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Cover Page

Order ID : Q2842

Project ID : Former Schlumberger STC PTC Site D3868221

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
Q2842-01	RMW-03B-90.4-081225
Q2842-02	RMW-02B-66.3-081225
Q2842-03	MW-17B-55.5-081225
Q2842-04	MW-17B-55.5-081225MS
Q2842-05	MW-17B-55.5-081225MSD
Q2842-06	MW-06-6.5-081225
Q2842-08	TB01-081225
Q2842-09	MW-17B-55.5-081225
Q2842-10	MW-17B-55.5-081225MS
Q2842-11	MW-17B-55.5-081225MSD

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

Signature : _____

Date: 10/28/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

JACOBS Engineering Group, Inc.
Project Name: Former Schlumberger STC PTC Site D3868221
Project # N/A
Order ID # Q2842
Test Name: VOCMS Group3

A. Number of Samples and Date of Receipt:
6 Water samples were received on 08/12/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: VOCMS Group3. This data package contains results for VOCMS Group3.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOCMS Group3 was based on method 8260D.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries were met for all analysis.
The Internal Standards Areas were met for all analysis.
The Retention Times were met for all analysis.
The MS recoveries met the requirements for all compounds.
The MSD recoveries met the requirements for all compounds.
The RPD were met for all analysis.
The Blank Spike met requirements for all compounds.

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

Samples RMW-03B-90.4-081225, RMW-02B-66.3-081225 and MW-17B-55.5-081225, All these samples were run at straight dilution after checking past history of these samples containing high amounts of compounds cis-1,2-Dichloroethene and Trichloroethene.

E. Additional Comments:

This Data Package has been revised due to Data Package type changed.

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The SIM analysis is not required for the sample MW-17B-55.5-081225-SIM as all the SIM target analytes are detected at or above the sample adjusted CRQLs in the full scan analysis, a SIM analysis is not to be performed for that sample."

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

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

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

Signature_____

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DATA REPORTING QUALIFIERS- ORGANIC

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

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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q2842 MATRIX: Water

METHOD: 8260D

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements.			✓
	The Initial Calibration met the requirements.			
	The Continuous Calibration met the requirements.			
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The MS recoveries met the requirements for all compounds.			
	The MSD recoveries met the requirements for all compounds.			
	The RPD were met for all analysis.			
	The Blank Spike met requirements for all compounds			
9.	Internal Standard Area/Retention Time Shift Meet Criteria			✓
	Comments:			
10.	Analysis Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

ADDITIONAL COMMENTS:

This Data Package has been revised due to Data Package type changed

The SIM analysis is not required for the sample MW-17B-55.5-081225-SIM as all the SIM target analytes are detected at or above the sample adjusted CRQLs in the full scan analysis, a SIM analysis is not to be performed for that sample."

Samples RMW-03B-90.4-08122025, RMW-02B-66.3-08122025 and MW-17B-55.5-08122025, All these samples were run at straight dilution after checking past history of these samples containing high amounts of compounds cis-1,2-Dichloroethene and Trichloroethene.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

_____ _____

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q2842**

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

QA Review Signature: **SOHIL JODHANI** **Date:** **10/28/2025**

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LAB CHRONICLE

OrderID:	Q2842	**OrderDate:**	8/13/2025 8:34:00 AM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger STC PTC Site D3868221
Contact:	John Ynfante	**Location:**	J23,J32,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2842-01	**RMW-03B-90.4-081225**	**Water**			**08/12/25**			**08/12/25**
			VOCMS Group3	8260-Low			08/14/25	
Q2842-02	**RMW-02B-66.3-081225**	**Water**			**08/12/25**			**08/12/25**
			VOCMS Group3	8260-Low			08/14/25	
Q2842-03	**MW-17B-55.5-081225**	**Water**			**08/12/25**			**08/12/25**
			VOCMS Group3	8260-Low			08/14/25	
Q2842-08	**TB01-081225**	**Water**			**08/12/25**			**08/12/25**
			VOCMS Group3	8260-Low			08/14/25	

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Hit Summary Sheet
SW-846

SDG No.: Q2842

Client: JACOBS Engineering Group, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**RMW-03B-90.4-081225**							
Q2842-01	RMW-03B-90.4-08	Water	cis-1,2-Dichloroethene	2800		7.60	40.0	ug/L
Q2842-01	RMW-03B-90.4-08	Water	Trichloroethene	810		3.70	40.0	ug/L
			Total Voc :	3610				
			Total Concentration:	3610				
Client ID:	**RMW-02B-66.3-081225**							
Q2842-02	RMW-02B-66.3-08	Water	Vinyl Chloride	240		10.4	40.0	ug/L
Q2842-02	RMW-02B-66.3-08	Water	1,1-Dichloroethene	130		9.20	40.0	ug/L
Q2842-02	RMW-02B-66.3-08	Water	cis-1,2-Dichloroethene	1600		7.60	40.0	ug/L
Q2842-02	RMW-02B-66.3-08	Water	Trichloroethene	1500		3.70	40.0	ug/L
Q2842-02	RMW-02B-66.3-08	Water	Tetrachloroethene	24.7	J	9.20	40.0	ug/L
			Total Voc :	3490				
			Total Concentration:	3490				
Client ID:	**MW-17B-55.5-081225**							
Q2842-03	MW-17B-55.5-0812	Water	cis-1,2-Dichloroethene	3000		19.0	100	ug/L
Q2842-03	MW-17B-55.5-0812	Water	Trichloroethene	3600		9.30	100	ug/L
Q2842-03	MW-17B-55.5-0812	Water	Tetrachloroethene	56.3	J	23.0	100	ug/L
			Total Voc :	6660				
			Total Concentration:	6660				

QC SUMMARY

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Surrogate Summary

SDG No.: Q2842

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q2842-01	RMW-03B-90.4-081225	1,2-Dichloroethane-d4	50	53.7	107		70 (74)	130 (125)
		Dibromofluoromethane	50	45.5	91		70 (75)	130 (124)
		Toluene-d8	50	45.7	91		70 (86)	130 (113)
		4-Bromofluorobenzene	50	43.9	88		70 (77)	130 (121)
Q2842-02	RMW-02B-66.3-081225	1,2-Dichloroethane-d4	50	57.0	114		70 (74)	130 (125)
		Dibromofluoromethane	50	45.1	90		70 (75)	130 (124)
		Toluene-d8	50	46.0	92		70 (86)	130 (113)
		4-Bromofluorobenzene	50	45.0	90		70 (77)	130 (121)
Q2842-03	MW-17B-55.5-081225	1,2-Dichloroethane-d4	50	56.6	113		70 (74)	130 (125)
		Dibromofluoromethane	50	45.1	90		70 (75)	130 (124)
		Toluene-d8	50	46.5	93		70 (86)	130 (113)
		4-Bromofluorobenzene	50	45.5	91		70 (77)	130 (121)
Q2842-04MS	MW-17B-55.5-081225MS	1,2-Dichloroethane-d4	50	53.8	108		70 (74)	130 (125)
		Dibromofluoromethane	50	47.9	96		70 (75)	130 (124)
		Toluene-d8	50	47.9	96		70 (86)	130 (113)
		4-Bromofluorobenzene	50	51.7	103		70 (77)	130 (121)
Q2842-05MSD	MW-17B-55.5-081225MSD	1,2-Dichloroethane-d4	50	54.6	109		70 (74)	130 (125)
		Dibromofluoromethane	50	46.7	93		70 (75)	130 (124)
		Toluene-d8	50	48.2	96		70 (86)	130 (113)
		4-Bromofluorobenzene	50	50.5	101		70 (77)	130 (121)
Q2842-08	TB01-081225	1,2-Dichloroethane-d4	50	55.1	110		70 (74)	130 (125)
		Dibromofluoromethane	50	44.9	90		70 (75)	130 (124)
		Toluene-d8	50	45.6	91		70 (86)	130 (113)
		4-Bromofluorobenzene	50	44.2	88		70 (77)	130 (121)
VN0814WBL01	VN0814WBL01	1,2-Dichloroethane-d4	50	52.9	106		70 (74)	130 (125)
		Dibromofluoromethane	50	44.2	88		70 (75)	130 (124)
		Toluene-d8	50	44.2	88		70 (86)	130 (113)
		4-Bromofluorobenzene	50	43.7	87		70 (77)	130 (121)
VN0814WBS01	VN0814WBS01	1,2-Dichloroethane-d4	50	57.6	115		70 (74)	130 (125)
		Dibromofluoromethane	50	50.7	101		70 (75)	130 (124)
		Toluene-d8	50	50.7	101		70 (86)	130 (113)
		4-Bromofluorobenzene	50	52.9	106		70 (77)	130 (121)

( ) = LABORATORY INHOUSE LIMIT

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2842 **Analytical Method:** SW8260-Low

Client: JACOBS Engineering Group, In **Datafile :** VN087569.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Lab Sample ID : Q2842-04MS		**Client Sample ID : MW-17B-55.5-081225MS**									
Vinyl chloride	5000	0	5400	ug/L	108				70 (69)	130 (125)	
1,1-Dichloroethene	5000	0	5200	ug/L	104				70 (53)	130 (162)	
1,1-Dichloroethane	5000	0	5300	ug/L	106				70 (78)	130 (122)	
cis-1,2-Dichloroethene	5000	3000	8100	ug/L	102				70 (82)	130 (124)	
1,1,1-Trichloroethane	5000	0	5400	ug/L	108				70 (83)	130 (117)	
Benzene	5000	0	5100	ug/L	102				70 (81)	130 (128)	
1,2-Dichloroethane	5000	0	5500	ug/L	110				70 (76)	130 (120)	
Trichloroethene	5000	3600	10000	ug/L	128				70 (28)	130 (175)	
1,1,2-Trichloroethane	5000	0	5300	ug/L	106				70 (27)	130 (175)	
Tetrachloroethene	5000	56.3	4300	ug/L	85				70 (48)	130 (153)	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2842 **Analytical Method:** SW8260-Low

Client: JACOBS Engineering Group, In **Datafile :** VN087570.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Lab Sample ID : Q2842-05MSD		**Client Sample ID : MW-17B-55.5-081225MSD**									
Vinyl chloride	5000	0	5400	ug/L	108		0		70 (69)	130 (125)	20 (20)
1,1-Dichloroethene	5000	0	5300	ug/L	106		2		70 (53)	130 (162)	20 (20)
1,1-Dichloroethane	5000	0	5400	ug/L	108		2		70 (78)	130 (122)	20 (20)
cis-1,2-Dichloroethene	5000	3000	8000	ug/L	100		2		70 (82)	130 (124)	20 (20)
1,1,1-Trichloroethane	5000	0	5500	ug/L	110		2		70 (83)	130 (117)	20 (20)
Benzene	5000	0	5100	ug/L	102		0		70 (81)	130 (128)	20 (20)
1,2-Dichloroethane	5000	0	5300	ug/L	106		4		70 (76)	130 (120)	20 (20)
Trichloroethene	5000	3600	9500	ug/L	118		8		70 (28)	130 (175)	20 (20)
1,1,2-Trichloroethane	5000	0	5300	ug/L	106		0		70 (27)	130 (175)	20 (20)
Tetrachloroethene	5000	56.3	4300	ug/L	85		0		70 (48)	130 (153)	20 (20)

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2842 **Analytical Method:** SW8260-Low

Client: JACOBS Engineering Group, Inc. **Datafile :** VN087555.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0814WBS01	Vinyl chloride	20	21.4	ug/L	107			70 (65)	130 (117)	
	1,1-Dichloroethene	20	20.6	ug/L	103			70 (74)	130 (110)	
	1,1-Dichloroethane	20	21.6	ug/L	108			70 (78)	130 (112)	
	cis-1,2-Dichloroethene	20	21.2	ug/L	106			70 (77)	130 (110)	
	1,1,1-Trichloroethane	20	21.4	ug/L	107			70 (80)	130 (108)	
	Benzene	20	20.3	ug/L	102			70 (82)	130 (109)	
	1,2-Dichloroethane	20	21.5	ug/L	108			70 (80)	130 (115)	
	Trichloroethene	20	19.2	ug/L	96			70 (77)	130 (113)	
	1,1,2-Trichloroethane	20	20.7	ug/L	104			70 (83)	130 (112)	
	Tetrachloroethene	20	18.1	ug/L	91			70 (67)	130 (123)	

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VOLATILE METHOD BLANK SUMMARY

Client ID: VN0814WBL01

Lab Name: Alliance | Contract: JACO05

Lab Code: ACE | SDG NO.: Q2842

Lab File ID: VN087554.D | Lab Sample ID: VN0814WBL01

Date Analyzed: 08/14/2025 | Time Analyzed: 10:32

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0814WBS01	VN0814WBS01	VN087555.D	08/14/2025
TB01-081225	Q2842-08	VN087565.D	08/14/2025
RMW-03B-90.4-081225	Q2842-01	VN087566.D	08/14/2025
RMW-02B-66.3-081225	Q2842-02	VN087567.D	08/14/2025
MW-17B-55.5-081225	Q2842-03	VN087568.D	08/14/2025
MW-17B-55.5-081225MS	Q2842-04MS	VN087569.D	08/14/2025
MW-17B-55.5-081225MSD	Q2842-05MSD	VN087570.D	08/14/2025

COMMENTS:

Raw Data: **VN087327.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance | Contract: JACO05

Lab Code: ACE | SDG NO.: Q2842

Lab File ID: VN087327.D | BFB Injection Date: 07/16/2025

Instrument ID: MSVOA_N | BFB Injection Time: 16:10

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	50.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	70.9
175	5.0 - 9.0% of mass 174	3.6 (5.1) 1
176	95.0 - 101.0% of mass 174	68.7 (96.9) 1
177	5.0 - 9.0% of mass 176	4.8 (7) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VN087328.D	07/16/2025	17:05
VSTDICC005	VSTDICC005	VN087329.D	07/16/2025	17:27
VSTDICC020	VSTDICC020	VN087330.D	07/16/2025	17:49
VSTDICCC050	VSTDICCC050	VN087331.D	07/16/2025	18:11
VSTDICC100	VSTDICC100	VN087332.D	07/16/2025	18:32
VSTDICC150	VSTDICC150	VN087333.D	07/16/2025	18:54

Raw Data: **VN087551.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: JACO05
Lab Code: ACE
SDG NO.: Q2842
Lab File ID: VN087551.D
BFB Injection Date: 08/14/2025
Instrument ID: MSVOA_N
BFB Injection Time: 09:01
GC Column: RXI-624 ID: 0.25 (mm)
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.8
75	30.0 - 60.0% of mass 95	57.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	5.6
173	Less than 2.0% of mass 174	0.9 (1.3) 1
174	50.0 - 100.0% of mass 95	65.2
175	5.0 - 9.0% of mass 174	4.4 (6.8) 1
176	95.0 - 101.0% of mass 174	64.4 (98.8) 1
177	5.0 - 9.0% of mass 176	4 (6.2) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN087552.D	08/14/2025	09:34
VN0814WBL01	VN0814WBL01	VN087554.D	08/14/2025	10:32
VN0814WBS01	VN0814WBS01	VN087555.D	08/14/2025	11:07
TB01-081225	Q2842-08	VN087565.D	08/14/2025	14:58
RMW-03B-90.4-081225	Q2842-01	VN087566.D	08/14/2025	15:20
RMW-02B-66.3-081225	Q2842-02	VN087567.D	08/14/2025	15:42
MW-17B-55.5-081225	Q2842-03	VN087568.D	08/14/2025	16:04
MW-17B-55.5-081225MS	Q2842-04MS	VN087569.D	08/14/2025	16:27
MW-17B-55.5-081225MSD	Q2842-05MSD	VN087570.D	08/14/2025	16:49

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: JACO05

Lab Code: ACE SDG NO.: Q2842

Lab File ID: VN087552.D Date Analyzed: 08/14/2025

Instrument ID: MSVOA_N Time Analyzed: 09:34

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	271352	8.21	543098	9.08	500619	11.85
UPPER LIMIT	542704	8.712	1086200	9.582	1001240	12.347
LOWER LIMIT	135676	7.712	271549	8.582	250310	11.347
EPA SAMPLE NO.						
RMW-03B-90.4-081225	225616	8.21	494400	9.09	459245	11.85
RMW-02B-66.3-081225	218605	8.21	486591	9.09	438933	11.85
MW-17B-55.5-081225	219937	8.21	487780	9.09	455235	11.85
MW-17B-55.5-081225MS	238067	8.21	461160	9.08	435202	11.85
MW-17B-55.5-081225MSD	251785	8.21	498703	9.08	460182	11.85
TB01-081225	224412	8.21	498664	9.09	458661	11.85
VN0814WBL01	284398	8.21	560321	9.08	503771	11.85
VN0814WBS01	250453	8.21	485218	9.08	446518	11.85

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

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Fax : 908 789 8922

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: JACO05

Lab Code: ACE SDG NO.: Q2842

Lab File ID: VN087552.D Date Analyzed: 08/14/2025

Instrument ID: MSVOA_N Time Analyzed: 09:34

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	255173	13.77				
UPPER LIMIT	510346	14.27				
LOWER LIMIT	127587	13.27				
EPA SAMPLE NO.						
RMW-03B-90.4-081225	213548	13.77				
RMW-02B-66.3-081225	211146	13.77				
MW-17B-55.5-081225	209426	13.77				
MW-17B-55.5-081225MS	231778	13.77				
MW-17B-55.5-081225MSD	240017	13.77				
TB01-081225	214662	13.77				
VN0814WBL01	234765	13.77				
VN0814WBS01	221983	13.77				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

SAMPLE DATA

Raw Data: **VN087566.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/12/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	08/12/25
Client Sample ID:	RMW-03B-90.4-081225	SDG No.:	Q2842
Lab Sample ID:	Q2842-01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087566.D	40	08/14/25 15:20	VN081425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	10.4	U	10.4	40.0	ug/L
75-35-4	1,1-Dichloroethene	9.20	U	9.20	40.0	ug/L
75-34-3	1,1-Dichloroethane	9.20	U	9.20	40.0	ug/L
156-59-2	cis-1,2-Dichloroethene	2800		7.60	40.0	ug/L
71-55-6	1,1,1-Trichloroethane	8.00	U	8.00	40.0	ug/L
71-43-2	Benzene	6.00	U	6.00	40.0	ug/L
107-06-2	1,2-Dichloroethane	8.80	U	8.80	40.0	ug/L
79-01-6	Trichloroethene	810		3.70	40.0	ug/L
79-00-5	1,1,2-Trichloroethane	8.40	U	8.40	40.0	ug/L
127-18-4	Tetrachloroethene	9.20	U	9.20	40.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.7		70 (74) - 130 (125)	107%	SPK: 50
1868-53-7	Dibromofluoromethane	45.5		70 (75) - 130 (124)	91%	SPK: 50
2037-26-5	Toluene-d8	45.7		70 (86) - 130 (113)	91%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.9		70 (77) - 130 (121)	88%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	226000	8.206			
540-36-3	1,4-Difluorobenzene	494000	9.088			
3114-55-4	Chlorobenzene-d5	459000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	214000	13.77			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087566.D
Acq On : 14 Aug 2025 15:20
Operator : JC\MD
Sample : Q2842-01 40X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RMW-03B-90.4-081225

Quant Time: Aug 14 15:39:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

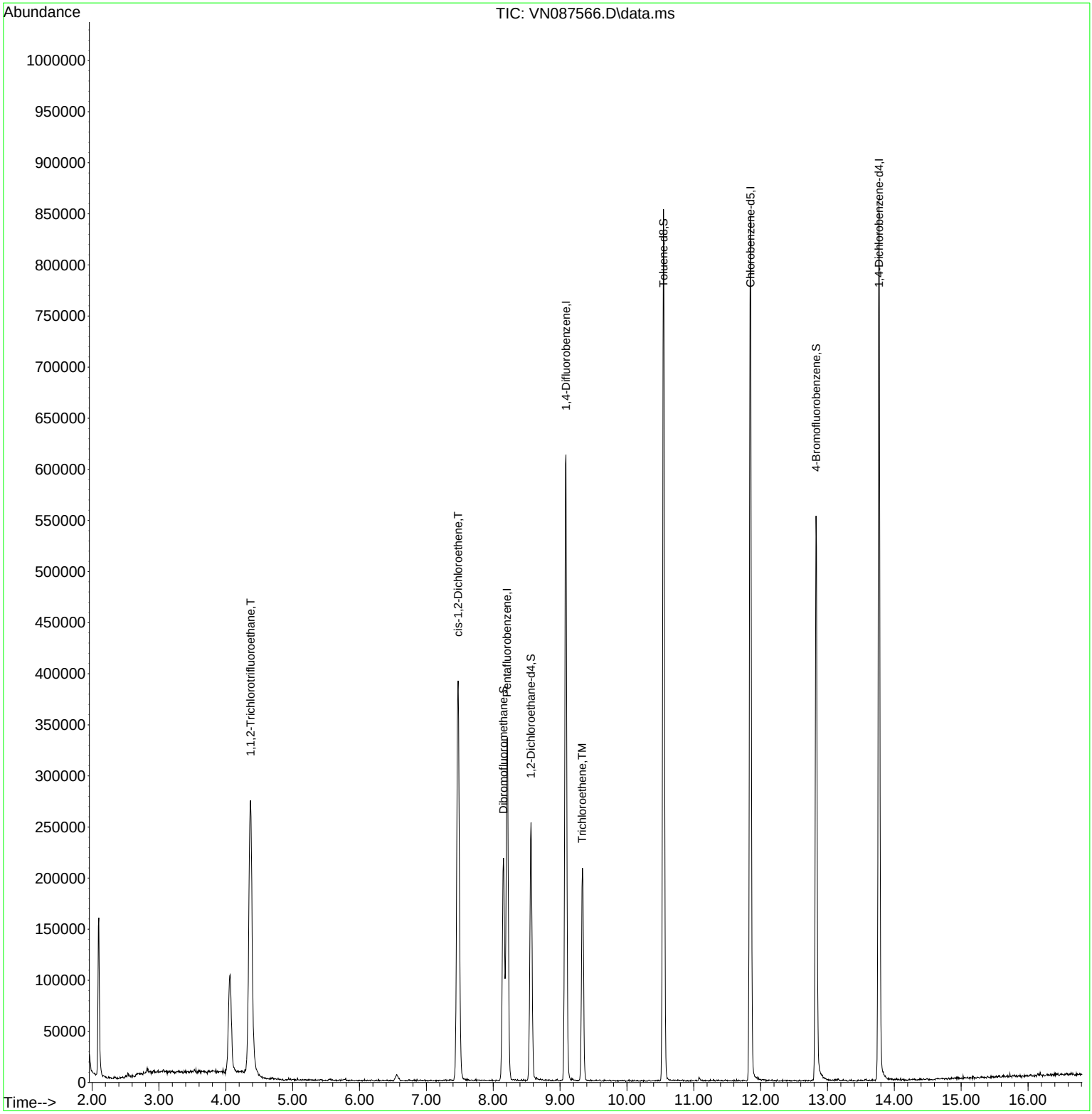
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	225616	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.088	114	494400	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	459245	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	213548	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	205410	53.657	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 107.320%			
35) Dibromofluoromethane	8.153	113	155257	45.525	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 91.040%			
50) Toluene-d8	10.547	98	555821	45.689	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 91.380%			
62) 4-Bromofluorobenzene	12.829	95	197243	43.886	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 87.780%			
Target Compounds						Qvalue
9) 1,1,2-Trichlorotrifluo...	4.371	101	188722	83.020	ug/l	95
27) cis-1,2-Dichloroethene	7.477	96	234562	70.144	ug/l	91
44) Trichloroethene	9.329	130	69531	20.207	ug/l	99

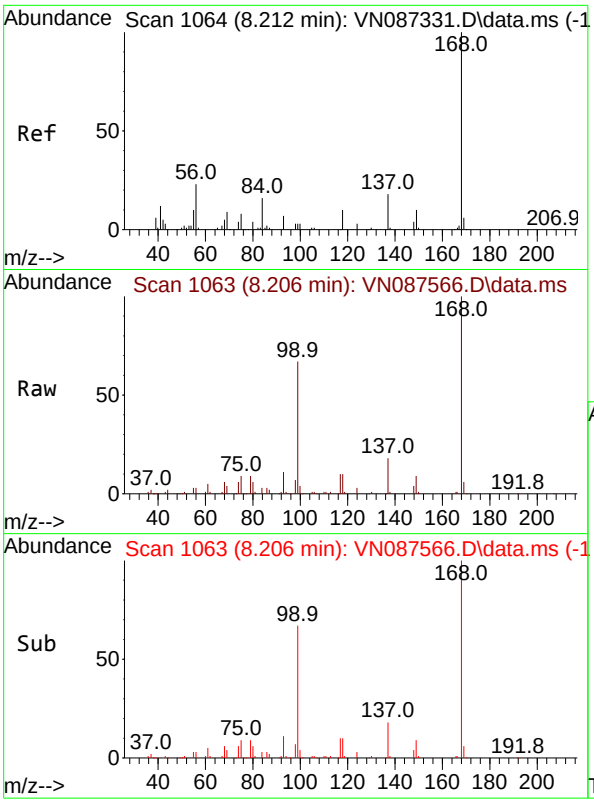
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087566.D
Acq On : 14 Aug 2025 15:20
Operator : JC\MD
Sample : Q2842-01 40X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RMW-03B-90.4-081225

Quant Time: Aug 14 15:39:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration



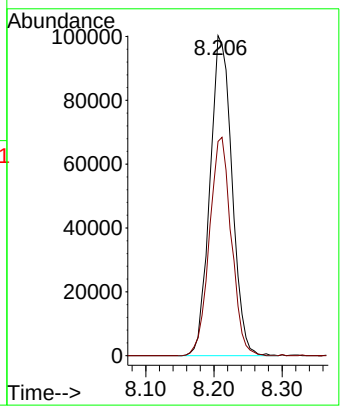


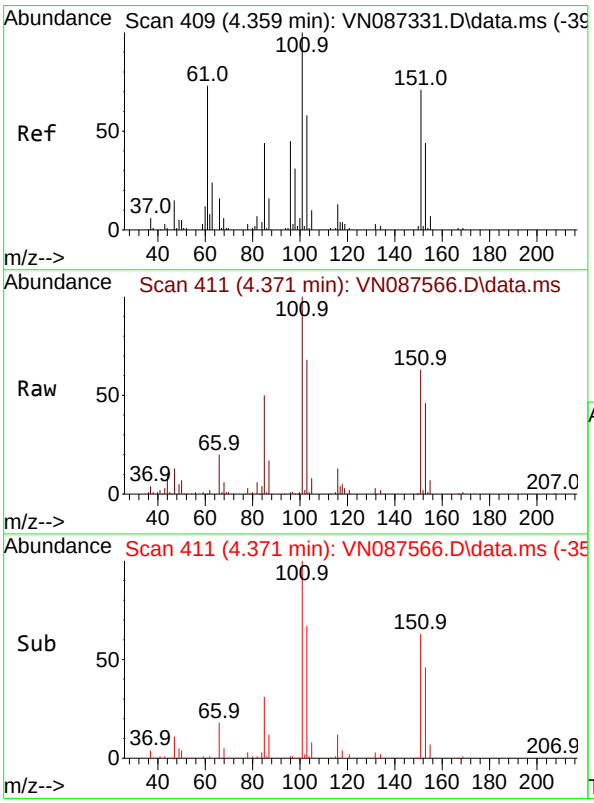
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Instrument :
MSVOA_N
ClientSampleId :
RMW-03B-90.4-081225

Tgt Ion:168 Resp: 225616

Ion	Ratio	Lower	Upper
168	100		
99	66.9	47.9	71.9

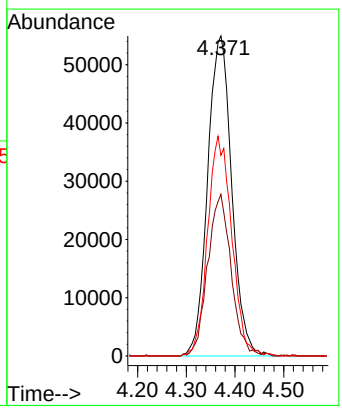


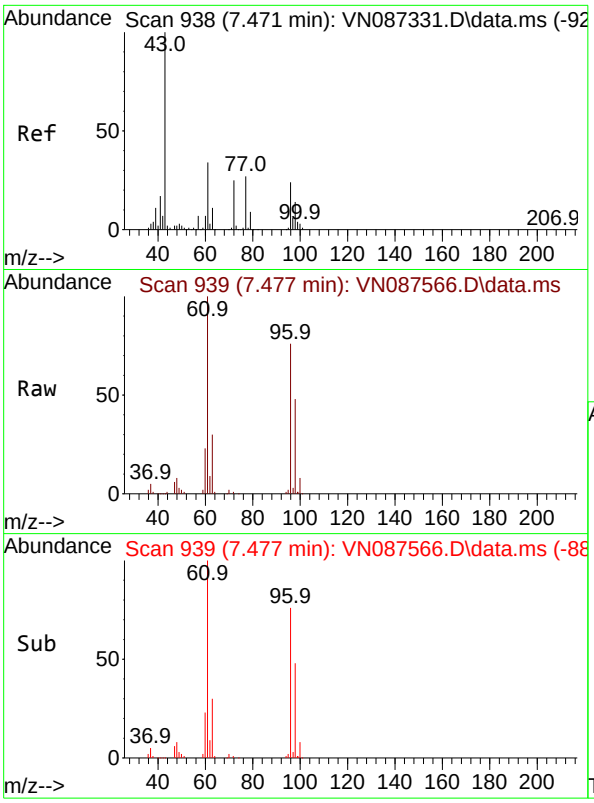


#9
1,1,2-Trichlorotrifluoroethane
Concen: 83.020 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.012 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Tgt Ion:101 Resp: 188722

Ion	Ratio	Lower	Upper
101	100		
85	49.1	37.3	55.9
151	68.6	58.9	88.3



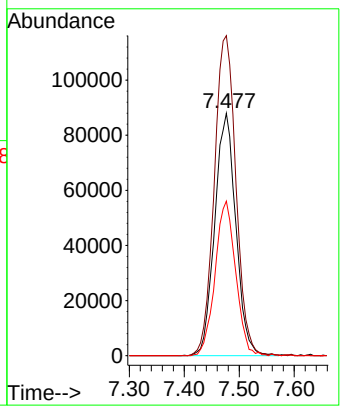


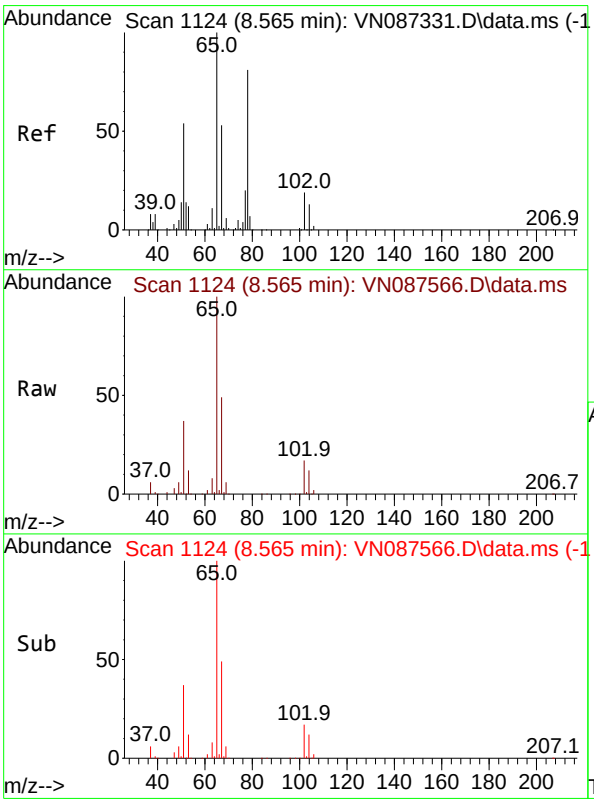
#27
cis-1,2-Dichloroethene
Concen: 70.144 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Instrument :
MSVOA_N
ClientSampleId :
RMW-03B-90.4-081225

Tgt Ion: 96 Resp: 234562

Ion	Ratio	Lower	Upper
96	100		
61	135.3	0.0	297.8
98	62.2	0.0	132.4

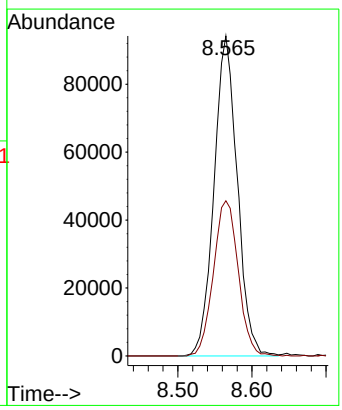


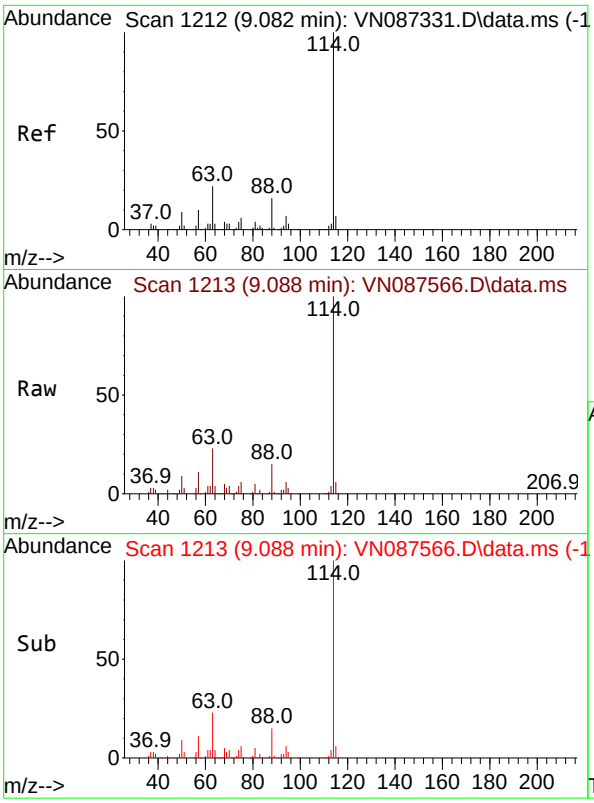


#33
1,2-Dichloroethane-d4
Concen: 53.657 ug/l
RT: 8.565 min Scan# 1124
Delta R.T. 0.000 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Tgt Ion: 65 Resp: 205410

Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	104.0



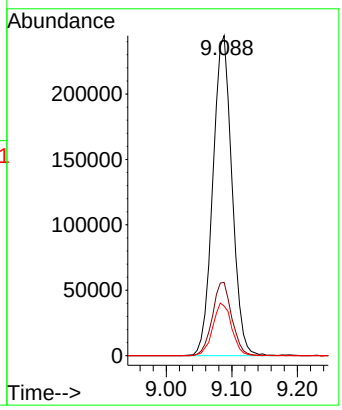


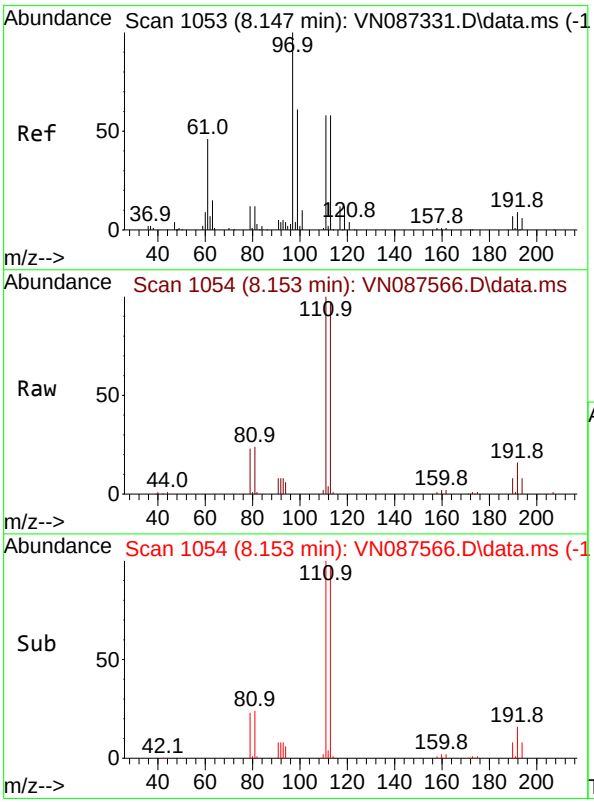
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.088 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Instrument :
MSVOA_N
ClientSampleId :
RMW-03B-90.4-081225

Tgt Ion:114 Resp: 494400

Ion	Ratio	Lower	Upper
114	100		
63	22.9	0.0	44.6
88	15.5	0.0	32.8

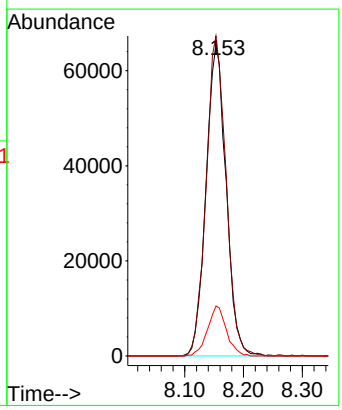


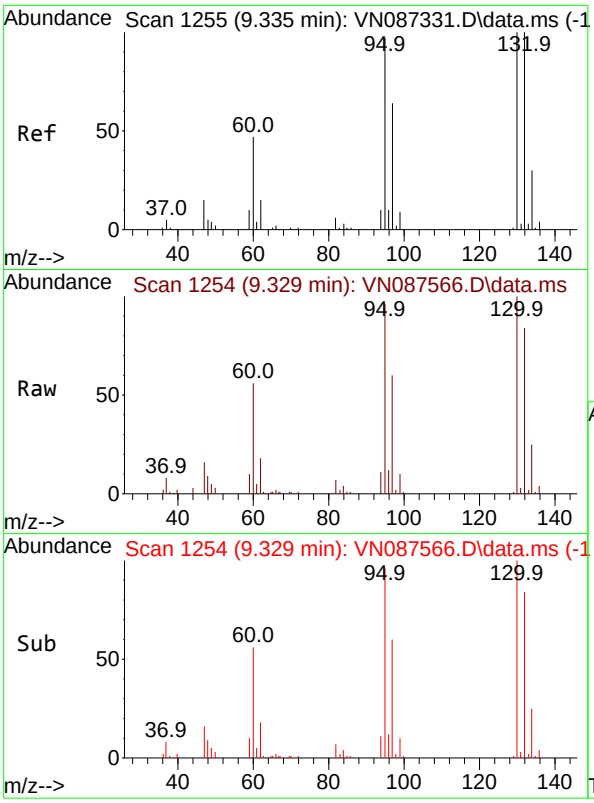


#35
Dibromofluoromethane
Concen: 45.525 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.006 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Tgt Ion:113 Resp: 155257

Ion	Ratio	Lower	Upper
113	100		
111	102.1	82.5	123.7
192	15.1	13.7	20.5



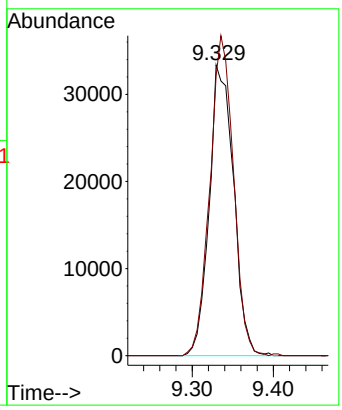


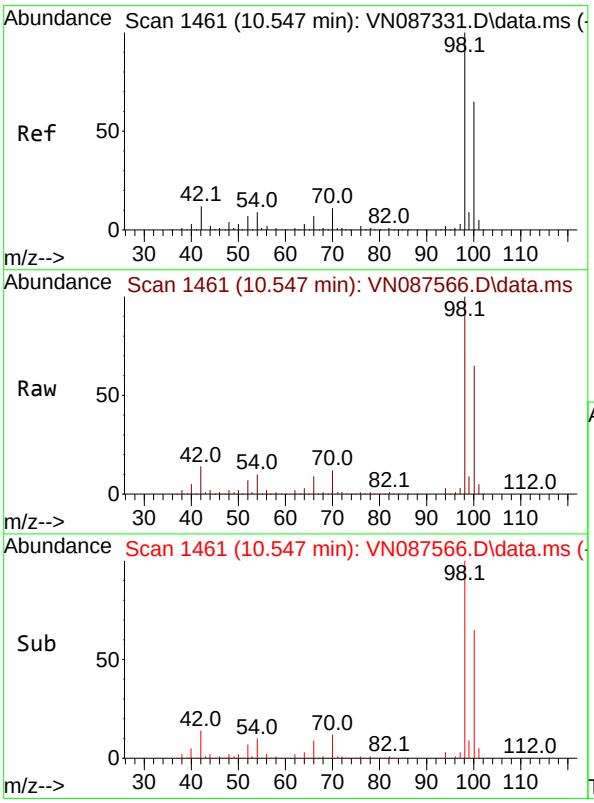
#44
Trichloroethene
Concen: 20.207 ug/l
RT: 9.329 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Instrument :
MSVOA_N
ClientSampleId :
RMW-03B-90.4-081225

Tgt Ion:130 Resp: 69531

Ion	Ratio	Lower	Upper
130	100		
95	96.4	0.0	195.2

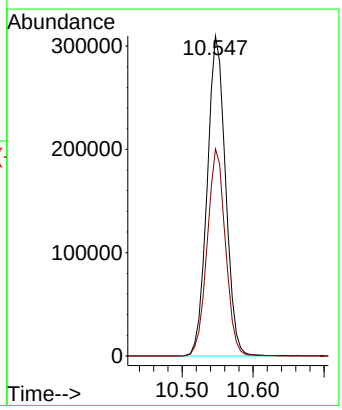


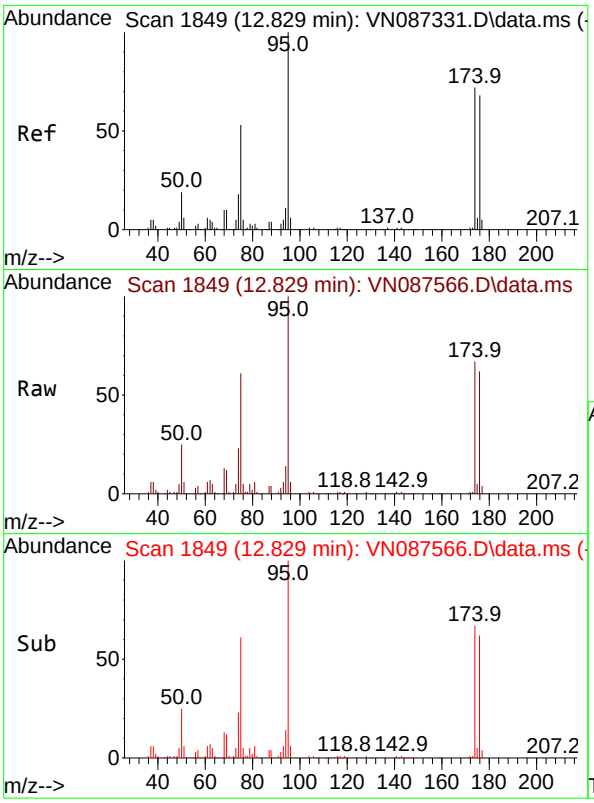


#50
Toluene-d8
Concen: 45.689 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Tgt Ion: 98 Resp: 555821

Ion	Ratio	Lower	Upper
98	100		
100	64.4	52.1	78.1



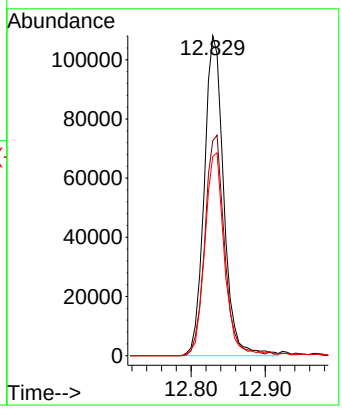


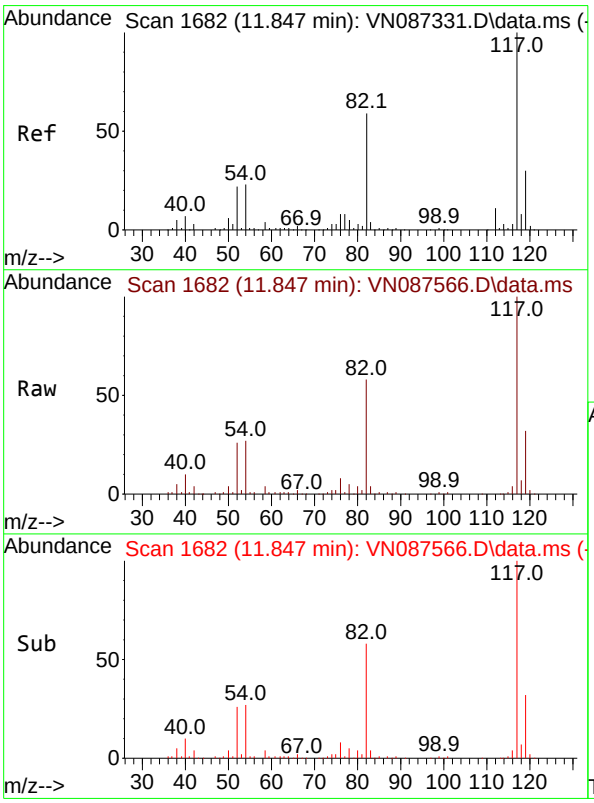
#62
4-Bromofluorobenzene
Concen: 43.886 ug/l
RT: 12.829 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Instrument :
MSVOA_N
ClientSampleId :
RMW-03B-90.4-081225

Tgt Ion: 95 Resp: 197243

Ion	Ratio	Lower	Upper
95	100		
174	69.3	0.0	149.4
176	64.4	0.0	141.2

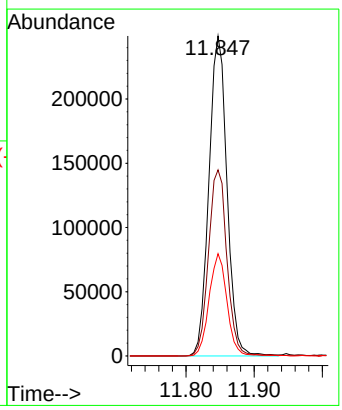


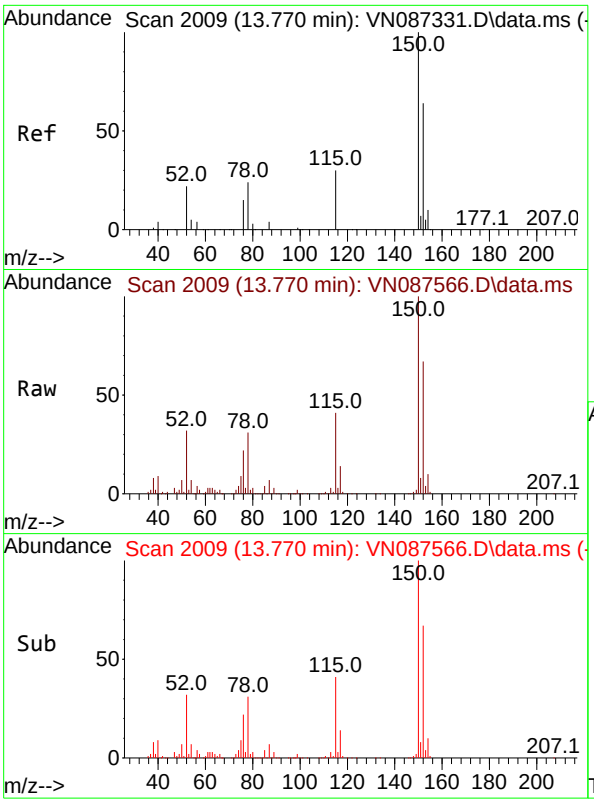


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1682
Delta R.T. -0.000 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Tgt Ion:117 Resp: 459245

Ion	Ratio	Lower	Upper
117	100		
82	58.2	47.4	71.2
119	32.0	23.8	35.8



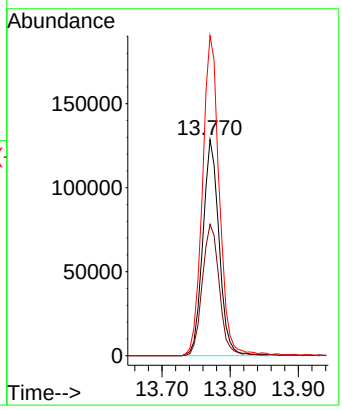


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087566.D
Acq: 14 Aug 2025 15:20

Instrument :
MSVOA_N
ClientSampleId :
RMW-03B-90.4-081225

Tgt Ion:152 Resp: 213548

Ion	Ratio	Lower	Upper
152	100		
115	63.6	31.1	93.5
150	154.0	0.0	349.0



Raw Data: **VN087567.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/12/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	08/12/25
Client Sample ID:	RMW-02B-66.3-081225	SDG No.:	Q2842
Lab Sample ID:	Q2842-02	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087567.D	40	08/14/25 15:42	VN081425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	240		10.4	40.0	ug/L
75-35-4	1,1-Dichloroethene	130		9.20	40.0	ug/L
75-34-3	1,1-Dichloroethane	9.20	U	9.20	40.0	ug/L
156-59-2	cis-1,2-Dichloroethene	1600		7.60	40.0	ug/L
71-55-6	1,1,1-Trichloroethane	8.00	U	8.00	40.0	ug/L
71-43-2	Benzene	6.00	U	6.00	40.0	ug/L
107-06-2	1,2-Dichloroethane	8.80	U	8.80	40.0	ug/L
79-01-6	Trichloroethene	1500		3.70	40.0	ug/L
79-00-5	1,1,2-Trichloroethane	8.40	U	8.40	40.0	ug/L
127-18-4	Tetrachloroethene	24.7	J	9.20	40.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.0		70 (74) - 130 (125)	114%	SPK: 50
1868-53-7	Dibromofluoromethane	45.1		70 (75) - 130 (124)	90%	SPK: 50
2037-26-5	Toluene-d8	46.0		70 (86) - 130 (113)	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.0		70 (77) - 130 (121)	90%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	219000	8.212			
540-36-3	1,4-Difluorobenzene	487000	9.088			
3114-55-4	Chlorobenzene-d5	439000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	211000	13.77			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087567.D
Acq On : 14 Aug 2025 15:42
Operator : JC\MD
Sample : Q2842-02 40X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Quant Time: Aug 14 19:59:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

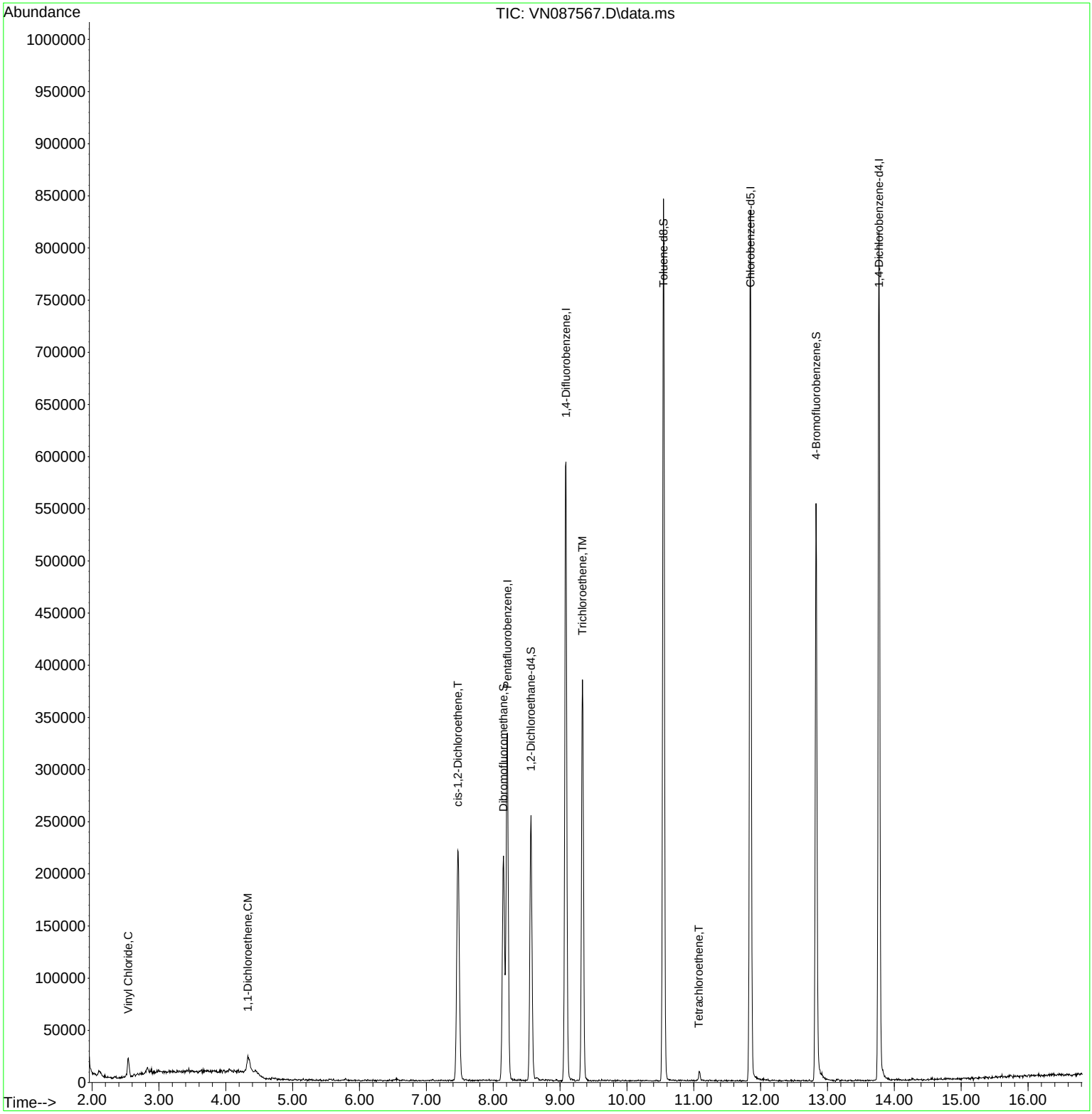
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	218605	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.088	114	486591	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	438933	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	211146	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	211465	57.010	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 114.020%			
35) Dibromofluoromethane	8.153	113	151404	45.108	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 90.220%			
50) Toluene-d8	10.547	98	550924	46.014	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 92.020%			
62) 4-Bromofluorobenzene	12.829	95	199247	45.043	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 90.080%			
Target Compounds						Qvalue
4) Vinyl Chloride	2.542	62	17532	6.042	ug/l	97
12) 1,1-Dichloroethene	4.330	96	8400	3.365	ug/l	94
27) cis-1,2-Dichloroethene	7.471	96	128340	39.610	ug/l	94
44) Trichloroethene	9.335	130	129163	38.140	ug/l	94
64) Tetrachloroethene	11.076	164	1746	0.618	ug/l #	78

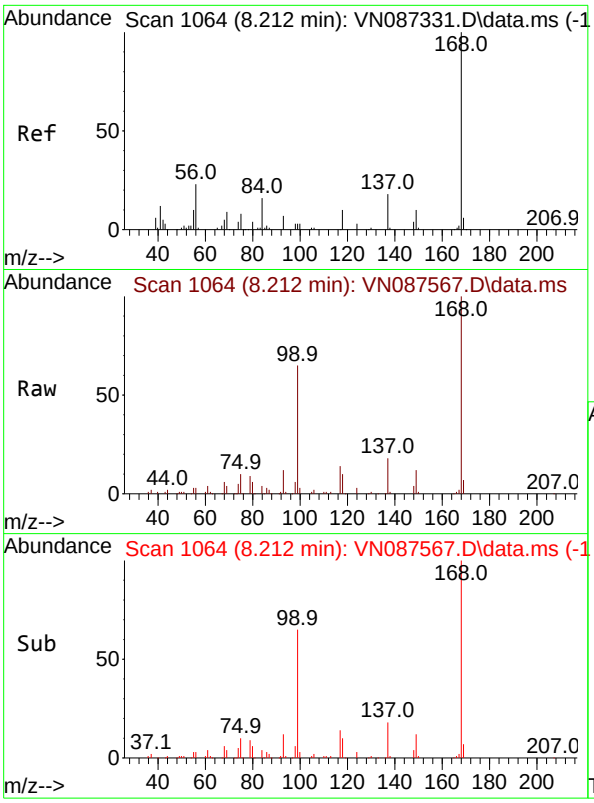
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087567.D
Acq On : 14 Aug 2025 15:42
Operator : JC\MD
Sample : Q2842-02 40X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Quant Time: Aug 14 19:59:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration



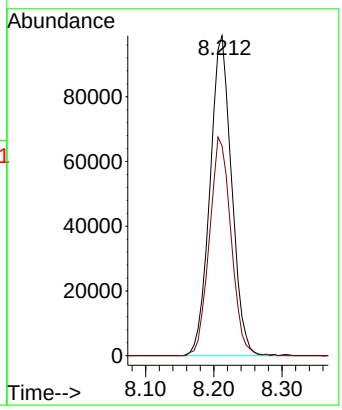


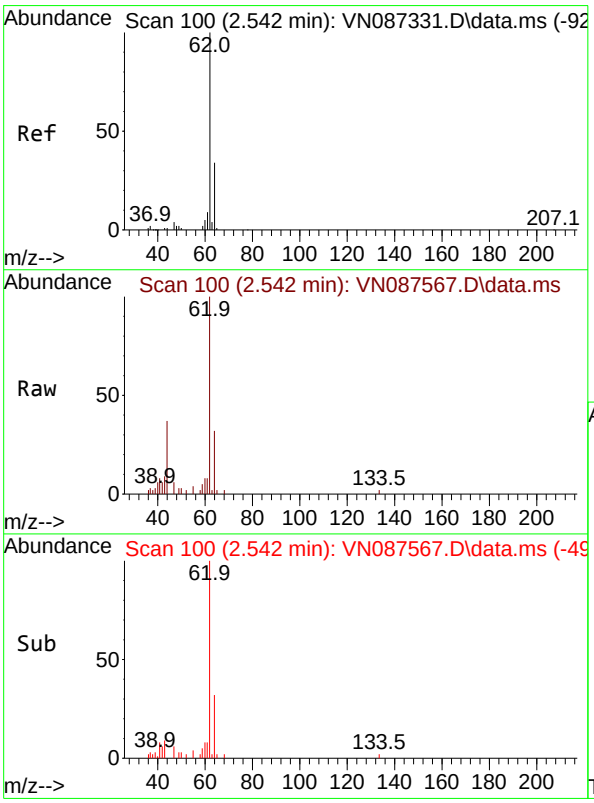
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Tgt Ion:168 Resp: 218605

Ion	Ratio	Lower	Upper
168	100		
99	65.5	47.9	71.9

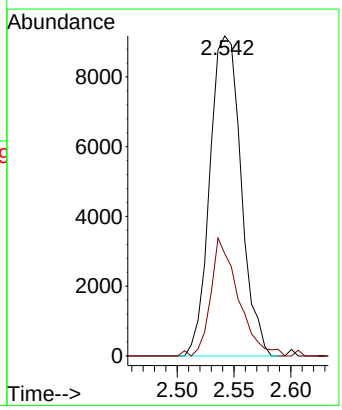


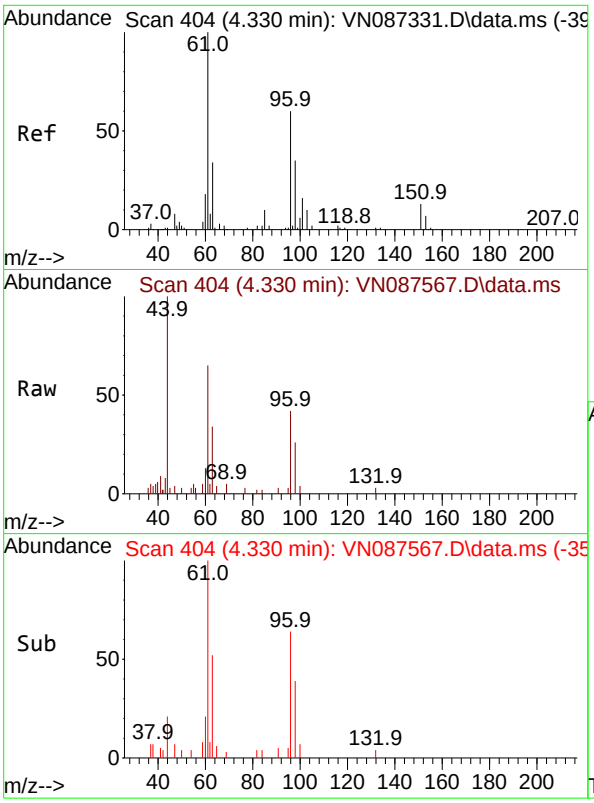


#4
Vinyl Chloride
Concen: 6.042 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Tgt Ion: 62 Resp: 17532

Ion	Ratio	Lower	Upper
62	100		
64	31.9	27.0	40.6



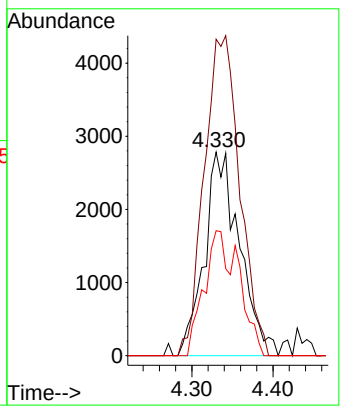


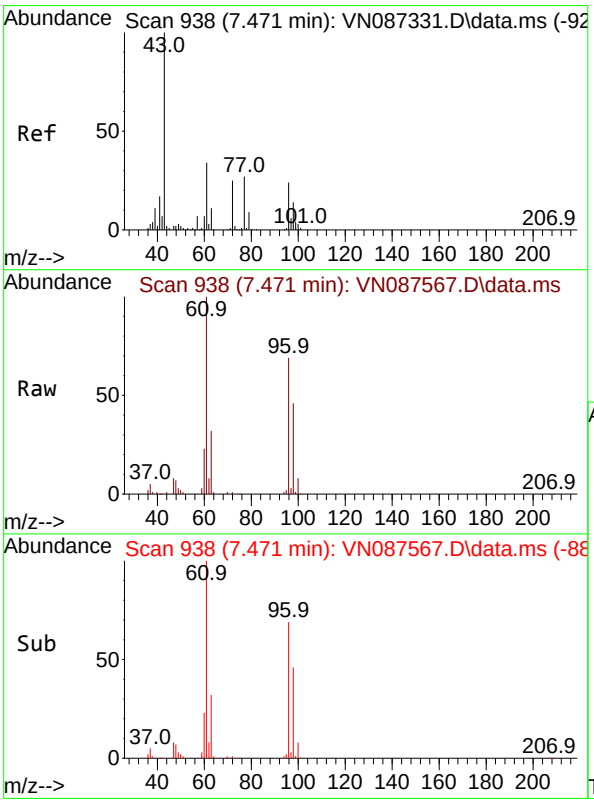
#12
1,1-Dichloroethene
Concen: 3.365 ug/l
RT: 4.330 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Tgt Ion: 96 Resp: 8400

Ion	Ratio	Lower	Upper
96	100		
61	155.5	132.3	198.5
98	61.4	46.8	70.2

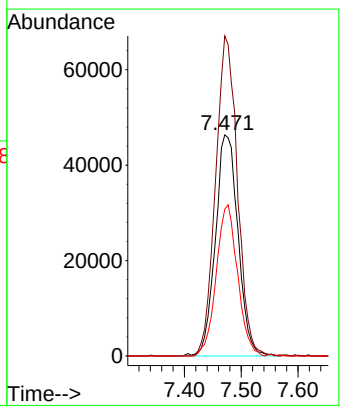


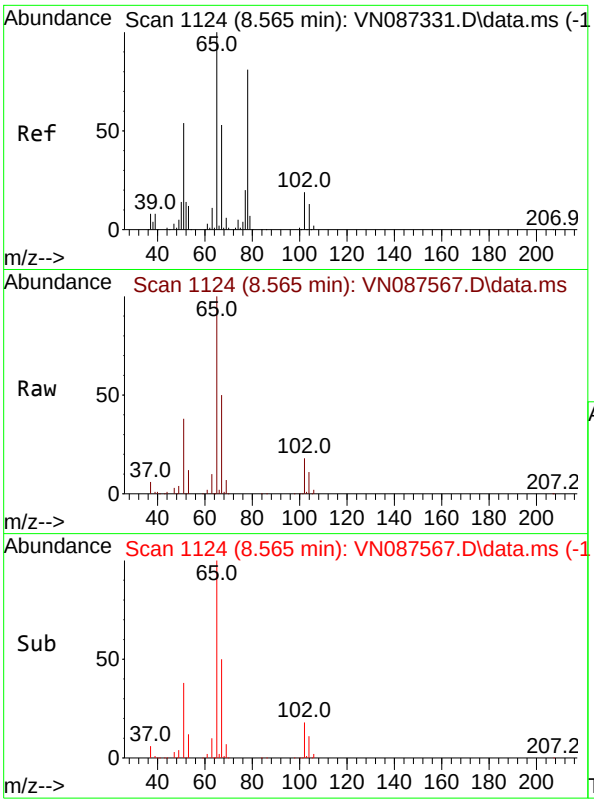


#27
cis-1,2-Dichloroethene
Concen: 39.610 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Tgt Ion: 96 Resp: 128340

Ion	Ratio	Lower	Upper
96	100		
61	139.9	0.0	297.8
98	64.5	0.0	132.4



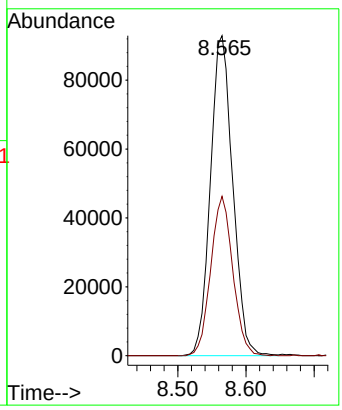


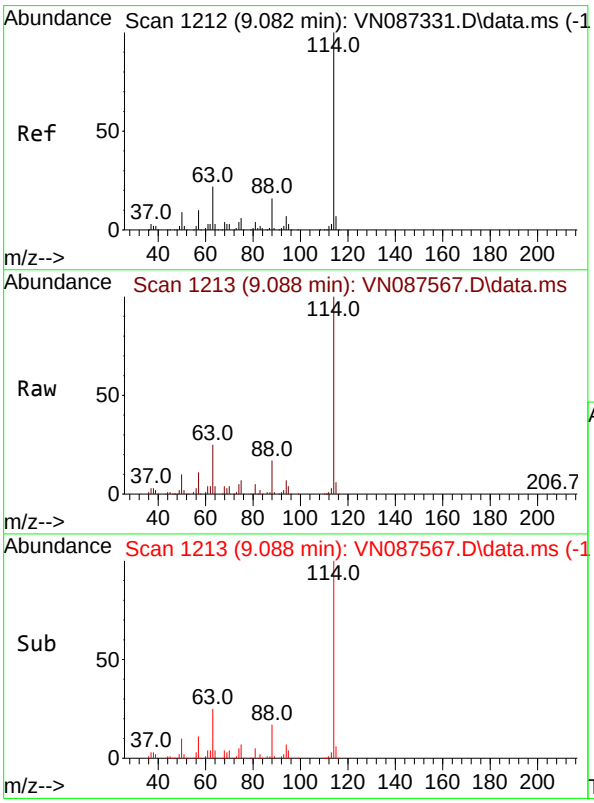
#33
1,2-Dichloroethane-d4
Concen: 57.010 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Tgt Ion: 65 Resp: 211465

Ion	Ratio	Lower	Upper
65	100		
67	49.2	0.0	104.0

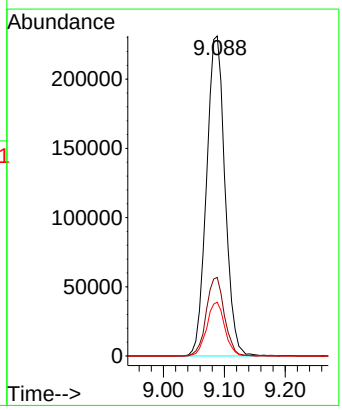


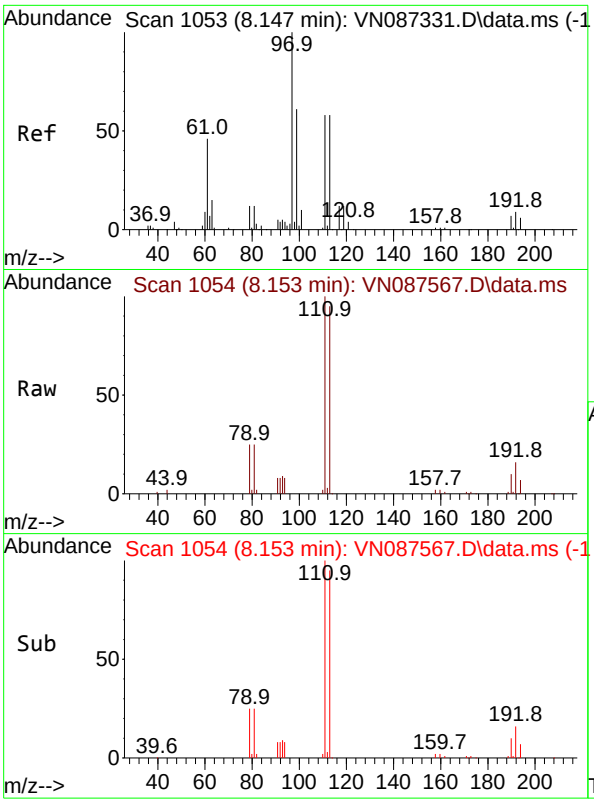


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.088 min Scan# 1213
Delta R.T. 0.006 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Tgt Ion:114 Resp: 486591

Ion	Ratio	Lower	Upper
114	100		
63	24.5	0.0	44.6
88	16.8	0.0	32.8



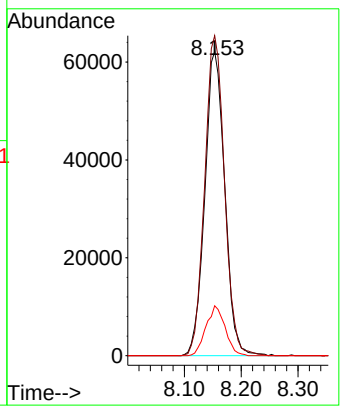


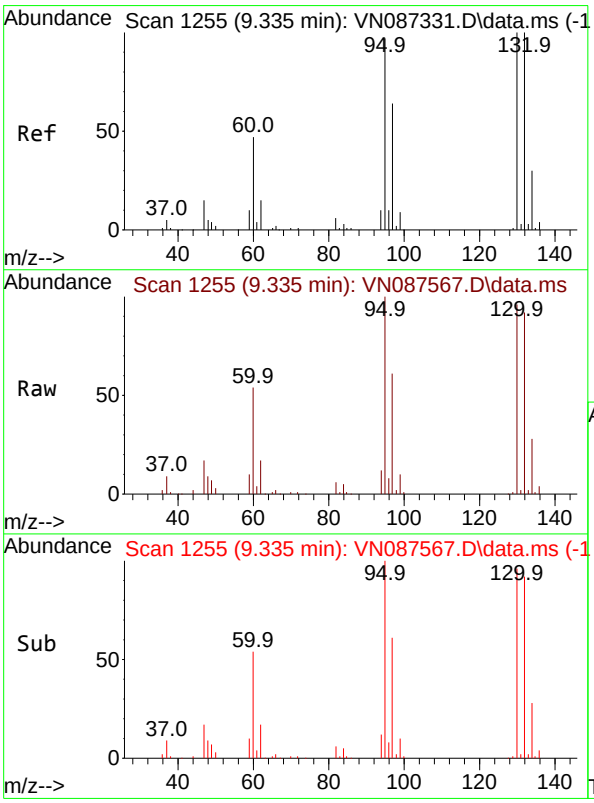
#35
Dibromofluoromethane
Concen: 45.108 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Tgt Ion:113 Resp: 151404

Ion	Ratio	Lower	Upper
113	100		
111	104.3	82.5	123.7
192	15.8	13.7	20.5

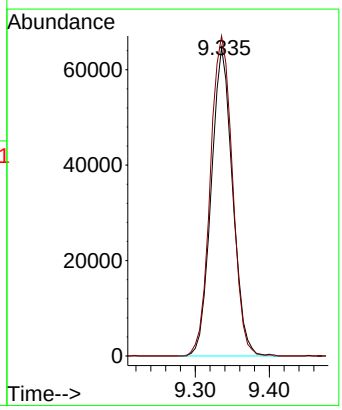


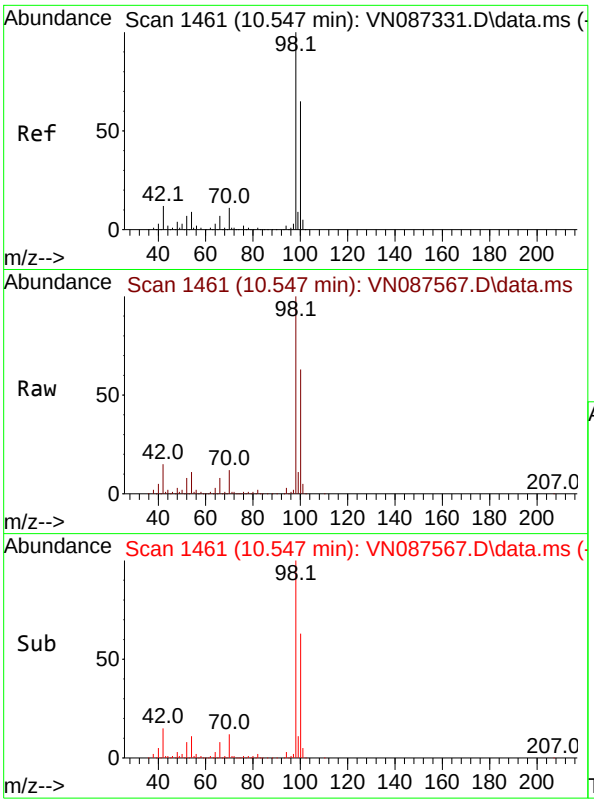


#44
Trichloroethene
Concen: 38.140 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Tgt Ion:130 Resp: 129163

Ion	Ratio	Lower	Upper
130	100		
95	103.7	0.0	195.2



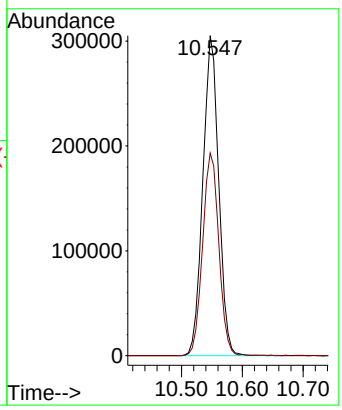


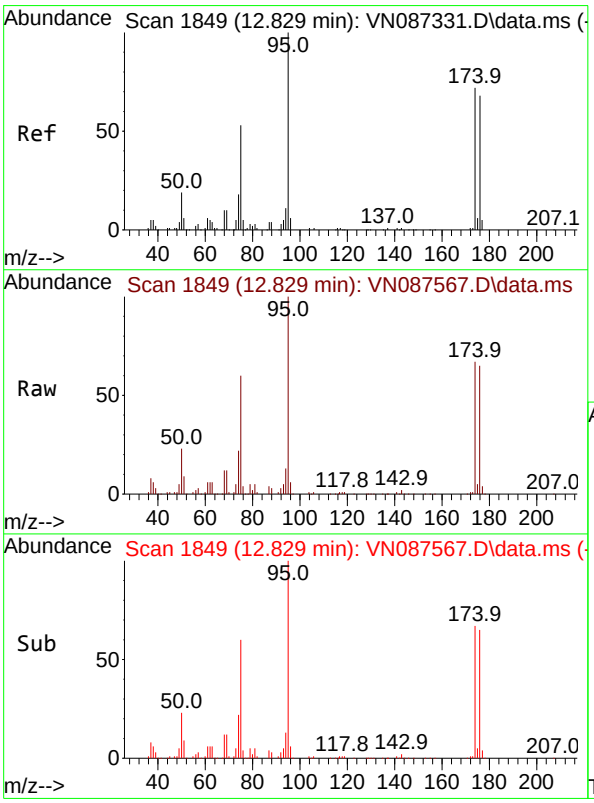
#50
Toluene-d8
Concen: 46.014 ug/l
RT: 10.547 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Tgt Ion: 98 Resp: 550924

Ion	Ratio	Lower	Upper
98	100		
100	64.8	52.1	78.1

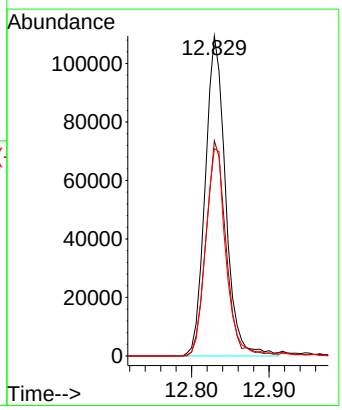


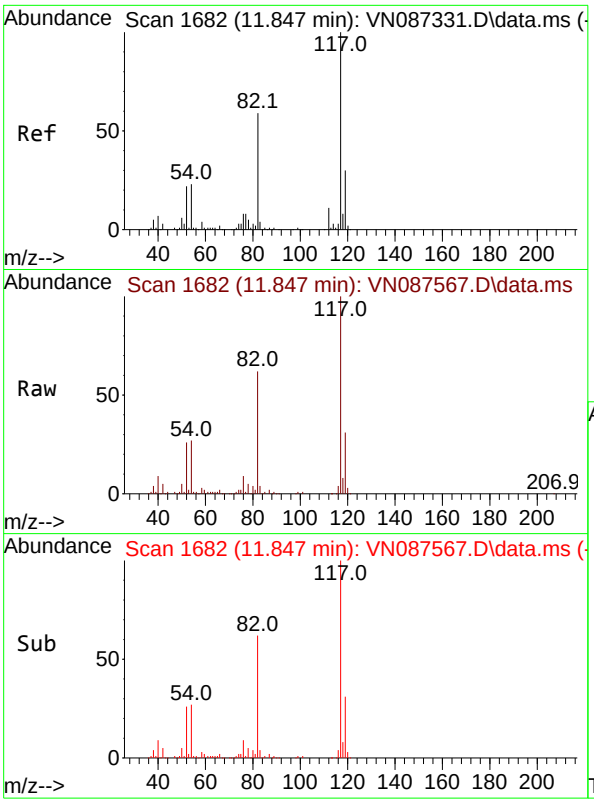


#62
4-Bromofluorobenzene
Concen: 45.043 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Tgt Ion: 95 Resp: 199247

Ion	Ratio	Lower	Upper
95	100		
174	66.4	0.0	149.4
176	64.9	0.0	141.2



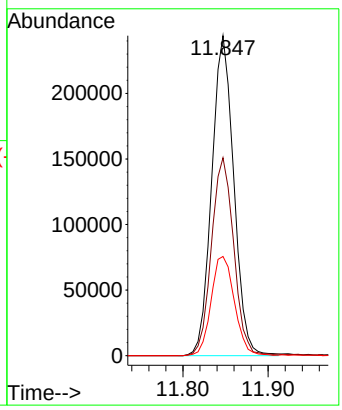


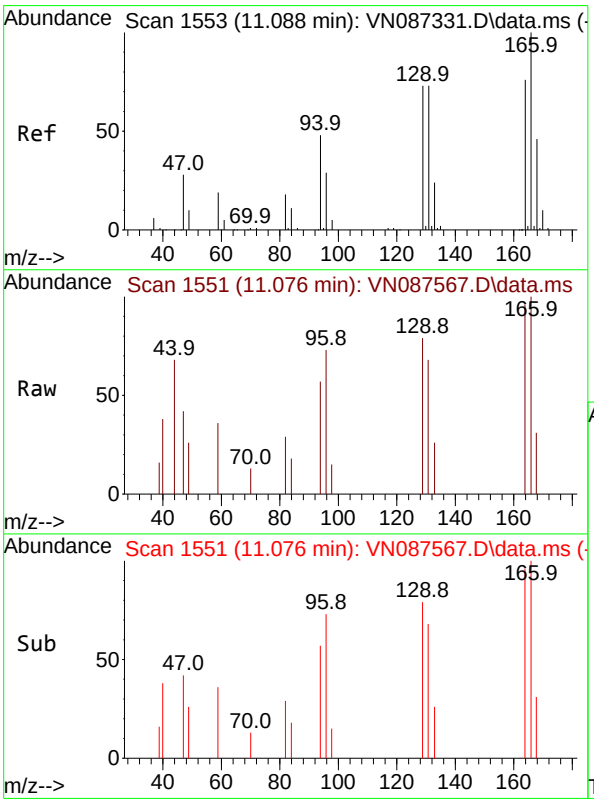
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Tgt Ion:117 Resp: 438933

Ion	Ratio	Lower	Upper
117	100		
82	61.8	47.4	71.2
119	31.0	23.8	35.8

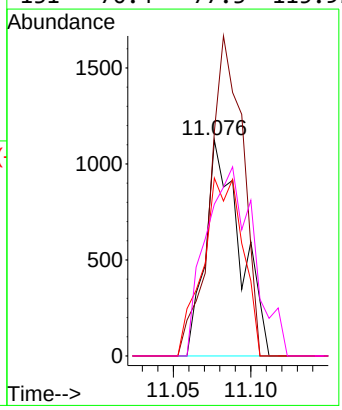


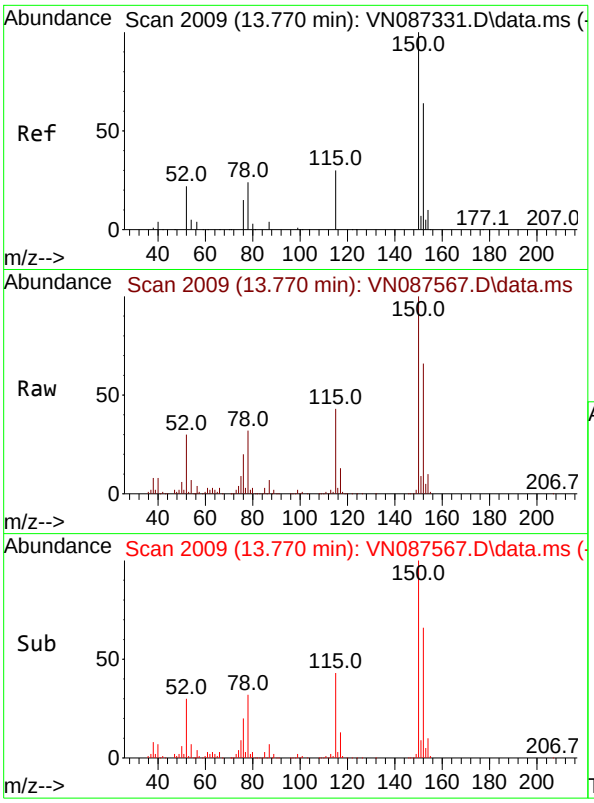


#64
Tetrachloroethene
Concen: 0.618 ug/l
RT: 11.076 min Scan# 1551
Delta R.T. -0.012 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Tgt Ion:164 Resp: 1746

Ion	Ratio	Lower	Upper
164	100		
166	103.9	105.5	158.3#
129	82.5	77.4	116.2
131	70.4	77.3	115.9#



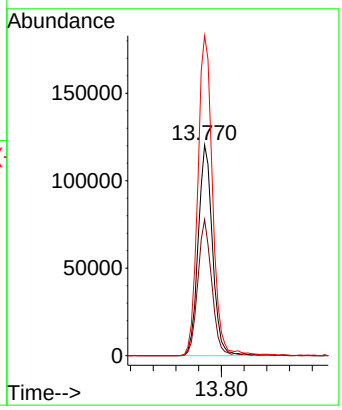


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087567.D
Acq: 14 Aug 2025 15:42

Instrument :
MSVOA_N
ClientSampleId :
RMW-02B-66.3-081225

Tgt Ion:152 Resp: 211146

Ion	Ratio	Lower	Upper
152	100		
115	63.3	31.1	93.5
150	156.0	0.0	349.0



Raw Data: **VN087568.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/12/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	08/12/25
Client Sample ID:	MW-17B-55.5-081225	SDG No.:	Q2842
Lab Sample ID:	Q2842-03	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087568.D	100	08/14/25 16:04	VN081425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	26.0	U	26.0	100	ug/L
75-35-4	1,1-Dichloroethene	23.0	U	23.0	100	ug/L
75-34-3	1,1-Dichloroethane	23.0	U	23.0	100	ug/L
156-59-2	cis-1,2-Dichloroethene	3000		19.0	100	ug/L
71-55-6	1,1,1-Trichloroethane	20.0	U	20.0	100	ug/L
71-43-2	Benzene	15.0	U	15.0	100	ug/L
107-06-2	1,2-Dichloroethane	22.0	U	22.0	100	ug/L
79-01-6	Trichloroethene	3600		9.30	100	ug/L
79-00-5	1,1,2-Trichloroethane	21.0	U	21.0	100	ug/L
127-18-4	Tetrachloroethene	56.3	J	23.0	100	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	56.6		70 (74) - 130 (125)	113%	SPK: 50
1868-53-7	Dibromofluoromethane	45.1		70 (75) - 130 (124)	90%	SPK: 50
2037-26-5	Toluene-d8	46.5		70 (86) - 130 (113)	93%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.5		70 (77) - 130 (121)	91%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	220000	8.212			
540-36-3	1,4-Difluorobenzene	488000	9.088			
3114-55-4	Chlorobenzene-d5	455000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	209000	13.77			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087568.D
Acq On : 14 Aug 2025 16:04
Operator : JC\MD
Sample : Q2842-03 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225

Quant Time: Aug 14 19:59:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

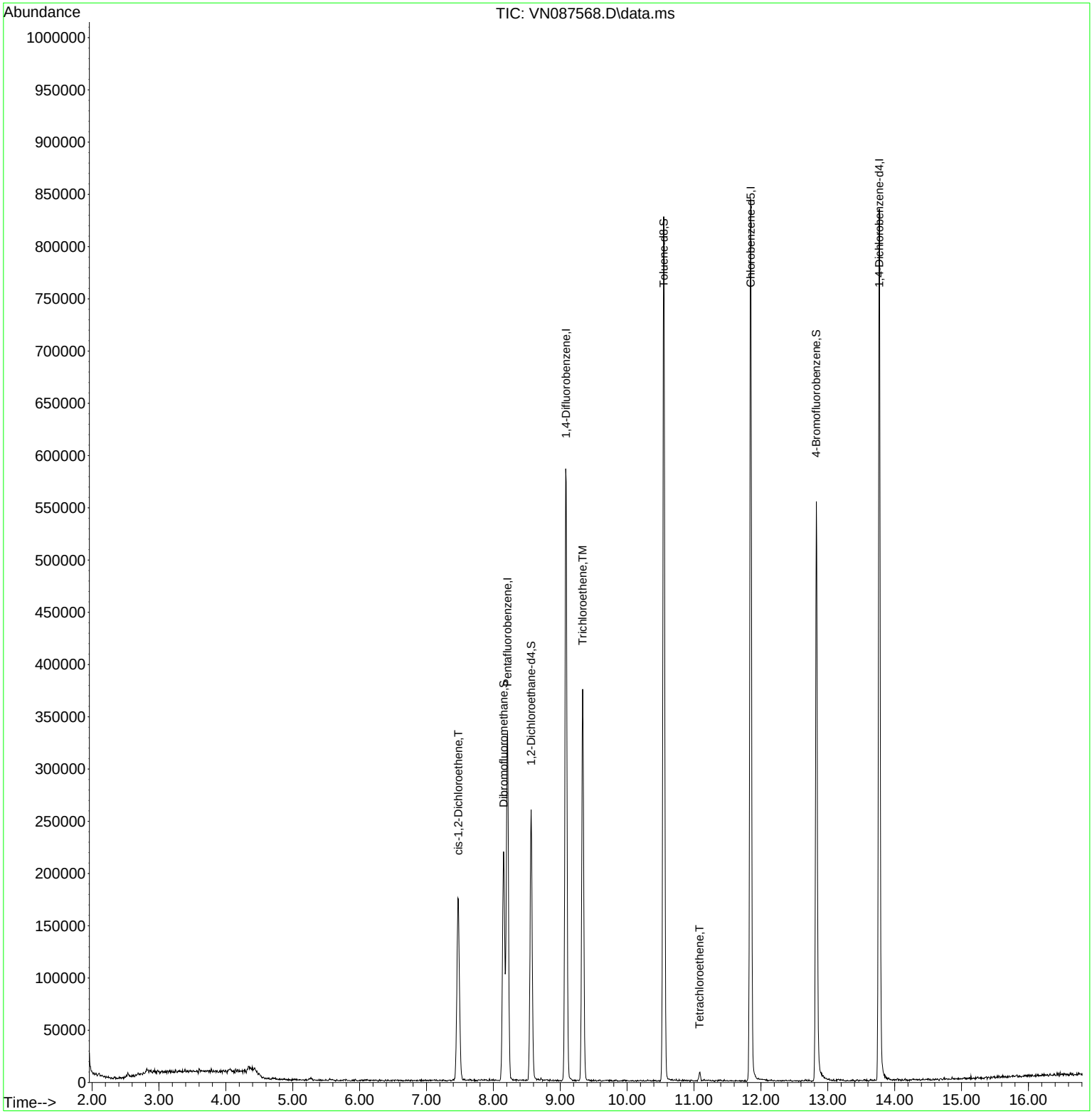
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	219937	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.088	114	487780	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	455235	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	209426	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	211074	56.560	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 113.120%			
35) Dibromofluoromethane	8.153	113	151622	45.062	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 90.120%			
50) Toluene-d8	10.547	98	557660	46.463	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 92.920%			
62) 4-Bromofluorobenzene	12.829	95	201626	45.470	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 90.940%			
Target Compounds						Qvalue
27) cis-1,2-Dichloroethene	7.477	96	99130	30.410	ug/l	93
44) Trichloroethene	9.335	130	123655	36.424	ug/l	98
64) Tetrachloroethene	11.082	164	1650	0.563	ug/l #	81

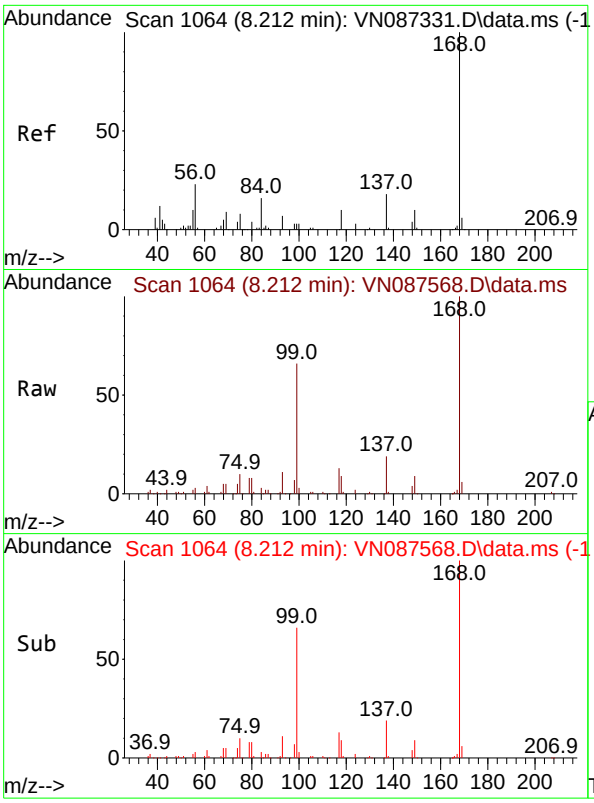
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087568.D
Acq On : 14 Aug 2025 16:04
Operator : JC\MD
Sample : Q2842-03 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225

Quant Time: Aug 14 19:59:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration



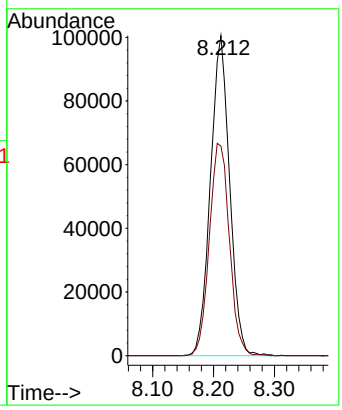


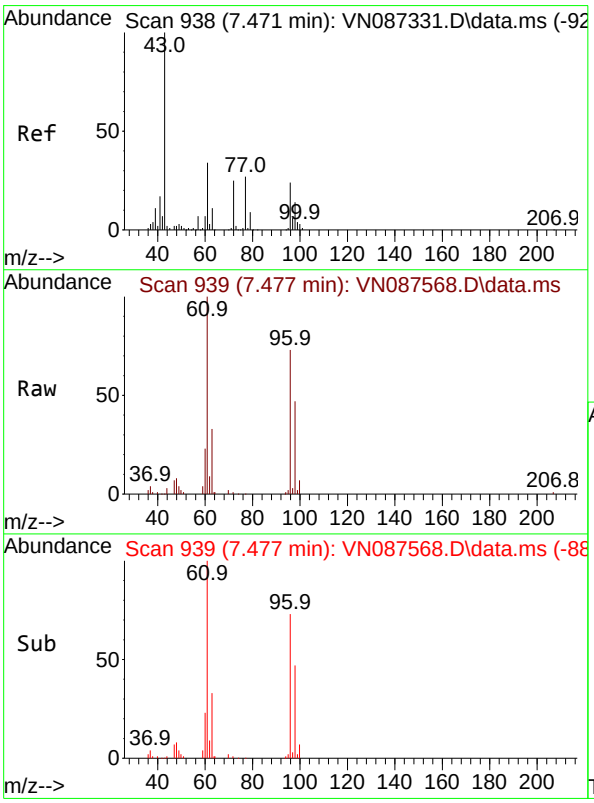
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225

Tgt Ion:168 Resp: 219937

Ion	Ratio	Lower	Upper
168	100		
99	65.5	47.9	71.9

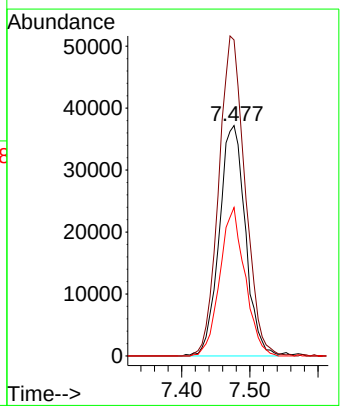


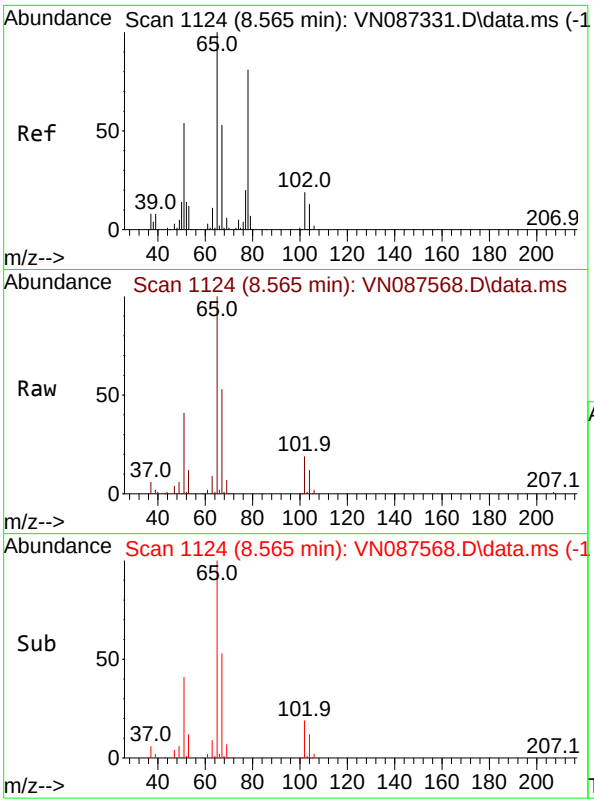


#27
cis-1,2-Dichloroethene
Concen: 30.410 ug/l
RT: 7.477 min Scan# 939
Delta R.T. 0.006 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Tgt Ion: 96 Resp: 99130

Ion	Ratio	Lower	Upper
96	100		
61	139.9	0.0	297.8
98	62.0	0.0	132.4



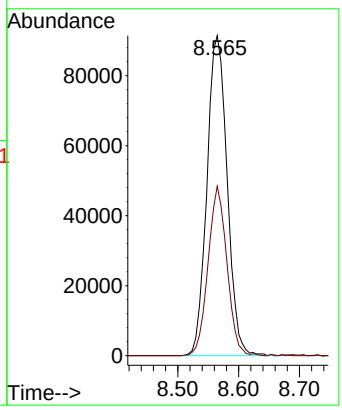


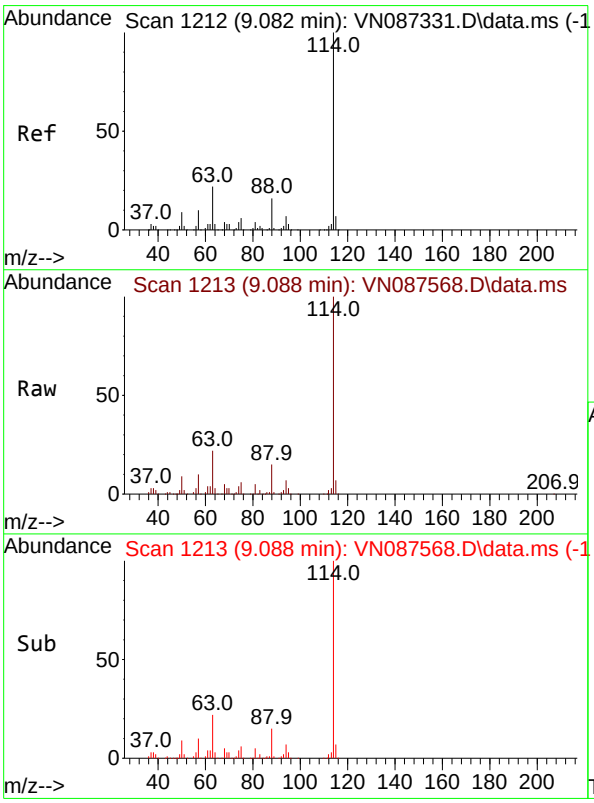
#33
1,2-Dichloroethane-d4
Concen: 56.560 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225

Tgt Ion: 65 Resp: 211074

Ion	Ratio	Lower	Upper
65	100		
67	49.4	0.0	104.0

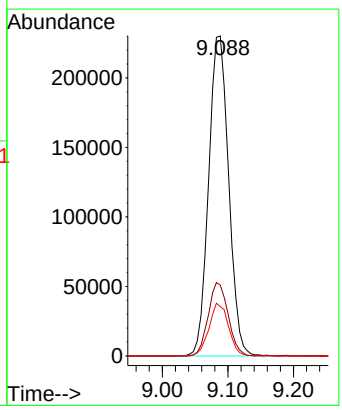


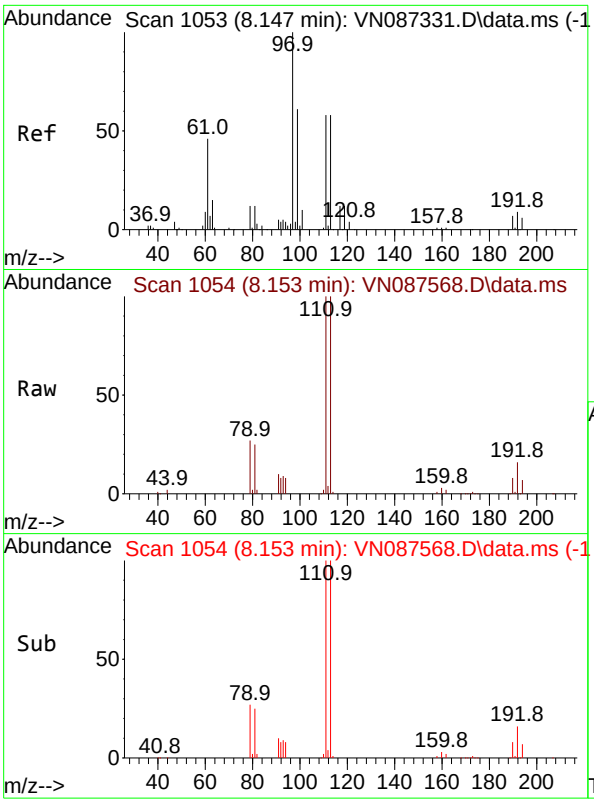


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.088 min Scan# 1213
Delta R.T. 0.006 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Tgt Ion:114 Resp: 487780

Ion	Ratio	Lower	Upper
114	100		
63	22.1	0.0	44.6
88	15.4	0.0	32.8



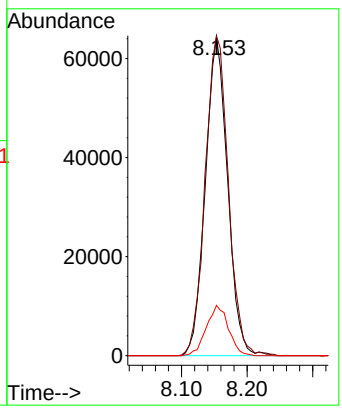


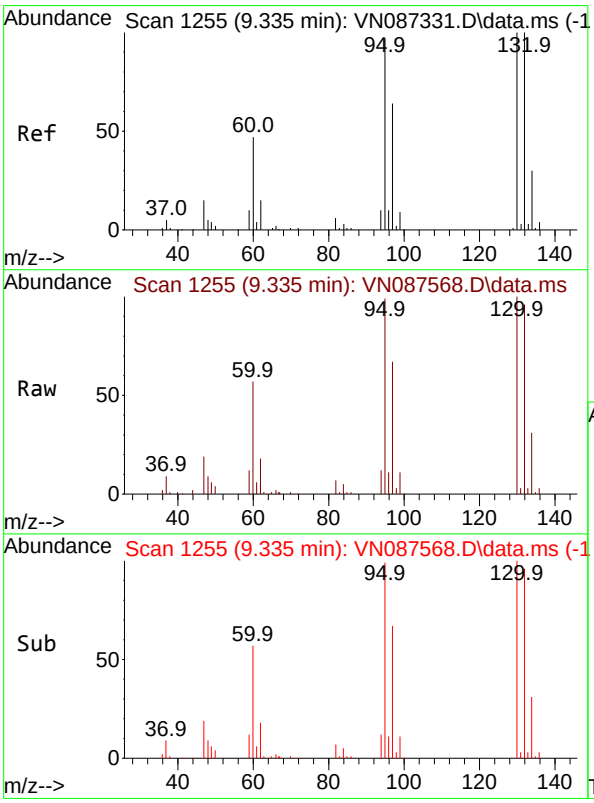
#35
Dibromofluoromethane
Concen: 45.062 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225

Tgt Ion:113 Resp: 151622

Ion	Ratio	Lower	Upper
113	100		
111	104.2	82.5	123.7
192	15.7	13.7	20.5

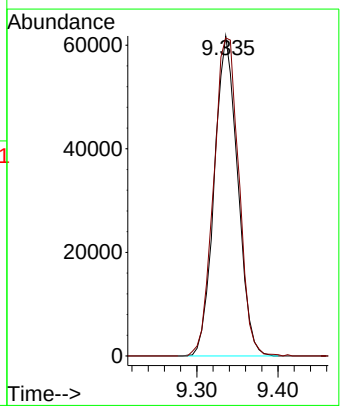


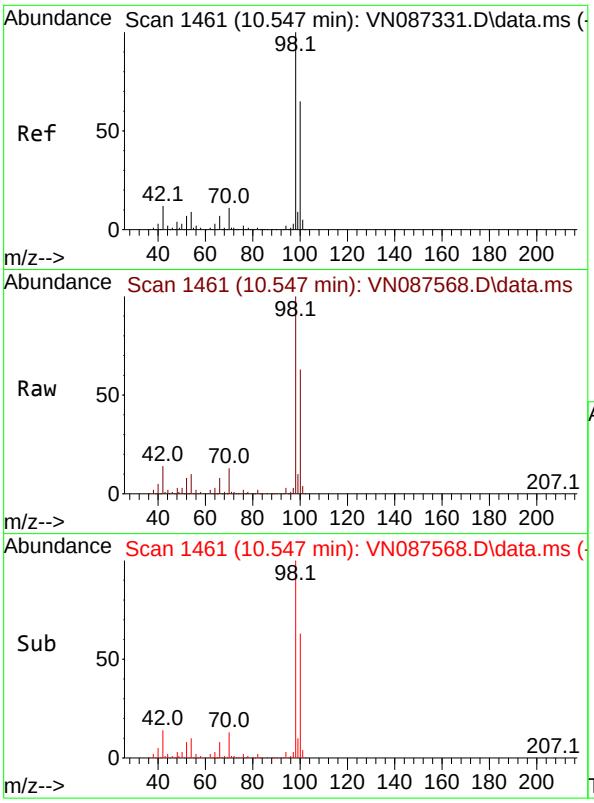


#44
Trichloroethene
Concen: 36.424 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Tgt Ion:130 Resp: 123655

Ion	Ratio	Lower	Upper
130	100		
95	99.4	0.0	195.2



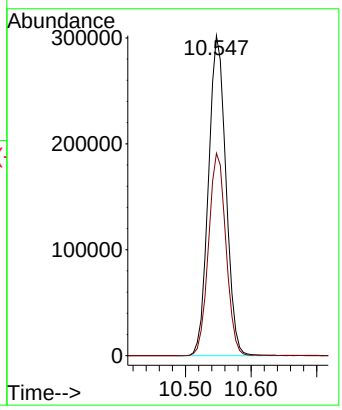


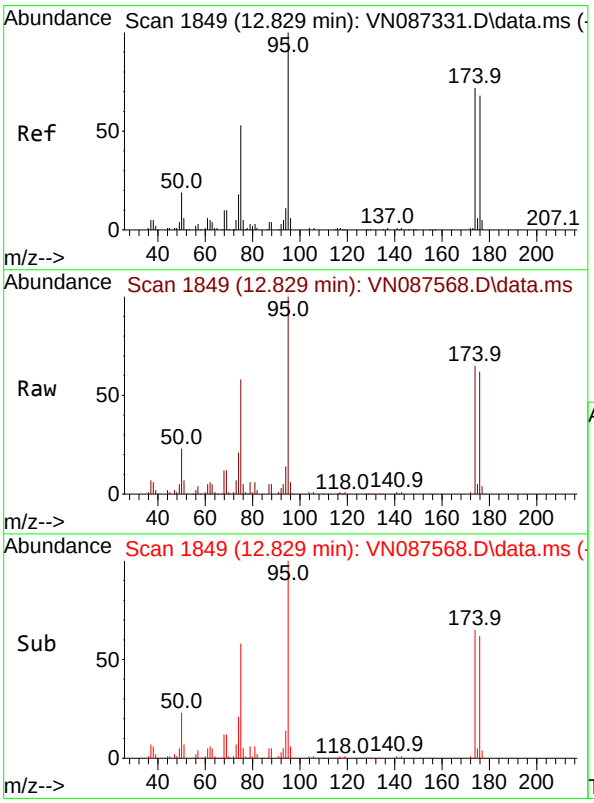
#50
Toluene-d8
Concen: 46.463 ug/l
RT: 10.547 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225

Tgt Ion: 98 Resp: 557660

Ion	Ratio	Lower	Upper
98	100		
100	63.3	52.1	78.1

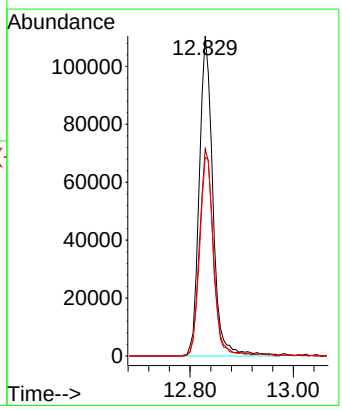


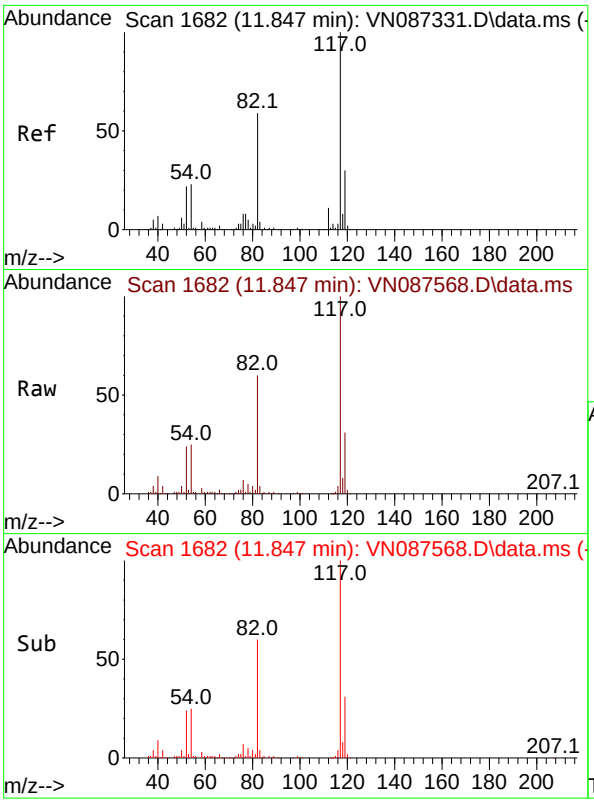


#62
4-Bromofluorobenzene
Concen: 45.470 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Tgt Ion: 95 Resp: 201626

Ion	Ratio	Lower	Upper
95	100		
174	65.3	0.0	149.4
176	63.8	0.0	141.2



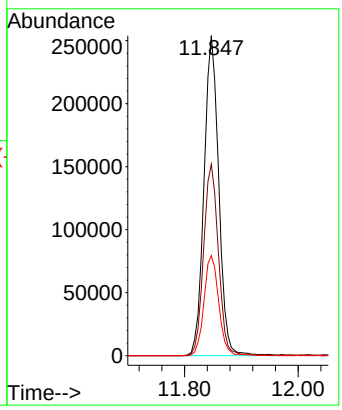


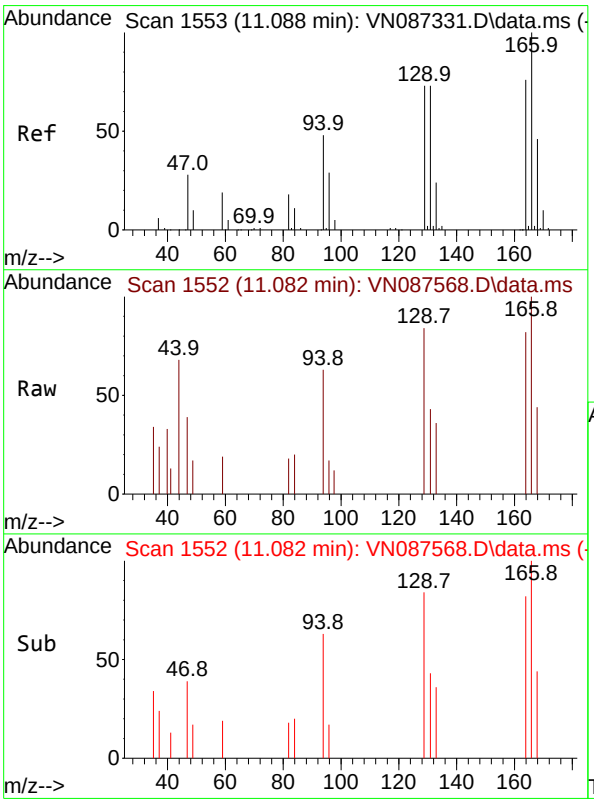
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225

Tgt Ion:117 Resp: 455235

Ion	Ratio	Lower	Upper
117	100		
82	59.8	47.4	71.2
119	31.3	23.8	35.8

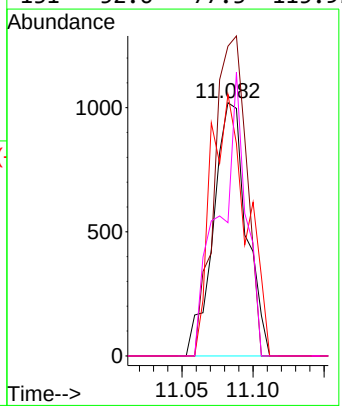


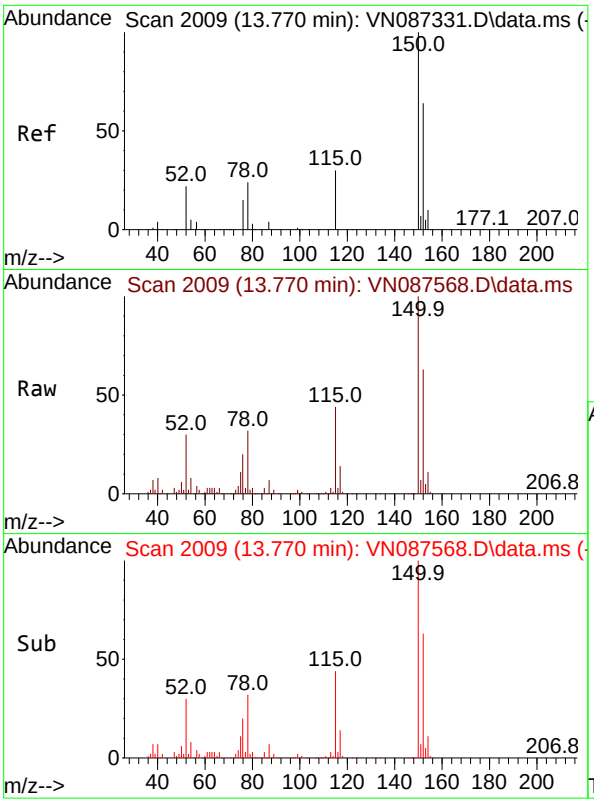


#64
Tetrachloroethene
Concen: 0.563 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.006 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Tgt Ion:164 Resp: 1650

Ion	Ratio	Lower	Upper
164	100		
166	122.4	105.5	158.3
129	103.2	77.4	116.2
131	52.6	77.3	115.9#



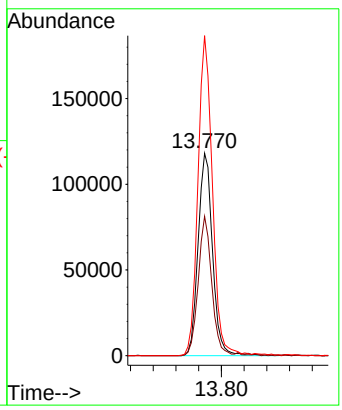


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087568.D
Acq: 14 Aug 2025 16:04

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225

Tgt Ion:152 Resp: 209426

Ion	Ratio	Lower	Upper
152	100		
115	64.3	31.1	93.5
150	157.1	0.0	349.0



Raw Data: **VN087565.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/12/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	08/12/25
Client Sample ID:	TB01-081225	SDG No.:	Q2842
Lab Sample ID:	Q2842-08	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087565.D	1	08/14/25 14:58	VN081425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
71-43-2	Benzene	0.15	U	0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.22	U	0.22	1.00	ug/L
79-01-6	Trichloroethene	0.090	U	0.090	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.1		70 (74) - 130 (125)	110%	SPK: 50
1868-53-7	Dibromofluoromethane	44.9		70 (75) - 130 (124)	90%	SPK: 50
2037-26-5	Toluene-d8	45.6		70 (86) - 130 (113)	91%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.2		70 (77) - 130 (121)	88%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	224000	8.212			
540-36-3	1,4-Difluorobenzene	499000	9.088			
3114-55-4	Chlorobenzene-d5	459000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	215000	13.77			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087565.D
Acq On : 14 Aug 2025 14:58
Operator : JC\MD
Sample : Q2842-08
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB01-081225

Quant Time: Aug 14 15:25:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

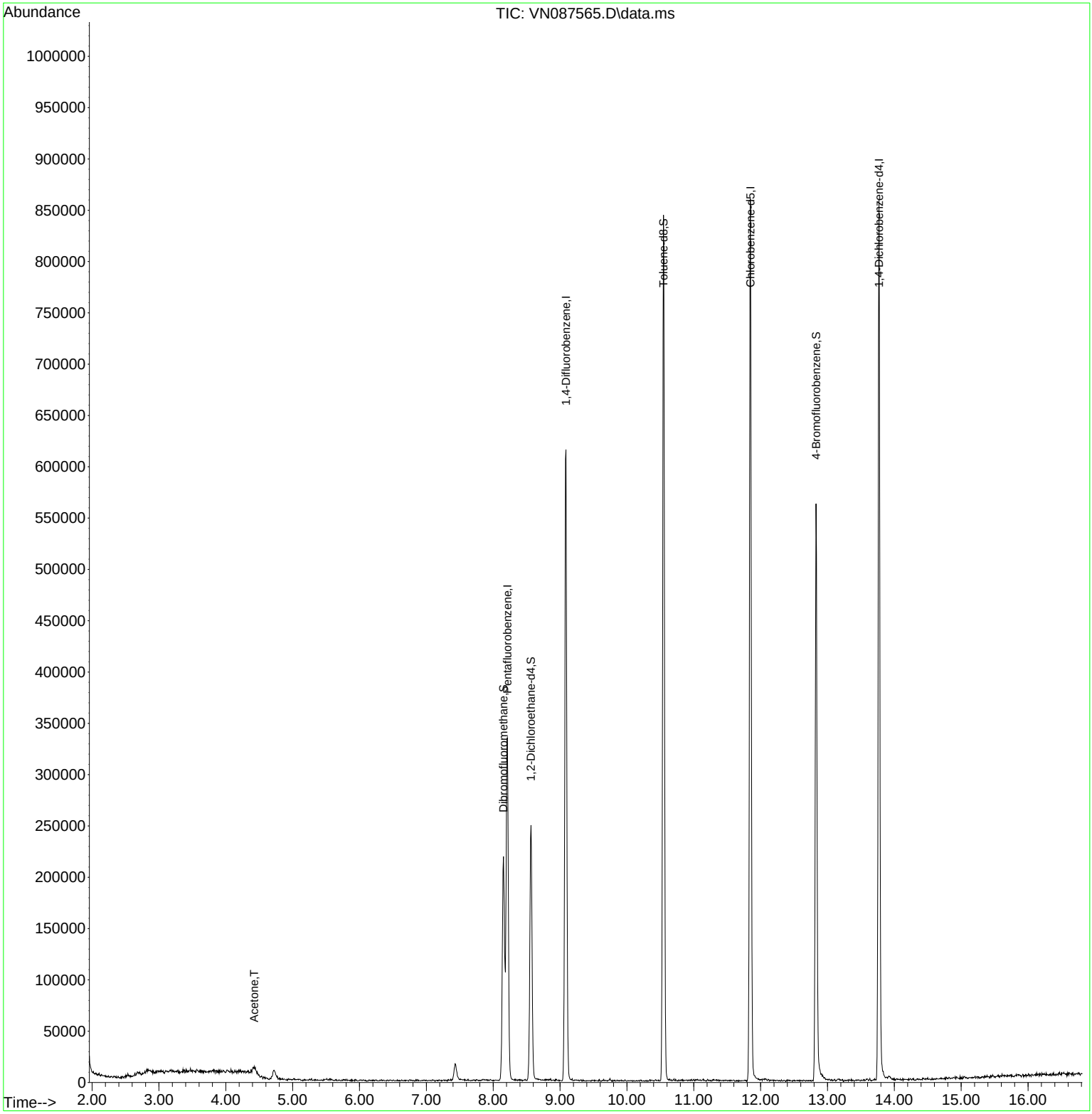
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	224412	50.000	ug/l	# 0.00
34) 1,4-Difluorobenzene	9.088	114	498664	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	458661	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	214662	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	209873	55.117	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 110.240%			
35) Dibromofluoromethane	8.153	113	154326	44.865	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 89.740%			
50) Toluene-d8	10.547	98	559384	45.589	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 91.180%			
62) 4-Bromofluorobenzene	12.829	95	200248	44.173	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 88.340%			
Target Compounds						Qvalue
16) Acetone	4.424	43	8905	4.988	ug/l	# 88

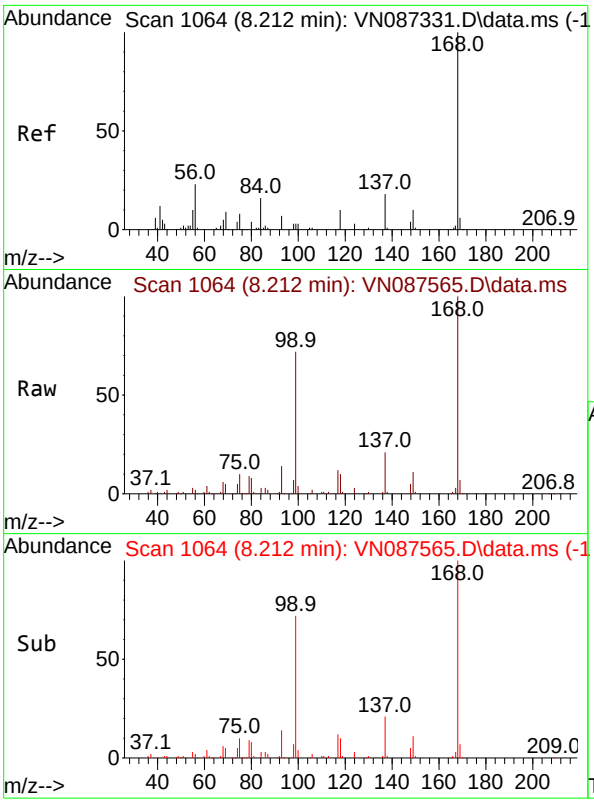
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087565.D
Acq On : 14 Aug 2025 14:58
Operator : JC\MD
Sample : Q2842-08
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB01-081225

Quant Time: Aug 14 15:25:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration



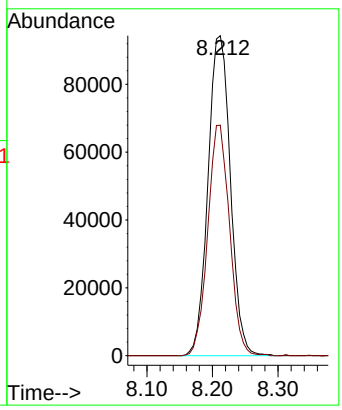


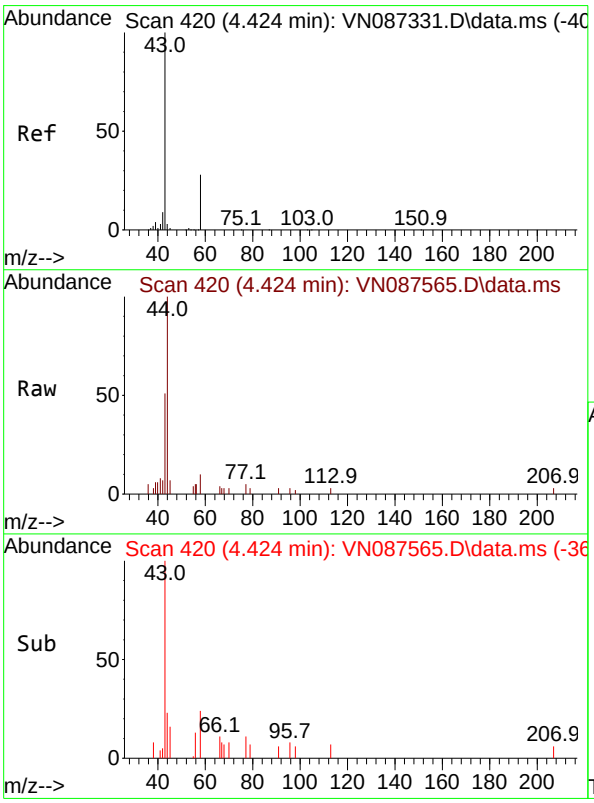
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Instrument :
MSVOA_N
ClientSampleId :
TB01-081225

Tgt Ion:168 Resp: 224412

Ion	Ratio	Lower	Upper
168	100		
99	72.0	47.9	71.9#

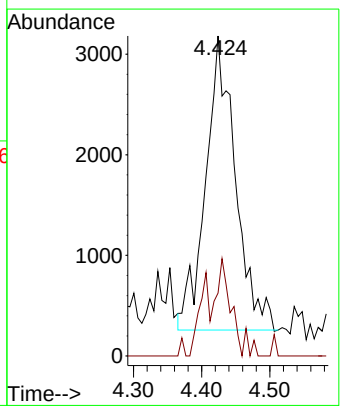


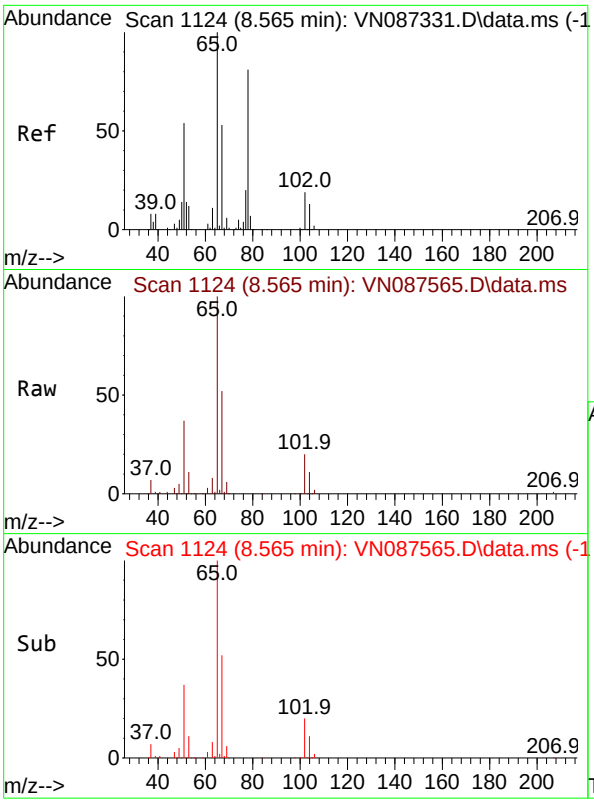


#16
Acetone
Concen: 4.988 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Tgt Ion: 43 Resp: 8905

Ion	Ratio	Lower	Upper
43	100		
58	21.4	22.3	33.5#



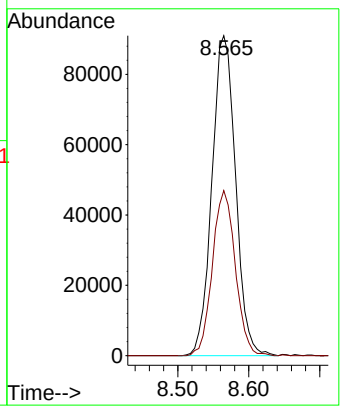


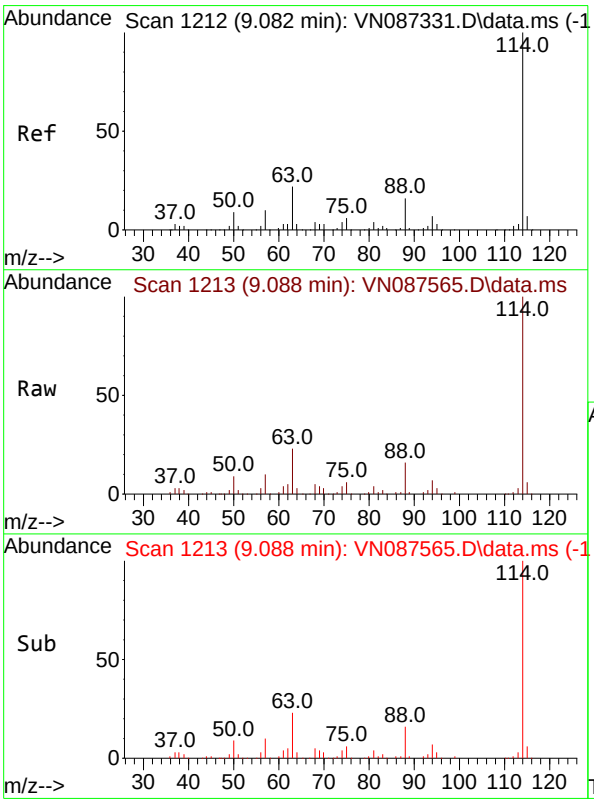
#33
1,2-Dichloroethane-d4
Concen: 55.117 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Instrument :
MSVOA_N
ClientSampleId :
TB01-081225

Tgt Ion: 65 Resp: 209873

Ion	Ratio	Lower	Upper
65	100		
67	50.1	0.0	104.0

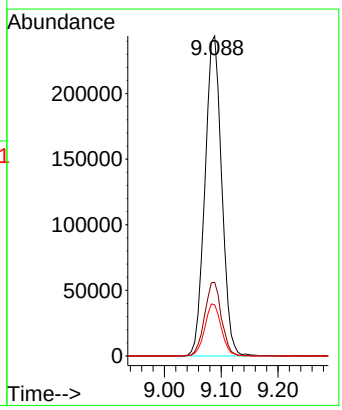


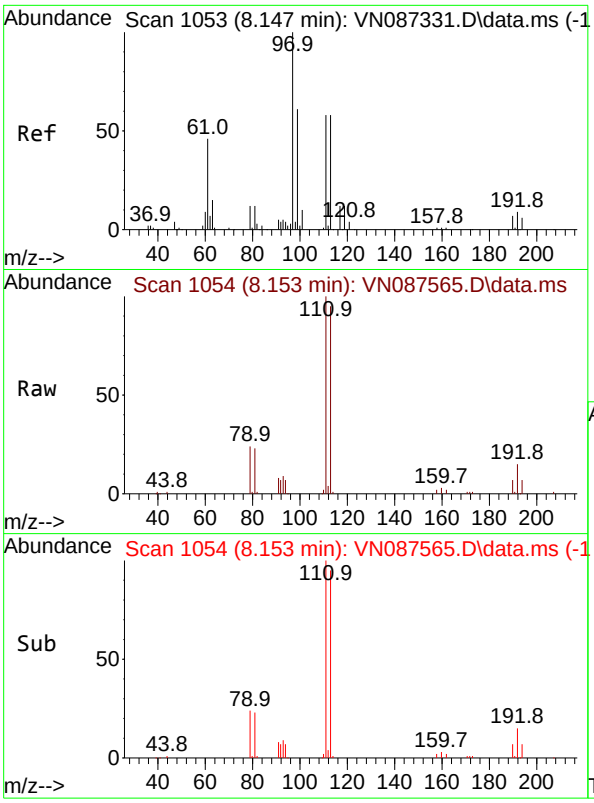


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.088 min Scan# 1213
Delta R.T. 0.006 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Tgt Ion:114 Resp: 498664

Ion	Ratio	Lower	Upper
114	100		
63	23.0	0.0	44.6
88	16.0	0.0	32.8



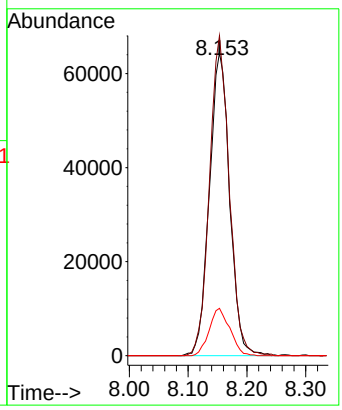


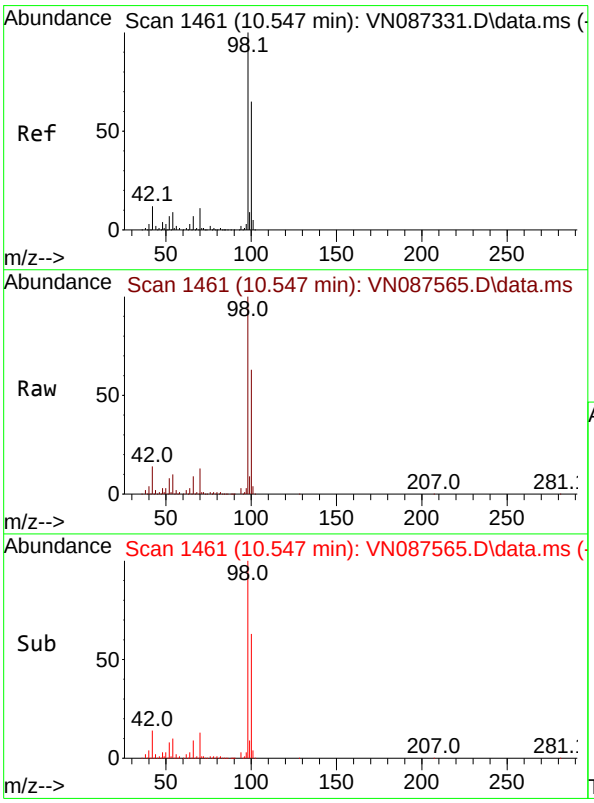
#35
Dibromofluoromethane
Concen: 44.865 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Instrument :
MSVOA_N
ClientSampleId :
TB01-081225

Tgt Ion:113 Resp: 154326

Ion	Ratio	Lower	Upper
113	100		
111	103.2	82.5	123.7
192	15.9	13.7	20.5

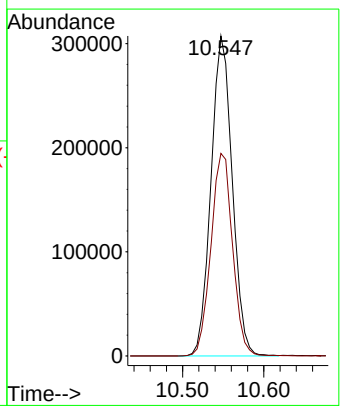


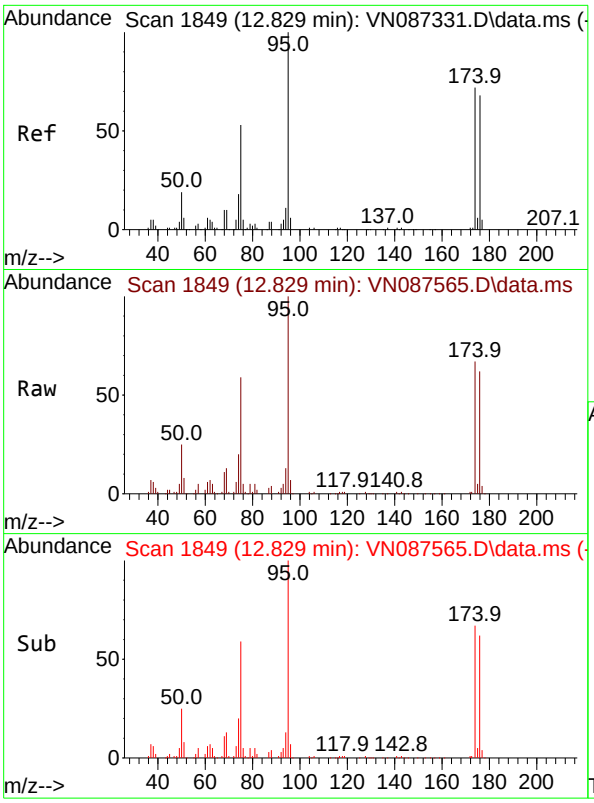


#50
Toluene-d8
Concen: 45.589 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Tgt Ion: 98 Resp: 559384

Ion	Ratio	Lower	Upper
98	100		
100	64.6	52.1	78.1



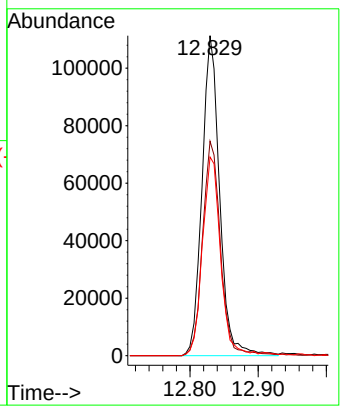


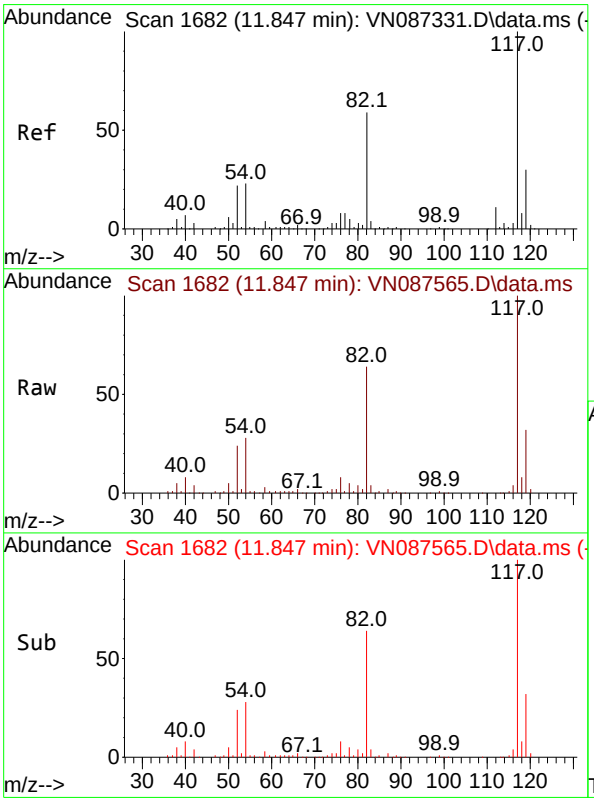
#62
4-Bromofluorobenzene
Concen: 44.173 ug/l
RT: 12.829 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Instrument :
MSVOA_N
ClientSampleId :
TB01-081225

Tgt Ion: 95 Resp: 200248

Ion	Ratio	Lower	Upper
95	100		
174	68.6	0.0	149.4
176	63.7	0.0	141.2

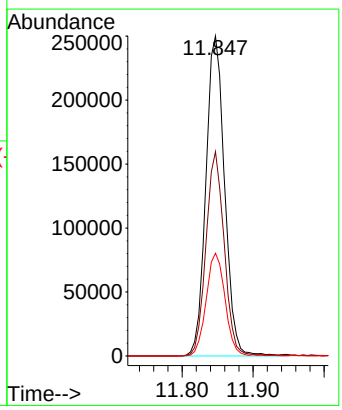


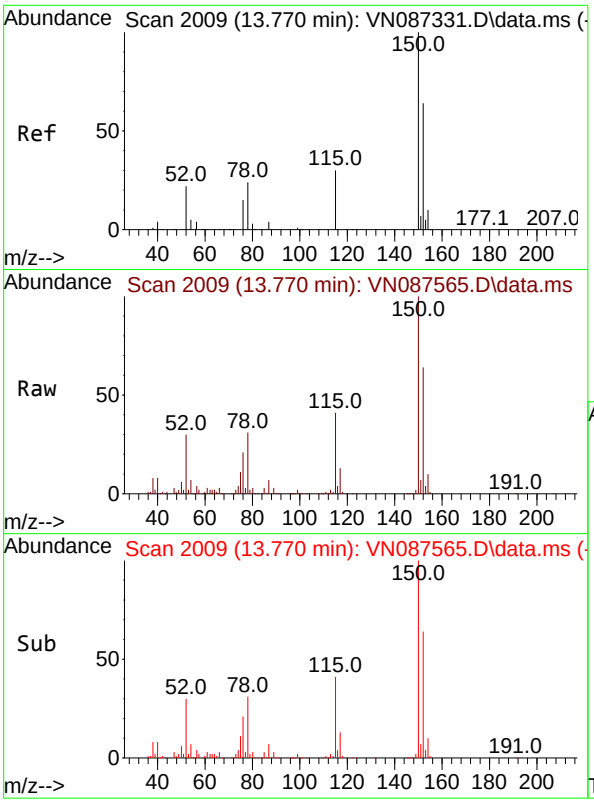


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1682
Delta R.T. -0.000 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Tgt Ion:117 Resp: 458661

Ion	Ratio	Lower	Upper
117	100		
82	63.8	47.4	71.2
119	32.1	23.8	35.8



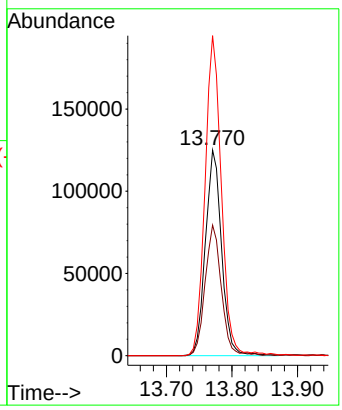


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087565.D
Acq: 14 Aug 2025 14:58

Instrument :
MSVOA_N
ClientSampleId :
TB01-081225

Tgt Ion:152 Resp: 214662

Ion	Ratio	Lower	Upper
152	100		
115	64.0	31.1	93.5
150	156.9	0.0	349.0



CALIBRATION SUMMARY

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: JACO05

Lab Code: ACE SDG No.: Q2842

Instrument ID: MSVOA_N Calibration Date(s): 07/16/2025 07/16/2025

Heated Purge: (Y/N) N Calibration Time(s): 17:05 18:54

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF001 = VN087328.D RRF005 = VN087329.D RRF020 = VN087330.D
RRF050 = VN087331.D RRF100 = VN087332.D RRF150 = VN087333.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Vinyl Chloride	0.554	0.665	0.623	0.728	0.692	0.720	0.664	9.9
1,1-Dichloroethene	0.635	0.641	0.553	0.545	0.514	0.537	0.571	9.4
1,1-Dichloroethane	1.304	1.325	1.254	1.222	1.185	1.212	1.250	4.4
cis-1,2-Dichloroethene	0.704	0.737	0.747	0.767	0.740	0.751	0.741	2.8
1,1,1-Trichloroethane	1.043	1.146	1.096	1.084	1.049	1.085	1.084	3.4
Benzene	1.370	1.430	1.502	1.553	1.483	1.499	1.473	4.3
1,2-Dichloroethane	0.553	0.565	0.569	0.567	0.544	0.552	0.558	1.8
Trichloroethene	0.373	0.330	0.337	0.356	0.339	0.352	0.348	4.5
1,1,2-Trichloroethane	0.367	0.364	0.365	0.367	0.357	0.354	0.362	1.6
Tetrachloroethene	0.329	0.338	0.317	0.320	0.310	0.317	0.322	3.2
1,2-Dichloroethane-d4		0.939	0.820	0.802	0.818	0.863	0.848	6.6
Dibromofluoromethane		0.347	0.341	0.332	0.348	0.356	0.345	2.6
Toluene-d8		1.180	1.176	1.224	1.255	1.316	1.230	4.7
4-Bromofluorobenzene		0.405	0.433	0.455	0.476	0.505	0.455	8.5

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Response Factor Report MSVOA_N_NEW

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N071625W.M
Title : SW846 8260
Last Update : Thu Jul 17 02:56:13 2025
Response Via : Initial Calibration

Calibration Files
1 =VN087328.D 5 =VN087329.D 20 =VN087330.D 50 =VN087331.D 100 =VN087332.D 150 =VN087333.D

		Compound	1	5	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.447	0.443	0.443	0.623	0.606	0.625	0.531	17.98
3)	P	Chloromethane	0.714	0.659	0.588	0.690	0.659	0.698	0.668	6.70
4)	C	Vinyl Chloride	0.554	0.665	0.623	0.728	0.692	0.720	0.664	9.93#
5)	T	Bromomethane		0.328	0.308	0.355	0.356	0.370	0.344	7.22
6)	T	Chloroethane	0.396	0.485	0.431	0.441	0.415	0.429	0.433	6.96
7)	T	Trichlorofluor...	0.959	0.975	0.963	1.025	0.960	1.007	0.981	2.83
8)	T	Diethyl Ether	0.335	0.391	0.399	0.395	0.371	0.393	0.381	6.40
9)	T	1,1,2-Trichlor...	0.463	0.495	0.539	0.525	0.491	0.509	0.504	5.34
10)	T	Methyl Iodide		0.288	0.360	0.494	0.554	0.564	0.452	27.17
11)	T	Tert butyl alc...		0.164	0.155	0.161	0.161	0.164	0.161	2.41
12)	CM	1,1-Dichloroet...	0.635	0.641	0.553	0.545	0.514	0.537	0.571	9.41#
13)	T	Acrolein		0.140	0.112	0.121	0.130	0.143	0.129	9.85
14)	T	Allyl chloride	0.949	0.978	1.134	1.002	0.995	1.141	1.033	8.02
15)	T	Acrylonitrile	0.419	0.419	0.455	0.453	0.436	0.440	0.437	3.57
16)	T	Acetone	0.455	0.426	0.393	0.387	0.361	0.366	0.398	9.15
17)	T	Carbon Disulfide	1.686	1.685	1.669	1.733	1.643	1.739	1.693	2.20
18)	T	Methyl Acetate	1.007	1.052	0.991	0.991	0.962	0.993	0.999	2.99
19)	T	Methyl tert-bu...	1.911	2.099	2.106	2.167	2.129	2.213	2.104	4.93
20)	T	Methylene Chlo...	1.107	0.788	0.700	0.672	0.655	0.672	0.766	22.70
21)	T	trans-1,2-Dich...	0.667	0.669	0.643	0.653	0.618	0.613	0.644	3.69
22)	T	Diisopropyl ether	1.797	2.199	2.353	2.286	2.165	2.201	2.167	8.94
23)	T	Vinyl Acetate	1.421	1.685	2.101	2.114	2.007	2.044	1.895	14.81
24)	P	1,1-Dichloroet...	1.304	1.325	1.254	1.222	1.185	1.212	1.250	4.38
25)	T	2-Butanone	0.552	0.608	0.650	0.643	0.617	0.618	0.615	5.65
26)	T	2,2-Dichloropr...	1.013	0.963	1.001	0.982	0.933	0.941	0.972	3.34
27)	T	cis-1,2-Dichlo...	0.704	0.737	0.747	0.767	0.740	0.751	0.741	2.83
28)	T	Bromochloromet...	0.596	0.640	0.578	0.595	0.597	0.584	0.598	3.64
29)	T	Tetrahydrofuran	0.360	0.397	0.413	0.425	0.400	0.401	0.399	5.52
30)	C	Chloroform	1.181	1.299	1.303	1.279	1.214	1.234	1.251	3.97#
31)	T	Cyclohexane		1.148	1.039	1.046	0.981	1.002	1.043	6.16
32)	T	1,1,1-Trichlor...	1.043	1.146	1.096	1.084	1.049	1.085	1.084	3.42
33)	S	1,2-Dichloroet...		0.939	0.820	0.802	0.818	0.863	0.848	6.56
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.347	0.341	0.332	0.348	0.356	0.345	2.55
36)	T	1,1-Dichloropr...	0.387	0.437	0.459	0.487	0.477	0.487	0.456	8.47
37)	T	Ethyl Acetate	0.587	0.671	0.655	0.706	0.660	0.669	0.658	5.94
38)	T	Carbon Tetrach...	0.453	0.523	0.498	0.517	0.504	0.518	0.502	5.10
39)	T	Methylcyclohexane	0.447	0.442	0.482	0.529	0.519	0.541	0.493	8.62
40)	TM	Benzene	1.370	1.430	1.502	1.553	1.483	1.499	1.473	4.34
41)	T	Methacrylonitrile	0.289	0.330	0.362	0.368	0.353	0.363	0.344	8.81
42)	TM	1,2-Dichloroet...	0.553	0.565	0.569	0.567	0.544	0.552	0.558	1.78
43)	T	Isopropyl Acetate	0.938	0.999	1.029	1.071	1.038	1.055	1.022	4.64
44)	TM	Trichloroethene	0.373	0.330	0.337	0.356	0.339	0.352	0.348	4.49
45)	C	1,2-Dichloropr...	0.335	0.367	0.395	0.395	0.376	0.378	0.374	5.90#
46)	T	Dibromomethane	0.265	0.296	0.279	0.289	0.274	0.278	0.280	3.94
47)	T	Bromodichlorom...	0.568	0.572	0.559	0.569	0.553	0.565	0.564	1.21
48)	T	Methyl methacr...	0.372	0.412	0.475	0.505	0.493	0.503	0.460	12.06
49)	T	1,4-Dioxane	0.006	0.007	0.007	0.008	0.008	0.008	0.007	12.52
50)	S	Toluene-d8		1.180	1.176	1.224	1.255	1.316	1.230	4.72
51)	T	4-Methyl-2-Pen...	0.551	0.641	0.685	0.689	0.658	0.652	0.646	7.79
52)	CM	Toluene	0.774	0.849	0.940	0.963	0.916	0.929	0.895	7.93#
53)	T	t-1,3-Dichloro...	0.459	0.536	0.586	0.621	0.607	0.619	0.571	11.08
54)	T	cis-1,3-Dichlo...	0.489	0.564	0.602	0.632	0.620	0.632	0.590	9.40
55)	T	1,1,2-Trichlor...	0.367	0.364	0.365	0.367	0.357	0.354	0.362	1.57
56)	T	Ethyl methacry...	0.348	0.486	0.567	0.627	0.626	0.656	0.552	21.20

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N071625W.M

57)	T	1,3-Dichloropr...	0.556	0.621	0.652	0.655	0.636	0.640	0.627	5.82
58)	T	2-Chloroethyl ...	0.220	0.273	0.303	0.346	0.310	0.332	0.297	15.20
59)	T	2-Hexanone	0.279	0.373	0.465	0.495	0.481	0.479	0.429	19.95
60)	T	Dibromochlorom...	0.352	0.416	0.425	0.430	0.424	0.433	0.413	7.39
61)	T	1,2-Dibromoethane	0.367	0.373	0.391	0.385	0.381	0.389	0.381	2.49
62)	S	4-Bromofluorob...		0.405	0.433	0.455	0.476	0.505	0.455	8.46
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.329	0.338	0.317	0.320	0.310	0.317	0.322	3.16
65)	PM	Chlorobenzene	1.139	1.131	1.133	1.119	1.092	1.122	1.123	1.48
66)	T	1,1,1,2-Tetrac...	0.324	0.406	0.393	0.393	0.381	0.394	0.382	7.64
67)	C	Ethyl Benzene	1.643	1.738	1.882	1.942	1.905	1.979	1.848	7.04#
68)	T	m/p-Xylenes	0.541	0.646	0.717	0.758	0.734	0.756	0.692	12.20
69)	T	o-Xylene	0.491	0.606	0.702	0.723	0.710	0.734	0.661	14.39
70)	T	Styrene	0.726	1.032	1.186	1.255	1.217	1.257	1.112	18.59
71)	P	Bromoform	0.246	0.302	0.314	0.328	0.322	0.337	0.308	10.69
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	2.524	2.889	3.242	3.396	3.302	3.529	3.147	11.86
74)	T	N-amyl acetate	1.309	1.256	1.249	1.138	1.378	1.515	1.307	9.83
75)	P	1,1,2,2-Tetrac...	1.159	1.181	1.228	1.207	1.156	1.174	1.184	2.37
76)	T	1,2,3-Trichlor...	1.208	1.238	1.101	1.191	0.969	1.019	1.121	9.79
77)	T	Bromobenzene	0.669	0.791	0.862	0.869	0.830	0.876	0.816	9.63
78)	T	n-propylbenzene	3.252	3.716	4.089	4.294	4.109	4.295	3.959	10.25
79)	T	2-Chlorotoluene	2.085	2.348	2.535	2.533	2.493	2.605	2.433	7.84
80)	T	1,3,5-Trimethy...	2.069	2.517	2.816	2.928	2.799	2.959	2.681	12.62
81)	T	trans-1,4-Dich...		0.327	0.448	0.404	0.417	0.453	0.410	12.30
82)	T	4-Chlorotoluene	2.225	2.460	2.618	2.647	2.552	2.699	2.533	6.79
83)	T	tert-Butylbenzene	1.781	2.068	2.303	2.423	2.376	2.485	2.239	11.92
84)	T	1,2,4-Trimethy...	2.201	2.411	2.906	3.003	2.872	3.034	2.738	12.64
85)	T	sec-Butylbenzene	3.120	3.136	3.460	3.565	3.387	3.570	3.373	5.98
86)	T	p-Isopropyltol...	2.081	2.417	2.806	2.991	2.893	3.032	2.703	13.90
87)	T	1,3-Dichlorobe...	1.448	1.592	1.651	1.657	1.588	1.674	1.602	5.19
88)	T	1,4-Dichlorobe...	1.807	1.709	1.742	1.703	1.627	1.677	1.711	3.56
89)	T	n-Butylbenzene	2.278	2.425	2.648	2.761	2.614	2.762	2.581	7.49
90)	T	Hexachloroethane	0.593	0.564	0.562	0.576	0.552	0.590	0.573	2.86
91)	T	1,2-Dichlorobe...	1.303	1.534	1.596	1.577	1.510	1.583	1.517	7.23
92)	T	1,2-Dibromo-3-...	0.339	0.325	0.304	0.302	0.290	0.305	0.311	5.76
93)	T	1,2,4-Trichlor...	0.761	0.860	0.875	0.937	0.921	0.994	0.891	8.94
94)	T	Hexachlorobuta...	0.351	0.337	0.324	0.329	0.316	0.331	0.331	3.57
95)	T	Naphthalene	2.486	2.658	3.113	3.441	3.451	3.797	3.158	16.01
96)	T	1,2,3-Trichlor...	0.803	0.844	0.887	0.922	0.917	0.992	0.894	7.37

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087328.D
Acq On : 16 Jul 2025 17:05
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:16:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	8.212	168	166177	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	9.082	114	312474	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.847	117	274838	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	128808	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	0.000	65	0d	0.000	ug/l		
Spiked Amount 50.000	Range 74 - 125		Recovery =	0.000%#			
35) Dibromofluoromethane	0.000	113	0d	0.000	ug/l		
Spiked Amount 50.000	Range 75 - 124		Recovery =	0.000%#			
50) Toluene-d8	0.000	98	0d	0.000	ug/l		
Spiked Amount 50.000	Range 86 - 113		Recovery =	0.000%#			
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l		
Spiked Amount 50.000	Range 77 - 121		Recovery =	0.000%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.142	85	1484	0.841	ug/l		98
3) Chloromethane	2.389	50	2372	1.069	ug/l		96
4) Vinyl Chloride	2.542	62	1841	0.835	ug/l	#	68
6) Chloroethane	3.153	64	1316	0.915	ug/l		93
7) Trichlorofluoromethane	3.506	101	3187	0.977	ug/l		92
8) Diethyl Ether	3.965	74	1114	0.880	ug/l		79
9) 1,1,2-Trichlorotrifluo...	4.371	101	1539	0.919	ug/l	#	31
12) 1,1-Dichloroethene	4.347	96	2112	1.113	ug/l	#	53
14) Allyl chloride	5.012	41	3155m	0.919	ug/l		
15) Acrylonitrile	5.712	53	6965	4.794	ug/l	#	80
16) Acetone	4.430	43	7566m	5.660	ug/l		
17) Carbon Disulfide	4.700	76	5602	0.996	ug/l	#	71
18) Methyl Acetate	5.018	43	3347	1.008	ug/l	#	74
19) Methyl tert-butyl Ether	5.789	73	6351m	0.908	ug/l		
20) Methylene Chloride	5.271	84	3679	1.019	ug/l	#	74
21) trans-1,2-Dichloroethene	5.777	96	2216	1.036	ug/l	#	53
22) Diisopropyl ether	6.659	45	5973	0.829	ug/l	#	75
23) Vinyl Acetate	6.600	43	23617	3.749	ug/l	#	93
24) 1,1-Dichloroethane	6.547	63	4333	1.043	ug/l	#	83
25) 2-Butanone	7.477	43	9174	4.491	ug/l		99
26) 2,2-Dichloropropane	7.471	77	3368	1.043	ug/l	#	67
27) cis-1,2-Dichloroethene	7.471	96	2340	0.950	ug/l		99
28) Bromochloromethane	7.794	49	1982	0.997	ug/l	#	85
29) Tetrahydrofuran	7.835	42	5981	4.507	ug/l		94
30) Chloroform	7.953	83	3924	0.943	ug/l	#	71
32) 1,1,1-Trichloroethane	8.165	97	3468	0.963	ug/l	#	45
36) 1,1-Dichloropropene	8.353	75	2421	0.850	ug/l		96
37) Ethyl Acetate	7.547	43	3670	0.892	ug/l	#	82
38) Carbon Tetrachloride	8.341	117	2833	0.903	ug/l	#	83
39) Methylcyclohexane	9.588	83	2794	0.906	ug/l	#	86
40) Benzene	8.588	78	8561	0.930	ug/l		97
41) Methacrylonitrile	7.771	41	1805	0.839	ug/l	#	87
42) 1,2-Dichloroethane	8.653	62	3456	0.990	ug/l		89
43) Isopropyl Acetate	8.677	43	5865	0.919	ug/l	#	95
44) Trichloroethene	9.341	130	2331	1.072	ug/l		70
45) 1,2-Dichloropropane	9.606	63	2094	0.895	ug/l	#	86

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087328.D
Acq On : 16 Jul 2025 17:05
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:16:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) Dibromomethane	9.694	93	1657	0.946	ug/l	#	87
47) Bromodichloromethane	9.871	83	3549	1.006	ug/l	#	91
48) Methyl methacrylate	9.671	41	2322	0.808	ug/l		94
49) 1,4-Dioxane	9.682	88	696	15.810	ug/l	#	53
51) 4-Methyl-2-Pentanone	10.429	43	17216	4.263	ug/l		91
52) Toluene	10.612	92	4834	0.864	ug/l		91
53) t-1,3-Dichloropropene	10.818	75	2869	0.804	ug/l	#	56
54) cis-1,3-Dichloropropene	10.294	75	3059	0.830	ug/l		94
55) 1,1,2-Trichloroethane	11.000	97	2294	1.013	ug/l	#	83
56) Ethyl methacrylate	10.859	69	2173	1.217	ug/l	#	90
57) 1,3-Dichloropropane	11.141	76	3477	0.888	ug/l		95
58) 2-Chloroethyl Vinyl ether	10.141	63	6887	3.707	ug/l		96
59) 2-Hexanone	11.182	43	8707	3.250	ug/l		87
60) Dibromochloromethane	11.347	129	2200	0.852	ug/l		82
61) 1,2-Dibromoethane	11.459	107	2291	0.962	ug/l		90
64) Tetrachloroethene	11.088	164	1807	1.022	ug/l	#	75
65) Chlorobenzene	11.870	112	6259	1.014	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.941	131	1783	0.850	ug/l	#	50
67) Ethyl Benzene	11.941	91	9031	0.889	ug/l		92
68) m/p-Xylenes	12.053	106	5952	1.565	ug/l		97
69) o-Xylene	12.388	106	2700	0.743	ug/l		91
70) Styrene	12.400	104	3989	0.653	ug/l		91
71) Bromoform	12.559	173	1351	0.797	ug/l	#	94
73) Isopropylbenzene	12.682	105	6501	0.802	ug/l		95
74) N-amyl acetate	12.841	43	3372m	1.065	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.917	83	2986	0.979	ug/l	#	78
76) 1,2,3-Trichloropropane	12.976	75	3113m	1.089	ug/l		
77) Bromobenzene	12.953	156	1724	0.820	ug/l		79
78) n-propylbenzene	13.017	91	8378	0.821	ug/l		95
79) 2-Chlorotoluene	13.100	91	5372	0.857	ug/l		93
80) 1,3,5-Trimethylbenzene	13.147	105	5329	0.772	ug/l		93
82) 4-Chlorotoluene	13.200	91	5733	0.878	ug/l		96
83) tert-Butylbenzene	13.412	119	4588	0.795	ug/l		90
84) 1,2,4-Trimethylbenzene	13.464	105	5671	0.804	ug/l		87
85) sec-Butylbenzene	13.594	105	8037	0.925	ug/l		97
86) p-Isopropyltoluene	13.712	119	5360	0.770	ug/l		92
87) 1,3-Dichlorobenzene	13.712	146	3731	0.904	ug/l		89
88) 1,4-Dichlorobenzene	13.794	146	4655m	1.056	ug/l		
89) n-Butylbenzene	14.035	91	5869	0.883	ug/l		91
90) Hexachloroethane	14.317	117	1527	1.035	ug/l		87
91) 1,2-Dichlorobenzene	14.088	146	3358	0.859	ug/l		85
92) 1,2-Dibromo-3-Chloropr...	14.711	75	874	1.091	ug/l	#	56
93) 1,2,4-Trichlorobenzene	15.376	180	1960	0.854	ug/l		78
94) Hexachlorobutadiene	15.476	225	903	1.058	ug/l		76
95) Naphthalene	15.611	128	6404	0.787	ug/l	#	95
96) 1,2,3-Trichlorobenzene	15.806	180	2068	0.898	ug/l		99

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

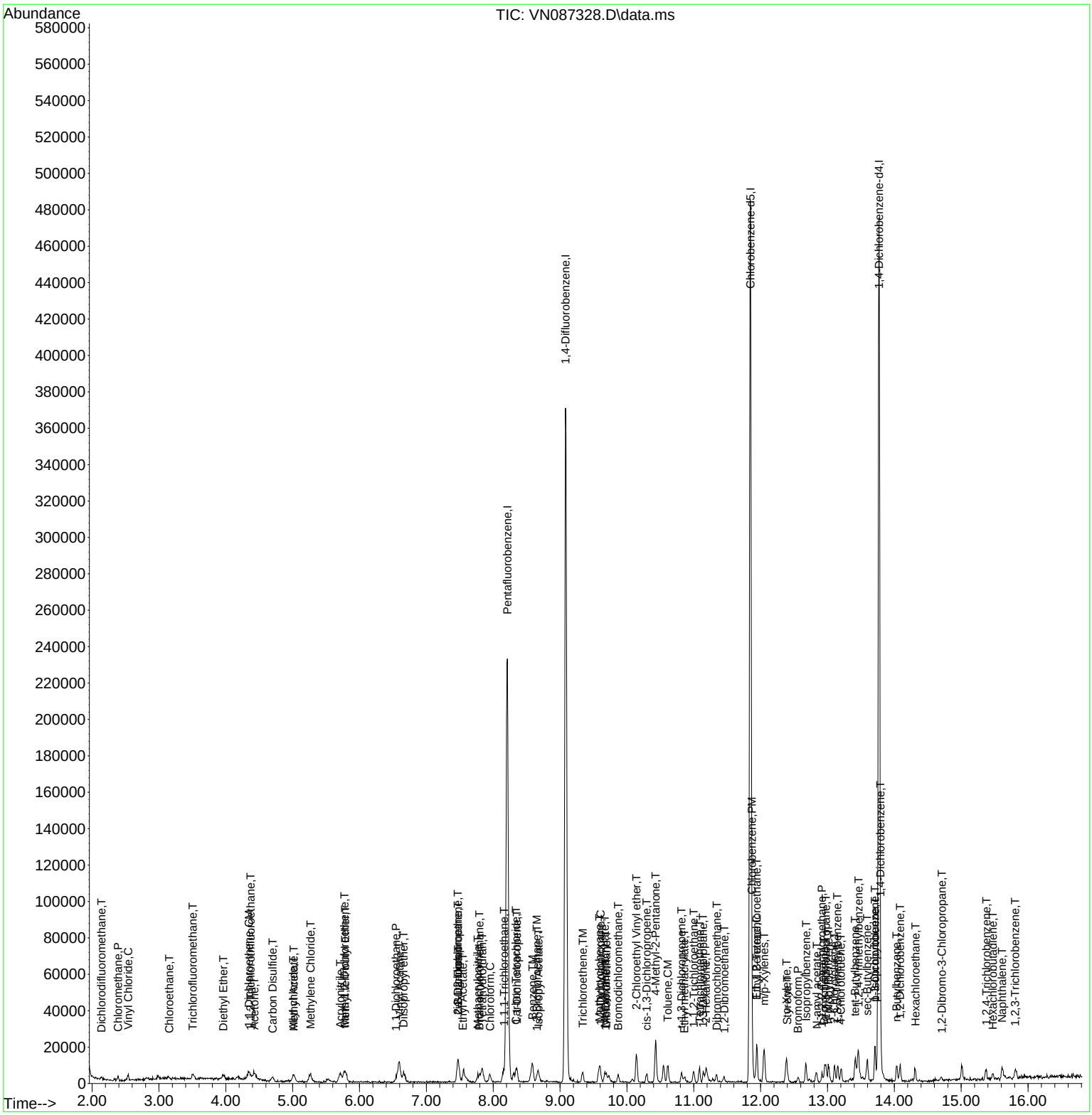
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087328.D
Acq On : 16 Jul 2025 17:05
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

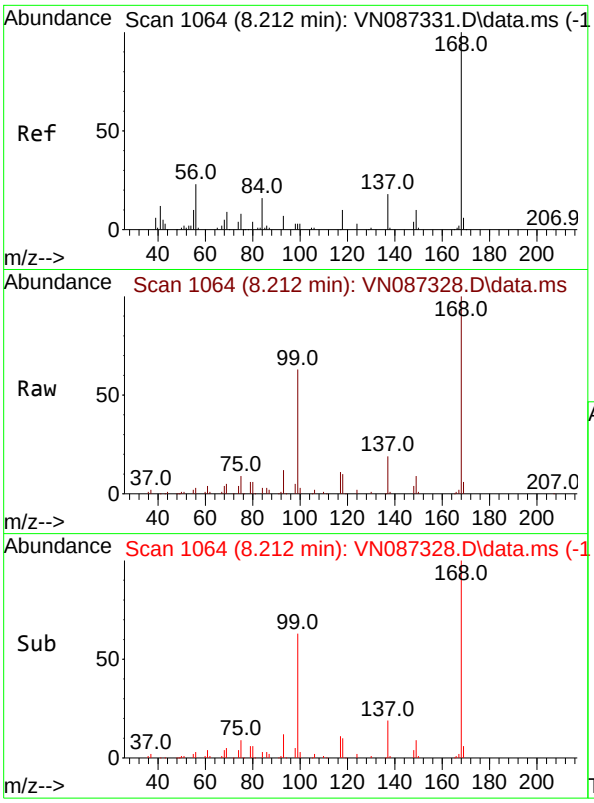
Quant Time: Jul 17 02:16:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

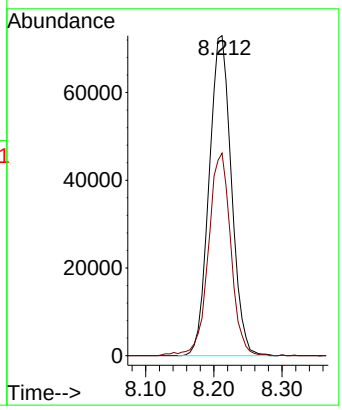




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:168 Resp: 16617

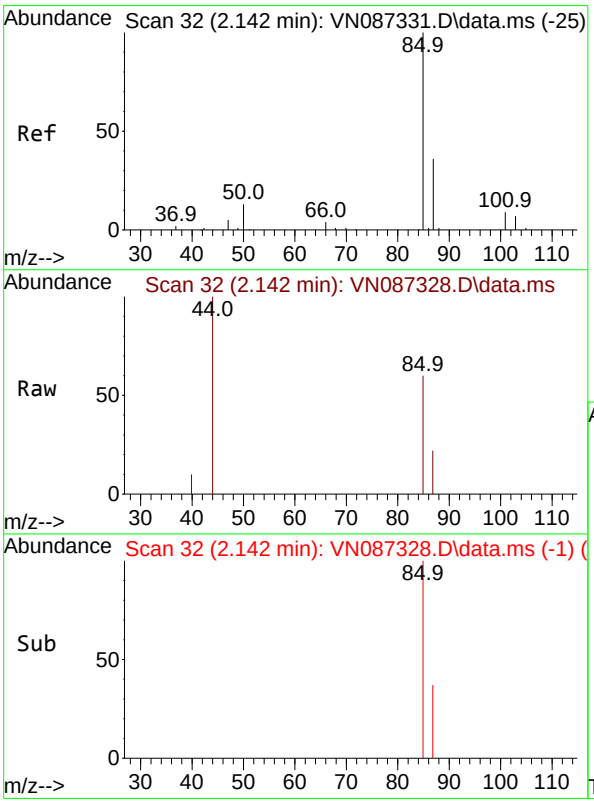
Ion	Ratio	Lower	Upper
168	100		
99	63.3	47.9	71.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

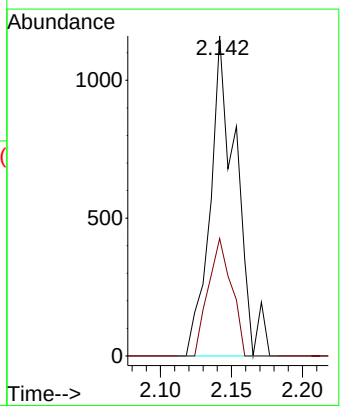
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

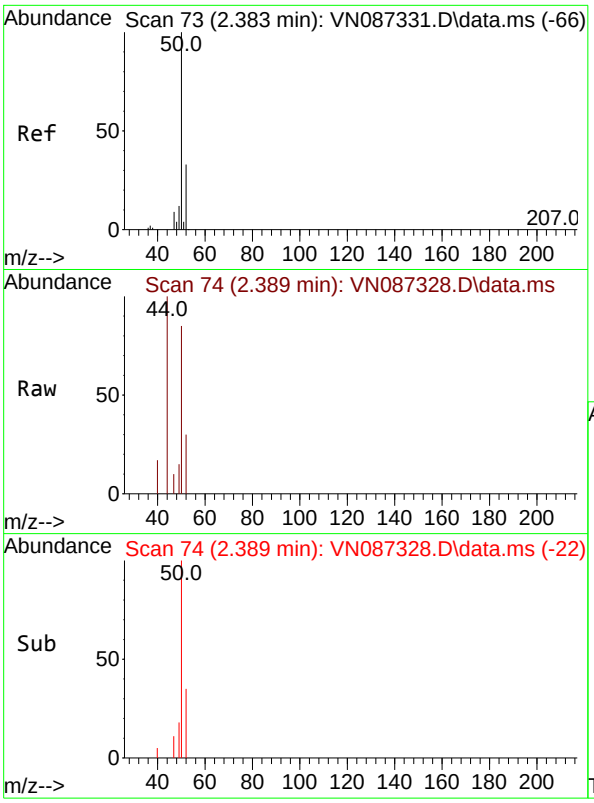


#2
Dichlorodifluoromethane
Concen: 0.841 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 85 Resp: 1484

Ion	Ratio	Lower	Upper
85	100		
87	36.7	17.8	53.3

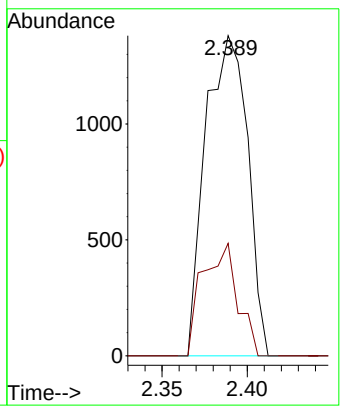




#3
Chloromethane
Concen: 1.069 ug/l
RT: 2.389 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 50 Resp: 237

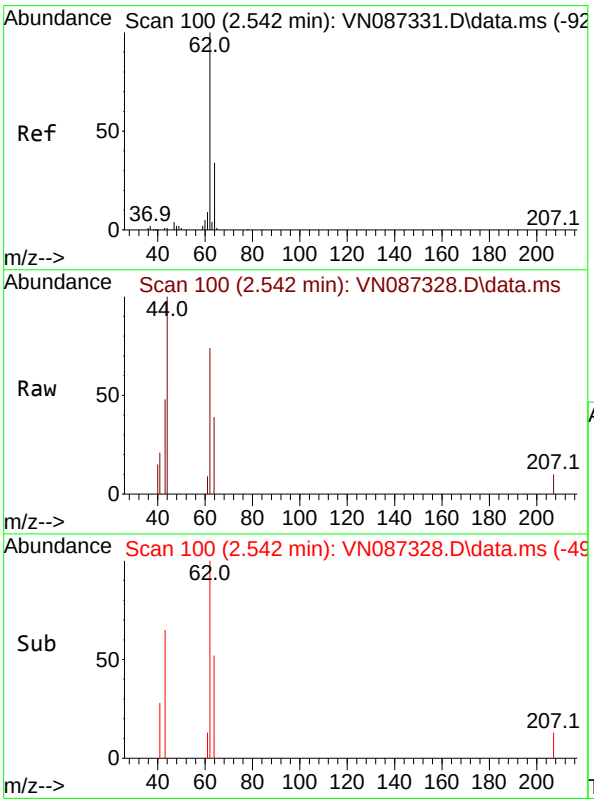
Ion	Ratio	Lower	Upper
50	100		
52	35.1	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

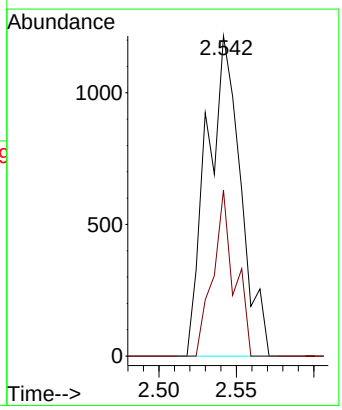
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

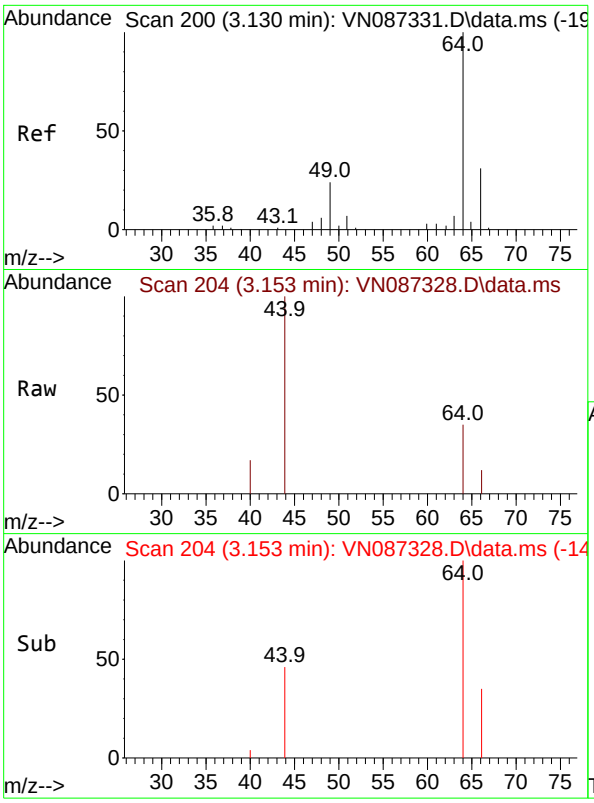


#4
Vinyl Chloride
Concen: 0.835 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 62 Resp: 1841

Ion	Ratio	Lower	Upper
62	100		
64	51.9	27.0	40.6#





#6
Chloroethane
Concen: 0.915 ug/l
RT: 3.153 min Scan# 2(
Delta R.T. 0.024 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

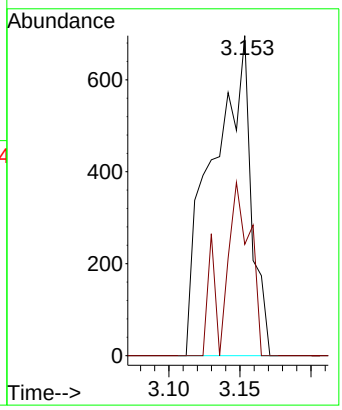
Tgt Ion: 64 Resp: 131(

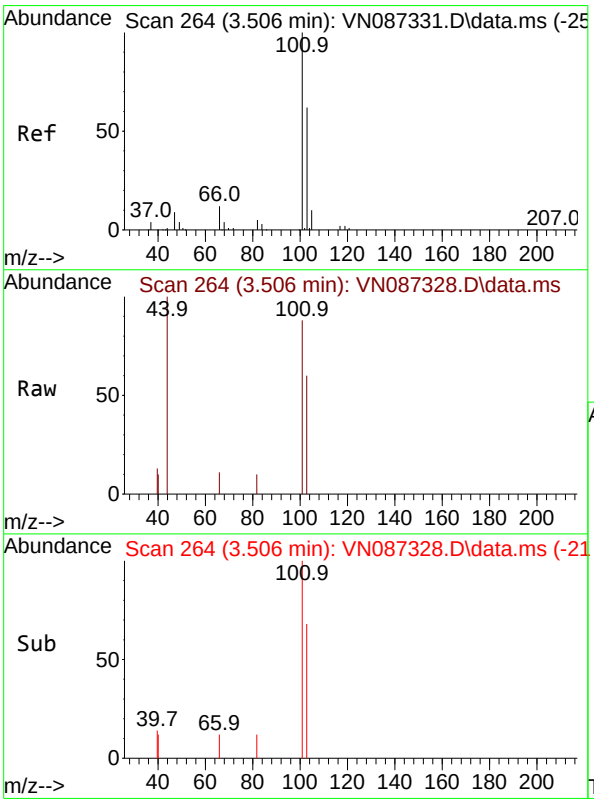
Ion	Ratio	Lower	Upper
64	100		
66	34.8	24.6	36.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

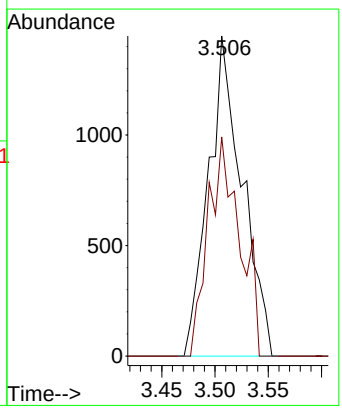


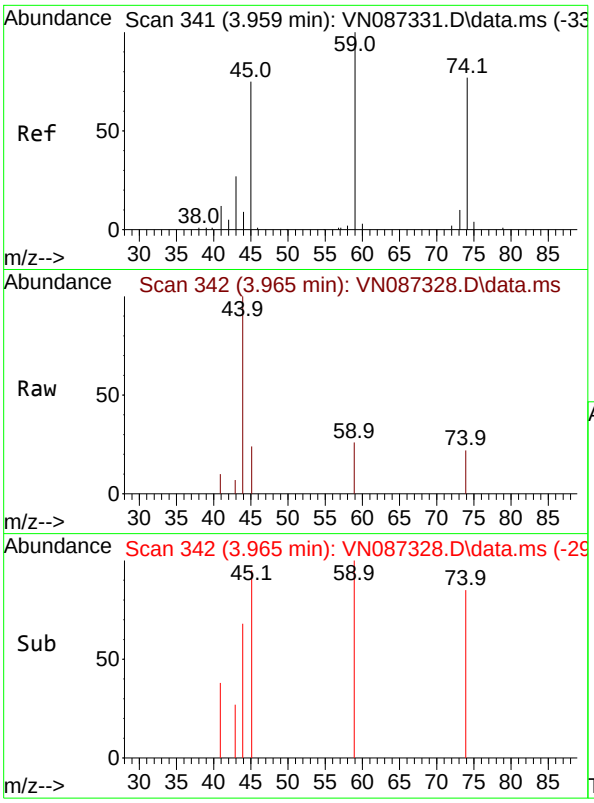


#7
Trichlorofluoromethane
Concen: 0.977 ug/l
RT: 3.506 min Scan# 264
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:101 Resp: 3187

Ion	Ratio	Lower	Upper
101	100		
103	68.4	49.8	74.6





#8
Diethyl Ether
Concen: 0.880 ug/l
RT: 3.965 min Scan# 34
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 74 Resp: 111

Ion	Ratio	Lower	Upper
74	100		
45	122.6	50.8	152.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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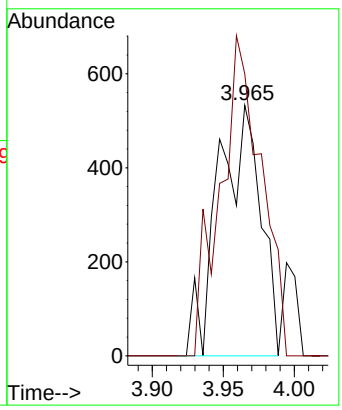
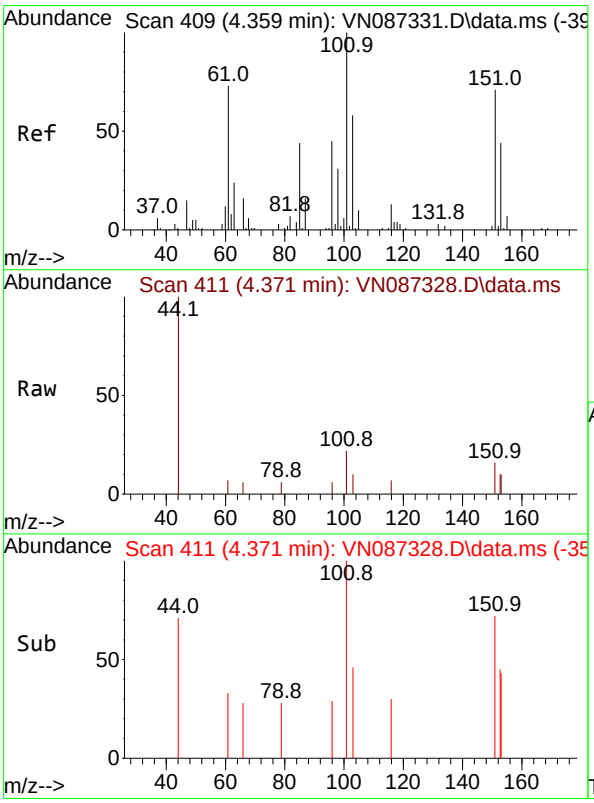
Supervised By :Semsettin Yesilyurt 07/17/2025

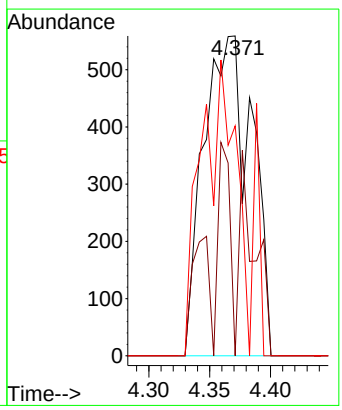


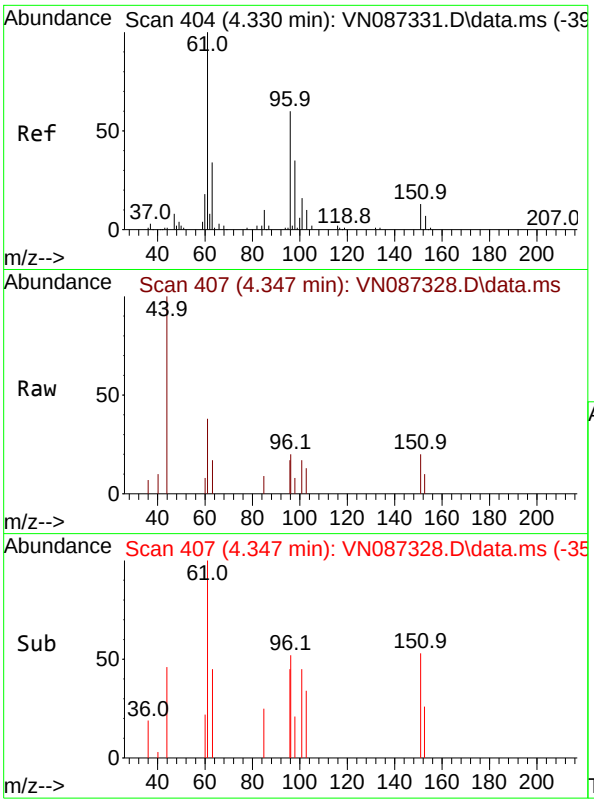


#9
1,1,2-Trichlorotrifluoroethane
Concen: 0.919 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.012 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:101 Resp: 1539

Ion	Ratio	Lower	Upper
101	100		
85	20.5	37.3	55.9#
151	0.0	58.9	88.3#

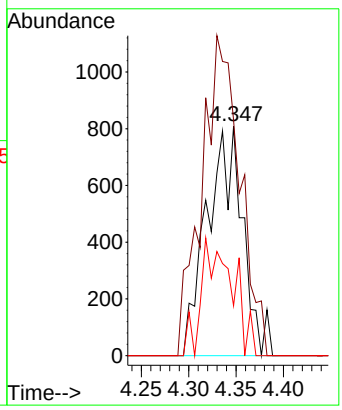




#12
1,1-Dichloroethene
Concen: 1.113 ug/l
RT: 4.347 min Scan# 4(
Delta R.T. 0.018 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 96 Resp: 211

Ion	Ratio	Lower	Upper
96	100		
61	102.7	132.3	198.5#
98	21.8	46.8	70.2#



Instrument :
MSVOA_N
ClientSampleId :
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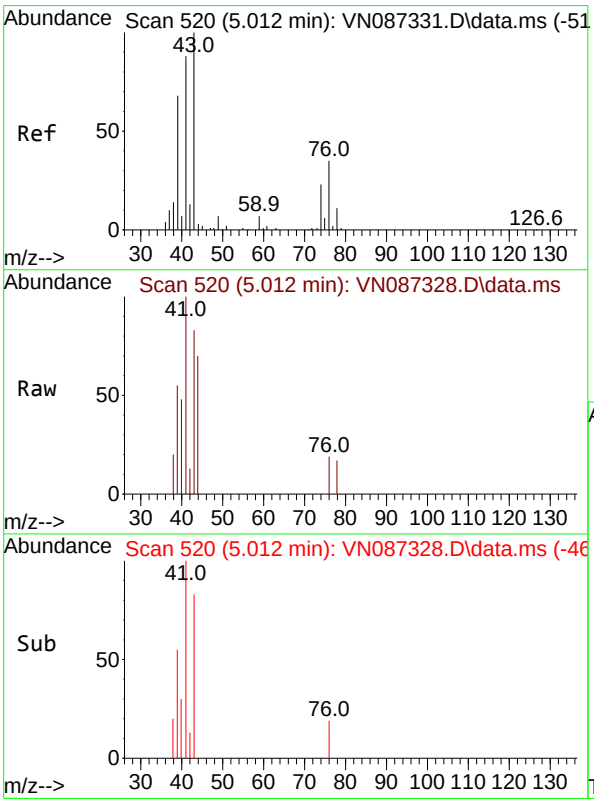
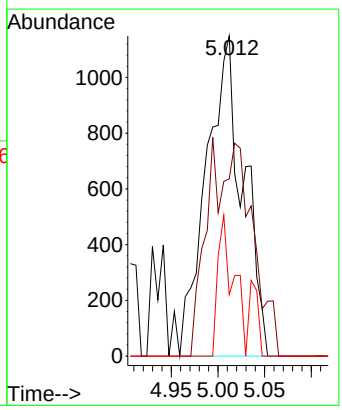
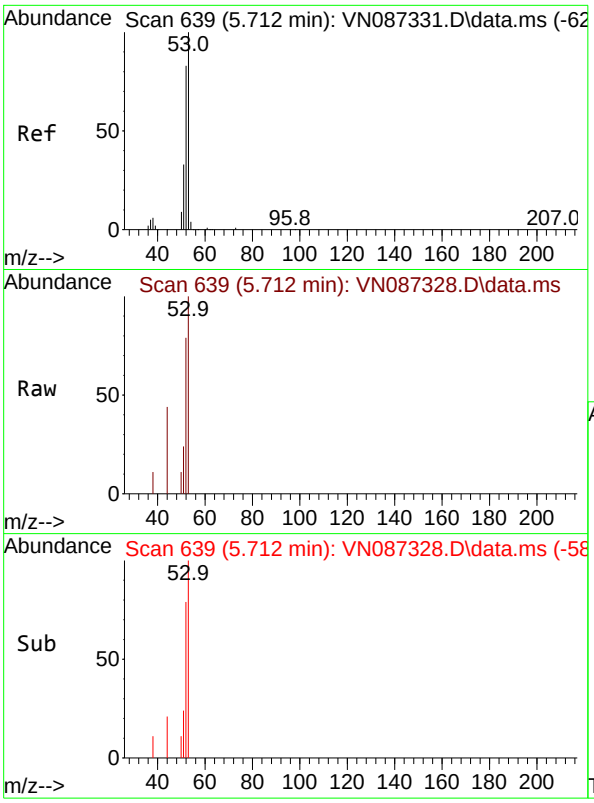


#14
Allyl chloride
Concen: 0.919 ug/l m
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 41 Resp: 3155

Ion	Ratio	Lower	Upper
41	100		
39	46.1	59.0	88.6#
76	18.6	28.7	43.1#

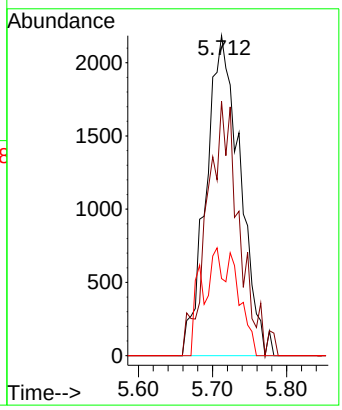




#15
Acrylonitrile
Concen: 4.794 ug/l
RT: 5.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 53 Resp: 696

Ion	Ratio	Lower	Upper
53	100		
52	75.2	65.5	98.3
51	7.2	28.7	43.1#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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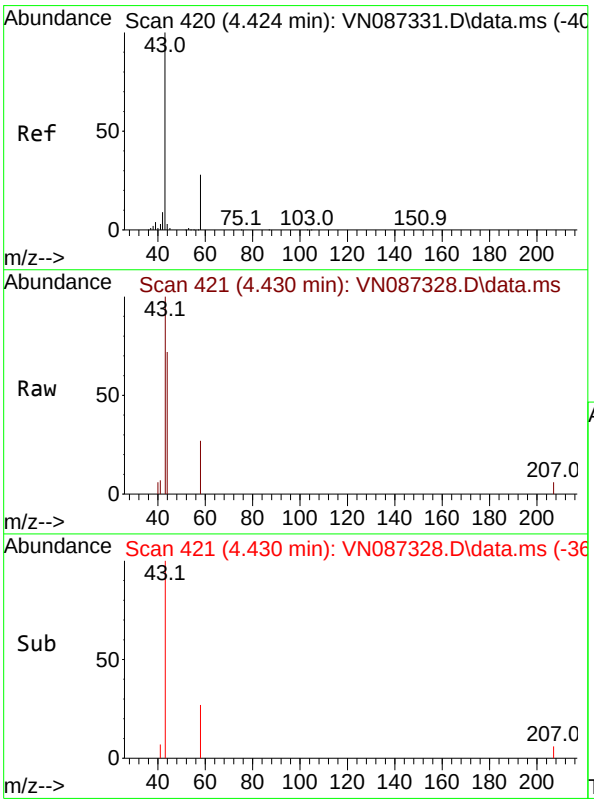
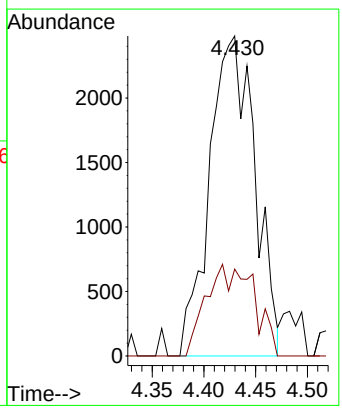
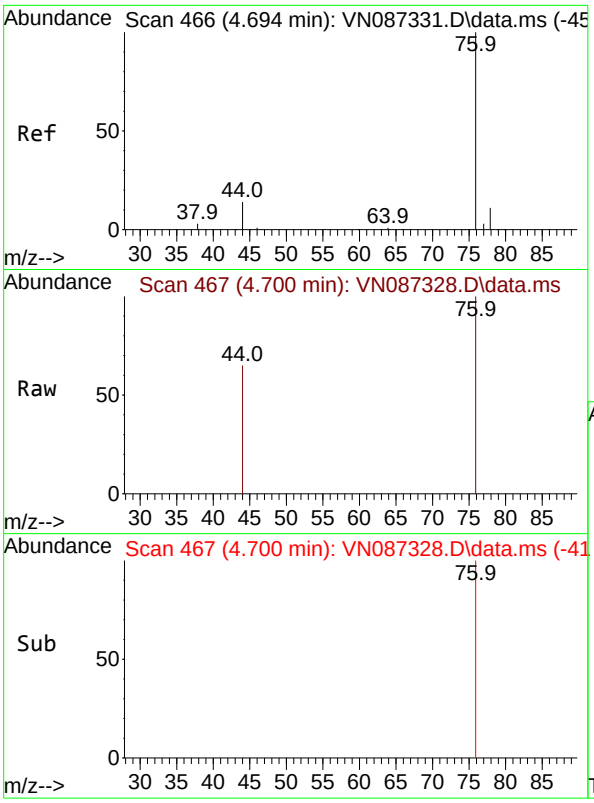


#16
Acetone
Concen: 5.660 ug/l m
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 7566

Ion	Ratio	Lower	Upper
43	100		
58	27.2	22.3	33.5





#17
Carbon Disulfide
Concen: 0.996 ug/l
RT: 4.700 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 76 Resp: 560

Ion	Ratio	Lower	Upper
76	100		
78	0.0	8.6	13.0#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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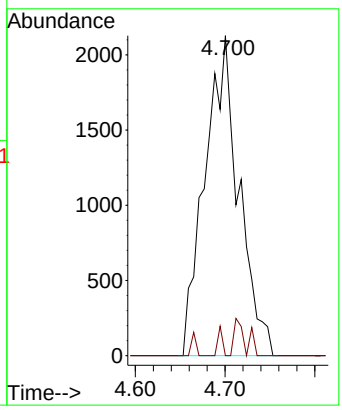
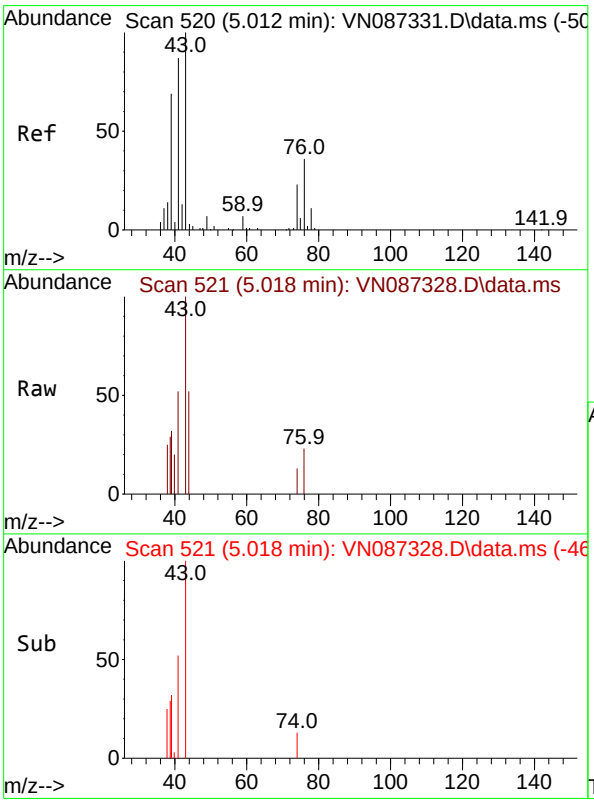
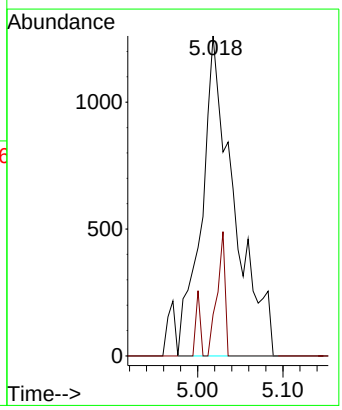


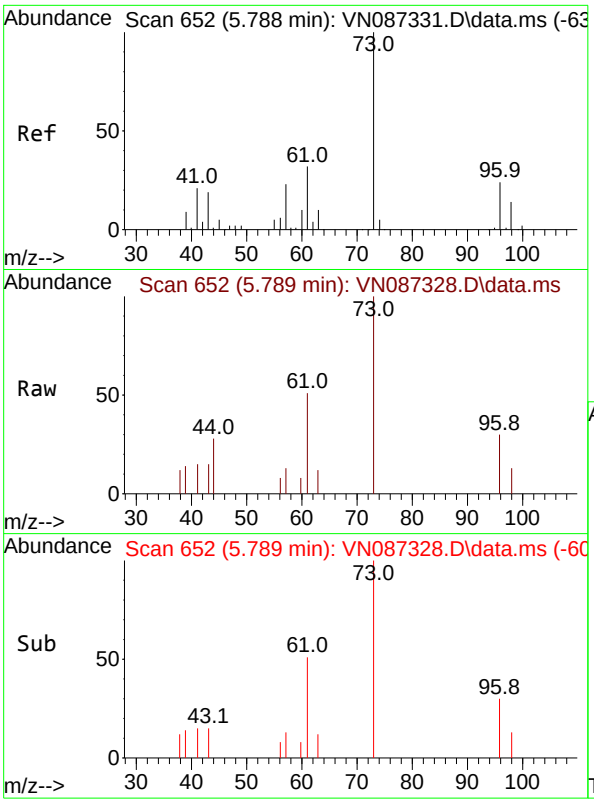


#18
Methyl Acetate
Concen: 1.008 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 3347

Ion	Ratio	Lower	Upper
43	100		
74	9.5	17.8	26.6#

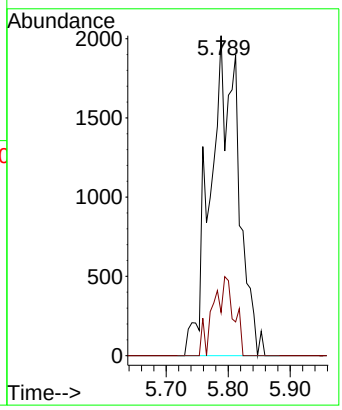




#19
Methyl tert-butyl Ether
Concen: 0.908 ug/l m
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 73 Resp: 635

Ion	Ratio	Lower	Upper
73	100		
57	13.5	18.6	27.8#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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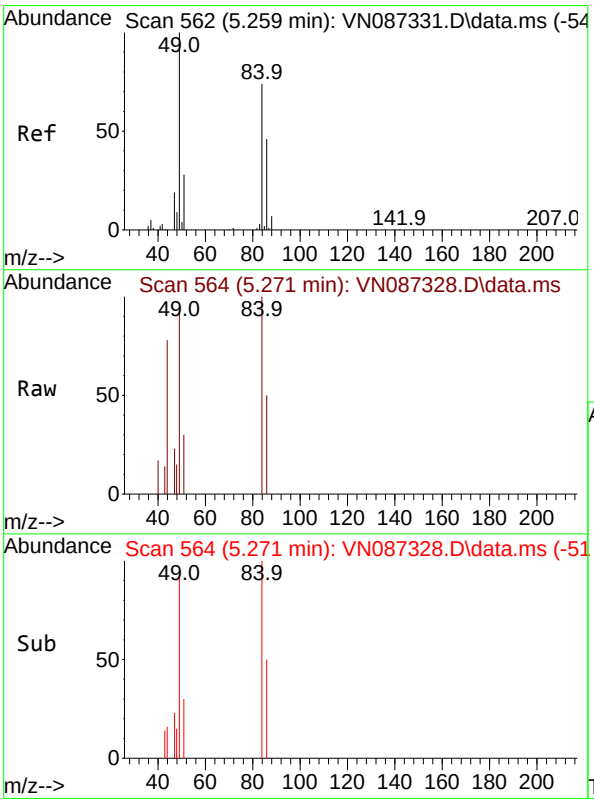
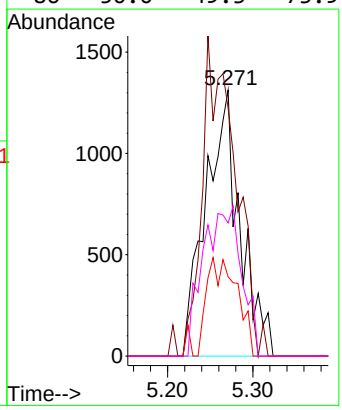
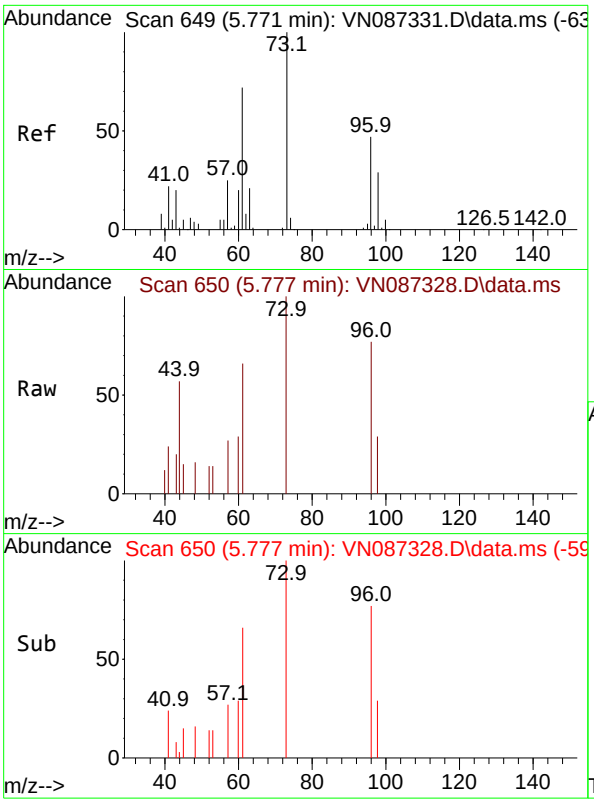


#20
Methylene Chloride
Concen: 1.019 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.012 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 84 Resp: 3679

Ion	Ratio	Lower	Upper
84	100		
49	93.3	107.5	161.3#
51	29.8	30.2	45.2#
86	50.0	49.3	73.9





#21
trans-1,2-Dichloroethene
Concen: 1.036 ug/l
RT: 5.777 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 96 Resp: 221

Ion	Ratio	Lower	Upper
96	100		
61	85.5	122.0	183.0#
98	37.1	50.0	75.0#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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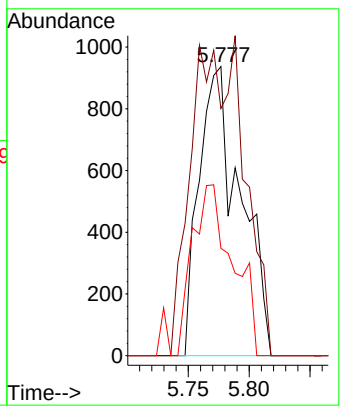
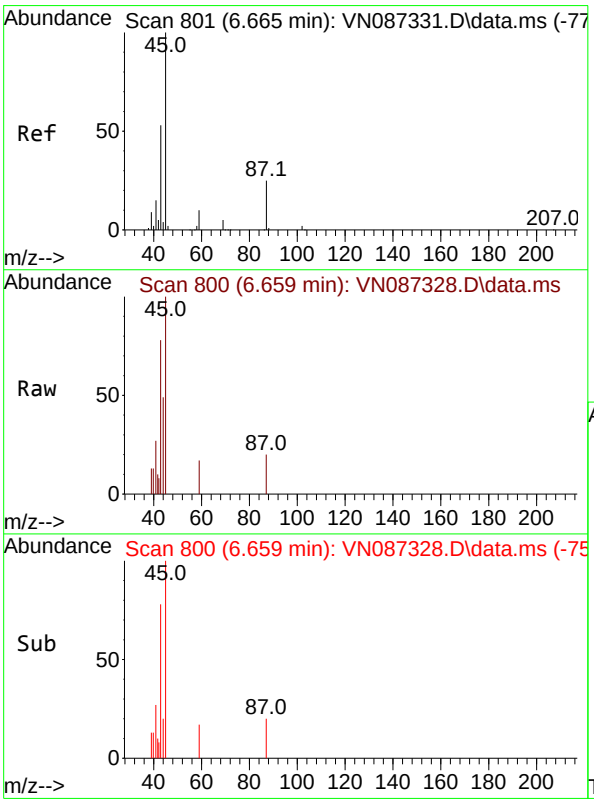
Supervised By :Semsettin Yesilyurt 07/17/2025

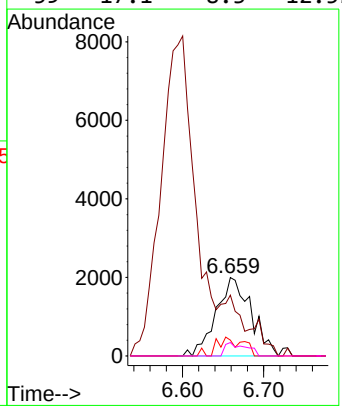


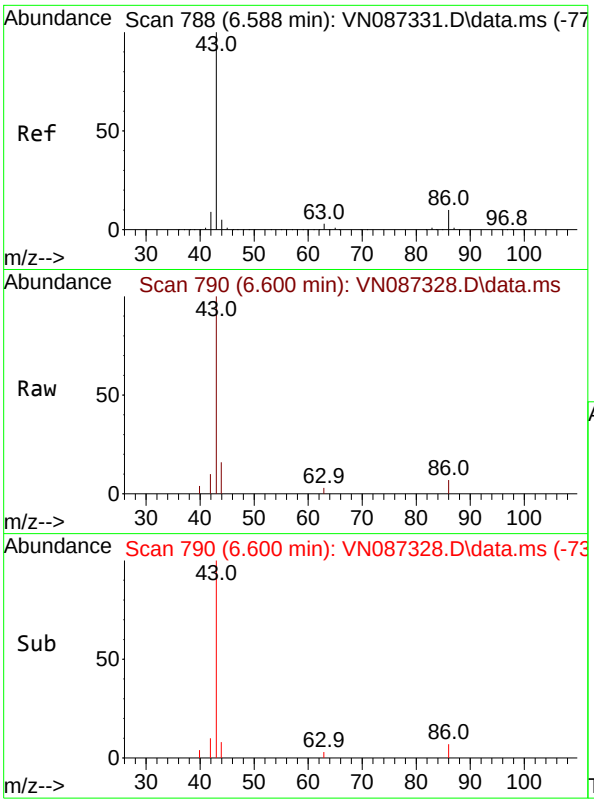


#22
Diisopropyl ether
Concen: 0.829 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 45 Resp: 5973

Ion	Ratio	Lower	Upper
45	100		
43	77.6	42.8	64.2#
87	20.3	19.8	29.6
59	17.1	8.3	12.5#





#23
Vinyl Acetate
Concen: 3.749 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.012 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 2361

Ion	Ratio	Lower	Upper
43	100		
86	7.1	7.7	11.5#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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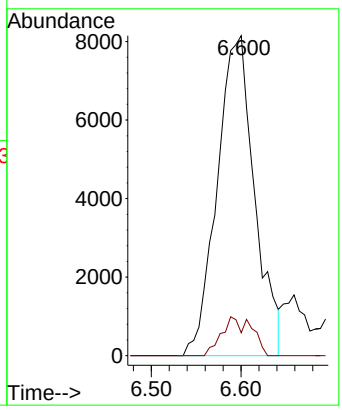
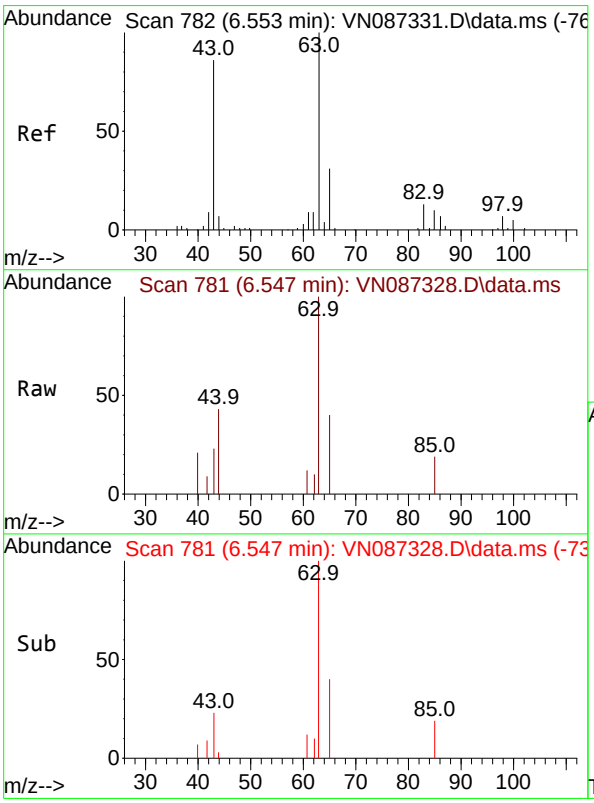
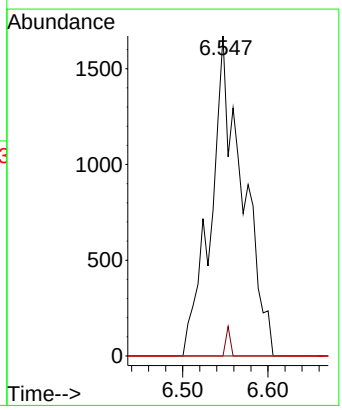


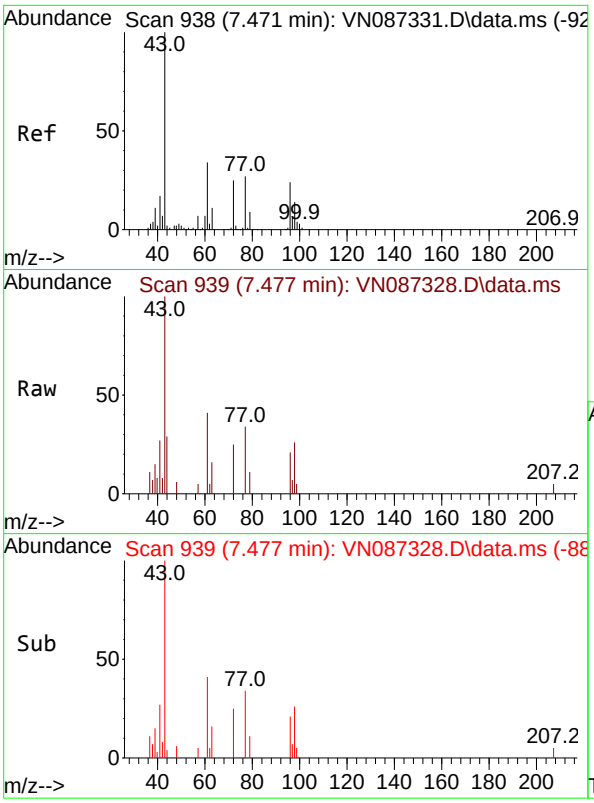


#24
1,1-Dichloroethane
Concen: 1.043 ug/l
RT: 6.547 min Scan# 781
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 63 Resp: 4333

Ion	Ratio	Lower	Upper
63	100		
98	0.0	3.3	9.9#
100	0.0	2.5	7.4#

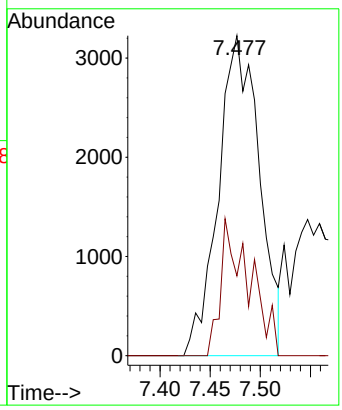




#25
2-Butanone
Concen: 4.491 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 917

Ion	Ratio	Lower	Upper
43	100		
72	24.9	19.6	29.4



Instrument :
MSVOA_N
ClientSampleId :
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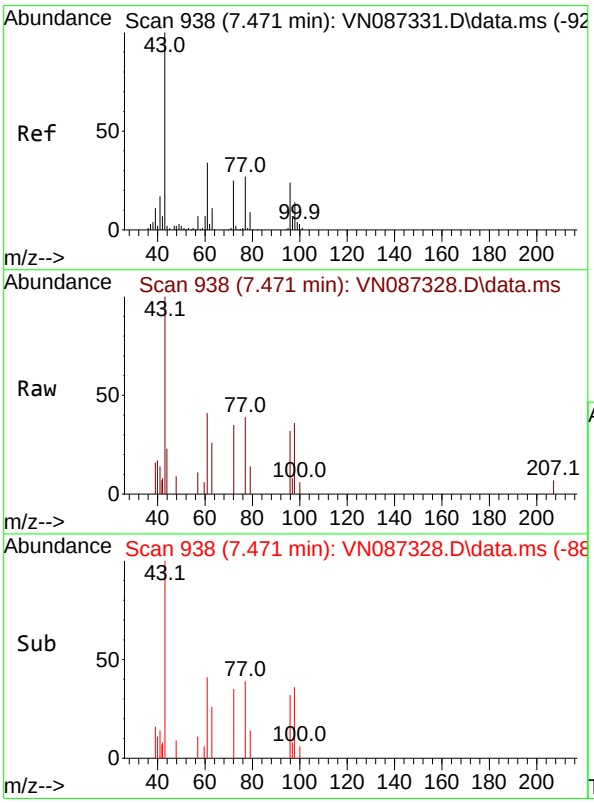
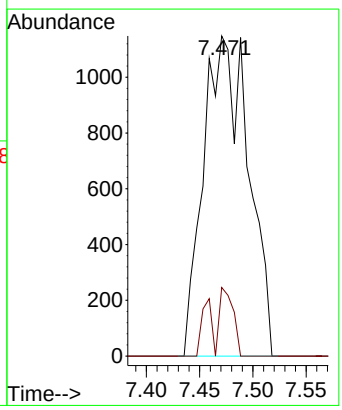
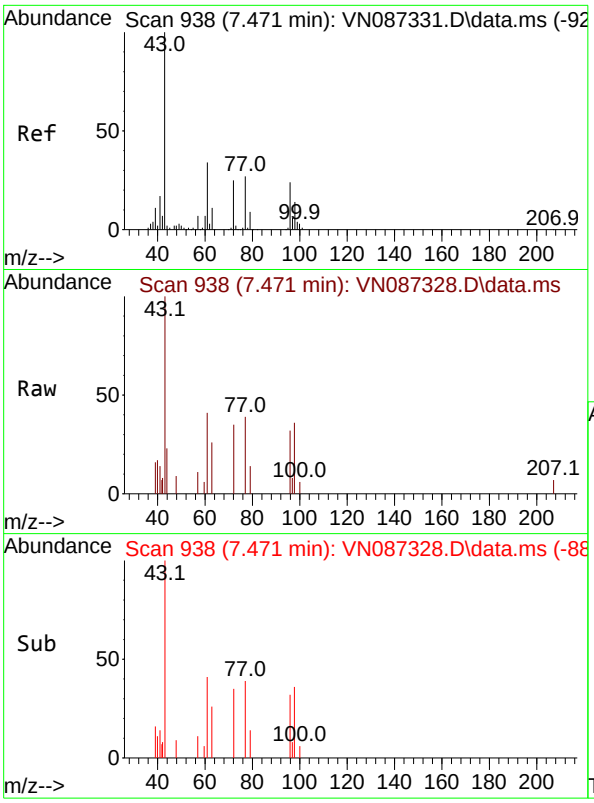


#26
2,2-Dichloropropane
Concen: 1.043 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 77 Resp: 3368

Ion	Ratio	Lower	Upper
77	100		
97	6.5	11.1	33.1#

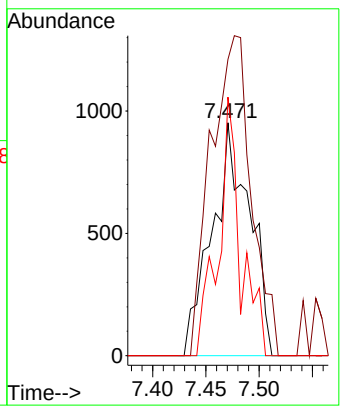




#27
cis-1,2-Dichloroethene
Concen: 0.950 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 96 Resp: 234

Ion	Ratio	Lower	Upper
96	100		
61	147.9	0.0	297.8
98	65.5	0.0	132.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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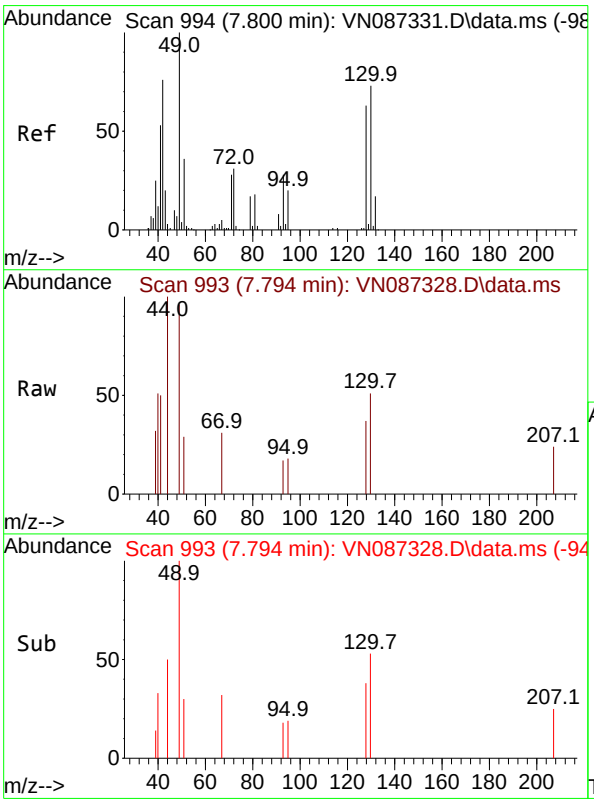
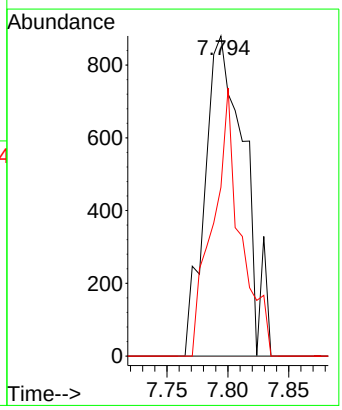
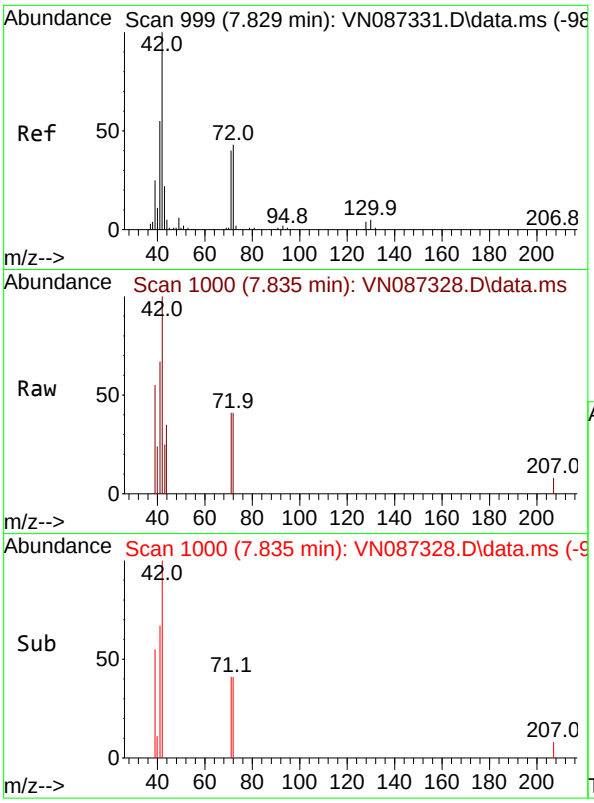


#28
Bromochloromethane
Concen: 0.997 ug/l
RT: 7.794 min Scan# 993
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 49 Resp: 1982

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.2
130	58.7	57.3	85.9





#29
Tetrahydrofuran
Concen: 4.507 ug/l
RT: 7.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 42 Resp: 598

Ion	Ratio	Lower	Upper
42	100		
72	37.1	33.4	50.0
71	36.3	31.2	46.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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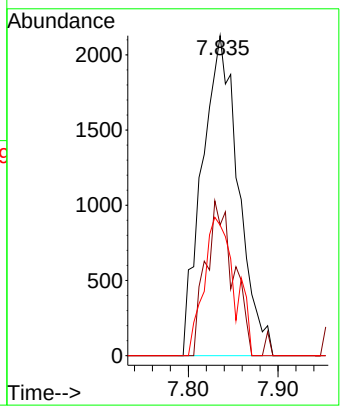
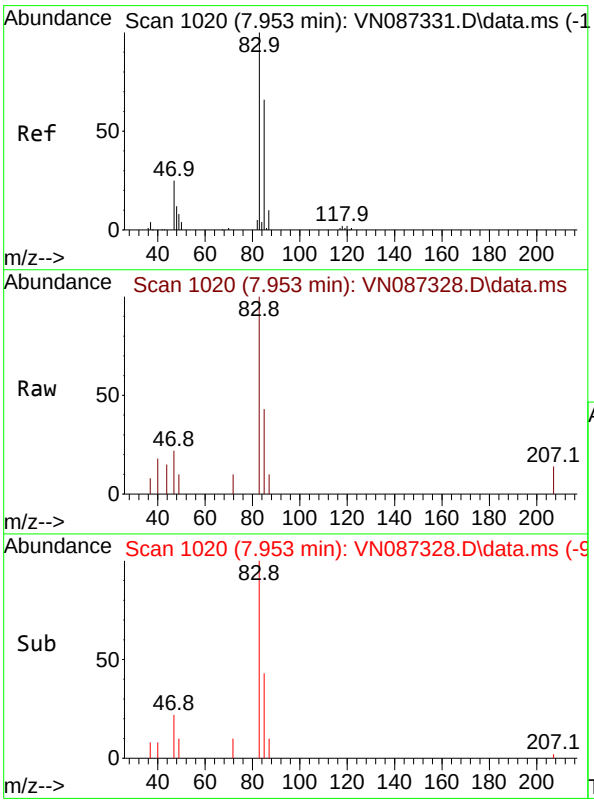
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

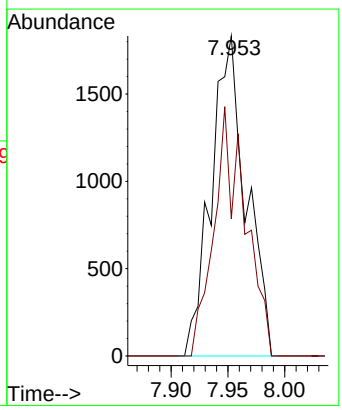


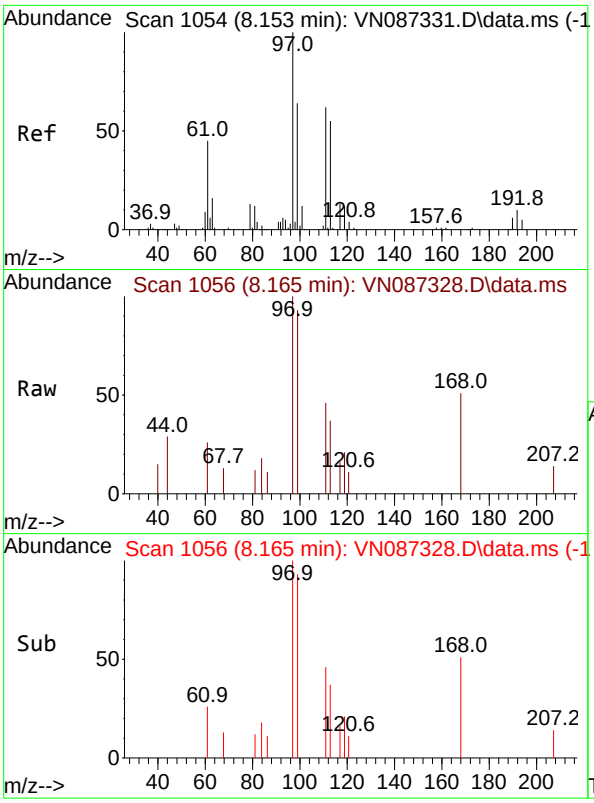


#30
Chloroform
Concen: 0.943 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 83 Resp: 3924

Ion	Ratio	Lower	Upper
83	100		
85	42.9	52.7	79.1#

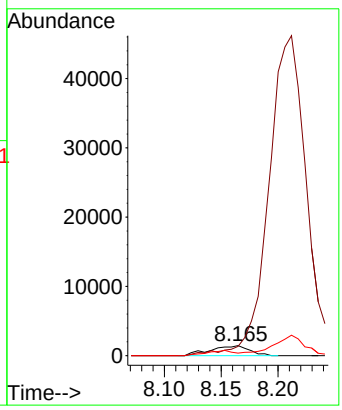




#32
1,1,1-Trichloroethane
Concen: 0.963 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 97 Resp: 346

Ion	Ratio	Lower	Upper
97	100		
99	0.0	51.8	77.8#
61	36.3	38.7	58.1#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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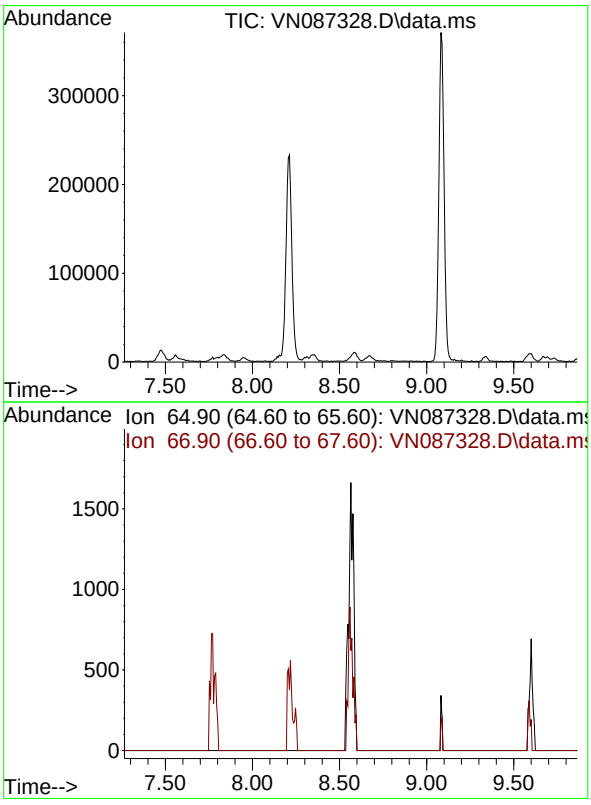
Supervised By :Semsettin Yesilyurt 07/17/2025

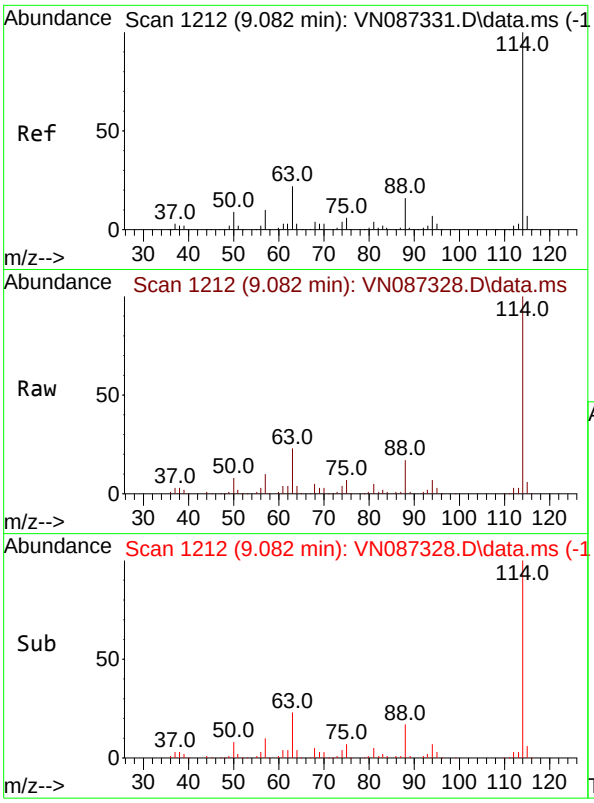


#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 8.56 min

Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 65

Sig	Exp Ratio
65	100
67	52.0



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.082 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:114 Resp: 31247

Ion	Ratio	Lower	Upper
114	100		
63	22.7	0.0	44.6
88	16.7	0.0	32.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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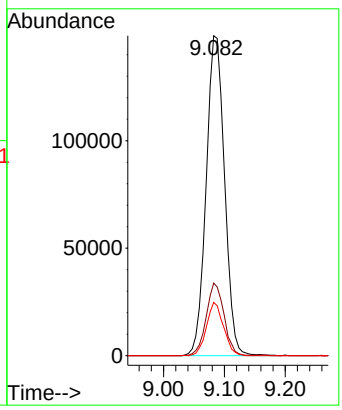
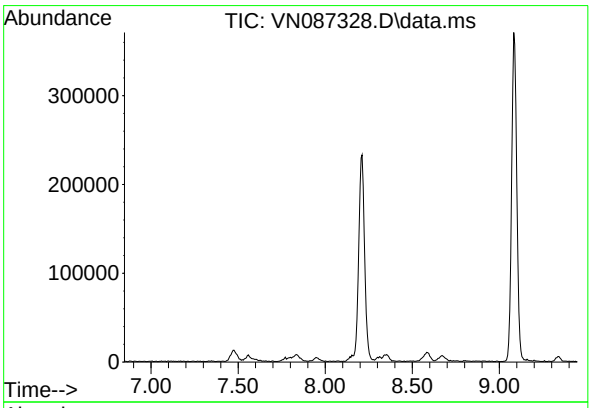


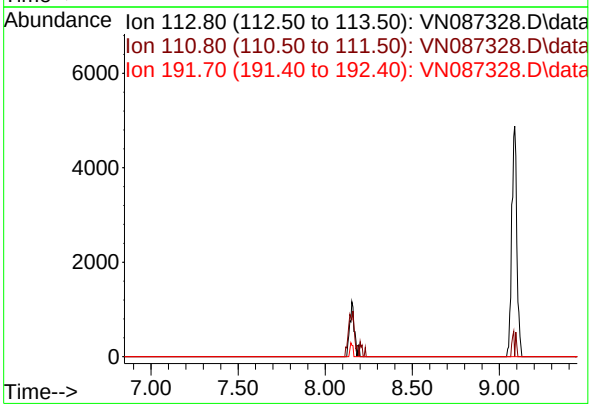


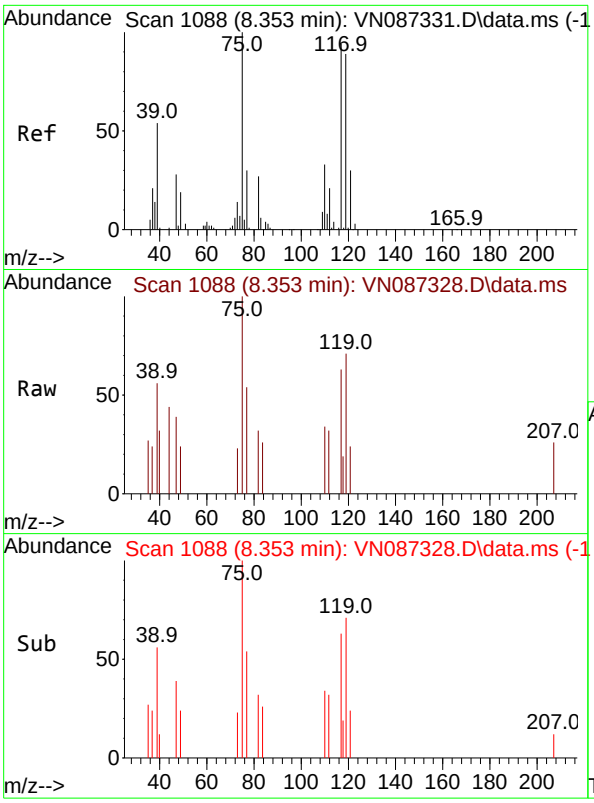
#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 8.15 min

Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 113

Sig	Exp Ratio
113	100
111	103.1
192	17.1

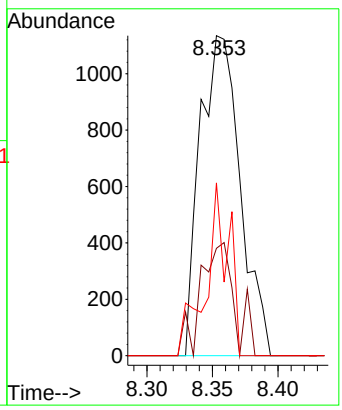




#36
1,1-Dichloropropene
Concen: 0.850 ug/l
RT: 8.353 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 75 Resp: 242

Ion	Ratio	Lower	Upper
75	100		
110	29.6	16.7	50.1
77	30.6	25.2	37.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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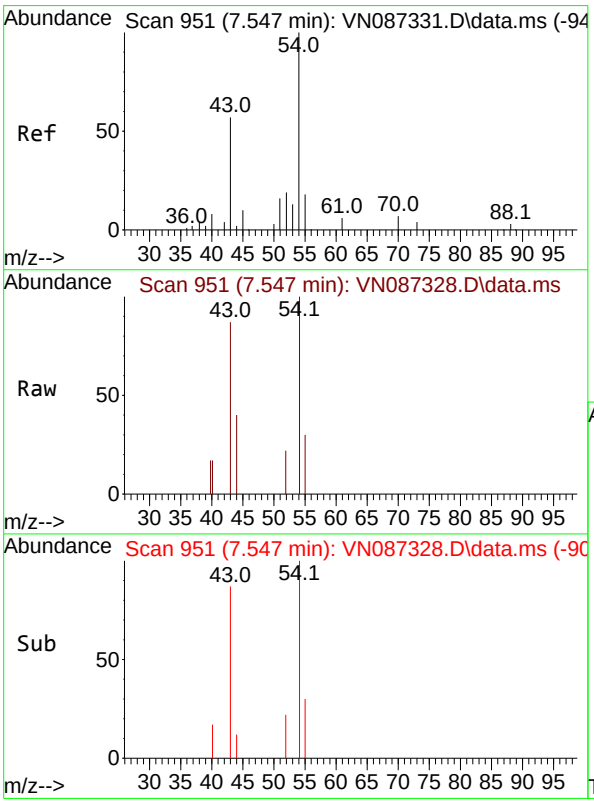
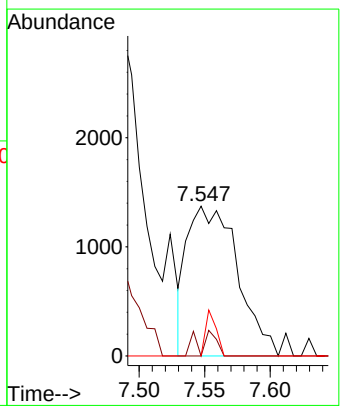
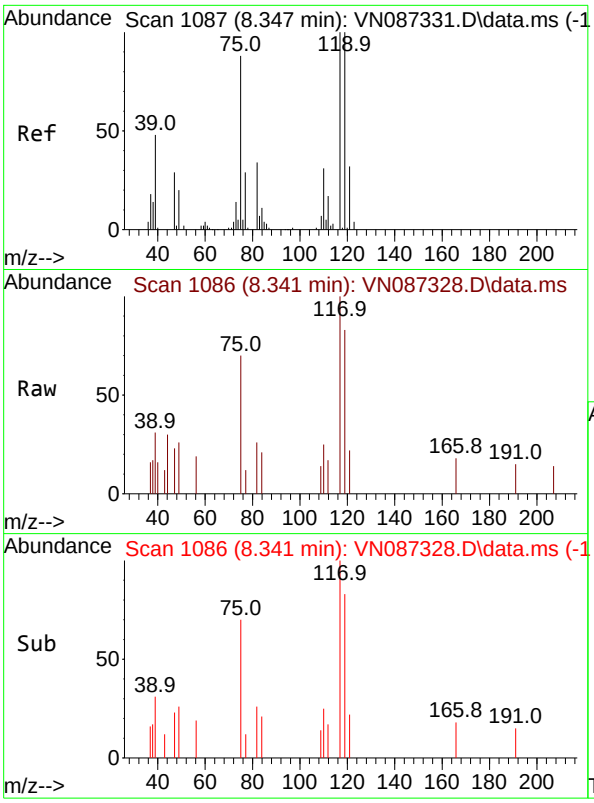


#37
Ethyl Acetate
Concen: 0.892 ug/l
RT: 7.547 min Scan# 951
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 3670

Ion	Ratio	Lower	Upper
43	100		
61	3.7	10.9	16.3#
70	6.5	7.4	11.0#





#38
Carbon Tetrachloride
Concen: 0.903 ug/l
RT: 8.341 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 283

Ion	Ratio	Lower	Upper
117	100		
119	83.1	80.2	120.2
121	21.7	25.4	38.2#

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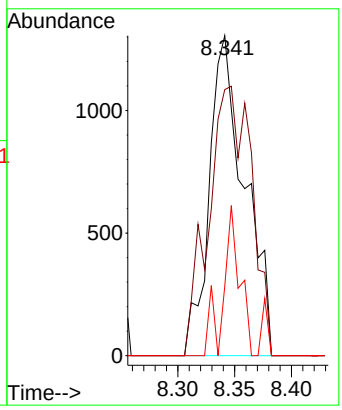
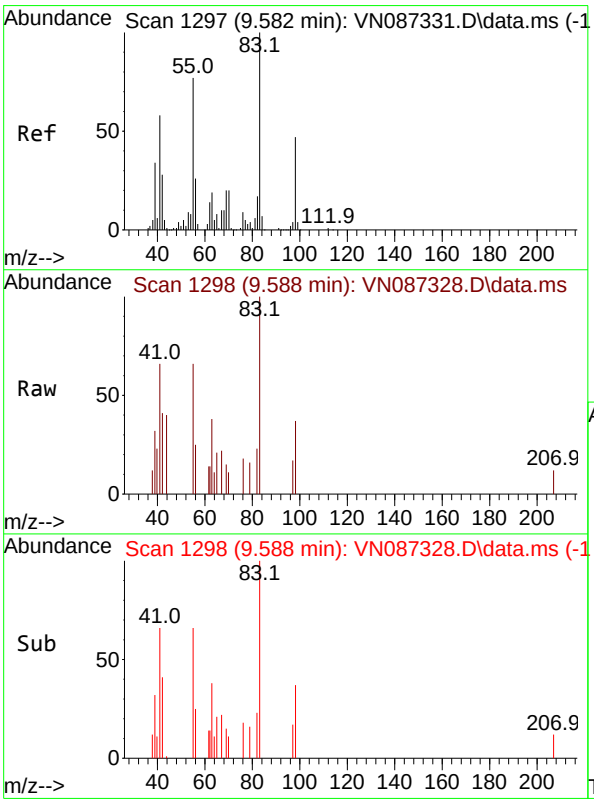
Supervised By :Semsettin Yesilyurt 07/17/2025

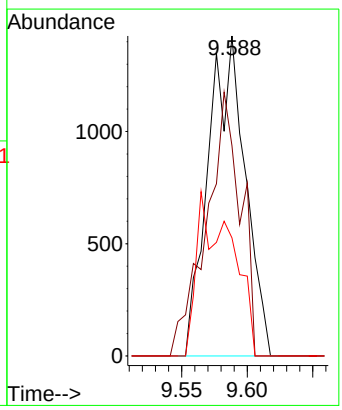


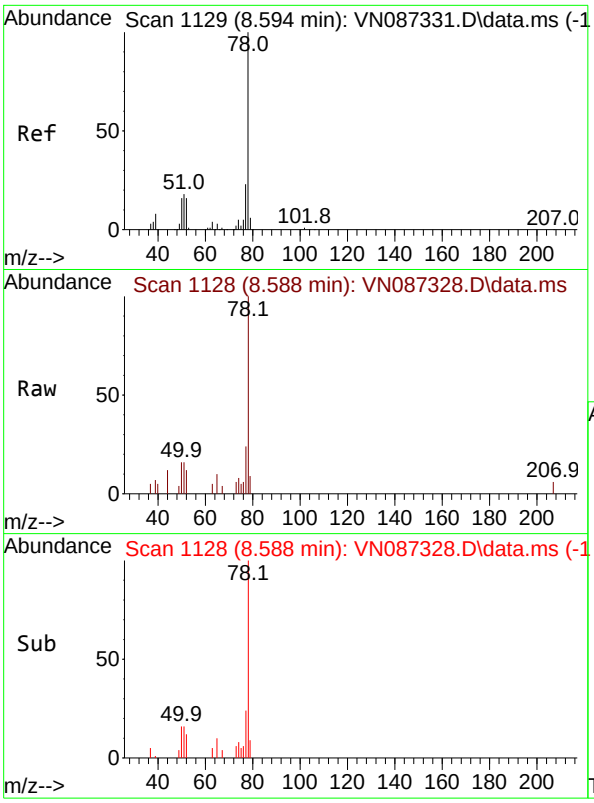


#39
Methylcyclohexane
Concen: 0.906 ug/l
RT: 9.588 min Scan# 1298
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 83 Resp: 2794

Ion	Ratio	Lower	Upper
83	100		
55	65.7	61.3	91.9
98	36.9	37.9	56.9#





#40
Benzene
Concen: 0.930 ug/l
RT: 8.588 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 78 Resp: 856

Ion	Ratio	Lower	Upper
78	100		
77	24.2	18.2	27.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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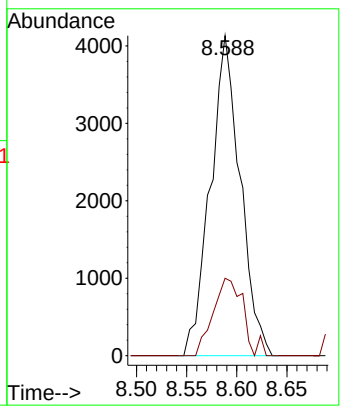
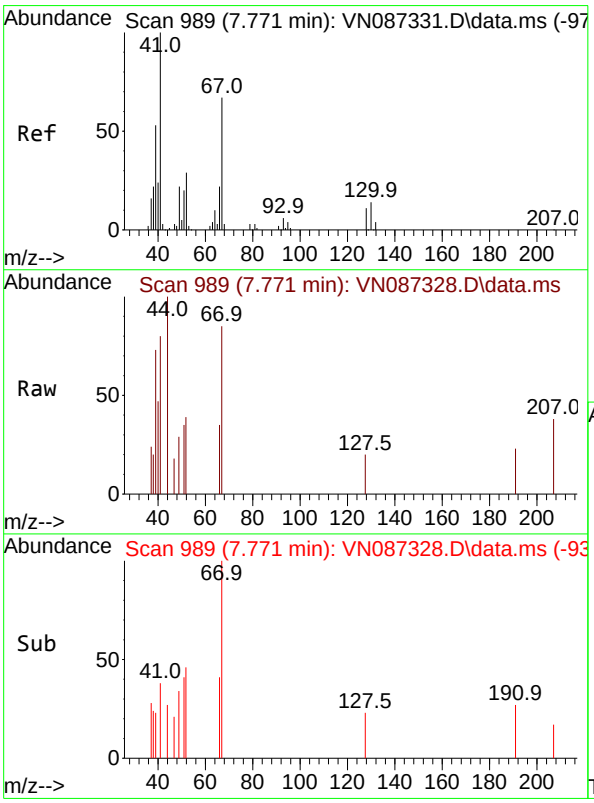
Supervised By :Semsettin Yesilyurt 07/17/2025

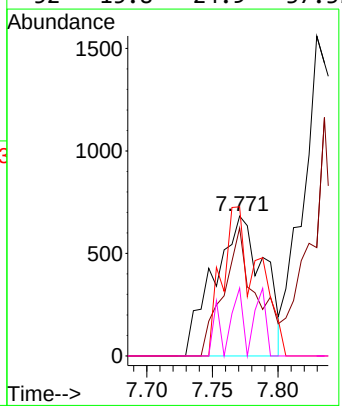


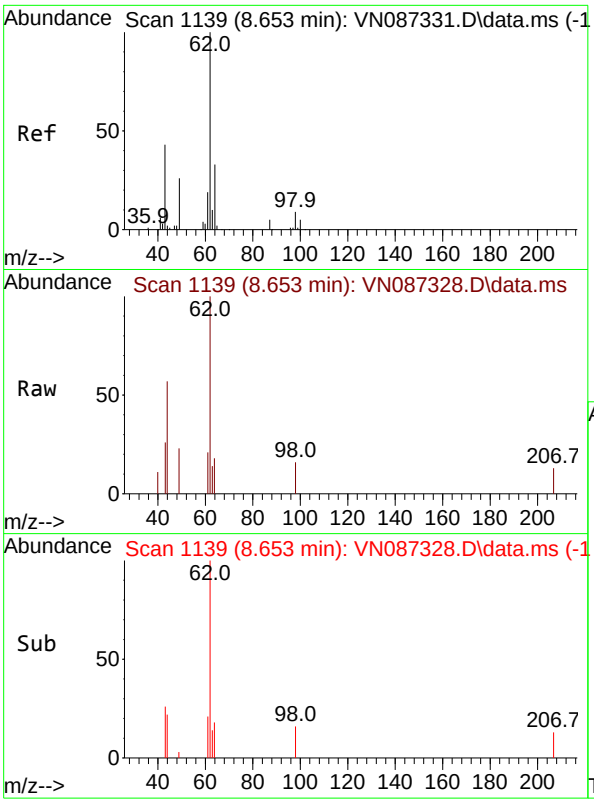


#41
Methacrylonitrile
Concen: 0.839 ug/l
RT: 7.771 min Scan# 989
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 41 Resp: 1805

Ion	Ratio	Lower	Upper
41	100		
39	60.9	43.4	65.0
67	76.1	55.1	82.7
52	15.8	24.9	37.3#





#42
1,2-Dichloroethane
Concen: 0.990 ug/l
RT: 8.653 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 62 Resp: 345

Ion	Ratio	Lower	Upper
62	100		
98	5.1	0.0	18.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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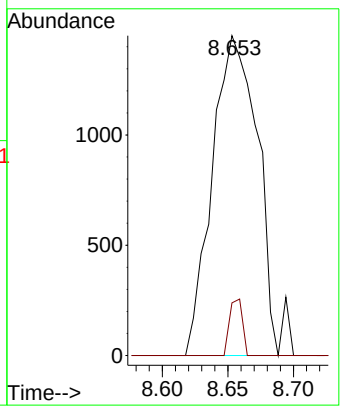
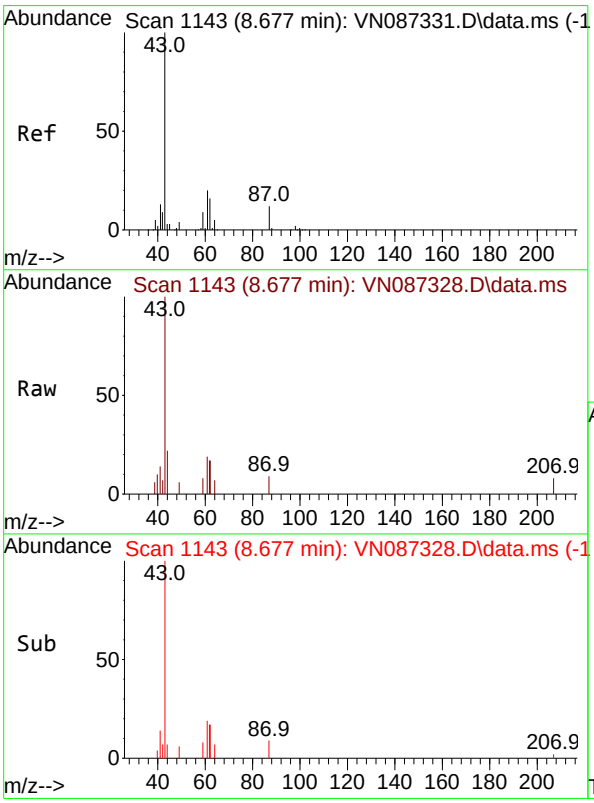
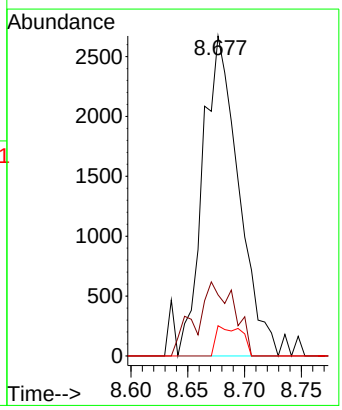


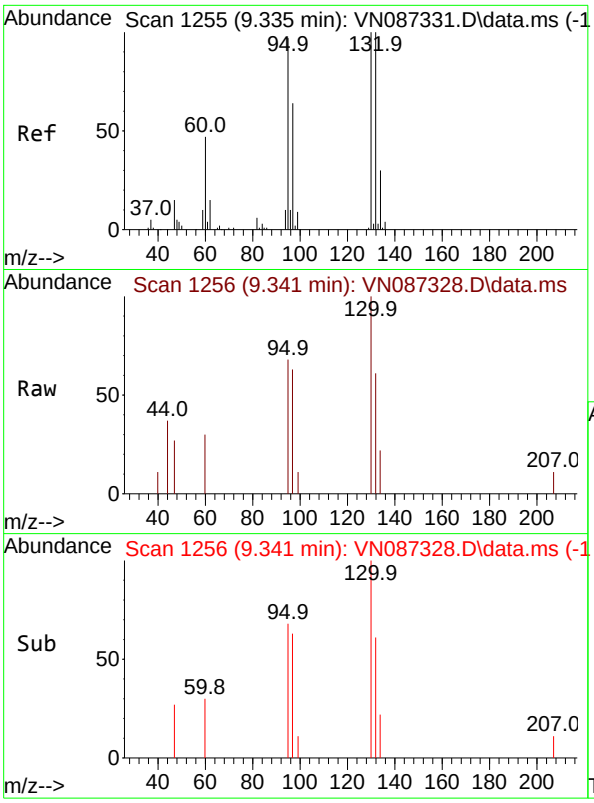


#43
Isopropyl Acetate
Concen: 0.919 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 5865

Ion	Ratio	Lower	Upper
43	100		
61	24.8	19.8	29.8
87	6.6	9.8	14.6#





#44
Trichloroethene
Concen: 1.072 ug/l
RT: 9.341 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:130 Resp: 233

Ion	Ratio	Lower	Upper
130	100		
95	68.2	0.0	195.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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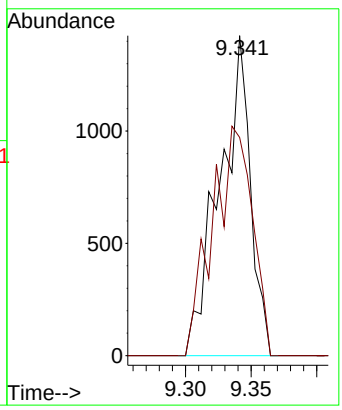
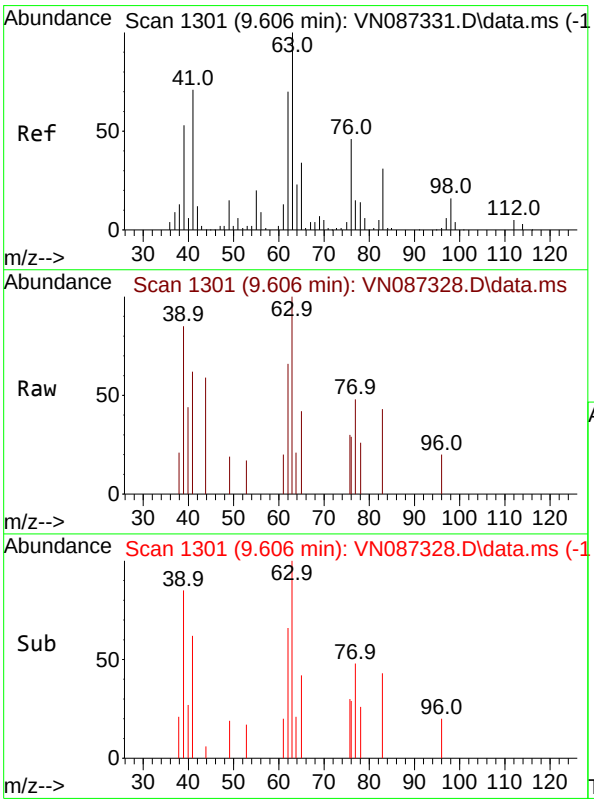
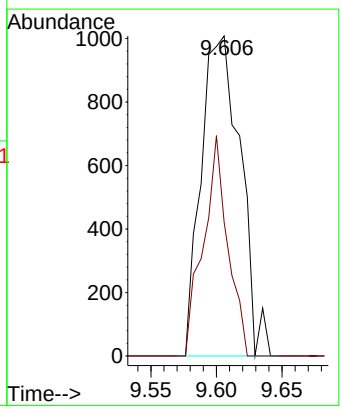


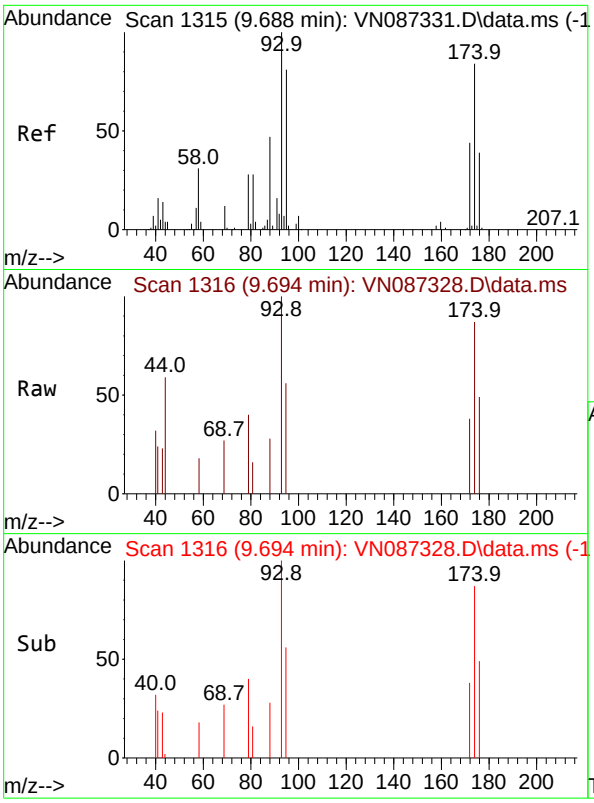


#45
1,2-Dichloropropane
Concen: 0.895 ug/l
RT: 9.606 min Scan# 1301
Delta R.T. -0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 63 Resp: 2094

Ion	Ratio	Lower	Upper
63	100		
65	41.9	27.0	40.4#





#46
Dibromomethane
Concen: 0.946 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 93 Resp: 165

Ion	Ratio	Lower	Upper
93	100		
95	62.2	65.8	98.8#
174	84.2	69.9	104.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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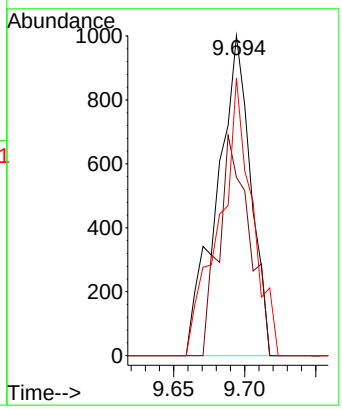
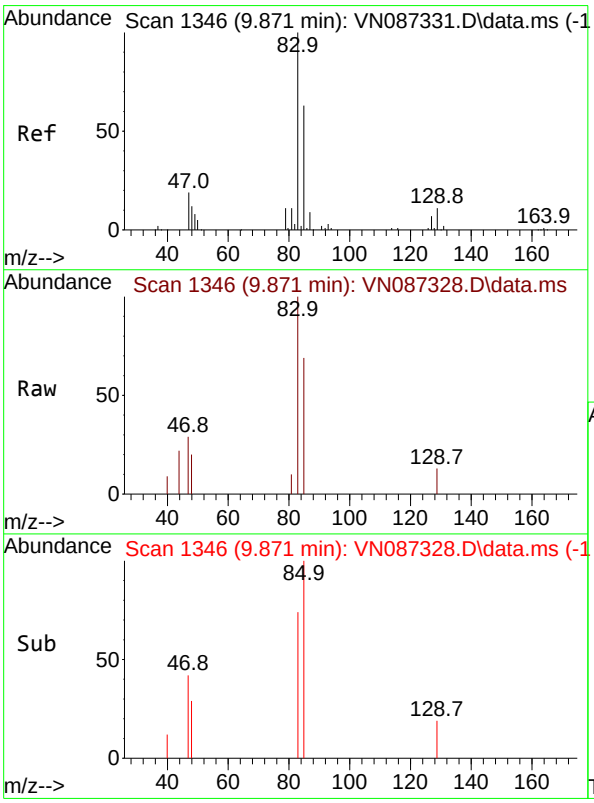
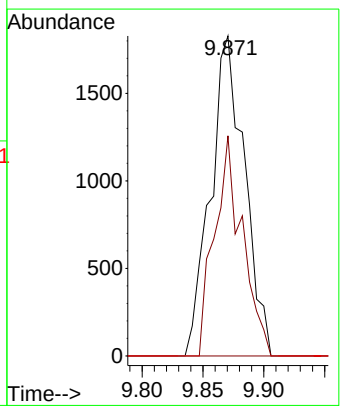


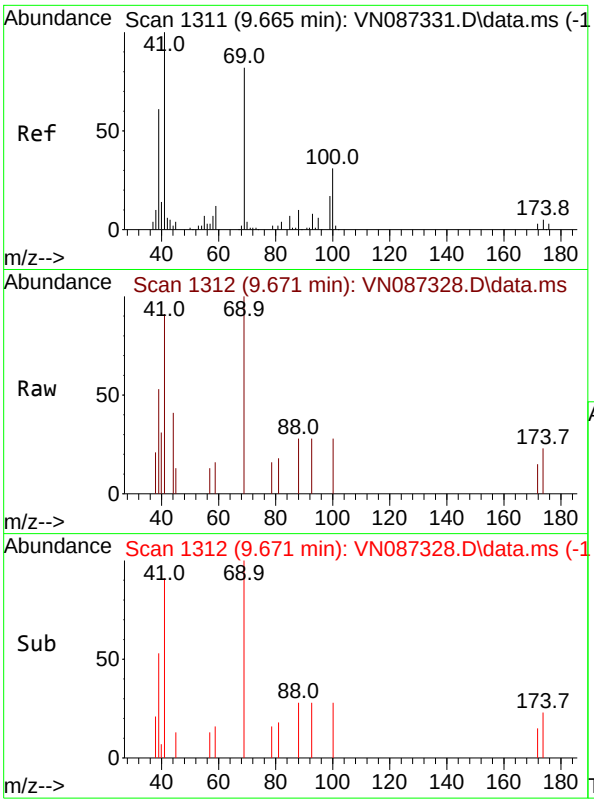


#47
Bromodichloromethane
Concen: 1.006 ug/l
RT: 9.871 min Scan# 1346
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 83 Resp: 3549

Ion	Ratio	Lower	Upper
83	100		
85	68.8	50.4	75.6
127	0.0	5.8	8.8#





#48
Methyl methacrylate
Concen: 0.808 ug/l
RT: 9.671 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 41 Resp: 232

Ion	Ratio	Lower	Upper
41	100		
69	87.9	64.1	96.1
39	56.1	45.5	68.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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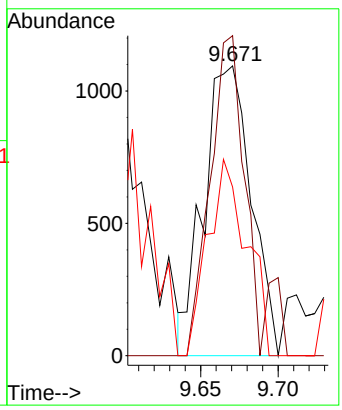
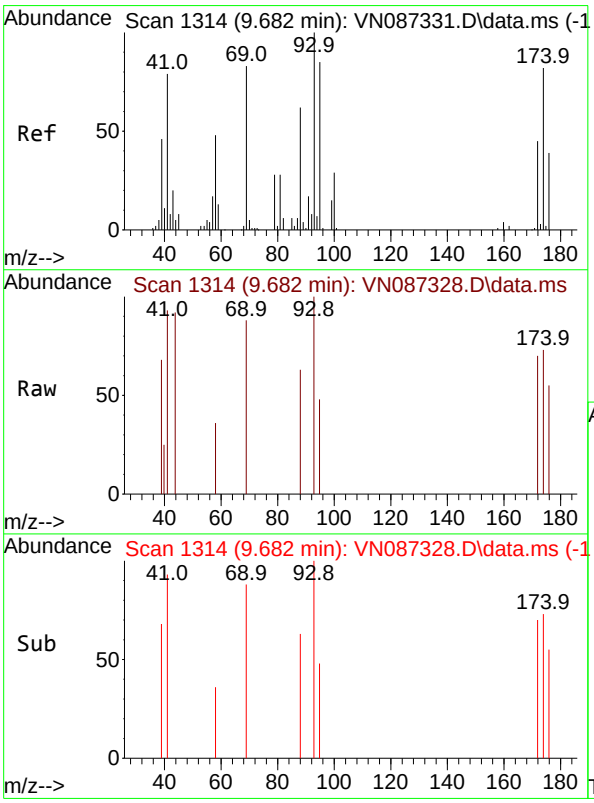
Supervised By :Semsettin Yesilyurt 07/17/2025

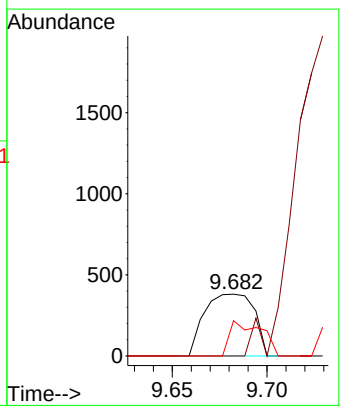


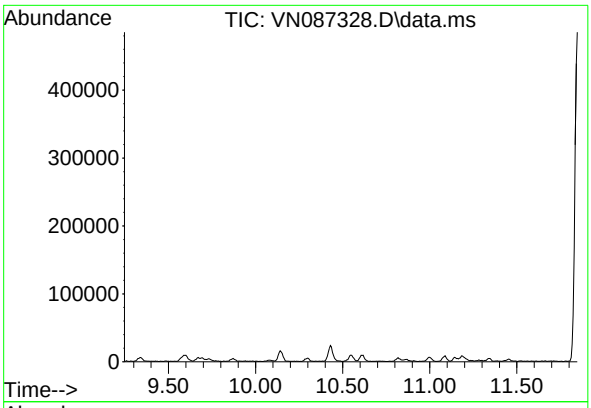


#49
1,4-Dioxane
Concen: 15.810 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 88 Resp: 696

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	35.9	61.1	91.7#





#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 10.55 min

Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 98

Sig	Exp Ratio
98	100
100	65.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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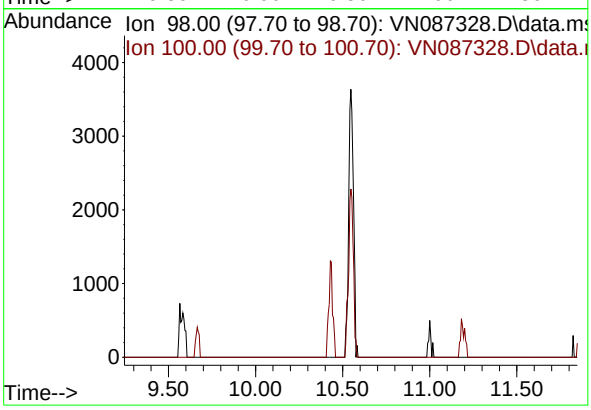
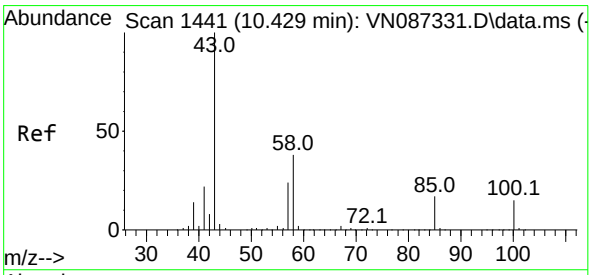
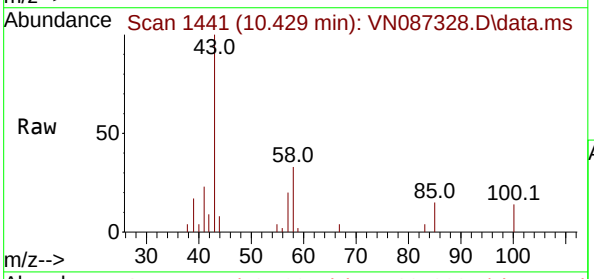
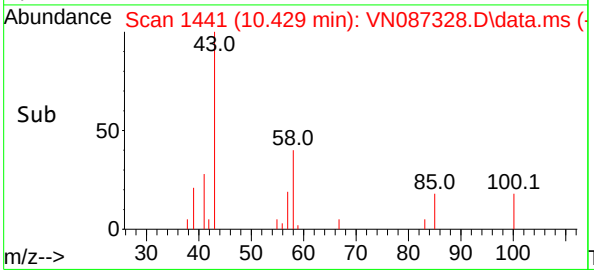
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025





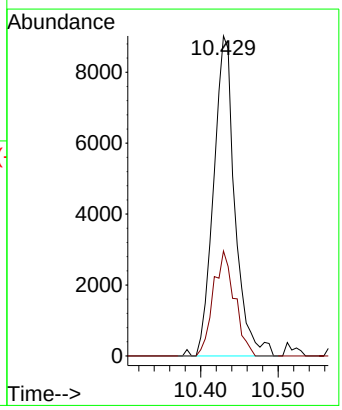


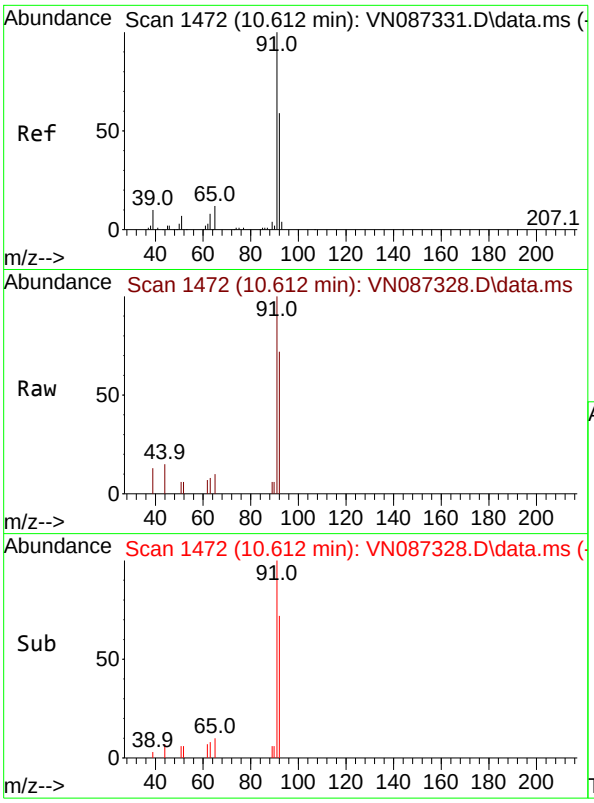


#51
4-Methyl-2-Pentanone
Concen: 4.263 ug/l
RT: 10.429 min Scan# 1441
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 17216

Ion	Ratio	Lower	Upper
43	100		
58	33.0	30.8	46.2





#52
Toluene
Concen: 0.864 ug/l
RT: 10.612 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 92 Resp: 483

Ion	Ratio	Lower	Upper
92	100		
91	157.1	135.1	202.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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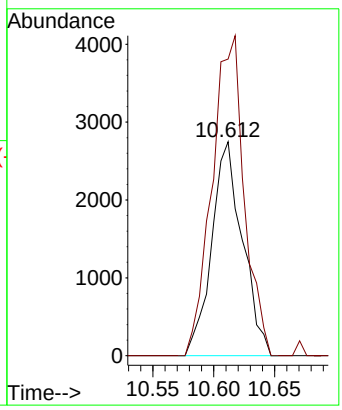
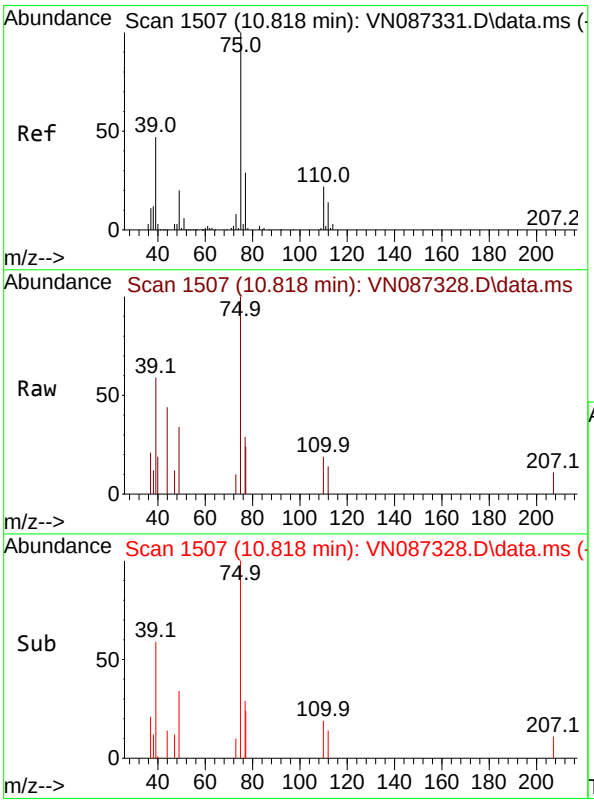
Supervised By :Semsettin Yesilyurt 07/17/2025

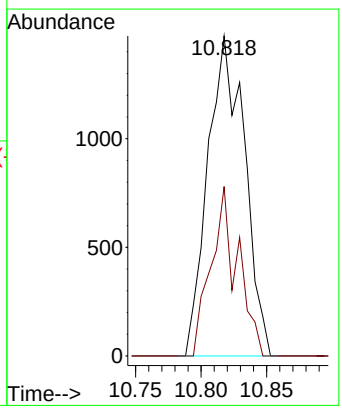


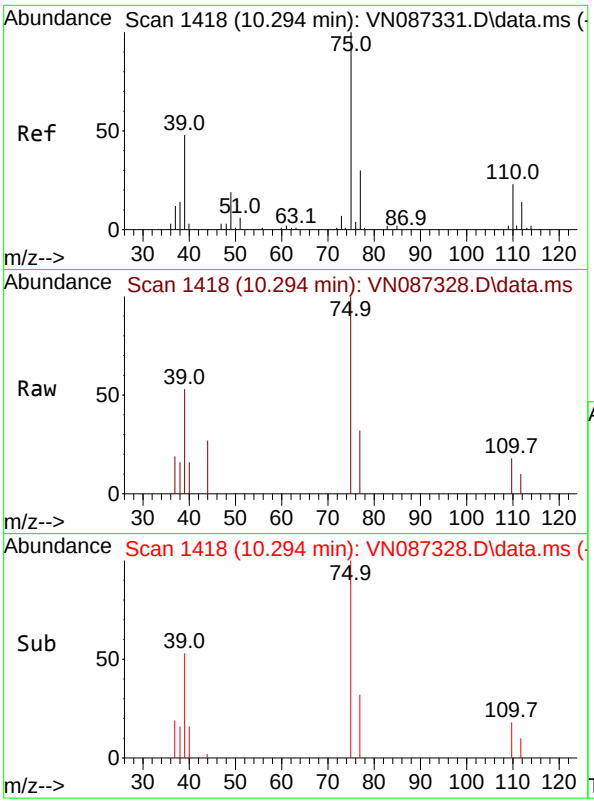


#53
t-1,3-Dichloropropene
Concen: 0.804 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. -0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 75 Resp: 2869

Ion	Ratio	Lower	Upper
75	100		
77	53.0	23.6	35.4#





#54
cis-1,3-Dichloropropene
Concen: 0.830 ug/l
RT: 10.294 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Tgt Ion: 75 Resp: 305

Ion	Ratio	Lower	Upper
75	100		
77	31.6	24.2	36.2
39	53.2	38.4	57.6

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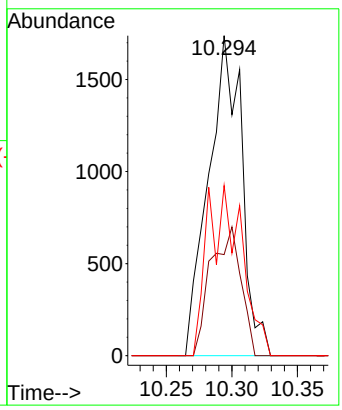
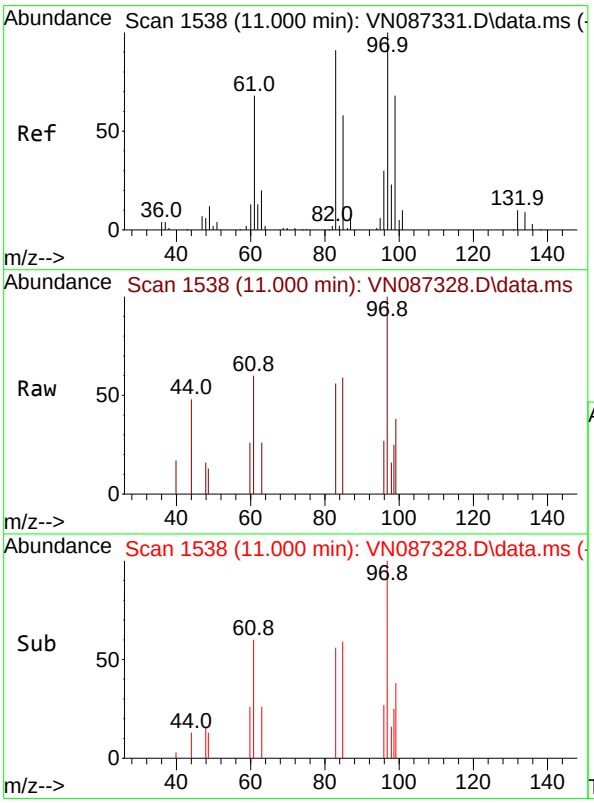
Supervised By :Semsettin Yesilyurt 07/17/2025

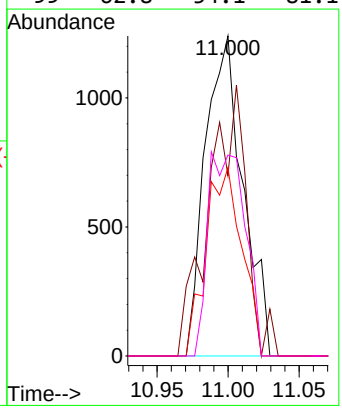


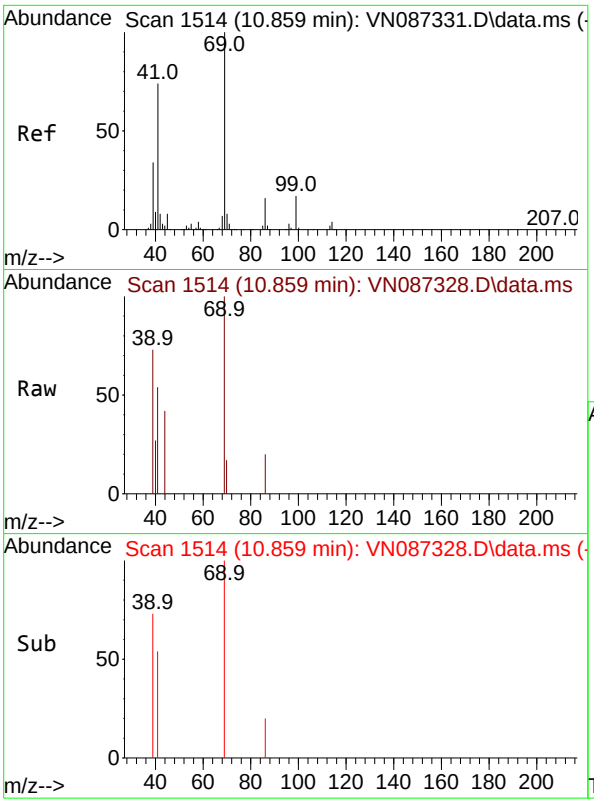


#55
1,1,2-Trichloroethane
Concen: 1.013 ug/l
RT: 11.000 min Scan# 1538
Delta R.T. -0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 97 Resp: 2294

Ion	Ratio	Lower	Upper
97	100		
83	56.4	72.6	109.0#
85	58.9	46.7	70.1
99	62.8	54.1	81.1

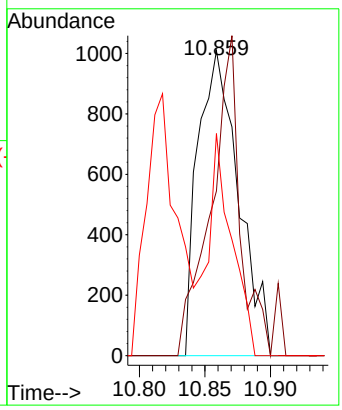




#56
Ethyl methacrylate
Concen: 1.217 ug/l
RT: 10.859 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 69 Resp: 217

Ion	Ratio	Lower	Upper
69	100		
41	75.4	55.1	82.7
39	42.6	27.9	41.9#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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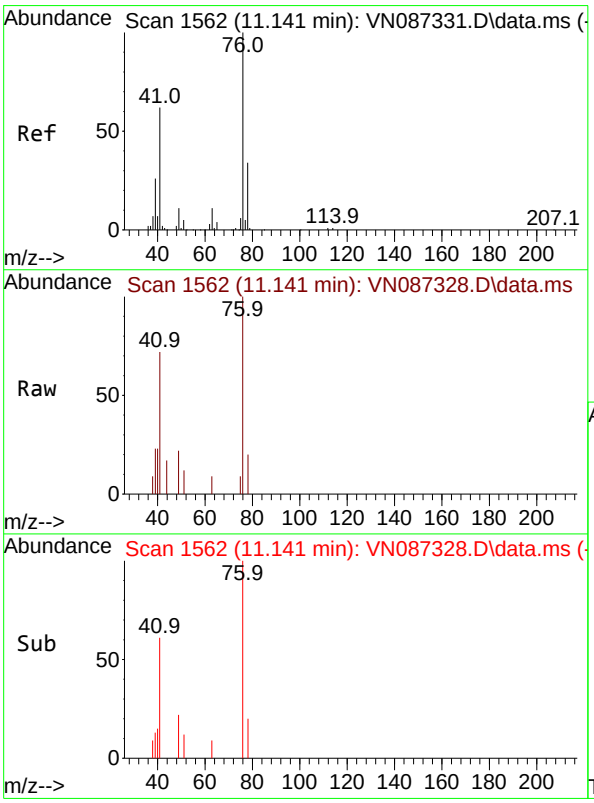
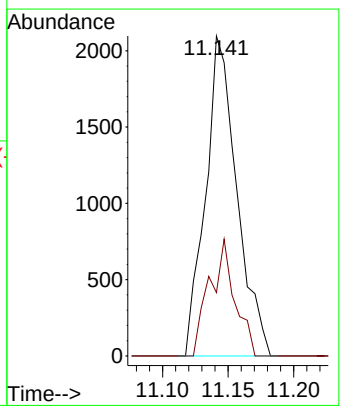
Supervised By :Semsettin Yesilyurt 07/17/2025

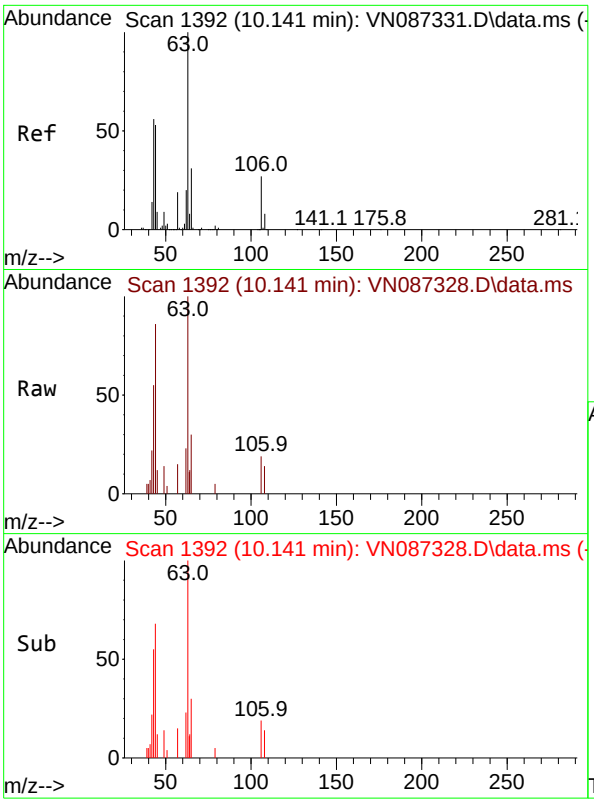


#57
1,3-Dichloropropane
Concen: 0.888 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 76 Resp: 3477

Ion	Ratio	Lower	Upper
76	100		
78	29.5	26.0	39.0





#58
2-Chloroethyl Vinyl ether
Concen: 3.707 ug/l
RT: 10.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 63 Resp: 688

Ion	Ratio	Lower	Upper
63	100		
106	24.9	21.7	32.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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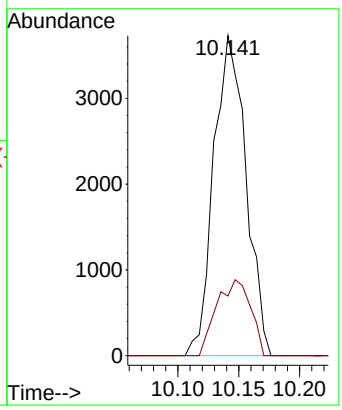
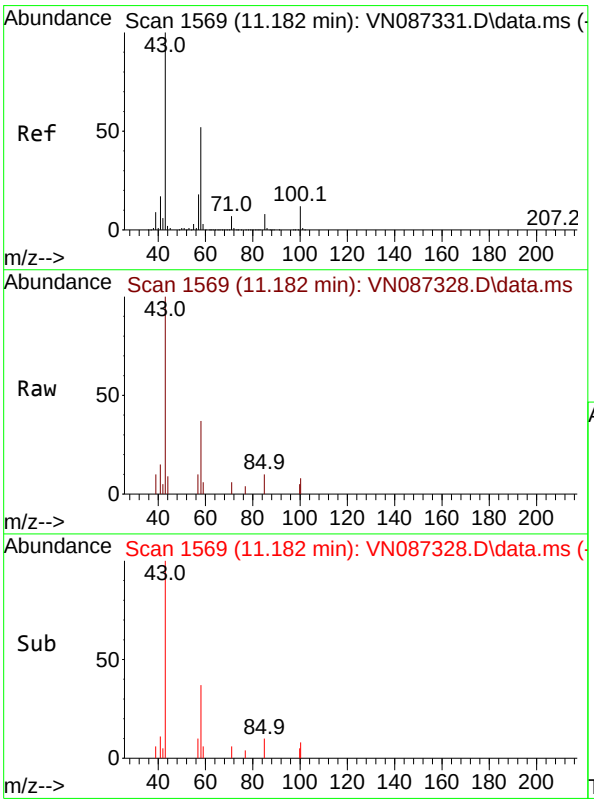
Supervised By :Semsettin Yesilyurt 07/17/2025

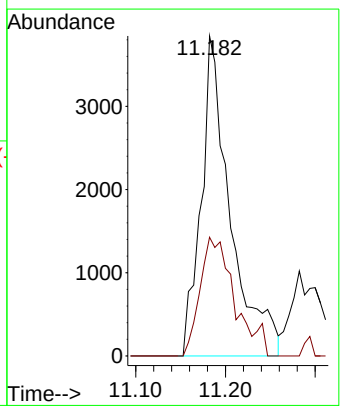


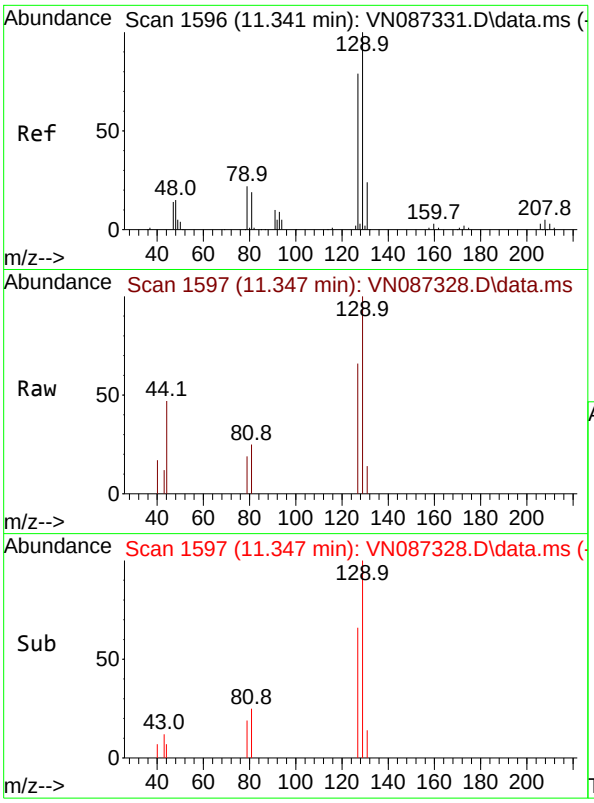


#59
2-Hexanone
Concen: 3.250 ug/l
RT: 11.182 min Scan# 1569
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 8707

Ion	Ratio	Lower	Upper
43	100		
58	43.8	26.7	80.0

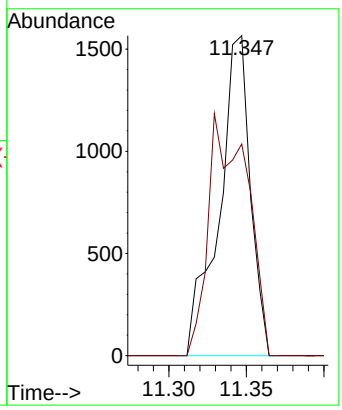




#60
Dibromochloromethane
Concen: 0.852 ug/l
RT: 11.347 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:129 Resp: 220

Ion	Ratio	Lower	Upper
129	100		
127	93.6	39.1	117.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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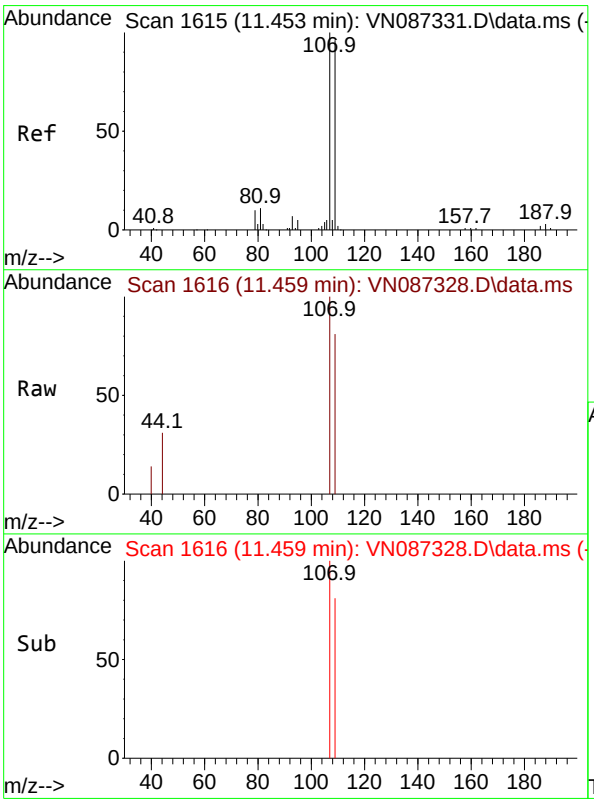
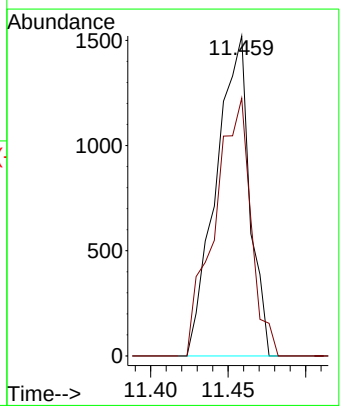
Supervised By :Semsettin Yesilyurt 07/17/2025

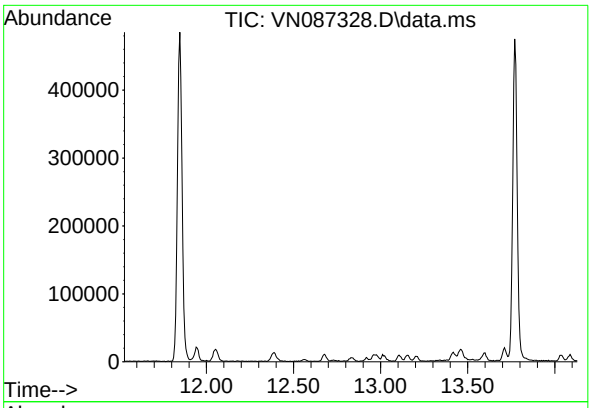


#61
1,2-Dibromoethane
Concen: 0.962 ug/l
RT: 11.459 min Scan# 1616
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:107 Resp: 2291

Ion	Ratio	Lower	Upper
107	100		
109	87.3	77.5	116.3





#62
4-Bromofluorobenzene
Concen: 0.000 ug/l
Expected RT: 12.83 min

Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 95

Sig	Exp Ratio
95	100
174	74.7
176	70.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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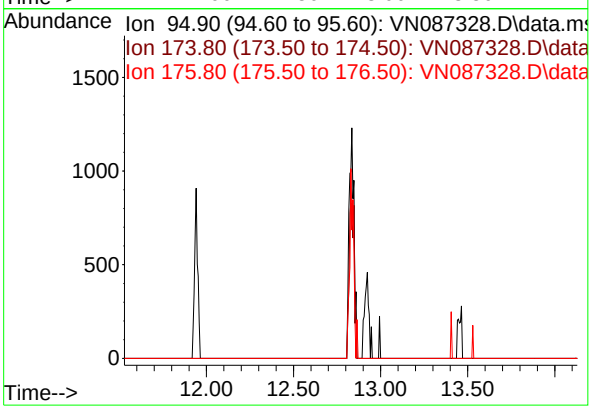
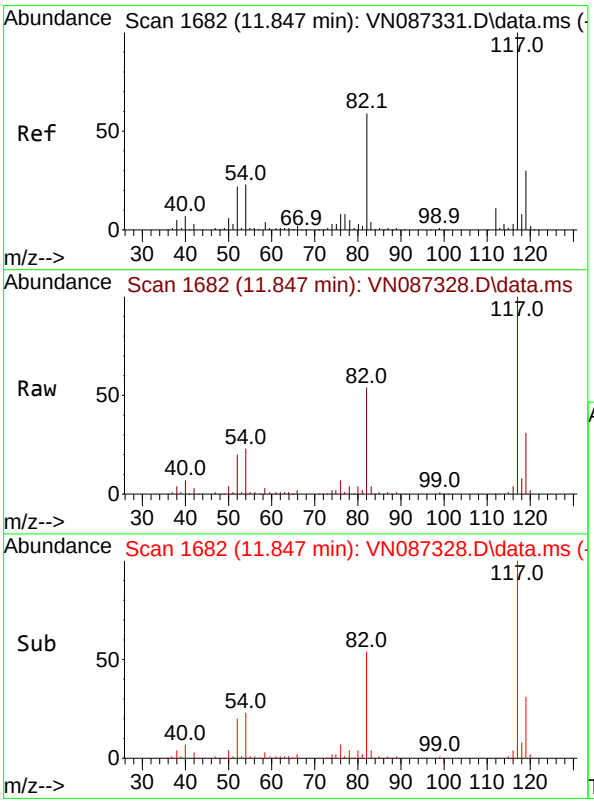
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

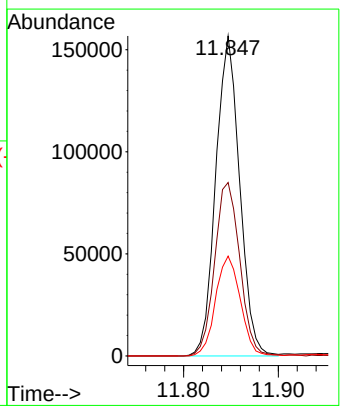


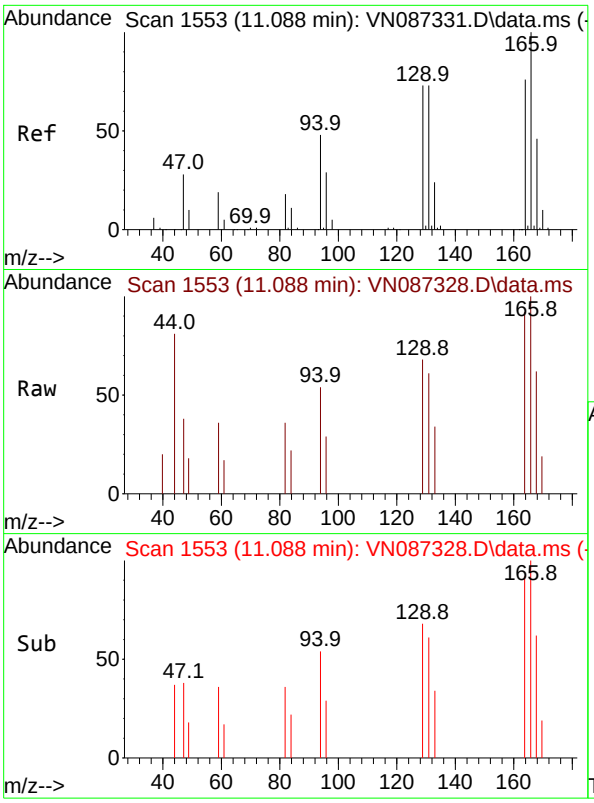


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1682
Delta R.T. -0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:117 Resp: 274838

Ion	Ratio	Lower	Upper
117	100		
82	54.2	47.4	71.2
119	31.2	23.8	35.8

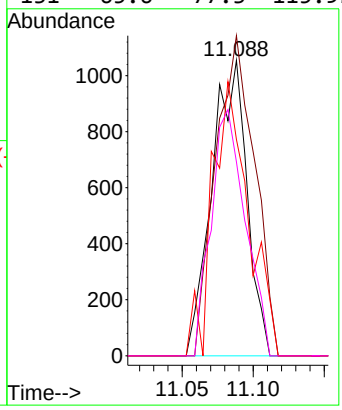




#64
Tetrachloroethene
Concen: 1.022 ug/l
RT: 11.088 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:164 Resp: 180

Ion	Ratio	Lower	Upper
164	100		
166	108.3	105.5	158.3
129	73.2	77.4	116.2#
131	65.6	77.3	115.9#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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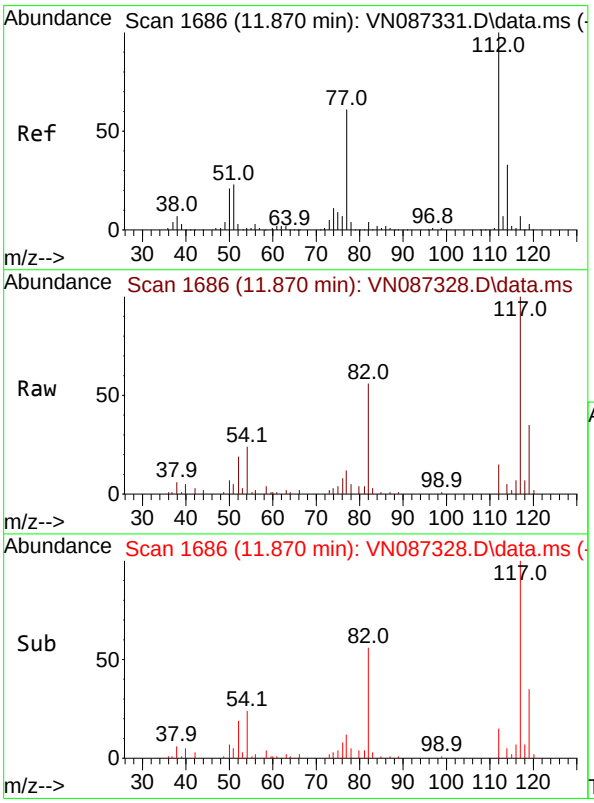
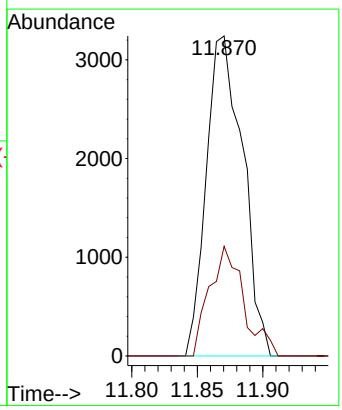
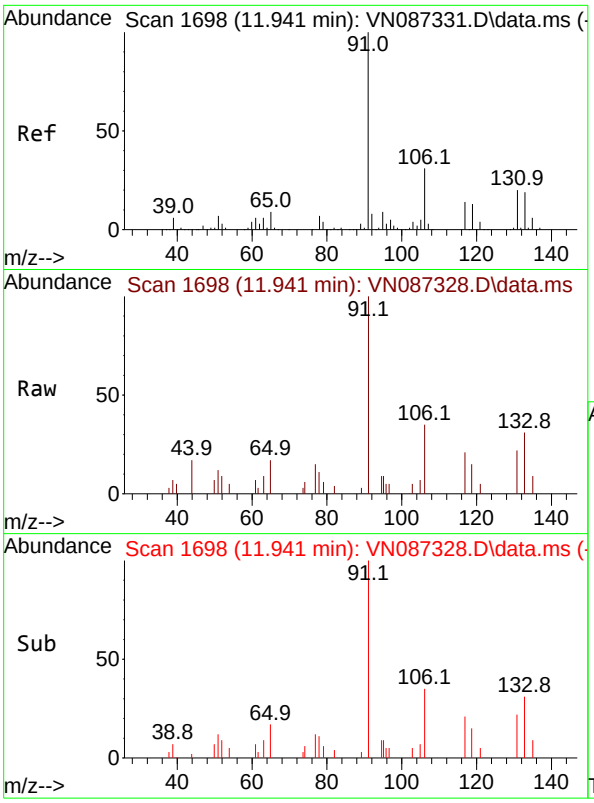


#65
Chlorobenzene
Concen: 1.014 ug/l
RT: 11.870 min Scan# 1686
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:112 Resp: 6259

Ion	Ratio	Lower	Upper
112	100		
114	34.3	26.5	39.7

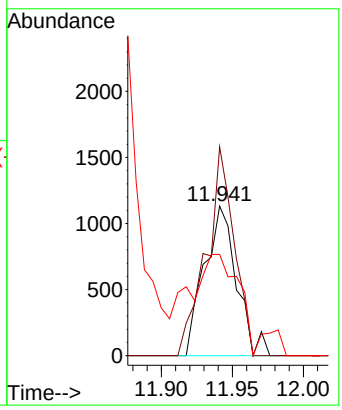




#66
1,1,1,2-Tetrachloroethane
Concen: 0.850 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:131 Resp: 178

Ion	Ratio	Lower	Upper
131	100		
133	120.9	47.4	142.3
119	0.0	33.1	99.2#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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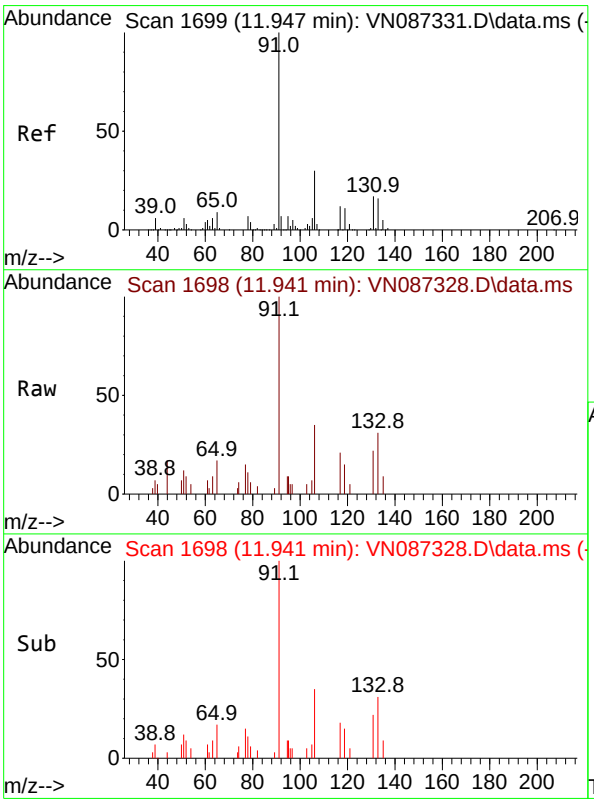
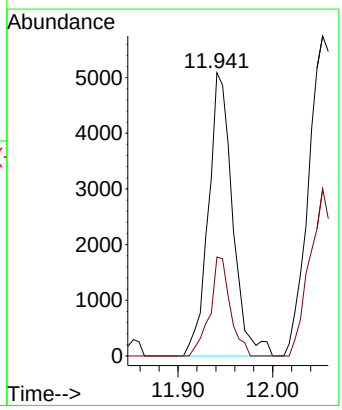
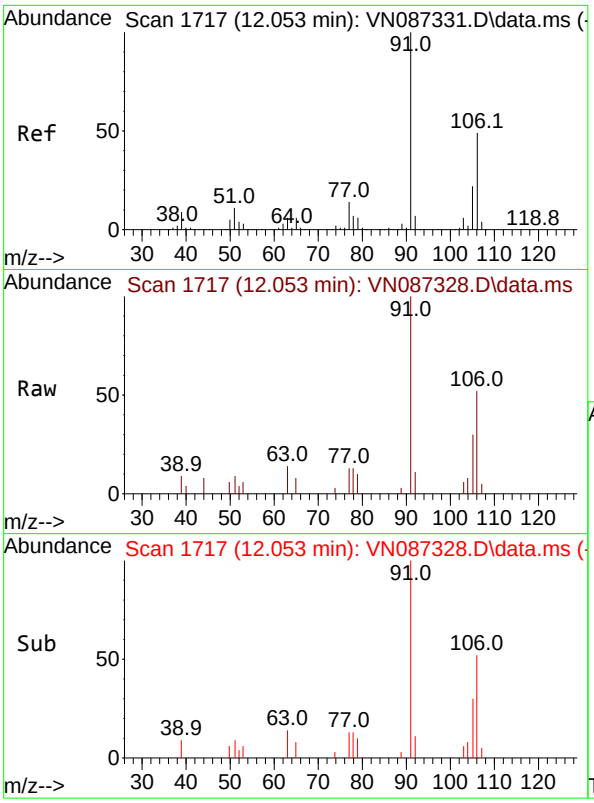


#67
Ethyl Benzene
Concen: 0.889 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 91 Resp: 9031

Ion	Ratio	Lower	Upper
91	100		
106	34.9	24.3	36.5





#68
m/p-Xylenes
Concen: 1.565 ug/l
RT: 12.053 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:106 Resp: 595

Ion	Ratio	Lower	Upper
106	100		
91	198.2	162.0	243.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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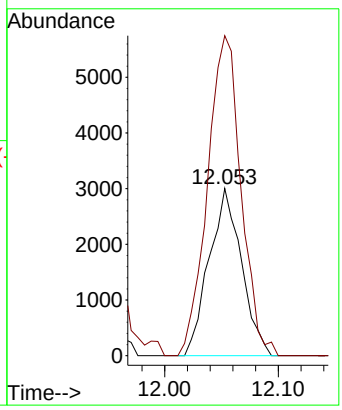
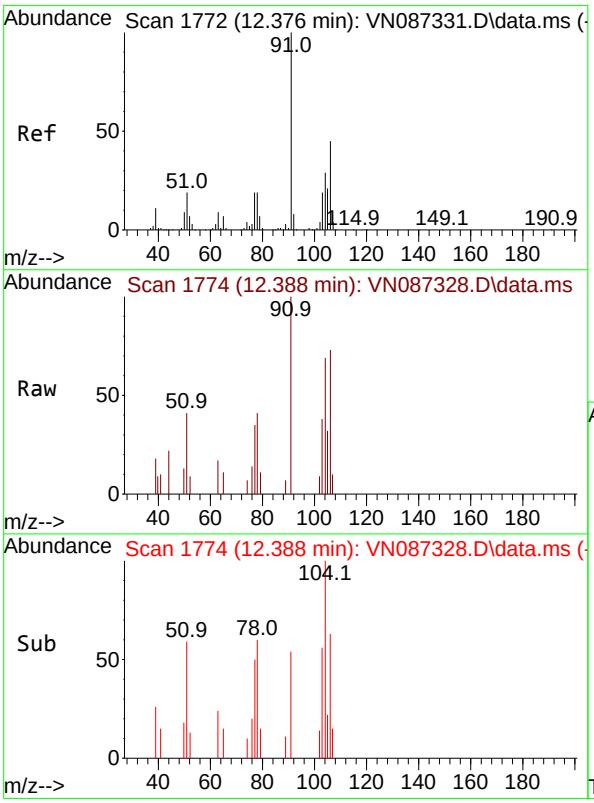
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

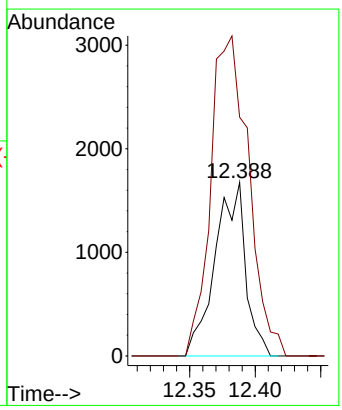


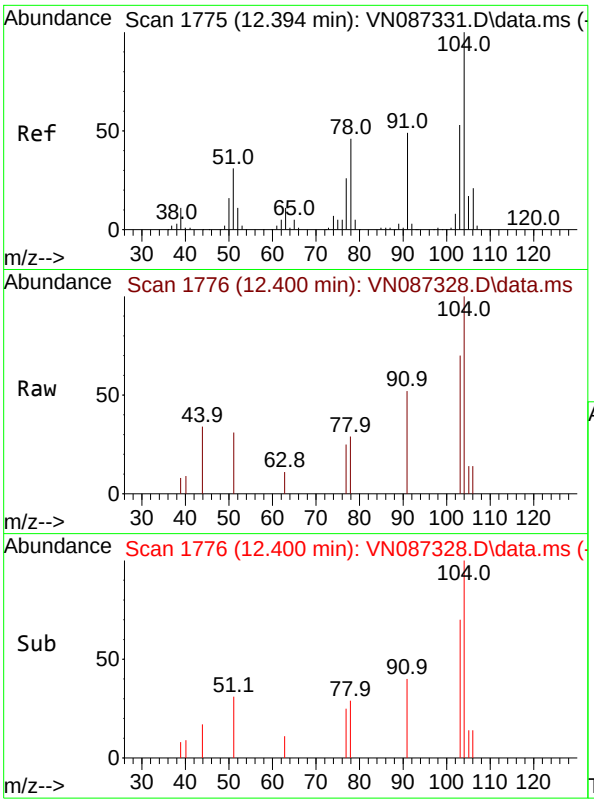


#69
o-Xylene
Concen: 0.743 ug/l
RT: 12.388 min Scan# 1774
Delta R.T. 0.012 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:106 Resp: 2700

Ion	Ratio	Lower	Upper
106	100		
91	229.8	107.7	323.3

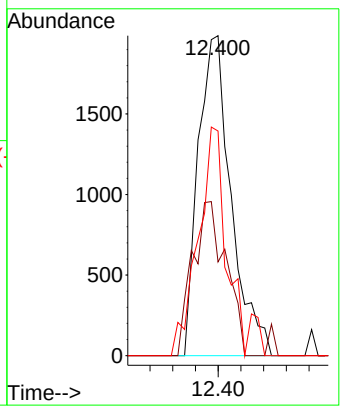




#70
Styrene
Concen: 0.653 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:104 Resp: 398

Ion	Ratio	Lower	Upper
104	100		
78	48.8	41.0	61.6
103	64.6	43.9	65.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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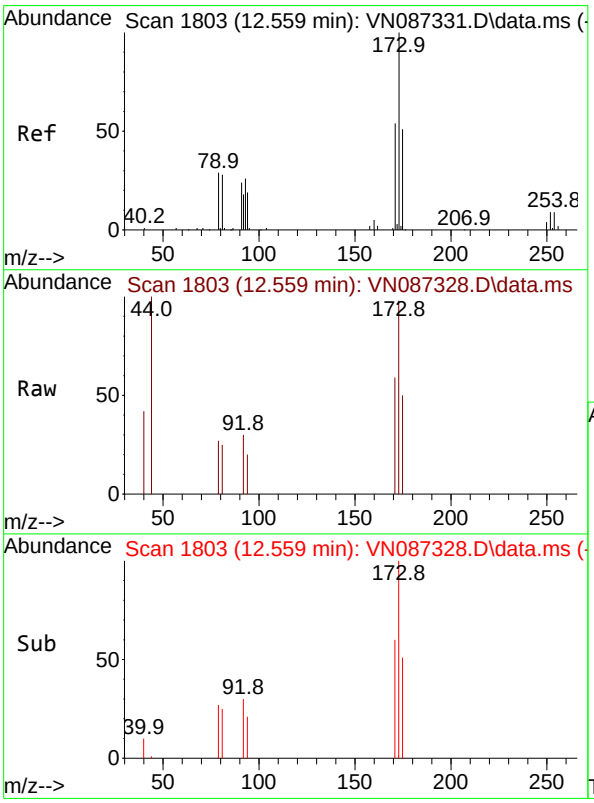
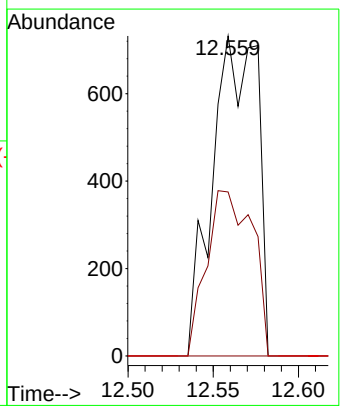
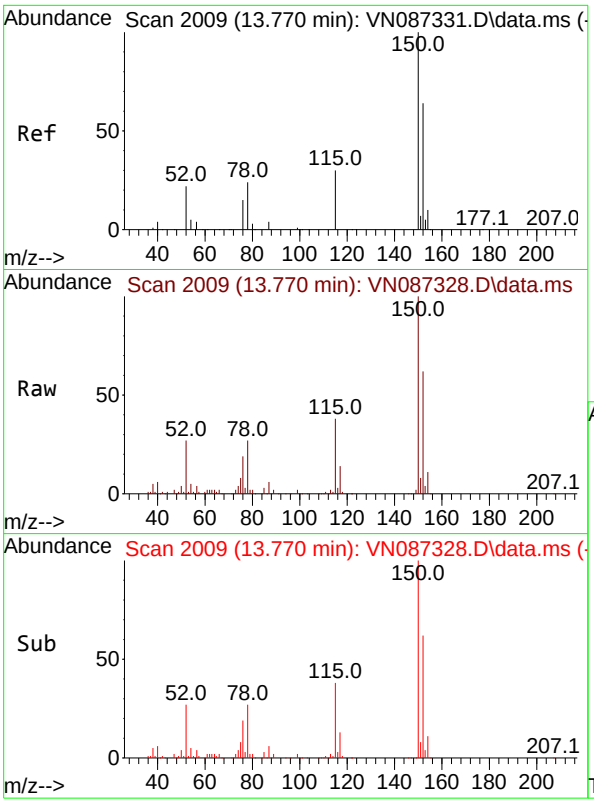


#71
Bromoform
Concen: 0.797 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:173 Resp: 1351

Ion	Ratio	Lower	Upper
173	100		
175	52.5	24.1	72.3
254	0.0	0.0	0.0

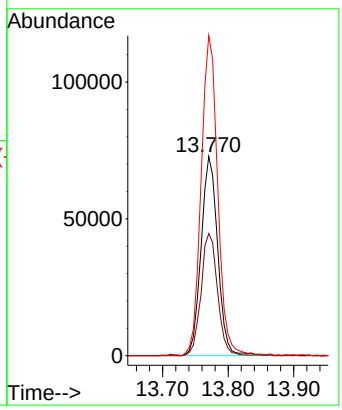




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:152 Resp: 12880

Ion	Ratio	Lower	Upper
152	100		
115	61.0	31.1	93.5
150	160.6	0.0	349.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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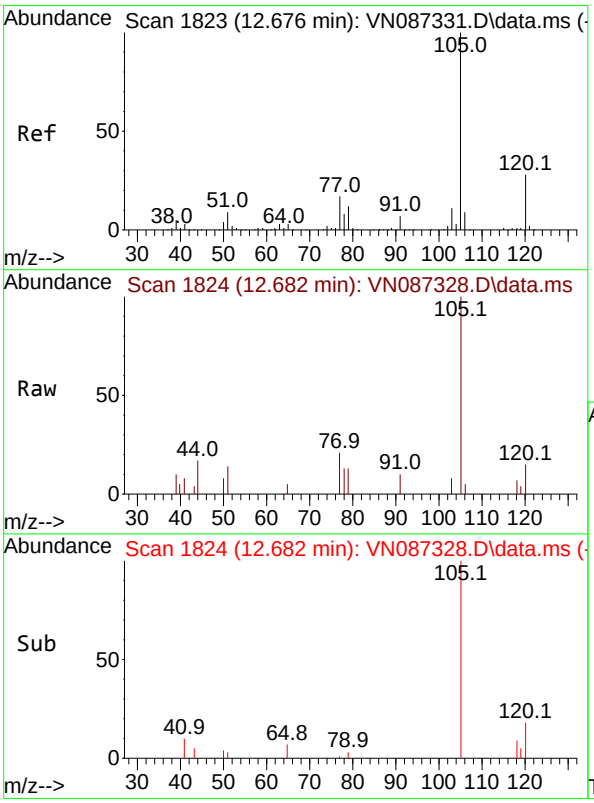
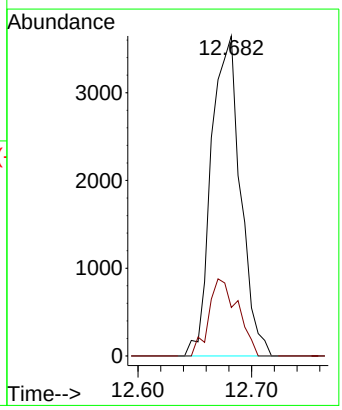
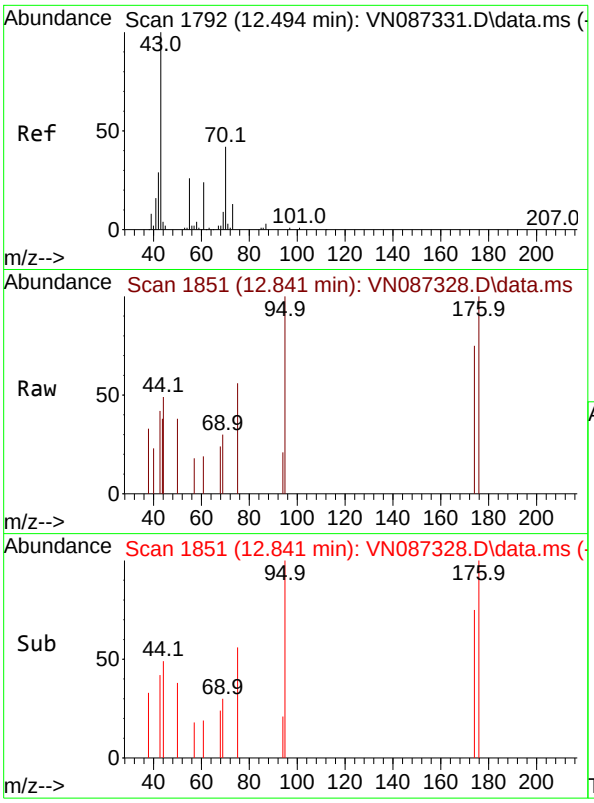


#73
Isopropylbenzene
Concen: 0.802 ug/l
RT: 12.682 min Scan# 1824
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:105 Resp: 6501

Ion	Ratio	Lower	Upper
105	100		
120	24.0	13.4	40.1

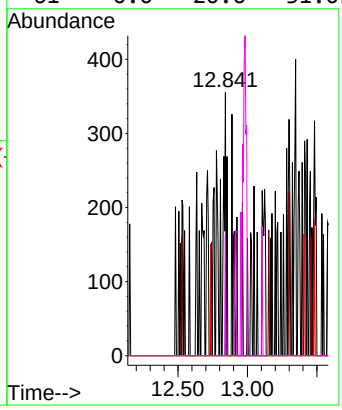




#74
N-amyl acetate
Concen: 1.065 ug/l m
RT: 12.841 min Scan# 1
Delta R.T. 0.347 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 43 Resp: 337

Ion	Ratio	Lower	Upper
43	100		
70	0.0	37.6	56.4#
55	0.0	19.6	29.4#
61	0.0	20.6	31.0#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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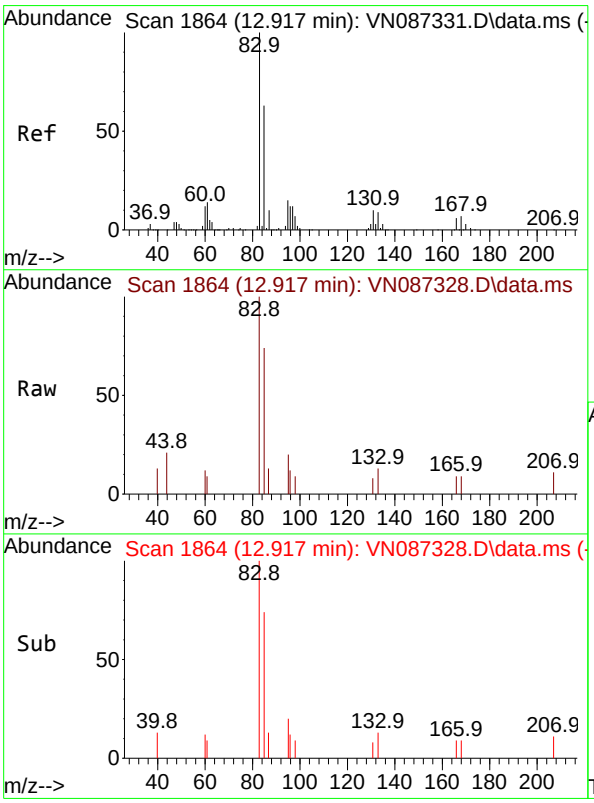
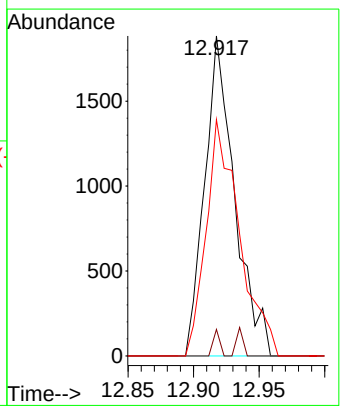
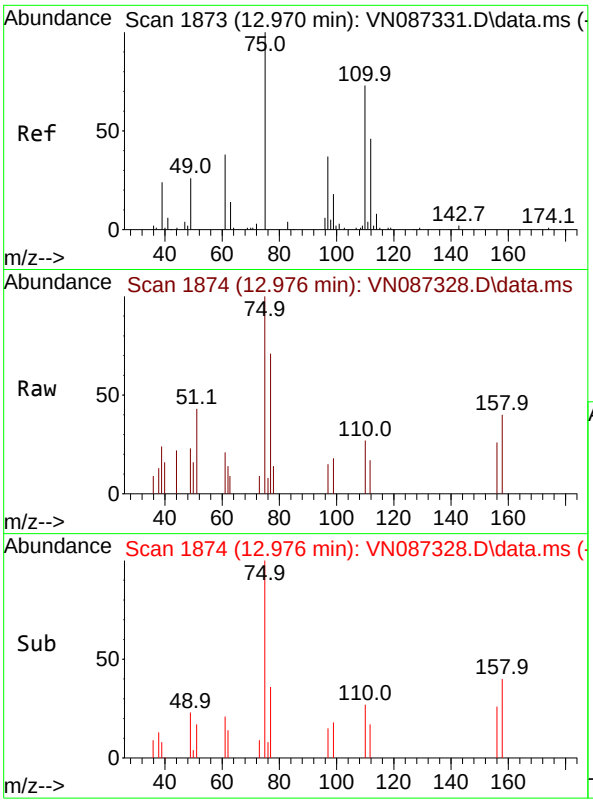


#75
1,1,2,2-Tetrachloroethane
Concen: 0.979 ug/l
RT: 12.917 min Scan# 1864
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 83 Resp: 2986

Ion	Ratio	Lower	Upper
83	100		
131	1.8	5.1	15.3#
85	82.1	32.5	97.4





#76
1,2,3-Trichloropropane
Concen: 1.089 ug/l m
RT: 12.976 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 75 Resp: 311

Ion	Ratio	Lower	Upper
75	100		
77	153.5	94.5	283.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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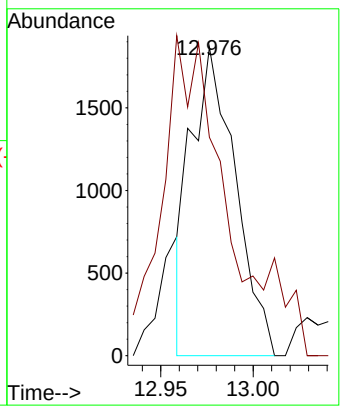
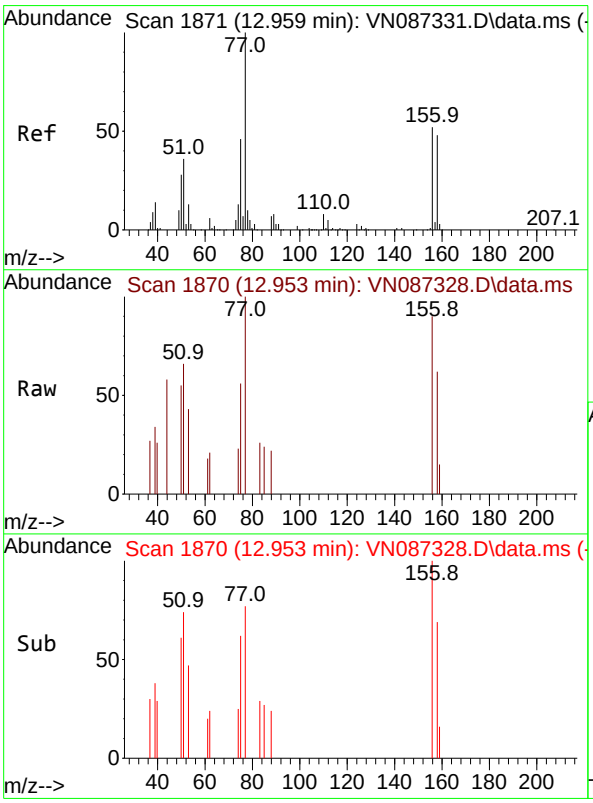
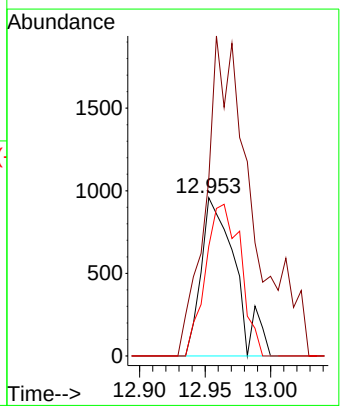


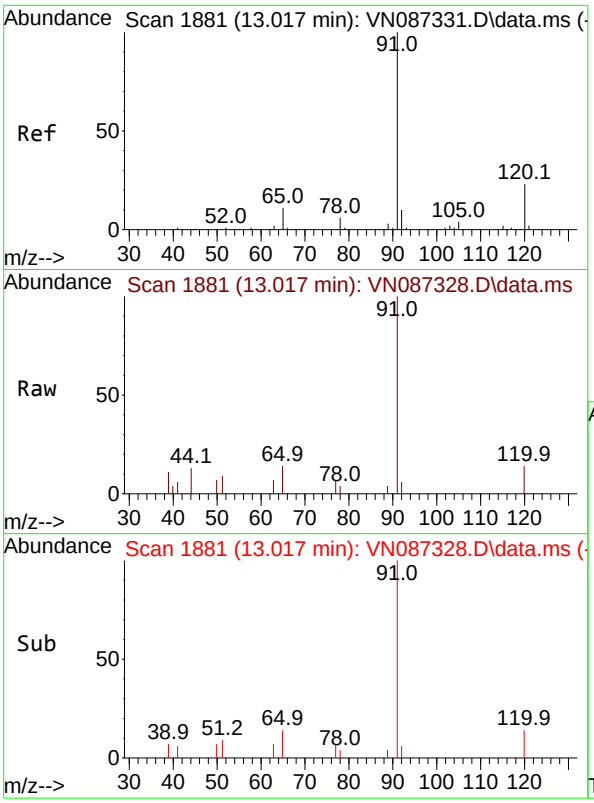


#77
Bromobenzene
Concen: 0.820 ug/l
RT: 12.953 min Scan# 1870
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:156 Resp: 1724

Ion	Ratio	Lower	Upper
156	100		
77	277.2	114.9	344.6
158	99.6	48.5	145.5





#78
n-propylbenzene
Concen: 0.821 ug/l
RT: 13.017 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 91 Resp: 837

Ion	Ratio	Lower	Upper
91	100		
120	19.9	11.3	33.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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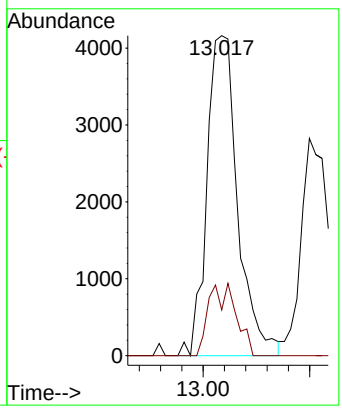
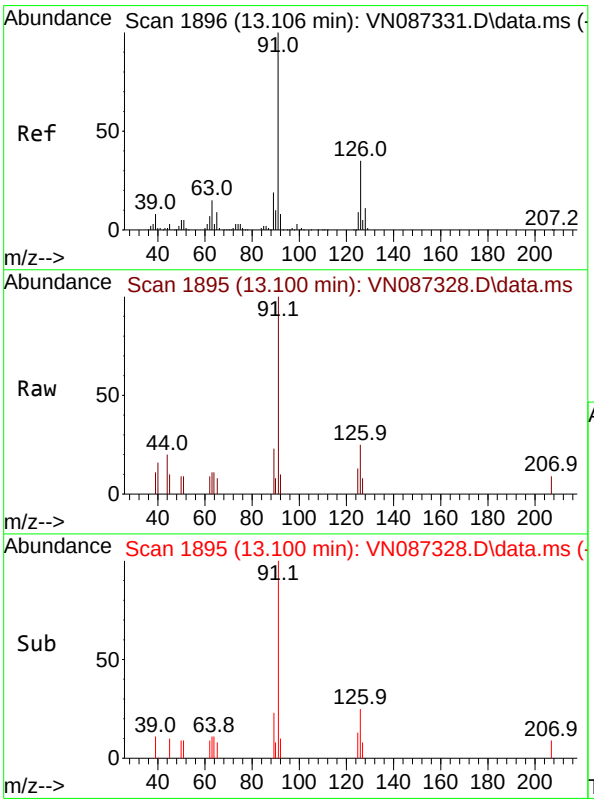
Supervised By :Semsettin Yesilyurt 07/17/2025

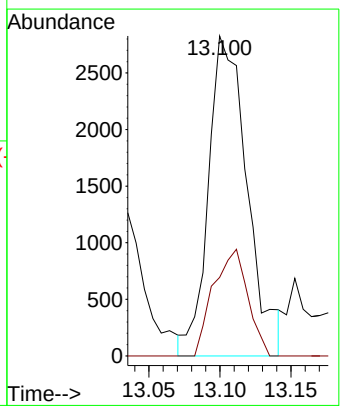


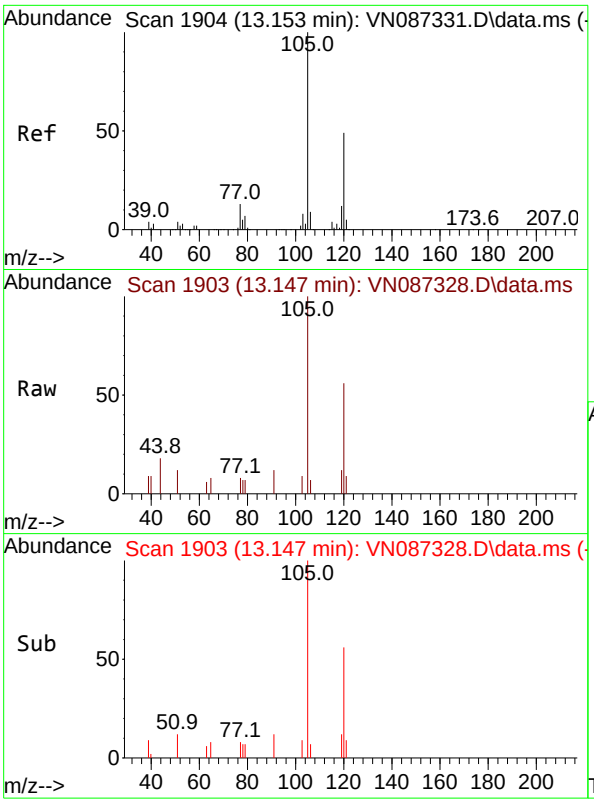


#79
2-Chlorotoluene
Concen: 0.857 ug/l
RT: 13.100 min Scan# 1895
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 91 Resp: 5372

Ion	Ratio	Lower	Upper
91	100		
126	29.6	16.9	50.6





#80
1,3,5-Trimethylbenzene
Concen: 0.772 ug/l
RT: 13.147 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:105 Resp: 532

Ion	Ratio	Lower	Upper
105	100		
120	52.9	24.3	72.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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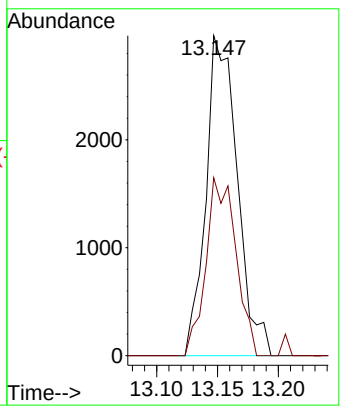
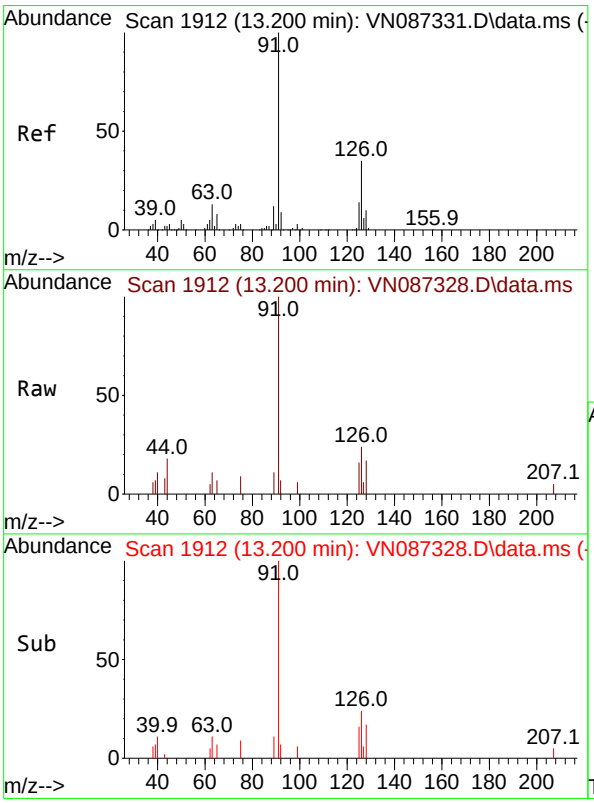
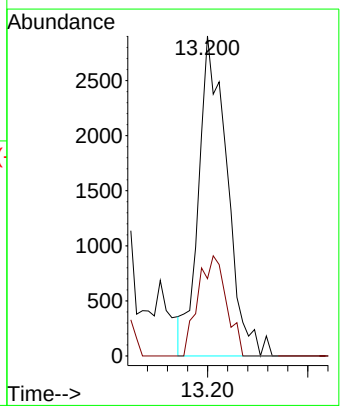


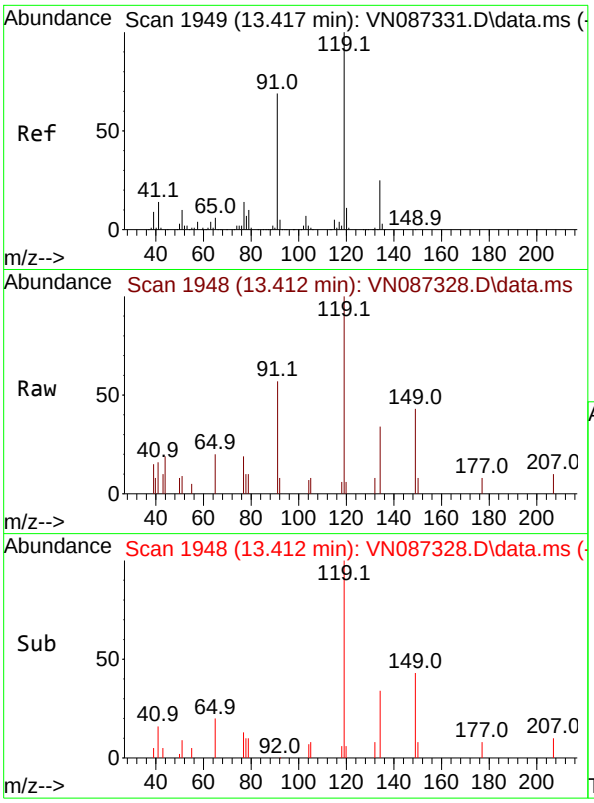


#82
4-Chlorotoluene
Concen: 0.878 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 91 Resp: 5733

Ion	Ratio	Lower	Upper
91	100		
126	31.1	16.6	49.7

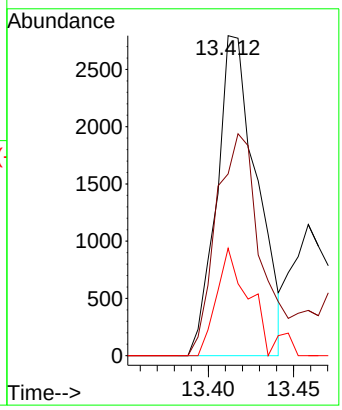




#83
tert-Butylbenzene
Concen: 0.795 ug/l
RT: 13.412 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:119 Resp: 458

Ion	Ratio	Lower	Upper
119	100		
91	79.4	35.0	105.1
134	29.0	12.6	37.6



Instrument :
MSVOA_N
ClientSampleId :
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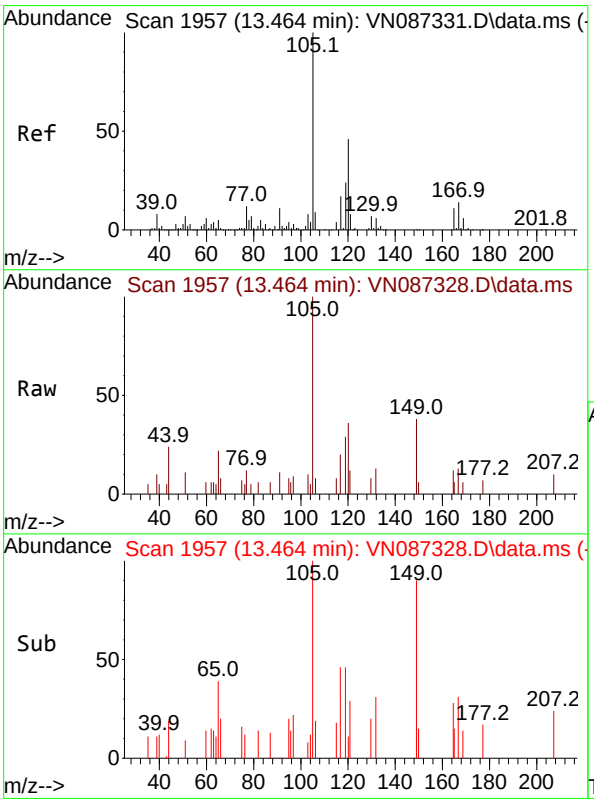
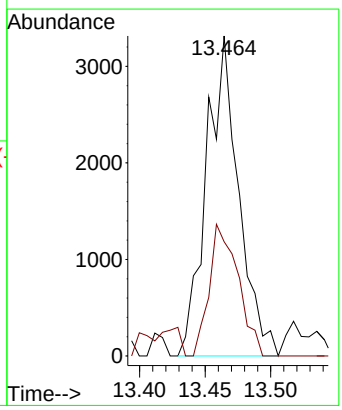
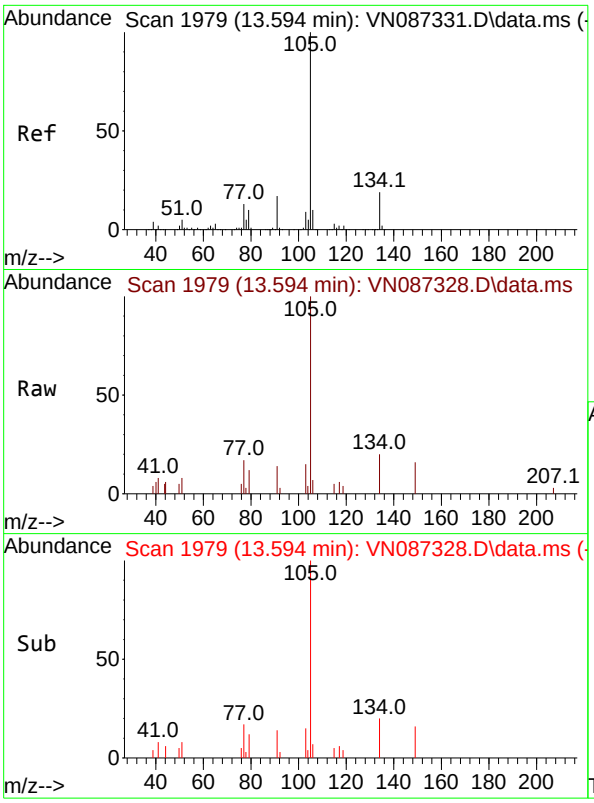


#84
1,2,4-Trimethylbenzene
Concen: 0.804 ug/l
RT: 13.464 min Scan# 1957
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:105 Resp: 5671

Ion	Ratio	Lower	Upper
105	100		
120	36.8	22.8	68.3





#85
sec-Butylbenzene
Concen: 0.925 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:105 Resp: 803

Ion	Ratio	Lower	Upper
105	100		
134	18.1	9.8	29.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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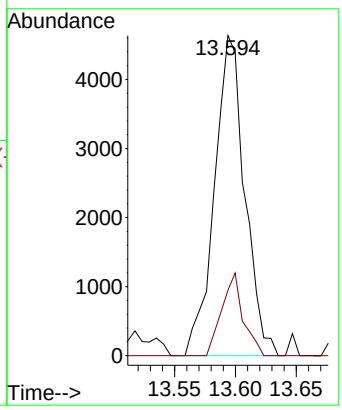
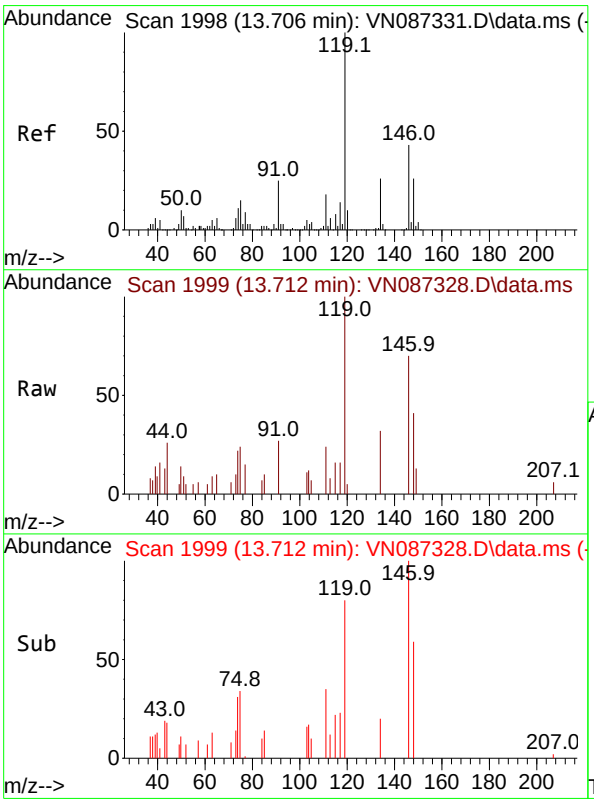
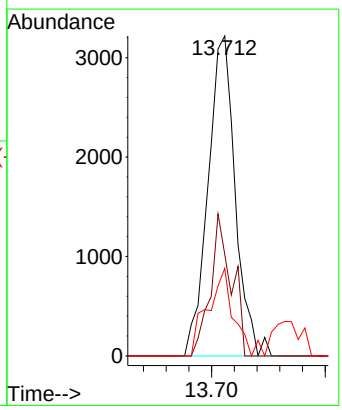


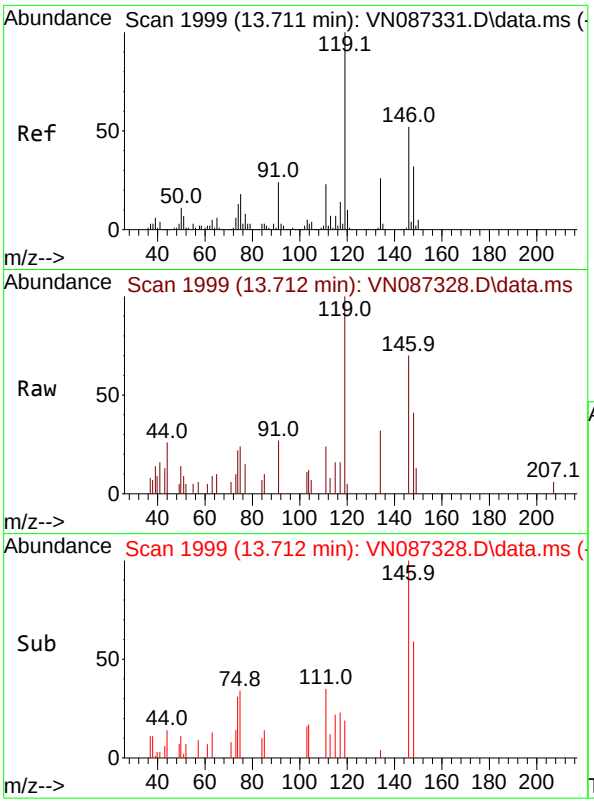


#86
p-Isopropyltoluene
Concen: 0.770 ug/l
RT: 13.712 min Scan# 1999
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:119 Resp: 5360

Ion	Ratio	Lower	Upper
119	100		
134	34.2	13.5	40.5
91	25.4	12.2	36.6





#87
1,3-Dichlorobenzene
Concen: 0.904 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

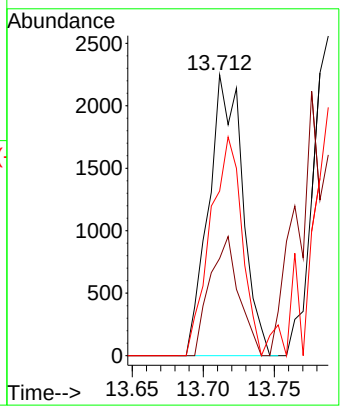
Tgt Ion:146 Resp: 373

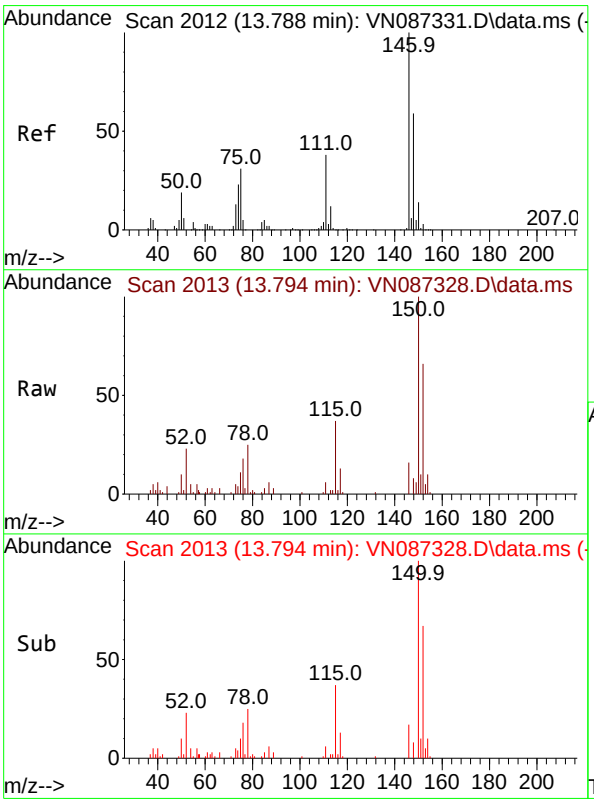
Ion	Ratio	Lower	Upper
146	100		
111	36.5	21.4	64.3
148	72.6	31.6	95.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

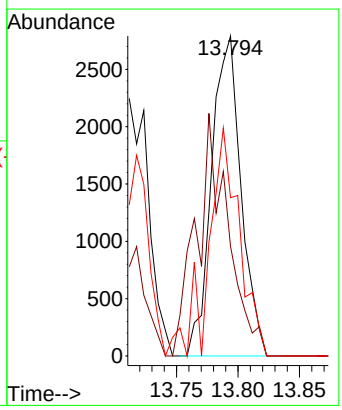


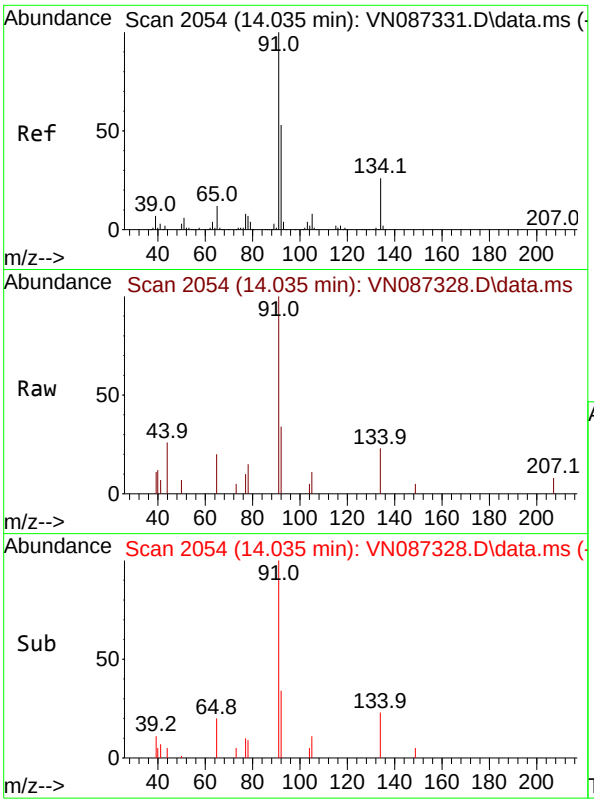


#88
1,4-Dichlorobenzene
Concen: 1.056 ug/l m
RT: 13.794 min Scan# 2013
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:146 Resp: 4655

Ion	Ratio	Lower	Upper
146	100		
111	29.2	19.6	58.7
148	58.2	31.4	94.0

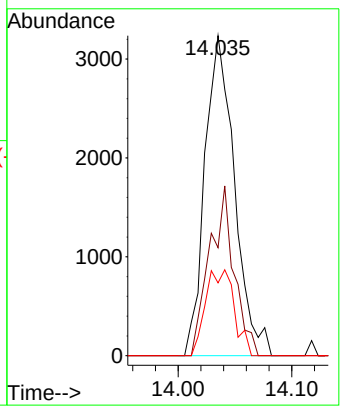




#89
n-Butylbenzene
Concen: 0.883 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 91 Resp: 586

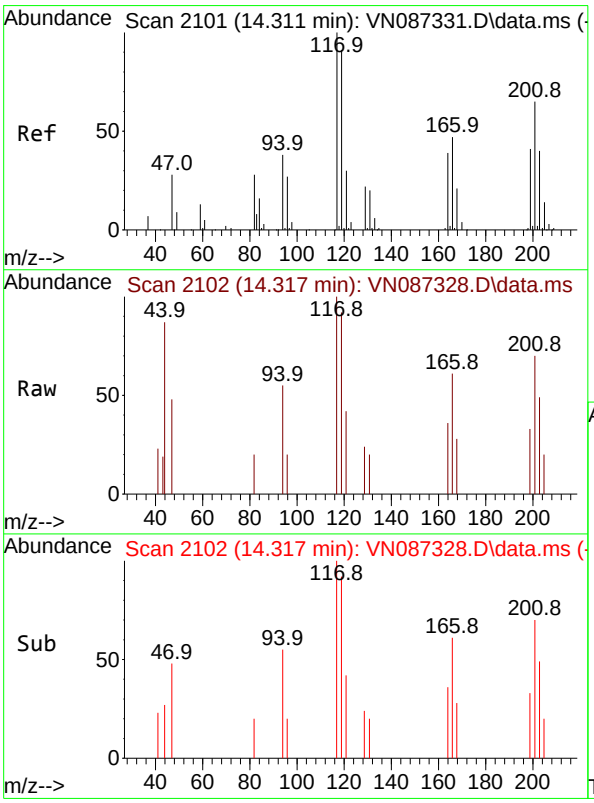
Ion	Ratio	Lower	Upper
91	100		
92	44.0	26.2	78.6
134	25.9	12.4	37.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

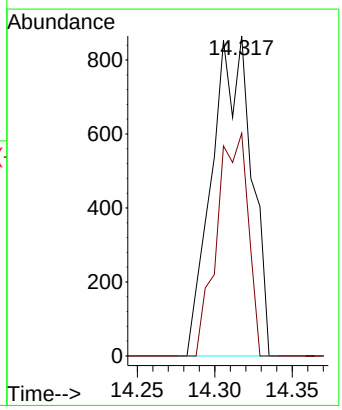
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

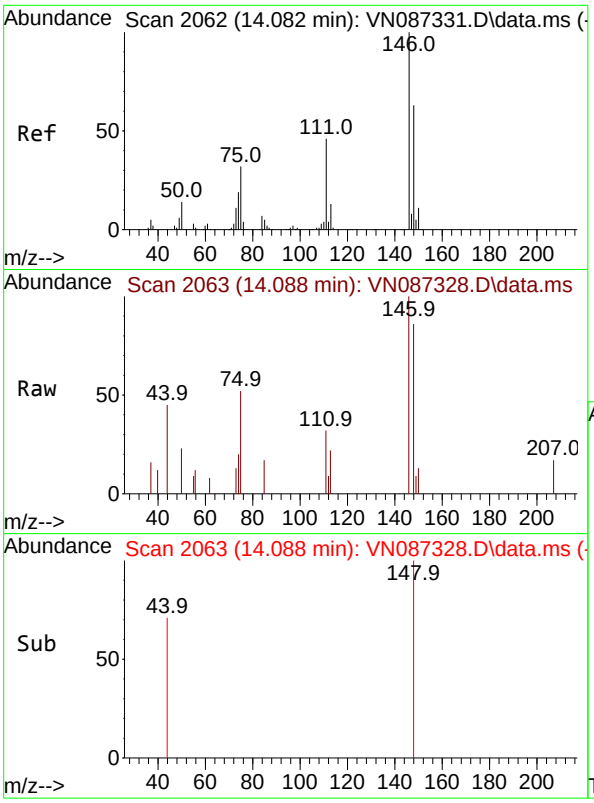


#90
Hexachloroethane
Concen: 1.035 ug/l
RT: 14.317 min Scan# 2102
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:117 Resp: 1527

Ion	Ratio	Lower	Upper
117	100		
201	55.1	32.8	98.4

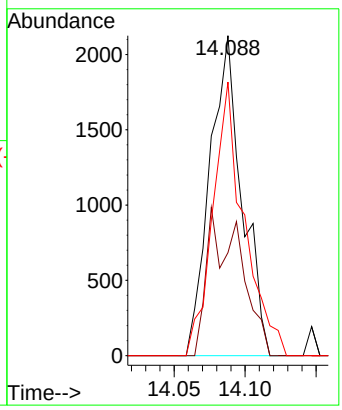




#91
1,2-Dichlorobenzene
Concen: 0.859 ug/l
RT: 14.088 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:146 Resp: 335

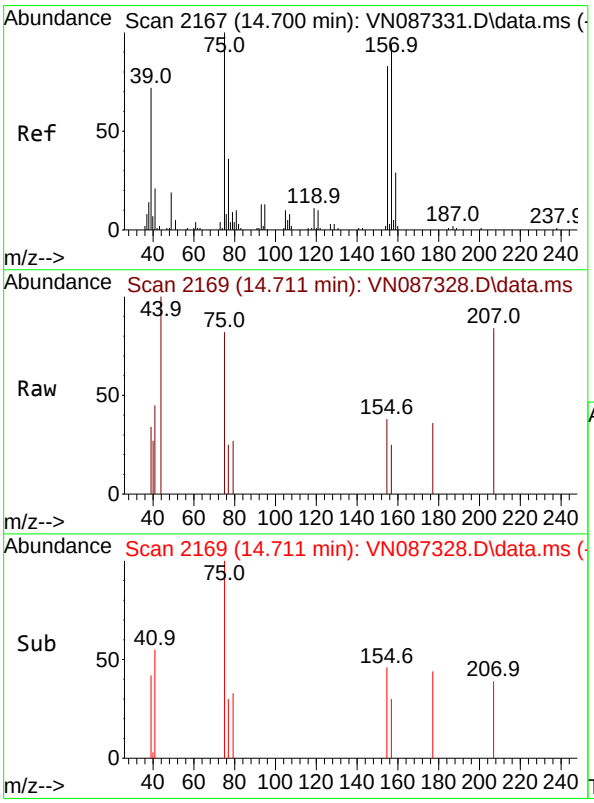
Ion	Ratio	Lower	Upper
146	100		
111	47.6	22.0	66.0
148	82.7	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

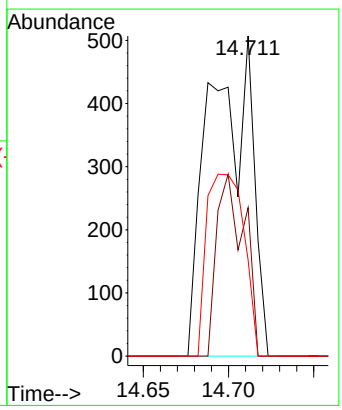
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

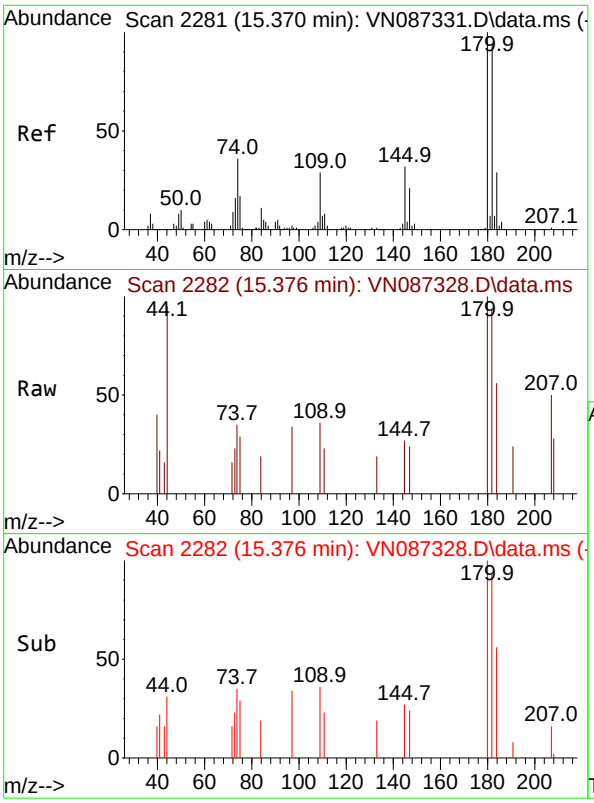


#92
1,2-Dibromo-3-Chloropropane
Concen: 1.091 ug/l
RT: 14.711 min Scan# 2169
Delta R.T. 0.012 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion: 75 Resp: 874

Ion	Ratio	Lower	Upper
75	100		
155	37.2	37.3	111.8#
157	50.2	46.2	138.6

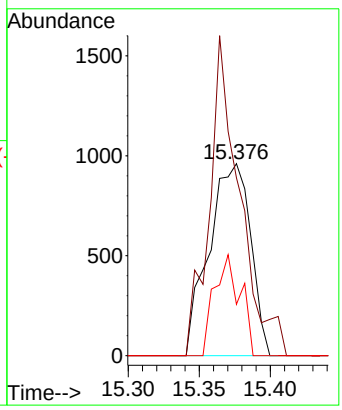




#93
1,2,4-Trichlorobenzene
Concen: 0.854 ug/l
RT: 15.376 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:180 Resp: 196

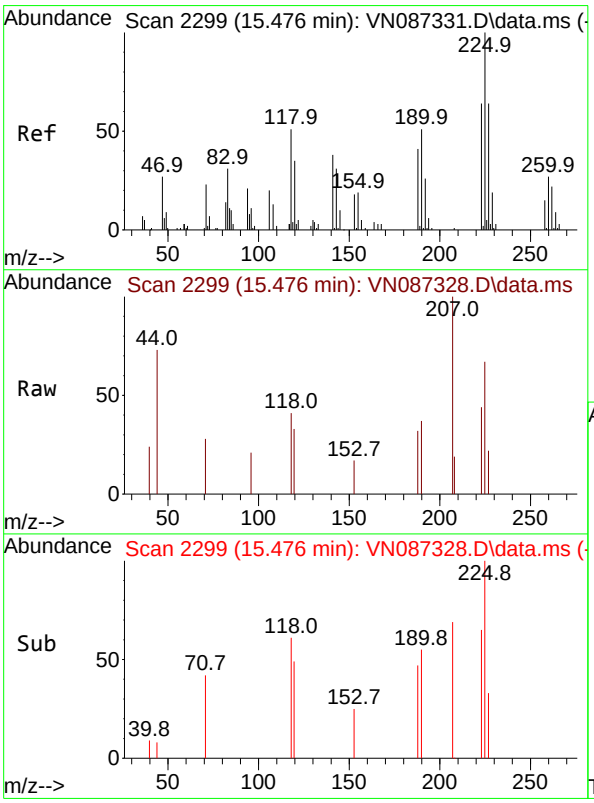
Ion	Ratio	Lower	Upper
180	100		
182	121.8	47.3	141.8
145	32.6	15.4	46.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

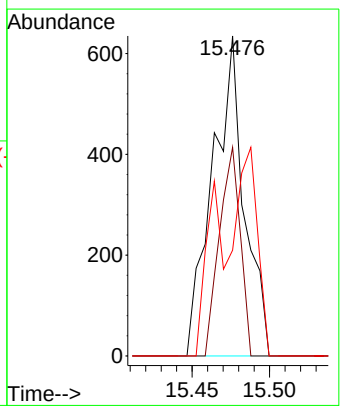
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

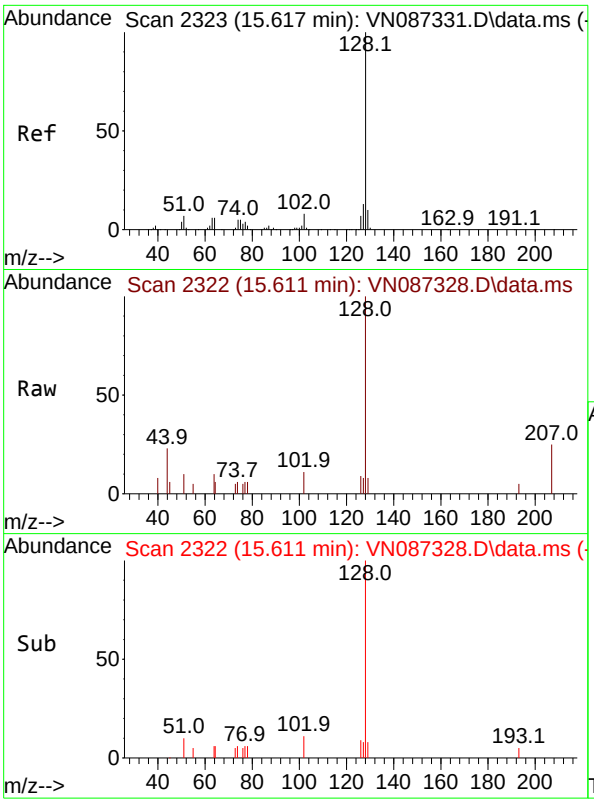


#94
Hexachlorobutadiene
Concen: 1.058 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:225 Resp: 903

Ion	Ratio	Lower	Upper
225	100		
223	42.9	32.1	96.3
227	46.0	31.3	93.9

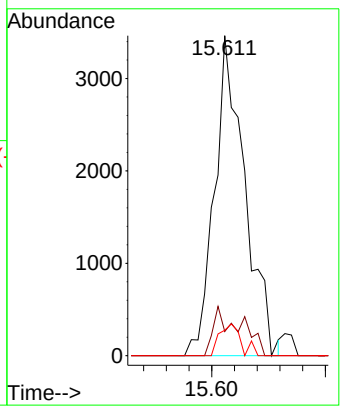




#95
Naphthalene
Concen: 0.787 ug/l
RT: 15.611 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:128 Resp: 640

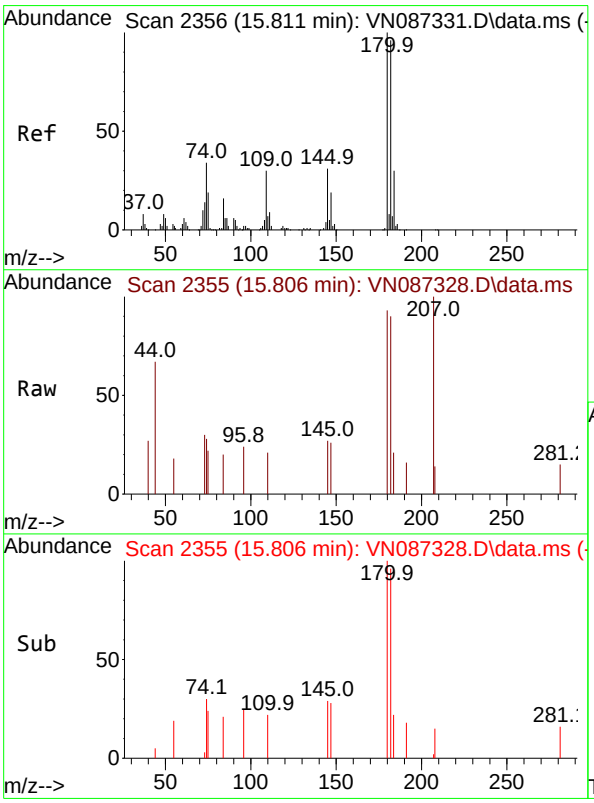
Ion	Ratio	Lower	Upper
128	100		
127	13.7	10.5	15.7
129	7.0	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

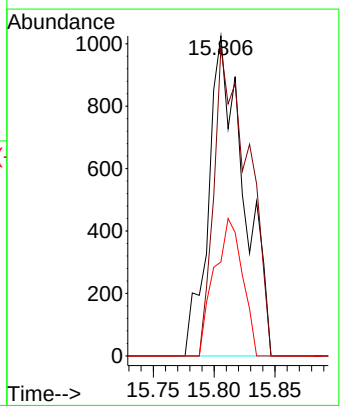
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 0.898 ug/l
RT: 15.806 min Scan# 2355
Delta R.T. -0.006 min
Lab File: VN087328.D
Acq: 16 Jul 2025 17:05

Tgt Ion:180 Resp: 2068

Ion	Ratio	Lower	Upper
180	100		
182	93.6	47.1	141.4
145	34.1	16.9	50.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087329.D
Acq On : 16 Jul 2025 17:27
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:17:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	8.206	168	172217	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	9.088	114	319926	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.847	117	285583	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	146494	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.565	65	16177	5.536	ug/l		0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 11.080%#				
35) Dibromofluoromethane	8.153	113	11111	5.035	ug/l		0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 10.060%#				
50) Toluene-d8	10.547	98	37751	4.796	ug/l		0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 9.600%#				
62) 4-Bromofluorobenzene	12.829	95	12943	4.450	ug/l		0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 8.900%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.142	85	7633	4.173	ug/l		90
3) Chloromethane	2.383	50	11350	4.934	ug/l		96
4) Vinyl Chloride	2.536	62	11459	5.013	ug/l		98
5) Bromomethane	2.971	94	5657	4.779	ug/l		87
6) Chloroethane	3.124	64	8358	5.606	ug/l	#	81
7) Trichlorofluoromethane	3.506	101	16796	4.969	ug/l	#	83
8) Diethyl Ether	3.959	74	6731	5.133	ug/l		91
9) 1,1,2-Trichlorotrifluo...	4.371	101	8532	4.917	ug/l	#	19
10) Methyl Iodide	4.577	142	4952m	8.093	ug/l		
11) Tert butyl alcohol	5.536	59	14147	25.497	ug/l		98
12) 1,1-Dichloroethene	4.330	96	11037	5.613	ug/l	#	83
13) Acrolein	4.177	56	12045	27.050	ug/l		96
14) Allyl chloride	5.006	41	16836	4.731	ug/l		97
15) Acrylonitrile	5.718	53	36114	23.986	ug/l		92
16) Acetone	4.430	43	36648	26.455	ug/l		96
17) Carbon Disulfide	4.695	76	29024	4.979	ug/l		94
18) Methyl Acetate	5.006	43	18125	5.265	ug/l		99
19) Methyl tert-butyl Ether	5.800	73	36155	4.989	ug/l		95
20) Methylene Chloride	5.259	84	13570	5.286	ug/l	#	86
21) trans-1,2-Dichloroethene	5.765	96	11514	5.193	ug/l		81
22) Diisopropyl ether	6.671	45	37879	5.075	ug/l	#	97
23) Vinyl Acetate	6.594	43	145089	22.225	ug/l	#	94
24) 1,1-Dichloroethane	6.547	63	22819	5.299	ug/l		95
25) 2-Butanone	7.477	43	52336	24.722	ug/l		95
26) 2,2-Dichloropropane	7.483	77	16583	4.953	ug/l		100
27) cis-1,2-Dichloroethene	7.471	96	12690	4.972	ug/l		99
28) Bromochloromethane	7.789	49	11022	5.348	ug/l	#	16
29) Tetrahydrofuran	7.830	42	34146	24.829	ug/l		99
30) Chloroform	7.959	83	22369	5.190	ug/l		84
31) Cyclohexane	8.236	56	19764	5.502	ug/l		87
32) 1,1,1-Trichloroethane	8.153	97	19739	5.287	ug/l	#	51
36) 1,1-Dichloropropene	8.347	75	13965	4.790	ug/l		98
37) Ethyl Acetate	7.553	43	21482	5.102	ug/l		97
38) Carbon Tetrachloride	8.341	117	16718	5.205	ug/l	#	89
39) Methylcyclohexane	9.582	83	14154	4.484	ug/l		86
40) Benzene	8.583	78	45748	4.855	ug/l		94

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087329.D
Acq On : 16 Jul 2025 17:27
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:17:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	10551	4.792	ug/l		97
42) 1,2-Dichloroethane	8.653	62	18086	5.061	ug/l		96
43) Isopropyl Acetate	8.677	43	31964	4.890	ug/l		100
44) Trichloroethene	9.335	130	10573	4.748	ug/l		79
45) 1,2-Dichloropropane	9.606	63	11728	4.898	ug/l		95
46) Dibromomethane	9.694	93	9473	5.284	ug/l		96
47) Bromodichloromethane	9.865	83	18300	5.068	ug/l	#	82
48) Methyl methacrylate	9.665	41	13169	4.475	ug/l		95
49) 1,4-Dioxane	9.682	88	4176	92.653	ug/l	#	87
51) 4-Methyl-2-Pentanone	10.430	43	102519	24.797	ug/l		97
52) Toluene	10.612	92	27158	4.742	ug/l		96
53) t-1,3-Dichloropropene	10.824	75	17133	4.688	ug/l	#	87
54) cis-1,3-Dichloropropene	10.294	75	18046	4.780	ug/l		97
55) 1,1,2-Trichloroethane	11.000	97	11643	5.021	ug/l	#	88
56) Ethyl methacrylate	10.859	69	15548	4.693	ug/l		95
57) 1,3-Dichloropropane	11.141	76	19868	4.956	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.147	63	43690	22.968	ug/l		94
59) 2-Hexanone	11.182	43	59736	21.778	ug/l		99
60) Dibromochloromethane	11.335	129	13321	5.037	ug/l		100
61) 1,2-Dibromoethane	11.453	107	11942	4.898	ug/l		89
64) Tetrachloroethene	11.082	164	9660	5.256	ug/l		95
65) Chlorobenzene	11.871	112	32304	5.038	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.941	131	11581	5.312	ug/l		96
67) Ethyl Benzene	11.947	91	49622	4.701	ug/l		92
68) m/p-Xylenes	12.059	106	36883	9.332	ug/l		98
69) o-Xylene	12.376	106	17293	4.580	ug/l		97
70) Styrene	12.394	104	29462	4.639	ug/l		99
71) Bromoform	12.559	173	8628	4.899	ug/l	#	96
73) Isopropylbenzene	12.676	105	42320	4.590	ug/l		98
74) N-amyl acetate	12.647	43	18405m	5.113	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.918	83	17305	4.988	ug/l		95
76) 1,2,3-Trichloropropane	12.976	75	18135m	5.580	ug/l		
77) Bromobenzene	12.965	156	11589	4.847	ug/l		84
78) n-propylbenzene	13.018	91	54443	4.693	ug/l		99
79) 2-Chlorotoluene	13.106	91	34400	4.825	ug/l		99
80) 1,3,5-Trimethylbenzene	13.153	105	36874	4.694	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.718	75	4795	3.994	ug/l	#	80
82) 4-Chlorotoluene	13.200	91	36031	4.854	ug/l		98
83) tert-Butylbenzene	13.418	119	30293	4.617	ug/l		96
84) 1,2,4-Trimethylbenzene	13.465	105	35326	4.403	ug/l		99
85) sec-Butylbenzene	13.594	105	45947	4.649	ug/l		98
86) p-Isopropyltoluene	13.706	119	35413	4.471	ug/l		97
87) 1,3-Dichlorobenzene	13.718	146	23326	4.970	ug/l		95
88) 1,4-Dichlorobenzene	13.794	146	25031	4.994	ug/l		90
89) n-Butylbenzene	14.035	91	35522	4.697	ug/l		95
90) Hexachloroethane	14.312	117	8261	4.923	ug/l		98
91) 1,2-Dichlorobenzene	14.088	146	22474	5.055	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.700	75	4757	5.223	ug/l		87
93) 1,2,4-Trichlorobenzene	15.364	180	12595	4.823	ug/l		97
94) Hexachlorobutadiene	15.476	225	4936	5.087	ug/l		98
95) Naphthalene	15.617	128	38936	4.208	ug/l		99
96) 1,2,3-Trichlorobenzene	15.812	180	12368	4.721	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087329.D
Acq On : 16 Jul 2025 17:27
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:17:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

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

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

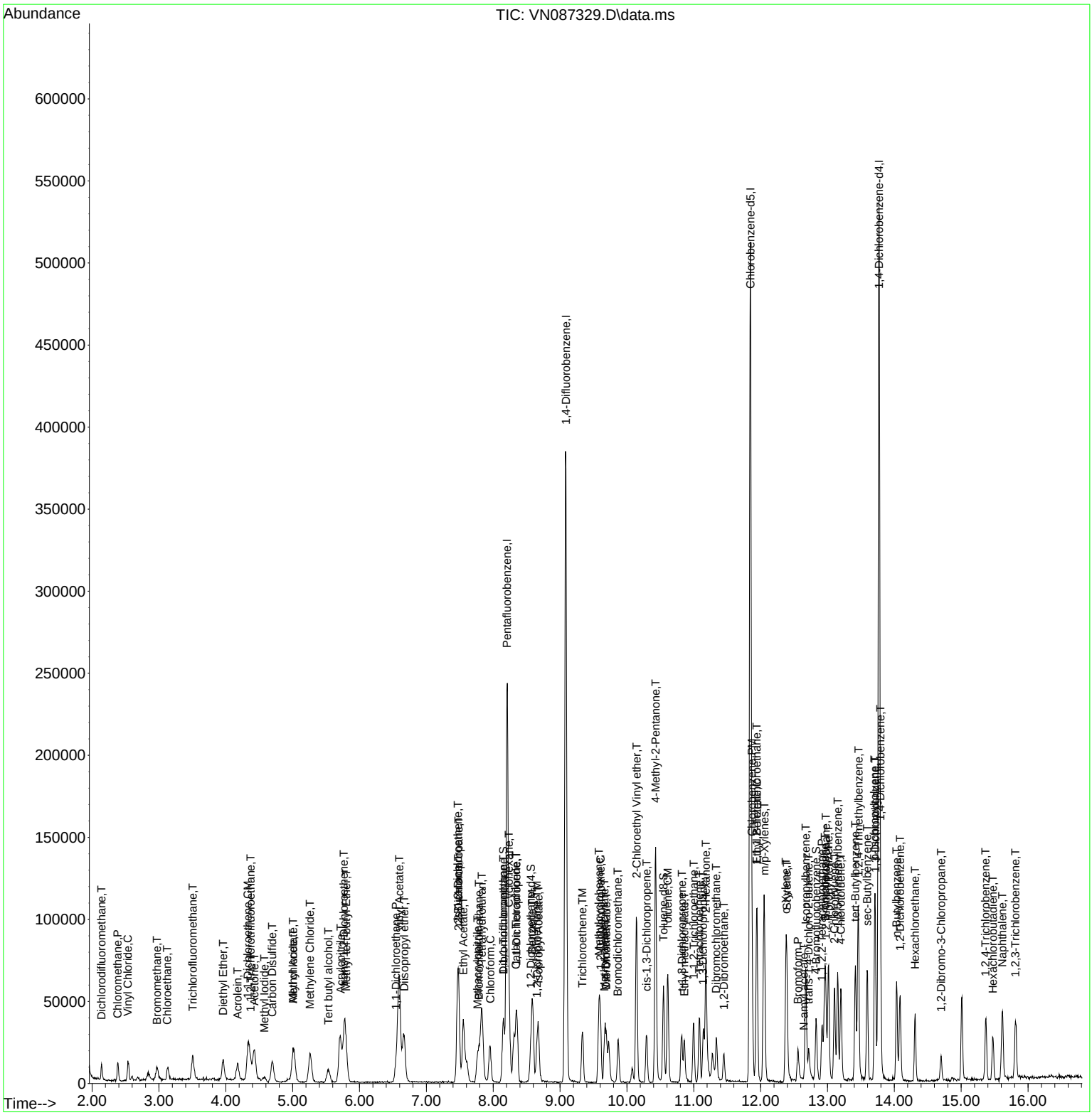
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087329.D
Acq On : 16 Jul 2025 17:27
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

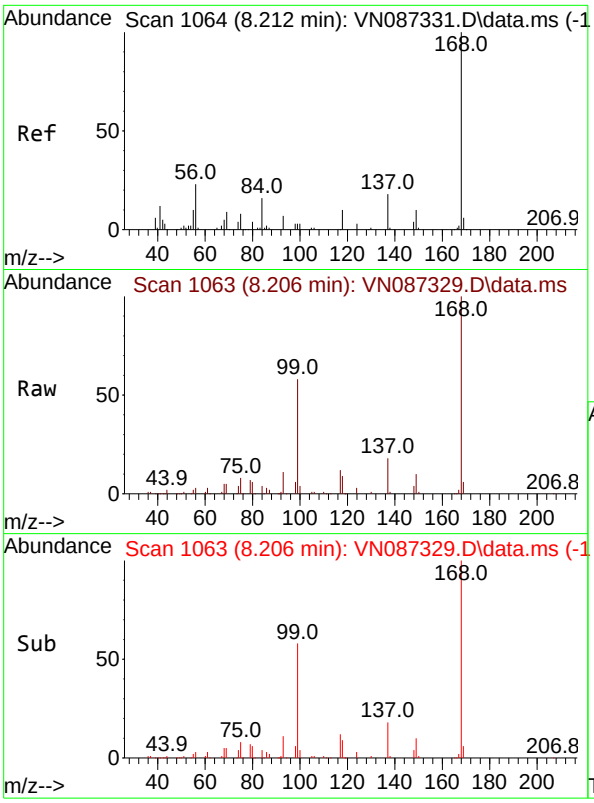
Quant Time: Jul 17 02:17:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

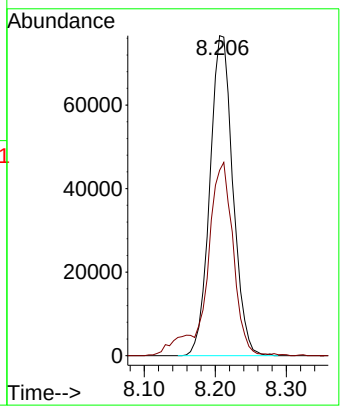




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:168 Resp: 17221

Ion	Ratio	Lower	Upper
168	100		
99	57.7	47.9	71.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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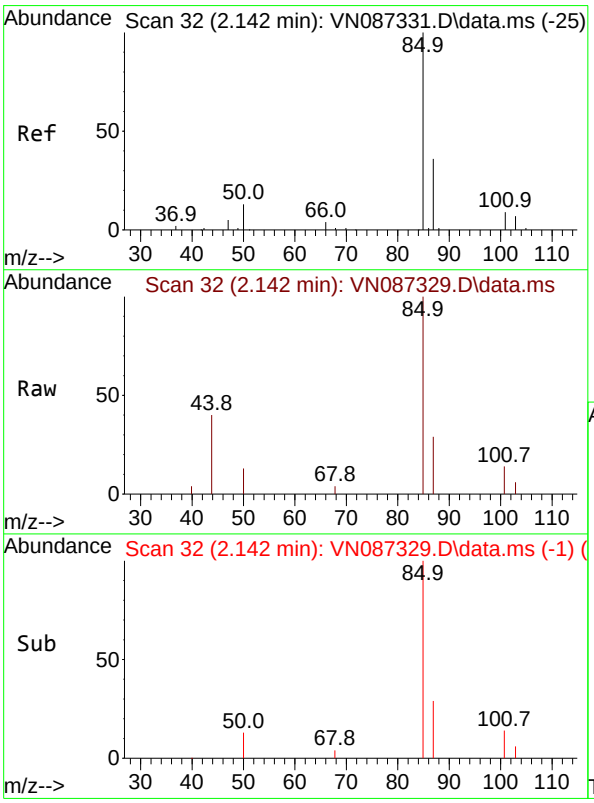
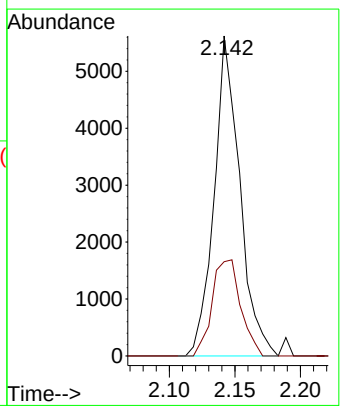
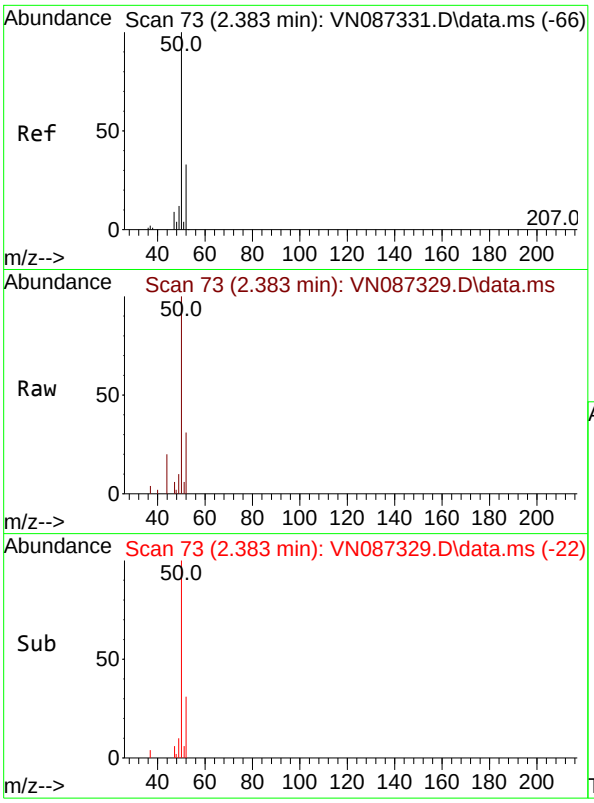


#2
Dichlorodifluoromethane
Concen: 4.173 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 85 Resp: 7633

Ion	Ratio	Lower	Upper
85	100		
87	29.4	17.8	53.3

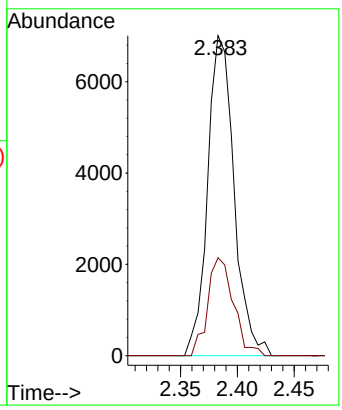




#3
Chloromethane
Concen: 4.934 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 50 Resp: 1135

Ion	Ratio	Lower	Upper
50	100		
52	30.6	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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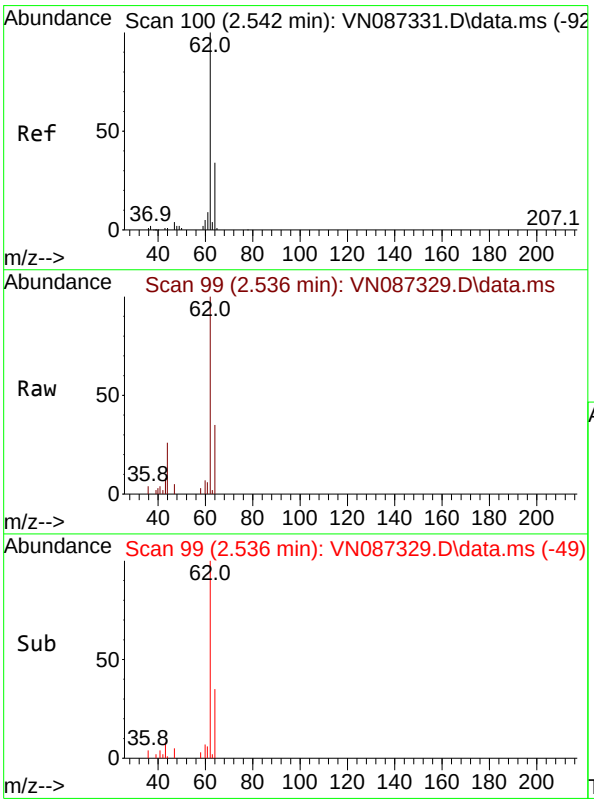
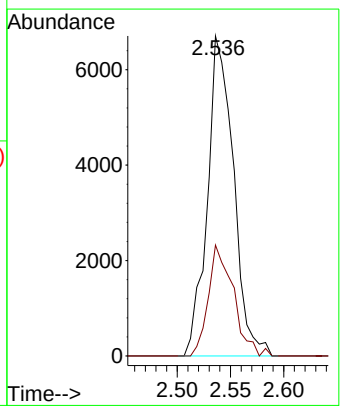
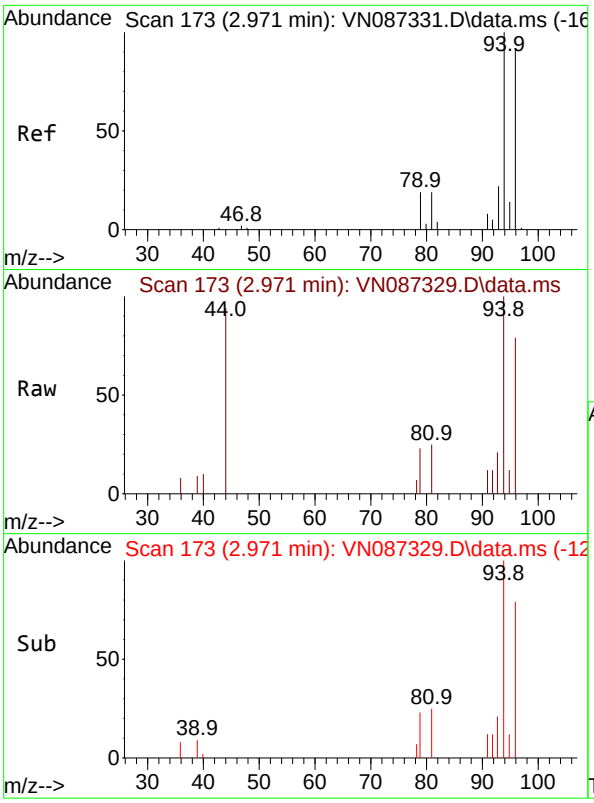


#4
Vinyl Chloride
Concen: 5.013 ug/l
RT: 2.536 min Scan# 99
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 62 Resp: 11459

Ion	Ratio	Lower	Upper
62	100		
64	34.7	27.0	40.6





#5
Bromomethane
Concen: 4.779 ug/l
RT: 2.971 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 94 Resp: 565

Ion	Ratio	Lower	Upper
94	100		
96	79.0	73.4	110.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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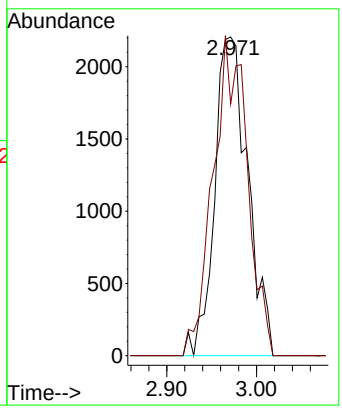
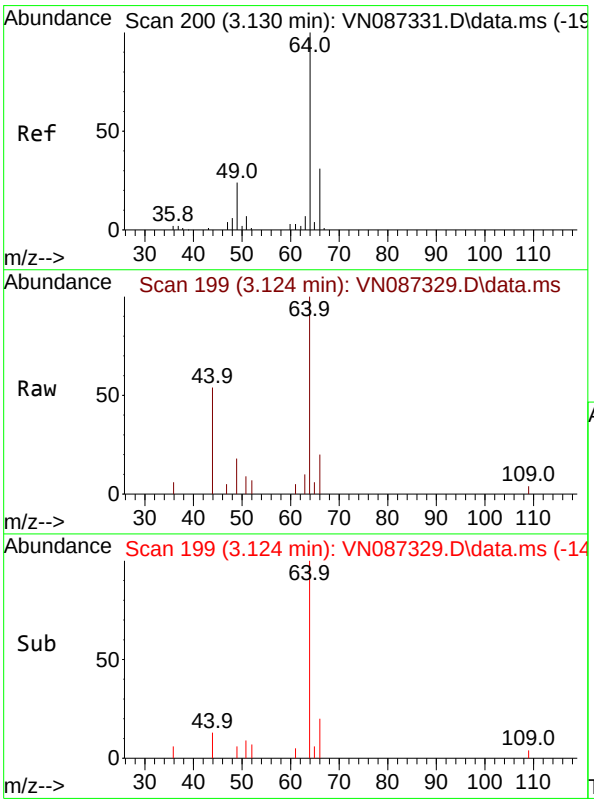
Supervised By :Semsettin Yesilyurt 07/17/2025

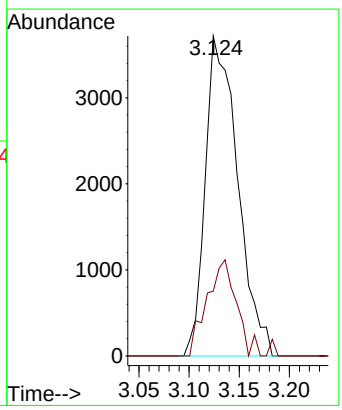


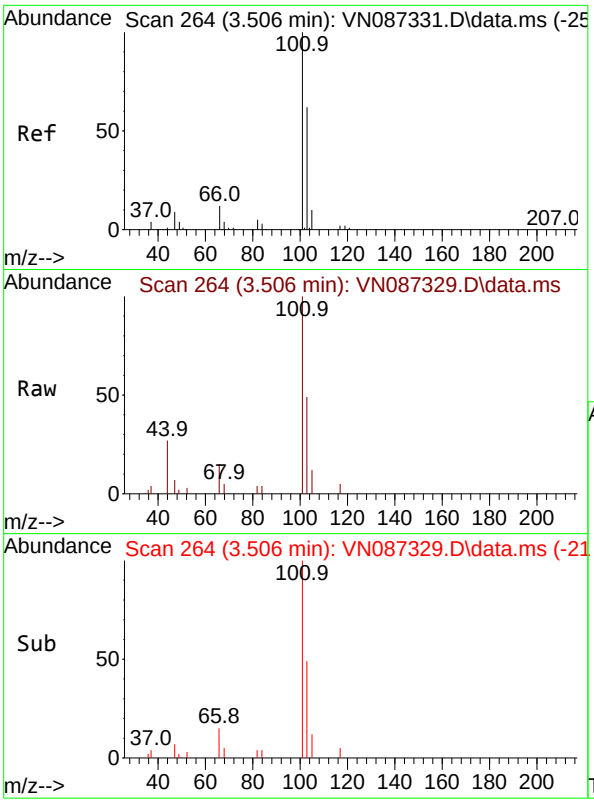


#6
Chloroethane
Concen: 5.606 ug/l
RT: 3.124 min Scan# 199
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 64 Resp: 8358

Ion	Ratio	Lower	Upper
64	100		
66	20.2	24.6	36.8#





#7
Trichlorofluoromethane
Concen: 4.969 ug/l
RT: 3.506 min Scan# 2(
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:101 Resp: 1679(

Ion	Ratio	Lower	Upper
101	100		
103	48.8	49.8	74.6#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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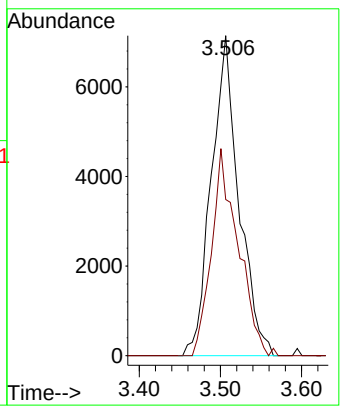
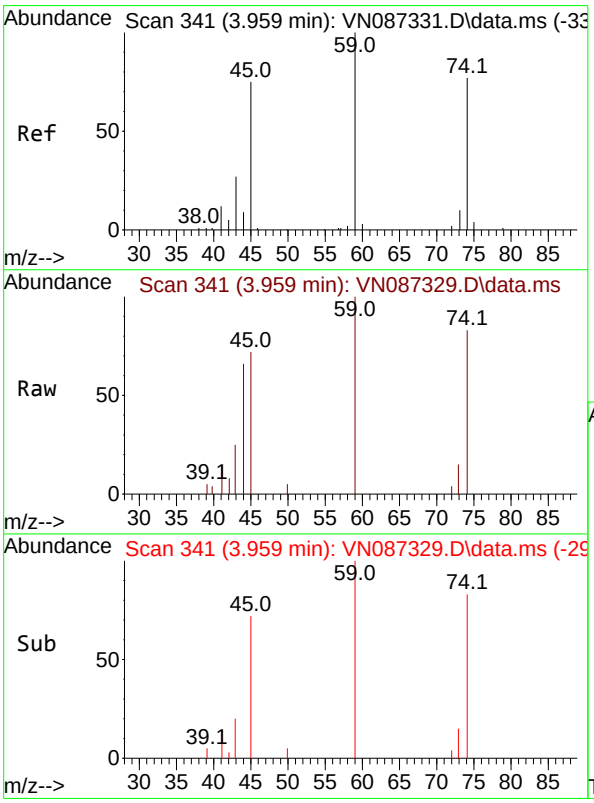
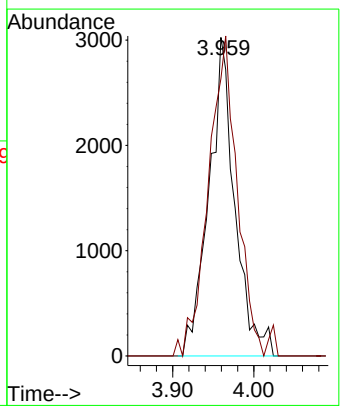


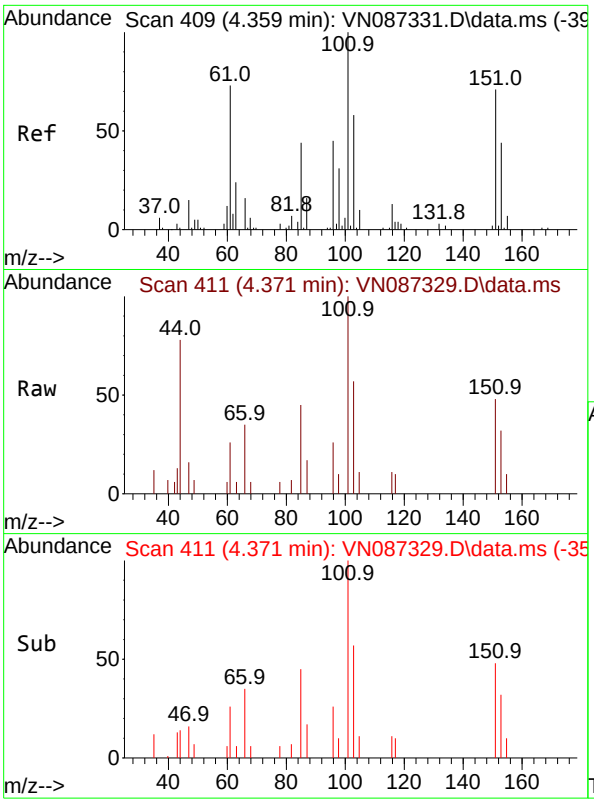


#8
Diethyl Ether
Concen: 5.133 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 74 Resp: 6731

Ion	Ratio	Lower	Upper
74	100		
45	111.0	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 4.917 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion:101 Resp: 853

Ion	Ratio	Lower	Upper
101	100		
85	0.0	37.3	55.9#
151	0.0	58.9	88.3#

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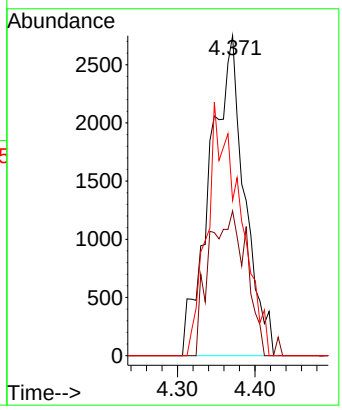
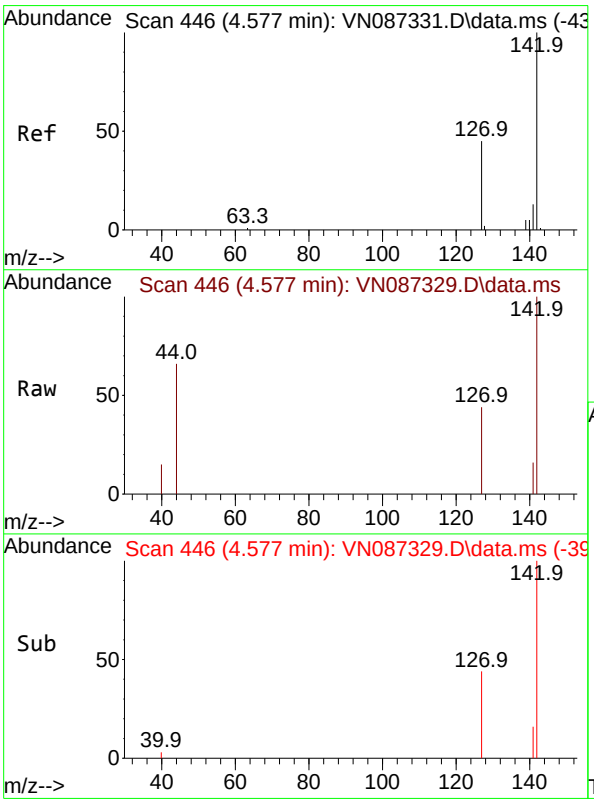
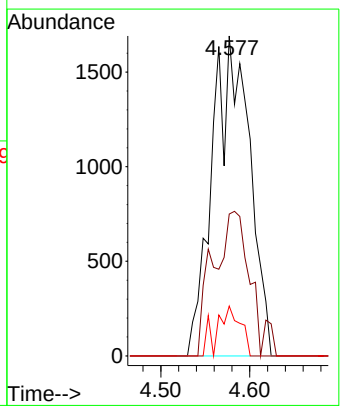


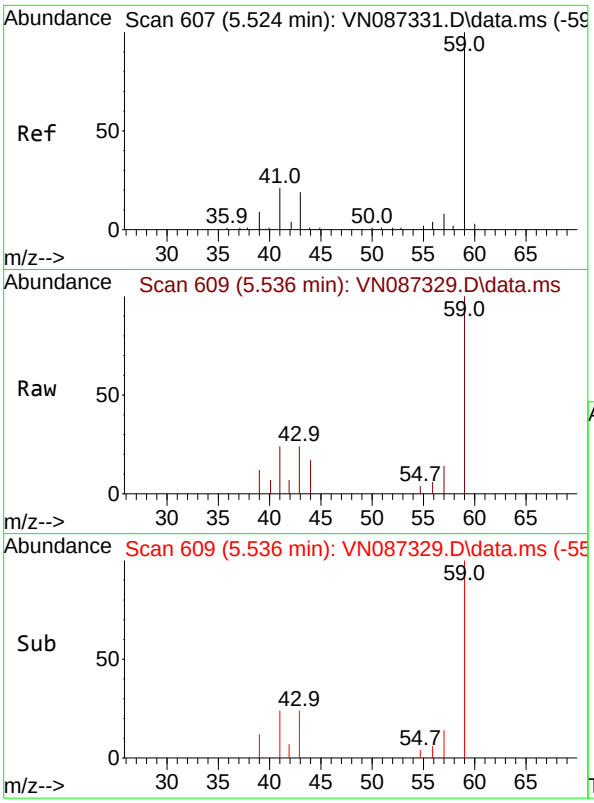


#10
Methyl Iodide
Concen: 8.093 ug/l m
RT: 4.577 min Scan# 446
Delta R.T. -0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:142 Resp: 4952

Ion	Ratio	Lower	Upper
142	100		
127	44.4	35.7	53.5
141	15.6	10.4	15.6#





#11
Tert butyl alcohol
Concen: 25.497 ug/l
RT: 5.536 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 59 Resp: 1414

Ion	Ratio	Lower	Upper
59	100		
57	9.7	8.3	12.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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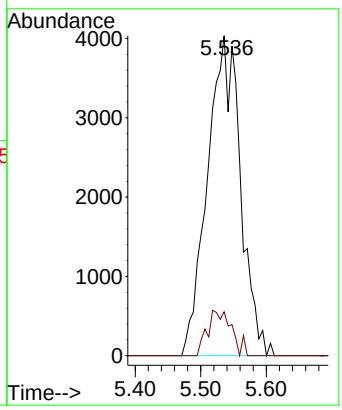
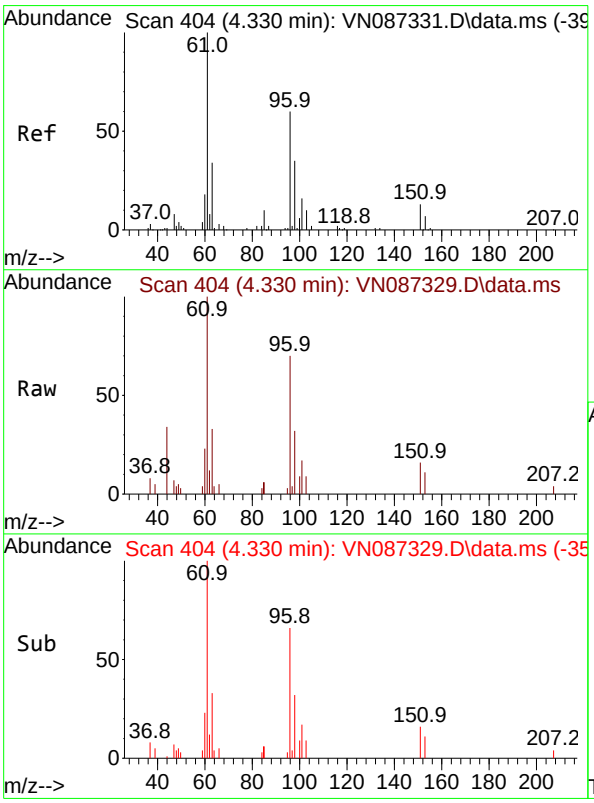
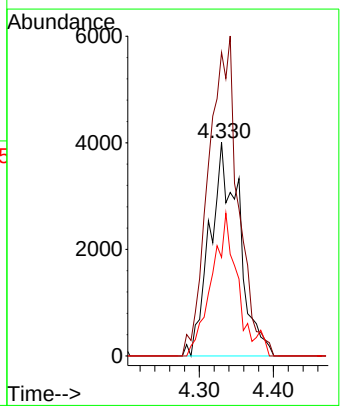


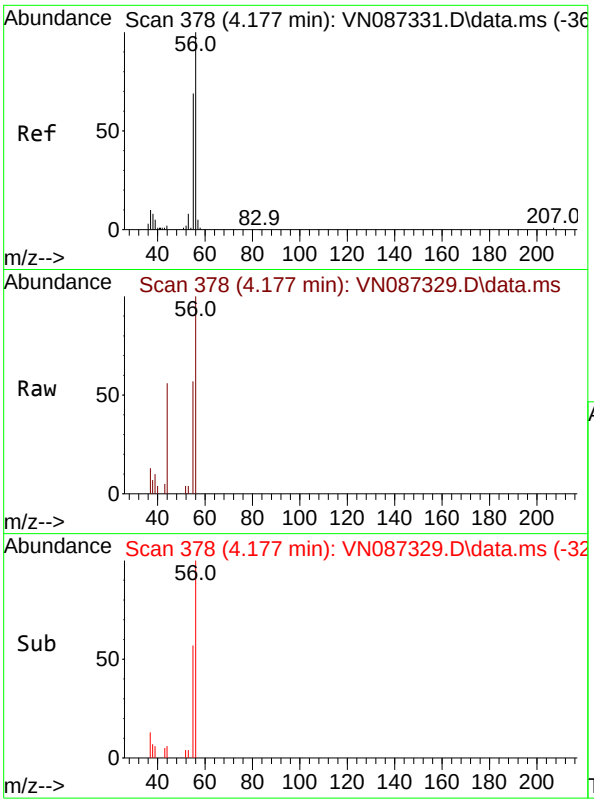


#12
1,1-Dichloroethene
Concen: 5.613 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 96 Resp: 11037

Ion	Ratio	Lower	Upper
96	100		
61	142.2	132.3	198.5
98	46.1	46.8	70.2#

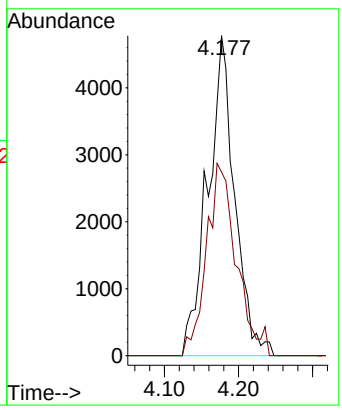




#13
Acrolein
Concen: 27.050 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 56 Resp: 1204

Ion	Ratio	Lower	Upper
56	100		
55	66.7	56.2	84.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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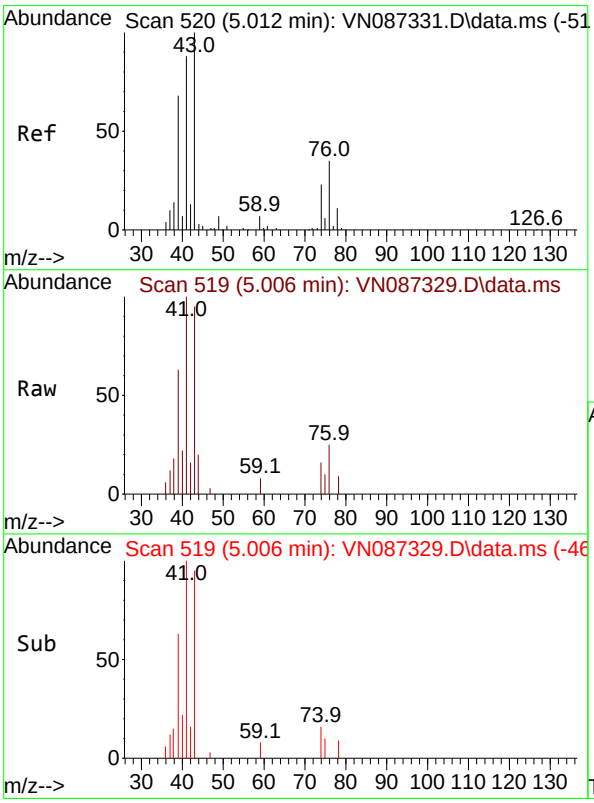
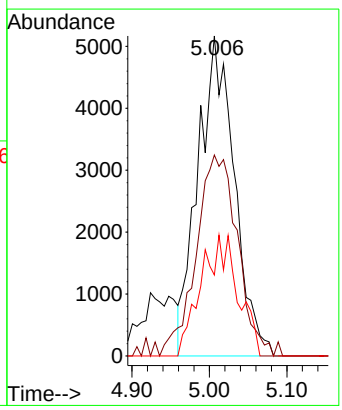
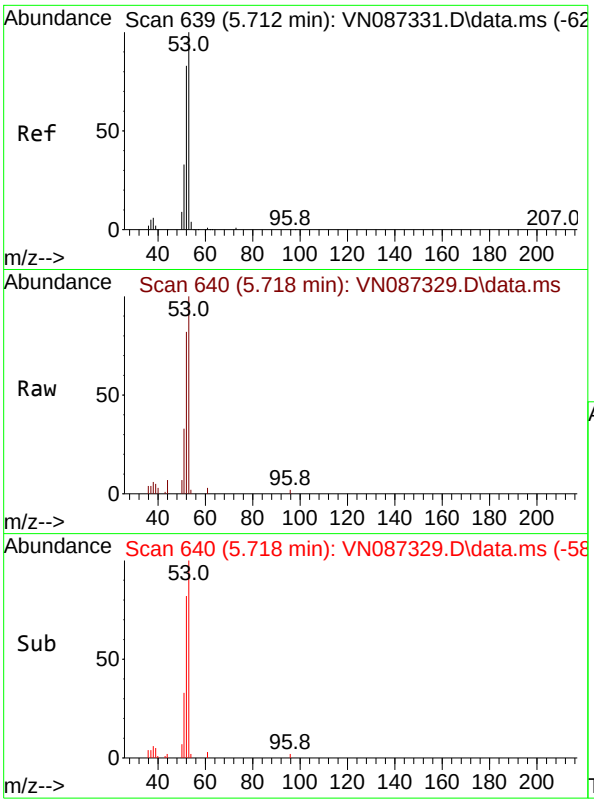


#14
Allyl chloride
Concen: 4.731 ug/l
RT: 5.006 min Scan# 519
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 41 Resp: 16836

Ion	Ratio	Lower	Upper
41	100		
39	71.9	59.0	88.6
76	38.3	28.7	43.1

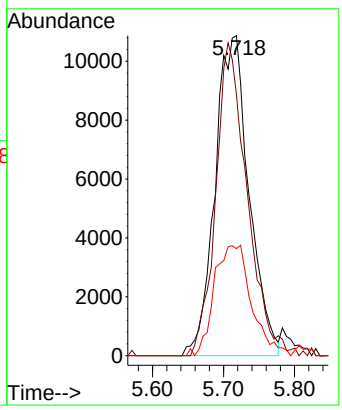




#15
Acrylonitrile
Concen: 23.986 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 53 Resp: 3611

Ion	Ratio	Lower	Upper
53	100		
52	90.3	65.5	98.3
51	37.7	28.7	43.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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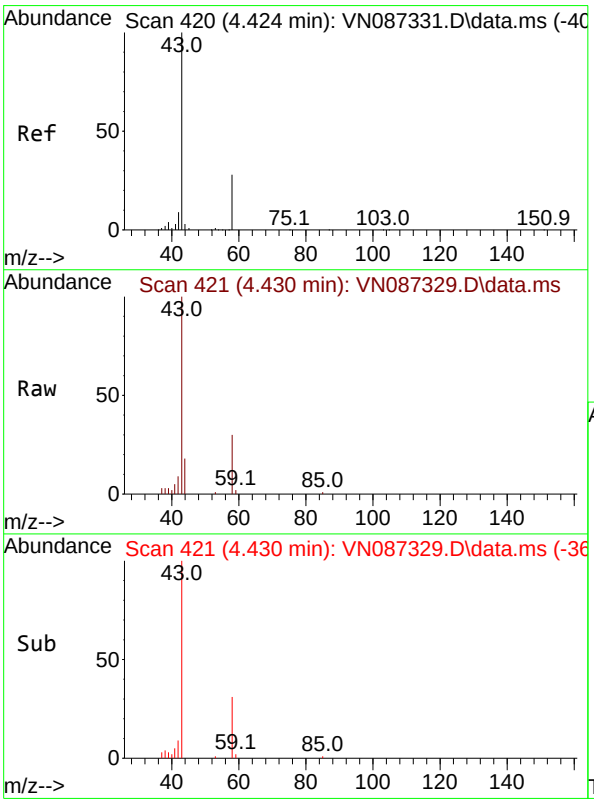
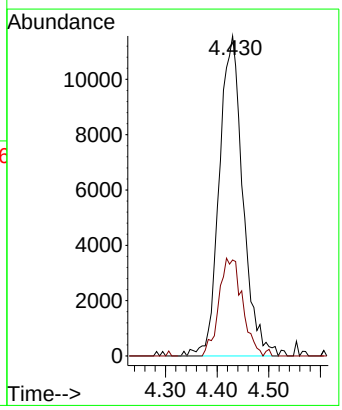
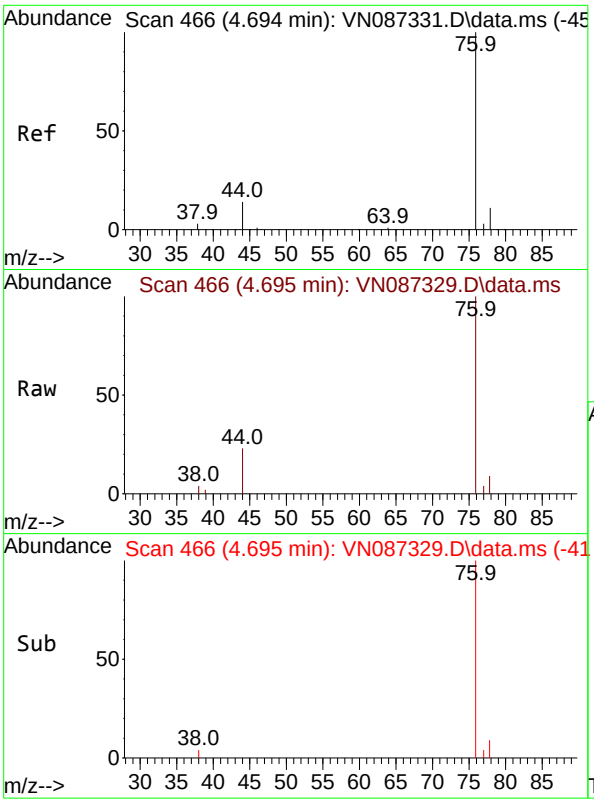


#16
Acetone
Concen: 26.455 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 36648

Ion	Ratio	Lower	Upper
43	100		
58	30.0	22.3	33.5

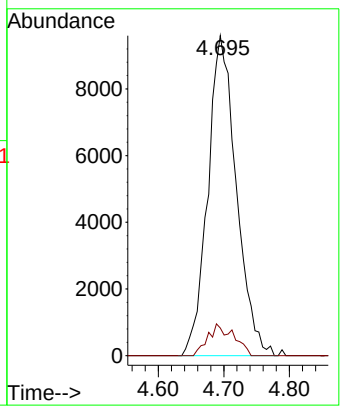




#17
Carbon Disulfide
Concen: 4.979 ug/l
RT: 4.695 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 76 Resp: 2902

Ion	Ratio	Lower	Upper
76	100		
78	8.6	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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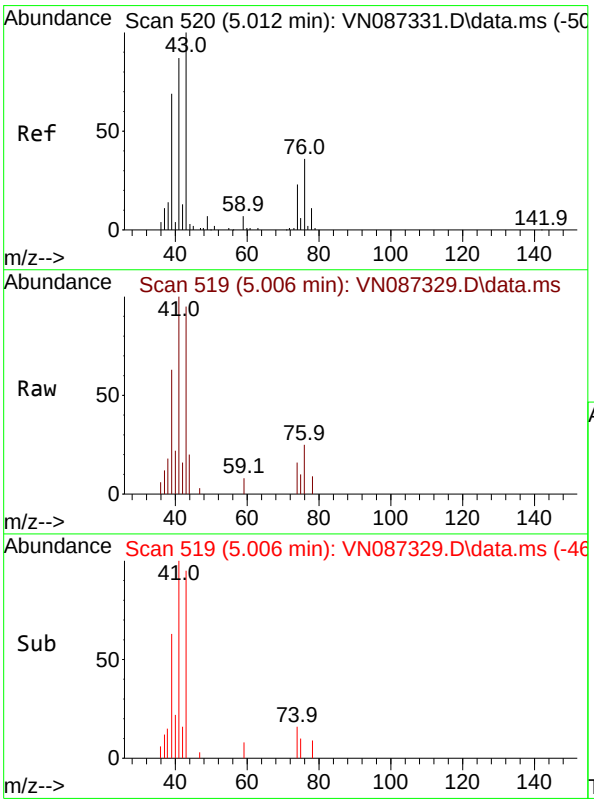
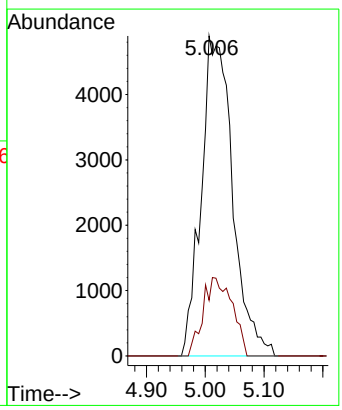
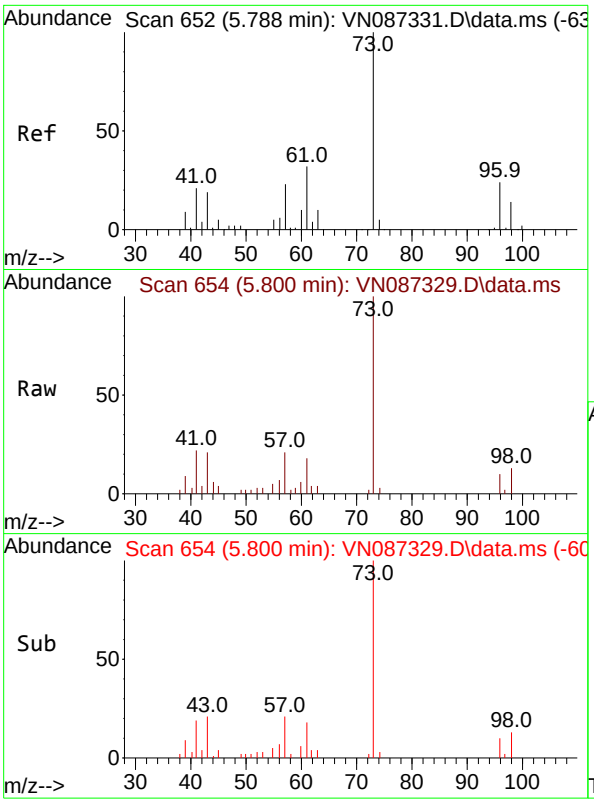


#18
Methyl Acetate
Concen: 5.265 ug/l
RT: 5.006 min Scan# 519
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 18125

Ion	Ratio	Lower	Upper
43	100		
74	22.8	17.8	26.6

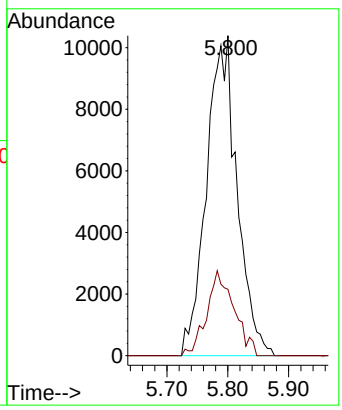




#19
Methyl tert-butyl Ether
Concen: 4.989 ug/l
RT: 5.800 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 73 Resp: 3615

Ion	Ratio	Lower	Upper
73	100		
57	20.7	18.6	27.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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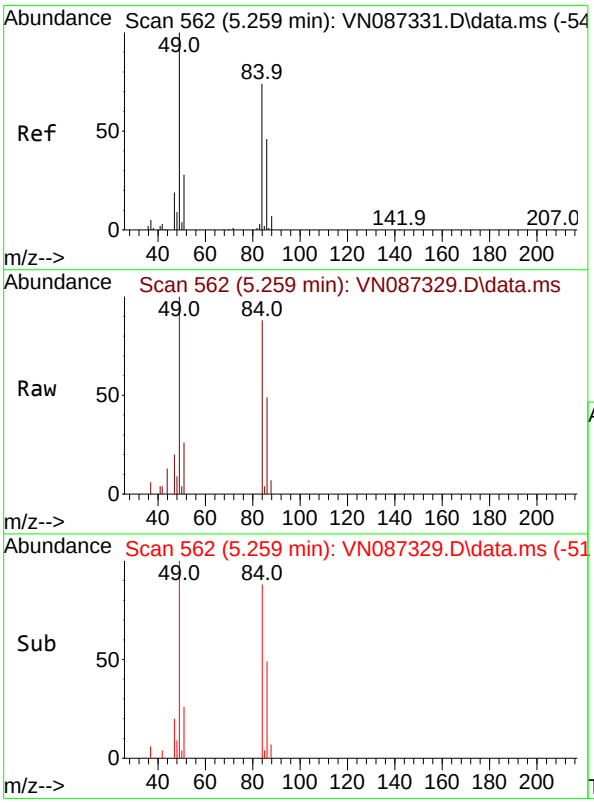
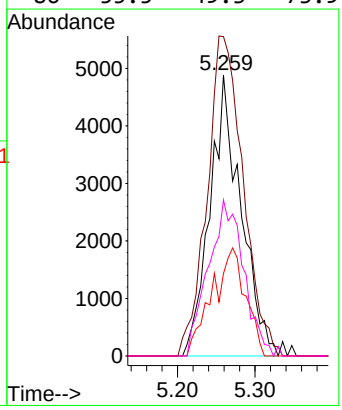
Supervised By :Semsettin Yesilyurt 07/17/2025

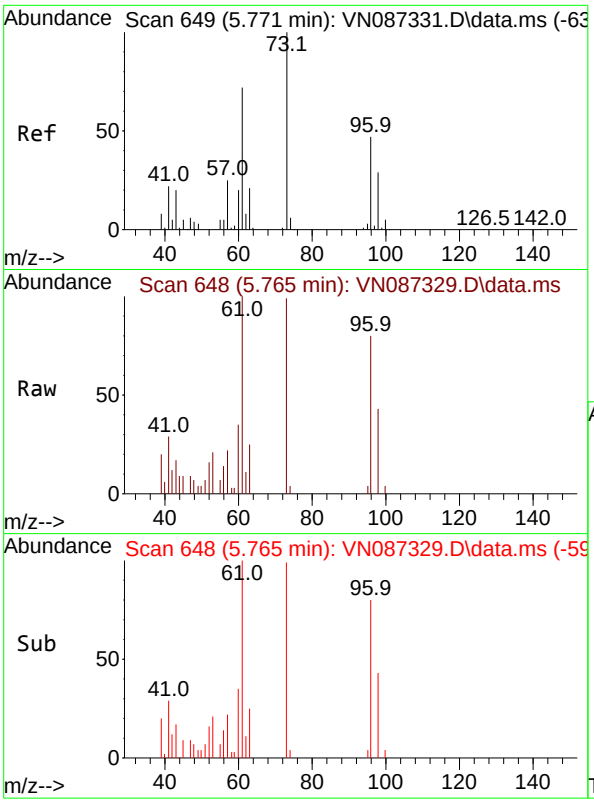


#20
Methylene Chloride
Concen: 5.286 ug/l
RT: 5.259 min Scan# 562
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 84 Resp: 13570

Ion	Ratio	Lower	Upper
84	100		
49	113.7	107.5	161.3
51	29.3	30.2	45.2#
86	55.5	49.3	73.9





#21
trans-1,2-Dichloroethene
Concen: 5.193 ug/l
RT: 5.765 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 96 Resp: 11514

Ion	Ratio	Lower	Upper
96	100		
61	124.3	122.0	183.0
98	53.3	50.0	75.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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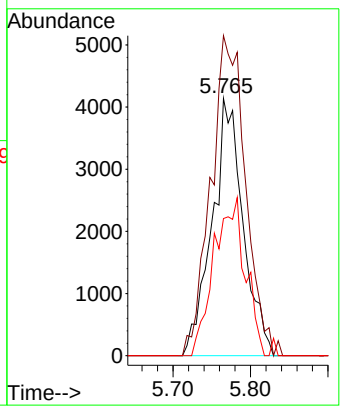
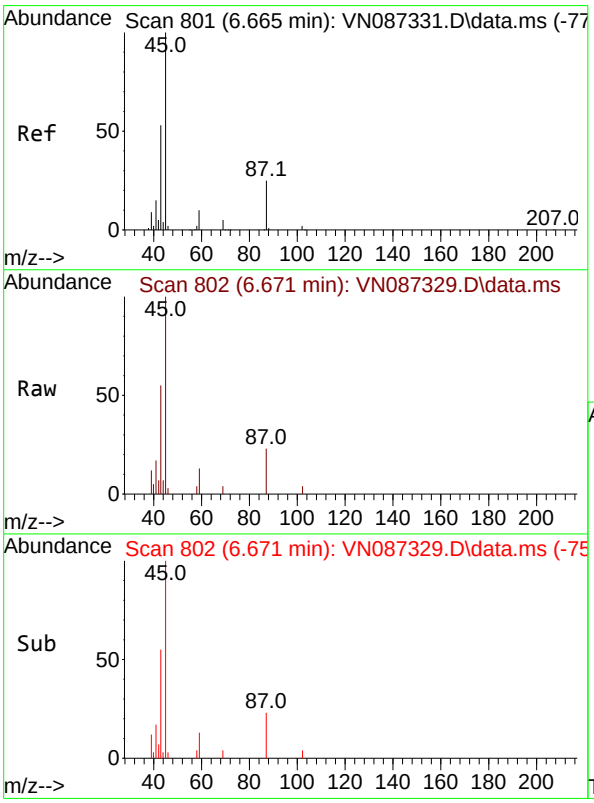
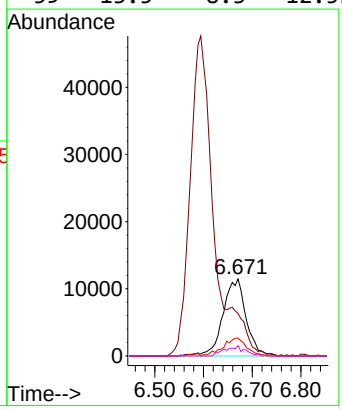


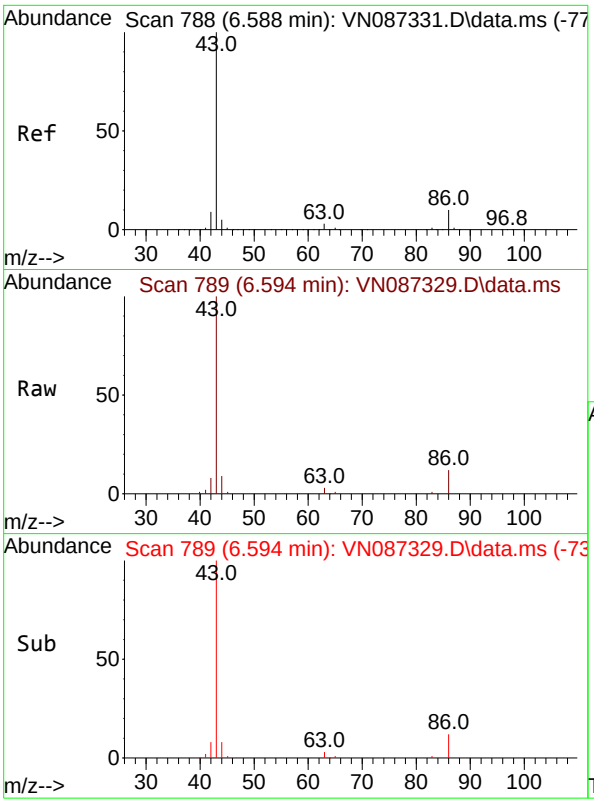


#22
Diisopropyl ether
Concen: 5.075 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 45 Resp: 37879

Ion	Ratio	Lower	Upper
45	100		
43	55.4	42.8	64.2
87	23.4	19.8	29.6
59	13.5	8.3	12.5#





#23
Vinyl Acetate
Concen: 22.225 ug/l
RT: 6.594 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 14508

Ion	Ratio	Lower	Upper
43	100		
86	11.8	7.7	11.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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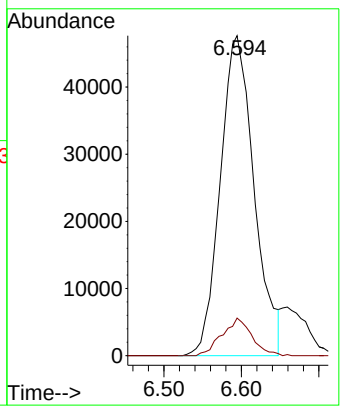
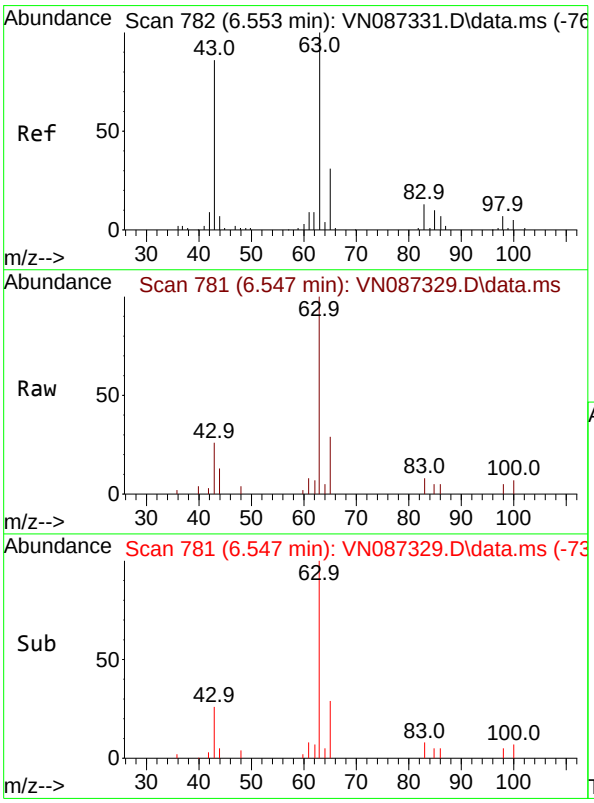
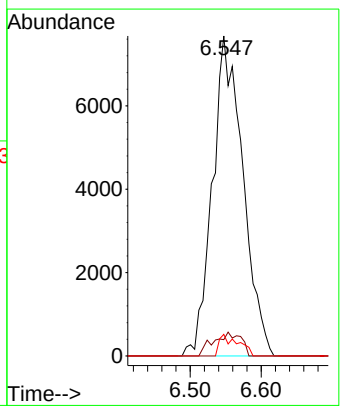


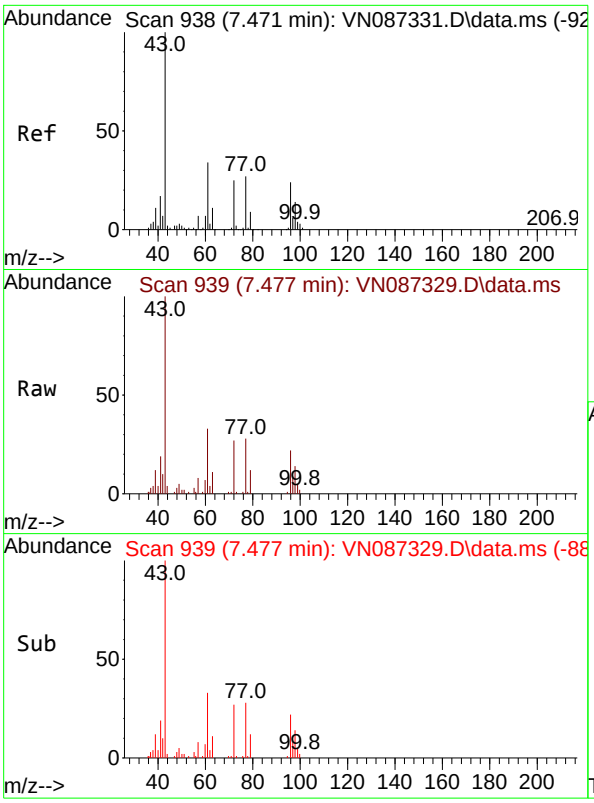


#24
1,1-Dichloroethane
Concen: 5.299 ug/l
RT: 6.547 min Scan# 781
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 63 Resp: 22819

Ion	Ratio	Lower	Upper
63	100		
98	5.1	3.3	9.9
100	6.7	2.5	7.4





#25
2-Butanone
Concen: 24.722 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 5233

Ion	Ratio	Lower	Upper
43	100		
72	27.0	19.6	29.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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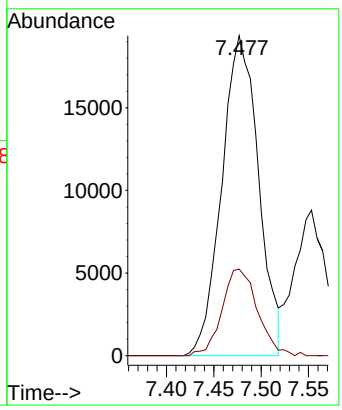
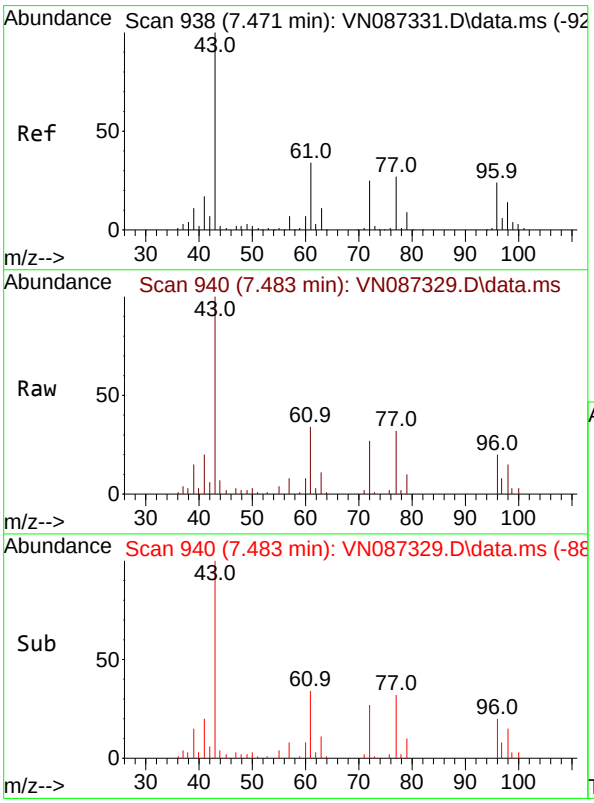
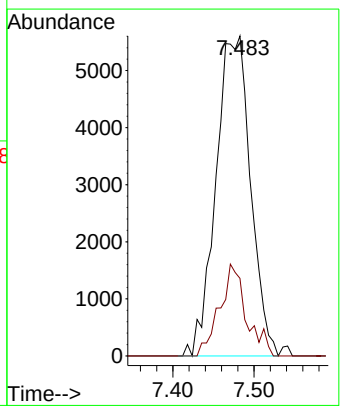


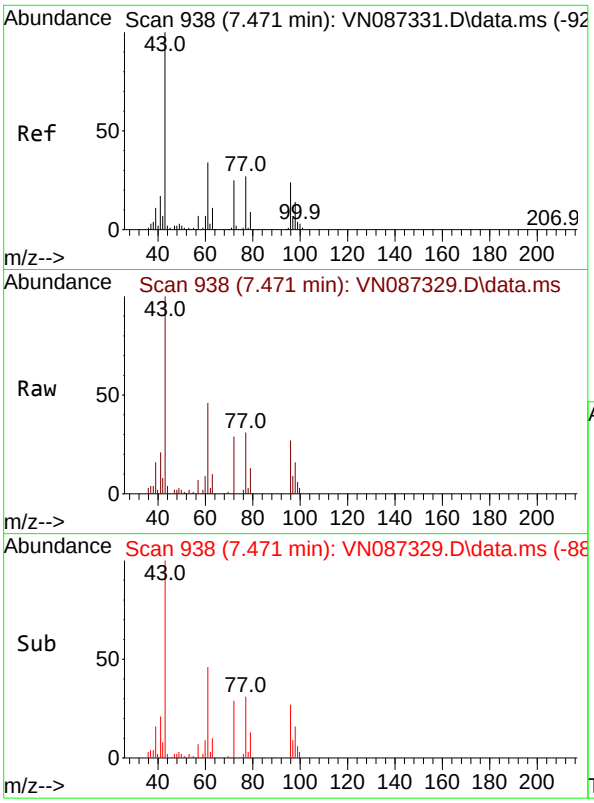


#26
2,2-Dichloropropane
Concen: 4.953 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.012 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 77 Resp: 16583

Ion	Ratio	Lower	Upper
77	100		
97	22.2	11.1	33.1

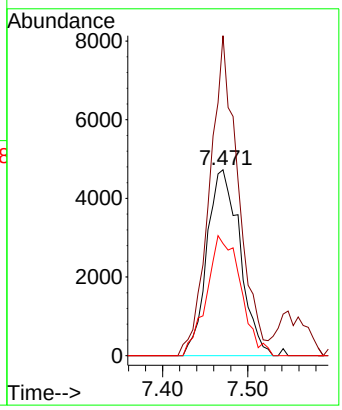




#27
cis-1,2-Dichloroethene
Concen: 4.972 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 96 Resp: 1269

Ion	Ratio	Lower	Upper
96	100		
61	150.3	0.0	297.8
98	66.8	0.0	132.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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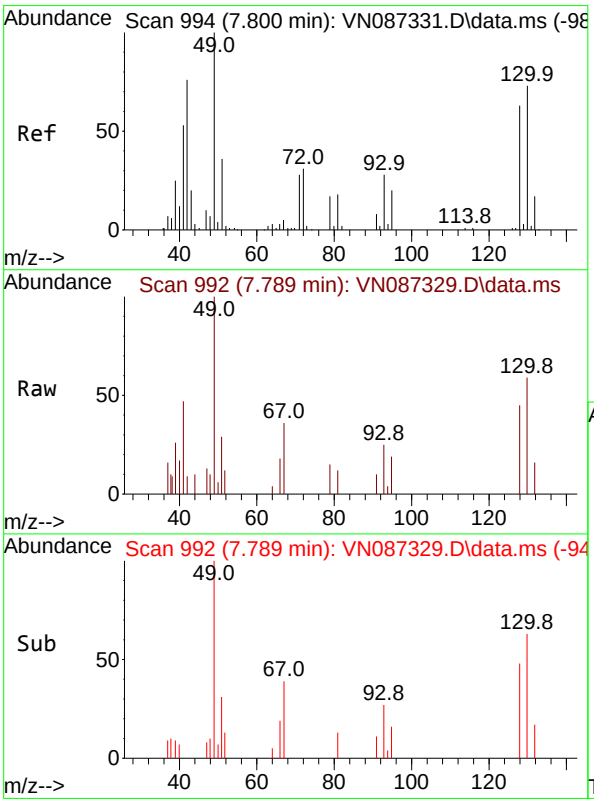
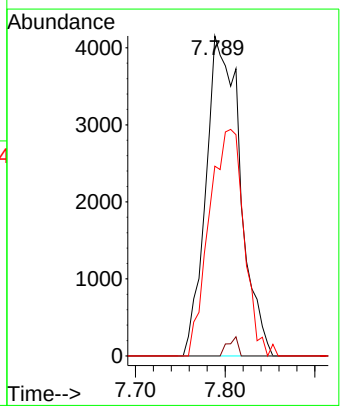
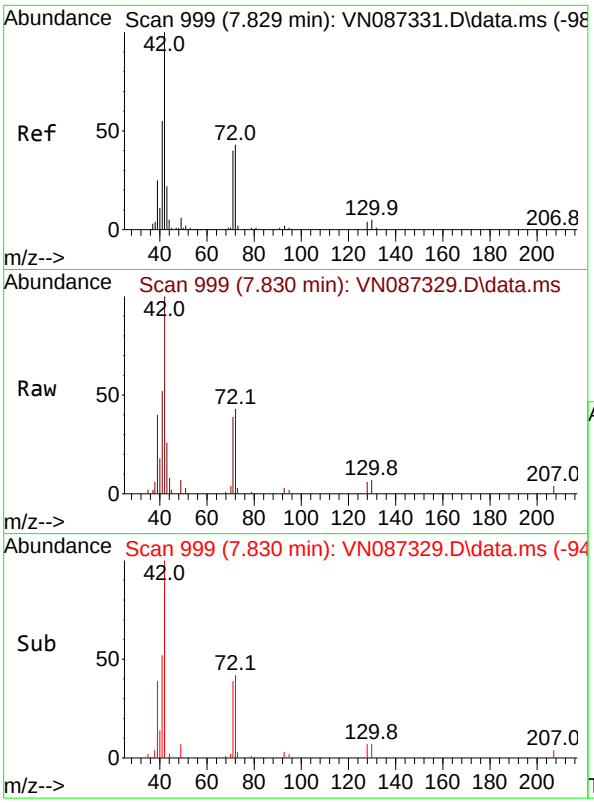


#28
Bromochloromethane
Concen: 5.348 ug/l
RT: 7.789 min Scan# 992
Delta R.T. -0.012 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 49 Resp: 11022

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.2
130	0.0	57.3	85.9#





#29
Tetrahydrofuran
Concen: 24.829 ug/l
RT: 7.830 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 42 Resp: 3414

Ion	Ratio	Lower	Upper
42	100		
72	42.1	33.4	50.0
71	37.6	31.2	46.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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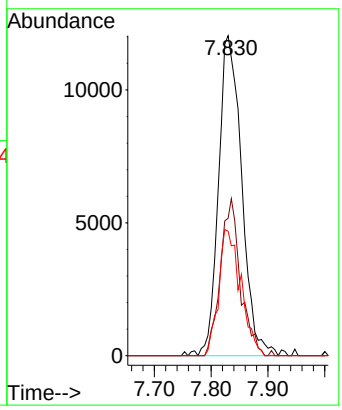
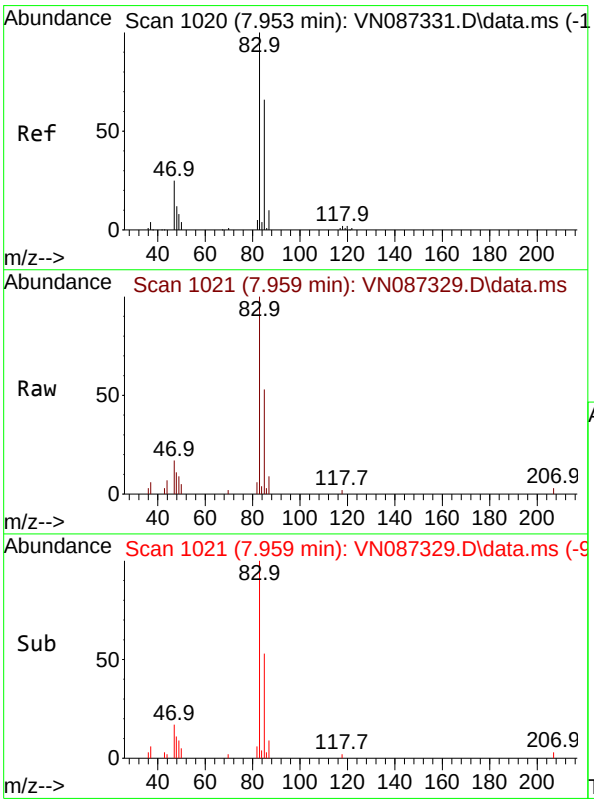
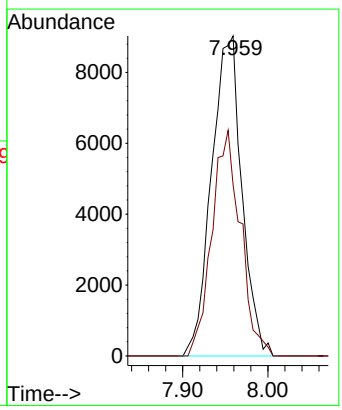


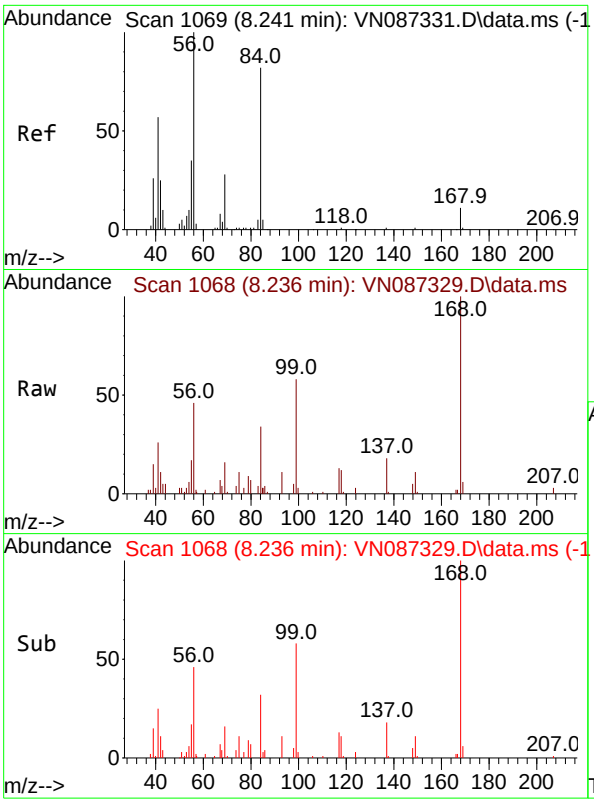


#30
Chloroform
Concen: 5.190 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 83 Resp: 22369

Ion	Ratio	Lower	Upper
83	100		
85	53.5	52.7	79.1

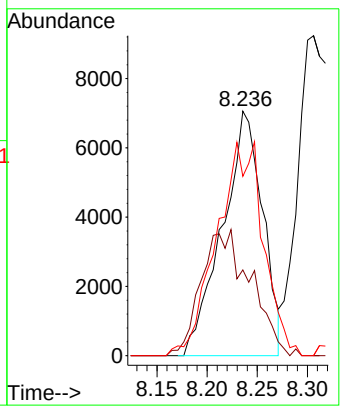




#31
Cyclohexane
Concen: 5.502 ug/l
RT: 8.236 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 56 Resp: 1976

Ion	Ratio	Lower	Upper
56	100		
69	32.8	22.7	34.1
84	69.3	65.8	98.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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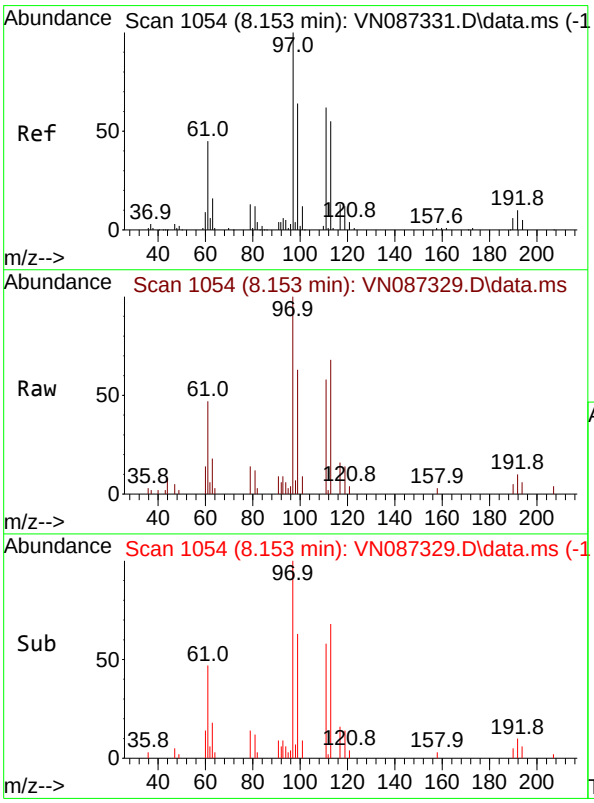
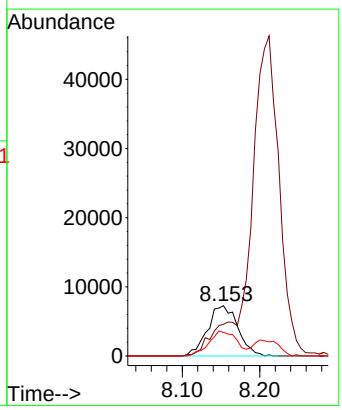
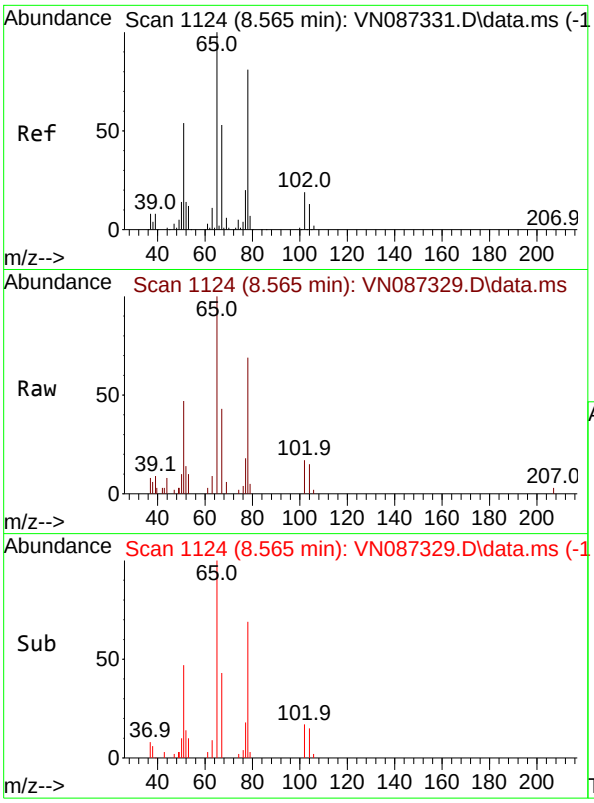


#32
1,1,1-Trichloroethane
Concen: 5.287 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 97 Resp: 19739

Ion	Ratio	Lower	Upper
97	100		
99	0.0	51.8	77.8#
61	45.3	38.7	58.1





#33
1,2-Dichloroethane-d4
Concen: 5.536 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 65 Resp: 1617

Ion	Ratio	Lower	Upper
65	100		
67	48.6	0.0	104.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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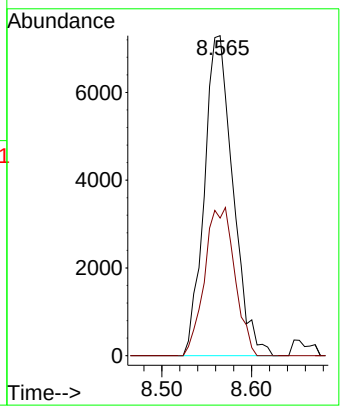
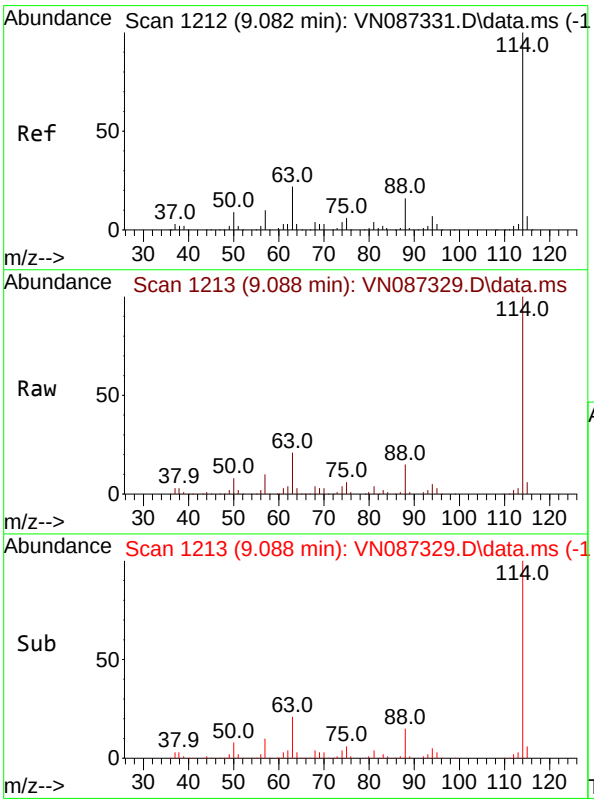
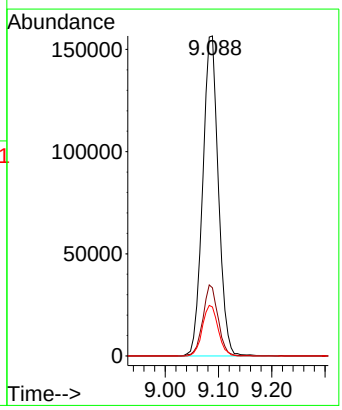


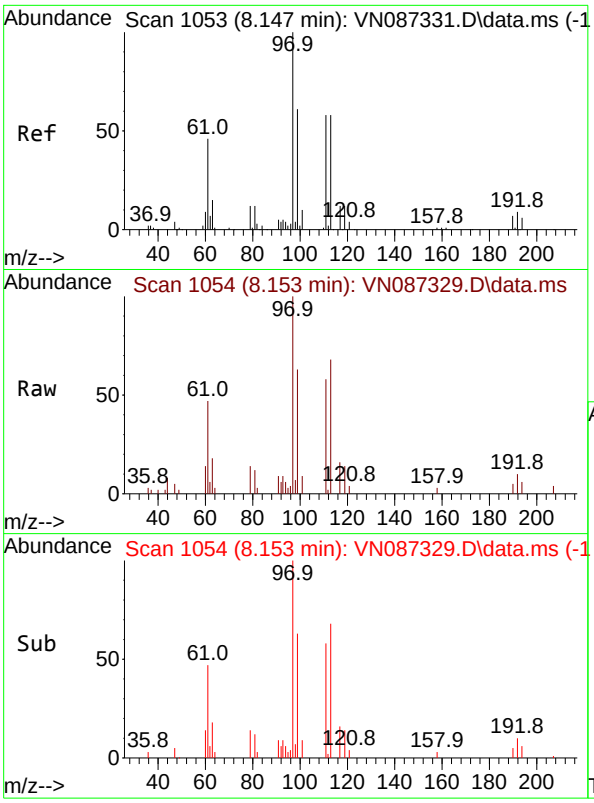


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.088 min Scan# 1213
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:114 Resp: 319926

Ion	Ratio	Lower	Upper
114	100		
63	21.3	0.0	44.6
88	15.3	0.0	32.8

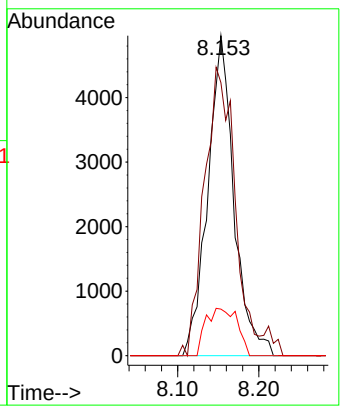




#35
Dibromofluoromethane
Concen: 5.035 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:113 Resp: 1111

Ion	Ratio	Lower	Upper
113	100		
111	104.4	82.5	123.7
192	17.7	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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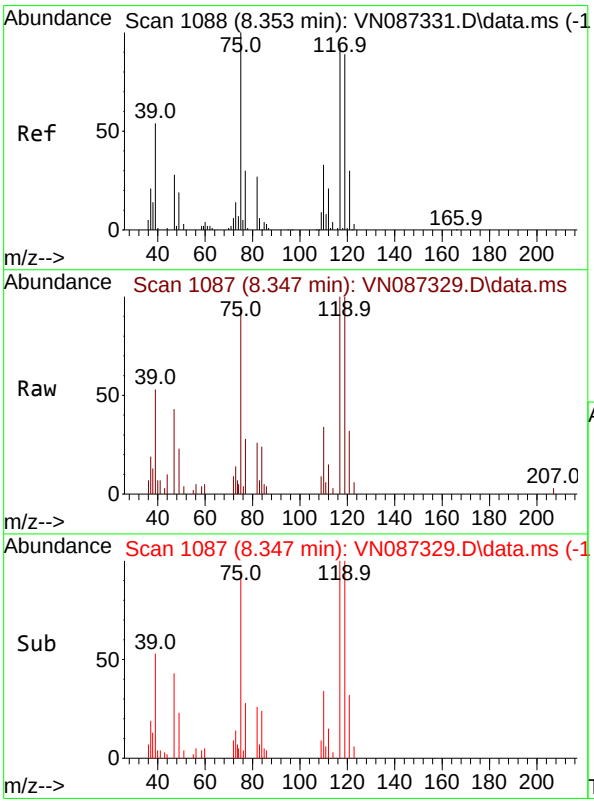
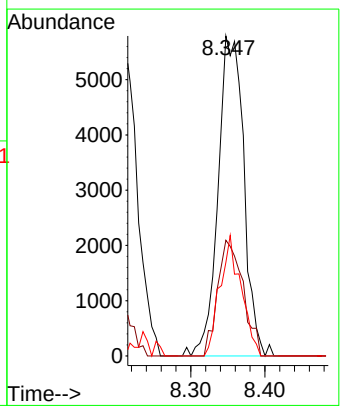
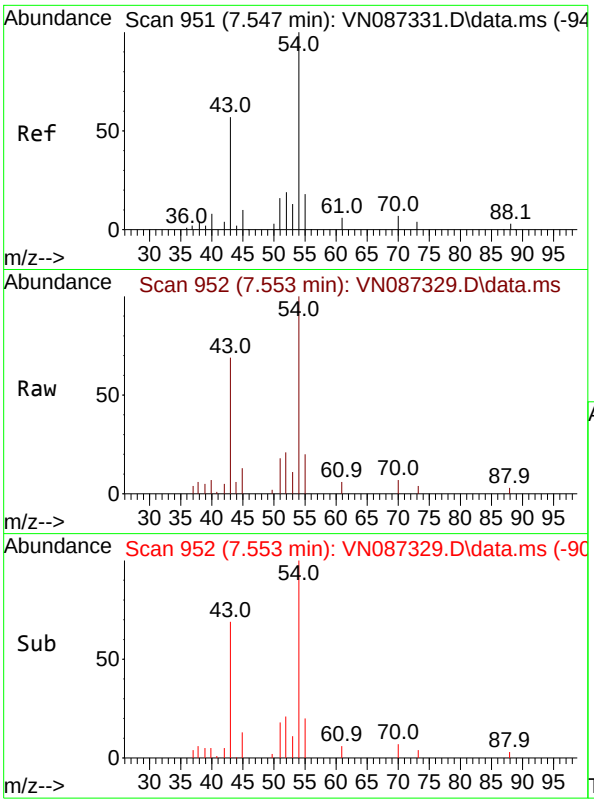


#36
1,1-Dichloropropene
Concen: 4.790 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 75 Resp: 13965

Ion	Ratio	Lower	Upper
75	100		
110	35.8	16.7	50.1
77	31.2	25.2	37.8





#37
Ethyl Acetate
Concen: 5.102 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 2148

Ion	Ratio	Lower	Upper
43	100		
61	12.2	10.9	16.3
70	8.5	7.4	11.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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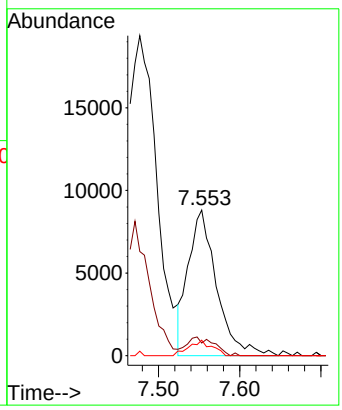
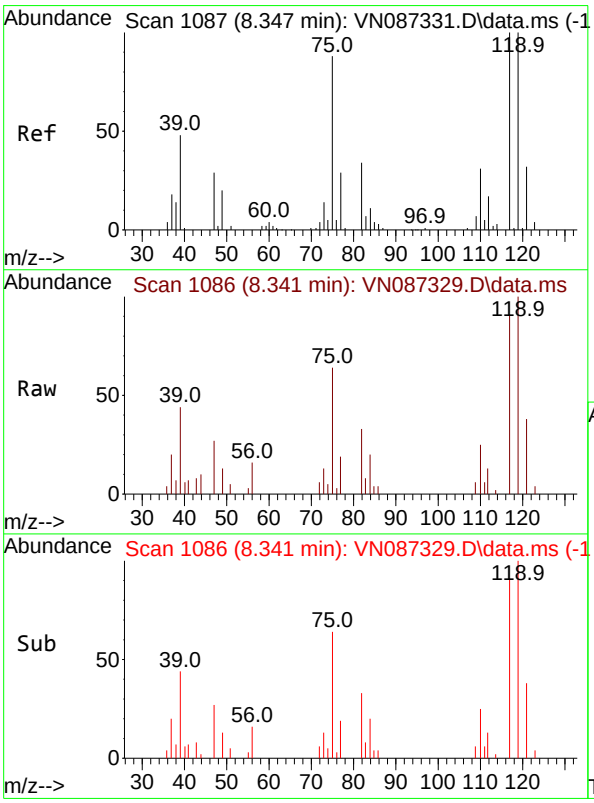
Supervised By :Semsettin Yesilyurt 07/17/2025

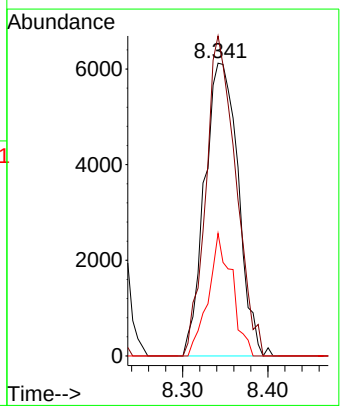


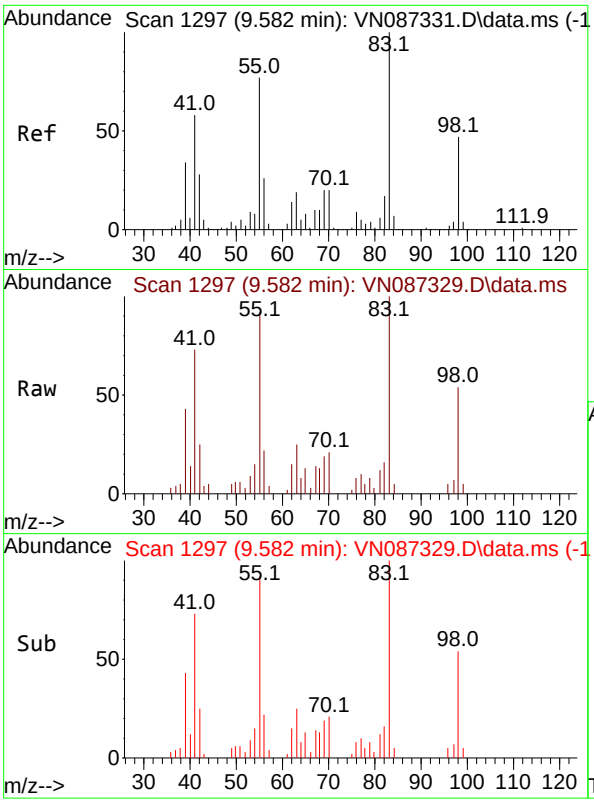


#38
Carbon Tetrachloride
Concen: 5.205 ug/l
RT: 8.341 min Scan# 1086
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:117 Resp: 16718

Ion	Ratio	Lower	Upper
117	100		
119	109.3	80.2	120.2
121	41.8	25.4	38.2#

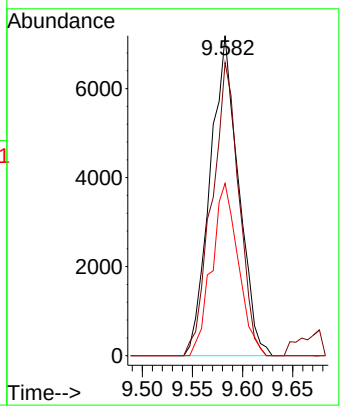




#39
Methylcyclohexane
Concen: 4.484 ug/l
RT: 9.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 83 Resp: 1415

Ion	Ratio	Lower	Upper
83	100		
55	91.6	61.3	91.9
98	53.8	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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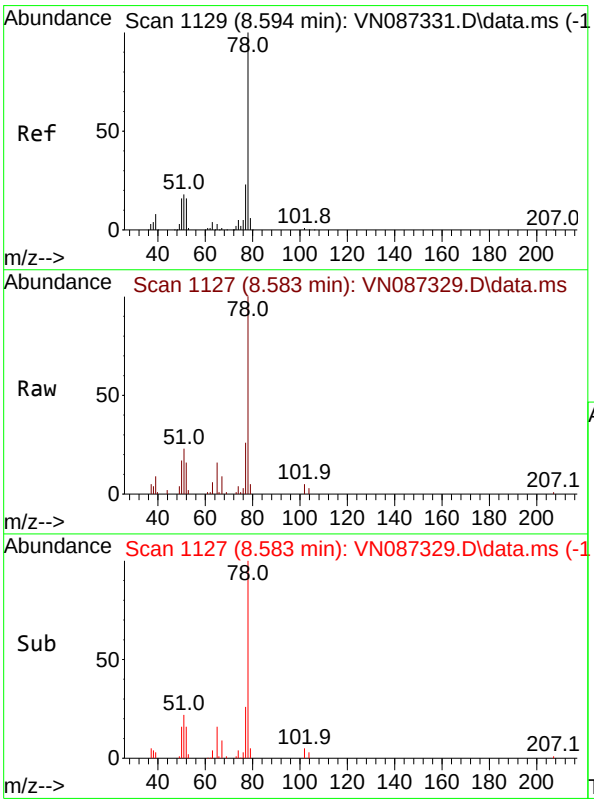
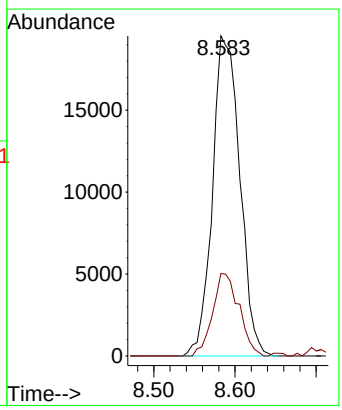
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

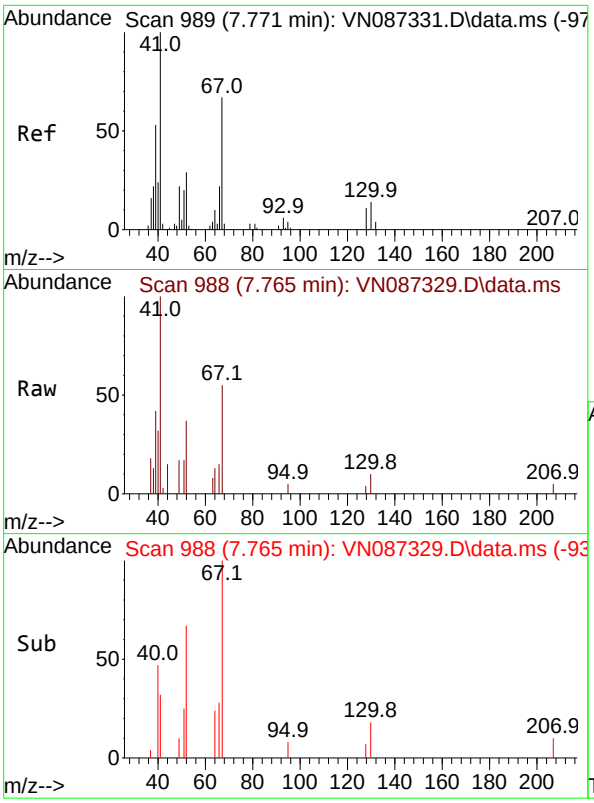


#40
Benzene
Concen: 4.855 ug/l
RT: 8.583 min Scan# 1127
Delta R.T. -0.012 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 78 Resp: 45748

Ion	Ratio	Lower	Upper
78	100		
77	25.8	18.2	27.2

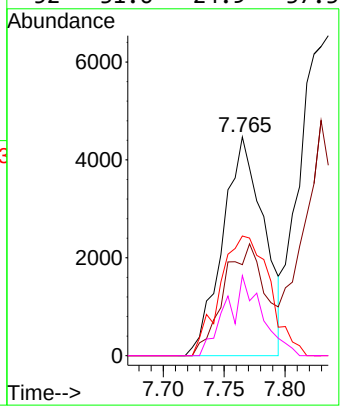




#41
Methacrylonitrile
Concen: 4.792 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 41 Resp: 1055

Ion	Ratio	Lower	Upper
41	100		
39	52.1	43.4	65.0
67	65.8	55.1	82.7
52	31.6	24.9	37.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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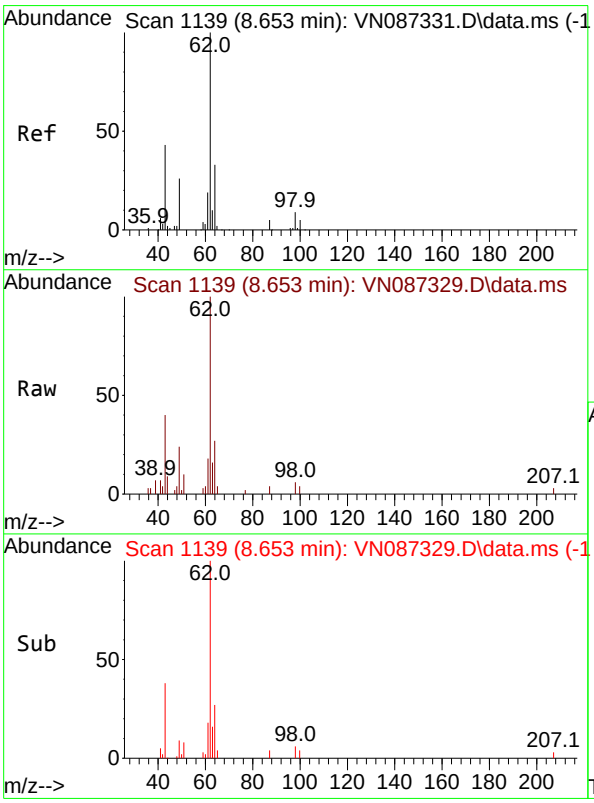
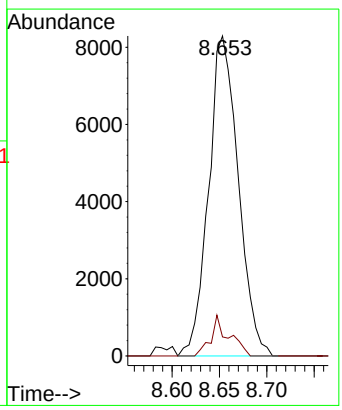
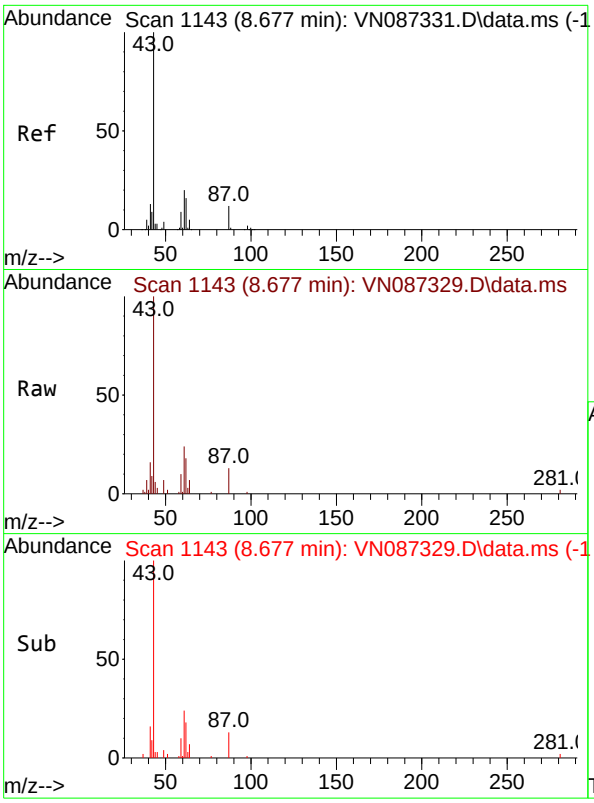


#42
1,2-Dichloroethane
Concen: 5.061 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 62 Resp: 18086

Ion	Ratio	Lower	Upper
62	100		
98	7.7	0.0	18.0





#43
Isopropyl Acetate
Concen: 4.890 ug/l
RT: 8.677 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 3196

Ion	Ratio	Lower	Upper
43	100		
61	24.7	19.8	29.8
87	12.2	9.8	14.6

Instrument :
MSVOA_N
ClientSampleId :
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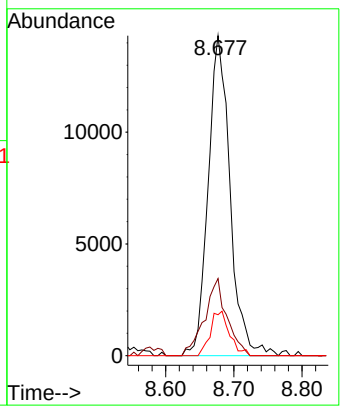
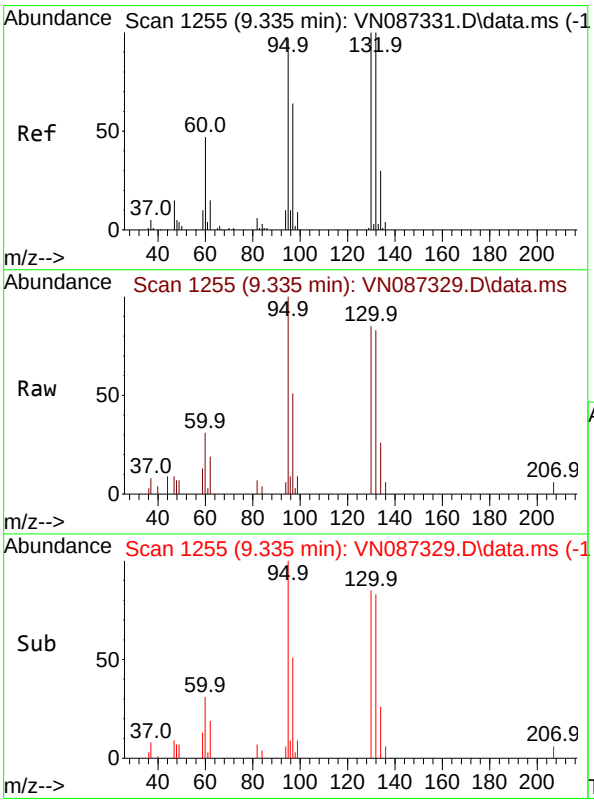
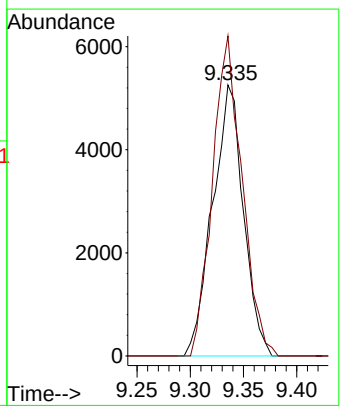


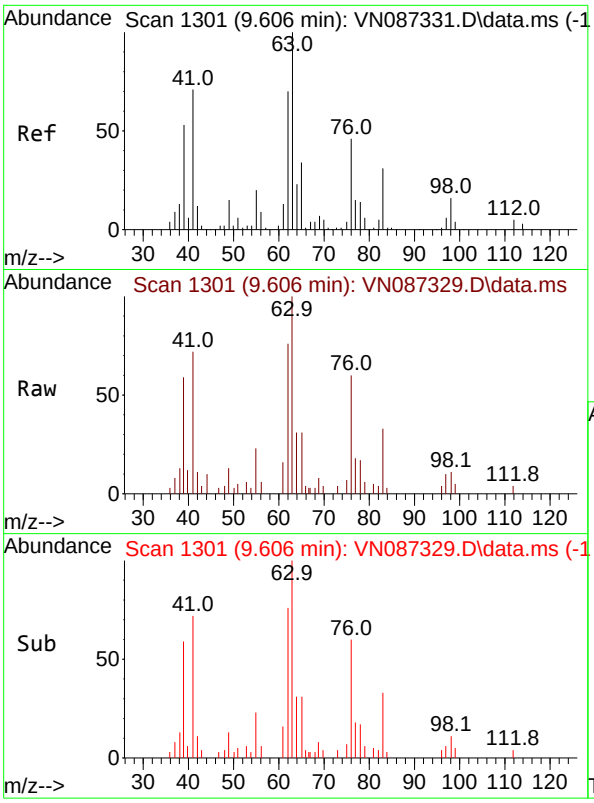


#44
Trichloroethene
Concen: 4.748 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:130 Resp: 10573

Ion	Ratio	Lower	Upper
130	100		
95	118.0	0.0	195.2

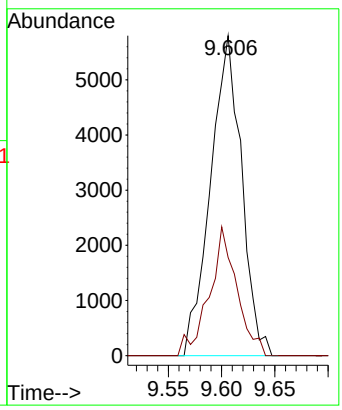




#45
1,2-Dichloropropane
Concen: 4.898 ug/l
RT: 9.606 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 63 Resp: 1172

Ion	Ratio	Lower	Upper
63	100		
65	30.7	27.0	40.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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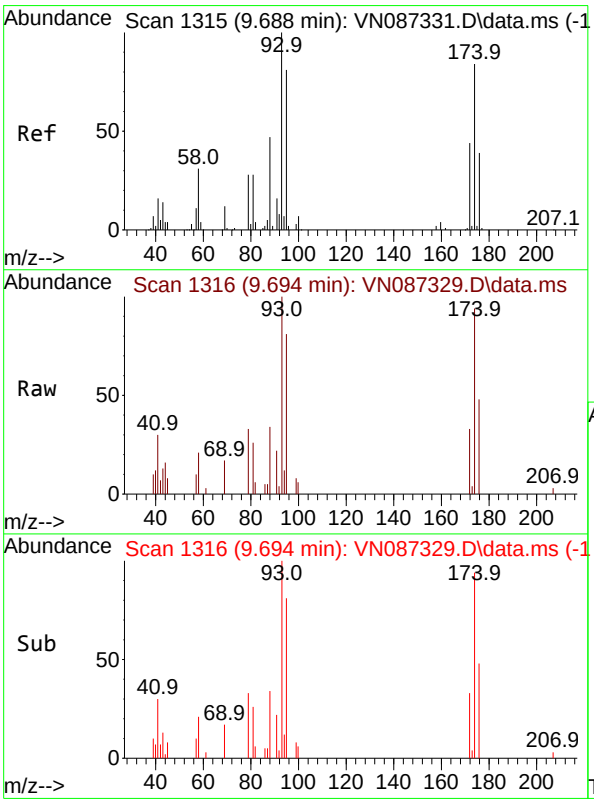
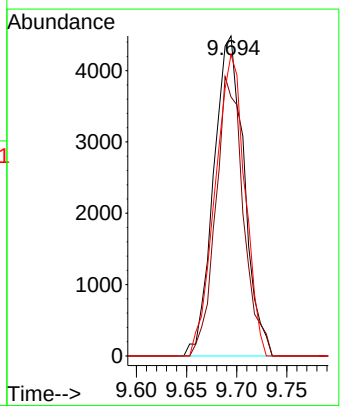
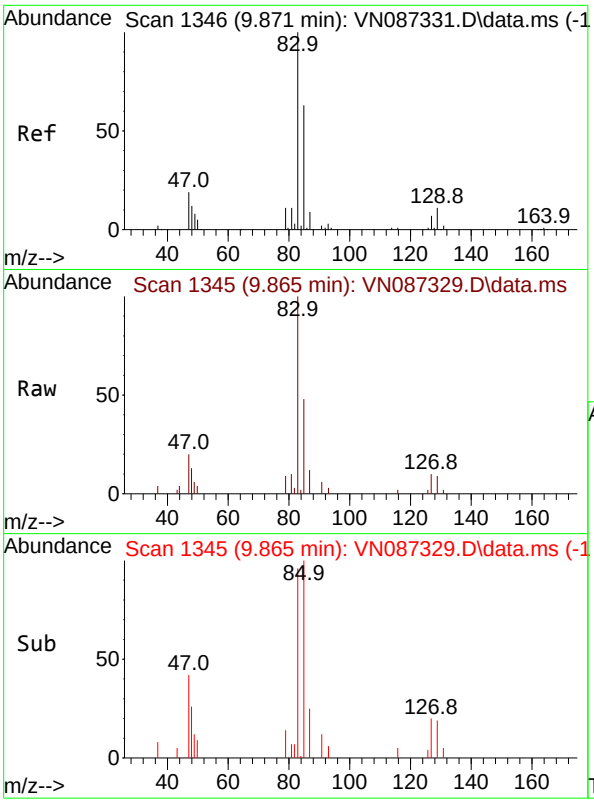


#46
Dibromomethane
Concen: 5.284 ug/l
RT: 9.694 min Scan# 1316
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 93 Resp: 9473

Ion	Ratio	Lower	Upper
93	100		
95	79.6	65.8	98.8
174	92.1	69.9	104.9

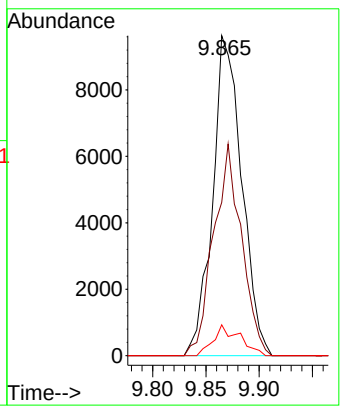




#47
Bromodichloromethane
Concen: 5.068 ug/l
RT: 9.865 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 83 Resp: 1830

Ion	Ratio	Lower	Upper
83	100		
85	47.9	50.4	75.6
127	9.7	5.8	8.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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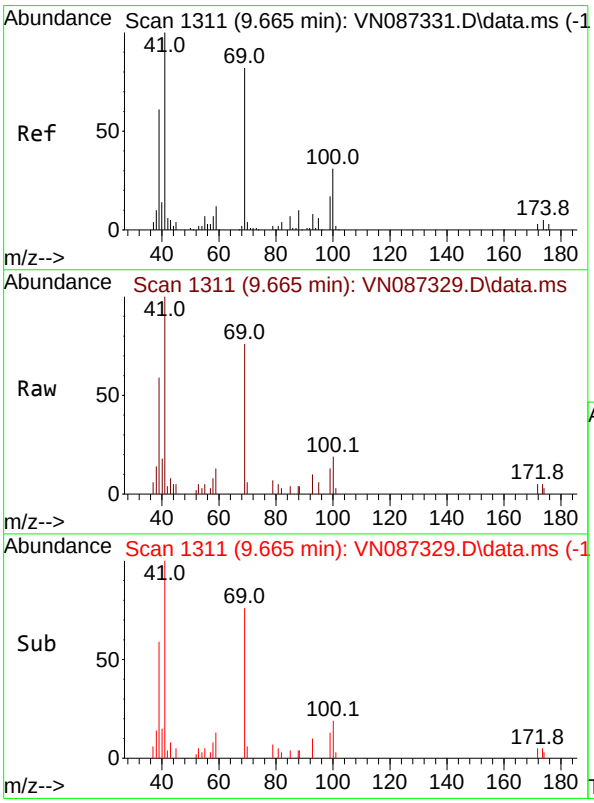
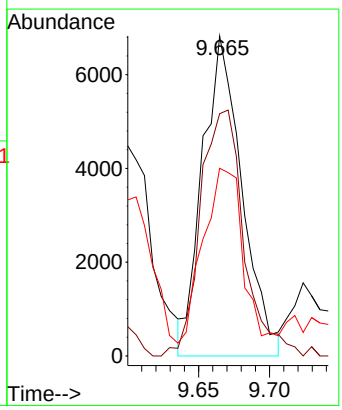
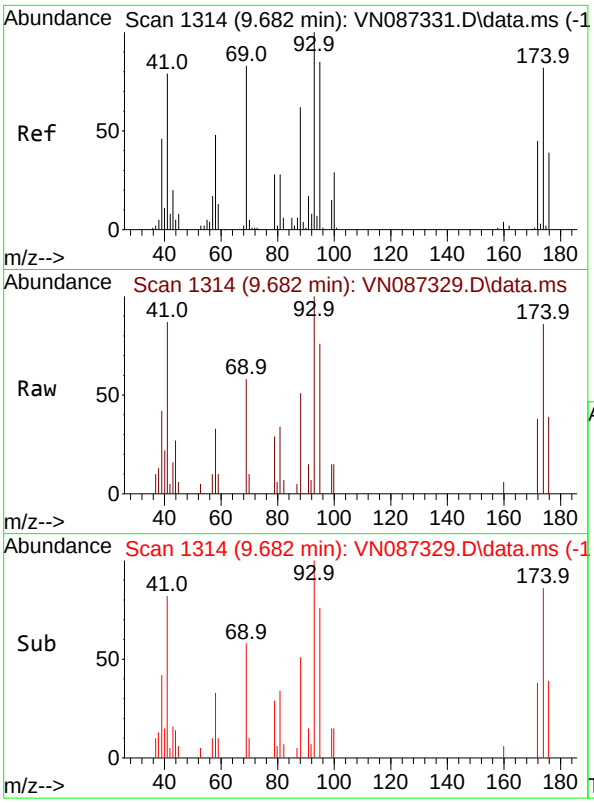


#48
Methyl methacrylate
Concen: 4.475 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 41 Resp: 13169

Ion	Ratio	Lower	Upper
41	100		
69	84.9	64.1	96.1
39	54.4	45.5	68.3

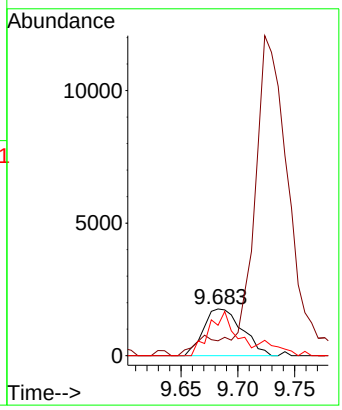




#49
1,4-Dioxane
Concen: 92.653 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 88 Resp: 417

Ion	Ratio	Lower	Upper
88	100		
43	25.3	0.0	0.0
58	65.4	61.1	91.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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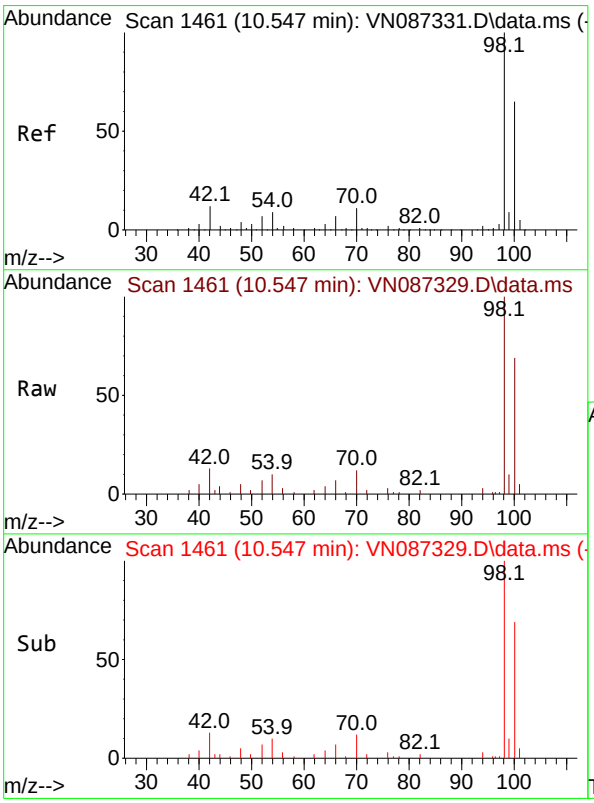
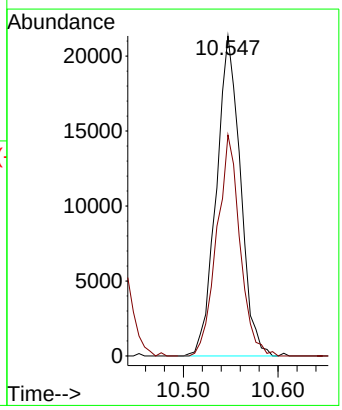
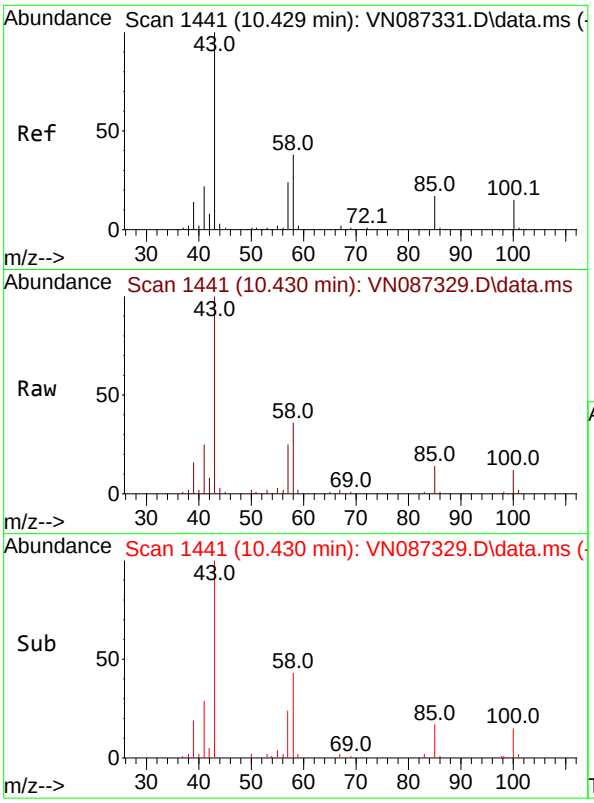


#50
Toluene-d8
Concen: 4.796 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 98 Resp: 37751

Ion	Ratio	Lower	Upper
98	100		
100	66.6	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 24.797 ug/l
RT: 10.430 min Scan# 14
Delta R.T. 0.001 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 10251

Ion	Ratio	Lower	Upper
43	100		
58	36.6	30.8	46.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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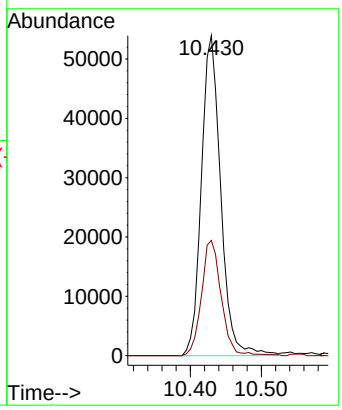
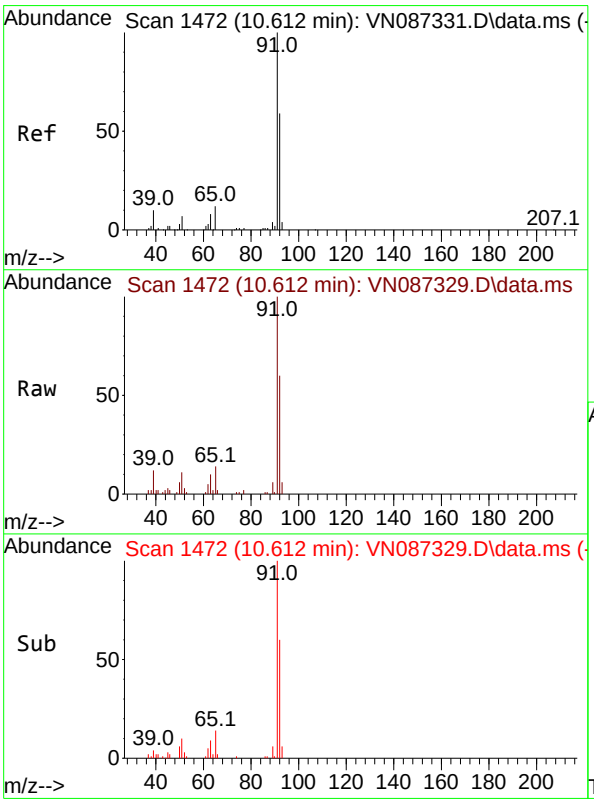
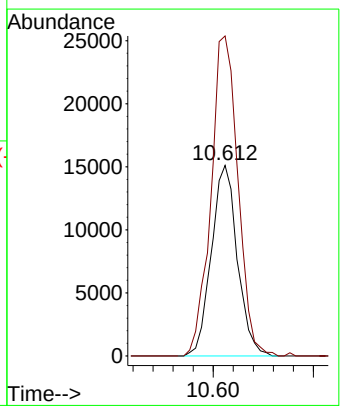


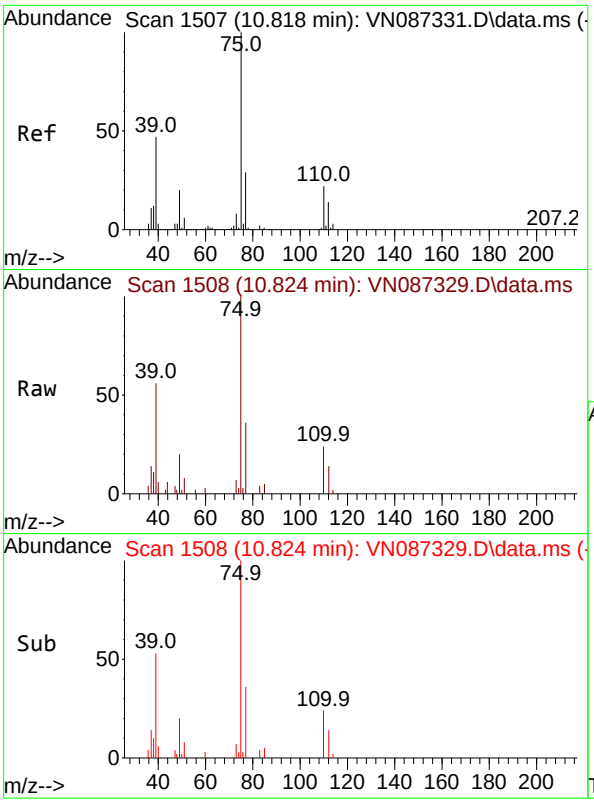


#52
Toluene
Concen: 4.742 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 92 Resp: 27158

Ion	Ratio	Lower	Upper
92	100		
91	174.6	135.1	202.7

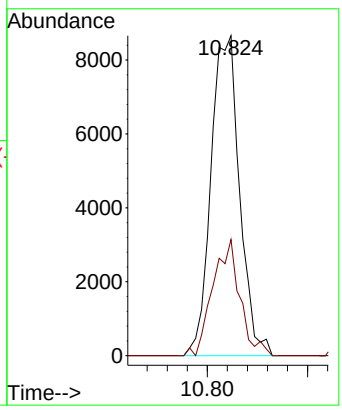




#53
t-1,3-Dichloropropene
Concen: 4.688 ug/l
RT: 10.824 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 75 Resp: 1713

Ion	Ratio	Lower	Upper
75	100		
77	36.3	23.6	35.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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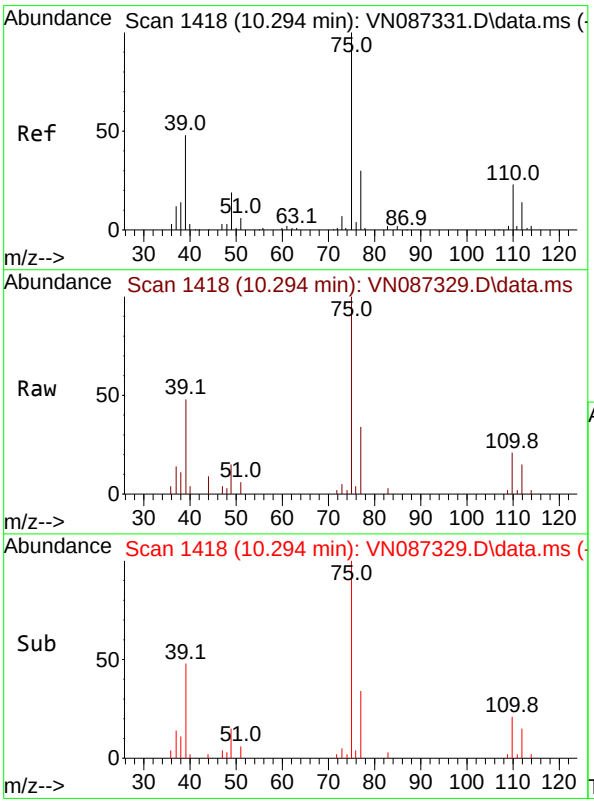
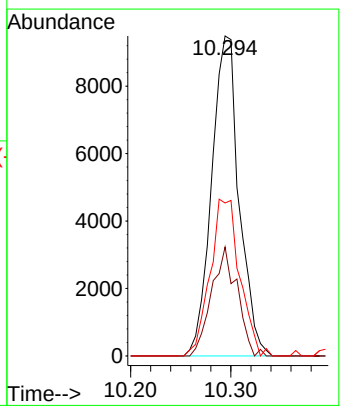
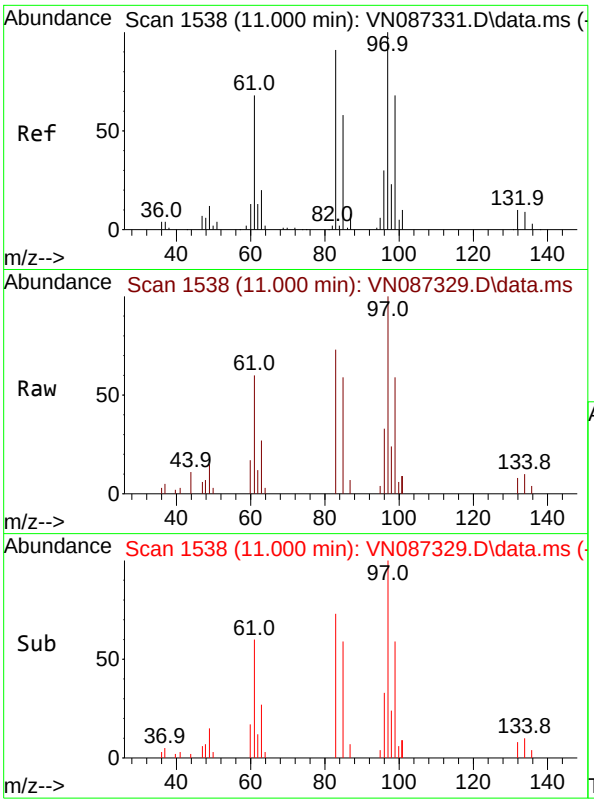


#54
cis-1,3-Dichloropropene
Concen: 4.780 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 75 Resp: 18046

Ion	Ratio	Lower	Upper
75	100		
77	34.0	24.2	36.2
39	47.8	38.4	57.6

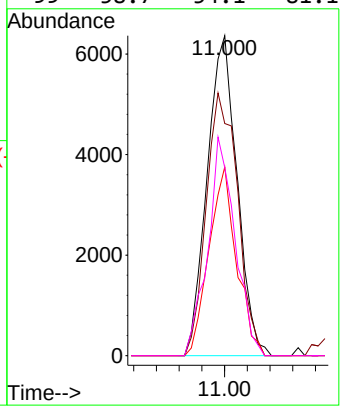




#55
1,1,2-Trichloroethane
Concen: 5.021 ug/l
RT: 11.000 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 97 Resp: 1164

Ion	Ratio	Lower	Upper
97	100		
83	72.6	72.6	109.0#
85	59.0	46.7	70.1
99	58.7	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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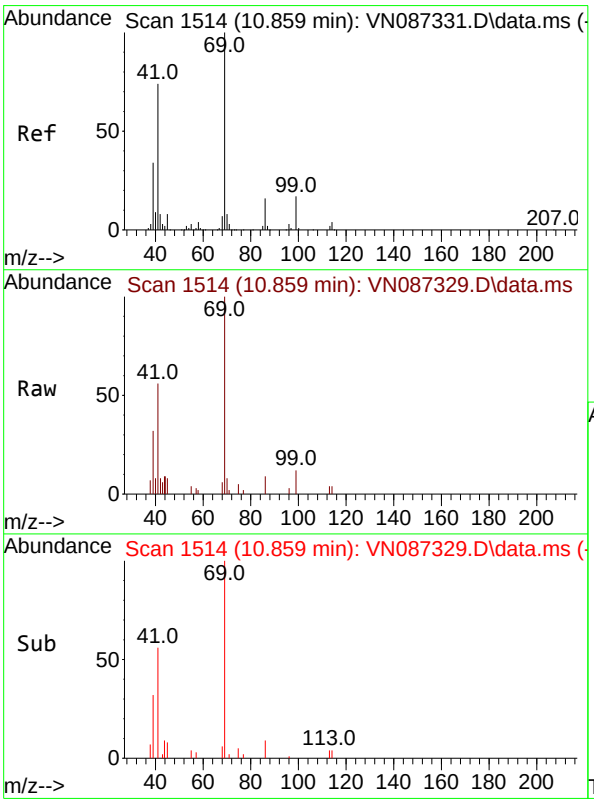
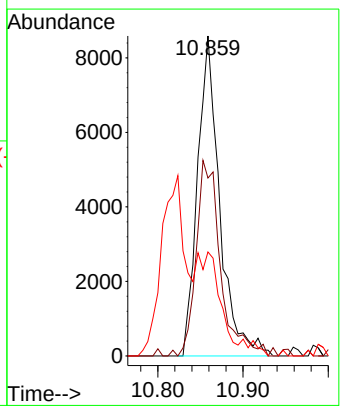
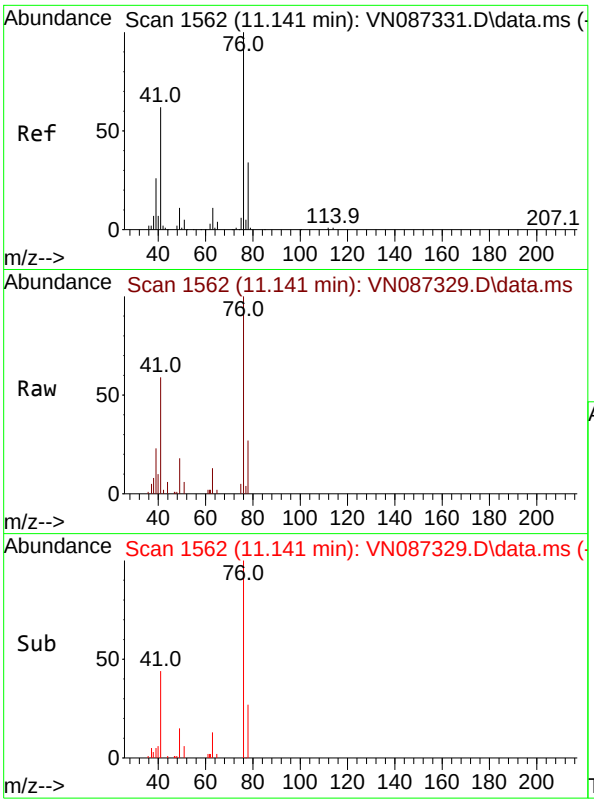


#56
Ethyl methacrylate
Concen: 4.693 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 69 Resp: 15548

Ion	Ratio	Lower	Upper
69	100		
41	67.5	55.1	82.7
39	28.8	27.9	41.9





#57
1,3-Dichloropropane
Concen: 4.956 ug/l
RT: 11.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 76 Resp: 1986

Ion	Ratio	Lower	Upper
76	100		
78	32.1	26.0	39.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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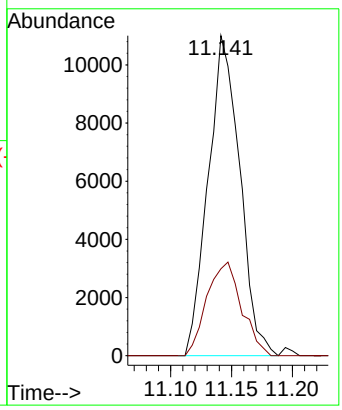
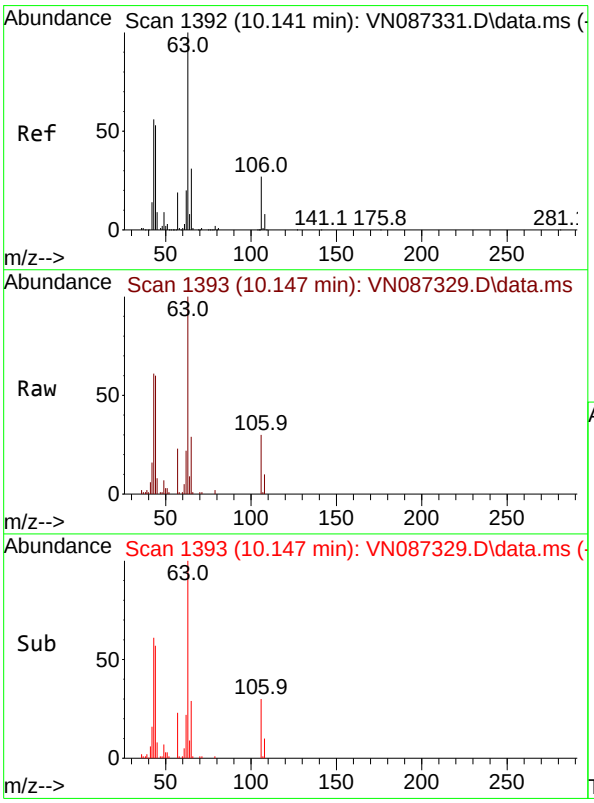
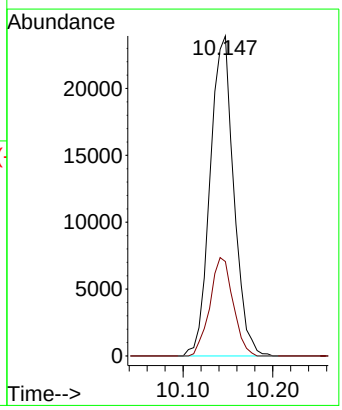


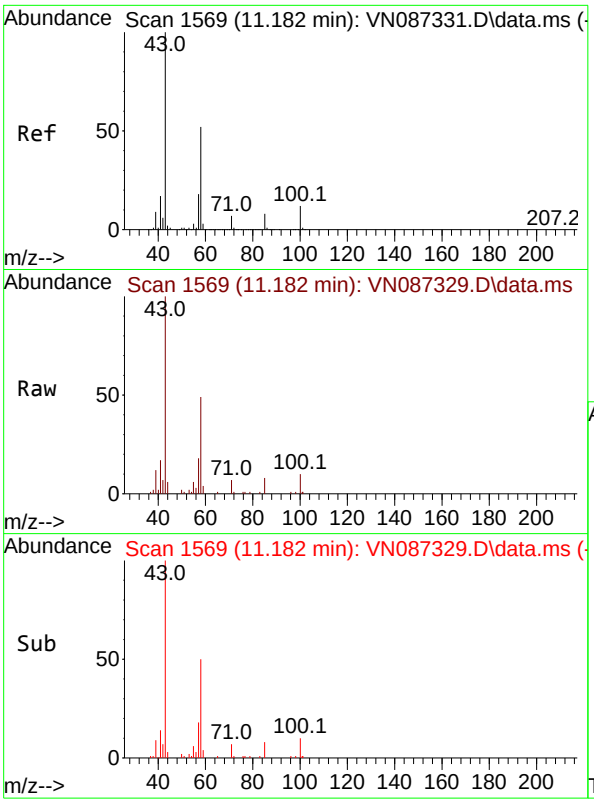


#58
2-Chloroethyl Vinyl ether
Concen: 22.968 ug/l
RT: 10.147 min Scan# 1393
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 63 Resp: 43690

Ion	Ratio	Lower	Upper
63	100		
106	30.2	21.7	32.5





#59
2-Hexanone
Concen: 21.778 ug/l
RT: 11.182 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 5973

Ion	Ratio	Lower	Upper
43	100		
58	52.6	26.7	80.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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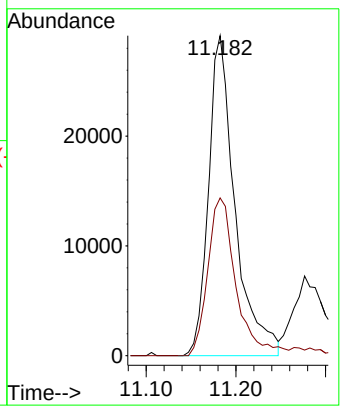
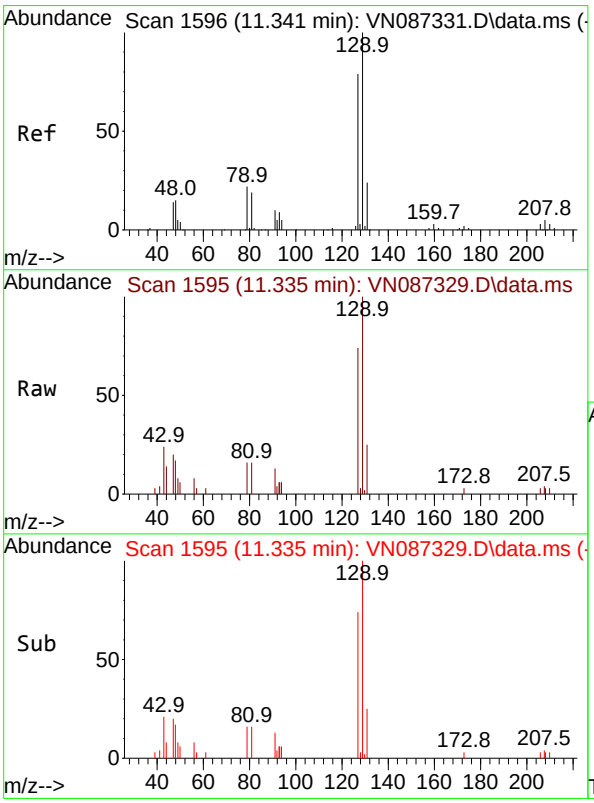
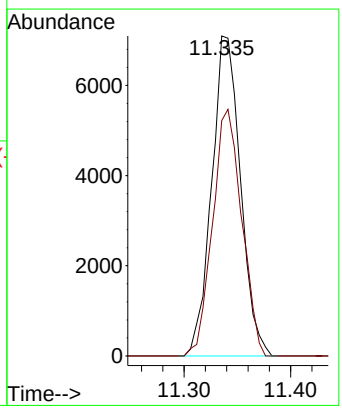


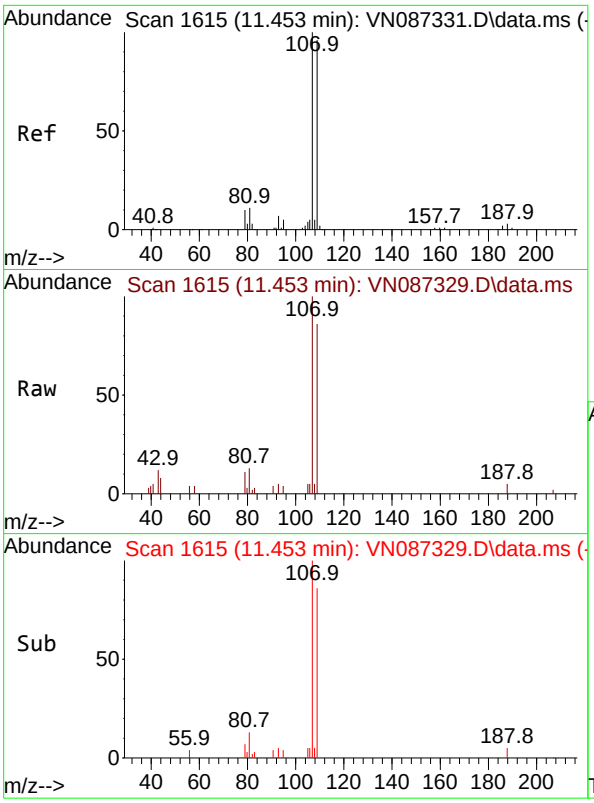


#60
Dibromochloromethane
Concen: 5.037 ug/l
RT: 11.335 min Scan# 1595
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:129 Resp: 13321

Ion	Ratio	Lower	Upper
129	100		
127	77.9	39.1	117.5





#61
1,2-Dibromoethane
Concen: 4.898 ug/l
RT: 11.453 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:107 Resp: 1194

Ion	Ratio	Lower	Upper
107	100		
109	86.3	77.5	116.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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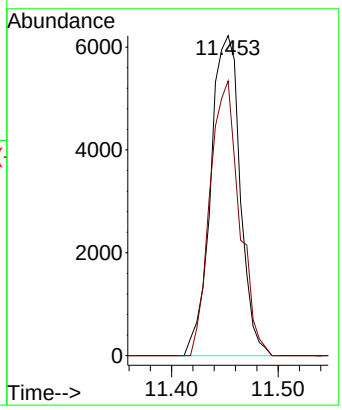
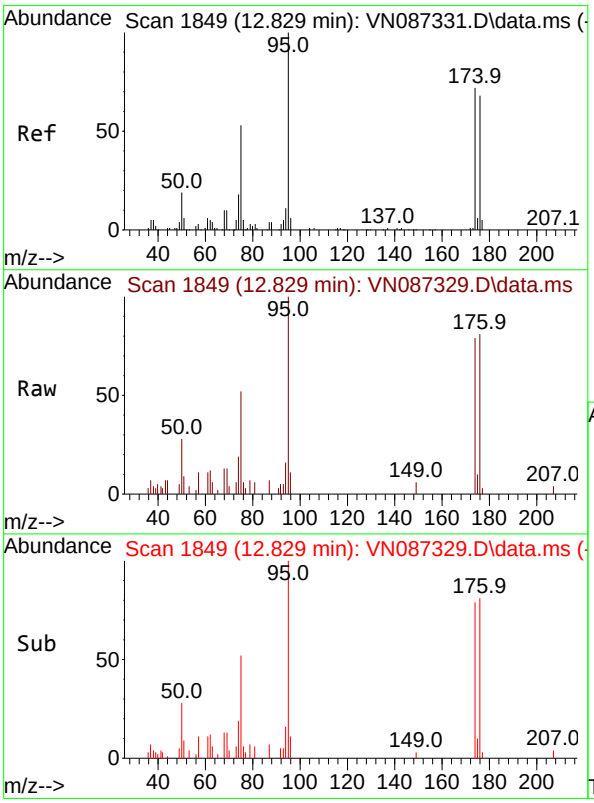
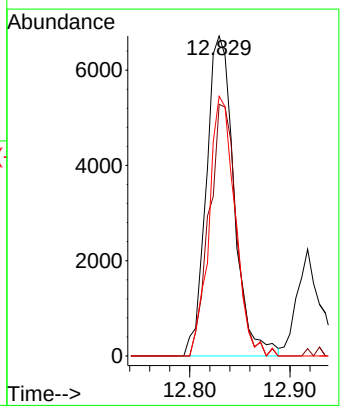


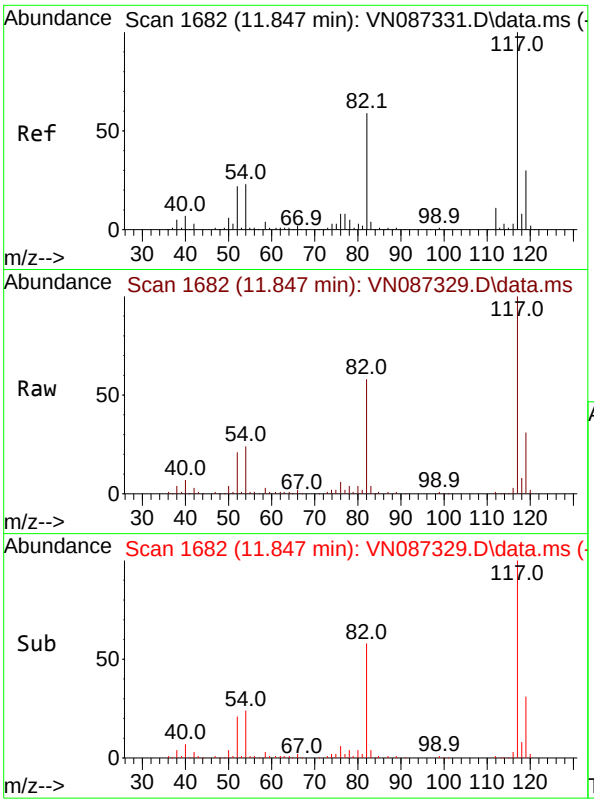


#62
4-Bromofluorobenzene
Concen: 4.450 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 95 Resp: 12943

Ion	Ratio	Lower	Upper
95	100		
174	76.6	0.0	149.4
176	76.1	0.0	141.2

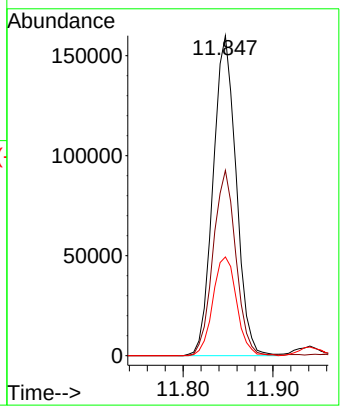




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:117 Resp: 28558

Ion	Ratio	Lower	Upper
117	100		
82	57.9	47.4	71.2
119	30.8	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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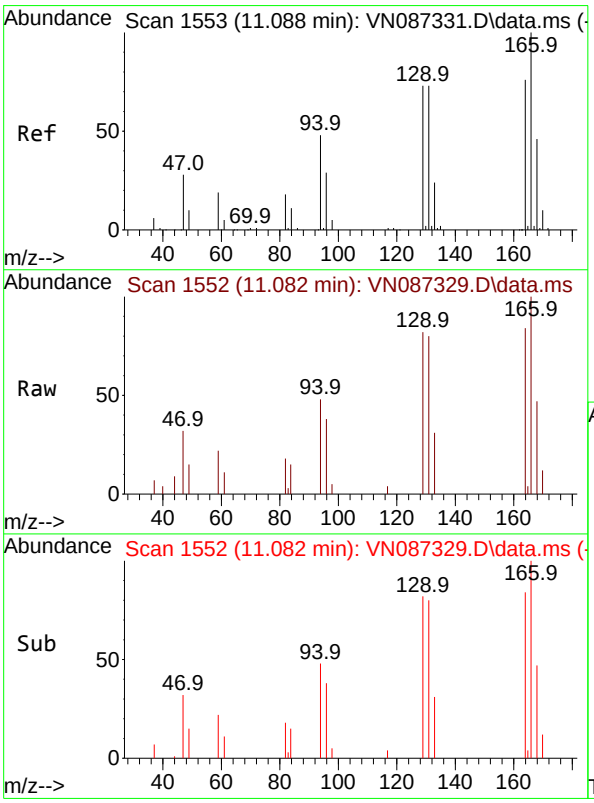
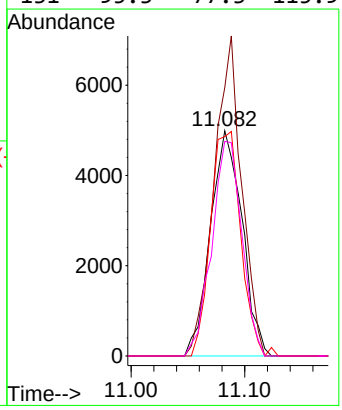
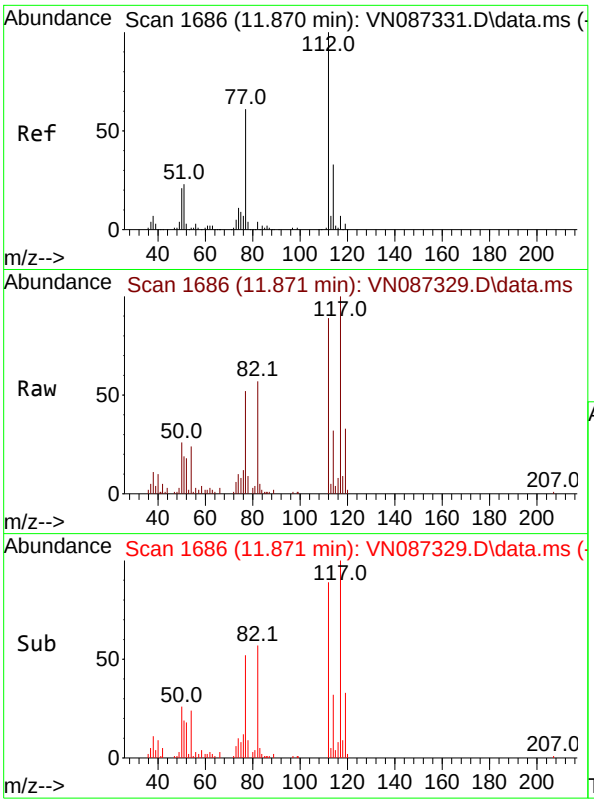


#64
Tetrachloroethene
Concen: 5.256 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:164 Resp: 9660

Ion	Ratio	Lower	Upper
164	100		
166	119.2	105.5	158.3
129	97.5	77.4	116.2
131	95.3	77.3	115.9





#65
Chlorobenzene
Concen: 5.038 ug/l
RT: 11.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:112 Resp: 3230

Ion	Ratio	Lower	Upper
112	100		
114	35.4	26.5	39.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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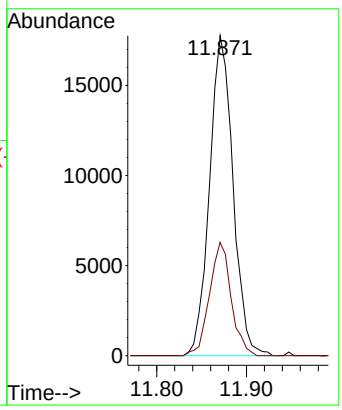
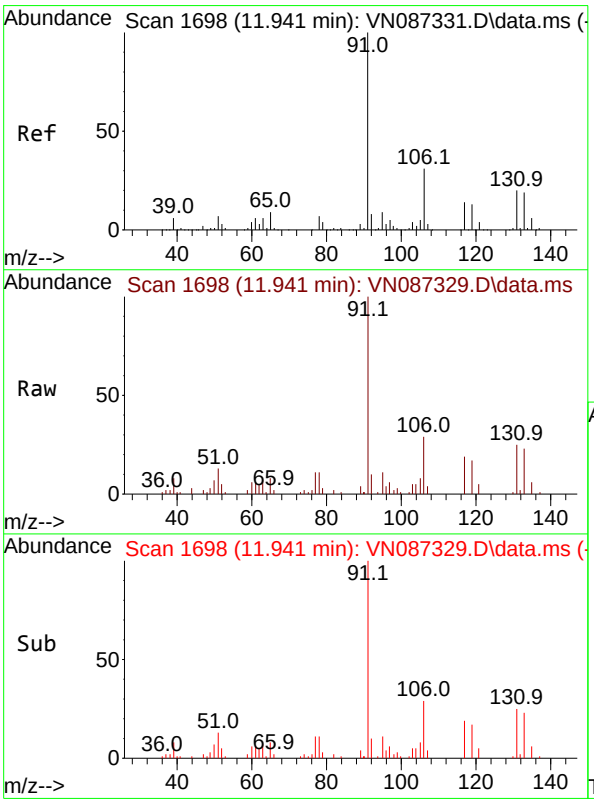
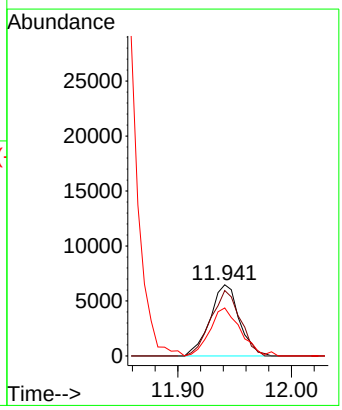


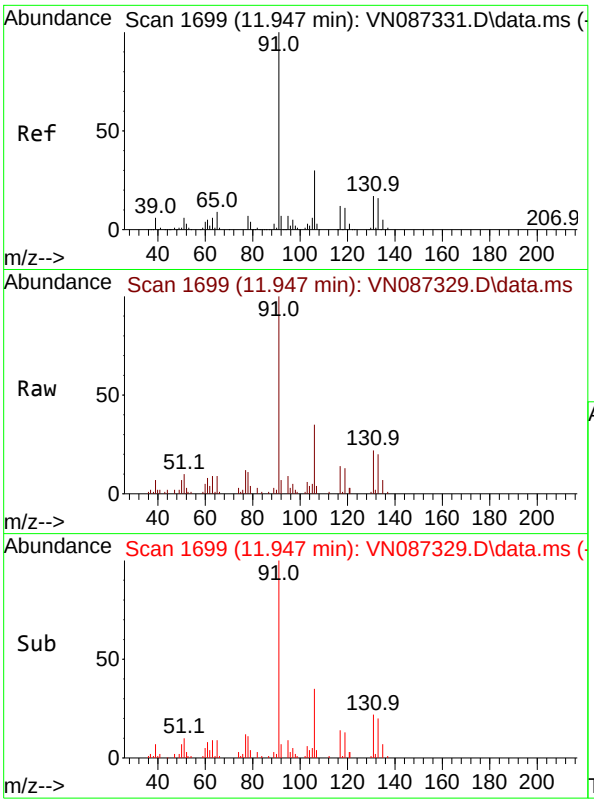


#66
1,1,1,2-Tetrachloroethane
Concen: 5.312 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:131 Resp: 11581

Ion	Ratio	Lower	Upper
131	100		
133	92.2	47.4	142.3
119	70.7	33.1	99.2

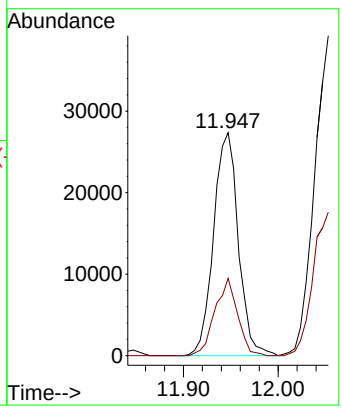




#67
Ethyl Benzene
Concen: 4.701 ug/l
RT: 11.947 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 91 Resp: 4962

Ion	Ratio	Lower	Upper
91	100		
106	34.6	24.3	36.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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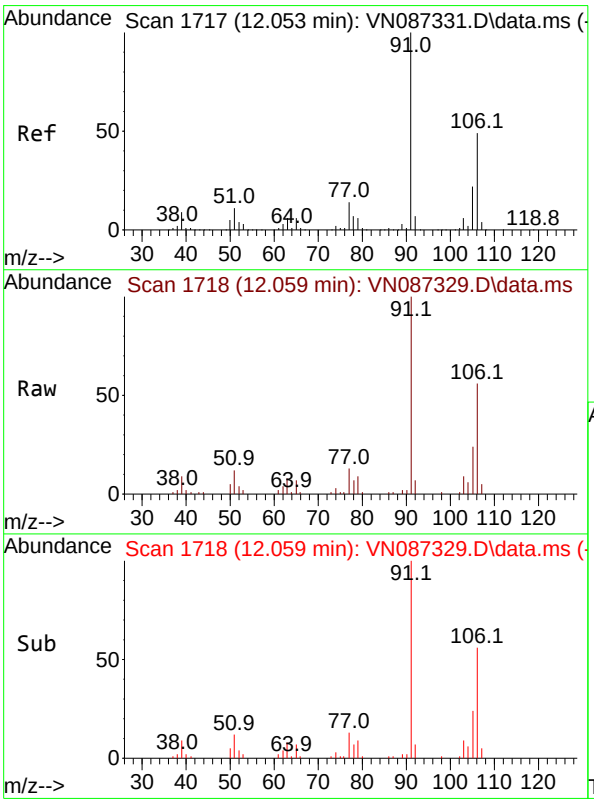
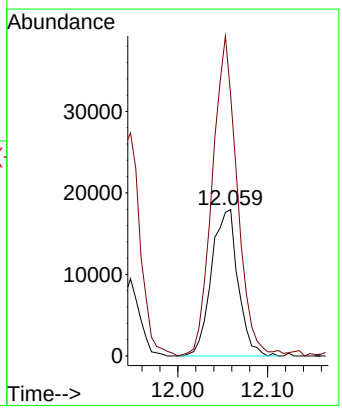
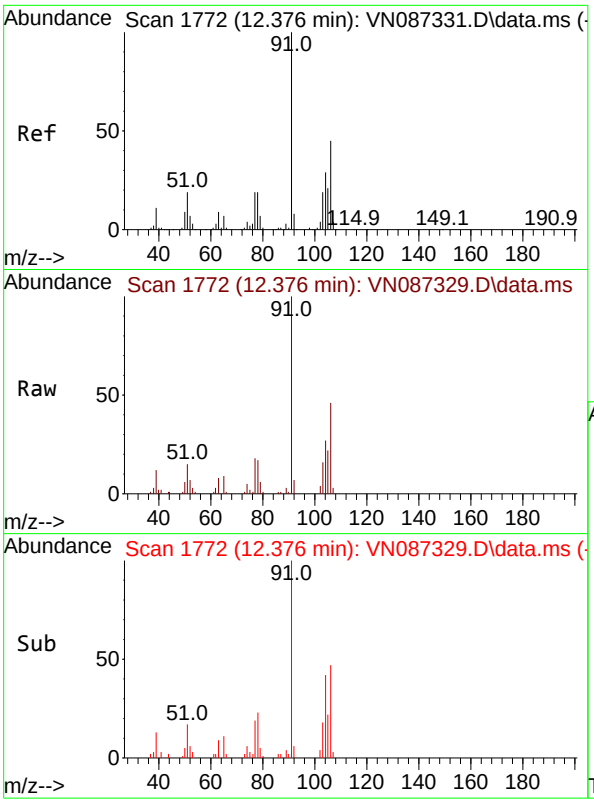


#68
m/p-Xylenes
Concen: 9.332 ug/l
RT: 12.059 min Scan# 1718
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:106 Resp: 36883

Ion	Ratio	Lower	Upper
106	100		
91	205.1	162.0	243.0





#69
o-Xylene
Concen: 4.580 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:106 Resp: 1729

Ion	Ratio	Lower	Upper
106	100		
91	219.7	107.7	323.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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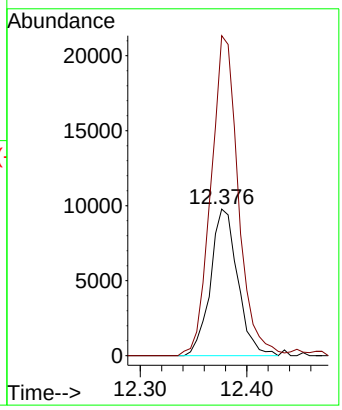
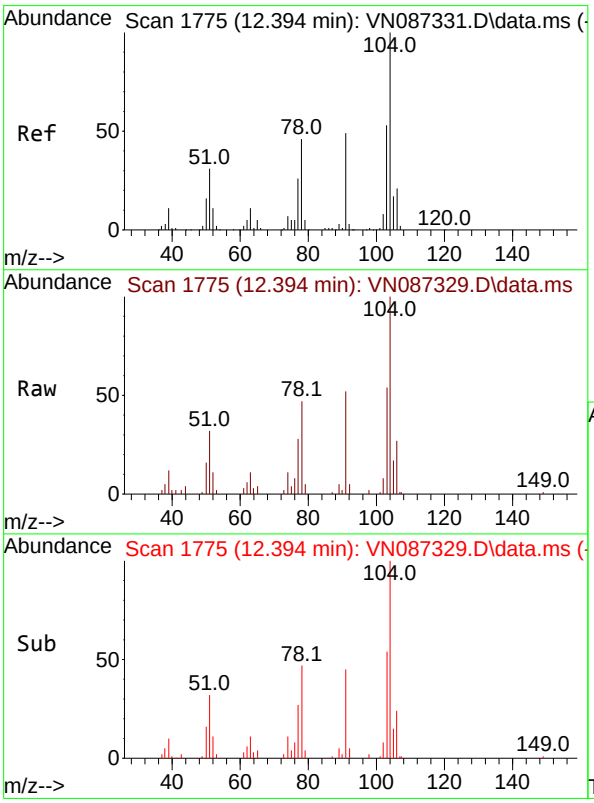
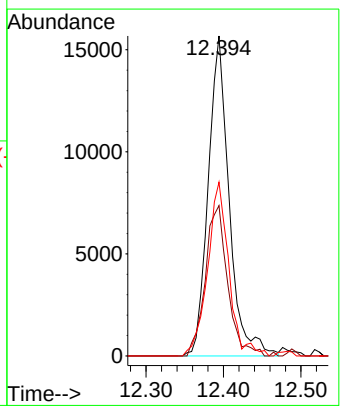


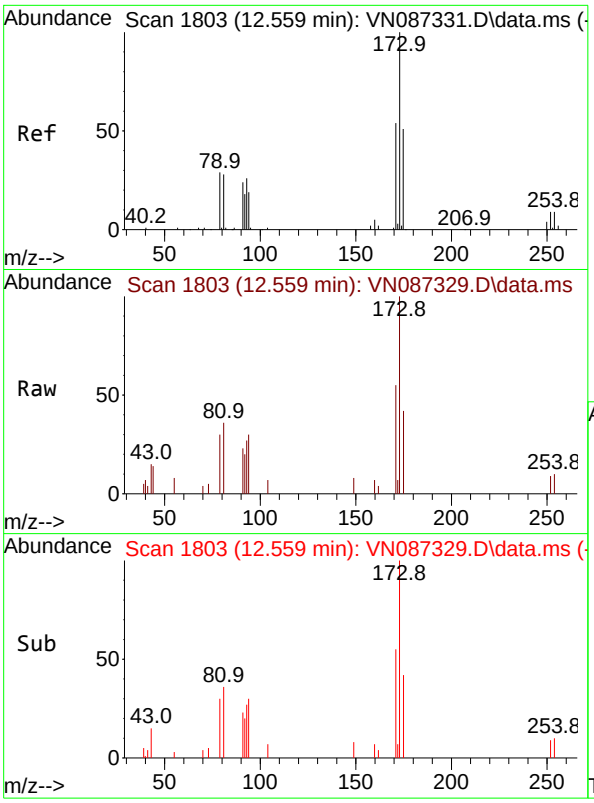


#70
Styrene
Concen: 4.639 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:104 Resp: 29462

Ion	Ratio	Lower	Upper
104	100		
78	50.2	41.0	61.6
103	55.1	43.9	65.9

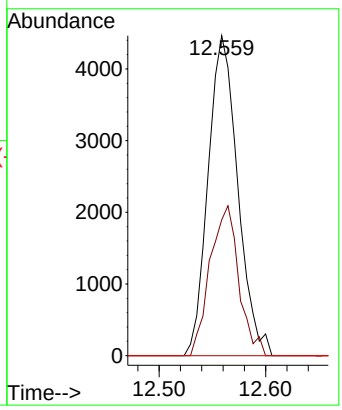




#71
Bromoform
Concen: 4.899 ug/l
RT: 12.559 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:173 Resp: 862

Ion	Ratio	Lower	Upper
173	100		
175	45.5	24.1	72.3
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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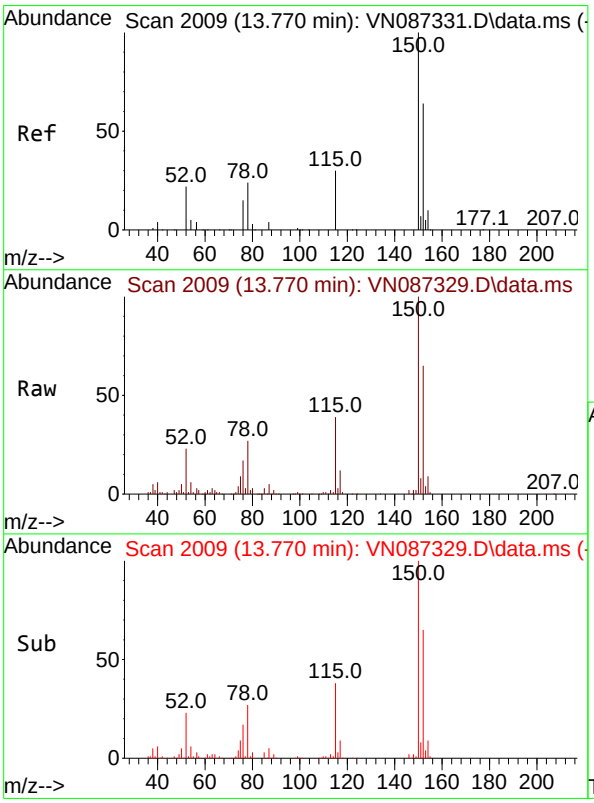
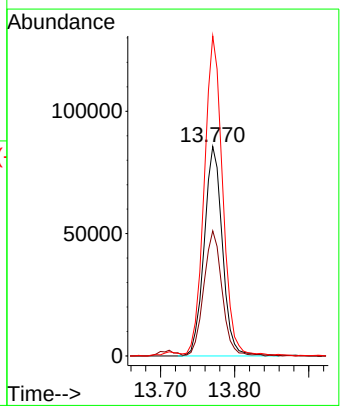
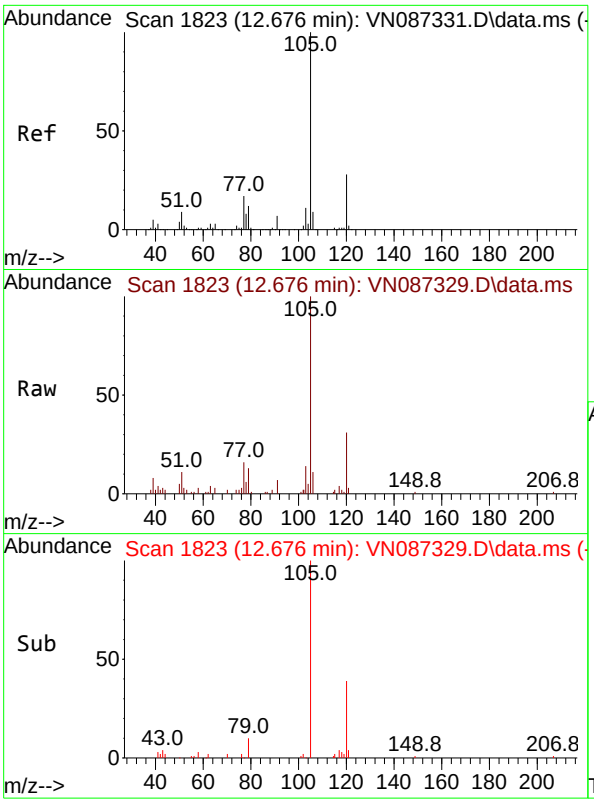


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:152 Resp: 146494

Ion	Ratio	Lower	Upper
152	100		
115	60.1	31.1	93.5
150	152.1	0.0	349.0





#73
Isopropylbenzene
Concen: 4.590 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:105 Resp: 4232

Ion	Ratio	Lower	Upper
105	100		
120	27.7	13.4	40.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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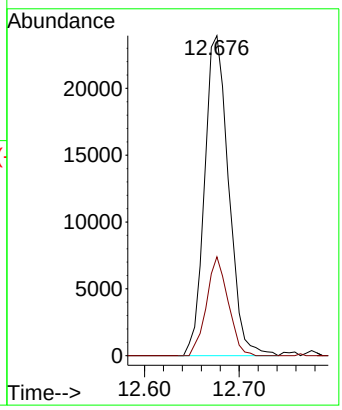
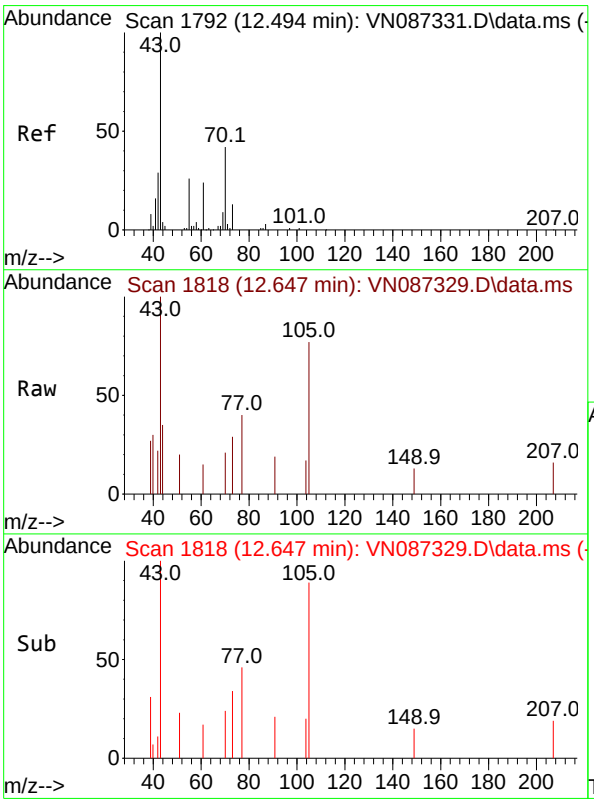
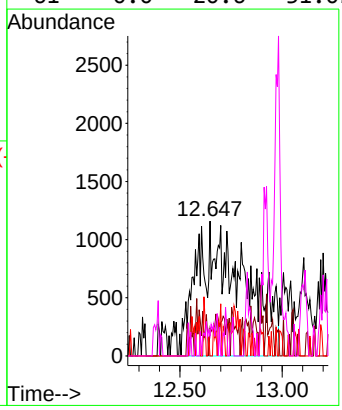


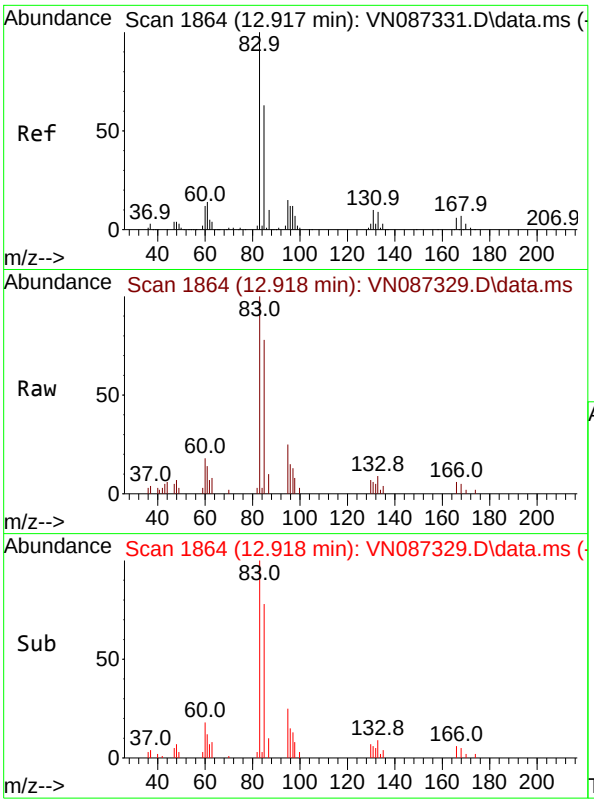


#74
N-amyl acetate
Concen: 5.113 ug/l m
RT: 12.647 min Scan# 1818
Delta R.T. 0.153 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 43 Resp: 18405

Ion	Ratio	Lower	Upper
43	100		
70	0.0	37.6	56.4#
55	0.0	19.6	29.4#
61	0.0	20.6	31.0#





#75
1,1,2,2-Tetrachloroethane
Concen: 4.988 ug/l
RT: 12.918 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

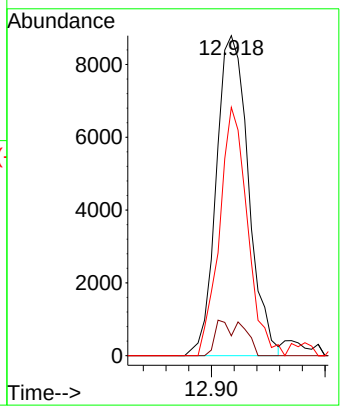
Tgt Ion: 83 Resp: 1730

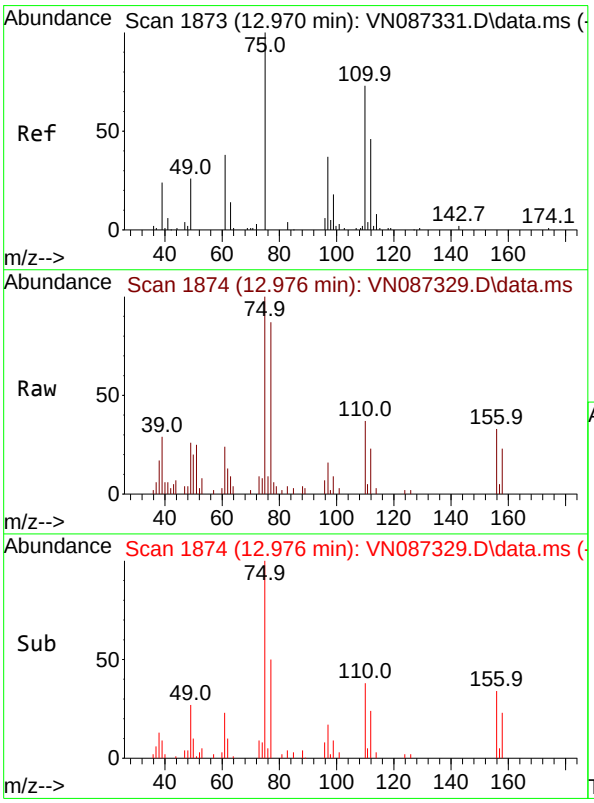
Ion	Ratio	Lower	Upper
83	100		
131	5.3	5.1	15.3
85	67.4	32.5	97.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

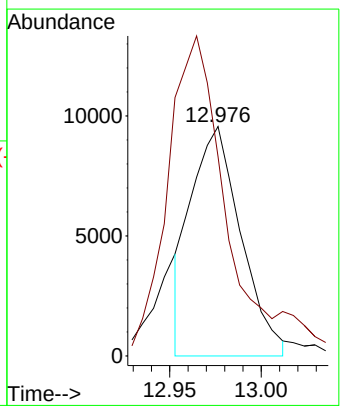


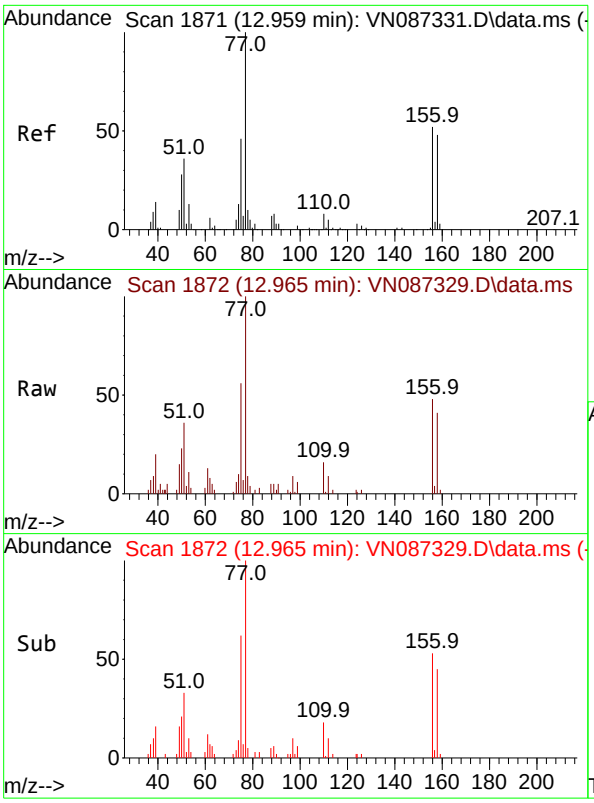


#76
1,2,3-Trichloropropane
Concen: 5.580 ug/l m
RT: 12.976 min Scan# 1874
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 75 Resp: 18135

Ion	Ratio	Lower	Upper
75	100		
77	170.2	94.5	283.6

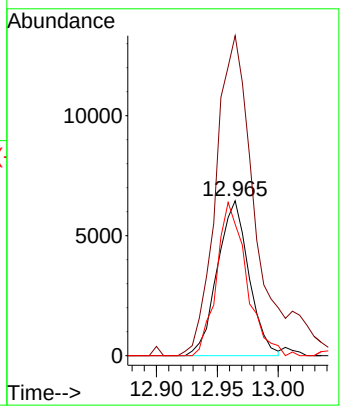




#77
Bromobenzene
Concen: 4.847 ug/l
RT: 12.965 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:156 Resp: 1158

Ion	Ratio	Lower	Upper
156	100		
77	266.3	114.9	344.6
158	94.4	48.5	145.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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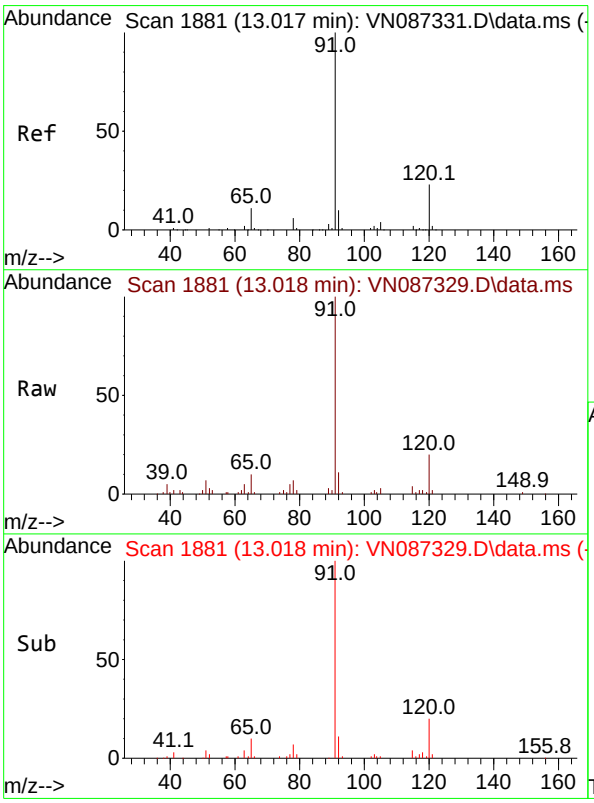
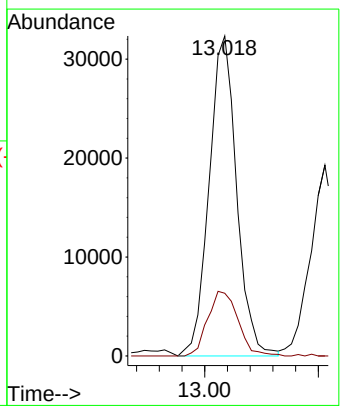
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

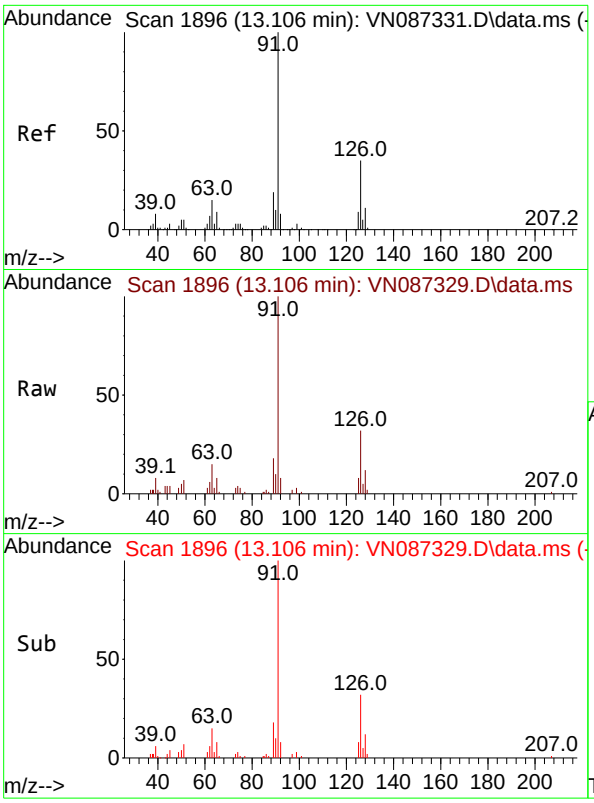


#78
n-propylbenzene
Concen: 4.693 ug/l
RT: 13.018 min Scan# 1881
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 91 Resp: 54443

Ion	Ratio	Lower	Upper
91	100		
120	22.2	11.3	33.8





#79
2-Chlorotoluene
Concen: 4.825 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 91 Resp: 3440

Ion	Ratio	Lower	Upper
91	100		
126	33.2	16.9	50.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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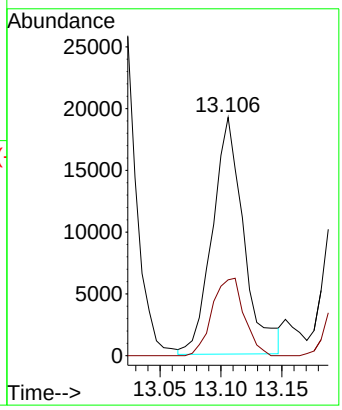
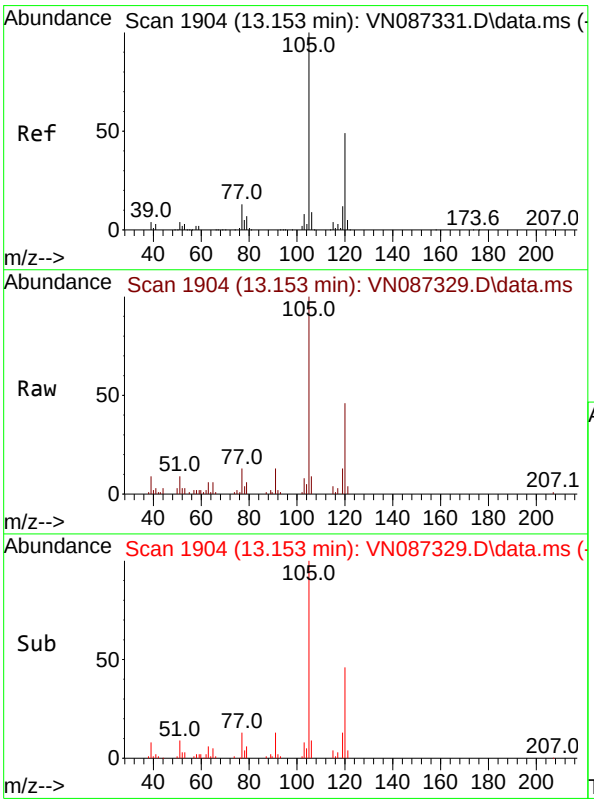
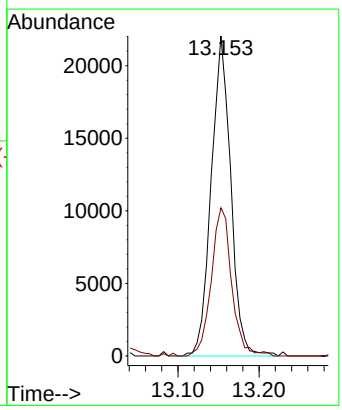


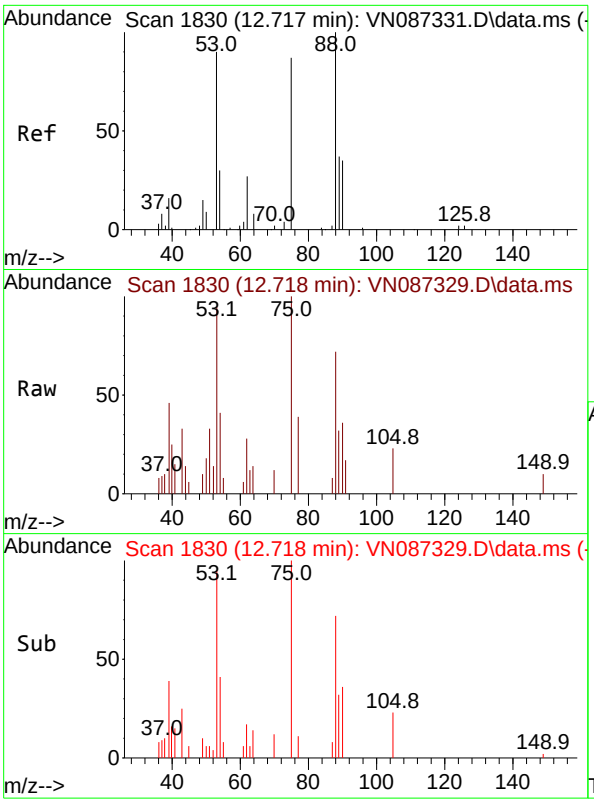


#80
1,3,5-Trimethylbenzene
Concen: 4.694 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:105 Resp: 36874

Ion	Ratio	Lower	Upper
105	100		
120	48.3	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 3.994 ug/l
RT: 12.718 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 75 Resp: 479

Ion	Ratio	Lower	Upper
75	100		
53	83.4	83.5	125.3#
89	34.7	38.4	57.6#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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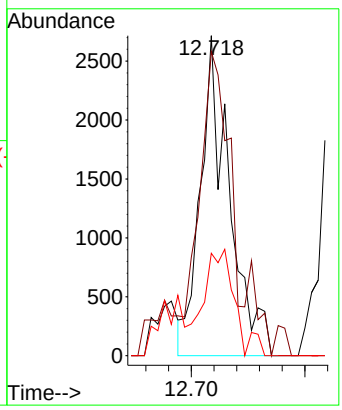
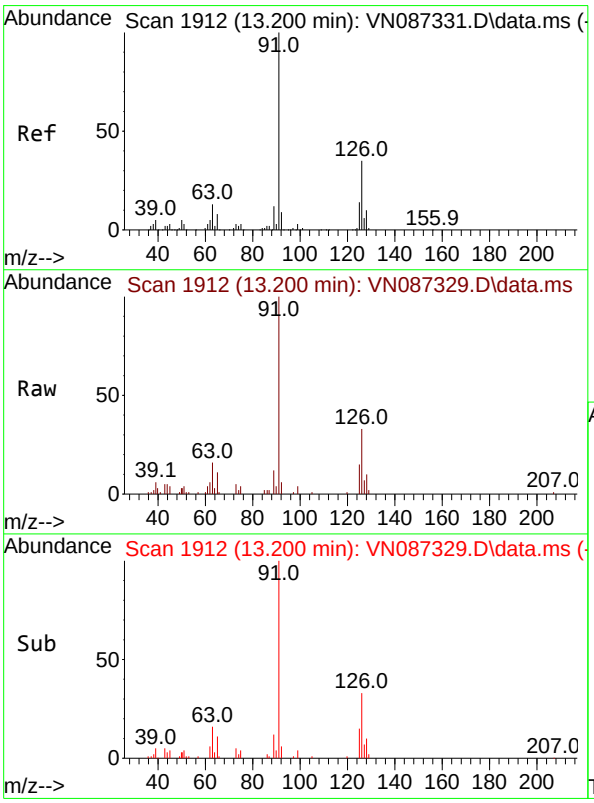
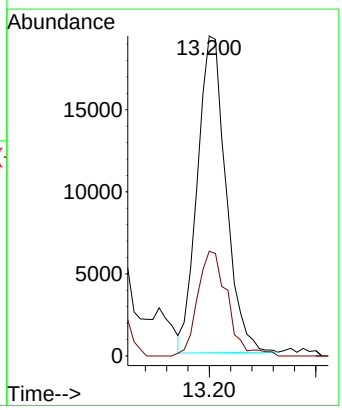


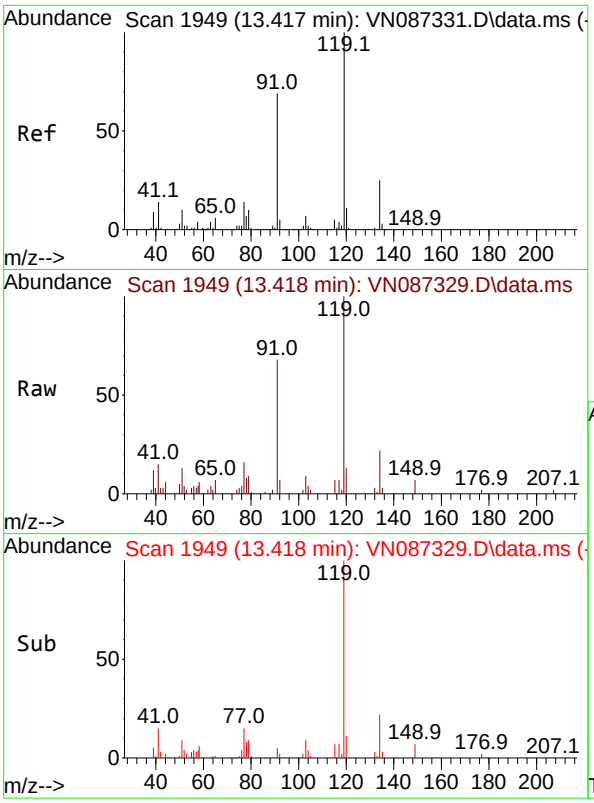


#82
4-Chlorotoluene
Concen: 4.854 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 91 Resp: 36031

Ion	Ratio	Lower	Upper
91	100		
126	34.5	16.6	49.7

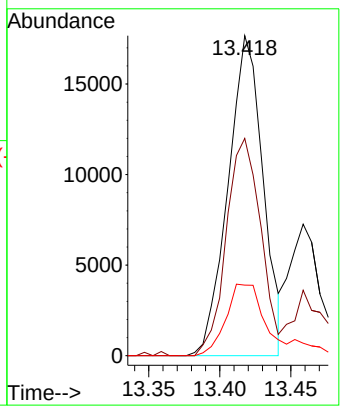




#83
tert-Butylbenzene
Concen: 4.617 ug/l
RT: 13.418 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:119 Resp: 3029

Ion	Ratio	Lower	Upper
119	100		
91	67.0	35.0	105.1
134	27.7	12.6	37.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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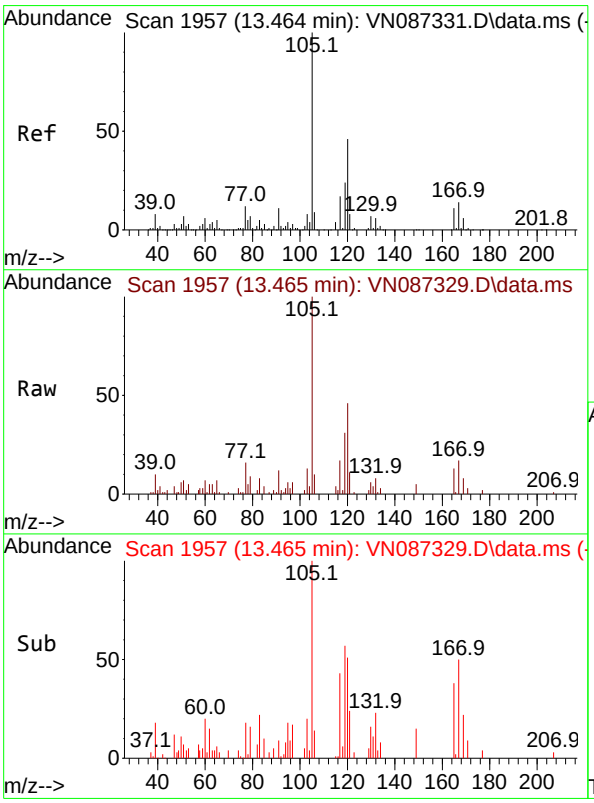
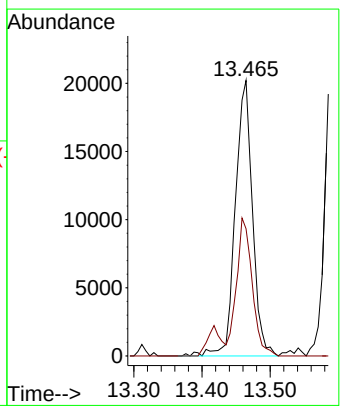
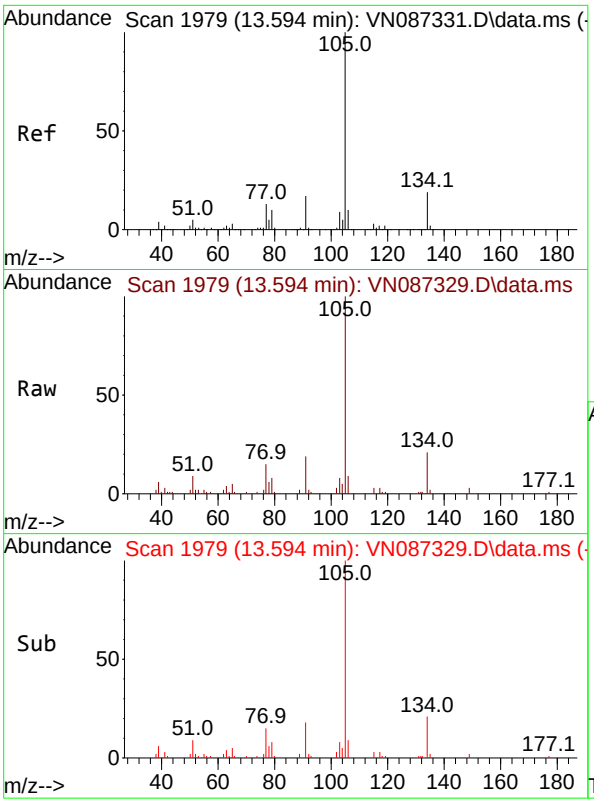


#84
1,2,4-Trimethylbenzene
Concen: 4.403 ug/l
RT: 13.465 min Scan# 1957
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:105 Resp: 35326

Ion	Ratio	Lower	Upper
105	100		
120	45.9	22.8	68.3





#85
sec-Butylbenzene
Concen: 4.649 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:105 Resp: 4594

Ion	Ratio	Lower	Upper
105	100		
134	18.9	9.8	29.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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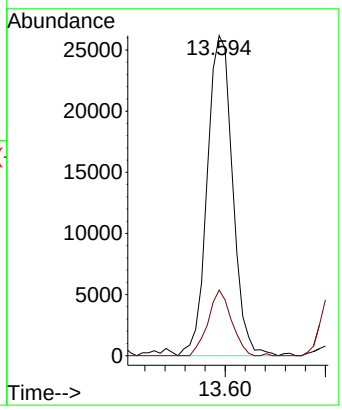
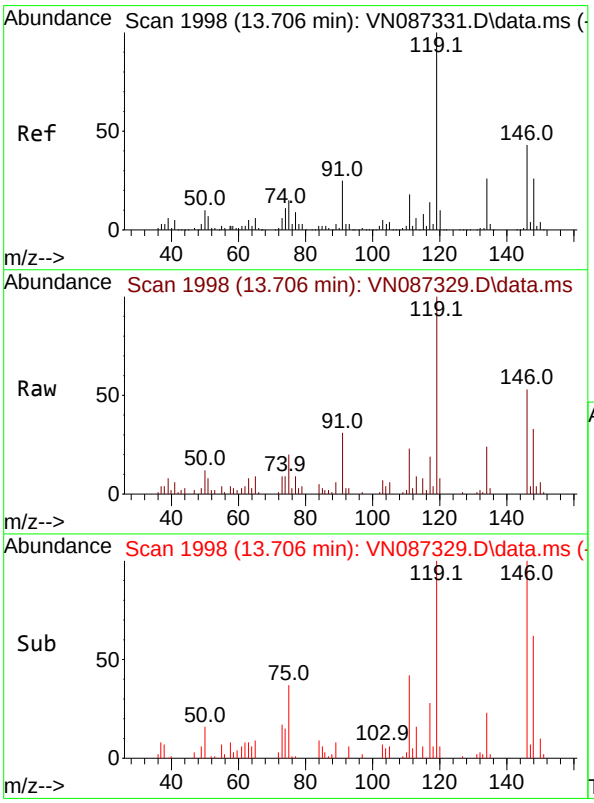
Supervised By :Semsettin Yesilyurt 07/17/2025

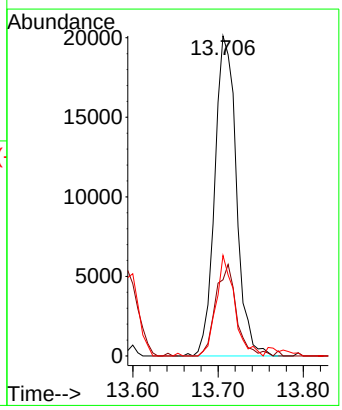


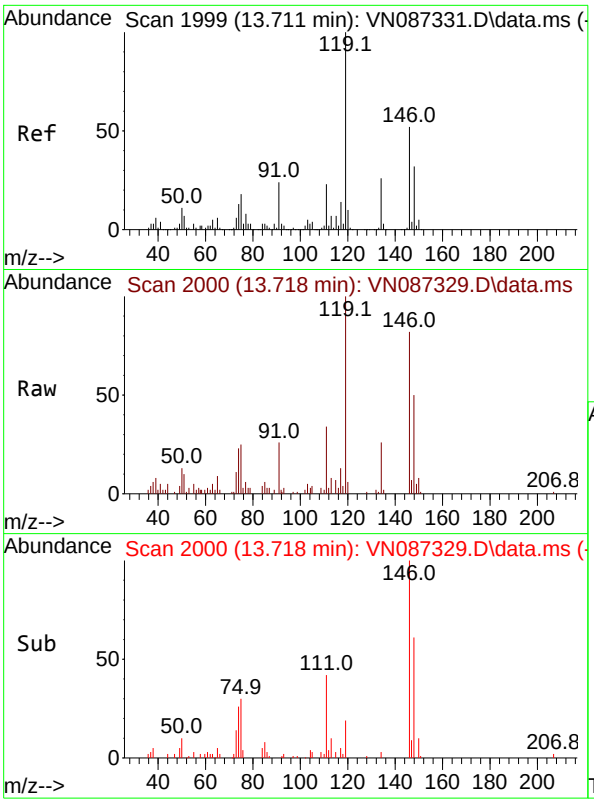


#86
p-Isopropyltoluene
Concen: 4.471 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:119 Resp: 35413

Ion	Ratio	Lower	Upper
119	100		
134	27.6	13.5	40.5
91	26.8	12.2	36.6

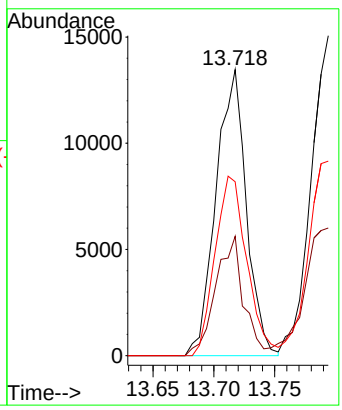




#87
1,3-Dichlorobenzene
Concen: 4.970 ug/l
RT: 13.718 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:146 Resp: 2332

Ion	Ratio	Lower	Upper
146	100		
111	38.8	21.4	64.3
148	66.1	31.6	95.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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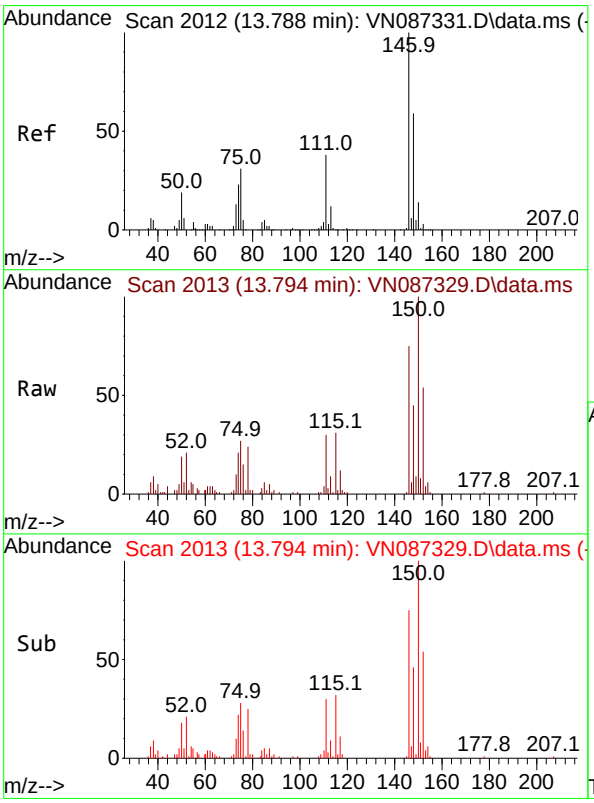
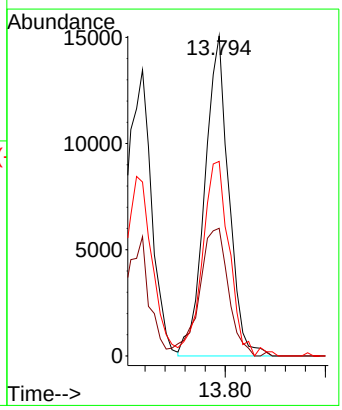
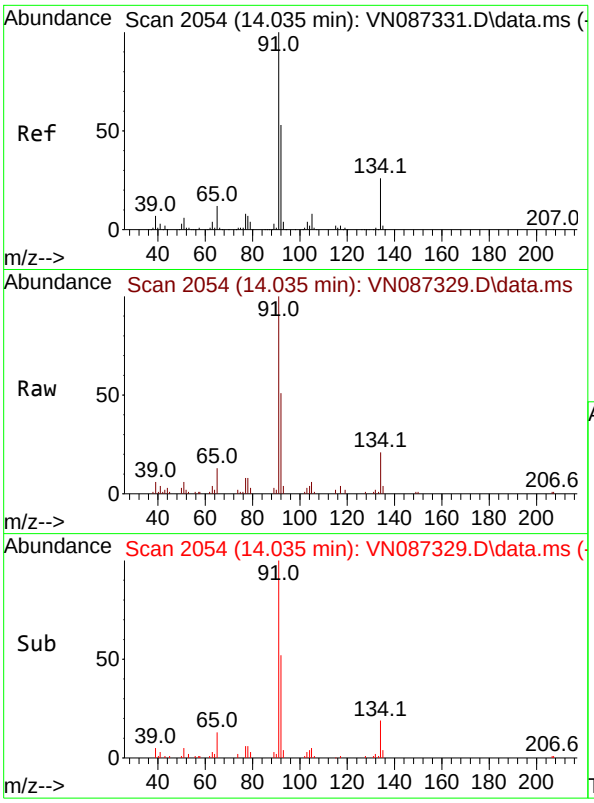


#88
1,4-Dichlorobenzene
Concen: 4.994 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:146 Resp: 25031

Ion	Ratio	Lower	Upper
146	100		
111	48.2	19.6	58.7
148	68.2	31.4	94.0

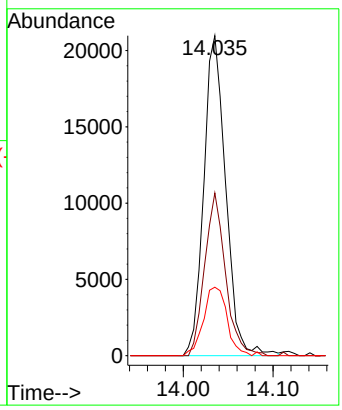




#89
n-Butylbenzene
Concen: 4.697 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 91 Resp: 3552

Ion	Ratio	Lower	Upper
91	100		
92	48.5	26.2	78.6
134	23.0	12.4	37.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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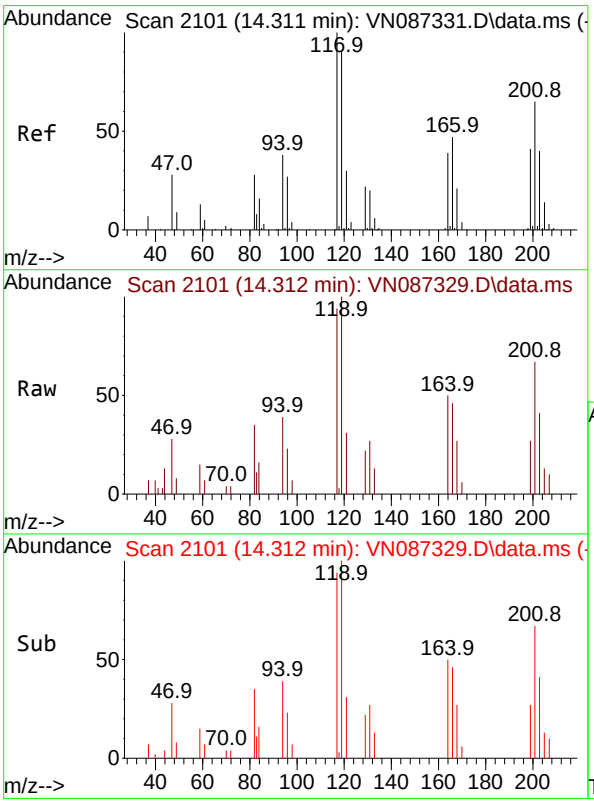
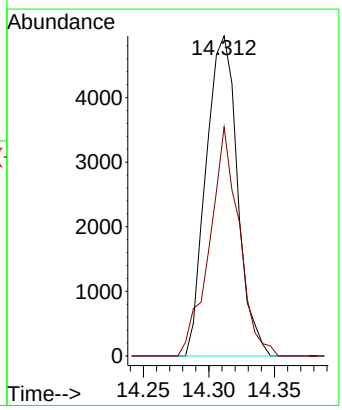
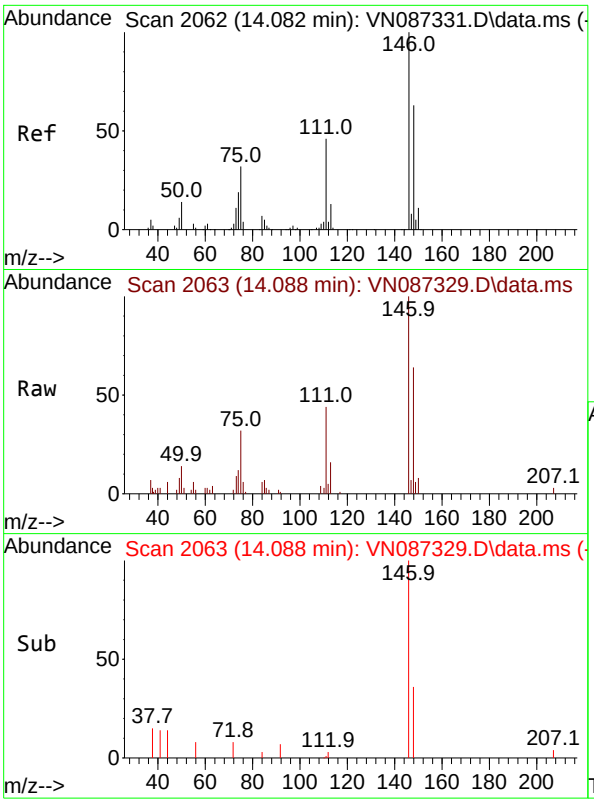


#90
Hexachloroethane
Concen: 4.923 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:117 Resp: 8261

Ion	Ratio	Lower	Upper
117	100		
201	67.1	32.8	98.4

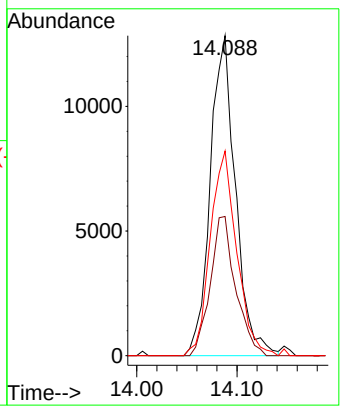




#91
1,2-Dichlorobenzene
Concen: 5.055 ug/l
RT: 14.088 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:146 Resp: 2247

Ion	Ratio	Lower	Upper
146	100		
111	43.7	22.0	66.0
148	67.1	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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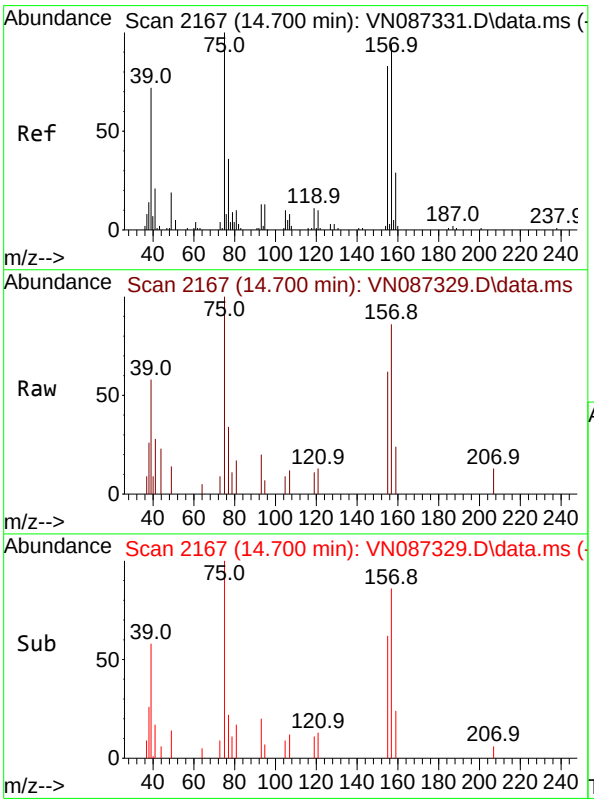
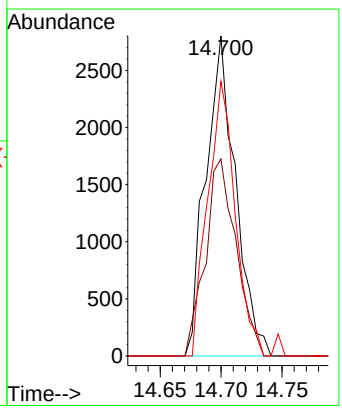
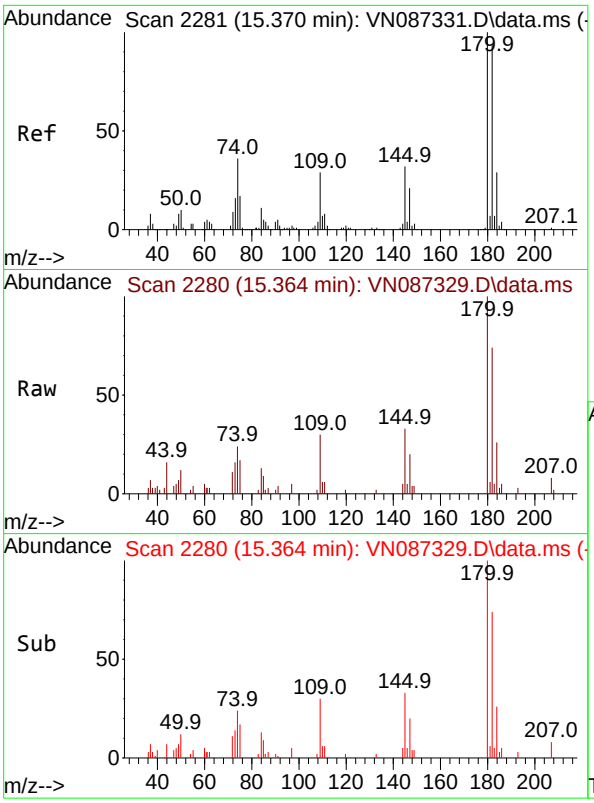


#92
1,2-Dibromo-3-Chloropropane
Concen: 5.223 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion: 75 Resp: 4757

Ion	Ratio	Lower	Upper
75	100		
155	63.8	37.3	111.8
157	79.5	46.2	138.6





#93
1,2,4-Trichlorobenzene
Concen: 4.823 ug/l
RT: 15.364 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion:180 Resp: 1259

Ion	Ratio	Lower	Upper
180	100		
182	93.5	47.3	141.8
145	35.6	15.4	46.4

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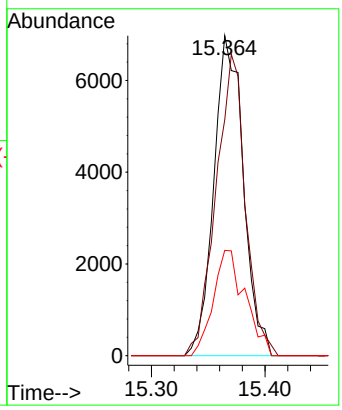
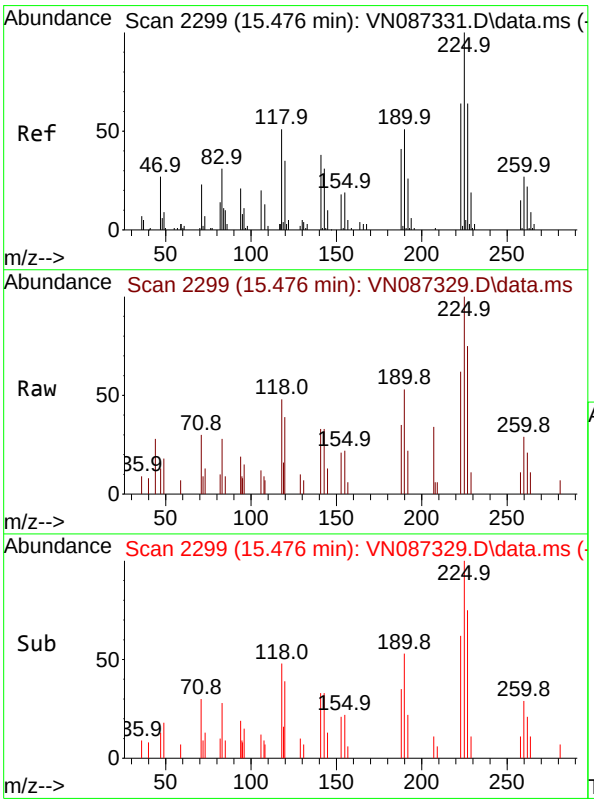
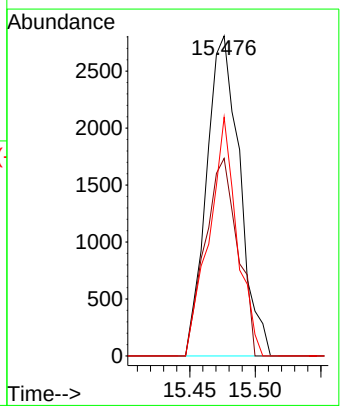


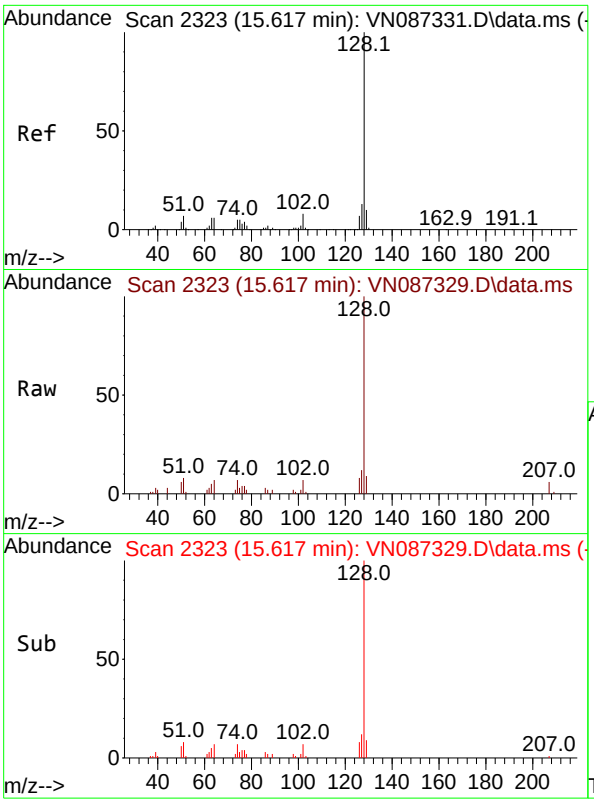


#94
Hexachlorobutadiene
Concen: 5.087 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:225 Resp: 4936

Ion	Ratio	Lower	Upper
225	100		
223	60.9	32.1	96.3
227	63.0	31.3	93.9

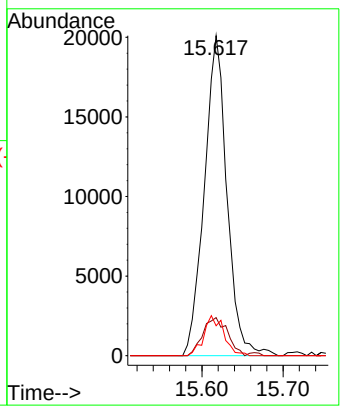




#95
Naphthalene
Concen: 4.208 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:128 Resp: 3893

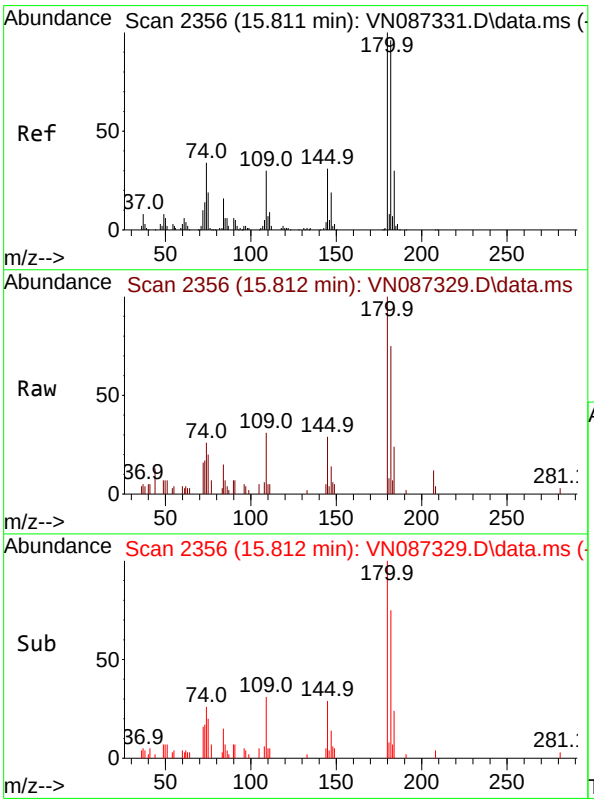
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.5	15.7
129	11.1	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

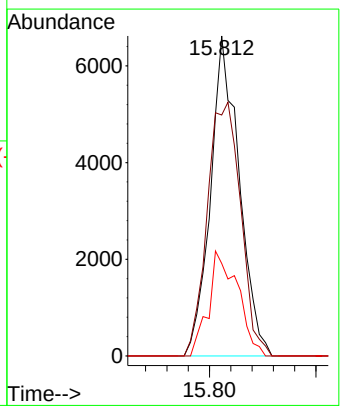
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 4.721 ug/l
RT: 15.812 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087329.D
Acq: 16 Jul 2025 17:27

Tgt Ion:180 Resp: 12368

Ion	Ratio	Lower	Upper
180	100		
182	92.4	47.1	141.4
145	33.5	16.9	50.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087330.D
Acq On : 16 Jul 2025 17:49
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:18:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	178514	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.088	114	328159	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	297202	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	156249	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	58584	19.341	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	38.680%#		
35) Dibromofluoromethane	8.153	113	44726	19.758	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	39.520%#		
50) Toluene-d8	10.547	98	154381	19.119	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	38.240%#		
62) 4-Bromofluorobenzene	12.829	95	56832	19.051	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	38.100%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	31604	16.669	ug/l	86
3) Chloromethane	2.383	50	41982	17.608	ug/l	94
4) Vinyl Chloride	2.542	62	44508	18.784	ug/l	99
5) Bromomethane	2.971	94	22025	17.950	ug/l	98
6) Chloroethane	3.130	64	30785	19.922	ug/l	100
7) Trichlorofluoromethane	3.506	101	68764	19.626	ug/l	97
8) Diethyl Ether	3.959	74	28520	20.984	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.365	101	38516	21.414	ug/l	95
10) Methyl Iodide	4.577	142	25698	17.955	ug/l	97
11) Tert butyl alcohol	5.530	59	55298	96.147	ug/l	99
12) 1,1-Dichloroethene	4.330	96	39480	19.370	ug/l	96
13) Acrolein	4.177	56	40135	86.954	ug/l	98
14) Allyl chloride	5.006	41	80983	21.955	ug/l	88
15) Acrylonitrile	5.712	53	162325	104.007	ug/l	99
16) Acetone	4.424	43	140161	97.607	ug/l	93
17) Carbon Disulfide	4.700	76	119191	19.725	ug/l #	93
18) Methyl Acetate	5.012	43	70735	19.824	ug/l	99
19) Methyl tert-butyl Ether	5.794	73	150385	20.018	ug/l	97
20) Methylene Chloride	5.265	84	49951	20.427	ug/l	87
21) trans-1,2-Dichloroethene	5.771	96	45917	19.980	ug/l	90
22) Diisopropyl ether	6.659	45	168043	21.719	ug/l	97
23) Vinyl Acetate	6.594	43	750202	110.863	ug/l	98
24) 1,1-Dichloroethane	6.559	63	89552	20.062	ug/l	95
25) 2-Butanone	7.477	43	231983	105.718	ug/l	96
26) 2,2-Dichloropropane	7.483	77	71478	20.596	ug/l	97
27) cis-1,2-Dichloroethene	7.471	96	53347	20.162	ug/l	98
28) Bromochloromethane	7.794	49	41285	19.325	ug/l	100
29) Tetrahydrofuran	7.830	42	147436	103.426	ug/l	99
30) Chloroform	7.953	83	93018	20.819	ug/l	100
31) Cyclohexane	8.241	56	74161	19.915	ug/l	98
32) 1,1,1-Trichloroethane	8.153	97	78235	20.217	ug/l	97
36) 1,1-Dichloropropene	8.359	75	60302	20.163	ug/l	98
37) Ethyl Acetate	7.553	43	85921	19.893	ug/l	98
38) Carbon Tetrachloride	8.347	117	65336	19.832	ug/l	95
39) Methylcyclohexane	9.588	83	63264	19.539	ug/l	95
40) Benzene	8.588	78	197187	20.400	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087330.D
Acq On : 16 Jul 2025 17:49
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 17 02:18:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	7.771	41	47550	21.054 ug/l		97
42) 1,2-Dichloroethane	8.659	62	74680	20.374 ug/l		99
43) Isopropyl Acetate	8.677	43	135010	20.136 ug/l		99
44) Trichloroethene	9.335	130	44202	19.354 ug/l		98
45) 1,2-Dichloropropane	9.606	63	51786	21.086 ug/l		97
46) Dibromomethane	9.688	93	36673	19.943 ug/l		96
47) Bromodichloromethane	9.871	83	73409	19.819 ug/l		93
48) Methyl methacrylate	9.665	41	62316	20.645 ug/l		99
49) 1,4-Dioxane	9.682	88	18509	400.357 ug/l	#	100
51) 4-Methyl-2-Pentanone	10.429	43	449710	106.046 ug/l		99
52) Toluene	10.612	92	123391	21.002 ug/l		98
53) t-1,3-Dichloropropene	10.818	75	76959	20.530 ug/l		92
54) cis-1,3-Dichloropropene	10.294	75	79019	20.407 ug/l		96
55) 1,1,2-Trichloroethane	11.000	97	47960	20.164 ug/l		94
56) Ethyl methacrylate	10.859	69	74408	19.384 ug/l		99
57) 1,3-Dichloropropane	11.147	76	85537	20.800 ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	198704	101.839 ug/l		100
59) 2-Hexanone	11.182	43	305342	108.526 ug/l		99
60) Dibromochloromethane	11.341	129	55783	20.564 ug/l		98
61) 1,2-Dibromoethane	11.447	107	51292	20.509 ug/l		97
64) Tetrachloroethene	11.082	164	37655	19.686 ug/l		93
65) Chlorobenzene	11.871	112	134668	20.183 ug/l		95
66) 1,1,1,2-Tetrachloroethane	11.941	131	46671	20.570 ug/l		98
67) Ethyl Benzene	11.947	91	223715	20.367 ug/l		100
68) m/p-Xylenes	12.053	106	170590	41.473 ug/l		98
69) o-Xylene	12.376	106	83415	21.230 ug/l		98
70) Styrene	12.388	104	140937	21.323 ug/l		100
71) Bromoform	12.559	173	37362	20.383 ug/l	#	99
73) Isopropylbenzene	12.676	105	202595	20.601 ug/l		100
74) N-amyl acetate	12.512	43	78074m	20.334 ug/l		
75) 1,1,2,2-Tetrachloroethane	12.918	83	76720	20.733 ug/l		98
76) 1,2,3-Trichloropropane	12.976	75	68839m	19.858 ug/l		
77) Bromobenzene	12.959	156	53881	21.127 ug/l		97
78) n-propylbenzene	13.017	91	255577	20.656 ug/l		99
79) 2-Chlorotoluene	13.106	91	158436	20.836 ug/l		96
80) 1,3,5-Trimethylbenzene	13.153	105	176006	21.006 ug/l		99
81) trans-1,4-Dichloro-2-b...	12.717	75	27975	21.846 ug/l		90
82) 4-Chlorotoluene	13.200	91	163615	20.667 ug/l		99
83) tert-Butylbenzene	13.417	119	143954	20.571 ug/l		98
84) 1,2,4-Trimethylbenzene	13.465	105	181623	21.226 ug/l		100
85) sec-Butylbenzene	13.594	105	216256	20.516 ug/l		99
86) p-Isopropyltoluene	13.706	119	175352	20.758 ug/l		99
87) 1,3-Dichlorobenzene	13.712	146	103157	20.609 ug/l		99
88) 1,4-Dichlorobenzene	13.788	146	108898	20.370 ug/l		98
89) n-Butylbenzene	14.035	91	165484	20.516 ug/l		99
90) Hexachloroethane	14.312	117	35108	19.615 ug/l		96
91) 1,2-Dichlorobenzene	14.088	146	99750	21.036 ug/l		97
92) 1,2-Dibromo-3-Chloropr...	14.700	75	19015	19.573 ug/l		98
93) 1,2,4-Trichlorobenzene	15.370	180	54714	19.643 ug/l		99
94) Hexachlorobutadiene	15.476	225	20248	19.563 ug/l		96
95) Naphthalene	15.617	128	194574	19.718 ug/l		100
96) 1,2,3-Trichlorobenzene	15.811	180	55463	19.850 ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087330.D
Acq On : 16 Jul 2025 17:49
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:18:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

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

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

ICAL Form

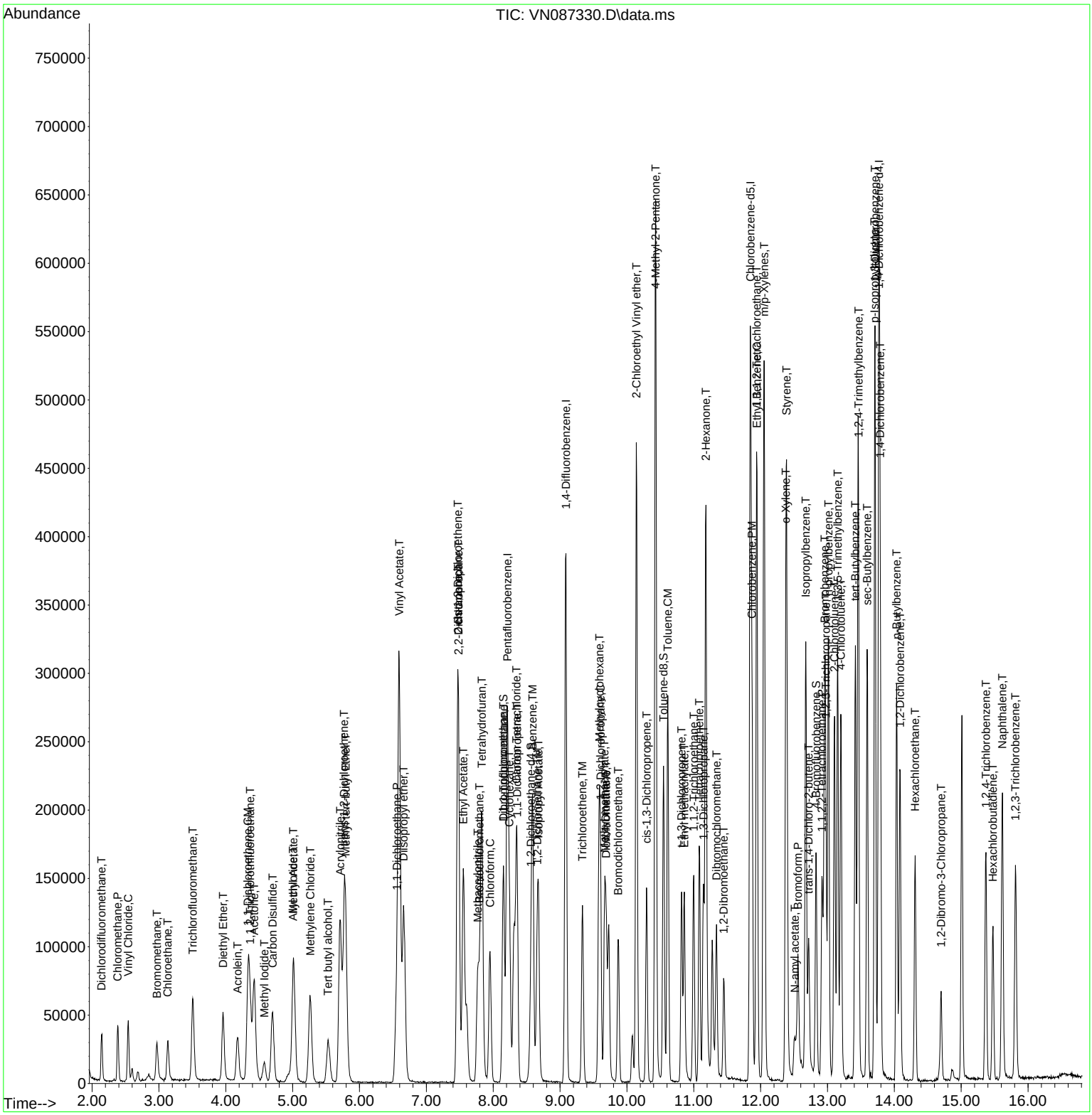
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087330.D
Acq On : 16 Jul 2025 17:49
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

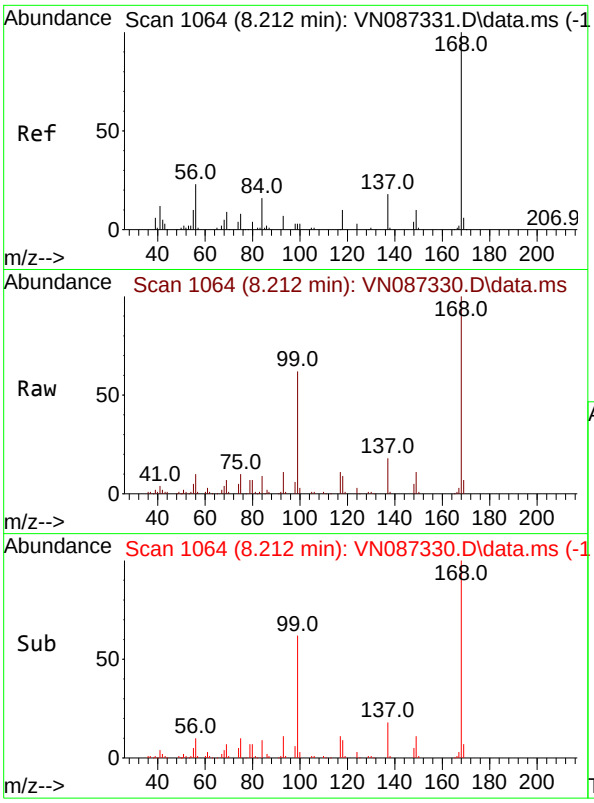
Quant Time: Jul 17 02:18:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

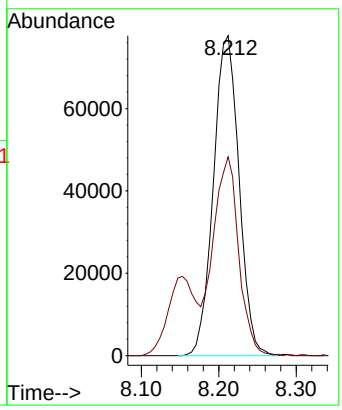
Tgt Ion:168 Resp: 17851

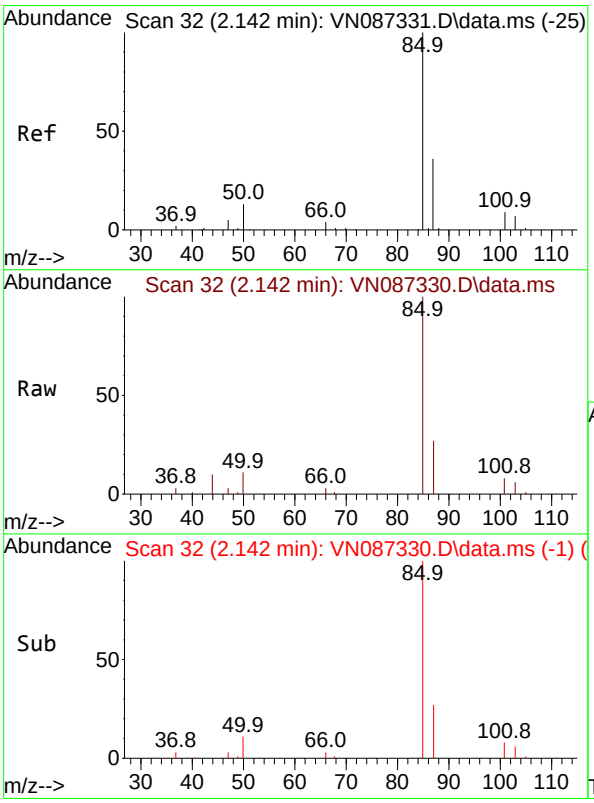
Ion	Ratio	Lower	Upper
168	100		
99	61.7	47.9	71.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

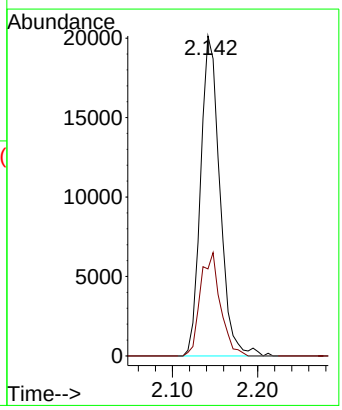


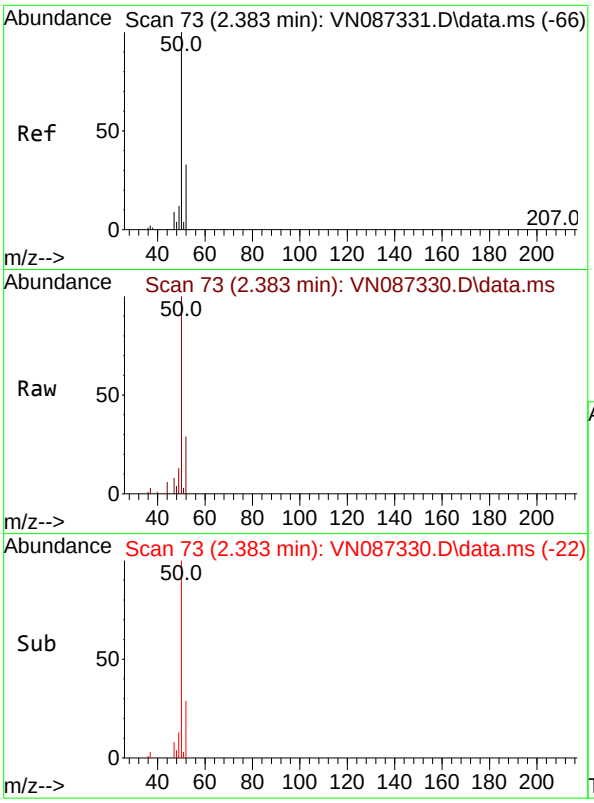


#2
Dichlorodifluoromethane
Concen: 16.669 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 85 Resp: 31604

Ion	Ratio	Lower	Upper
85	100		
87	27.2	17.8	53.3

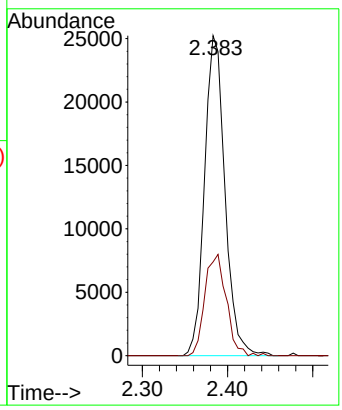




#3
Chloromethane
Concen: 17.608 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 50 Resp: 4198

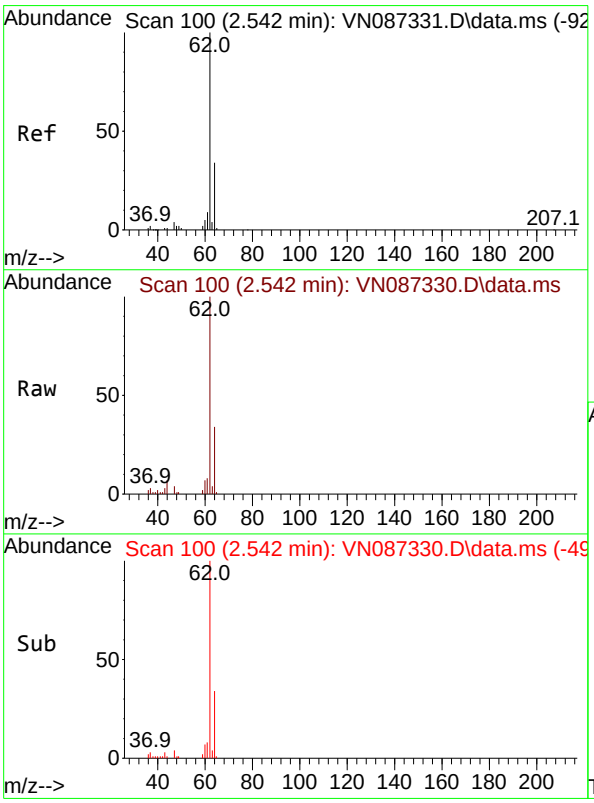
Ion	Ratio	Lower	Upper
50	100		
52	29.3	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

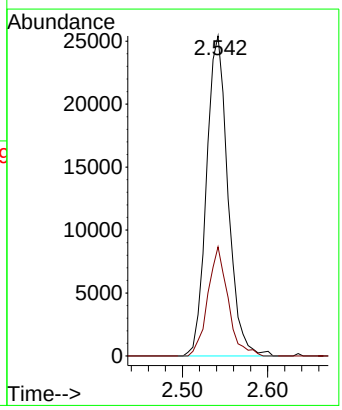
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

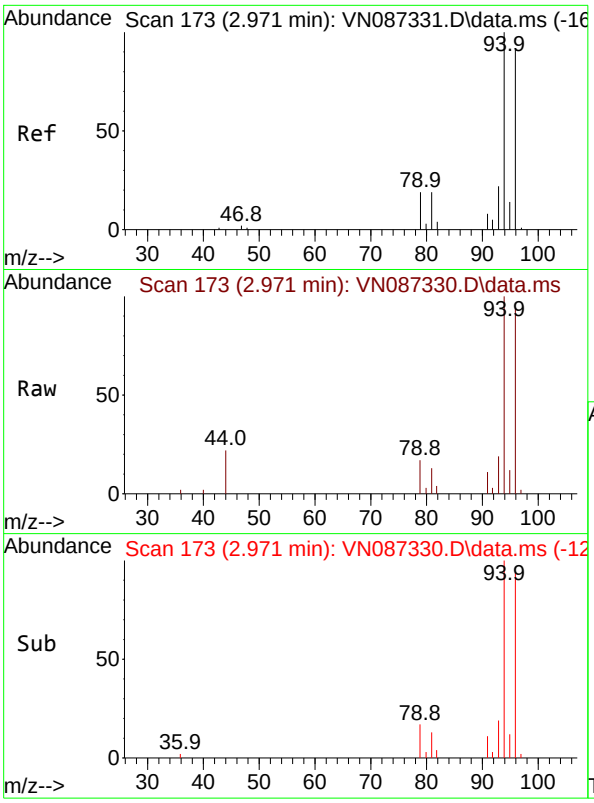


#4
Vinyl Chloride
Concen: 18.784 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 62 Resp: 44508

Ion	Ratio	Lower	Upper
62	100		
64	34.1	27.0	40.6

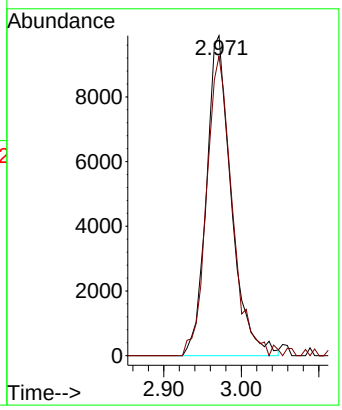




#5
Bromomethane
Concen: 17.950 ug/l
RT: 2.971 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 94 Resp: 2202

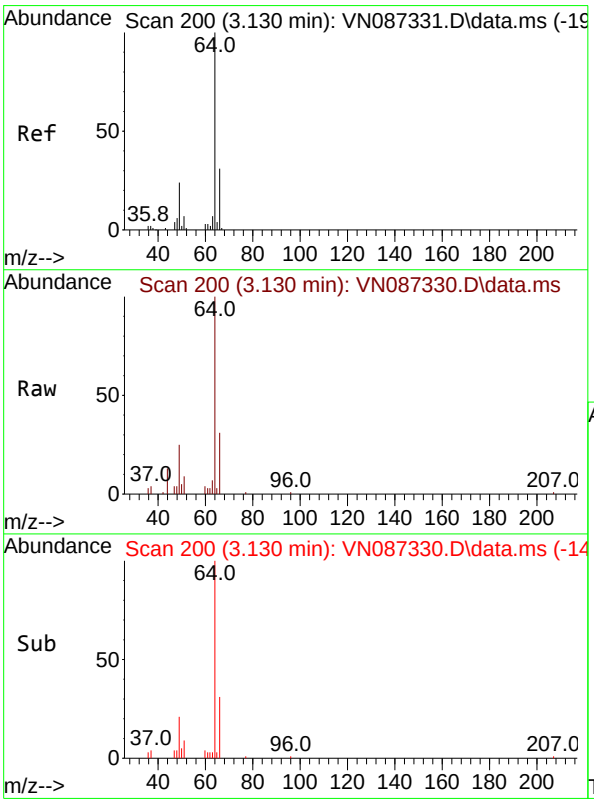
Ion	Ratio	Lower	Upper
94	100		
96	93.6	73.4	110.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

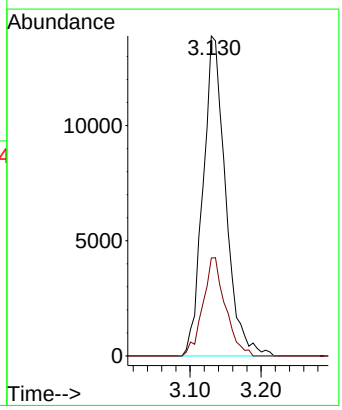
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

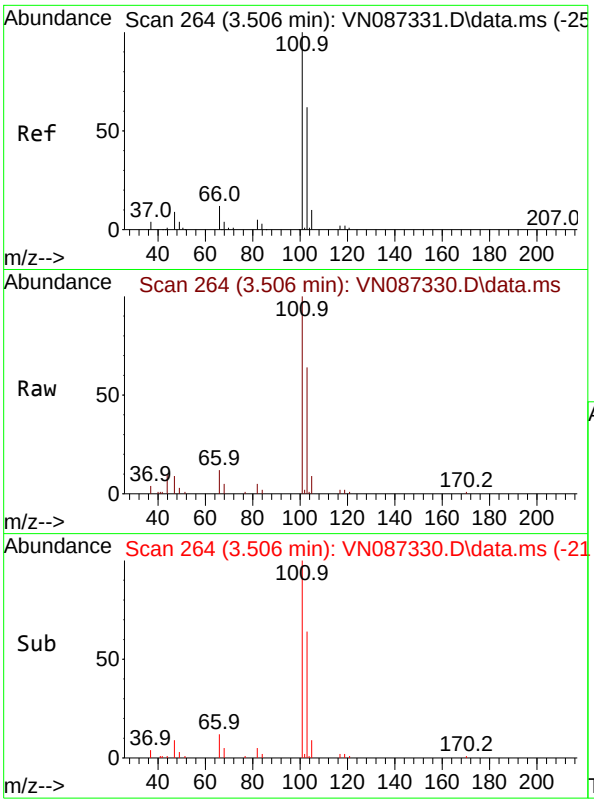


#6
Chloroethane
Concen: 19.922 ug/l
RT: 3.130 min Scan# 200
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 64 Resp: 30785

Ion	Ratio	Lower	Upper
64	100		
66	30.6	24.6	36.8





#7
Trichlorofluoromethane
Concen: 19.626 ug/l
RT: 3.506 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:101 Resp: 6876

Ion	Ratio	Lower	Upper
101	100		
103	64.4	49.8	74.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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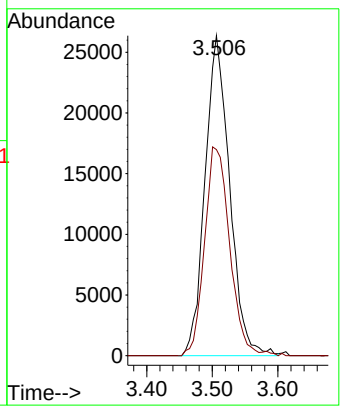
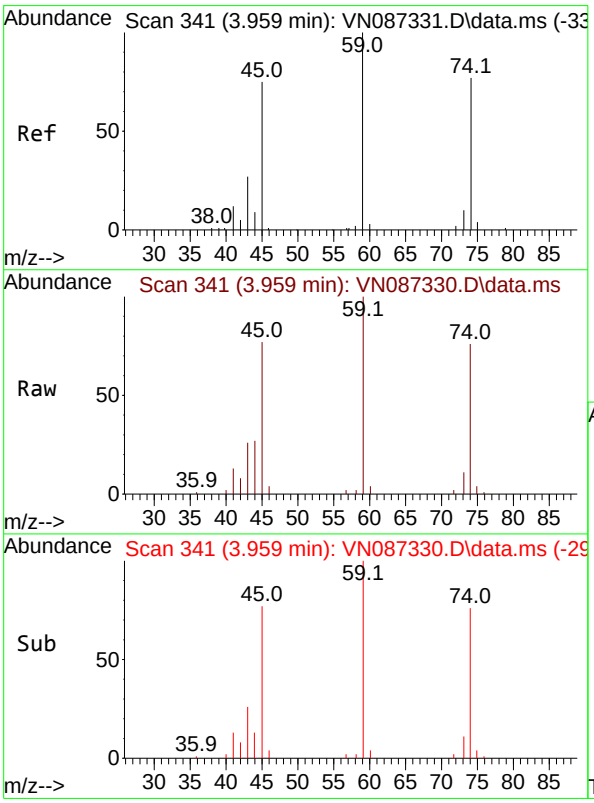
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

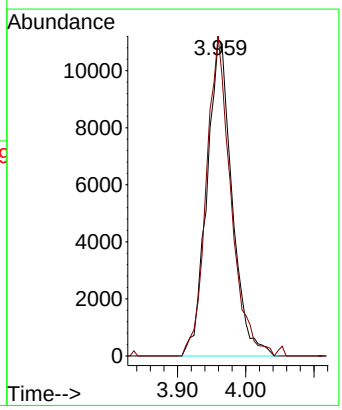


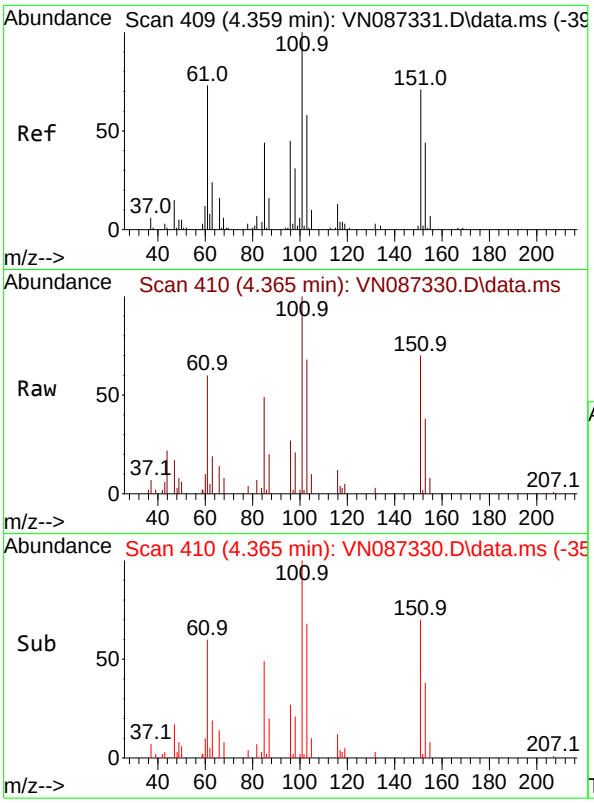


#8
Diethyl Ether
Concen: 20.984 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 74 Resp: 28520

Ion	Ratio	Lower	Upper
74	100		
45	98.3	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 21.414 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:101 Resp: 3851

Ion	Ratio	Lower	Upper
101	100		
85	44.0	37.3	55.9
151	69.3	58.9	88.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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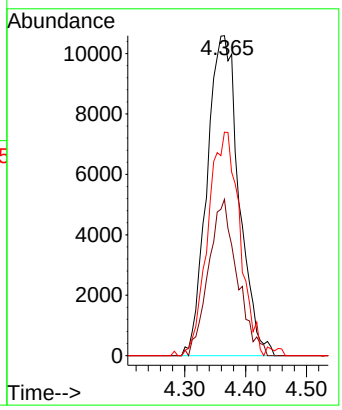
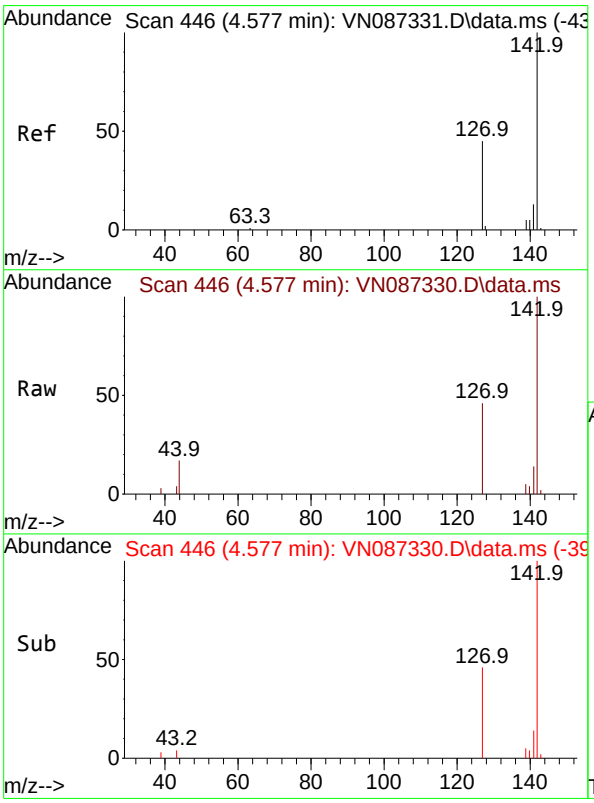
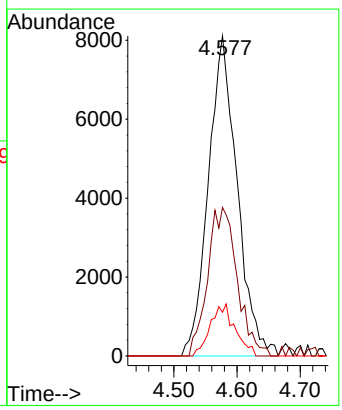


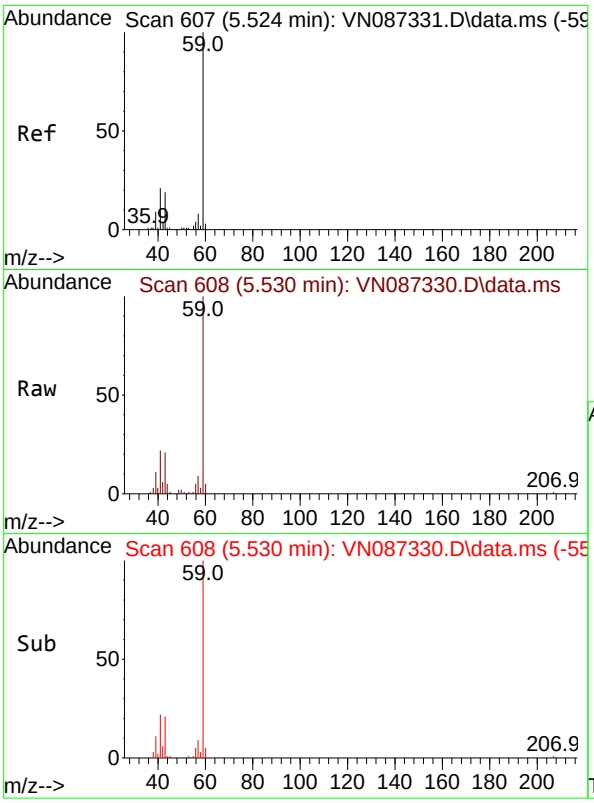


#10
Methyl Iodide
Concen: 17.955 ug/l
RT: 4.577 min Scan# 446
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:142 Resp: 25698

Ion	Ratio	Lower	Upper
142	100		
127	46.4	35.7	53.5
141	13.7	10.4	15.6

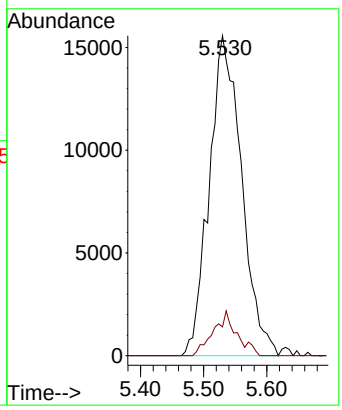




#11
Tert butyl alcohol
Concen: 96.147 ug/l
RT: 5.530 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 59 Resp: 5529

Ion	Ratio	Lower	Upper
59	100		
57	10.1	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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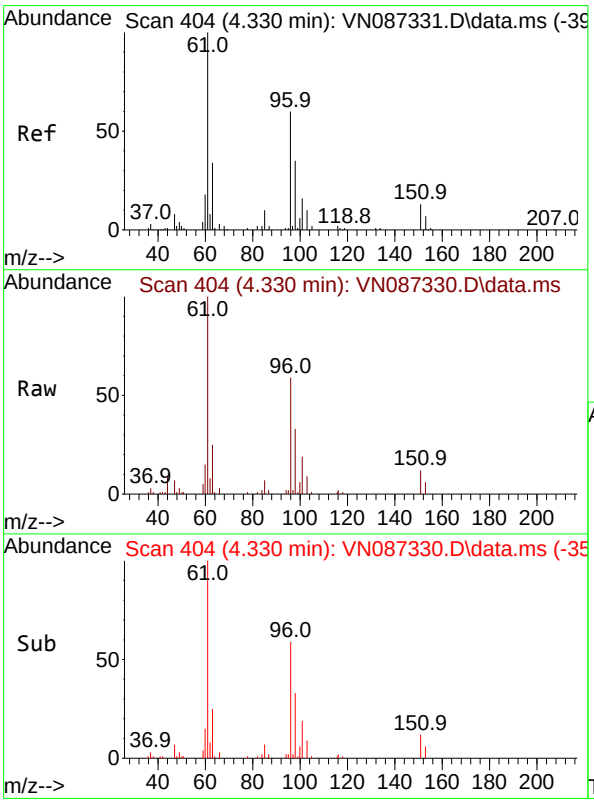
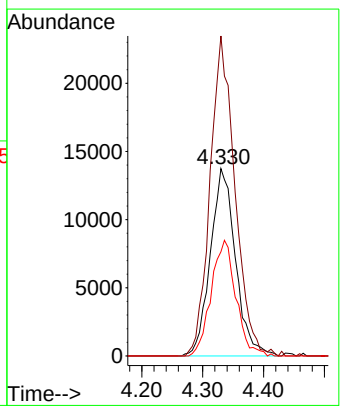
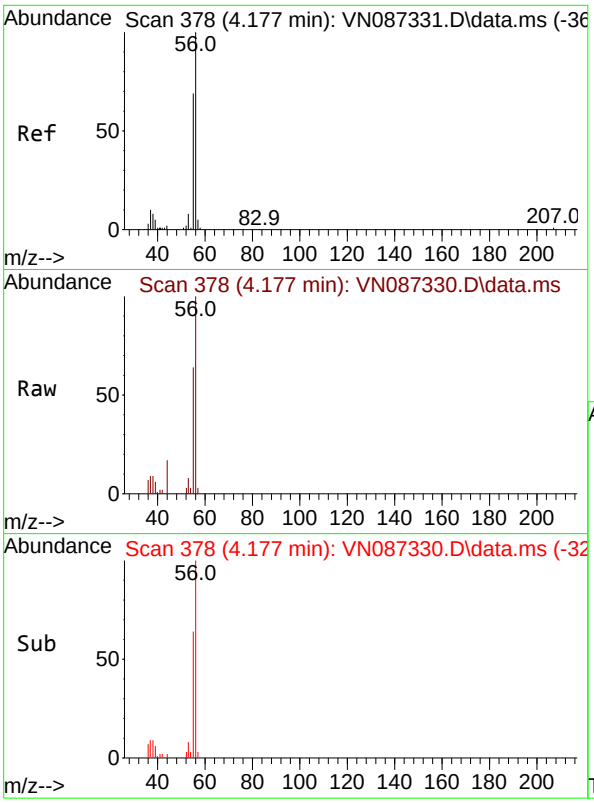


#12
1,1-Dichloroethene
Concen: 19.370 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 96 Resp: 39480

Ion	Ratio	Lower	Upper
96	100		
61	170.8	132.3	198.5
98	55.6	46.8	70.2

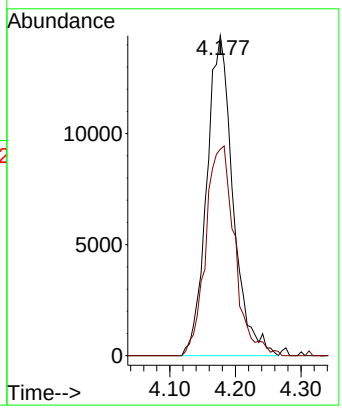




#13
Acrolein
Concen: 86.954 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 56 Resp: 4013

Ion	Ratio	Lower	Upper
56	100		
55	72.2	56.2	84.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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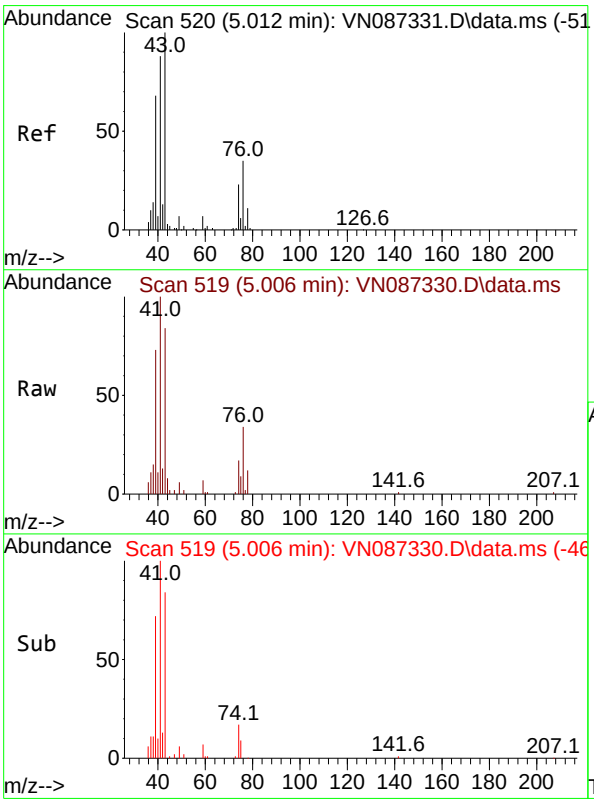
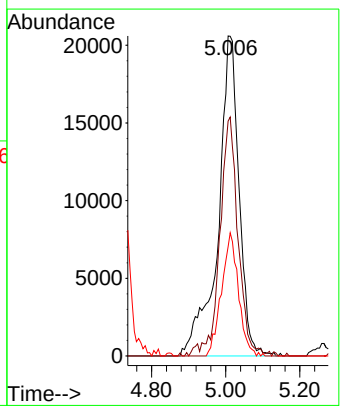
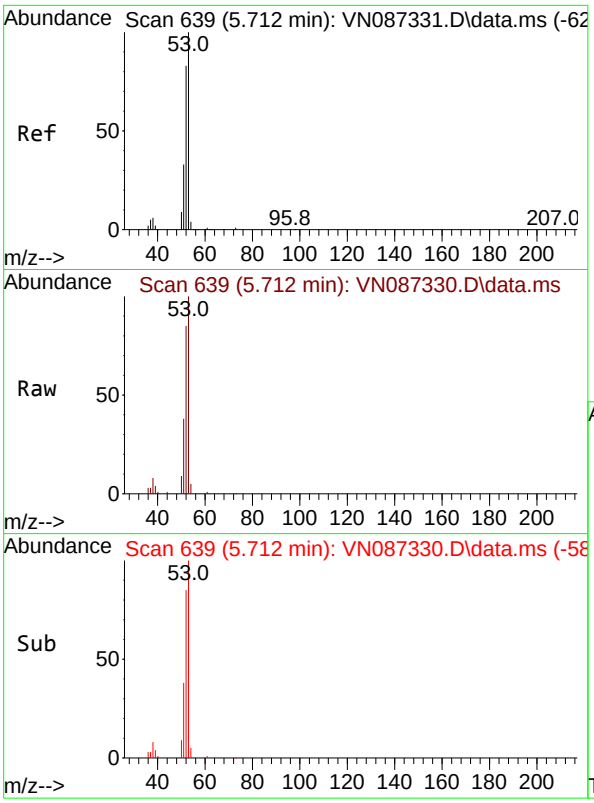


#14
Allyl chloride
Concen: 21.955 ug/l
RT: 5.006 min Scan# 519
Delta R.T. -0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 41 Resp: 80983

Ion	Ratio	Lower	Upper
41	100		
39	62.3	59.0	88.6
76	31.0	28.7	43.1





#15
Acrylonitrile
Concen: 104.007 ug/l
RT: 5.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 53 Resp: 16232

Ion	Ratio	Lower	Upper
53	100		
52	81.8	65.5	98.3
51	36.7	28.7	43.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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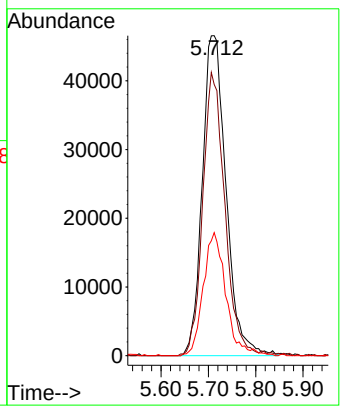
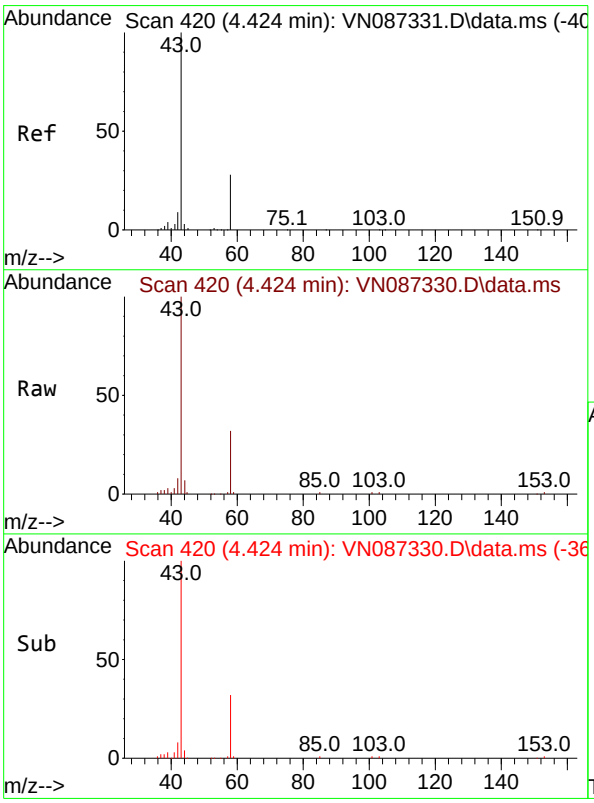
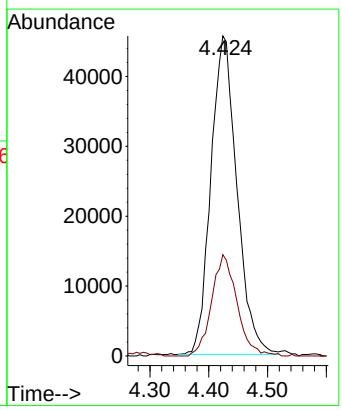


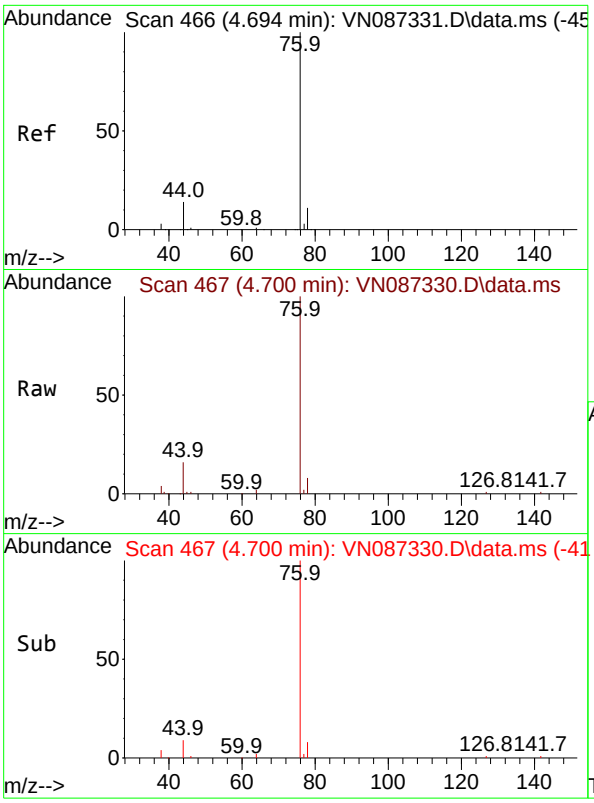


#16
Acetone
Concen: 97.607 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 140161

Ion	Ratio	Lower	Upper
43	100		
58	31.8	22.3	33.5





#17
Carbon Disulfide
Concen: 19.725 ug/l
RT: 4.700 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 76 Resp: 11919

Ion	Ratio	Lower	Upper
76	100		
78	8.2	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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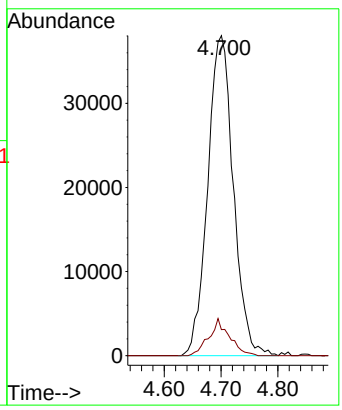
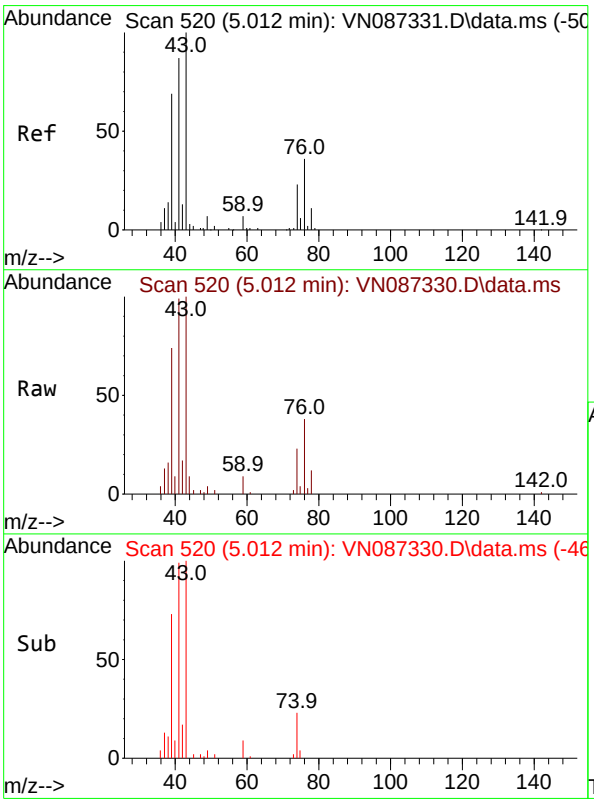
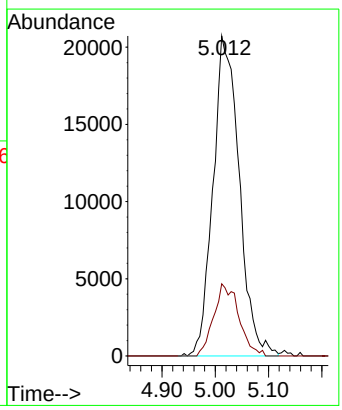


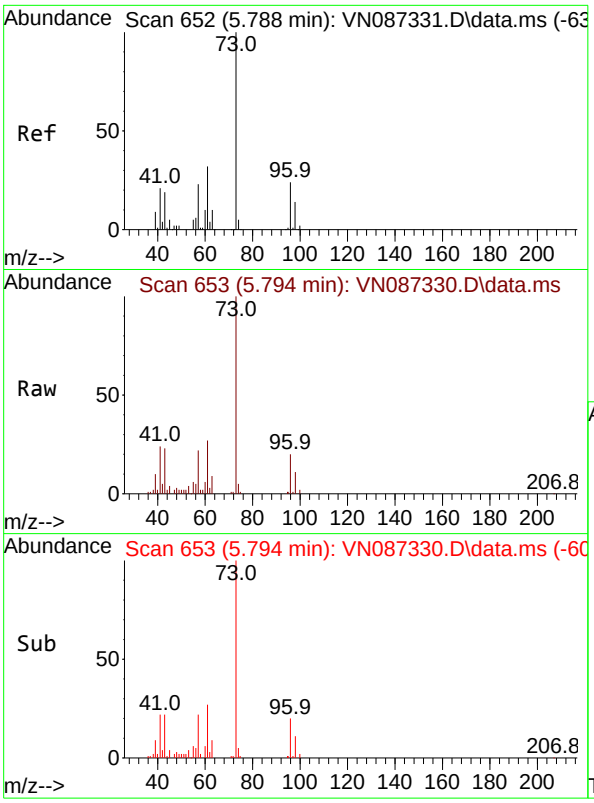


#18
Methyl Acetate
Concen: 19.824 ug/l
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 70735

Ion	Ratio	Lower	Upper
43	100		
74	21.6	17.8	26.6





#19
Methyl tert-butyl Ether
Concen: 20.018 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 73 Resp: 15038

Ion	Ratio	Lower	Upper
73	100		
57	21.5	18.6	27.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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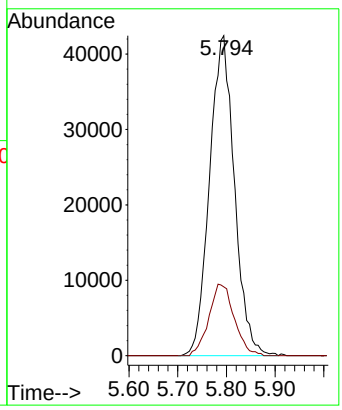
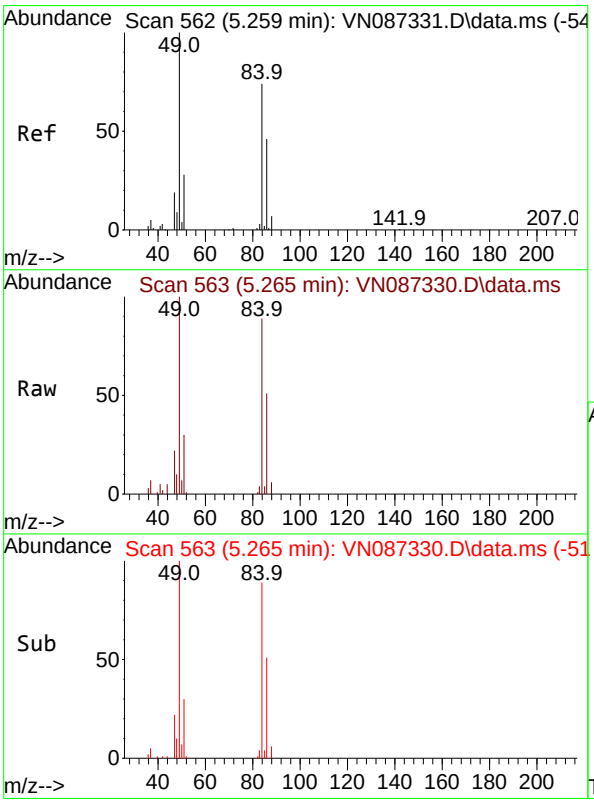
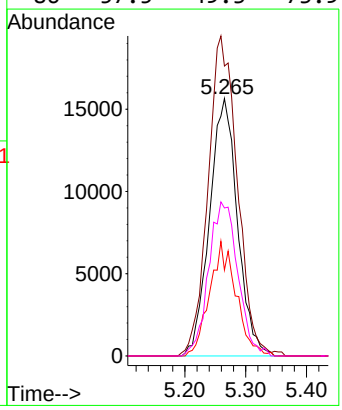


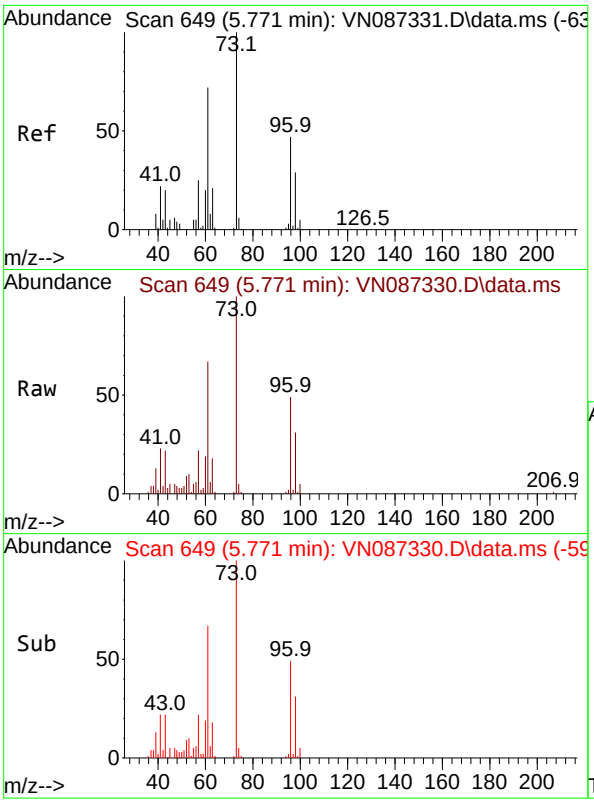


#20
Methylene Chloride
Concen: 20.427 ug/l
RT: 5.265 min Scan# 563
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 84 Resp: 49951

Ion	Ratio	Lower	Upper
84	100		
49	112.6	107.5	161.3
51	33.4	30.2	45.2
86	57.5	49.3	73.9





#21
trans-1,2-Dichloroethene
Concen: 19.980 ug/l
RT: 5.771 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 96 Resp: 4591

Ion	Ratio	Lower	Upper
96	100		
61	135.4	122.0	183.0
98	62.3	50.0	75.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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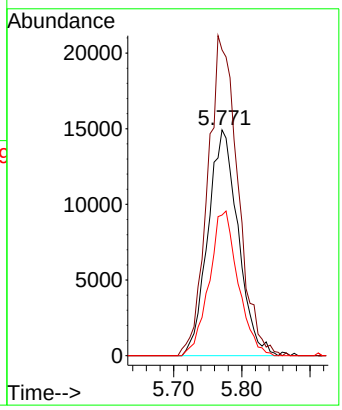
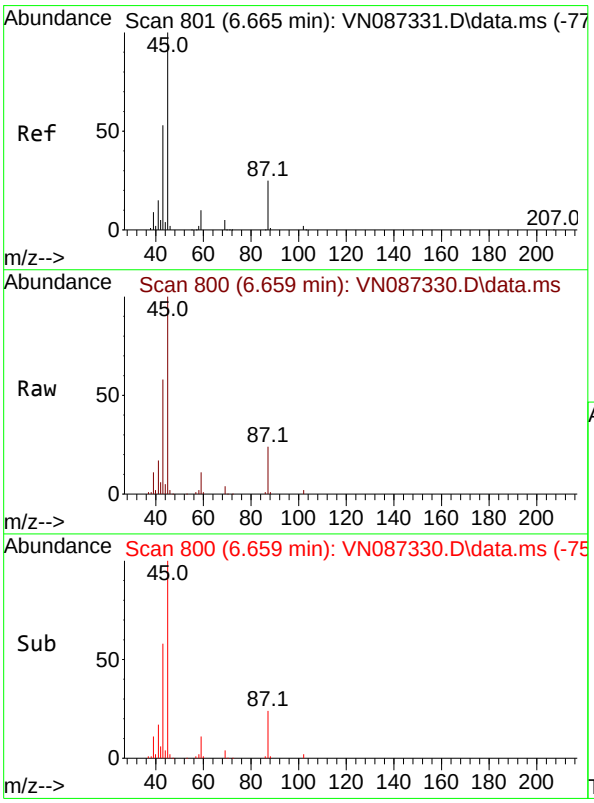
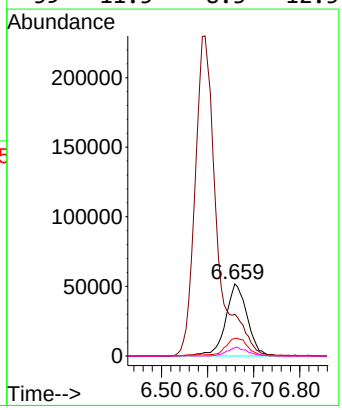


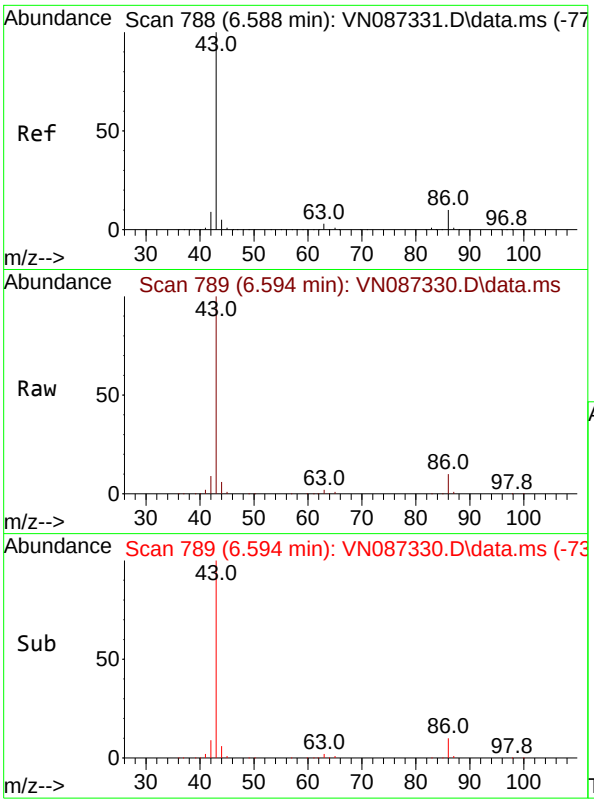


#22
Diisopropyl ether
Concen: 21.719 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 45 Resp: 168043

Ion	Ratio	Lower	Upper
45	100		
43	56.8	42.8	64.2
87	24.3	19.8	29.6
59	11.5	8.3	12.5





#23
Vinyl Acetate
Concen: 110.863 ug/l
RT: 6.594 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 75020

Ion	Ratio	Lower	Upper
43	100		
86	10.4	7.7	11.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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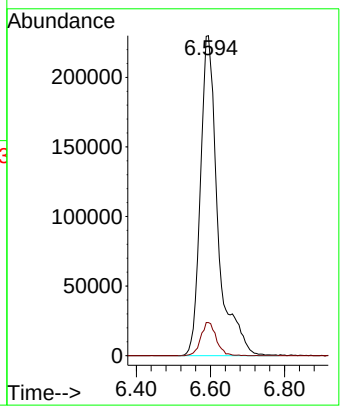
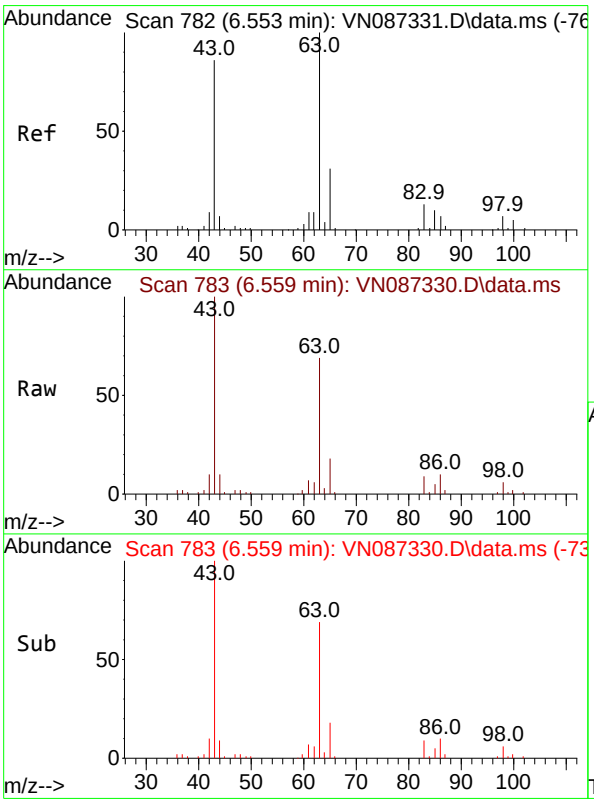
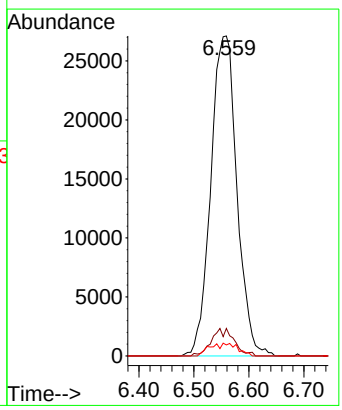


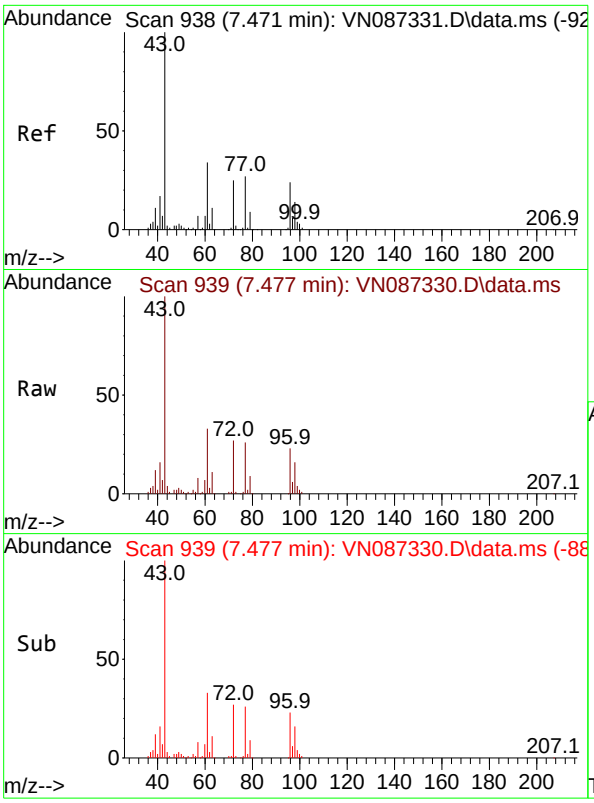


#24
1,1-Dichloroethane
Concen: 20.062 ug/l
RT: 6.559 min Scan# 783
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 63 Resp: 89552

Ion	Ratio	Lower	Upper
63	100		
98	8.6	3.3	9.9
100	3.4	2.5	7.4





#25
2-Butanone
Concen: 105.718 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 23198

Ion	Ratio	Lower	Upper
43	100		
72	26.6	19.6	29.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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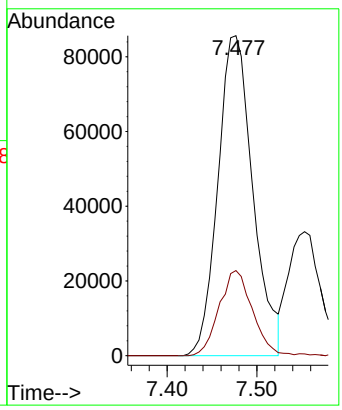
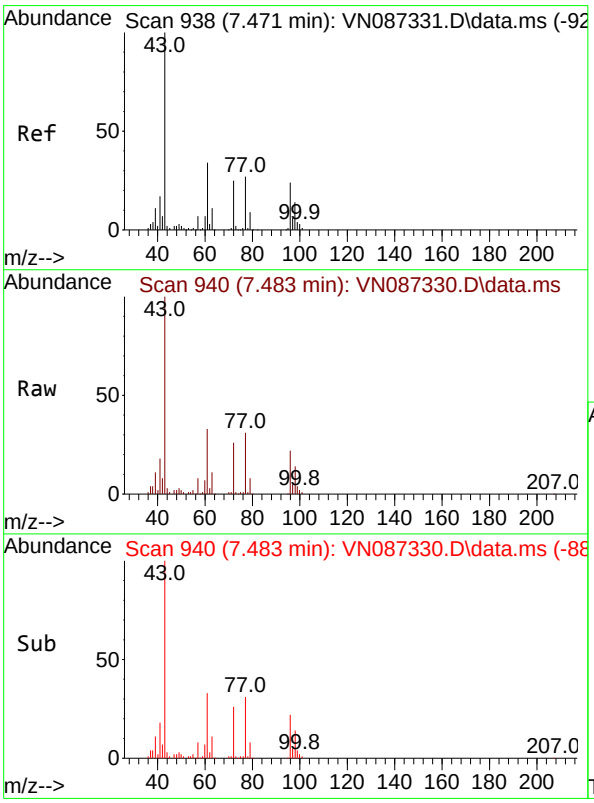
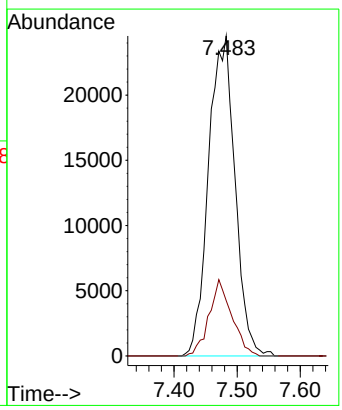


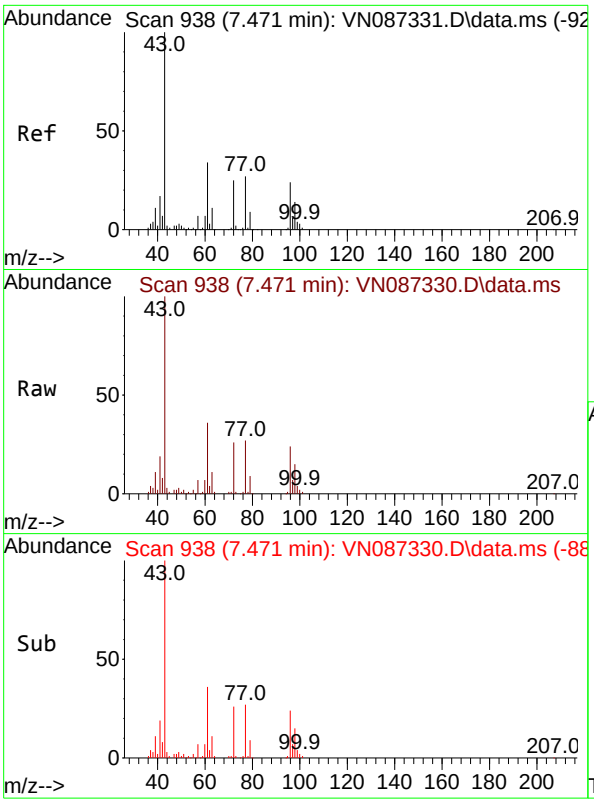


#26
2,2-Dichloropropane
Concen: 20.596 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.012 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 77 Resp: 71478

Ion	Ratio	Lower	Upper
77	100		
97	20.5	11.1	33.1





#27
cis-1,2-Dichloroethene
Concen: 20.162 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 96 Resp: 5334

Ion	Ratio	Lower	Upper
96	100		
61	151.5	0.0	297.8
98	67.4	0.0	132.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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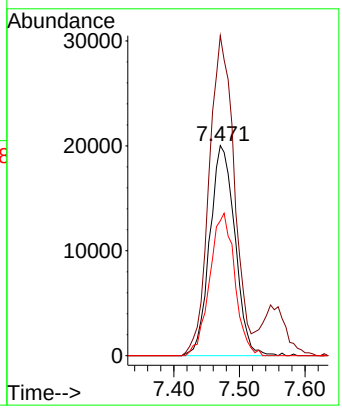
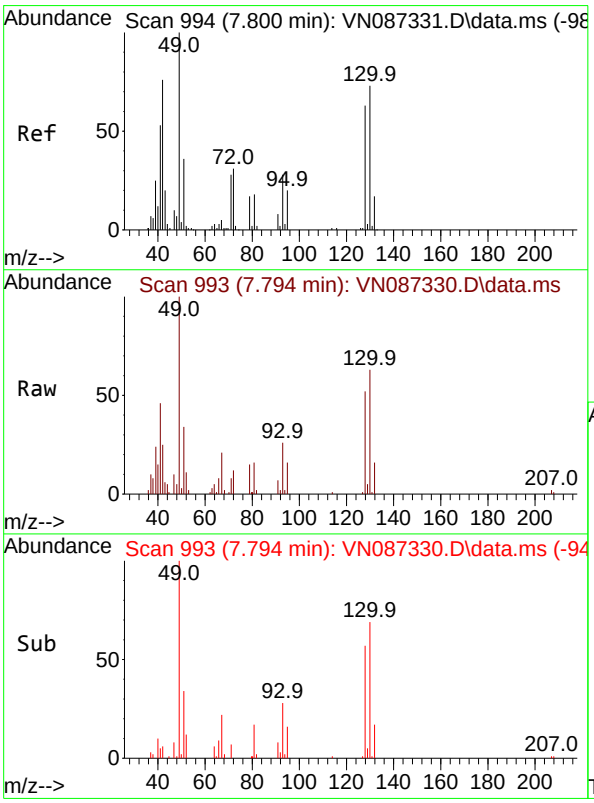
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

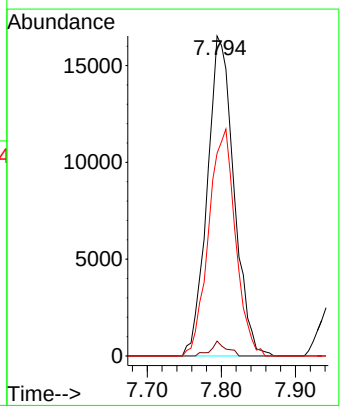


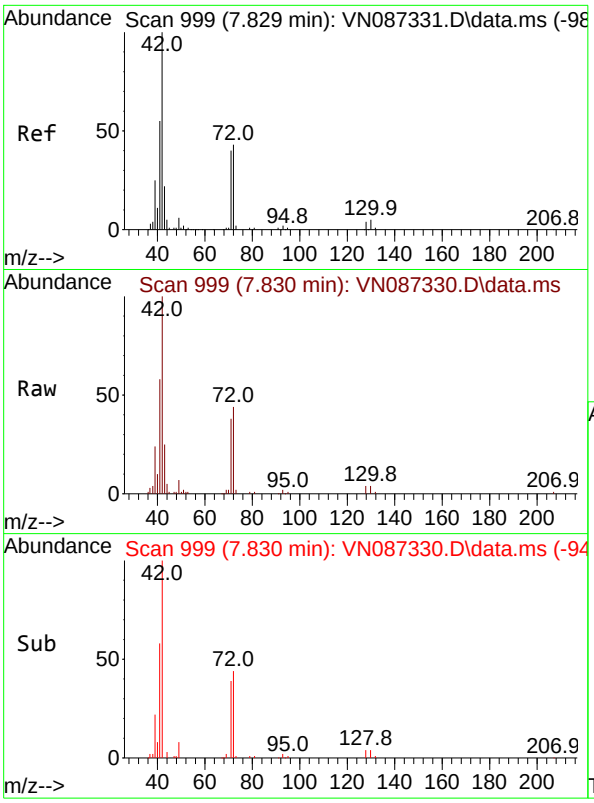


#28
Bromochloromethane
Concen: 19.325 ug/l
RT: 7.794 min Scan# 993
Delta R.T. -0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 49 Resp: 41285

Ion	Ratio	Lower	Upper
49	100		
129	2.7	0.0	4.2
130	71.2	57.3	85.9

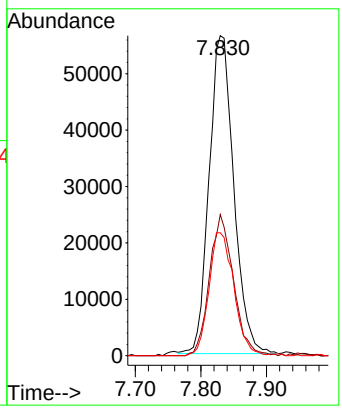




#29
Tetrahydrofuran
Concen: 103.426 ug/l
RT: 7.830 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 42 Resp: 14743

Ion	Ratio	Lower	Upper
42	100		
72	43.1	33.4	50.0
71	39.0	31.2	46.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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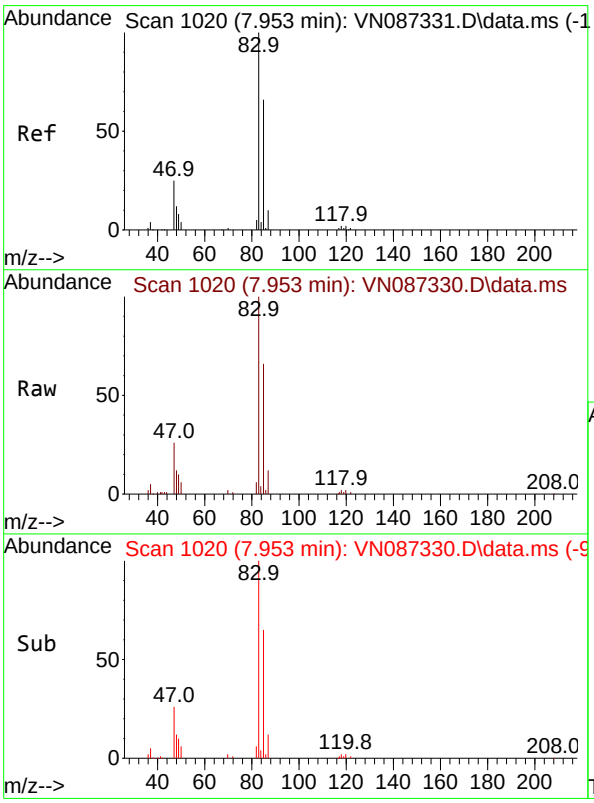
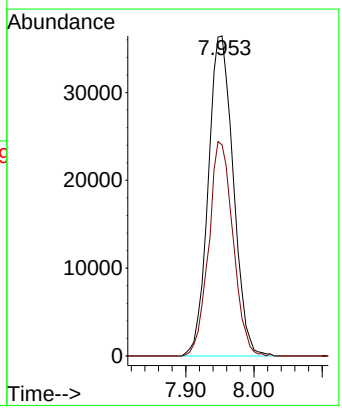
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

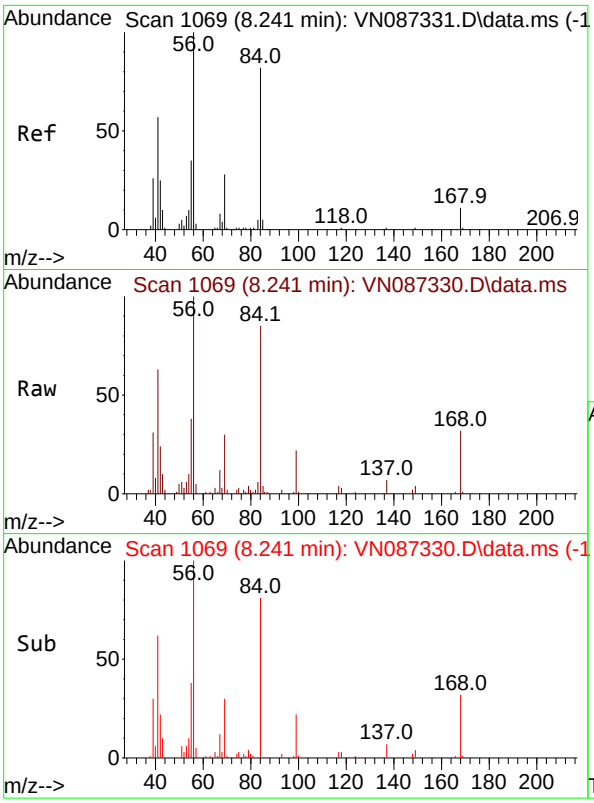


#30
Chloroform
Concen: 20.819 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 83 Resp: 93018

Ion	Ratio	Lower	Upper
83	100		
85	66.0	52.7	79.1

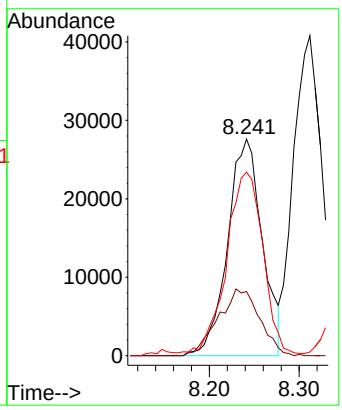




#31
Cyclohexane
Concen: 19.915 ug/l
RT: 8.241 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 56 Resp: 7416

Ion	Ratio	Lower	Upper
56	100		
69	29.6	22.7	34.1
84	83.3	65.8	98.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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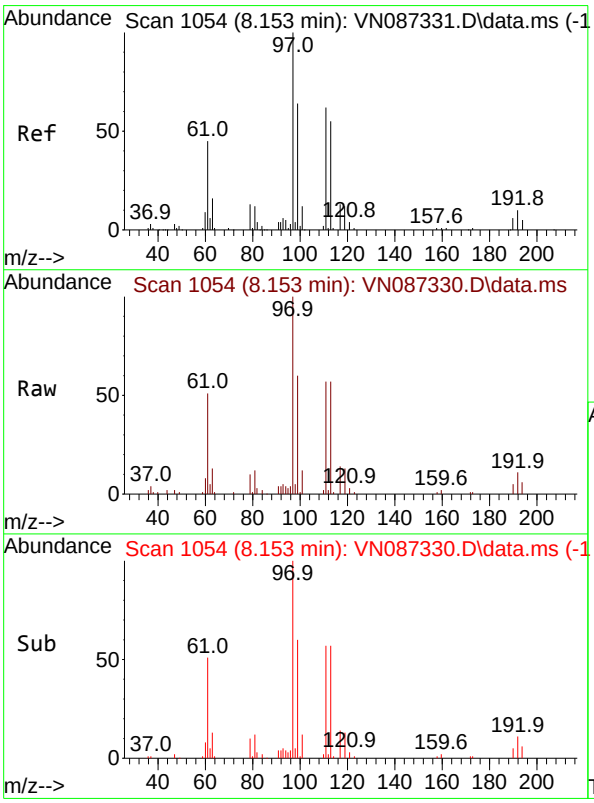
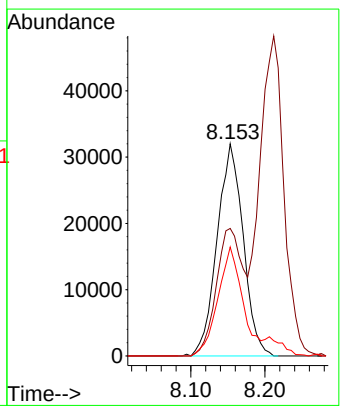
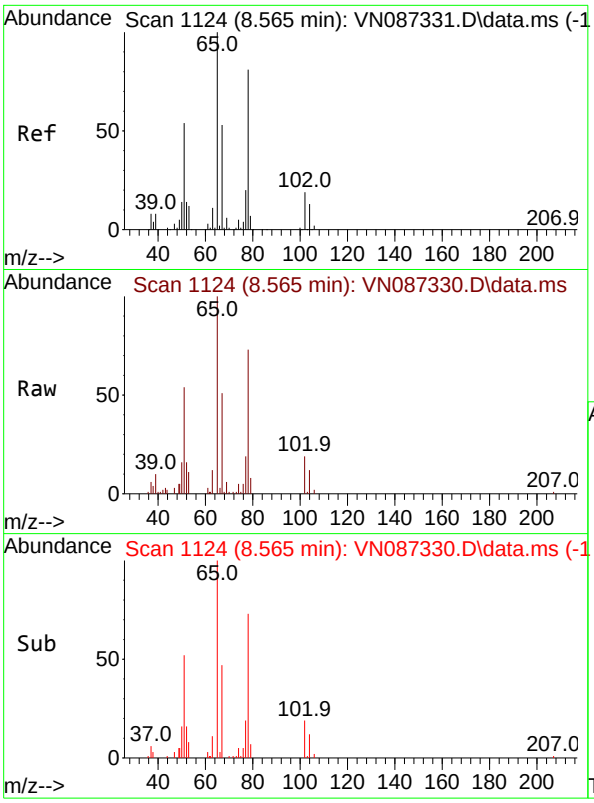


#32
1,1,1-Trichloroethane
Concen: 20.217 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 97 Resp: 78235

Ion	Ratio	Lower	Upper
97	100		
99	62.3	51.8	77.8
61	49.8	38.7	58.1

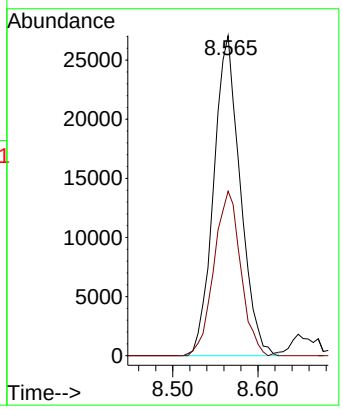




#33
1,2-Dichloroethane-d4
Concen: 19.341 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 65 Resp: 5858

Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	104.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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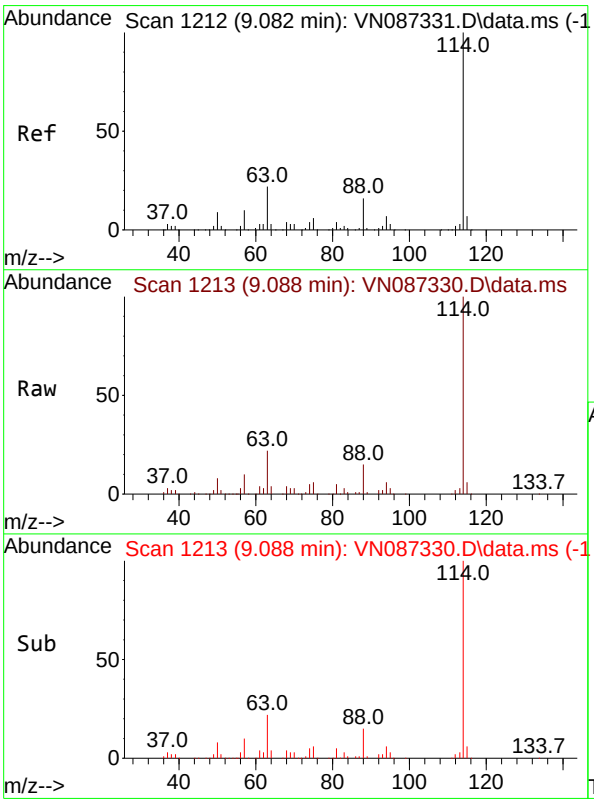
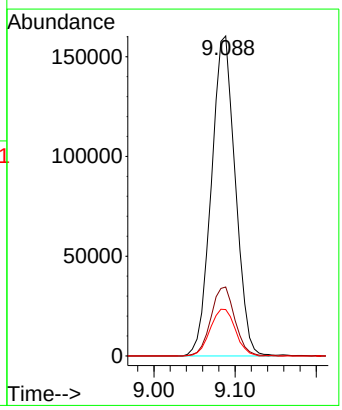
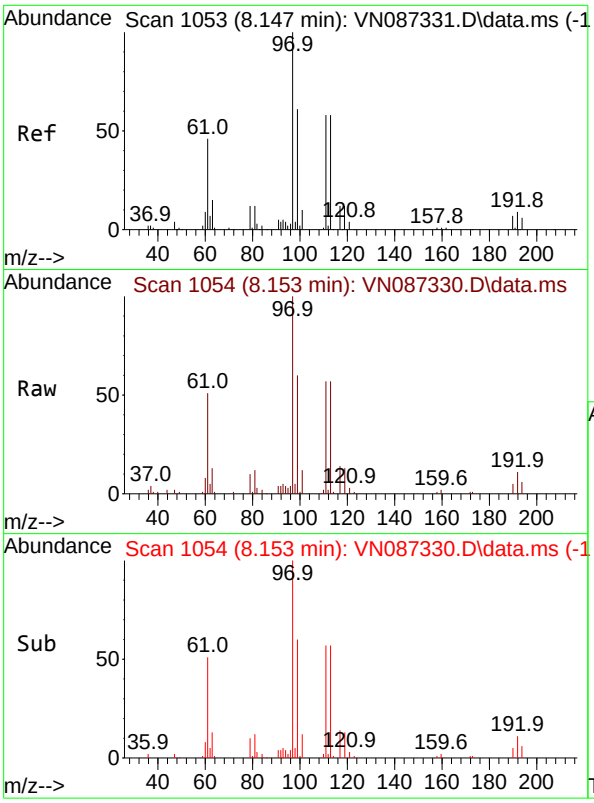


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.088 min Scan# 1213
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:114 Resp: 328159

Ion	Ratio	Lower	Upper
114	100		
63	21.5	0.0	44.6
88	14.5	0.0	32.8

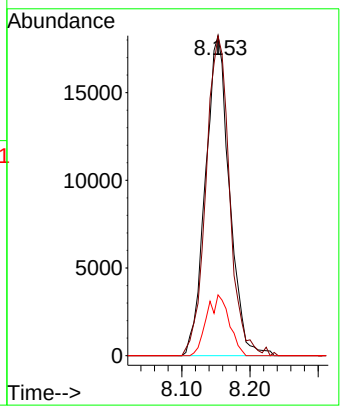




#35
Dibromofluoromethane
Concen: 19.758 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:113 Resp: 4472

Ion	Ratio	Lower	Upper
113	100		
111	97.7	82.5	123.7
192	17.8	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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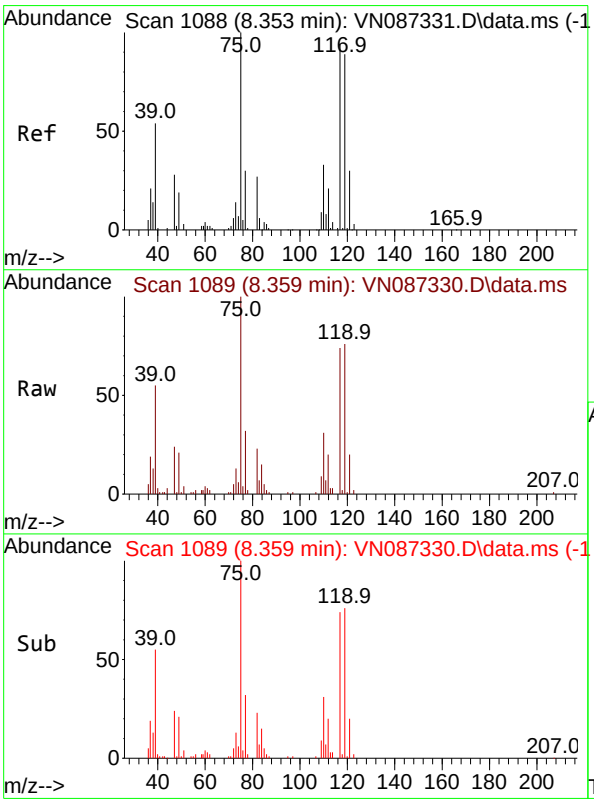
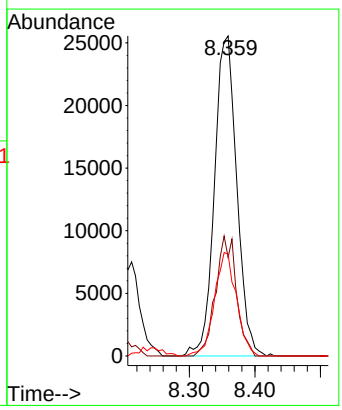
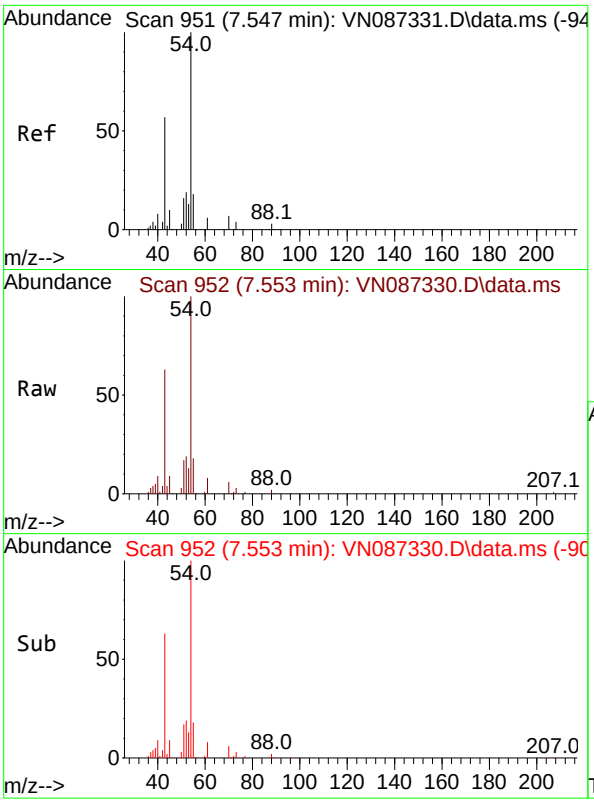


#36
1,1-Dichloropropene
Concen: 20.163 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 75 Resp: 60302

Ion	Ratio	Lower	Upper
75	100		
110	34.9	16.7	50.1
77	31.9	25.2	37.8





#37
Ethyl Acetate
Concen: 19.893 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 8592

Ion	Ratio	Lower	Upper
43	100		
61	14.0	10.9	16.3
70	10.1	7.4	11.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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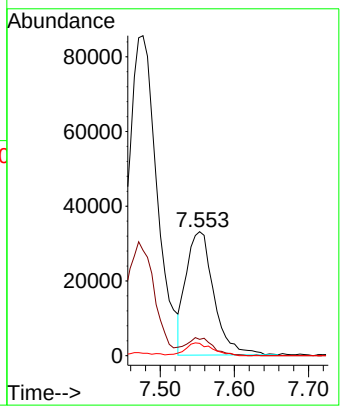
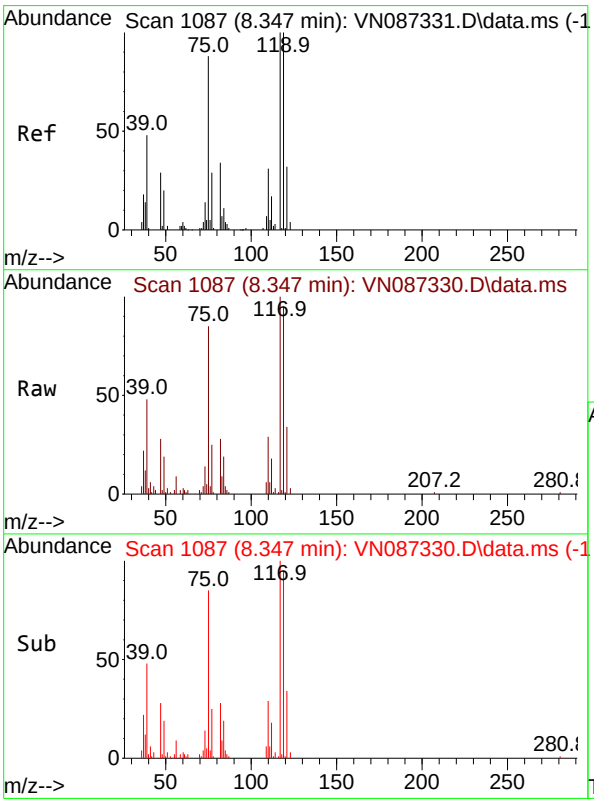
Supervised By :Semsettin Yesilyurt 07/17/2025

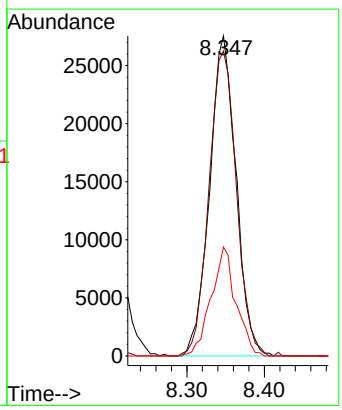


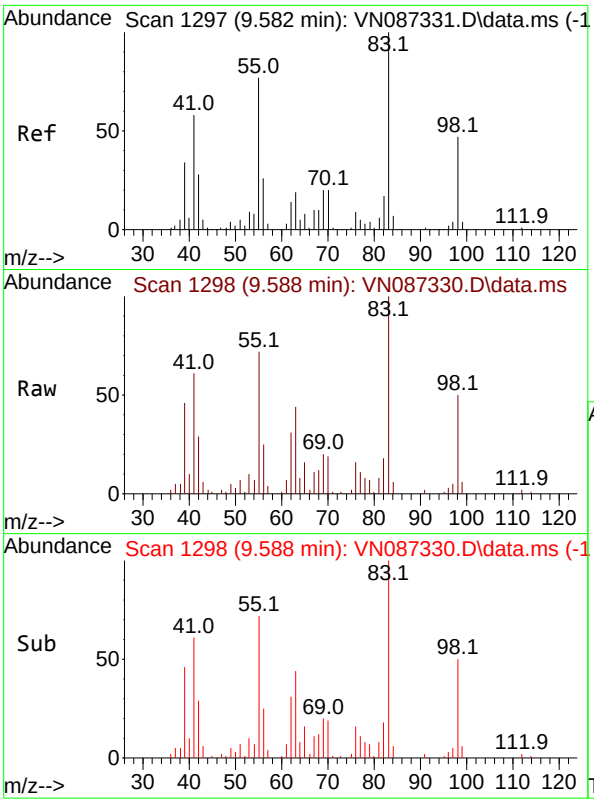


#38
Carbon Tetrachloride
Concen: 19.832 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:117 Resp: 65336

Ion	Ratio	Lower	Upper
117	100		
119	95.3	80.2	120.2
121	34.1	25.4	38.2





#39
Methylcyclohexane
Concen: 19.539 ug/l
RT: 9.588 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 83 Resp: 6326

Ion	Ratio	Lower	Upper
83	100		
55	71.5	61.3	91.9
98	50.0	37.9	56.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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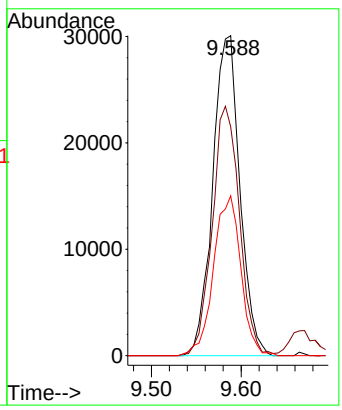
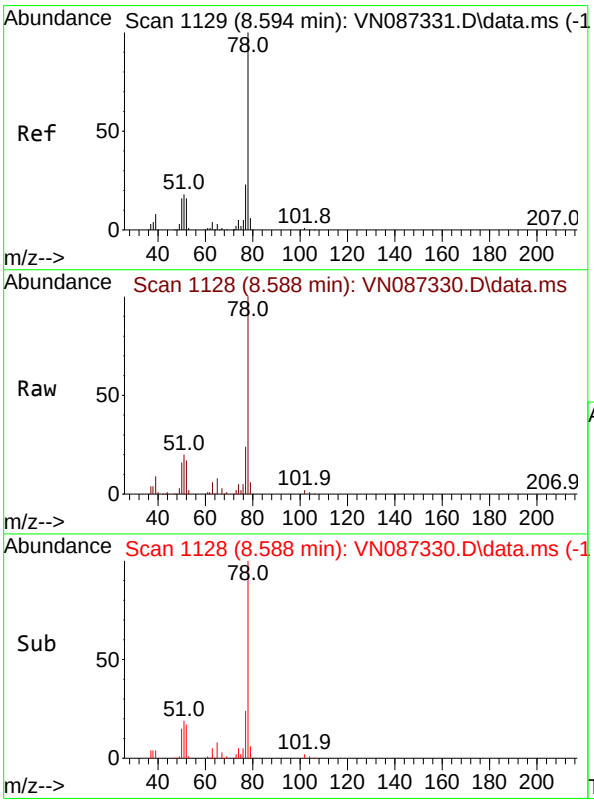
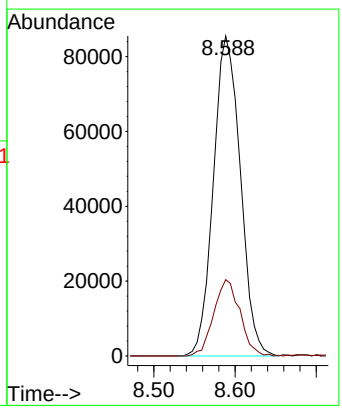


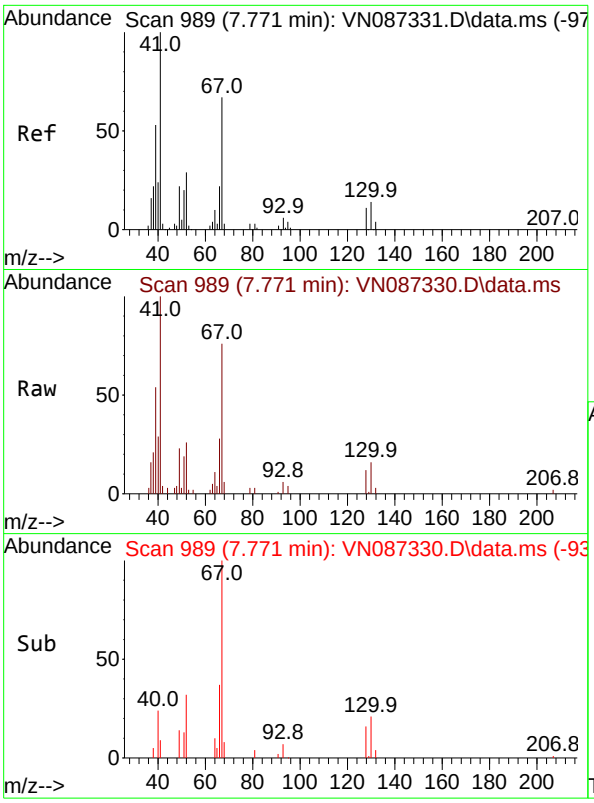


#40
Benzene
Concen: 20.400 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 78 Resp: 197187

Ion	Ratio	Lower	Upper
78	100		
77	23.9	18.2	27.2

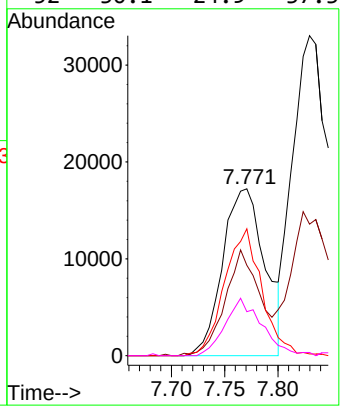




#41
Methacrylonitrile
Concen: 21.054 ug/l
RT: 7.771 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 41 Resp: 4755

Ion	Ratio	Lower	Upper
41	100		
39	51.7	43.4	65.0
67	67.2	55.1	82.7
52	30.1	24.9	37.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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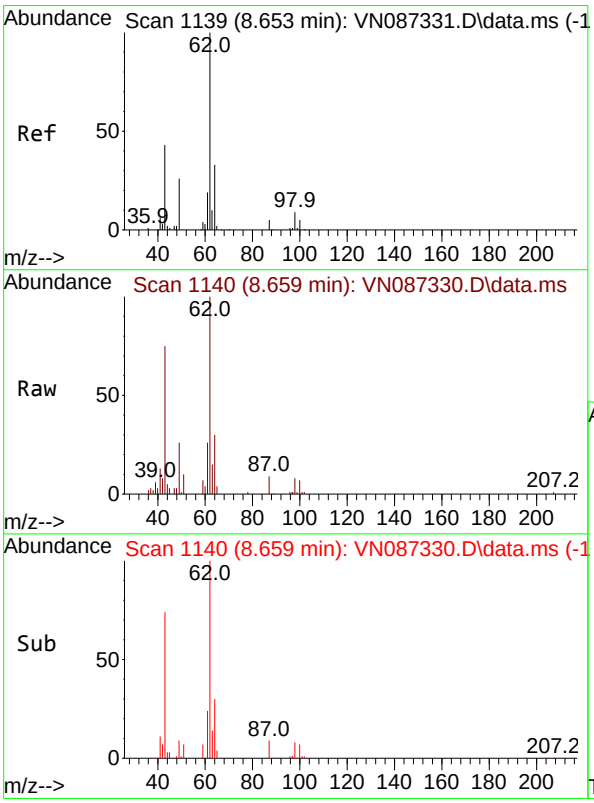
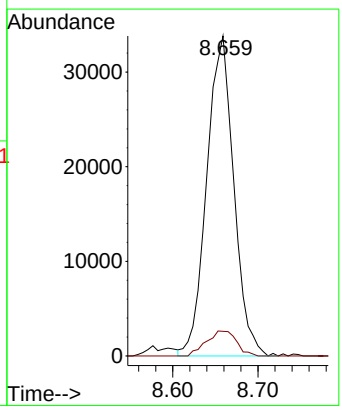
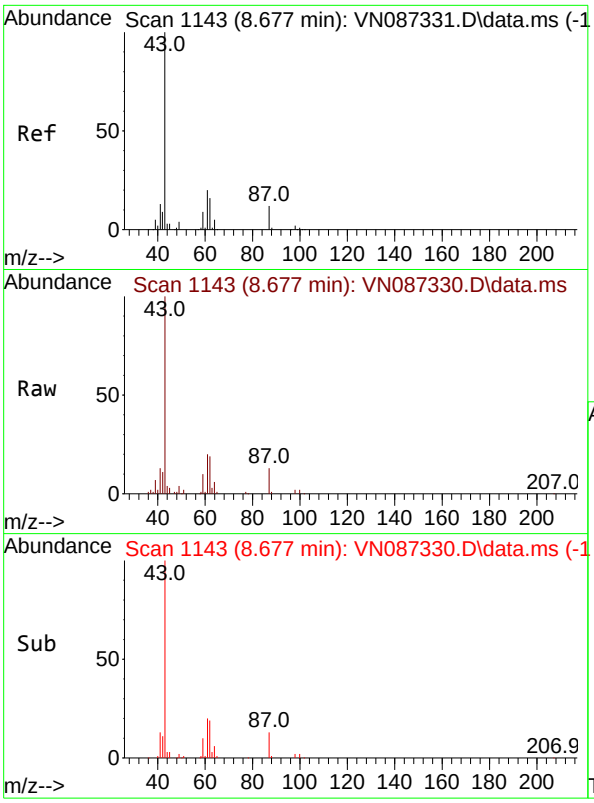


#42
1,2-Dichloroethane
Concen: 20.374 ug/l
RT: 8.659 min Scan# 1140
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 62 Resp: 74680

Ion	Ratio	Lower	Upper
62	100		
98	8.7	0.0	18.0





#43
Isopropyl Acetate
Concen: 20.136 ug/l
RT: 8.677 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 13501

Ion	Ratio	Lower	Upper
43	100		
61	25.0	19.8	29.8
87	13.2	9.8	14.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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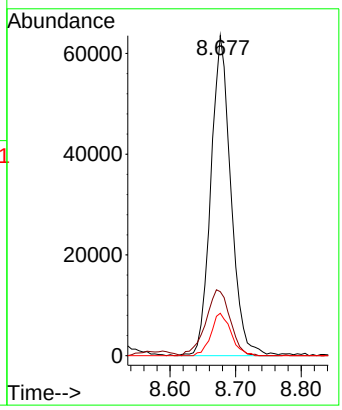
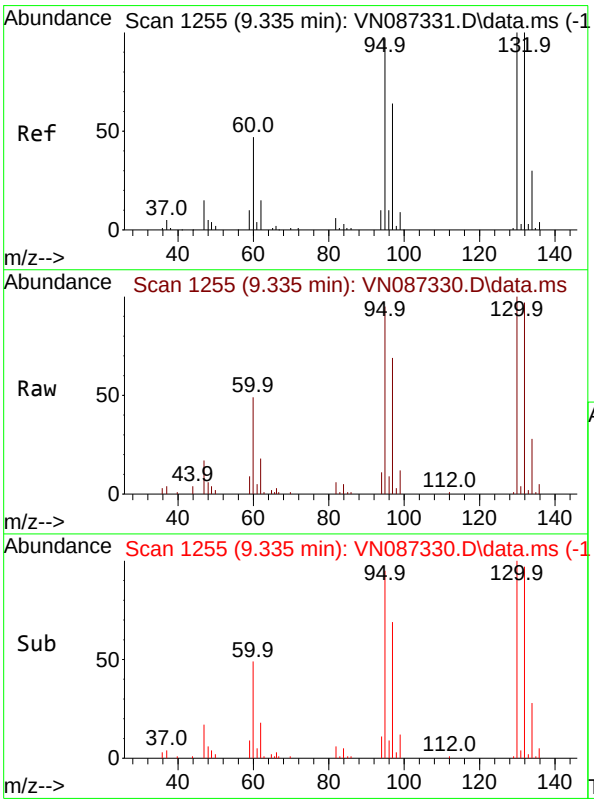
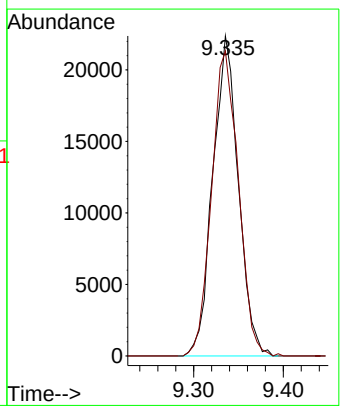


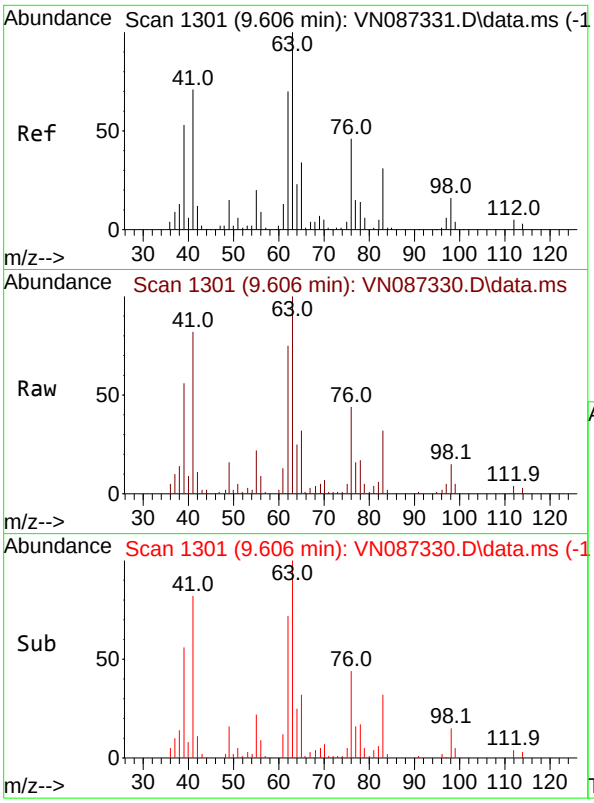


#44
Trichloroethene
Concen: 19.354 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:130 Resp: 44202

Ion	Ratio	Lower	Upper
130	100		
95	95.4	0.0	195.2





#45
1,2-Dichloropropane
Concen: 21.086 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 63 Resp: 5178

Ion	Ratio	Lower	Upper
63	100		
65	32.3	27.0	40.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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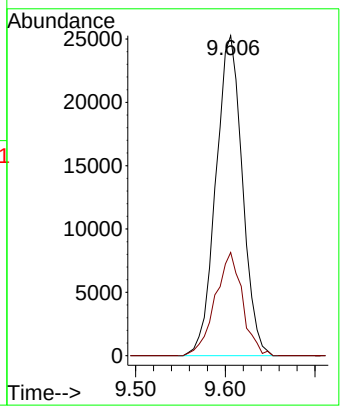
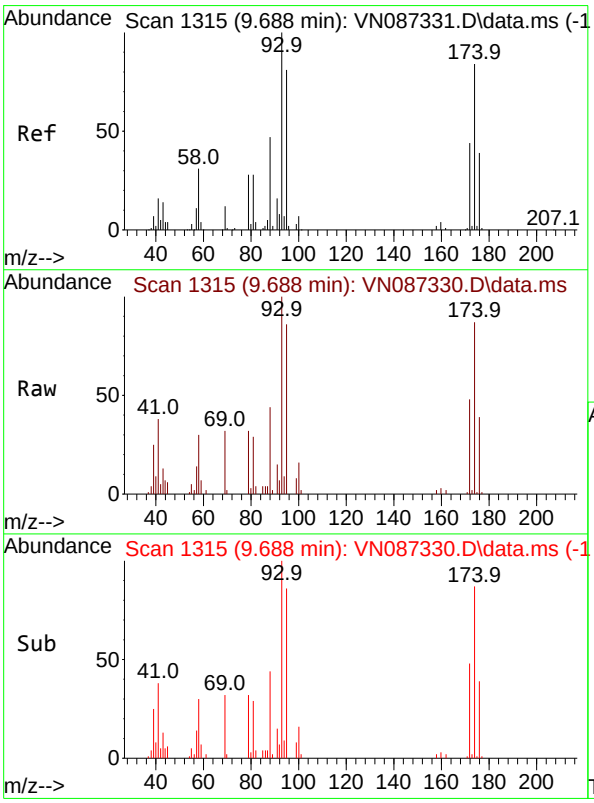
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

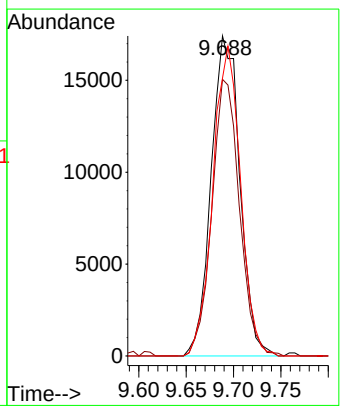


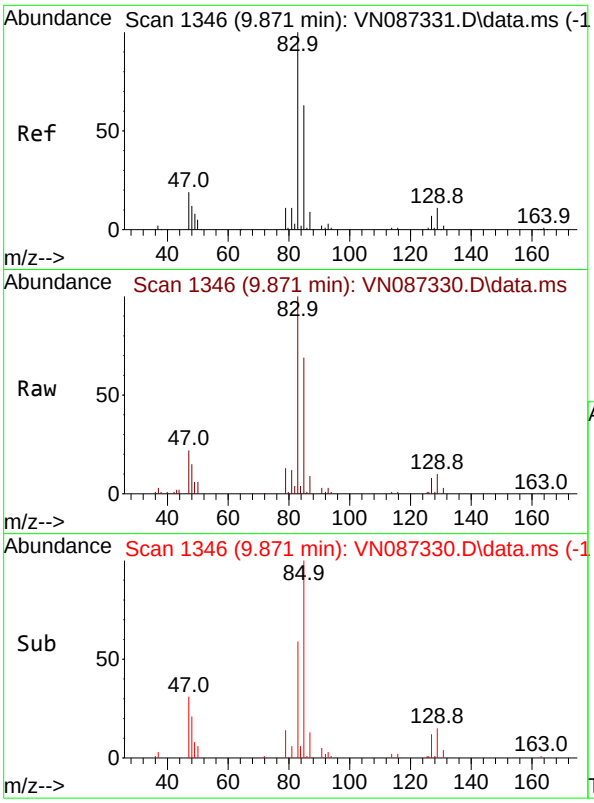


#46
Dibromomethane
Concen: 19.943 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 93 Resp: 36673

Ion	Ratio	Lower	Upper
93	100		
95	83.3	65.8	98.8
174	93.5	69.9	104.9

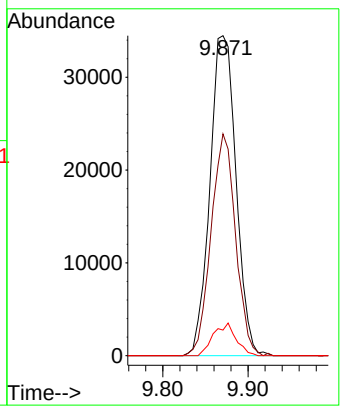




#47
Bromodichloromethane
Concen: 19.819 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 83 Resp: 7340

Ion	Ratio	Lower	Upper
83	100		
85	69.3	50.4	75.6
127	8.0	5.8	8.8



Instrument :
MSVOA_N
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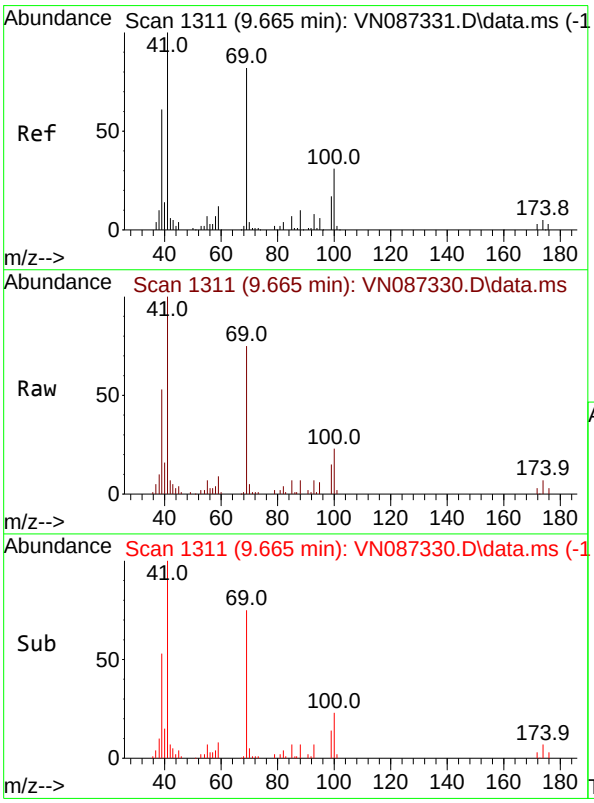
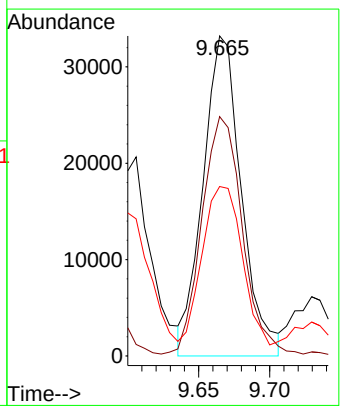
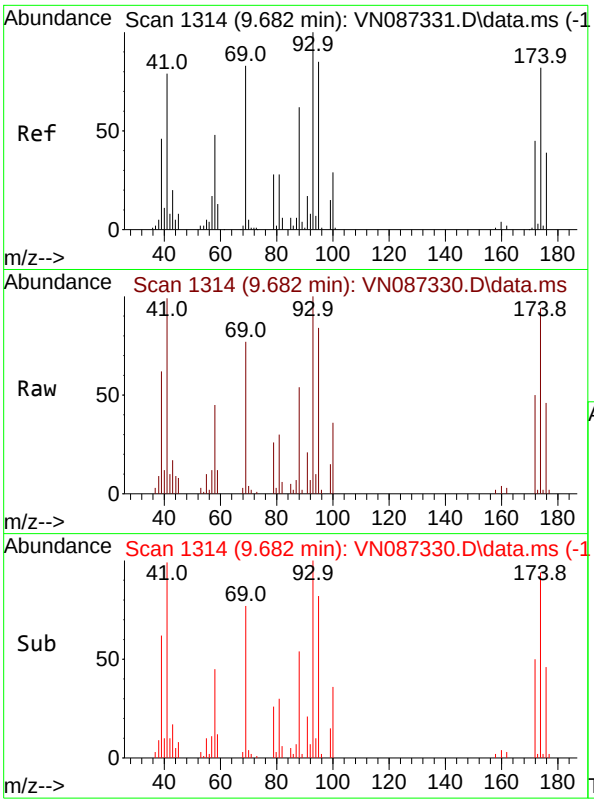


#48
Methyl methacrylate
Concen: 20.645 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 41 Resp: 62316

Ion	Ratio	Lower	Upper
41	100		
69	78.3	64.1	96.1
39	57.4	45.5	68.3

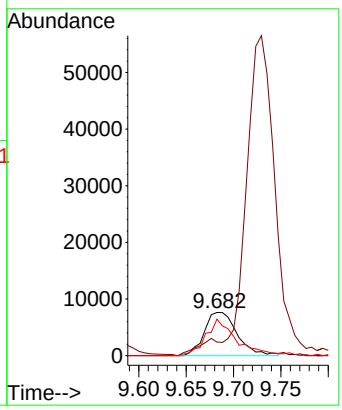




#49
1,4-Dioxane
Concen: 400.357 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 88 Resp: 1850

Ion	Ratio	Lower	Upper
88	100		
43	28.0	0.0	0.0
58	76.8	61.1	91.7



Instrument :
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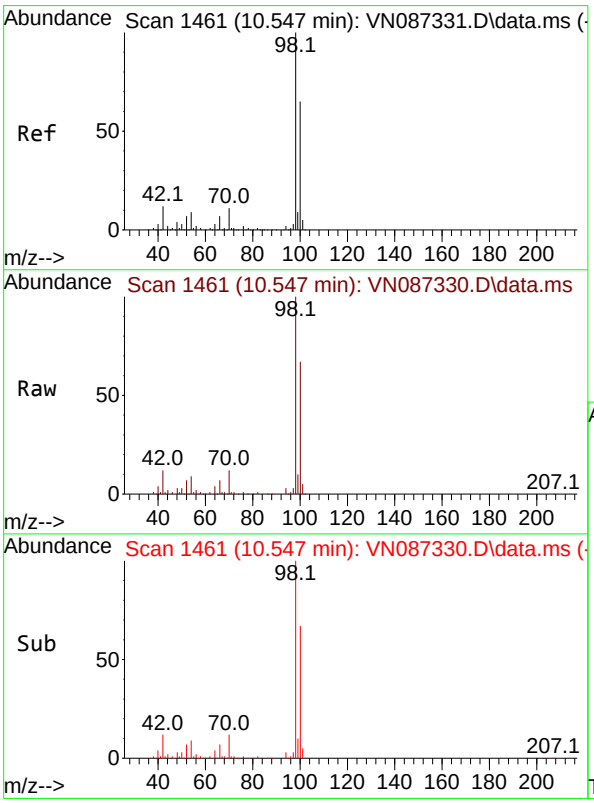
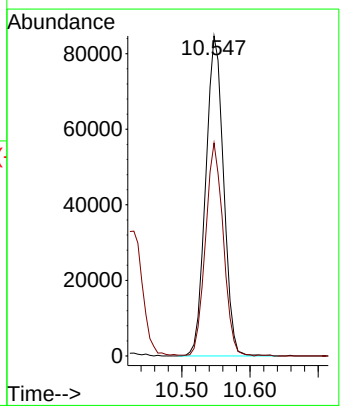
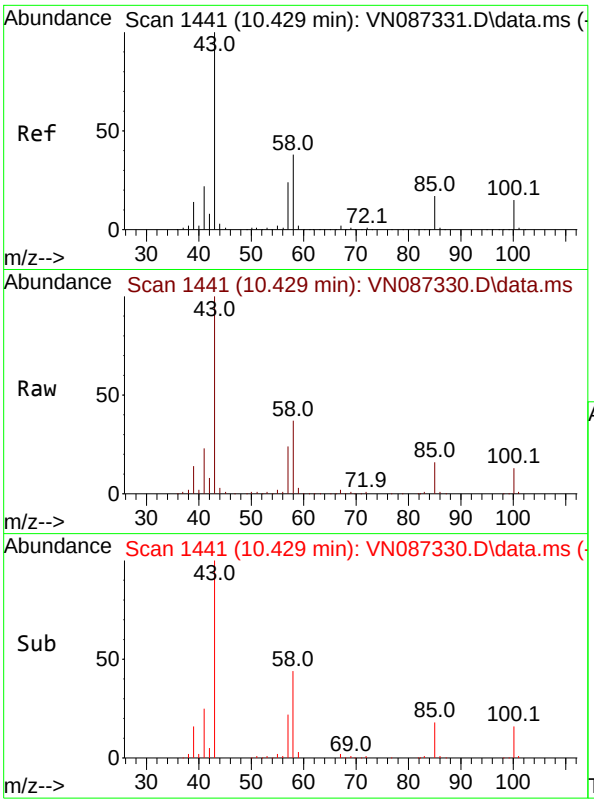


#50
Toluene-d8
Concen: 19.119 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 98 Resp: 154381

Ion	Ratio	Lower	Upper
98	100		
100	66.1	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 106.046 ug/l
RT: 10.429 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 44971

Ion	Ratio	Lower	Upper
43	100		
58	37.6	30.8	46.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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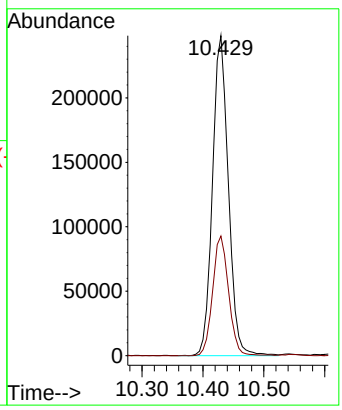
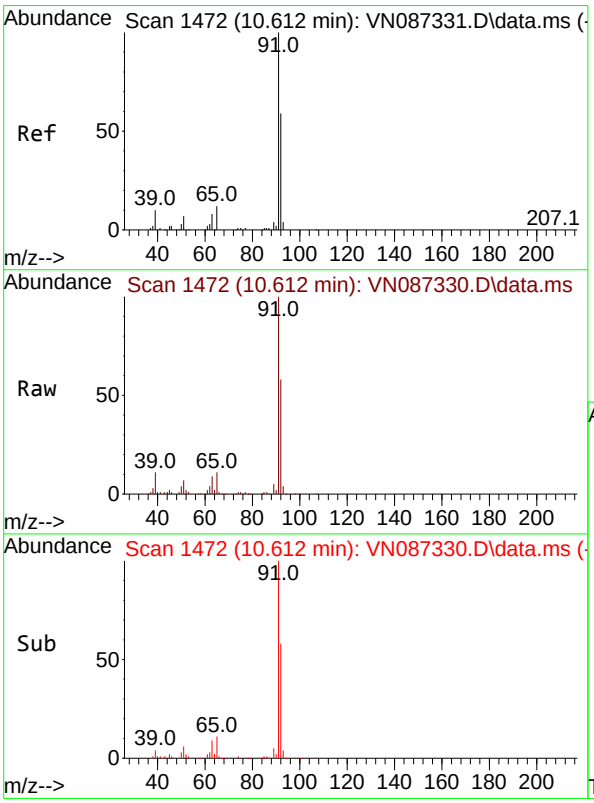
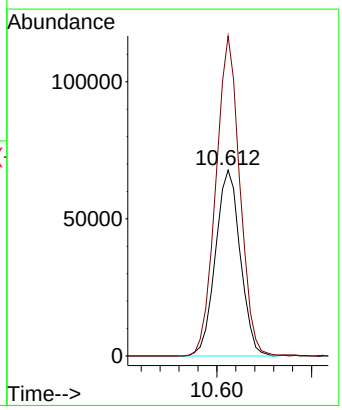


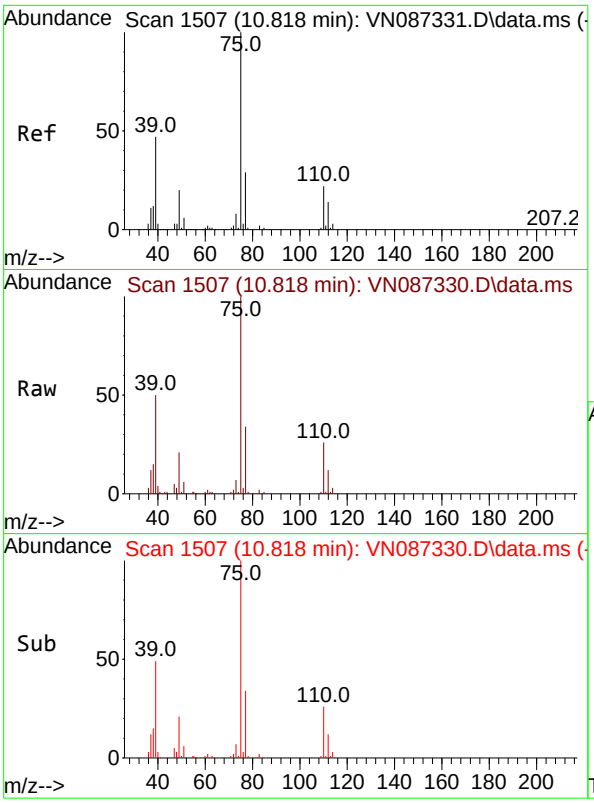


#52
Toluene
Concen: 21.002 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 92 Resp: 123391

Ion	Ratio	Lower	Upper
92	100		
91	166.7	135.1	202.7

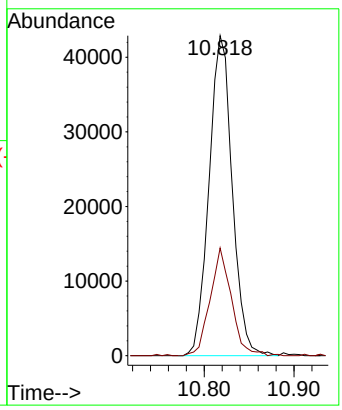




#53
t-1,3-Dichloropropene
Concen: 20.530 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 75 Resp: 7695

Ion	Ratio	Lower	Upper
75	100		
77	33.6	23.6	35.4



Instrument :
MSVOA_N
ClientSampleId :
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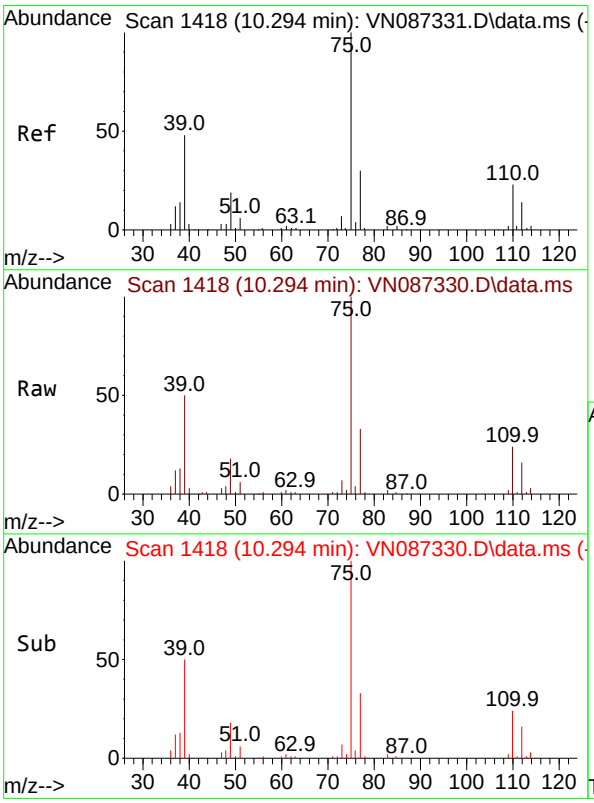
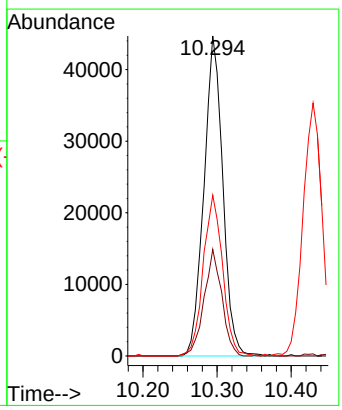
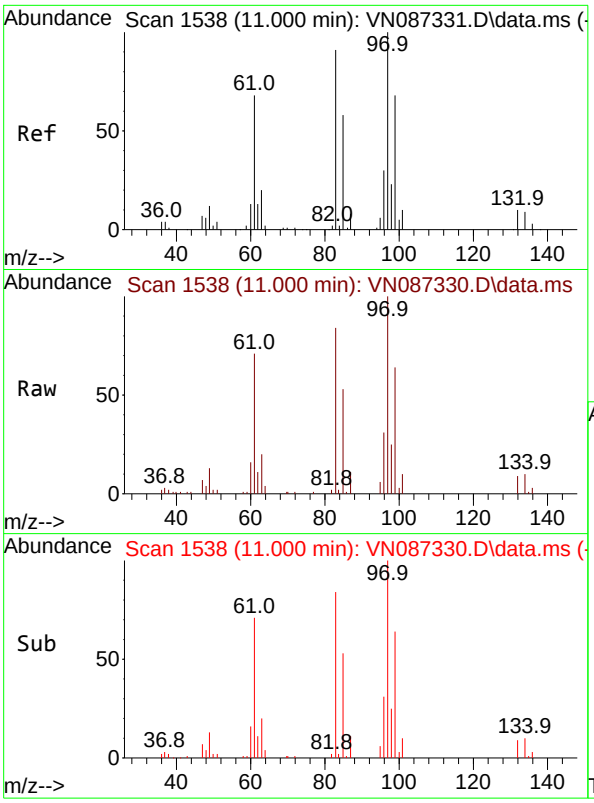


#54
cis-1,3-Dichloropropene
Concen: 20.407 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 75 Resp: 79019

Ion	Ratio	Lower	Upper
75	100		
77	33.3	24.2	36.2
39	50.3	38.4	57.6

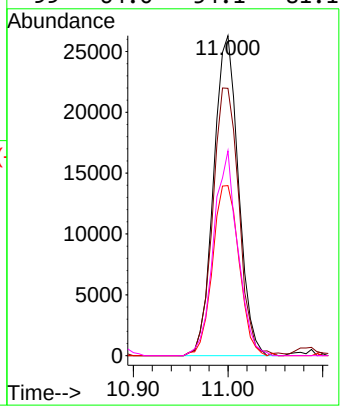




#55
1,1,2-Trichloroethane
Concen: 20.164 ug/l
RT: 11.000 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 97 Resp: 4796

Ion	Ratio	Lower	Upper
97	100		
83	83.6	72.6	109.0
85	53.1	46.7	70.1
99	64.0	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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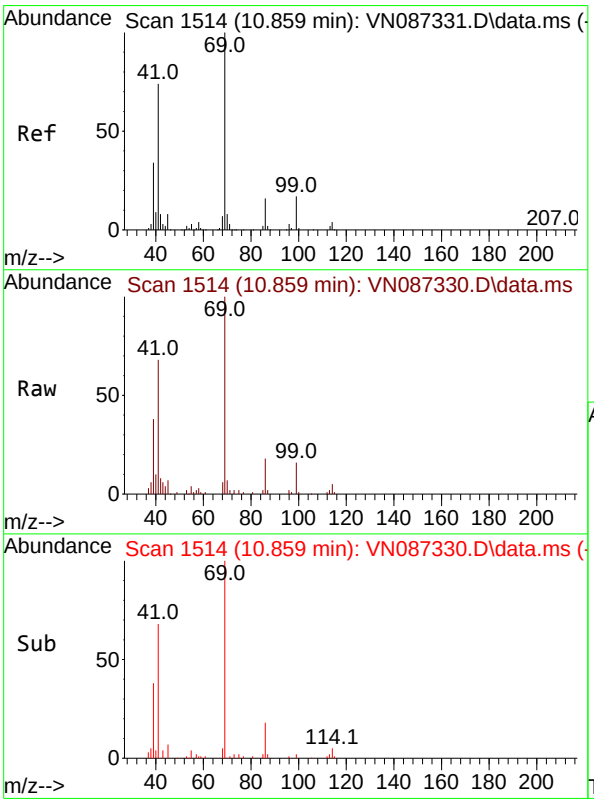
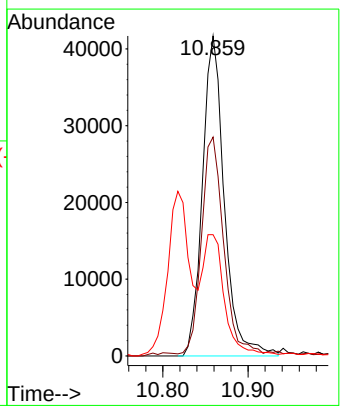
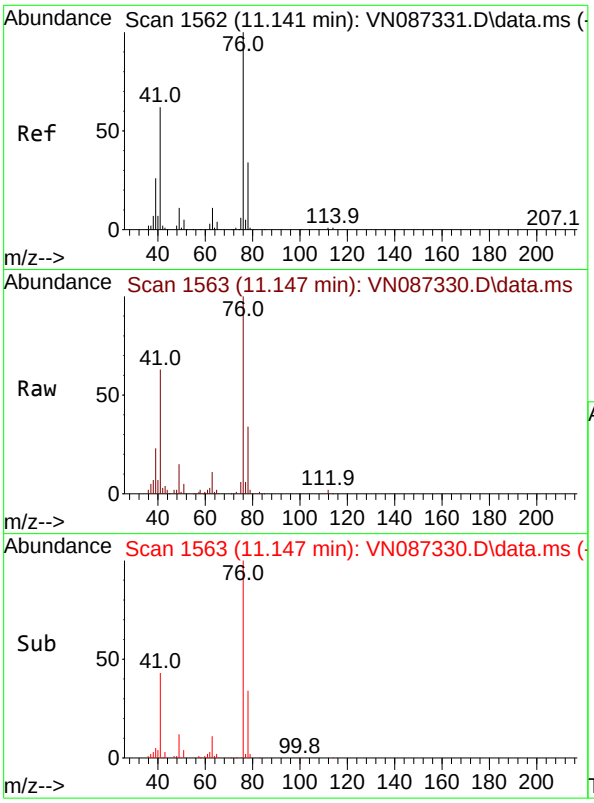


#56
Ethyl methacrylate
Concen: 19.384 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 69 Resp: 74408

Ion	Ratio	Lower	Upper
69	100		
41	68.1	55.1	82.7
39	36.2	27.9	41.9





#57
1,3-Dichloropropane
Concen: 20.800 ug/l
RT: 11.147 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 76 Resp: 8553

Ion	Ratio	Lower	Upper
76	100		
78	31.7	26.0	39.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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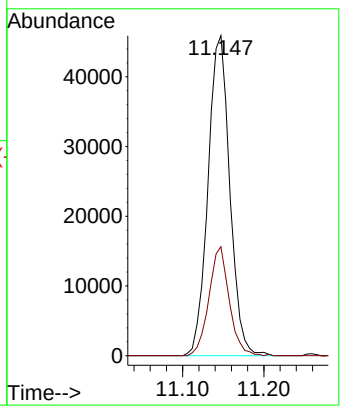
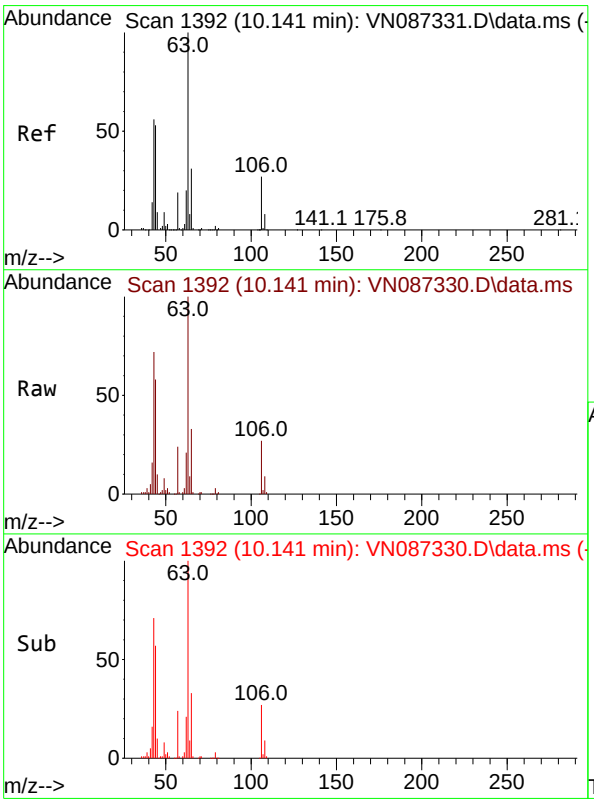
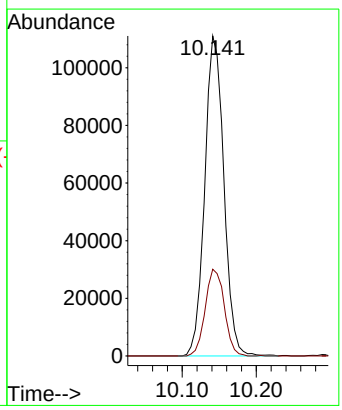


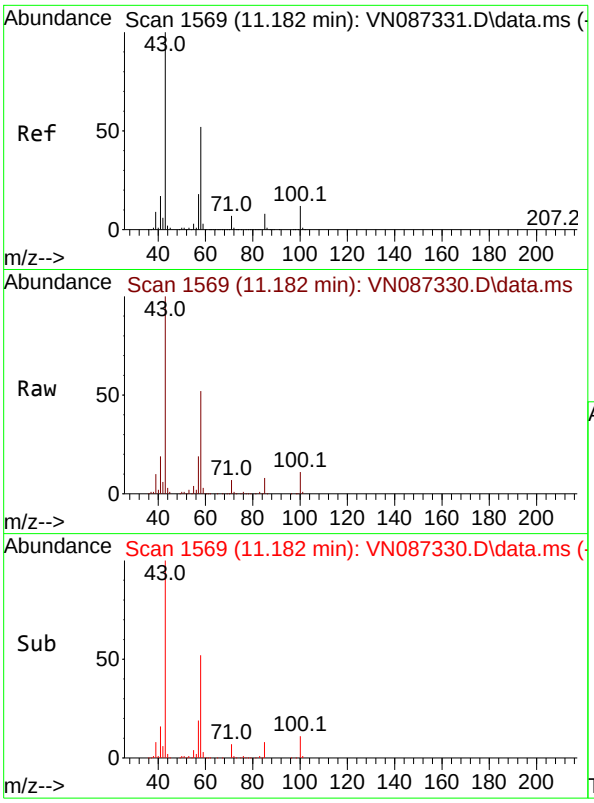


#58
2-Chloroethyl Vinyl ether
Concen: 101.839 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 63 Resp: 198704

Ion	Ratio	Lower	Upper
63	100		
106	27.1	21.7	32.5





#59
2-Hexanone
Concen: 108.526 ug/l
RT: 11.182 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 30534

Ion	Ratio	Lower	Upper
43	100		
58	52.8	26.7	80.0

Instrument :
MSVOA_N
ClientSampleId :
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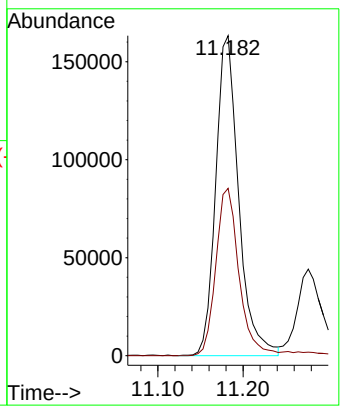
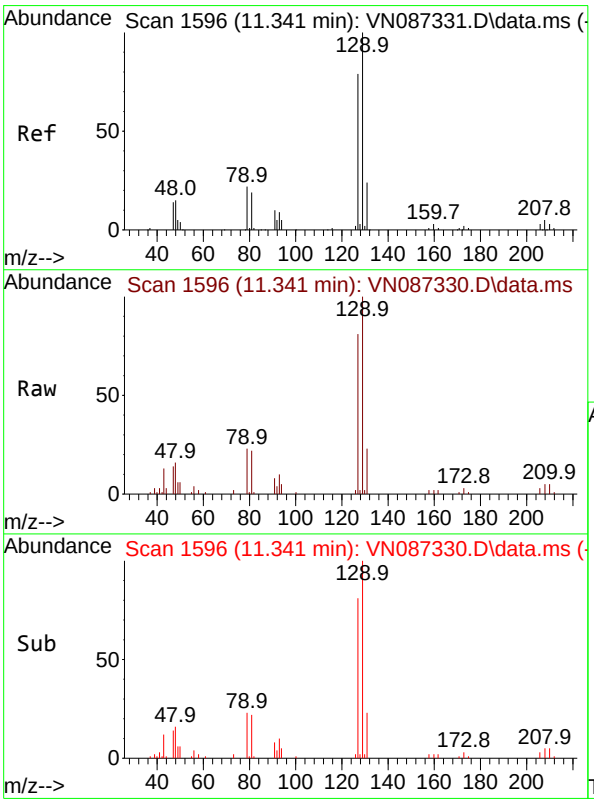
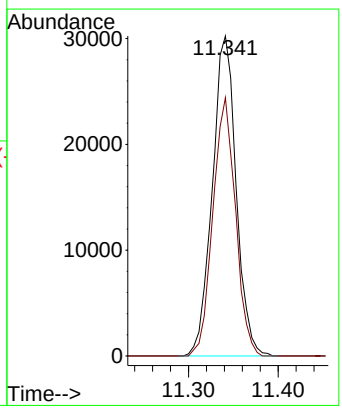


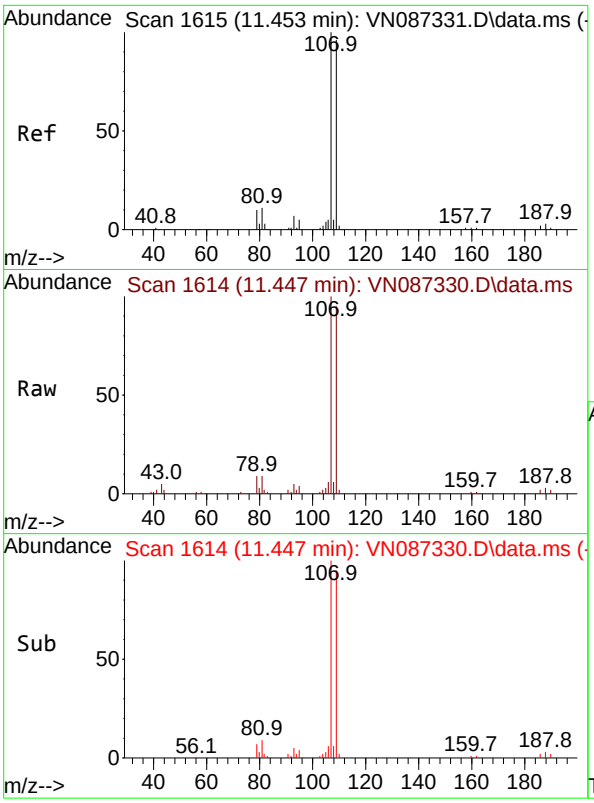


#60
Dibromochloromethane
Concen: 20.564 ug/l
RT: 11.341 min Scan# 1596
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:129 Resp: 55783

Ion	Ratio	Lower	Upper
129	100		
127	76.4	39.1	117.5





#61
1,2-Dibromoethane
Concen: 20.509 ug/l
RT: 11.447 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:107 Resp: 5129

Ion	Ratio	Lower	Upper
107	100		
109	94.2	77.5	116.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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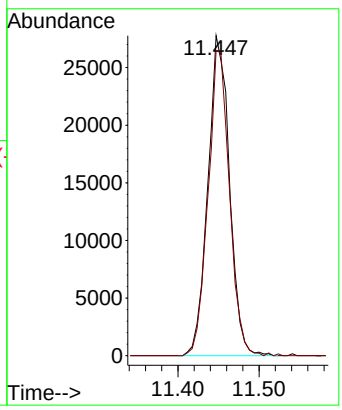
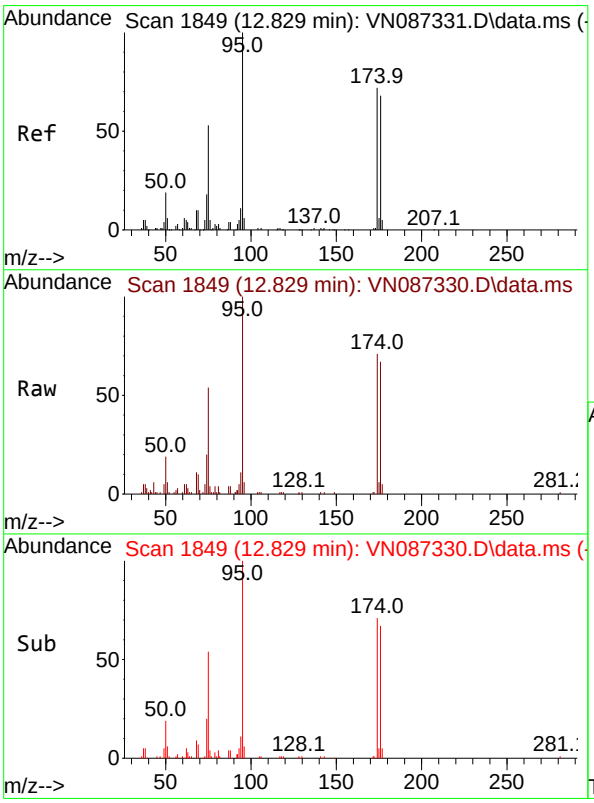
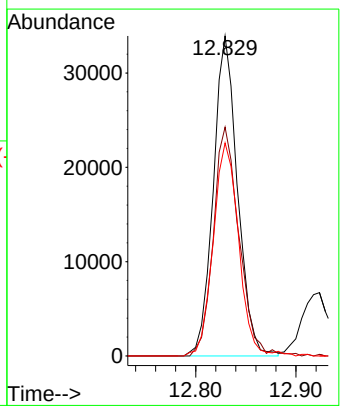


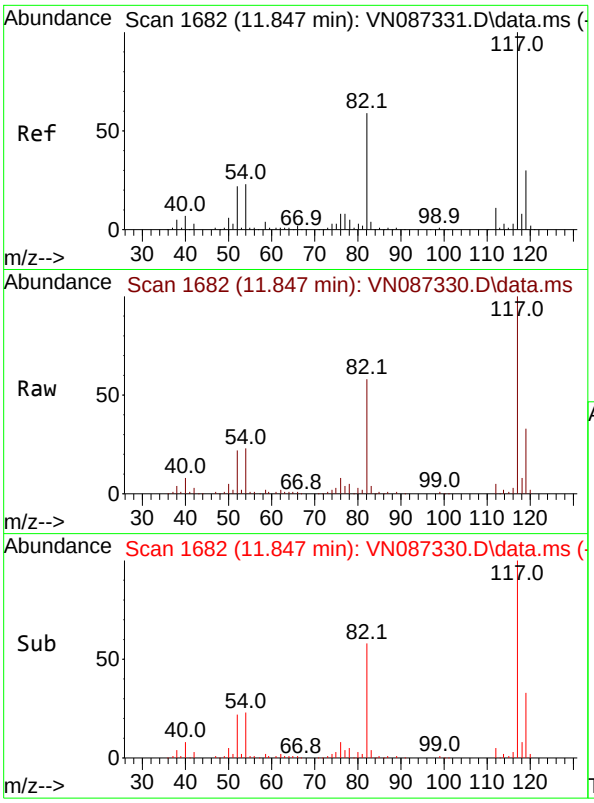


#62
4-Bromofluorobenzene
Concen: 19.051 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 95 Resp: 56832

Ion	Ratio	Lower	Upper
95	100		
174	75.9	0.0	149.4
176	70.0	0.0	141.2

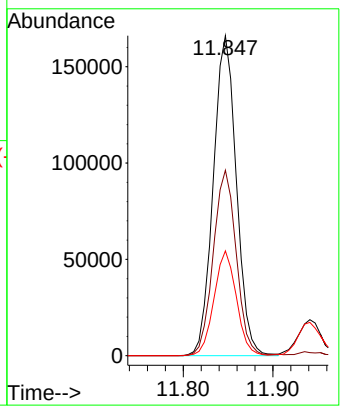




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:117 Resp: 29720

Ion	Ratio	Lower	Upper
117	100		
82	58.0	47.4	71.2
119	32.7	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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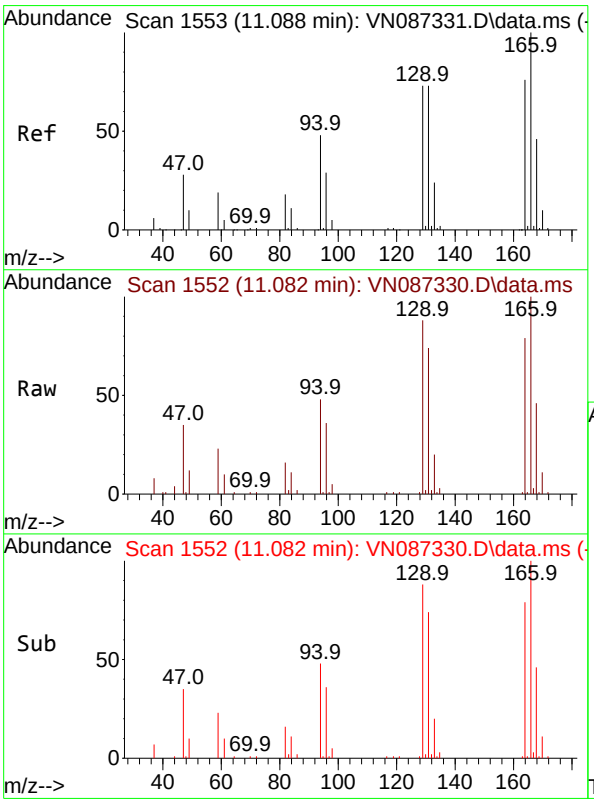
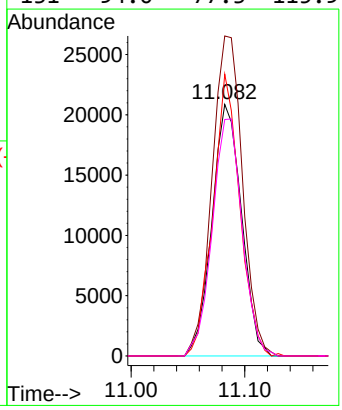
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

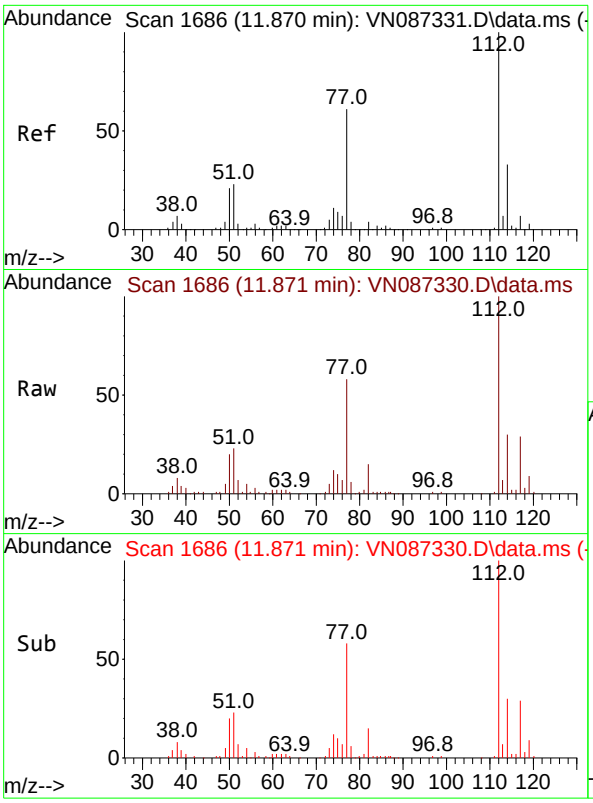


#64
Tetrachloroethene
Concen: 19.686 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:164 Resp: 37655

Ion	Ratio	Lower	Upper
164	100		
166	127.2	105.5	158.3
129	112.0	77.4	116.2
131	94.0	77.3	115.9

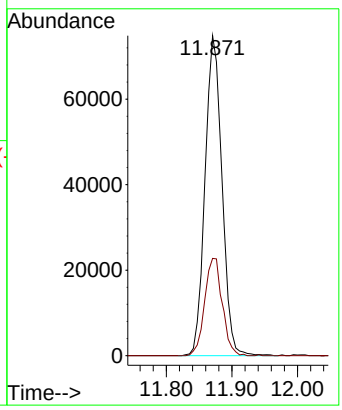




#65
Chlorobenzene
Concen: 20.183 ug/l
RT: 11.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:112 Resp: 13466

Ion	Ratio	Lower	Upper
112	100		
114	30.4	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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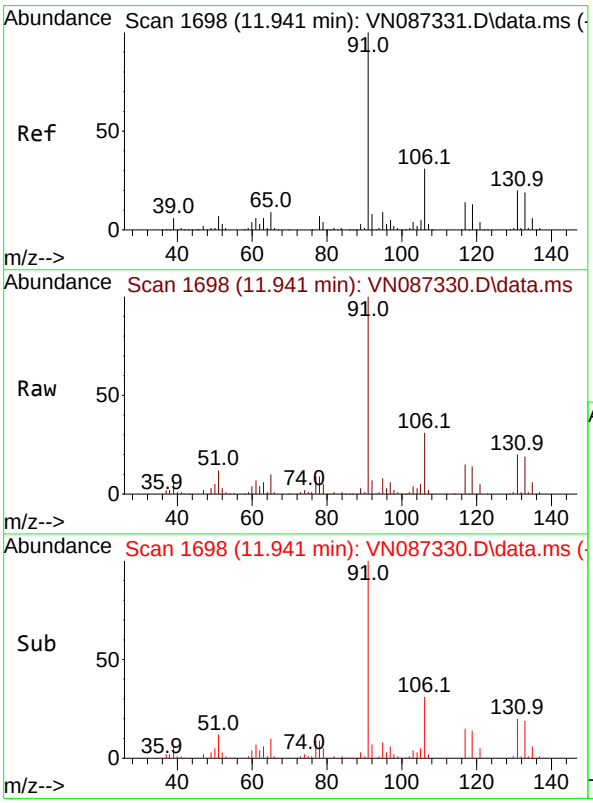
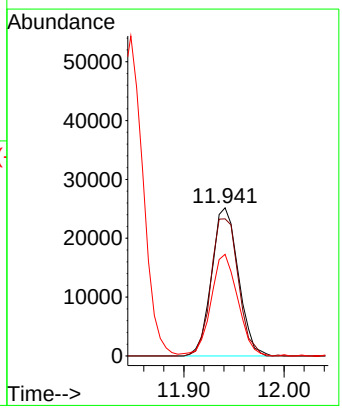
Supervised By :Semsettin Yesilyurt 07/17/2025

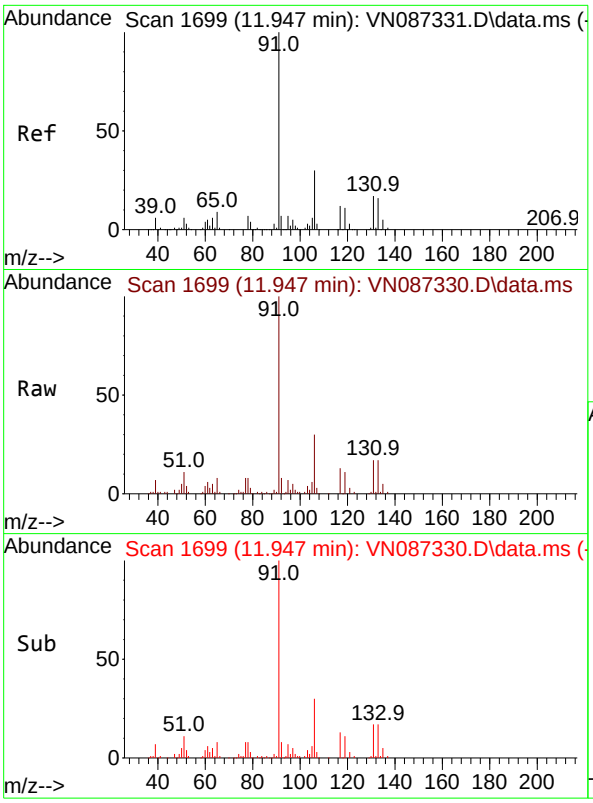


#66
1,1,1,2-Tetrachloroethane
Concen: 20.570 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:131 Resp: 46671

Ion	Ratio	Lower	Upper
131	100		
133	94.6	47.4	142.3
119	68.8	33.1	99.2





#67
Ethyl Benzene
Concen: 20.367 ug/l
RT: 11.947 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 91 Resp: 22371

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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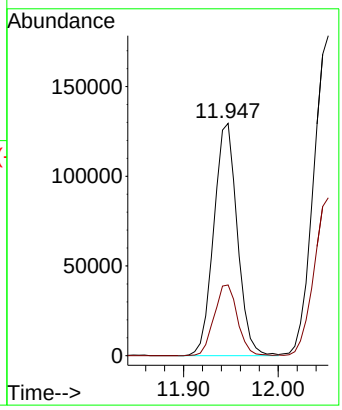
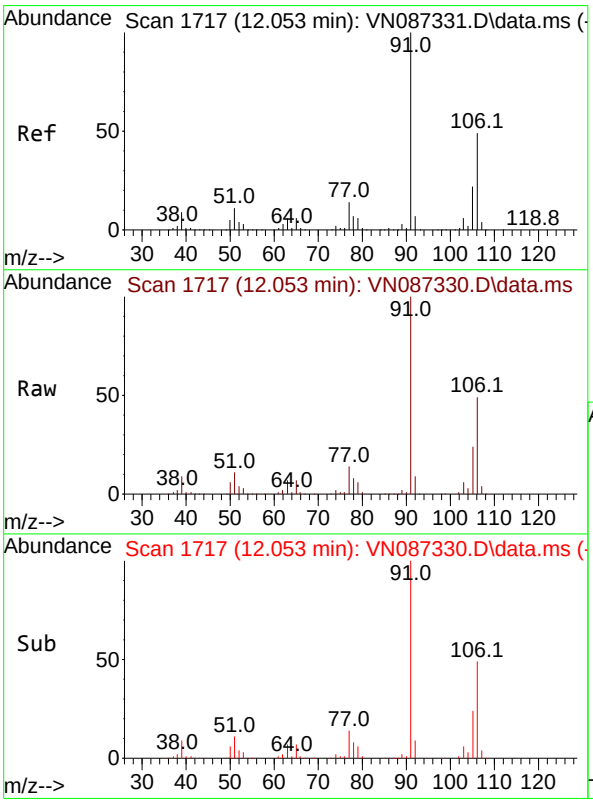
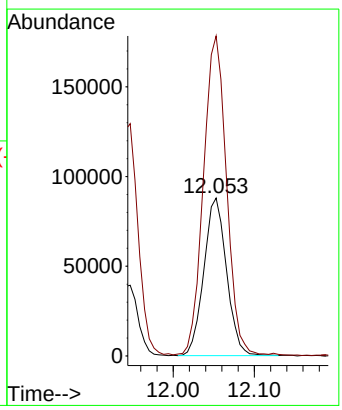


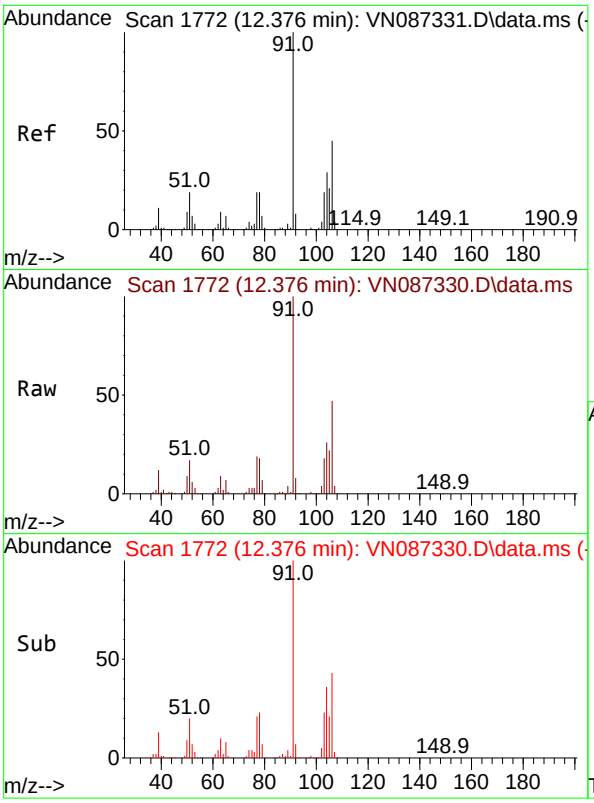


#68
m/p-Xylenes
Concen: 41.473 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:106 Resp: 170590

Ion	Ratio	Lower	Upper
106	100		
91	205.1	162.0	243.0





#69
o-Xylene
Concen: 21.230 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:106 Resp: 8341

Ion	Ratio	Lower	Upper
106	100		
91	212.7	107.7	323.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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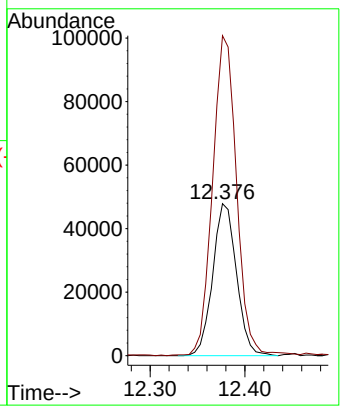
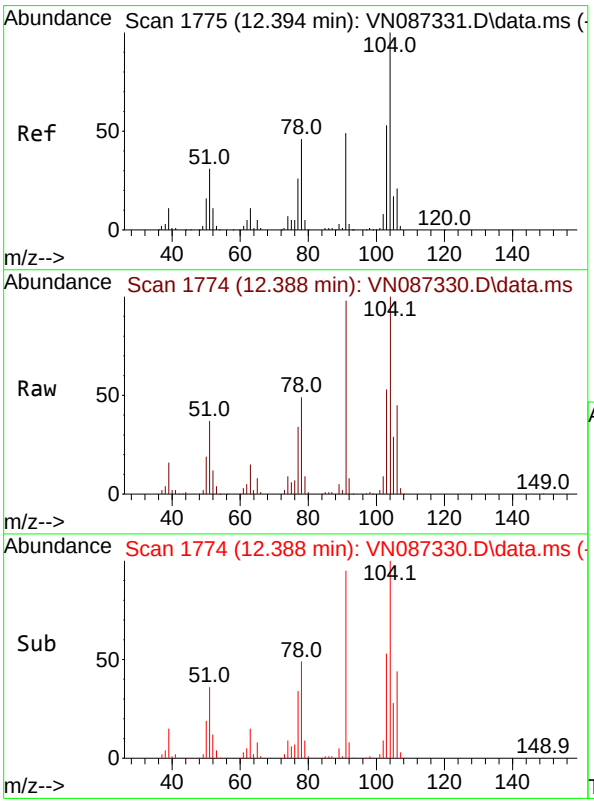
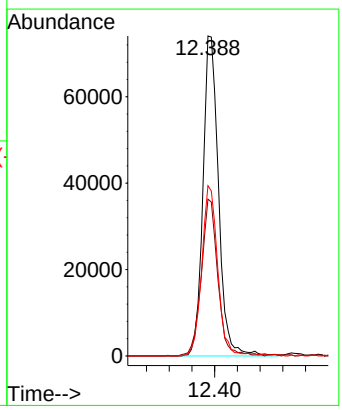


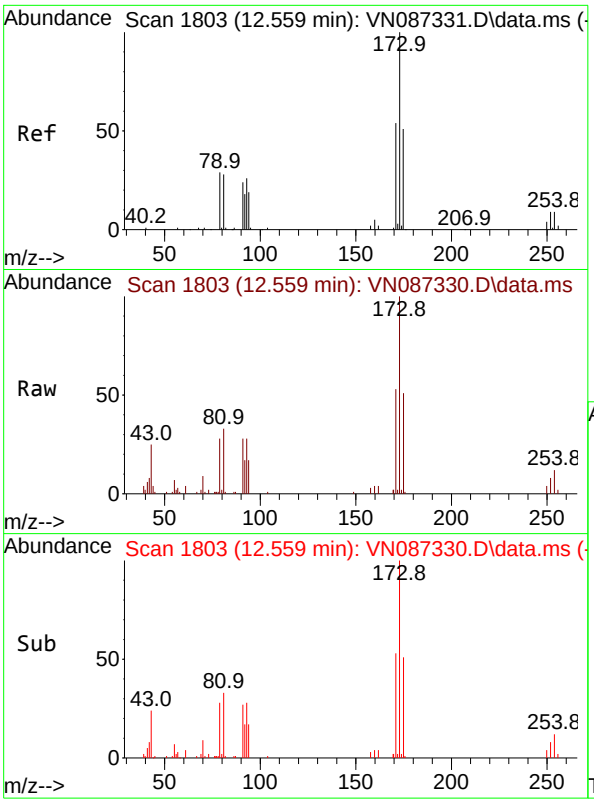


#70
Styrene
Concen: 21.323 ug/l
RT: 12.388 min Scan# 1774
Delta R.T. -0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:104 Resp: 140937

Ion	Ratio	Lower	Upper
104	100		
78	51.6	41.0	61.6
103	54.8	43.9	65.9

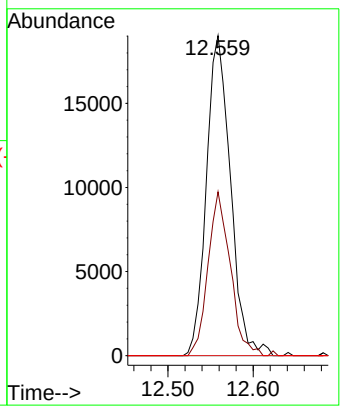




#71
Bromoform
Concen: 20.383 ug/l
RT: 12.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:173 Resp: 3736

Ion	Ratio	Lower	Upper
173	100		
175	47.3	24.1	72.3
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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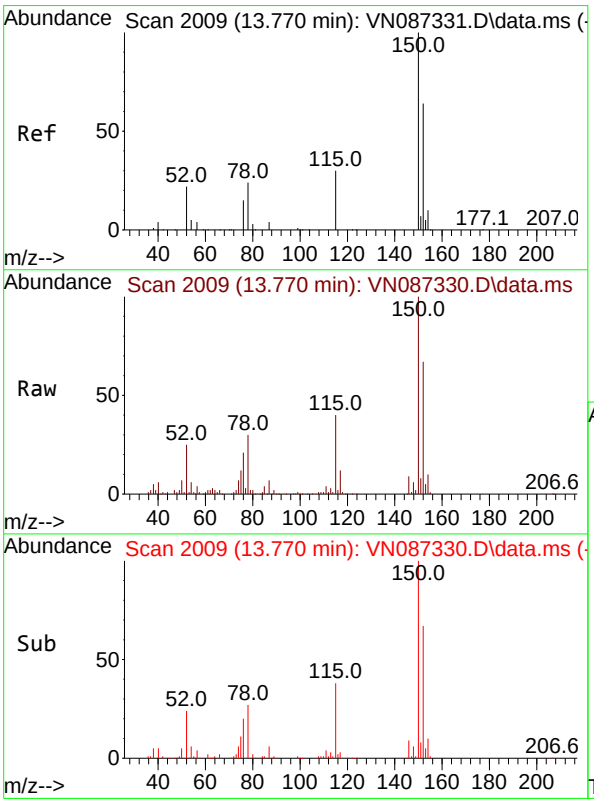
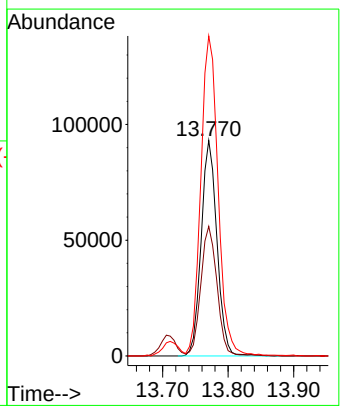
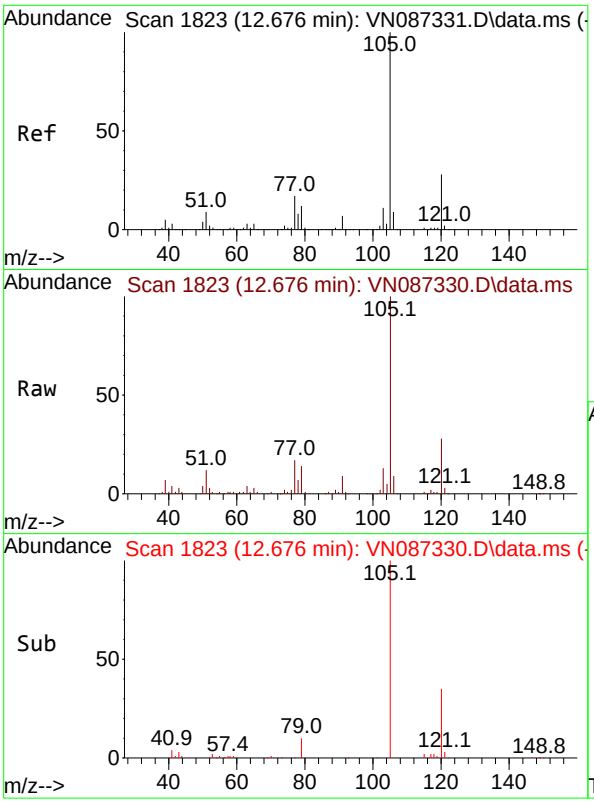


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:152 Resp: 156249

Ion	Ratio	Lower	Upper
152	100		
115	61.9	31.1	93.5
150	162.0	0.0	349.0





#73
Isopropylbenzene
Concen: 20.601 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:105 Resp: 20259

Ion	Ratio	Lower	Upper
105	100		
120	26.9	13.4	40.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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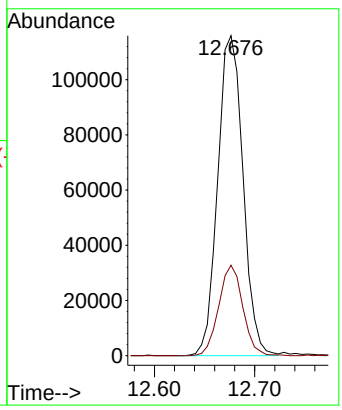
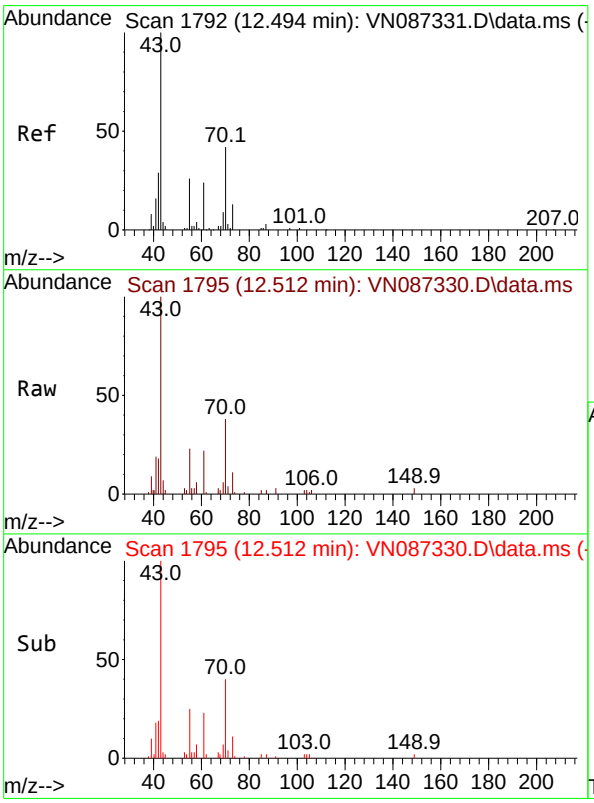
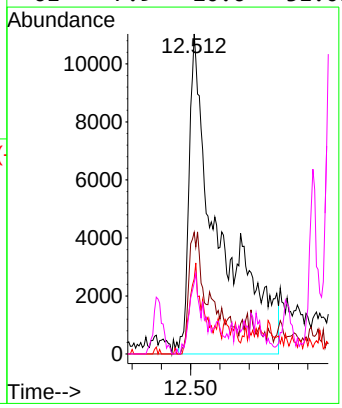


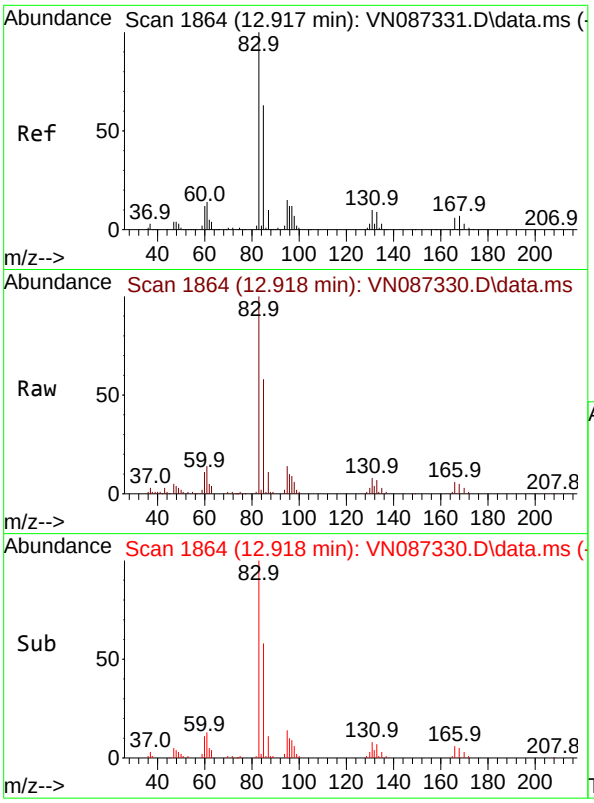


#74
N-amyl acetate
Concen: 20.334 ug/l m
RT: 12.512 min Scan# 1795
Delta R.T. 0.018 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 43 Resp: 78074

Ion	Ratio	Lower	Upper
43	100		
70	17.4	37.6	56.4#
55	12.3	19.6	29.4#
61	7.9	20.6	31.0#





#75
1,1,2,2-Tetrachloroethane
Concen: 20.733 ug/l
RT: 12.918 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 83 Resp: 7672

Ion	Ratio	Lower	Upper
83	100		
131	9.4	5.1	15.3
85	63.6	32.5	97.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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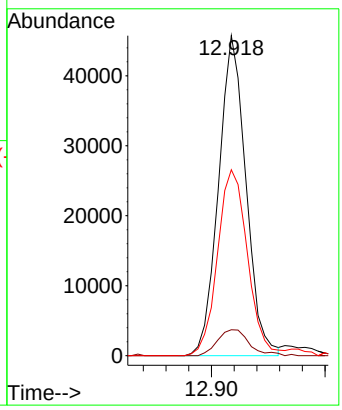
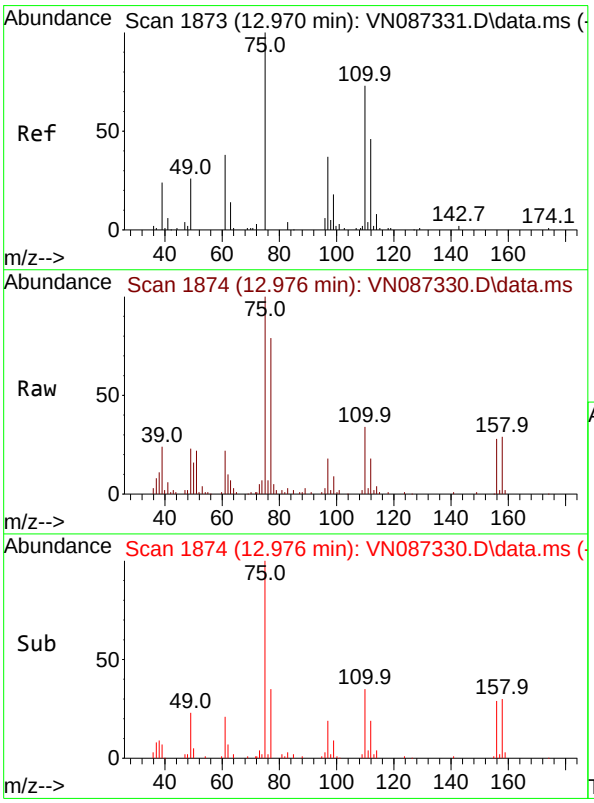
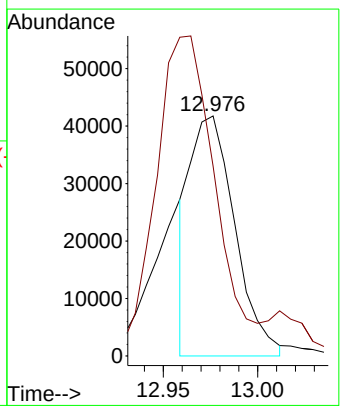


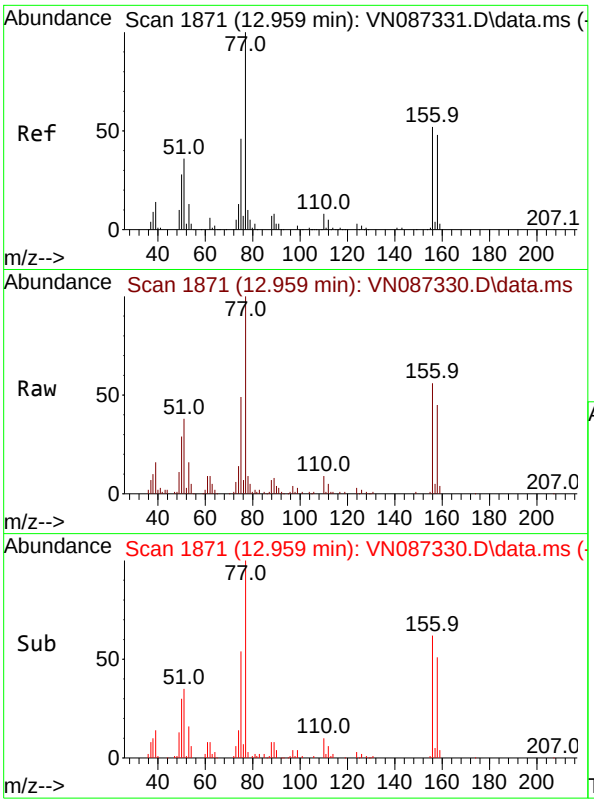


#76
1,2,3-Trichloropropane
Concen: 19.858 ug/l m
RT: 12.976 min Scan# 1874
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 75 Resp: 68839

Ion	Ratio	Lower	Upper
75	100		
77	176.6	94.5	283.6





#77
Bromobenzene
Concen: 21.127 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:156 Resp: 5388

Ion	Ratio	Lower	Upper
156	100		
77	225.6	114.9	344.6
158	93.0	48.5	145.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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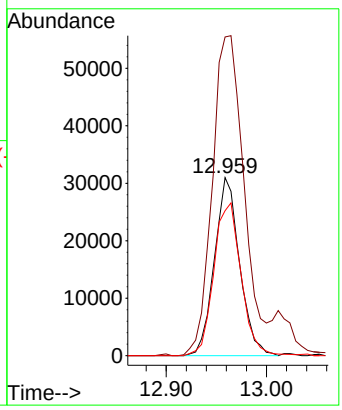
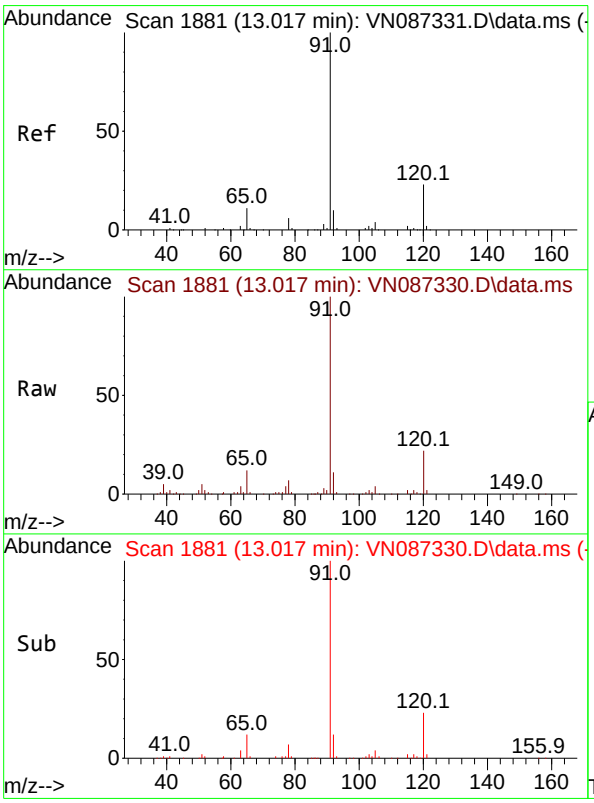
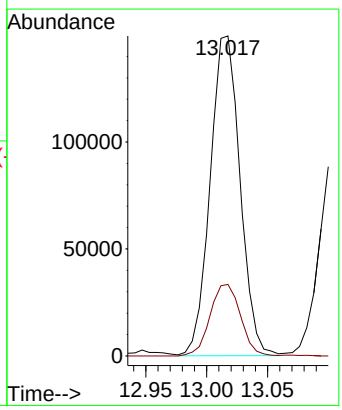


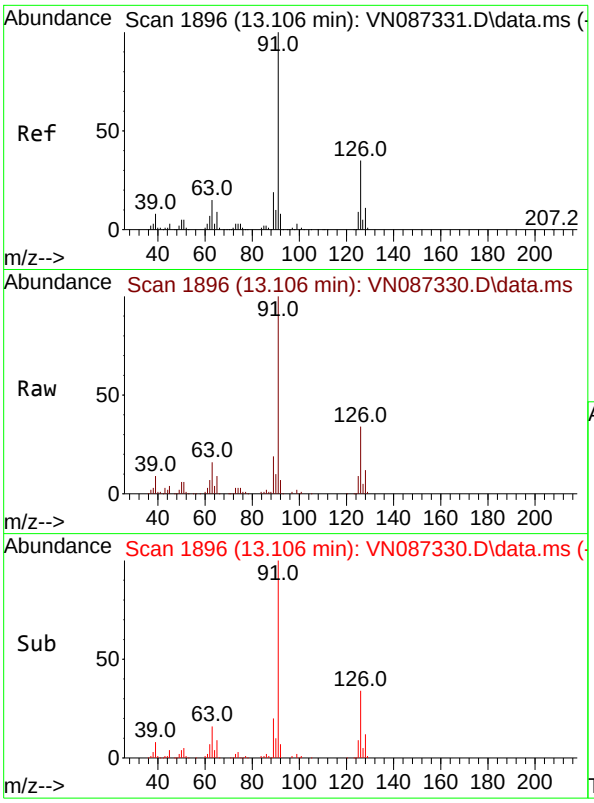


#78
n-propylbenzene
Concen: 20.656 ug/l
RT: 13.017 min Scan# 1881
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 91 Resp: 255577

Ion	Ratio	Lower	Upper
91	100		
120	22.7	11.3	33.8





#79
2-Chlorotoluene
Concen: 20.836 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 91 Resp: 15843

Ion	Ratio	Lower	Upper
91	100		
126	31.5	16.9	50.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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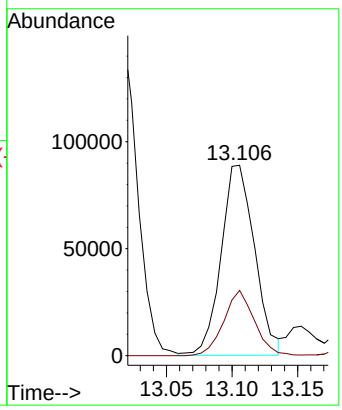
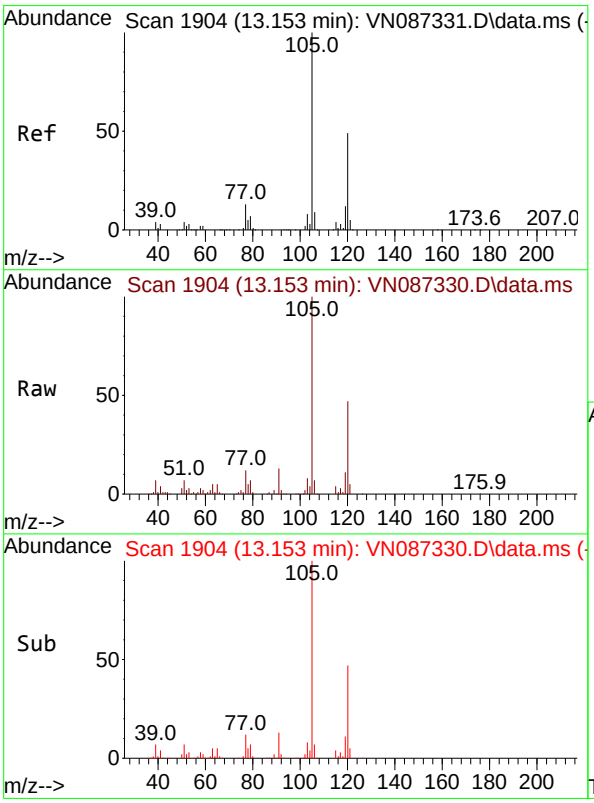
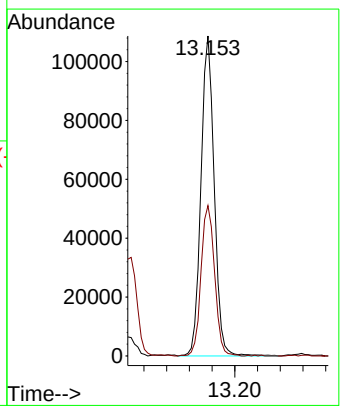


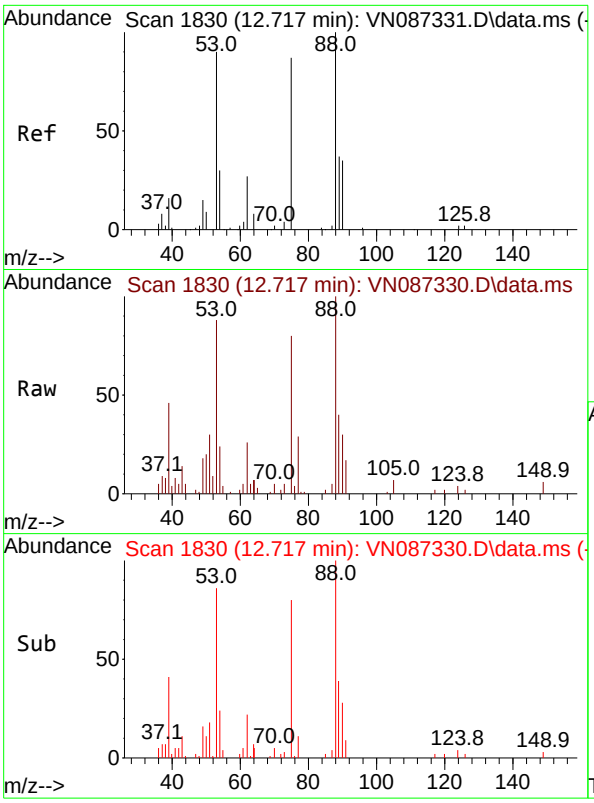


#80
1,3,5-Trimethylbenzene
Concen: 21.006 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:105 Resp: 176006

Ion	Ratio	Lower	Upper
105	100		
120	48.1	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 21.846 ug/l
RT: 12.717 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion: 75 Resp: 2797

Ion	Ratio	Lower	Upper
75	100		
53	93.5	83.5	125.3
89	42.7	38.4	57.6

Manual Integrations
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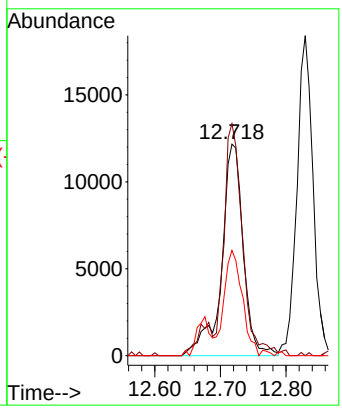
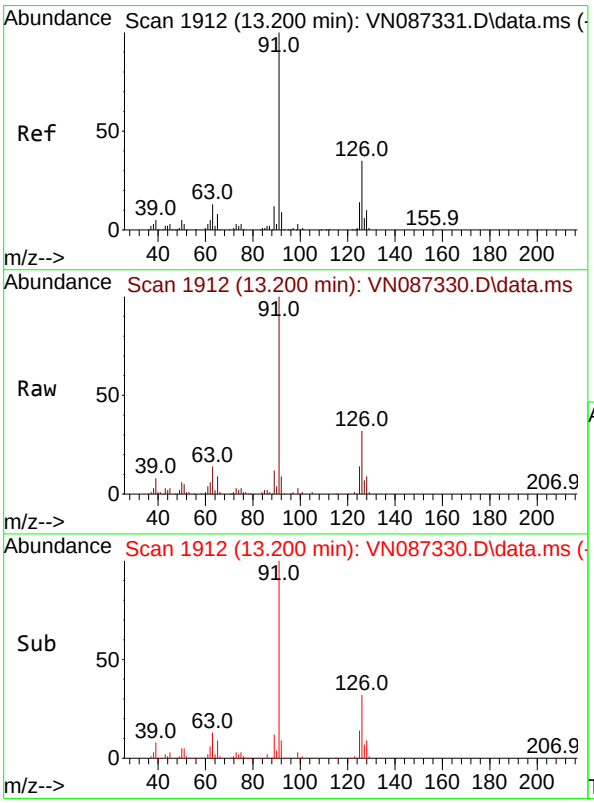
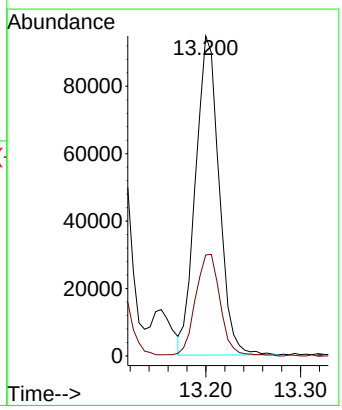


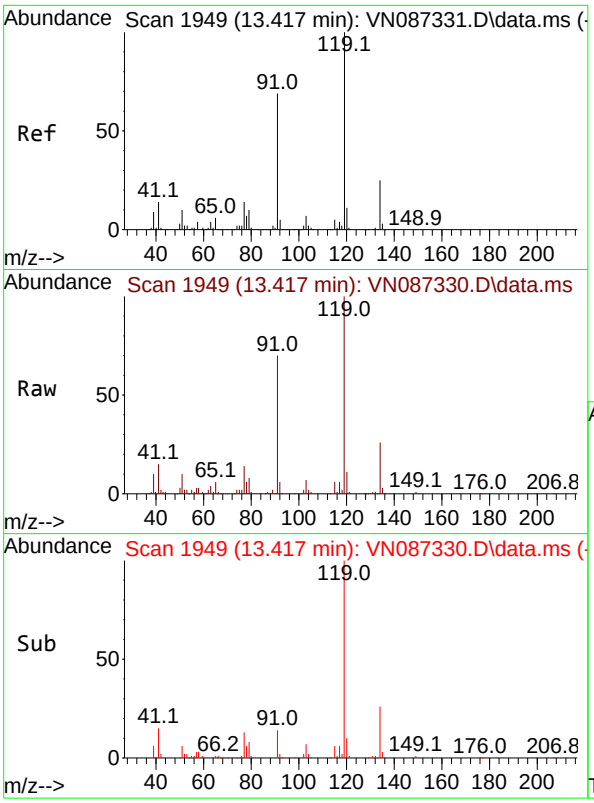


#82
4-Chlorotoluene
Concen: 20.667 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 91 Resp: 163615

Ion	Ratio	Lower	Upper
91	100		
126	33.7	16.6	49.7

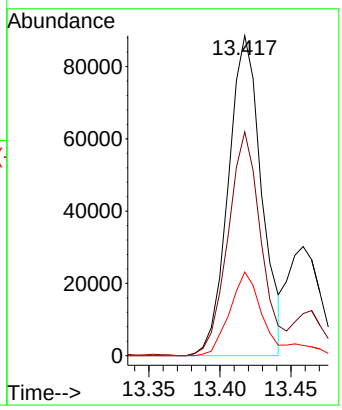




#83
tert-Butylbenzene
Concen: 20.571 ug/l
RT: 13.417 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:119 Resp: 14395

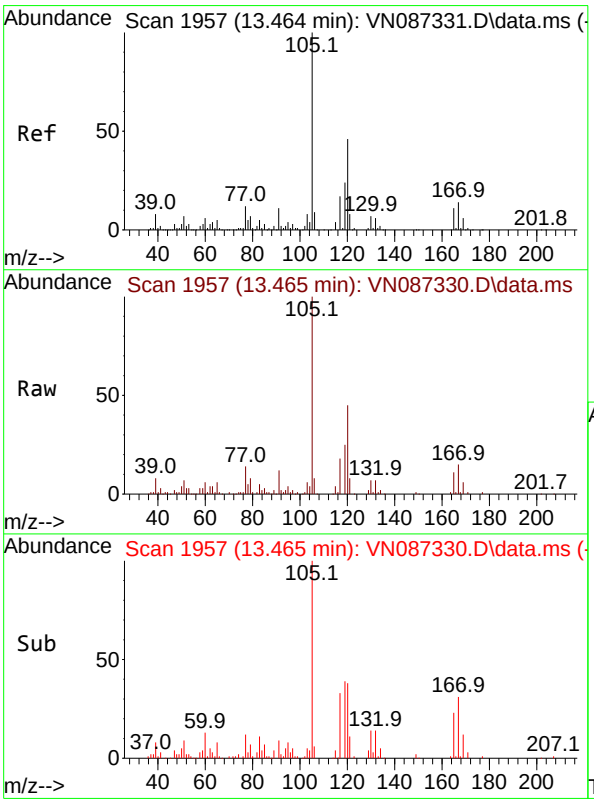
Ion	Ratio	Lower	Upper
119	100		
91	70.2	35.0	105.1
134	27.9	12.6	37.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

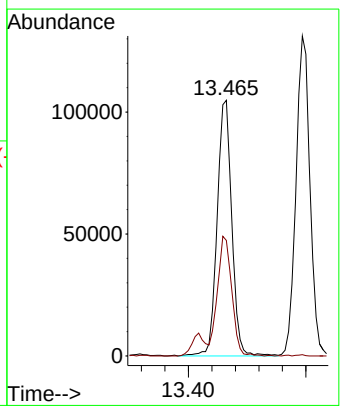
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

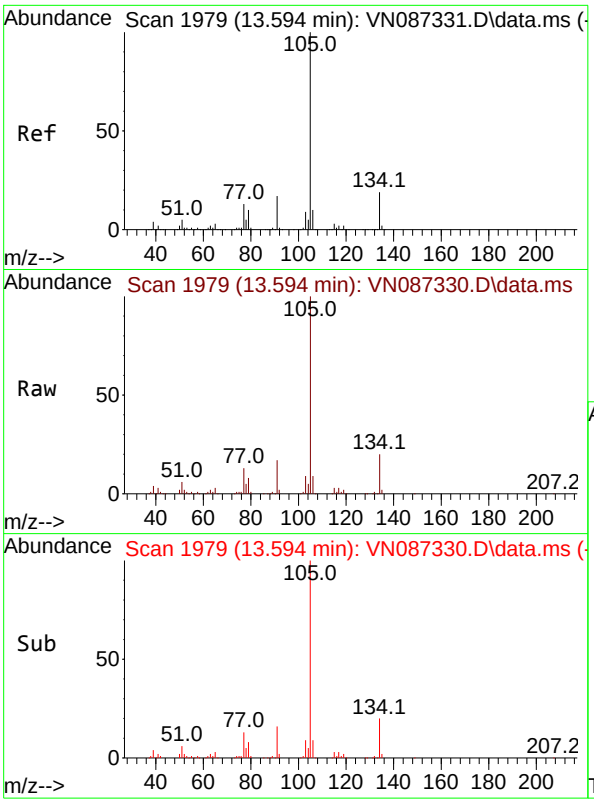


#84
1,2,4-Trimethylbenzene
Concen: 21.226 ug/l
RT: 13.465 min Scan# 1957
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:105 Resp: 181623

Ion	Ratio	Lower	Upper
105	100		
120	45.6	22.8	68.3

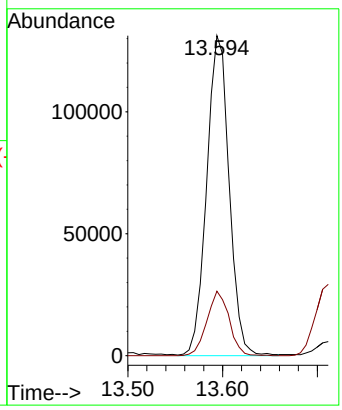




#85
sec-Butylbenzene
Concen: 20.516 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:105 Resp: 21625

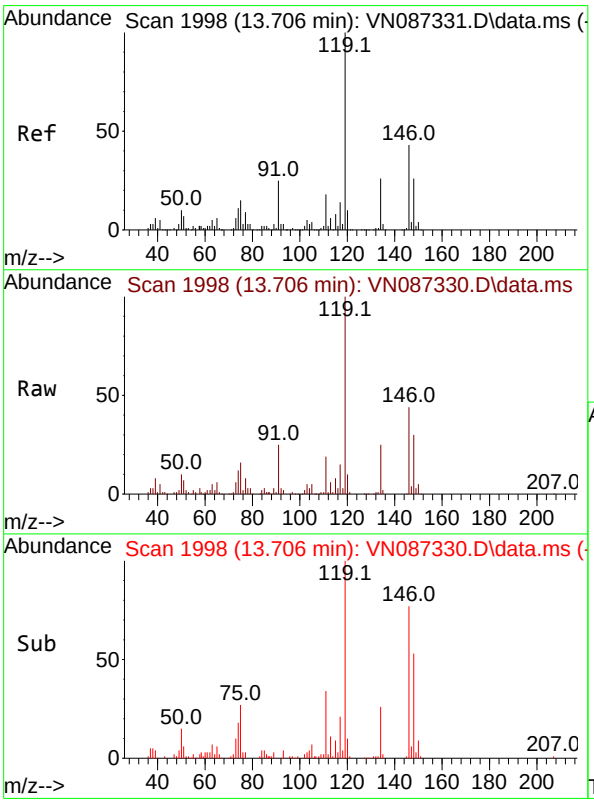
Ion	Ratio	Lower	Upper
105	100		
134	19.9	9.8	29.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

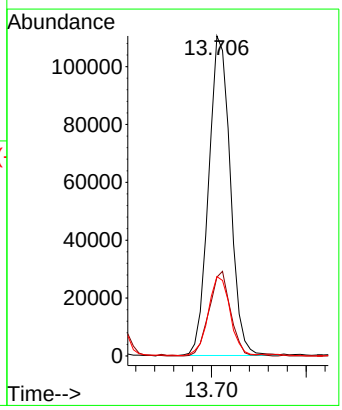
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

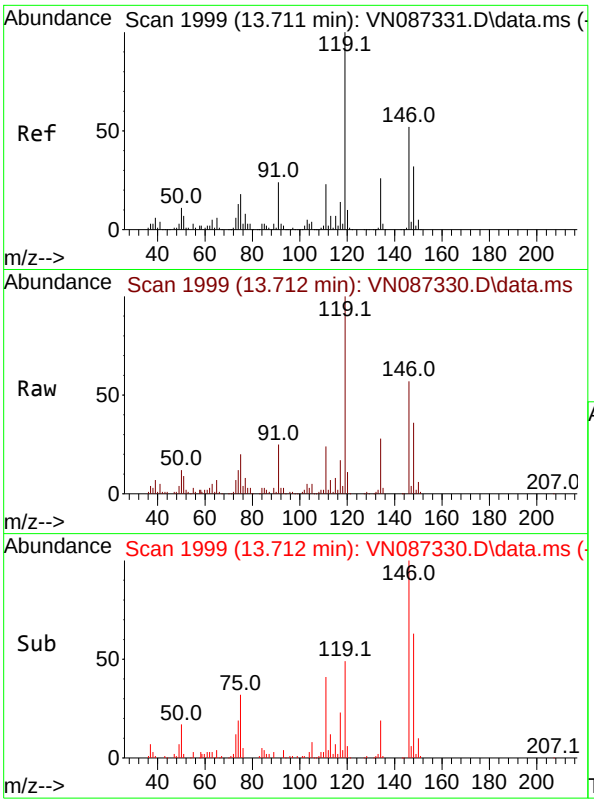


#86
p-Isopropyltoluene
Concen: 20.758 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:119 Resp: 175352

Ion	Ratio	Lower	Upper
119	100		
134	26.2	13.5	40.5
91	25.0	12.2	36.6

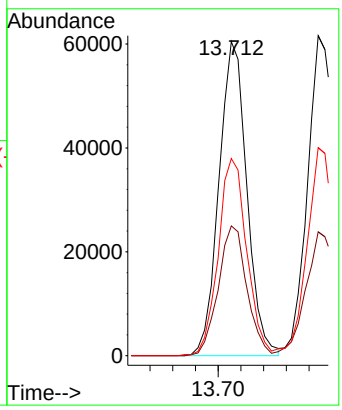




#87
1,3-Dichlorobenzene
Concen: 20.609 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:146 Resp: 10315

Ion	Ratio	Lower	Upper
146	100		
111	42.3	21.4	64.3
148	63.9	31.6	95.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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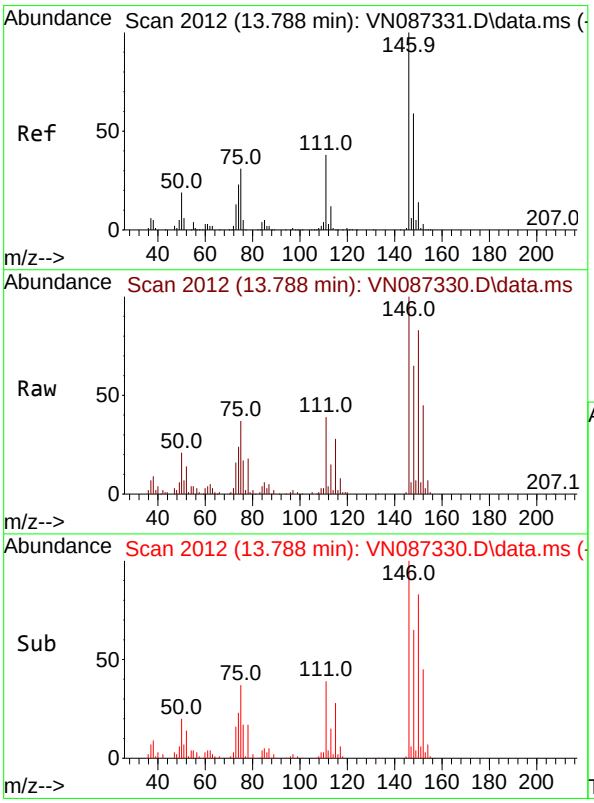
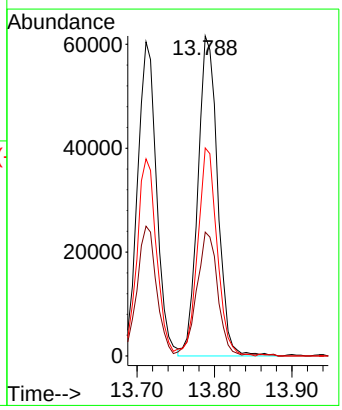
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

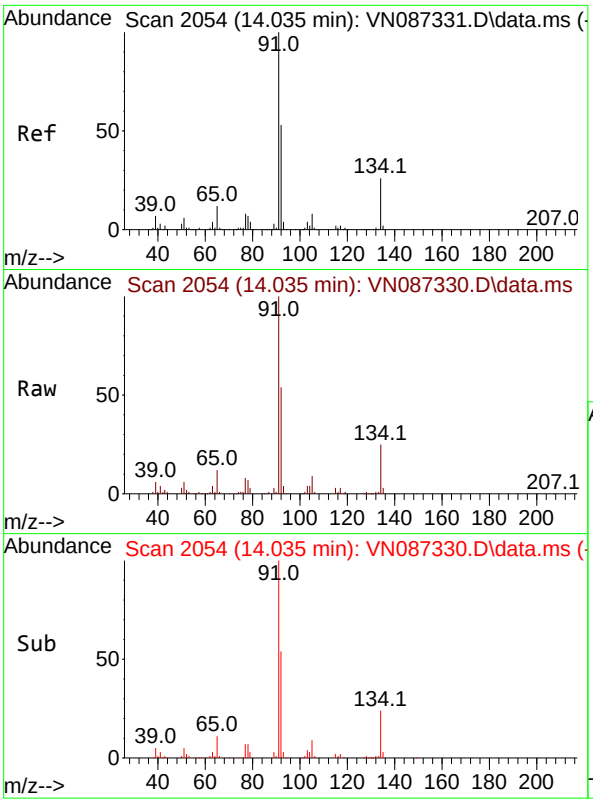


#88
1,4-Dichlorobenzene
Concen: 20.370 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:146 Resp: 108898

Ion	Ratio	Lower	Upper
146	100		
111	40.3	19.6	58.7
148	63.9	31.4	94.0

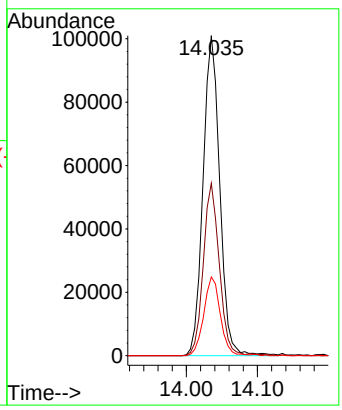




#89
n-Butylbenzene
Concen: 20.516 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 91 Resp: 16548

Ion	Ratio	Lower	Upper
91	100		
92	51.8	26.2	78.6
134	24.5	12.4	37.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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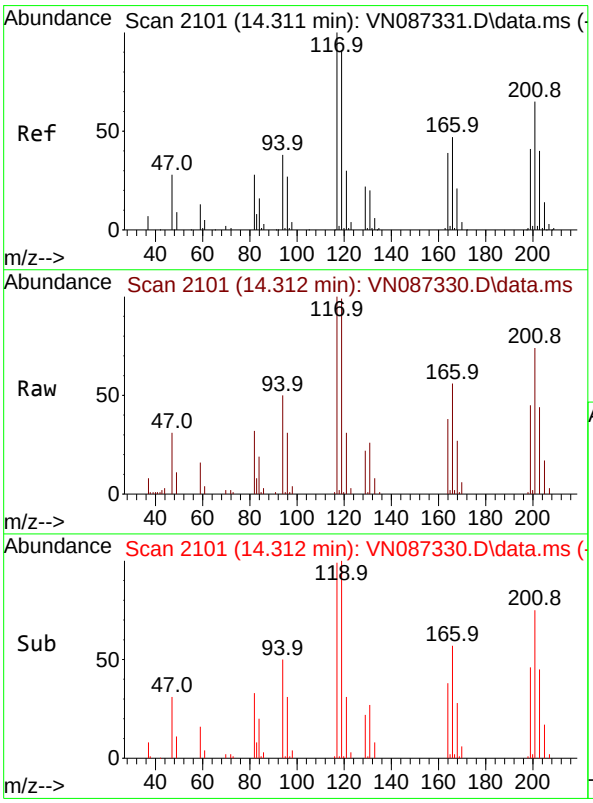
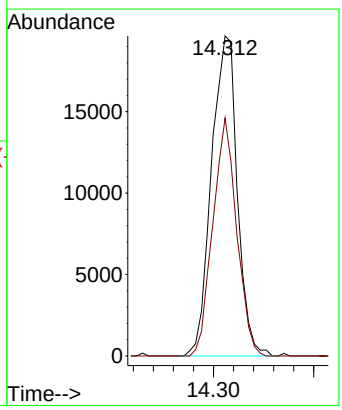
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

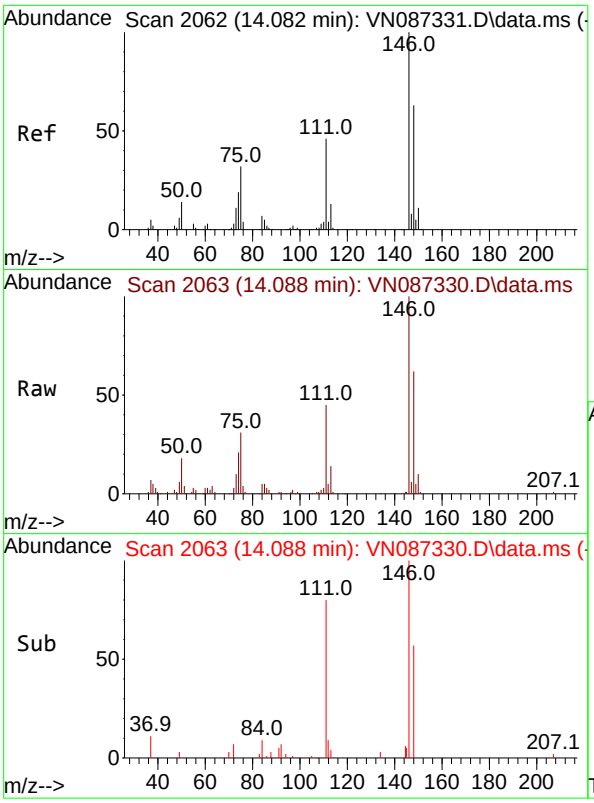


#90
Hexachloroethane
Concen: 19.615 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:117 Resp: 35108

Ion	Ratio	Lower	Upper
117	100		
201	68.6	32.8	98.4

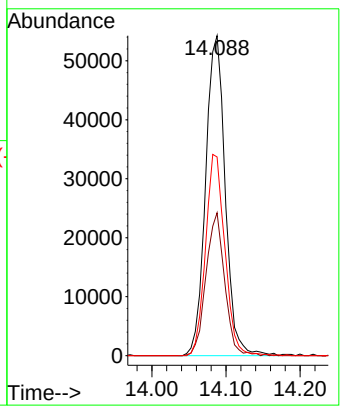




#91
1,2-Dichlorobenzene
Concen: 21.036 ug/l
RT: 14.088 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:146 Resp: 9975

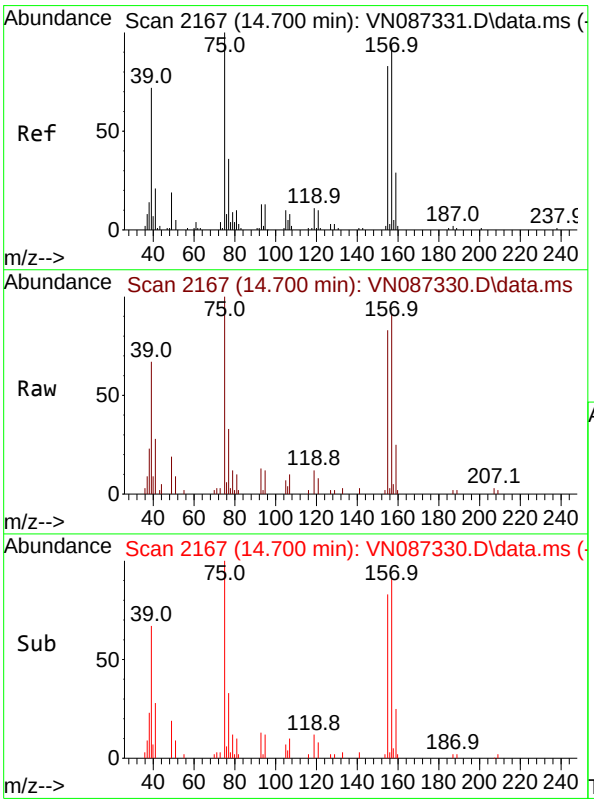
Ion	Ratio	Lower	Upper
146	100		
111	42.6	22.0	66.0
148	62.0	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

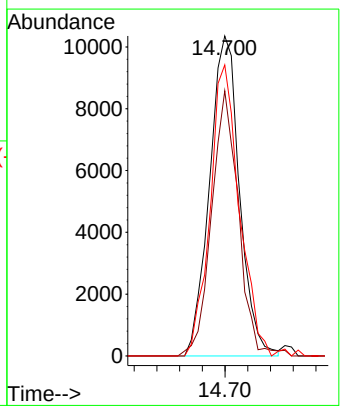
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

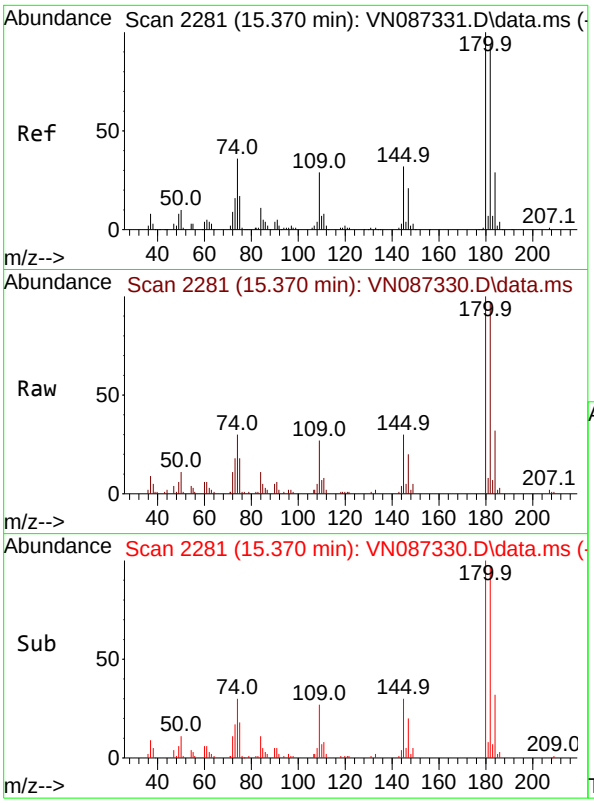


#92
1,2-Dibromo-3-Chloropropane
Concen: 19.573 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion: 75 Resp: 19015

Ion	Ratio	Lower	Upper
75	100		
155	74.2	37.3	111.8
157	89.0	46.2	138.6





#93
1,2,4-Trichlorobenzene
Concen: 19.643 ug/l
RT: 15.370 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

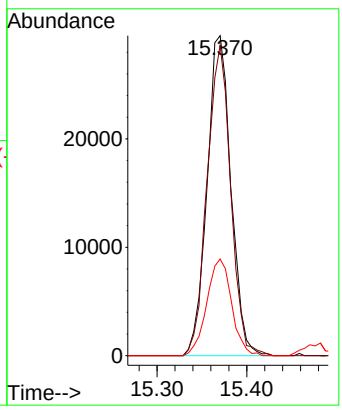
Tgt Ion:180 Resp: 5471

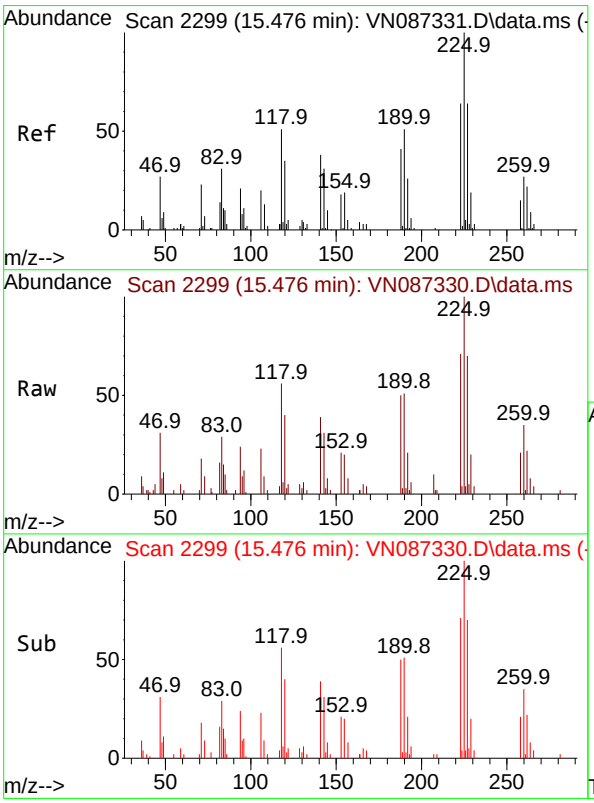
Ion	Ratio	Lower	Upper
180	100		
182	95.4	47.3	141.8
145	31.3	15.4	46.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

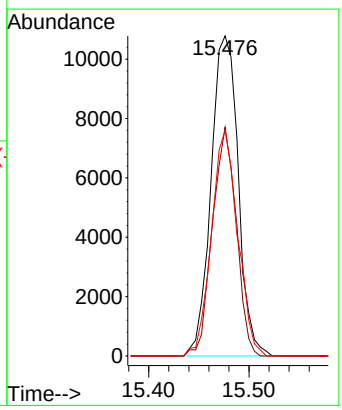


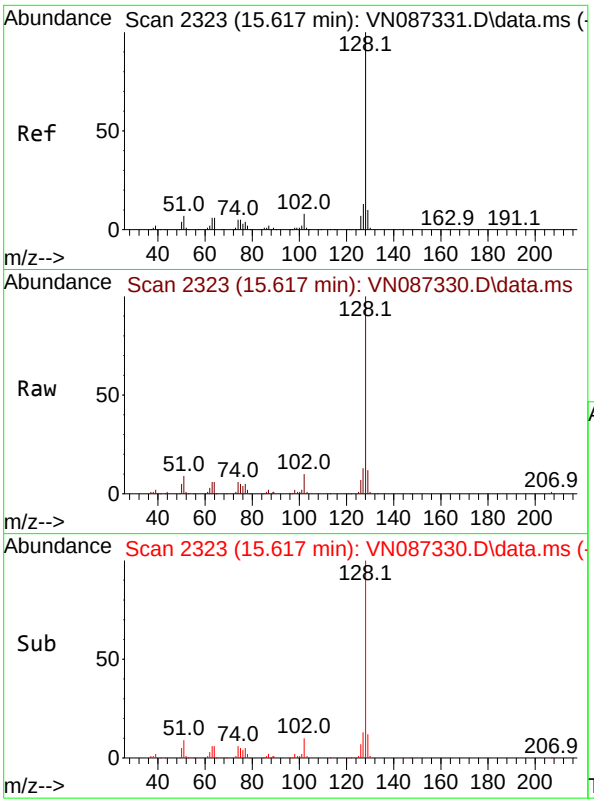


#94
Hexachlorobutadiene
Concen: 19.563 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:225 Resp: 20248

Ion	Ratio	Lower	Upper
225	100		
223	62.9	32.1	96.3
227	68.0	31.3	93.9

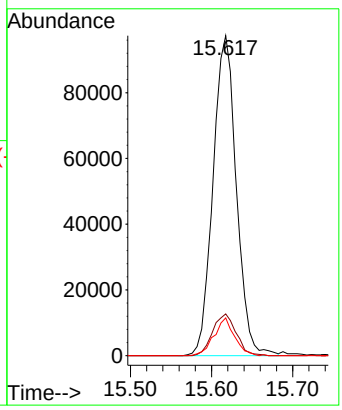




#95
Naphthalene
Concen: 19.718 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:128 Resp: 19457

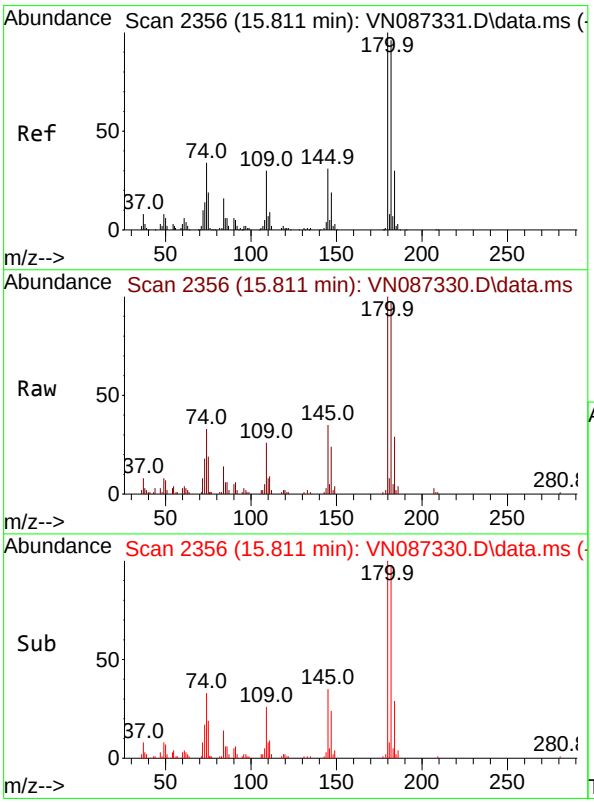
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.5	15.7
129	10.5	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

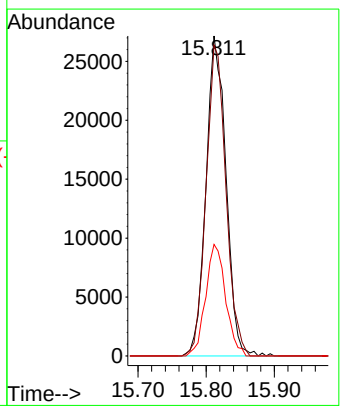
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 19.850 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087330.D
Acq: 16 Jul 2025 17:49

Tgt Ion:180 Resp: 55463

Ion	Ratio	Lower	Upper
180	100		
182	96.4	47.1	141.4
145	34.8	16.9	50.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087331.D
Acq On : 16 Jul 2025 18:11
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:19:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	182792	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	325711	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	300150	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	158477	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	146559	47.253	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 94.500%			
35) Dibromofluoromethane	8.147	113	108271	48.190	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 96.380%			
50) Toluene-d8	10.547	98	398776	49.757	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 99.520%			
62) 4-Bromofluorobenzene	12.829	95	148158	50.037	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 100.080%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	113853	58.643	ug/l	100
3) Chloromethane	2.383	50	126054	51.631	ug/l	100
4) Vinyl Chloride	2.542	62	132985	54.810	ug/l	100
5) Bromomethane	2.971	94	64982	51.719	ug/l	100
6) Chloroethane	3.130	64	80606	50.942	ug/l	100
7) Trichlorofluoromethane	3.506	101	187302	52.206	ug/l	100
8) Diethyl Ether	3.959	74	72151	51.843	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.359	101	95895	52.068	ug/l	100
10) Methyl Iodide	4.577	142	90277	47.912	ug/l	100
11) Tert butyl alcohol	5.524	59	146939	249.504	ug/l	100
12) 1,1-Dichloroethene	4.330	96	99569	47.708	ug/l	100
13) Acrolein	4.177	56	110711	234.247	ug/l	100
14) Allyl chloride	5.012	41	183089	48.475	ug/l	100
15) Acrylonitrile	5.712	53	414273	259.227	ug/l	100
16) Acetone	4.424	43	353373	240.328	ug/l	100
17) Carbon Disulfide	4.694	76	316833	51.205	ug/l	100
18) Methyl Acetate	5.012	43	181199	49.594	ug/l	100
19) Methyl tert-butyl Ether	5.788	73	396133	51.495	ug/l	100
20) Methylene Chloride	5.259	84	122921	50.001	ug/l	100
21) trans-1,2-Dichloroethene	5.771	96	119278	50.687	ug/l	100
22) Diisopropyl ether	6.665	45	417843	52.740	ug/l	100
23) Vinyl Acetate	6.588	43	1931809	278.796	ug/l	100
24) 1,1-Dichloroethane	6.553	63	223298	48.853	ug/l	100
25) 2-Butanone	7.471	43	588032	261.702	ug/l	100
26) 2,2-Dichloropropane	7.471	77	179431	50.492	ug/l	100
27) cis-1,2-Dichloroethene	7.471	96	140194	51.746	ug/l	100
28) Bromochloromethane	7.800	49	108748	49.713	ug/l	100
29) Tetrahydrofuran	7.829	42	388704	266.294	ug/l	100
30) Chloroform	7.953	83	233747	51.092	ug/l	100
31) Cyclohexane	8.241	56	191116	50.122	ug/l	100
32) 1,1,1-Trichloroethane	8.153	97	198135	50.002	ug/l	100
36) 1,1-Dichloropropene	8.353	75	158563	53.418	ug/l	100
37) Ethyl Acetate	7.547	43	230005	53.652	ug/l	100
38) Carbon Tetrachloride	8.347	117	168403	51.501	ug/l	100
39) Methylcyclohexane	9.582	83	172297	53.614	ug/l	100
40) Benzene	8.594	78	505723	52.714	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087331.D
Acq On : 16 Jul 2025 18:11
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:19:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.771	41	119895	53.486	ug/l		100
42) 1,2-Dichloroethane	8.653	62	184670	50.759	ug/l		100
43) Isopropyl Acetate	8.677	43	348709	52.399	ug/l		100
44) Trichloroethene	9.335	130	115974	51.160	ug/l		100
45) 1,2-Dichloropropane	9.606	63	128530	52.726	ug/l		100
46) Dibromomethane	9.688	93	94179	51.601	ug/l		100
47) Bromodichloromethane	9.871	83	185222	50.382	ug/l		100
48) Methyl methacrylate	9.665	41	164476	54.899	ug/l		100
49) 1,4-Dioxane	9.682	88	52072	1134.802	ug/l	#	100
51) 4-Methyl-2-Pentanone	10.429	43	1122857	266.771	ug/l		100
52) Toluene	10.612	92	313806	53.814	ug/l		100
53) t-1,3-Dichloropropene	10.818	75	202129	54.327	ug/l		100
54) cis-1,3-Dichloropropene	10.294	75	205720	53.529	ug/l		100
55) 1,1,2-Trichloroethane	11.000	97	119612	50.666	ug/l		100
56) Ethyl methacrylate	10.859	69	204376	51.427	ug/l		100
57) 1,3-Dichloropropane	11.141	76	213343	52.267	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.141	63	562790	290.607	ug/l		100
59) 2-Hexanone	11.182	43	806824	288.920	ug/l		100
60) Dibromochloromethane	11.341	129	139955	51.982	ug/l		100
61) 1,2-Dibromoethane	11.453	107	125416	50.525	ug/l		100
64) Tetrachloroethene	11.088	164	96176	49.786	ug/l		100
65) Chlorobenzene	11.870	112	335833	49.837	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.941	131	117833	51.425	ug/l		100
67) Ethyl Benzene	11.947	91	582851	52.540	ug/l		100
68) m/p-Xylenes	12.053	106	455017	109.536	ug/l		100
69) o-Xylene	12.376	106	217121	54.717	ug/l		100
70) Styrene	12.394	104	376745	56.440	ug/l		100
71) Bromoform	12.559	173	98549	53.237	ug/l	#	100
73) Isopropylbenzene	12.676	105	538245	53.964	ug/l		100
74) N-amyl acetate	12.494	43	180343m	46.310	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.917	83	191273	50.964	ug/l		100
76) 1,2,3-Trichloropropane	12.970	75	188824m	53.705	ug/l		
77) Bromobenzene	12.959	156	137669	53.221	ug/l		100
78) n-propylbenzene	13.017	91	680506	54.227	ug/l		100
79) 2-Chlorotoluene	13.106	91	401444	52.051	ug/l		100
80) 1,3,5-Trimethylbenzene	13.153	105	464063	54.607	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.717	75	63993	49.271	ug/l		100
82) 4-Chlorotoluene	13.200	91	419474	52.240	ug/l		100
83) tert-Butylbenzene	13.417	119	383986	54.099	ug/l		100
84) 1,2,4-Trimethylbenzene	13.464	105	475982	54.846	ug/l		100
85) sec-Butylbenzene	13.594	105	565038	52.851	ug/l		100
86) p-Isopropyltoluene	13.706	119	473942	55.316	ug/l		100
87) 1,3-Dichlorobenzene	13.711	146	262675	51.740	ug/l		100
88) 1,4-Dichlorobenzene	13.788	146	269881	49.773	ug/l		100
89) n-Butylbenzene	14.035	91	437514	53.478	ug/l		100
90) Hexachloroethane	14.311	117	91313	50.301	ug/l		100
91) 1,2-Dichlorobenzene	14.082	146	249988	51.977	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.700	75	47931	48.643	ug/l		100
93) 1,2,4-Trichlorobenzene	15.370	180	148472	52.553	ug/l		100
94) Hexachlorobutadiene	15.476	225	52130	49.659	ug/l		100
95) Naphthalene	15.617	128	545367	54.490	ug/l		100
96) 1,2,3-Trichlorobenzene	15.811	180	146080	51.547	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087331.D
Acq On : 16 Jul 2025 18:11
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
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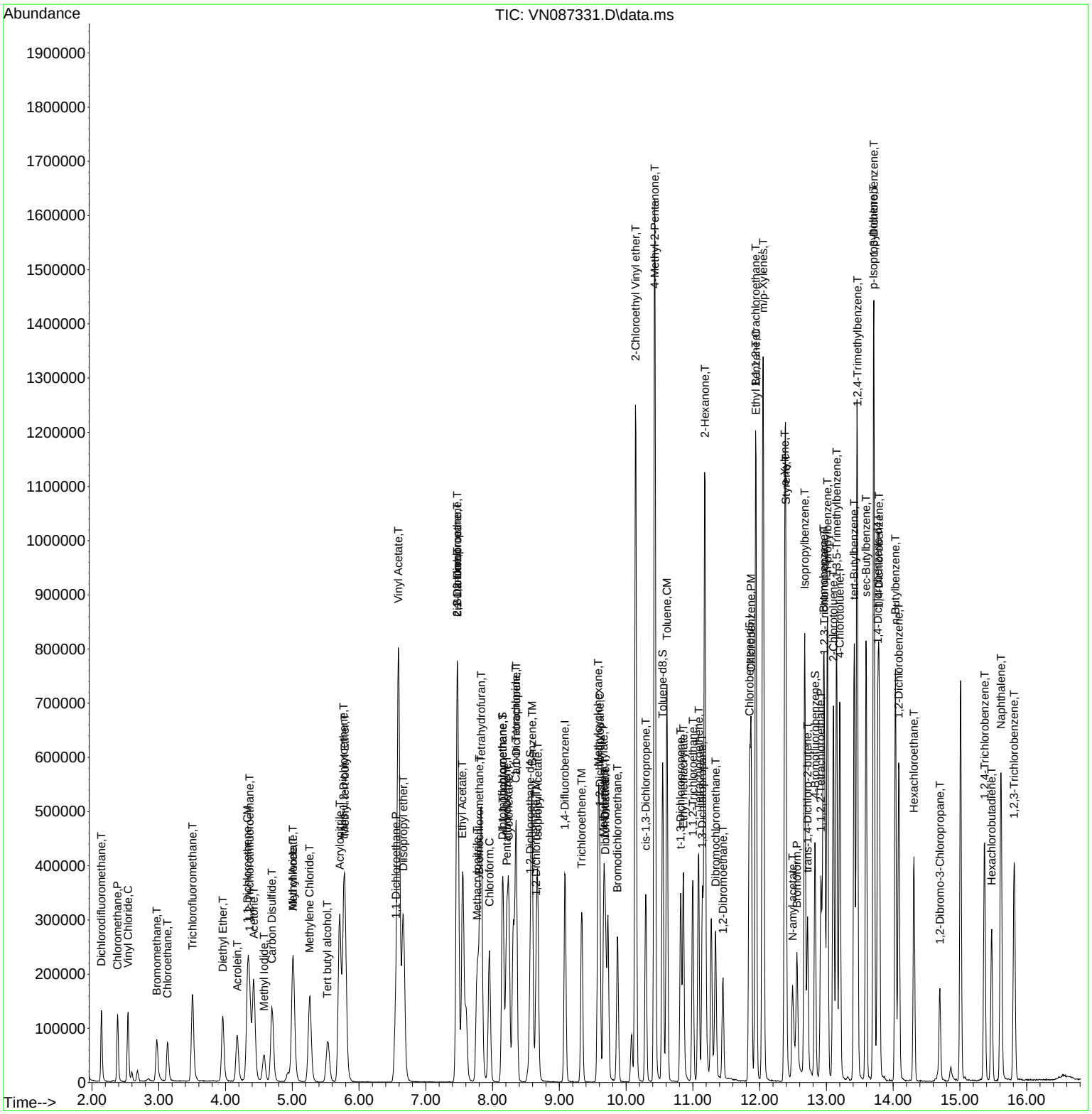
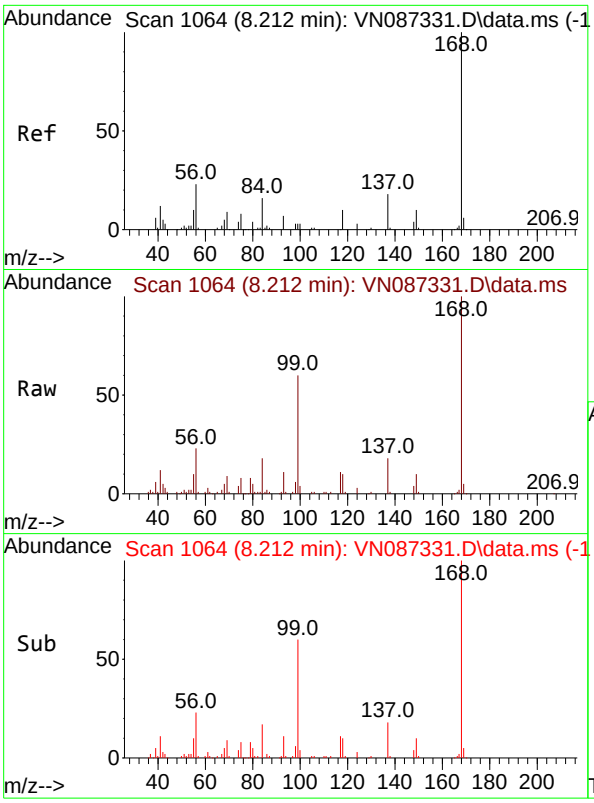
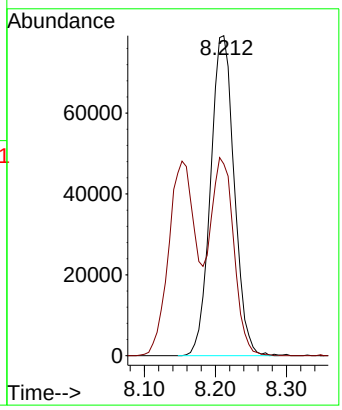




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:168 Resp: 18279

Ion	Ratio	Lower	Upper
168	100		
99	59.9	47.9	71.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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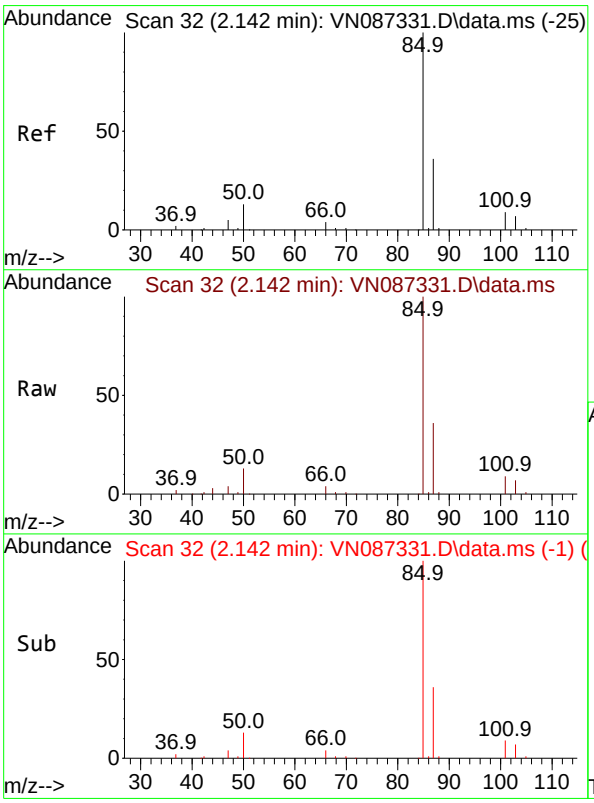
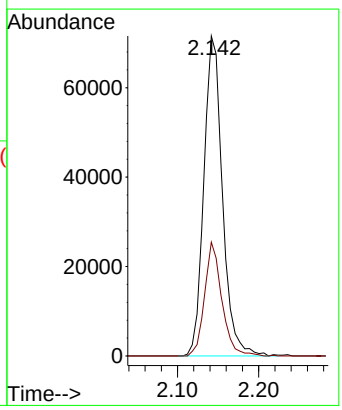
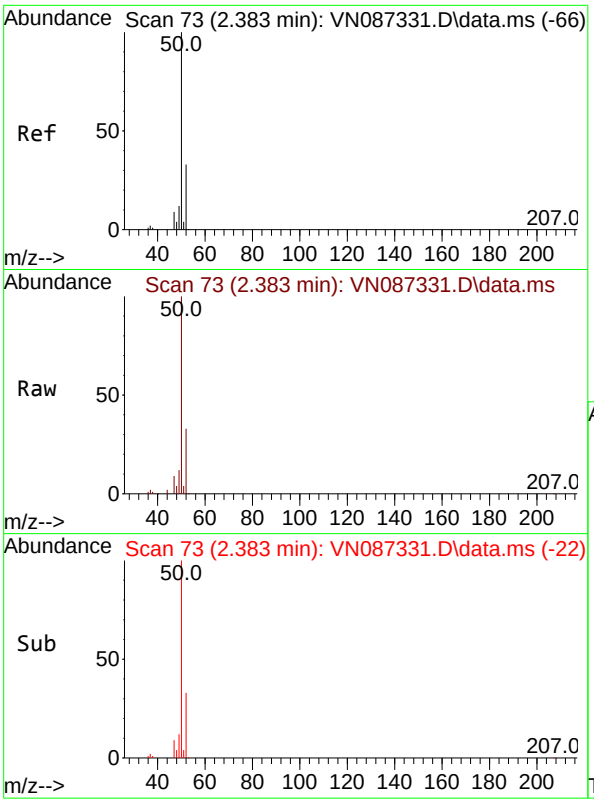


#2
Dichlorodifluoromethane
Concen: 58.643 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 85 Resp: 113853

Ion	Ratio	Lower	Upper
85	100		
87	35.5	17.8	53.3

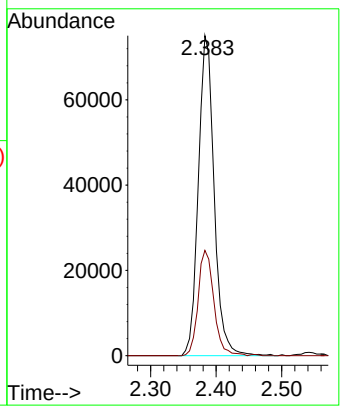




#3
Chloromethane
Concen: 51.631 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 50 Resp: 12605

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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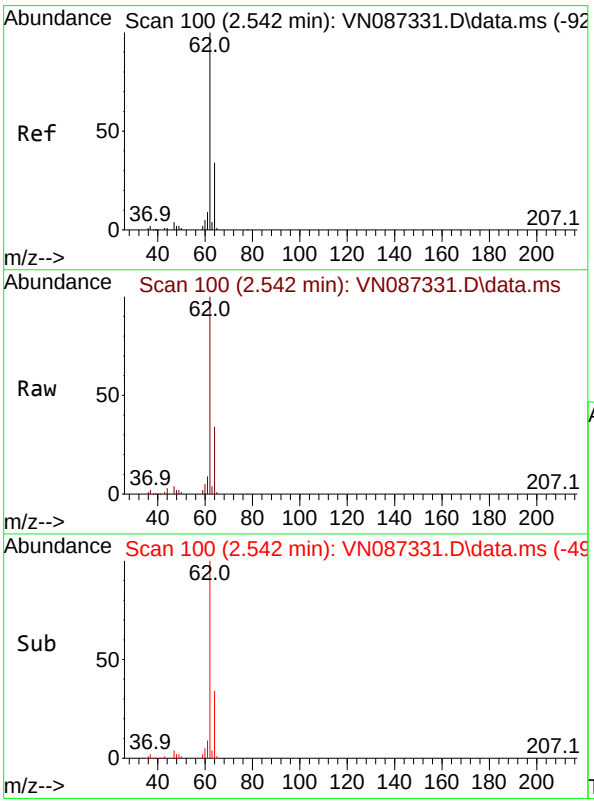
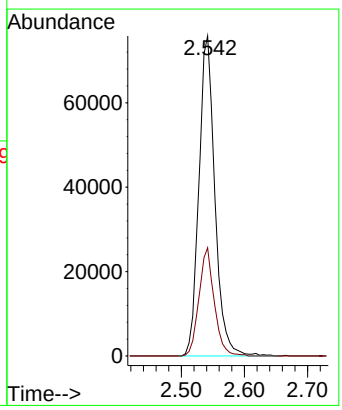
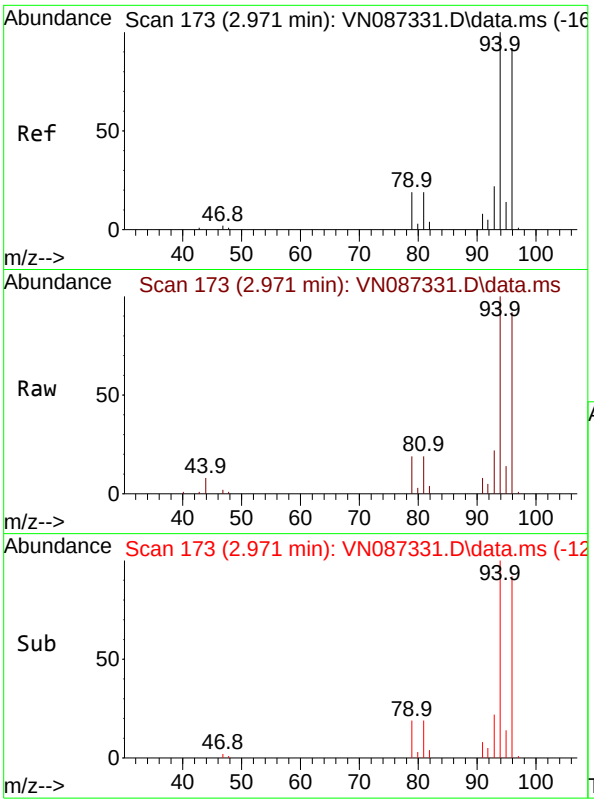


#4
Vinyl Chloride
Concen: 54.810 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 62 Resp: 132985

Ion	Ratio	Lower	Upper
62	100		
64	33.8	27.0	40.6

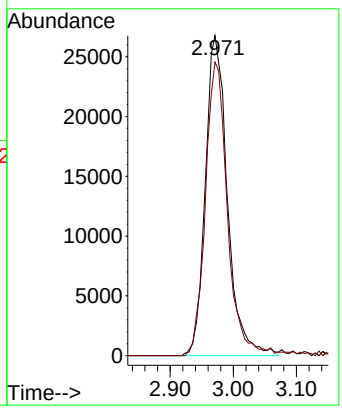




#5
Bromomethane
Concen: 51.719 ug/l
RT: 2.971 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 94 Resp: 6498

Ion	Ratio	Lower	Upper
94	100		
96	91.8	73.4	110.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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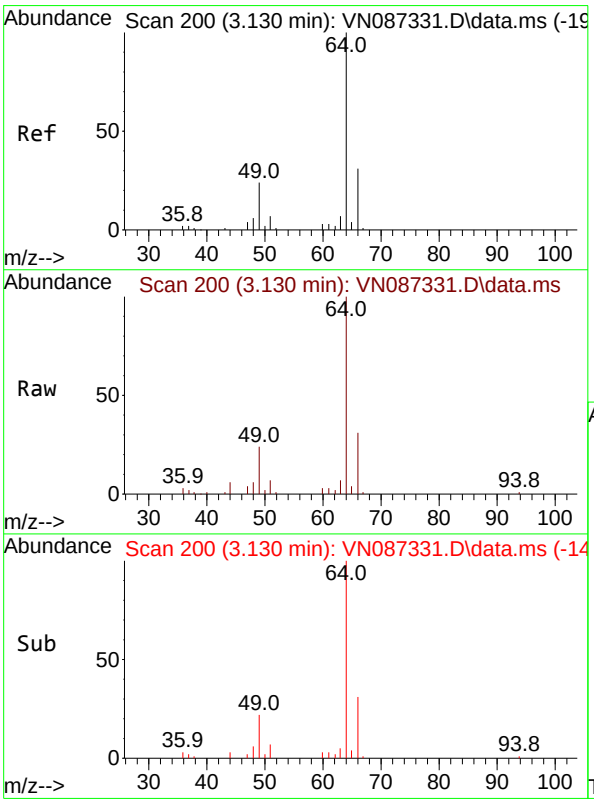
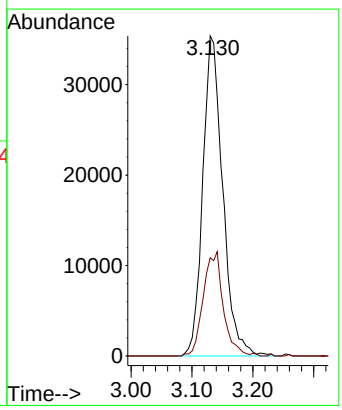
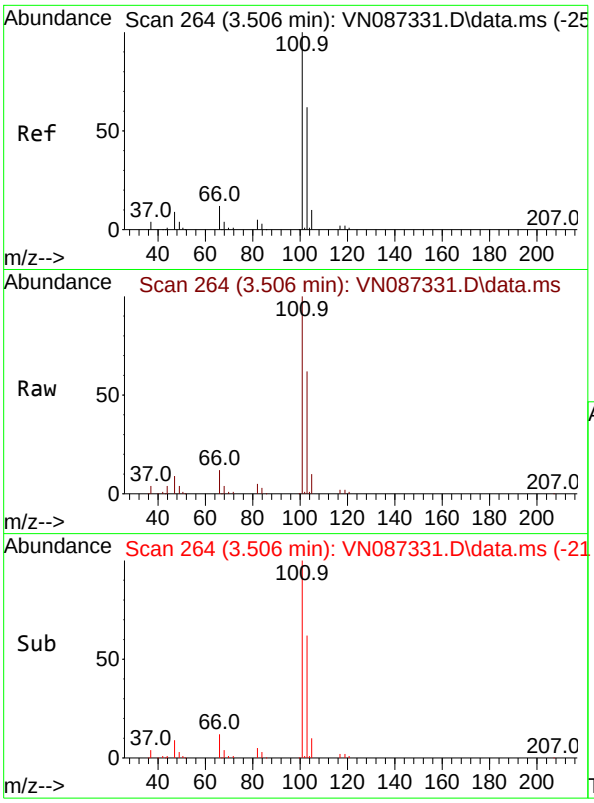


#6
Chloroethane
Concen: 50.942 ug/l
RT: 3.130 min Scan# 200
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 64 Resp: 80606

Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	36.8

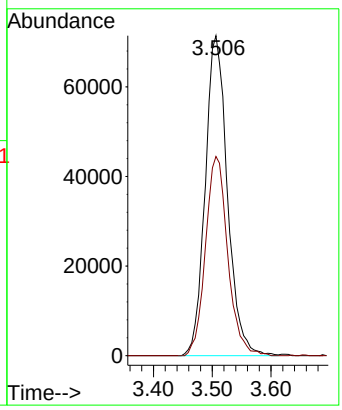




#7
Trichlorofluoromethane
Concen: 52.206 ug/l
RT: 3.506 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:101 Resp: 18730

Ion	Ratio	Lower	Upper
101	100		
103	62.2	49.8	74.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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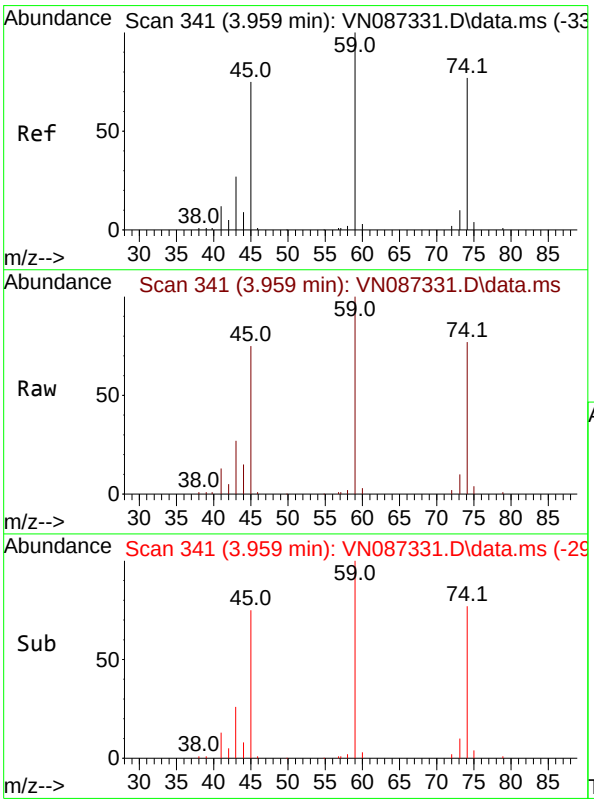
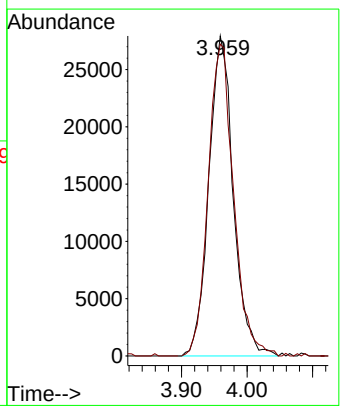
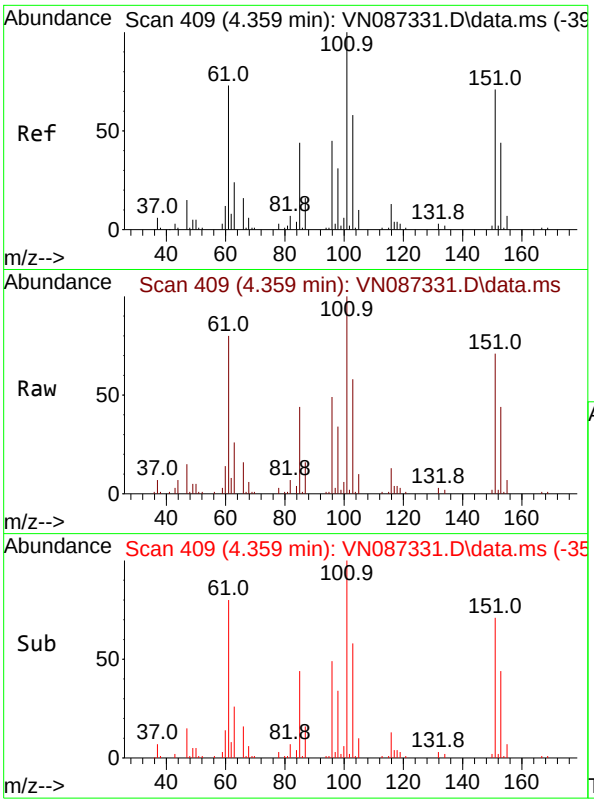


#8
Diethyl Ether
Concen: 51.843 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 74 Resp: 72151

Ion	Ratio	Lower	Upper
74	100		
45	101.7	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 52.068 ug/l
RT: 4.359 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:101 Resp: 9589

Ion	Ratio	Lower	Upper
101	100		
85	46.6	37.3	55.9
151	73.6	58.9	88.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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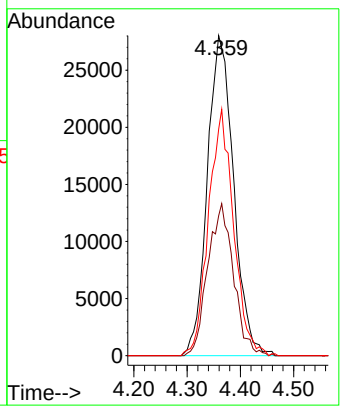
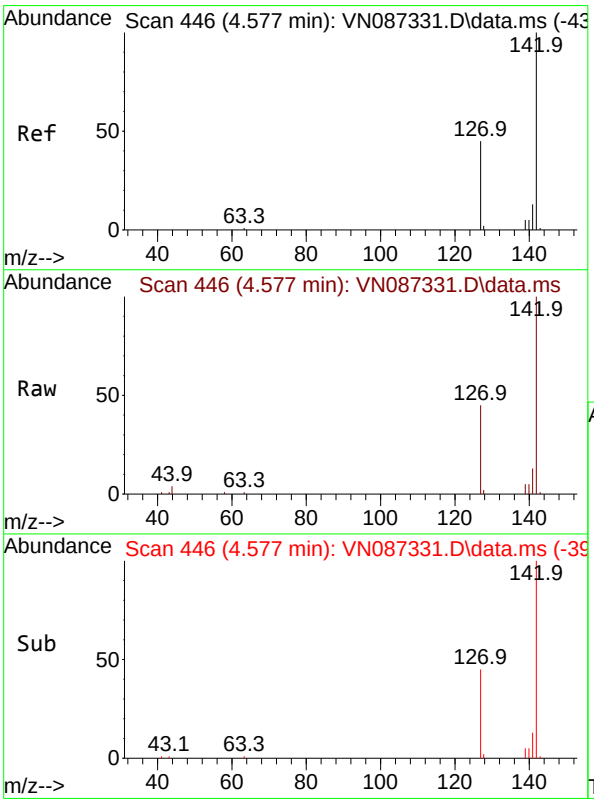
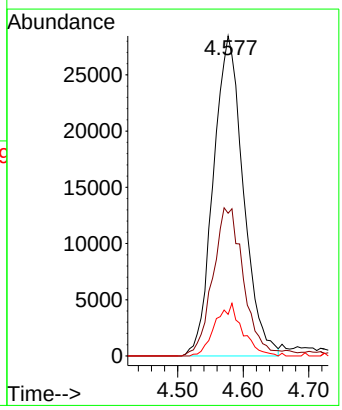


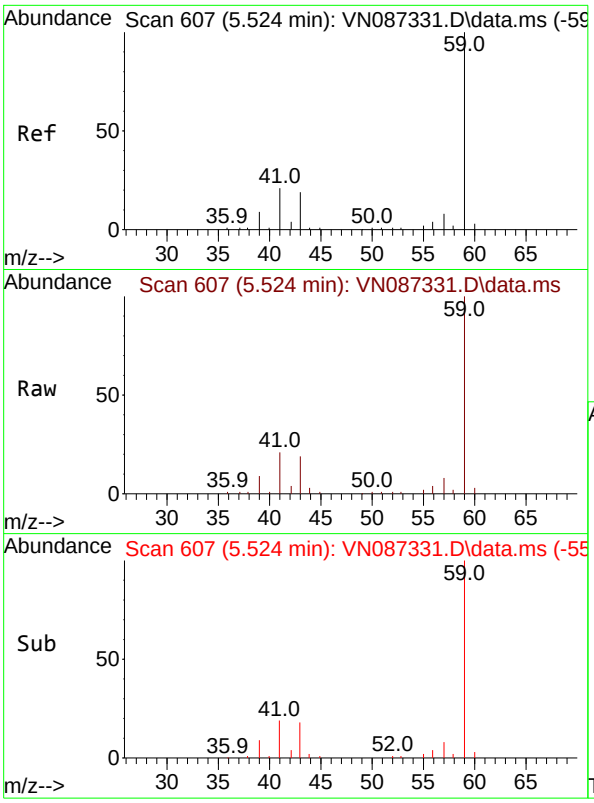


#10
Methyl Iodide
Concen: 47.912 ug/l
RT: 4.577 min Scan# 446
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:142 Resp: 90277

Ion	Ratio	Lower	Upper
142	100		
127	44.6	35.7	53.5
141	13.0	10.4	15.6

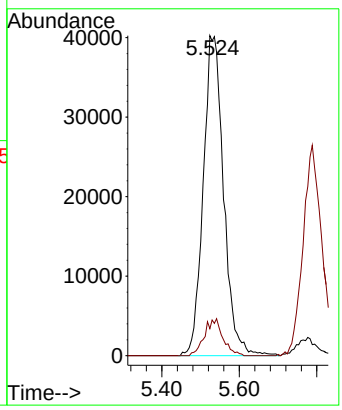




#11
Tert butyl alcohol
Concen: 249.504 ug/l
RT: 5.524 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 59 Resp: 14693

Ion	Ratio	Lower	Upper
59	100		
57	10.4	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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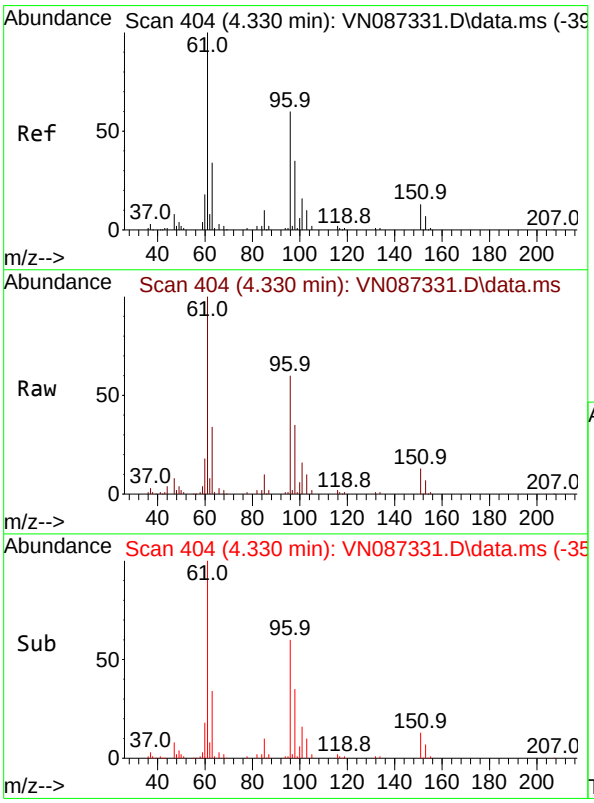
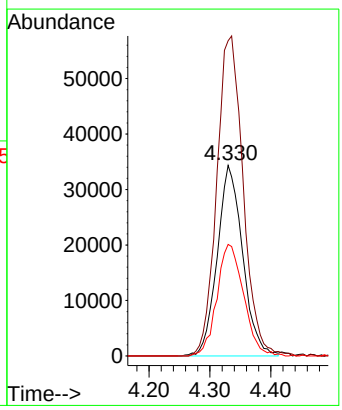
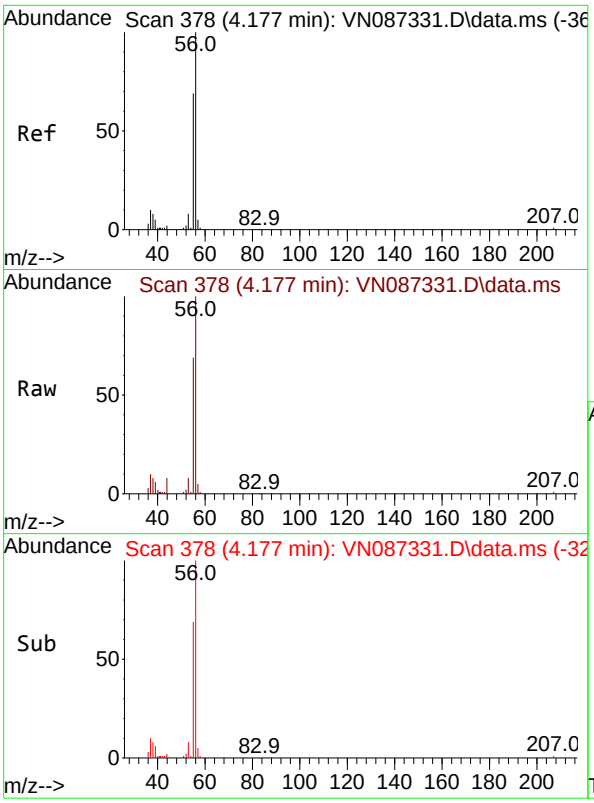


#12
1,1-Dichloroethene
Concen: 47.708 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 96 Resp: 99569

Ion	Ratio	Lower	Upper
96	100		
61	165.4	132.3	198.5
98	58.5	46.8	70.2

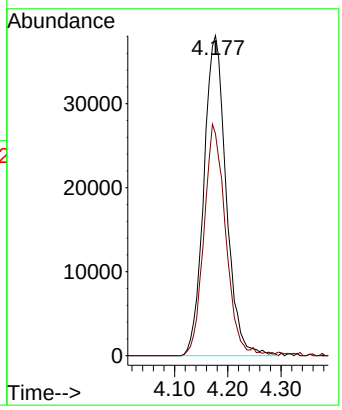




#13
Acrolein
Concen: 234.247 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 56 Resp: 11071

Ion	Ratio	Lower	Upper
56	100		
55	70.3	56.2	84.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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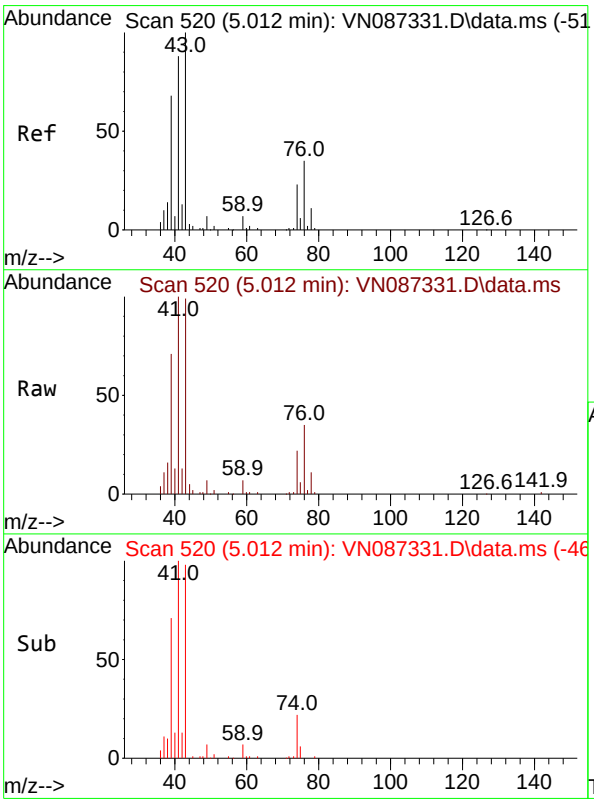
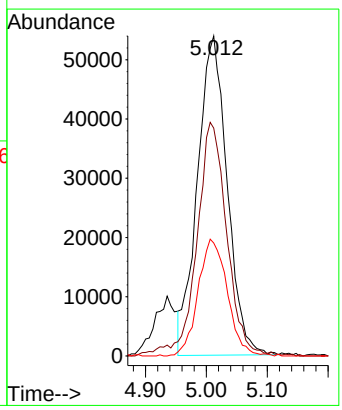
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

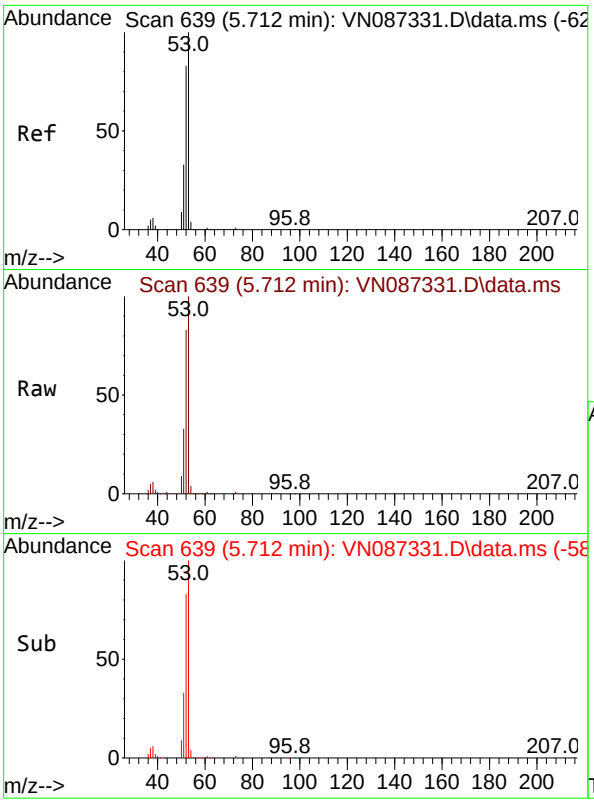


#14
Allyl chloride
Concen: 48.475 ug/l
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 41 Resp: 183089

Ion	Ratio	Lower	Upper
41	100		
39	73.8	59.0	88.6
76	35.9	28.7	43.1

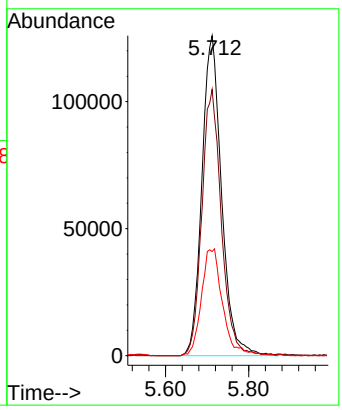




#15
Acrylonitrile
Concen: 259.227 ug/l
RT: 5.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 53 Resp: 41427

Ion	Ratio	Lower	Upper
53	100		
52	81.9	65.5	98.3
51	35.9	28.7	43.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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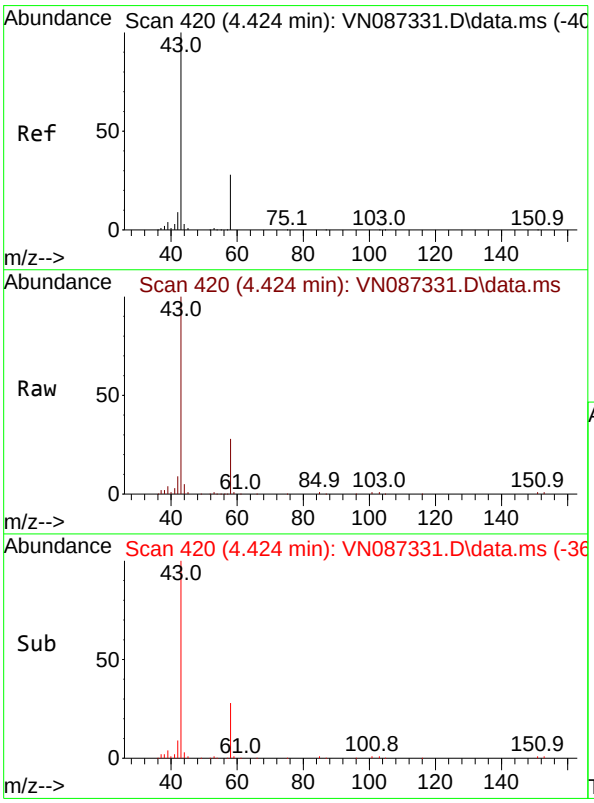
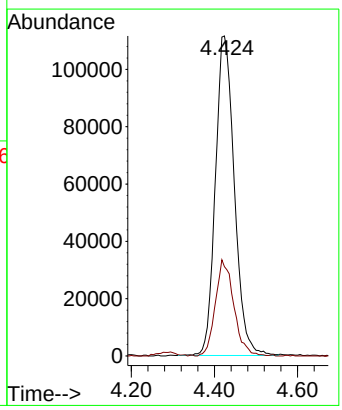
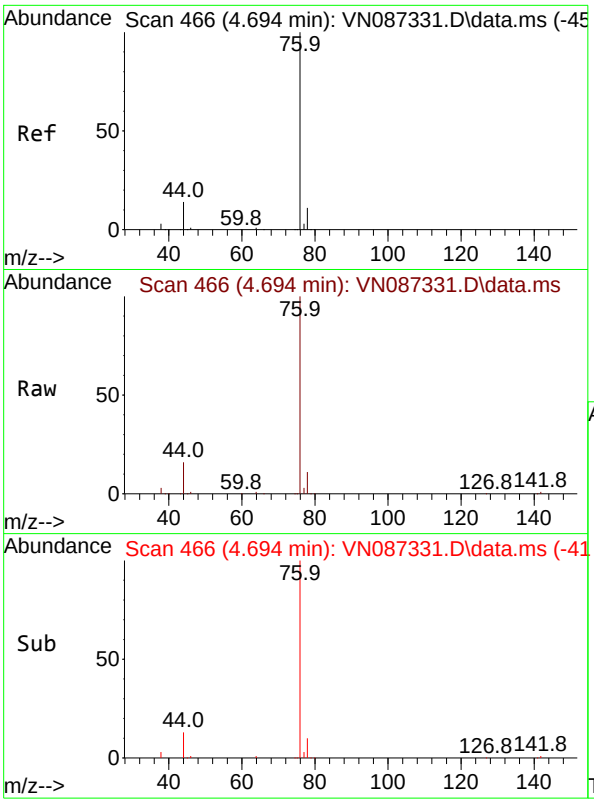


#16
Acetone
Concen: 240.328 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 353373

Ion	Ratio	Lower	Upper
43	100		
58	27.9	22.3	33.5

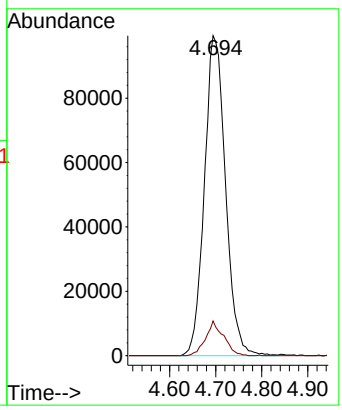




#17
Carbon Disulfide
Concen: 51.205 ug/l
RT: 4.694 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 76 Resp: 31683

Ion	Ratio	Lower	Upper
76	100		
78	10.8	8.6	13.0



Instrument :
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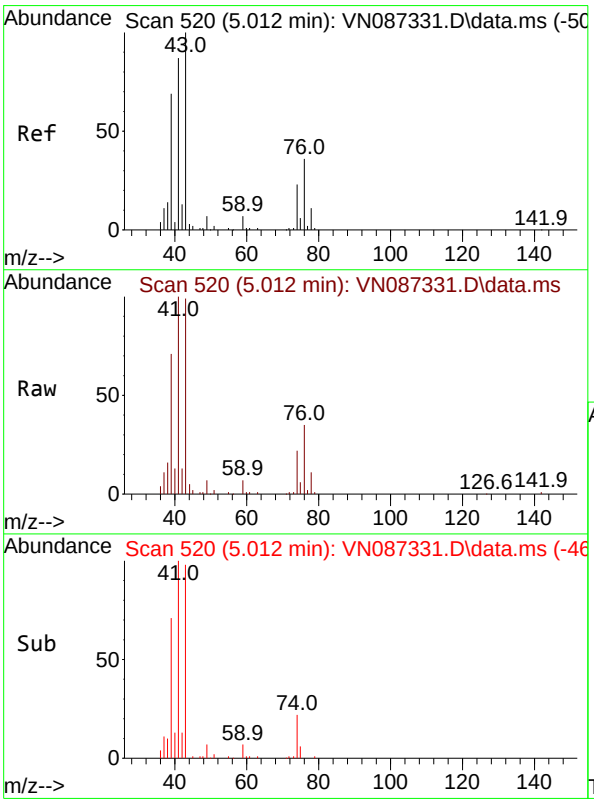
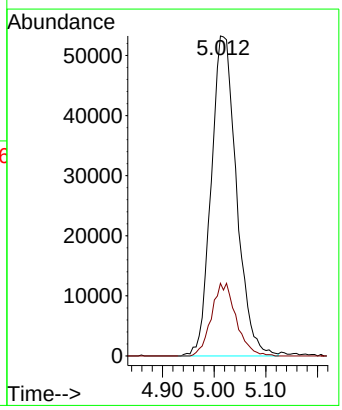
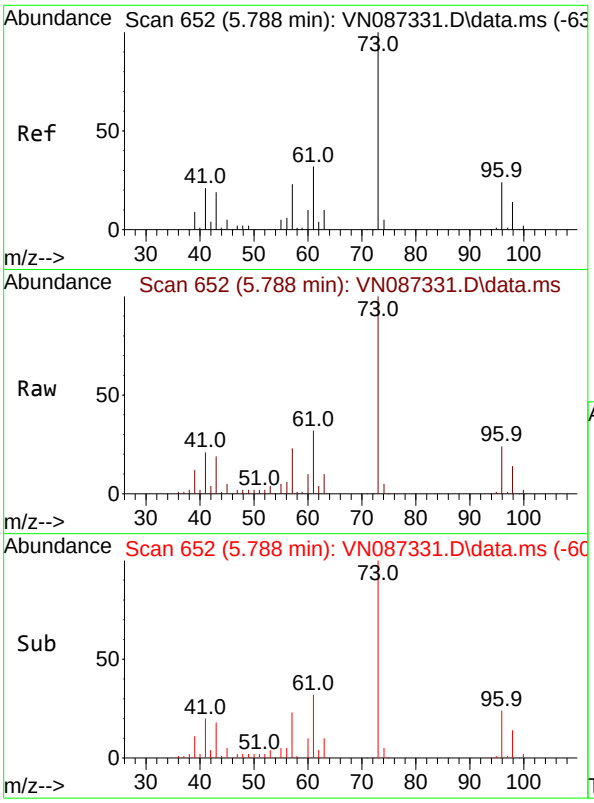


#18
Methyl Acetate
Concen: 49.594 ug/l
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 181199

Ion	Ratio	Lower	Upper
43	100		
74	22.2	17.8	26.6

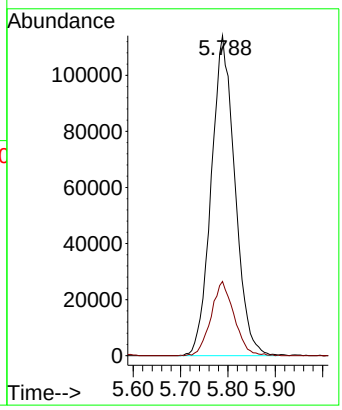




#19
Methyl tert-butyl Ether
Concen: 51.495 ug/l
RT: 5.788 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 73 Resp: 39613

Ion	Ratio	Lower	Upper
73	100		
57	23.2	18.6	27.8



Instrument :
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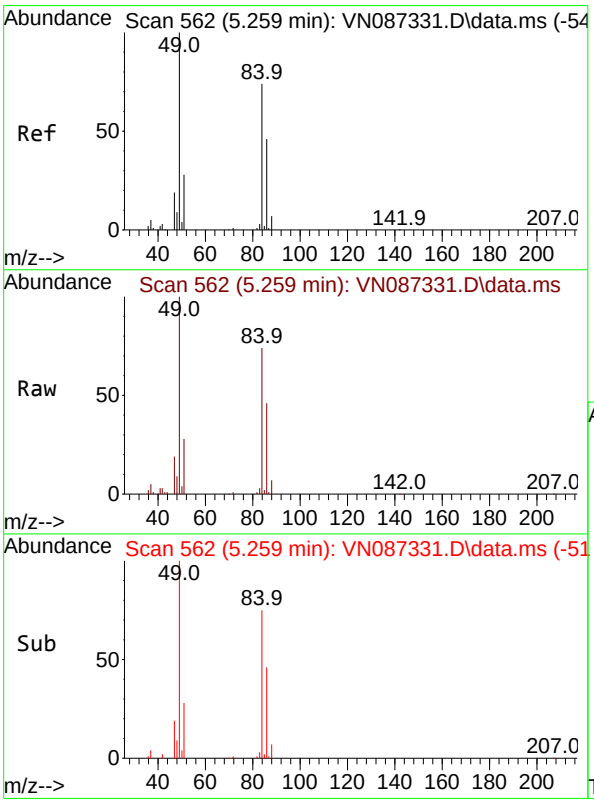
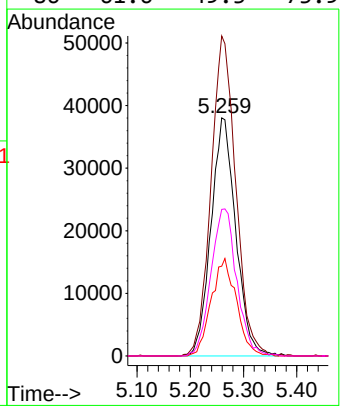
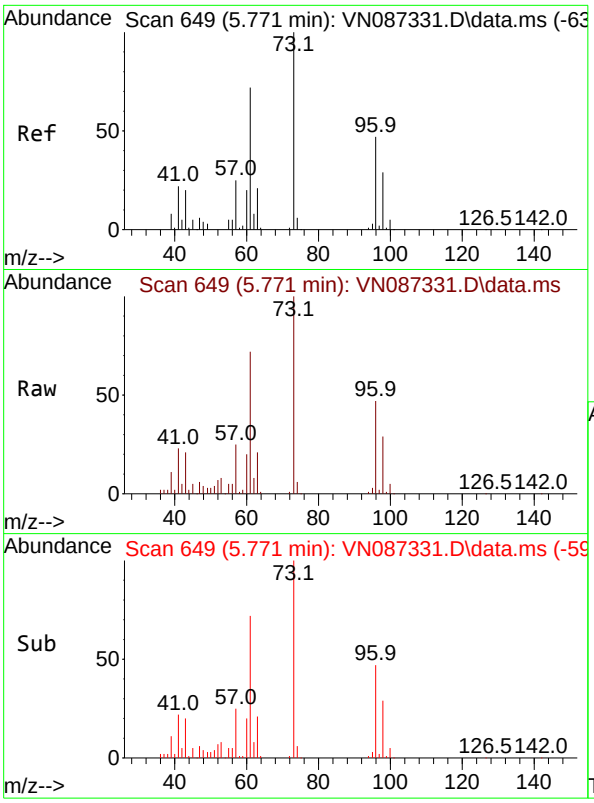


#20
Methylene Chloride
Concen: 50.001 ug/l
RT: 5.259 min Scan# 562
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 84 Resp: 122921

Ion	Ratio	Lower	Upper
84	100		
49	134.4	107.5	161.3
51	37.7	30.2	45.2
86	61.6	49.3	73.9

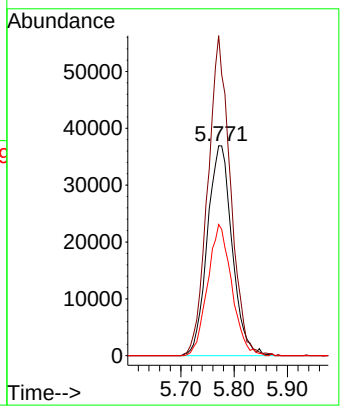




#21
trans-1,2-Dichloroethene
Concen: 50.687 ug/l
RT: 5.771 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 96 Resp: 11927

Ion	Ratio	Lower	Upper
96	100		
61	152.5	122.0	183.0
98	62.5	50.0	75.0



Instrument :
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ClientSampleId :
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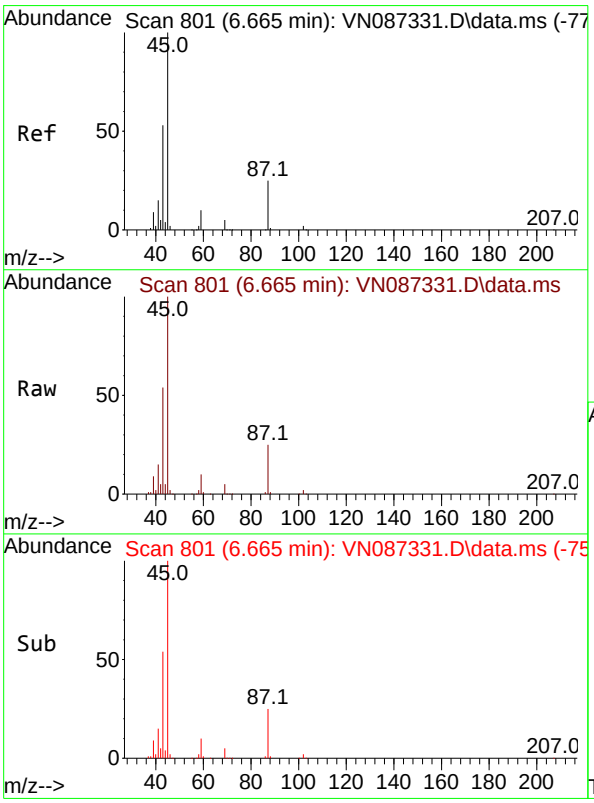
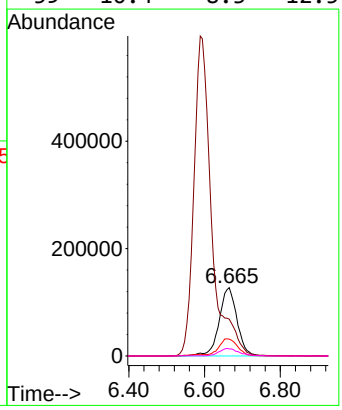
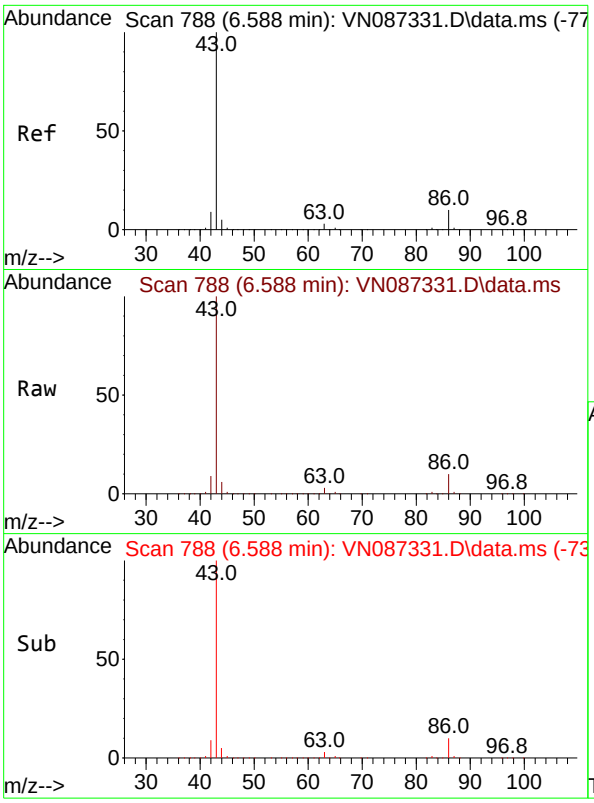


#22
Diisopropyl ether
Concen: 52.740 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 45 Resp: 417843

Ion	Ratio	Lower	Upper
45	100		
43	53.5	42.8	64.2
87	24.7	19.8	29.6
59	10.4	8.3	12.5





#23
Vinyl Acetate
Concen: 278.796 ug/l
RT: 6.588 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 193180

Ion	Ratio	Lower	Upper
43	100		
86	9.6	7.7	11.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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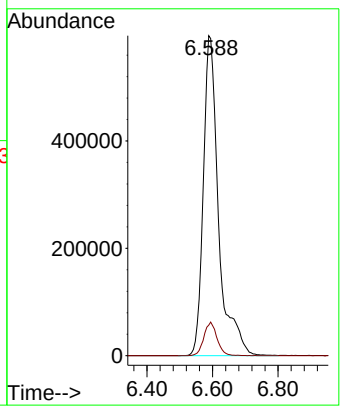
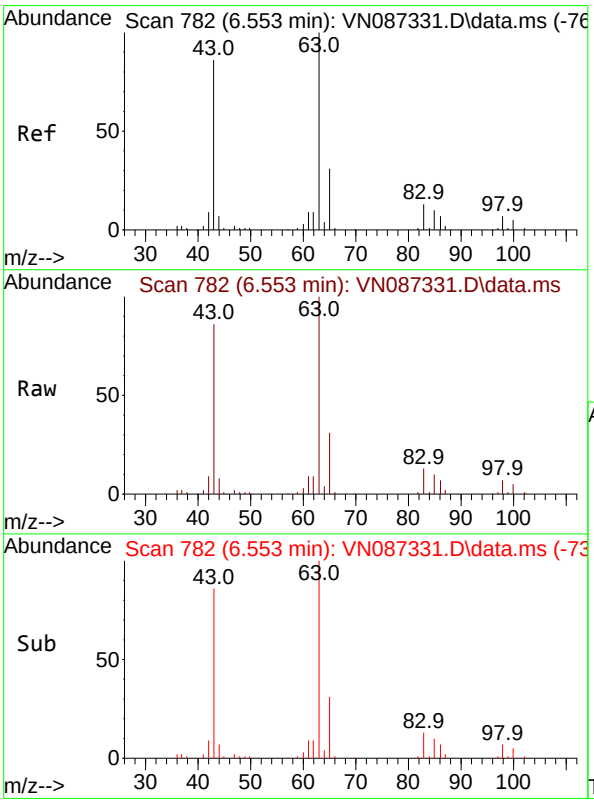
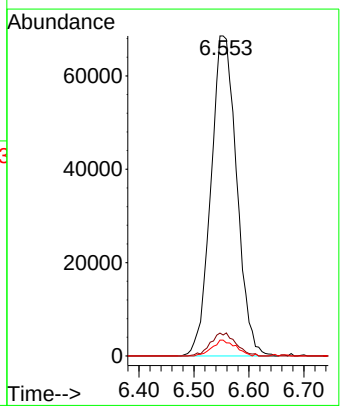


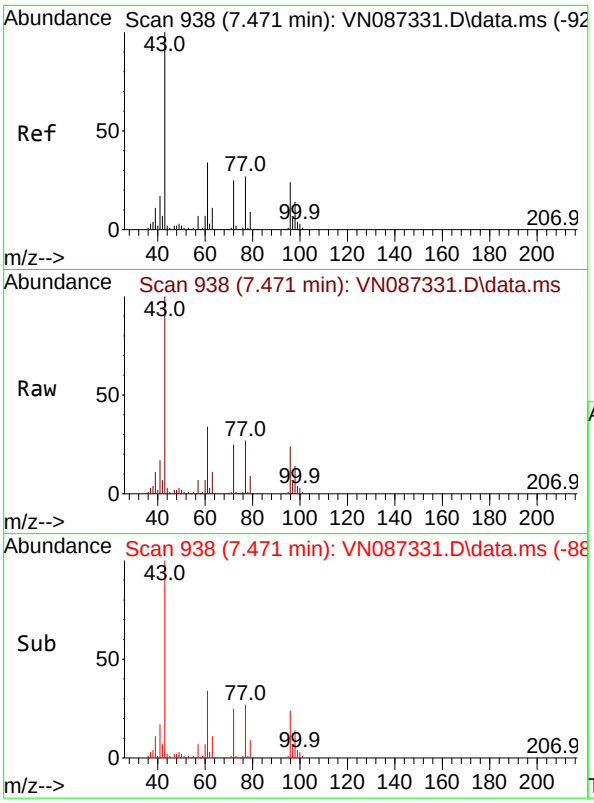


#24
1,1-Dichloroethane
Concen: 48.853 ug/l
RT: 6.553 min Scan# 782
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 63 Resp: 223298

Ion	Ratio	Lower	Upper
63	100		
98	6.6	3.3	9.9
100	4.9	2.5	7.4





#25
2-Butanone
Concen: 261.702 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 58803

Ion	Ratio	Lower	Upper
43	100		
72	24.5	19.6	29.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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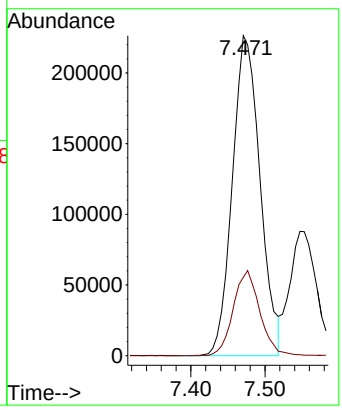
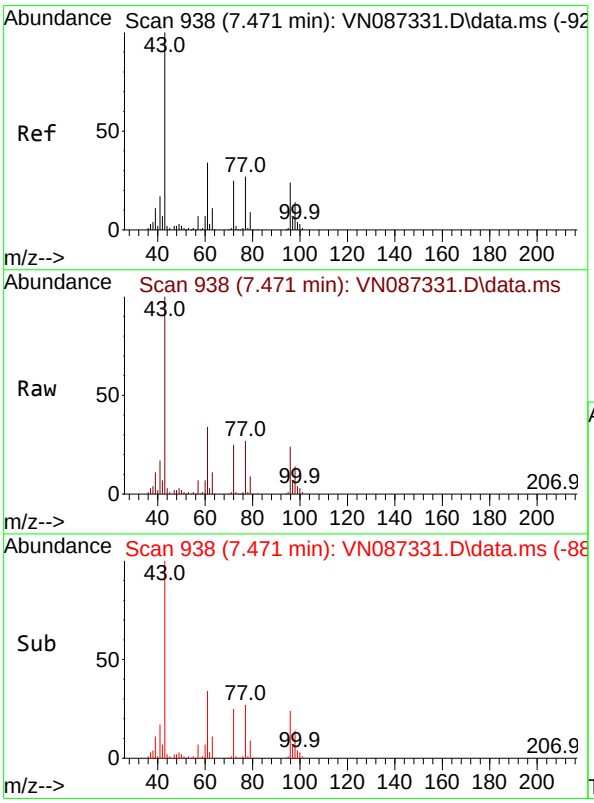
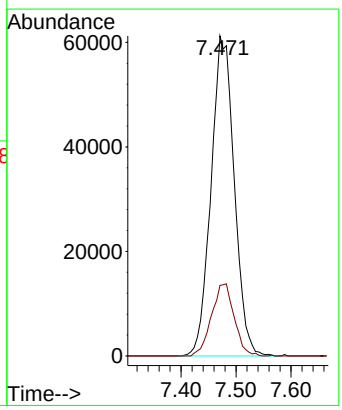


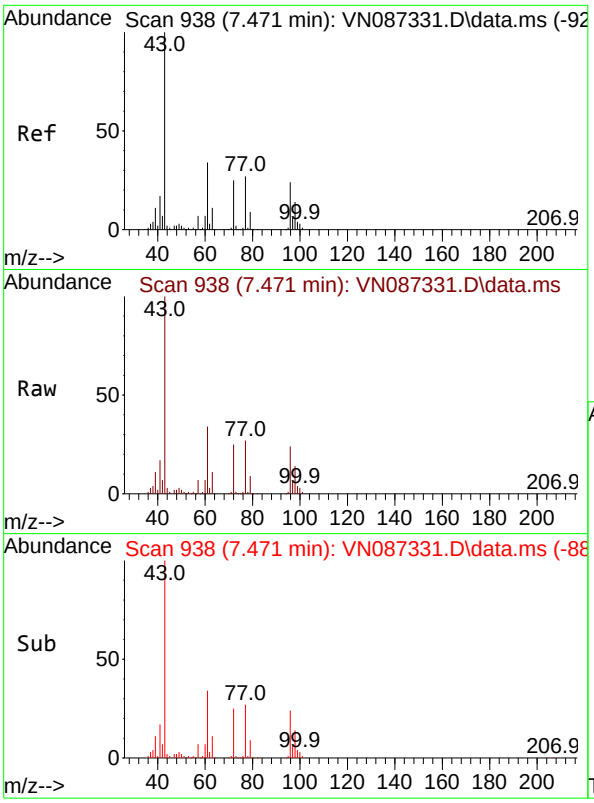


#26
2,2-Dichloropropane
Concen: 50.492 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 77 Resp: 179431

Ion	Ratio	Lower	Upper
77	100		
97	22.1	11.1	33.1





#27
cis-1,2-Dichloroethene
Concen: 51.746 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 96 Resp: 14019

Ion	Ratio	Lower	Upper
96	100		
61	148.9	0.0	297.8
98	66.2	0.0	132.4

Instrument :
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VSTDICCC050

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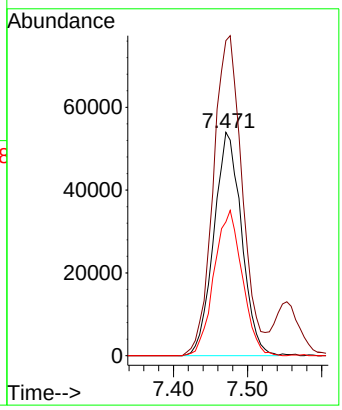
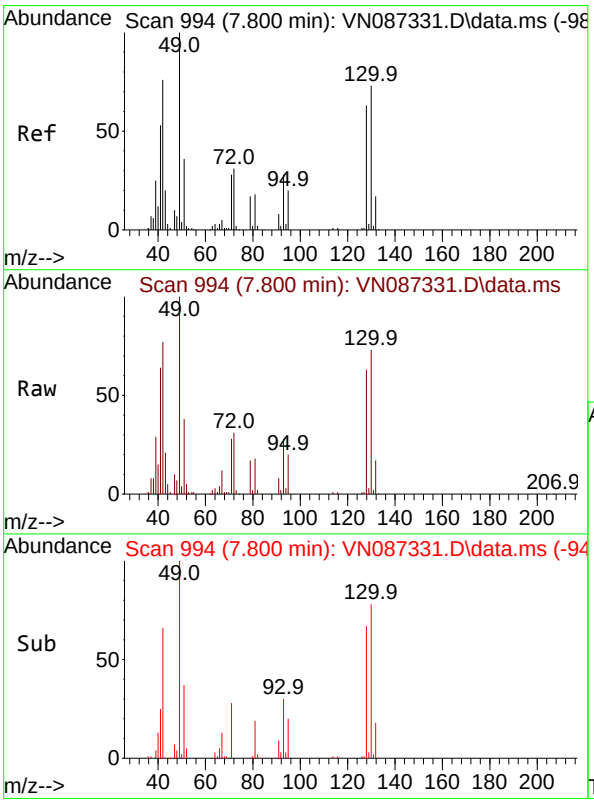
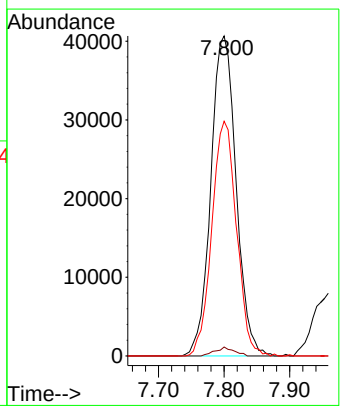


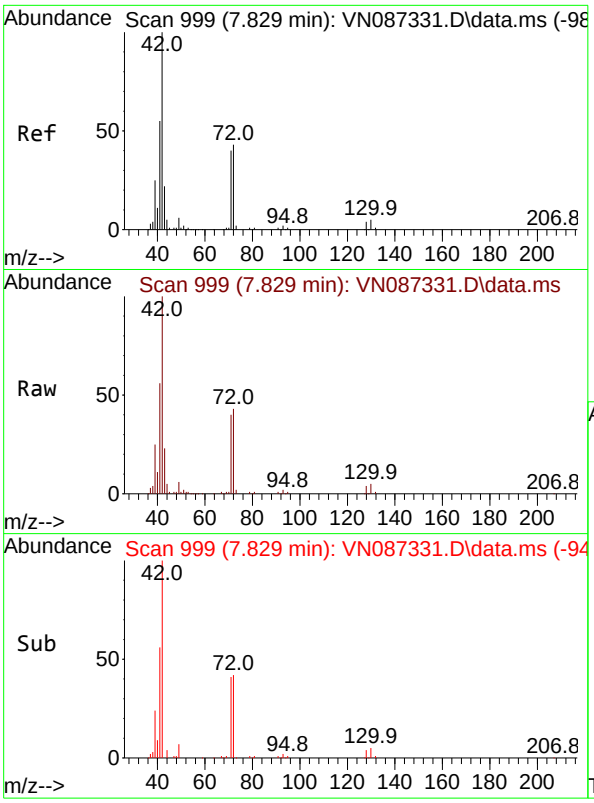


#28
Bromochloromethane
Concen: 49.713 ug/l
RT: 7.800 min Scan# 994
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 49 Resp: 108748

Ion	Ratio	Lower	Upper
49	100		
129	2.1	0.0	4.2
130	71.6	57.3	85.9

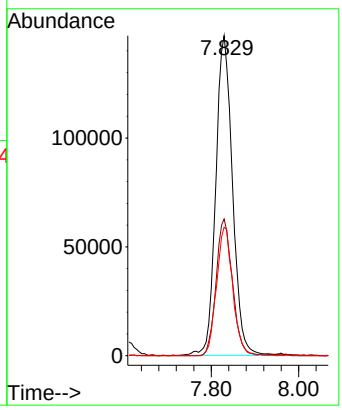




#29
Tetrahydrofuran
Concen: 266.294 ug/l
RT: 7.829 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 42 Resp: 38870

Ion	Ratio	Lower	Upper
42	100		
72	41.7	33.4	50.0
71	39.0	31.2	46.8



Instrument :
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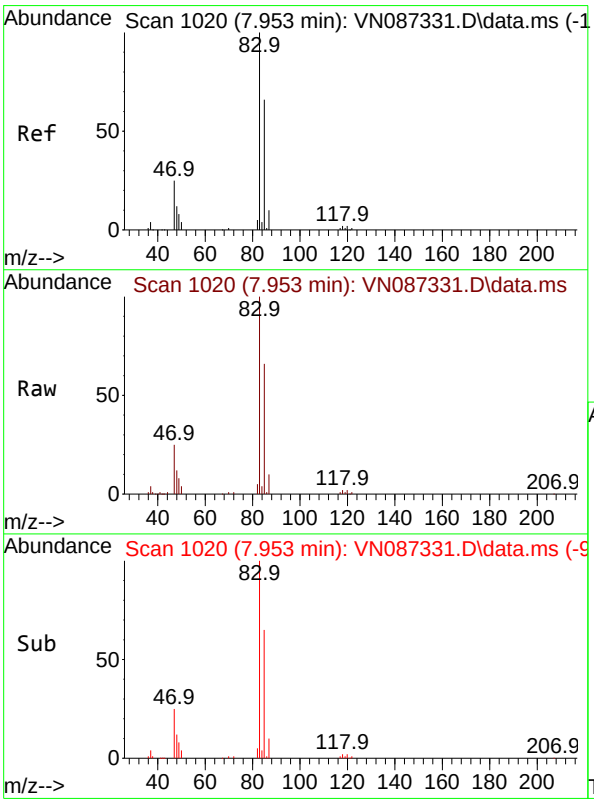
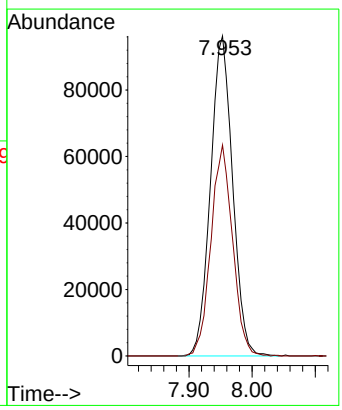
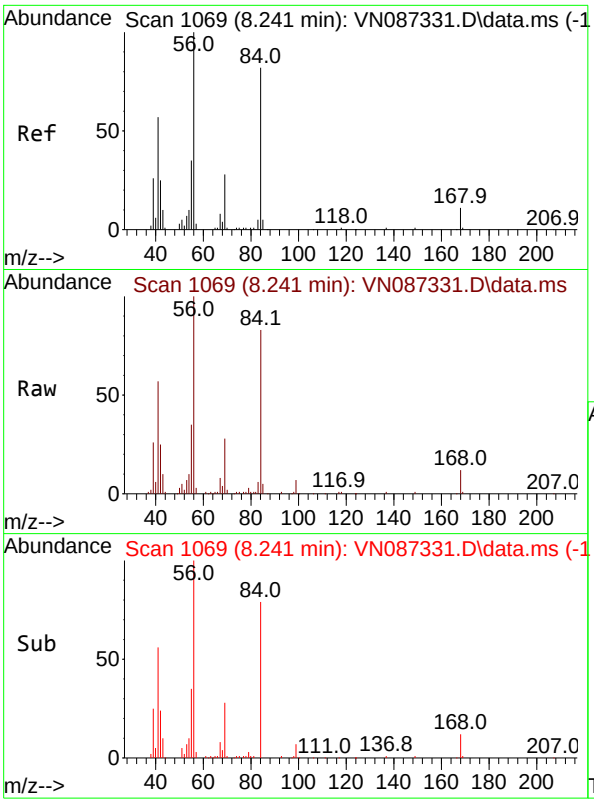


#30
Chloroform
Concen: 51.092 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 83 Resp: 233747

Ion	Ratio	Lower	Upper
83	100		
85	65.9	52.7	79.1

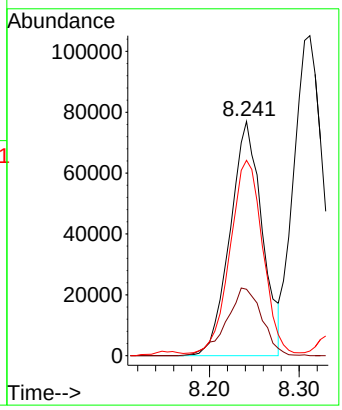




#31
Cyclohexane
Concen: 50.122 ug/l
RT: 8.241 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 56 Resp: 19111

Ion	Ratio	Lower	Upper
56	100		
69	28.4	22.7	34.1
84	82.2	65.8	98.6



Instrument :
MSVOA_N
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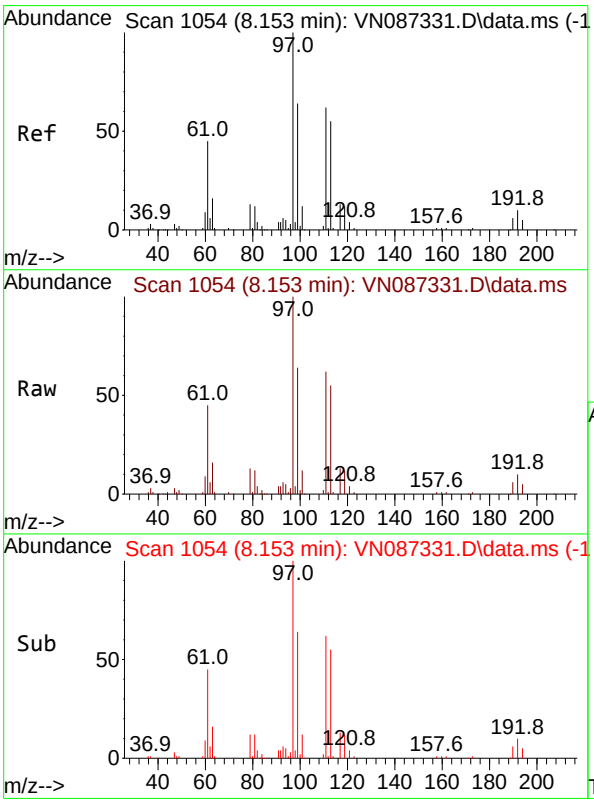
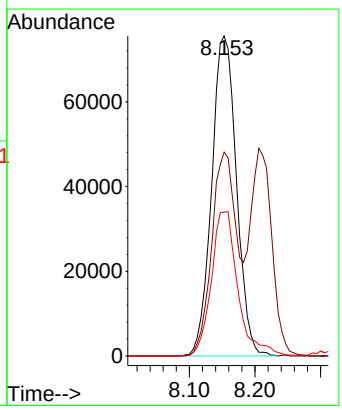
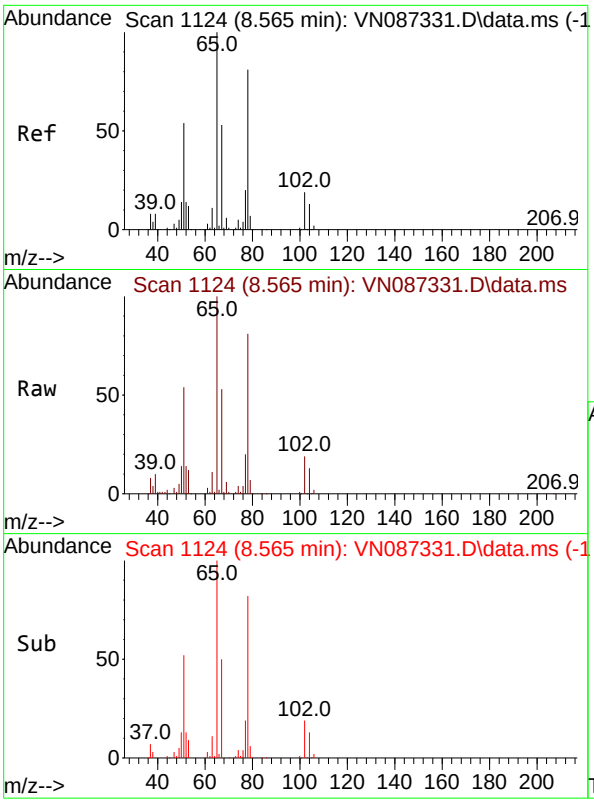


#32
1,1,1-Trichloroethane
Concen: 50.002 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 97 Resp: 198135

Ion	Ratio	Lower	Upper
97	100		
99	64.8	51.8	77.8
61	48.4	38.7	58.1

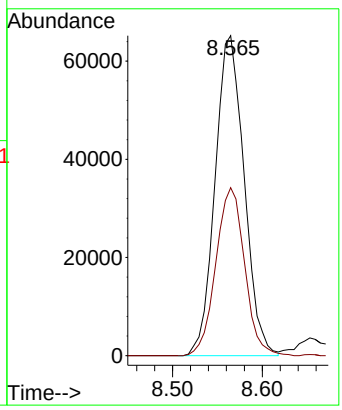




#33
1,2-Dichloroethane-d4
Concen: 47.253 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 65 Resp: 14655

Ion	Ratio	Lower	Upper
65	100		
67	52.0	0.0	104.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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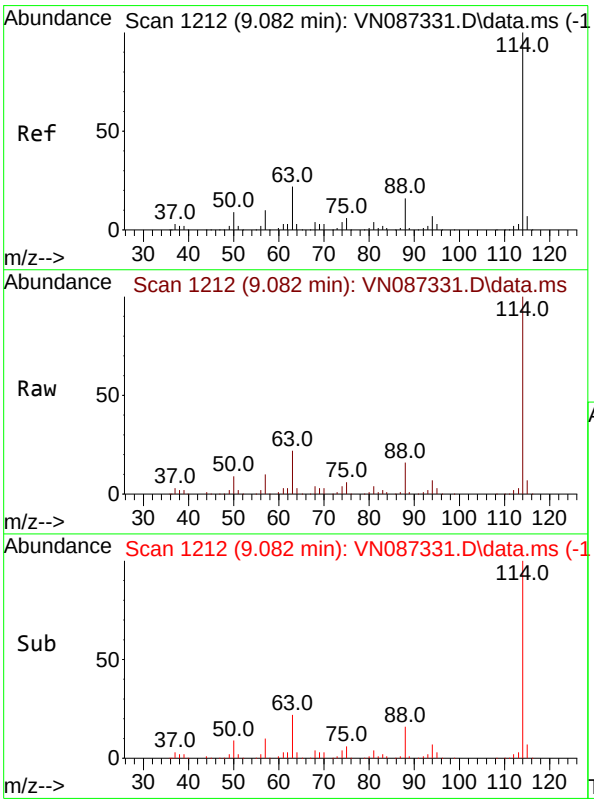
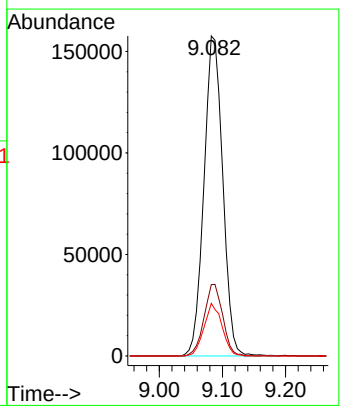
Supervised By :Semsettin Yesilyurt 07/17/2025

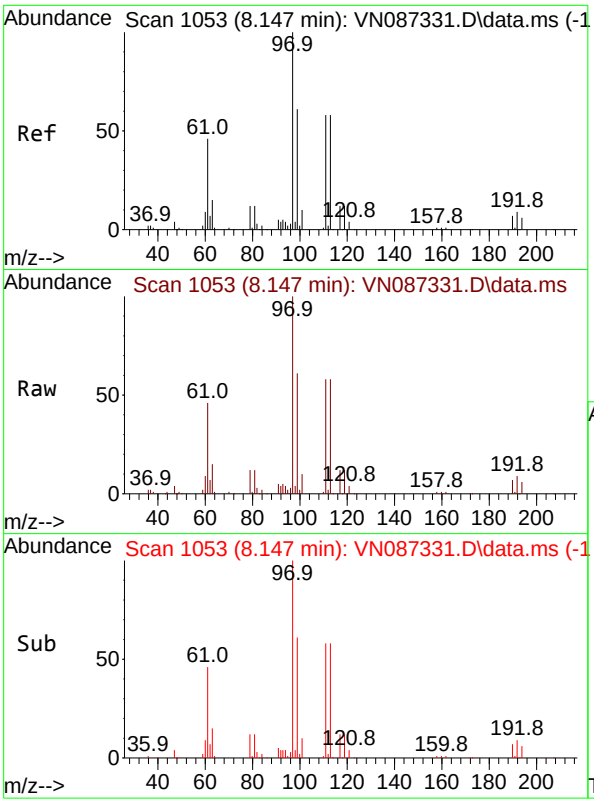


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:114 Resp: 325711

Ion	Ratio	Lower	Upper
114	100		
63	22.3	0.0	44.6
88	16.4	0.0	32.8

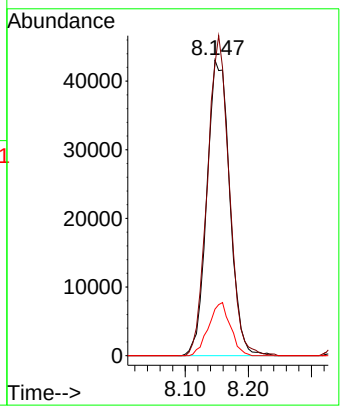




#35
Dibromofluoromethane
Concen: 48.190 ug/l
RT: 8.147 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:113 Resp: 10827

Ion	Ratio	Lower	Upper
113	100		
111	103.1	82.5	123.7
192	17.1	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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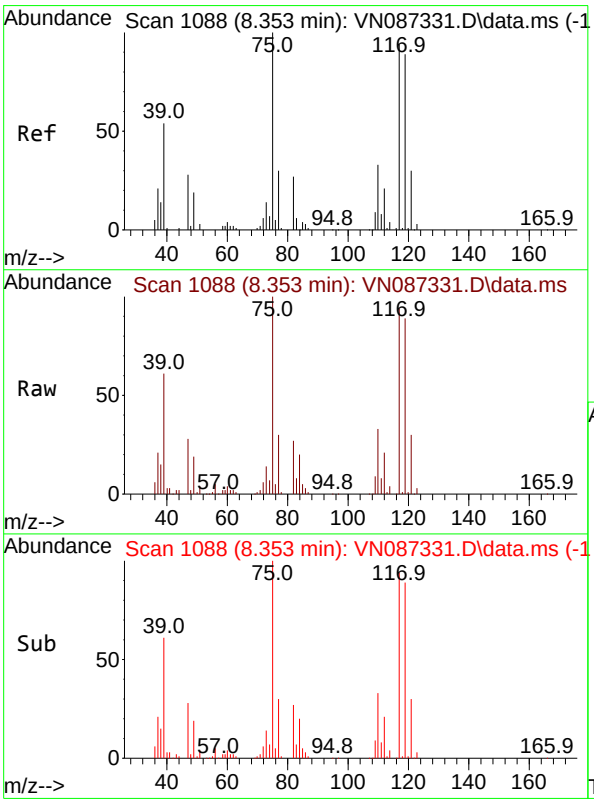
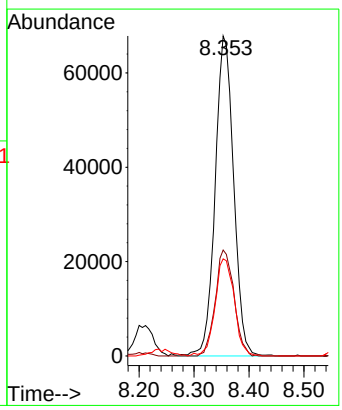
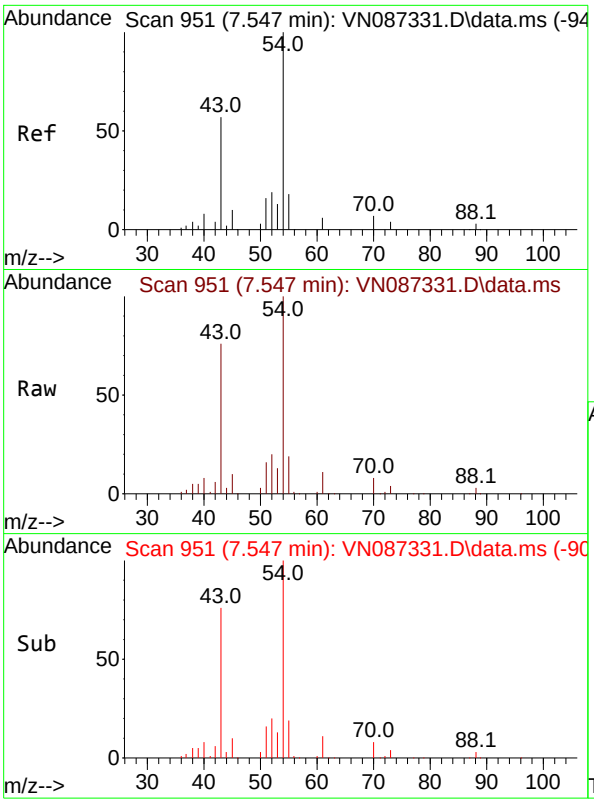


#36
1,1-Dichloropropene
Concen: 53.418 ug/l
RT: 8.353 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 75 Resp: 158563

Ion	Ratio	Lower	Upper
75	100		
110	33.4	16.7	50.1
77	31.5	25.2	37.8

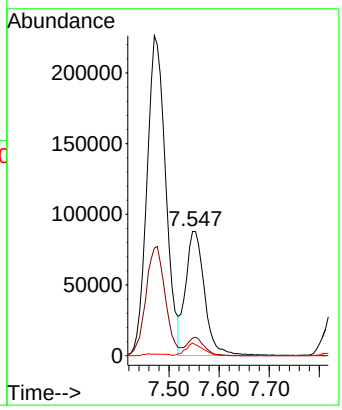




#37
Ethyl Acetate
Concen: 53.652 ug/l
RT: 7.547 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 23000

Ion	Ratio	Lower	Upper
43	100		
61	13.6	10.9	16.3
70	9.2	7.4	11.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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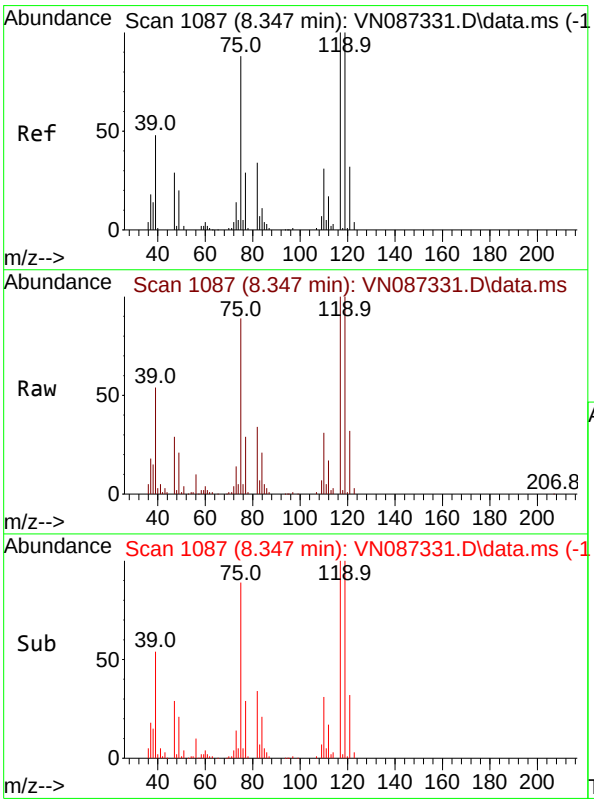
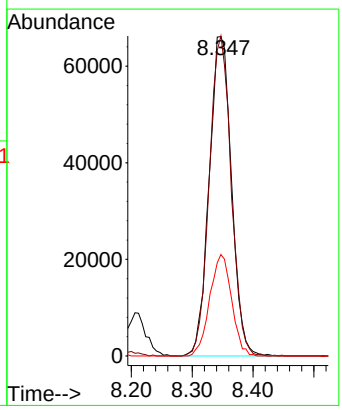
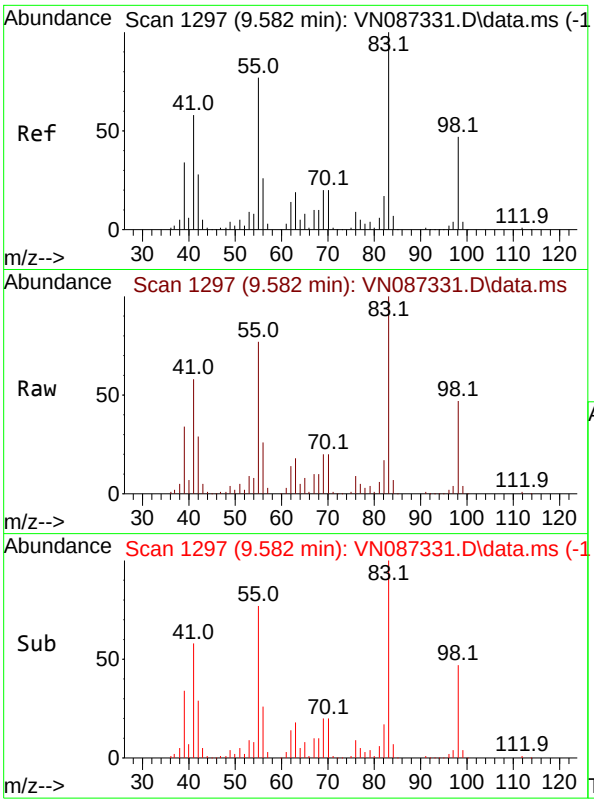


#38
Carbon Tetrachloride
Concen: 51.501 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:117 Resp: 168403

Ion	Ratio	Lower	Upper
117	100		
119	100.2	80.2	120.2
121	31.8	25.4	38.2

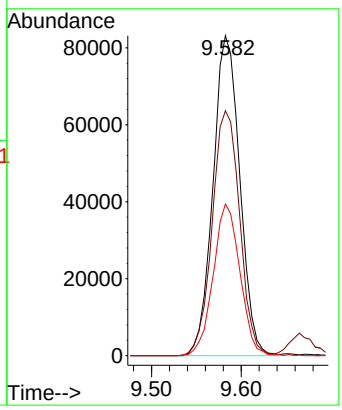




#39
Methylcyclohexane
Concen: 53.614 ug/l
RT: 9.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 83 Resp: 17229

Ion	Ratio	Lower	Upper
83	100		
55	76.6	61.3	91.9
98	47.4	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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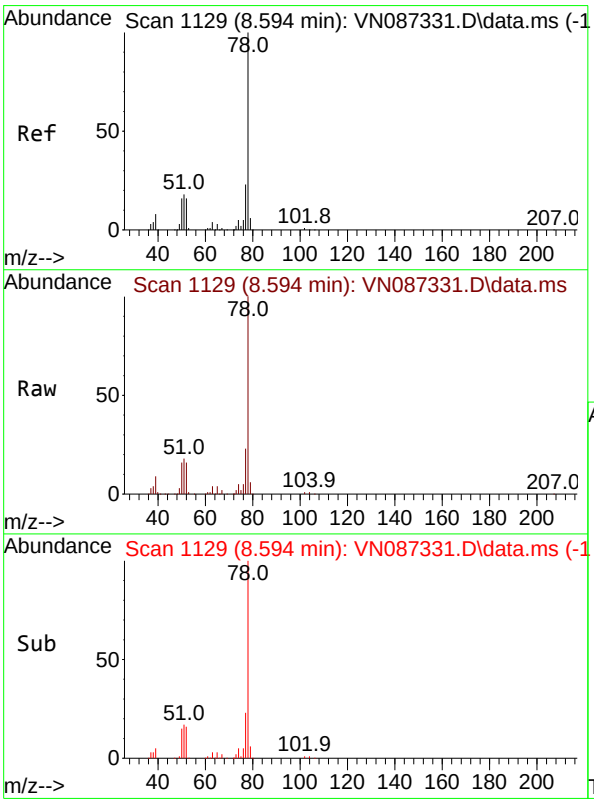
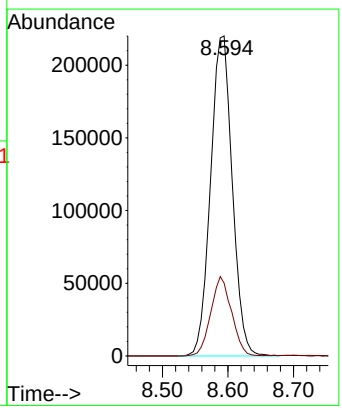
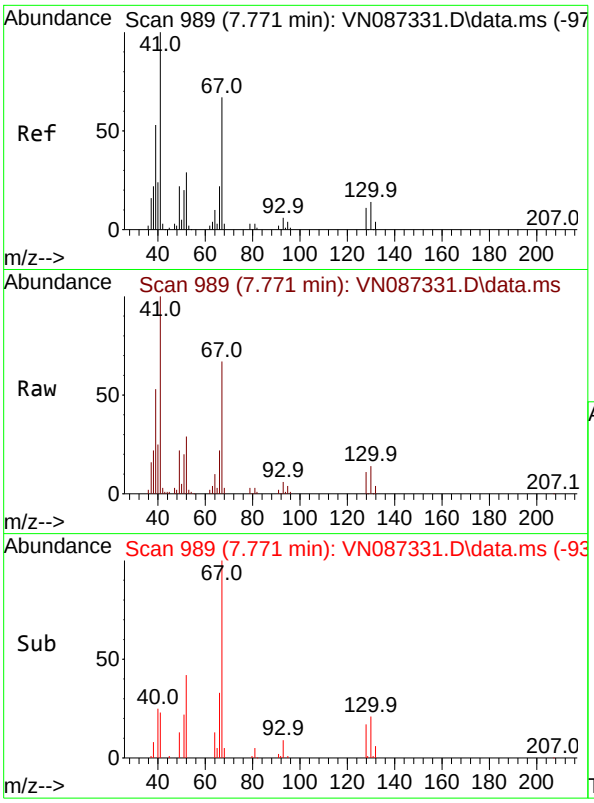


#40
Benzene
Concen: 52.714 ug/l
RT: 8.594 min Scan# 1129
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 78 Resp: 505723

Ion	Ratio	Lower	Upper
78	100		
77	22.7	18.2	27.2

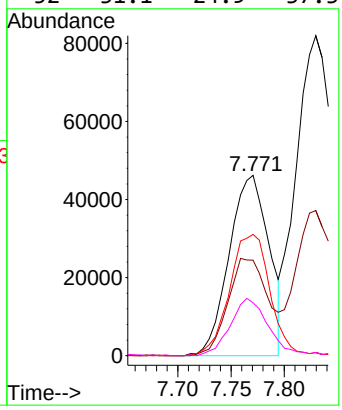




#41
Methacrylonitrile
Concen: 53.486 ug/l
RT: 7.771 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 41 Resp: 11989

Ion	Ratio	Lower	Upper
41	100		
39	54.2	43.4	65.0
67	68.9	55.1	82.7
52	31.1	24.9	37.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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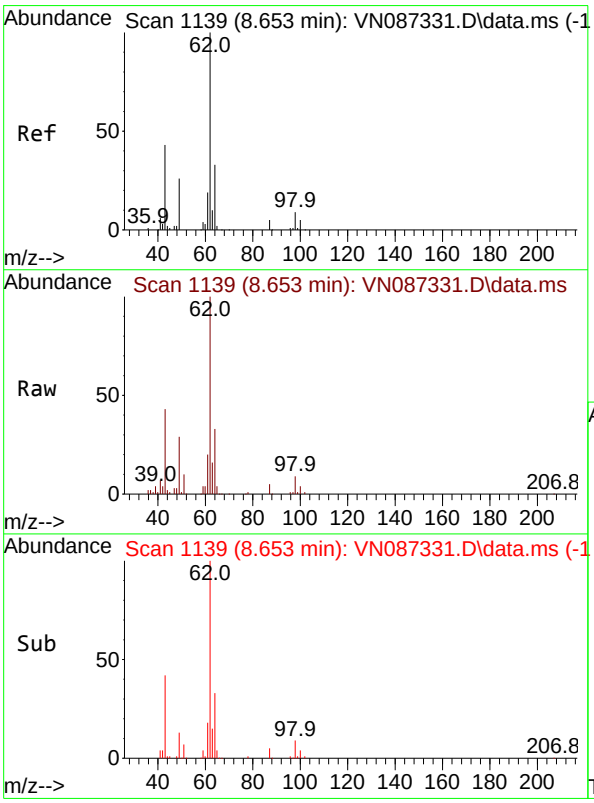
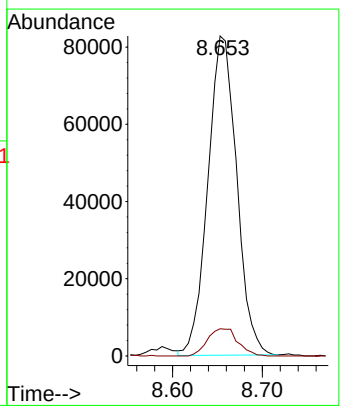
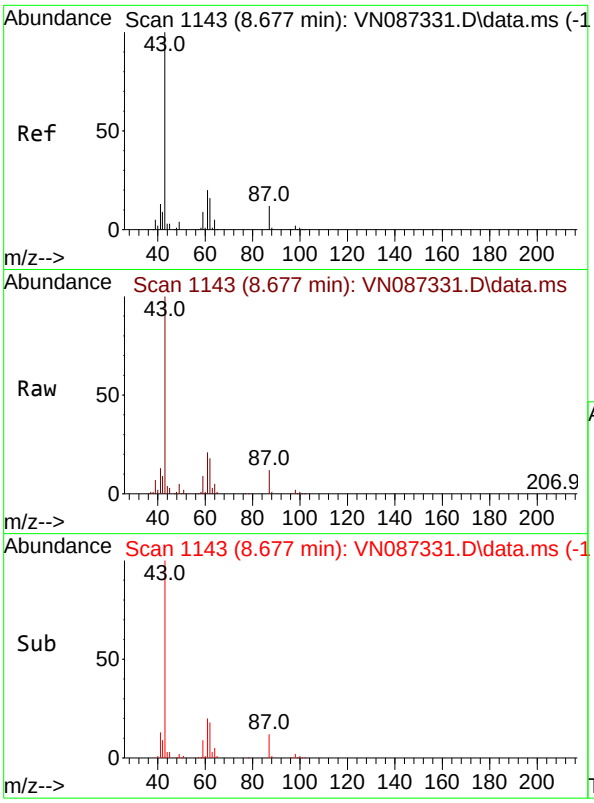


#42
1,2-Dichloroethane
Concen: 50.759 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 62 Resp: 184670

Ion	Ratio	Lower	Upper
62	100		
98	9.0	0.0	18.0





#43
Isopropyl Acetate
Concen: 52.399 ug/l
RT: 8.677 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 34870

Ion	Ratio	Lower	Upper
43	100		
61	24.8	19.8	29.8
87	12.2	9.8	14.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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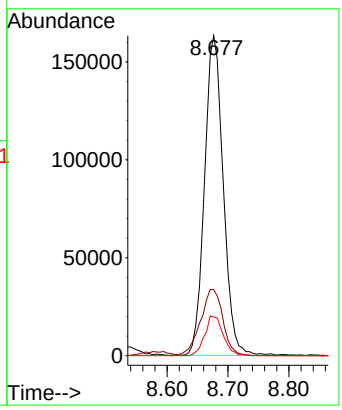
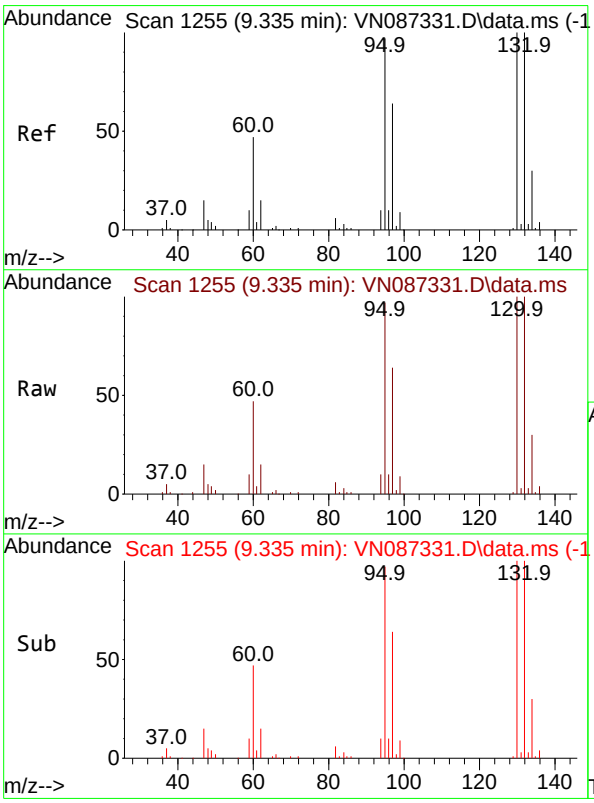
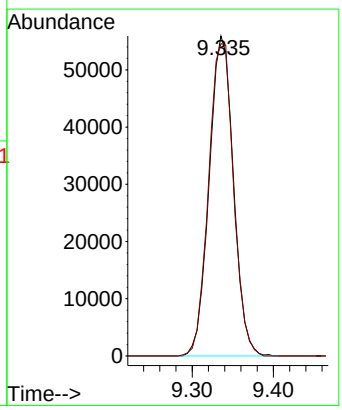


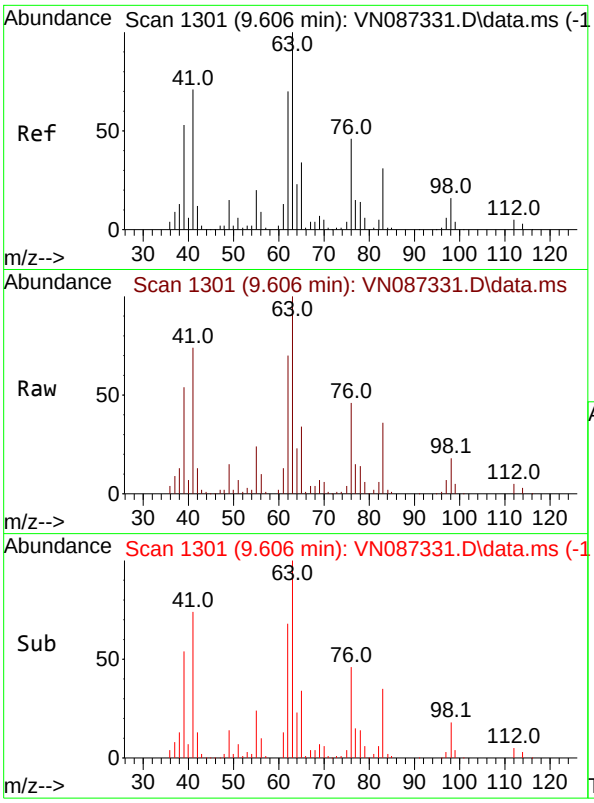


#44
Trichloroethene
Concen: 51.160 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:130 Resp: 115974

Ion	Ratio	Lower	Upper
130	100		
95	97.6	0.0	195.2

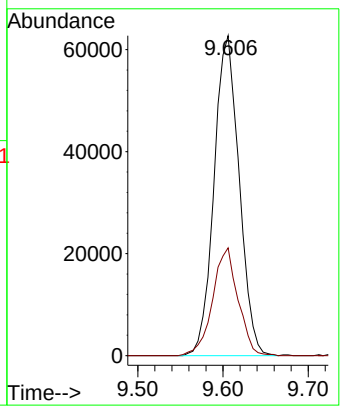




#45
1,2-Dichloropropane
Concen: 52.726 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 63 Resp: 12853

Ion	Ratio	Lower	Upper
63	100		
65	33.7	27.0	40.4



Instrument :
MSVOA_N
ClientSampleId :
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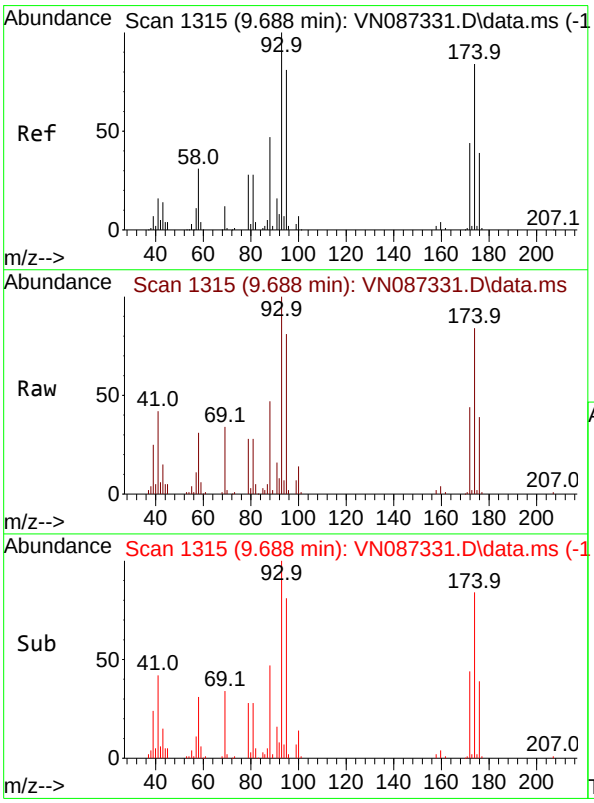
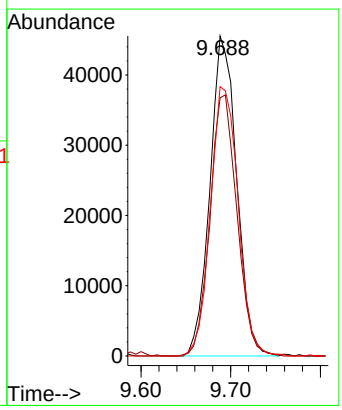
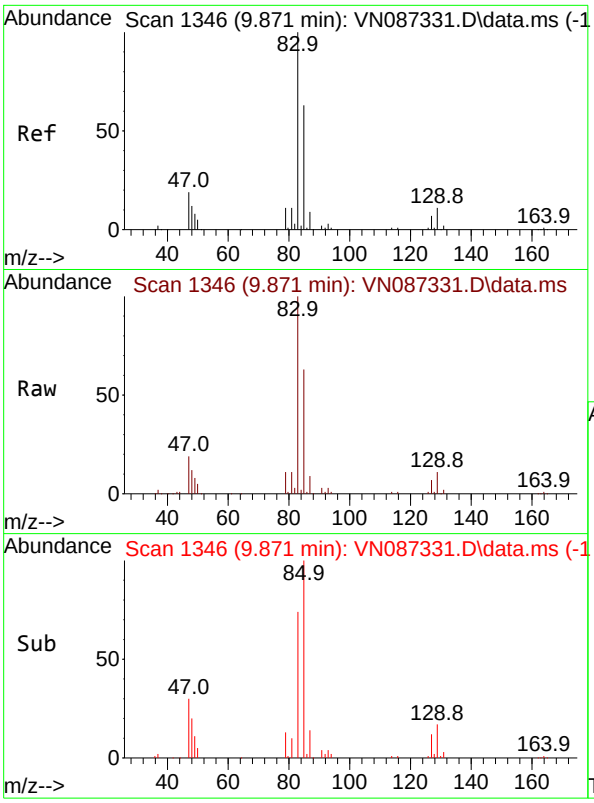


#46
Dibromomethane
Concen: 51.601 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 93 Resp: 94179

Ion	Ratio	Lower	Upper
93	100		
95	82.3	65.8	98.8
174	87.4	69.9	104.9

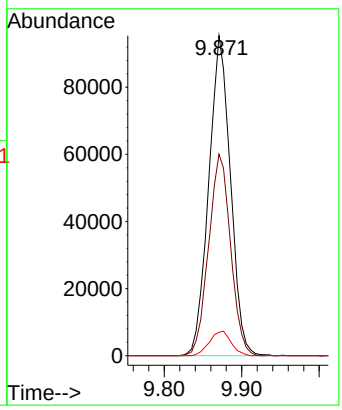




#47
Bromodichloromethane
Concen: 50.382 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 83 Resp: 18522

Ion	Ratio	Lower	Upper
83	100		
85	63.0	50.4	75.6
127	7.3	5.8	8.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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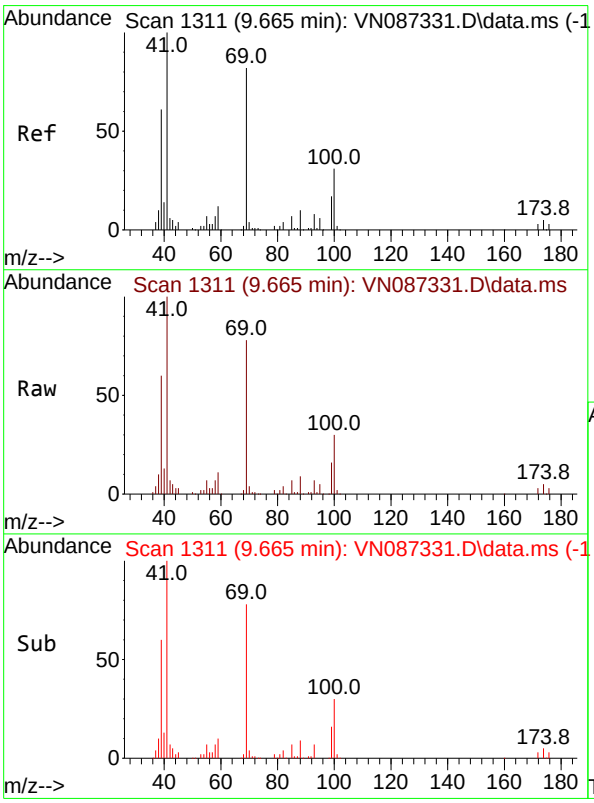
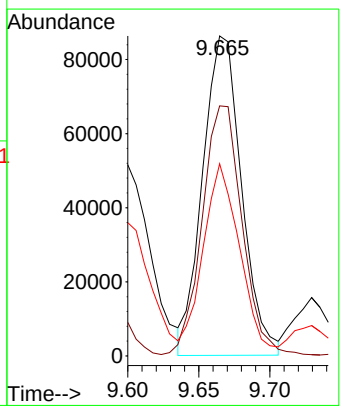
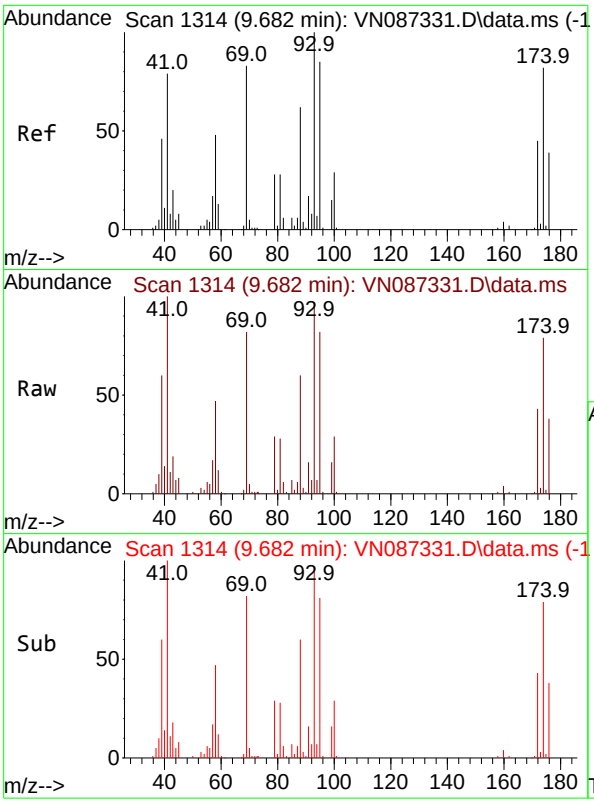


#48
Methyl methacrylate
Concen: 54.899 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 41 Resp: 164476

Ion	Ratio	Lower	Upper
41	100		
69	80.1	64.1	96.1
39	56.9	45.5	68.3

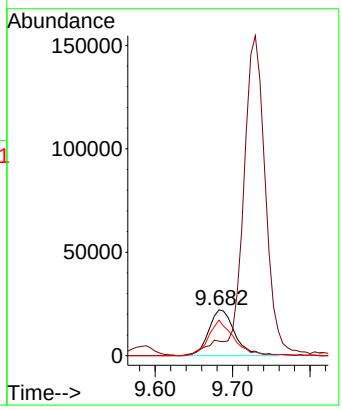




#49
1,4-Dioxane
Concen: 1134.802 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 88 Resp: 5207

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	76.4	61.1	91.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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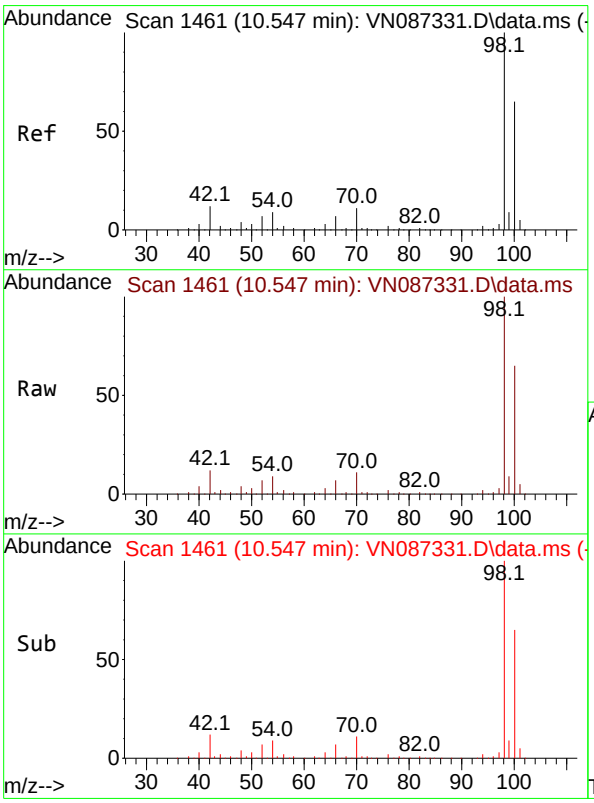
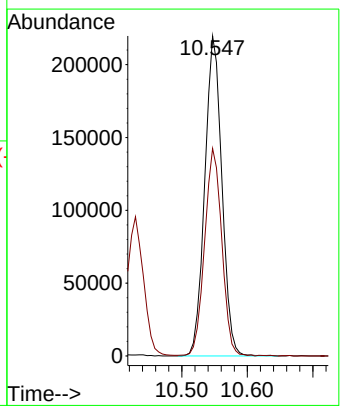
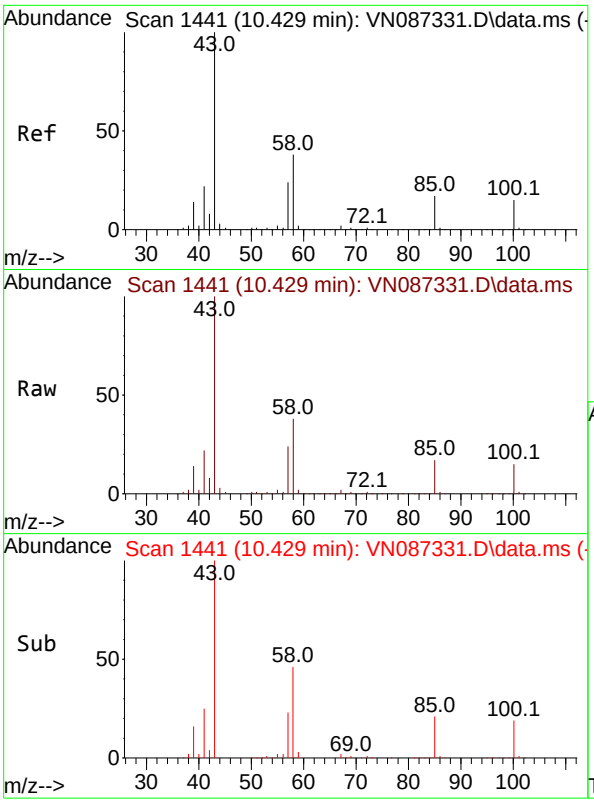


#50
Toluene-d8
Concen: 49.757 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 98 Resp: 398776

Ion	Ratio	Lower	Upper
98	100		
100	65.1	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 266.771 ug/l
RT: 10.429 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 112285

Ion	Ratio	Lower	Upper
43	100		
58	38.5	30.8	46.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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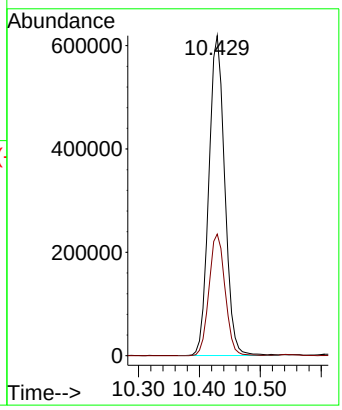
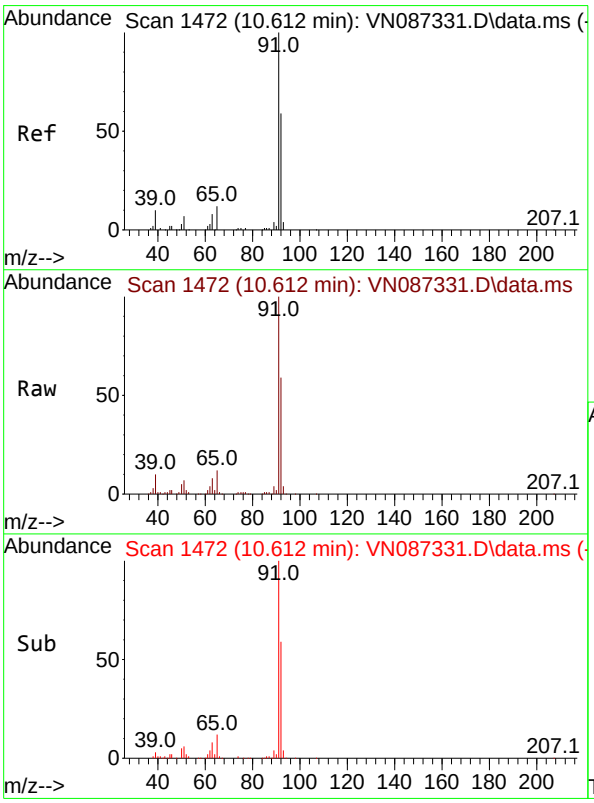
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

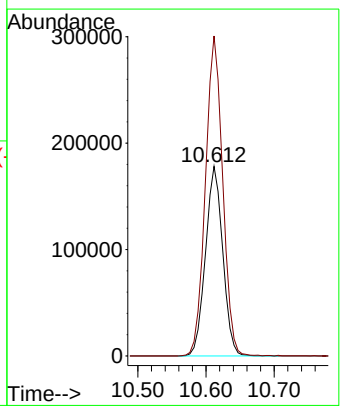


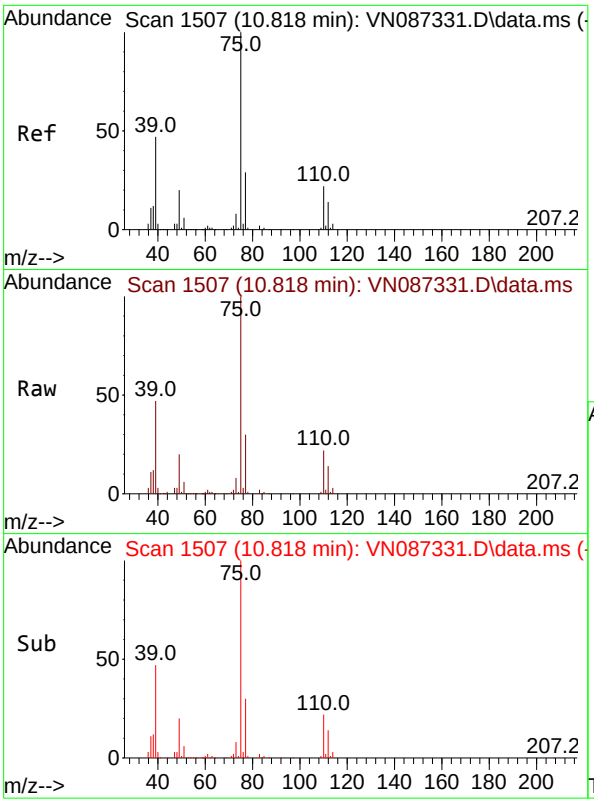


#52
Toluene
Concen: 53.814 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 92 Resp: 313806

Ion	Ratio	Lower	Upper
92	100		
91	168.9	135.1	202.7

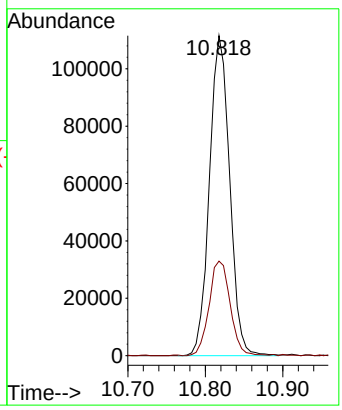




#53
t-1,3-Dichloropropene
Concen: 54.327 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 75 Resp: 20212

Ion	Ratio	Lower	Upper
75	100		
77	29.5	23.6	35.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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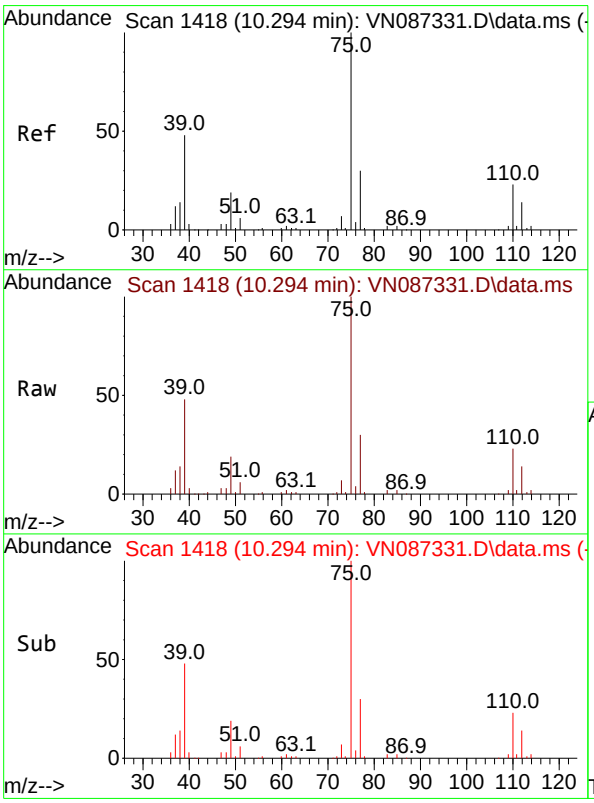
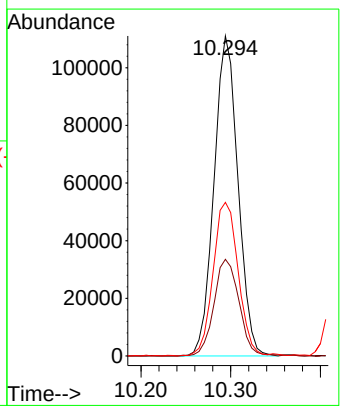
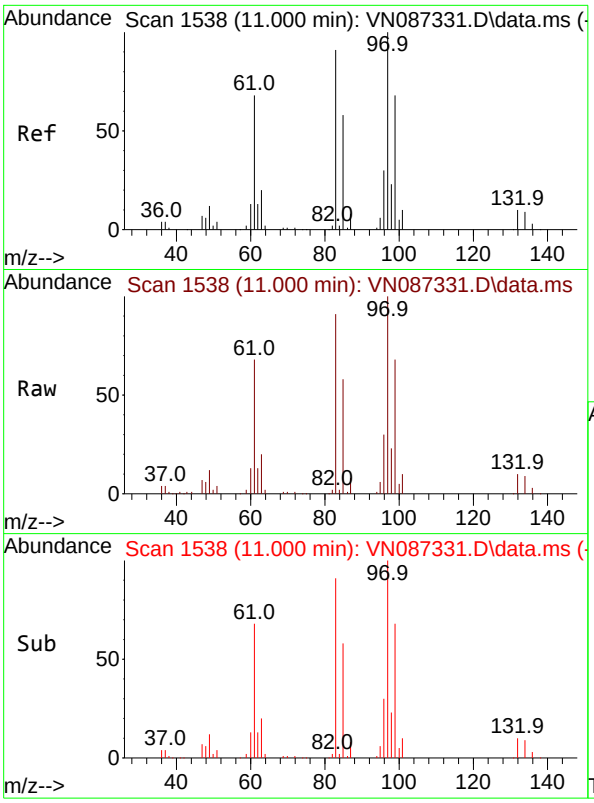


#54
cis-1,3-Dichloropropene
Concen: 53.529 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 75 Resp: 205720

Ion	Ratio	Lower	Upper
75	100		
77	30.2	24.2	36.2
39	48.0	38.4	57.6

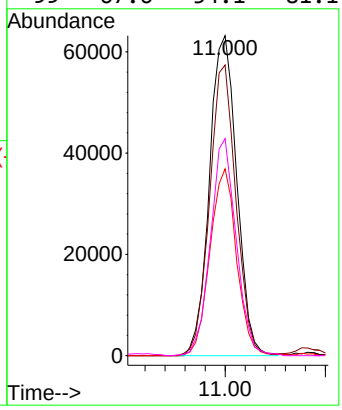




#55
1,1,2-Trichloroethane
Concen: 50.666 ug/l
RT: 11.000 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 97 Resp: 11961

Ion	Ratio	Lower	Upper
97	100		
83	90.8	72.6	109.0
85	58.4	46.7	70.1
99	67.6	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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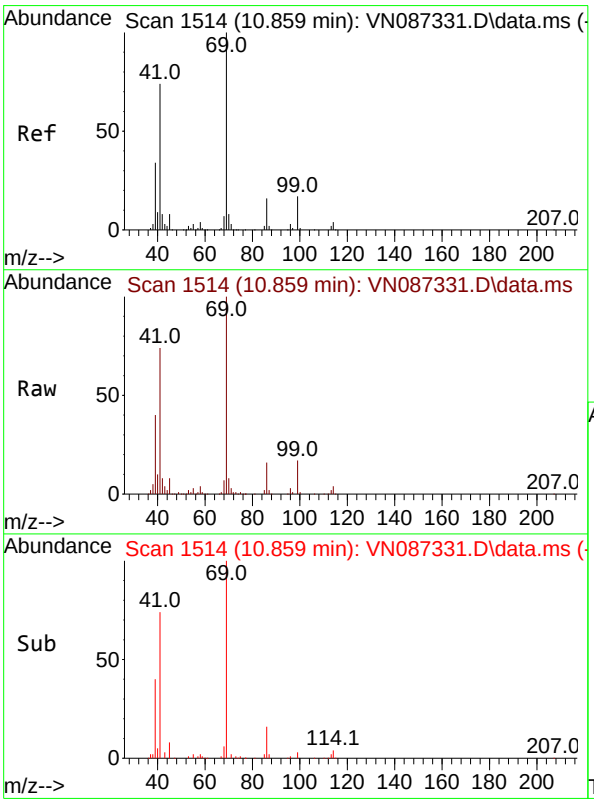
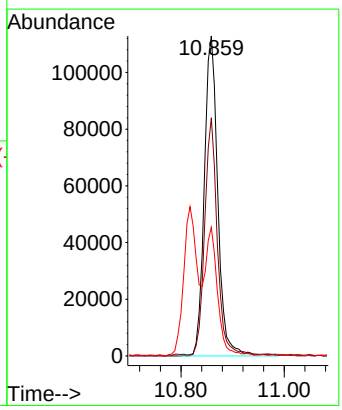
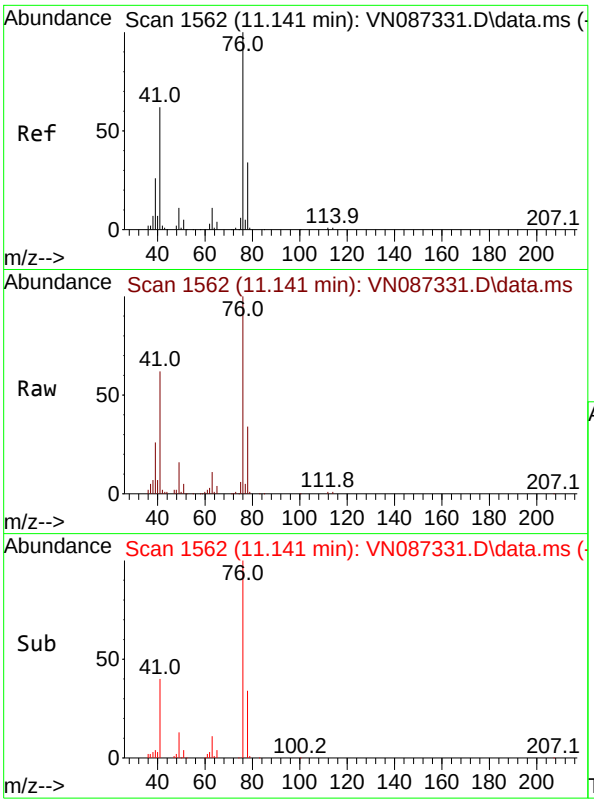


#56
Ethyl methacrylate
Concen: 51.427 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 69 Resp: 204376

Ion	Ratio	Lower	Upper
69	100		
41	68.9	55.1	82.7
39	34.9	27.9	41.9

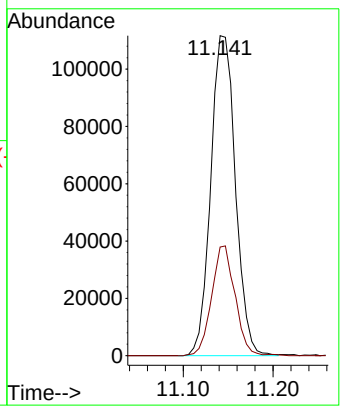




#57
1,3-Dichloropropane
Concen: 52.267 ug/l
RT: 11.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 76 Resp: 21334

Ion	Ratio	Lower	Upper
76	100		
78	32.5	26.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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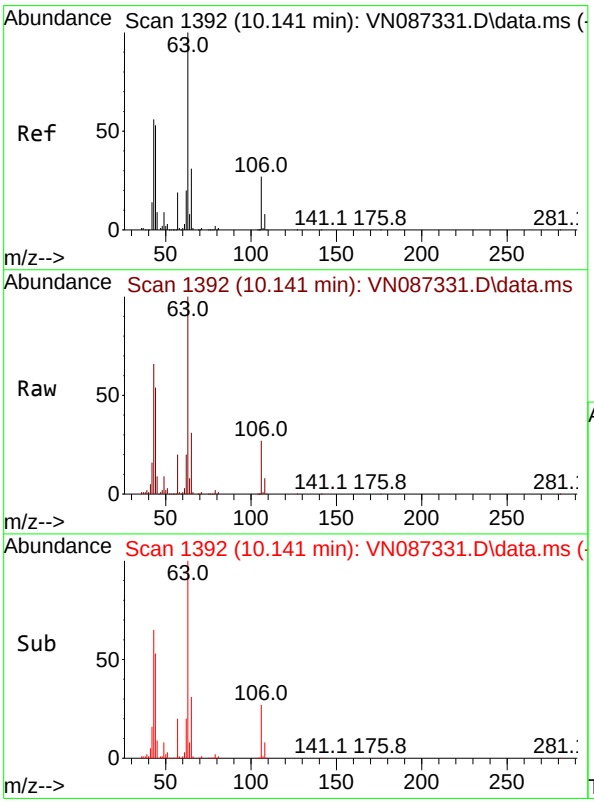
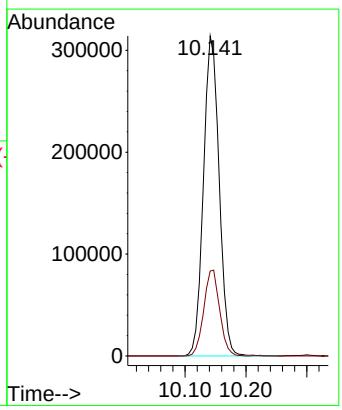
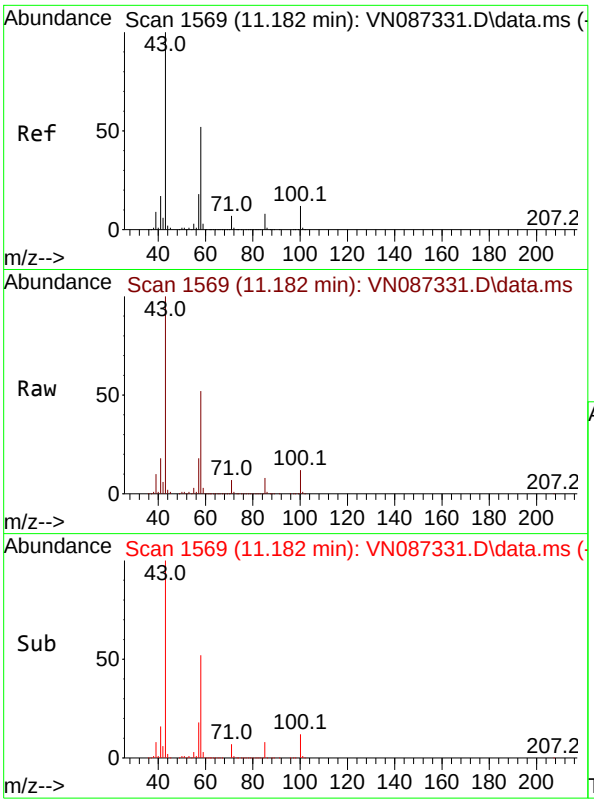


#58
2-Chloroethyl Vinyl ether
Concen: 290.607 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 63 Resp: 562790

Ion	Ratio	Lower	Upper
63	100		
106	27.1	21.7	32.5





#59
2-Hexanone
Concen: 288.920 ug/l
RT: 11.182 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 80682

Ion	Ratio	Lower	Upper
43	100		
58	53.3	26.7	80.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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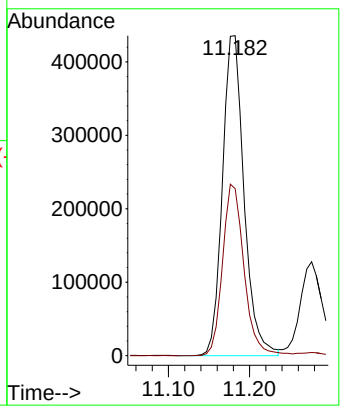
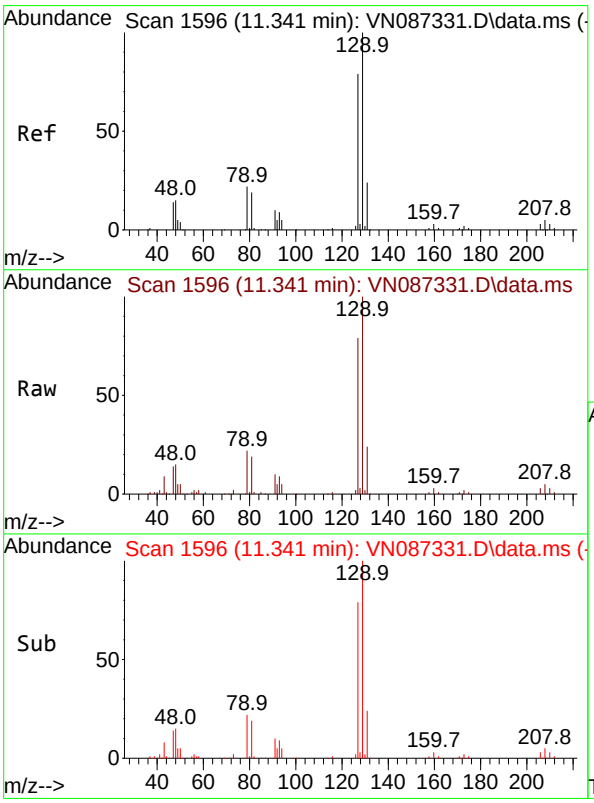
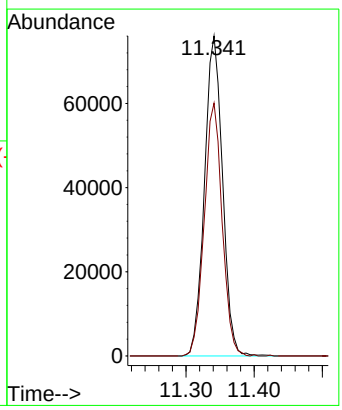


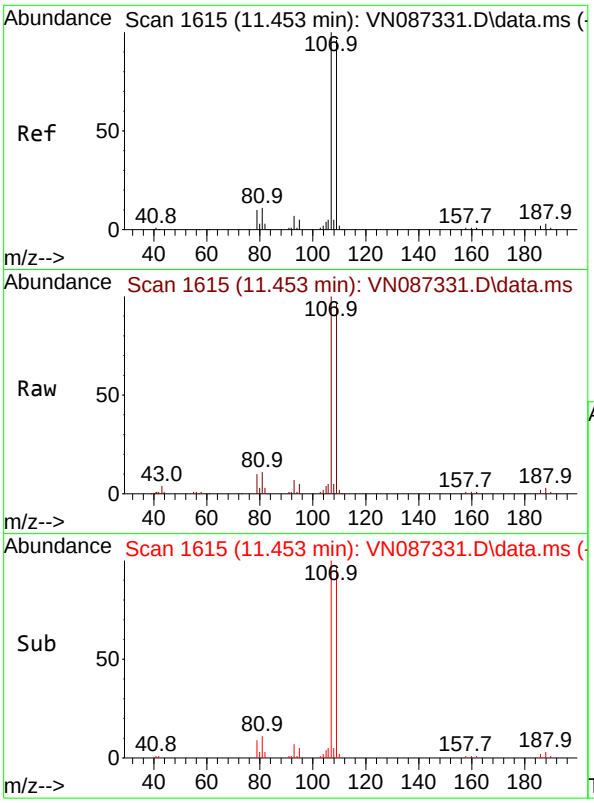


#60
Dibromochloromethane
Concen: 51.982 ug/l
RT: 11.341 min Scan# 1596
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:129 Resp: 139955

Ion	Ratio	Lower	Upper
129	100		
127	78.3	39.1	117.5





#61
1,2-Dibromoethane
Concen: 50.525 ug/l
RT: 11.453 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:107 Resp: 12541

Ion	Ratio	Lower	Upper
107	100		
109	96.9	77.5	116.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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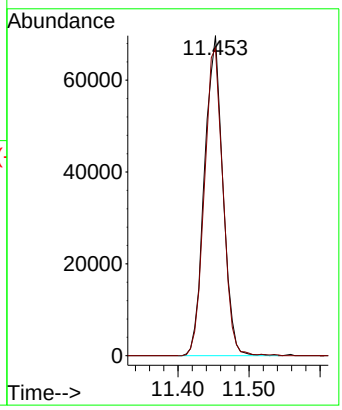
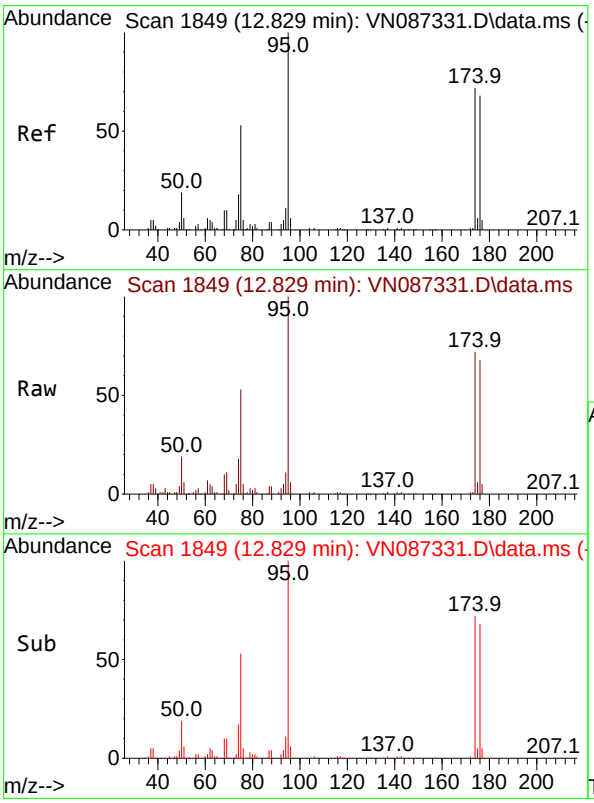
Supervised By :Semsettin Yesilyurt 07/17/2025

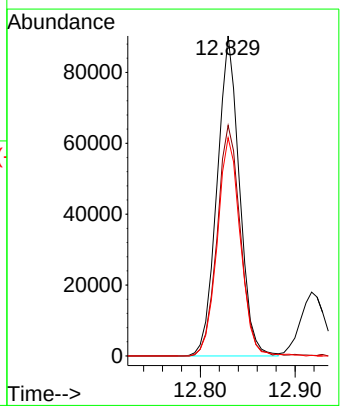


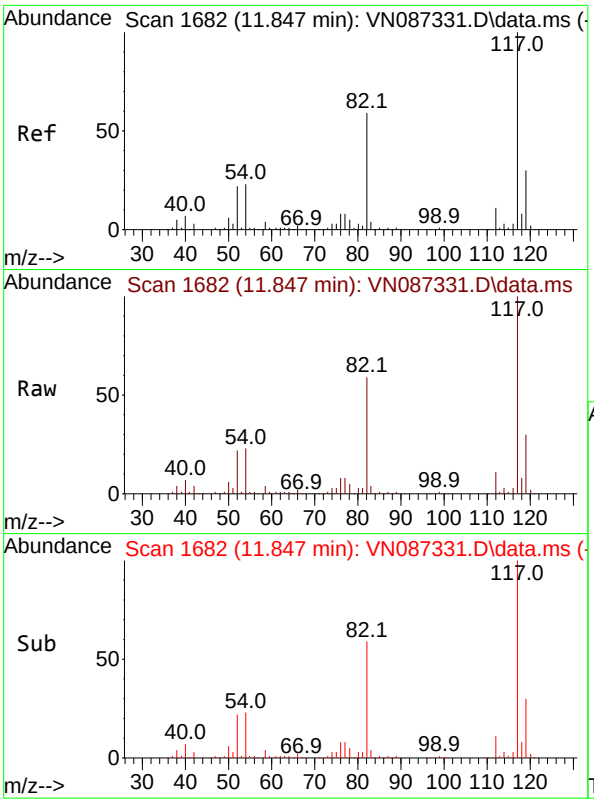


#62
4-Bromofluorobenzene
Concen: 50.037 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 95 Resp: 148158

Ion	Ratio	Lower	Upper
95	100		
174	74.7	0.0	149.4
176	70.6	0.0	141.2

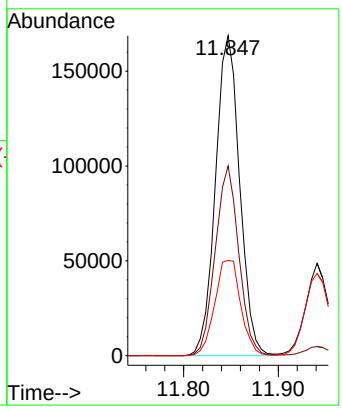




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:117 Resp: 30015

Ion	Ratio	Lower	Upper
117	100		
82	59.3	47.4	71.2
119	29.8	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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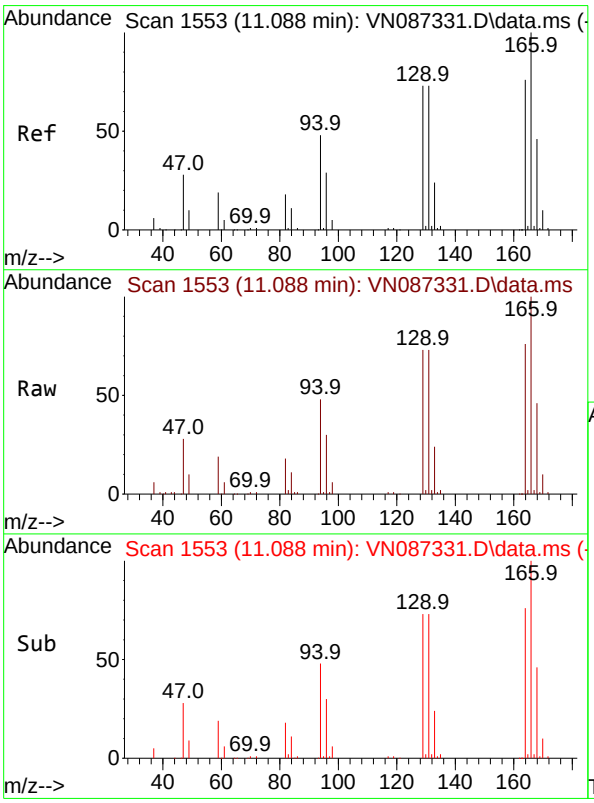
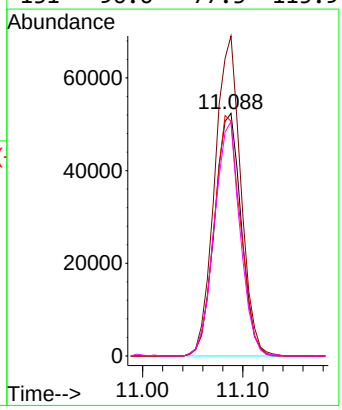
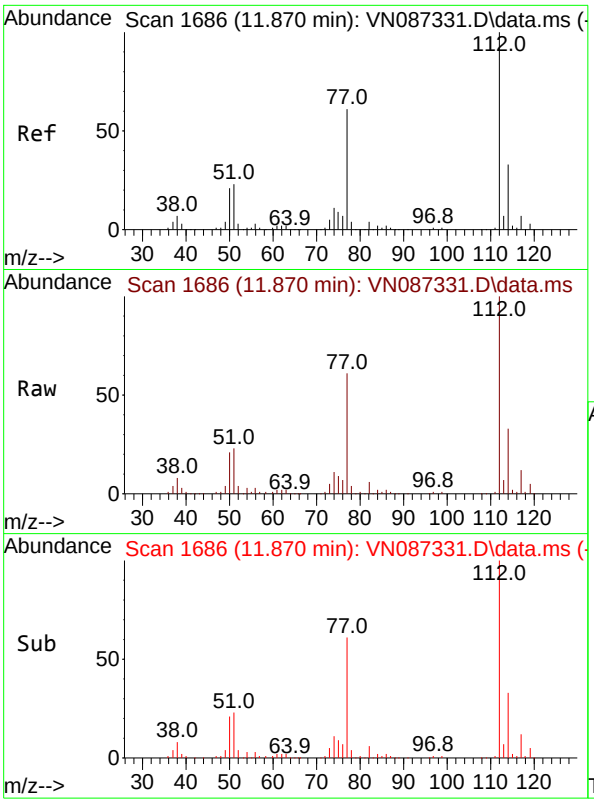


#64
Tetrachloroethene
Concen: 49.786 ug/l
RT: 11.088 min Scan# 1553
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:164 Resp: 96176

Ion	Ratio	Lower	Upper
164	100		
166	131.9	105.5	158.3
129	96.8	77.4	116.2
131	96.6	77.3	115.9

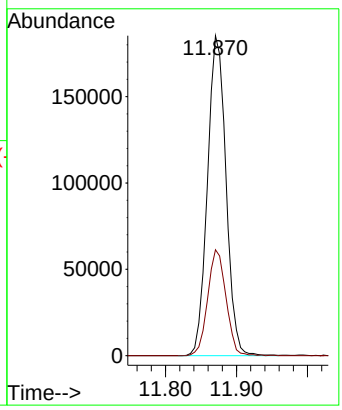




#65
Chlorobenzene
Concen: 49.837 ug/l
RT: 11.870 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:112 Resp: 33583

Ion	Ratio	Lower	Upper
112	100		
114	33.1	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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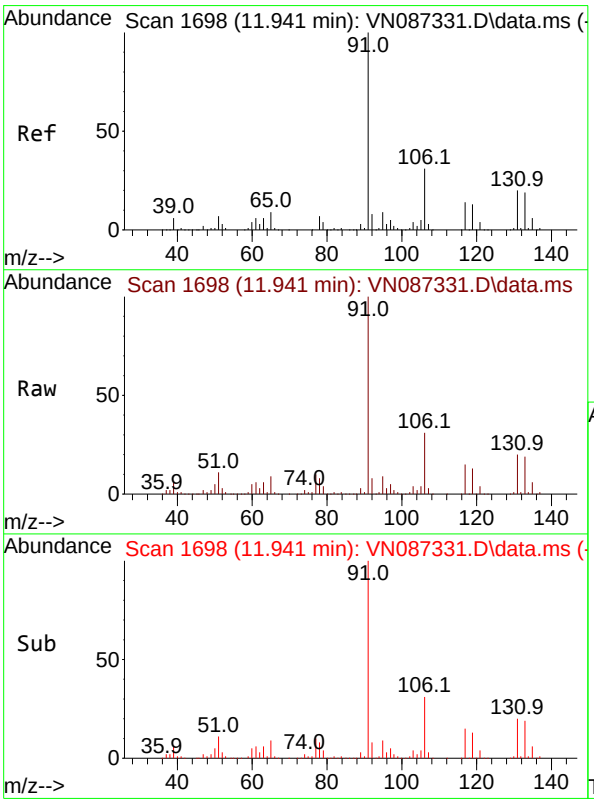
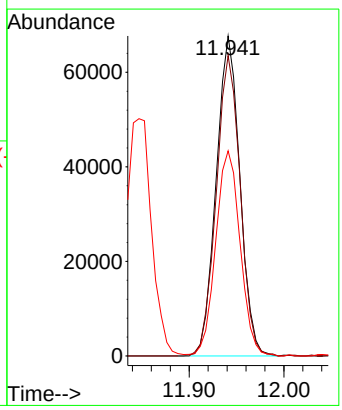
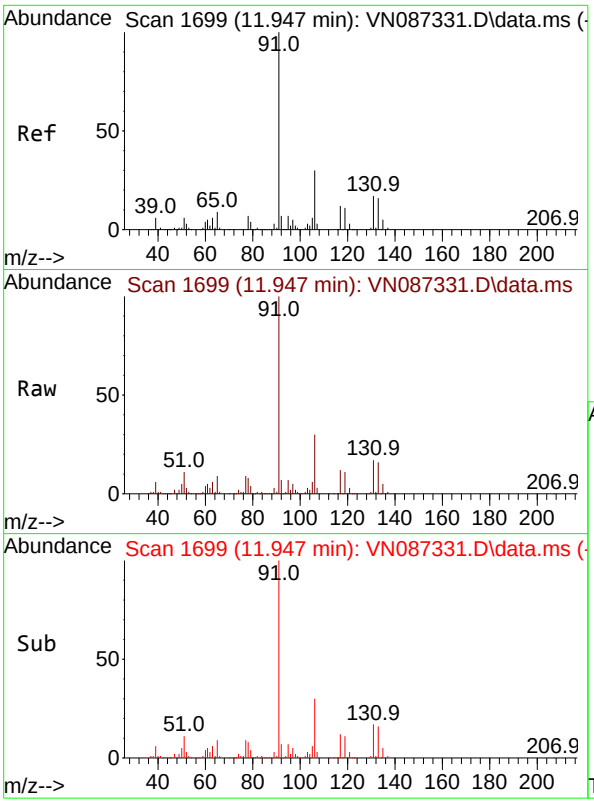


#66
1,1,1,2-Tetrachloroethane
Concen: 51.425 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:131 Resp: 117833

Ion	Ratio	Lower	Upper
131	100		
133	94.9	47.4	142.3
119	66.1	33.1	99.2





#67
Ethyl Benzene
Concen: 52.540 ug/l
RT: 11.947 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 91 Resp: 58285

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
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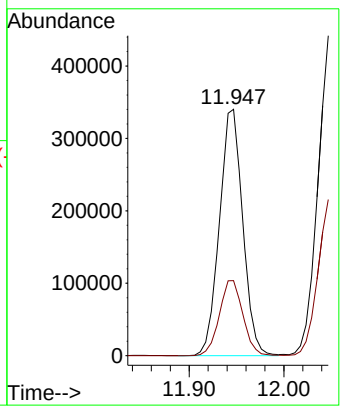
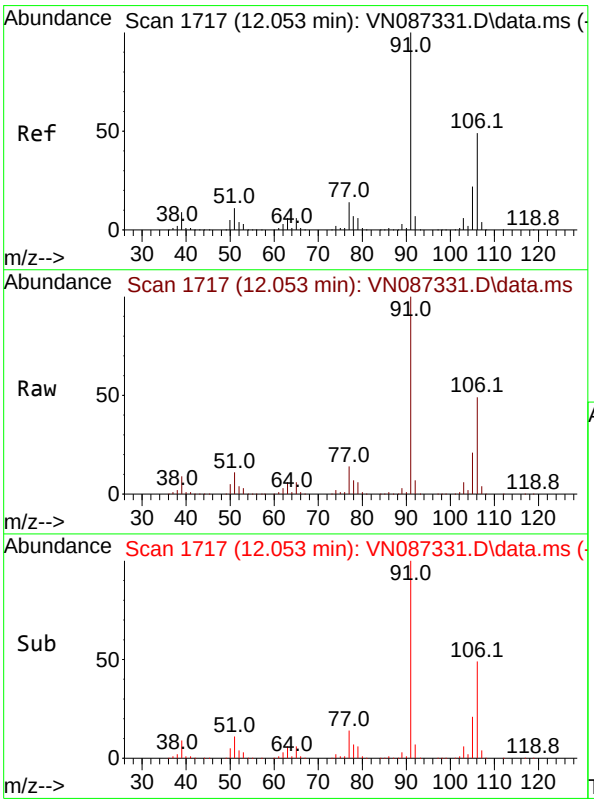
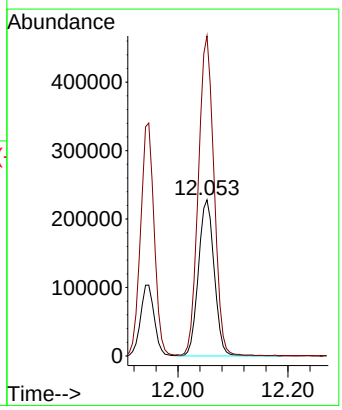


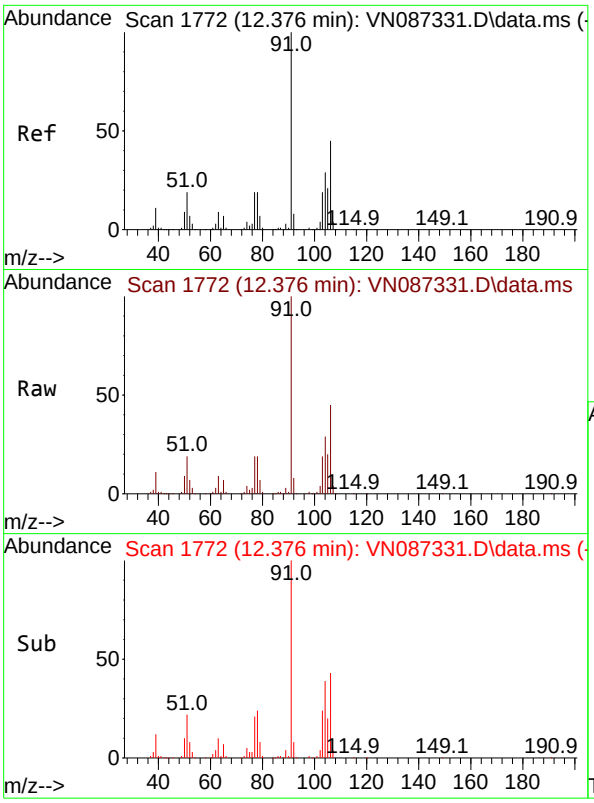


#68
m/p-Xylenes
Concen: 109.536 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:106 Resp: 455017

Ion	Ratio	Lower	Upper
106	100		
91	202.5	162.0	243.0





#69
o-Xylene
Concen: 54.717 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:106 Resp: 21712

Ion	Ratio	Lower	Upper
106	100		
91	215.5	107.7	323.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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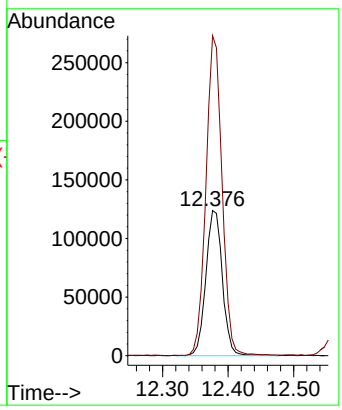
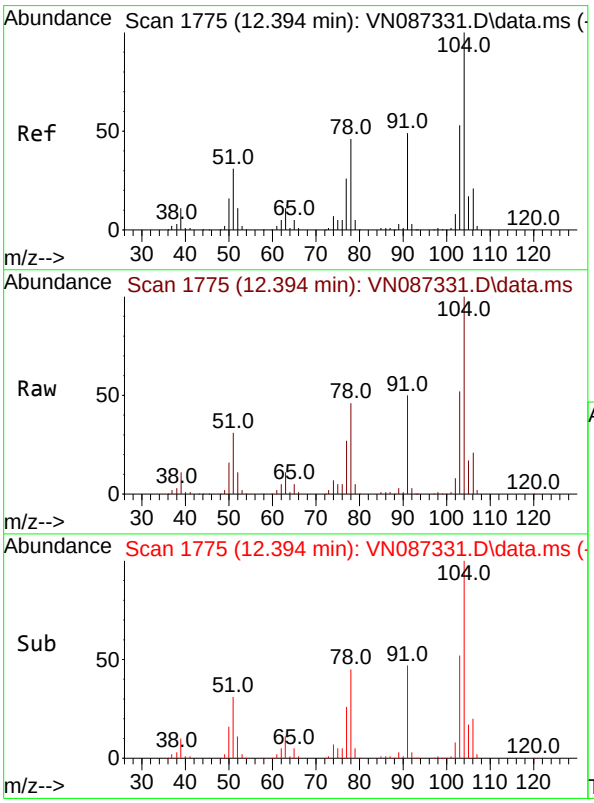
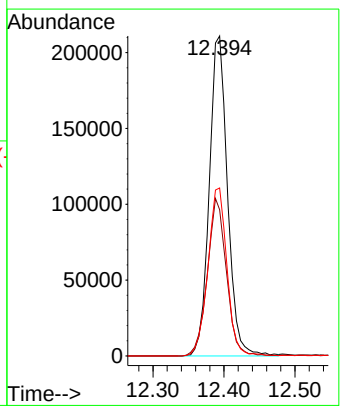


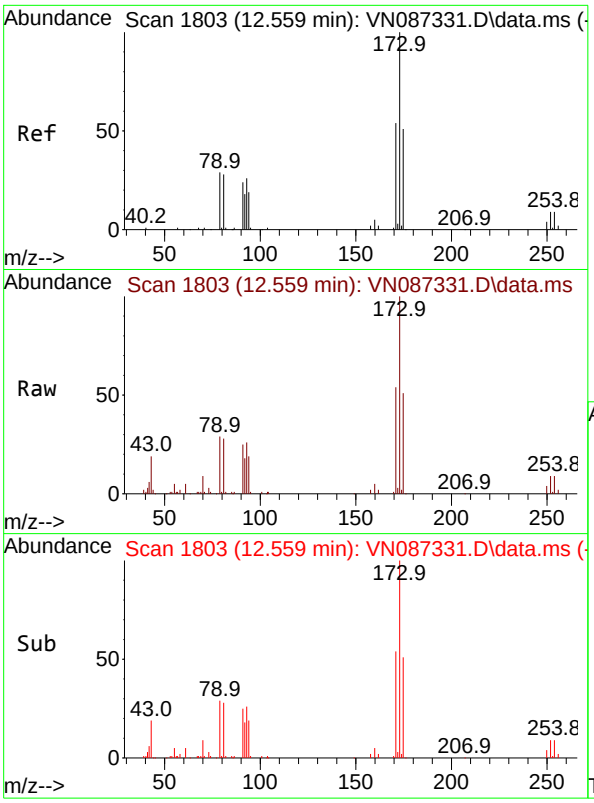


#70
Styrene
Concen: 56.440 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:104 Resp: 376745

Ion	Ratio	Lower	Upper
104	100		
78	51.3	41.0	61.6
103	54.9	43.9	65.9

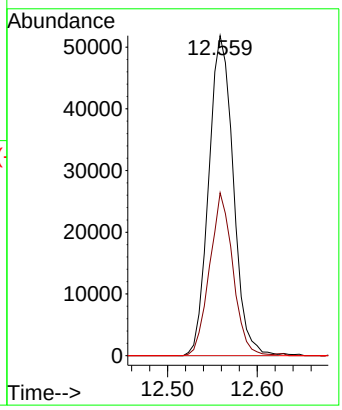




#71
Bromoform
Concen: 53.237 ug/l
RT: 12.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:173 Resp: 9854

Ion	Ratio	Lower	Upper
173	100		
175	48.2	24.1	72.3
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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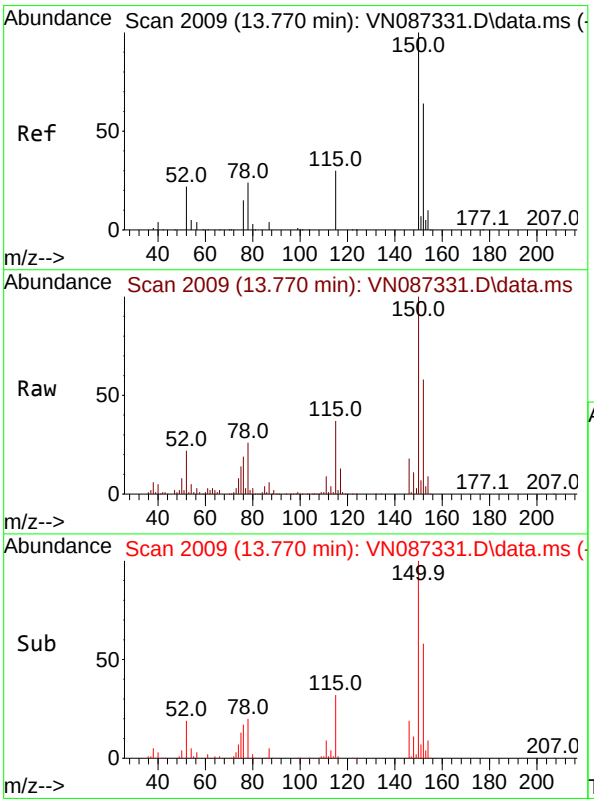
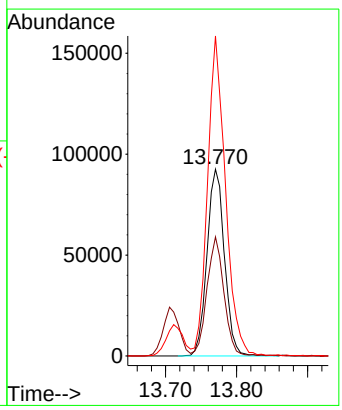
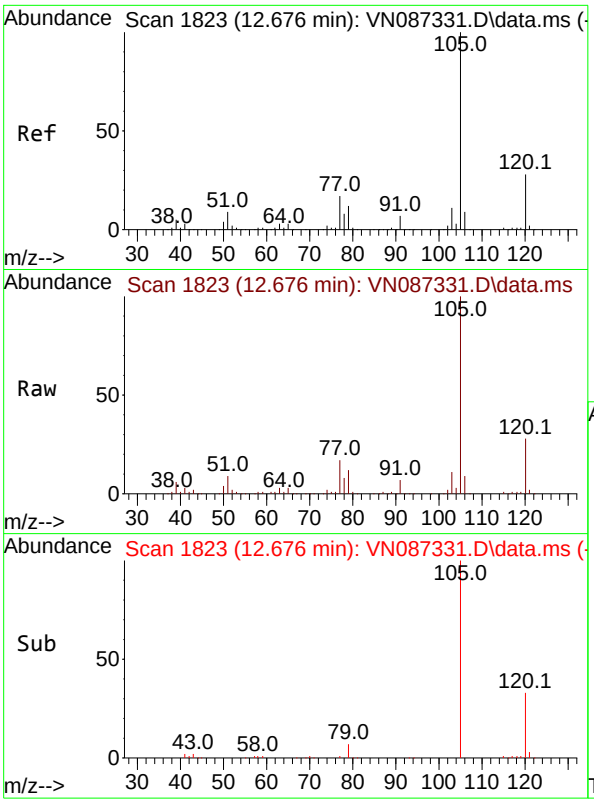


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:152 Resp: 158477

Ion	Ratio	Lower	Upper
152	100		
115	62.3	31.1	93.5
150	174.5	0.0	349.0

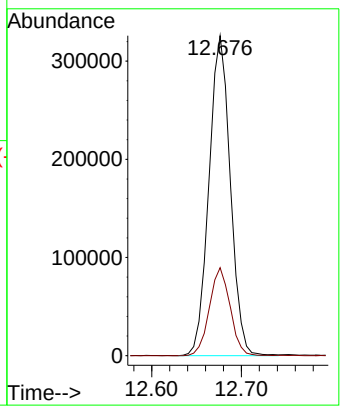




#73
Isopropylbenzene
Concen: 53.964 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:105 Resp: 53824

Ion	Ratio	Lower	Upper
105	100		
120	26.7	13.4	40.1



Instrument :
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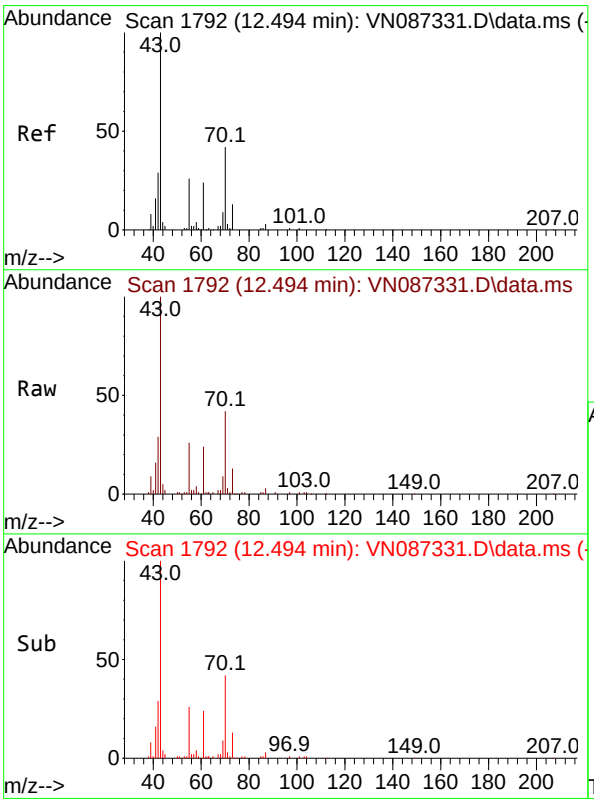
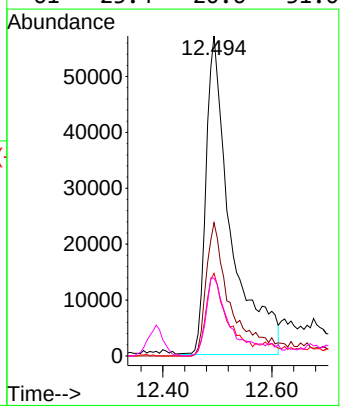
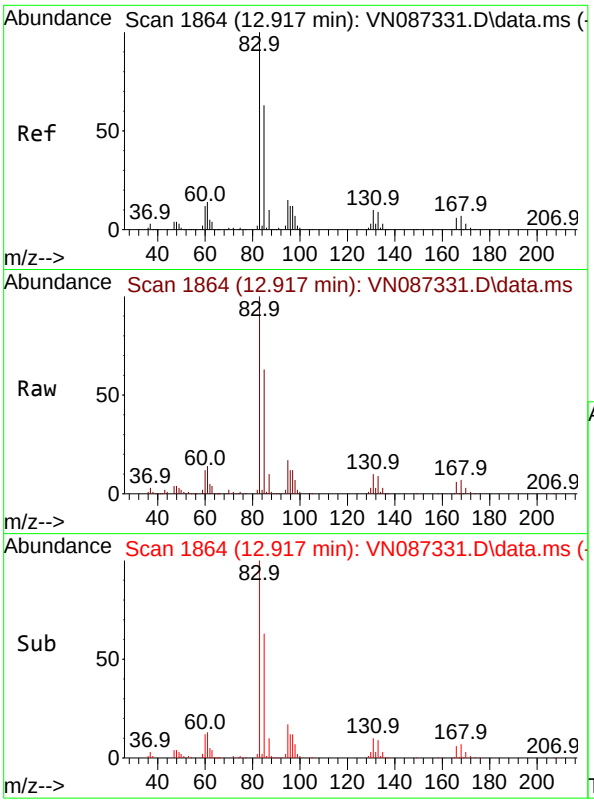


#74
N-amyl acetate
Concen: 46.310 ug/l m
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 43 Resp: 180343

Ion	Ratio	Lower	Upper
43	100		
70	42.5	37.6	56.4
55	22.2	19.6	29.4
61	23.4	20.6	31.0

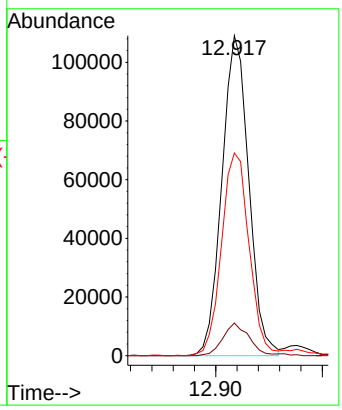




#75
1,1,2,2-Tetrachloroethane
Concen: 50.964 ug/l
RT: 12.917 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 83 Resp: 19127

Ion	Ratio	Lower	Upper
83	100		
131	10.2	5.1	15.3
85	64.9	32.5	97.4



Instrument :
MSVOA_N
ClientSampleId :
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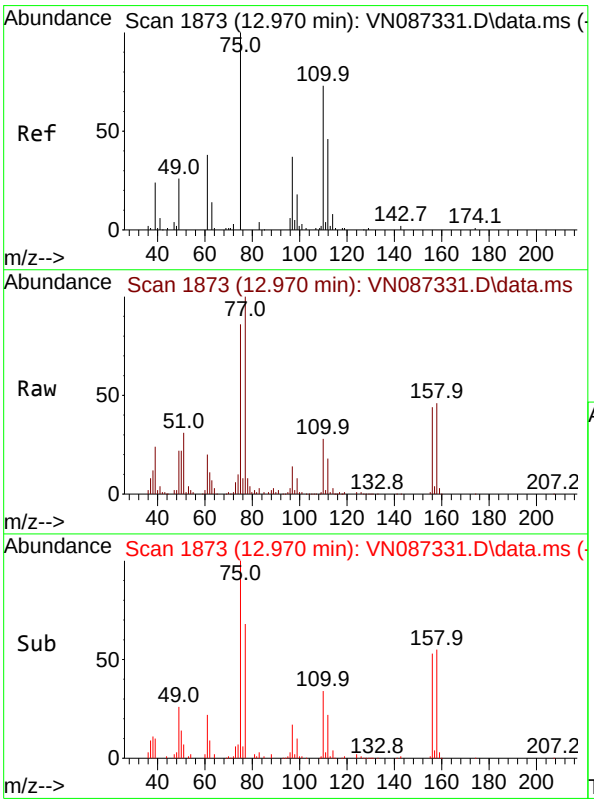
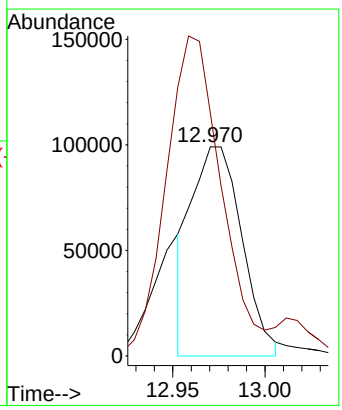
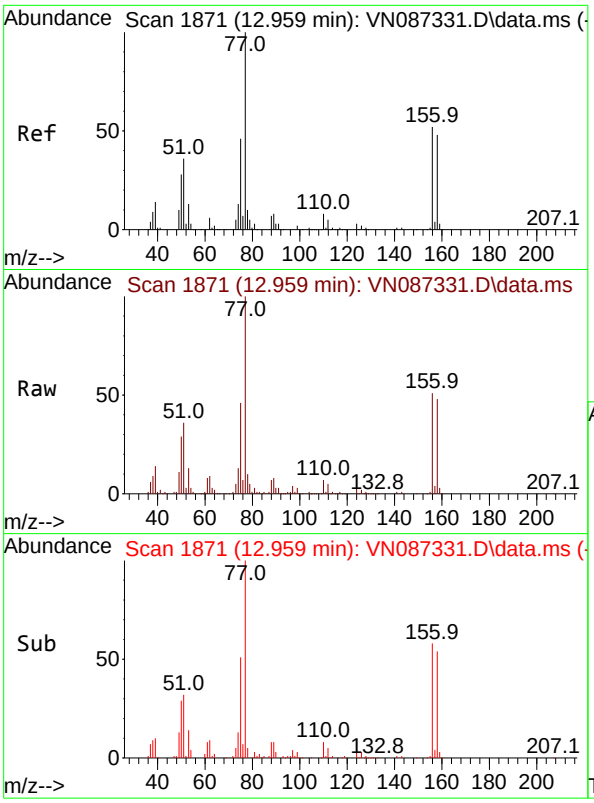


#76
1,2,3-Trichloropropane
Concen: 53.705 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 75 Resp: 188824

Ion	Ratio	Lower	Upper
75	100		
77	167.4	94.5	283.6





#77
Bromobenzene
Concen: 53.221 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:156 Resp: 13766

Ion	Ratio	Lower	Upper
156	100		
77	229.7	114.9	344.6
158	97.0	48.5	145.5

Instrument :
MSVOA_N
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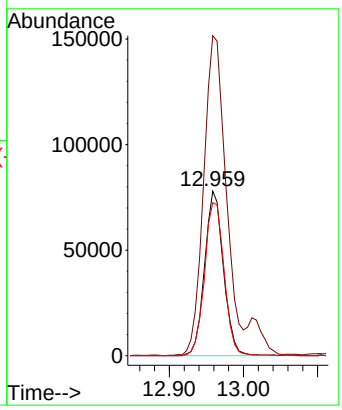
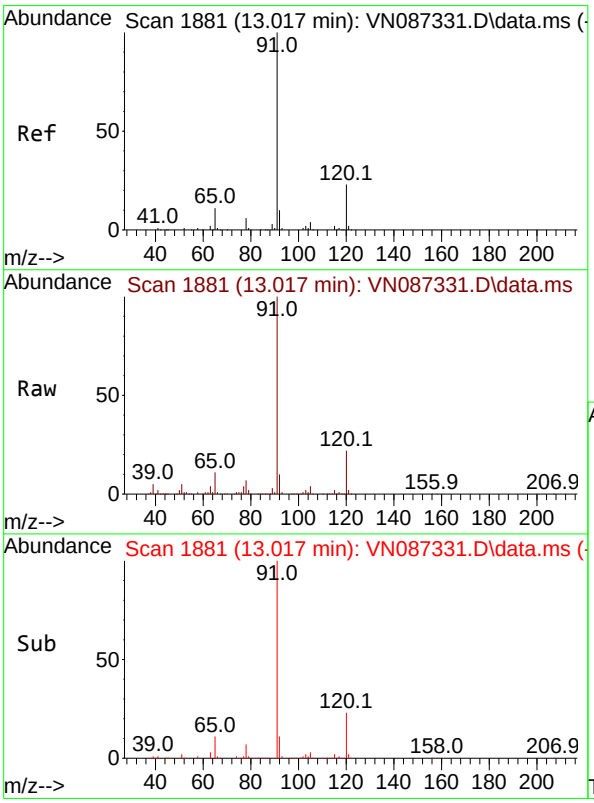
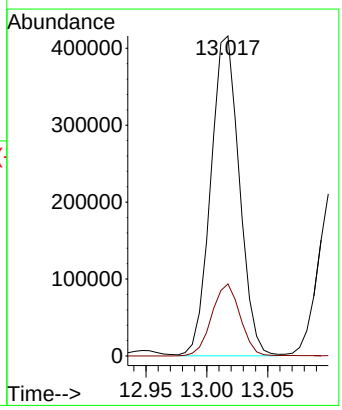


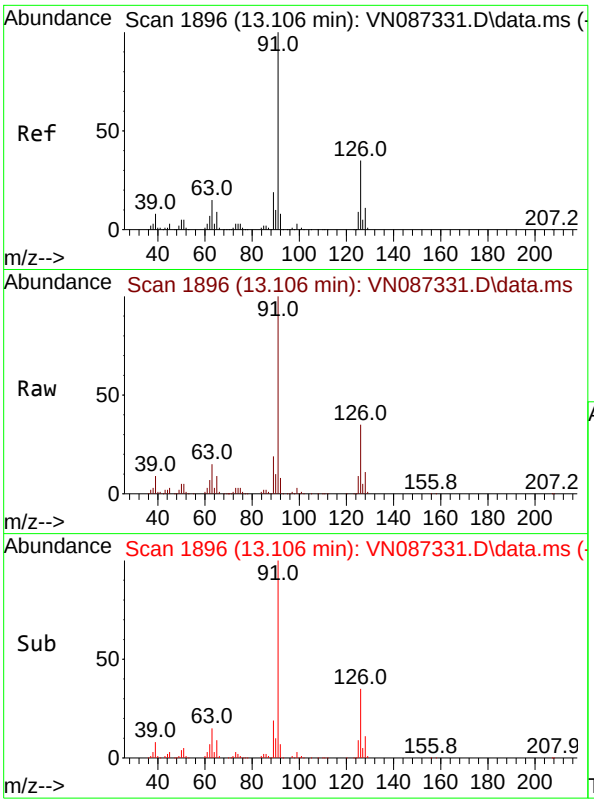


#78
n-propylbenzene
Concen: 54.227 ug/l
RT: 13.017 min Scan# 1881
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 91 Resp: 680506

Ion	Ratio	Lower	Upper
91	100		
120	22.5	11.3	33.8

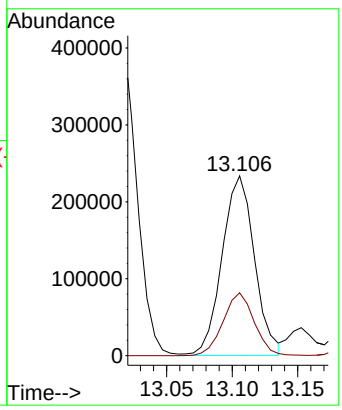




#79
2-Chlorotoluene
Concen: 52.051 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 91 Resp: 40144

Ion	Ratio	Lower	Upper
91	100		
126	33.7	16.9	50.6



Instrument :
MSVOA_N
ClientSampleId :
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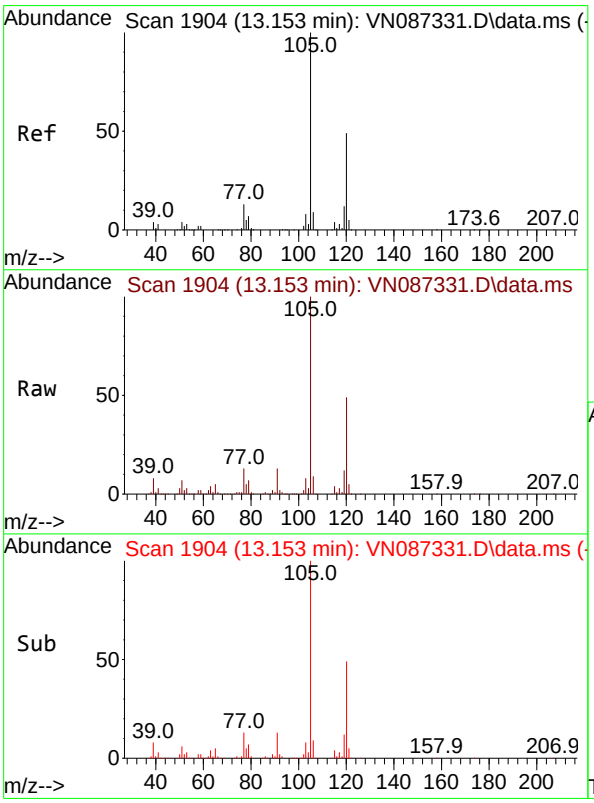
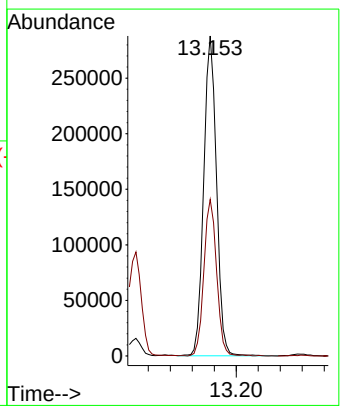
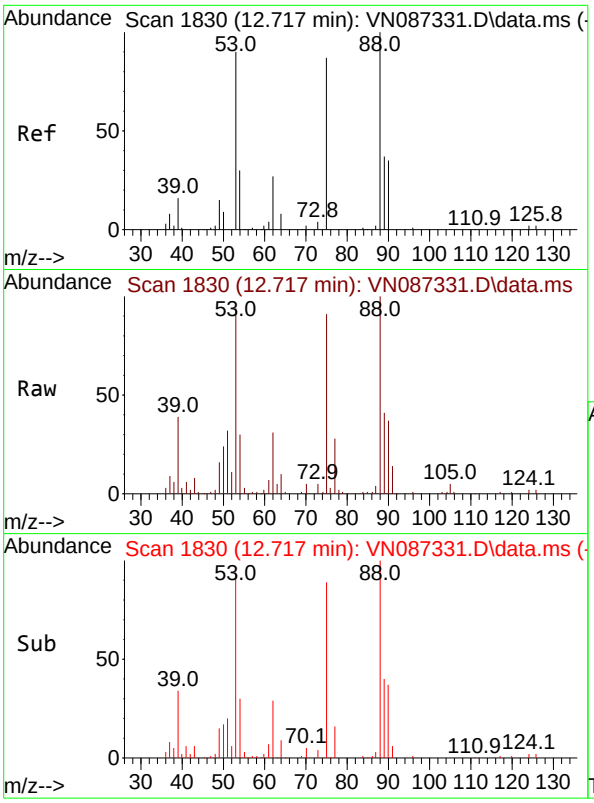


#80
1,3,5-Trimethylbenzene
Concen: 54.607 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:105 Resp: 464063

Ion	Ratio	Lower	Upper
105	100		
120	48.5	24.3	72.8

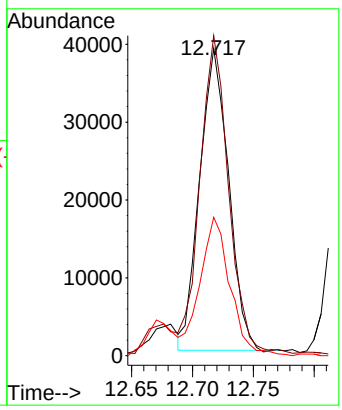




#81
trans-1,4-Dichloro-2-butene
Concen: 49.271 ug/l
RT: 12.717 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 75 Resp: 6399

Ion	Ratio	Lower	Upper
75	100		
53	104.5	83.5	125.3
89	48.0	38.4	57.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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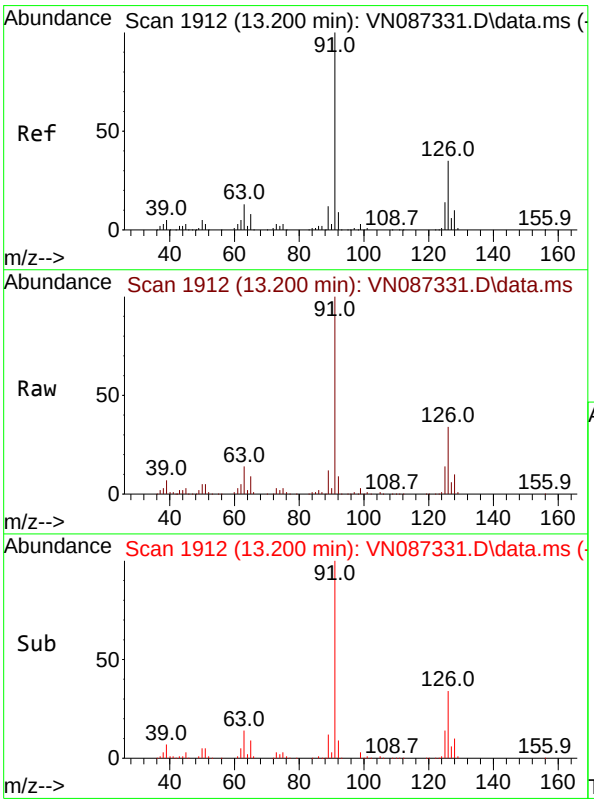
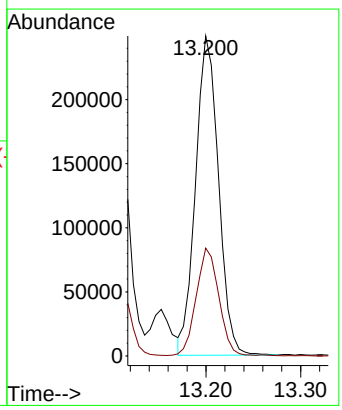
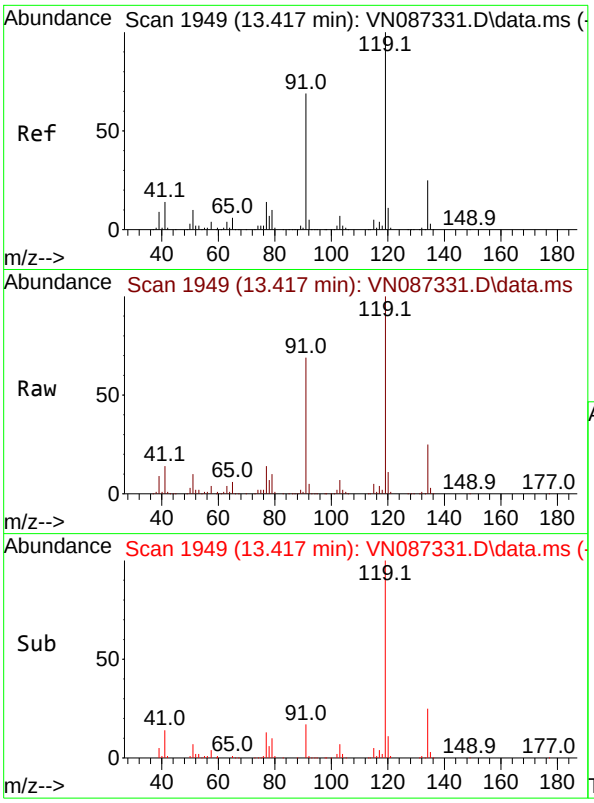


#82
4-Chlorotoluene
Concen: 52.240 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 91 Resp: 419474

Ion	Ratio	Lower	Upper
91	100		
126	33.1	16.6	49.7

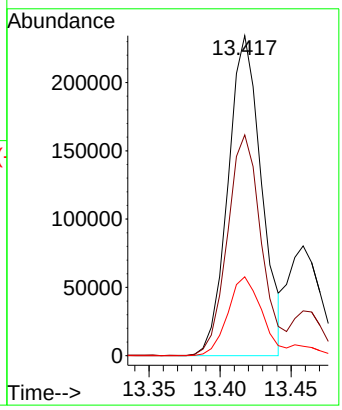




#83
tert-Butylbenzene
Concen: 54.099 ug/l
RT: 13.417 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:119 Resp: 38398

Ion	Ratio	Lower	Upper
119	100		
91	70.1	35.0	105.1
134	25.1	12.6	37.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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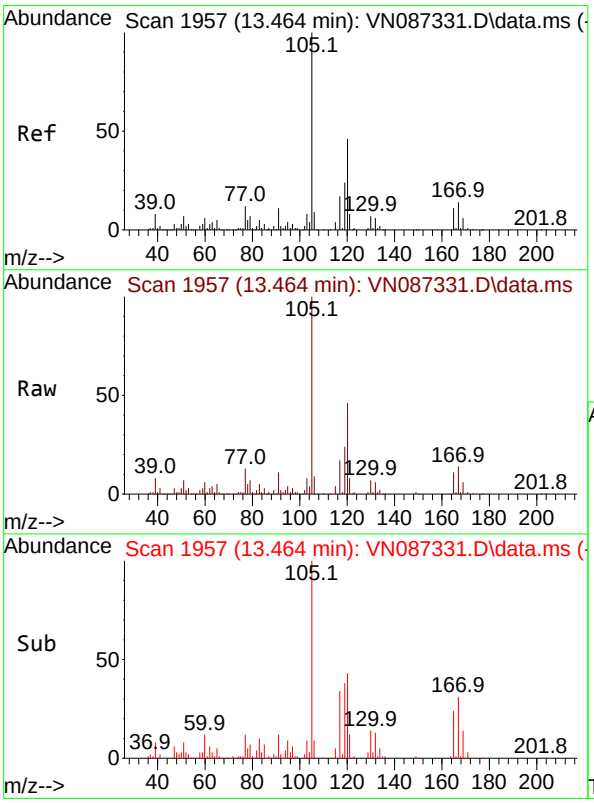
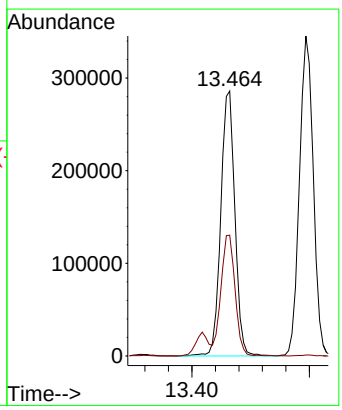
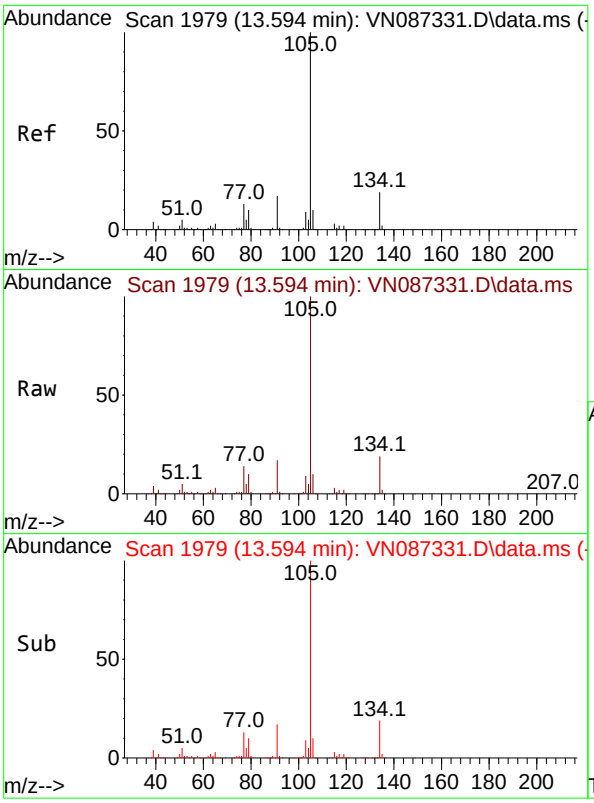


#84
1,2,4-Trimethylbenzene
Concen: 54.846 ug/l
RT: 13.464 min Scan# 1957
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:105 Resp: 475982

Ion	Ratio	Lower	Upper
105	100		
120	45.5	22.8	68.3

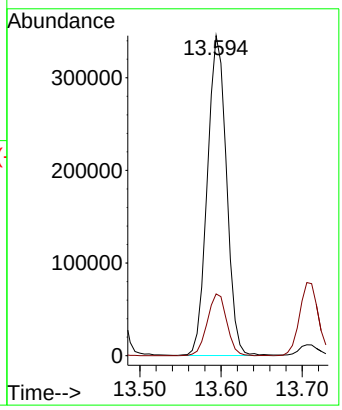




#85
sec-Butylbenzene
Concen: 52.851 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:105 Resp: 56503

Ion	Ratio	Lower	Upper
105	100		
134	19.6	9.8	29.4



Instrument :
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ClientSampleId :
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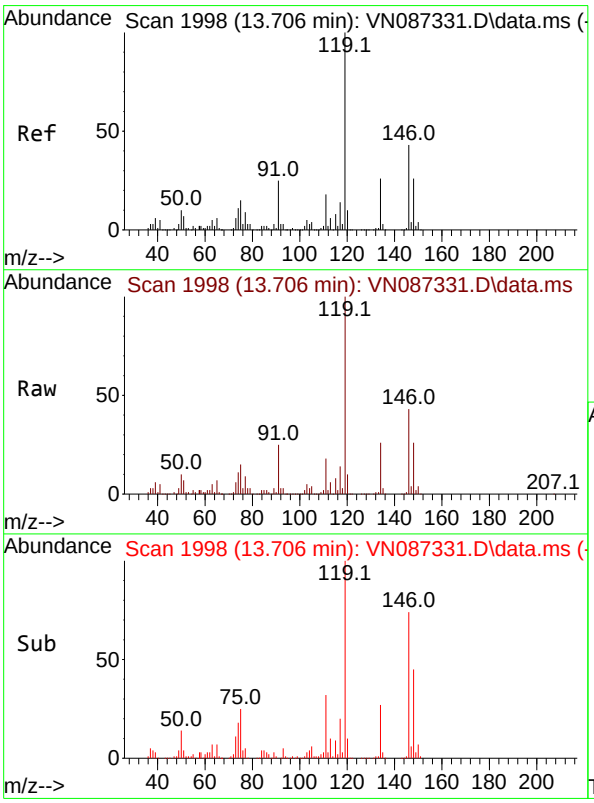
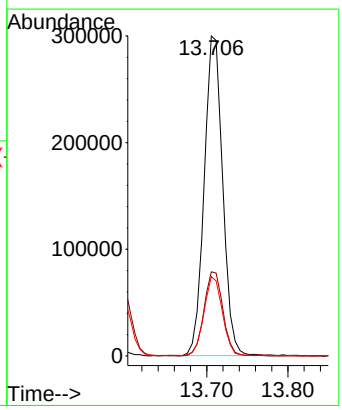
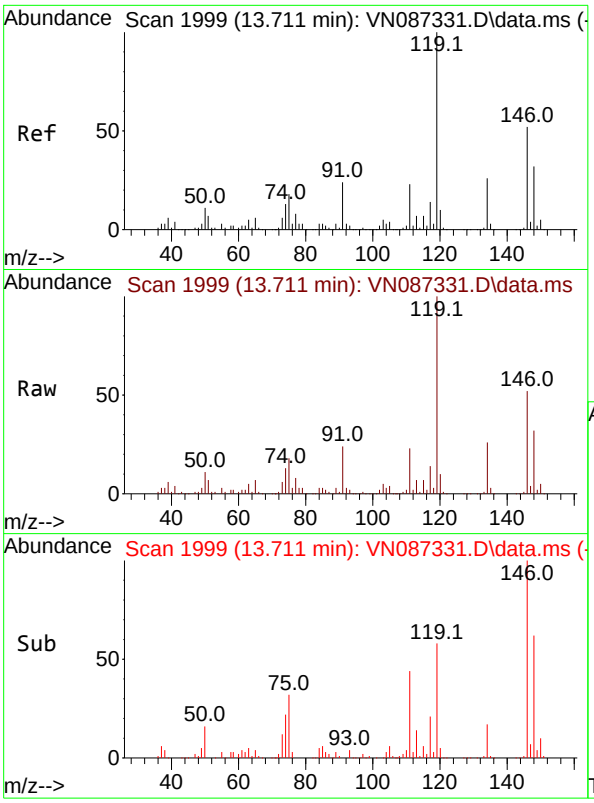


#86
p-Isopropyltoluene
Concen: 55.316 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:119 Resp: 473942

Ion	Ratio	Lower	Upper
119	100		
134	27.0	13.5	40.5
91	24.4	12.2	36.6

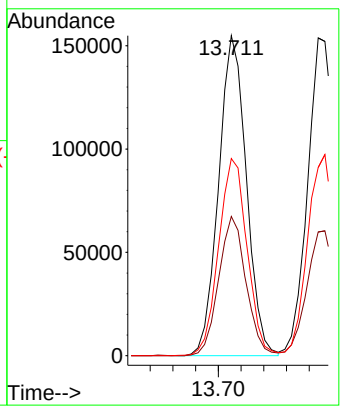




#87
1,3-Dichlorobenzene
Concen: 51.740 ug/l
RT: 13.711 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:146 Resp: 26267

Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.4	64.3
148	63.3	31.6	95.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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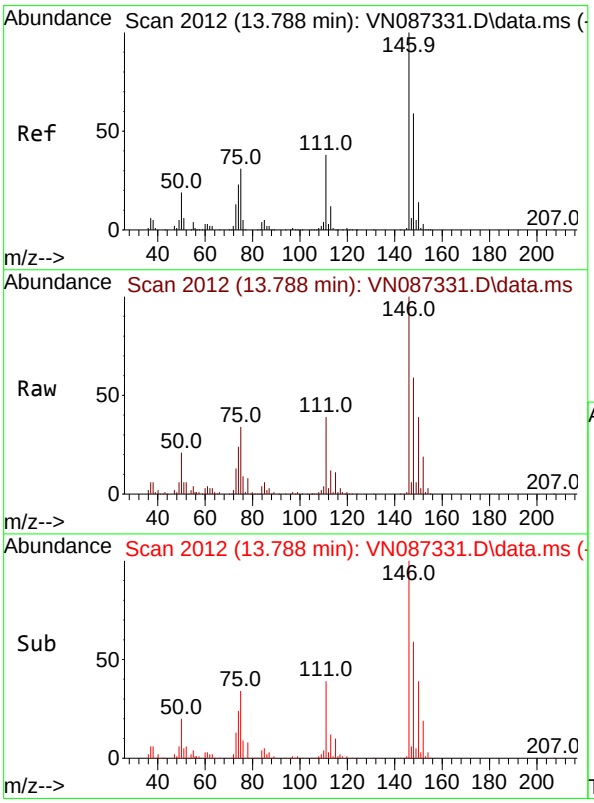
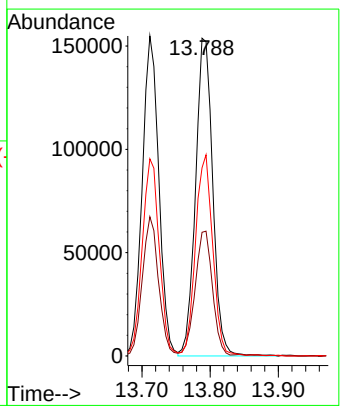
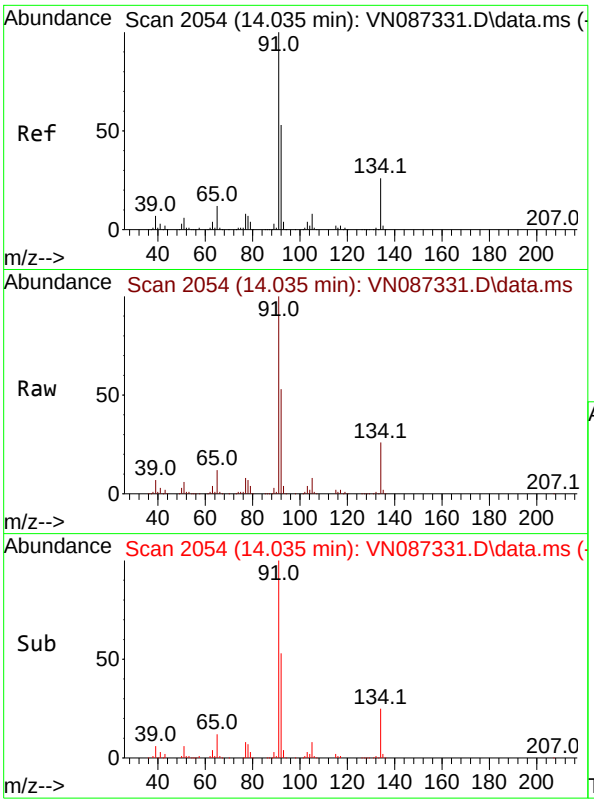


#88
1,4-Dichlorobenzene
Concen: 49.773 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:146 Resp: 269881

Ion	Ratio	Lower	Upper
146	100		
111	39.1	19.6	58.7
148	62.7	31.4	94.0

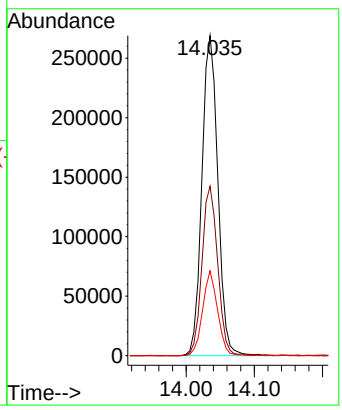




#89
n-Butylbenzene
Concen: 53.478 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 91 Resp: 43751

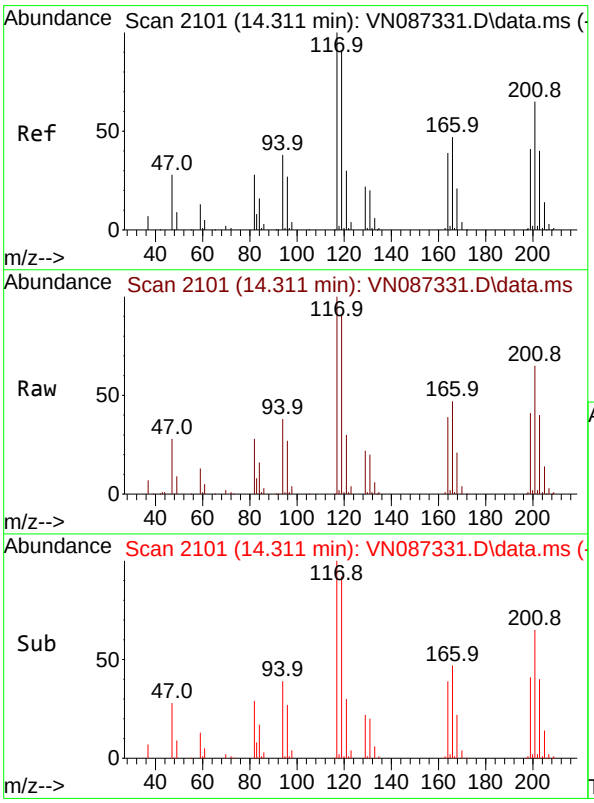
Ion	Ratio	Lower	Upper
91	100		
92	52.4	26.2	78.6
134	24.8	12.4	37.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

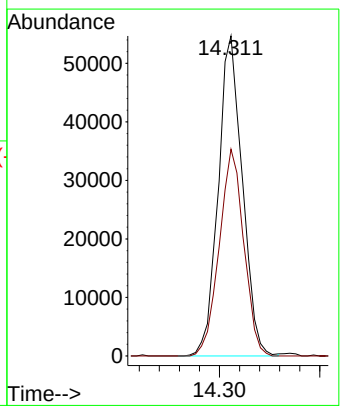
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

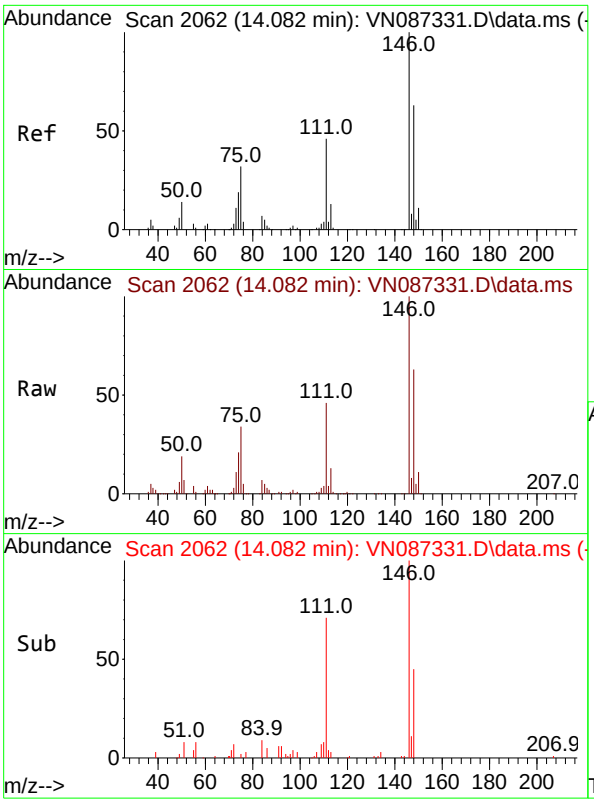


#90
Hexachloroethane
Concen: 50.301 ug/l
RT: 14.311 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:117 Resp: 91313

Ion	Ratio	Lower	Upper
117	100		
201	65.6	32.8	98.4

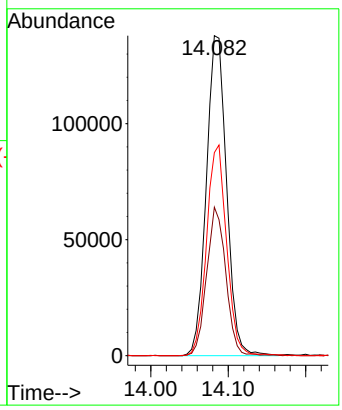




#91
1,2-Dichlorobenzene
Concen: 51.977 ug/l
RT: 14.082 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:146 Resp: 24998

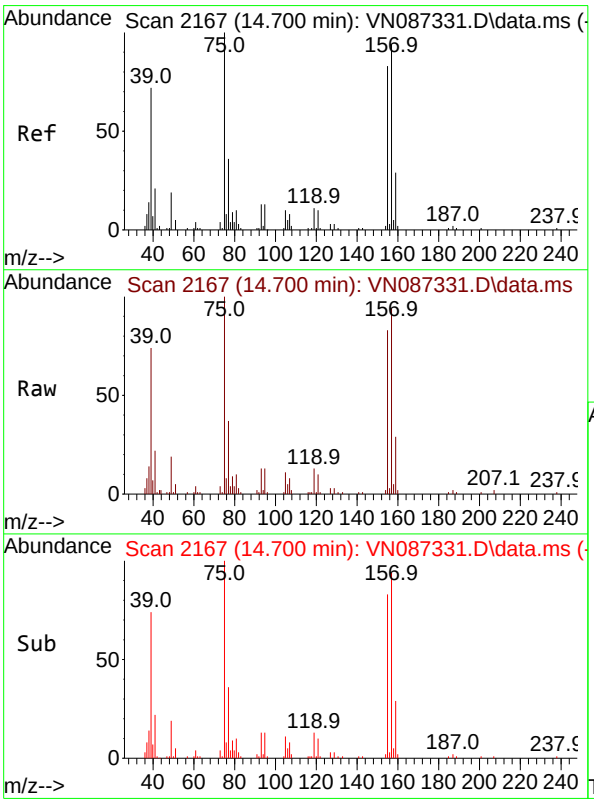
Ion	Ratio	Lower	Upper
146	100		
111	44.0	22.0	66.0
148	65.4	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

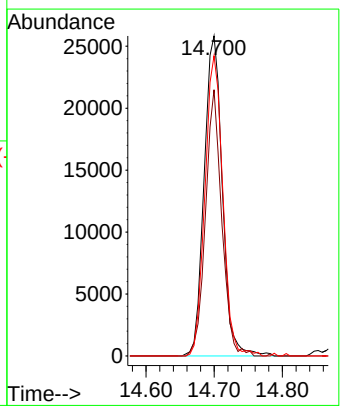
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

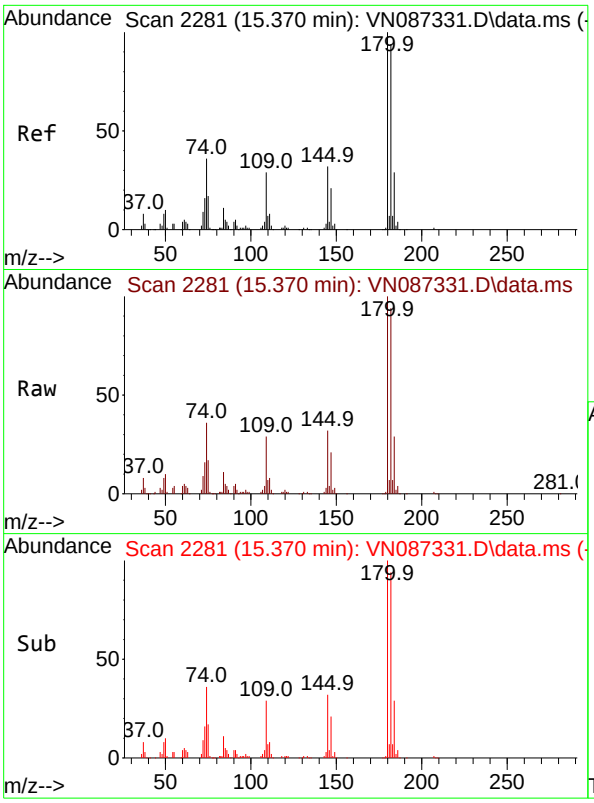


#92
1,2-Dibromo-3-Chloropropane
Concen: 48.643 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion: 75 Resp: 47931

Ion	Ratio	Lower	Upper
75	100		
155	74.5	37.3	111.8
157	92.4	46.2	138.6

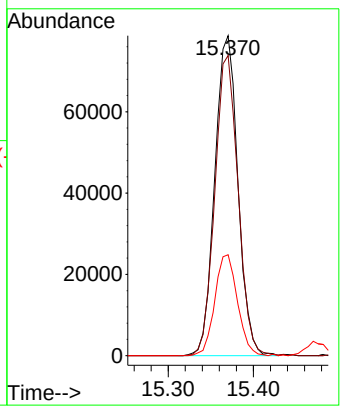




#93
1,2,4-Trichlorobenzene
Concen: 52.553 ug/l
RT: 15.370 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:180 Resp: 14847

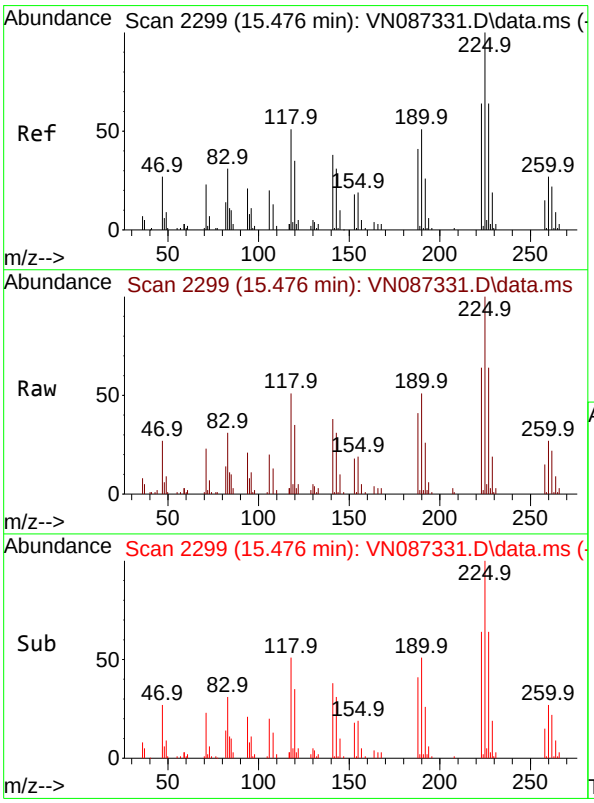
Ion	Ratio	Lower	Upper
180	100		
182	94.5	47.3	141.8
145	30.9	15.4	46.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

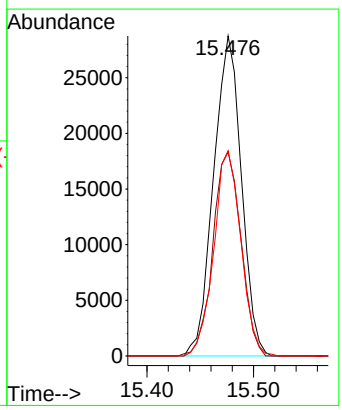
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

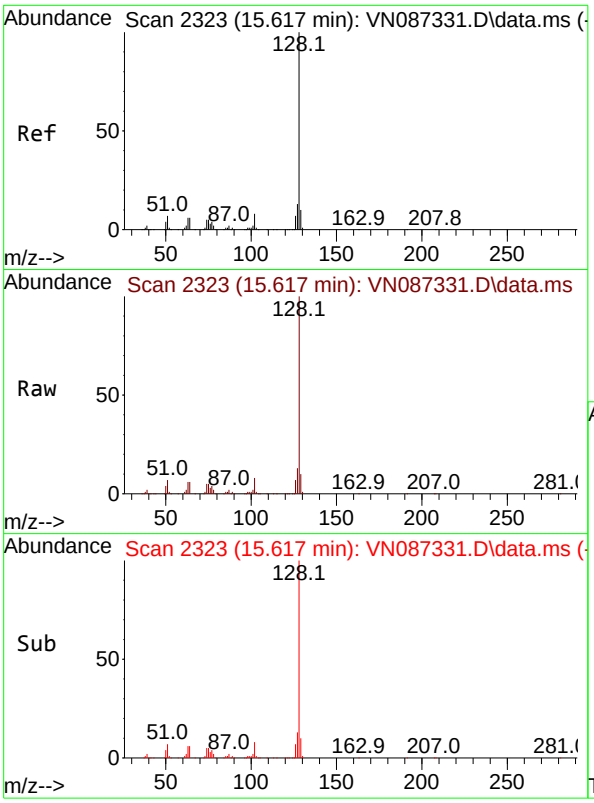


#94
Hexachlorobutadiene
Concen: 49.659 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:225 Resp: 52130

Ion	Ratio	Lower	Upper
225	100		
223	64.2	32.1	96.3
227	62.6	31.3	93.9

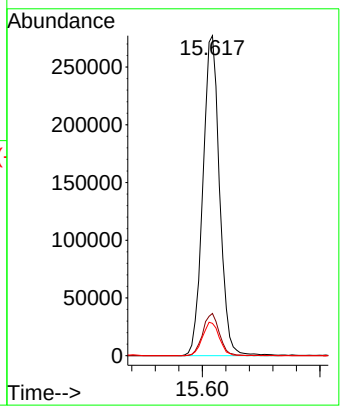




#95
Naphthalene
Concen: 54.490 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:128 Resp: 54536

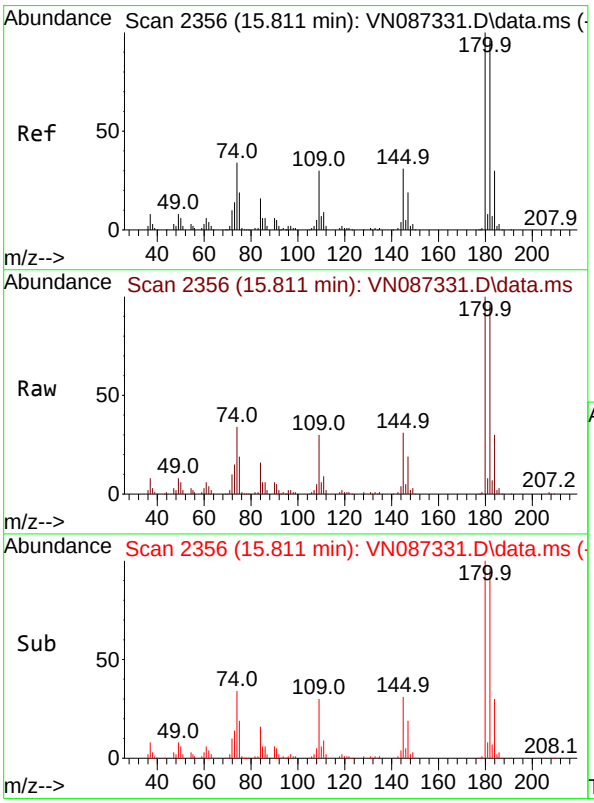
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.5	15.7
129	10.5	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

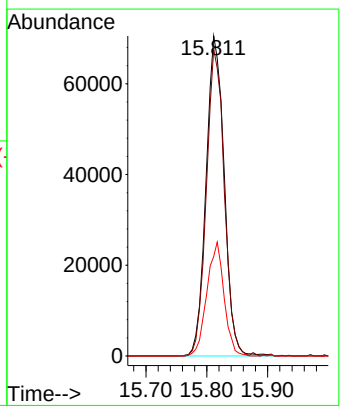
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 51.547 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087331.D
Acq: 16 Jul 2025 18:11

Tgt Ion:180 Resp: 146080

Ion	Ratio	Lower	Upper
180	100		
182	94.3	47.1	141.4
145	33.7	16.9	50.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087332.D
Acq On : 16 Jul 2025 18:32
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 17 02:20:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	192275	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.088	114	339591	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	314849	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	168489	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	314416	96.373	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 192.740%#			
35) Dibromofluoromethane	8.153	113	236468	100.947	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 201.900%#			
50) Toluene-d8	10.547	98	852301	101.999	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 204.000%#			
62) 4-Bromofluorobenzene	12.829	95	323070	104.650	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 209.300%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	233197	114.190	ug/l	92
3) Chloromethane	2.383	50	253369	98.660	ug/l	98
4) Vinyl Chloride	2.542	62	266221	104.312	ug/l	94
5) Bromomethane	2.959	94	136793	103.503	ug/l	96
6) Chloroethane	3.124	64	159422	95.783	ug/l	92
7) Trichlorofluoromethane	3.501	101	369032	97.786	ug/l	98
8) Diethyl Ether	3.959	74	142652	97.445	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.353	101	188841	97.477	ug/l	100
10) Methyl Iodide	4.571	142	213127	100.524	ug/l	99
11) Tert butyl alcohol	5.536	59	309615	499.800	ug/l	99
12) 1,1-Dichloroethene	4.336	96	197760	90.083	ug/l	95
13) Acrolein	4.177	56	250115	503.102	ug/l	99
14) Allyl chloride	5.006	41	382812	96.355	ug/l	100
15) Acrylonitrile	5.706	53	839080	499.150	ug/l	100
16) Acetone	4.424	43	693485	448.375	ug/l	96
17) Carbon Disulfide	4.695	76	631695	97.056	ug/l	95
18) Methyl Acetate	5.012	43	369894	96.247	ug/l	99
19) Methyl tert-butyl Ether	5.789	73	818763	101.186	ug/l	98
20) Methylene Chloride	5.259	84	251830	98.001	ug/l	97
21) trans-1,2-Dichloroethene	5.771	96	237704	96.030	ug/l	94
22) Diisopropyl ether	6.659	45	832709	99.921	ug/l	96
23) Vinyl Acetate	6.594	43	3859420	529.516	ug/l	97
24) 1,1-Dichloroethane	6.553	63	455820	94.807	ug/l	100
25) 2-Butanone	7.471	43	1185700	501.667	ug/l	98
26) 2,2-Dichloropropane	7.477	77	358596	95.932	ug/l	99
27) cis-1,2-Dichloroethene	7.477	96	284578	99.858	ug/l	98
28) Bromochloromethane	7.800	49	229544	99.757	ug/l	100
29) Tetrahydrofuran	7.830	42	768521	500.532	ug/l	98
30) Chloroform	7.953	83	466838	97.008	ug/l	99
31) Cyclohexane	8.241	56	377159	94.035	ug/l	95
32) 1,1,1-Trichloroethane	8.153	97	403445	96.794	ug/l	97
36) 1,1-Dichloropropene	8.353	75	324047	104.705	ug/l	99
37) Ethyl Acetate	7.547	43	448428	100.326	ug/l	99
38) Carbon Tetrachloride	8.347	117	342043	100.328	ug/l	99
39) Methylcyclohexane	9.582	83	352211	105.118	ug/l	96
40) Benzene	8.588	78	1007257	100.700	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087332.D
Acq On : 16 Jul 2025 18:32
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 17 02:20:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	239659	102.544	ug/l		99
42) 1,2-Dichloroethane	8.653	62	369731	97.472	ug/l		99
43) Isopropyl Acetate	8.677	43	704936	101.598	ug/l		99
44) Trichloroethene	9.335	130	230373	97.472	ug/l		93
45) 1,2-Dichloropropane	9.606	63	255369	100.478	ug/l		96
46) Dibromomethane	9.694	93	185908	97.696	ug/l		98
47) Bromodichloromethane	9.871	83	375910	98.072	ug/l		97
48) Methyl methacrylate	9.665	41	334941	107.228	ug/l		97
49) 1,4-Dioxane	9.688	88	102159	2135.348	ug/l	#	95
51) 4-Methyl-2-Pentanone	10.429	43	2234274	509.127	ug/l		100
52) Toluene	10.612	92	622259	102.349	ug/l		97
53) t-1,3-Dichloropropene	10.818	75	412142	106.245	ug/l		100
54) cis-1,3-Dichloropropene	10.294	75	421386	105.164	ug/l		98
55) 1,1,2-Trichloroethane	11.000	97	242683	98.595	ug/l		97
56) Ethyl methacrylate	10.859	69	425458	98.980	ug/l		98
57) 1,3-Dichloropropane	11.147	76	431753	101.453	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.141	63	1052628	521.327	ug/l		99
59) 2-Hexanone	11.176	43	1631949	560.508	ug/l		99
60) Dibromochloromethane	11.341	129	287682	102.484	ug/l		99
61) 1,2-Dibromoethane	11.453	107	258936	100.051	ug/l		98
64) Tetrachloroethene	11.082	164	195044	96.252	ug/l		97
65) Chlorobenzene	11.871	112	687696	97.289	ug/l		97
66) 1,1,1,2-Tetrachloroethane	11.941	131	239722	99.736	ug/l		99
67) Ethyl Benzene	11.947	91	1199510	103.080	ug/l		99
68) m/p-Xylenes	12.053	106	924069	212.065	ug/l		99
69) o-Xylene	12.376	106	447092	107.413	ug/l		100
70) Styrene	12.394	104	766471	109.464	ug/l		98
71) Bromoform	12.559	173	202915	104.498	ug/l	#	99
73) Isopropylbenzene	12.676	105	1112821	104.940	ug/l		100
74) N-amyl acetate	12.482	43	464246	112.129	ug/l		94
75) 1,1,2,2-Tetrachloroethane	12.918	83	389392	97.587	ug/l		98
76) 1,2,3-Trichloropropane	12.970	75	326434m	87.327	ug/l		
77) Bromobenzene	12.959	156	279589	101.662	ug/l		100
78) n-propylbenzene	13.018	91	1384517	103.771	ug/l		99
79) 2-Chlorotoluene	13.106	91	840073	102.452	ug/l		98
80) 1,3,5-Trimethylbenzene	13.153	105	943119	104.383	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.718	75	140673	101.874	ug/l		96
82) 4-Chlorotoluene	13.200	91	859965	100.734	ug/l		99
83) tert-Butylbenzene	13.418	119	800700	106.106	ug/l		99
84) 1,2,4-Trimethylbenzene	13.459	105	967878	104.898	ug/l		100
85) sec-Butylbenzene	13.594	105	1141320	100.410	ug/l		98
86) p-Isopropyltoluene	13.706	119	975014	107.037	ug/l		99
87) 1,3-Dichlorobenzene	13.712	146	535172	99.151	ug/l		100
88) 1,4-Dichlorobenzene	13.788	146	548212	95.097	ug/l		99
89) n-Butylbenzene	14.035	91	880763	101.260	ug/l		99
90) Hexachloroethane	14.312	117	185973	96.358	ug/l		98
91) 1,2-Dichlorobenzene	14.082	146	508902	99.523	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.700	75	97572	93.137	ug/l		94
93) 1,2,4-Trichlorobenzene	15.364	180	310448	103.357	ug/l		99
94) Hexachlorobutadiene	15.476	225	106429	95.360	ug/l		98
95) Naphthalene	15.611	128	1162930	109.289	ug/l		99
96) 1,2,3-Trichlorobenzene	15.811	180	308888	102.519	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087332.D
Acq On : 16 Jul 2025 18:32
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:20:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

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

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

ICAL Form

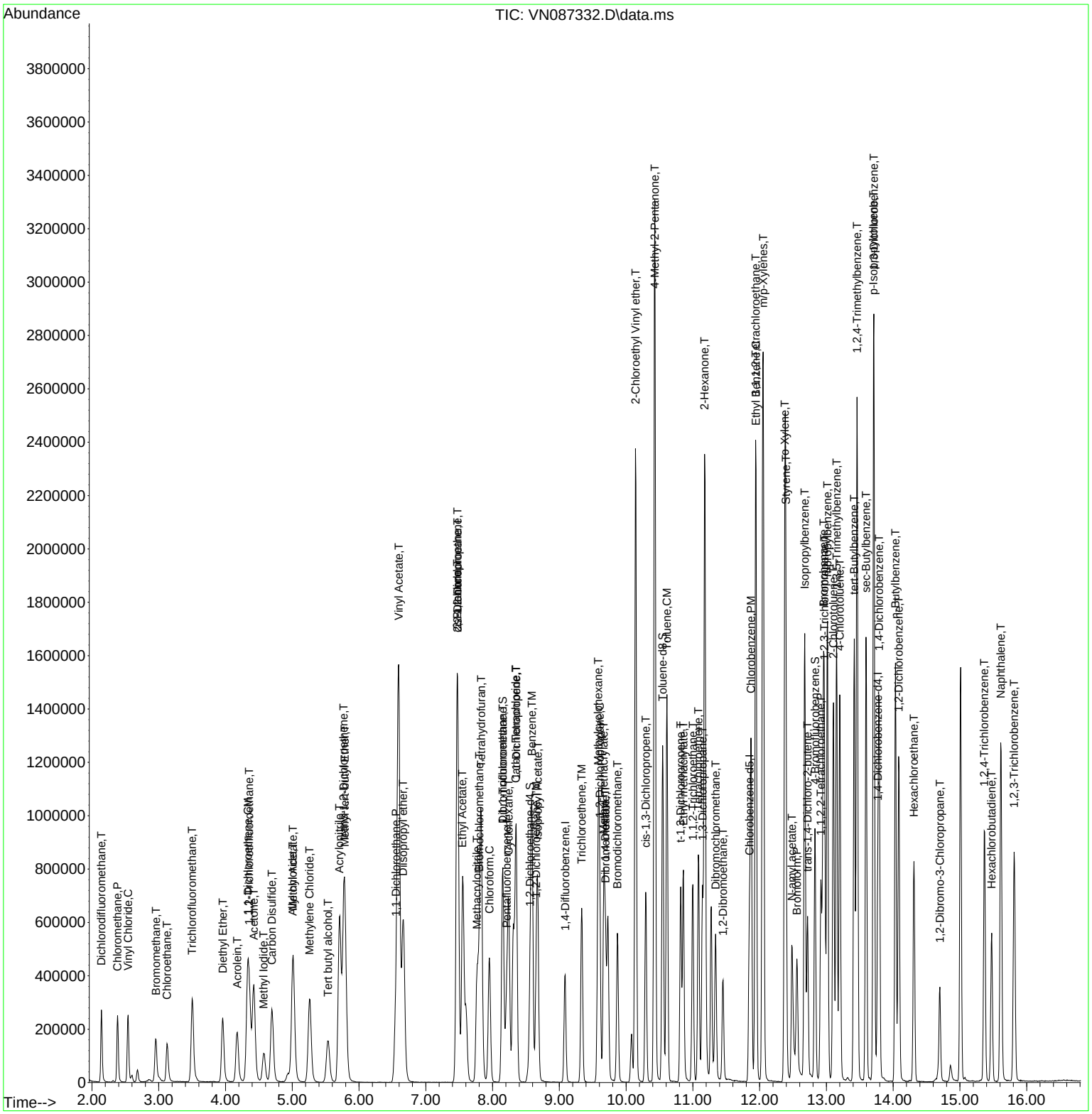
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087332.D
Acq On : 16 Jul 2025 18:32
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

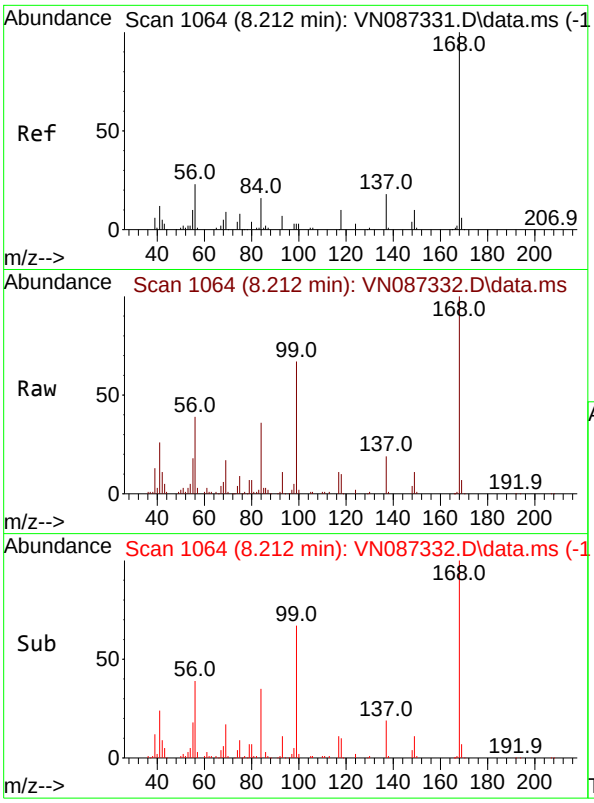
Quant Time: Jul 17 02:20:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

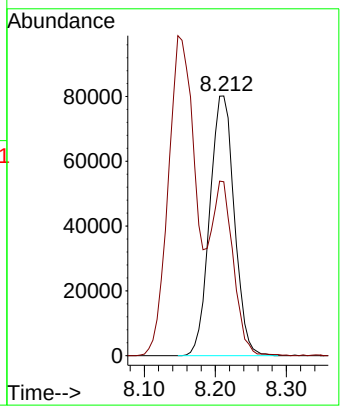




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:168 Resp: 19227

Ion	Ratio	Lower	Upper
168	100		
99	66.5	47.9	71.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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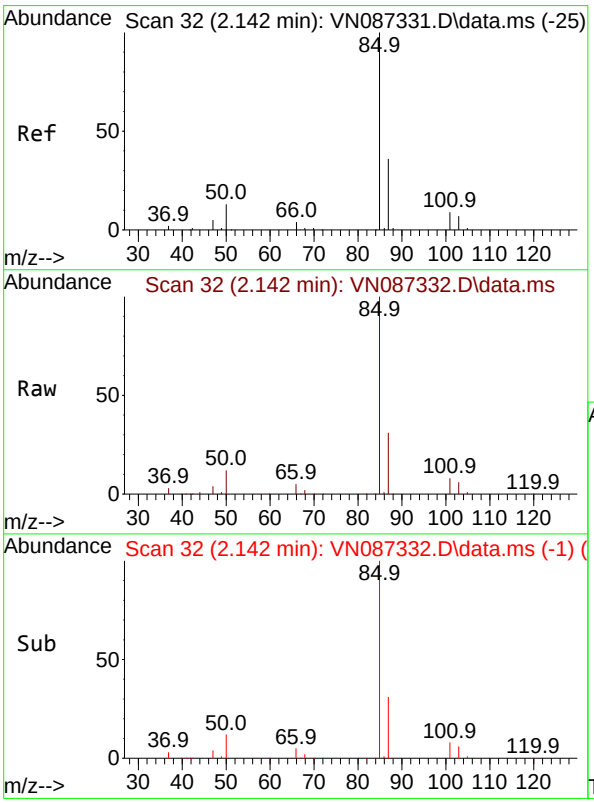
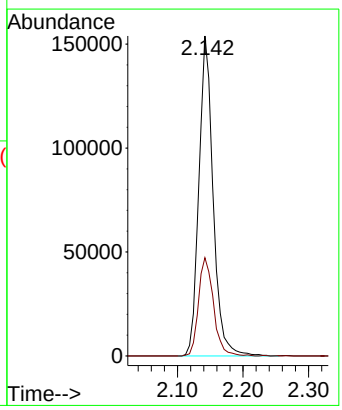
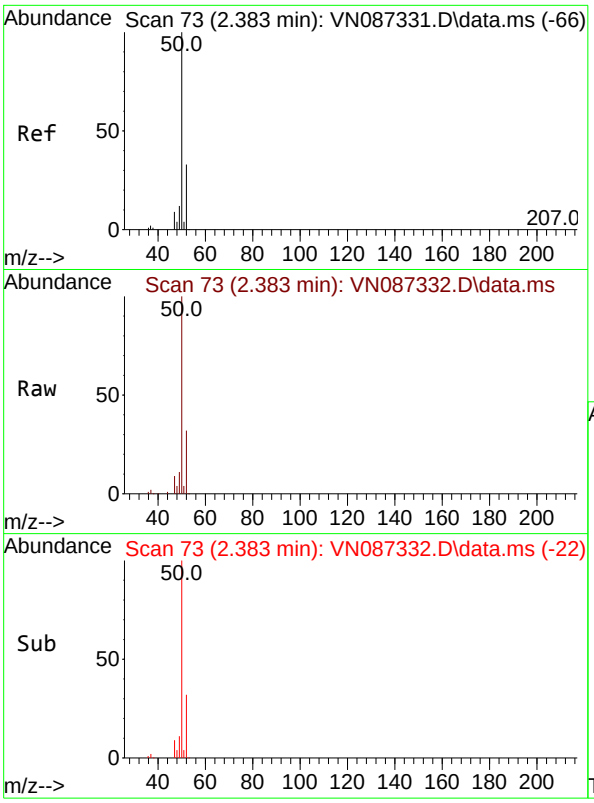


#2
Dichlorodifluoromethane
Concen: 114.190 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 85 Resp: 233197

Ion	Ratio	Lower	Upper
85	100		
87	30.7	17.8	53.3

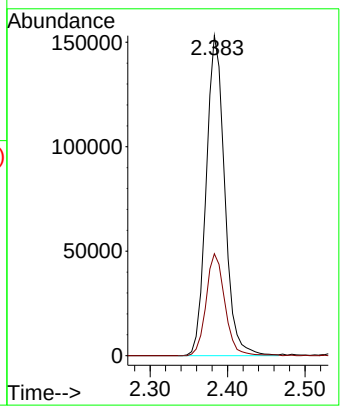




#3
Chloromethane
Concen: 98.660 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 50 Resp: 25336

Ion	Ratio	Lower	Upper
50	100		
52	31.8	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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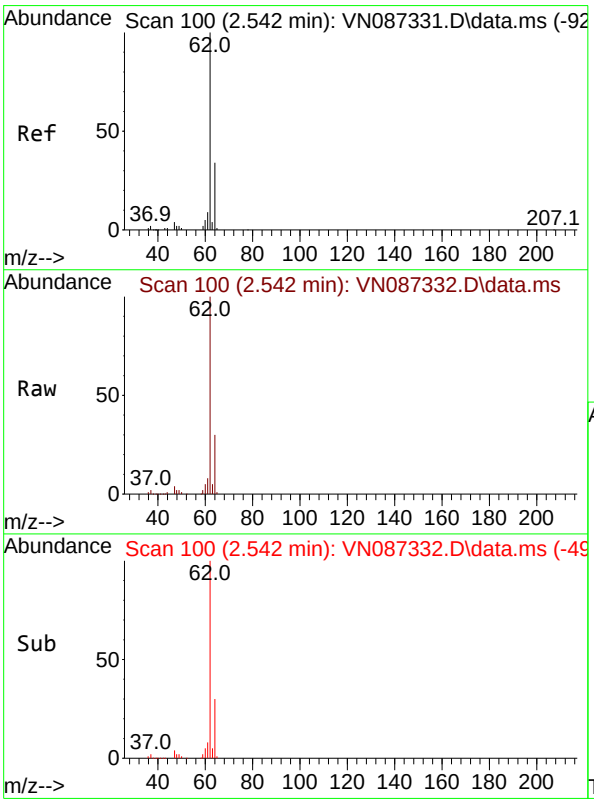
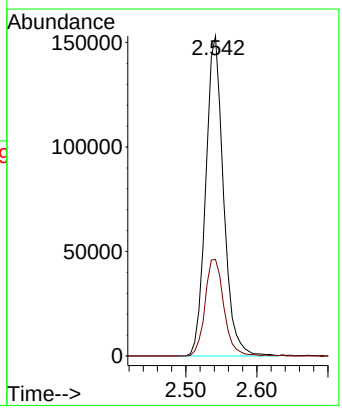
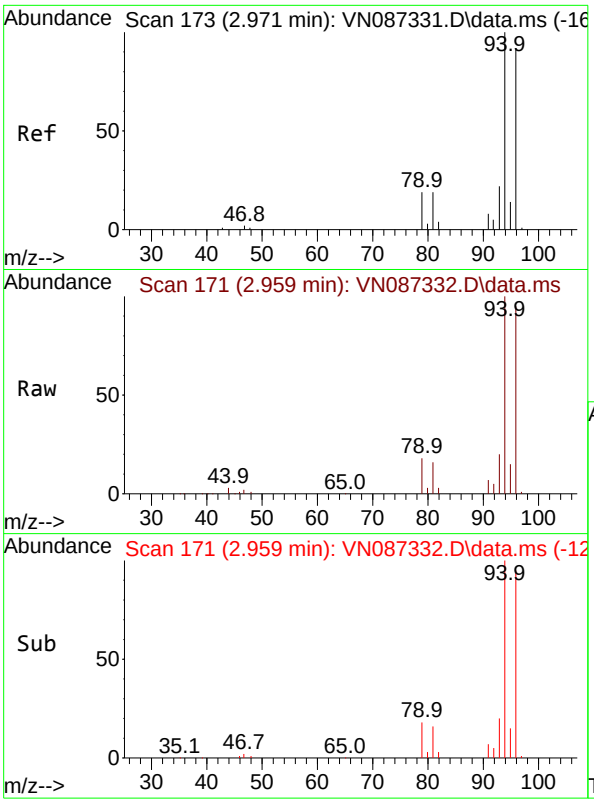


#4
Vinyl Chloride
Concen: 104.312 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 62 Resp: 266221

Ion	Ratio	Lower	Upper
62	100		
64	30.2	27.0	40.6





#5
Bromomethane
Concen: 103.503 ug/l
RT: 2.959 min Scan# 1
Delta R.T. -0.012 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 94 Resp: 13679

Ion	Ratio	Lower	Upper
94	100		
96	95.4	73.4	110.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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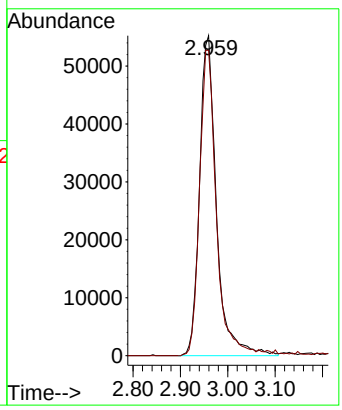
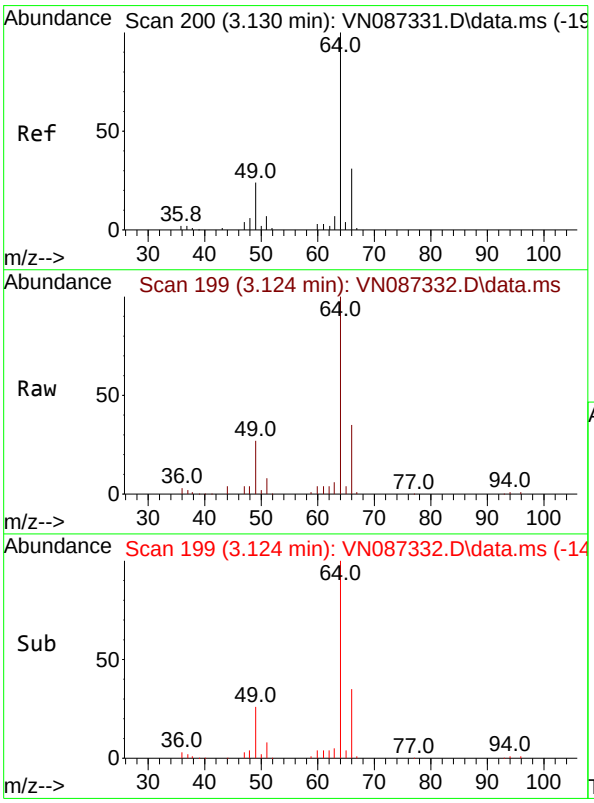
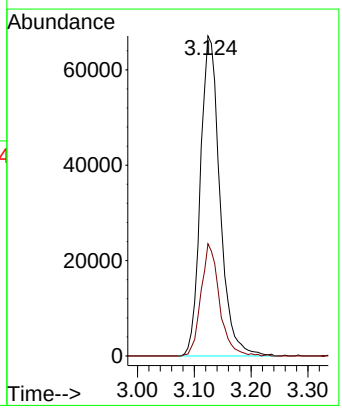


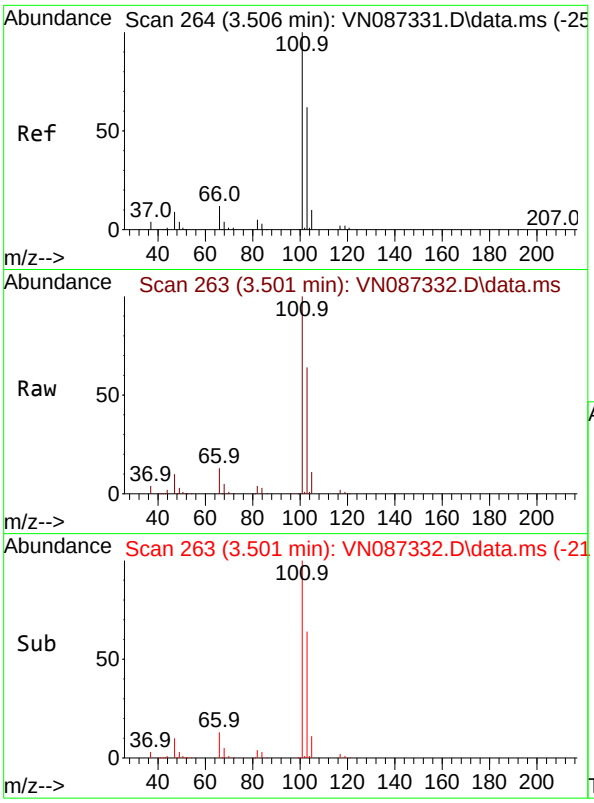


#6
Chloroethane
Concen: 95.783 ug/l
RT: 3.124 min Scan# 199
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 64 Resp: 159422

Ion	Ratio	Lower	Upper
64	100		
66	35.0	24.6	36.8

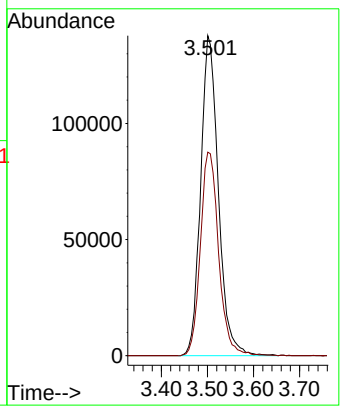




#7
Trichlorofluoromethane
Concen: 97.786 ug/l
RT: 3.501 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:101 Resp: 36903

Ion	Ratio	Lower	Upper
101	100		
103	63.6	49.8	74.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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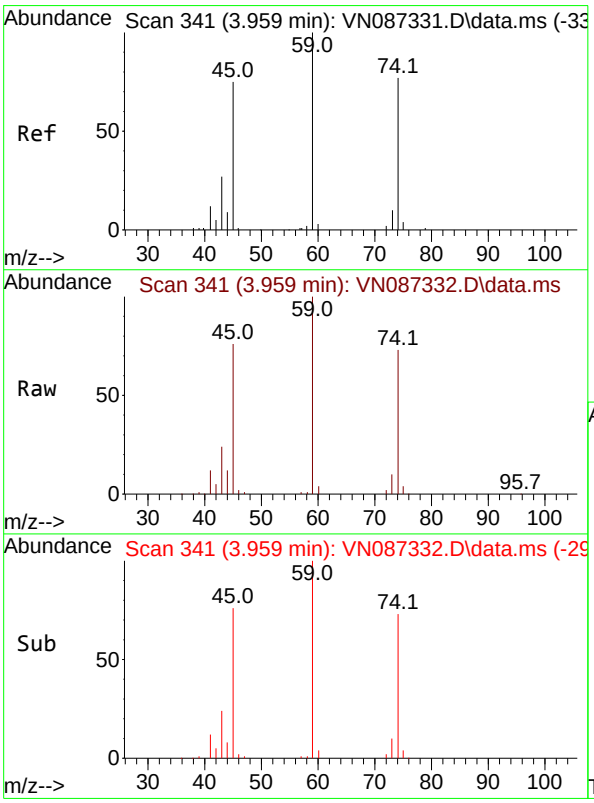
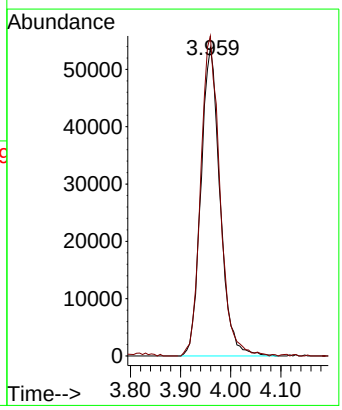
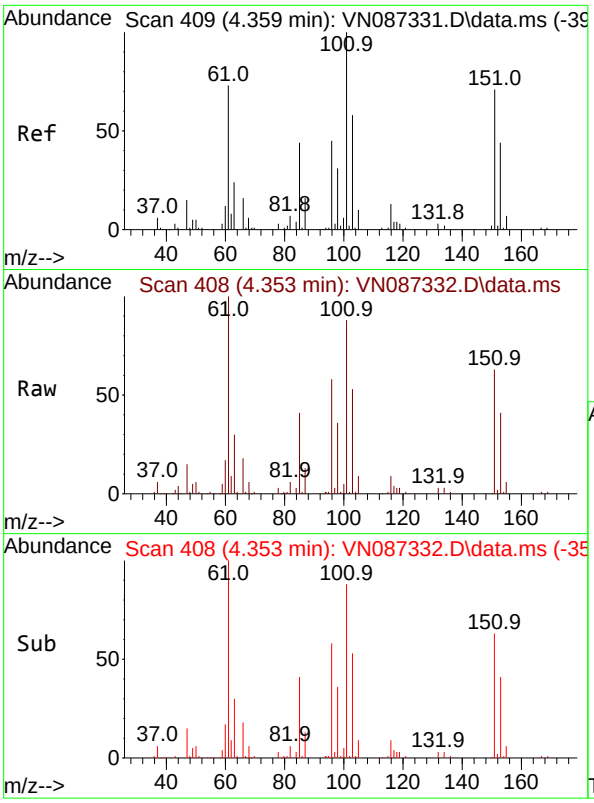


#8
Diethyl Ether
Concen: 97.445 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 74 Resp: 142652

Ion	Ratio	Lower	Upper
74	100		
45	104.3	50.8	152.5

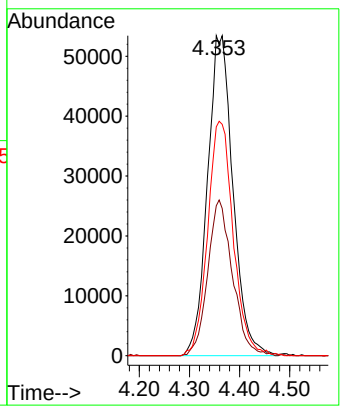




#9
1,1,2-Trichlorotrifluoroethane
Concen: 97.477 ug/l
RT: 4.353 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:101 Resp: 18884

Ion	Ratio	Lower	Upper
101	100		
85	47.3	37.3	55.9
151	73.6	58.9	88.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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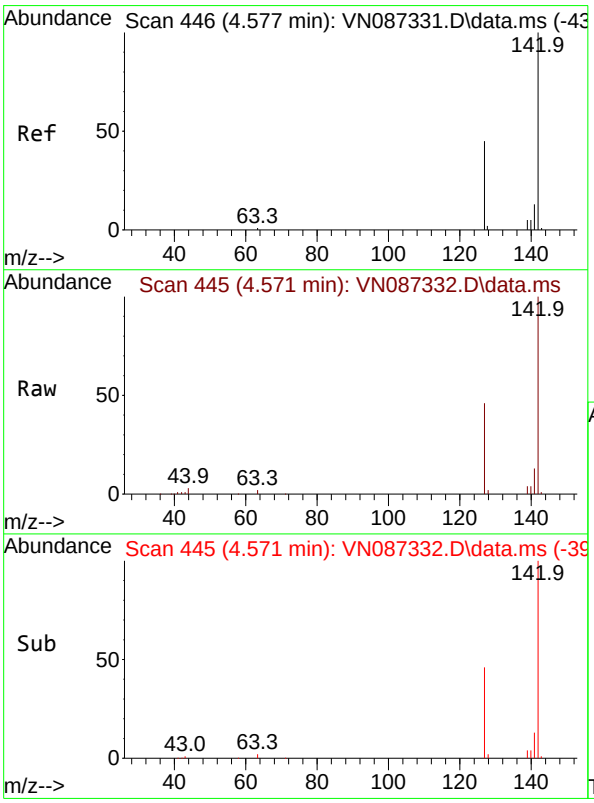
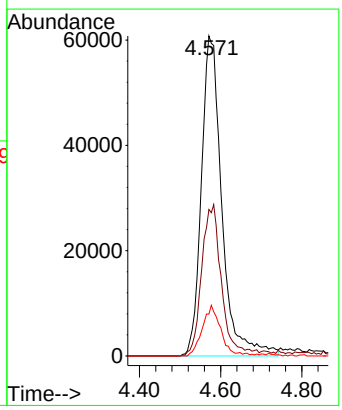
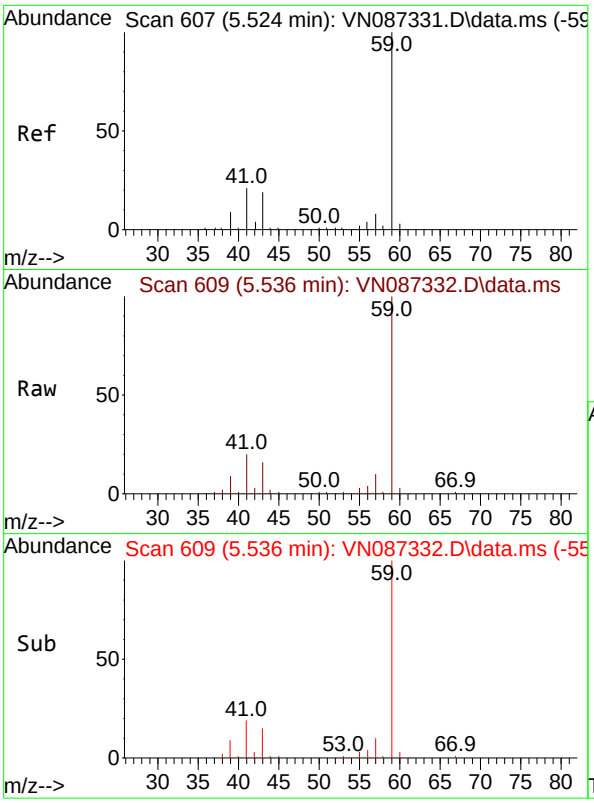


#10
Methyl Iodide
Concen: 100.524 ug/l
RT: 4.571 min Scan# 445
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:142 Resp: 213127

Ion	Ratio	Lower	Upper
142	100		
127	45.8	35.7	53.5
141	13.1	10.4	15.6

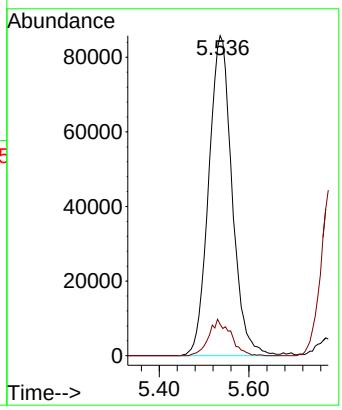




#11
Tert butyl alcohol
Concen: 499.800 ug/l
RT: 5.536 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 59 Resp: 30961

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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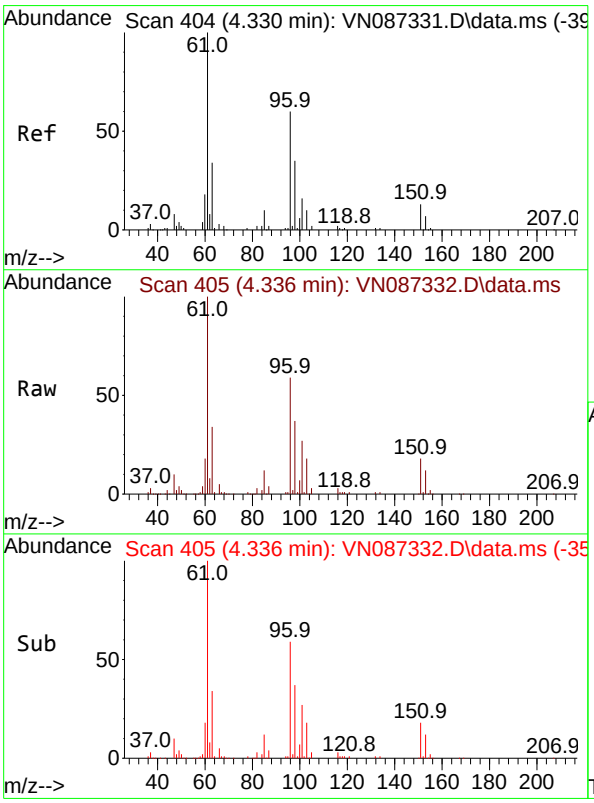
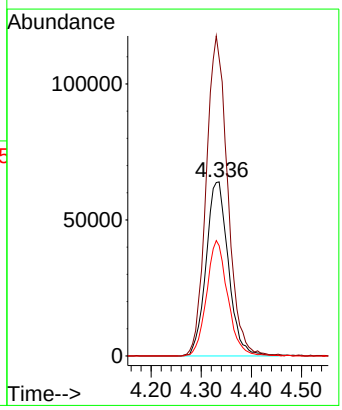
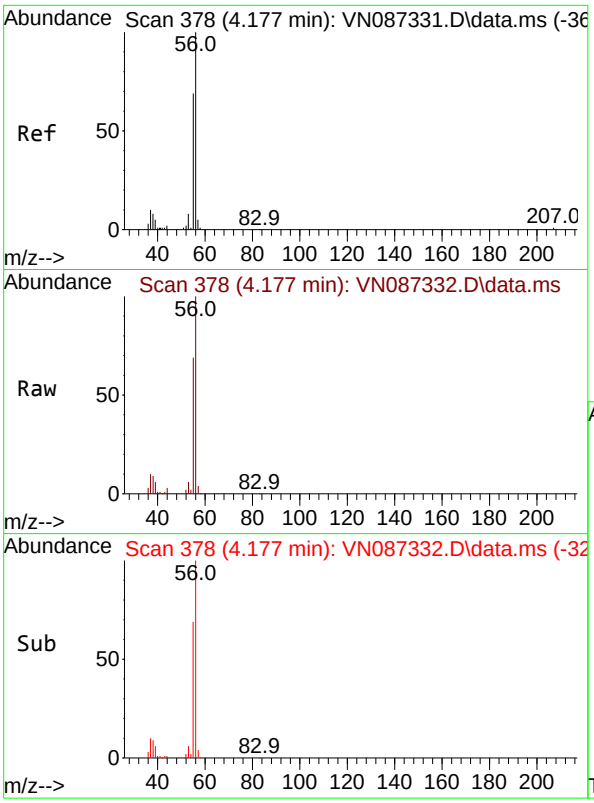


#12
1,1-Dichloroethene
Concen: 90.083 ug/l
RT: 4.336 min Scan# 405
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 96 Resp: 197760

Ion	Ratio	Lower	Upper
96	100		
61	170.8	132.3	198.5
98	63.3	46.8	70.2

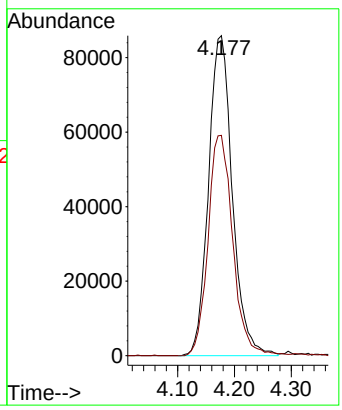




#13
Acrolein
Concen: 503.102 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 56 Resp: 25011

Ion	Ratio	Lower	Upper
56	100		
55	71.3	56.2	84.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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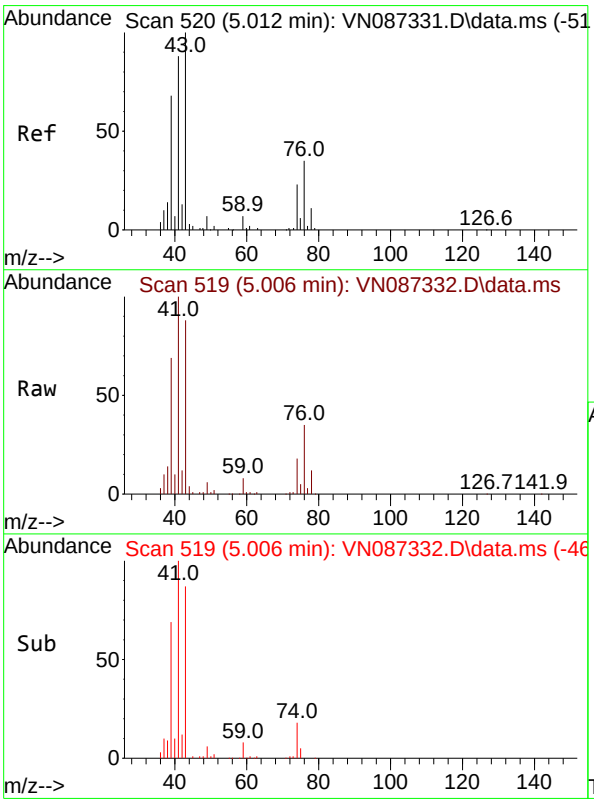
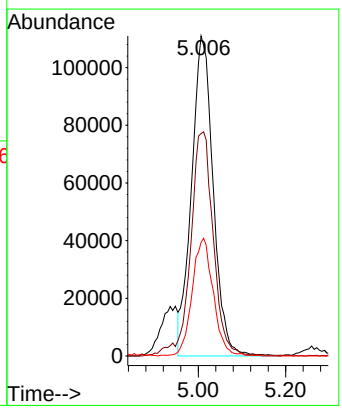
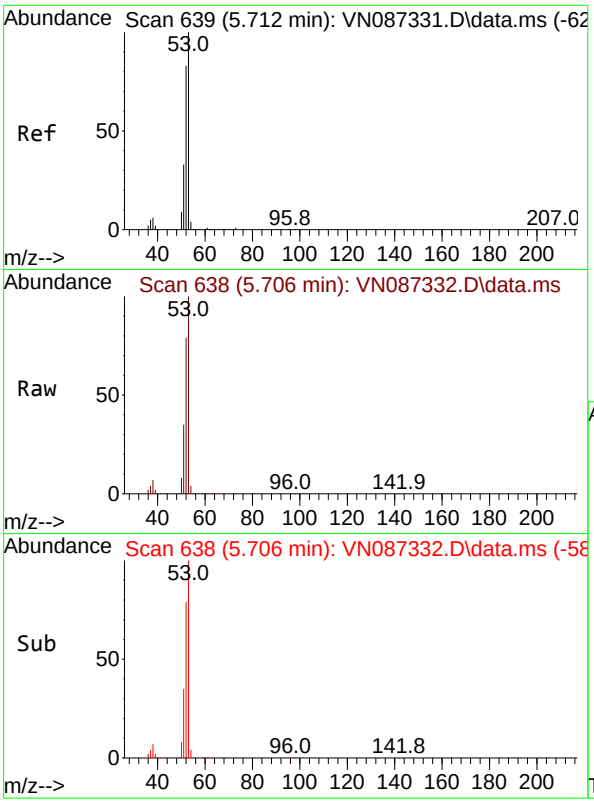


#14
Allyl chloride
Concen: 96.355 ug/l
RT: 5.006 min Scan# 519
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 41 Resp: 382812

Ion	Ratio	Lower	Upper
41	100		
39	73.3	59.0	88.6
76	35.9	28.7	43.1





#15
Acrylonitrile
Concen: 499.150 ug/l
RT: 5.706 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 53 Resp: 83908

Ion	Ratio	Lower	Upper
53	100		
52	82.1	65.5	98.3
51	35.6	28.7	43.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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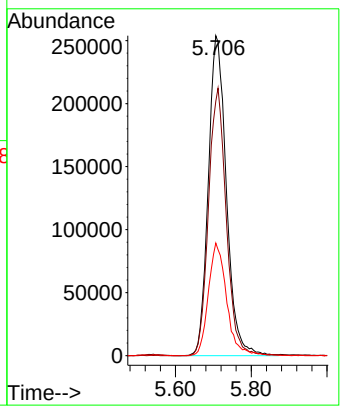
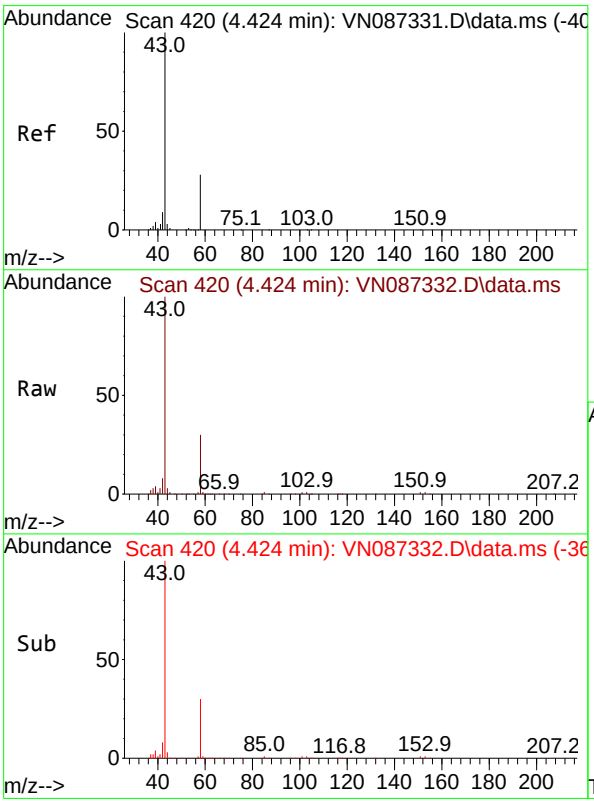
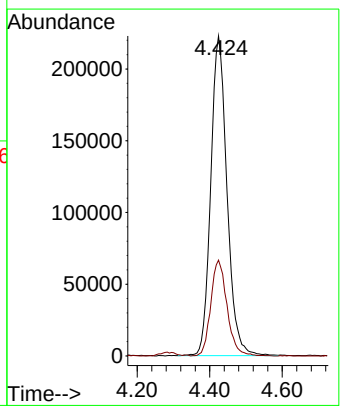


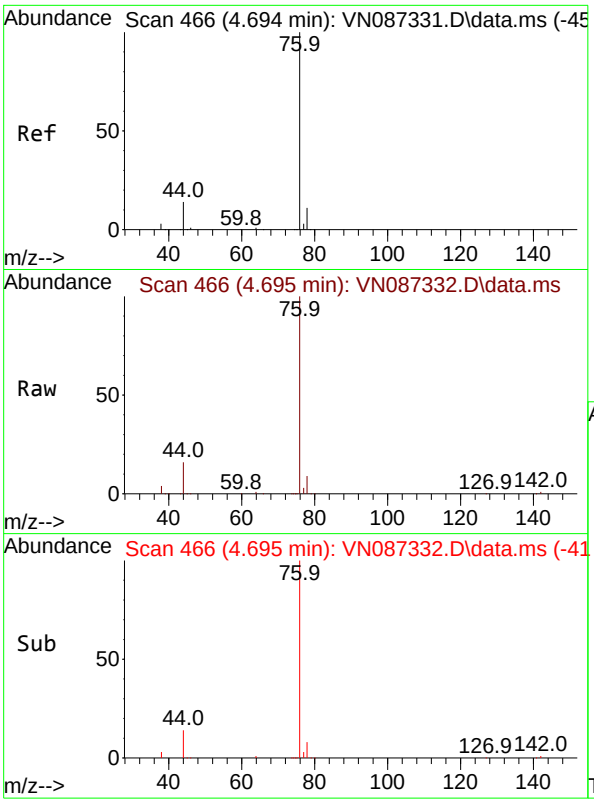


#16
Acetone
Concen: 448.375 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 693485

Ion	Ratio	Lower	Upper
43	100		
58	30.0	22.3	33.5





#17
Carbon Disulfide
Concen: 97.056 ug/l
RT: 4.695 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 76 Resp: 63169

Ion	Ratio	Lower	Upper
76	100		
78	8.8	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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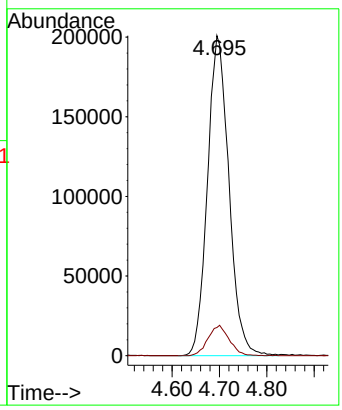
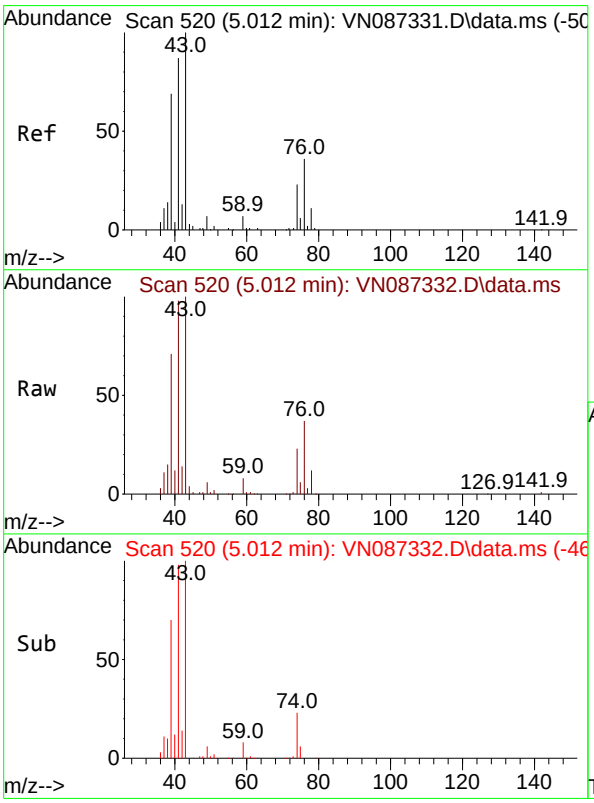
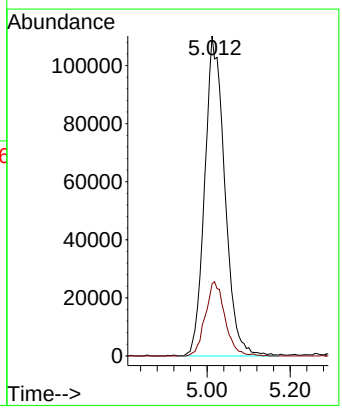


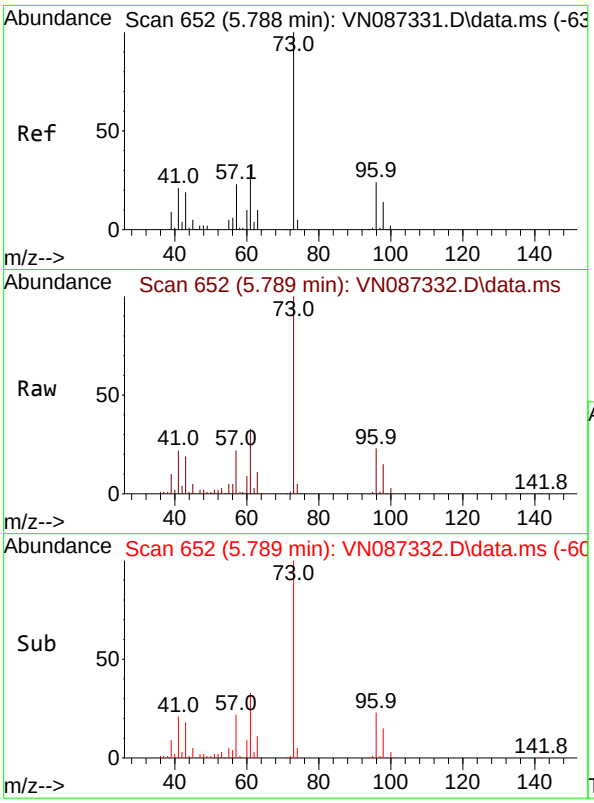


#18
Methyl Acetate
Concen: 96.247 ug/l
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 369894

Ion	Ratio	Lower	Upper
43	100		
74	22.5	17.8	26.6





#19
Methyl tert-butyl Ether
Concen: 101.186 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 73 Resp: 81876

Ion	Ratio	Lower	Upper
73	100		
57	22.1	18.6	27.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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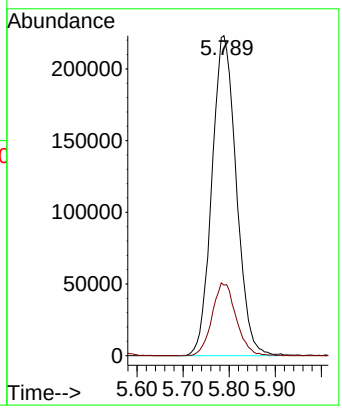
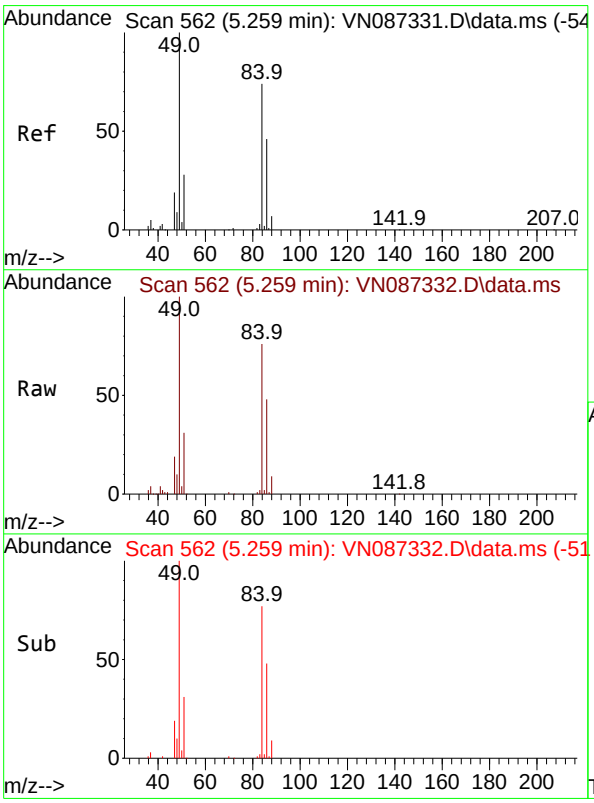
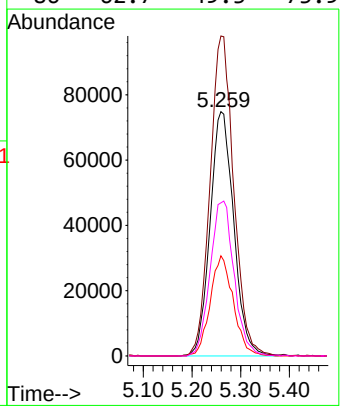


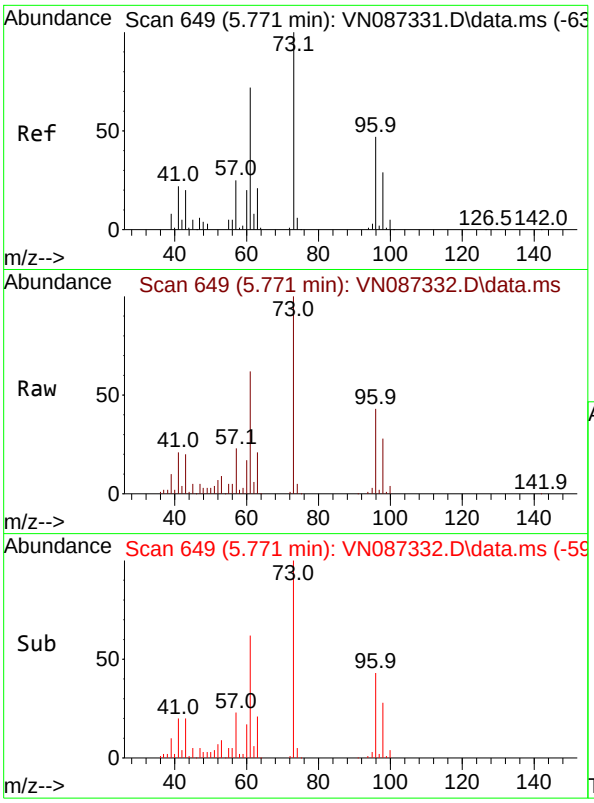


#20
Methylene Chloride
Concen: 98.001 ug/l
RT: 5.259 min Scan# 562
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 84 Resp: 251830

Ion	Ratio	Lower	Upper
84	100		
49	131.0	107.5	161.3
51	41.0	30.2	45.2
86	62.7	49.3	73.9





#21
trans-1,2-Dichloroethene
Concen: 96.030 ug/l
RT: 5.771 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 96 Resp: 23770

Ion	Ratio	Lower	Upper
96	100		
61	143.5	122.0	183.0
98	64.7	50.0	75.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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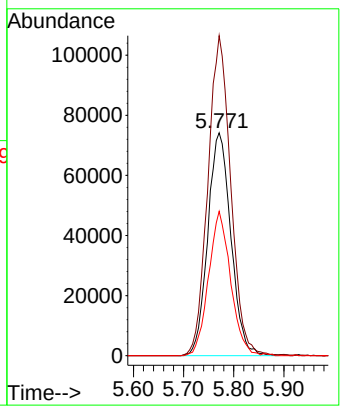
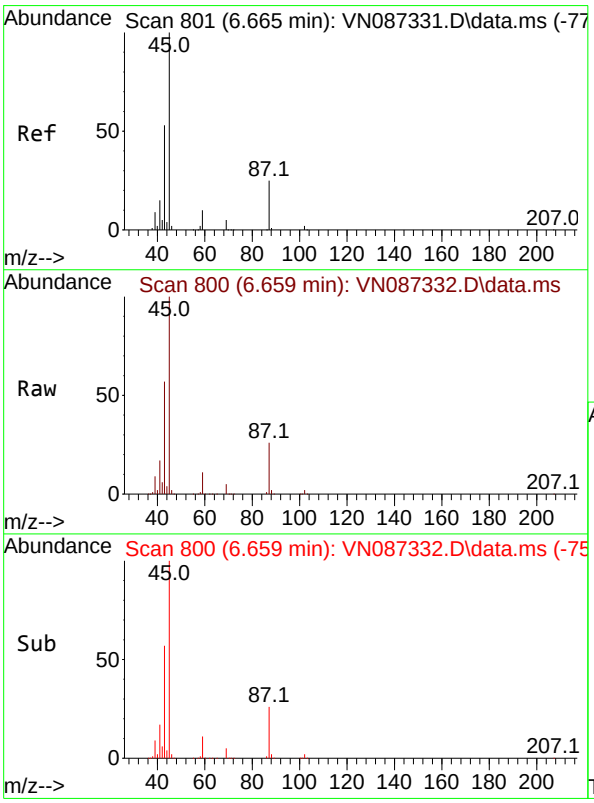
Supervised By :Semsettin Yesilyurt 07/17/2025

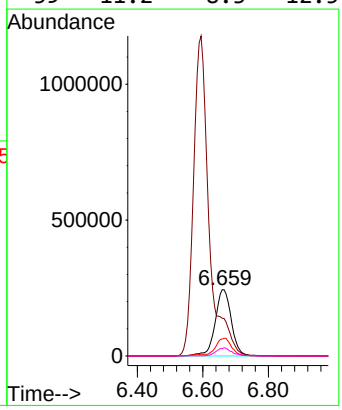


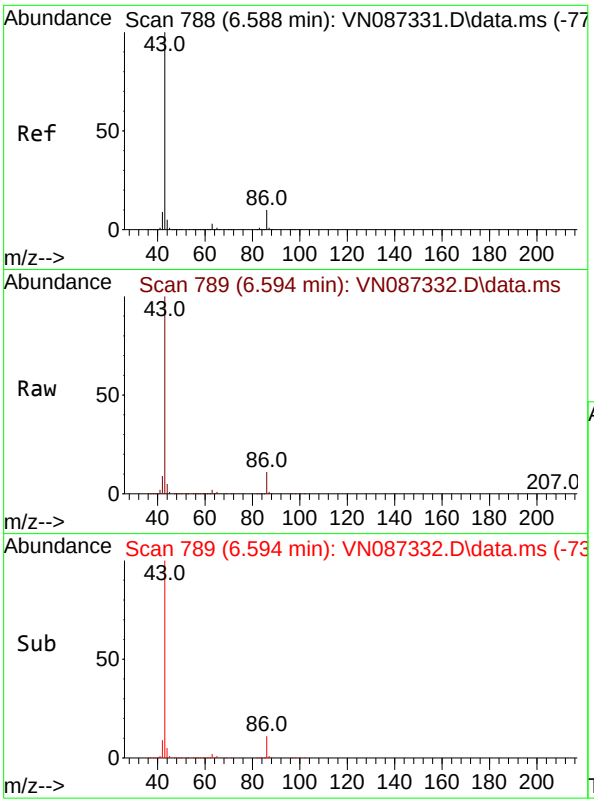


#22
Diisopropyl ether
Concen: 99.921 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 45 Resp: 832709

Ion	Ratio	Lower	Upper
45	100		
43	56.9	42.8	64.2
87	25.7	19.8	29.6
59	11.2	8.3	12.5





#23
Vinyl Acetate
Concen: 529.516 ug/l
RT: 6.594 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 385942

Ion	Ratio	Lower	Upper
43	100		
86	10.7	7.7	11.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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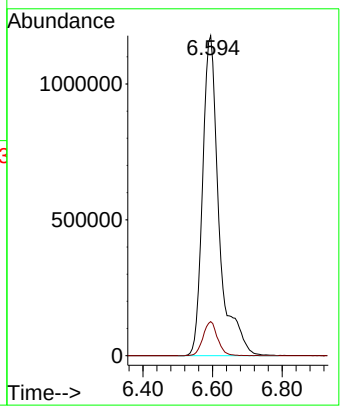
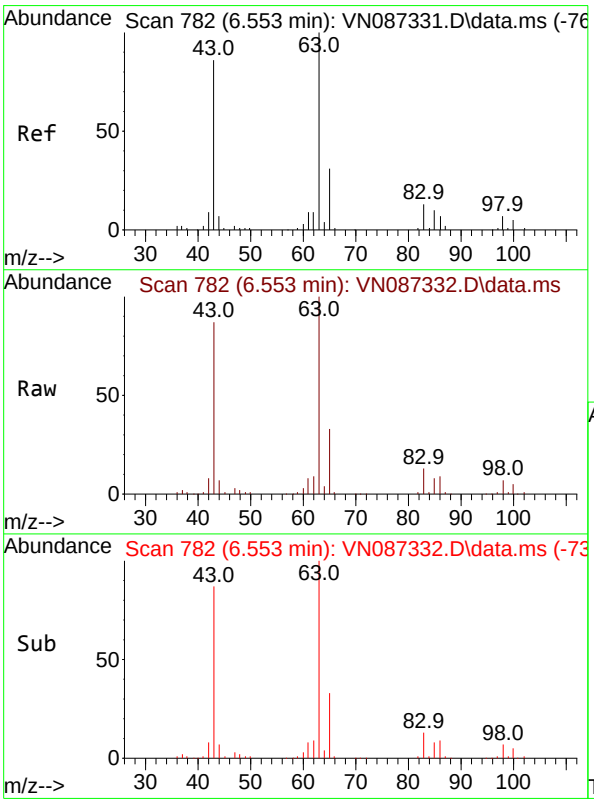
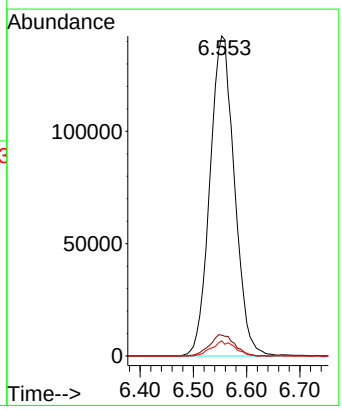


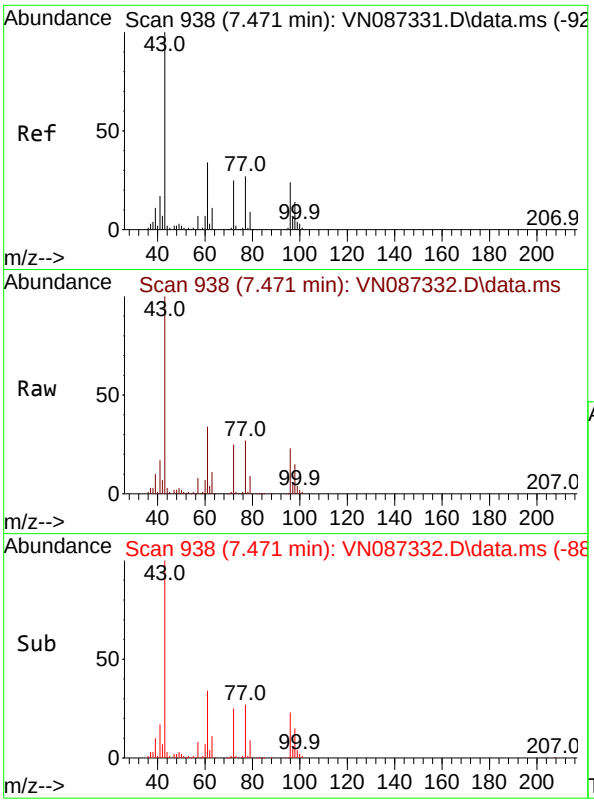


#24
1,1-Dichloroethane
Concen: 94.807 ug/l
RT: 6.553 min Scan# 782
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 63 Resp: 455820

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	4.7	2.5	7.4





#25
2-Butanone
Concen: 501.667 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 118570

Ion	Ratio	Lower	Upper
43	100		
72	25.3	19.6	29.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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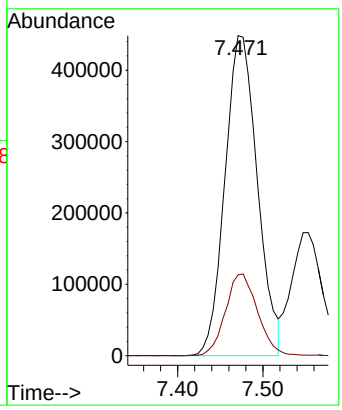
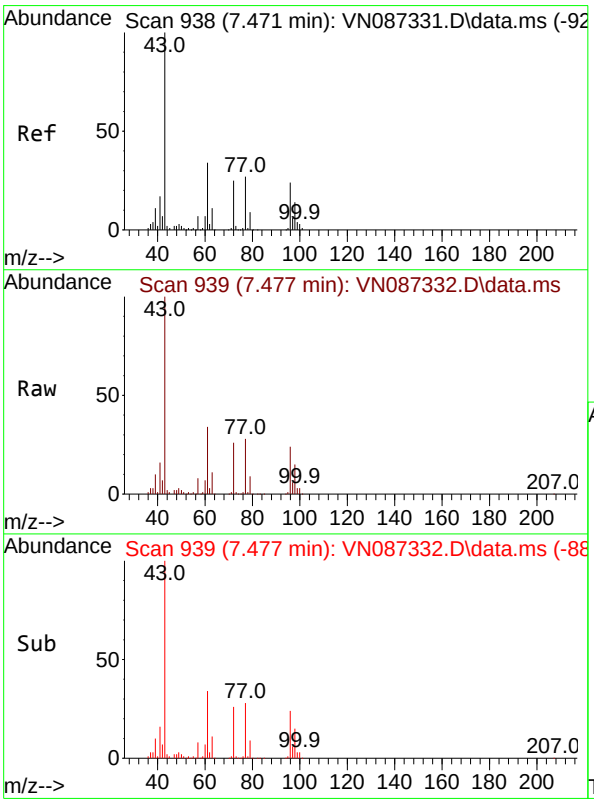
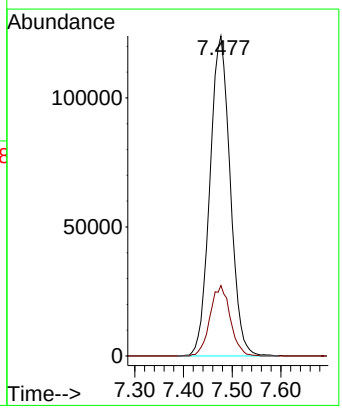


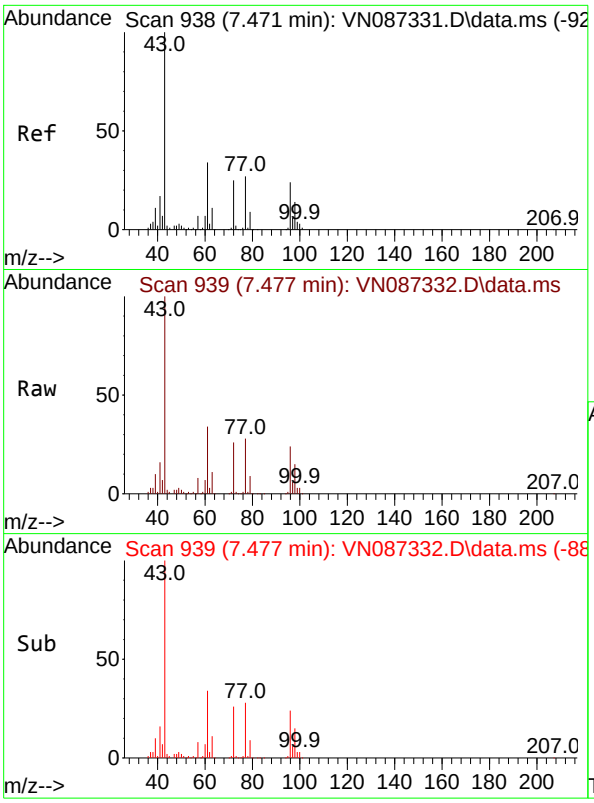


#26
2,2-Dichloropropane
Concen: 95.932 ug/l
RT: 7.477 min Scan# 939
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 77 Resp: 358596

Ion	Ratio	Lower	Upper
77	100		
97	21.9	11.1	33.1





#27
cis-1,2-Dichloroethene
Concen: 99.858 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 96 Resp: 28457

Ion	Ratio	Lower	Upper
96	100		
61	147.5	0.0	297.8
98	63.9	0.0	132.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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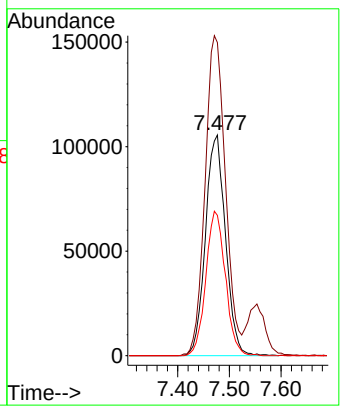
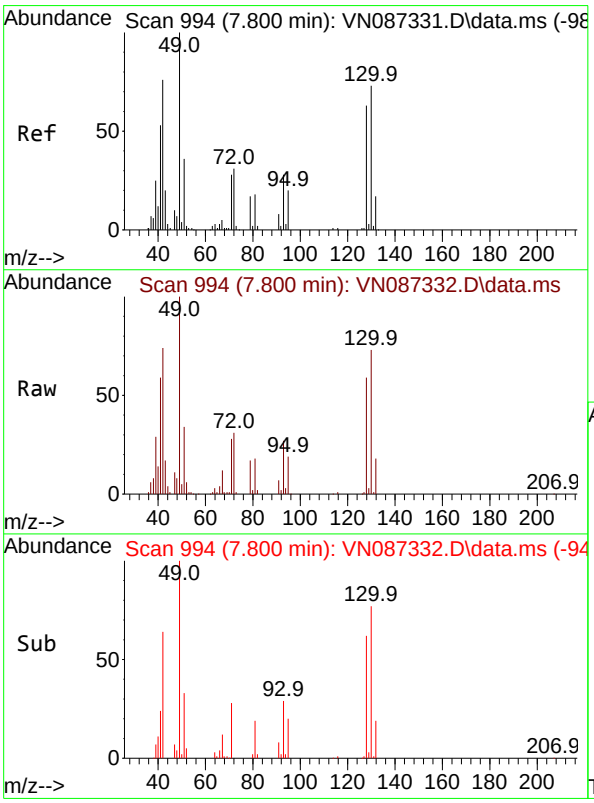
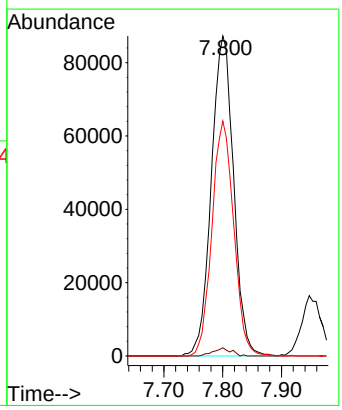


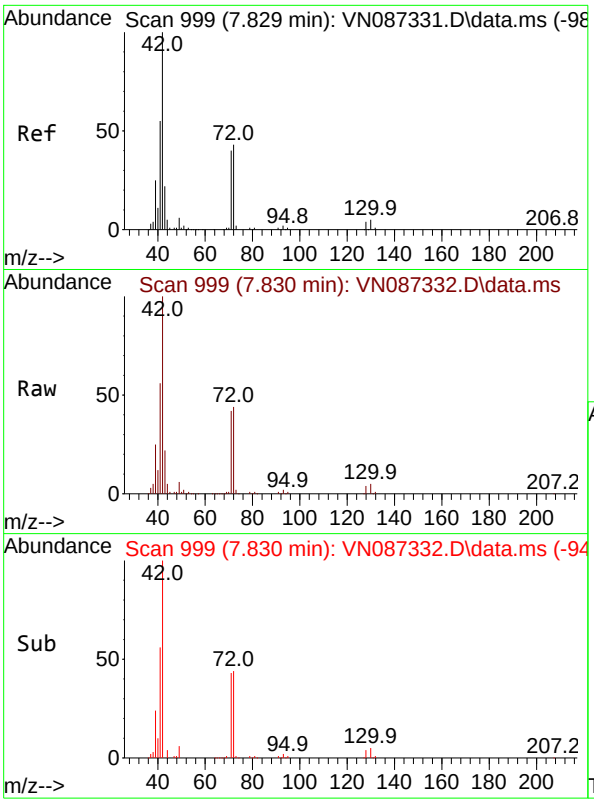


#28
Bromochloromethane
Concen: 99.757 ug/l
RT: 7.800 min Scan# 994
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 49 Resp: 229544

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.2
130	71.8	57.3	85.9

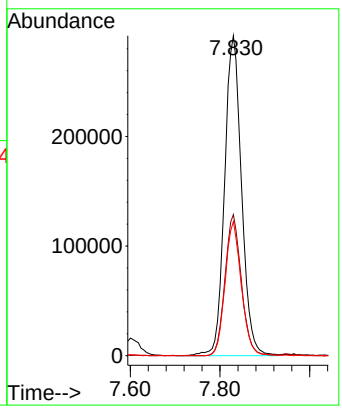




#29
Tetrahydrofuran
Concen: 500.532 ug/l
RT: 7.830 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 42 Resp: 76852

Ion	Ratio	Lower	Upper
42	100		
72	42.4	33.4	50.0
71	40.2	31.2	46.8



Instrument :
MSVOA_N
ClientSampleId :
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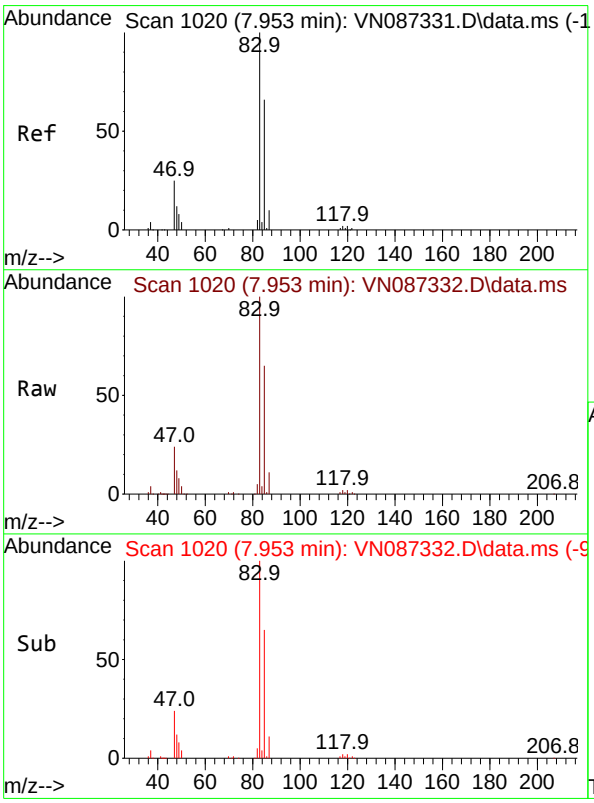
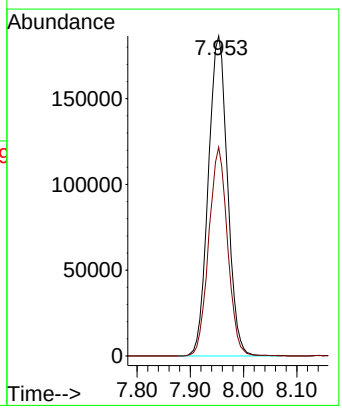
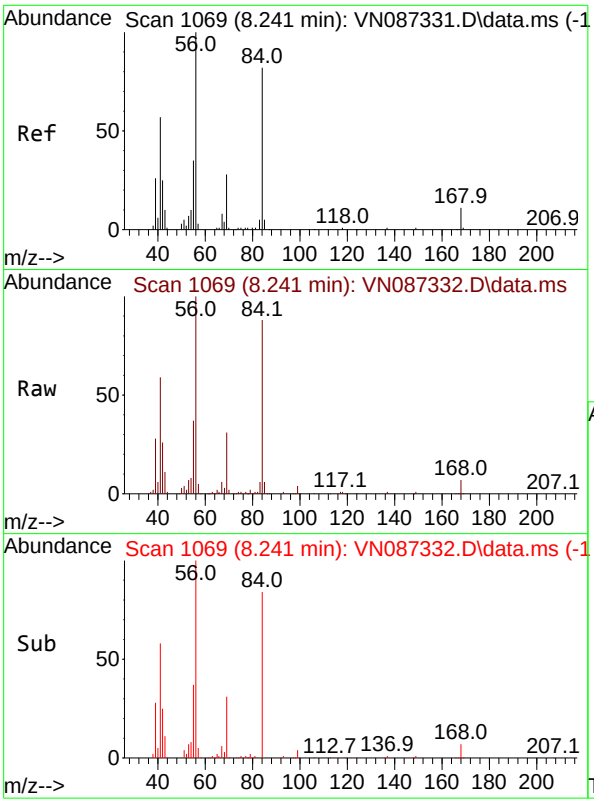


#30
Chloroform
Concen: 97.008 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 83 Resp: 466838

Ion	Ratio	Lower	Upper
83	100		
85	65.3	52.7	79.1

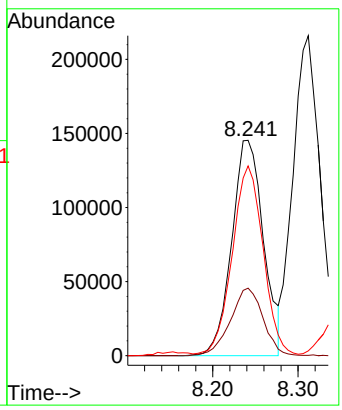




#31
Cyclohexane
Concen: 94.035 ug/l
RT: 8.241 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 56 Resp: 37715

Ion	Ratio	Lower	Upper
56	100		
69	31.4	22.7	34.1
84	86.8	65.8	98.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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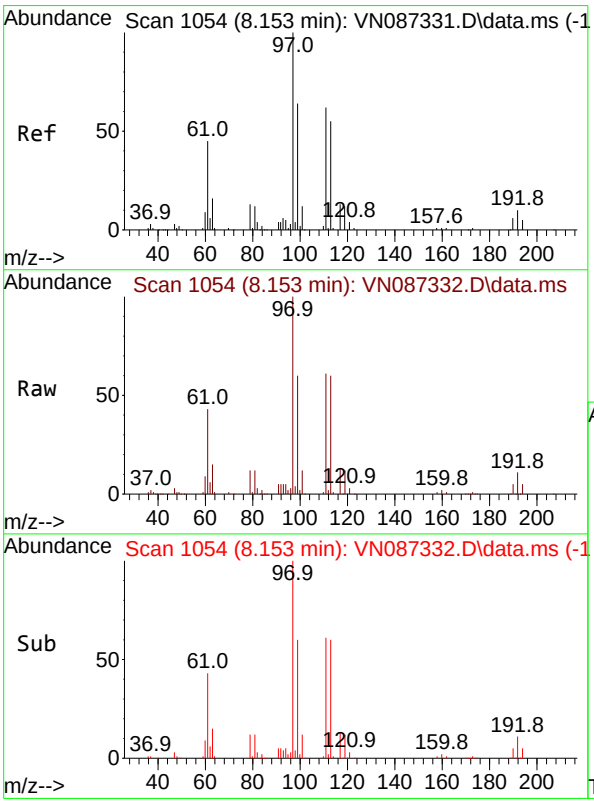
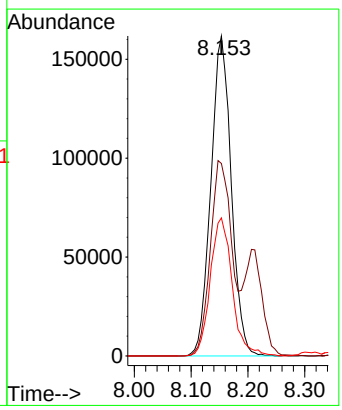
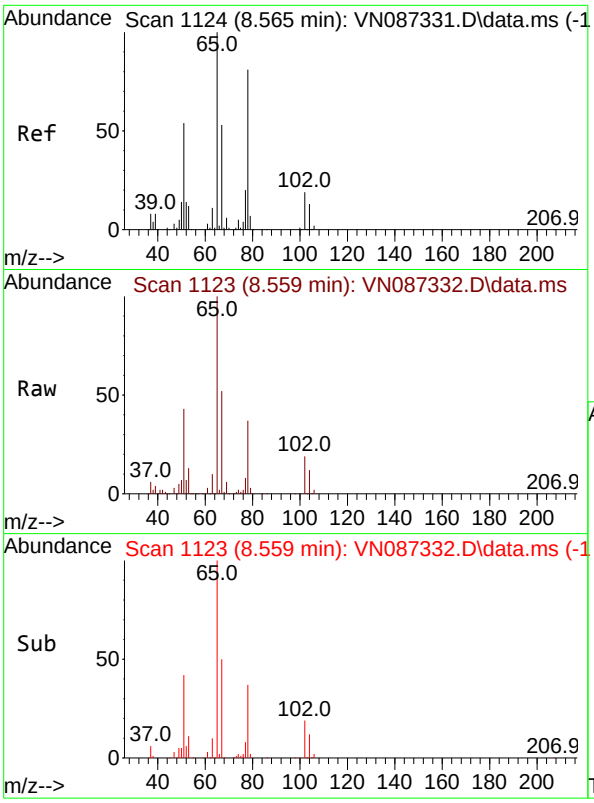


#32
1,1,1-Trichloroethane
Concen: 96.794 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 97 Resp: 403445

Ion	Ratio	Lower	Upper
97	100		
99	62.9	51.8	77.8
61	46.4	38.7	58.1





#33
1,2-Dichloroethane-d4
Concen: 96.373 ug/l
RT: 8.559 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 65 Resp: 31441

Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	104.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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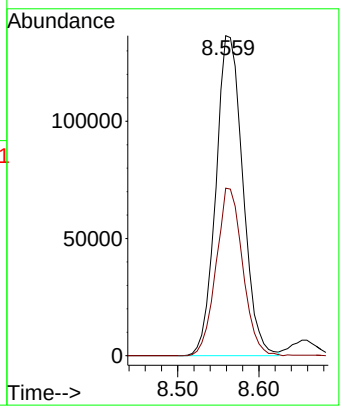
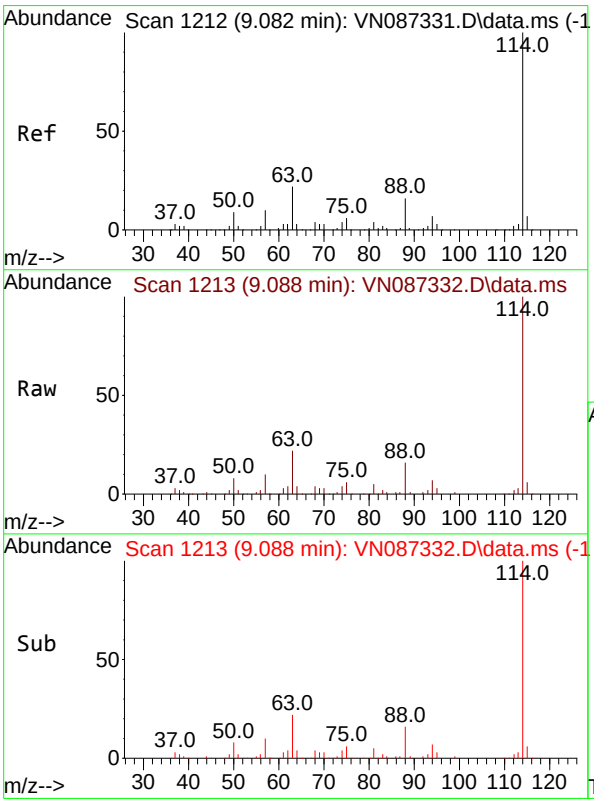
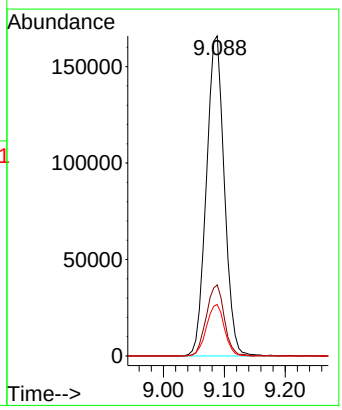


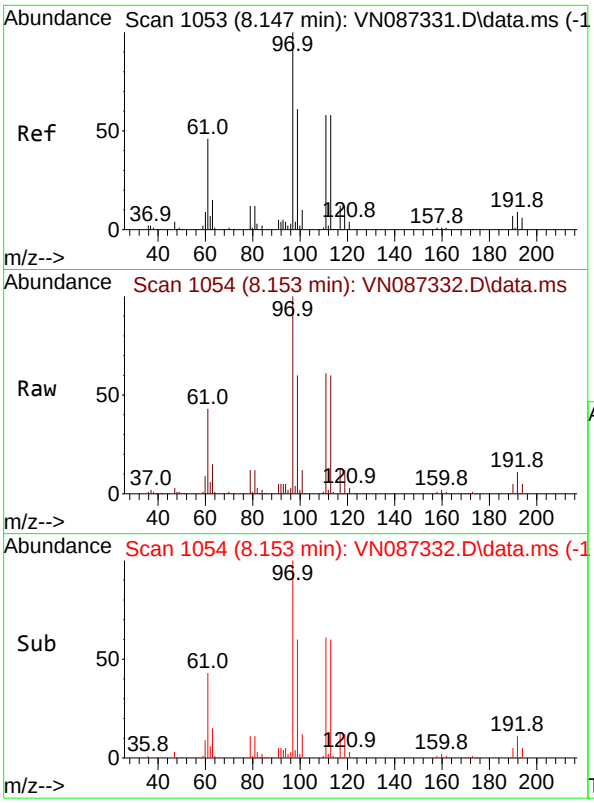


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.088 min Scan# 1213
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:114 Resp: 339591

Ion	Ratio	Lower	Upper
114	100		
63	22.2	0.0	44.6
88	16.1	0.0	32.8

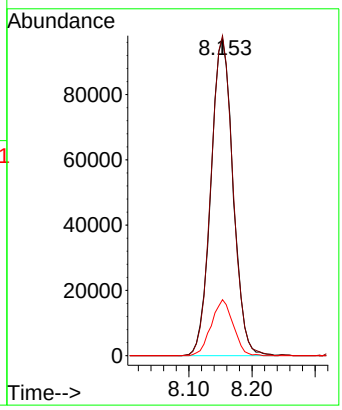




#35
Dibromofluoromethane
Concen: 100.947 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:113 Resp: 23646

Ion	Ratio	Lower	Upper
113	100		
111	100.2	82.5	123.7
192	17.5	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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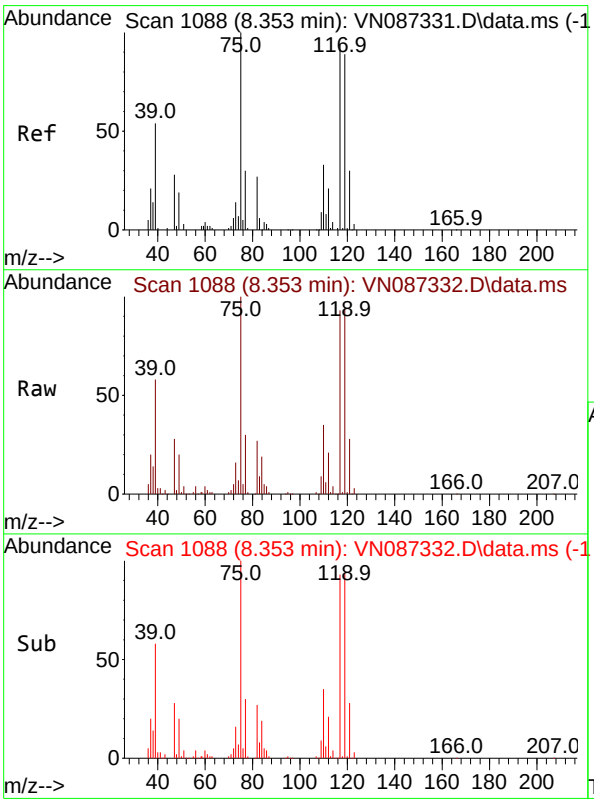
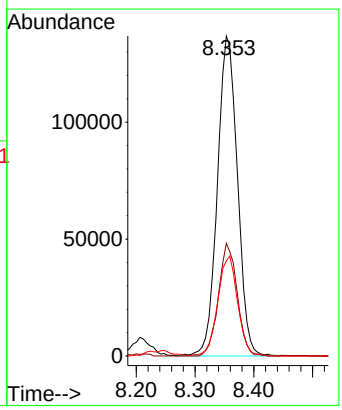
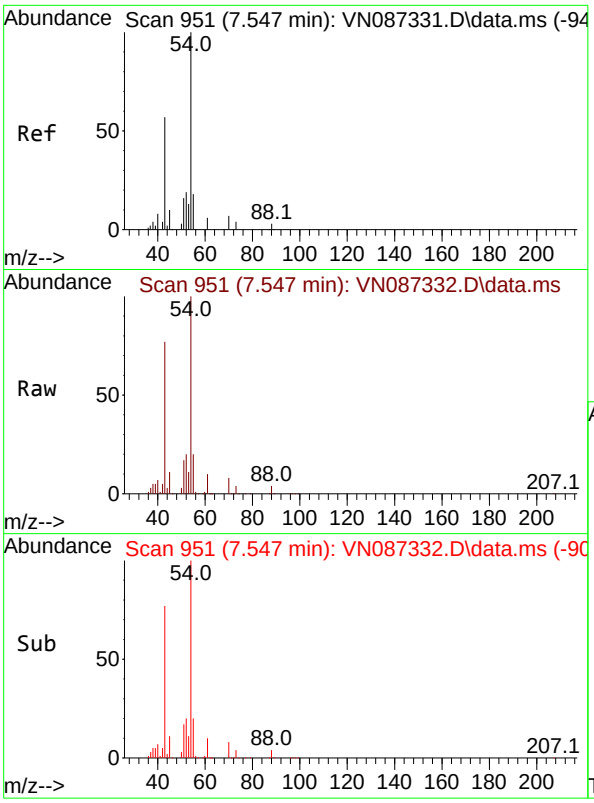


#36
1,1-Dichloropropene
Concen: 104.705 ug/l
RT: 8.353 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 75 Resp: 324047

Ion	Ratio	Lower	Upper
75	100		
110	32.9	16.7	50.1
77	30.9	25.2	37.8

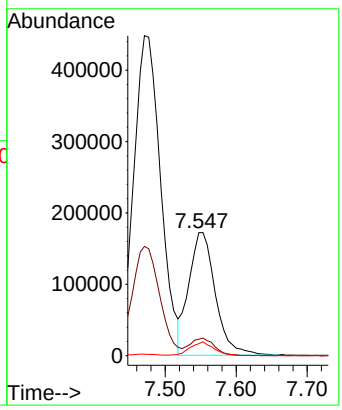




#37
Ethyl Acetate
Concen: 100.326 ug/l
RT: 7.547 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 44842

Ion	Ratio	Lower	Upper
43	100		
61	13.3	10.9	16.3
70	10.1	7.4	11.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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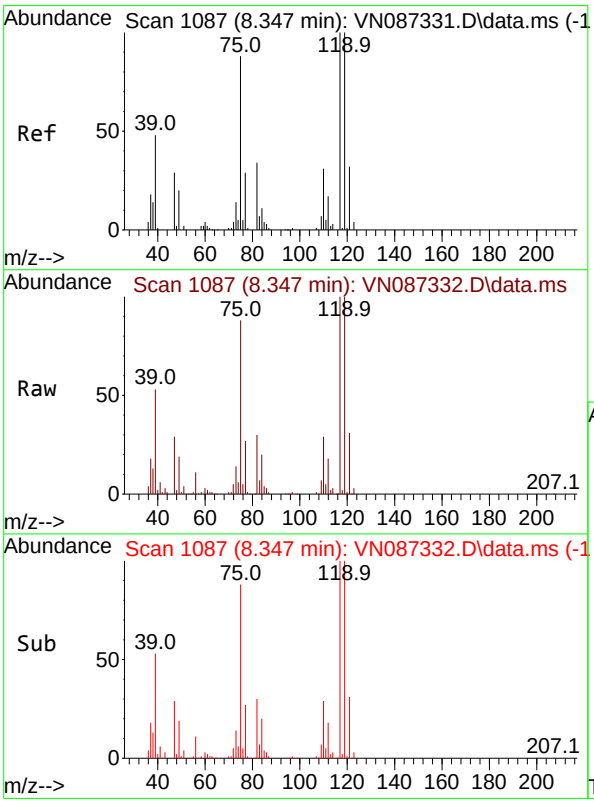
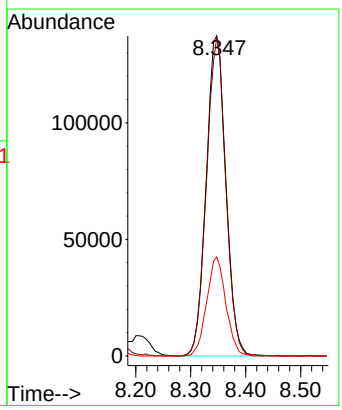
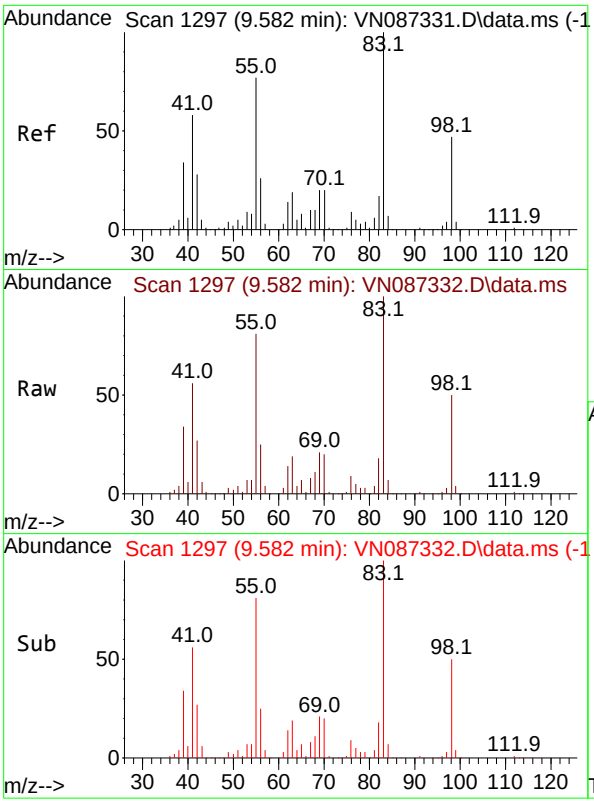


#38
Carbon Tetrachloride
Concen: 100.328 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:117 Resp: 342043

Ion	Ratio	Lower	Upper
117	100		
119	99.6	80.2	120.2
121	31.0	25.4	38.2

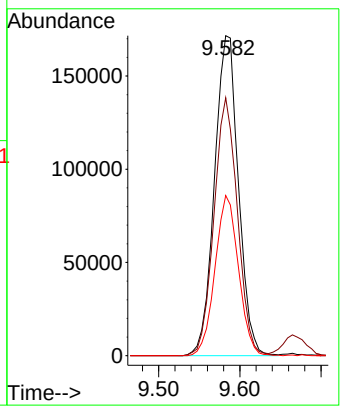




#39
Methylcyclohexane
Concen: 105.118 ug/l
RT: 9.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 83 Resp: 35221

Ion	Ratio	Lower	Upper
83	100		
55	80.6	61.3	91.9
98	50.1	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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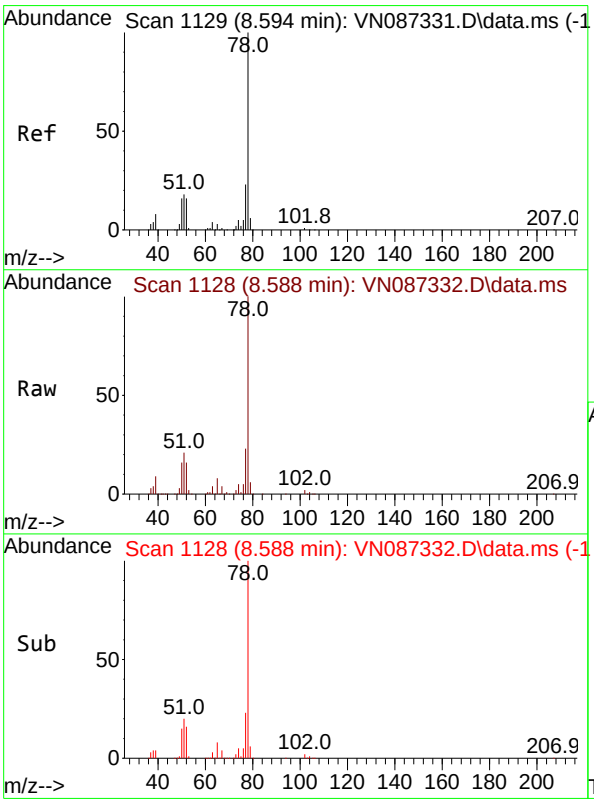
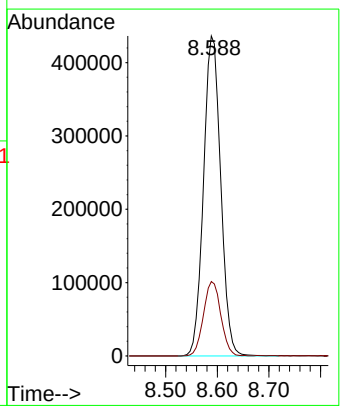
Supervised By :Semsettin Yesilyurt 07/17/2025

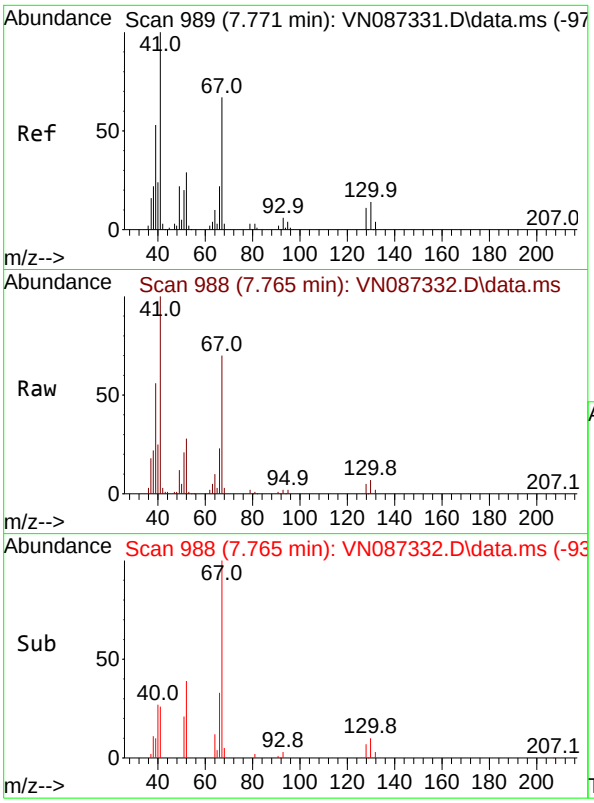


#40
Benzene
Concen: 100.700 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 78 Resp: 1007257

Ion	Ratio	Lower	Upper
78	100		
77	23.2	18.2	27.2

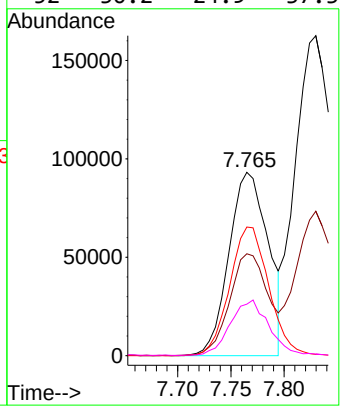




#41
Methacrylonitrile
Concen: 102.544 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 41 Resp: 23965

Ion	Ratio	Lower	Upper
41	100		
39	54.5	43.4	65.0
67	69.8	55.1	82.7
52	30.2	24.9	37.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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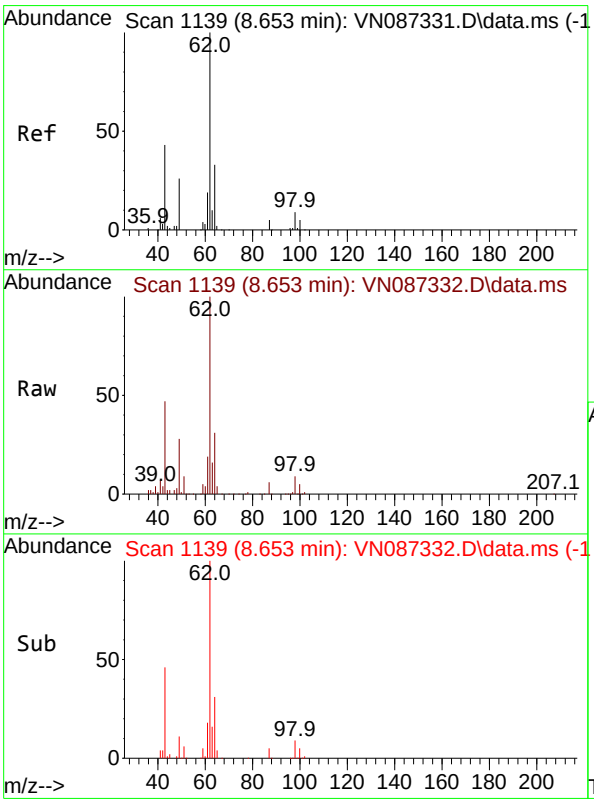
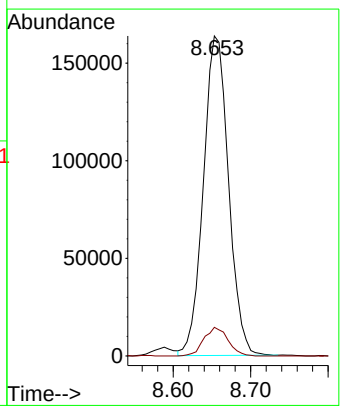
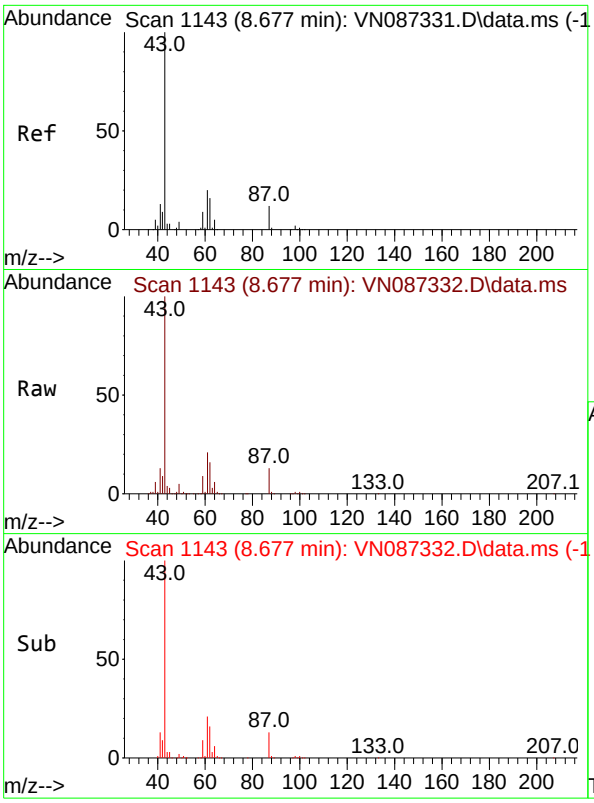


#42
1,2-Dichloroethane
Concen: 97.472 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 62 Resp: 369731

Ion	Ratio	Lower	Upper
62	100		
98	8.6	0.0	18.0





#43
Isopropyl Acetate
Concen: 101.598 ug/l
RT: 8.677 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 70493

Ion	Ratio	Lower	Upper
43	100		
61	24.8	19.8	29.8
87	12.8	9.8	14.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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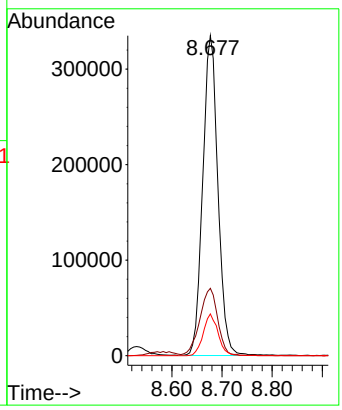
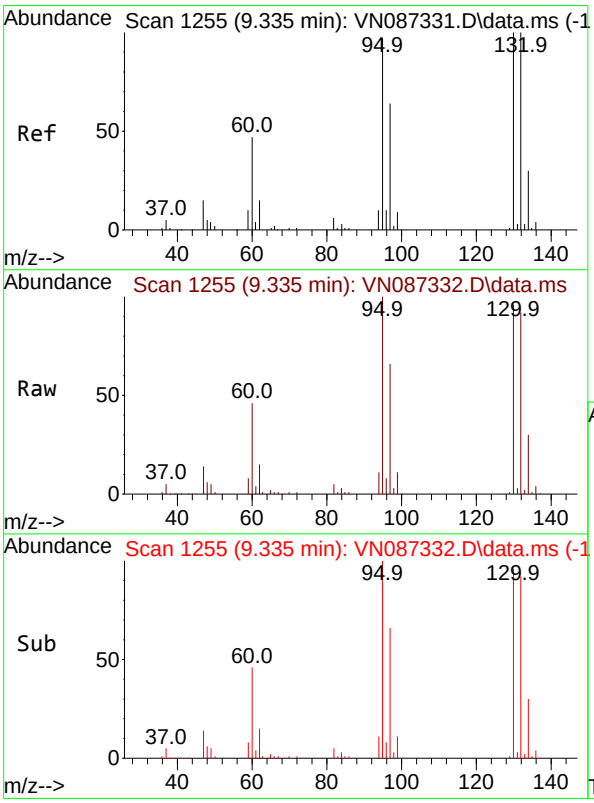
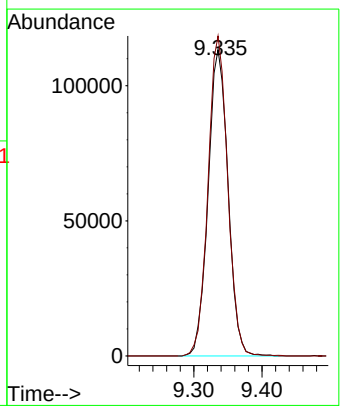


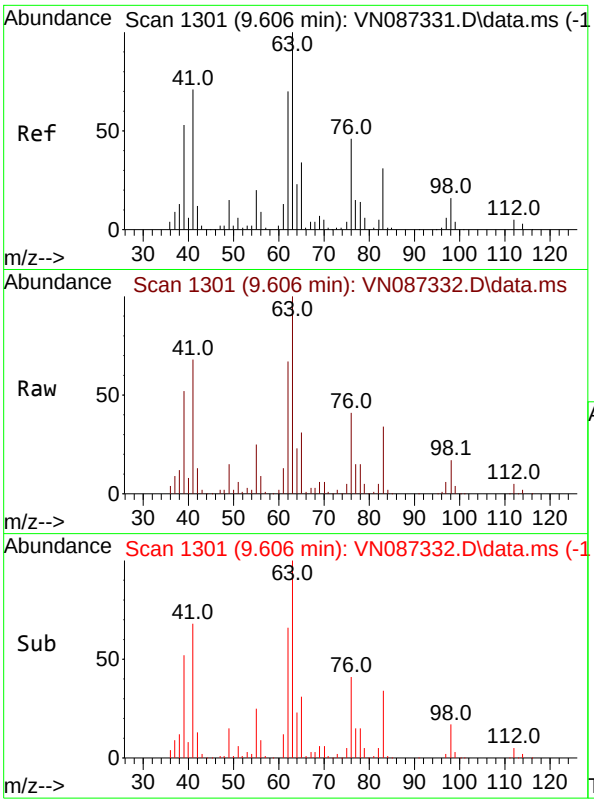


#44
Trichloroethene
Concen: 97.472 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:130 Resp: 230373

Ion	Ratio	Lower	Upper
130	100		
95	104.4	0.0	195.2





#45
1,2-Dichloropropane
Concen: 100.478 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 63 Resp: 25536

Ion	Ratio	Lower	Upper
63	100		
65	31.4	27.0	40.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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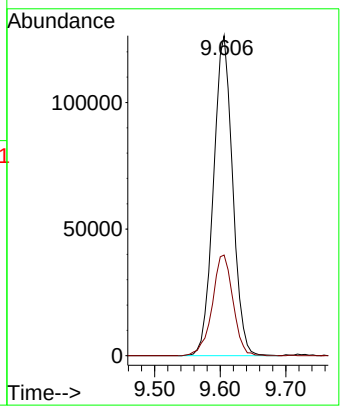
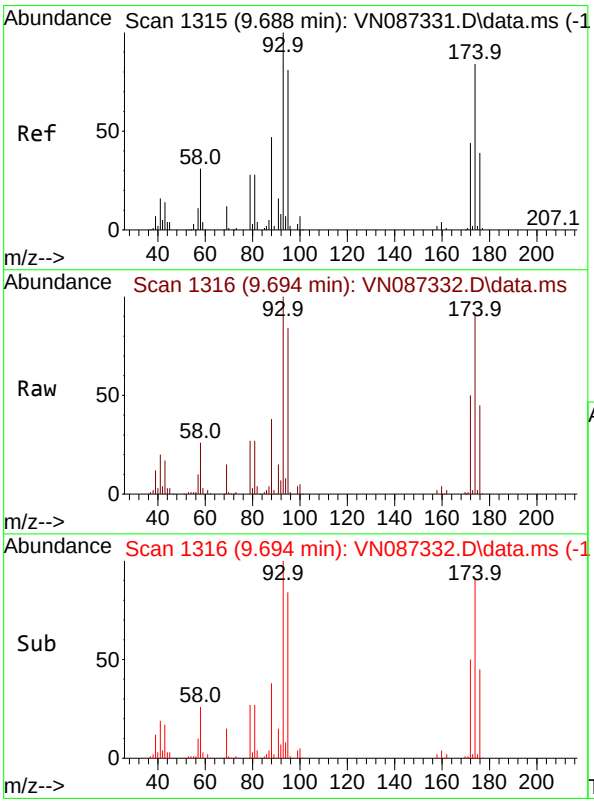
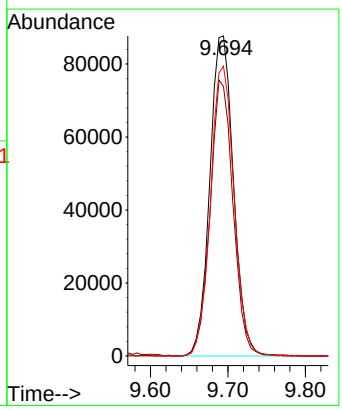


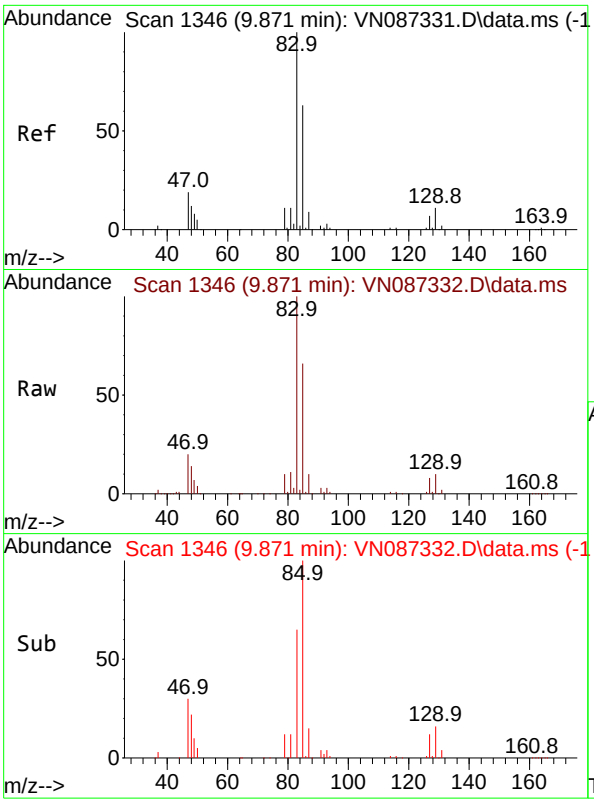


#46
Dibromomethane
Concen: 97.696 ug/l
RT: 9.694 min Scan# 1316
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 93 Resp: 185908

Ion	Ratio	Lower	Upper
93	100		
95	83.5	65.8	98.8
174	90.3	69.9	104.9

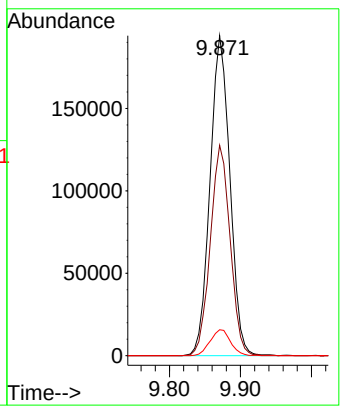




#47
Bromodichloromethane
Concen: 98.072 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 83 Resp: 37591

Ion	Ratio	Lower	Upper
83	100		
85	65.7	50.4	75.6
127	8.1	5.8	8.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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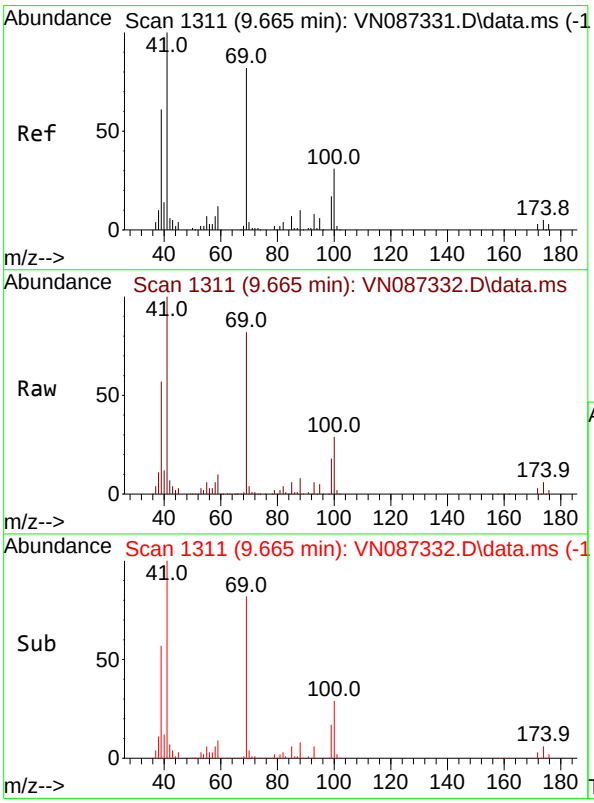
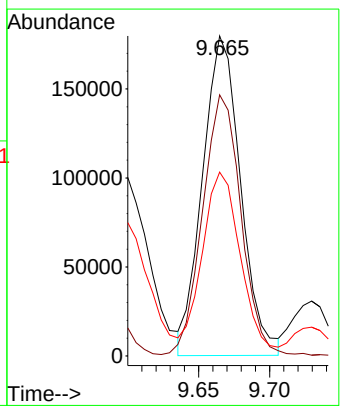
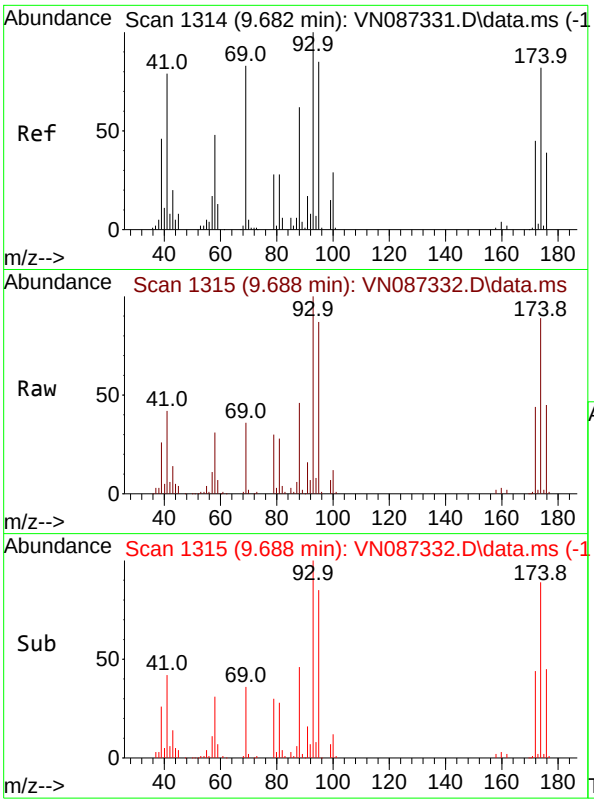


#48
Methyl methacrylate
Concen: 107.228 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 41 Resp: 334941

Ion	Ratio	Lower	Upper
41	100		
69	83.2	64.1	96.1
39	58.3	45.5	68.3

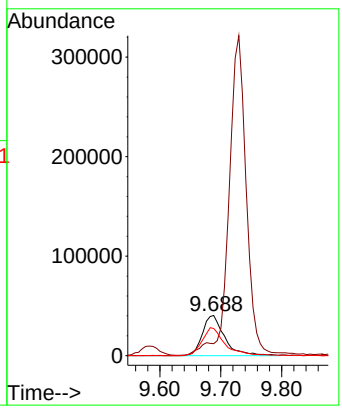




#49
1,4-Dioxane
Concen: 2135.348 ug/l
RT: 9.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 88 Resp: 10215

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	72.4	61.1	91.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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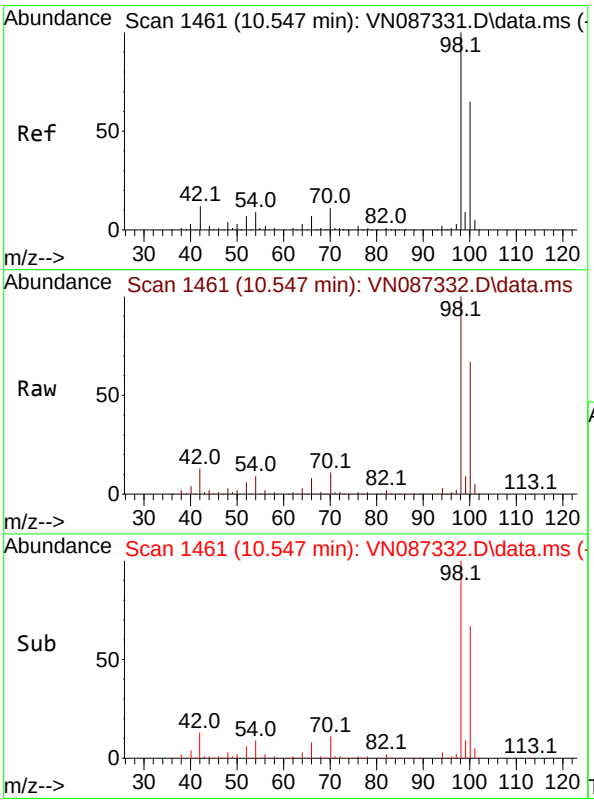
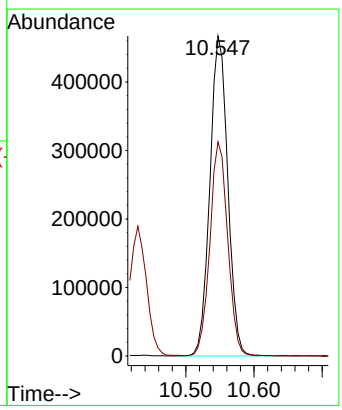
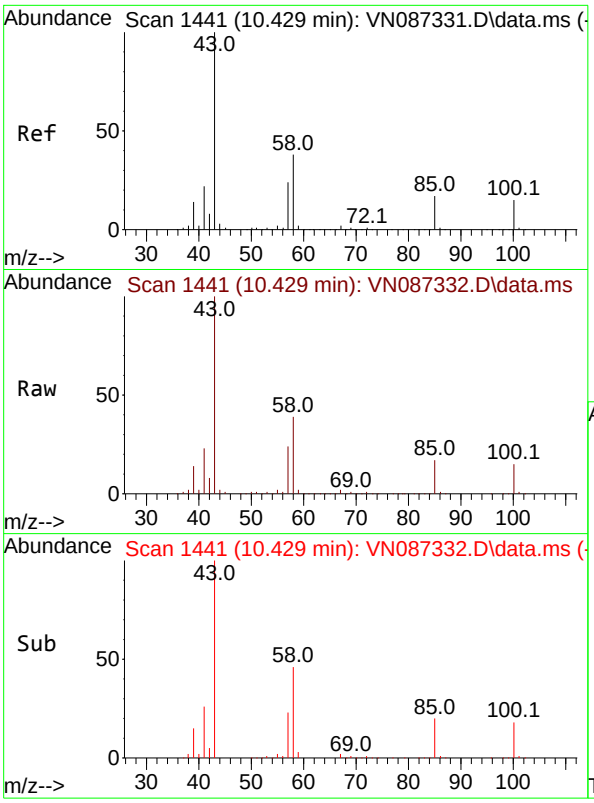


#50
Toluene-d8
Concen: 101.999 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 98 Resp: 852301

Ion	Ratio	Lower	Upper
98	100		
100	66.6	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 509.127 ug/l
RT: 10.429 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 223427

Ion	Ratio	Lower	Upper
43	100		
58	38.7	30.8	46.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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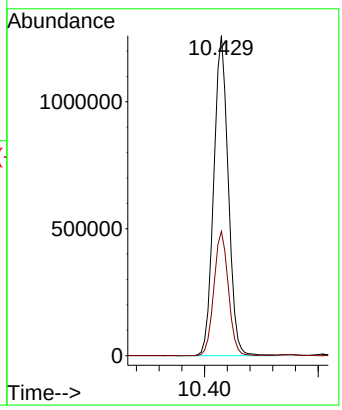
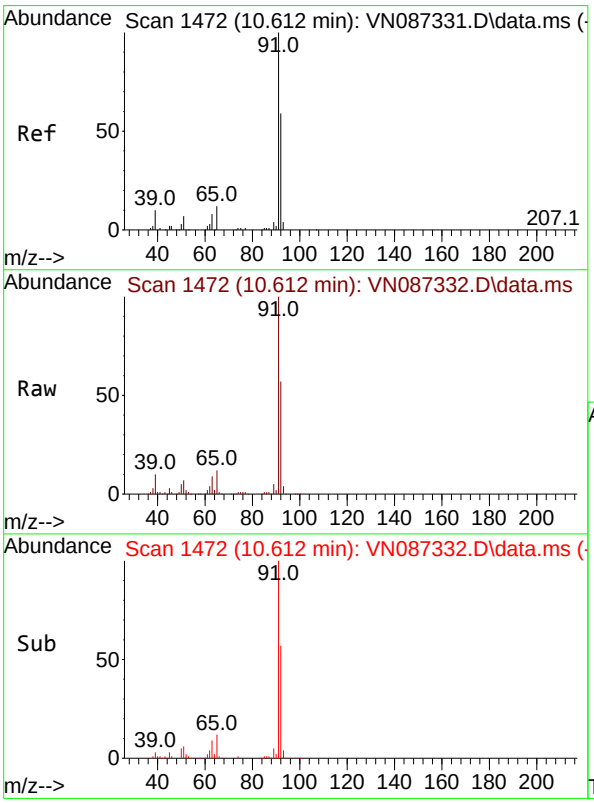
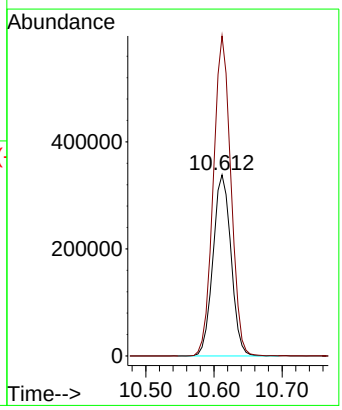


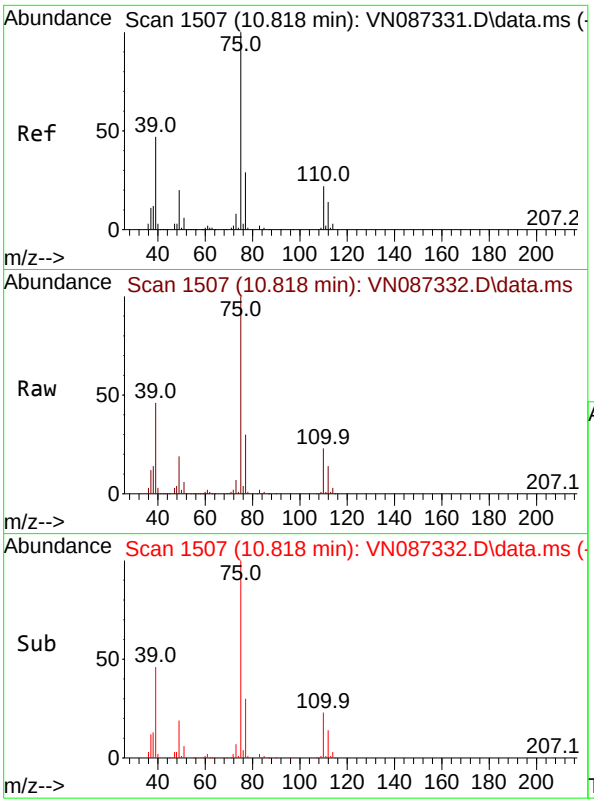


#52
Toluene
Concen: 102.349 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 92 Resp: 622259

Ion	Ratio	Lower	Upper
92	100		
91	172.5	135.1	202.7

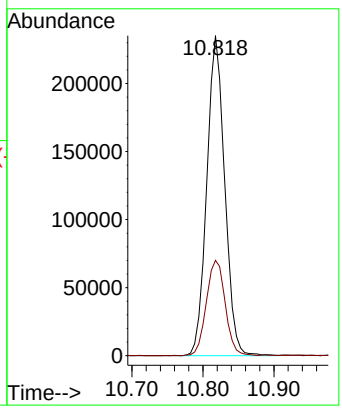




#53
t-1,3-Dichloropropene
Concen: 106.245 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 75 Resp: 41214

Ion	Ratio	Lower	Upper
75	100		
77	29.7	23.6	35.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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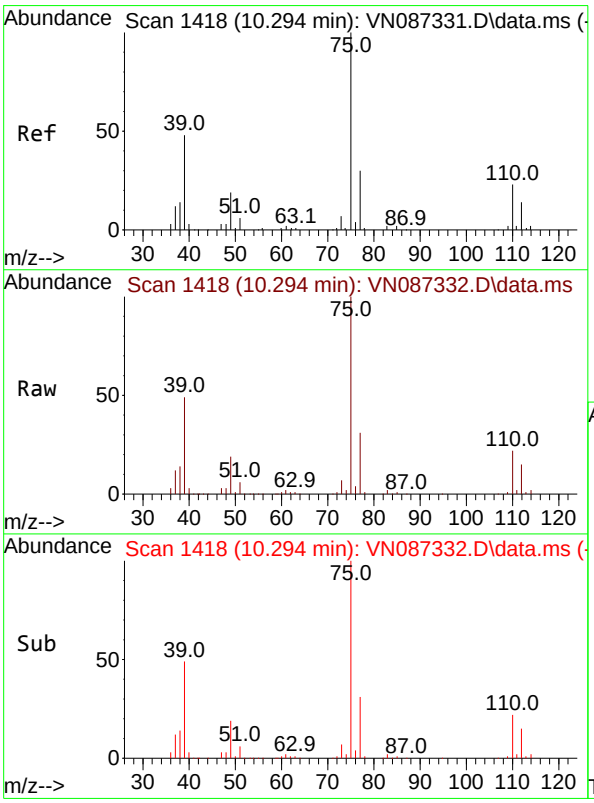
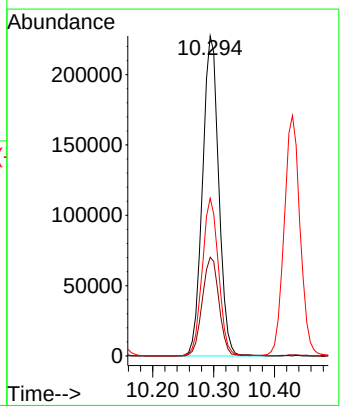
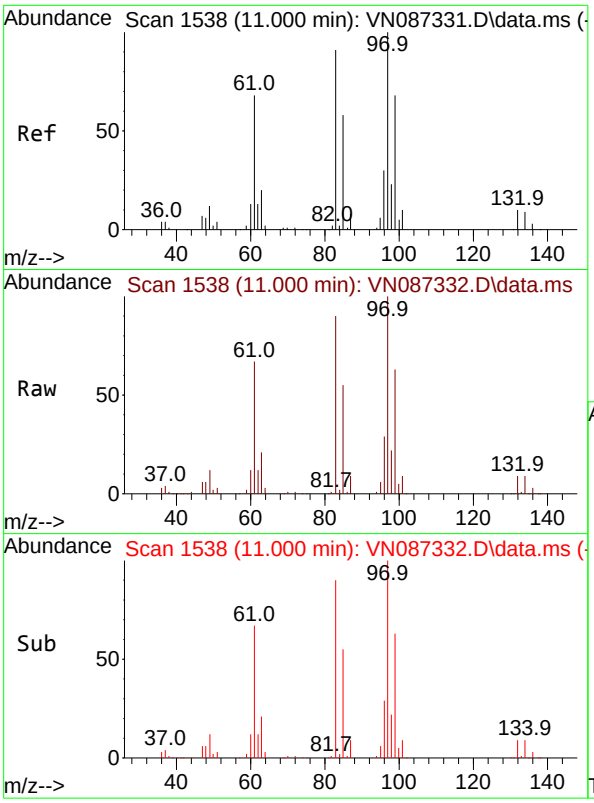


#54
cis-1,3-Dichloropropene
Concen: 105.164 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 75 Resp: 421386

Ion	Ratio	Lower	Upper
75	100		
77	30.9	24.2	36.2
39	49.1	38.4	57.6

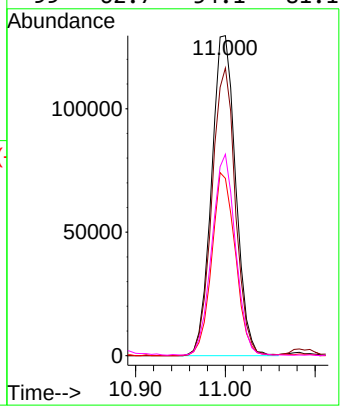




#55
1,1,2-Trichloroethane
Concen: 98.595 ug/l
RT: 11.000 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 97 Resp: 24268

Ion	Ratio	Lower	Upper
97	100		
83	89.9	72.6	109.0
85	55.4	46.7	70.1
99	62.7	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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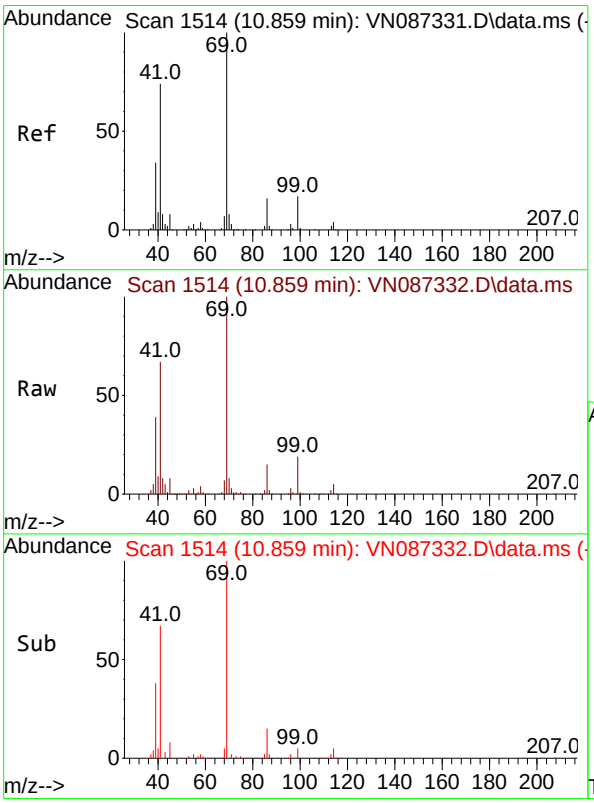
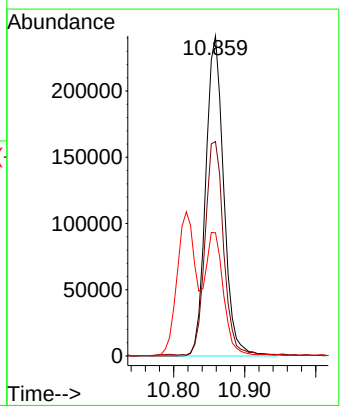
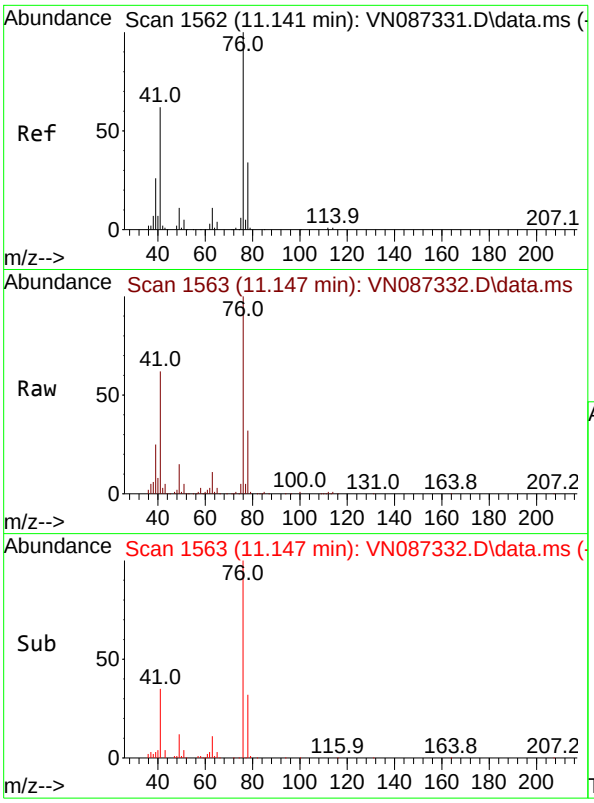


#56
Ethyl methacrylate
Concen: 98.980 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 69 Resp: 425458

Ion	Ratio	Lower	Upper
69	100		
41	69.0	55.1	82.7
39	38.9	27.9	41.9

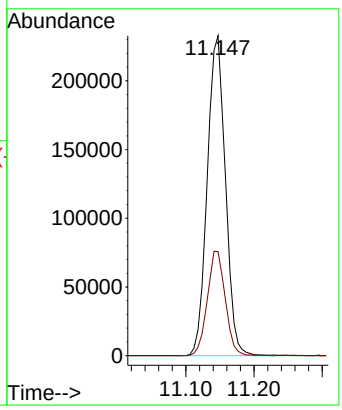




#57
1,3-Dichloropropane
Concen: 101.453 ug/l
RT: 11.147 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 76 Resp: 43175

Ion	Ratio	Lower	Upper
76	100		
78	32.3	26.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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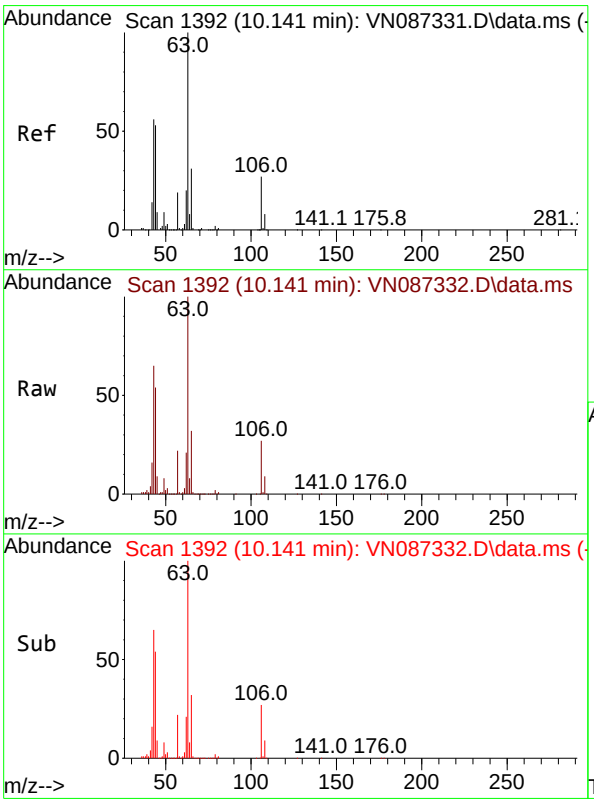
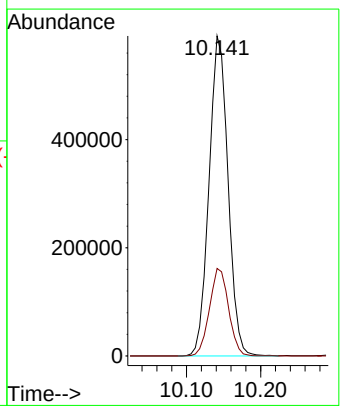
Supervised By :Semsettin Yesilyurt 07/17/2025

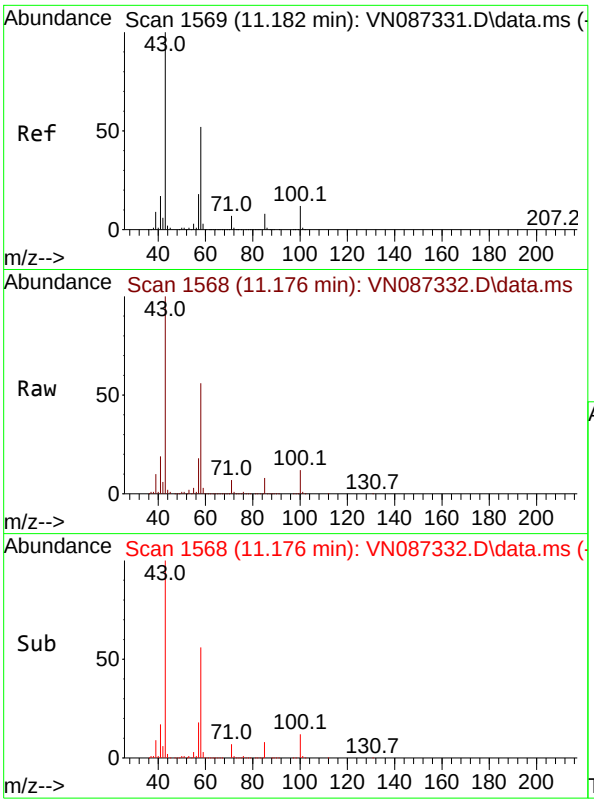


#58
2-Chloroethyl Vinyl ether
Concen: 521.327 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 63 Resp: 1052628

Ion	Ratio	Lower	Upper
63	100		
106	27.5	21.7	32.5





#59
2-Hexanone
Concen: 560.508 ug/l
RT: 11.176 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 163194

Ion	Ratio	Lower	Upper
43	100		
58	54.1	26.7	80.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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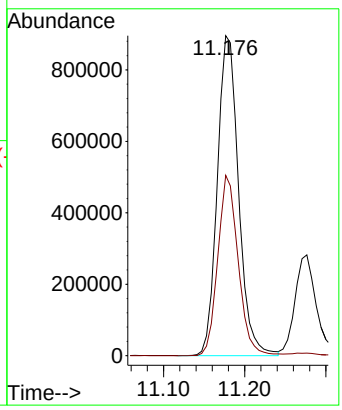
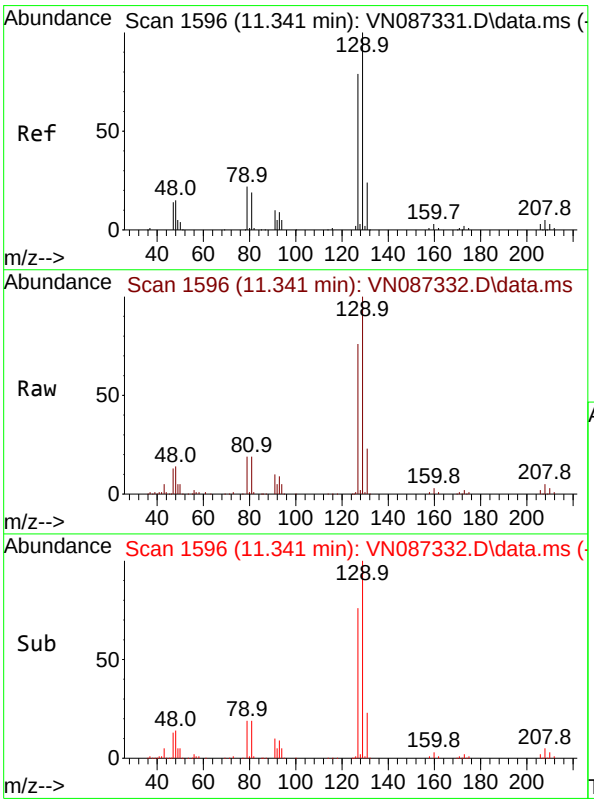
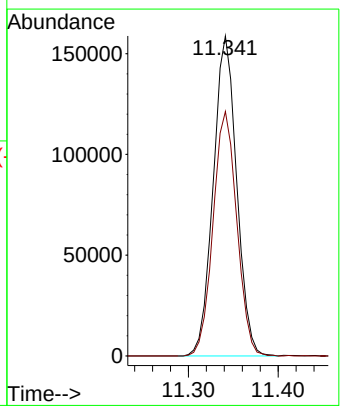


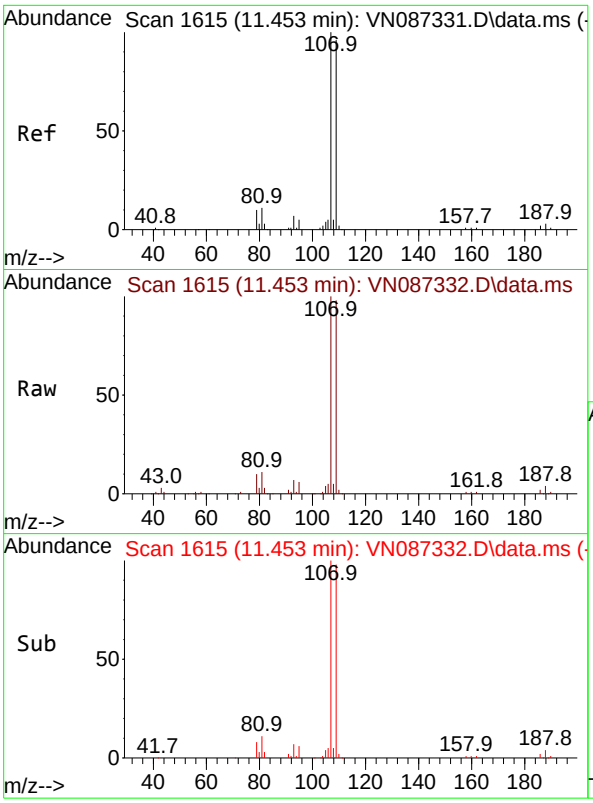


#60
Dibromochloromethane
Concen: 102.484 ug/l
RT: 11.341 min Scan# 1596
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:129 Resp: 287682

Ion	Ratio	Lower	Upper
129	100		
127	77.3	39.1	117.5





#61
1,2-Dibromoethane
Concen: 100.051 ug/l
RT: 11.453 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:107 Resp: 25893

Ion	Ratio	Lower	Upper
107	100		
109	94.9	77.5	116.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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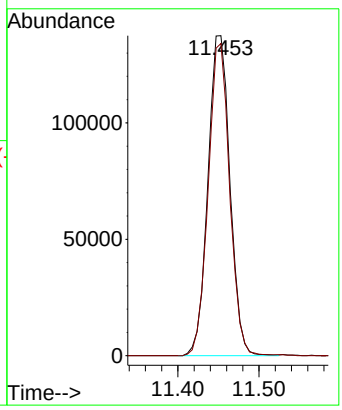
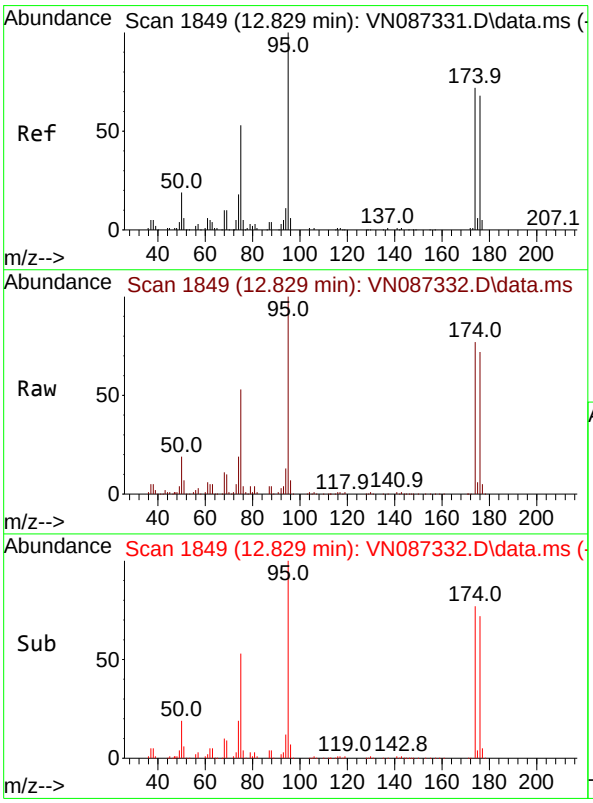
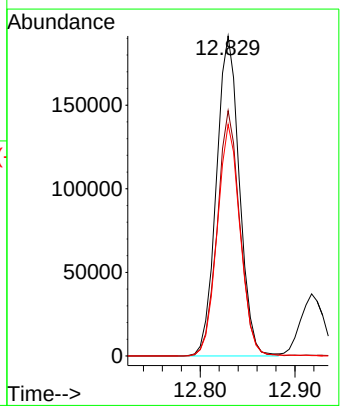


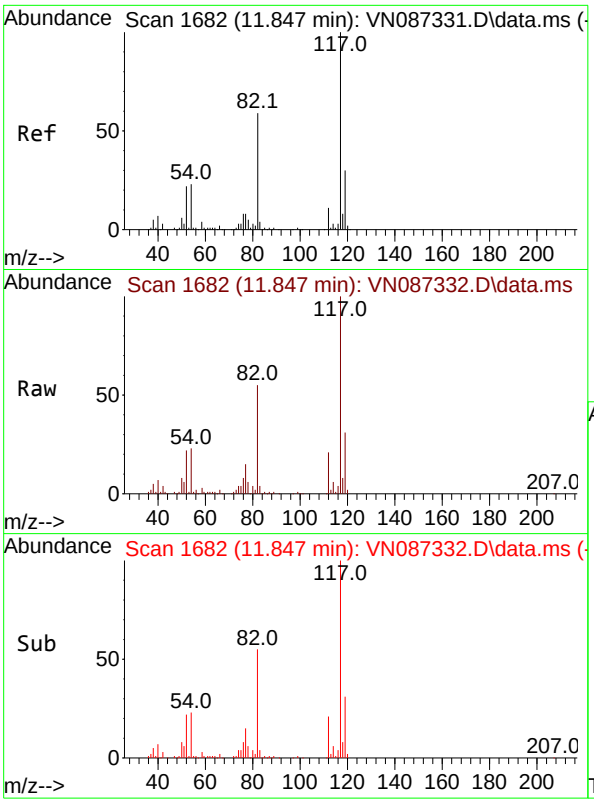


#62
4-Bromofluorobenzene
Concen: 104.650 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 95 Resp: 323070

Ion	Ratio	Lower	Upper
95	100		
174	75.5	0.0	149.4
176	72.2	0.0	141.2

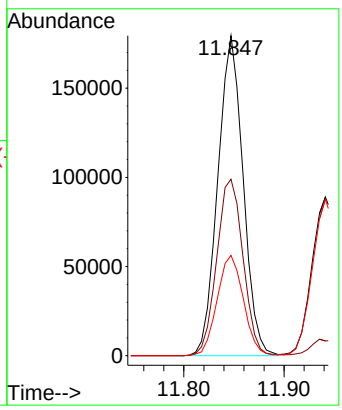




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:117 Resp: 31484

Ion	Ratio	Lower	Upper
117	100		
82	55.1	47.4	71.2
119	31.4	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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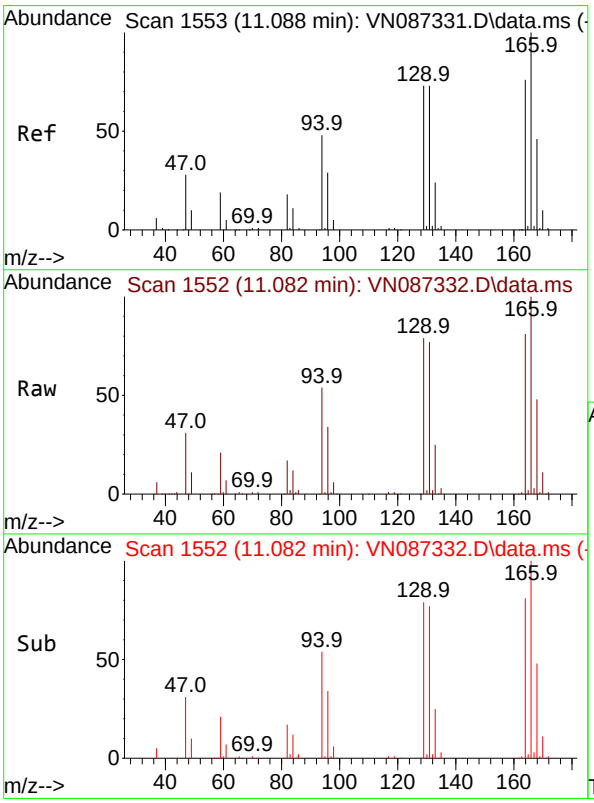
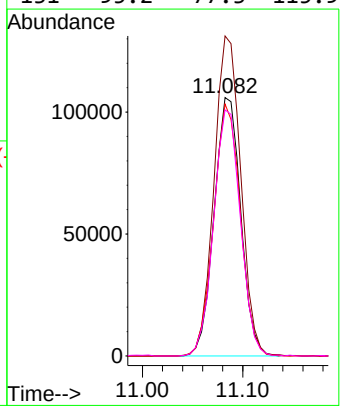
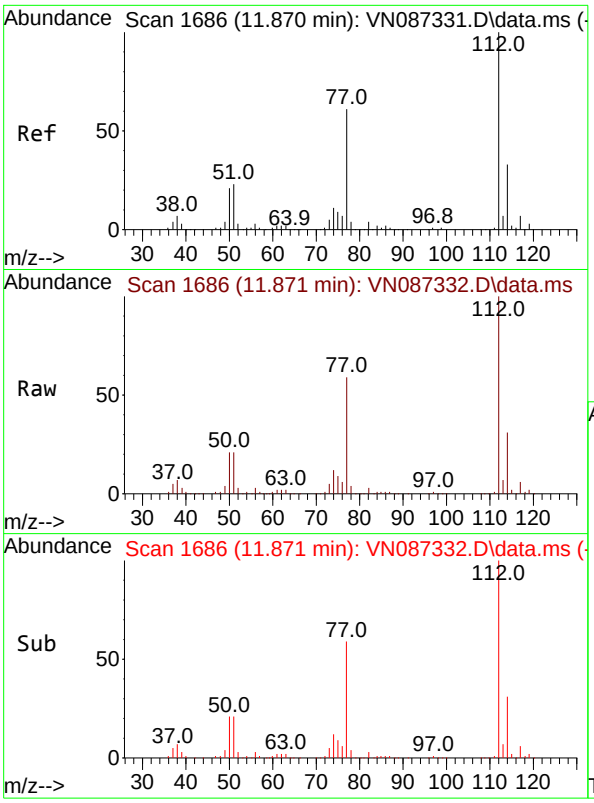


#64
Tetrachloroethene
Concen: 96.252 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:164 Resp: 195044

Ion	Ratio	Lower	Upper
164	100		
166	123.8	105.5	158.3
129	97.4	77.4	116.2
131	95.2	77.3	115.9

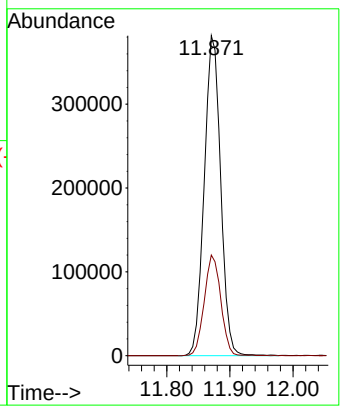




#65
Chlorobenzene
Concen: 97.289 ug/l
RT: 11.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:112 Resp: 68769

Ion	Ratio	Lower	Upper
112	100		
114	31.5	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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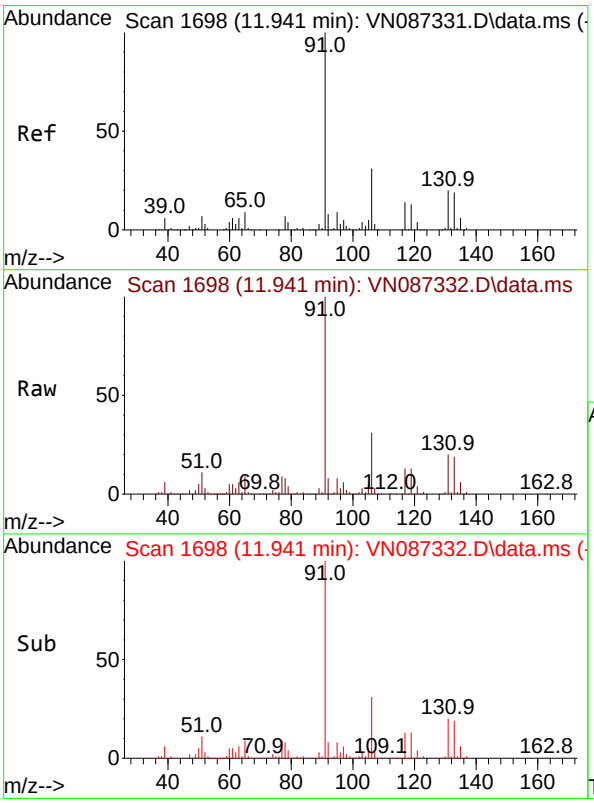
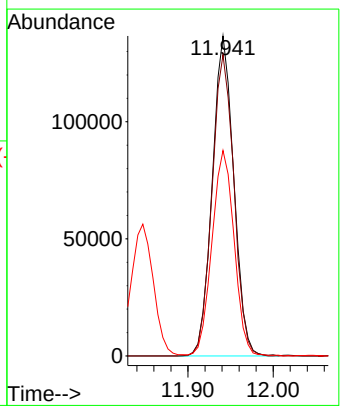
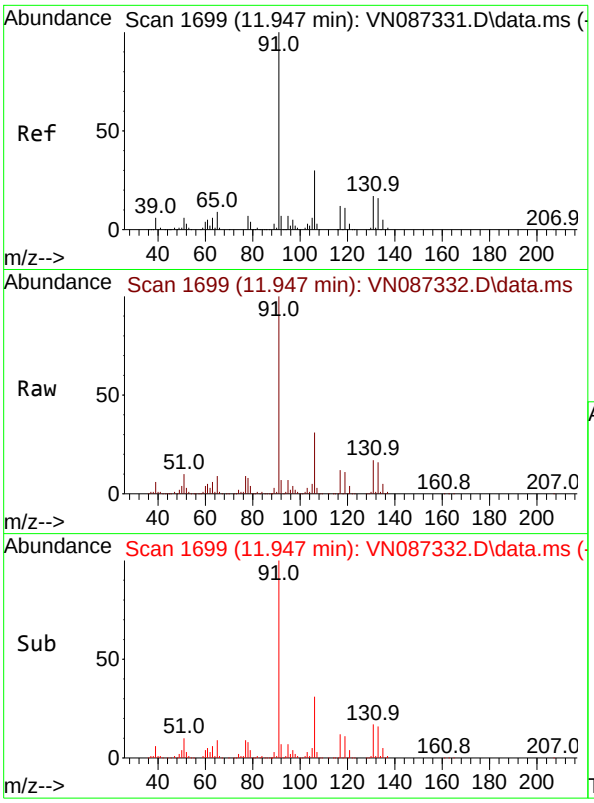


#66
1,1,1,2-Tetrachloroethane
Concen: 99.736 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:131 Resp: 239722

Ion	Ratio	Lower	Upper
131	100		
133	95.7	47.4	142.3
119	66.2	33.1	99.2





#67
Ethyl Benzene
Concen: 103.080 ug/l
RT: 11.947 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 91 Resp: 119951

Ion	Ratio	Lower	Upper
91	100		
106	30.9	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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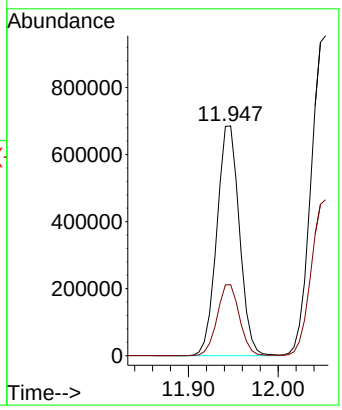
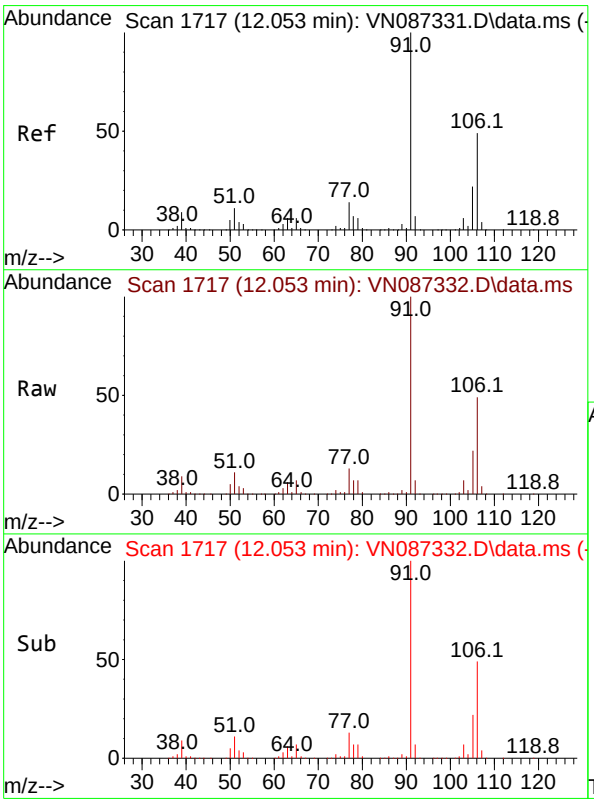
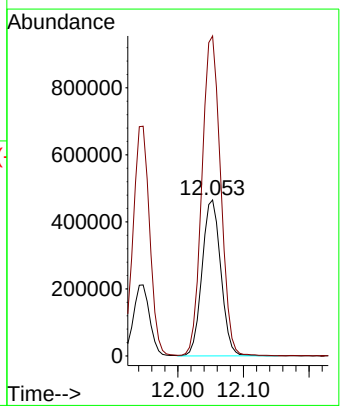


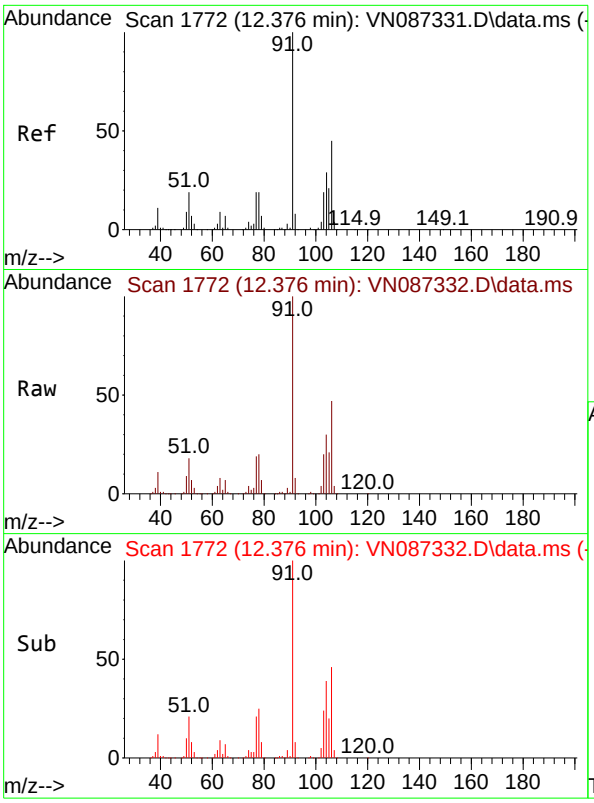


#68
m/p-Xylenes
Concen: 212.065 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:106 Resp: 924069

Ion	Ratio	Lower	Upper
106	100		
91	204.6	162.0	243.0





#69
o-Xylene
Concen: 107.413 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:106 Resp: 44709

Ion	Ratio	Lower	Upper
106	100		
91	216.0	107.7	323.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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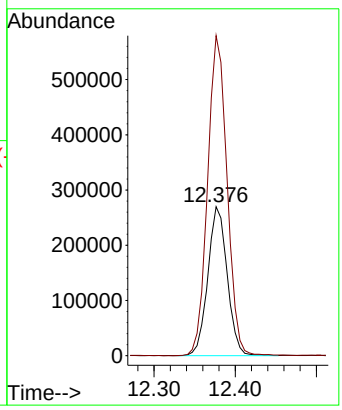
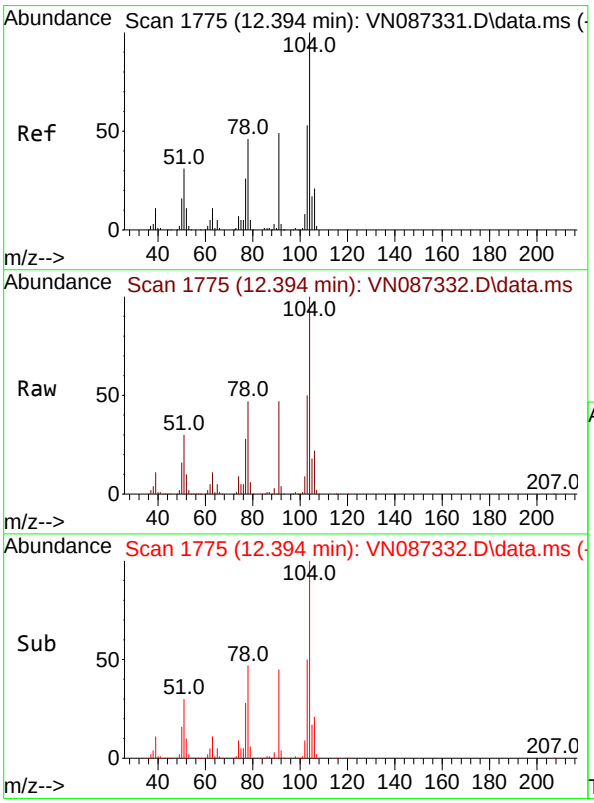
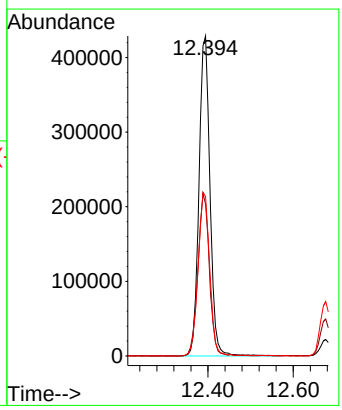


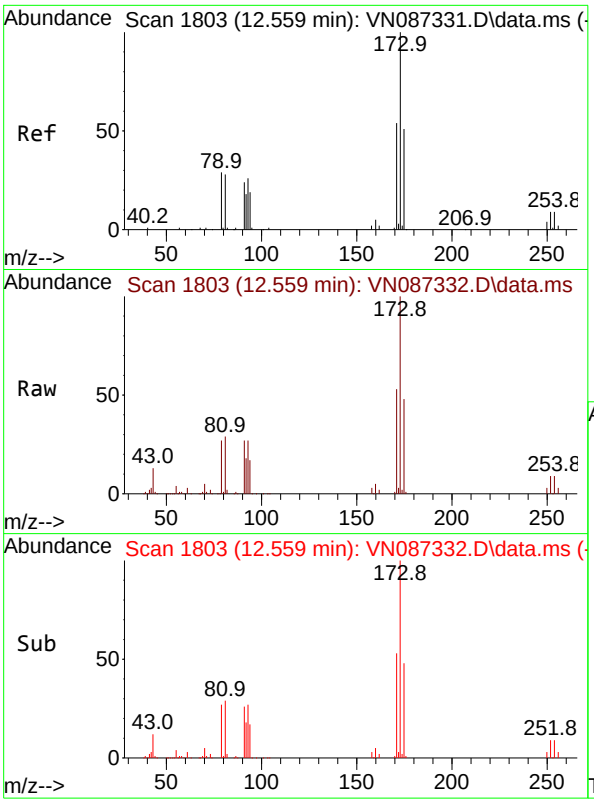


#70
Styrene
Concen: 109.464 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:104 Resp: 766471

Ion	Ratio	Lower	Upper
104	100		
78	53.0	41.0	61.6
103	54.0	43.9	65.9

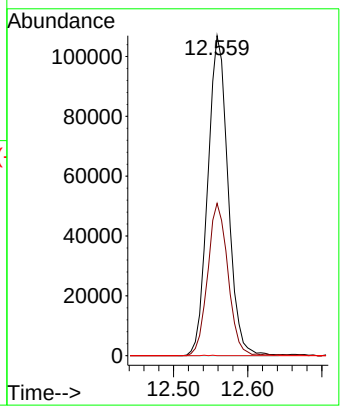




#71
Bromoform
Concen: 104.498 ug/l
RT: 12.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:173 Resp: 20291

Ion	Ratio	Lower	Upper
173	100		
175	47.7	24.1	72.3
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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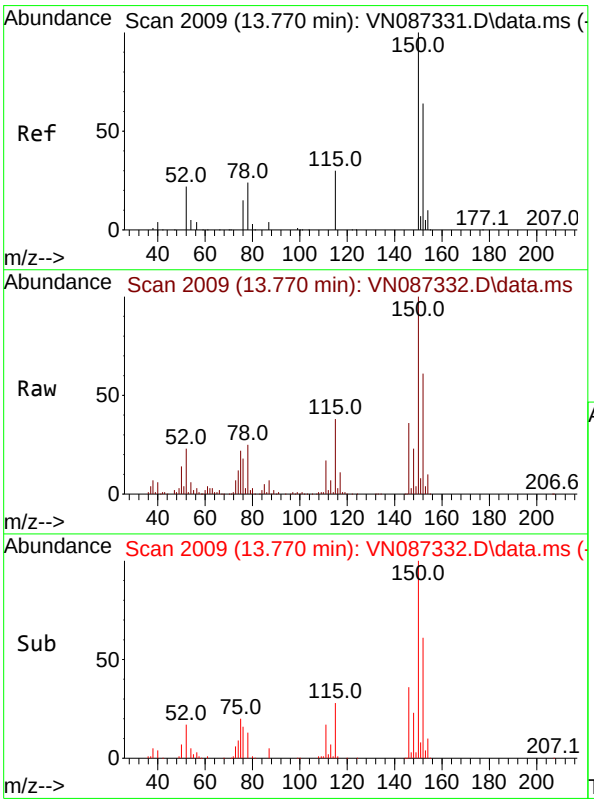
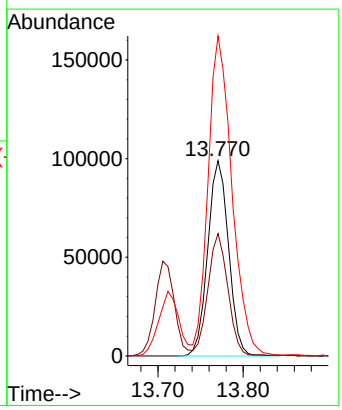
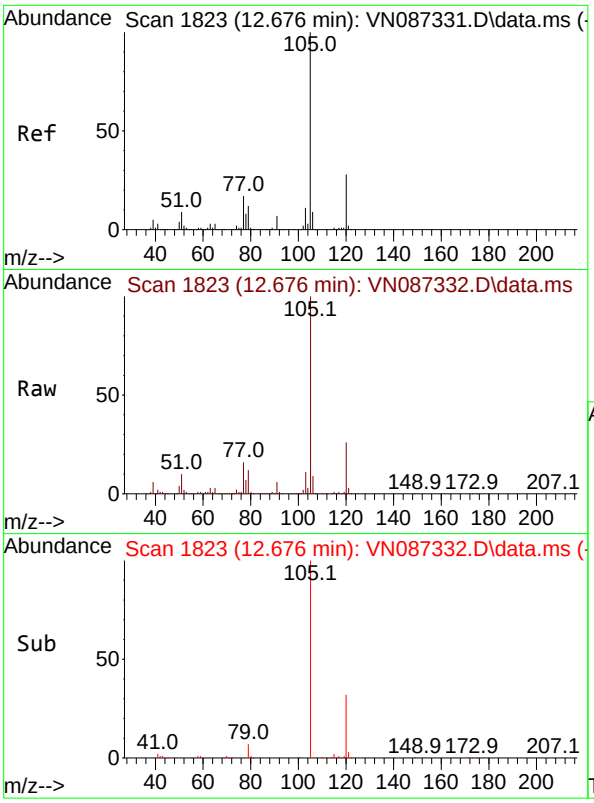


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:152 Resp: 168489

Ion	Ratio	Lower	Upper
152	100		
115	59.2	31.1	93.5
150	186.3	0.0	349.0

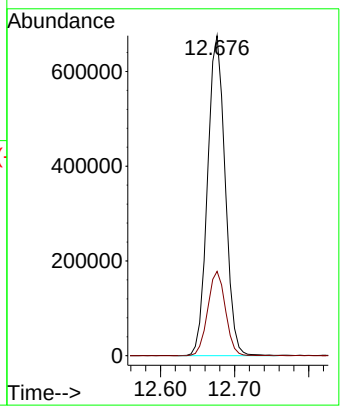




#73
Isopropylbenzene
Concen: 104.940 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:105 Resp: 111282

Ion	Ratio	Lower	Upper
105	100		
120	26.5	13.4	40.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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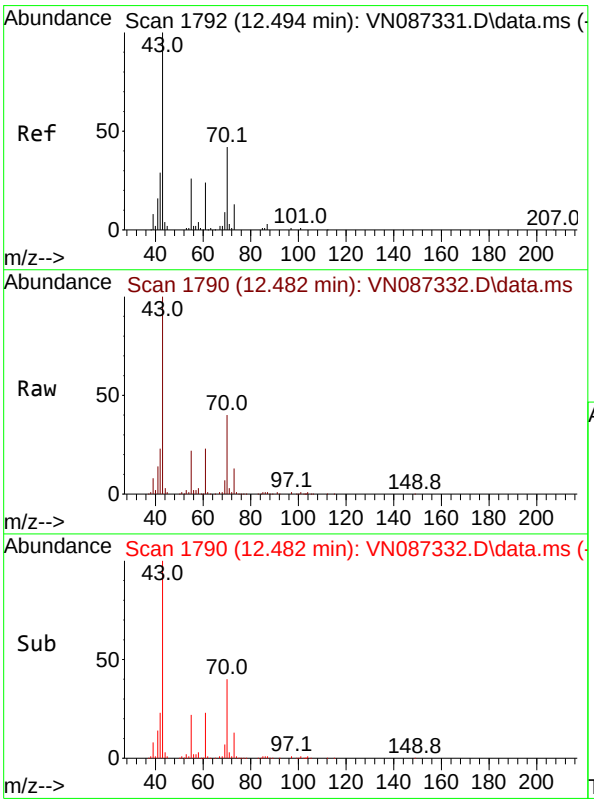
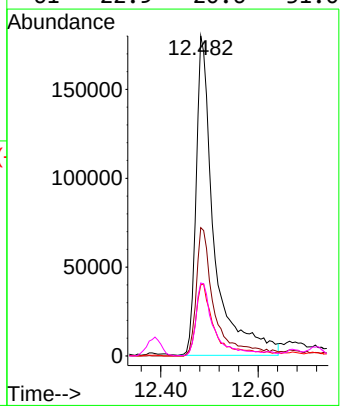
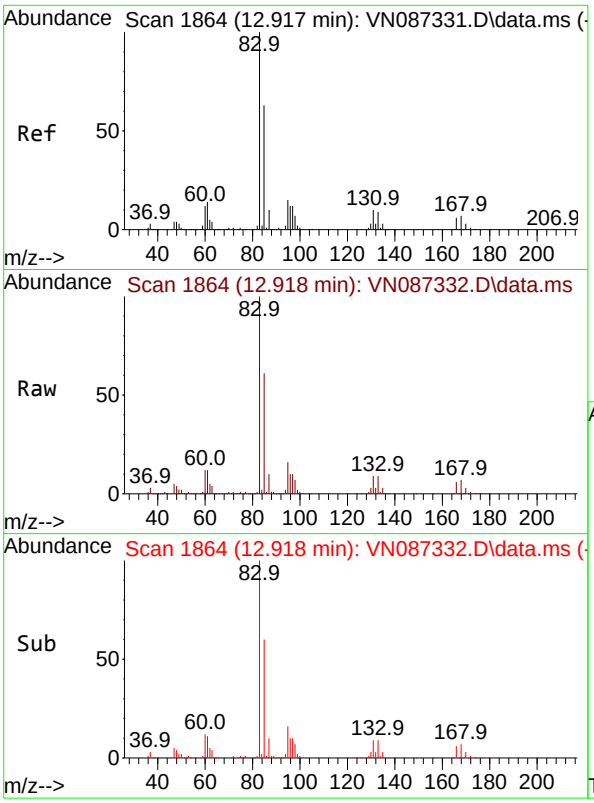


#74
N-amyl acetate
Concen: 112.129 ug/l
RT: 12.482 min Scan# 1790
Delta R.T. -0.012 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 43 Resp: 464246

Ion	Ratio	Lower	Upper
43	100		
70	41.1	37.6	56.4
55	23.5	19.6	29.4
61	22.9	20.6	31.0





#75
1,1,2,2-Tetrachloroethane
Concen: 97.587 ug/l
RT: 12.918 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 83 Resp: 38939

Ion	Ratio	Lower	Upper
83	100		
131	10.2	5.1	15.3
85	63.5	32.5	97.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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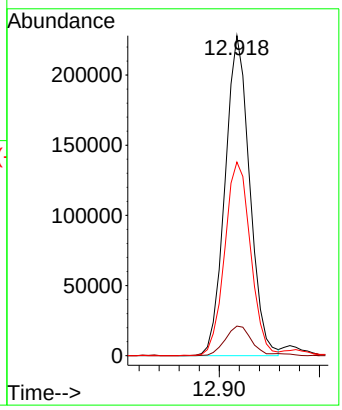
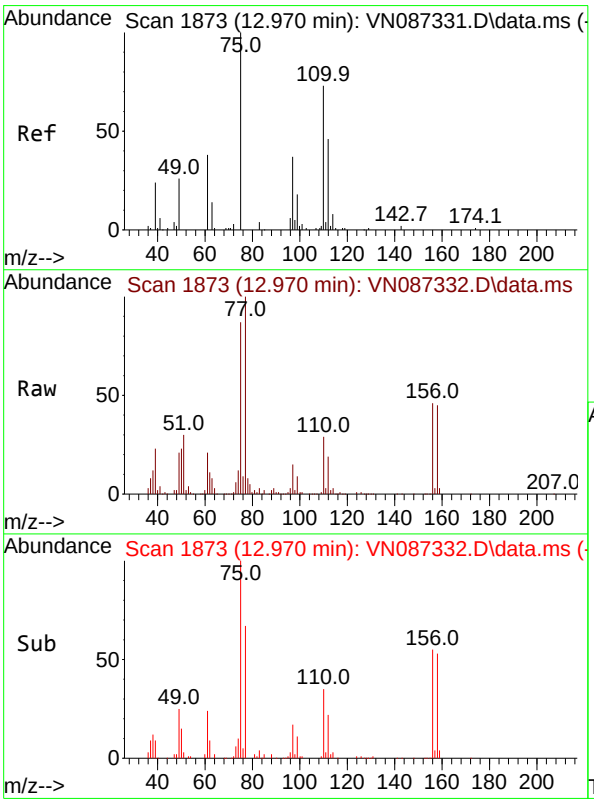
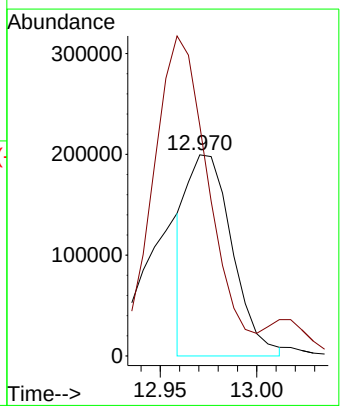


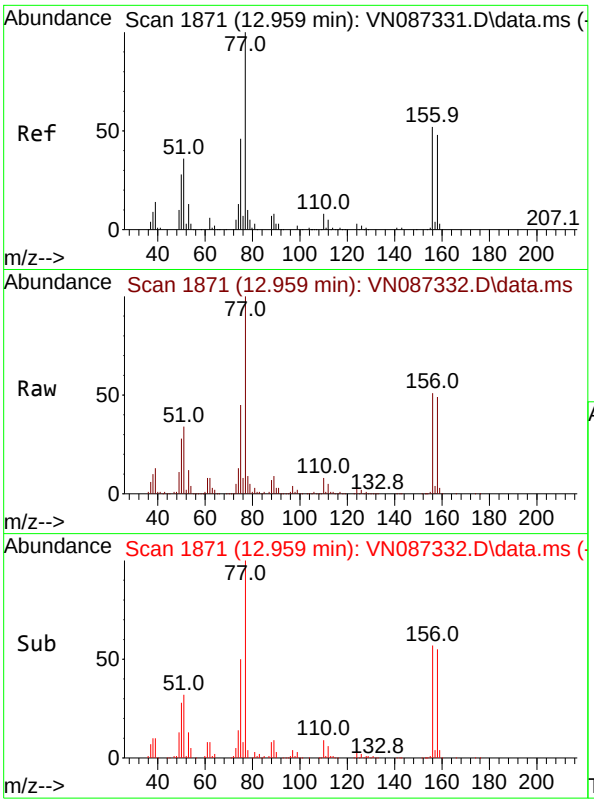


#76
1,2,3-Trichloropropane
Concen: 87.327 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 75 Resp: 326434

Ion	Ratio	Lower	Upper
75	100		
77	196.5	94.5	283.6

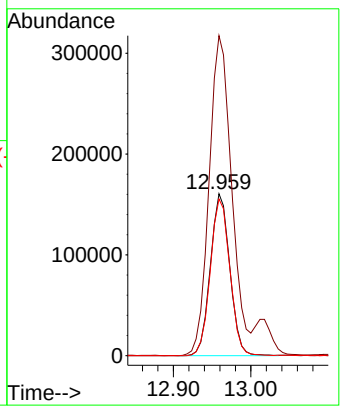




#77
Bromobenzene
Concen: 101.662 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:156 Resp: 27958

Ion	Ratio	Lower	Upper
156	100		
77	229.4	114.9	344.6
158	97.6	48.5	145.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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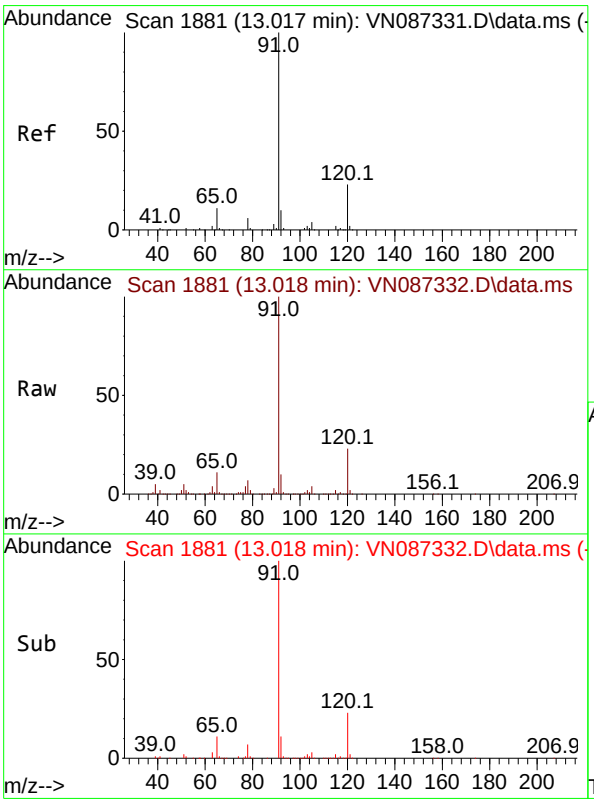
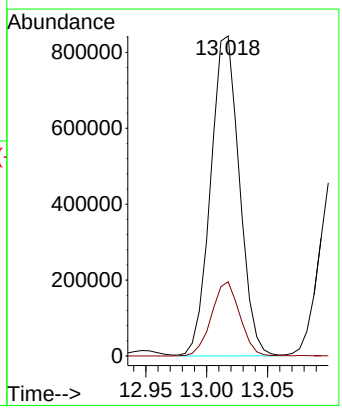
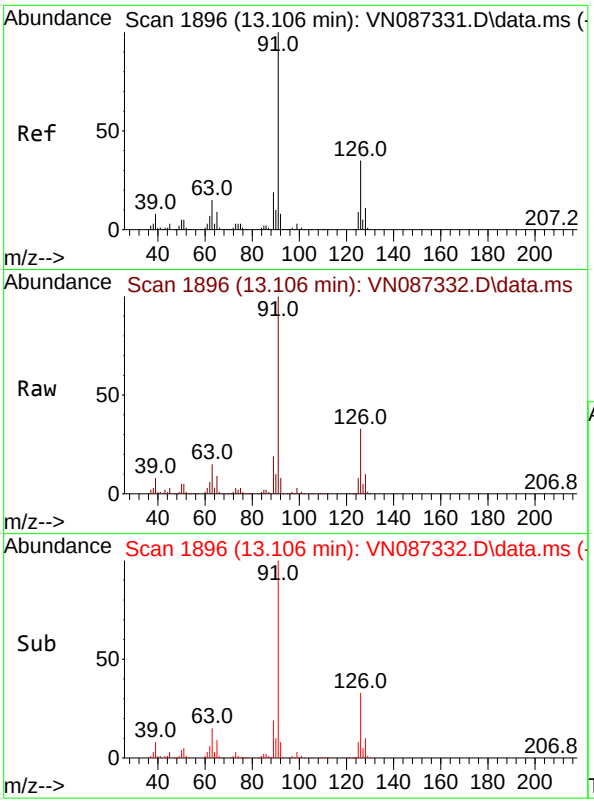


#78
n-propylbenzene
Concen: 103.771 ug/l
RT: 13.018 min Scan# 1881
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 91 Resp: 1384517

Ion	Ratio	Lower	Upper
91	100		
120	22.7	11.3	33.8

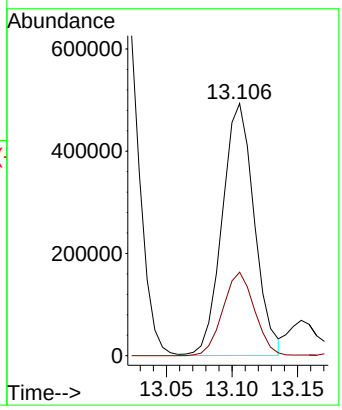




#79
2-Chlorotoluene
Concen: 102.452 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 91 Resp: 84007

Ion	Ratio	Lower	Upper
91	100		
126	32.8	16.9	50.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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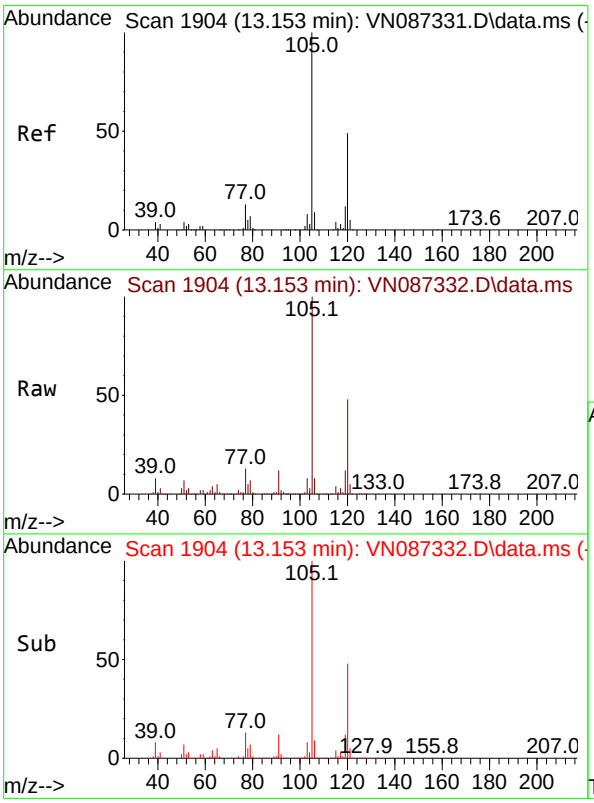
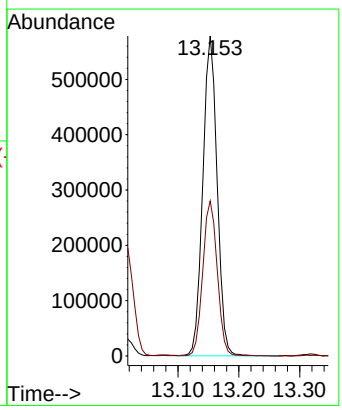
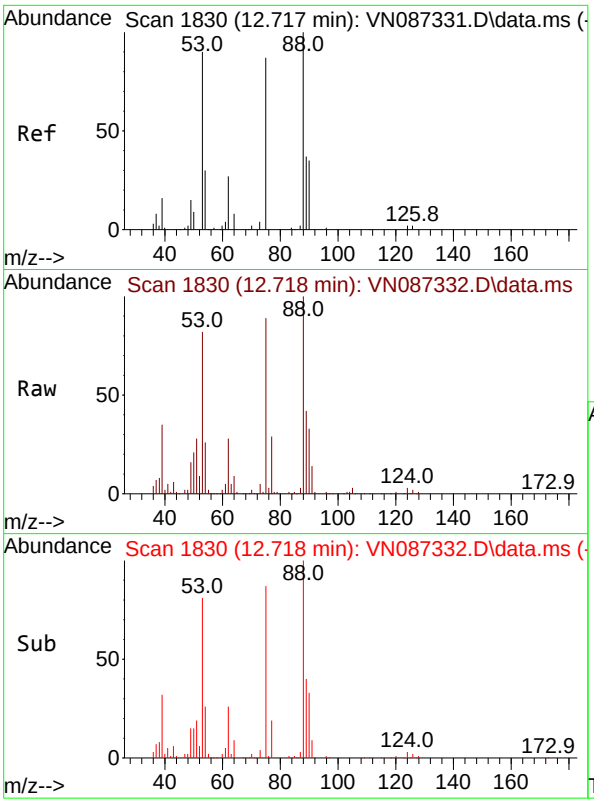


#80
1,3,5-Trimethylbenzene
Concen: 104.383 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:105 Resp: 943119

Ion	Ratio	Lower	Upper
105	100		
120	48.7	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 101.874 ug/l
RT: 12.718 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 75 Resp: 14067

Ion	Ratio	Lower	Upper
75	100		
53	110.2	83.5	125.3
89	49.1	38.4	57.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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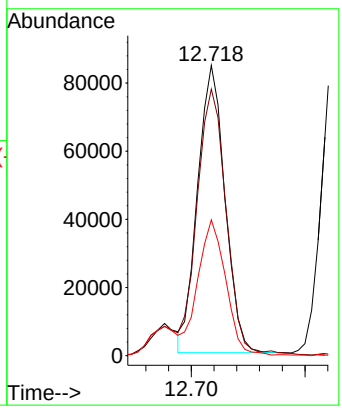
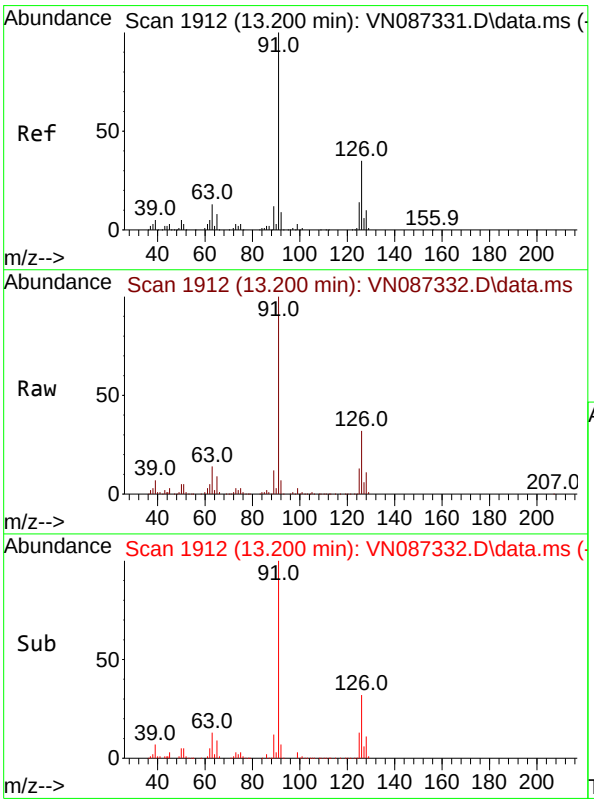
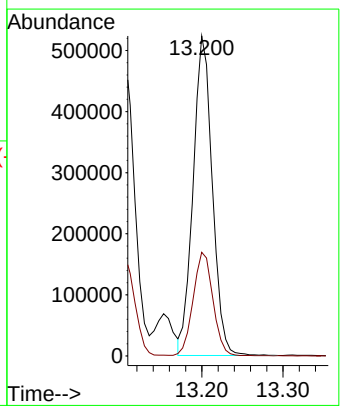


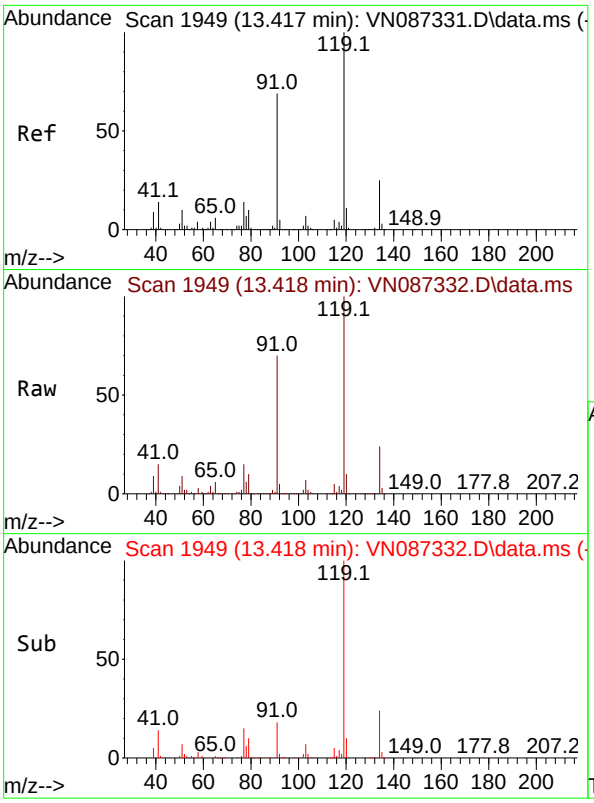


#82
4-Chlorotoluene
Concen: 100.734 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 91 Resp: 859965

Ion	Ratio	Lower	Upper
91	100		
126	33.8	16.6	49.7

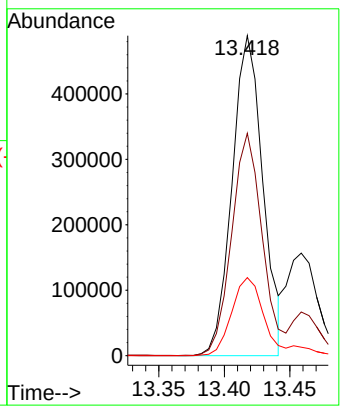




#83
tert-Butylbenzene
Concen: 106.106 ug/l
RT: 13.418 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:119 Resp: 80070

Ion	Ratio	Lower	Upper
119	100		
91	69.4	35.0	105.1
134	24.9	12.6	37.6



Instrument :
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ClientSampleId :
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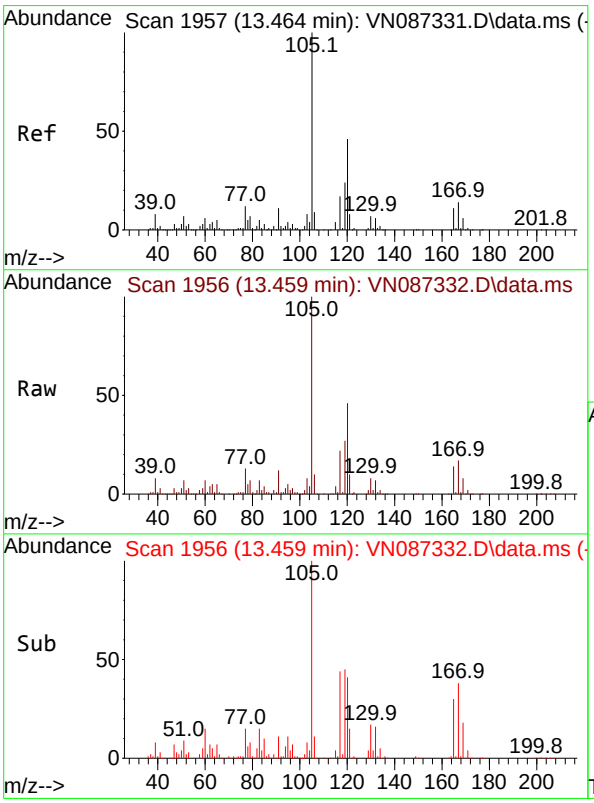
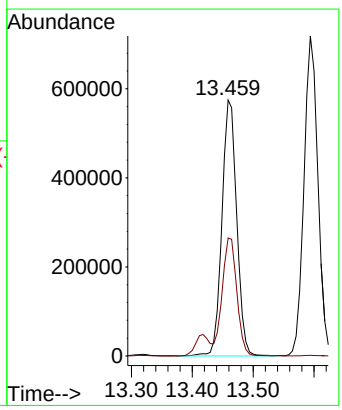
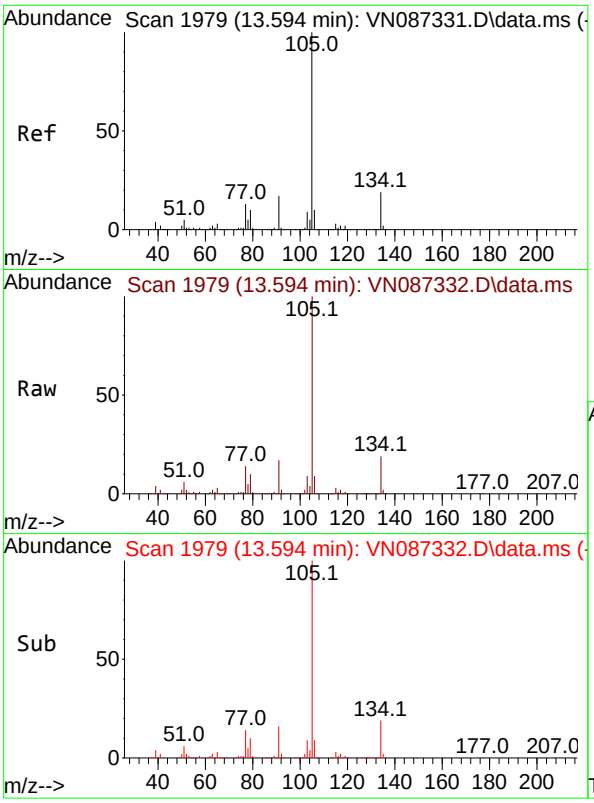


#84
1,2,4-Trimethylbenzene
Concen: 104.898 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:105 Resp: 967878

Ion	Ratio	Lower	Upper
105	100		
120	45.5	22.8	68.3

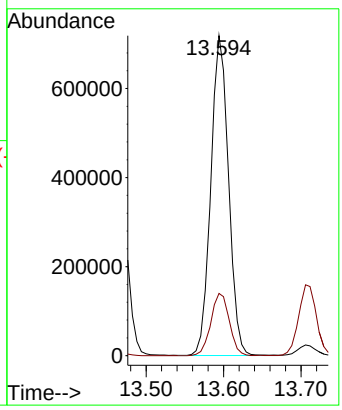




#85
sec-Butylbenzene
Concen: 100.410 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:105 Resp: 114132

Ion	Ratio	Lower	Upper
105	100		
134	20.3	9.8	29.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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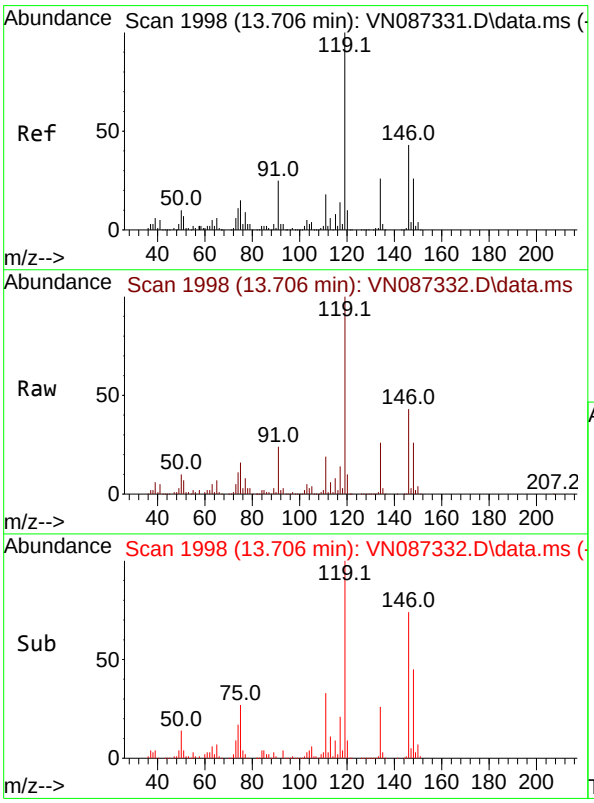
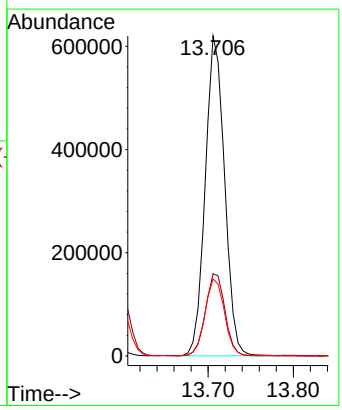
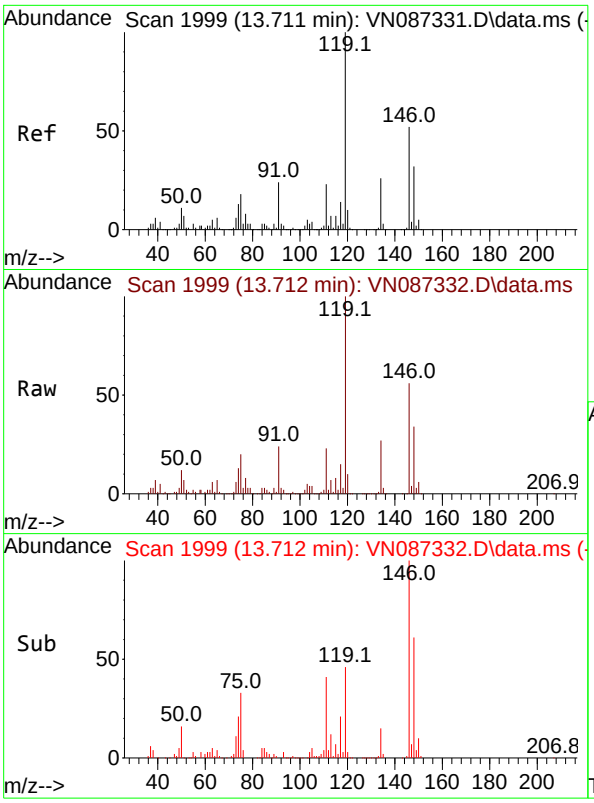


#86
p-Isopropyltoluene
Concen: 107.037 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:119 Resp: 975014

Ion	Ratio	Lower	Upper
119	100		
134	26.0	13.5	40.5
91	24.5	12.2	36.6

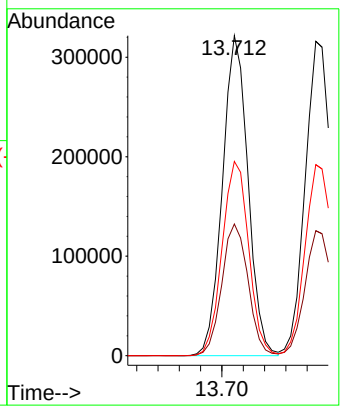




#87
1,3-Dichlorobenzene
Concen: 99.151 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:146 Resp: 53517

Ion	Ratio	Lower	Upper
146	100		
111	42.4	21.4	64.3
148	63.2	31.6	95.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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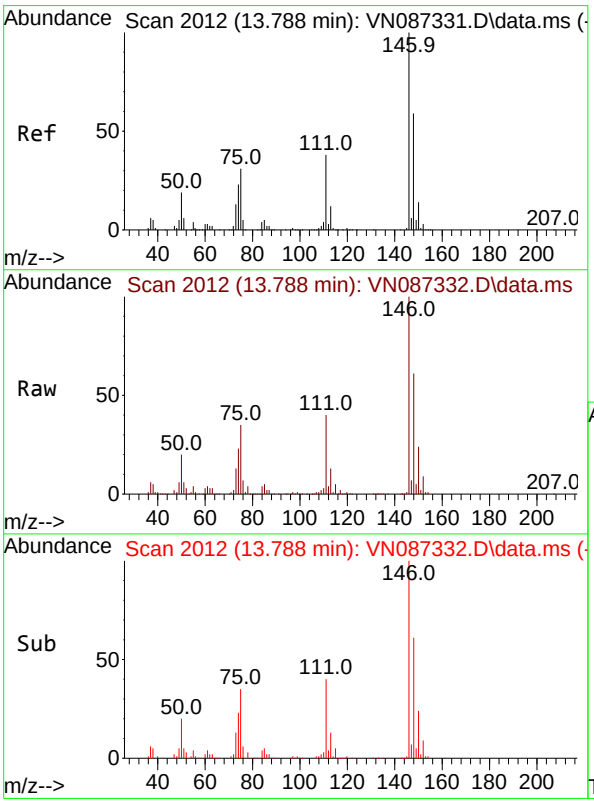
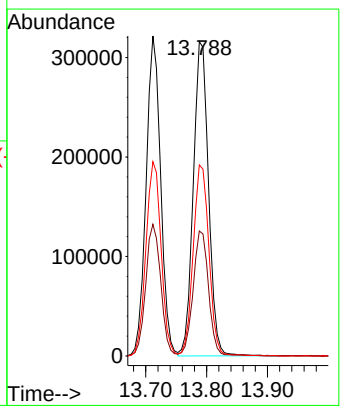
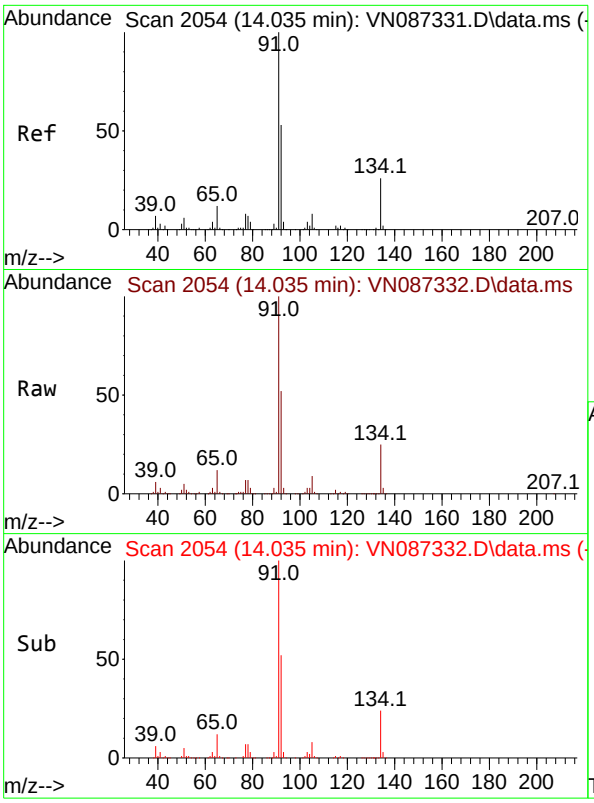


#88
1,4-Dichlorobenzene
Concen: 95.097 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:146 Resp: 548212

Ion	Ratio	Lower	Upper
146	100		
111	40.6	19.6	58.7
148	62.7	31.4	94.0

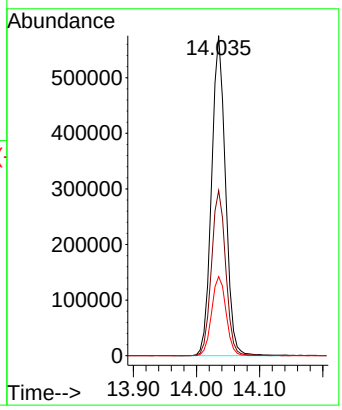




#89
n-Butylbenzene
Concen: 101.260 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 91 Resp: 88076

Ion	Ratio	Lower	Upper
91	100		
92	52.7	26.2	78.6
134	25.7	12.4	37.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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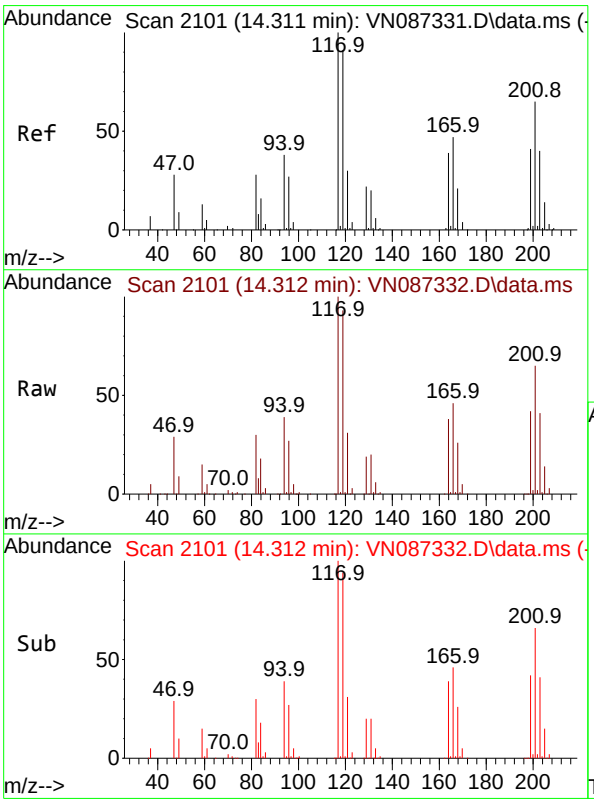
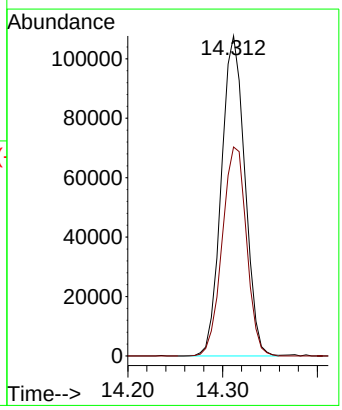
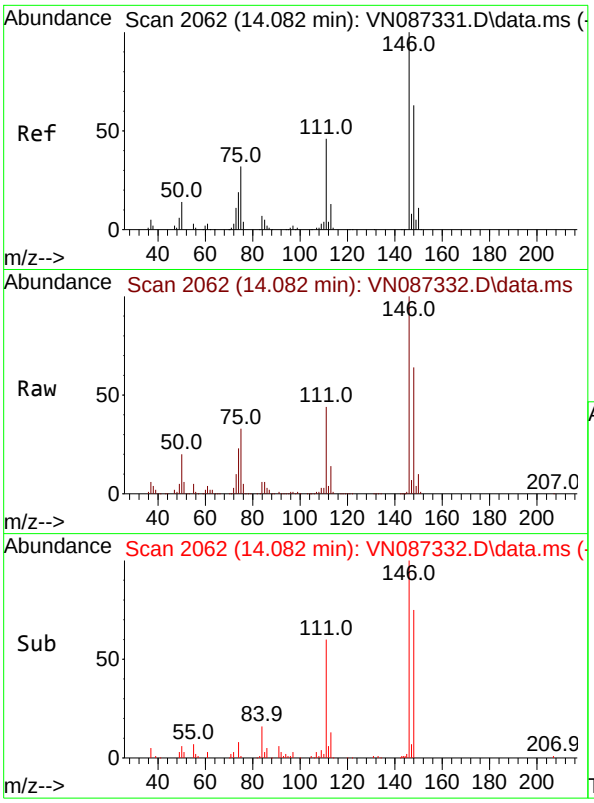


#90
Hexachloroethane
Concen: 96.358 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:117 Resp: 185973

Ion	Ratio	Lower	Upper
117	100		
201	67.5	32.8	98.4

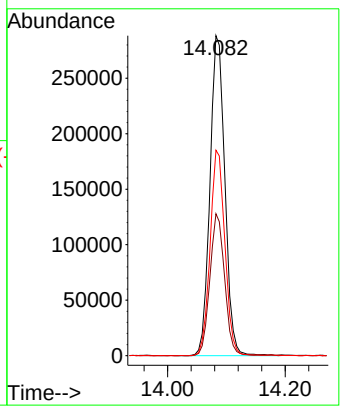




#91
1,2-Dichlorobenzene
Concen: 99.523 ug/l
RT: 14.082 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:146 Resp: 50890

Ion	Ratio	Lower	Upper
146	100		
111	43.8	22.0	66.0
148	63.6	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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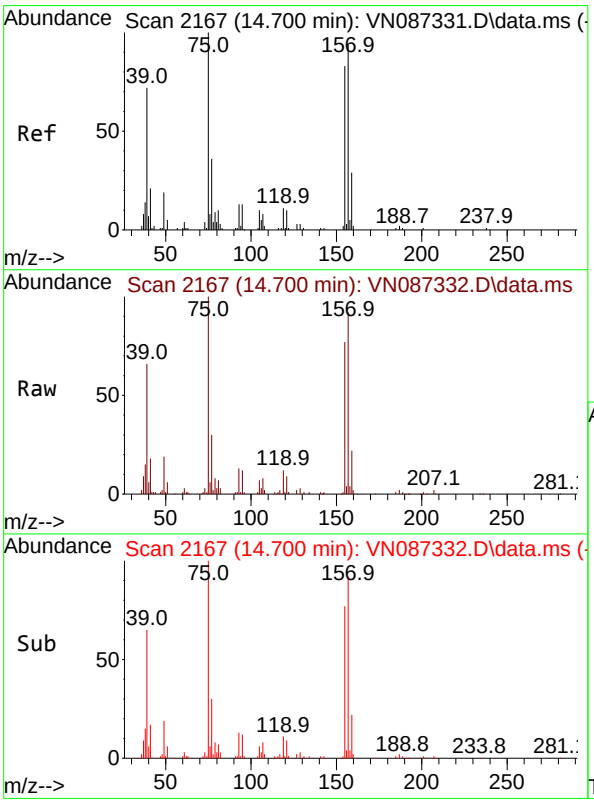
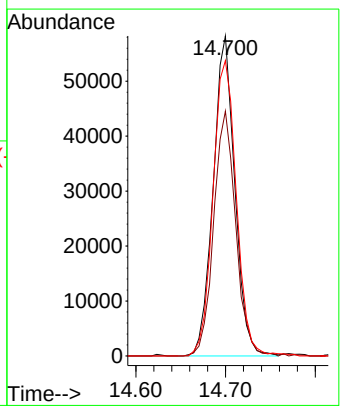
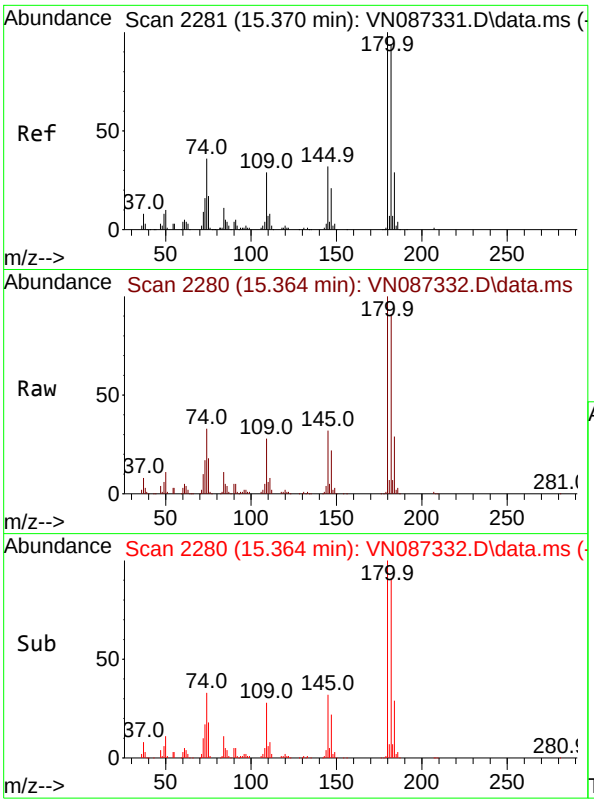


#92
1,2-Dibromo-3-Chloropropane
Concen: 93.137 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion: 75 Resp: 97572

Ion	Ratio	Lower	Upper
75	100		
155	78.0	37.3	111.8
157	99.6	46.2	138.6

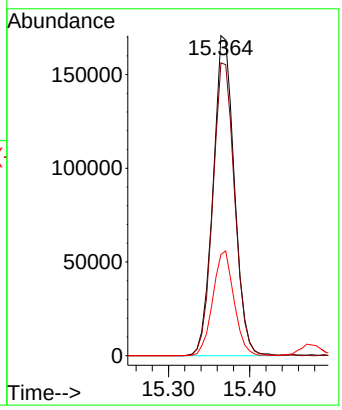




#93
1,2,4-Trichlorobenzene
Concen: 103.357 ug/l
RT: 15.364 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:180 Resp: 31044

Ion	Ratio	Lower	Upper
180	100		
182	93.8	47.3	141.8
145	32.7	15.4	46.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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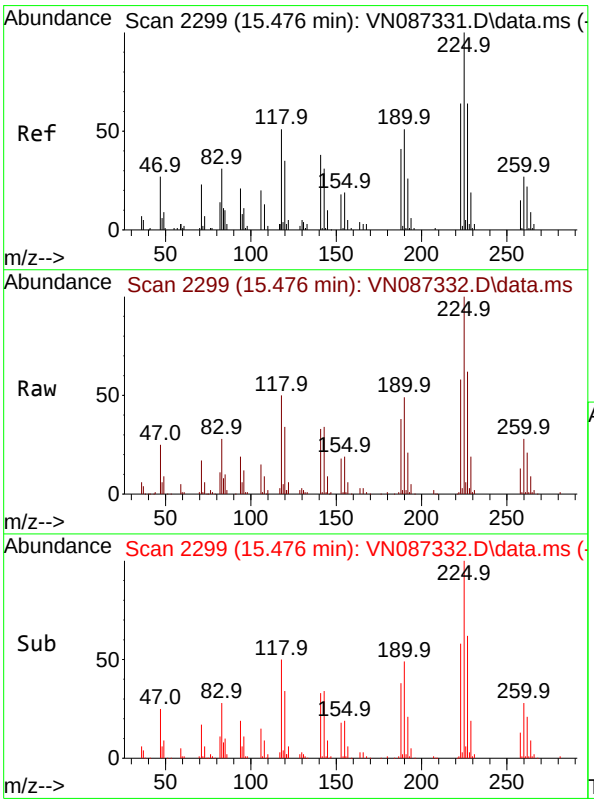
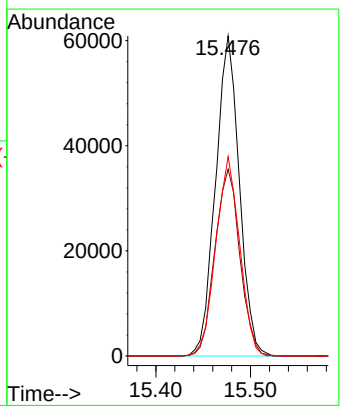
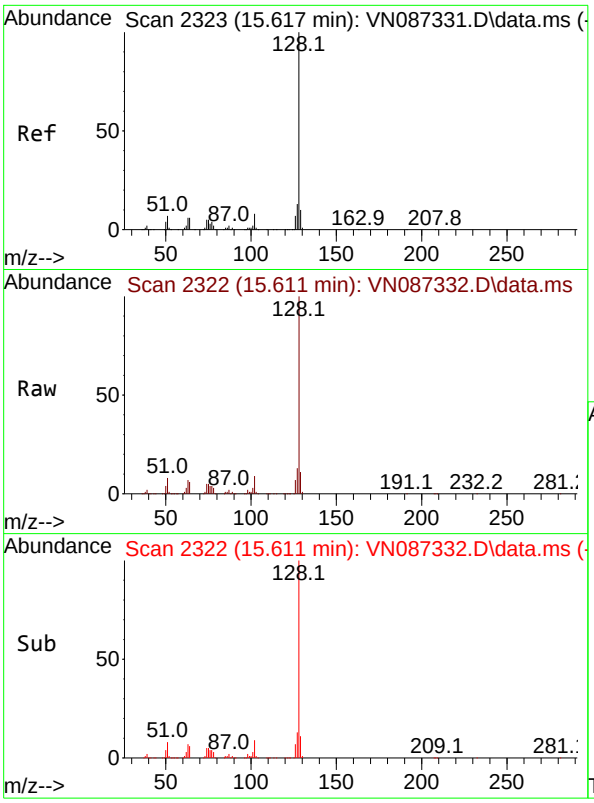


#94
Hexachlorobutadiene
Concen: 95.360 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:225 Resp: 106429

Ion	Ratio	Lower	Upper
225	100		
223	61.0	32.1	96.3
227	62.4	31.3	93.9

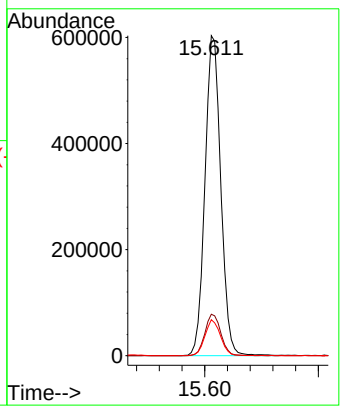




#95
Naphthalene
Concen: 109.289 ug/l
RT: 15.611 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:128 Resp: 116293

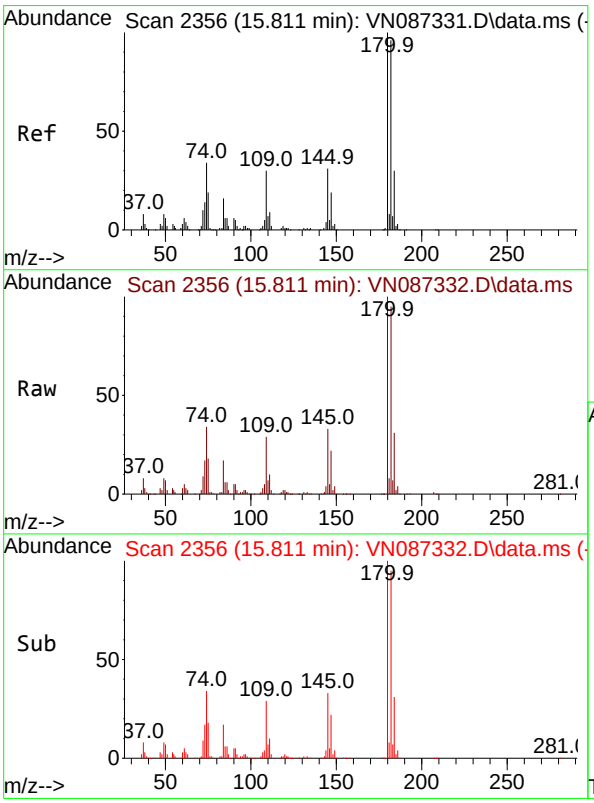
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.5	15.7
129	11.0	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

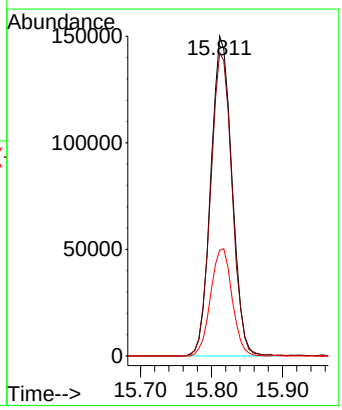
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 102.519 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087332.D
Acq: 16 Jul 2025 18:32

Tgt Ion:180 Resp: 308888

Ion	Ratio	Lower	Upper
180	100		
182	96.2	47.1	141.4
145	34.2	16.9	50.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087333.D
Acq On : 16 Jul 2025 18:54
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:21:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	193853	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	344966	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	317026	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.771	152	165077	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	501760	152.545	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 305.080%#			
35) Dibromofluoromethane	8.153	113	368306	154.778	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 309.560%#			
50) Toluene-d8	10.547	98	1362098	160.469	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 320.940%#			
62) 4-Bromofluorobenzene	12.829	95	522221	166.525	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 333.040%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	363327	176.463	ug/l	95
3) Chloromethane	2.383	50	405800	156.728	ug/l	99
4) Vinyl Chloride	2.542	62	418507	162.646	ug/l	94
5) Bromomethane	2.942	94	215335	161.604	ug/l	95
6) Chloroethane	3.118	64	249466	148.663	ug/l	100
7) Trichlorofluoromethane	3.501	101	585457	153.872	ug/l	97
8) Diethyl Ether	3.959	74	228544	154.847	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.353	101	296076	151.587	ug/l	99
10) Methyl Iodide	4.571	142	328079	150.516	ug/l	99
11) Tert butyl alcohol	5.536	59	478279	765.784	ug/l	100
12) 1,1-Dichloroethene	4.330	96	312325	141.111	ug/l	97
13) Acrolein	4.177	56	415488	828.945	ug/l	100
14) Allyl chloride	5.006	41	663403	165.621	ug/l	91
15) Acrylonitrile	5.706	53	1279363	754.869	ug/l	100
16) Acetone	4.424	43	1064061	682.373	ug/l	96
17) Carbon Disulfide	4.695	76	1011315	154.118	ug/l	95
18) Methyl Acetate	5.012	43	577536	149.052	ug/l	99
19) Methyl tert-butyl Ether	5.789	73	1286728	157.724	ug/l	95
20) Methylene Chloride	5.259	84	390988	151.266	ug/l	94
21) trans-1,2-Dichloroethene	5.765	96	356549	142.870	ug/l	96
22) Diisopropyl ether	6.659	45	1280267	152.375	ug/l	99
23) Vinyl Acetate	6.589	43	5943020	808.750	ug/l	98
24) 1,1-Dichloroethane	6.553	63	704727	145.384	ug/l	98
25) 2-Butanone	7.477	43	1797146	754.179	ug/l	98
26) 2,2-Dichloropropane	7.477	77	547190	145.193	ug/l	100
27) cis-1,2-Dichloroethene	7.471	96	437021	152.102	ug/l	99
28) Bromochloromethane	7.800	49	339529	146.355	ug/l	100
29) Tetrahydrofuran	7.830	42	1166702	753.679	ug/l	98
30) Chloroform	7.953	83	717424	147.865	ug/l	98
31) Cyclohexane	8.241	56	582988	144.170	ug/l	94
32) 1,1,1-Trichloroethane	8.153	97	630986	150.152	ug/l	98
36) 1,1-Dichloropropene	8.353	75	503793	160.248	ug/l	99
37) Ethyl Acetate	7.553	43	692256	152.464	ug/l	98
38) Carbon Tetrachloride	8.347	117	535575	154.647	ug/l	98
39) Methylcyclohexane	9.583	83	559851	164.485	ug/l	98
40) Benzene	8.588	78	1550984	152.642	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087333.D
Acq On : 16 Jul 2025 18:54
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 17 02:21:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	375482	158.156	ug/l		99
42) 1,2-Dichloroethane	8.653	62	571634	148.352	ug/l		100
43) Isopropyl Acetate	8.677	43	1091736	154.893	ug/l		99
44) Trichloroethene	9.335	130	364760	151.927	ug/l		96
45) 1,2-Dichloropropane	9.606	63	391676	151.708	ug/l		97
46) Dibromomethane	9.694	93	287252	148.602	ug/l		98
47) Bromodichloromethane	9.871	83	584546	150.128	ug/l		99
48) Methyl methacrylate	9.665	41	520990	164.191	ug/l		99
49) 1,4-Dioxane	9.688	88	157400	3238.745	ug/l	#	93
51) 4-Methyl-2-Pentanone	10.430	43	3375607	757.219	ug/l		99
52) Toluene	10.612	92	961314	155.654	ug/l		99
53) t-1,3-Dichloropropene	10.818	75	640188	162.462	ug/l		94
54) cis-1,3-Dichloropropene	10.294	75	654301	160.747	ug/l		96
55) 1,1,2-Trichloroethane	11.000	97	365858	146.322	ug/l		99
56) Ethyl methacrylate	10.859	69	679202	150.296	ug/l		96
57) 1,3-Dichloropropane	11.147	76	662154	153.168	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	1717427	837.324	ug/l		100
59) 2-Hexanone	11.177	43	2477578	837.689	ug/l		98
60) Dibromochloromethane	11.341	129	448307	157.217	ug/l		99
61) 1,2-Dibromoethane	11.453	107	402978	153.282	ug/l		97
64) Tetrachloroethene	11.082	164	301404	147.718	ug/l		97
65) Chlorobenzene	11.871	112	1066757	149.878	ug/l		97
66) 1,1,1,2-Tetrachloroethane	11.941	131	375162	155.013	ug/l		98
67) Ethyl Benzene	11.941	91	1881920	160.613	ug/l		99
68) m/p-Xylenes	12.053	106	1437290	327.579	ug/l		98
69) o-Xylene	12.376	106	698363	166.628	ug/l		98
70) Styrene	12.394	104	1195068	169.502	ug/l		99
71) Bromoform	12.559	173	320960	164.154	ug/l	#	99
73) Isopropylbenzene	12.676	105	1747567	168.203	ug/l		100
74) N-amyl acetate	12.482	43	750104	184.917	ug/l		91
75) 1,1,2,2-Tetrachloroethane	12.918	83	581568	148.761	ug/l		100
76) 1,2,3-Trichloropropane	12.971	75	504791m	137.832	ug/l		
77) Bromobenzene	12.959	156	433814	161.001	ug/l		99
78) n-propylbenzene	13.018	91	2127215	162.733	ug/l		100
79) 2-Chlorotoluene	13.106	91	1290205	160.600	ug/l		98
80) 1,3,5-Trimethylbenzene	13.153	105	1465159	165.514	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.718	75	224191	165.713	ug/l		95
82) 4-Chlorotoluene	13.200	91	1336462	159.785	ug/l		100
83) tert-Butylbenzene	13.418	119	1230683	166.457	ug/l		98
84) 1,2,4-Trimethylbenzene	13.459	105	1502651	166.222	ug/l		100
85) sec-Butylbenzene	13.594	105	1767949	158.754	ug/l		99
86) p-Isopropyltoluene	13.706	119	1501303	168.219	ug/l		98
87) 1,3-Dichlorobenzene	13.712	146	828885	156.742	ug/l		99
88) 1,4-Dichlorobenzene	13.788	146	830255	147.000	ug/l		99
89) n-Butylbenzene	14.035	91	1367813	160.505	ug/l		98
90) Hexachloroethane	14.312	117	292183	154.518	ug/l		97
91) 1,2-Dichlorobenzene	14.082	146	784106	156.513	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.694	75	151090	147.203	ug/l		93
93) 1,2,4-Trichlorobenzene	15.370	180	492237	167.266	ug/l		99
94) Hexachlorobutadiene	15.476	225	163922	149.909	ug/l		99
95) Naphthalene	15.612	128	1880423	180.370	ug/l		99
96) 1,2,3-Trichlorobenzene	15.812	180	491195	166.396	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087333.D
Acq On : 16 Jul 2025 18:54
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 02:21:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

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

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

ICAL Form

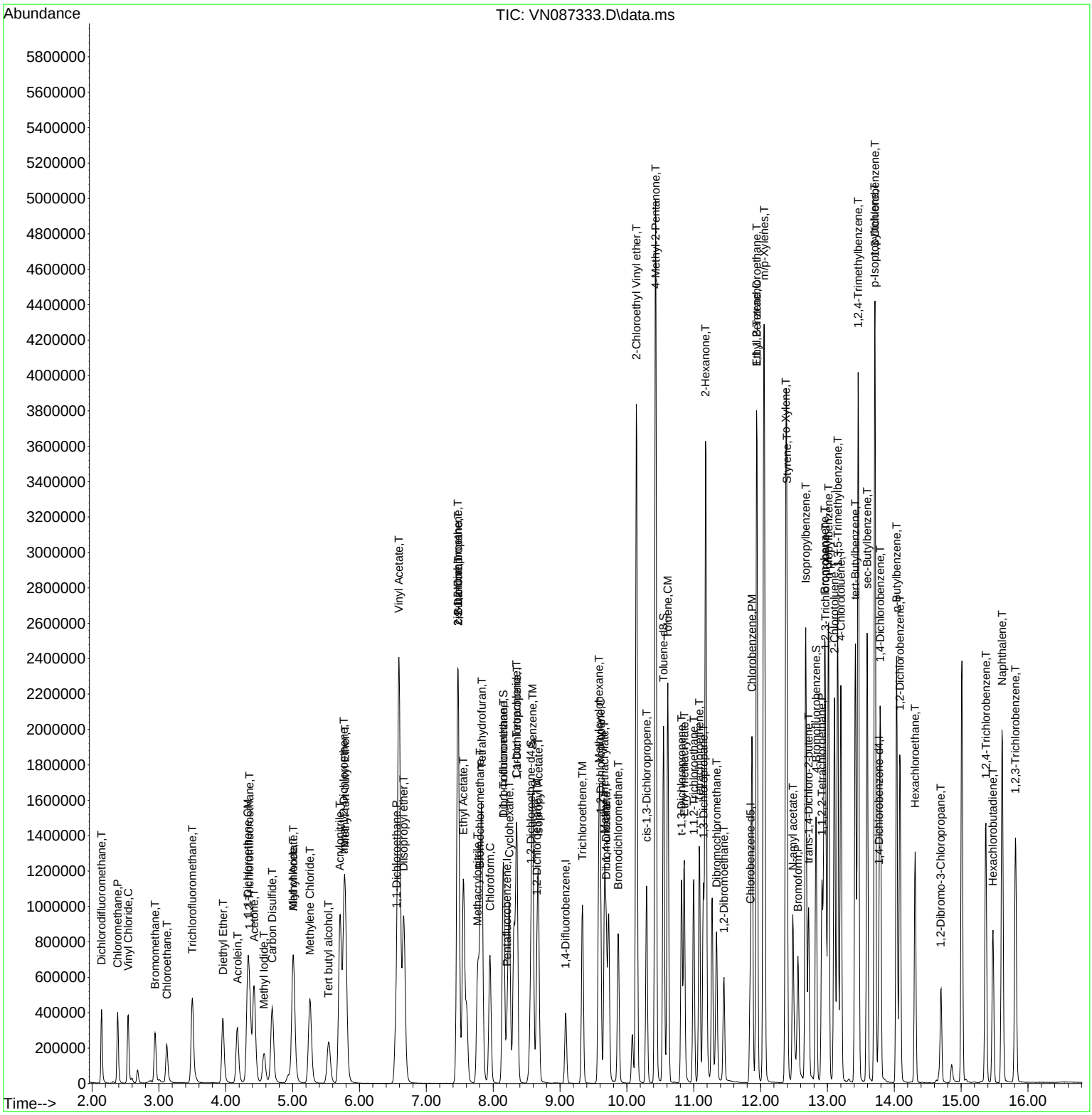
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087333.D
Acq On : 16 Jul 2025 18:54
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

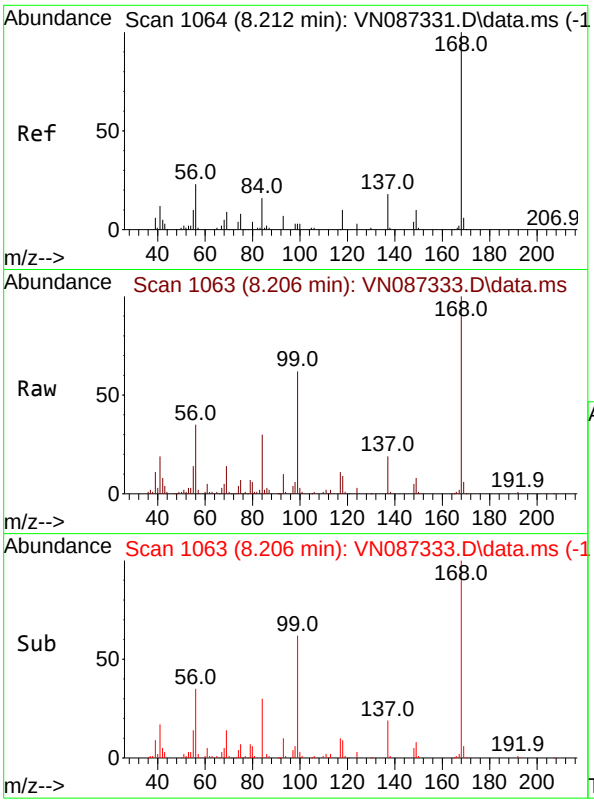
Quant Time: Jul 17 02:21:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:09:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

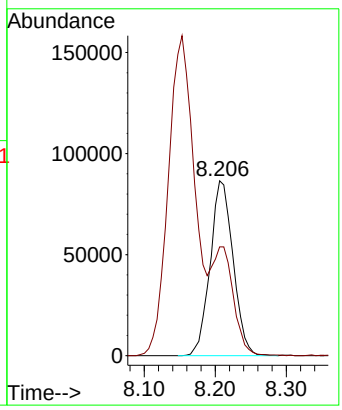




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:168 Resp: 19385

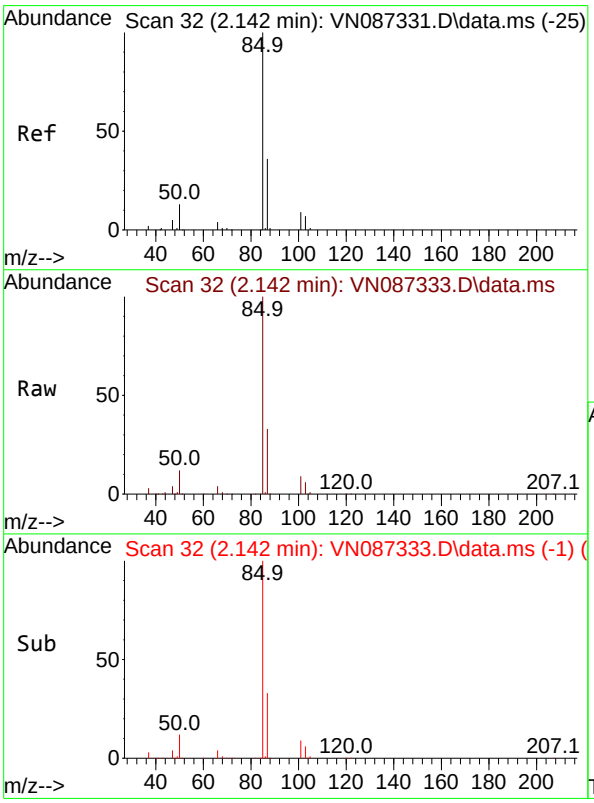
Ion	Ratio	Lower	Upper
168	100		
99	61.8	47.9	71.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

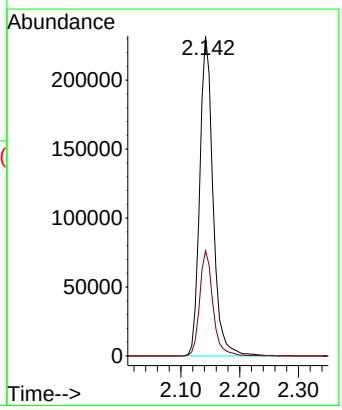
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

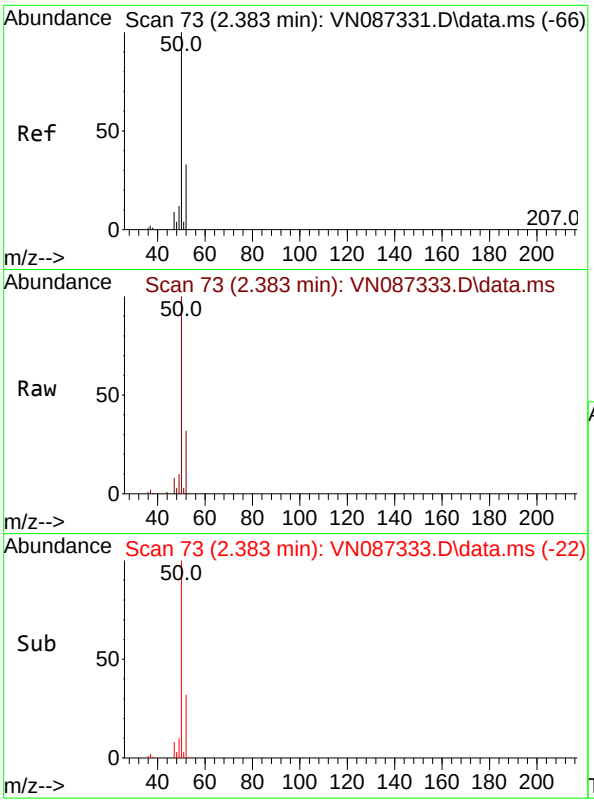


#2
Dichlorodifluoromethane
Concen: 176.463 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 85 Resp: 363327

Ion	Ratio	Lower	Upper
85	100		
87	32.9	17.8	53.3

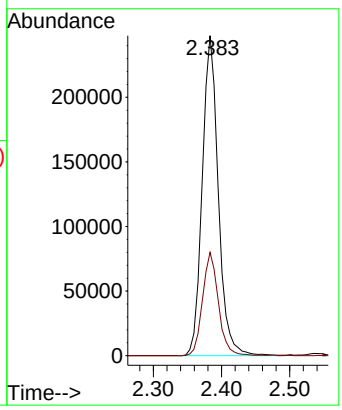




#3
Chloromethane
Concen: 156.728 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 50 Resp: 40580

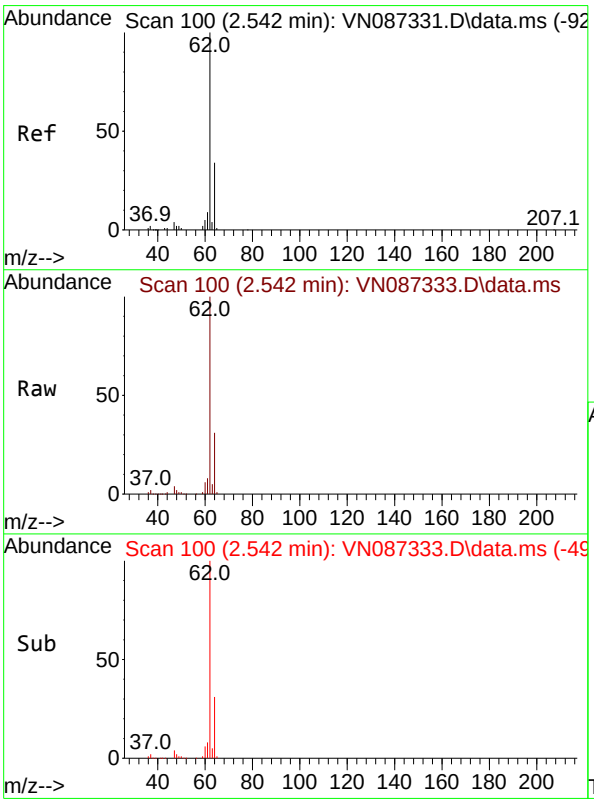
Ion	Ratio	Lower	Upper
50	100		
52	32.3	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

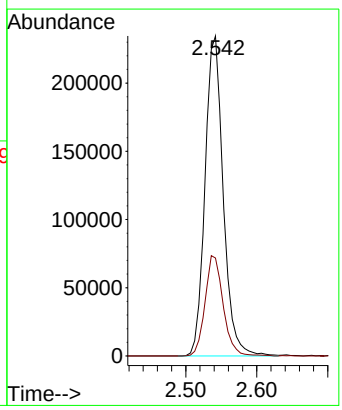
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

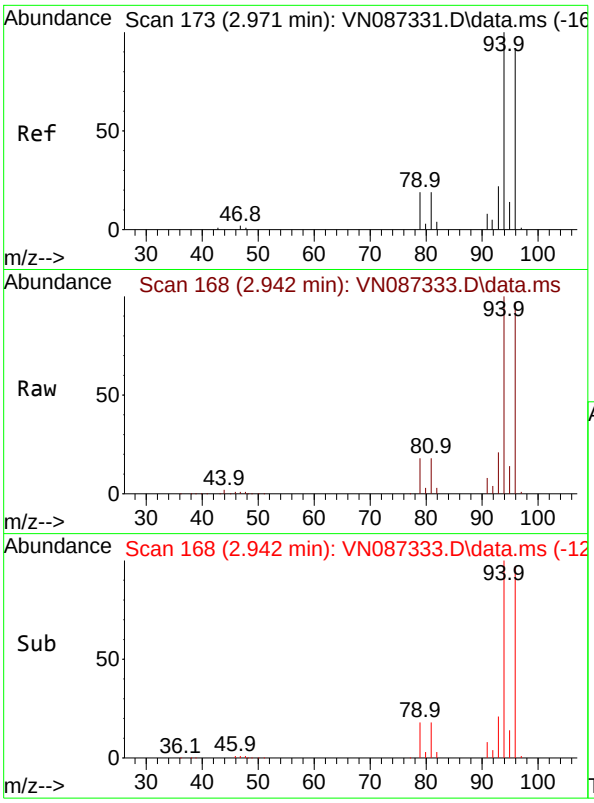


#4
Vinyl Chloride
Concen: 162.646 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 62 Resp: 418507

Ion	Ratio	Lower	Upper
62	100		
64	30.6	27.0	40.6





#5
Bromomethane
Concen: 161.604 ug/l
RT: 2.942 min Scan# 1
Delta R.T. -0.029 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

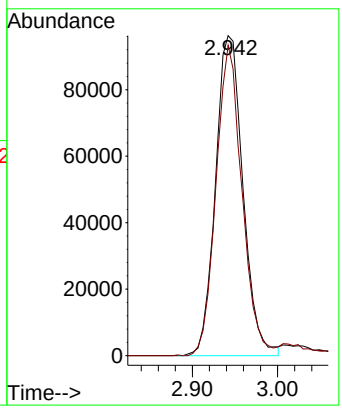
Tgt Ion: 94 Resp: 21533

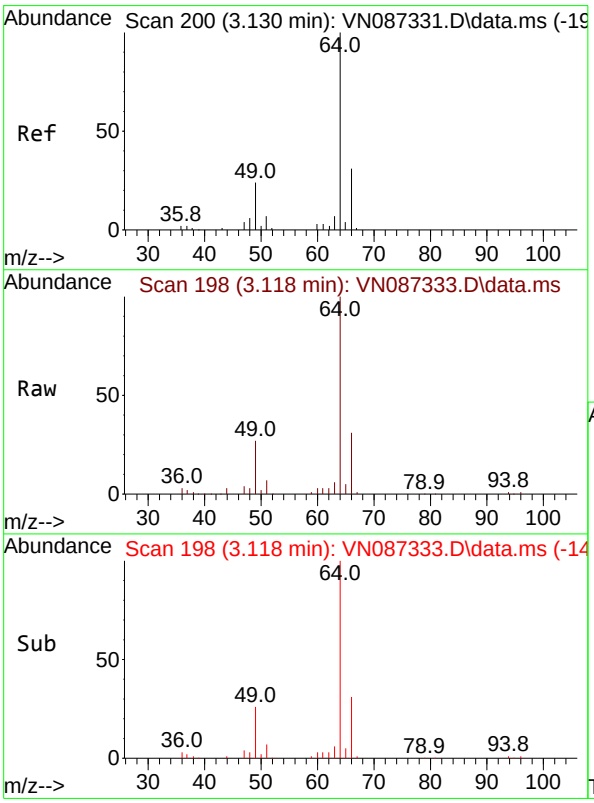
Ion	Ratio	Lower	Upper
94	100		
96	96.7	73.4	110.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

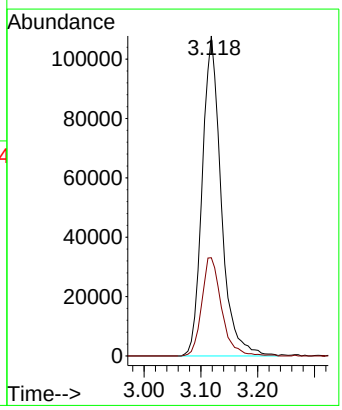


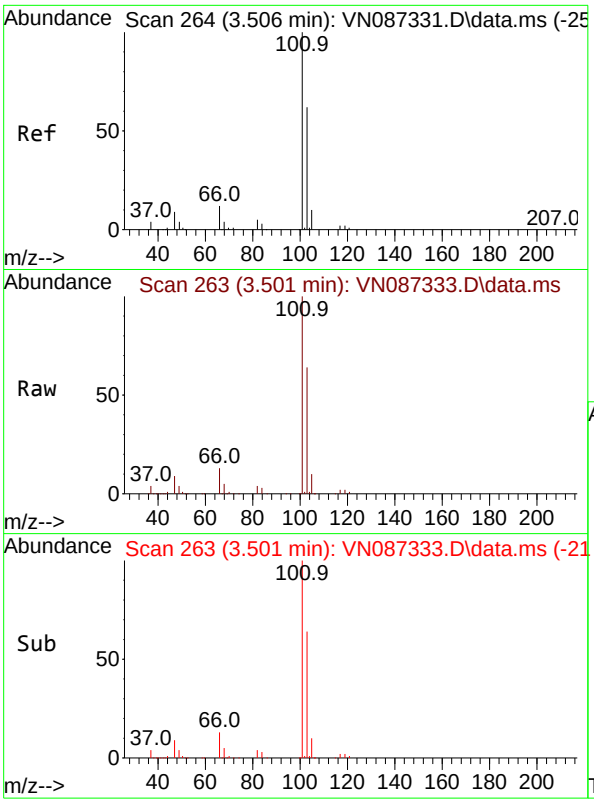


#6
Chloroethane
Concen: 148.663 ug/l
RT: 3.118 min Scan# 198
Delta R.T. -0.012 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 64 Resp: 249466

Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	36.8





#7
Trichlorofluoromethane
Concen: 153.872 ug/l
RT: 3.501 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

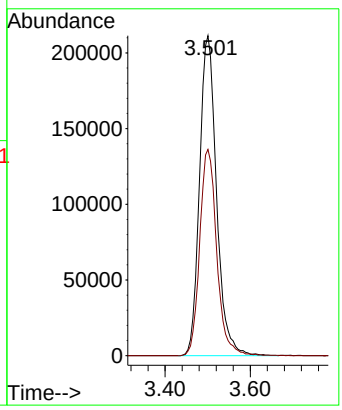
Tgt Ion:101 Resp: 58545

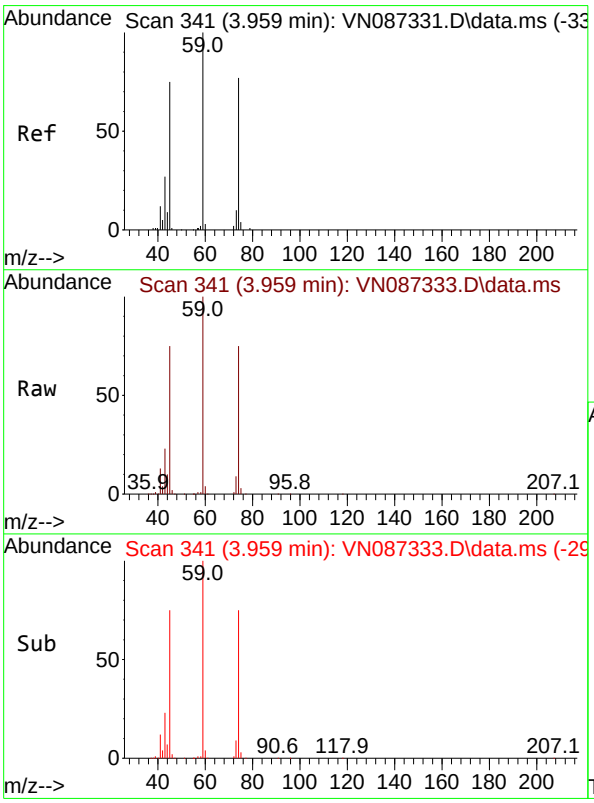
Ion	Ratio	Lower	Upper
101	100		
103	64.5	49.8	74.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

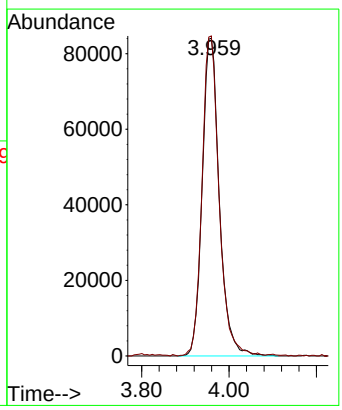


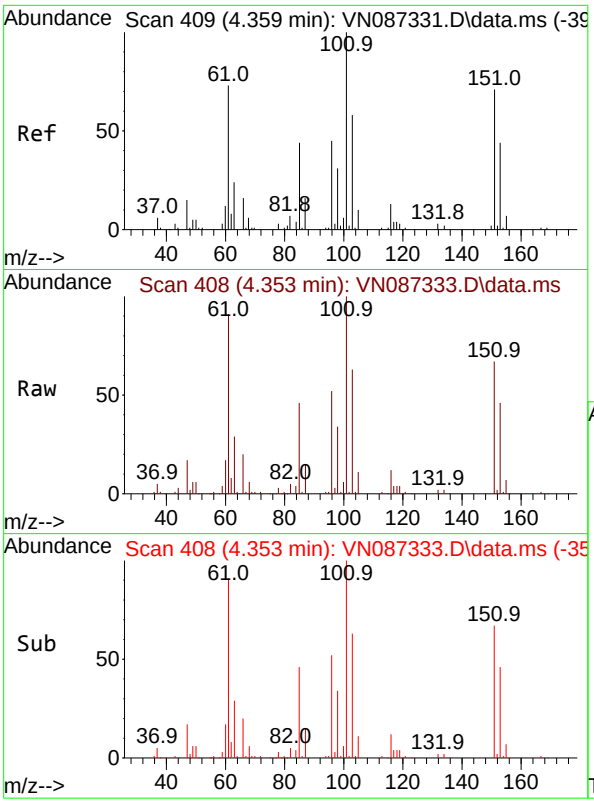


#8
Diethyl Ether
Concen: 154.847 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 74 Resp: 228544

Ion	Ratio	Lower	Upper
74	100		
45	100.7	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 151.587 ug/l
RT: 4.353 min Scan# 4(
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:101 Resp: 29607(

Ion	Ratio	Lower	Upper
101	100		
85	46.1	37.3	55.9
151	73.1	58.9	88.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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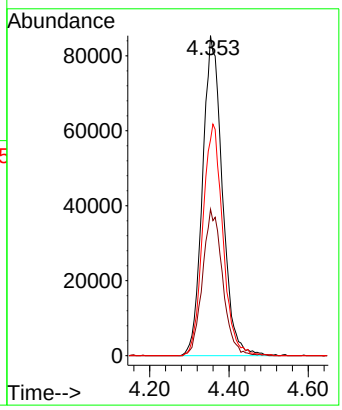
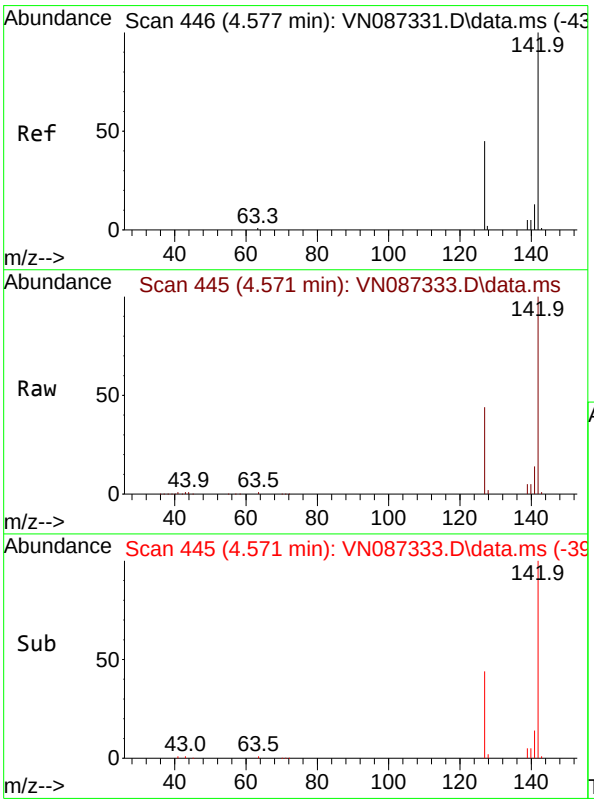
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

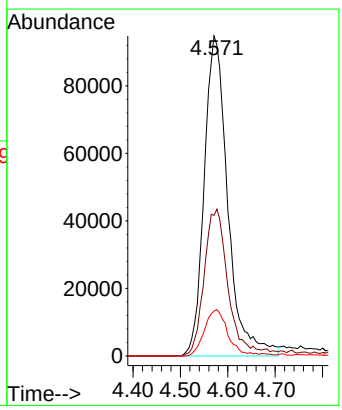


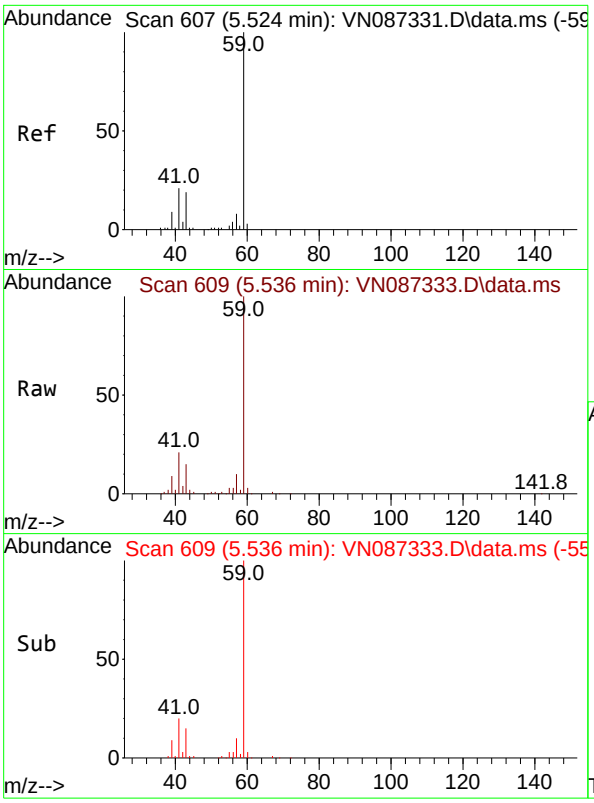


#10
Methyl Iodide
Concen: 150.516 ug/l
RT: 4.571 min Scan# 445
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:142 Resp: 328079

Ion	Ratio	Lower	Upper
142	100		
127	44.0	35.7	53.5
141	14.1	10.4	15.6





#11
Tert butyl alcohol
Concen: 765.784 ug/l
RT: 5.536 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 59 Resp: 47827

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.3	12.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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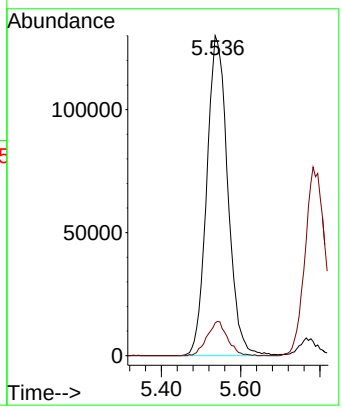
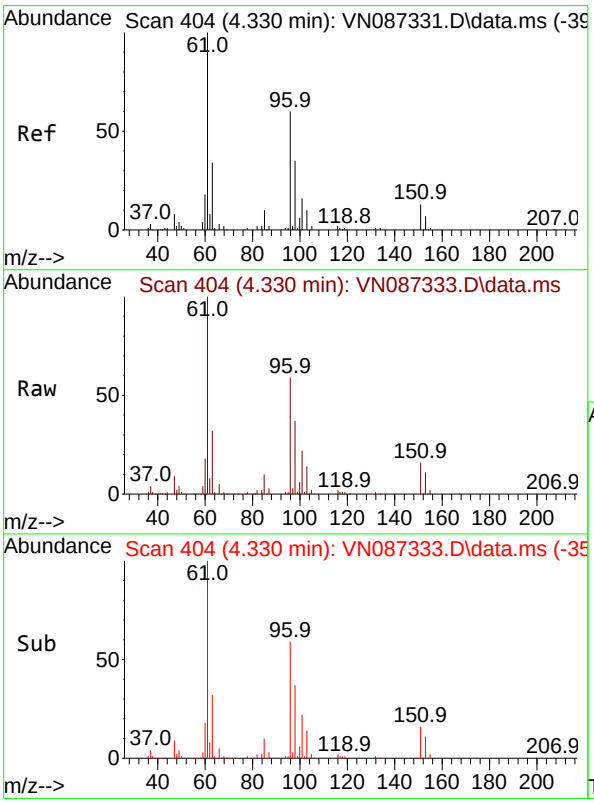
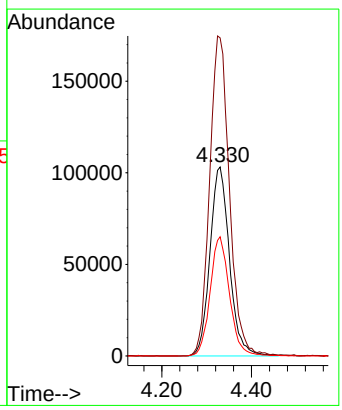


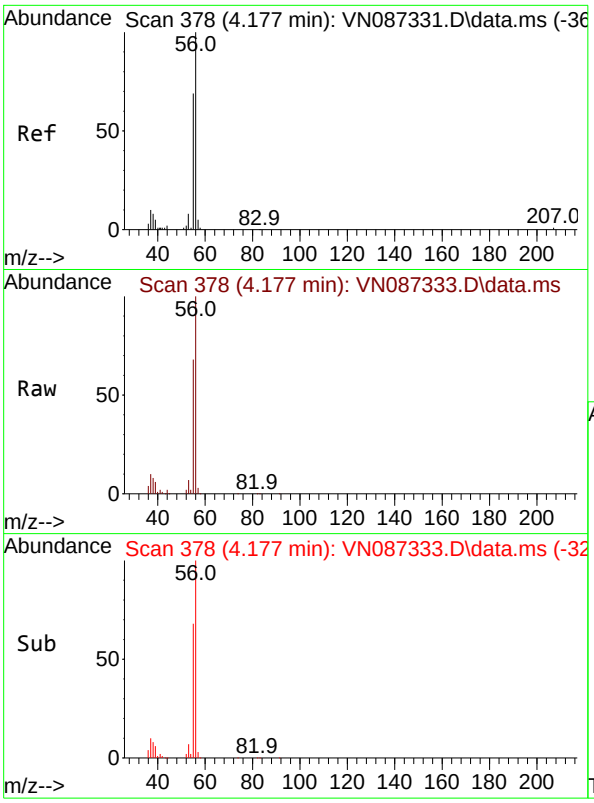


#12
1,1-Dichloroethene
Concen: 141.111 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 96 Resp: 312325

Ion	Ratio	Lower	Upper
96	100		
61	168.2	132.3	198.5
98	63.0	46.8	70.2

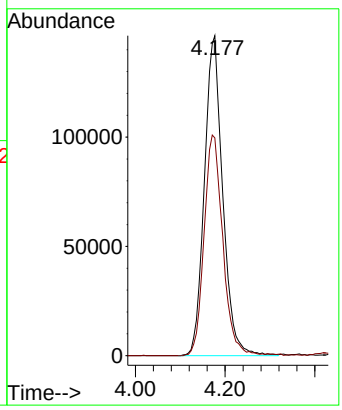




#13
Acrolein
Concen: 828.945 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 56 Resp: 41548

Ion	Ratio	Lower	Upper
56	100		
55	70.4	56.2	84.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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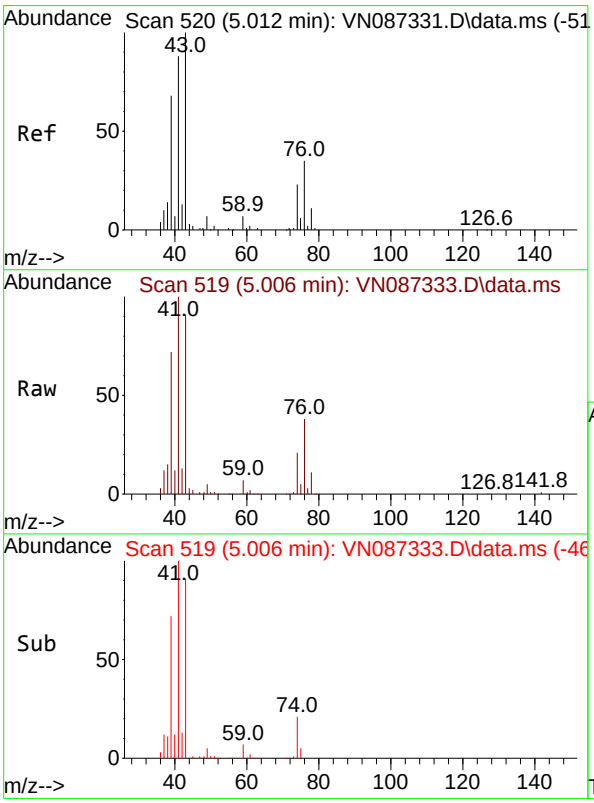
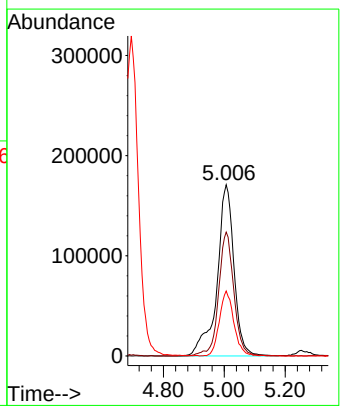
Supervised By :Semsettin Yesilyurt 07/17/2025

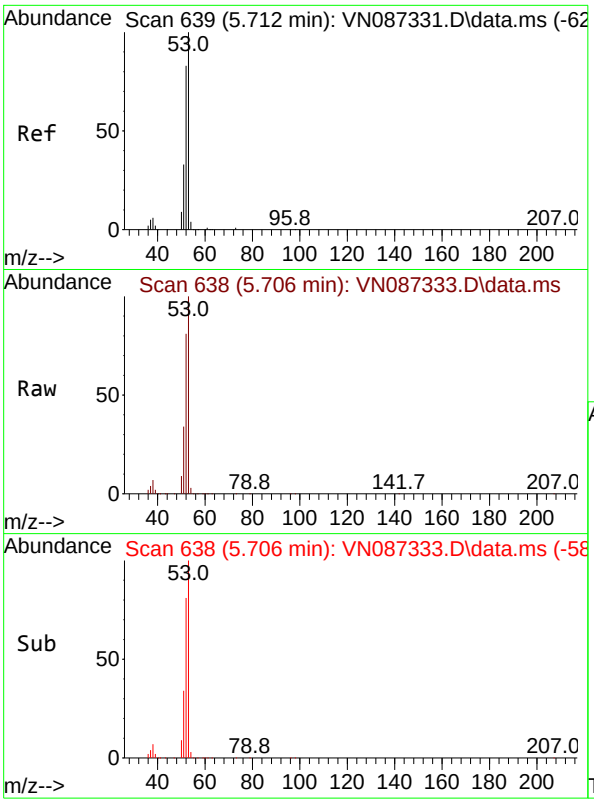


#14
Allyl chloride
Concen: 165.621 ug/l
RT: 5.006 min Scan# 519
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 41 Resp: 663403

Ion	Ratio	Lower	Upper
41	100		
39	64.9	59.0	88.6
76	32.4	28.7	43.1

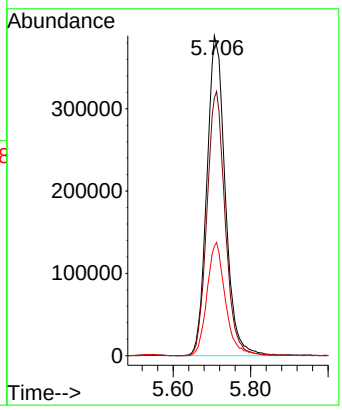




#15
Acrylonitrile
Concen: 754.869 ug/l
RT: 5.706 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 53 Resp: 127936

Ion	Ratio	Lower	Upper
53	100		
52	81.7	65.5	98.3
51	35.5	28.7	43.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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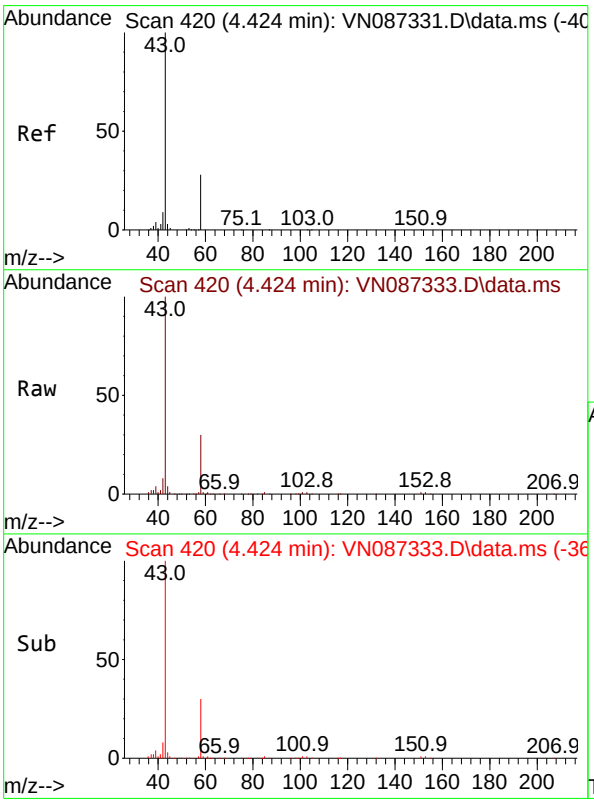
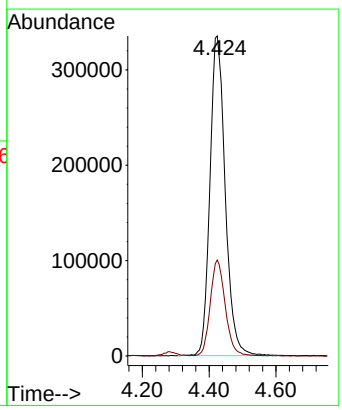
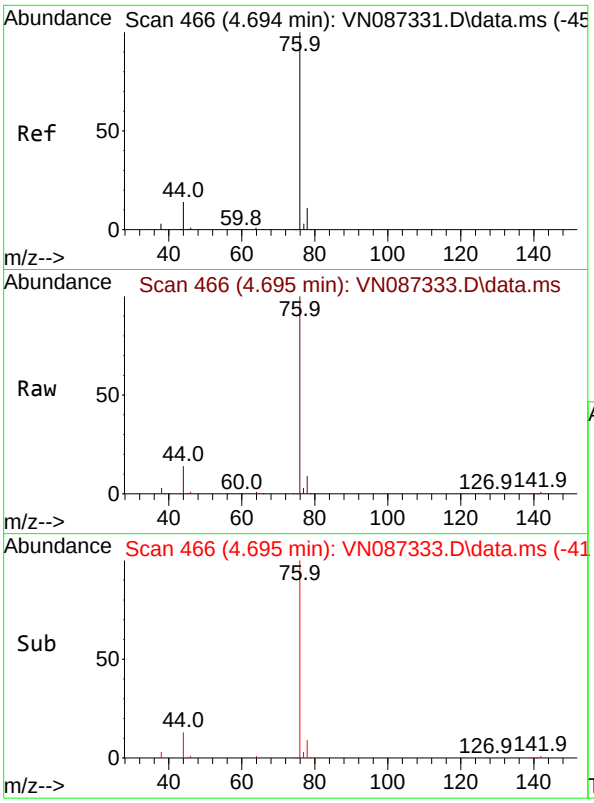


#16
Acetone
Concen: 682.373 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 1064061

Ion	Ratio	Lower	Upper
43	100		
58	29.9	22.3	33.5

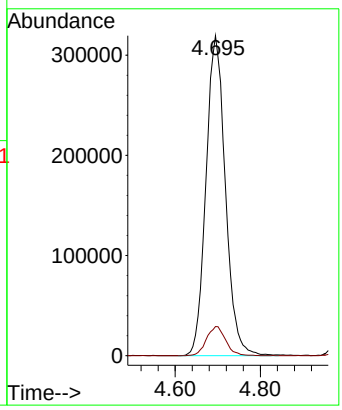




#17
Carbon Disulfide
Concen: 154.118 ug/l
RT: 4.695 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 76 Resp: 101131

Ion	Ratio	Lower	Upper
76	100		
78	9.1	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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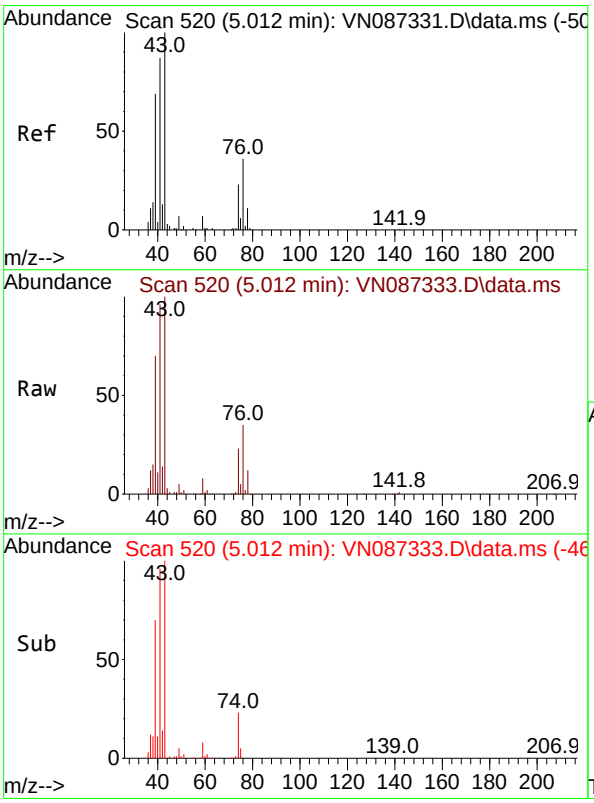
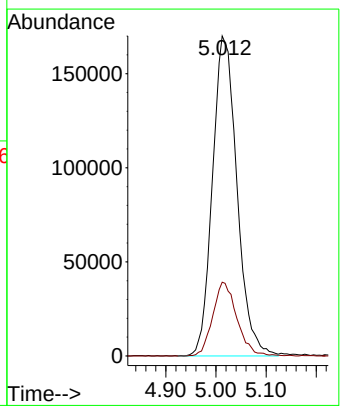
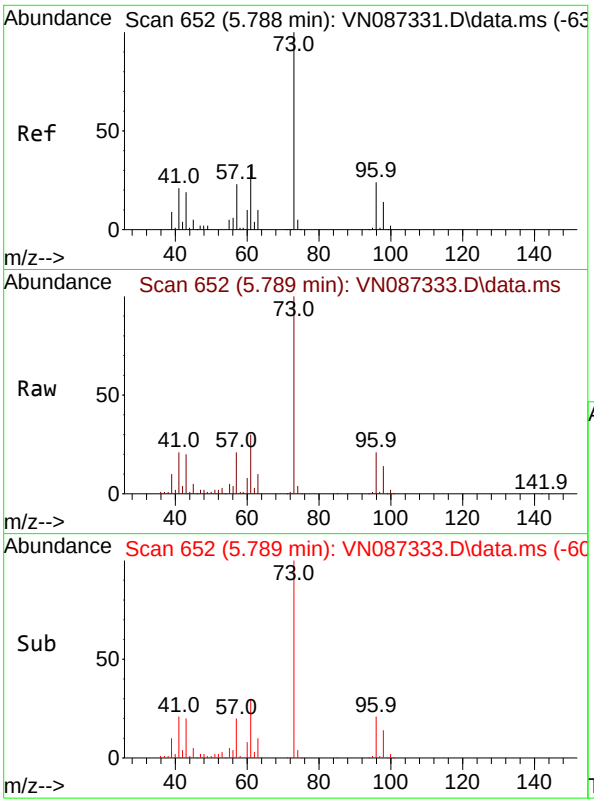


#18
Methyl Acetate
Concen: 149.052 ug/l
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 577536

Ion	Ratio	Lower	Upper
43	100		
74	22.7	17.8	26.6

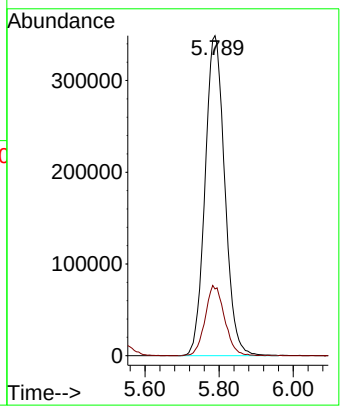




#19
Methyl tert-butyl Ether
Concen: 157.724 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 73 Resp: 128672

Ion	Ratio	Lower	Upper
73	100		
57	20.8	18.6	27.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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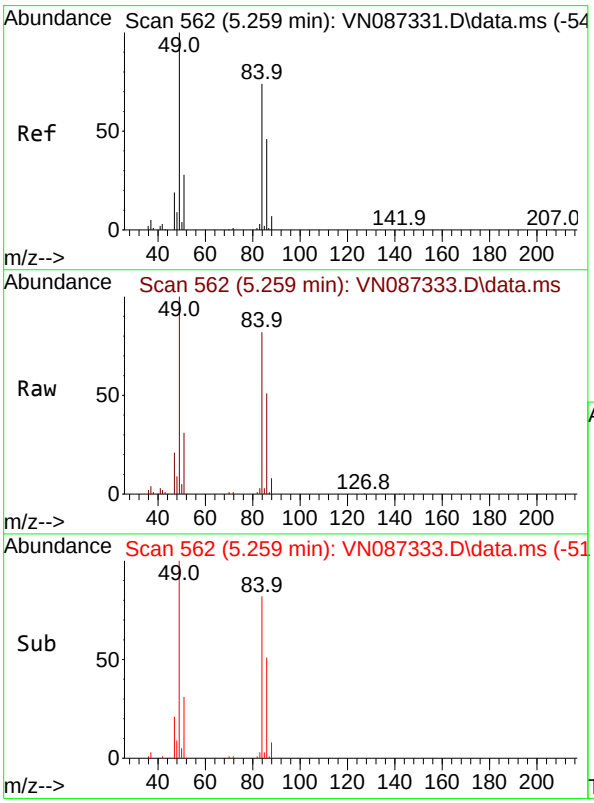
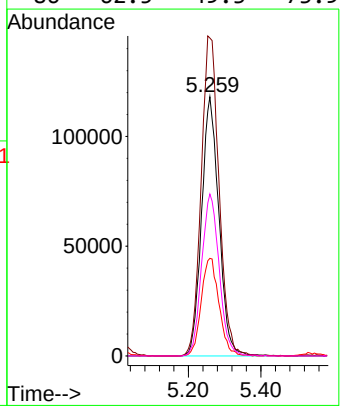
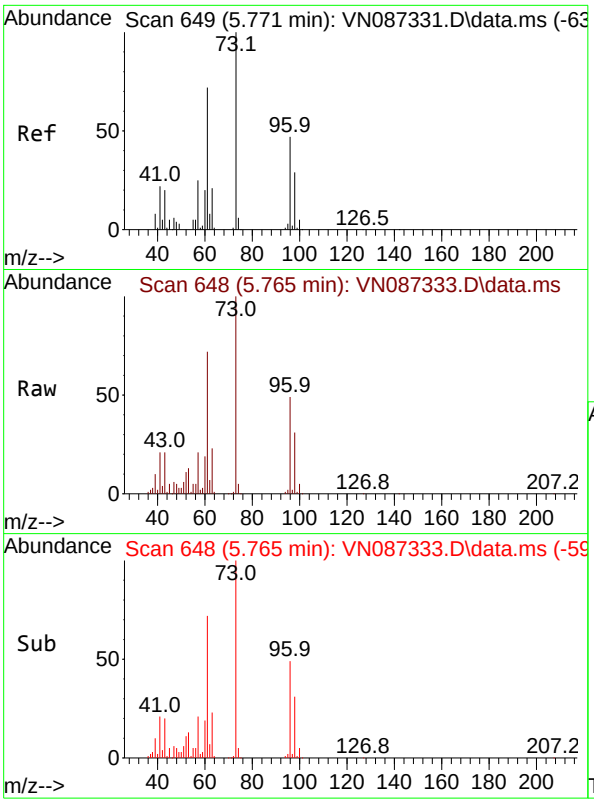


#20
Methylene Chloride
Concen: 151.266 ug/l
RT: 5.259 min Scan# 562
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 84 Resp: 390988

Ion	Ratio	Lower	Upper
84	100		
49	122.7	107.5	161.3
51	37.7	30.2	45.2
86	62.5	49.3	73.9





#21
trans-1,2-Dichloroethene
Concen: 142.870 ug/l
RT: 5.765 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 96 Resp: 35654

Ion	Ratio	Lower	Upper
96	100		
61	145.5	122.0	183.0
98	62.9	50.0	75.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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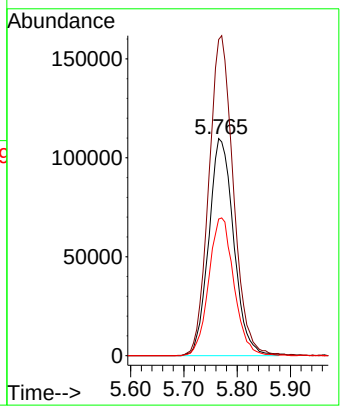
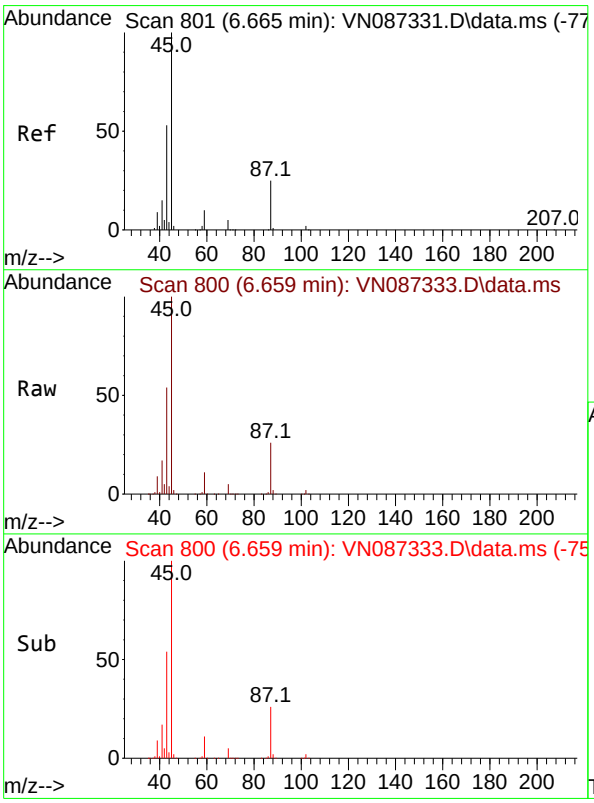
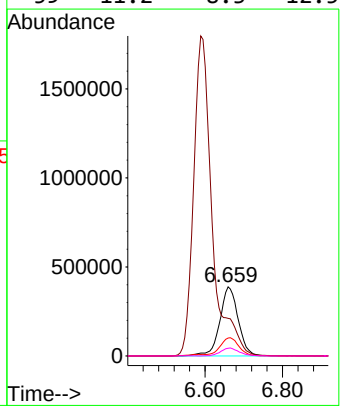


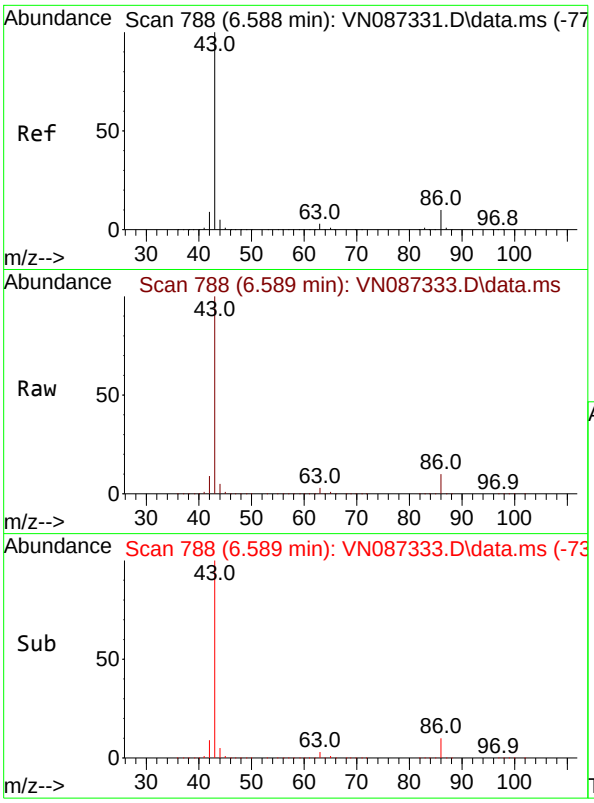


#22
Diisopropyl ether
Concen: 152.375 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 45 Resp: 1280267

Ion	Ratio	Lower	Upper
45	100		
43	53.9	42.8	64.2
87	25.9	19.8	29.6
59	11.2	8.3	12.5

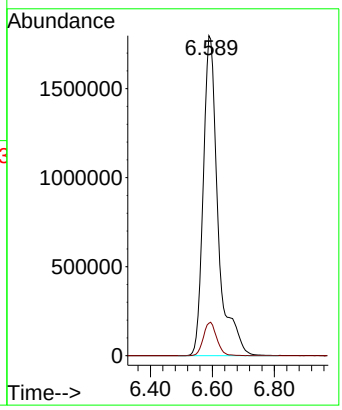




#23
Vinyl Acetate
Concen: 808.750 ug/l
RT: 6.589 min Scan# 7
Delta R.T. 0.001 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 594302

Ion	Ratio	Lower	Upper
43	100		
86	10.2	7.7	11.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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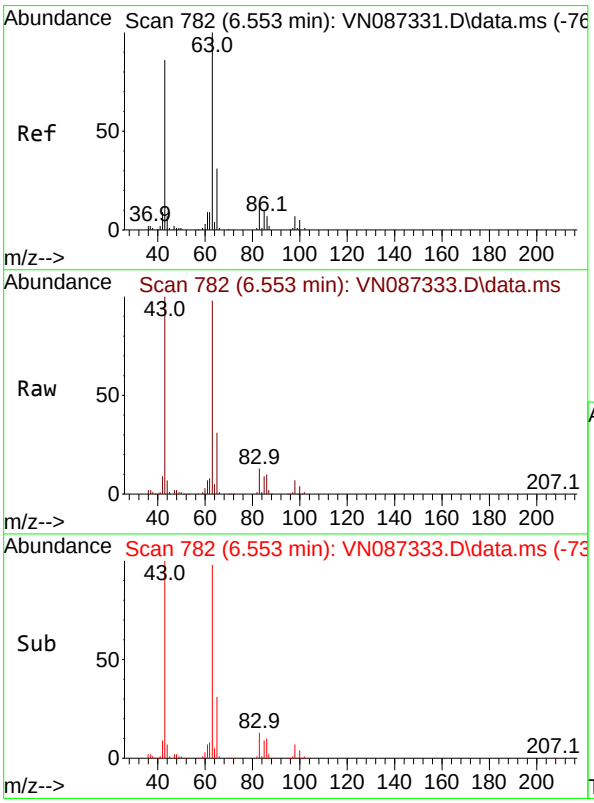
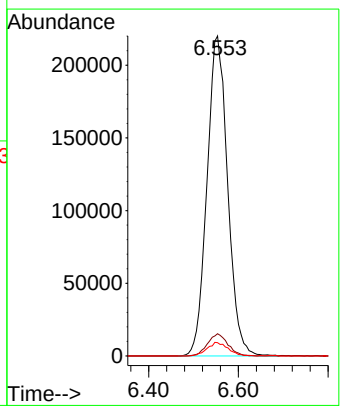
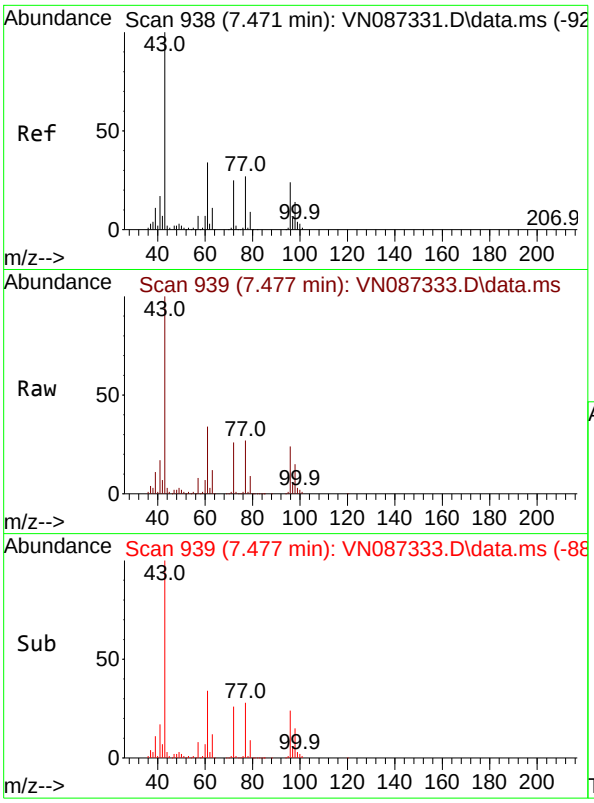


#24
1,1-Dichloroethane
Concen: 145.384 ug/l
RT: 6.553 min Scan# 782
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 63 Resp: 704727

Ion	Ratio	Lower	Upper
63	100		
98	7.0	3.3	9.9
100	4.2	2.5	7.4





#25
2-Butanone
Concen: 754.179 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 179714

Ion	Ratio	Lower	Upper
43	100		
72	25.6	19.6	29.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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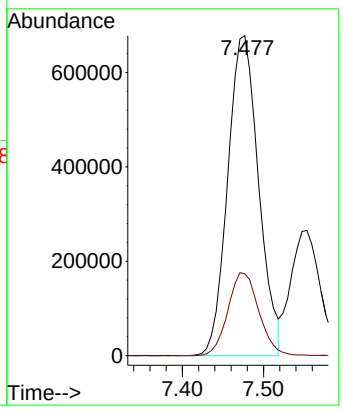
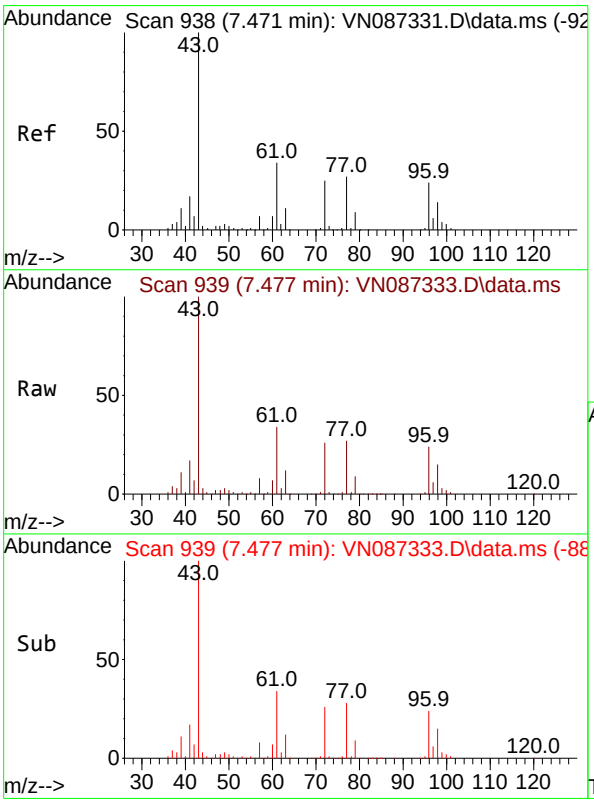
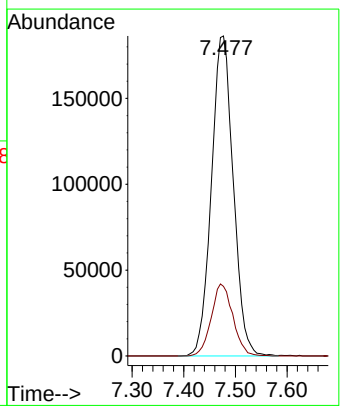


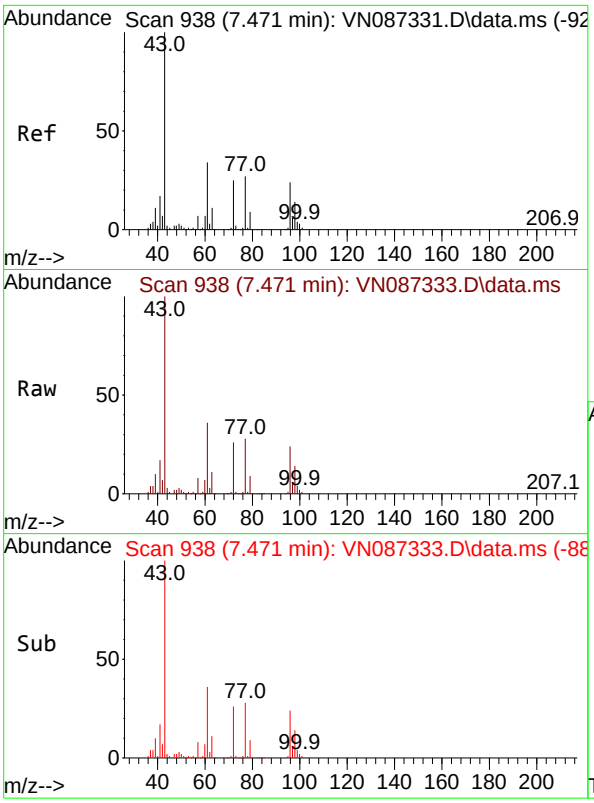


#26
2,2-Dichloropropane
Concen: 145.193 ug/l
RT: 7.477 min Scan# 939
Delta R.T. 0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 77 Resp: 547190

Ion	Ratio	Lower	Upper
77	100		
97	22.2	11.1	33.1





#27
cis-1,2-Dichloroethene
Concen: 152.102 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 96 Resp: 43702

Ion	Ratio	Lower	Upper
96	100		
61	149.1	0.0	297.8
98	63.7	0.0	132.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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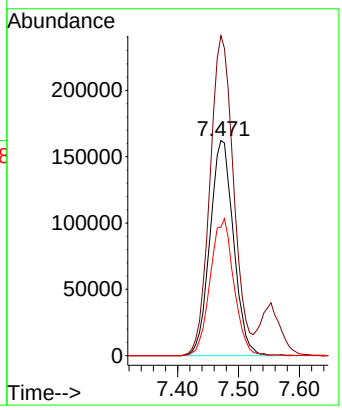
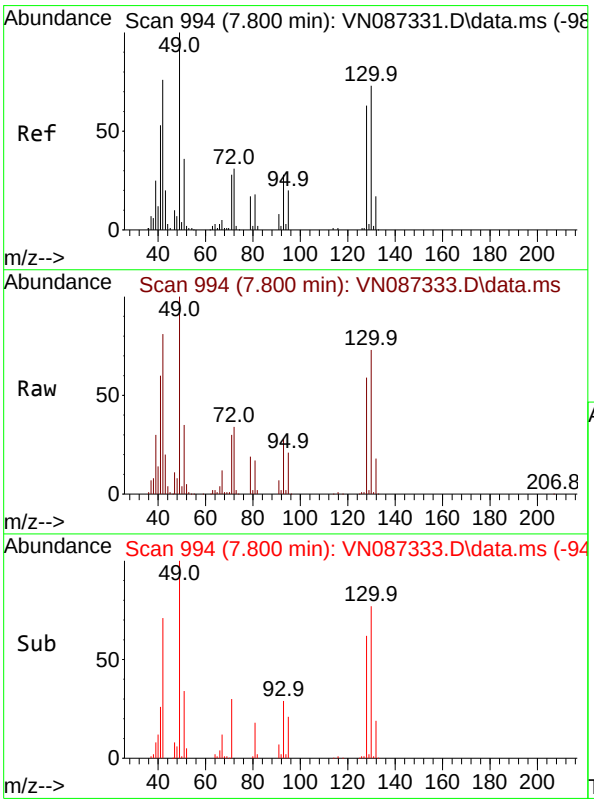
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

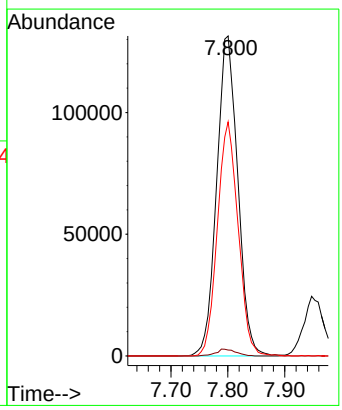


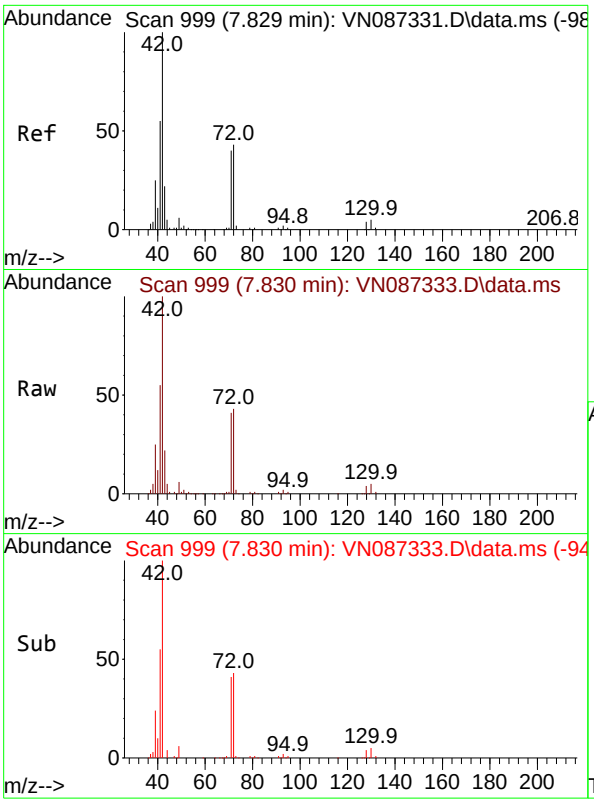


#28
Bromochloromethane
Concen: 146.355 ug/l
RT: 7.800 min Scan# 994
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 49 Resp: 339529

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.2
130	71.9	57.3	85.9

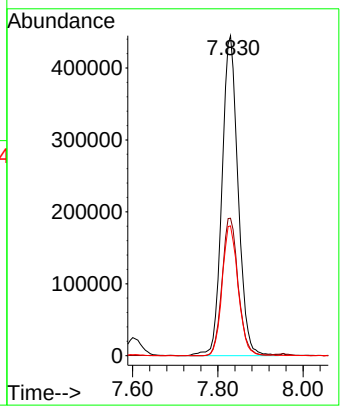




#29
Tetrahydrofuran
Concen: 753.679 ug/l
RT: 7.830 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 42 Resp: 116670

Ion	Ratio	Lower	Upper
42	100		
72	43.0	33.4	50.0
71	40.3	31.2	46.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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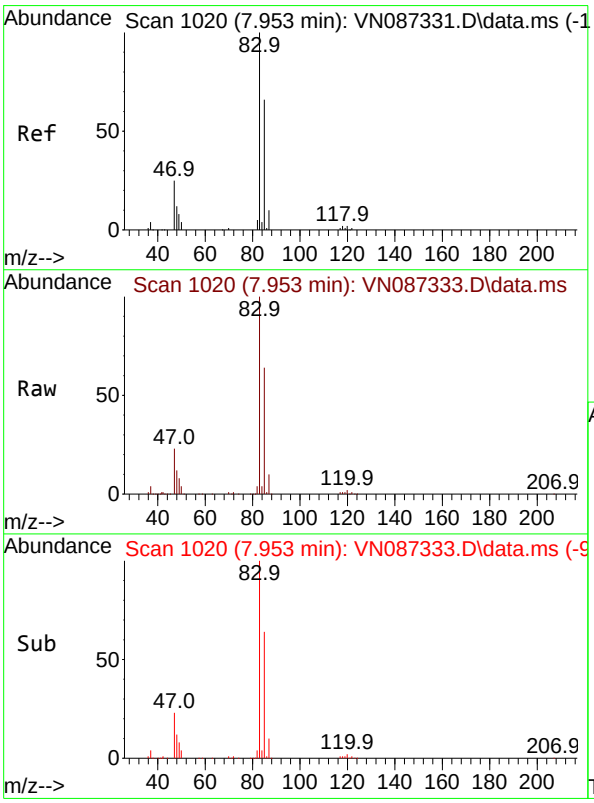
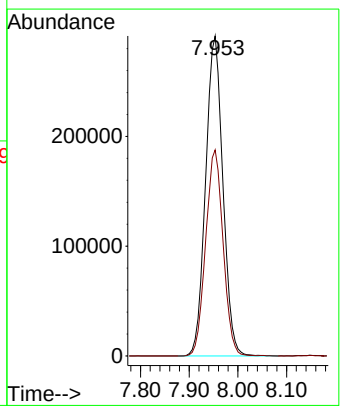
Supervised By :Semsettin Yesilyurt 07/17/2025

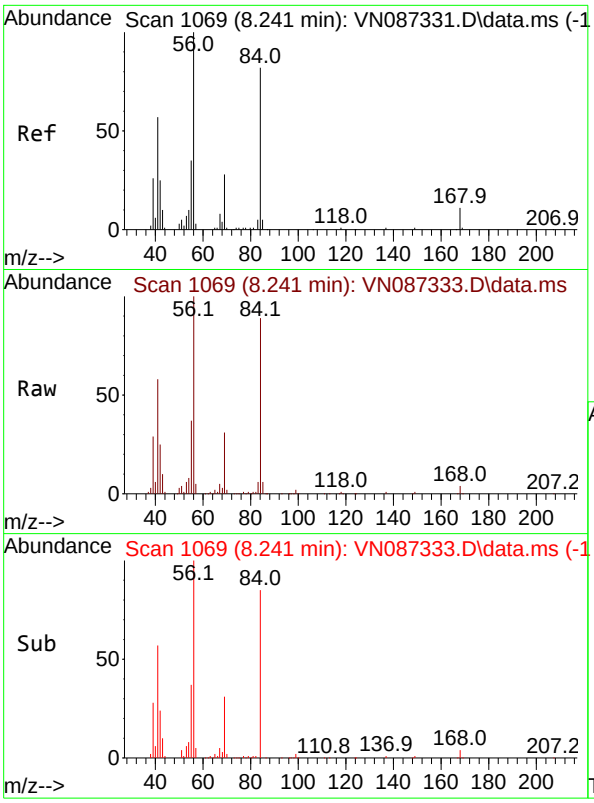


#30
Chloroform
Concen: 147.865 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 83 Resp: 717424

Ion	Ratio	Lower	Upper
83	100		
85	64.4	52.7	79.1

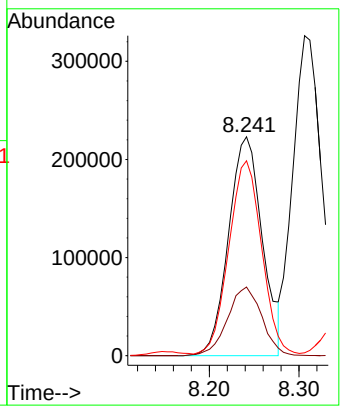




#31
Cyclohexane
Concen: 144.170 ug/l
RT: 8.241 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 56 Resp: 58298

Ion	Ratio	Lower	Upper
56	100		
69	31.4	22.7	34.1
84	87.7	65.8	98.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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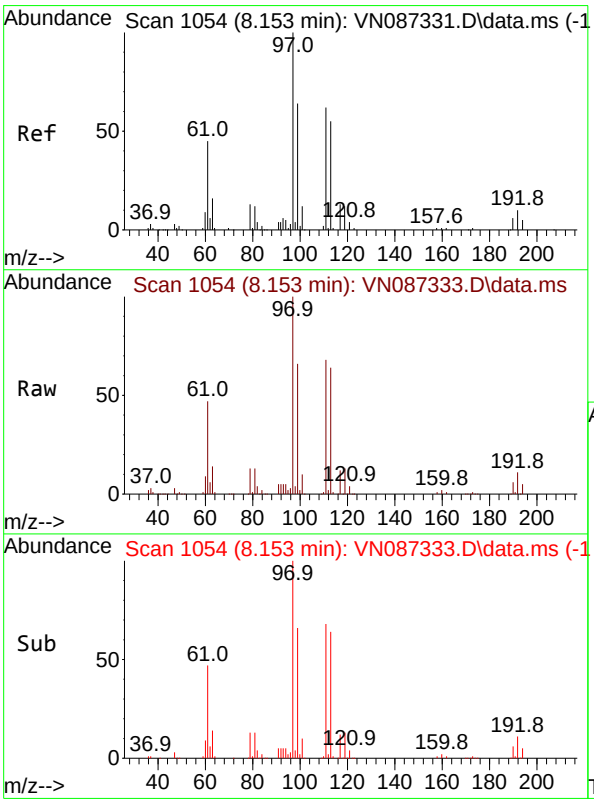
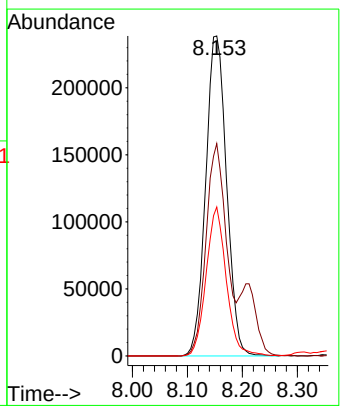
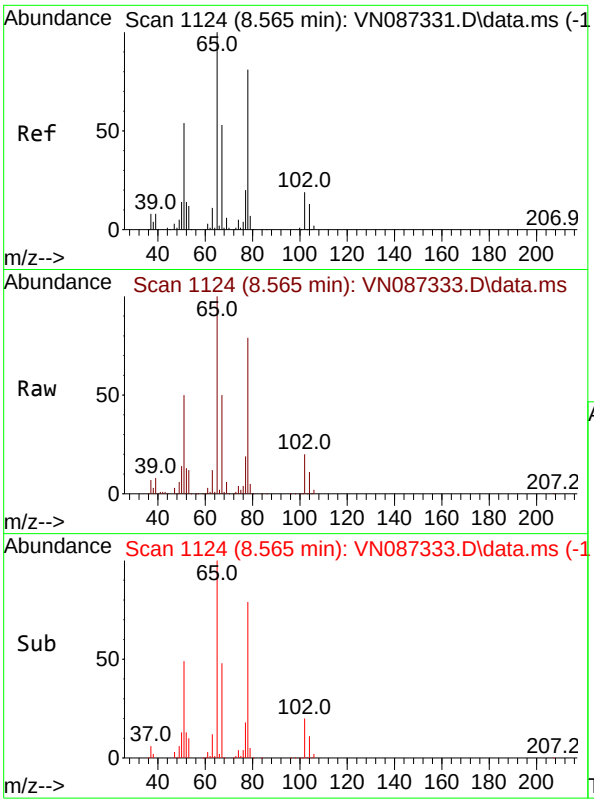


#32
1,1,1-Trichloroethane
Concen: 150.152 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 97 Resp: 630986

Ion	Ratio	Lower	Upper
97	100		
99	64.9	51.8	77.8
61	45.0	38.7	58.1





#33
1,2-Dichloroethane-d4
Concen: 152.545 ug/l
RT: 8.565 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 65 Resp: 50176

Ion	Ratio	Lower	Upper
65	100		
67	51.9	0.0	104.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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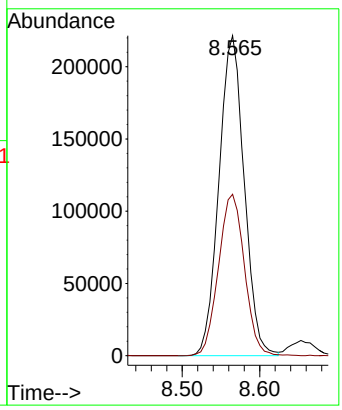
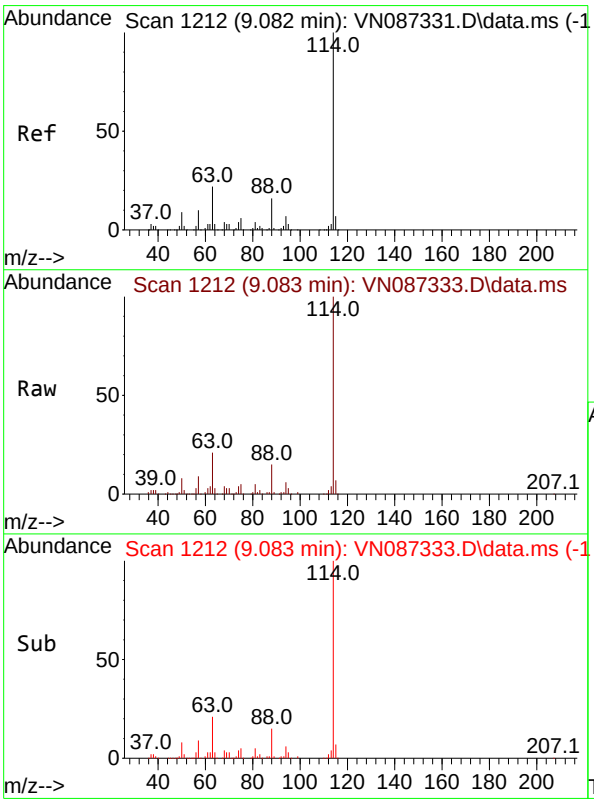
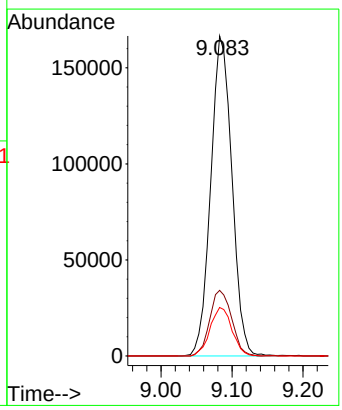


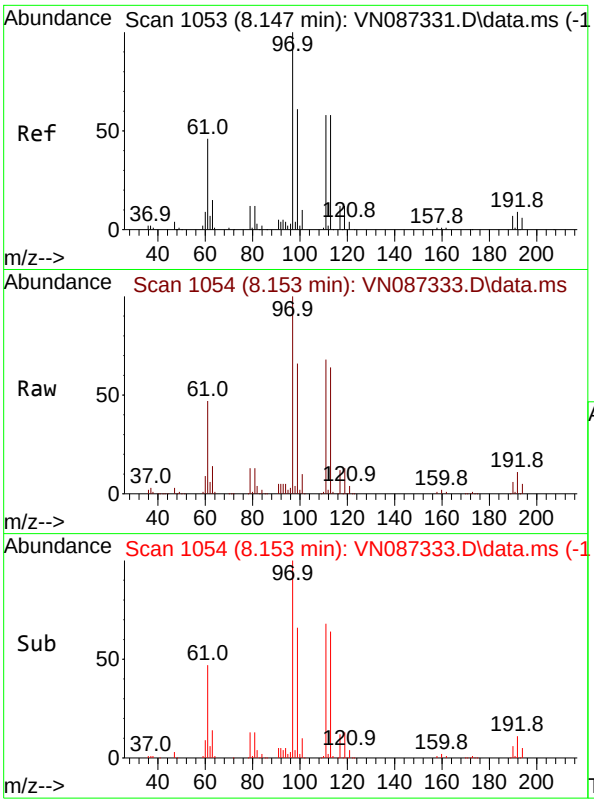


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.083 min Scan# 1212
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:114 Resp: 344966

Ion	Ratio	Lower	Upper
114	100		
63	20.5	0.0	44.6
88	15.2	0.0	32.8

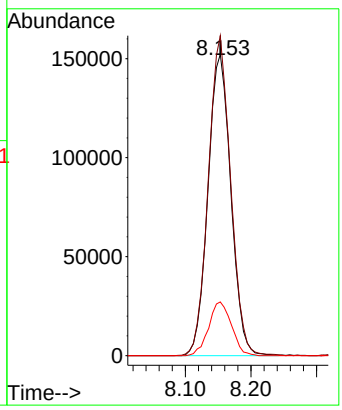




#35
Dibromofluoromethane
Concen: 154.778 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:113 Resp: 36830

Ion	Ratio	Lower	Upper
113	100		
111	103.8	82.5	123.7
192	17.8	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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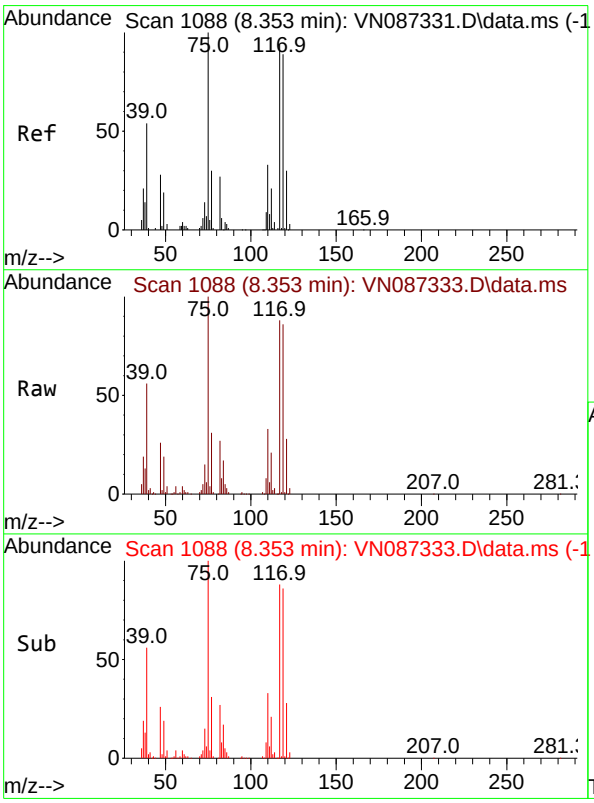
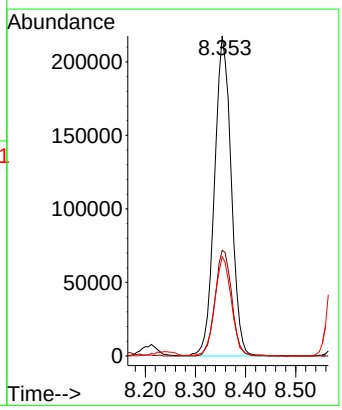
Supervised By :Semsettin Yesilyurt 07/17/2025

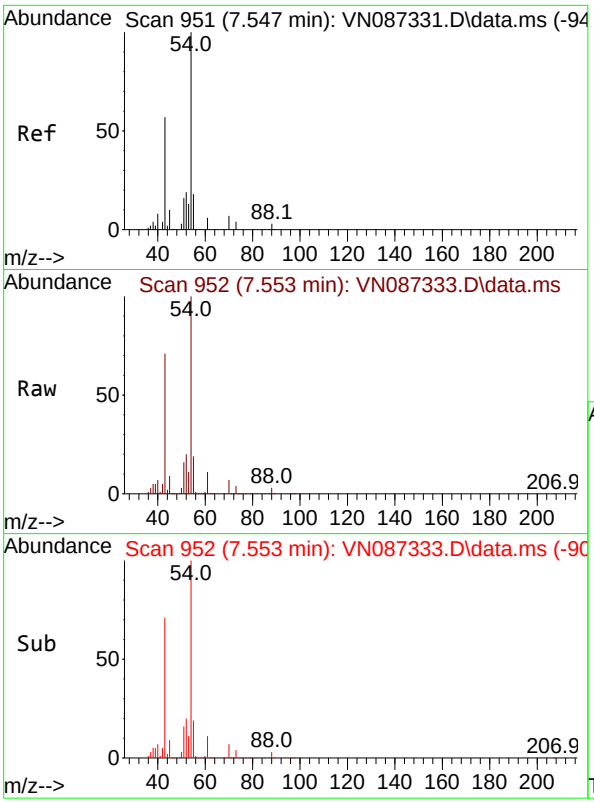


#36
1,1-Dichloropropene
Concen: 160.248 ug/l
RT: 8.353 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 75 Resp: 503793

Ion	Ratio	Lower	Upper
75	100		
110	33.1	16.7	50.1
77	30.9	25.2	37.8

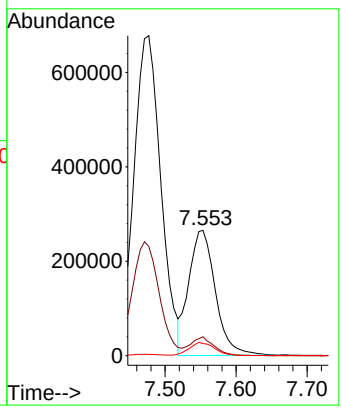




#37
Ethyl Acetate
Concen: 152.464 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 69225

Ion	Ratio	Lower	Upper
43	100		
61	13.2	10.9	16.3
70	10.1	7.4	11.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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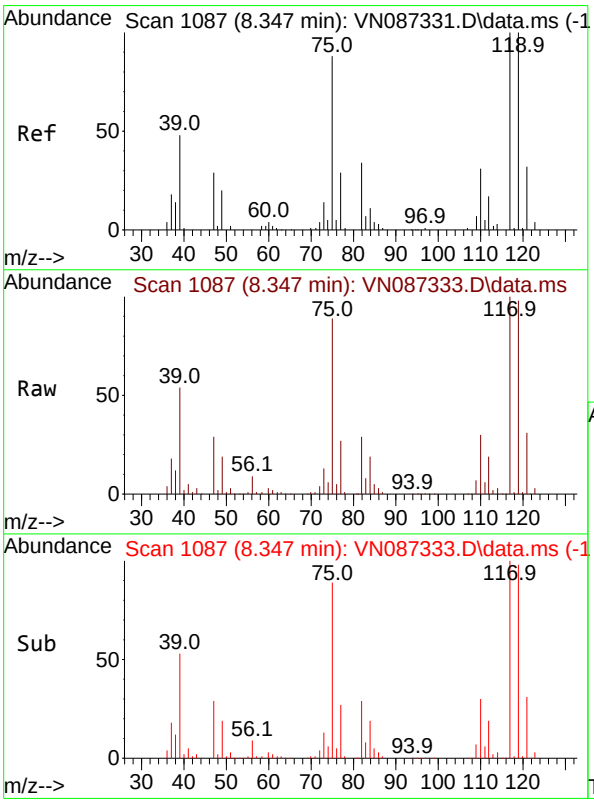
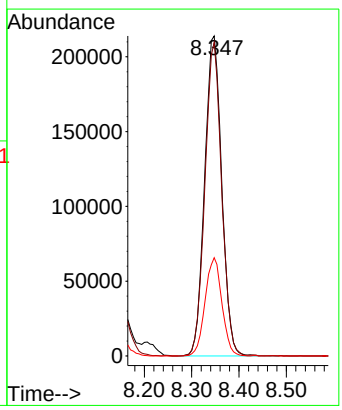
Supervised By :Semsettin Yesilyurt 07/17/2025

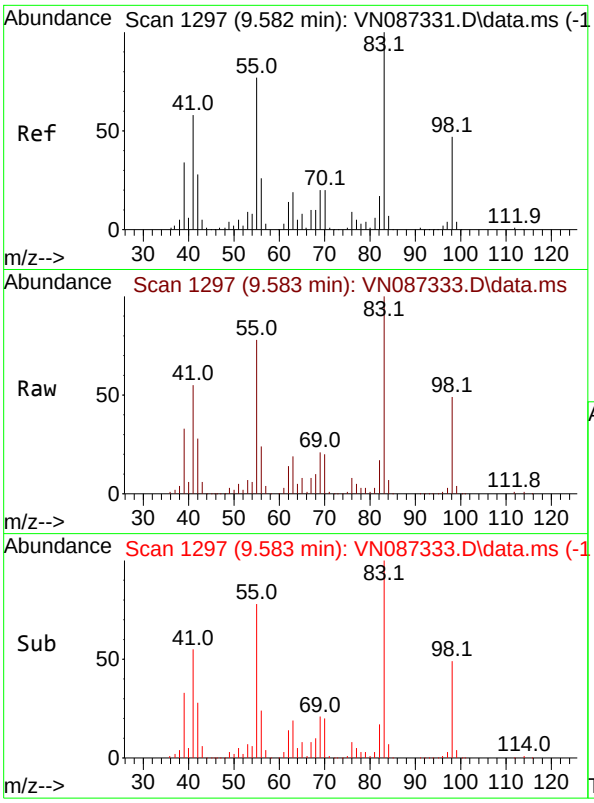


#38
Carbon Tetrachloride
Concen: 154.647 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:117 Resp: 535575

Ion	Ratio	Lower	Upper
117	100		
119	98.0	80.2	120.2
121	30.7	25.4	38.2

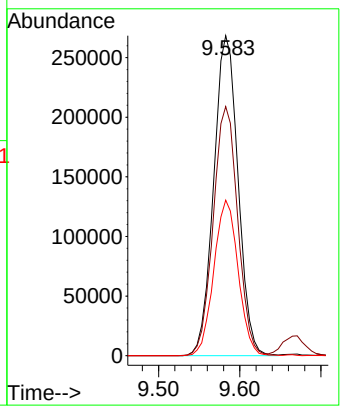




#39
Methylcyclohexane
Concen: 164.485 ug/l
RT: 9.583 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 83 Resp: 55985

Ion	Ratio	Lower	Upper
83	100		
55	77.8	61.3	91.9
98	48.6	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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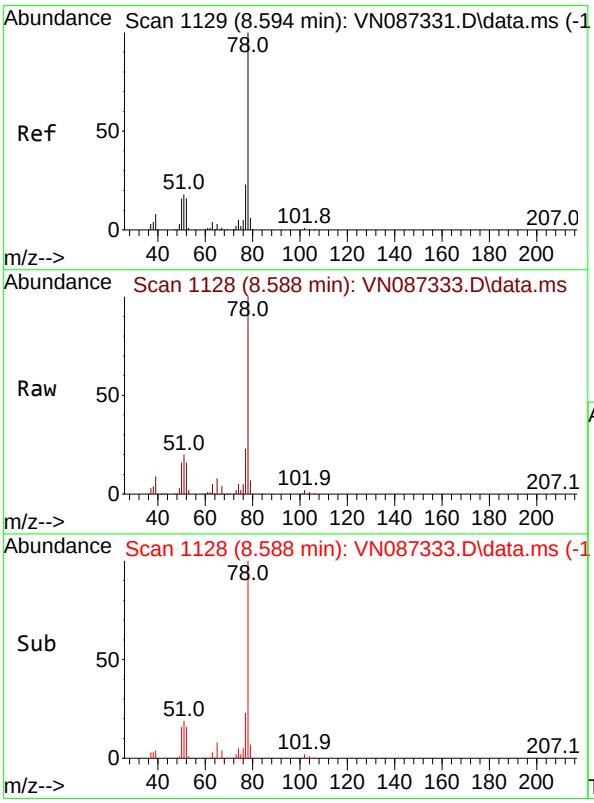
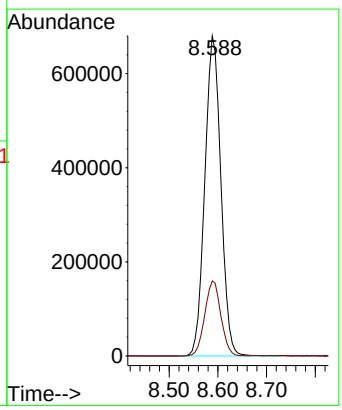
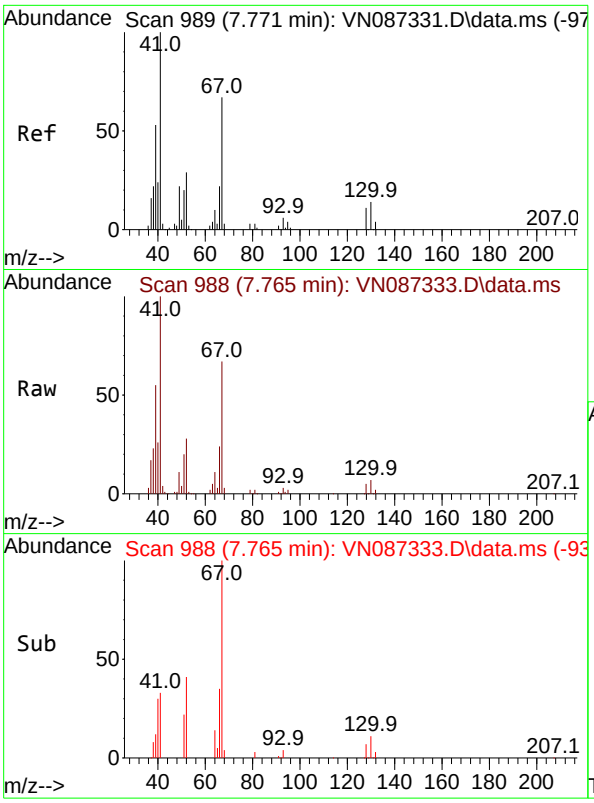


#40
Benzene
Concen: 152.642 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 78 Resp: 1550984

Ion	Ratio	Lower	Upper
78	100		
77	23.5	18.2	27.2

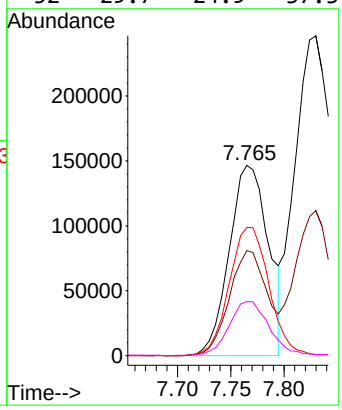




#41
Methacrylonitrile
Concen: 158.156 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 41 Resp: 37548

Ion	Ratio	Lower	Upper
41	100		
39	53.7	43.4	65.0
67	68.5	55.1	82.7
52	29.7	24.9	37.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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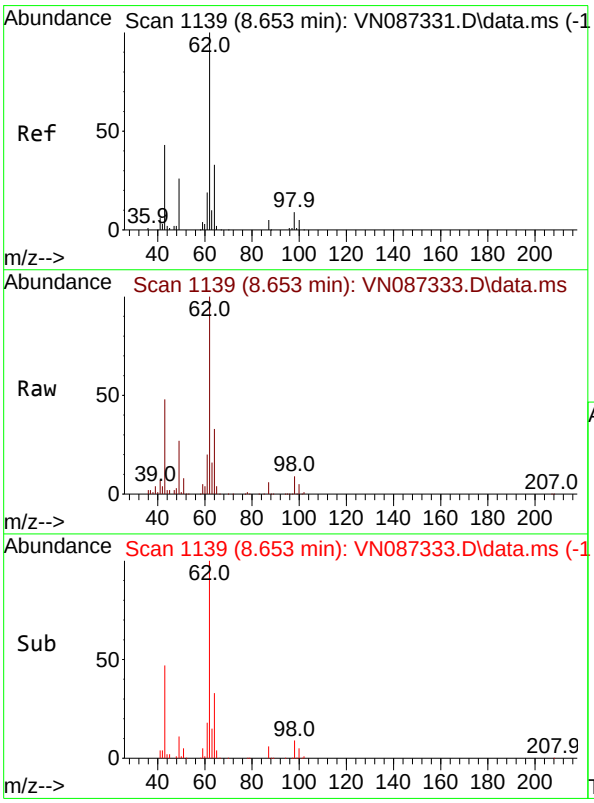
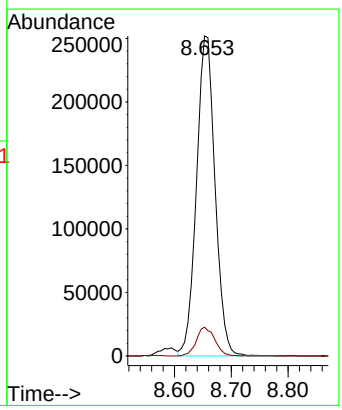
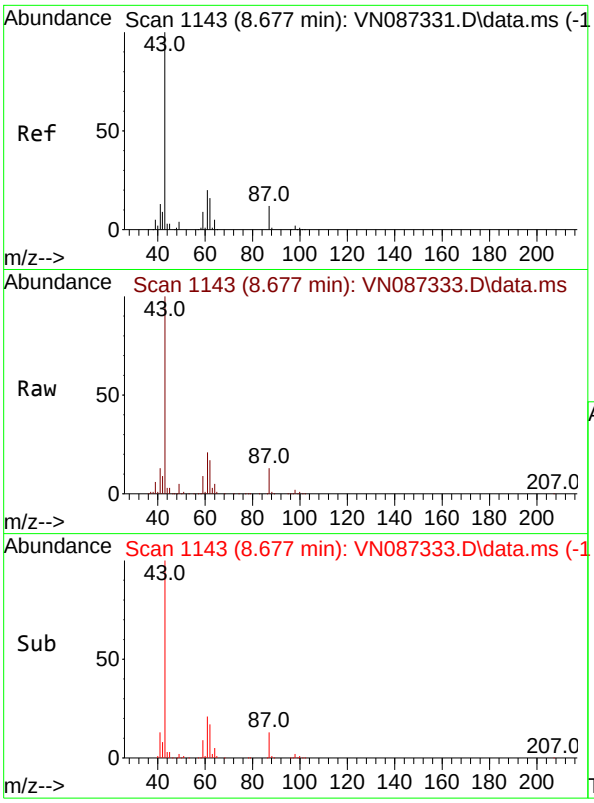


#42
1,2-Dichloroethane
Concen: 148.352 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 62 Resp: 571634

Ion	Ratio	Lower	Upper
62	100		
98	9.0	0.0	18.0





#43
Isopropyl Acetate
Concen: 154.893 ug/l
RT: 8.677 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 109173

Ion	Ratio	Lower	Upper
43	100		
61	24.8	19.8	29.8
87	12.8	9.8	14.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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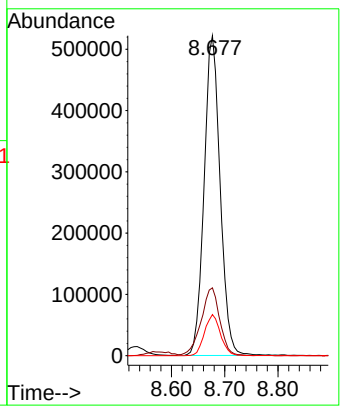
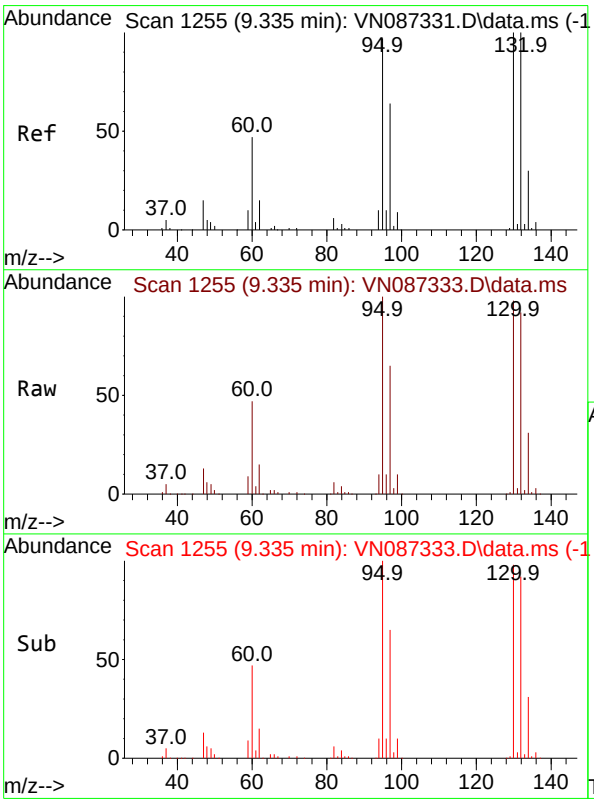
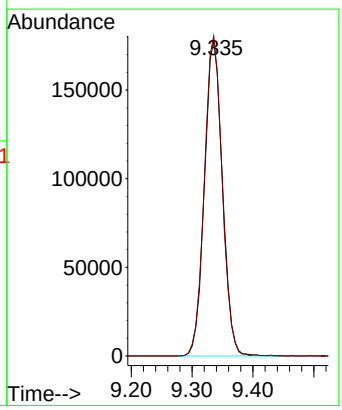


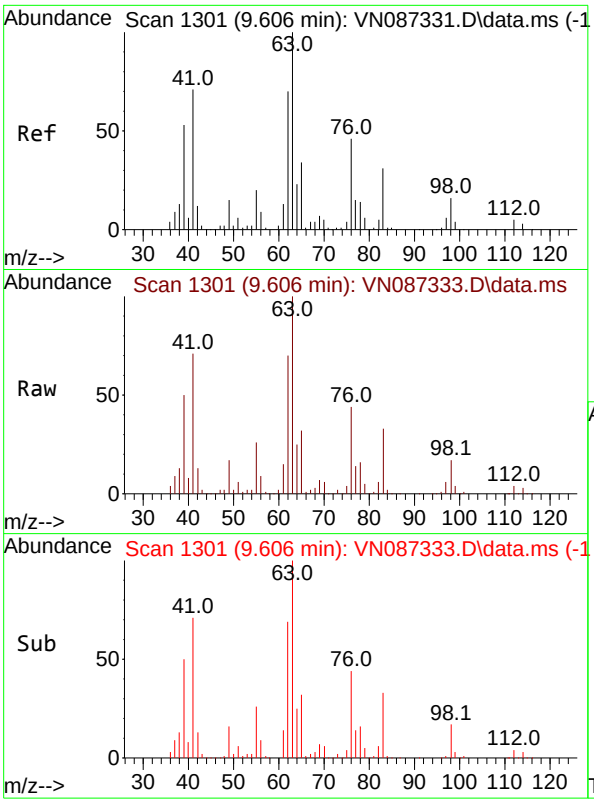


#44
Trichloroethene
Concen: 151.927 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:130 Resp: 364760

Ion	Ratio	Lower	Upper
130	100		
95	101.7	0.0	195.2

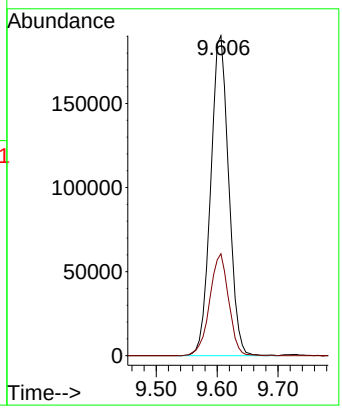




#45
1,2-Dichloropropane
Concen: 151.708 ug/l
RT: 9.606 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 63 Resp: 39167

Ion	Ratio	Lower	Upper
63	100		
65	31.9	27.0	40.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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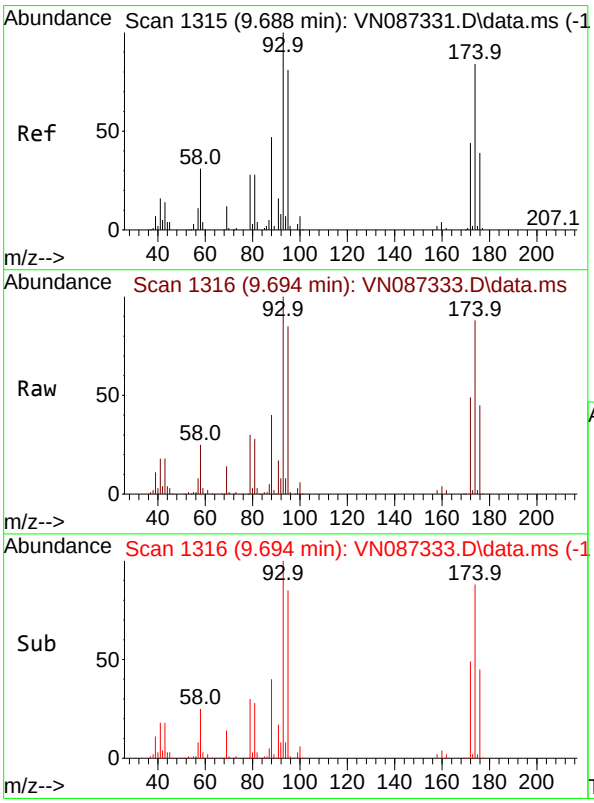
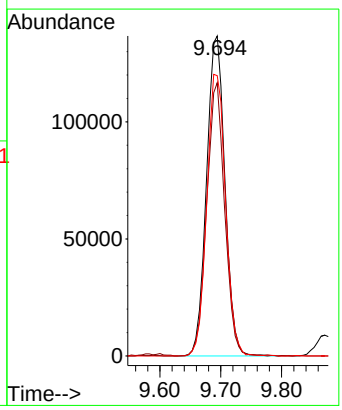
Supervised By :Semsettin Yesilyurt 07/17/2025

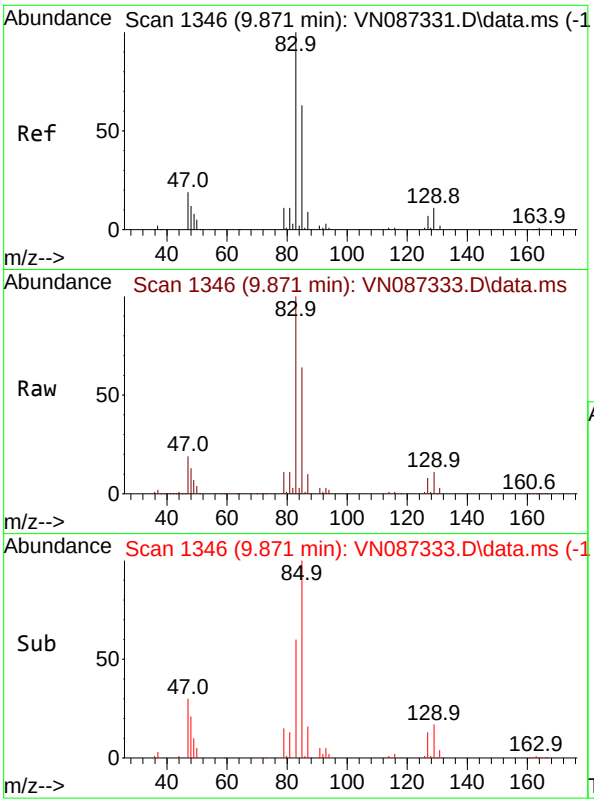


#46
Dibromomethane
Concen: 148.602 ug/l
RT: 9.694 min Scan# 1316
Delta R.T. 0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 93 Resp: 287252

Ion	Ratio	Lower	Upper
93	100		
95	83.3	65.8	98.8
174	89.7	69.9	104.9

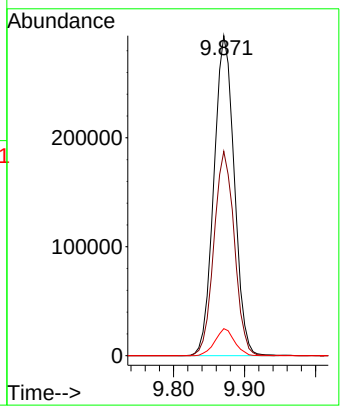




#47
Bromodichloromethane
Concen: 150.128 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 83 Resp: 58454

Ion	Ratio	Lower	Upper
83	100		
85	63.8	50.4	75.6
127	8.4	5.8	8.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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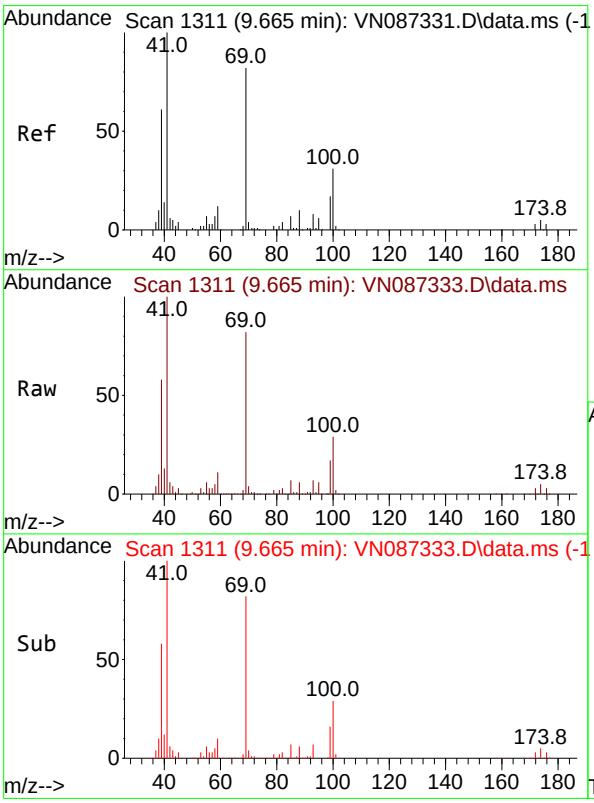
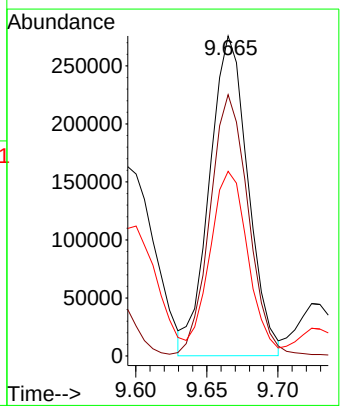
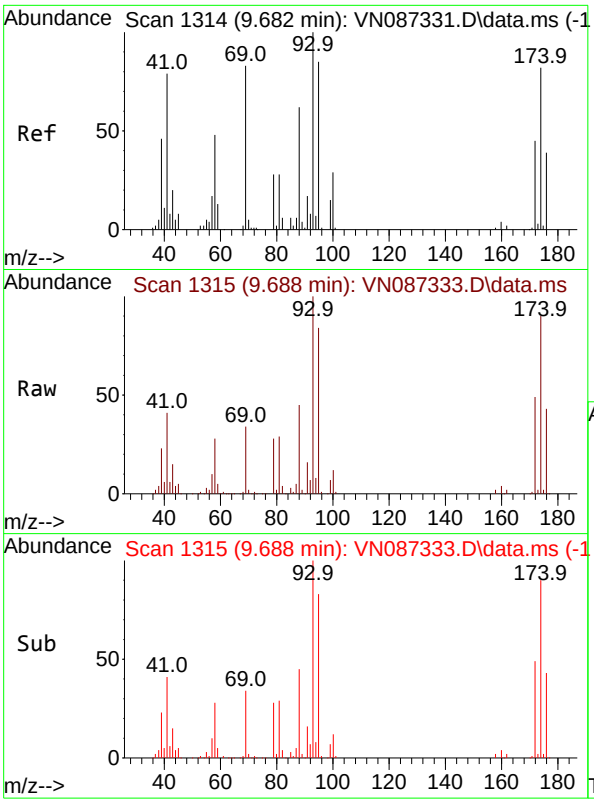


#48
Methyl methacrylate
Concen: 164.191 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 41 Resp: 520990

Ion	Ratio	Lower	Upper
41	100		
69	81.7	64.1	96.1
39	57.0	45.5	68.3

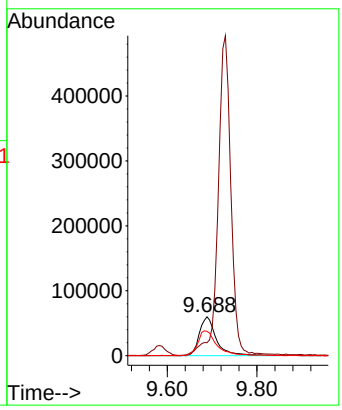




#49
1,4-Dioxane
Concen: 3238.745 ug/l
RT: 9.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 88 Resp: 15740

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	70.5	61.1	91.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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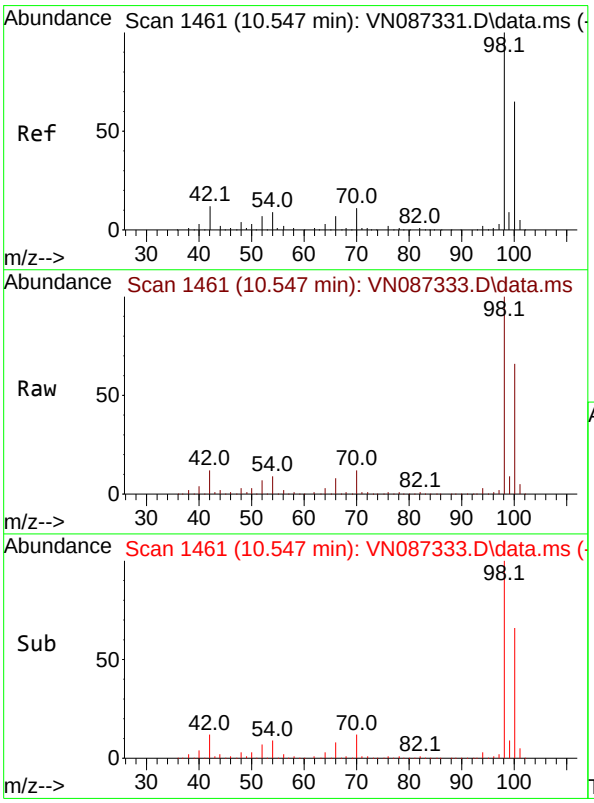
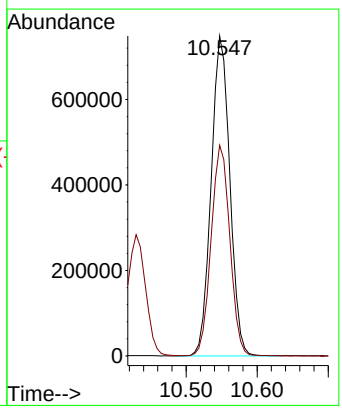
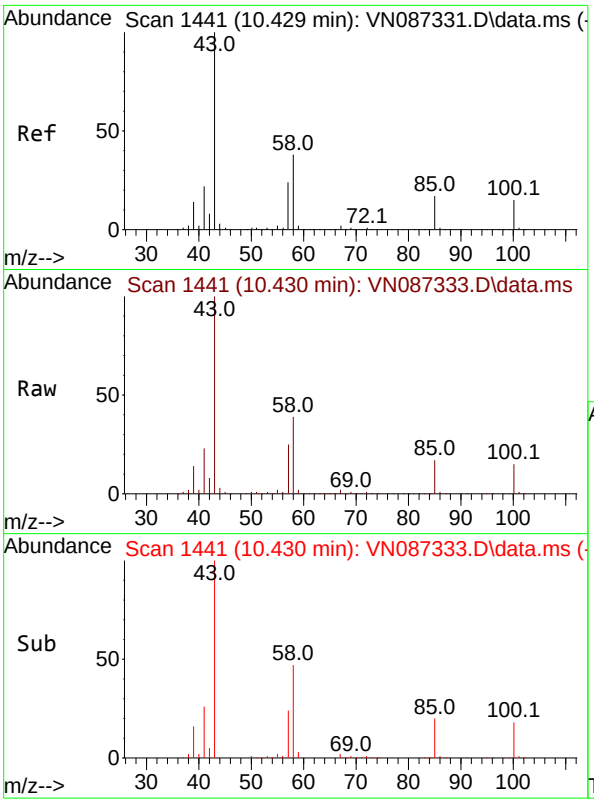


#50
Toluene-d8
Concen: 160.469 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 98 Resp: 1362098

Ion	Ratio	Lower	Upper
98	100		
100	66.2	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 757.219 ug/l
RT: 10.430 min Scan# 14
Delta R.T. 0.001 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 337560

Ion	Ratio	Lower	Upper
43	100		
58	38.8	30.8	46.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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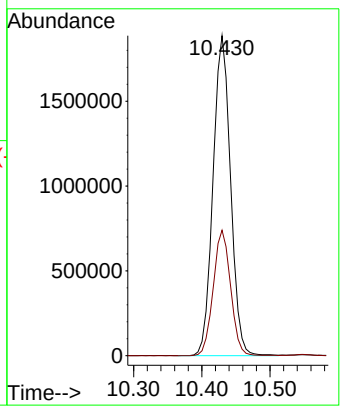
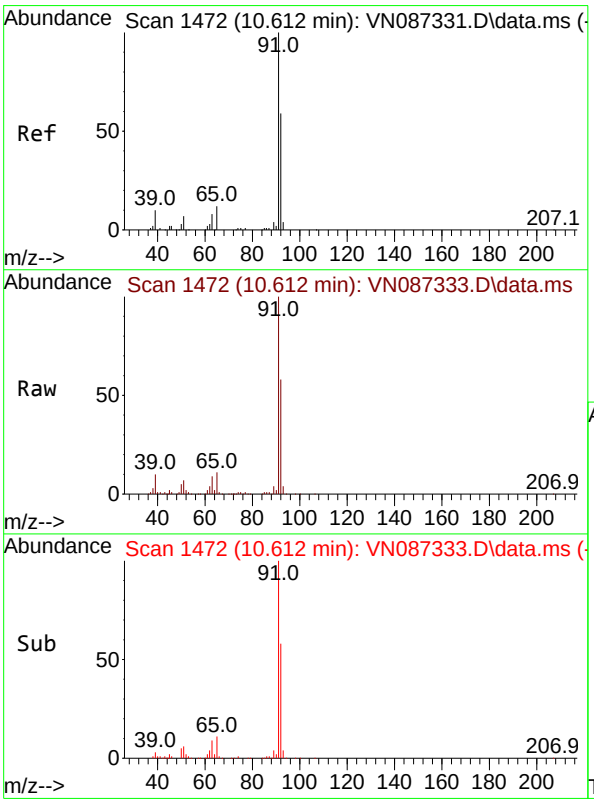
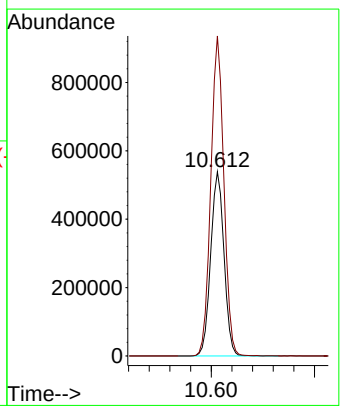


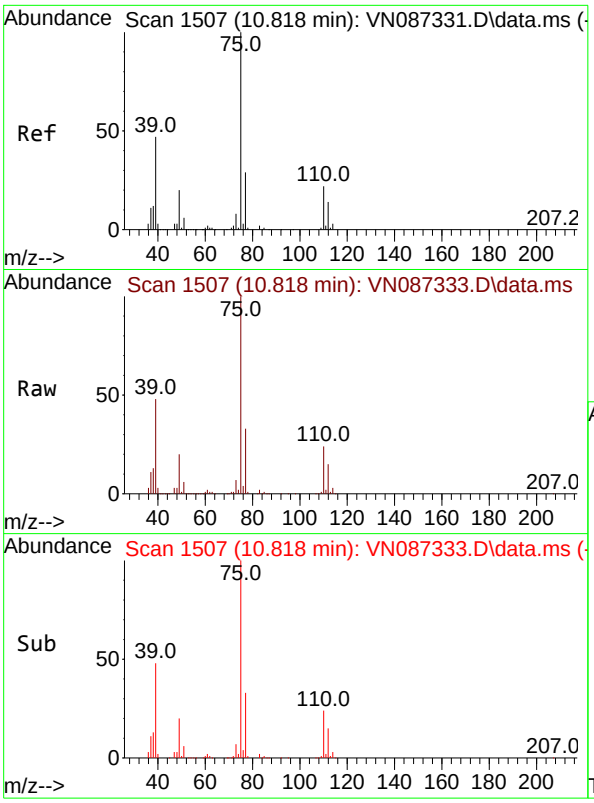


#52
Toluene
Concen: 155.654 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 92 Resp: 961314

Ion	Ratio	Lower	Upper
92	100		
91	170.6	135.1	202.7

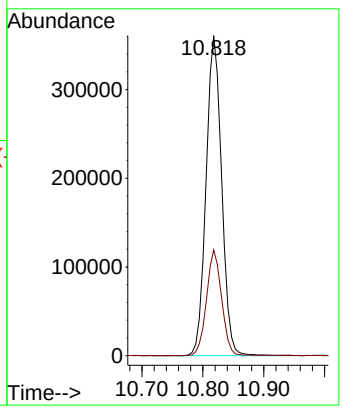




#53
t-1,3-Dichloropropene
Concen: 162.462 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 75 Resp: 64018

Ion	Ratio	Lower	Upper
75	100		
77	33.0	23.6	35.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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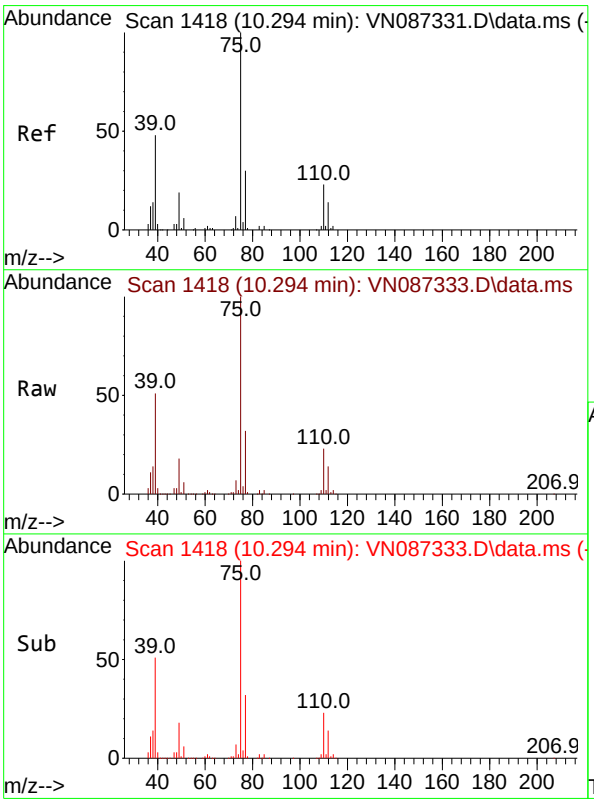
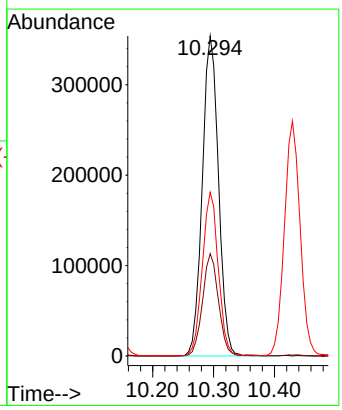
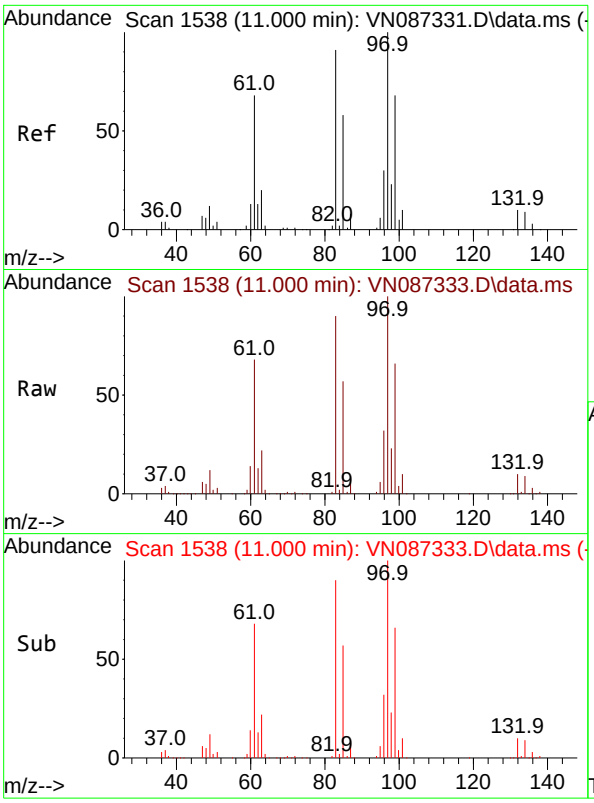


#54
cis-1,3-Dichloropropene
Concen: 160.747 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 75 Resp: 654301

Ion	Ratio	Lower	Upper
75	100		
77	32.0	24.2	36.2
39	51.0	38.4	57.6

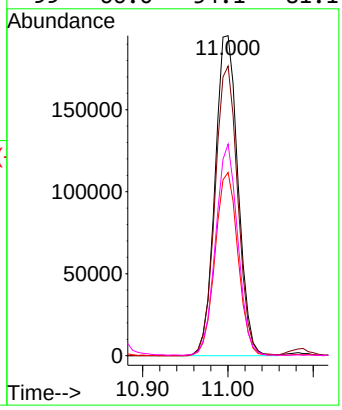




#55
1,1,2-Trichloroethane
Concen: 146.322 ug/l
RT: 11.000 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 97 Resp: 36585

Ion	Ratio	Lower	Upper
97	100		
83	90.5	72.6	109.0
85	57.3	46.7	70.1
99	66.0	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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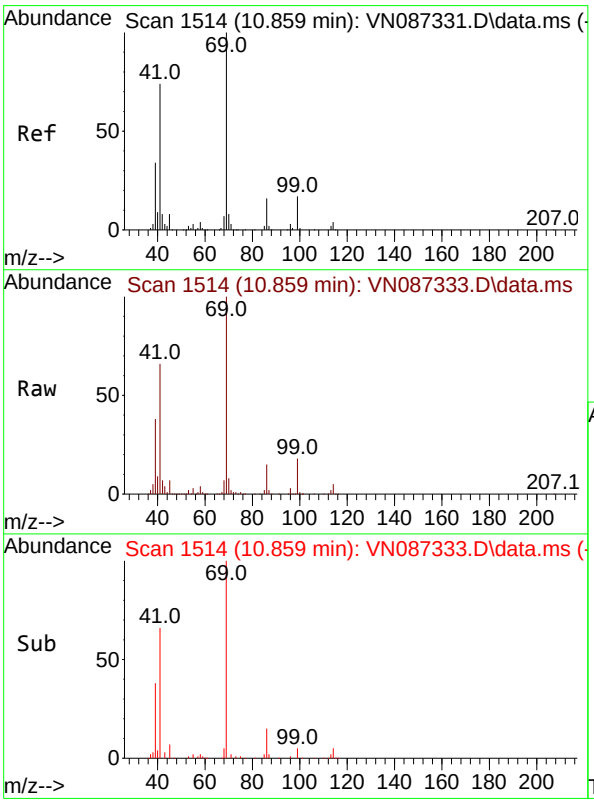
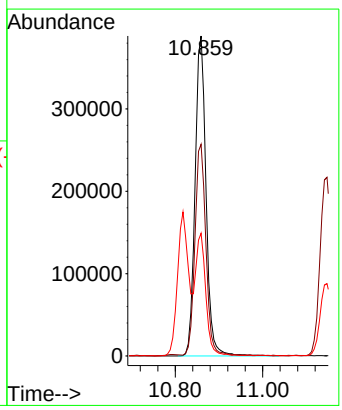
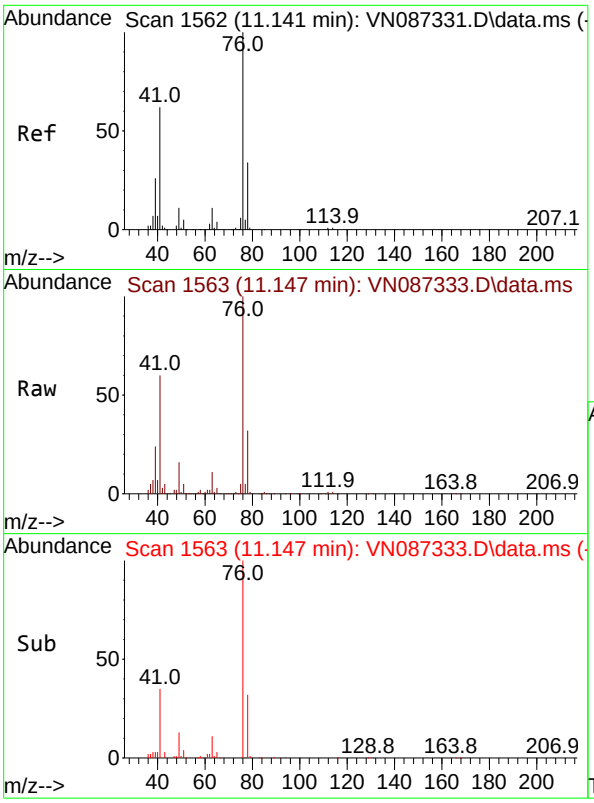


#56
Ethyl methacrylate
Concen: 150.296 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 69 Resp: 679202

Ion	Ratio	Lower	Upper
69	100		
41	66.4	55.1	82.7
39	37.8	27.9	41.9

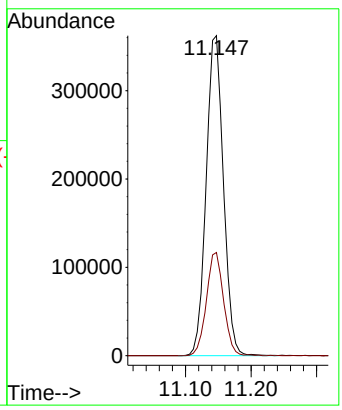




#57
1,3-Dichloropropane
Concen: 153.168 ug/l
RT: 11.147 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 76 Resp: 66215

Ion	Ratio	Lower	Upper
76	100		
78	32.2	26.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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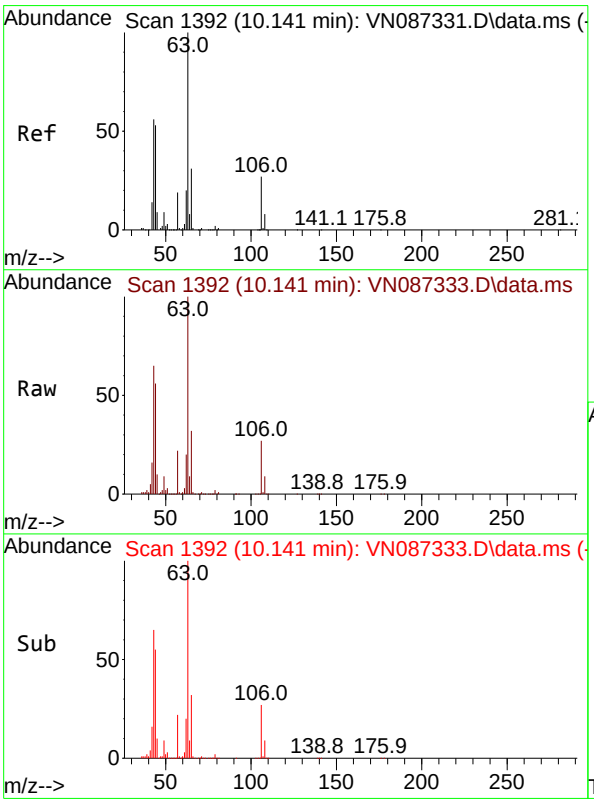
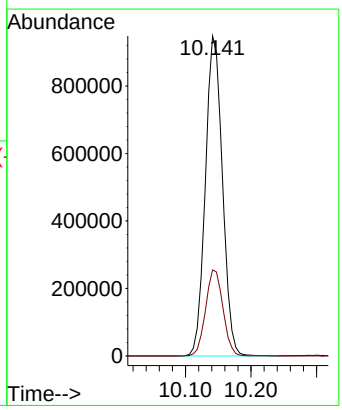
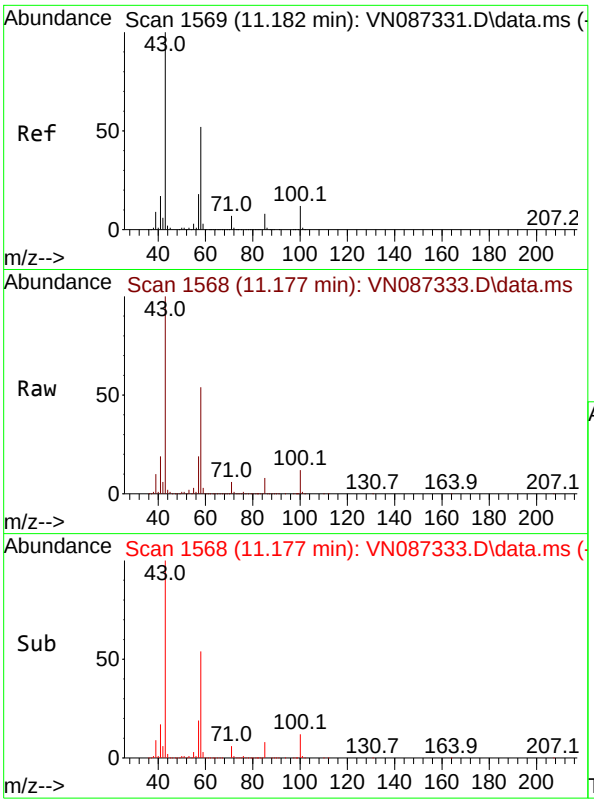


#58
2-Chloroethyl Vinyl ether
Concen: 837.324 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 63 Resp: 1717427

Ion	Ratio	Lower	Upper
63	100		
106	27.4	21.7	32.5





#59
2-Hexanone
Concen: 837.689 ug/l
RT: 11.177 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 247757

Ion	Ratio	Lower	Upper
43	100		
58	54.4	26.7	80.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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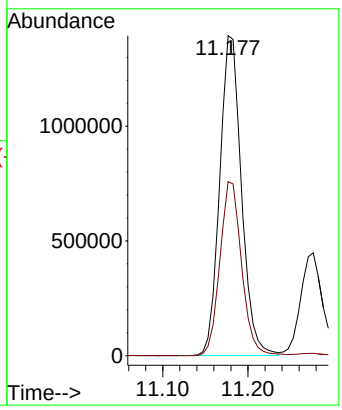
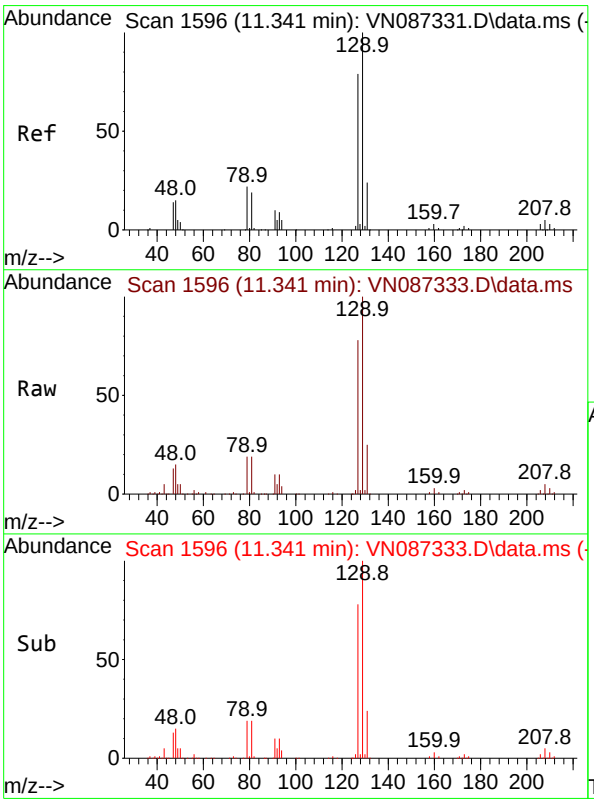
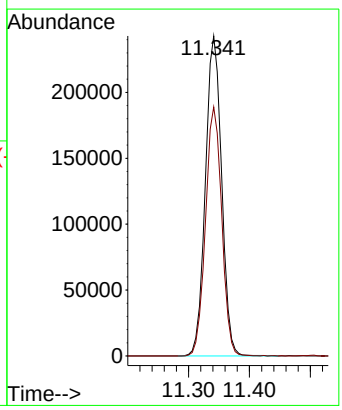


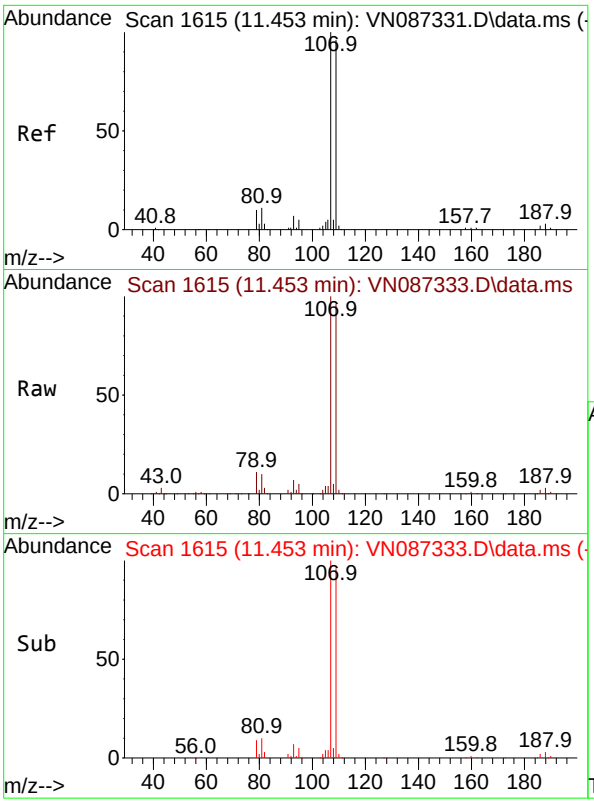


#60
Dibromochloromethane
Concen: 157.217 ug/l
RT: 11.341 min Scan# 1596
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:129 Resp: 448307

Ion	Ratio	Lower	Upper
129	100		
127	77.8	39.1	117.5





#61
1,2-Dibromoethane
Concen: 153.282 ug/l
RT: 11.453 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:107 Resp: 40297

Ion	Ratio	Lower	Upper
107	100		
109	94.2	77.5	116.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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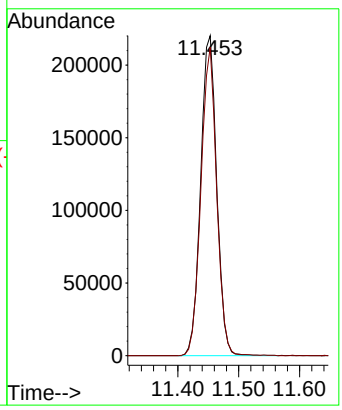
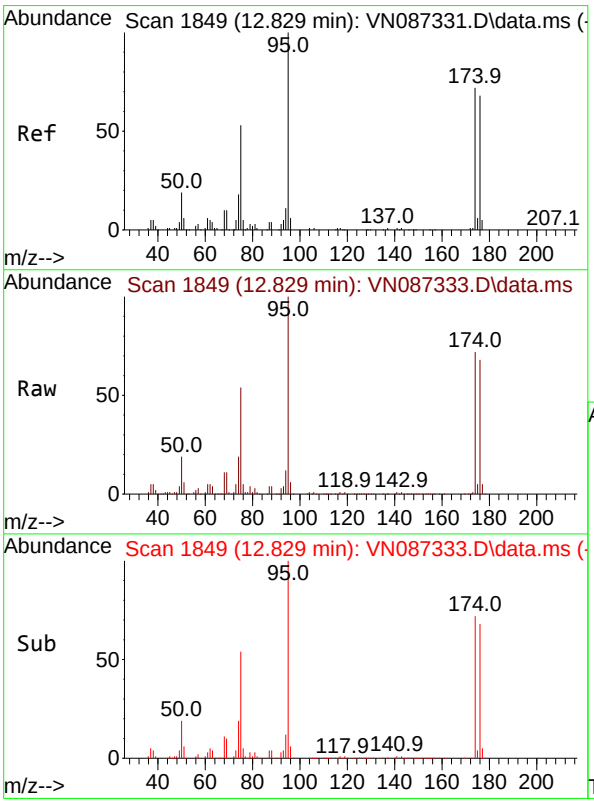
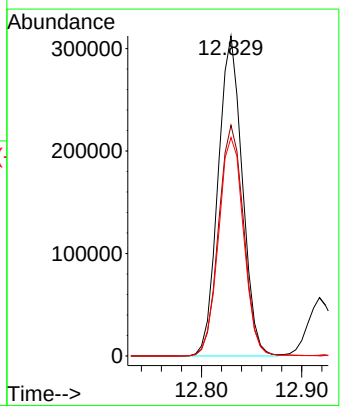


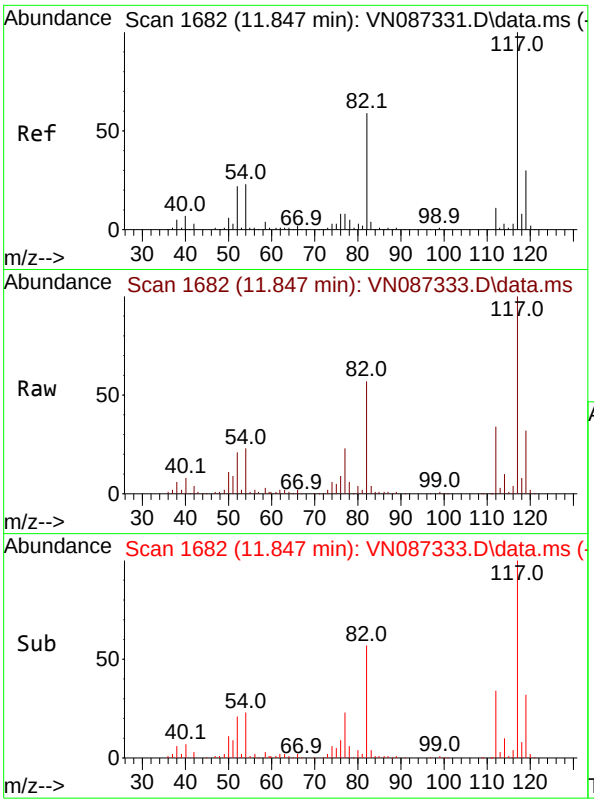


#62
4-Bromofluorobenzene
Concen: 166.525 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 95 Resp: 522221

Ion	Ratio	Lower	Upper
95	100		
174	74.8	0.0	149.4
176	71.2	0.0	141.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:117 Resp: 31702

Ion	Ratio	Lower	Upper
117	100		
82	57.3	47.4	71.2
119	31.6	23.8	35.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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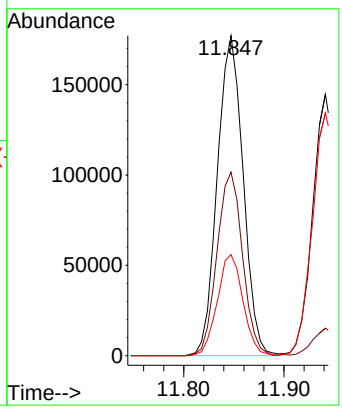
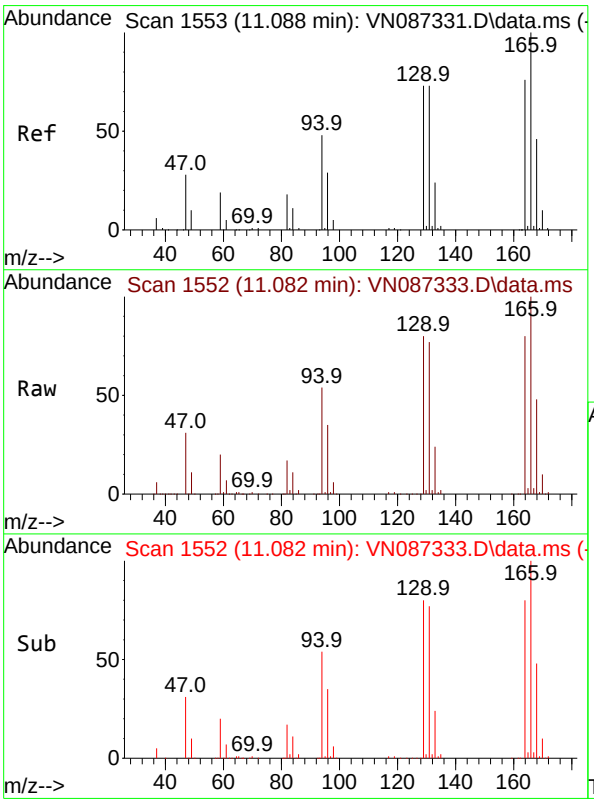
Supervised By :Semsettin Yesilyurt 07/17/2025

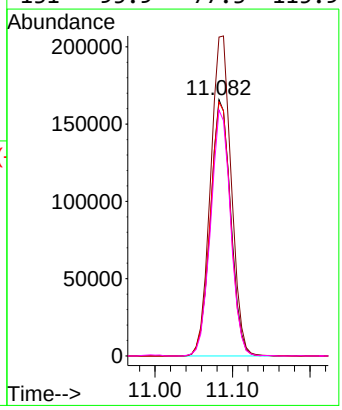


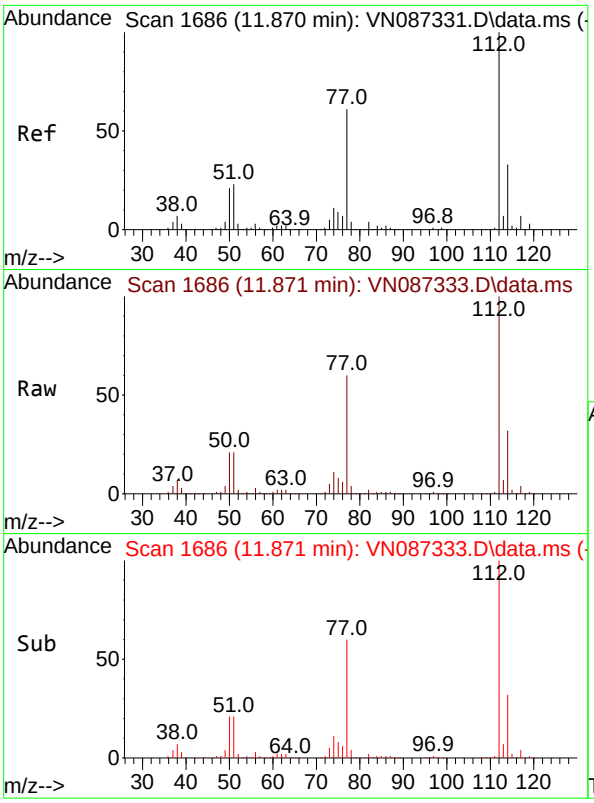


#64
Tetrachloroethene
Concen: 147.718 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:164 Resp: 301404

Ion	Ratio	Lower	Upper
164	100		
166	124.4	105.5	158.3
129	99.0	77.4	116.2
131	95.9	77.3	115.9

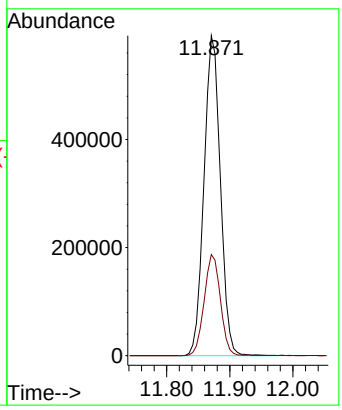




#65
Chlorobenzene
Concen: 149.878 ug/l
RT: 11.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:112 Resp: 106675

Ion	Ratio	Lower	Upper
112	100		
114	31.6	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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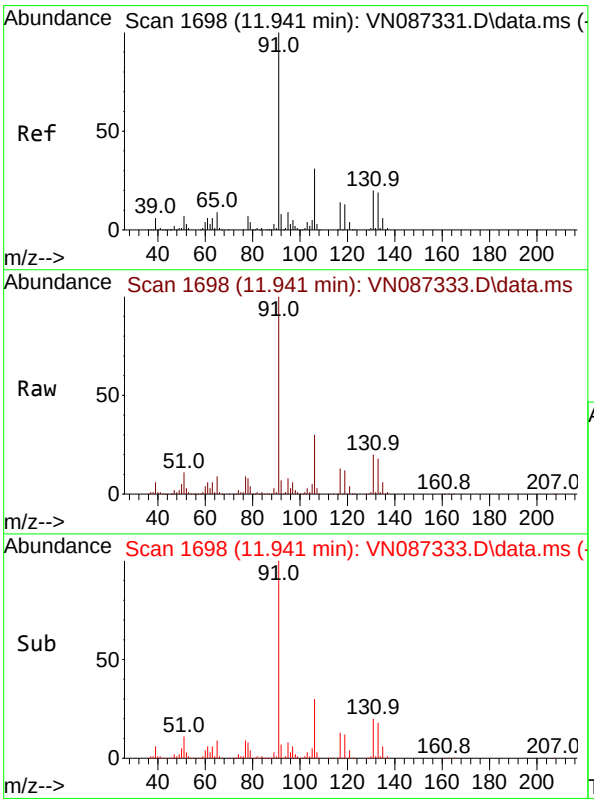
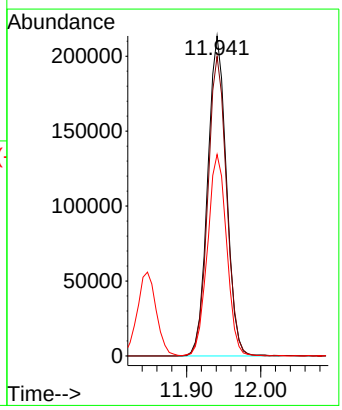
Supervised By :Semsettin Yesilyurt 07/17/2025

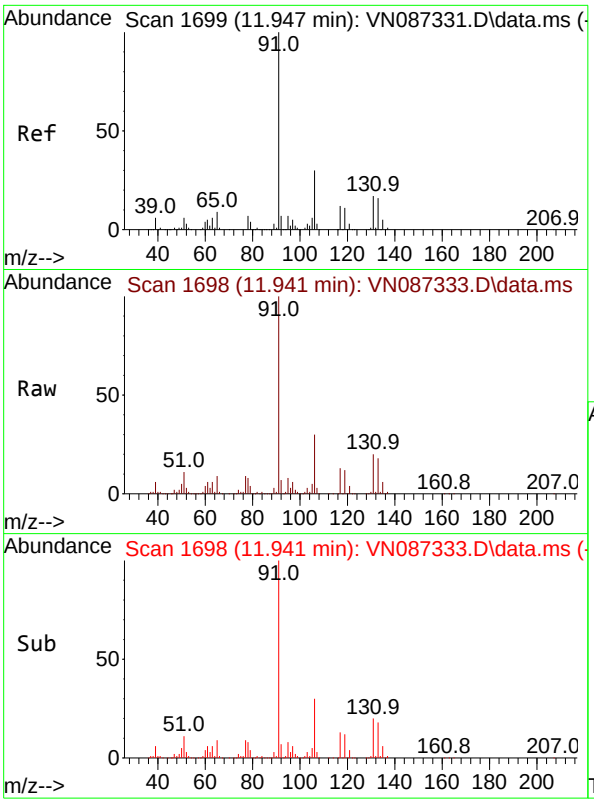


#66
1,1,1,2-Tetrachloroethane
Concen: 155.013 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:131 Resp: 375162

Ion	Ratio	Lower	Upper
131	100		
133	93.5	47.4	142.3
119	64.4	33.1	99.2





#67
Ethyl Benzene
Concen: 160.613 ug/l
RT: 11.941 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 91 Resp: 188192

Ion	Ratio	Lower	Upper
91	100		
106	29.9	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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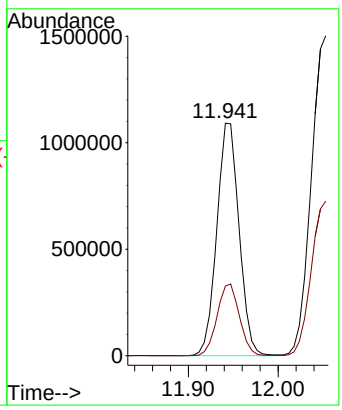
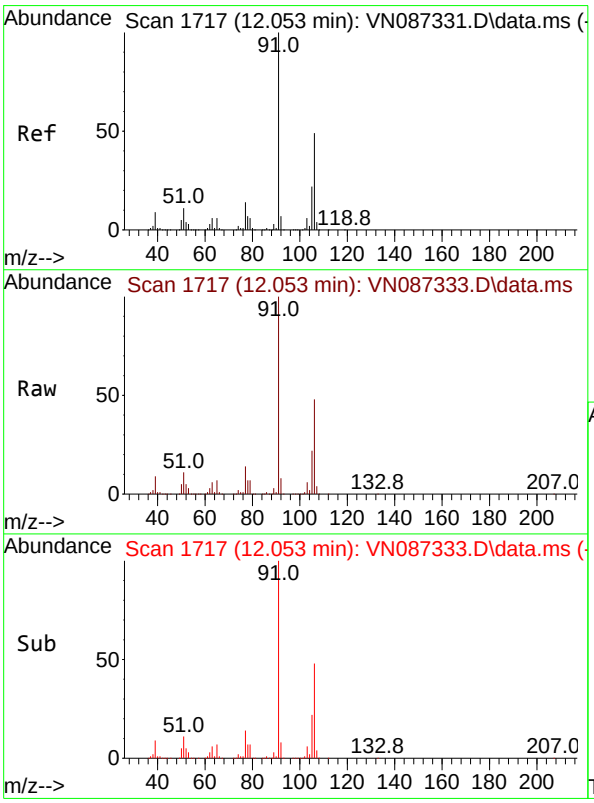
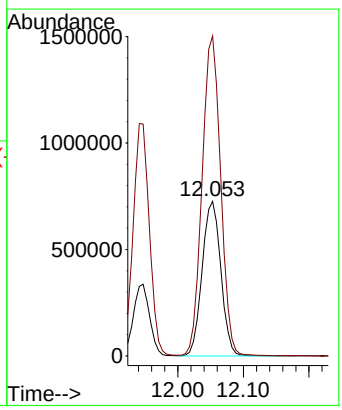


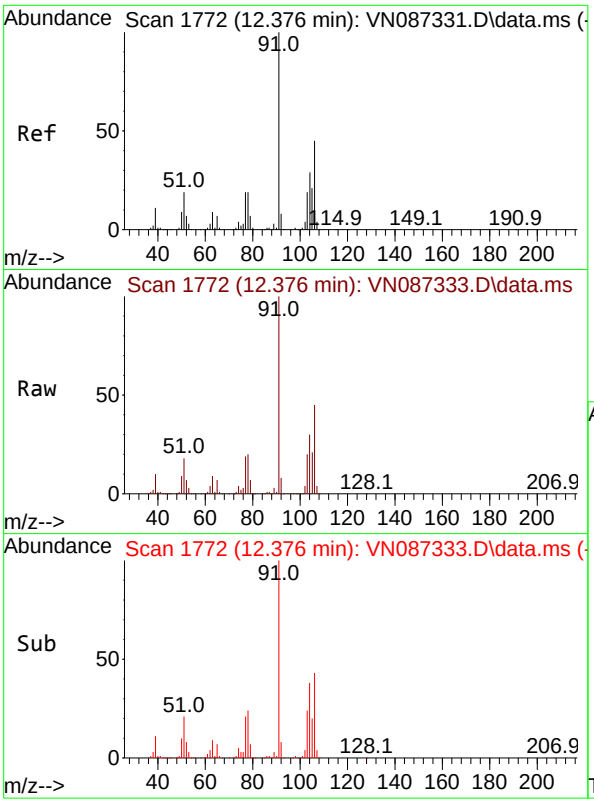


#68
m/p-Xylenes
Concen: 327.579 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:106 Resp: 1437290

Ion	Ratio	Lower	Upper
106	100		
91	206.0	162.0	243.0





#69
o-Xylene
Concen: 166.628 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:106 Resp: 69836

Ion	Ratio	Lower	Upper
106	100		
91	218.8	107.7	323.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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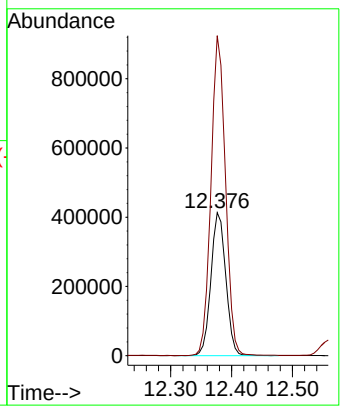
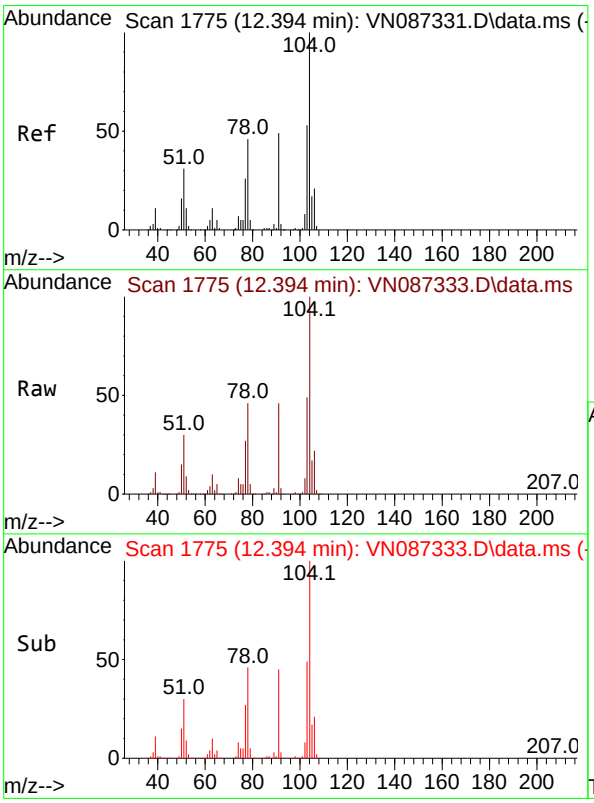
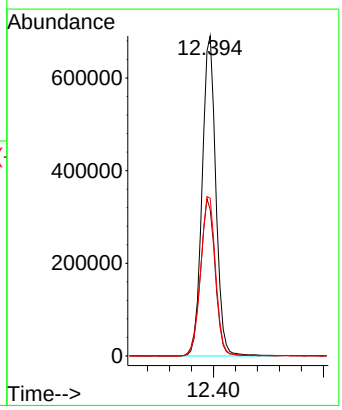


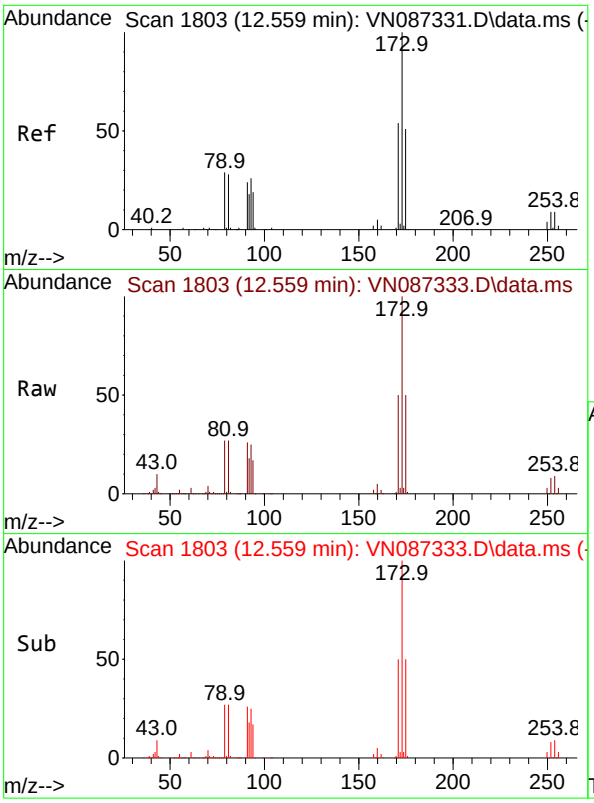


#70
Styrene
Concen: 169.502 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:104 Resp: 1195068

Ion	Ratio	Lower	Upper
104	100		
78	52.6	41.0	61.6
103	54.2	43.9	65.9

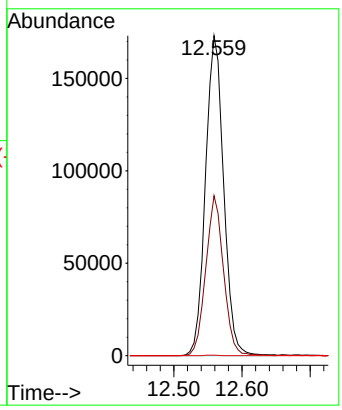




#71
Bromoform
Concen: 164.154 ug/l
RT: 12.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:173 Resp: 32096

Ion	Ratio	Lower	Upper
173	100		
175	49.0	24.1	72.3
254	0.1	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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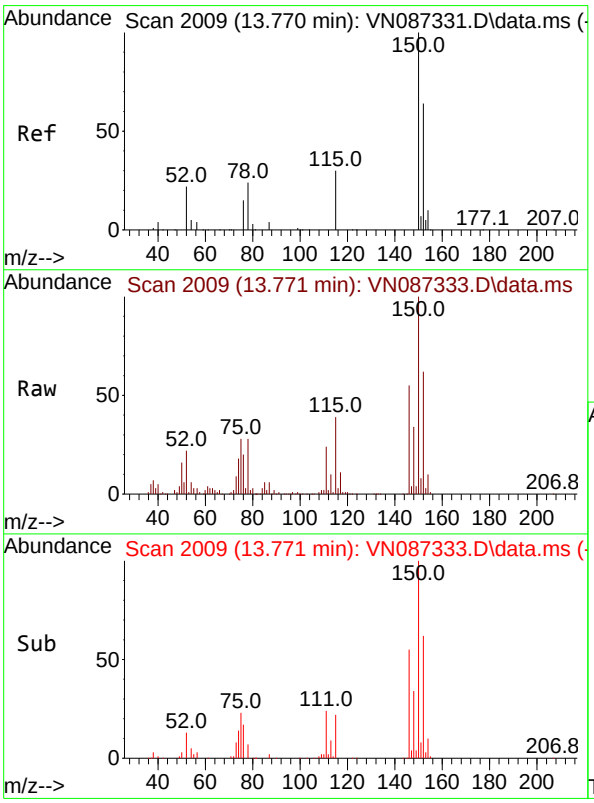
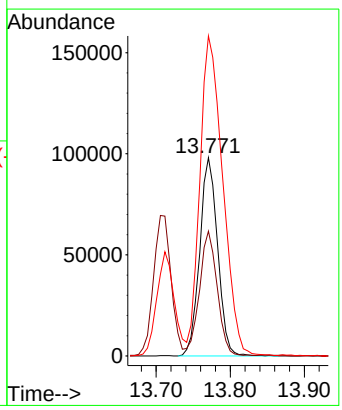
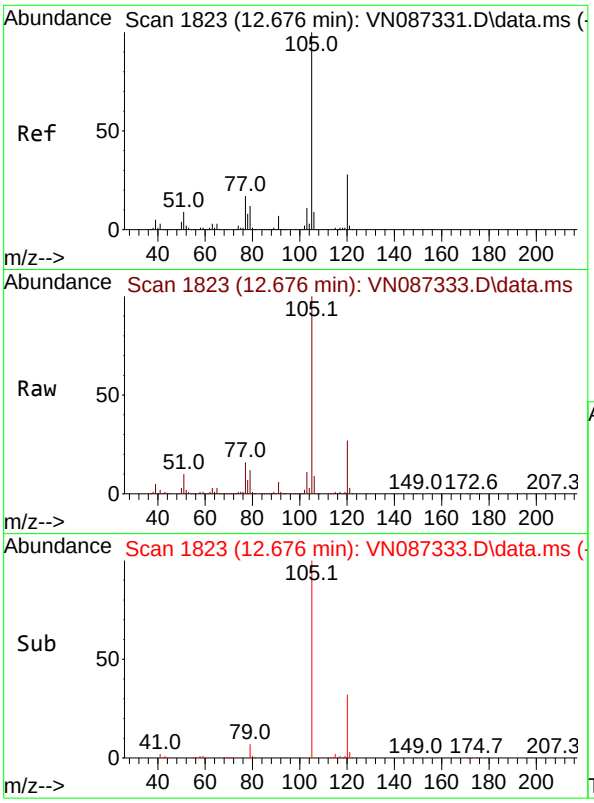


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.771 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:152 Resp: 165077

Ion	Ratio	Lower	Upper
152	100		
115	62.1	31.1	93.5
150	205.0	0.0	349.0

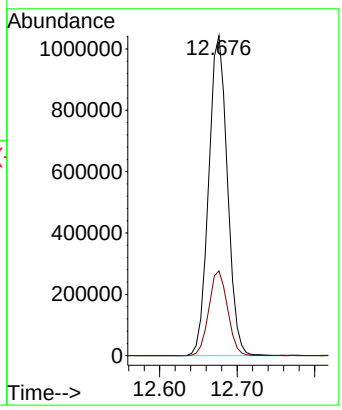




#73
Isopropylbenzene
Concen: 168.203 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:105 Resp: 174756

Ion	Ratio	Lower	Upper
105	100		
120	26.7	13.4	40.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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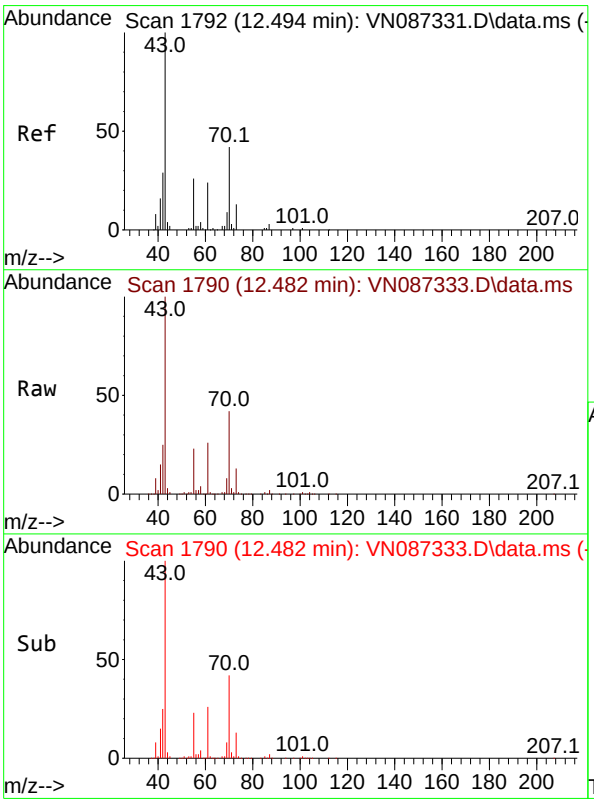
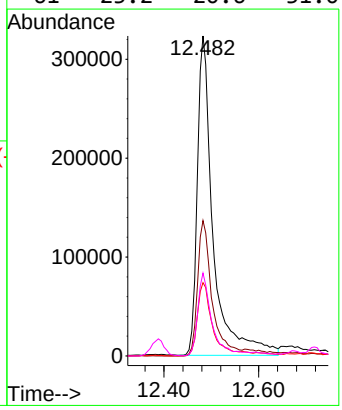
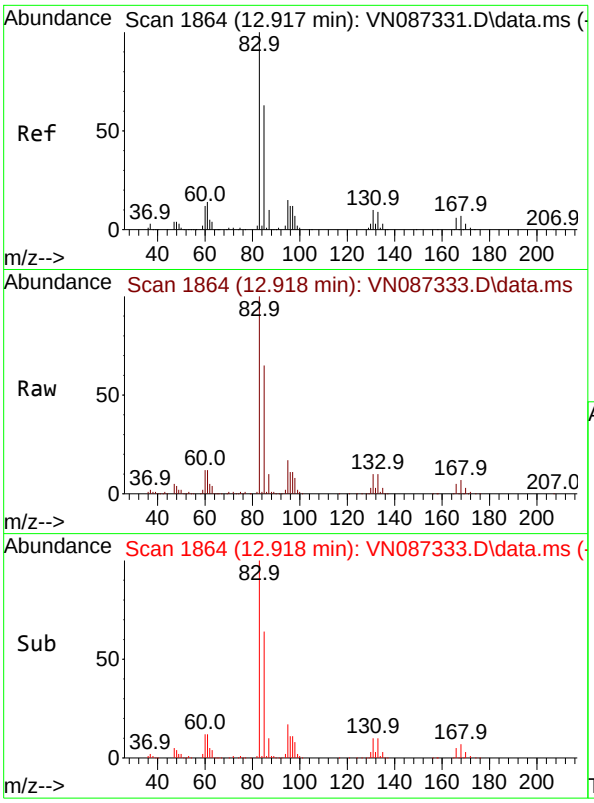


#74
N-amyl acetate
Concen: 184.917 ug/l
RT: 12.482 min Scan# 1790
Delta R.T. -0.012 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 43 Resp: 750104

Ion	Ratio	Lower	Upper
43	100		
70	38.7	37.6	56.4
55	21.4	19.6	29.4
61	23.2	20.6	31.0

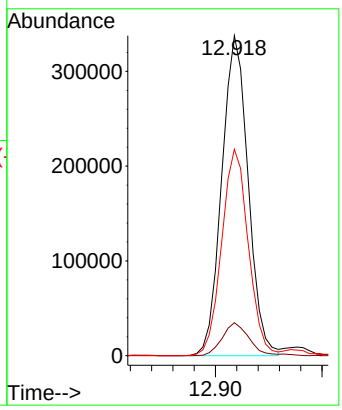




#75
1,1,2,2-Tetrachloroethane
Concen: 148.761 ug/l
RT: 12.918 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 83 Resp: 58156

Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.1	15.3
85	65.0	32.5	97.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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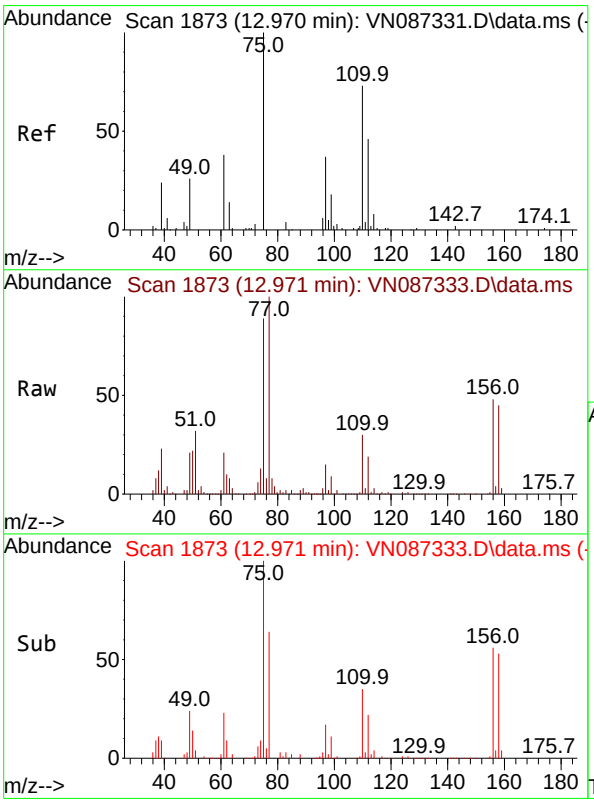
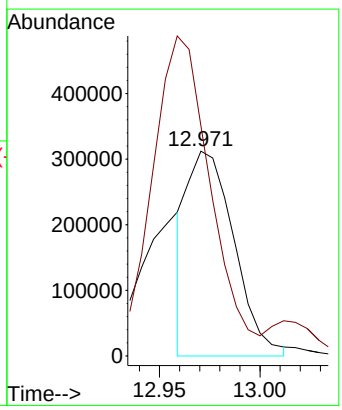
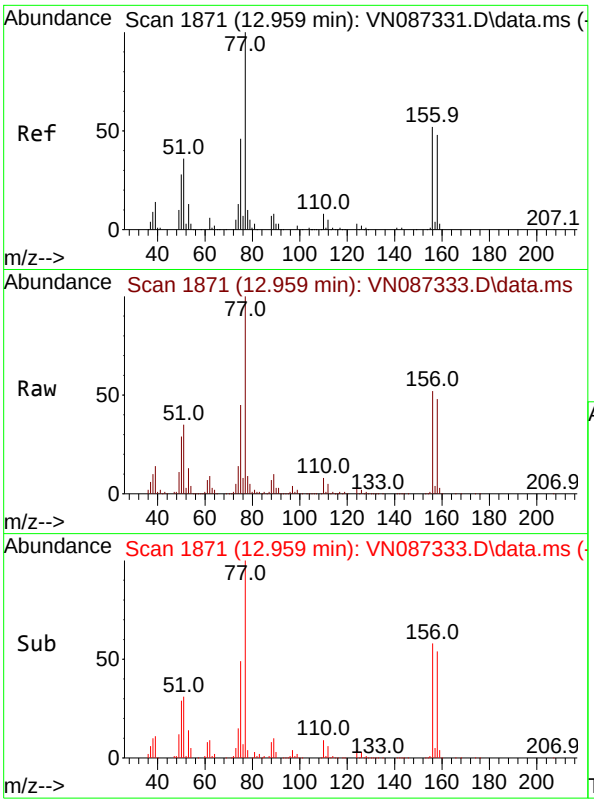


#76
1,2,3-Trichloropropane
Concen: 137.832 ug/l m
RT: 12.971 min Scan# 1873
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 75 Resp: 504791

Ion	Ratio	Lower	Upper
75	100		
77	195.6	94.5	283.6

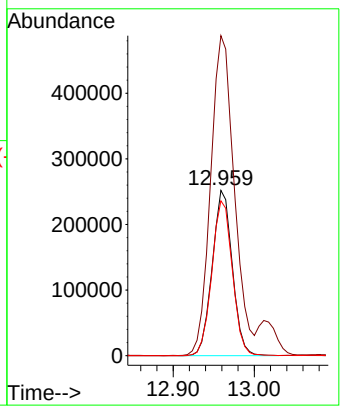




#77
Bromobenzene
Concen: 161.001 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:156 Resp: 43381

Ion	Ratio	Lower	Upper
156	100		
77	227.6	114.9	344.6
158	95.5	48.5	145.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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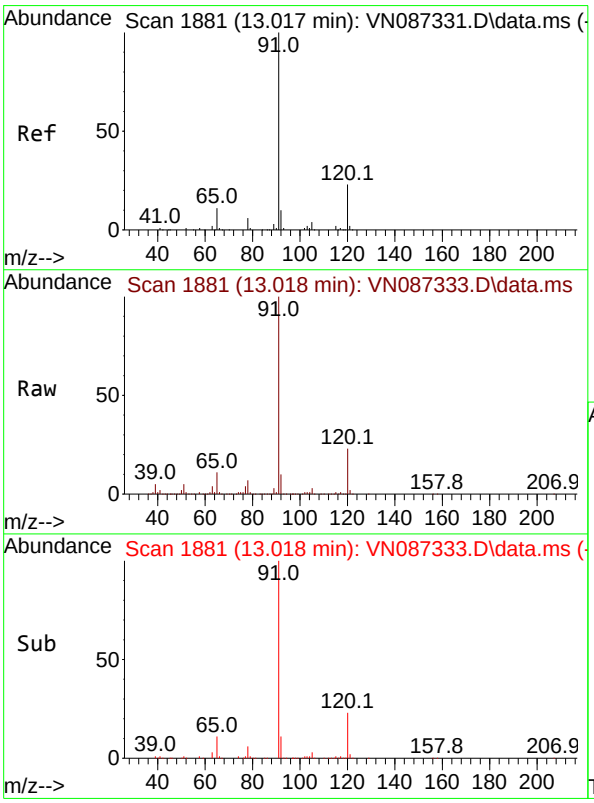
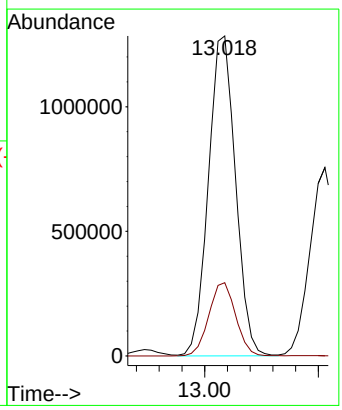
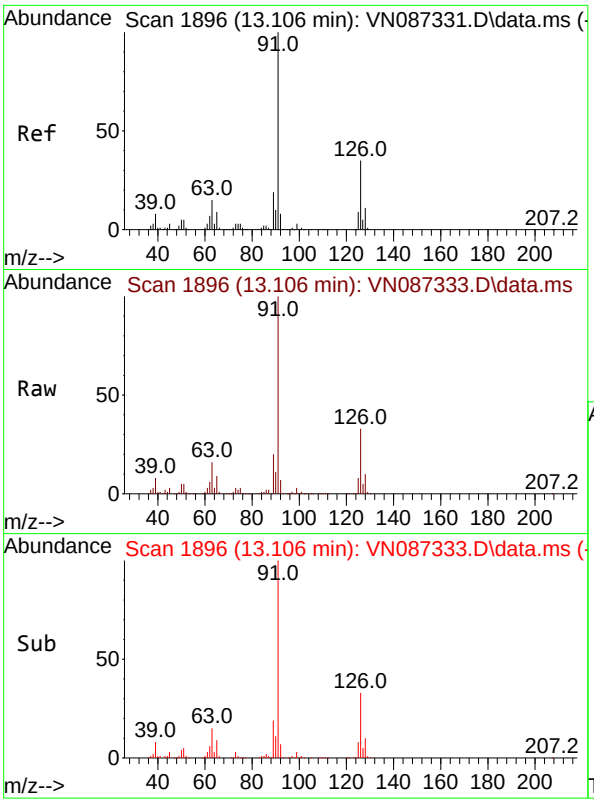


#78
n-propylbenzene
Concen: 162.733 ug/l
RT: 13.018 min Scan# 1881
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 91 Resp: 2127215

Ion	Ratio	Lower	Upper
91	100		
120	22.7	11.3	33.8





#79
2-Chlorotoluene
Concen: 160.600 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 91 Resp: 129020

Ion	Ratio	Lower	Upper
91	100		
126	32.6	16.9	50.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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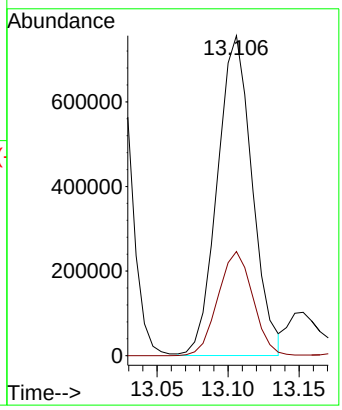
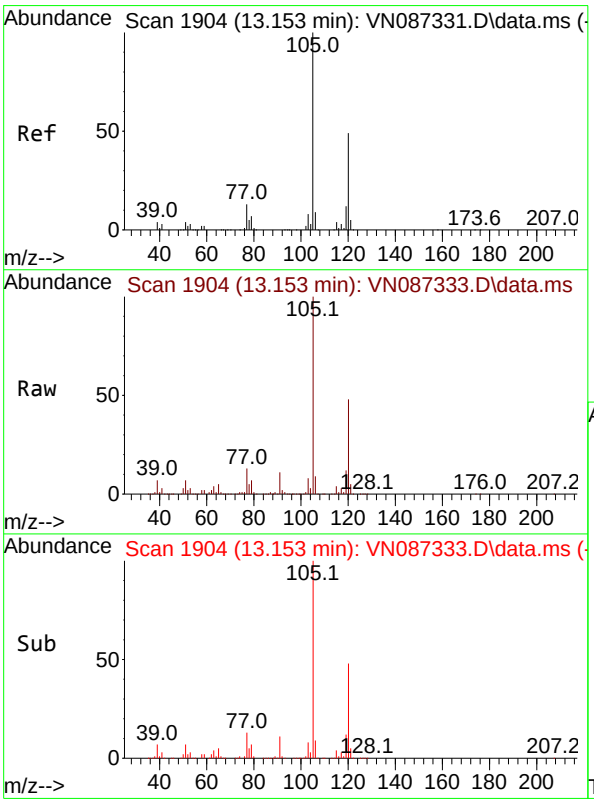
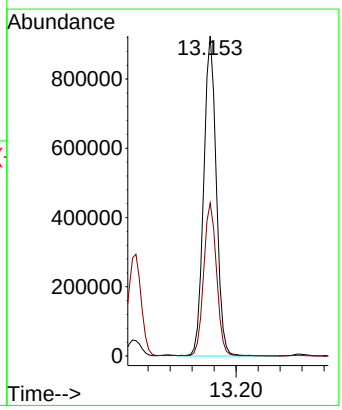


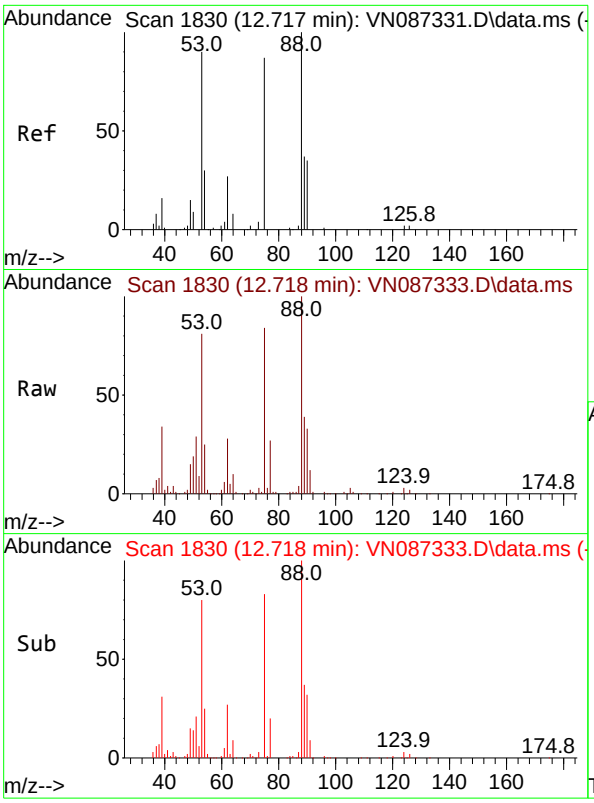


#80
1,3,5-Trimethylbenzene
Concen: 165.514 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:105 Resp: 1465159

Ion	Ratio	Lower	Upper
105	100		
120	48.8	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 165.713 ug/l
RT: 12.718 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 75 Resp: 22419

Ion	Ratio	Lower	Upper
75	100		
53	97.9	83.5	125.3
89	47.3	38.4	57.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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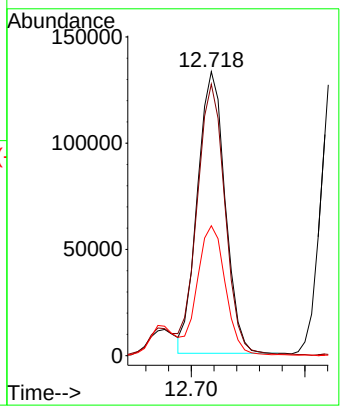
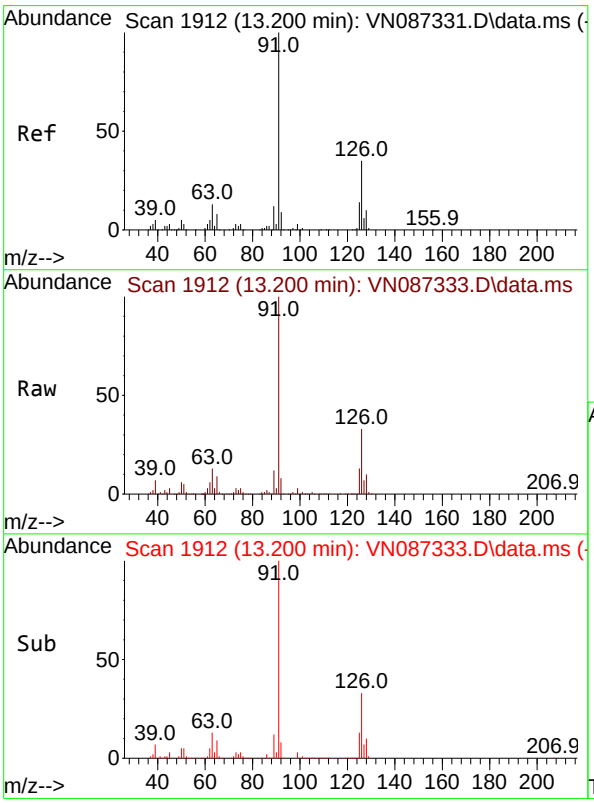
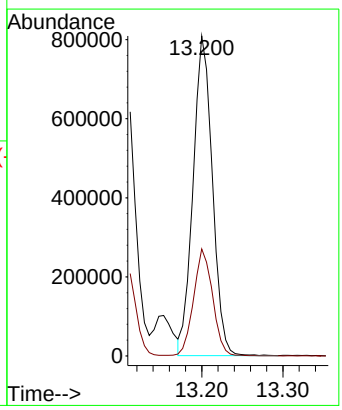


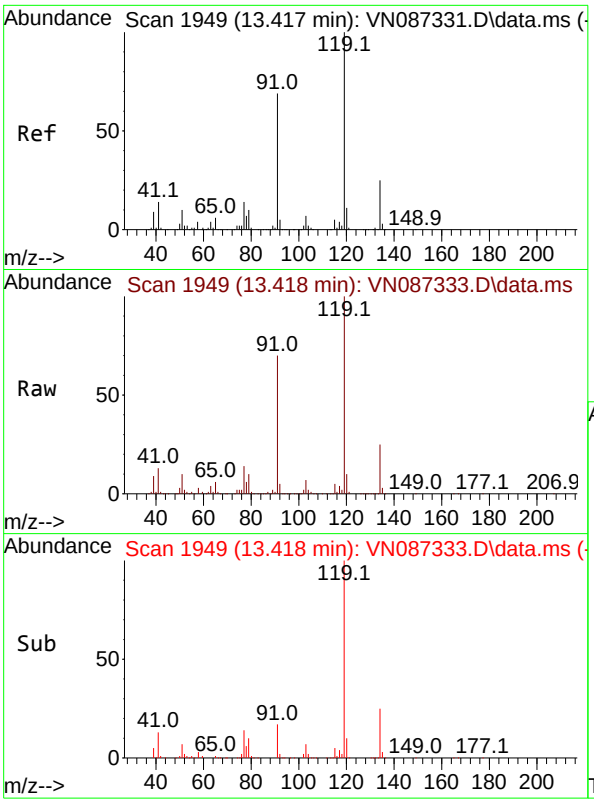


#82
4-Chlorotoluene
Concen: 159.785 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 91 Resp: 1336462

Ion	Ratio	Lower	Upper
91	100		
126	33.1	16.6	49.7

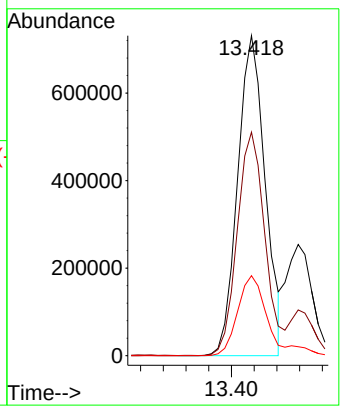




#83
tert-Butylbenzene
Concen: 166.457 ug/l
RT: 13.418 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:119 Resp: 123068

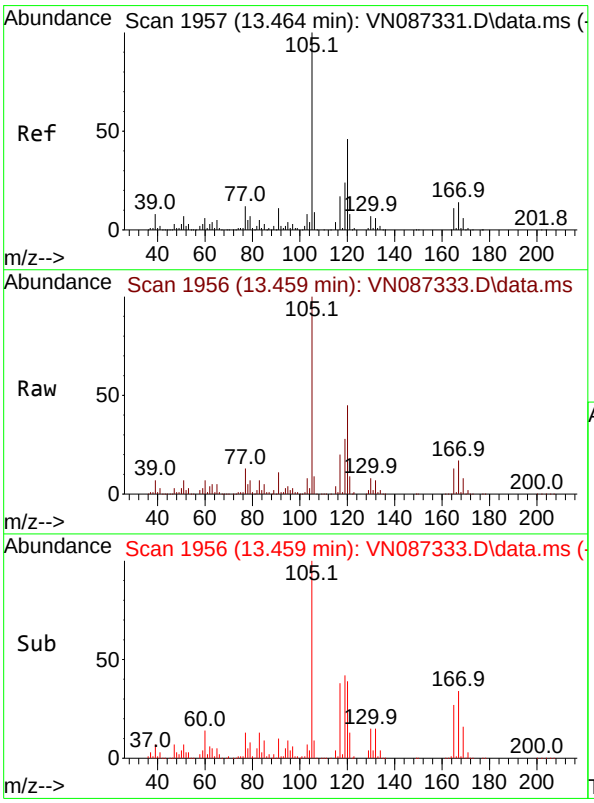
Ion	Ratio	Lower	Upper
119	100		
91	70.4	35.0	105.1
134	27.7	12.6	37.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

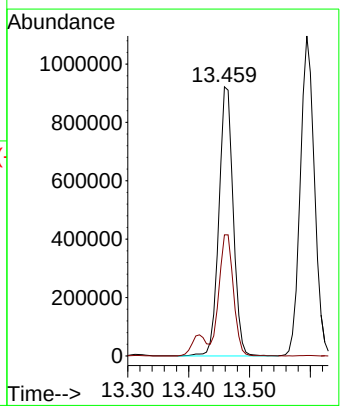
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

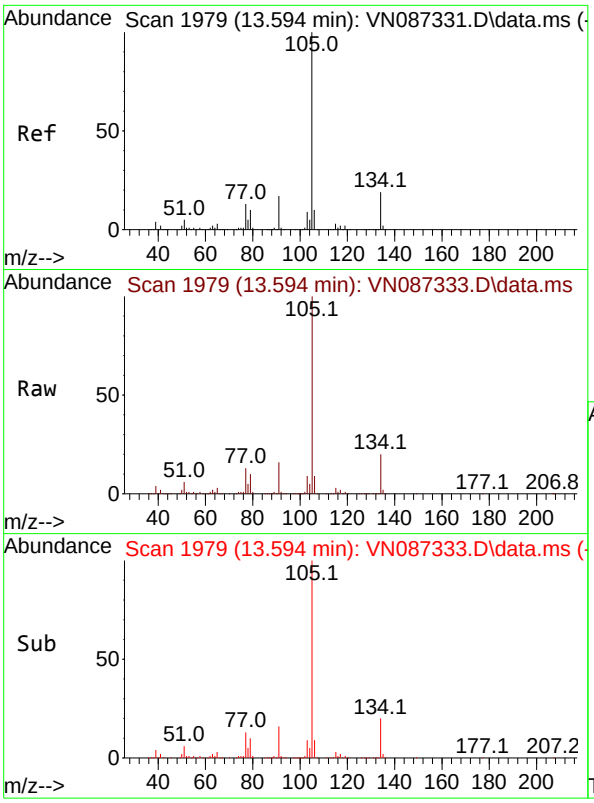


#84
1,2,4-Trimethylbenzene
Concen: 166.222 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:105 Resp: 1502651

Ion	Ratio	Lower	Upper
105	100		
120	45.2	22.8	68.3

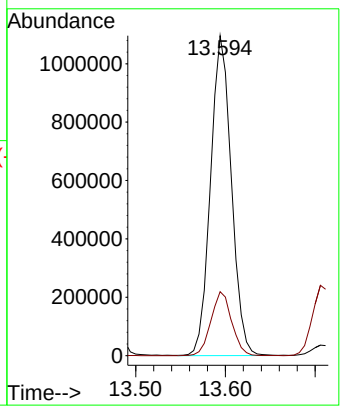




#85
sec-Butylbenzene
Concen: 158.754 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:105 Resp: 176794

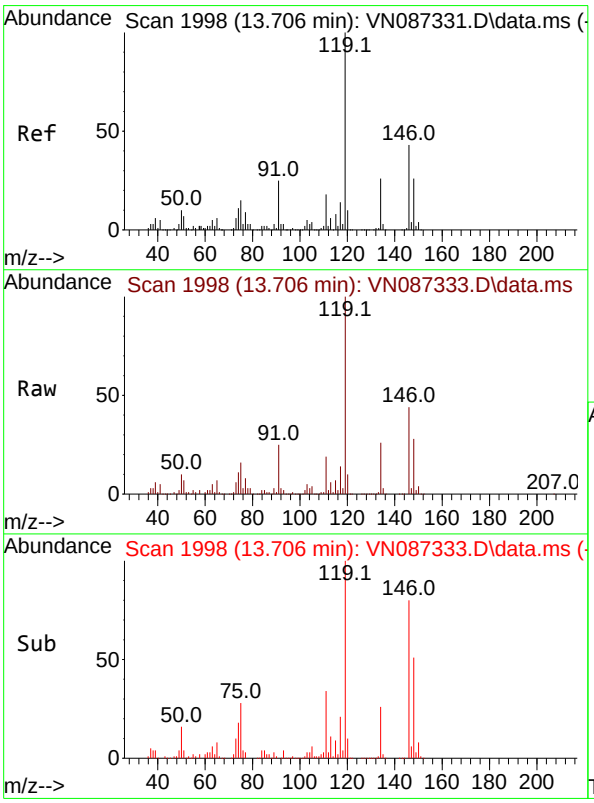
Ion	Ratio	Lower	Upper
105	100		
134	19.9	9.8	29.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

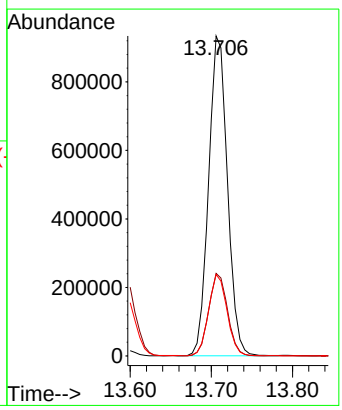
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

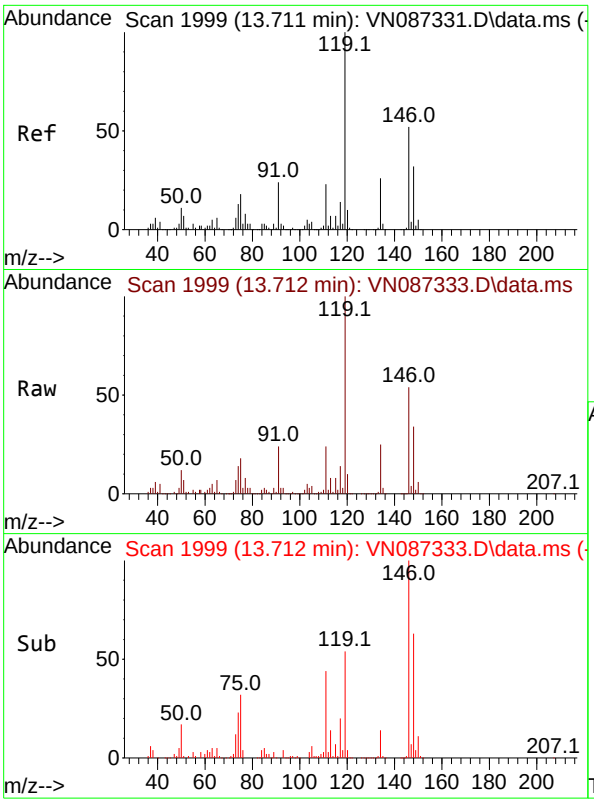


#86
p-Isopropyltoluene
Concen: 168.219 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:119 Resp: 1501303

Ion	Ratio	Lower	Upper
119	100		
134	25.8	13.5	40.5
91	25.0	12.2	36.6

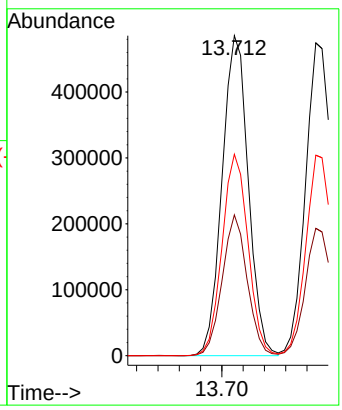




#87
1,3-Dichlorobenzene
Concen: 156.742 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:146 Resp: 82888

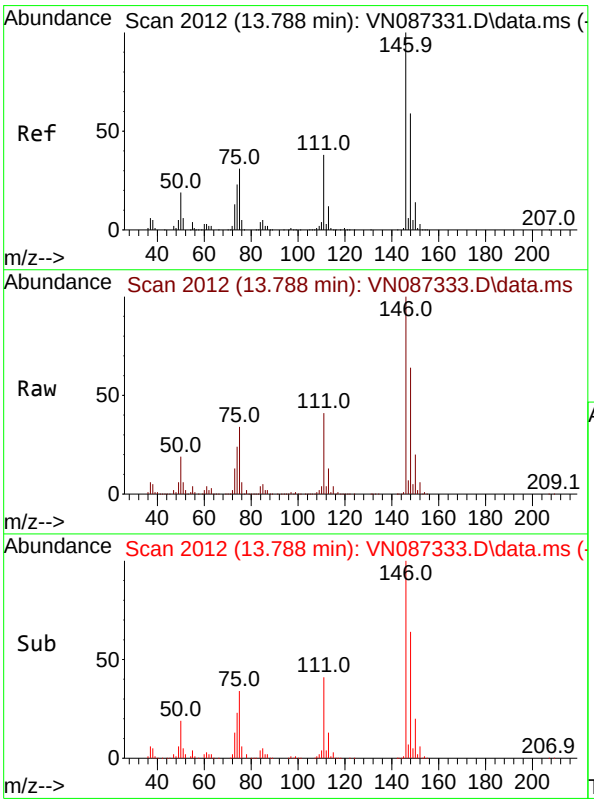
Ion	Ratio	Lower	Upper
146	100		
111	42.0	21.4	64.3
148	62.5	31.6	95.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

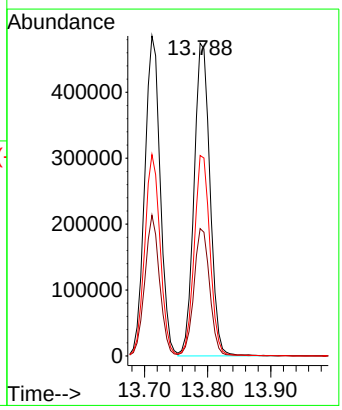
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

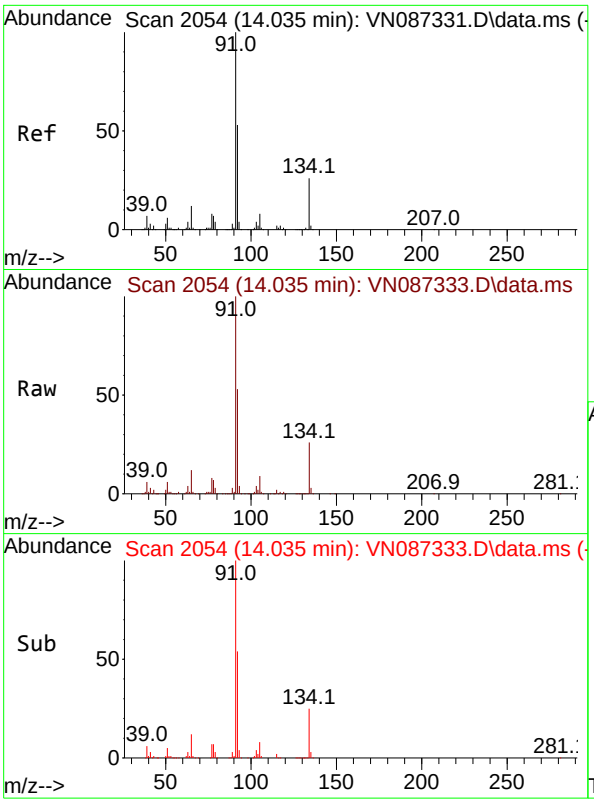


#88
1,4-Dichlorobenzene
Concen: 147.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:146 Resp: 830255

Ion	Ratio	Lower	Upper
146	100		
111	40.5	19.6	58.7
148	63.1	31.4	94.0

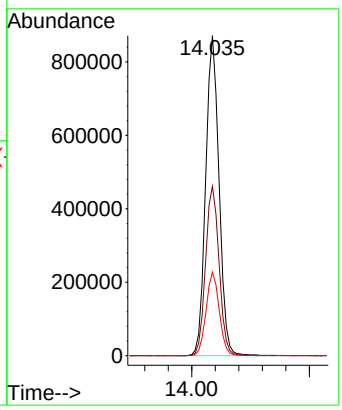




#89
n-Butylbenzene
Concen: 160.505 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 91 Resp: 136781

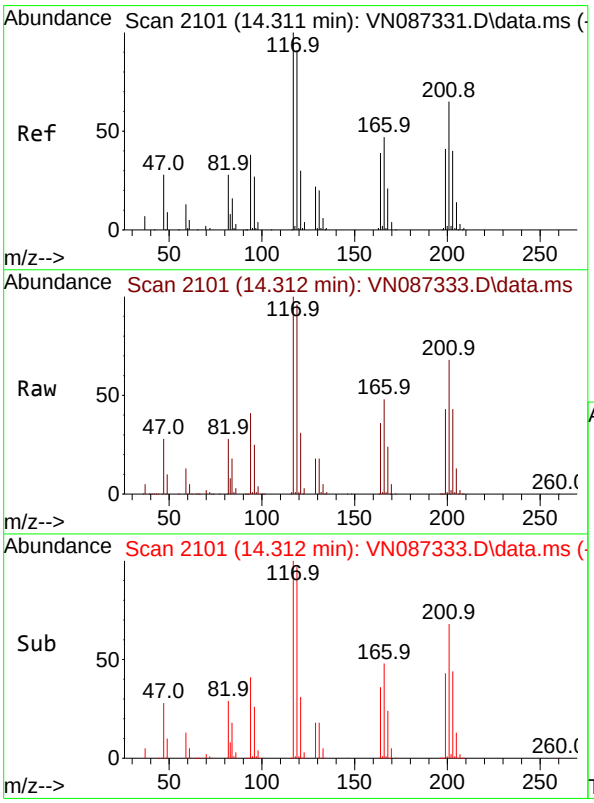
Ion	Ratio	Lower	Upper
91	100		
92	53.7	26.2	78.6
134	25.8	12.4	37.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

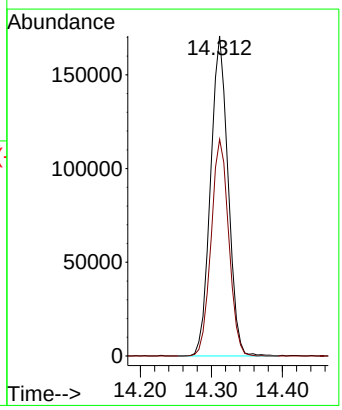
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

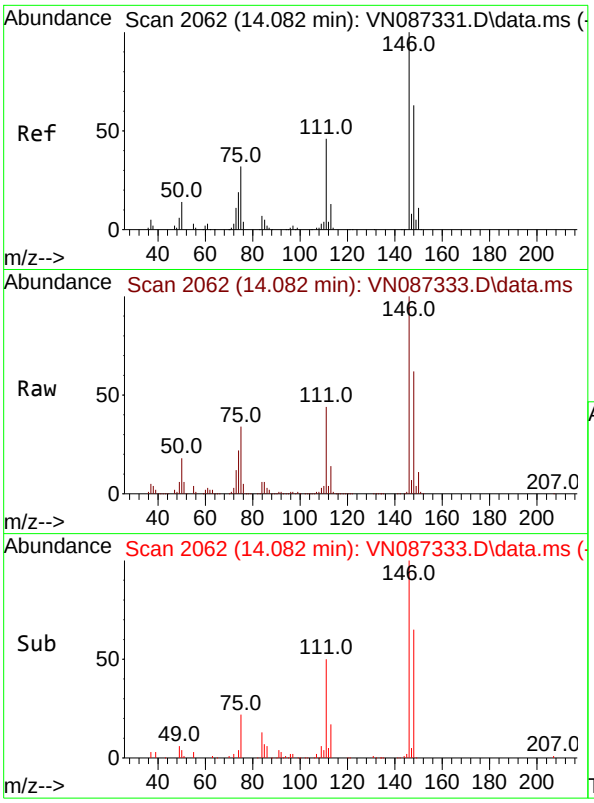


#90
Hexachloroethane
Concen: 154.518 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:117 Resp: 292183

Ion	Ratio	Lower	Upper
117	100		
201	68.0	32.8	98.4

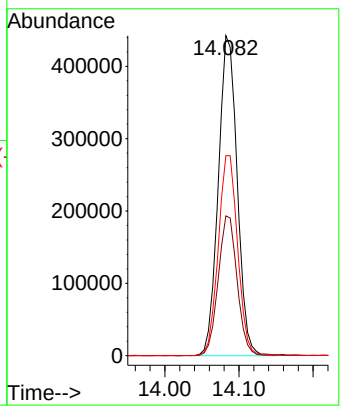




#91
1,2-Dichlorobenzene
Concen: 156.513 ug/l
RT: 14.082 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:146 Resp: 78410

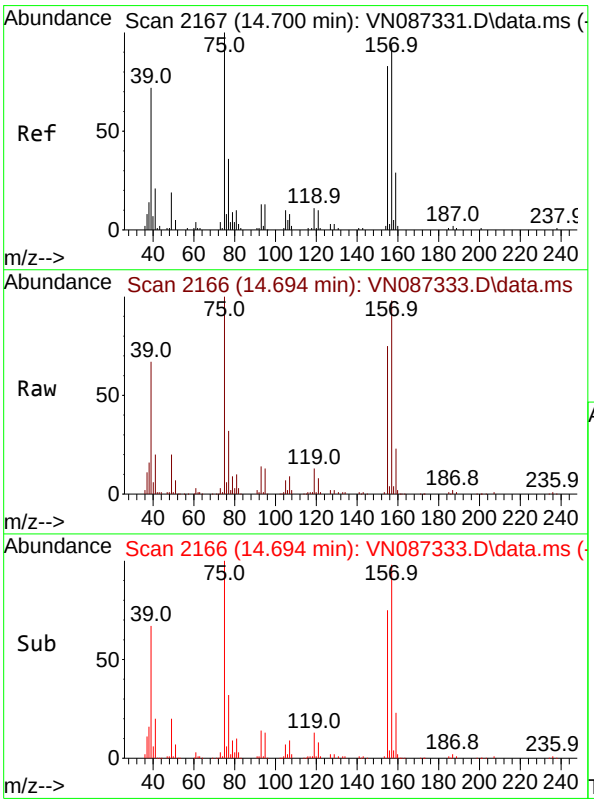
Ion	Ratio	Lower	Upper
146	100		
111	43.9	22.0	66.0
148	64.1	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

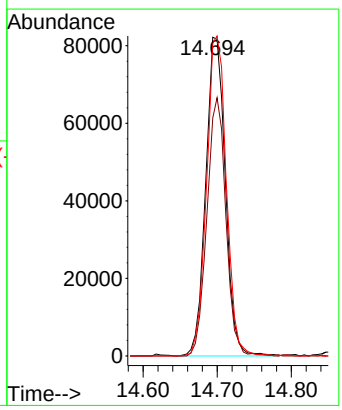
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

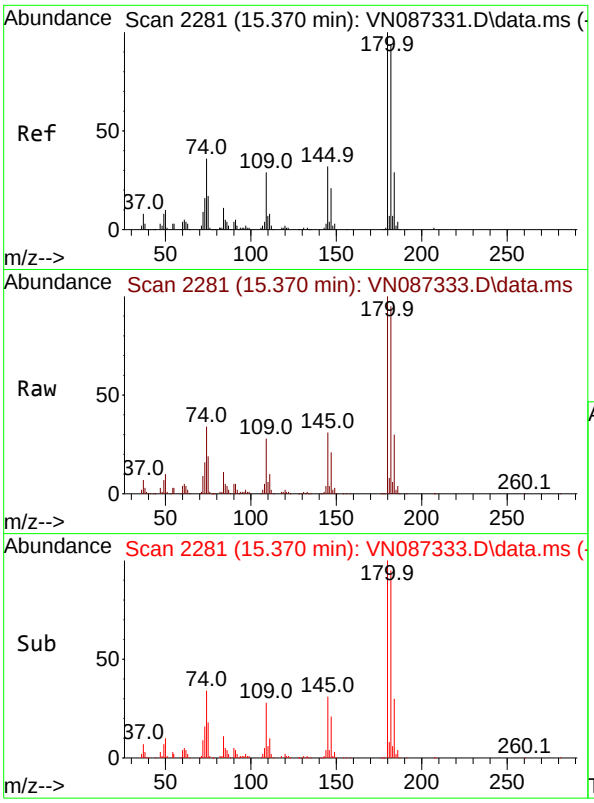


#92
1,2-Dibromo-3-Chloropropane
Concen: 147.203 ug/l
RT: 14.694 min Scan# 2166
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion: 75 Resp: 151090

Ion	Ratio	Lower	Upper
75	100		
155	78.4	37.3	111.8
157	101.0	46.2	138.6

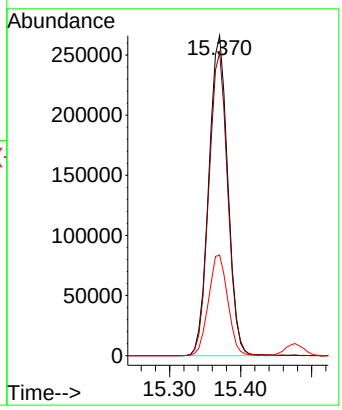




#93
1,2,4-Trichlorobenzene
Concen: 167.266 ug/l
RT: 15.370 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:180 Resp: 49223

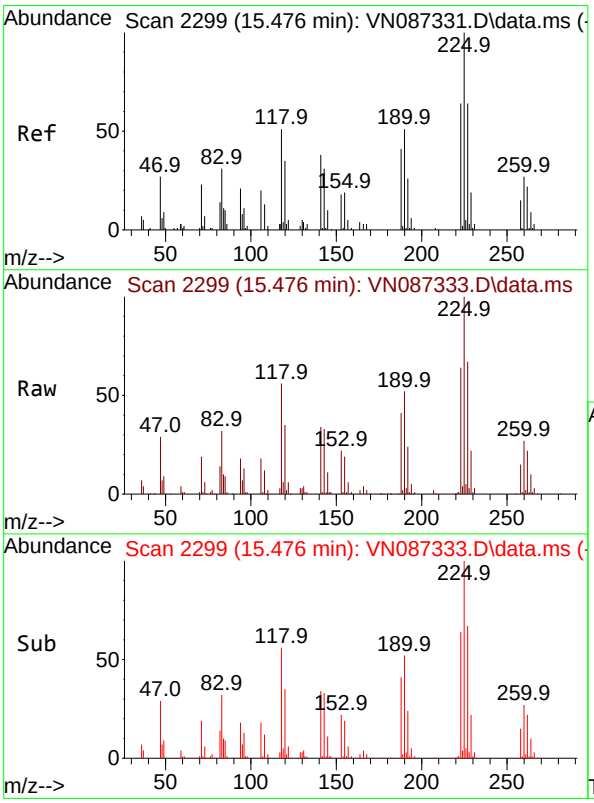
Ion	Ratio	Lower	Upper
180	100		
182	94.3	47.3	141.8
145	32.1	15.4	46.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

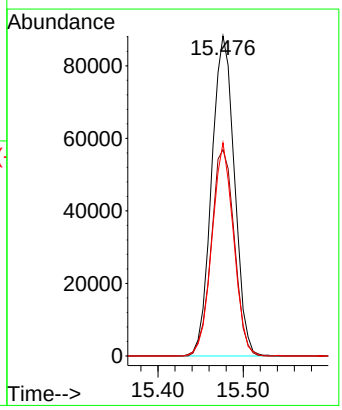
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

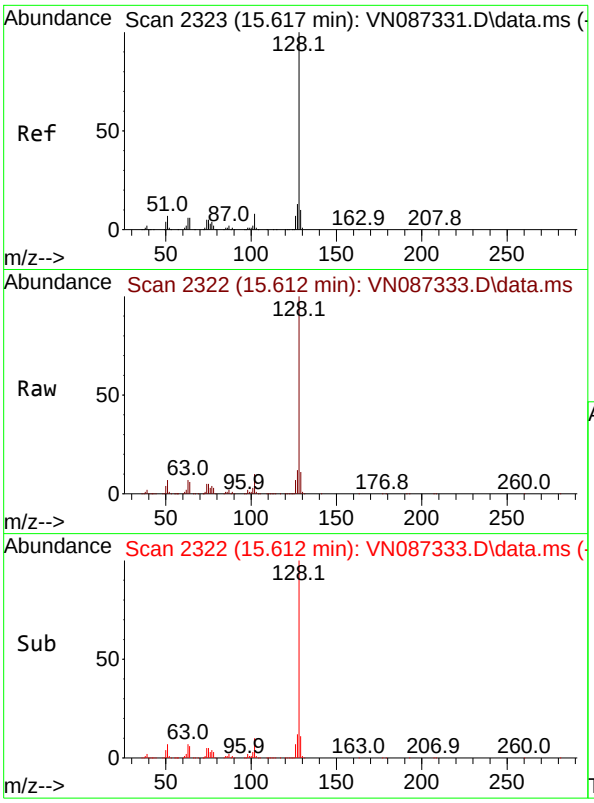


#94
Hexachlorobutadiene
Concen: 149.909 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:225 Resp: 163922

Ion	Ratio	Lower	Upper
225	100		
223	65.1	32.1	96.3
227	63.1	31.3	93.9

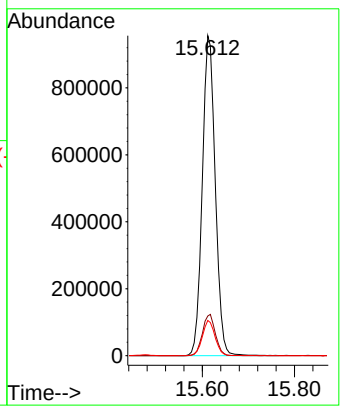




#95
Naphthalene
Concen: 180.370 ug/l
RT: 15.612 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:128 Resp: 188042

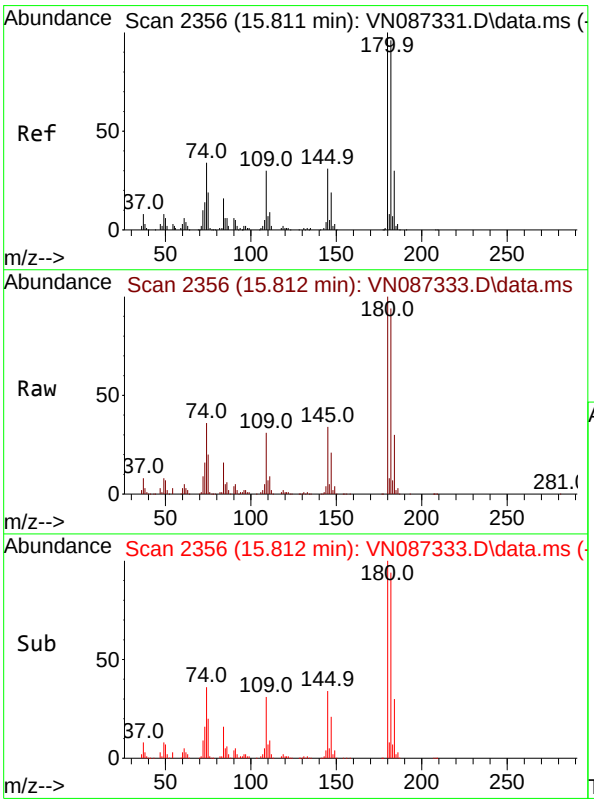
Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.5	15.7
129	10.8	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

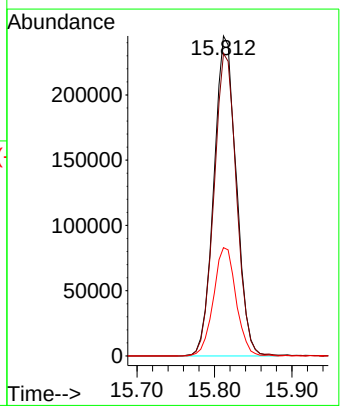
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 166.396 ug/l
RT: 15.812 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087333.D
Acq: 16 Jul 2025 18:54

Tgt Ion:180 Resp: 491195

Ion	Ratio	Lower	Upper
180	100		
182	95.2	47.1	141.4
145	34.2	16.9	50.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	198299	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	343165	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	319692	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	166959	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	162194	48.204	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 96.400%			
35) Dibromofluoromethane	8.153	113	118201	49.934	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.860%			
50) Toluene-d8	10.547	98	435474	51.573	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 103.140%			
62) 4-Bromofluorobenzene	12.829	95	165160	52.942	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 105.880%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	122218	58.029	ug/l	94
3) Chloromethane	2.383	50	135040	50.986	ug/l	99
4) Vinyl Chloride	2.542	62	141054	53.589	ug/l	93
5) Bromomethane	2.971	94	79496	58.322	ug/l	100
6) Chloroethane	3.130	64	84406	49.172	ug/l	97
7) Trichlorofluoromethane	3.506	101	192022	49.336	ug/l	93
8) Diethyl Ether	3.959	74	76789	50.861	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.365	101	98940	49.520	ug/l	99
10) Methyl Iodide	4.577	142	103627	50.369	ug/l	98
11) Tert butyl alcohol	5.530	59	167953	262.884	ug/l	99
12) 1,1-Dichloroethene	4.330	96	102861	45.432	ug/l	97
13) Acrolein	4.171	56	142098	277.145	ug/l	97
14) Allyl chloride	5.006	41	200790	49.004	ug/l	99
15) Acrylonitrile	5.706	53	437956	252.616	ug/l	99
16) Acetone	4.424	43	375335	237.913	ug/l	100
17) Carbon Disulfide	4.700	76	335264	49.947	ug/l	96
18) Methyl Acetate	5.018	43	194657	49.111	ug/l	99
19) Methyl tert-butyl Ether	5.789	73	425099	50.939	ug/l	94
20) Methylene Chloride	5.265	84	131885	49.445	ug/l	93
21) trans-1,2-Dichloroethene	5.771	96	120707	47.283	ug/l	97
22) Diisopropyl ether	6.659	45	439978	51.191	ug/l	97
23) Vinyl Acetate	6.594	43	2052885	273.101	ug/l	98
24) 1,1-Dichloroethane	6.553	63	238854	48.170	ug/l	99
25) 2-Butanone	7.477	43	622581	255.411	ug/l	98
26) 2,2-Dichloropropane	7.477	77	176180	45.700	ug/l	100
27) cis-1,2-Dichloroethene	7.471	96	148552	50.543	ug/l	96
28) Bromochloromethane	7.800	49	116494	49.089	ug/l	98
29) Tetrahydrofuran	7.830	42	412353	260.404	ug/l	100
30) Chloroform	7.947	83	239752	48.306	ug/l	100
31) Cyclohexane	8.241	56	202863	49.042	ug/l	96
32) 1,1,1-Trichloroethane	8.153	97	212405	49.412	ug/l	99
36) 1,1-Dichloropropene	8.353	75	167912	53.690	ug/l	99
37) Ethyl Acetate	7.553	43	241759	53.525	ug/l	99
38) Carbon Tetrachloride	8.347	117	181974	52.821	ug/l	90
39) Methylcyclohexane	9.582	83	179820	53.109	ug/l	96
40) Benzene	8.588	78	529446	52.380	ug/l	96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	127286	53.895	ug/l		98
42) 1,2-Dichloroethane	8.653	62	194804	50.821	ug/l		98
43) Isopropyl Acetate	8.677	43	374957	53.477	ug/l		100
44) Trichloroethene	9.335	130	118775	49.731	ug/l		95
45) 1,2-Dichloropropane	9.606	63	135864	52.900	ug/l		99
46) Dibromomethane	9.688	93	98534	51.241	ug/l		98
47) Bromodichloromethane	9.871	83	200236	51.696	ug/l		97
48) Methyl methacrylate	9.665	41	177068	56.096	ug/l		99
49) 1,4-Dioxane	9.682	88	56917	1177.300	ug/l	#	97
51) 4-Methyl-2-Pentanone	10.429	43	1192765	268.966	ug/l		99
52) Toluene	10.612	92	320922	52.236	ug/l		97
53) t-1,3-Dichloropropene	10.818	75	214141	54.628	ug/l		97
54) cis-1,3-Dichloropropene	10.294	75	216023	53.351	ug/l		96
55) 1,1,2-Trichloroethane	11.000	97	124090	49.889	ug/l		97
56) Ethyl methacrylate	10.859	69	222410	53.042	ug/l		98
57) 1,3-Dichloropropane	11.147	76	224493	52.202	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	581689	285.088	ug/l		99
59) 2-Hexanone	11.176	43	849057	288.579	ug/l		100
60) Dibromochloromethane	11.341	129	149449	52.685	ug/l		100
61) 1,2-Dibromoethane	11.447	107	135330	51.746	ug/l		94
64) Tetrachloroethene	11.082	164	98391	47.819	ug/l		97
65) Chlorobenzene	11.870	112	347934	48.477	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.941	131	123321	50.530	ug/l		99
67) Ethyl Benzene	11.947	91	608779	51.523	ug/l		99
68) m/p-Xylenes	12.053	106	465762	105.269	ug/l		97
69) o-Xylene	12.376	106	224934	53.221	ug/l		99
70) Styrene	12.394	104	387319	54.477	ug/l		98
71) Bromoform	12.559	173	102502	51.987	ug/l	#	99
73) Isopropylbenzene	12.676	105	573938	54.619	ug/l		100
74) N-amyl acetate	12.494	43	218170m	49.972	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.917	83	203947	51.580	ug/l		98
76) 1,2,3-Trichloropropane	12.976	75	175797m	46.955	ug/l		
77) Bromobenzene	12.959	156	142714	52.368	ug/l		99
78) n-propylbenzene	13.012	91	709437	53.661	ug/l		99
79) 2-Chlorotoluene	13.106	91	426373	52.475	ug/l		99
80) 1,3,5-Trimethylbenzene	13.153	105	484100	54.071	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.717	75	69894	51.080	ug/l		97
82) 4-Chlorotoluene	13.200	91	443817	52.464	ug/l		99
83) tert-Butylbenzene	13.417	119	413882	55.349	ug/l		98
84) 1,2,4-Trimethylbenzene	13.459	105	500792	54.773	ug/l		99
85) sec-Butylbenzene	13.594	105	594712	52.800	ug/l		98
86) p-Isopropyltoluene	13.706	119	496291	54.982	ug/l		99
87) 1,3-Dichlorobenzene	13.712	146	277102	51.809	ug/l		99
88) 1,4-Dichlorobenzene	13.788	146	282084	49.381	ug/l		99
89) n-Butylbenzene	14.035	91	458964	53.250	ug/l		99
90) Hexachloroethane	14.312	117	93464	48.870	ug/l		95
91) 1,2-Dichlorobenzene	14.088	146	260874	51.485	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.700	75	50904	49.035	ug/l		97
93) 1,2,4-Trichlorobenzene	15.370	180	155818	52.351	ug/l		99
94) Hexachlorobutadiene	15.476	225	55599	50.273	ug/l		98
95) Naphthalene	15.617	128	586097	55.585	ug/l		98
96) 1,2,3-Trichlorobenzene	15.811	180	157909	52.890	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
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Instrument :
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ClientSampleId :
ICVVN071625

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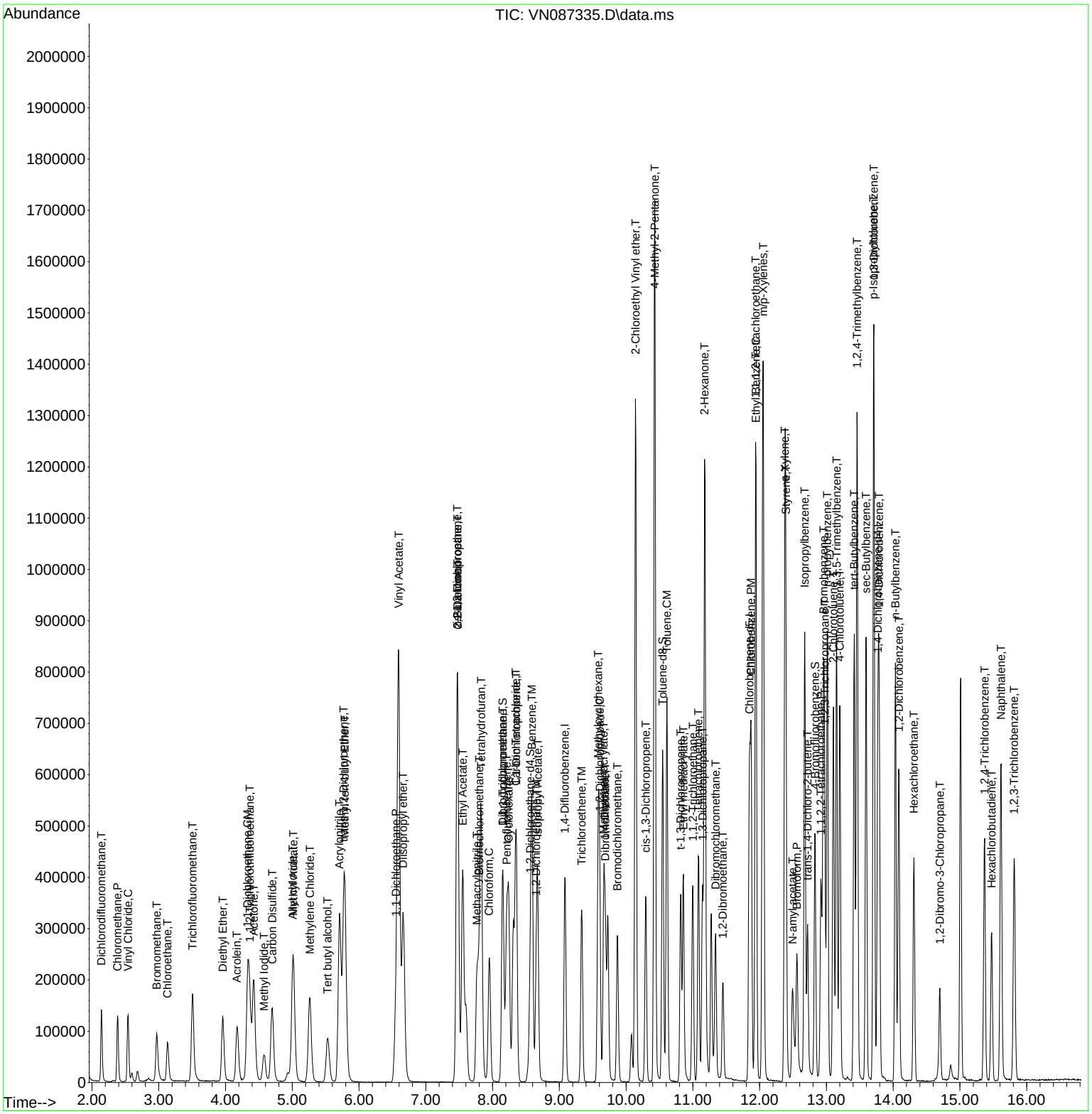

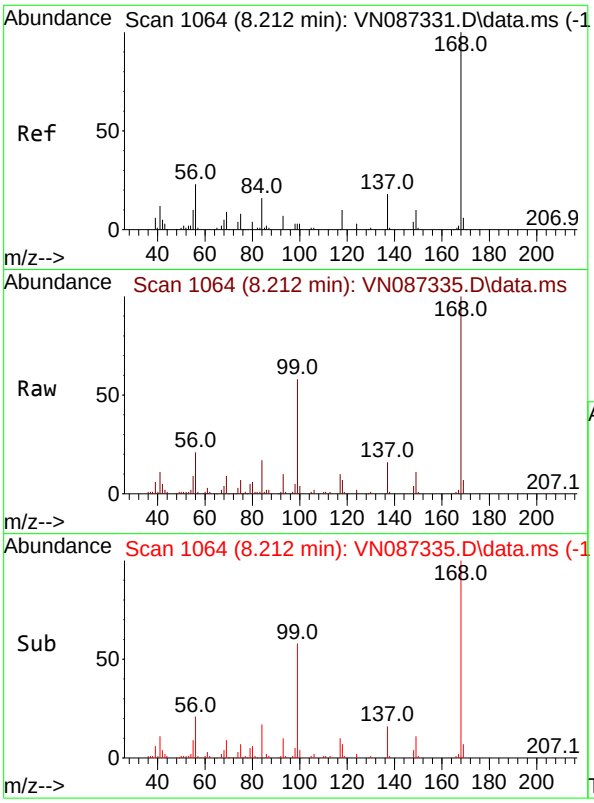

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:168 Resp: 19829

Ion	Ratio	Lower	Upper
168	100		
99	57.5	47.9	71.9

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
APPROVED

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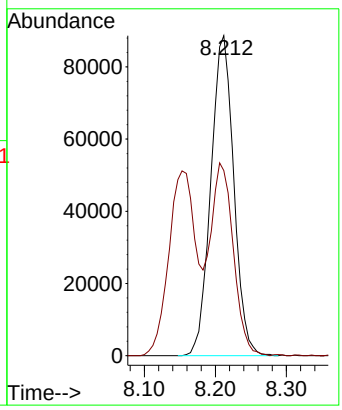
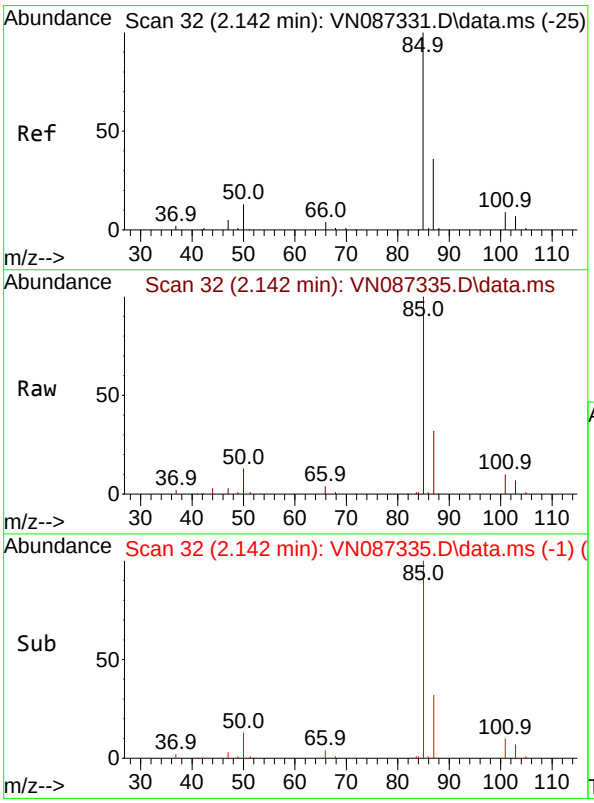
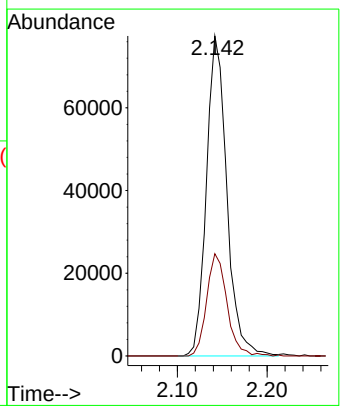


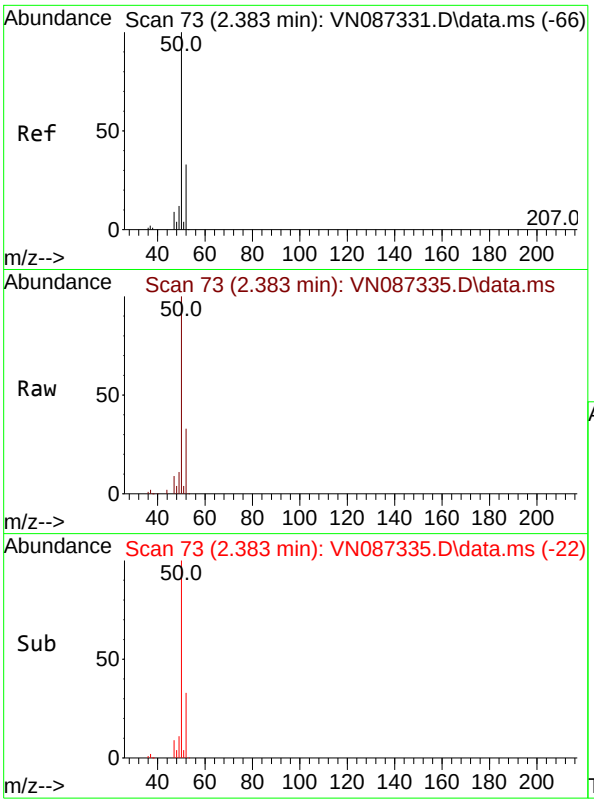


#2
Dichlorodifluoromethane
Concen: 58.029 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 85 Resp: 122218

Ion	Ratio	Lower	Upper
85	100		
87	32.0	17.8	53.3





#3
Chloromethane
Concen: 50.986 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 50 Resp: 13504

Ion	Ratio	Lower	Upper
50	100		
52	33.3	26.3	39.5

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
APPROVED

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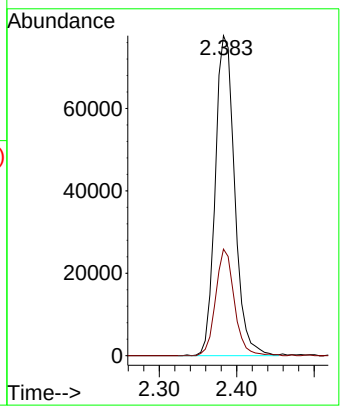
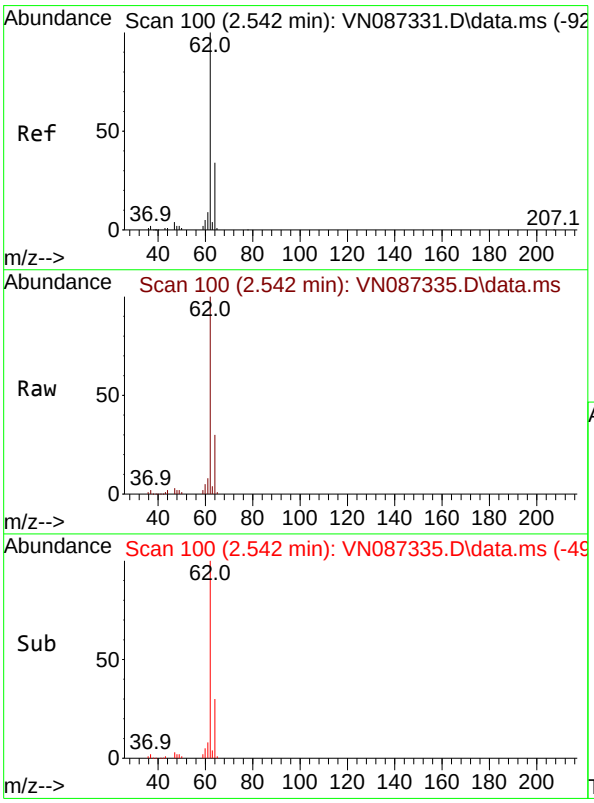
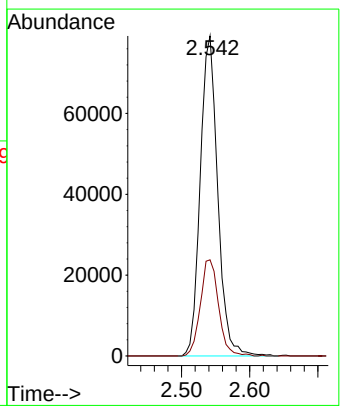


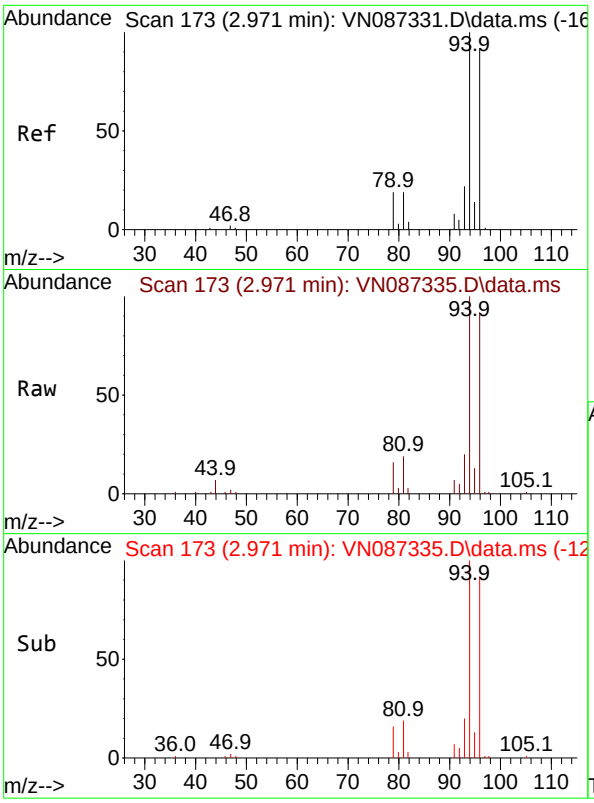


#4
Vinyl Chloride
Concen: 53.589 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 62 Resp: 141054

Ion	Ratio	Lower	Upper
62	100		
64	30.0	27.0	40.6





#5
Bromomethane
Concen: 58.322 ug/l
RT: 2.971 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 94 Resp: 7949

Ion	Ratio	Lower	Upper
94	100		
96	92.2	73.4	110.2

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
APPROVED

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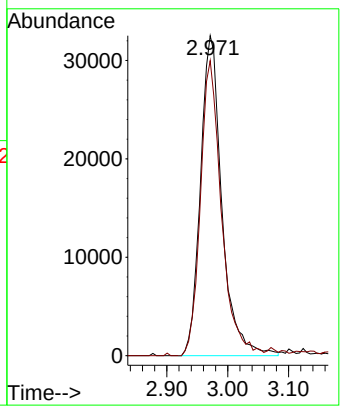
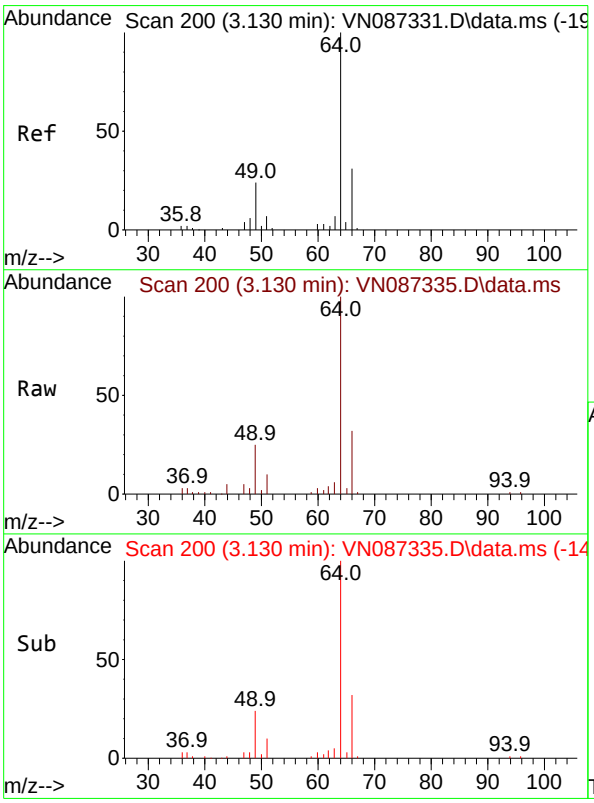
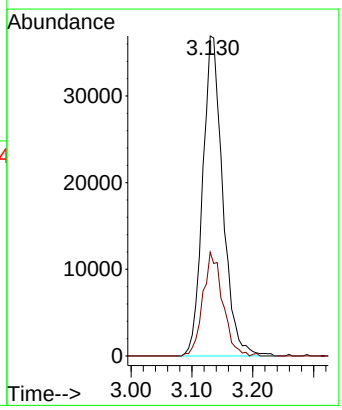


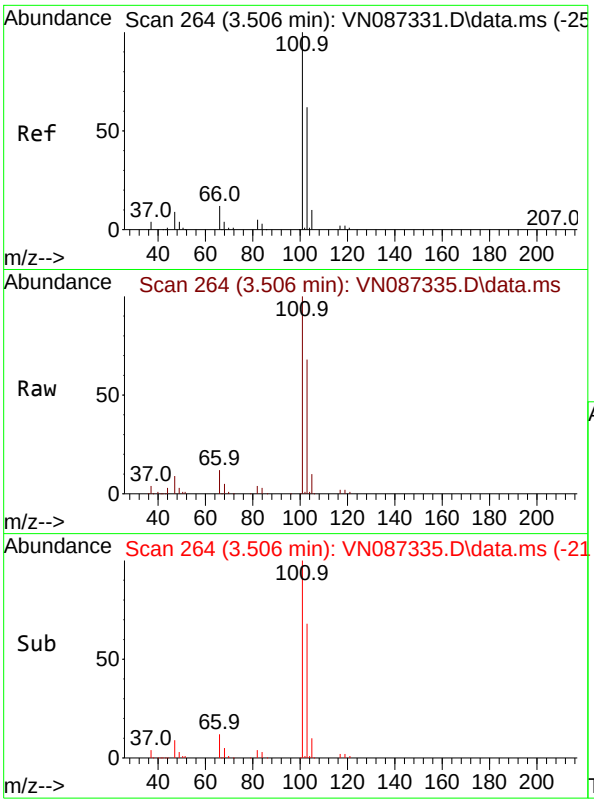


#6
Chloroethane
Concen: 49.172 ug/l
RT: 3.130 min Scan# 200
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 64 Resp: 84406

Ion	Ratio	Lower	Upper
64	100		
66	32.5	24.6	36.8

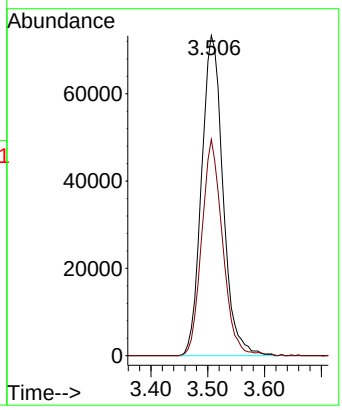




#7
Trichlorofluoromethane
Concen: 49.336 ug/l
RT: 3.506 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:101 Resp: 19202

Ion	Ratio	Lower	Upper
101	100		
103	67.6	49.8	74.6



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
APPROVED

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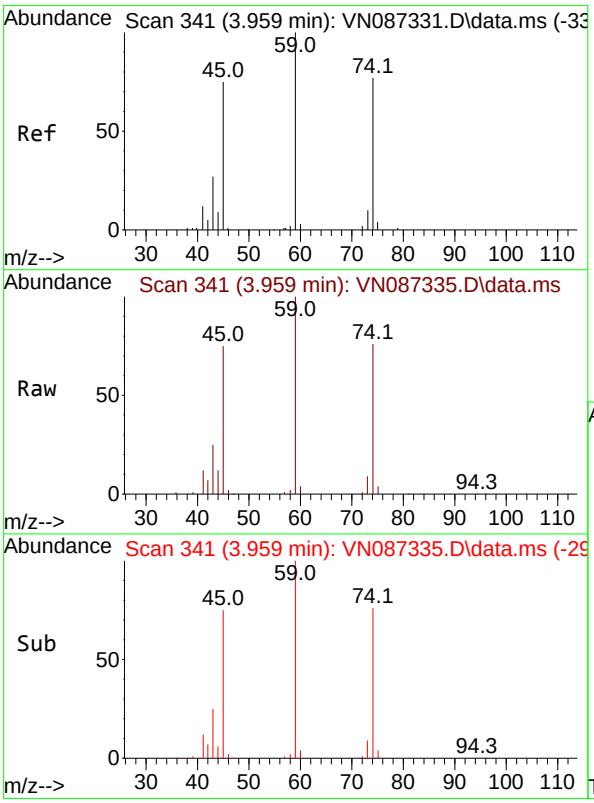
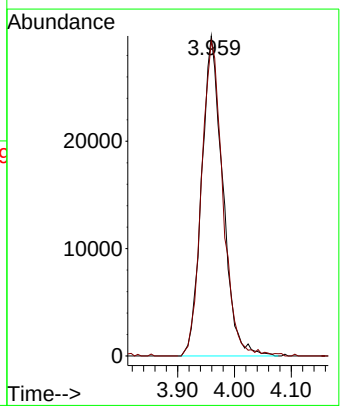
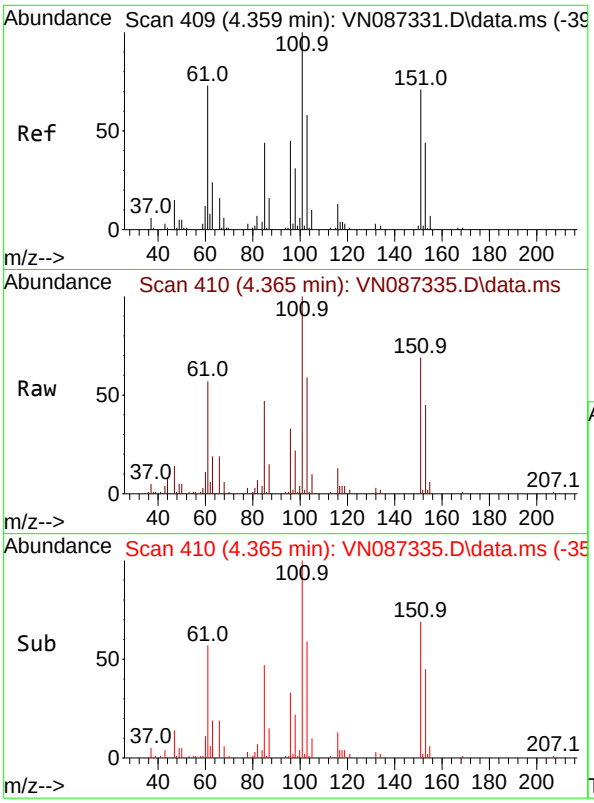


#8
Diethyl Ether
Concen: 50.861 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 74 Resp: 76789

Ion	Ratio	Lower	Upper
74	100		
45	99.6	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 49.520 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:101 Resp: 9894

Ion	Ratio	Lower	Upper
101	100		
85	46.6	37.3	55.9
151	72.5	58.9	88.3

Instrument :
MSVOA_N
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Manual Integrations
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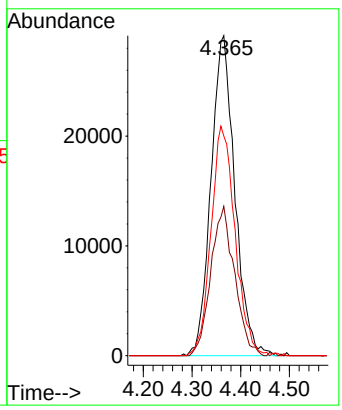
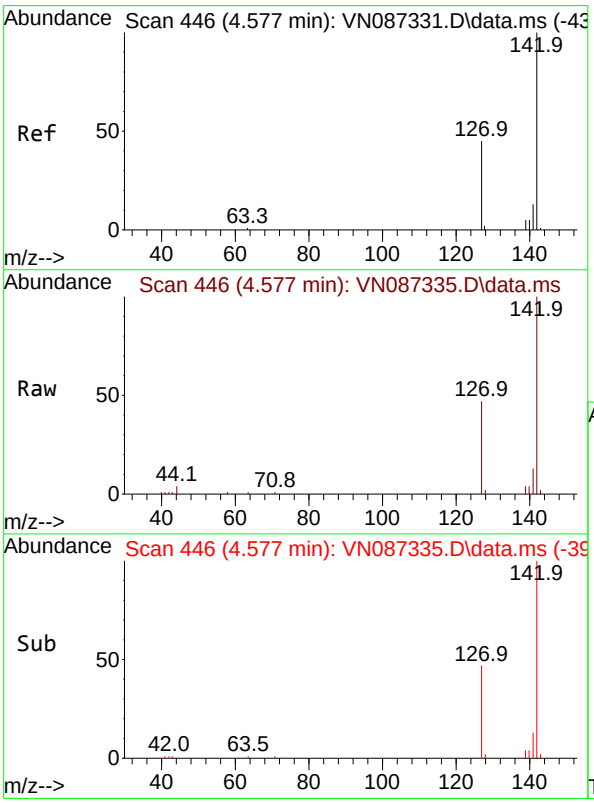
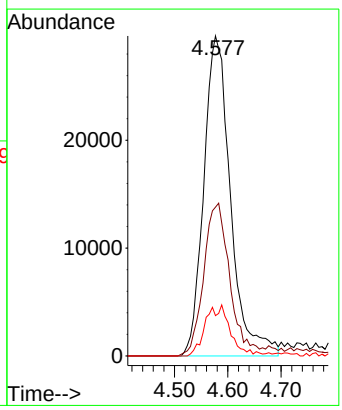


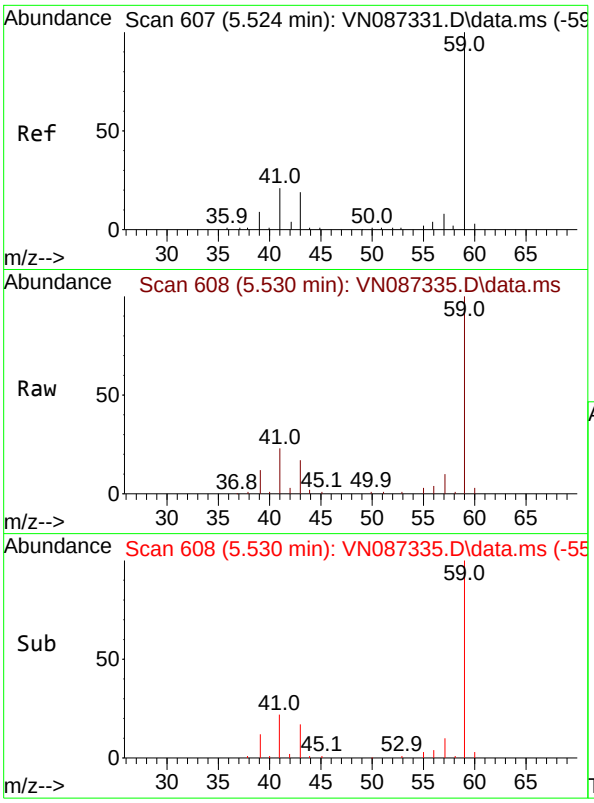


#10
Methyl Iodide
Concen: 50.369 ug/l
RT: 4.577 min Scan# 446
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:142 Resp: 103627

Ion	Ratio	Lower	Upper
142	100		
127	46.5	35.7	53.5
141	12.6	10.4	15.6

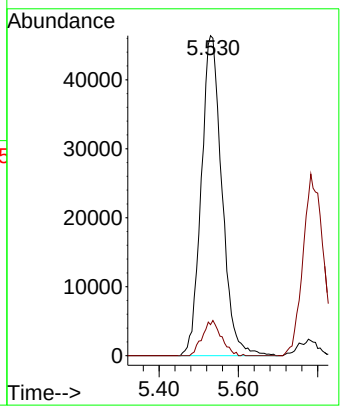




#11
Tert butyl alcohol
Concen: 262.884 ug/l
RT: 5.530 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 59 Resp: 16795

Ion	Ratio	Lower	Upper
59	100		
57	10.0	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
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Manual Integrations
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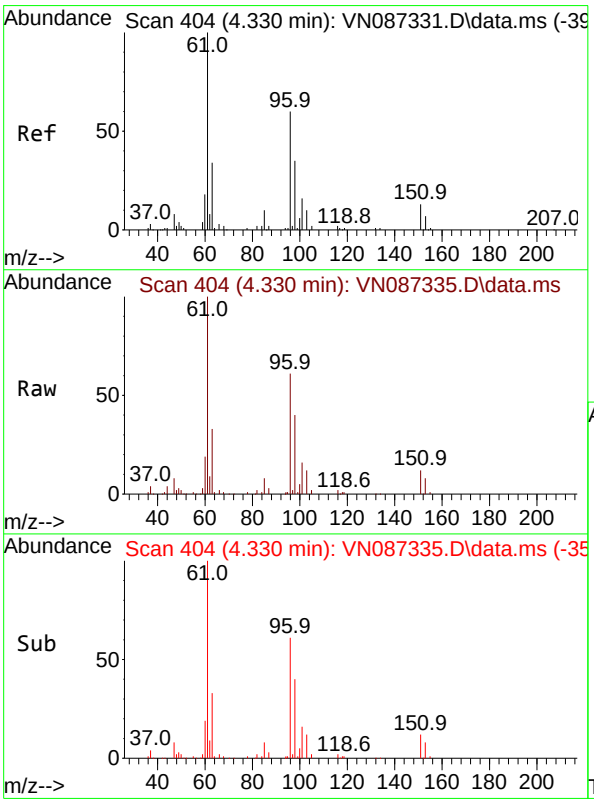
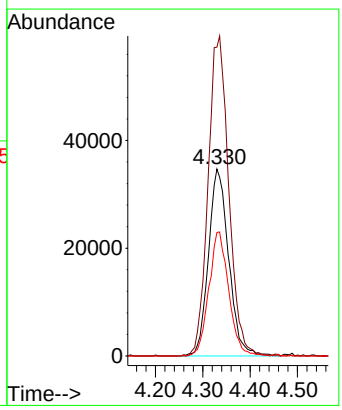
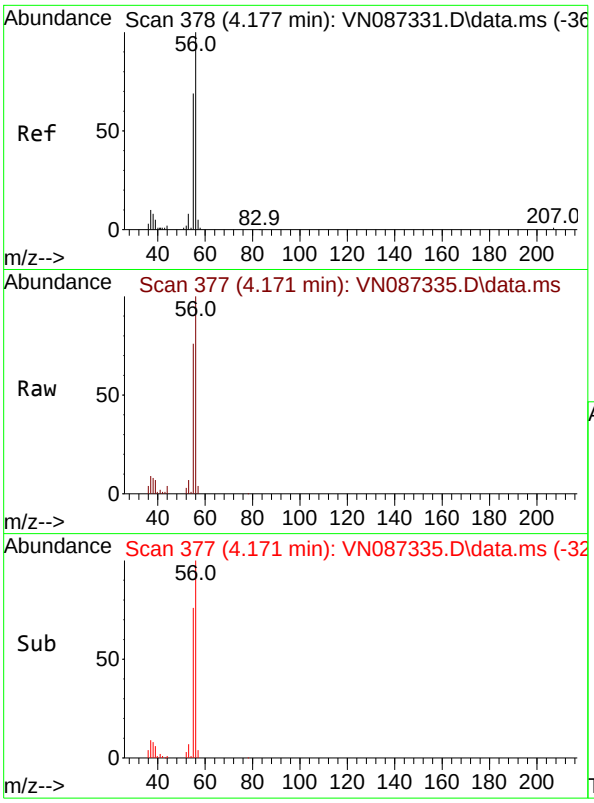


#12
1,1-Dichloroethene
Concen: 45.432 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 96 Resp: 102861

Ion	Ratio	Lower	Upper
96	100		
61	165.3	132.3	198.5
98	66.1	46.8	70.2

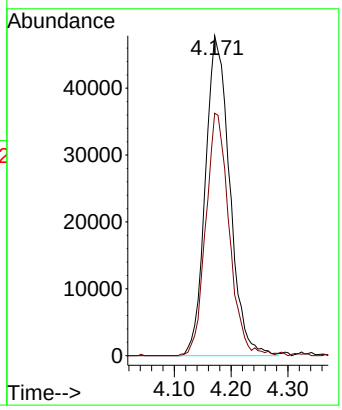




#13
Acrolein
Concen: 277.145 ug/l
RT: 4.171 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 56 Resp: 14209

Ion	Ratio	Lower	Upper
56	100		
55	72.9	56.2	84.4



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
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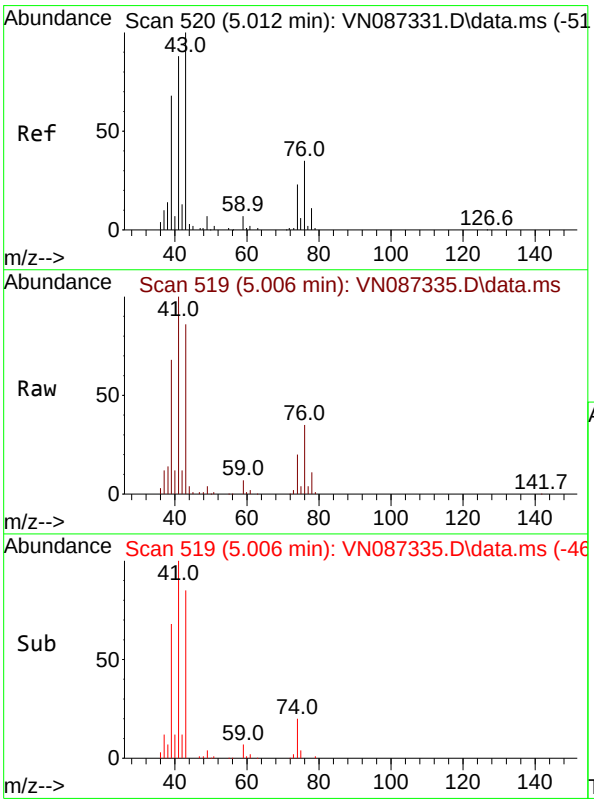
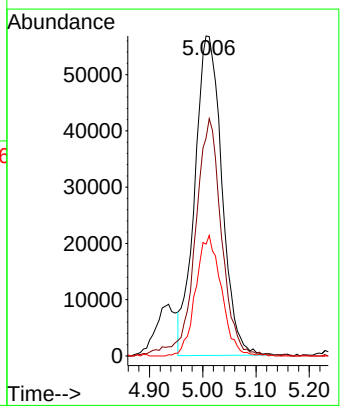
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

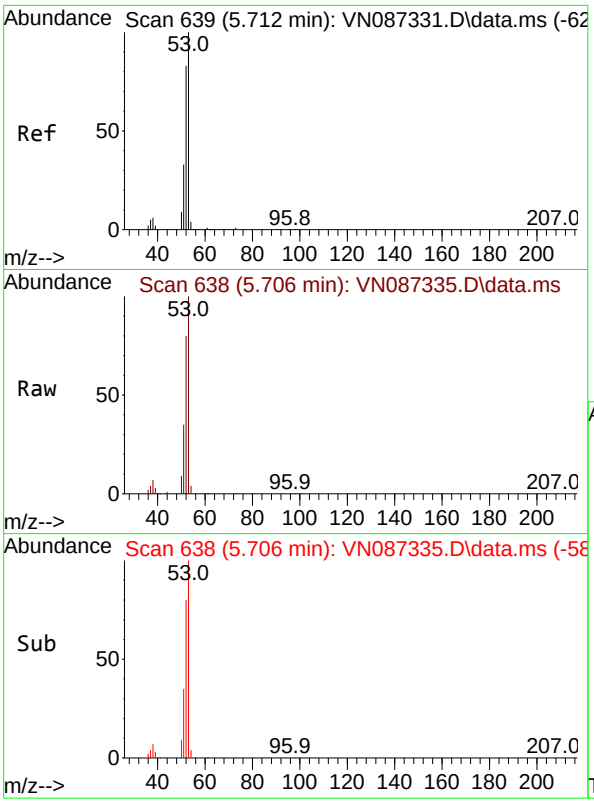


#14
Allyl chloride
Concen: 49.004 ug/l
RT: 5.006 min Scan# 519
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 41 Resp: 200790

Ion	Ratio	Lower	Upper
41	100		
39	72.4	59.0	88.6
76	35.6	28.7	43.1

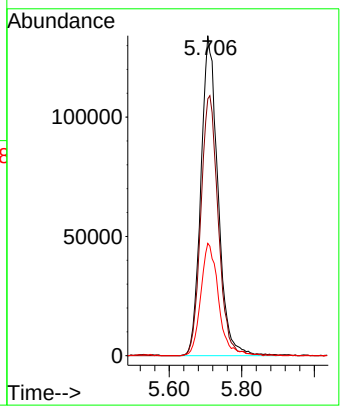




#15
Acrylonitrile
Concen: 252.616 ug/l
RT: 5.706 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 53 Resp: 43795

Ion	Ratio	Lower	Upper
53	100		
52	82.7	65.5	98.3
51	36.6	28.7	43.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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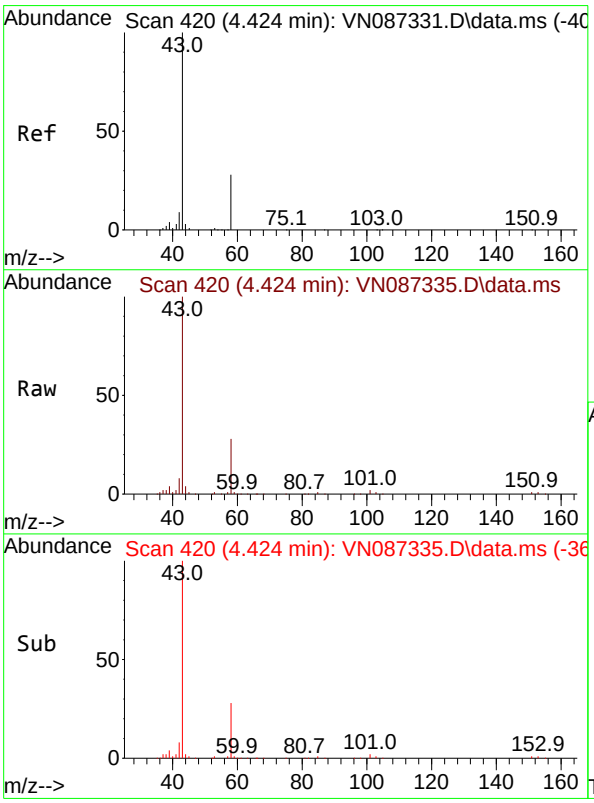
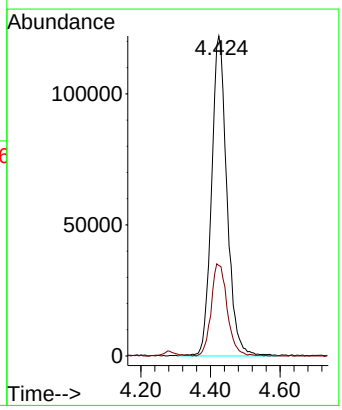
Supervised By :Semsettin Yesilyurt 07/17/2025

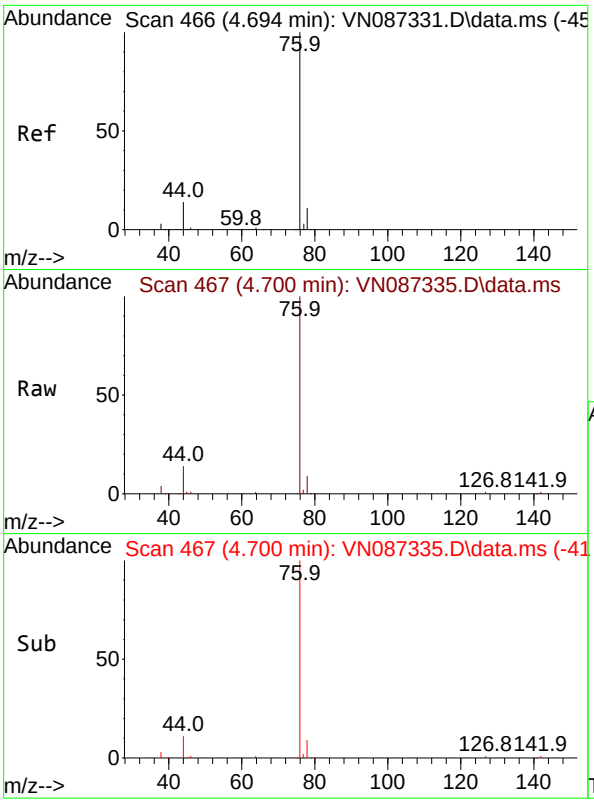


#16
Acetone
Concen: 237.913 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 375335

Ion	Ratio	Lower	Upper
43	100		
58	28.1	22.3	33.5





#17
Carbon Disulfide
Concen: 49.947 ug/l
RT: 4.700 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 76 Resp: 33526

Ion	Ratio	Lower	Upper
76	100		
78	9.3	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
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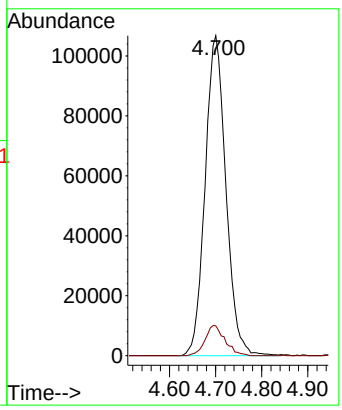
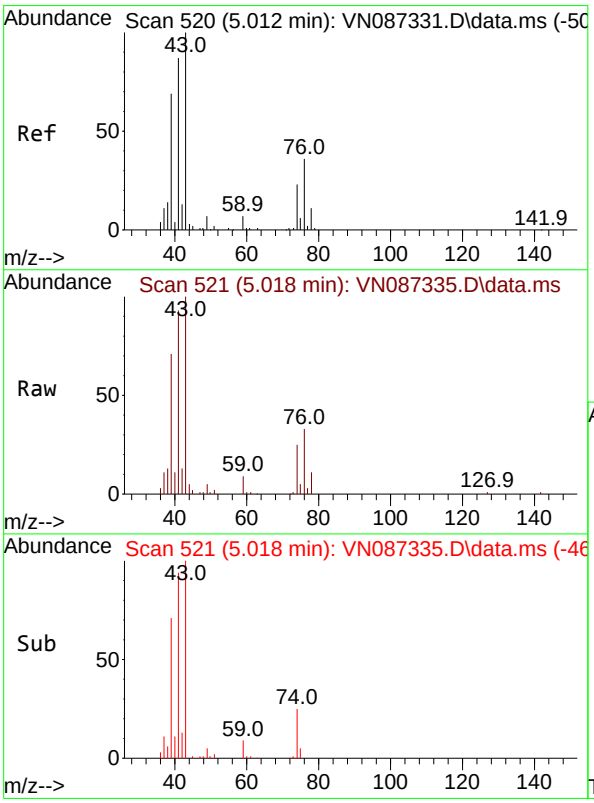
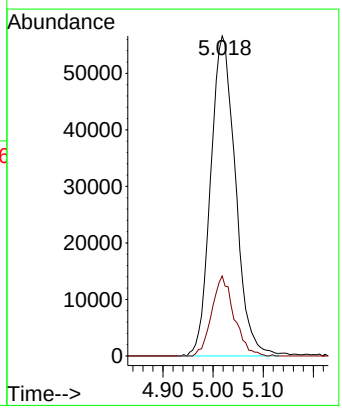


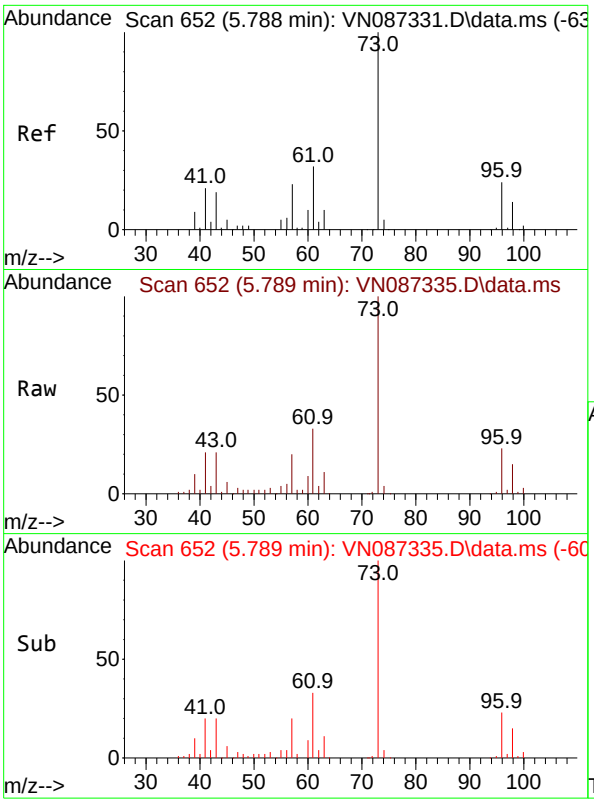


#18
Methyl Acetate
Concen: 49.111 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 194657

Ion	Ratio	Lower	Upper
43	100		
74	22.5	17.8	26.6





#19
Methyl tert-butyl Ether
Concen: 50.939 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 73 Resp: 42509

Ion	Ratio	Lower	Upper
73	100		
57	20.2	18.6	27.8

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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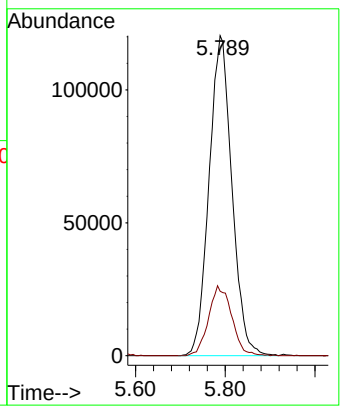
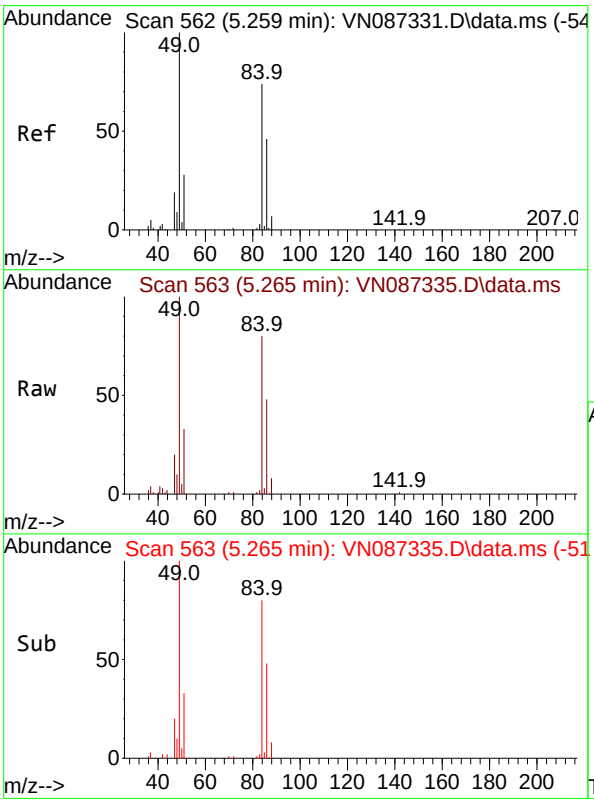
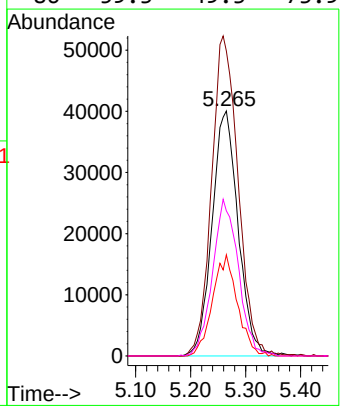


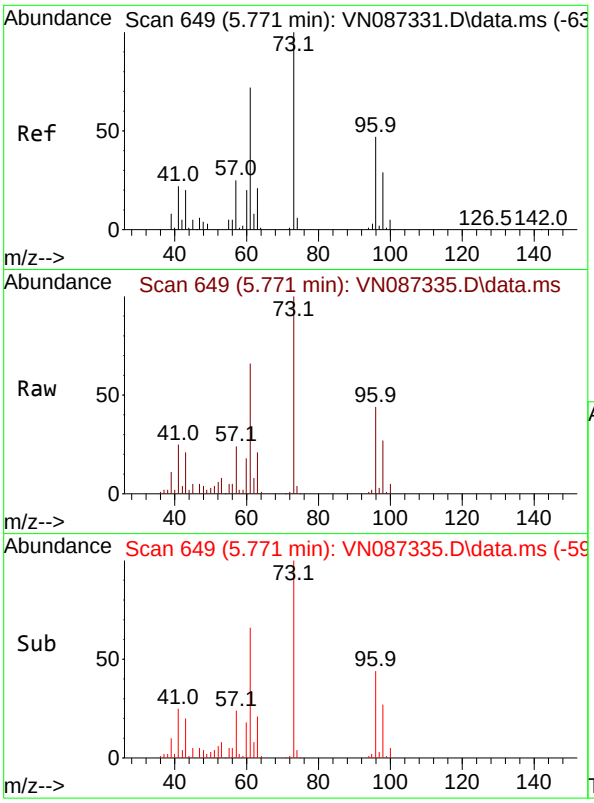


#20
Methylene Chloride
Concen: 49.445 ug/l
RT: 5.265 min Scan# 563
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 84 Resp: 131885

Ion	Ratio	Lower	Upper
84	100		
49	124.5	107.5	161.3
51	41.3	30.2	45.2
86	59.3	49.3	73.9





#21
trans-1,2-Dichloroethene
Concen: 47.283 ug/l
RT: 5.771 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 96 Resp: 12070

Ion	Ratio	Lower	Upper
96	100		
61	148.5	122.0	183.0
98	61.3	50.0	75.0

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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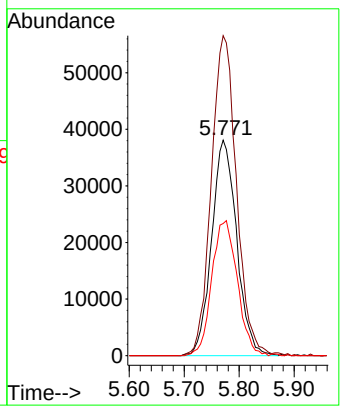
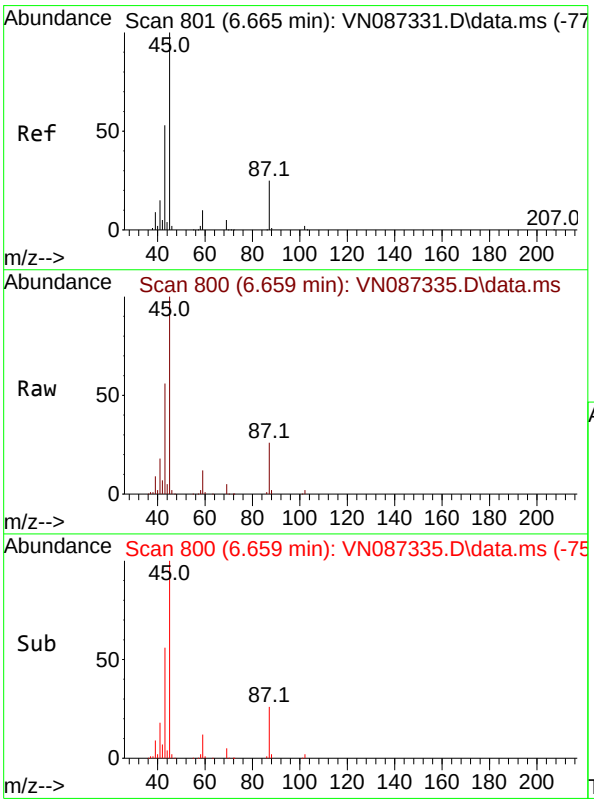
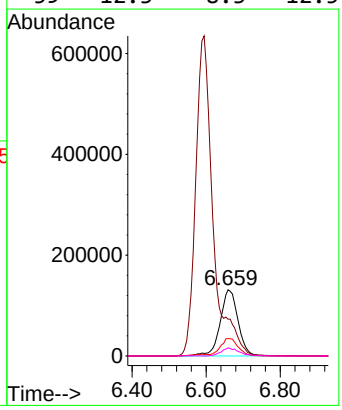


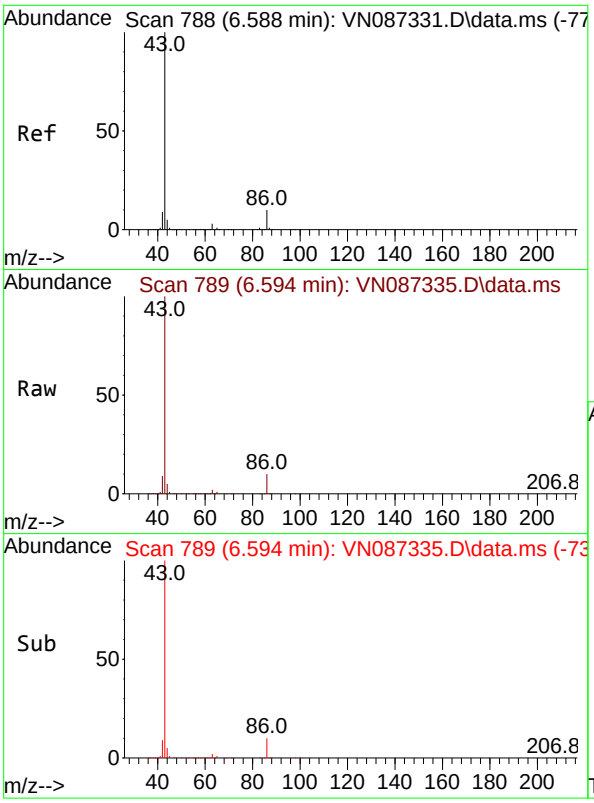


#22
Diisopropyl ether
Concen: 51.191 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 45 Resp: 439978

Ion	Ratio	Lower	Upper
45	100		
43	55.2	42.8	64.2
87	26.3	19.8	29.6
59	12.3	8.3	12.5





#23
Vinyl Acetate
Concen: 273.101 ug/l
RT: 6.594 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 205288

Ion	Ratio	Lower	Upper
43	100		
86	10.2	7.7	11.5

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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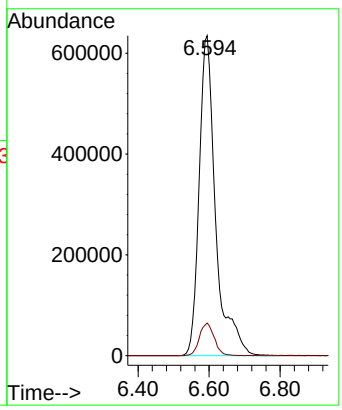
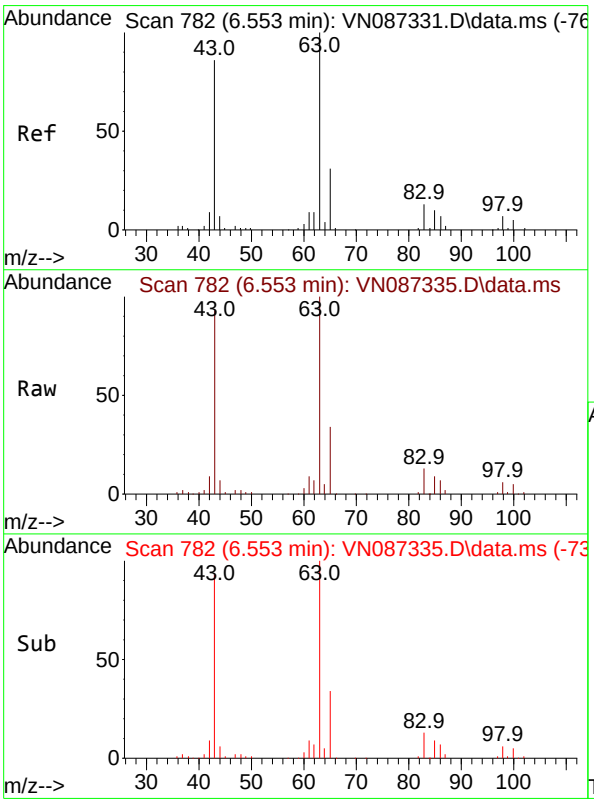
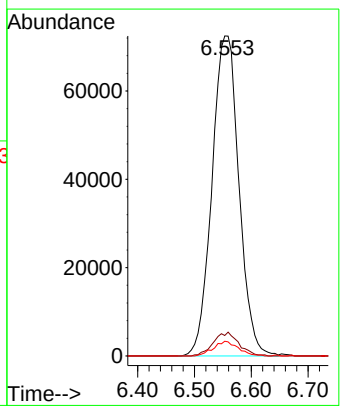


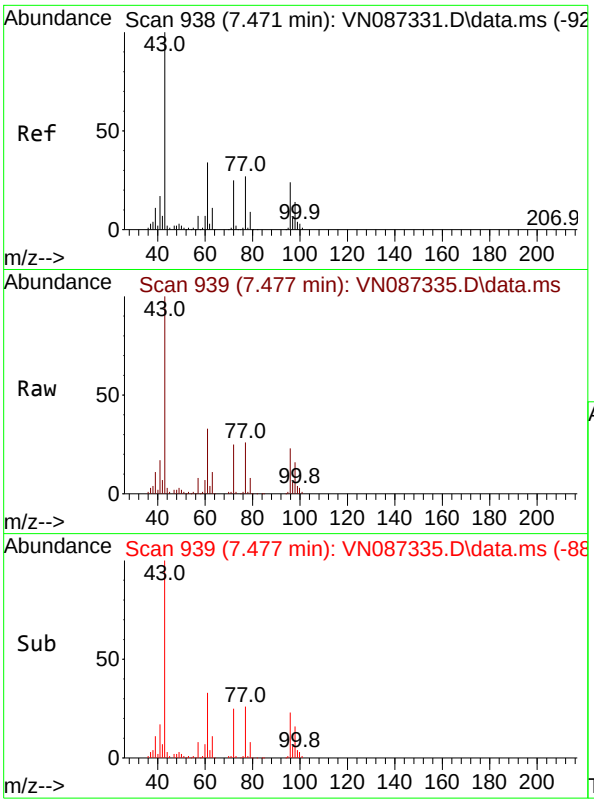


#24
1,1-Dichloroethane
Concen: 48.170 ug/l
RT: 6.553 min Scan# 782
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 63 Resp: 238854

Ion	Ratio	Lower	Upper
63	100		
98	6.4	3.3	9.9
100	4.6	2.5	7.4

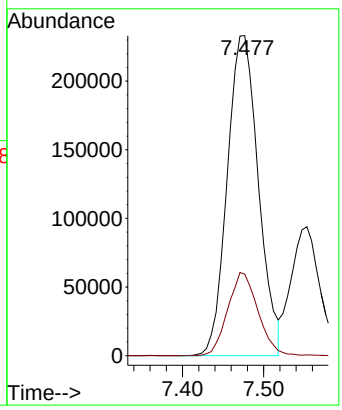




#25
2-Butanone
Concen: 255.411 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 62258

Ion	Ratio	Lower	Upper
43	100		
72	25.4	19.6	29.4



Instrument :
MSVOA_N
ClientSampleId :
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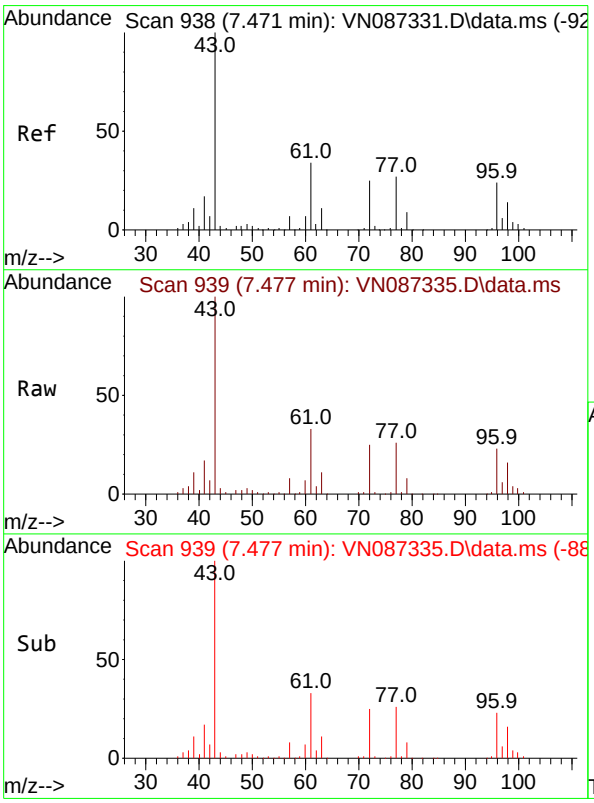
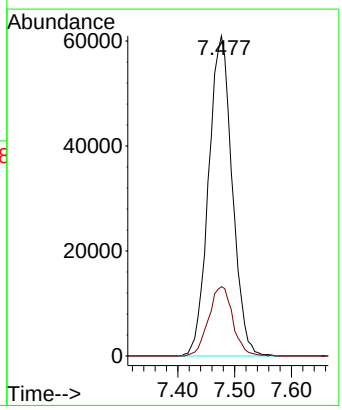
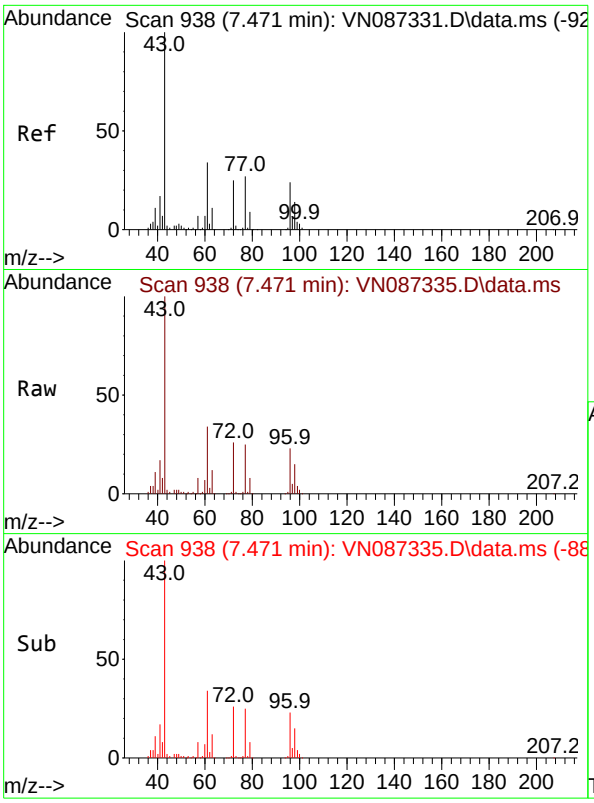


#26
2,2-Dichloropropane
Concen: 45.700 ug/l
RT: 7.477 min Scan# 939
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 77 Resp: 176180

Ion	Ratio	Lower	Upper
77	100		
97	22.2	11.1	33.1





#27
cis-1,2-Dichloroethene
Concen: 50.543 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 96 Resp: 14855

Ion	Ratio	Lower	Upper
96	100		
61	144.0	0.0	297.8
98	63.7	0.0	132.4

Instrument :
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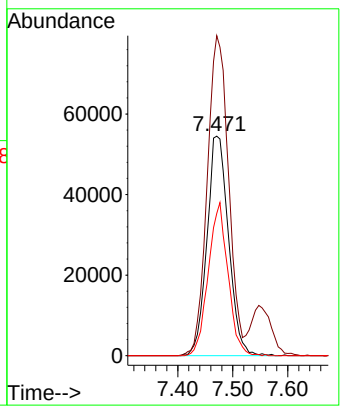
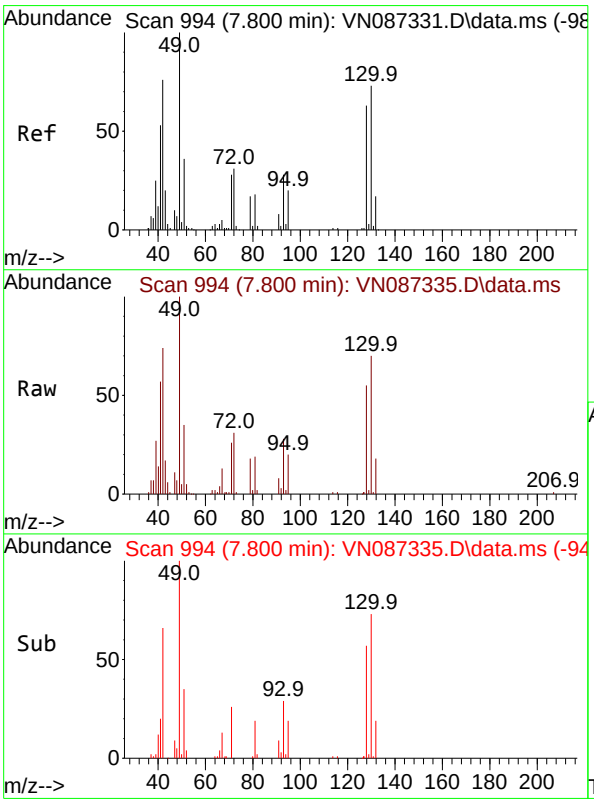
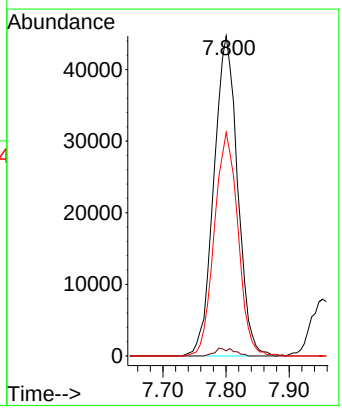


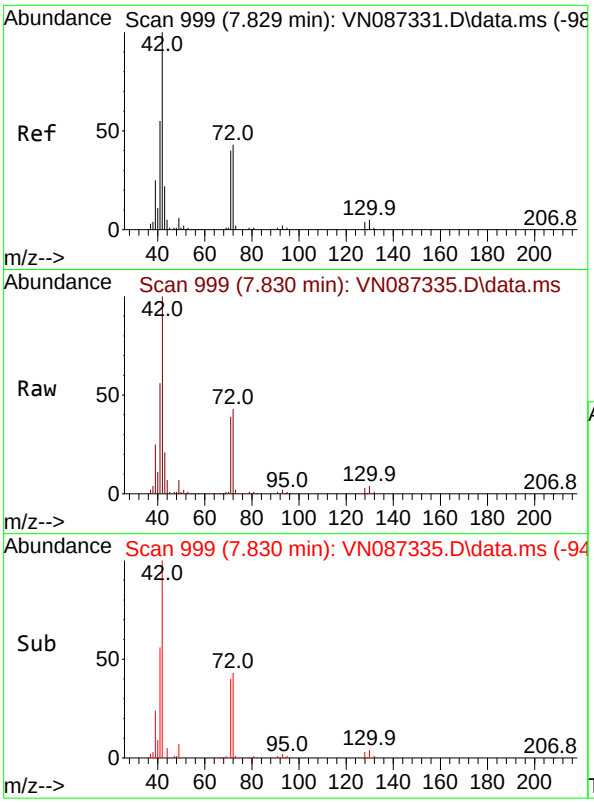


#28
Bromochloromethane
Concen: 49.089 ug/l
RT: 7.800 min Scan# 994
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 49 Resp: 116494

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.2
130	69.6	57.3	85.9





#29
Tetrahydrofuran
Concen: 260.404 ug/l
RT: 7.830 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 42 Resp: 41235

Ion	Ratio	Lower	Upper
42	100		
72	41.3	33.4	50.0
71	38.9	31.2	46.8

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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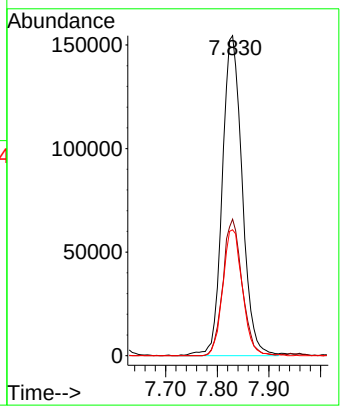
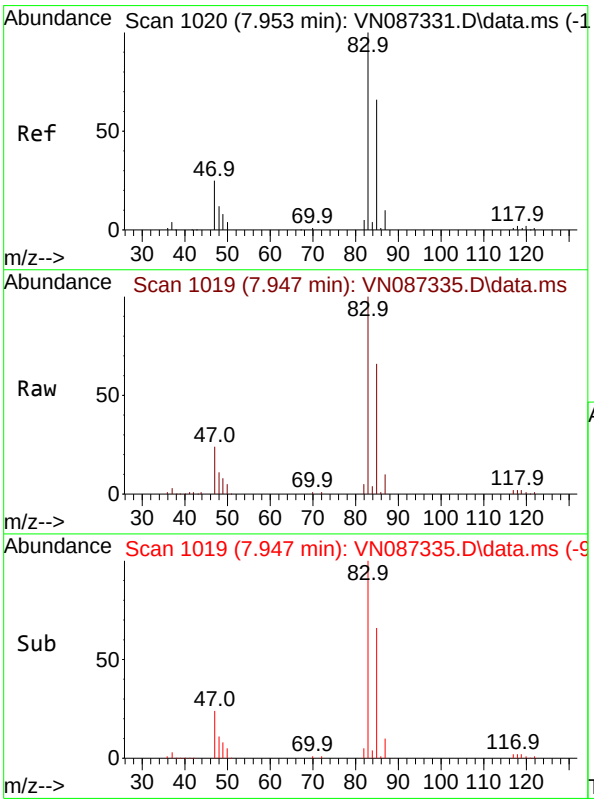
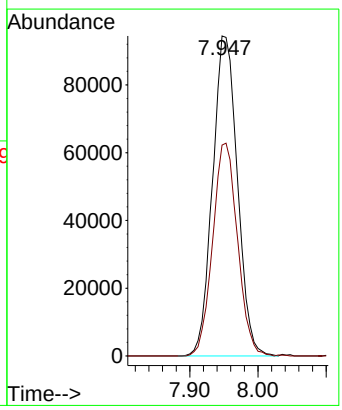


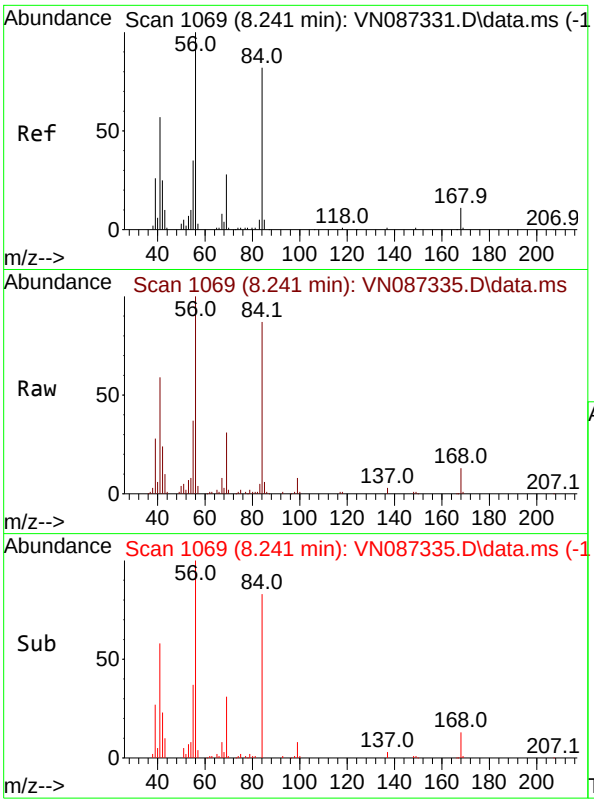


#30
Chloroform
Concen: 48.306 ug/l
RT: 7.947 min Scan# 1019
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 83 Resp: 239752

Ion	Ratio	Lower	Upper
83	100		
85	65.9	52.7	79.1

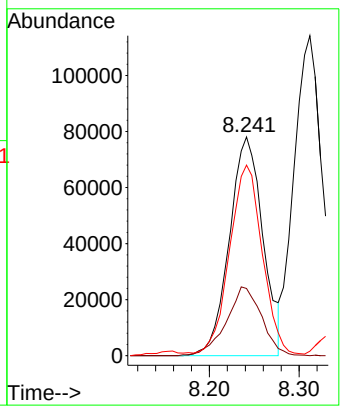




#31
Cyclohexane
Concen: 49.042 ug/l
RT: 8.241 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 56 Resp: 20286

Ion	Ratio	Lower	Upper
56	100		
69	30.0	22.7	34.1
84	85.9	65.8	98.6



Instrument :
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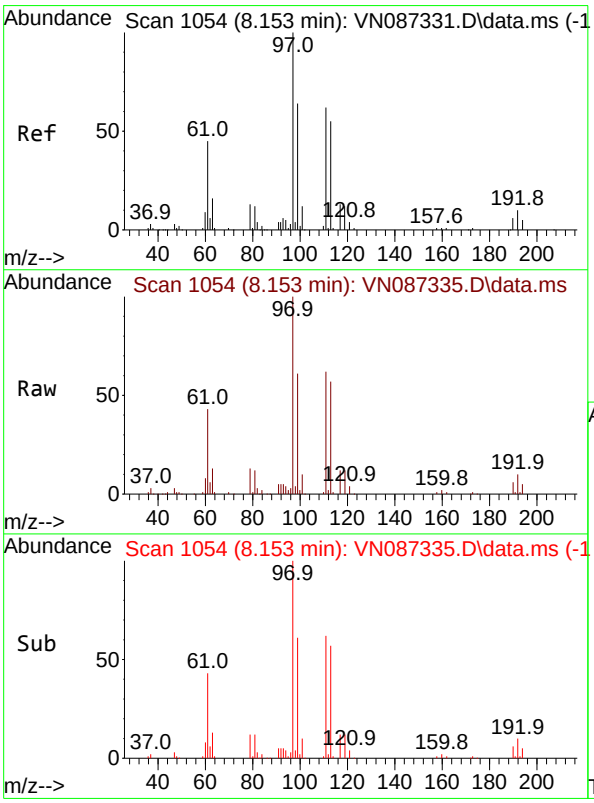
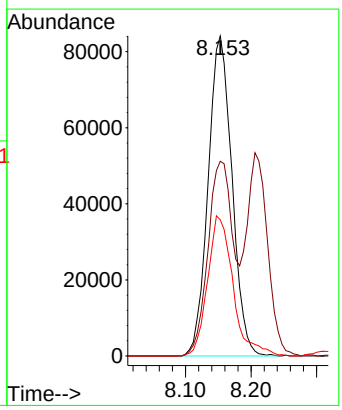
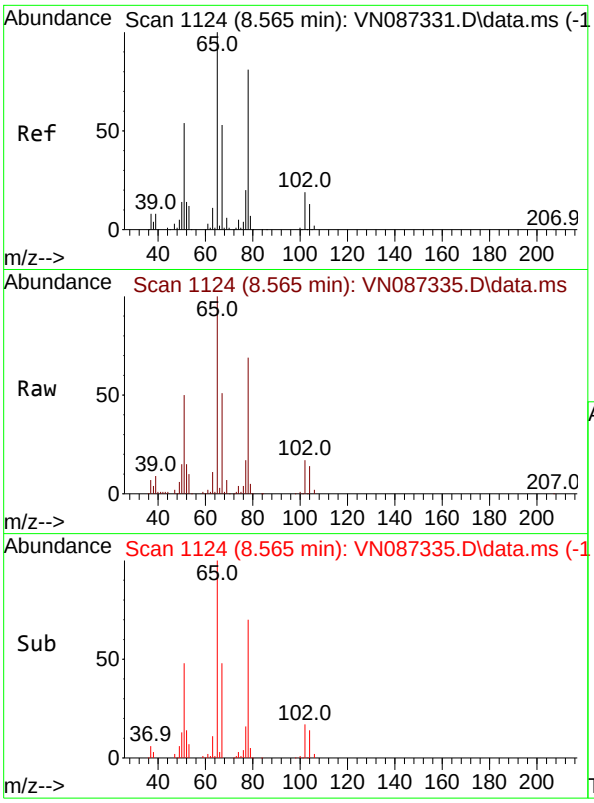


#32
1,1,1-Trichloroethane
Concen: 49.412 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 97 Resp: 212405

Ion	Ratio	Lower	Upper
97	100		
99	64.8	51.8	77.8
61	46.8	38.7	58.1

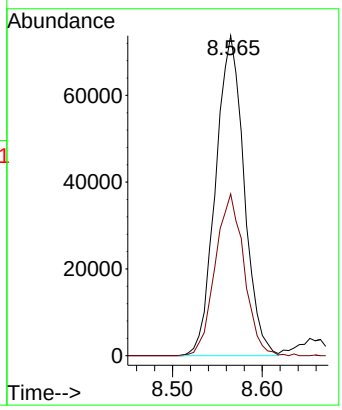




#33
1,2-Dichloroethane-d4
Concen: 48.204 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 65 Resp: 16219

Ion	Ratio	Lower	Upper
65	100		
67	51.3	0.0	104.0



Instrument :
MSVOA_N
ClientSampleId :
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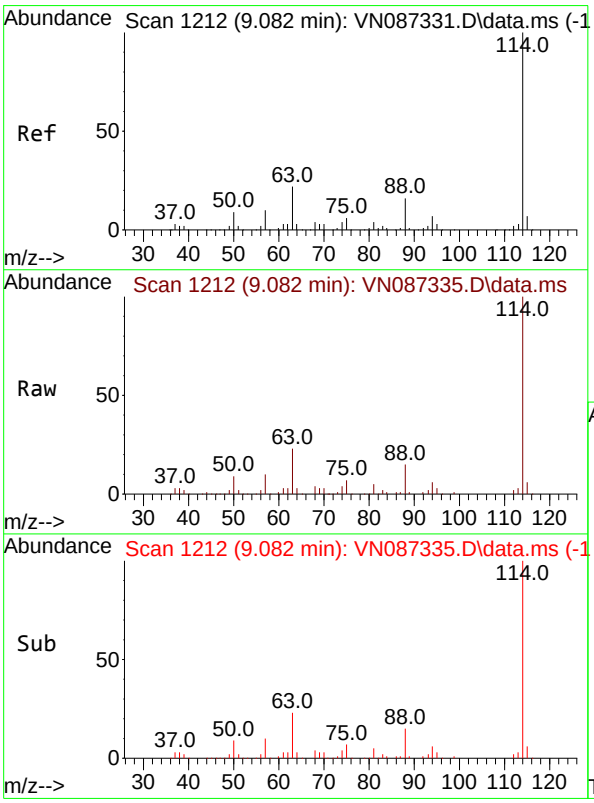
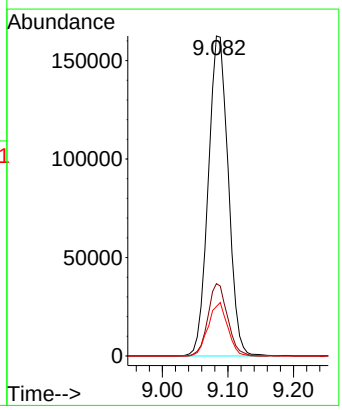
Supervised By :Semsettin Yesilyurt 07/17/2025

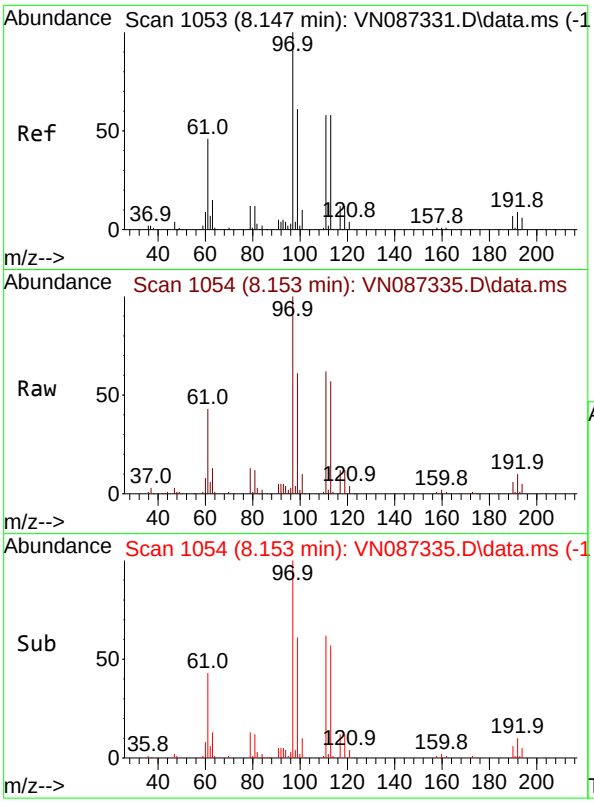


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:114 Resp: 343165

Ion	Ratio	Lower	Upper
114	100		
63	22.6	0.0	44.6
88	15.4	0.0	32.8

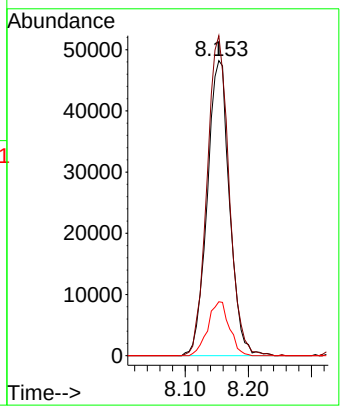




#35
Dibromofluoromethane
Concen: 49.934 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:113 Resp: 11820

Ion	Ratio	Lower	Upper
113	100		
111	107.2	82.5	123.7
192	17.6	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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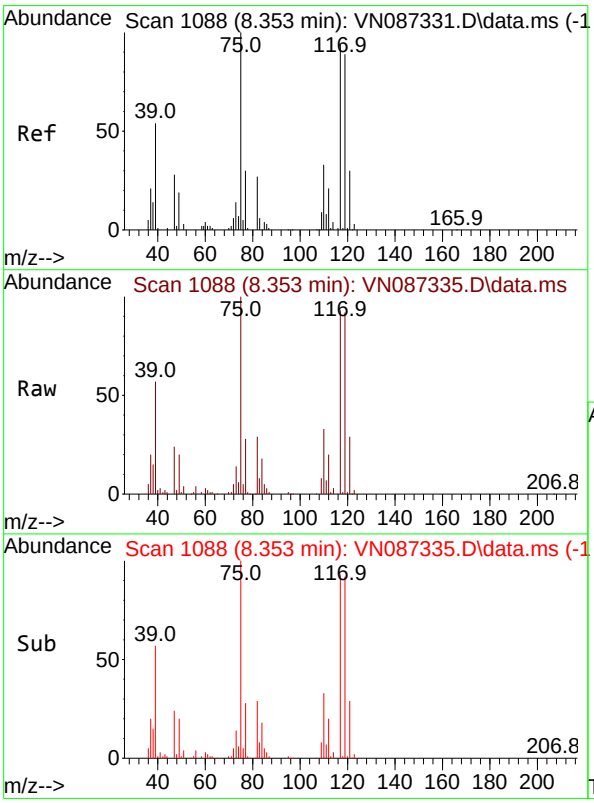
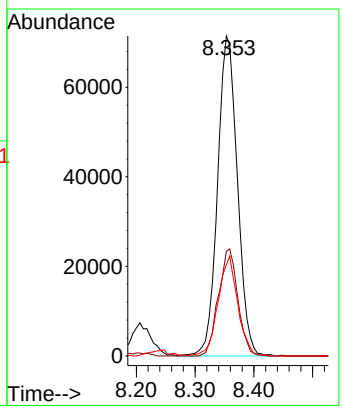
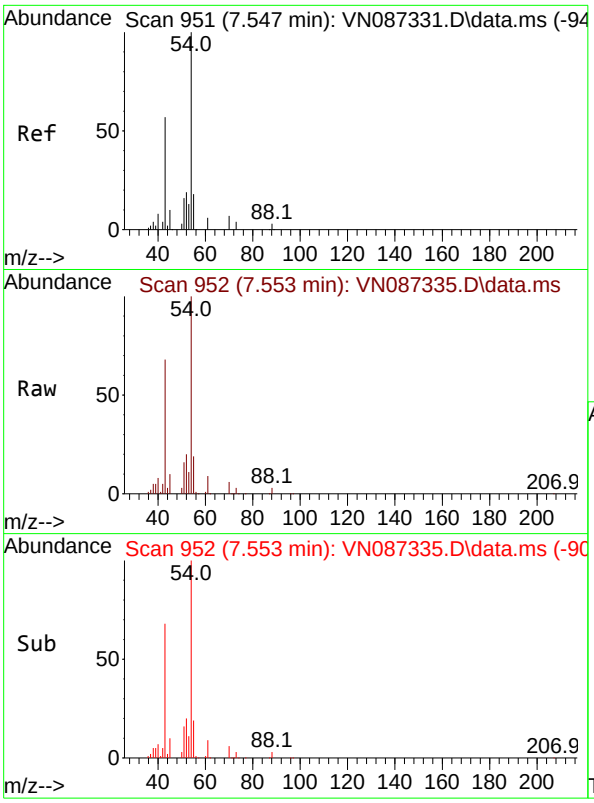


#36
1,1-Dichloropropene
Concen: 53.690 ug/l
RT: 8.353 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 75 Resp: 167912

Ion	Ratio	Lower	Upper
75	100		
110	32.7	16.7	50.1
77	30.7	25.2	37.8





#37
Ethyl Acetate
Concen: 53.525 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 24175

Ion	Ratio	Lower	Upper
43	100		
61	12.9	10.9	16.3
70	9.6	7.4	11.0

Instrument :
MSVOA_N
ClientSampleId :
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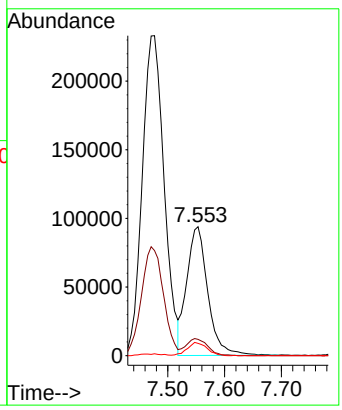
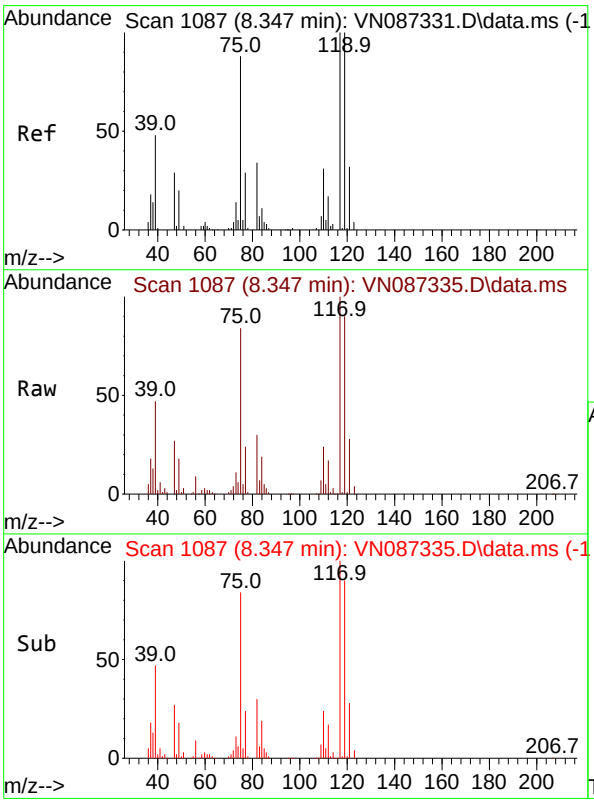
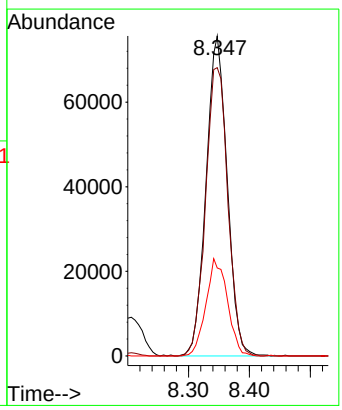


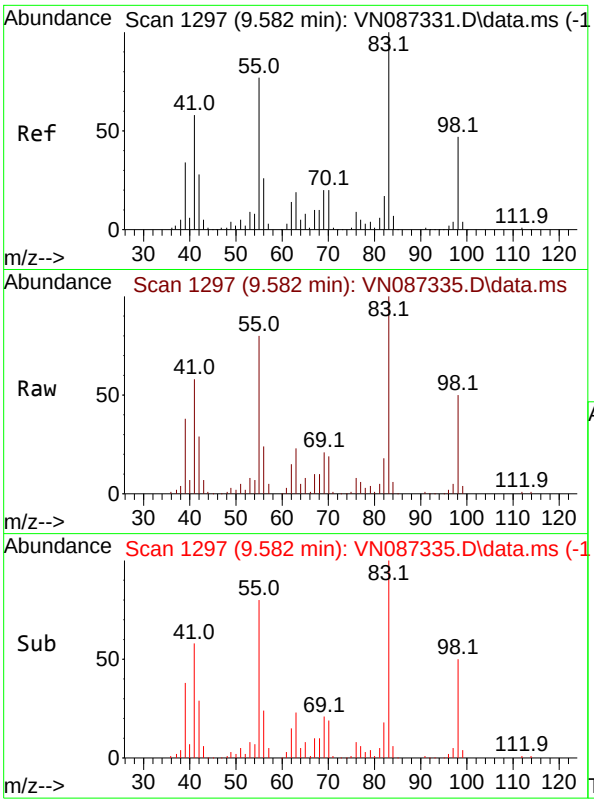


#38
Carbon Tetrachloride
Concen: 52.821 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:117 Resp: 181974

Ion	Ratio	Lower	Upper
117	100		
119	90.1	80.2	120.2
121	27.5	25.4	38.2

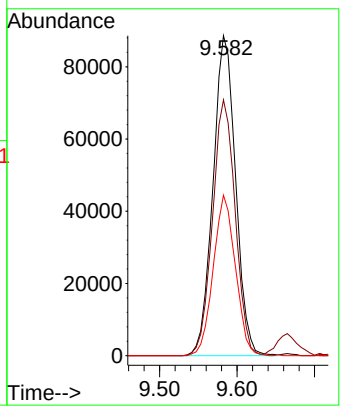




#39
Methylcyclohexane
Concen: 53.109 ug/l
RT: 9.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 83 Resp: 17982

Ion	Ratio	Lower	Upper
83	100		
55	79.9	61.3	91.9
98	50.2	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
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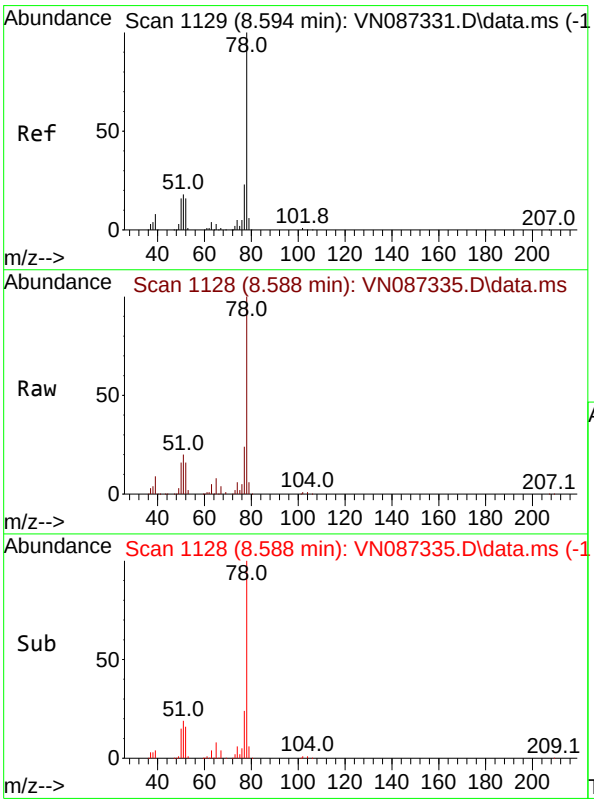
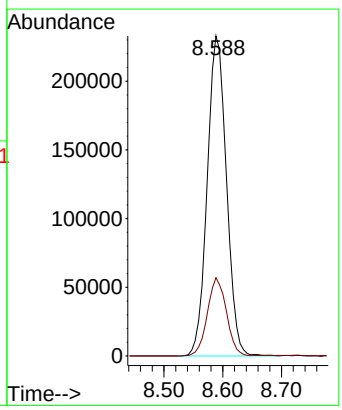
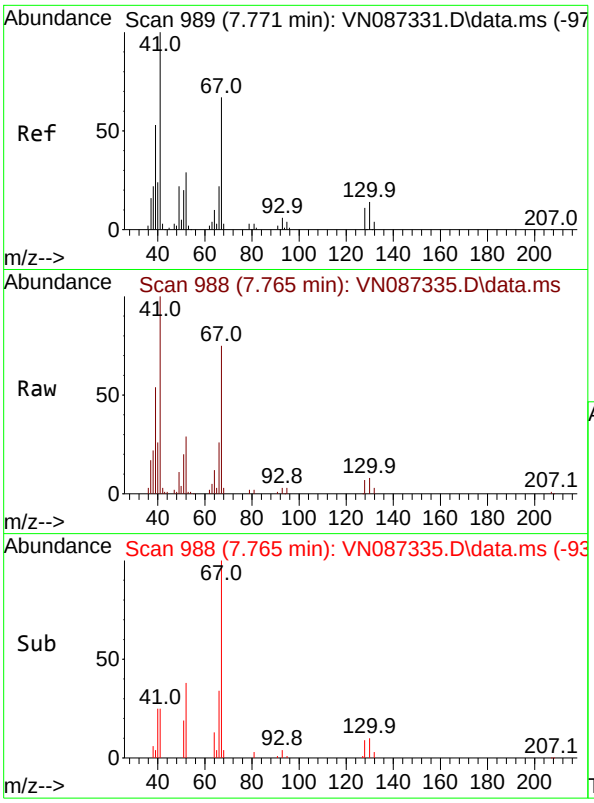


#40
Benzene
Concen: 52.380 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 78 Resp: 529446

Ion	Ratio	Lower	Upper
78	100		
77	24.4	18.2	27.2

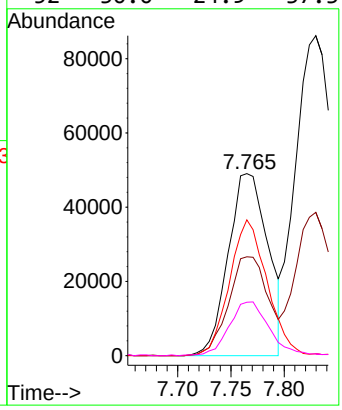




#41
Methacrylonitrile
Concen: 53.895 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 41 Resp: 12728

Ion	Ratio	Lower	Upper
41	100		
39	53.9	43.4	65.0
67	71.0	55.1	82.7
52	30.0	24.9	37.3



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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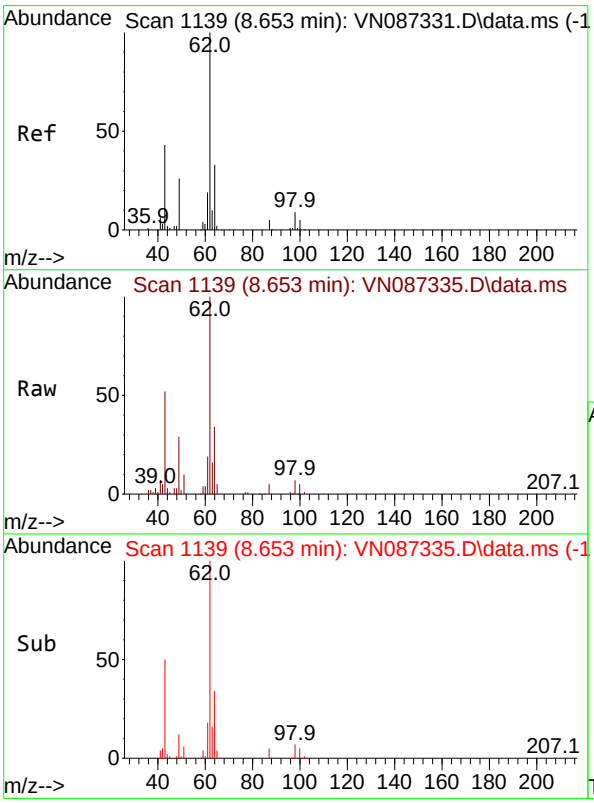
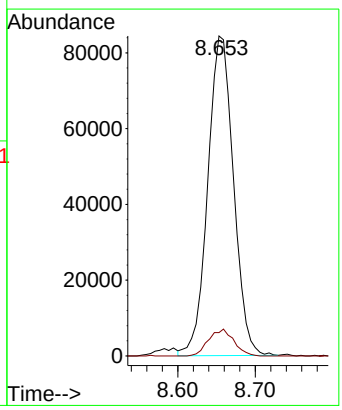
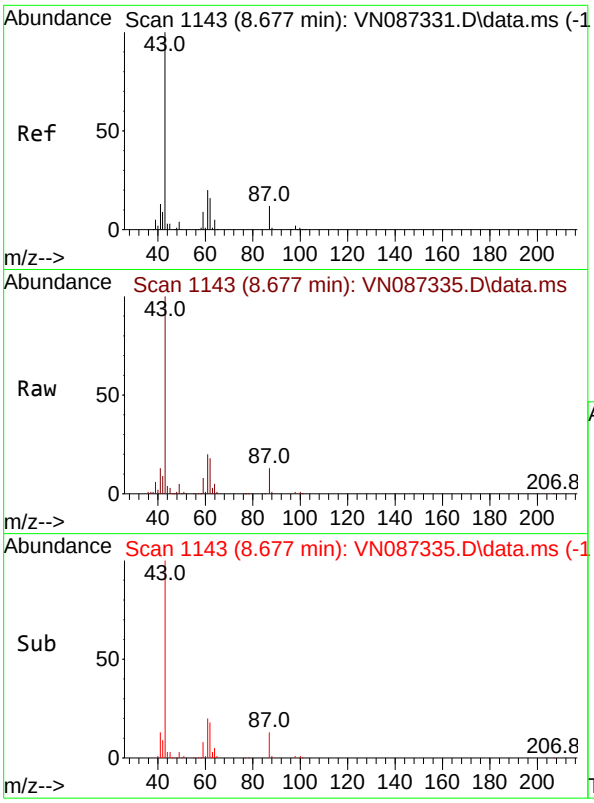


#42
1,2-Dichloroethane
Concen: 50.821 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 62 Resp: 194804

Ion	Ratio	Lower	Upper
62	100		
98	8.2	0.0	18.0





#43
Isopropyl Acetate
Concen: 53.477 ug/l
RT: 8.677 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 37495

Ion	Ratio	Lower	Upper
43	100		
61	24.9	19.8	29.8
87	12.1	9.8	14.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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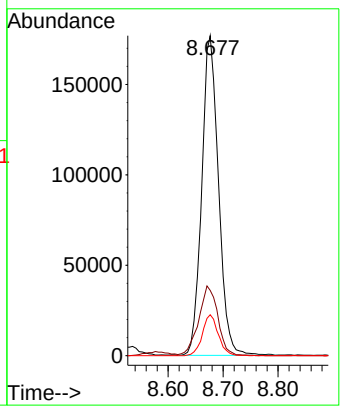
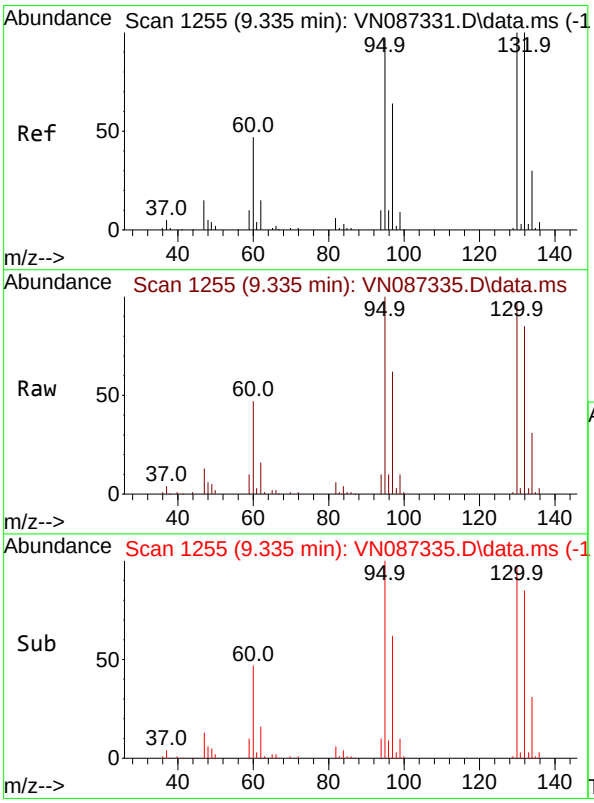
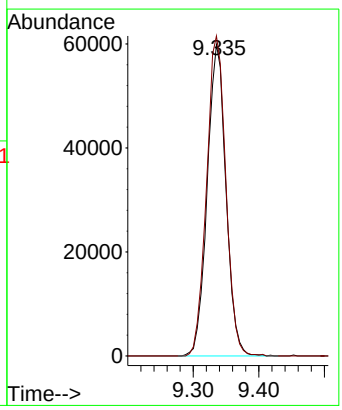


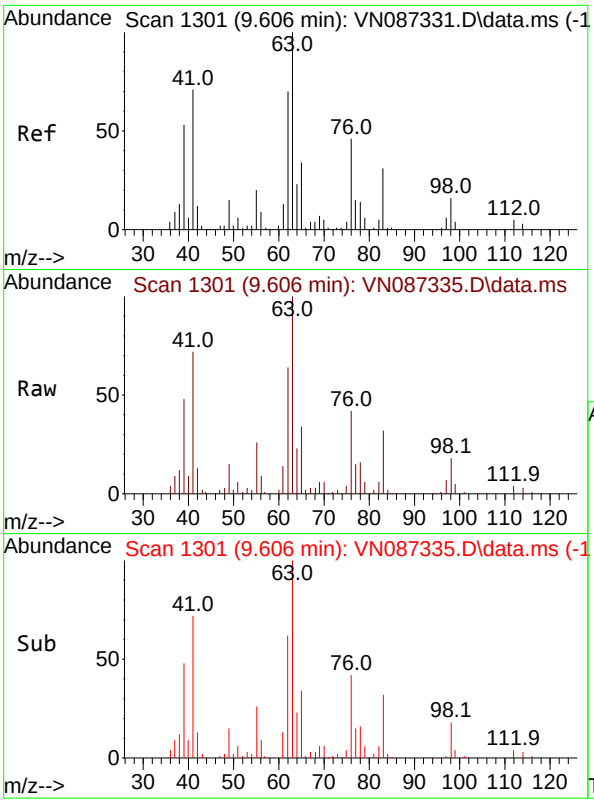


#44
Trichloroethene
Concen: 49.731 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:130 Resp: 118775

Ion	Ratio	Lower	Upper
130	100		
95	102.8	0.0	195.2

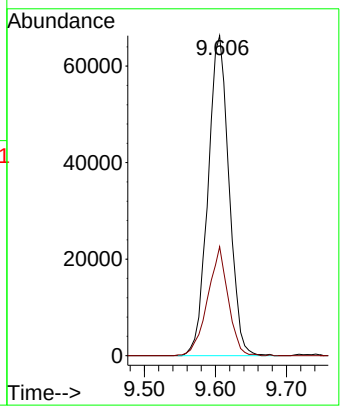




#45
1,2-Dichloropropane
Concen: 52.900 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 63 Resp: 13586

Ion	Ratio	Lower	Upper
63	100		
65	34.0	27.0	40.4



Instrument :
MSVOA_N
ClientSampleId :
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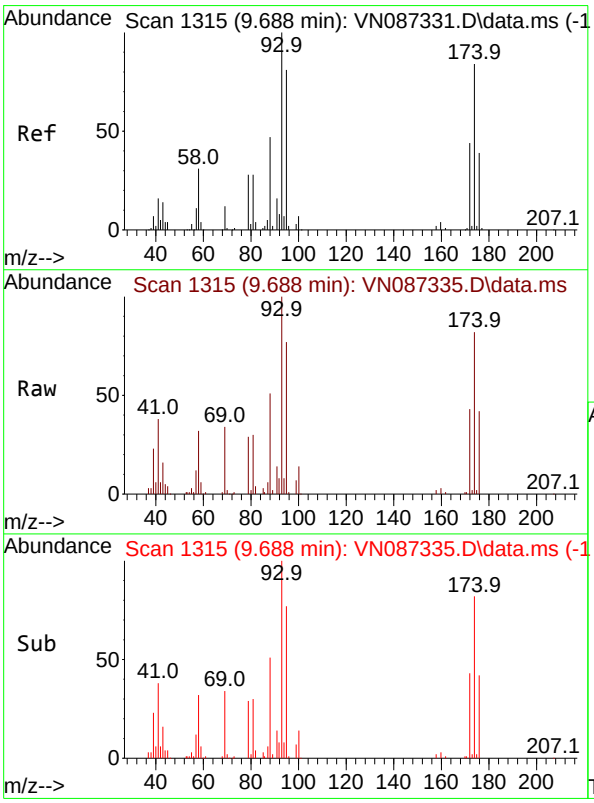
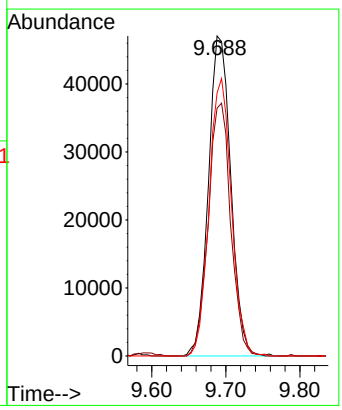
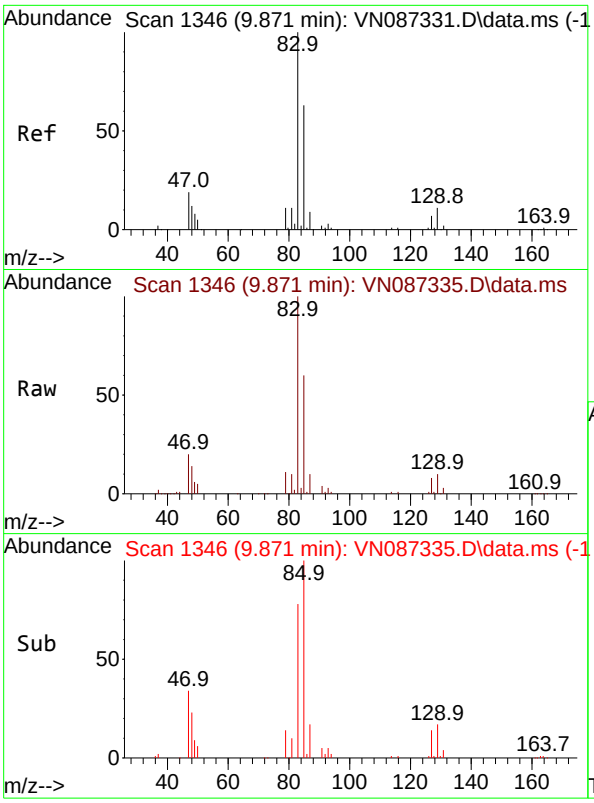


#46
Dibromomethane
Concen: 51.241 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 93 Resp: 98534

Ion	Ratio	Lower	Upper
93	100		
95	79.2	65.8	98.8
174	86.5	69.9	104.9

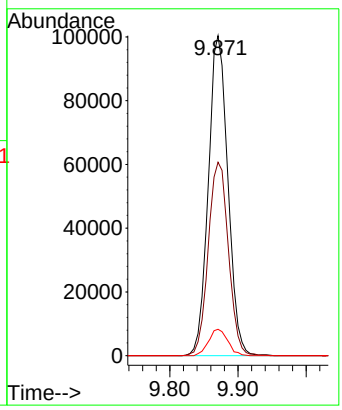




#47
Bromodichloromethane
Concen: 51.696 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 83 Resp: 20023

Ion	Ratio	Lower	Upper
83	100		
85	60.5	50.4	75.6
127	8.2	5.8	8.8



Instrument :
MSVOA_N
ClientSampleId :
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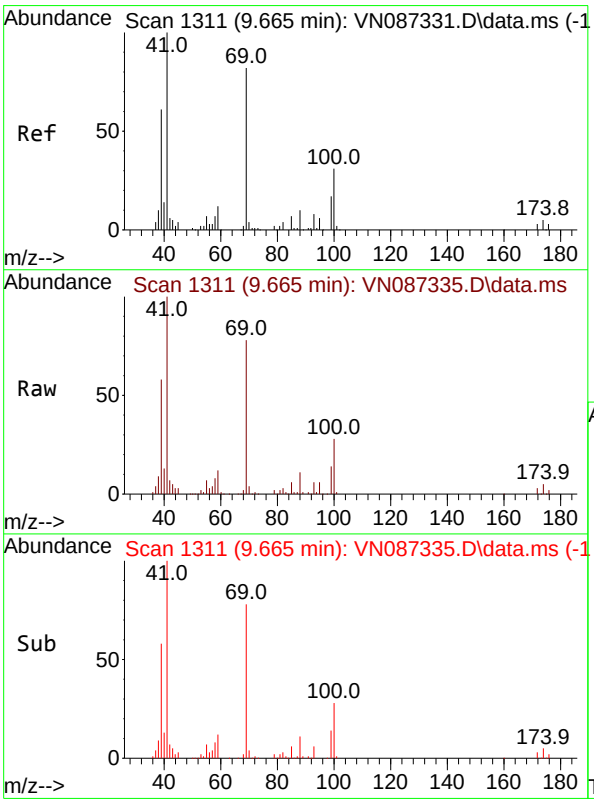
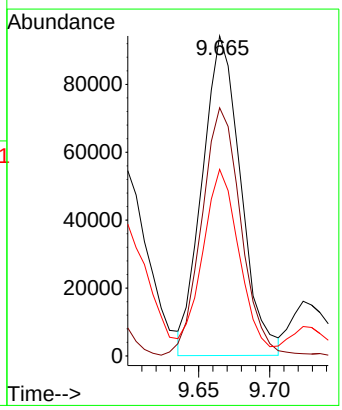
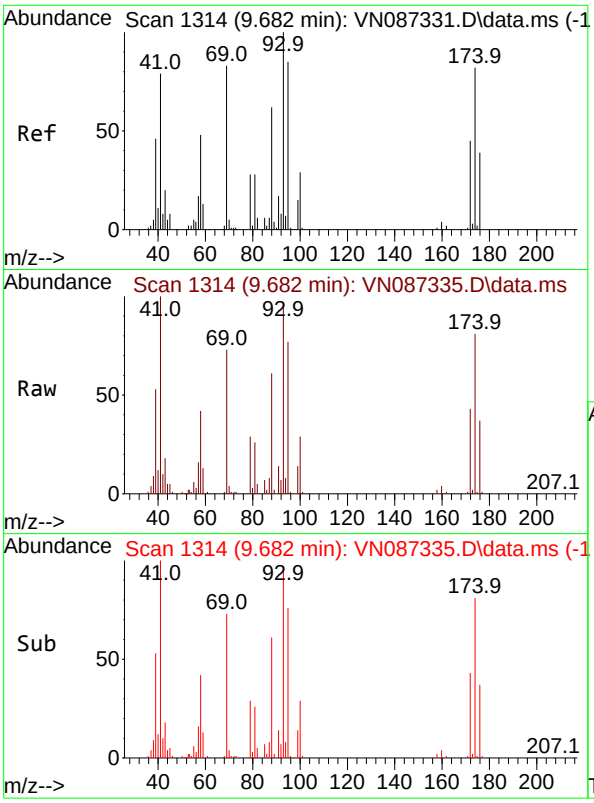


#48
Methyl methacrylate
Concen: 56.096 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 41 Resp: 177068

Ion	Ratio	Lower	Upper
41	100		
69	79.9	64.1	96.1
39	56.0	45.5	68.3

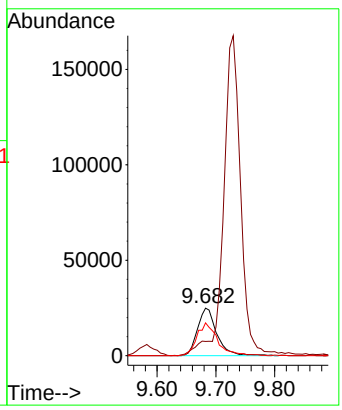




#49
1,4-Dioxane
Concen: 1177.300 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 88 Resp: 5691

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	73.7	61.1	91.7



Instrument :
MSVOA_N
ClientSampleId :
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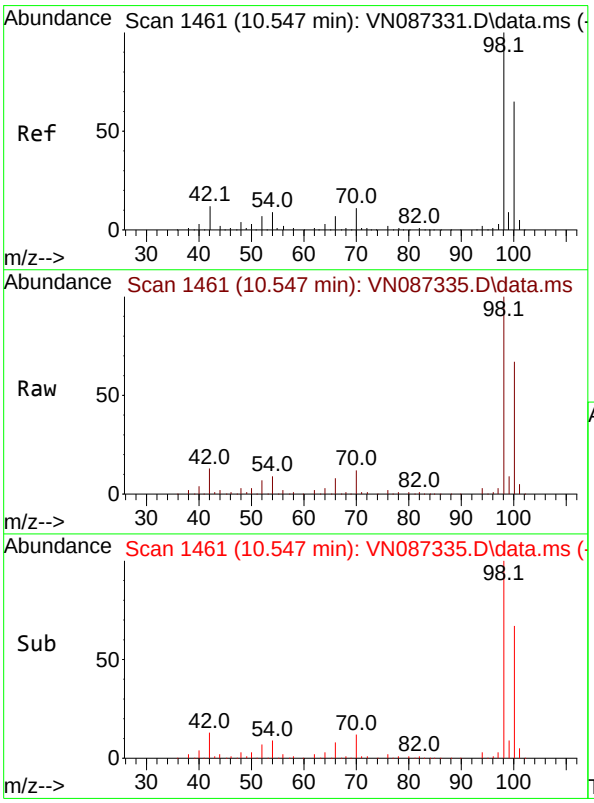
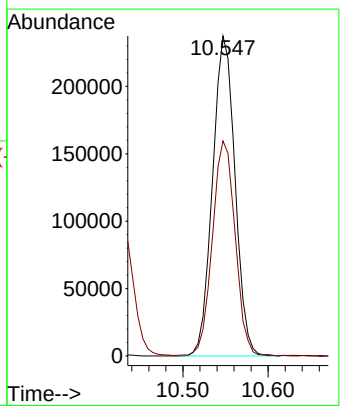
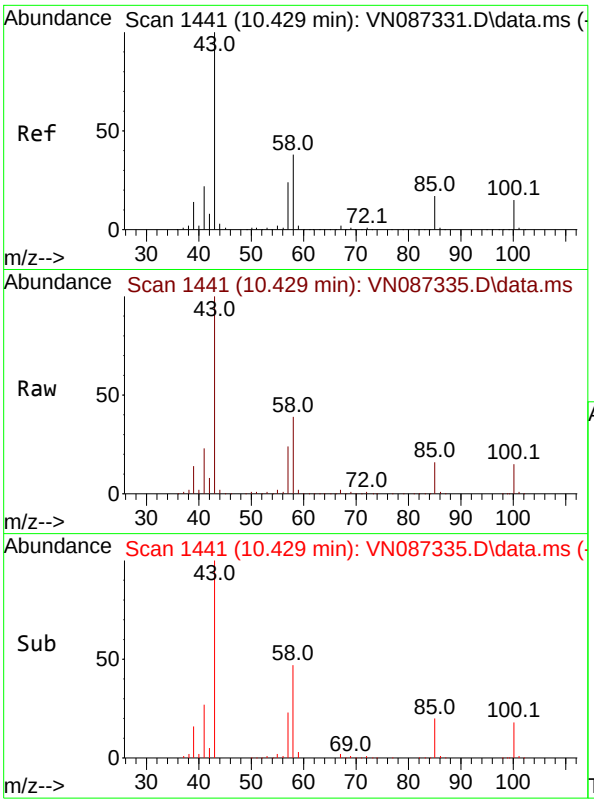


#50
Toluene-d8
Concen: 51.573 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 98 Resp: 435474

Ion	Ratio	Lower	Upper
98	100		
100	68.2	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 268.966 ug/l
RT: 10.429 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 119276

Ion	Ratio	Lower	Upper
43	100		
58	38.0	30.8	46.2

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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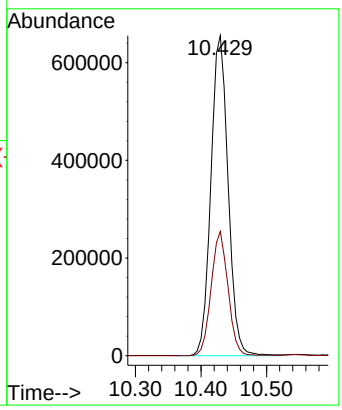
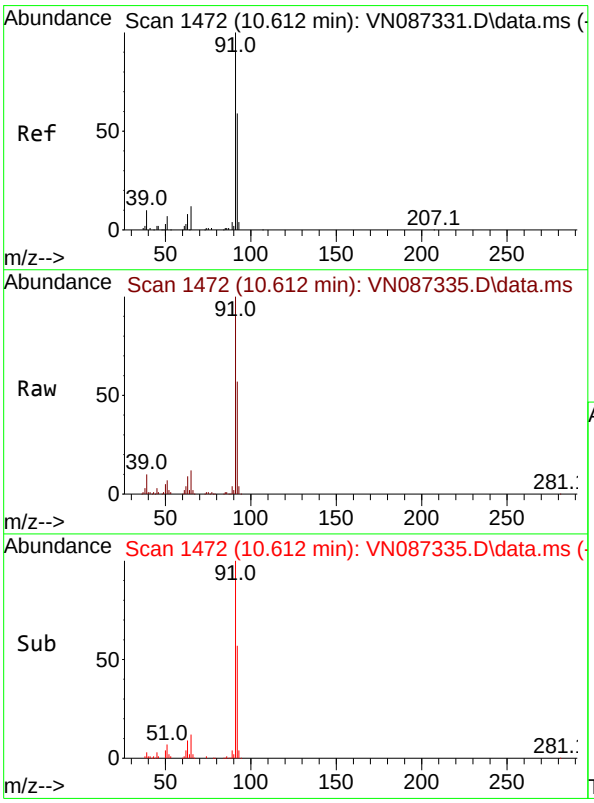
Supervised By :Semsettin Yesilyurt 07/17/2025

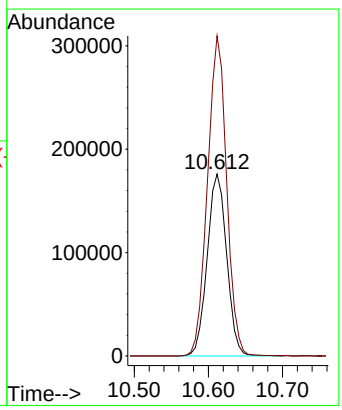


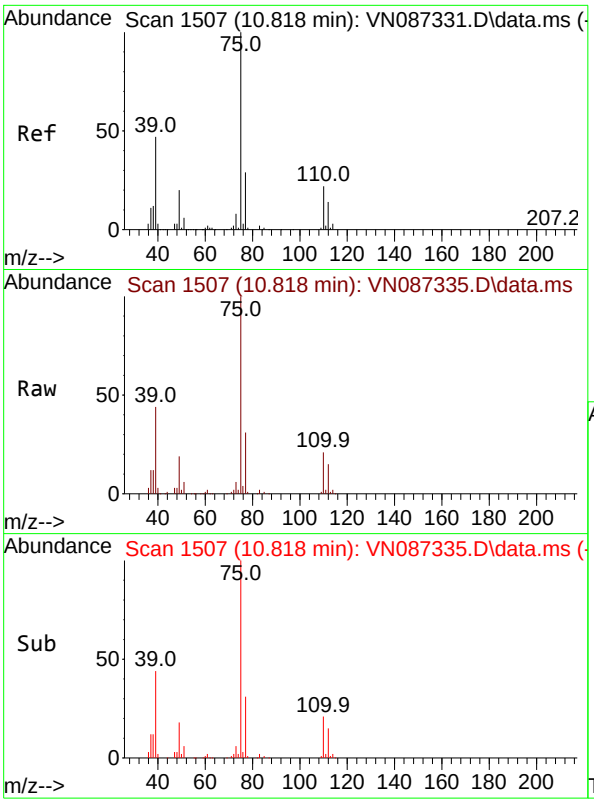


#52
Toluene
Concen: 52.236 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 92 Resp: 320922

Ion	Ratio	Lower	Upper
92	100		
91	173.1	135.1	202.7

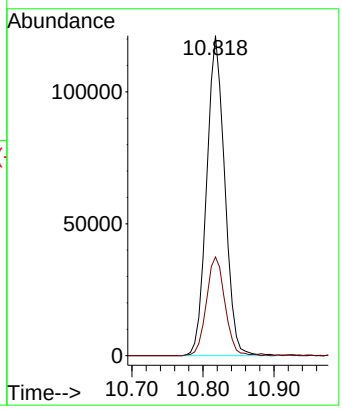




#53
t-1,3-Dichloropropene
Concen: 54.628 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 75 Resp: 21414

Ion	Ratio	Lower	Upper
75	100		
77	30.9	23.6	35.4



Instrument :
MSVOA_N
ClientSampleId :
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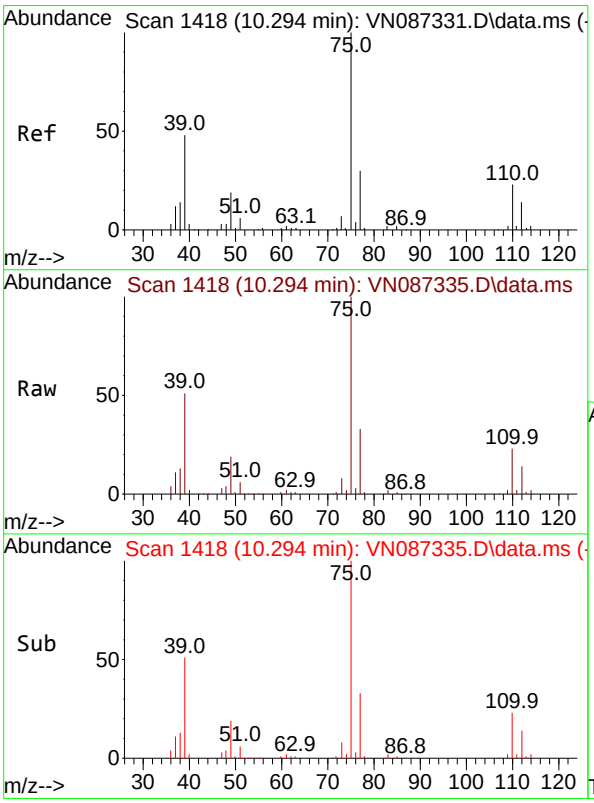
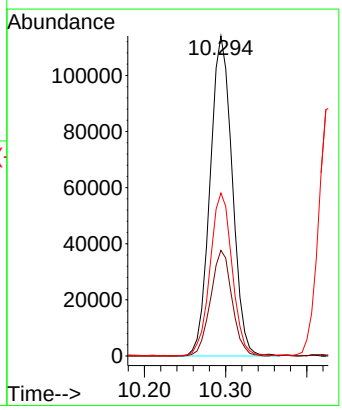
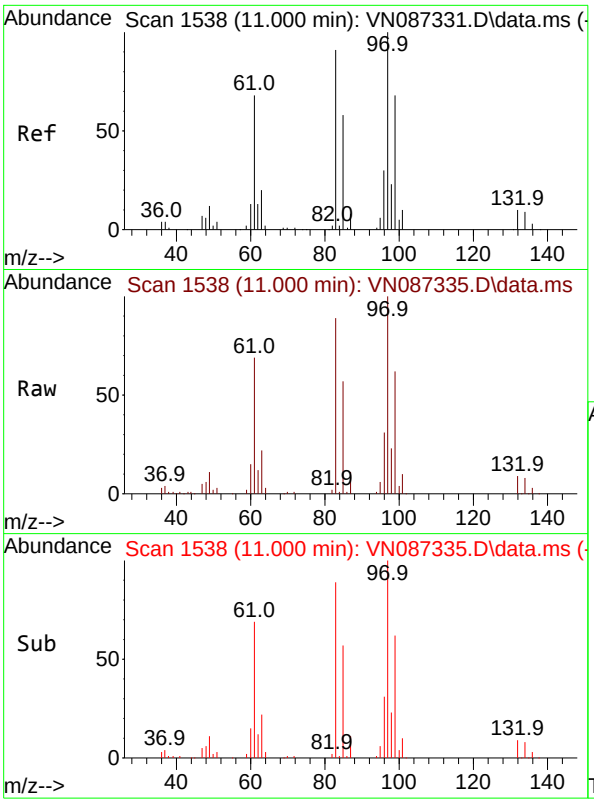


#54
cis-1,3-Dichloropropene
Concen: 53.351 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 75 Resp: 216023

Ion	Ratio	Lower	Upper
75	100		
77	33.0	24.2	36.2
39	50.8	38.4	57.6

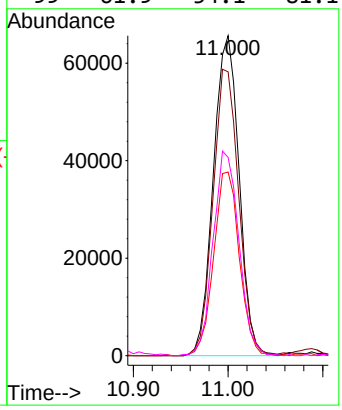




#55
1,1,2-Trichloroethane
Concen: 49.889 ug/l
RT: 11.000 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 97 Resp: 12409

Ion	Ratio	Lower	Upper
97	100		
83	88.7	72.6	109.0
85	57.4	46.7	70.1
99	61.9	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
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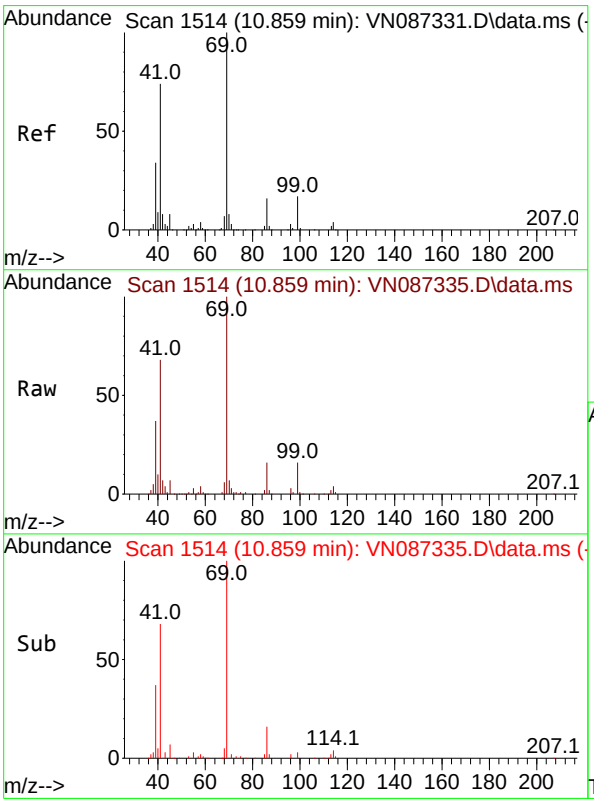
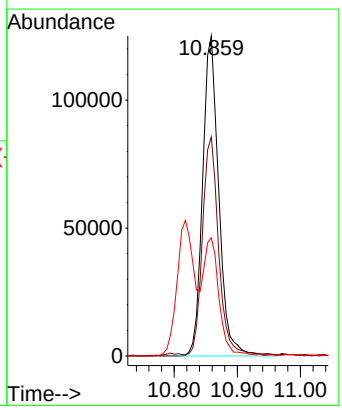
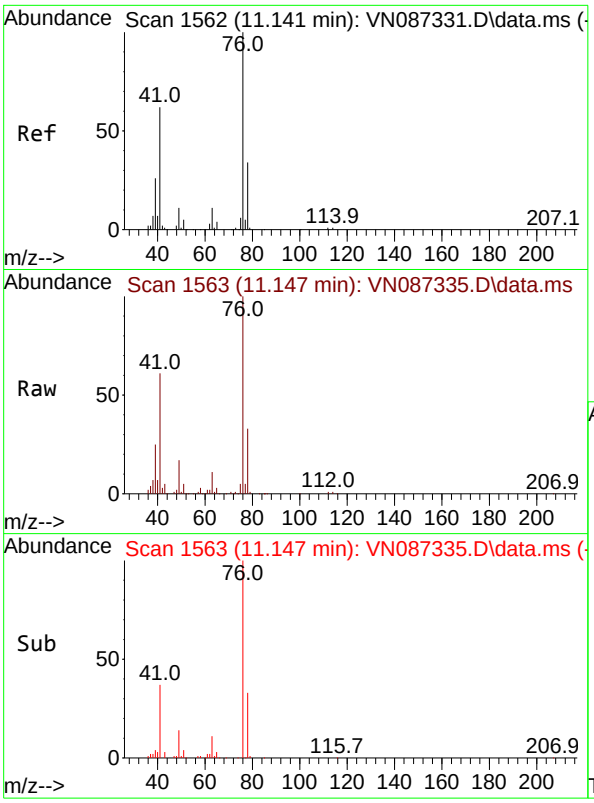


#56
Ethyl methacrylate
Concen: 53.042 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 69 Resp: 222410

Ion	Ratio	Lower	Upper
69	100		
41	67.6	55.1	82.7
39	34.0	27.9	41.9

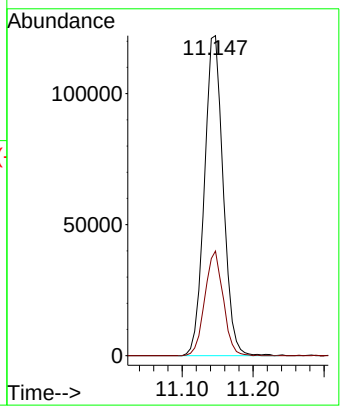




#57
1,3-Dichloropropane
Concen: 52.202 ug/l
RT: 11.147 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 76 Resp: 22449

Ion	Ratio	Lower	Upper
76	100		
78	31.9	26.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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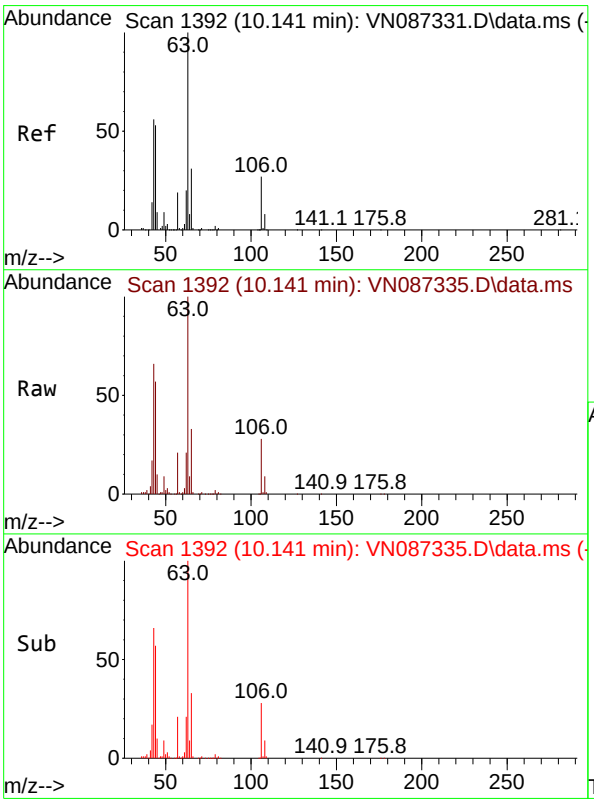
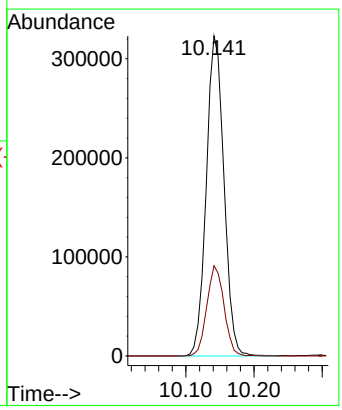
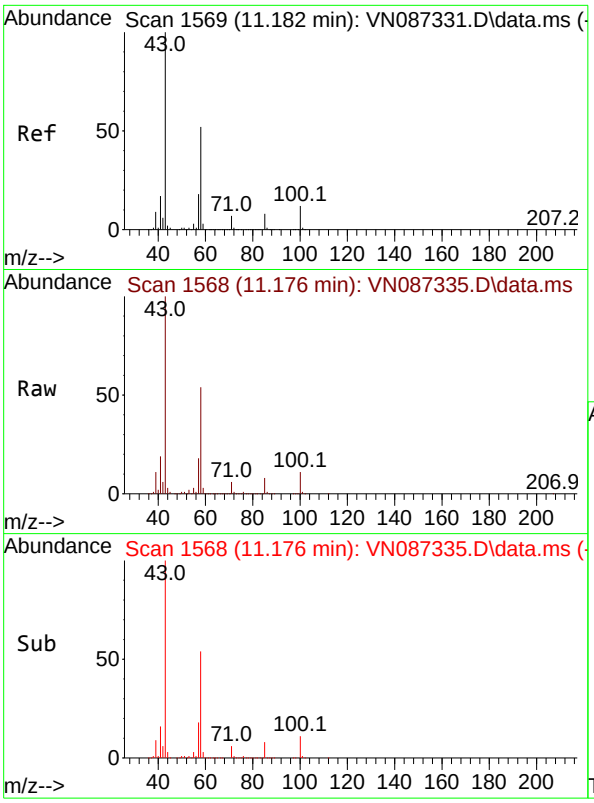


#58
2-Chloroethyl Vinyl ether
Concen: 285.088 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 63 Resp: 581689

Ion	Ratio	Lower	Upper
63	100		
106	27.5	21.7	32.5





#59
2-Hexanone
Concen: 288.579 ug/l
RT: 11.176 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 84905

Ion	Ratio	Lower	Upper
43	100		
58	53.4	26.7	80.0

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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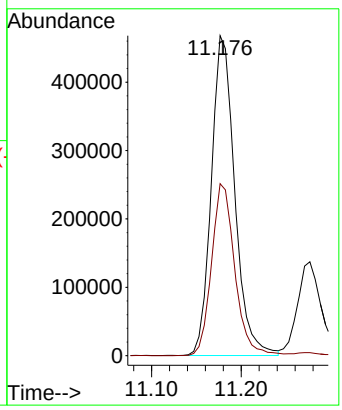
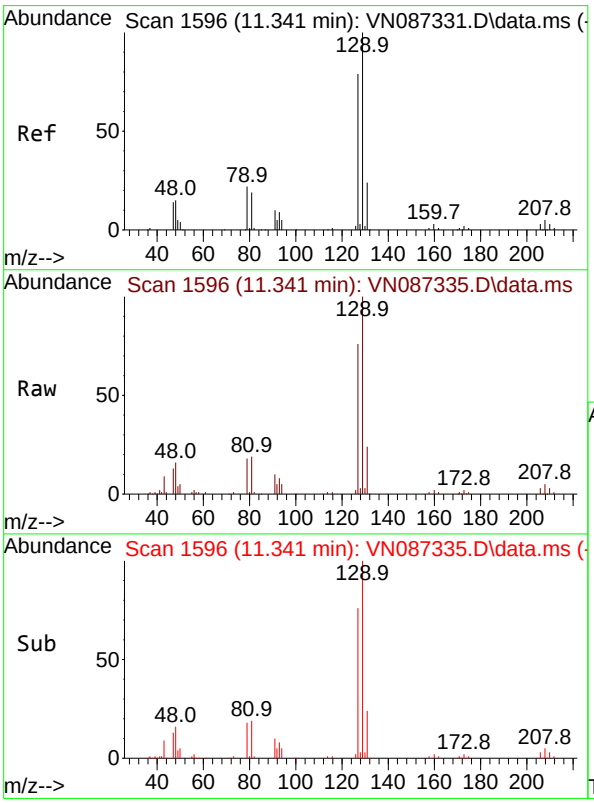
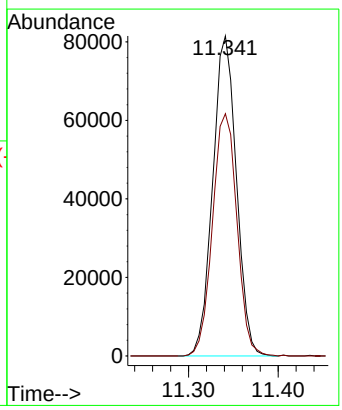


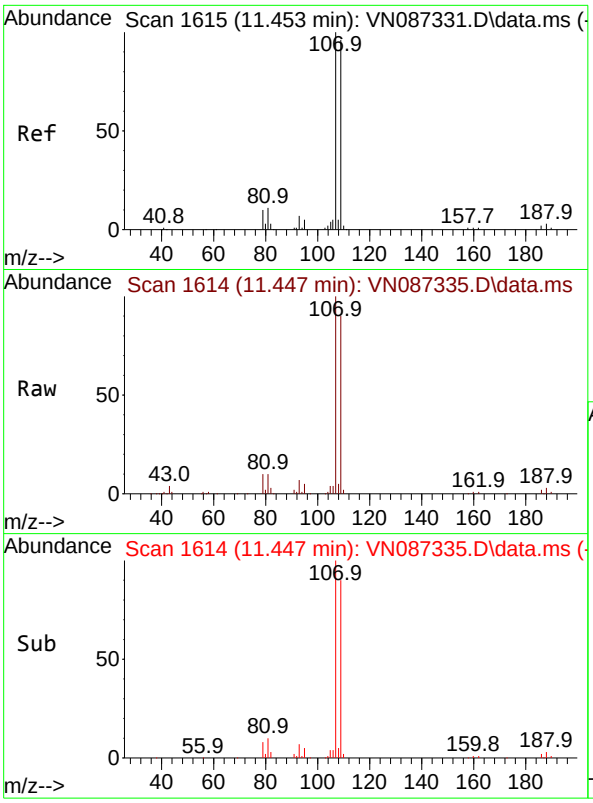


#60
Dibromochloromethane
Concen: 52.685 ug/l
RT: 11.341 min Scan# 1596
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:129 Resp: 149449

Ion	Ratio	Lower	Upper
129	100		
127	78.0	39.1	117.5





#61
1,2-Dibromoethane
Concen: 51.746 ug/l
RT: 11.447 min Scan# 1(
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:107 Resp: 13533(

Ion	Ratio	Lower	Upper
107	100		
109	91.4	77.5	116.3

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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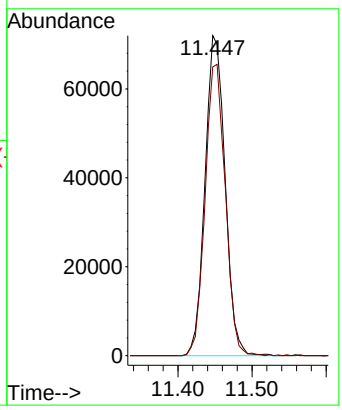
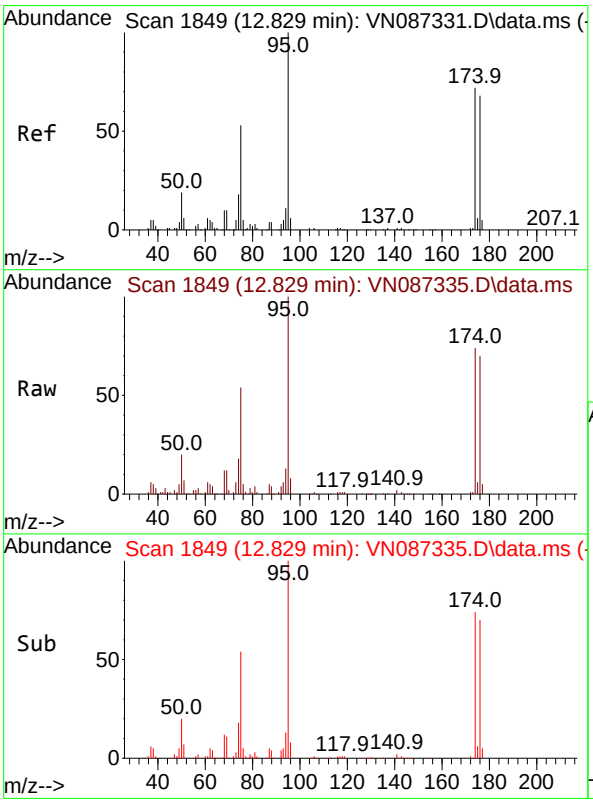
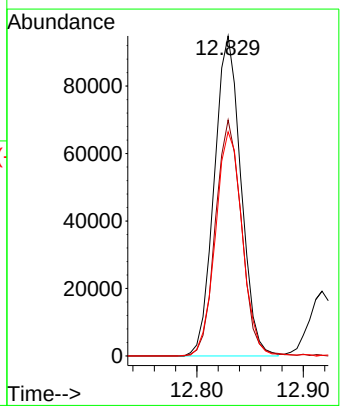


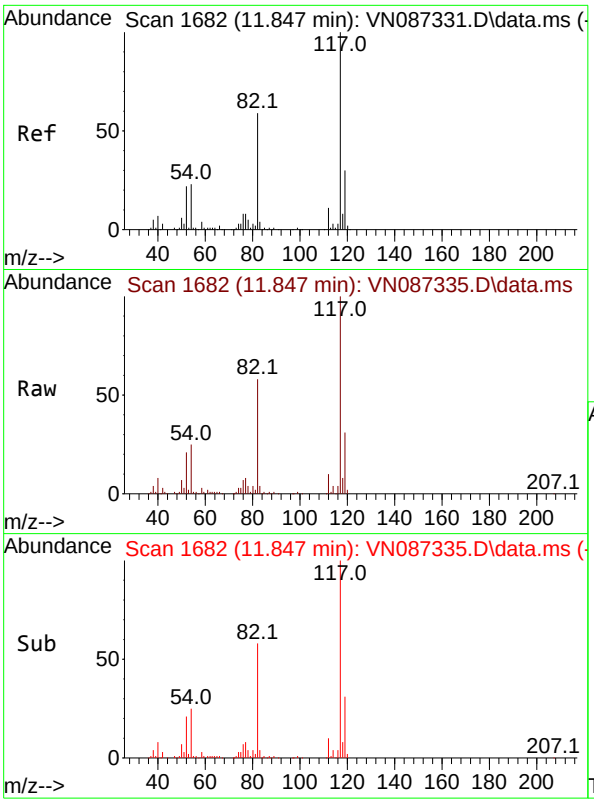


#62
4-Bromofluorobenzene
Concen: 52.942 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 95 Resp: 165160

Ion	Ratio	Lower	Upper
95	100		
174	71.8	0.0	149.4
176	70.6	0.0	141.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:117 Resp: 31969

Ion	Ratio	Lower	Upper
117	100		
82	57.6	47.4	71.2
119	31.0	23.8	35.8

Instrument :
MSVOA_N
ClientSampleId :
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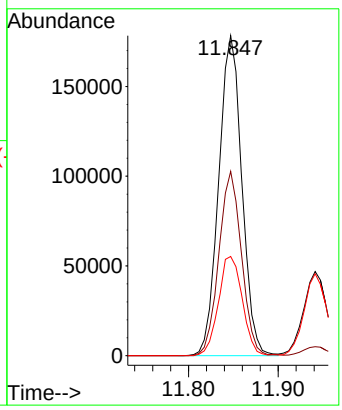
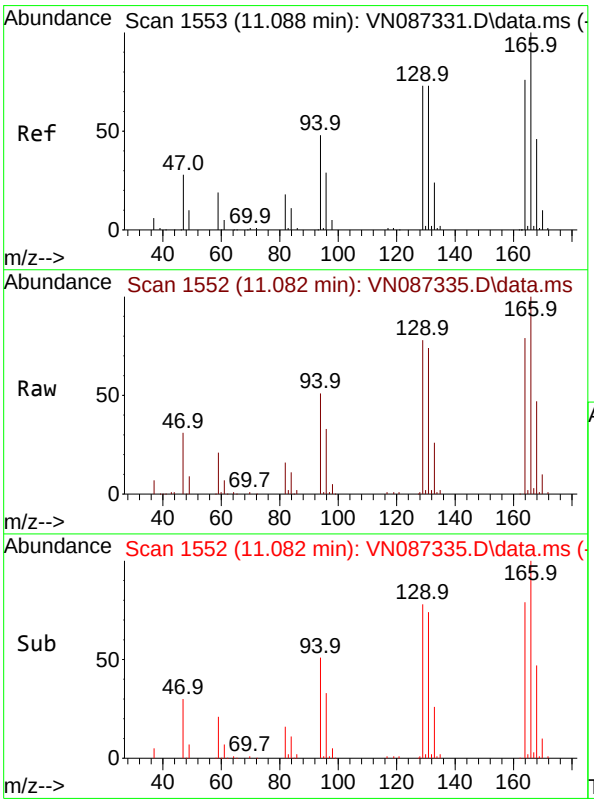
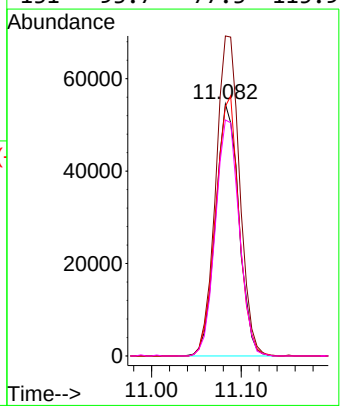


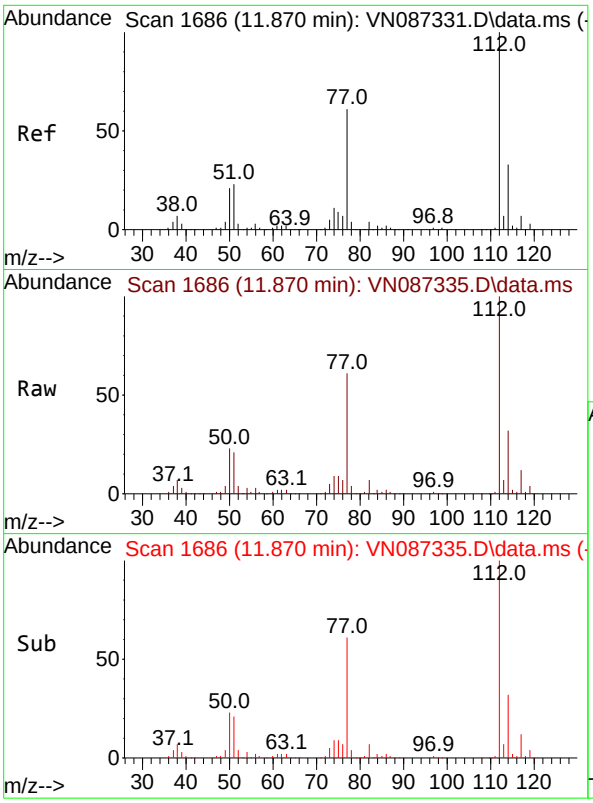


#64
Tetrachloroethene
Concen: 47.819 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:164 Resp: 98391

Ion	Ratio	Lower	Upper
164	100		
166	127.0	105.5	158.3
129	99.0	77.4	116.2
131	93.7	77.3	115.9

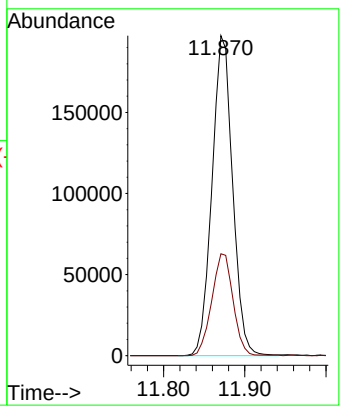




#65
Chlorobenzene
Concen: 48.477 ug/l
RT: 11.870 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:112 Resp: 34793

Ion	Ratio	Lower	Upper
112	100		
114	31.8	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
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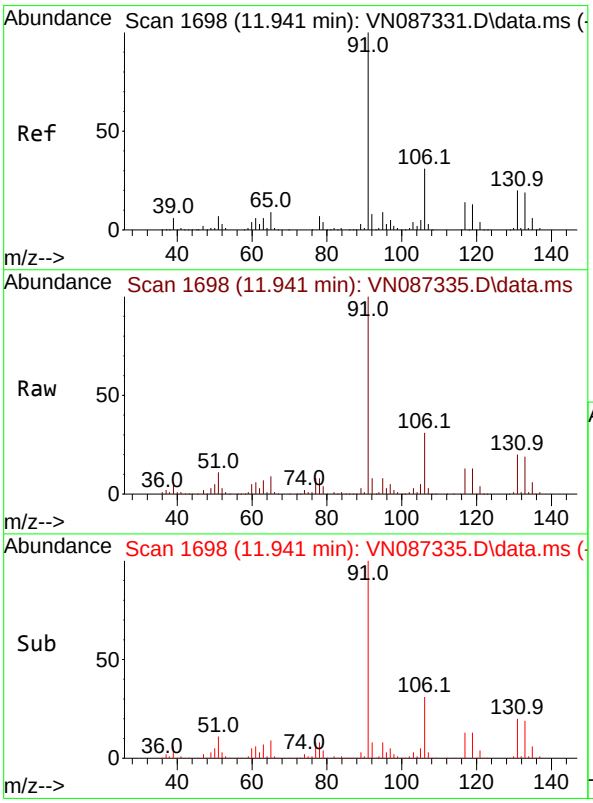
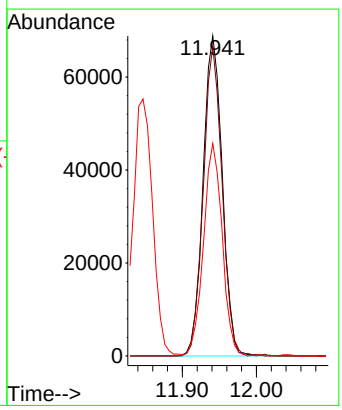
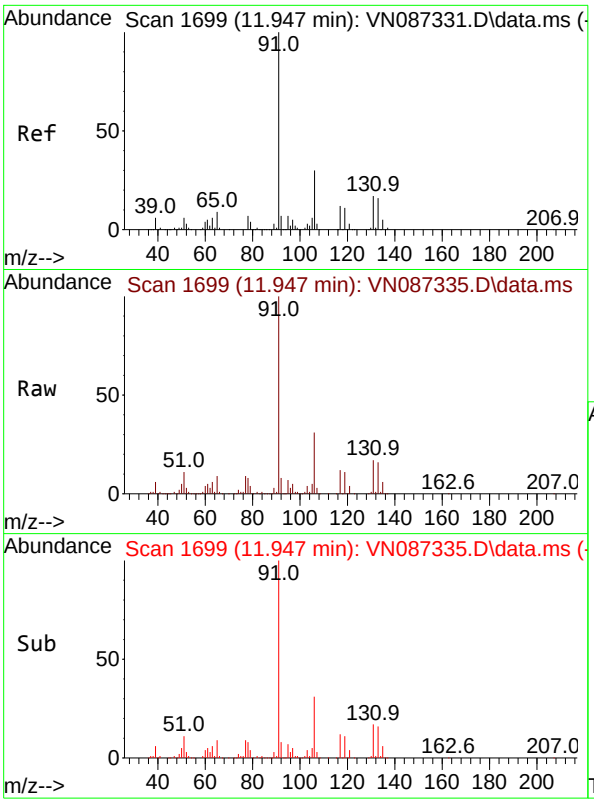


#66
1,1,1,2-Tetrachloroethane
Concen: 50.530 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:131 Resp: 123321

Ion	Ratio	Lower	Upper
131	100		
133	95.5	47.4	142.3
119	65.0	33.1	99.2





#67
Ethyl Benzene
Concen: 51.523 ug/l
RT: 11.947 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 91 Resp: 60877

Ion	Ratio	Lower	Upper
91	100		
106	30.9	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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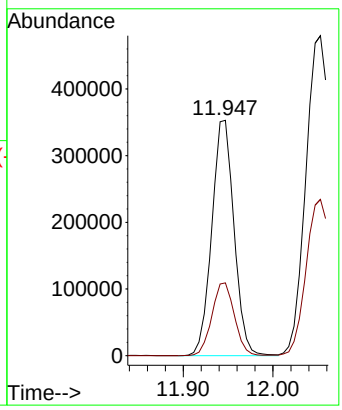
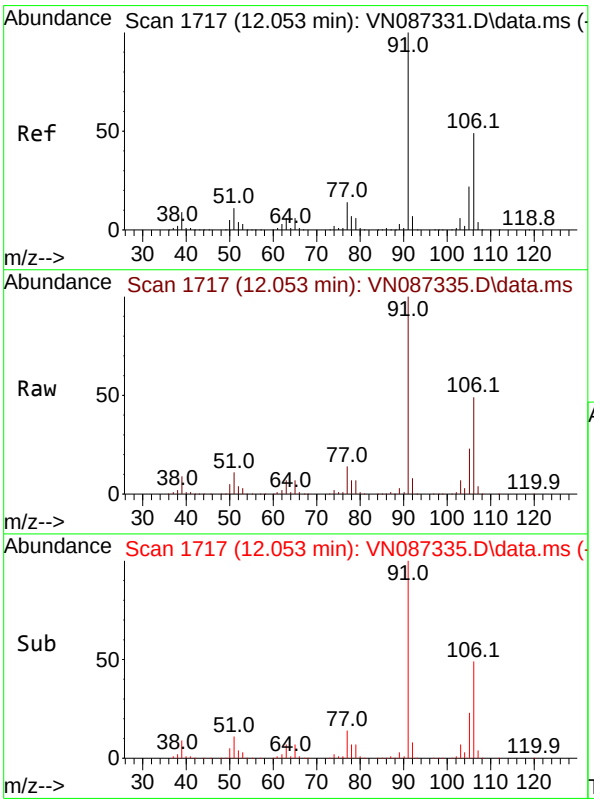
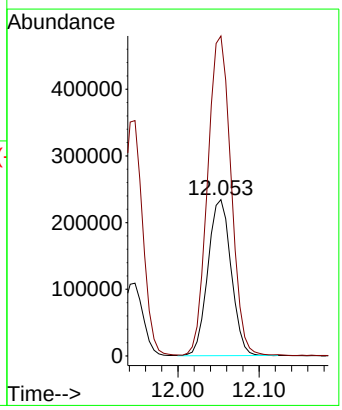


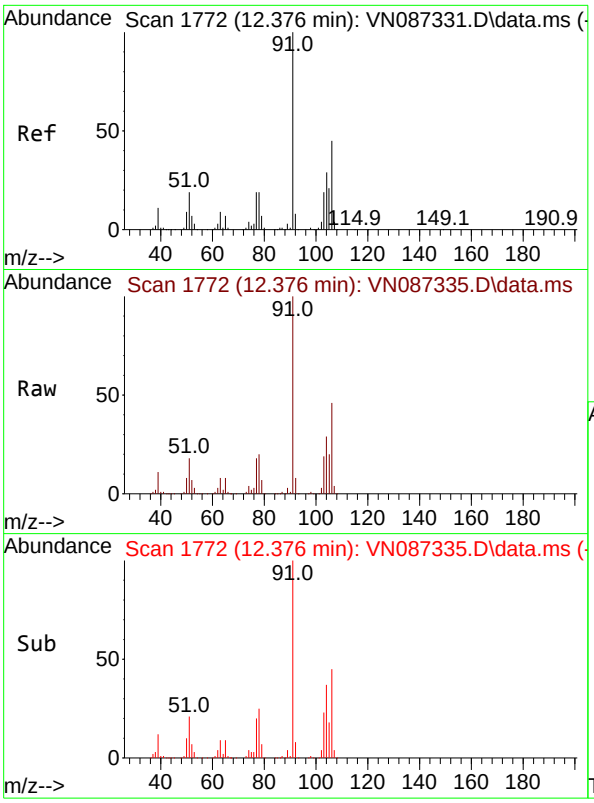


#68
m/p-Xylenes
Concen: 105.269 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:106 Resp: 465762

Ion	Ratio	Lower	Upper
106	100		
91	206.7	162.0	243.0





#69
o-Xylene
Concen: 53.221 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:106 Resp: 22493

Ion	Ratio	Lower	Upper
106	100		
91	217.3	107.7	323.3

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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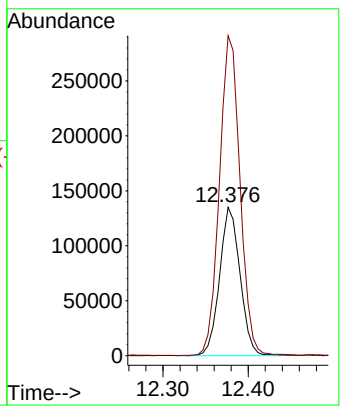
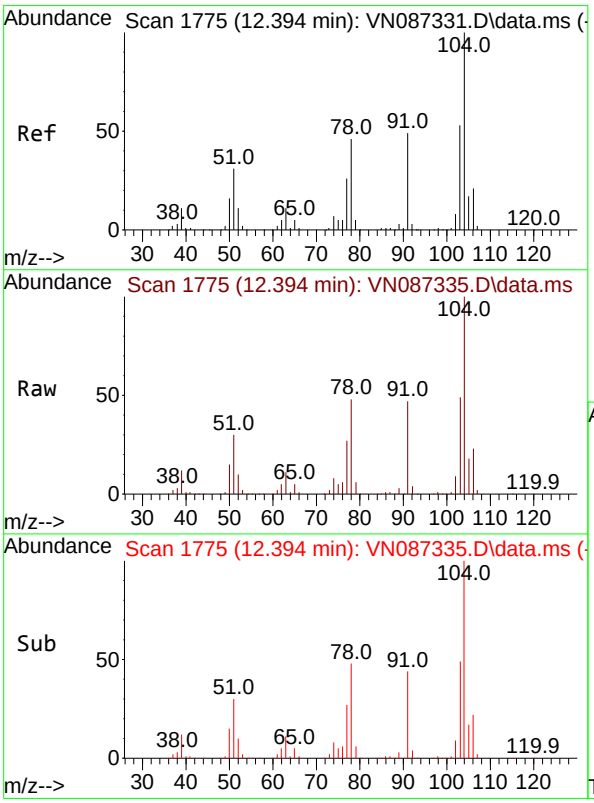
Supervised By :Semsettin Yesilyurt 07/17/2025

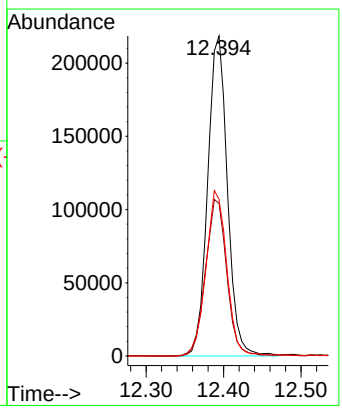


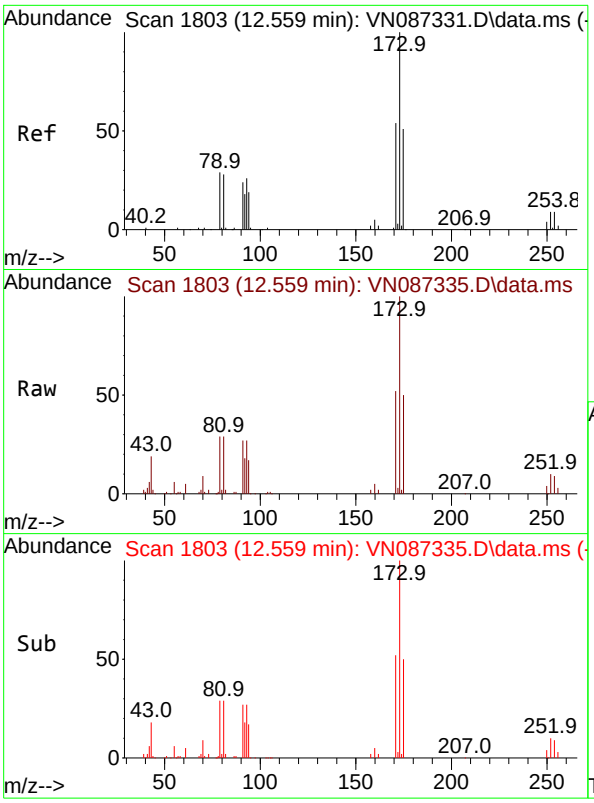


#70
Styrene
Concen: 54.477 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:104 Resp: 387319

Ion	Ratio	Lower	Upper
104	100		
78	53.1	41.0	61.6
103	54.5	43.9	65.9

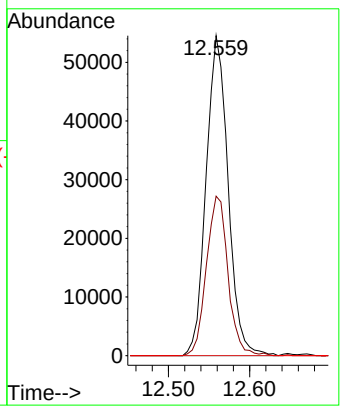




#71
Bromoform
Concen: 51.987 ug/l
RT: 12.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:173 Resp: 10250

Ion	Ratio	Lower	Upper
173	100		
175	49.0	24.1	72.3
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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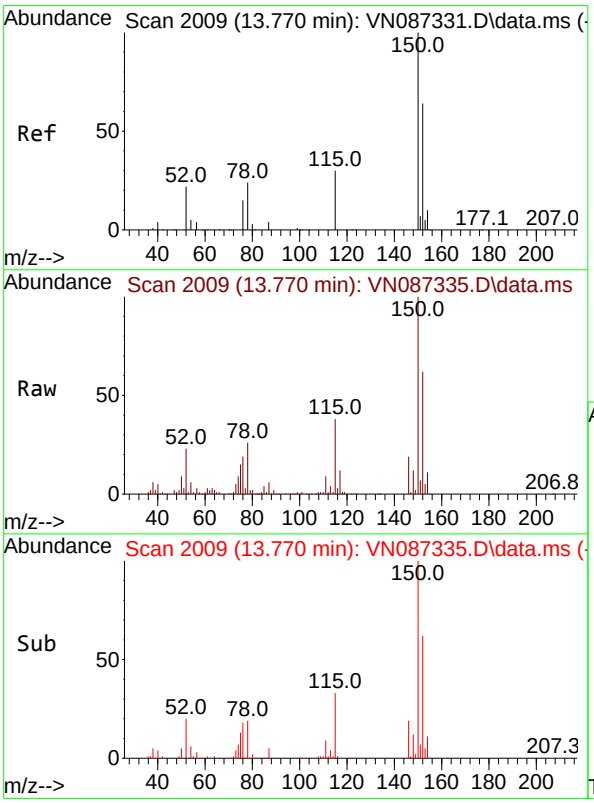
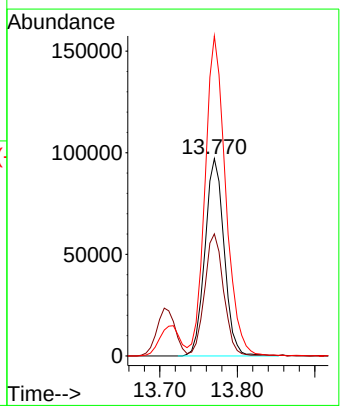
Supervised By :Semsettin Yesilyurt 07/17/2025

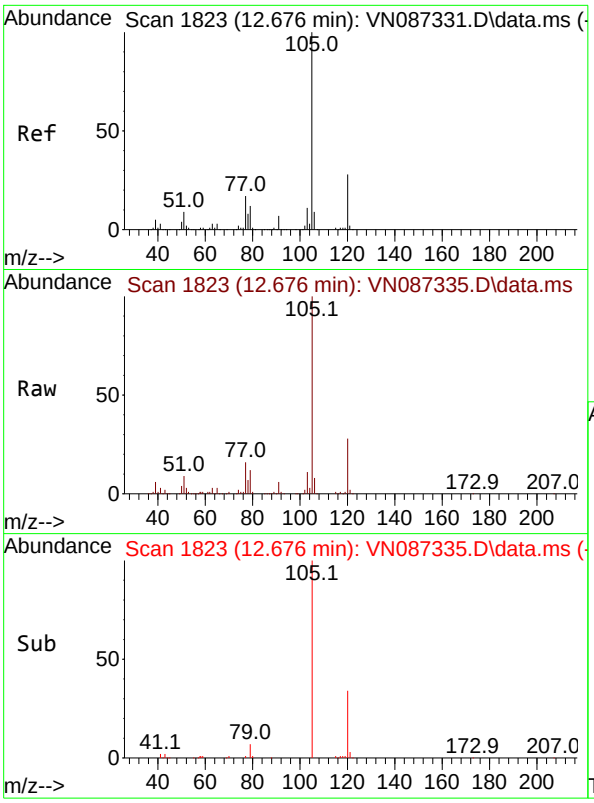


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:152 Resp: 166959

Ion	Ratio	Lower	Upper
152	100		
115	60.2	31.1	93.5
150	174.4	0.0	349.0





#73
Isopropylbenzene
Concen: 54.619 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:105 Resp: 57393

Ion	Ratio	Lower	Upper
105	100		
120	26.9	13.4	40.1

Instrument :
MSVOA_N
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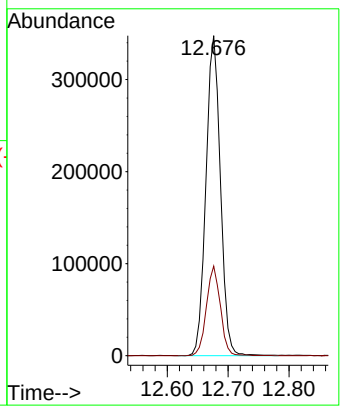
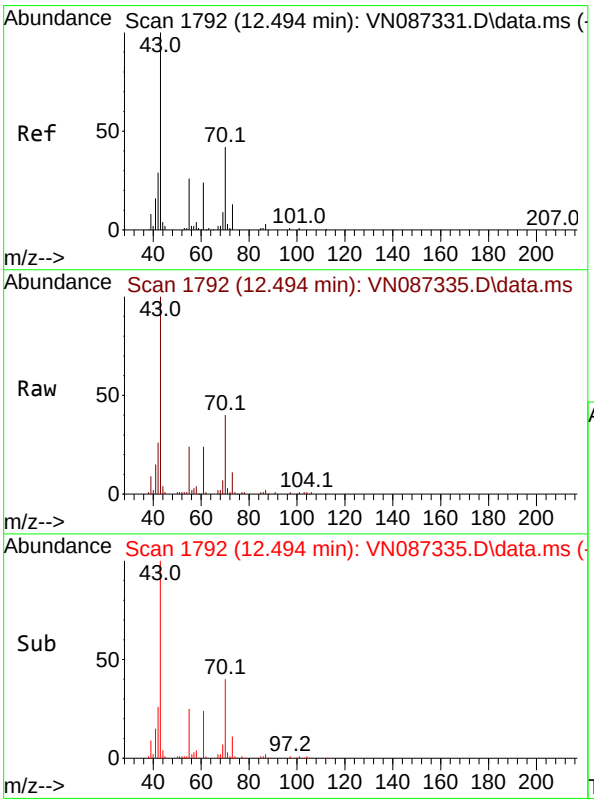
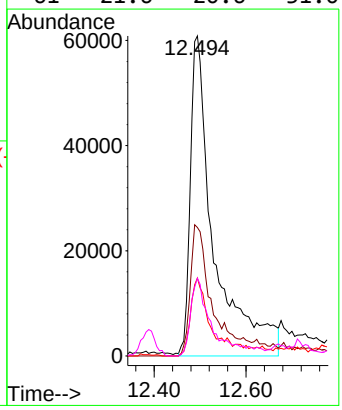


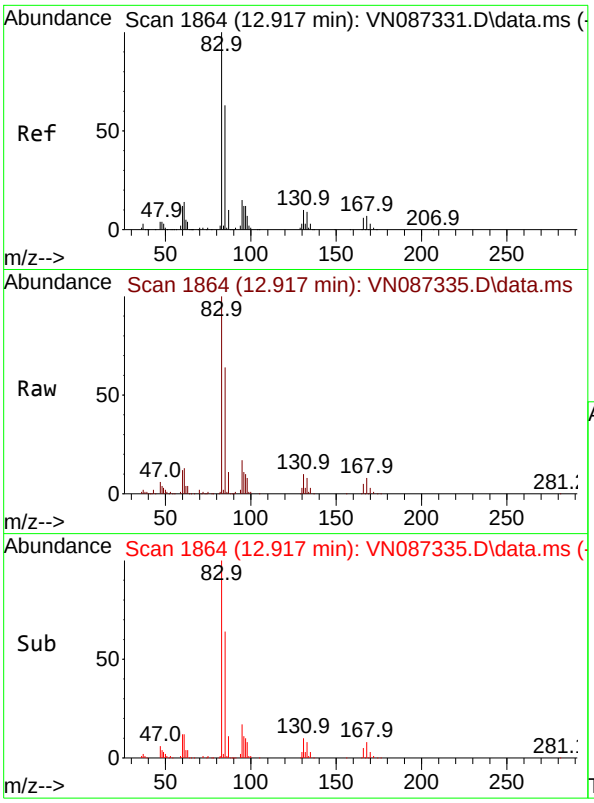


#74
N-amyl acetate
Concen: 49.972 ug/l m
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 43 Resp: 218170

Ion	Ratio	Lower	Upper
43	100		
70	37.9	37.6	56.4
55	19.4	19.6	29.4#
61	21.6	20.6	31.0

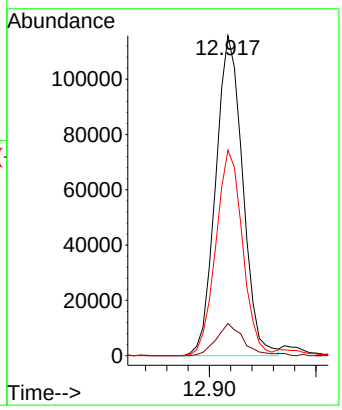




#75
1,1,2,2-Tetrachloroethane
Concen: 51.580 ug/l
RT: 12.917 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 83 Resp: 20394

Ion	Ratio	Lower	Upper
83	100		
131	10.2	5.1	15.3
85	63.4	32.5	97.4



Instrument :
MSVOA_N
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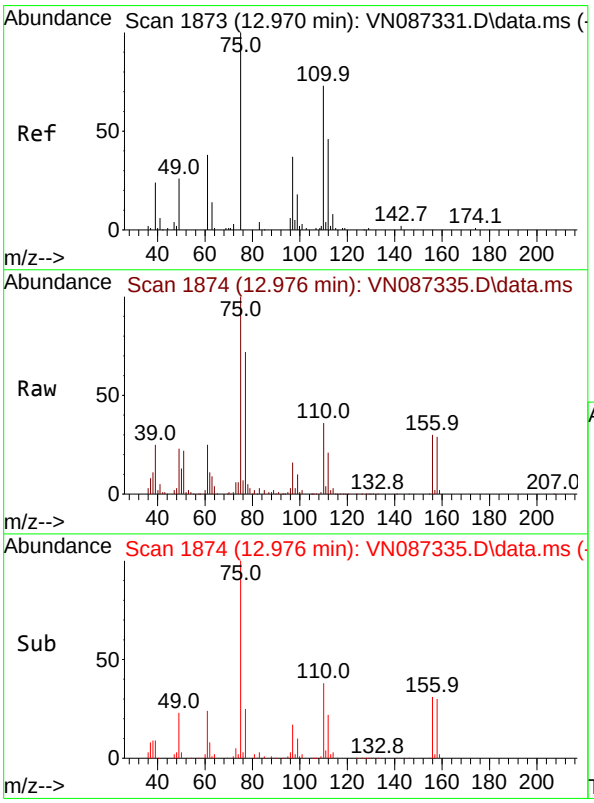
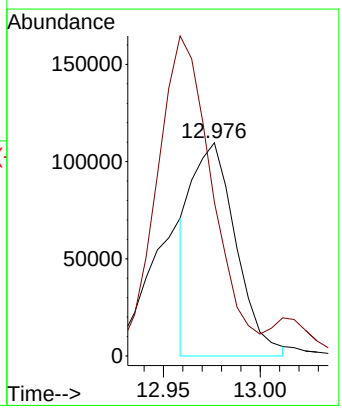
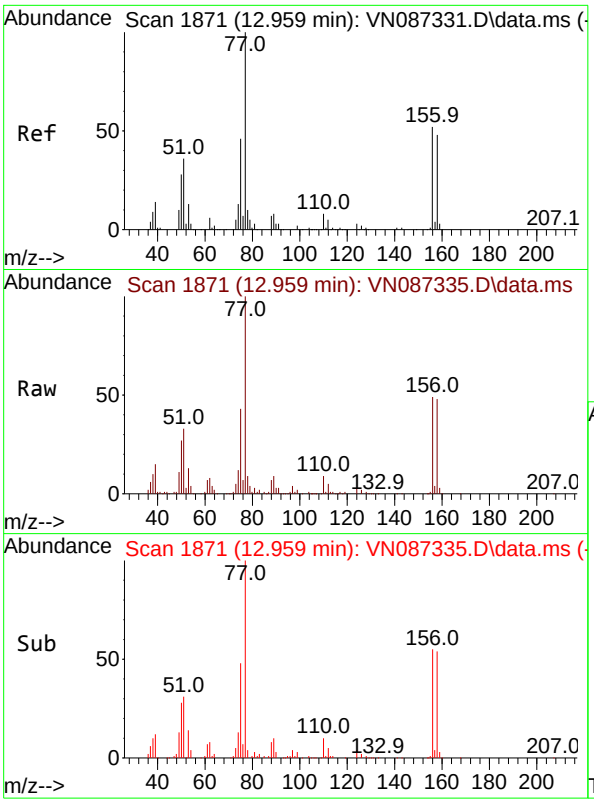


#76
1,2,3-Trichloropropane
Concen: 46.955 ug/l m
RT: 12.976 min Scan# 1874
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 75 Resp: 175797

Ion	Ratio	Lower	Upper
75	100		
77	187.3	94.5	283.6





#77
Bromobenzene
Concen: 52.368 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:156 Resp: 14271

Ion	Ratio	Lower	Upper
156	100		
77	230.7	114.9	344.6
158	98.1	48.5	145.5

Instrument :
MSVOA_N
ClientSampleId :
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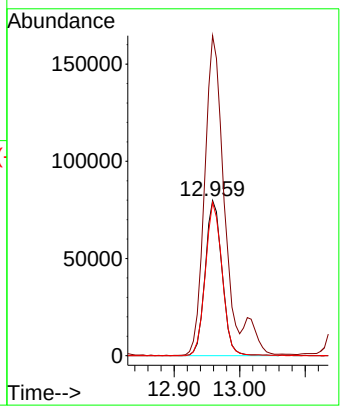
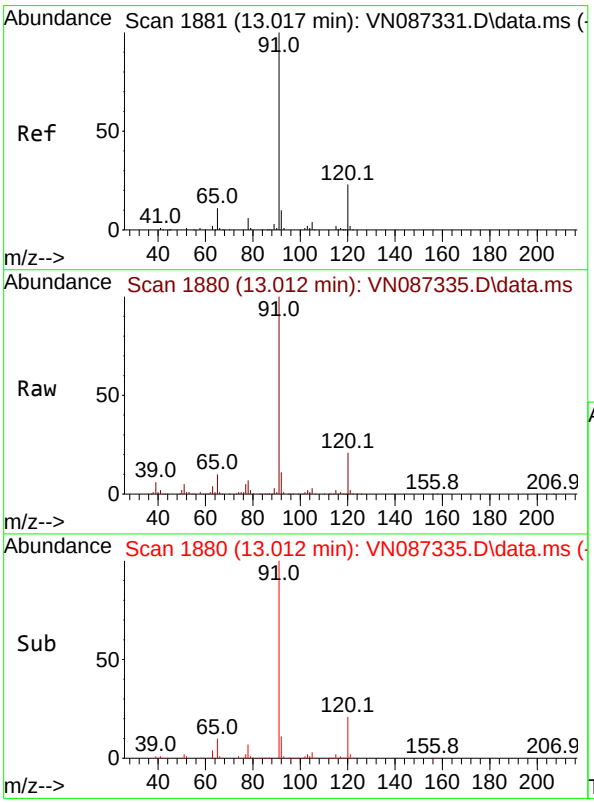
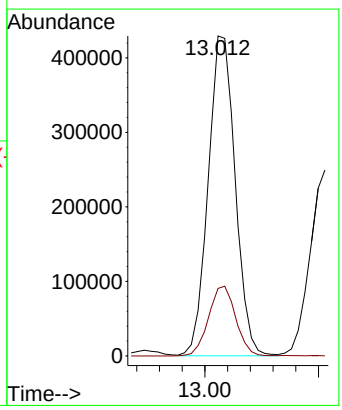


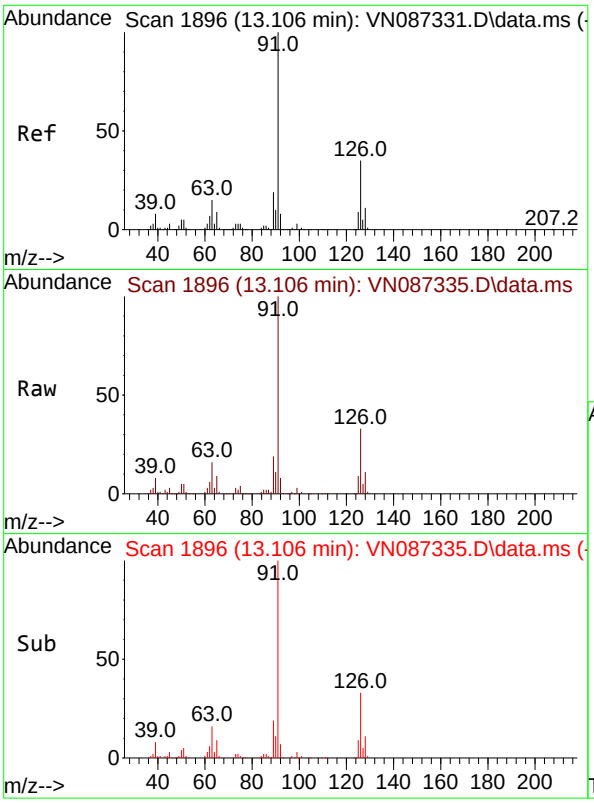


#78
n-propylbenzene
Concen: 53.661 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 91 Resp: 709437

Ion	Ratio	Lower	Upper
91	100		
120	21.9	11.3	33.8





#79
2-Chlorotoluene
Concen: 52.475 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 91 Resp: 42637

Ion	Ratio	Lower	Upper
91	100		
126	33.1	16.9	50.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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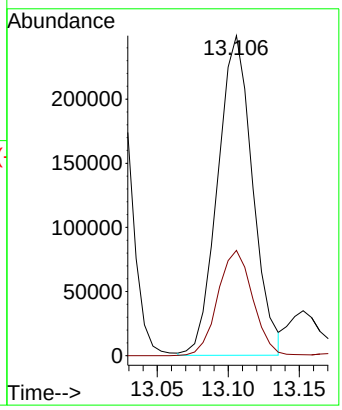
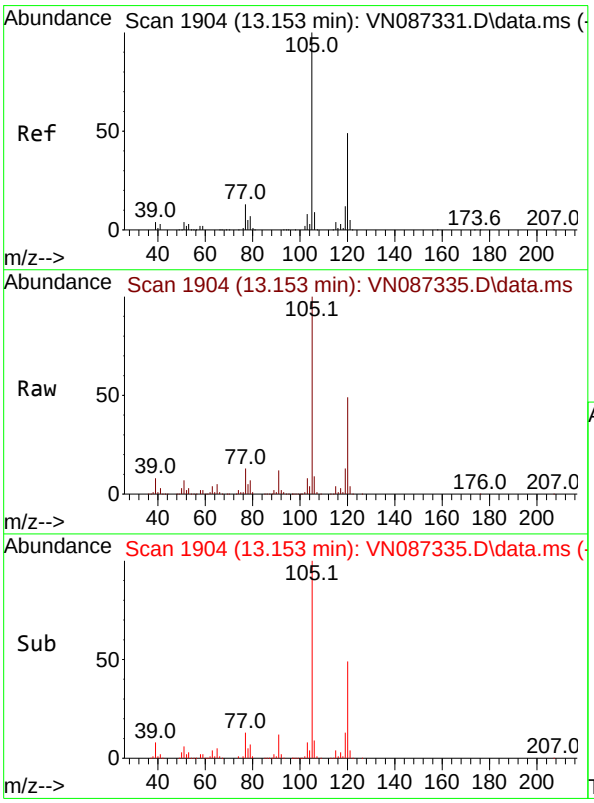
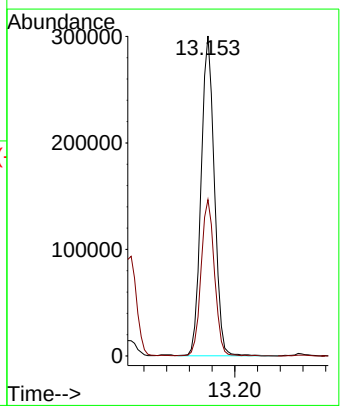


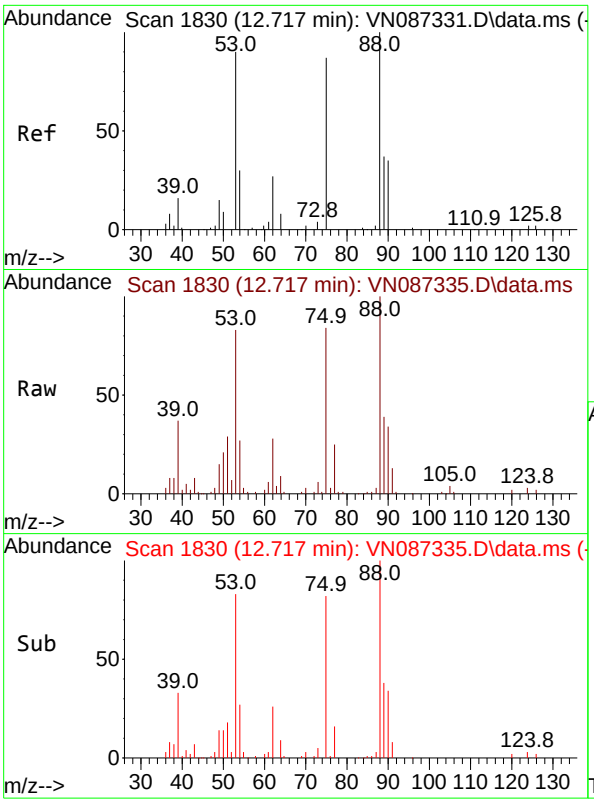


#80
1,3,5-Trimethylbenzene
Concen: 54.071 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:105 Resp: 484100

Ion	Ratio	Lower	Upper
105	100		
120	49.5	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 51.080 ug/l
RT: 12.717 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 75 Resp: 6989

Ion	Ratio	Lower	Upper
75	100		
53	100.2	83.5	125.3
89	48.6	38.4	57.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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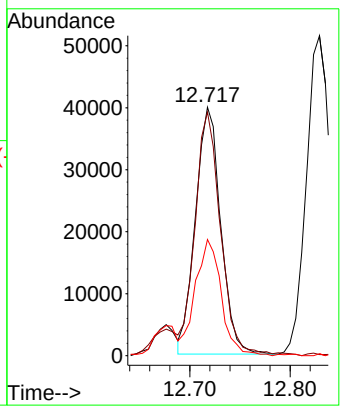
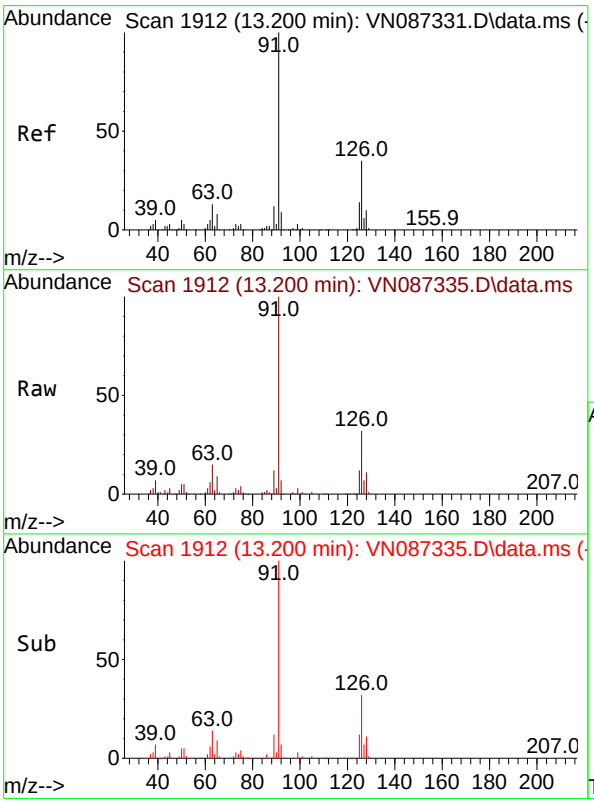
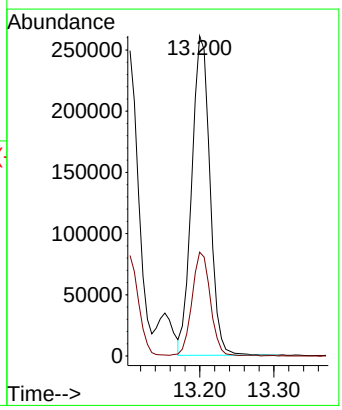


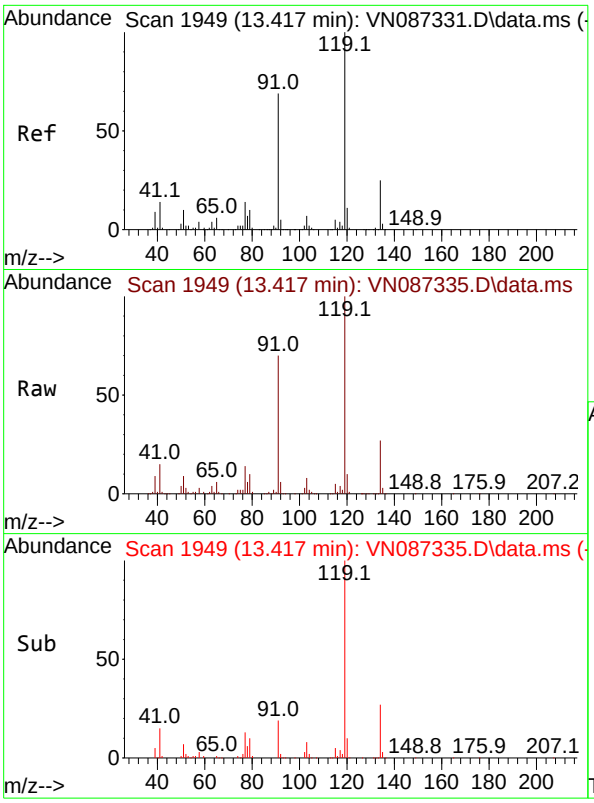


#82
4-Chlorotoluene
Concen: 52.464 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 91 Resp: 443817

Ion	Ratio	Lower	Upper
91	100		
126	32.4	16.6	49.7

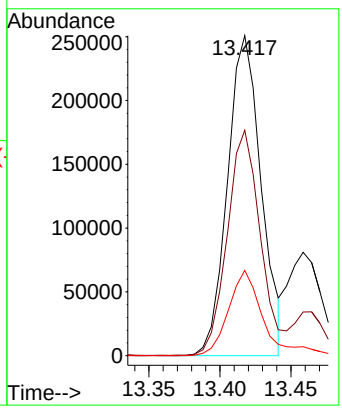




#83
tert-Butylbenzene
Concen: 55.349 ug/l
RT: 13.417 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:119 Resp: 41388

Ion	Ratio	Lower	Upper
119	100		
91	69.7	35.0	105.1
134	27.6	12.6	37.6



Instrument :
MSVOA_N
ClientSampleId :
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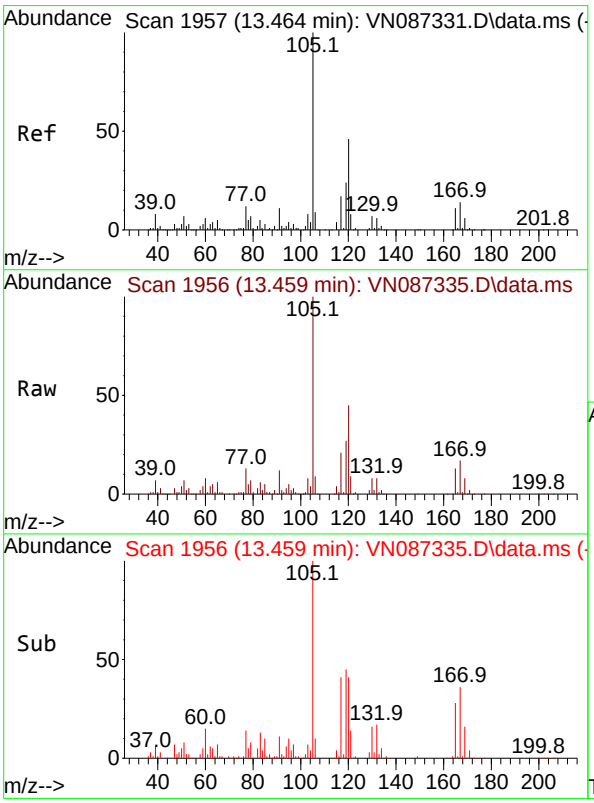
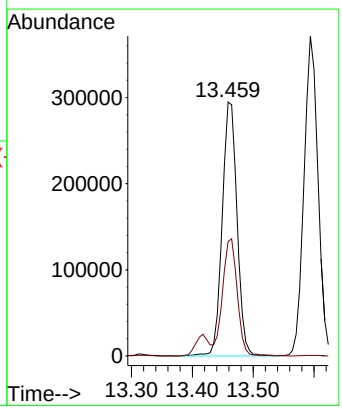
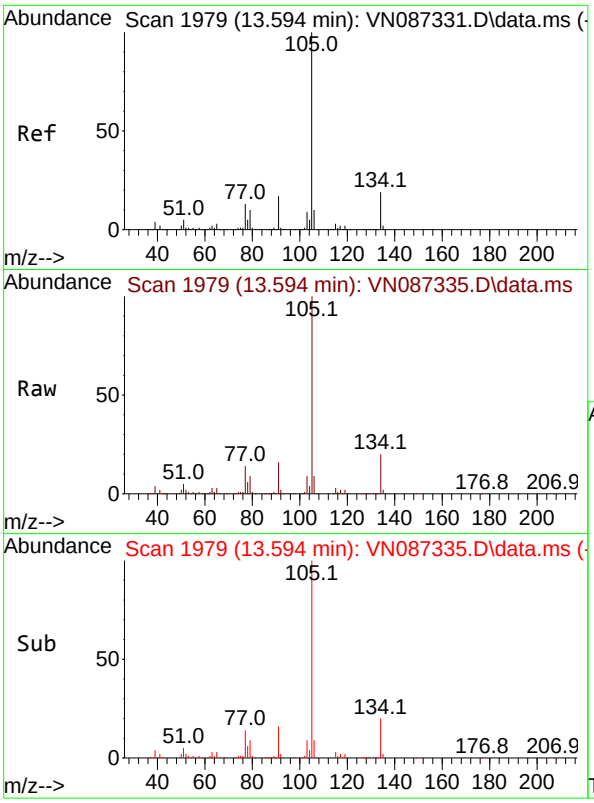


#84
1,2,4-Trimethylbenzene
Concen: 54.773 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:105 Resp: 500792

Ion	Ratio	Lower	Upper
105	100		
120	46.0	22.8	68.3

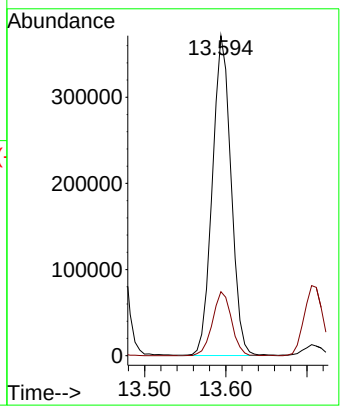




#85
sec-Butylbenzene
Concen: 52.800 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:105 Resp: 59471

Ion	Ratio	Lower	Upper
105	100		
134	20.4	9.8	29.4



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

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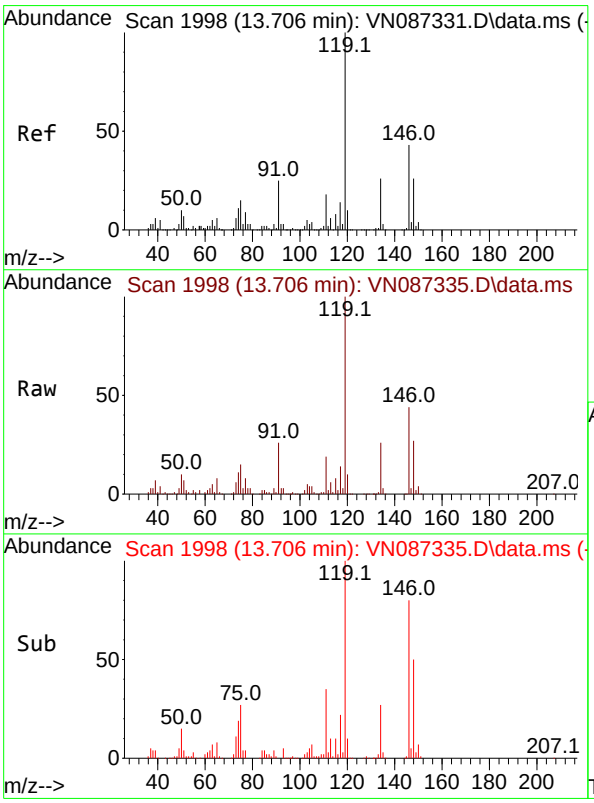
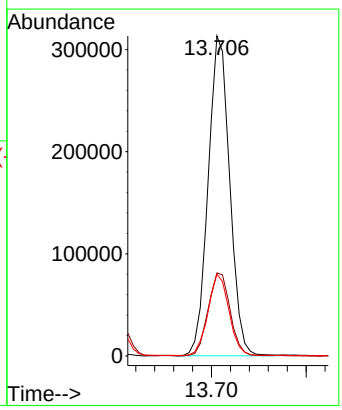
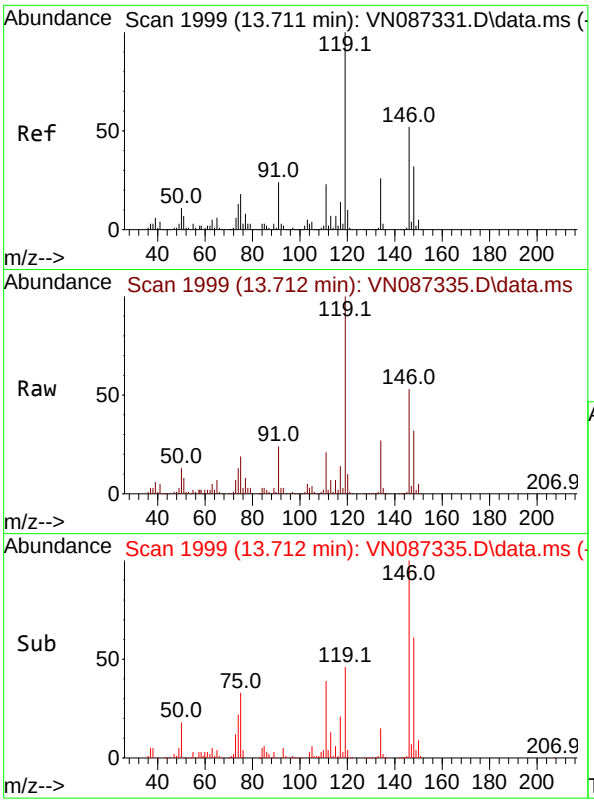


#86
p-Isopropyltoluene
Concen: 54.982 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:119 Resp: 496291

Ion	Ratio	Lower	Upper
119	100		
134	26.5	13.5	40.5
91	24.6	12.2	36.6

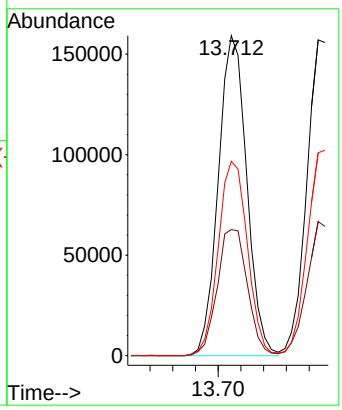




#87
1,3-Dichlorobenzene
Concen: 51.809 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:146 Resp: 27710

Ion	Ratio	Lower	Upper
146	100		
111	42.0	21.4	64.3
148	62.5	31.6	95.0



Instrument :
MSVOA_N
ClientSampleId :
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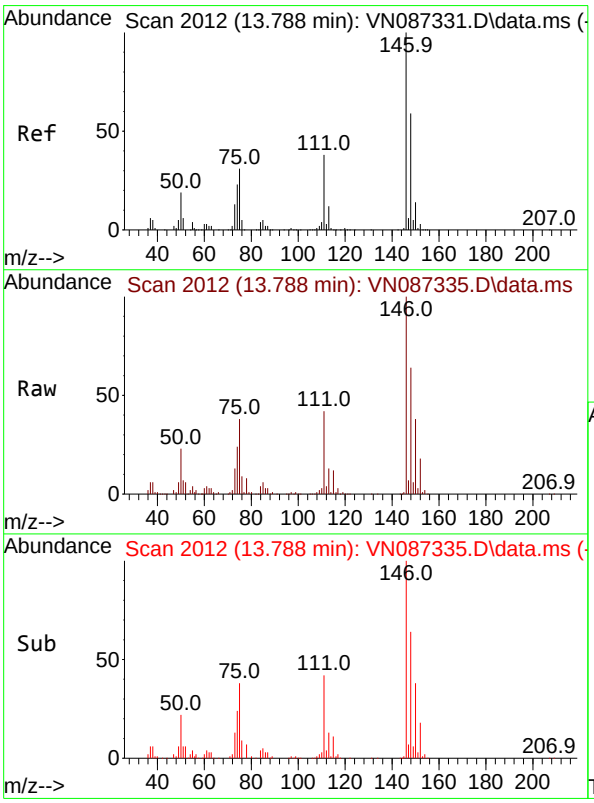
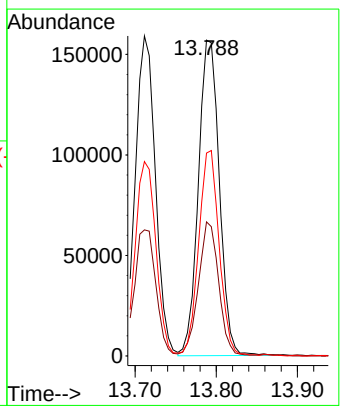
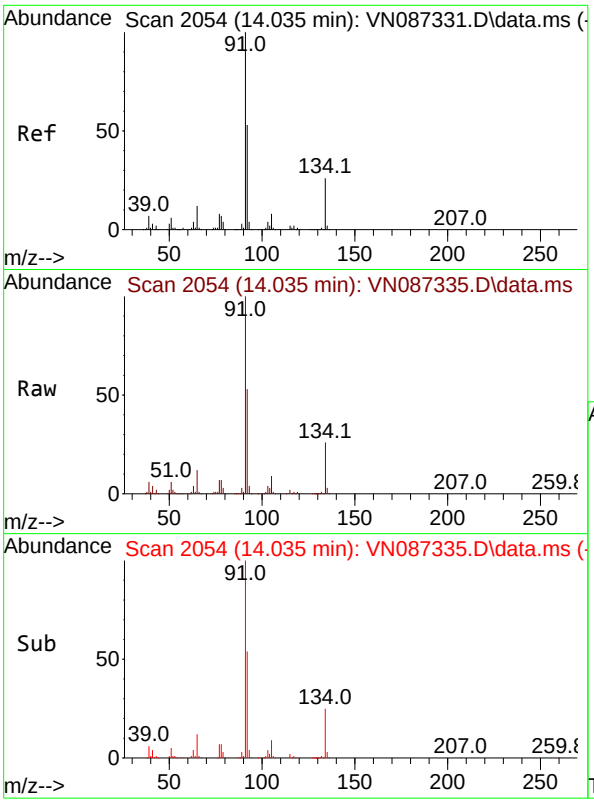


#88
1,4-Dichlorobenzene
Concen: 49.381 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:146 Resp: 282084

Ion	Ratio	Lower	Upper
146	100		
111	40.5	19.6	58.7
148	63.2	31.4	94.0

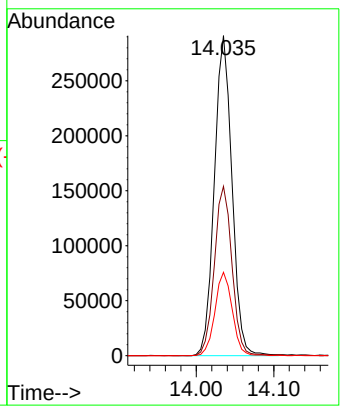




#89
n-Butylbenzene
Concen: 53.250 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 91 Resp: 45896

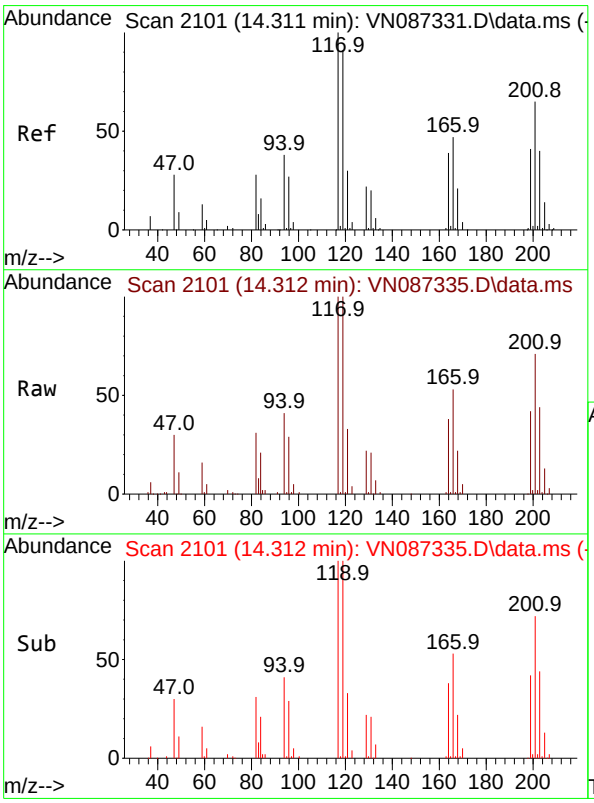
Ion	Ratio	Lower	Upper
91	100		
92	53.0	26.2	78.6
134	25.7	12.4	37.2



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
APPROVED

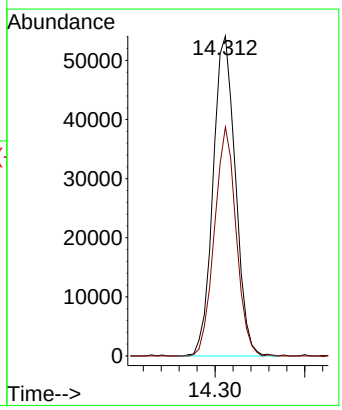
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

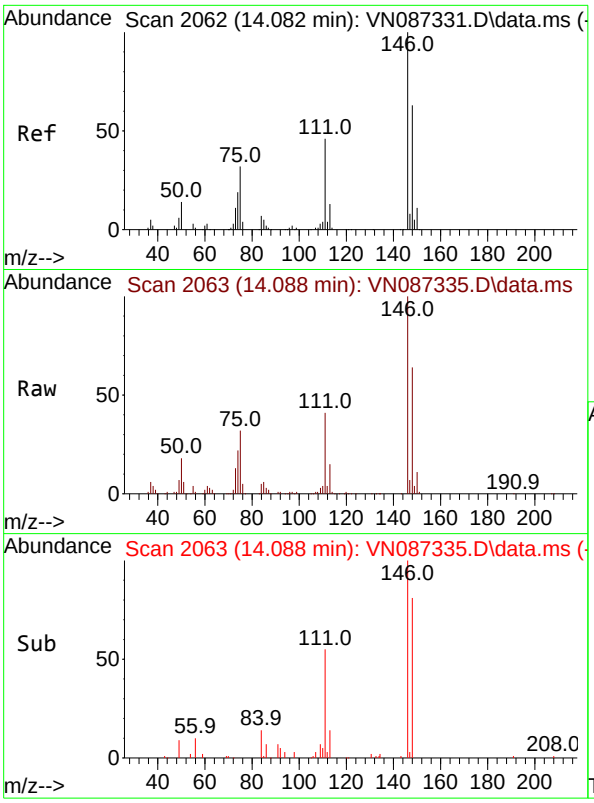


#90
Hexachloroethane
Concen: 48.870 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:117 Resp: 93464

Ion	Ratio	Lower	Upper
117	100		
201	69.6	32.8	98.4

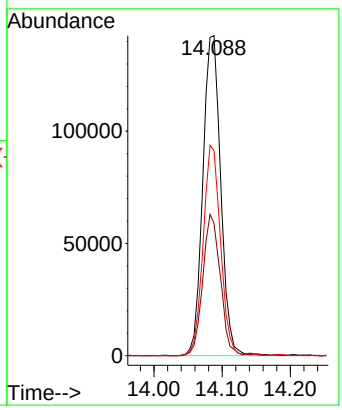




#91
1,2-Dichlorobenzene
Concen: 51.485 ug/l
RT: 14.088 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:146 Resp: 26087

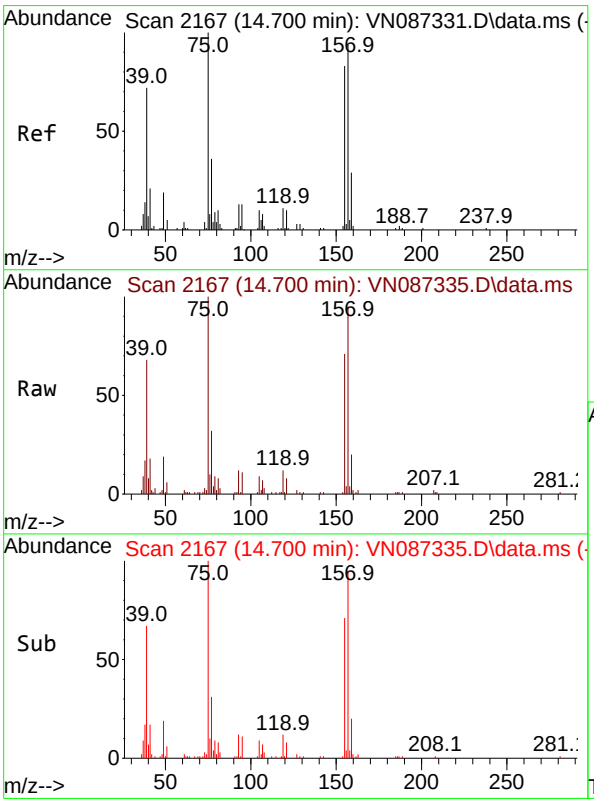
Ion	Ratio	Lower	Upper
146	100		
111	43.4	22.0	66.0
148	64.0	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
APPROVED

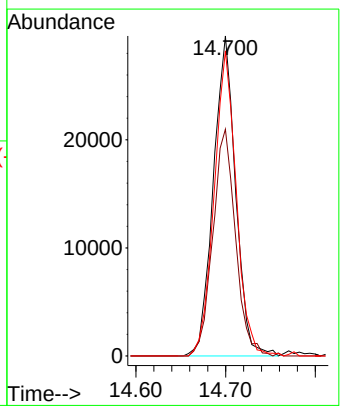
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

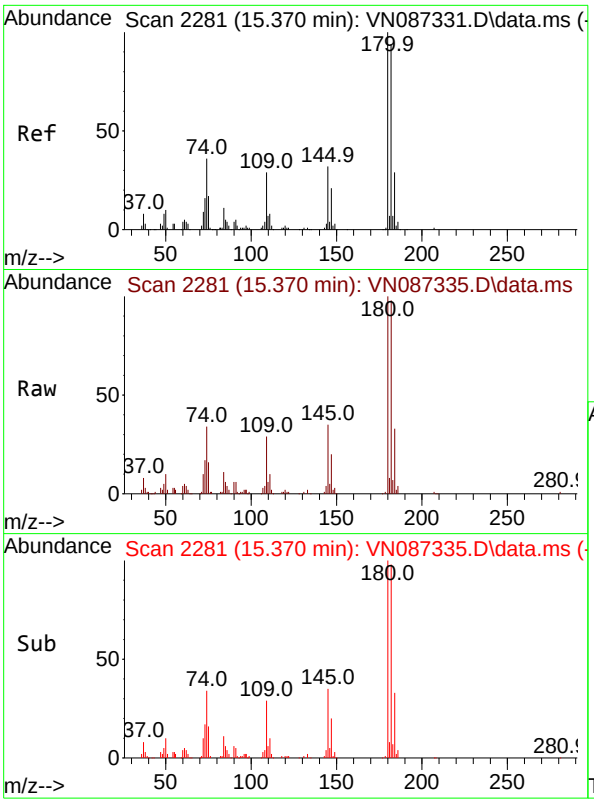


#92
1,2-Dibromo-3-Chloropropane
Concen: 49.035 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion: 75 Resp: 50904

Ion	Ratio	Lower	Upper
75	100		
155	72.3	37.3	111.8
157	95.1	46.2	138.6





#93
1,2,4-Trichlorobenzene
Concen: 52.351 ug/l
RT: 15.370 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

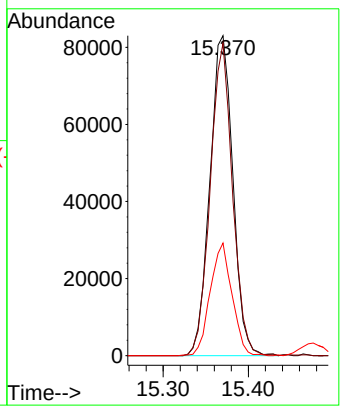
Tgt Ion:180 Resp: 15581

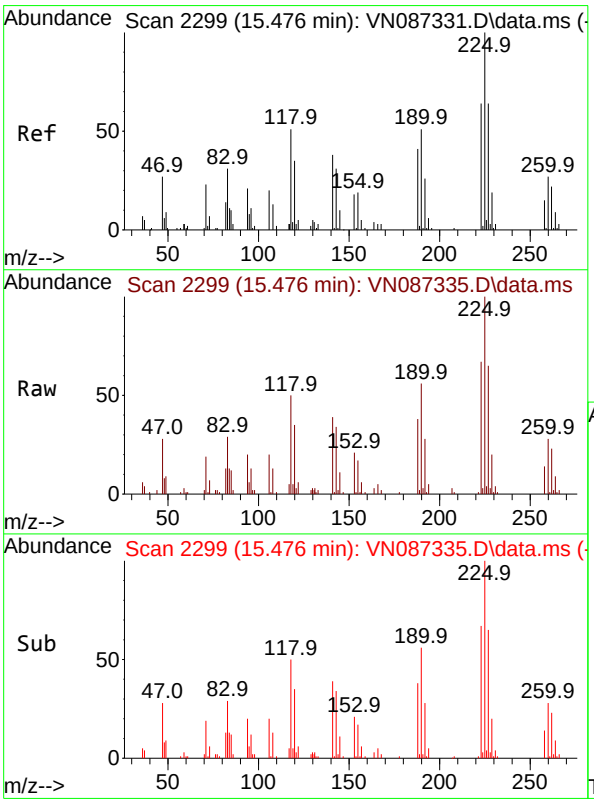
Ion	Ratio	Lower	Upper
180	100		
182	94.5	47.3	141.8
145	33.3	15.4	46.4

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

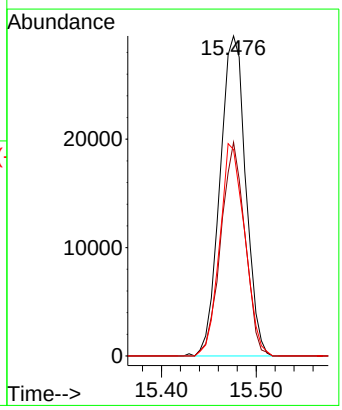


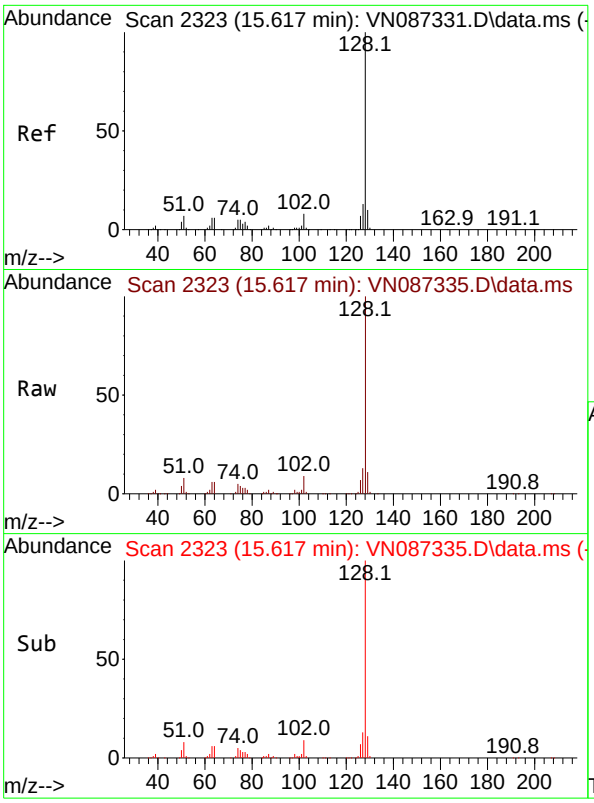


#94
Hexachlorobutadiene
Concen: 50.273 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:225 Resp: 55599

Ion	Ratio	Lower	Upper
225	100		
223	62.7	32.1	96.3
227	64.6	31.3	93.9

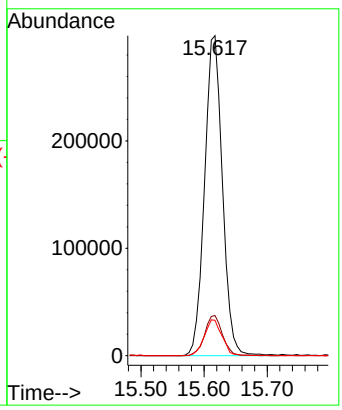




#95
Naphthalene
Concen: 55.585 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:128 Resp: 58609

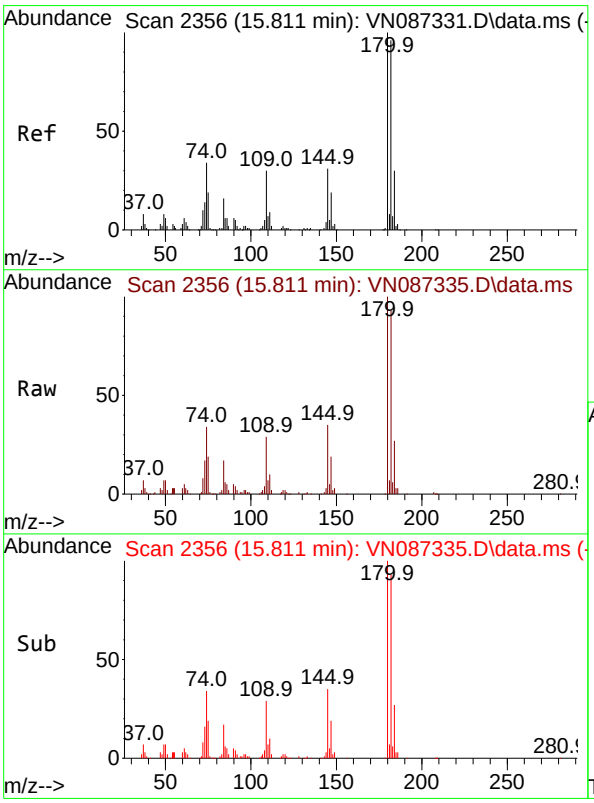
Ion	Ratio	Lower	Upper
128	100		
127	12.5	10.5	15.7
129	11.1	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Manual Integrations
APPROVED

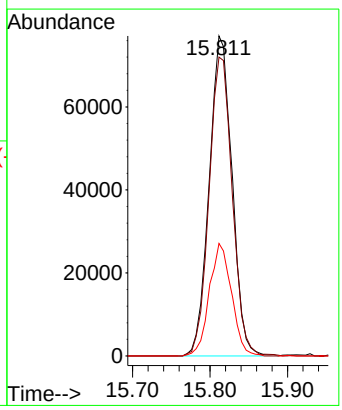
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 52.890 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087335.D
Acq: 16 Jul 2025 19:59

Tgt Ion:180 Resp: 157909

Ion	Ratio	Lower	Upper
180	100		
182	94.8	47.1	141.4
145	34.2	16.9	50.6



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	108	0.00
2	T	Dichlorodifluoromethane	0.531	0.616	-16.0	107	0.00
3	P	Chloromethane	0.668	0.681	-1.9	107	0.00
4	C	Vinyl Chloride	0.664	0.711	-7.1#	106	0.00
5	T	Bromomethane	0.344	0.401	-16.6	122	0.00
6	T	Chloroethane	0.433	0.426	1.6	105	0.00
7	T	Trichlorofluoromethane	0.981	0.968	1.3	103	0.00
8	T	Diethyl Ether	0.381	0.387	-1.6	106	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.504	0.499	1.0	103	0.00
10	T	Methyl Iodide	0.452	0.523	-15.7	115	0.00
11	T	Tert butyl alcohol	0.161	0.169	-5.0	114	0.00
12	CM	1,1-Dichloroethene	0.571	0.519	9.1#	103	0.00
13	T	Acrolein	0.129	0.143	-10.9	128	0.00
14	T	Allyl chloride	1.033	1.013	1.9	110	0.00
15	T	Acrylonitrile	0.437	0.442	-1.1	106	0.00
16	T	Acetone	0.398	0.379	4.8	106	0.00
17	T	Carbon Disulfide	1.693	1.691	0.1	106	0.00
18	T	Methyl Acetate	0.999	0.982	1.7	107	0.00
19	T	Methyl tert-butyl Ether	2.104	2.144	-1.9	107	0.00
20	T	Methylene Chloride	0.766	0.665	13.2	107	0.00
21	T	trans-1,2-Dichloroethene	0.644	0.609	5.4	101	0.00
22	T	Diisopropyl ether	2.167	2.219	-2.4	105	0.00
23	T	Vinyl Acetate	1.895	2.070	-9.2	106	0.00
24	P	1,1-Dichloroethane	1.250	1.205	3.6	107	0.00
25	T	2-Butanone	0.615	0.628	-2.1	106	0.00
26	T	2,2-Dichloropropane	0.972	0.888	8.6	98	0.00
27	T	cis-1,2-Dichloroethene	0.741	0.749	-1.1	106	0.00
28	T	Bromochloromethane	0.598	0.587	1.8	107	0.00
29	T	Tetrahydrofuran	0.399	0.416	-4.3	106	0.00
30	C	Chloroform	1.251	1.209	3.4#	103	0.00
31	T	Cyclohexane	1.043	1.023	1.9	106	0.00
32	T	1,1,1-Trichloroethane	1.084	1.071	1.2	107	0.00
33	S	1,2-Dichloroethane-d4	0.848	0.818	3.5	111	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
35	S	Dibromofluoromethane	0.345	0.344	0.3	109	0.00
36	T	1,1-Dichloropropene	0.456	0.489	-7.2	106	0.00
37	T	Ethyl Acetate	0.658	0.704	-7.0	105	0.00
38	T	Carbon Tetrachloride	0.502	0.530	-5.6	108	0.00
39	T	Methylcyclohexane	0.493	0.524	-6.3	104	0.00
40	TM	Benzene	1.473	1.543	-4.8	105	0.00
41	T	Methacrylonitrile	0.344	0.371	-7.8	106	0.00
42	TM	1,2-Dichloroethane	0.558	0.568	-1.8	105	0.00
43	T	Isopropyl Acetate	1.022	1.093	-6.9	108	0.00
44	TM	Trichloroethene	0.348	0.346	0.6	102	0.00
45	C	1,2-Dichloropropane	0.374	0.396	-5.9#	106	0.00
46	T	Dibromomethane	0.280	0.287	-2.5	105	0.00
47	T	Bromodichloromethane	0.564	0.583	-3.4	108	0.00
48	T	Methyl methacrylate	0.460	0.516	-12.2	108	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.007	0.008	-14.3	109	0.00
50	S	Toluene-d8	1.230	1.269	-3.2	109	0.00
51	T	4-Methyl-2-Pentanone	0.646	0.695	-7.6	106	0.00
52	CM	Toluene	0.895	0.935	-4.5#	102	0.00
53	T	t-1,3-Dichloropropene	0.571	0.624	-9.3	106	0.00
54	T	cis-1,3-Dichloropropene	0.590	0.630	-6.8	105	0.00
55	T	1,1,2-Trichloroethane	0.362	0.362	0.0	104	0.00
56	T	Ethyl methacrylate	0.552	0.648	-17.4	109	0.00
57	T	1,3-Dichloropropane	0.627	0.654	-4.3	105	0.00
58	T	2-Chloroethyl Vinyl ether	0.297	0.339	-14.1	103	0.00
59	T	2-Hexanone	0.429	0.495	-15.4	105	0.00
60	T	Dibromochloromethane	0.413	0.436	-5.6	107	0.00
61	T	1,2-Dibromoethane	0.381	0.394	-3.4	108	0.00
62	S	4-Bromofluorobenzene	0.455	0.481	-5.7	111	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00
64	T	Tetrachloroethene	0.322	0.308	4.3	102	0.00
65	PM	Chlorobenzene	1.123	1.088	3.1	104	0.00
66	T	1,1,1,2-Tetrachloroethane	0.382	0.386	-1.0	105	0.00
67	C	Ethyl Benzene	1.848	1.904	-3.0#	104	0.00
68	T	m/p-Xylenes	0.692	0.728	-5.2	102	0.00
69	T	o-Xylene	0.661	0.704	-6.5	104	0.00
70	T	Styrene	1.112	1.212	-9.0	103	0.00
71	P	Bromoform	0.308	0.321	-4.2	104	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	105	0.00
73	T	Isopropylbenzene	3.147	3.438	-9.2	107	0.00
74	T	N-amyl acetate	1.307	1.307	0.0	121	0.00
75	P	1,1,2,2-Tetrachloroethane	1.184	1.222	-3.2	107	0.00
76	T	1,2,3-Trichloropropane	1.121	1.053	6.1	93	0.00
77	T	Bromobenzene	0.816	0.855	-4.8	104	0.00
78	T	n-propylbenzene	3.959	4.249	-7.3	104	0.00
79	T	2-Chlorotoluene	2.433	2.554	-5.0	106	0.00
80	T	1,3,5-Trimethylbenzene	2.681	2.900	-8.2	104	0.00
81	T	trans-1,4-Dichloro-2-butene	0.410	0.419	-2.2	109	0.00
82	T	4-Chlorotoluene	2.533	2.658	-4.9	106	0.00
83	T	tert-Butylbenzene	2.239	2.479	-10.7	108	0.00
84	T	1,2,4-Trimethylbenzene	2.738	2.999	-9.5	105	0.00
85	T	sec-Butylbenzene	3.373	3.562	-5.6	105	0.00
86	T	p-Isopropyltoluene	2.703	2.973	-10.0	105	0.00
87	T	1,3-Dichlorobenzene	1.602	1.660	-3.6	105	0.00
88	T	1,4-Dichlorobenzene	1.711	1.690	1.2	105	0.00
89	T	n-Butylbenzene	2.581	2.749	-6.5	105	0.00
90	T	Hexachloroethane	0.573	0.560	2.3	102	0.00
91	T	1,2-Dichlorobenzene	1.517	1.563	-3.0	104	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.311	0.305	1.9	106	0.00
93	T	1,2,4-Trichlorobenzene	0.891	0.933	-4.7	105	0.00
94	T	Hexachlorobutadiene	0.331	0.333	-0.6	107	0.00
95	T	Naphthalene	3.158	3.510	-11.1	107	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.894	0.946	-5.8	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	108	0.00
2	T	Dichlorodifluoromethane	50.000	58.029	-16.1	107	0.00
3	P	Chloromethane	50.000	50.986	-2.0	107	0.00
4	C	Vinyl Chloride	50.000	53.589	-7.2#	106	0.00
5	T	Bromomethane	50.000	58.322	-16.6	122	0.00
6	T	Chloroethane	50.000	49.172	1.7	105	0.00
7	T	Trichlorofluoromethane	50.000	49.336	1.3	103	0.00
8	T	Diethyl Ether	50.000	50.861	-1.7	106	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	49.520	1.0	103	0.00
10	T	Methyl Iodide	50.000	50.369	-0.7	115	0.00
11	T	Tert butyl alcohol	250.000	262.884	-5.2	114	0.00
12	CM	1,1-Dichloroethene	50.000	45.432	9.1#	103	0.00
13	T	Acrolein	250.000	277.145	-10.9	128	0.00
14	T	Allyl chloride	50.000	49.004	2.0	110	0.00
15	T	Acrylonitrile	250.000	252.616	-1.0	106	0.00
16	T	Acetone	250.000	237.913	4.8	106	0.00
17	T	Carbon Disulfide	50.000	49.947	0.1	106	0.00
18	T	Methyl Acetate	50.000	49.111	1.8	107	0.00
19	T	Methyl tert-butyl Ether	50.000	50.939	-1.9	107	0.00
20	T	Methylene Chloride	50.000	49.445	1.1	107	0.00
21	T	trans-1,2-Dichloroethene	50.000	47.283	5.4	101	0.00
22	T	Diisopropyl ether	50.000	51.191	-2.4	105	0.00
23	T	Vinyl Acetate	250.000	273.101	-9.2	106	0.00
24	P	1,1-Dichloroethane	50.000	48.170	3.7	107	0.00
25	T	2-Butanone	250.000	255.411	-2.2	106	0.00
26	T	2,2-Dichloropropane	50.000	45.700	8.6	98	0.00
27	T	cis-1,2-Dichloroethene	50.000	50.543	-1.1	106	0.00
28	T	Bromochloromethane	50.000	49.089	1.8	107	0.00
29	T	Tetrahydrofuran	250.000	260.404	-4.2	106	0.00
30	C	Chloroform	50.000	48.306	3.4#	103	0.00
31	T	Cyclohexane	50.000	49.042	1.9	106	0.00
32	T	1,1,1-Trichloroethane	50.000	49.412	1.2	107	0.00
33	S	1,2-Dichloroethane-d4	50.000	48.204	3.6	111	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	105	0.00
35	S	Dibromofluoromethane	50.000	49.934	0.1	109	0.00
36	T	1,1-Dichloropropene	50.000	53.690	-7.4	106	0.00
37	T	Ethyl Acetate	50.000	53.525	-7.0	105	0.00
38	T	Carbon Tetrachloride	50.000	52.821	-5.6	108	0.00
39	T	Methylcyclohexane	50.000	53.109	-6.2	104	0.00
40	TM	Benzene	50.000	52.380	-4.8	105	0.00
41	T	Methacrylonitrile	50.000	53.895	-7.8	106	0.00
42	TM	1,2-Dichloroethane	50.000	50.821	-1.6	105	0.00
43	T	Isopropyl Acetate	50.000	53.477	-7.0	108	0.00
44	TM	Trichloroethene	50.000	49.731	0.5	102	0.00
45	C	1,2-Dichloropropane	50.000	52.900	-5.8#	106	0.00
46	T	Dibromomethane	50.000	51.241	-2.5	105	0.00
47	T	Bromodichloromethane	50.000	51.696	-3.4	108	0.00
48	T	Methyl methacrylate	50.000	56.096	-12.2	108	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1177.300	-17.7	109	0.00
50	S	Toluene-d8	50.000	51.573	-3.1	109	0.00
51	T	4-Methyl-2-Pentanone	250.000	268.966	-7.6	106	0.00
52	CM	Toluene	50.000	52.236	-4.5#	102	0.00
53	T	t-1,3-Dichloropropene	50.000	54.628	-9.3	106	0.00
54	T	cis-1,3-Dichloropropene	50.000	53.351	-6.7	105	0.00
55	T	1,1,2-Trichloroethane	50.000	49.889	0.2	104	0.00
56	T	Ethyl methacrylate	50.000	53.042	-6.1	109	0.00
57	T	1,3-Dichloropropane	50.000	52.202	-4.4	105	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	285.088	-14.0	103	0.00
59	T	2-Hexanone	250.000	288.579	-15.4	105	0.00
60	T	Dibromochloromethane	50.000	52.685	-5.4	107	0.00
61	T	1,2-Dibromoethane	50.000	51.746	-3.5	108	0.00
62	S	4-Bromofluorobenzene	50.000	52.942	-5.9	111	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	107	0.00
64	T	Tetrachloroethene	50.000	47.819	4.4	102	0.00
65	PM	Chlorobenzene	50.000	48.477	3.0	104	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	50.530	-1.1	105	0.00
67	C	Ethyl Benzene	50.000	51.523	-3.0#	104	0.00
68	T	m/p-Xylenes	100.000	105.269	-5.3	102	0.00
69	T	o-Xylene	50.000	53.221	-6.4	104	0.00
70	T	Styrene	50.000	54.477	-9.0	103	0.00
71	P	Bromoform	50.000	51.987	-4.0	104	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	105	0.00
73	T	Isopropylbenzene	50.000	54.619	-9.2	107	0.00
74	T	N-amyl acetate	50.000	49.972	0.1	121	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	51.580	-3.2	107	0.00
76	T	1,2,3-Trichloropropane	50.000	46.955	6.1	93	0.00
77	T	Bromobenzene	50.000	52.368	-4.7	104	0.00
78	T	n-propylbenzene	50.000	53.661	-7.3	104	0.00
79	T	2-Chlorotoluene	50.000	52.475	-5.0	106	0.00
80	T	1,3,5-Trimethylbenzene	50.000	54.071	-8.1	104	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	51.080	-2.2	109	0.00
82	T	4-Chlorotoluene	50.000	52.464	-4.9	106	0.00
83	T	tert-Butylbenzene	50.000	55.349	-10.7	108	0.00
84	T	1,2,4-Trimethylbenzene	50.000	54.773	-9.5	105	0.00
85	T	sec-Butylbenzene	50.000	52.800	-5.6	105	0.00
86	T	p-Isopropyltoluene	50.000	54.982	-10.0	105	0.00
87	T	1,3-Dichlorobenzene	50.000	51.809	-3.6	105	0.00
88	T	1,4-Dichlorobenzene	50.000	49.381	1.2	105	0.00
89	T	n-Butylbenzene	50.000	53.250	-6.5	105	0.00
90	T	Hexachloroethane	50.000	48.870	2.3	102	0.00
91	T	1,2-Dichlorobenzene	50.000	51.485	-3.0	104	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	49.035	1.9	106	0.00
93	T	1,2,4-Trichlorobenzene	50.000	52.351	-4.7	105	0.00
94	T	Hexachlorobutadiene	50.000	50.273	-0.5	107	0.00
95	T	Naphthalene	50.000	55.585	-11.2	107	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087335.D
Acq On : 16 Jul 2025 19:59
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN071625

Quant Time: Jul 17 03:00:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	52.890	-5.8	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN087552.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	Alliance	Contract:	JACO05
Lab Code:	ACE	SDG No.:	Q2842
Instrument ID:	MSVOA_N	Calibration Date/Time:	08/14/2025 09:34
Lab File ID:	VN087552.D	Init. Calib. Date(s):	07/16/2025 07/16/2025
Heated Purge: (Y/N)	N	Init. Calib. Time(s):	17:05 18:54

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.664	0.678		2.11	20
1,1-Dichloroethene	0.571	0.562		-1.58	20
1,1-Dichloroethane	1.250	1.280	0.1	2.4	20
cis-1,2-Dichloroethene	0.741	0.782		5.53	20
1,1,1-Trichloroethane	1.084	1.139		5.07	20
Benzene	1.473	1.404		-4.68	20
1,2-Dichloroethane	0.558	0.573		2.69	20
Trichloroethene	0.348	0.305		-12.36	20
1,1,2-Trichloroethane	0.362	0.350		-3.32	20
Tetrachloroethene	0.322	0.260		-19.25	20
1,2-Dichloroethane-d4	0.848	0.912		7.55	20
Dibromofluoromethane	0.345	0.310		-10.15	20
Toluene-d8	1.230	1.125		-8.54	20
4-Bromofluorobenzene	0.455	0.433		-4.84	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 08/14/2025
Supervised By :Mahesh Dadoda 08/19/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	271352	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	543098	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	500619	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	255173	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	247424	53.738	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 107.480%			
35) Dibromofluoromethane	8.153	113	168221	44.903	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 89.800%			
50) Toluene-d8	10.547	98	611058	45.726	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 91.460%			
62) 4-Bromofluorobenzene	12.829	95	235280	47.655	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 95.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	160120	55.557	ug/l	96
3) Chloromethane	2.383	50	169400	46.740	ug/l	99
4) Vinyl Chloride	2.542	62	183878	51.052	ug/l	96
5) Bromomethane	2.965	94	102629	55.023	ug/l	98
6) Chloroethane	3.130	64	126750	53.961	ug/l	97
7) Trichlorofluoromethane	3.506	101	267426	50.212	ug/l	97
8) Diethyl Ether	3.965	74	117073	56.667	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.359	101	145784	53.322	ug/l	96
10) Methyl Iodide	4.577	142	103333	38.232	ug/l #	89
11) Tert butyl alcohol	5.536	59	241449	276.178	ug/l	100
12) 1,1-Dichloroethene	4.336	96	152389	49.187	ug/l	99
13) Acrolein	4.177	56	160450	228.690	ug/l	99
14) Allyl chloride	5.012	41	286033	51.014	ug/l	90
15) Acrylonitrile	5.712	53	598909	252.452	ug/l	98
16) Acetone	4.424	43	657966	304.782	ug/l	97
17) Carbon Disulfide	4.700	76	405663	44.164	ug/l	98
18) Methyl Acetate	5.018	43	317943	58.620	ug/l	99
19) Methyl tert-butyl Ether	5.789	73	659220	57.727	ug/l	95
20) Methylene Chloride	5.259	84	192849	52.881	ug/l	97
21) trans-1,2-Dichloroethene	5.777	96	170971	48.942	ug/l	88
22) Diisopropyl ether	6.659	45	674122	57.318	ug/l	95
23) Vinyl Acetate	6.589	43	3071299	298.585	ug/l	100
24) 1,1-Dichloroethane	6.553	63	347405	51.200	ug/l	98
25) 2-Butanone	7.471	43	892036	267.432	ug/l	97
26) 2,2-Dichloropropane	7.471	77	298522	56.588	ug/l	98
27) cis-1,2-Dichloroethene	7.477	96	212209	52.764	ug/l	95
28) Bromochloromethane	7.794	49	184324	56.761	ug/l	92
29) Tetrahydrofuran	7.824	42	572583	264.243	ug/l	100
30) Chloroform	7.947	83	372180	54.800	ug/l	98
31) Cyclohexane	8.235	56	278777	49.251	ug/l	98
32) 1,1,1-Trichloroethane	8.153	97	309142	52.554	ug/l	98
36) 1,1-Dichloropropene	8.353	75	237939	48.073	ug/l	97
37) Ethyl Acetate	7.547	43	340534	47.639	ug/l	98
38) Carbon Tetrachloride	8.347	117	246721	45.251	ug/l	97
39) Methylcyclohexane	9.582	83	254444	47.484	ug/l	96
40) Benzene	8.588	78	762513	47.666	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 08/14/2025
Supervised By :Mahesh Dadoda 08/19/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	178825	47.844	ug/l		96
42) 1,2-Dichloroethane	8.653	62	311061	51.277	ug/l		97
43) Isopropyl Acetate	8.671	43	575331	51.848	ug/l		98
44) Trichloroethene	9.335	130	165523	43.791	ug/l		95
45) 1,2-Dichloropropane	9.606	63	200161	49.245	ug/l		92
46) Dibromomethane	9.694	93	147474	48.459	ug/l		96
47) Bromodichloromethane	9.871	83	298595	48.711	ug/l		100
48) Methyl methacrylate	9.665	41	263753	52.798	ug/l		93
49) 1,4-Dioxane	9.682	88	77554	1013.618	ug/l	#	99
51) 4-Methyl-2-Pentanone	10.429	43	1771617	252.428	ug/l		98
52) Toluene	10.612	92	472630	48.609	ug/l		95
53) t-1,3-Dichloropropene	10.818	75	316497	51.017	ug/l		96
54) cis-1,3-Dichloropropene	10.294	75	326996	51.028	ug/l	#	86
55) 1,1,2-Trichloroethane	11.000	97	190088	48.289	ug/l		95
56) Ethyl methacrylate	10.859	69	331191	50.043	ug/l	#	92
57) 1,3-Dichloropropane	11.147	76	336112	49.384	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	934209	289.306	ug/l		99
59) 2-Hexanone	11.176	43	1221722	262.377	ug/l		98
60) Dibromochloromethane	11.341	129	217527	48.455	ug/l		100
61) 1,2-Dibromoethane	11.453	107	202290	48.875	ug/l		97
64) Tetrachloroethene	11.082	164	130358	40.459	ug/l		93
65) Chlorobenzene	11.871	112	508857	45.275	ug/l		97
66) 1,1,1,2-Tetrachloroethane	11.941	131	183045	47.896	ug/l		99
67) Ethyl Benzene	11.947	91	914813	49.442	ug/l		100
68) m/p-Xylenes	12.053	106	683841	98.699	ug/l		95
69) o-Xylene	12.376	106	337782	51.038	ug/l		95
70) Styrene	12.394	104	583897	52.445	ug/l		97
71) Bromoform	12.559	173	143351	46.429	ug/l	#	99
73) Isopropylbenzene	12.676	105	854755	53.222	ug/l		98
74) N-amyl acetate	12.500	43	259021	38.819	ug/l	#	88
75) 1,1,2,2-Tetrachloroethane	12.918	83	304854	50.447	ug/l		100
76) 1,2,3-Trichloropropane	12.976	75	257264m	44.960	ug/l		
77) Bromobenzene	12.959	156	203849	48.942	ug/l		93
78) n-propylbenzene	13.012	91	1079956	53.447	ug/l		97
79) 2-Chlorotoluene	13.106	91	652303	52.528	ug/l		95
80) 1,3,5-Trimethylbenzene	13.153	105	735691	53.765	ug/l		97
81) trans-1,4-Dichloro-2-b...	12.718	75	101369	48.472	ug/l		95
82) 4-Chlorotoluene	13.200	91	684119	52.913	ug/l		96
83) tert-Butylbenzene	13.417	119	613860	53.713	ug/l		97
84) 1,2,4-Trimethylbenzene	13.459	105	762982	54.601	ug/l		95
85) sec-Butylbenzene	13.594	105	915066	53.157	ug/l		98
86) p-Isopropyltoluene	13.706	119	762503	55.271	ug/l		97
87) 1,3-Dichlorobenzene	13.712	146	399195	48.835	ug/l		99
88) 1,4-Dichlorobenzene	13.794	146	400669	45.893	ug/l		97
89) n-Butylbenzene	14.035	91	736497	55.909	ug/l		98
90) Hexachloroethane	14.312	117	139358	47.677	ug/l		96
91) 1,2-Dichlorobenzene	14.082	146	381913	49.316	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.700	75	70382	44.360	ug/l		99
93) 1,2,4-Trichlorobenzene	15.370	180	226838	49.866	ug/l		98
94) Hexachlorobutadiene	15.476	225	82198	48.630	ug/l		99
95) Naphthalene	15.617	128	838952	52.059	ug/l		99
96) 1,2,3-Trichlorobenzene	15.811	180	220386	48.298	ug/l		97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 08/14/2025
Supervised By :Mahesh Dadoda 08/19/2025

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

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

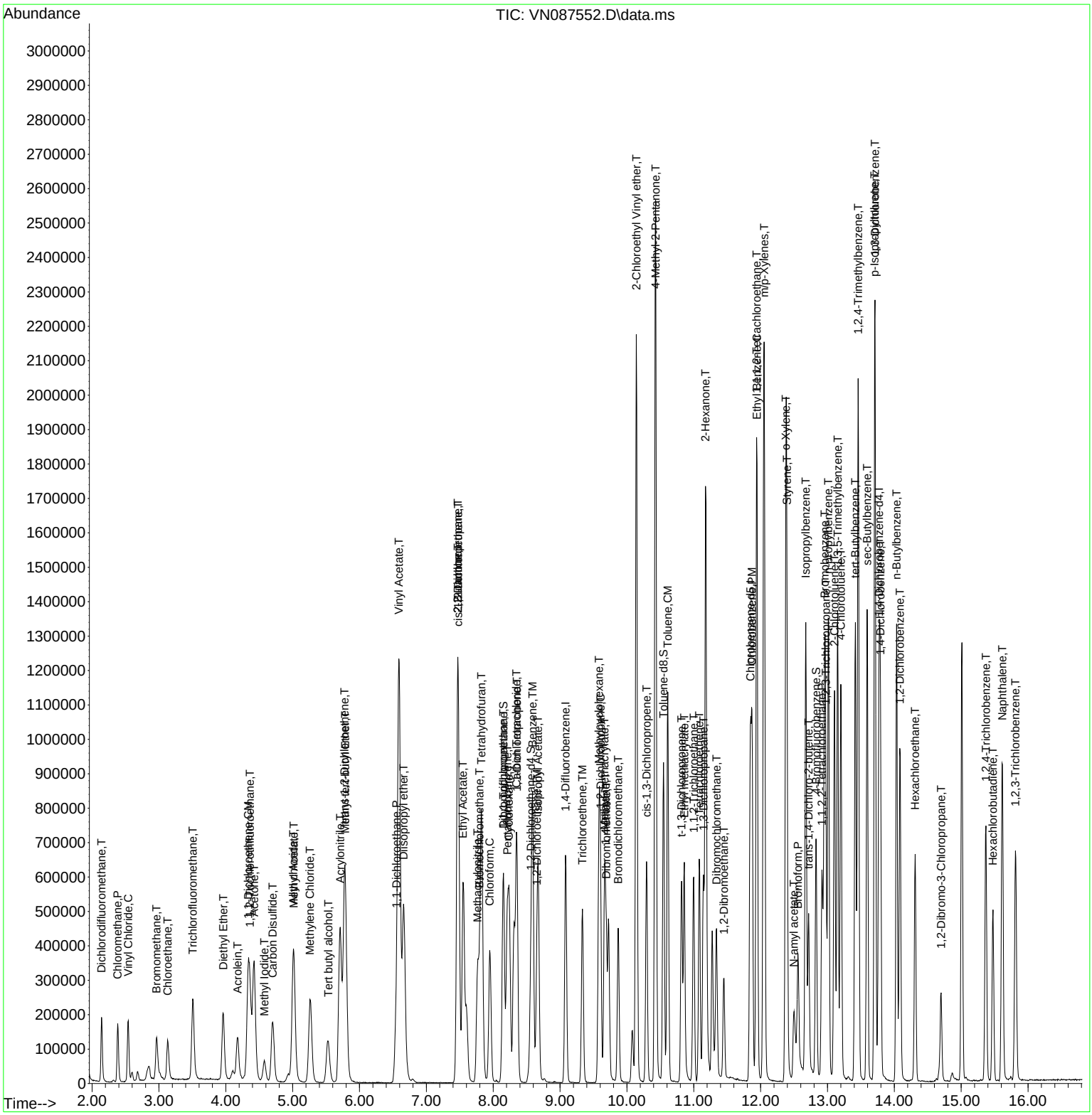
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

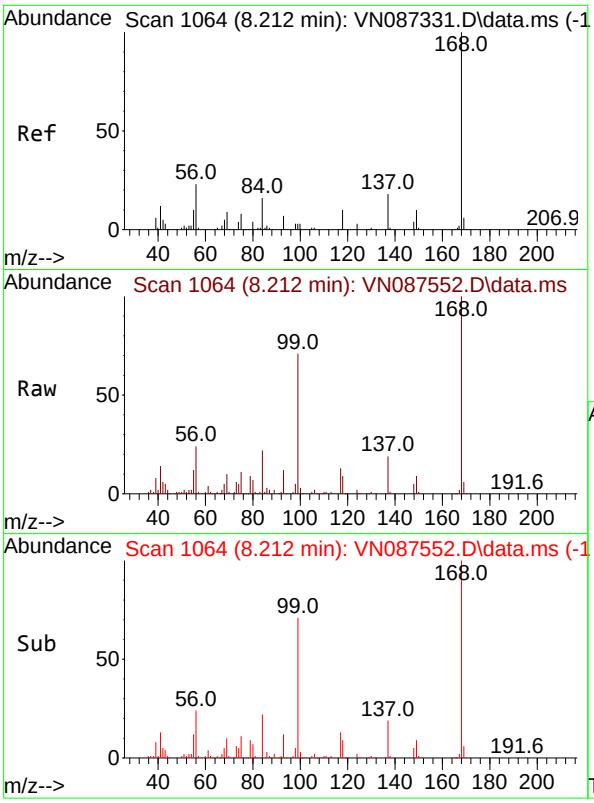
Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 08/14/2025
Supervised By :Mahesh Dadoda 08/19/2025

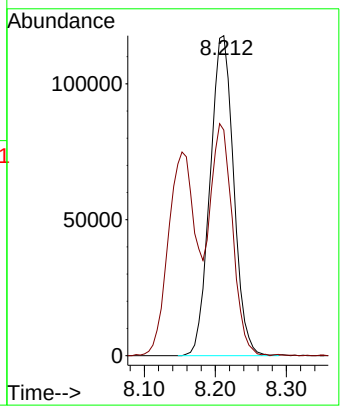




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:168 Resp: 27135

Ion	Ratio	Lower	Upper
168	100		
99	70.1	47.9	71.9



Instrument :
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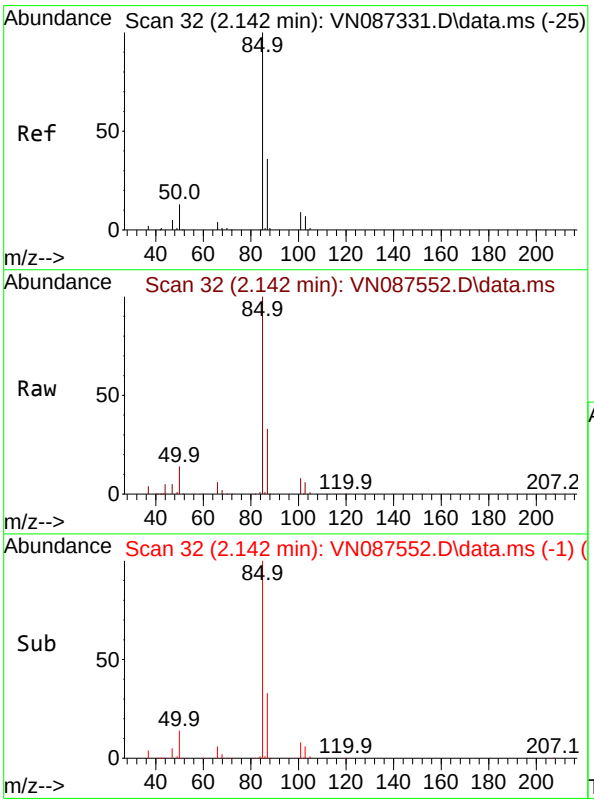
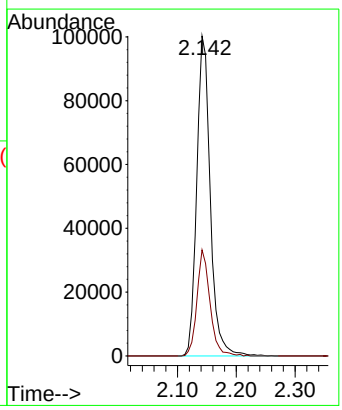
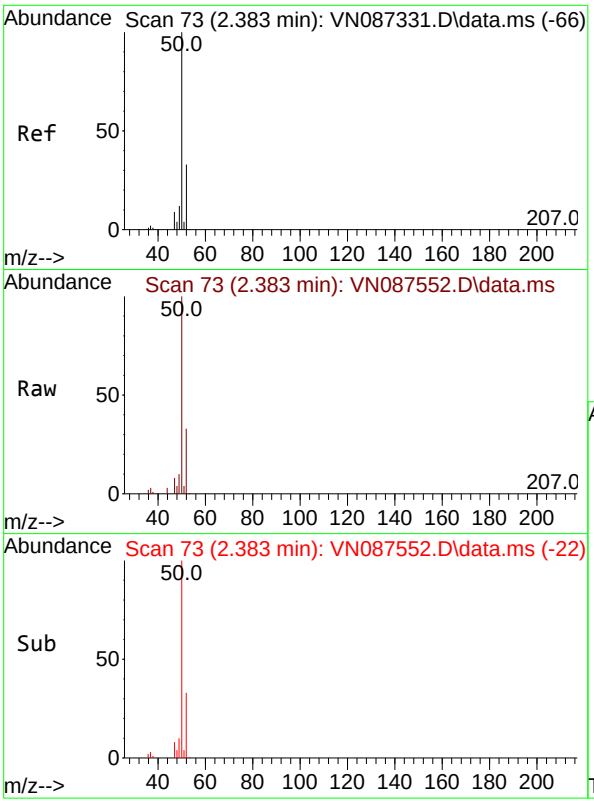


#2
Dichlorodifluoromethane
Concen: 55.557 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 85 Resp: 160120

Ion	Ratio	Lower	Upper
85	100		
87	33.2	17.8	53.3

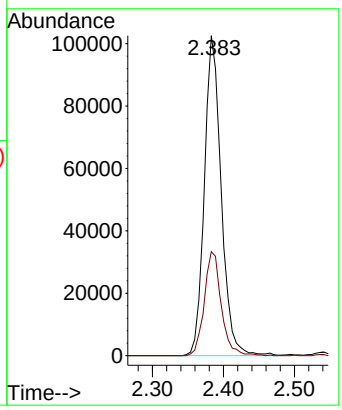




#3
Chloromethane
Concen: 46.740 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 50 Resp: 16940

Ion	Ratio	Lower	Upper
50	100		
52	32.5	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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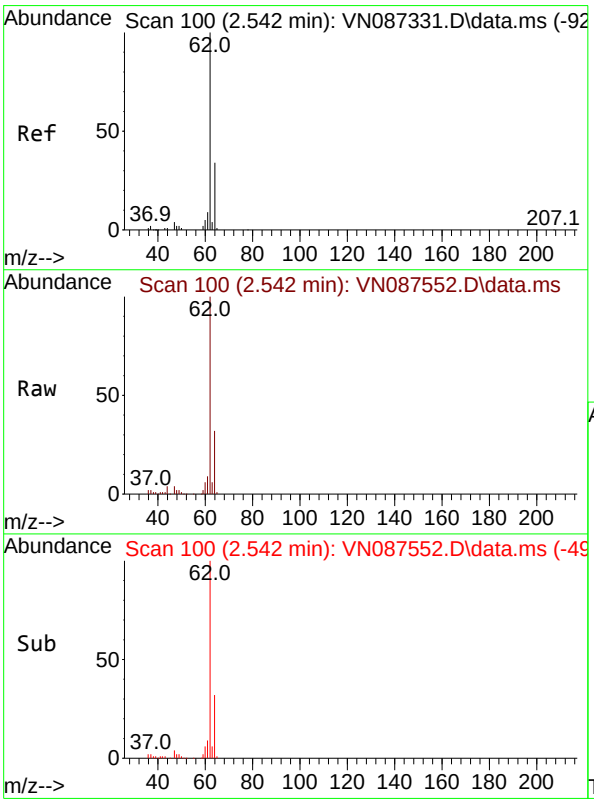
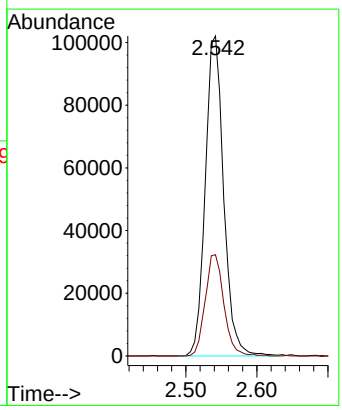
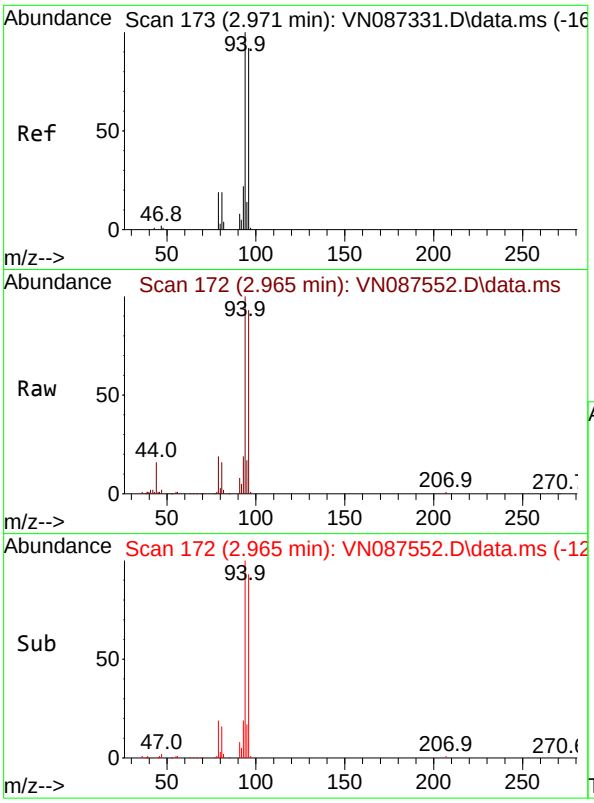


#4
Vinyl Chloride
Concen: 51.052 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 62 Resp: 183878

Ion	Ratio	Lower	Upper
62	100		
64	31.6	27.0	40.6

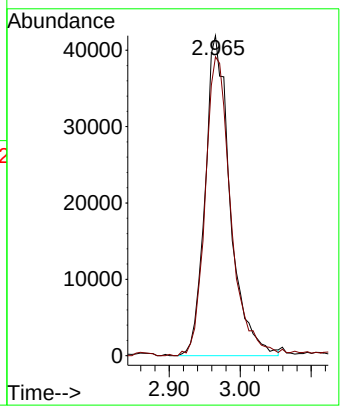




#5
Bromomethane
Concen: 55.023 ug/l
RT: 2.965 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 94 Resp: 10262

Ion	Ratio	Lower	Upper
94	100		
96	93.4	73.4	110.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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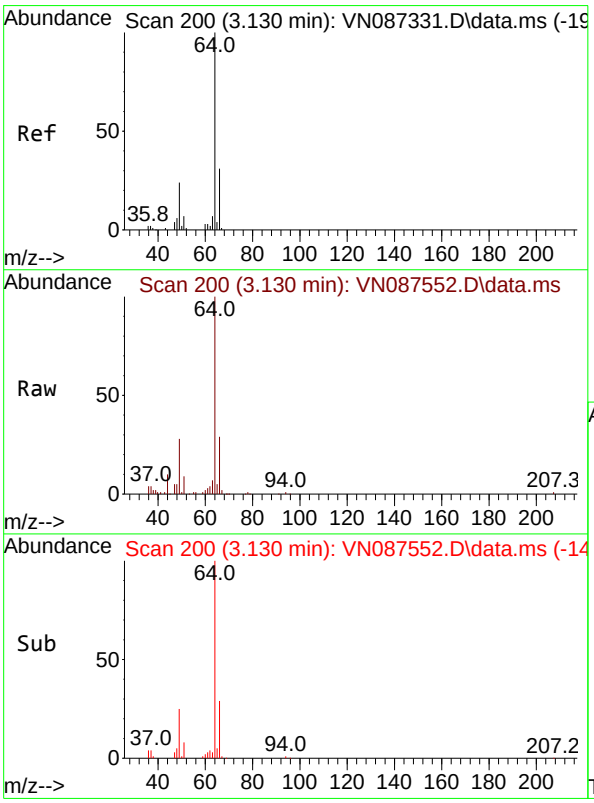
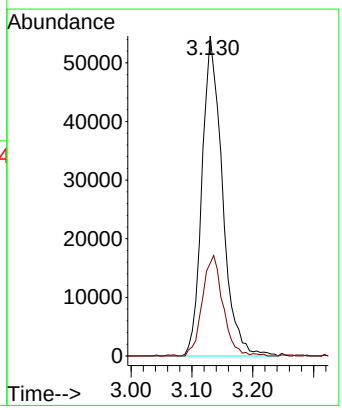
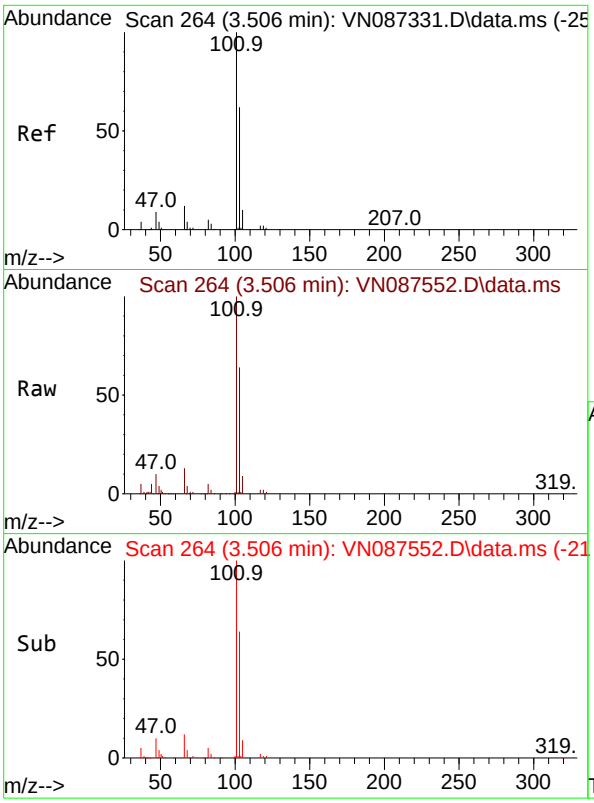


#6
Chloroethane
Concen: 53.961 ug/l
RT: 3.130 min Scan# 200
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 64 Resp: 126750

Ion	Ratio	Lower	Upper
64	100		
66	29.0	24.6	36.8

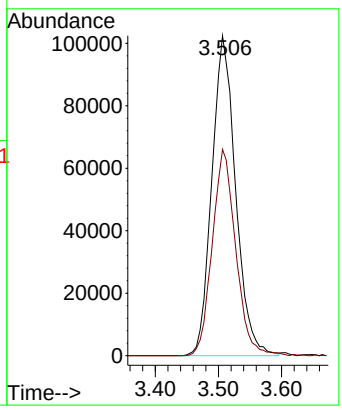




#7
Trichlorofluoromethane
Concen: 50.212 ug/l
RT: 3.506 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:101 Resp: 26742

Ion	Ratio	Lower	Upper
101	100		
103	64.5	49.8	74.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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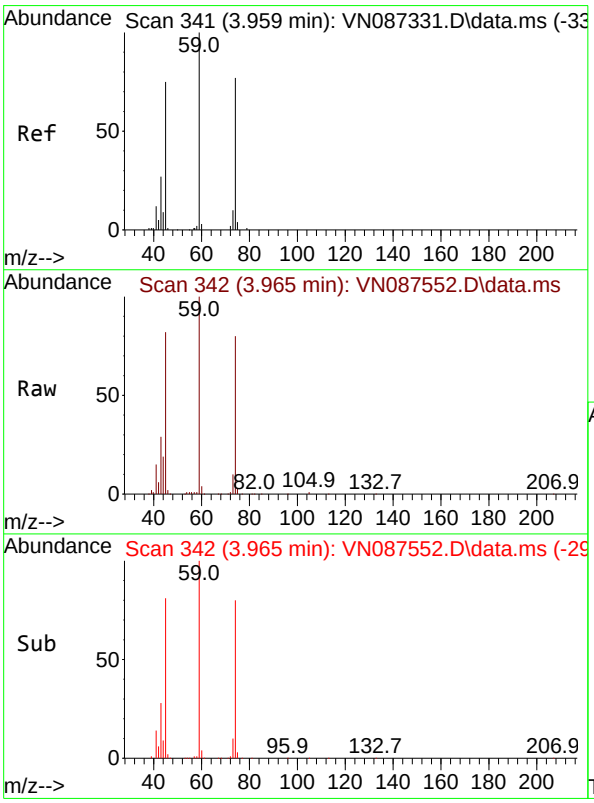
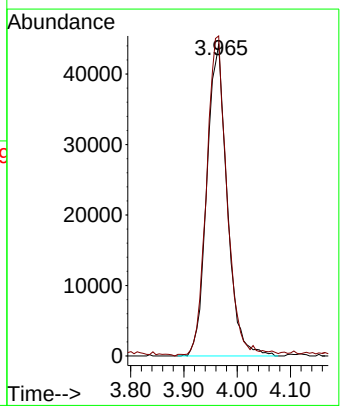
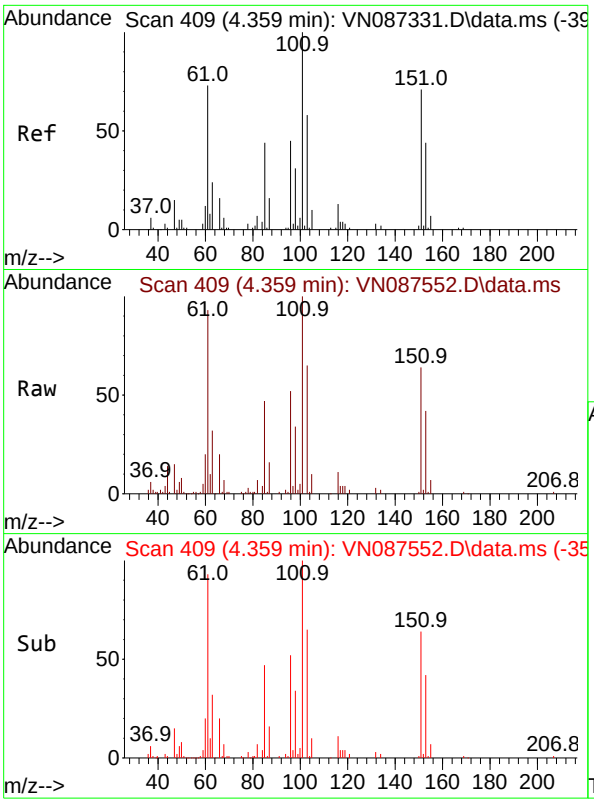


#8
Diethyl Ether
Concen: 56.667 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 74 Resp: 117073

Ion	Ratio	Lower	Upper
74	100		
45	103.9	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 53.322 ug/l
RT: 4.359 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:101 Resp: 14578

Ion	Ratio	Lower	Upper
101	100		
85	46.7	37.3	55.9
151	67.5	58.9	88.3

Instrument :
MSVOA_N
ClientSampleId :
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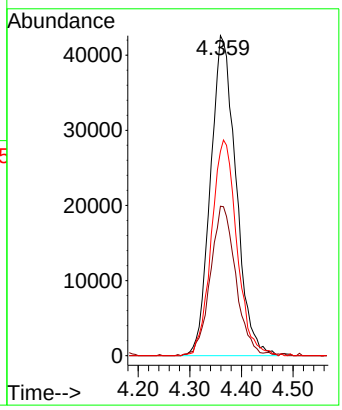
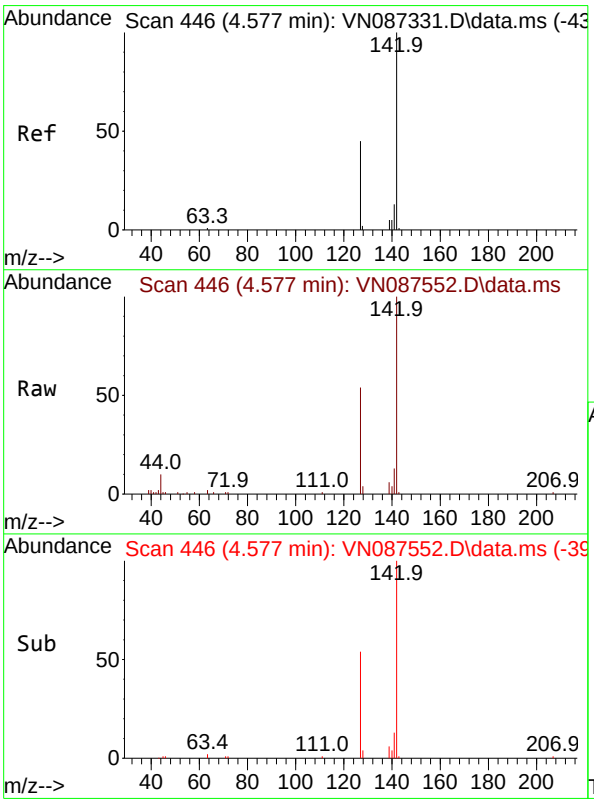
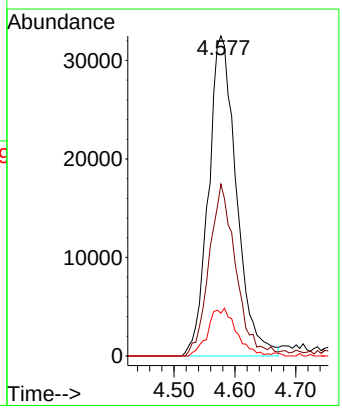


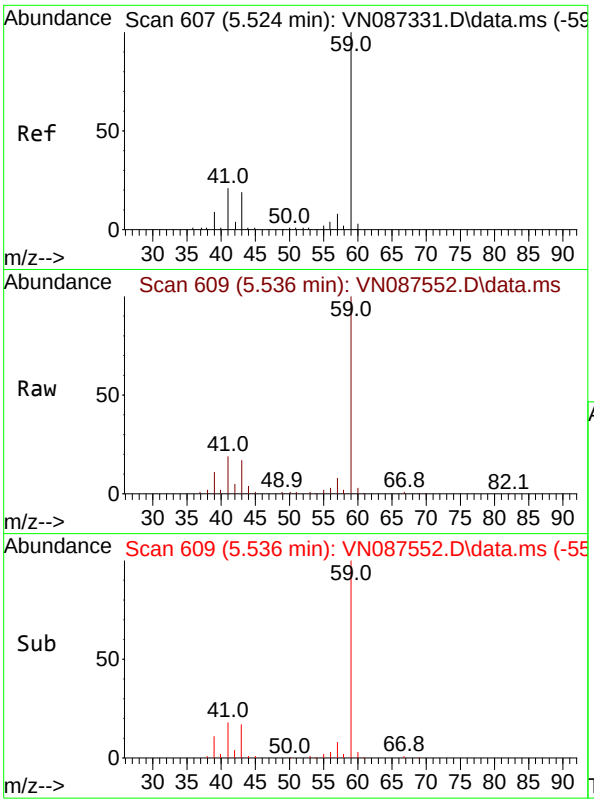


#10
Methyl Iodide
Concen: 38.232 ug/l
RT: 4.577 min Scan# 446
Delta R.T. -0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:142 Resp: 103333

Ion	Ratio	Lower	Upper
142	100		
127	53.7	35.7	53.5#
141	13.4	10.4	15.6

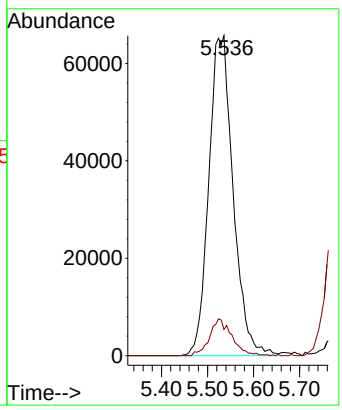




#11
Tert butyl alcohol
Concen: 276.178 ug/l
RT: 5.536 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 59 Resp: 24144

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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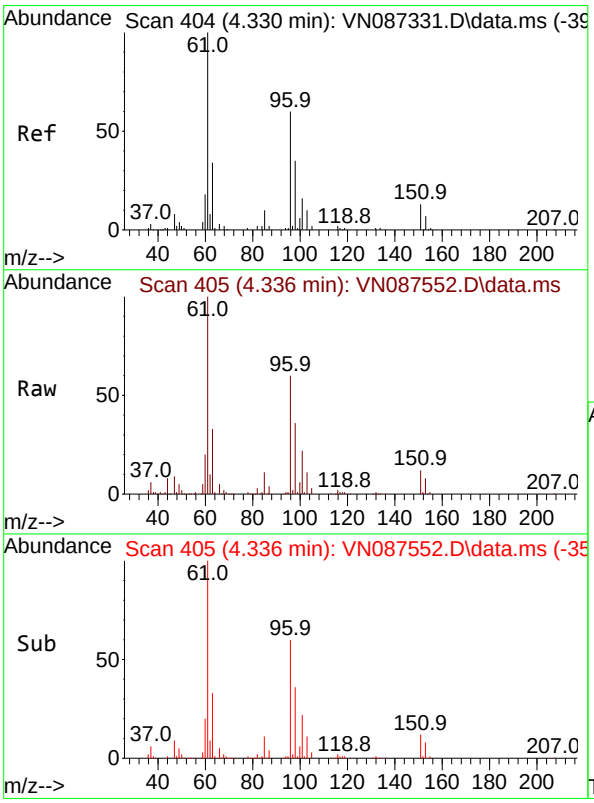
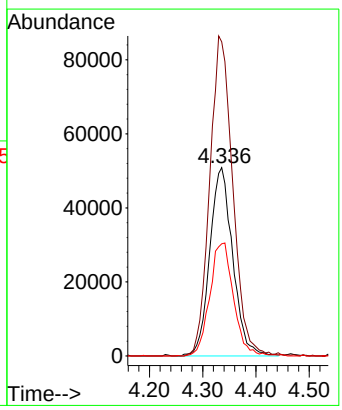
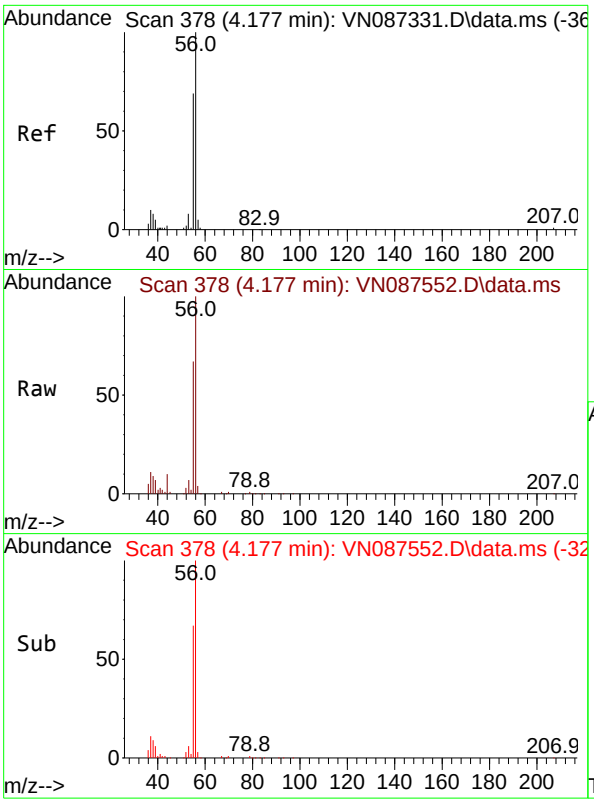


#12
1,1-Dichloroethene
Concen: 49.187 ug/l
RT: 4.336 min Scan# 405
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 96 Resp: 152389

Ion	Ratio	Lower	Upper
96	100		
61	166.8	132.3	198.5
98	59.3	46.8	70.2

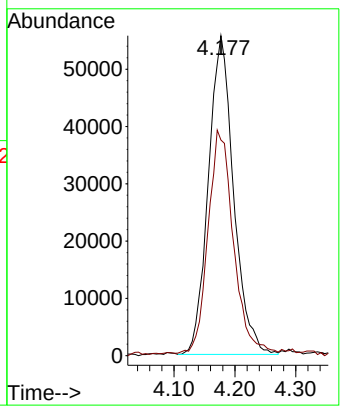




#13
Acrolein
Concen: 228.690 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 56 Resp: 16045

Ion	Ratio	Lower	Upper
56	100		
55	69.7	56.2	84.4



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VSTDCCC050

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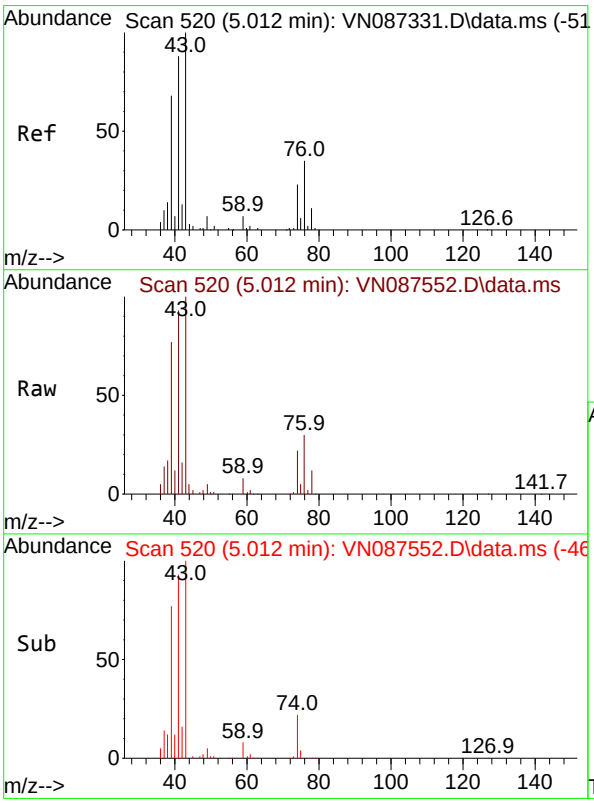
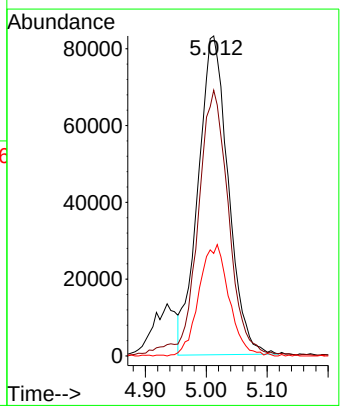
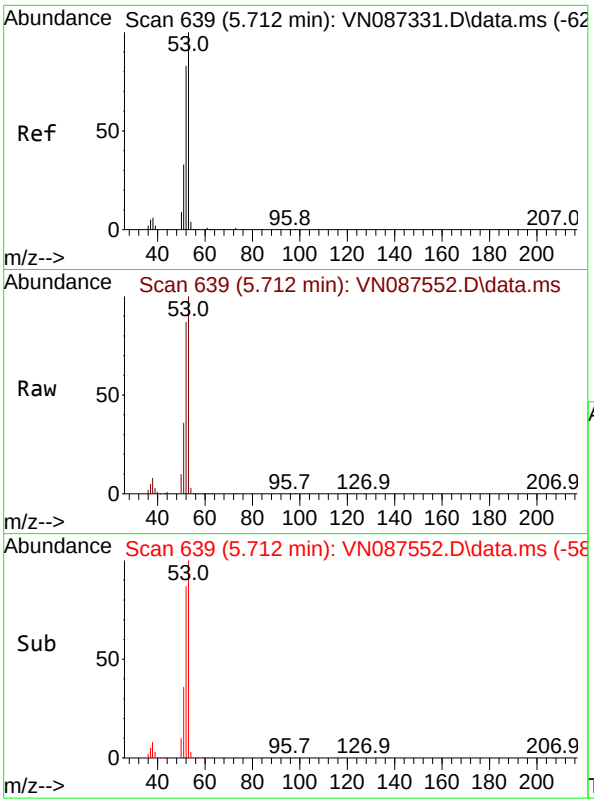


#14
Allyl chloride
Concen: 51.014 ug/l
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 41 Resp: 286033

Ion	Ratio	Lower	Upper
41	100		
39	85.7	59.0	88.6
76	34.9	28.7	43.1

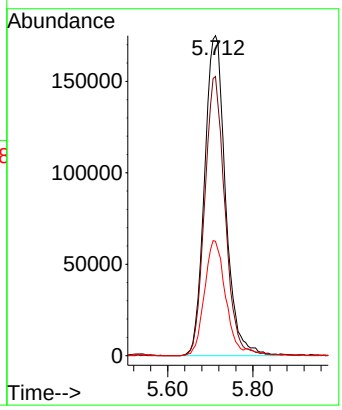




#15
Acrylonitrile
Concen: 252.452 ug/l
RT: 5.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 53 Resp: 59890

Ion	Ratio	Lower	Upper
53	100		
52	84.2	65.5	98.3
51	35.6	28.7	43.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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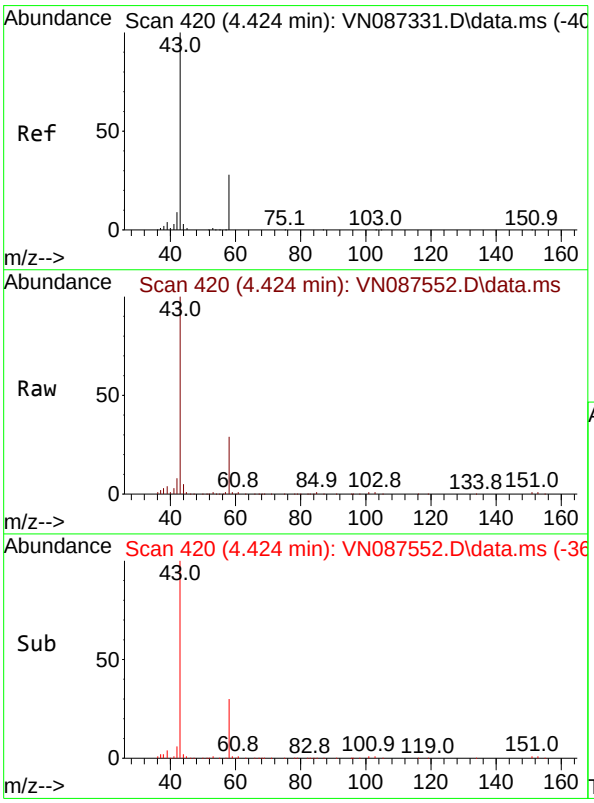
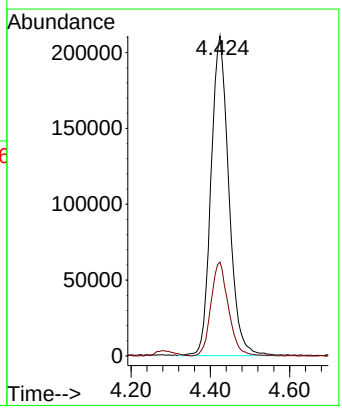
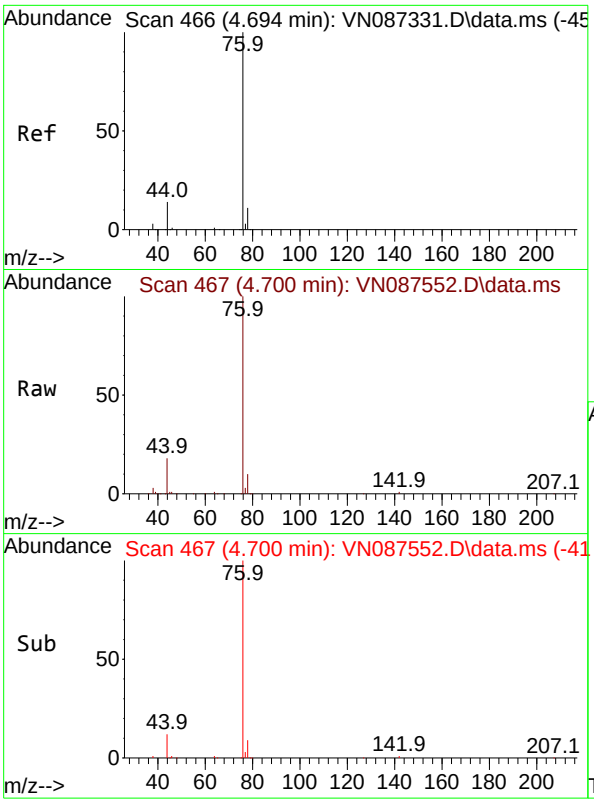


#16
Acetone
Concen: 304.782 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 657966

Ion	Ratio	Lower	Upper
43	100		
58	29.4	22.3	33.5





#17
Carbon Disulfide
Concen: 44.164 ug/l
RT: 4.700 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 76 Resp: 40566

Ion	Ratio	Lower	Upper
76	100		
78	9.9	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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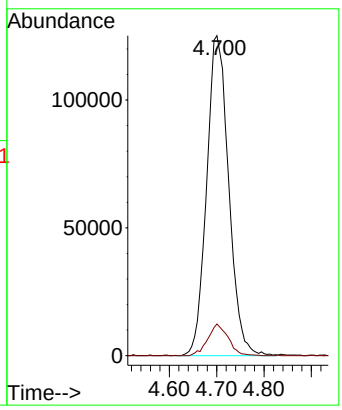
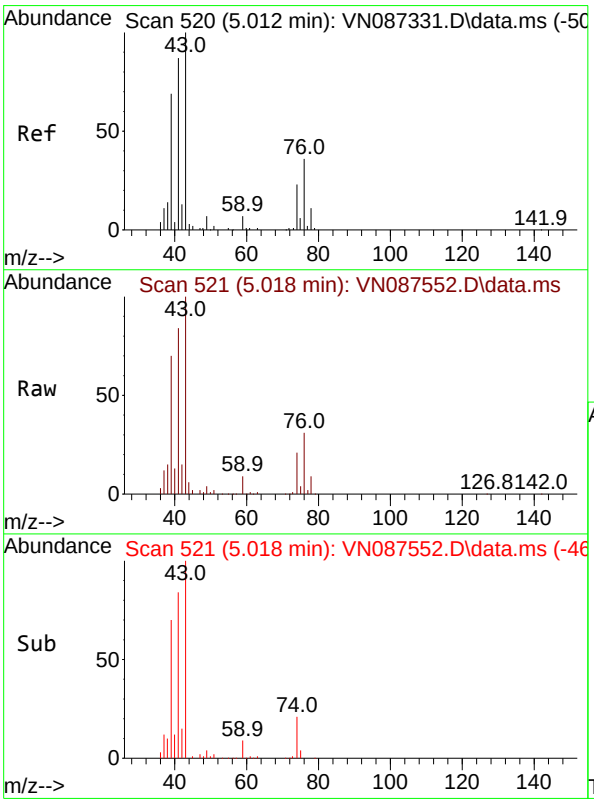
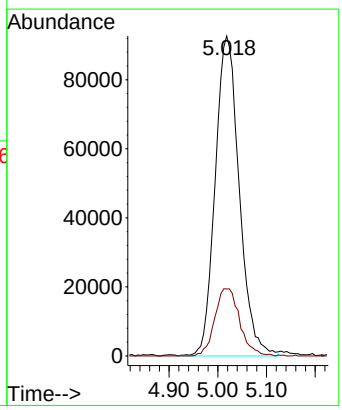


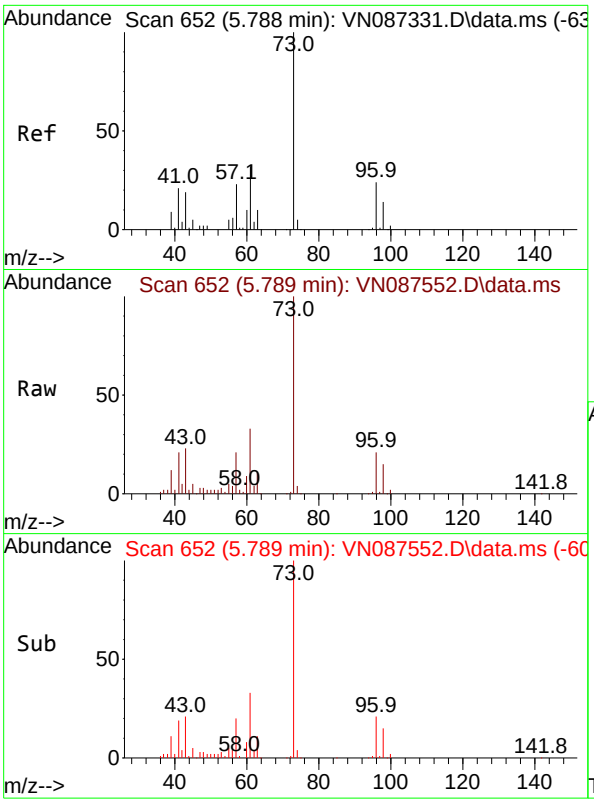


#18
Methyl Acetate
Concen: 58.620 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 317943

Ion	Ratio	Lower	Upper
43	100		
74	21.8	17.8	26.6

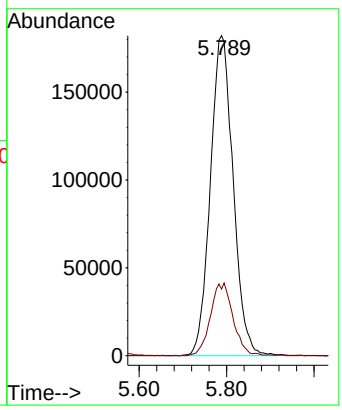




#19
Methyl tert-butyl Ether
Concen: 57.727 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 73 Resp: 65922

Ion	Ratio	Lower	Upper
73	100		
57	20.8	18.6	27.8



Instrument :
MSVOA_N
ClientSampleId :
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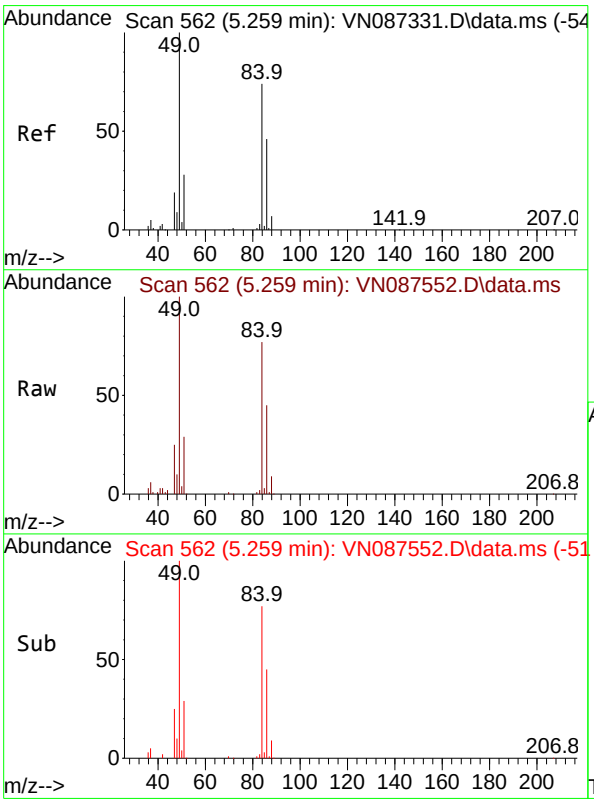
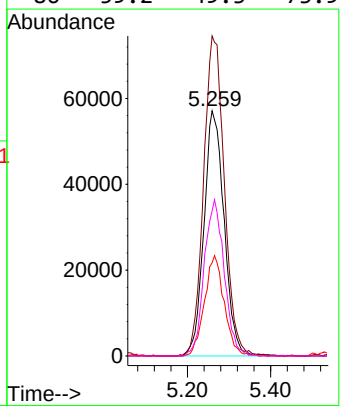
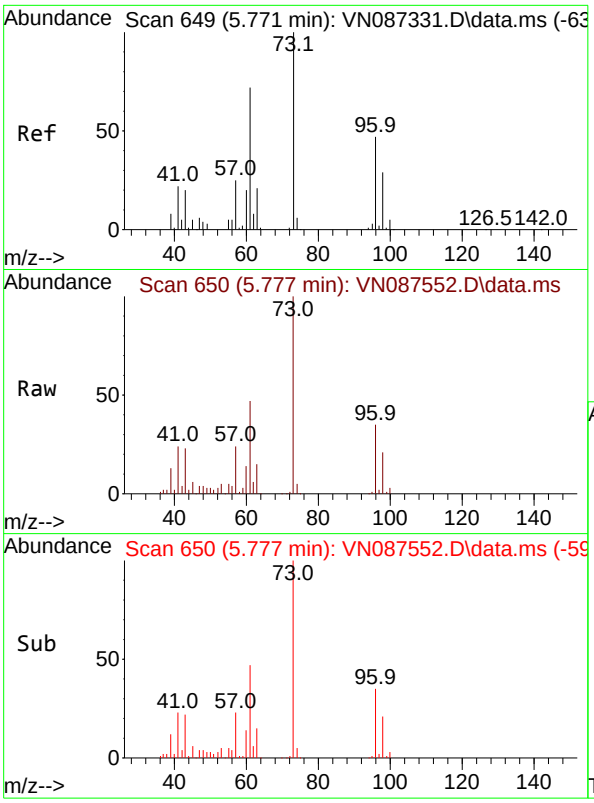


#20
Methylene Chloride
Concen: 52.881 ug/l
RT: 5.259 min Scan# 562
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 84 Resp: 192849

Ion	Ratio	Lower	Upper
84	100		
49	130.5	107.5	161.3
51	38.0	30.2	45.2
86	59.2	49.3	73.9

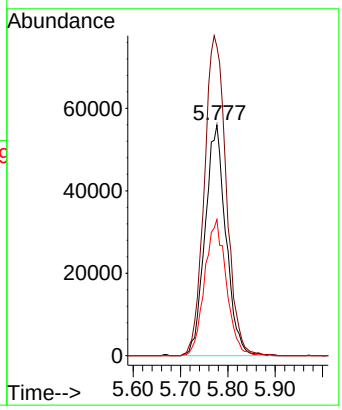




#21
trans-1,2-Dichloroethene
Concen: 48.942 ug/l
RT: 5.777 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 96 Resp: 17097

Ion	Ratio	Lower	Upper
96	100		
61	133.9	122.0	183.0
98	59.0	50.0	75.0



Instrument :
MSVOA_N
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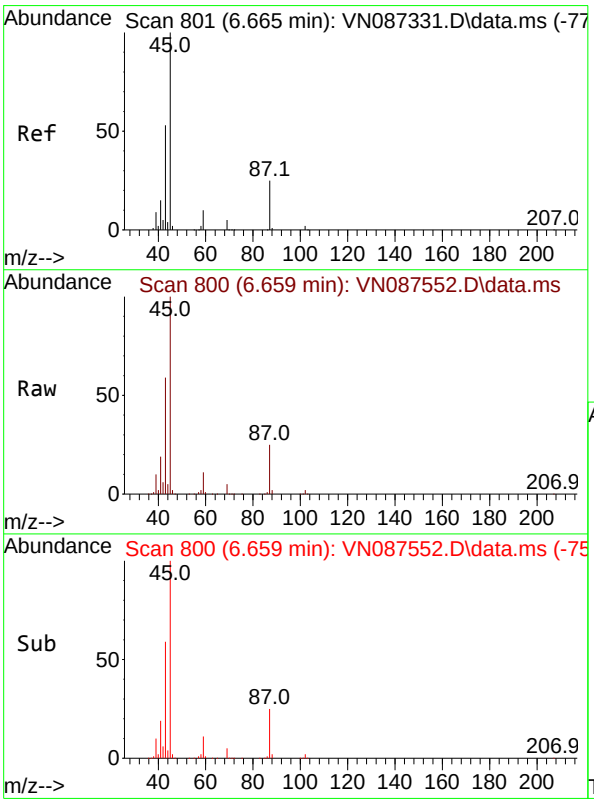
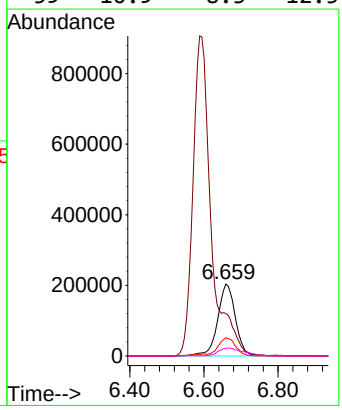
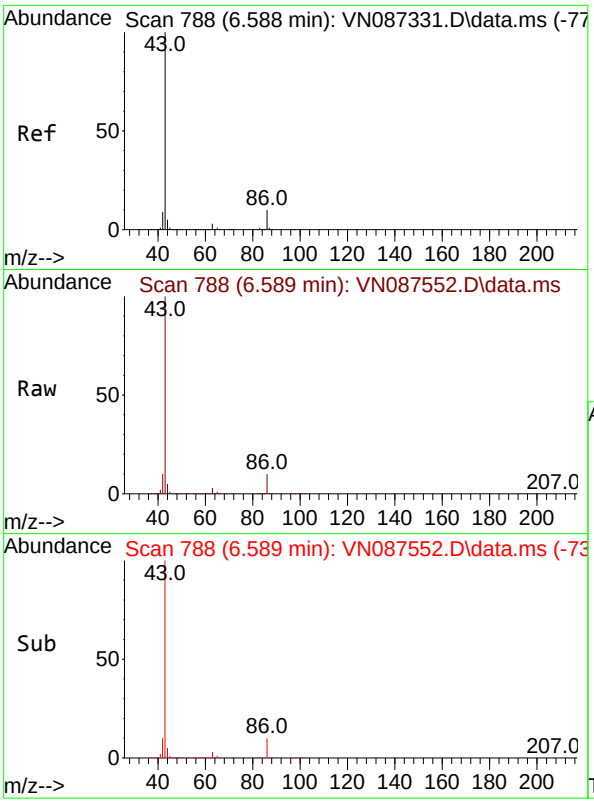


#22
Diisopropyl ether
Concen: 57.318 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 45 Resp: 674122

Ion	Ratio	Lower	Upper
45	100		
43	58.4	42.8	64.2
87	25.3	19.8	29.6
59	10.9	8.3	12.5

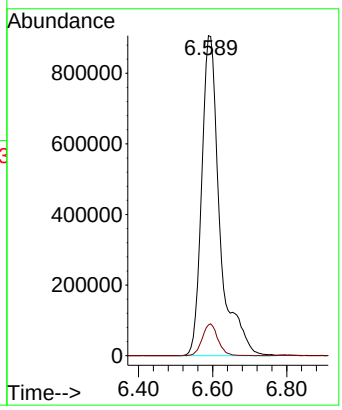




#23
Vinyl Acetate
Concen: 298.585 ug/l
RT: 6.589 min Scan# 7
Delta R.T. 0.001 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 307129

Ion	Ratio	Lower	Upper
43	100		
86	9.6	7.7	11.5



Instrument :
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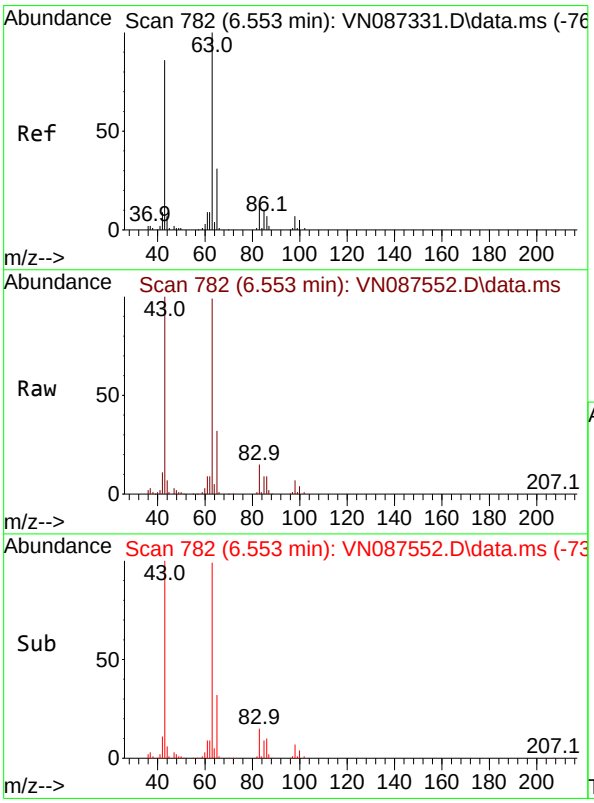
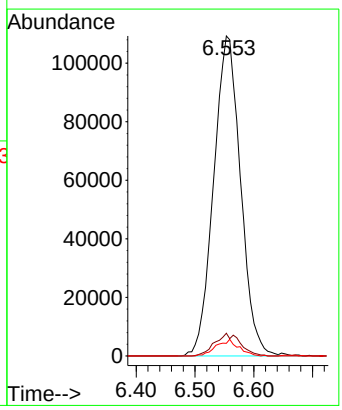
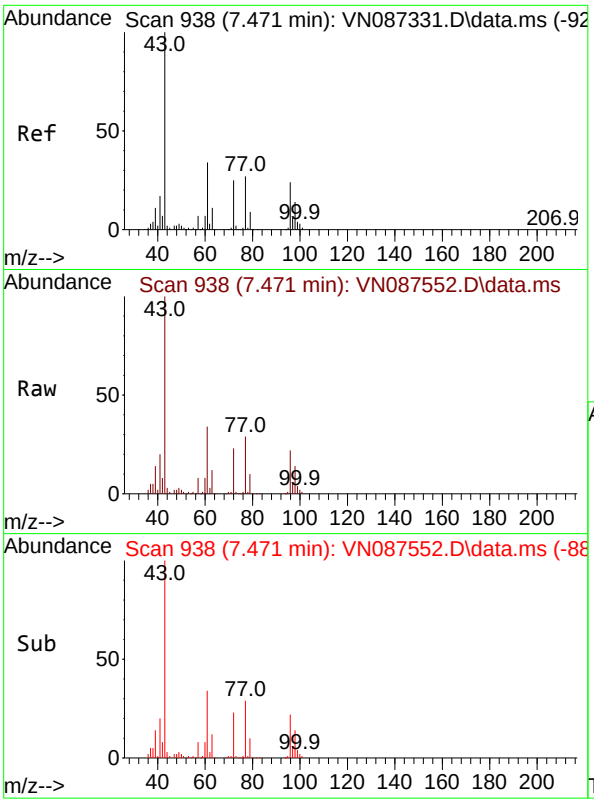


#24
1,1-Dichloroethane
Concen: 51.200 ug/l
RT: 6.553 min Scan# 782
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 63 Resp: 347405

Ion	Ratio	Lower	Upper
63	100		
98	7.1	3.3	9.9
100	3.9	2.5	7.4





#25
2-Butanone
Concen: 267.432 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 89203

Ion	Ratio	Lower	Upper
43	100		
72	23.0	19.6	29.4

Instrument :
MSVOA_N
ClientSampleId :
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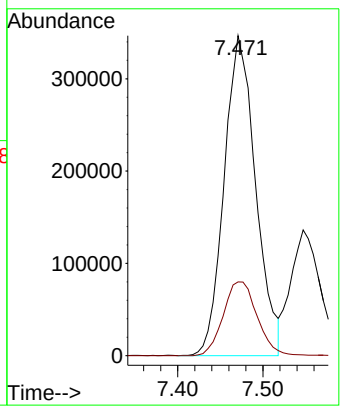
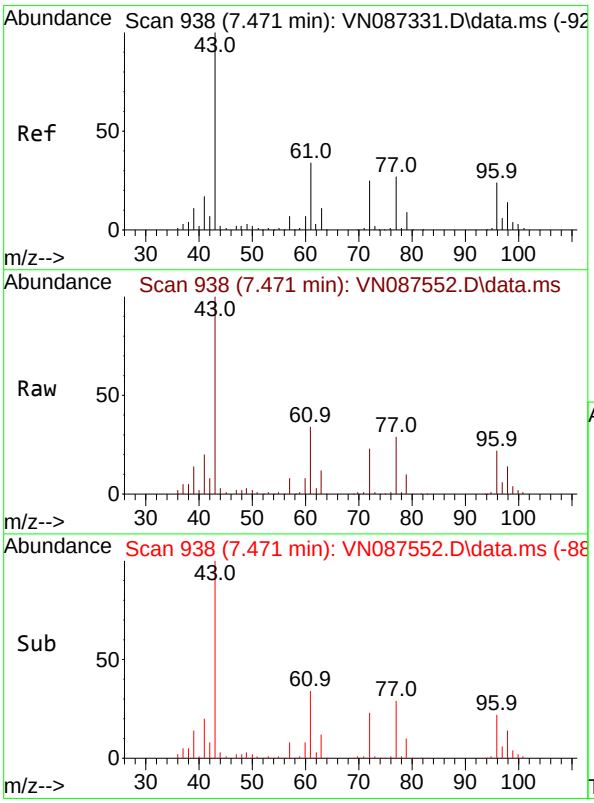
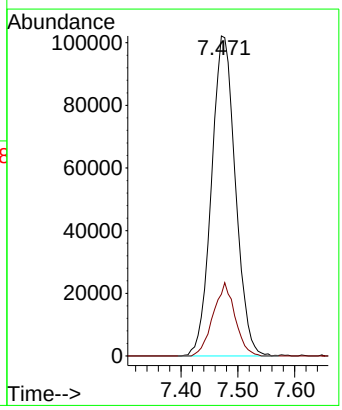


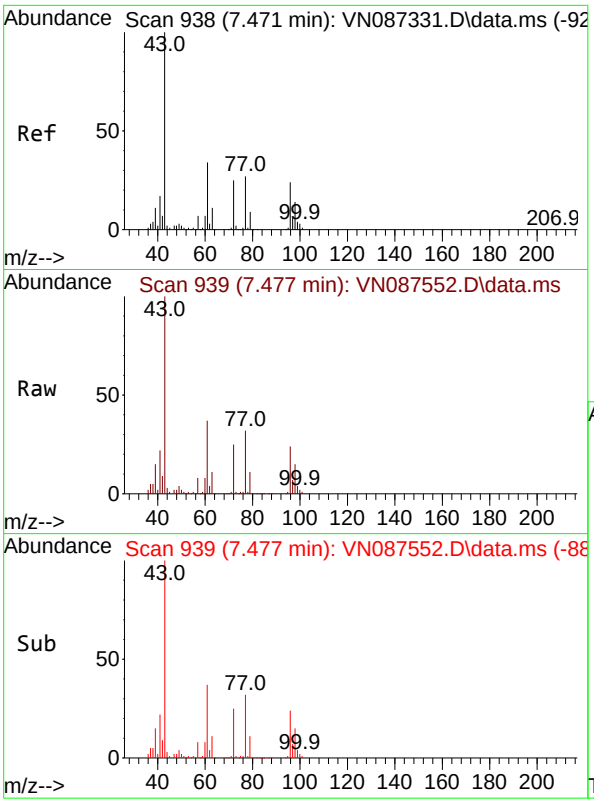


#26
2,2-Dichloropropane
Concen: 56.588 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 77 Resp: 298522

Ion	Ratio	Lower	Upper
77	100		
97	21.0	11.1	33.1





#27
cis-1,2-Dichloroethene
Concen: 52.764 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 96 Resp: 21220

Ion	Ratio	Lower	Upper
96	100		
61	155.5	0.0	297.8
98	63.2	0.0	132.4

Instrument :
MSVOA_N
ClientSampleId :
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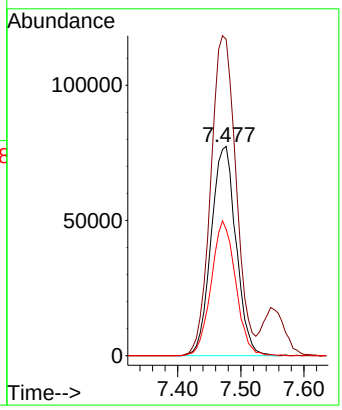
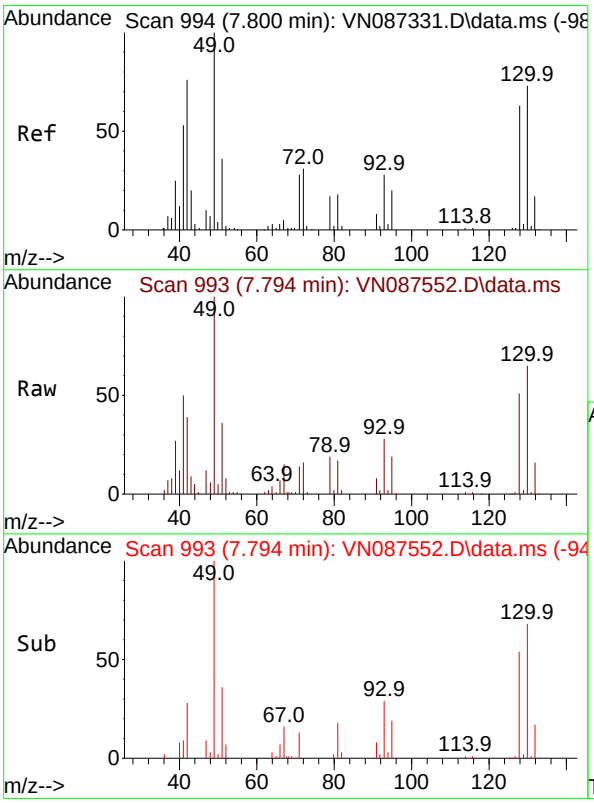
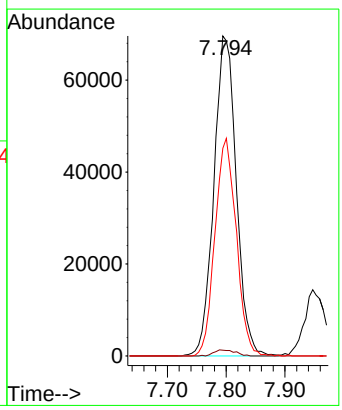


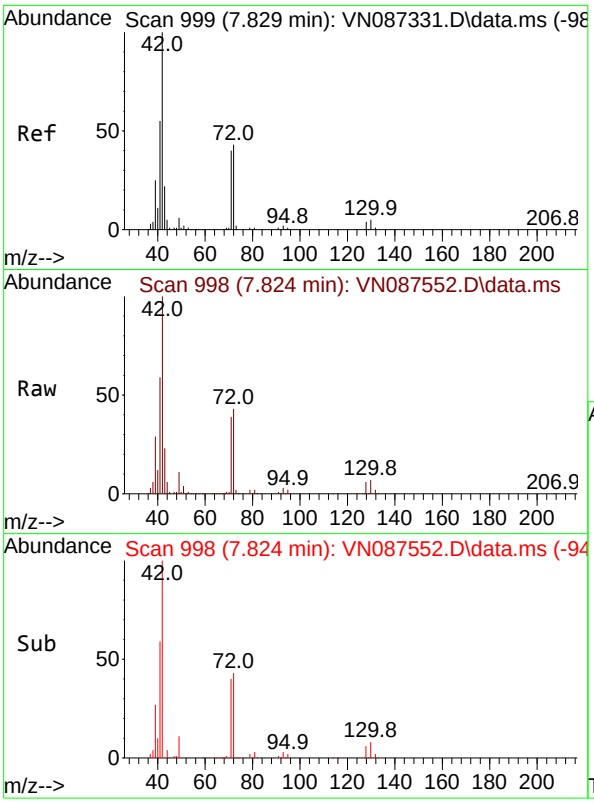


#28
Bromochloromethane
Concen: 56.761 ug/l
RT: 7.794 min Scan# 993
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 49 Resp: 184324

Ion	Ratio	Lower	Upper
49	100		
129	1.8	0.0	4.2
130	64.7	57.3	85.9





#29
Tetrahydrofuran
Concen: 264.243 ug/l
RT: 7.824 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 42 Resp: 57258

Ion	Ratio	Lower	Upper
42	100		
72	41.8	33.4	50.0
71	39.2	31.2	46.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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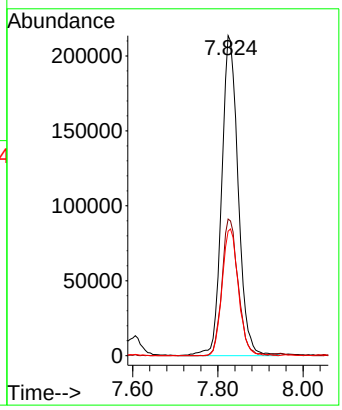
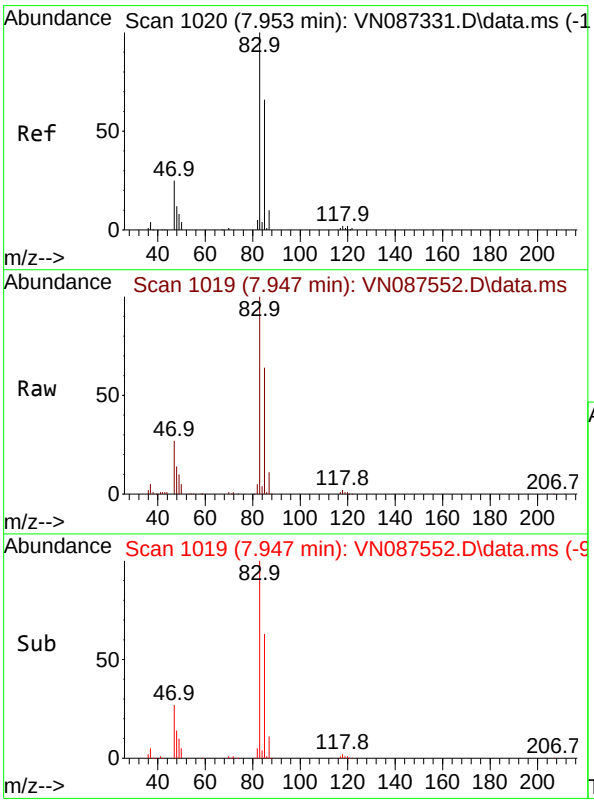
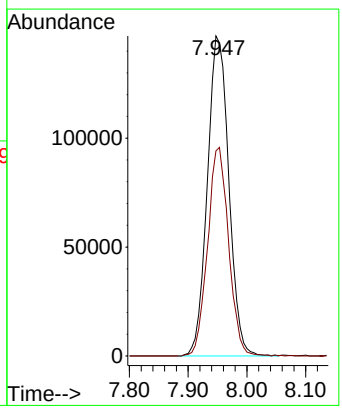


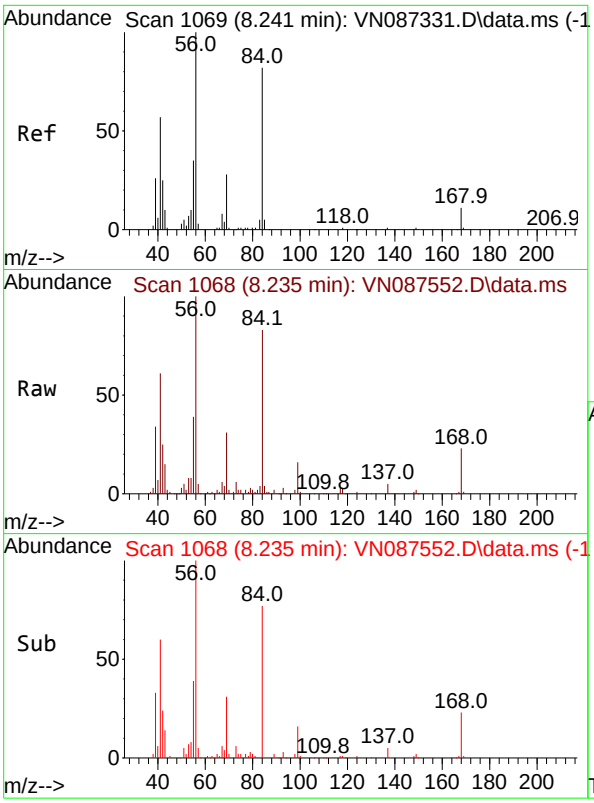


#30
Chloroform
Concen: 54.800 ug/l
RT: 7.947 min Scan# 1019
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 83 Resp: 372180

Ion	Ratio	Lower	Upper
83	100		
85	64.1	52.7	79.1

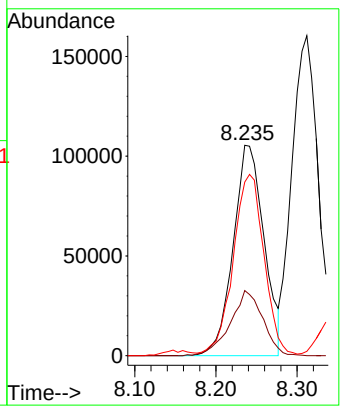




#31
Cyclohexane
Concen: 49.251 ug/l
RT: 8.235 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 56 Resp: 27877

Ion	Ratio	Lower	Upper
56	100		
69	31.0	22.7	34.1
84	80.7	65.8	98.6



Instrument :
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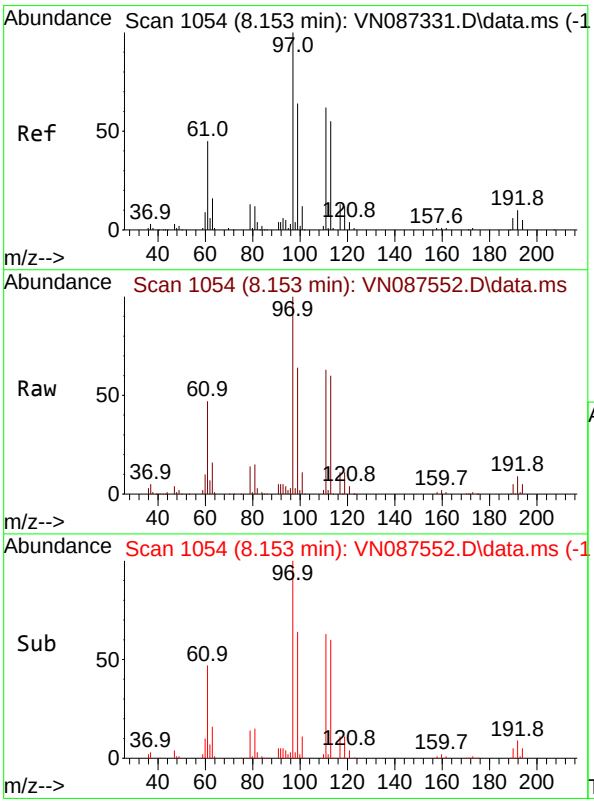
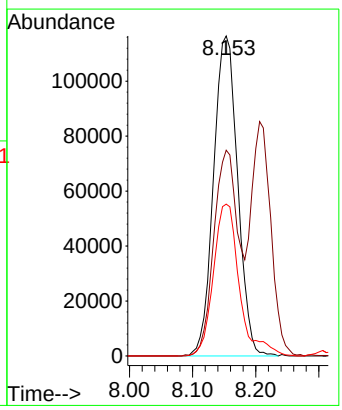
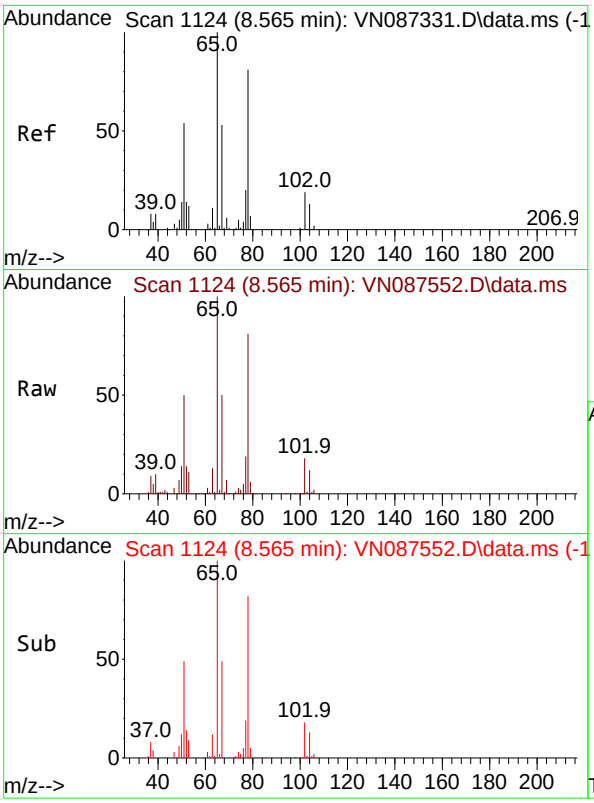


#32
1,1,1-Trichloroethane
Concen: 52.554 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 97 Resp: 309142

Ion	Ratio	Lower	Upper
97	100		
99	65.7	51.8	77.8
61	51.1	38.7	58.1

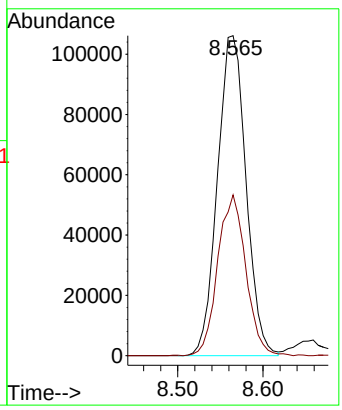




#33
1,2-Dichloroethane-d4
Concen: 53.738 ug/l
RT: 8.565 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 65 Resp: 24742

Ion	Ratio	Lower	Upper
65	100		
67	49.4	0.0	104.0



Instrument :
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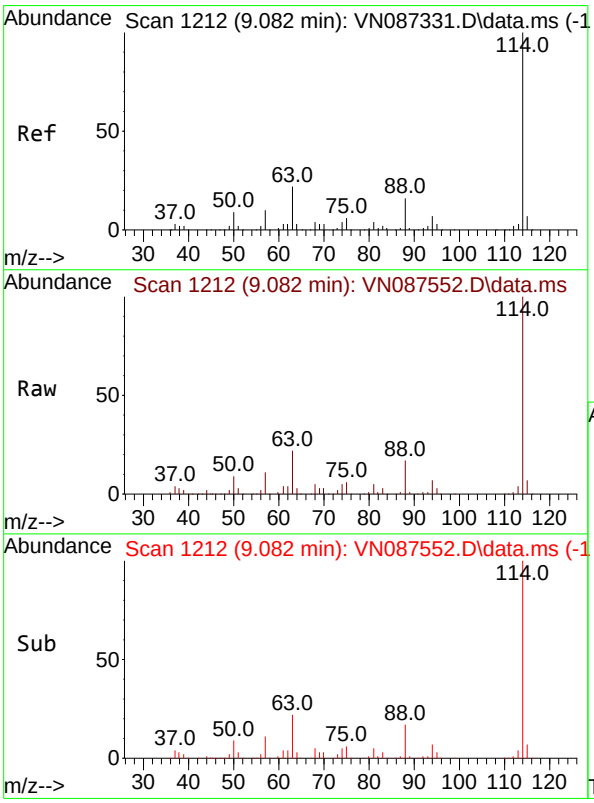
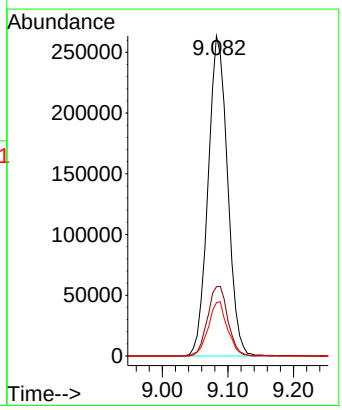
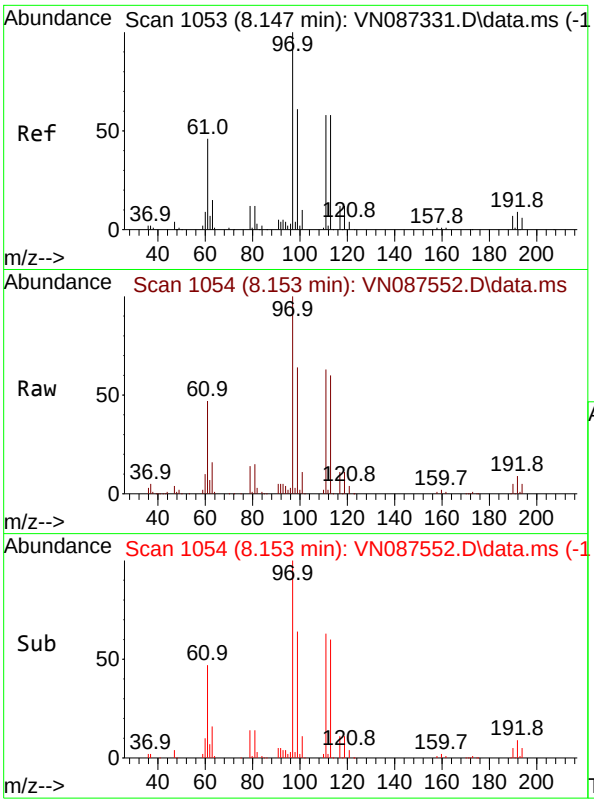


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:114 Resp: 543098

Ion	Ratio	Lower	Upper
114	100		
63	21.6	0.0	44.6
88	16.7	0.0	32.8

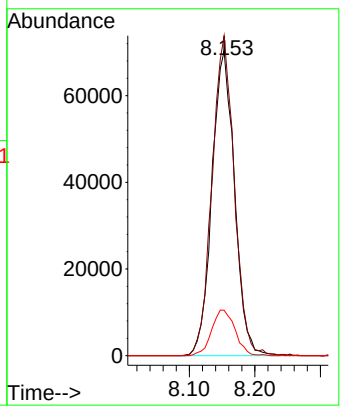




#35
Dibromofluoromethane
Concen: 44.903 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:113 Resp: 16822

Ion	Ratio	Lower	Upper
113	100		
111	103.3	82.5	123.7
192	15.6	13.7	20.5



Instrument :
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ClientSampleId :
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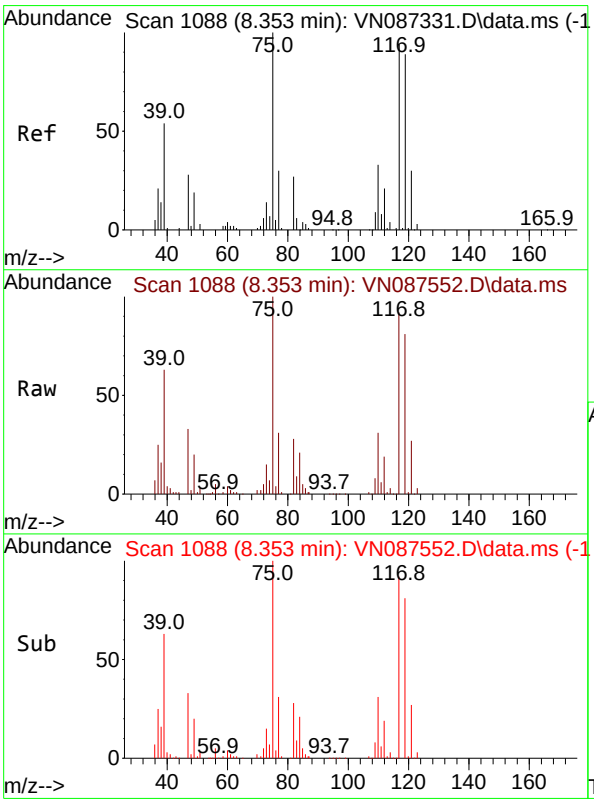
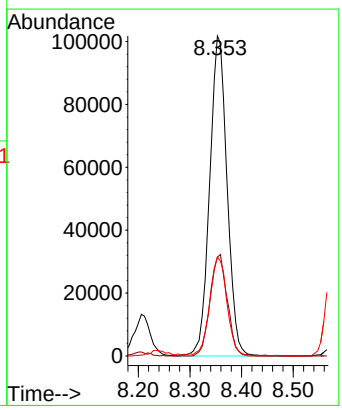
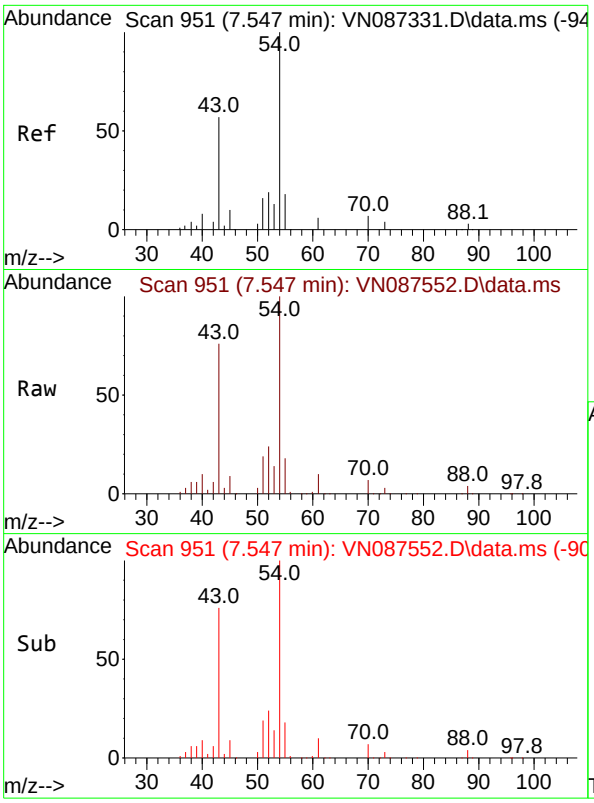


#36
1,1-Dichloropropene
Concen: 48.073 ug/l
RT: 8.353 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 75 Resp: 237939

Ion	Ratio	Lower	Upper
75	100		
110	31.4	16.7	50.1
77	30.7	25.2	37.8

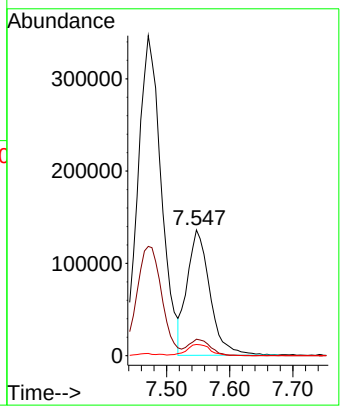




#37
Ethyl Acetate
Concen: 47.639 ug/l
RT: 7.547 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 34053

Ion	Ratio	Lower	Upper
43	100		
61	12.6	10.9	16.3
70	9.4	7.4	11.0



Instrument :
MSVOA_N
ClientSampleId :
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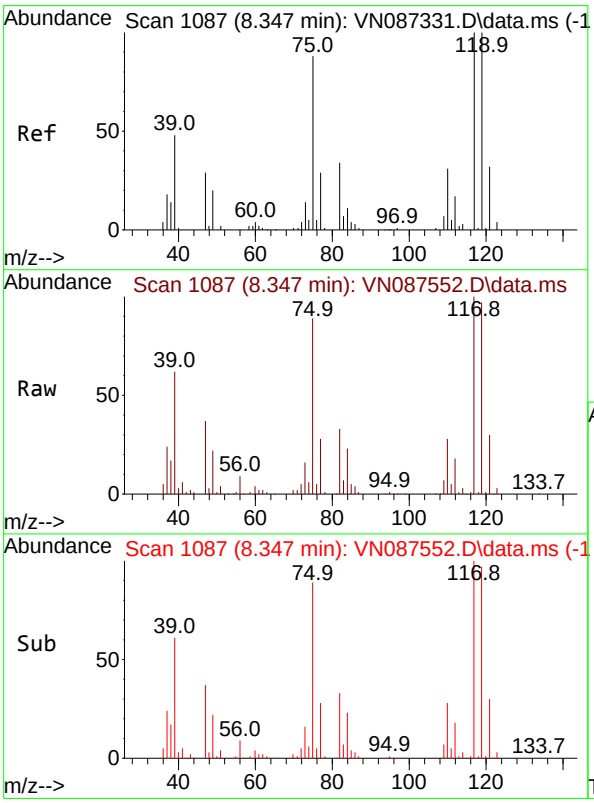
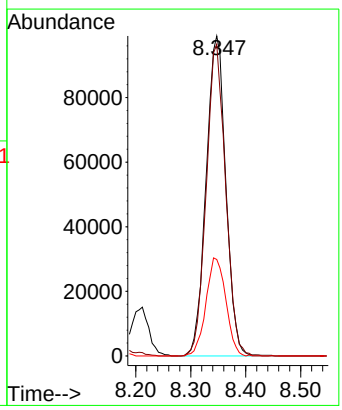
Supervised By :Mahesh Dadoda 08/19/2025

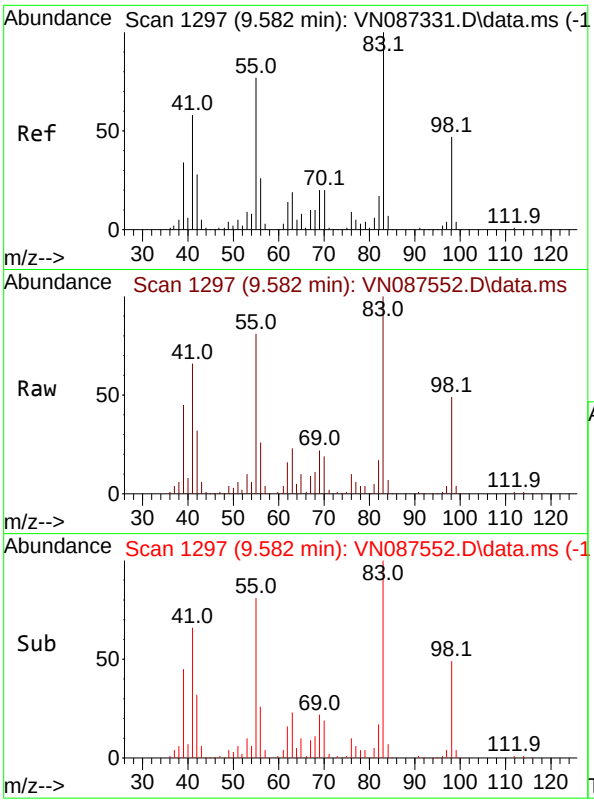


#38
Carbon Tetrachloride
Concen: 45.251 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:117 Resp: 246721

Ion	Ratio	Lower	Upper
117	100		
119	97.5	80.2	120.2
121	30.1	25.4	38.2

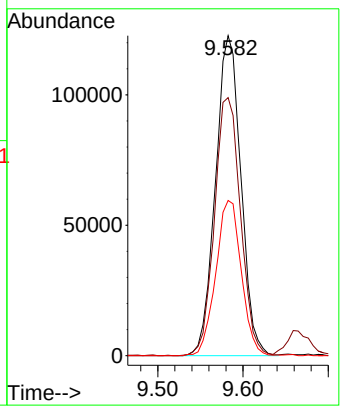




#39
Methylcyclohexane
Concen: 47.484 ug/l
RT: 9.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 83 Resp: 25444

Ion	Ratio	Lower	Upper
83	100		
55	80.6	61.3	91.9
98	48.5	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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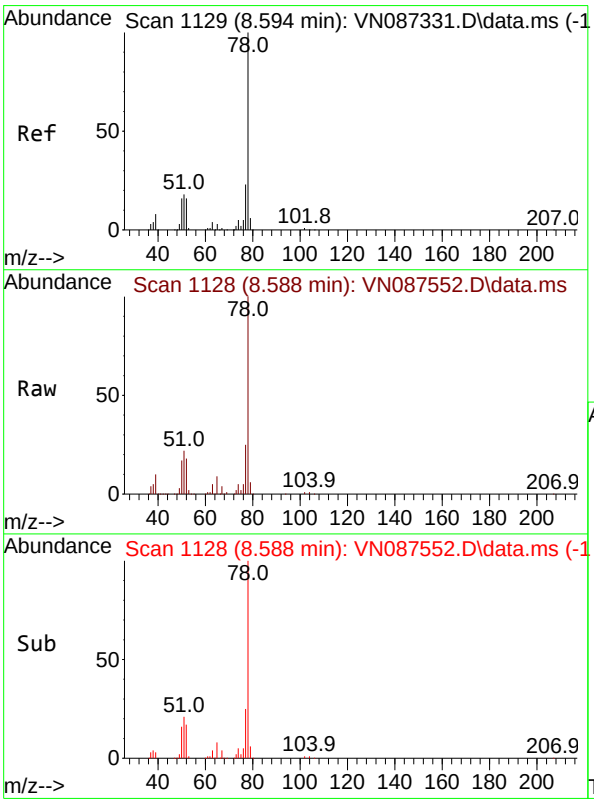
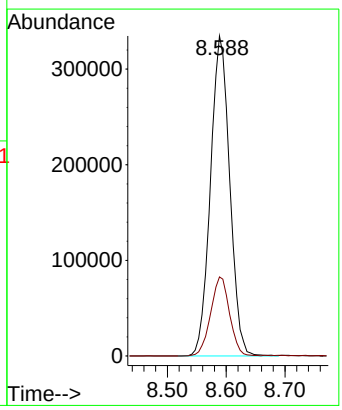
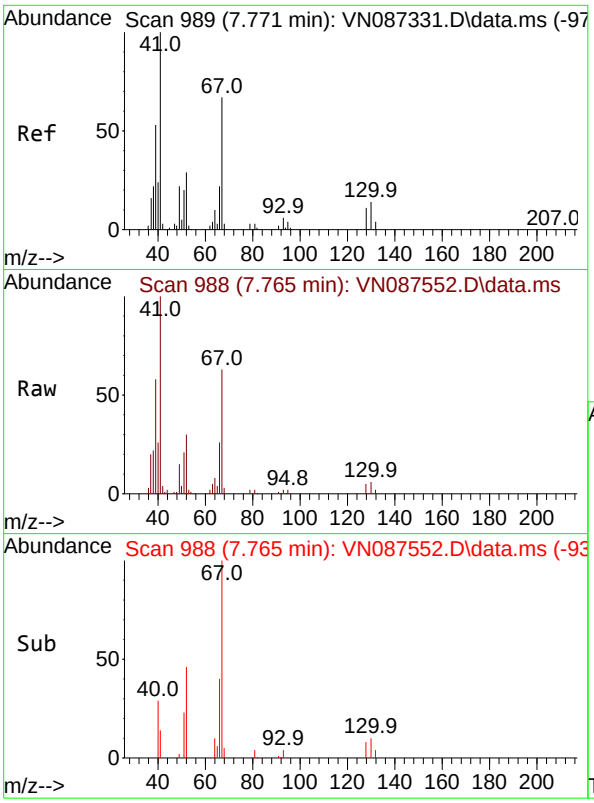


#40
Benzene
Concen: 47.666 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 78 Resp: 762513

Ion	Ratio	Lower	Upper
78	100		
77	24.7	18.2	27.2

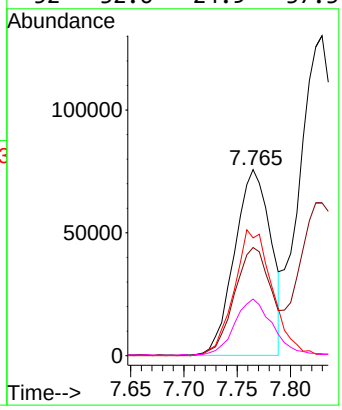




#41
Methacrylonitrile
Concen: 47.844 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 41 Resp: 17882

Ion	Ratio	Lower	Upper
41	100		
39	58.4	43.4	65.0
67	71.7	55.1	82.7
52	32.6	24.9	37.3



Instrument :
MSVOA_N
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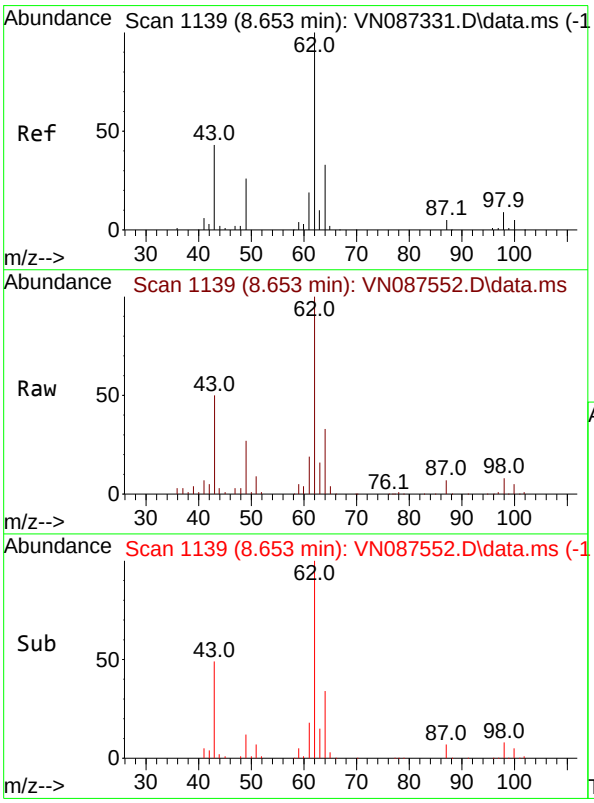
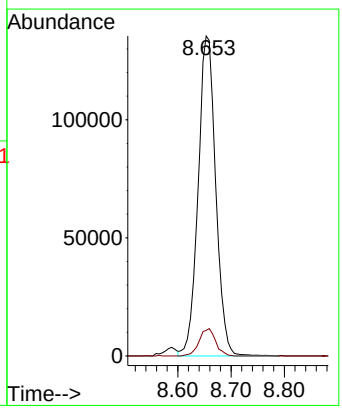
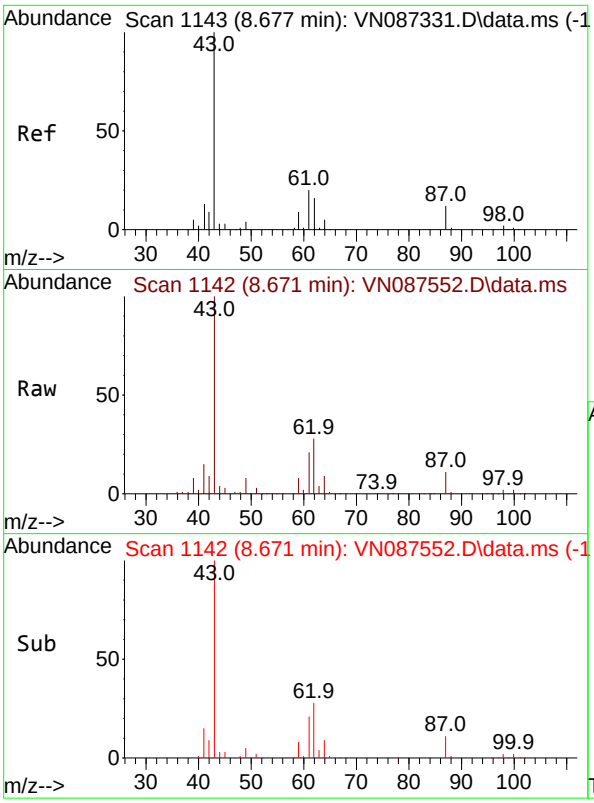


#42
1,2-Dichloroethane
Concen: 51.277 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 62 Resp: 311061

Ion	Ratio	Lower	Upper
62	100		
98	8.0	0.0	18.0

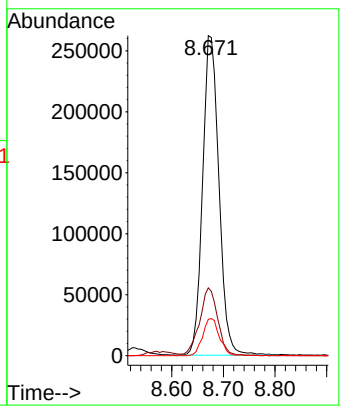




#43
Isopropyl Acetate
Concen: 51.848 ug/l
RT: 8.671 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 57533

Ion	Ratio	Lower	Upper
43	100		
61	23.2	19.8	29.8
87	11.9	9.8	14.6



Instrument :
MSVOA_N
ClientSampleId :
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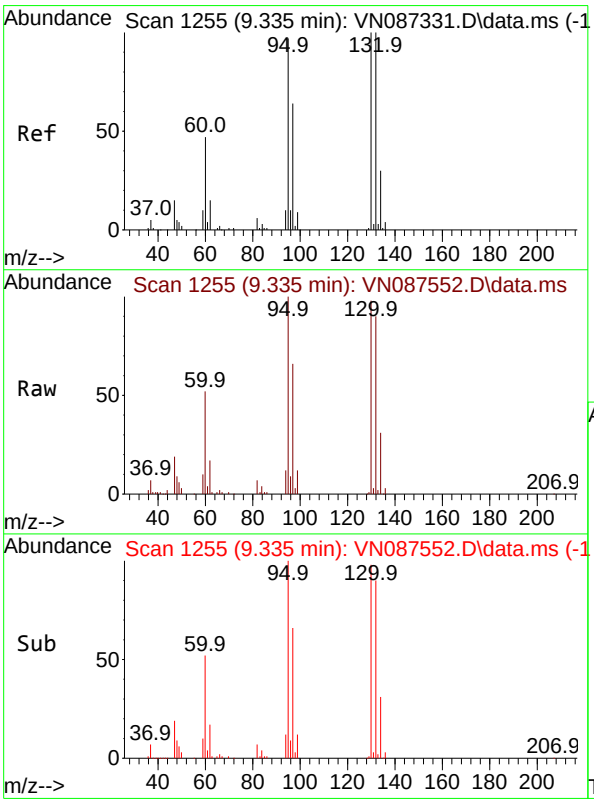
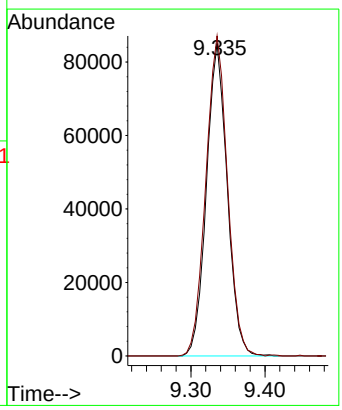
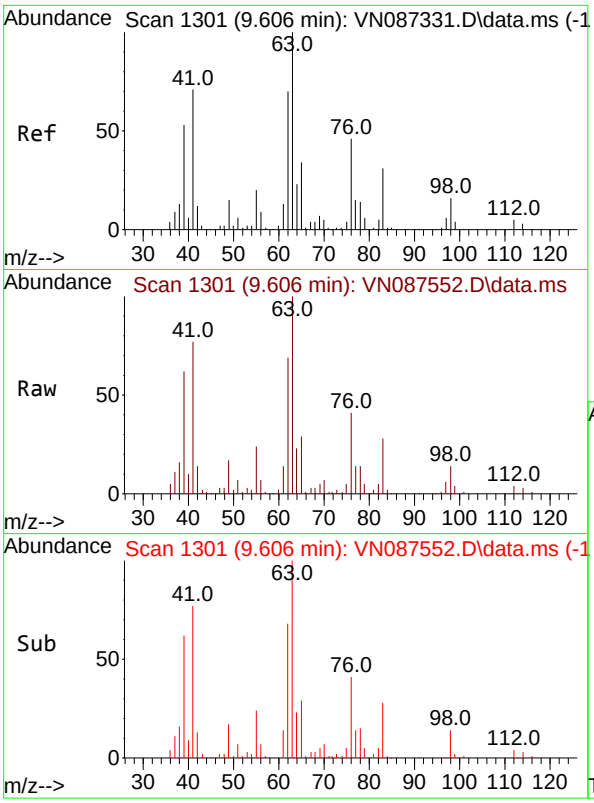


#44
Trichloroethene
Concen: 43.791 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:130 Resp: 165523

Ion	Ratio	Lower	Upper
130	100		
95	102.4	0.0	195.2

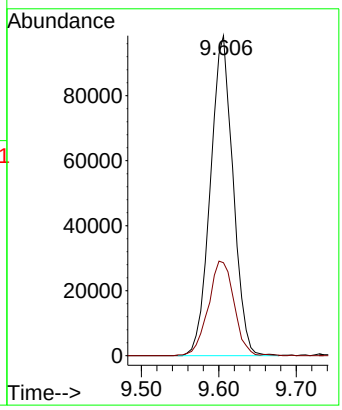




#45
1,2-Dichloropropane
Concen: 49.245 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 63 Resp: 20016

Ion	Ratio	Lower	Upper
63	100		
65	28.9	27.0	40.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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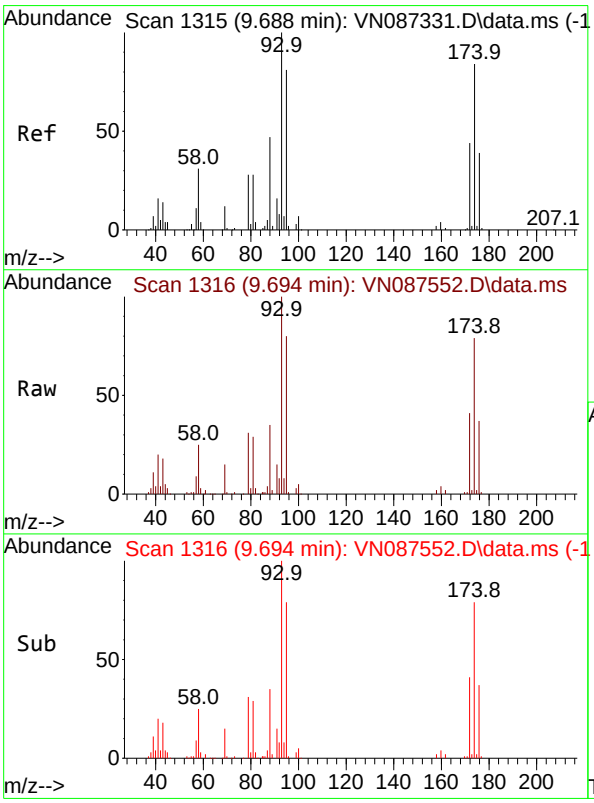
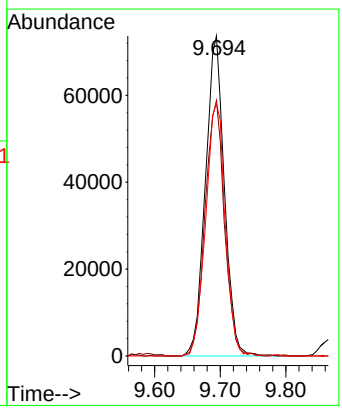
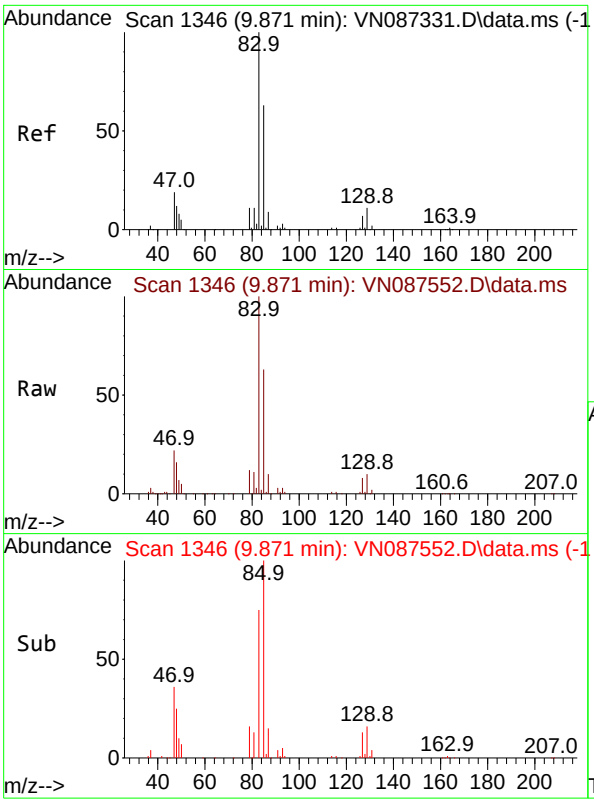


#46
Dibromomethane
Concen: 48.459 ug/l
RT: 9.694 min Scan# 1316
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 93 Resp: 147474

Ion	Ratio	Lower	Upper
93	100		
95	81.6	65.8	98.8
174	81.6	69.9	104.9





#47
Bromodichloromethane
Concen: 48.711 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 83 Resp: 29859

Ion	Ratio	Lower	Upper
83	100		
85	62.8	50.4	75.6
127	8.0	5.8	8.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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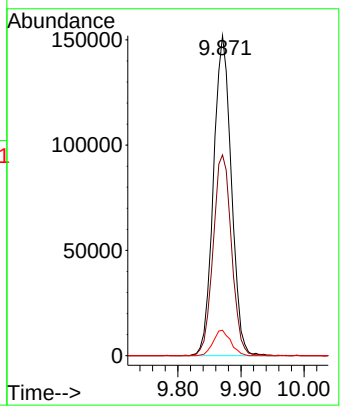
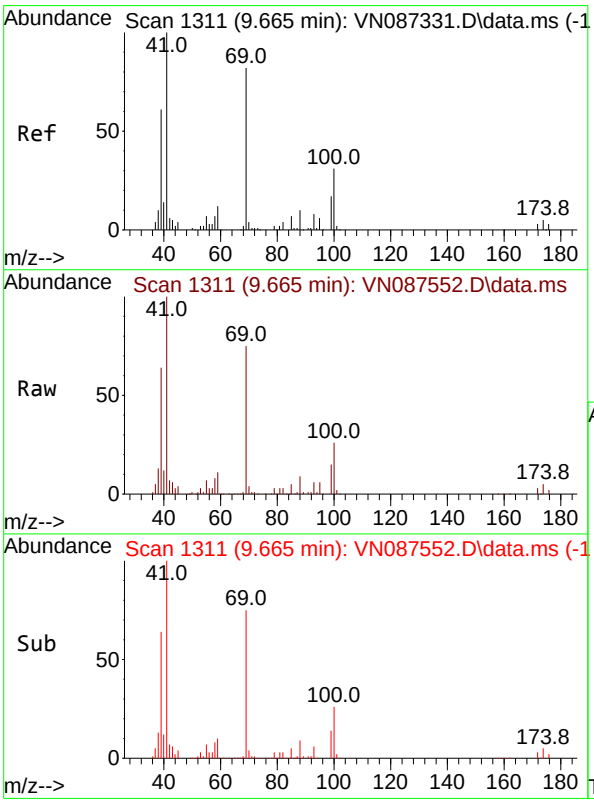
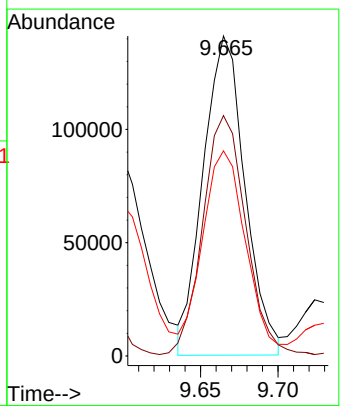


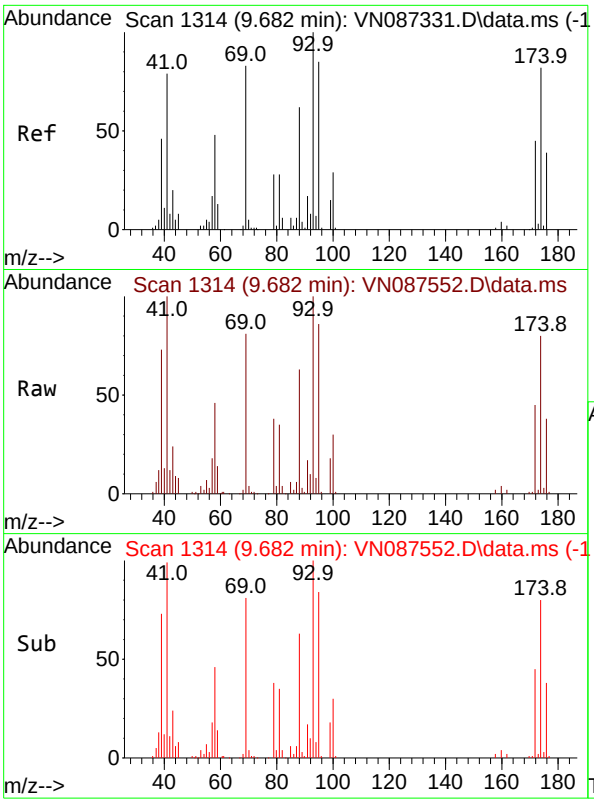


#48
Methyl methacrylate
Concen: 52.798 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 41 Resp: 263753

Ion	Ratio	Lower	Upper
41	100		
69	78.3	64.1	96.1
39	67.0	45.5	68.3

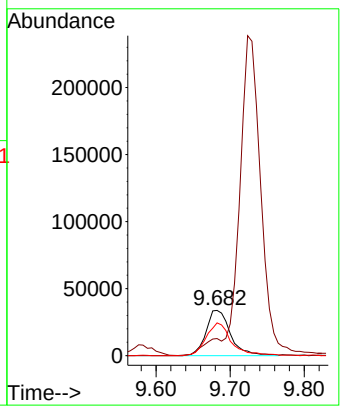




#49
1,4-Dioxane
Concen: 1013.618 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 88 Resp: 7755

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	75.2	61.1	91.7



Instrument :
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ClientSampleId :
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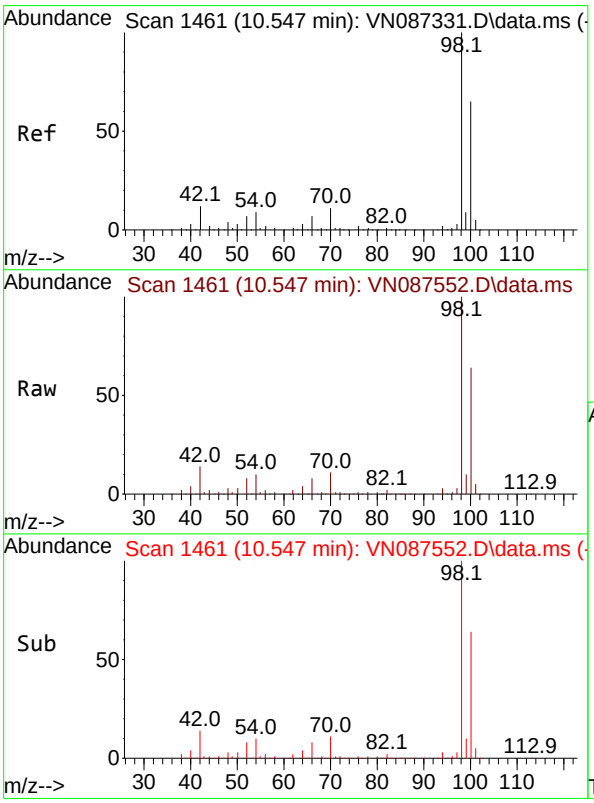
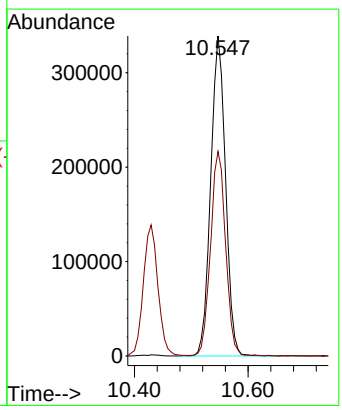
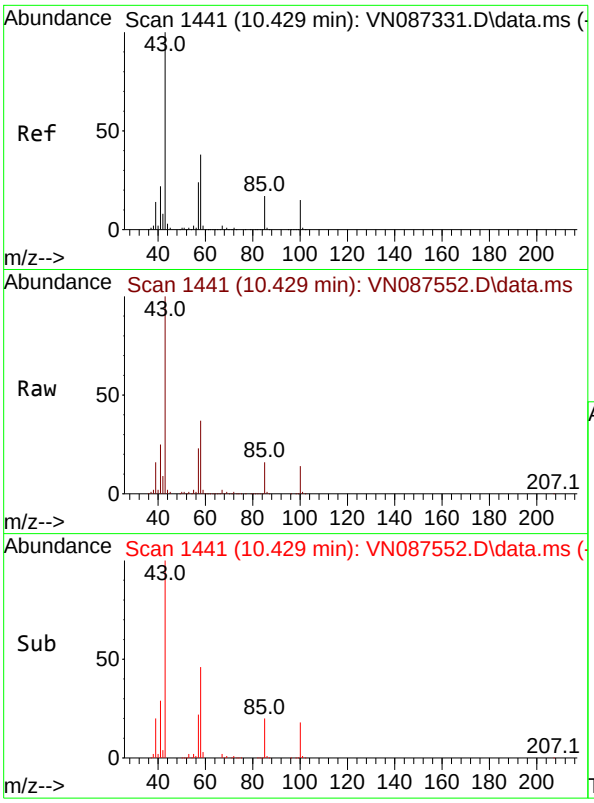


#50
Toluene-d8
Concen: 45.726 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 98 Resp: 611058

Ion	Ratio	Lower	Upper
98	100		
100	65.0	52.1	78.1

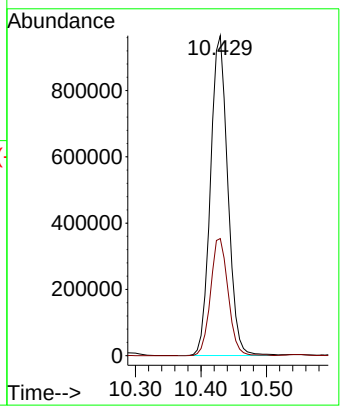




#51
4-Methyl-2-Pentanone
Concen: 252.428 ug/l
RT: 10.429 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 177161

Ion	Ratio	Lower	Upper
43	100		
58	37.2	30.8	46.2



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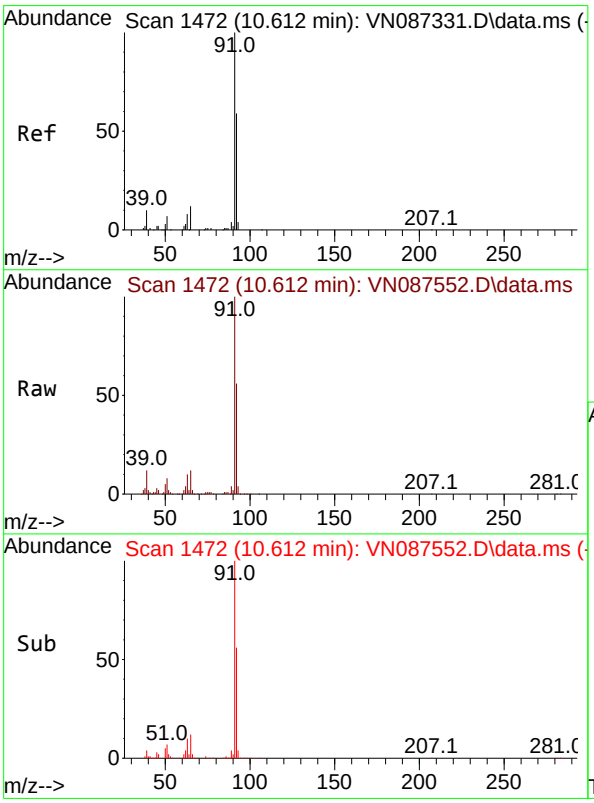
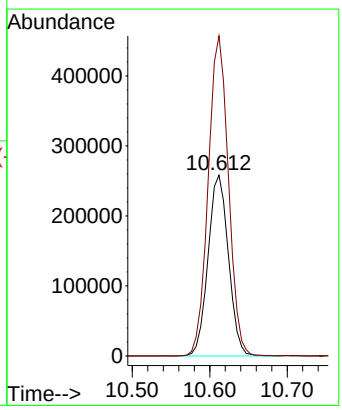
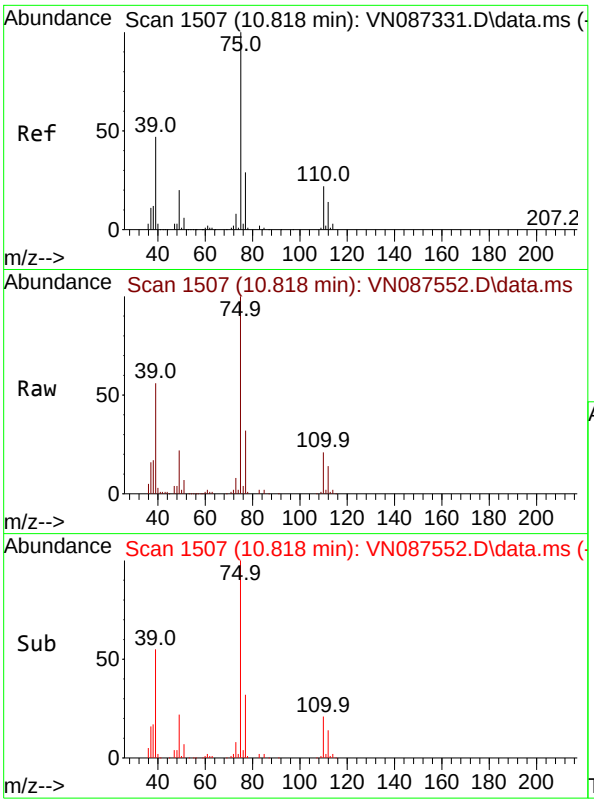


#52
Toluene
Concen: 48.609 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 92 Resp: 472630

Ion	Ratio	Lower	Upper
92	100		
91	176.0	135.1	202.7

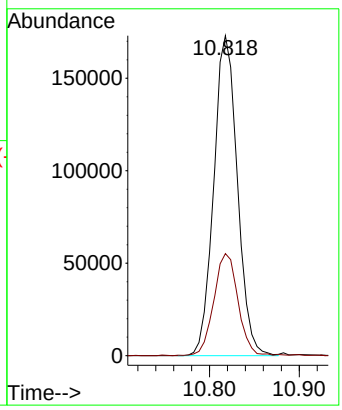




#53
t-1,3-Dichloropropene
Concen: 51.017 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 75 Resp: 31649

Ion	Ratio	Lower	Upper
75	100		
77	31.8	23.6	35.4



Instrument :
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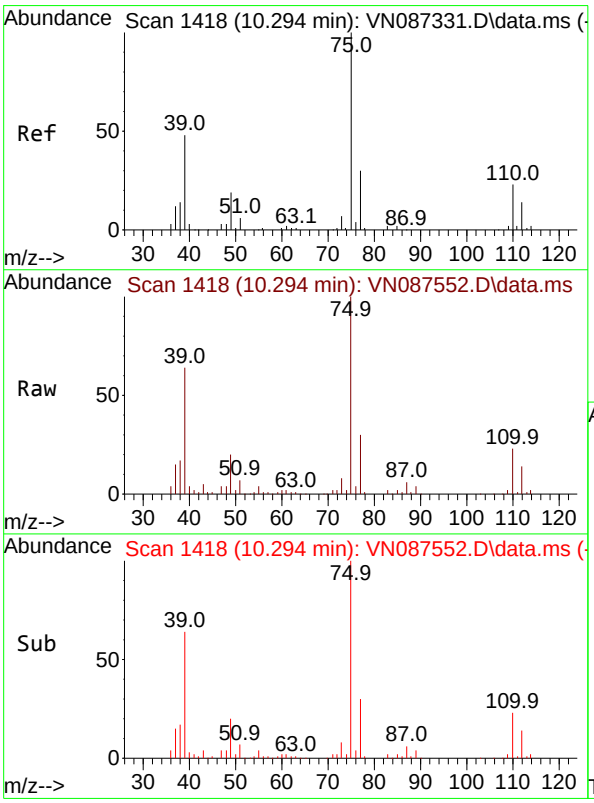
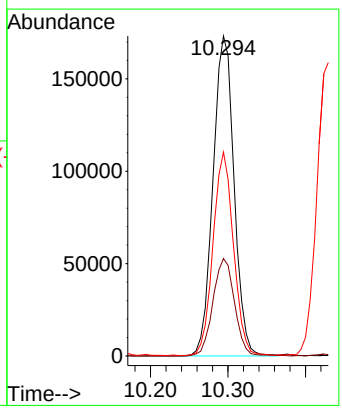
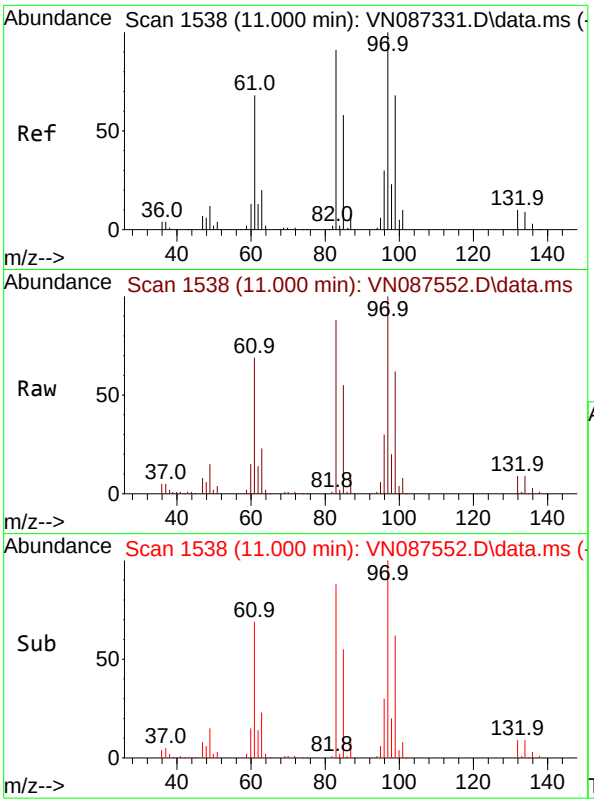


#54
cis-1,3-Dichloropropene
Concen: 51.028 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 75 Resp: 326996

Ion	Ratio	Lower	Upper
75	100		
77	30.5	24.2	36.2
39	63.5	38.4	57.6#

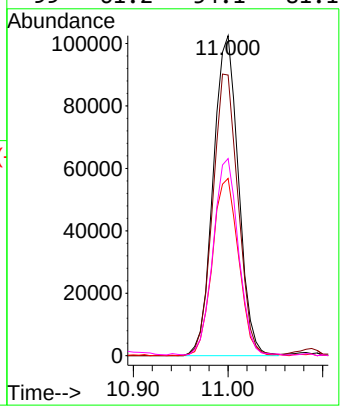




#55
1,1,2-Trichloroethane
Concen: 48.289 ug/l
RT: 11.000 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 97 Resp: 19008

Ion	Ratio	Lower	Upper
97	100		
83	87.7	72.6	109.0
85	55.4	46.7	70.1
99	61.2	54.1	81.1



Instrument :
MSVOA_N
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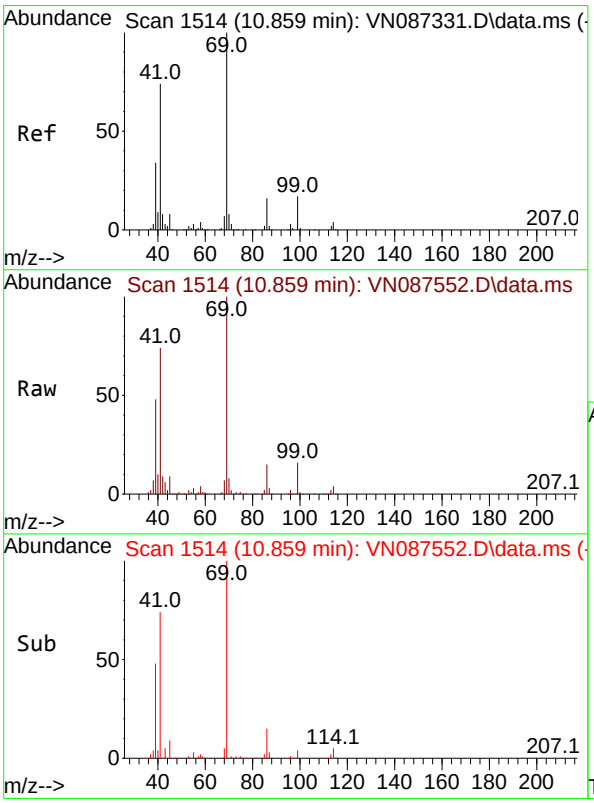
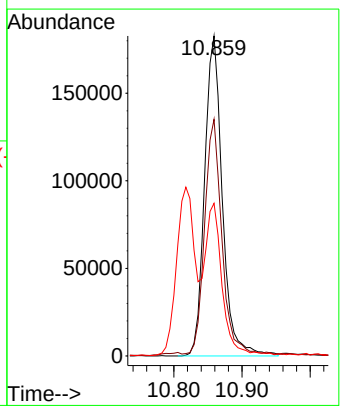
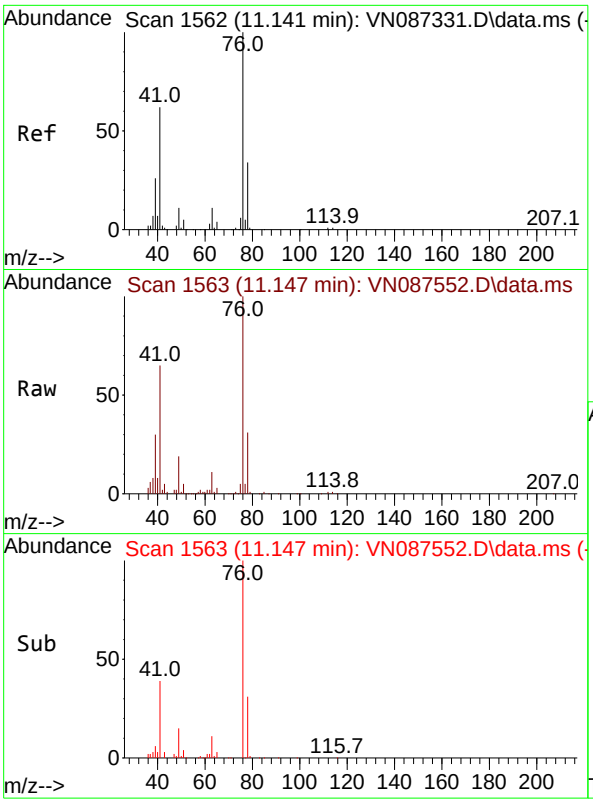


#56
Ethyl methacrylate
Concen: 50.043 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 69 Resp: 331191

Ion	Ratio	Lower	Upper
69	100		
41	70.4	55.1	82.7
39	46.2	27.9	41.9#

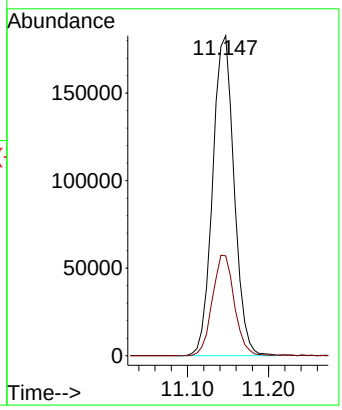




#57
1,3-Dichloropropane
Concen: 49.384 ug/l
RT: 11.147 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 76 Resp: 33611

Ion	Ratio	Lower	Upper
76	100		
78	32.2	26.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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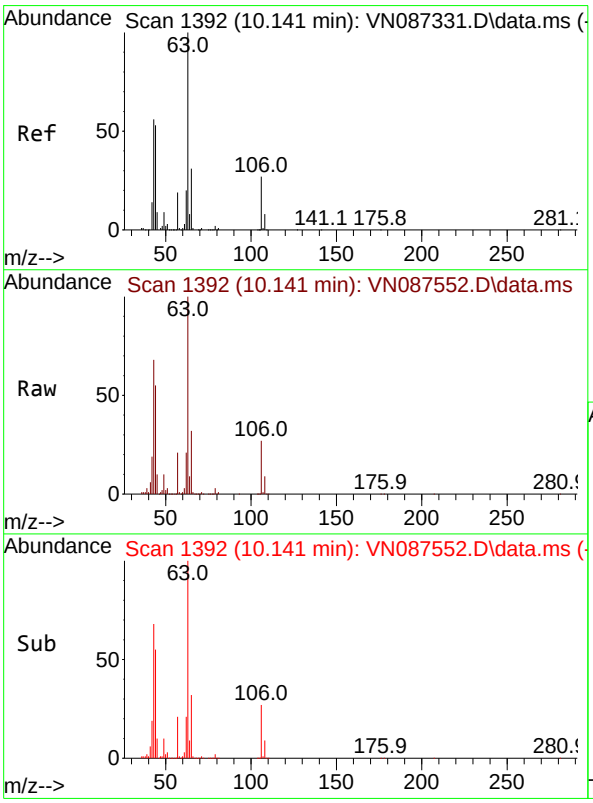
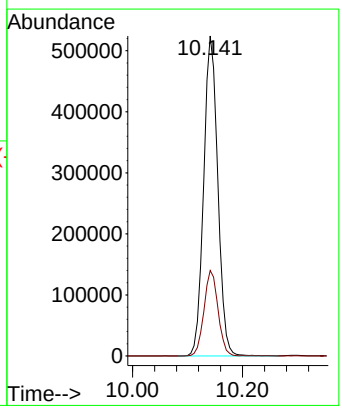
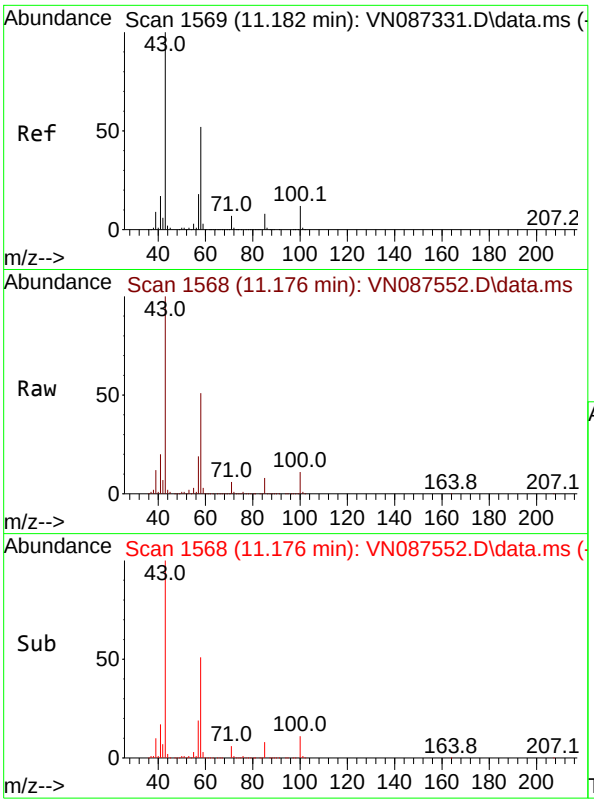


#58
2-Chloroethyl Vinyl ether
Concen: 289.306 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 63 Resp: 934209

Ion	Ratio	Lower	Upper
63	100		
106	26.6	21.7	32.5





#59
2-Hexanone
Concen: 262.377 ug/l
RT: 11.176 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 122172

Ion	Ratio	Lower	Upper
43	100		
58	51.9	26.7	80.0

Instrument :
MSVOA_N
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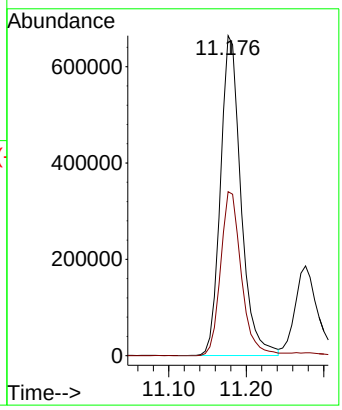
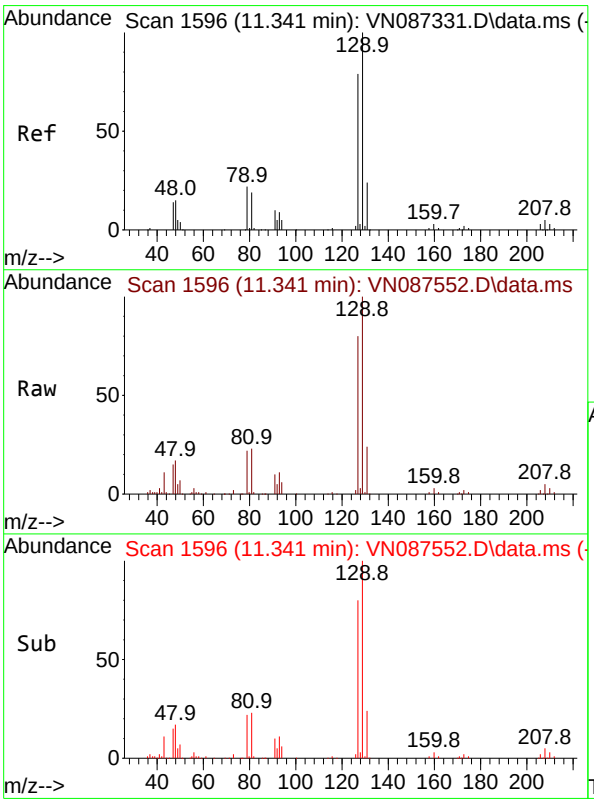
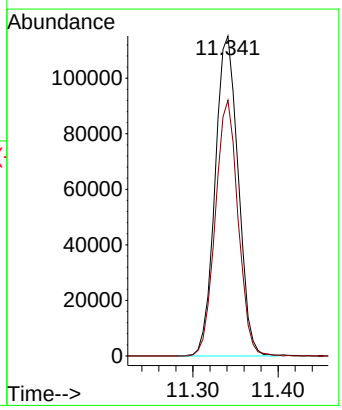


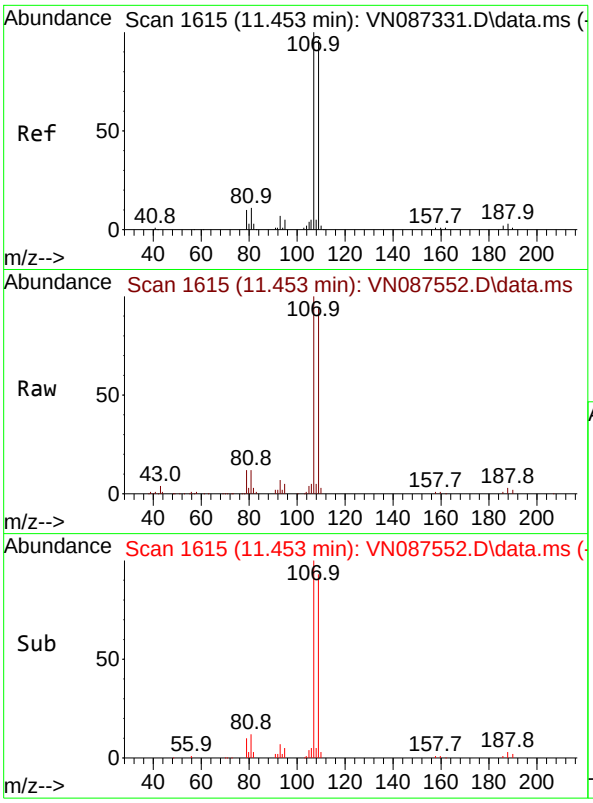


#60
Dibromochloromethane
Concen: 48.455 ug/l
RT: 11.341 min Scan# 1596
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:129 Resp: 217527

Ion	Ratio	Lower	Upper
129	100		
127	78.5	39.1	117.5





#61
1,2-Dibromoethane
Concen: 48.875 ug/l
RT: 11.453 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:107 Resp: 20229

Ion	Ratio	Lower	Upper
107	100		
109	94.1	77.5	116.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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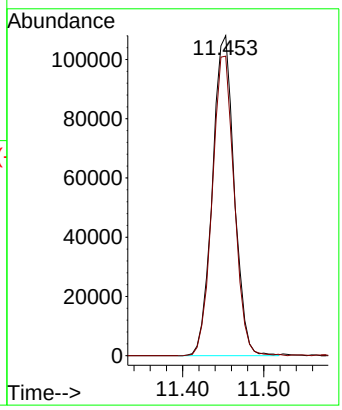
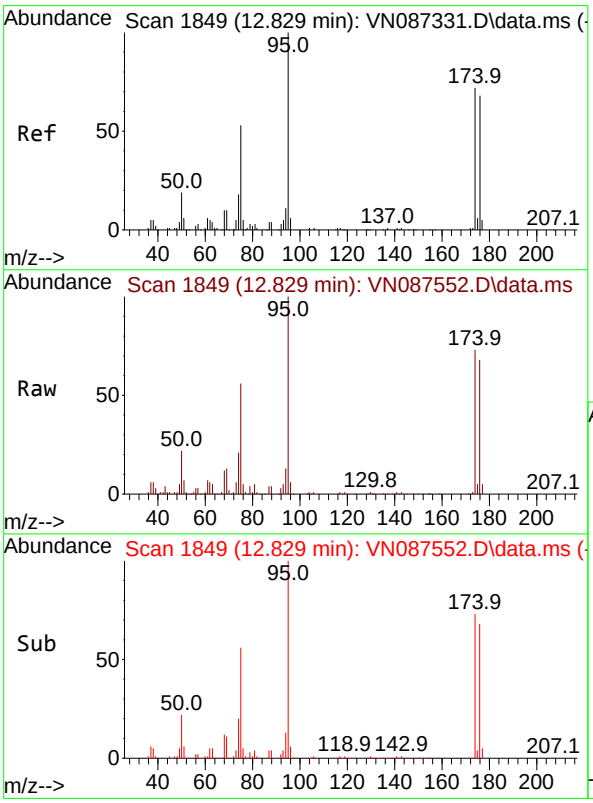
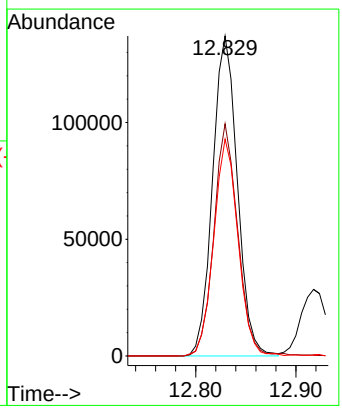


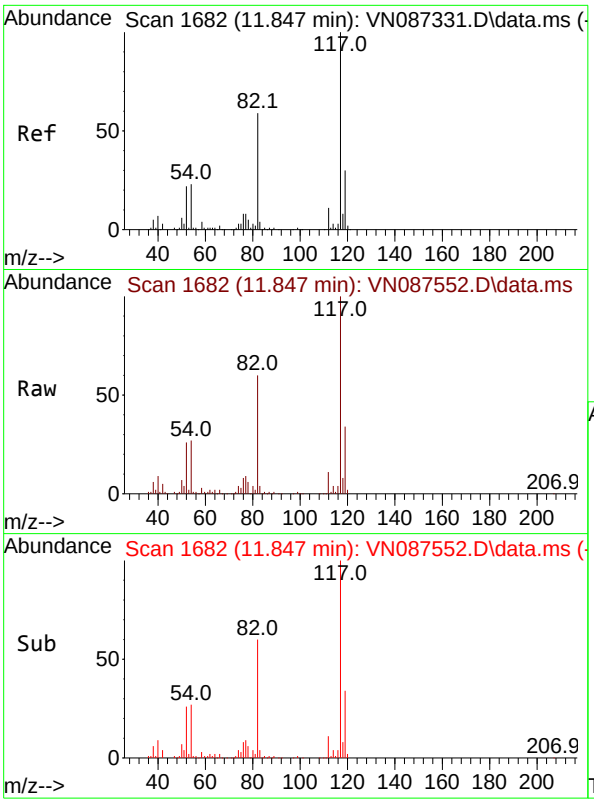


#62
4-Bromofluorobenzene
Concen: 47.655 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 95 Resp: 235280

Ion	Ratio	Lower	Upper
95	100		
174	70.2	0.0	149.4
176	66.7	0.0	141.2

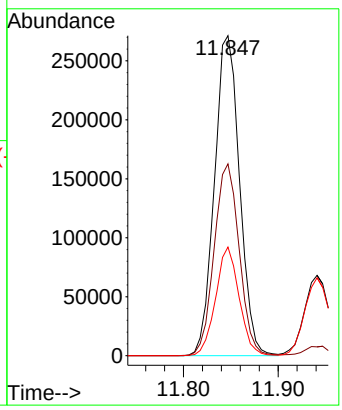




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:117 Resp: 50061

Ion	Ratio	Lower	Upper
117	100		
82	59.9	47.4	71.2
119	34.0	23.8	35.8



Instrument :
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ClientSampleId :
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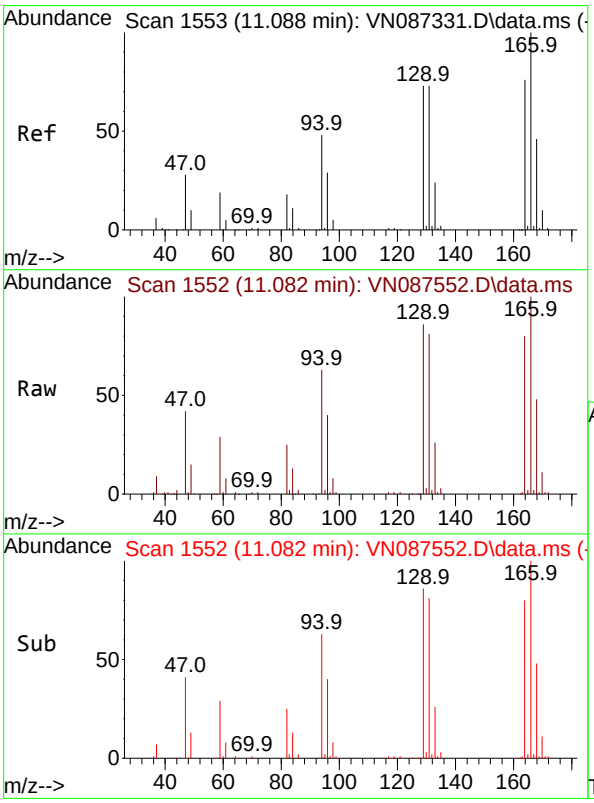
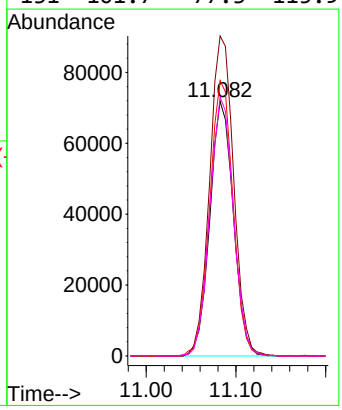
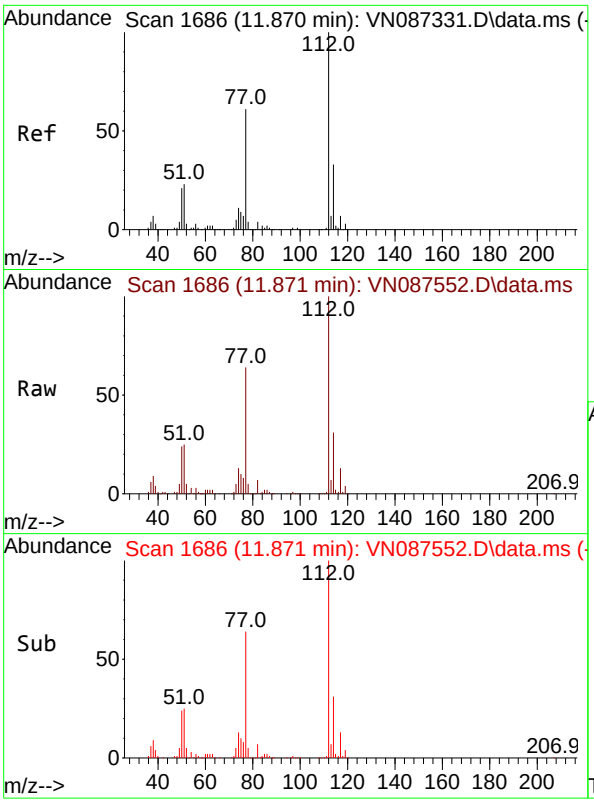


#64
Tetrachloroethene
Concen: 40.459 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:164 Resp: 130358

Ion	Ratio	Lower	Upper
164	100		
166	125.7	105.5	158.3
129	108.2	77.4	116.2
131	101.7	77.3	115.9





#65
Chlorobenzene
Concen: 45.275 ug/l
RT: 11.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:112 Resp: 50885

Ion	Ratio	Lower	Upper
112	100		
114	31.5	26.5	39.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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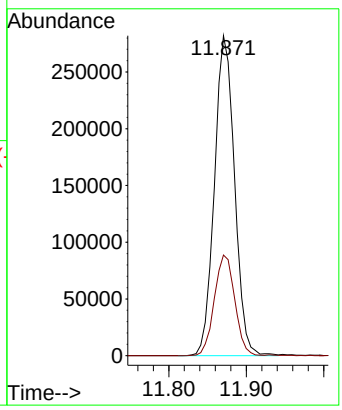
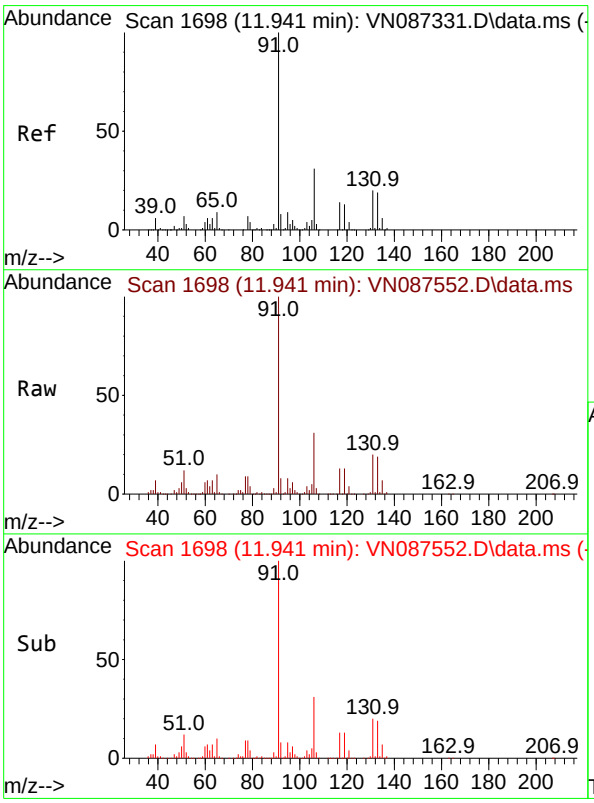
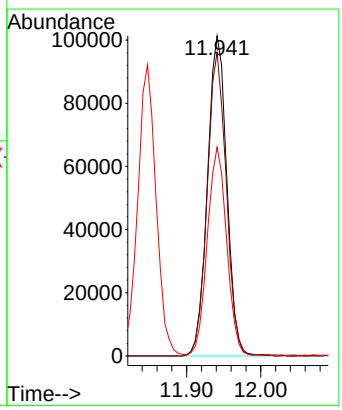


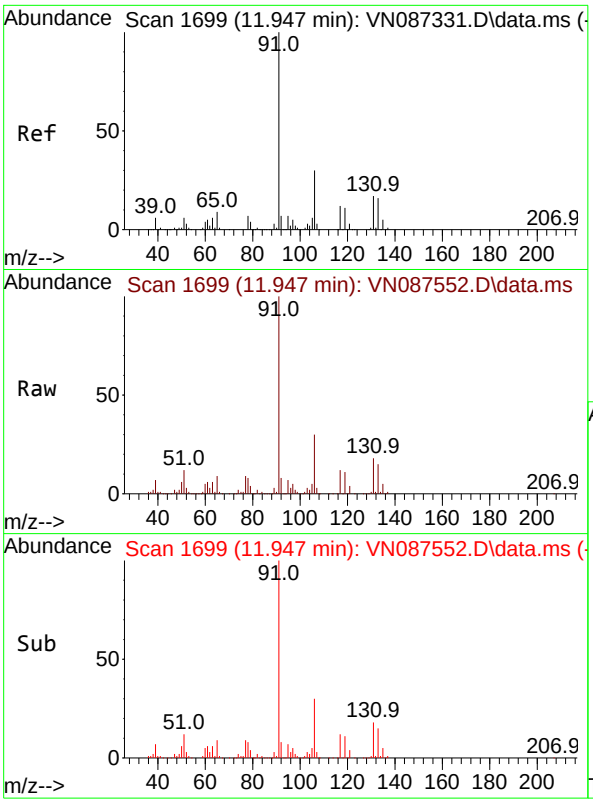


#66
1,1,1,2-Tetrachloroethane
Concen: 47.896 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:131 Resp: 183045

Ion	Ratio	Lower	Upper
131	100		
133	93.8	47.4	142.3
119	65.7	33.1	99.2





#67
Ethyl Benzene
Concen: 49.442 ug/l
RT: 11.947 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 91 Resp: 91481

Ion	Ratio	Lower	Upper
91	100		
106	30.5	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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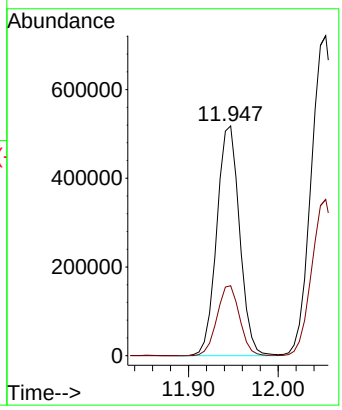
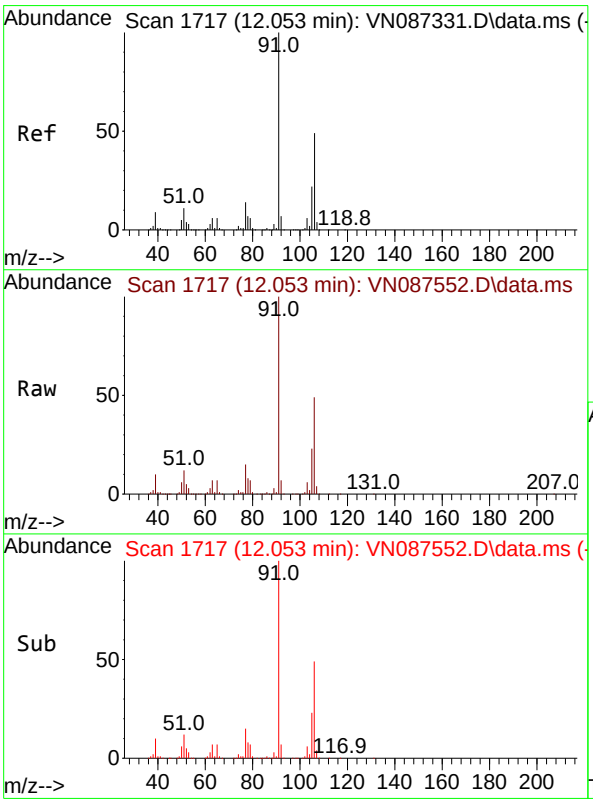
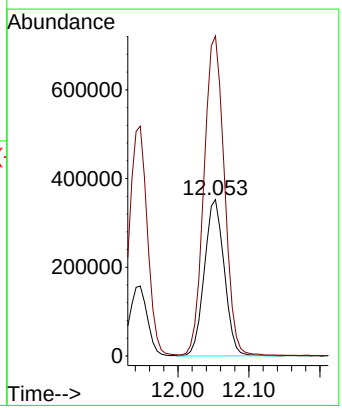


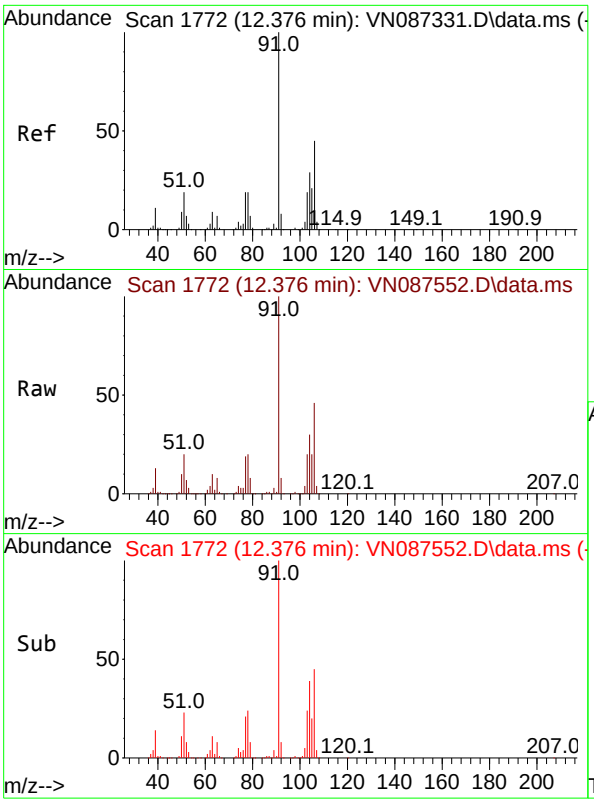


#68
m/p-Xylenes
Concen: 98.699 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:106 Resp: 683841

Ion	Ratio	Lower	Upper
106	100		
91	210.7	162.0	243.0

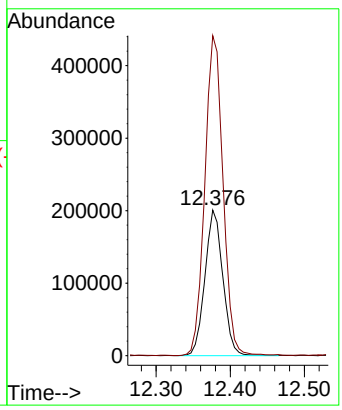




#69
o-Xylene
Concen: 51.038 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:106 Resp: 33778

Ion	Ratio	Lower	Upper
106	100		
91	223.0	107.7	323.3



Instrument :
MSVOA_N
ClientSampleId :
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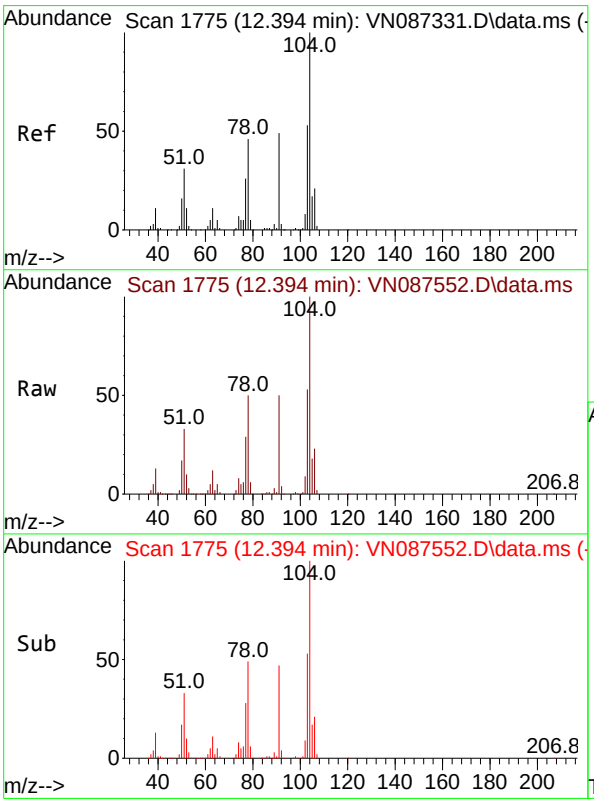
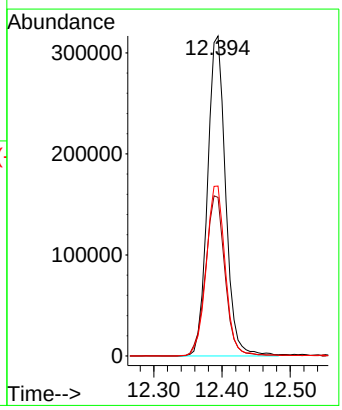
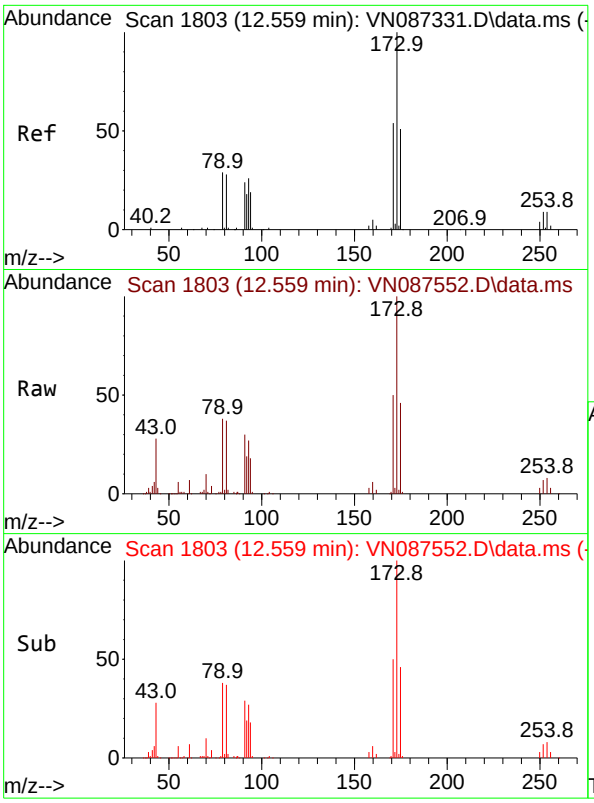


#70
Styrene
Concen: 52.445 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:104 Resp: 583897

Ion	Ratio	Lower	Upper
104	100		
78	53.9	41.0	61.6
103	56.4	43.9	65.9

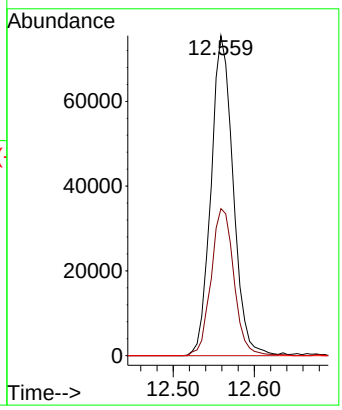




#71
Bromoform
Concen: 46.429 ug/l
RT: 12.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:173 Resp: 14335

Ion	Ratio	Lower	Upper
173	100		
175	47.4	24.1	72.3
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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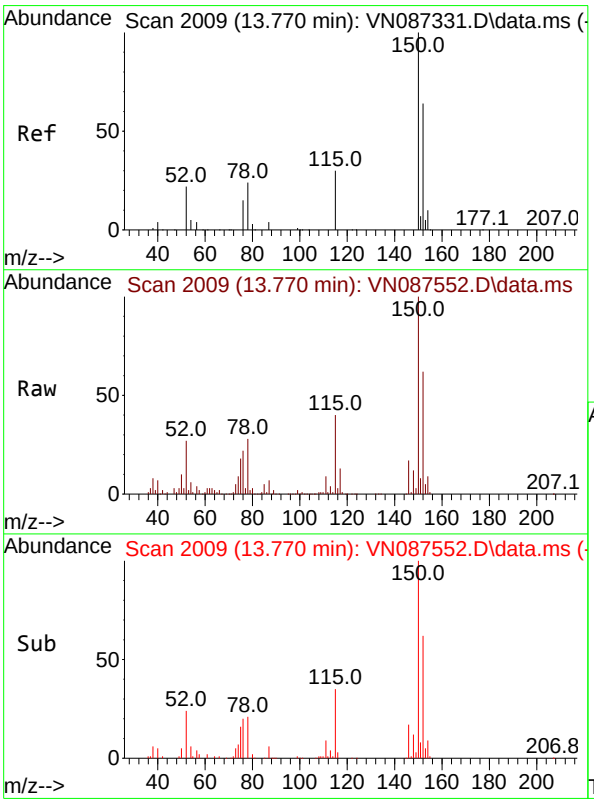
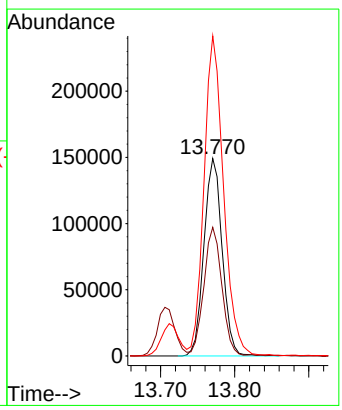
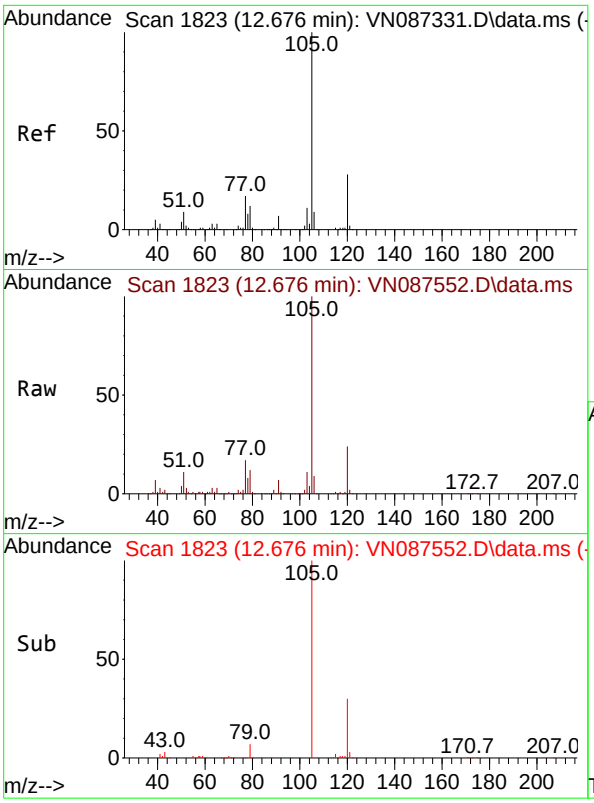


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:152 Resp: 255173

Ion	Ratio	Lower	Upper
152	100		
115	64.3	31.1	93.5
150	173.5	0.0	349.0





#73
Isopropylbenzene
Concen: 53.222 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:105 Resp: 85475

Ion	Ratio	Lower	Upper
105	100		
120	25.4	13.4	40.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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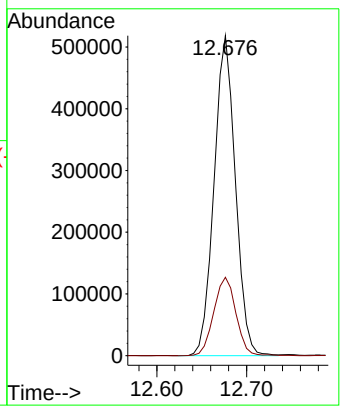
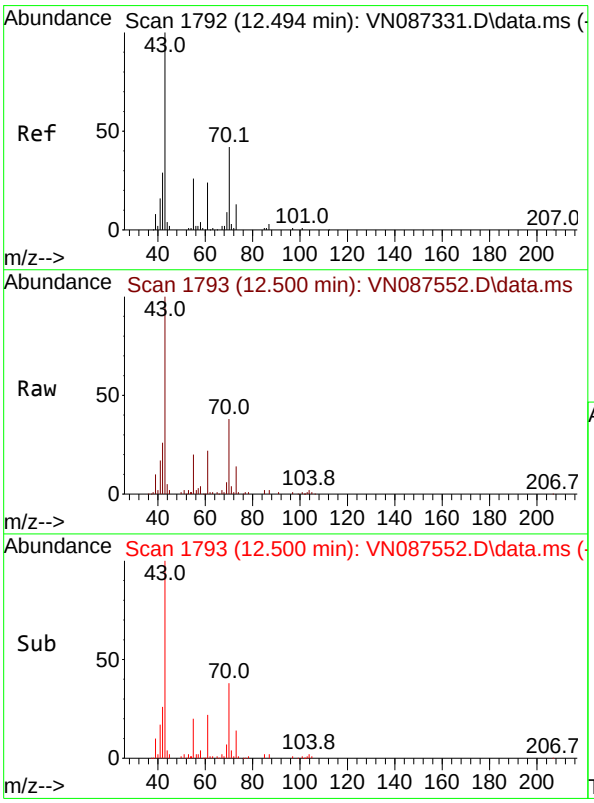
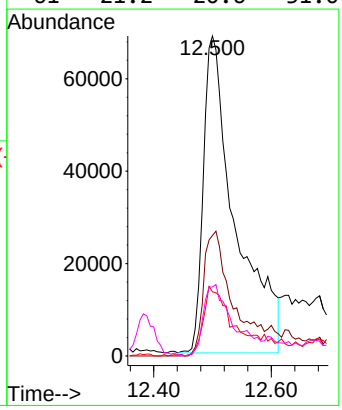


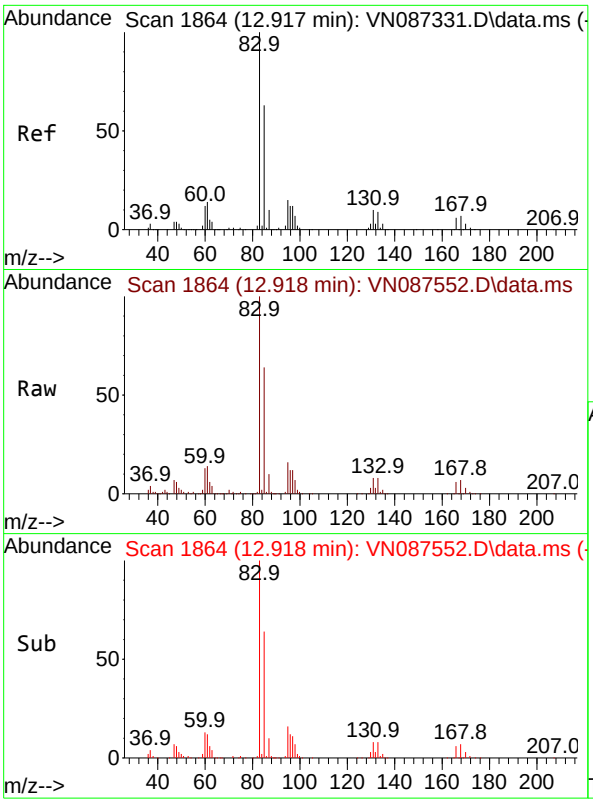


#74
N-amyl acetate
Concen: 38.819 ug/l
RT: 12.500 min Scan# 1793
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 43 Resp: 259021

Ion	Ratio	Lower	Upper
43	100		
70	36.1	37.6	56.4#
55	20.5	19.6	29.4
61	21.2	20.6	31.0

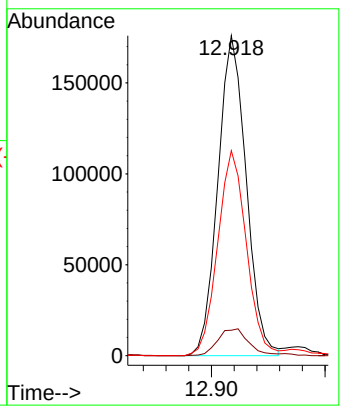




#75
1,1,2,2-Tetrachloroethane
Concen: 50.447 ug/l
RT: 12.918 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 83 Resp: 30485

Ion	Ratio	Lower	Upper
83	100		
131	9.5	5.1	15.3
85	64.8	32.5	97.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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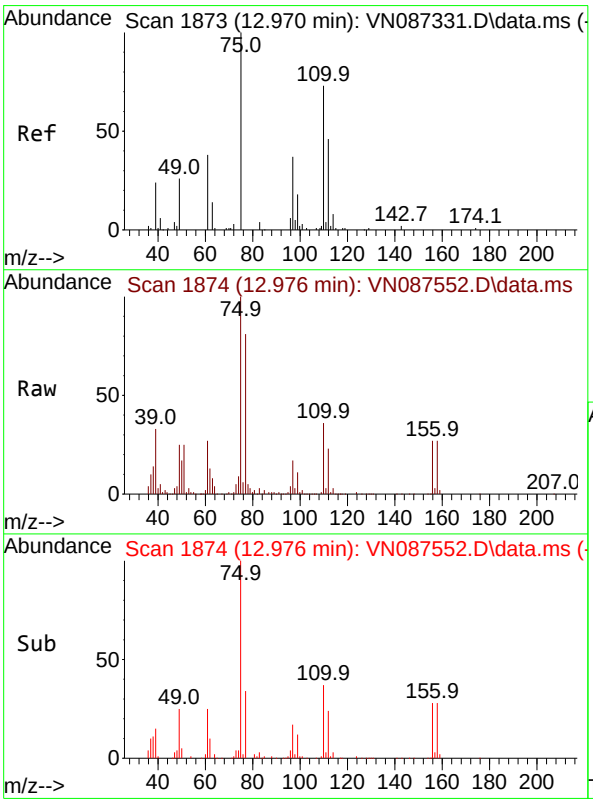
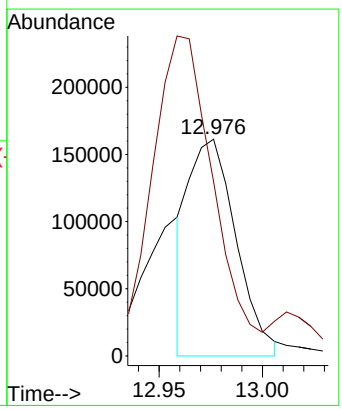
Reviewed By :John Carlone 08/14/2025
Supervised By :Mahesh Dadoda 08/19/2025

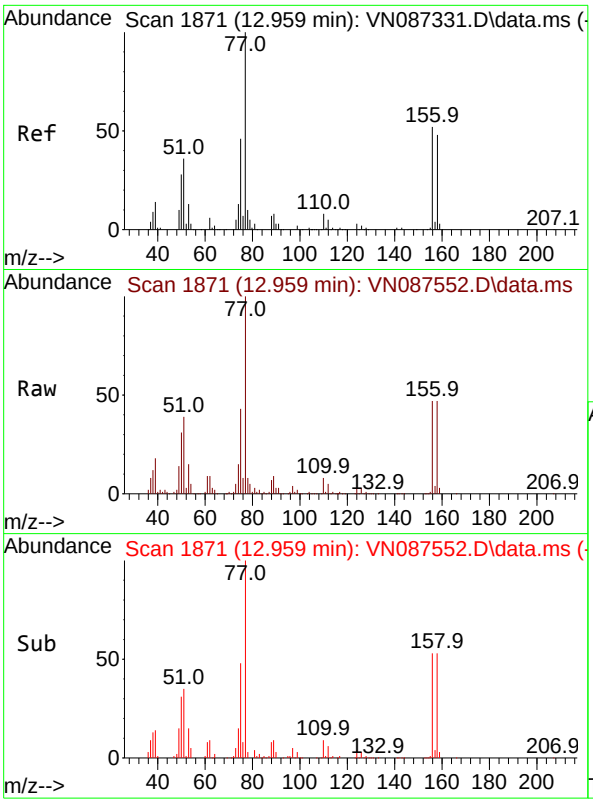


#76
1,2,3-Trichloropropane
Concen: 44.960 ug/l m
RT: 12.976 min Scan# 1874
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 75 Resp: 257264

Ion	Ratio	Lower	Upper
75	100		
77	193.5	94.5	283.6

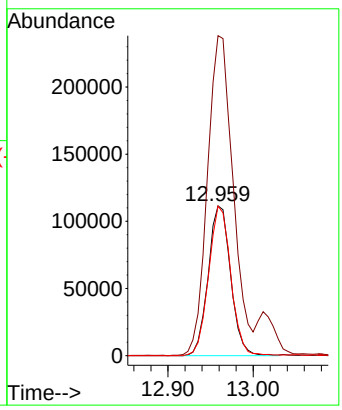




#77
Bromobenzene
Concen: 48.942 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:156 Resp: 20384

Ion	Ratio	Lower	Upper
156	100		
77	244.2	114.9	344.6
158	98.6	48.5	145.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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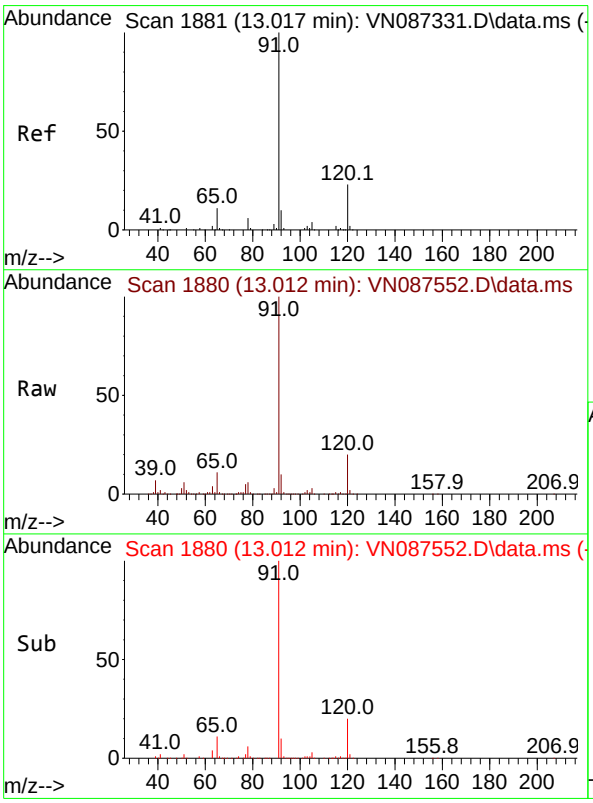
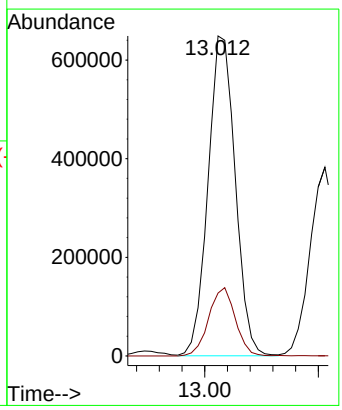
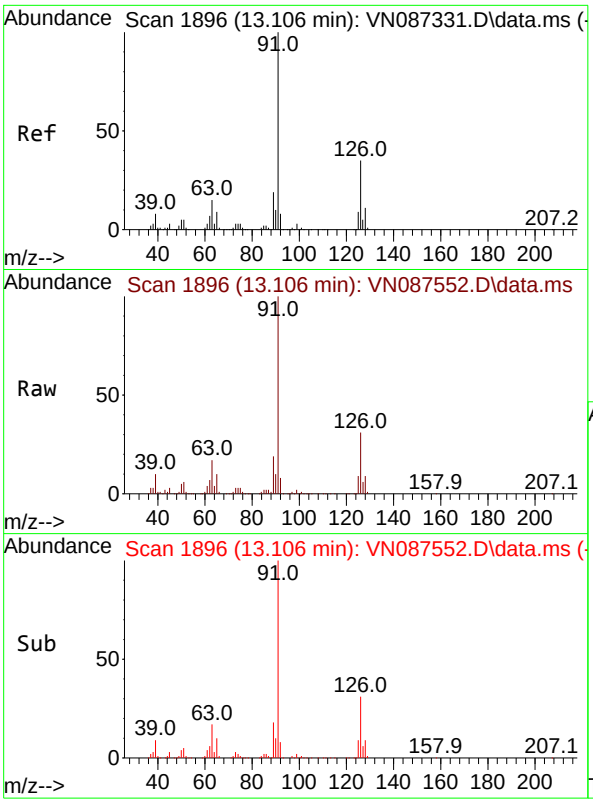


#78
n-propylbenzene
Concen: 53.447 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 91 Resp: 1079956

Ion	Ratio	Lower	Upper
91	100		
120	20.9	11.3	33.8





#79
2-Chlorotoluene
Concen: 52.528 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 91 Resp: 65230

Ion	Ratio	Lower	Upper
91	100		
126	30.8	16.9	50.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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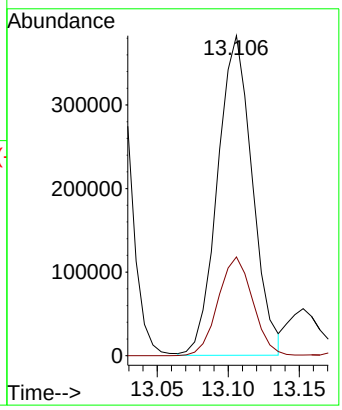
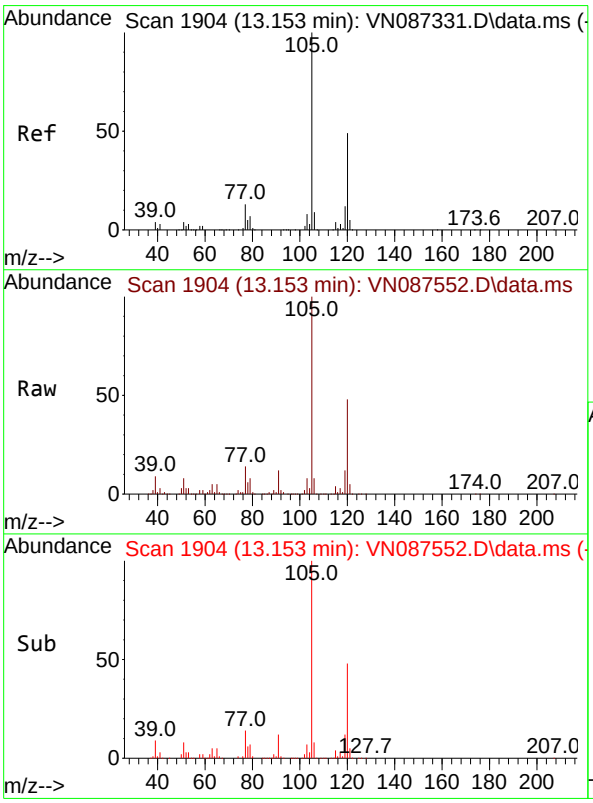
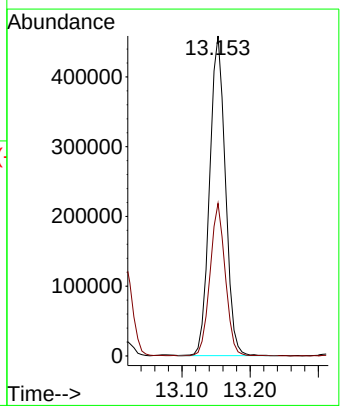


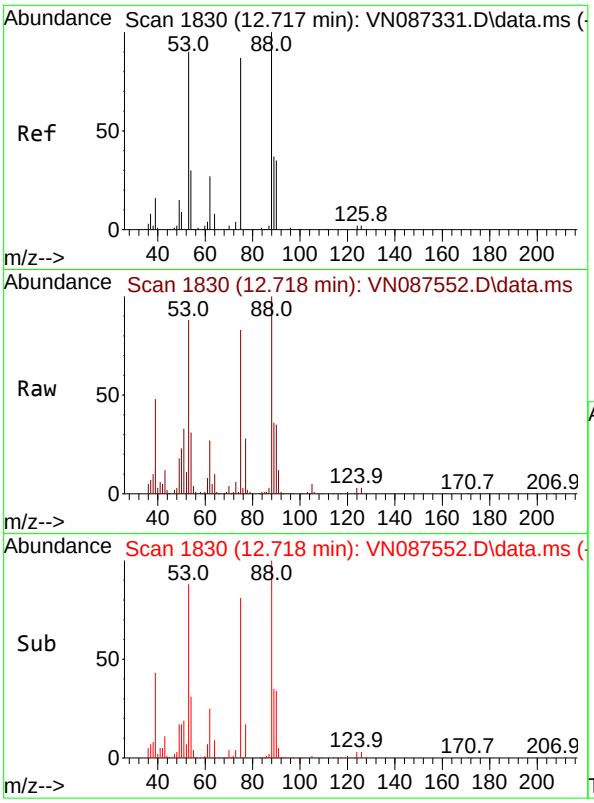


#80
1,3,5-Trimethylbenzene
Concen: 53.765 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:105 Resp: 735691

Ion	Ratio	Lower	Upper
105	100		
120	46.2	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 48.472 ug/l
RT: 12.718 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 75 Resp: 10136

Ion	Ratio	Lower	Upper
75	100		
53	109.0	83.5	125.3
89	43.7	38.4	57.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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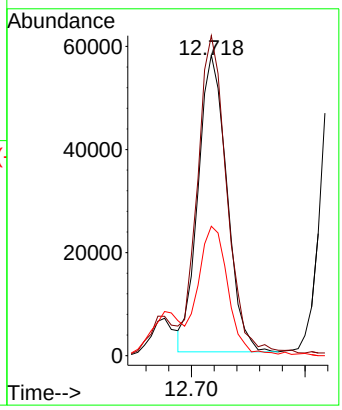
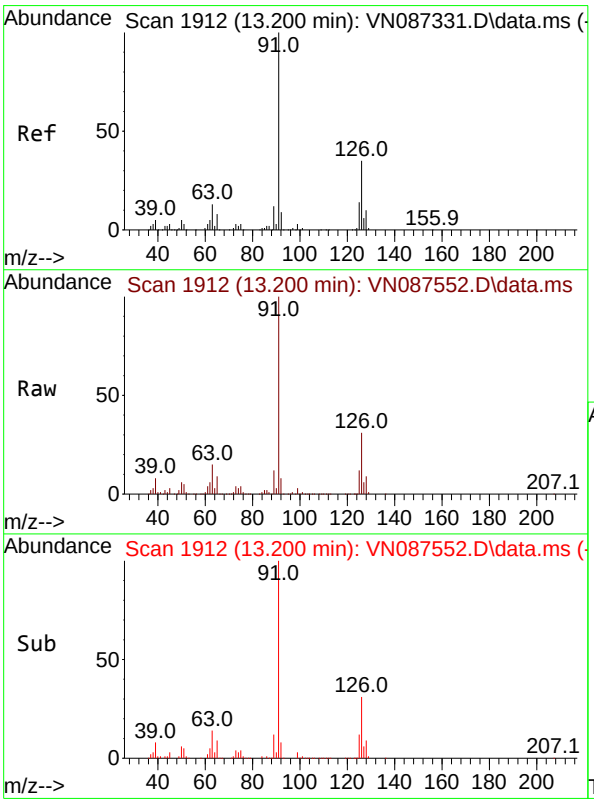
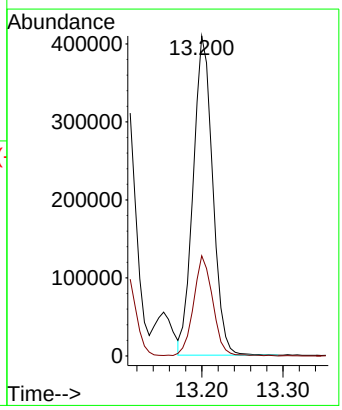


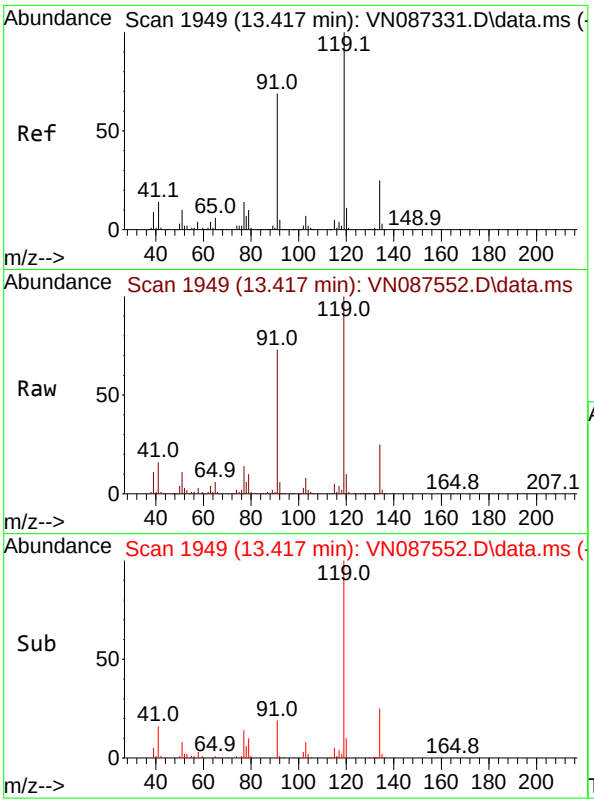


#82
4-Chlorotoluene
Concen: 52.913 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 91 Resp: 684119

Ion	Ratio	Lower	Upper
91	100		
126	31.1	16.6	49.7





#83
tert-Butylbenzene
Concen: 53.713 ug/l
RT: 13.417 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:119 Resp: 61386

Ion	Ratio	Lower	Upper
119	100		
91	72.3	35.0	105.1
134	26.5	12.6	37.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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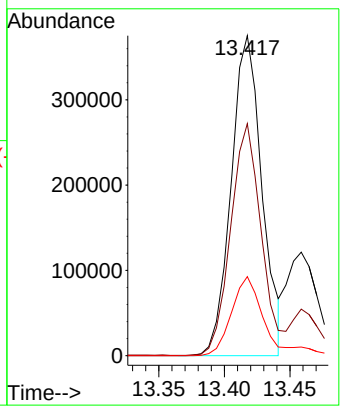
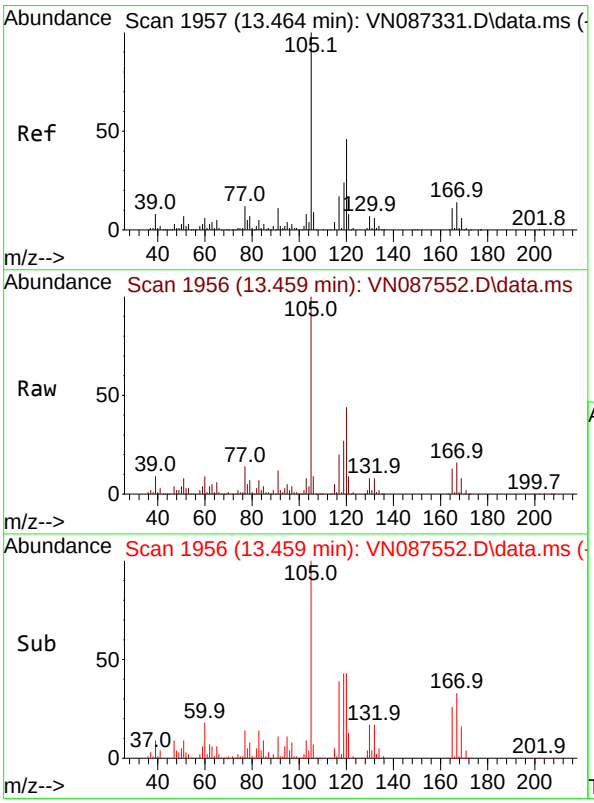
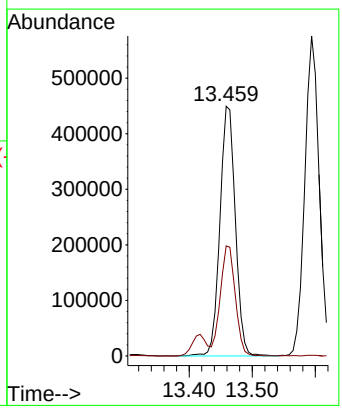


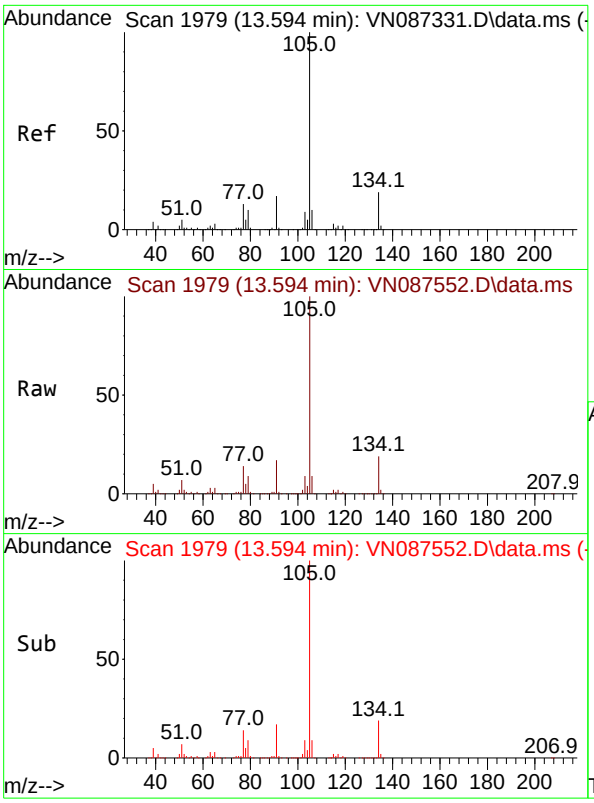


#84
1,2,4-Trimethylbenzene
Concen: 54.601 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:105 Resp: 762982

Ion	Ratio	Lower	Upper
105	100		
120	42.4	22.8	68.3





#85
sec-Butylbenzene
Concen: 53.157 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:105 Resp: 91506

Ion	Ratio	Lower	Upper
105	100		
134	18.9	9.8	29.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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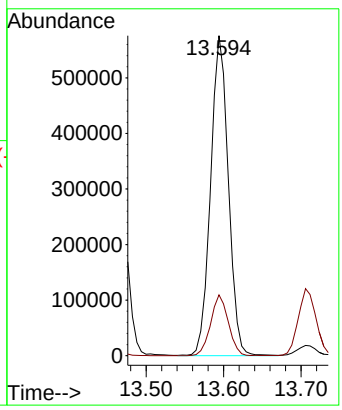
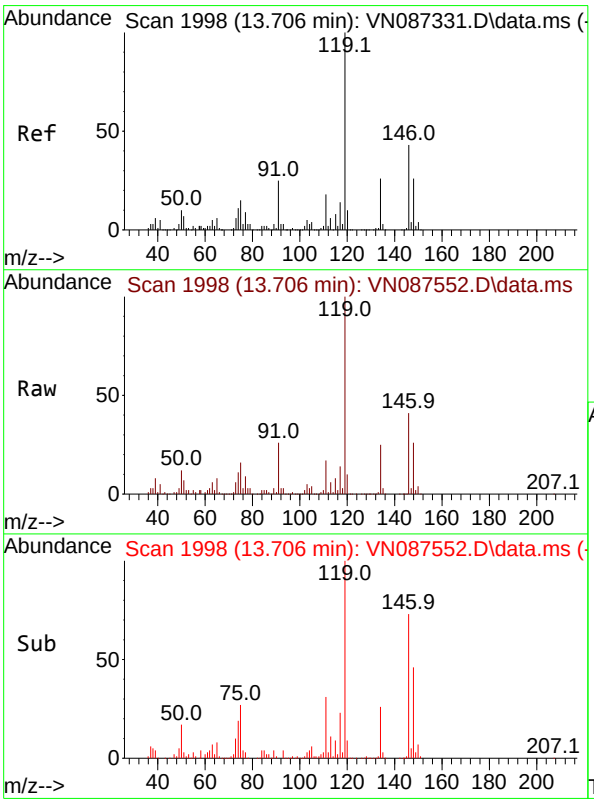
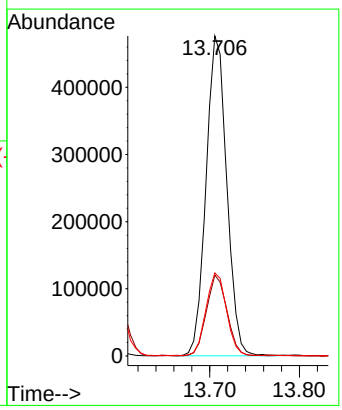


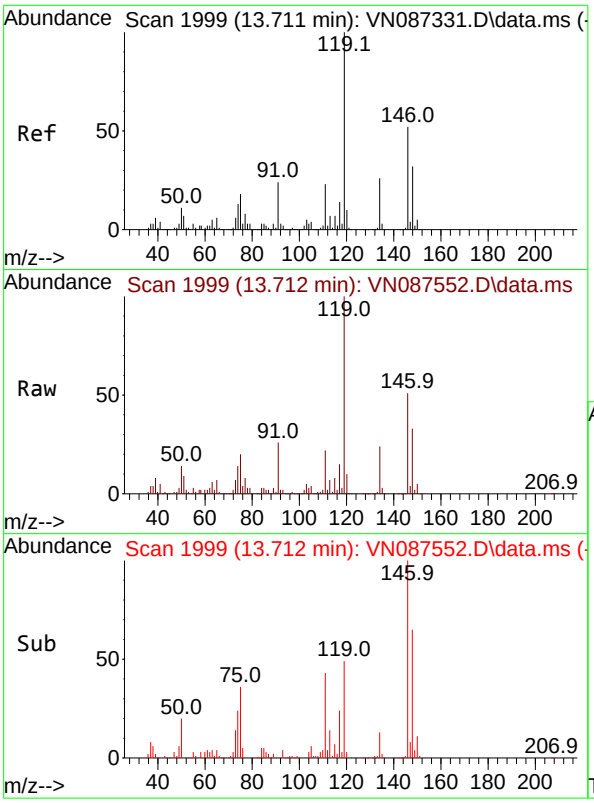


#86
p-Isopropyltoluene
Concen: 55.271 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:119 Resp: 762503

Ion	Ratio	Lower	Upper
119	100		
134	25.0	13.5	40.5
91	25.5	12.2	36.6





#87
1,3-Dichlorobenzene
Concen: 48.835 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:146 Resp: 39919

Ion	Ratio	Lower	Upper
146	100		
111	42.6	21.4	64.3
148	63.9	31.6	95.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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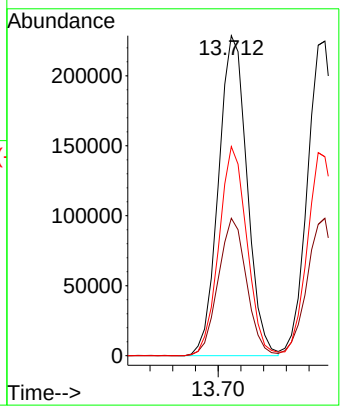
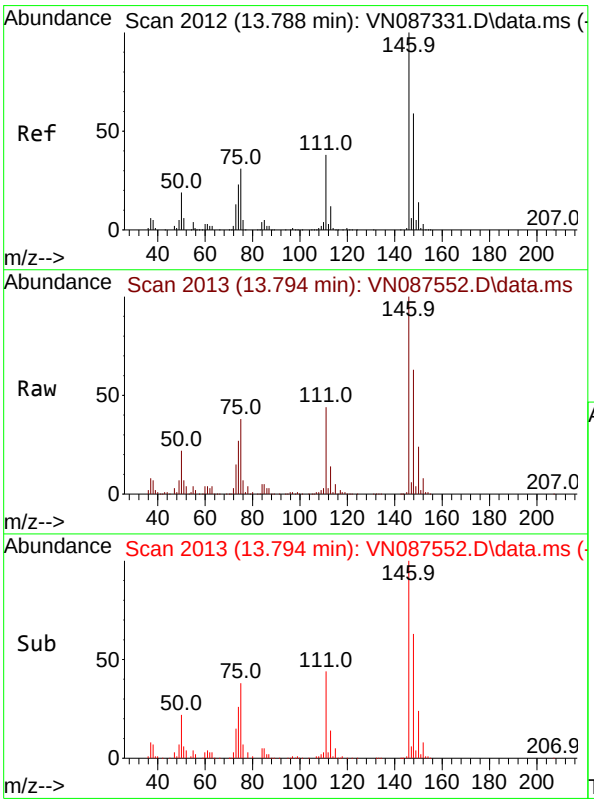
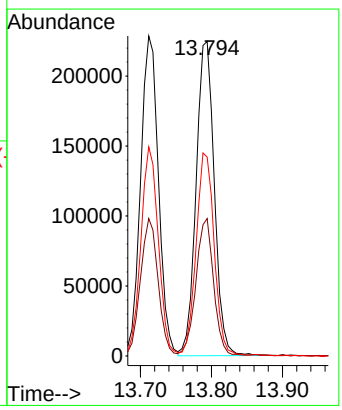


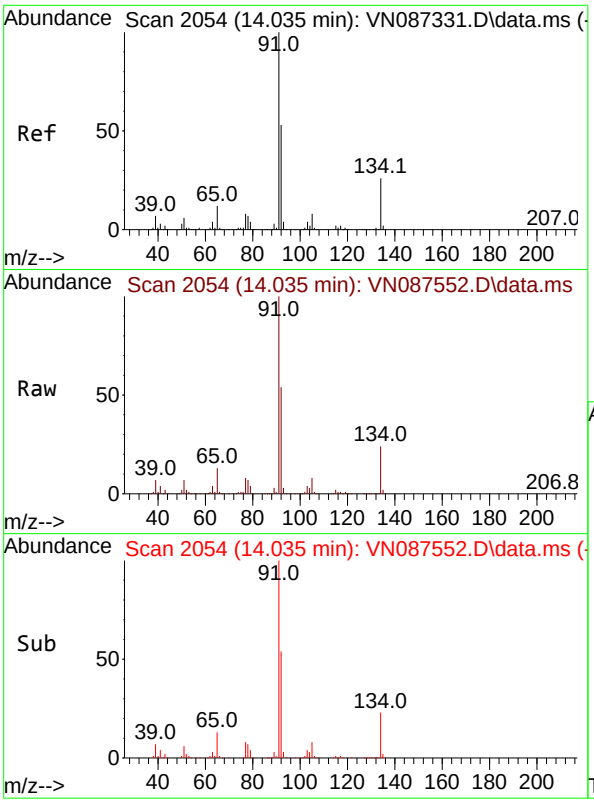


#88
1,4-Dichlorobenzene
Concen: 45.893 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.006 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:146 Resp: 400669

Ion	Ratio	Lower	Upper
146	100		
111	42.1	19.6	58.7
148	63.8	31.4	94.0





#89
n-Butylbenzene
Concen: 55.909 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 91 Resp: 73649

Ion	Ratio	Lower	Upper
91	100		
92	53.2	26.2	78.6
134	23.5	12.4	37.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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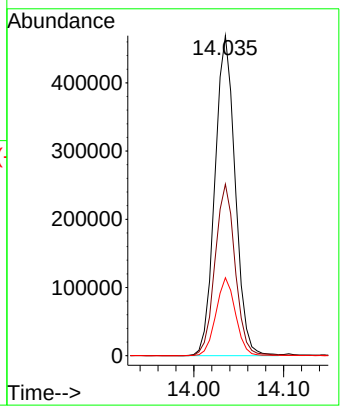
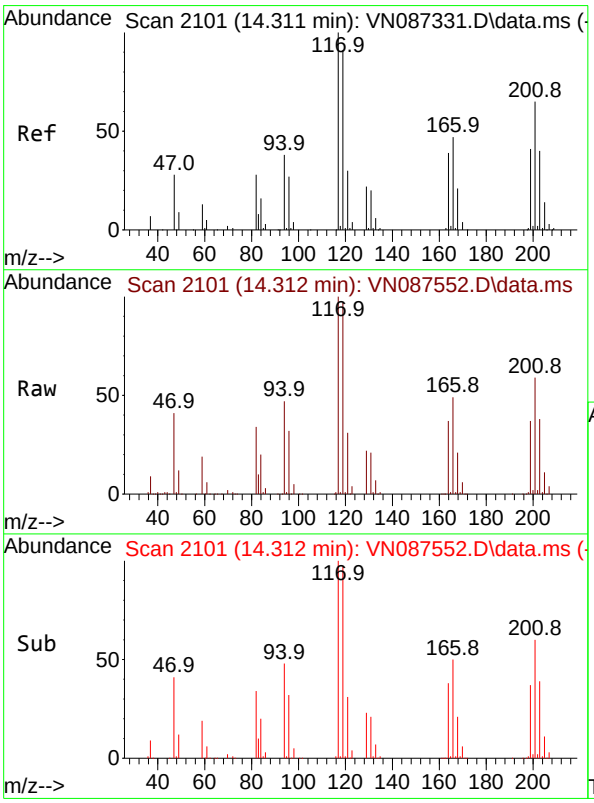
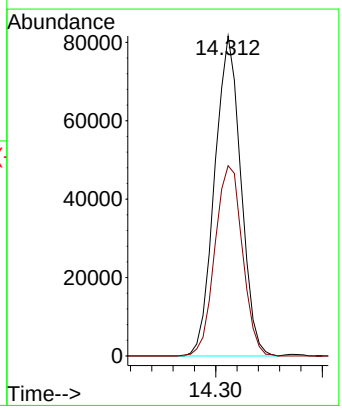


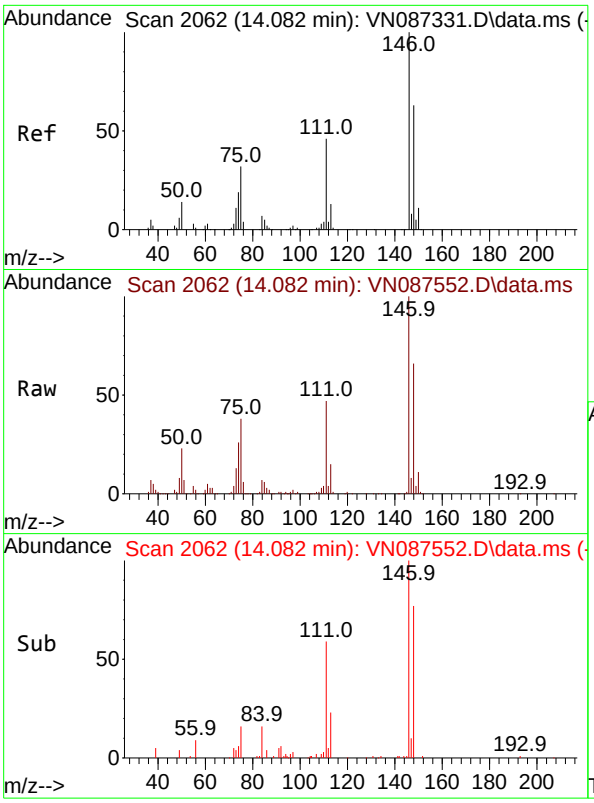


#90
Hexachloroethane
Concen: 47.677 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:117 Resp: 139358

Ion	Ratio	Lower	Upper
117	100		
201	62.5	32.8	98.4

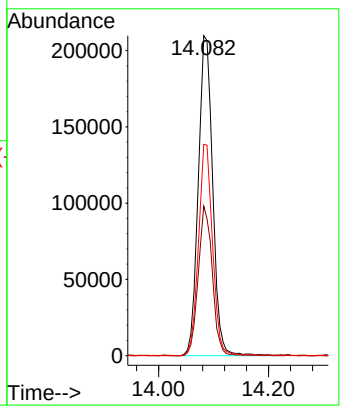




#91
1,2-Dichlorobenzene
Concen: 49.316 ug/l
RT: 14.082 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:146 Resp: 38191

Ion	Ratio	Lower	Upper
146	100		
111	45.7	22.0	66.0
148	64.3	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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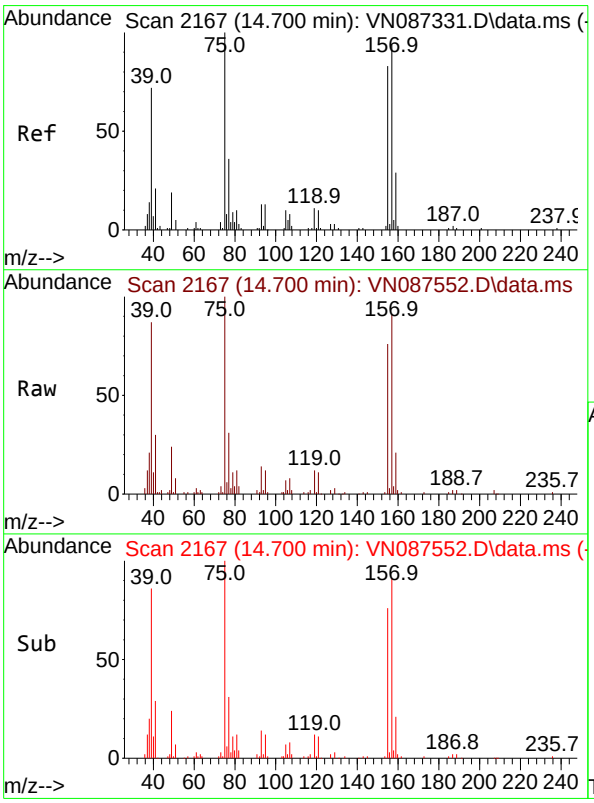
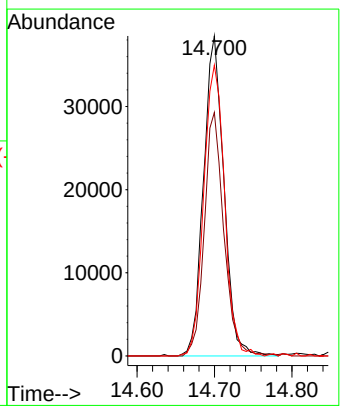
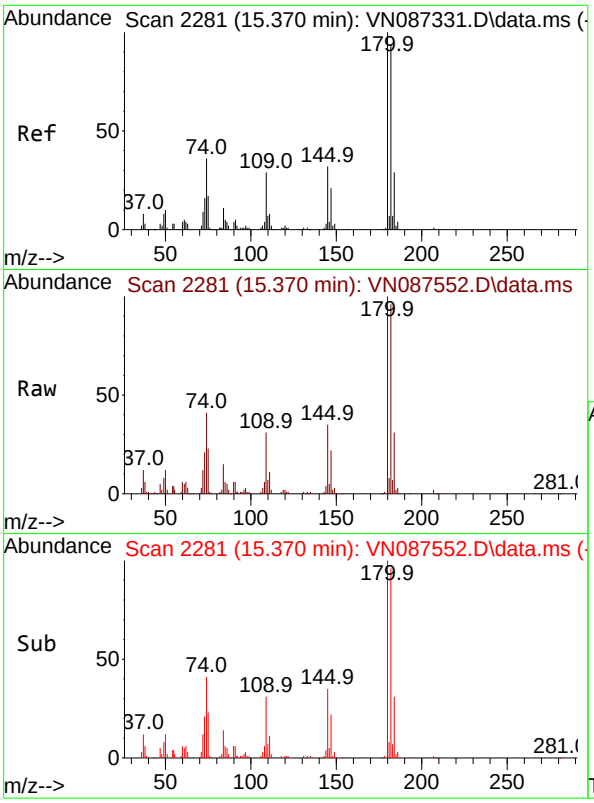


#92
1,2-Dibromo-3-Chloropropane
Concen: 44.360 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion: 75 Resp: 70382

Ion	Ratio	Lower	Upper
75	100		
155	73.3	37.3	111.8
157	92.7	46.2	138.6





#93
1,2,4-Trichlorobenzene
Concen: 49.866 ug/l
RT: 15.370 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:180 Resp: 22683

Ion	Ratio	Lower	Upper
180	100		
182	95.3	47.3	141.8
145	33.8	15.4	46.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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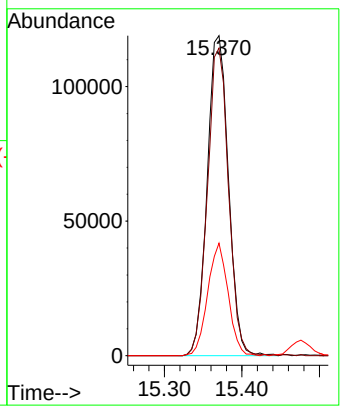
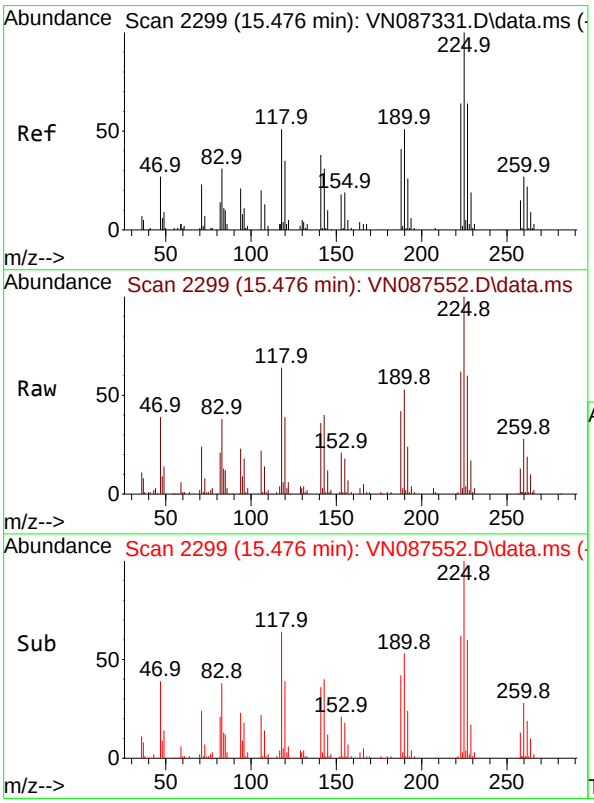
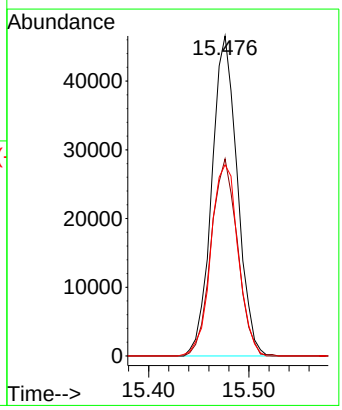


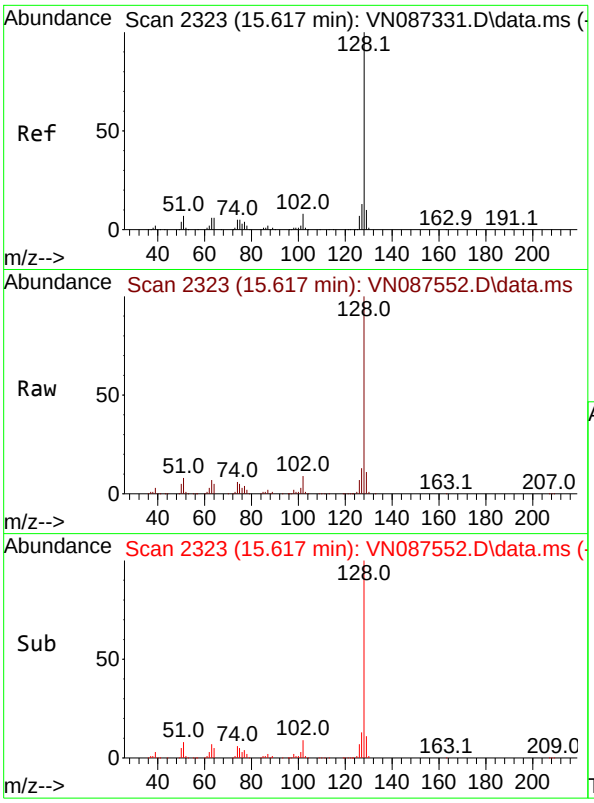


#94
Hexachlorobutadiene
Concen: 48.630 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:225 Resp: 82198

Ion	Ratio	Lower	Upper
225	100		
223	63.6	32.1	96.3
227	64.0	31.3	93.9

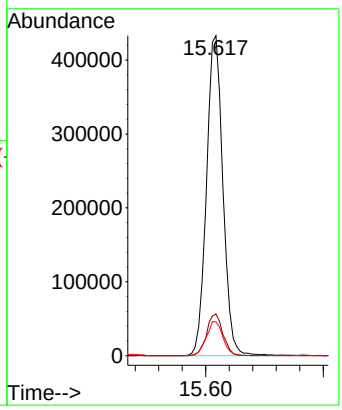




#95
Naphthalene
Concen: 52.059 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:128 Resp: 83895

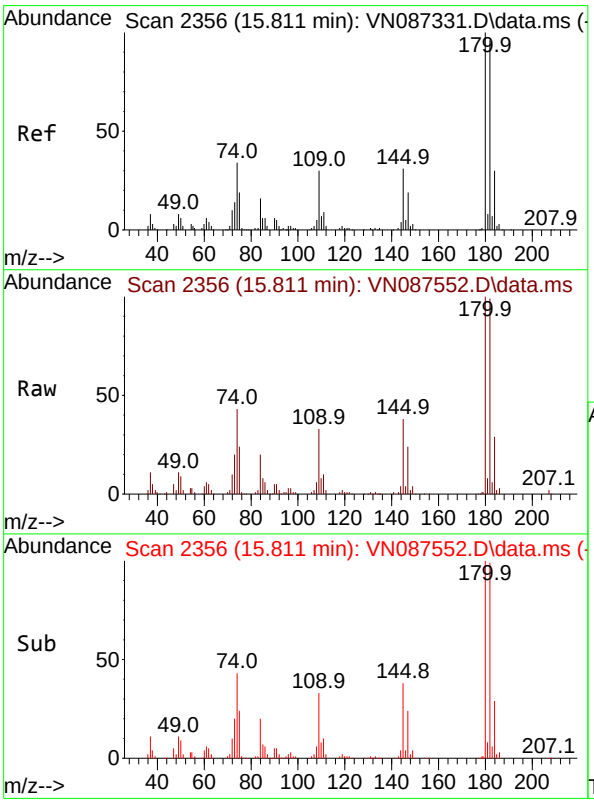
Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.5	15.7
129	10.8	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

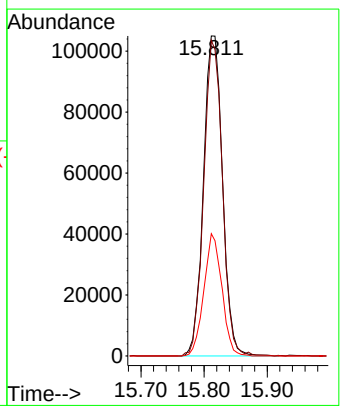
Reviewed By :John Carlone 08/14/2025
Supervised By :Mahesh Dadoda 08/19/2025



#96
1,2,3-Trichlorobenzene
Concen: 48.298 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087552.D
Acq: 14 Aug 2025 09:34

Tgt Ion:180 Resp: 220386

Ion	Ratio	Lower	Upper
180	100		
182	96.4	47.1	141.4
145	36.0	16.9	50.6



Sample Results: **VN087552.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	148	0.00
2	T	Dichlorodifluoromethane	0.531	0.590	-11.1	141	0.00
3	P	Chloromethane	0.668	0.624	6.6	134	0.00
4	C	Vinyl Chloride	0.664	0.678	-2.1#	138	0.00
5	T	Bromomethane	0.344	0.378	-9.9	158#	0.00
6	T	Chloroethane	0.433	0.467	-7.9	157#	0.00
7	T	Trichlorofluoromethane	0.981	0.986	-0.5	143	0.00
8	T	Diethyl Ether	0.381	0.431	-13.1	162#	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.504	0.537	-6.5	152#	0.00
10	T	Methyl Iodide	0.452	0.381	15.7	114	0.00
11	T	Tert butyl alcohol	0.161	0.178	-10.6	164#	0.01
12	CM	1,1-Dichloroethene	0.571	0.562	1.6#	153#	0.00
13	T	Acrolein	0.129	0.118	8.5	145	0.00
14	T	Allyl chloride	1.033	1.054	-2.0	156#	0.00
15	T	Acrylonitrile	0.437	0.441	-0.9	145	0.00
16	T	Acetone	0.398	0.485	-21.9	186#	0.00
17	T	Carbon Disulfide	1.693	1.495	11.7	128	0.00
18	T	Methyl Acetate	0.999	1.172	-17.3	175#	0.00
19	T	Methyl tert-butyl Ether	2.104	2.429	-15.4	166#	0.00
20	T	Methylene Chloride	0.766	0.711	7.2	157#	0.00
21	T	trans-1,2-Dichloroethene	0.644	0.630	2.2	143	0.00
22	T	Diisopropyl ether	2.167	2.484	-14.6	161#	0.00
23	T	Vinyl Acetate	1.895	2.264	-19.5	159#	0.00
24	P	1,1-Dichloroethane	1.250	1.280	-2.4	156#	0.00
25	T	2-Butanone	0.615	0.657	-6.8	152#	0.00
26	T	2,2-Dichloropropane	0.972	1.100	-13.2	166#	0.00
27	T	cis-1,2-Dichloroethene	0.741	0.782	-5.5	151#	0.00
28	T	Bromochloromethane	0.598	0.679	-13.5	169#	0.00
29	T	Tetrahydrofuran	0.399	0.422	-5.8	147	0.00
30	C	Chloroform	1.251	1.372	-9.7#	159#	0.00
31	T	Cyclohexane	1.043	1.027	1.5	146	0.00
32	T	1,1,1-Trichloroethane	1.084	1.139	-5.1	156#	0.00
33	S	1,2-Dichloroethane-d4	0.848	0.912	-7.5	169#	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	167#	0.00
35	S	Dibromofluoromethane	0.345	0.310	10.1	155#	0.00
36	T	1,1-Dichloropropene	0.456	0.438	3.9	150#	0.00
37	T	Ethyl Acetate	0.658	0.627	4.7	148	0.00
38	T	Carbon Tetrachloride	0.502	0.454	9.6	147	0.00
39	T	Methylcyclohexane	0.493	0.469	4.9	148	0.00
40	TM	Benzene	1.473	1.404	4.7	151#	0.00
41	T	Methacrylonitrile	0.344	0.329	4.4	149	0.00
42	TM	1,2-Dichloroethane	0.558	0.573	-2.7	168#	0.00
43	T	Isopropyl Acetate	1.022	1.059	-3.6	165#	0.00
44	TM	Trichloroethene	0.348	0.305	12.4	143	0.00
45	C	1,2-Dichloropropane	0.374	0.369	1.3#	156#	0.00
46	T	Dibromomethane	0.280	0.272	2.9	157#	0.00
47	T	Bromodichloromethane	0.564	0.550	2.5	161#	0.00
48	T	Methyl methacrylate	0.460	0.486	-5.7	160#	0.00

Sample Results: **VN087552.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.007	0.007	0.0	149	0.00
50	S	Toluene-d8	1.230	1.125	8.5	153#	0.00
51	T	4-Methyl-2-Pentanone	0.646	0.652	-0.9	158#	0.00
52	CM	Toluene	0.895	0.870	2.8#	151#	0.00
53	T	t-1,3-Dichloropropene	0.571	0.583	-2.1	157#	0.00
54	T	cis-1,3-Dichloropropene	0.590	0.602	-2.0	159#	0.00
55	T	1,1,2-Trichloroethane	0.362	0.350	3.3	159#	0.00
56	T	Ethyl methacrylate	0.552	0.610	-10.5	162#	0.00
57	T	1,3-Dichloropropane	0.627	0.619	1.3	158#	0.00
58	T	2-Chloroethyl Vinyl ether	0.297	0.344	-15.8	166#	0.00
59	T	2-Hexanone	0.429	0.450	-4.9	151#	0.00
60	T	Dibromochloromethane	0.413	0.401	2.9	155#	0.00
61	T	1,2-Dibromoethane	0.381	0.372	2.4	161#	0.00
62	S	4-Bromofluorobenzene	0.455	0.433	4.8	159#	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	167#	0.00
64	T	Tetrachloroethene	0.322	0.260	19.3	136	0.00
65	PM	Chlorobenzene	1.123	1.016	9.5	152#	0.00
66	T	1,1,1,2-Tetrachloroethane	0.382	0.366	4.2	155#	0.00
67	C	Ethyl Benzene	1.848	1.827	1.1#	157#	0.00
68	T	m/p-Xylenes	0.692	0.683	1.3	150#	0.00
69	T	o-Xylene	0.661	0.675	-2.1	156#	0.00
70	T	Styrene	1.112	1.166	-4.9	155#	0.00
71	P	Bromoform	0.308	0.286	7.1	145	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	161#	0.00
73	T	Isopropylbenzene	3.147	3.350	-6.5	159#	0.00
74	T	N-amyl acetate	1.307	1.015	22.3	144	0.00
75	P	1,1,2,2-Tetrachloroethane	1.184	1.195	-0.9	159#	0.00
76	T	1,2,3-Trichloropropane	1.121	1.008	10.1	136	0.00
77	T	Bromobenzene	0.816	0.799	2.1	148	0.00
78	T	n-propylbenzene	3.959	4.232	-6.9	159#	0.00
79	T	2-Chlorotoluene	2.433	2.556	-5.1	162#	0.00
80	T	1,3,5-Trimethylbenzene	2.681	2.883	-7.5	159#	0.00
81	T	trans-1,4-Dichloro-2-butene	0.410	0.397	3.2	158#	0.00
82	T	4-Chlorotoluene	2.533	2.681	-5.8	163#	0.00
83	T	tert-Butylbenzene	2.239	2.406	-7.5	160#	0.00
84	T	1,2,4-Trimethylbenzene	2.738	2.990	-9.2	160#	0.00
85	T	sec-Butylbenzene	3.373	3.586	-6.3	162#	0.00
86	T	p-Isopropyltoluene	2.703	2.988	-10.5	161#	0.00
87	T	1,3-Dichlorobenzene	1.602	1.564	2.4	152#	0.00
88	T	1,4-Dichlorobenzene	1.711	1.570	8.2	148	0.00
89	T	n-Butylbenzene	2.581	2.886	-11.8	168#	0.00
90	T	Hexachloroethane	0.573	0.546	4.7	153#	0.00
91	T	1,2-Dichlorobenzene	1.517	1.497	1.3	153#	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.311	0.276	11.3	147	0.00
93	T	1,2,4-Trichlorobenzene	0.891	0.889	0.2	153#	0.00
94	T	Hexachlorobutadiene	0.331	0.322	2.7	158#	0.00
95	T	Naphthalene	3.158	3.288	-4.1	154#	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.894	0.864	3.4	151#	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN087552.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	148	0.00
2	T	Dichlorodifluoromethane	50.000	55.557	-11.1	141	0.00
3	P	Chloromethane	50.000	46.740	6.5	134	0.00
4	C	Vinyl Chloride	50.000	51.052	-2.1#	138	0.00
5	T	Bromomethane	50.000	55.023	-10.0	158	0.00
6	T	Chloroethane	50.000	53.961	-7.9	157	0.00
7	T	Trichlorofluoromethane	50.000	50.212	-0.4	143	0.00
8	T	Diethyl Ether	50.000	56.667	-13.3	162	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	53.322	-6.6	152	0.00
10	T	Methyl Iodide	50.000	38.232	23.5	114	0.00
11	T	Tert butyl alcohol	250.000	276.178	-10.5	164	0.01
12	CM	1,1-Dichloroethene	50.000	49.187	1.6#	153	0.00
13	T	Acrolein	250.000	228.690	8.5	145	0.00
14	T	Allyl chloride	50.000	51.014	-2.0	156	0.00
15	T	Acrylonitrile	250.000	252.452	-1.0	145	0.00
16	T	Acetone	250.000	304.782	-21.9	186	0.00
17	T	Carbon Disulfide	50.000	44.164	11.7	128	0.00
18	T	Methyl Acetate	50.000	58.620	-17.2	175	0.00
19	T	Methyl tert-butyl Ether	50.000	57.727	-15.5	166	0.00
20	T	Methylene Chloride	50.000	52.881	-5.8	157	0.00
21	T	trans-1,2-Dichloroethene	50.000	48.942	2.1	143	0.00
22	T	Diisopropyl ether	50.000	57.318	-14.6	161	0.00
23	T	Vinyl Acetate	250.000	298.585	-19.4	159	0.00
24	P	1,1-Dichloroethane	50.000	51.200	-2.4	156	0.00
25	T	2-Butanone	250.000	267.432	-7.0	152	0.00
26	T	2,2-Dichloropropane	50.000	56.588	-13.2	166	0.00
27	T	cis-1,2-Dichloroethene	50.000	52.764	-5.5	151	0.00
28	T	Bromochloromethane	50.000	56.761	-13.5	169	0.00
29	T	Tetrahydrofuran	250.000	264.243	-5.7	147	0.00
30	C	Chloroform	50.000	54.800	-9.6#	159	0.00
31	T	Cyclohexane	50.000	49.251	1.5	146	0.00
32	T	1,1,1-Trichloroethane	50.000	52.554	-5.1	156	0.00
33	S	1,2-Dichloroethane-d4	50.000	53.738	-7.5	169	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	167	0.00
35	S	Dibromofluoromethane	50.000	44.903	10.2	155	0.00
36	T	1,1-Dichloropropene	50.000	48.073	3.9	150	0.00
37	T	Ethyl Acetate	50.000	47.639	4.7	148	0.00
38	T	Carbon Tetrachloride	50.000	45.251	9.5	147	0.00
39	T	Methylcyclohexane	50.000	47.484	5.0	148	0.00
40	TM	Benzene	50.000	47.666	4.7	151	0.00
41	T	Methacrylonitrile	50.000	47.844	4.3	149	0.00
42	TM	1,2-Dichloroethane	50.000	51.277	-2.6	168	0.00
43	T	Isopropyl Acetate	50.000	51.848	-3.7	165	0.00
44	TM	Trichloroethene	50.000	43.791	12.4	143	0.00
45	C	1,2-Dichloropropane	50.000	49.245	1.5#	156	0.00
46	T	Dibromomethane	50.000	48.459	3.1	157	0.00
47	T	Bromodichloromethane	50.000	48.711	2.6	161	0.00
48	T	Methyl methacrylate	50.000	52.798	-5.6	160	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1013.618	-1.4	149	0.00
50	S	Toluene-d8	50.000	45.726	8.5	153	0.00
51	T	4-Methyl-2-Pentanone	250.000	252.428	-1.0	158	0.00
52	CM	Toluene	50.000	48.609	2.8#	151	0.00
53	T	t-1,3-Dichloropropene	50.000	51.017	-2.0	157	0.00
54	T	cis-1,3-Dichloropropene	50.000	51.028	-2.1	159	0.00
55	T	1,1,2-Trichloroethane	50.000	48.289	3.4	159	0.00
56	T	Ethyl methacrylate	50.000	50.043	-0.1	162	0.00
57	T	1,3-Dichloropropane	50.000	49.384	1.2	158	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	289.306	-15.7	166	0.00
59	T	2-Hexanone	250.000	262.377	-5.0	151	0.00
60	T	Dibromochloromethane	50.000	48.455	3.1	155	0.00
61	T	1,2-Dibromoethane	50.000	48.875	2.3	161	0.00
62	S	4-Bromofluorobenzene	50.000	47.655	4.7	159	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	167	0.00
64	T	Tetrachloroethene	50.000	40.459	19.1	136	0.00
65	PM	Chlorobenzene	50.000	45.275	9.5	152	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	47.896	4.2	155	0.00
67	C	Ethyl Benzene	50.000	49.442	1.1#	157	0.00
68	T	m/p-Xylenes	100.000	98.699	1.3	150	0.00
69	T	o-Xylene	50.000	51.038	-2.1	156	0.00
70	T	Styrene	50.000	52.445	-4.9	155	0.00
71	P	Bromoform	50.000	46.429	7.1	145	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	161	0.00
73	T	Isopropylbenzene	50.000	53.222	-6.4	159	0.00
74	T	N-amyl acetate	50.000	38.819	22.4	144	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	50.447	-0.9	159	0.00
76	T	1,2,3-Trichloropropane	50.000	44.960	10.1	136	0.00
77	T	Bromobenzene	50.000	48.942	2.1	148	0.00
78	T	n-propylbenzene	50.000	53.447	-6.9	159	0.00
79	T	2-Chlorotoluene	50.000	52.528	-5.1	162	0.00
80	T	1,3,5-Trimethylbenzene	50.000	53.765	-7.5	159	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	48.472	3.1	158	0.00
82	T	4-Chlorotoluene	50.000	52.913	-5.8	163	0.00
83	T	tert-Butylbenzene	50.000	53.713	-7.4	160	0.00
84	T	1,2,4-Trimethylbenzene	50.000	54.601	-9.2	160	0.00
85	T	sec-Butylbenzene	50.000	53.157	-6.3	162	0.00
86	T	p-Isopropyltoluene	50.000	55.271	-10.5	161	0.00
87	T	1,3-Dichlorobenzene	50.000	48.835	2.3	152	0.00
88	T	1,4-Dichlorobenzene	50.000	45.893	8.2	148	0.00
89	T	n-Butylbenzene	50.000	55.909	-11.8	168	0.00
90	T	Hexachloroethane	50.000	47.677	4.6	153	0.00
91	T	1,2-Dichlorobenzene	50.000	49.316	1.4	153	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	44.360	11.3	147	0.00
93	T	1,2,4-Trichlorobenzene	50.000	49.866	0.3	153	0.00
94	T	Hexachlorobutadiene	50.000	48.630	2.7	158	0.00
95	T	Naphthalene	50.000	52.059	-4.1	154	0.00

Sample Results: **VN087552.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087552.D
Acq On : 14 Aug 2025 09:34
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 15:23:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.298	3.4	151	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

QC SAMPLE DATA

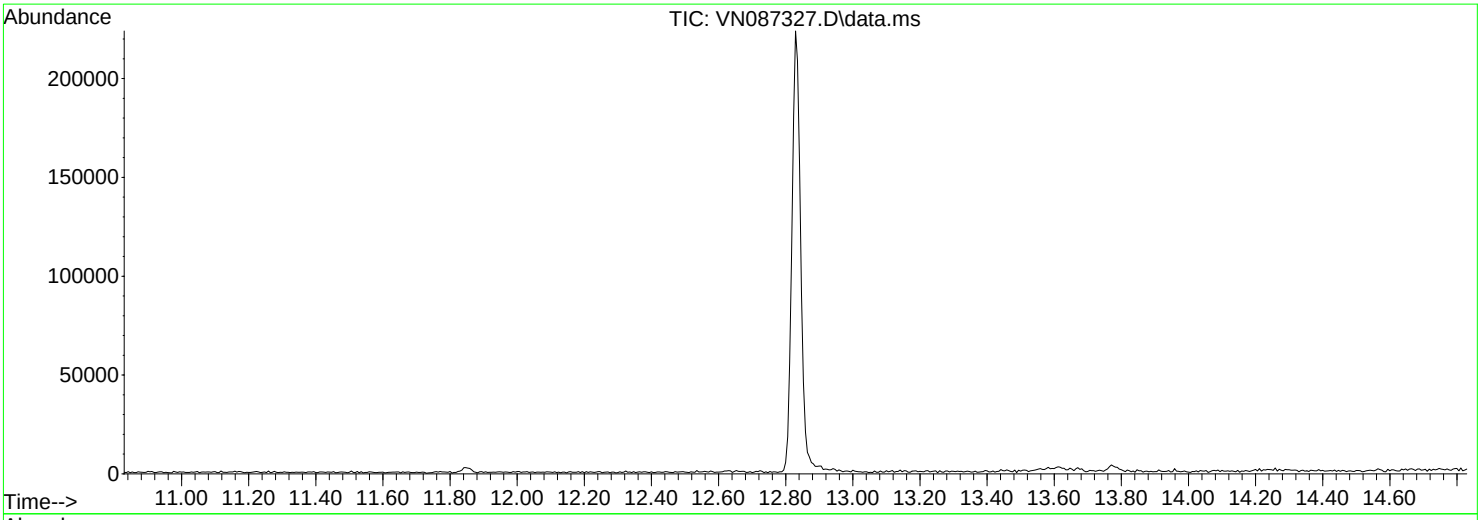
Sample Results: **VN087327.D**

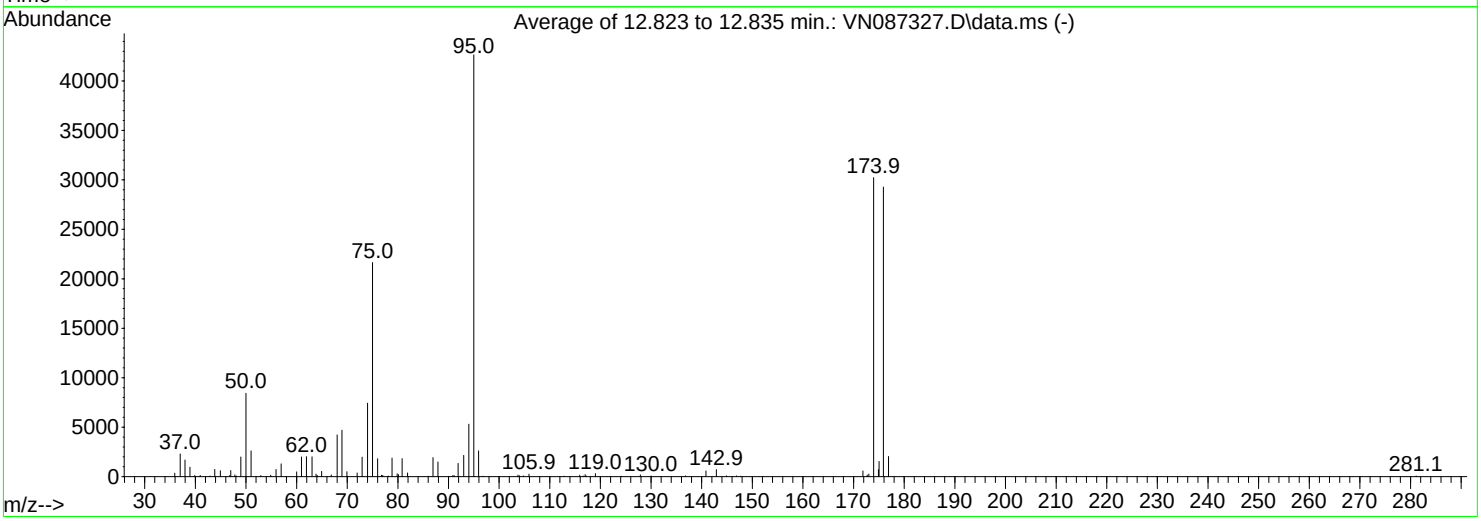
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071625\
Data File : VN087327.D
Acq On : 16 Jul 2025 16:10
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Title : SW846 8260
Last Update : Thu Jul 17 02:56:13 2025





AutoFind: Scans 1848, 1849, 1850; Background Corrected with Scan 1839

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.8	8426	PASS
75	95	30	60	50.8	21643	PASS
95	95	100	100	100.0	42640	PASS
96	95	5	9	6.1	2612	PASS
173	174	0.00	2	0.8	255	PASS
174	95	50	100	70.9	30229	PASS
175	174	5	9	5.1	1538	PASS
176	174	95	101	96.9	29285	PASS
177	176	5	9	7.0	2046	PASS

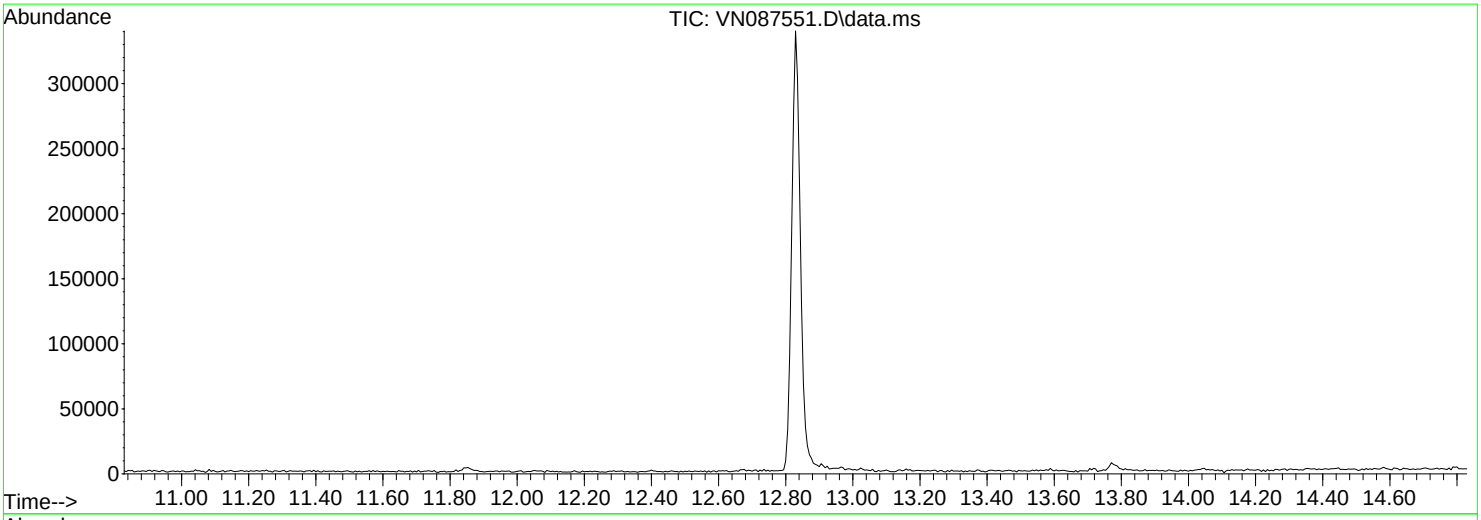
Sample Results: **VN087551.D**

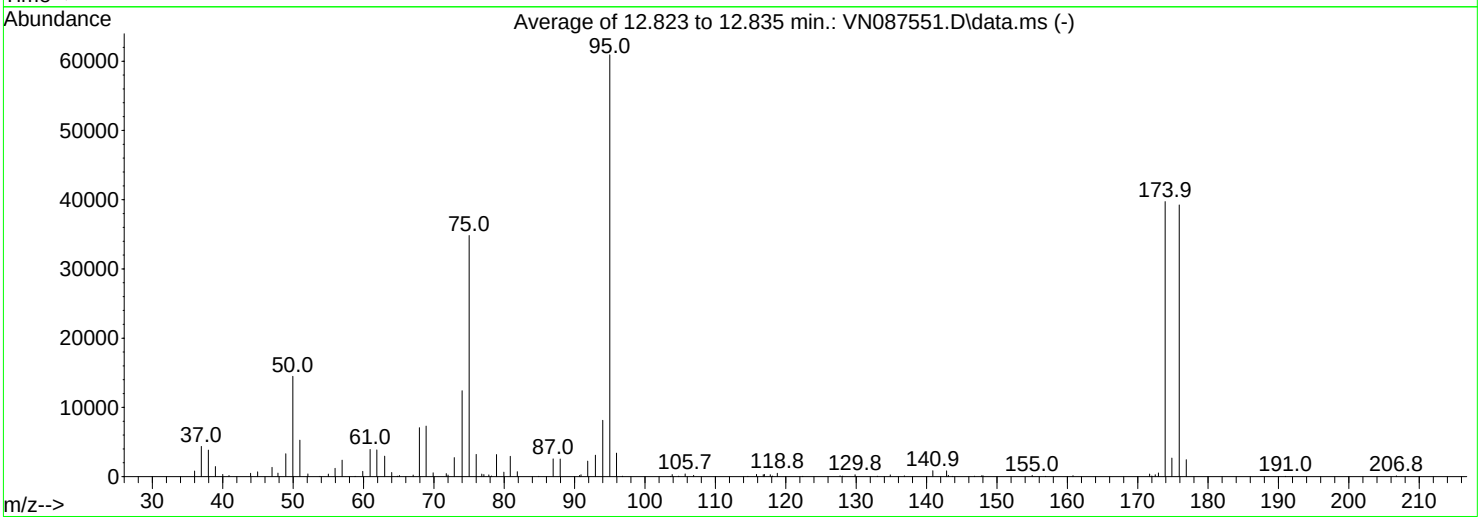
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087551.D
Acq On : 14 Aug 2025 09:01
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Title : SW846 8260
Last Update : Thu Jul 17 02:56:13 2025





AutoFind: Scans 1848, 1849, 1850; Background Corrected with Scan 1840

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.8	14484	PASS
75	95	30	60	57.2	34829	PASS
95	95	100	100	100.0	60920	PASS
96	95	5	9	5.6	3407	PASS
173	174	0.00	2	1.3	536	PASS
174	95	50	100	65.2	39723	PASS
175	174	5	9	6.8	2685	PASS
176	174	95	101	98.8	39240	PASS
177	176	5	9	6.2	2451	PASS

Raw Data: **VN087554.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	
Client Sample ID:	VN0814WBL01	SDG No.:	Q2842
Lab Sample ID:	VN0814WBL01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087554.D	1	08/14/25 10:32	VN081425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
71-43-2	Benzene	0.15	U	0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.22	U	0.22	1.00	ug/L
79-01-6	Trichloroethene	0.090	U	0.090	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.9		70 (74) - 130 (125)	106%	SPK: 50
1868-53-7	Dibromofluoromethane	44.2		70 (75) - 130 (124)	88%	SPK: 50
2037-26-5	Toluene-d8	44.2		70 (86) - 130 (113)	88%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.7		70 (77) - 130 (121)	87%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	284000	8.206			
540-36-3	1,4-Difluorobenzene	560000	9.083			
3114-55-4	Chlorobenzene-d5	504000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	235000	13.771			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087554.D
Acq On : 14 Aug 2025 10:32
Operator : JC\MD
Sample : VN0814WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Quant Time: Aug 14 15:23:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	284398	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	560321	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	503771	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.771	152	234765	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	255137	52.871	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 105.740%			
35) Dibromofluoromethane	8.153	113	170840	44.201	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 88.400%			
50) Toluene-d8	10.547	98	608969	44.169	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 88.340%			
62) 4-Bromofluorobenzene	12.829	95	222642	43.709	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 87.420%			
Target Compounds						Qvalue

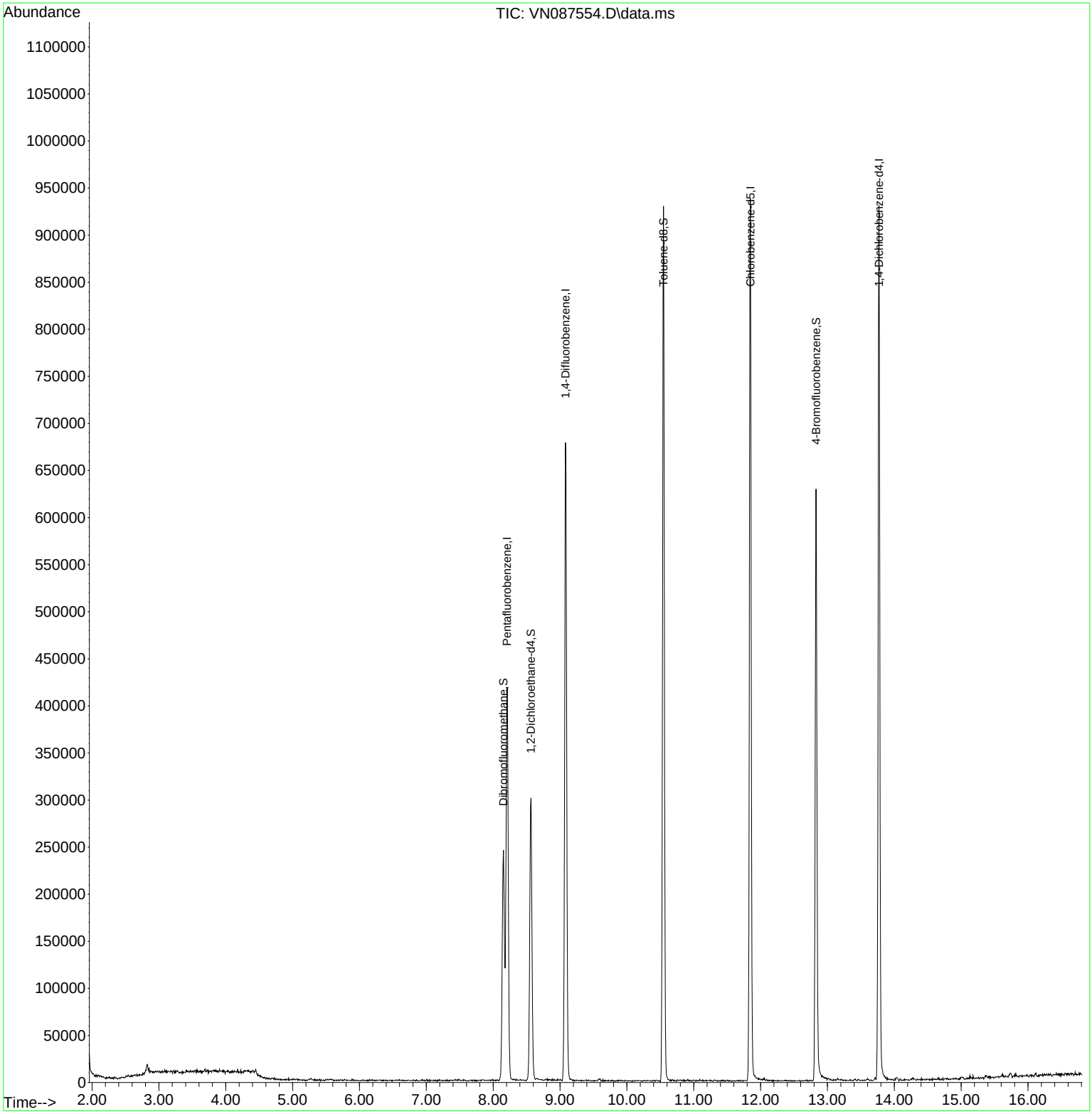
(#) = qualifier out of range (m) = manual integration (+) = signals summed

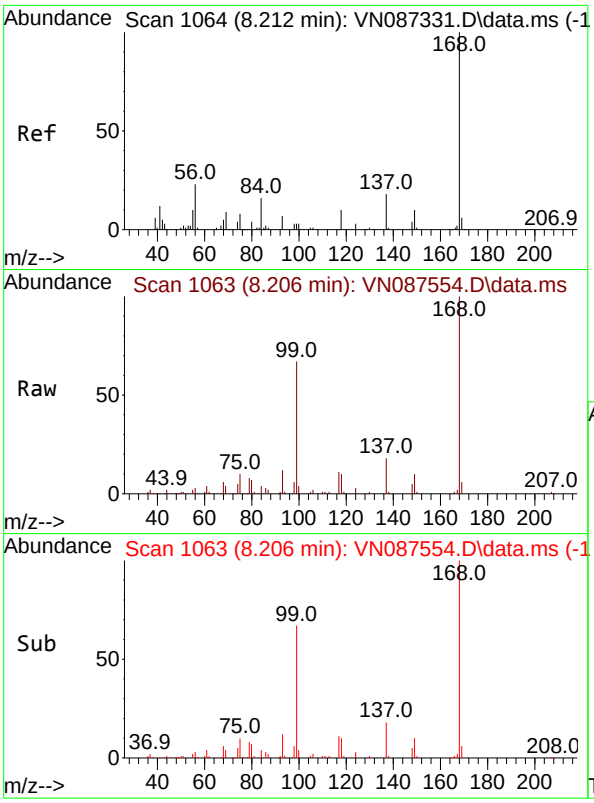
Sample Results: **VN087554.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087554.D
Acq On : 14 Aug 2025 10:32
Operator : JC\MD
Sample : VN0814WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Quant Time: Aug 14 15:23:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration



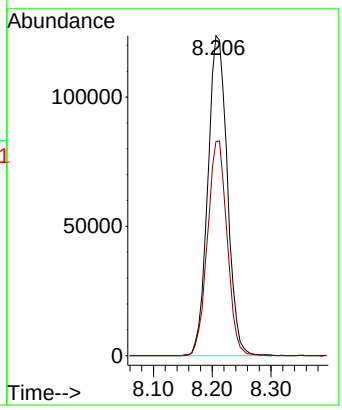


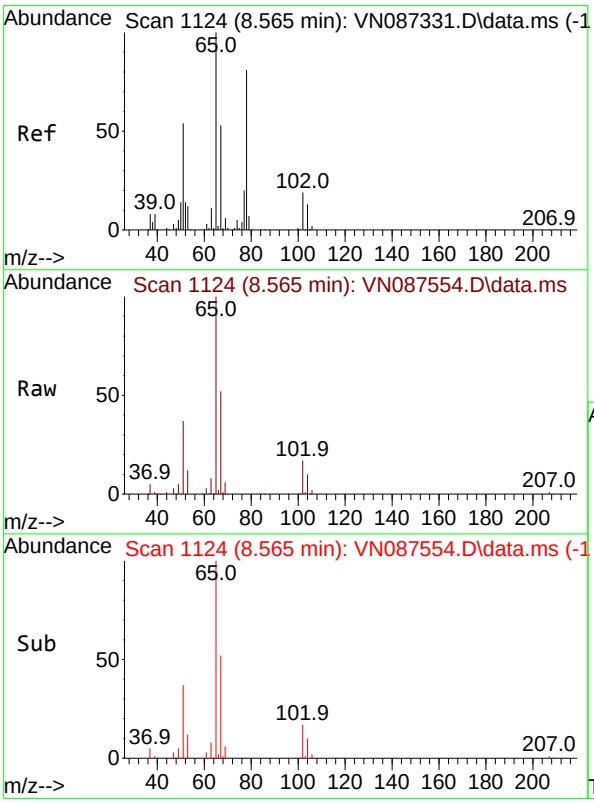
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087554.D
Acq: 14 Aug 2025 10:32

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Tgt Ion:168 Resp: 284398

Ion	Ratio	Lower	Upper
168	100		
99	67.0	47.9	71.9

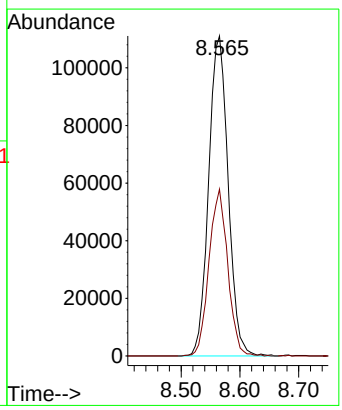


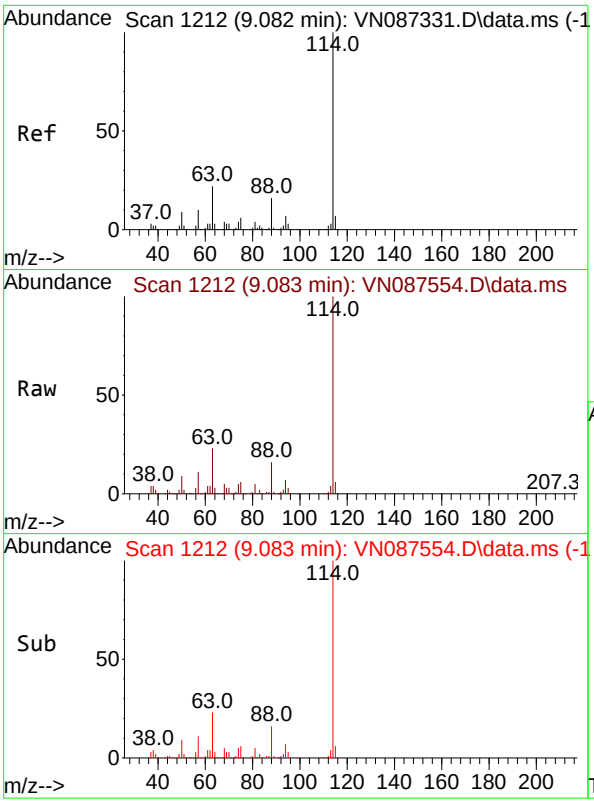


#33
1,2-Dichloroethane-d4
Concen: 52.871 ug/l
RT: 8.565 min Scan# 1124
Delta R.T. 0.000 min
Lab File: VN087554.D
Acq: 14 Aug 2025 10:32

Tgt Ion: 65 Resp: 255137

Ion	Ratio	Lower	Upper
65	100		
67	50.2	0.0	104.0



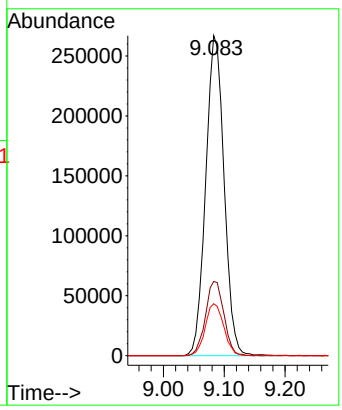


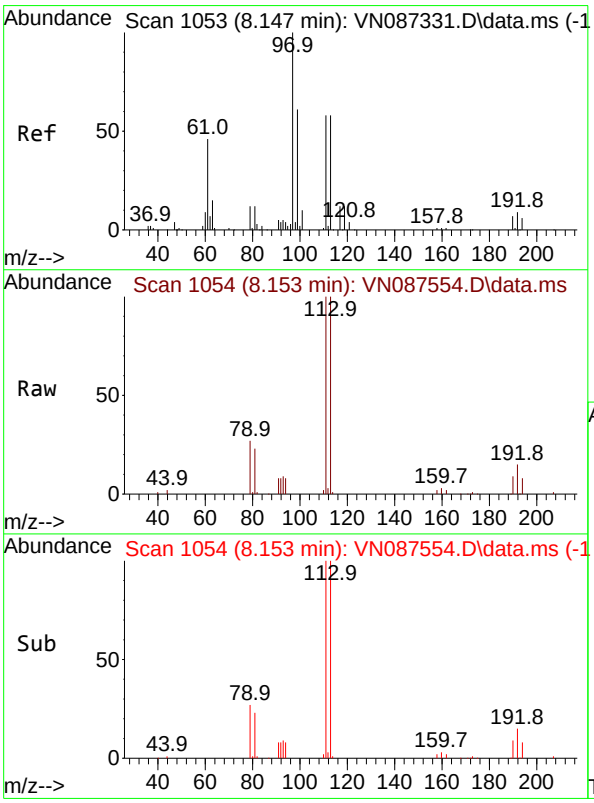
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.083 min Scan# 1
Delta R.T. 0.001 min
Lab File: VN087554.D
Acq: 14 Aug 2025 10:32

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Tgt Ion:114 Resp: 560321

Ion	Ratio	Lower	Upper
114	100		
63	23.2	0.0	44.6
88	16.3	0.0	32.8

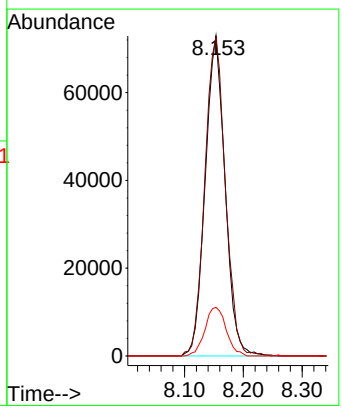


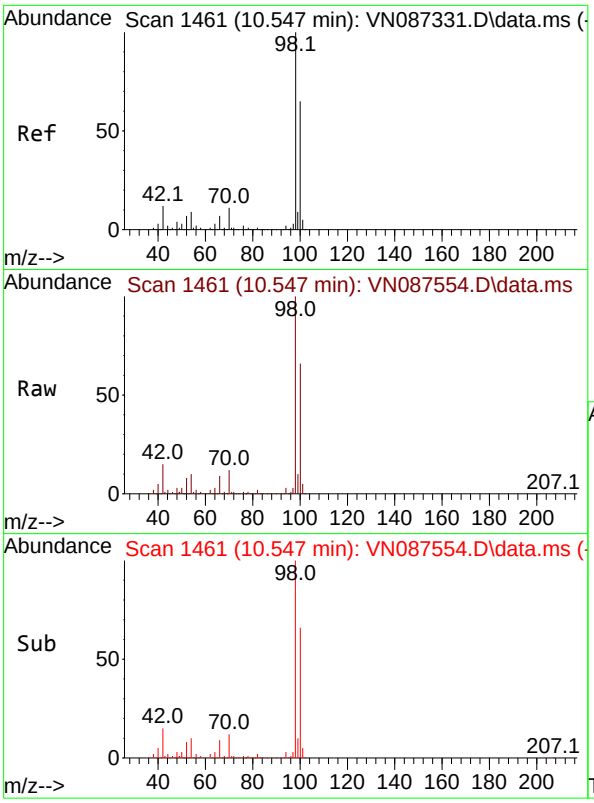


#35
Dibromofluoromethane
Concen: 44.201 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.006 min
Lab File: VN087554.D
Acq: 14 Aug 2025 10:32

Tgt Ion:113 Resp: 170840

Ion	Ratio	Lower	Upper
113	100		
111	103.1	82.5	123.7
192	16.3	13.7	20.5



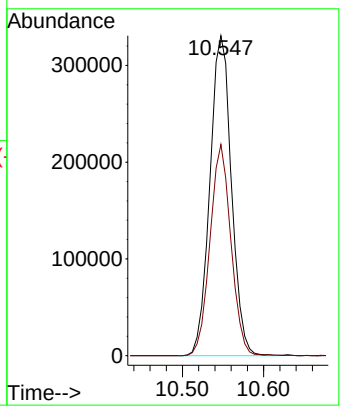


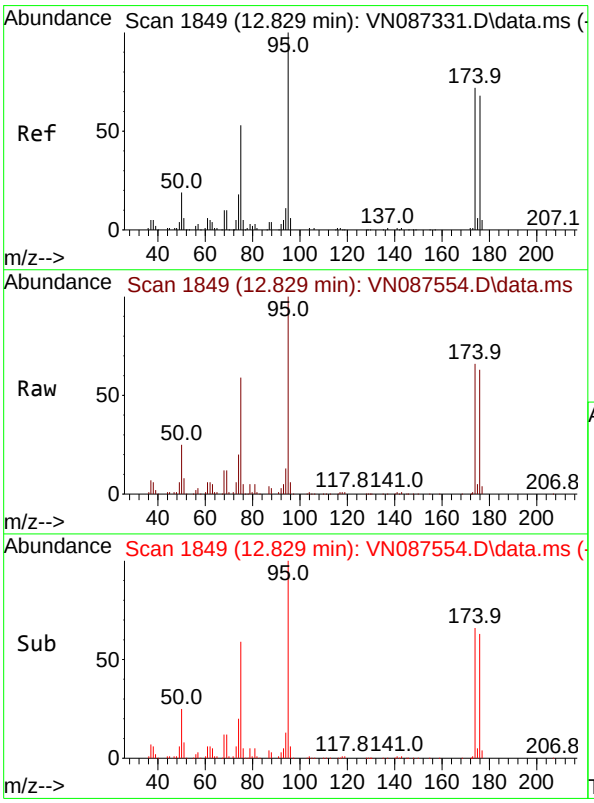
#50
Toluene-d8
Concen: 44.169 ug/l
RT: 10.547 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087554.D
Acq: 14 Aug 2025 10:32

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Tgt Ion: 98 Resp: 608969

Ion	Ratio	Lower	Upper
98	100		
100	64.2	52.1	78.1

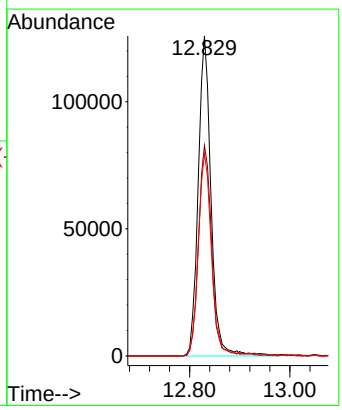


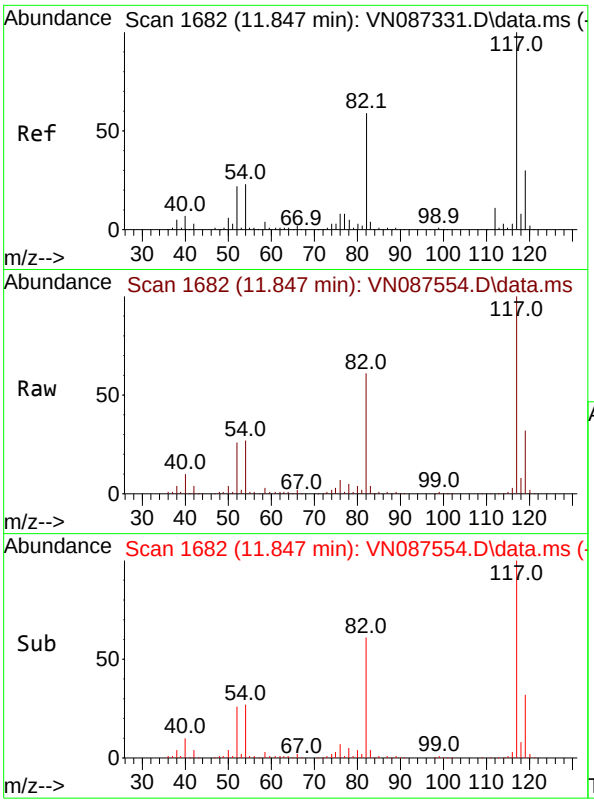


#62
4-Bromofluorobenzene
Concen: 43.709 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087554.D
Acq: 14 Aug 2025 10:32

Tgt Ion: 95 Resp: 222642

Ion	Ratio	Lower	Upper
95	100		
174	66.5	0.0	149.4
176	64.9	0.0	141.2



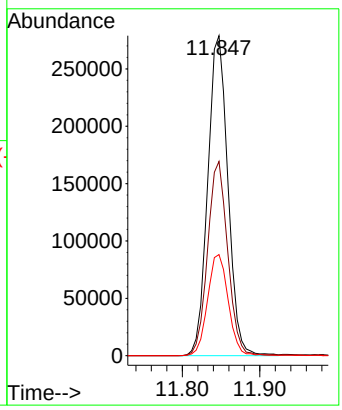


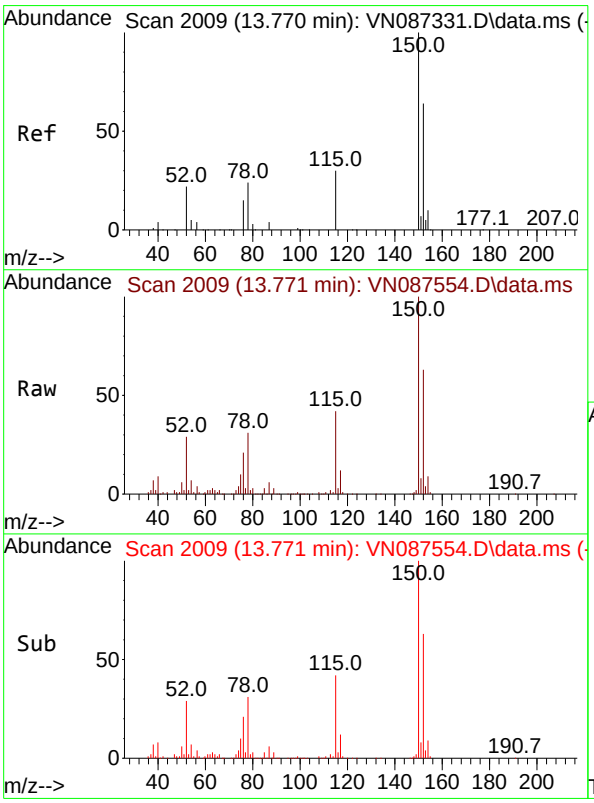
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087554.D
Acq: 14 Aug 2025 10:32

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Tgt Ion:117 Resp: 503771

Ion	Ratio	Lower	Upper
117	100		
82	60.7	47.4	71.2
119	31.6	23.8	35.8

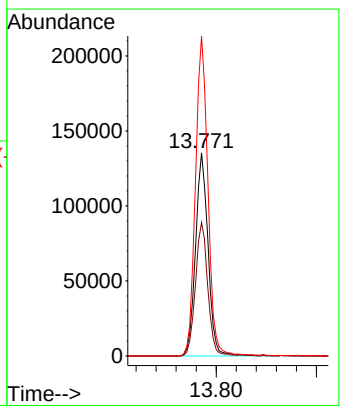




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.771 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087554.D
Acq: 14 Aug 2025 10:32

Tgt Ion:152 Resp: 234765

Ion	Ratio	Lower	Upper
152	100		
115	64.5	31.1	93.5
150	156.1	0.0	349.0



Raw Data: **VN087555.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	
Client Sample ID:	VN0814WBS01	SDG No.:	Q2842
Lab Sample ID:	VN0814WBS01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087555.D	1	08/14/25 11:07	VN081425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	21.4		0.26	1.00	ug/L
75-35-4	1,1-Dichloroethene	20.6		0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	21.6		0.23	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	21.2		0.19	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	21.4		0.20	1.00	ug/L
71-43-2	Benzene	20.3		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.5		0.22	1.00	ug/L
79-01-6	Trichloroethene	19.2		0.090	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.7		0.21	1.00	ug/L
127-18-4	Tetrachloroethene	18.1		0.23	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.6		70 (74) - 130 (125)	115%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7		70 (75) - 130 (124)	101%	SPK: 50
2037-26-5	Toluene-d8	50.7		70 (86) - 130 (113)	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.9		70 (77) - 130 (121)	106%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	250000	8.206			
540-36-3	1,4-Difluorobenzene	485000	9.082			
3114-55-4	Chlorobenzene-d5	447000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	222000	13.77			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087555.D
Acq On : 14 Aug 2025 11:07
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 15:23:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 08/18/2025
Supervised By :Mahesh Dadoda 08/19/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	250453	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	485218	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	446518	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	221983	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	244982	57.648	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 115.300%			
35) Dibromofluoromethane	8.153	113	169668	50.692	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.380%			
50) Toluene-d8	10.547	98	605258	50.695	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 101.380%			
62) 4-Bromofluorobenzene	12.829	95	233458	52.926	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 105.860%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	60972	22.921	ug/l	92
3) Chloromethane	2.383	50	64803	19.372	ug/l	100
4) Vinyl Chloride	2.542	62	71080	21.381	ug/l	99
5) Bromomethane	2.983	94	38871	22.579	ug/l	96
6) Chloroethane	3.136	64	47553	21.934	ug/l	92
7) Trichlorofluoromethane	3.506	101	103028	20.959	ug/l	98
8) Diethyl Ether	3.965	74	45341	23.778	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.359	101	56020	22.200	ug/l	96
10) Methyl Iodide	4.571	142	33911	17.223	ug/l	89
11) Tert butyl alcohol	5.530	59	92129	114.174	ug/l	97
12) 1,1-Dichloroethene	4.336	96	58932	20.609	ug/l	91
13) Acrolein	4.177	56	52972	81.801	ug/l	95
14) Allyl chloride	5.012	41	106153	20.512	ug/l	91
15) Acrylonitrile	5.706	53	228245	104.238	ug/l	97
16) Acetone	4.430	43	234225	117.551	ug/l	98
17) Carbon Disulfide	4.700	76	152230	17.956	ug/l	97
18) Methyl Acetate	5.024	43	120344	24.040	ug/l	98
19) Methyl tert-butyl Ether	5.794	73	247283	23.461	ug/l	98
20) Methylene Chloride	5.259	84	73232	21.375	ug/l	96
21) trans-1,2-Dichloroethene	5.777	96	62532	19.394	ug/l	92
22) Diisopropyl ether	6.659	45	247597	22.809	ug/l	95
23) Vinyl Acetate	6.588	43	1129441	118.964	ug/l	100
24) 1,1-Dichloroethane	6.559	63	135050	21.564	ug/l	97
25) 2-Butanone	7.477	43	332813	108.103	ug/l	95
26) 2,2-Dichloropropane	7.477	77	115630	23.748	ug/l	97
27) cis-1,2-Dichloroethene	7.477	96	78759	21.217	ug/l	94
28) Bromochloromethane	7.800	49	75409	25.159	ug/l	95
29) Tetrahydrofuran	7.829	42	208941	104.471	ug/l	98
30) Chloroform	7.953	83	140698	22.445	ug/l	99
31) Cyclohexane	8.241	56	111696	21.380	ug/l	97
32) 1,1,1-Trichloroethane	8.153	97	115982	21.362	ug/l	96
36) 1,1-Dichloropropene	8.353	75	90752	20.523	ug/l	97
37) Ethyl Acetate	7.547	43	131078	20.524	ug/l	98
38) Carbon Tetrachloride	8.347	117	93434	19.181	ug/l	96
39) Methylcyclohexane	9.582	83	96372	20.130	ug/l	93
40) Benzene	8.588	78	289566	20.261	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087555.D
Acq On : 14 Aug 2025 11:07
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 15:23:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 08/18/2025
Supervised By :Mahesh Dadoda 08/19/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	66759	19.992	ug/l		95
42) 1,2-Dichloroethane	8.659	62	116694	21.531	ug/l		97
43) Isopropyl Acetate	8.676	43	215090	21.696	ug/l		98
44) Trichloroethene	9.335	130	64743	19.172	ug/l		82
45) 1,2-Dichloropropane	9.606	63	74233	20.442	ug/l		94
46) Dibromomethane	9.688	93	56540	20.795	ug/l		94
47) Bromodichloromethane	9.871	83	112437	20.530	ug/l		99
48) Methyl methacrylate	9.665	41	98225	22.008	ug/l		95
49) 1,4-Dioxane	9.688	88	30568	447.176	ug/l	#	100
51) 4-Methyl-2-Pentanone	10.429	43	661207	105.450	ug/l		98
52) Toluene	10.612	92	177586	20.443	ug/l		97
53) t-1,3-Dichloropropene	10.818	75	116338	20.990	ug/l		99
54) cis-1,3-Dichloropropene	10.294	75	116909	20.420	ug/l	#	82
55) 1,1,2-Trichloroethane	10.994	97	72631	20.652	ug/l		92
56) Ethyl methacrylate	10.859	69	120174	21.091	ug/l	#	93
57) 1,3-Dichloropropane	11.141	76	128302	21.100	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.141	63	328582	113.893	ug/l		98
59) 2-Hexanone	11.182	43	431325	103.681	ug/l		98
60) Dibromochloromethane	11.335	129	76256	19.012	ug/l		98
61) 1,2-Dibromoethane	11.447	107	75775	20.492	ug/l		95
64) Tetrachloroethene	11.088	164	51988	18.090	ug/l		94
65) Chlorobenzene	11.870	112	192917	19.244	ug/l		93
66) 1,1,1,2-Tetrachloroethane	11.941	131	65609	19.247	ug/l		97
67) Ethyl Benzene	11.947	91	336124	20.367	ug/l		98
68) m/p-Xylenes	12.053	106	249595	40.389	ug/l		94
69) o-Xylene	12.376	106	119950	20.320	ug/l		93
70) Styrene	12.394	104	205053	20.649	ug/l		96
71) Bromoform	12.559	173	48296	17.538	ug/l	#	99
73) Isopropylbenzene	12.676	105	314281	22.495	ug/l		97
74) N-amyl acetate	12.535	43	108512m	18.694	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.923	83	115038	21.882	ug/l		99
76) 1,2,3-Trichloropropane	12.976	75	100267m	20.143	ug/l		
77) Bromobenzene	12.959	156	73544	20.297	ug/l		91
78) n-propylbenzene	13.017	91	389520	22.160	ug/l		99
79) 2-Chlorotoluene	13.106	91	241476	22.353	ug/l		94
80) 1,3,5-Trimethylbenzene	13.153	105	262222	22.029	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.723	75	32197	17.698	ug/l		91
82) 4-Chlorotoluene	13.200	91	250722	22.292	ug/l		95
83) tert-Butylbenzene	13.417	119	222918	22.422	ug/l		96
84) 1,2,4-Trimethylbenzene	13.464	105	269488	22.169	ug/l		99
85) sec-Butylbenzene	13.594	105	329434	21.998	ug/l		99
86) p-Isopropyltoluene	13.706	119	272080	22.671	ug/l		97
87) 1,3-Dichlorobenzene	13.711	146	145480	20.458	ug/l		98
88) 1,4-Dichlorobenzene	13.794	146	150121	19.766	ug/l		97
89) n-Butylbenzene	14.035	91	270370	23.593	ug/l		98
90) Hexachloroethane	14.311	117	49037	19.285	ug/l		96
91) 1,2-Dichlorobenzene	14.088	146	138916	20.620	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.700	75	27318	19.792	ug/l		92
93) 1,2,4-Trichlorobenzene	15.364	180	83245	21.036	ug/l		99
94) Hexachlorobutadiene	15.476	225	31065	21.127	ug/l		99
95) Naphthalene	15.617	128	298554	21.296	ug/l		99
96) 1,2,3-Trichlorobenzene	15.811	180	78959	19.891	ug/l		95

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087555.D
Acq On : 14 Aug 2025 11:07
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 15:23:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 08/18/2025
Supervised By :Mahesh Dadoda 08/19/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087555.D
Acq On : 14 Aug 2025 11:07
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 15:23:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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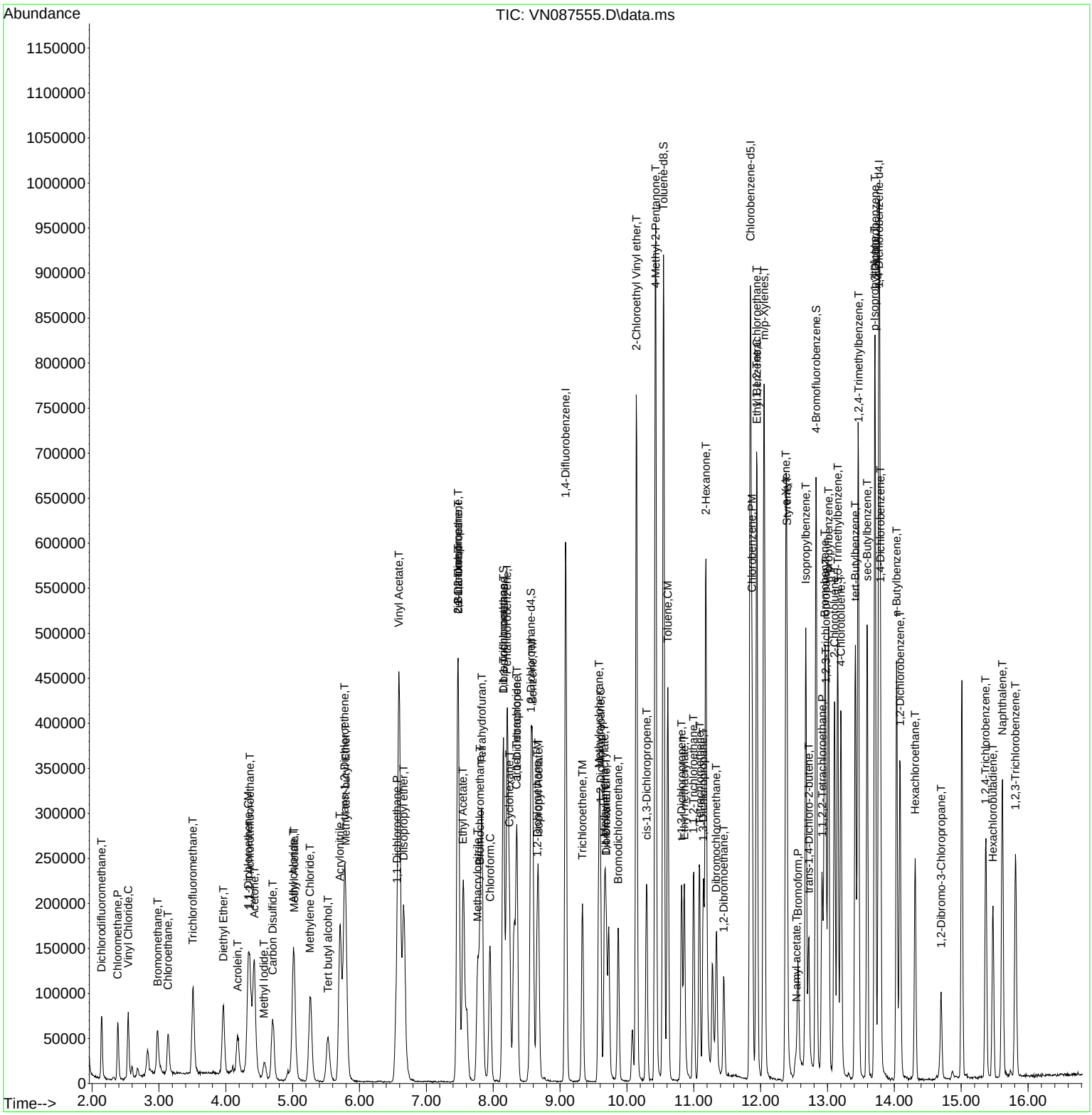
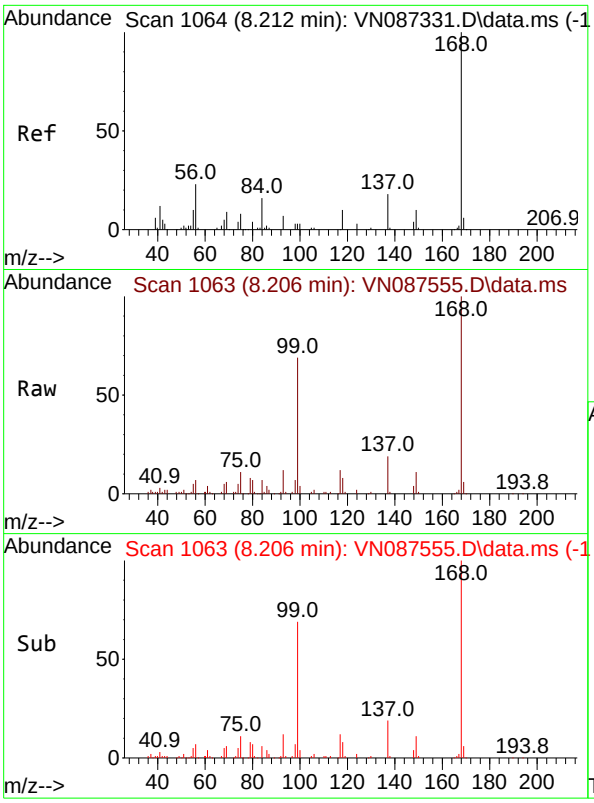
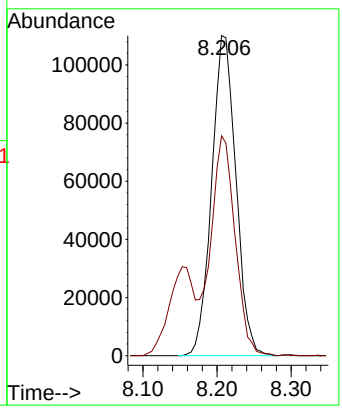




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:168 Resp: 25045

Ion	Ratio	Lower	Upper
168	100		
99	68.7	47.9	71.9



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
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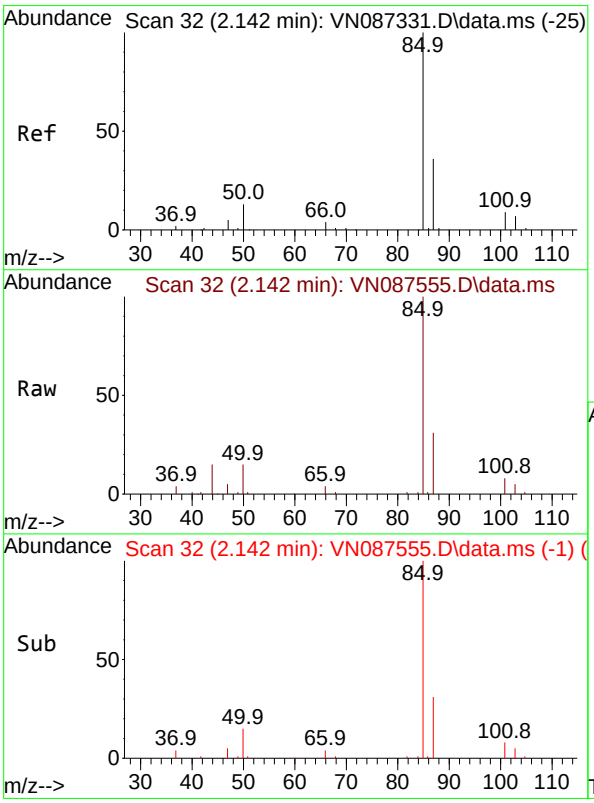
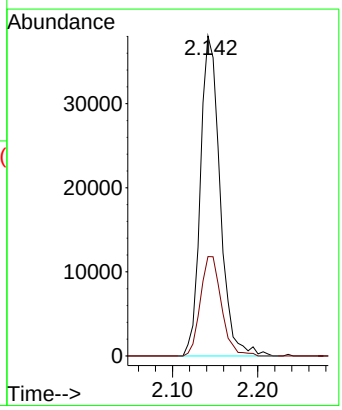
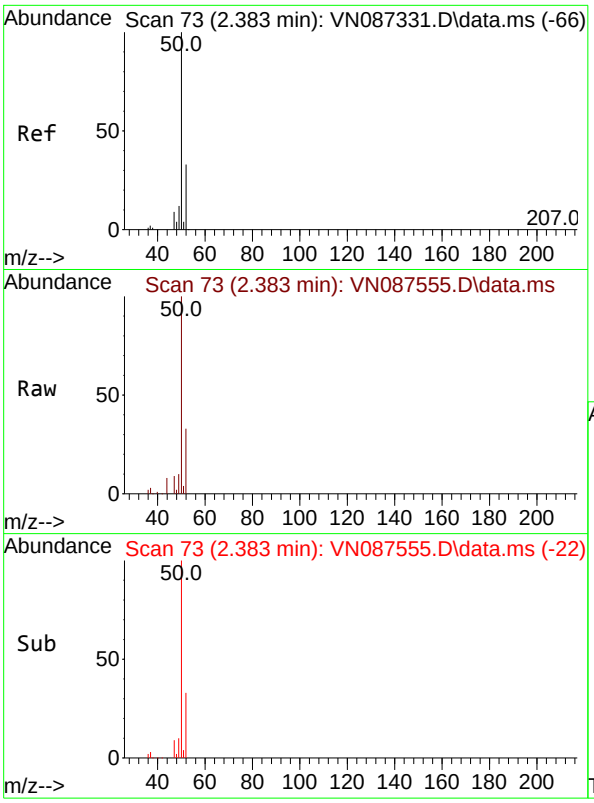


#2
Dichlorodifluoromethane
Concen: 22.921 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 85 Resp: 60972

Ion	Ratio	Lower	Upper
85	100		
87	31.1	17.8	53.3

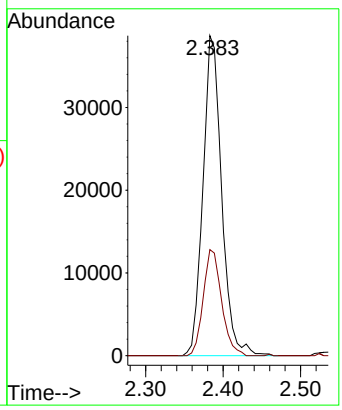




#3
Chloromethane
Concen: 19.372 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 50 Resp: 6480

Ion	Ratio	Lower	Upper
50	100		
52	33.1	26.3	39.5



Instrument :
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ClientSampleId :
VN0814WBS01

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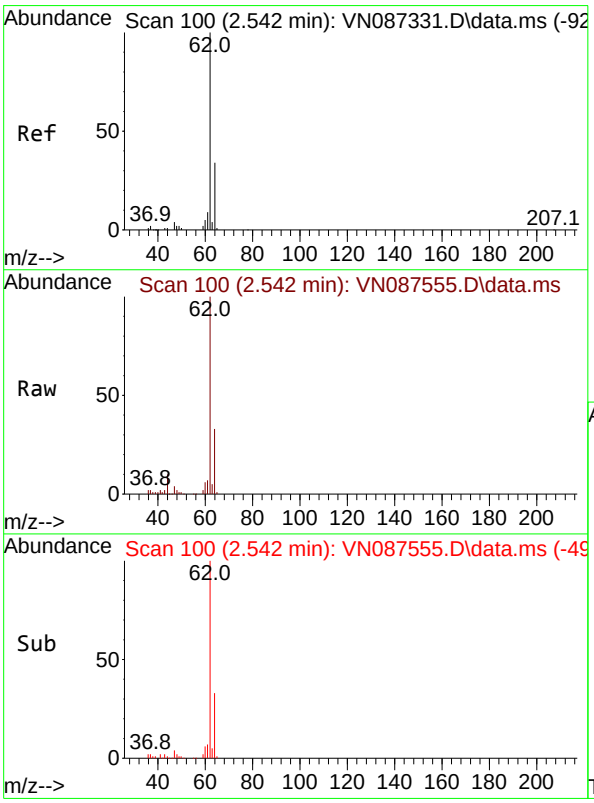
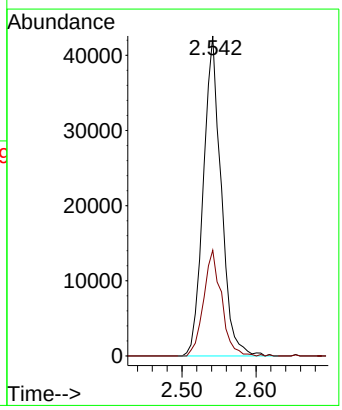
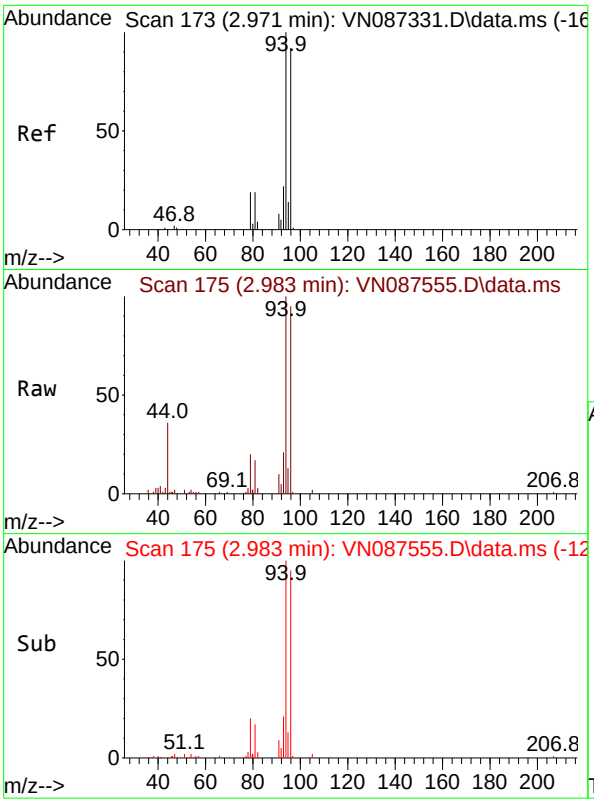


#4
Vinyl Chloride
Concen: 21.381 ug/l
RT: 2.542 min Scan# 100
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 62 Resp: 71080

Ion	Ratio	Lower	Upper
62	100		
64	33.0	27.0	40.6

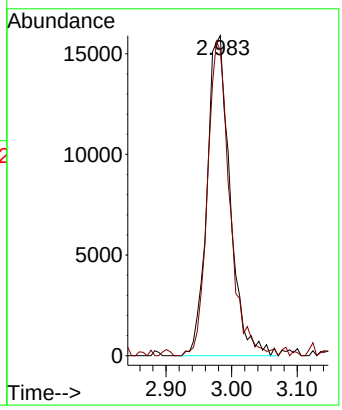




#5
Bromomethane
Concen: 22.579 ug/l
RT: 2.983 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 94 Resp: 3887

Ion	Ratio	Lower	Upper
94	100		
96	95.3	73.4	110.2



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
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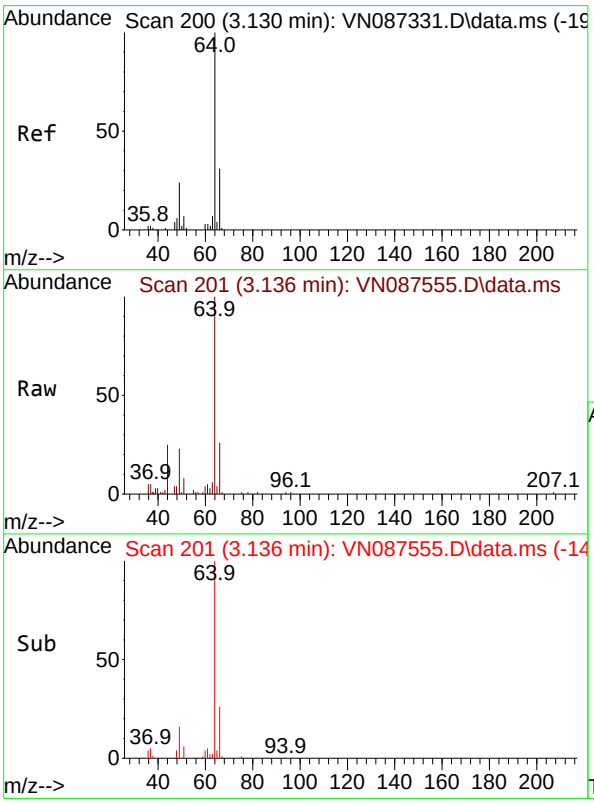
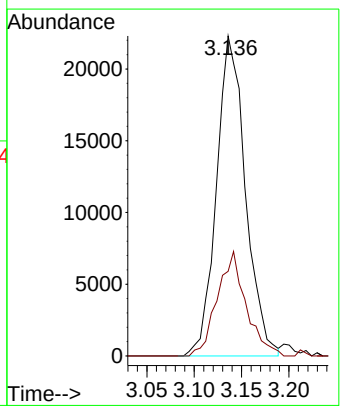
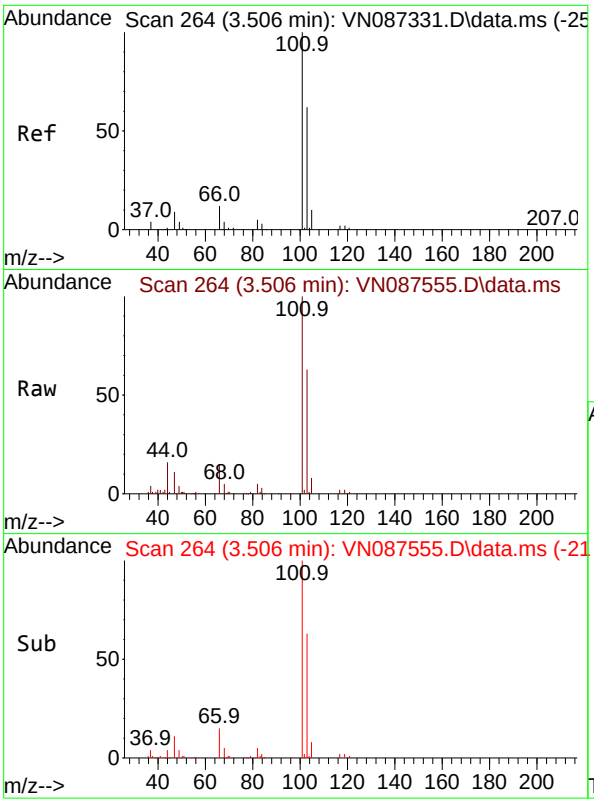


#6
Chloroethane
Concen: 21.934 ug/l
RT: 3.136 min Scan# 201
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 64 Resp: 47553

Ion	Ratio	Lower	Upper
64	100		
66	26.5	24.6	36.8

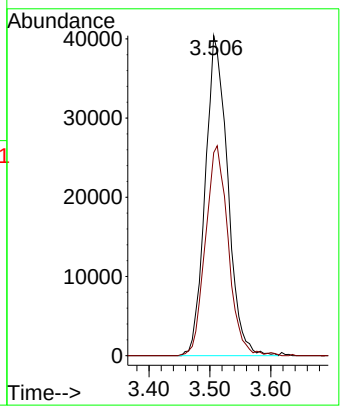




#7
Trichlorofluoromethane
Concen: 20.959 ug/l
RT: 3.506 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:101 Resp: 10302

Ion	Ratio	Lower	Upper
101	100		
103	63.5	49.8	74.6



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
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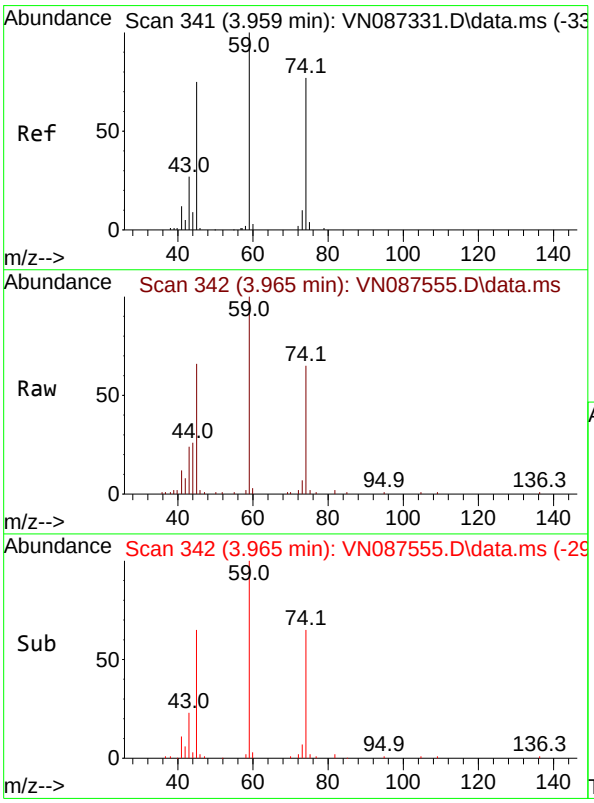
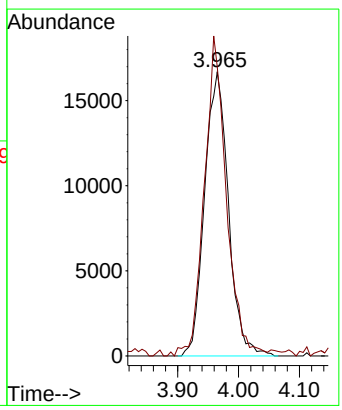
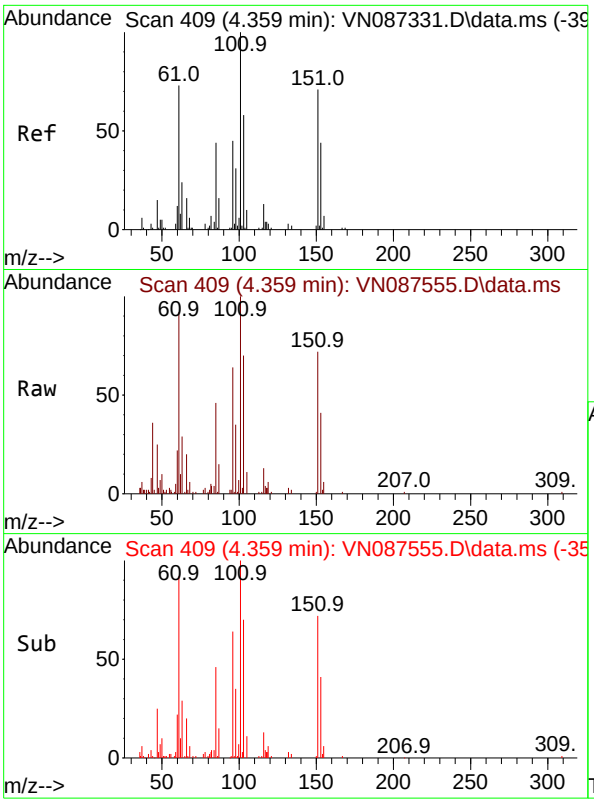


#8
Diethyl Ether
Concen: 23.778 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 74 Resp: 45341

Ion	Ratio	Lower	Upper
74	100		
45	104.4	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 22.200 ug/l
RT: 4.359 min Scan# 4(
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Tgt Ion:101 Resp: 5602(

Ion	Ratio	Lower	Upper
101	100		
85	50.2	37.3	55.9
151	70.4	58.9	88.3

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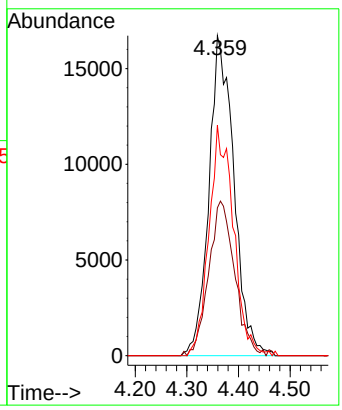
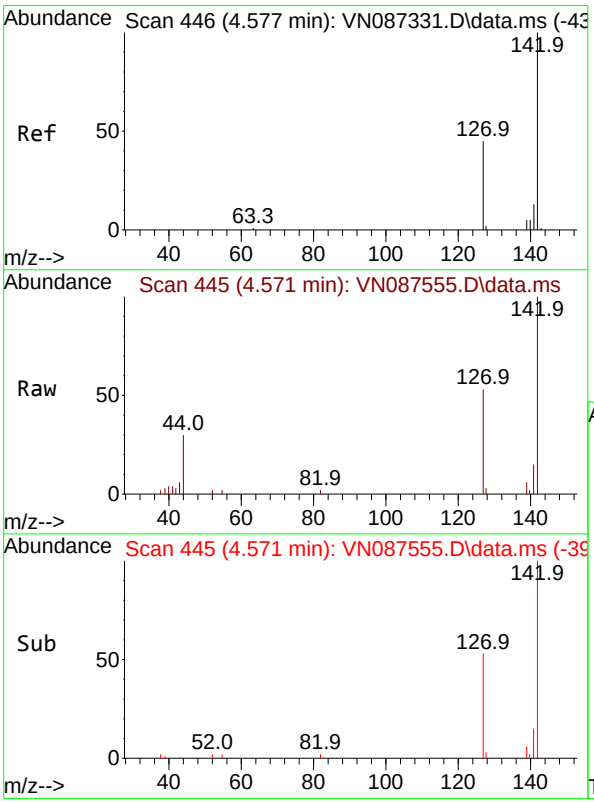
Supervised By :Mahesh Dadoda 08/19/2025

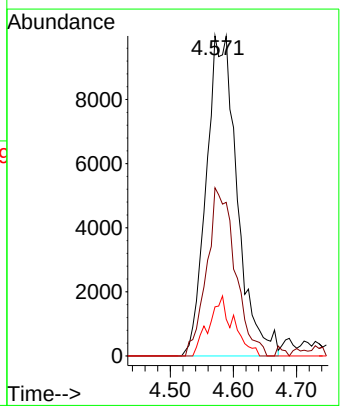


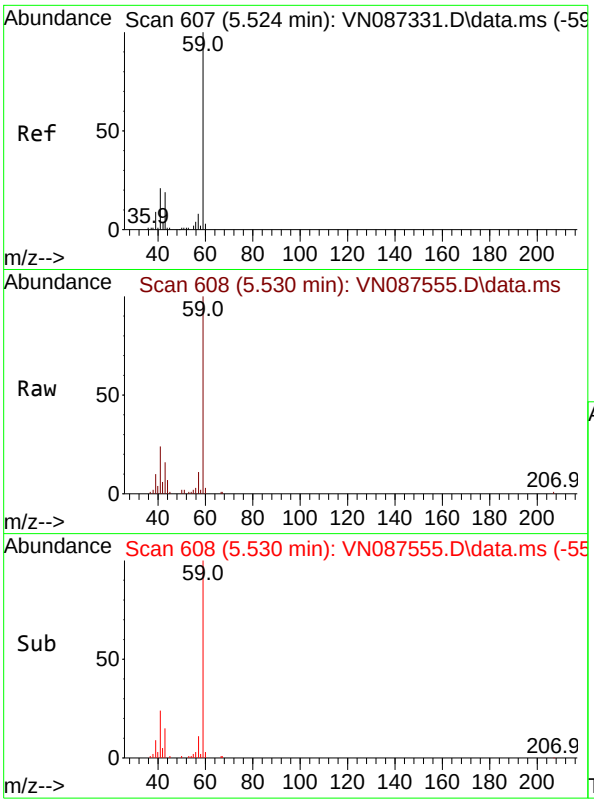


#10
Methyl Iodide
Concen: 17.223 ug/l
RT: 4.571 min Scan# 445
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:142 Resp: 33911

Ion	Ratio	Lower	Upper
142	100		
127	52.5	35.7	53.5
141	15.3	10.4	15.6

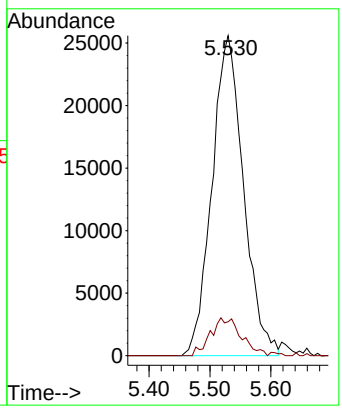




#11
Tert butyl alcohol
Concen: 114.174 ug/l
RT: 5.530 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 59 Resp: 9212

Ion	Ratio	Lower	Upper
59	100		
57	11.4	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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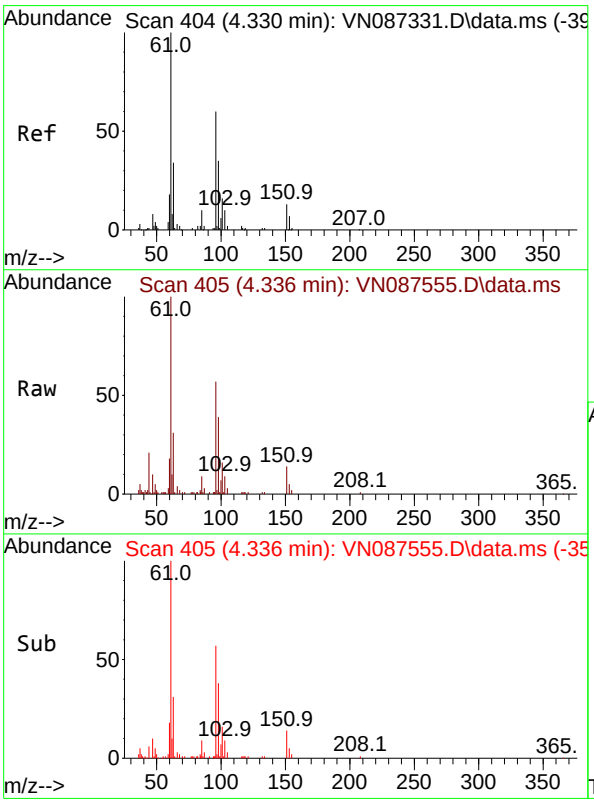
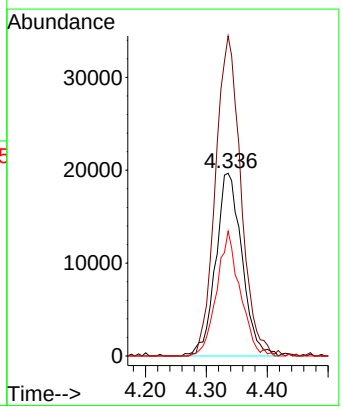
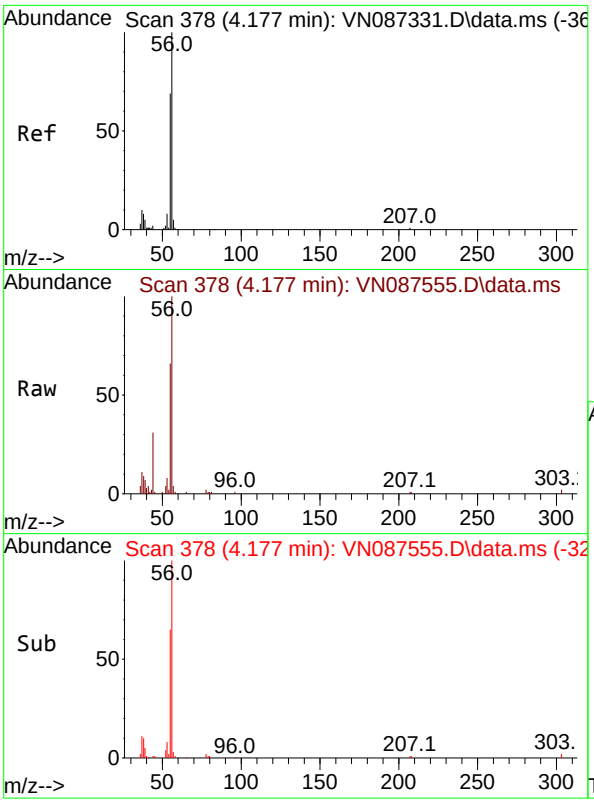


#12
1,1-Dichloroethene
Concen: 20.609 ug/l
RT: 4.336 min Scan# 405
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 96 Resp: 58932

Ion	Ratio	Lower	Upper
96	100		
61	175.2	132.3	198.5
98	68.3	46.8	70.2

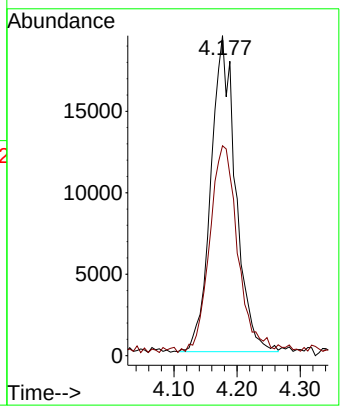




#13
Acrolein
Concen: 81.801 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 56 Resp: 5297

Ion	Ratio	Lower	Upper
56	100		
55	74.1	56.2	84.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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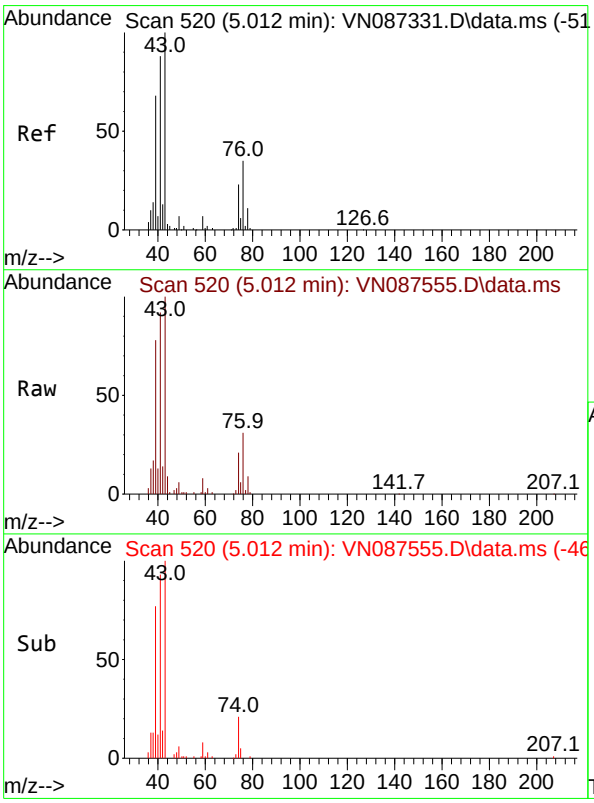
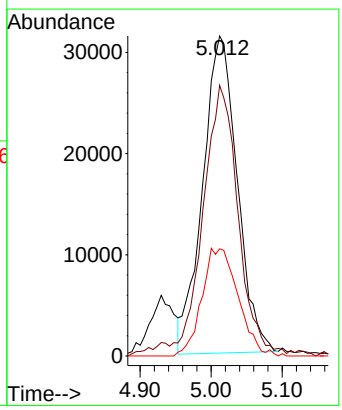
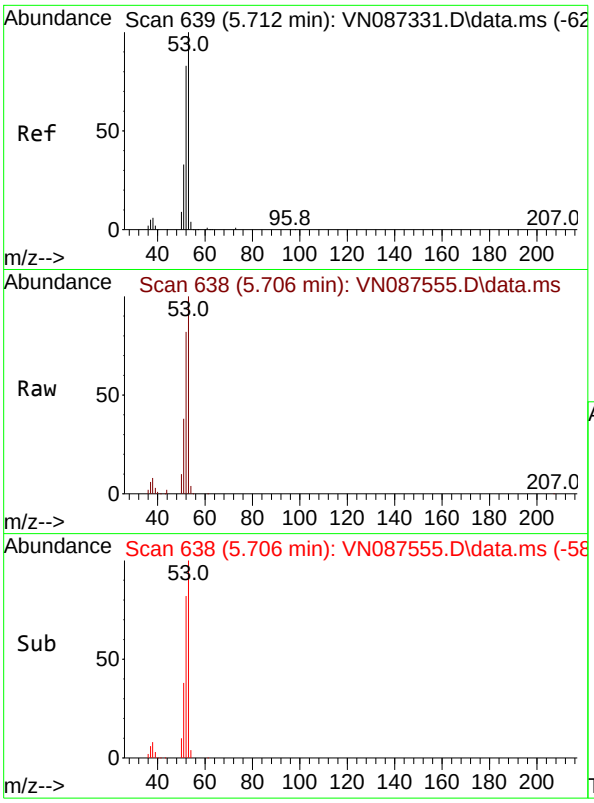


#14
Allyl chloride
Concen: 20.512 ug/l
RT: 5.012 min Scan# 520
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 41 Resp: 106153

Ion	Ratio	Lower	Upper
41	100		
39	84.4	59.0	88.6
76	35.6	28.7	43.1

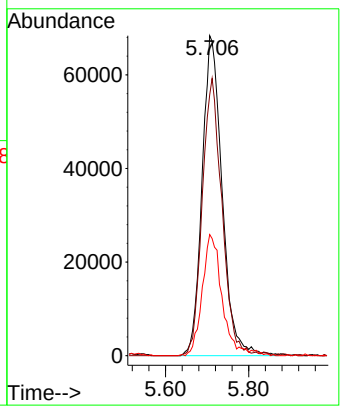




#15
Acrylonitrile
Concen: 104.238 ug/l
RT: 5.706 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 53 Resp: 22824

Ion	Ratio	Lower	Upper
53	100		
52	85.4	65.5	98.3
51	37.0	28.7	43.1



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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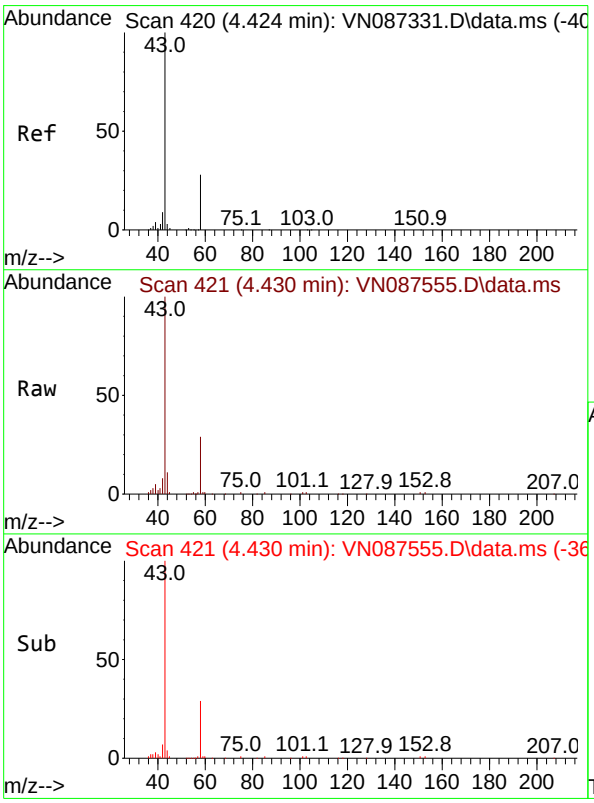
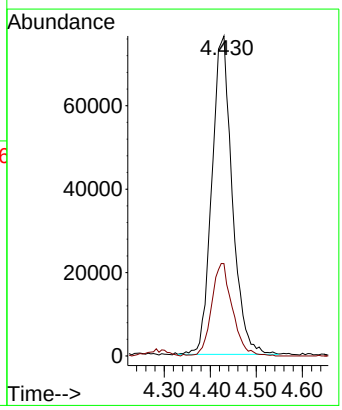
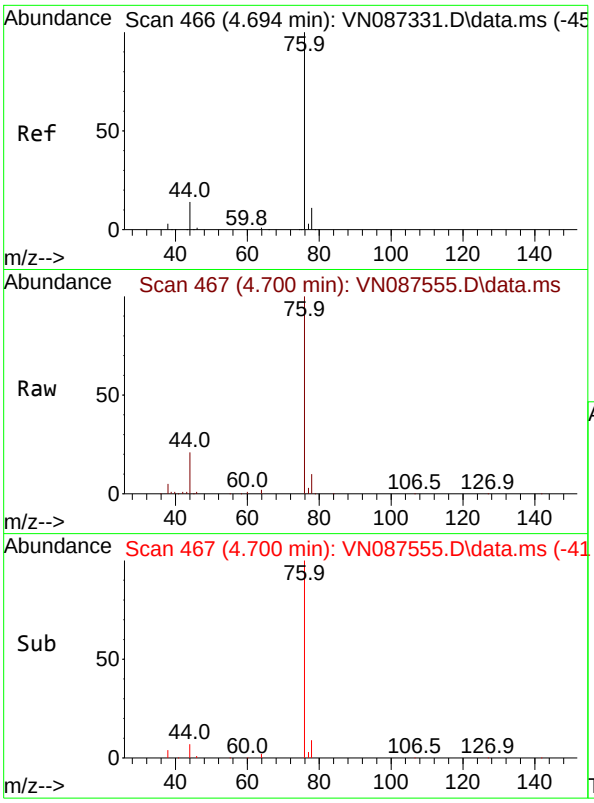


#16
Acetone
Concen: 117.551 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 234225

Ion	Ratio	Lower	Upper
43	100		
58	29.0	22.3	33.5

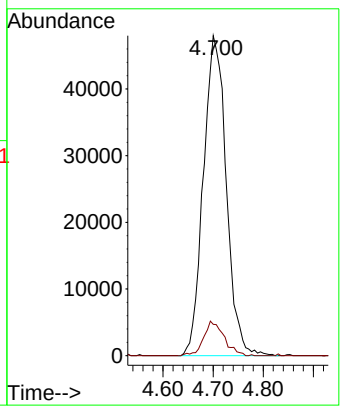




#17
Carbon Disulfide
Concen: 17.956 ug/l
RT: 4.700 min Scan# 4(
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 76 Resp: 15223(

Ion	Ratio	Lower	Upper
76	100		
78	9.8	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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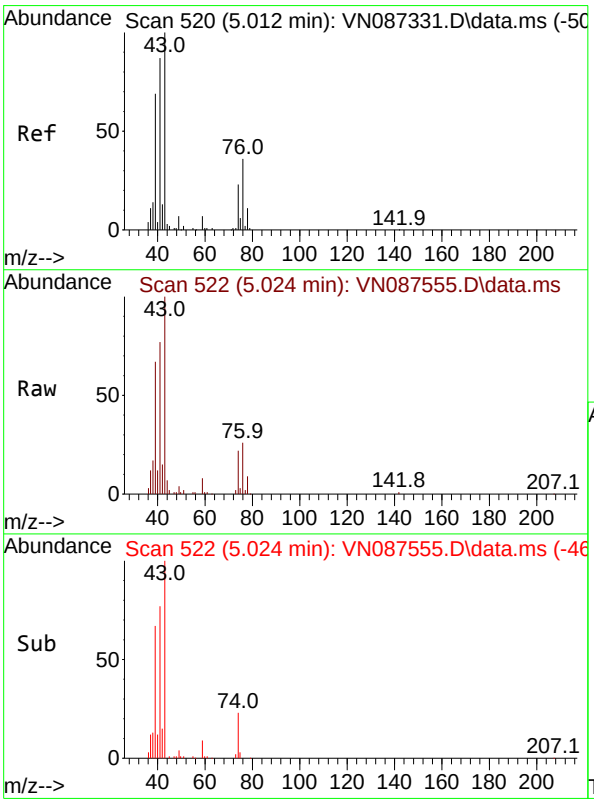
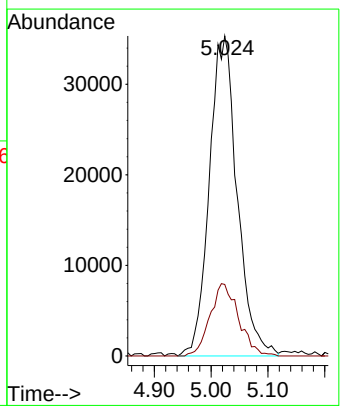
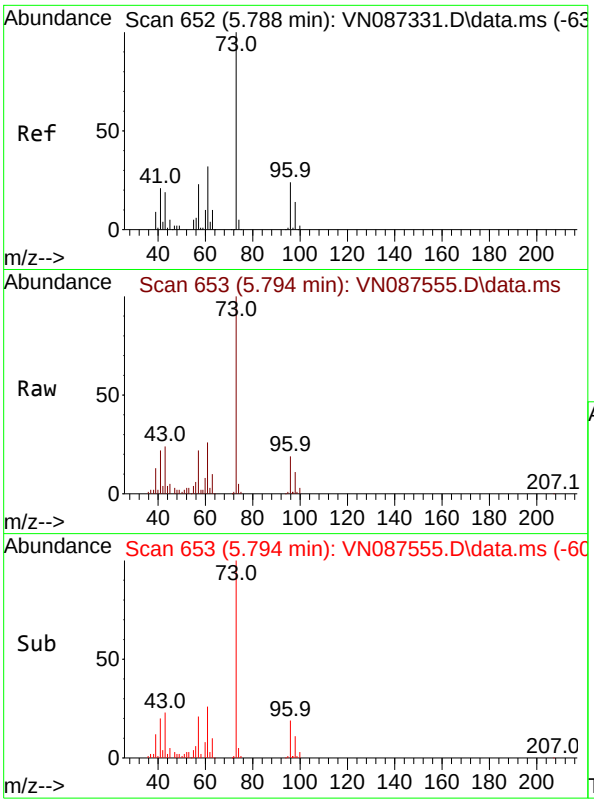


#18
Methyl Acetate
Concen: 24.040 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.012 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 120344

Ion	Ratio	Lower	Upper
43	100		
74	23.2	17.8	26.6

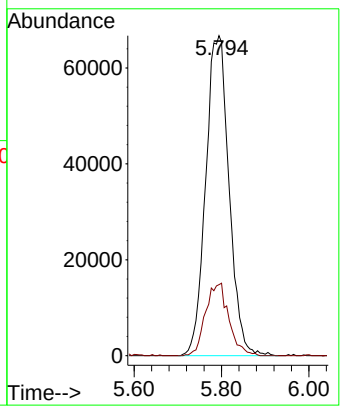




#19
Methyl tert-butyl Ether
Concen: 23.461 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 73 Resp: 24728

Ion	Ratio	Lower	Upper
73	100		
57	22.2	18.6	27.8



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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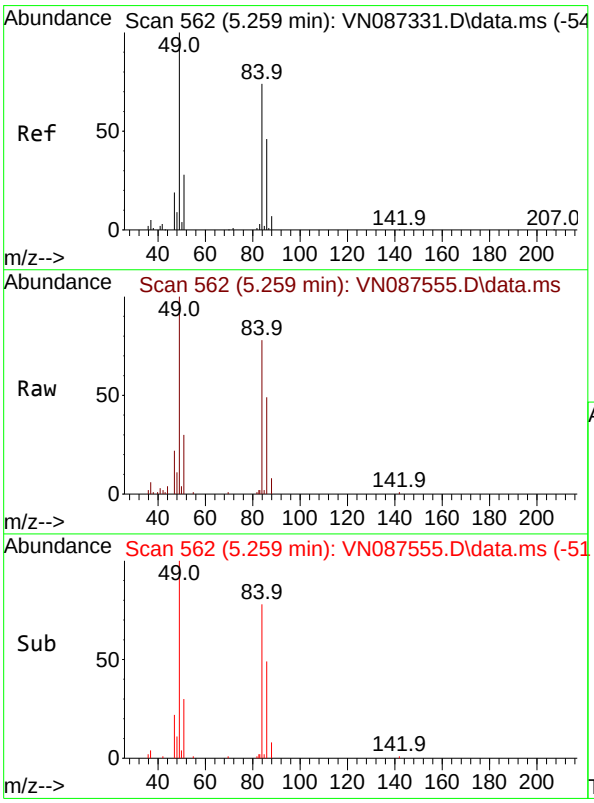
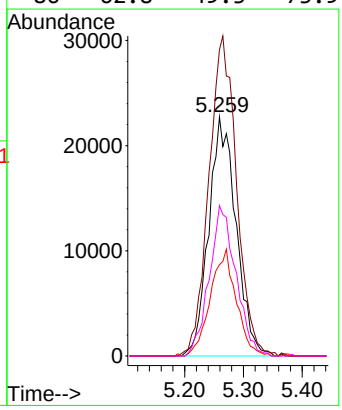
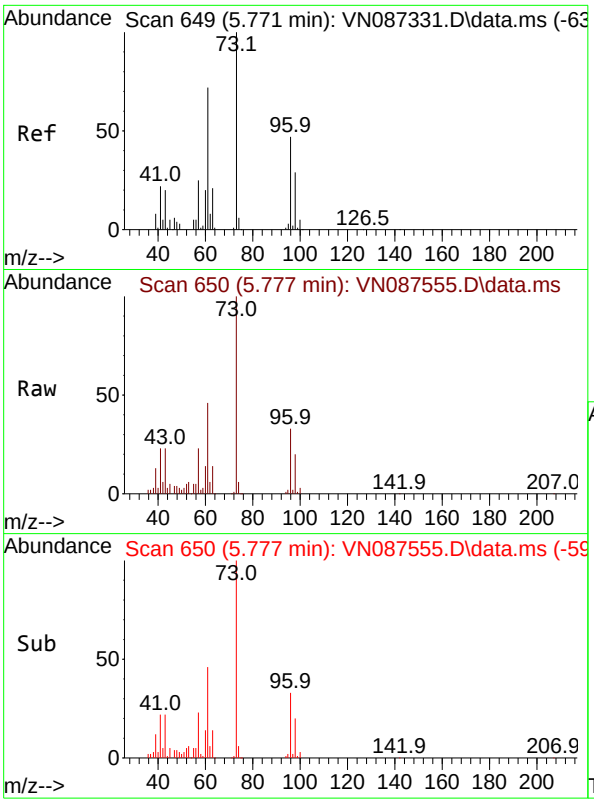


#20
Methylene Chloride
Concen: 21.375 ug/l
RT: 5.259 min Scan# 562
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 84 Resp: 73232

Ion	Ratio	Lower	Upper
84	100		
49	128.1	107.5	161.3
51	38.2	30.2	45.2
86	62.8	49.3	73.9

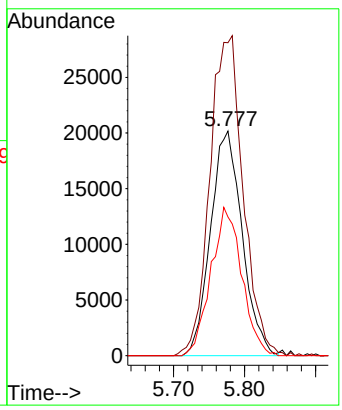




#21
trans-1,2-Dichloroethene
Concen: 19.394 ug/l
RT: 5.777 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 96 Resp: 6253

Ion	Ratio	Lower	Upper
96	100		
61	138.4	122.0	183.0
98	61.8	50.0	75.0



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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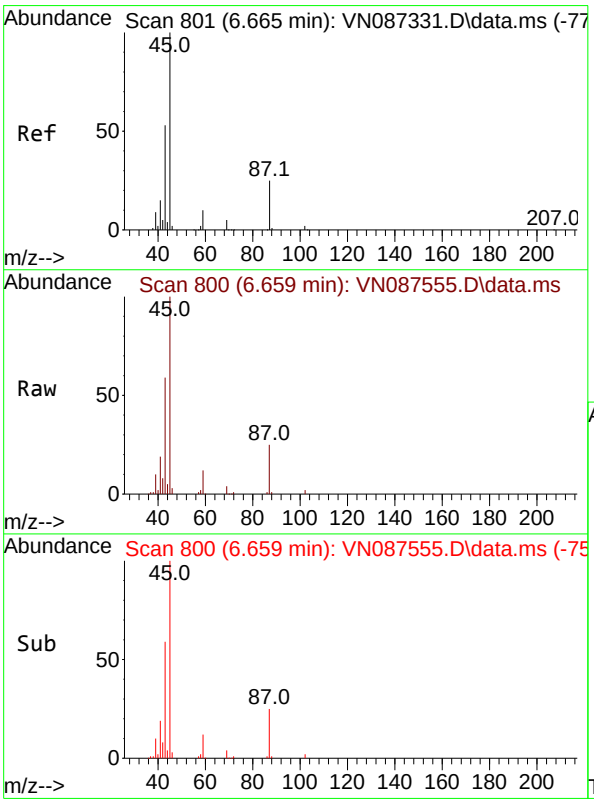
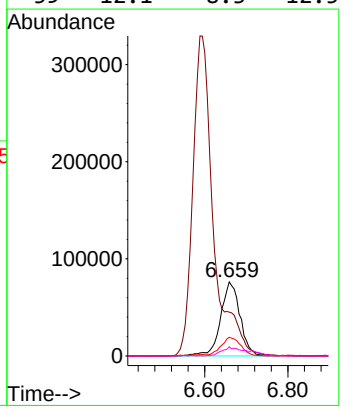
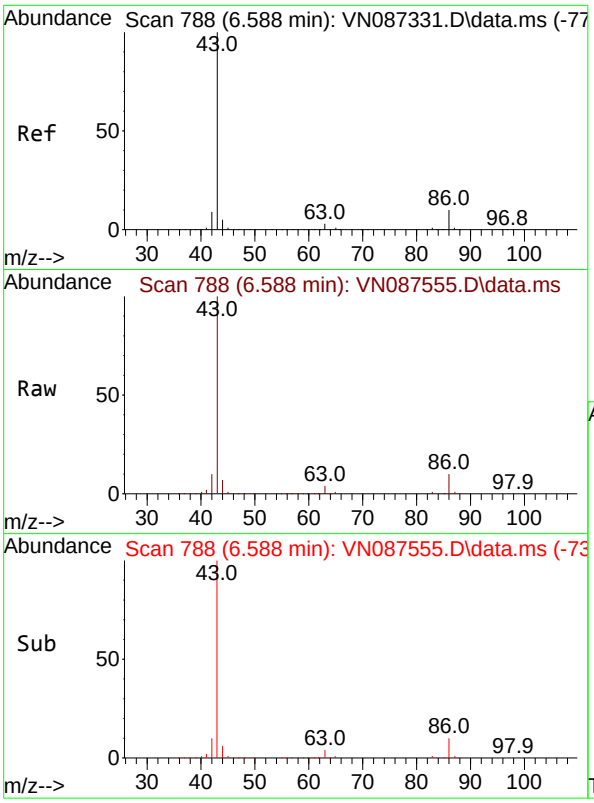


#22
Diisopropyl ether
Concen: 22.809 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 45 Resp: 247597

Ion	Ratio	Lower	Upper
45	100		
43	58.6	42.8	64.2
87	25.3	19.8	29.6
59	12.1	8.3	12.5





#23
Vinyl Acetate
Concen: 118.964 ug/l
RT: 6.588 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 112944

Ion	Ratio	Lower	Upper
43	100		
86	9.7	7.7	11.5

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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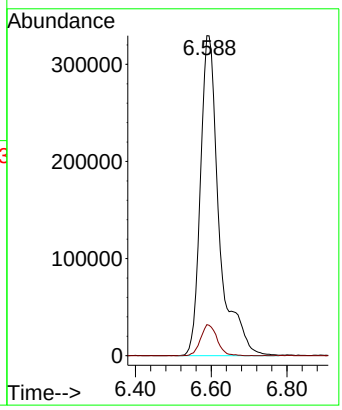
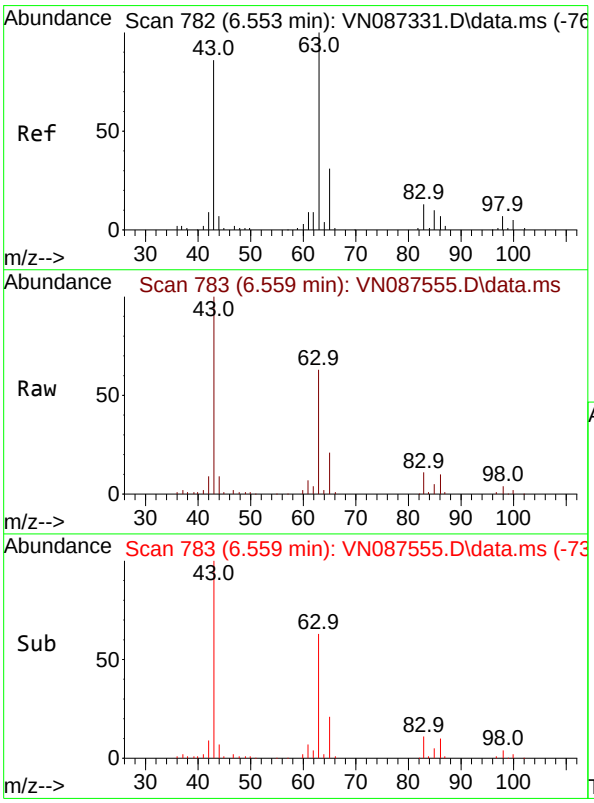
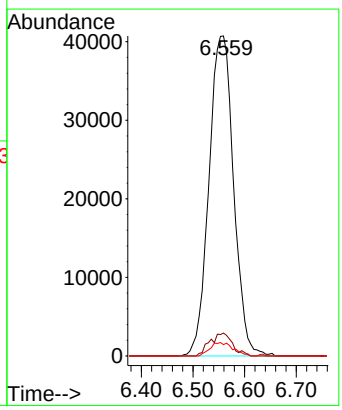


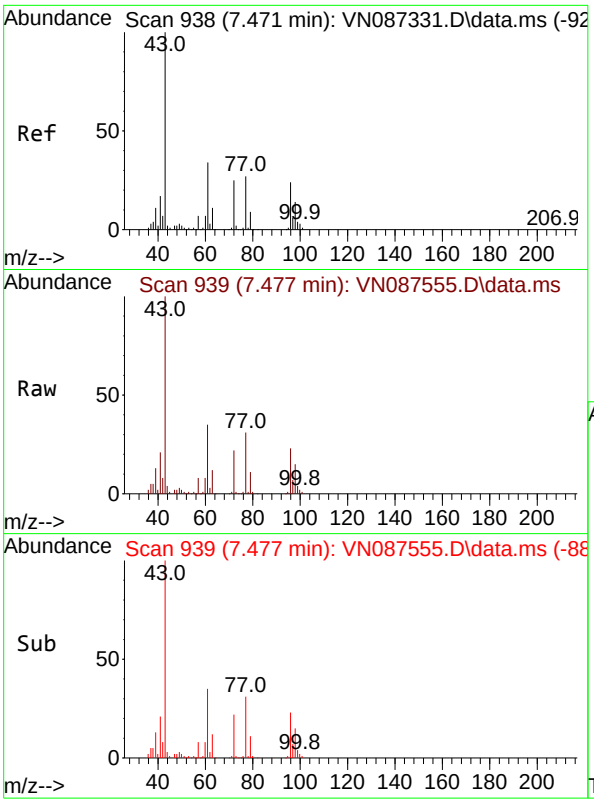


#24
1,1-Dichloroethane
Concen: 21.564 ug/l
RT: 6.559 min Scan# 783
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 63 Resp: 135050

Ion	Ratio	Lower	Upper
63	100		
98	7.1	3.3	9.9
100	3.5	2.5	7.4





#25
2-Butanone
Concen: 108.103 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 33281

Ion	Ratio	Lower	Upper
43	100		
72	22.1	19.6	29.4

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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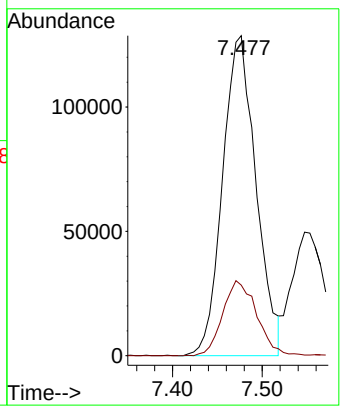
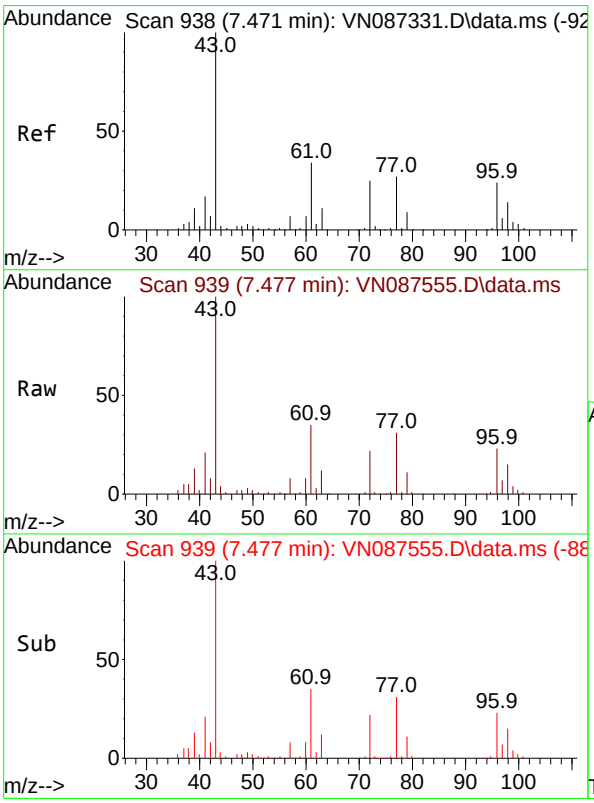
Supervised By :Mahesh Dadoda 08/19/2025

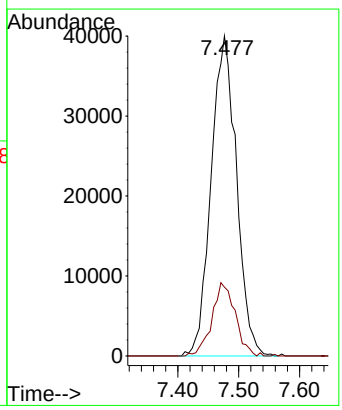


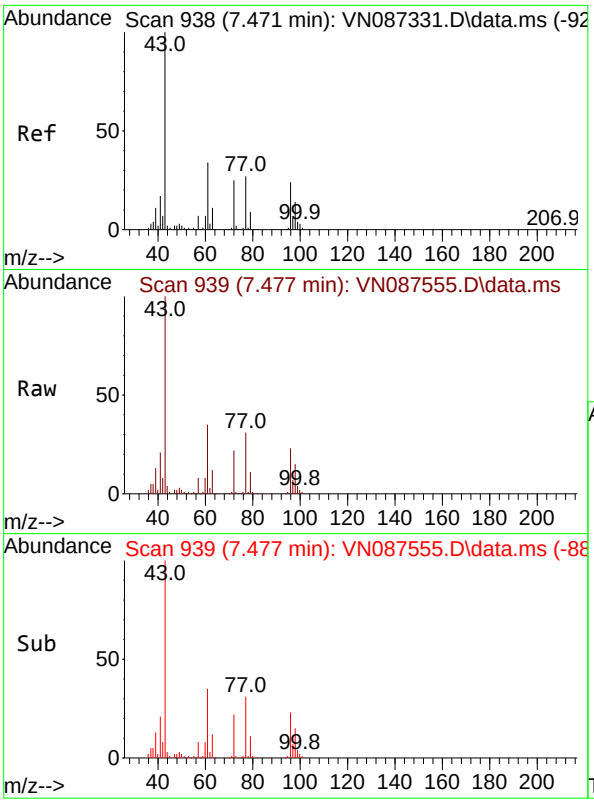


#26
2,2-Dichloropropane
Concen: 23.748 ug/l
RT: 7.477 min Scan# 939
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 77 Resp: 115630

Ion	Ratio	Lower	Upper
77	100		
97	20.9	11.1	33.1

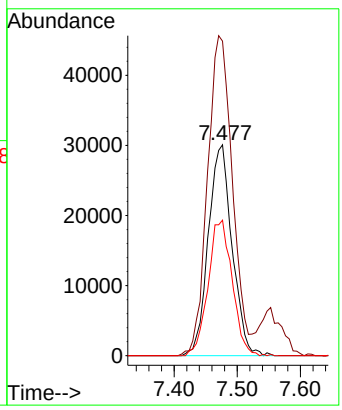




#27
cis-1,2-Dichloroethene
Concen: 21.217 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 96 Resp: 7875

Ion	Ratio	Lower	Upper
96	100		
61	159.0	0.0	297.8
98	65.0	0.0	132.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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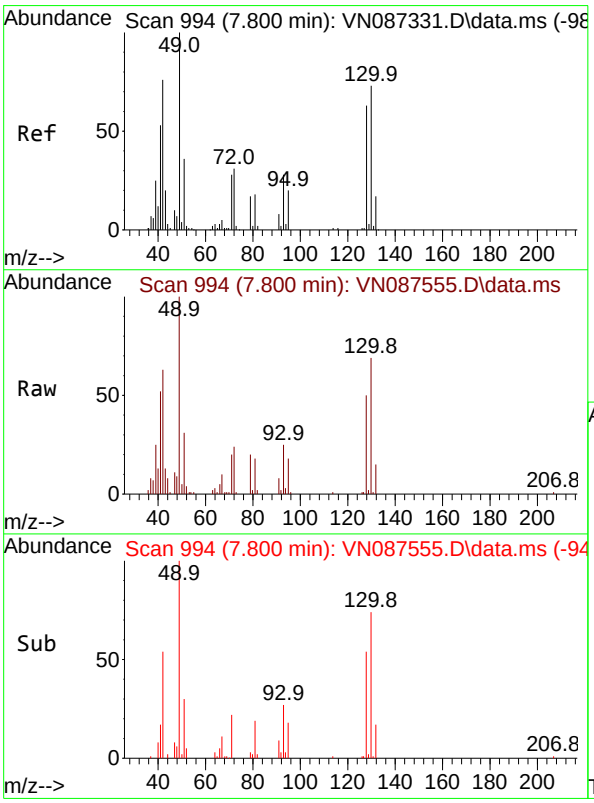
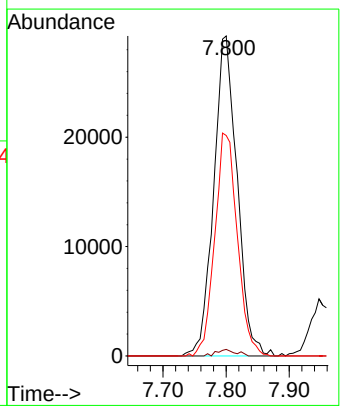
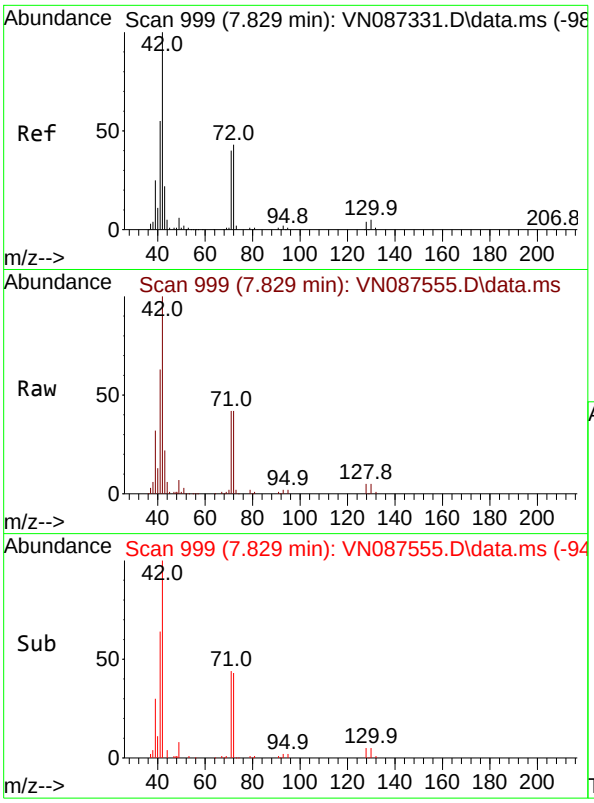


#28
Bromochloromethane
Concen: 25.159 ug/l
RT: 7.800 min Scan# 994
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 49 Resp: 75409

Ion	Ratio	Lower	Upper
49	100		
129	1.7	0.0	4.2
130	67.2	57.3	85.9

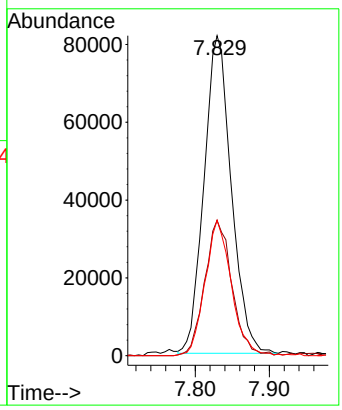




#29
Tetrahydrofuran
Concen: 104.471 ug/l
RT: 7.829 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 42 Resp: 20894

Ion	Ratio	Lower	Upper
42	100		
72	42.6	33.4	50.0
71	41.0	31.2	46.8



Instrument :
MSVOA_N
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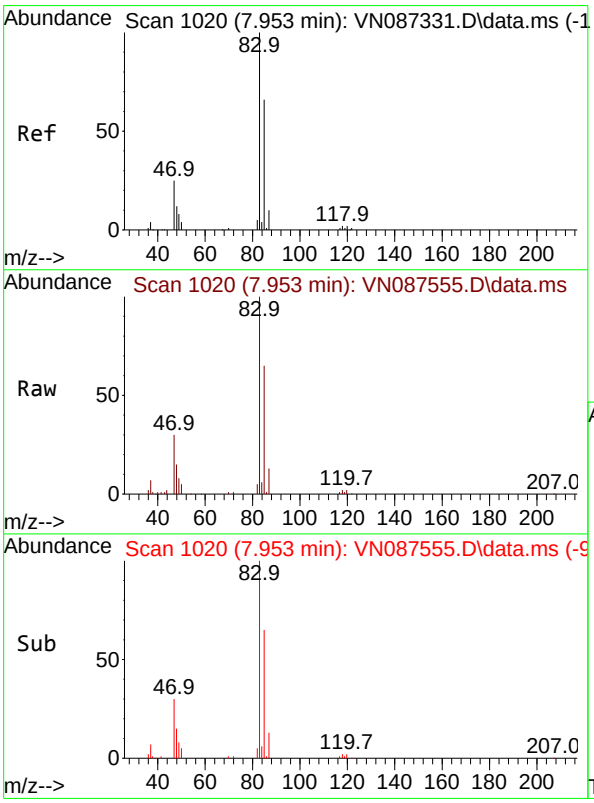
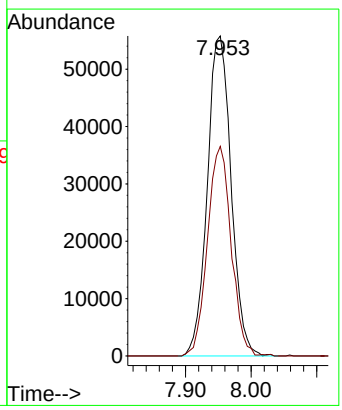
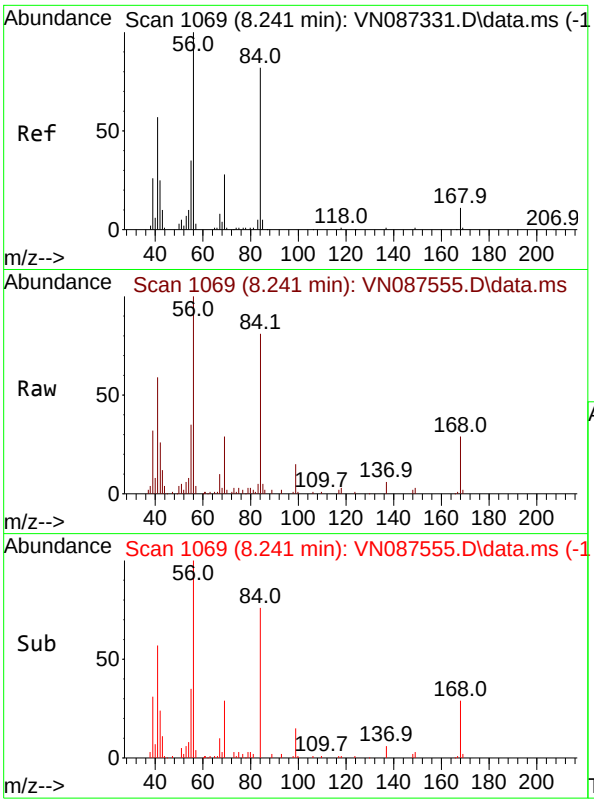


#30
Chloroform
Concen: 22.445 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 83 Resp: 140698

Ion	Ratio	Lower	Upper
83	100		
85	65.5	52.7	79.1

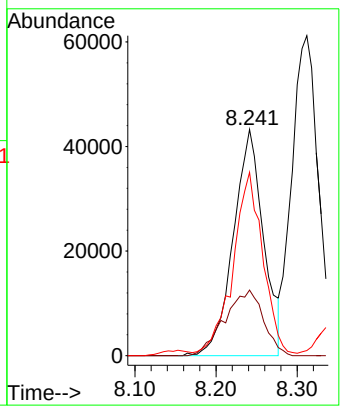




#31
Cyclohexane
Concen: 21.380 ug/l
RT: 8.241 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 56 Resp: 11169

Ion	Ratio	Lower	Upper
56	100		
69	29.0	22.7	34.1
84	78.7	65.8	98.6



Instrument :
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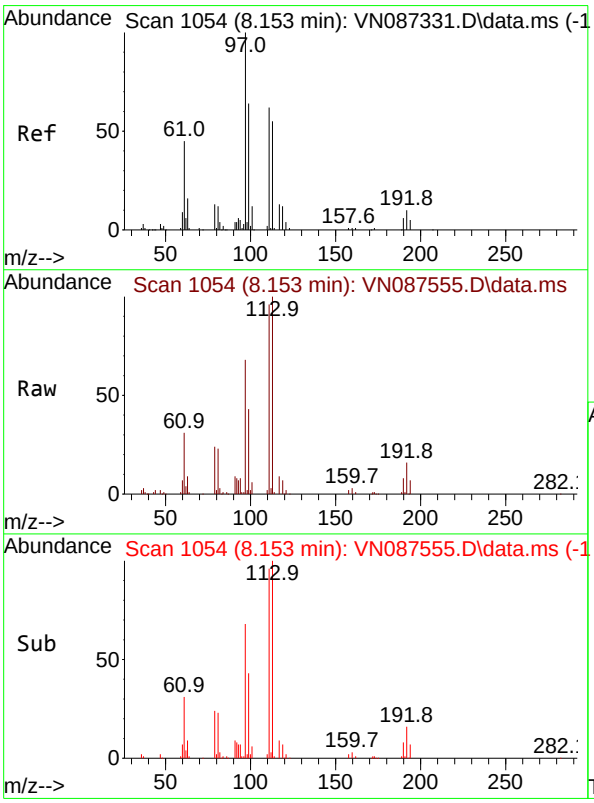
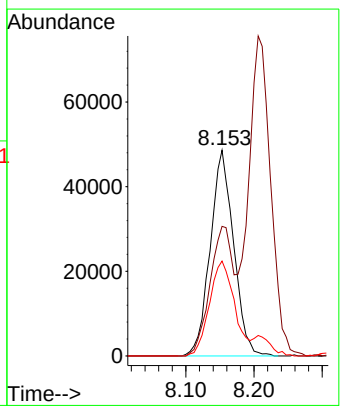
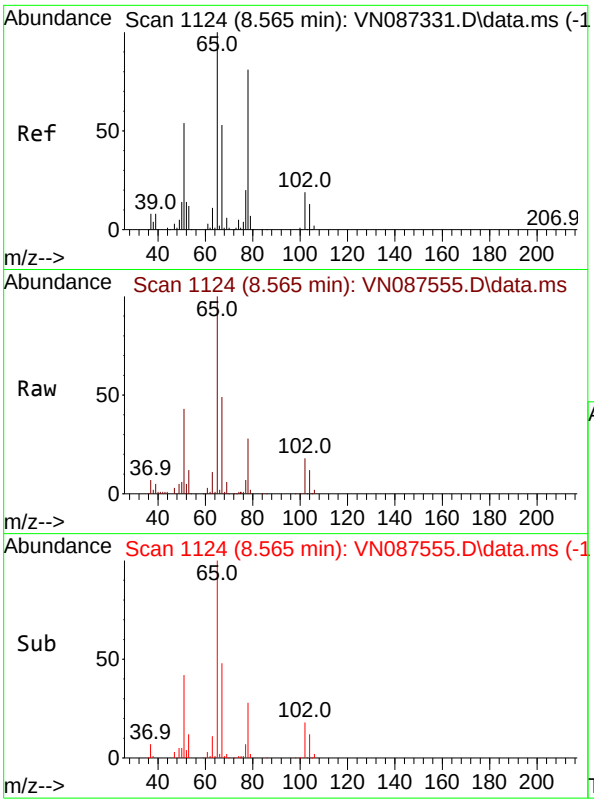


#32
1,1,1-Trichloroethane
Concen: 21.362 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 97 Resp: 115982

Ion	Ratio	Lower	Upper
97	100		
99	60.1	51.8	77.8
61	49.7	38.7	58.1

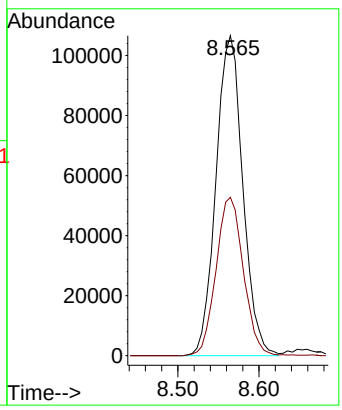




#33
1,2-Dichloroethane-d4
Concen: 57.648 ug/l
RT: 8.565 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 65 Resp: 24498

Ion	Ratio	Lower	Upper
65	100		
67	50.5	0.0	104.0



Instrument :
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ClientSampleId :
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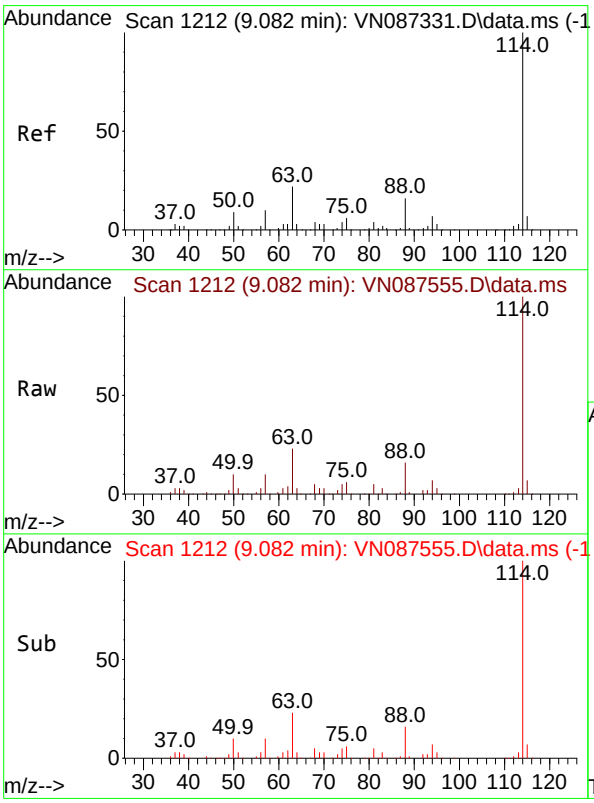
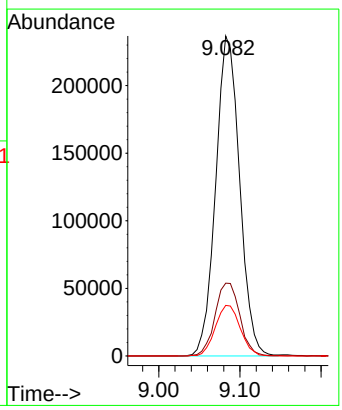
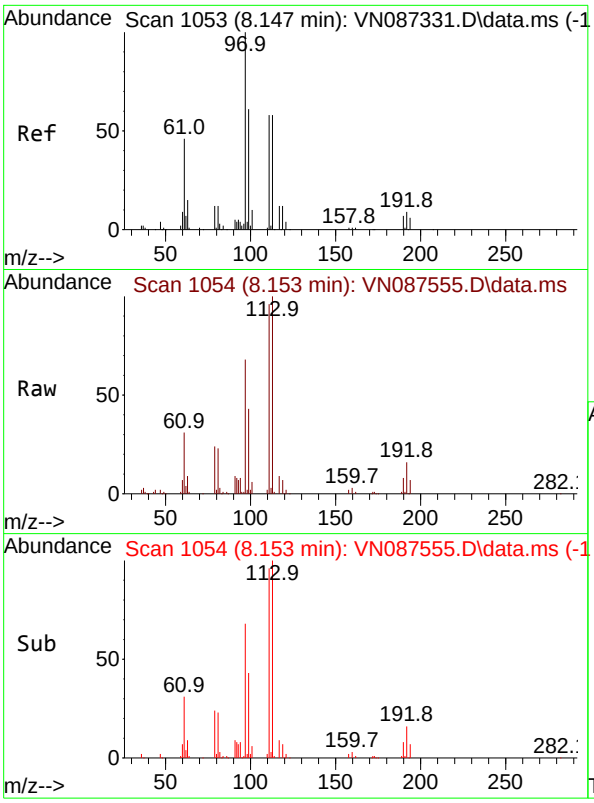


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:114 Resp: 485218

Ion	Ratio	Lower	Upper
114	100		
63	22.7	0.0	44.6
88	15.8	0.0	32.8





#35
Dibromofluoromethane
Concen: 50.692 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:113 Resp: 16966

Ion	Ratio	Lower	Upper
113	100		
111	102.4	82.5	123.7
192	16.1	13.7	20.5

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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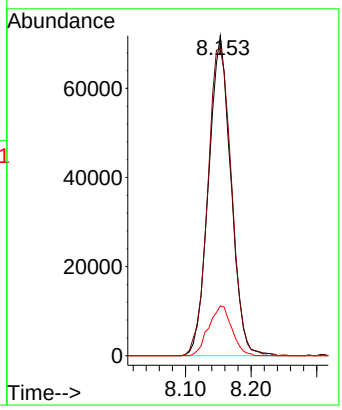
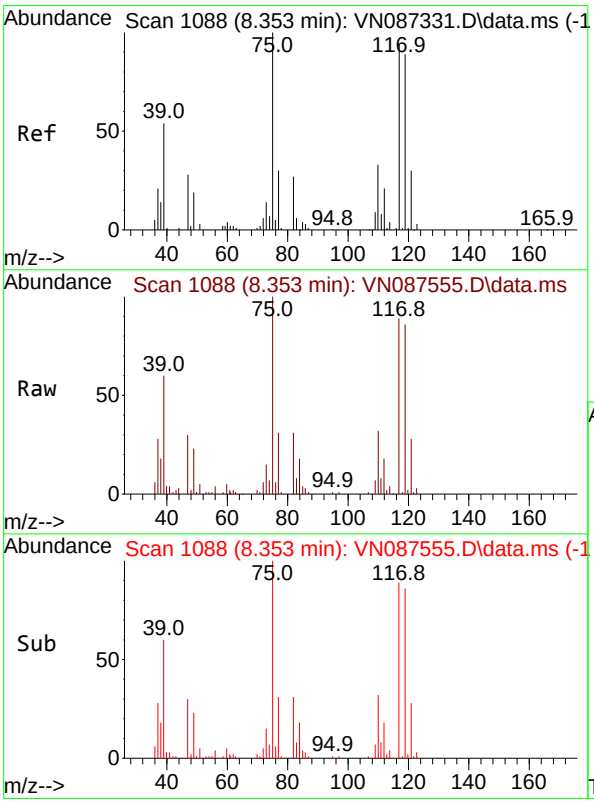
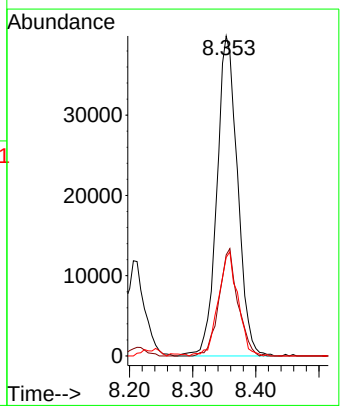


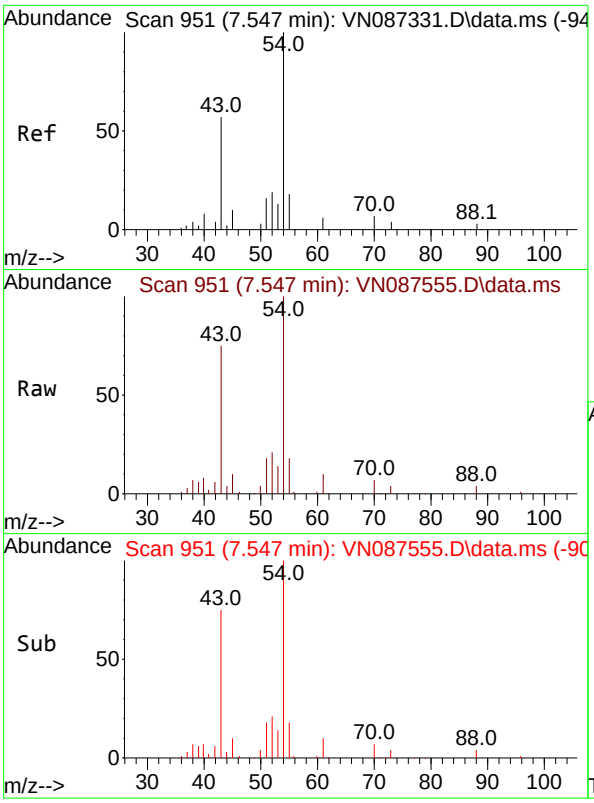


#36
1,1-Dichloropropene
Concen: 20.523 ug/l
RT: 8.353 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 75 Resp: 90752

Ion	Ratio	Lower	Upper
75	100		
110	30.8	16.7	50.1
77	31.0	25.2	37.8

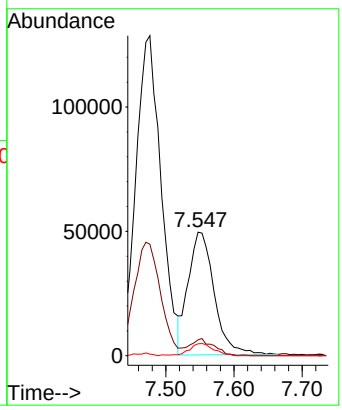




#37
Ethyl Acetate
Concen: 20.524 ug/l
RT: 7.547 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 13107

Ion	Ratio	Lower	Upper
43	100		
61	12.5	10.9	16.3
70	9.3	7.4	11.0



Instrument :
MSVOA_N
ClientSampleId :
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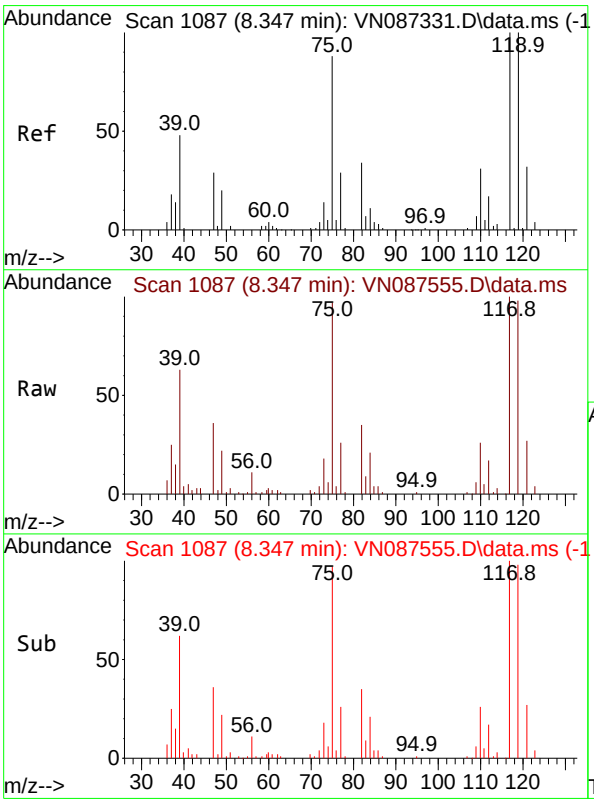
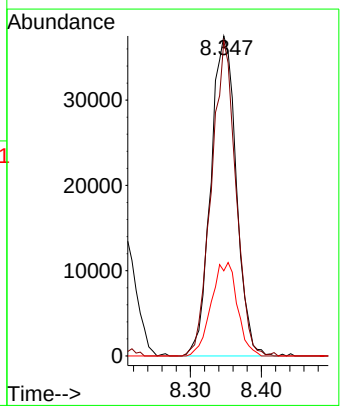
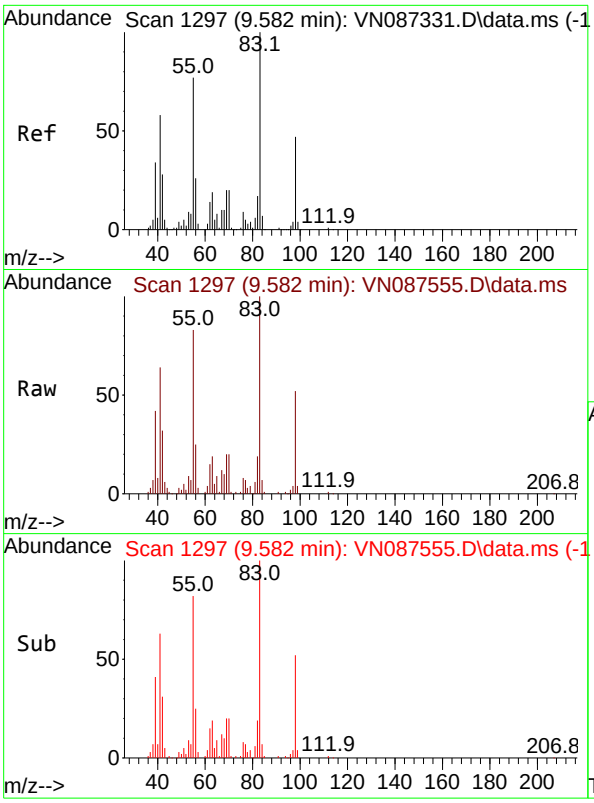


#38
Carbon Tetrachloride
Concen: 19.181 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:117 Resp: 93434

Ion	Ratio	Lower	Upper
117	100		
119	98.4	80.2	120.2
121	26.6	25.4	38.2





#39
Methylcyclohexane
Concen: 20.130 ug/l
RT: 9.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 83 Resp: 9637

Ion	Ratio	Lower	Upper
83	100		
55	83.1	61.3	91.9
98	51.6	37.9	56.9

Instrument :
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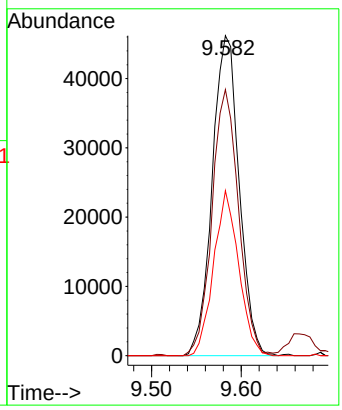
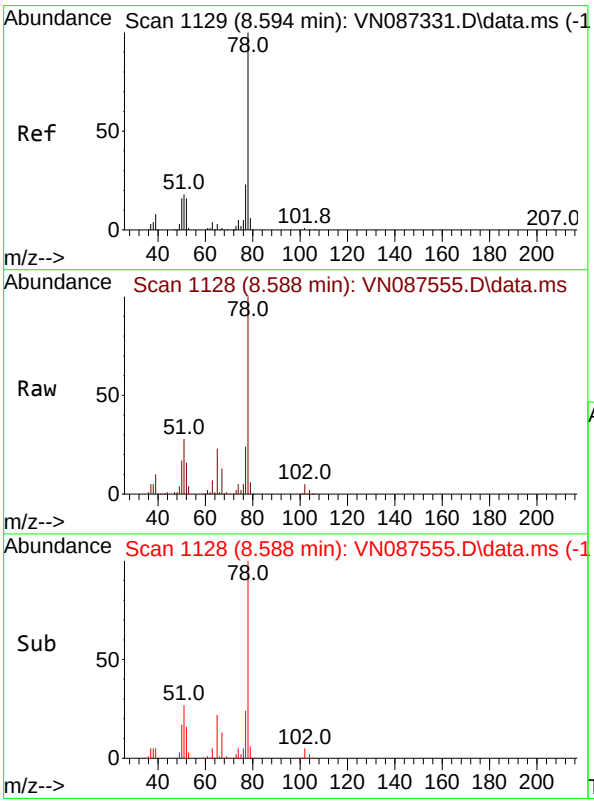
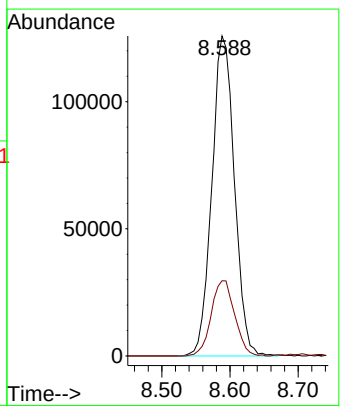


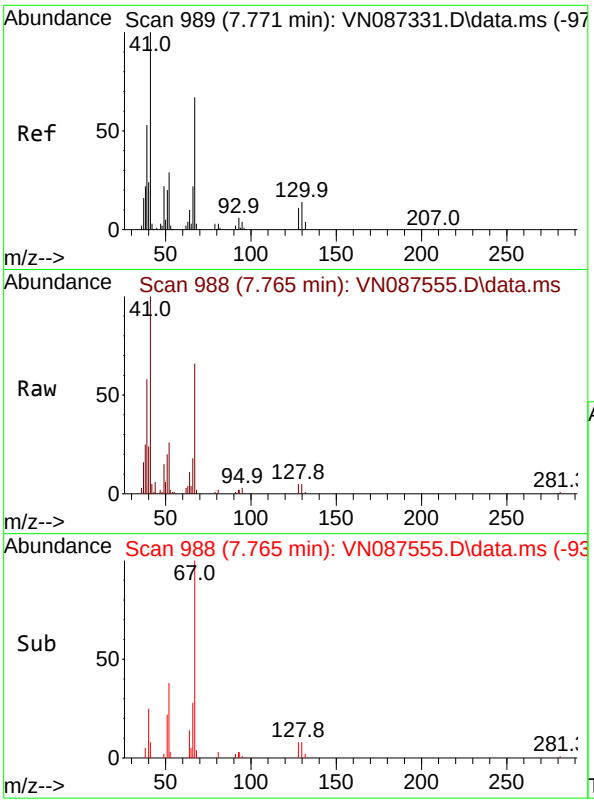


#40
Benzene
Concen: 20.261 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 78 Resp: 289566

Ion	Ratio	Lower	Upper
78	100		
77	23.5	18.2	27.2

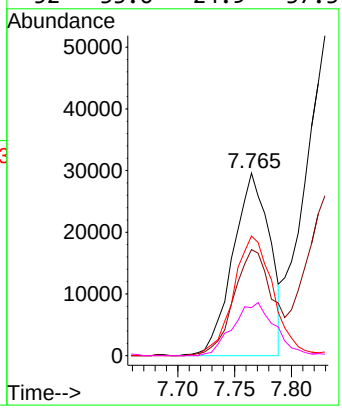




#41
Methacrylonitrile
Concen: 19.992 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 41 Resp: 6675

Ion	Ratio	Lower	Upper
41	100		
39	61.1	43.4	65.0
67	70.9	55.1	82.7
52	33.6	24.9	37.3



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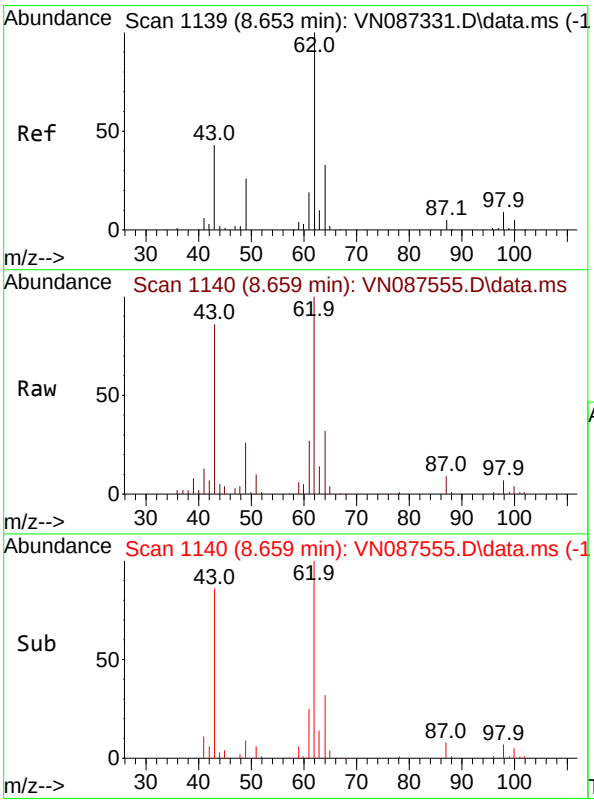
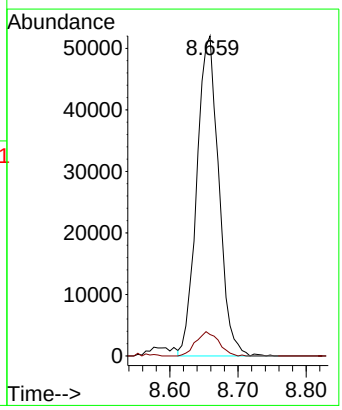
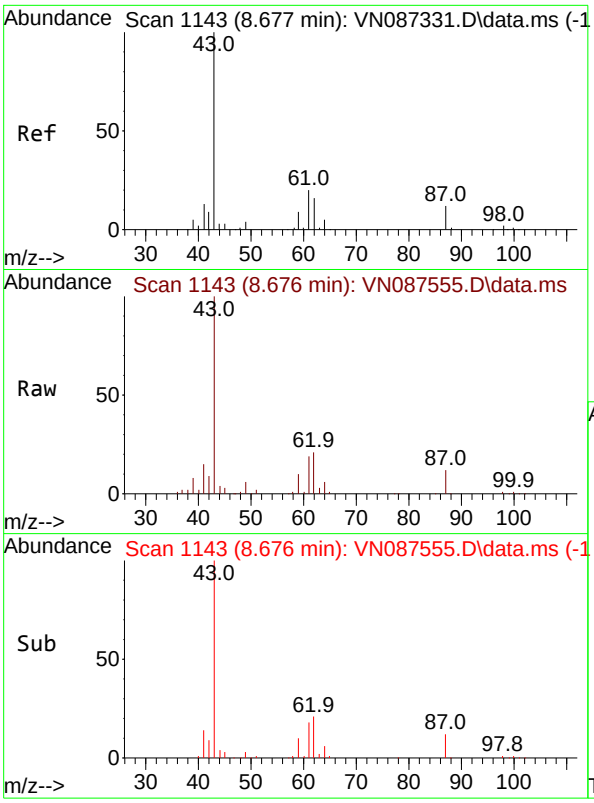


#42
1,2-Dichloroethane
Concen: 21.531 ug/l
RT: 8.659 min Scan# 1140
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 62 Resp: 116694

Ion	Ratio	Lower	Upper
62	100		
98	7.9	0.0	18.0

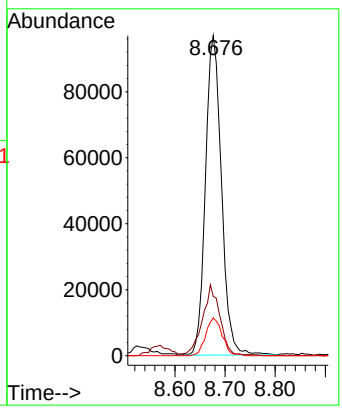




#43
Isopropyl Acetate
Concen: 21.696 ug/l
RT: 8.676 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 21509

Ion	Ratio	Lower	Upper
43	100		
61	23.3	19.8	29.8
87	12.2	9.8	14.6



Instrument :
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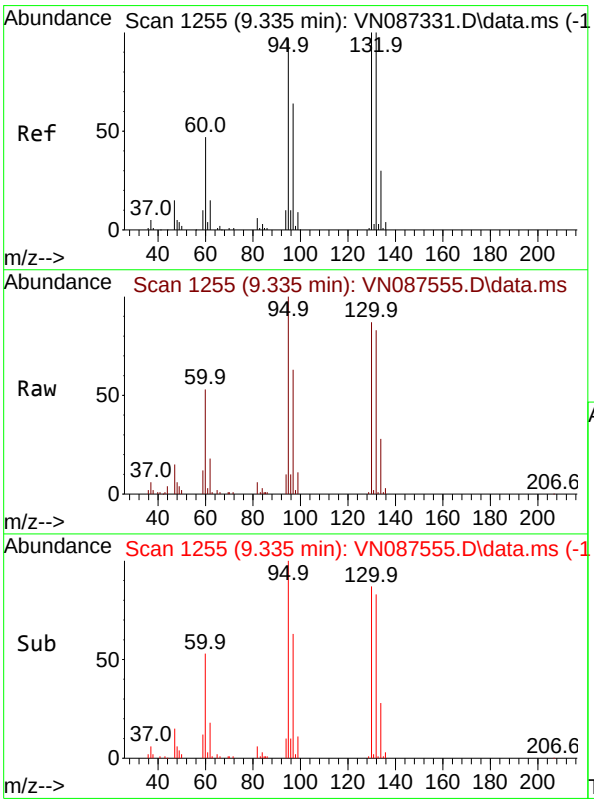
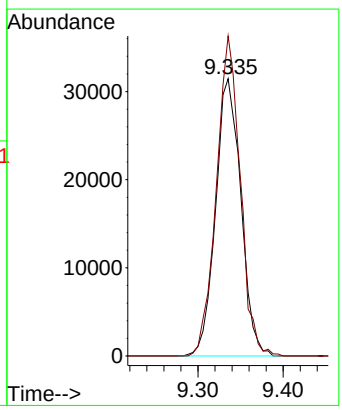
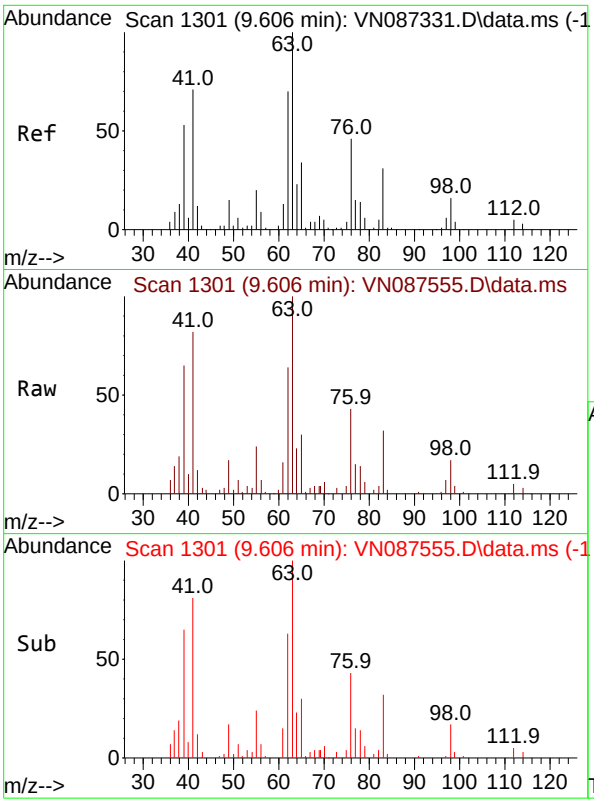


#44
Trichloroethene
Concen: 19.172 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:130 Resp: 64743

Ion	Ratio	Lower	Upper
130	100		
95	115.4	0.0	195.2

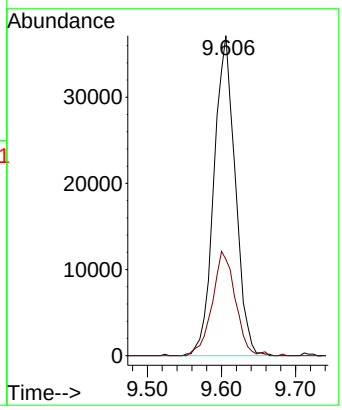




#45
1,2-Dichloropropane
Concen: 20.442 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 63 Resp: 7423

Ion	Ratio	Lower	Upper
63	100		
65	30.1	27.0	40.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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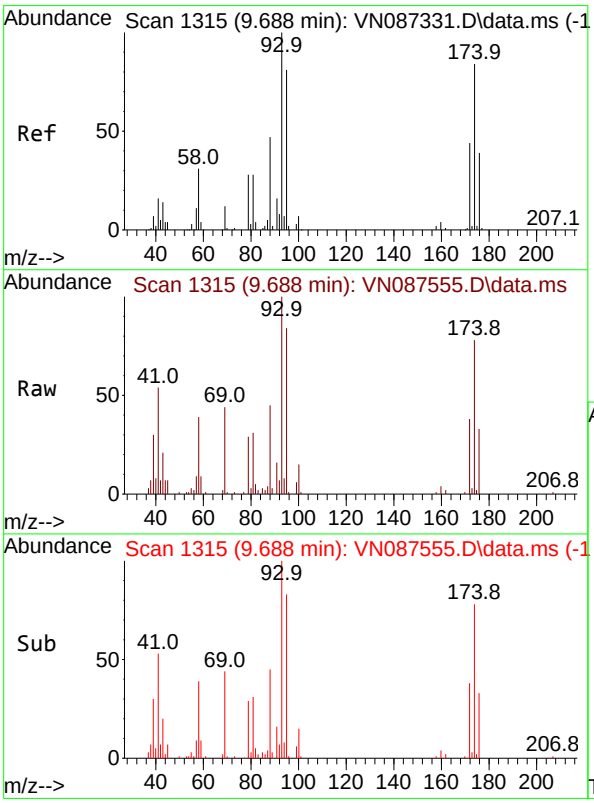
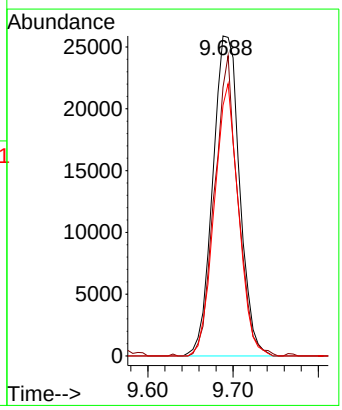
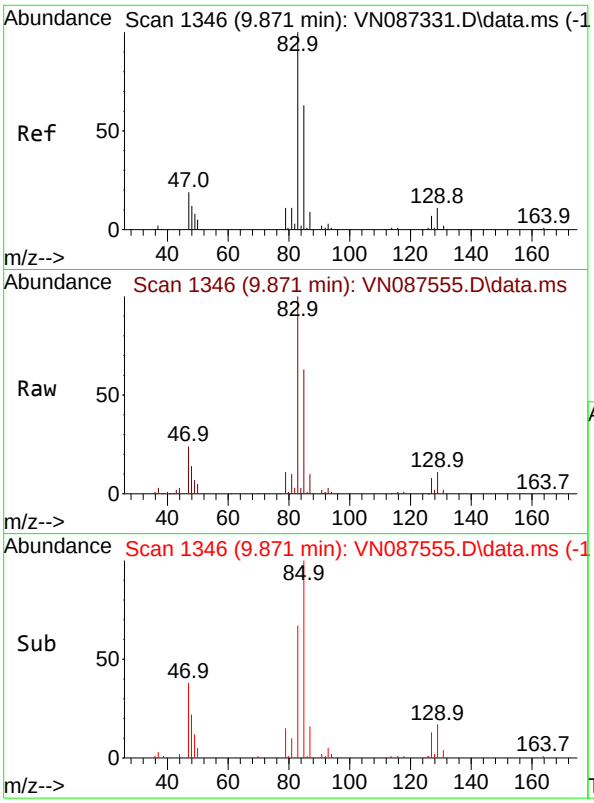


#46
Dibromomethane
Concen: 20.795 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 93 Resp: 56540

Ion	Ratio	Lower	Upper
93	100		
95	81.5	65.8	98.8
174	76.8	69.9	104.9

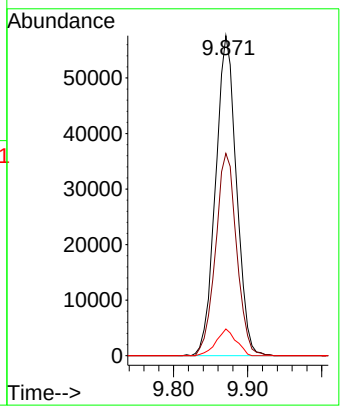




#47
Bromodichloromethane
Concen: 20.530 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 83 Resp: 11243

Ion	Ratio	Lower	Upper
83	100		
85	63.2	50.4	75.6
127	8.3	5.8	8.8



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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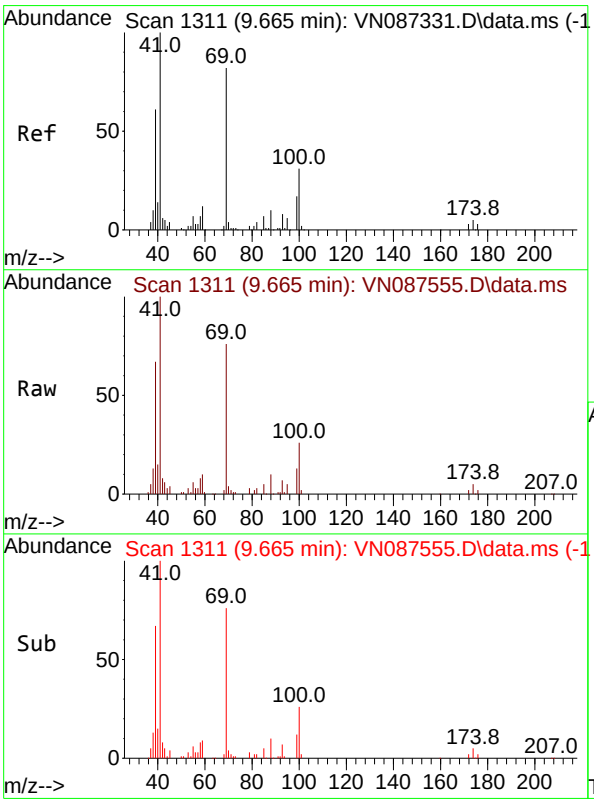
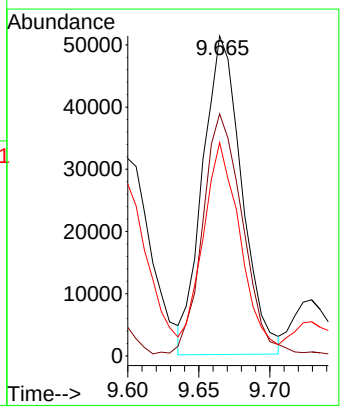
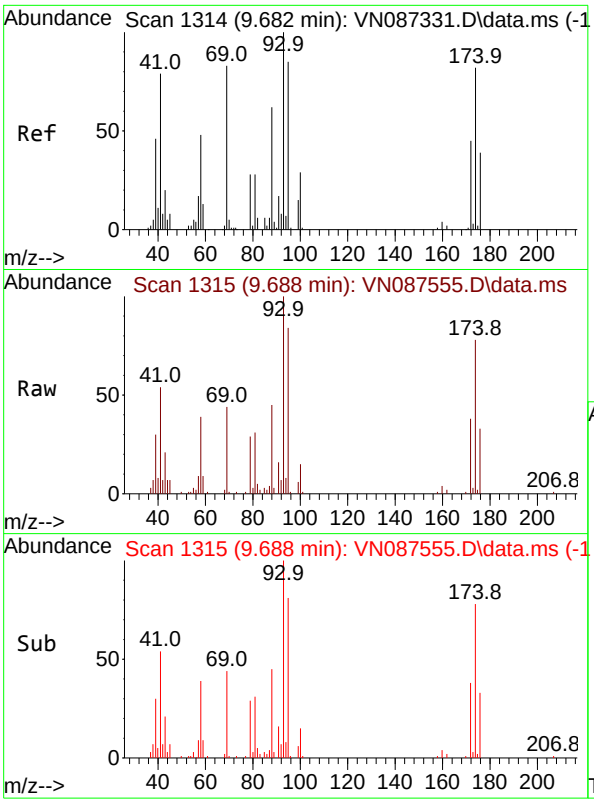


#48
Methyl methacrylate
Concen: 22.008 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 41 Resp: 98225

Ion	Ratio	Lower	Upper
41	100		
69	78.9	64.1	96.1
39	65.2	45.5	68.3





#49
1,4-Dioxane
Concen: 447.176 ug/l
RT: 9.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 88 Resp: 3056

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	76.6	61.1	91.7

Instrument :
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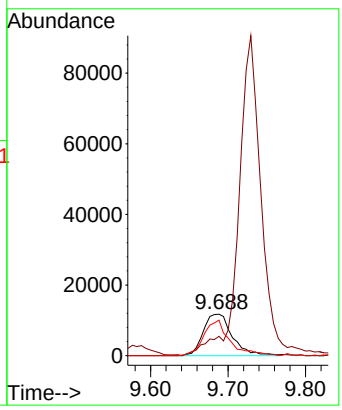
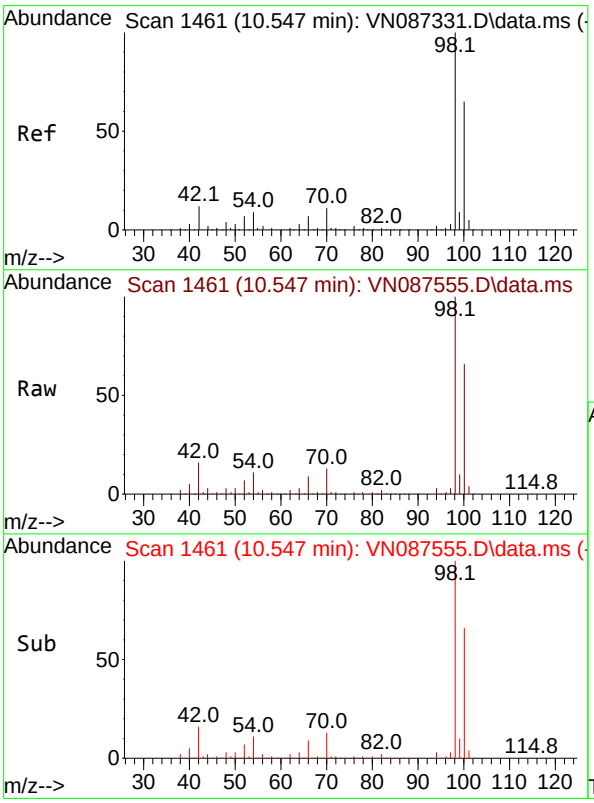
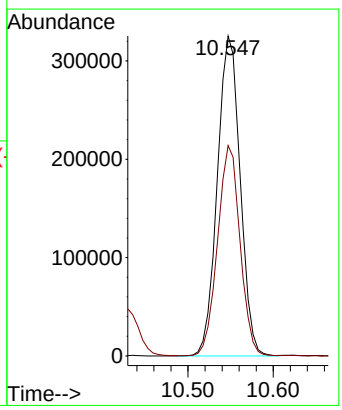


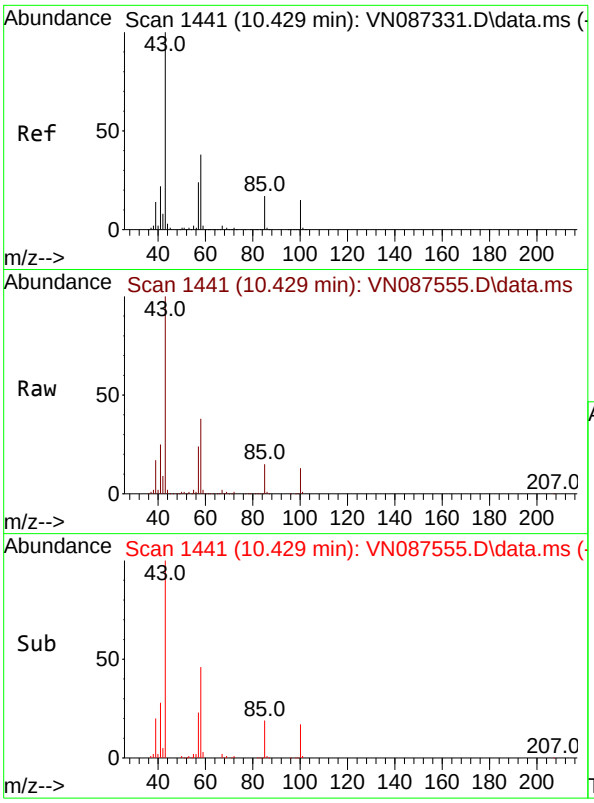


#50
Toluene-d8
Concen: 50.695 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 98 Resp: 605258

Ion	Ratio	Lower	Upper
98	100		
100	64.5	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 105.450 ug/l
RT: 10.429 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 66120

Ion	Ratio	Lower	Upper
43	100		
58	37.3	30.8	46.2

Instrument :
MSVOA_N
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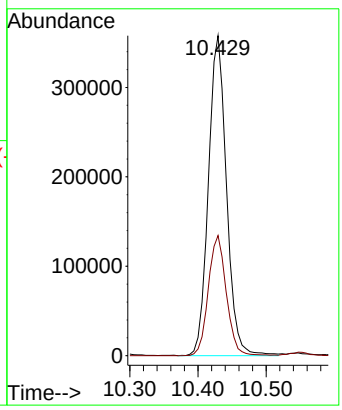
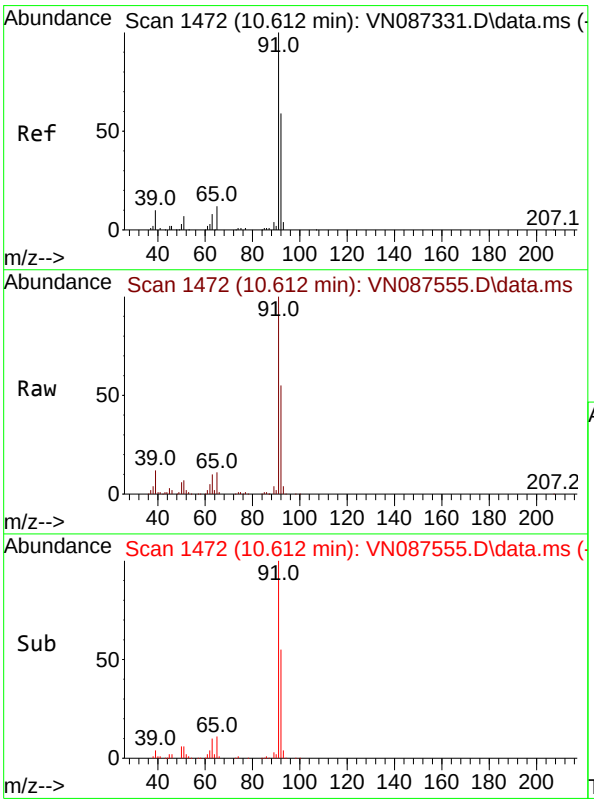
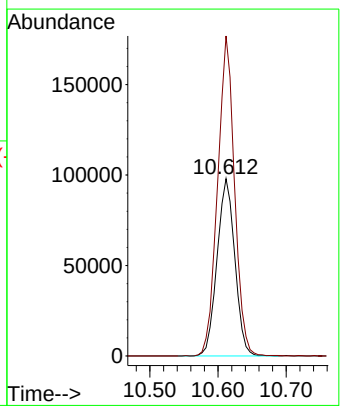


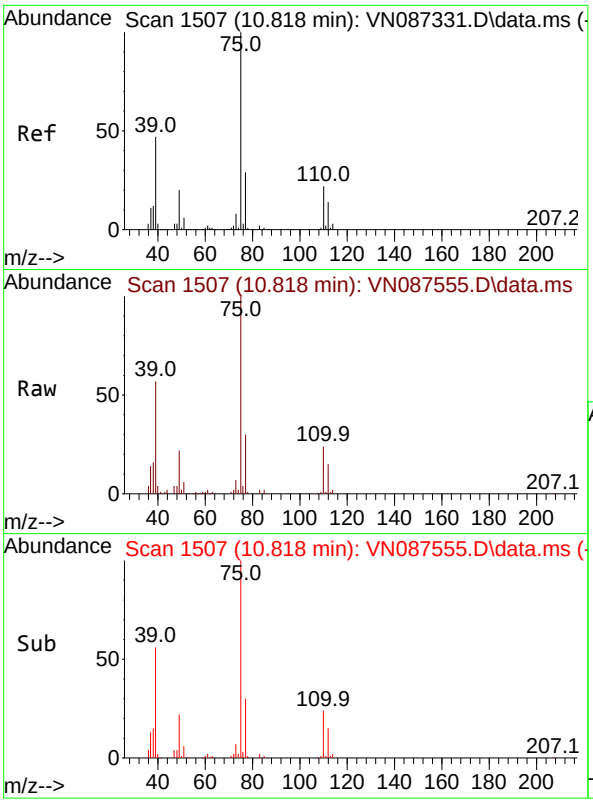


#52
Toluene
Concen: 20.443 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 92 Resp: 177586

Ion	Ratio	Lower	Upper
92	100		
91	172.6	135.1	202.7

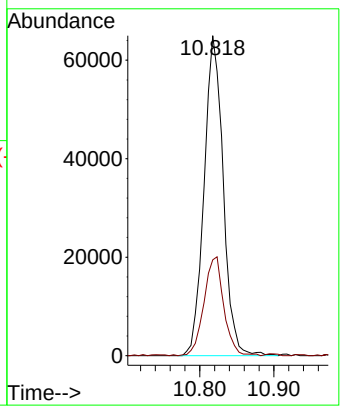




#53
t-1,3-Dichloropropene
Concen: 20.990 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 75 Resp: 11633

Ion	Ratio	Lower	Upper
75	100		
77	30.0	23.6	35.4



Instrument :
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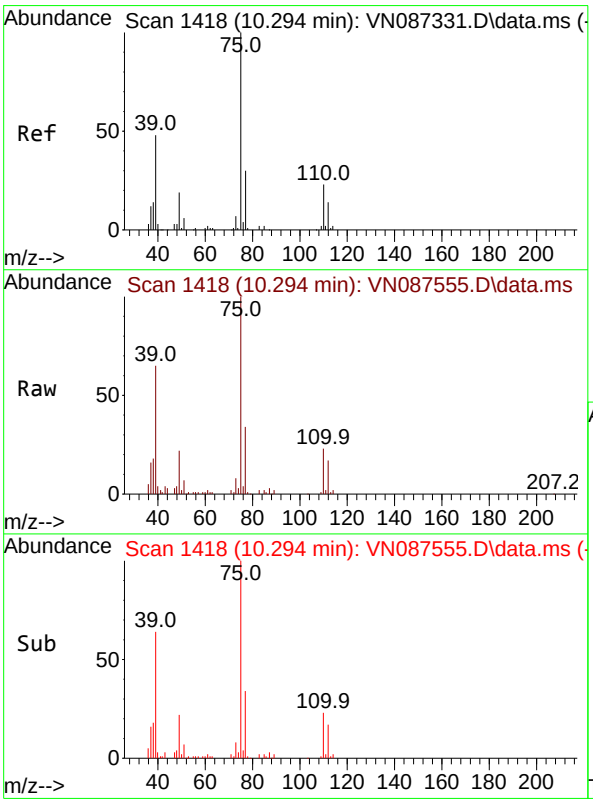
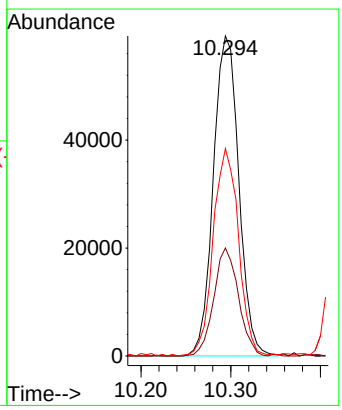
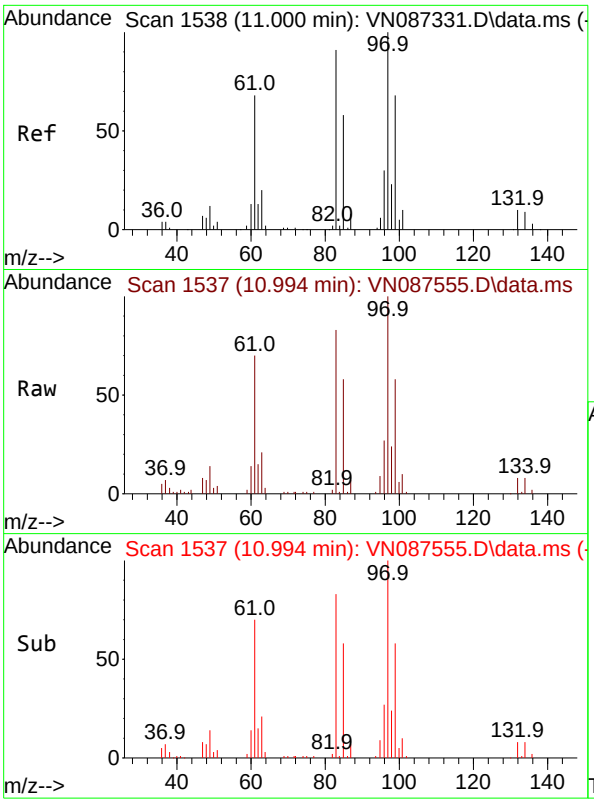


#54
cis-1,3-Dichloropropene
Concen: 20.420 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 75 Resp: 116909

Ion	Ratio	Lower	Upper
75	100		
77	33.7	24.2	36.2
39	64.8	38.4	57.6#

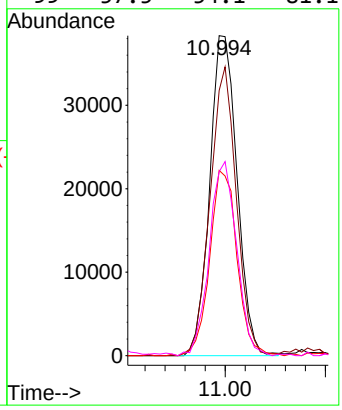




#55
1,1,2-Trichloroethane
Concen: 20.652 ug/l
RT: 10.994 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 97 Resp: 7263

Ion	Ratio	Lower	Upper
97	100		
83	82.8	72.6	109.0
85	57.9	46.7	70.1
99	57.5	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
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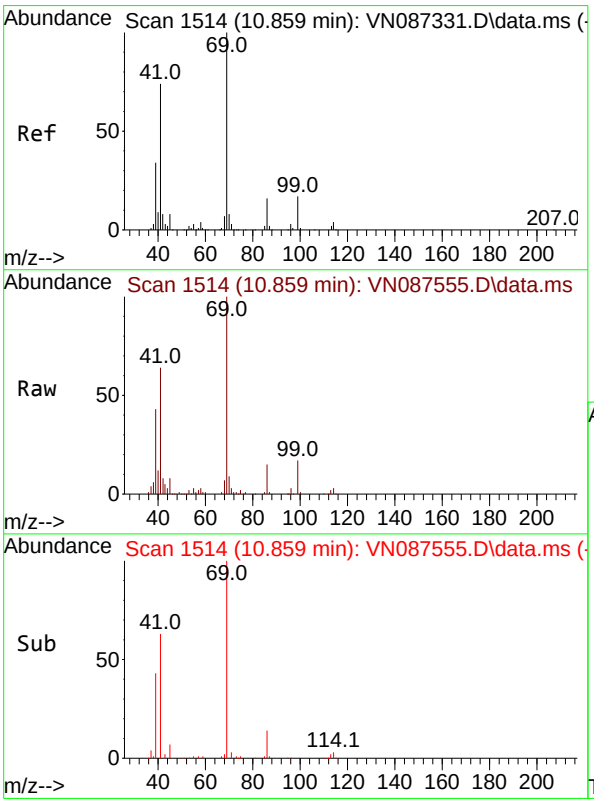
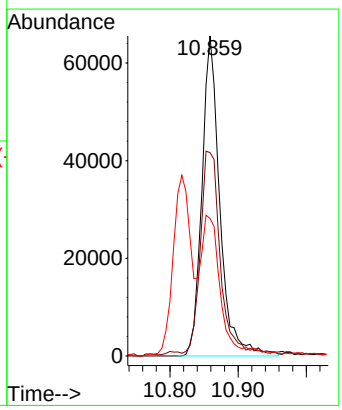
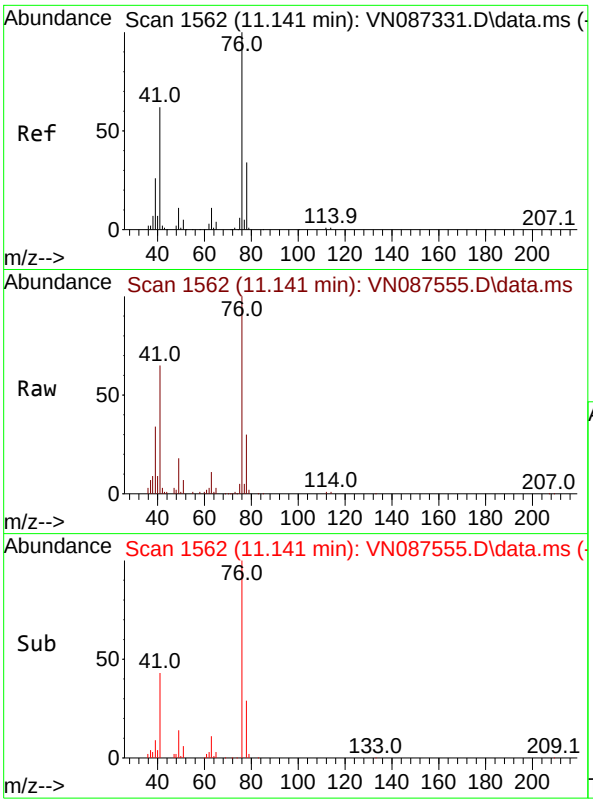


#56
Ethyl methacrylate
Concen: 21.091 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 69 Resp: 120174

Ion	Ratio	Lower	Upper
69	100		
41	70.4	55.1	82.7
39	44.5	27.9	41.9#

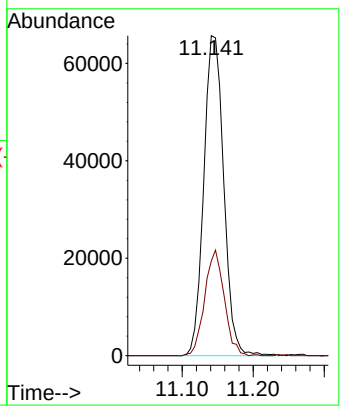




#57
1,3-Dichloropropane
Concen: 21.100 ug/l
RT: 11.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 76 Resp: 12830

Ion	Ratio	Lower	Upper
76	100		
78	32.4	26.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
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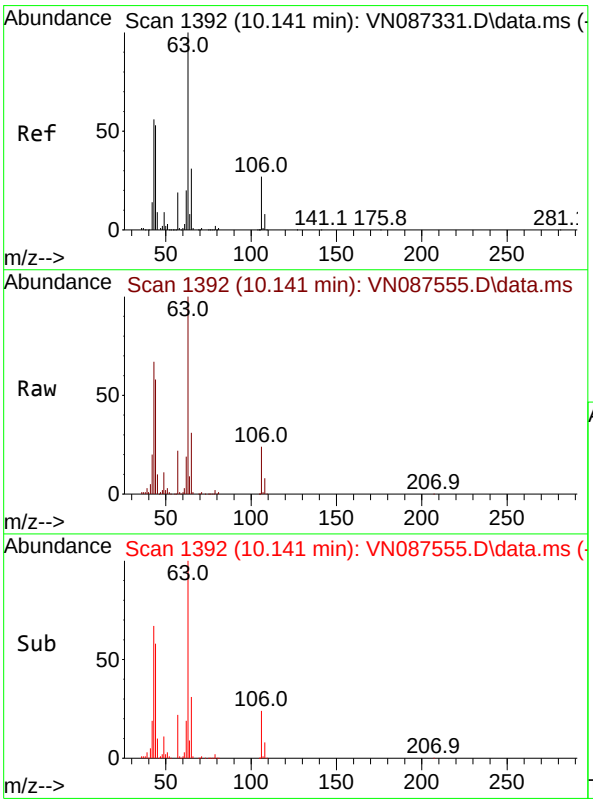
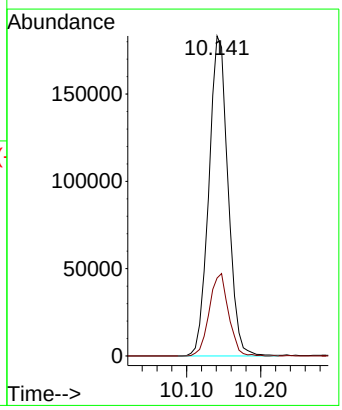
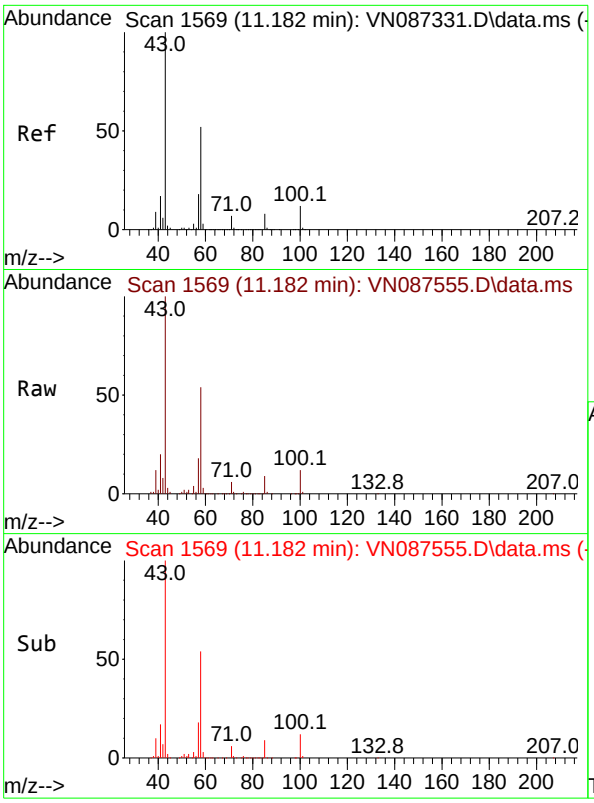


#58
2-Chloroethyl Vinyl ether
Concen: 113.893 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 63 Resp: 328582

Ion	Ratio	Lower	Upper
63	100		
106	25.9	21.7	32.5





#59
2-Hexanone
Concen: 103.681 ug/l
RT: 11.182 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 43132

Ion	Ratio	Lower	Upper
43	100		
58	51.5	26.7	80.0

Instrument :
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ClientSampleId :
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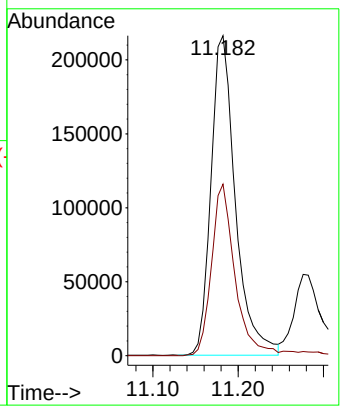
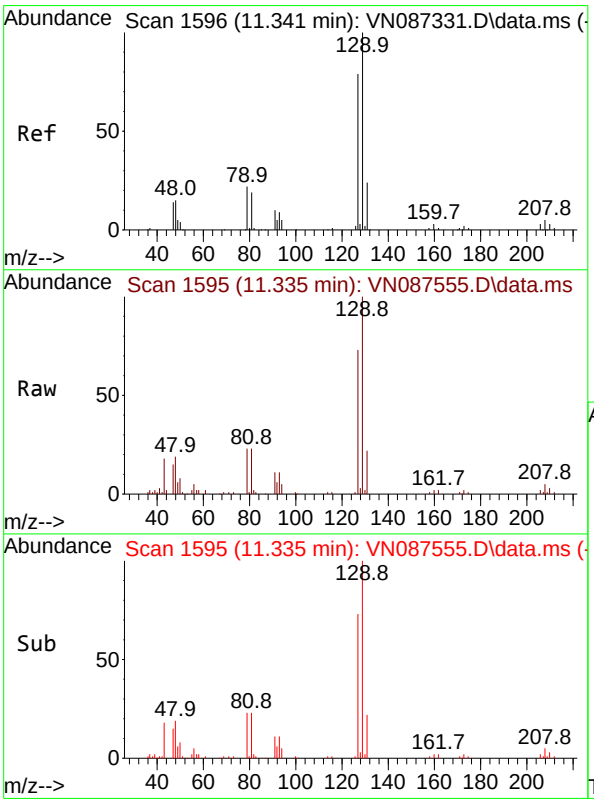
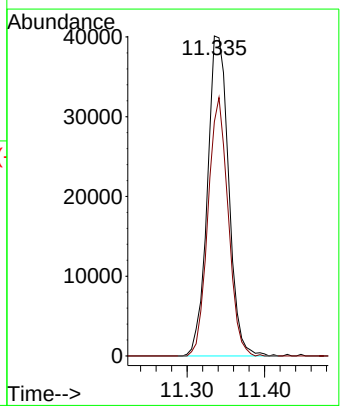


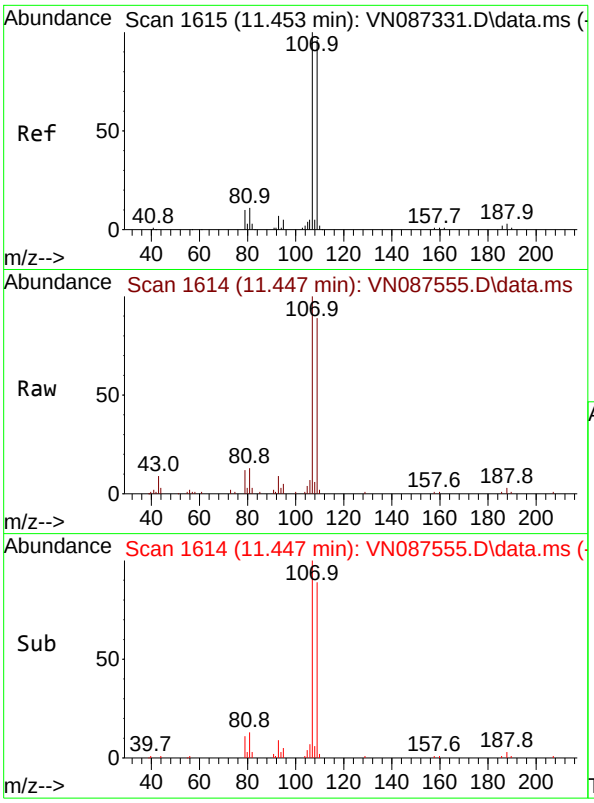


#60
Dibromochloromethane
Concen: 19.012 ug/l
RT: 11.335 min Scan# 1595
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:129 Resp: 76256

Ion	Ratio	Lower	Upper
129	100		
127	76.6	39.1	117.5

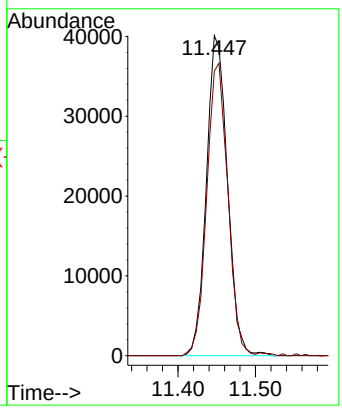




#61
1,2-Dibromoethane
Concen: 20.492 ug/l
RT: 11.447 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:107 Resp: 7577

Ion	Ratio	Lower	Upper
107	100		
109	91.5	77.5	116.3



Instrument :
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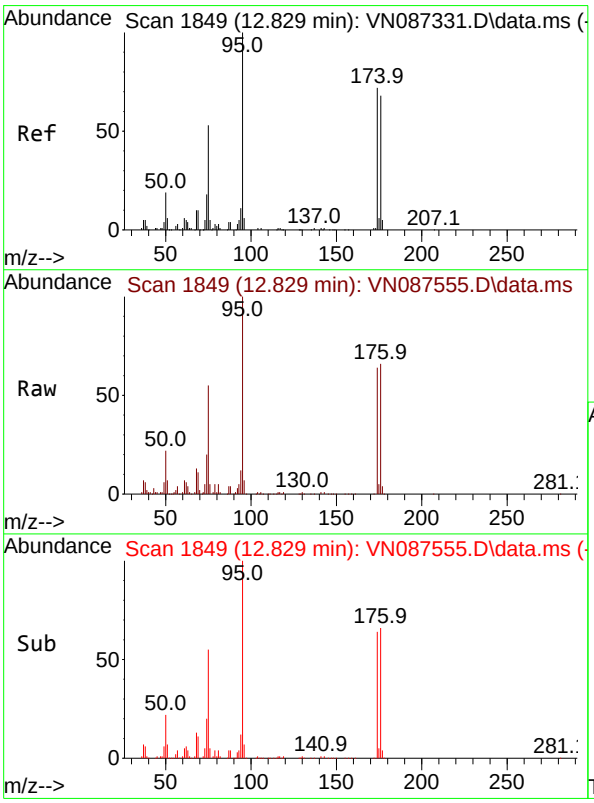
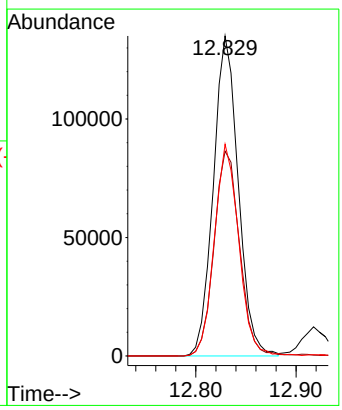
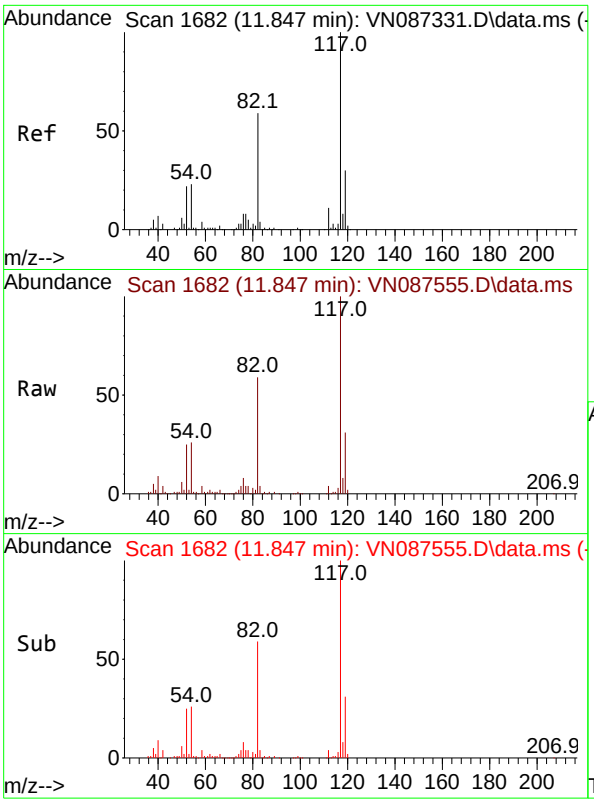


#62
4-Bromofluorobenzene
Concen: 52.926 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 95 Resp: 233458

Ion	Ratio	Lower	Upper
95	100		
174	65.4	0.0	149.4
176	64.8	0.0	141.2

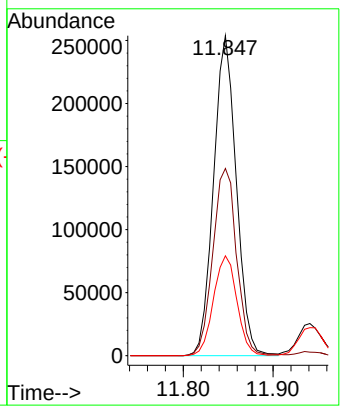




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:117 Resp: 44651

Ion	Ratio	Lower	Upper
117	100		
82	58.5	47.4	71.2
119	31.2	23.8	35.8



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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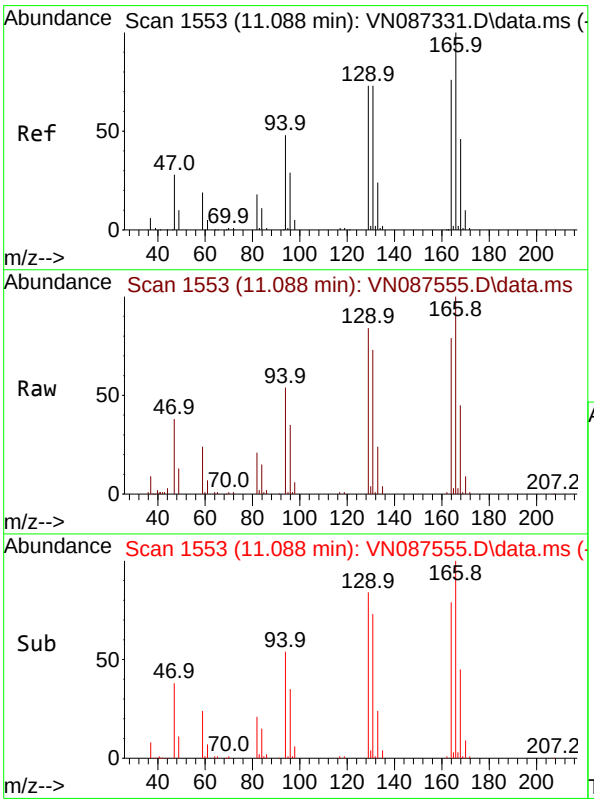
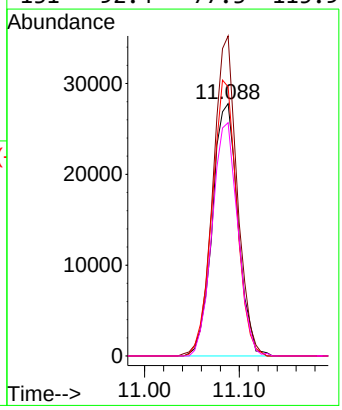
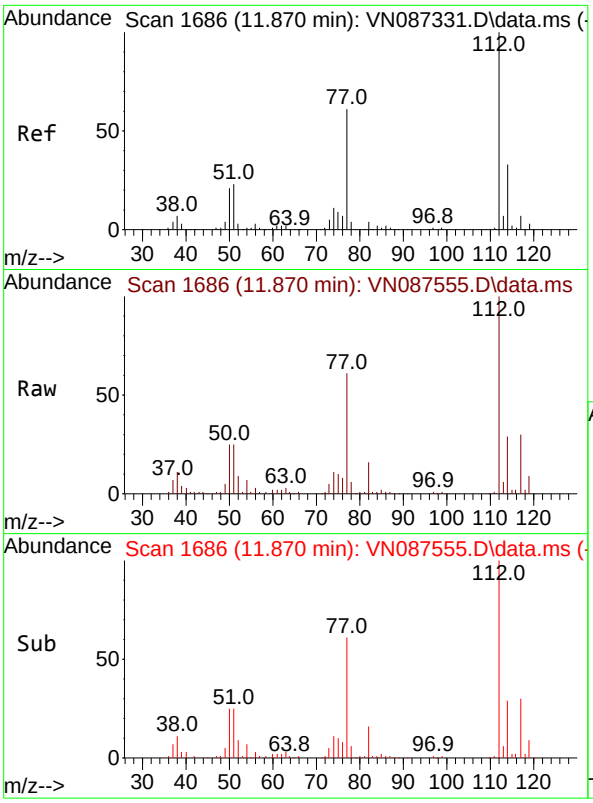


#64
Tetrachloroethene
Concen: 18.090 ug/l
RT: 11.088 min Scan# 1553
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:164 Resp: 51988

Ion	Ratio	Lower	Upper
164	100		
166	126.8	105.5	158.3
129	106.6	77.4	116.2
131	92.4	77.3	115.9

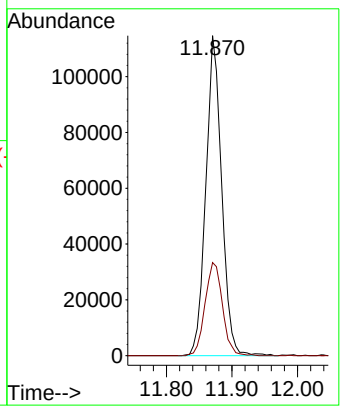




#65
Chlorobenzene
Concen: 19.244 ug/l
RT: 11.870 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:112 Resp: 19291

Ion	Ratio	Lower	Upper
112	100		
114	29.1	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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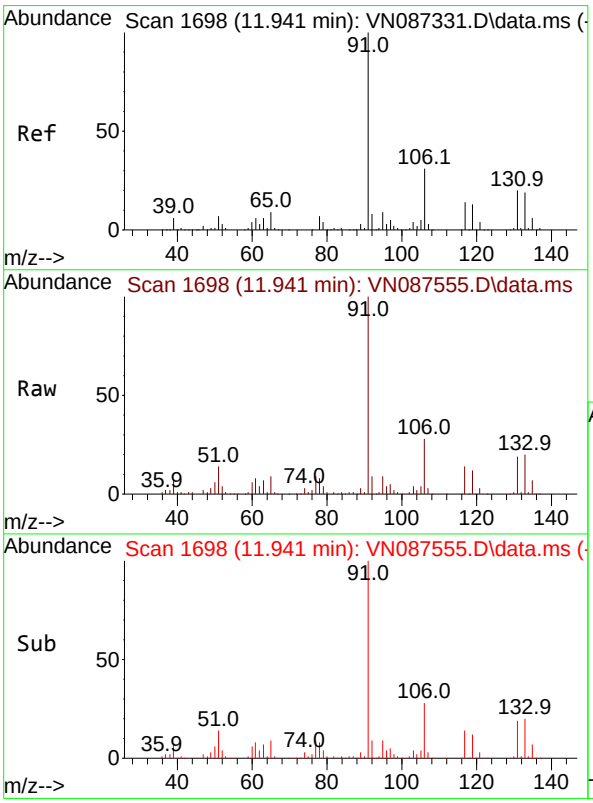
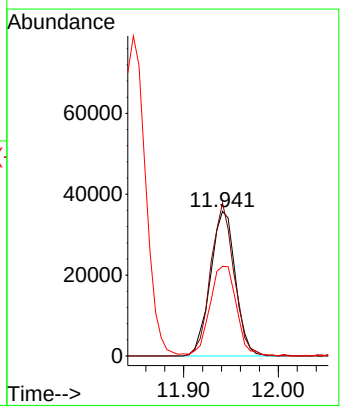
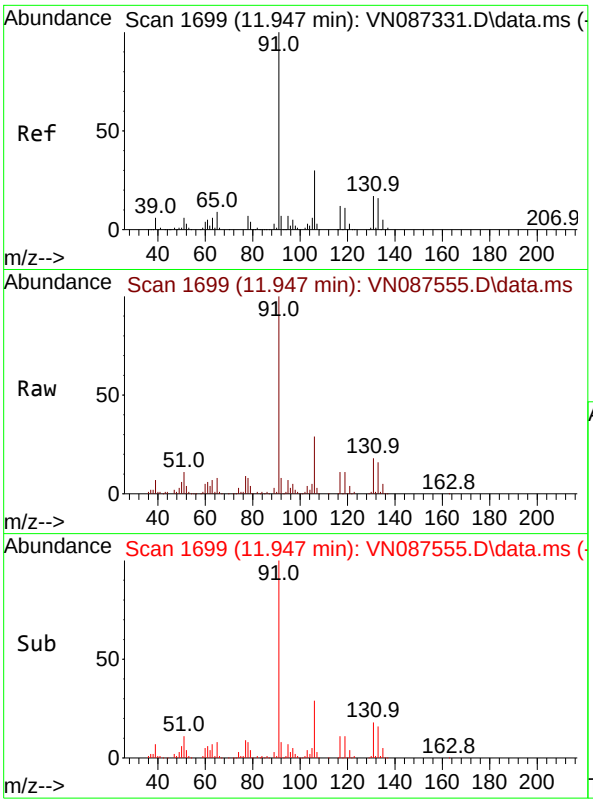


#66
1,1,1,2-Tetrachloroethane
Concen: 19.247 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:131 Resp: 65609

Ion	Ratio	Lower	Upper
131	100		
133	98.9	47.4	142.3
119	65.8	33.1	99.2





#67
Ethyl Benzene
Concen: 20.367 ug/l
RT: 11.947 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 91 Resp: 33612

Ion	Ratio	Lower	Upper
91	100		
106	29.4	24.3	36.5

Instrument :
MSVOA_N
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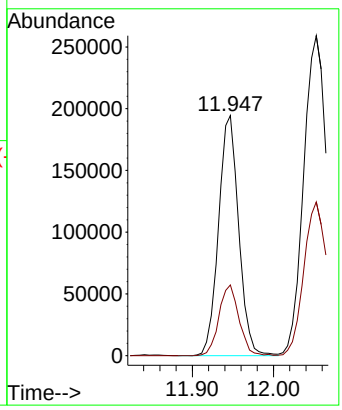
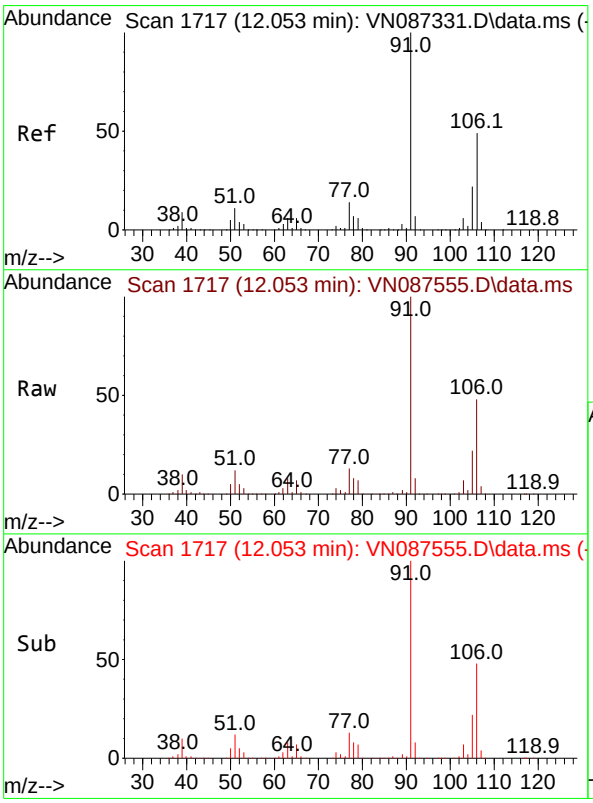
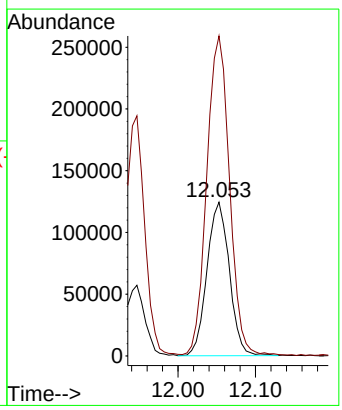


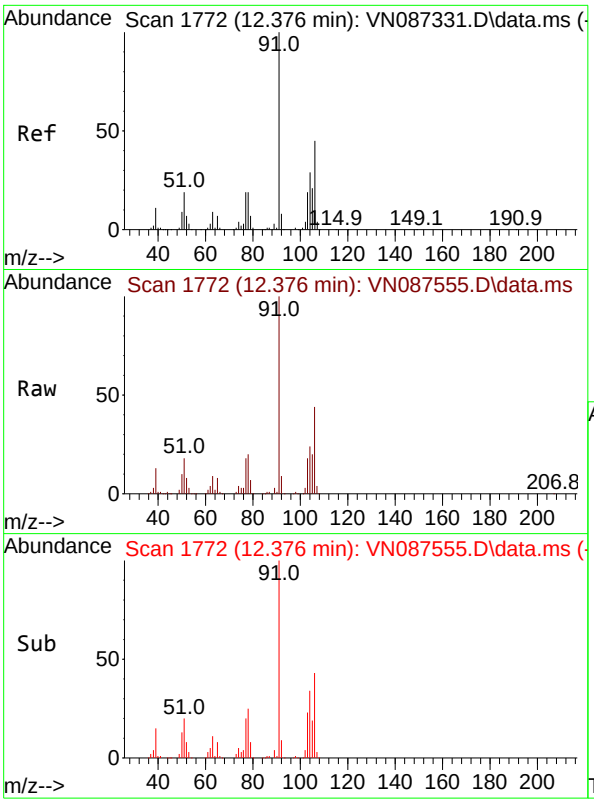


#68
m/p-Xylenes
Concen: 40.389 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:106 Resp: 249595

Ion	Ratio	Lower	Upper
106	100		
91	211.9	162.0	243.0

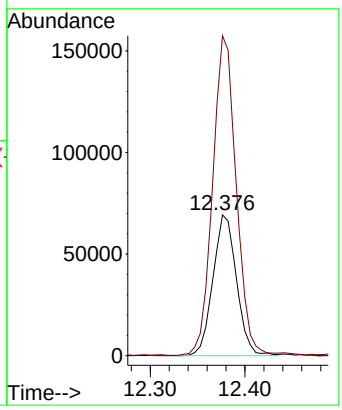




#69
o-Xylene
Concen: 20.320 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:106 Resp: 11995

Ion	Ratio	Lower	Upper
106	100		
91	227.3	107.7	323.3



Instrument :
MSVOA_N
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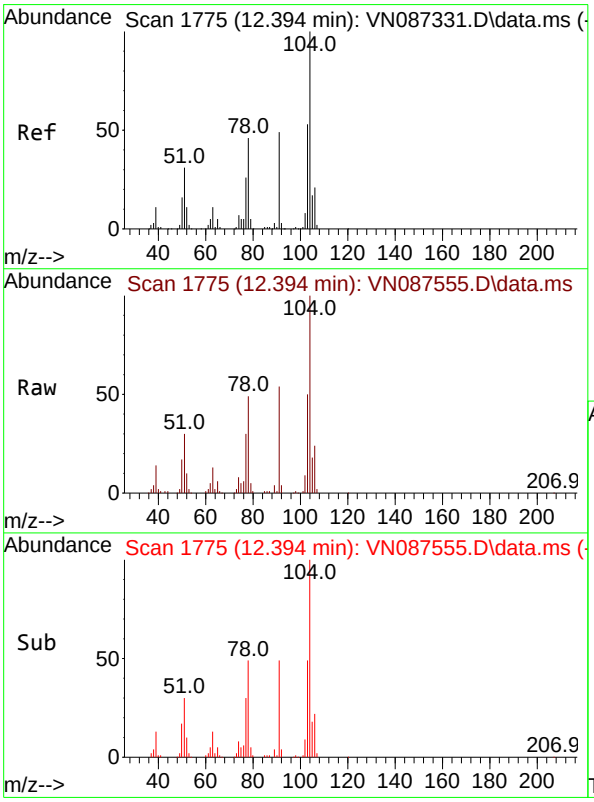
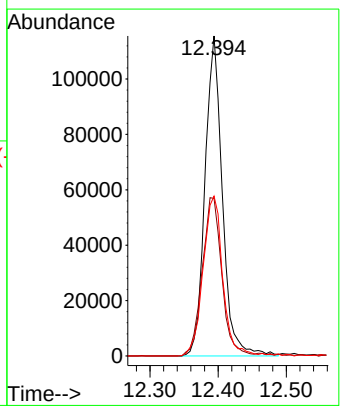
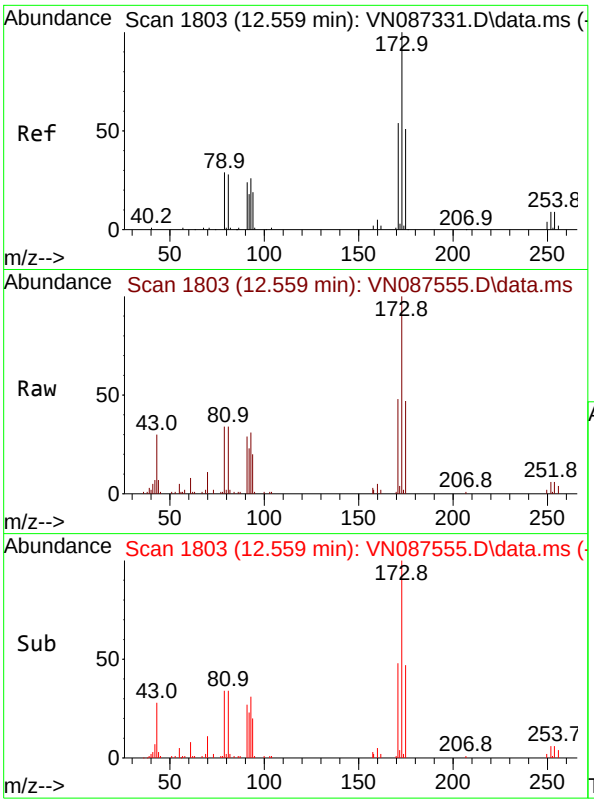


#70
Styrene
Concen: 20.649 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:104 Resp: 205053

Ion	Ratio	Lower	Upper
104	100		
78	55.7	41.0	61.6
103	56.6	43.9	65.9





#71
Bromoform
Concen: 17.538 ug/l
RT: 12.559 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:173 Resp: 4829

Ion	Ratio	Lower	Upper
173	100		
175	48.7	24.1	72.3
254	0.0	0.0	0.0

Instrument :
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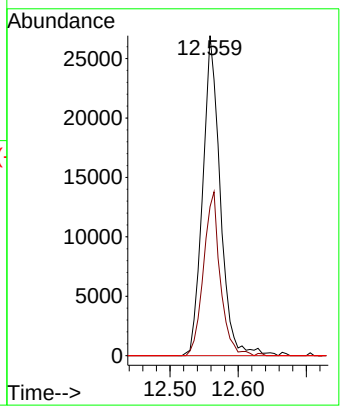
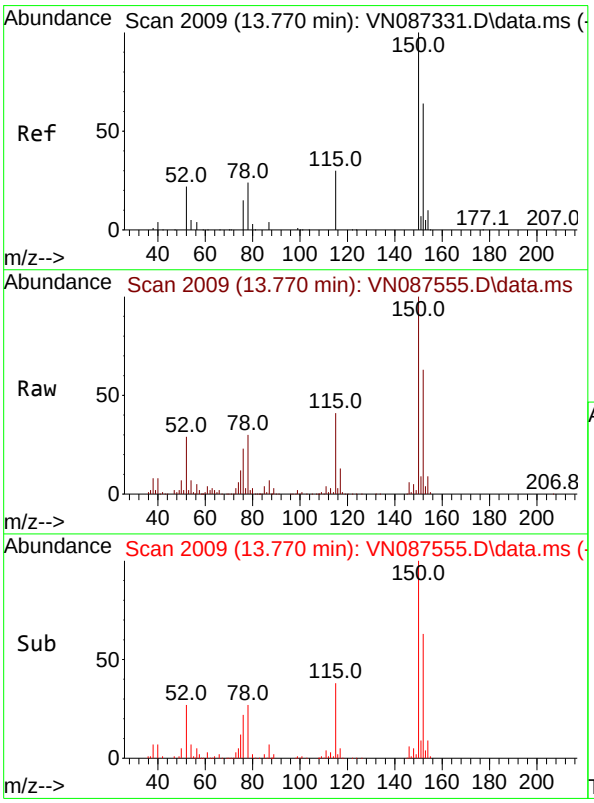
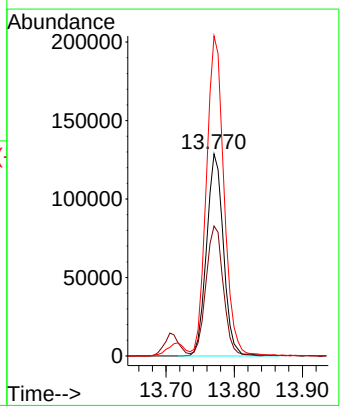


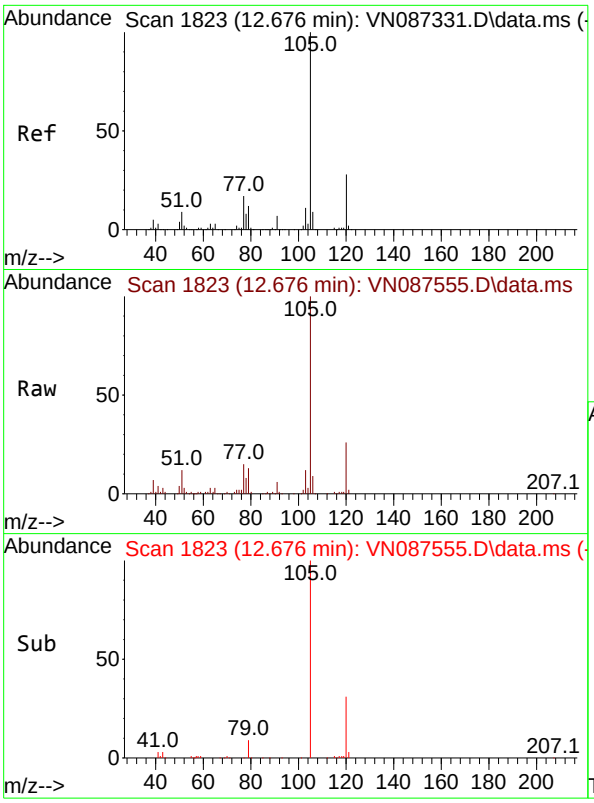


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:152 Resp: 221983

Ion	Ratio	Lower	Upper
152	100		
115	65.8	31.1	93.5
150	165.1	0.0	349.0

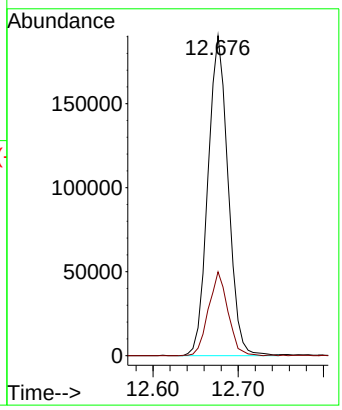




#73
Isopropylbenzene
Concen: 22.495 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:105 Resp: 31428

Ion	Ratio	Lower	Upper
105	100		
120	25.2	13.4	40.1



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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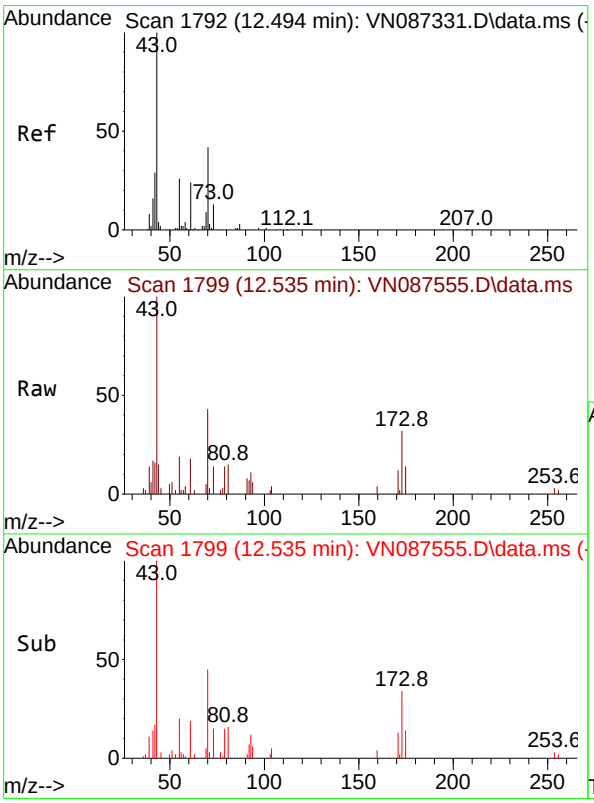
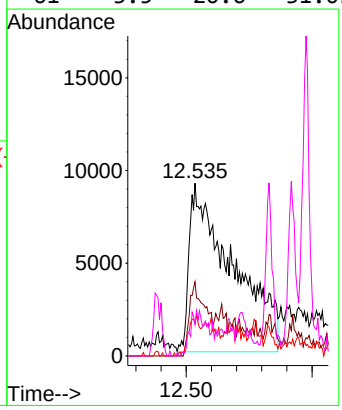
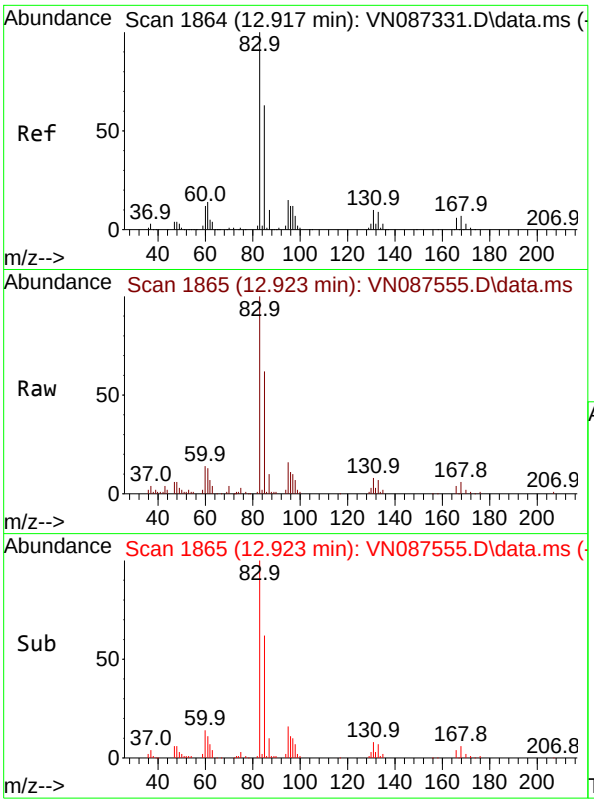


#74
N-amyl acetate
Concen: 18.694 ug/l m
RT: 12.535 min Scan# 1799
Delta R.T. 0.041 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 43 Resp: 108512

Ion	Ratio	Lower	Upper
43	100		
70	16.4	37.6	56.4#
55	3.6	19.6	29.4#
61	3.5	20.6	31.0#





#75
1,1,2,2-Tetrachloroethane
Concen: 21.882 ug/l
RT: 12.923 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 83 Resp: 11503

Ion	Ratio	Lower	Upper
83	100		
131	9.5	5.1	15.3
85	64.1	32.5	97.4

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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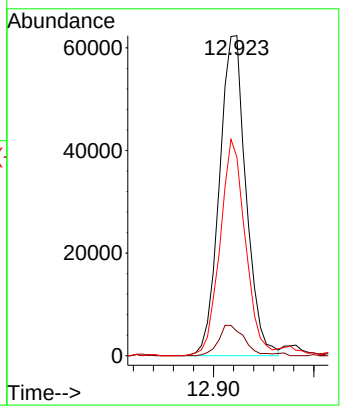
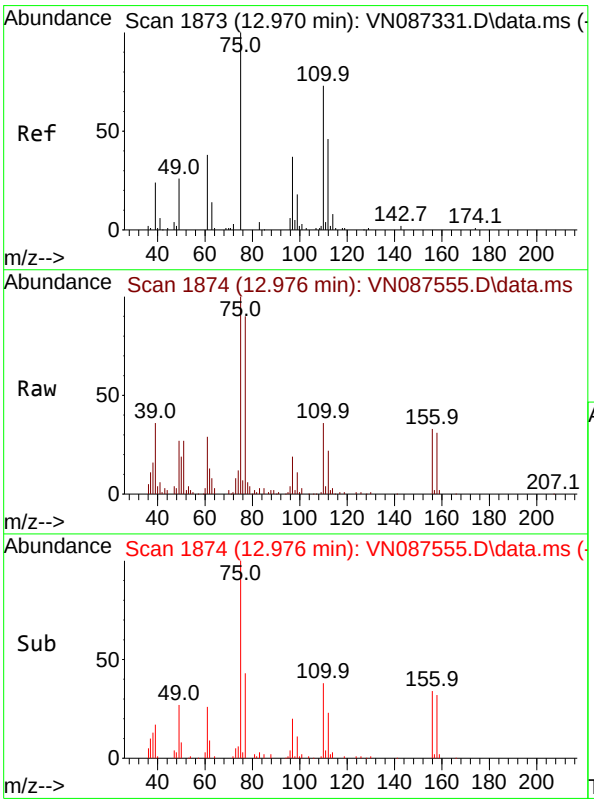
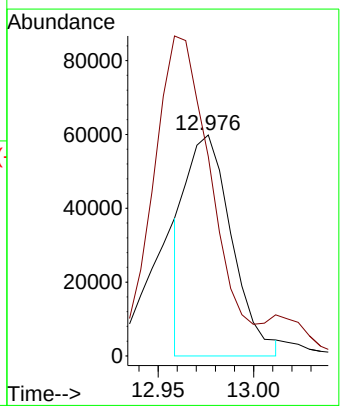


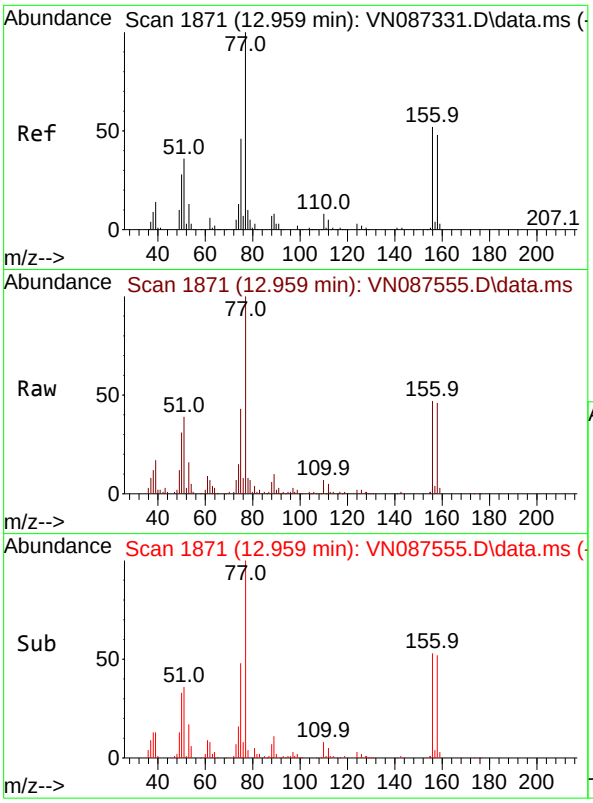


#76
1,2,3-Trichloropropane
Concen: 20.143 ug/l m
RT: 12.976 min Scan# 1874
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 75 Resp: 100267

Ion	Ratio	Lower	Upper
75	100		
77	182.8	94.5	283.6

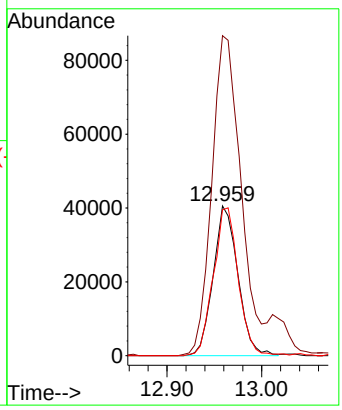




#77
Bromobenzene
Concen: 20.297 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:156 Resp: 7354

Ion	Ratio	Lower	Upper
156	100		
77	249.2	114.9	344.6
158	99.8	48.5	145.5



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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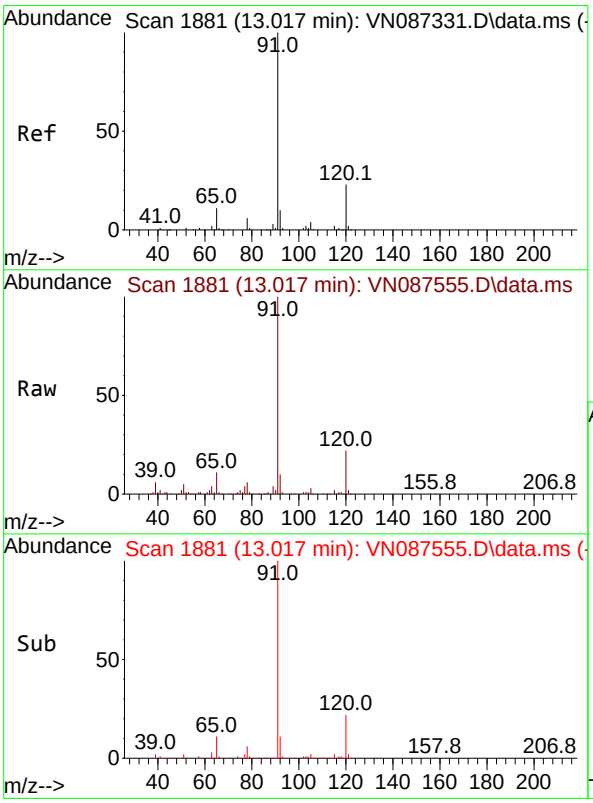
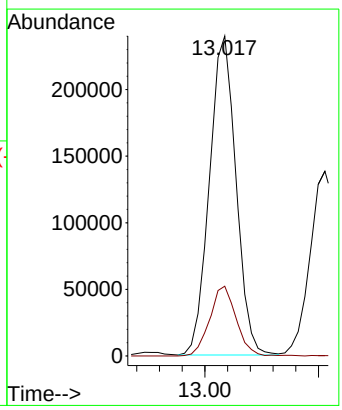
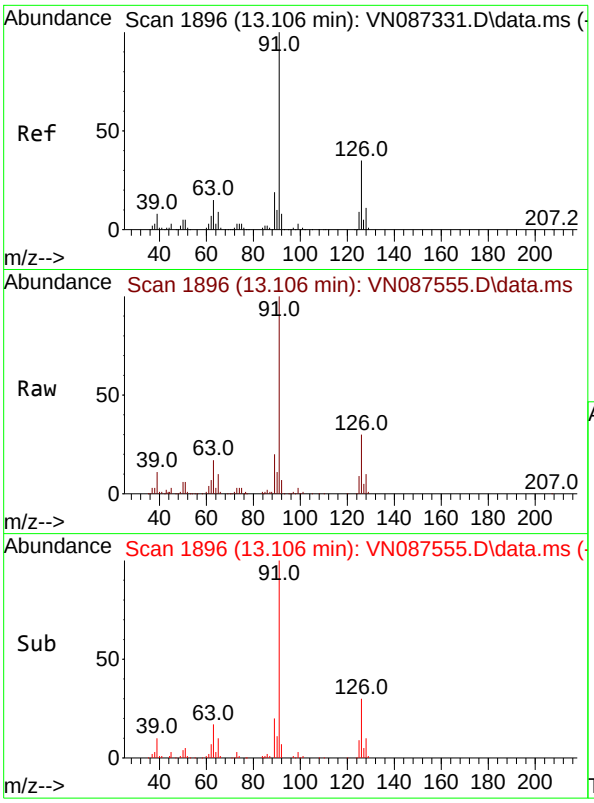


#78
n-propylbenzene
Concen: 22.160 ug/l
RT: 13.017 min Scan# 1881
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 91 Resp: 389520

Ion	Ratio	Lower	Upper
91	100		
120	21.8	11.3	33.8

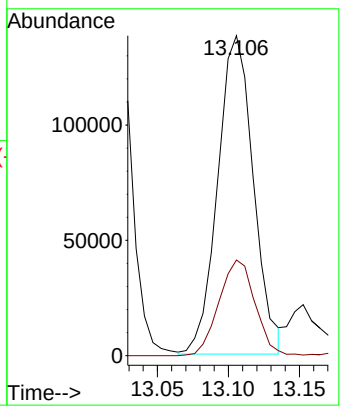




#79
2-Chlorotoluene
Concen: 22.353 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 91 Resp: 24147

Ion	Ratio	Lower	Upper
91	100		
126	30.3	16.9	50.6



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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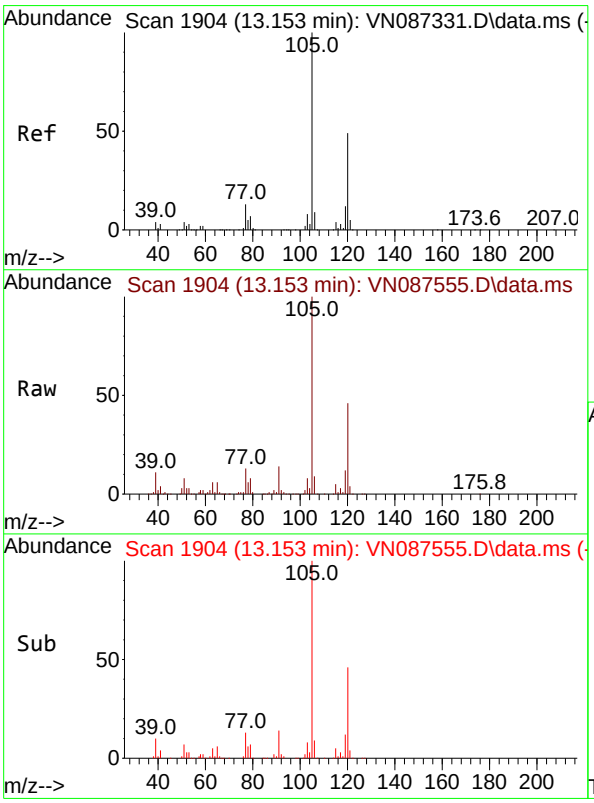
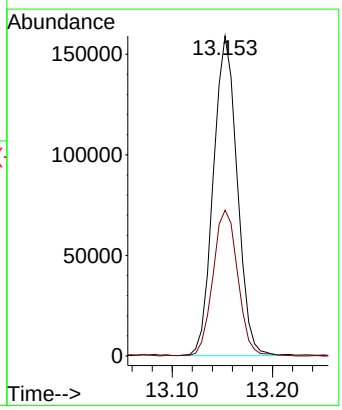
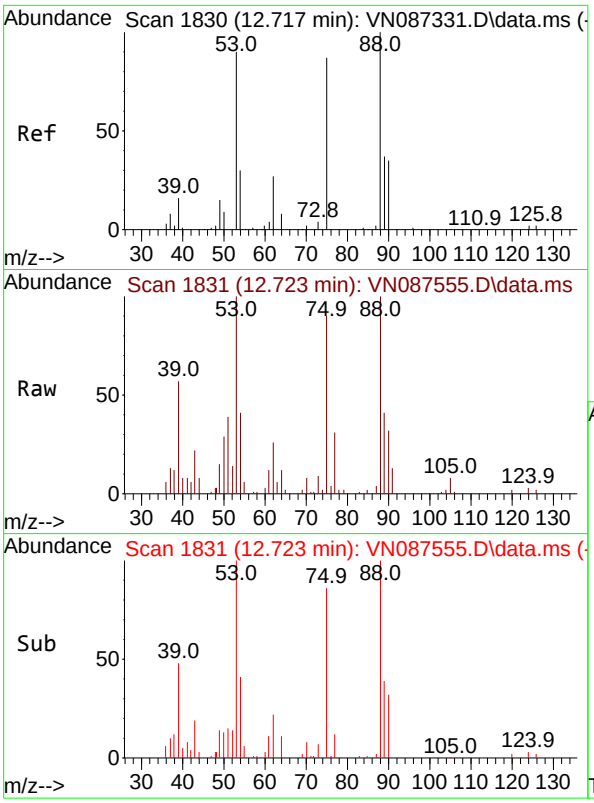


#80
1,3,5-Trimethylbenzene
Concen: 22.029 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:105 Resp: 262222

Ion	Ratio	Lower	Upper
105	100		
120	47.6	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 17.698 ug/l
RT: 12.723 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 75 Resp: 3219

Ion	Ratio	Lower	Upper
75	100		
53	117.4	83.5	125.3
89	49.5	38.4	57.6

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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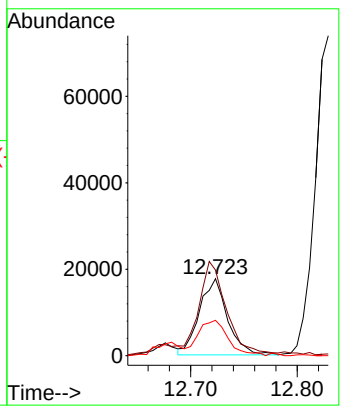
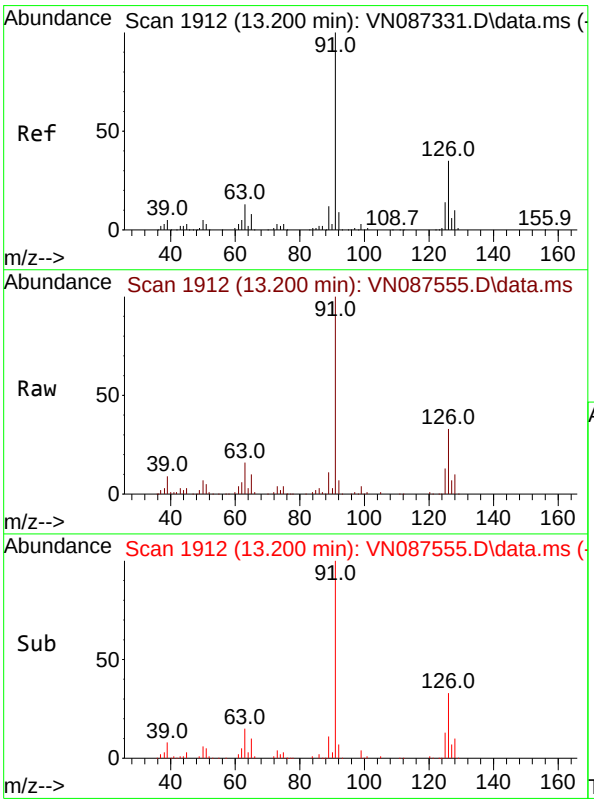
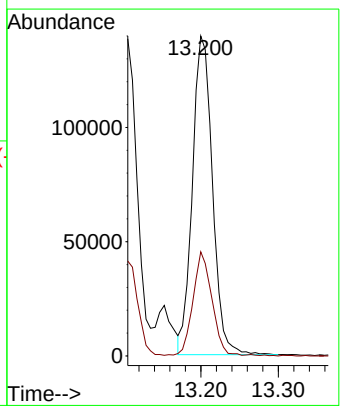


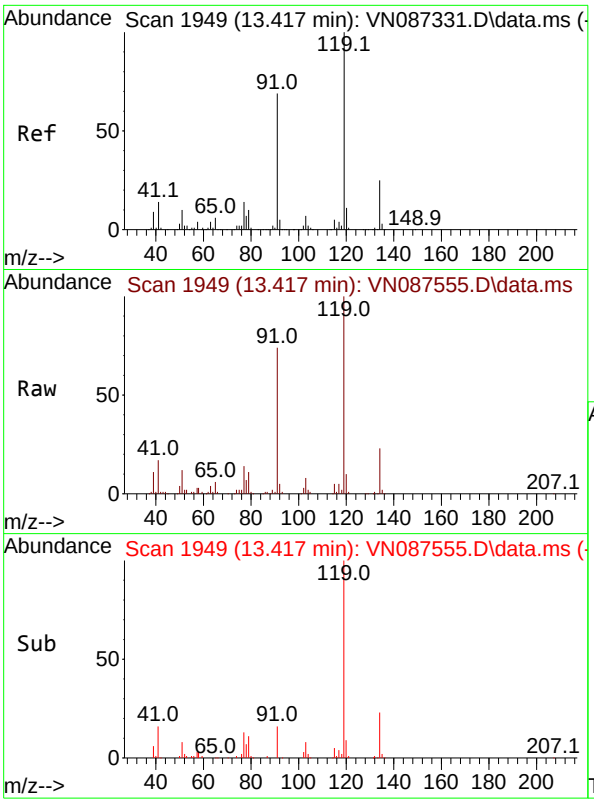


#82
4-Chlorotoluene
Concen: 22.292 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 91 Resp: 250722

Ion	Ratio	Lower	Upper
91	100		
126	30.5	16.6	49.7

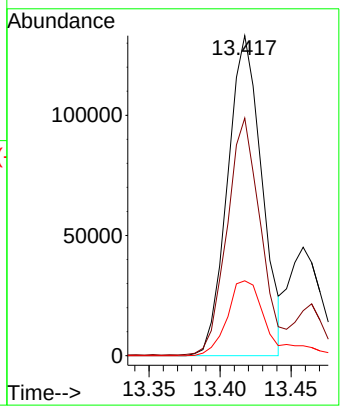




#83
tert-Butylbenzene
Concen: 22.422 ug/l
RT: 13.417 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:119 Resp: 22291

Ion	Ratio	Lower	Upper
119	100		
91	73.3	35.0	105.1
134	27.2	12.6	37.6



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
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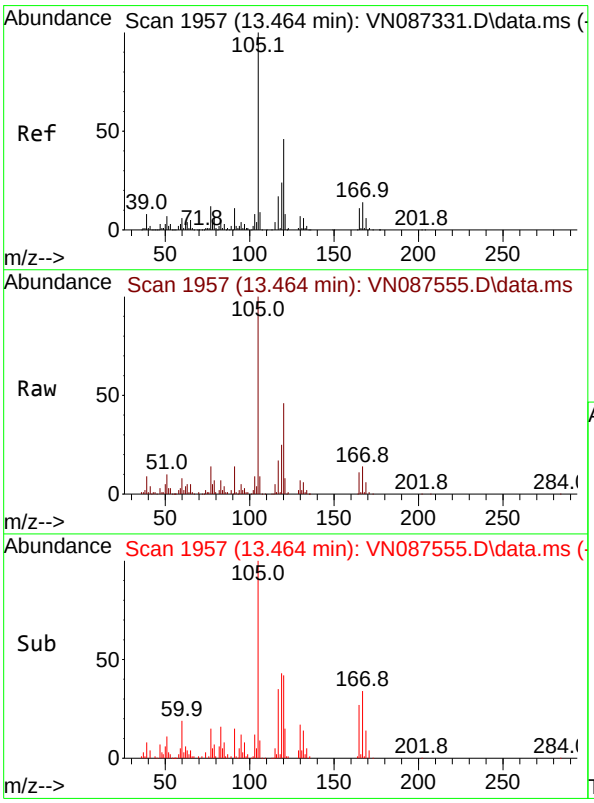
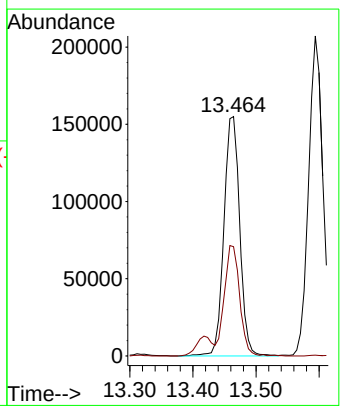
Reviewed By :John Carlone 08/18/2025
Supervised By :Mahesh Dadoda 08/19/2025

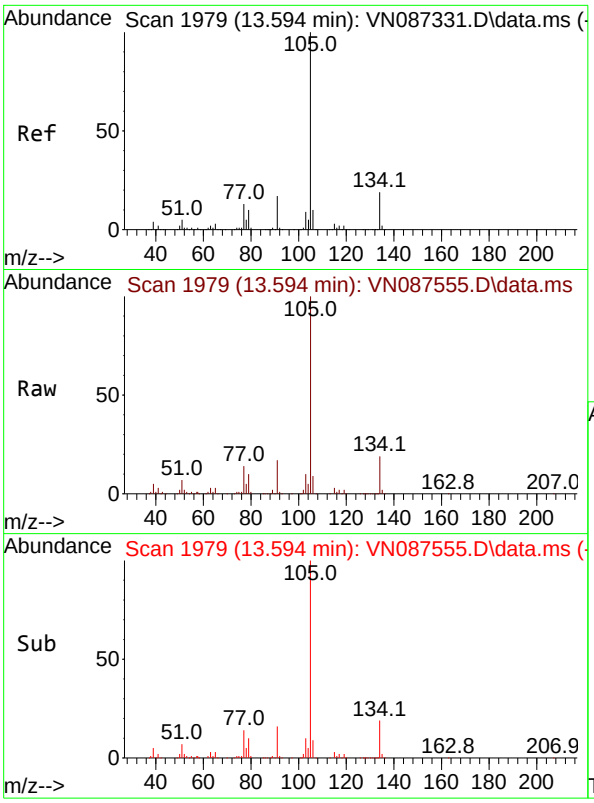


#84
1,2,4-Trimethylbenzene
Concen: 22.169 ug/l
RT: 13.464 min Scan# 1957
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:105 Resp: 269488

Ion	Ratio	Lower	Upper
105	100		
120	44.7	22.8	68.3

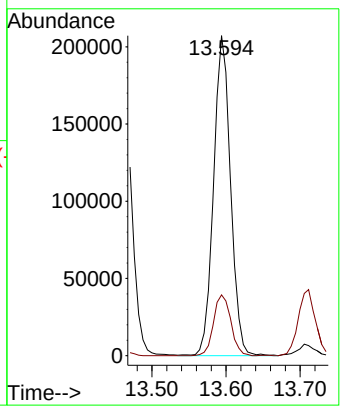




#85
sec-Butylbenzene
Concen: 21.998 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:105 Resp: 32943

Ion	Ratio	Lower	Upper
105	100		
134	19.3	9.8	29.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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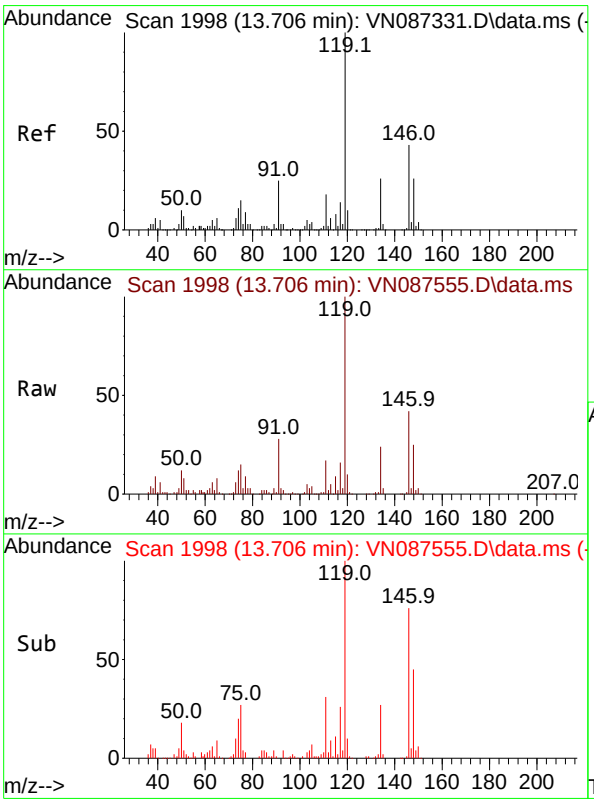
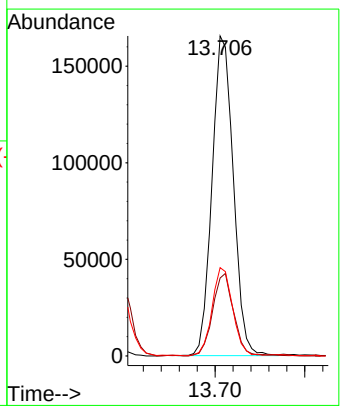
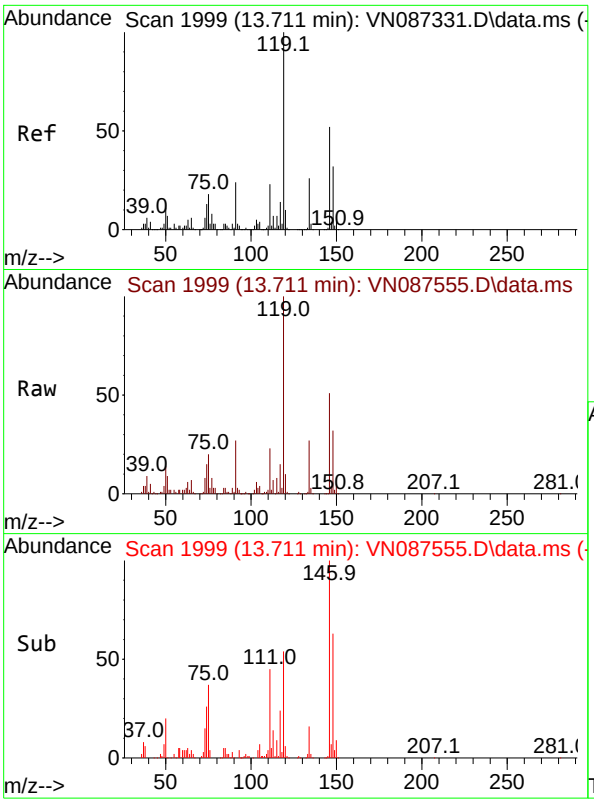


#86
p-Isopropyltoluene
Concen: 22.671 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:119 Resp: 272080

Ion	Ratio	Lower	Upper
119	100		
134	25.6	13.5	40.5
91	26.4	12.2	36.6

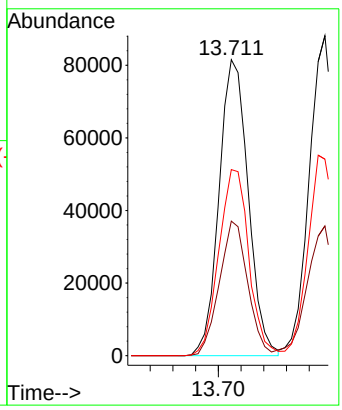




#87
1,3-Dichlorobenzene
Concen: 20.458 ug/l
RT: 13.711 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:146 Resp: 14548

Ion	Ratio	Lower	Upper
146	100		
111	44.2	21.4	64.3
148	64.7	31.6	95.0



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
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Reviewed By :John Carlone 08/18/2025
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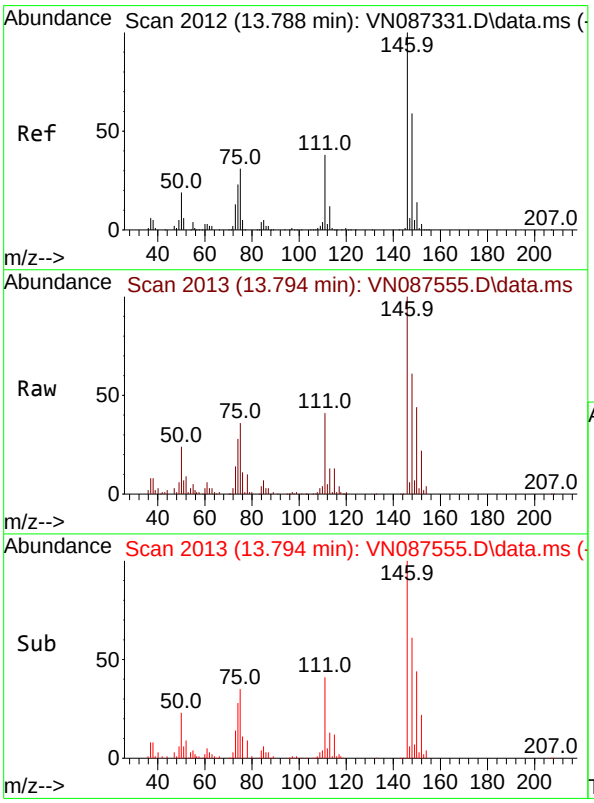
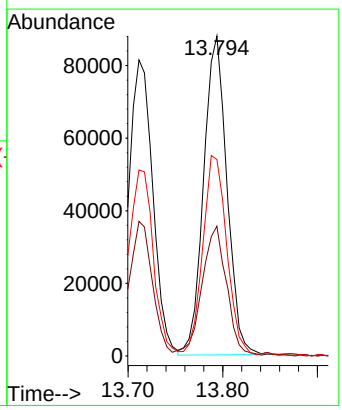
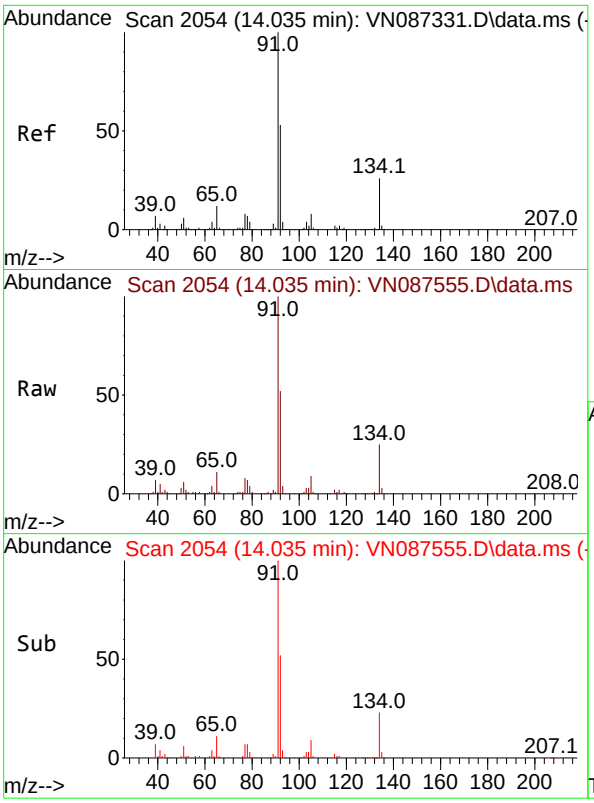


#88
1,4-Dichlorobenzene
Concen: 19.766 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:146 Resp: 150121

Ion	Ratio	Lower	Upper
146	100		
111	42.6	19.6	58.7
148	64.2	31.4	94.0

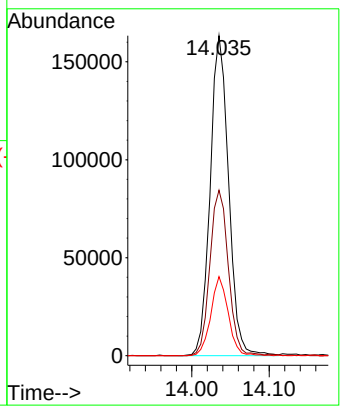




#89
n-Butylbenzene
Concen: 23.593 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 91 Resp: 27037

Ion	Ratio	Lower	Upper
91	100		
92	51.6	26.2	78.6
134	23.3	12.4	37.2



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
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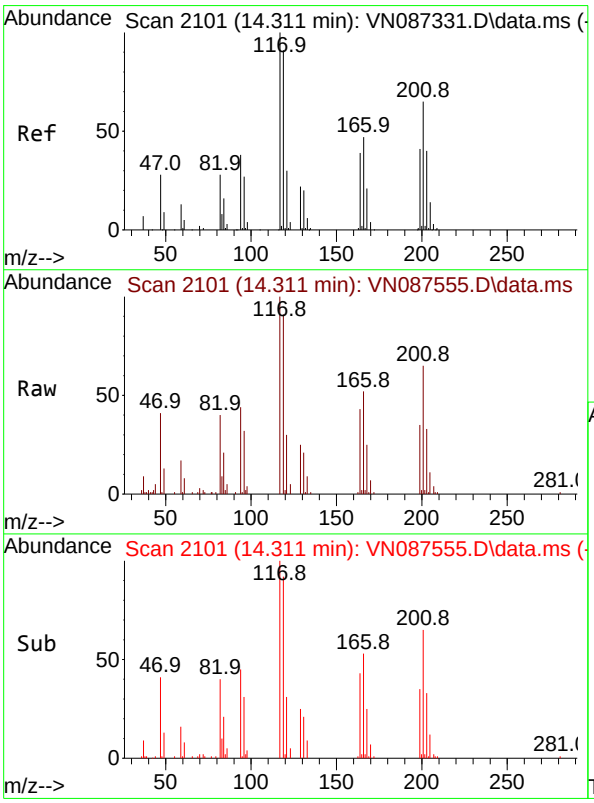
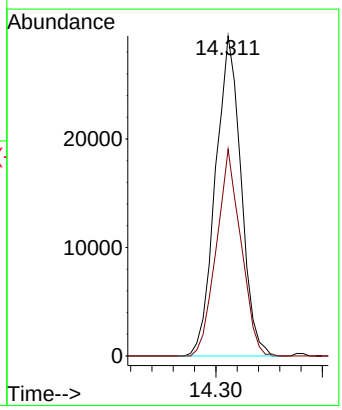
Reviewed By :John Carlone 08/18/2025
Supervised By :Mahesh Dadoda 08/19/2025

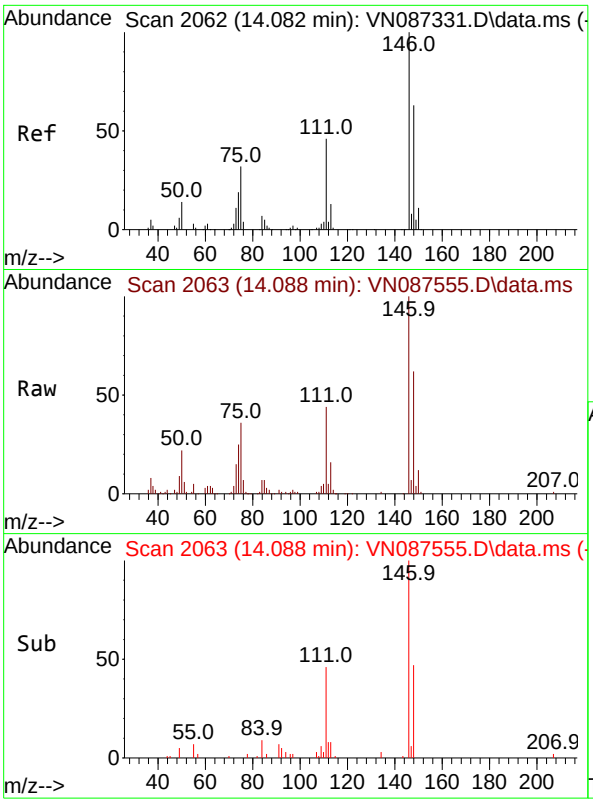


#90
Hexachloroethane
Concen: 19.285 ug/l
RT: 14.311 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:117 Resp: 49037

Ion	Ratio	Lower	Upper
117	100		
201	62.3	32.8	98.4

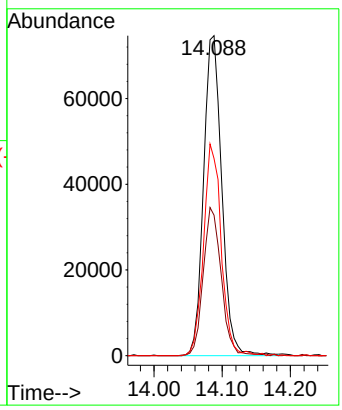




#91
1,2-Dichlorobenzene
Concen: 20.620 ug/l
RT: 14.088 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:146 Resp: 13891

Ion	Ratio	Lower	Upper
146	100		
111	46.0	22.0	66.0
148	64.4	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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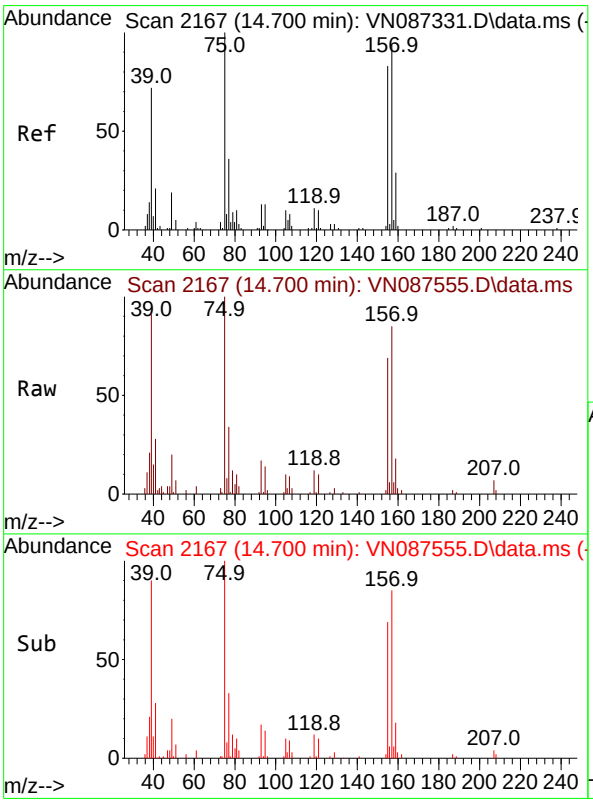
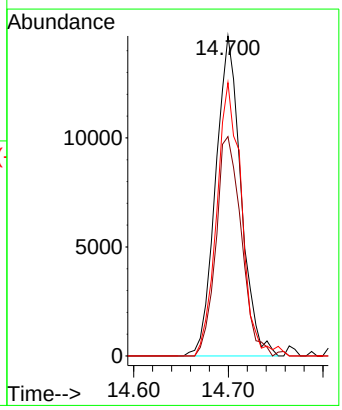
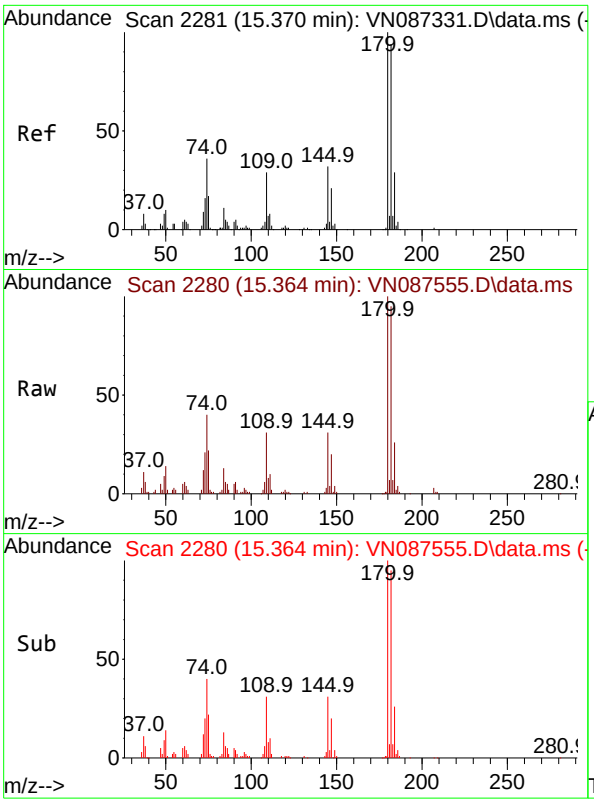


#92
1,2-Dibromo-3-Chloropropane
Concen: 19.792 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. -0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion: 75 Resp: 27318

Ion	Ratio	Lower	Upper
75	100		
155	69.0	37.3	111.8
157	83.3	46.2	138.6





#93
1,2,4-Trichlorobenzene
Concen: 21.036 ug/l
RT: 15.364 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Tgt Ion:180 Resp: 8324

Ion	Ratio	Lower	Upper
180	100		
182	94.2	47.3	141.8
145	31.6	15.4	46.4

Manual Integrations
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Reviewed By :John Carlone 08/18/2025
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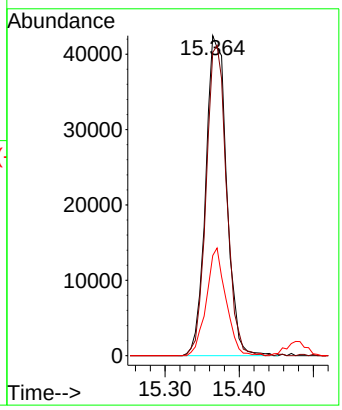
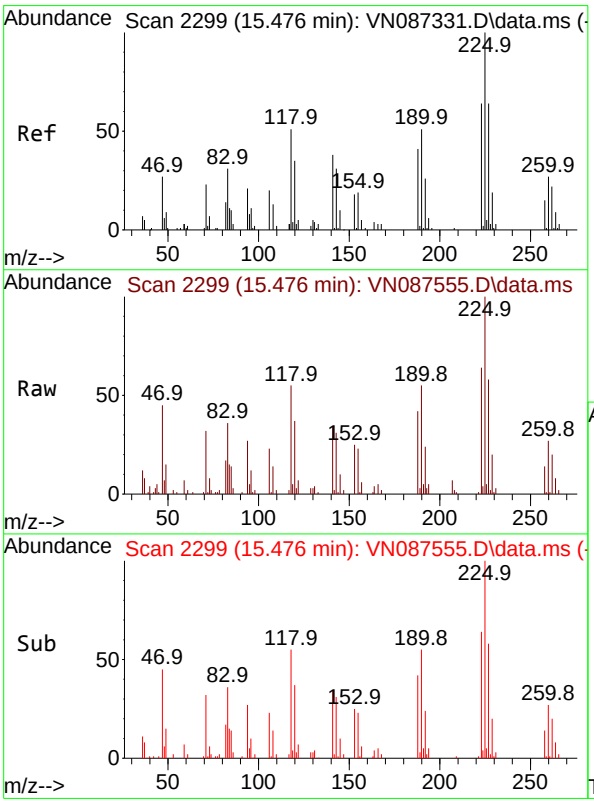
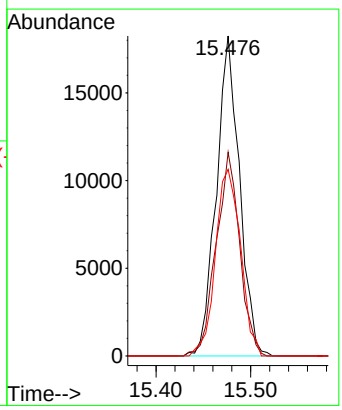


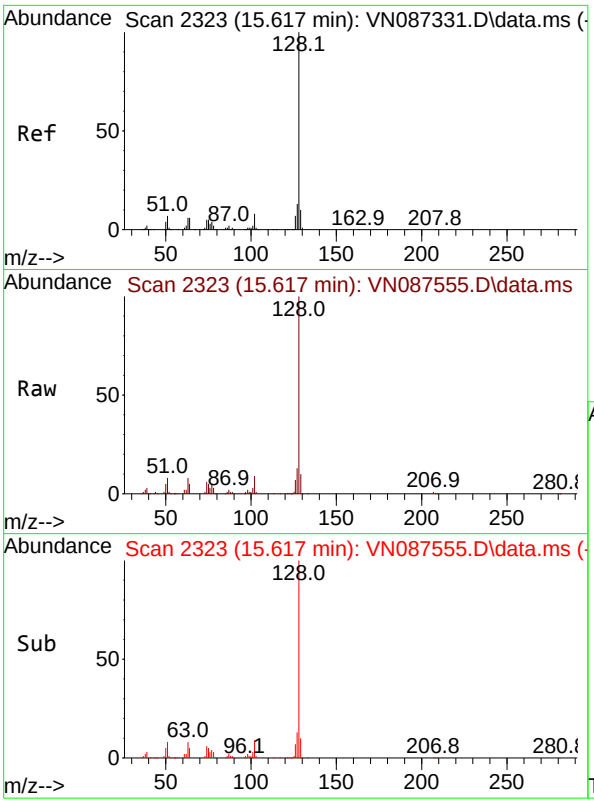


#94
Hexachlorobutadiene
Concen: 21.127 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:225 Resp: 31065

Ion	Ratio	Lower	Upper
225	100		
223	64.6	32.1	96.3
227	63.2	31.3	93.9

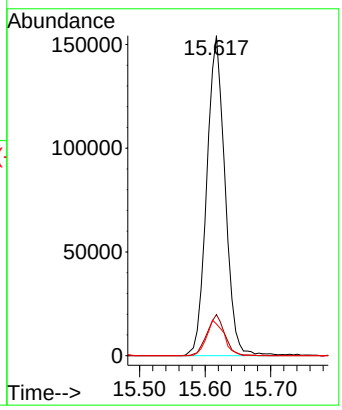




#95
Naphthalene
Concen: 21.296 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:128 Resp: 29855

Ion	Ratio	Lower	Upper
128	100		
127	12.4	10.5	15.7
129	10.7	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
APPROVED

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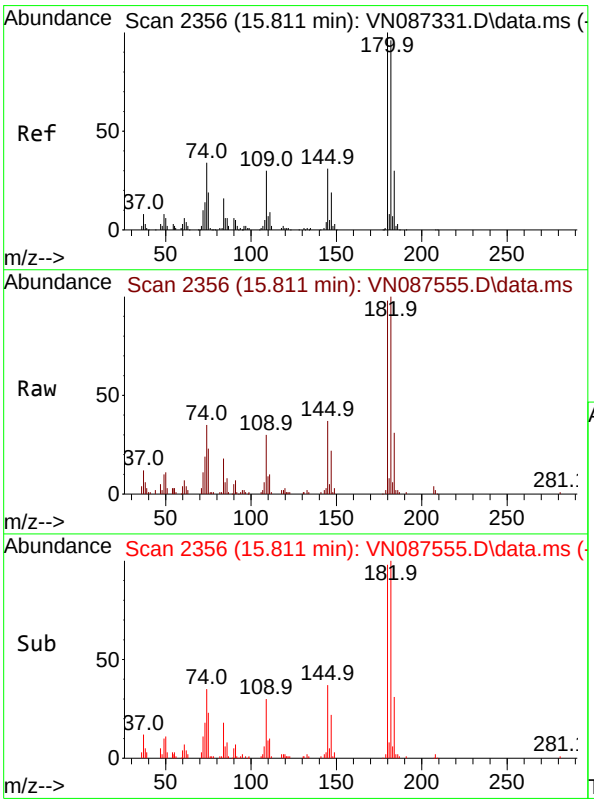
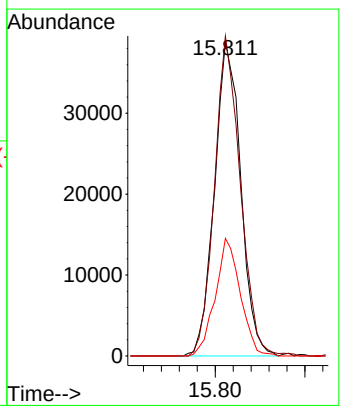


#96
1,2,3-Trichlorobenzene
Concen: 19.891 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087555.D
Acq: 14 Aug 2025 11:07

Tgt Ion:180 Resp: 78959

Ion	Ratio	Lower	Upper
180	100		
182	100.0	47.1	141.4
145	35.6	16.9	50.6



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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/12/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	08/12/25
Client Sample ID:	MW-17B-55.5-081225MS	SDG No.:	Q2842
Lab Sample ID:	Q2842-04MS	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087569.D	100	08/14/25 16:27	VN081425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5400		26.0	100	ug/L
75-35-4	1,1-Dichloroethene	5200		23.0	100	ug/L
75-34-3	1,1-Dichloroethane	5300		23.0	100	ug/L
156-59-2	cis-1,2-Dichloroethene	8100		19.0	100	ug/L
71-55-6	1,1,1-Trichloroethane	5400		20.0	100	ug/L
71-43-2	Benzene	5100		15.0	100	ug/L
107-06-2	1,2-Dichloroethane	5500		22.0	100	ug/L
79-01-6	Trichloroethene	10000		9.30	100	ug/L
79-00-5	1,1,2-Trichloroethane	5300		21.0	100	ug/L
127-18-4	Tetrachloroethene	4300		23.0	100	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.8		70 (74) - 130 (125)	108%	SPK: 50
1868-53-7	Dibromofluoromethane	47.9		70 (75) - 130 (124)	96%	SPK: 50
2037-26-5	Toluene-d8	47.9		70 (86) - 130 (113)	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.7		70 (77) - 130 (121)	103%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	238000	8.206			
540-36-3	1,4-Difluorobenzene	461000	9.083			
3114-55-4	Chlorobenzene-d5	435000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	232000	13.77			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087569.D
Acq On : 14 Aug 2025 16:27
Operator : JC\MD
Sample : Q2842-04MS 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 14 19:59:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	238067	50.000	ug/l	# 0.00
34) 1,4-Difluorobenzene	9.083	114	461160	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	435202	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	231778	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	217494	53.842	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 107.680%			
35) Dibromofluoromethane	8.153	113	152403	47.909	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 95.820%			
50) Toluene-d8	10.547	98	543343	47.883	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 95.760%			
62) 4-Bromofluorobenzene	12.829	95	216897	51.737	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 103.480%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	143419	56.720	ug/l	100
3) Chloromethane	2.383	50	152078	47.827	ug/l	100
4) Vinyl Chloride	2.542	62	169468	53.629	ug/l	95
5) Bromomethane	2.971	94	89339	54.595	ug/l	96
6) Chloroethane	3.136	64	114275	55.452	ug/l	97
7) Trichlorofluoromethane	3.501	101	253745	54.304	ug/l	97
8) Diethyl Ether	3.965	74	112077	61.834	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.359	101	138606	57.785	ug/l	95
10) Methyl Iodide	4.577	142	91710	38.610	ug/l	91
11) Tert butyl alcohol	5.536	59	219902	286.700	ug/l	100
12) 1,1-Dichloroethene	4.330	96	140041	51.521	ug/l	99
13) Acrolein	4.177	56	135355	219.895	ug/l	99
14) Allyl chloride	5.012	41	254609	51.759	ug/l	94
15) Acrylonitrile	5.712	53	562090	270.058	ug/l	98
16) Acetone	4.430	43	530238	279.957	ug/l	98
17) Carbon Disulfide	4.700	76	356757	44.270	ug/l #	93
18) Methyl Acetate	5.018	43	302650	63.602	ug/l	100
19) Methyl tert-butyl Ether	5.789	73	601237	60.011	ug/l	96
20) Methylene Chloride	5.265	84	169920	53.111	ug/l	99
21) trans-1,2-Dichloroethene	5.771	96	153170	49.977	ug/l	93
22) Diisopropyl ether	6.659	45	612749	59.384	ug/l	97
23) Vinyl Acetate	6.594	43	2775483	307.552	ug/l	99
24) 1,1-Dichloroethane	6.553	63	318408	53.488	ug/l	98
25) 2-Butanone	7.471	43	850355	290.579	ug/l	98
26) 2,2-Dichloropropane	7.471	77	249304	53.865	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	284580	80.651	ug/l	97
28) Bromochloromethane	7.800	49	143451	50.351	ug/l	93
29) Tetrahydrofuran	7.830	42	541901	285.049	ug/l	99
30) Chloroform	7.953	83	341066	57.240	ug/l	99
31) Cyclohexane	8.241	56	253936	51.134	ug/l	96
32) 1,1,1-Trichloroethane	8.153	97	279470	54.153	ug/l	97
36) 1,1-Dichloropropene	8.353	75	214559	51.052	ug/l	98
37) Ethyl Acetate	7.553	43	307770	50.705	ug/l	98
38) Carbon Tetrachloride	8.347	117	228035	49.255	ug/l	93
39) Methylcyclohexane	9.583	83	237505	52.198	ug/l	96
40) Benzene	8.588	78	696316	51.262	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087569.D
Acq On : 14 Aug 2025 16:27
Operator : JC\MD
Sample : Q2842-04MS 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 14 19:59:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	175869	55.413	ug/l		98
42) 1,2-Dichloroethane	8.653	62	283996	55.133	ug/l		97
43) Isopropyl Acetate	8.677	43	532619	56.527	ug/l		97
44) Trichloroethene	9.335	130	321363	100.127	ug/l		88
45) 1,2-Dichloropropane	9.606	63	182390	52.845	ug/l		94
46) Dibromomethane	9.694	93	137378	53.162	ug/l		95
47) Bromodichloromethane	9.871	83	277559	53.324	ug/l		96
48) Methyl methacrylate	9.665	41	245497	57.875	ug/l		93
49) 1,4-Dioxane	9.688	88	69859	1075.274	ug/l	#	97
51) 4-Methyl-2-Pentanone	10.430	43	1677266	281.447	ug/l		98
52) Toluene	10.612	92	435684	52.770	ug/l		96
53) t-1,3-Dichloropropene	10.818	75	283224	53.765	ug/l		95
54) cis-1,3-Dichloropropene	10.294	75	296099	54.416	ug/l	#	88
55) 1,1,2-Trichloroethane	11.000	97	176388	52.770	ug/l		94
56) Ethyl methacrylate	10.859	69	305796	54.213	ug/l		93
57) 1,3-Dichloropropane	11.147	76	313150	54.186	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.141	63	584151	213.042	ug/l		99
59) 2-Hexanone	11.182	43	1146887	290.068	ug/l		100
60) Dibromochloromethane	11.341	129	195208	51.209	ug/l		99
61) 1,2-Dibromoethane	11.447	107	185145	52.680	ug/l		98
64) Tetrachloroethene	11.088	164	120472	43.011	ug/l		96
65) Chlorobenzene	11.871	112	472723	48.382	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.941	131	165027	49.672	ug/l		100
67) Ethyl Benzene	11.941	91	844688	52.514	ug/l		99
68) m/p-Xylenes	12.053	106	627919	104.251	ug/l		93
69) o-Xylene	12.376	106	307518	53.449	ug/l		94
70) Styrene	12.394	104	539497	55.741	ug/l		98
71) Bromoform	12.559	173	129055	48.082	ug/l	#	99
73) Isopropylbenzene	12.676	105	797605	54.677	ug/l		98
74) N-amyl acetate	12.500	43	204124	33.679	ug/l	#	93
75) 1,1,2,2-Tetrachloroethane	12.918	83	285137	51.946	ug/l		99
76) 1,2,3-Trichloropropane	12.976	75	244697m	47.080	ug/l		
77) Bromobenzene	12.959	156	183370	48.469	ug/l		91
78) n-propylbenzene	13.018	91	990768	53.982	ug/l		97
79) 2-Chlorotoluene	13.106	91	600287	53.218	ug/l		96
80) 1,3,5-Trimethylbenzene	13.153	105	686579	55.240	ug/l		96
81) trans-1,4-Dichloro-2-b...	12.718	75	87284	45.950	ug/l		93
82) 4-Chlorotoluene	13.200	91	625581	53.269	ug/l		97
83) tert-Butylbenzene	13.418	119	576103	55.497	ug/l		98
84) 1,2,4-Trimethylbenzene	13.459	105	715753	56.391	ug/l		95
85) sec-Butylbenzene	13.594	105	866181	55.396	ug/l		99
86) p-Isopropyltoluene	13.706	119	703516	56.143	ug/l		97
87) 1,3-Dichlorobenzene	13.712	146	370720	49.929	ug/l		99
88) 1,4-Dichlorobenzene	13.794	146	374267	47.195	ug/l		97
89) n-Butylbenzene	14.035	91	697153	58.265	ug/l		98
90) Hexachloroethane	14.312	117	126427	47.619	ug/l		93
91) 1,2-Dichlorobenzene	14.082	146	361117	51.338	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.700	75	69760	48.406	ug/l		95
93) 1,2,4-Trichlorobenzene	15.370	180	212082	51.328	ug/l		99
94) Hexachlorobutadiene	15.476	225	79123	51.536	ug/l		97
95) Naphthalene	15.617	128	789585	53.941	ug/l		99
96) 1,2,3-Trichlorobenzene	15.817	180	206242	49.760	ug/l		99

Sample Results: **VN087569.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087569.D
Acq On : 14 Aug 2025 16:27
Operator : JC\MD
Sample : Q2842-04MS 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 14 19:59:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087569.D
Acq On : 14 Aug 2025 16:27
Operator : JC\MD
Sample : Q2842-04MS 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 14 19:59:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
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ClientSampleId :
MW-17B-55.5-081225MS

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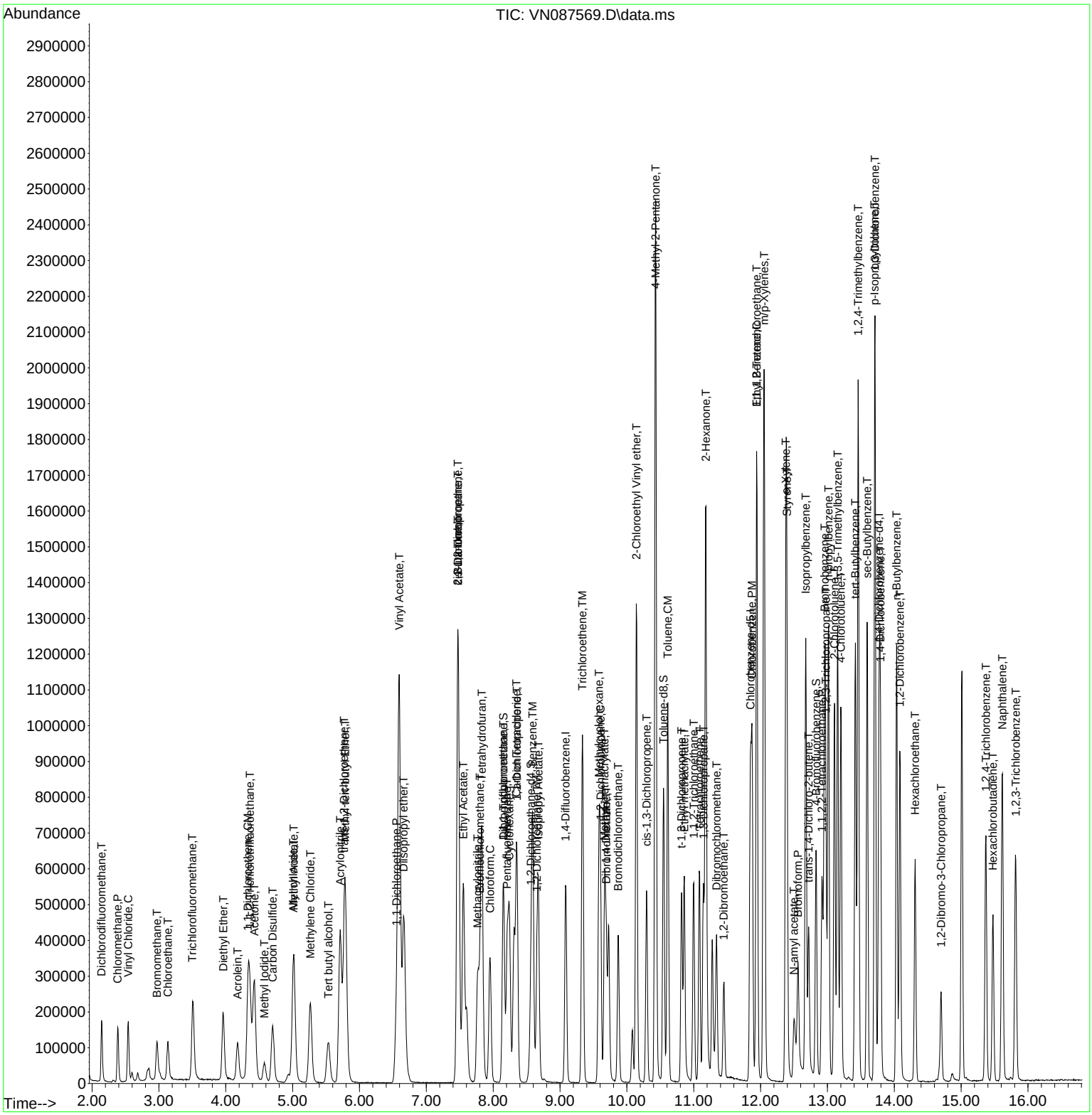
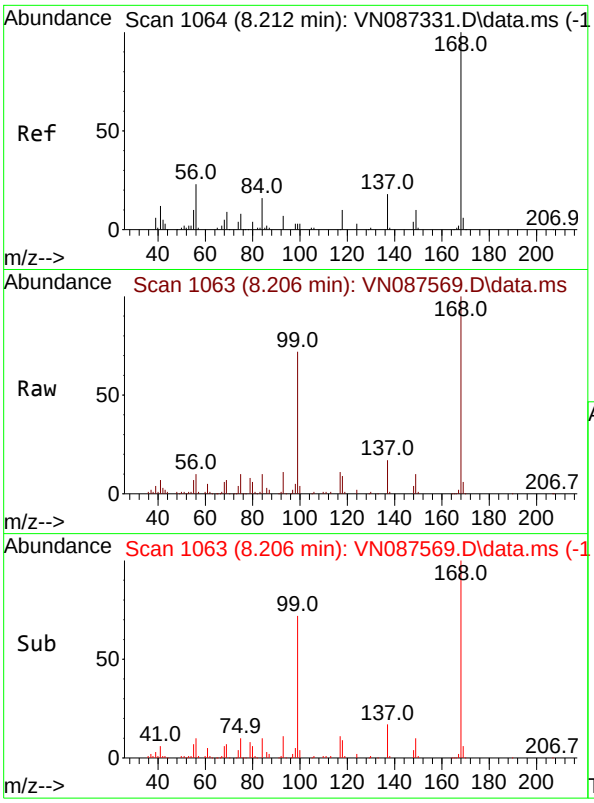
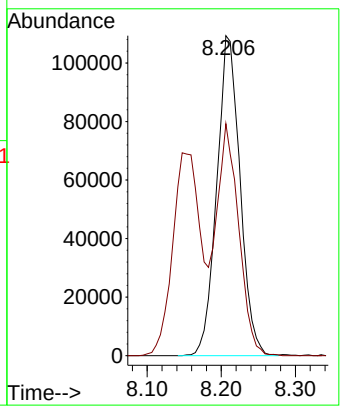




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:168 Resp: 23806

Ion	Ratio	Lower	Upper
168	100		
99	72.2	47.9	71.9



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
APPROVED

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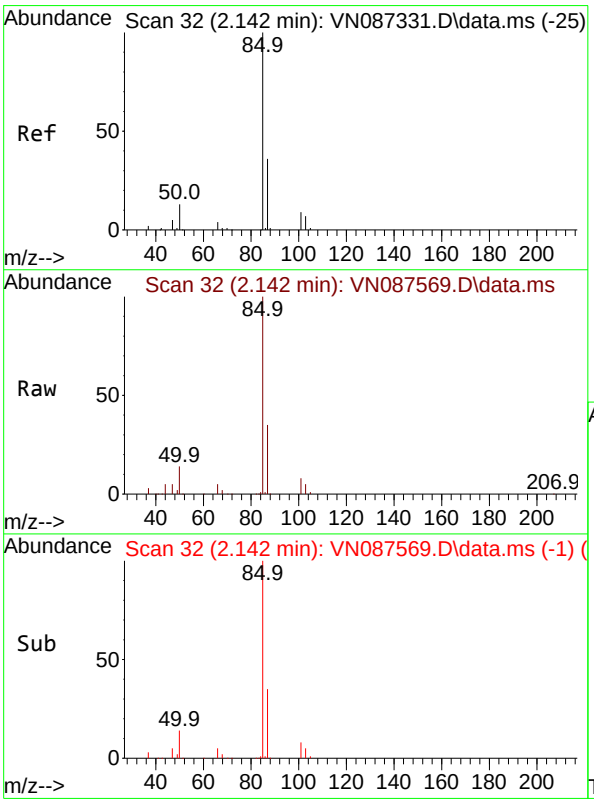
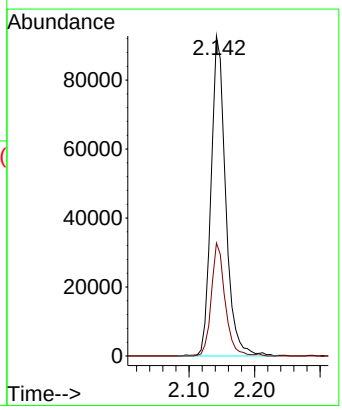
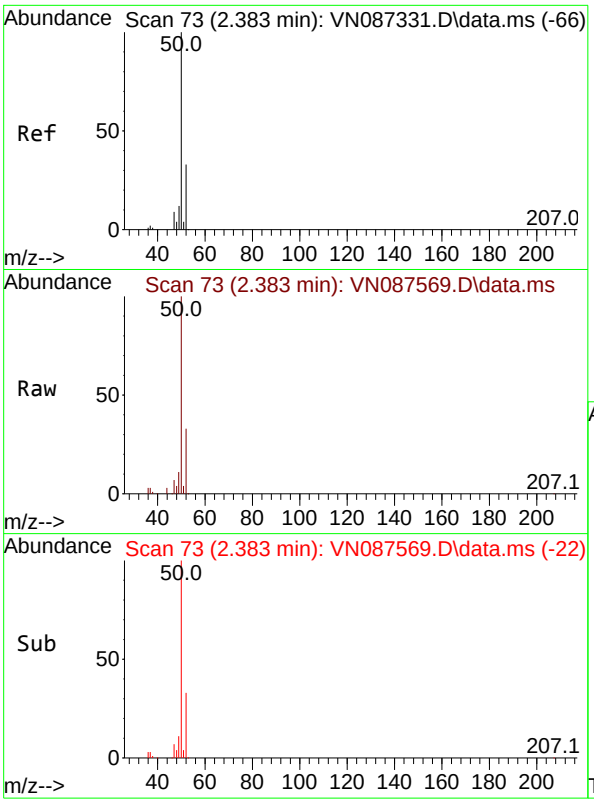


#2
Dichlorodifluoromethane
Concen: 56.720 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 85 Resp: 143419

Ion	Ratio	Lower	Upper
85	100		
87	35.3	17.8	53.3

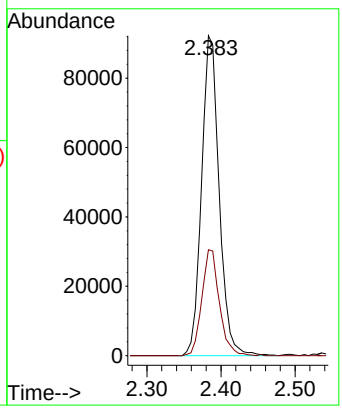




#3
Chloromethane
Concen: 47.827 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 50 Resp: 15207

Ion	Ratio	Lower	Upper
50	100		
52	33.1	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
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Reviewed By :John Carlone 08/15/2025
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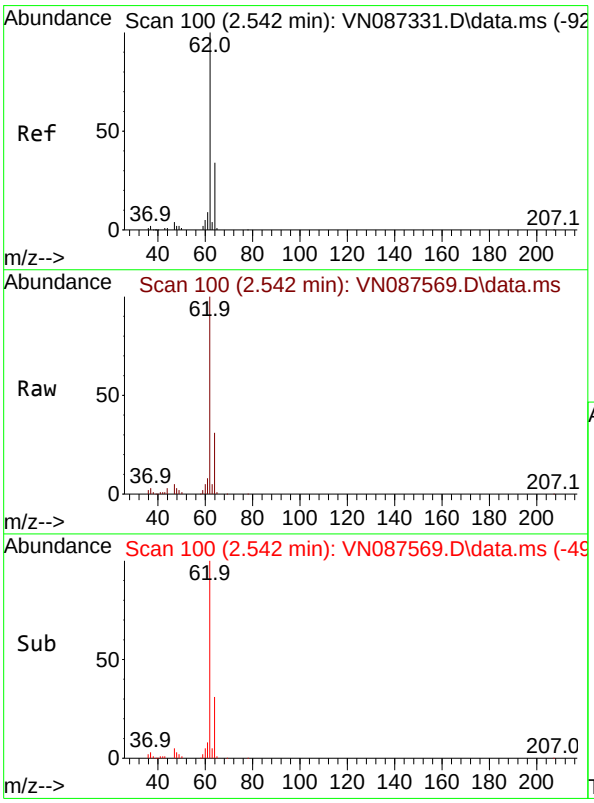
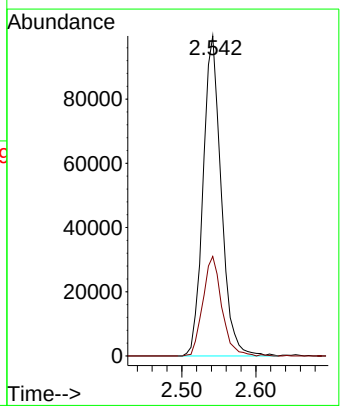
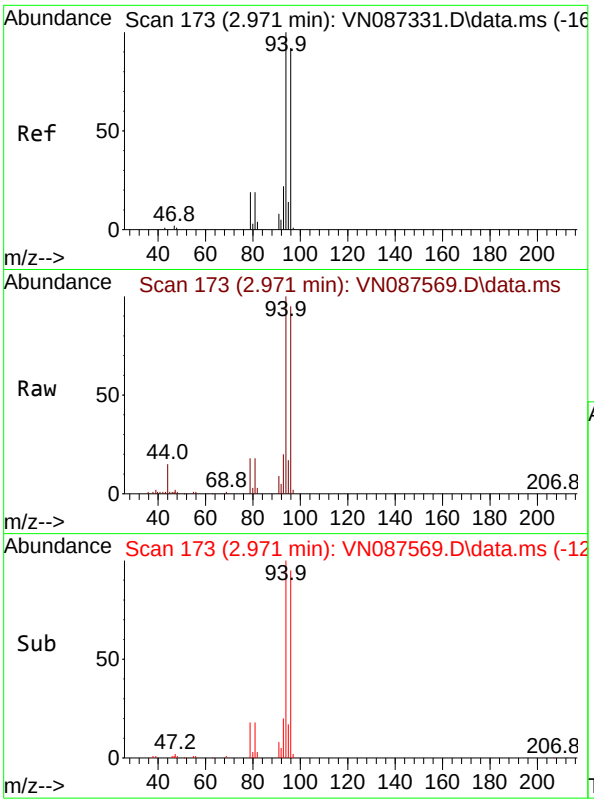


#4
Vinyl Chloride
Concen: 53.629 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 62 Resp: 169468

Ion	Ratio	Lower	Upper
62	100		
64	31.1	27.0	40.6





#5
Bromomethane
Concen: 54.595 ug/l
RT: 2.971 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 94 Resp: 8933

Ion	Ratio	Lower	Upper
94	100		
96	95.4	73.4	110.2

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
APPROVED

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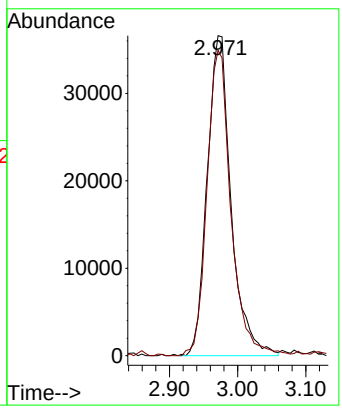
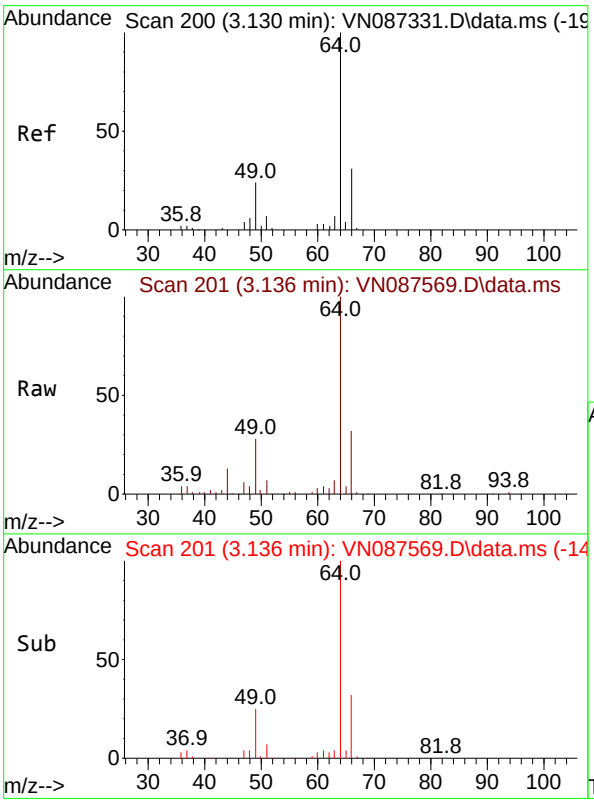
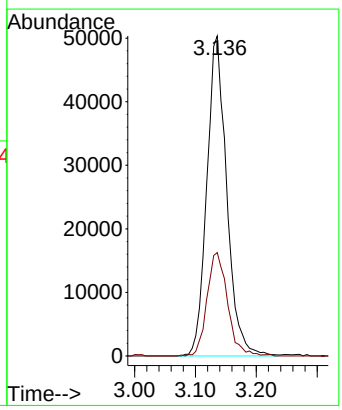


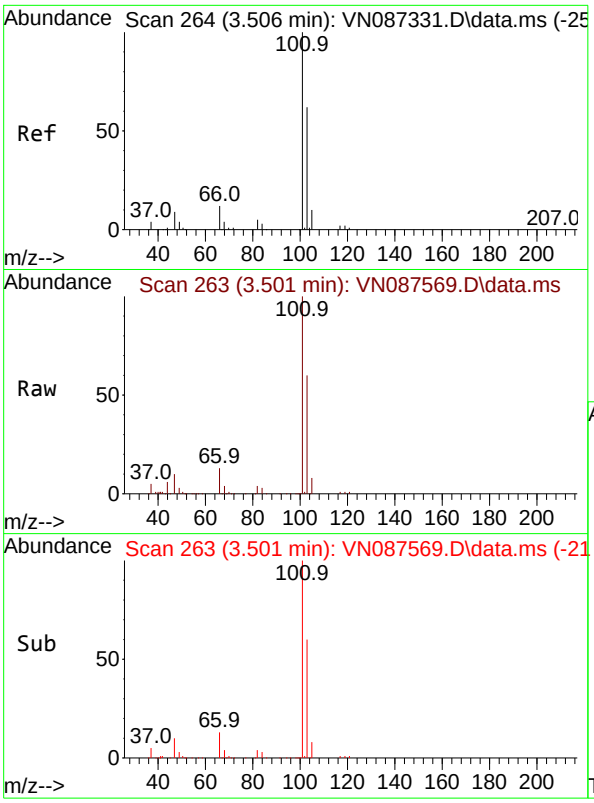


#6
Chloroethane
Concen: 55.452 ug/l
RT: 3.136 min Scan# 201
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 64 Resp: 114275

Ion	Ratio	Lower	Upper
64	100		
66	32.3	24.6	36.8





#7
Trichlorofluoromethane
Concen: 54.304 ug/l
RT: 3.501 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:101 Resp: 25374

Ion	Ratio	Lower	Upper
101	100		
103	60.0	49.8	74.6

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
APPROVED

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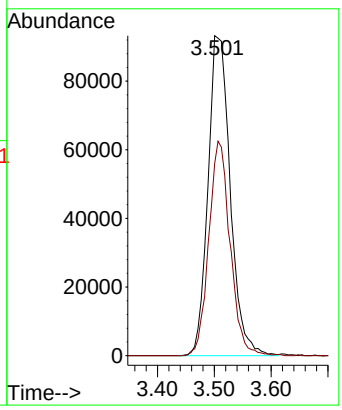
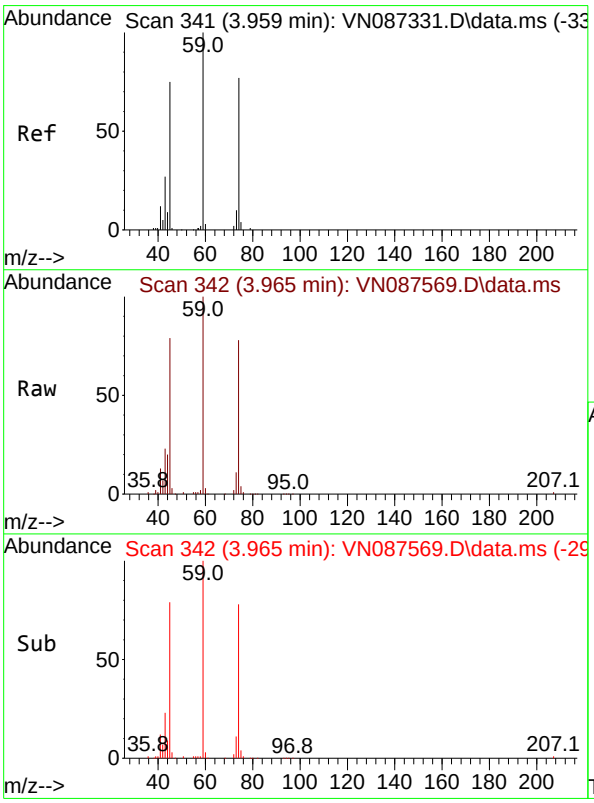
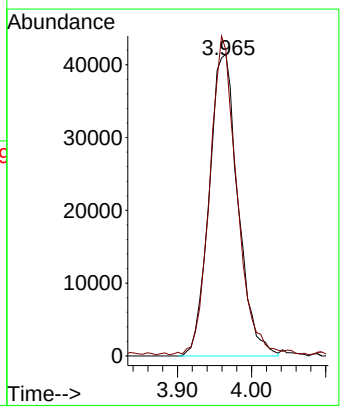


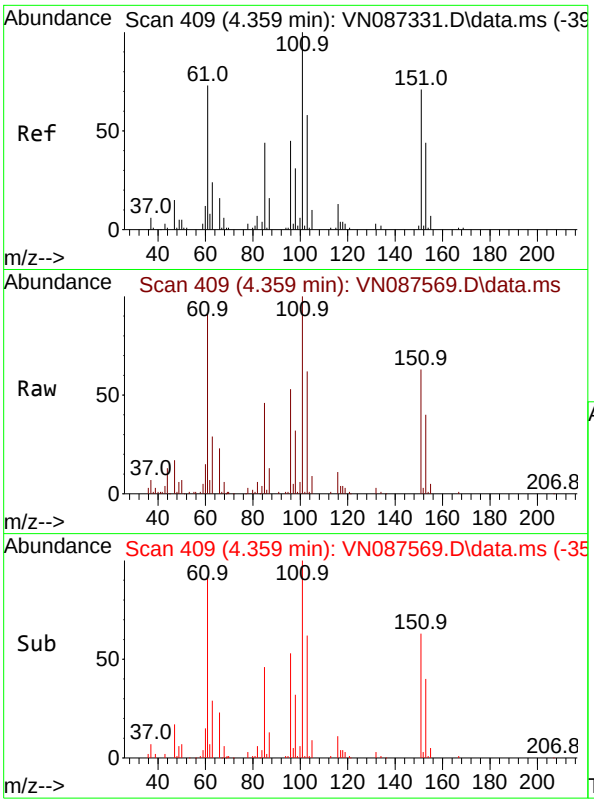


#8
Diethyl Ether
Concen: 61.834 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 74 Resp: 112077

Ion	Ratio	Lower	Upper
74	100		
45	99.5	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 57.785 ug/l
RT: 4.359 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:101 Resp: 13860(

Ion	Ratio	Lower	Upper
101	100		
85	48.3	37.3	55.9
151	68.6	58.9	88.3

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
APPROVED

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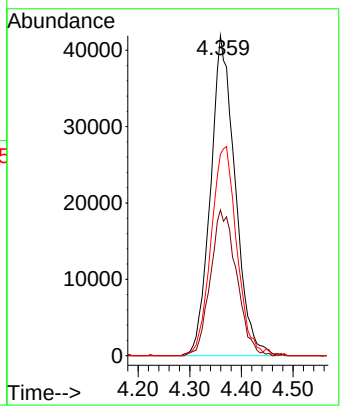
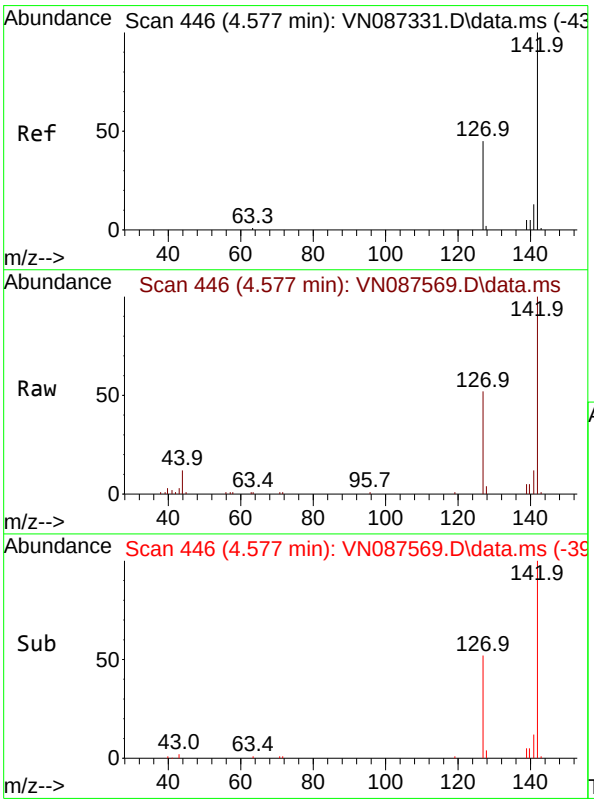
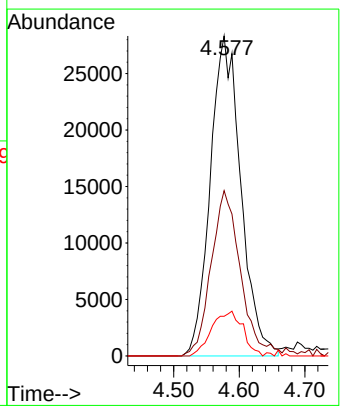


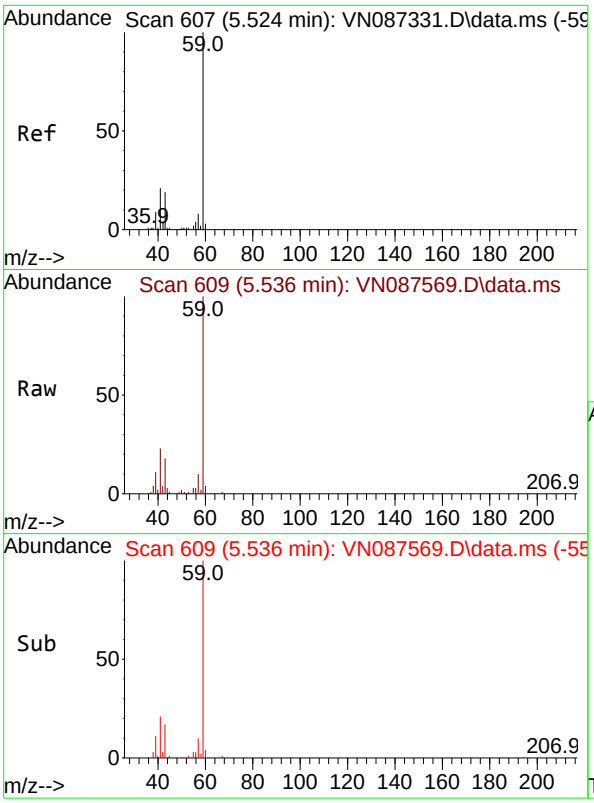


#10
Methyl Iodide
Concen: 38.610 ug/l
RT: 4.577 min Scan# 446
Delta R.T. -0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:142 Resp: 91710

Ion	Ratio	Lower	Upper
142	100		
127	51.6	35.7	53.5
141	12.4	10.4	15.6

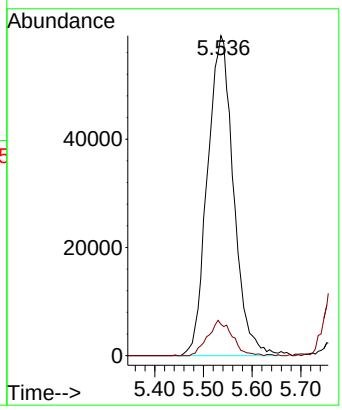




#11
Tert butyl alcohol
Concen: 286.700 ug/l
RT: 5.536 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 59 Resp: 21990

Ion	Ratio	Lower	Upper
59	100		
57	10.3	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
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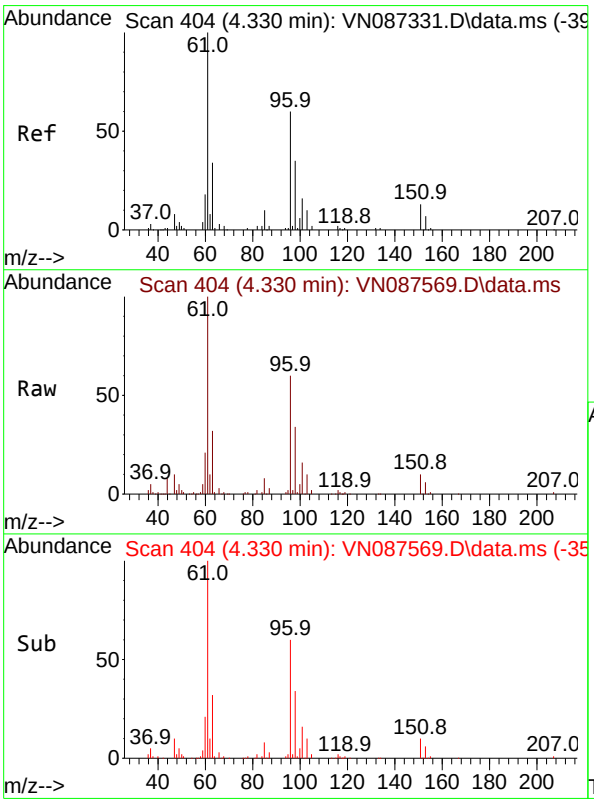
Manual Integrations
APPROVED

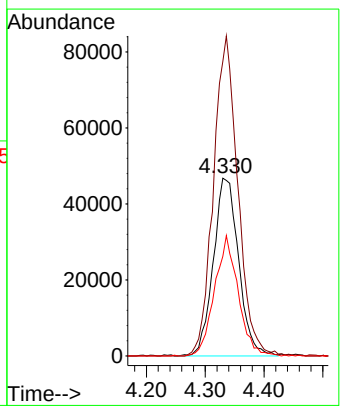
Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

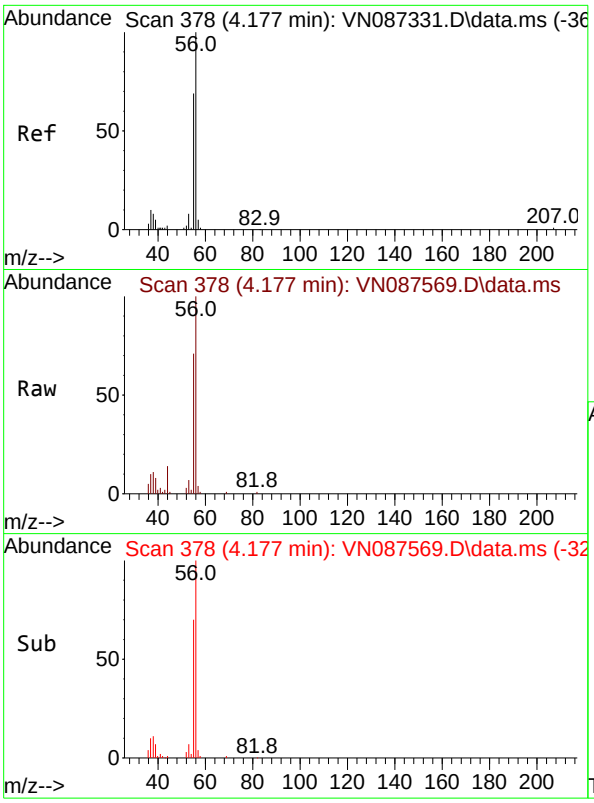


#12
1,1-Dichloroethene
Concen: 51.521 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 96 Resp: 140041

Ion	Ratio	Lower	Upper
96	100		
61	165.7	132.3	198.5
98	56.0	46.8	70.2





#13
Acrolein
Concen: 219.895 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 56 Resp: 13535

Ion	Ratio	Lower	Upper
56	100		
55	69.8	56.2	84.4

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

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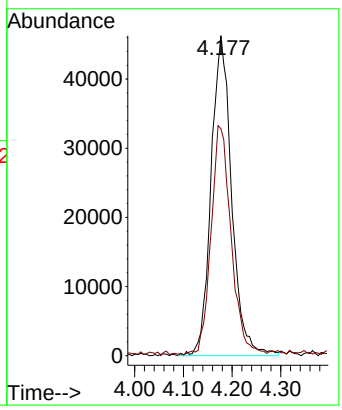
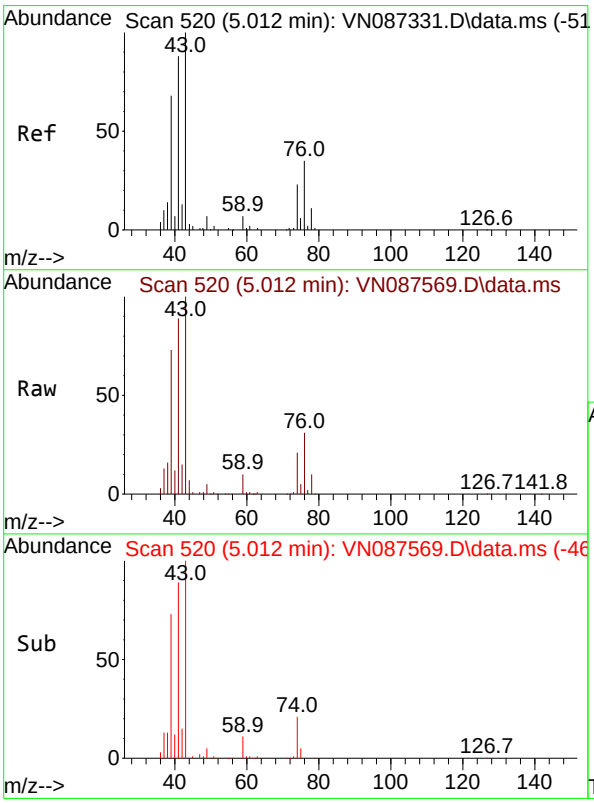
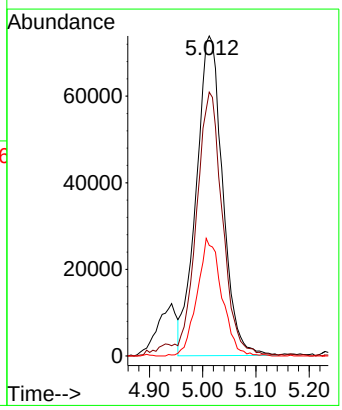


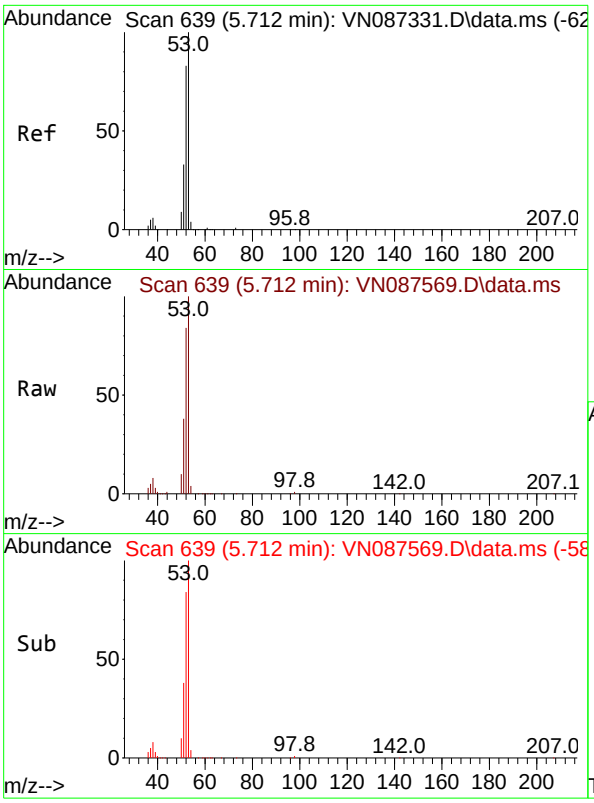


#14
Allyl chloride
Concen: 51.759 ug/l
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 41 Resp: 254609

Ion	Ratio	Lower	Upper
41	100		
39	80.7	59.0	88.6
76	34.6	28.7	43.1





#15
Acrylonitrile
Concen: 270.058 ug/l
RT: 5.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 53 Resp: 56209

Ion	Ratio	Lower	Upper
53	100		
52	82.8	65.5	98.3
51	37.5	28.7	43.1

Instrument :
MSVOA_N
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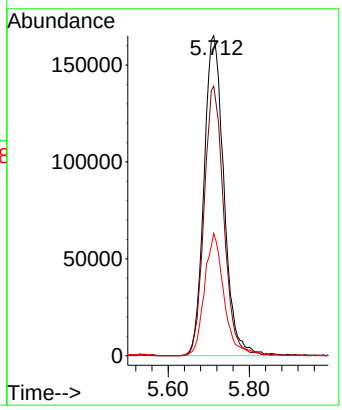
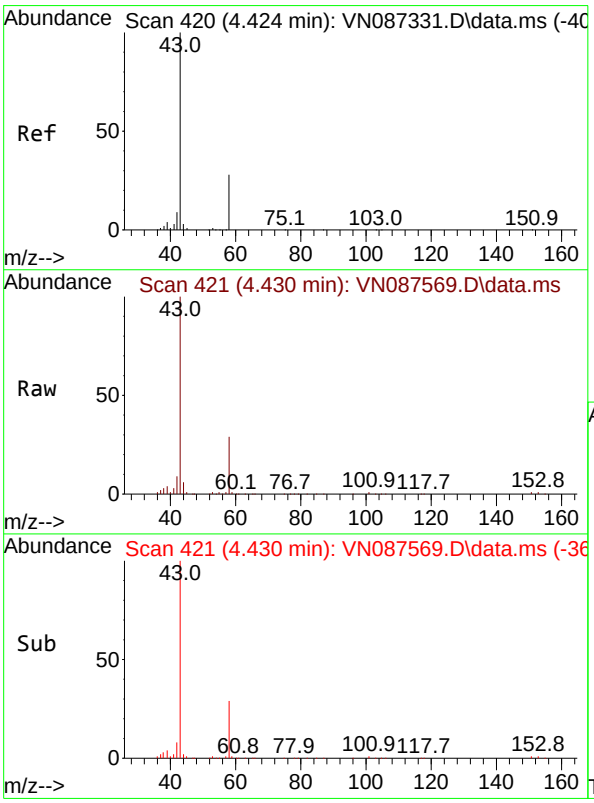
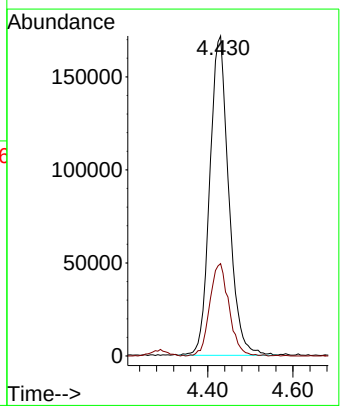


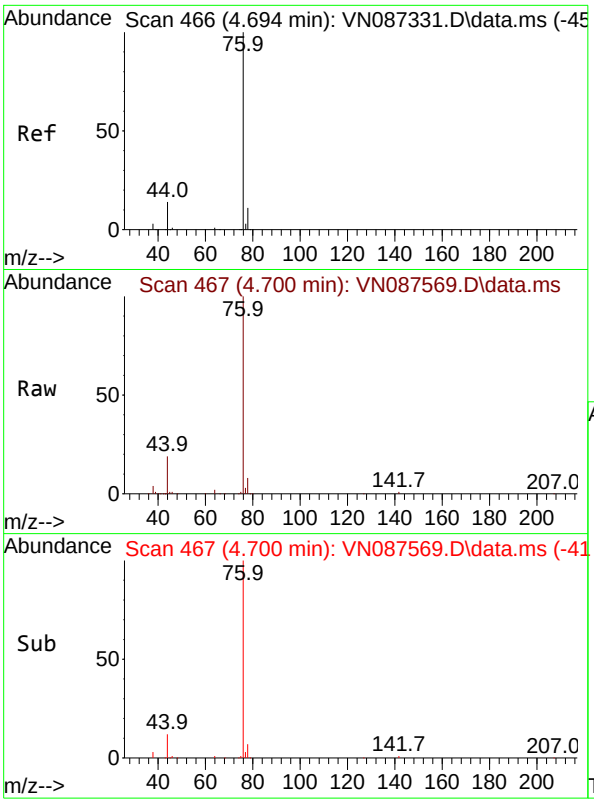


#16
Acetone
Concen: 279.957 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 530238

Ion	Ratio	Lower	Upper
43	100		
58	28.7	22.3	33.5

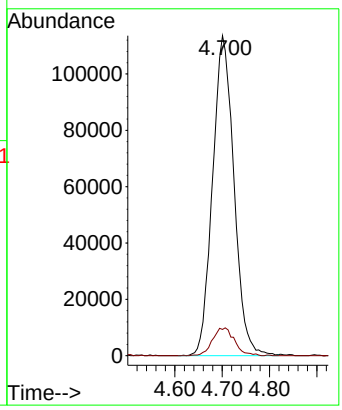




#17
Carbon Disulfide
Concen: 44.270 ug/l
RT: 4.700 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 76 Resp: 35675

Ion	Ratio	Lower	Upper
76	100		
78	8.2	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
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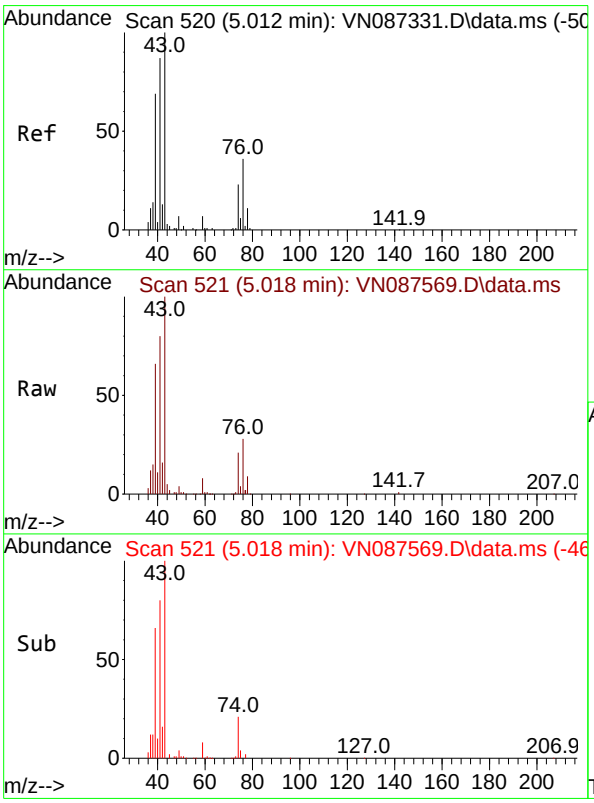
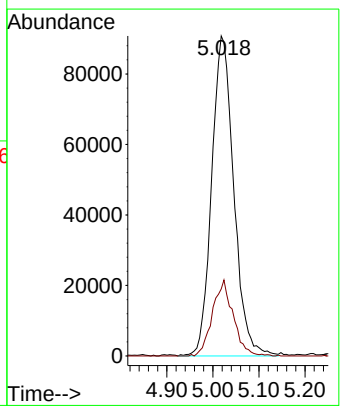
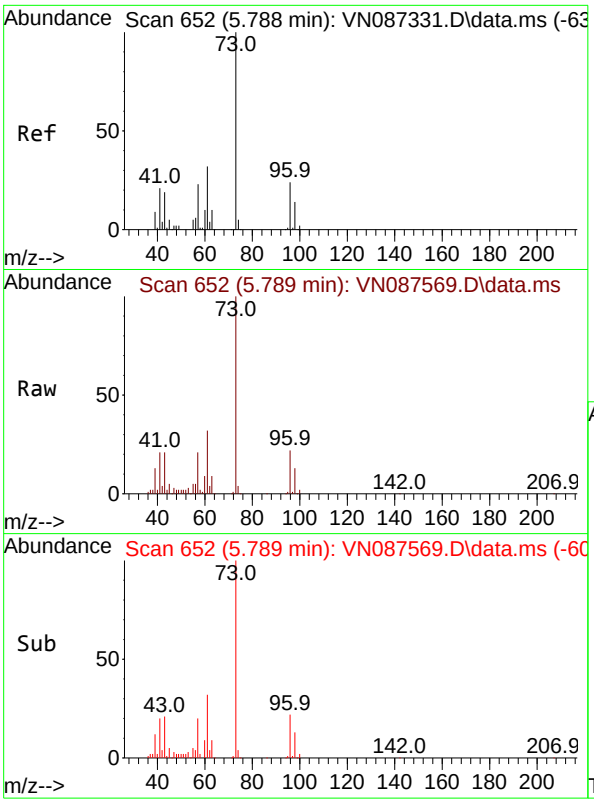


#18
Methyl Acetate
Concen: 63.602 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 302650

Ion	Ratio	Lower	Upper
43	100		
74	22.3	17.8	26.6

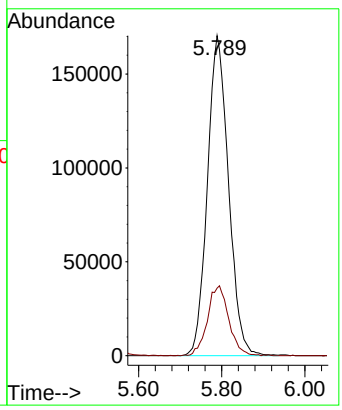




#19
Methyl tert-butyl Ether
Concen: 60.011 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 73 Resp: 60123

Ion	Ratio	Lower	Upper
73	100		
57	21.1	18.6	27.8



Instrument :
MSVOA_N
ClientSampleId :
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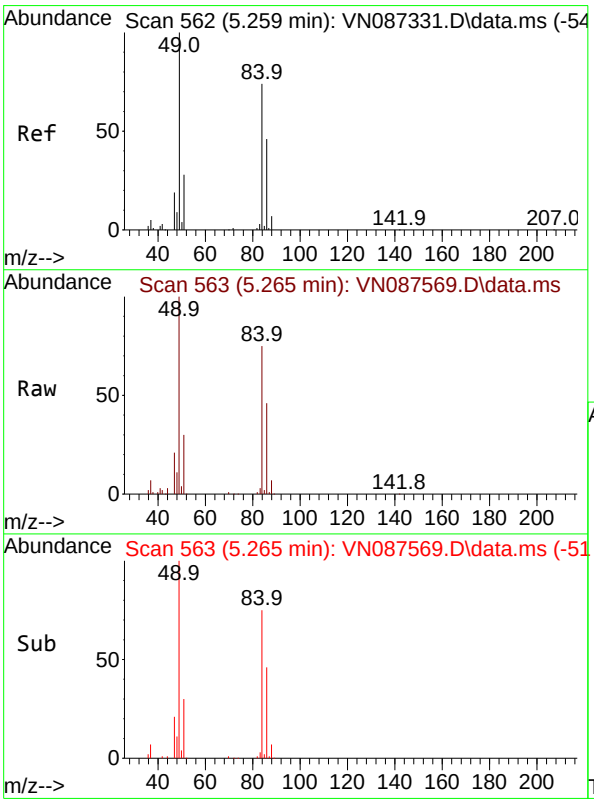
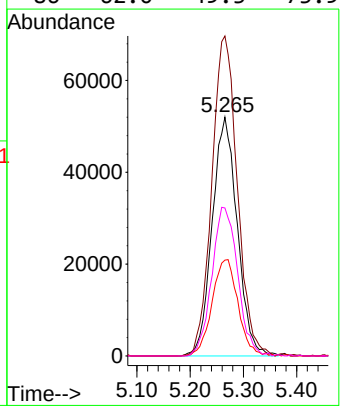
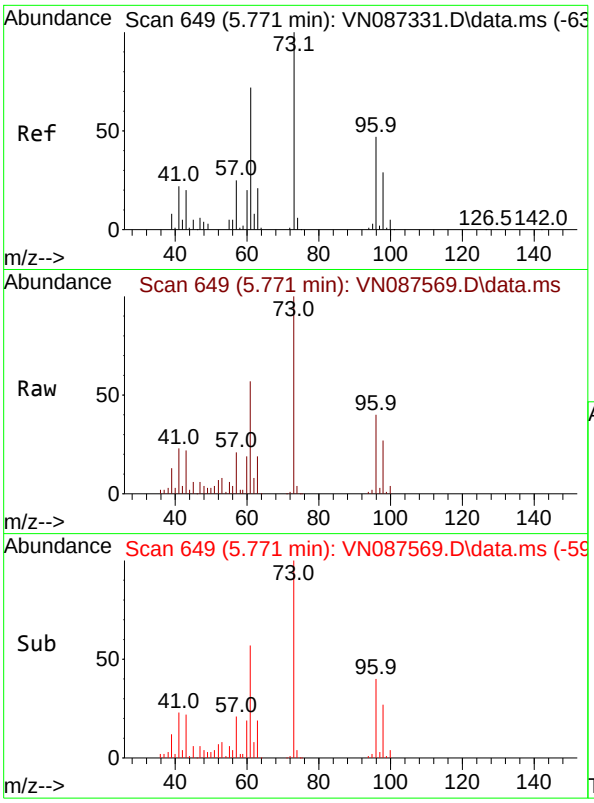


#20
Methylene Chloride
Concen: 53.111 ug/l
RT: 5.265 min Scan# 563
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 84 Resp: 169920

Ion	Ratio	Lower	Upper
84	100		
49	134.1	107.5	161.3
51	40.2	30.2	45.2
86	62.0	49.3	73.9





#21
trans-1,2-Dichloroethene
Concen: 49.977 ug/l
RT: 5.771 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 96 Resp: 15317

Ion	Ratio	Lower	Upper
96	100		
61	141.9	122.0	183.0
98	66.8	50.0	75.0

Instrument :
MSVOA_N
ClientSampleId :
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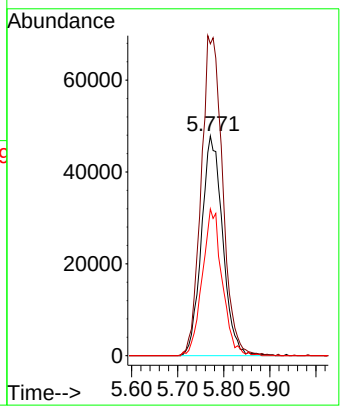
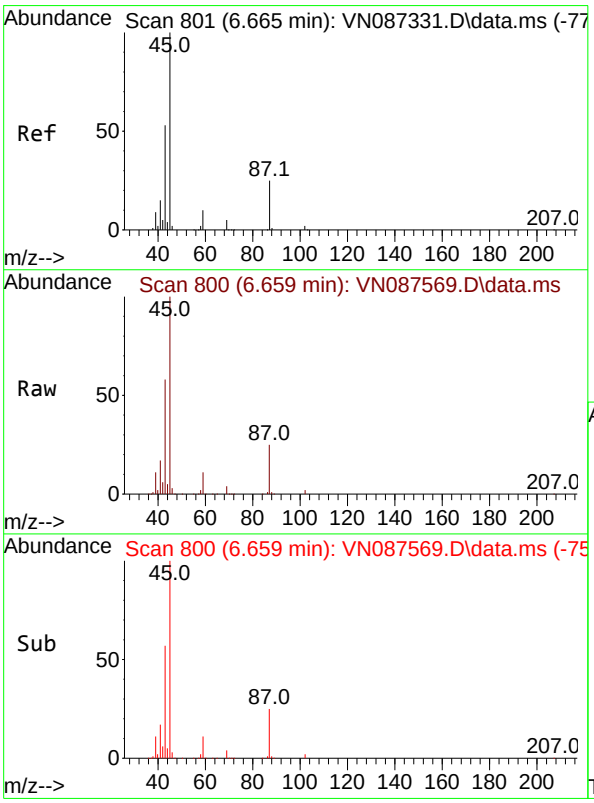
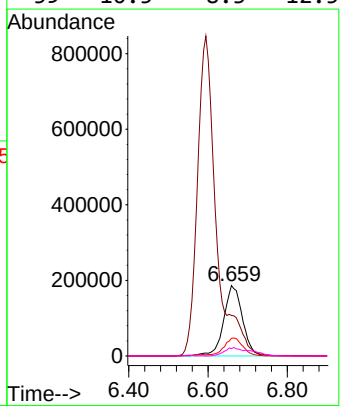


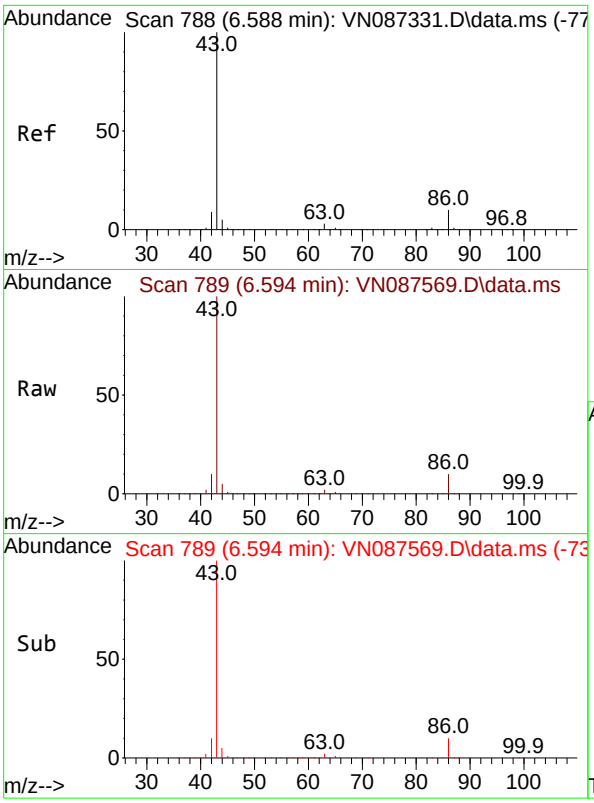


#22
Diisopropyl ether
Concen: 59.384 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 45 Resp: 612749

Ion	Ratio	Lower	Upper
45	100		
43	57.1	42.8	64.2
87	25.2	19.8	29.6
59	10.5	8.3	12.5





#23
Vinyl Acetate
Concen: 307.552 ug/l
RT: 6.594 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 277548

Ion	Ratio	Lower	Upper
43	100		
86	10.1	7.7	11.5

Instrument :
MSVOA_N
ClientSampleId :
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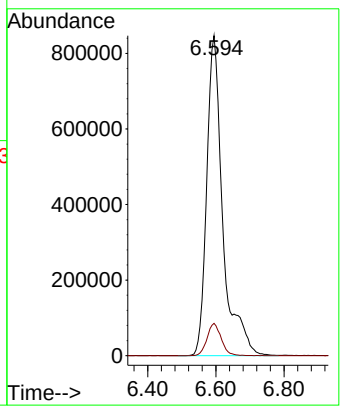
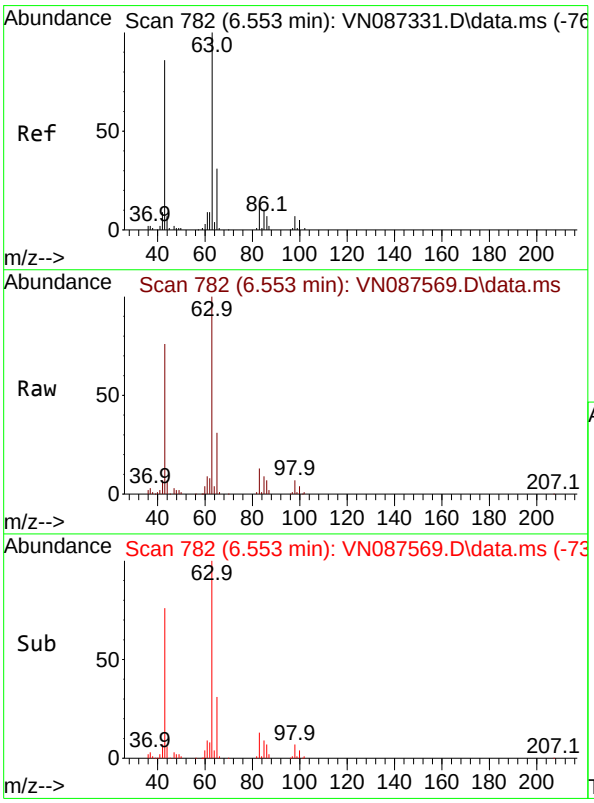
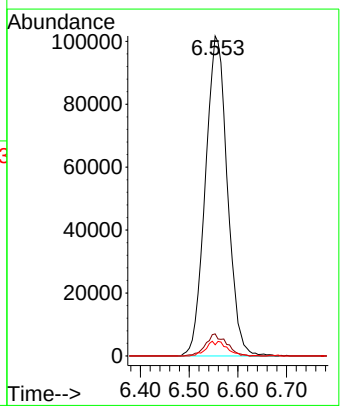


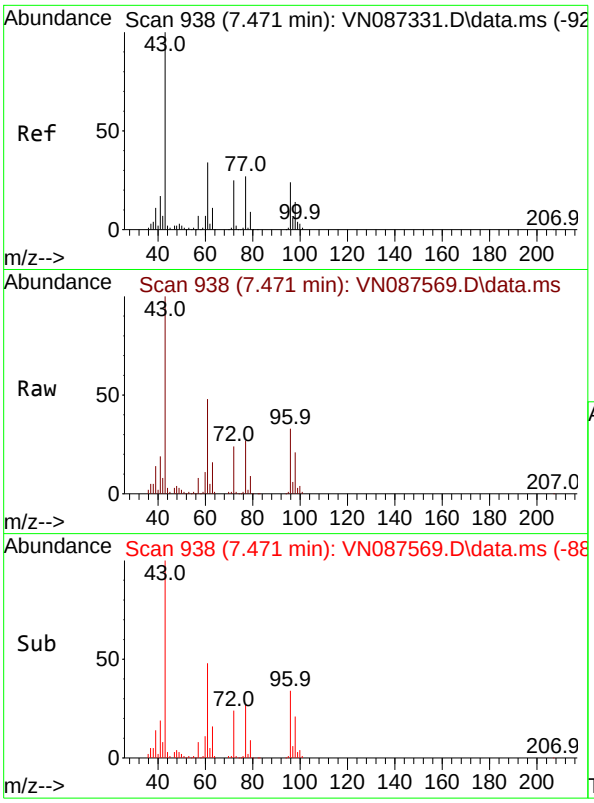


#24
1,1-Dichloroethane
Concen: 53.488 ug/l
RT: 6.553 min Scan# 782
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 63 Resp: 318408

Ion	Ratio	Lower	Upper
63	100		
98	6.9	3.3	9.9
100	3.5	2.5	7.4

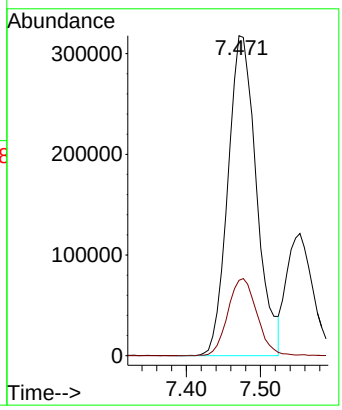




#25
2-Butanone
Concen: 290.579 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 85035

Ion	Ratio	Lower	Upper
43	100		
72	23.5	19.6	29.4



Instrument :
MSVOA_N
ClientSampleId :
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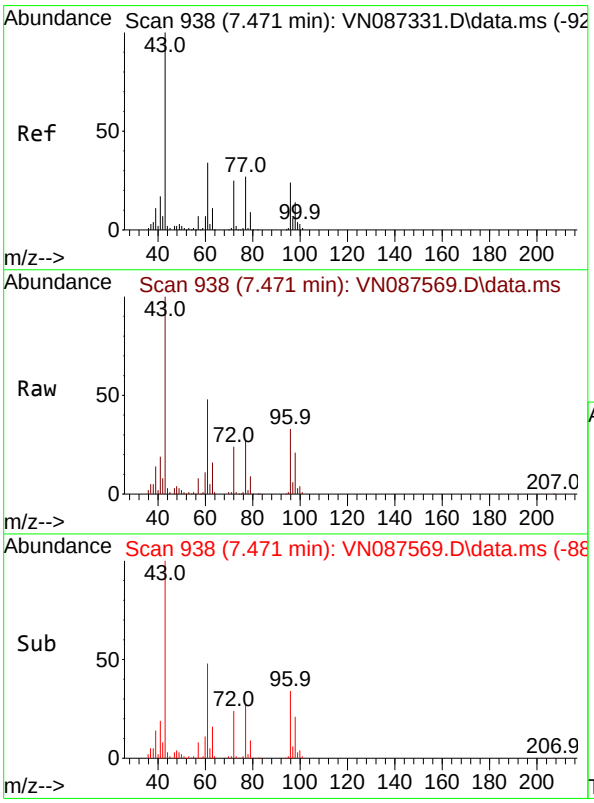
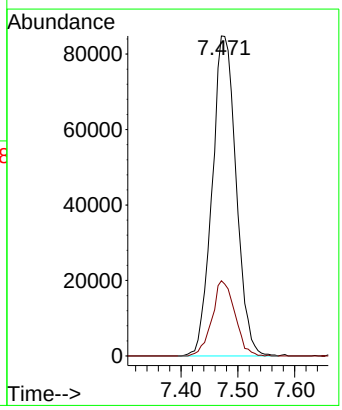
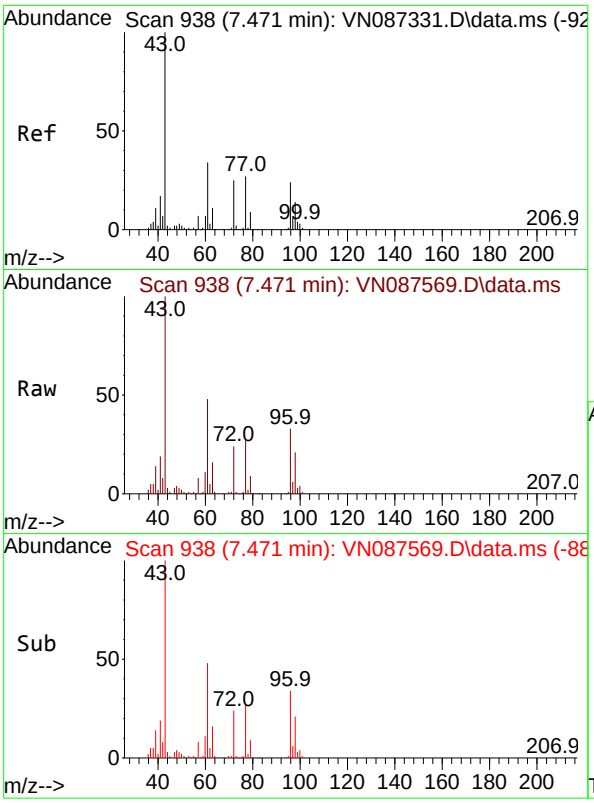


#26
2,2-Dichloropropane
Concen: 53.865 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 77 Resp: 249304

Ion	Ratio	Lower	Upper
77	100		
97	22.4	11.1	33.1





#27
cis-1,2-Dichloroethene
Concen: 80.651 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 96 Resp: 28458

Ion	Ratio	Lower	Upper
96	100		
61	146.1	0.0	297.8
98	63.4	0.0	132.4

Instrument :
MSVOA_N
ClientSampleId :
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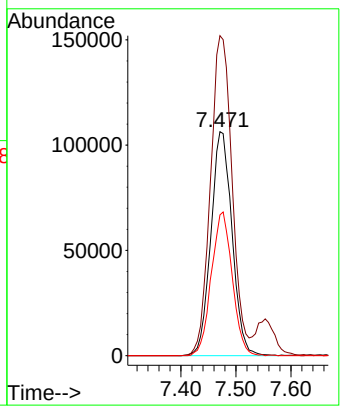
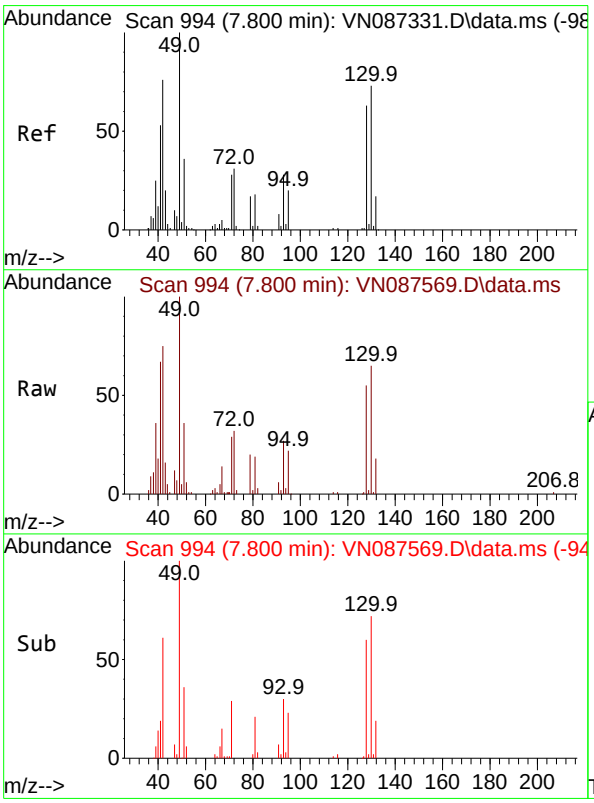
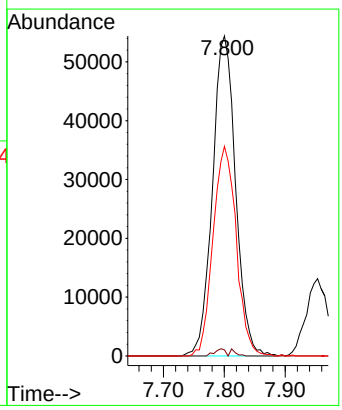


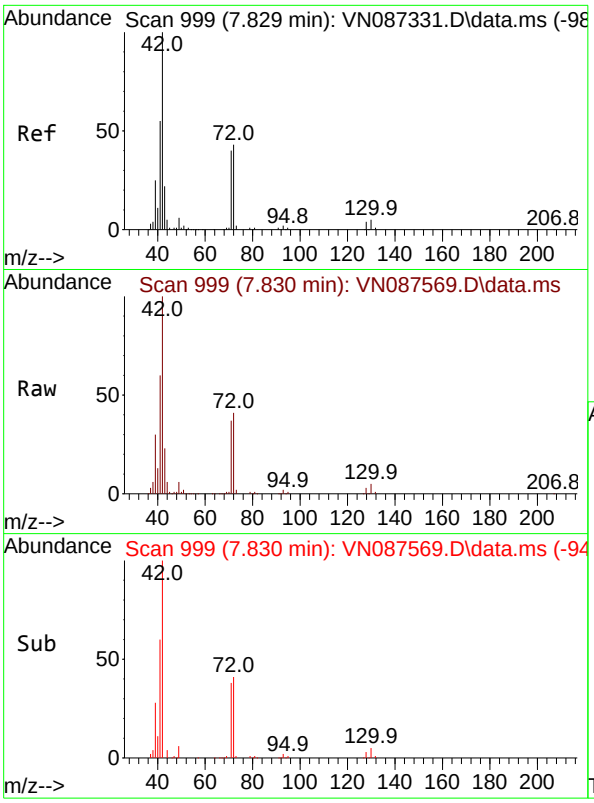


#28
Bromochloromethane
Concen: 50.351 ug/l
RT: 7.800 min Scan# 994
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 49 Resp: 143451

Ion	Ratio	Lower	Upper
49	100		
129	1.0	0.0	4.2
130	65.8	57.3	85.9





#29
Tetrahydrofuran
Concen: 285.049 ug/l
RT: 7.830 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 42 Resp: 54190

Ion	Ratio	Lower	Upper
42	100		
72	41.0	33.4	50.0
71	38.9	31.2	46.8

Instrument :
MSVOA_N
ClientSampleId :
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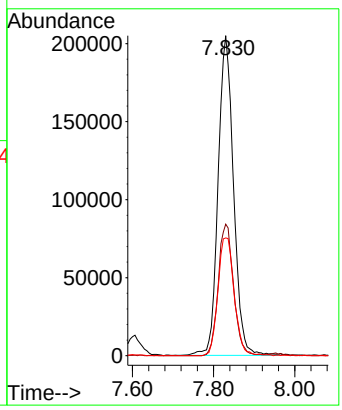
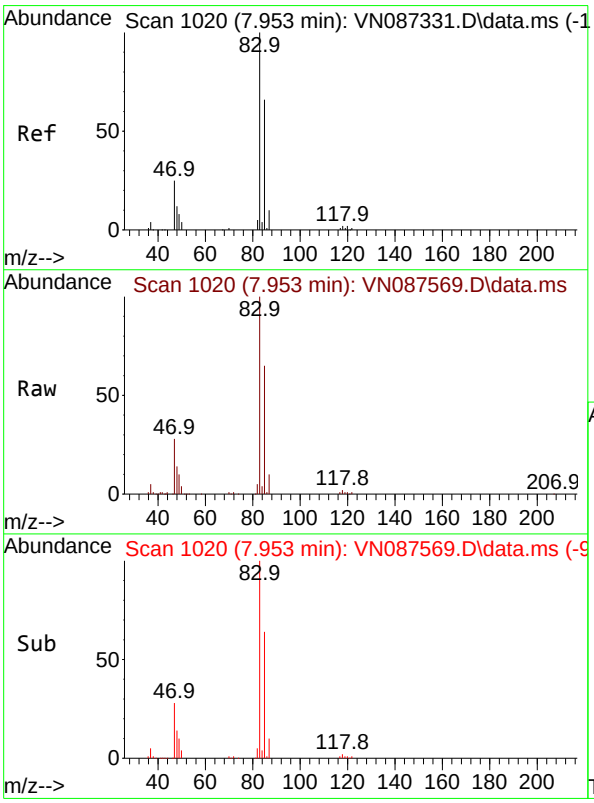
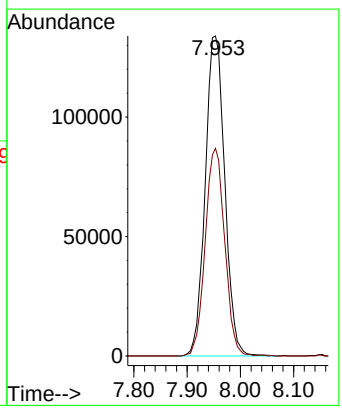


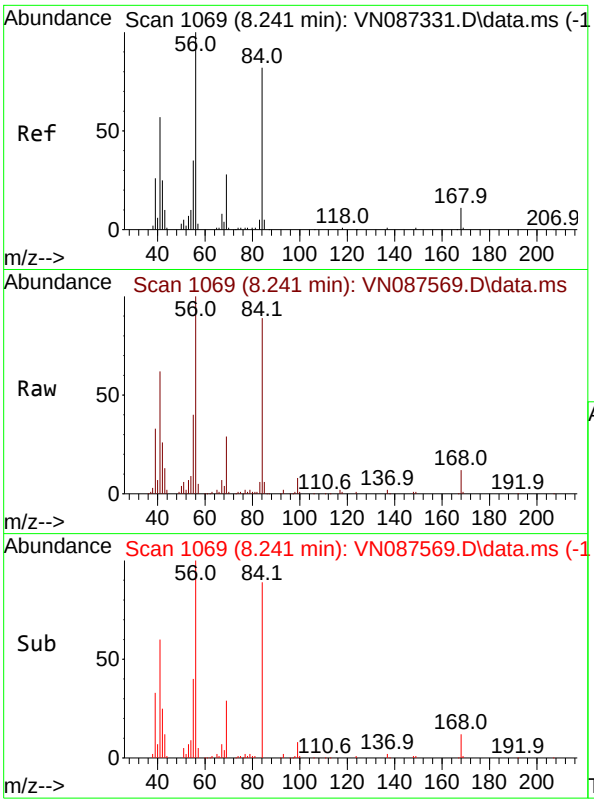


#30
Chloroform
Concen: 57.240 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 83 Resp: 341066

Ion	Ratio	Lower	Upper
83	100		
85	64.9	52.7	79.1

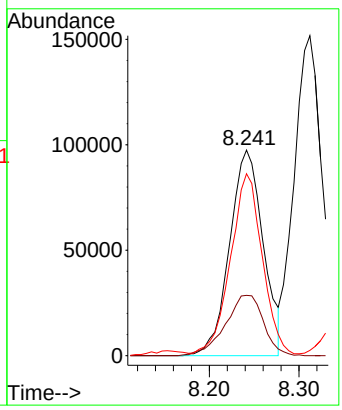




#31
Cyclohexane
Concen: 51.134 ug/l
RT: 8.241 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 56 Resp: 25393

Ion	Ratio	Lower	Upper
56	100		
69	29.3	22.7	34.1
84	86.7	65.8	98.6



Instrument :
MSVOA_N
ClientSampleId :
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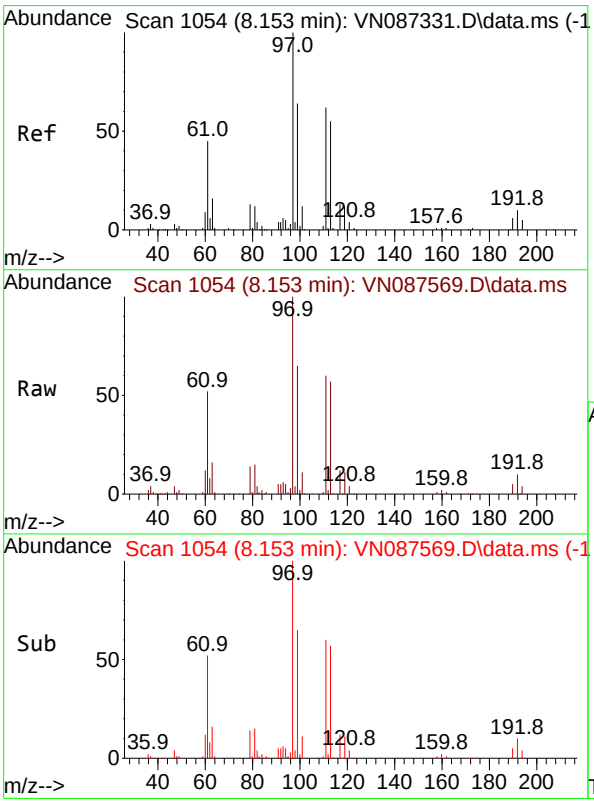
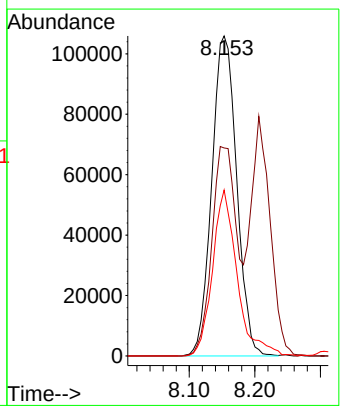
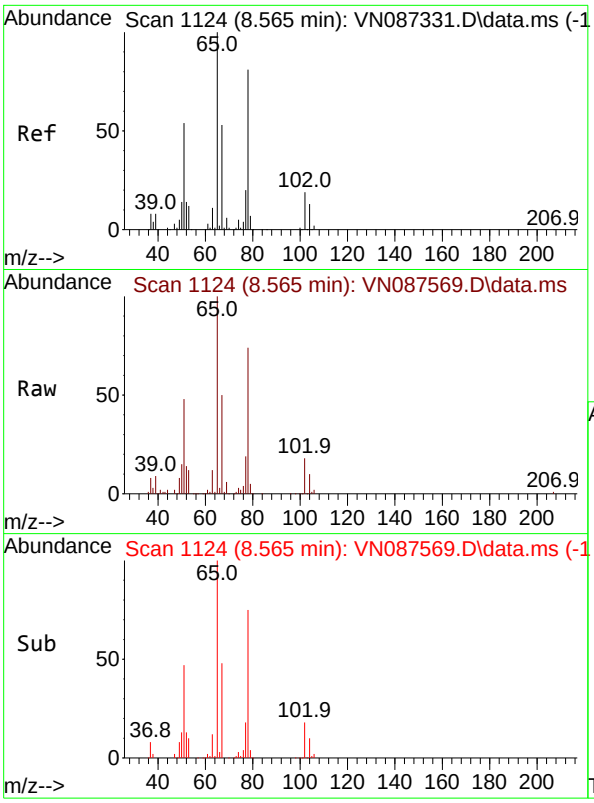


#32
1,1,1-Trichloroethane
Concen: 54.153 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 97 Resp: 279470

Ion	Ratio	Lower	Upper
97	100		
99	65.8	51.8	77.8
61	51.4	38.7	58.1





#33
1,2-Dichloroethane-d4
Concen: 53.842 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 65 Resp: 21749

Ion	Ratio	Lower	Upper
65	100		
67	50.2	0.0	104.0

Instrument :
MSVOA_N
ClientSampleId :
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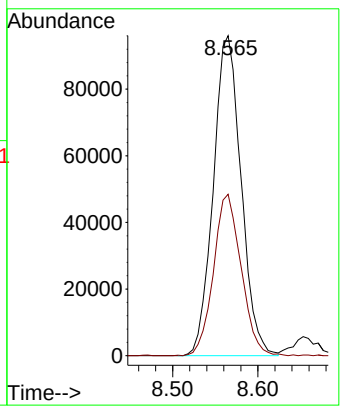
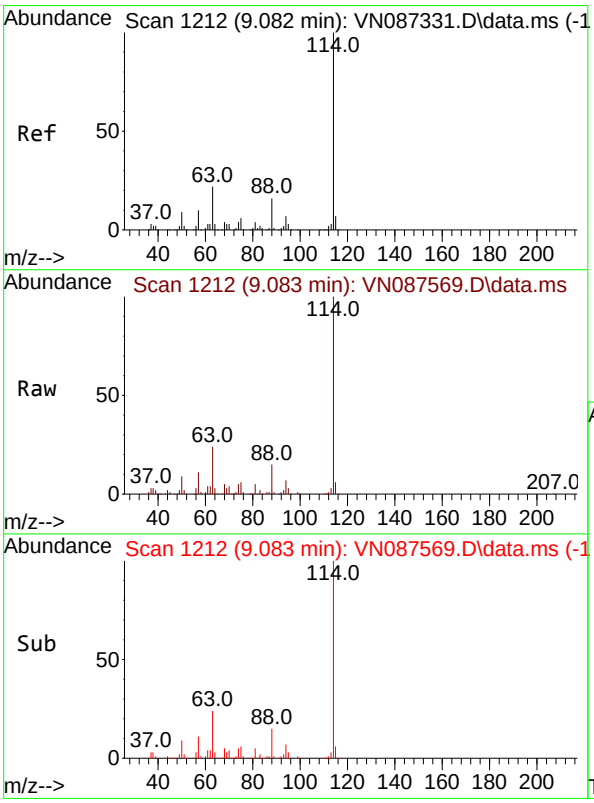
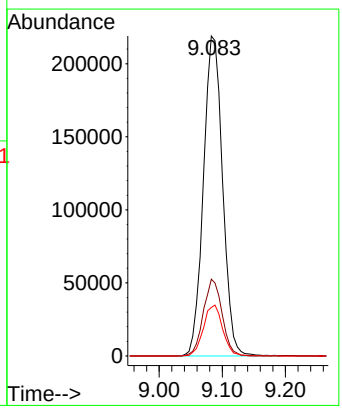


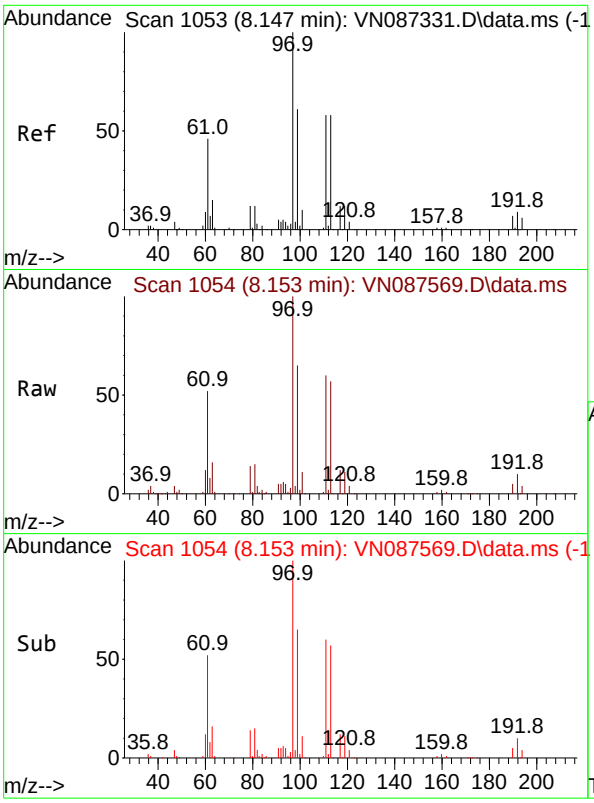


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.083 min Scan# 1212
Delta R.T. 0.001 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:114 Resp: 461160

Ion	Ratio	Lower	Upper
114	100		
63	24.0	0.0	44.6
88	15.1	0.0	32.8

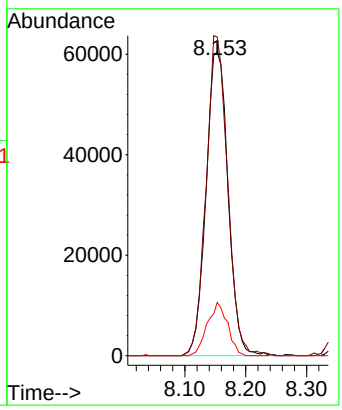




#35
Dibromofluoromethane
Concen: 47.909 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:113 Resp: 15240

Ion	Ratio	Lower	Upper
113	100		
111	102.2	82.5	123.7
192	16.1	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
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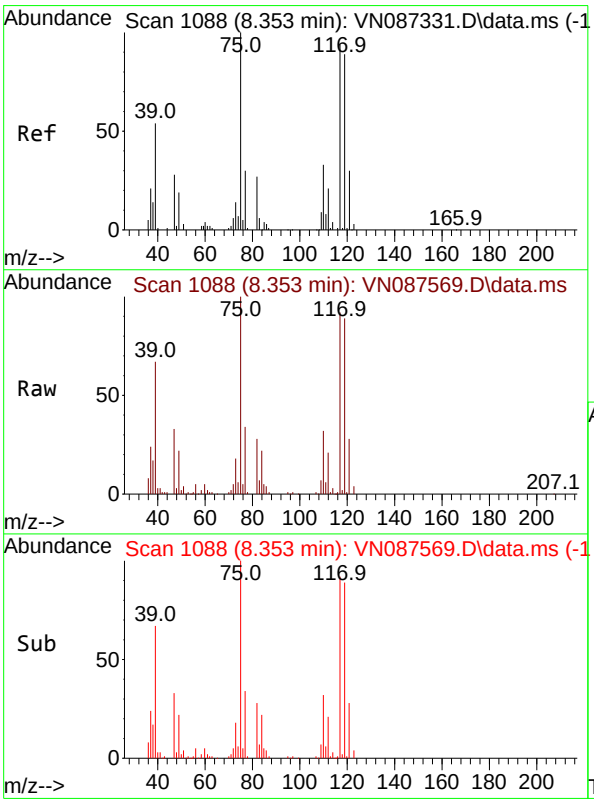
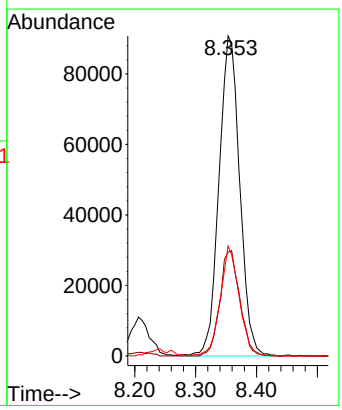
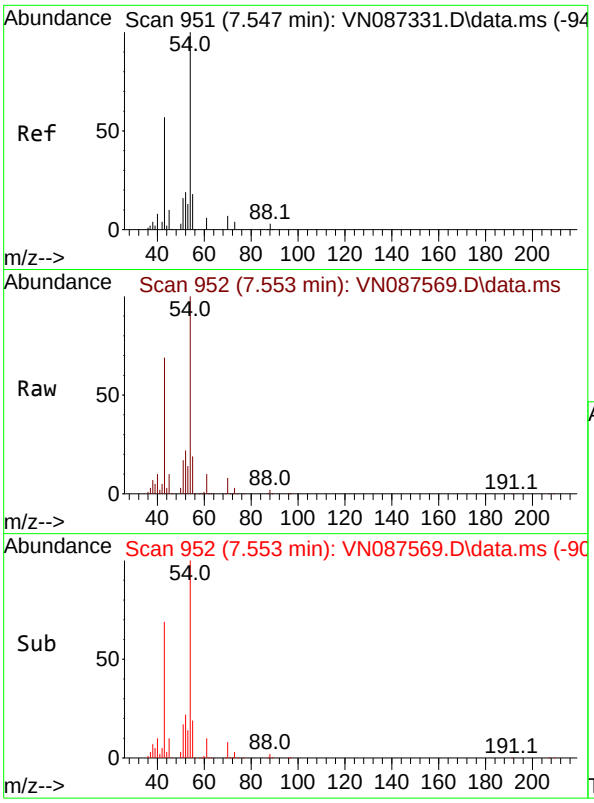


#36
1,1-Dichloropropene
Concen: 51.052 ug/l
RT: 8.353 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 75 Resp: 214559

Ion	Ratio	Lower	Upper
75	100		
110	31.6	16.7	50.1
77	31.4	25.2	37.8





#37
Ethyl Acetate
Concen: 50.705 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 30777

Ion	Ratio	Lower	Upper
43	100		
61	14.1	10.9	16.3
70	10.2	7.4	11.0

Instrument :
MSVOA_N
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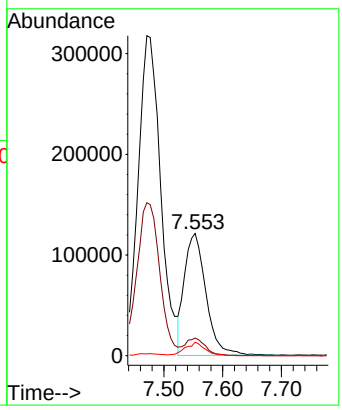
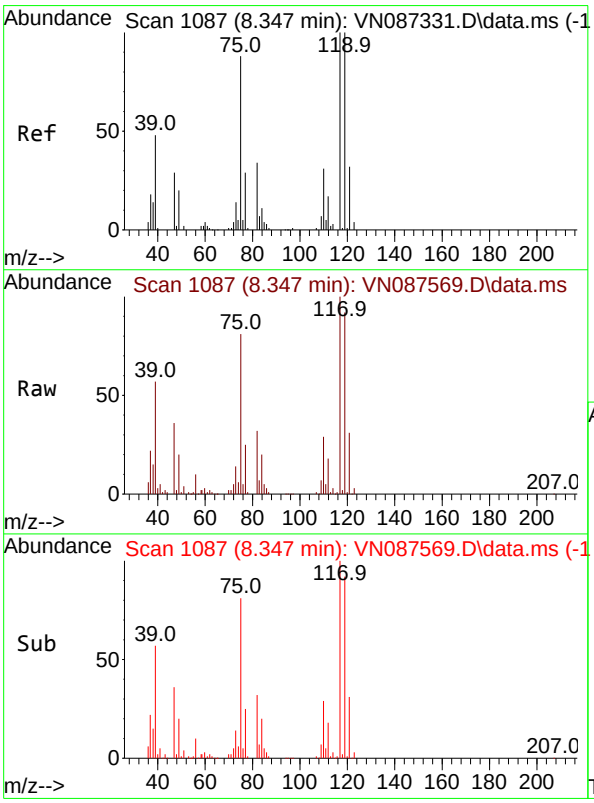
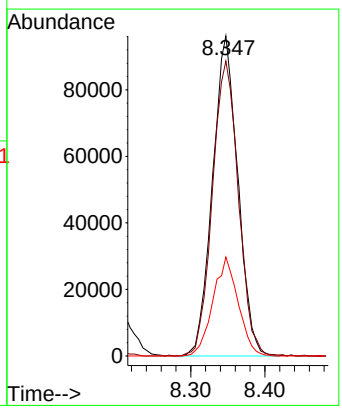


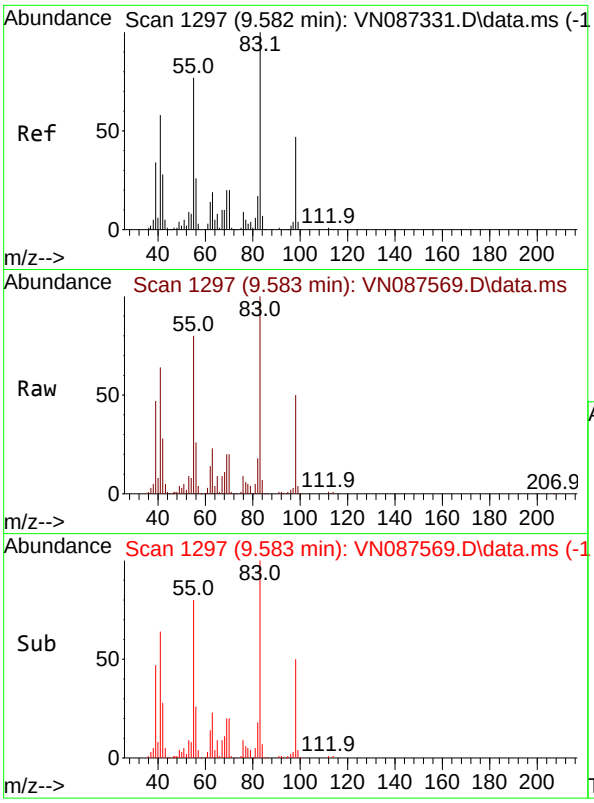


#38
Carbon Tetrachloride
Concen: 49.255 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:117 Resp: 228035

Ion	Ratio	Lower	Upper
117	100		
119	92.1	80.2	120.2
121	30.9	25.4	38.2





#39
Methylcyclohexane
Concen: 52.198 ug/l
RT: 9.583 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 83 Resp: 23750

Ion	Ratio	Lower	Upper
83	100		
55	80.4	61.3	91.9
98	49.6	37.9	56.9

Instrument :
MSVOA_N
ClientSampleId :
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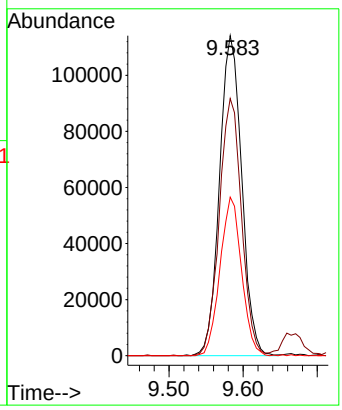
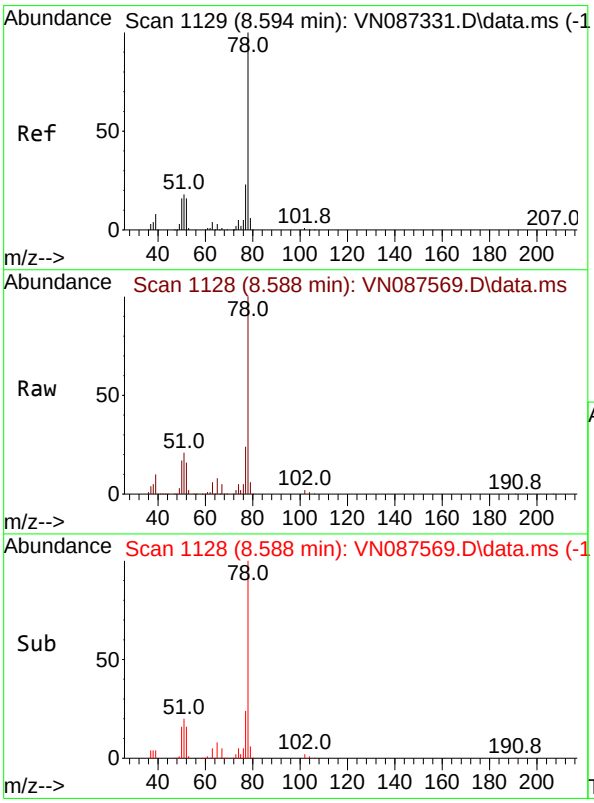
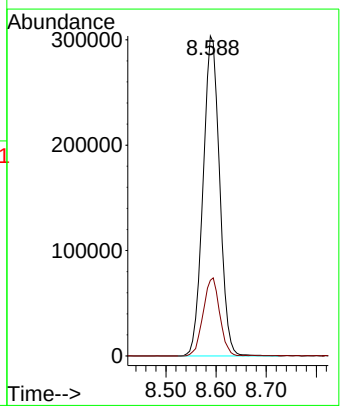


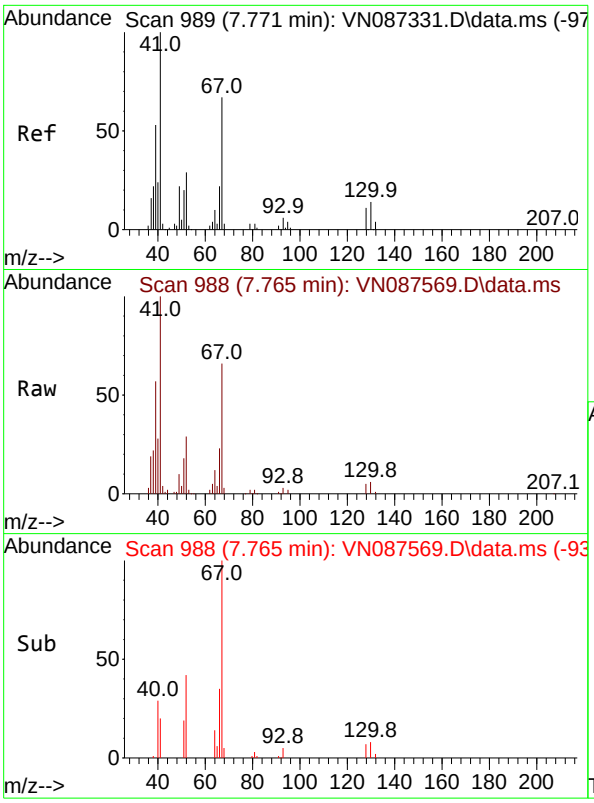


#40
Benzene
Concen: 51.262 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 78 Resp: 696316

Ion	Ratio	Lower	Upper
78	100		
77	23.6	18.2	27.2

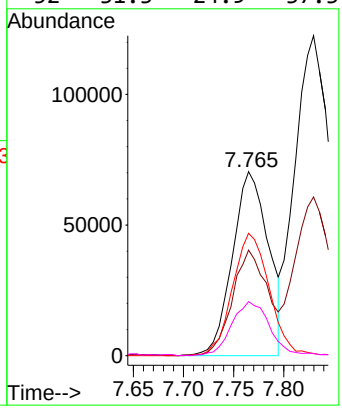




#41
Methacrylonitrile
Concen: 55.413 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 41 Resp: 17586

Ion	Ratio	Lower	Upper
41	100		
39	56.6	43.4	65.0
67	68.3	55.1	82.7
52	31.3	24.9	37.3



Instrument :
MSVOA_N
ClientSampleId :
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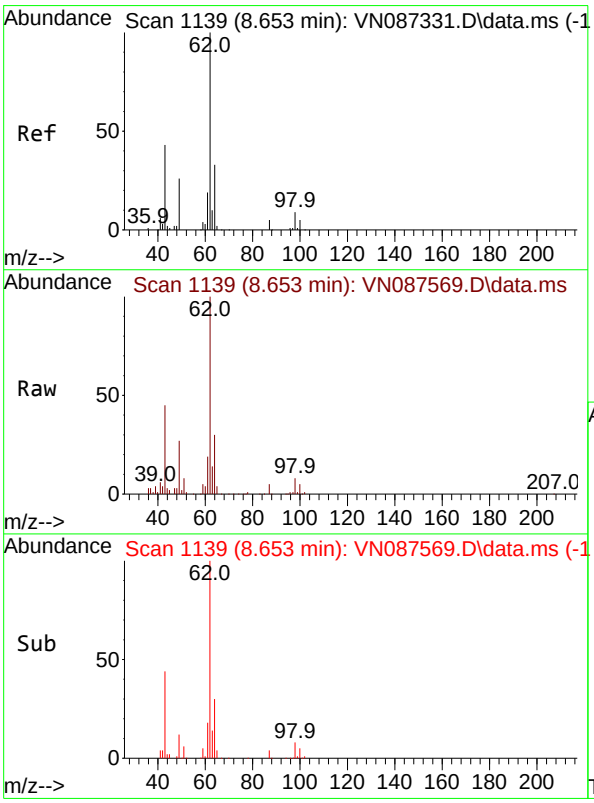
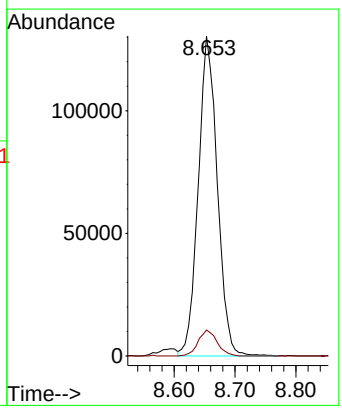
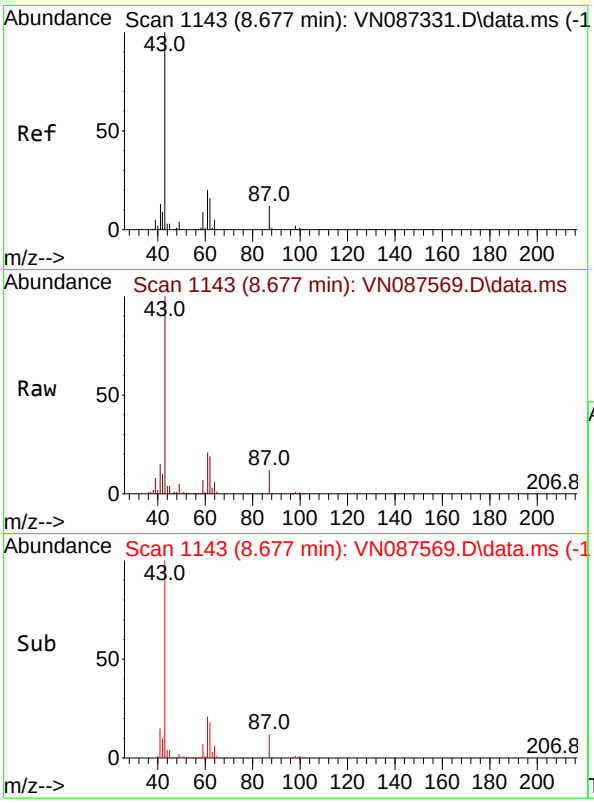


#42
1,2-Dichloroethane
Concen: 55.133 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 62 Resp: 283996

Ion	Ratio	Lower	Upper
62	100		
98	8.0	0.0	18.0

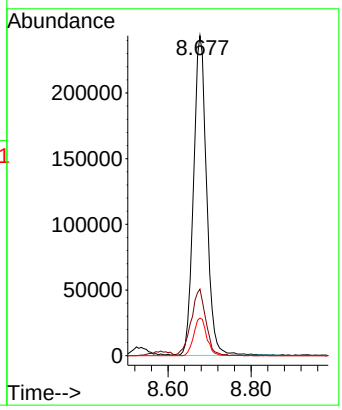




#43
Isopropyl Acetate
Concen: 56.527 ug/l
RT: 8.677 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 53261

Ion	Ratio	Lower	Upper
43	100		
61	23.0	19.8	29.8
87	11.7	9.8	14.6



Instrument :
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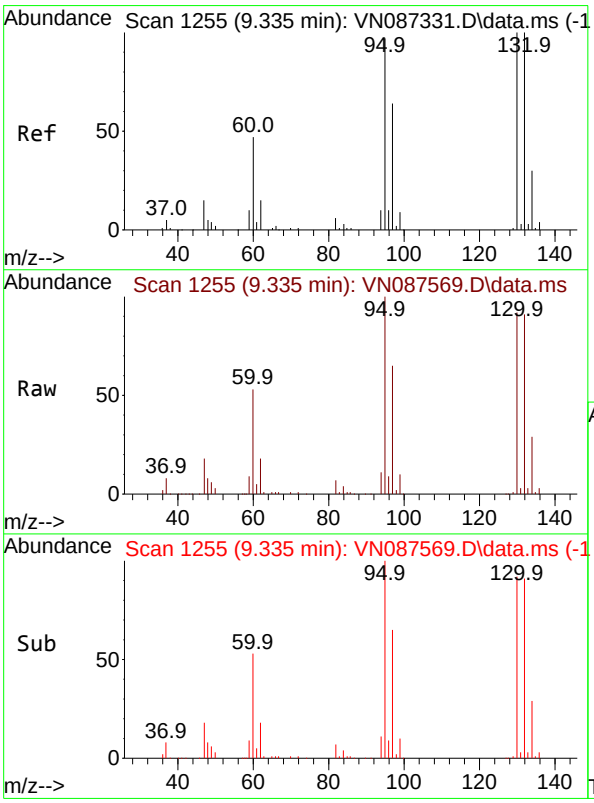
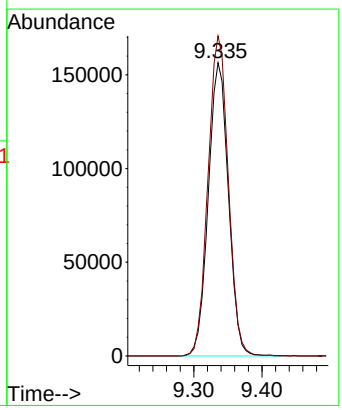
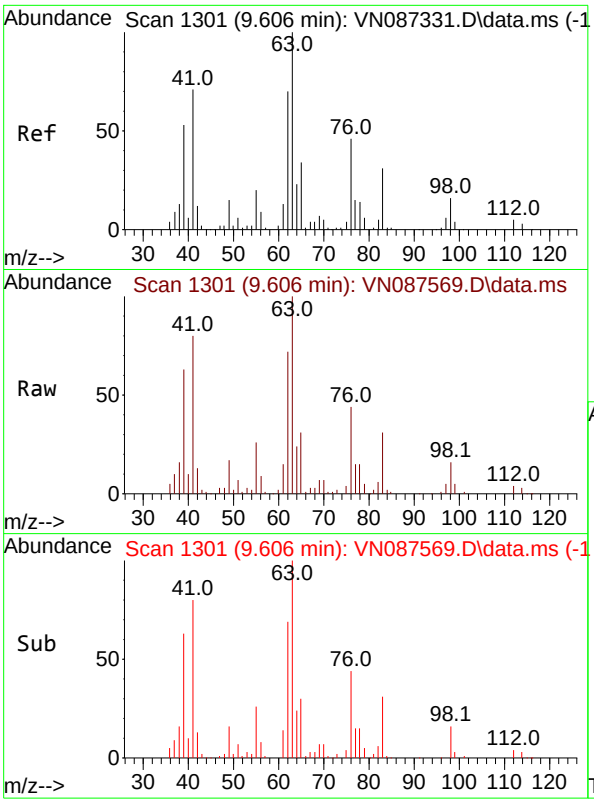


#44
Trichloroethene
Concen: 100.127 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:130 Resp: 321363

Ion	Ratio	Lower	Upper
130	100		
95	109.1	0.0	195.2

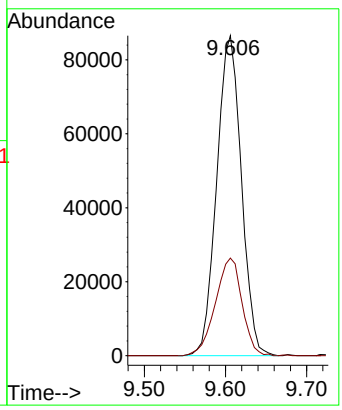




#45
1,2-Dichloropropane
Concen: 52.845 ug/l
RT: 9.606 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 63 Resp: 18239

Ion	Ratio	Lower	Upper
63	100		
65	30.5	27.0	40.4



Instrument :
MSVOA_N
ClientSampleId :
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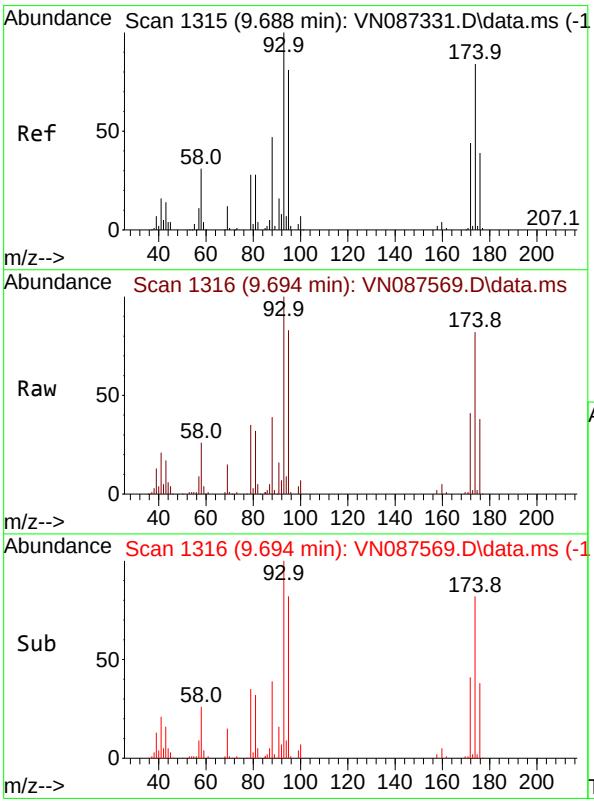
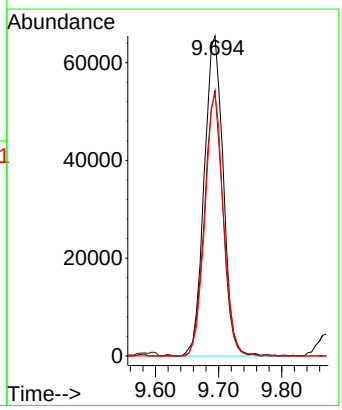
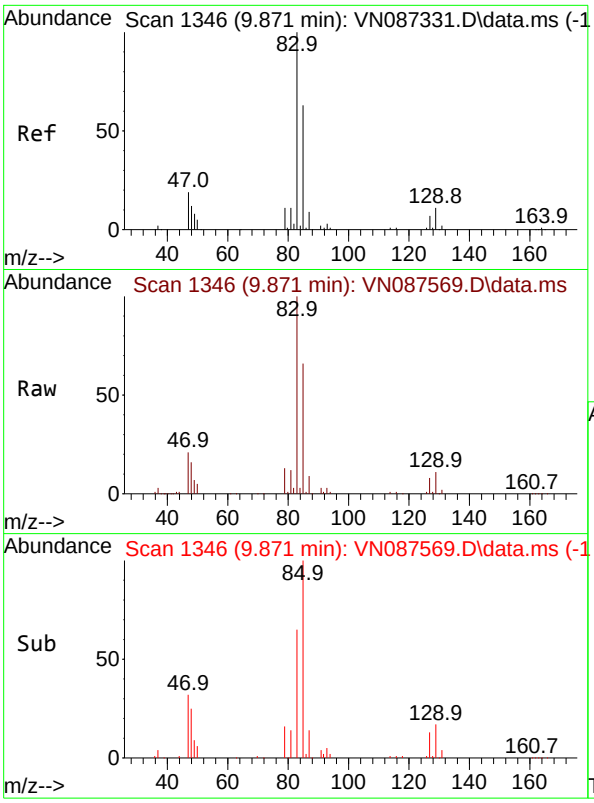


#46
Dibromomethane
Concen: 53.162 ug/l
RT: 9.694 min Scan# 1316
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 93 Resp: 137378

Ion	Ratio	Lower	Upper
93	100		
95	79.9	65.8	98.8
174	79.9	69.9	104.9

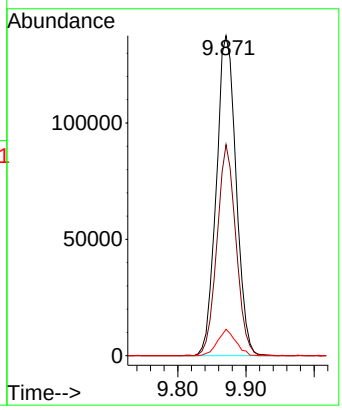




#47
Bromodichloromethane
Concen: 53.324 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 83 Resp: 27755

Ion	Ratio	Lower	Upper
83	100		
85	65.9	50.4	75.6
127	8.3	5.8	8.8



Instrument :
MSVOA_N
ClientSampleId :
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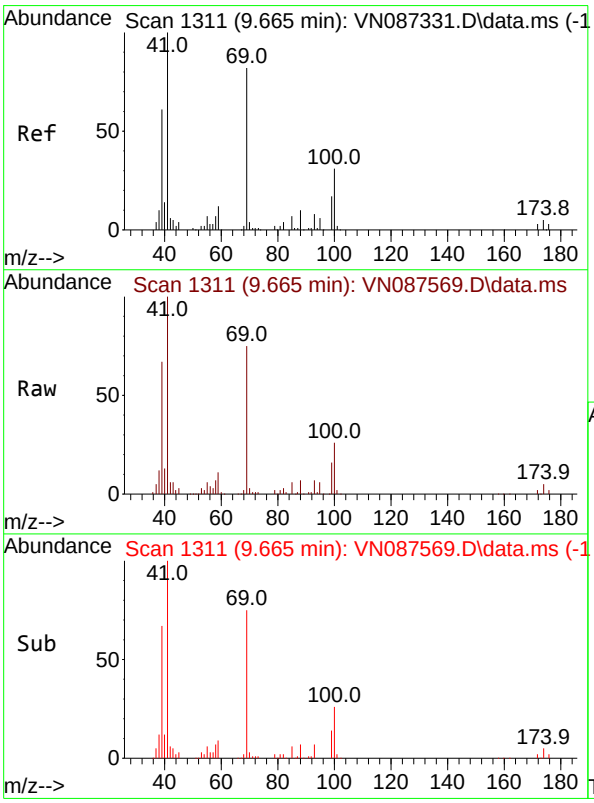
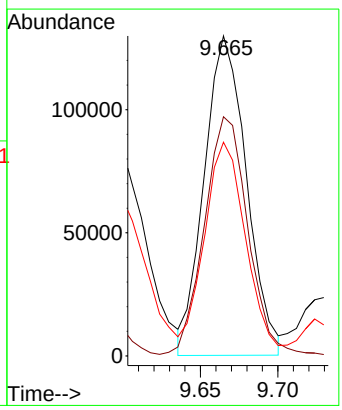
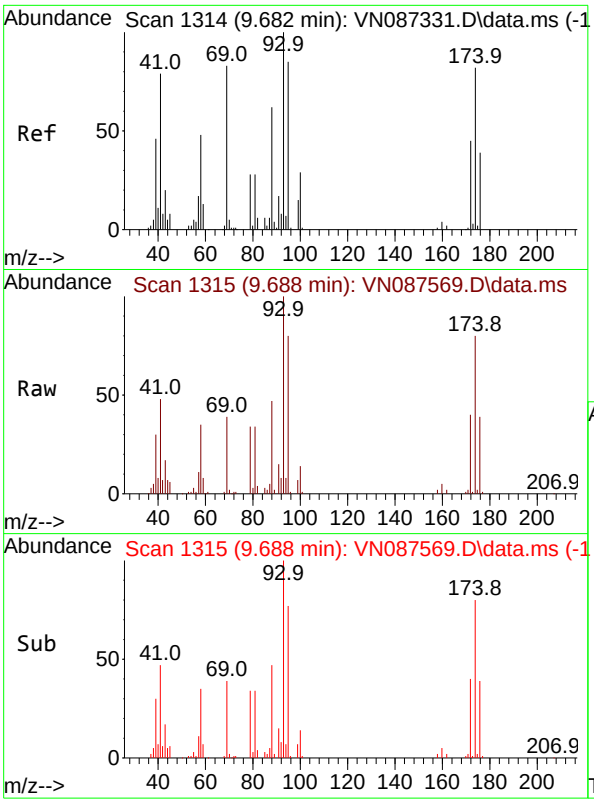


#48
Methyl methacrylate
Concen: 57.875 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 41 Resp: 245497

Ion	Ratio	Lower	Upper
41	100		
69	77.6	64.1	96.1
39	65.8	45.5	68.3





#49
1,4-Dioxane
Concen: 1075.274 ug/l
RT: 9.688 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 88 Resp: 6985

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	73.7	61.1	91.7

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
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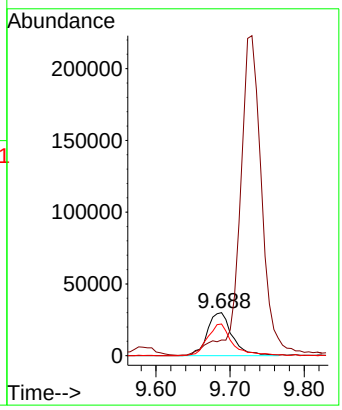
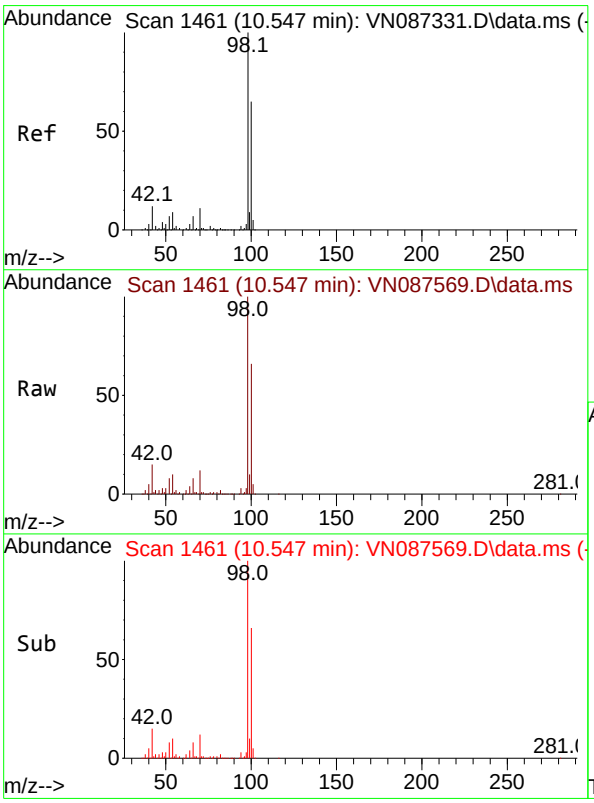
Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

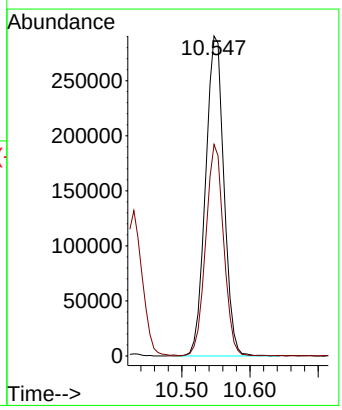


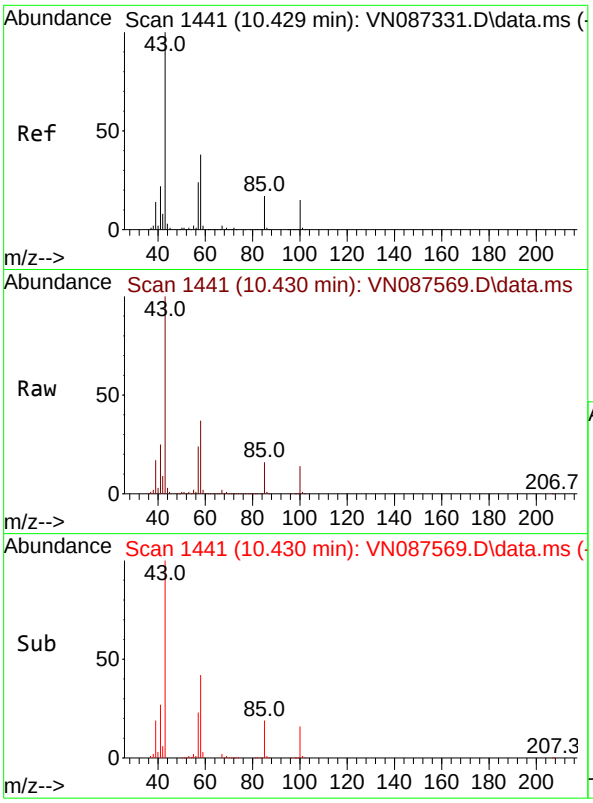


#50
Toluene-d8
Concen: 47.883 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 98 Resp: 543343

Ion	Ratio	Lower	Upper
98	100		
100	64.5	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 281.447 ug/l
RT: 10.430 min Scan# 14
Delta R.T. 0.001 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 167726

Ion	Ratio	Lower	Upper
43	100		
58	37.1	30.8	46.2

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

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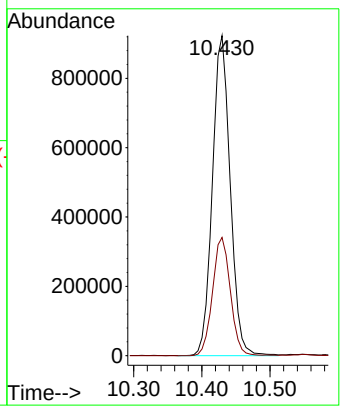
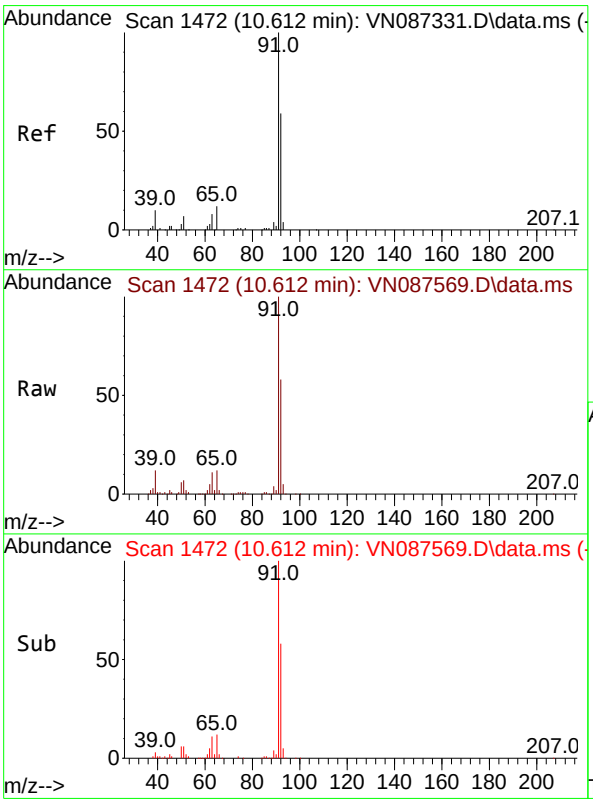
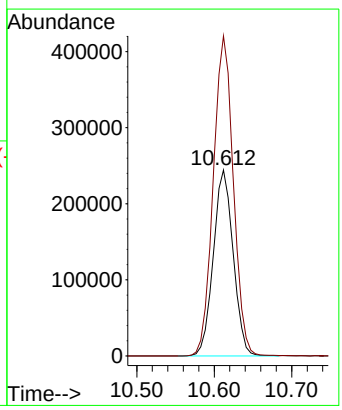


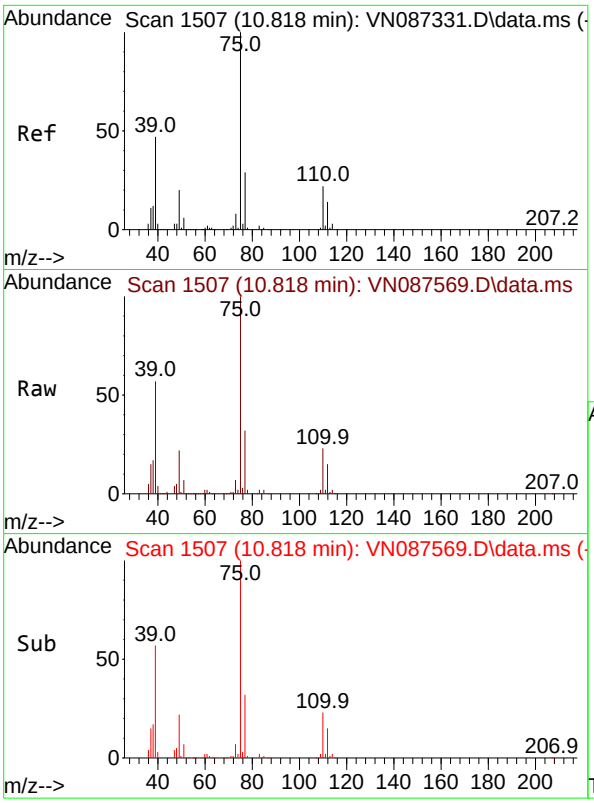


#52
Toluene
Concen: 52.770 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 92 Resp: 435684

Ion	Ratio	Lower	Upper
92	100		
91	174.1	135.1	202.7





#53
t-1,3-Dichloropropene
Concen: 53.765 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 75 Resp: 28322

Ion	Ratio	Lower	Upper
75	100		
77	32.3	23.6	35.4

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

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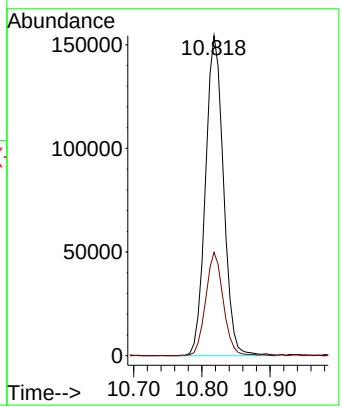
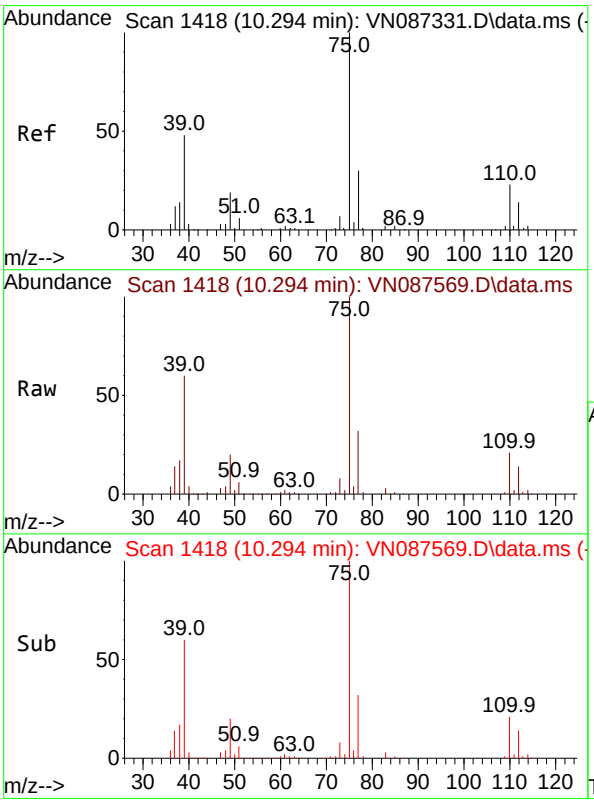
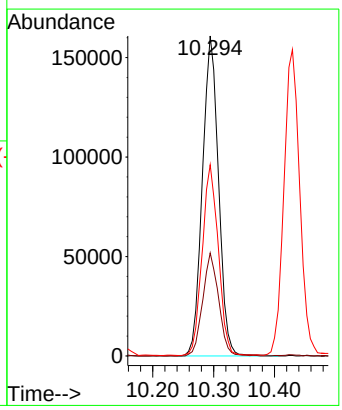


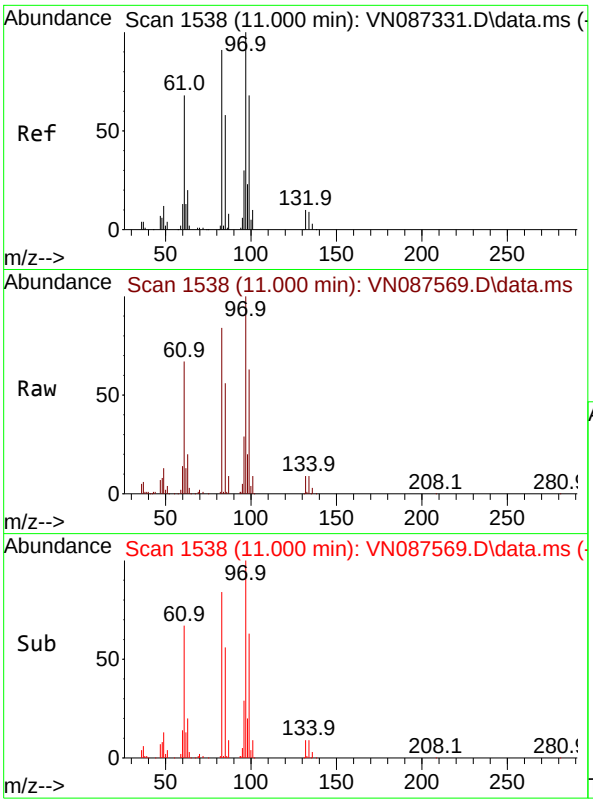


#54
cis-1,3-Dichloropropene
Concen: 54.416 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 75 Resp: 296099

Ion	Ratio	Lower	Upper
75	100		
77	32.2	24.2	36.2
39	59.6	38.4	57.6#

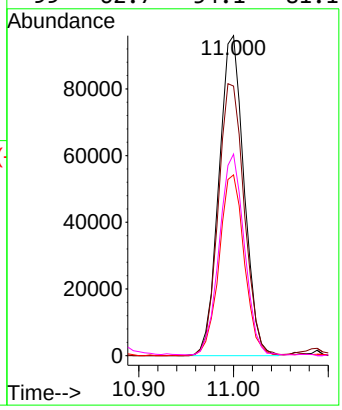




#55
1,1,2-Trichloroethane
Concen: 52.770 ug/l
RT: 11.000 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 97 Resp: 17638

Ion	Ratio	Lower	Upper
97	100		
83	84.2	72.6	109.0
85	56.5	46.7	70.1
99	62.7	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

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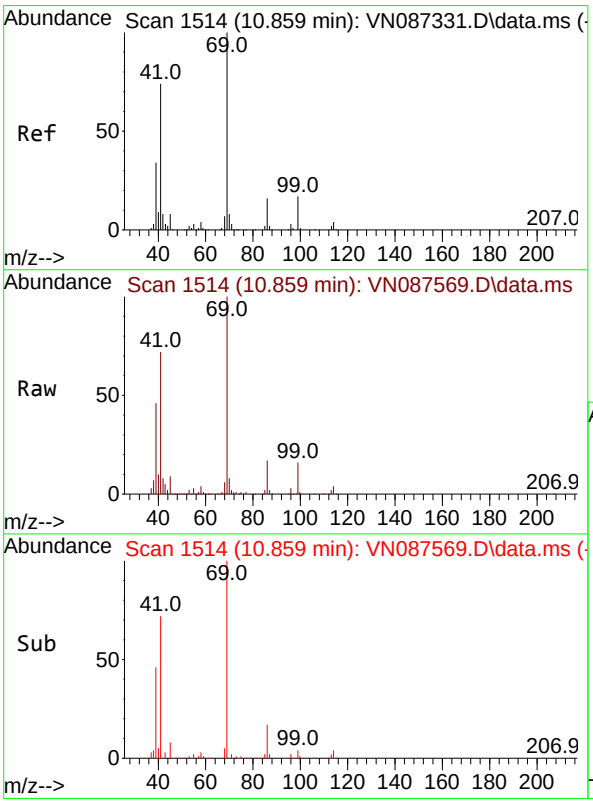
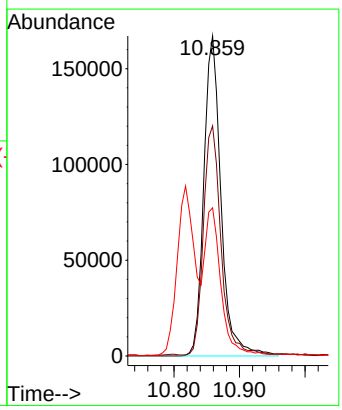
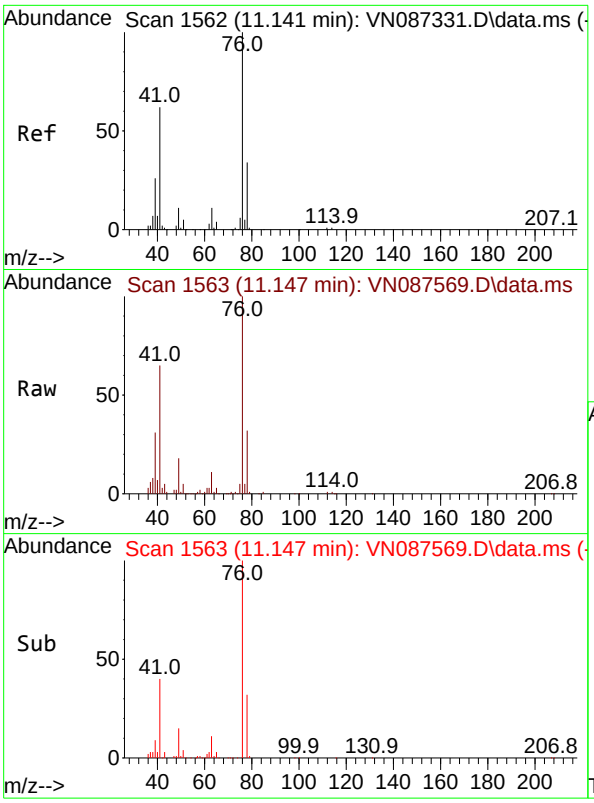


#56
Ethyl methacrylate
Concen: 54.213 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 69 Resp: 305796

Ion	Ratio	Lower	Upper
69	100		
41	73.1	55.1	82.7
39	41.9	27.9	41.9

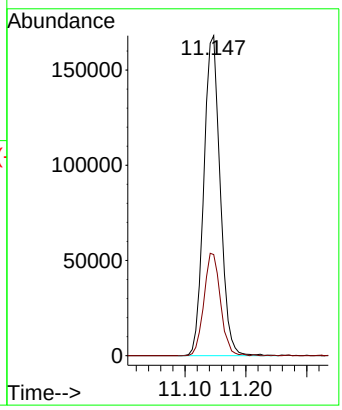




#57
1,3-Dichloropropane
Concen: 54.186 ug/l
RT: 11.147 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 76 Resp: 31315

Ion	Ratio	Lower	Upper
76	100		
78	32.4	26.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

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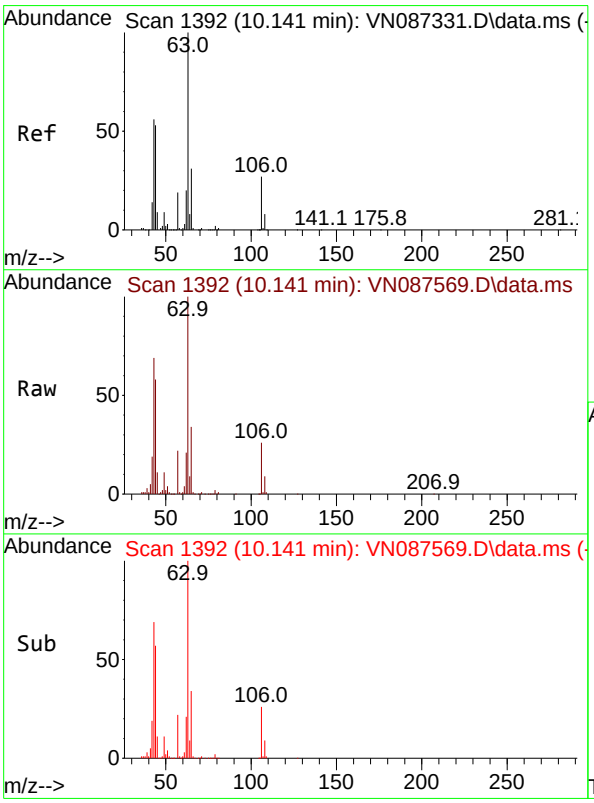
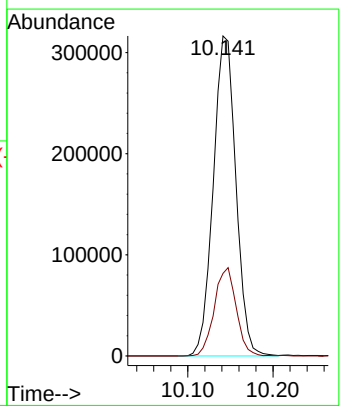
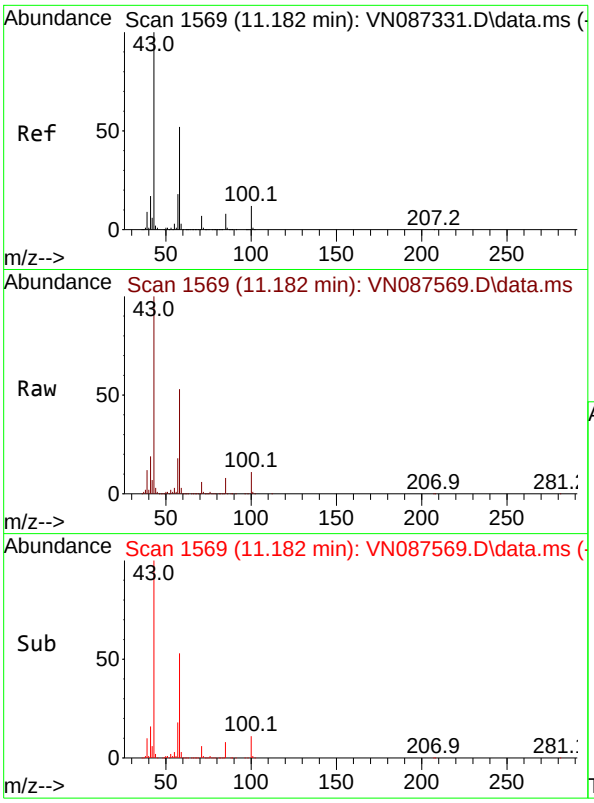


#58
2-Chloroethyl Vinyl ether
Concen: 213.042 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 63 Resp: 584151

Ion	Ratio	Lower	Upper
63	100		
106	26.7	21.7	32.5





#59
2-Hexanone
Concen: 290.068 ug/l
RT: 11.182 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 114688

Ion	Ratio	Lower	Upper
43	100		
58	53.1	26.7	80.0

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
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Reviewed By :John Carlone 08/15/2025
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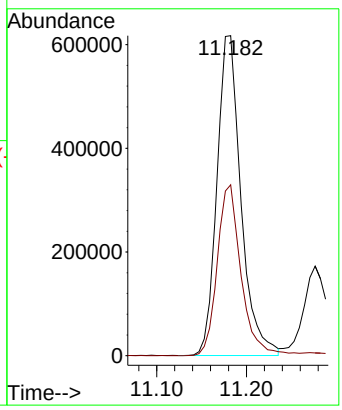
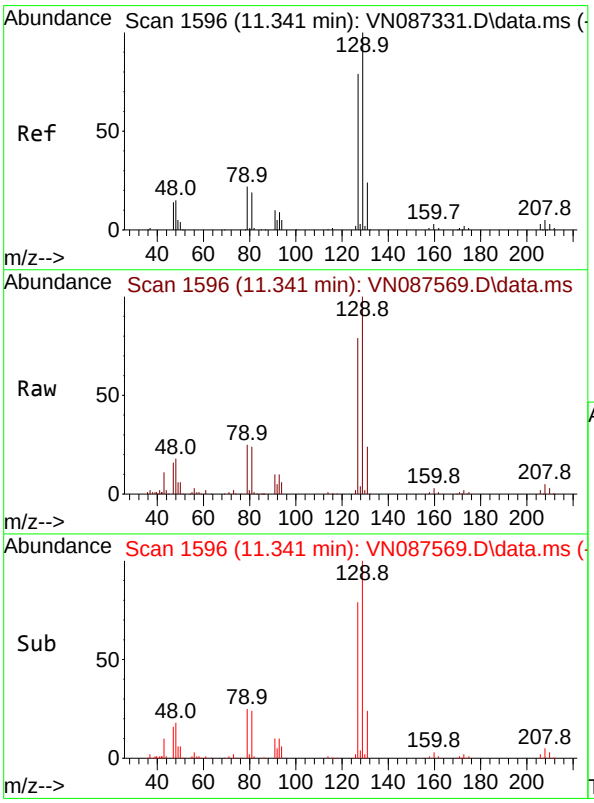
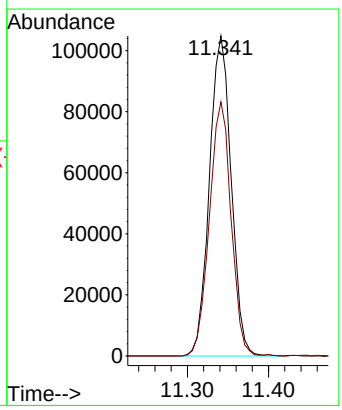


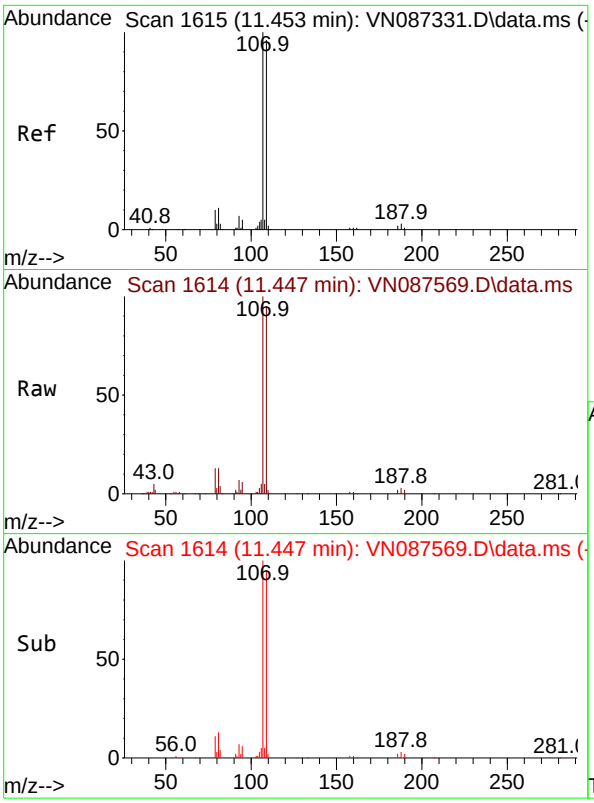


#60
Dibromochloromethane
Concen: 51.209 ug/l
RT: 11.341 min Scan# 1596
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:129 Resp: 195208

Ion	Ratio	Lower	Upper
129	100		
127	78.9	39.1	117.5





#61
1,2-Dibromoethane
Concen: 52.680 ug/l
RT: 11.447 min Scan# 1(
Delta R.T. -0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:107 Resp: 18514

Ion	Ratio	Lower	Upper
107	100		
109	95.1	77.5	116.3

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
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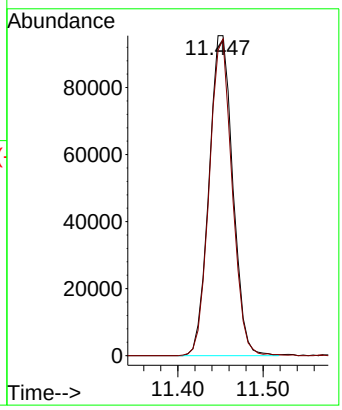
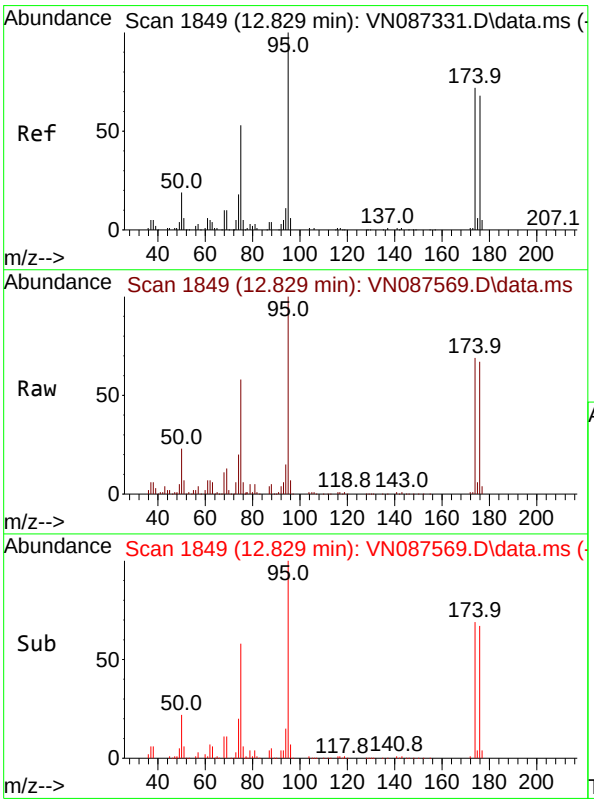
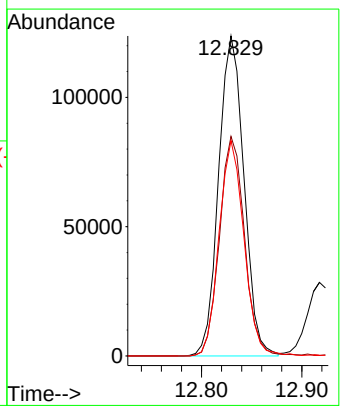


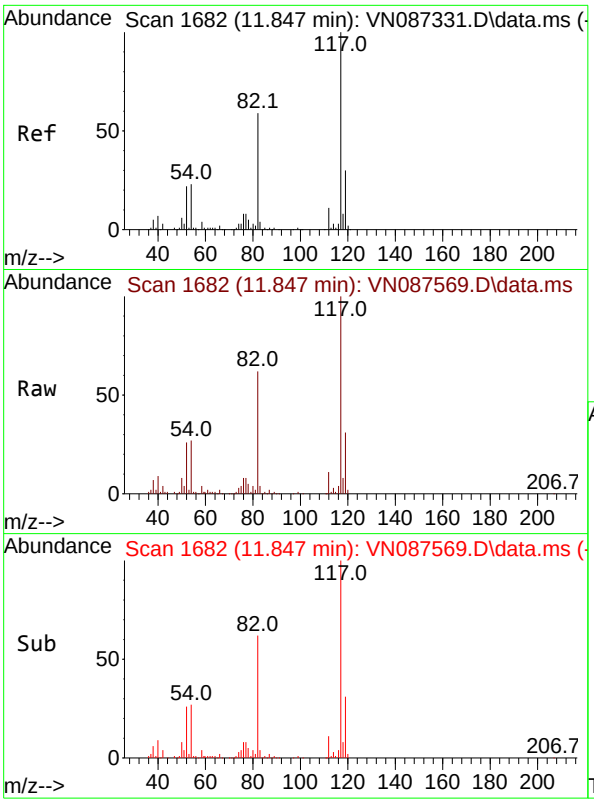


#62
4-Bromofluorobenzene
Concen: 51.737 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 95 Resp: 216897

Ion	Ratio	Lower	Upper
95	100		
174	67.8	0.0	149.4
176	66.2	0.0	141.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:117 Resp: 43520

Ion	Ratio	Lower	Upper
117	100		
82	61.7	47.4	71.2
119	30.9	23.8	35.8

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
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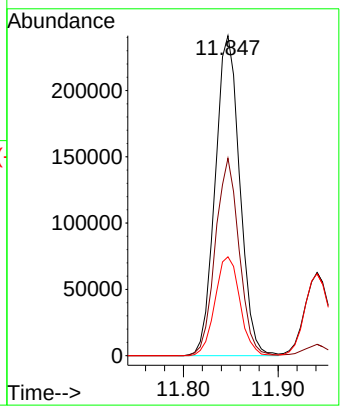
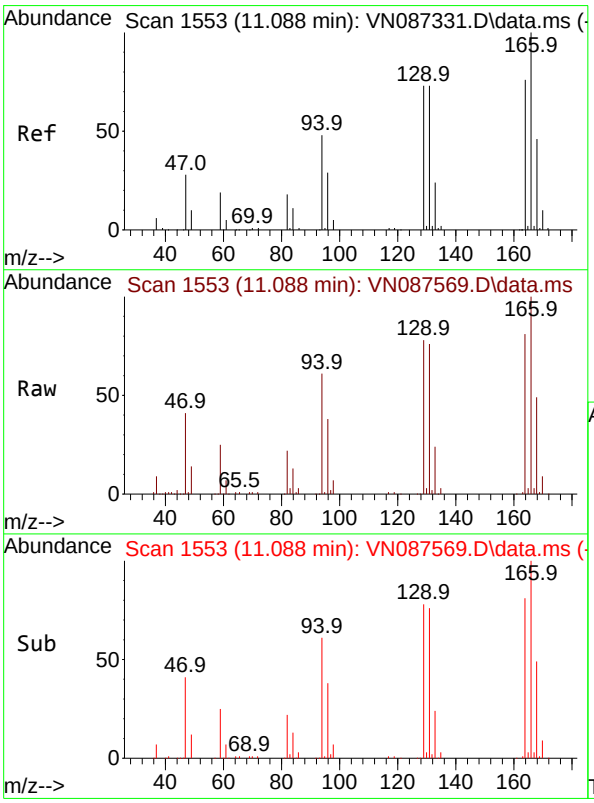
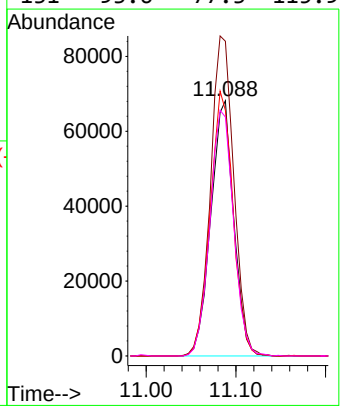


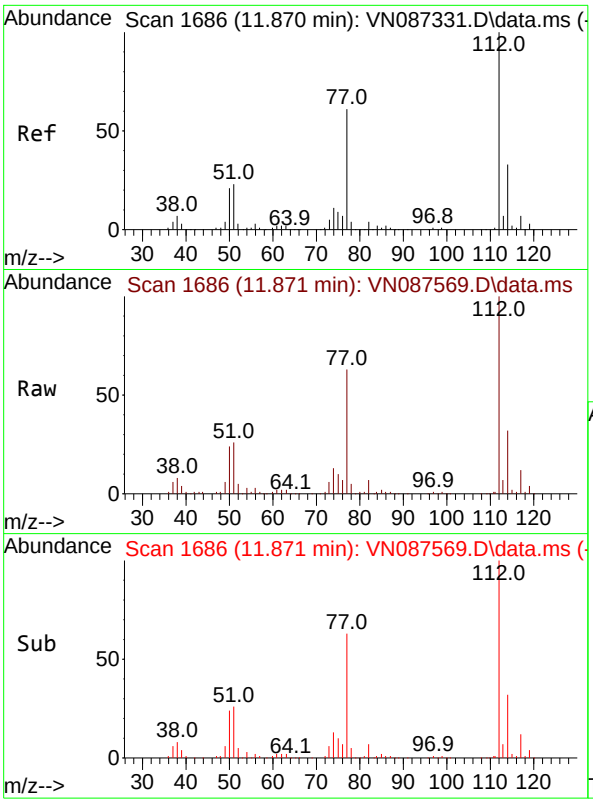


#64
Tetrachloroethene
Concen: 43.011 ug/l
RT: 11.088 min Scan# 1553
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:164 Resp: 120472

Ion	Ratio	Lower	Upper
164	100		
166	123.4	105.5	158.3
129	96.3	77.4	116.2
131	93.6	77.3	115.9





#65
Chlorobenzene
Concen: 48.382 ug/l
RT: 11.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:112 Resp: 47272

Ion	Ratio	Lower	Upper
112	100		
114	32.5	26.5	39.7

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
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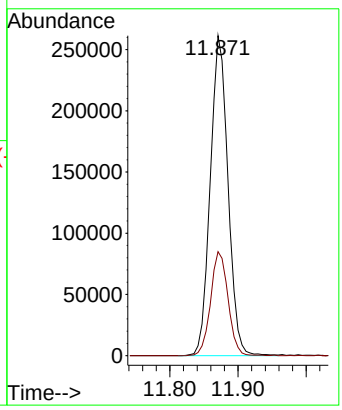
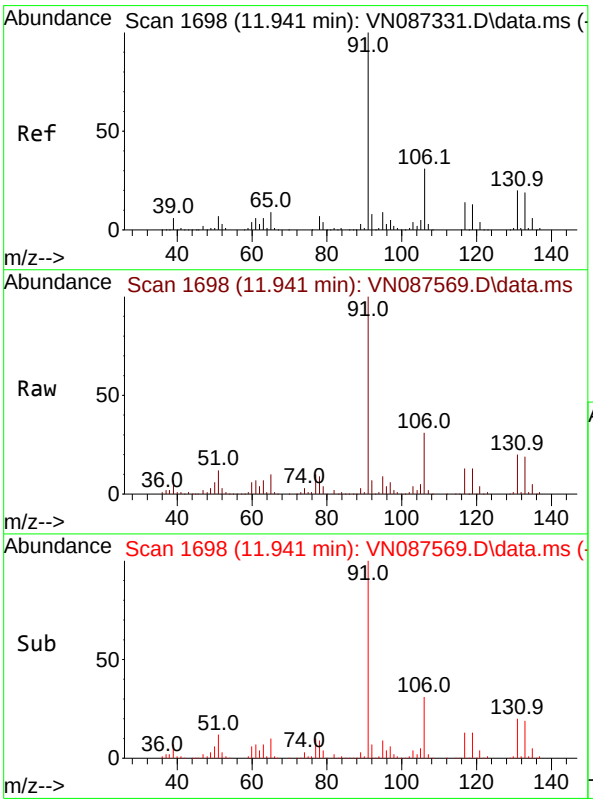
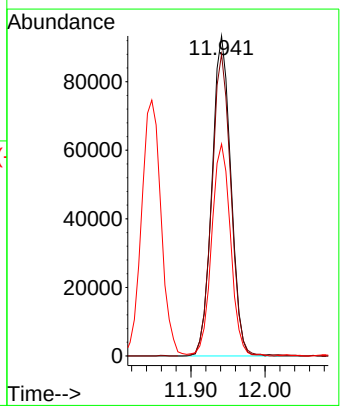


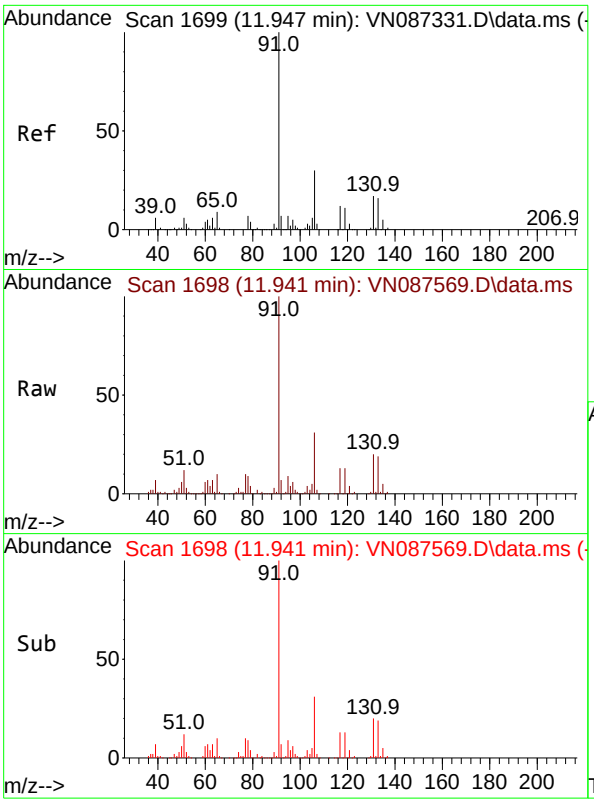


#66
1,1,1,2-Tetrachloroethane
Concen: 49.672 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:131 Resp: 165027

Ion	Ratio	Lower	Upper
131	100		
133	95.2	47.4	142.3
119	66.5	33.1	99.2





#67
Ethyl Benzene
Concen: 52.514 ug/l
RT: 11.941 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 91 Resp: 84468

Ion	Ratio	Lower	Upper
91	100		
106	30.8	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
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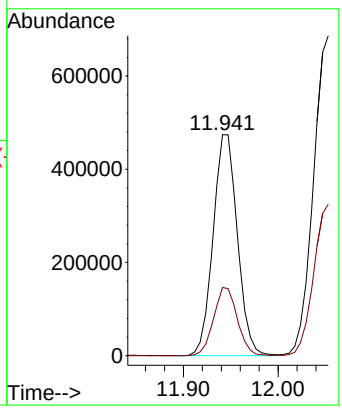
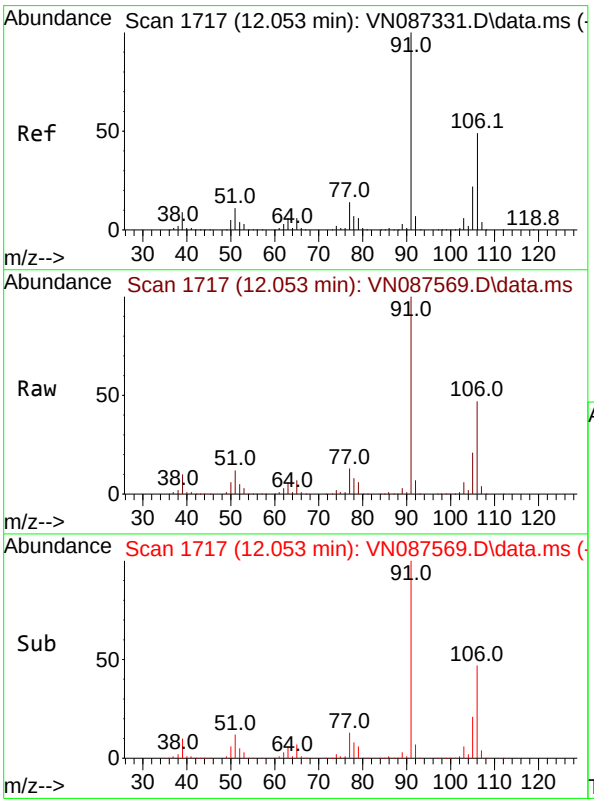
Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

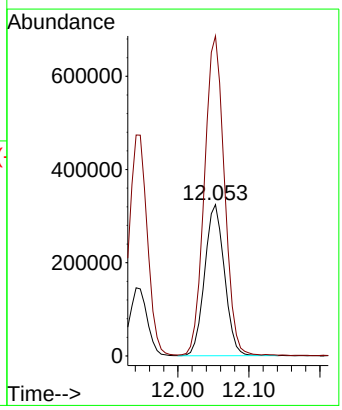


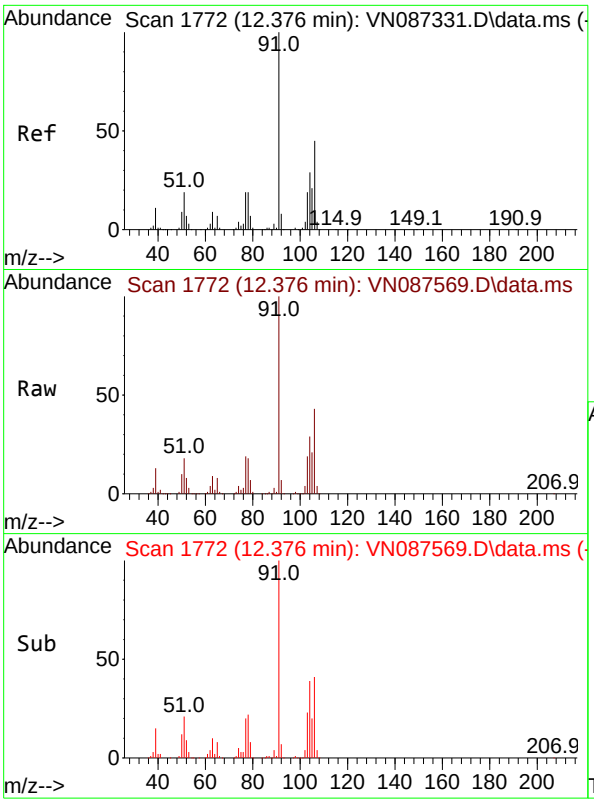


#68
m/p-Xylenes
Concen: 104.251 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:106 Resp: 627919

Ion	Ratio	Lower	Upper
106	100		
91	212.8	162.0	243.0





#69
o-Xylene
Concen: 53.449 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:106 Resp: 30751

Ion	Ratio	Lower	Upper
106	100		
91	224.3	107.7	323.3

Instrument :
MSVOA_N
ClientSampleId :
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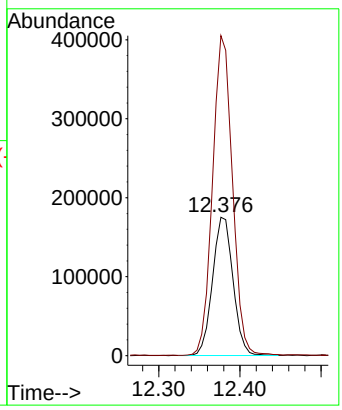
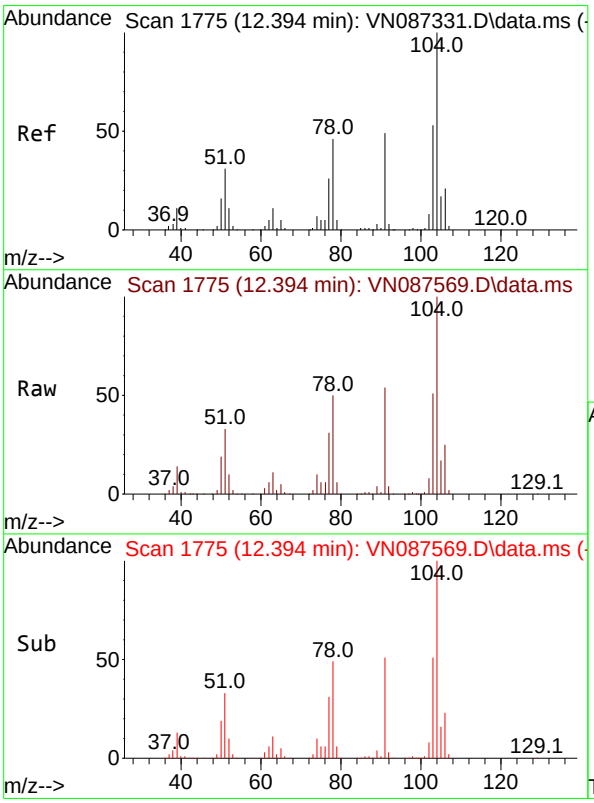
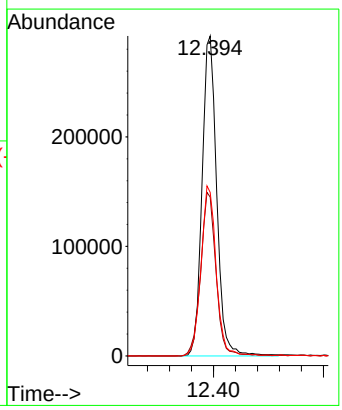


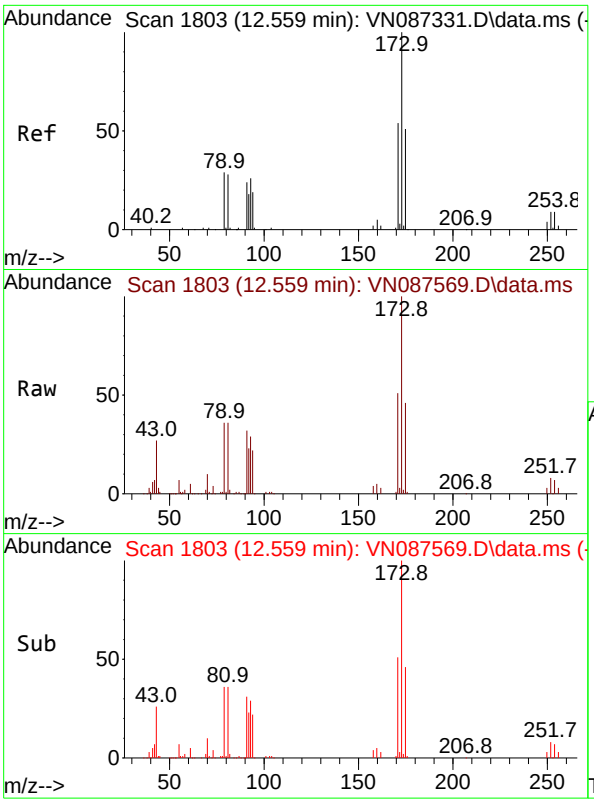


#70
Styrene
Concen: 55.741 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:104 Resp: 539497

Ion	Ratio	Lower	Upper
104	100		
78	53.4	41.0	61.6
103	55.2	43.9	65.9





#71
Bromoform
Concen: 48.082 ug/l
RT: 12.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:173 Resp: 12905

Ion	Ratio	Lower	Upper
173	100		
175	47.3	24.1	72.3
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
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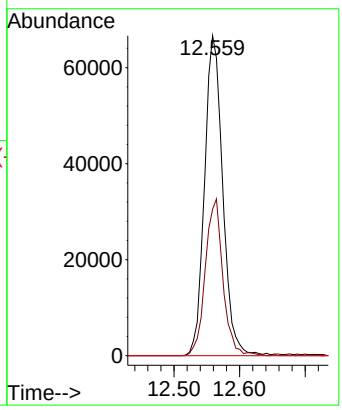
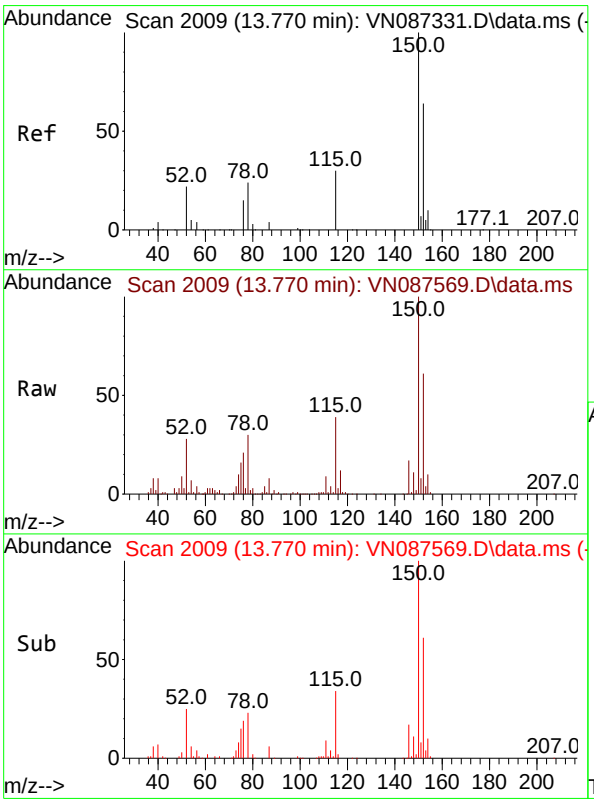
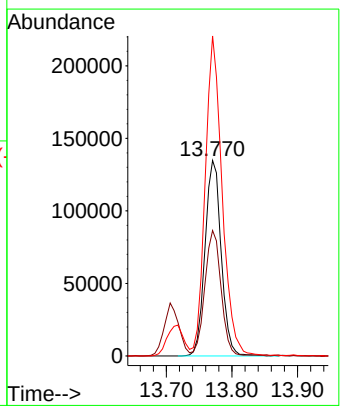


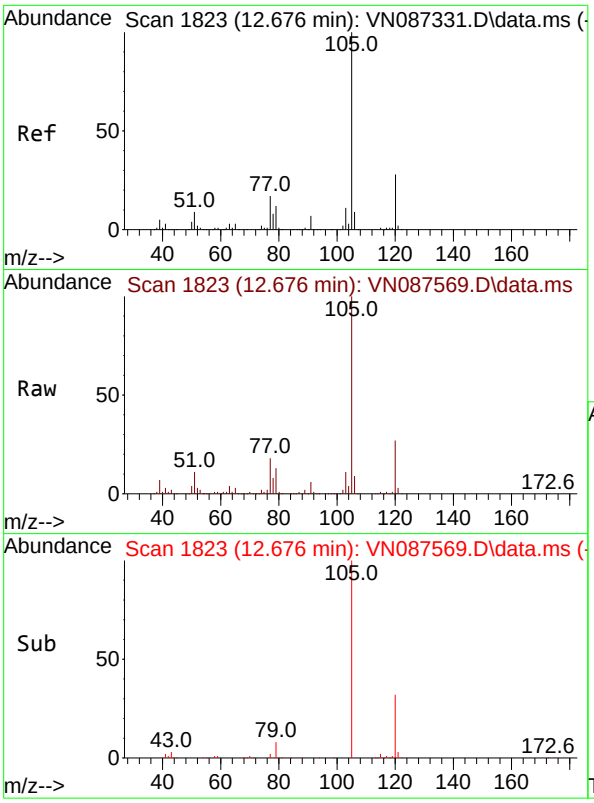


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:152 Resp: 231778

Ion	Ratio	Lower	Upper
152	100		
115	64.6	31.1	93.5
150	170.8	0.0	349.0





#73
Isopropylbenzene
Concen: 54.677 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:105 Resp: 79760

Ion	Ratio	Lower	Upper
105	100		
120	25.7	13.4	40.1

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

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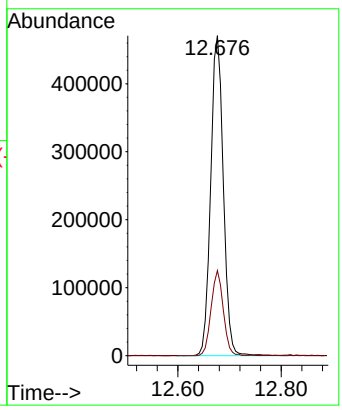
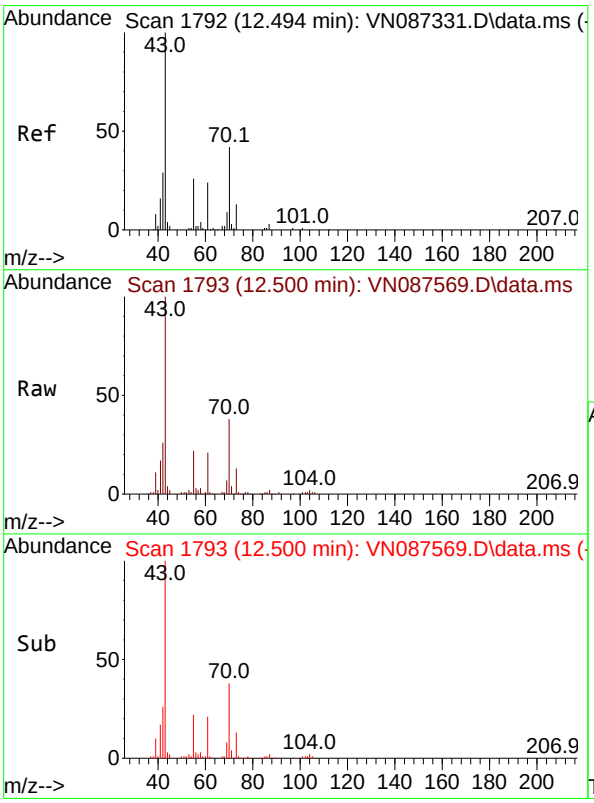
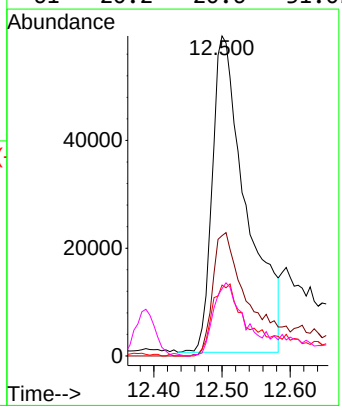


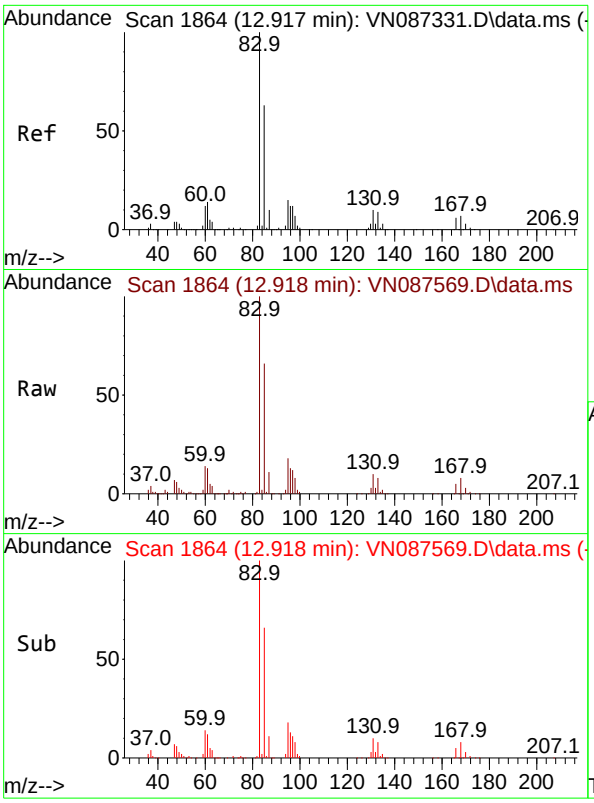


#74
N-amyl acetate
Concen: 33.679 ug/l
RT: 12.500 min Scan# 1793
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 43 Resp: 204124

Ion	Ratio	Lower	Upper
43	100		
70	42.1	37.6	56.4
55	22.5	19.6	29.4
61	20.2	20.6	31.0#

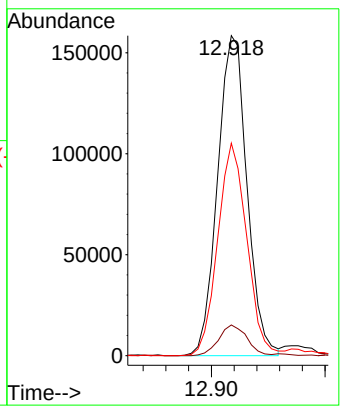




#75
1,1,2,2-Tetrachloroethane
Concen: 51.946 ug/l
RT: 12.918 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 83 Resp: 28513

Ion	Ratio	Lower	Upper
83	100		
131	9.2	5.1	15.3
85	65.5	32.5	97.4



Instrument :
MSVOA_N
ClientSampleId :
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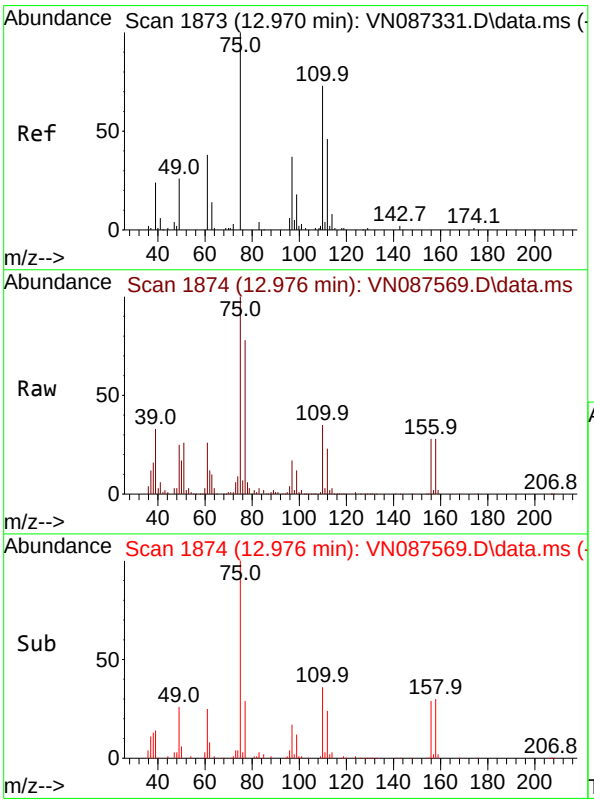
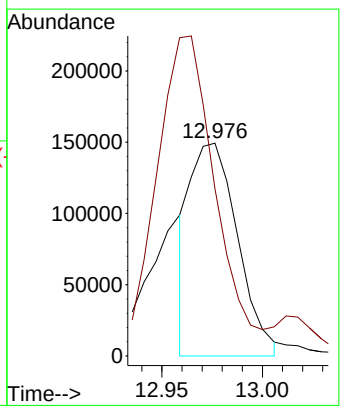
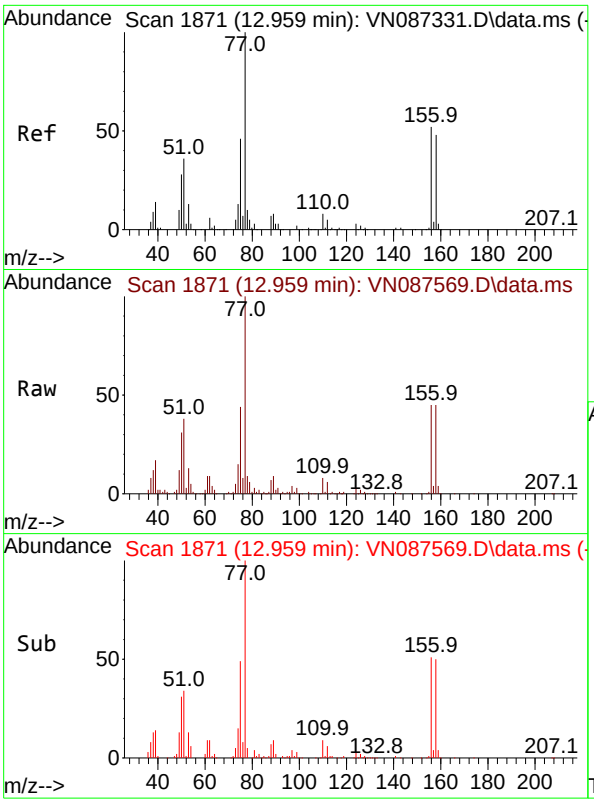


#76
1,2,3-Trichloropropane
Concen: 47.080 ug/l m
RT: 12.976 min Scan# 1874
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 75 Resp: 244697

Ion	Ratio	Lower	Upper
75	100		
77	188.3	94.5	283.6

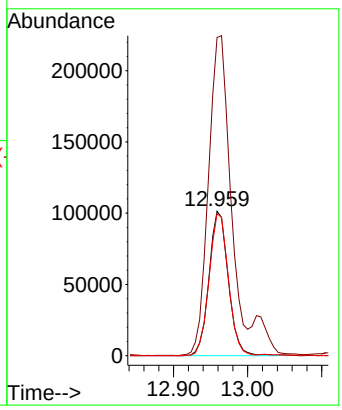




#77
Bromobenzene
Concen: 48.469 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:156 Resp: 18337

Ion	Ratio	Lower	Upper
156	100		
77	251.3	114.9	344.6
158	98.0	48.5	145.5



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

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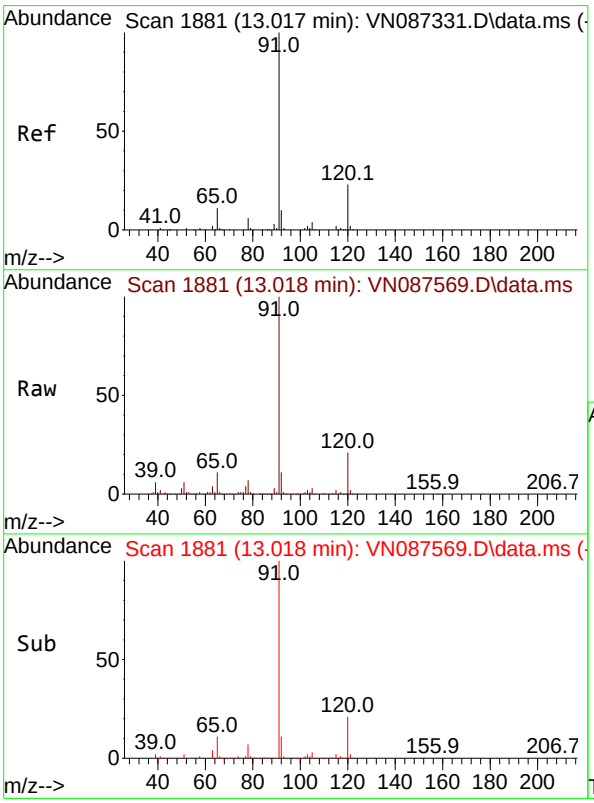
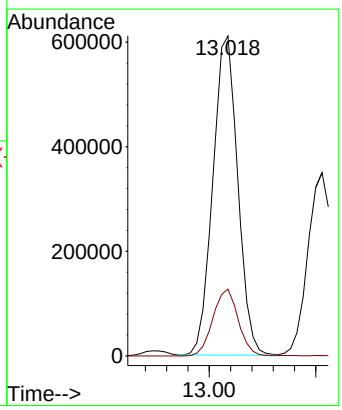
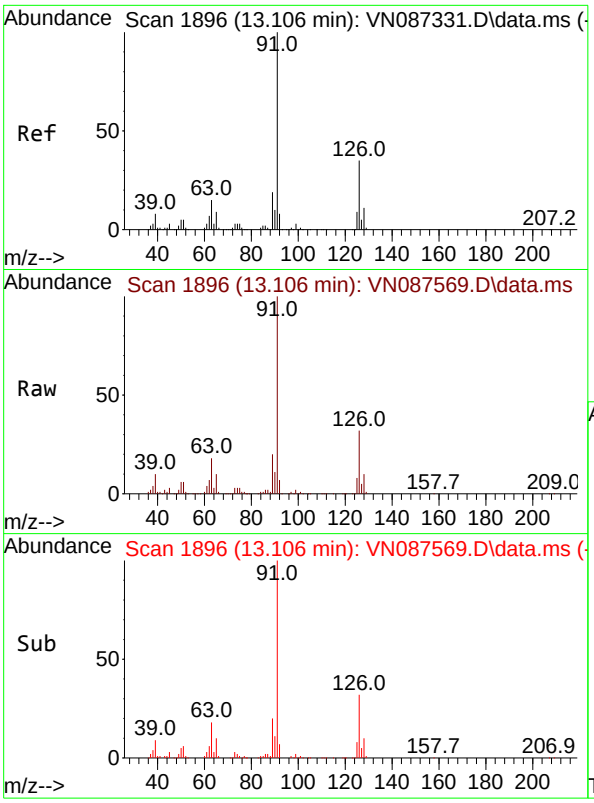


#78
n-propylbenzene
Concen: 53.982 ug/l
RT: 13.018 min Scan# 1881
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 91 Resp: 990768

Ion	Ratio	Lower	Upper
91	100		
120	21.3	11.3	33.8





#79
2-Chlorotoluene
Concen: 53.218 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 91 Resp: 60028

Ion	Ratio	Lower	Upper
91	100		
126	31.6	16.9	50.6

Instrument :
MSVOA_N
ClientSampleId :
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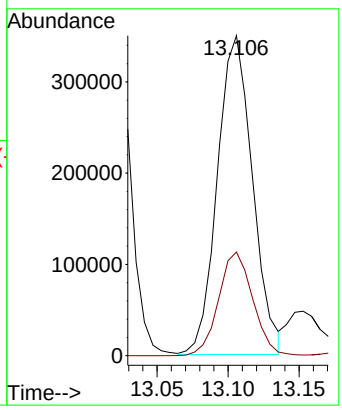
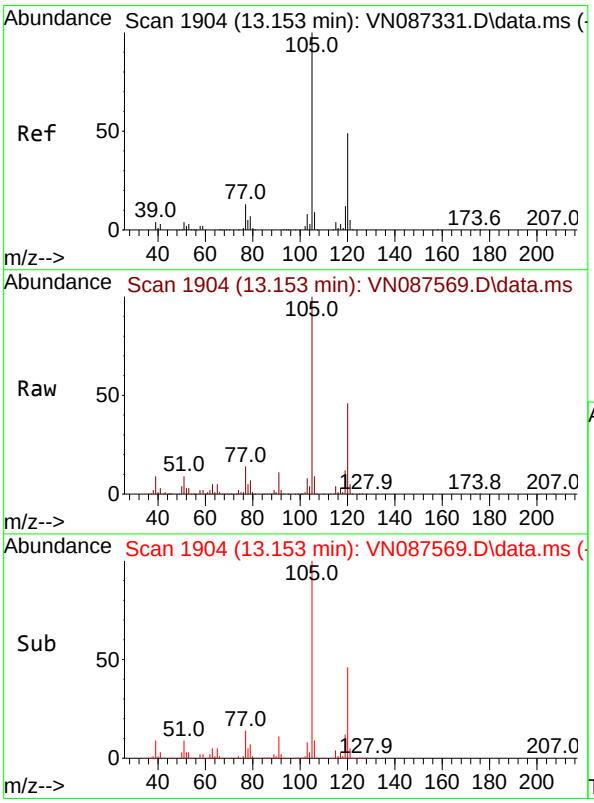
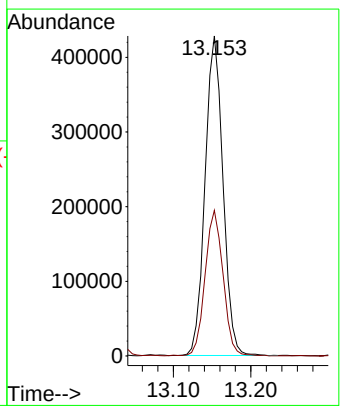


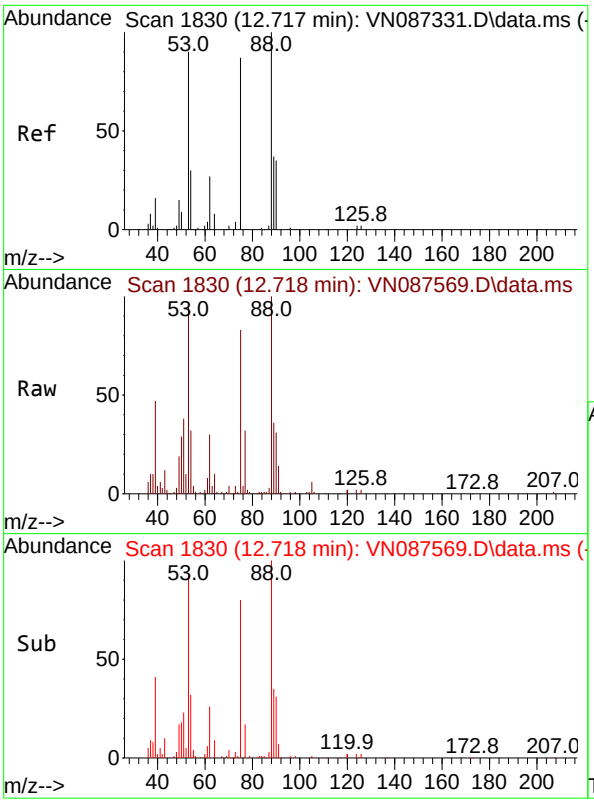


#80
1,3,5-Trimethylbenzene
Concen: 55.240 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:105 Resp: 686579

Ion	Ratio	Lower	Upper
105	100		
120	45.6	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 45.950 ug/l
RT: 12.718 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Tgt Ion: 75 Resp: 8728

Ion	Ratio	Lower	Upper
75	100		
53	113.7	83.5	125.3
89	45.2	38.4	57.6

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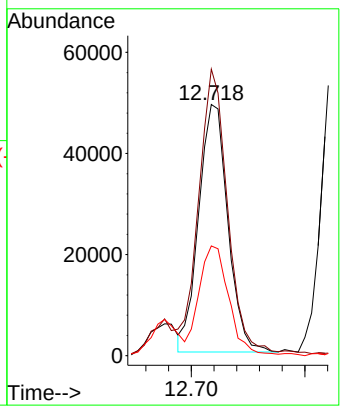
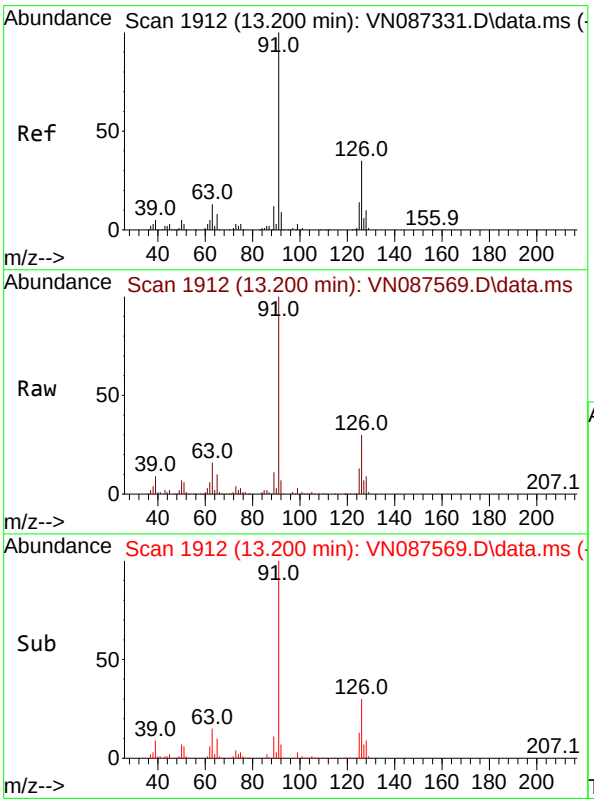
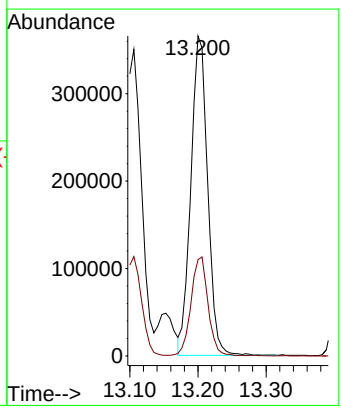


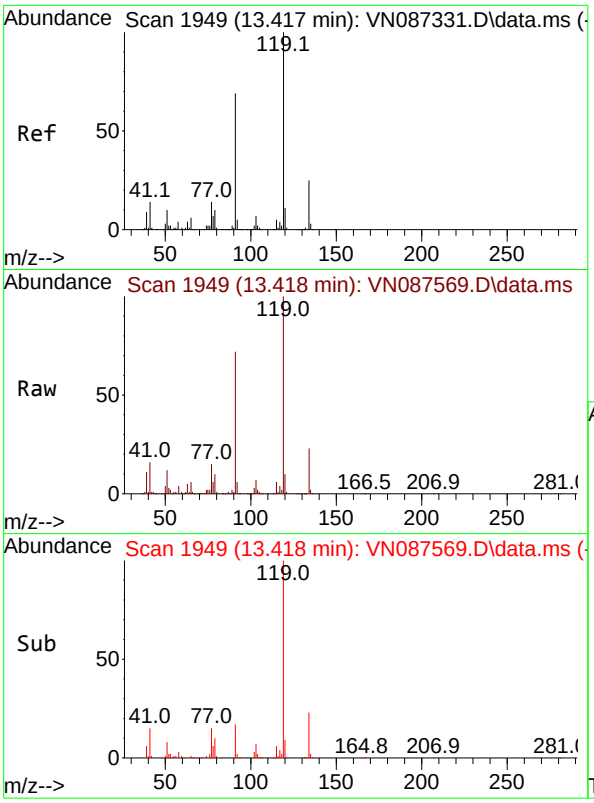


#82
4-Chlorotoluene
Concen: 53.269 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 91 Resp: 625581

Ion	Ratio	Lower	Upper
91	100		
126	31.3	16.6	49.7





#83
tert-Butylbenzene
Concen: 55.497 ug/l
RT: 13.418 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:119 Resp: 57610

Ion	Ratio	Lower	Upper
119	100		
91	71.9	35.0	105.1
134	26.6	12.6	37.6

Instrument :
MSVOA_N
ClientSampleId :
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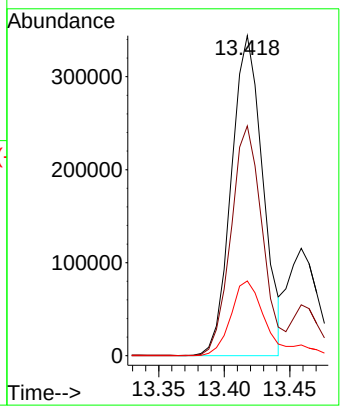
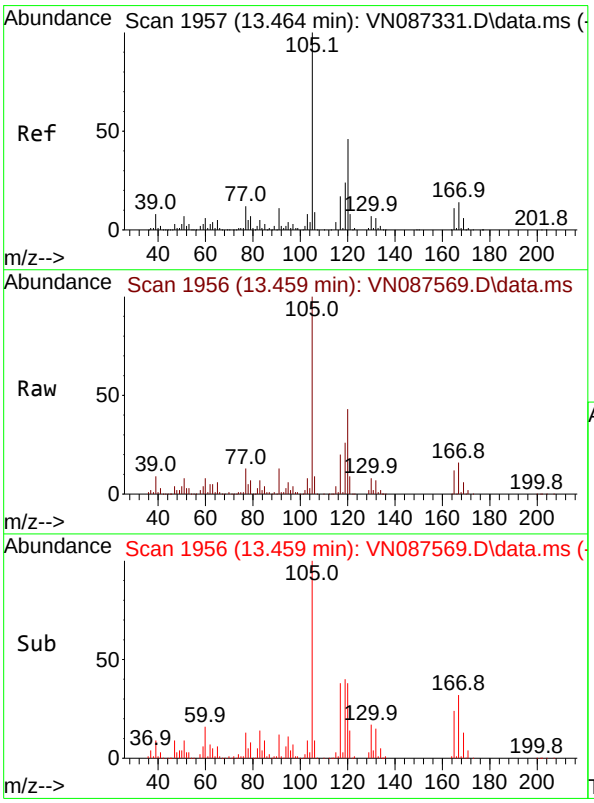
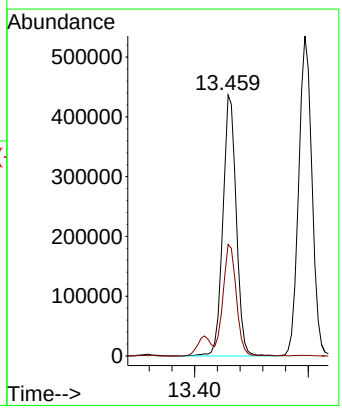


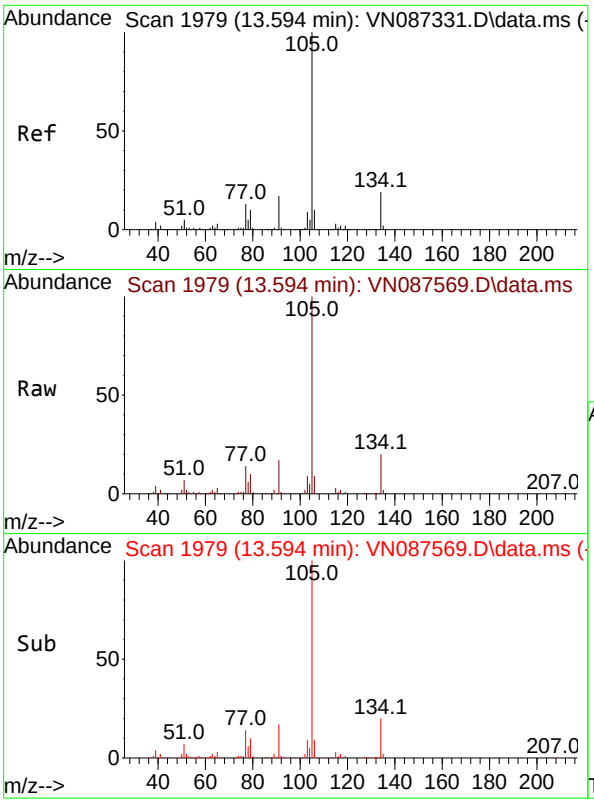


#84
1,2,4-Trimethylbenzene
Concen: 56.391 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:105 Resp: 715753

Ion	Ratio	Lower	Upper
105	100		
120	42.2	22.8	68.3





#85
sec-Butylbenzene
Concen: 55.396 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:105 Resp: 86618

Ion	Ratio	Lower	Upper
105	100		
134	19.2	9.8	29.4

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

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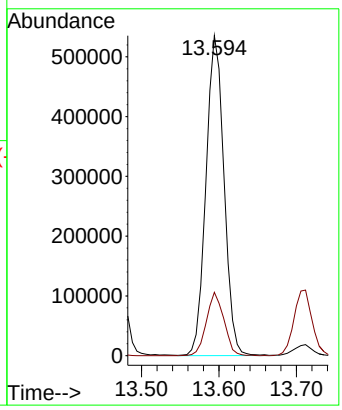
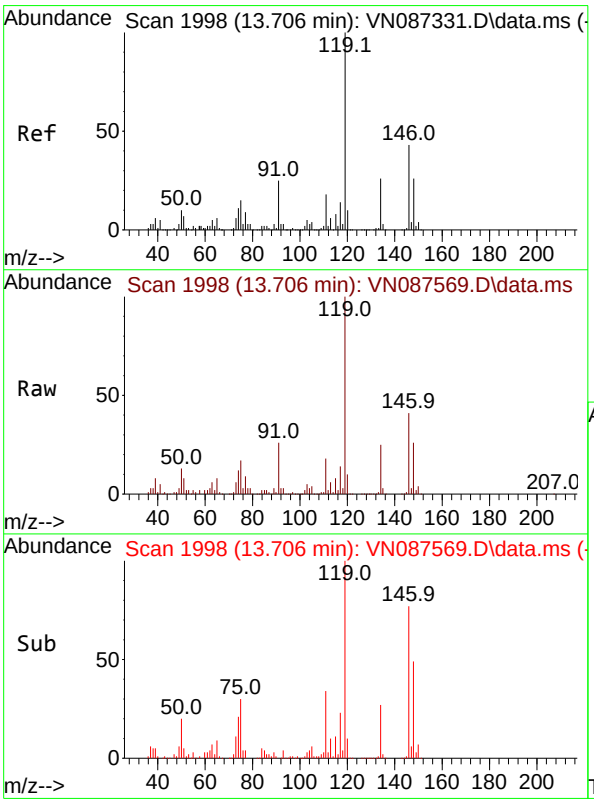
Supervised By :Mahesh Dadoda 08/19/2025

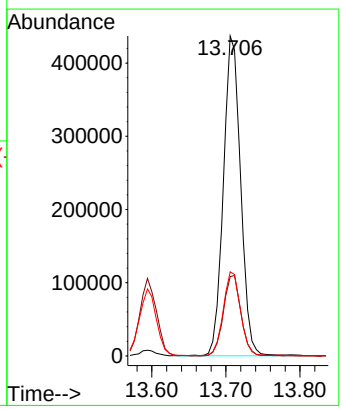


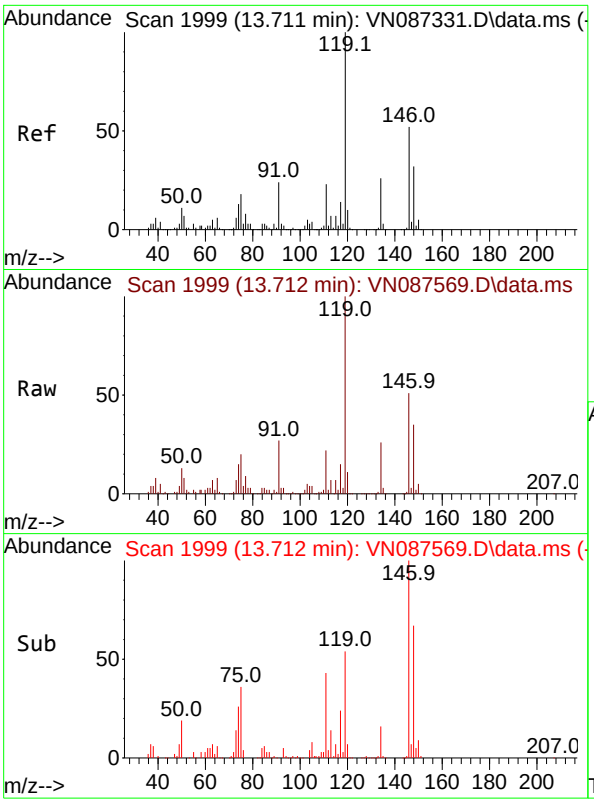


#86
p-Isopropyltoluene
Concen: 56.143 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:119 Resp: 703516

Ion	Ratio	Lower	Upper
119	100		
134	25.7	13.5	40.5
91	26.3	12.2	36.6





#87
1,3-Dichlorobenzene
Concen: 49.929 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

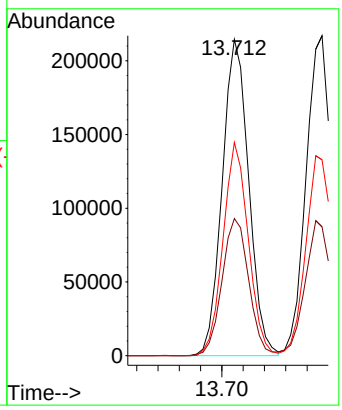
Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

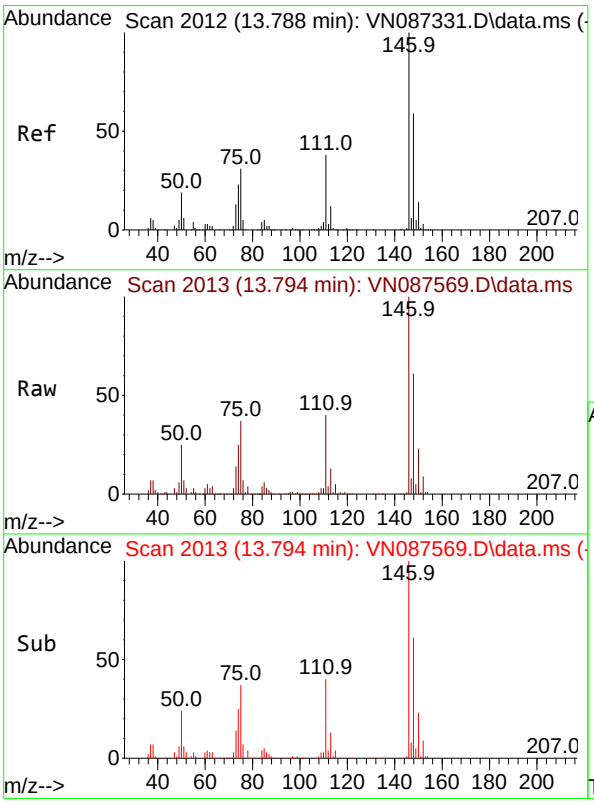
Tgt Ion:146 Resp: 37072

Ion	Ratio	Lower	Upper
146	100		
111	43.8	21.4	64.3
148	64.4	31.6	95.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

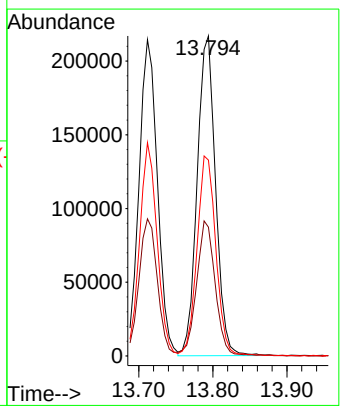


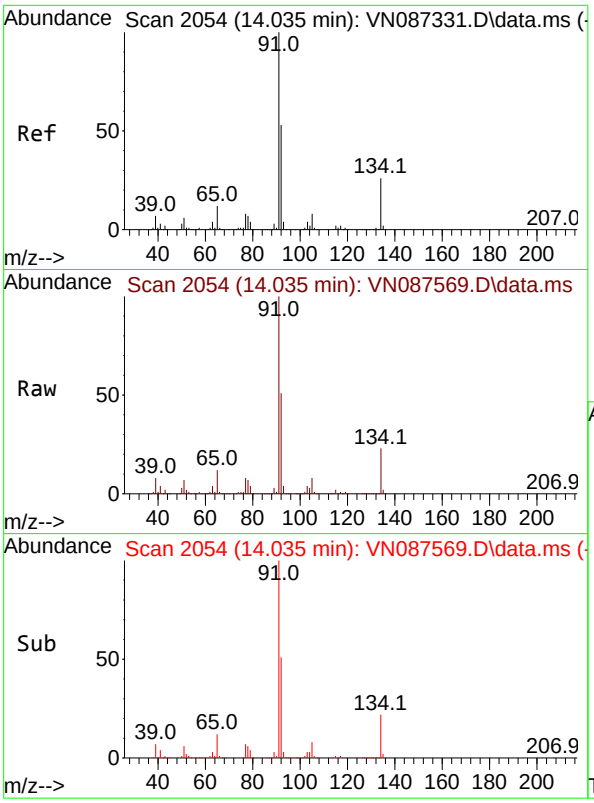


#88
1,4-Dichlorobenzene
Concen: 47.195 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:146 Resp: 374267

Ion	Ratio	Lower	Upper
146	100		
111	43.1	19.6	58.7
148	63.7	31.4	94.0





#89
n-Butylbenzene
Concen: 58.265 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

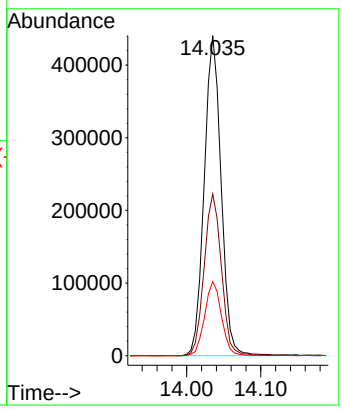
Tgt Ion: 91 Resp: 69715

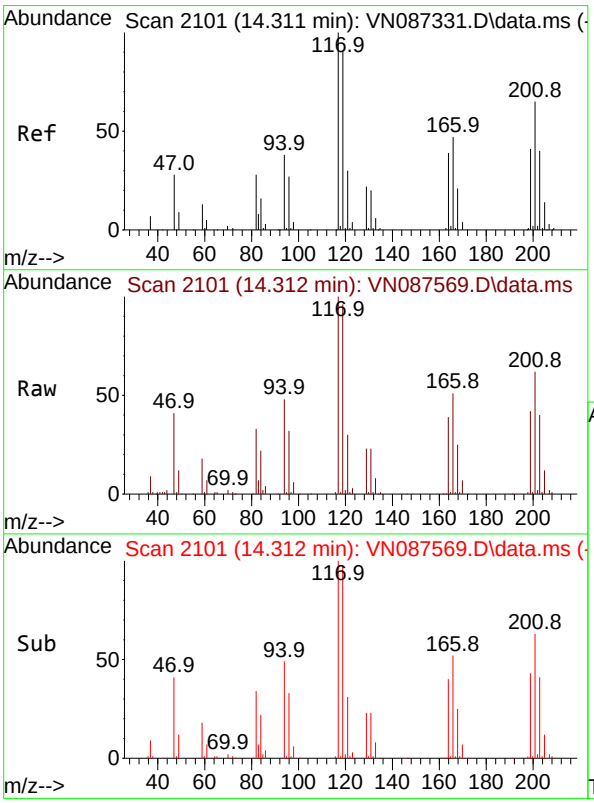
Ion	Ratio	Lower	Upper
91	100		
92	51.5	26.2	78.6
134	23.1	12.4	37.2

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

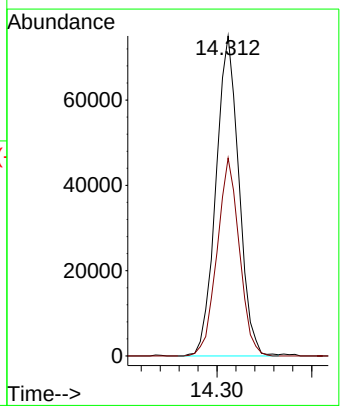


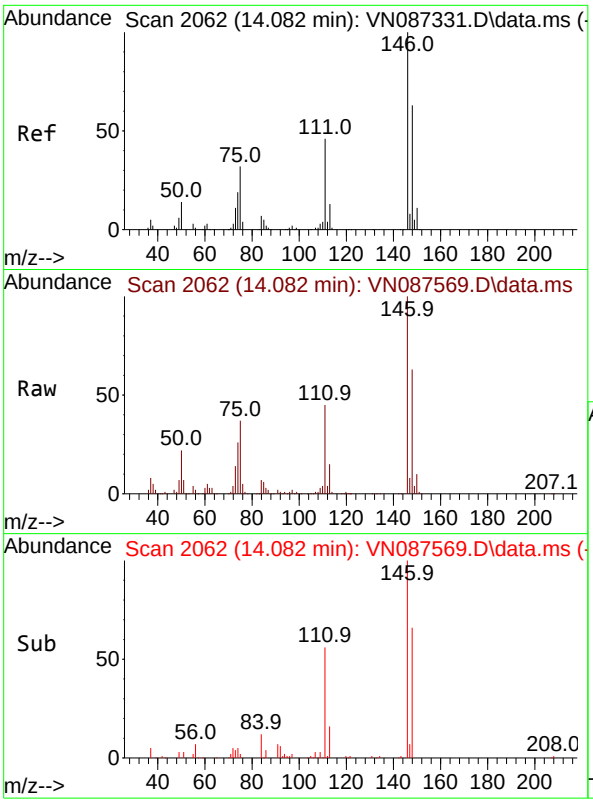


#90
Hexachloroethane
Concen: 47.619 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:117 Resp: 126427

Ion	Ratio	Lower	Upper
117	100		
201	60.0	32.8	98.4

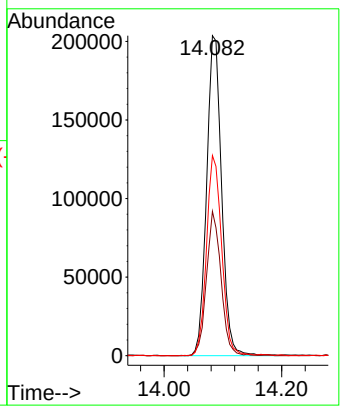




#91
1,2-Dichlorobenzene
Concen: 51.338 ug/l
RT: 14.082 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:146 Resp: 36111

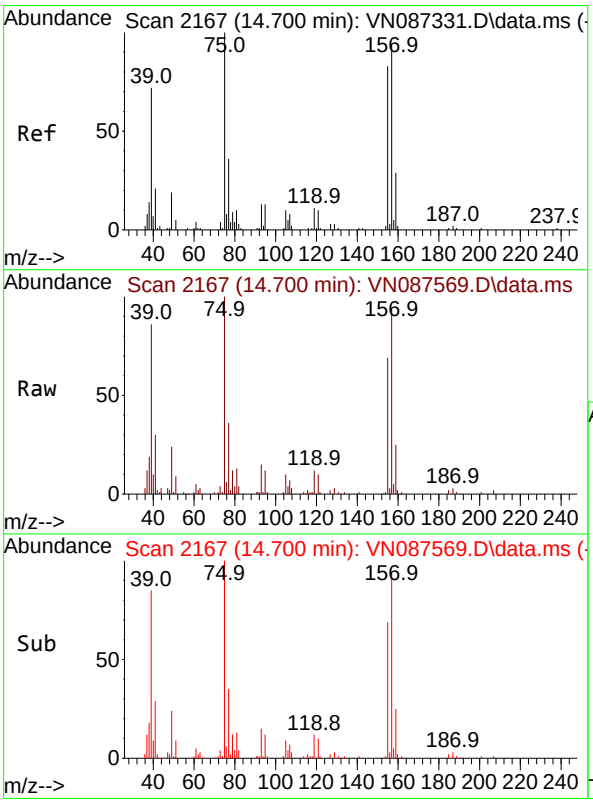
Ion	Ratio	Lower	Upper
146	100		
111	43.8	22.0	66.0
148	63.4	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
APPROVED

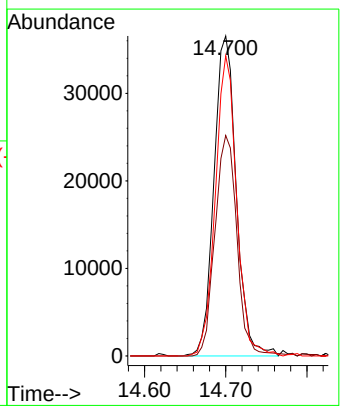
Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

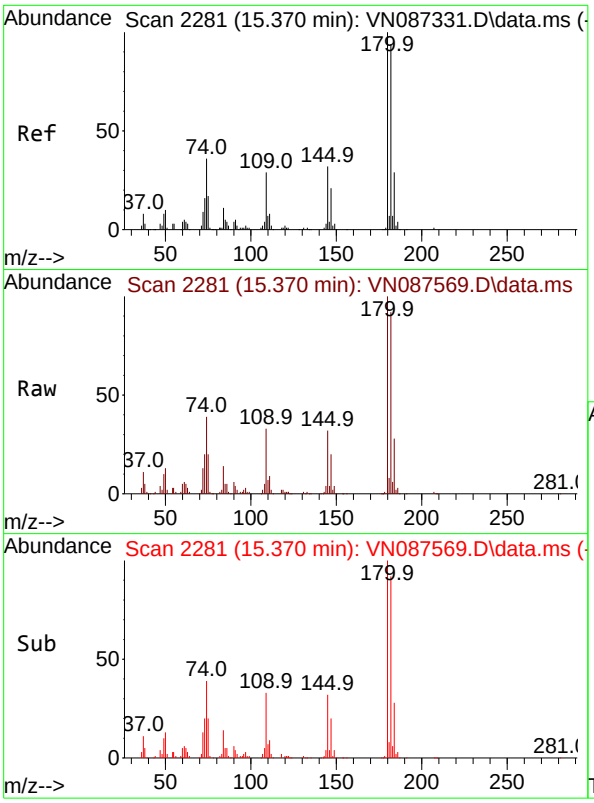


#92
1,2-Dibromo-3-Chloropropane
Concen: 48.406 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion: 75 Resp: 69760

Ion	Ratio	Lower	Upper
75	100		
155	68.3	37.3	111.8
157	89.9	46.2	138.6





#93
1,2,4-Trichlorobenzene
Concen: 51.328 ug/l
RT: 15.370 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Tgt Ion:180 Resp: 21208

Ion	Ratio	Lower	Upper
180	100		
182	94.3	47.3	141.8
145	33.1	15.4	46.4

Manual Integrations
APPROVED

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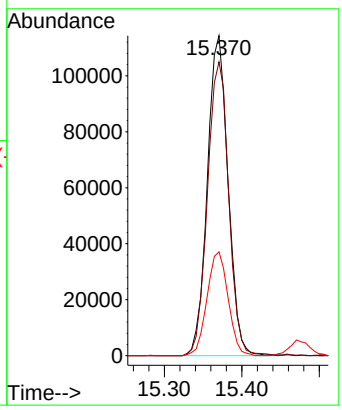
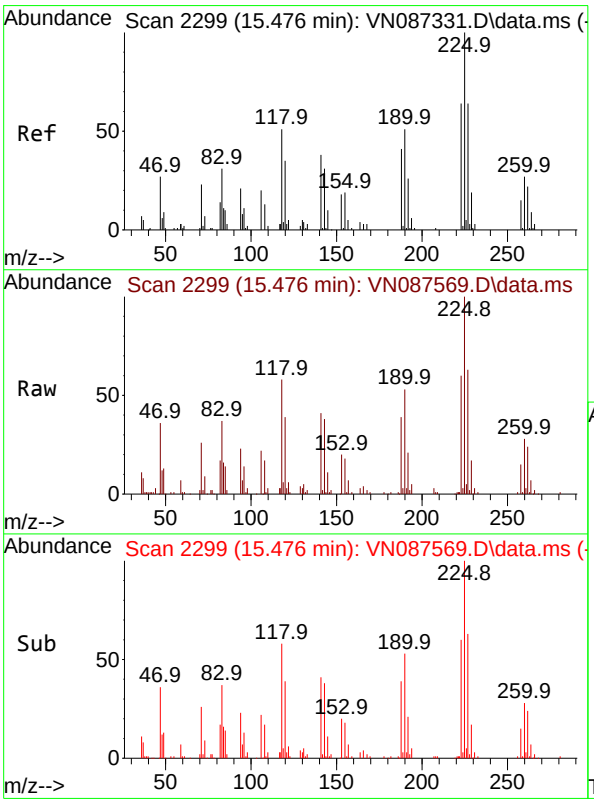
Supervised By :Mahesh Dadoda 08/19/2025

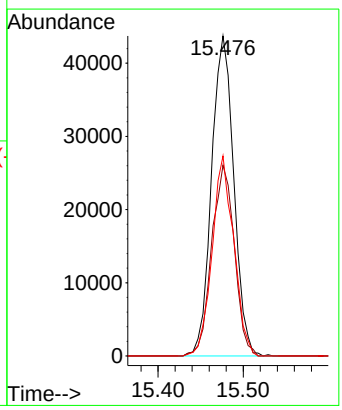


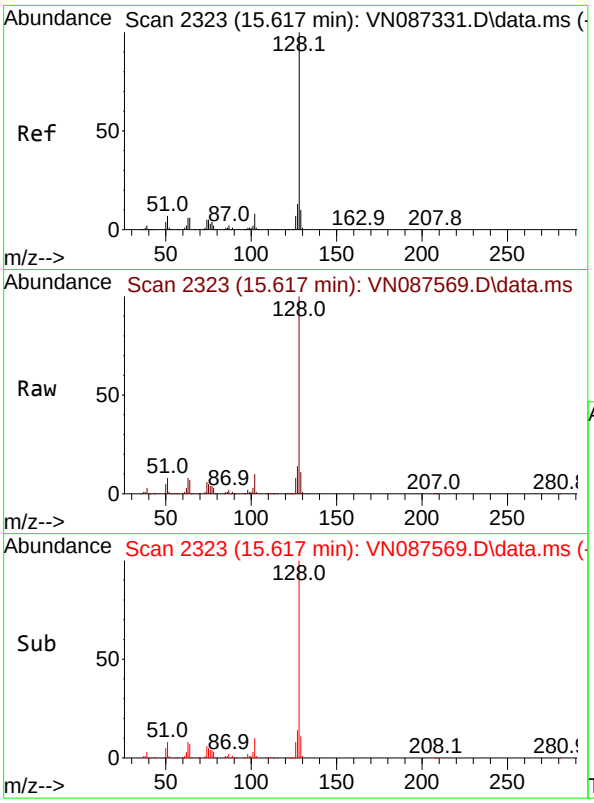


#94
Hexachlorobutadiene
Concen: 51.536 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:225 Resp: 79123

Ion	Ratio	Lower	Upper
225	100		
223	60.9	32.1	96.3
227	60.9	31.3	93.9

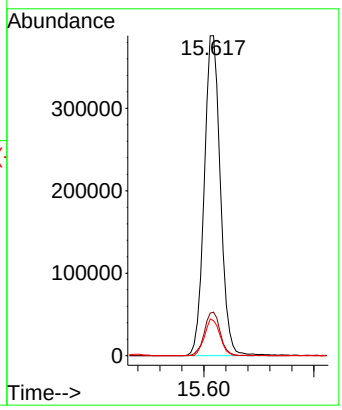




#95
Naphthalene
Concen: 53.941 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:128 Resp: 78958

Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.5	15.7
129	10.9	8.4	12.6



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MS

Manual Integrations
APPROVED

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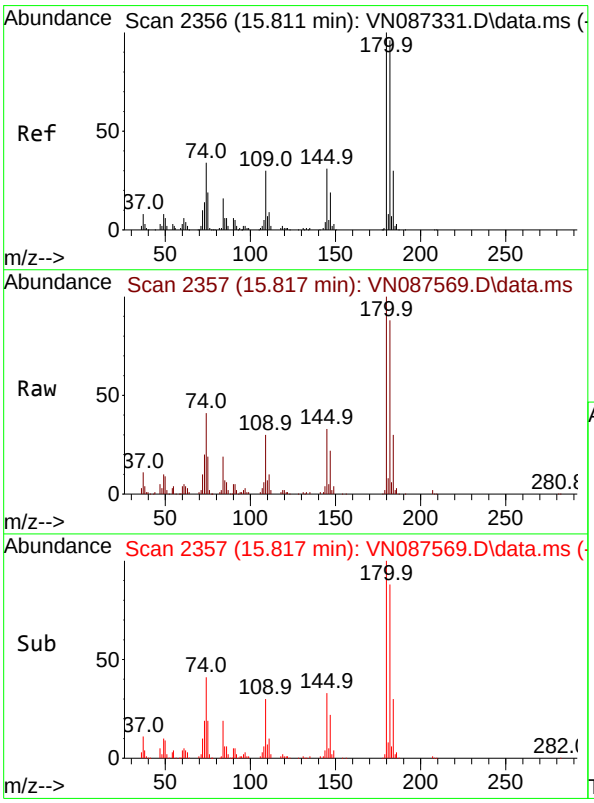
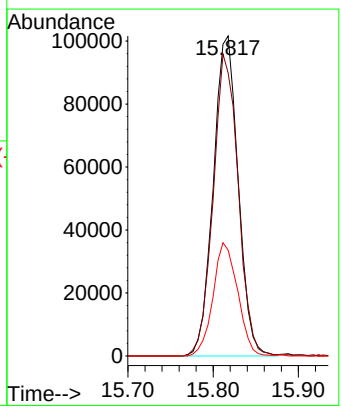


#96
1,2,3-Trichlorobenzene
Concen: 49.760 ug/l
RT: 15.817 min Scan# 2357
Delta R.T. 0.006 min
Lab File: VN087569.D
Acq: 14 Aug 2025 16:27

Tgt Ion:180 Resp: 206242

Ion	Ratio	Lower	Upper
180	100		
182	94.9	47.1	141.4
145	35.0	16.9	50.6



Raw Data: **VN087570.D**

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/12/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	08/12/25
Client Sample ID:	MW-17B-55.5-081225MSD	SDG No.:	Q2842
Lab Sample ID:	Q2842-05MSD	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087570.D	100	08/14/25 16:49	VN081425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5400		26.0	100	ug/L
75-35-4	1,1-Dichloroethene	5300		23.0	100	ug/L
75-34-3	1,1-Dichloroethane	5400		23.0	100	ug/L
156-59-2	cis-1,2-Dichloroethene	8000		19.0	100	ug/L
71-55-6	1,1,1-Trichloroethane	5500		20.0	100	ug/L
71-43-2	Benzene	5100		15.0	100	ug/L
107-06-2	1,2-Dichloroethane	5300		22.0	100	ug/L
79-01-6	Trichloroethene	9500		9.30	100	ug/L
79-00-5	1,1,2-Trichloroethane	5300		21.0	100	ug/L
127-18-4	Tetrachloroethene	4300		23.0	100	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.6		70 (74) - 130 (125)	109%	SPK: 50
1868-53-7	Dibromofluoromethane	46.7		70 (75) - 130 (124)	93%	SPK: 50
2037-26-5	Toluene-d8	48.2		70 (86) - 130 (113)	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.5		70 (77) - 130 (121)	101%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	252000	8.212			
540-36-3	1,4-Difluorobenzene	499000	9.082			
3114-55-4	Chlorobenzene-d5	460000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	240000	13.77			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **VN087570.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087570.D
Acq On : 14 Aug 2025 16:49
Operator : JC\MD
Sample : Q2842-05MSD 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 20:00:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

Manual Integrations APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.212	168	251785	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	498703	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	460182	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	240017	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	233131	54.569	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 109.140%			
35) Dibromofluoromethane	8.153	113	160785	46.739	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 93.480%			
50) Toluene-d8	10.547	98	591485	48.202	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 96.400%			
62) 4-Bromofluorobenzene	12.829	95	228797	50.467	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 100.940%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	160380	59.972	ug/l	95
3) Chloromethane	2.383	50	164845	49.018	ug/l	95
4) Vinyl Chloride	2.542	62	181197	54.217	ug/l	94
5) Bromomethane	2.971	94	111058	64.170	ug/l	100
6) Chloroethane	3.130	64	124775	57.248	ug/l	97
7) Trichlorofluoromethane	3.506	101	269630	54.560	ug/l	92
8) Diethyl Ether	3.965	74	116948	61.006	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.365	101	146884	57.900	ug/l	97
10) Methyl Iodide	4.583	142	119433	46.239	ug/l	95
11) Tert butyl alcohol	5.536	59	241582	297.805	ug/l	99
12) 1,1-Dichloroethene	4.342	96	151233	52.607	ug/l	98
13) Acrolein	4.177	56	121388	186.460	ug/l	99
14) Allyl chloride	5.018	41	274012	52.668	ug/l	93
15) Acrylonitrile	5.706	53	596577	271.011	ug/l	97
16) Acetone	4.424	43	565138	282.126	ug/l	97
17) Carbon Disulfide	4.700	76	383063	44.945	ug/l	97
18) Methyl Acetate	5.024	43	323417	64.264	ug/l	100
19) Methyl tert-butyl Ether	5.794	73	630203	59.475	ug/l	96
20) Methylene Chloride	5.265	84	180635	53.387	ug/l #	89
21) trans-1,2-Dichloroethene	5.777	96	165046	50.918	ug/l	96
22) Diisopropyl ether	6.665	45	653071	59.843	ug/l	98
23) Vinyl Acetate	6.594	43	2963851	310.532	ug/l	99
24) 1,1-Dichloroethane	6.559	63	337459	53.599	ug/l	99
25) 2-Butanone	7.477	43	880575	284.512	ug/l	97
26) 2,2-Dichloropropane	7.477	77	251846	51.450	ug/l	98
27) cis-1,2-Dichloroethene	7.471	96	296951	79.572	ug/l	98
28) Bromochloromethane	7.794	49	161291	53.528	ug/l	92
29) Tetrahydrofuran	7.830	42	579208	288.074	ug/l	99
30) Chloroform	7.953	83	365342	57.974	ug/l	98
31) Cyclohexane	8.241	56	269452	51.302	ug/l	99
32) 1,1,1-Trichloroethane	8.153	97	301283	55.199	ug/l	97
36) 1,1-Dichloropropene	8.359	75	232570	51.172	ug/l	98
37) Ethyl Acetate	7.547	43	344525	52.488	ug/l	98
38) Carbon Tetrachloride	8.347	117	240818	48.100	ug/l	96
39) Methylcyclohexane	9.582	83	251368	51.086	ug/l	95
40) Benzene	8.588	78	748859	50.980	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087570.D
Acq On : 14 Aug 2025 16:49
Operator : JC\MD
Sample : Q2842-05MSD 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 20:00:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

Manual Integrations APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	188160	54.823	ug/l		97
42) 1,2-Dichloroethane	8.659	62	295609	53.067	ug/l		97
43) Isopropyl Acetate	8.677	43	557773	54.740	ug/l		99
44) Trichloroethene	9.335	130	330475	95.214	ug/l		96
45) 1,2-Dichloropropane	9.606	63	191212	51.231	ug/l		98
46) Dibromomethane	9.694	93	141089	50.488	ug/l		95
47) Bromodichloromethane	9.871	83	288056	51.174	ug/l		98
48) Methyl methacrylate	9.665	41	268246	58.477	ug/l		94
49) 1,4-Dioxane	9.682	88	74858	1065.478	ug/l	#	100
51) 4-Methyl-2-Pentanone	10.429	43	1774583	275.360	ug/l		97
52) Toluene	10.612	92	460377	51.563	ug/l		96
53) t-1,3-Dichloropropene	10.818	75	308221	54.105	ug/l		96
54) cis-1,3-Dichloropropene	10.294	75	308333	52.399	ug/l	#	87
55) 1,1,2-Trichloroethane	11.000	97	190288	52.643	ug/l		92
56) Ethyl methacrylate	10.859	69	326690	53.587	ug/l	#	95
57) 1,3-Dichloropropane	11.147	76	329546	52.730	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	412625	139.157	ug/l		99
59) 2-Hexanone	11.182	43	1237547	289.435	ug/l		98
60) Dibromochloromethane	11.341	129	205718	49.903	ug/l		98
61) 1,2-Dibromoethane	11.447	107	193708	50.967	ug/l		98
64) Tetrachloroethene	11.082	164	127664	43.104	ug/l		94
65) Chlorobenzene	11.871	112	500916	48.485	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.941	131	176284	50.180	ug/l		99
67) Ethyl Benzene	11.941	91	898707	52.840	ug/l		99
68) m/p-Xylenes	12.053	106	662341	103.996	ug/l		93
69) o-Xylene	12.376	106	328068	53.926	ug/l		96
70) Styrene	12.394	104	567805	55.481	ug/l		98
71) Bromoform	12.559	173	133281	46.961	ug/l	#	95
73) Isopropylbenzene	12.676	105	839673	55.585	ug/l		99
74) N-amyl acetate	12.500	43	234757	37.404	ug/l	#	94
75) 1,1,2,2-Tetrachloroethane	12.918	83	304955	53.650	ug/l		99
76) 1,2,3-Trichloropropane	12.970	75	297389m	55.254	ug/l		
77) Bromobenzene	12.959	156	197712	50.466	ug/l		94
78) n-propylbenzene	13.018	91	1061543	55.853	ug/l		98
79) 2-Chlorotoluene	13.106	91	637513	54.578	ug/l		96
80) 1,3,5-Trimethylbenzene	13.153	105	725164	56.342	ug/l		96
81) trans-1,4-Dichloro-2-b...	12.718	75	93157	47.359	ug/l		94
82) 4-Chlorotoluene	13.200	91	661408	54.387	ug/l		97
83) tert-Butylbenzene	13.418	119	601617	55.966	ug/l		97
84) 1,2,4-Trimethylbenzene	13.459	105	747848	56.897	ug/l		96
85) sec-Butylbenzene	13.594	105	905664	55.933	ug/l		98
86) p-Isopropyltoluene	13.706	119	748208	57.660	ug/l		97
87) 1,3-Dichlorobenzene	13.712	146	393523	51.181	ug/l		100
88) 1,4-Dichlorobenzene	13.788	146	395731	48.189	ug/l		98
89) n-Butylbenzene	14.035	91	730169	58.929	ug/l		98
90) Hexachloroethane	14.312	117	136983	49.824	ug/l		91
91) 1,2-Dichlorobenzene	14.088	146	372655	51.160	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.700	75	74799	50.121	ug/l		97
93) 1,2,4-Trichlorobenzene	15.370	180	220758	51.594	ug/l		98
94) Hexachlorobutadiene	15.476	225	77907	49.002	ug/l		98
95) Naphthalene	15.617	128	847533	55.913	ug/l		100
96) 1,2,3-Trichlorobenzene	15.817	180	217612	50.701	ug/l		98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087570.D
Acq On : 14 Aug 2025 16:49
Operator : JC\MD
Sample : Q2842-05MSD 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 20:00:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

Manual Integrations APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081425\
Data File : VN087570.D
Acq On : 14 Aug 2025 16:49
Operator : JC\MD
Sample : Q2842-05MSD 100X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 20:00:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
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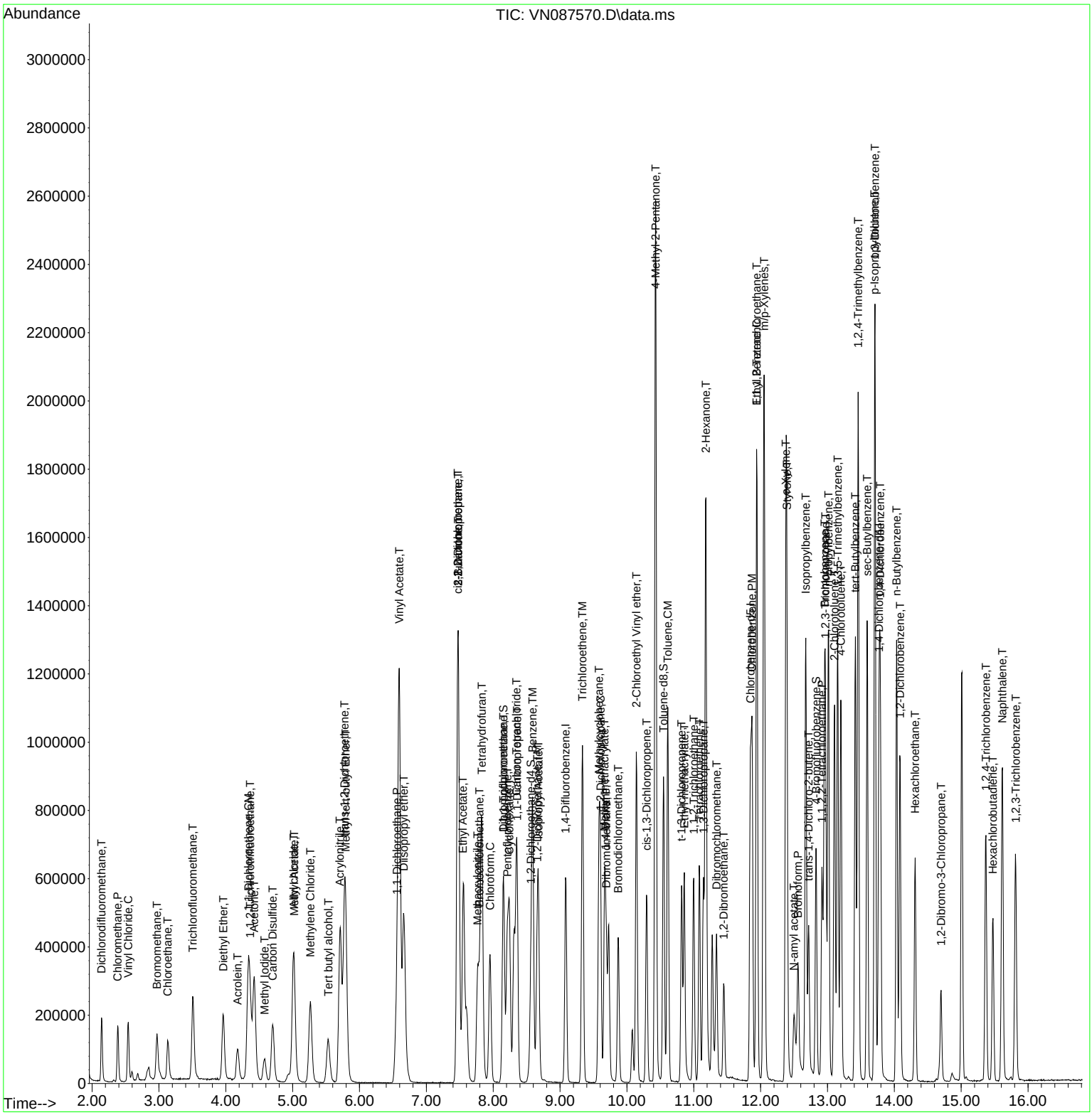

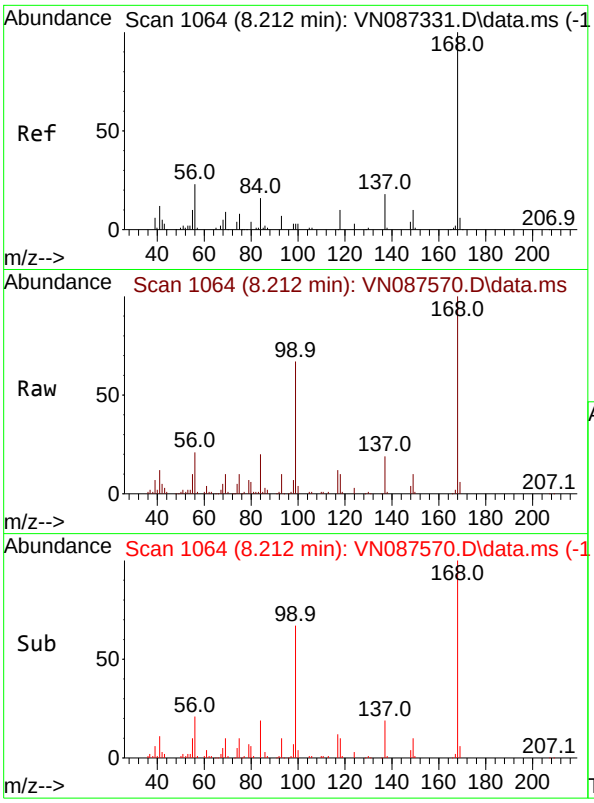

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:168 Resp: 25178

Ion	Ratio	Lower	Upper
168	100		
99	66.6	47.9	71.9

Instrument :
MSVOA_N
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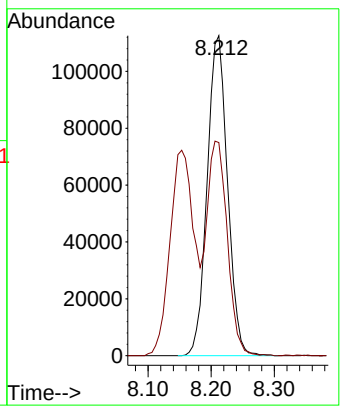
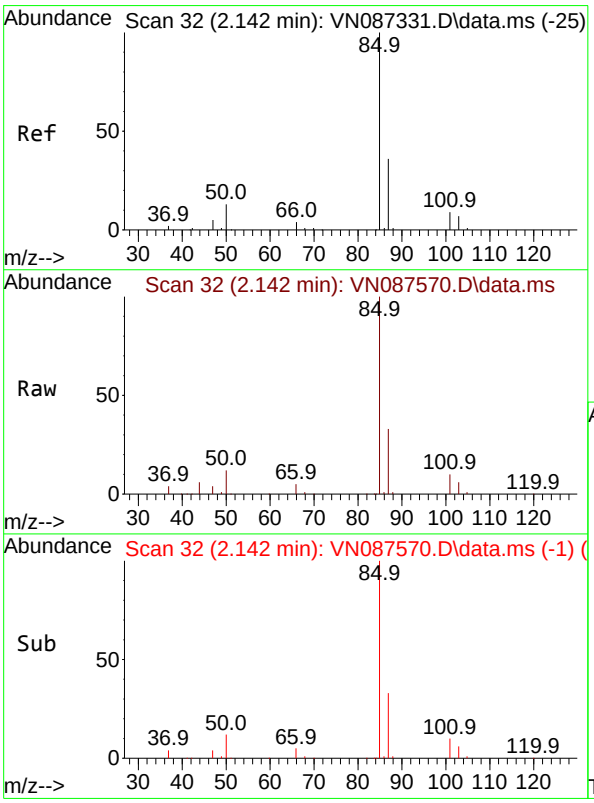
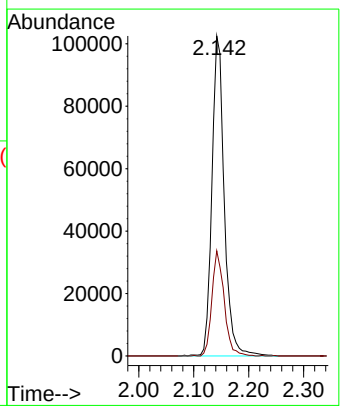


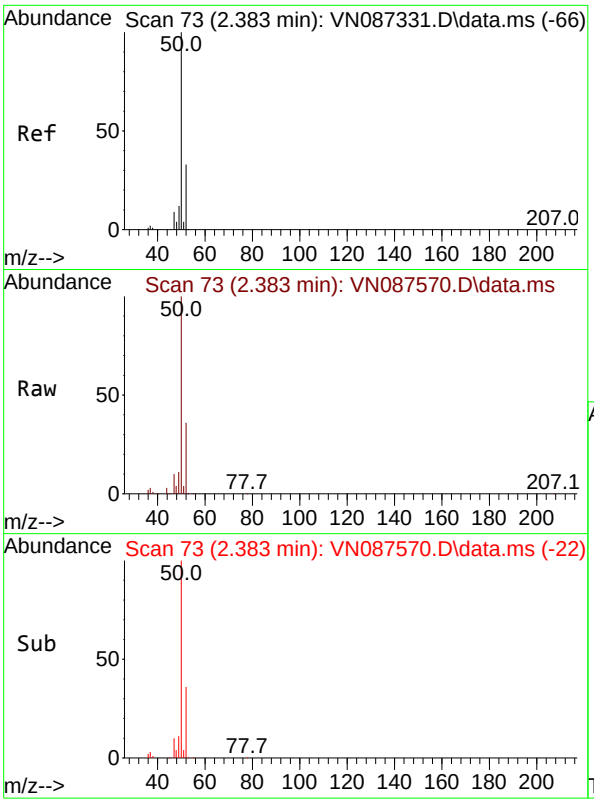


#2
Dichlorodifluoromethane
Concen: 59.972 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 85 Resp: 160380

Ion	Ratio	Lower	Upper
85	100		
87	32.8	17.8	53.3

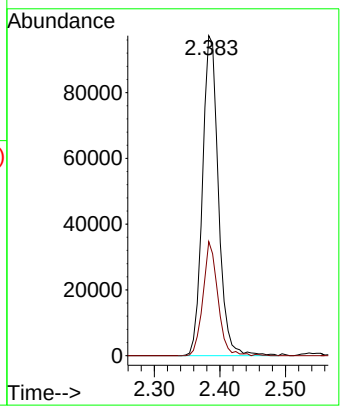




#3
Chloromethane
Concen: 49.018 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 50 Resp: 16484

Ion	Ratio	Lower	Upper
50	100		
52	35.6	26.3	39.5



Instrument :
MSVOA_N
ClientSampleId :
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Manual Integrations
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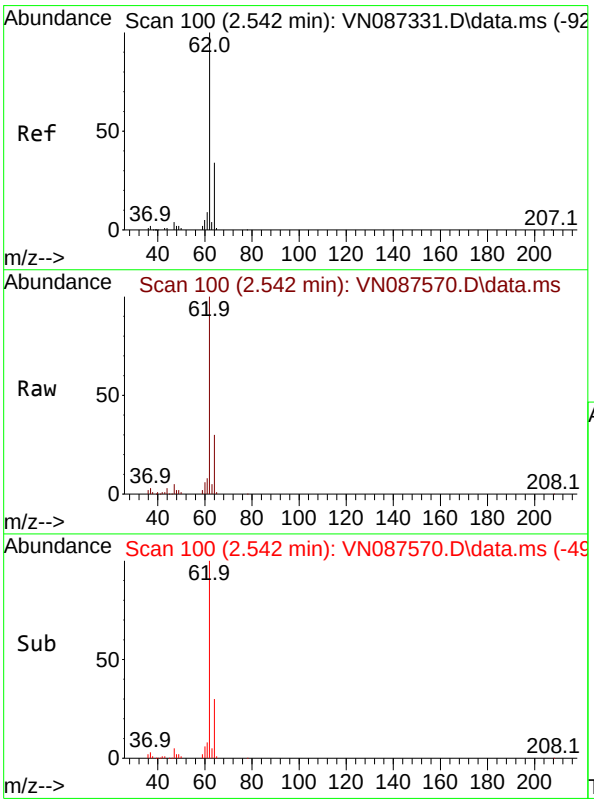
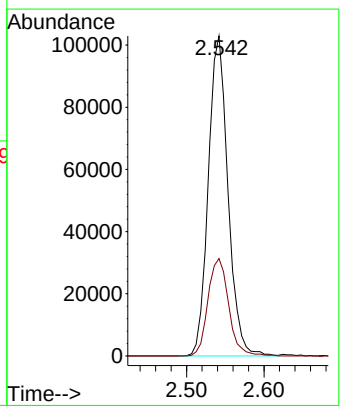
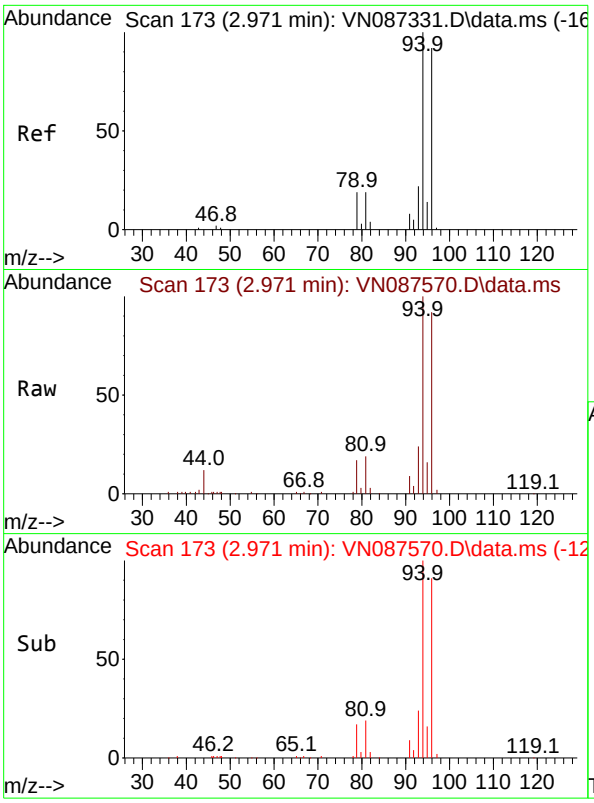


#4
Vinyl Chloride
Concen: 54.217 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 62 Resp: 181197

Ion	Ratio	Lower	Upper
62	100		
64	30.4	27.0	40.6





#5
Bromomethane
Concen: 64.170 ug/l
RT: 2.971 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 94 Resp: 11105

Ion	Ratio	Lower	Upper
94	100		
96	91.8	73.4	110.2

Instrument :
MSVOA_N
ClientSampleId :
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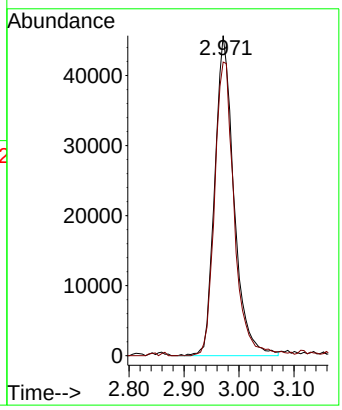
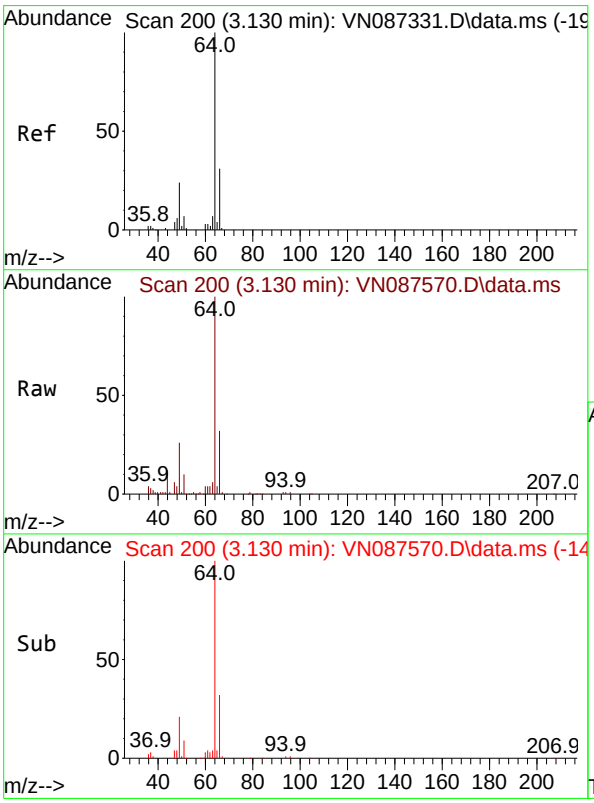
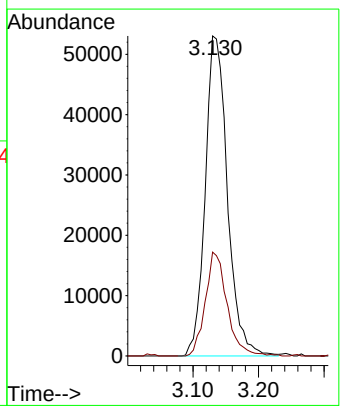


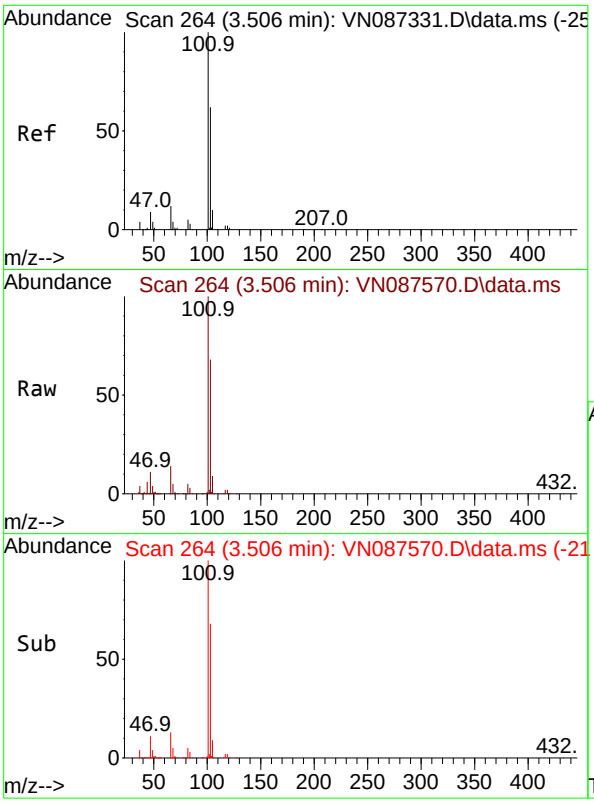


#6
Chloroethane
Concen: 57.248 ug/l
RT: 3.130 min Scan# 200
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 64 Resp: 124775

Ion	Ratio	Lower	Upper
64	100		
66	32.4	24.6	36.8





#7
Trichlorofluoromethane
Concen: 54.560 ug/l
RT: 3.506 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:101 Resp: 26963

Ion	Ratio	Lower	Upper
101	100		
103	68.3	49.8	74.6

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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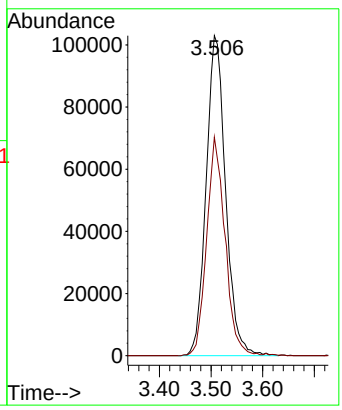
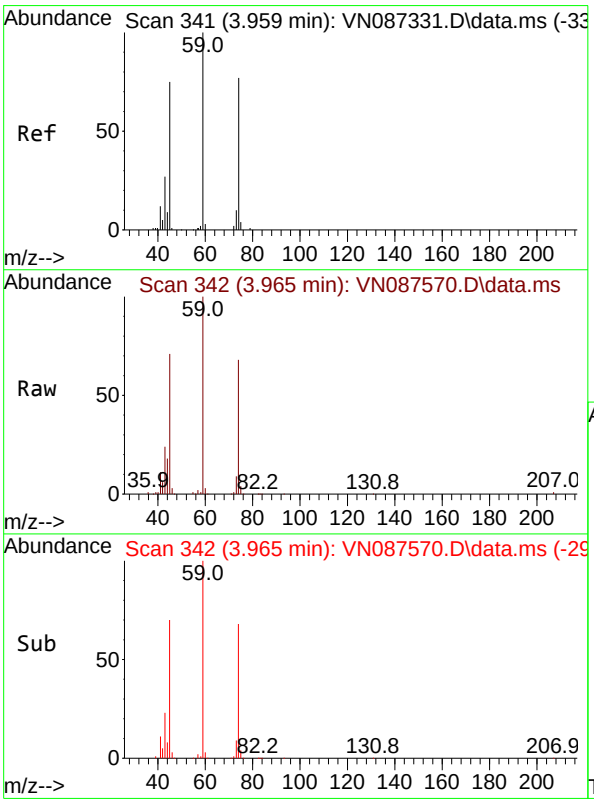
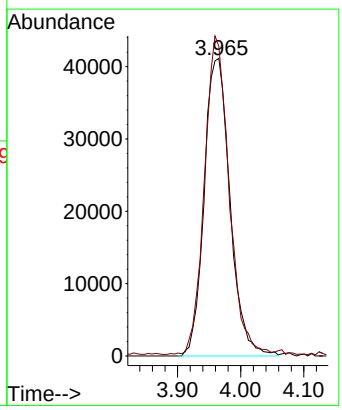


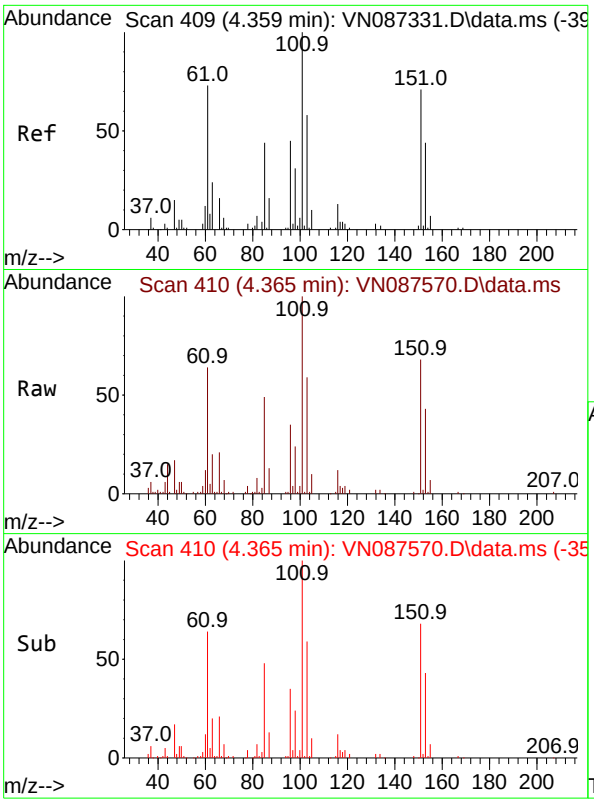


#8
Diethyl Ether
Concen: 61.006 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 74 Resp: 116948

Ion	Ratio	Lower	Upper
74	100		
45	102.1	50.8	152.5





#9
1,1,2-Trichlorotrifluoroethane
Concen: 57.900 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:101 Resp: 14688

Ion	Ratio	Lower	Upper
101	100		
85	48.3	37.3	55.9
151	71.3	58.9	88.3

Instrument :
MSVOA_N
ClientSampleId :
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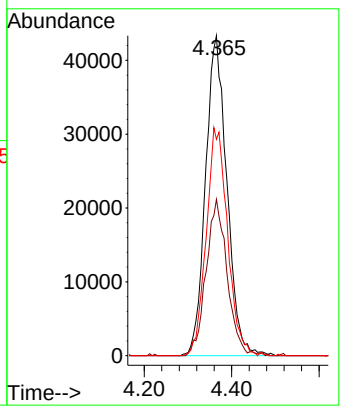
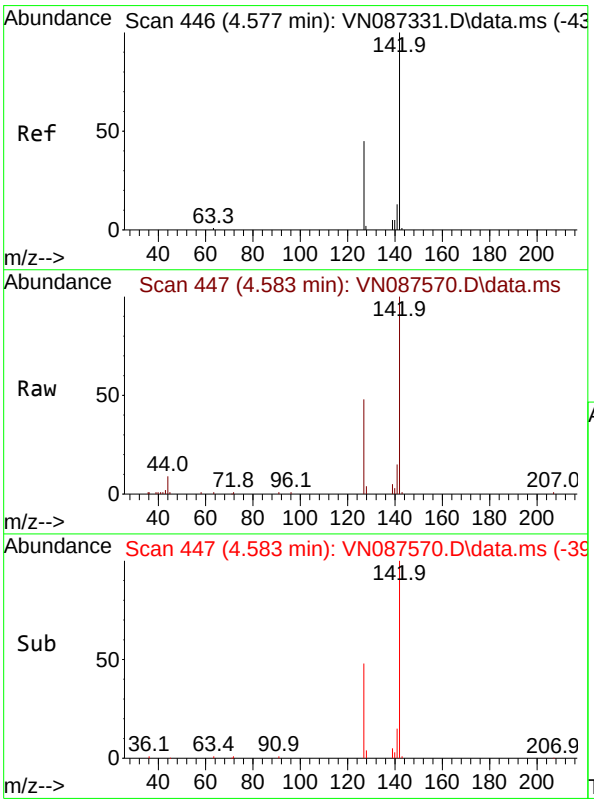
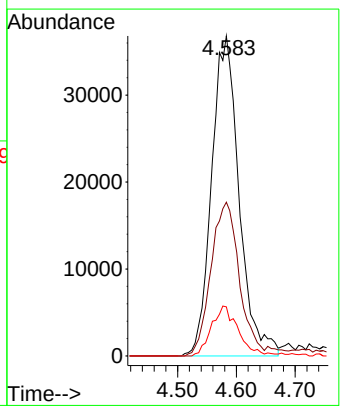


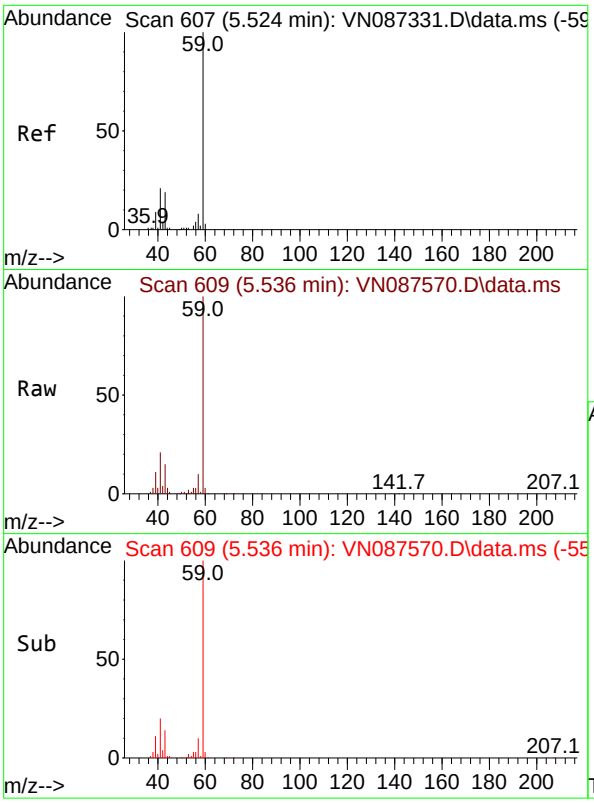


#10
Methyl Iodide
Concen: 46.239 ug/l
RT: 4.583 min Scan# 447
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:142 Resp: 119433

Ion	Ratio	Lower	Upper
142	100		
127	48.0	35.7	53.5
141	15.3	10.4	15.6

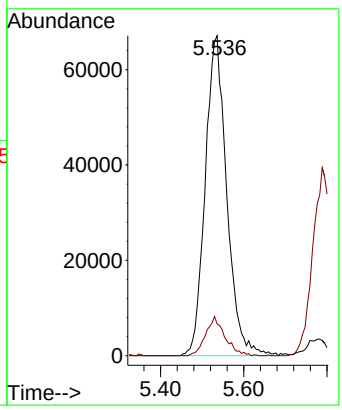




#11
Tert butyl alcohol
Concen: 297.805 ug/l
RT: 5.536 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 59 Resp: 24158

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
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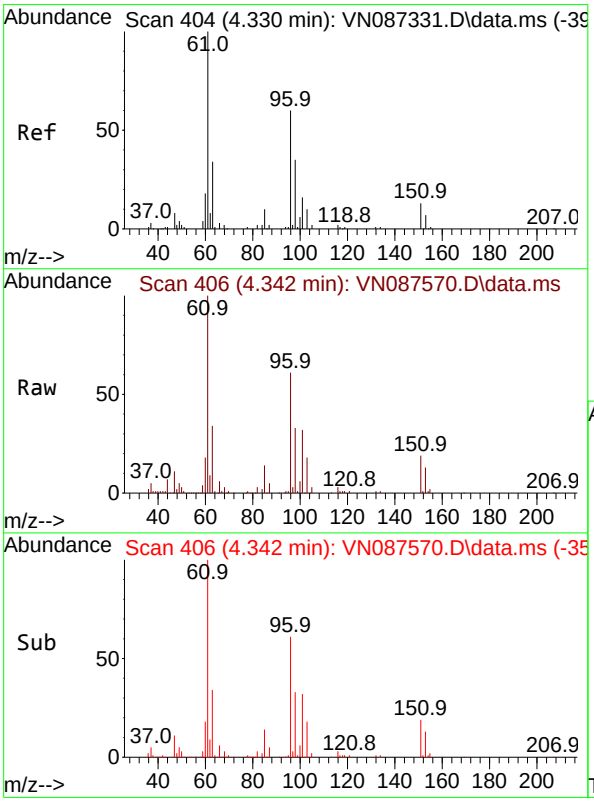
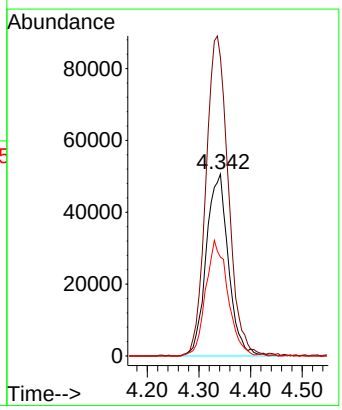
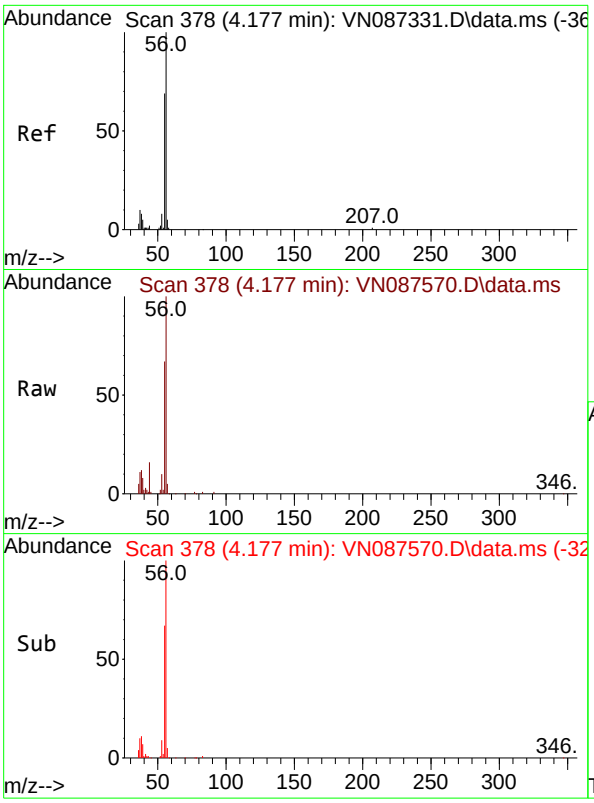


#12
1,1-Dichloroethene
Concen: 52.607 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.012 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 96 Resp: 151233

Ion	Ratio	Lower	Upper
96	100		
61	164.0	132.3	198.5
98	54.4	46.8	70.2

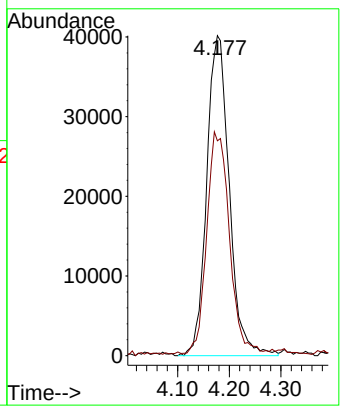




#13
Acrolein
Concen: 186.460 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 56 Resp: 12138

Ion	Ratio	Lower	Upper
56	100		
55	69.3	56.2	84.4



Instrument :
MSVOA_N
ClientSampleId :
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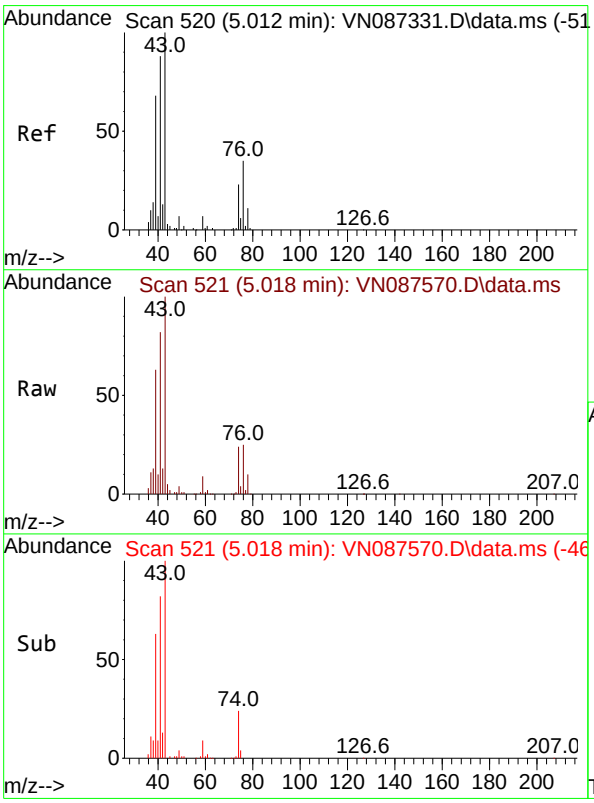
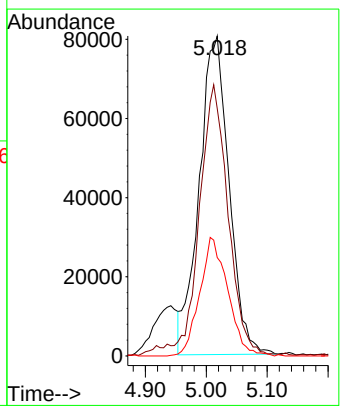
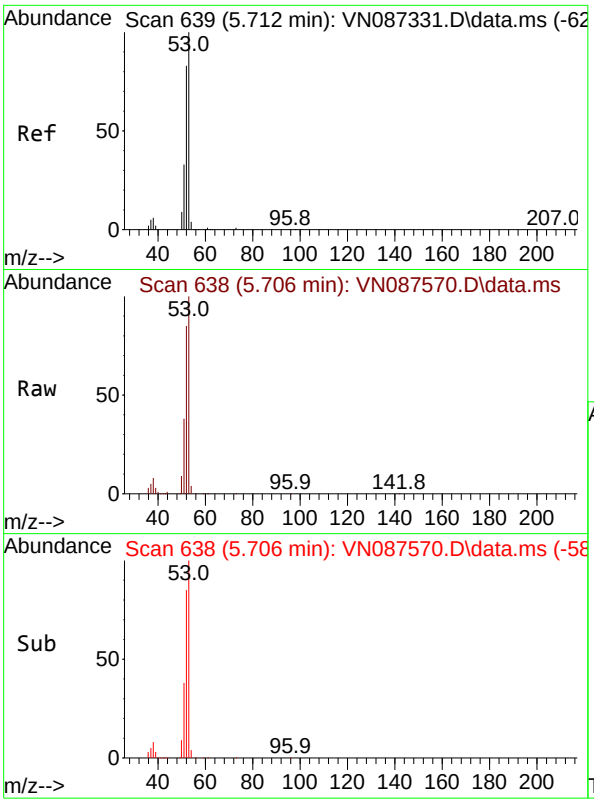


#14
Allyl chloride
Concen: 52.668 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 41 Resp: 274012

Ion	Ratio	Lower	Upper
41	100		
39	82.5	59.0	88.6
76	35.0	28.7	43.1

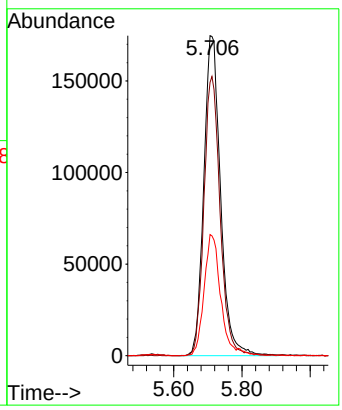




#15
Acrylonitrile
Concen: 271.011 ug/l
RT: 5.706 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 53 Resp: 59657

Ion	Ratio	Lower	Upper
53	100		
52	84.4	65.5	98.3
51	37.8	28.7	43.1



Instrument :
MSVOA_N
ClientSampleId :
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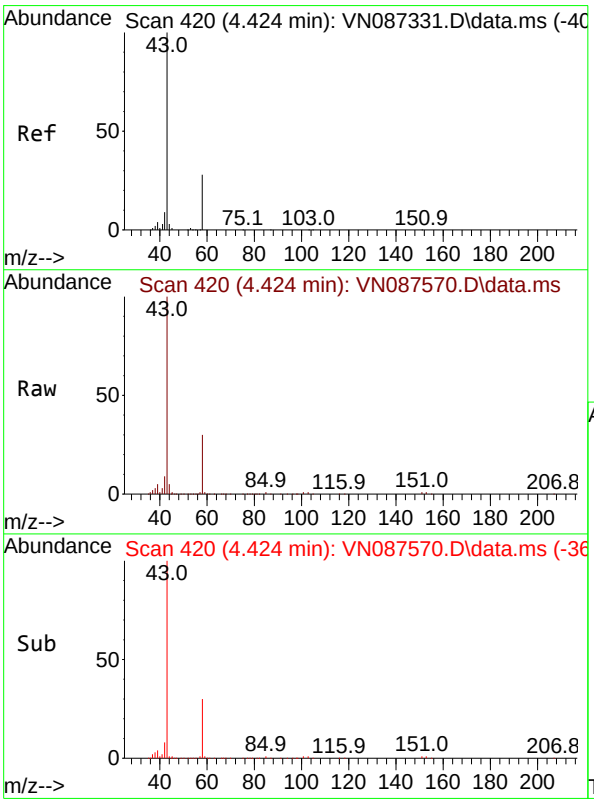
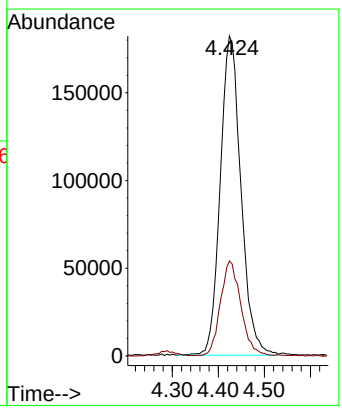
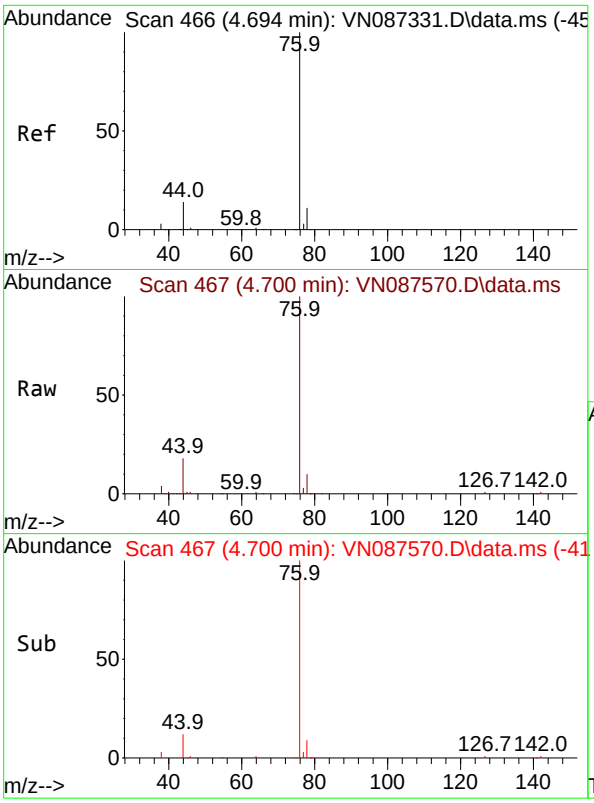


#16
Acetone
Concen: 282.126 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 565138

Ion	Ratio	Lower	Upper
43	100		
58	29.4	22.3	33.5





#17
Carbon Disulfide
Concen: 44.945 ug/l
RT: 4.700 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 76 Resp: 38306

Ion	Ratio	Lower	Upper
76	100		
78	9.6	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
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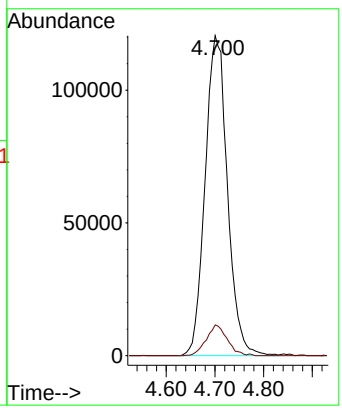
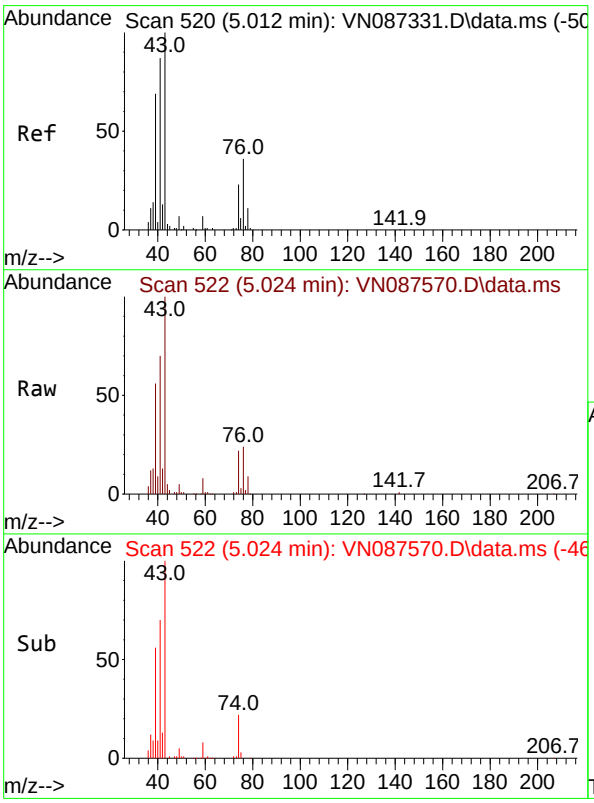
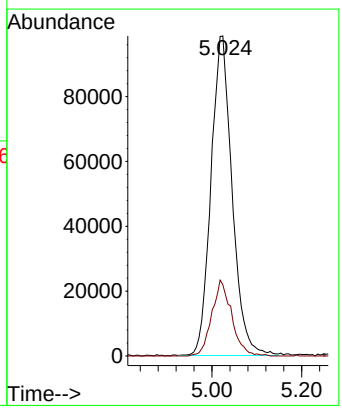


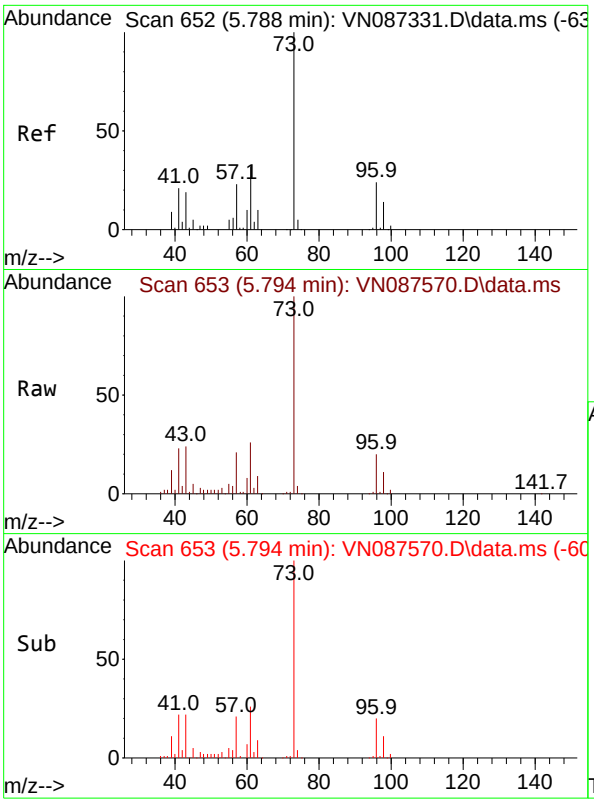


#18
Methyl Acetate
Concen: 64.264 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.012 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 323417

Ion	Ratio	Lower	Upper
43	100		
74	22.3	17.8	26.6





#19
Methyl tert-butyl Ether
Concen: 59.475 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 73 Resp: 63020

Ion	Ratio	Lower	Upper
73	100		
57	21.4	18.6	27.8

Instrument :
MSVOA_N
ClientSampleId :
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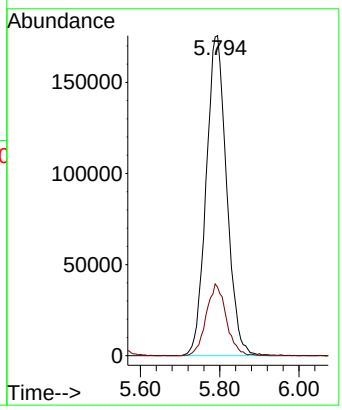
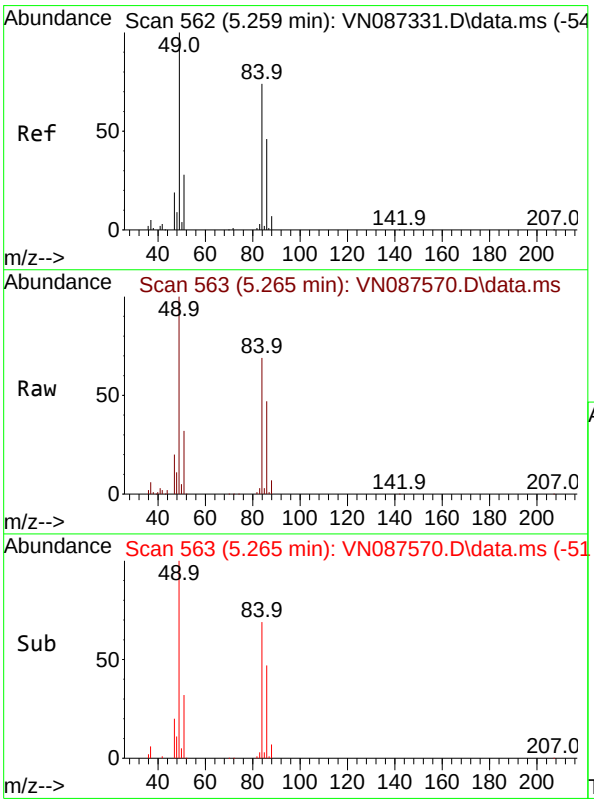
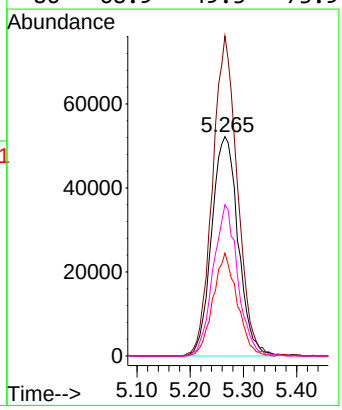


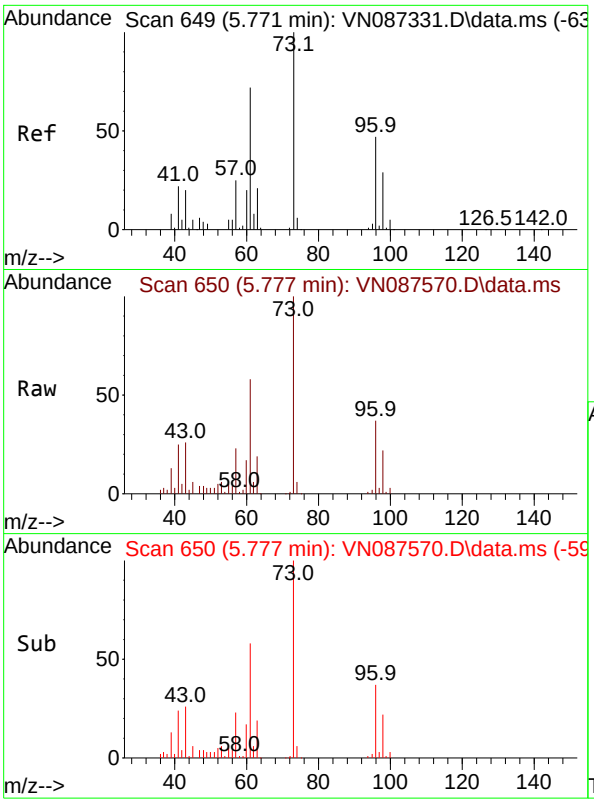


#20
Methylene Chloride
Concen: 53.387 ug/l
RT: 5.265 min Scan# 563
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 84 Resp: 180635

Ion	Ratio	Lower	Upper
84	100		
49	145.8	107.5	161.3
51	46.8	30.2	45.2#
86	68.9	49.3	73.9

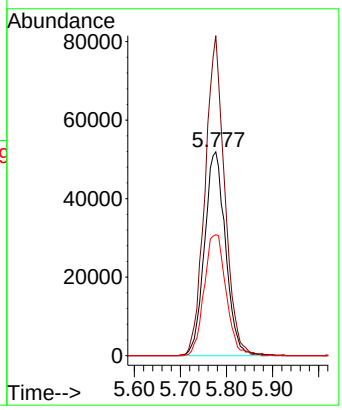




#21
trans-1,2-Dichloroethene
Concen: 50.918 ug/l
RT: 5.777 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 96 Resp: 16504

Ion	Ratio	Lower	Upper
96	100		
61	156.9	122.0	183.0
98	59.3	50.0	75.0



Instrument :
MSVOA_N
ClientSampleId :
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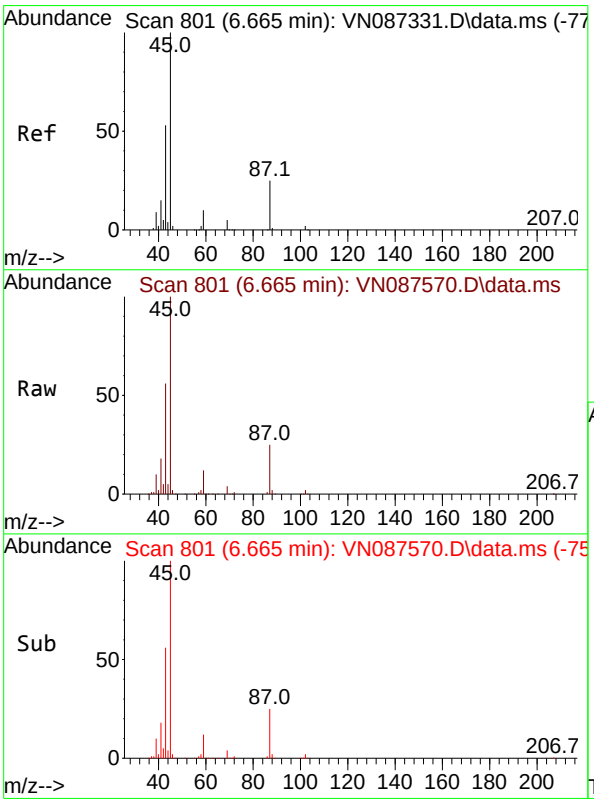
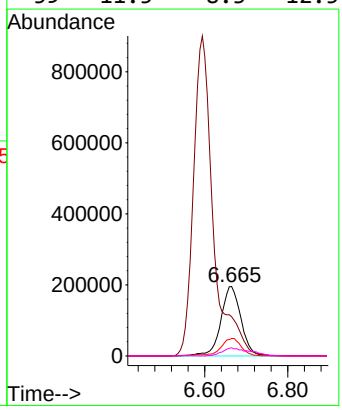
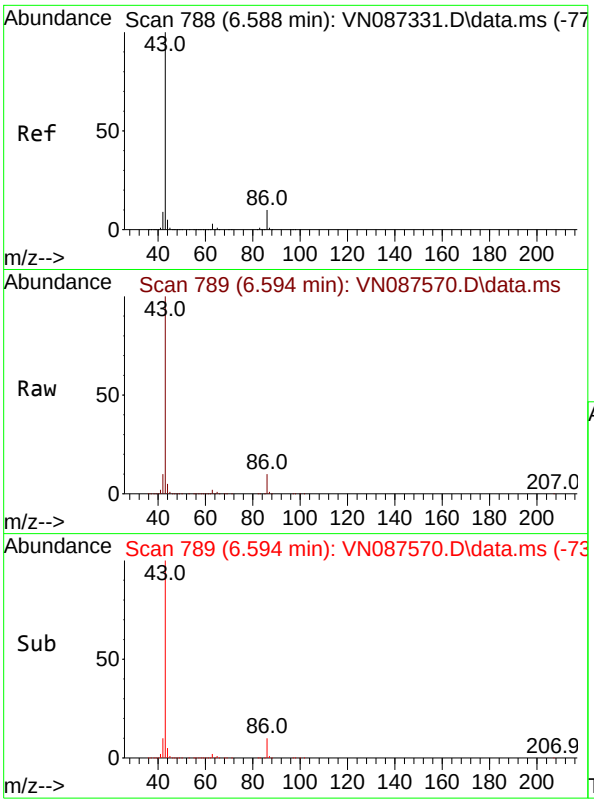


#22
Diisopropyl ether
Concen: 59.843 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 45 Resp: 653071

Ion	Ratio	Lower	Upper
45	100		
43	55.6	42.8	64.2
87	25.1	19.8	29.6
59	11.5	8.3	12.5

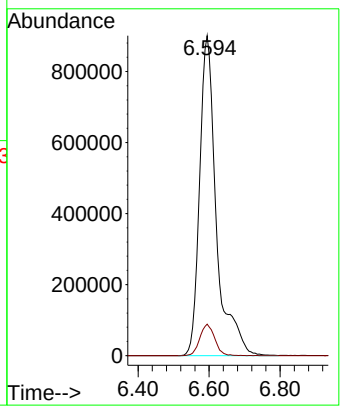




#23
Vinyl Acetate
Concen: 310.532 ug/l
RT: 6.594 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 296385

Ion	Ratio	Lower	Upper
43	100		
86	9.9	7.7	11.5



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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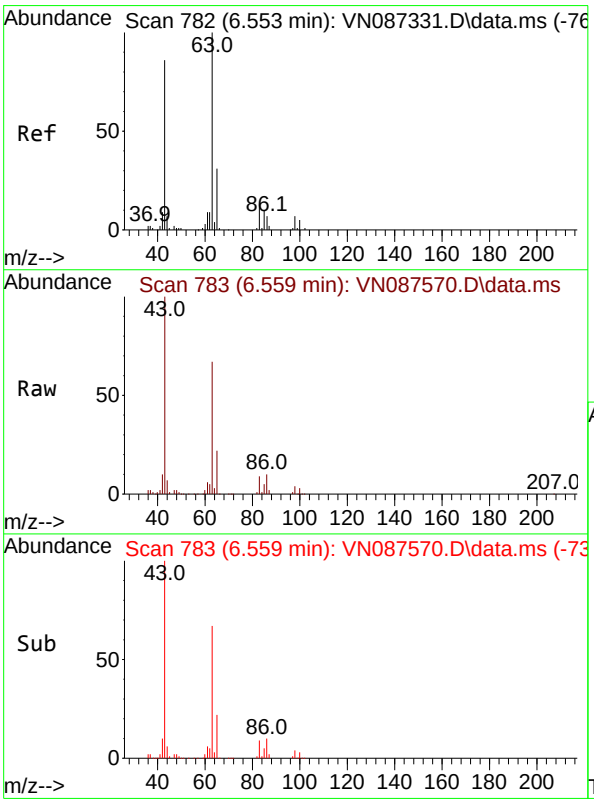
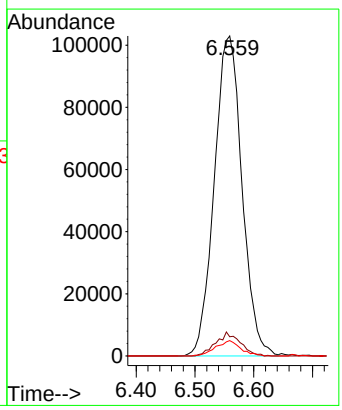
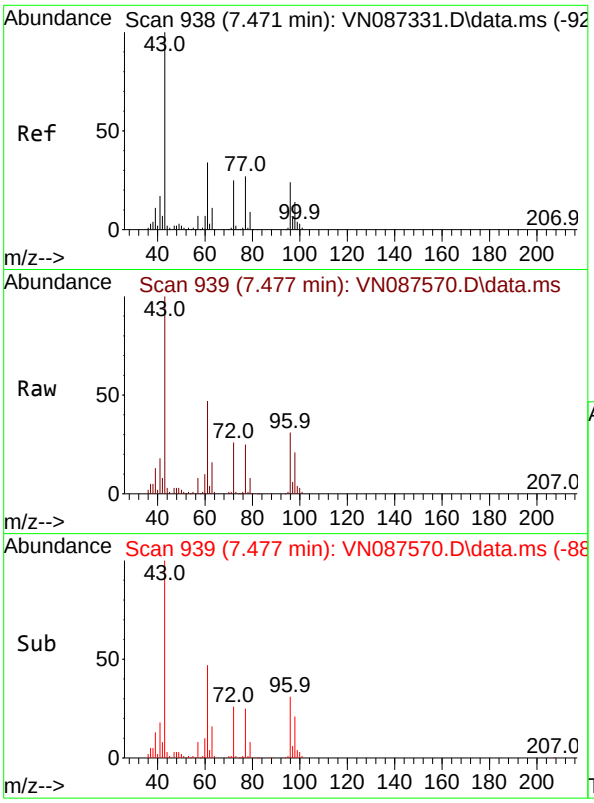


#24
1,1-Dichloroethane
Concen: 53.599 ug/l
RT: 6.559 min Scan# 783
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 63 Resp: 337459

Ion	Ratio	Lower	Upper
63	100		
98	6.0	3.3	9.9
100	4.8	2.5	7.4





#25
2-Butanone
Concen: 284.512 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 88057

Ion	Ratio	Lower	Upper
43	100		
72	25.9	19.6	29.4

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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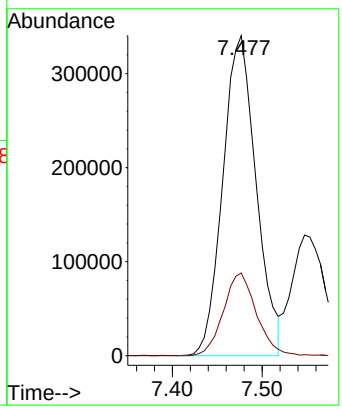
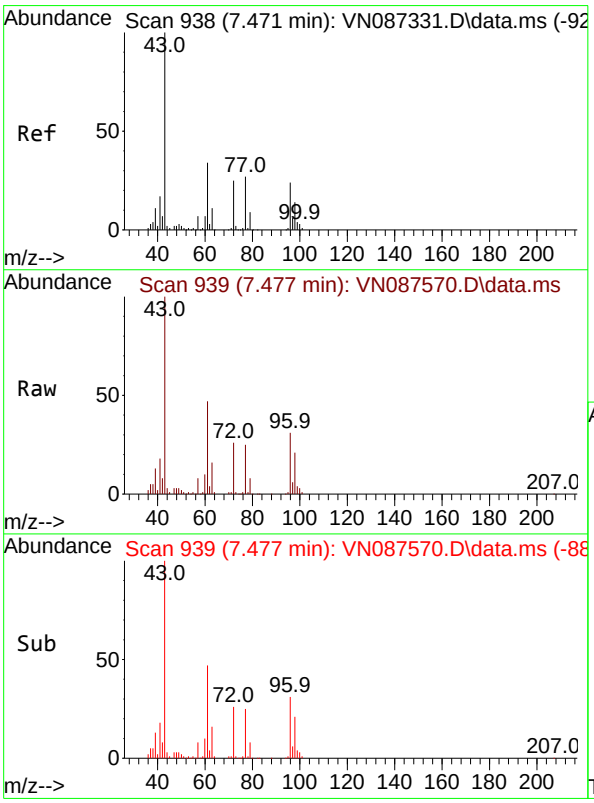
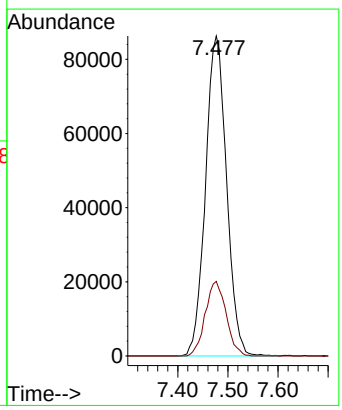


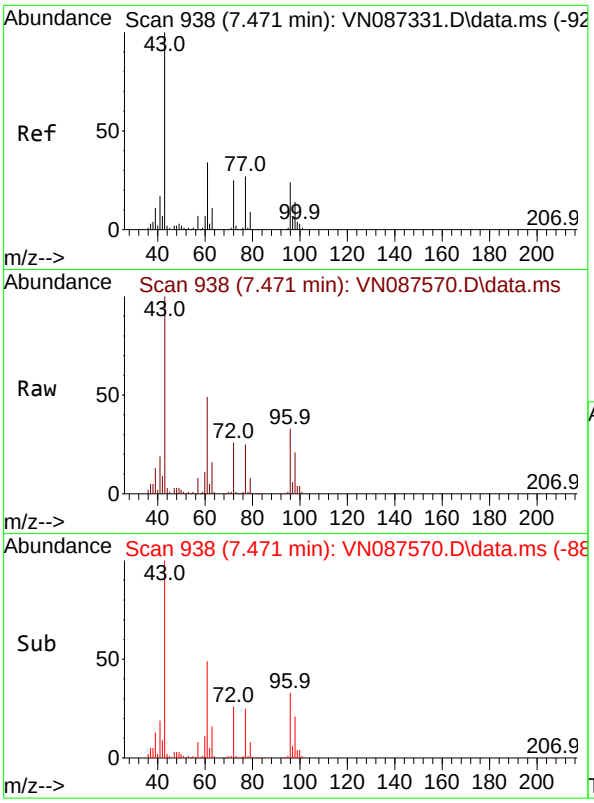


#26
2,2-Dichloropropane
Concen: 51.450 ug/l
RT: 7.477 min Scan# 939
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 77 Resp: 251846

Ion	Ratio	Lower	Upper
77	100		
97	23.0	11.1	33.1





#27
cis-1,2-Dichloroethene
Concen: 79.572 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 96 Resp: 29695

Ion	Ratio	Lower	Upper
96	100		
61	150.5	0.0	297.8
98	63.9	0.0	132.4

Instrument :
MSVOA_N
ClientSampleId :
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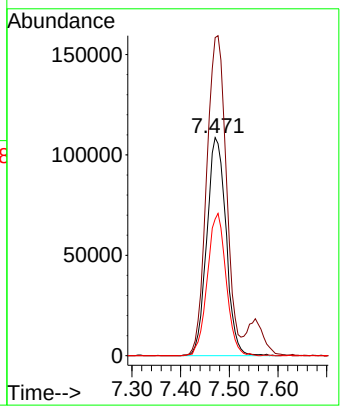
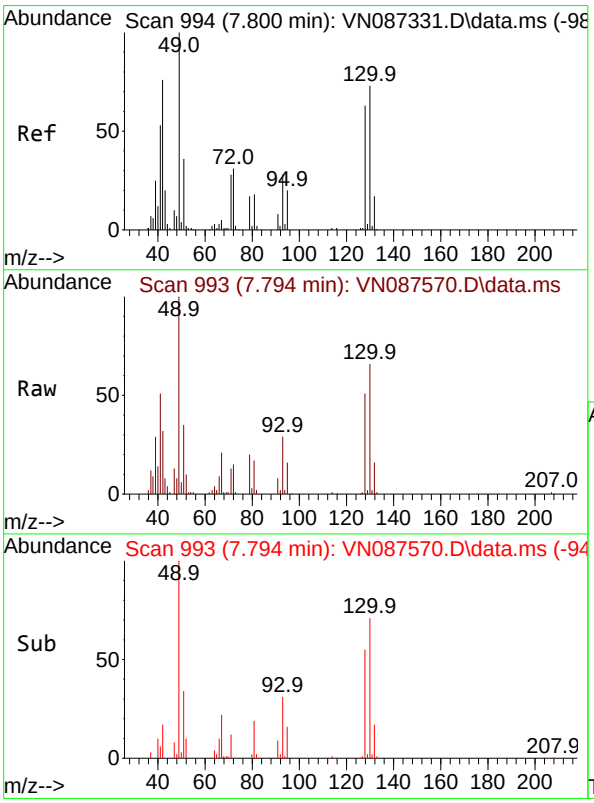
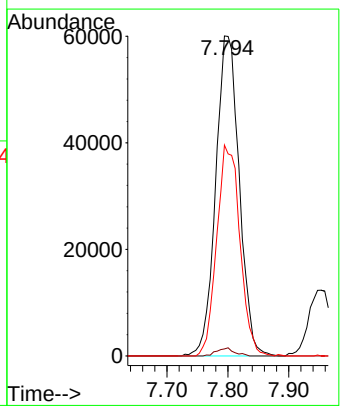


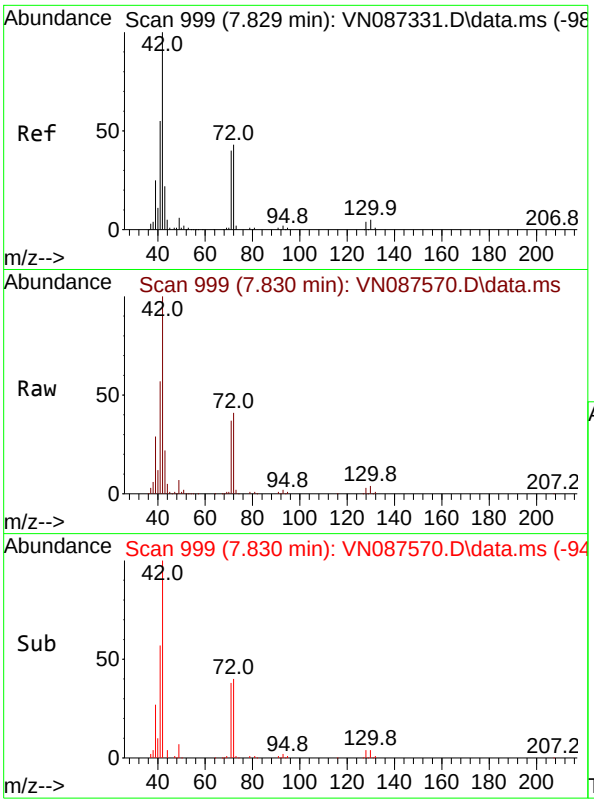


#28
Bromochloromethane
Concen: 53.528 ug/l
RT: 7.794 min Scan# 993
Delta R.T. -0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 49 Resp: 161291

Ion	Ratio	Lower	Upper
49	100		
129	1.9	0.0	4.2
130	64.8	57.3	85.9





#29
Tetrahydrofuran
Concen: 288.074 ug/l
RT: 7.830 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 42 Resp: 57920

Ion	Ratio	Lower	Upper
42	100		
72	41.2	33.4	50.0
71	39.4	31.2	46.8

Instrument :
MSVOA_N
ClientSampleId :
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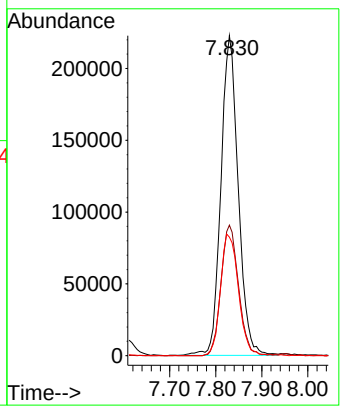
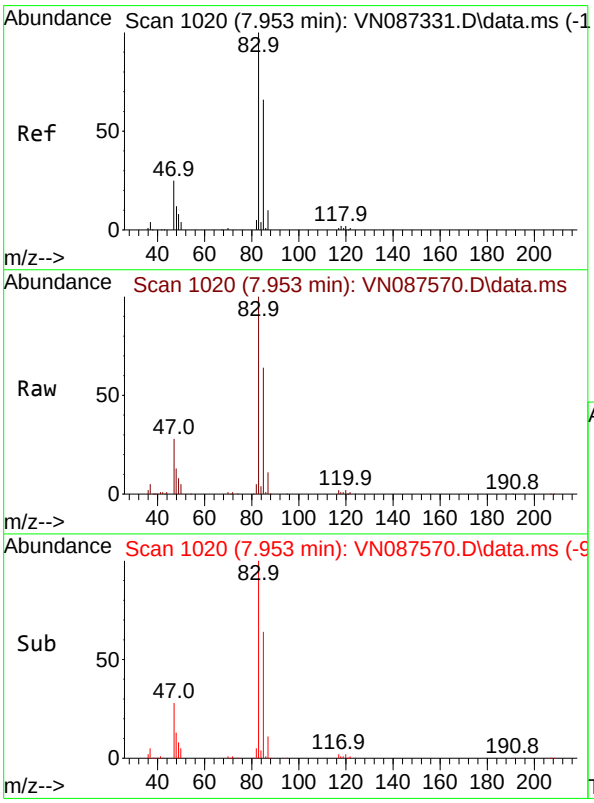
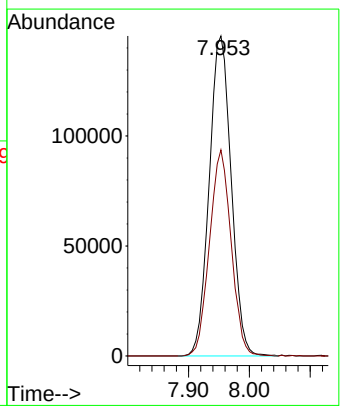


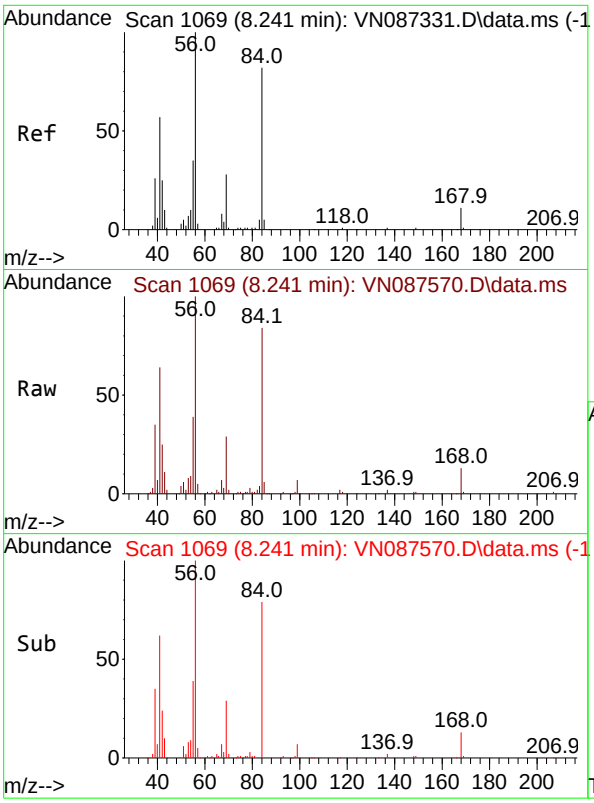


#30
Chloroform
Concen: 57.974 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 83 Resp: 365342

Ion	Ratio	Lower	Upper
83	100		
85	64.4	52.7	79.1





#31
Cyclohexane
Concen: 51.302 ug/l
RT: 8.241 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 56 Resp: 26945

Ion	Ratio	Lower	Upper
56	100		
69	28.5	22.7	34.1
84	83.6	65.8	98.6

Instrument :
MSVOA_N
ClientSampleId :
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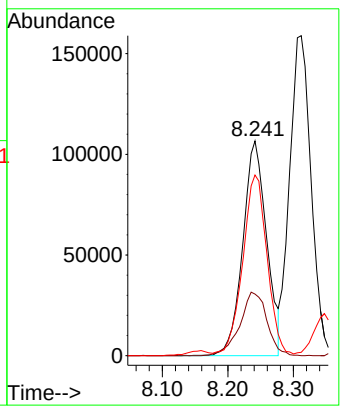
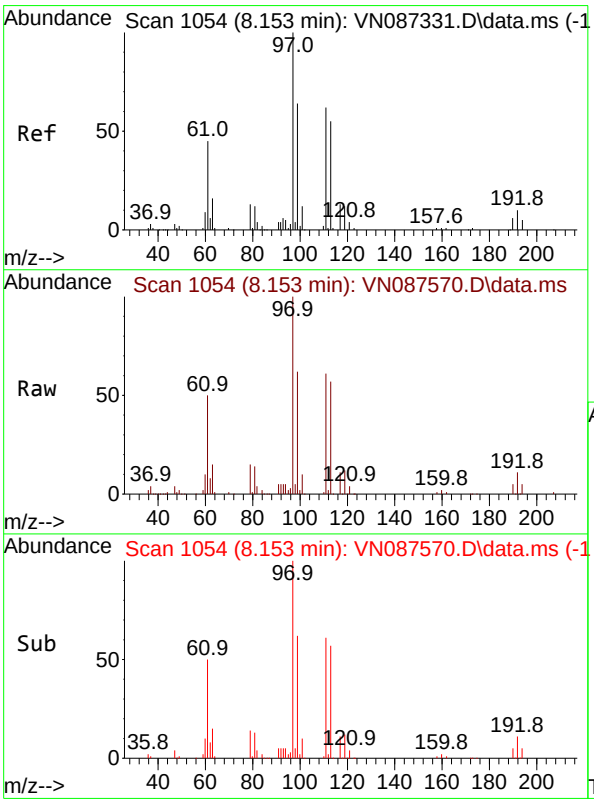
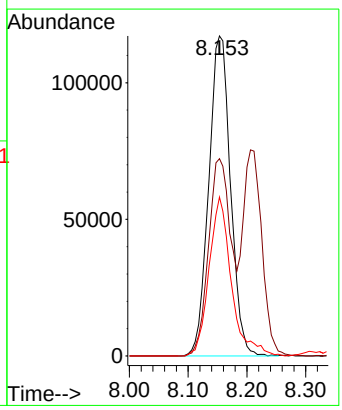


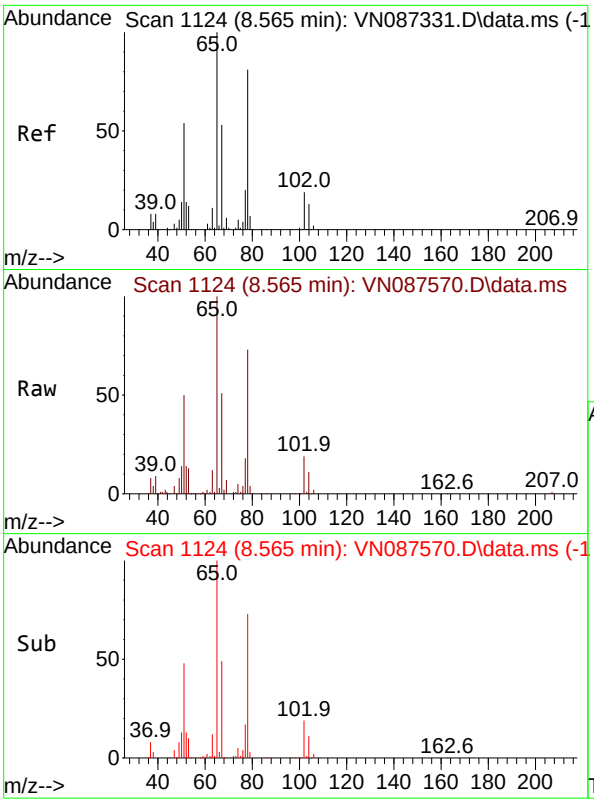


#32
1,1,1-Trichloroethane
Concen: 55.199 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 97 Resp: 301283

Ion	Ratio	Lower	Upper
97	100		
99	63.5	51.8	77.8
61	50.9	38.7	58.1





#33
1,2-Dichloroethane-d4
Concen: 54.569 ug/l
RT: 8.565 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 65 Resp: 23313

Ion	Ratio	Lower	Upper
65	100		
67	51.1	0.0	104.0

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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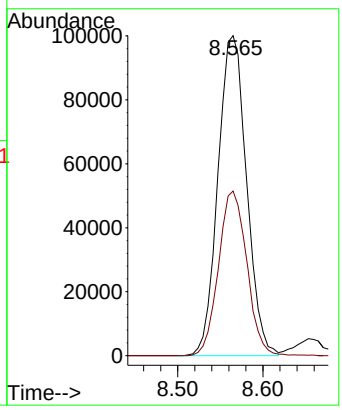
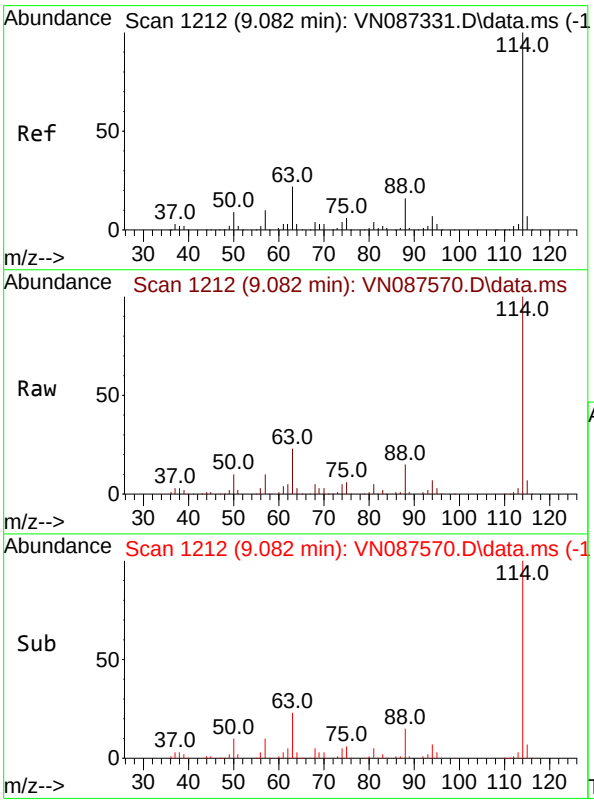
Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

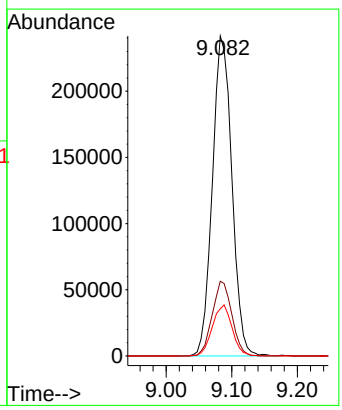


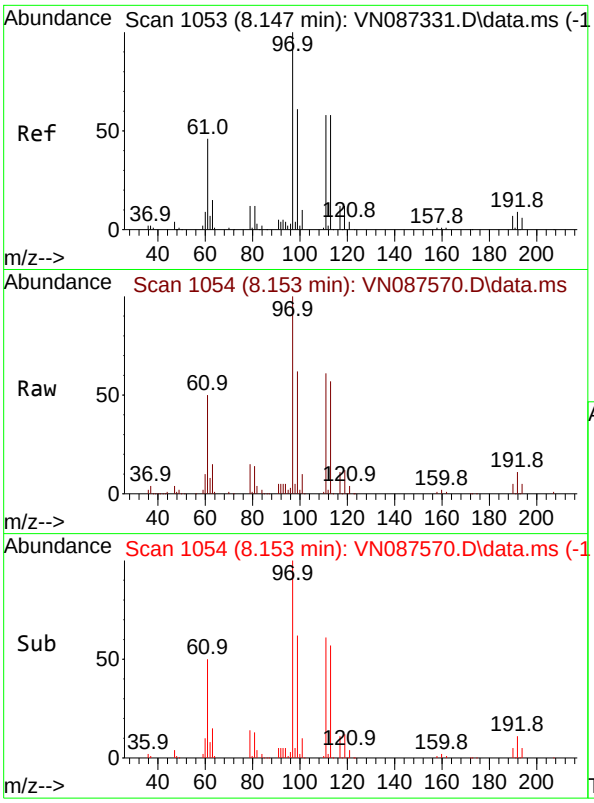


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:114 Resp: 498703

Ion	Ratio	Lower	Upper
114	100		
63	23.3	0.0	44.6
88	14.7	0.0	32.8

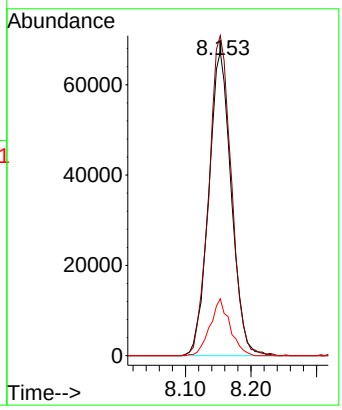




#35
Dibromofluoromethane
Concen: 46.739 ug/l
RT: 8.153 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:113 Resp: 16078

Ion	Ratio	Lower	Upper
113	100		
111	104.8	82.5	123.7
192	16.5	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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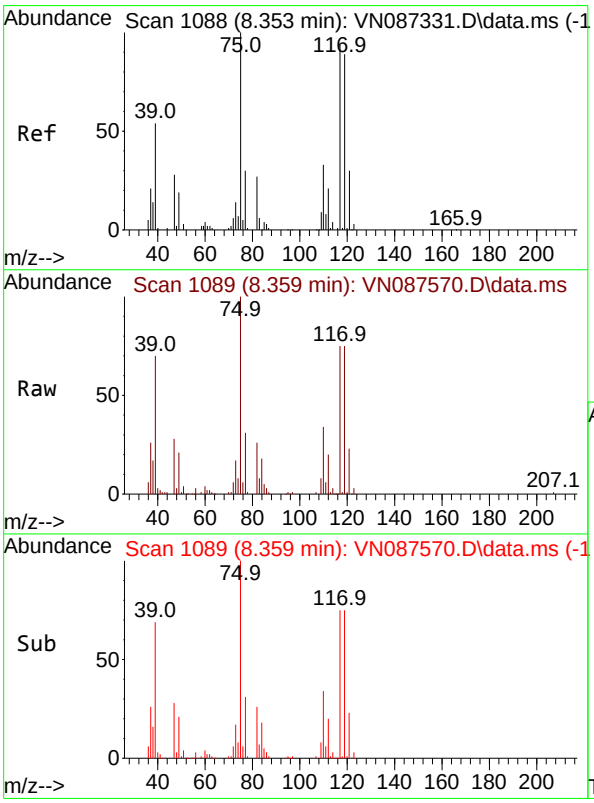
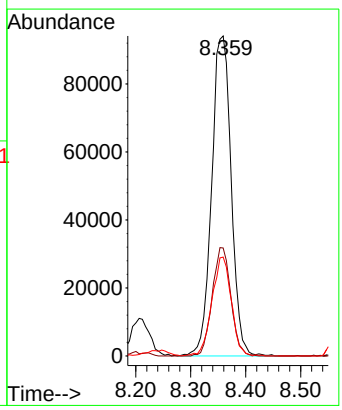
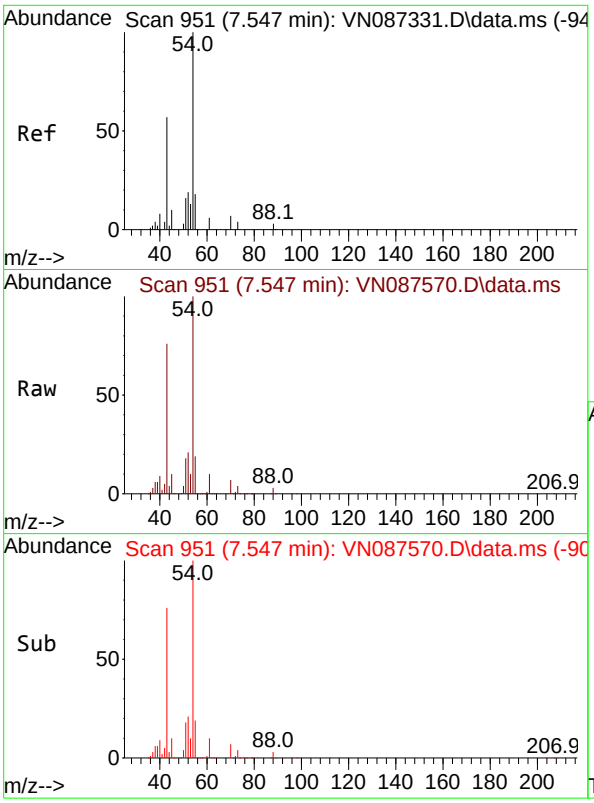


#36
1,1-Dichloropropene
Concen: 51.172 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 75 Resp: 232570

Ion	Ratio	Lower	Upper
75	100		
110	32.3	16.7	50.1
77	30.6	25.2	37.8





#37
Ethyl Acetate
Concen: 52.488 ug/l
RT: 7.547 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 34452

Ion	Ratio	Lower	Upper
43	100		
61	12.5	10.9	16.3
70	9.3	7.4	11.0

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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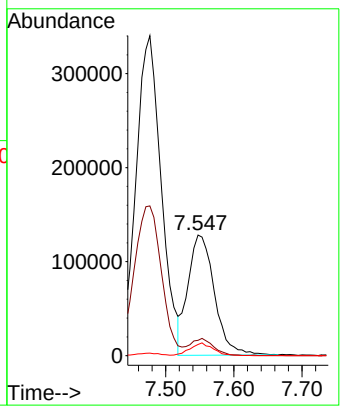
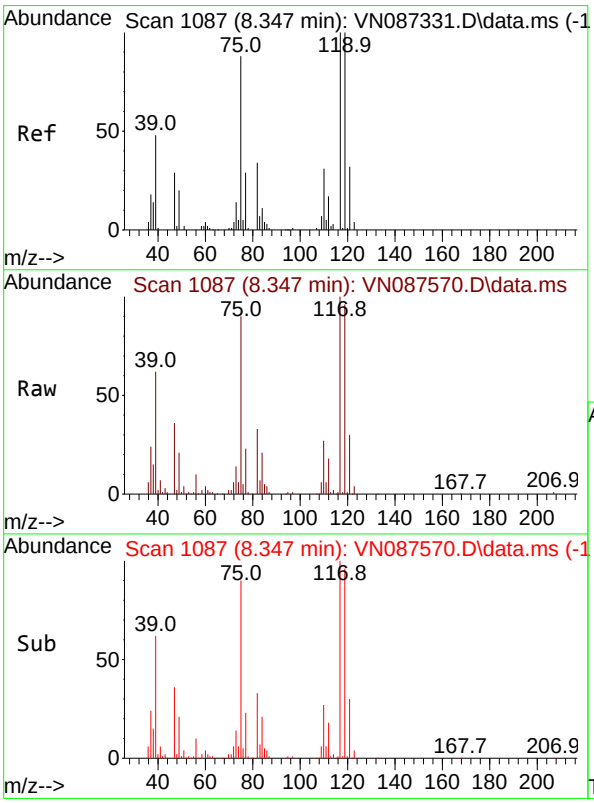
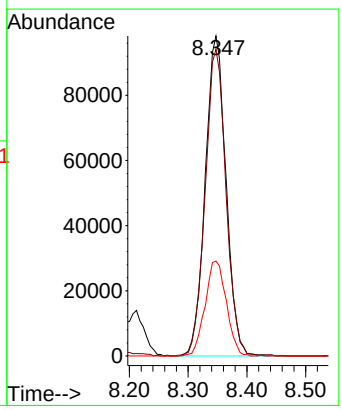


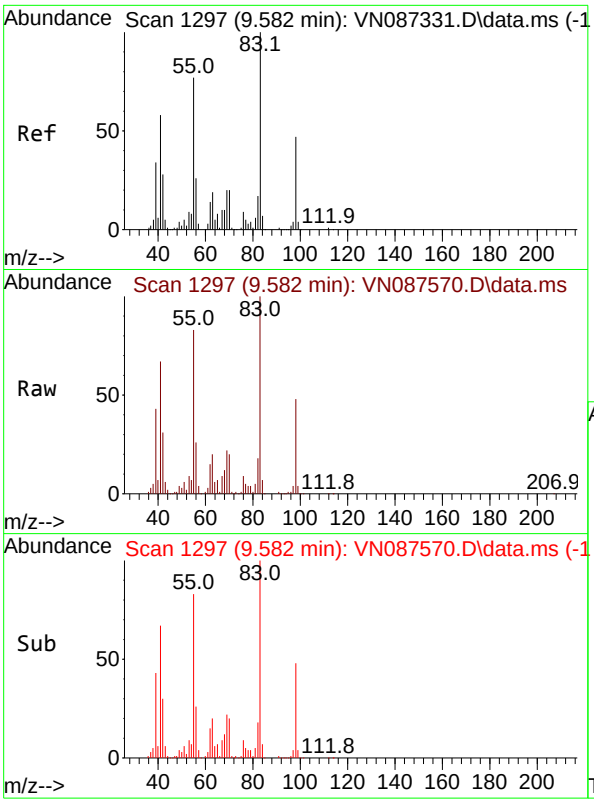


#38
Carbon Tetrachloride
Concen: 48.100 ug/l
RT: 8.347 min Scan# 1087
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:117 Resp: 240818

Ion	Ratio	Lower	Upper
117	100		
119	95.8	80.2	120.2
121	29.6	25.4	38.2





#39
Methylcyclohexane
Concen: 51.086 ug/l
RT: 9.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 83 Resp: 25136

Ion	Ratio	Lower	Upper
83	100		
55	83.5	61.3	91.9
98	48.1	37.9	56.9

Instrument :
MSVOA_N
ClientSampleId :
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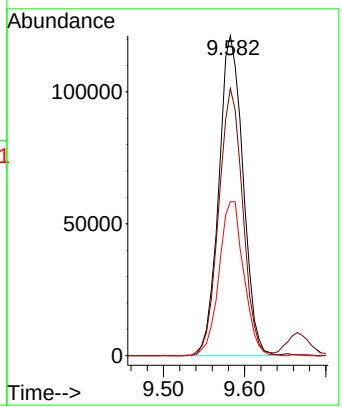
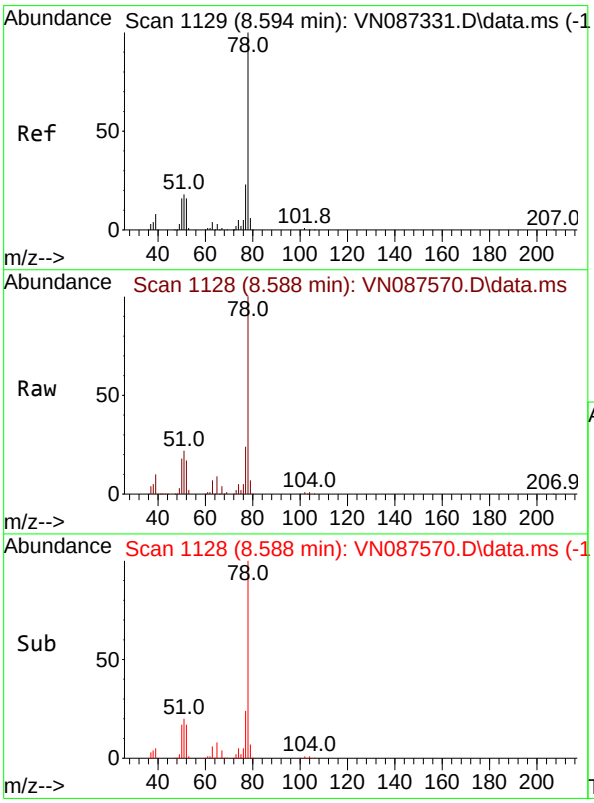
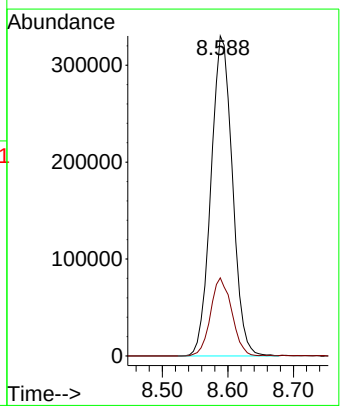


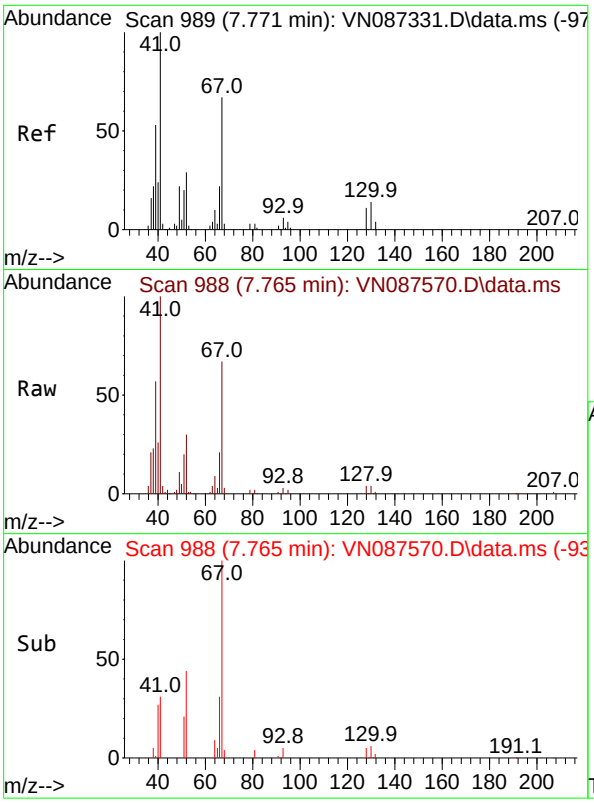


#40
Benzene
Concen: 50.980 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 78 Resp: 748859

Ion	Ratio	Lower	Upper
78	100		
77	24.4	18.2	27.2

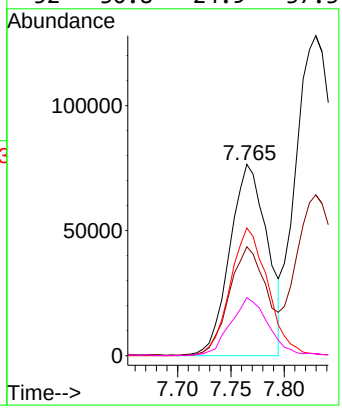




#41
Methacrylonitrile
Concen: 54.823 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 41 Resp: 18816

Ion	Ratio	Lower	Upper
41	100		
39	57.2	43.4	65.0
67	67.2	55.1	82.7
52	30.8	24.9	37.3



Instrument :
MSVOA_N
ClientSampleId :
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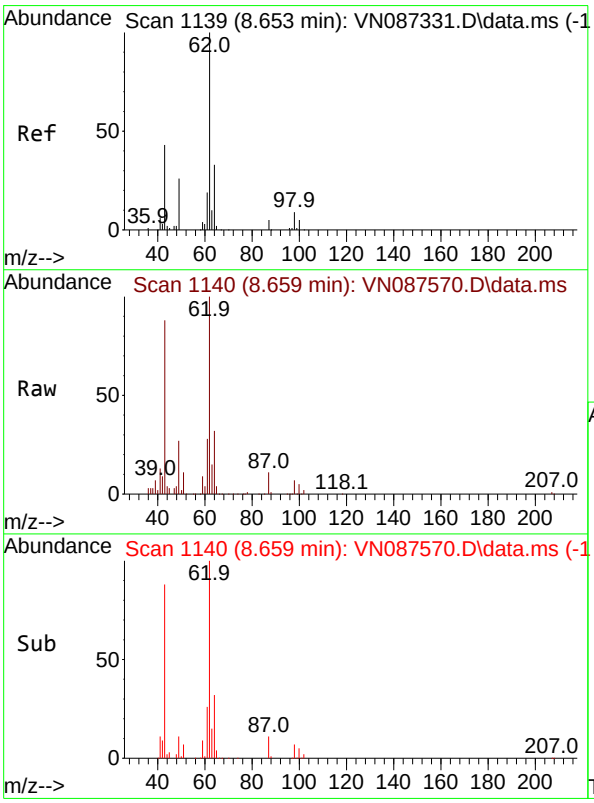
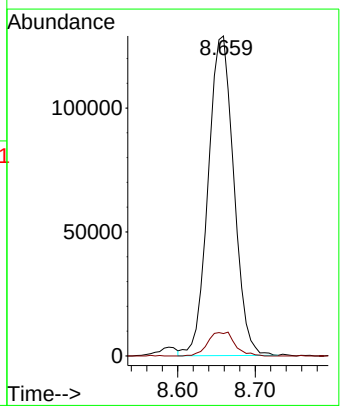
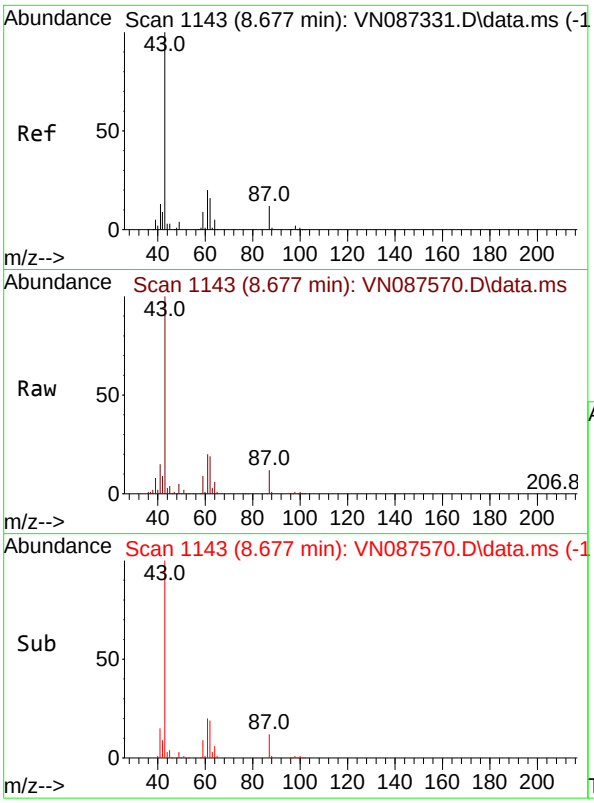


#42
1,2-Dichloroethane
Concen: 53.067 ug/l
RT: 8.659 min Scan# 1140
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 62 Resp: 295609

Ion	Ratio	Lower	Upper
62	100		
98	7.9	0.0	18.0





#43
Isopropyl Acetate
Concen: 54.740 ug/l
RT: 8.677 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 55777

Ion	Ratio	Lower	Upper
43	100		
61	24.2	19.8	29.8
87	12.1	9.8	14.6

Instrument :
MSVOA_N
ClientSampleId :
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Manual Integrations
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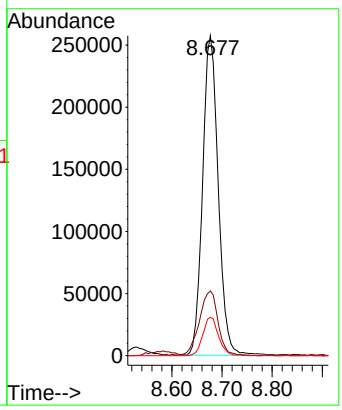
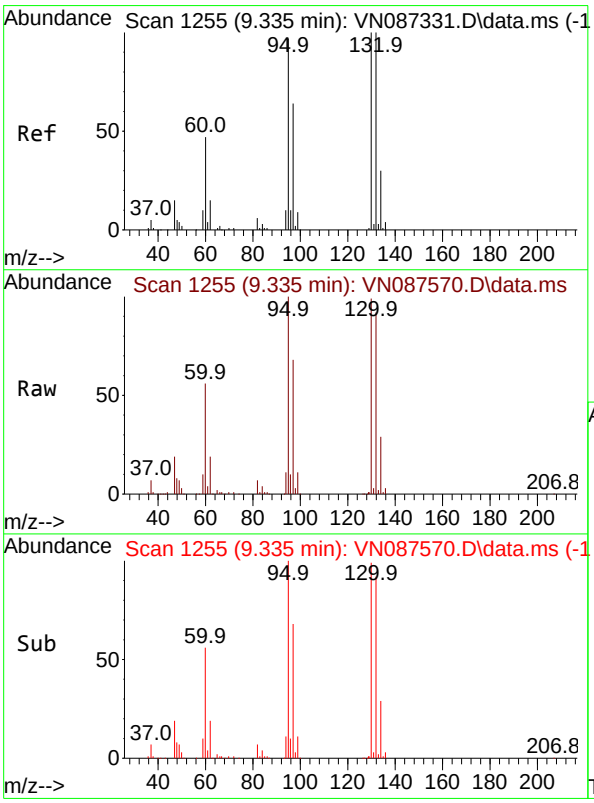
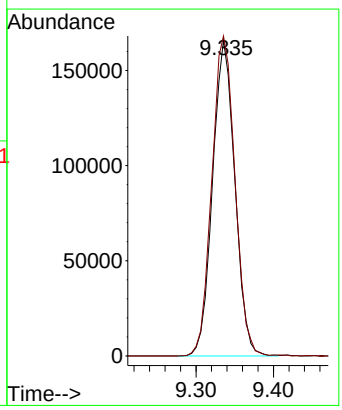


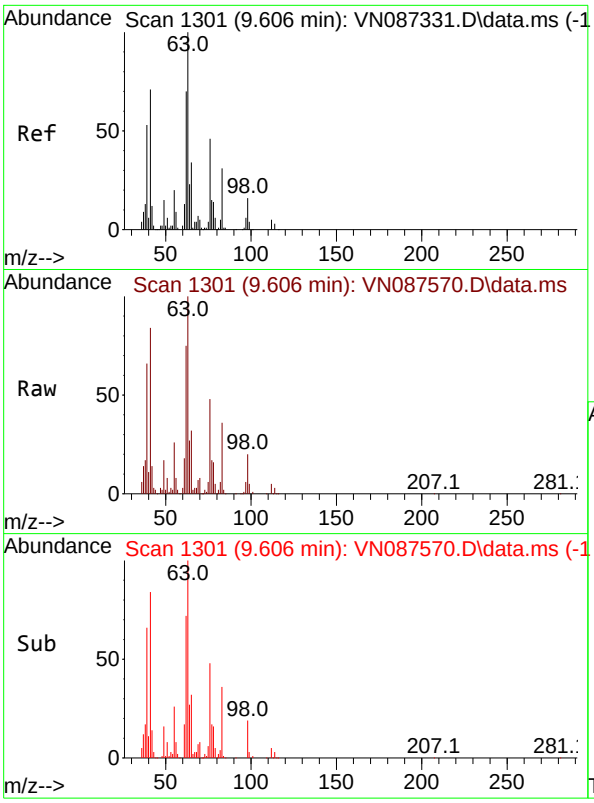


#44
Trichloroethene
Concen: 95.214 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:130 Resp: 330475

Ion	Ratio	Lower	Upper
130	100		
95	101.4	0.0	195.2





#45
1,2-Dichloropropane
Concen: 51.231 ug/l
RT: 9.606 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 63 Resp: 19121

Ion	Ratio	Lower	Upper
63	100		
65	32.4	27.0	40.4

Instrument :
MSVOA_N
ClientSampleId :
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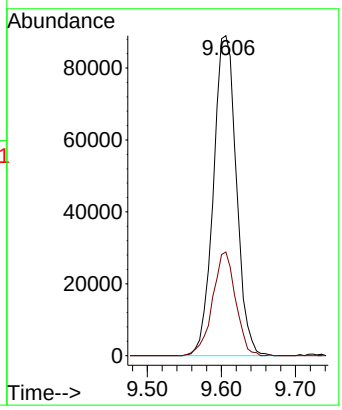
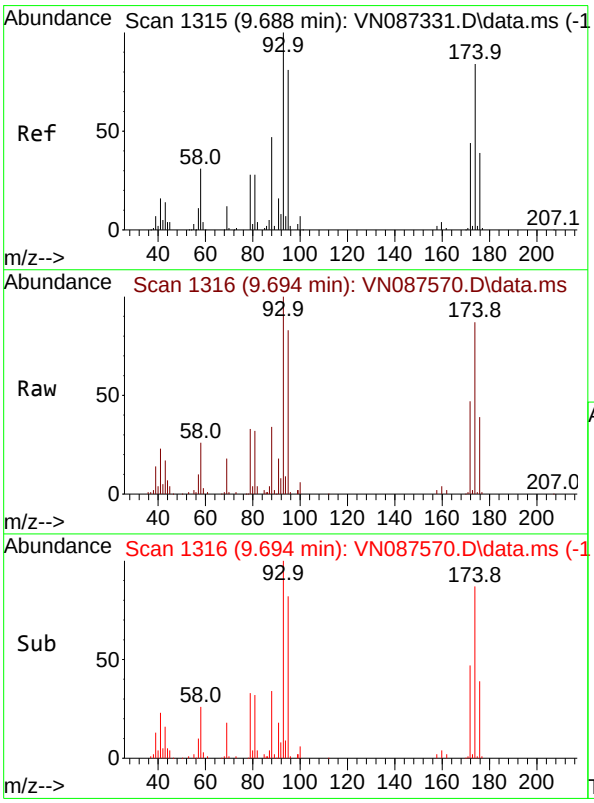
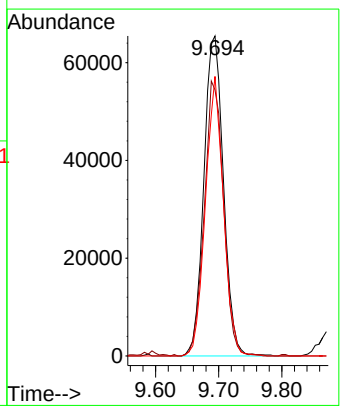


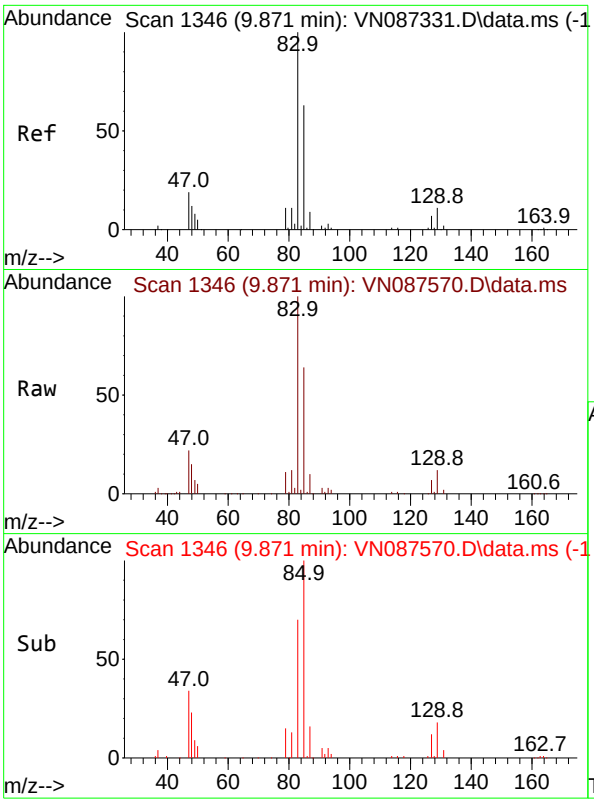


#46
Dibromomethane
Concen: 50.488 ug/l
RT: 9.694 min Scan# 1316
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 93 Resp: 141089

Ion	Ratio	Lower	Upper
93	100		
95	84.5	65.8	98.8
174	80.4	69.9	104.9

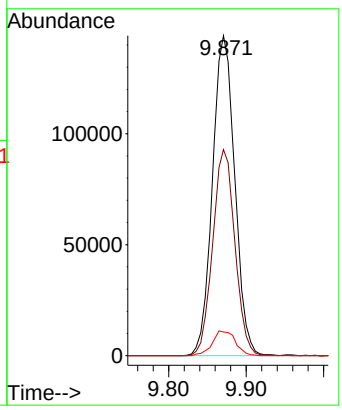




#47
Bromodichloromethane
Concen: 51.174 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 83 Resp: 28805

Ion	Ratio	Lower	Upper
83	100		
85	64.4	50.4	75.6
127	7.4	5.8	8.8



Instrument :
MSVOA_N
ClientSampleId :
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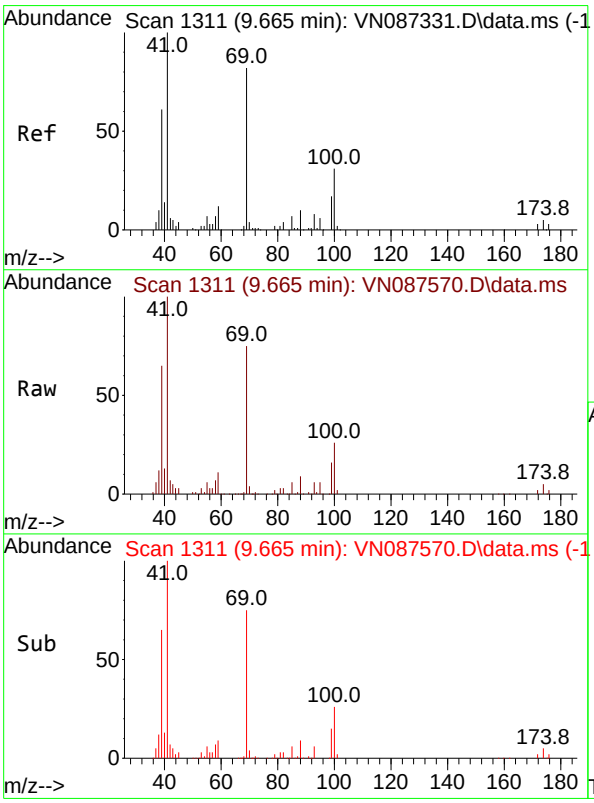
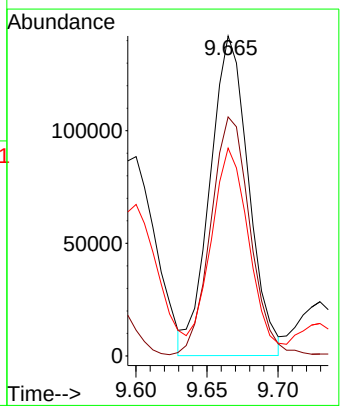
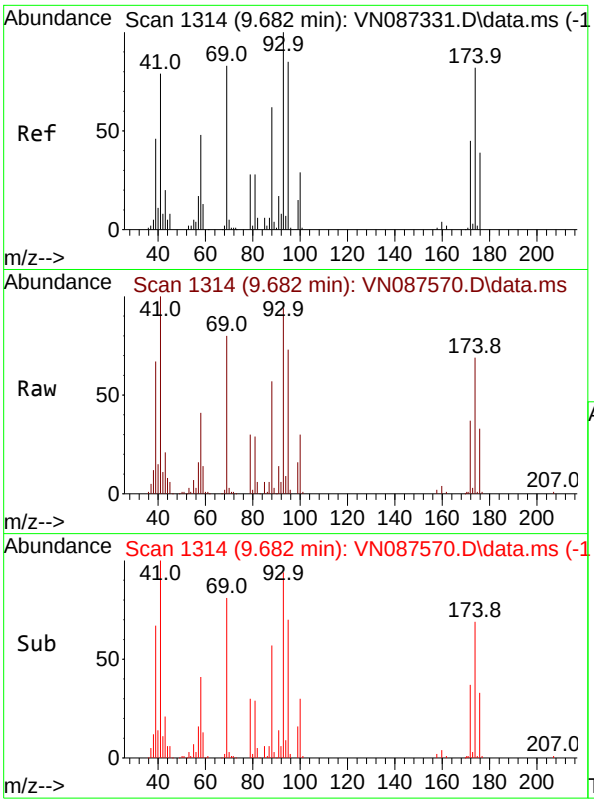


#48
Methyl methacrylate
Concen: 58.477 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 41 Resp: 268246

Ion	Ratio	Lower	Upper
41	100		
69	77.2	64.1	96.1
39	64.3	45.5	68.3

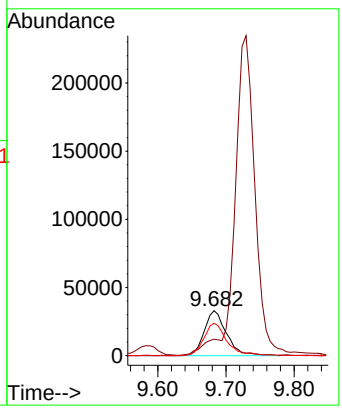




#49
1,4-Dioxane
Concen: 1065.478 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 88 Resp: 7485

Ion	Ratio	Lower	Upper
88	100		
43	0.0	0.0	0.0
58	76.0	61.1	91.7



Instrument :
MSVOA_N
ClientSampleId :
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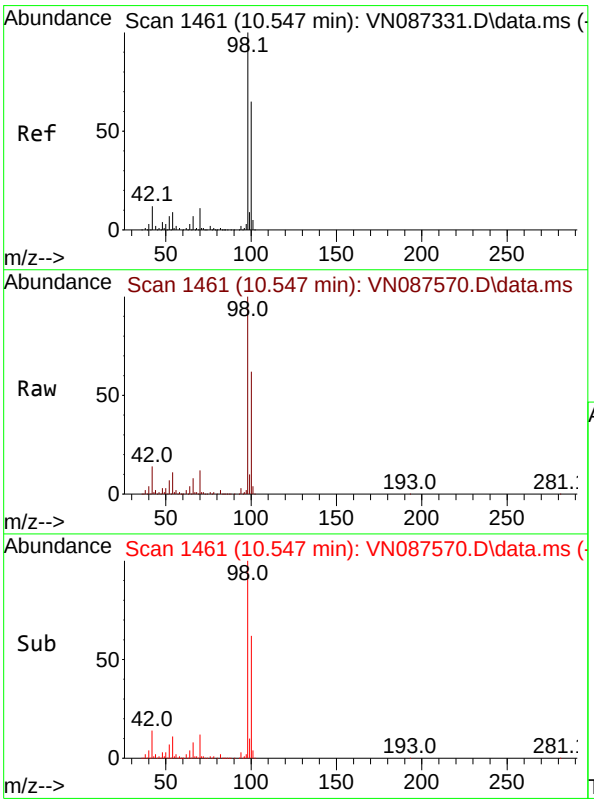
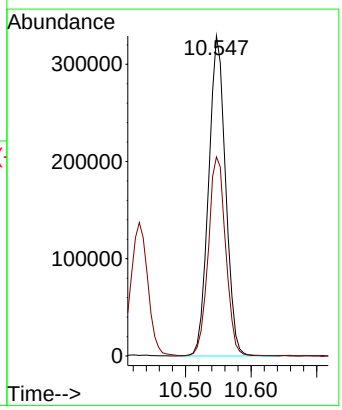
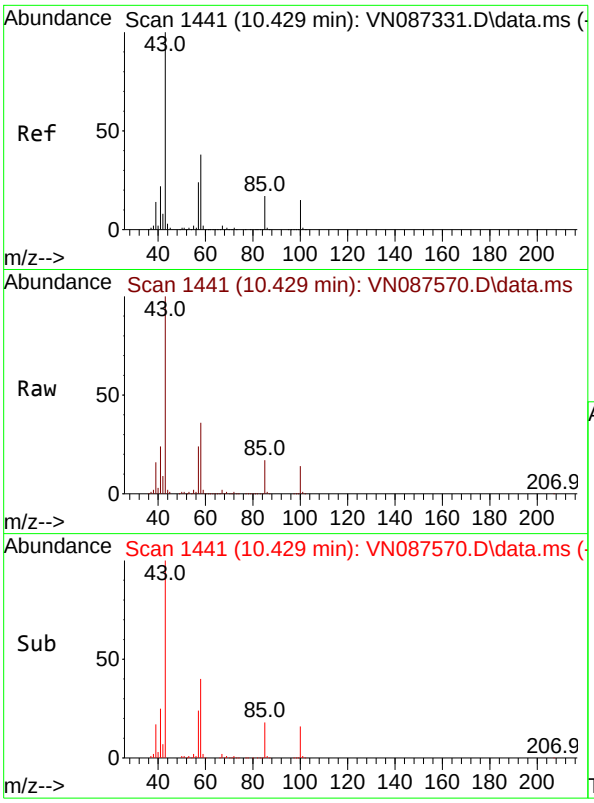


#50
Toluene-d8
Concen: 48.202 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 98 Resp: 591485

Ion	Ratio	Lower	Upper
98	100		
100	63.5	52.1	78.1





#51
4-Methyl-2-Pentanone
Concen: 275.360 ug/l
RT: 10.429 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 177458

Ion	Ratio	Lower	Upper
43	100		
58	36.9	30.8	46.2

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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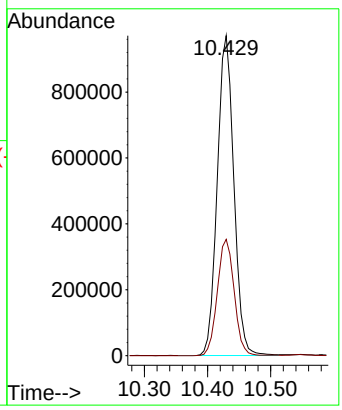
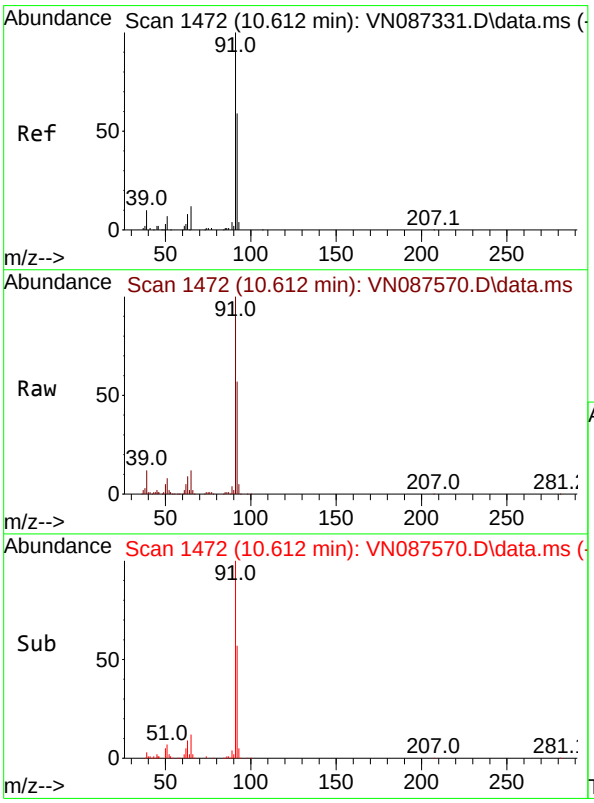
Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

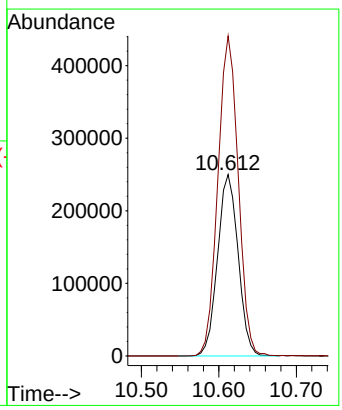


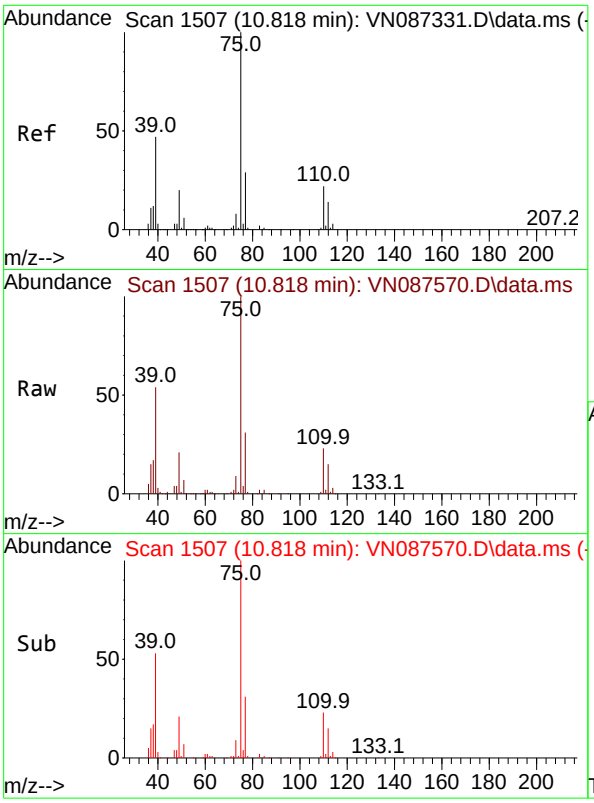


#52
Toluene
Concen: 51.563 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 92 Resp: 460377

Ion	Ratio	Lower	Upper
92	100		
91	175.0	135.1	202.7





#53
t-1,3-Dichloropropene
Concen: 54.105 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 75 Resp: 30822

Ion	Ratio	Lower	Upper
75	100		
77	31.5	23.6	35.4

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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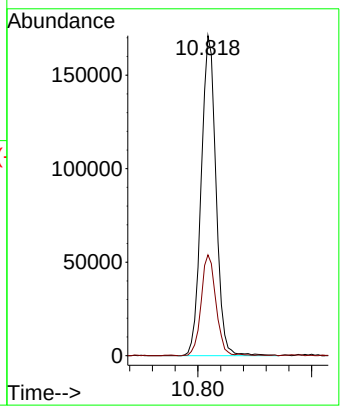
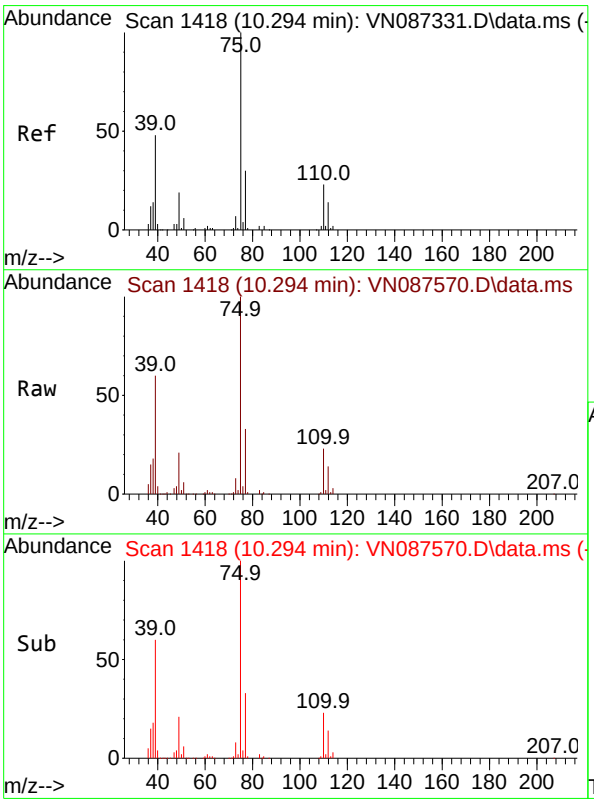
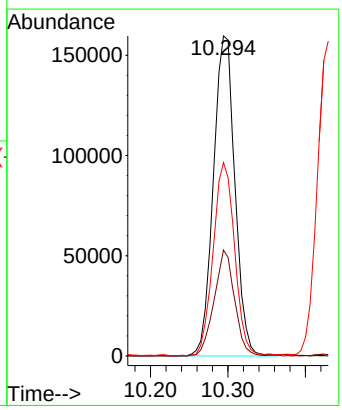


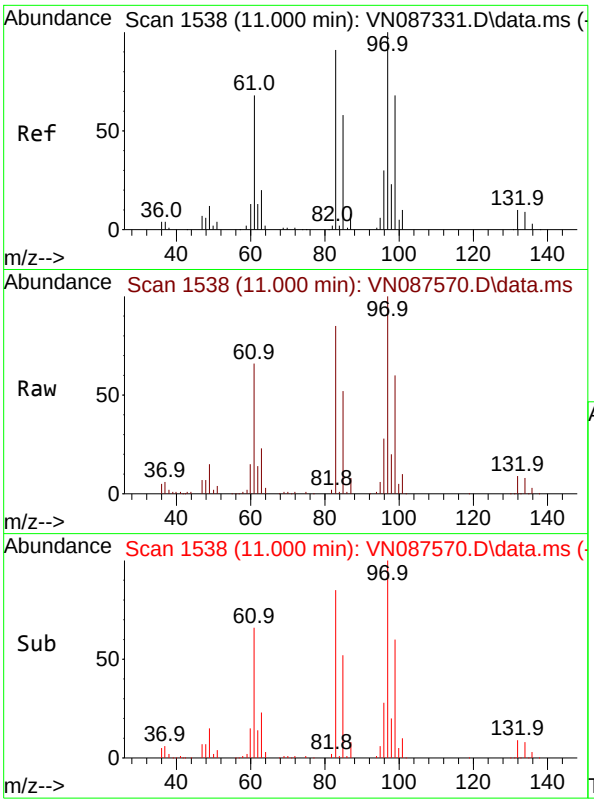


#54
cis-1,3-Dichloropropene
Concen: 52.399 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 75 Resp: 308333

Ion	Ratio	Lower	Upper
75	100		
77	33.1	24.2	36.2
39	60.3	38.4	57.6#

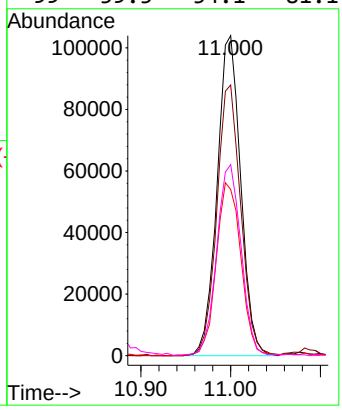




#55
1,1,2-Trichloroethane
Concen: 52.643 ug/l
RT: 11.000 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 97 Resp: 19028

Ion	Ratio	Lower	Upper
97	100		
83	84.6	72.6	109.0
85	51.8	46.7	70.1
99	59.5	54.1	81.1



Instrument :
MSVOA_N
ClientSampleId :
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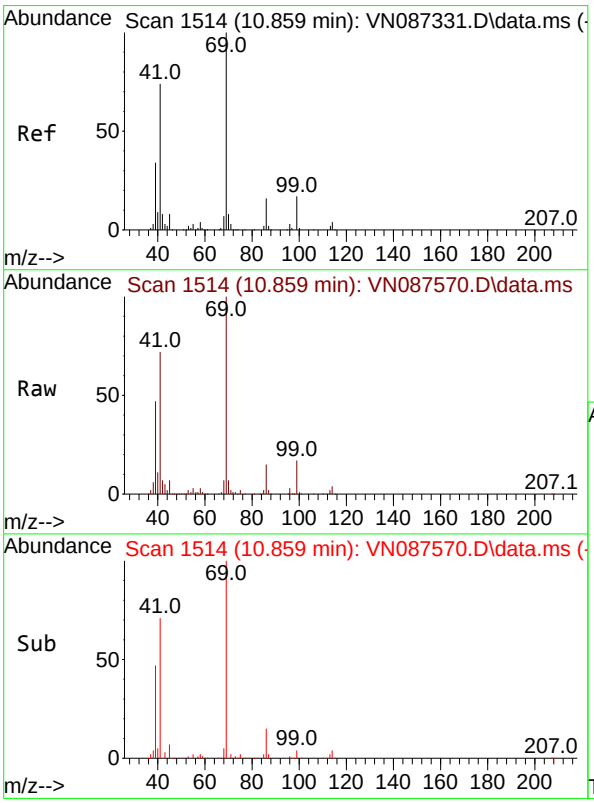
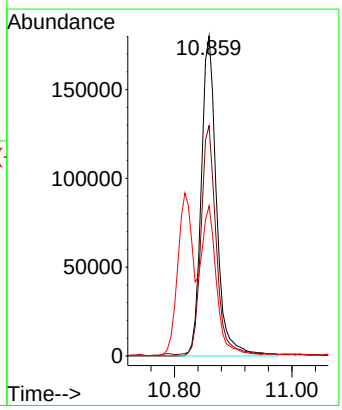
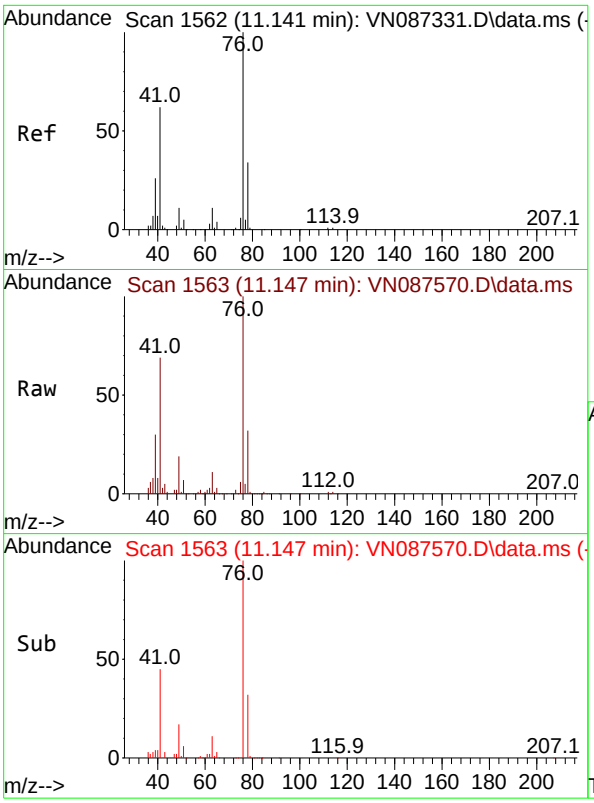


#56
Ethyl methacrylate
Concen: 53.587 ug/l
RT: 10.859 min Scan# 1514
Delta R.T. -0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 69 Resp: 326690

Ion	Ratio	Lower	Upper
69	100		
41	69.8	55.1	82.7
39	42.5	27.9	41.9#

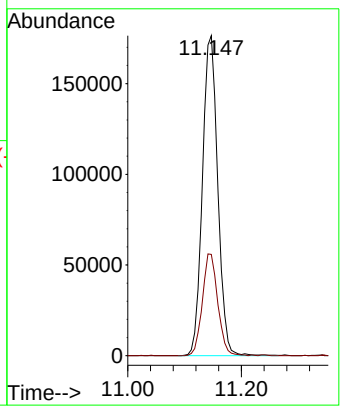




#57
1,3-Dichloropropane
Concen: 52.730 ug/l
RT: 11.147 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 76 Resp: 32954

Ion	Ratio	Lower	Upper
76	100		
78	31.9	26.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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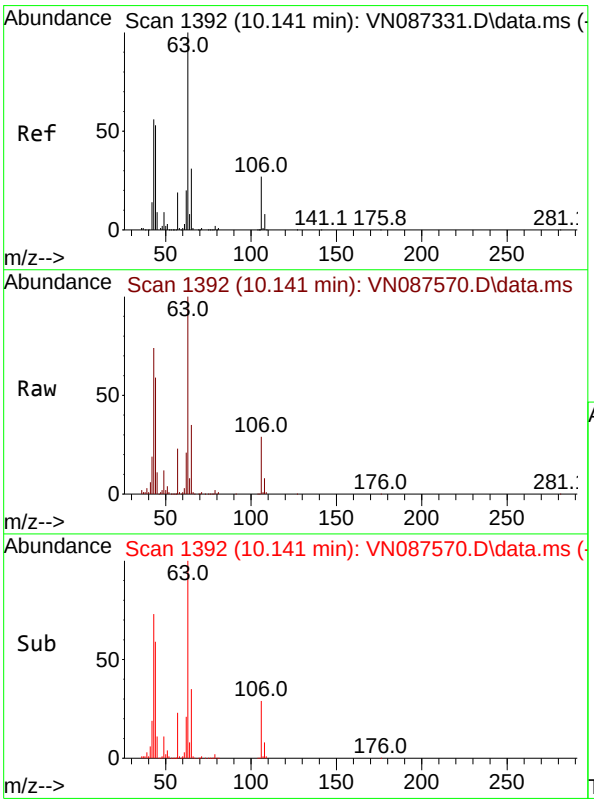
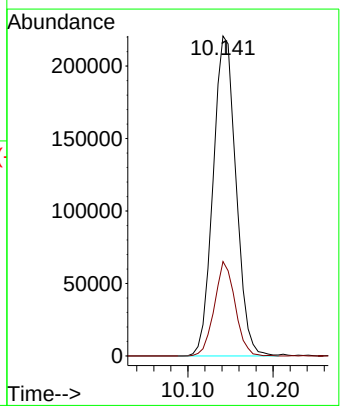
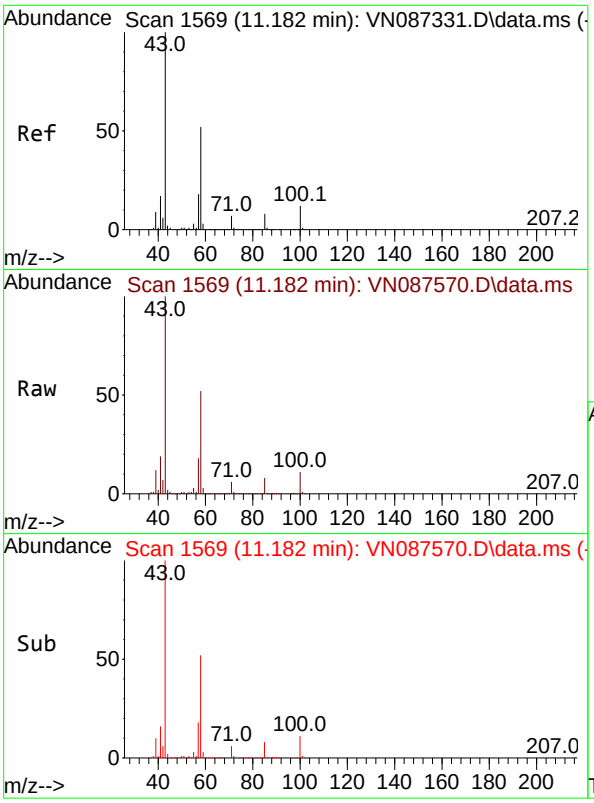


#58
2-Chloroethyl Vinyl ether
Concen: 139.157 ug/l
RT: 10.141 min Scan# 1392
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 63 Resp: 412625

Ion	Ratio	Lower	Upper
63	100		
106	26.7	21.7	32.5





#59
2-Hexanone
Concen: 289.435 ug/l
RT: 11.182 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 123754

Ion	Ratio	Lower	Upper
43	100		
58	51.6	26.7	80.0

Instrument :
MSVOA_N
ClientSampleId :
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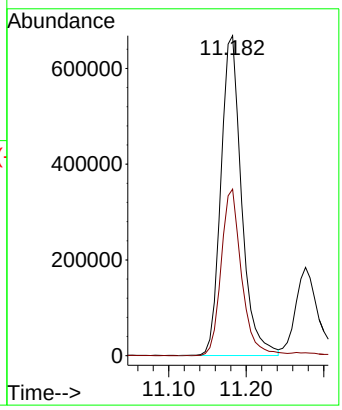
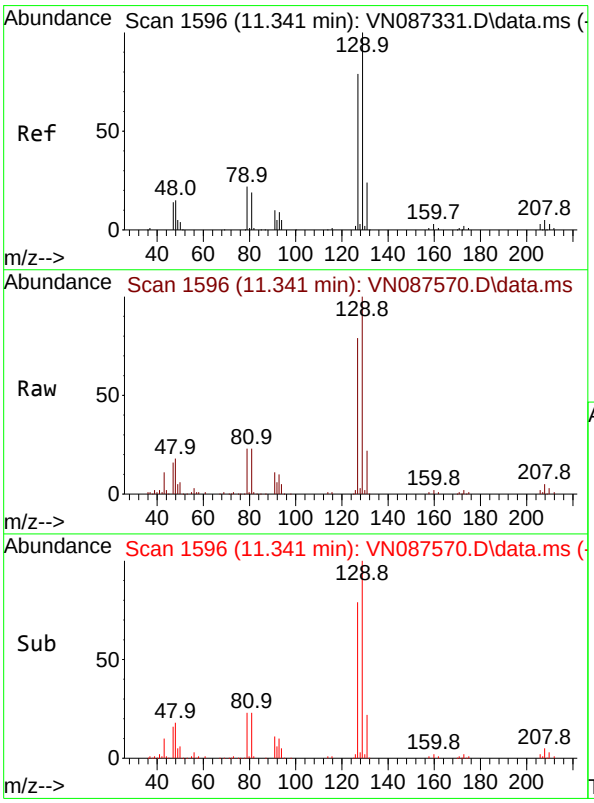
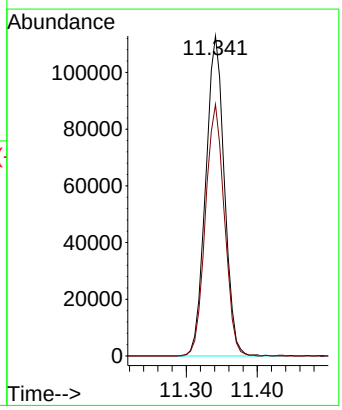


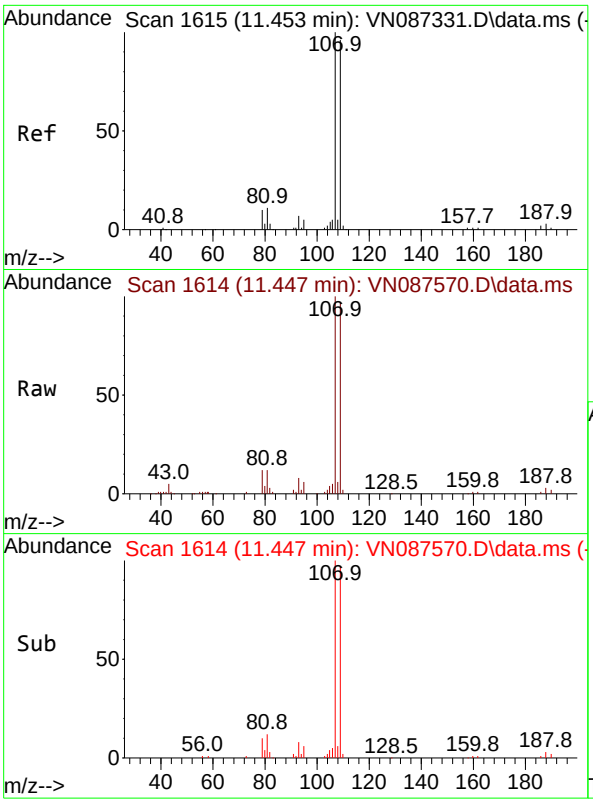


#60
Dibromochloromethane
Concen: 49.903 ug/l
RT: 11.341 min Scan# 1596
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:129 Resp: 205718

Ion	Ratio	Lower	Upper
129	100		
127	80.0	39.1	117.5

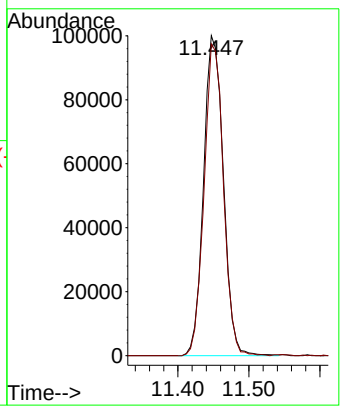




#61
1,2-Dibromoethane
Concen: 50.967 ug/l
RT: 11.447 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:107 Resp: 19370

Ion	Ratio	Lower	Upper
107	100		
109	95.3	77.5	116.3



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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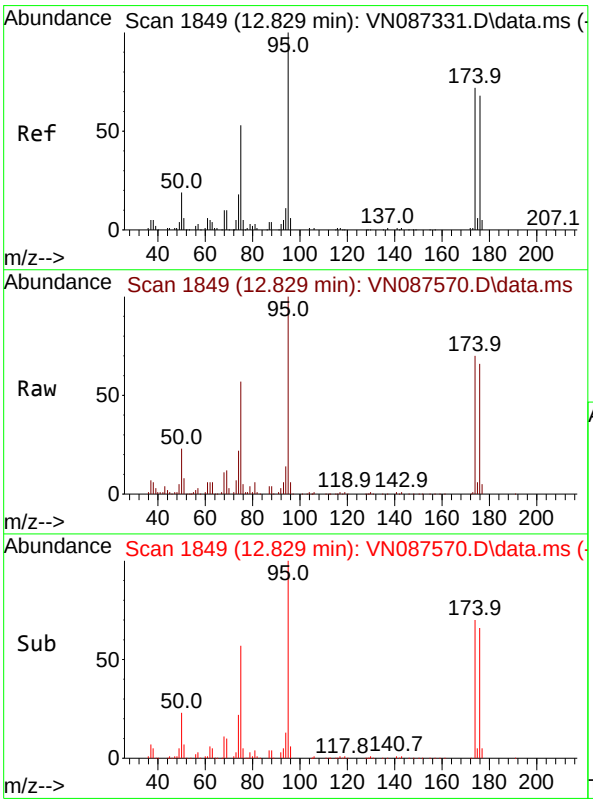
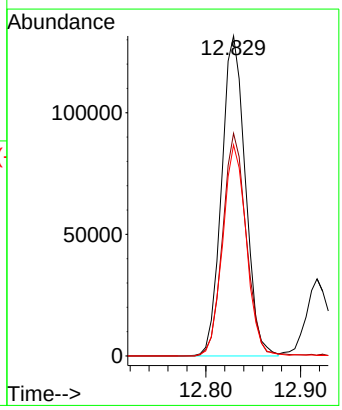
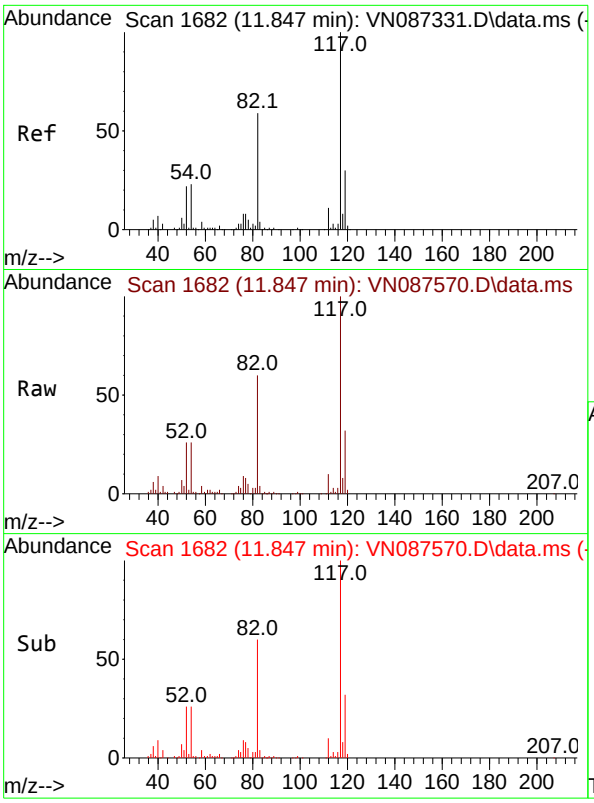


#62
4-Bromofluorobenzene
Concen: 50.467 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 95 Resp: 228797

Ion	Ratio	Lower	Upper
95	100		
174	69.5	0.0	149.4
176	65.8	0.0	141.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:117 Resp: 46018

Ion	Ratio	Lower	Upper
117	100		
82	59.6	47.4	71.2
119	32.0	23.8	35.8

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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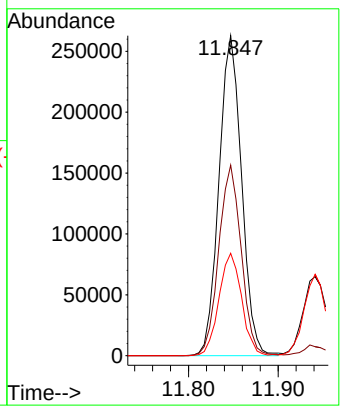
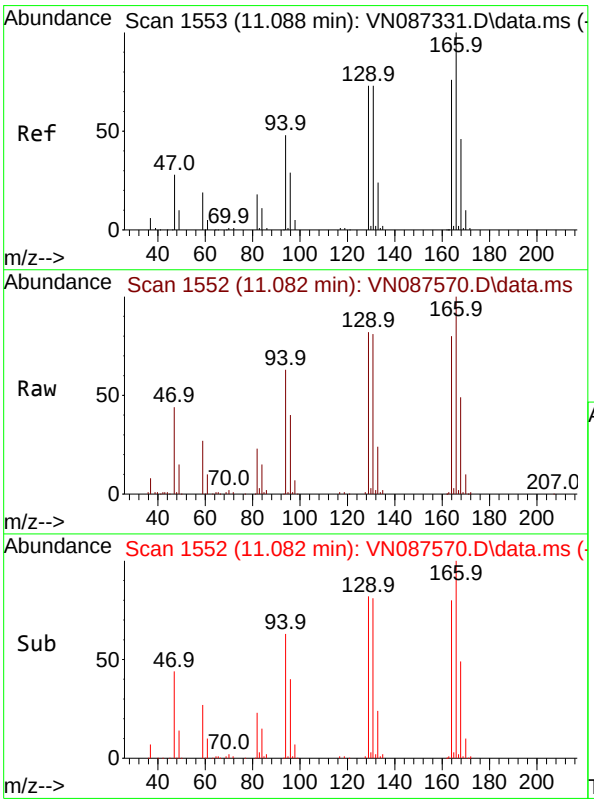
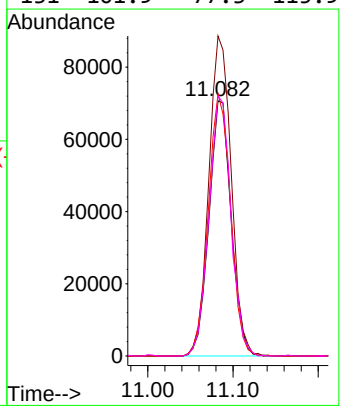


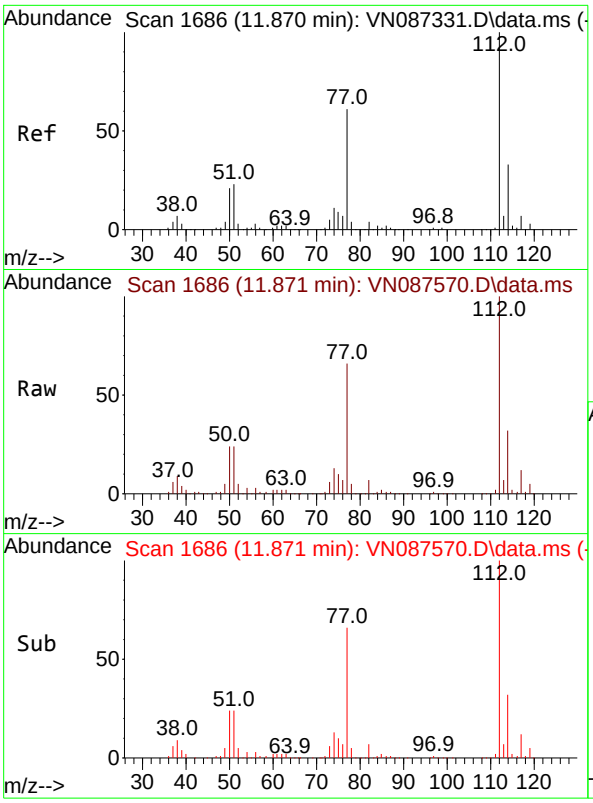


#64
Tetrachloroethene
Concen: 43.104 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:164 Resp: 127664

Ion	Ratio	Lower	Upper
164	100		
166	125.4	105.5	158.3
129	102.7	77.4	116.2
131	101.9	77.3	115.9

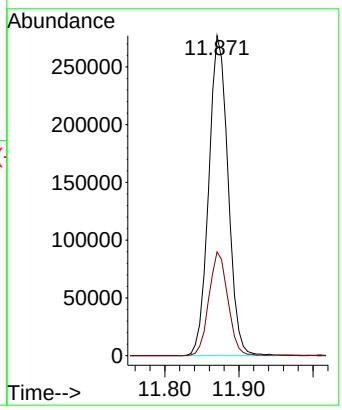




#65
Chlorobenzene
Concen: 48.485 ug/l
RT: 11.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:112 Resp: 50091

Ion	Ratio	Lower	Upper
112	100		
114	32.5	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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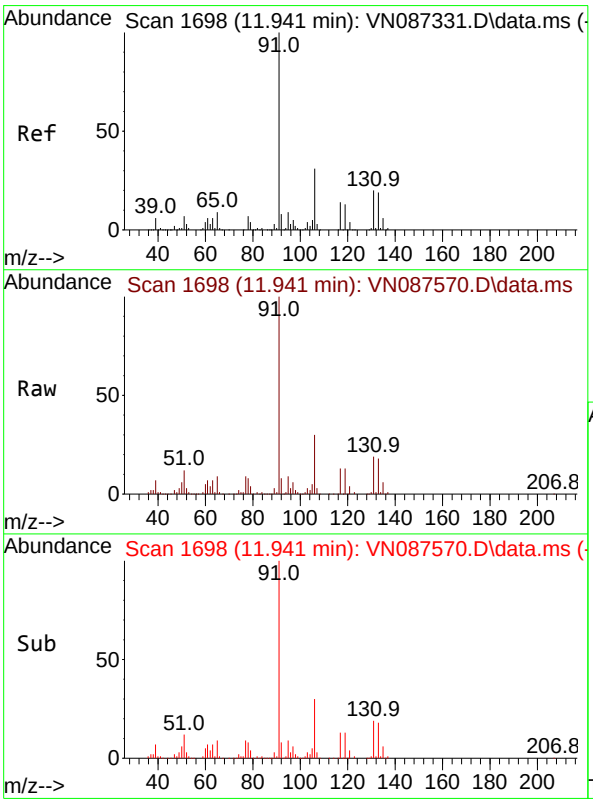
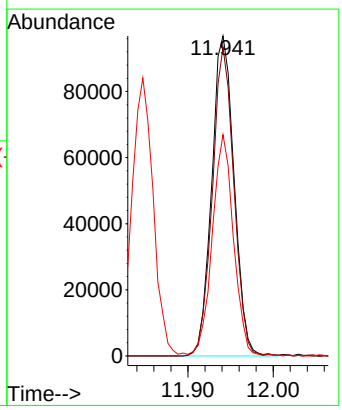
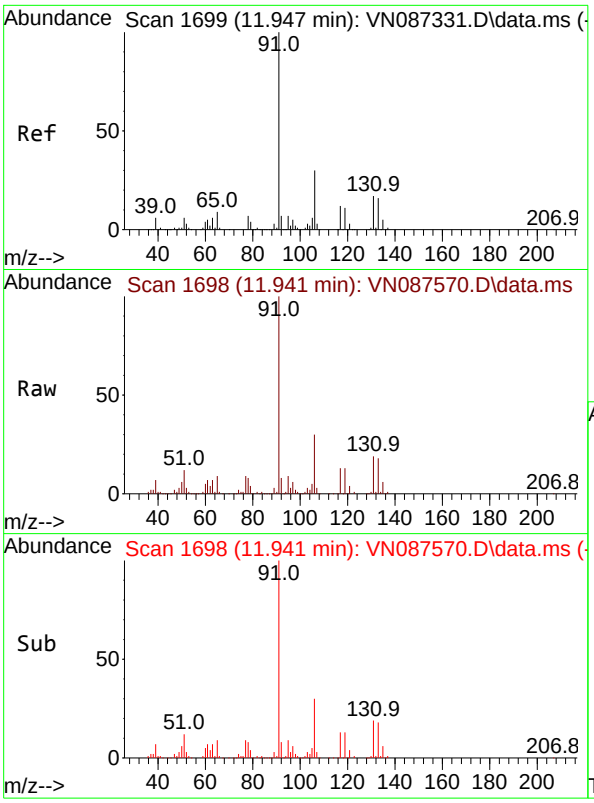


#66
1,1,1,2-Tetrachloroethane
Concen: 50.180 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:131 Resp: 176284

Ion	Ratio	Lower	Upper
131	100		
133	93.4	47.4	142.3
119	65.7	33.1	99.2





#67
Ethyl Benzene
Concen: 52.840 ug/l
RT: 11.941 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 91 Resp: 89870

Ion	Ratio	Lower	Upper
91	100		
106	29.8	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
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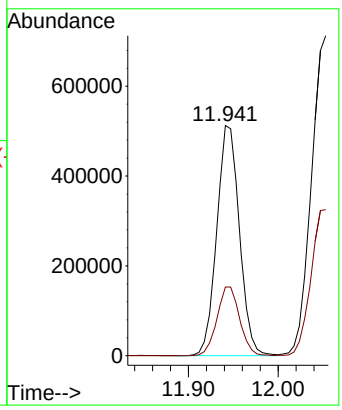
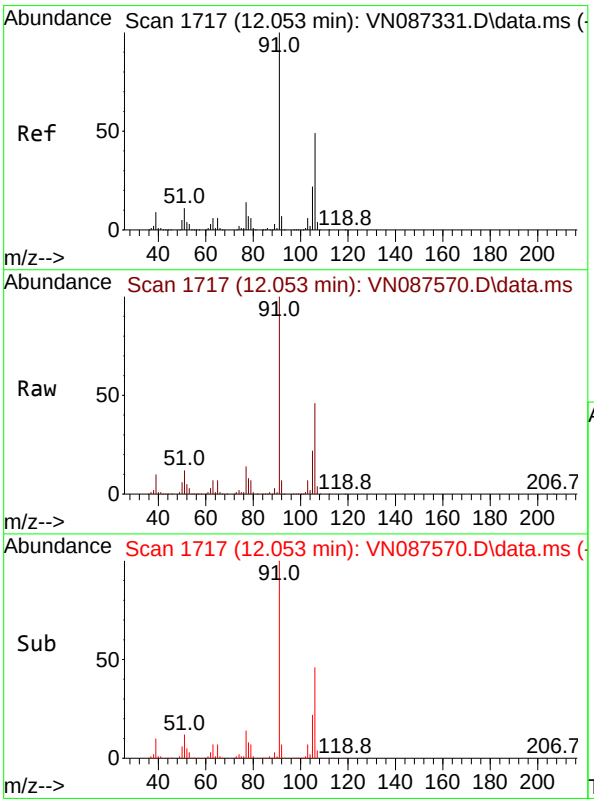
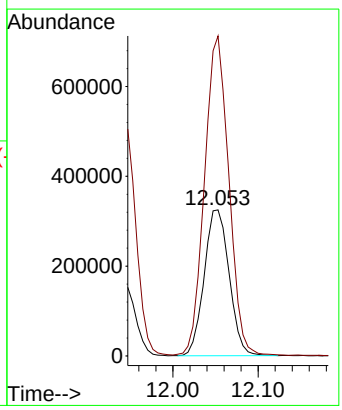


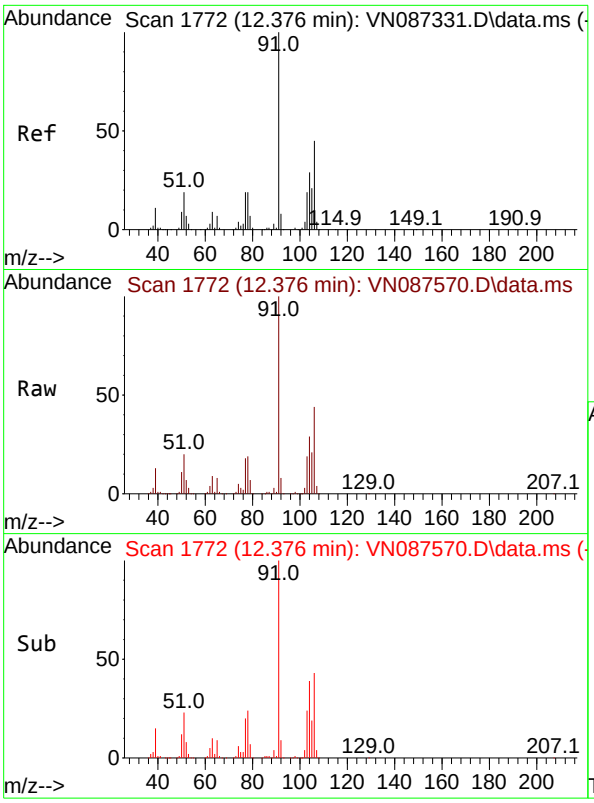


#68
m/p-Xylenes
Concen: 103.996 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:106 Resp: 662341

Ion	Ratio	Lower	Upper
106	100		
91	213.4	162.0	243.0





#69
o-Xylene
Concen: 53.926 ug/l
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:106 Resp: 32806

Ion	Ratio	Lower	Upper
106	100		
91	222.1	107.7	323.3

Instrument :
MSVOA_N
ClientSampleId :
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Manual Integrations
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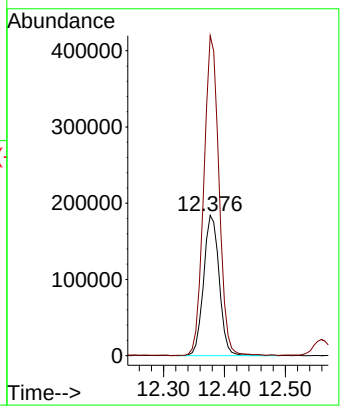
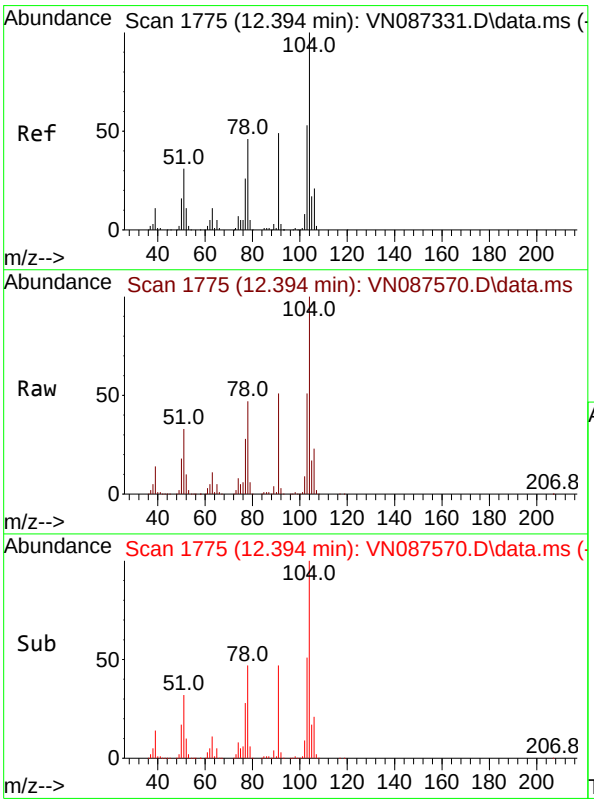
Supervised By :Mahesh Dadoda 08/19/2025

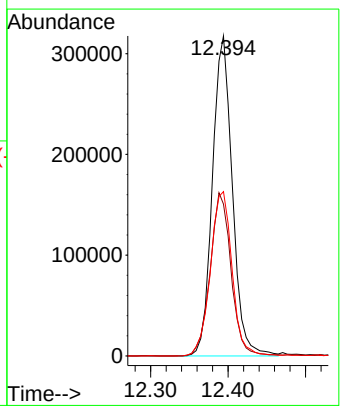


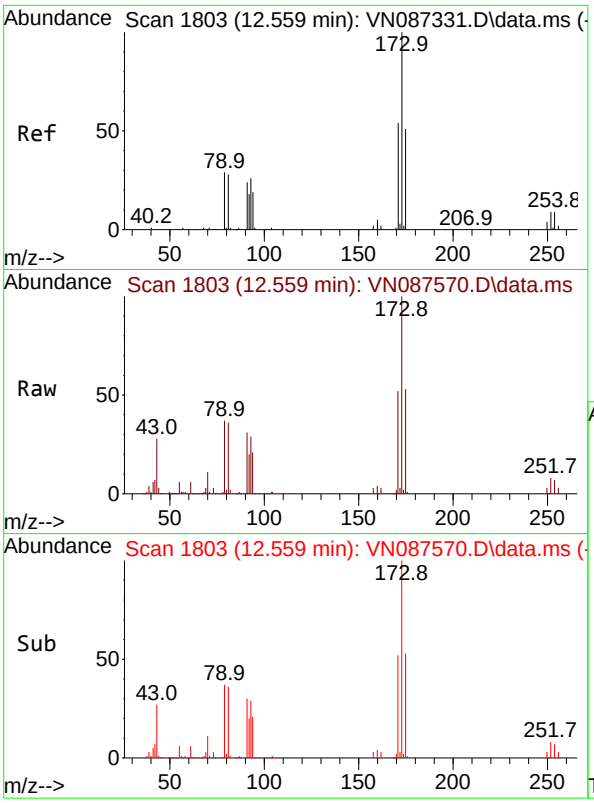


#70
Styrene
Concen: 55.481 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:104 Resp: 567805

Ion	Ratio	Lower	Upper
104	100		
78	53.5	41.0	61.6
103	55.8	43.9	65.9

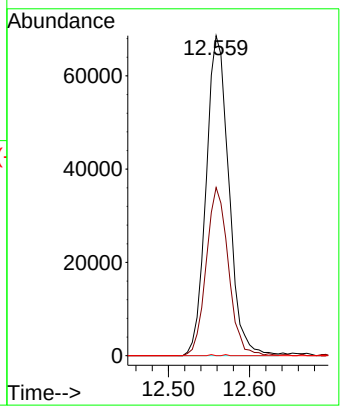




#71
Bromoform
Concen: 46.961 ug/l
RT: 12.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:173 Resp: 13328

Ion	Ratio	Lower	Upper
173	100		
175	51.5	24.1	72.3
254	0.1	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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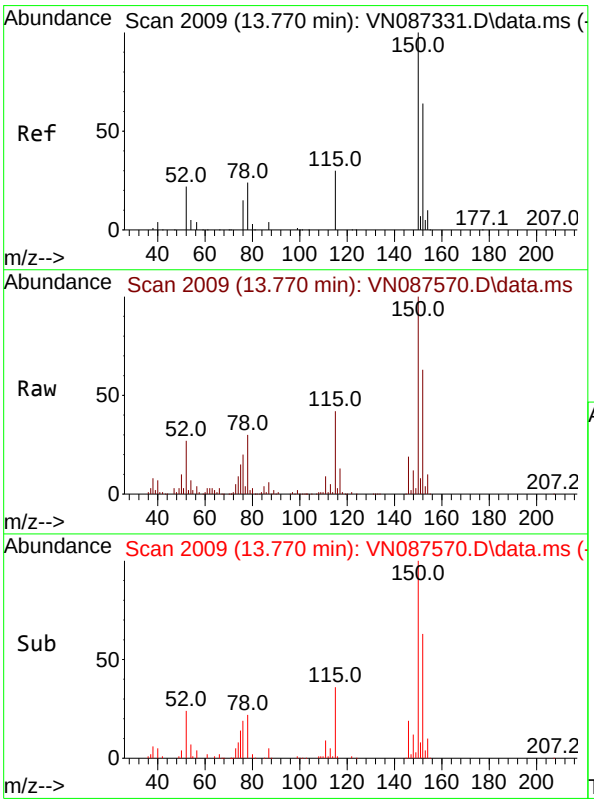
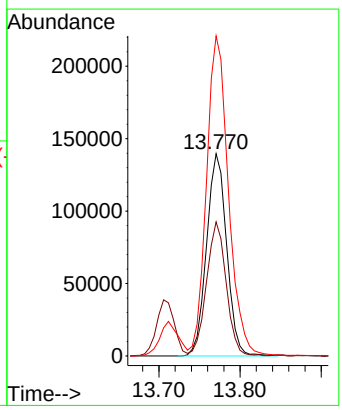
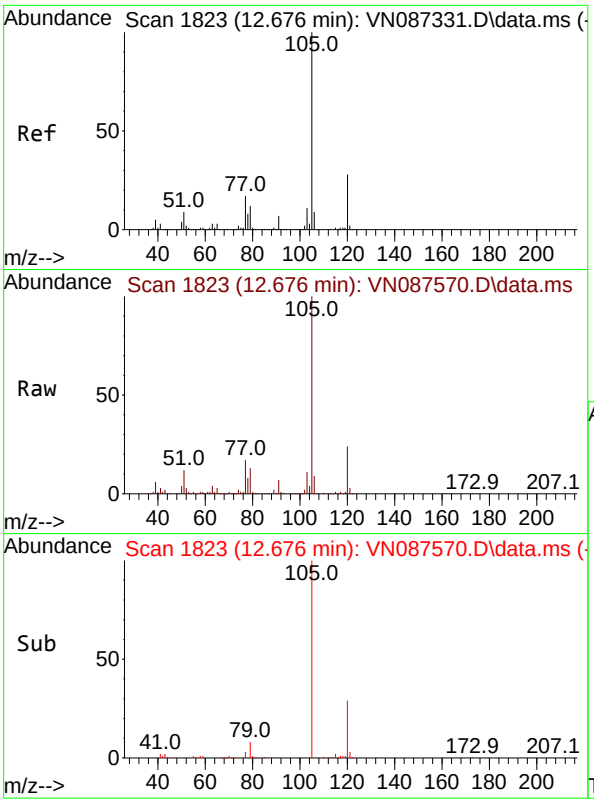


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:152 Resp: 240017

Ion	Ratio	Lower	Upper
152	100		
115	64.3	31.1	93.5
150	173.6	0.0	349.0





#73
Isopropylbenzene
Concen: 55.585 ug/l
RT: 12.676 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:105 Resp: 83967

Ion	Ratio	Lower	Upper
105	100		
120	26.0	13.4	40.1

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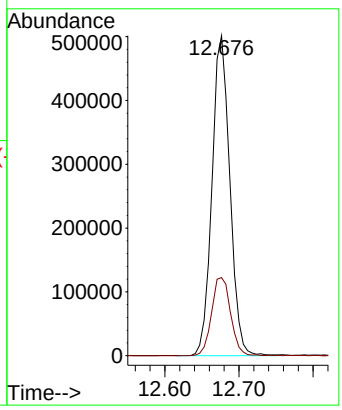
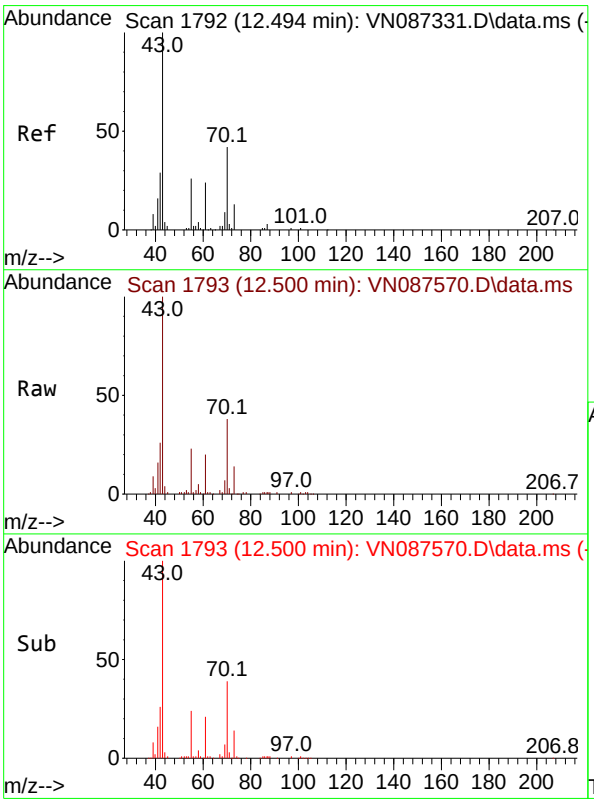
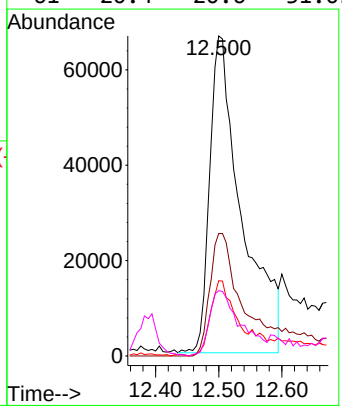


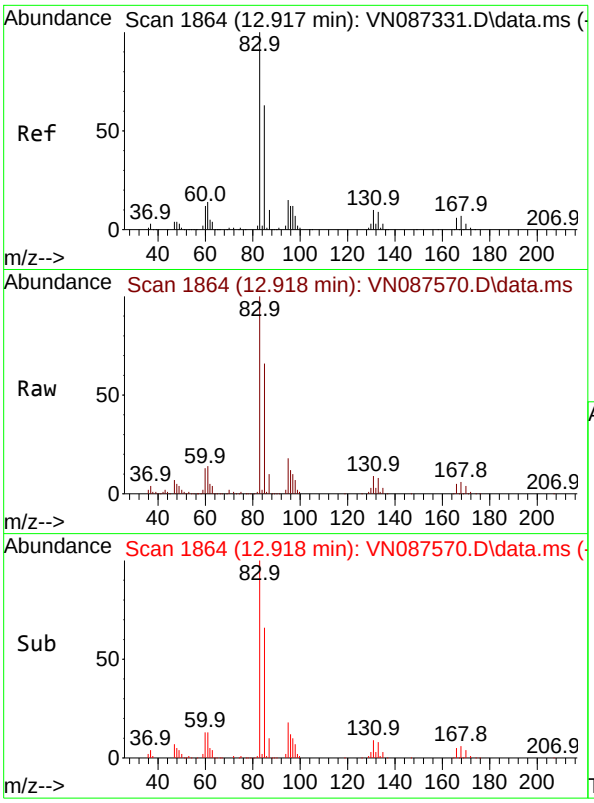


#74
N-amyl acetate
Concen: 37.404 ug/l
RT: 12.500 min Scan# 1793
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 43 Resp: 234757

Ion	Ratio	Lower	Upper
43	100		
70	46.9	37.6	56.4
55	18.2	19.6	29.4#
61	20.4	20.6	31.0#





#75
1,1,2,2-Tetrachloroethane
Concen: 53.650 ug/l
RT: 12.918 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 83 Resp: 30495

Ion	Ratio	Lower	Upper
83	100		
131	9.3	5.1	15.3
85	63.9	32.5	97.4

Instrument :
MSVOA_N
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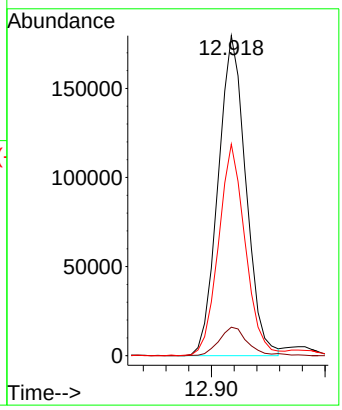
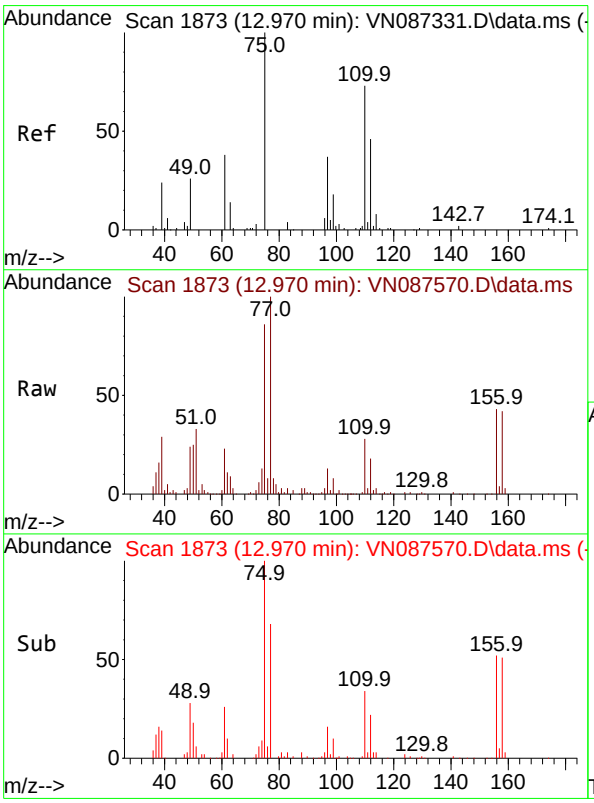
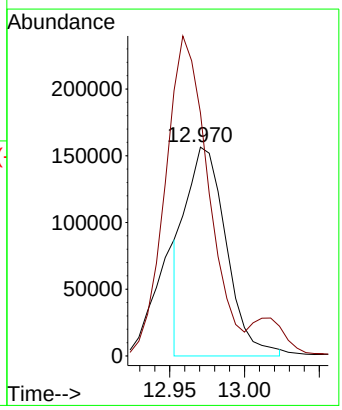


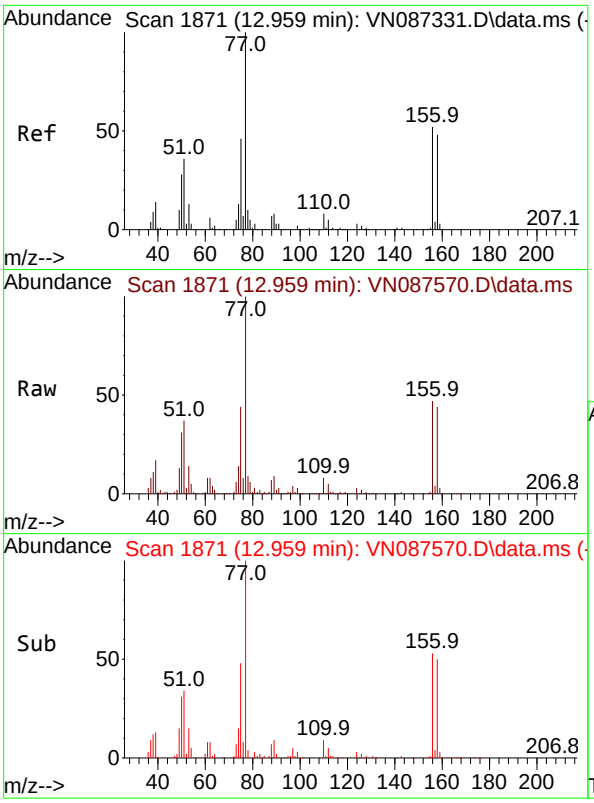


#76
1,2,3-Trichloropropane
Concen: 55.254 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 75 Resp: 297389

Ion	Ratio	Lower	Upper
75	100		
77	162.0	94.5	283.6

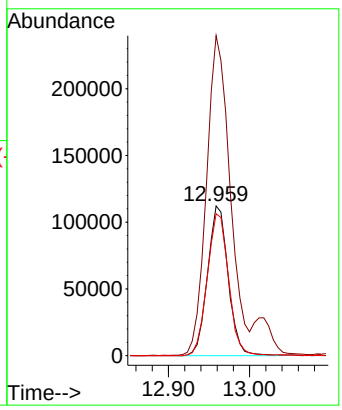




#77
Bromobenzene
Concen: 50.466 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:156 Resp: 19771

Ion	Ratio	Lower	Upper
156	100		
77	243.7	114.9	344.6
158	98.0	48.5	145.5



Instrument :
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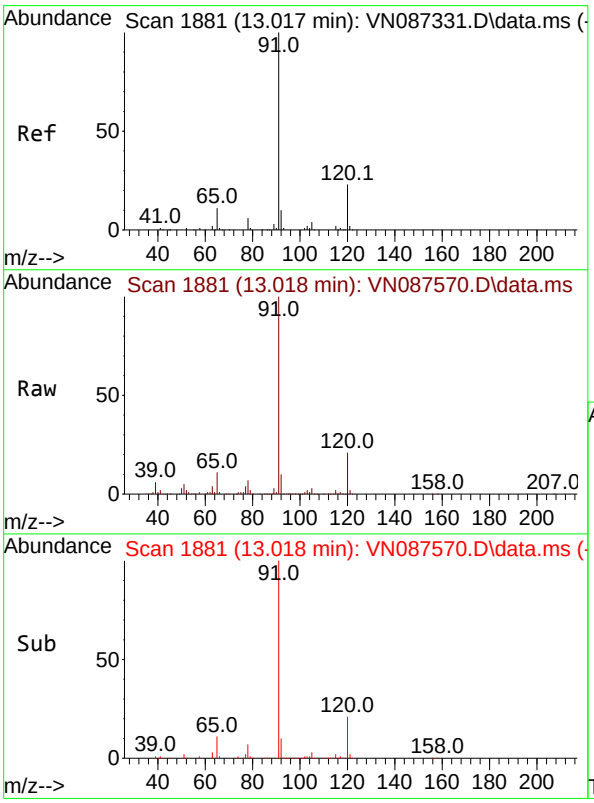
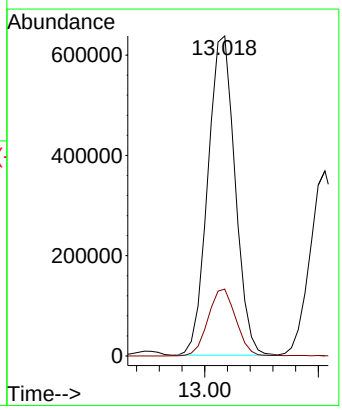
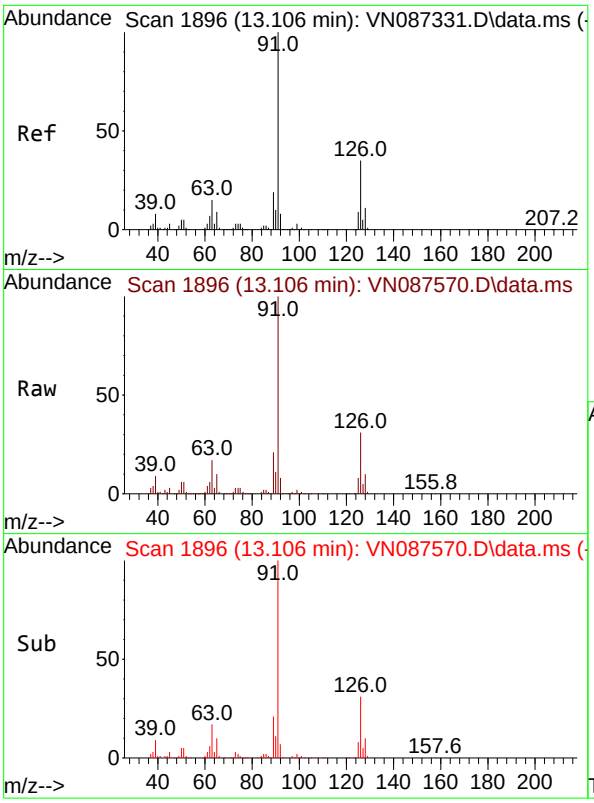


#78
n-propylbenzene
Concen: 55.853 ug/l
RT: 13.018 min Scan# 1881
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 91 Resp: 1061543

Ion	Ratio	Lower	Upper
91	100		
120	21.4	11.3	33.8





#79
2-Chlorotoluene
Concen: 54.578 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 91 Resp: 63751

Ion	Ratio	Lower	Upper
91	100		
126	31.5	16.9	50.6

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

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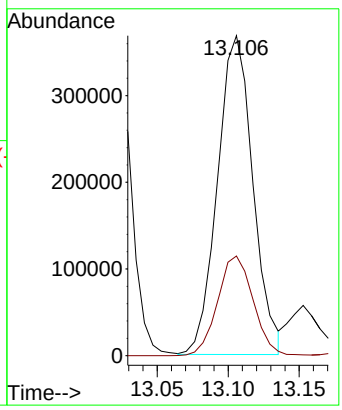
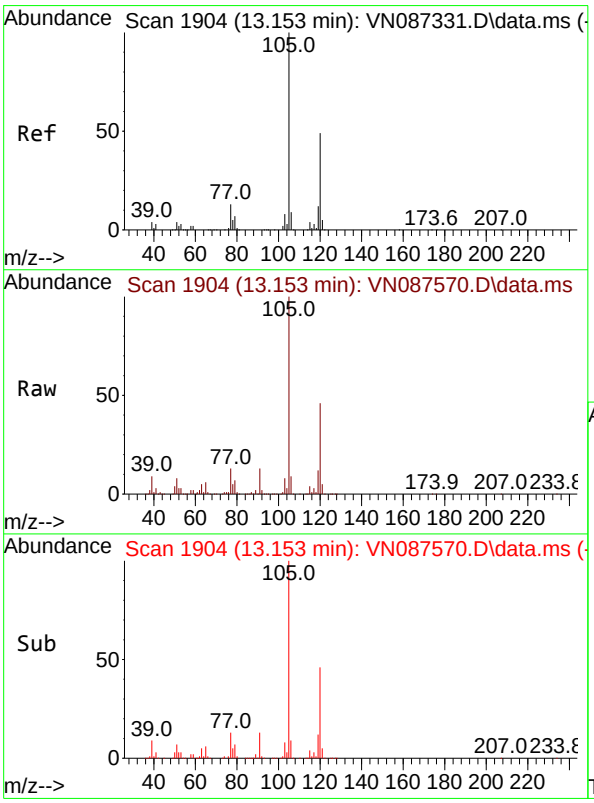
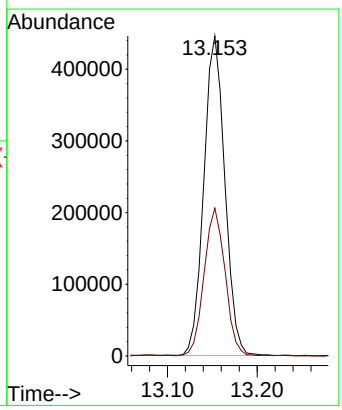


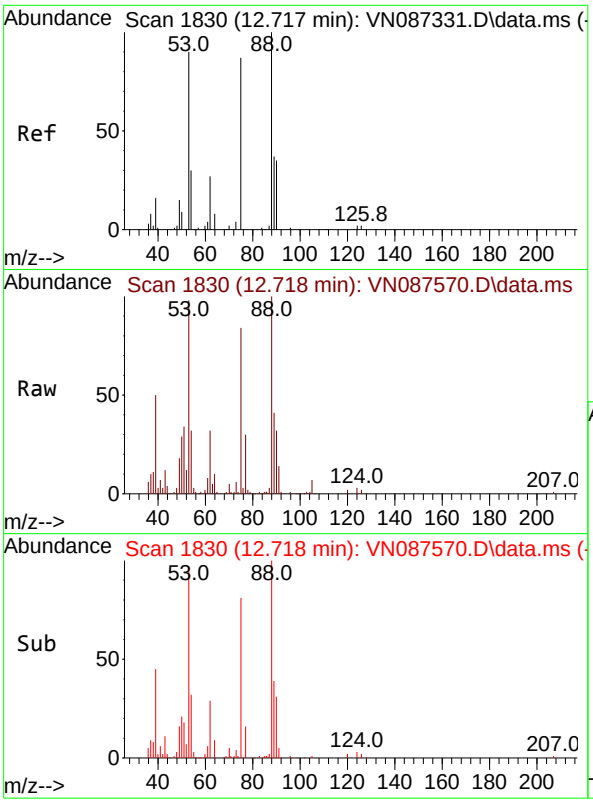


#80
1,3,5-Trimethylbenzene
Concen: 56.342 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:105 Resp: 725164

Ion	Ratio	Lower	Upper
105	100		
120	46.0	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 47.359 ug/l
RT: 12.718 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 75 Resp: 9315

Ion	Ratio	Lower	Upper
75	100		
53	112.1	83.5	125.3
89	45.5	38.4	57.6

Instrument :
MSVOA_N
ClientSampleId :
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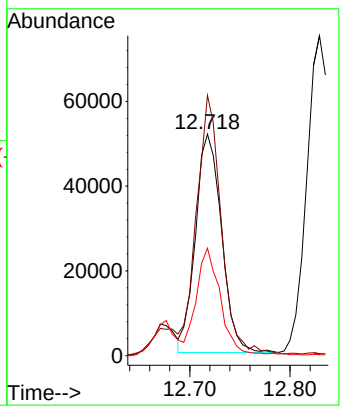
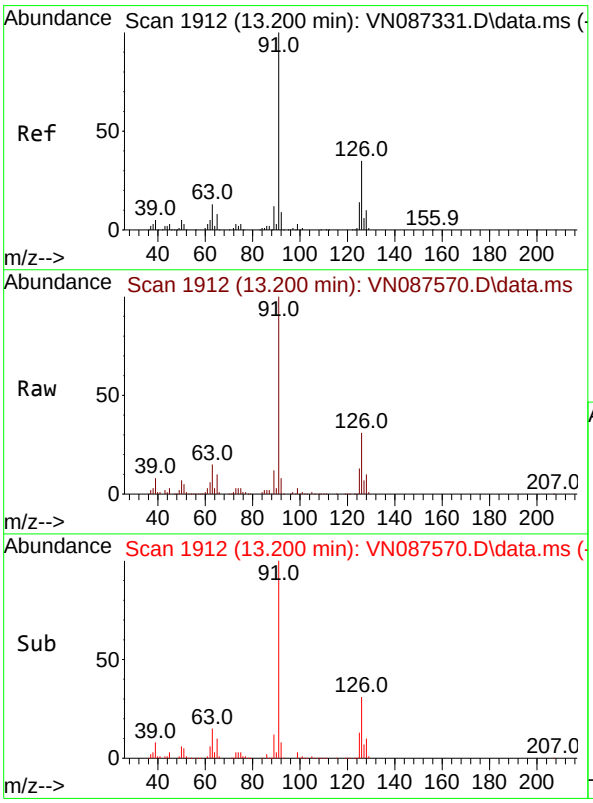
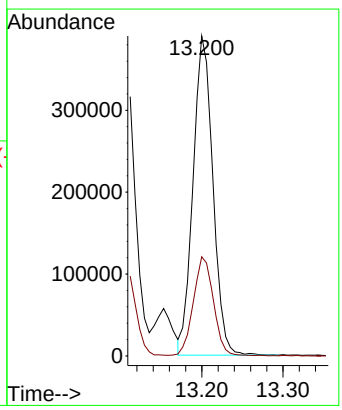


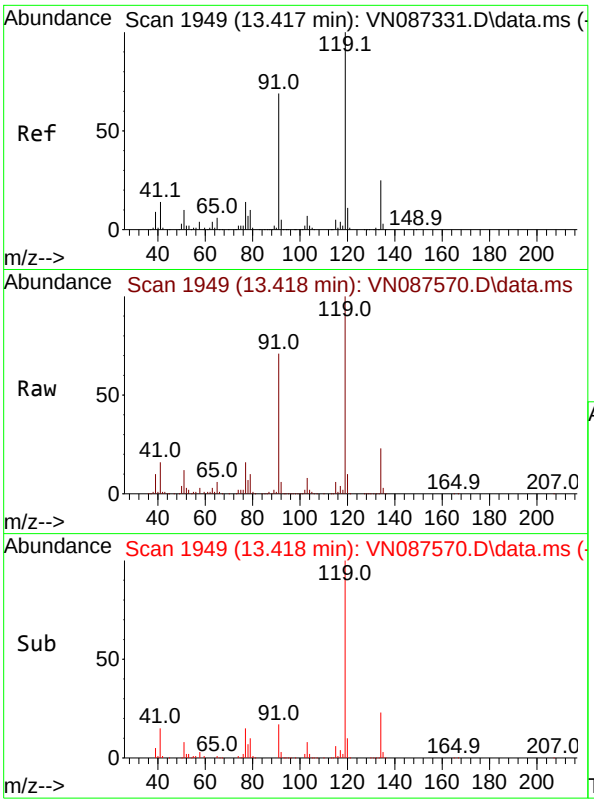


#82
4-Chlorotoluene
Concen: 54.387 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 91 Resp: 661408

Ion	Ratio	Lower	Upper
91	100		
126	31.7	16.6	49.7





#83
tert-Butylbenzene
Concen: 55.966 ug/l
RT: 13.418 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:119 Resp: 60161

Ion	Ratio	Lower	Upper
119	100		
91	72.4	35.0	105.1
134	26.6	12.6	37.6

Instrument :
MSVOA_N
ClientSampleId :
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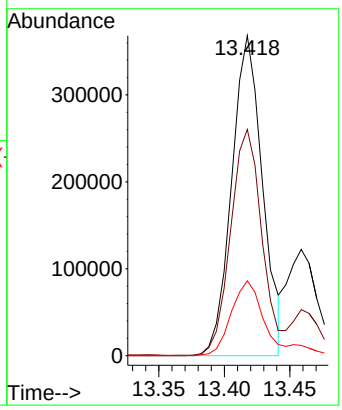
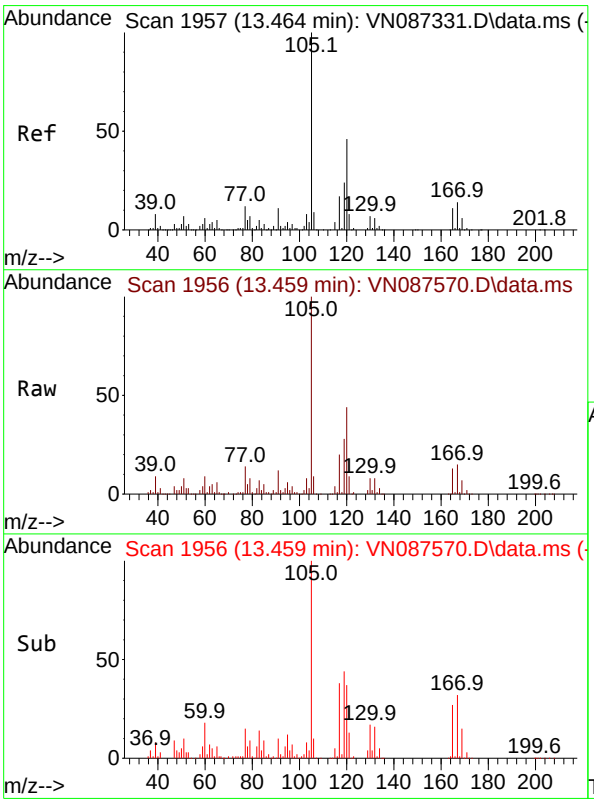
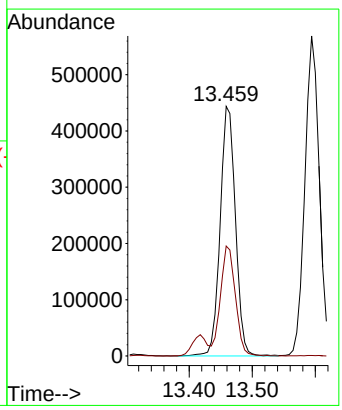


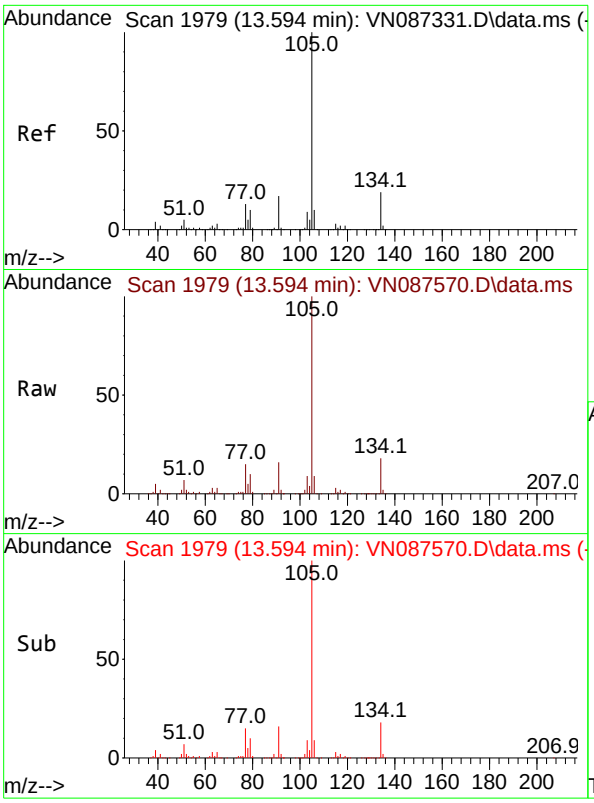


#84
1,2,4-Trimethylbenzene
Concen: 56.897 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:105 Resp: 747848

Ion	Ratio	Lower	Upper
105	100		
120	42.8	22.8	68.3





#85
sec-Butylbenzene
Concen: 55.933 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:105 Resp: 90566

Ion	Ratio	Lower	Upper
105	100		
134	18.7	9.8	29.4

Instrument :
MSVOA_N
ClientSampleId :
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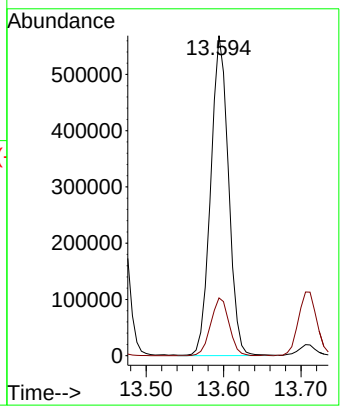
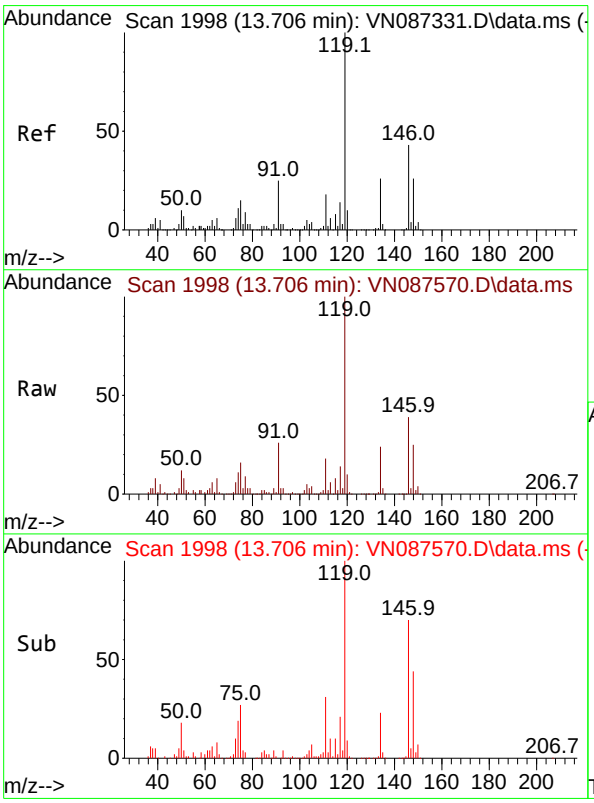
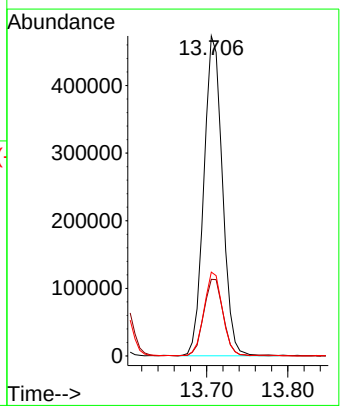


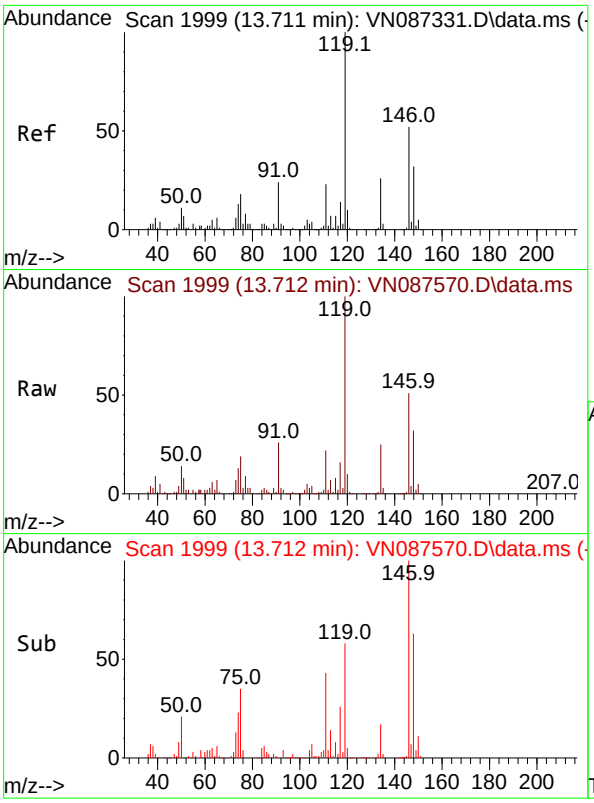


#86
p-Isopropyltoluene
Concen: 57.660 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:119 Resp: 748208

Ion	Ratio	Lower	Upper
119	100		
134	25.1	13.5	40.5
91	26.0	12.2	36.6

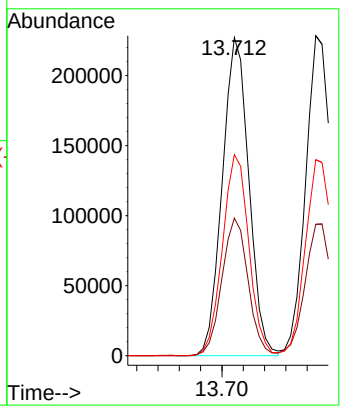




#87
1,3-Dichlorobenzene
Concen: 51.181 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:146 Resp: 39352

Ion	Ratio	Lower	Upper
146	100		
111	42.6	21.4	64.3
148	62.9	31.6	95.0



Instrument :
MSVOA_N
ClientSampleId :
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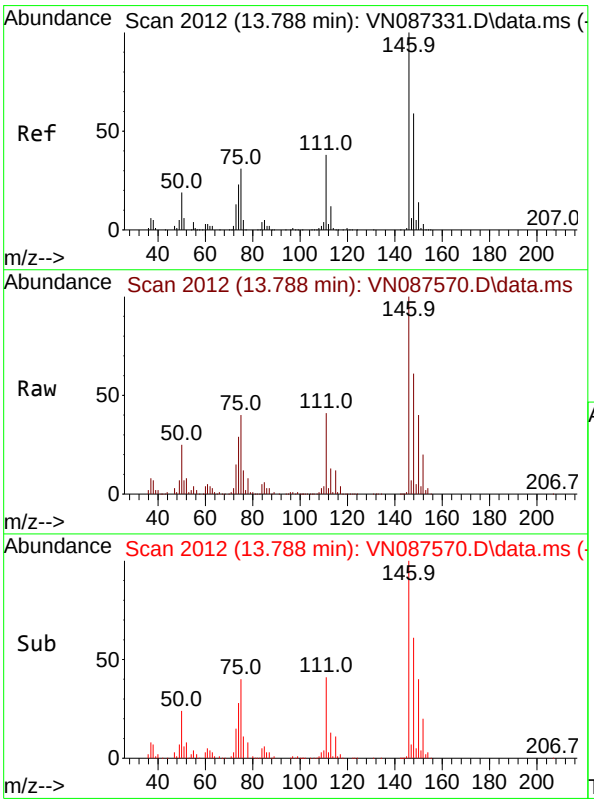
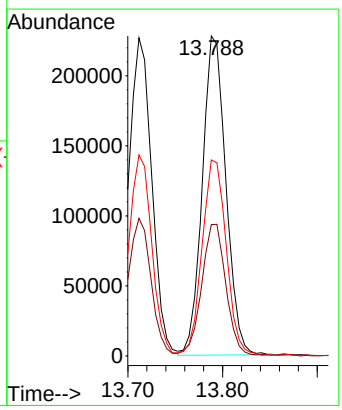
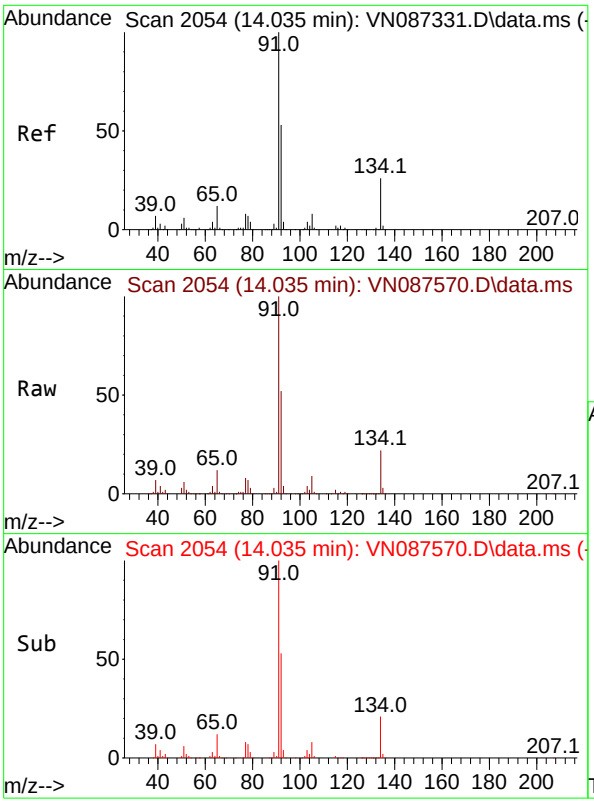


#88
1,4-Dichlorobenzene
Concen: 48.189 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:146 Resp: 395731

Ion	Ratio	Lower	Upper
146	100		
111	42.0	19.6	58.7
148	62.7	31.4	94.0





#89
n-Butylbenzene
Concen: 58.929 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

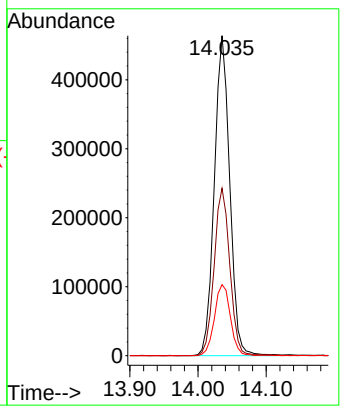
Tgt Ion: 91 Resp: 73016

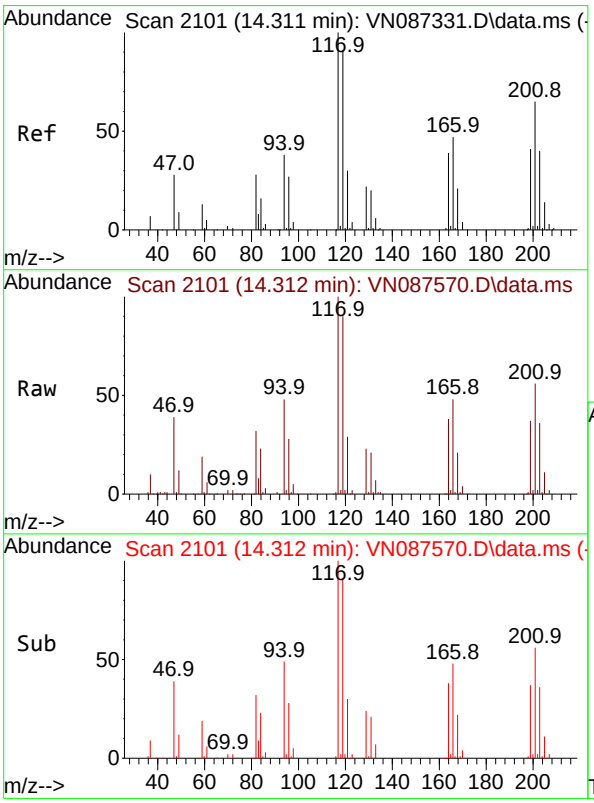
Ion	Ratio	Lower	Upper
91	100		
92	53.1	26.2	78.6
134	23.0	12.4	37.2

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

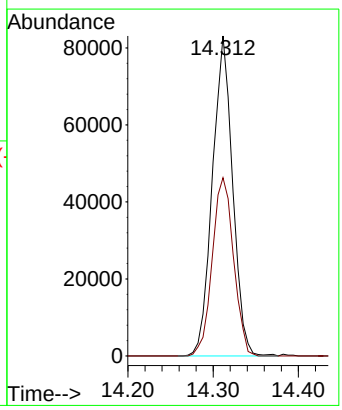


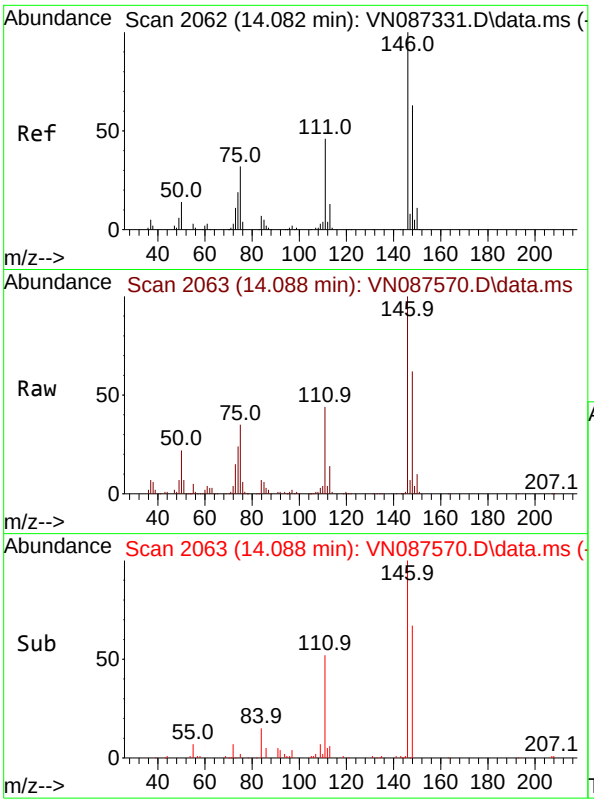


#90
Hexachloroethane
Concen: 49.824 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:117 Resp: 136983

Ion	Ratio	Lower	Upper
117	100		
201	58.6	32.8	98.4

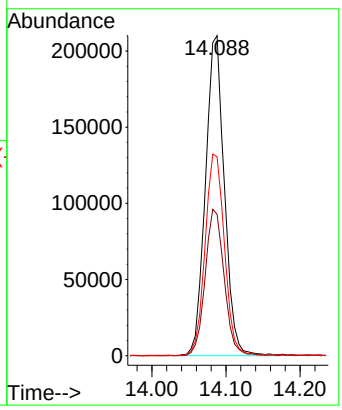




#91
1,2-Dichlorobenzene
Concen: 51.160 ug/l
RT: 14.088 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:146 Resp: 37265

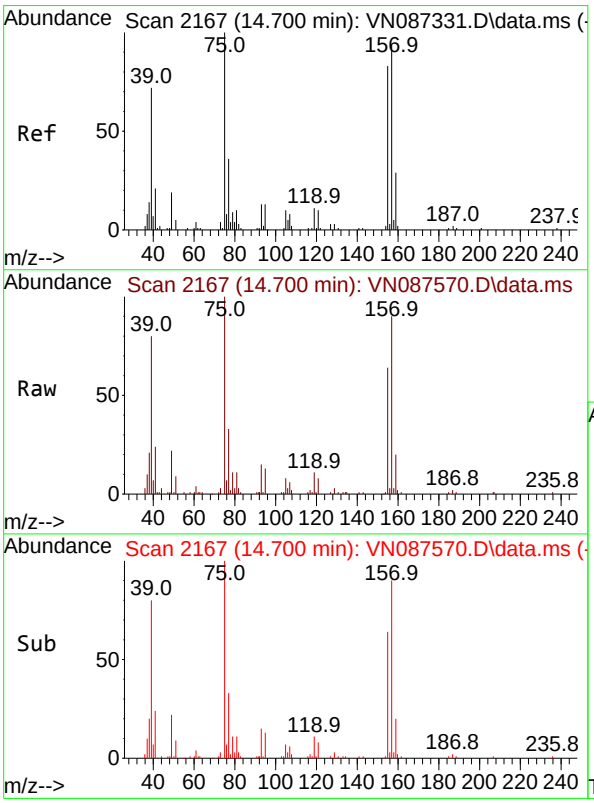
Ion	Ratio	Lower	Upper
146	100		
111	46.0	22.0	66.0
148	64.6	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

Manual Integrations
APPROVED

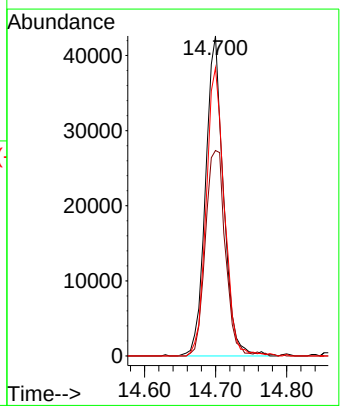
Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

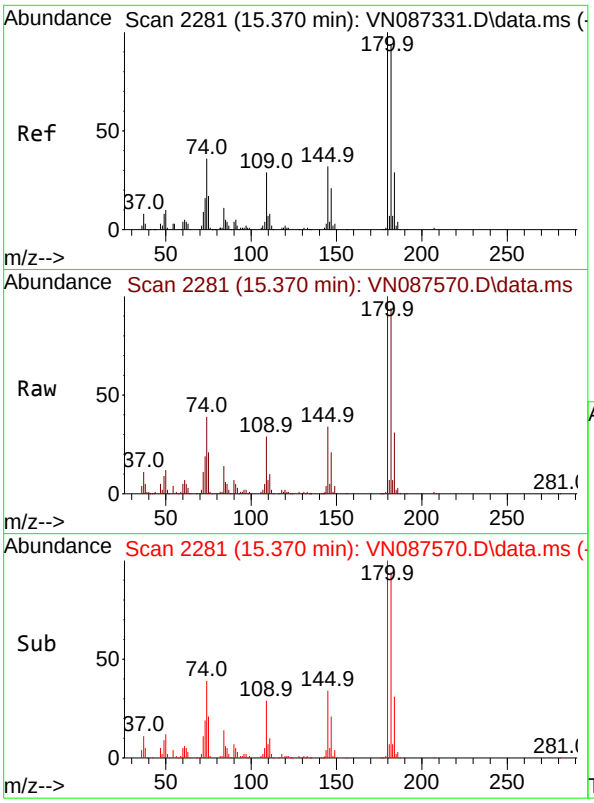


#92
1,2-Dibromo-3-Chloropropane
Concen: 50.121 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion: 75 Resp: 74799

Ion	Ratio	Lower	Upper
75	100		
155	71.2	37.3	111.8
157	90.8	46.2	138.6





#93
1,2,4-Trichlorobenzene
Concen: 51.594 ug/l
RT: 15.370 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

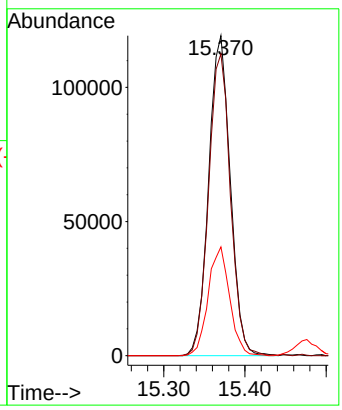
Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

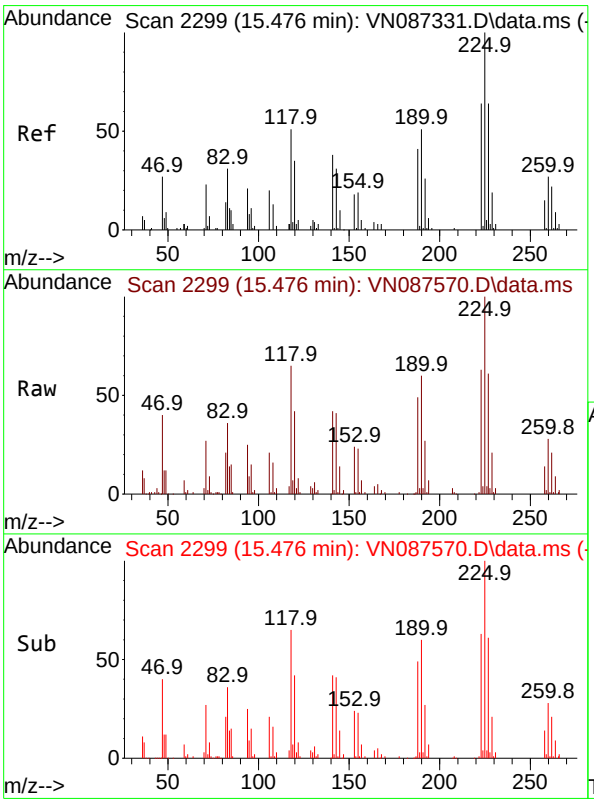
Tgt Ion:180 Resp: 22075

Ion	Ratio	Lower	Upper
180	100		
182	95.2	47.3	141.8
145	33.7	15.4	46.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

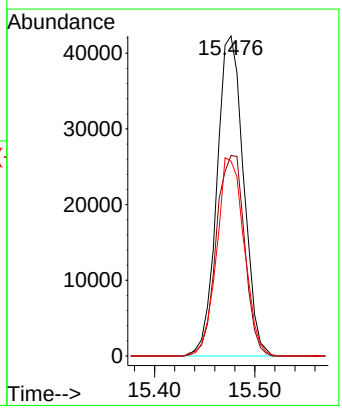


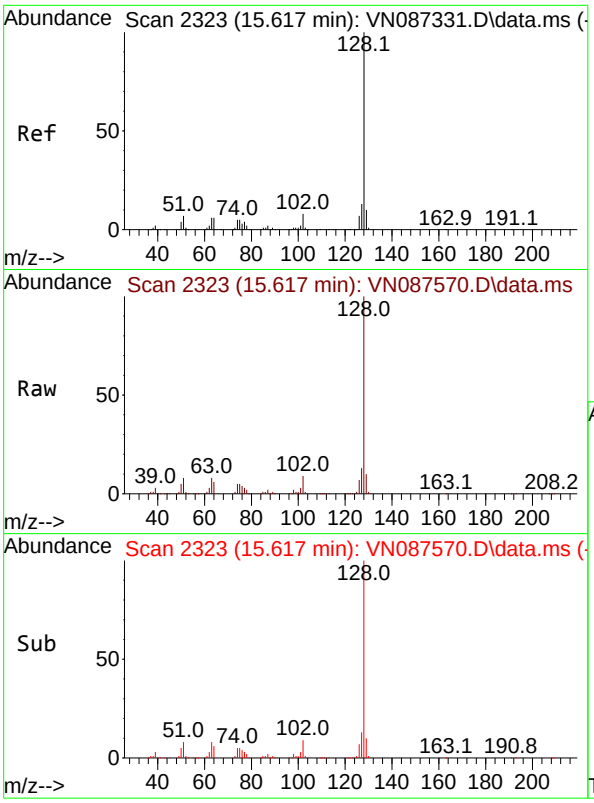


#94
Hexachlorobutadiene
Concen: 49.002 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:225 Resp: 77907

Ion	Ratio	Lower	Upper
225	100		
223	66.5	32.1	96.3
227	63.9	31.3	93.9





#95
Naphthalene
Concen: 55.913 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

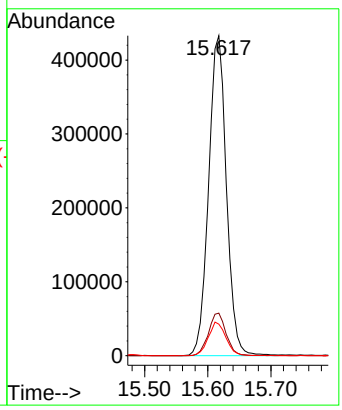
Tgt Ion:128 Resp: 84753

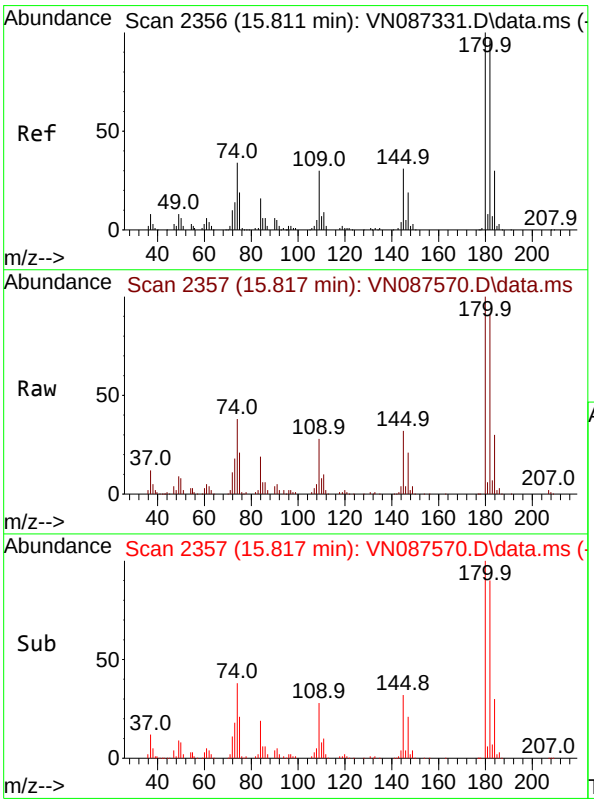
Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.5	15.7
129	10.4	8.4	12.6

Instrument :
MSVOA_N
ClientSampleId :
MW-17B-55.5-081225MSD

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/15/2025
Supervised By :Mahesh Dadoda 08/19/2025

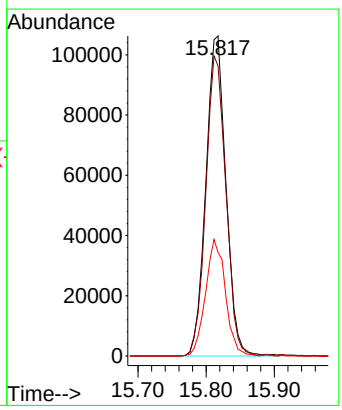




#96
1,2,3-Trichlorobenzene
Concen: 50.701 ug/l
RT: 15.817 min Scan# 2357
Delta R.T. 0.006 min
Lab File: VN087570.D
Acq: 14 Aug 2025 16:49

Tgt Ion:180 Resp: 217612

Ion	Ratio	Lower	Upper
180	100		
182	93.8	47.1	141.4
145	36.1	16.9	50.6



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Manual Integration Report

Sequence:	VN071625	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VN087328.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	1,4-Dichlorobenzene	MMDadoda	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	Acetone	MMDadoda	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	Allyl chloride	MMDadoda	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	Methyl tert-butyl Ether	MMDadoda	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	N-amyl acetate	MMDadoda	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC005	VN087329.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:19:53 AM	Sam	7/17/2025 8:24:55 AM	Peak Integrated by Software
VSTDICC005	VN087329.D	Methyl Iodide	MMDadoda	7/17/2025 8:19:53 AM	Sam	7/17/2025 8:24:55 AM	Peak Integrated by Software
VSTDICC005	VN087329.D	N-amyl acetate	MMDadoda	7/17/2025 8:19:53 AM	Sam	7/17/2025 8:24:55 AM	Peak Integrated by Software
VSTDICC020	VN087330.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:19:54 AM	Sam	7/17/2025 8:24:56 AM	Peak Integrated by Software
VSTDICC020	VN087330.D	N-amyl acetate	MMDadoda	7/17/2025 8:19:54 AM	Sam	7/17/2025 8:24:56 AM	Peak Integrated by Software
VSTDICCC050	VN087331.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:19:56 AM	Sam	7/17/2025 8:25:01 AM	Peak Integrated by Software
VSTDICCC050	VN087331.D	N-amyl acetate	MMDadoda	7/17/2025 8:19:56 AM	Sam	7/17/2025 8:25:01 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN071625	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN087332.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:19:58 AM	Sam	7/17/2025 8:25:00 AM	Peak Integrated by Software
VSTDICC150	VN087333.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:19:59 AM	Sam	7/17/2025 8:25:02 AM	Peak Integrated by Software
VSTDICV050	VN087335.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:20:01 AM	Sam	7/17/2025 8:25:03 AM	Peak Integrated by Software
VSTDICV050	VN087335.D	N-amyl acetate	MMDadoda	7/17/2025 8:20:01 AM	Sam	7/17/2025 8:25:03 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VN081425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN087552.D	1,2,3-Trichloropropane	JOHN	8/14/2025 4:35:55 PM	MMDadoda	8/19/2025 1:44:04 AM	Peak Integrated by Software
VN0814WBS01	VN087555.D	1,2,3-Trichloropropane	JOHN	8/18/2025 8:11:28 AM	MMDadoda	8/19/2025 1:44:07 AM	Peak Integrated by Software
VN0814WBS01	VN087555.D	N-amyl acetate	JOHN	8/18/2025 8:11:28 AM	MMDadoda	8/19/2025 1:44:07 AM	Peak Integrated by Software
Q2842-04MS	VN087569.D	1,2,3-Trichloropropane	JOHN	8/15/2025 8:40:03 AM	MMDadoda	8/19/2025 1:44:16 AM	Peak Integrated by Software
Q2842-05MSD	VN087570.D	1,2,3-Trichloropropane	JOHN	8/15/2025 8:40:08 AM	MMDadoda	8/19/2025 1:44:19 AM	Peak Integrated by Software
VSTDCCC050	VN087571.D	1,2,3-Trichloropropane	JOHN	8/15/2025 8:40:12 AM	MMDadoda	8/19/2025 1:44:23 AM	Peak Integrated by Software

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN071625

Review By	Mahesh Dadoda	Review On	7/17/2025 8:20:05 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	7/17/2025 8:25:10 AM		
SubDirectory	VN071625	HP Acquire Method		HP Processing Method	82N071625W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134794
Initial Calibration Stds	VP134795,VP134796,VP134797,VP134798,VP134799,VP134800
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP134801
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087327.D	16 Jul 2025 16:10	JC\MD	Ok
2	VSTDICC001	VN087328.D	16 Jul 2025 17:05	JC\MD	Ok,M
3	VSTDICC005	VN087329.D	16 Jul 2025 17:27	JC\MD	Ok,M
4	VSTDICC020	VN087330.D	16 Jul 2025 17:49	JC\MD	Ok,M
5	VSTDICCC050	VN087331.D	16 Jul 2025 18:11	JC\MD	Ok,M
6	VSTDICC100	VN087332.D	16 Jul 2025 18:32	JC\MD	Ok,M
7	VSTDICC150	VN087333.D	16 Jul 2025 18:54	JC\MD	Ok,M
8	IBLK	VN087334.D	16 Jul 2025 19:16	JC\MD	Ok
9	VSTDICV050	VN087335.D	16 Jul 2025 19:59	JC\MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN081425

Review By	John Carlone	Review On	8/15/2025 8:42:25 AM		
Supervise By	Mahesh Dadoda	Supervise On	8/19/2025 1:44:35 AM		
SubDirectory	VN081425	HP Acquire Method		HP Processing Method	82N071625W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135139
Initial Calibration Stds	
CCC	VP135140,VP135141
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087551.D	14 Aug 2025 09:01	JC\MD	Ok
2	VSTDCCC050	VN087552.D	14 Aug 2025 09:34	JC\MD	Ok,M
3	VN0814MBL01	VN087553.D	14 Aug 2025 10:10	JC\MD	Ok
4	VN0814WBL01	VN087554.D	14 Aug 2025 10:32	JC\MD	Ok
5	VN0814WBS01	VN087555.D	14 Aug 2025 11:07	JC\MD	Ok,M
6	VN0814WBSD01	VN087556.D	14 Aug 2025 11:41	JC\MD	Ok,M
7	Q2832-02	VN087557.D	14 Aug 2025 12:03	JC\MD	Ok
8	Q2832-04	VN087558.D	14 Aug 2025 12:24	JC\MD	Ok,M
9	Q2836-01	VN087559.D	14 Aug 2025 12:46	JC\MD	Ok
10	Q2836-05	VN087560.D	14 Aug 2025 13:08	JC\MD	Ok
11	Q2836-09	VN087561.D	14 Aug 2025 13:30	JC\MD	Ok
12	Q2836-13	VN087562.D	14 Aug 2025 13:52	JC\MD	Ok
13	Q2838-04	VN087563.D	14 Aug 2025 14:14	JC\MD	Ok
14	Q2838-08	VN087564.D	14 Aug 2025 14:36	JC\MD	Ok
15	Q2842-08	VN087565.D	14 Aug 2025 14:58	JC\MD	Ok
16	Q2842-01	VN087566.D	14 Aug 2025 15:20	JC\MD	Ok
17	Q2842-02	VN087567.D	14 Aug 2025 15:42	JC\MD	Ok
18	Q2842-03	VN087568.D	14 Aug 2025 16:04	JC\MD	Ok
19	Q2842-04MS	VN087569.D	14 Aug 2025 16:27	JC\MD	Ok,M
20	Q2842-05MSD	VN087570.D	14 Aug 2025 16:49	JC\MD	Ok,M
21	VSTDCCC050	VN087571.D	14 Aug 2025 17:11	JC\MD	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN071625

Review By	Mahesh Dadoda	Review On	7/17/2025 8:20:05 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	7/17/2025 8:25:10 AM		
SubDirectory	VN071625	HP Acquire Method		HP Processing Method	82N071625W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134794
Initial Calibration Stds	VP134795,VP134796,VP134797,VP134798,VP134799,VP134800
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP134801
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087327.D	16 Jul 2025 16:10		JC\MD	Ok
2	VSTDICC001	VSTDICC001	VN087328.D	16 Jul 2025 17:05		JC\MD	Ok,M
3	VSTDICC005	VSTDICC005	VN087329.D	16 Jul 2025 17:27	% d fail for com.#10 in 5 ppb	JC\MD	Ok,M
4	VSTDICC020	VSTDICC020	VN087330.D	16 Jul 2025 17:49	LR- 10,20	JC\MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VN087331.D	16 Jul 2025 18:11	QR- 56	JC\MD	Ok,M
6	VSTDICC100	VSTDICC100	VN087332.D	16 Jul 2025 18:32		JC\MD	Ok,M
7	VSTDICC150	VSTDICC150	VN087333.D	16 Jul 2025 18:54		JC\MD	Ok,M
8	IBLK	IBLK	VN087334.D	16 Jul 2025 19:16		JC\MD	Ok
9	VSTDICV050	ICVVN071625	VN087335.D	16 Jul 2025 19:59		JC\MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN081425

Review By	John Carlone	Review On	8/15/2025 8:42:25 AM		
Supervise By	Mahesh Dadoda	Supervise On	8/19/2025 1:44:35 AM		
SubDirectory	VN081425	HP Acquire Method		HP Processing Method	82N071625W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135139
Initial Calibration Stds	
CCC	VP135140,VP135141
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087551.D	14 Aug 2025 09:01		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN087552.D	14 Aug 2025 09:34	pH#Lot#V12668	JC\MD	Ok,M
3	VN0814MBL01	VN0814MBL01	VN087553.D	14 Aug 2025 10:10		JC\MD	Ok
4	VN0814WBL01	VN0814WBL01	VN087554.D	14 Aug 2025 10:32		JC\MD	Ok
5	VN0814WBS01	VN0814WBS01	VN087555.D	14 Aug 2025 11:07		JC\MD	Ok,M
6	VN0814WBSD01	VN0814WBSD01	VN087556.D	14 Aug 2025 11:41		JC\MD	Ok,M
7	Q2832-02	TG-S01	VN087557.D	14 Aug 2025 12:03	vial B pH#5.0	JC\MD	Ok
8	Q2832-04	TG-S02	VN087558.D	14 Aug 2025 12:24	vial B pH#5.0	JC\MD	Ok,M
9	Q2836-01	WC-A2-15-G	VN087559.D	14 Aug 2025 12:46	vial B pH#5.0	JC\MD	Ok
10	Q2836-05	WC-A2-16-G	VN087560.D	14 Aug 2025 13:08	vial B pH#5.0	JC\MD	Ok
11	Q2836-09	WC-A2-17-G	VN087561.D	14 Aug 2025 13:30	vial B pH#5.0	JC\MD	Ok
12	Q2836-13	WC-A5-02-G	VN087562.D	14 Aug 2025 13:52	vial B pH#5.0	JC\MD	Ok
13	Q2838-04	TP-11	VN087563.D	14 Aug 2025 14:14	vial B pH#5.0	JC\MD	Ok
14	Q2838-08	TP-10	VN087564.D	14 Aug 2025 14:36	vial B pH#5.0	JC\MD	Ok
15	Q2842-08	TB01-081225	VN087565.D	14 Aug 2025 14:58	vial A pH<2 TB	JC\MD	Ok
16	Q2842-01	RMW-03B-90.4-081225	VN087566.D	14 Aug 2025 15:20	vial A pH<2	JC\MD	Ok
17	Q2842-02	RMW-02B-66.3-081225	VN087567.D	14 Aug 2025 15:42	vial A pH<2	JC\MD	Ok
18	Q2842-03	MW-17B-55.5-081225	VN087568.D	14 Aug 2025 16:04	vial A pH<2	JC\MD	Ok

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN081425

Review By	John Carlone	Review On	8/15/2025 8:42:25 AM		
Supervise By	Mahesh Dadoda	Supervise On	8/19/2025 1:44:35 AM		
SubDirectory	VN081425	HP Acquire Method		HP Processing Method	82N071625W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135139
Initial Calibration Stds	
CCC	VP135140,VP135141
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q2842-04MS	MW-17B-55.5-081225M	VN087569.D	14 Aug 2025 16:27	vial A pH<2	JC\MD	Ok,M
20	Q2842-05MSD	MW-17B-55.5-081225M	VN087570.D	14 Aug 2025 16:49	vial A pH<2	JC\MD	Ok,M
21	VSTDCCC050	VSTDCCC050EC	VN087571.D	14 Aug 2025 17:11		JC\MD	Ok,M

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q2842

Test : VOCMS Group3

Prepbatch ID :

Sequence ID/Qc Batch ID: VN081425,

Standard ID :
VP134142,VP134149,VP134933,VP134956,VP134957,VP135059,VP135129,VP135139,VP135140,VP135141,

Chemical ID :
V13391,V14290,V14444,V14446,V14507,V14508,V14529,V14530,V14625,V14626,V14636,V14637,V14638,V14639,V14668,V14671,V14673,V14675,V14702,V14705,V14716,V14745,V14751,V14806,V14807,V14843,V14906,V14929,V15057,V15058,V15059,W3112,

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
719	8260 Working STD (BCM)-First source, 400PPM	VP134142	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 1.00000ml of V14668 + 1.00000ml of V14671 + 1.00000ml of V14673 + 1.00000ml of V14675 + 16.00000ml of V14929 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1810	8260 Working Std(2-CVE)-800ppm	VP134149	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 1.00000ml of V14636 + 1.00000ml of V14637 + 1.00000ml of V14638 + 1.00000ml of V14639 + 46.00000ml of V14929 = Final Quantity: 50.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
617	8260 Surrogate, 400PPM	VP134933	07/29/2025	01/29/2026	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/19/2025

FROM 0.40000ml of V14906 + 24.60000ml of V14625 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP134956	08/01/2025	11/09/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/06/2025

FROM 0.25000ml of V14290 + 24.75000ml of V14626 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP134957	08/01/2025	11/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/06/2025

FROM 0.50000ml of V13391 + 49.50000ml of V14625 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP135059	08/11/2025	09/19/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/19/2025

FROM 0.40000ml of V14843 + 1.00000ml of V14444 + 1.00000ml of V14446 + 1.00000ml of V14507 + 1.00000ml of V14508 + 1.00000ml of V14529 + 1.00000ml of V14530 + 1.00000ml of V14705 + 1.00000ml of V14745 + 1.00000ml of V14751 + 1.00000ml of V14806 + 1.00000ml of V14807 + 1.50000ml of V14702 + 1.50000ml of V14716 + 10.60000ml of V14625 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP135129	08/14/2025	09/13/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/19/2025

FROM 1.00000ml of V15059 + 1.50000ml of V15057 + 1.50000ml of V15058 + 21.00000ml of V14625 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP135139	08/14/2025	08/15/2025	John Carlone	None	None	Mahesh Dadoda 08/19/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP134957 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP135140	08/14/2025	08/15/2025	John Carlone	None	None	Mahesh Dadoda 08/19/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP134142 + 0.00500ml of VP134933 + 0.00800ml of VP134956 + 0.01250ml of VP134149 + 0.01250ml of VP135059 + 0.01250ml of VP135129 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP135141	08/14/2025	08/15/2025	John Carlone	None	None	Mahesh Dadoda 08/19/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP134142 + 0.00500ml of VP134933 + 0.00800ml of VP134956 + 0.01250ml of VP134149 + 0.01250ml of VP135059 + 0.01250ml of VP135129 = Final Quantity: 40.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	11/22/2025	11/22/2024 / SAM	01/13/2023 / SAM	V13391

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	12/12/2025	12/12/2024 / SAM	04/15/2024 / SAM	V14290

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	09/30/2025	08/08/2025 / SAM	08/15/2024 / SAM	V14444

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	09/30/2025	08/08/2025 / SAM	08/15/2024 / SAM	V14446

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	02/08/2026	08/08/2025 / SAM	09/17/2024 / SAM	V14507

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	02/08/2026	08/08/2025 / SAM	09/17/2024 / SAM	V14508

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	02/08/2026	08/08/2025 / SAM	09/18/2024 / SAM	V14529

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	02/08/2026	08/08/2025 / SAM	09/18/2024 / SAM	V14530

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	01/29/2026	07/29/2025 / SAM	11/26/2024 / SAM	V14625

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	11/09/2025	05/09/2025 / SAM	11/26/2024 / SAM	V14626

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14636

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14637

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14638

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14639

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14668

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14671

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14673

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14675

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14702

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14705

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14716

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14745

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	02/08/2026	08/08/2025 / SAM	01/08/2025 / SAM	V14806

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	02/08/2026	08/08/2025 / SAM	01/08/2025 / SAM	V14807

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0217535	11/12/2025	05/12/2025 / SAM	01/21/2025 / SAM	V14843

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0223904	07/29/2026	07/29/2025 / SAM	03/24/2025 / SAM	V14906

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	12/06/2025	06/06/2025 / SAM	05/09/2025 / SAM	V14929

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	081325	09/13/2025	08/14/2025 / SAM	08/14/2025 / SAM	V15057

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	081325	09/13/2025	08/14/2025 / SAM	08/14/2025 / SAM	V15058

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	081325	09/13/2025	08/14/2025 / SAM	08/14/2025 / SAM	V15059

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
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Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
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Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
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Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0466)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06128PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 846mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 8040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

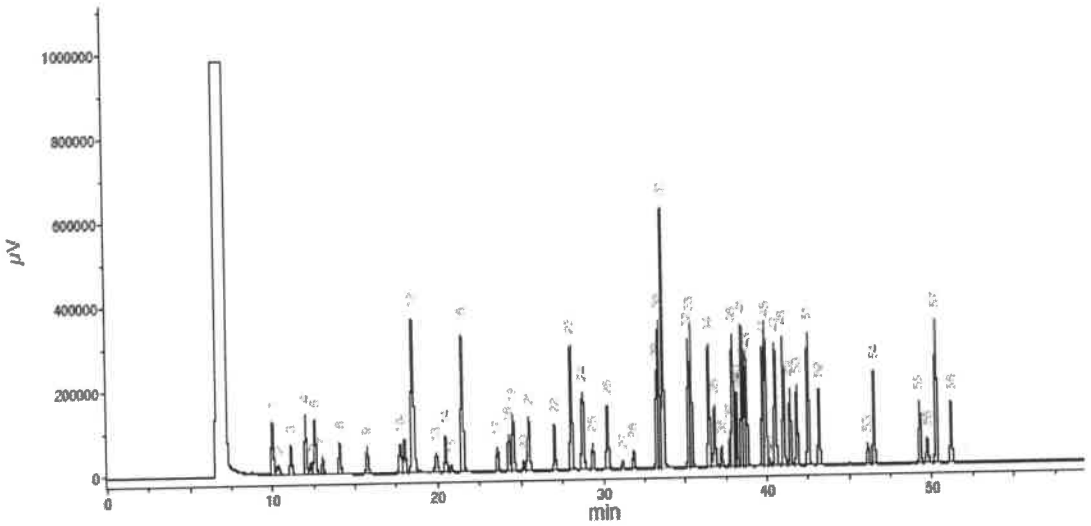
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,3-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropene	19.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.86
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.62
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.07
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.34
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.85
32	o-Xylene	35.33
33	Styrene	35.50
34	Isopropylbenzene/Bromoform	35.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.12
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.58
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.46
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0466)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06128PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 846mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 8040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

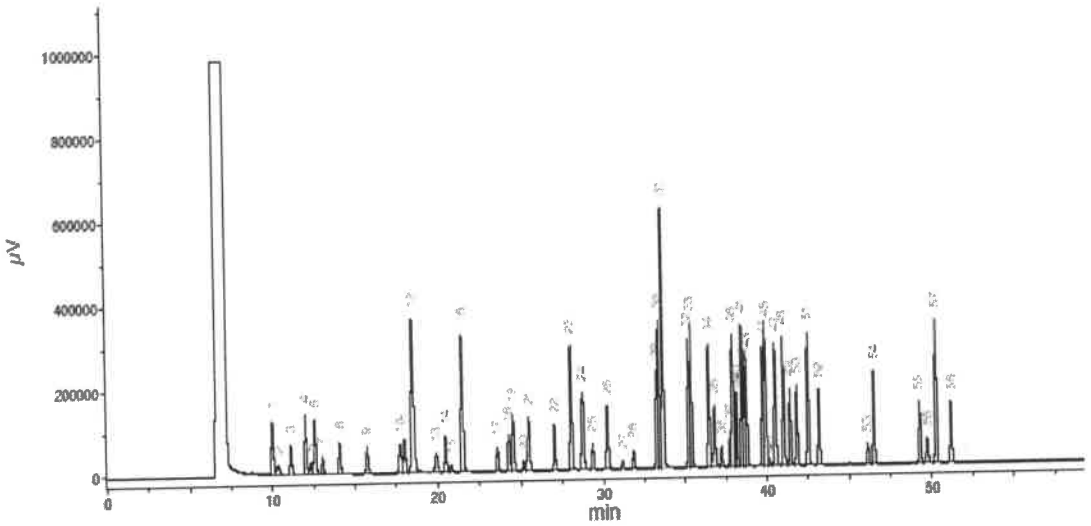
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,3-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropene	19.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.86
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.62
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.07
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.34
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.85
32	o-Xylene	35.33
33	Styrene	35.50
34	Isopropylbenzene/Bromoform	35.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.12
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.58
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.46
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.

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Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

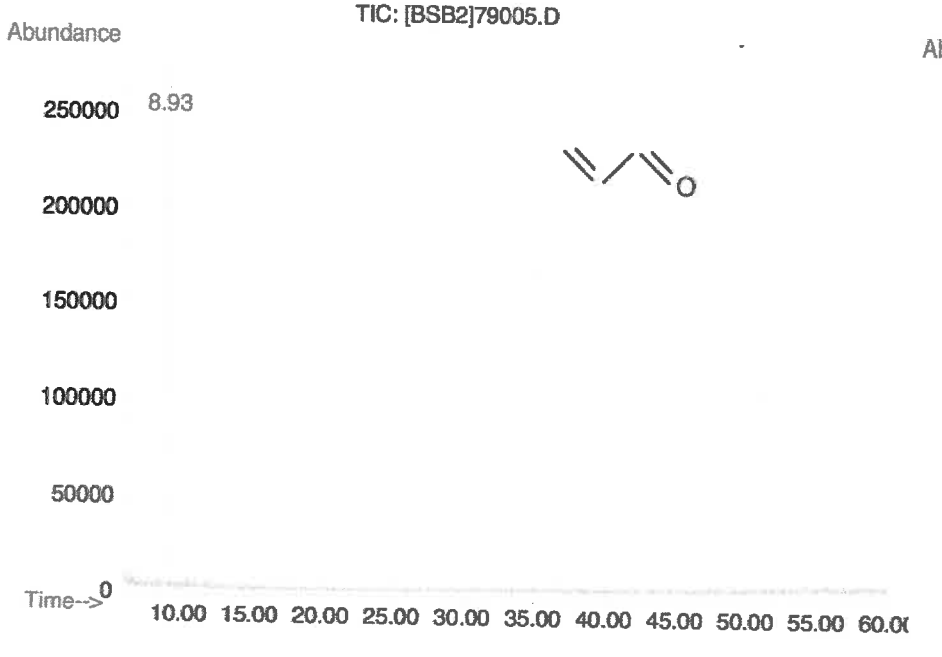
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

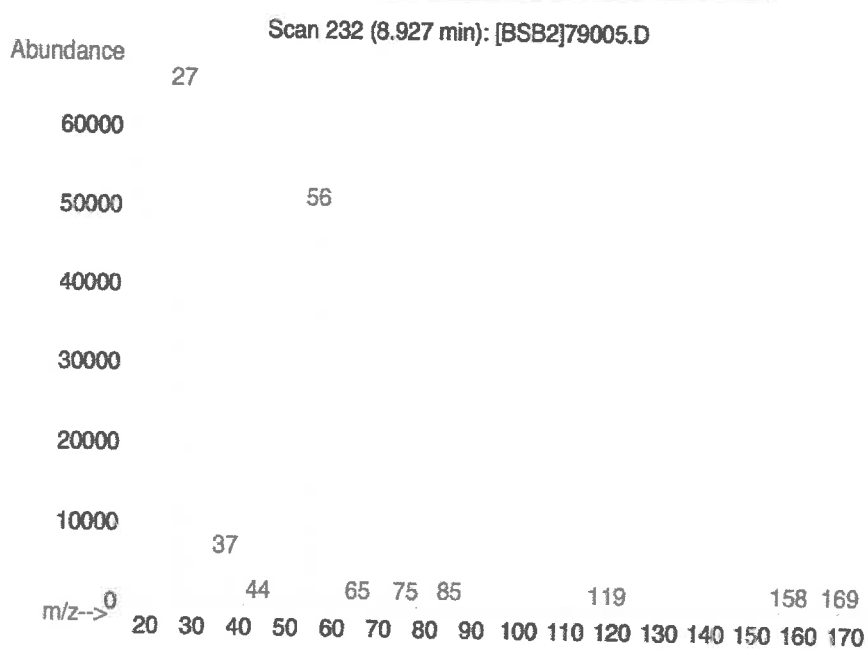
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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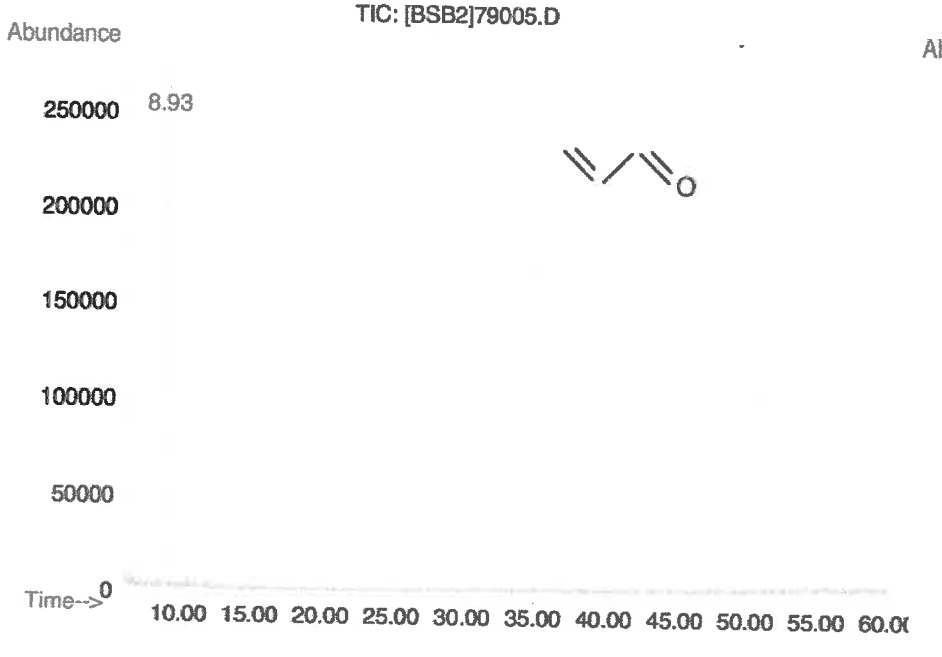

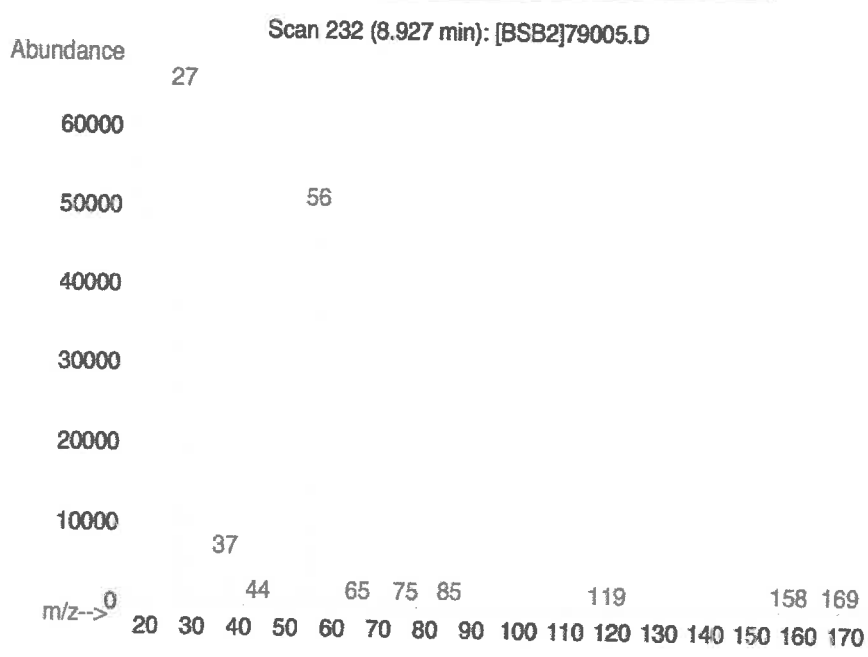

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Certified Reference Material CRM

Rec 12/6/24
20 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

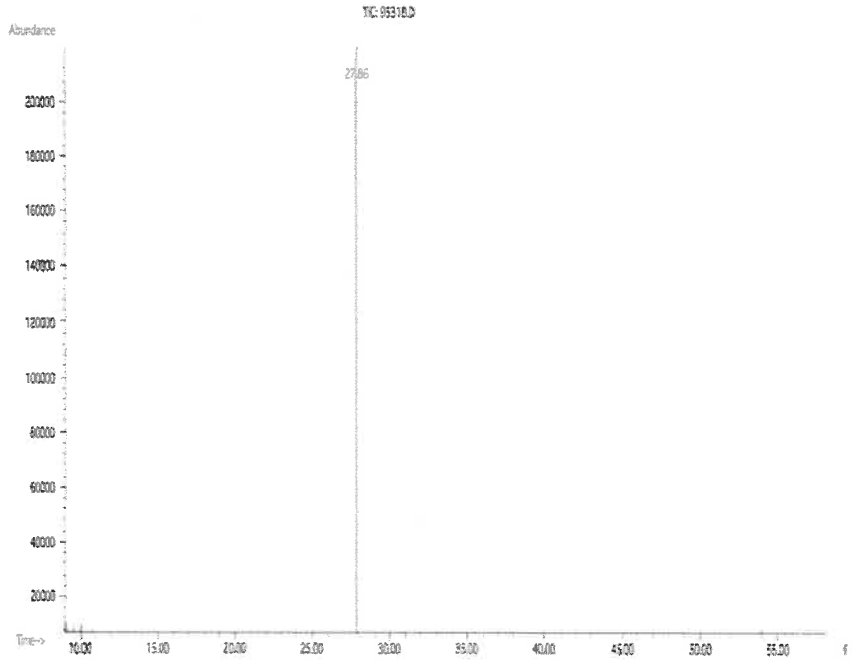
V14630 to V14649

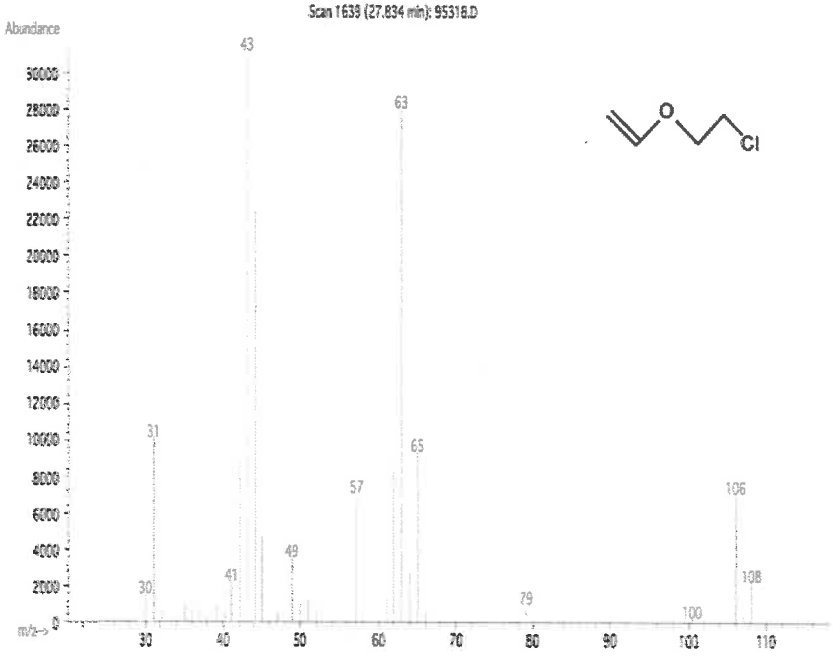
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Formulated By:	Prashant Chauhan	120524 DATE
Reviewed By:	Pedro L. Rentas	120524 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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Certified Reference Material CRM

Rec 12/6/24
20 vial

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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

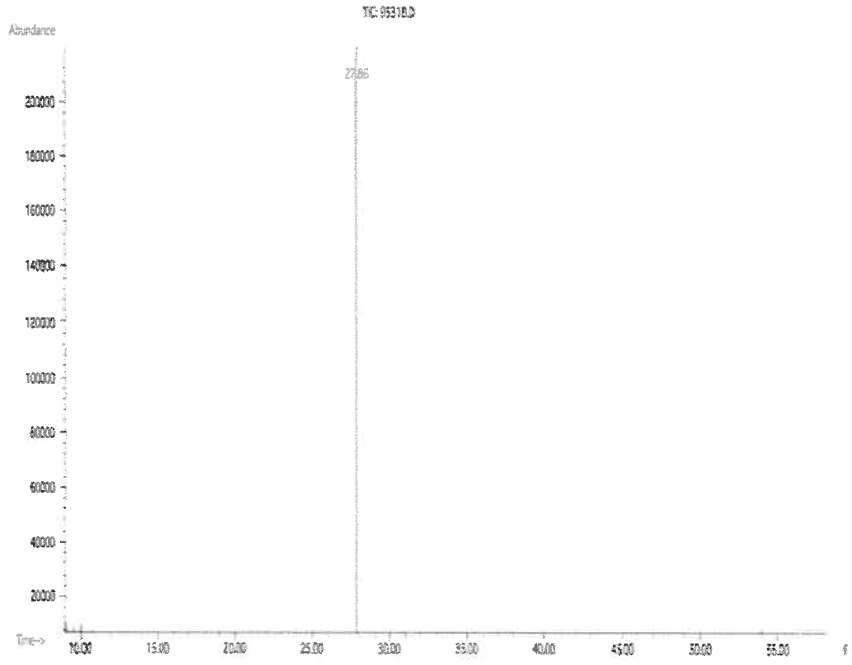
V14630 to V14649

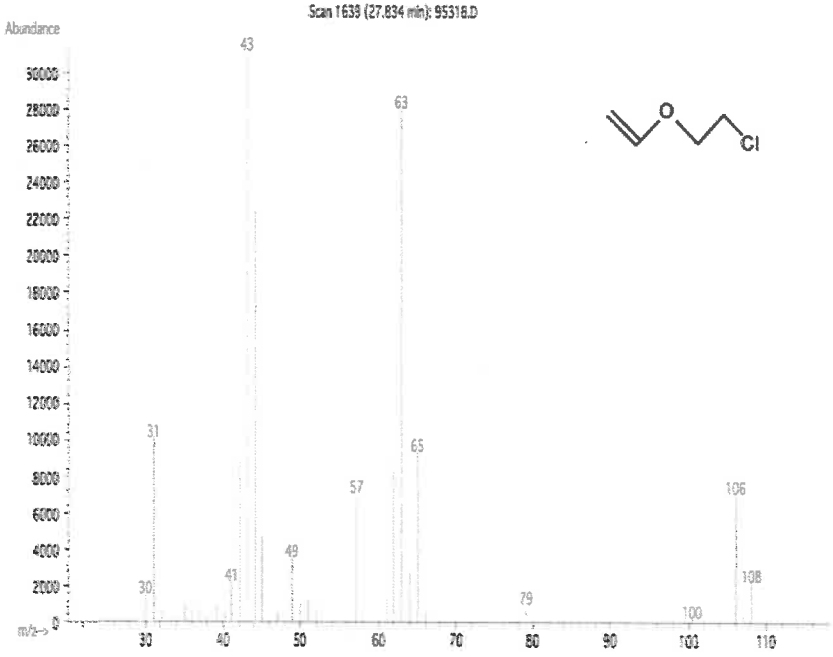
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Formulated By:	Prashant Chauhan	120524 DATE
Reviewed By:	Pedro L. Rentas	120524 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

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Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 12/6/24
20 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

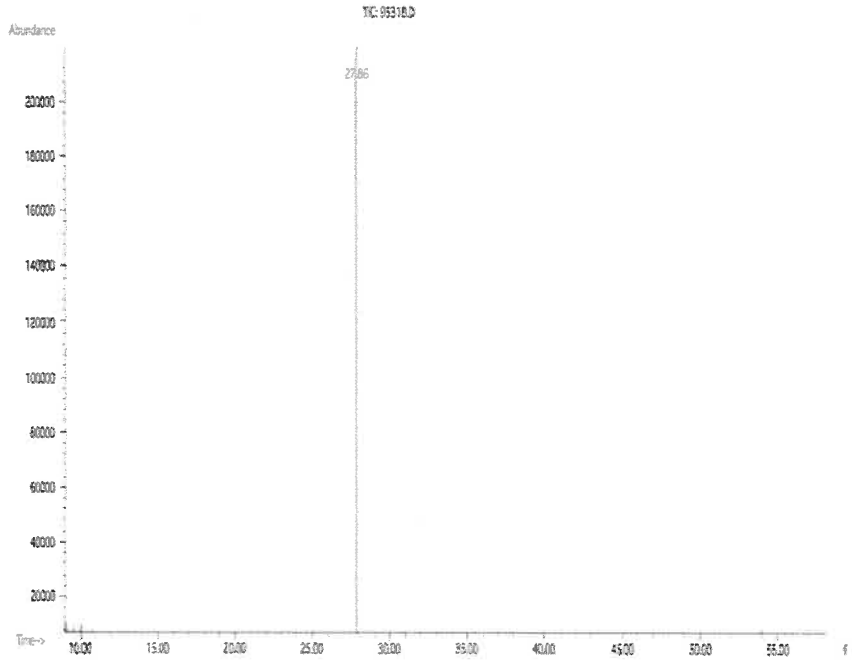
V14630 to V14649

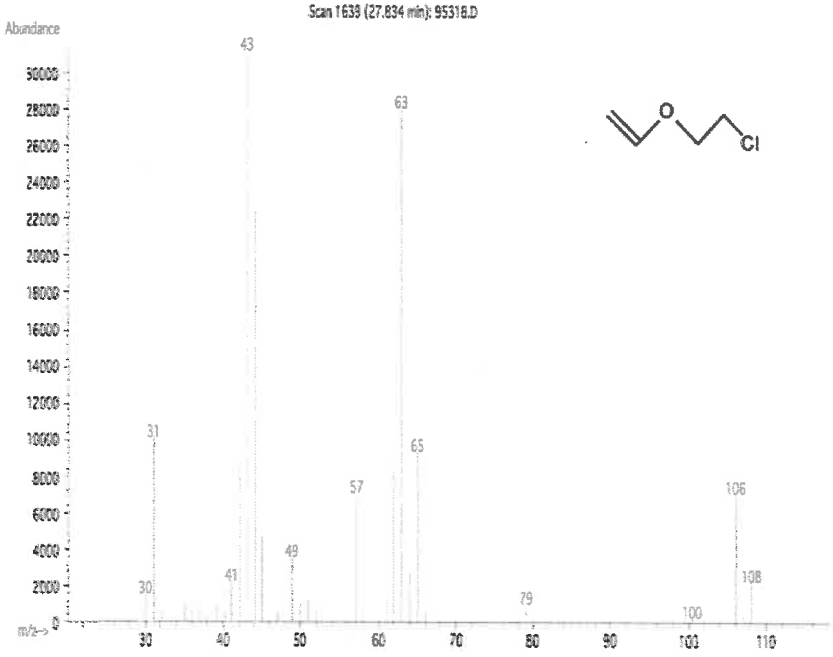
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Formulated By:	Prashant Chauhan	120524 DATE
Reviewed By:	Pedro L. Rentas	120524 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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Nominal Concentration (µg/mL): 10000
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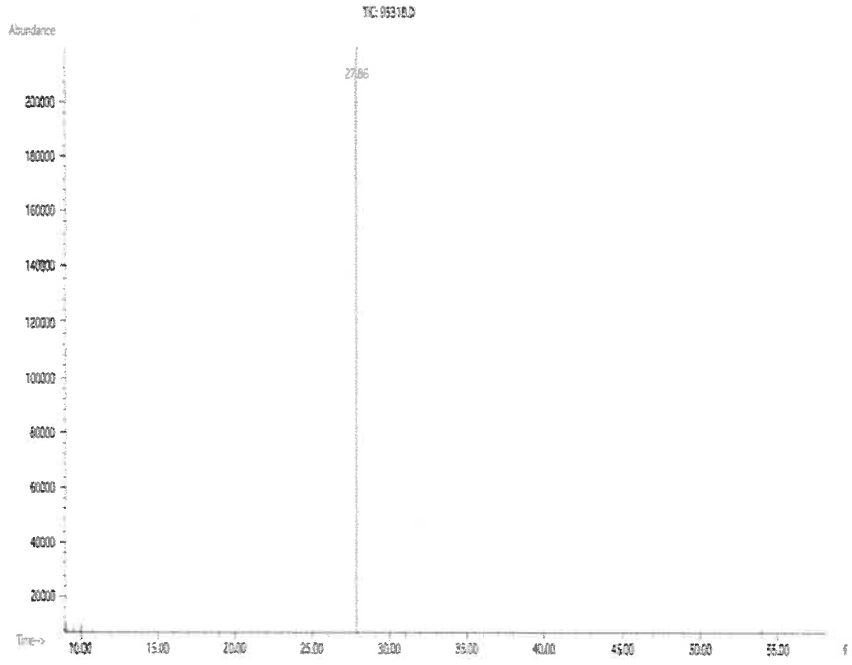

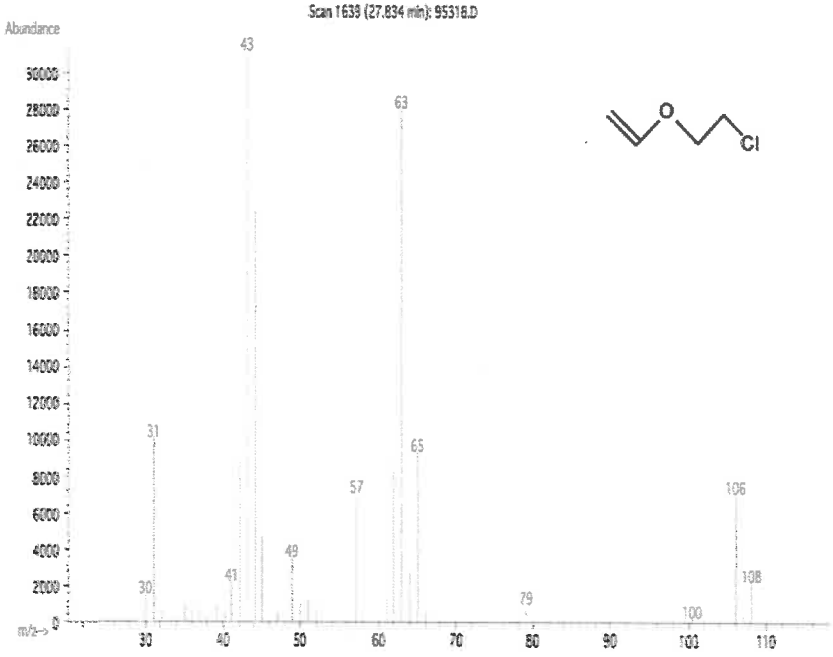

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Proper shipping name: Methanol

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UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

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RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0191805

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,483.9 µg/mL	+/- 139.5488

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

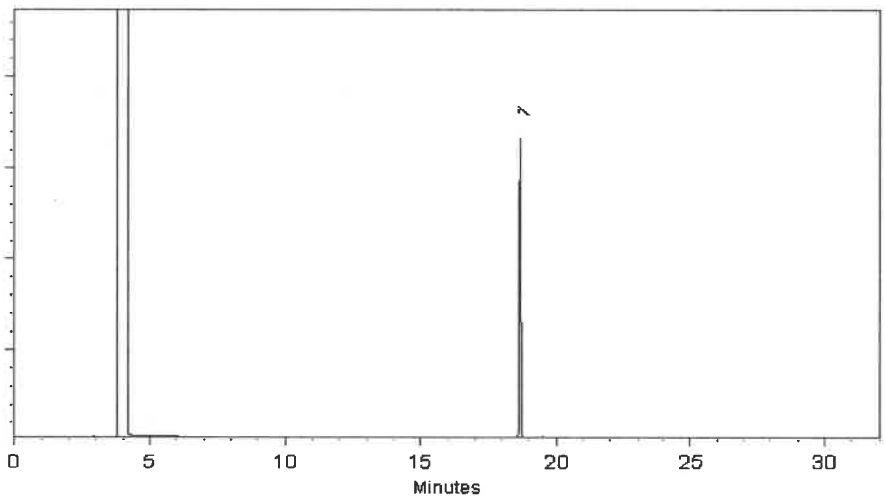
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alicia Leathers - Operation Technician I **Date Mixed:** 17-Nov-2022 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Nov-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
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Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

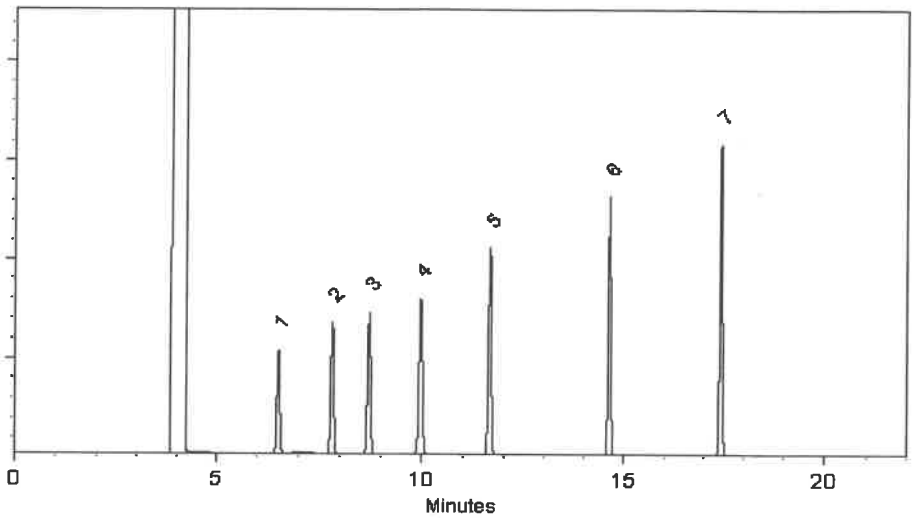
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

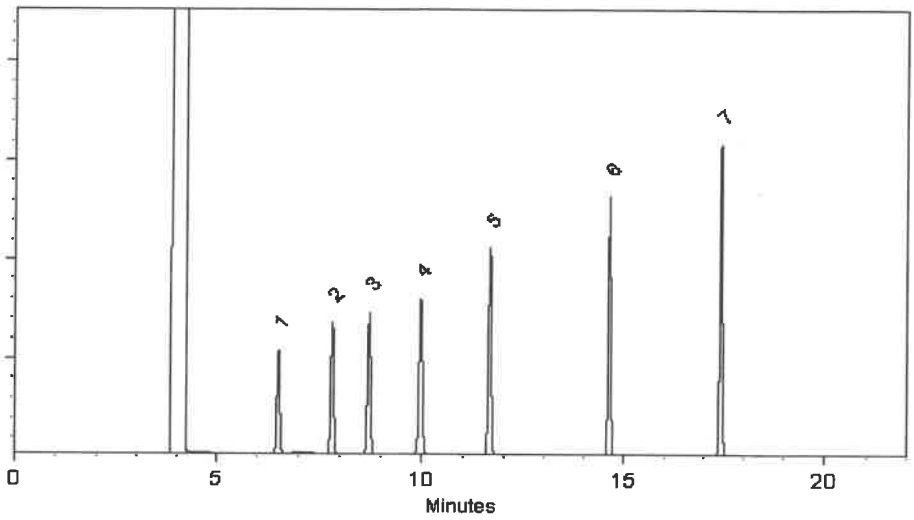
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555581 **Lot No.:** A0210184

Description : Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	25,212.0 µg/mL	+/- 1,427.8857
2	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,220.0 µg/mL	+/- 1,428.3388
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,116.0 µg/mL	+/- 1,422.4487
4	Pentafluorobenzene	363-72-4	MKCR9383	99%	25,180.0 µg/mL	+/- 1,426.0734

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

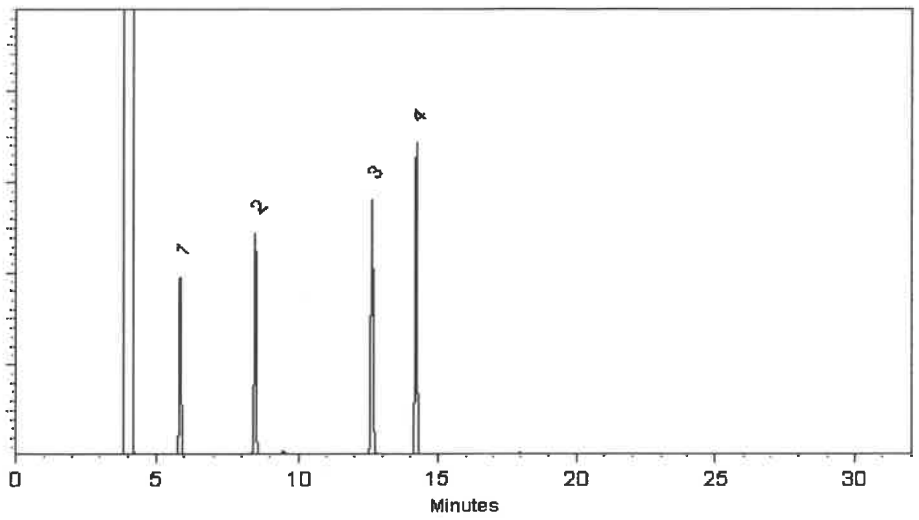
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

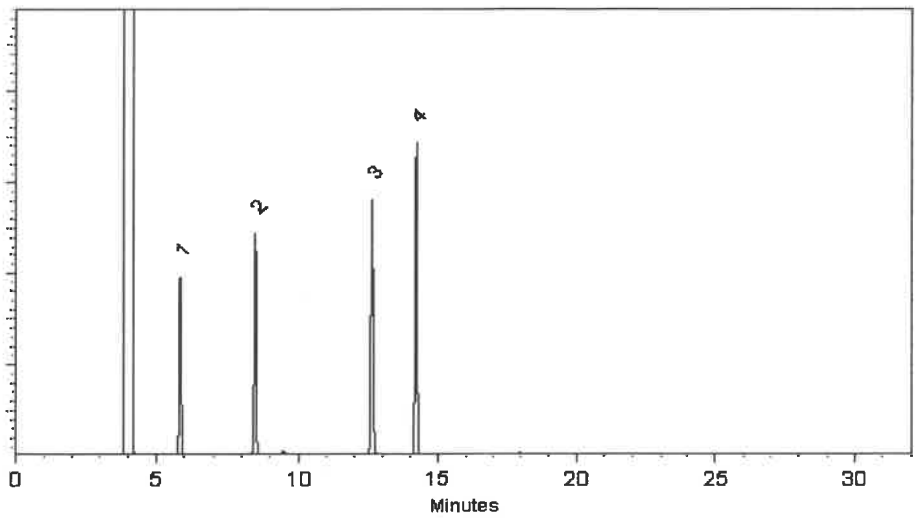
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
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Det. Type:
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Split Vent:
40 ml/min

Inj. Vol
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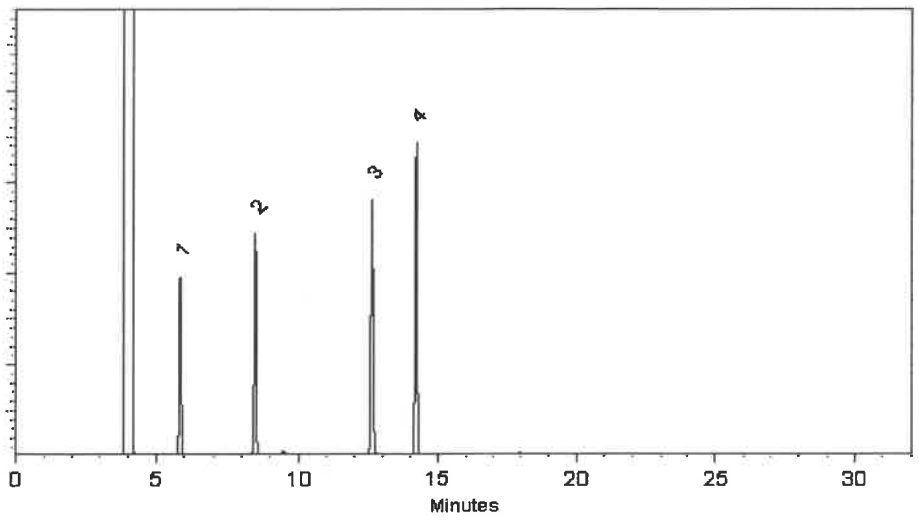

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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Dec: 12/09/24

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

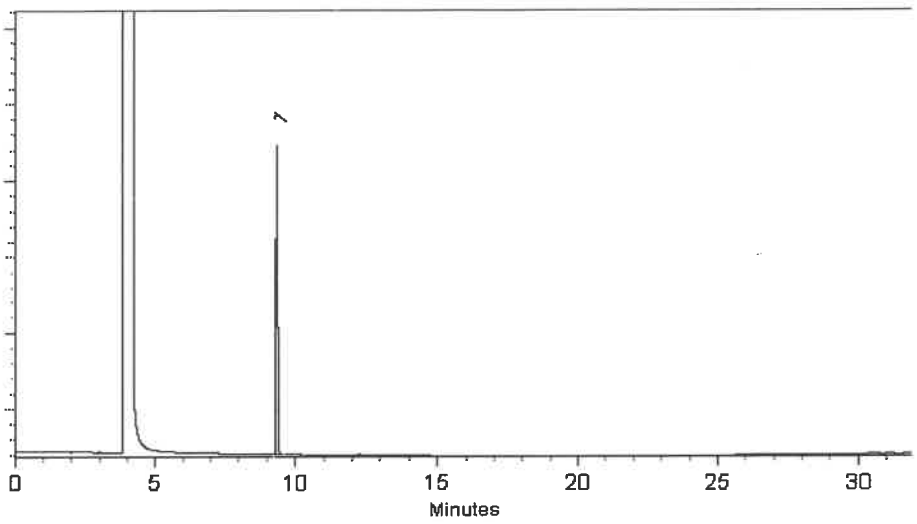
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

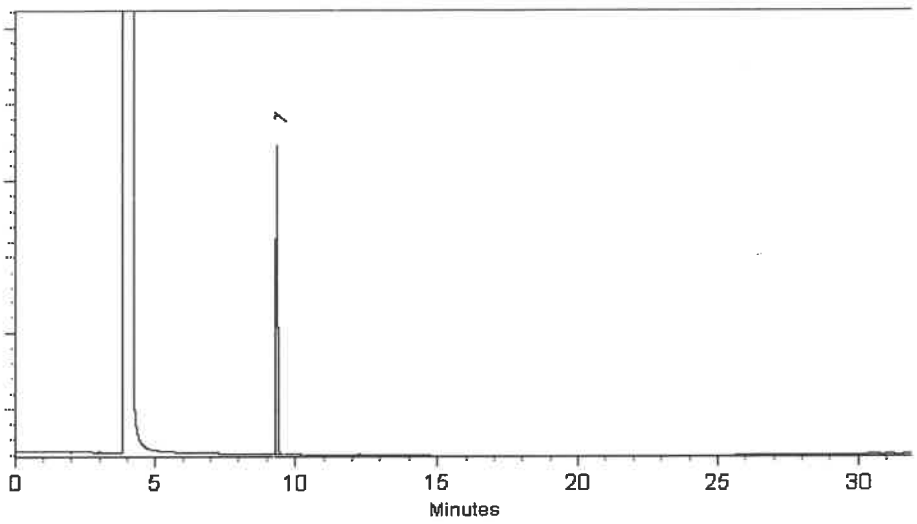
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

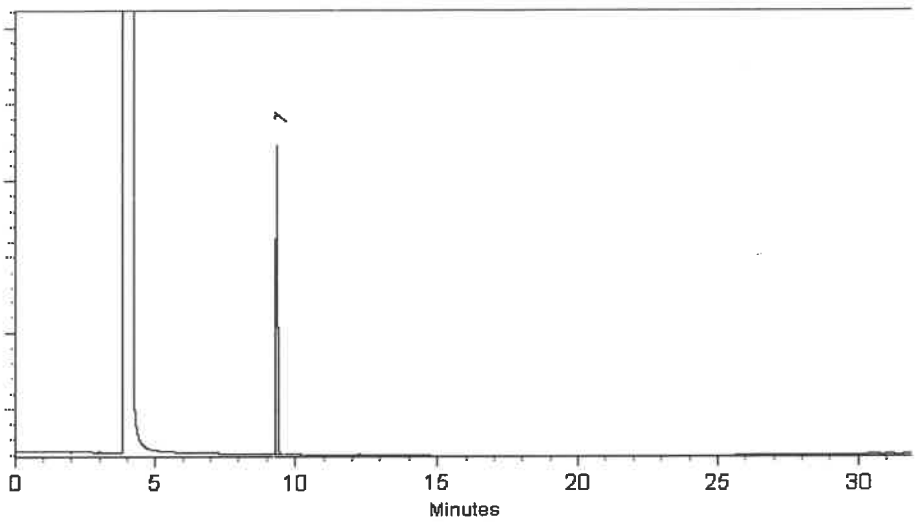
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

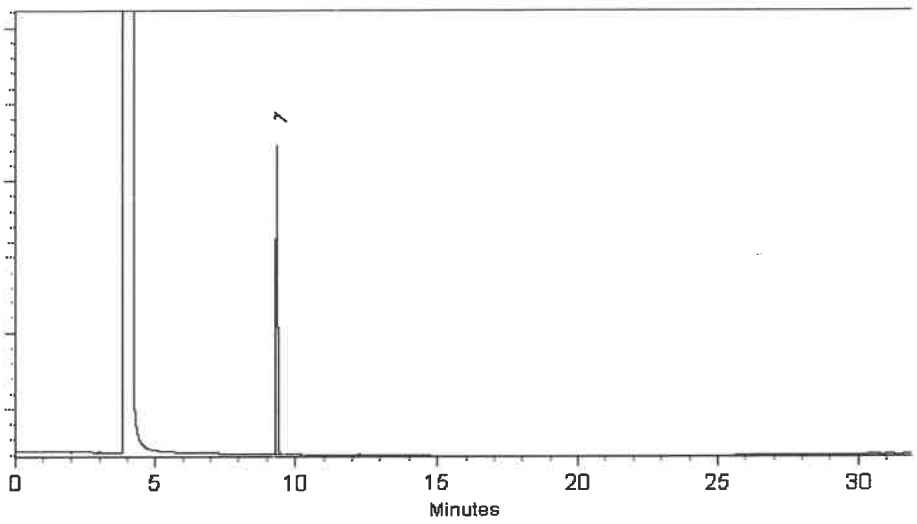
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Reference Material Producer
Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

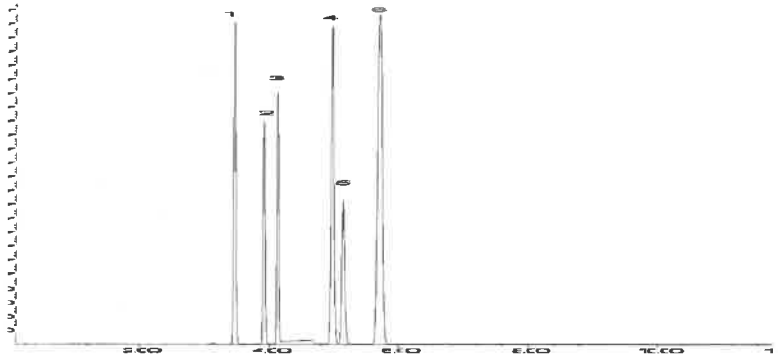
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

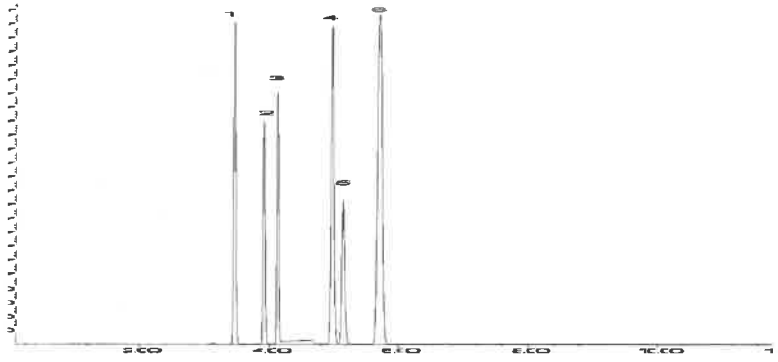
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

J14842 to 14846

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

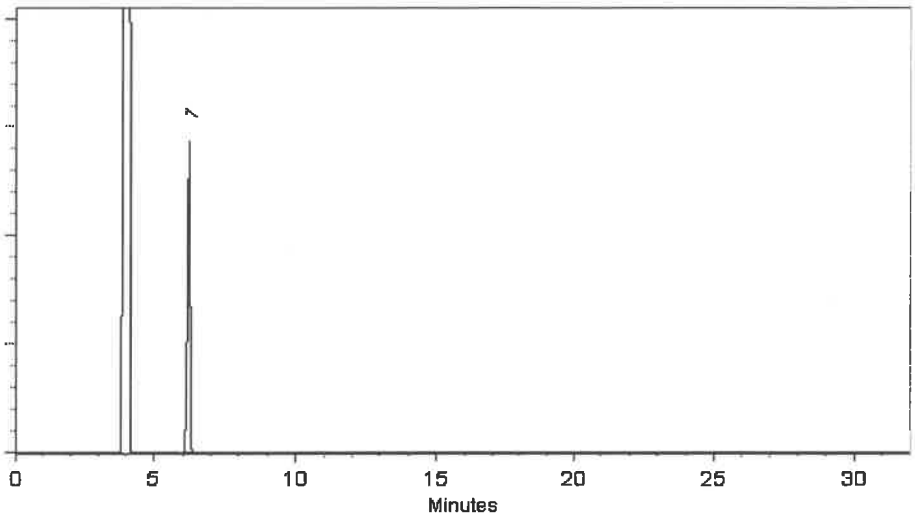
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Zoviny Rec 01/08/21

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

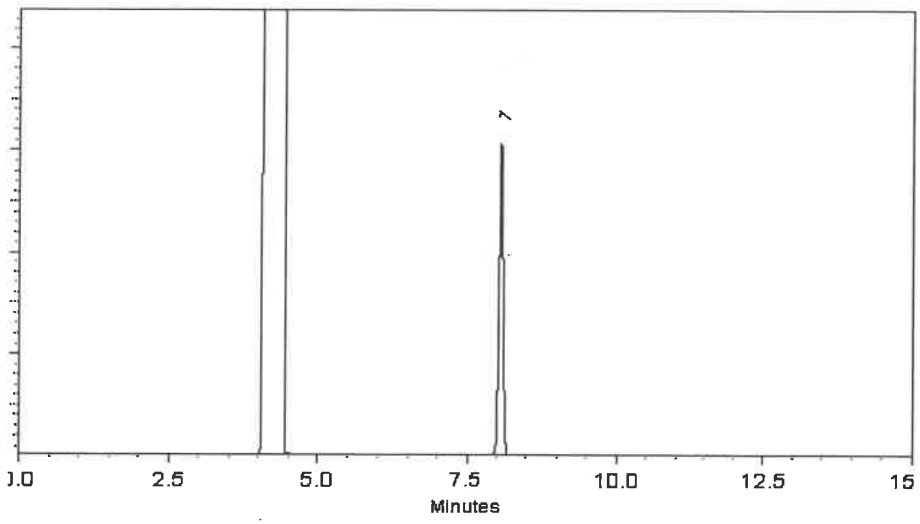
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Zoviny Rec 01/08/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

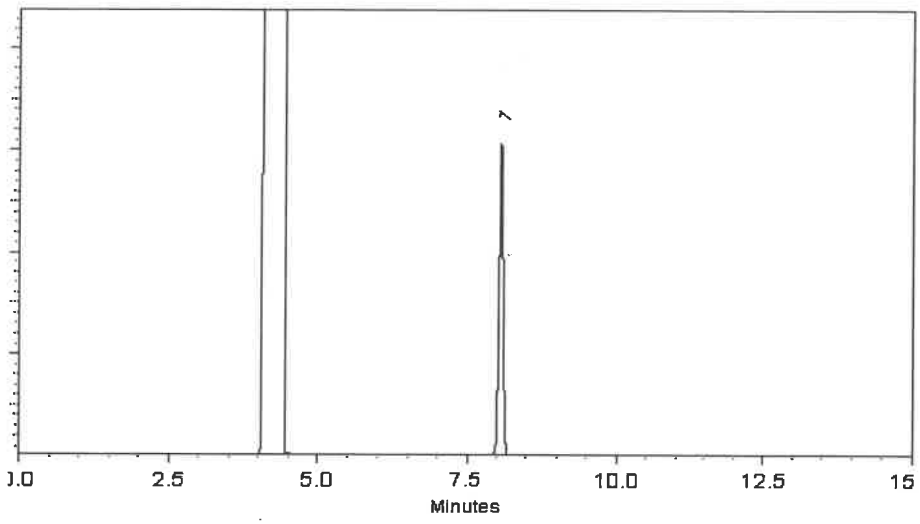
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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10 vial

CERTIFIED REFERENCE MATERIAL

Lee 03/31/25

Certificate of Analysis

gravimetric

V14904 to V14913

ilac-MRA
A2LA ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
A2LA ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A0223904

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	25,108.0 µg/mL	+/- 1,421.9957
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	25,108.0 µg/mL	+/- 1,421.9957
3	Dibromofluoromethane	1868-53-7	VENKAT02	99%	25,232.0 µg/mL	+/- 1,429.0184
4	Toluene-d8	2037-26-5	PR-34141	99%	25,156.0 µg/mL	+/- 1,424.7141

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Brittany Federinko - Operations Tech I

Date Mixed: 27-Mar-2025 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

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Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rev 08/14/25 5 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 081325
Description: Acrolein

Expiration Date: 091325
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water **Lot#** 041725Q

V15057 to V15061

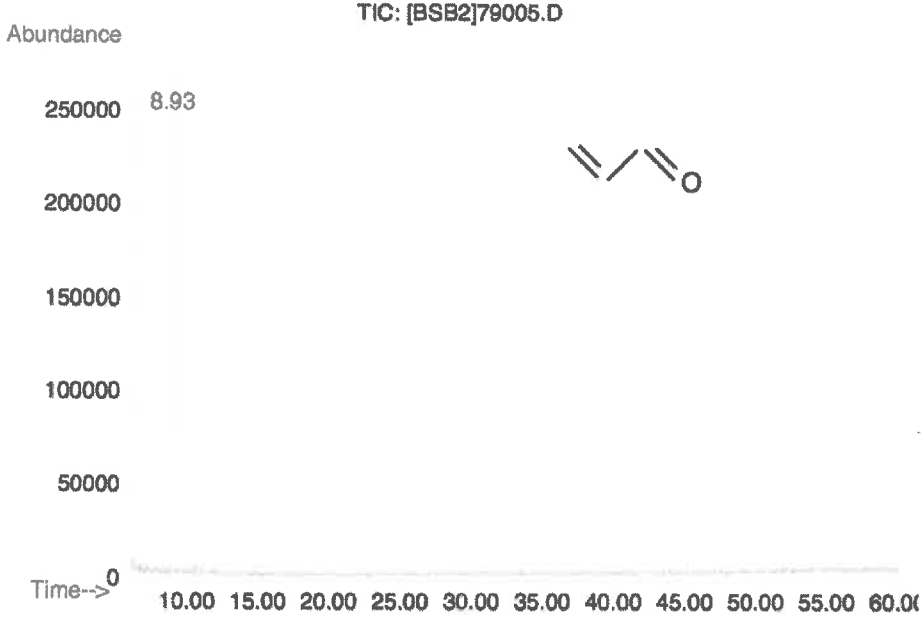
Eli Aliaga		081325
Formulated By:	Eli Aliaga	DATE
Pedro Rentas		081325
Reviewed By:	Pedro L. Rentas	DATE

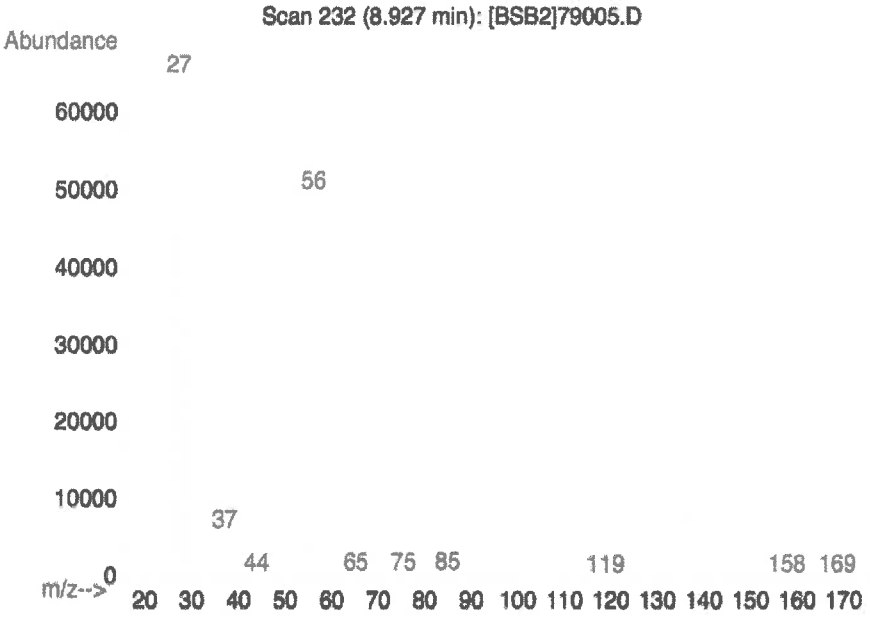
5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05176	5009.9	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).**
- **Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**
  Rev 1.0, 2/25/2025

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rev 08/14/25 5 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 081325
Description: Acrolein

Expiration Date: 091325
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water **Lot#** 041725Q

V15057 to V15061

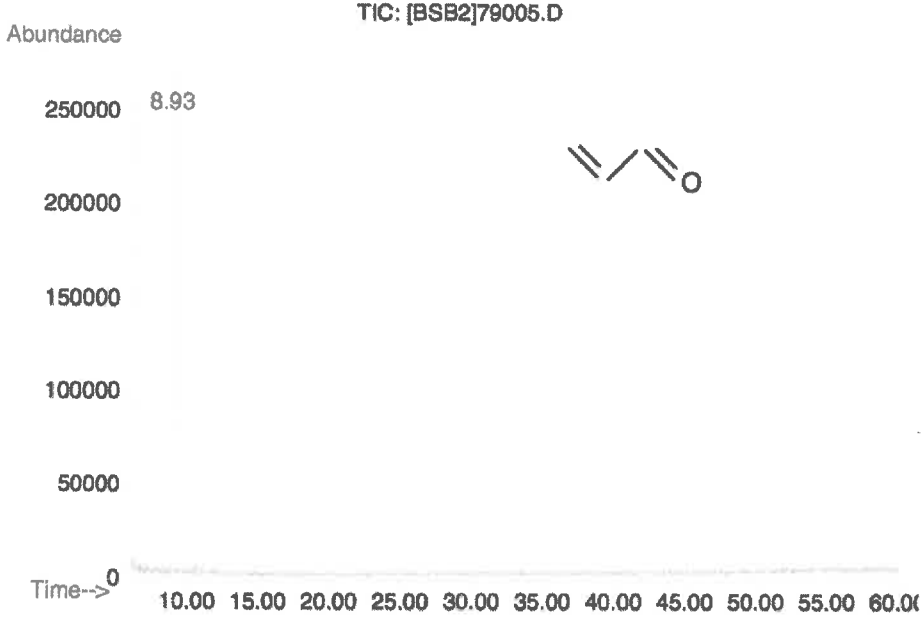
Eli Aliaga		081325
Formulated By:	Eli Aliaga	DATE
Pedro Rentas		081325
Reviewed By:	Pedro L. Rentas	DATE

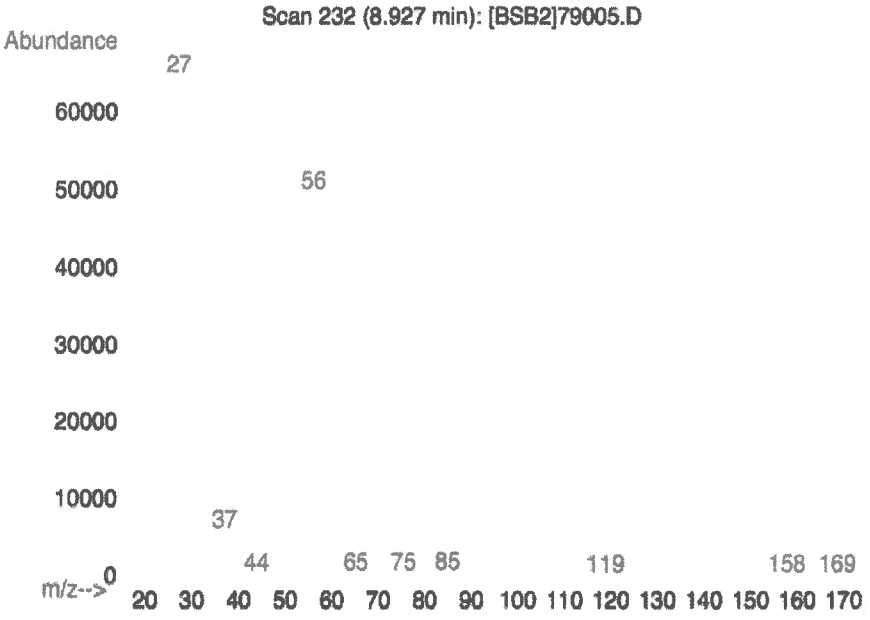
5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05176	5009.9	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).**
- **Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.**
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- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**
  Rev 1.0, 2/25/2025

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rev 08/14/25 5 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 081325
Description: Acrolein

Expiration Date: 091325
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water **Lot#** 041725Q

V15057 to V15061

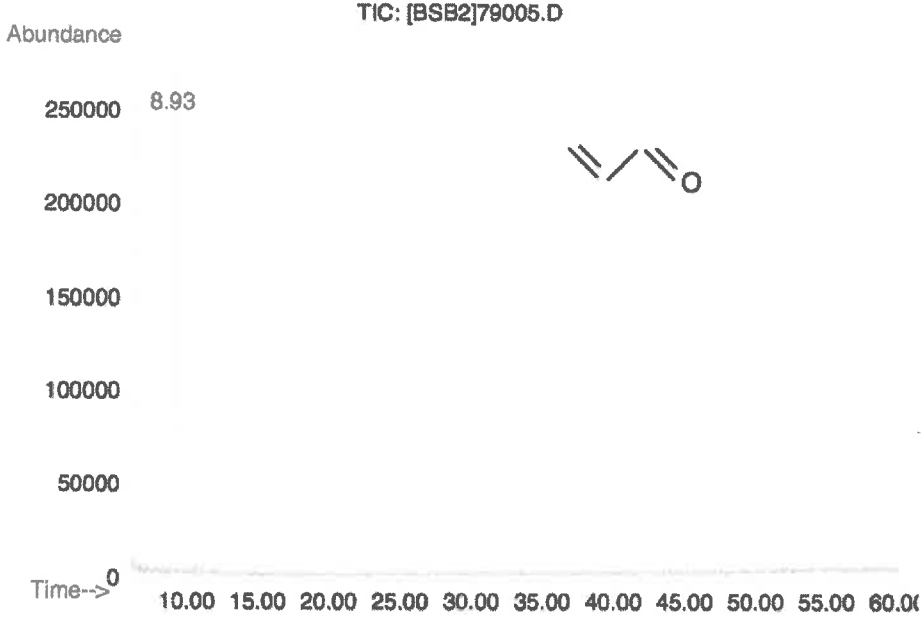
Eli Aliaga		081325
Formulated By:	Eli Aliaga	DATE
Pedro Rentas		081325
Reviewed By:	Pedro L. Rentas	DATE

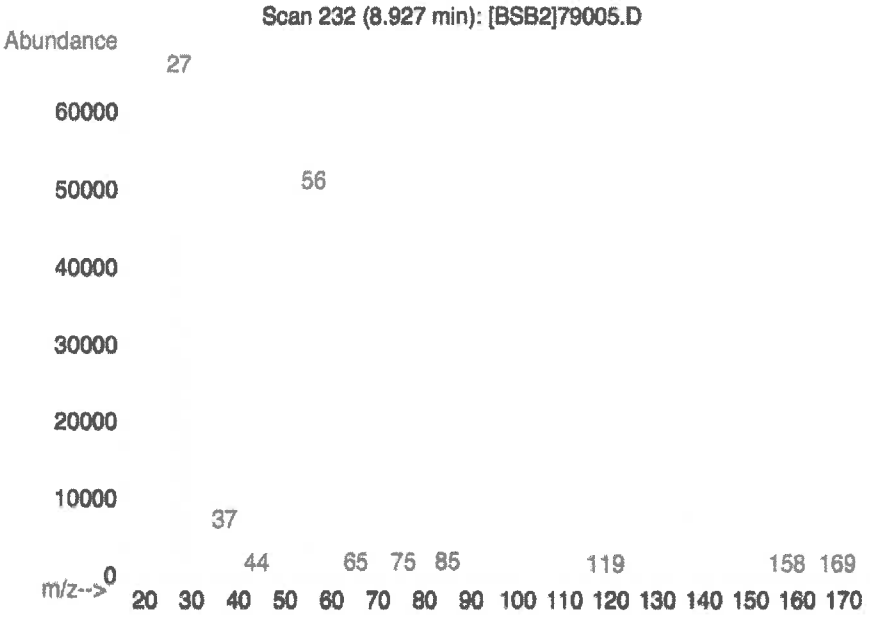
5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05176	5009.9	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).**
- **Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**
  Rev 1.0, 2/25/2025

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q 2842
COC Number 2045376

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite 100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Ynfante John.Ynfante@jacobs.com
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D386822 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard TAT DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ EDD FORMAT
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced ☐ US EPA CLP
- ☐ NYS ASP A ☐ NYS ASP B
- ☐ Other

ANALYSIS

1. Site specific VOCs (8260D-Low)
2. 1,4 Dioxane (8270E-SIM)
3. Total metals (6020B)
4. Dissolved Iron (6020B)
5. Alkalinity (SM2320B)
6. TDS (SM2540C)
7. Anions (9056)
8. Trace VOCs (STAM01.1-SIM)
9.

PRESERVATIVES

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1 A/E	2 E	3 B/E	4 E	5 E	6 E	7 E	8 A/E	9	COMMENTS ← Specify Preservatives A-HCl B-HN03 C-H2SO4 D-NaOH E-ICE F-OTHER
1.	RMW-03B-90.4-08122025	GW		✓	8/12/25	1230	6	✓	✓					✓			
2.	~~RMW-02A~~ RMW-02B-66.3-08122025	GW		✓	8/12/25	1530	5	✓	✓								
3.	MW-17B-55.5-08122025	GW		✓	8/12/25	1154	27	✓	✓	✓	✓	✓	✓	✓			MS/MSD
4.	MW-06-6.5-08122025	GW		✓	8/12/25	1530	2		✓								
5.	MW-17B-55.5-081225-SIM	GW		✓	8/12/25	1154	3								✓		
6.	TB01-081225	DI		✓	8/12/25	1600	2	✓									
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [signature]	8/12/25 1700	1. [signature] 1700 8-12-25
2.		2.
3. [signature]	8-12-25 1822	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.0 °C
Comments: See work order for list of site specific VOCs
Dissolved Iron is field filtered

Page 1 of 2

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

From: Yazmeen Gomez
Sent: Thursday, August 14, 2025 10:30 AM
To: Ynfante, John; Sohil Jodhani
Cc: Mohammad Ahmed
Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q2842.
Attachments: quant2841.pdf; quant2842.pdf

John,

The lab informed me –

Q2841- 42 sample screened with 8260 method as they are usually highly contaminated samples for Trichloroethene

Q2841-01 (MW-06-6.5-08122025) at 200x

Q2842-07(MW-17B-55.5-081225-SIM) 200x

Sample can be analyzed with 8260 under low dilution

Sim analysis is not possible as it may contaminate instrument

Please see attached.

Best Regards,

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

From: Ynfante, John <John.Ynfante@jacobs.com>
Sent: Wednesday, August 13, 2025 3:23 PM
To: Sohil Jodhani <Sohil.Jodhani@alliancetg.com>
Cc: Yazmeen Gomez <Yazmeen.Gomez@AllianceTG.com>; Mohammad Ahmed <mohammad.ahmed@alliancetg.com>; Nimisha Pandya <Nimisha.Pandya@AllianceTG.com>
Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q2842.

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Secured by Check Point

Thanks Sohil

From: Sohil Jodhani <Sohil.Jodhani@alliancetg.com>
Sent: Wednesday, August 13, 2025 1:23 PM
To: Ynfante, John <John.Ynfante@jacobs.com>
Cc: Yazmeen Gomez <Yazmeen.Gomez@AllianceTG.com>; Mohammad Ahmed <mohammad.ahmed@alliancetg.com>; Nimisha Pandya <Nimisha.Pandya@AllianceTG.com>
Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q2842.

Hi John,

Sample IDs are updated as per below request. Lab will notify you if in case VOC-SIM (for Vinyl chloride) is not required for the samples based on low level VOA analysis.

Thanks & Regards,

Sohil Jodhani (he/him/his)
QA/QC Director
Alliance Technical Group, LLC-Newark
Main: 908-789-8900
Direct: 908-728-3152
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Mohammad Ahmed <mohammad.ahmed@alliancetg.com>
Sent: Wednesday, August 13, 2025 2:10 PM
To: Ynfante, John <John.Ynfante@jacobs.com>; Data-EWR <Data-EWR@alliancetg.com>; Yazmeen Gomez <yazmeen.gomez@alliancetg.com>
Cc: Sohil Jodhani <Sohil.Jodhani@alliancetg.com>
Subject: Re: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q2842.

Hi John,
yaz is our of the office today , but i will coordinate with lab to make sure we communicate with you and run these analysis accordingly

Mohammad Ahmed
Laboratory Director
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3151
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Ynfante, John <John.Ynfante@jacobs.com>
Sent: Wednesday, August 13, 2025 2:01 PM
To: Data-EWR <Data-EWR@alliancetg.com>; Yazmeen Gomez <yazmeen.gomez@alliancetg.com>
Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q2842.

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Secured by Check Point

Yazmeen,

A couple of comments on this Princeton login for Q2842:

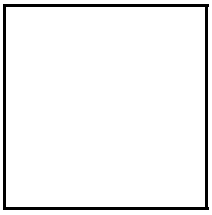
1. I assume your SFAM-SIM method for VOCs can still only report vinyl chloride out of our project list of VOCs – if that is the case then note that sample Q2842-07 (MW-17B-55.5-081225-SIM) and any other SFAM-SIM samples only need to be analyzed if their corresponding 8260D-Low analysis shows the vinyl chloride to be non-detect and of course if the lab is able to analyze them by SIM. I know up to this point the lab has said the concentrations have been too high in the SIM samples to even run the SFAM-SIM on so let me know how it looks on those after your analysts run the regular VOCs run on them.

2. The date part of the sample IDs should have used a MMDD**YY** format, not MMDD**YYYY** as is listed on the chain. Please change the "2025" bit to just "25" on all these sample IDs. For example, "RMW-03B-90.4-08122025" should be changed to "RMW-03B-90.4-081225", etc.

Thanks

- John Y.

From: Data-EWR@alliancetg.com <Data-EWR@alliancetg.com>
Sent: Wednesday, August 13, 2025 9:38 AM
To: Ongjoco, Alec <Alec.Ongjoco@jacobs.com>; Dillon, Alexa <Alexa.Dillon@jacobs.com>; Lader, Chelsea <Chelsea.Lader@jacobs.com>; Holmes, Daniel <Daniel.Holmes@jacobs.com>; Reamer, David <David.Reamer@jacobs.com>; Ynfante, John <John.Ynfante@jacobs.com>; Murphy, Mary <Mary.Murphy@jacobs.com>; Warren, Melissa <Melissa.Warren@jacobs.com>; Asher, Sarah <Sarah.Asher@jacobs.com>
Cc: yazmeen.gomez@alliancetg.com
Subject: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q2842.



To John Ynfante;

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

Order ID	: Q2842
Project ID	: Former Schlumberger STC PTC Site D3868221
Download File	: https://chemtech.net/secureLogin.aspx
Order Date	: 8/13/2025 8:34:00 AM

Alliance's Project Manager	: YAZMEEN GOMEZ , yazmeen.gomez@alliancetg.com , 908-728-3147
Alliance's Sales Executive	: Jordan Hedvat , jordan.hedvat@alliancetg.com , 908-728-3144

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

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

Thank you,

Alliance Technical Group LLC.

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

Laboratory Certification

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

QA Control Code: A2070148

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2842 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : John Ynfante
Invoice Name : JACOBS Engineering Grou
Invoice Contact : John Ynfante

Order Date : 8/13/2025 8:34:00 AM
Project Name : Former Schlumberger STC
Receive DateTime : 8/12/2025 6:22:00 PM
Purchase Order :

Project Mgr : Deepak
Report Type : Level 34
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff : 8/13/2025 10:38:03 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2842-01	RMW-03B-90.4-081225	Water	08/12/2025	12:30					
					VOCMS Group3		8260-Low		10 Bus. Days
Q2842-02	RMW-02B-66.3-081225	Water	08/12/2025	15:30					
					VOCMS Group3		8260-Low		10 Bus. Days
Q2842-03	MW-17B-55.5-081225	Water	08/12/2025	11:54					
					VOCMS Group3		8260-Low		10 Bus. Days
Q2842-04	Q2842-03MS	Water	08/12/2025	11:54					
					VOCMS Group3		8260-Low		10 Bus. Days
Q2842-05	Q2842-03MSD	Water	08/12/2025	11:54					
					VOCMS Group3		8260-Low		10 Bus. Days
Q2842-08	TB01-081225	Water	08/12/2025	16:00					
					VOCMS Group3		8260-Low		10 Bus. Days

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID :	Q2842 JACO05	**Order Date :**	8/13/2025 8:34:00 AM	**Project Mgr :**	Deepak
Client Name :	JACOBS Engineering Grou	**Project Name :**	Former Schlumberger STC	**Report Type :**	Level ~~3~~ 4
Client Contact :	John Ynfante	**Receive DateTime :**	8/12/2025 6:22:00 PM	**EDD Type :**	CH2MHILL
Invoice Name :	JACOBS Engineering Grou	**Purchase Order :**		**Hard Copy Date :**	
Invoice Contact :	John Ynfante			**Date Signoff :**	8/13/2025 10:38:03 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

Relinguished By : _____
Date / Time : 8/13/25 09:15

Received By : _____
Date / Time : 08/13/25 09:15

Storage Area : **VOA Refridgerator Room**

Rg 4