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

Cover Page

Order ID : Q1812

Project ID : Former Schlumberger STC PTC Site D3868221

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
Q1812-01	TB01-041525
Q1812-02	RINSE-EB-TANK-041525
Q1812-03	RINSE-EB-PUMP-041525

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

Signature : _____

Date: 4/18/2025

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
Chemtech Project # Q1812
Test Name: VOC-TCLVOA-10

A. Number of Samples and Date of Receipt:
3 Water samples were received on 04/15/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Mercury, Metals ICP-RCRA, METALS RCRA, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

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 VOC-TCLVOA-10 was based on method 8260D.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 20% in the Initial Calibration method (82N041525W.M) for Acetone is passing on Linear Regression.

The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

E. Additional Comments:
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

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

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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

CHEMTECH PROJECT NUMBER: Q1812 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 %RSD is greater than 20% in the Initial Calibration method (82N041525W.M) for Acetone is passing on Linear Regression.			
	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 Blank Spike met requirements for all samples .			
	The Blank Spike Duplicate met requirements for all samples .			
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:

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

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

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q1812**

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

QA Review Signature: **SOHIL JODHANI** **Date:** **04/18/2025**

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LAB CHRONICLE

OrderID:	Q1812	**OrderDate:**	4/15/2025 4:26:00 PM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger STC PTC Site D3868221
Contact:	John Ynfante	**Location:**	L31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1812-01	**TB01-041525**	**Water**			**04/15/25**			**04/15/25**
			VOC-TCLVOA-10	8260-Low			04/16/25	
Q1812-02	**RINSE-EB-TANK-041525**	**Water**			**04/15/25**			**04/15/25**
			VOC-TCLVOA-10	8260-Low			04/16/25	
Q1812-03	**RINSE-EB-PUMP-041525**	**Water**			**04/15/25**			**04/15/25**
			VOC-TCLVOA-10	8260-Low			04/16/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1812

Client: JACOBS Engineering Group, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**RINSE-EB-TANK-041525**							
Q1812-02	RINSE-EB-TANK-(	Water	Chloroform	40.8		0.25	1.00	ug/L
Q1812-02	RINSE-EB-TANK-(	Water	Bromodichloromethane	10.7		0.22	1.00	ug/L
Q1812-02	RINSE-EB-TANK-(	Water	Dibromochloromethane	2.00		0.18	1.00	ug/L
			Total Voc :		53.5			
			Total Concentration:		53.5			
Client ID:	**RINSE-EB-PUMP-041525**							
Q1812-03	RINSE-EB-PUMP-(	Water	Chloroform	39.5		0.25	1.00	ug/L
Q1812-03	RINSE-EB-PUMP-(	Water	Bromodichloromethane	10.4		0.22	1.00	ug/L
Q1812-03	RINSE-EB-PUMP-(	Water	Dibromochloromethane	1.80		0.18	1.00	ug/L
			Total Voc :		51.7			
			Total Concentration:		51.7			

QC SUMMARY

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Surrogate Summary

SDG No.: Q1812

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
Q1812-01	TB01-041525	1,2-Dichloroethane-d4	50	50.0	100	70 (74)	130 (125)
		Dibromofluoromethane	50	55.1	110	70 (75)	130 (124)
		Toluene-d8	50	51.3	103	70 (86)	130 (113)
		4-Bromofluorobenzene	50	51.3	103	70 (77)	130 (121)
Q1812-02	RINSE-EB-TANK-041525	1,2-Dichloroethane-d4	50	49.4	99	70 (74)	130 (125)
		Dibromofluoromethane	50	53.6	107	70 (75)	130 (124)
		Toluene-d8	50	50.4	101	70 (86)	130 (113)
		4-Bromofluorobenzene	50	50.3	101	70 (77)	130 (121)
Q1812-03	RINSE-EB-PUMP-041525	1,2-Dichloroethane-d4	50	50.3	101	70 (74)	130 (125)
		Dibromofluoromethane	50	53.7	107	70 (75)	130 (124)
		Toluene-d8	50	51.0	102	70 (86)	130 (113)
		4-Bromofluorobenzene	50	52.2	104	70 (77)	130 (121)
VN0416WBL01	VN0416WBL01	1,2-Dichloroethane-d4	50	49.2	98	70 (74)	130 (125)
		Dibromofluoromethane	50	55.0	110	70 (75)	130 (124)
		Toluene-d8	50	50.6	101	70 (86)	130 (113)
		4-Bromofluorobenzene	50	49.9	100	70 (77)	130 (121)
VN0416WBS01	VN0416WBS01	1,2-Dichloroethane-d4	50	50.6	101	70 (74)	130 (125)
		Dibromofluoromethane	50	50.4	101	70 (75)	130 (124)
		Toluene-d8	50	50.8	102	70 (86)	130 (113)
		4-Bromofluorobenzene	50	49.8	100	70 (77)	130 (121)
VN0416WBSD0	VN0416WBSD01	1,2-Dichloroethane-d4	50	53.5	107	70 (74)	130 (125)
		Dibromofluoromethane	50	55.7	111	70 (75)	130 (124)
		Toluene-d8	50	54.6	109	70 (86)	130 (113)
		4-Bromofluorobenzene	50	53.6	107	70 (77)	130 (121)

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1812

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low **Datafile :** VN086289.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0416WBS01	Dichlorodifluoromethane	20	18.8	ug/L	94			40 (69)	160 (116)	
	Chloromethane	20	17.2	ug/L	86			40 (65)	160 (116)	
	Vinyl chloride	20	17.8	ug/L	89			70 (65)	130 (117)	
	Bromomethane	20	19.7	ug/L	99			40 (58)	160 (125)	
	Chloroethane	20	17.3	ug/L	86			40 (56)	160 (128)	
	Trichlorofluoromethane	20	17.9	ug/L	90			40 (73)	160 (115)	
	1,1,2-Trichlorotrifluoroethane	20	18.2	ug/L	91			70 (80)	130 (112)	
	1,1-Dichloroethene	20	17.1	ug/L	86			70 (74)	130 (110)	
	Acetone	100	100	ug/L	100			40 (60)	160 (125)	
	Carbon disulfide	20	16.8	ug/L	84			40 (64)	160 (112)	
	Methyl tert-butyl Ether	20	17.5	ug/L	88			70 (78)	130 (114)	
	Methyl Acetate	20	17.3	ug/L	86			70 (67)	130 (125)	
	Methylene Chloride	20	17.1	ug/L	86			70 (72)	130 (114)	
	trans-1,2-Dichloroethene	20	17.4	ug/L	87			70 (75)	130 (108)	
	1,1-Dichloroethane	20	17.7	ug/L	89			70 (78)	130 (112)	
	Cyclohexane	20	17.5	ug/L	88			70 (75)	130 (110)	
	2-Butanone	100	93.4	ug/L	93			40 (65)	160 (122)	
	Carbon Tetrachloride	20	17.9	ug/L	90			70 (77)	130 (113)	
	cis-1,2-Dichloroethene	20	17.5	ug/L	88			70 (77)	130 (110)	
	Bromochloromethane	20	25.4	ug/L	127			70 (70)	130 (124)	
	Chloroform	20	17.5	ug/L	88			70 (79)	130 (113)	
	1,1,1-Trichloroethane	20	17.9	ug/L	90			70 (80)	130 (108)	
	Methylcyclohexane	20	18.1	ug/L	91			70 (72)	130 (115)	
	Benzene	20	17.9	ug/L	90			70 (82)	130 (109)	
	1,2-Dichloroethane	20	17.7	ug/L	89			70 (80)	130 (115)	
	Trichloroethene	20	18.2	ug/L	91			70 (77)	130 (113)	
	1,2-Dichloropropane	20	17.8	ug/L	89			70 (83)	130 (111)	
	Bromodichloromethane	20	18.1	ug/L	91			70 (83)	130 (110)	
	4-Methyl-2-Pentanone	100	89.9	ug/L	90			40 (74)	160 (118)	
	Toluene	20	18.0	ug/L	90			70 (82)	130 (110)	
	t-1,3-Dichloropropene	20	18.2	ug/L	91			70 (79)	130 (110)	
	cis-1,3-Dichloropropene	20	17.7	ug/L	89			70 (82)	130 (110)	
	1,1,2-Trichloroethane	20	17.9	ug/L	90			70 (83)	130 (112)	
	2-Hexanone	100	92.6	ug/L	93			40 (73)	160 (117)	
	Dibromochloromethane	20	18.0	ug/L	90			70 (82)	130 (110)	
	1,2-Dibromoethane	20	18.1	ug/L	91			70 (81)	130 (110)	
	Tetrachloroethene	20	18.6	ug/L	93			70 (67)	130 (123)	
	Chlorobenzene	20	17.9	ug/L	90			70 (82)	130 (109)	
	Ethyl Benzene	20	18.0	ug/L	90			70 (83)	130 (109)	
	m/p-Xylenes	40	36.3	ug/L	91			70 (82)	130 (110)	
	o-Xylene	20	18.0	ug/L	90			70 (83)	130 (109)	
	Styrene	20	18.1	ug/L	91			70 (80)	130 (111)	
	Bromoform	20	18.1	ug/L	91			70 (79)	130 (109)	
	Isopropylbenzene	20	17.8	ug/L	89			70 (83)	130 (112)	
	1,1,2,2-Tetrachloroethane	20	17.1	ug/L	86			70 (76)	130 (118)	
	1,3-Dichlorobenzene	20	18.0	ug/L	90			70 (82)	130 (108)	
	1,4-Dichlorobenzene	20	17.9	ug/L	90			70 (82)	130 (107)	
	1,2-Dichlorobenzene	20	17.9	ug/L	90			70 (82)	130 (109)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1812

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low **Datafile :** VN086289.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0416WBS01	1,2-Dibromo-3-Chloropropane	20	18.7	ug/L	94			40 (68)	160 (112)	
	1,2,4-Trichlorobenzene	20	19.4	ug/L	97			70 (75)	130 (113)	
	1,2,3-Trichlorobenzene	20	19.0	ug/L	95			70 (76)	130 (114)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1812

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low **Datafile :** VN086292.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VN0416WBSD01	Dichlorodifluoromethane	20	20.7	ug/L	104	10		40 (69)	160 (116)	20 (20)
	Chloromethane	20	19.2	ug/L	96	11		40 (65)	160 (116)	20 (20)
	Vinyl chloride	20	19.6	ug/L	98	10		70 (65)	130 (117)	20 (20)
	Bromomethane	20	21.7	ug/L	109	10		40 (58)	160 (125)	20 (20)
	Chloroethane	20	18.9	ug/L	95	10		40 (56)	160 (128)	20 (20)
	Trichlorofluoromethane	20	19.9	ug/L	100	11		40 (73)	160 (115)	20 (20)
	1,1,2-Trichlorotrifluoroethane	20	19.7	ug/L	99	8		70 (80)	130 (112)	20 (20)
	1,1-Dichloroethene	20	19.3	ug/L	97	12		70 (74)	130 (110)	20 (20)
	Acetone	100	110	ug/L	110	10		40 (60)	160 (125)	20 (20)
	Carbon disulfide	20	18.3	ug/L	92	9		40 (64)	160 (112)	20 (20)
	Methyl tert-butyl Ether	20	19.2	ug/L	96	9		70 (78)	130 (114)	20 (20)
	Methyl Acetate	20	18.3	ug/L	92	7		70 (67)	130 (125)	20 (20)
	Methylene Chloride	20	19.5	ug/L	98	13		70 (72)	130 (114)	20 (20)
	trans-1,2-Dichloroethene	20	19.4	ug/L	97	11		70 (75)	130 (108)	20 (20)
	1,1-Dichloroethane	20	19.2	ug/L	96	8		70 (78)	130 (112)	20 (20)
	Cyclohexane	20	19.2	ug/L	96	9		70 (75)	130 (110)	20 (20)
	2-Butanone	100	98.0	ug/L	98	5		40 (65)	160 (122)	20 (20)
	Carbon Tetrachloride	20	19.9	ug/L	100	11		70 (77)	130 (113)	20 (20)
	cis-1,2-Dichloroethene	20	19.2	ug/L	96	9		70 (77)	130 (110)	20 (20)
	Bromochloromethane	20	22.3	ug/L	112	13		70 (70)	130 (124)	20 (20)
	Chloroform	20	19.3	ug/L	97	10		70 (79)	130 (113)	20 (20)
	1,1,1-Trichloroethane	20	19.5	ug/L	98	9		70 (80)	130 (108)	20 (20)
	Methylcyclohexane	20	19.7	ug/L	99	8		70 (72)	130 (115)	20 (20)
	Benzene	20	19.8	ug/L	99	10		70 (82)	130 (109)	20 (20)
	1,2-Dichloroethane	20	19.9	ug/L	100	12		70 (80)	130 (115)	20 (20)
	Trichloroethene	20	20.0	ug/L	100	9		70 (77)	130 (113)	20 (20)
	1,2-Dichloropropane	20	19.6	ug/L	98	10		70 (83)	130 (111)	20 (20)
	Bromodichloromethane	20	19.8	ug/L	99	8		70 (83)	130 (110)	20 (20)
	4-Methyl-2-Pentanone	100	100	ug/L	100	11		40 (74)	160 (118)	20 (20)
	Toluene	20	19.8	ug/L	99	10		70 (82)	130 (110)	20 (20)
	t-1,3-Dichloropropene	20	19.9	ug/L	100	9		70 (79)	130 (110)	20 (20)
	cis-1,3-Dichloropropene	20	19.6	ug/L	98	10		70 (82)	130 (110)	20 (20)
	1,1,2-Trichloroethane	20	19.7	ug/L	99	10		70 (83)	130 (112)	20 (20)
	2-Hexanone	100	99.8	ug/L	100	7		40 (73)	160 (117)	20 (20)
	Dibromochloromethane	20	20.1	ug/L	101	12		70 (82)	130 (110)	20 (20)
	1,2-Dibromoethane	20	20.2	ug/L	101	10		70 (81)	130 (110)	20 (20)
	Tetrachloroethene	20	20.6	ug/L	103	10		70 (67)	130 (123)	20 (20)
	Chlorobenzene	20	19.7	ug/L	99	10		70 (82)	130 (109)	20 (20)
	Ethyl Benzene	20	19.9	ug/L	100	11		70 (83)	130 (109)	20 (20)
	m/p-Xylenes	40	39.8	ug/L	100	9		70 (82)	130 (110)	20 (20)
	o-Xylene	20	19.9	ug/L	100	11		70 (83)	130 (109)	20 (20)
	Styrene	20	20.0	ug/L	100	9		70 (80)	130 (111)	20 (20)
	Bromoform	20	20.3	ug/L	102	11		70 (79)	130 (109)	20 (20)
	Isopropylbenzene	20	20.0	ug/L	100	12		70 (83)	130 (112)	20 (20)
	1,1,2,2-Tetrachloroethane	20	19.8	ug/L	99	14		70 (76)	130 (118)	20 (20)
	1,3-Dichlorobenzene	20	20.1	ug/L	101	12		70 (82)	130 (108)	20 (20)
	1,4-Dichlorobenzene	20	19.9	ug/L	100	11		70 (82)	130 (107)	20 (20)
	1,2-Dichlorobenzene	20	20.5	ug/L	103	13		70 (82)	130 (109)	20 (20)

( ) = LABORATORY INHOUSE LIMIT

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Fax : 908 789 8922

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1812

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low **Datafile :** VN086292.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VN0416WBSD01	1,2-Dibromo-3-Chloropropane	20	20.7	ug/L	104	10		40 (68)	160 (112)	20 (20)
	1,2,4-Trichlorobenzene	20	20.1	ug/L	101	4		70 (75)	130 (113)	20 (20)
	1,2,3-Trichlorobenzene	20	19.8	ug/L	99	4		70 (76)	130 (114)	20 (20)

( ) = LABORATORY INHOUSE LIMIT

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0416WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG NO.: Q1812

Lab File ID: VN086288.D Lab Sample ID: VN0416WBL01

Date Analyzed: 04/16/2025 Time Analyzed: 10:12

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
VN0416WBS01	VN0416WBS01	VN086289.D	04/16/2025
VN0416WBSD01	VN0416WBSD01	VN086292.D	04/16/2025
RINSE-EB-TANK-041525	Q1812-02	VN086293.D	04/16/2025
RINSE-EB-PUMP-041525	Q1812-03	VN086294.D	04/16/2025
TB01-041525	Q1812-01	VN086295.D	04/16/2025

COMMENTS:

Raw Data: **VN086276.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG NO.: Q1812

Lab File ID: VN086276.D BFB Injection Date: 04/15/2025

Instrument ID: MSVOA_N BFB Injection Time: 10:47

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	19.6
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	6.3
173	Less than 2.0% of mass 174	0.4 (0.6) 1
174	50.0 - 100.0% of mass 95	67.6
175	5.0 - 9.0% of mass 174	5.1 (7.6) 1
176	95.0 - 101.0% of mass 174	64.6 (95.5) 1
177	5.0 - 9.0% of mass 176	4.4 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VN086277.D	04/15/2025	11:29
VSTDICC005	VSTDICC005	VN086278.D	04/15/2025	12:21
VSTDICC010	VSTDICC010	VN086279.D	04/15/2025	12:45
VSTDICC020	VSTDICC020	VN086280.D	04/15/2025	13:09
VSTDICCC050	VSTDICCC050	VN086281.D	04/15/2025	13:51
VSTDICC100	VSTDICC100	VN086282.D	04/15/2025	14:29

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG NO.: Q1812

Lab File ID: VN086285.D BFB Injection Date: 04/16/2025

Instrument ID: MSVOA_N BFB Injection Time: 08:38

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	19.5
75	30.0 - 60.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.4 (0.6) 1
174	50.0 - 100.0% of mass 95	69.1
175	5.0 - 9.0% of mass 174	5.1 (7.4) 1
176	95.0 - 101.0% of mass 174	67.2 (97.3) 1
177	5.0 - 9.0% of mass 176	4.2 (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:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN086286.D	04/16/2025	09:14
VN0416WBL01	VN0416WBL01	VN086288.D	04/16/2025	10:12
VN0416WBS01	VN0416WBS01	VN086289.D	04/16/2025	11:52
VN0416WBSD01	VN0416WBSD01	VN086292.D	04/16/2025	13:14
RINSE-EB-TANK-041525	Q1812-02	VN086293.D	04/16/2025	13:38
RINSE-EB-PUMP-041525	Q1812-03	VN086294.D	04/16/2025	14:02
TB01-041525	Q1812-01	VN086295.D	04/16/2025	14:26

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG NO.: Q1812

Lab File ID: VN086286.D Date Analyzed: 04/16/2025

Instrument ID: MSVOA_N Time Analyzed: 09:14

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	235673	8.22	430893	9.09	383563	11.87
UPPER LIMIT	471346	8.724	861786	9.594	767126	12.365
LOWER LIMIT	117837	7.724	215447	8.594	191782	11.365
EPA SAMPLE NO.						
TB01-041525	185374	8.22	360844	9.10	336378	11.87
RINSE-EB-TANK-041525	187101	8.22	358779	9.10	327128	11.87
RINSE-EB-PUMP-041525	180932	8.22	354597	9.10	332731	11.87
VN0416WBL01	215943	8.22	412690	9.10	374988	11.87
VN0416WBS01	282564	8.22	522491	9.09	460155	11.87
VN0416WBSD01	223172	8.22	407332	9.10	359125	11.87

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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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG NO.: Q1812

Lab File ID: VN086286.D Date Analyzed: 04/16/2025

Instrument ID: MSVOA_N Time Analyzed: 09:14

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

	IS4 AREA #	RT #				
12 HOUR STD	177295	13.788				
UPPER LIMIT	354590	14.288				
LOWER LIMIT	88647.5	13.288				
EPA SAMPLE NO.						
TB01-041525	145687	13.79				
RINSE-EB-TANK-041525	145489	13.79				
RINSE-EB-PUMP-041525	151028	13.79				
VN0416WBL01	162383	13.79				
VN0416WBS01	208645	13.79				
VN0416WBSD01	160957	13.79				

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: **VN086295.D**

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Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	TB01-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086295.D	1		04/16/25 14:26	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.22	U	0.22	1.00	ug/L
74-87-3	Chloromethane	0.32	U	0.32	1.00	ug/L
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.47	U	0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.33	U	0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
67-64-1	Acetone	1.50	U	1.50	5.00	ug/L
75-15-0	Carbon Disulfide	0.21	U	0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.27	U	0.27	1.00	ug/L
75-09-2	Methylene Chloride	0.28	U	0.28	1.00	ug/L
156-60-5	trans-1,2-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
110-82-7	Cyclohexane	1.50	U	1.50	5.00	ug/L
78-93-3	2-Butanone	0.98	U	0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
74-97-5	Bromochloromethane	0.22	U	0.22	1.00	ug/L
67-66-3	Chloroform	0.25	U	0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
108-87-2	Methylcyclohexane	0.16	U	0.16	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
78-87-5	1,2-Dichloropropane	0.20	U	0.20	1.00	ug/L
75-27-4	Bromodichloromethane	0.22	U	0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.68	U	0.68	5.00	ug/L
108-88-3	Toluene	0.14	U	0.14	1.00	ug/L

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Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	TB01-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086295.D	1		04/16/25 14:26	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.17	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.16	U	0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	0.89	U	0.89	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.15	U	0.15	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	0.13	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	0.24	U	0.24	2.00	ug/L
95-47-6	o-Xylene	0.12	U	0.12	1.00	ug/L
100-42-5	Styrene	0.15	U	0.15	1.00	ug/L
75-25-2	Bromoform	0.19	U	0.19	1.00	ug/L
98-82-8	Isopropylbenzene	0.12	U	0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.0		70 (74) - 130 (125)	100%	SPK: 50
1868-53-7	Dibromofluoromethane	55.1		70 (75) - 130 (124)	110%	SPK: 50
2037-26-5	Toluene-d8	51.3		70 (86) - 130 (113)	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.3		70 (77) - 130 (121)	103%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	185000	8.224			
540-36-3	1,4-Difluorobenzene	361000	9.1			
3114-55-4	Chlorobenzene-d5	336000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	146000	13.788			

Raw Data: **VN086295.D**

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Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	TB01-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086295.D	1		04/16/25 14:26	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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\VN041625\
Data File : VN086295.D
Acq On : 16 Apr 2025 14:26
Operator : JC\MD
Sample : Q1812-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Quant Time: Apr 17 03:07:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

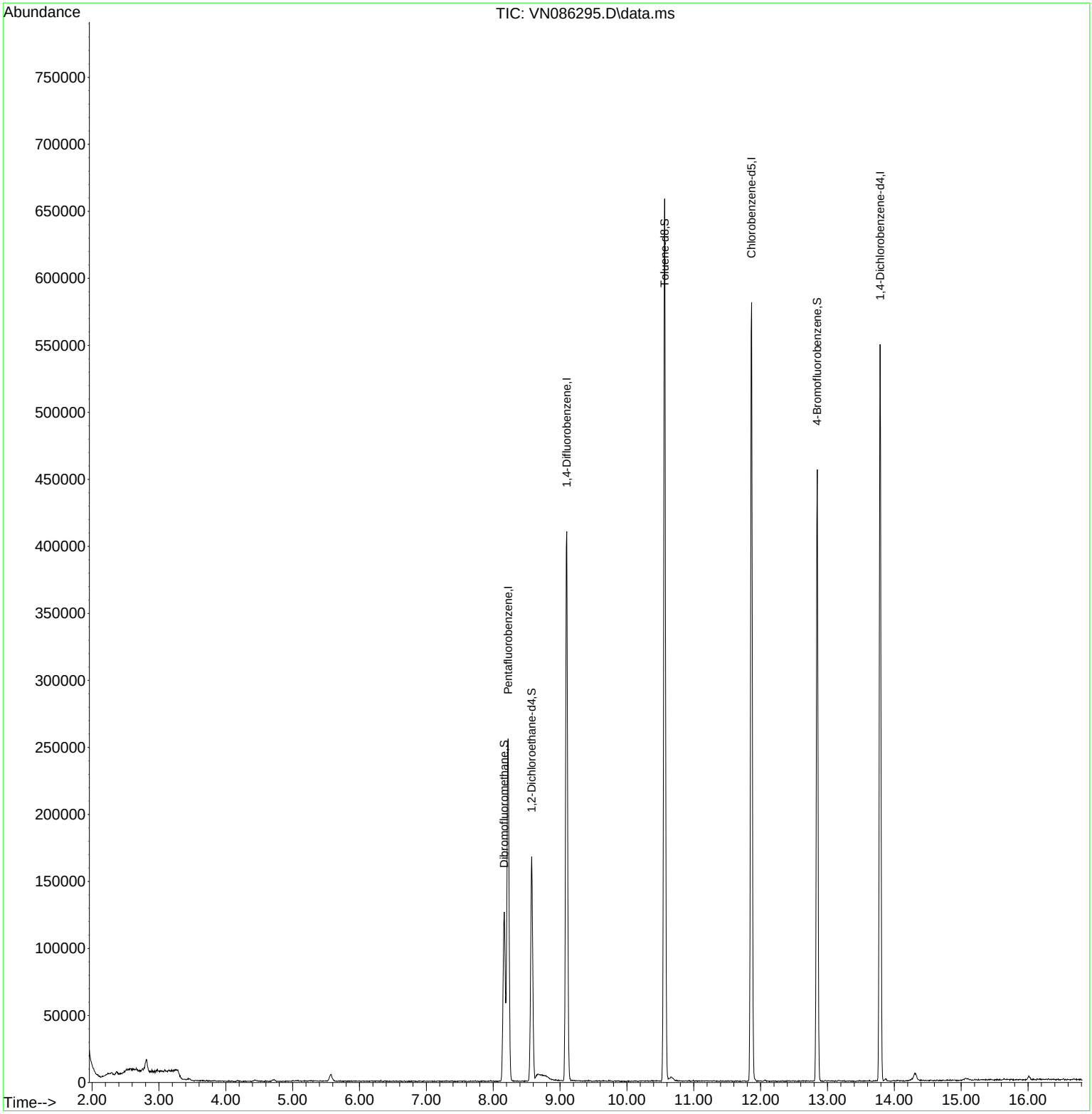
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	185374	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	360844	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	336378	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	145687	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	134272	49.951	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 99.900%			
35) Dibromofluoromethane	8.165	113	92292	55.109	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 110.220%			
50) Toluene-d8	10.565	98	459007	51.283	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.560%			
62) 4-Bromofluorobenzene	12.847	95	167350	51.261	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 102.520%			
Target Compounds						Qvalue

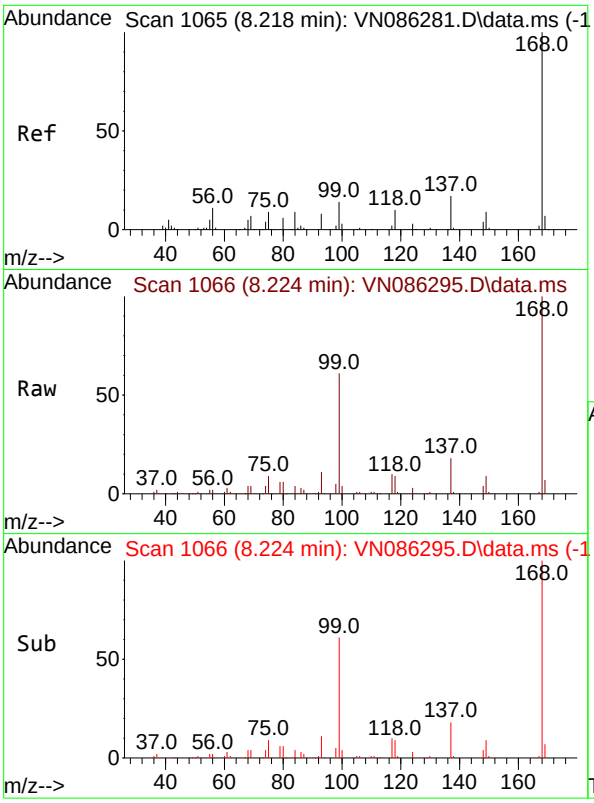
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086295.D
Acq On : 16 Apr 2025 14:26
Operator : JC\MD
Sample : Q1812-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Quant Time: Apr 17 03:07:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration



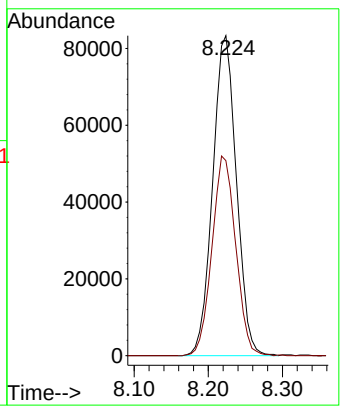


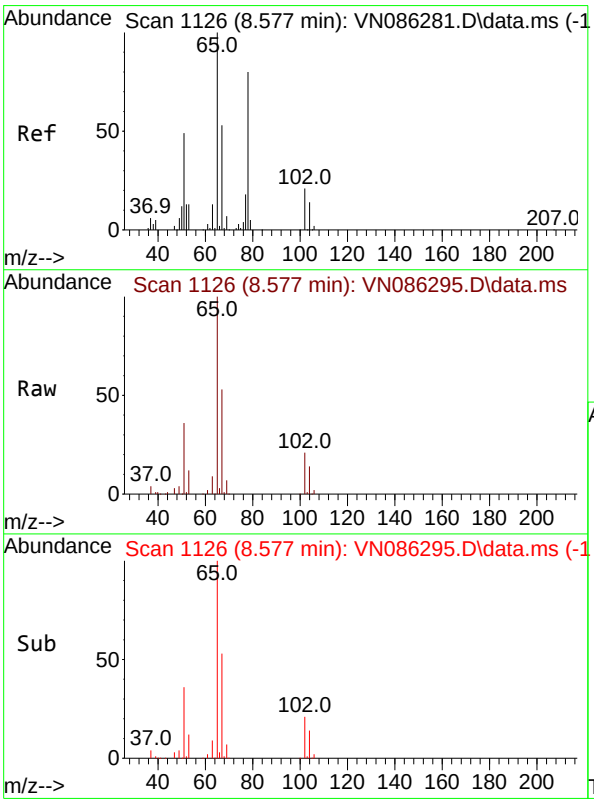
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086295.D
Acq: 16 Apr 2025 14:26

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Tgt Ion:168 Resp: 185374

Ion	Ratio	Lower	Upper
168	100		
99	60.9	52.5	78.7

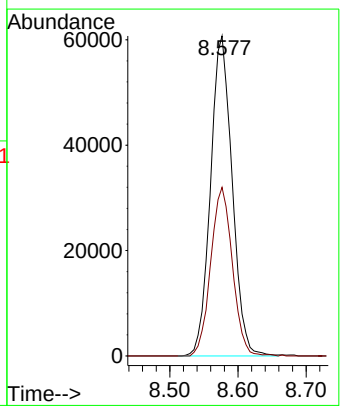


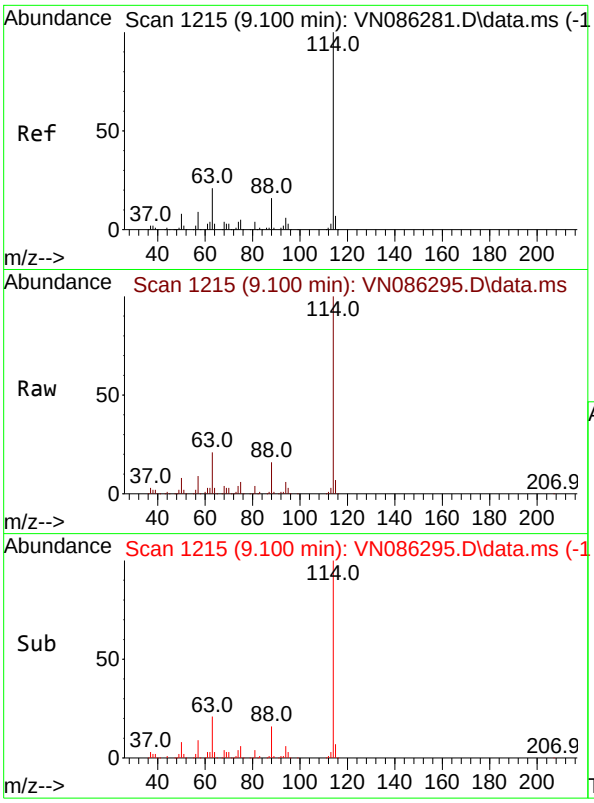


#33
1,2-Dichloroethane-d4
Concen: 49.951 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. -0.000 min
Lab File: VN086295.D
Acq: 16 Apr 2025 14:26

Tgt Ion: 65 Resp: 134272

Ion	Ratio	Lower	Upper
65	100		
67	52.7	0.0	106.0



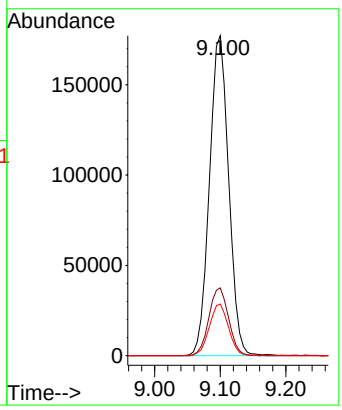


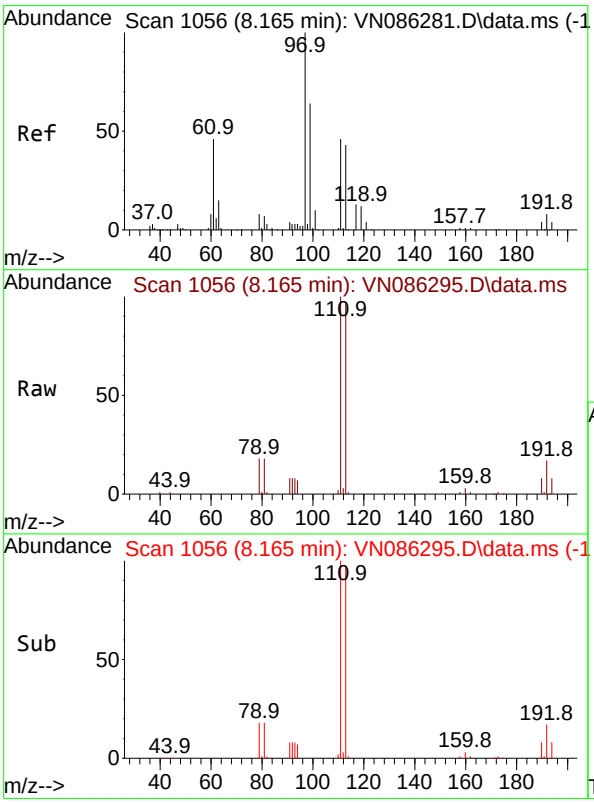
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086295.D
Acq: 16 Apr 2025 14:26

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Tgt Ion:114 Resp: 360844

Ion	Ratio	Lower	Upper
114	100		
63	21.2	0.0	42.6
88	16.1	0.0	31.8

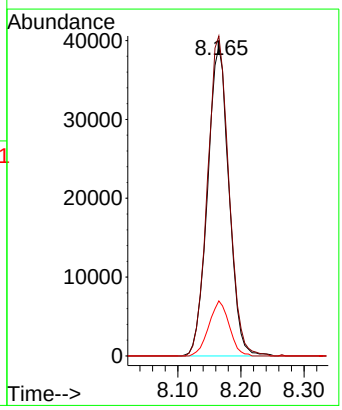


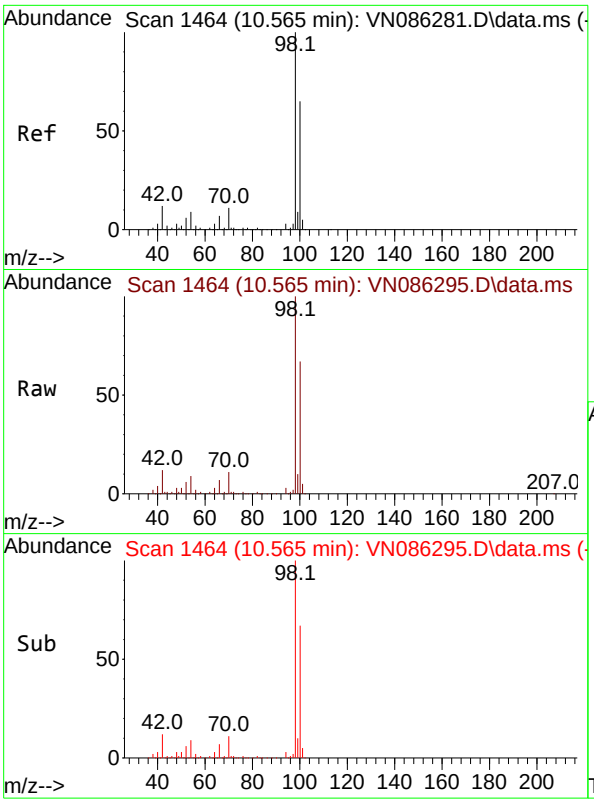


#35
Dibromofluoromethane
Concen: 55.109 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN086295.D
Acq: 16 Apr 2025 14:26

Tgt Ion:113 Resp: 92292

Ion	Ratio	Lower	Upper
113	100		
111	103.6	83.4	125.0
192	17.0	13.7	20.5



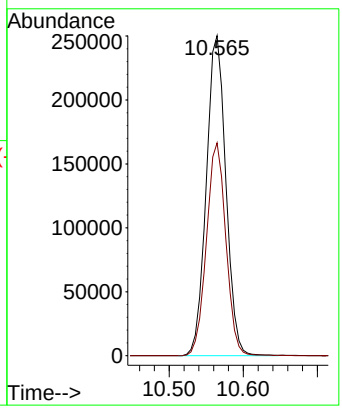


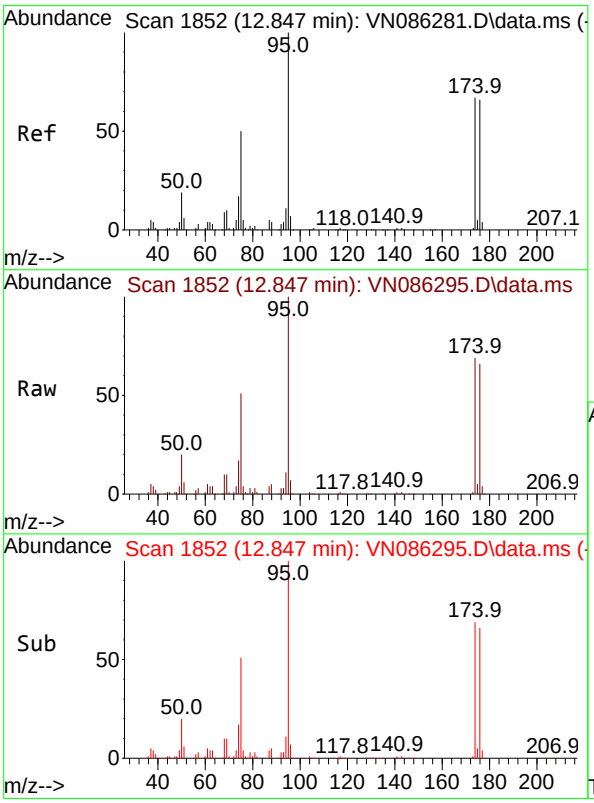
#50
Toluene-d8
Concen: 51.283 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086295.D
Acq: 16 Apr 2025 14:26

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Tgt Ion: 98 Resp: 459007

Ion	Ratio	Lower	Upper
98	100		
100	65.9	52.5	78.7

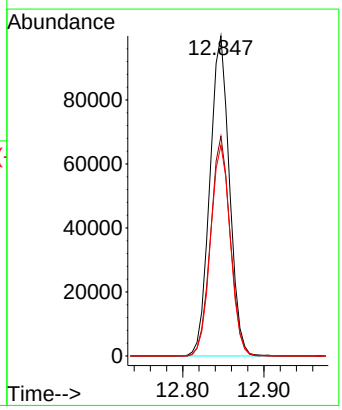


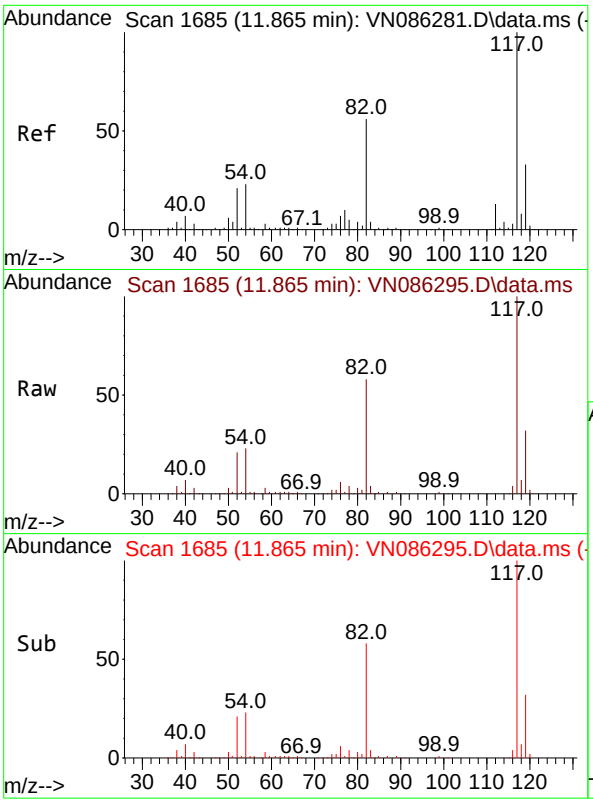


#62
4-Bromofluorobenzene
Concen: 51.261 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086295.D
Acq: 16 Apr 2025 14:26

Tgt Ion: 95 Resp: 167350

Ion	Ratio	Lower	Upper
95	100		
174	68.7	0.0	133.4
176	66.4	0.0	129.2



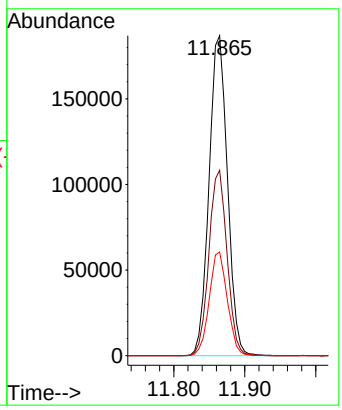


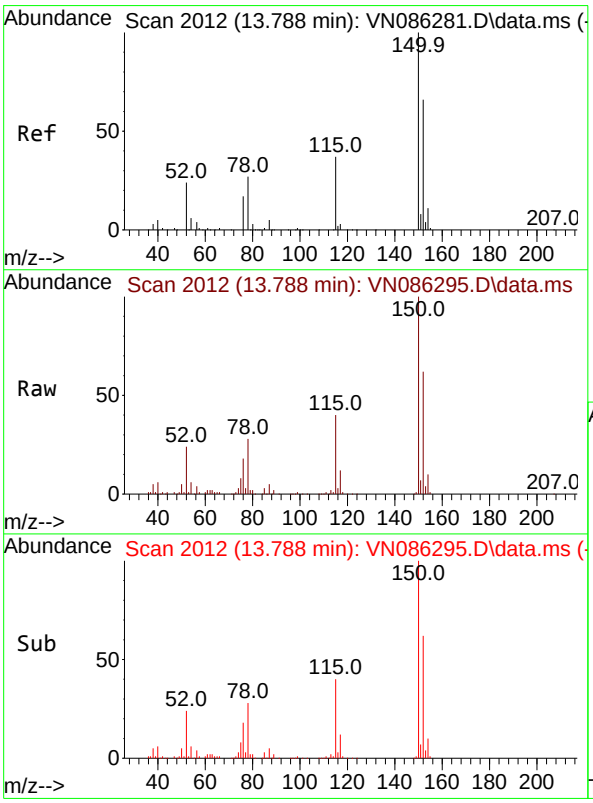
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086295.D
Acq: 16 Apr 2025 14:26

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Tgt Ion:117 Resp: 336378

Ion	Ratio	Lower	Upper
117	100		
82	57.9	44.7	67.1
119	32.4	26.4	39.6

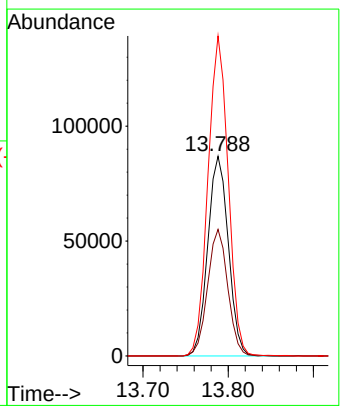




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN086295.D
Acq: 16 Apr 2025 14:26

Tgt Ion:152 Resp: 145687

Ion	Ratio	Lower	Upper
152	100		
115	62.2	31.9	95.9
150	157.6	0.0	352.0



Sample Results: **VN086295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086295.D
Acq On : 16 Apr 2025 14:26
Operator : JC\MD
Sample : Q1812-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Title : SW846 8260

Signal : TIC: VN086295.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.812	138	146	153	rVB2	9232	23216	1.92%	0.386%
2	5.577	607	616	623	rBV3	5021	13987	1.16%	0.232%
3	8.165	1047	1056	1060	rBV	126246	290570	24.02%	4.825%
4	8.224	1060	1066	1075	rVB	255075	567524	46.92%	9.424%
5	8.577	1115	1126	1134	rBV	167459	367430	30.38%	6.102%
6	9.100	1206	1215	1225	rVB	409904	833671	68.92%	13.844%
7	10.565	1455	1464	1473	rBV	658529	1209545	100.00%	20.086%
8	11.865	1676	1685	1698	rVB	581366	1039231	85.92%	17.258%
9	12.847	1845	1852	1863	rVB	456567	763656	63.14%	12.681%
10	13.788	2005	2012	2020	rBV	549666	913031	75.49%	15.162%

Sum of corrected areas: 6021861

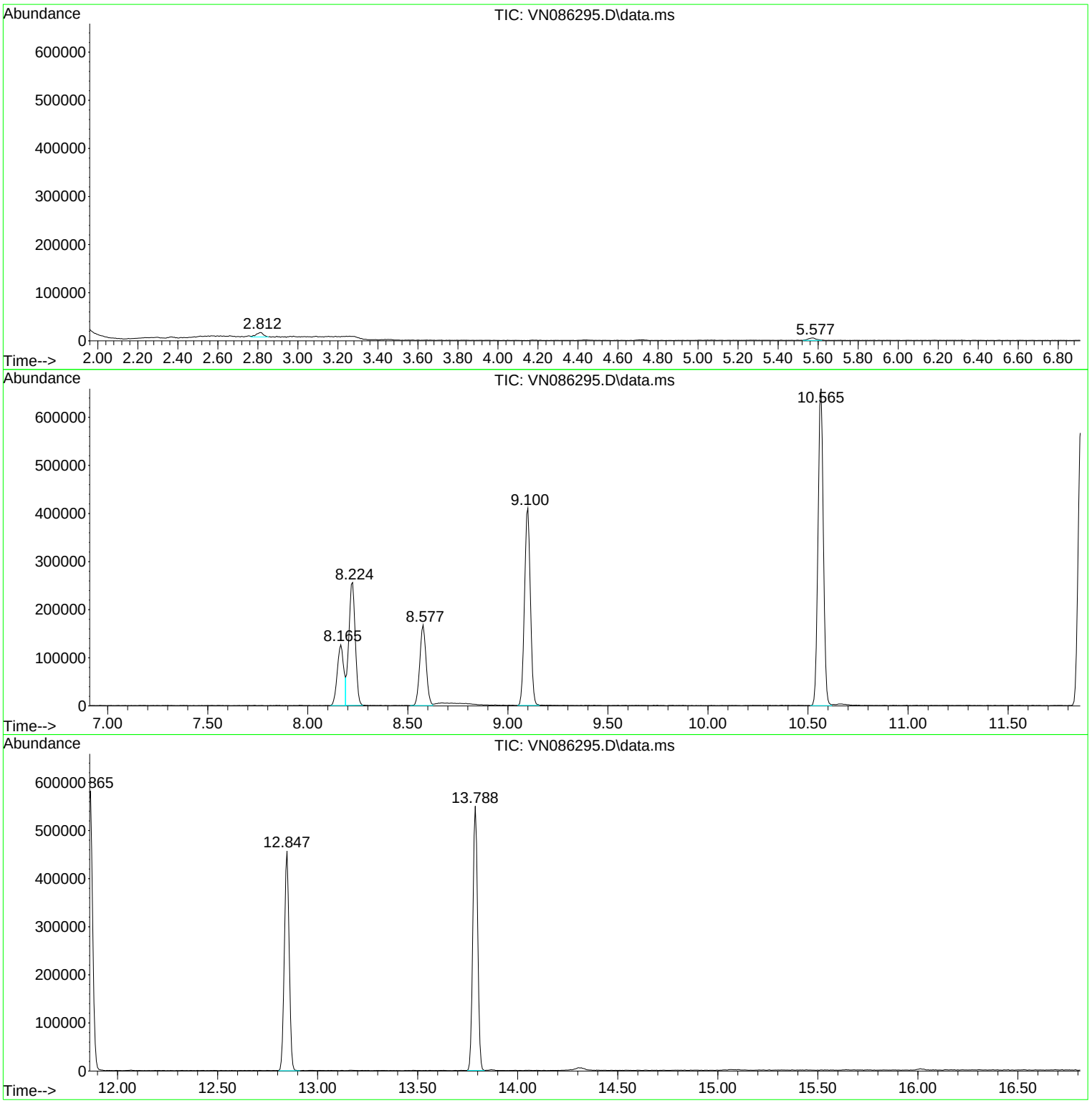
Sample Results: **VN086295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086295.D
Acq On : 16 Apr 2025 14:26
Operator : JC\MD
Sample : Q1812-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086295.D
Acq On : 16 Apr 2025 14:26
Operator : JC\MD
Sample : Q1812-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086295.D
Acq On : 16 Apr 2025 14:26
Operator : JC\MD
Sample : Q1812-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB01-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Raw Data: **VN086293.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:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-TANK-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086293.D	1		04/16/25 13:38	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.22	U	0.22	1.00	ug/L
74-87-3	Chloromethane	0.32	U	0.32	1.00	ug/L
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.47	U	0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.33	U	0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
67-64-1	Acetone	1.50	U	1.50	5.00	ug/L
75-15-0	Carbon Disulfide	0.21	U	0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.27	U	0.27	1.00	ug/L
75-09-2	Methylene Chloride	0.28	U	0.28	1.00	ug/L
156-60-5	trans-1,2-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
110-82-7	Cyclohexane	1.50	U	1.50	5.00	ug/L
78-93-3	2-Butanone	0.98	U	0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
74-97-5	Bromochloromethane	0.22	U	0.22	1.00	ug/L
67-66-3	Chloroform	40.8		0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
108-87-2	Methylcyclohexane	0.16	U	0.16	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
78-87-5	1,2-Dichloropropane	0.20	U	0.20	1.00	ug/L
75-27-4	Bromodichloromethane	10.7		0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.68	U	0.68	5.00	ug/L
108-88-3	Toluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VN086293.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:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-TANK-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086293.D	1		04/16/25 13:38	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.17	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.16	U	0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	0.89	U	0.89	5.00	ug/L
124-48-1	Dibromochloromethane	2.00		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.15	U	0.15	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	0.13	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	0.24	U	0.24	2.00	ug/L
95-47-6	o-Xylene	0.12	U	0.12	1.00	ug/L
100-42-5	Styrene	0.15	U	0.15	1.00	ug/L
75-25-2	Bromoform	0.19	U	0.19	1.00	ug/L
98-82-8	Isopropylbenzene	0.12	U	0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.4		70 (74) - 130 (125)	99%	SPK: 50
1868-53-7	Dibromofluoromethane	53.6		70 (75) - 130 (124)	107%	SPK: 50
2037-26-5	Toluene-d8	50.4		70 (86) - 130 (113)	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		70 (77) - 130 (121)	101%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	187000	8.224			
540-36-3	1,4-Difluorobenzene	359000	9.1			
3114-55-4	Chlorobenzene-d5	327000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	145000	13.788			

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:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-TANK-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086293.D	1		04/16/25 13:38	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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\VN041625\
Data File : VN086293.D
Acq On : 16 Apr 2025 13:38
Operator : JC\MD
Sample : Q1812-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Quant Time: Apr 17 03:06:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

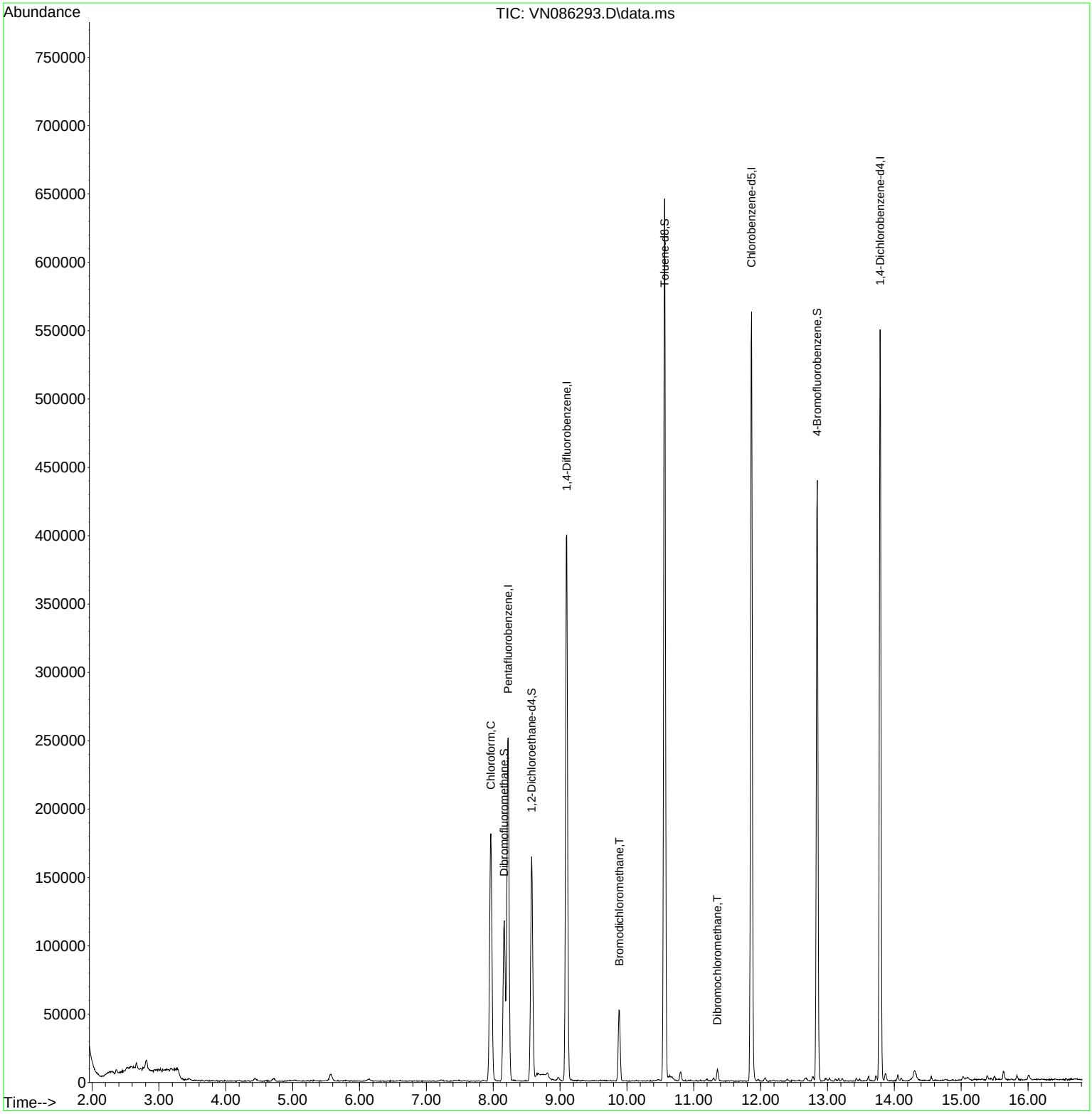
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	187101	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	358779	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	327128	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	145489	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	133897	49.351	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 98.700%			
35) Dibromofluoromethane	8.165	113	89240	53.593	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 107.180%			
50) Toluene-d8	10.565	98	448849	50.436	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.880%			
62) 4-Bromofluorobenzene	12.847	95	163259	50.296	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 100.600%			
Target Compounds						Qvalue
30) Chloroform	7.965	83	180293	40.846	ug/l	99
47) Bromodichloromethane	9.888	83	38322	10.676	ug/l	95
60) Dibromochloromethane	11.353	129	5154	1.962	ug/l	98

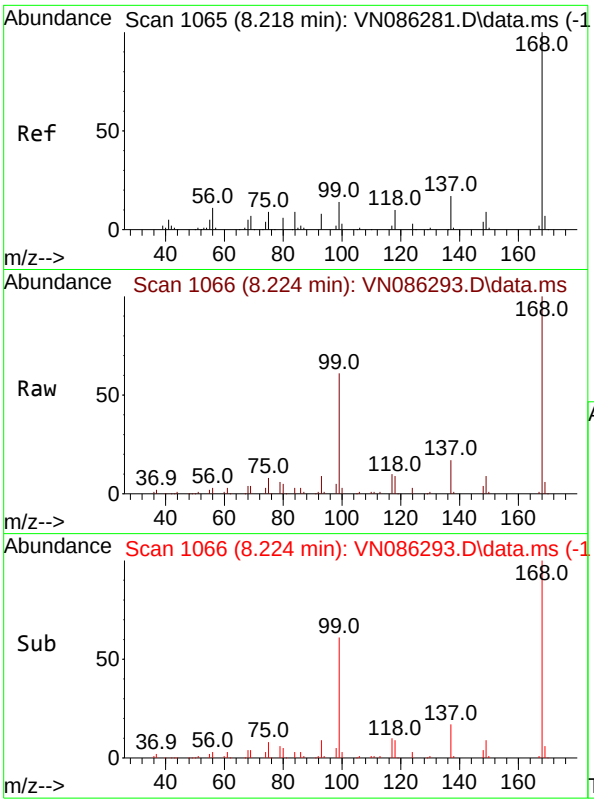
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086293.D
Acq On : 16 Apr 2025 13:38
Operator : JC\MD
Sample : Q1812-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Quant Time: Apr 17 03:06:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration



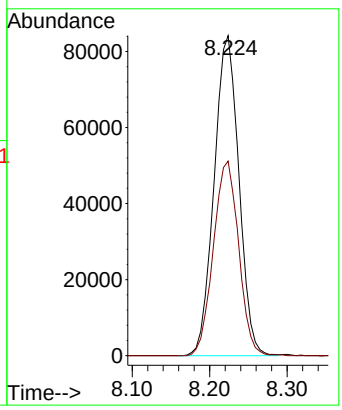


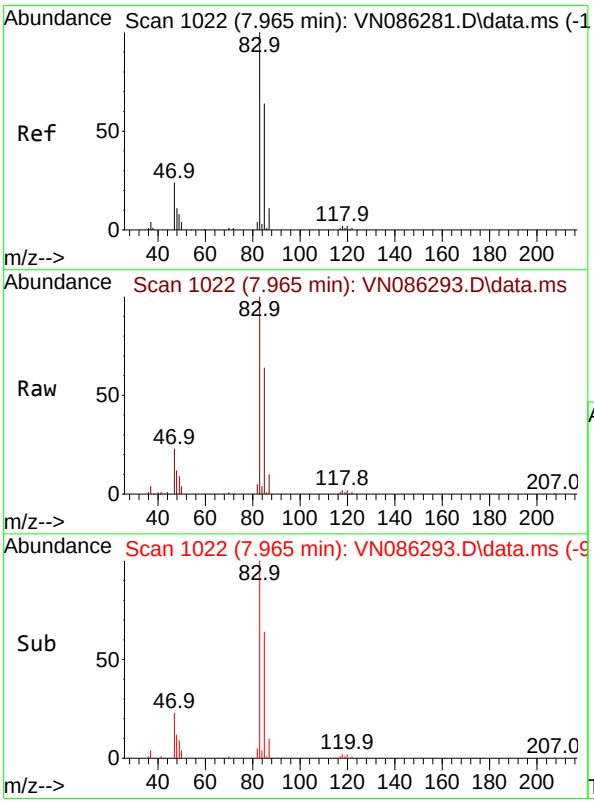
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Tgt Ion:168 Resp: 187101

Ion	Ratio	Lower	Upper
168	100		
99	60.8	52.5	78.7

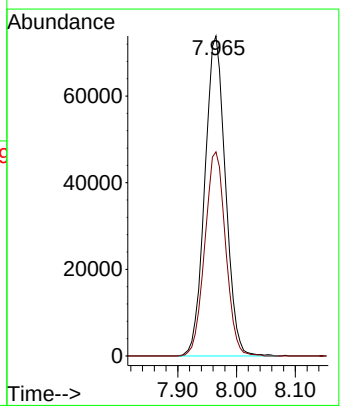


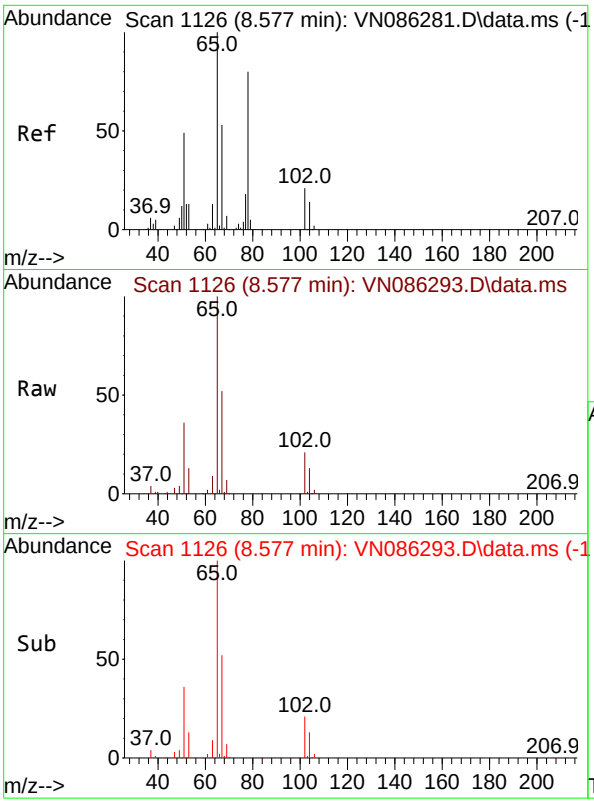


#30
Chloroform
Concen: 40.846 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Tgt Ion: 83 Resp: 180293

Ion	Ratio	Lower	Upper
83	100		
85	63.8	51.5	77.3



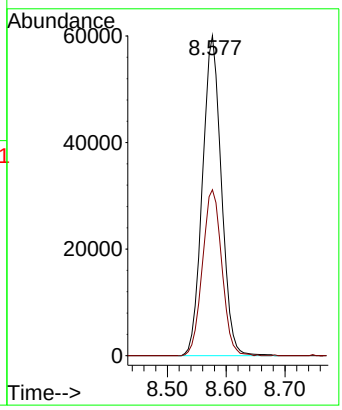


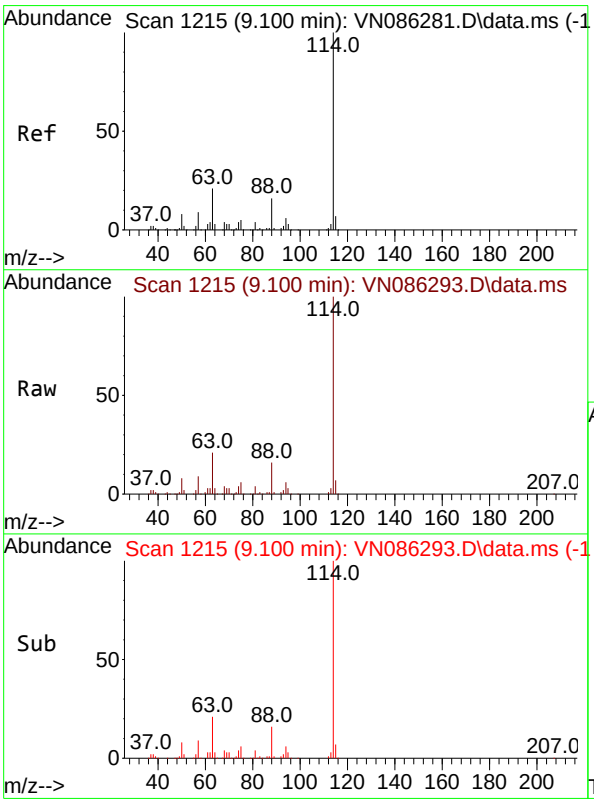
#33
1,2-Dichloroethane-d4
Concen: 49.351 ug/l
RT: 8.577 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Tgt Ion: 65 Resp: 133897

Ion	Ratio	Lower	Upper
65	100		
67	53.2	0.0	106.0

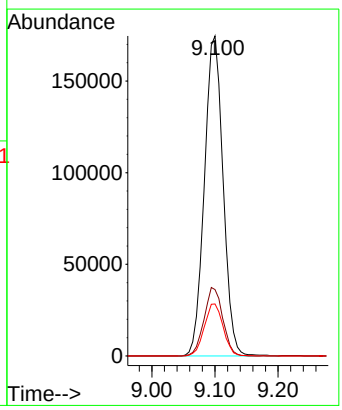


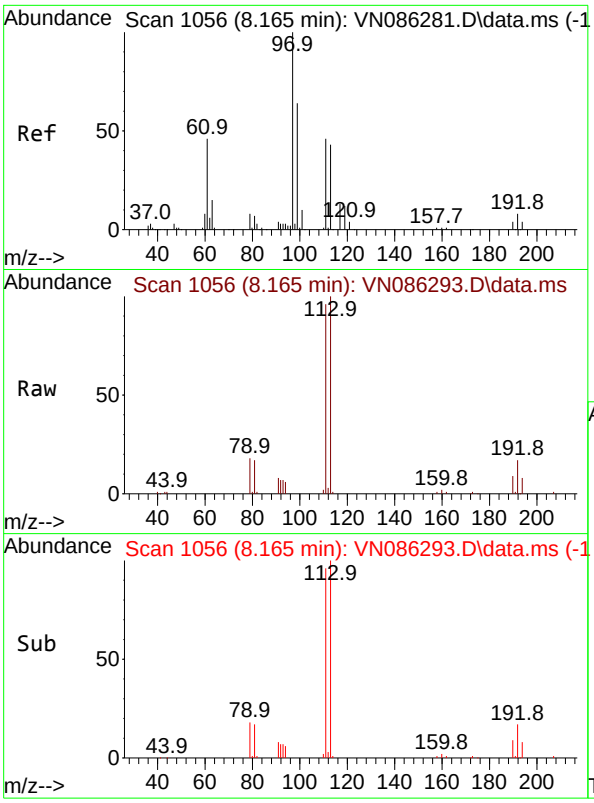


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Tgt Ion:114 Resp: 358779

Ion	Ratio	Lower	Upper
114	100		
63	20.7	0.0	42.6
88	16.2	0.0	31.8



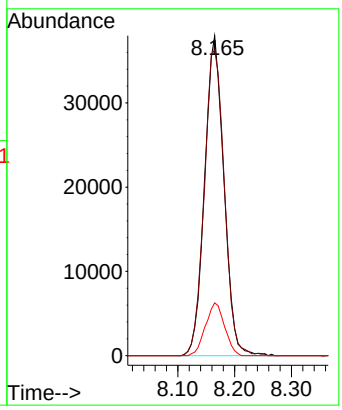


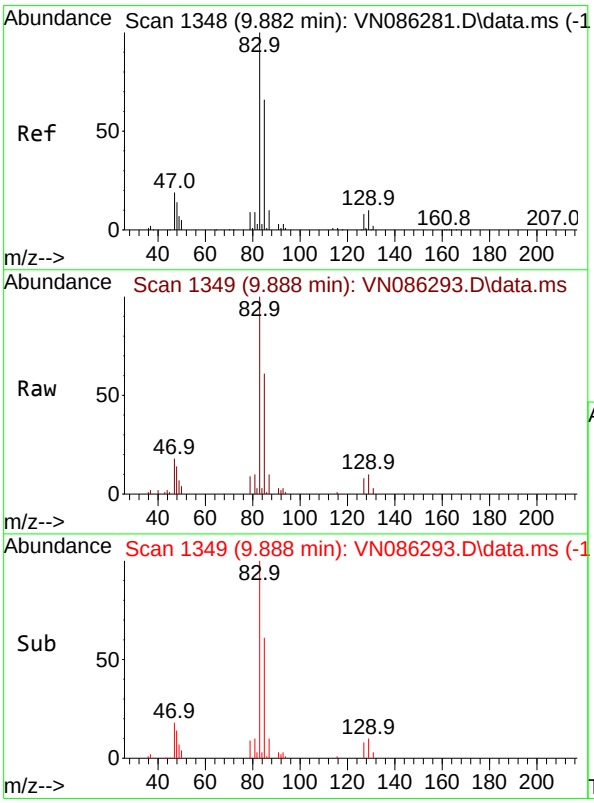
#35
Dibromofluoromethane
Concen: 53.593 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Tgt Ion:113 Resp: 89240

Ion	Ratio	Lower	Upper
113	100		
111	100.4	83.4	125.0
192	16.4	13.7	20.5

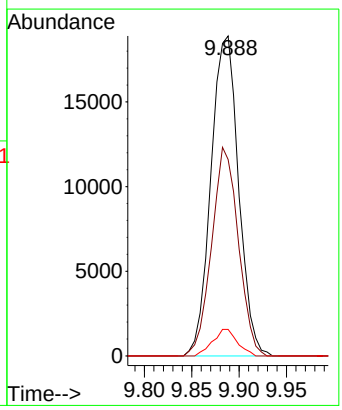


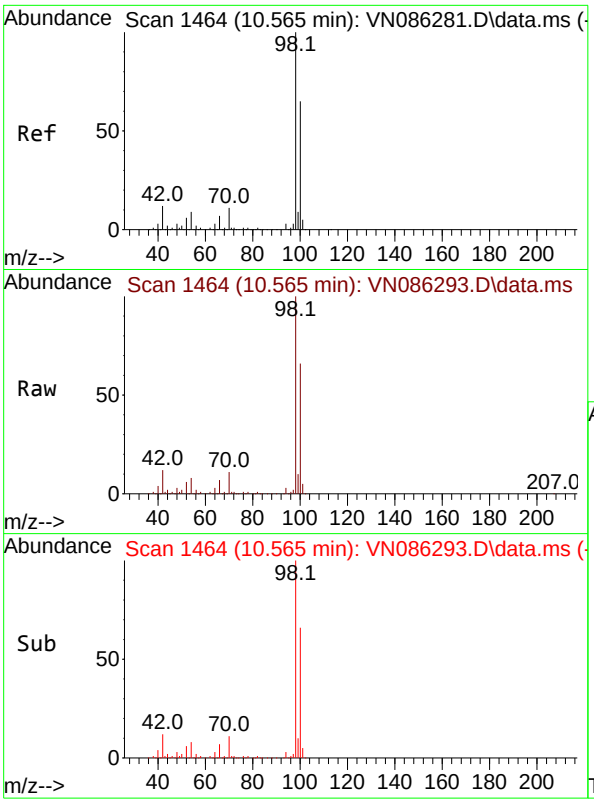


#47
Bromodichloromethane
Concen: 10.676 ug/l
RT: 9.888 min Scan# 1349
Delta R.T. 0.006 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Tgt Ion: 83 Resp: 38322

Ion	Ratio	Lower	Upper
83	100		
85	61.4	52.6	78.8
127	8.3	6.1	9.1



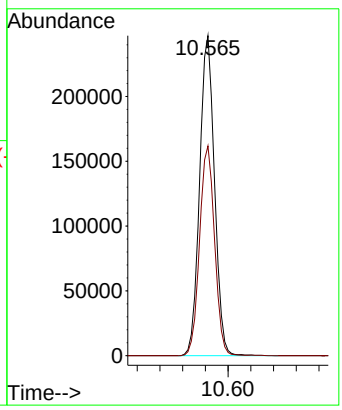


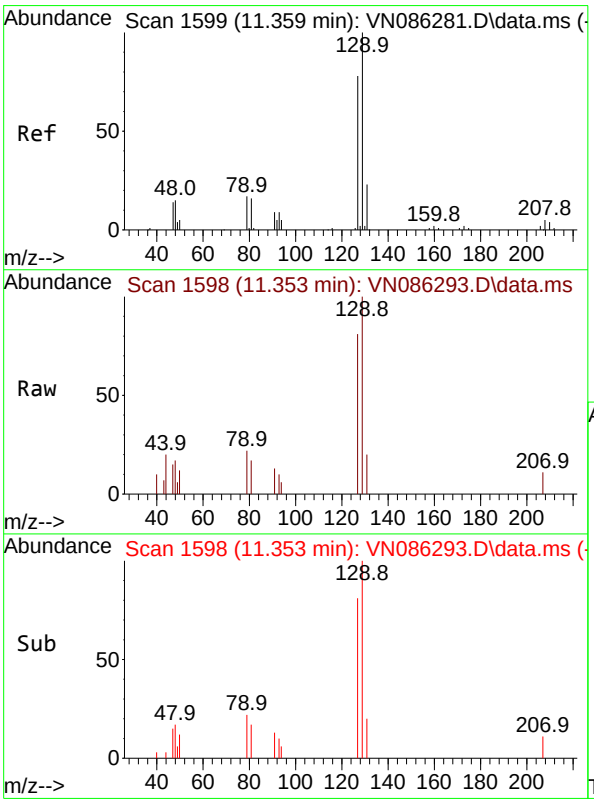
#50
Toluene-d8
Concen: 50.436 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Tgt Ion: 98 Resp: 448849

Ion	Ratio	Lower	Upper
98	100		
100	65.9	52.5	78.7

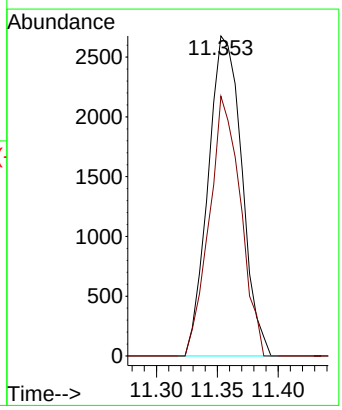


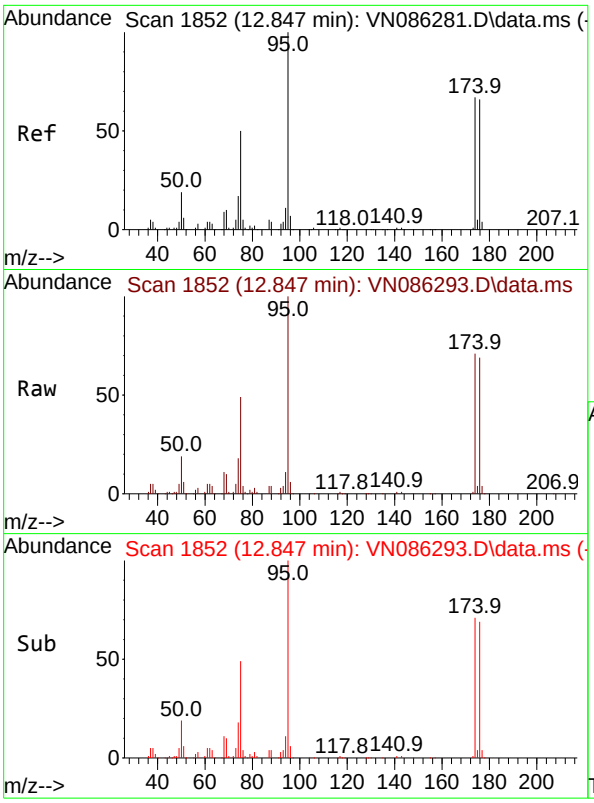


#60
Dibromochloromethane
Concen: 1.962 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.006 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Tgt Ion:129 Resp: 5154

Ion	Ratio	Lower	Upper
129	100		
127	75.3	38.7	116.1



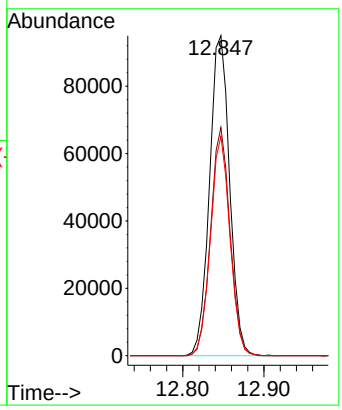


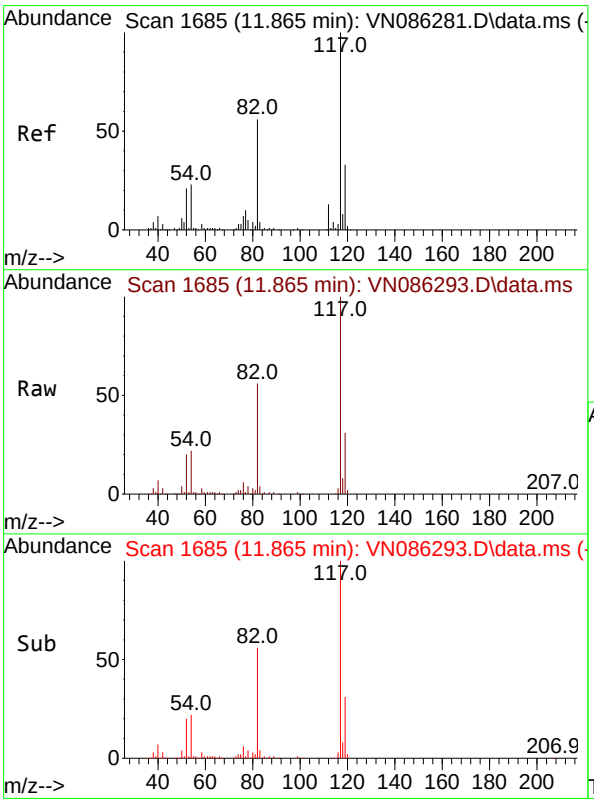
#62
4-Bromofluorobenzene
Concen: 50.296 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Tgt Ion: 95 Resp: 163259

Ion	Ratio	Lower	Upper
95	100		
174	68.9	0.0	133.4
176	66.3	0.0	129.2

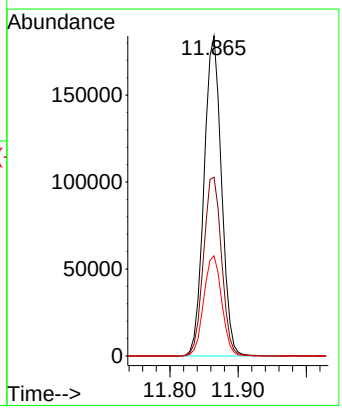


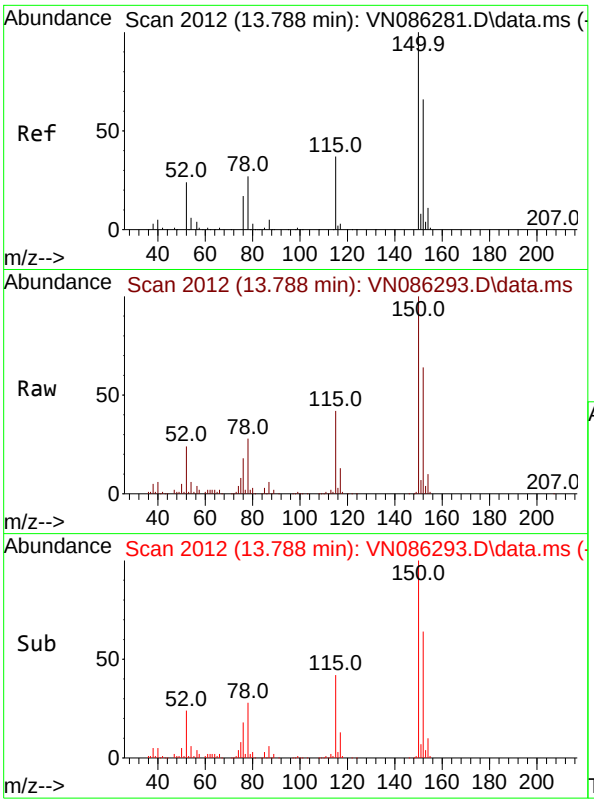


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Tgt Ion:117 Resp: 327128

Ion	Ratio	Lower	Upper
117	100		
82	55.8	44.7	67.1
119	31.3	26.4	39.6



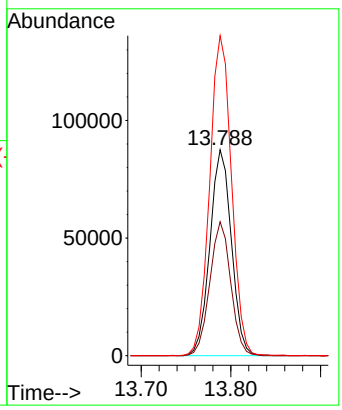


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086293.D
Acq: 16 Apr 2025 13:38

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Tgt Ion:152 Resp: 145489

Ion	Ratio	Lower	Upper
152	100		
115	63.4	31.9	95.9
150	157.7	0.0	352.0



Sample Results: **VN086293.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086293.D
Acq On : 16 Apr 2025 13:38
Operator : JC\MD
Sample : Q1812-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Title : SW846 8260

Signal : TIC: VN086293.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.812	141	146	154	rVB	7447	17111	1.45%	0.262%
2	7.965	1012	1022	1036	rBV	181113	443935	37.55%	6.792%
3	8.165	1046	1056	1060	rBV	117592	276919	23.42%	4.237%
4	8.224	1060	1066	1075	rVB	250735	565379	47.82%	8.650%
5	8.577	1116	1126	1135	rBV	164303	370581	31.35%	5.670%
6	9.100	1204	1215	1226	rBV	399533	830352	70.24%	12.704%
7	9.882	1340	1348	1359	rBV	52081	105568	8.93%	1.615%
8	10.565	1455	1464	1472	rBV	645058	1182204	100.00%	18.087%
9	10.806	1496	1505	1512	rBV3	6719	13684	1.16%	0.209%
10	11.353	1593	1598	1604	rVB	8608	14218	1.20%	0.218%
11	11.865	1677	1685	1698	rBV	562779	1023147	86.55%	15.654%
12	12.847	1845	1852	1861	rVB	439783	746000	63.10%	11.413%
13	13.788	2005	2012	2021	rVV	549695	916177	77.50%	14.017%
14	14.306	2082	2100	2113	rBV7	7700	30919	2.62%	0.473%

Sum of corrected areas: 6536194

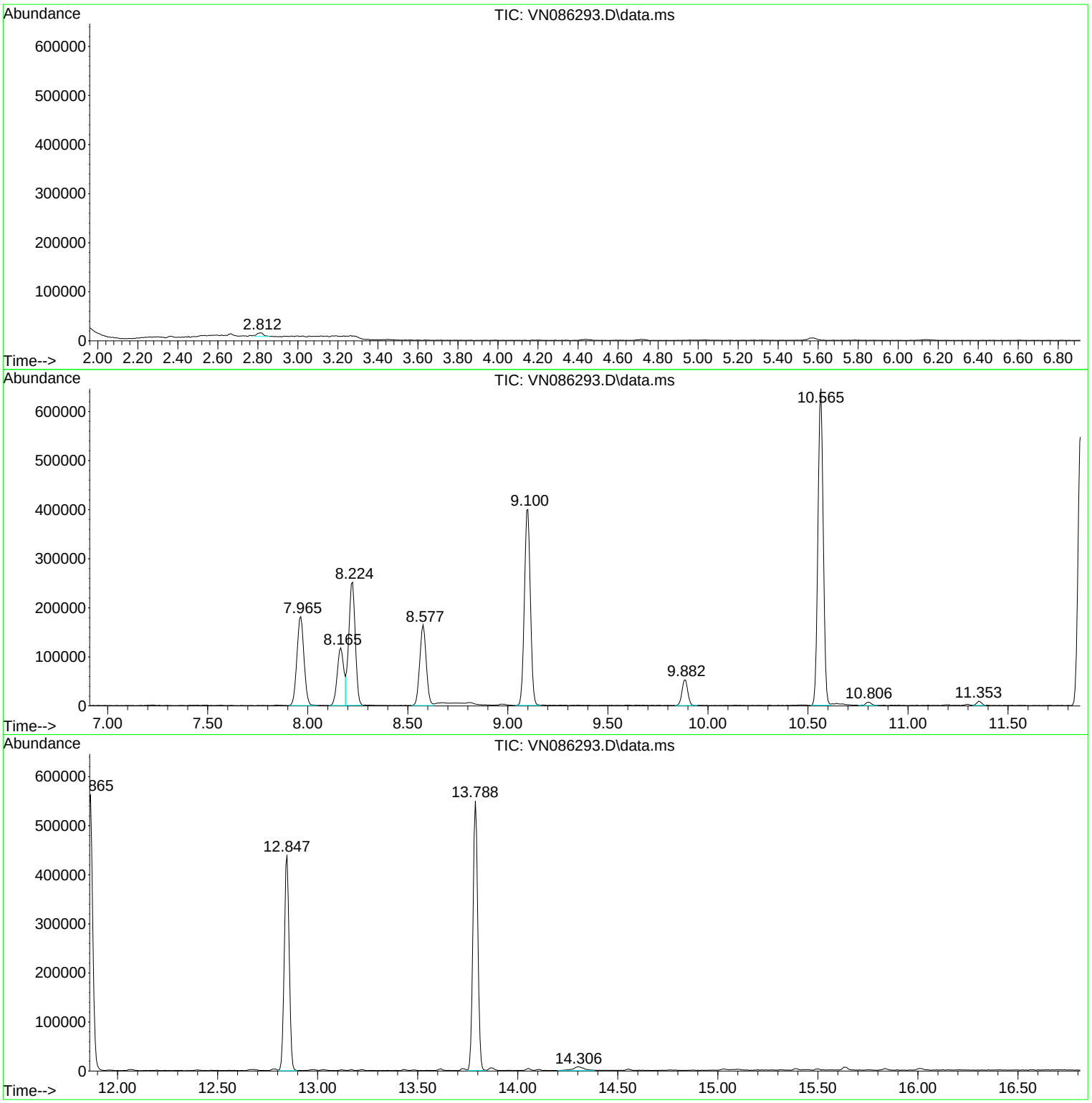
Sample Results: **VN086293.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086293.D
Acq On : 16 Apr 2025 13:38
Operator : JC\MD
Sample : Q1812-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086293.D
Acq On : 16 Apr 2025 13:38
Operator : JC\MD
Sample : Q1812-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086293.D
Acq On : 16 Apr 2025 13:38
Operator : JC\MD
Sample : Q1812-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-TANK-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Raw Data: **VN086294.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:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-PUMP-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086294.D	1		04/16/25 14:02	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.22	U	0.22	1.00	ug/L
74-87-3	Chloromethane	0.32	U	0.32	1.00	ug/L
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.47	U	0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.33	U	0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
67-64-1	Acetone	1.50	U	1.50	5.00	ug/L
75-15-0	Carbon Disulfide	0.21	U	0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.27	U	0.27	1.00	ug/L
75-09-2	Methylene Chloride	0.28	U	0.28	1.00	ug/L
156-60-5	trans-1,2-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
110-82-7	Cyclohexane	1.50	U	1.50	5.00	ug/L
78-93-3	2-Butanone	0.98	U	0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
74-97-5	Bromochloromethane	0.22	U	0.22	1.00	ug/L
67-66-3	Chloroform	39.5		0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
108-87-2	Methylcyclohexane	0.16	U	0.16	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
78-87-5	1,2-Dichloropropane	0.20	U	0.20	1.00	ug/L
75-27-4	Bromodichloromethane	10.4		0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.68	U	0.68	5.00	ug/L
108-88-3	Toluene	0.14	U	0.14	1.00	ug/L

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:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-PUMP-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086294.D	1		04/16/25 14:02	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.17	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.16	U	0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	0.89	U	0.89	5.00	ug/L
124-48-1	Dibromochloromethane	1.80		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.15	U	0.15	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	0.13	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	0.24	U	0.24	2.00	ug/L
95-47-6	o-Xylene	0.12	U	0.12	1.00	ug/L
100-42-5	Styrene	0.15	U	0.15	1.00	ug/L
75-25-2	Bromoform	0.19	U	0.19	1.00	ug/L
98-82-8	Isopropylbenzene	0.12	U	0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.3		70 (74) - 130 (125)	101%	SPK: 50
1868-53-7	Dibromofluoromethane	53.7		70 (75) - 130 (124)	107%	SPK: 50
2037-26-5	Toluene-d8	51.0		70 (86) - 130 (113)	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.2		70 (77) - 130 (121)	104%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	181000	8.218			
540-36-3	1,4-Difluorobenzene	355000	9.1			
3114-55-4	Chlorobenzene-d5	333000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	151000	13.788			

Raw Data: **VN086294.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:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-PUMP-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086294.D	1		04/16/25 14:02	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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\VN041625\
Data File : VN086294.D
Acq On : 16 Apr 2025 14:02
Operator : JC\MD
Sample : Q1812-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Quant Time: Apr 17 03:07:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

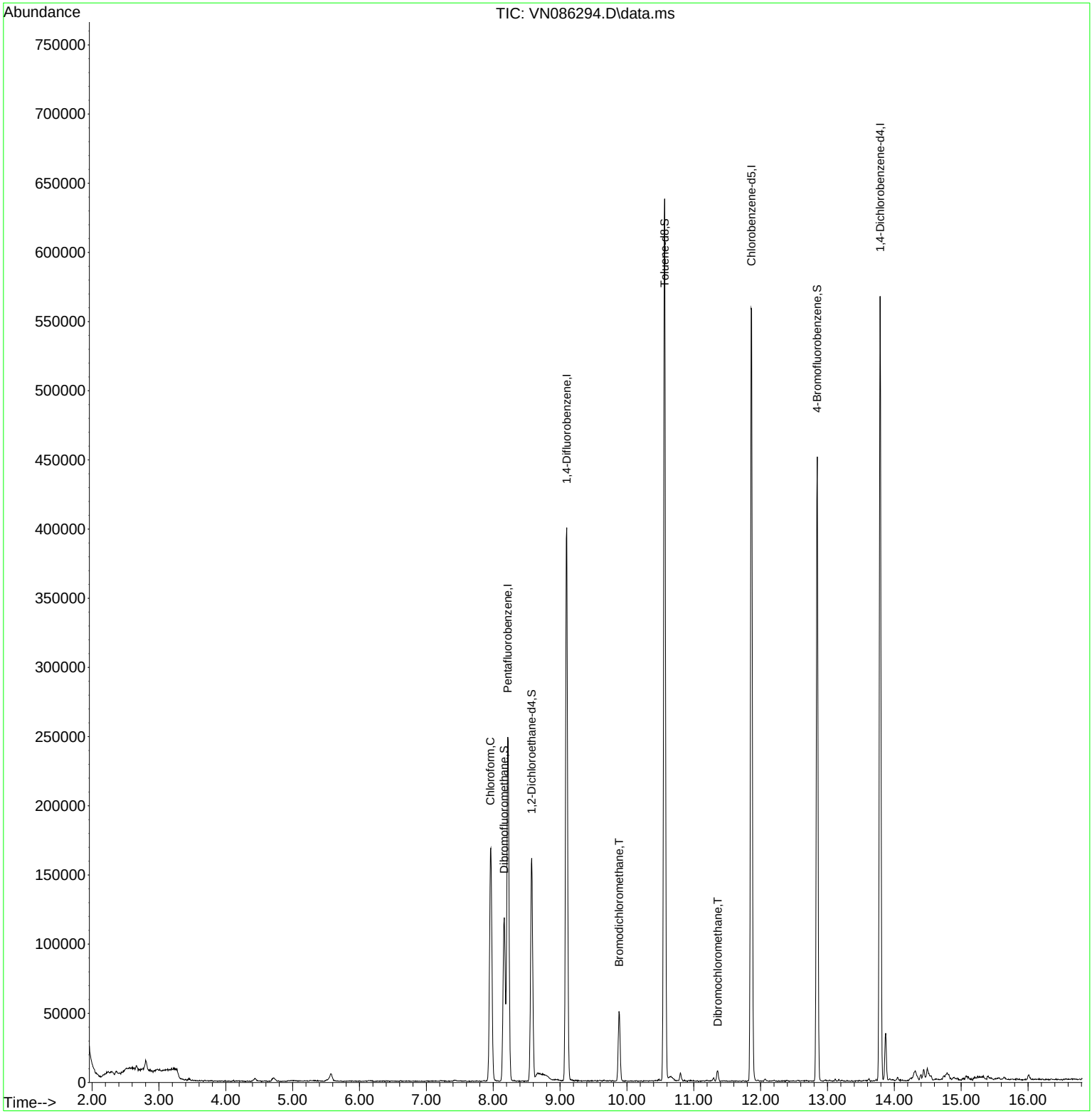
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	180932	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	354597	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	332731	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	151028	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	132021	50.319	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 100.640%			
35) Dibromofluoromethane	8.165	113	88424	53.729	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 107.460%			
50) Toluene-d8	10.565	98	448820	51.028	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.060%			
62) 4-Bromofluorobenzene	12.847	95	167466	52.201	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 104.400%			
Target Compounds						Qvalue
30) Chloroform	7.959	83	168726	39.529	ug/l	97
47) Bromodichloromethane	9.882	83	36894	10.400	ug/l	93
60) Dibromochloromethane	11.359	129	4725	1.820	ug/l	97

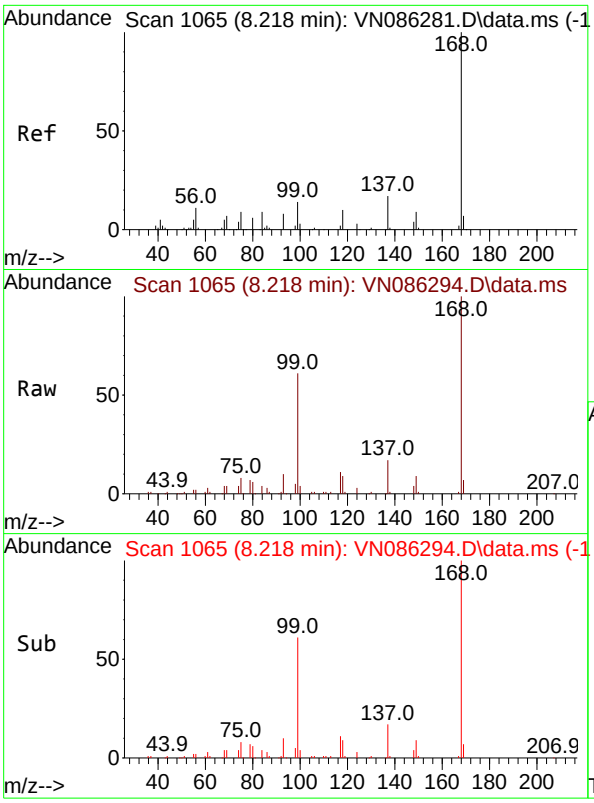
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086294.D
Acq On : 16 Apr 2025 14:02
Operator : JC\MD
Sample : Q1812-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Quant Time: Apr 17 03:07:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration



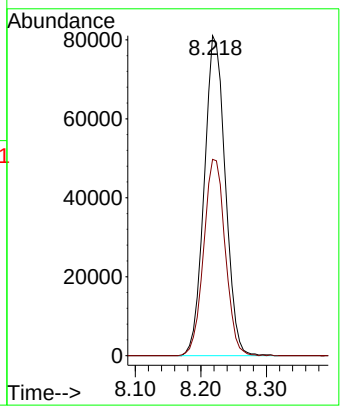


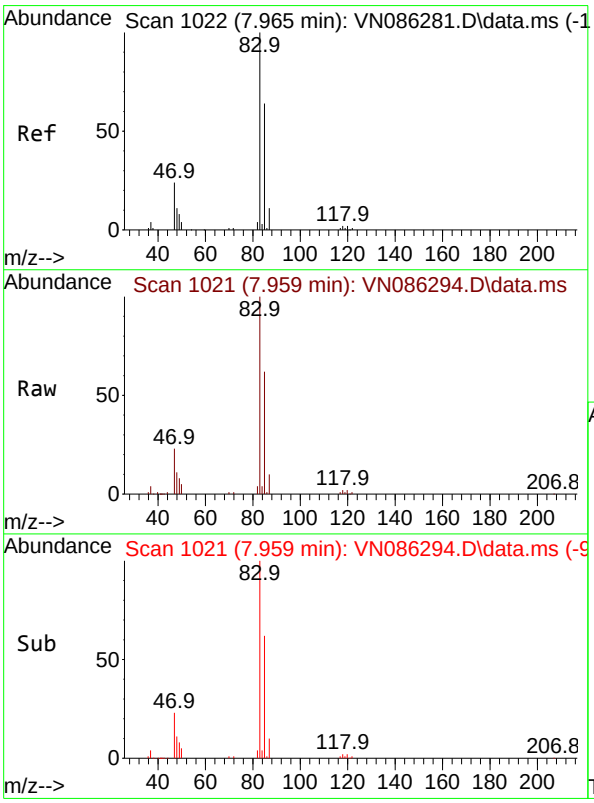
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Tgt Ion:168 Resp: 180932

Ion	Ratio	Lower	Upper
168	100		
99	61.4	52.5	78.7

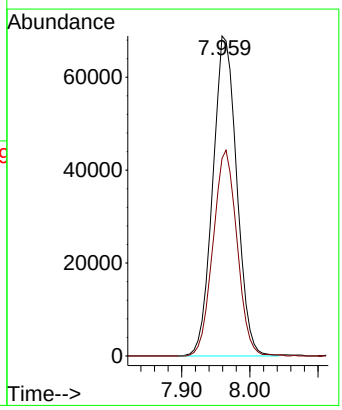


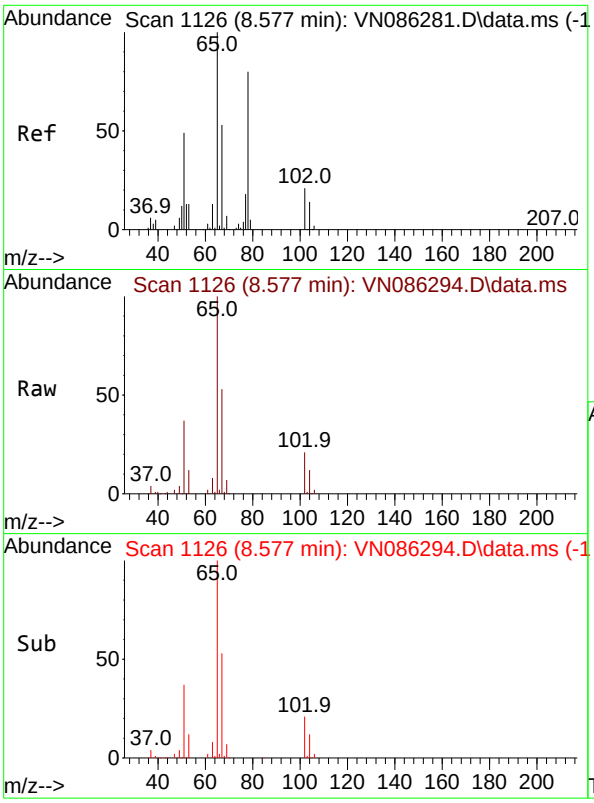


#30
Chloroform
Concen: 39.529 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. -0.006 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Tgt Ion: 83 Resp: 168726

Ion	Ratio	Lower	Upper
83	100		
85	61.7	51.5	77.3



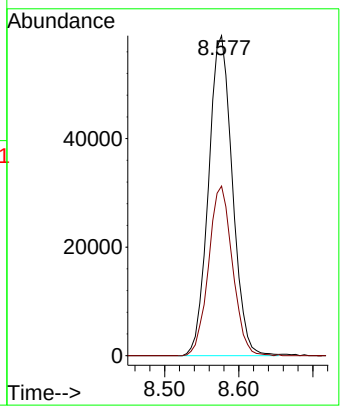


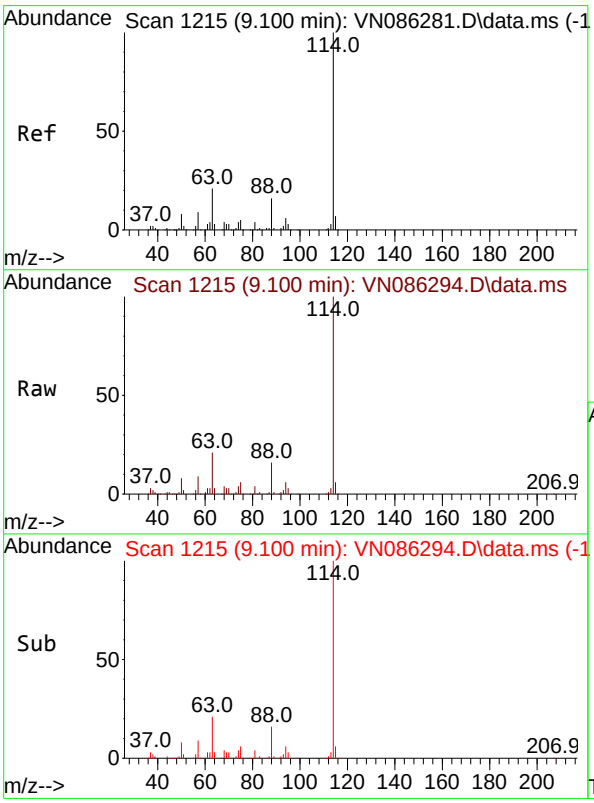
#33
1,2-Dichloroethane-d4
Concen: 50.319 ug/l
RT: 8.577 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Tgt Ion: 65 Resp: 132021

Ion	Ratio	Lower	Upper
65	100		
67	53.0	0.0	106.0

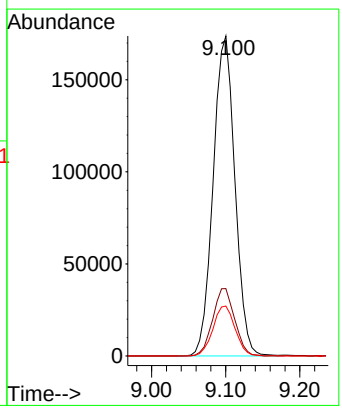


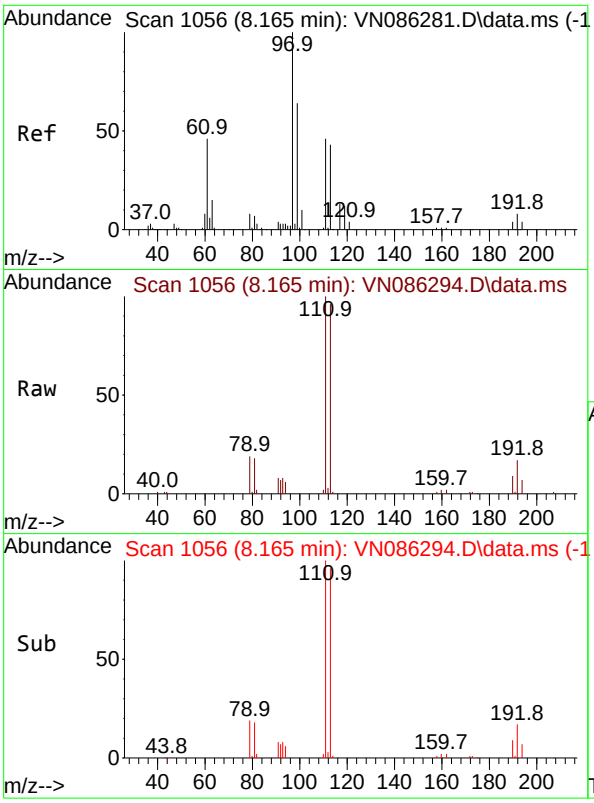


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Tgt Ion:114 Resp: 354597

Ion	Ratio	Lower	Upper
114	100		
63	21.1	0.0	42.6
88	15.6	0.0	31.8



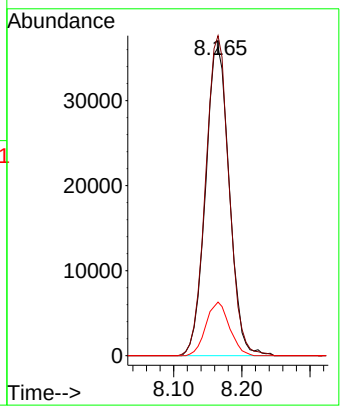


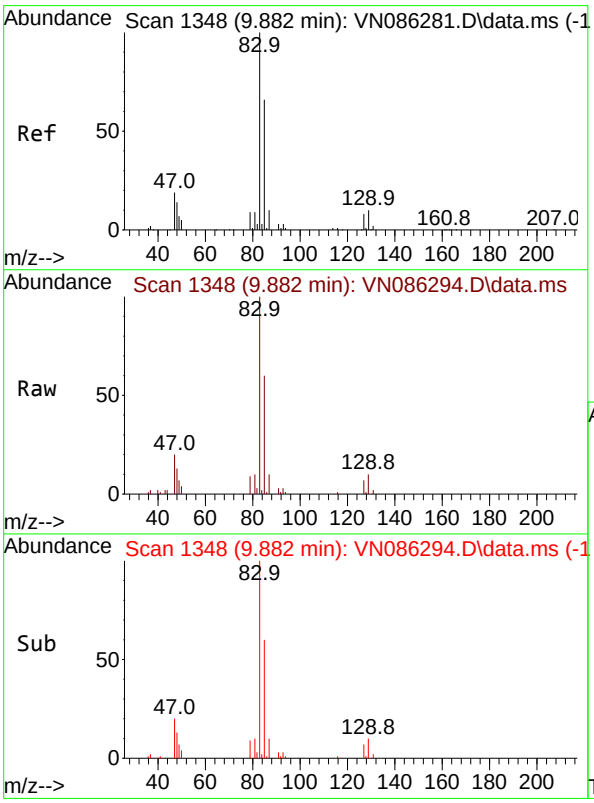
#35
Dibromofluoromethane
Concen: 53.729 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Tgt Ion:113 Resp: 88424

Ion	Ratio	Lower	Upper
113	100		
111	101.9	83.4	125.0
192	17.1	13.7	20.5

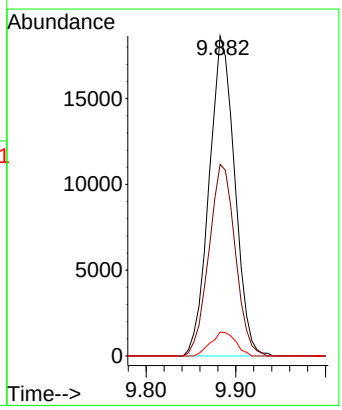


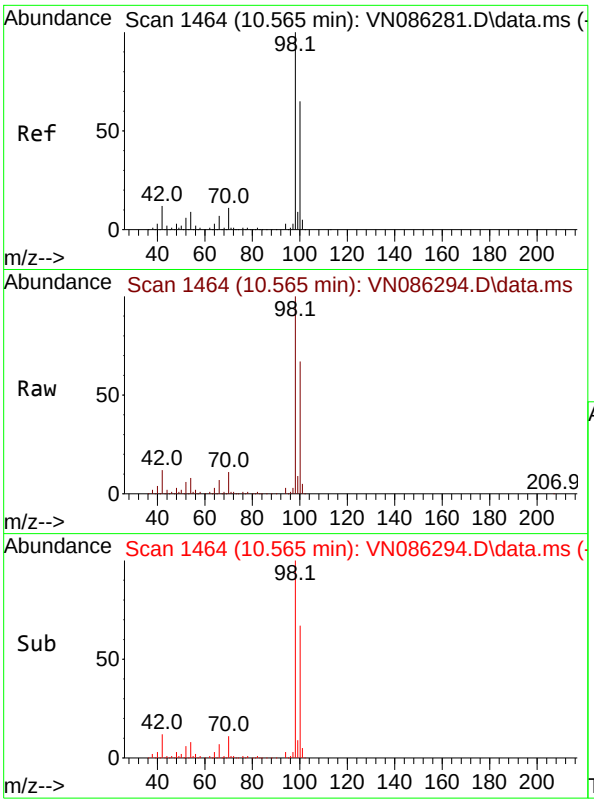


#47
Bromodichloromethane
Concen: 10.400 ug/l
RT: 9.882 min Scan# 1348
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Tgt Ion: 83 Resp: 36894

Ion	Ratio	Lower	Upper
83	100		
85	59.9	52.6	78.8
127	7.4	6.1	9.1



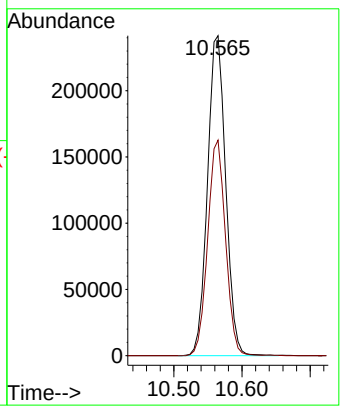


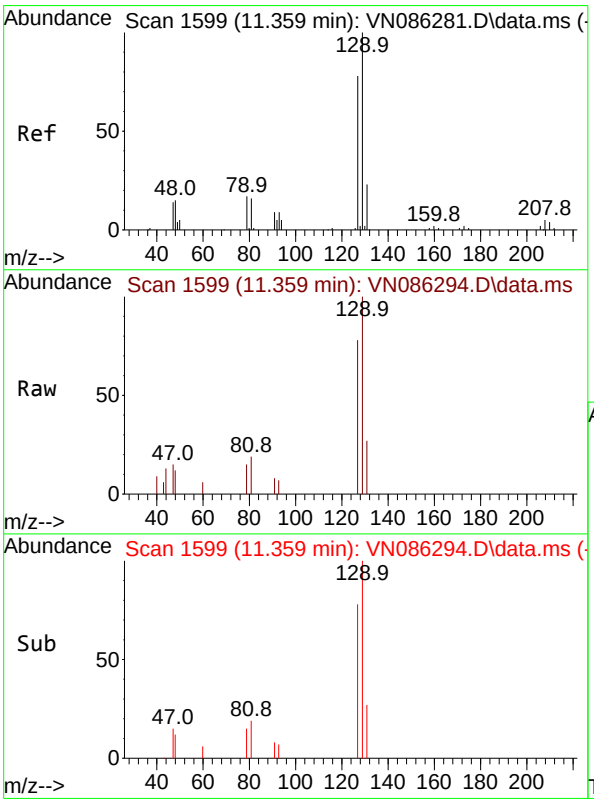
#50
Toluene-d8
Concen: 51.028 ug/l
RT: 10.565 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Tgt Ion: 98 Resp: 448820

Ion	Ratio	Lower	Upper
98	100		
100	65.9	52.5	78.7

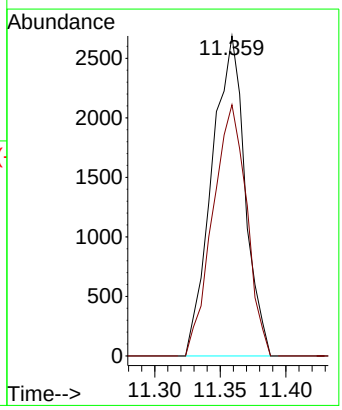


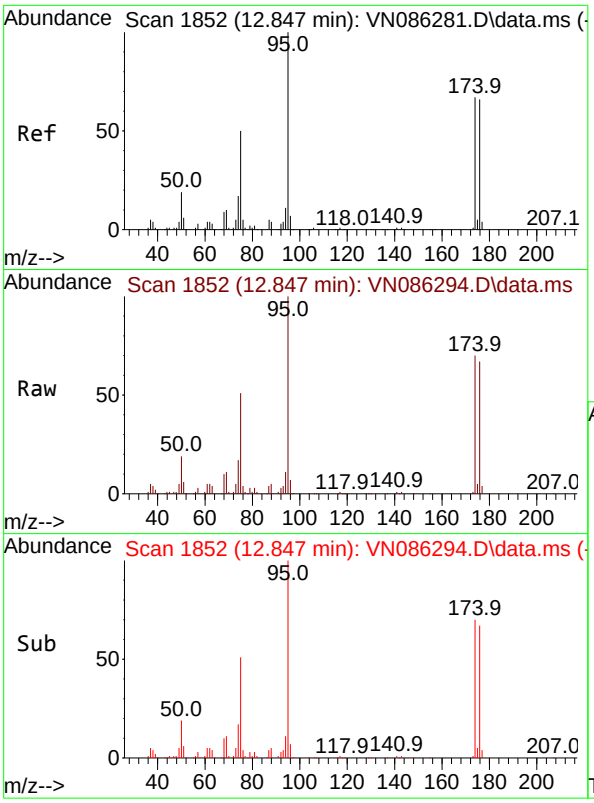


#60
Dibromochloromethane
Concen: 1.820 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Tgt Ion:129 Resp: 4725

Ion	Ratio	Lower	Upper
129	100		
127	80.3	38.7	116.1



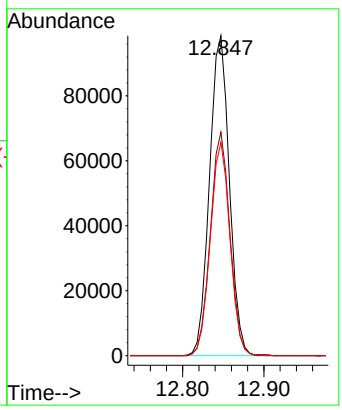


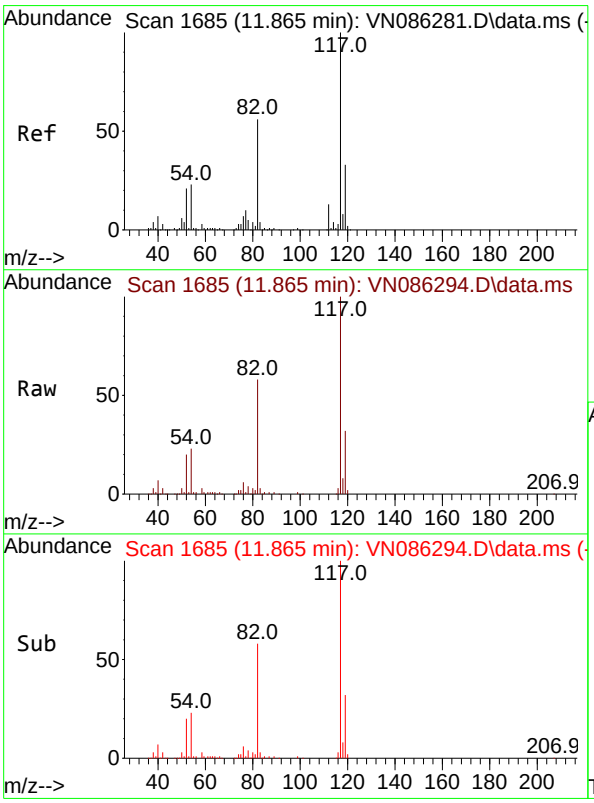
#62
4-Bromofluorobenzene
Concen: 52.201 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Tgt Ion: 95 Resp: 167466

Ion	Ratio	Lower	Upper
95	100		
174	68.8	0.0	133.4
176	65.8	0.0	129.2

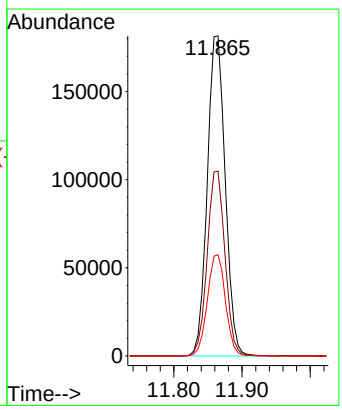


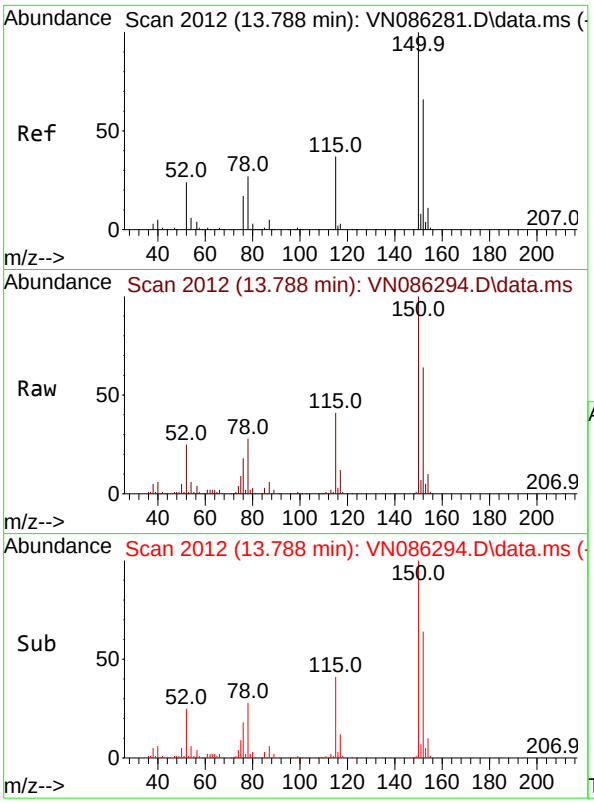


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Tgt Ion:117 Resp: 332731

Ion	Ratio	Lower	Upper
117	100		
82	57.7	44.7	67.1
119	31.6	26.4	39.6



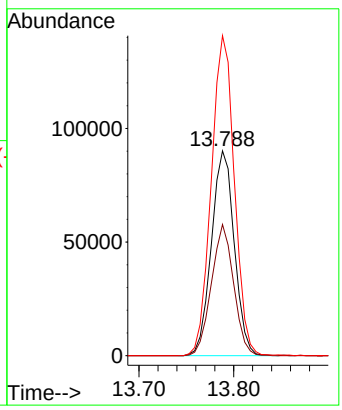


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086294.D
Acq: 16 Apr 2025 14:02

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Tgt Ion:152 Resp: 151028

Ion	Ratio	Lower	Upper
152	100		
115	62.3	31.9	95.9
150	157.8	0.0	352.0



Sample Results: **VN086294.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086294.D
Acq On : 16 Apr 2025 14:02
Operator : JC\MD
Sample : Q1812-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Title : SW846 8260

Signal : TIC: VN086294.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.801	139	144	152	rVB2	7768	16501	1.40%	0.251%
2	5.571	606	615	622	rVB2	5097	14549	1.23%	0.222%
3	7.965	1011	1022	1034	rBV	168365	416173	35.26%	6.342%
4	8.165	1044	1056	1060	rBV	118335	278160	23.57%	4.239%
5	8.218	1060	1065	1080	rVB	248627	555968	47.11%	8.472%
6	8.577	1117	1126	1134	rBV	161141	364119	30.85%	5.548%
7	9.100	1206	1215	1224	rBV	399727	823280	69.76%	12.545%
8	9.882	1341	1348	1358	rVB	50526	100702	8.53%	1.534%
9	10.565	1455	1464	1473	rBV	637276	1180176	100.00%	17.983%
10	11.359	1593	1599	1605	rVB3	7813	15244	1.29%	0.232%
11	11.859	1677	1684	1698	rBV	558594	1027034	87.02%	15.650%
12	12.847	1844	1852	1863	rBV	451287	760699	64.46%	11.591%
13	13.788	2005	2012	2020	rBV	566957	941766	79.80%	14.350%
14	13.870	2020	2026	2032	rVB	33766	55277	4.68%	0.842%
15	14.494	2127	2132	2140	rVV4	6650	12974	1.10%	0.198%

Sum of corrected areas: 6562622

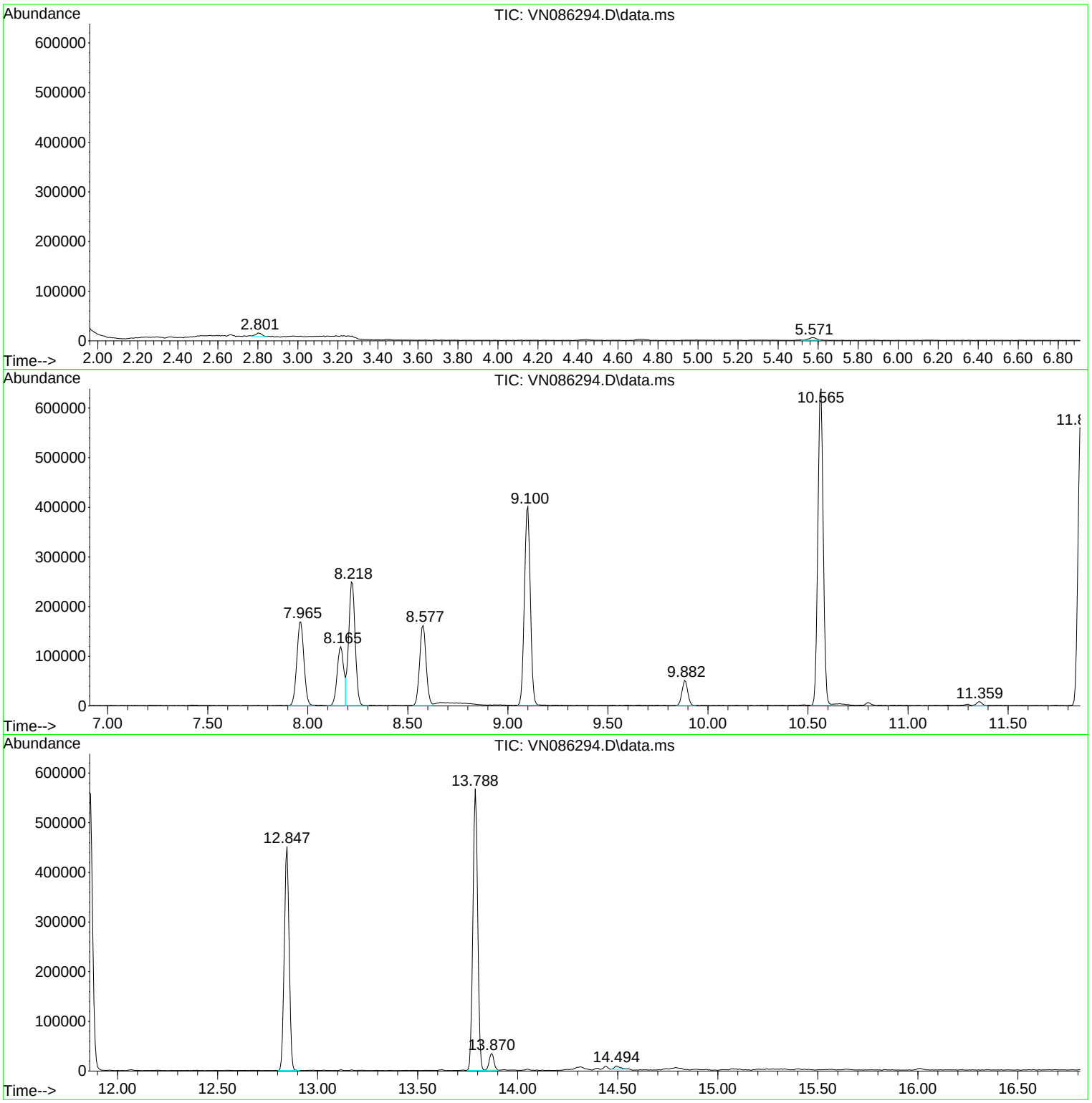
Sample Results: **VN086294.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086294.D
Acq On : 16 Apr 2025 14:02
Operator : JC\MD
Sample : Q1812-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086294.D
Acq On : 16 Apr 2025 14:02
Operator : JC\MD
Sample : Q1812-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086294.D
Acq On : 16 Apr 2025 14:02
Operator : JC\MD
Sample : Q1812-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
RINSE-EB-PUMP-041525

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

CALIBRATION SUMMARY

Raw Data

Alliance TECHNICAL GROUP

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG No.: Q1812

Instrument ID: MSVOA_N Calibration Date(s): 04/15/2025 04/15/2025

Heated Purge: (Y/N) N Calibration Time(s): 11:29 14:29

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

LAB FILE ID: RRF001 = VN086277.D RRF005 = VN086278.D RRF010 = VN086279.D
RRF020 = VN086280.D RRF050 = VN086281.D RRF100 = VN086282.D

COMPOUND	RRF001	RRF005	RRF010	RRF020	RRF050	RRF100	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.606	0.561	0.582	0.624	0.591	0.593	0.593	3.6
Chloromethane	1.113	0.904	0.783	0.819	0.754	0.795	0.861	15.5
Vinyl Chloride	0.897	0.825	0.785	0.846	0.791	0.788	0.822	5.4
Bromomethane		0.383	0.370	0.395	0.356	0.344	0.370	5.5
Chloroethane	0.650	0.580	0.519	0.543	0.500	0.509	0.550	10.3
Trichlorofluoromethane	0.988	0.951	0.859	0.927	0.863	0.875	0.911	5.9
1,1,2-Trichlorotrifluoroethane	0.577	0.581	0.522	0.567	0.526	0.532	0.551	4.9
1,1-Dichloroethene	0.660	0.622	0.553	0.588	0.551	0.557	0.588	7.6
Acetone	0.423	0.284	0.252	0.283	0.251	0.247	0.290	23.2
Carbon Disulfide	2.325	1.864	1.602	1.721	1.558	1.503	1.762	17.3
Methyl tert-butyl Ether	2.478	2.266	2.013	2.199	2.010	2.014	2.163	8.8
Methyl Acetate	1.024	0.912	0.819	0.864	0.781	0.822	0.870	10
Methylene Chloride	0.782	0.707	0.616	0.670	0.619	0.629	0.670	9.7
trans-1,2-Dichloroethene	0.703	0.656	0.557	0.620	0.575	0.580	0.615	9.1
1,1-Dichloroethane	1.315	1.274	1.122	1.206	1.136	1.152	1.201	6.6
Cyclohexane		1.439	1.140	1.169	1.066	1.062	1.175	13.1
2-Butanone	0.504	0.473	0.420	0.466	0.425	0.420	0.451	7.7
Carbon Tetrachloride	0.470	0.471	0.409	0.449	0.423	0.426	0.441	5.9
cis-1,2-Dichloroethene	0.882	0.810	0.694	0.764	0.714	0.720	0.764	9.3
Bromochloromethane	0.545	0.608	0.436	0.465	0.495	0.506	0.509	12
Chloroform	1.318	1.233	1.122	1.196	1.105	1.104	1.180	7.3
1,1,1-Trichloroethane	1.095	1.083	0.953	1.026	0.949	0.949	1.009	6.8
Methylcyclohexane	0.611	0.579	0.513	0.549	0.524	0.531	0.551	6.8
Benzene	1.648	1.545	1.389	1.508	1.409	1.411	1.485	6.8
1,2-Dichloroethane	0.526	0.496	0.448	0.482	0.444	0.446	0.474	7.1
Trichloroethene	0.390	0.357	0.334	0.352	0.338	0.341	0.352	5.8
1,2-Dichloropropane	0.378	0.383	0.355	0.368	0.349	0.347	0.364	4.2
Bromodichloromethane	0.531	0.530	0.477	0.510	0.475	0.477	0.500	5.4
4-Methyl-2-Pentanone	0.522	0.522	0.479	0.521	0.484	0.471	0.500	4.9
Toluene	1.003	0.963	0.865	0.941	0.892	0.895	0.927	5.6

* 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.

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG No.: Q1812

Instrument ID: MSVOA_N Calibration Date(s): 04/15/2025 04/15/2025

Heated Purge: (Y/N) N Calibration Time(s): 11:29 14:29

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

LAB FILE ID: RRF001 = VN086277.D RRF005 = VN086278.D RRF010 = VN086279.D
RRF020 = VN086280.D RRF050 = VN086281.D RRF100 = VN086282.D

COMPOUND	RRF001	RRF005	RRF010	RRF020	RRF050	RRF100	$\overline{RRF}$	% RSD
t-1,3-Dichloropropene	0.576	0.574	0.528	0.572	0.547	0.554	0.558	3.4
cis-1,3-Dichloropropene	0.679	0.636	0.580	0.621	0.577	0.587	0.613	6.5
1,1,2-Trichloroethane	0.367	0.357	0.315	0.332	0.318	0.313	0.333	6.9
2-Hexanone	0.394	0.387	0.355	0.383	0.355	0.349	0.371	5.3
Dibromochloromethane	0.377	0.381	0.354	0.375	0.353	0.356	0.366	3.5
1,2-Dibromoethane	0.359	0.342	0.319	0.350	0.324	0.323	0.336	4.9
Tetrachloroethene	0.419	0.399	0.358	0.390	0.371	0.370	0.385	5.8
Chlorobenzene	1.235	1.175	1.058	1.117	1.050	1.059	1.116	6.8
Ethyl Benzene	2.210	2.112	1.873	2.028	1.918	1.941	2.014	6.4
m/p-Xylenes	0.809	0.795	0.705	0.757	0.727	0.734	0.754	5.4
o-Xylene	0.791	0.792	0.709	0.753	0.713	0.718	0.746	5.2
Styrene	1.306	1.288	1.156	1.245	1.218	1.246	1.243	4.3
Bromoform	0.306	0.294	0.258	0.279	0.261	0.264	0.277	7
Isopropylbenzene	4.666	4.271	3.991	4.181	3.728	3.706	4.090	8.9
1,1,2,2-Tetrachloroethane	1.347	1.294	1.181	1.212	1.035	0.985	1.176	12.1
1,3-Dichlorobenzene	1.866	1.822	1.618	1.698	1.610	1.608	1.704	6.7
1,4-Dichlorobenzene	1.942	1.815	1.615	1.713	1.614	1.597	1.716	8
1,2-Dichlorobenzene	1.819	1.820	1.565	1.646	1.559	1.502	1.652	8.4
1,2-Dibromo-3-Chloropropane	0.234	0.274	0.229	0.251	0.222	0.213	0.237	9.2
1,2,4-Trichlorobenzene	0.822	0.865	0.730	0.793	0.765	0.771	0.791	6
1,2,3-Trichlorobenzene	0.819	0.810	0.697	0.749	0.708	0.709	0.749	7.2
1,2-Dichloroethane-d4		0.746	0.745	0.707	0.719	0.708	0.725	2.6
Dibromofluoromethane		0.267	0.255	0.230	0.215	0.194	0.232	12.8
Toluene-d8		1.247	1.281	1.185	1.251	1.237	1.240	2.8
4-Bromofluorobenzene		0.459	0.456	0.421	0.459	0.467	0.452	4

* 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 : 82N041525W.M
Title : SW846 8260
Last Update : Wed Apr 16 04:19:23 2025
Response Via : Initial Calibration

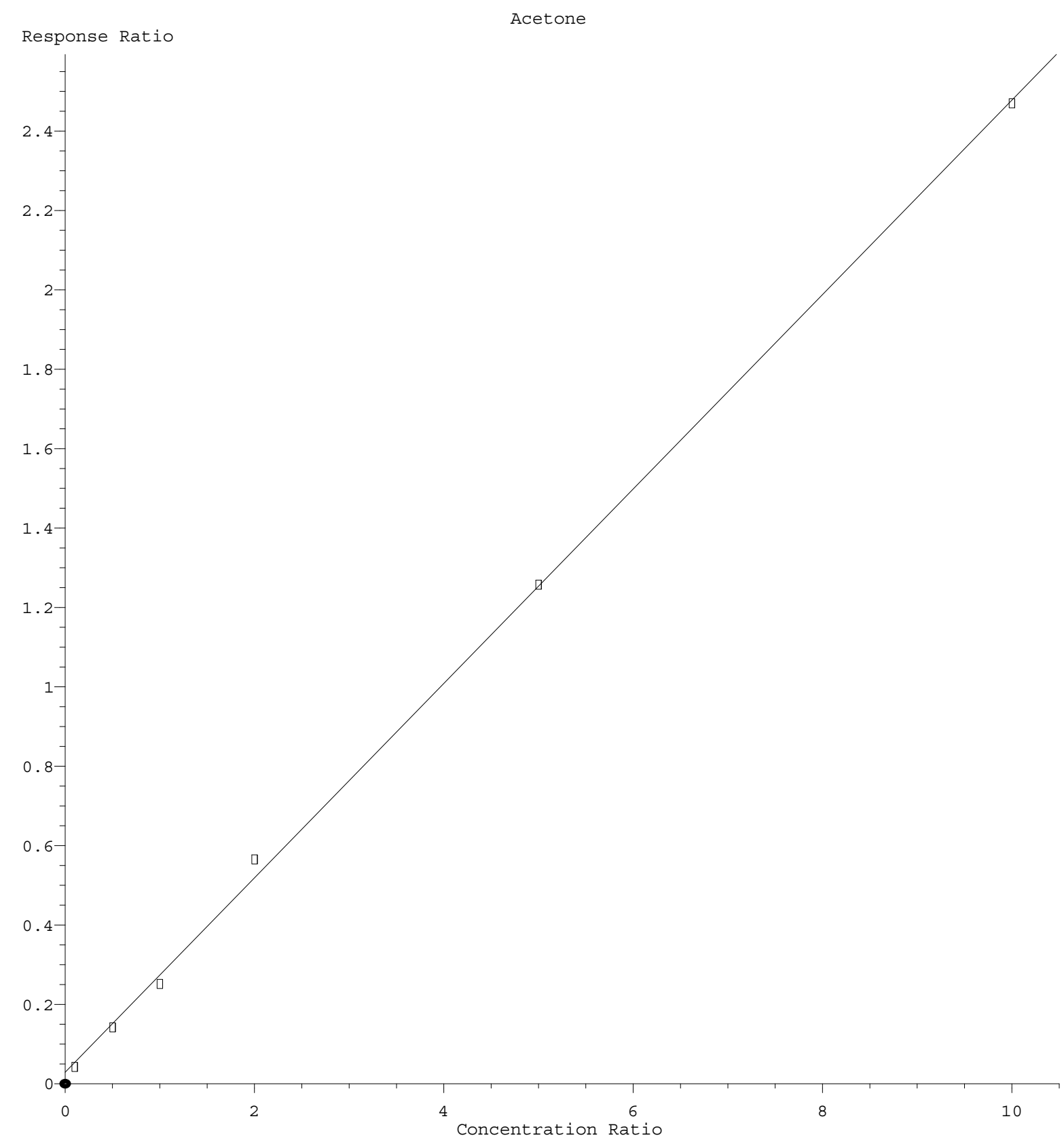
Calibration Files
1 =VN086277.D 5 =VN086278.D 10 =VN086279.D 20 =VN086280.D 50 =VN086281.D 100 =VN086282.D

		Compound	1	5	10	20	50	100	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.606	0.561	0.582	0.624	0.591	0.593	0.593	3.56
3)	P	Chloromethane	1.113	0.904	0.783	0.819	0.754	0.795	0.861	15.46
4)	C	Vinyl Chloride	0.897	0.825	0.785	0.846	0.791	0.788	0.822	5.36#
5)	T	Bromomethane		0.383	0.370	0.395	0.356	0.344	0.370	5.53
6)	T	Chloroethane	0.650	0.580	0.519	0.543	0.500	0.509	0.550	10.31
7)	T	Trichlorofluor...	0.988	0.951	0.859	0.927	0.863	0.875	0.911	5.87
8)	T	Diethyl Ether	0.423	0.421	0.375	0.415	0.374	0.377	0.398	6.12
9)	T	1,1,2-Trichlor...	0.577	0.581	0.522	0.567	0.526	0.532	0.551	4.93
10)	T	Methyl Iodide		0.598	0.564	0.636	0.599	0.631	0.606	4.84
11)	T	Tert butyl alc...		0.145	0.135	0.142	0.124	0.115	0.132	9.44
12)	CM	1,1-Dichloroet...	0.660	0.622	0.553	0.588	0.551	0.557	0.588	7.59#
13)	T	Acrolein		0.121	0.070	0.065	0.061	0.060	0.075	34.06
14)	T	Allyl chloride	1.330	1.082	0.957	1.025	0.929	0.954	1.046	14.33
15)	T	Acrylonitrile	0.332	0.349	0.308	0.343	0.317	0.313	0.327	5.13
16)	T	Acetone	0.423	0.284	0.252	0.283	0.251	0.247	0.290	23.22
17)	T	Carbon Disulfide	2.325	1.864	1.602	1.721	1.558	1.503	1.762	17.28
18)	T	Methyl Acetate	1.024	0.912	0.819	0.864	0.781	0.822	0.870	10.04
19)	T	Methyl tert-bu...	2.478	2.266	2.013	2.199	2.010	2.014	2.163	8.76
20)	T	Methylene Chlo...	0.782	0.707	0.616	0.670	0.619	0.629	0.670	9.71
21)	T	trans-1,2-Dich...	0.703	0.656	0.557	0.620	0.575	0.580	0.615	9.11
22)	T	Diisopropyl ether	2.660	2.385	2.107	2.266	2.109	2.128	2.276	9.58
23)	T	Vinyl Acetate	1.743	1.757	1.524	1.643	1.483	1.396	1.591	9.21
24)	P	1,1-Dichloroet...	1.315	1.274	1.122	1.206	1.136	1.152	1.201	6.57
25)	T	2-Butanone	0.504	0.473	0.420	0.466	0.425	0.420	0.451	7.73
26)	T	2,2-Dichloropr...	1.174	1.154	1.024	1.084	0.983	1.032	1.075	7.07
27)	T	cis-1,2-Dichlo...	0.882	0.810	0.694	0.764	0.714	0.720	0.764	9.32
28)	T	Bromochloromet...	0.545	0.608	0.436	0.465	0.495	0.506	0.509	11.96
29)	T	Tetrahydrofuran	0.337	0.319	0.286	0.314	0.281	0.273	0.302	8.30
30)	C	Chloroform	1.318	1.233	1.122	1.196	1.105	1.104	1.180	7.29#
31)	T	Cyclohexane		1.439	1.140	1.169	1.066	1.062	1.175	13.14
32)	T	1,1,1-Trichlor...	1.095	1.083	0.953	1.026	0.949	0.949	1.009	6.79
33)	S	1,2-Dichloroet...		0.746	0.745	0.707	0.719	0.708	0.725	2.63
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.267	0.255	0.230	0.215	0.194	0.232	12.85
36)	T	1,1-Dichloropr...	0.509	0.488	0.426	0.466	0.443	0.448	0.463	6.68
37)	T	Ethyl Acetate	0.585	0.509	0.458	0.491	0.446	0.439	0.488	11.15
38)	T	Carbon Tetrach...	0.470	0.471	0.409	0.449	0.423	0.426	0.441	5.93
39)	T	Methylcyclohexane	0.611	0.579	0.513	0.549	0.524	0.531	0.551	6.83
40)	TM	Benzene	1.648	1.545	1.389	1.508	1.409	1.411	1.485	6.81
41)	T	Methacrylonitrile	0.327	0.285	0.278	0.283	0.264	0.259	0.283	8.57
42)	TM	1,2-Dichloroet...	0.526	0.496	0.448	0.482	0.444	0.446	0.474	7.09
43)	T	Isopropyl Acetate	2.155	1.263	0.969	0.975	0.866	0.833	1.177	42.71
44)	TM	Trichloroethene	0.390	0.357	0.334	0.352	0.338	0.341	0.352	5.83
45)	C	1,2-Dichloropr...	0.378	0.383	0.355	0.368	0.349	0.347	0.364	4.24#
46)	T	Dibromomethane	0.234	0.244	0.220	0.239	0.227	0.226	0.232	3.74
47)	T	Bromodichlorom...	0.531	0.530	0.477	0.510	0.475	0.477	0.500	5.39
48)	T	Methyl methacr...	0.517	0.436	0.404	0.433	0.395	0.386	0.429	11.14
49)	T	1,4-Dioxane	0.009	0.008	0.007	0.008	0.007	0.006	0.007	15.51
50)	S	Toluene-d8		1.247	1.281	1.185	1.251	1.237	1.240	2.81
51)	T	4-Methyl-2-Pen...	0.522	0.522	0.479	0.521	0.484	0.471	0.500	4.90
52)	CM	Toluene	1.003	0.963	0.865	0.941	0.892	0.895	0.927	5.60#
53)	T	t-1,3-Dichloro...	0.576	0.574	0.528	0.572	0.547	0.554	0.558	3.38
54)	T	cis-1,3-Dichlo...	0.679	0.636	0.580	0.621	0.577	0.587	0.613	6.52
55)	T	1,1,2-Trichlor...	0.367	0.357	0.315	0.332	0.318	0.313	0.333	6.91
56)	T	Ethyl methacry...	0.668	0.644	0.578	0.623	0.579	0.585	0.613	6.23

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N041525W.M

57)	T	1,3-Dichloropr...	0.629	0.617	0.567	0.602	0.564	0.571	0.592	4.75
58)	T	2-Chloroethyl ...	0.294	0.354	0.242	0.275	0.287	0.294	0.291	12.51
59)	T	2-Hexanone	0.394	0.387	0.355	0.383	0.355	0.349	0.371	5.28
60)	T	Dibromochlorom...	0.377	0.381	0.354	0.375	0.353	0.356	0.366	3.48
61)	T	1,2-Dibromoethane	0.359	0.342	0.319	0.350	0.324	0.323	0.336	4.94
62)	S	4-Bromofluorob...		0.459	0.456	0.421	0.459	0.467	0.452	4.02
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.419	0.399	0.358	0.390	0.371	0.370	0.385	5.83
65)	PM	Chlorobenzene	1.235	1.175	1.058	1.117	1.050	1.059	1.116	6.78
66)	T	1,1,1,2-Tetrac...	0.400	0.396	0.349	0.368	0.347	0.348	0.368	6.70
67)	C	Ethyl Benzene	2.210	2.112	1.873	2.028	1.918	1.941	2.014	6.39#
68)	T	m/p-Xylenes	0.809	0.795	0.705	0.757	0.727	0.734	0.754	5.38
69)	T	o-Xylene	0.791	0.792	0.709	0.753	0.713	0.718	0.746	5.16
70)	T	Styrene	1.306	1.288	1.156	1.245	1.218	1.246	1.243	4.28
71)	P	Bromoform	0.306	0.294	0.258	0.279	0.261	0.264	0.277	7.03
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	4.666	4.271	3.991	4.181	3.728	3.706	4.090	8.89
74)	T	N-amyl acetate	2.690	2.110	1.879	2.000	1.778	1.760	2.036	17.03
75)	P	1,1,2,2-Tetrac...	1.347	1.294	1.181	1.212	1.035	0.985	1.176	12.07
76)	T	1,2,3-Trichlor...	1.518	1.144	1.153	1.182	1.042	1.040	1.180	14.93
77)	T	Bromobenzene	0.968	0.935	0.905	0.946	0.850	0.833	0.906	5.99
78)	T	n-propylbenzene	5.366	5.072	4.629	4.862	4.488	4.501	4.820	7.26
79)	T	2-Chlorotoluene	3.378	3.247	2.908	3.058	2.759	2.745	3.016	8.61
80)	T	1,3,5-Trimethy...	3.800	3.518	3.178	3.418	3.083	3.088	3.348	8.50
81)	T	trans-1,4-Dich...		0.526	0.493	0.494	0.461	0.482	0.491	4.81
82)	T	4-Chlorotoluene	3.304	3.152	2.851	3.047	2.810	2.812	2.996	6.86
83)	T	tert-Butylbenzene	3.382	3.057	2.795	2.886	2.608	2.675	2.901	9.80
84)	T	1,2,4-Trimethy...	3.782	3.644	3.262	3.431	3.171	3.156	3.408	7.62
85)	T	sec-Butylbenzene	4.451	4.309	3.897	3.991	3.763	3.729	4.023	7.34
86)	T	p-Isopropyltol...	3.603	3.487	3.174	3.290	3.158	3.185	3.316	5.63
87)	T	1,3-Dichlorobe...	1.866	1.822	1.618	1.698	1.610	1.608	1.704	6.72
88)	T	1,4-Dichlorobe...	1.942	1.815	1.615	1.713	1.614	1.597	1.716	8.05
89)	T	n-Butylbenzene	3.209	3.013	2.746	2.921	2.838	2.910	2.939	5.43
90)	T	Hexachloroethane	0.617	0.586	0.530	0.557	0.518	0.538	0.558	6.74
91)	T	1,2-Dichlorobe...	1.819	1.820	1.565	1.646	1.559	1.502	1.652	8.35
92)	T	1,2-Dibromo-3-...	0.234	0.274	0.229	0.251	0.222	0.213	0.237	9.21
93)	T	1,2,4-Trichlor...	0.822	0.865	0.730	0.793	0.765	0.771	0.791	5.99
94)	T	Hexachlorobuta...	0.308	0.339	0.286	0.301	0.280	0.278	0.299	7.61
95)	T	Naphthalene	3.012	2.955	2.601	2.904	2.675	2.674	2.804	6.20
96)	T	1,2,3-Trichlor...	0.819	0.810	0.697	0.749	0.708	0.709	0.749	7.25

(#) = Out of Range



Response = 2.450e-001 * Amt + 2.861e-002
Coef of Det (r^2) = 0.999327 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N041525W.M
Calibration Table Last Updated: Wed Apr 16 04:19:23 2025

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086277.D
Acq On : 15 Apr 2025 11:29
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:54:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	8.224	168	218868	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	9.100	114	404752	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.865	117	341637	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	145129	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	2.124	85	2651	1.022	ug/l		95
3) Chloromethane	2.360	50	4871	1.292	ug/l		93
4) Vinyl Chloride	2.518	62	3928	1.092	ug/l		94
6) Chloroethane	3.124	64	2846	1.182	ug/l	#	86
7) Trichlorofluoromethane	3.495	101	4327	1.086	ug/l	#	79
8) Diethyl Ether	3.965	74	1853	1.065	ug/l		91
9) 1,1,2-Trichlorotrifluo...	4.365	101	2525	1.047	ug/l	#	84
12) 1,1-Dichloroethene	4.342	96	2890	1.122	ug/l		97
14) Allyl chloride	5.018	41	5821	1.272	ug/l		94
15) Acrylonitrile	5.730	53	7256	5.069	ug/l		100
16) Acetone	4.430	43	9264m	2.774	ug/l		
17) Carbon Disulfide	4.706	76	10177	1.319	ug/l		97
18) Methyl Acetate	5.024	43	4481	1.176	ug/l		92
19) Methyl tert-butyl Ether	5.789	73	10847	1.145	ug/l	#	91
20) Methylene Chloride	5.271	84	3423	1.167	ug/l	#	94
21) trans-1,2-Dichloroethene	5.783	96	3079	1.143	ug/l	#	84
22) Diisopropyl ether	6.665	45	11644	1.169	ug/l		98
23) Vinyl Acetate	6.606	43	38143	5.479	ug/l		96
24) 1,1-Dichloroethane	6.565	63	5756	1.095	ug/l	#	85
25) 2-Butanone	7.489	43	11026	5.581	ug/l		99
26) 2,2-Dichloropropane	7.494	77	5139	1.092	ug/l		99
27) cis-1,2-Dichloroethene	7.489	96	3859	1.154	ug/l		90
28) Bromochloromethane	7.800	49	2387	1.071	ug/l	#	92
29) Tetrahydrofuran	7.841	42	7367	5.577	ug/l		93
30) Chloroform	7.959	83	5771	1.118	ug/l		98
32) 1,1,1-Trichloroethane	8.165	97	4792	1.085	ug/l	#	51
36) 1,1-Dichloropropene	8.371	75	4123	1.099	ug/l		94
37) Ethyl Acetate	7.559	43	4732	1.198	ug/l	#	91
38) Carbon Tetrachloride	8.359	117	3808	1.066	ug/l		100
39) Methylcyclohexane	9.594	83	4950	1.110	ug/l		96
40) Benzene	8.606	78	13340	1.110	ug/l		97
41) Methacrylonitrile	7.765	41	2651	1.158	ug/l	#	94
42) 1,2-Dichloroethane	8.665	62	4258	1.111	ug/l		96
43) Isopropyl Acetate	8.683	43	17444	0.619	ug/l	#	75
44) Trichloroethene	9.353	130	3157	1.108	ug/l		87
45) 1,2-Dichloropropane	9.612	63	3063	1.041	ug/l	#	86

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086277.D
Acq On : 15 Apr 2025 11:29
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:54:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) Dibromomethane	9.706	93	1891	1.009 ug/l	91
47) Bromodichloromethane	9.888	83	4302	1.062 ug/l #	97
48) Methyl methacrylate	9.683	41	4185	1.206 ug/l	94
49) 1,4-Dioxane	9.688	88	1477	25.032 ug/l #	76
51) 4-Methyl-2-Pentanone	10.441	43	21143	5.227 ug/l	98
52) Toluene	10.624	92	8120	1.083 ug/l	99
53) t-1,3-Dichloropropene	10.841	75	4663	1.032 ug/l	93
54) cis-1,3-Dichloropropene	10.306	75	5497	1.107 ug/l	89
55) 1,1,2-Trichloroethane	11.018	97	2967	1.099 ug/l	93
56) Ethyl methacrylate	10.871	69	5409	1.090 ug/l	90
57) 1,3-Dichloropropane	11.159	76	5091	1.063 ug/l	98
58) 2-Chloroethyl Vinyl ether	10.159	63	11885	5.048 ug/l	97
59) 2-Hexanone	11.194	43	15945	5.315 ug/l	98
60) Dibromochloromethane	11.353	129	3054	1.031 ug/l	96
61) 1,2-Dibromoethane	11.465	107	2908	1.068 ug/l	90
64) Tetrachloroethene	11.106	164	2864	1.090 ug/l	95
65) Chlorobenzene	11.882	112	8440	1.107 ug/l	93
66) 1,1,1,2-Tetrachloroethane	11.959	131	2734	1.087 ug/l #	62
67) Ethyl Benzene	11.959	91	15099	1.097 ug/l	96
68) m/p-Xylenes	12.071	106	11055	2.144 ug/l	98
69) o-Xylene	12.394	106	5408	1.061 ug/l	97
70) Styrene	12.406	104	8925	1.051 ug/l	96
71) Bromoform	12.576	173	2089	1.103 ug/l #	80
73) Isopropylbenzene	12.694	105	13542	1.141 ug/l	98
74) N-amyl acetate	12.494	43	7807	1.321 ug/l	91
75) 1,1,2,2-Tetrachloroethane	12.935	83	3910	1.145 ug/l	94
76) 1,2,3-Trichloropropane	12.988	75	4407m	1.293 ug/l	
77) Bromobenzene	12.982	156	2811	1.069 ug/l	90
78) n-propylbenzene	13.029	91	15576	1.113 ug/l	98
79) 2-Chlorotoluene	13.124	91	9804	1.120 ug/l	99
80) 1,3,5-Trimethylbenzene	13.171	105	11029	1.135 ug/l	99
82) 4-Chlorotoluene	13.218	91	9589	1.103 ug/l	98
83) tert-Butylbenzene	13.435	119	9817	1.166 ug/l	98
84) 1,2,4-Trimethylbenzene	13.482	105	10977	1.110 ug/l	96
85) sec-Butylbenzene	13.612	105	12920	1.106 ug/l	98
86) p-Isopropyltoluene	13.729	119	10458	1.086 ug/l	99
87) 1,3-Dichlorobenzene	13.735	146	5415	1.095 ug/l	94
88) 1,4-Dichlorobenzene	13.812	146	5636m	1.132 ug/l	
89) n-Butylbenzene	14.053	91	9315	1.092 ug/l	99
90) Hexachloroethane	14.329	117	1792	1.107 ug/l	86
91) 1,2-Dichlorobenzene	14.106	146	5279	1.101 ug/l	95
92) 1,2-Dibromo-3-Chloropr...	14.718	75	679	0.987 ug/l	90
93) 1,2,4-Trichlorobenzene	15.388	180	2387	1.040 ug/l	93
94) Hexachlorobutadiene	15.494	225	893	1.030 ug/l	78
95) Naphthalene	15.641	128	8743	1.074 ug/l	97
96) 1,2,3-Trichlorobenzene	15.829	180	2378	1.094 ug/l	91

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

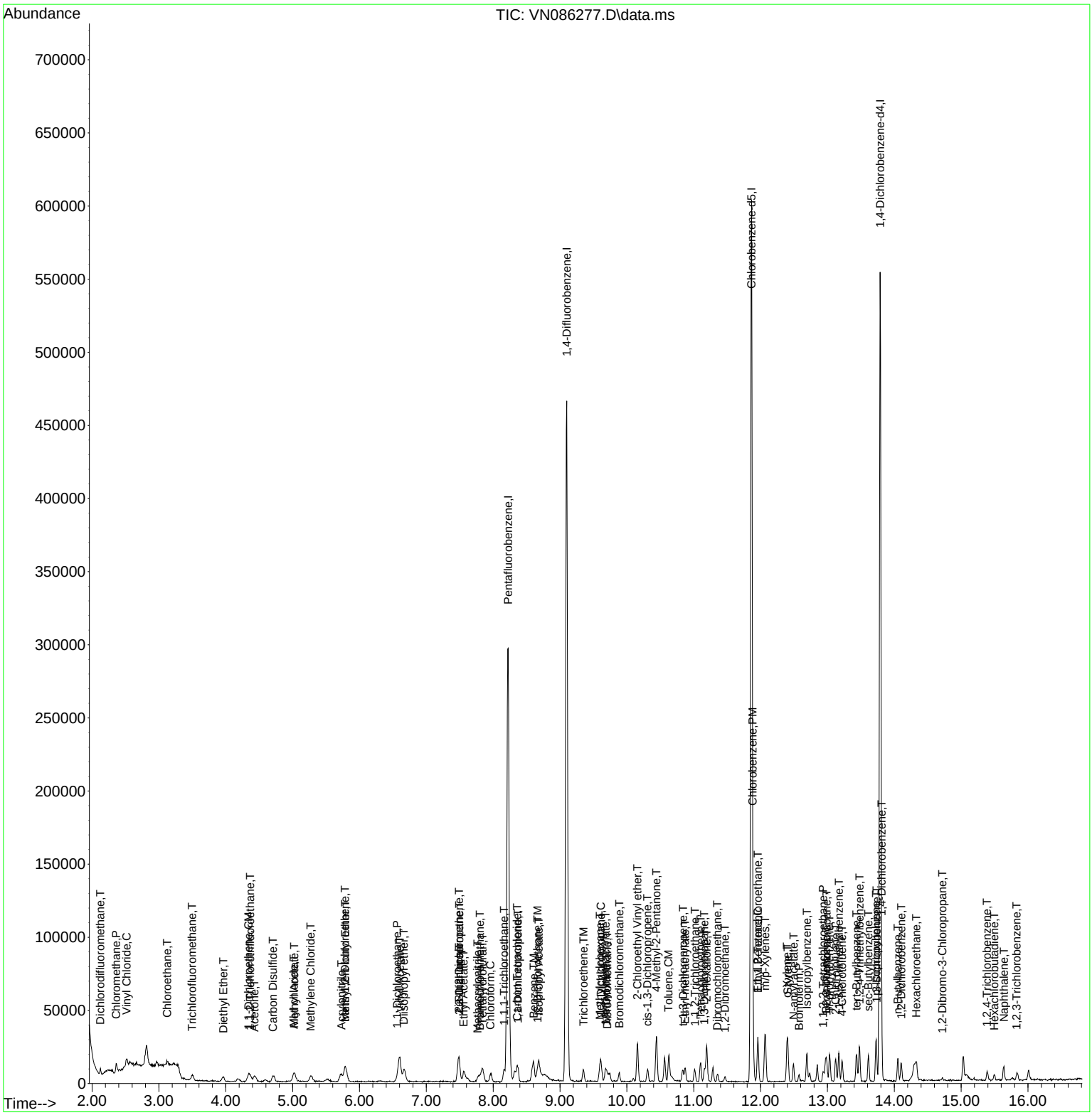
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086277.D
Acq On : 15 Apr 2025 11:29
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

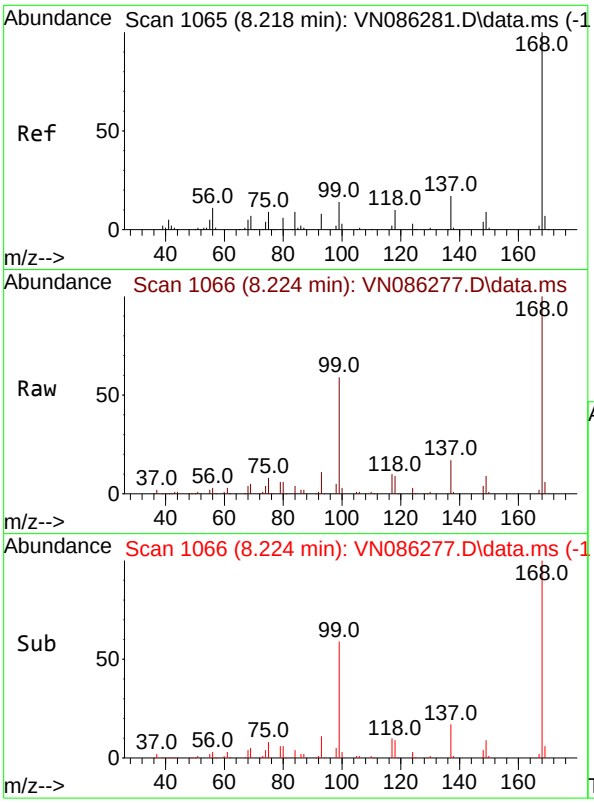
Quant Time: Apr 16 03:54:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

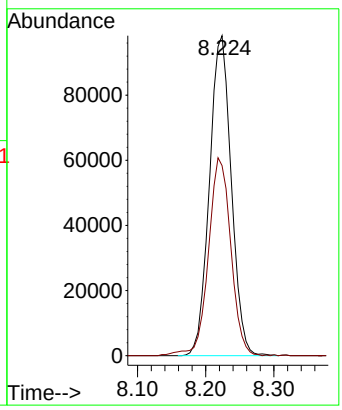




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:168 Resp: 21886

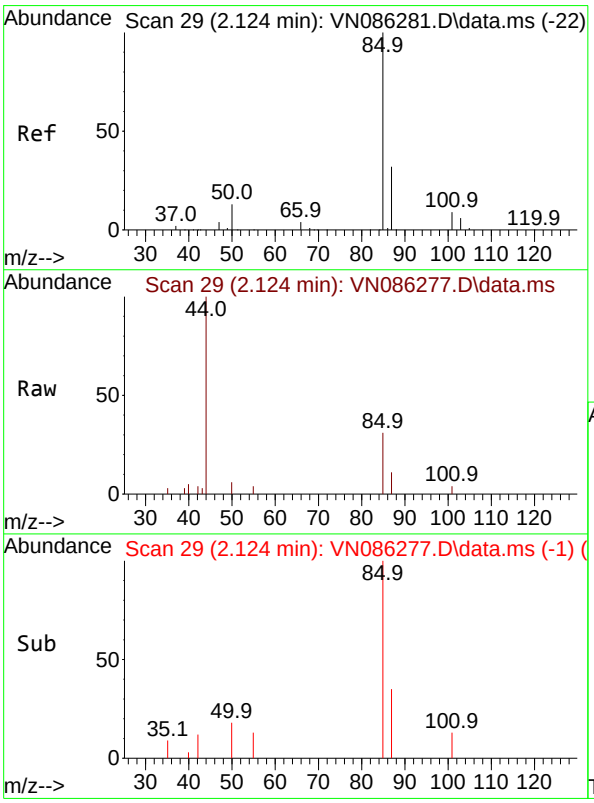
Ion	Ratio	Lower	Upper
168	100		
99	59.4	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

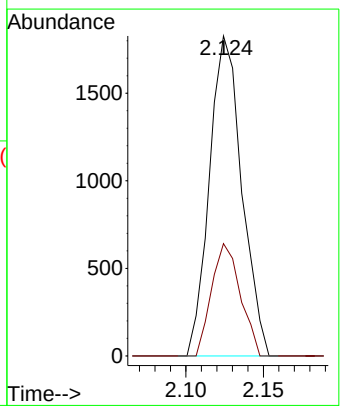
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

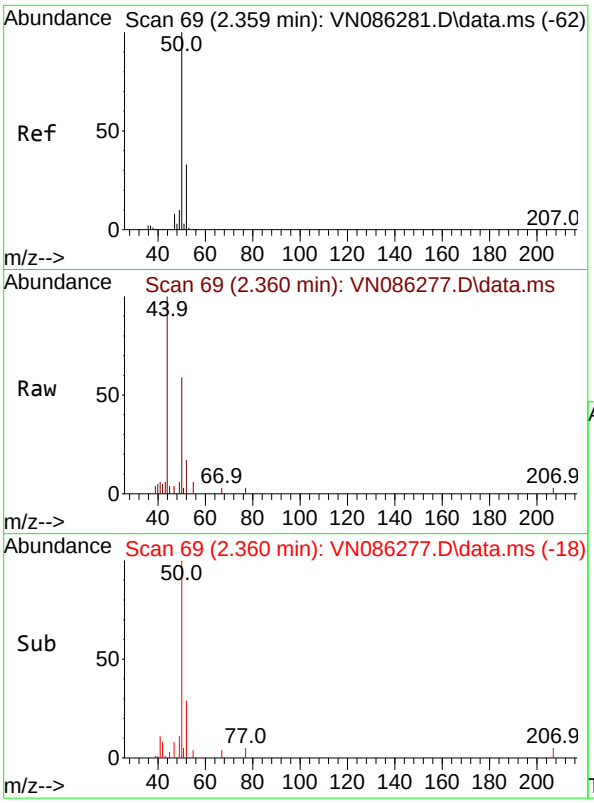


#2
Dichlorodifluoromethane
Concen: 1.022 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 85 Resp: 2651

Ion	Ratio	Lower	Upper
85	100		
87	35.1	16.3	48.8

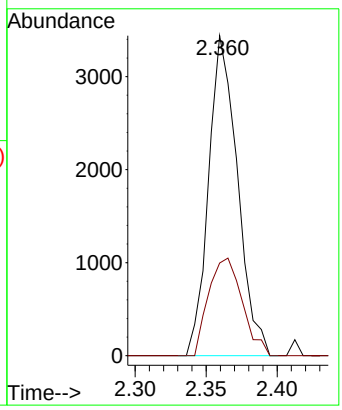




#3
Chloromethane
Concen: 1.292 ug/l
RT: 2.360 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 50 Resp: 487

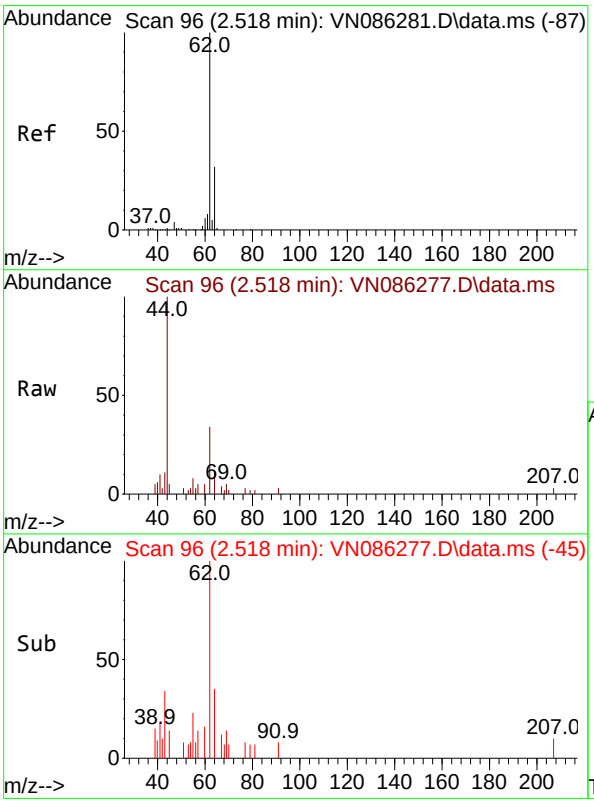
Ion	Ratio	Lower	Upper
50	100		
52	29.0	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

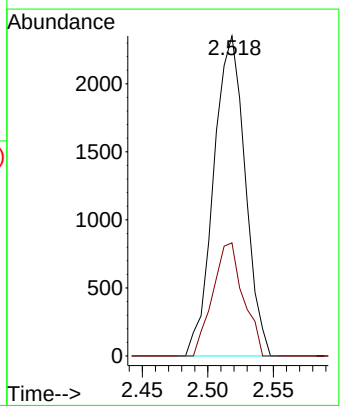
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

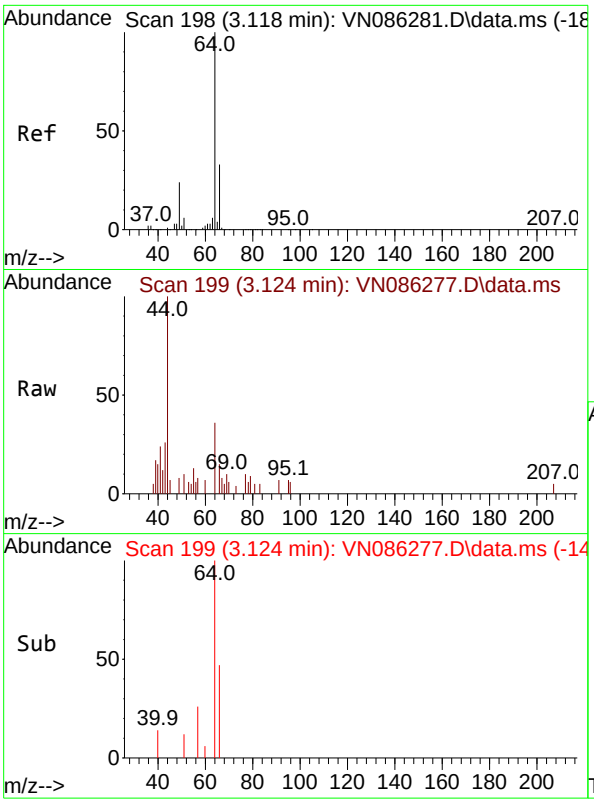


#4
Vinyl Chloride
Concen: 1.092 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 62 Resp: 3928

Ion	Ratio	Lower	Upper
62	100		
64	35.3	25.6	38.4

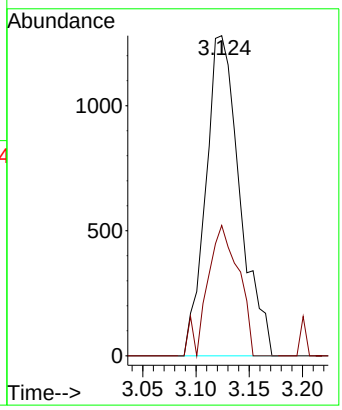




#6
Chloroethane
Concen: 1.182 ug/l
RT: 3.124 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 64 Resp: 284

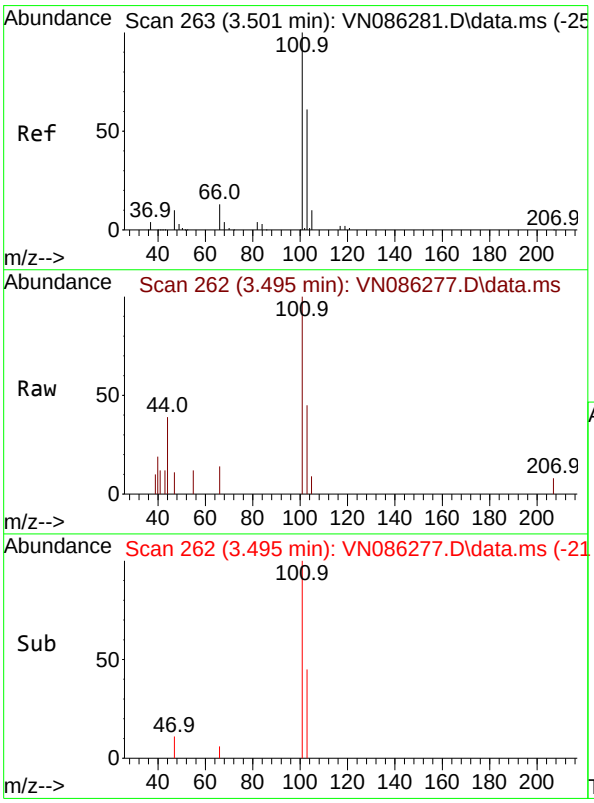
Ion	Ratio	Lower	Upper
64	100		
66	40.7	26.2	39.2#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

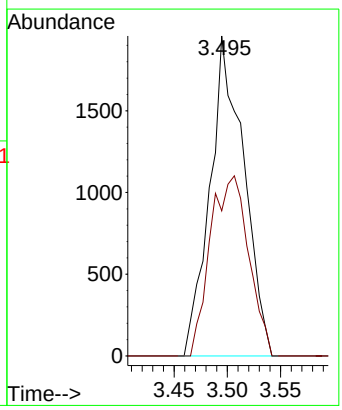
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

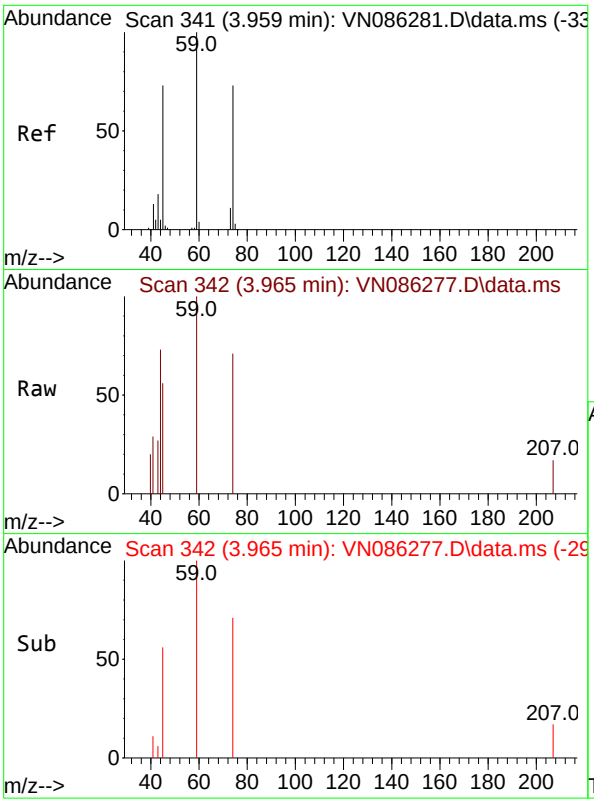


#7
Trichlorofluoromethane
Concen: 1.086 ug/l
RT: 3.495 min Scan# 262
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:101 Resp: 4327

Ion	Ratio	Lower	Upper
101	100		
103	45.4	49.2	73.8#





#8
Diethyl Ether
Concen: 1.065 ug/l
RT: 3.965 min Scan# 34
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

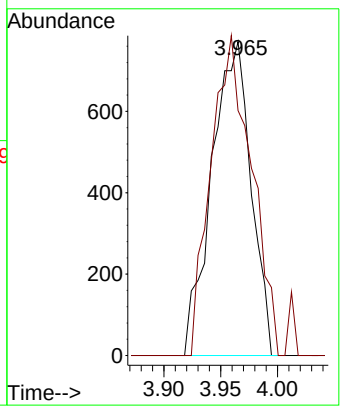
Tgt Ion: 74 Resp: 185

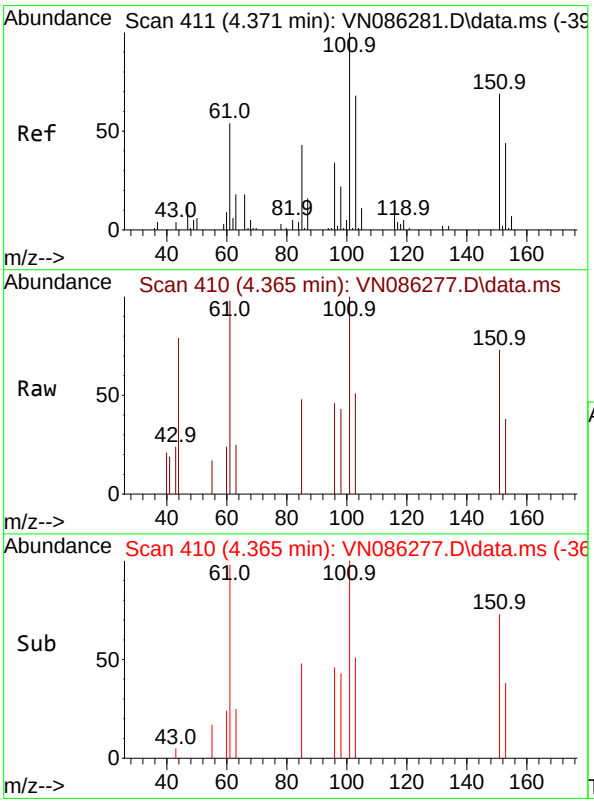
Ion	Ratio	Lower	Upper
74	100		
45	105.3	48.0	144.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

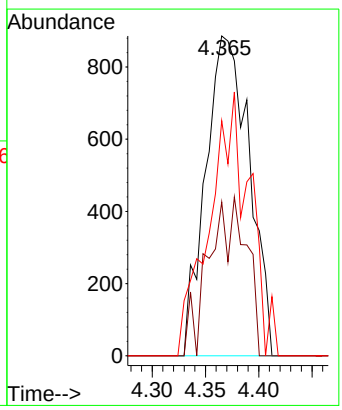


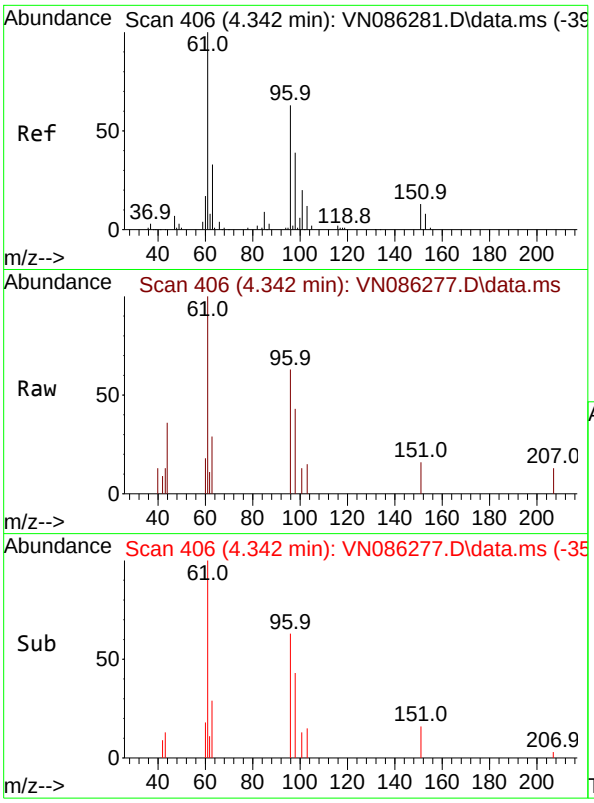


#9
1,1,2-Trichlorotrifluoroethane
Concen: 1.047 ug/l
RT: 4.365 min Scan# 410
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:101 Resp: 2525

Ion	Ratio	Lower	Upper
101	100		
85	23.9	34.7	52.1#
151	75.8	56.1	84.1

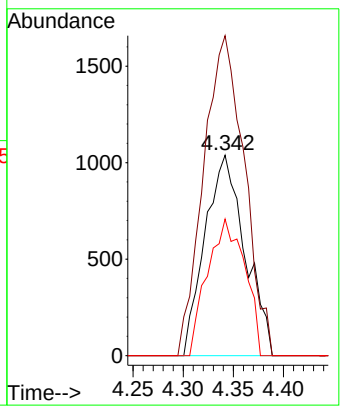




#12
1,1-Dichloroethene
Concen: 1.122 ug/l
RT: 4.342 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 96 Resp: 289(

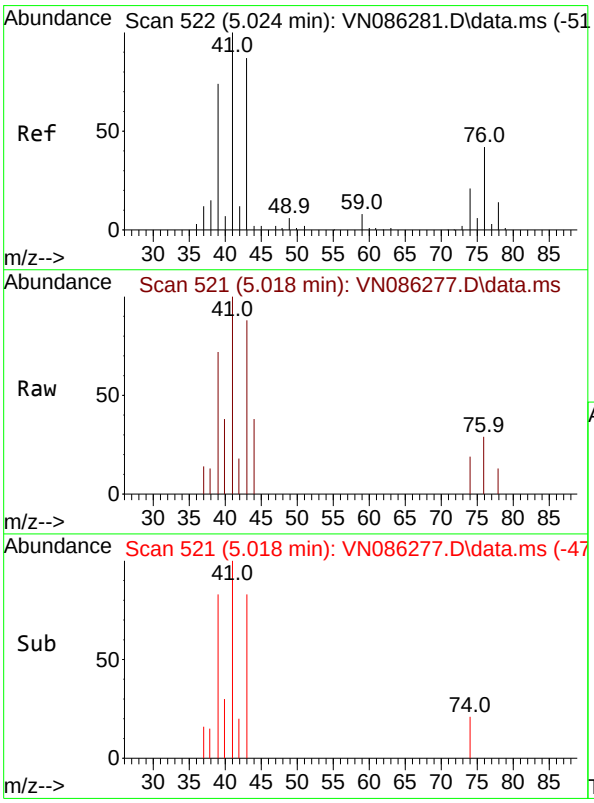
Ion	Ratio	Lower	Upper
96	100		
61	159.6	126.6	189.8
98	68.1	49.6	74.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

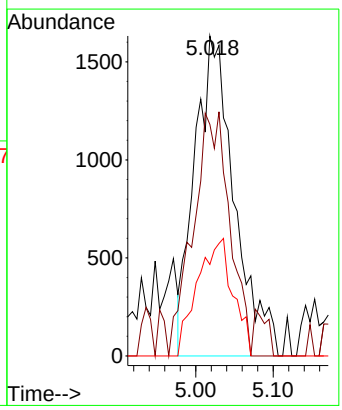
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

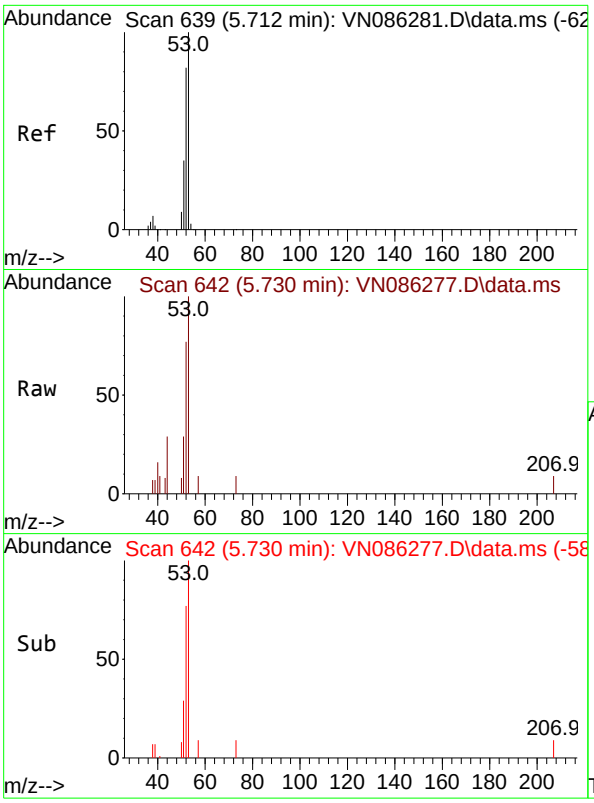


#14
Allyl chloride
Concen: 1.272 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 41 Resp: 5821

Ion	Ratio	Lower	Upper
41	100		
39	70.2	59.2	88.8
76	32.9	31.2	46.8





#15
Acrylonitrile
Concen: 5.069 ug/l
RT: 5.730 min Scan# 64
Delta R.T. 0.018 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 53 Resp: 725

Ion	Ratio	Lower	Upper
53	100		
52	81.7	65.5	98.3
51	36.3	28.6	42.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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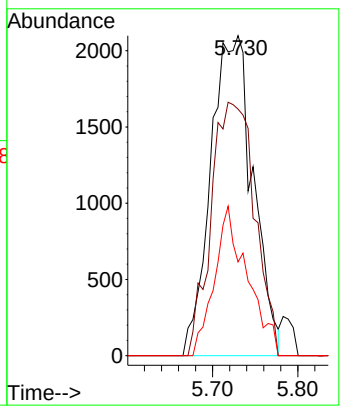
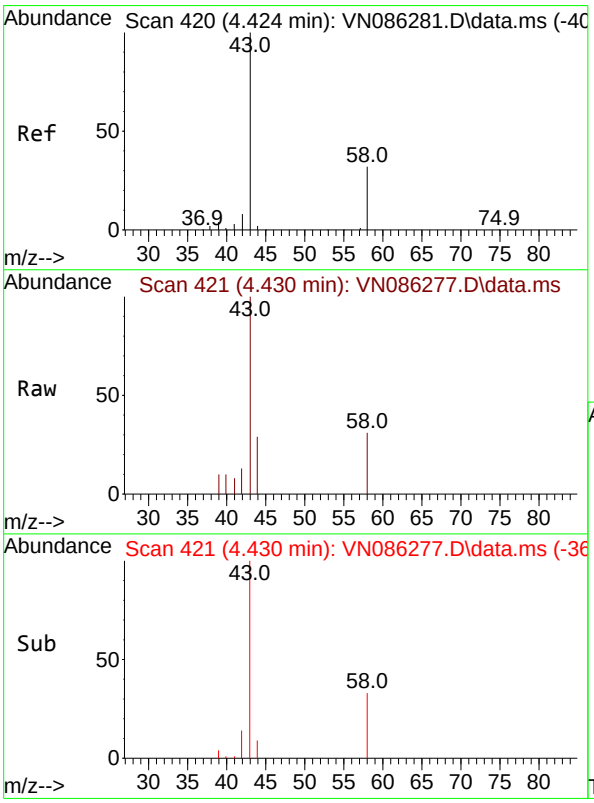
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

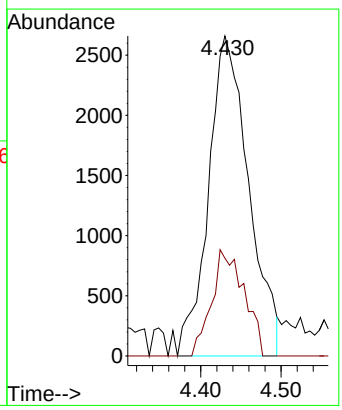


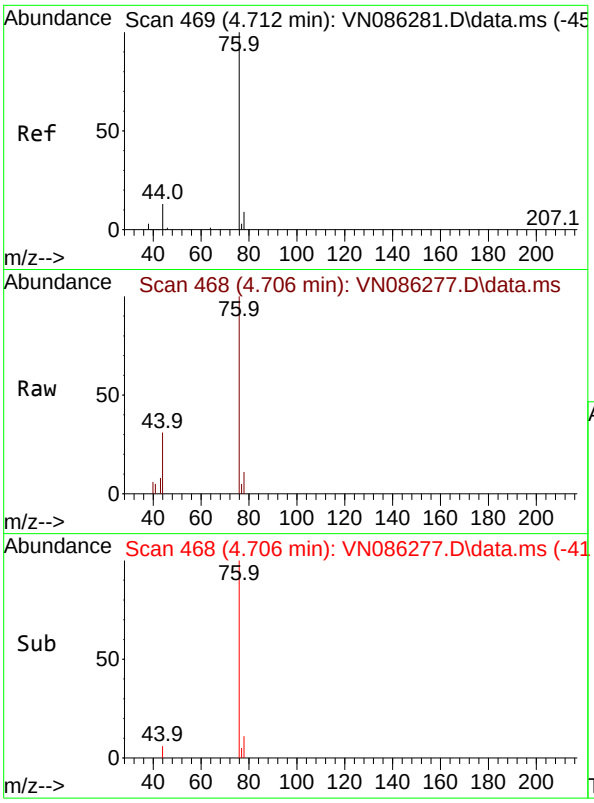


#16
Acetone
Concen: 2.774 ug/l m
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 9264

Ion	Ratio	Lower	Upper
43	100		
58	30.5	25.3	37.9





#17
Carbon Disulfide
Concen: 1.319 ug/l
RT: 4.706 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 76 Resp: 1017

Ion	Ratio	Lower	Upper
76	100		
78	10.7	7.6	11.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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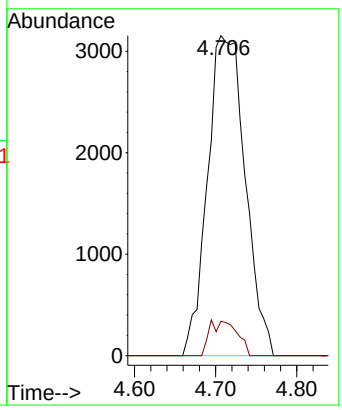
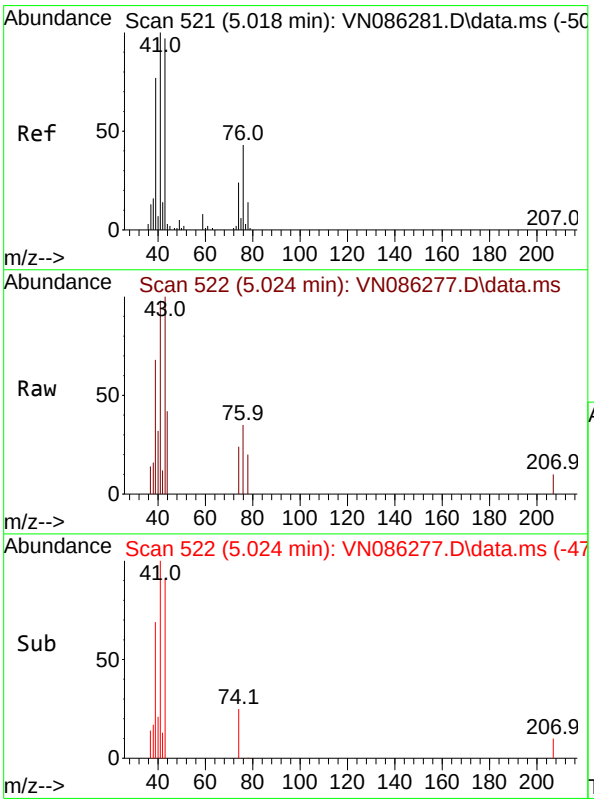
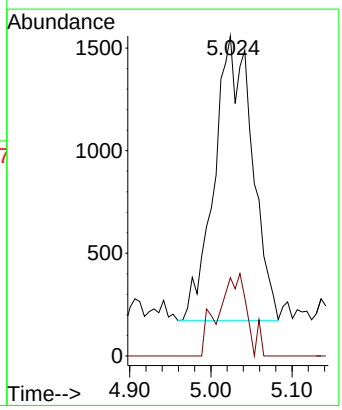


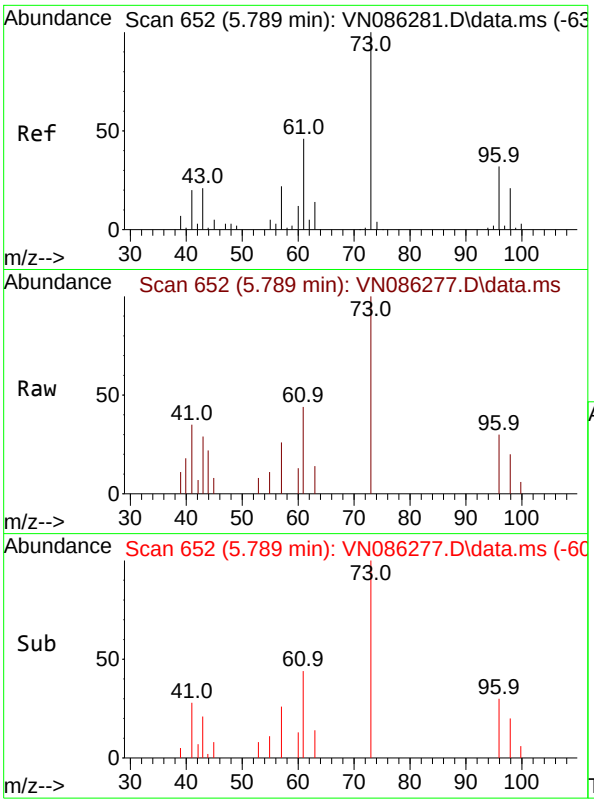


#18
Methyl Acetate
Concen: 1.176 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 4481

Ion	Ratio	Lower	Upper
43	100		
74	20.9	19.8	29.6





#19
Methyl tert-butyl Ether
Concen: 1.145 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 73 Resp: 1084

Ion	Ratio	Lower	Upper
73	100		
57	26.5	17.6	26.4#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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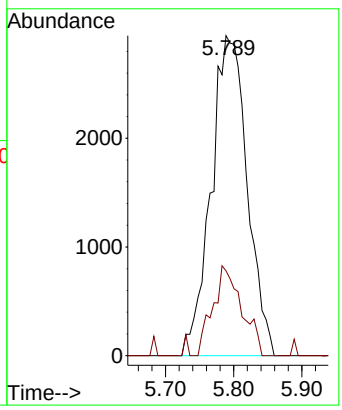
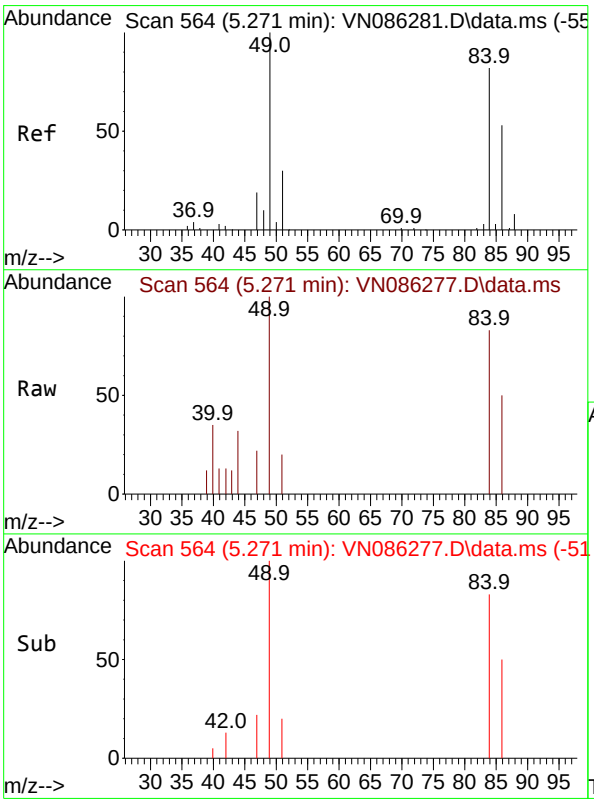
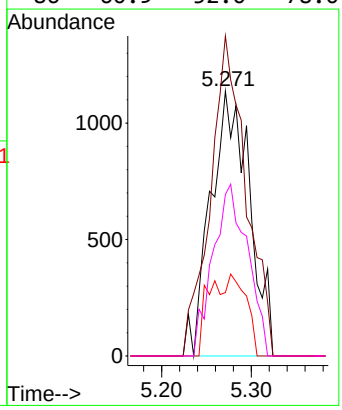


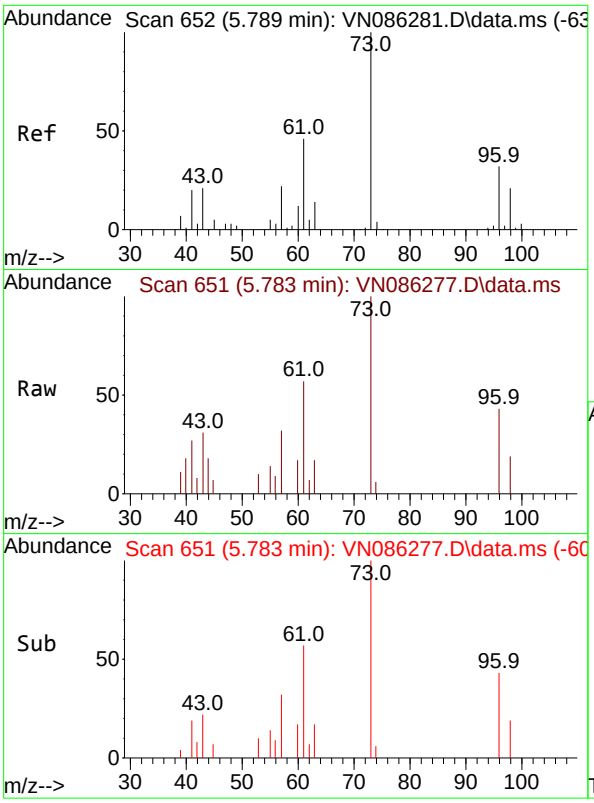


#20
Methylene Chloride
Concen: 1.167 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 84 Resp: 3423

Ion	Ratio	Lower	Upper
84	100		
49	120.8	98.2	147.2
51	23.9	29.8	44.6#
86	60.9	52.0	78.0

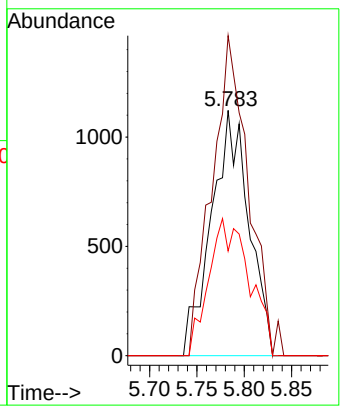




#21
trans-1,2-Dichloroethene
Concen: 1.143 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 96 Resp: 307

Ion	Ratio	Lower	Upper
96	100		
61	130.5	114.6	171.8
98	42.7	51.2	76.8#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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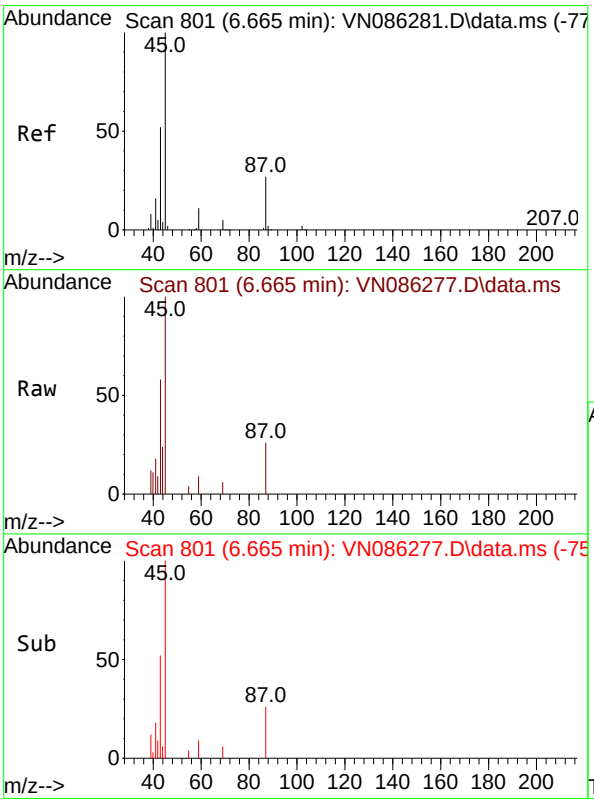
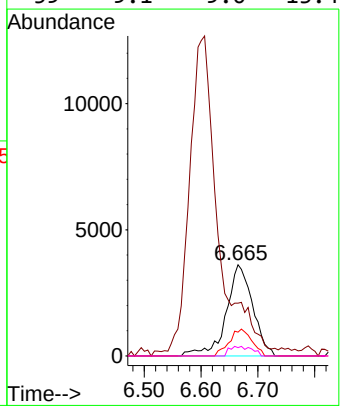
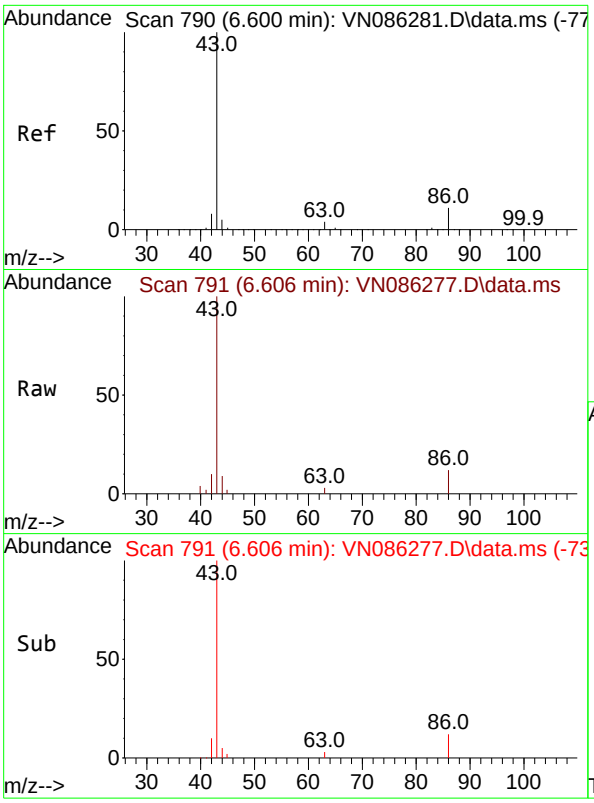


#22
Diisopropyl ether
Concen: 1.169 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 45 Resp: 11644

Ion	Ratio	Lower	Upper
45	100		
43	51.1	41.8	62.8
87	26.2	21.6	32.4
59	9.1	9.0	13.4





#23
Vinyl Acetate
Concen: 5.479 ug/l
RT: 6.606 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 3814

Ion	Ratio	Lower	Upper
43	100		
86	12.3	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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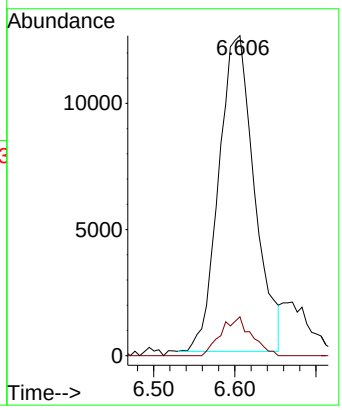
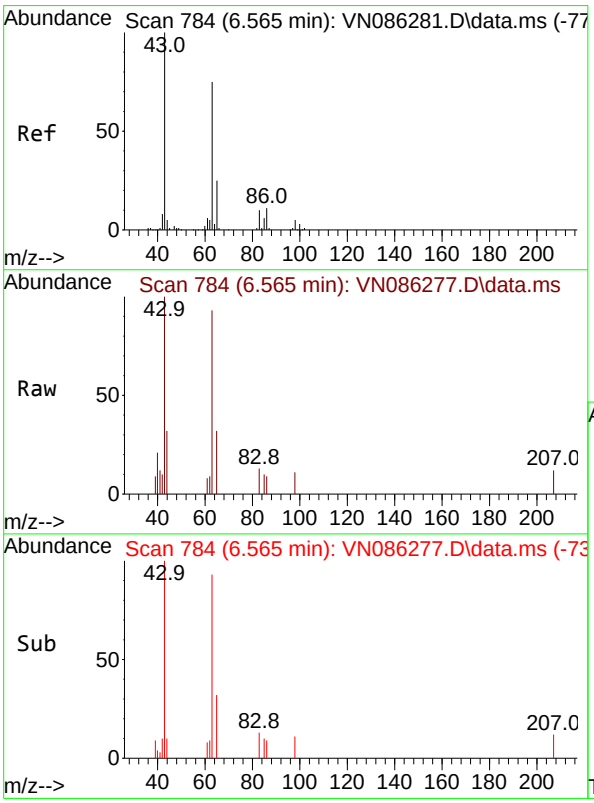
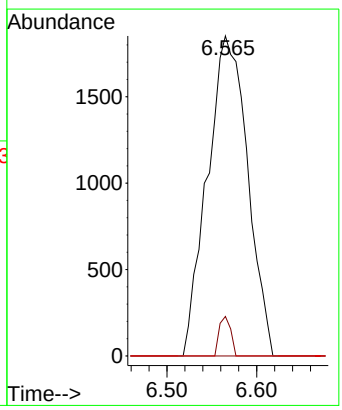


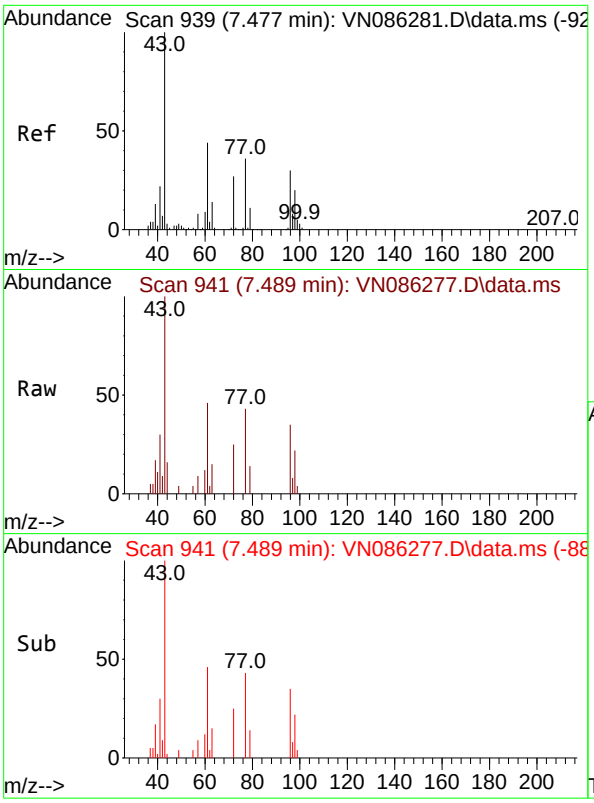


#24
1,1-Dichloroethane
Concen: 1.095 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 63 Resp: 5756

Ion	Ratio	Lower	Upper
63	100		
98	12.3	3.4	10.2#
100	0.0	2.1	6.5#





#25
2-Butanone
Concen: 5.581 ug/l
RT: 7.489 min Scan# 94
Delta R.T. 0.012 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 1102

Ion	Ratio	Lower	Upper
43	100		
72	26.5	21.7	32.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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Reviewed By :John Carlone 04/16/2025
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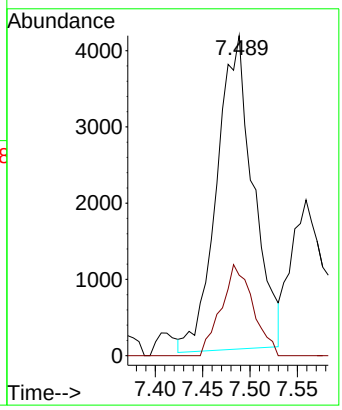
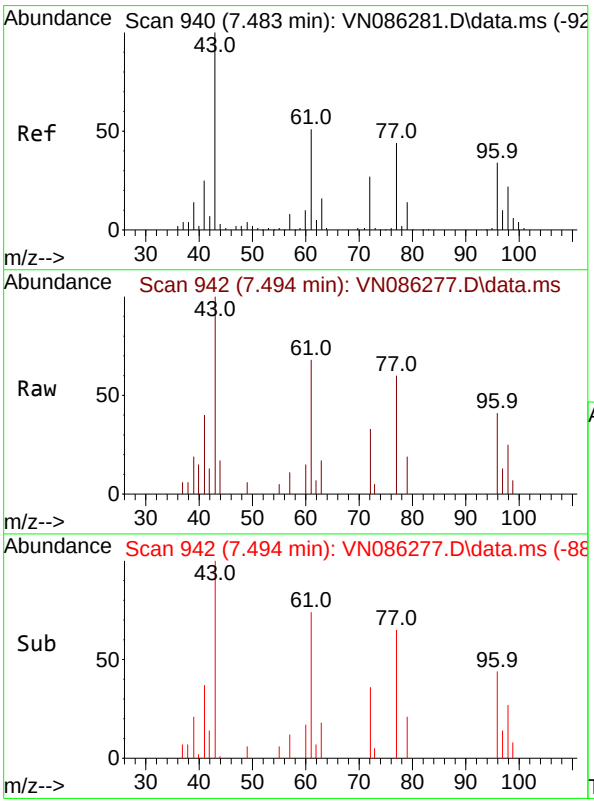
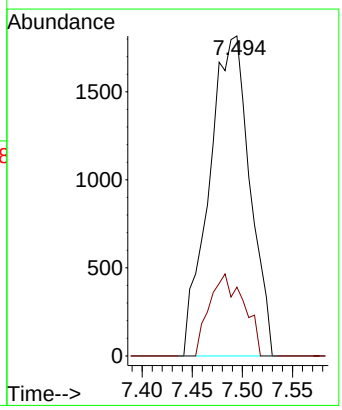


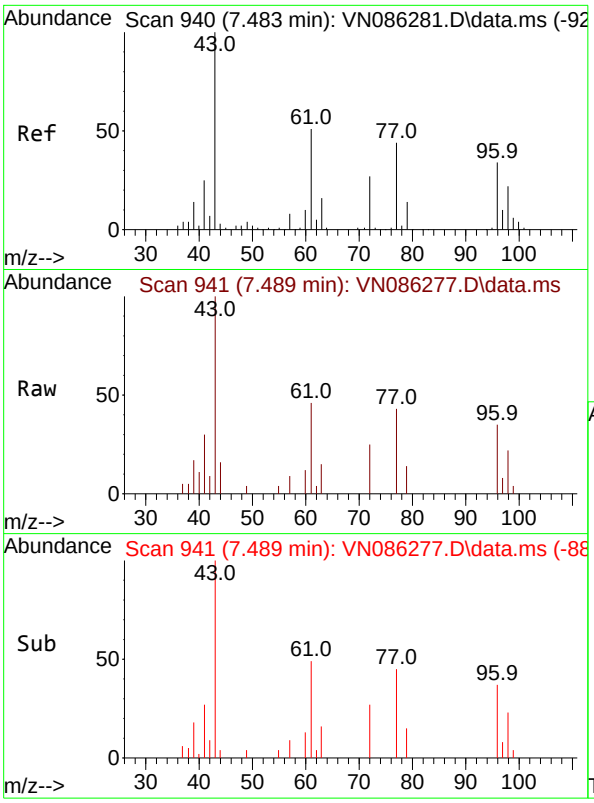


#26
2,2-Dichloropropane
Concen: 1.092 ug/l
RT: 7.494 min Scan# 942
Delta R.T. 0.012 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 77 Resp: 5139

Ion	Ratio	Lower	Upper
77	100		
97	21.7	11.2	33.5





#27
cis-1,2-Dichloroethene
Concen: 1.154 ug/l
RT: 7.489 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 96 Resp: 385

Ion	Ratio	Lower	Upper
96	100		
61	133.8	0.0	299.0
98	60.5	0.0	129.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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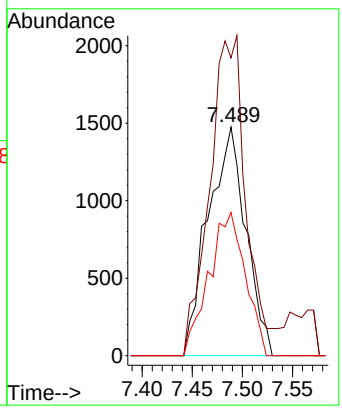
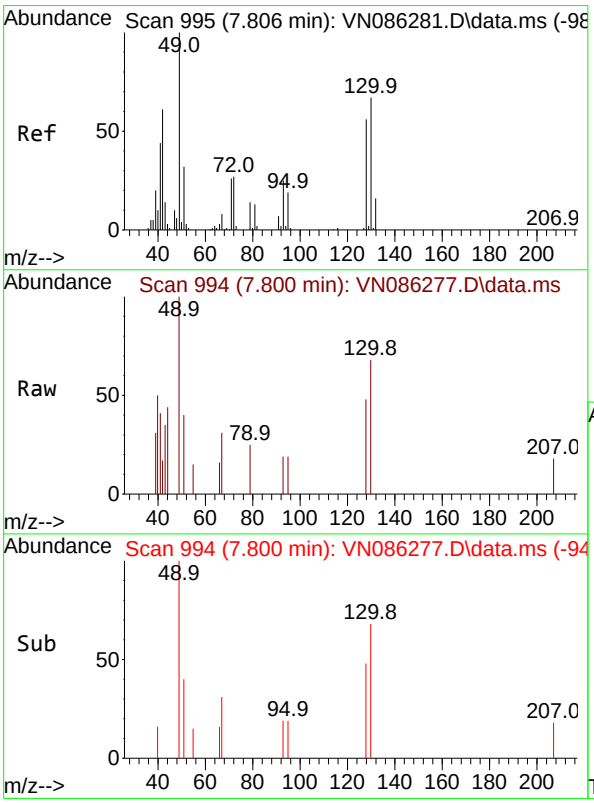
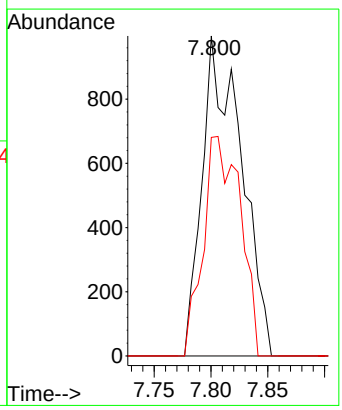


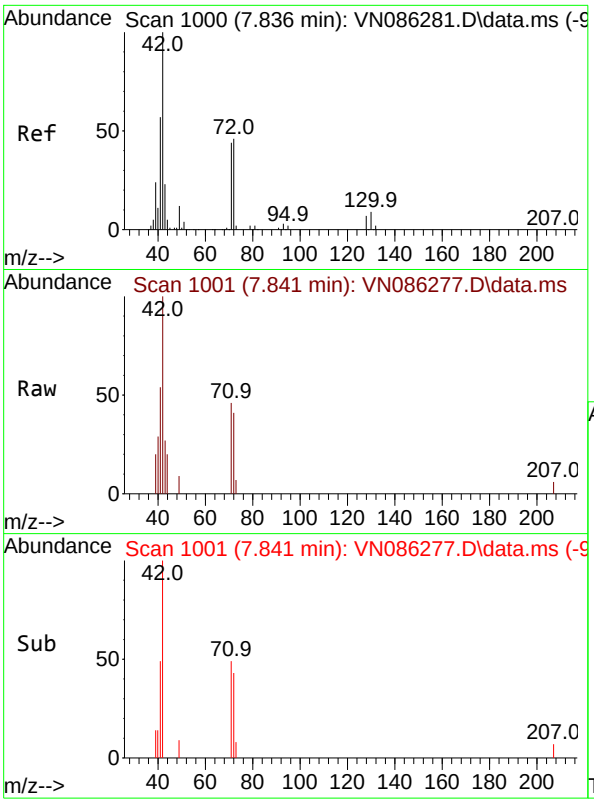


#28
Bromochloromethane
Concen: 1.071 ug/l
RT: 7.800 min Scan# 994
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 49 Resp: 2387

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	3.4
130	64.9	57.1	85.7





#29
Tetrahydrofuran
Concen: 5.577 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 42 Resp: 736

Ion	Ratio	Lower	Upper
42	100		
72	40.8	36.2	54.4
71	37.4	34.0	51.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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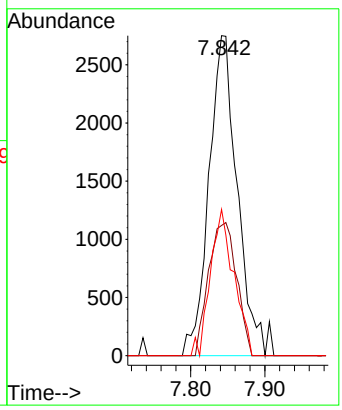
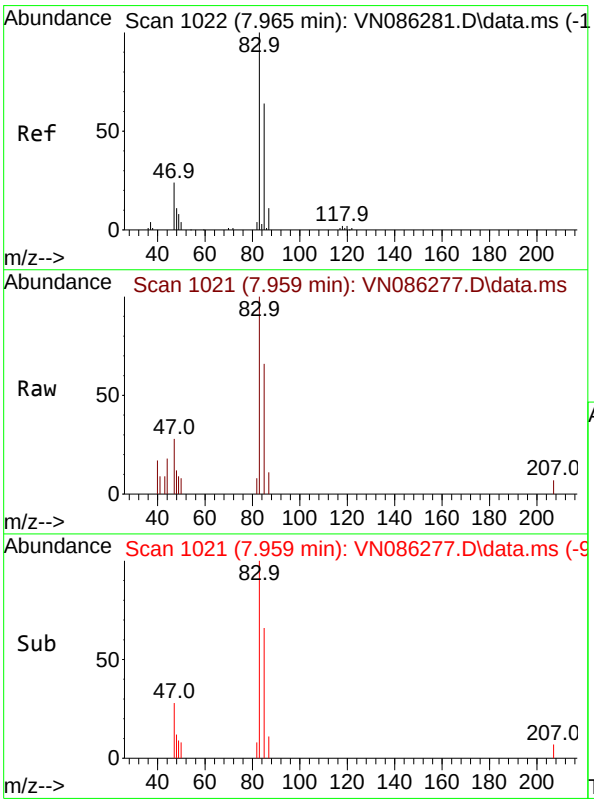
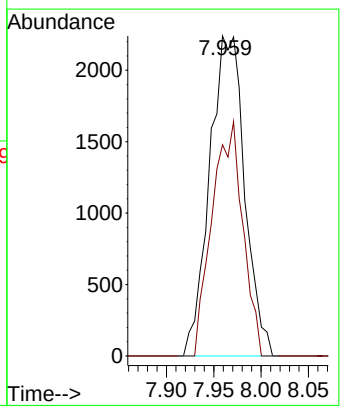


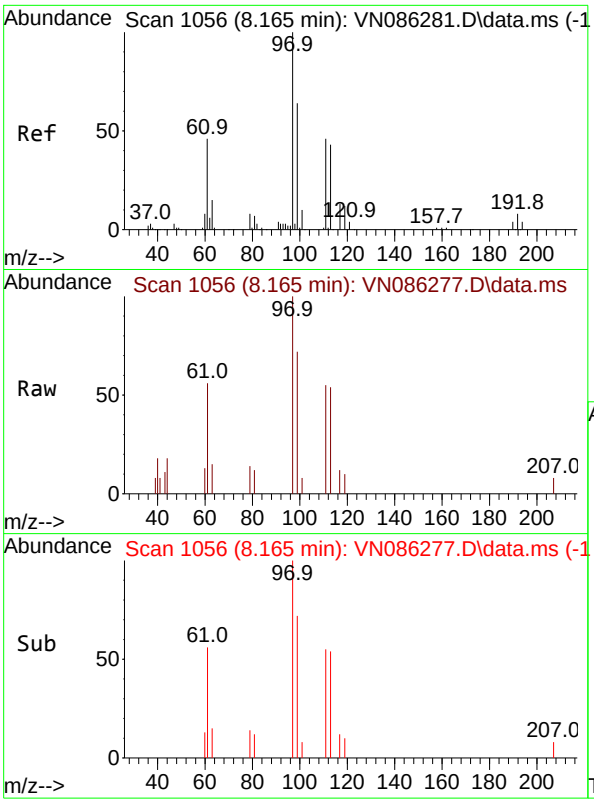


#30
Chloroform
Concen: 1.118 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 83 Resp: 5771

Ion	Ratio	Lower	Upper
83	100		
85	66.0	51.5	77.3





#32
1,1,1-Trichloroethane
Concen: 1.085 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 97 Resp: 479

Ion	Ratio	Lower	Upper
97	100		
99	0.0	52.7	79.1#
61	46.6	39.5	59.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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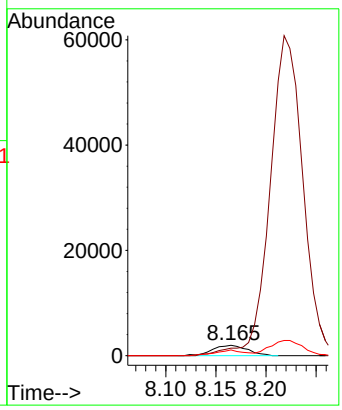
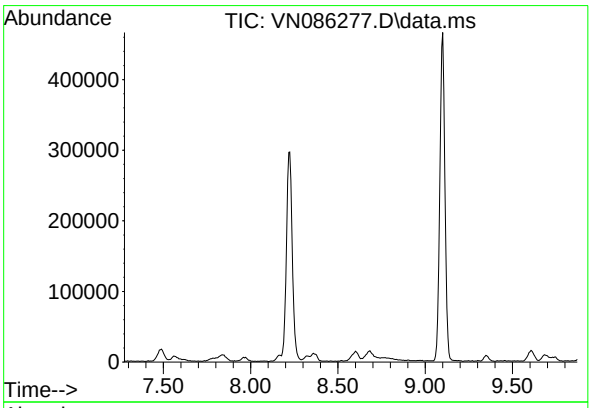


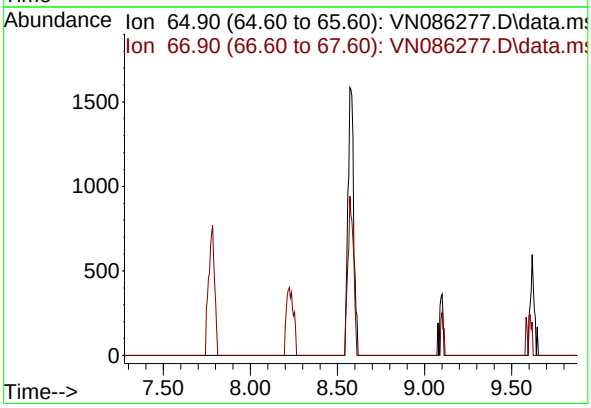


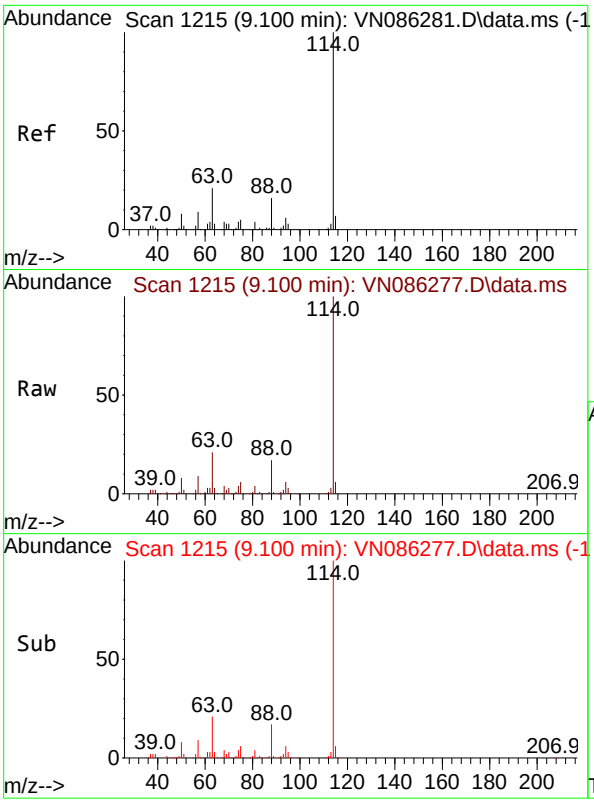
#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 8.58 min

Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 65

Sig	Exp Ratio
65	100
67	53.0





#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:114 Resp: 40475

Ion	Ratio	Lower	Upper
114	100		
63	20.9	0.0	42.6
88	16.7	0.0	31.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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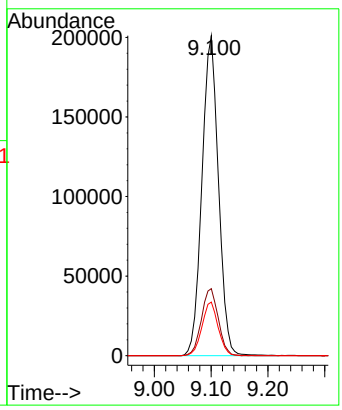
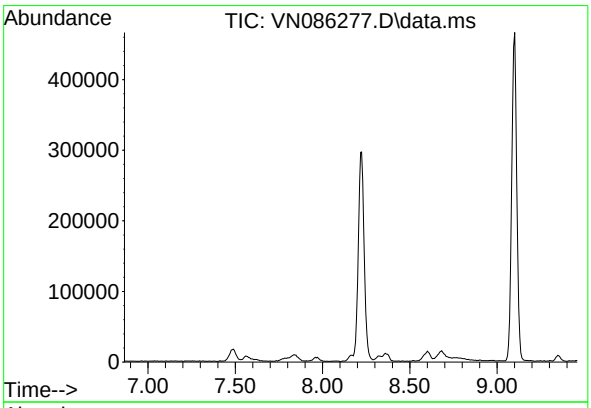
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025



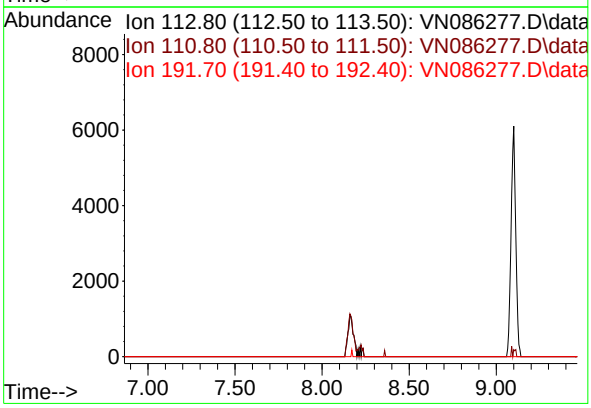


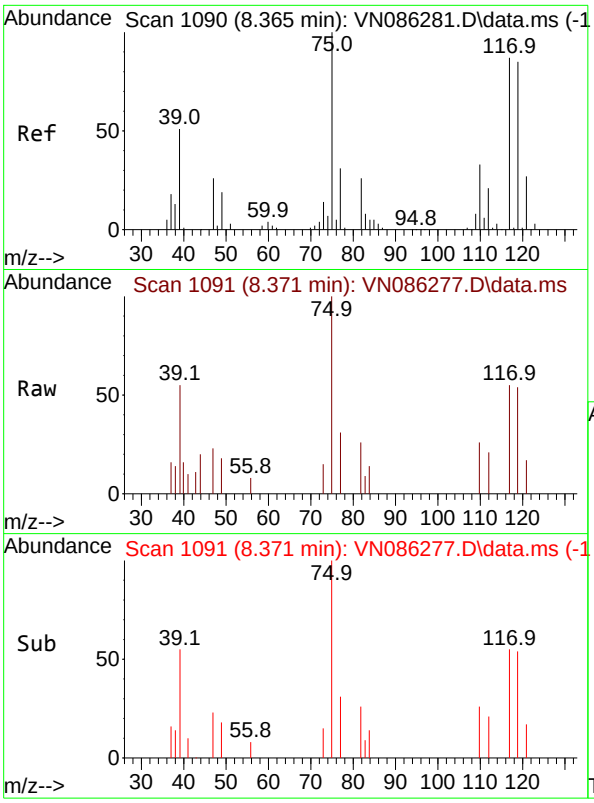
#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 8.16 min

Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 113

Sig	Exp Ratio
113	100
111	104.2
192	17.1





#36
1,1-Dichloropropene
Concen: 1.099 ug/l
RT: 8.371 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 75 Resp: 412

Ion	Ratio	Lower	Upper
75	100		
110	30.0	16.8	50.4
77	34.7	24.9	37.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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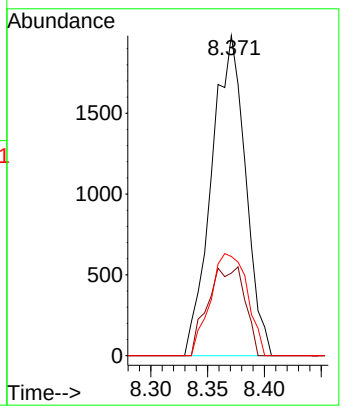
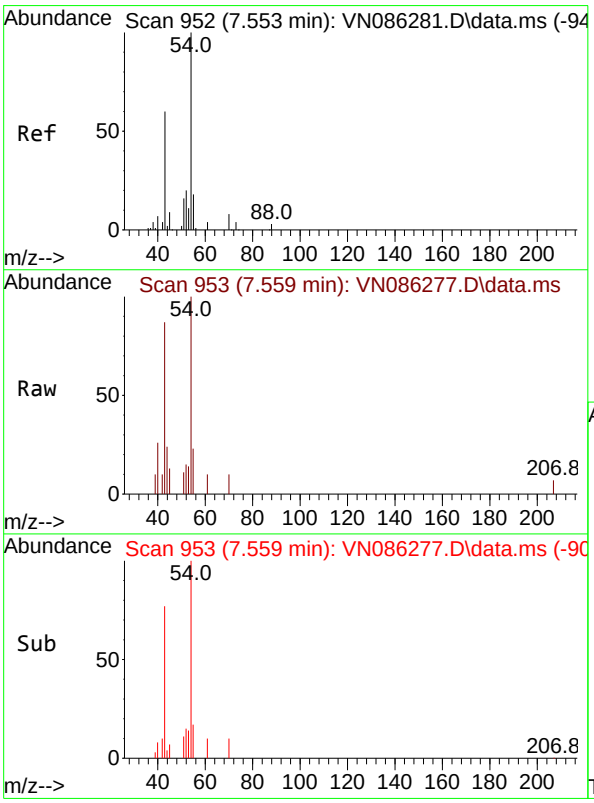
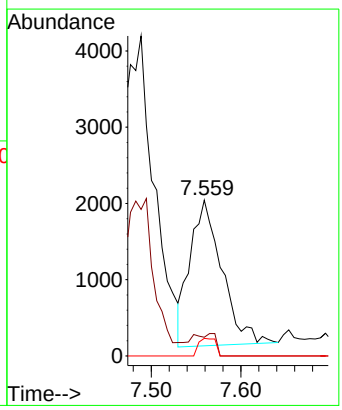


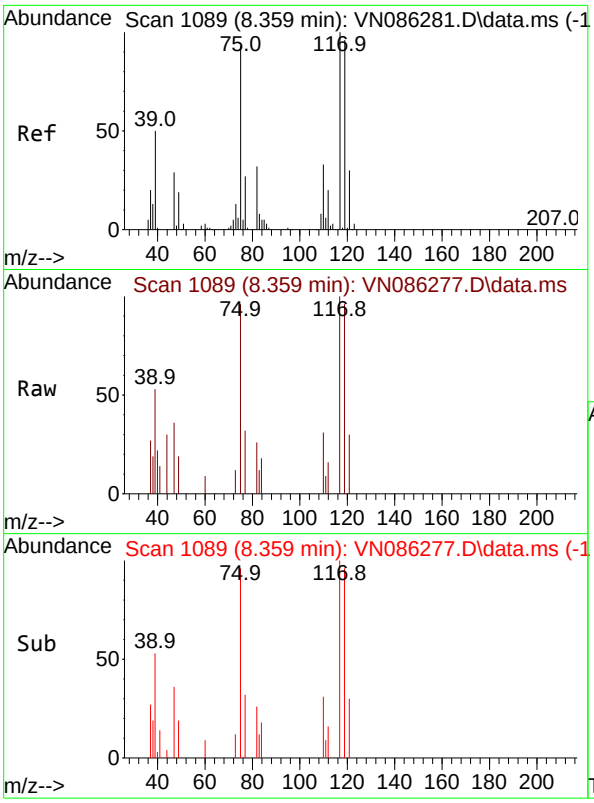


#37
Ethyl Acetate
Concen: 1.198 ug/l
RT: 7.559 min Scan# 953
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 4732

Ion	Ratio	Lower	Upper
43	100		
61	11.6	11.1	16.7
70	6.4	9.2	13.8#





#38
Carbon Tetrachloride
Concen: 1.066 ug/l
RT: 8.359 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:117 Resp: 380

Ion	Ratio	Lower	Upper
117	100		
119	95.5	76.8	115.2
121	29.9	23.8	35.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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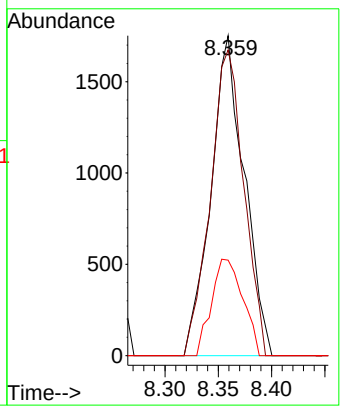
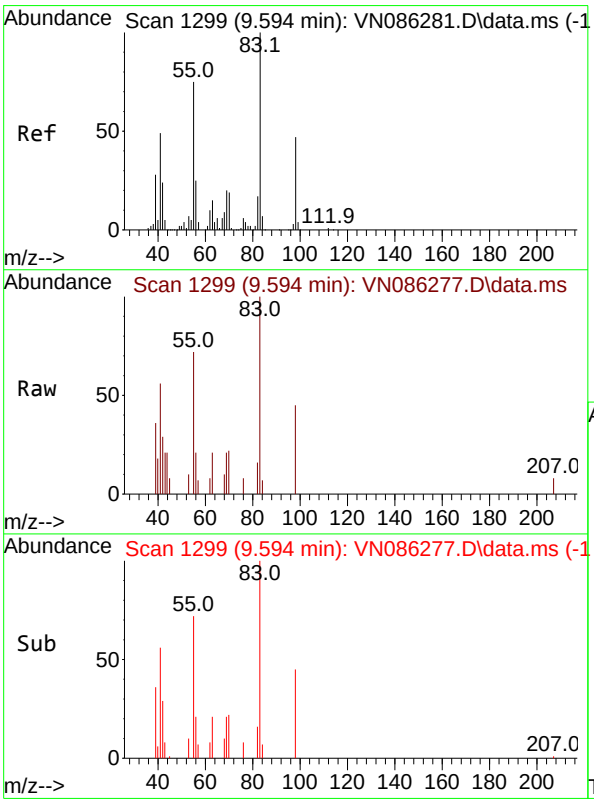
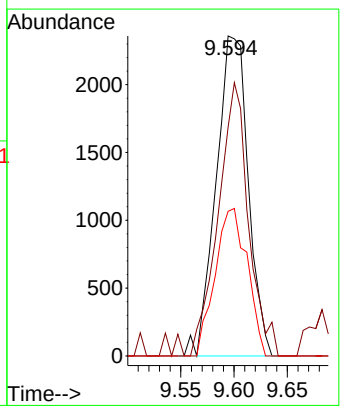


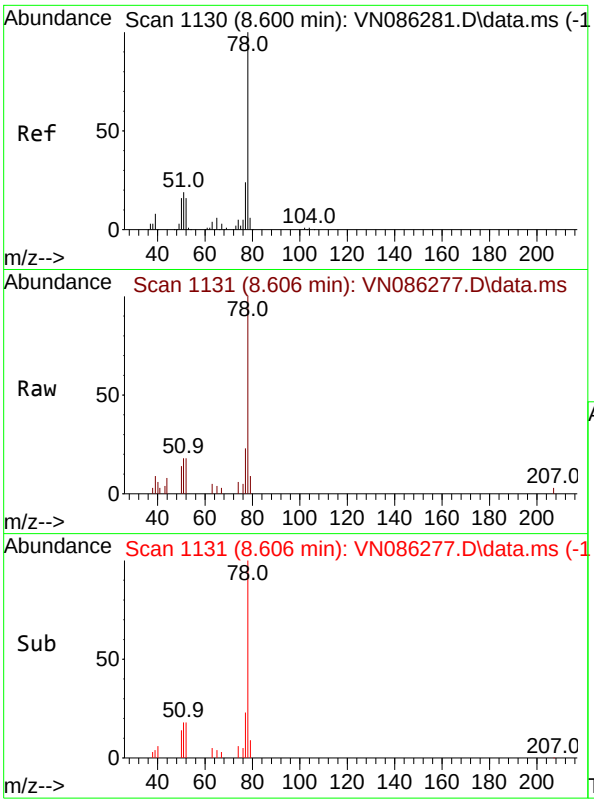


#39
Methylcyclohexane
Concen: 1.110 ug/l
RT: 9.594 min Scan# 1299
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 83 Resp: 4950

Ion	Ratio	Lower	Upper
83	100		
55	71.5	59.8	89.8
98	45.2	37.9	56.9





#40
Benzene
Concen: 1.110 ug/l
RT: 8.606 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 78 Resp: 1334

Ion	Ratio	Lower	Upper
78	100		
77	22.8	19.4	29.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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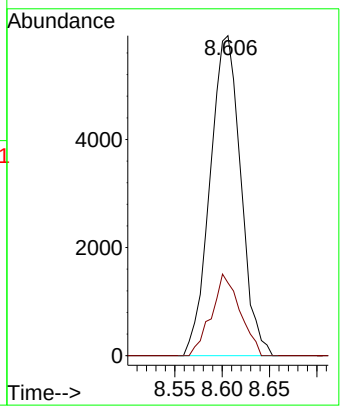
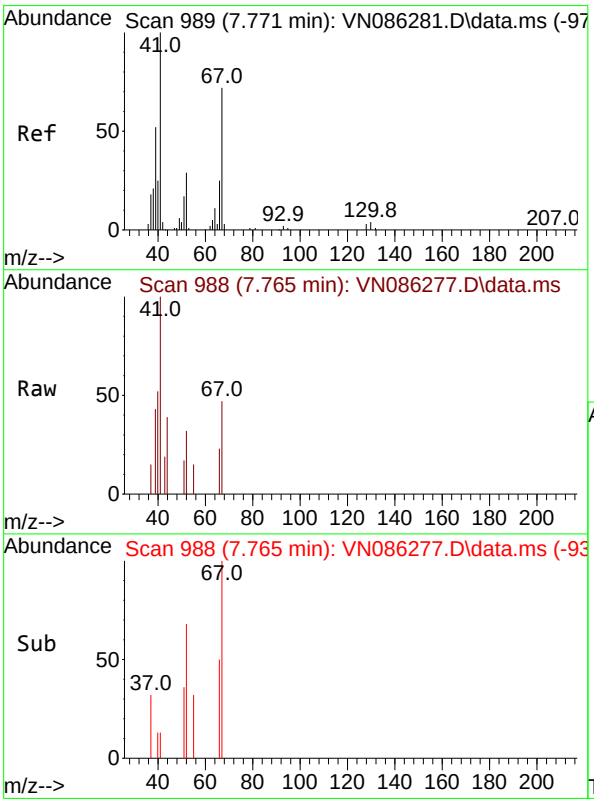
Supervised By :Semsettin Yesilyurt 04/16/2025

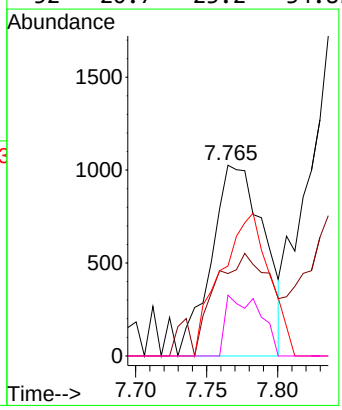


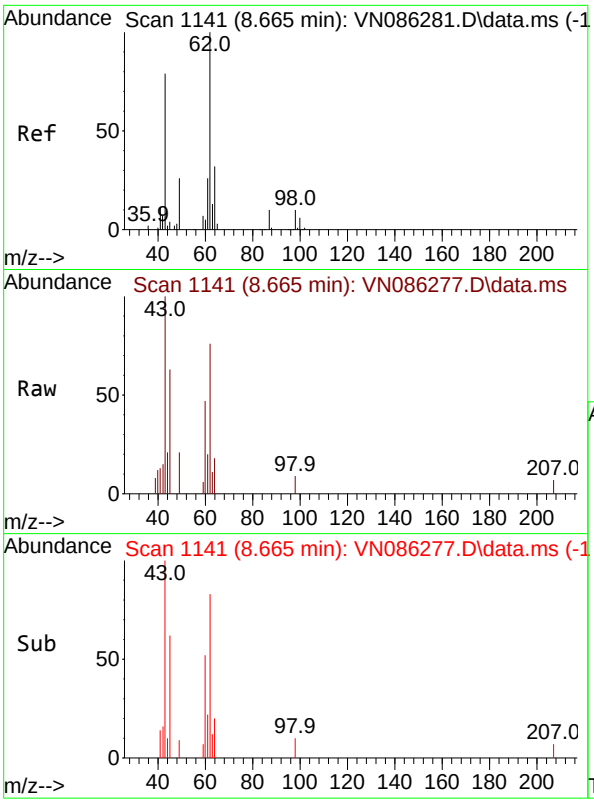


#41
Methacrylonitrile
Concen: 1.158 ug/l
RT: 7.765 min Scan# 988
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 41 Resp: 2651

Ion	Ratio	Lower	Upper
41	100		
39	55.5	43.0	64.4
67	68.9	58.8	88.2
52	20.7	23.2	34.8#





#42
1,2-Dichloroethane
Concen: 1.111 ug/l
RT: 8.665 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 62 Resp: 425

Ion	Ratio	Lower	Upper
62	100		
98	11.0	0.0	19.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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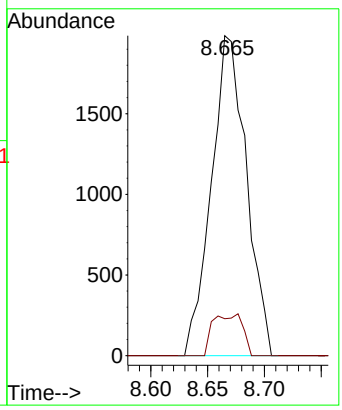
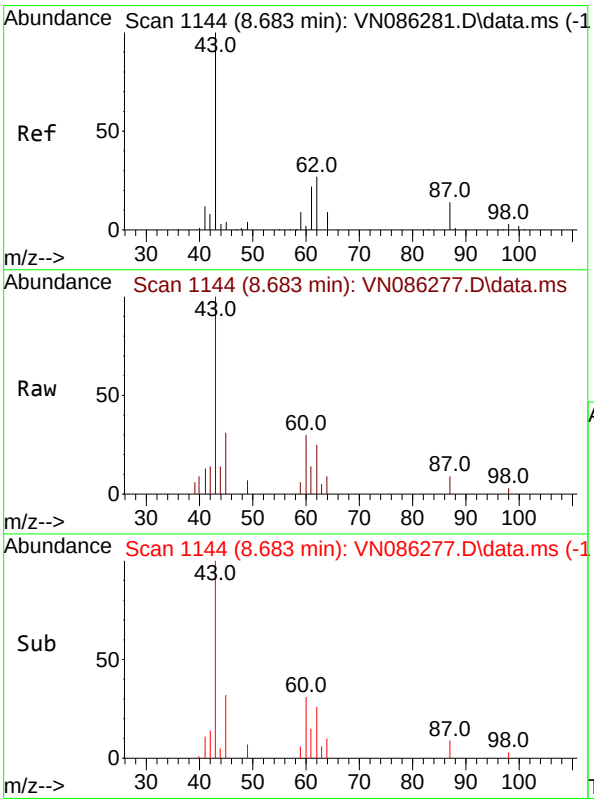
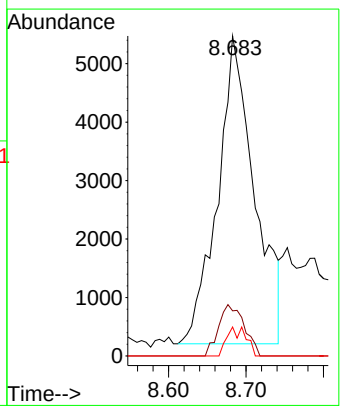


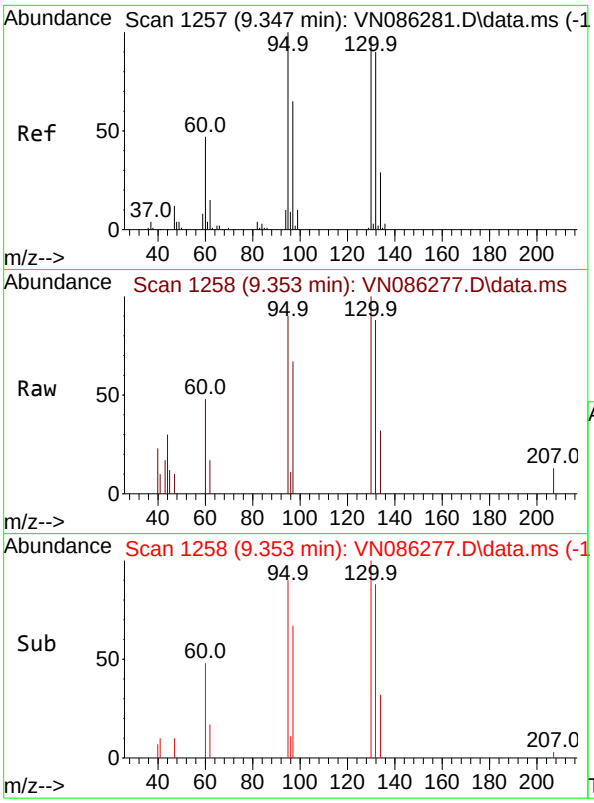


#43
Isopropyl Acetate
Concen: 0.619 ug/l
RT: 8.683 min Scan# 1144
Delta R.T. -0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 17444

Ion	Ratio	Lower	Upper
43	100		
61	11.6	20.5	30.7#
87	4.9	10.5	15.7#





#44
Trichloroethene
Concen: 1.108 ug/l
RT: 9.353 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:130 Resp: 315

Ion	Ratio	Lower	Upper
130	100		
95	90.4	0.0	207.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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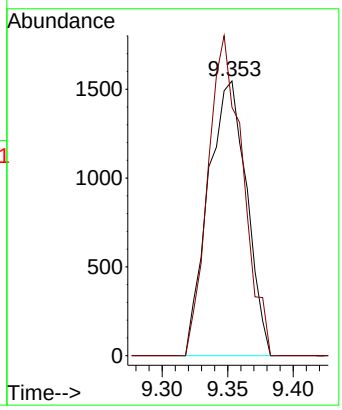
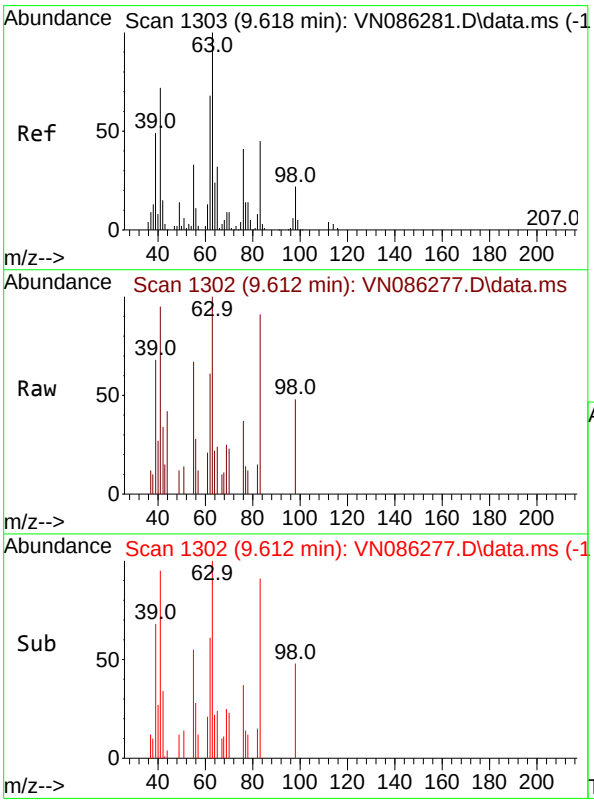
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

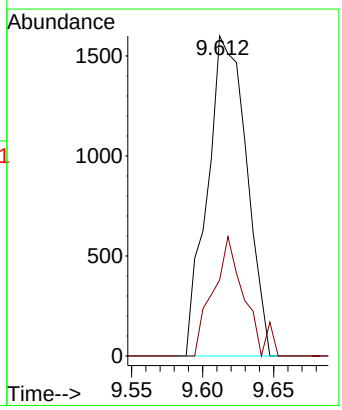


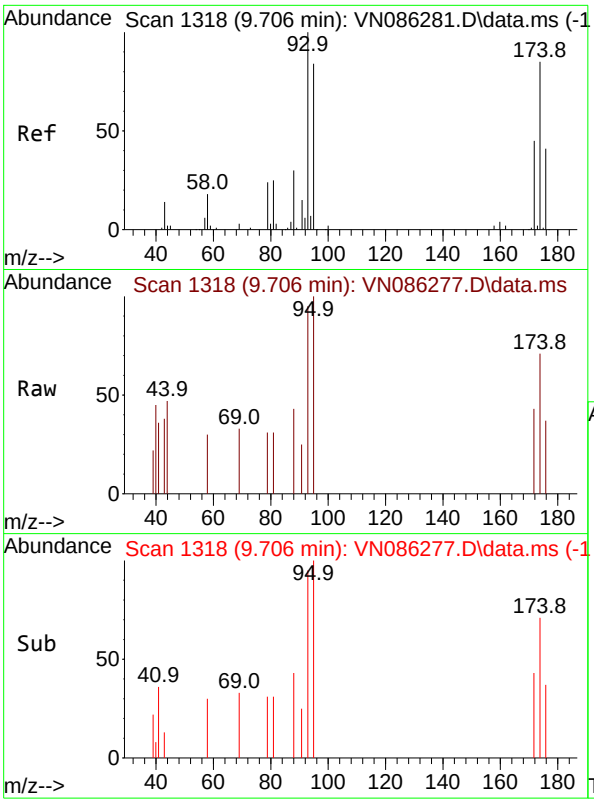


#45
1,2-Dichloropropane
Concen: 1.041 ug/l
RT: 9.612 min Scan# 1302
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 63 Resp: 3063

Ion	Ratio	Lower	Upper
63	100		
65	23.8	25.4	38.2#

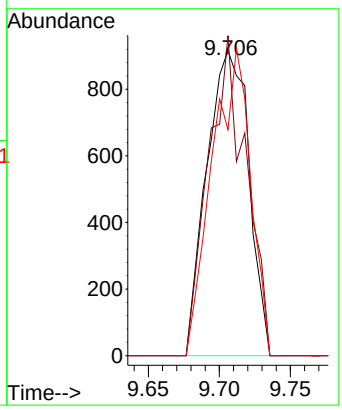




#46
Dibromomethane
Concen: 1.009 ug/l
RT: 9.706 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 93 Resp: 189

Ion	Ratio	Lower	Upper
93	100		
95	92.9	66.2	99.4
174	91.8	67.8	101.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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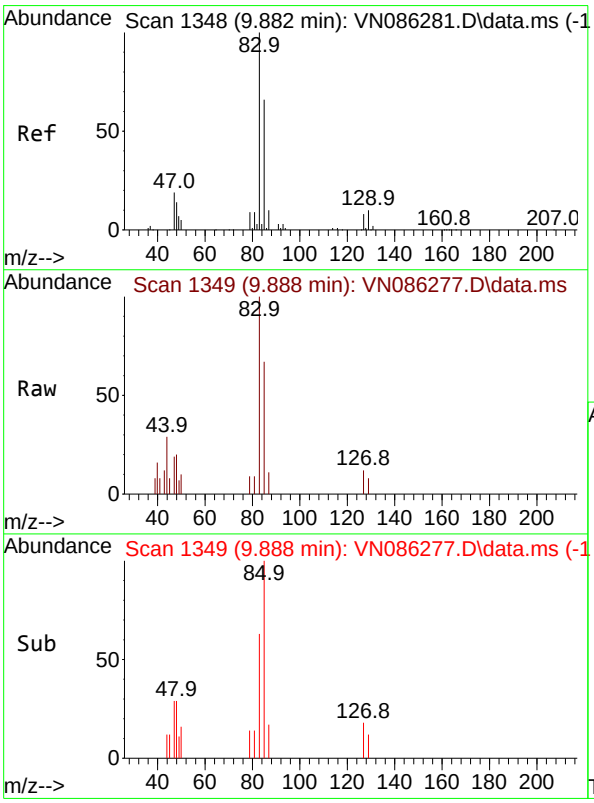
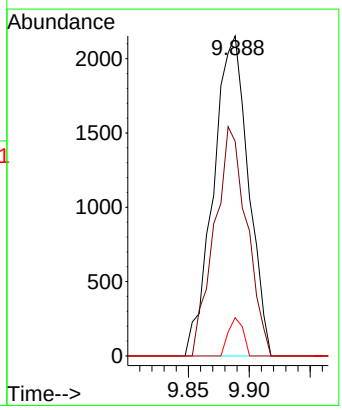
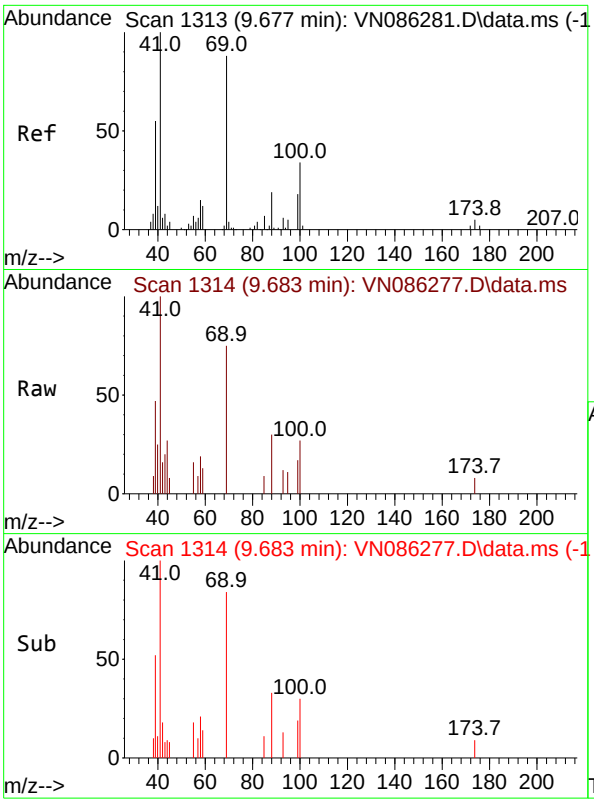


#47
Bromodichloromethane
Concen: 1.062 ug/l
RT: 9.888 min Scan# 1349
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 83 Resp: 4302

Ion	Ratio	Lower	Upper
83	100		
85	67.1	52.6	78.8
127	11.9	6.1	9.1#





#48
Methyl methacrylate
Concen: 1.206 ug/l
RT: 9.683 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 41 Resp: 418

Ion	Ratio	Lower	Upper
41	100		
69	77.7	68.2	102.2
39	54.6	45.2	67.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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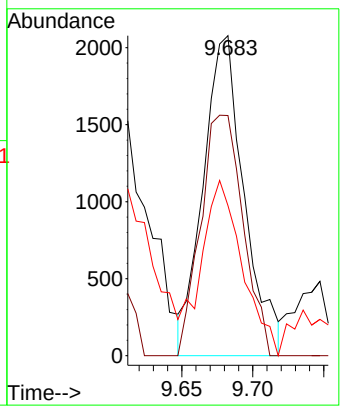
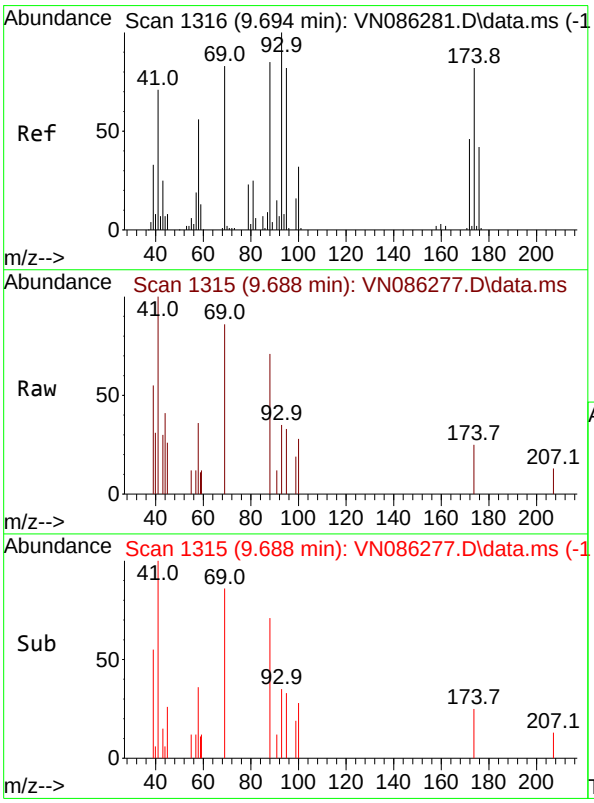
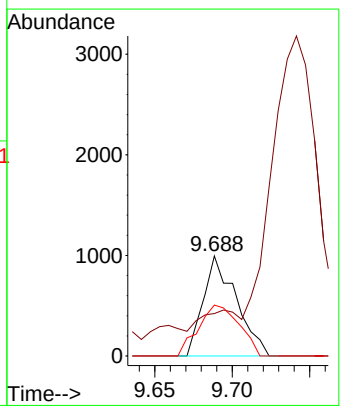


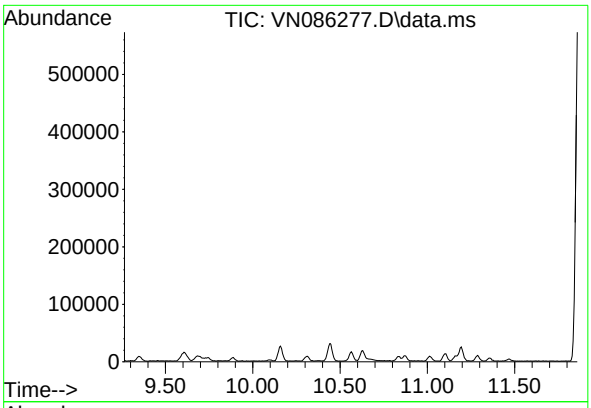


#49
1,4-Dioxane
Concen: 25.032 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 88 Resp: 1477

Ion	Ratio	Lower	Upper
88	100		
43	0.0	23.8	35.8#
58	62.7	57.4	86.2





#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 10.56 min

Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 98

Sig	Exp Ratio
98	100
100	65.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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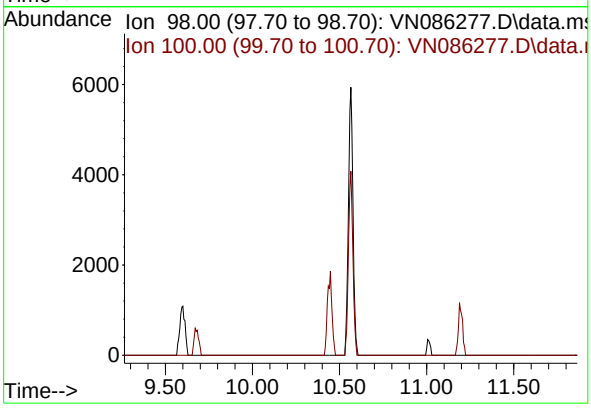
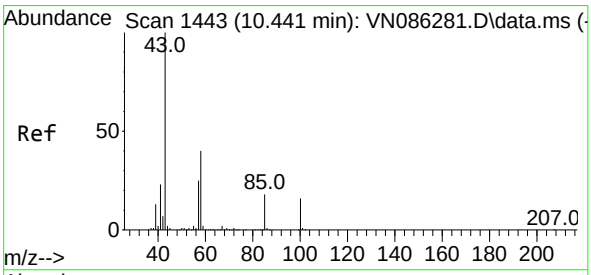
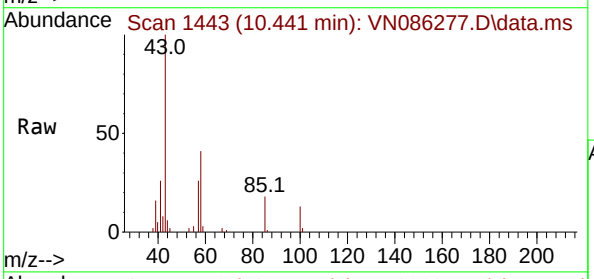
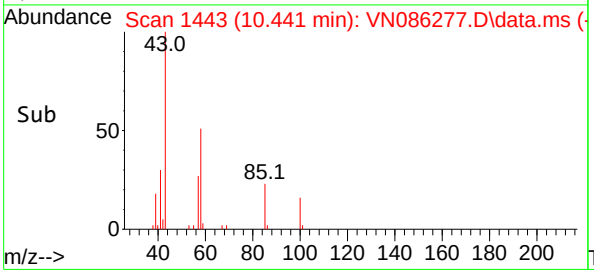




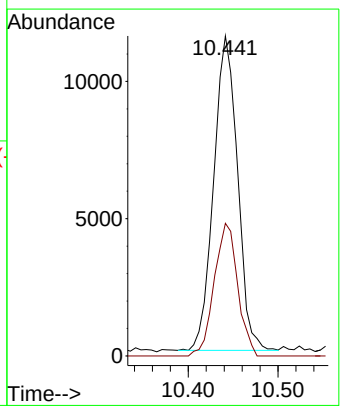


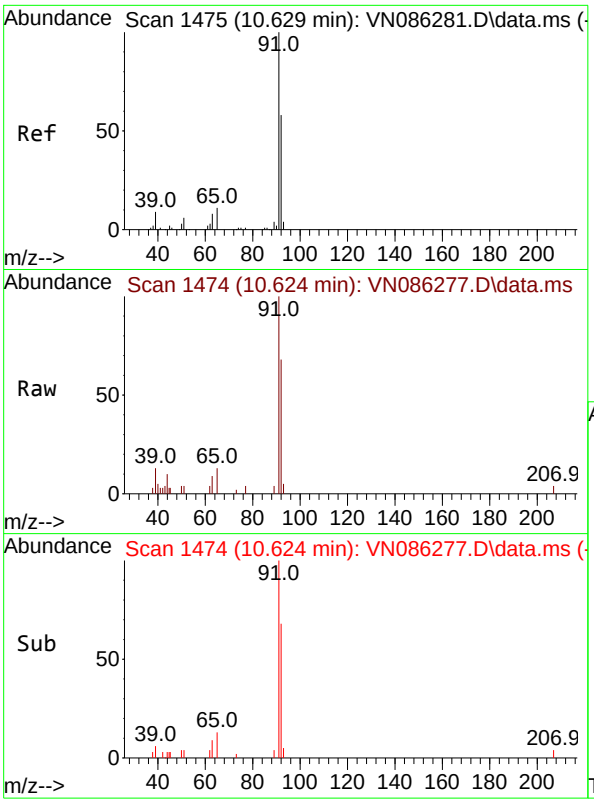


#51
4-Methyl-2-Pentanone
Concen: 5.227 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 21143

Ion	Ratio	Lower	Upper
43	100		
58	41.3	32.2	48.4

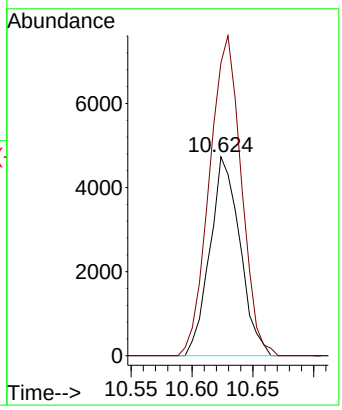




#52
Toluene
Concen: 1.083 ug/l
RT: 10.624 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 92 Resp: 812

Ion	Ratio	Lower	Upper
92	100		
91	170.7	137.3	205.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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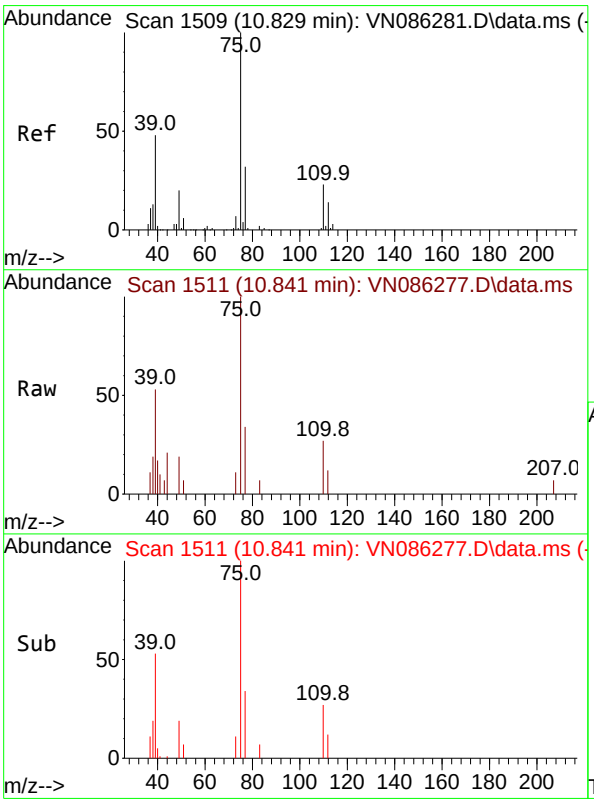
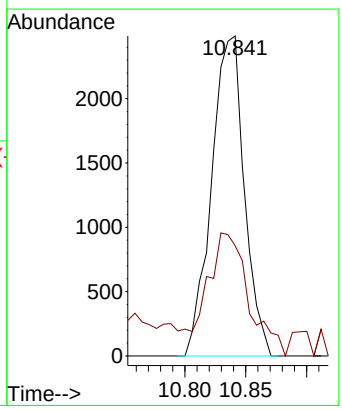
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

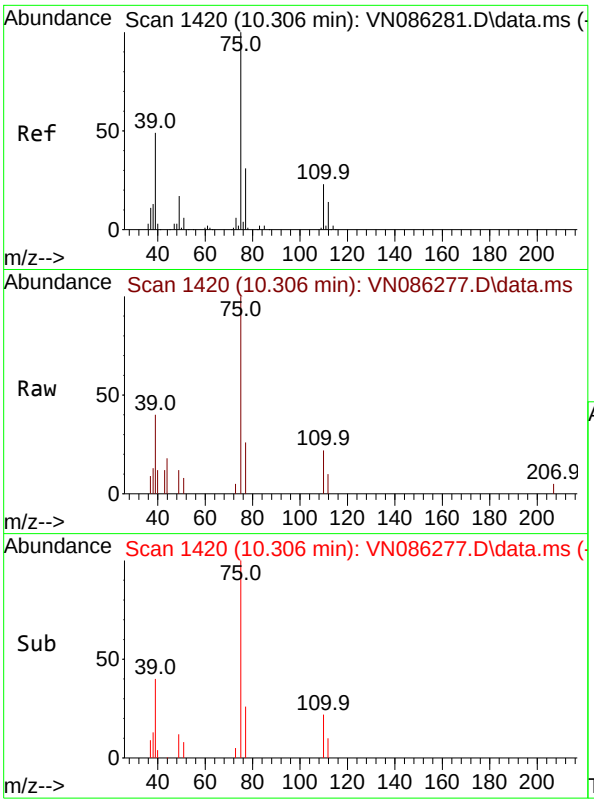


#53
t-1,3-Dichloropropene
Concen: 1.032 ug/l
RT: 10.841 min Scan# 1511
Delta R.T. 0.012 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 75 Resp: 4663

Ion	Ratio	Lower	Upper
75	100		
77	28.0	25.4	38.0





#54
cis-1,3-Dichloropropene
Concen: 1.107 ug/l
RT: 10.306 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 75 Resp: 549

Ion	Ratio	Lower	Upper
75	100		
77	26.4	25.2	37.8
39	40.4	39.3	58.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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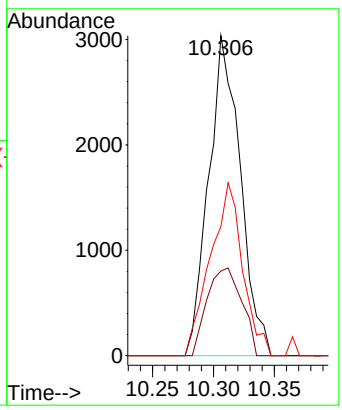
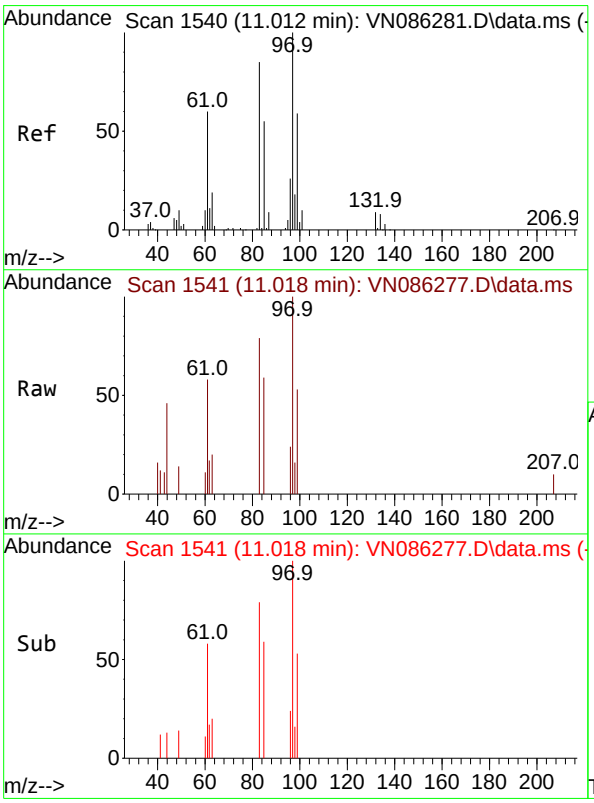
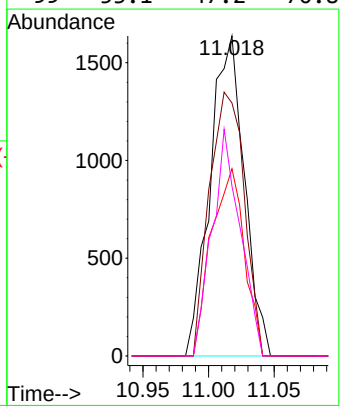


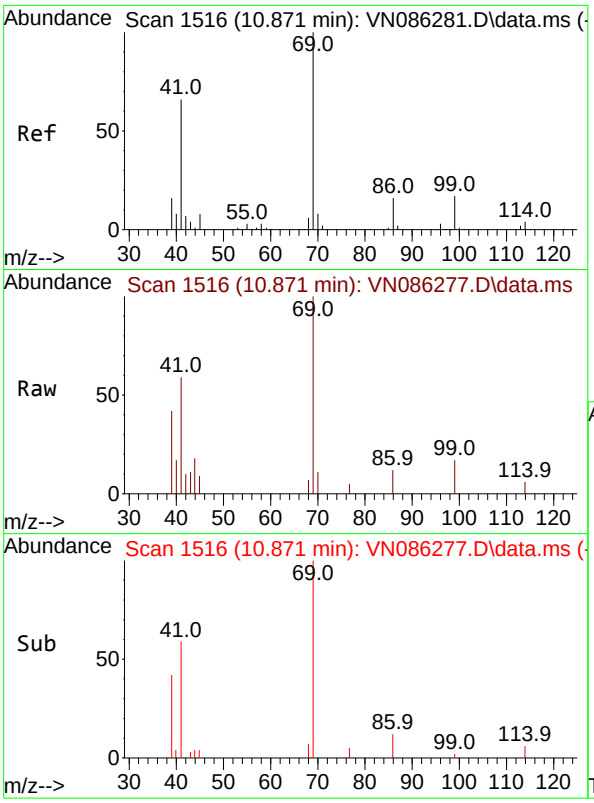


#55
1,1,2-Trichloroethane
Concen: 1.099 ug/l
RT: 11.018 min Scan# 1541
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 97 Resp: 2967

Ion	Ratio	Lower	Upper
97	100		
83	79.0	68.4	102.6
85	58.5	43.9	65.9
99	53.1	47.2	70.8

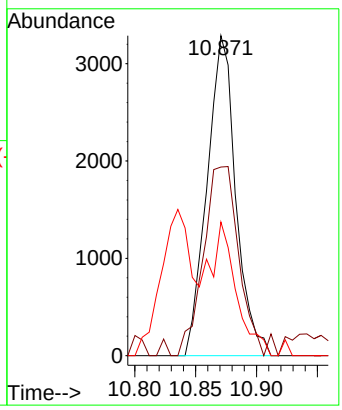




#56
Ethyl methacrylate
Concen: 1.090 ug/l
RT: 10.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 69 Resp: 540

Ion	Ratio	Lower	Upper
69	100		
41	72.0	51.7	77.5
39	38.9	26.3	39.5



Instrument :
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ClientSampleId :
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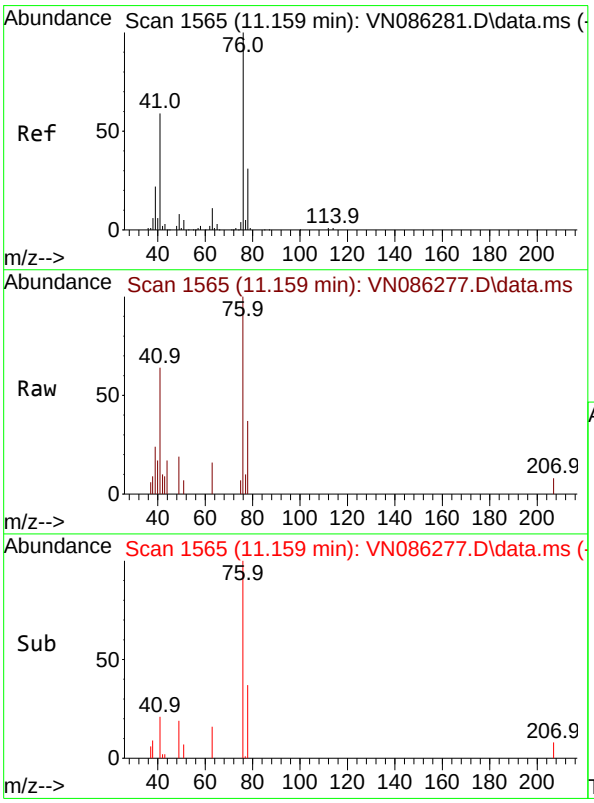
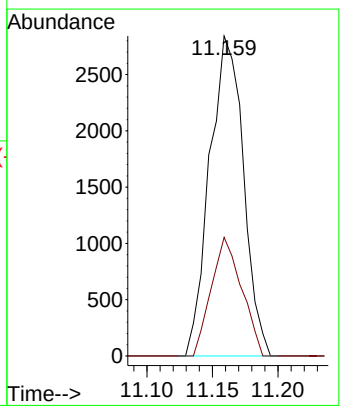
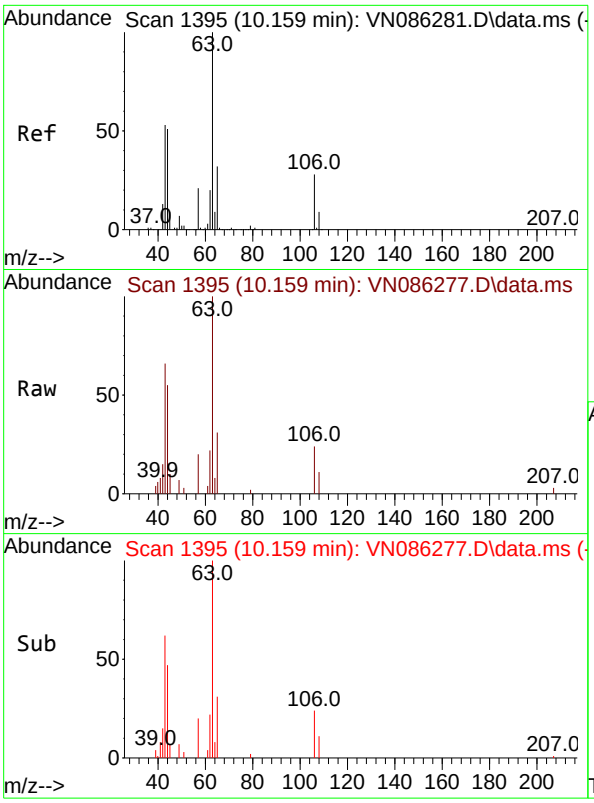


#57
1,3-Dichloropropane
Concen: 1.063 ug/l
RT: 11.159 min Scan# 1565
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 76 Resp: 5091

Ion	Ratio	Lower	Upper
76	100		
78	33.3	25.6	38.4





#58
2-Chloroethyl Vinyl ether
Concen: 5.048 ug/l
RT: 10.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 63 Resp: 1188

Ion	Ratio	Lower	Upper
63	100		
106	26.0	22.2	33.2

Instrument :
MSVOA_N
ClientSampleId :
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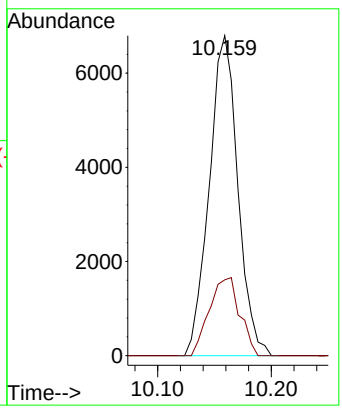
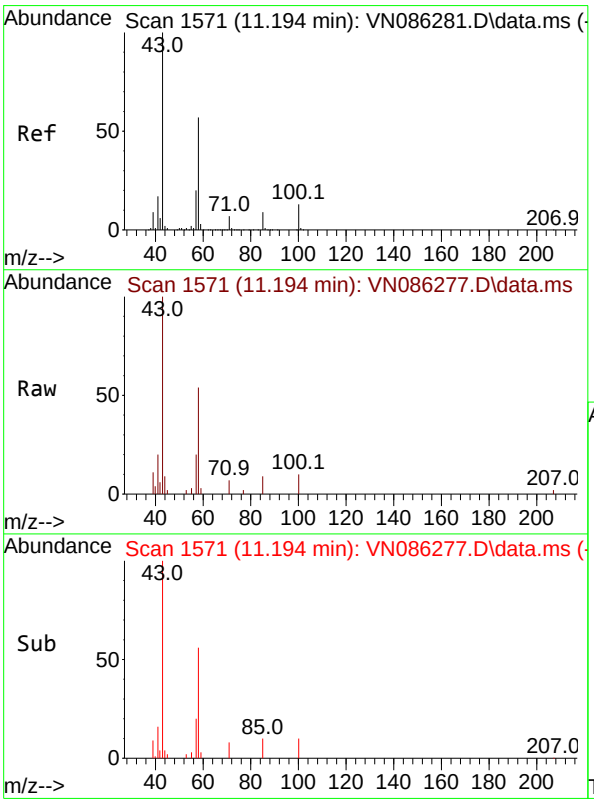
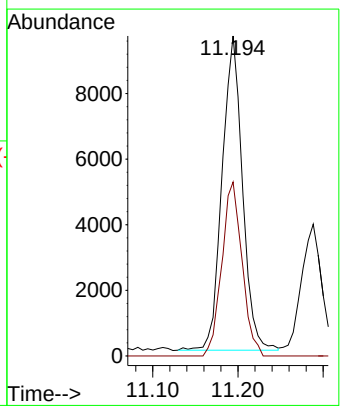


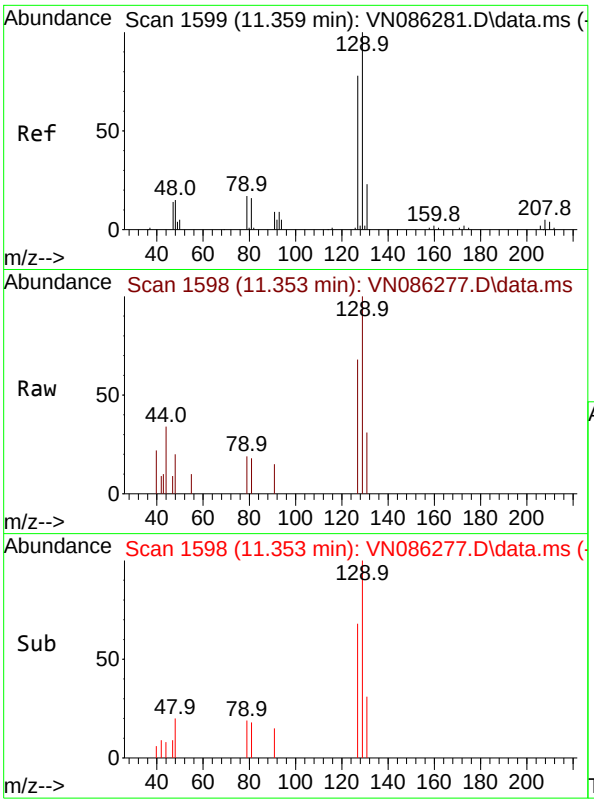


#59
2-Hexanone
Concen: 5.315 ug/l
RT: 11.194 min Scan# 1571
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 15945

Ion	Ratio	Lower	Upper
43	100		
58	54.9	28.3	85.0

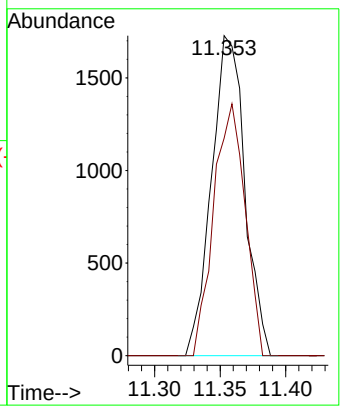




#60
Dibromochloromethane
Concen: 1.031 ug/l
RT: 11.353 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:129 Resp: 305

Ion	Ratio	Lower	Upper
129	100		
127	74.0	38.7	116.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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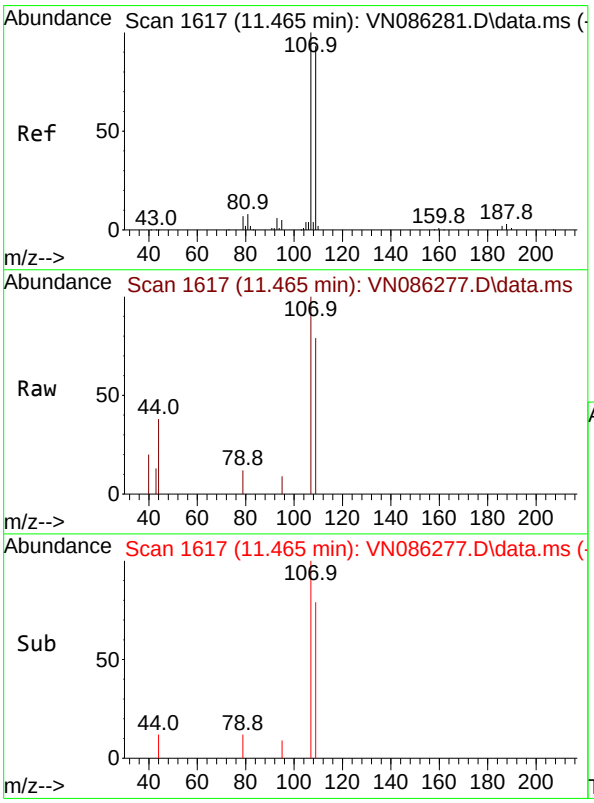
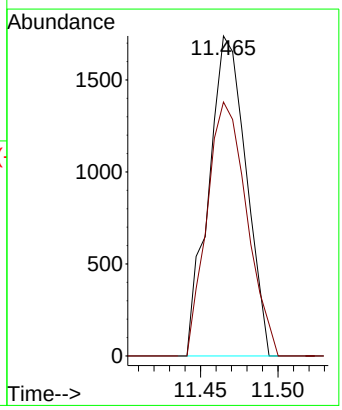
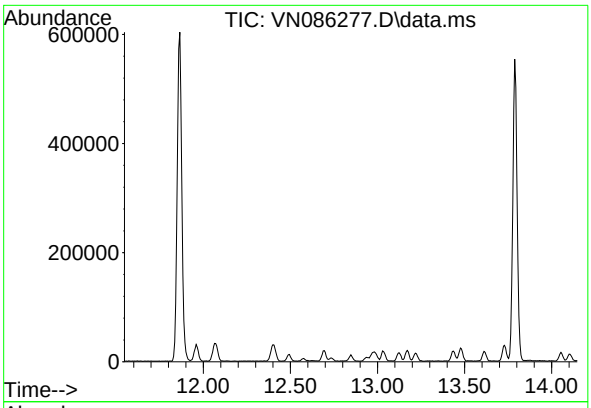


#61
1,2-Dibromoethane
Concen: 1.068 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:107 Resp: 2908

Ion	Ratio	Lower	Upper
107	100		
109	84.7	75.4	113.0





#62
4-Bromofluorobenzene
Concen: 0.000 ug/l
Expected RT: 12.85 min

Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 95

Sig	Exp Ratio
95	100
174	66.7
176	64.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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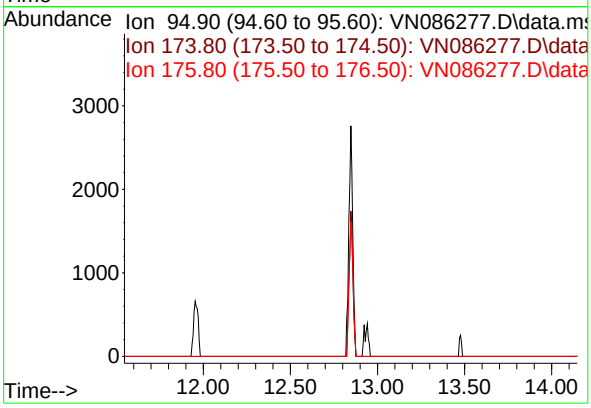
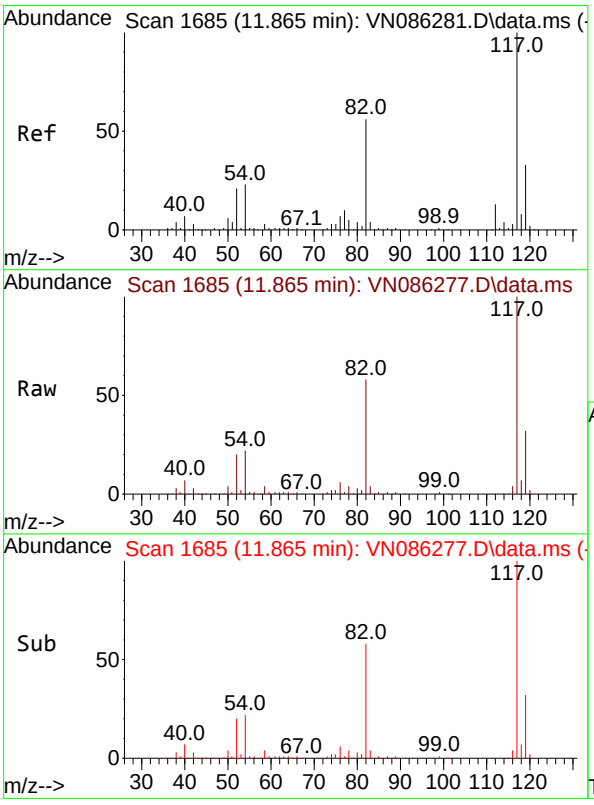
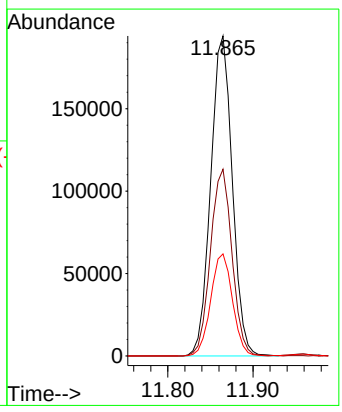


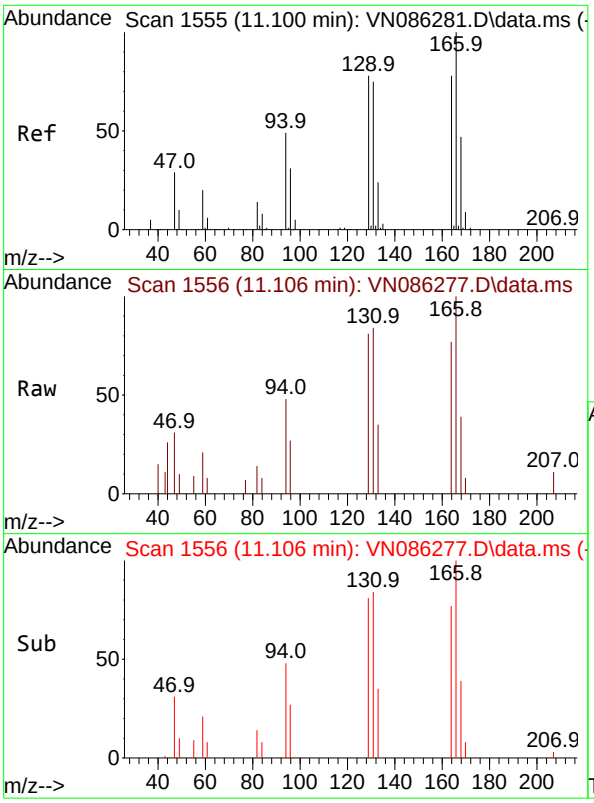


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:117 Resp: 341637

Ion	Ratio	Lower	Upper
117	100		
82	58.3	44.7	67.1
119	31.9	26.4	39.6

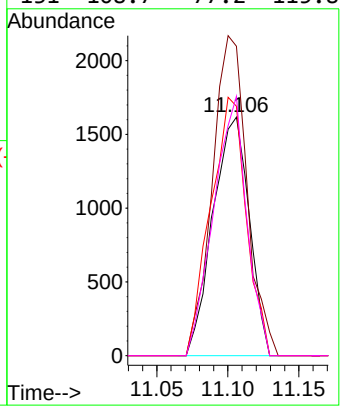




#64
Tetrachloroethene
Concen: 1.090 ug/l
RT: 11.106 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:164 Resp: 286

Ion	Ratio	Lower	Upper
164	100		
166	129.7	103.0	154.4
129	104.6	80.1	120.1
131	108.7	77.2	115.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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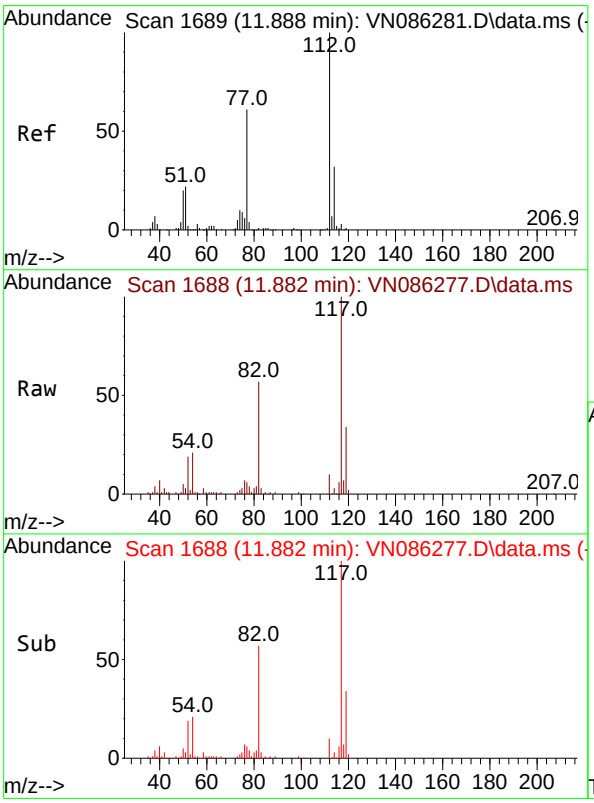
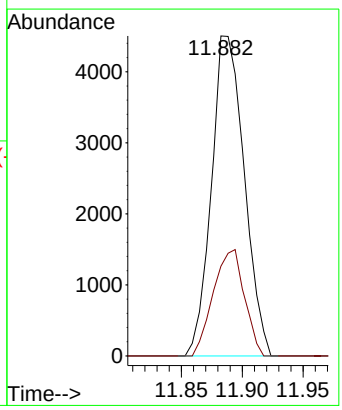
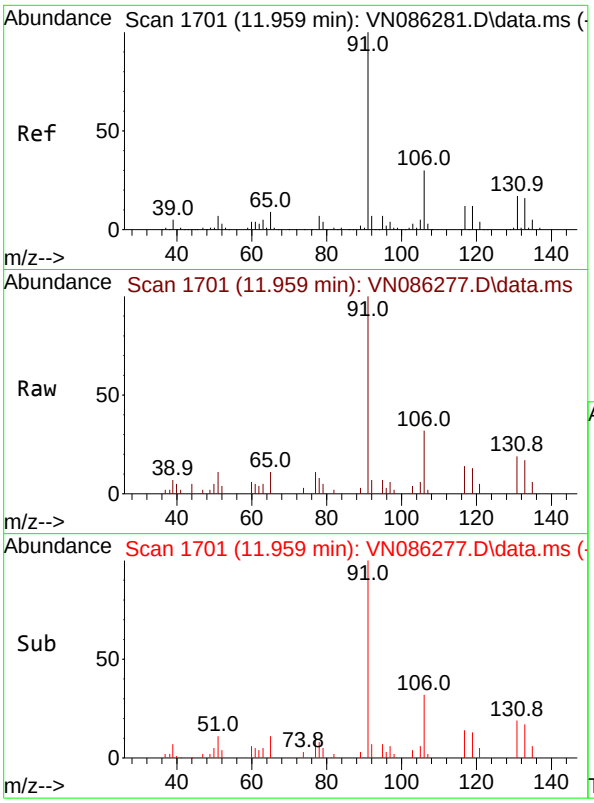


#65
Chlorobenzene
Concen: 1.107 ug/l
RT: 11.882 min Scan# 1688
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:112 Resp: 8440

Ion	Ratio	Lower	Upper
112	100		
114	28.1	25.4	38.0

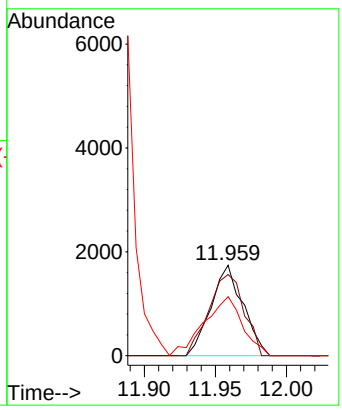




#66
1,1,1,2-Tetrachloroethane
Concen: 1.087 ug/l
RT: 11.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:131 Resp: 273

Ion	Ratio	Lower	Upper
131	100		
133	98.6	47.1	141.3
119	0.0	33.8	101.4



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ClientSampleId :
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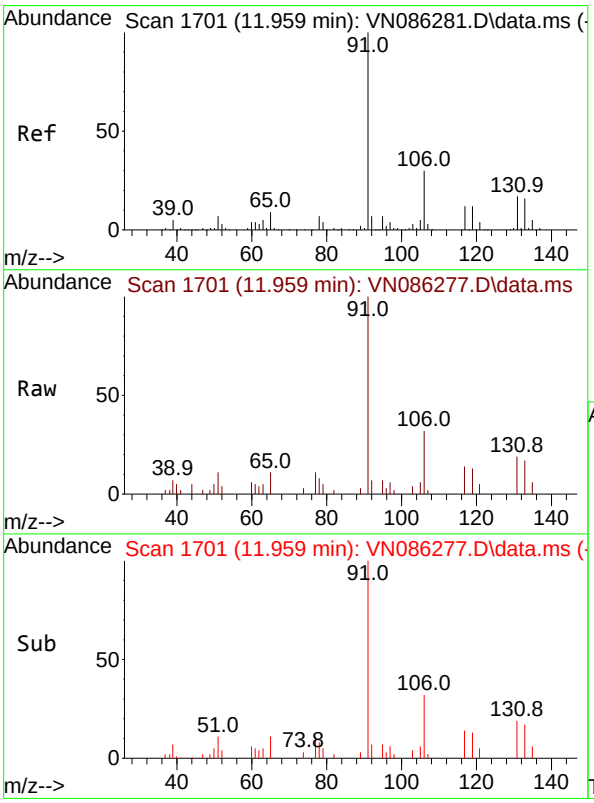
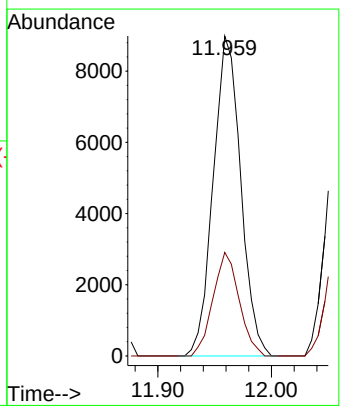
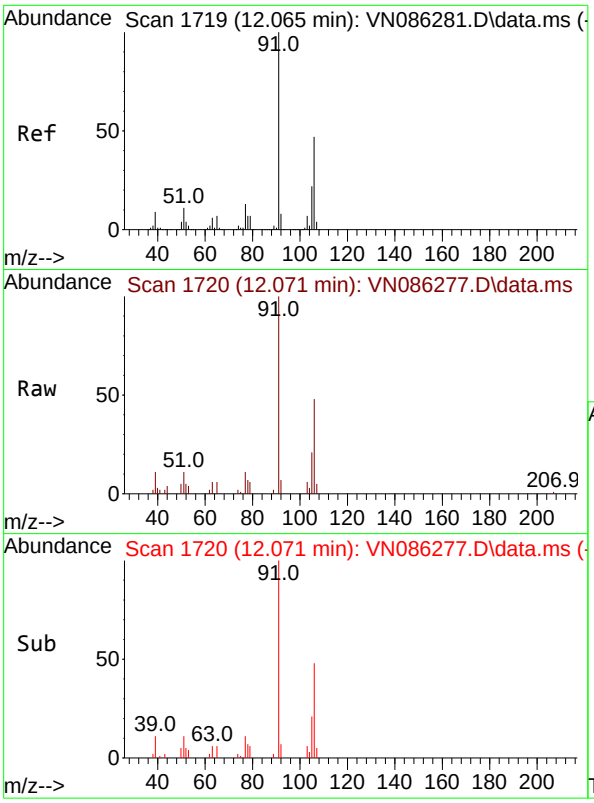


#67
Ethyl Benzene
Concen: 1.097 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 91 Resp: 15099

Ion	Ratio	Lower	Upper
91	100		
106	32.3	24.3	36.5





#68
m/p-Xylenes
Concen: 2.144 ug/l
RT: 12.071 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:106 Resp: 1105

Ion	Ratio	Lower	Upper
106	100		
91	211.7	166.5	249.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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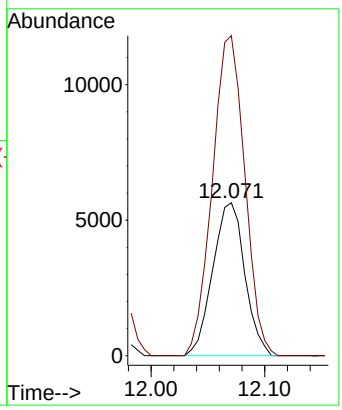
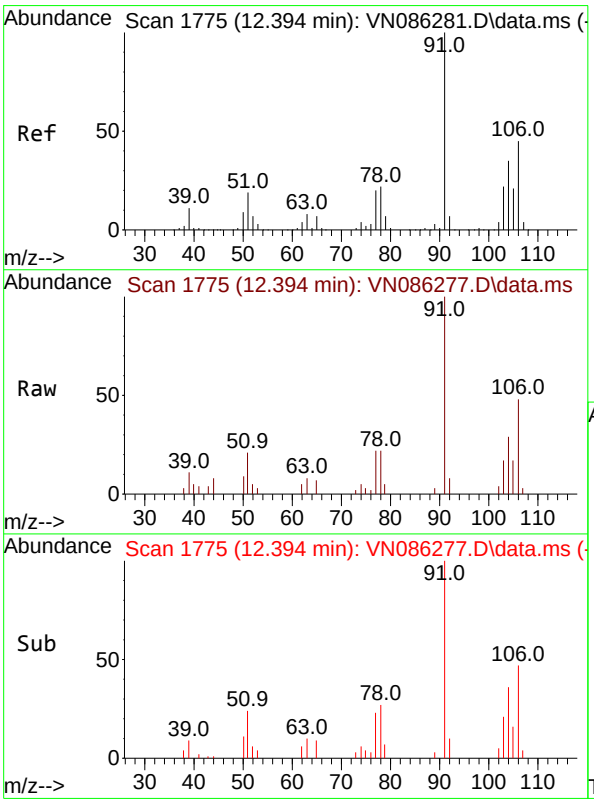
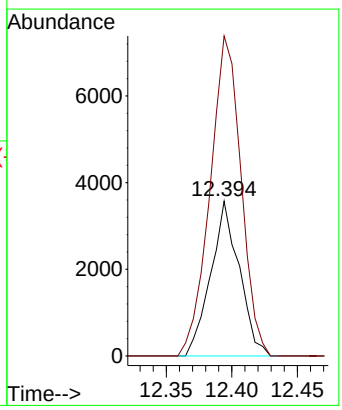


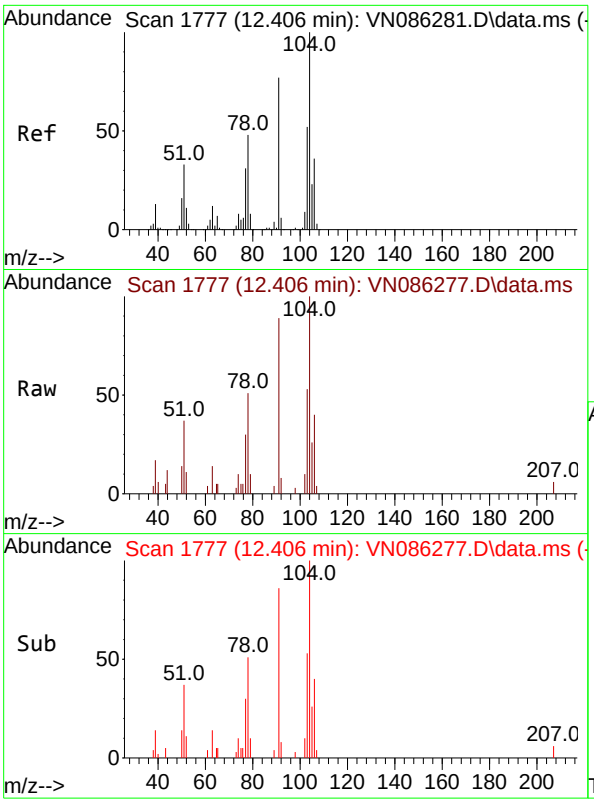


#69
o-Xylene
Concen: 1.061 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:106 Resp: 5408

Ion	Ratio	Lower	Upper
106	100		
91	224.6	109.7	329.0





#70
Styrene
Concen: 1.051 ug/l
RT: 12.406 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:104 Resp: 892

Ion	Ratio	Lower	Upper
104	100		
78	54.2	40.6	61.0
103	52.4	43.6	65.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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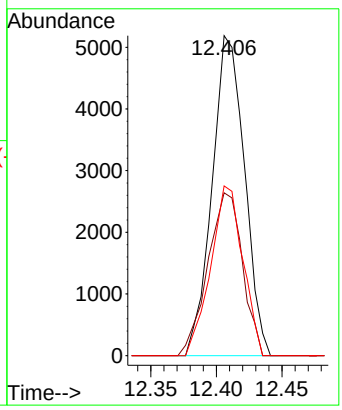
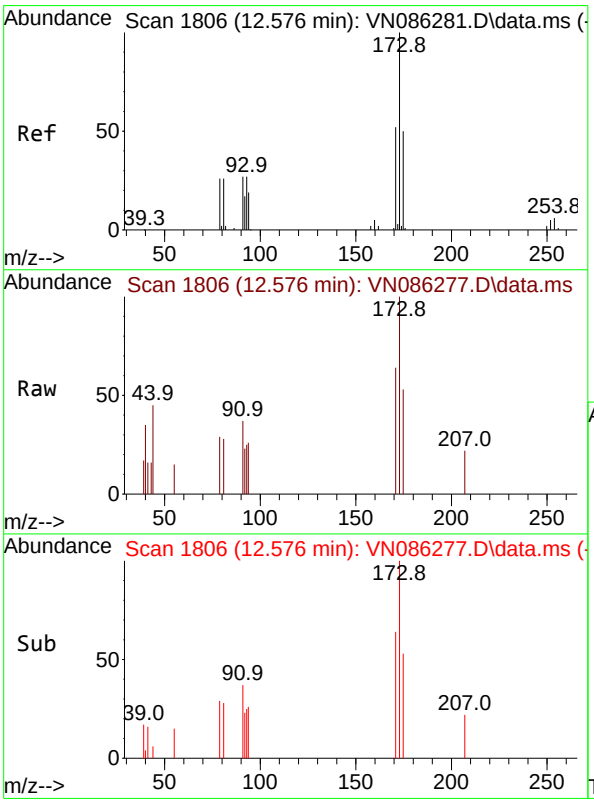
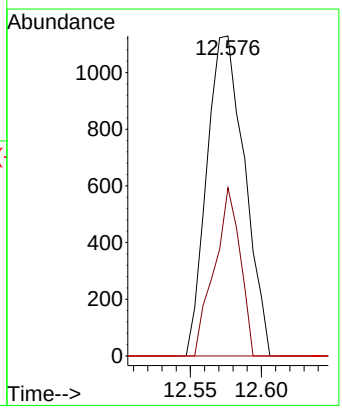


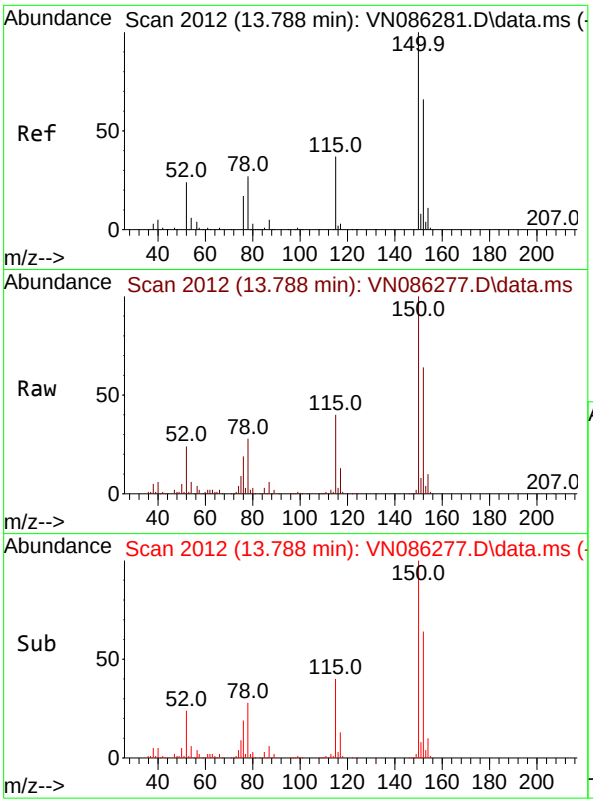


#71
Bromoform
Concen: 1.103 ug/l
RT: 12.576 min Scan# 1806
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:173 Resp: 2089

Ion	Ratio	Lower	Upper
173	100		
175	35.7	24.6	73.6
254	0.0	0.0	0.0

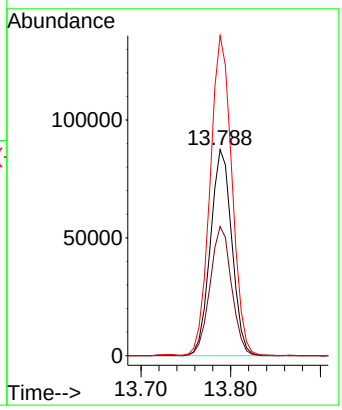




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:152 Resp: 14512

Ion	Ratio	Lower	Upper
152	100		
115	63.1	31.9	95.9
150	158.0	0.0	352.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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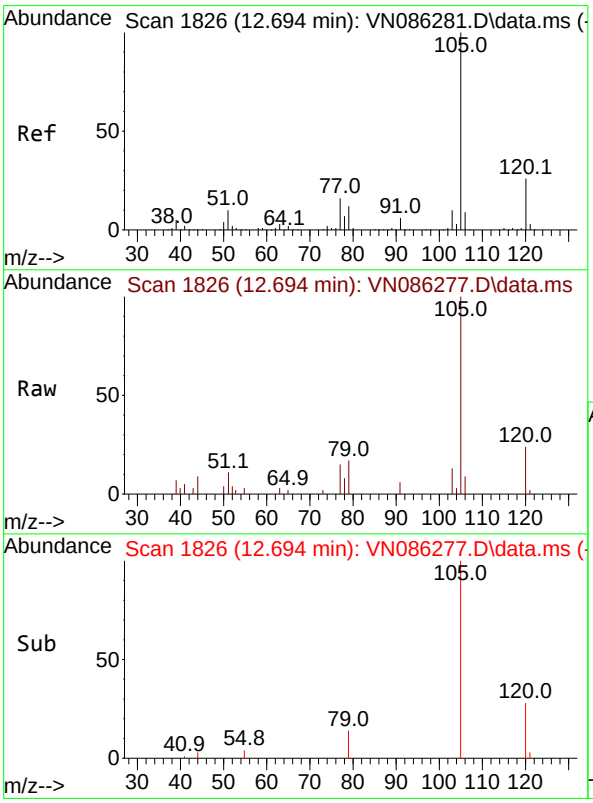
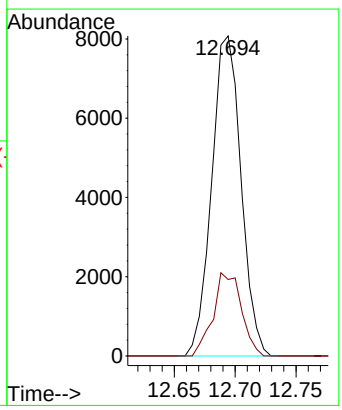
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

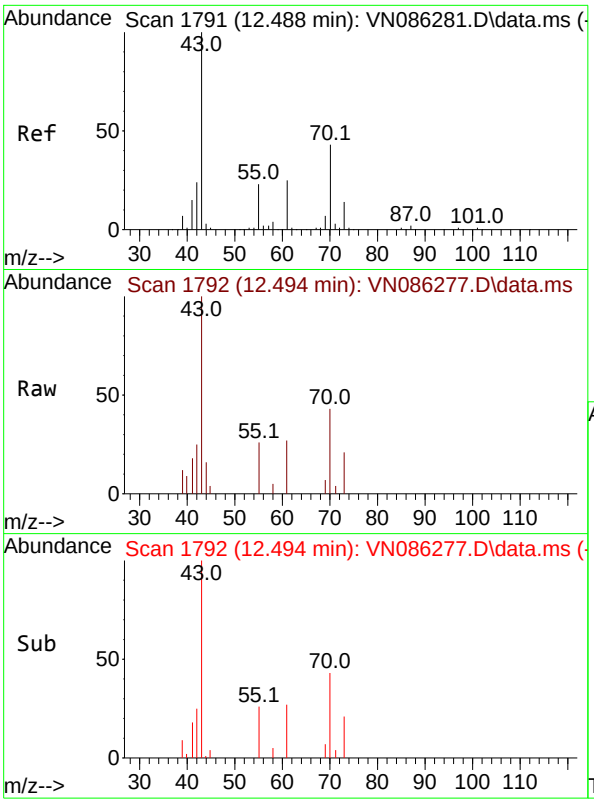


#73
Isopropylbenzene
Concen: 1.141 ug/l
RT: 12.694 min Scan# 1826
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:105 Resp: 13542

Ion	Ratio	Lower	Upper
105	100		
120	25.0	13.1	39.3

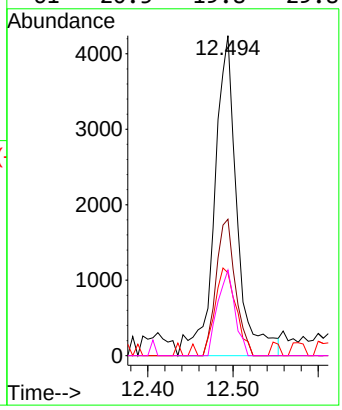




#74
N-amyl acetate
Concen: 1.321 ug/l
RT: 12.494 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 43 Resp: 780

Ion	Ratio	Lower	Upper
43	100		
70	36.5	35.0	52.4
55	25.5	19.0	28.4
61	20.5	19.8	29.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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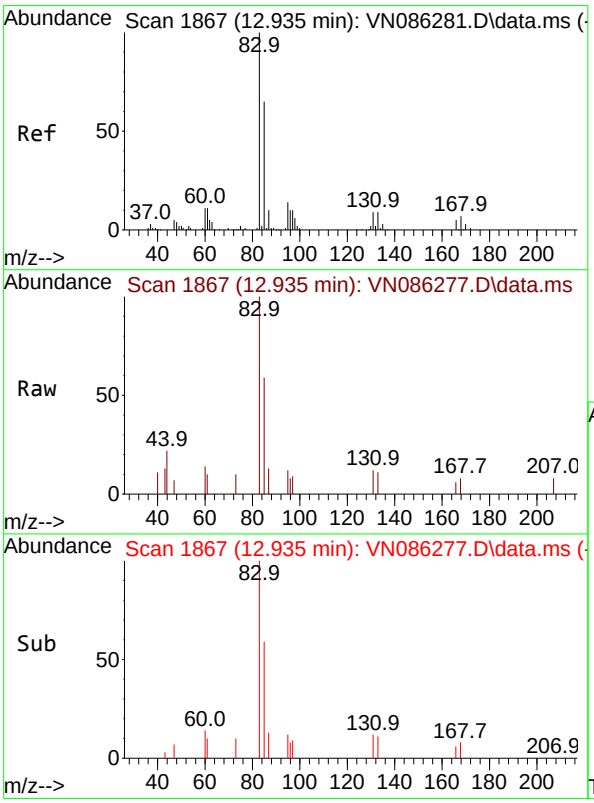
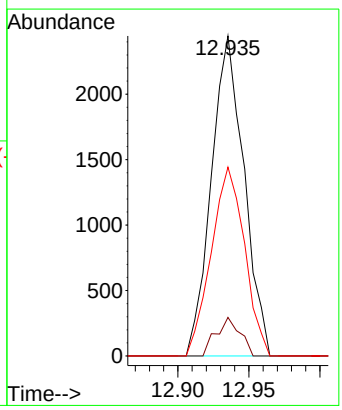
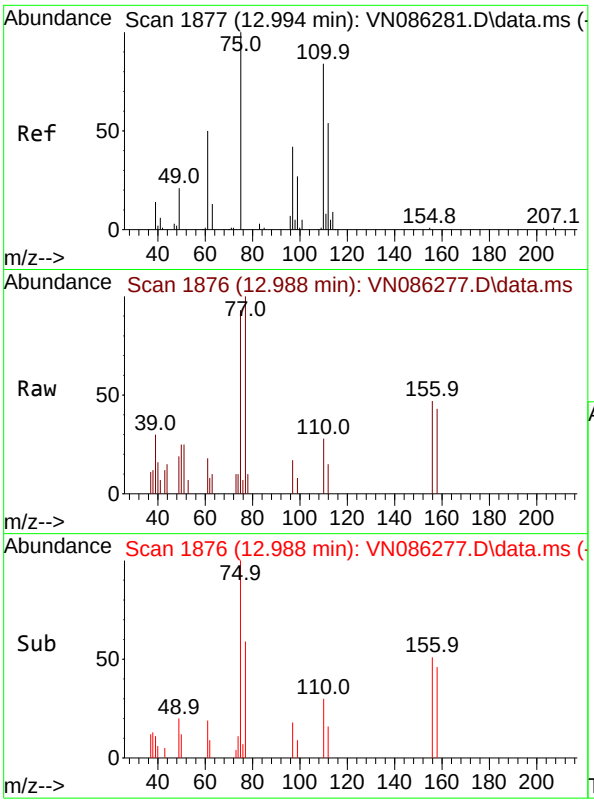


#75
1,1,2,2-Tetrachloroethane
Concen: 1.145 ug/l
RT: 12.935 min Scan# 1867
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 83 Resp: 3910

Ion	Ratio	Lower	Upper
83	100		
131	8.8	4.7	14.1
85	60.2	32.7	98.1





#76
1,2,3-Trichloropropane
Concen: 1.293 ug/l m
RT: 12.988 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 75 Resp: 440

Ion	Ratio	Lower	Upper
75	100		
77	166.9	98.8	296.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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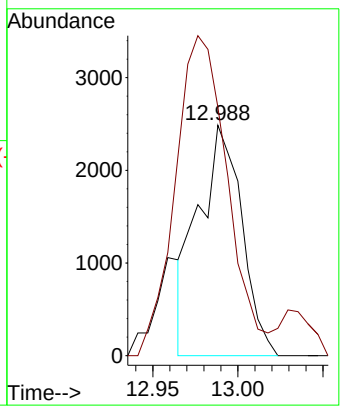
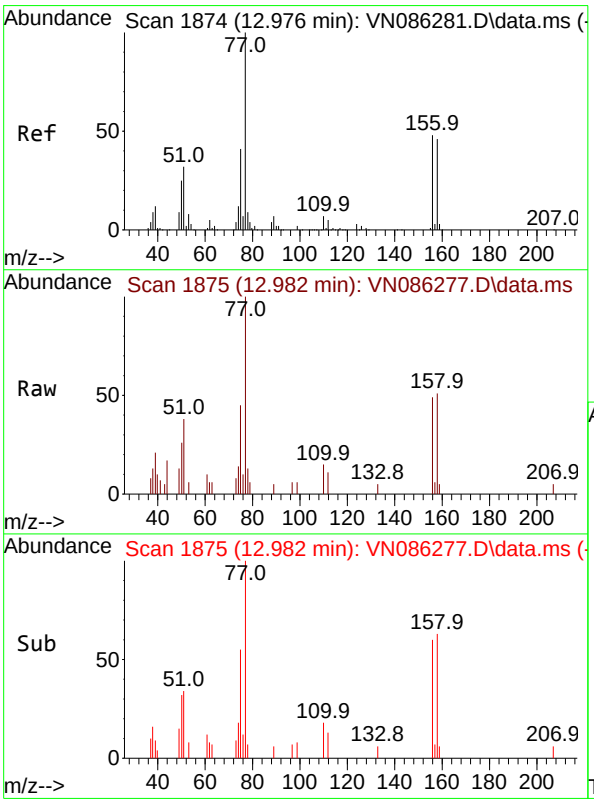
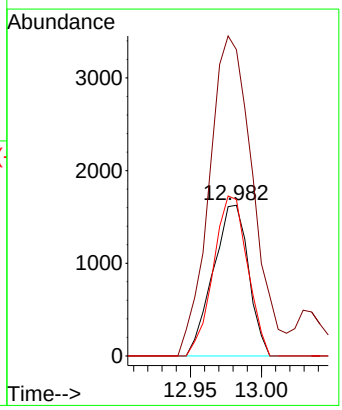


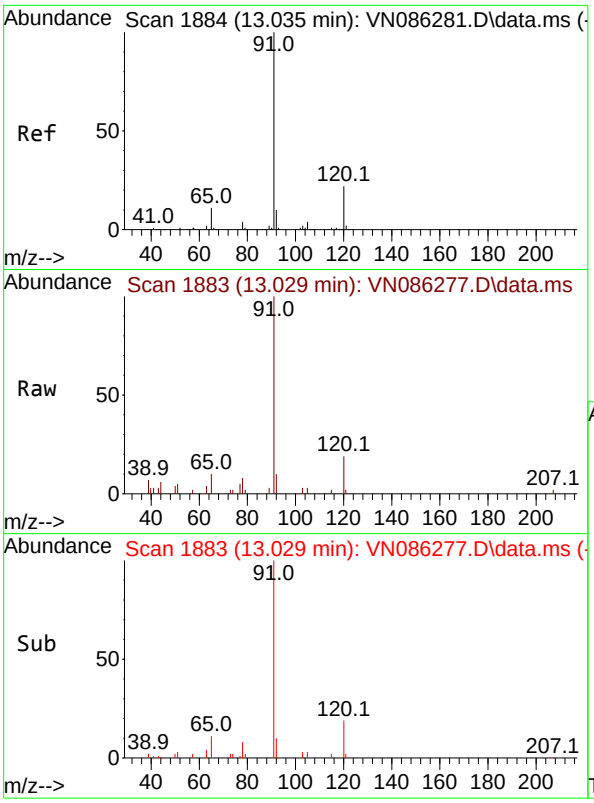


#77
Bromobenzene
Concen: 1.069 ug/l
RT: 12.982 min Scan# 1875
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:156 Resp: 2811

Ion	Ratio	Lower	Upper
156	100		
77	261.7	121.1	363.1
158	102.7	47.9	143.6





#78
n-propylbenzene
Concen: 1.113 ug/l
RT: 13.029 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 91 Resp: 1557

Ion	Ratio	Lower	Upper
91	100		
120	21.1	11.1	33.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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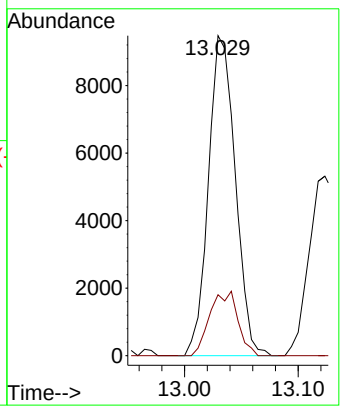
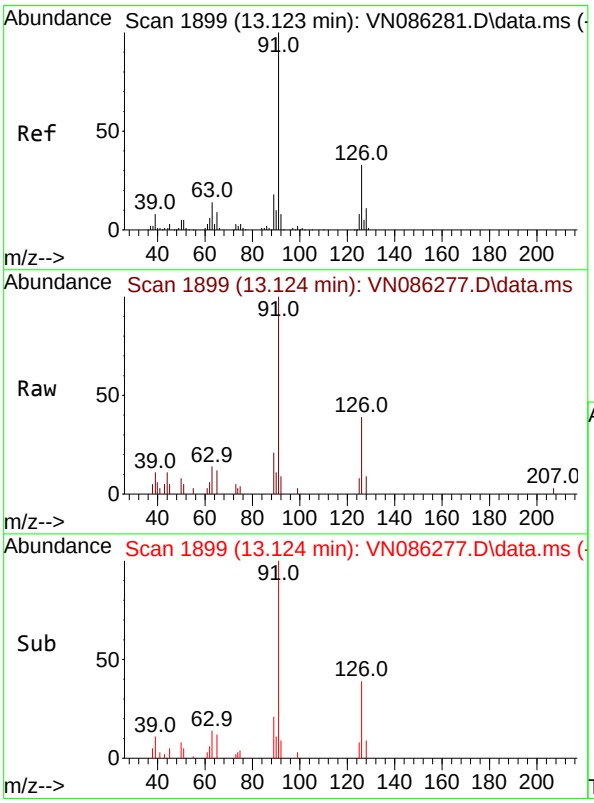
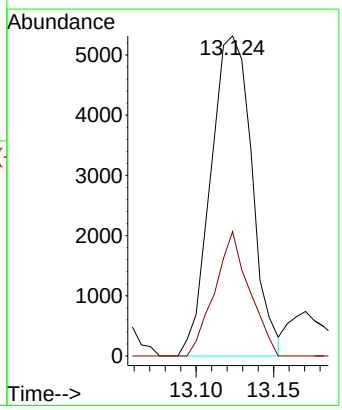


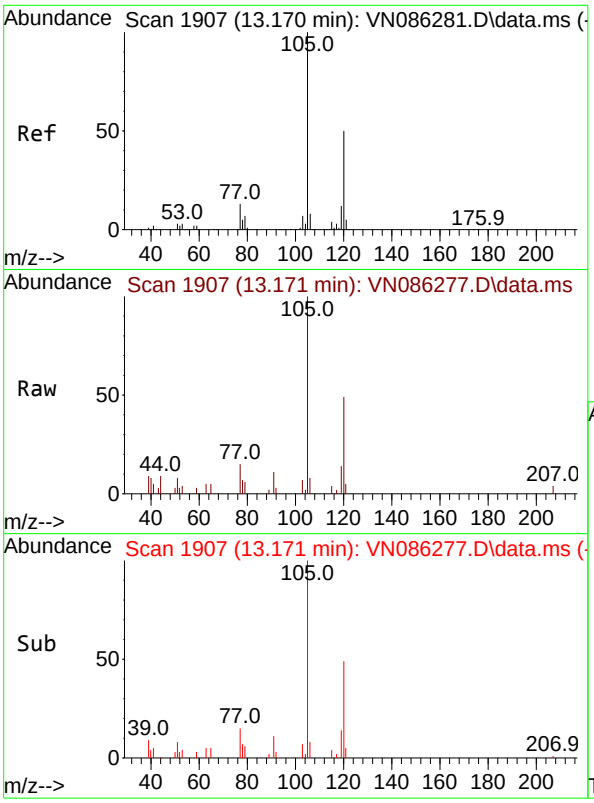


#79
2-Chlorotoluene
Concen: 1.120 ug/l
RT: 13.124 min Scan# 1899
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 91 Resp: 9804

Ion	Ratio	Lower	Upper
91	100		
126	32.8	16.1	48.2





#80
1,3,5-Trimethylbenzene
Concen: 1.135 ug/l
RT: 13.171 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:105 Resp: 1102

Ion	Ratio	Lower	Upper
105	100		
120	48.3	24.5	73.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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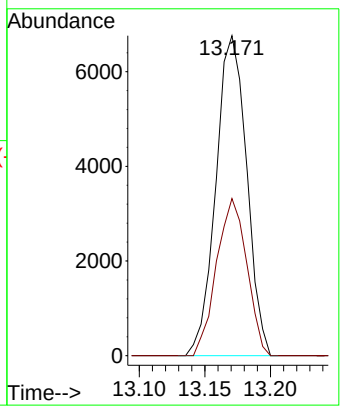
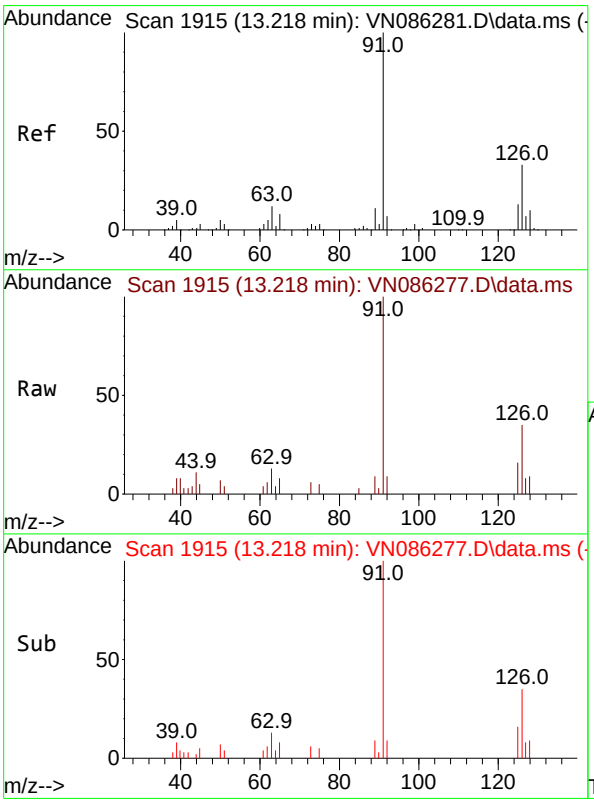
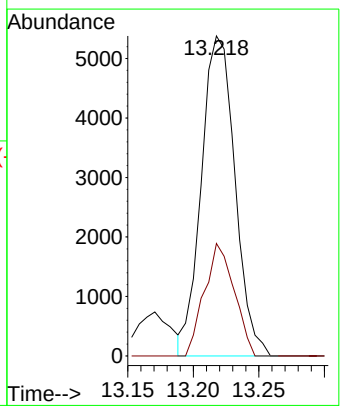


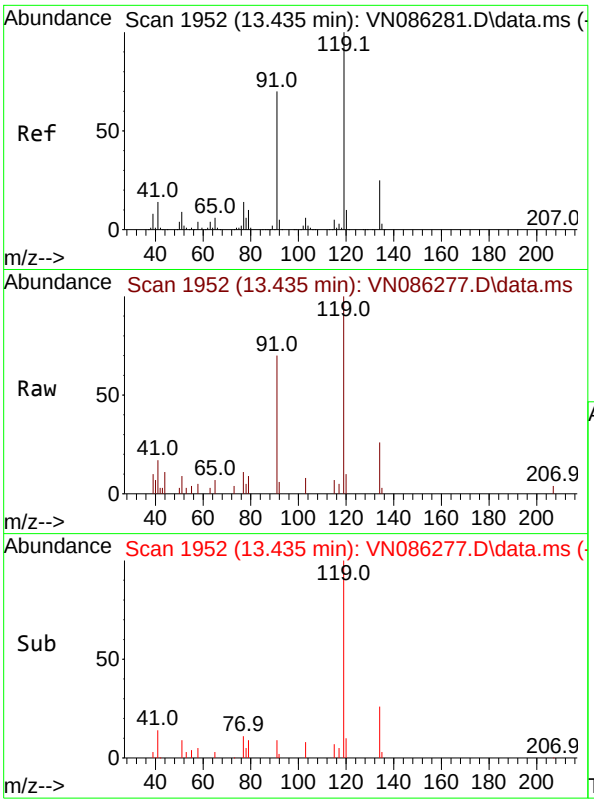


#82
4-Chlorotoluene
Concen: 1.103 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 91 Resp: 9589

Ion	Ratio	Lower	Upper
91	100		
126	31.2	16.2	48.6

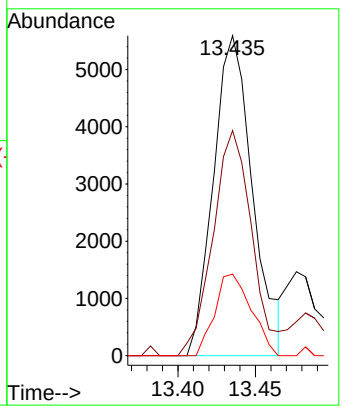




#83
tert-Butylbenzene
Concen: 1.166 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:119 Resp: 981

Ion	Ratio	Lower	Upper
119	100		
91	69.5	34.4	103.3
134	23.7	13.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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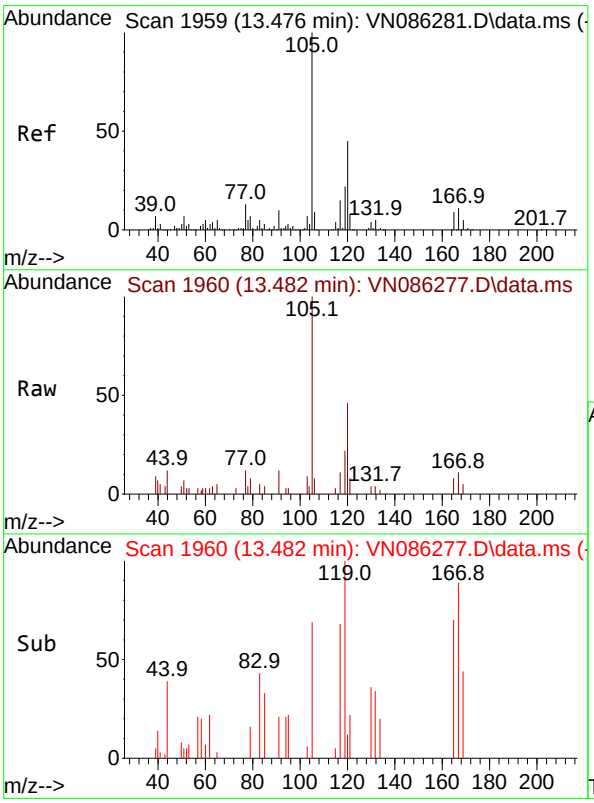
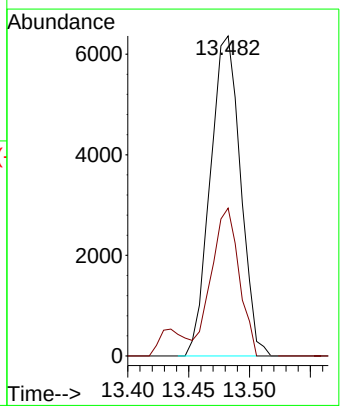
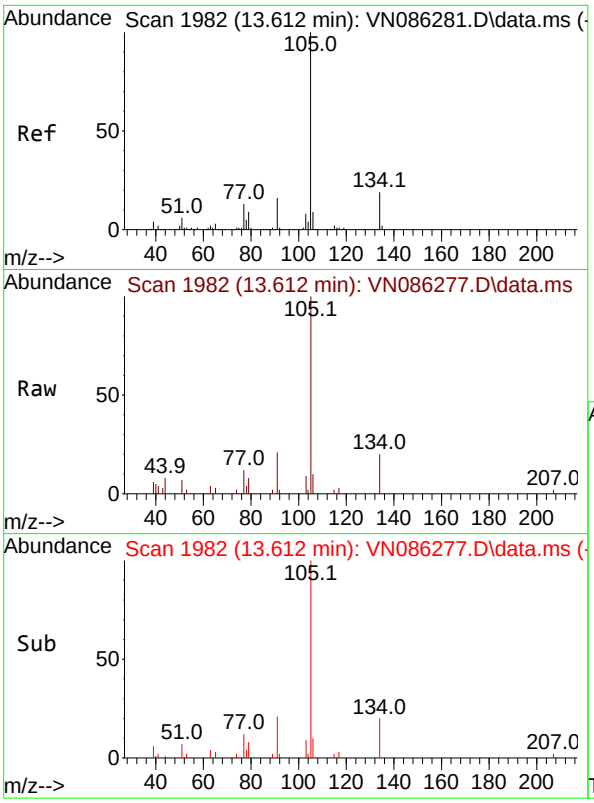


#84
1,2,4-Trimethylbenzene
Concen: 1.110 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:105 Resp: 10977

Ion	Ratio	Lower	Upper
105	100		
120	42.5	22.4	67.3

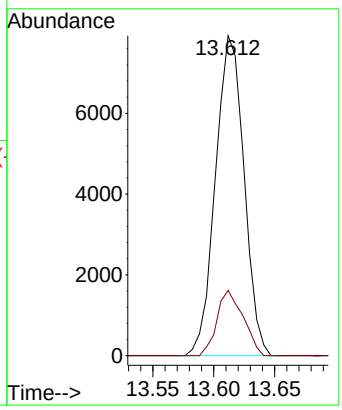




#85
sec-Butylbenzene
Concen: 1.106 ug/l
RT: 13.612 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:105 Resp: 1292

Ion	Ratio	Lower	Upper
105	100		
134	18.7	9.7	29.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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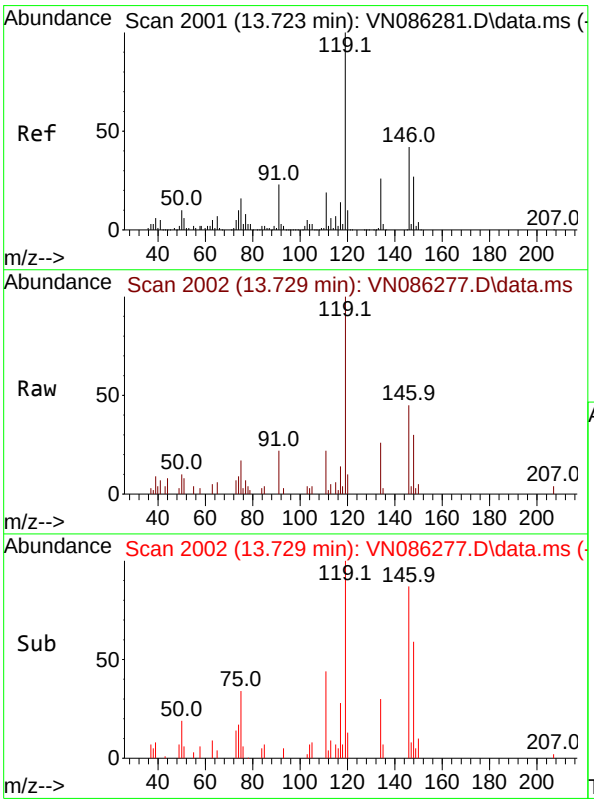
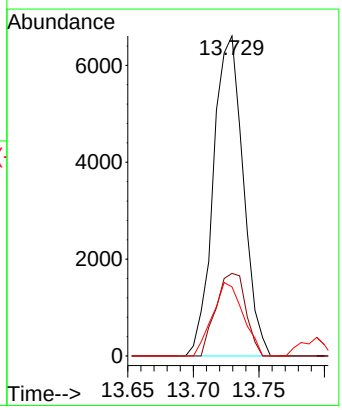
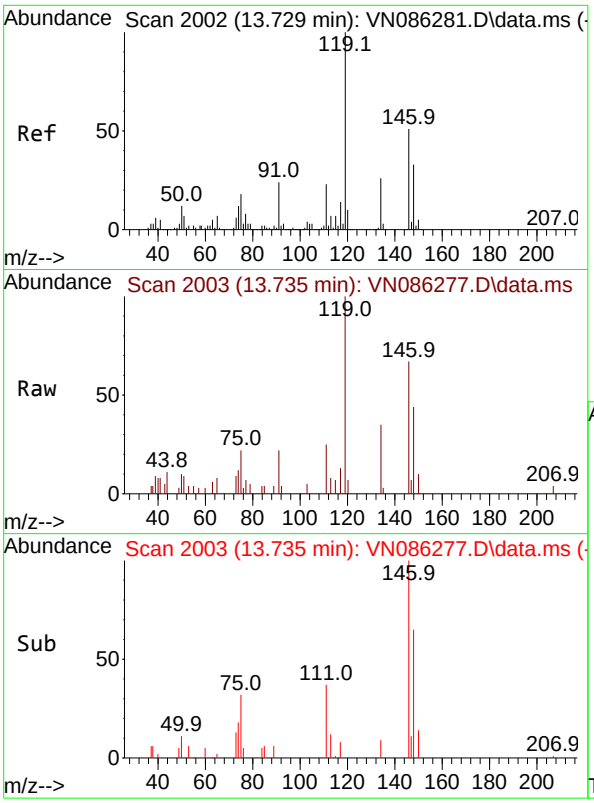


#86
p-Isopropyltoluene
Concen: 1.086 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:119 Resp: 10458

Ion	Ratio	Lower	Upper
119	100		
134	25.8	13.1	39.1
91	23.4	11.9	35.9

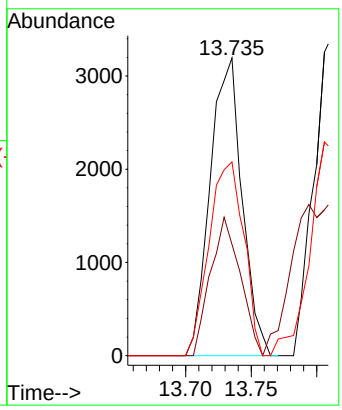




#87
1,3-Dichlorobenzene
Concen: 1.095 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:146 Resp: 541

Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.9	65.7
148	71.0	31.9	95.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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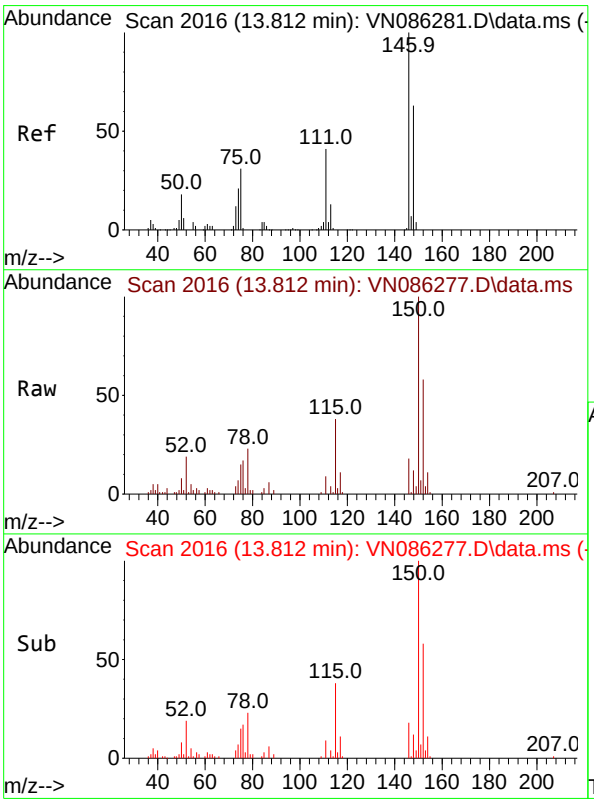
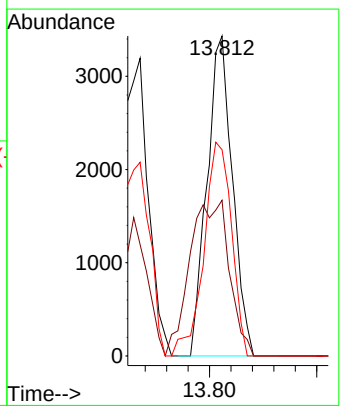
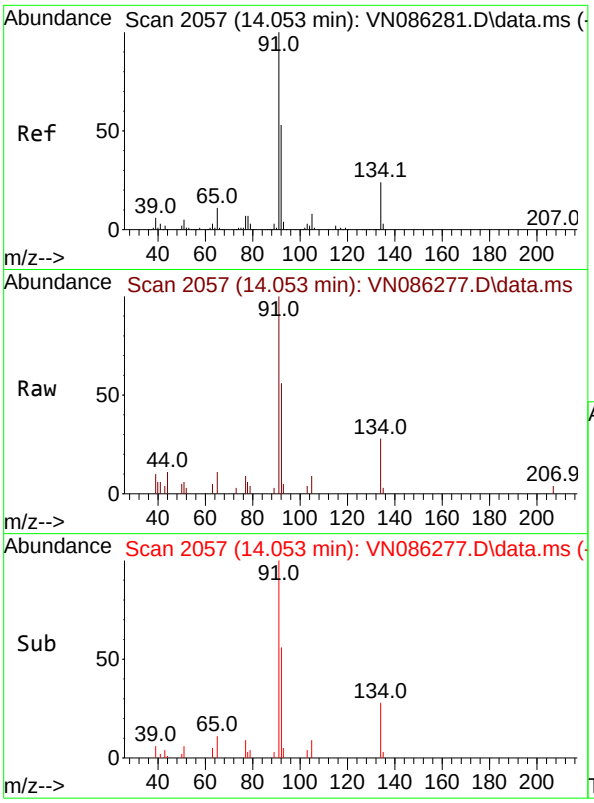


#88
1,4-Dichlorobenzene
Concen: 1.132 ug/l m
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:146 Resp: 5636

Ion	Ratio	Lower	Upper
146	100		
111	41.8	21.3	63.9
148	68.2	31.9	95.9





#89
n-Butylbenzene
Concen: 1.092 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 91 Resp: 931

Ion	Ratio	Lower	Upper
91	100		
92	52.9	26.8	80.4
134	23.3	12.2	36.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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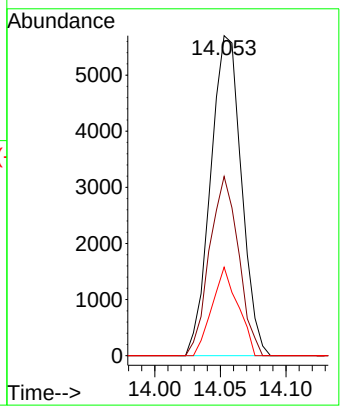
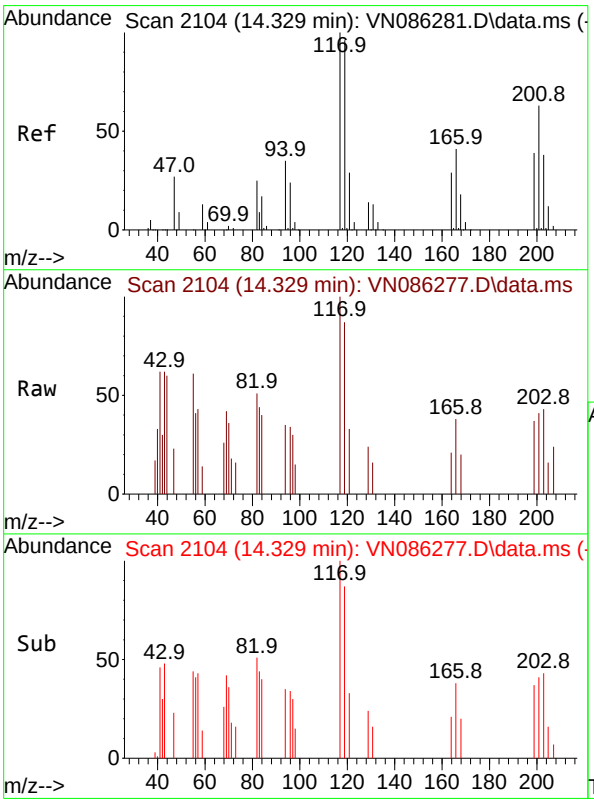
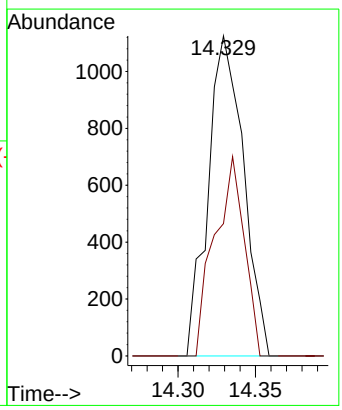


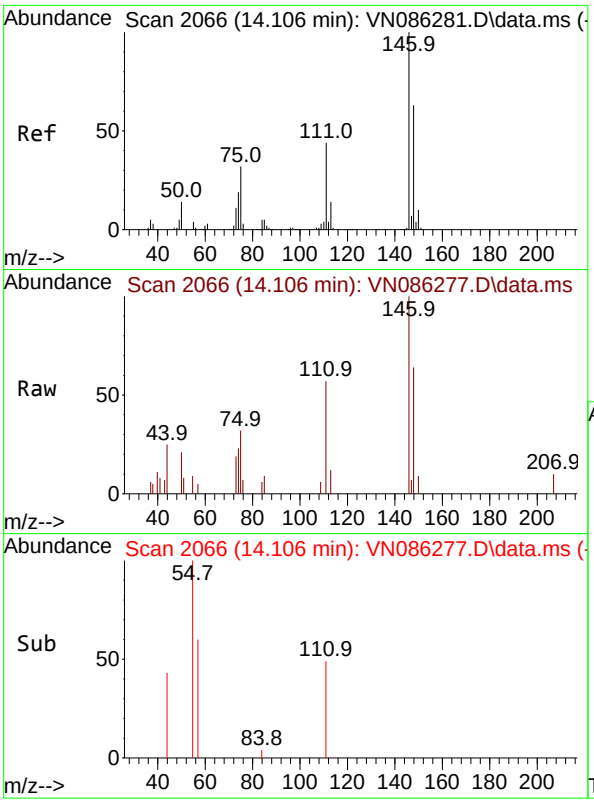


#90
Hexachloroethane
Concen: 1.107 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:117 Resp: 1792

Ion	Ratio	Lower	Upper
117	100		
201	52.0	31.4	94.2

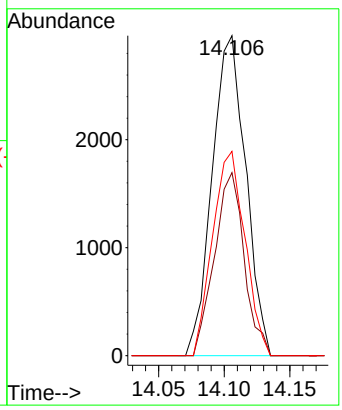




#91
1,2-Dichlorobenzene
Concen: 1.101 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:146 Resp: 527

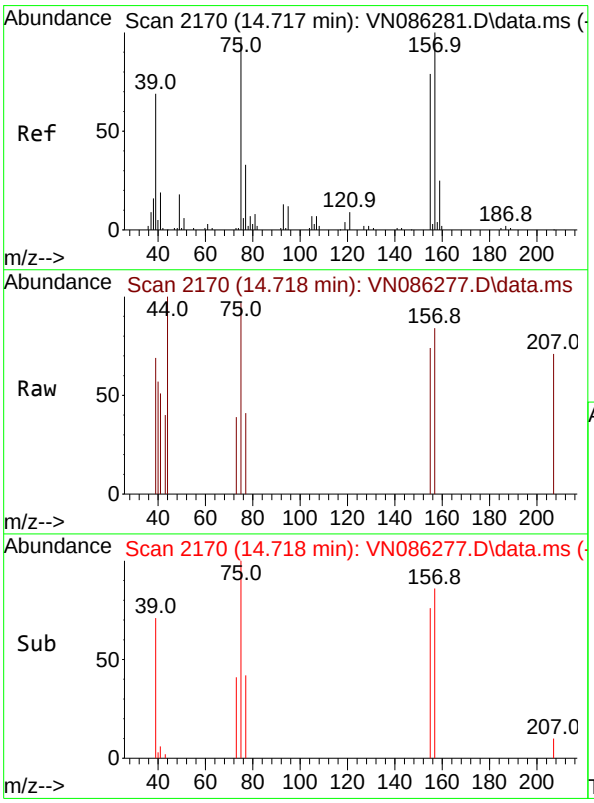
Ion	Ratio	Lower	Upper
146	100		
111	50.7	22.4	67.0
148	61.5	31.8	95.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

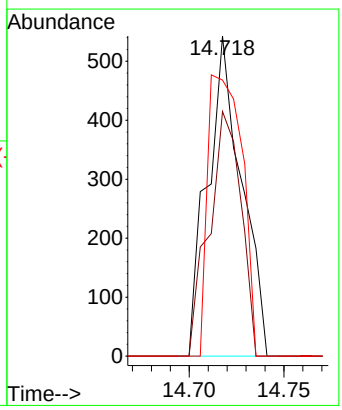
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

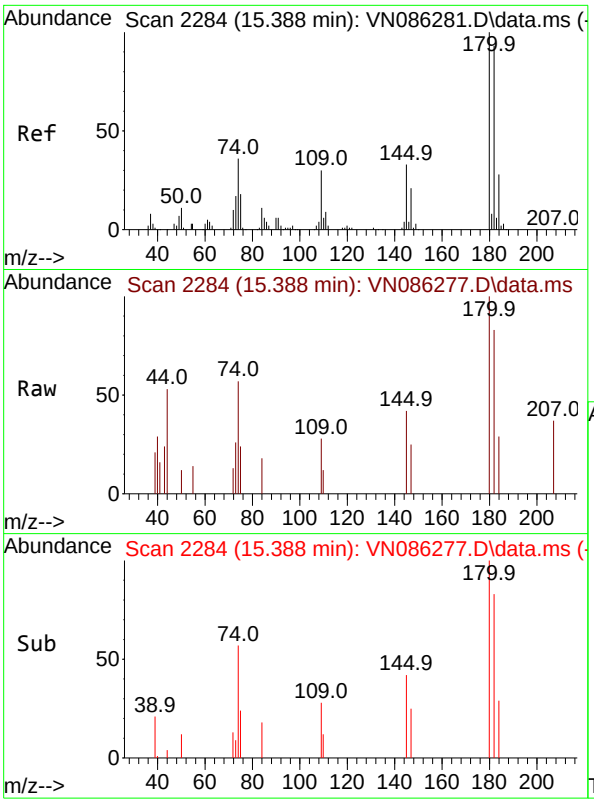


#92
1,2-Dibromo-3-Chloropropane
Concen: 0.987 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion: 75 Resp: 679

Ion	Ratio	Lower	Upper
75	100		
155	71.9	40.3	120.9
157	88.7	49.0	147.2

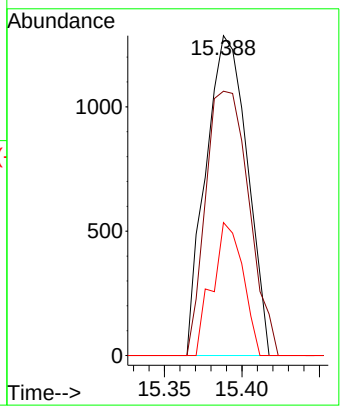




#93
1,2,4-Trichlorobenzene
Concen: 1.040 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:180 Resp: 238

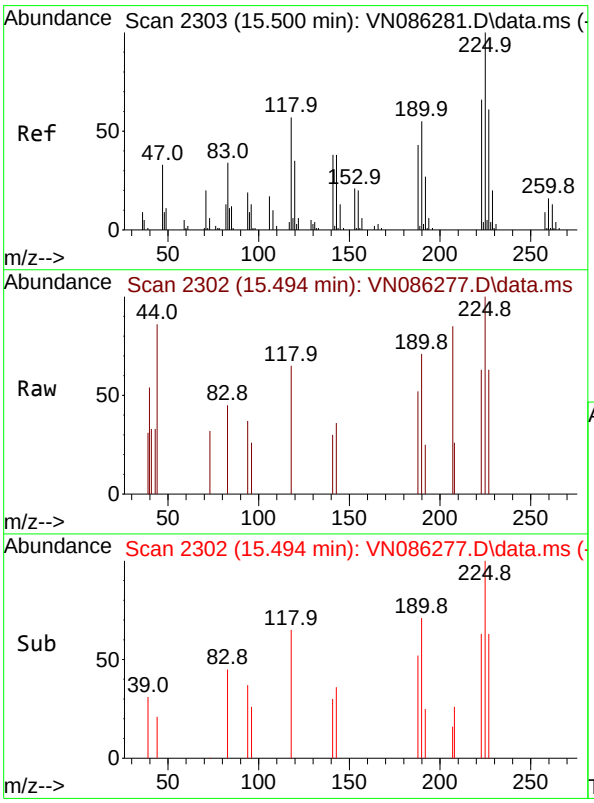
Ion	Ratio	Lower	Upper
180	100		
182	86.6	47.0	141.0
145	30.7	16.4	49.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

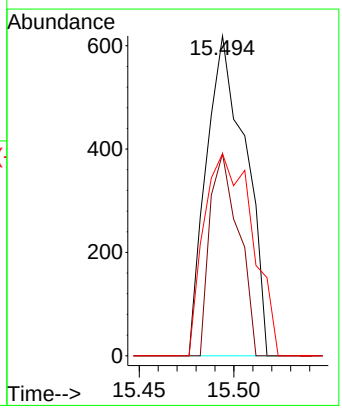
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

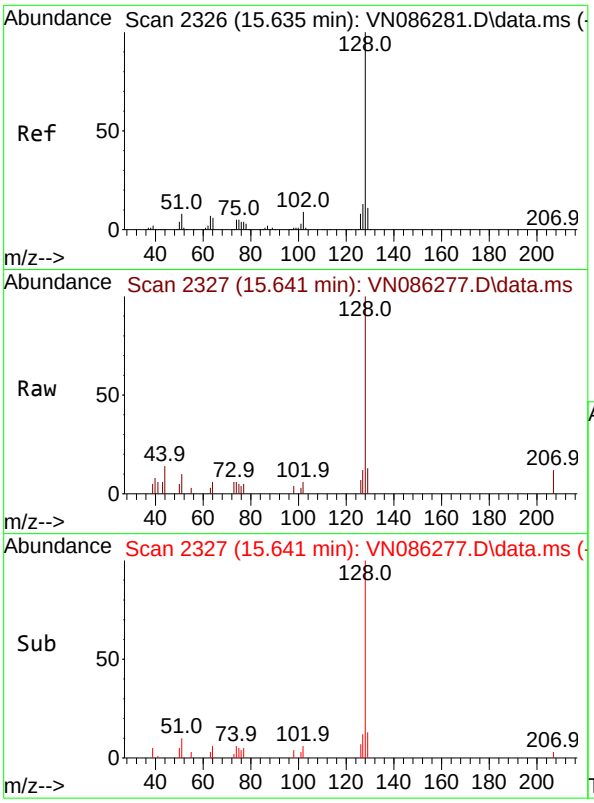


#94
Hexachlorobutadiene
Concen: 1.030 ug/l
RT: 15.494 min Scan# 2302
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:225 Resp: 893

Ion	Ratio	Lower	Upper
225	100		
223	46.5	32.8	98.3
227	77.6	31.4	94.0

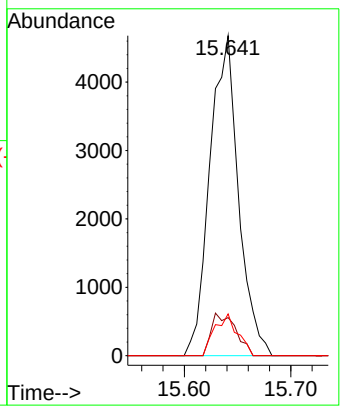




#95
Naphthalene
Concen: 1.074 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:128 Resp: 874

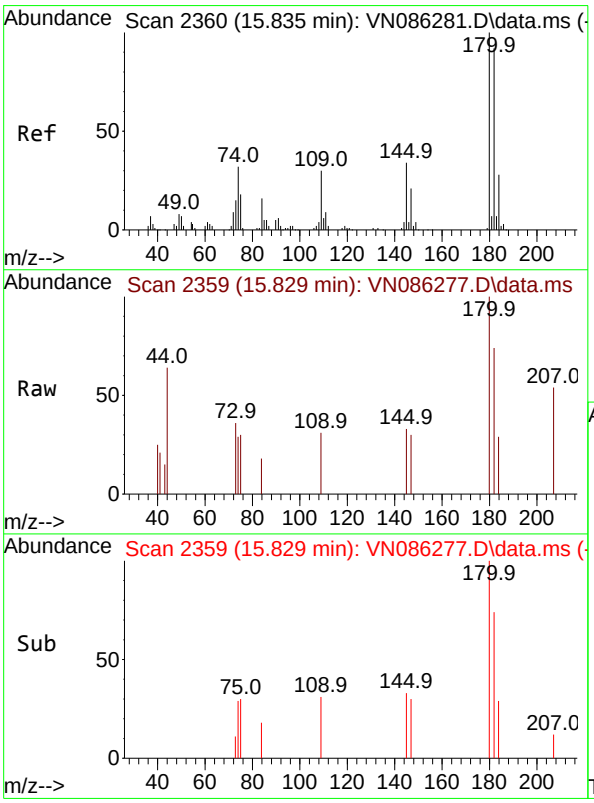
Ion	Ratio	Lower	Upper
128	100		
127	11.3	10.2	15.4
129	10.4	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

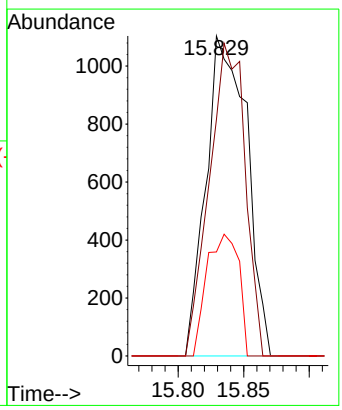
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025



#96
1,2,3-Trichlorobenzene
Concen: 1.094 ug/l
RT: 15.829 min Scan# 2359
Delta R.T. -0.006 min
Lab File: VN086277.D
Acq: 15 Apr 2025 11:29

Tgt Ion:180 Resp: 2378

Ion	Ratio	Lower	Upper
180	100		
182	86.0	47.3	142.0
145	29.9	17.2	51.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086278.D
Acq On : 15 Apr 2025 12:21
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 :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:55:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	234470	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	436245	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	375851	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	167796	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	17487	5.143	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	10.280%#		
35) Dibromofluoromethane	8.171	113	11660	5.759	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	11.520%#		
50) Toluene-d8	10.565	98	54403	5.028	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	10.060%#		
62) 4-Bromofluorobenzene	12.847	95	20034	5.076	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	10.160%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	13162	4.735	ug/l	95
3) Chloromethane	2.359	50	21191	5.246	ug/l	96
4) Vinyl Chloride	2.512	62	19342	5.018	ug/l	99
5) Bromomethane	2.948	94	8981	5.180	ug/l	91
6) Chloroethane	3.112	64	13592	5.268	ug/l	98
7) Trichlorofluoromethane	3.495	101	22304	5.223	ug/l	92
8) Diethyl Ether	3.959	74	9862	5.291	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.377	101	13633	5.278	ug/l	99
10) Methyl Iodide	4.589	142	14033	4.941	ug/l	94
11) Tert butyl alcohol	5.518	59	16966	27.348	ug/l #	88
12) 1,1-Dichloroethene	4.342	96	14583	5.284	ug/l	94
13) Acrolein	4.177	56	14133	35.938	ug/l	91
14) Allyl chloride	5.018	41	25369	5.174	ug/l	98
15) Acrylonitrile	5.712	53	40960	26.709	ug/l	99
16) Acetone	4.430	43	33298	23.124	ug/l	100
17) Carbon Disulfide	4.712	76	43706	5.289	ug/l	98
18) Methyl Acetate	5.024	43	21384	5.239	ug/l	97
19) Methyl tert-butyl Ether	5.789	73	53138	5.238	ug/l	92
20) Methylene Chloride	5.277	84	16566	5.270	ug/l	97
21) trans-1,2-Dichloroethene	5.783	96	15380	5.331	ug/l	98
22) Diisopropyl ether	6.665	45	55913	5.239	ug/l #	98
23) Vinyl Acetate	6.600	43	205955m	27.614	ug/l	
24) 1,1-Dichloroethane	6.559	63	29865	5.304	ug/l	99
25) 2-Butanone	7.483	43	55470	26.210	ug/l	100
26) 2,2-Dichloropropane	7.488	77	27048	5.365	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	18982	5.301	ug/l	97
28) Bromochloromethane	7.806	49	14246	5.967	ug/l	95
29) Tetrahydrofuran	7.841	42	37437	26.453	ug/l	99
30) Chloroform	7.965	83	28901	5.225	ug/l	98
31) Cyclohexane	8.253	56	33730	6.122	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	25387	5.365	ug/l	89
36) 1,1-Dichloropropene	8.371	75	21310	5.270	ug/l	100
37) Ethyl Acetate	7.559	43	22206	5.216	ug/l	99
38) Carbon Tetrachloride	8.359	117	20544	5.335	ug/l	92
39) Methylcyclohexane	9.594	83	25242	5.251	ug/l	99
40) Benzene	8.600	78	67406	5.202	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086278.D
Acq On : 15 Apr 2025 12:21
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 16 03:55:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.771	41	12454	5.047	ug/l		95
42) 1,2-Dichloroethane	8.671	62	21638	5.237	ug/l		100
43) Isopropyl Acetate	8.682	43	55105	5.444	ug/l	#	90
44) Trichloroethene	9.353	130	15562	5.067	ug/l		95
45) 1,2-Dichloropropane	9.618	63	16719	5.272	ug/l		94
46) Dibromomethane	9.706	93	10633	5.262	ug/l		97
47) Bromodichloromethane	9.888	83	23118	5.297	ug/l		95
48) Methyl methacrylate	9.682	41	19018	5.087	ug/l		98
49) 1,4-Dioxane	9.688	88	6722	105.699	ug/l		97
51) 4-Methyl-2-Pentanone	10.441	43	113773	26.097	ug/l		100
52) Toluene	10.624	92	42032	5.199	ug/l		100
53) t-1,3-Dichloropropene	10.835	75	25020	5.136	ug/l		99
54) cis-1,3-Dichloropropene	10.306	75	27737	5.183	ug/l		95
55) 1,1,2-Trichloroethane	11.018	97	15559	5.349	ug/l		98
56) Ethyl methacrylate	10.871	69	28102	5.256	ug/l		97
57) 1,3-Dichloropropane	11.159	76	26905	5.213	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.153	63	77113	30.387	ug/l		100
59) 2-Hexanone	11.194	43	84443	26.113	ug/l		99
60) Dibromochloromethane	11.359	129	16611	5.201	ug/l		100
61) 1,2-Dibromoethane	11.471	107	14929	5.087	ug/l		97
64) Tetrachloroethene	11.100	164	14998	5.188	ug/l		96
65) Chlorobenzene	11.888	112	44164	5.265	ug/l		95
66) 1,1,1,2-Tetrachloroethane	11.959	131	14896	5.383	ug/l		98
67) Ethyl Benzene	11.959	91	79376	5.244	ug/l		97
68) m/p-Xylenes	12.071	106	59758	10.537	ug/l		99
69) o-Xylene	12.394	106	29751	5.305	ug/l		98
70) Styrene	12.406	104	48407	5.180	ug/l		99
71) Bromoform	12.576	173	11065	5.311	ug/l	#	97
73) Isopropylbenzene	12.694	105	71658	5.221	ug/l		100
74) N-amyl acetate	12.488	43	35409	5.182	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.935	83	21720	5.503	ug/l		99
76) 1,2,3-Trichloropropane	12.988	75	19196m	4.870	ug/l		
77) Bromobenzene	12.976	156	15681	5.156	ug/l		93
78) n-propylbenzene	13.035	91	85101	5.261	ug/l		99
79) 2-Chlorotoluene	13.123	91	54490	5.384	ug/l		98
80) 1,3,5-Trimethylbenzene	13.170	105	59035	5.255	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.735	75	8832m	5.357	ug/l		
82) 4-Chlorotoluene	13.217	91	52887	5.260	ug/l		99
83) tert-Butylbenzene	13.435	119	51302	5.270	ug/l		99
84) 1,2,4-Trimethylbenzene	13.476	105	61145	5.347	ug/l		98
85) sec-Butylbenzene	13.612	105	72305	5.355	ug/l		99
86) p-Isopropyltoluene	13.723	119	58514	5.258	ug/l		99
87) 1,3-Dichlorobenzene	13.729	146	30570	5.347	ug/l		100
88) 1,4-Dichlorobenzene	13.806	146	30447	5.287	ug/l		94
89) n-Butylbenzene	14.053	91	50562	5.126	ug/l		99
90) Hexachloroethane	14.329	117	9832	5.252	ug/l		97
91) 1,2-Dichlorobenzene	14.100	146	30546	5.511	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	4593	5.772	ug/l		93
93) 1,2,4-Trichlorobenzene	15.388	180	14506	5.465	ug/l		99
94) Hexachlorobutadiene	15.500	225	5680	5.669	ug/l		97
95) Naphthalene	15.641	128	49586	5.270	ug/l		100
96) 1,2,3-Trichlorobenzene	15.841	180	13599	5.412	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086278.D
Acq On : 15 Apr 2025 12:21
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 :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:55:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

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

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

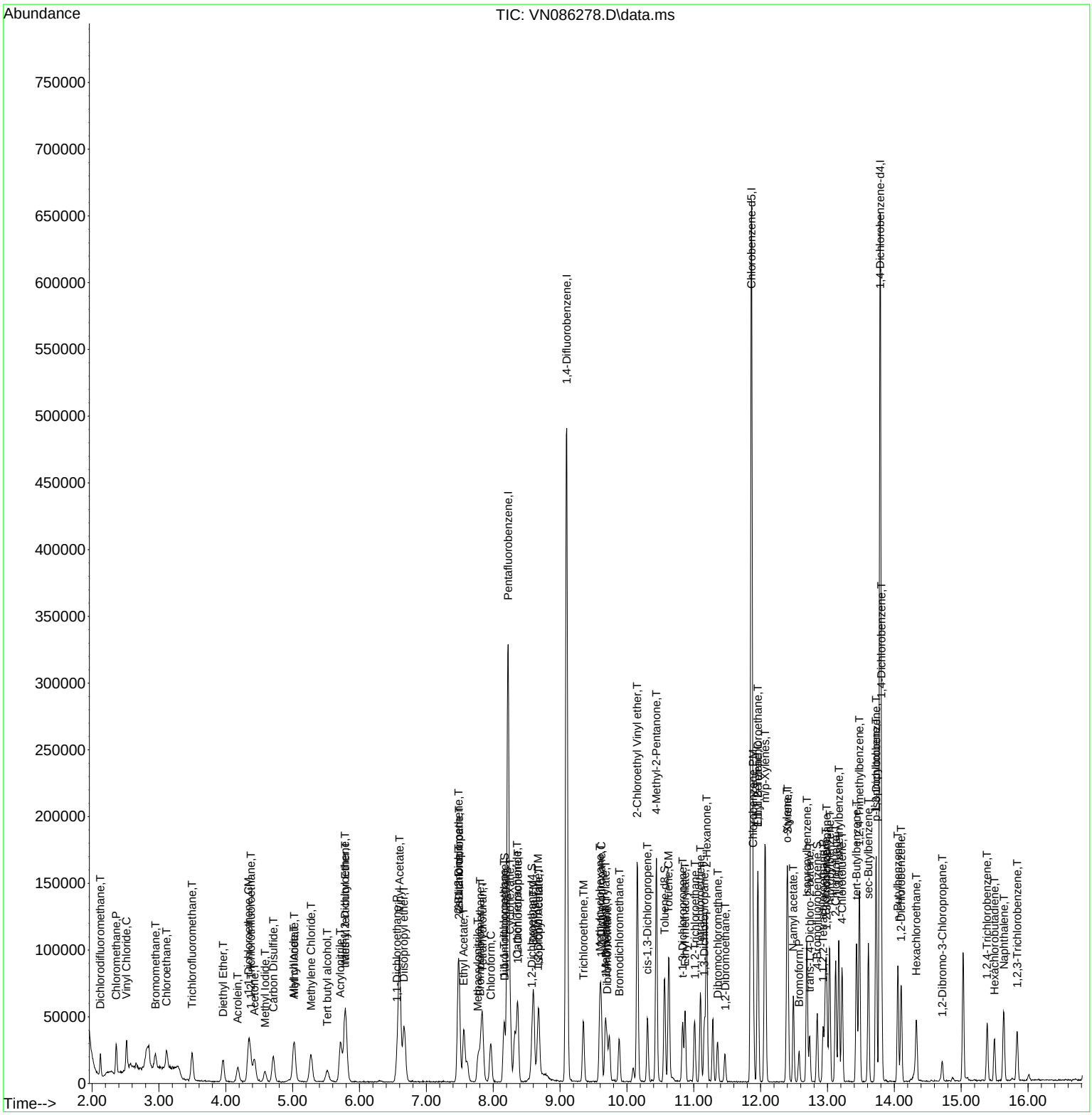
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086278.D
Acq On : 15 Apr 2025 12:21
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

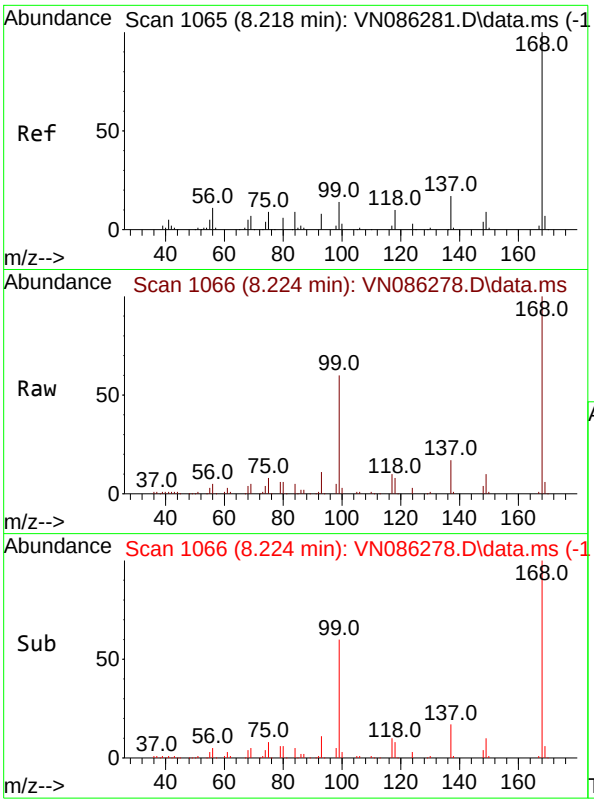
Quant Time: Apr 16 03:55:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

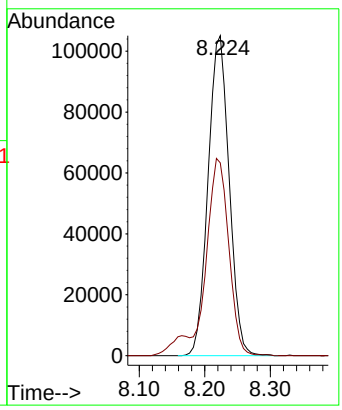




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:168 Resp: 23447

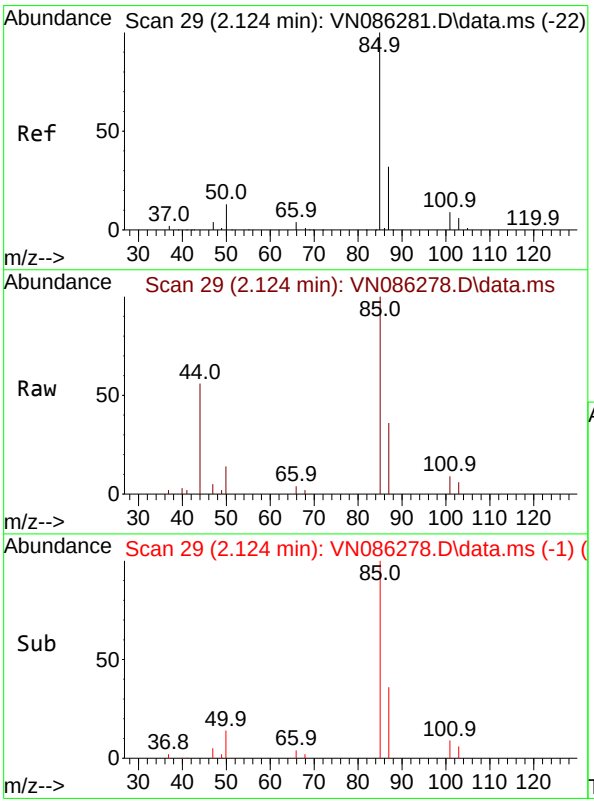
Ion	Ratio	Lower	Upper
168	100		
99	60.2	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

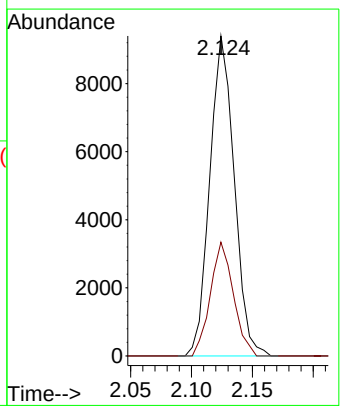
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

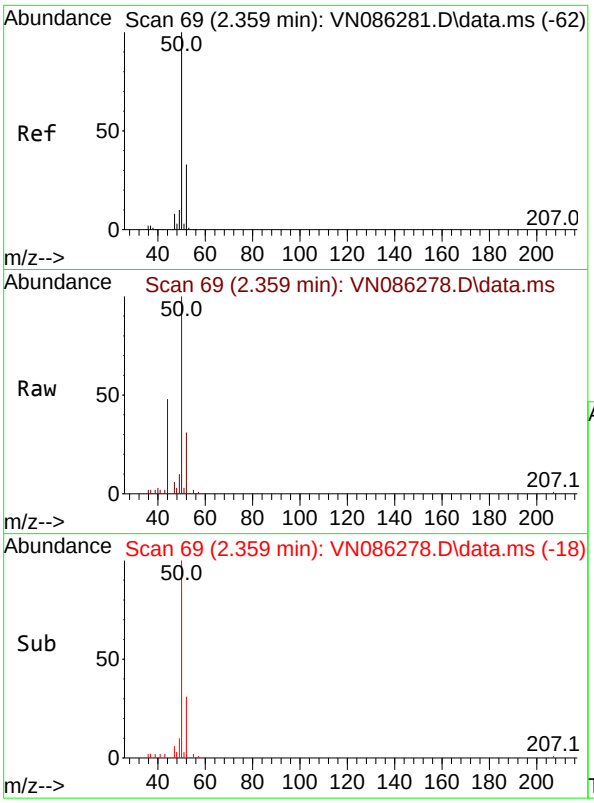


#2
Dichlorodifluoromethane
Concen: 4.735 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 85 Resp: 13162

Ion	Ratio	Lower	Upper
85	100		
87	35.6	16.3	48.8

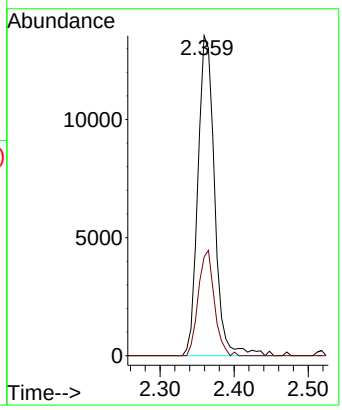




#3
Chloromethane
Concen: 5.246 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 50 Resp: 2119

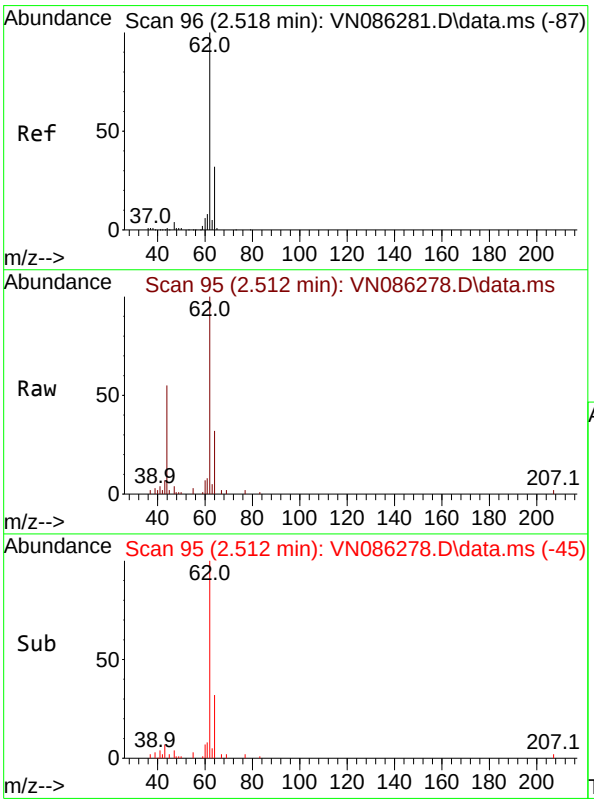
Ion	Ratio	Lower	Upper
50	100		
52	30.8	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

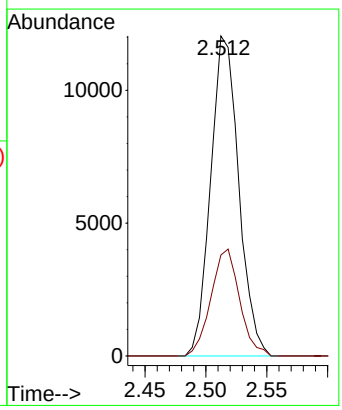
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

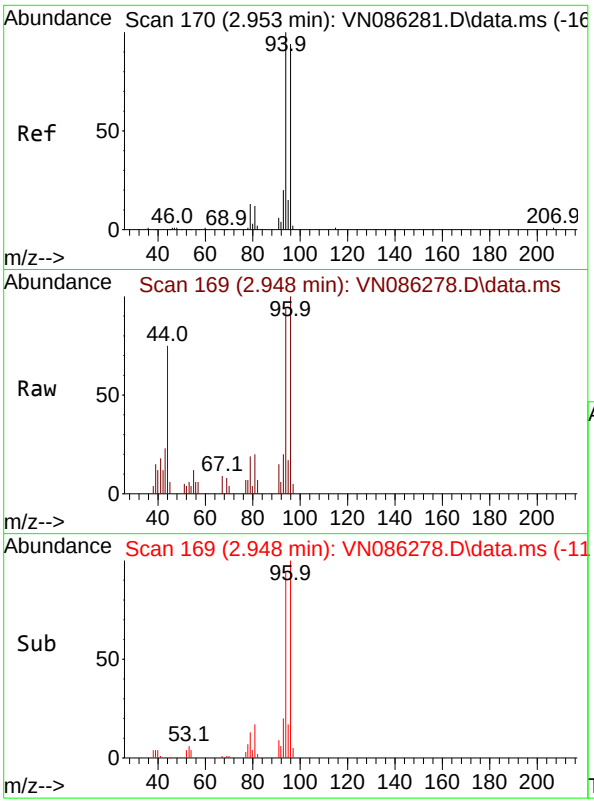


#4
Vinyl Chloride
Concen: 5.018 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 62 Resp: 19342

Ion	Ratio	Lower	Upper
62	100		
64	31.5	25.6	38.4





#5
Bromomethane
Concen: 5.180 ug/l
RT: 2.948 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 94 Resp: 898

Ion	Ratio	Lower	Upper
94	100		
96	102.3	75.2	112.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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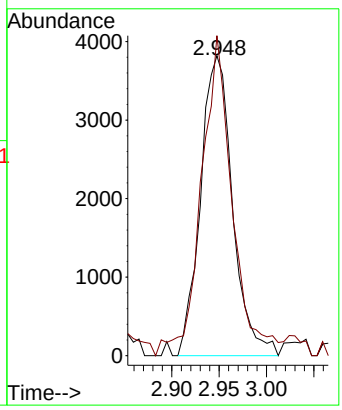
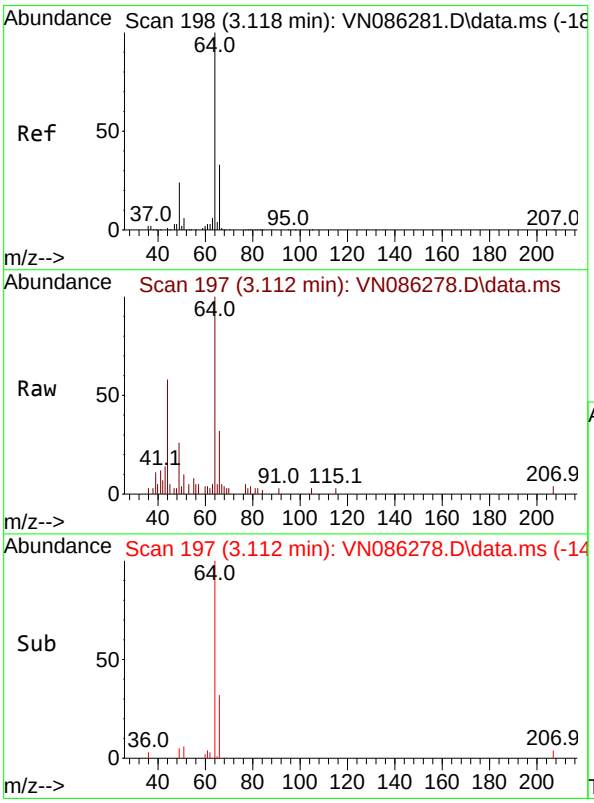
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

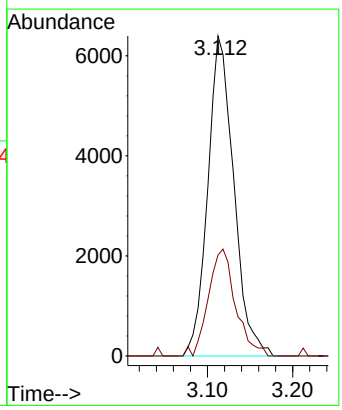


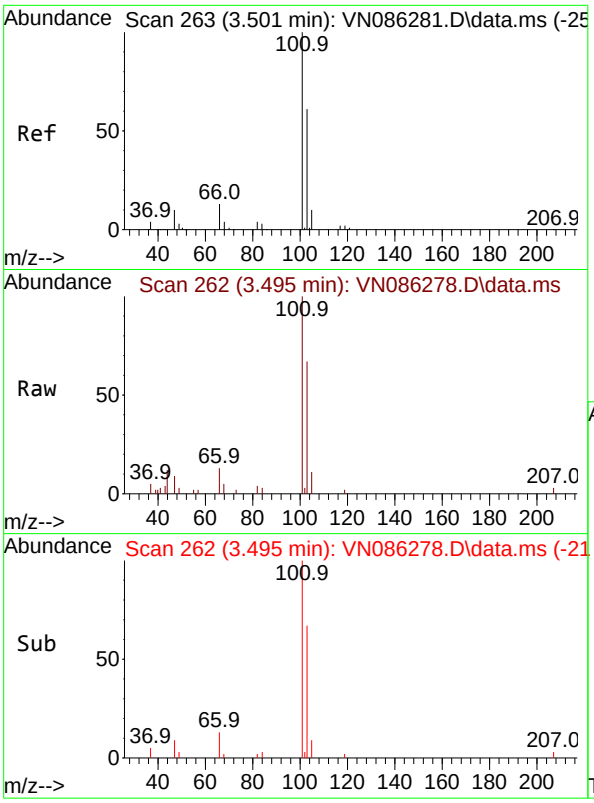


#6
Chloroethane
Concen: 5.268 ug/l
RT: 3.112 min Scan# 197
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 64 Resp: 13592

Ion	Ratio	Lower	Upper
64	100		
66	31.6	26.2	39.2





#7
Trichlorofluoromethane
Concen: 5.223 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:101 Resp: 2230

Ion	Ratio	Lower	Upper
101	100		
103	67.3	49.2	73.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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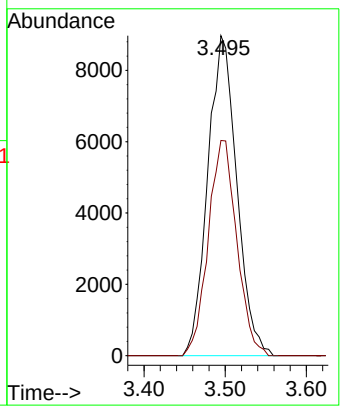
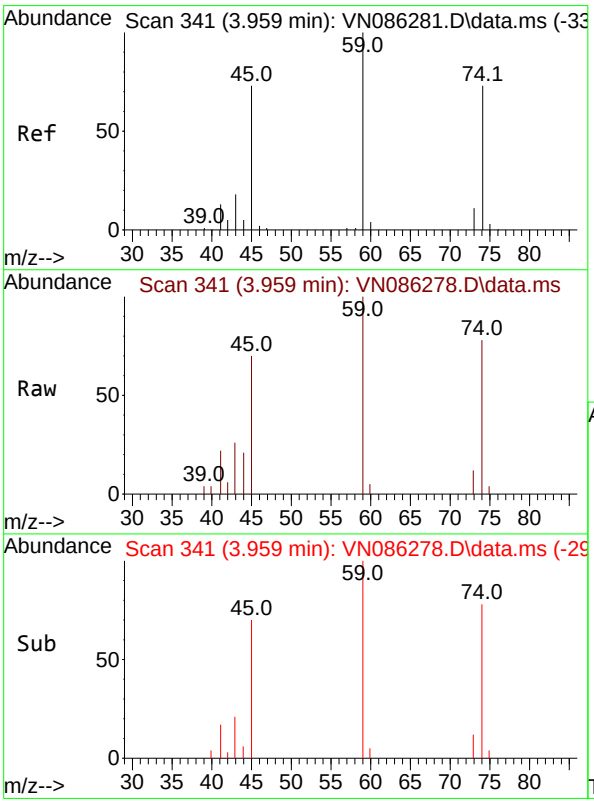
Supervised By :Semsettin Yesilyurt 04/16/2025

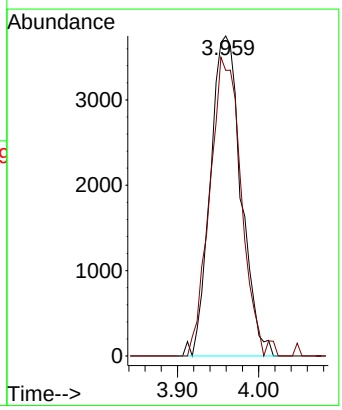


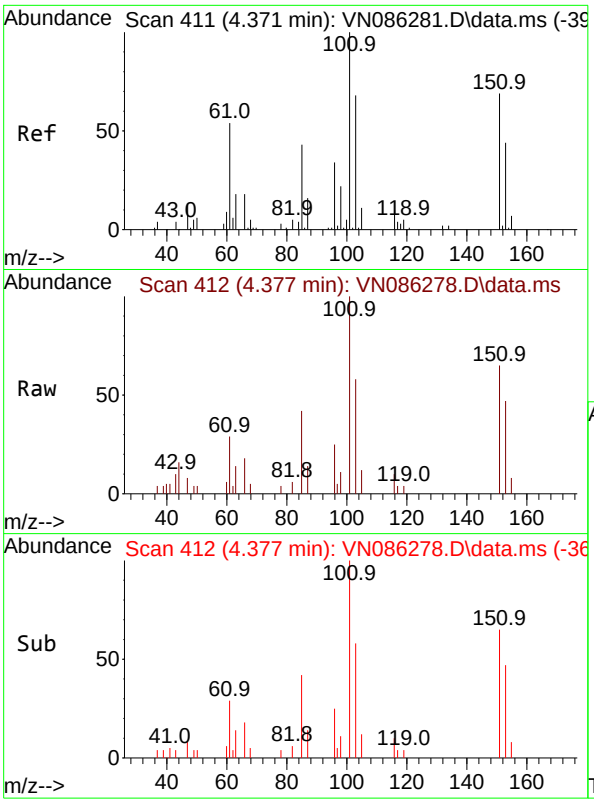


#8
Diethyl Ether
Concen: 5.291 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 74 Resp: 9862

Ion	Ratio	Lower	Upper
74	100		
45	94.4	48.0	144.2

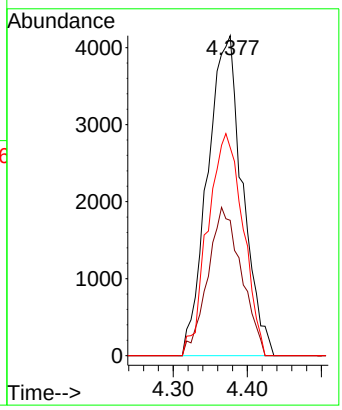




#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.278 ug/l
RT: 4.377 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:101 Resp: 1363

Ion	Ratio	Lower	Upper
101	100		
85	44.6	34.7	52.1
151	69.9	56.1	84.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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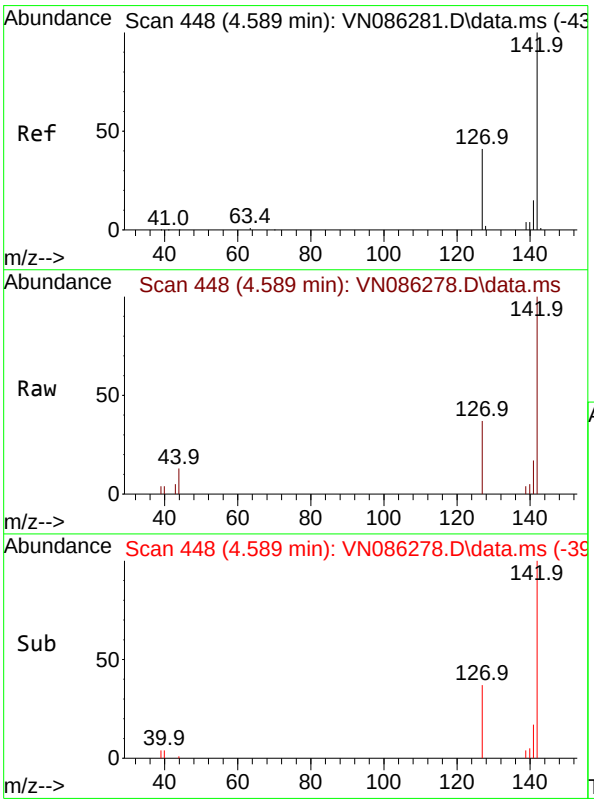
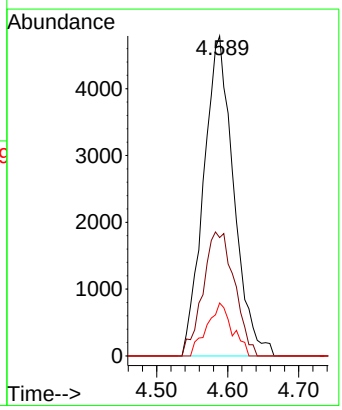
Supervised By :Semsettin Yesilyurt 04/16/2025

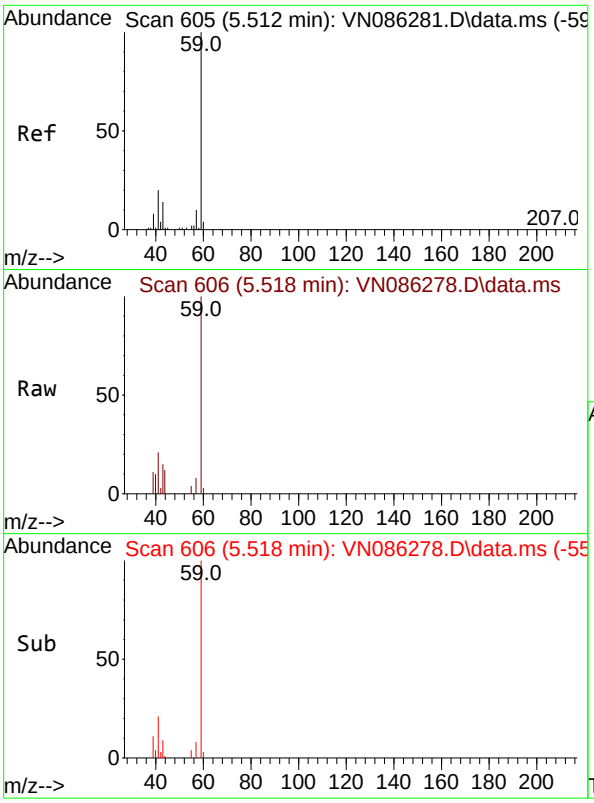


#10
Methyl Iodide
Concen: 4.941 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:142 Resp: 14033

Ion	Ratio	Lower	Upper
142	100		
127	37.0	32.7	49.1
141	16.5	11.7	17.5





#11
Tert butyl alcohol
Concen: 27.348 ug/l
RT: 5.518 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 59 Resp: 1696

Ion	Ratio	Lower	Upper
59	100		
57	5.8	8.3	12.5#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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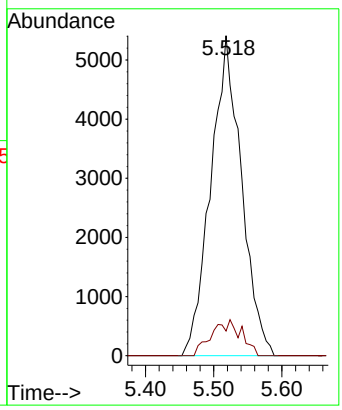
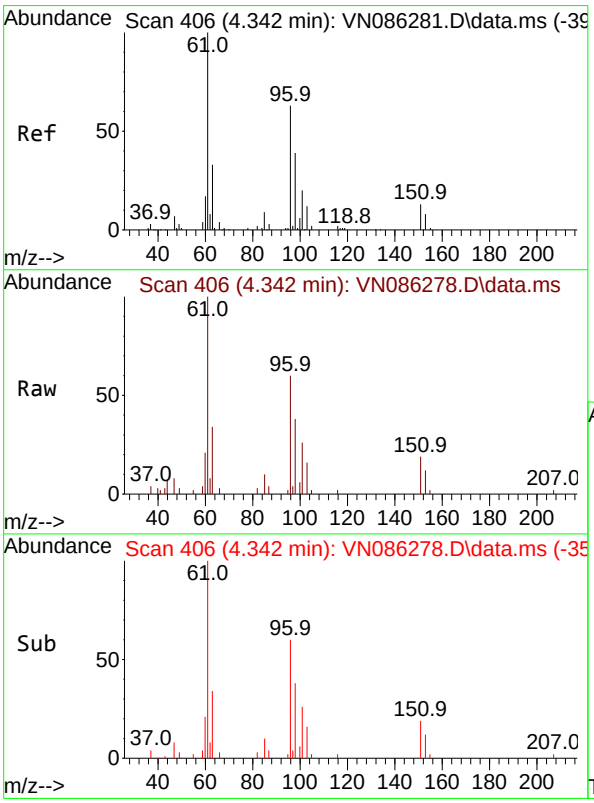
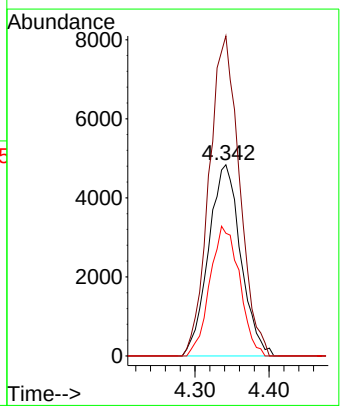


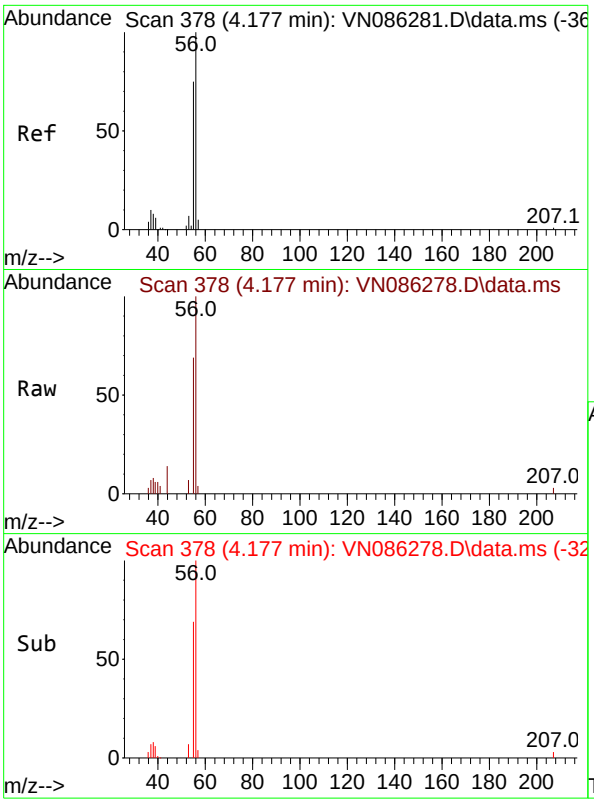


#12
1,1-Dichloroethene
Concen: 5.284 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 96 Resp: 14583

Ion	Ratio	Lower	Upper
96	100		
61	167.4	126.6	189.8
98	64.2	49.6	74.4

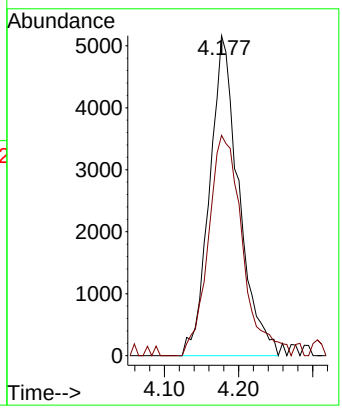




#13
Acrolein
Concen: 35.938 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 56 Resp: 1413

Ion	Ratio	Lower	Upper
56	100		
55	80.3	58.5	87.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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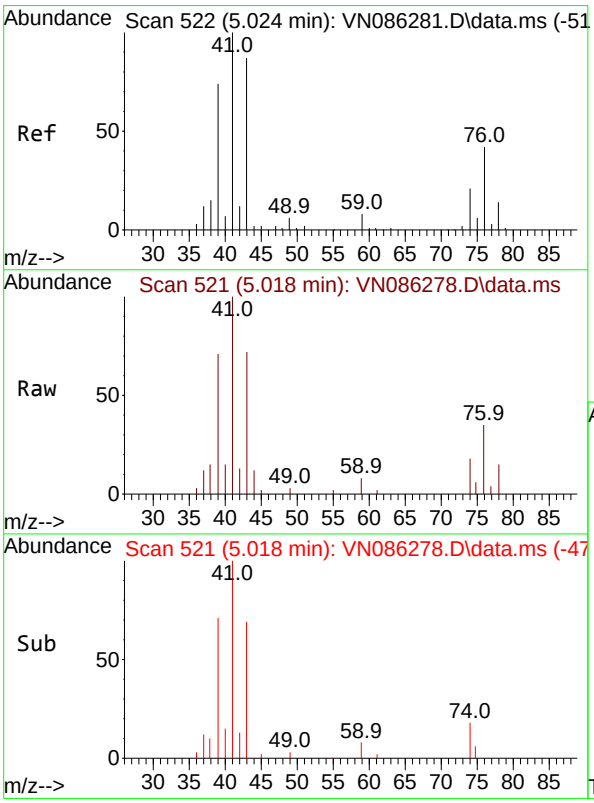
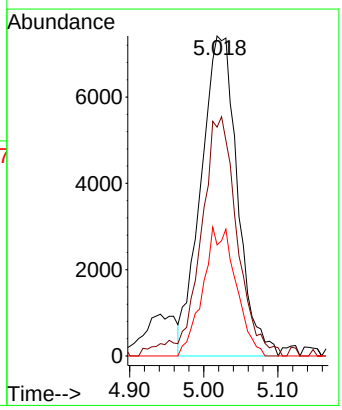
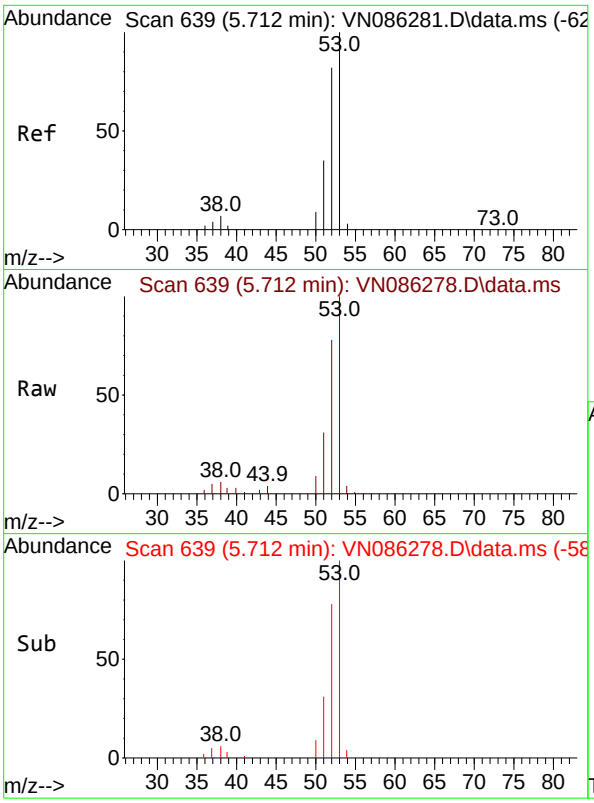


#14
Allyl chloride
Concen: 5.174 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 41 Resp: 25369

Ion	Ratio	Lower	Upper
41	100		
39	74.8	59.2	88.8
76	36.4	31.2	46.8





#15
Acrylonitrile
Concen: 26.709 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 53 Resp: 4096

Ion	Ratio	Lower	Upper
53	100		
52	80.2	65.5	98.3
51	35.5	28.6	42.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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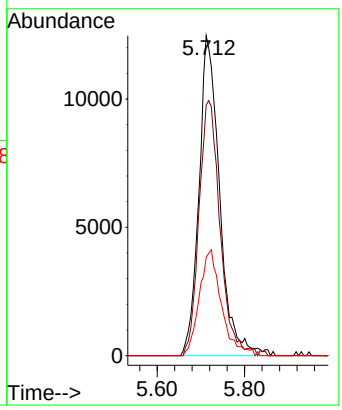
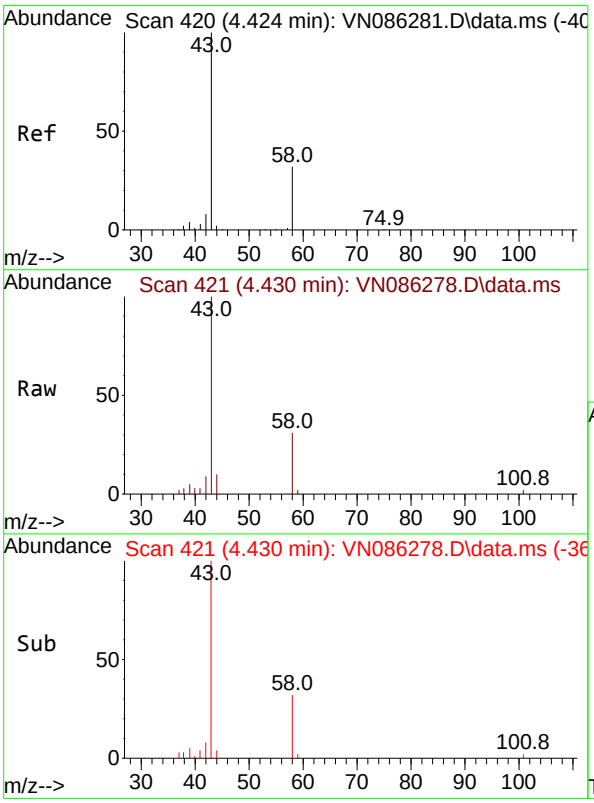
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

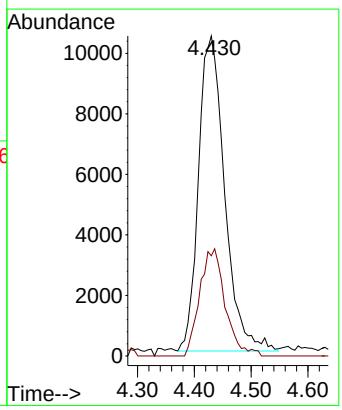


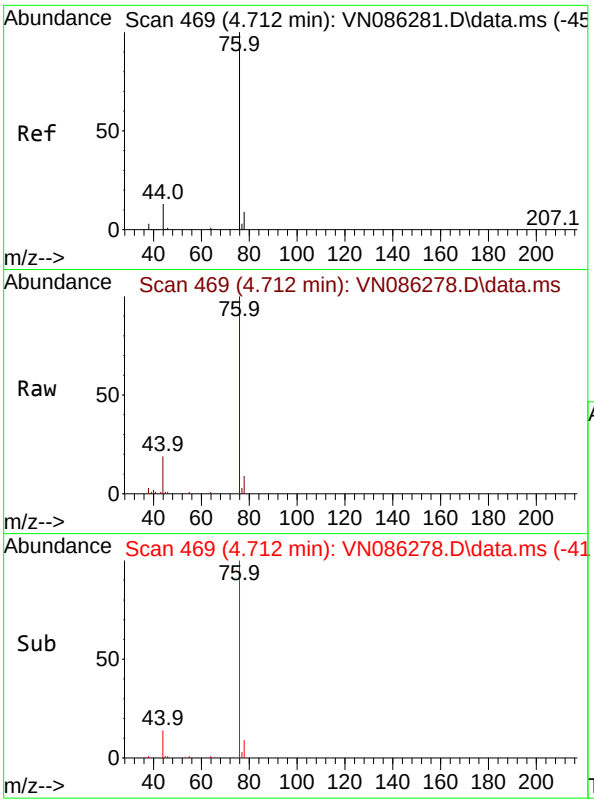


#16
Acetone
Concen: 23.124 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 33298

Ion	Ratio	Lower	Upper
43	100		
58	31.8	25.3	37.9

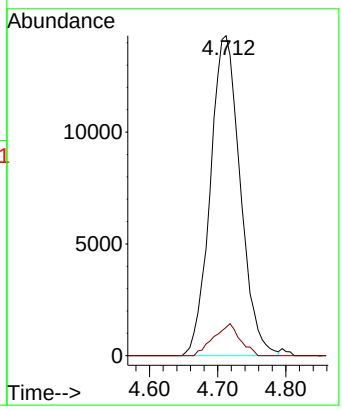




#17
Carbon Disulfide
Concen: 5.289 ug/l
RT: 4.712 min Scan# 4(
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 76 Resp: 4370(

Ion	Ratio	Lower	Upper
76	100		
78	8.8	7.6	11.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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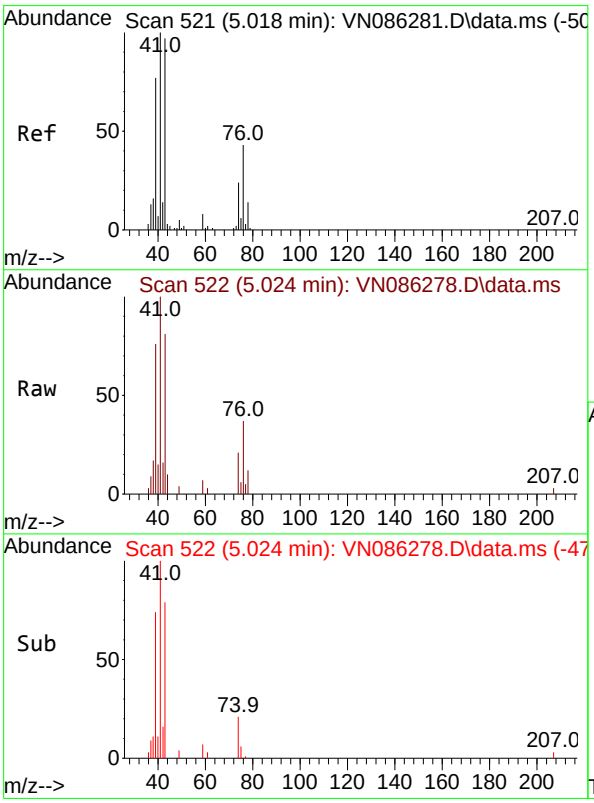
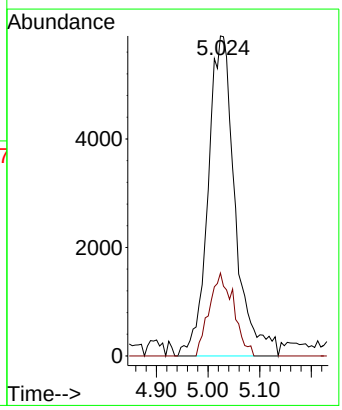
Supervised By :Semsettin Yesilyurt 04/16/2025

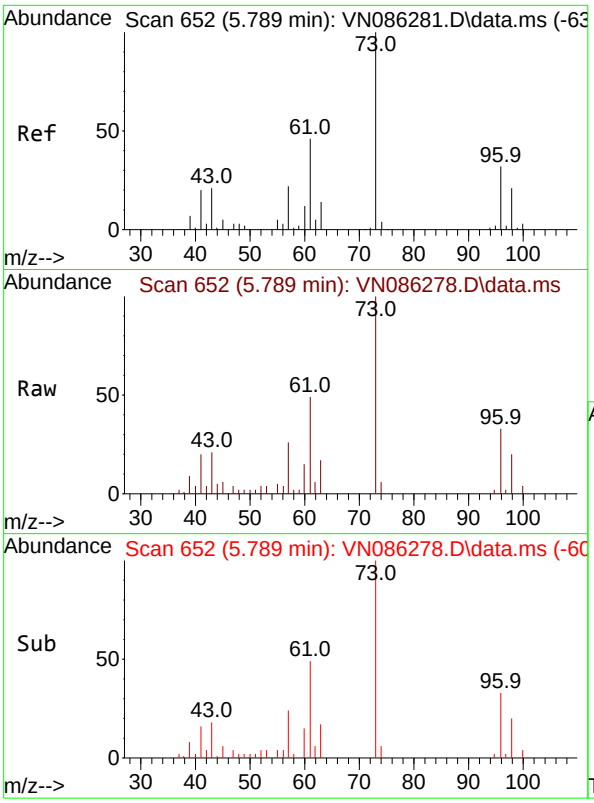


#18
Methyl Acetate
Concen: 5.239 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 21384

Ion	Ratio	Lower	Upper
43	100		
74	23.4	19.8	29.6

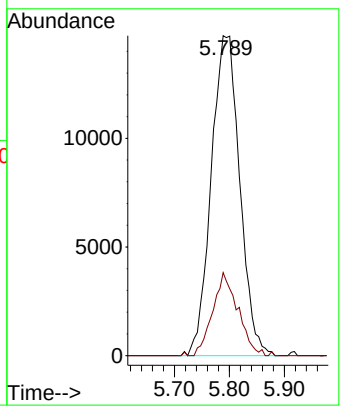




#19
Methyl tert-butyl Ether
Concen: 5.238 ug/l
RT: 5.789 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 73 Resp: 5313

Ion	Ratio	Lower	Upper
73	100		
57	26.0	17.6	26.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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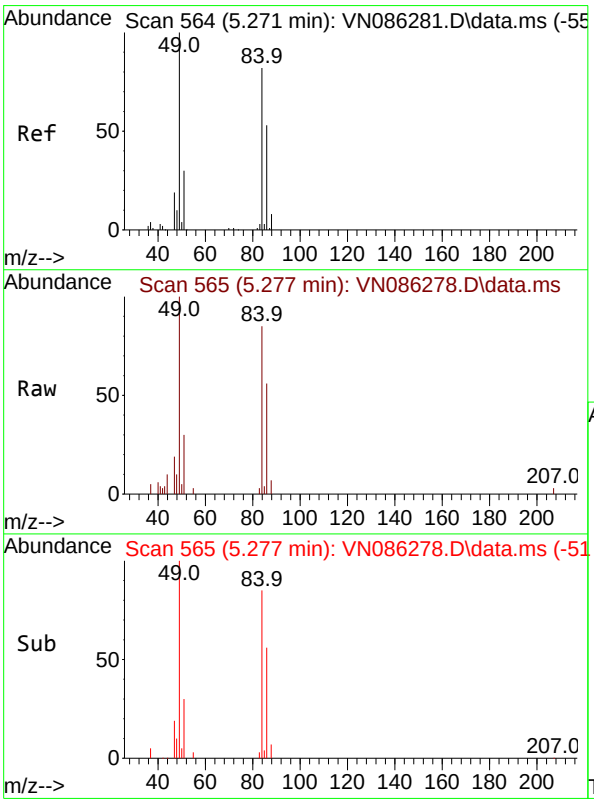
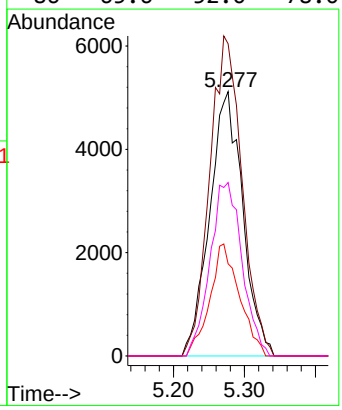
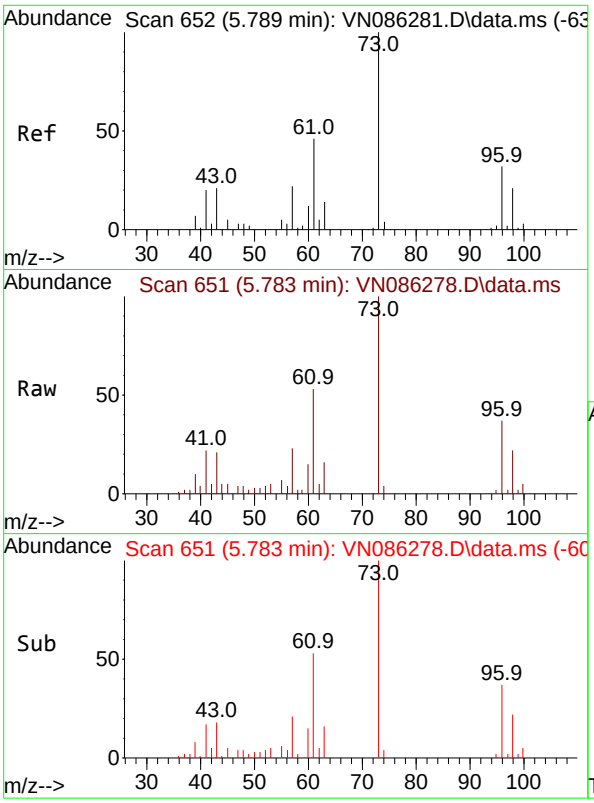


#20
Methylene Chloride
Concen: 5.270 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 84 Resp: 16566

Ion	Ratio	Lower	Upper
84	100		
49	118.1	98.2	147.2
51	34.9	29.8	44.6
86	65.6	52.0	78.0

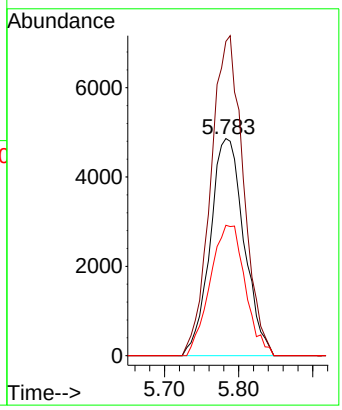




#21
trans-1,2-Dichloroethene
Concen: 5.331 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 96 Resp: 1538

Ion	Ratio	Lower	Upper
96	100		
61	144.8	114.6	171.8
98	60.1	51.2	76.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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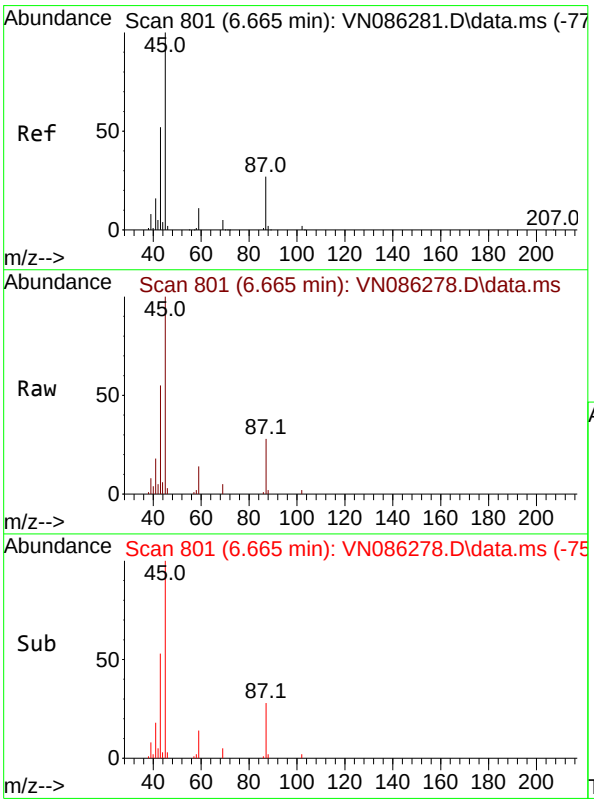
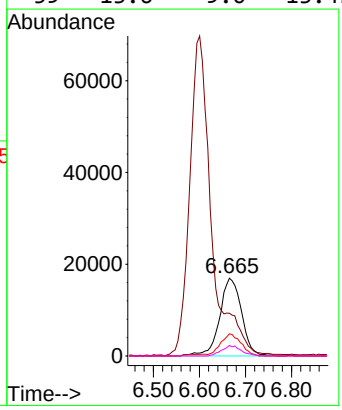
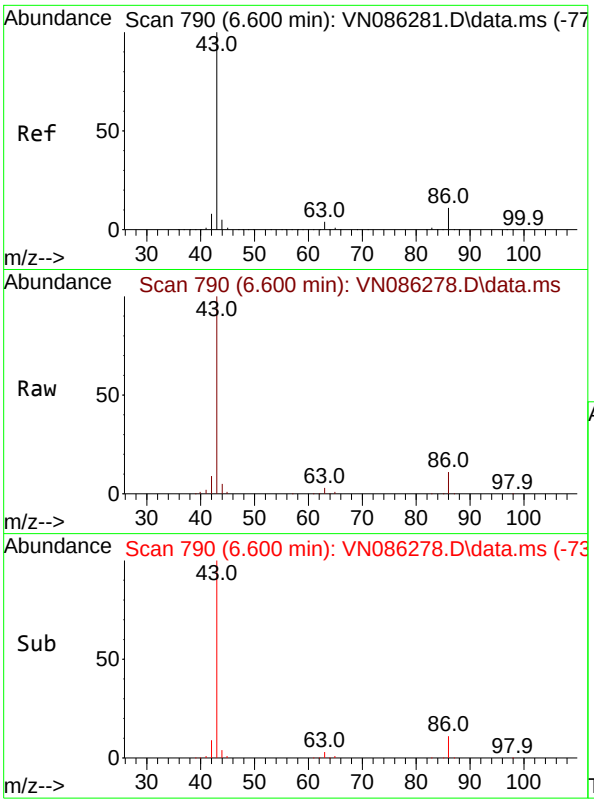


#22
Diisopropyl ether
Concen: 5.239 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 45 Resp: 55913

Ion	Ratio	Lower	Upper
45	100		
43	52.8	41.8	62.8
87	28.4	21.6	32.4
59	13.6	9.0	13.4#





#23
Vinyl Acetate
Concen: 27.614 ug/l m
RT: 6.600 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 20595

Ion	Ratio	Lower	Upper
43	100		
86	10.9	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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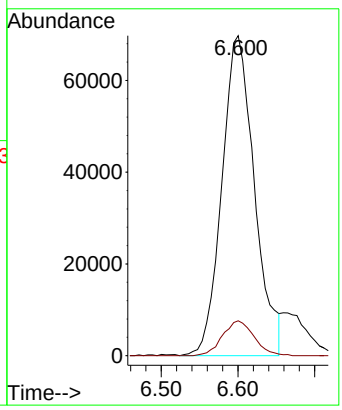
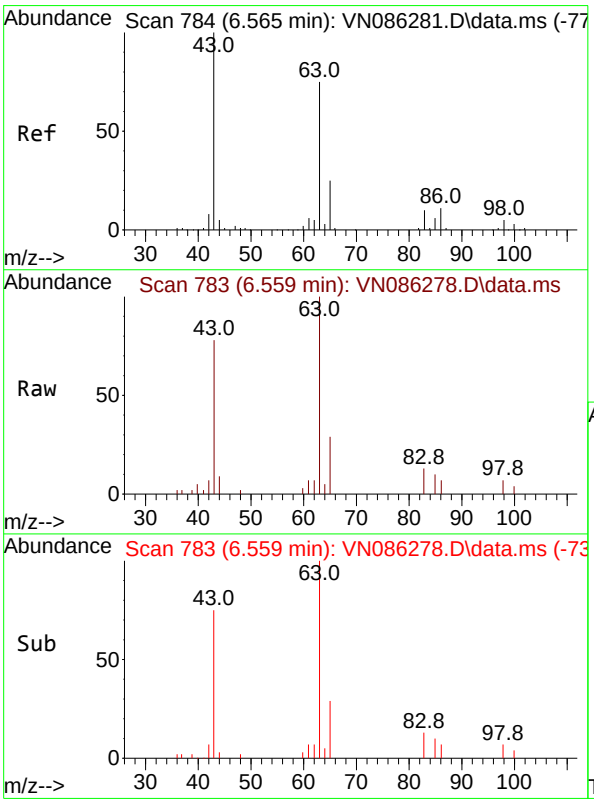
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

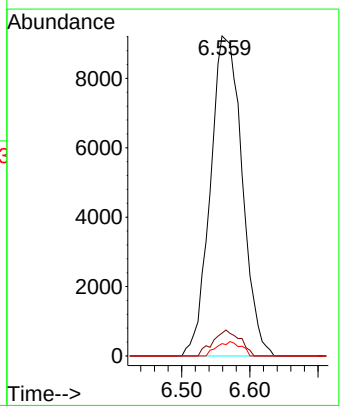


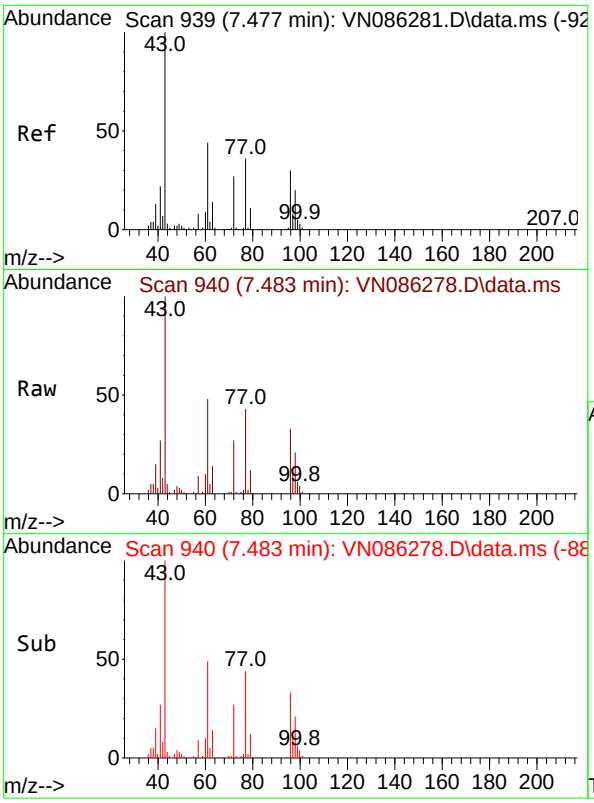


#24
1,1-Dichloroethane
Concen: 5.304 ug/l
RT: 6.559 min Scan# 783
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 63 Resp: 29865

Ion	Ratio	Lower	Upper
63	100		
98	7.2	3.4	10.2
100	3.9	2.1	6.5

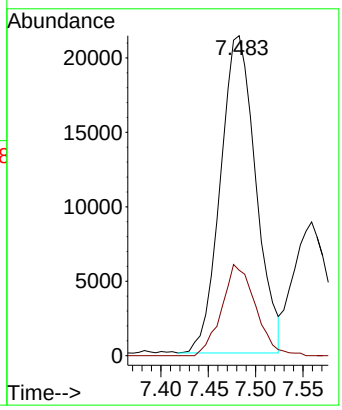




#25
2-Butanone
Concen: 26.210 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 5547

Ion	Ratio	Lower	Upper
43	100		
72	26.9	21.7	32.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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Reviewed By :John Carlone 04/16/2025
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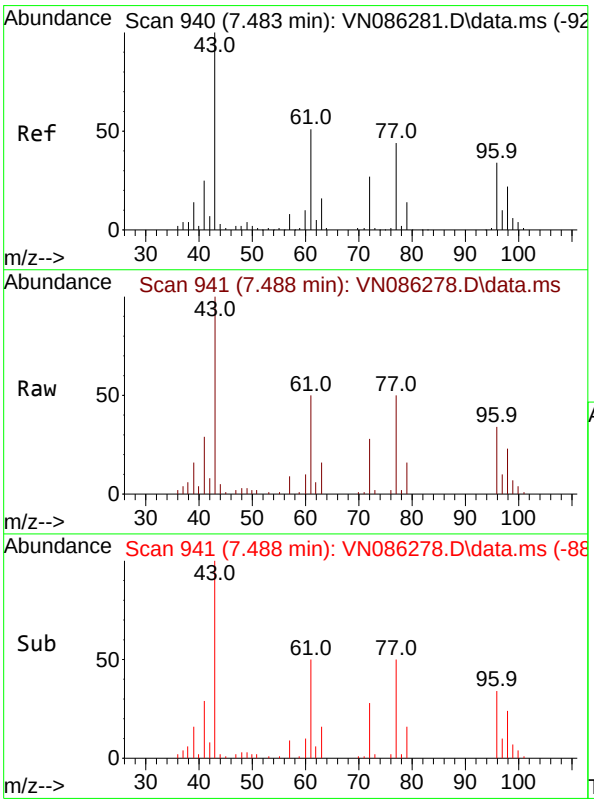
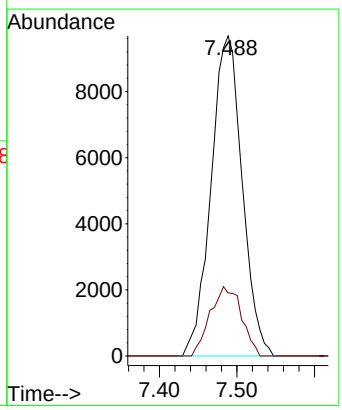
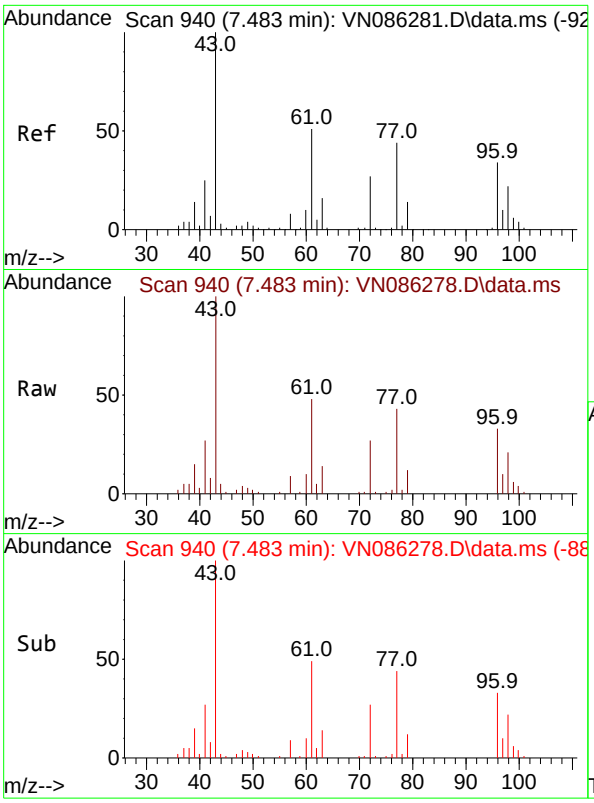


#26
2,2-Dichloropropane
Concen: 5.365 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 77 Resp: 27048

Ion	Ratio	Lower	Upper
77	100		
97	21.7	11.2	33.5

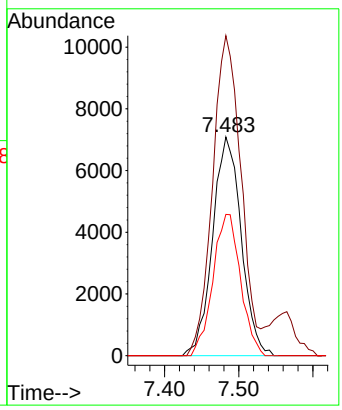




#27
cis-1,2-Dichloroethene
Concen: 5.301 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 96 Resp: 1898

Ion	Ratio	Lower	Upper
96	100		
61	145.6	0.0	299.0
98	62.3	0.0	129.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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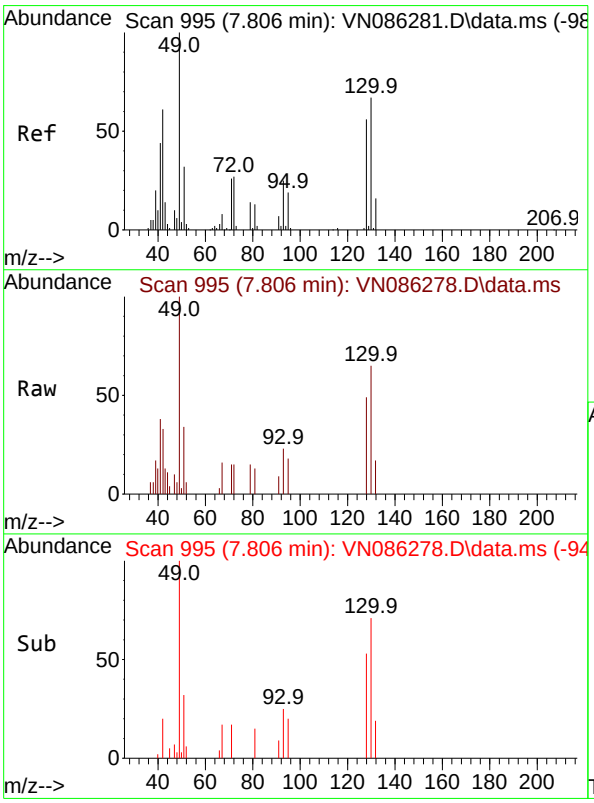
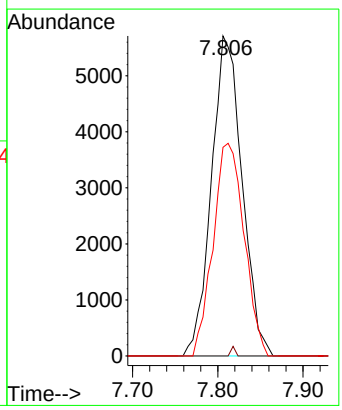
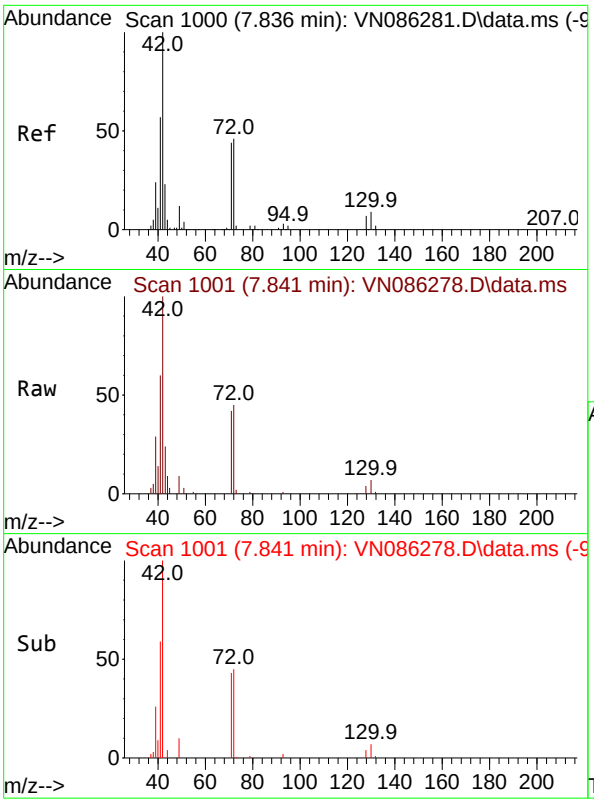


#28
Bromochloromethane
Concen: 5.967 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 49 Resp: 14246

Ion	Ratio	Lower	Upper
49	100		
129	0.4	0.0	3.4
130	67.3	57.1	85.7





#29
Tetrahydrofuran
Concen: 26.453 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 42 Resp: 3743

Ion	Ratio	Lower	Upper
42	100		
72	44.3	36.2	54.4
71	42.1	34.0	51.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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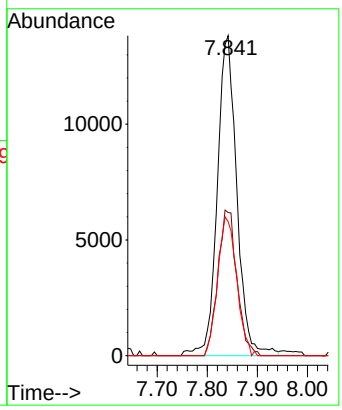
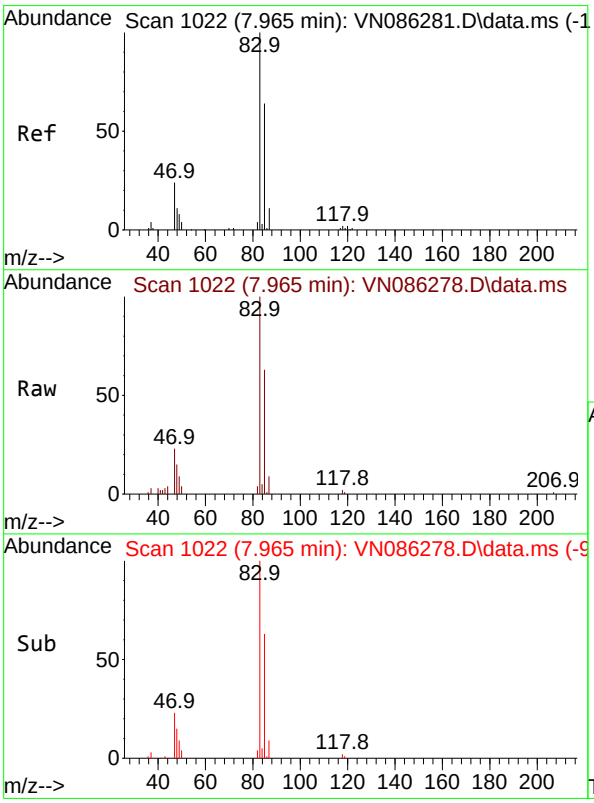
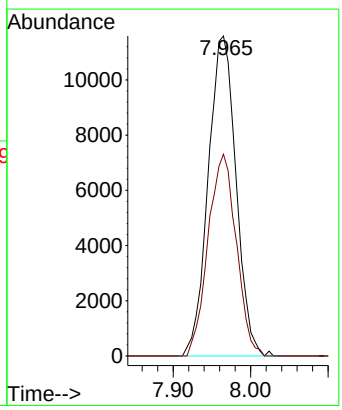


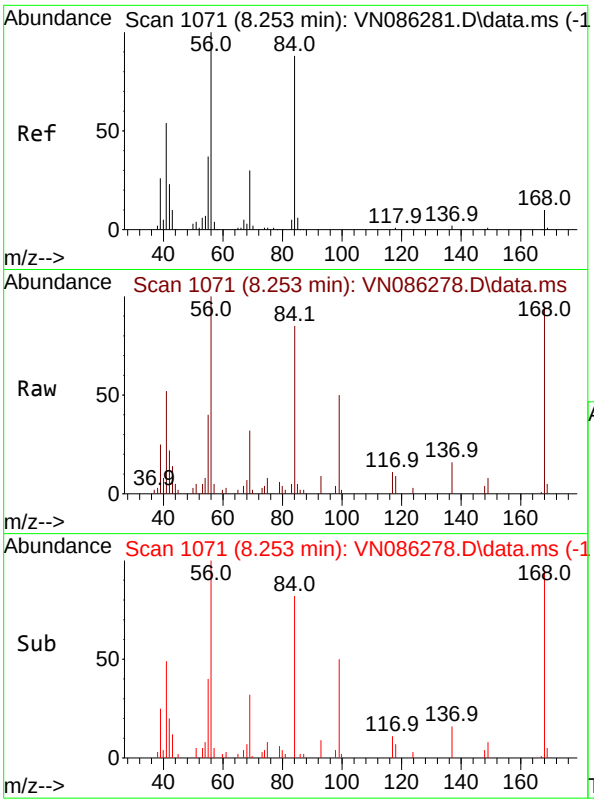


#30
Chloroform
Concen: 5.225 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 83 Resp: 28901

Ion	Ratio	Lower	Upper
83	100		
85	63.0	51.5	77.3

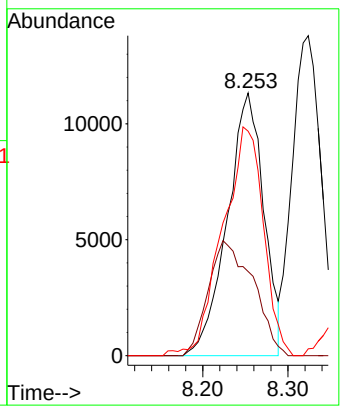




#31
Cyclohexane
Concen: 6.122 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 56 Resp: 3373

Ion	Ratio	Lower	Upper
56	100		
69	32.0	24.2	36.2
84	83.8	70.3	105.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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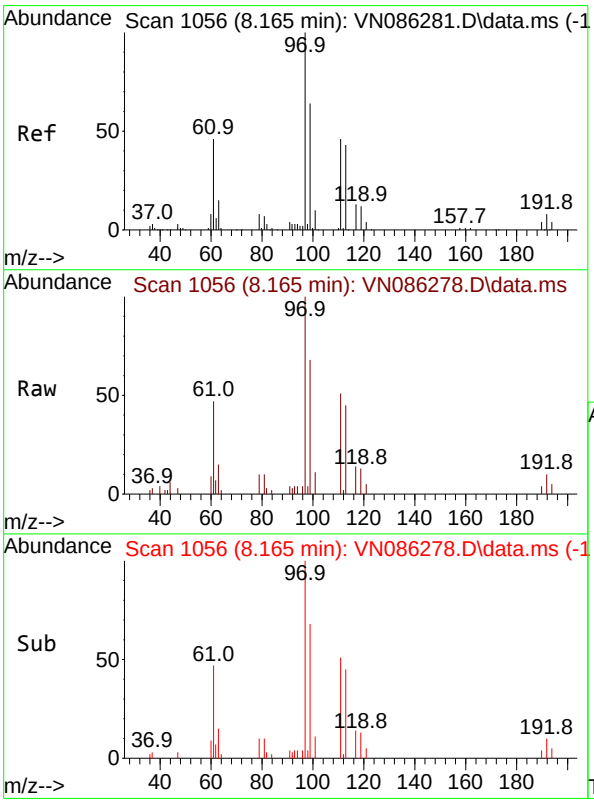
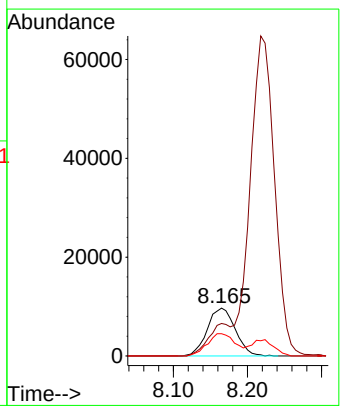
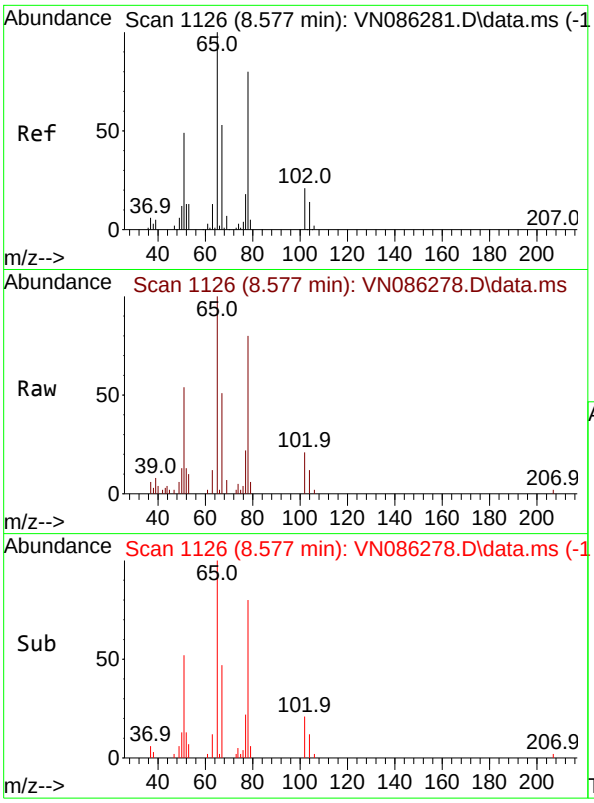


#32
1,1,1-Trichloroethane
Concen: 5.365 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 97 Resp: 25387

Ion	Ratio	Lower	Upper
97	100		
99	53.1	52.7	79.1
61	46.2	39.5	59.3





#33
1,2-Dichloroethane-d4
Concen: 5.143 ug/l
RT: 8.577 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 65 Resp: 1748

Ion	Ratio	Lower	Upper
65	100		
67	54.6	0.0	106.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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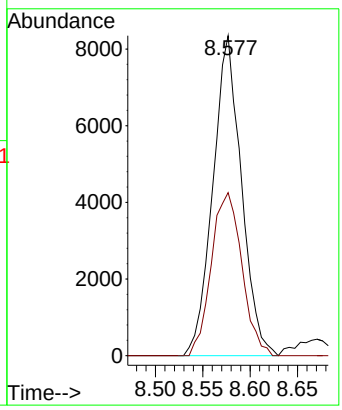
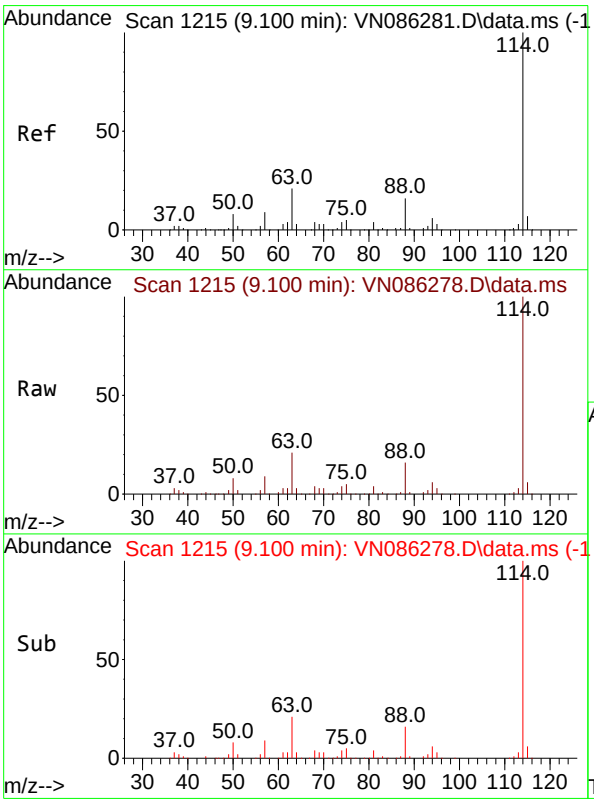
Supervised By :Semsettin Yesilyurt 04/16/2025

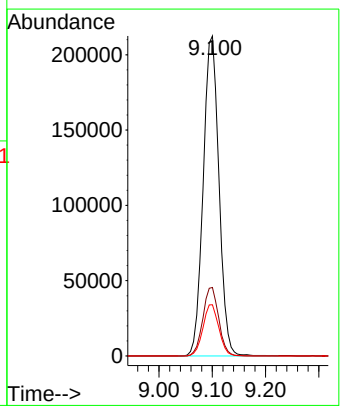


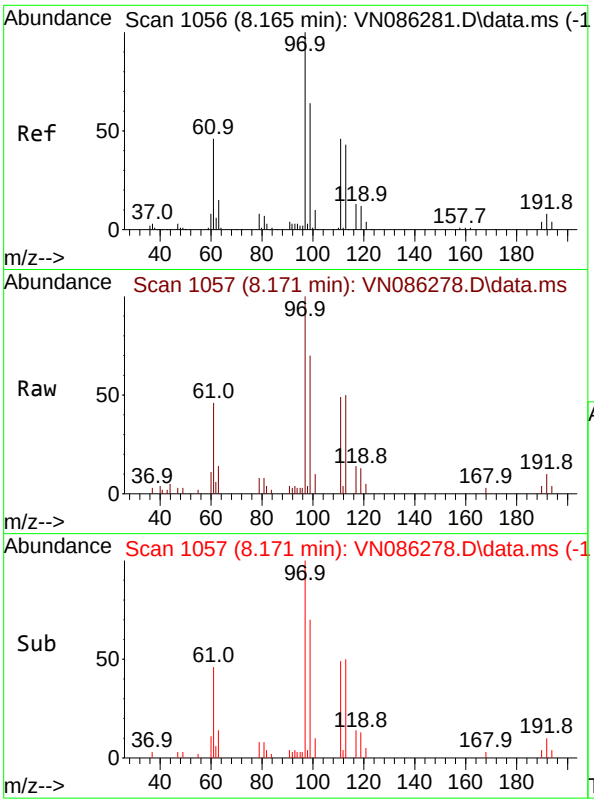


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:114 Resp: 436245

Ion	Ratio	Lower	Upper
114	100		
63	21.4	0.0	42.6
88	16.0	0.0	31.8

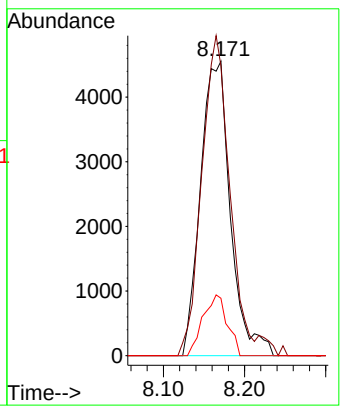




#35
Dibromofluoromethane
Concen: 5.759 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:113 Resp: 1166

Ion	Ratio	Lower	Upper
113	100		
111	100.7	83.4	125.0
192	16.7	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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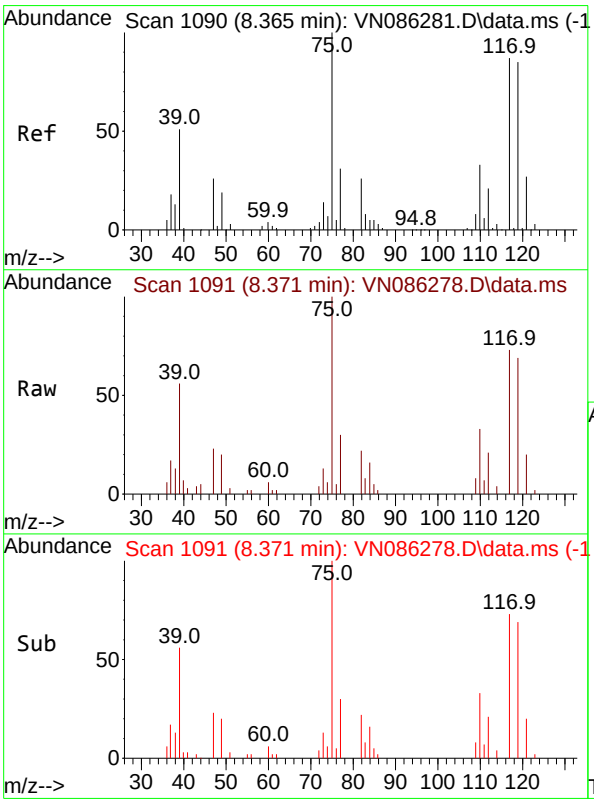
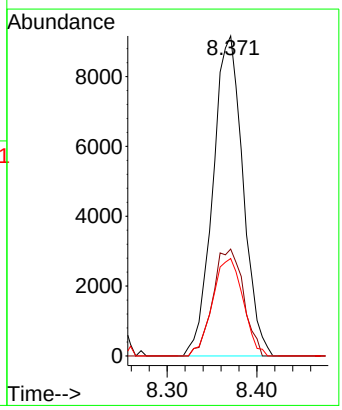
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

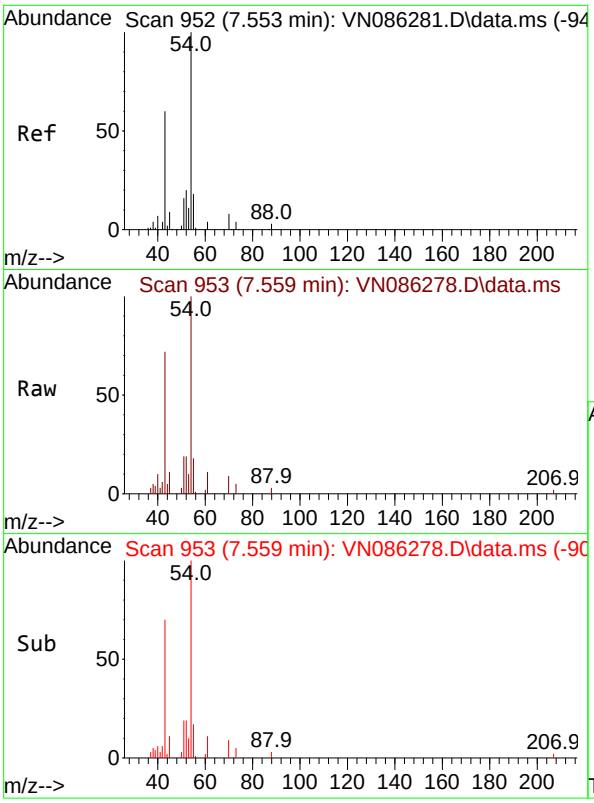


#36
1,1-Dichloropropene
Concen: 5.270 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 75 Resp: 21310

Ion	Ratio	Lower	Upper
75	100		
110	34.0	16.8	50.4
77	31.0	24.9	37.3





#37
Ethyl Acetate
Concen: 5.216 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 2220

Ion	Ratio	Lower	Upper
43	100		
61	14.5	11.1	16.7
70	11.0	9.2	13.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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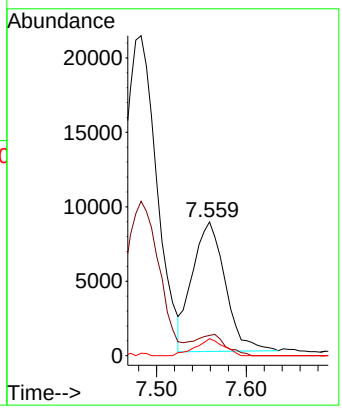
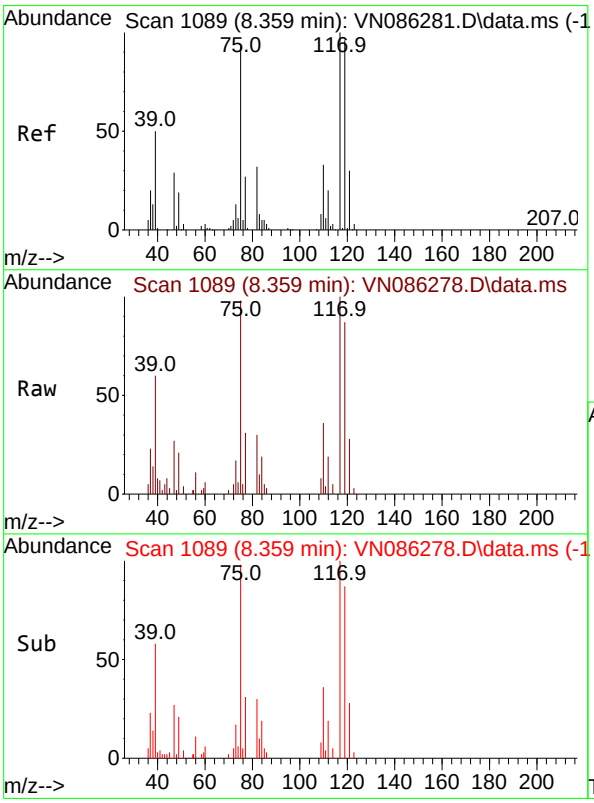
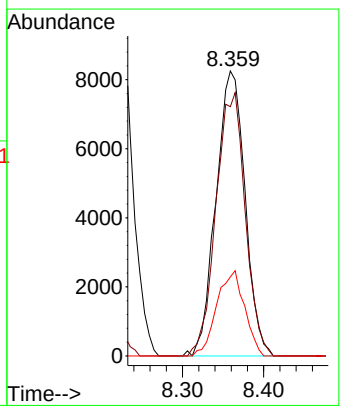


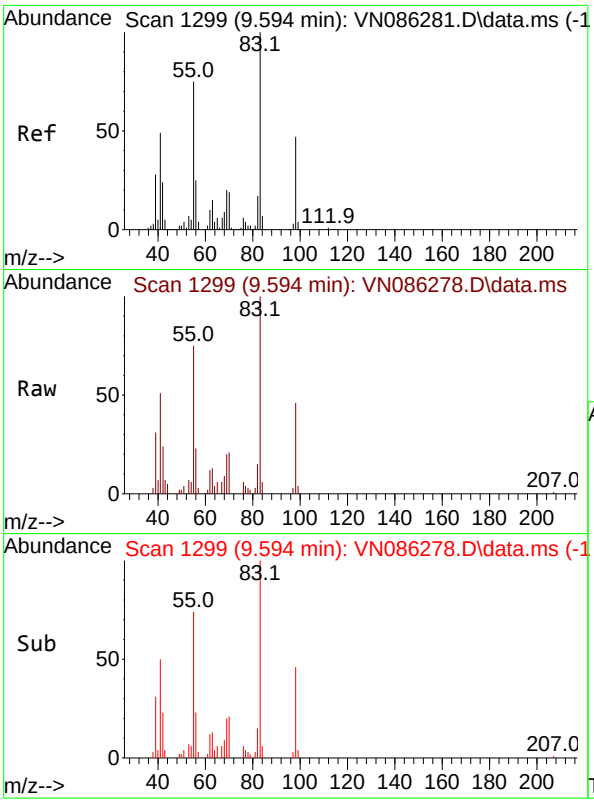


#38
Carbon Tetrachloride
Concen: 5.335 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:117 Resp: 20544

Ion	Ratio	Lower	Upper
117	100		
119	87.5	76.8	115.2
121	27.7	23.8	35.8





#39
Methylcyclohexane
Concen: 5.251 ug/l
RT: 9.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 83 Resp: 2524

Ion	Ratio	Lower	Upper
83	100		
55	75.4	59.8	89.8
98	46.3	37.9	56.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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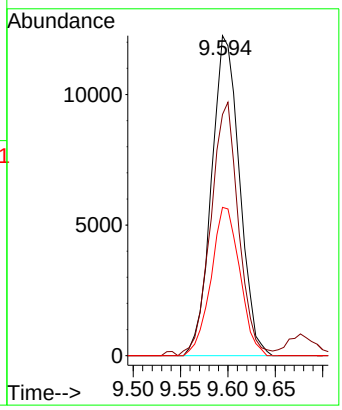
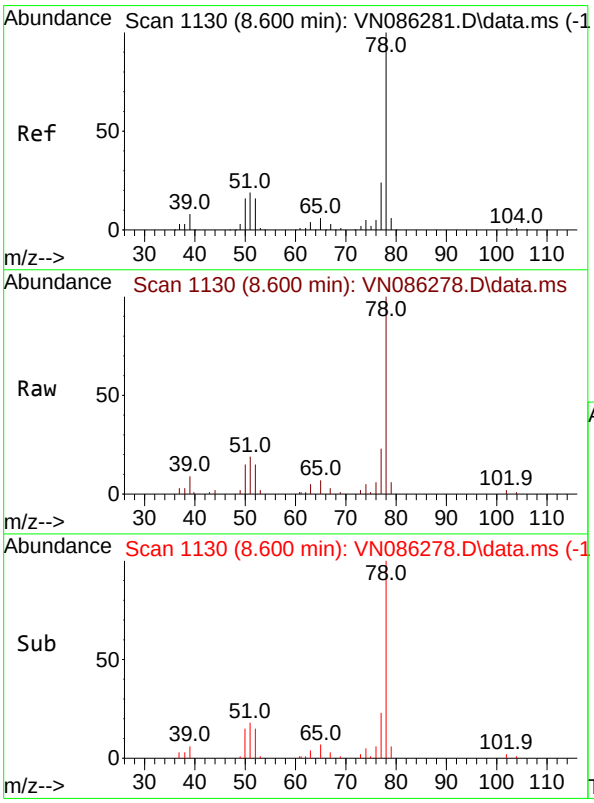
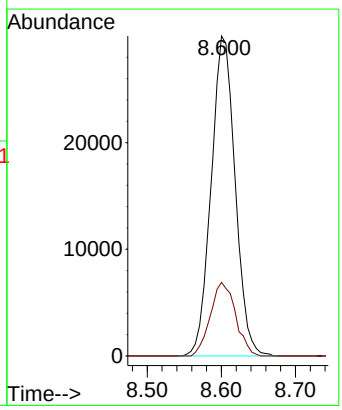


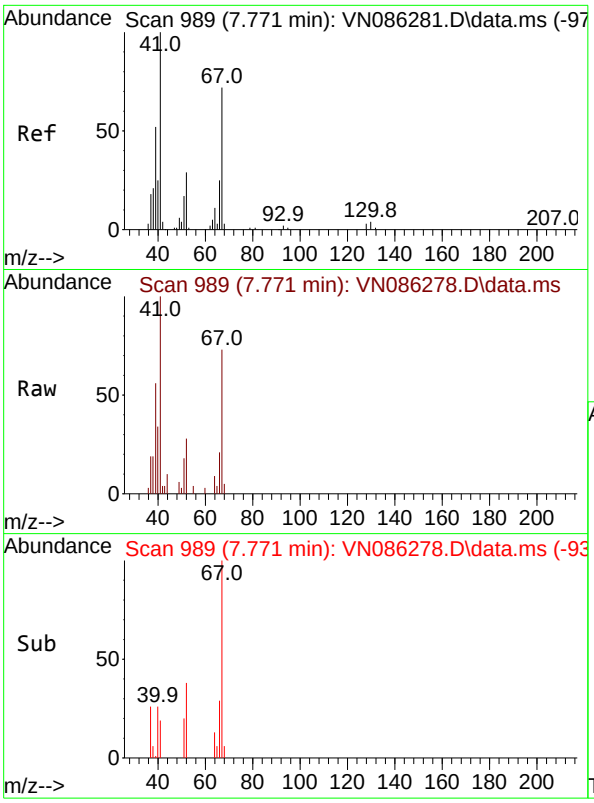


#40
Benzene
Concen: 5.202 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 78 Resp: 67406

Ion	Ratio	Lower	Upper
78	100		
77	23.0	19.4	29.2

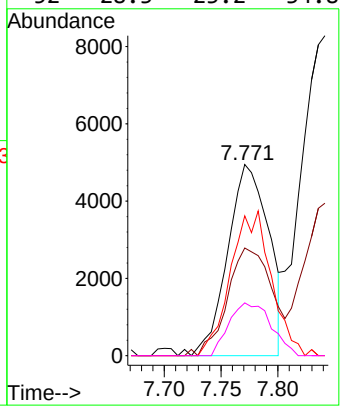




#41
Methacrylonitrile
Concen: 5.047 ug/l
RT: 7.771 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 41 Resp: 1245

Ion	Ratio	Lower	Upper
41	100		
39	61.1	43.0	64.4
67	75.0	58.8	88.2
52	28.3	23.2	34.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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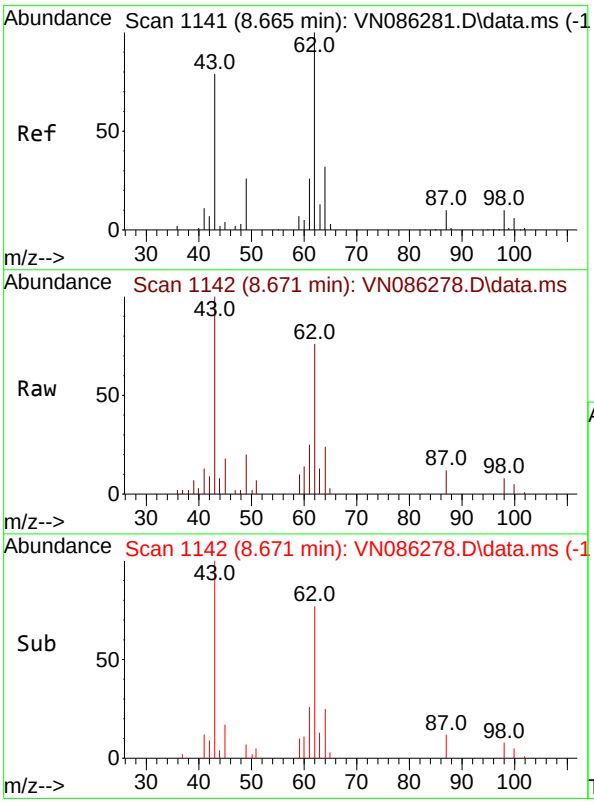
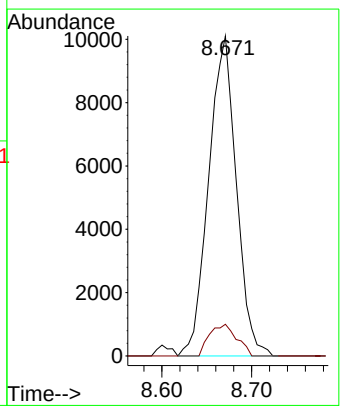
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

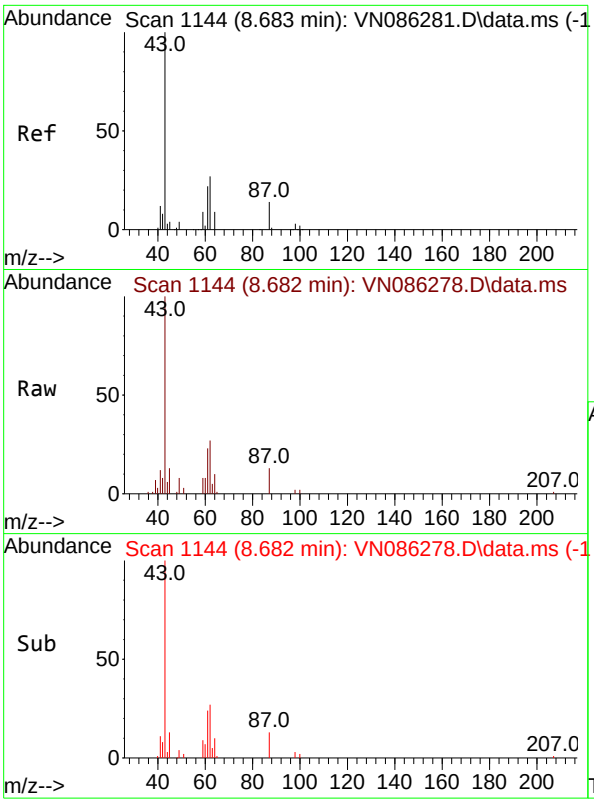


#42
1,2-Dichloroethane
Concen: 5.237 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 62 Resp: 21638

Ion	Ratio	Lower	Upper
62	100		
98	9.7	0.0	19.2





#43
Isopropyl Acetate
Concen: 5.444 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 5510

Ion	Ratio	Lower	Upper
43	100		
61	20.2	20.5	30.7#
87	10.1	10.5	15.7#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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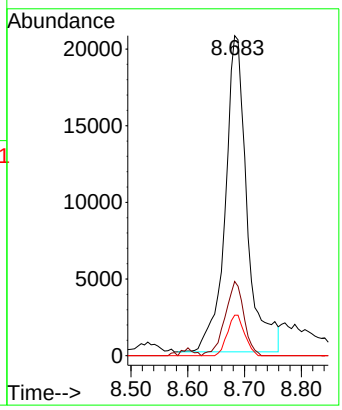
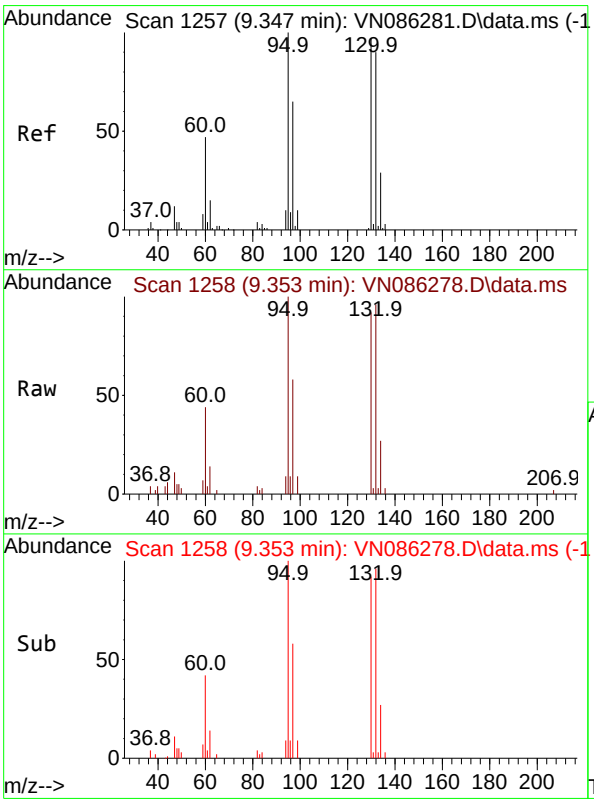
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

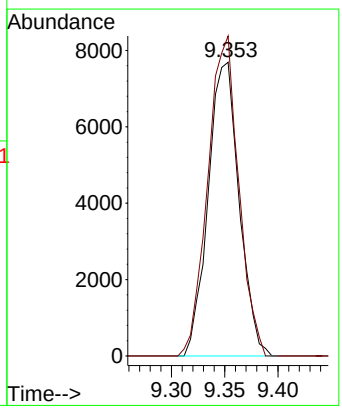


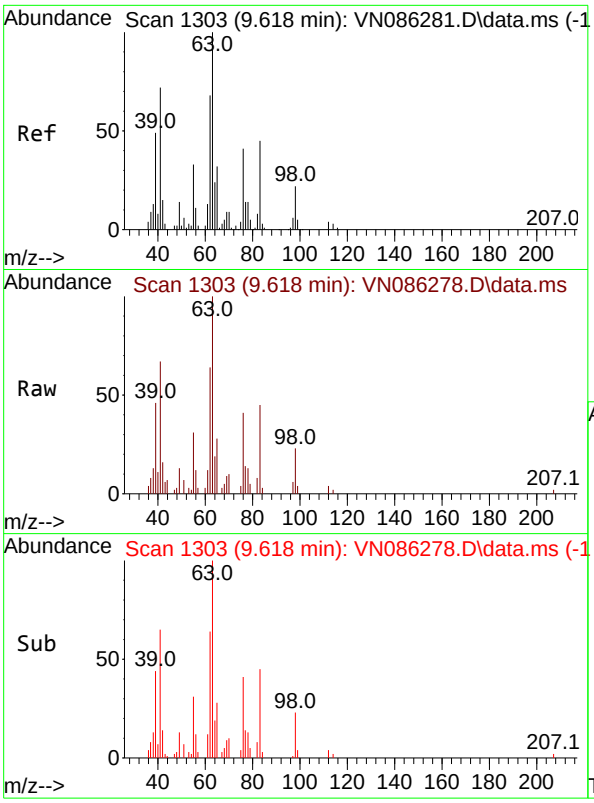


#44
Trichloroethene
Concen: 5.067 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:130 Resp: 15562

Ion	Ratio	Lower	Upper
130	100		
95	108.9	0.0	207.2





#45
1,2-Dichloropropane
Concen: 5.272 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 63 Resp: 1671

Ion	Ratio	Lower	Upper
63	100		
65	28.4	25.4	38.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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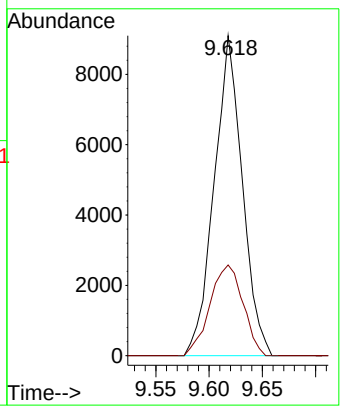
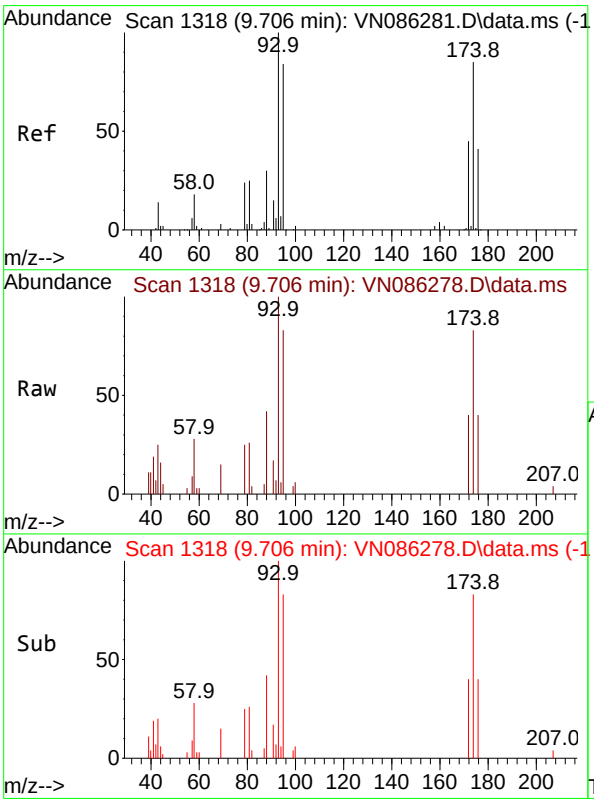
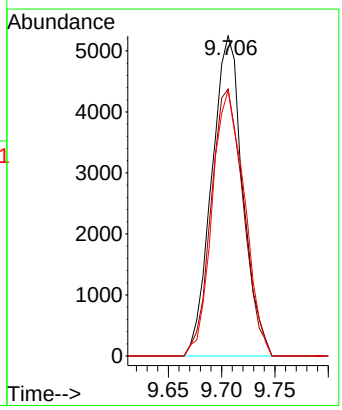


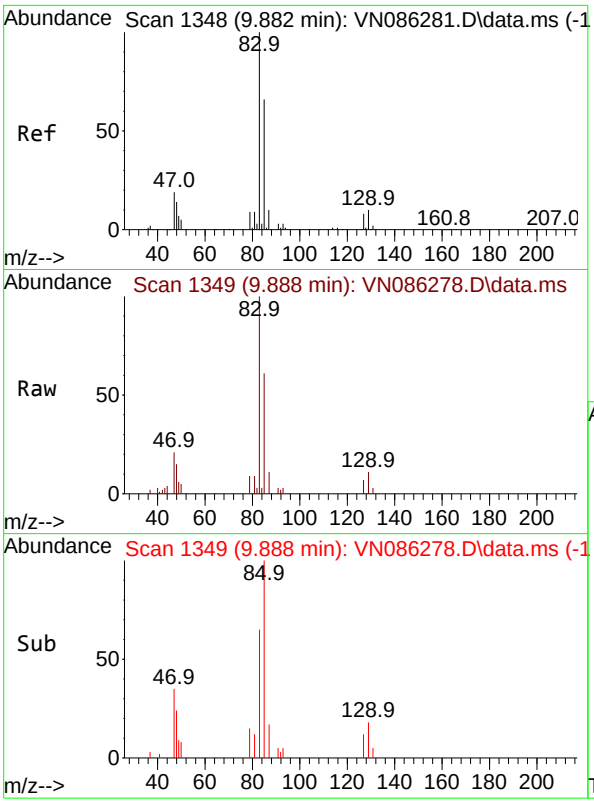


#46
Dibromomethane
Concen: 5.262 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 93 Resp: 10633

Ion	Ratio	Lower	Upper
93	100		
95	86.1	66.2	99.4
174	86.0	67.8	101.6

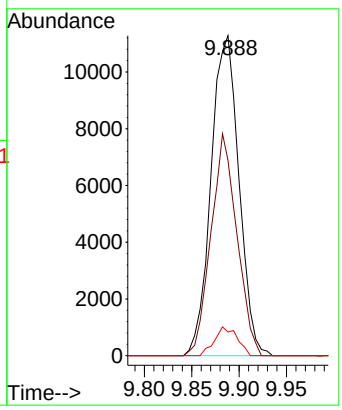




#47
Bromodichloromethane
Concen: 5.297 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 83 Resp: 2311

Ion	Ratio	Lower	Upper
83	100		
85	61.1	52.6	78.8
127	7.4	6.1	9.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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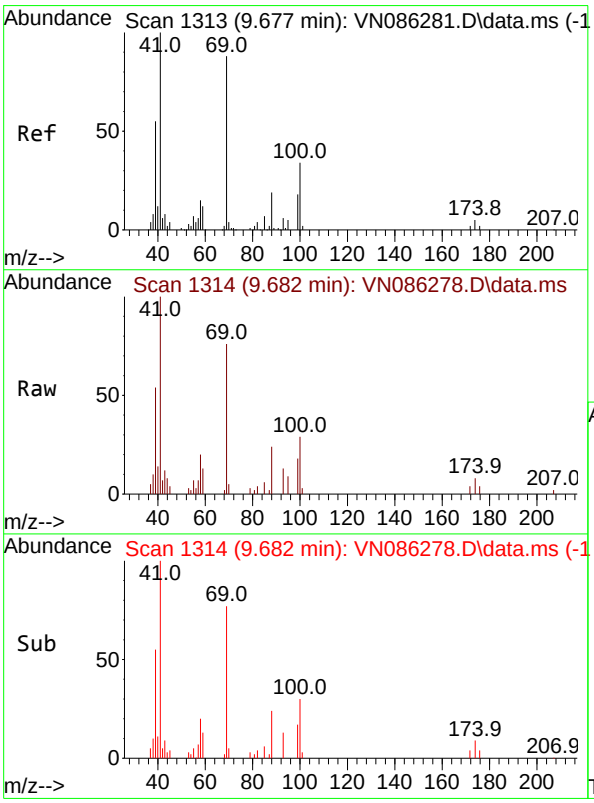
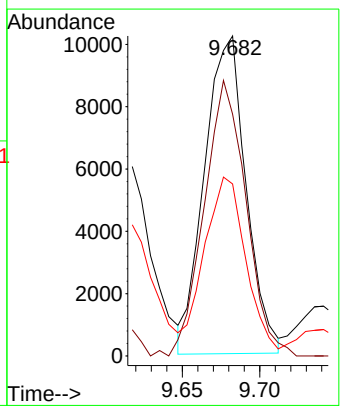
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

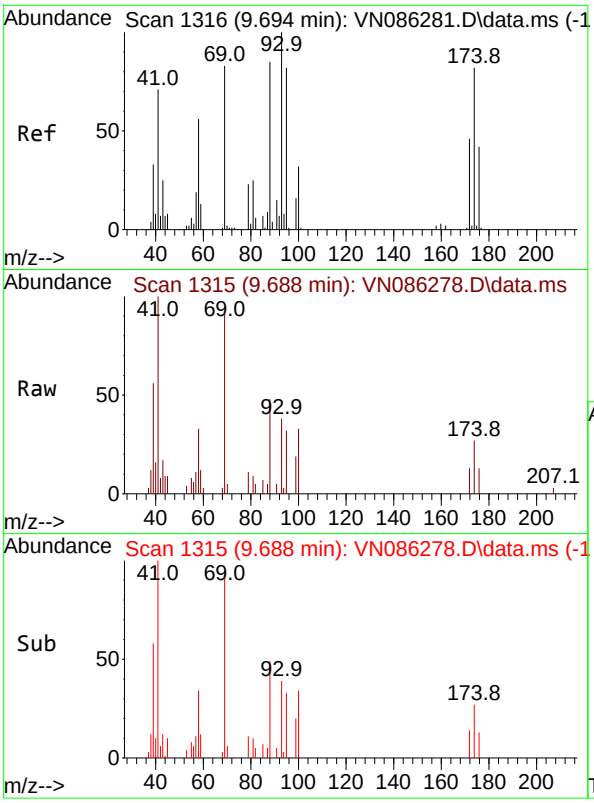


#48
Methyl methacrylate
Concen: 5.087 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 41 Resp: 19018

Ion	Ratio	Lower	Upper
41	100		
69	87.2	68.2	102.2
39	57.1	45.2	67.8

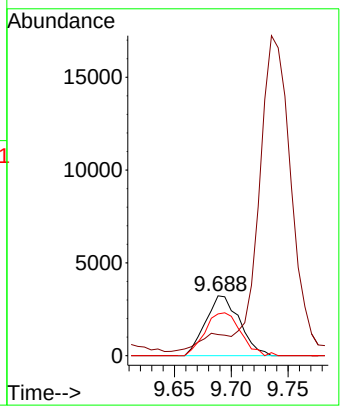




#49
1,4-Dioxane
Concen: 105.699 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 88 Resp: 672

Ion	Ratio	Lower	Upper
88	100		
43	28.2	23.8	35.8
58	74.9	57.4	86.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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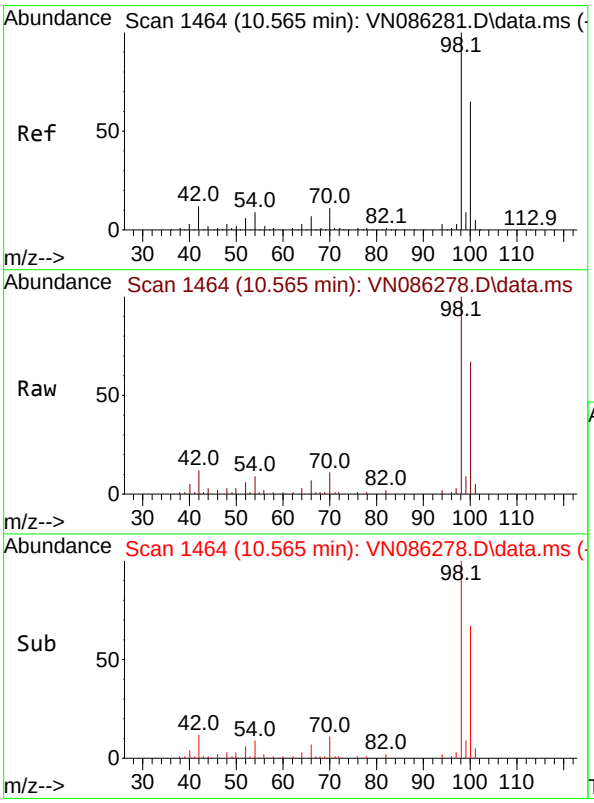
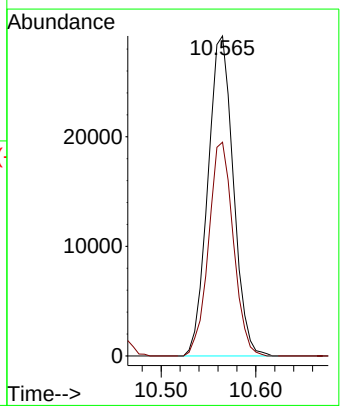
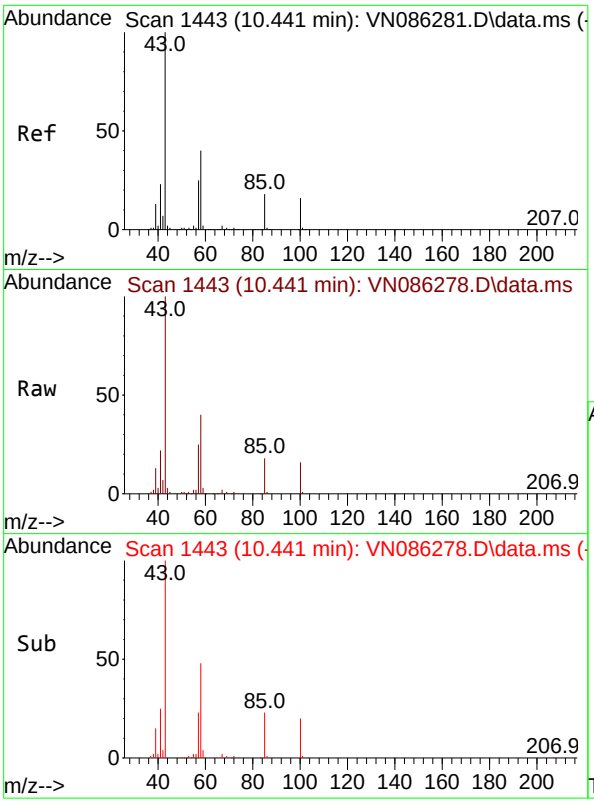


#50
Toluene-d8
Concen: 5.028 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 98 Resp: 54403

Ion	Ratio	Lower	Upper
98	100		
100	64.9	52.5	78.7





#51
4-Methyl-2-Pentanone
Concen: 26.097 ug/l
RT: 10.441 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 11377

Ion	Ratio	Lower	Upper
43	100		
58	40.4	32.2	48.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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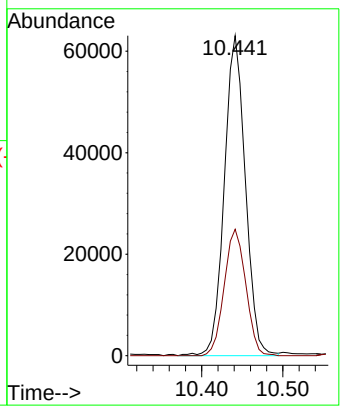
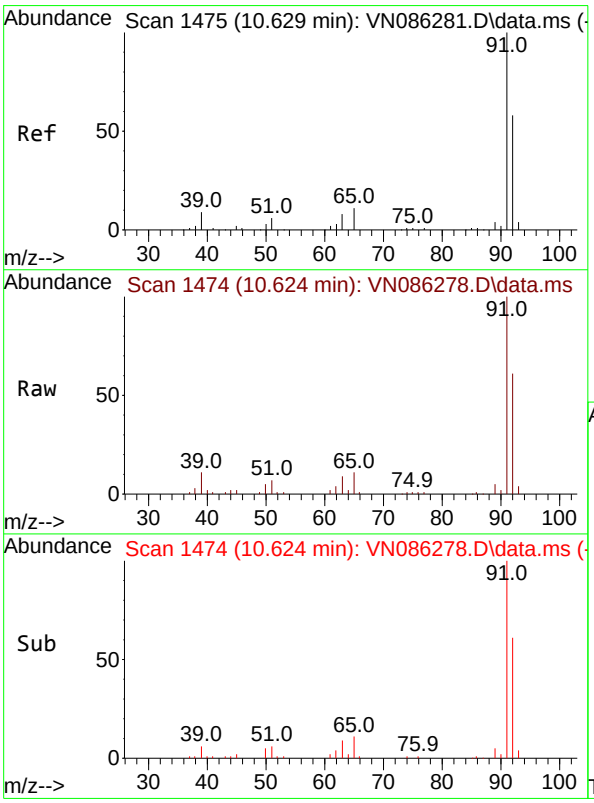
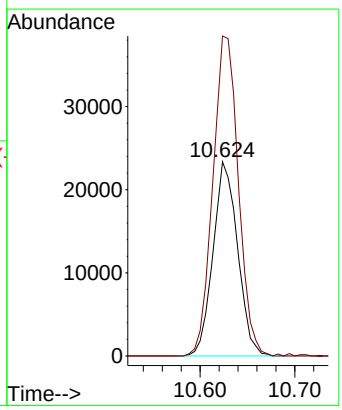


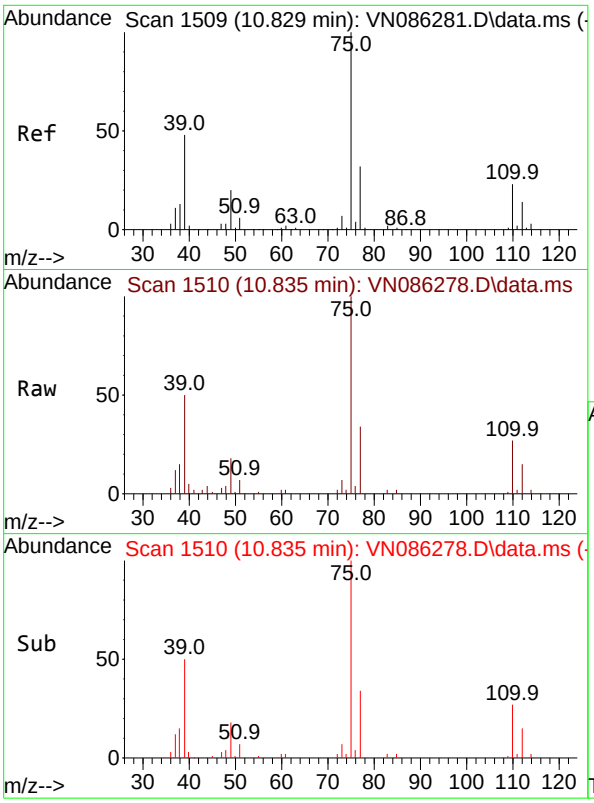


#52
Toluene
Concen: 5.199 ug/l
RT: 10.624 min Scan# 1474
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 92 Resp: 42032

Ion	Ratio	Lower	Upper
92	100		
91	171.2	137.3	205.9





#53
t-1,3-Dichloropropene
Concen: 5.136 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 75 Resp: 2502

Ion	Ratio	Lower	Upper
75	100		
77	32.1	25.4	38.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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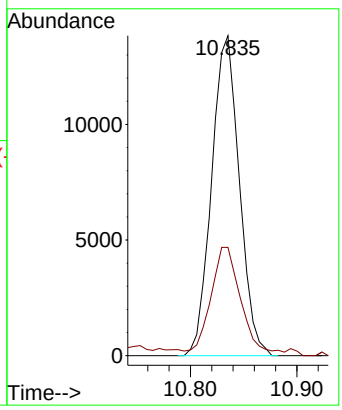
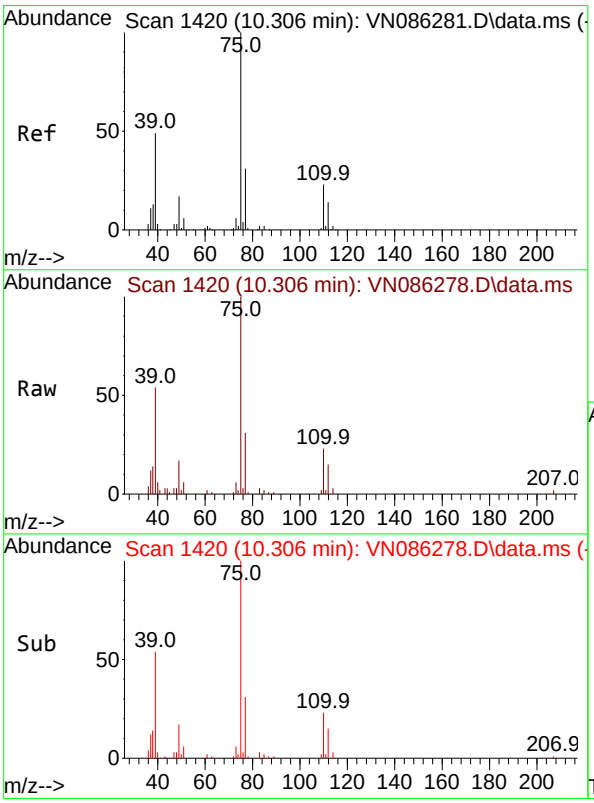
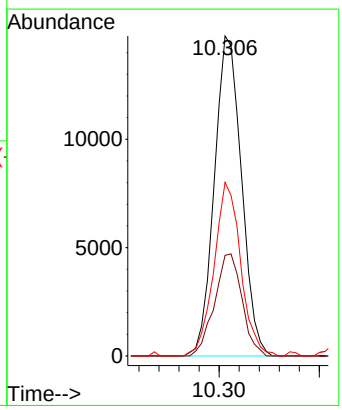


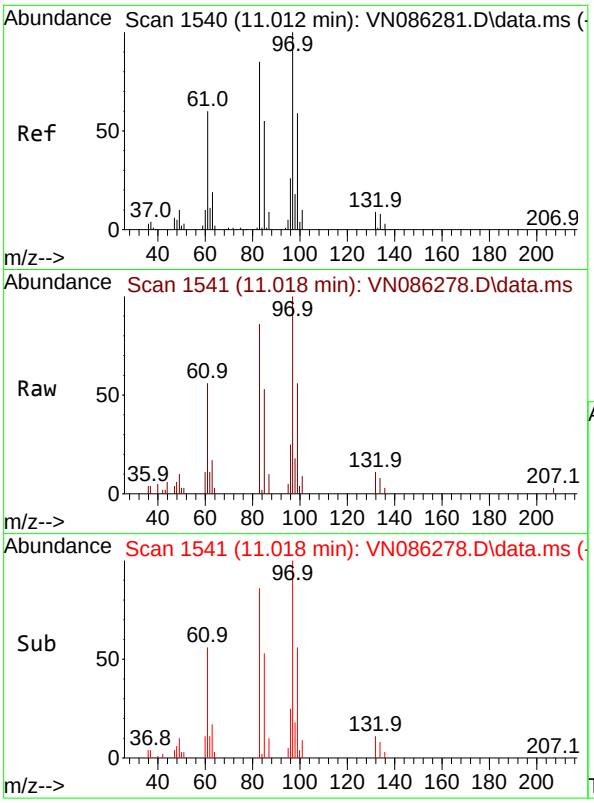


#54
cis-1,3-Dichloropropene
Concen: 5.183 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 75 Resp: 27737

Ion	Ratio	Lower	Upper
75	100		
77	31.4	25.2	37.8
39	54.3	39.3	58.9

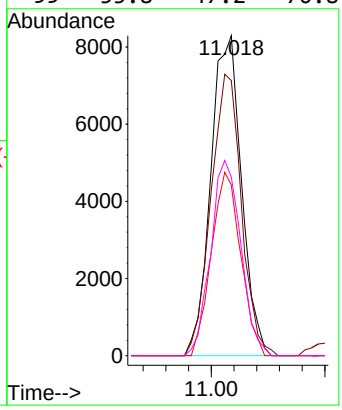




#55
1,1,2-Trichloroethane
Concen: 5.349 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 97 Resp: 1555

Ion	Ratio	Lower	Upper
97	100		
83	86.0	68.4	102.6
85	53.3	43.9	65.9
99	55.8	47.2	70.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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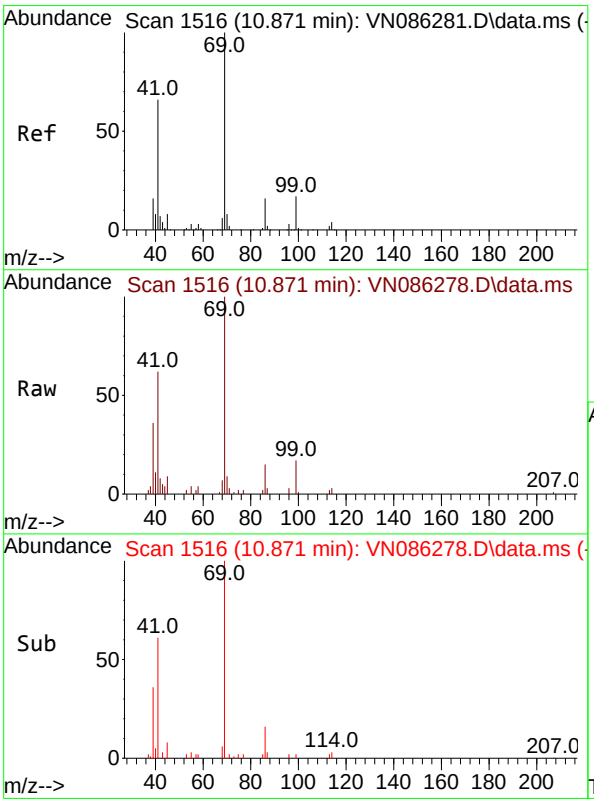
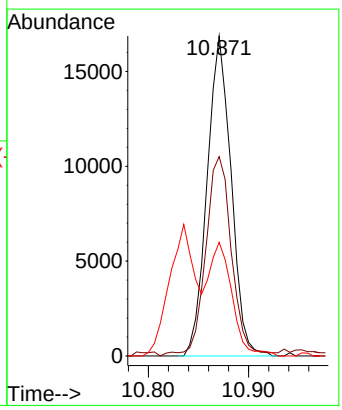
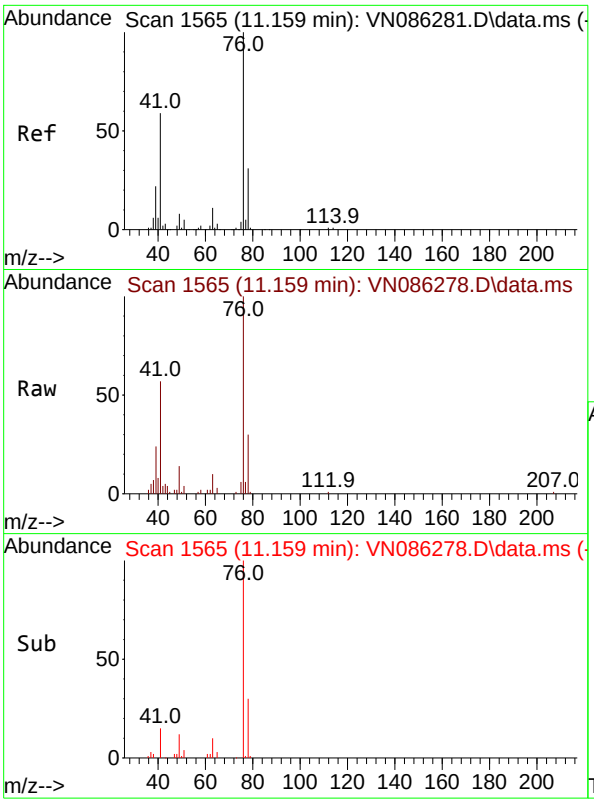


#56
Ethyl methacrylate
Concen: 5.256 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 69 Resp: 28102

Ion	Ratio	Lower	Upper
69	100		
41	67.2	51.7	77.5
39	34.8	26.3	39.5

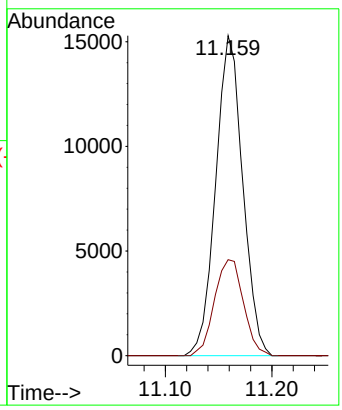




#57
1,3-Dichloropropane
Concen: 5.213 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 76 Resp: 2690

Ion	Ratio	Lower	Upper
76	100		
78	32.2	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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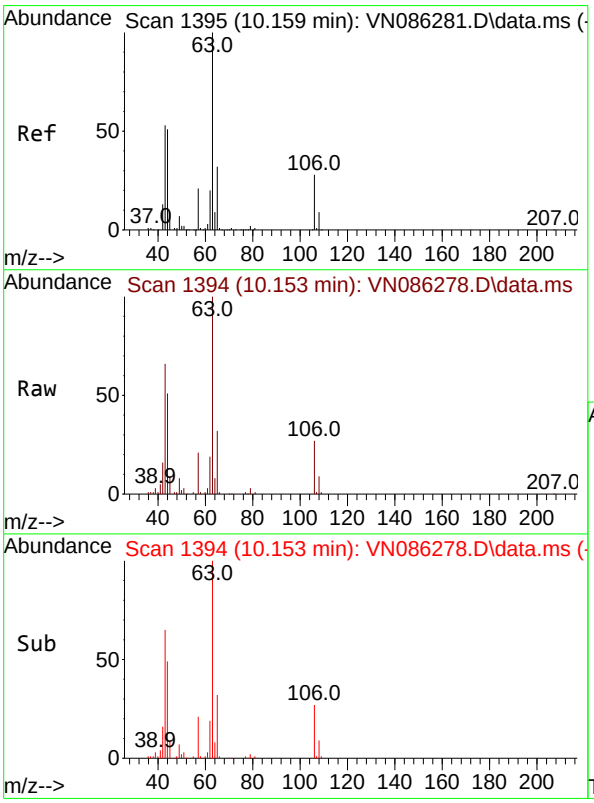
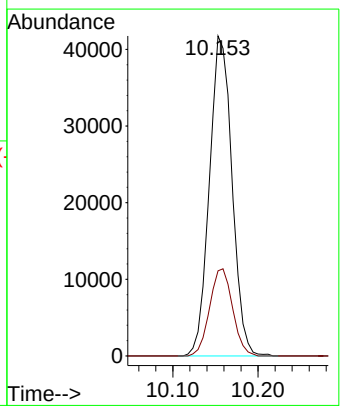
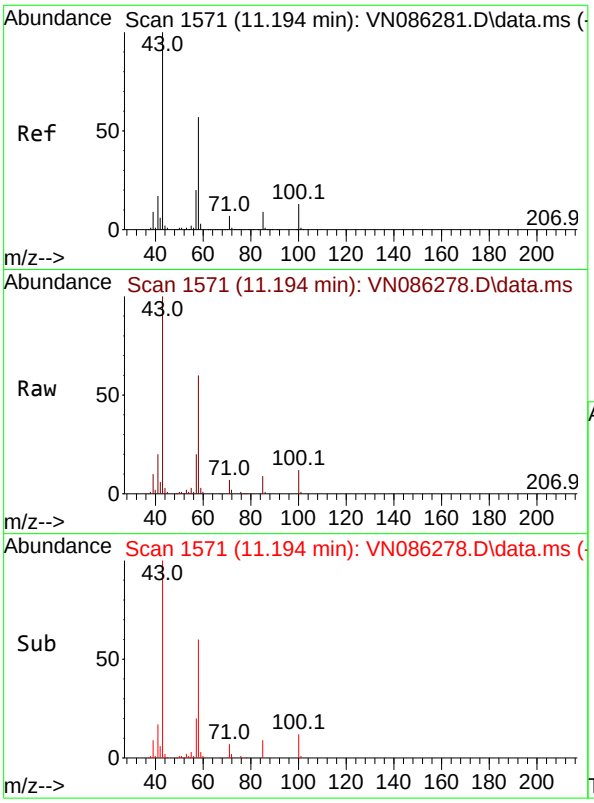


#58
2-Chloroethyl Vinyl ether
Concen: 30.387 ug/l
RT: 10.153 min Scan# 1394
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 63 Resp: 77113

Ion	Ratio	Lower	Upper
63	100		
106	27.6	22.2	33.2





#59
2-Hexanone
Concen: 26.113 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 8444

Ion	Ratio	Lower	Upper
43	100		
58	56.3	28.3	85.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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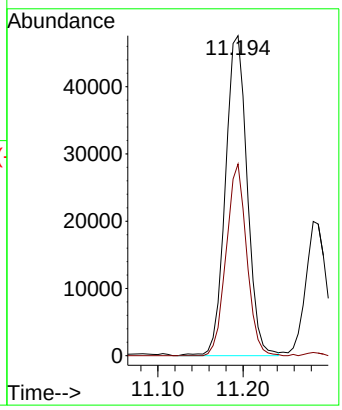
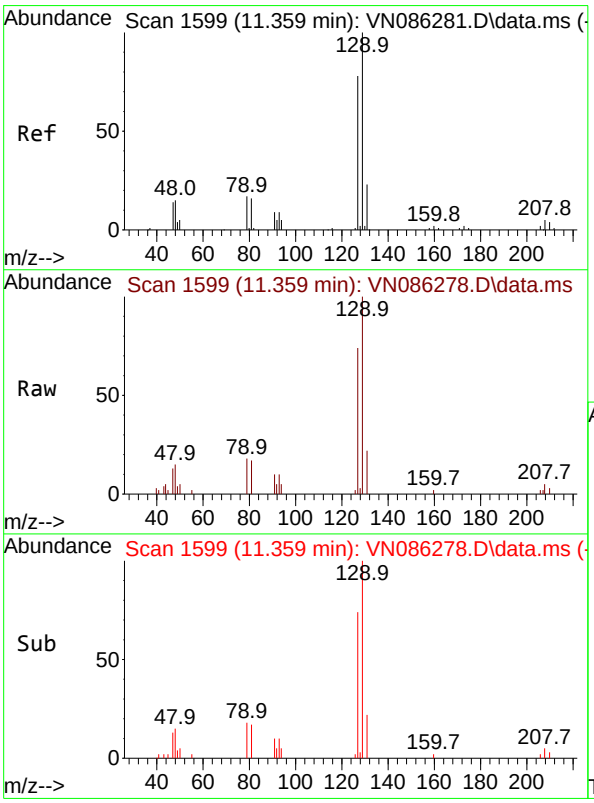
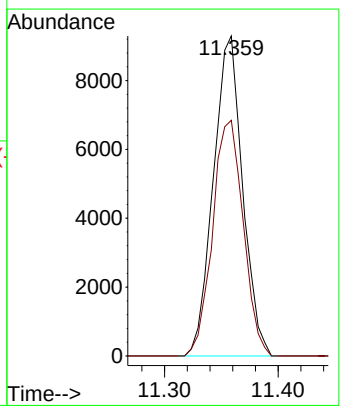


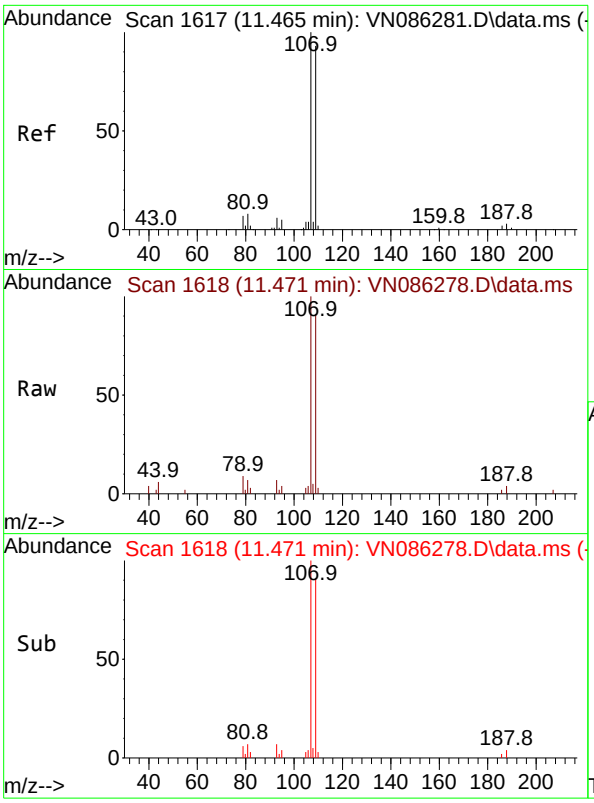


#60
Dibromochloromethane
Concen: 5.201 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:129 Resp: 16611

Ion	Ratio	Lower	Upper
129	100		
127	77.1	38.7	116.1

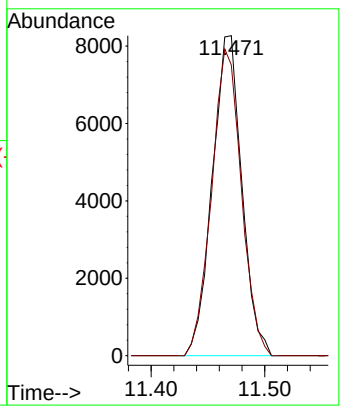




#61
1,2-Dibromoethane
Concen: 5.087 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:107 Resp: 1492

Ion	Ratio	Lower	Upper
107	100		
109	96.8	75.4	113.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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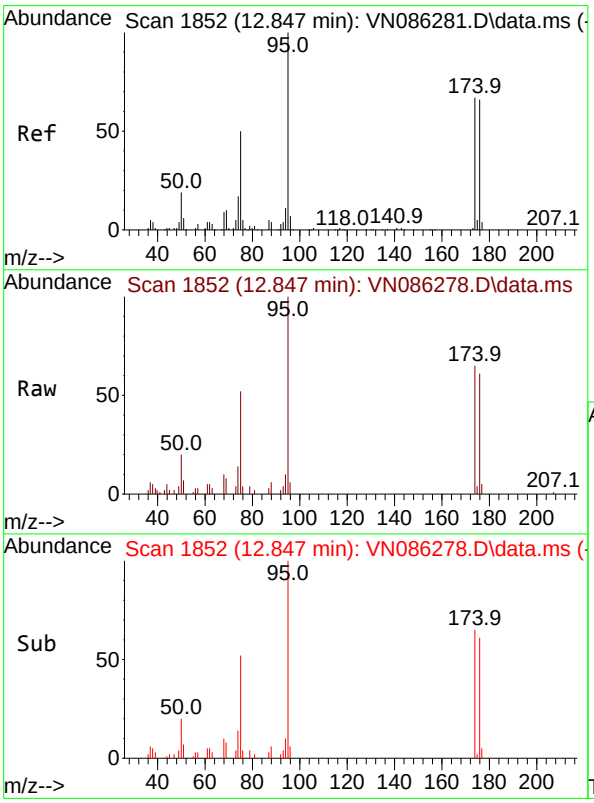
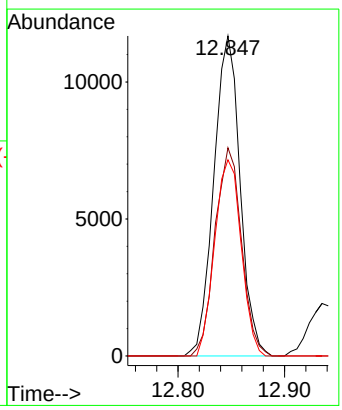
Supervised By :Semsettin Yesilyurt 04/16/2025

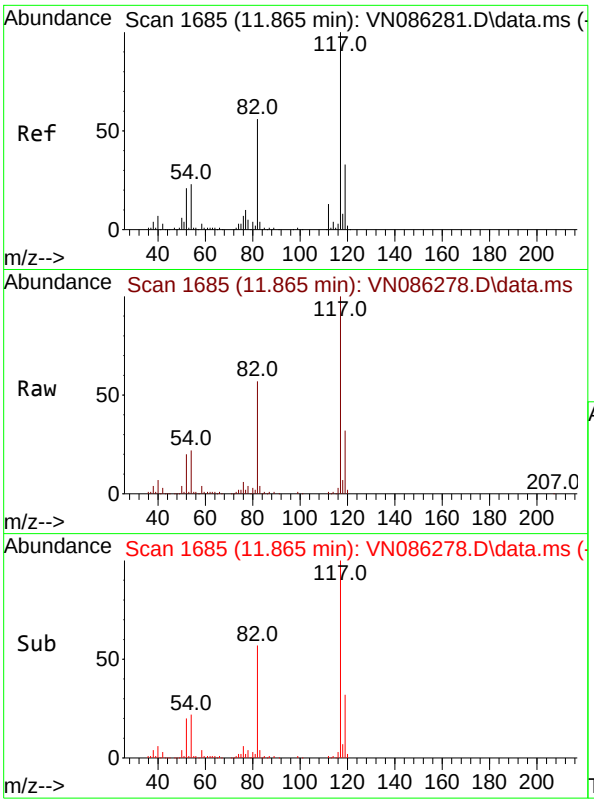


#62
4-Bromofluorobenzene
Concen: 5.076 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 95 Resp: 20034

Ion	Ratio	Lower	Upper
95	100		
174	65.4	0.0	133.4
176	61.7	0.0	129.2

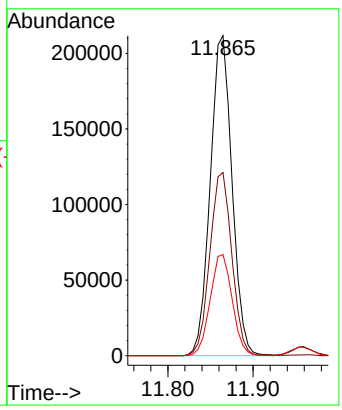




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:117 Resp: 37585

Ion	Ratio	Lower	Upper
117	100		
82	57.2	44.7	67.1
119	31.6	26.4	39.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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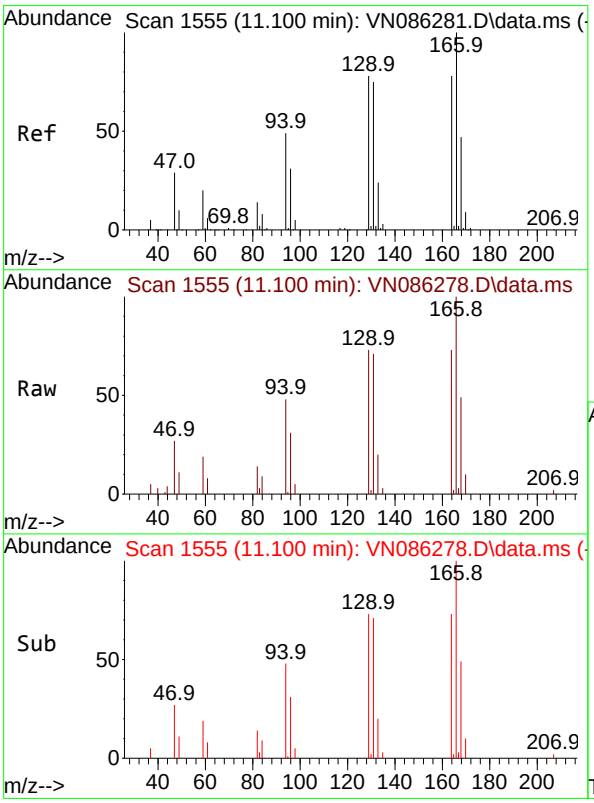
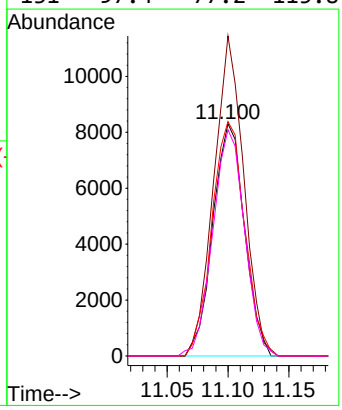
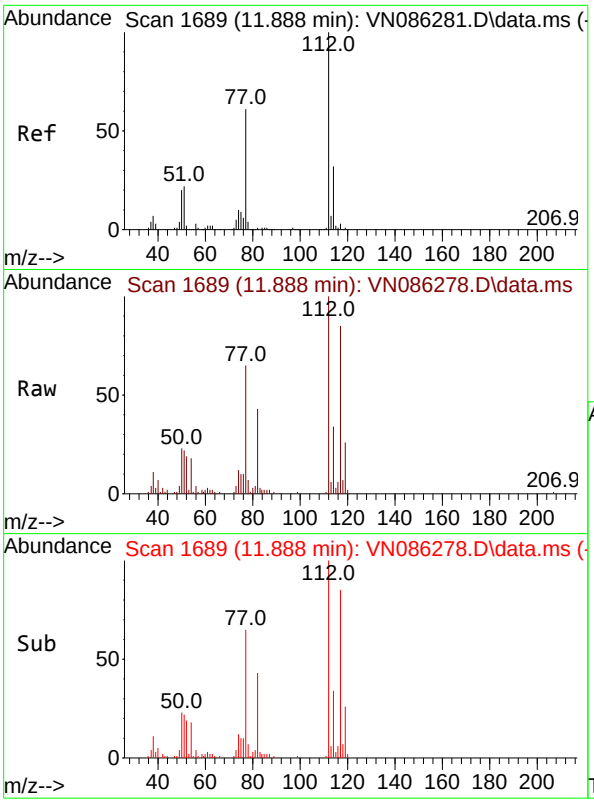


#64
Tetrachloroethene
Concen: 5.188 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:164 Resp: 14998

Ion	Ratio	Lower	Upper
164	100		
166	137.7	103.0	154.4
129	100.9	80.1	120.1
131	97.4	77.2	115.8

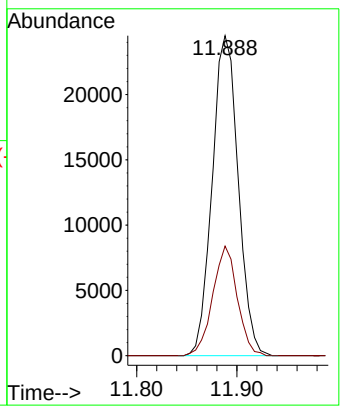




#65
Chlorobenzene
Concen: 5.265 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:112 Resp: 4416

Ion	Ratio	Lower	Upper
112	100		
114	34.2	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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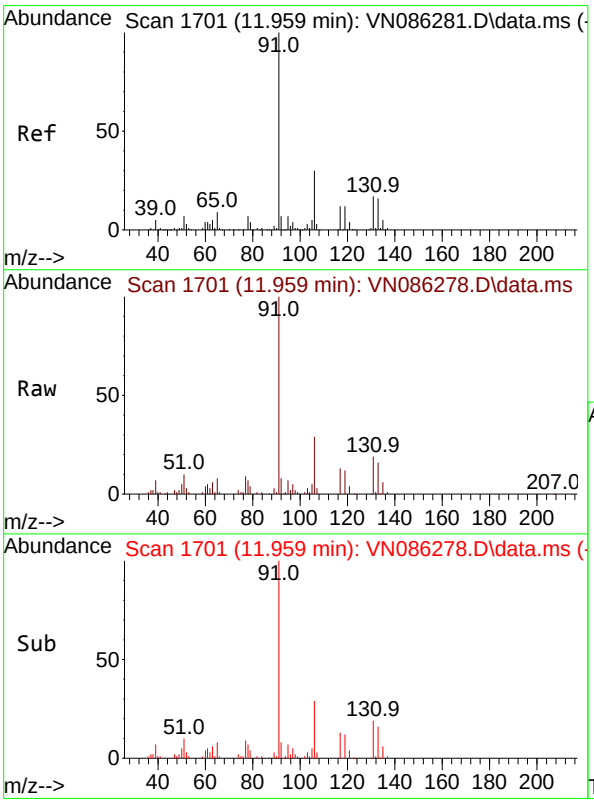
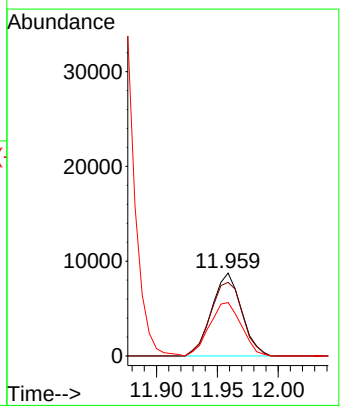
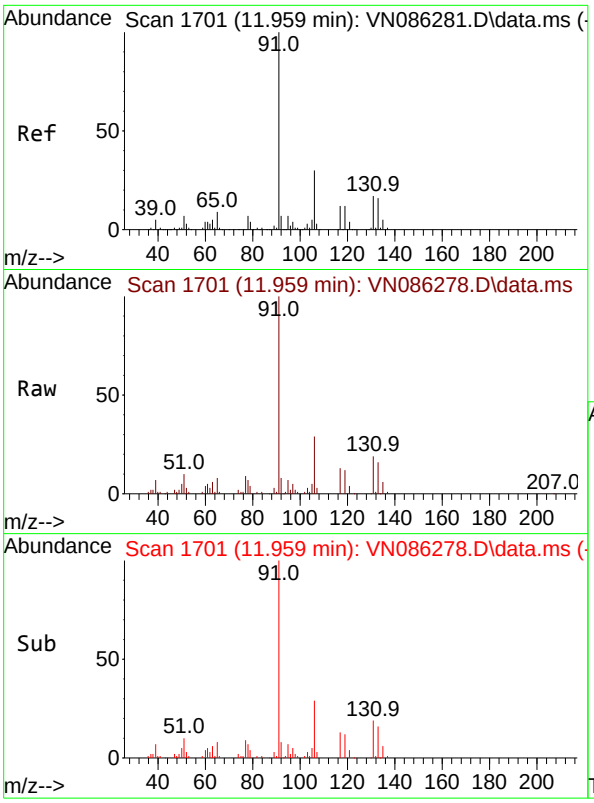


#66
1,1,1,2-Tetrachloroethane
Concen: 5.383 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:131 Resp: 14896

Ion	Ratio	Lower	Upper
131	100		
133	96.2	47.1	141.3
119	68.8	33.8	101.4

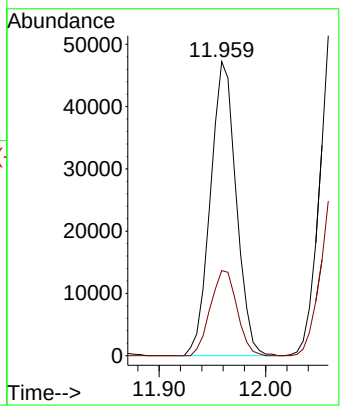




#67
Ethyl Benzene
Concen: 5.244 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 91 Resp: 7937

Ion	Ratio	Lower	Upper
91	100		
106	29.0	24.3	36.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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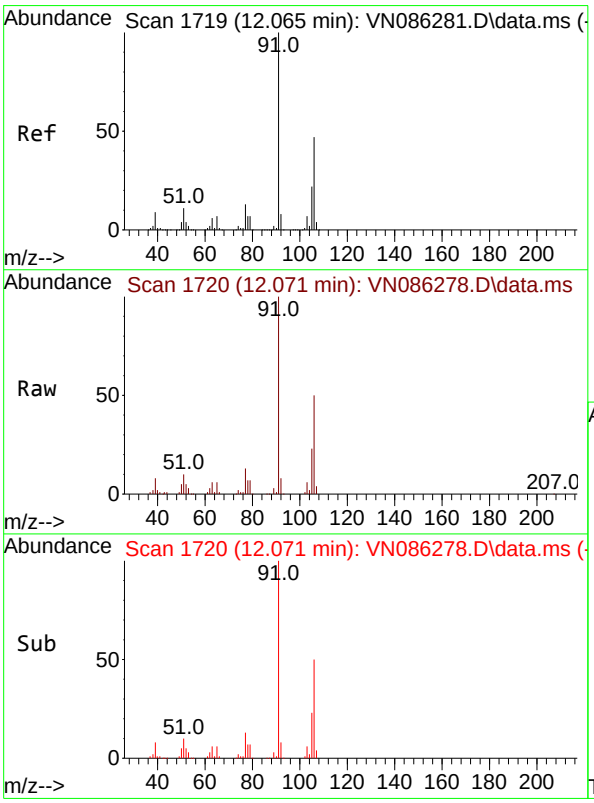
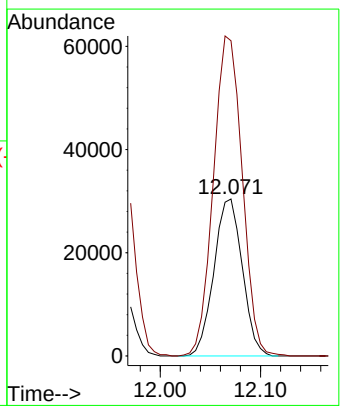
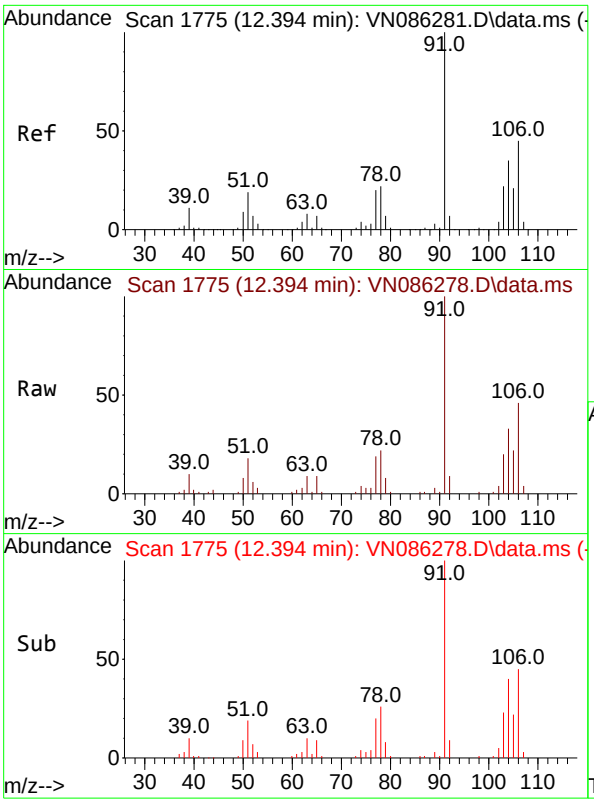


#68
m/p-Xylenes
Concen: 10.537 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:106 Resp: 59758

Ion	Ratio	Lower	Upper
106	100		
91	207.0	166.5	249.7

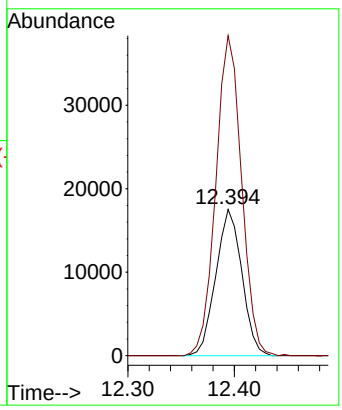




#69
o-Xylene
Concen: 5.305 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:106 Resp: 2975

Ion	Ratio	Lower	Upper
106	100		
91	216.1	109.7	329.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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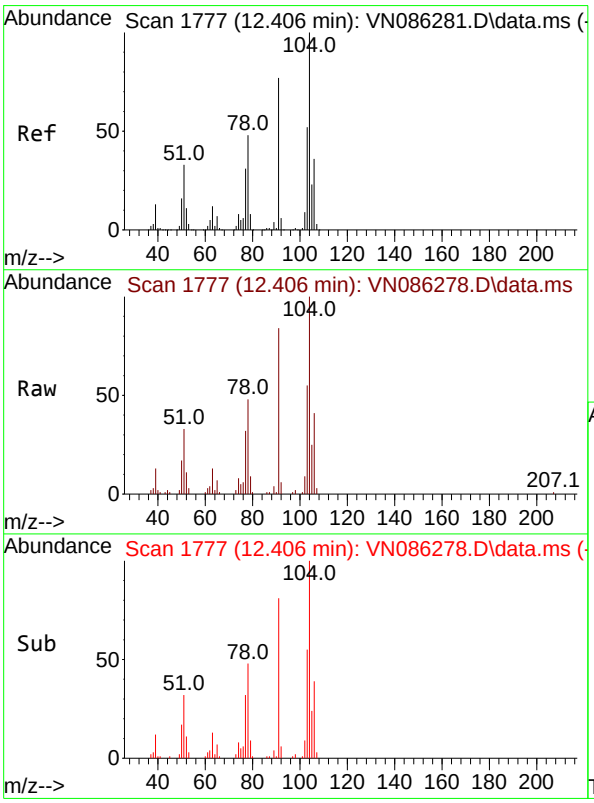
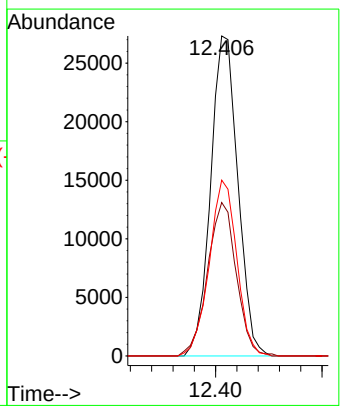
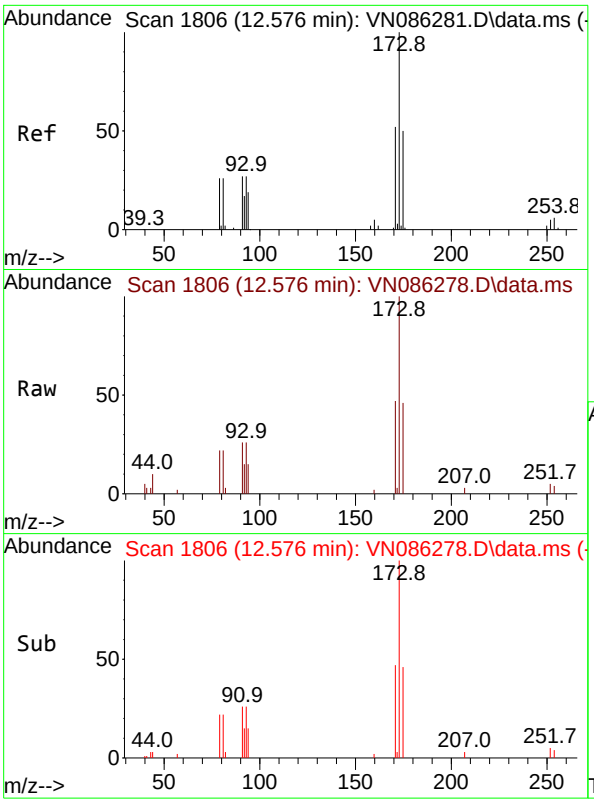


#70
Styrene
Concen: 5.180 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:104 Resp: 48407

Ion	Ratio	Lower	Upper
104	100		
78	50.6	40.6	61.0
103	55.8	43.6	65.4





#71
Bromoform
Concen: 5.311 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion:173 Resp: 1106

Ion	Ratio	Lower	Upper
173	100		
175	47.3	24.6	73.6
254	0.0	0.0	0.0

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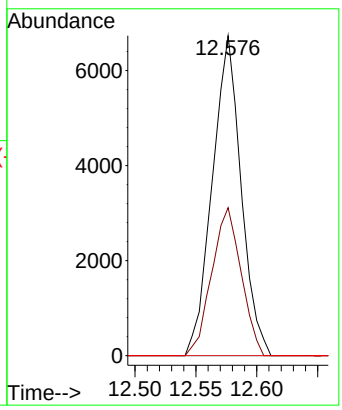
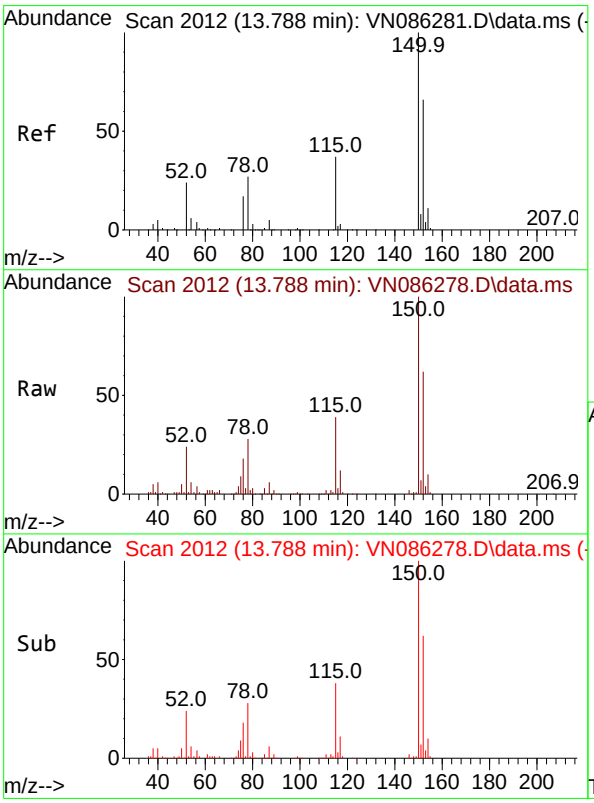
Supervised By :Semsettin Yesilyurt 04/16/2025

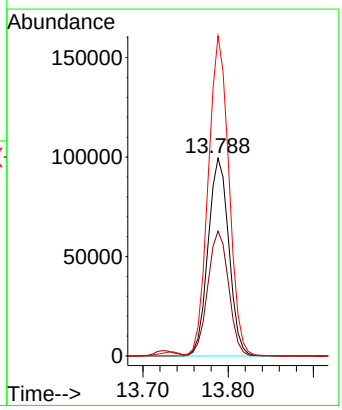


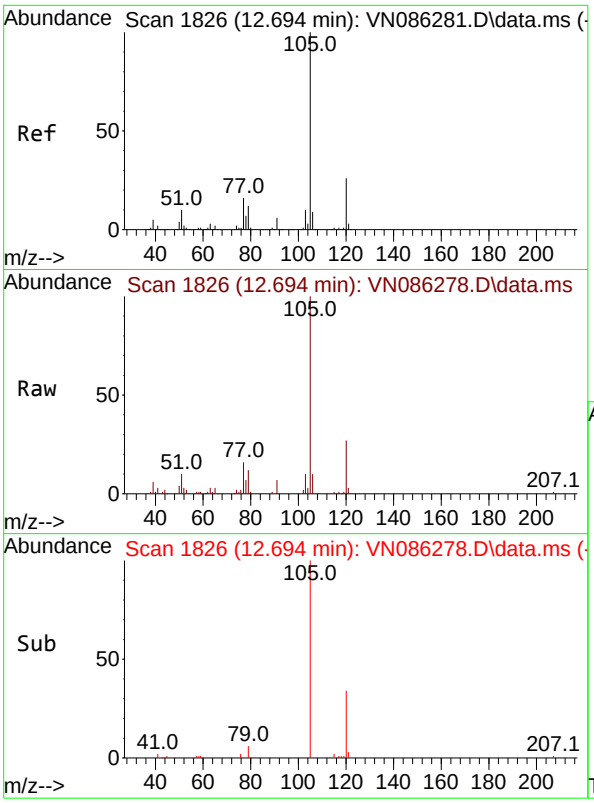


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:152 Resp: 167796

Ion	Ratio	Lower	Upper
152	100		
115	63.4	31.9	95.9
150	161.6	0.0	352.0

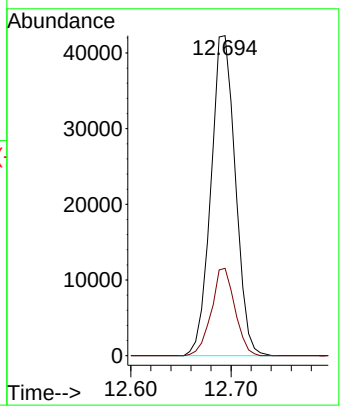




#73
Isopropylbenzene
Concen: 5.221 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:105 Resp: 7165

Ion	Ratio	Lower	Upper
105	100		
120	26.2	13.1	39.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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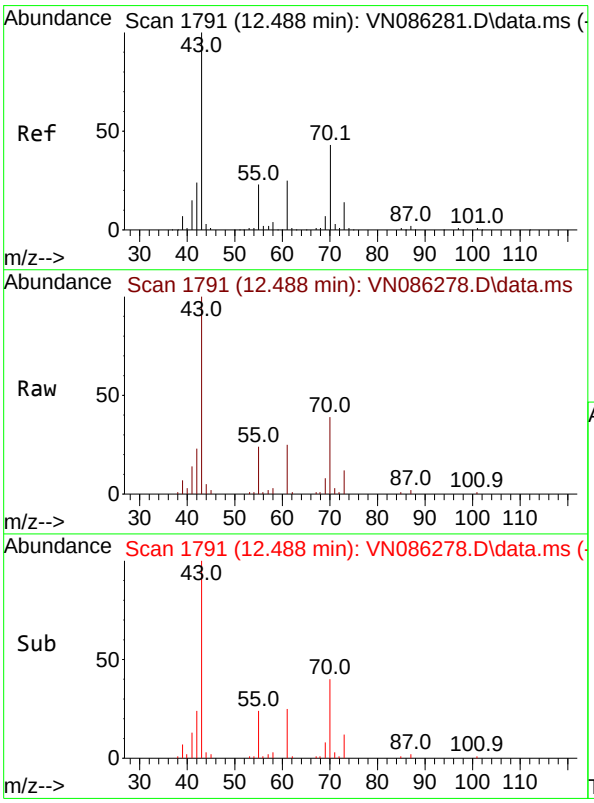
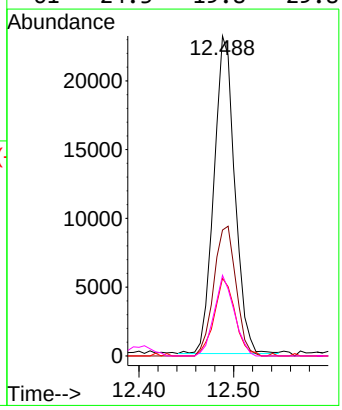
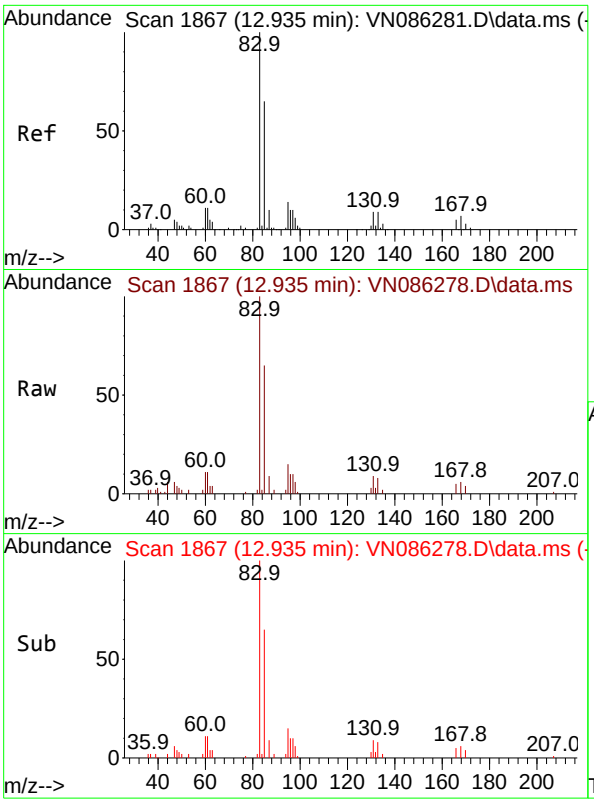


#74
N-amyl acetate
Concen: 5.182 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 43 Resp: 35409

Ion	Ratio	Lower	Upper
43	100		
70	43.4	35.0	52.4
55	24.4	19.0	28.4
61	24.3	19.8	29.8





#75
1,1,2,2-Tetrachloroethane
Concen: 5.503 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 83 Resp: 2172

Ion	Ratio	Lower	Upper
83	100		
131	8.3	4.7	14.1
85	64.4	32.7	98.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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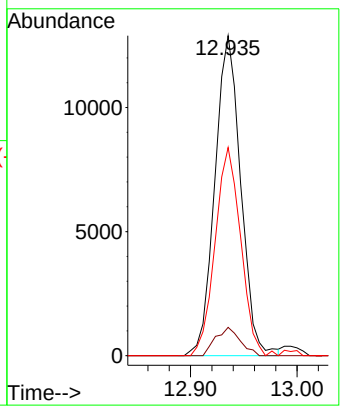
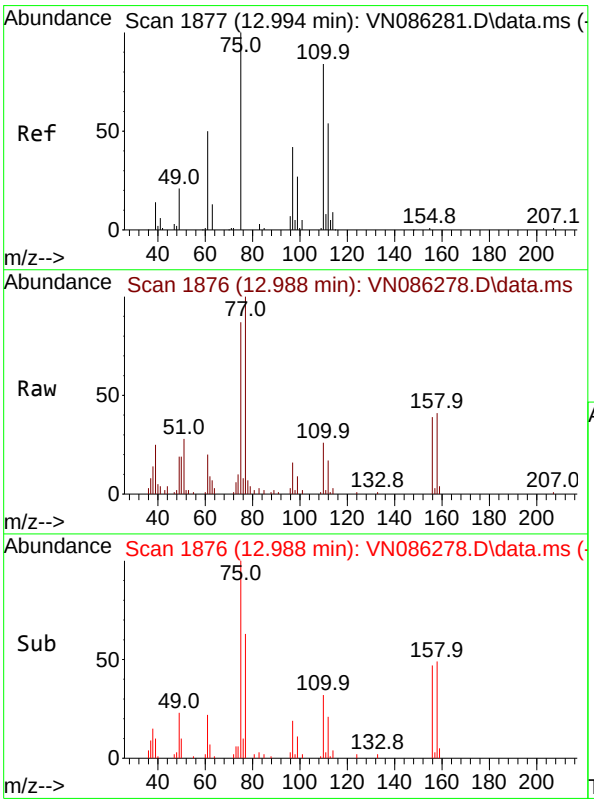
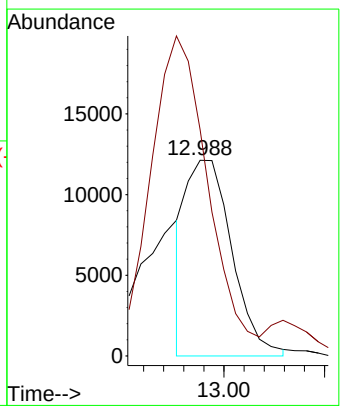


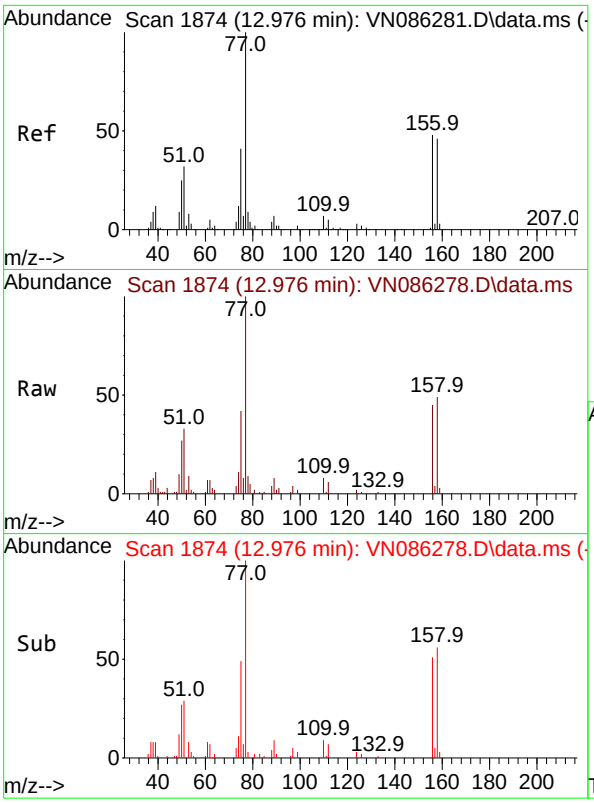


#76
1,2,3-Trichloropropane
Concen: 4.870 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 75 Resp: 19196

Ion	Ratio	Lower	Upper
75	100		
77	208.2	98.8	296.4





#77
Bromobenzene
Concen: 5.156 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:156 Resp: 1568

Ion	Ratio	Lower	Upper
156	100		
77	254.9	121.1	363.1
158	101.7	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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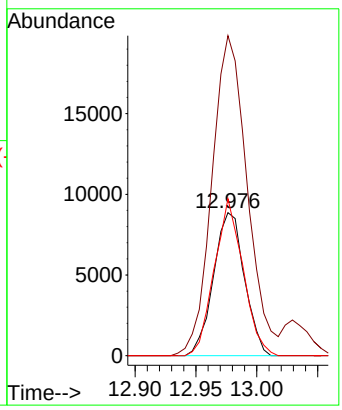
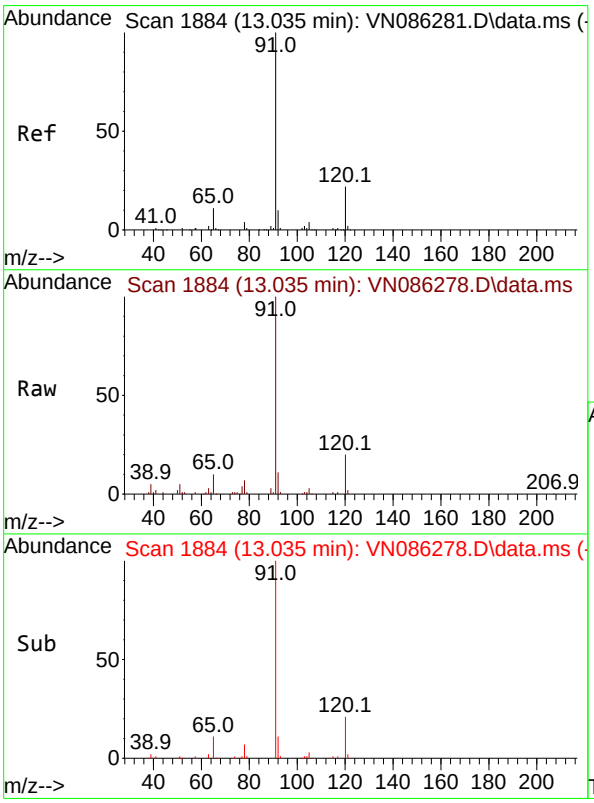
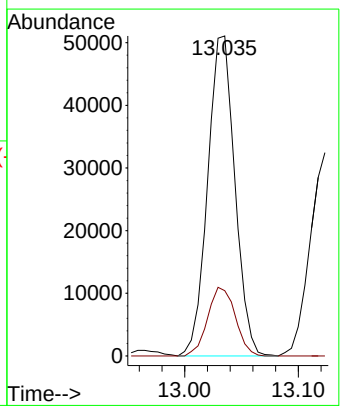


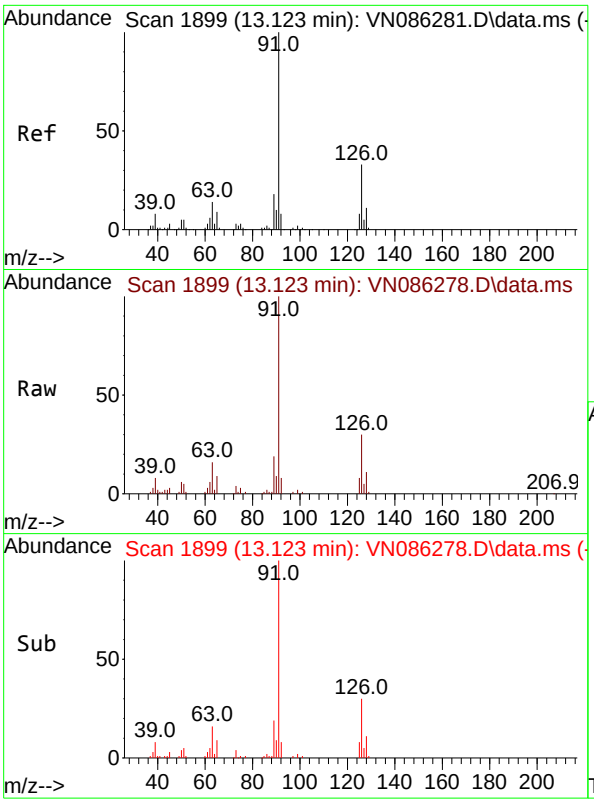


#78
n-propylbenzene
Concen: 5.261 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 91 Resp: 85101

Ion	Ratio	Lower	Upper
91	100		
120	21.8	11.1	33.3

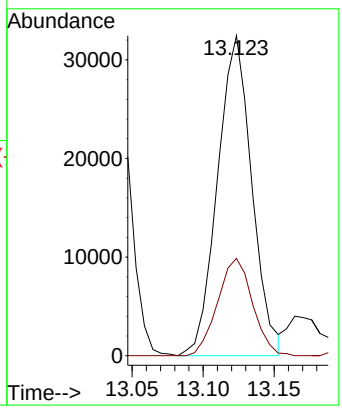




#79
2-Chlorotoluene
Concen: 5.384 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 91 Resp: 5449

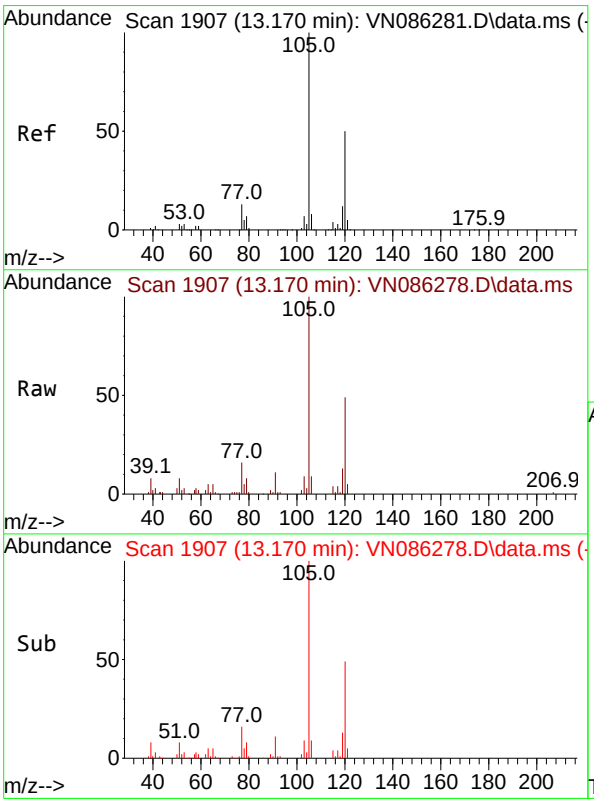
Ion	Ratio	Lower	Upper
91	100		
126	30.8	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

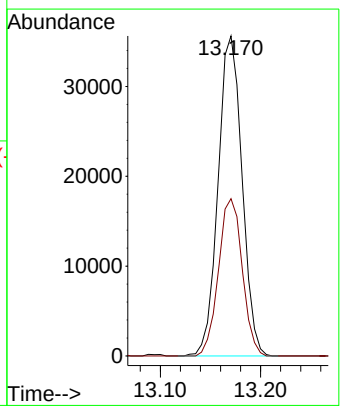
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

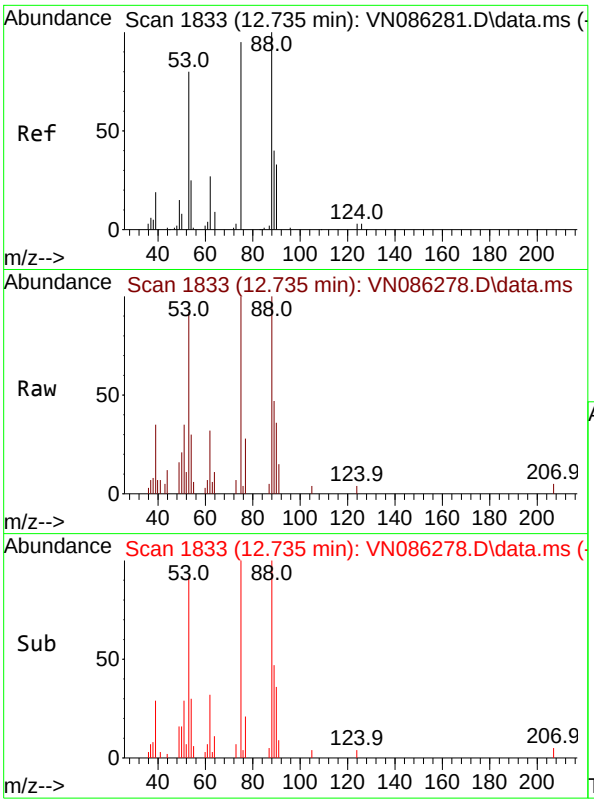


#80
1,3,5-Trimethylbenzene
Concen: 5.255 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:105 Resp: 59035

Ion	Ratio	Lower	Upper
105	100		
120	48.7	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 5.357 ug/l m
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion: 75 Resp: 883

Ion	Ratio	Lower	Upper
75	100		
53	92.8	79.2	118.8
89	44.1	35.7	53.5

Manual Integrations
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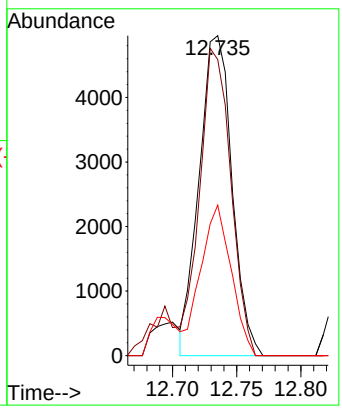
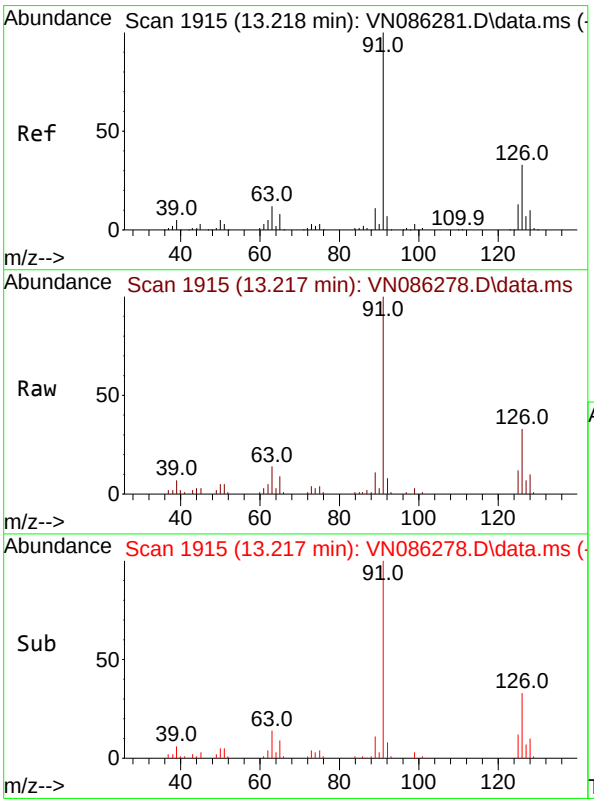
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

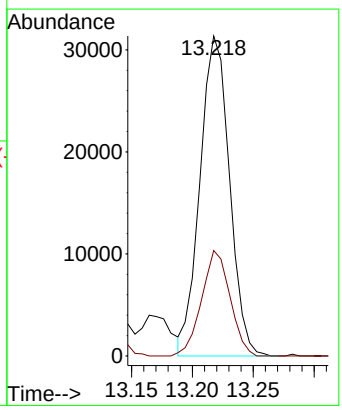


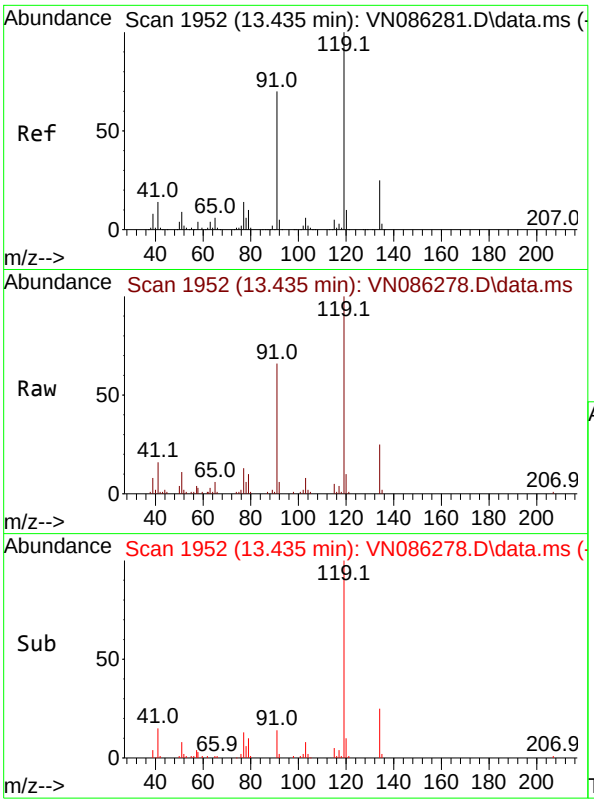


#82
4-Chlorotoluene
Concen: 5.260 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 91 Resp: 52887

Ion	Ratio	Lower	Upper
91	100		
126	31.7	16.2	48.6

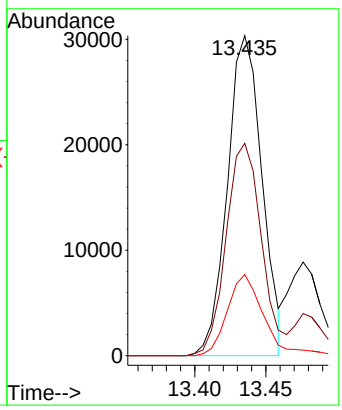




#83
tert-Butylbenzene
Concen: 5.270 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:119 Resp: 5130

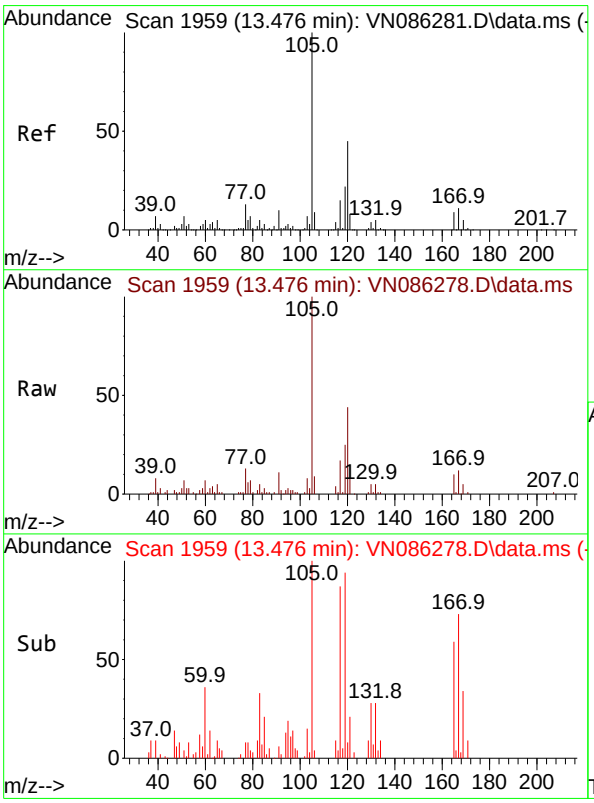
Ion	Ratio	Lower	Upper
119	100		
91	68.4	34.4	103.3
134	26.7	13.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

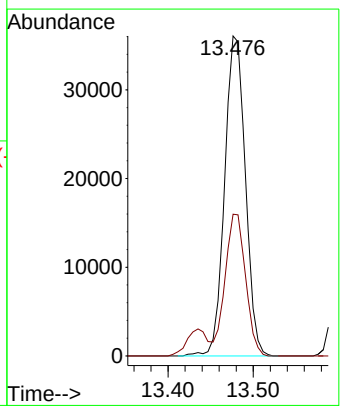
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

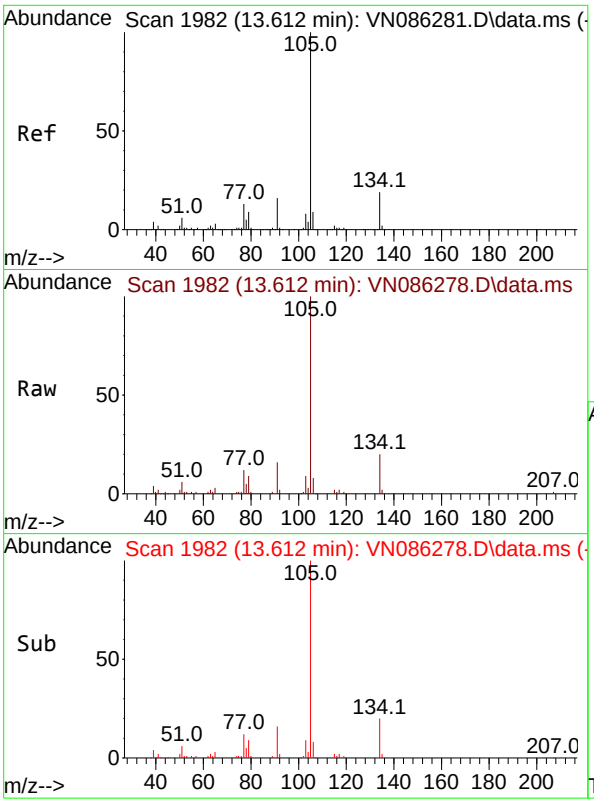


#84
1,2,4-Trimethylbenzene
Concen: 5.347 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:105 Resp: 61145

Ion	Ratio	Lower	Upper
105	100		
120	43.4	22.4	67.3

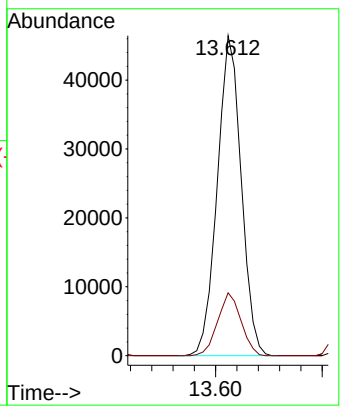




#85
sec-Butylbenzene
Concen: 5.355 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:105 Resp: 7230

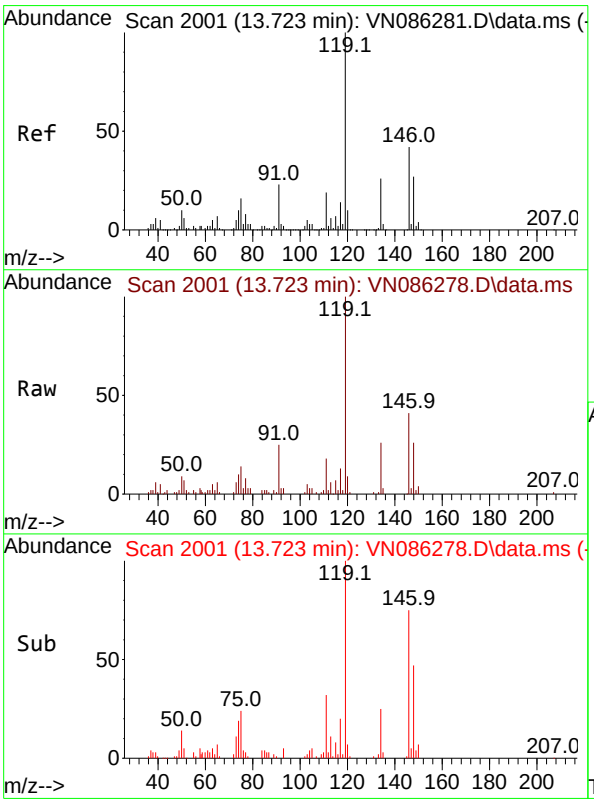
Ion	Ratio	Lower	Upper
105	100		
134	19.2	9.7	29.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

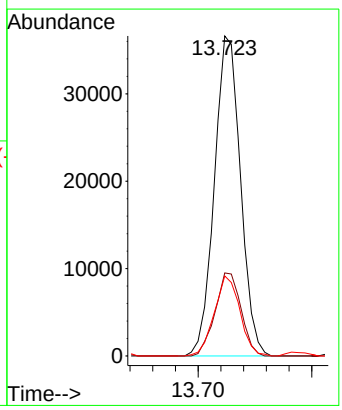
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

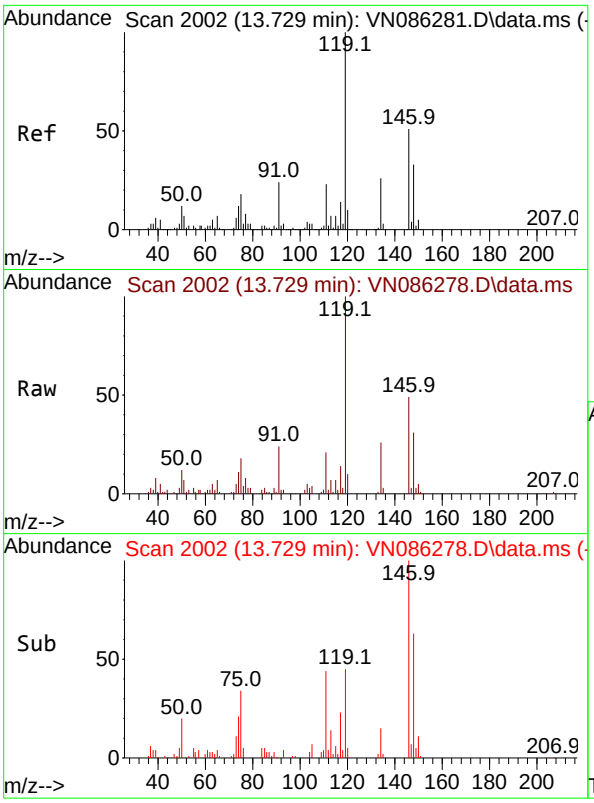


#86
p-Isopropyltoluene
Concen: 5.258 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:119 Resp: 58514

Ion	Ratio	Lower	Upper
119	100		
134	25.7	13.1	39.1
91	24.4	11.9	35.9

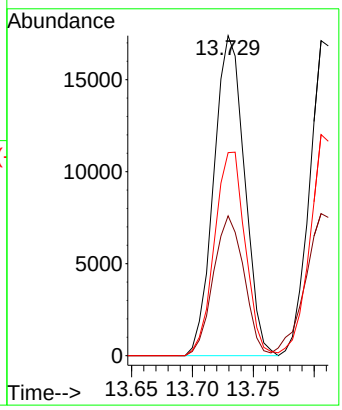




#87
1,3-Dichlorobenzene
Concen: 5.347 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:146 Resp: 3057

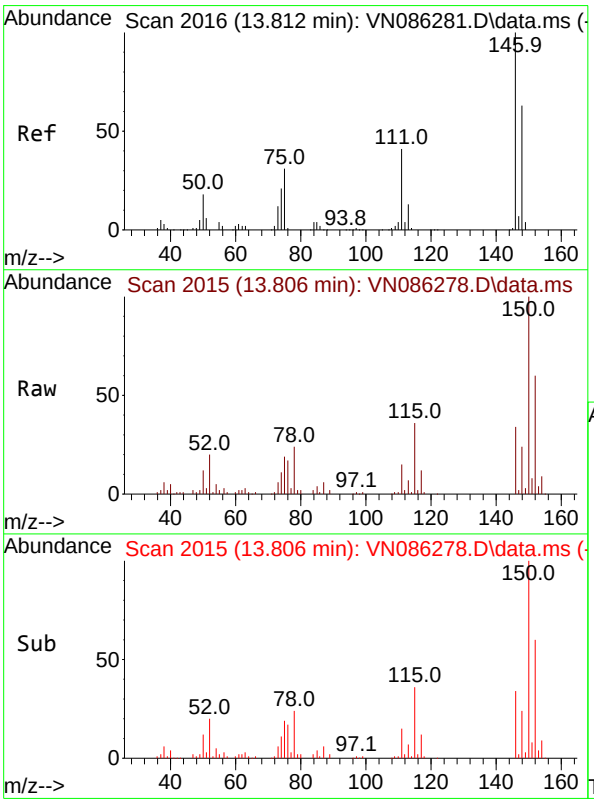
Ion	Ratio	Lower	Upper
146	100		
111	43.7	21.9	65.7
148	63.7	31.9	95.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

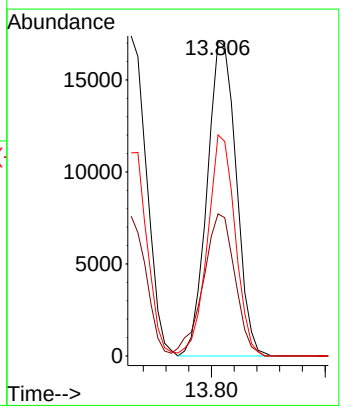
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

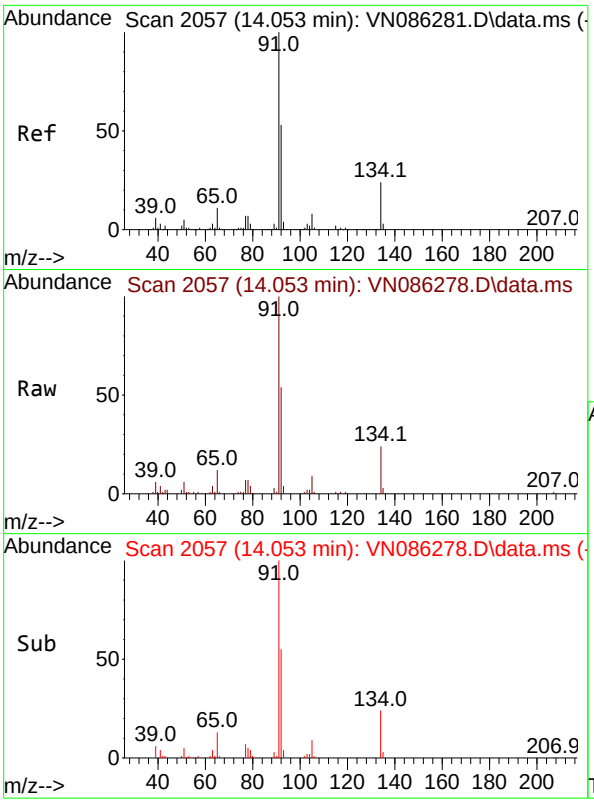


#88
1,4-Dichlorobenzene
Concen: 5.287 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:146 Resp: 30447

Ion	Ratio	Lower	Upper
146	100		
111	49.3	21.3	63.9
148	66.7	31.9	95.9





#89
n-Butylbenzene
Concen: 5.126 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

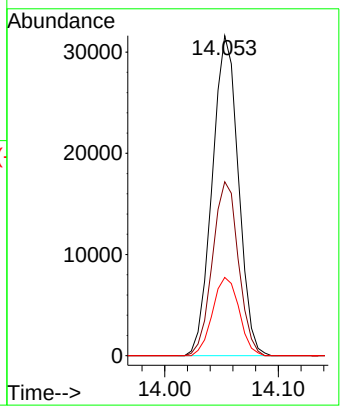
Tgt Ion: 91 Resp: 5056

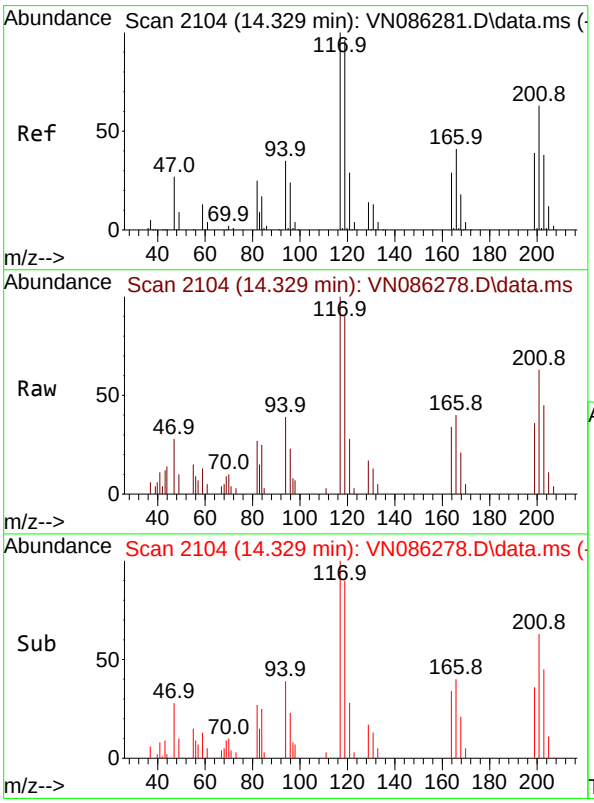
Ion	Ratio	Lower	Upper
91	100		
92	54.0	26.8	80.4
134	24.9	12.2	36.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

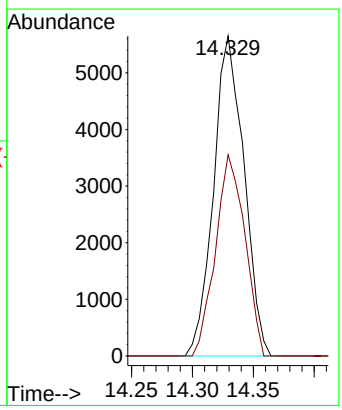


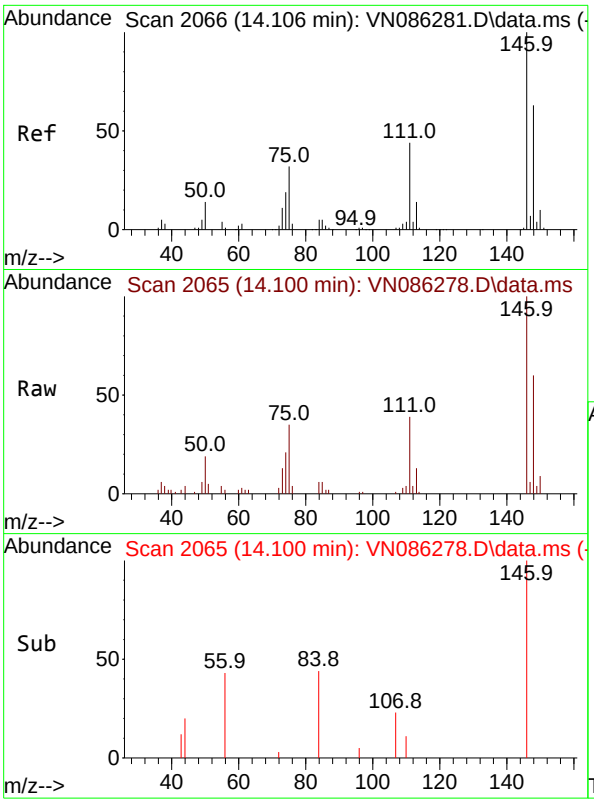


#90
Hexachloroethane
Concen: 5.252 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:117 Resp: 9832

Ion	Ratio	Lower	Upper
117	100		
201	60.5	31.4	94.2

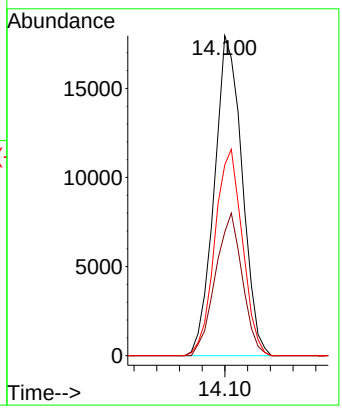




#91
1,2-Dichlorobenzene
Concen: 5.511 ug/l
RT: 14.100 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:146 Resp: 3054

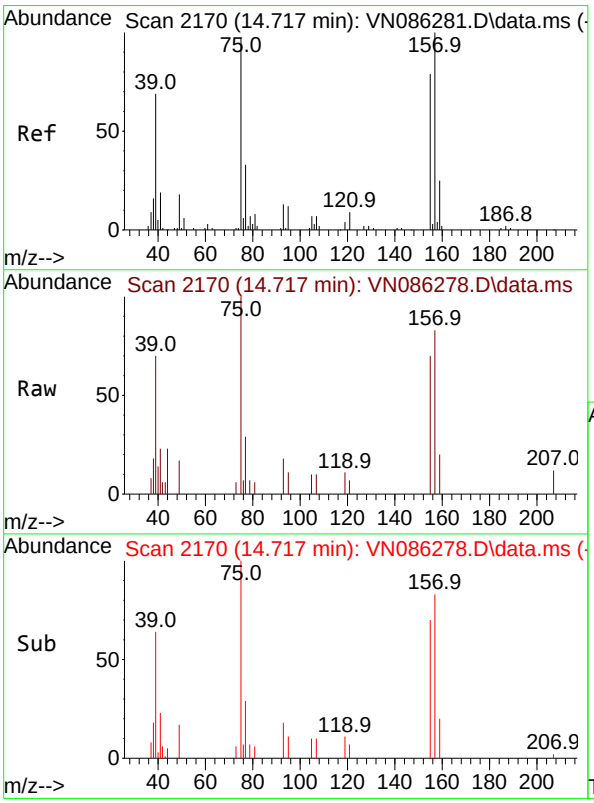
Ion	Ratio	Lower	Upper
146	100		
111	43.2	22.4	67.0
148	64.0	31.8	95.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

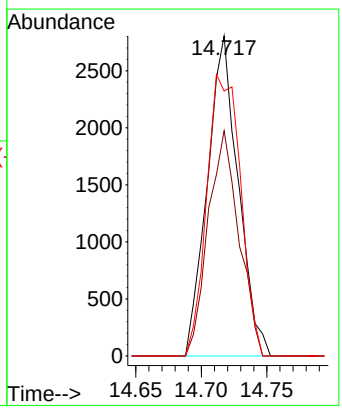
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

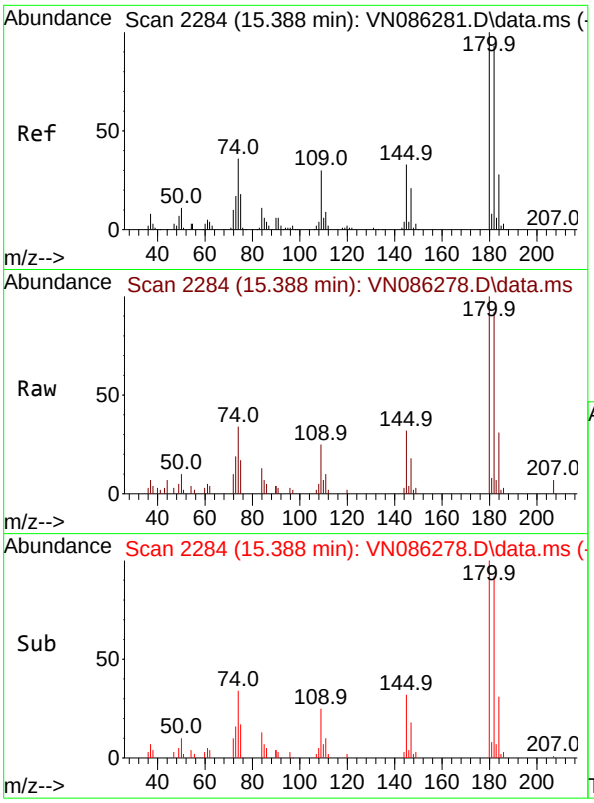


#92
1,2-Dibromo-3-Chloropropane
Concen: 5.772 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion: 75 Resp: 4593

Ion	Ratio	Lower	Upper
75	100		
155	70.0	40.3	120.9
157	96.0	49.0	147.2

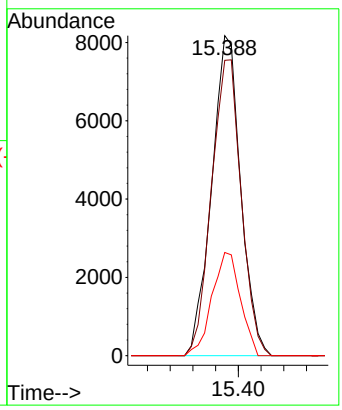




#93
1,2,4-Trichlorobenzene
Concen: 5.465 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:180 Resp: 1450

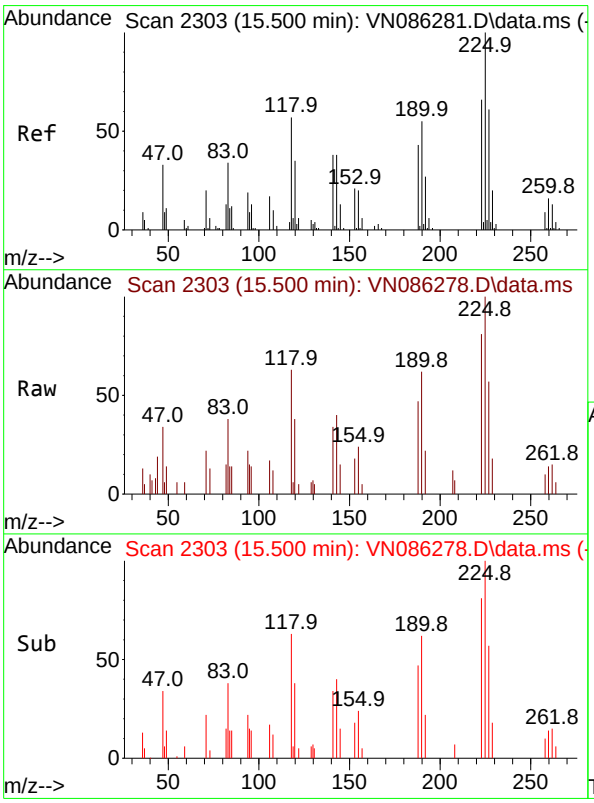
Ion	Ratio	Lower	Upper
180	100		
182	94.5	47.0	141.0
145	31.5	16.4	49.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

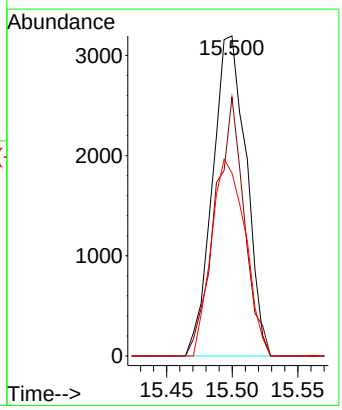
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

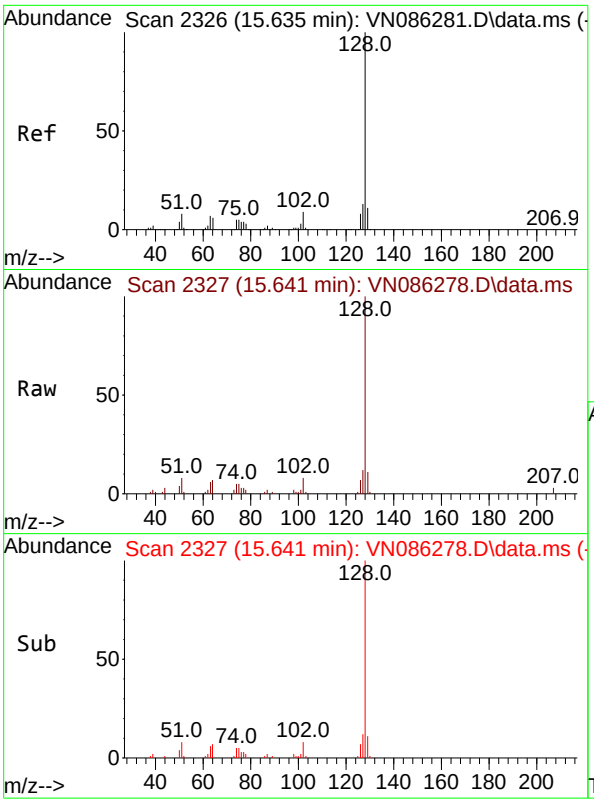


#94
Hexachlorobutadiene
Concen: 5.669 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:225 Resp: 5680

Ion	Ratio	Lower	Upper
225	100		
223	70.3	32.8	98.3
227	62.4	31.4	94.0

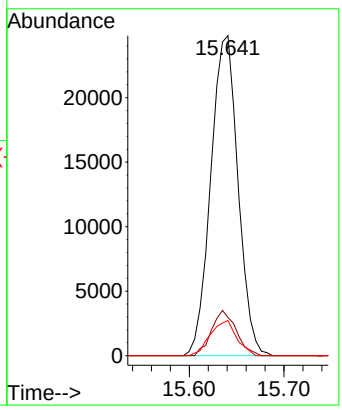




#95
Naphthalene
Concen: 5.270 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:128 Resp: 4958

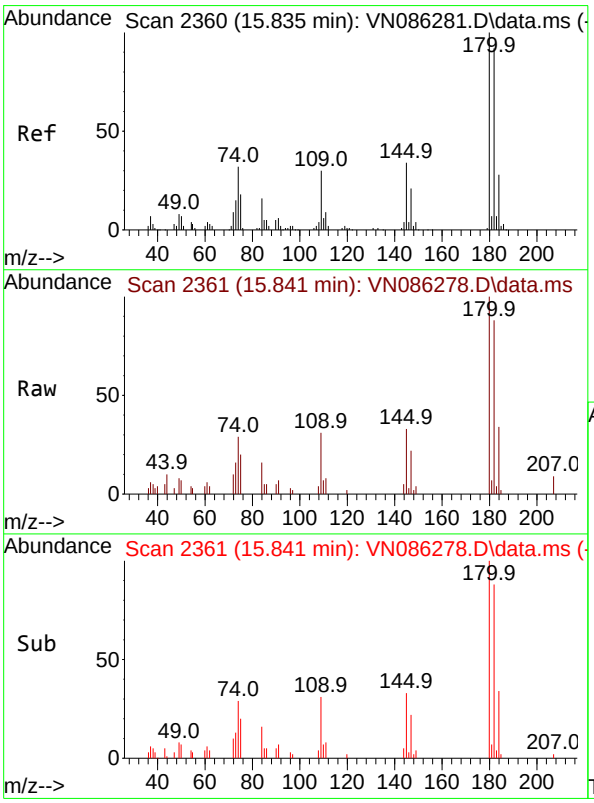
Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.2	15.4
129	10.6	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

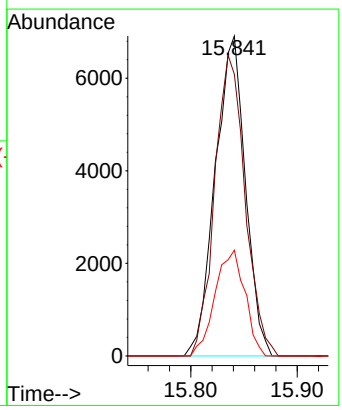
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025



#96
1,2,3-Trichlorobenzene
Concen: 5.412 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.006 min
Lab File: VN086278.D
Acq: 15 Apr 2025 12:21

Tgt Ion:180 Resp: 13599

Ion	Ratio	Lower	Upper
180	100		
182	94.6	47.3	142.0
145	32.7	17.2	51.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086279.D
Acq On : 15 Apr 2025 12:45
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:56:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	253576	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	468933	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	411009	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	178484	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	37770	10.272	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	20.540%#		
35) Dibromofluoromethane	8.159	113	23907	10.985	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	21.960%#		
50) Toluene-d8	10.565	98	120121	10.327	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	20.660%#		
62) 4-Bromofluorobenzene	12.847	95	42791	10.086	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	20.180%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.130	85	29521	9.821	ug/l	96
3) Chloromethane	2.359	50	39728	9.094	ug/l	94
4) Vinyl Chloride	2.518	62	39819	9.551	ug/l	99
5) Bromomethane	2.965	94	18776	10.013	ug/l	87
6) Chloroethane	3.124	64	26337	9.439	ug/l	92
7) Trichlorofluoromethane	3.506	101	43539	9.428	ug/l	99
8) Diethyl Ether	3.959	74	19000	9.425	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	26478	9.478	ug/l	99
10) Methyl Iodide	4.589	142	28586	9.308	ug/l	98
11) Tert butyl alcohol	5.506	59	34343	51.188	ug/l	99
12) 1,1-Dichloroethene	4.342	96	28022	9.389	ug/l	90
13) Acrolein	4.183	56	17703	44.165	ug/l	99
14) Allyl chloride	5.024	41	48555m	9.157	ug/l	
15) Acrylonitrile	5.718	53	78184	47.141	ug/l	97
16) Acetone	4.430	43	63789	45.485	ug/l	99
17) Carbon Disulfide	4.712	76	81234	9.090	ug/l	99
18) Methyl Acetate	5.024	43	41546	9.413	ug/l	97
19) Methyl tert-butyl Ether	5.794	73	102069	9.304	ug/l	95
20) Methylene Chloride	5.277	84	31218	9.183	ug/l	97
21) trans-1,2-Dichloroethene	5.783	96	28271	9.060	ug/l	99
22) Diisopropyl ether	6.671	45	106867	9.259	ug/l	97
23) Vinyl Acetate	6.600	43	386388	47.903	ug/l	100
24) 1,1-Dichloroethane	6.571	63	56906	9.345	ug/l	96
25) 2-Butanone	7.477	43	106429	46.500	ug/l	98
26) 2,2-Dichloropropane	7.488	77	51934	9.525	ug/l	100
27) cis-1,2-Dichloroethene	7.488	96	35180	9.084	ug/l	99
28) Bromochloromethane	7.806	49	22094	8.557	ug/l	98
29) Tetrahydrofuran	7.835	42	72642	47.462	ug/l	100
30) Chloroform	7.965	83	56896	9.511	ug/l	95
31) Cyclohexane	8.253	56	57797	9.699	ug/l	95
32) 1,1,1-Trichloroethane	8.171	97	48313	9.441	ug/l	93
36) 1,1-Dichloropropene	8.371	75	39999	9.202	ug/l	98
37) Ethyl Acetate	7.559	43	42951	9.385	ug/l	99
38) Carbon Tetrachloride	8.359	117	38345	9.263	ug/l	99
39) Methylcyclohexane	9.594	83	48076	9.305	ug/l	98
40) Benzene	8.606	78	130256	9.352	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086279.D
Acq On : 15 Apr 2025 12:45
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 16 03:56:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	26058	9.824	ug/l		98
42) 1,2-Dichloroethane	8.671	62	41980	9.452	ug/l		100
43) Isopropyl Acetate	8.682	43	90916	9.381	ug/l		95
44) Trichloroethene	9.347	130	31281	9.476	ug/l		94
45) 1,2-Dichloropropane	9.618	63	33270	9.759	ug/l		98
46) Dibromomethane	9.706	93	20677	9.519	ug/l		97
47) Bromodichloromethane	9.882	83	44773	9.543	ug/l		97
48) Methyl methacrylate	9.676	41	37900	9.430	ug/l		98
49) 1,4-Dioxane	9.688	88	13198	193.063	ug/l		99
51) 4-Methyl-2-Pentanone	10.441	43	224548	47.916	ug/l		98
52) Toluene	10.623	92	81084	9.330	ug/l		100
53) t-1,3-Dichloropropene	10.835	75	49510	9.454	ug/l		100
54) cis-1,3-Dichloropropene	10.312	75	54411	9.459	ug/l		97
55) 1,1,2-Trichloroethane	11.012	97	29512	9.439	ug/l		93
56) Ethyl methacrylate	10.871	69	54203	9.431	ug/l		98
57) 1,3-Dichloropropane	11.159	76	53151	9.581	ug/l		98
58) 2-Chloroethyl Vinyl ether	10.159	63	113279	41.526	ug/l		99
59) 2-Hexanone	11.194	43	166643	47.941	ug/l		100
60) Dibromochloromethane	11.353	129	33195	9.668	ug/l		98
61) 1,2-Dibromoethane	11.465	107	29886	9.473	ug/l		99
64) Tetrachloroethene	11.100	164	29467	9.321	ug/l		99
65) Chlorobenzene	11.888	112	86997	9.485	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.959	131	28657	9.471	ug/l		97
67) Ethyl Benzene	11.959	91	153929	9.300	ug/l		99
68) m/p-Xylenes	12.065	106	115926	18.692	ug/l		99
69) o-Xylene	12.394	106	58314	9.508	ug/l		99
70) Styrene	12.406	104	95045	9.301	ug/l		100
71) Bromoform	12.576	173	21240	9.323	ug/l	#	100
73) Isopropylbenzene	12.694	105	142461	9.757	ug/l		100
74) N-amyl acetate	12.488	43	67074	9.228	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.935	83	42167	10.045	ug/l		100
76) 1,2,3-Trichloropropane	12.988	75	41148m	9.813	ug/l		
77) Bromobenzene	12.976	156	32305	9.986	ug/l		99
78) n-propylbenzene	13.035	91	165250	9.605	ug/l		99
79) 2-Chlorotoluene	13.123	91	103789	9.641	ug/l		100
80) 1,3,5-Trimethylbenzene	13.170	105	113458	9.494	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.735	75	17595	10.033	ug/l		92
82) 4-Chlorotoluene	13.217	91	101784	9.518	ug/l		99
83) tert-Butylbenzene	13.435	119	99779	9.636	ug/l		99
84) 1,2,4-Trimethylbenzene	13.476	105	116448	9.573	ug/l		99
85) sec-Butylbenzene	13.612	105	139108	9.686	ug/l		99
86) p-Isopropyltoluene	13.729	119	113316	9.572	ug/l		99
87) 1,3-Dichlorobenzene	13.729	146	57753	9.497	ug/l		100
88) 1,4-Dichlorobenzene	13.806	146	57656	9.412	ug/l		98
89) n-Butylbenzene	14.053	91	98010	9.340	ug/l		99
90) Hexachloroethane	14.329	117	18922	9.503	ug/l		100
91) 1,2-Dichlorobenzene	14.106	146	55856	9.473	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	8165	9.646	ug/l		98
93) 1,2,4-Trichlorobenzene	15.388	180	26050	9.227	ug/l		99
94) Hexachlorobutadiene	15.494	225	10205	9.575	ug/l		97
95) Naphthalene	15.635	128	92844	9.277	ug/l		99
96) 1,2,3-Trichlorobenzene	15.835	180	24879	9.308	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086279.D
Acq On : 15 Apr 2025 12:45
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:56:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 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

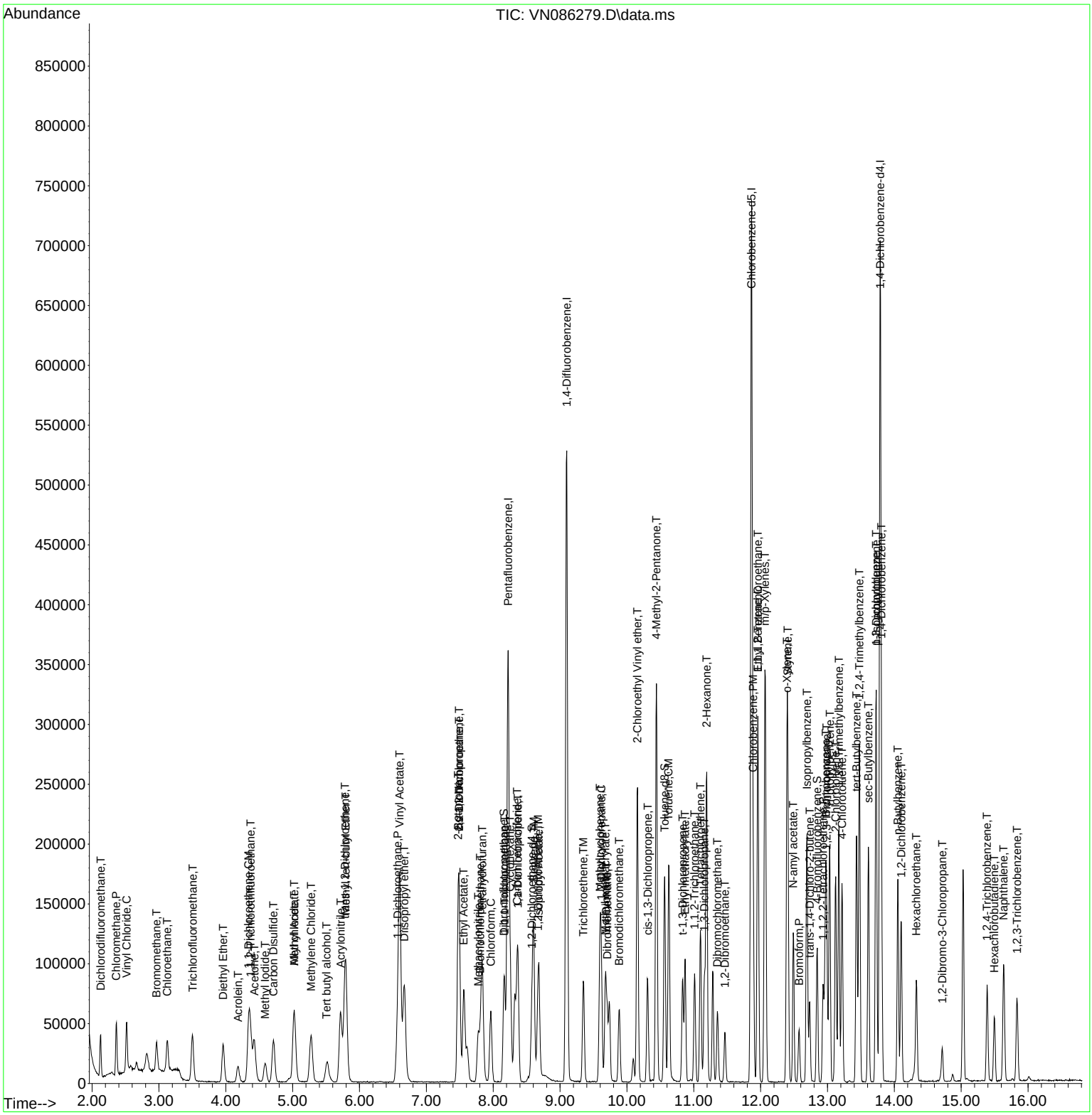
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086279.D
Acq On : 15 Apr 2025 12:45
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

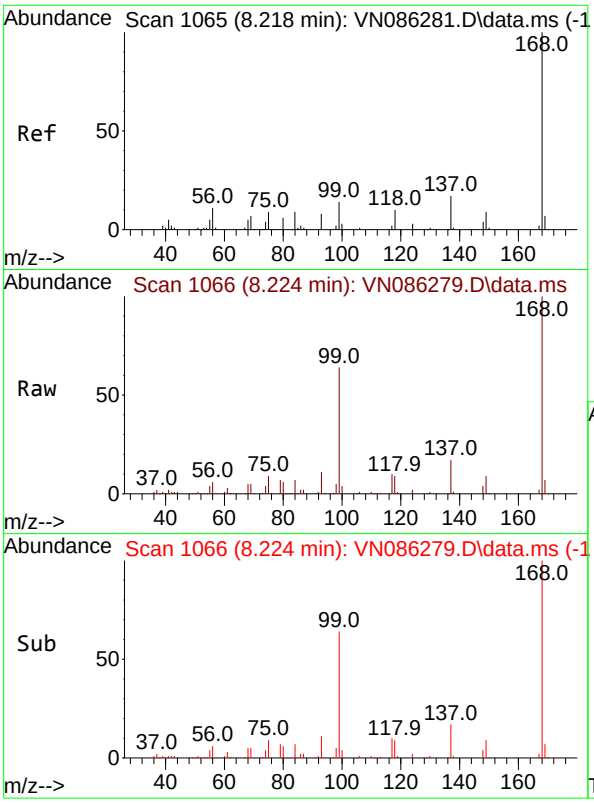
Quant Time: Apr 16 03:56:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

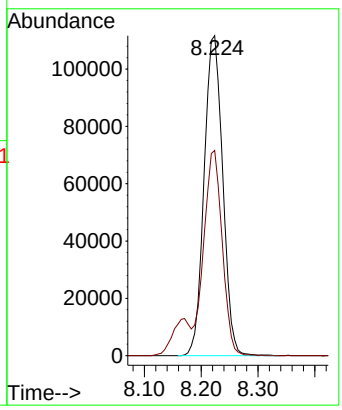




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:168 Resp: 25357

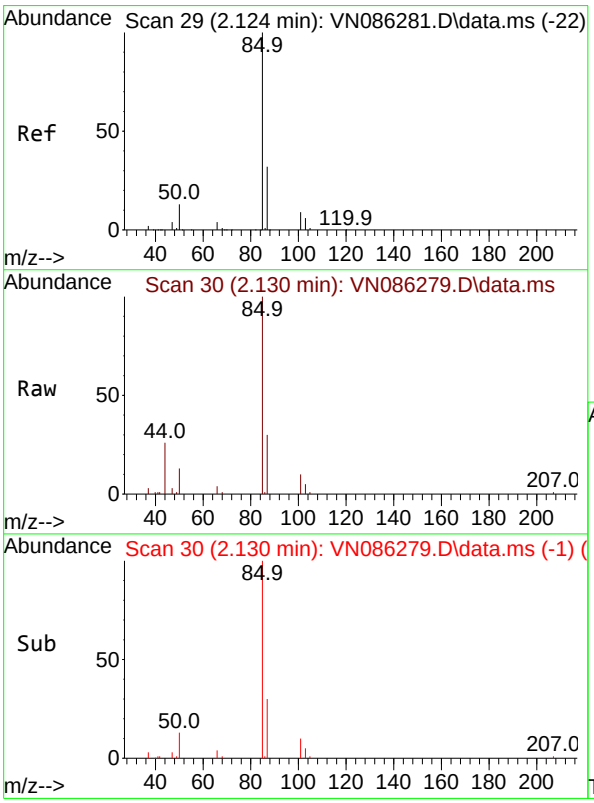
Ion	Ratio	Lower	Upper
168	100		
99	64.1	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

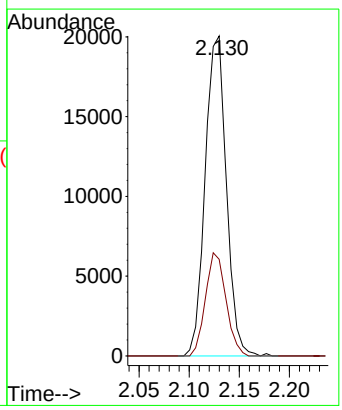
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

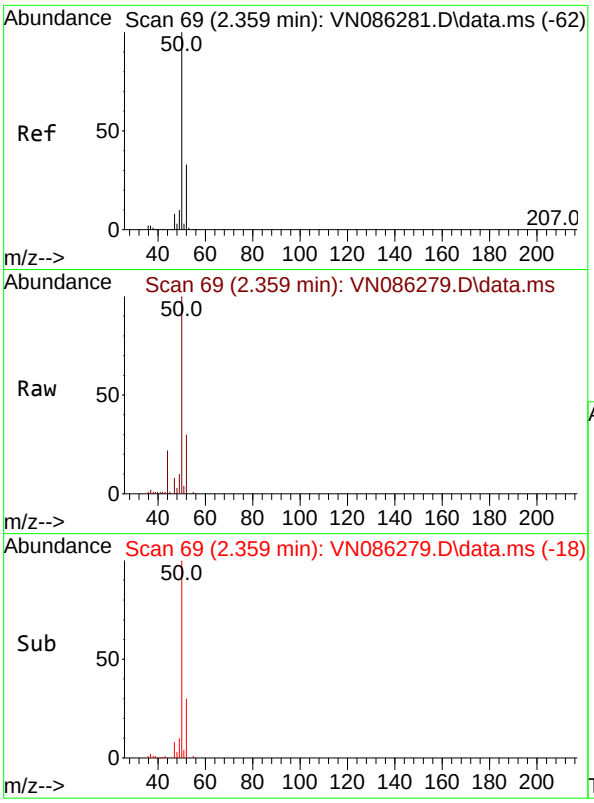


#2
Dichlorodifluoromethane
Concen: 9.821 ug/l
RT: 2.130 min Scan# 30
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 85 Resp: 29521

Ion	Ratio	Lower	Upper
85	100		
87	30.2	16.3	48.8

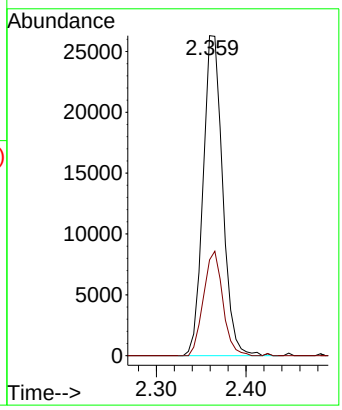




#3
Chloromethane
Concen: 9.094 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 50 Resp: 3972

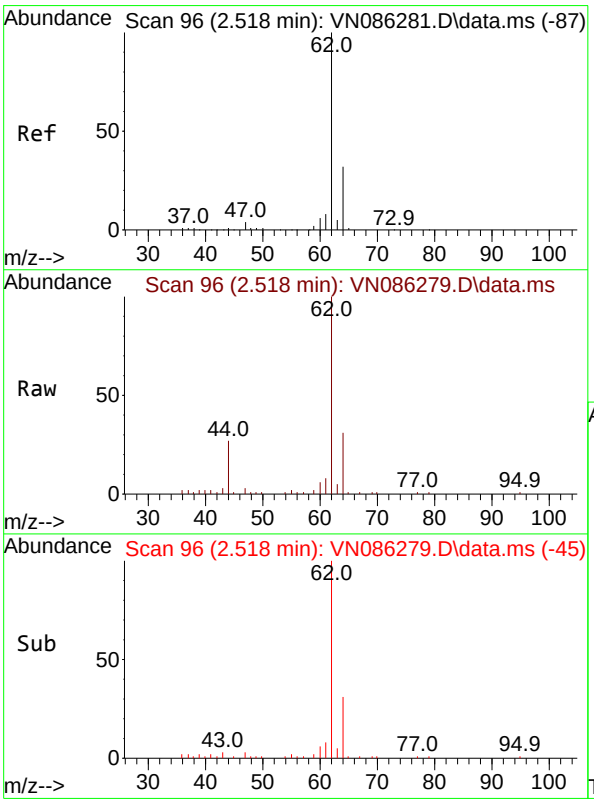
Ion	Ratio	Lower	Upper
50	100		
52	30.0	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

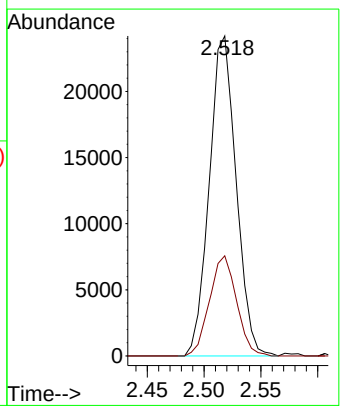
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

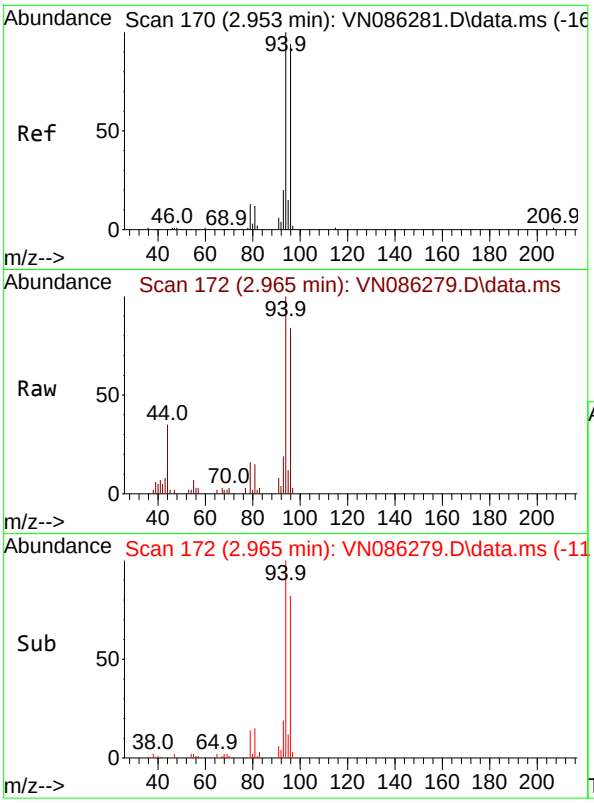


#4
Vinyl Chloride
Concen: 9.551 ug/l
RT: 2.518 min Scan# 96
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 62 Resp: 39819

Ion	Ratio	Lower	Upper
62	100		
64	31.3	25.6	38.4

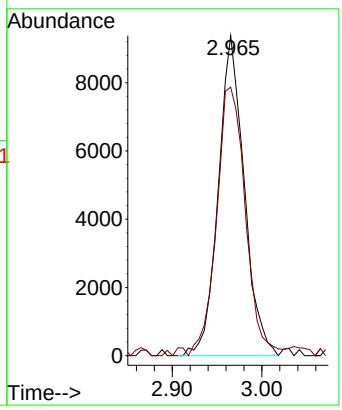




#5
Bromomethane
Concen: 10.013 ug/l
RT: 2.965 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 94 Resp: 1877

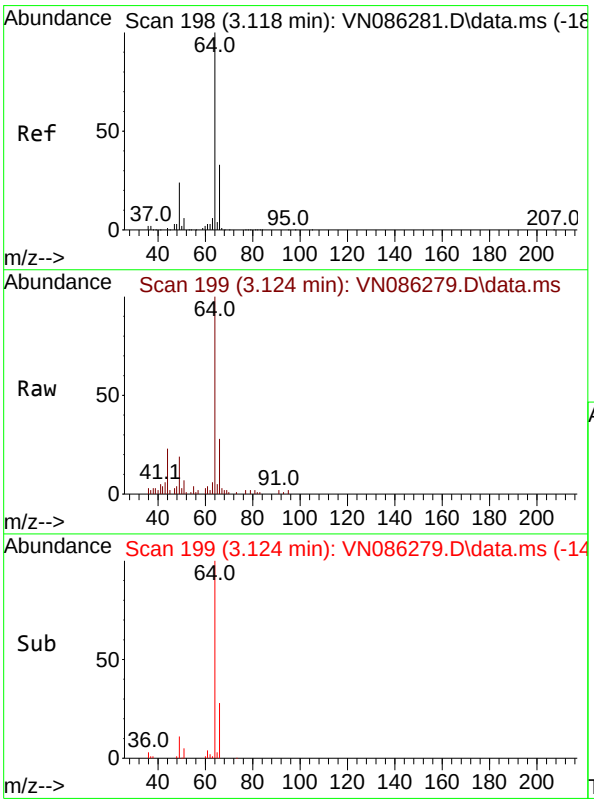
Ion	Ratio	Lower	Upper
94	100		
96	81.7	75.2	112.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

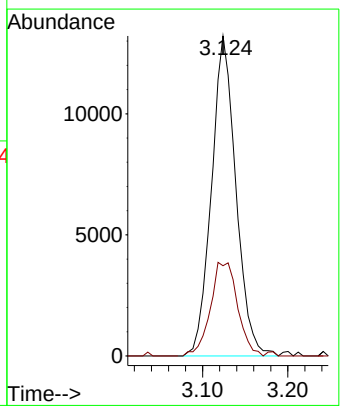
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

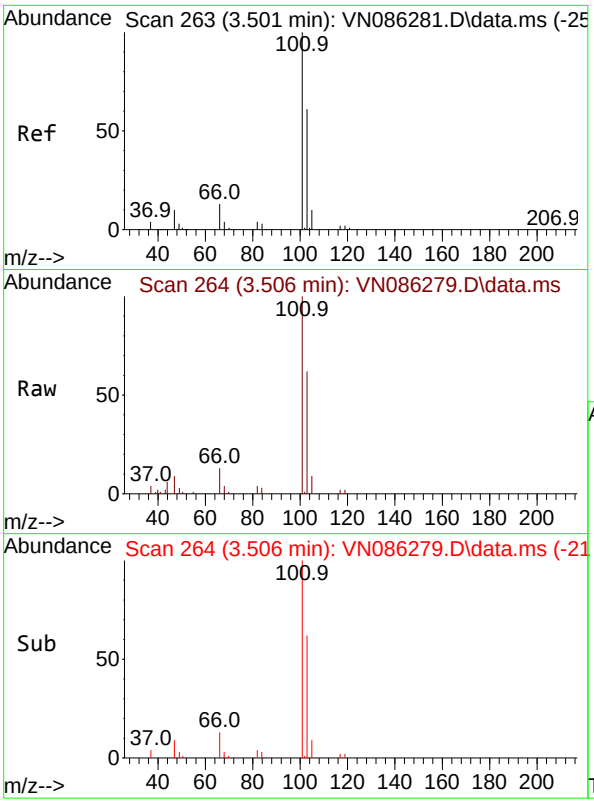


#6
Chloroethane
Concen: 9.439 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 64 Resp: 26337

Ion	Ratio	Lower	Upper
64	100		
66	28.2	26.2	39.2

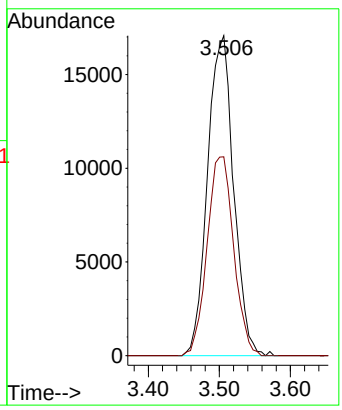




#7
Trichlorofluoromethane
Concen: 9.428 ug/l
RT: 3.506 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:101 Resp: 4353

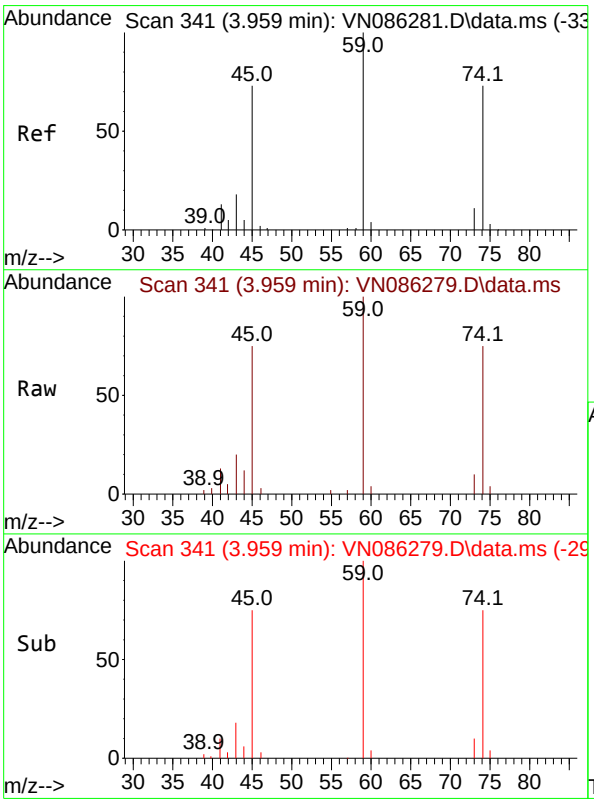
Ion	Ratio	Lower	Upper
101	100		
103	62.2	49.2	73.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

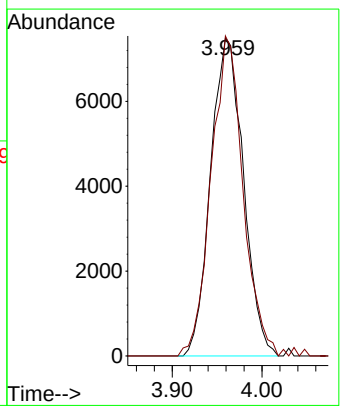
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

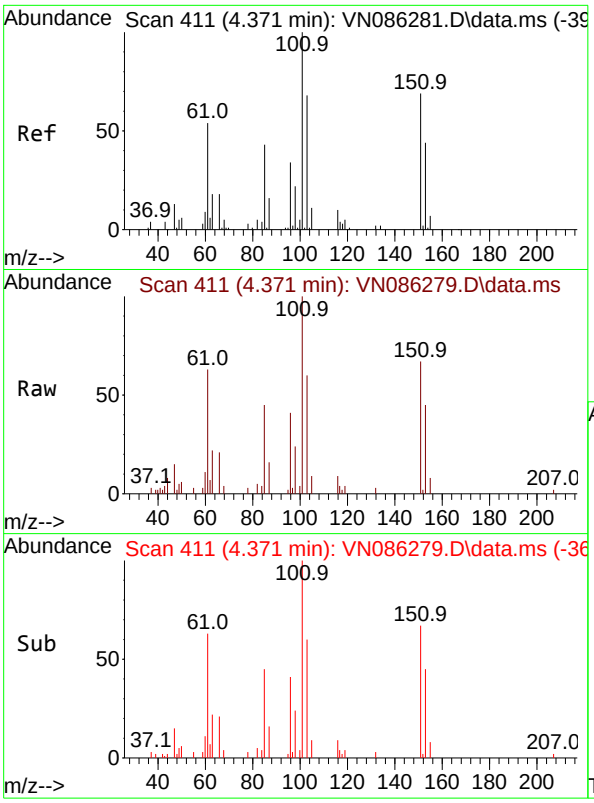


#8
Diethyl Ether
Concen: 9.425 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 74 Resp: 19000

Ion	Ratio	Lower	Upper
74	100		
45	98.3	48.0	144.2

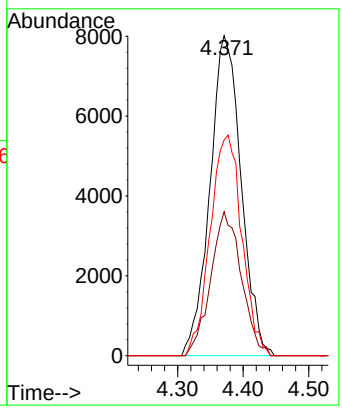




#9
1,1,2-Trichlorotrifluoroethane
Concen: 9.478 ug/l
RT: 4.371 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:101 Resp: 2647

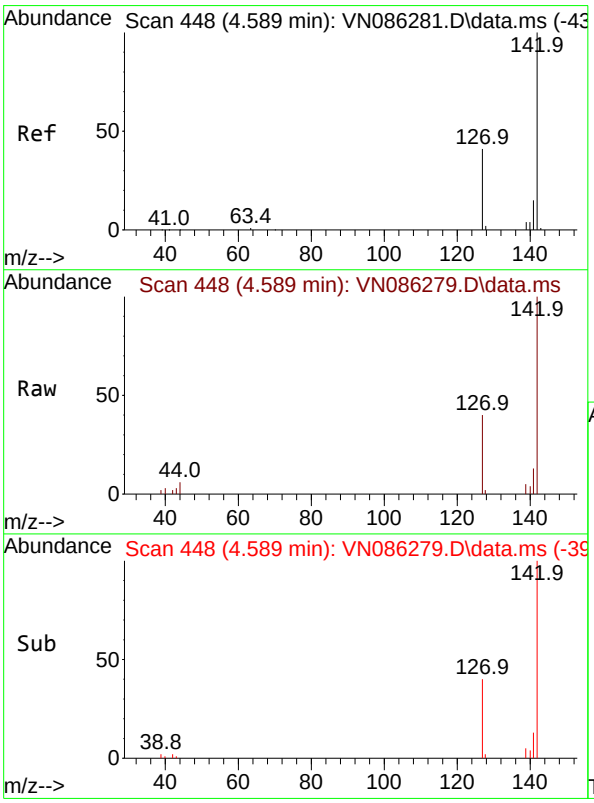
Ion	Ratio	Lower	Upper
101	100		
85	44.2	34.7	52.1
151	69.8	56.1	84.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

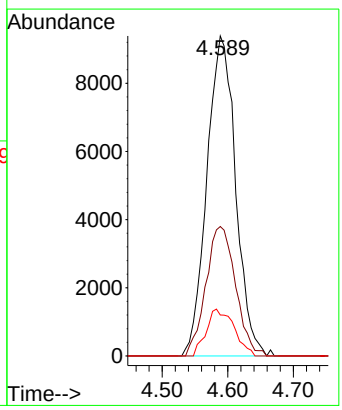
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

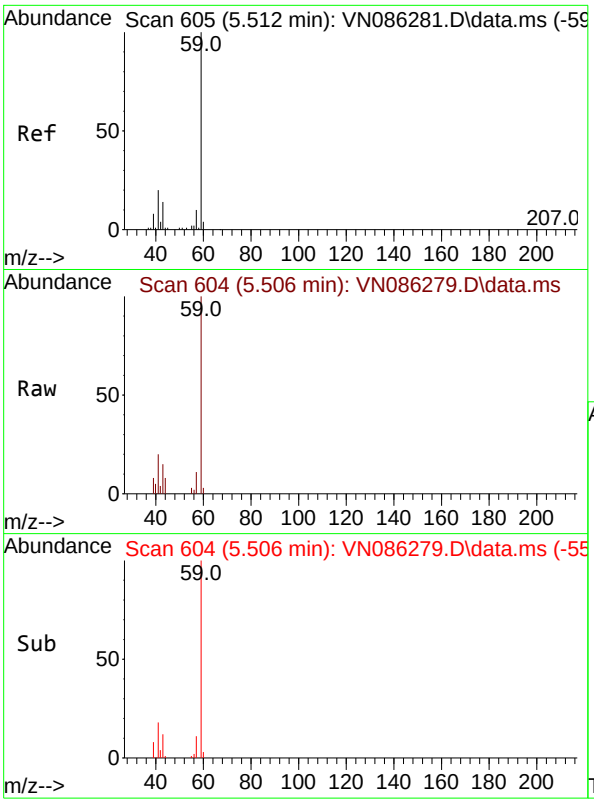


#10
Methyl Iodide
Concen: 9.308 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:142 Resp: 28586

Ion	Ratio	Lower	Upper
142	100		
127	40.4	32.7	49.1
141	12.8	11.7	17.5





#11
Tert butyl alcohol
Concen: 51.188 ug/l
RT: 5.506 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 59 Resp: 3434

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.3	12.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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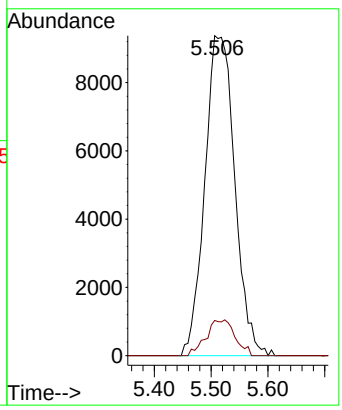
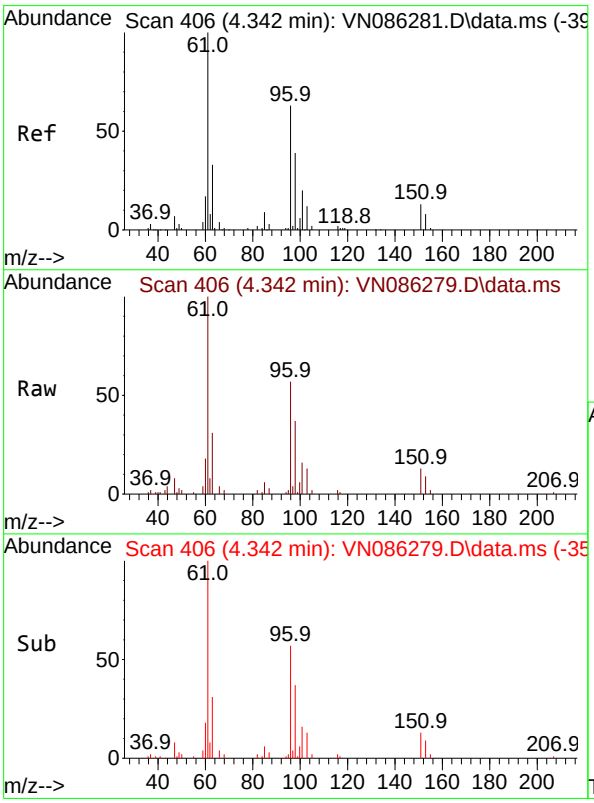
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

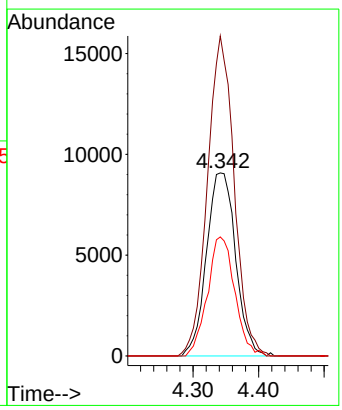


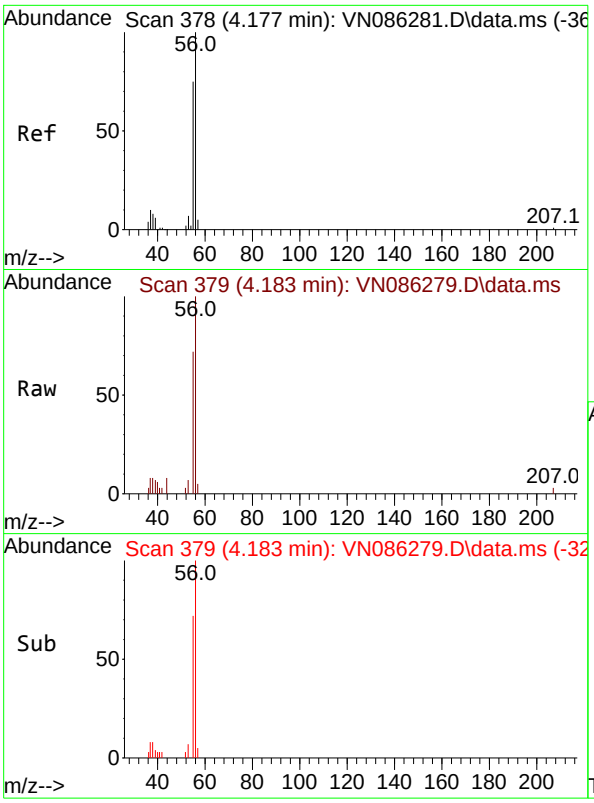


#12
1,1-Dichloroethene
Concen: 9.389 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 96 Resp: 28022

Ion	Ratio	Lower	Upper
96	100		
61	174.9	126.6	189.8
98	65.1	49.6	74.4

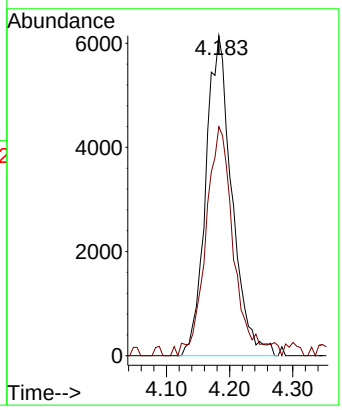




#13
Acrolein
Concen: 44.165 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 56 Resp: 1770

Ion	Ratio	Lower	Upper
56	100		
55	74.3	58.5	87.7



Instrument :
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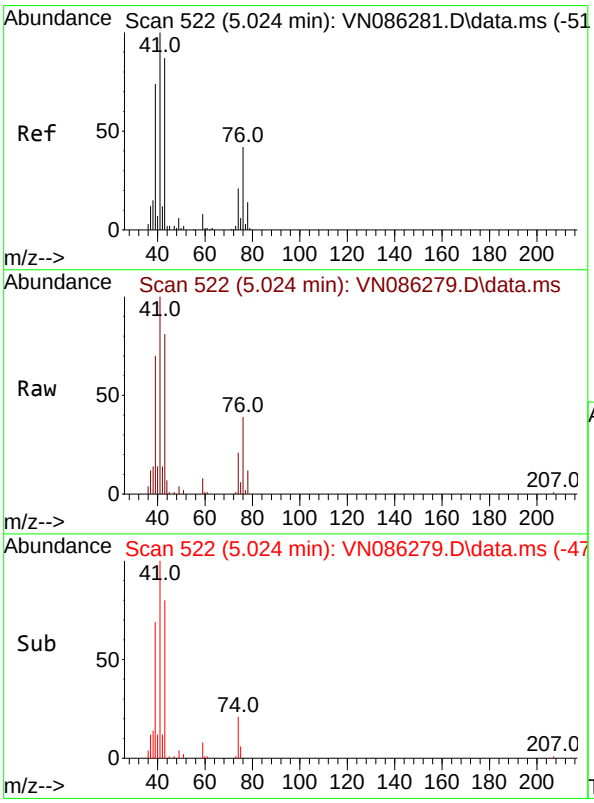
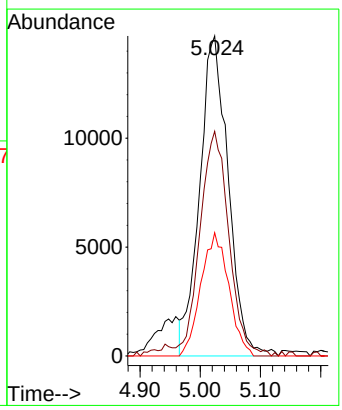
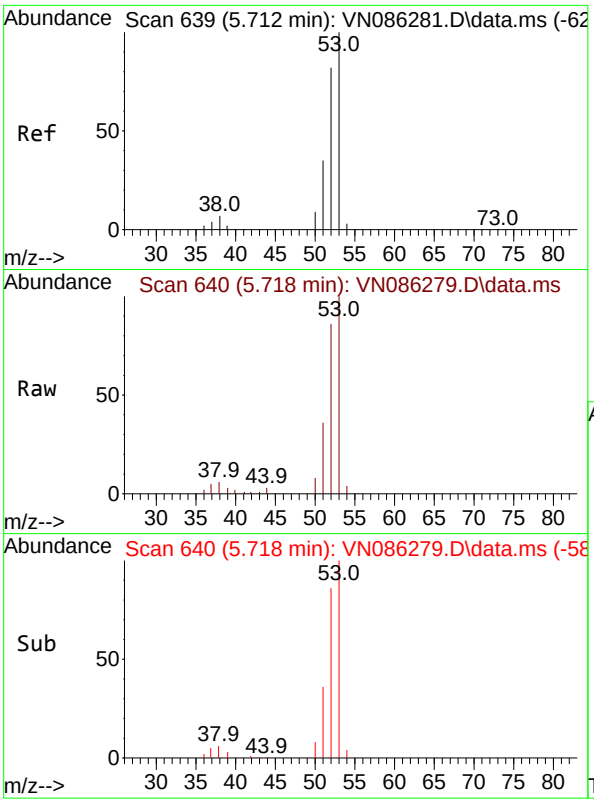


#14
Allyl chloride
Concen: 9.157 ug/l m
RT: 5.024 min Scan# 522
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 41 Resp: 48555

Ion	Ratio	Lower	Upper
41	100		
39	70.8	59.2	88.8
76	37.4	31.2	46.8

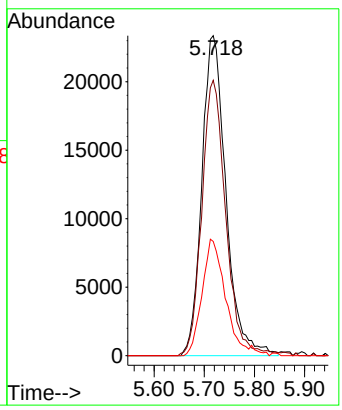




#15
Acrylonitrile
Concen: 47.141 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 53 Resp: 7818

Ion	Ratio	Lower	Upper
53	100		
52	85.3	65.5	98.3
51	35.8	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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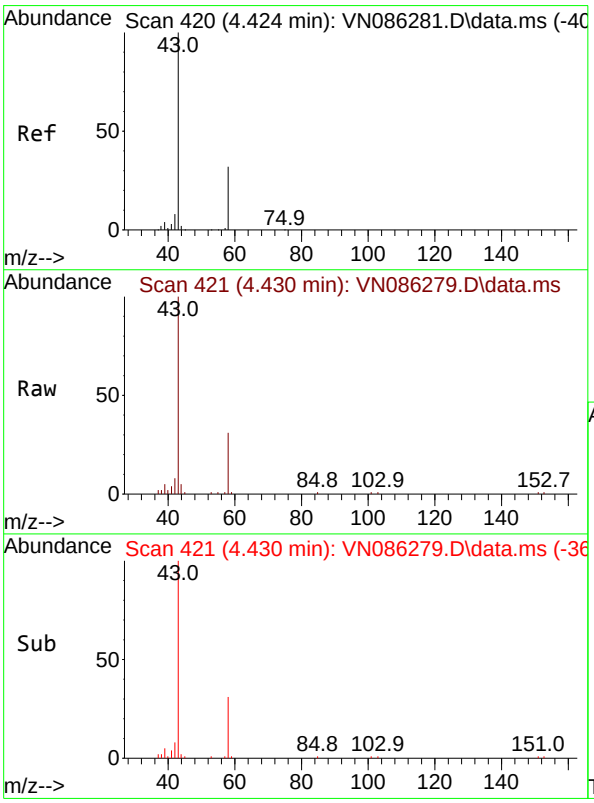
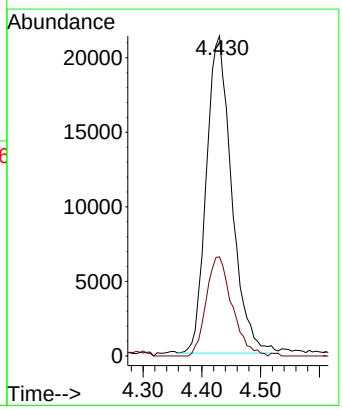
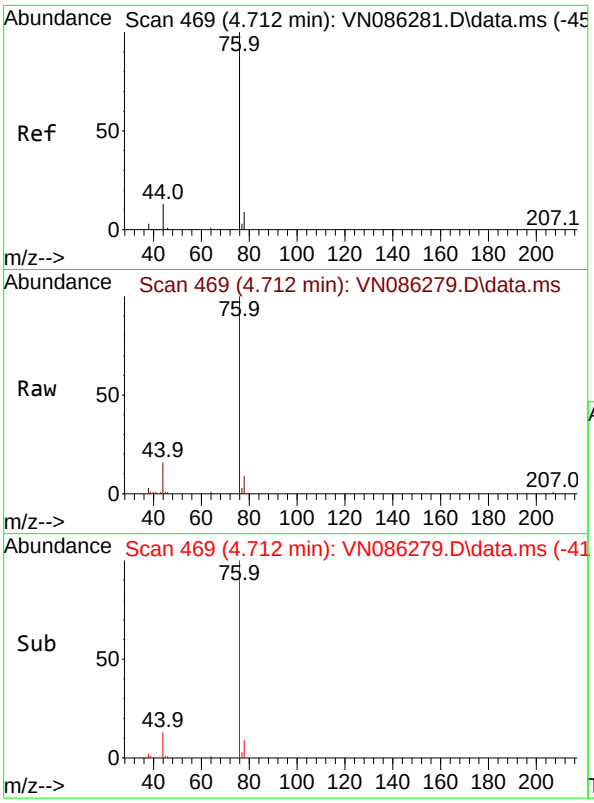


#16
Acetone
Concen: 45.485 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 63789

Ion	Ratio	Lower	Upper
43	100		
58	31.2	25.3	37.9

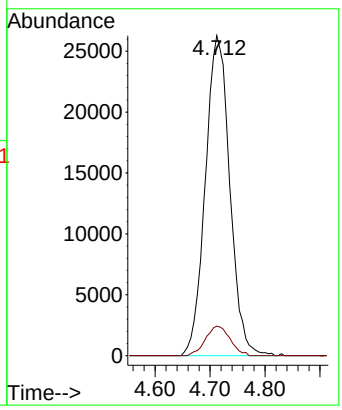




#17
Carbon Disulfide
Concen: 9.090 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 76 Resp: 8123

Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.6	11.4



Instrument :
MSVOA_N
ClientSampleId :
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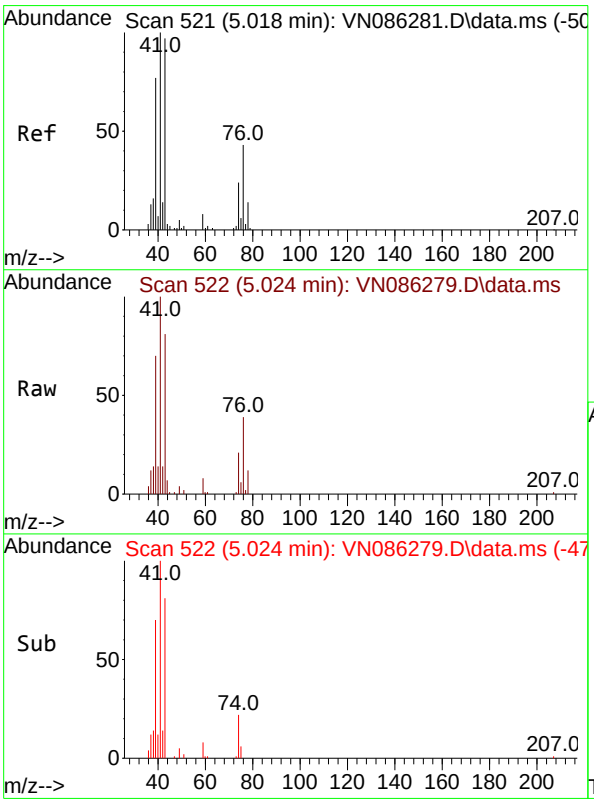
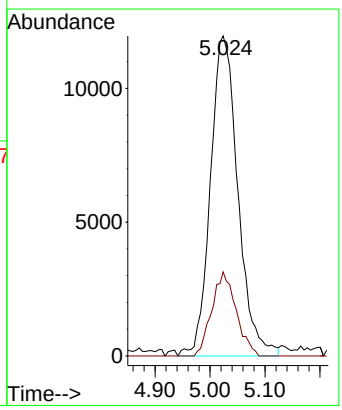
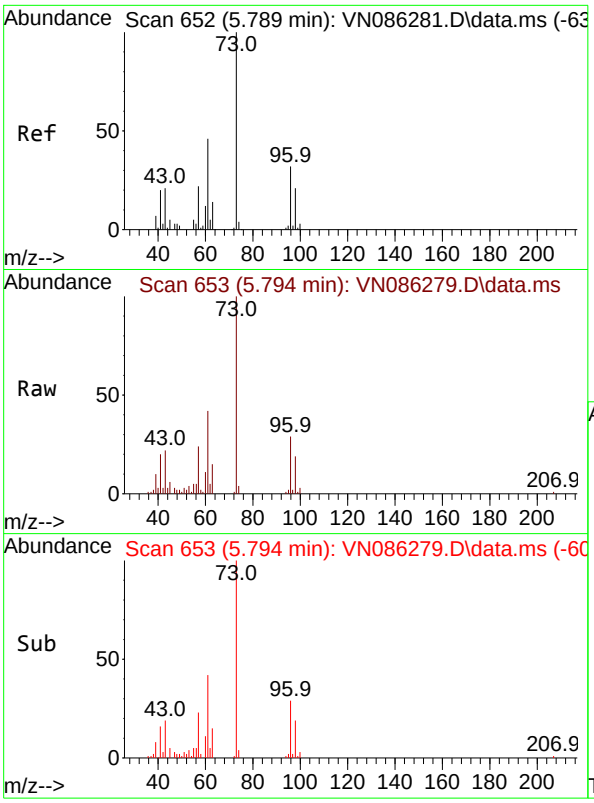


#18
Methyl Acetate
Concen: 9.413 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 41546

Ion	Ratio	Lower	Upper
43	100		
74	23.2	19.8	29.6

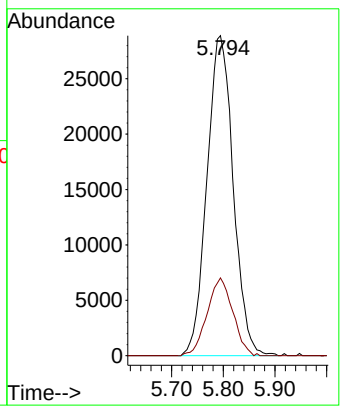




#19
Methyl tert-butyl Ether
Concen: 9.304 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 73 Resp: 10206

Ion	Ratio	Lower	Upper
73	100		
57	24.3	17.6	26.4



Instrument :
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ClientSampleId :
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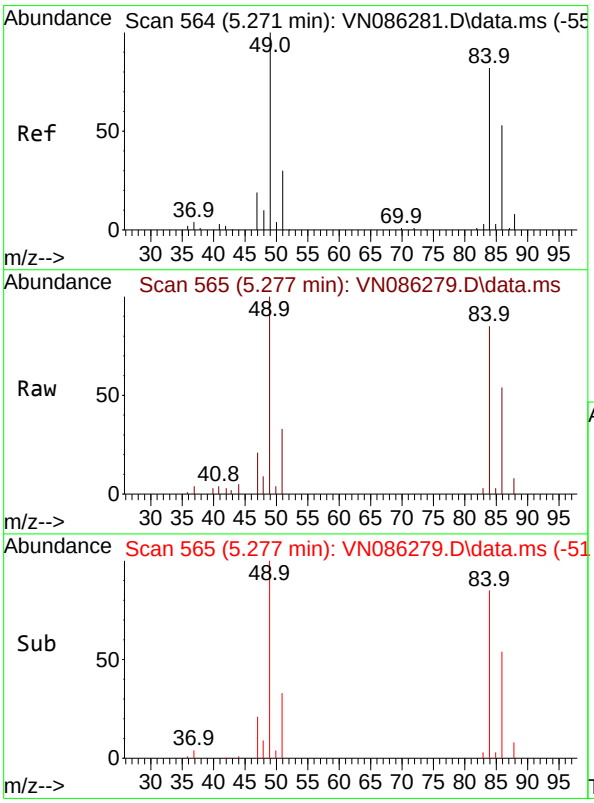
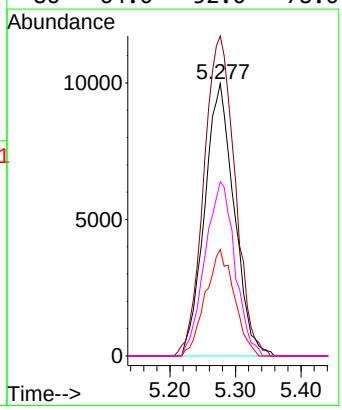
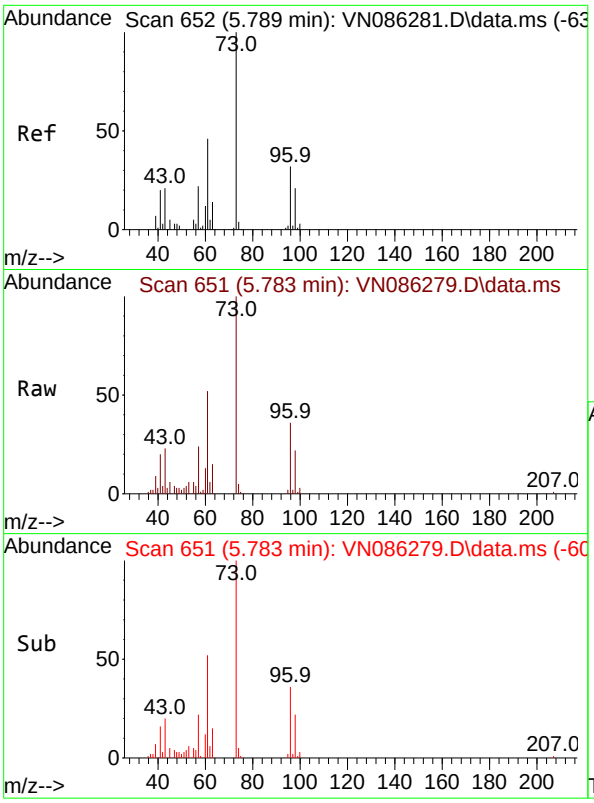


#20
Methylene Chloride
Concen: 9.183 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 84 Resp: 31218

Ion	Ratio	Lower	Upper
84	100		
49	117.5	98.2	147.2
51	39.1	29.8	44.6
86	64.0	52.0	78.0

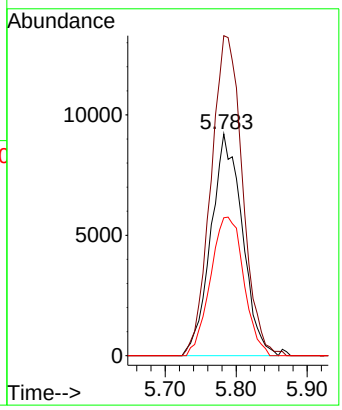




#21
trans-1,2-Dichloroethene
Concen: 9.060 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 96 Resp: 2827

Ion	Ratio	Lower	Upper
96	100		
61	144.3	114.6	171.8
98	62.1	51.2	76.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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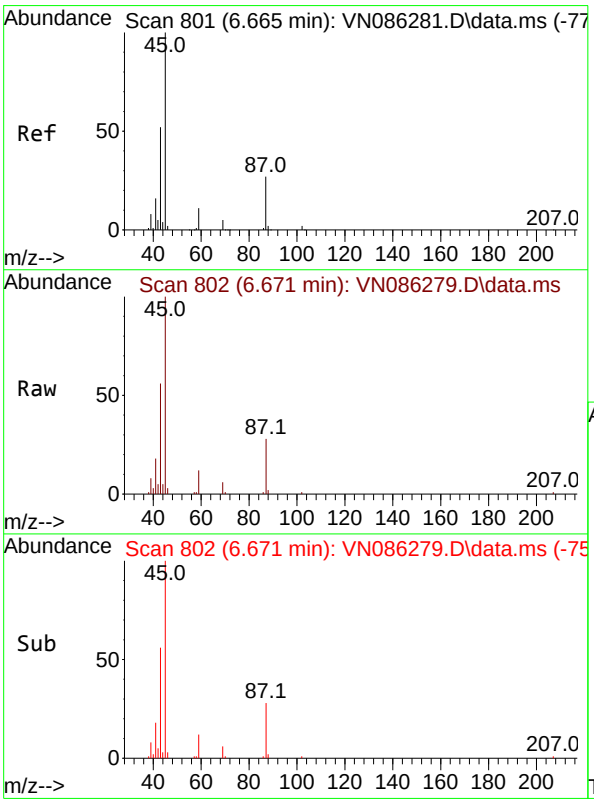
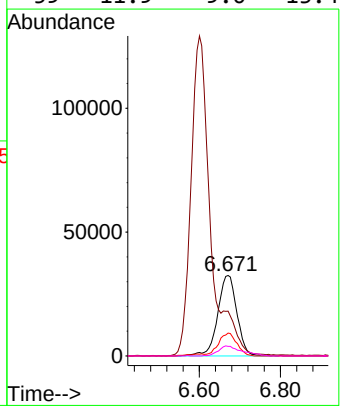
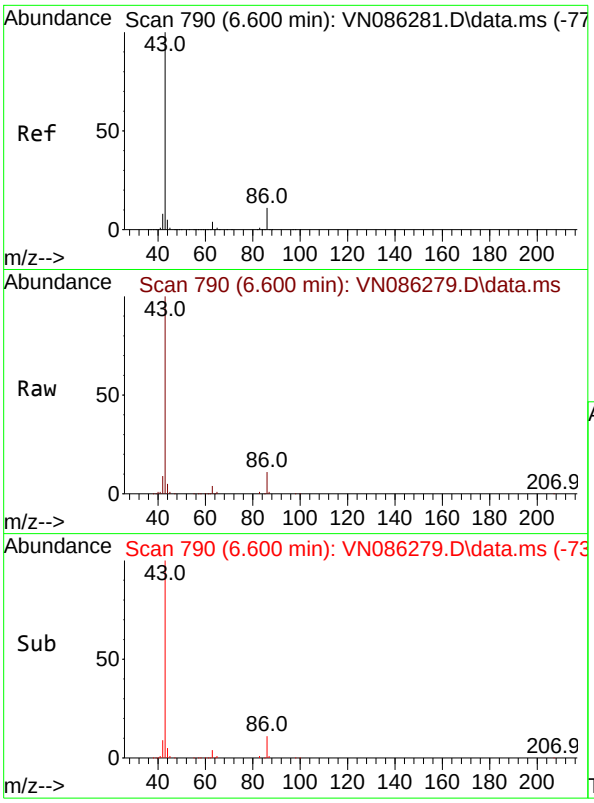


#22
Diisopropyl ether
Concen: 9.259 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 45 Resp: 106867

Ion	Ratio	Lower	Upper
45	100		
43	54.4	41.8	62.8
87	28.4	21.6	32.4
59	11.9	9.0	13.4





#23
Vinyl Acetate
Concen: 47.903 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 38638

Ion	Ratio	Lower	Upper
43	100		
86	10.9	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
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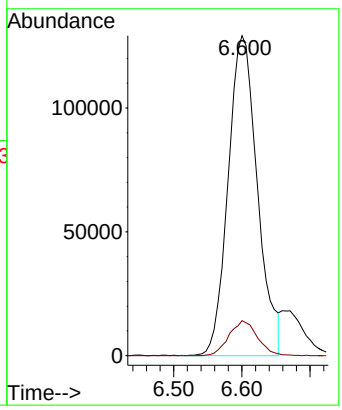
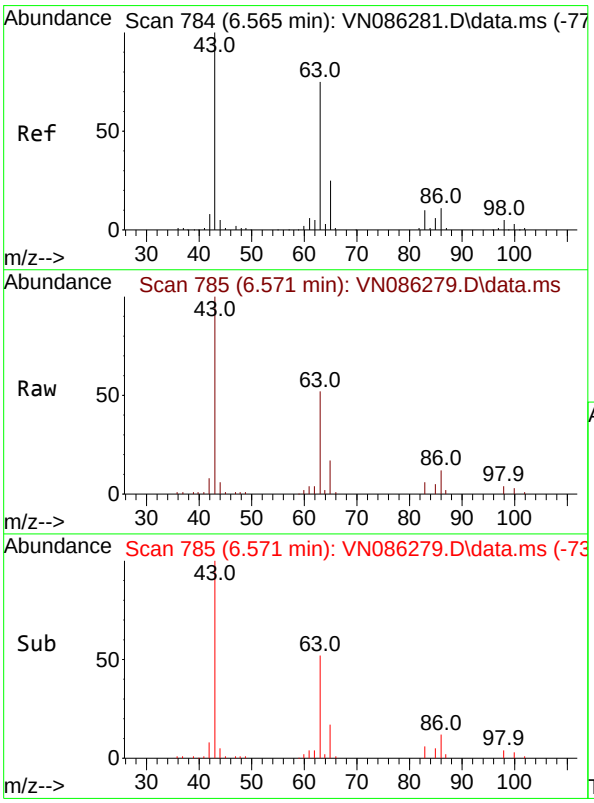
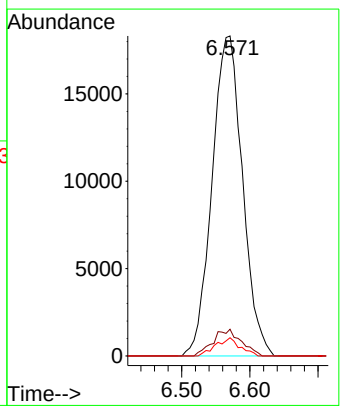


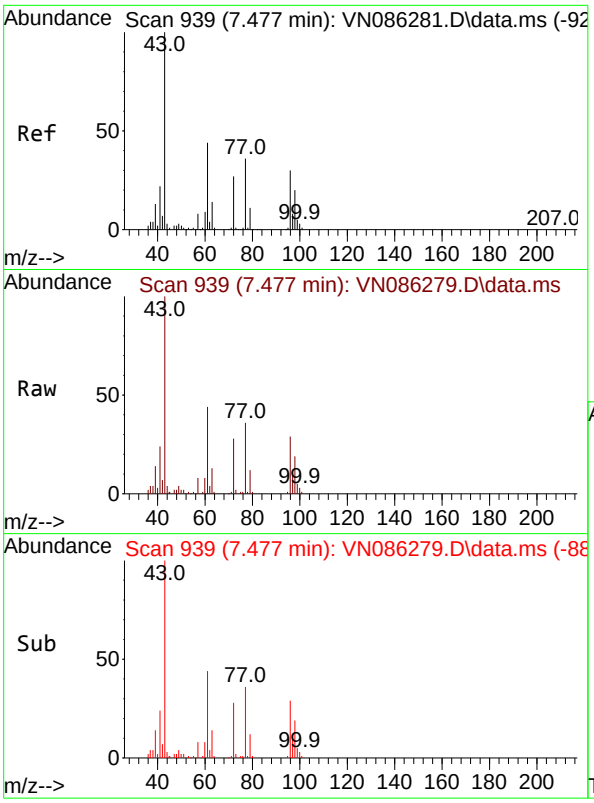


#24
1,1-Dichloroethane
Concen: 9.345 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 63 Resp: 56906

Ion	Ratio	Lower	Upper
63	100		
98	8.4	3.4	10.2
100	5.7	2.1	6.5





#25
2-Butanone
Concen: 46.500 ug/l
RT: 7.477 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 10642

Ion	Ratio	Lower	Upper
43	100		
72	28.3	21.7	32.5

Instrument :
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ClientSampleId :
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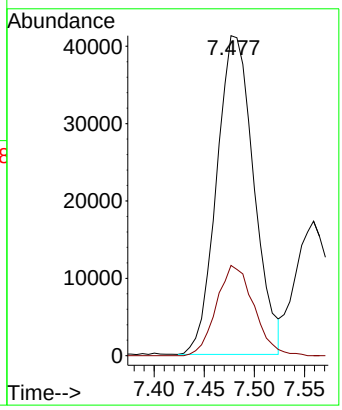
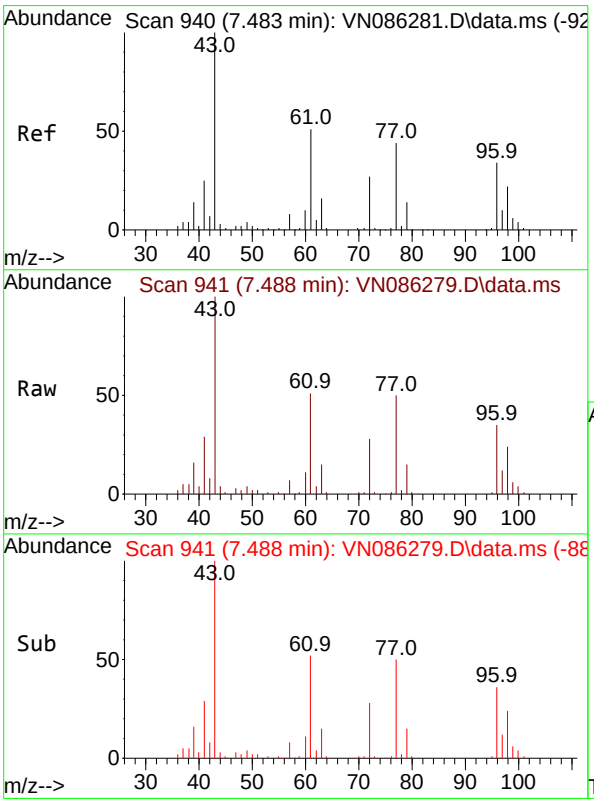
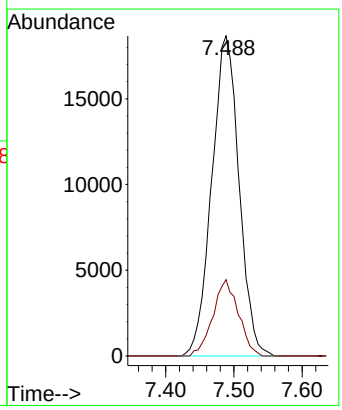


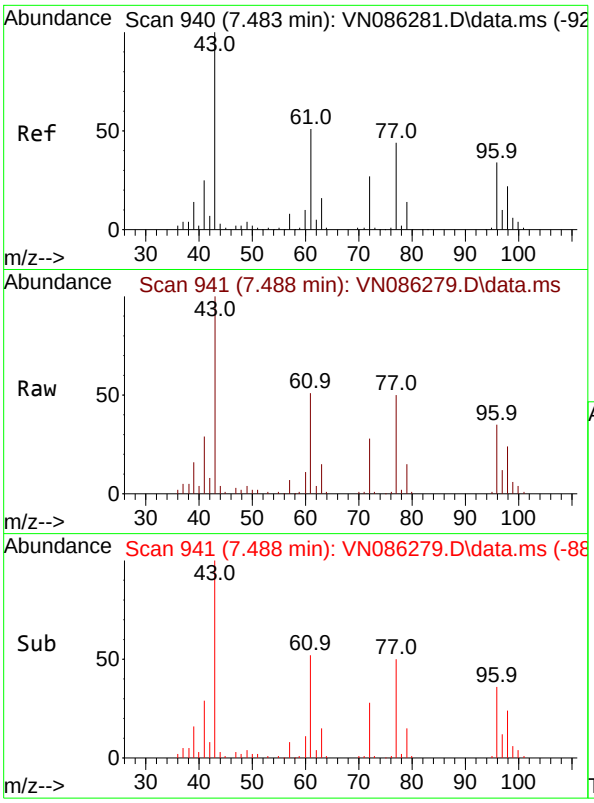


#26
2,2-Dichloropropane
Concen: 9.525 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 77 Resp: 51934

Ion	Ratio	Lower	Upper
77	100		
97	22.3	11.2	33.5





#27
cis-1,2-Dichloroethene
Concen: 9.084 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 96 Resp: 3518

Ion	Ratio	Lower	Upper
96	100		
61	149.5	0.0	299.0
98	66.1	0.0	129.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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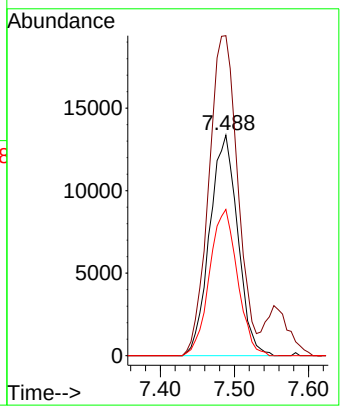
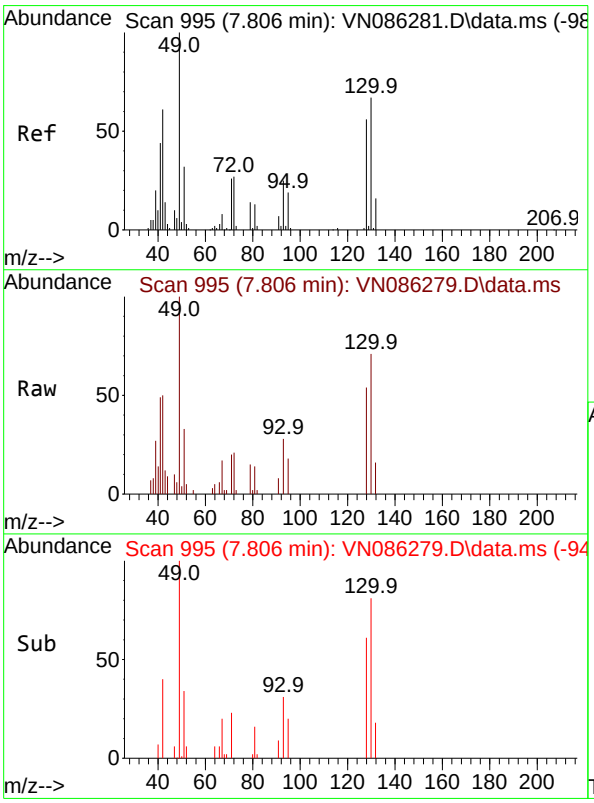
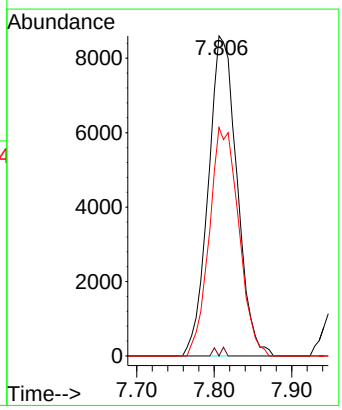


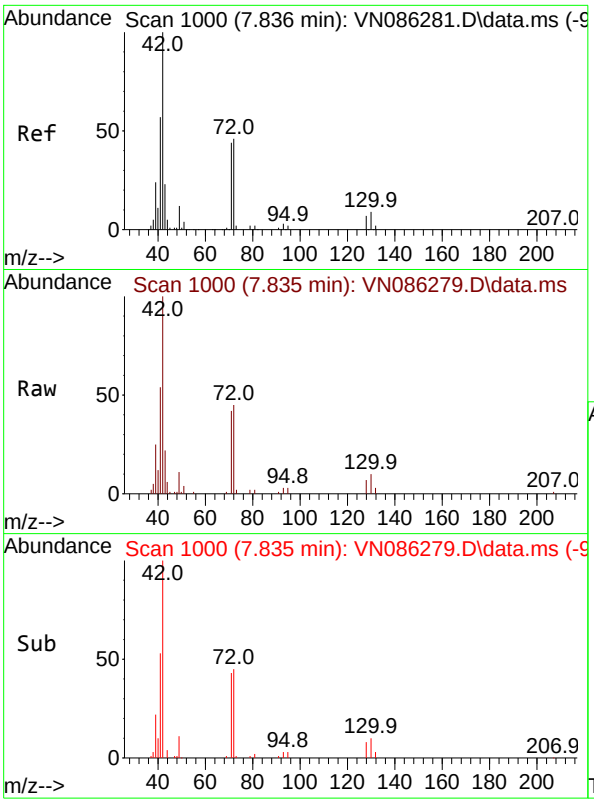


#28
Bromochloromethane
Concen: 8.557 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 49 Resp: 22094

Ion	Ratio	Lower	Upper
49	100		
129	0.7	0.0	3.4
130	73.4	57.1	85.7





#29
Tetrahydrofuran
Concen: 47.462 ug/l
RT: 7.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 42 Resp: 7264

Ion	Ratio	Lower	Upper
42	100		
72	45.4	36.2	54.4
71	42.6	34.0	51.0

Instrument :
MSVOA_N
ClientSampleId :
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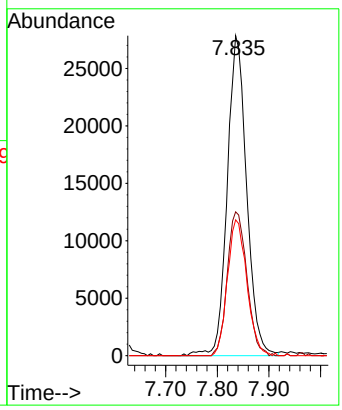
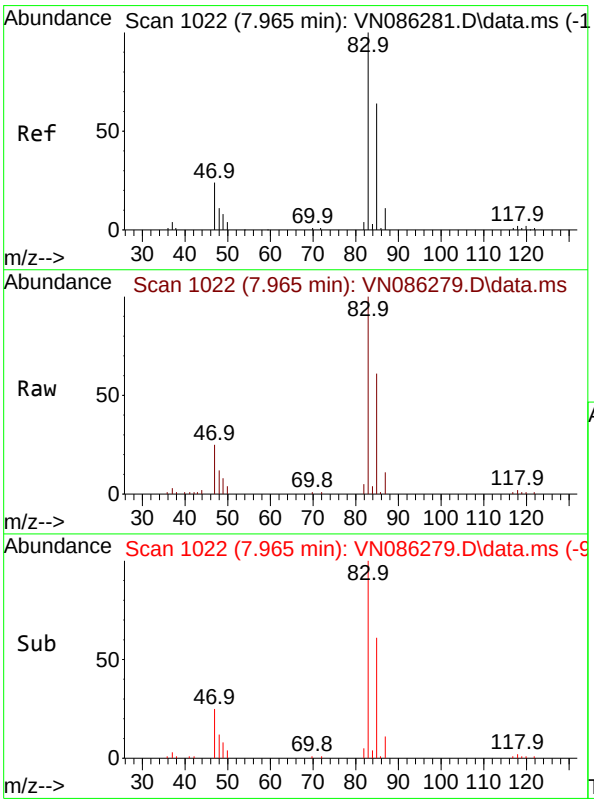
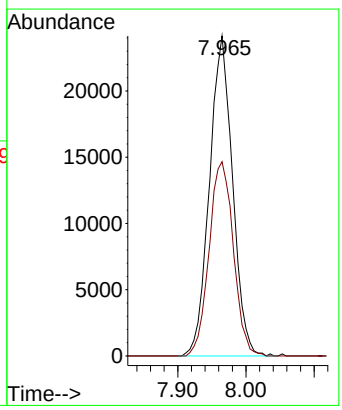


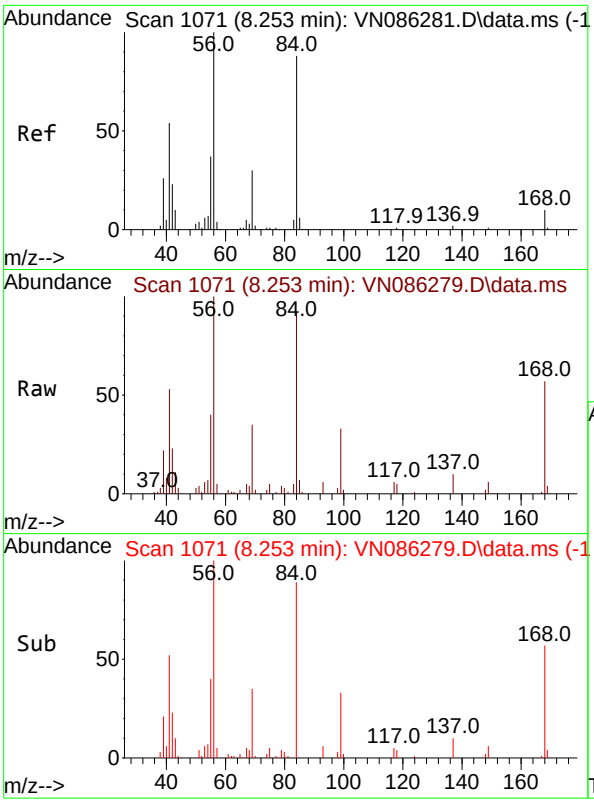


#30
Chloroform
Concen: 9.511 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 83 Resp: 56896

Ion	Ratio	Lower	Upper
83	100		
85	60.7	51.5	77.3

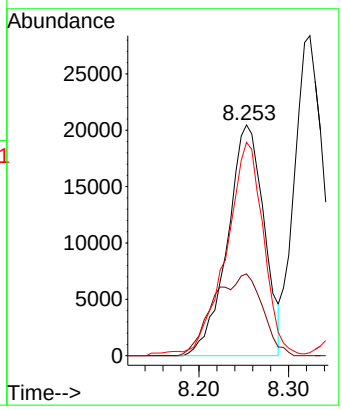




#31
Cyclohexane
Concen: 9.699 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 56 Resp: 5779

Ion	Ratio	Lower	Upper
56	100		
69	35.4	24.2	36.2
84	90.6	70.3	105.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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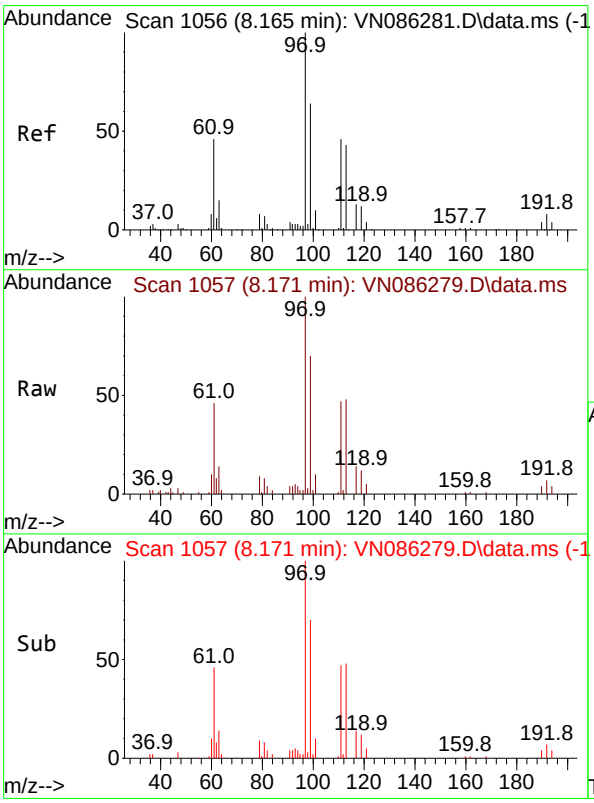
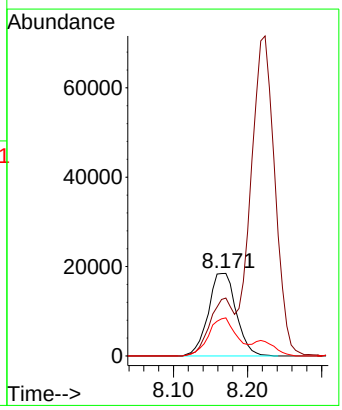
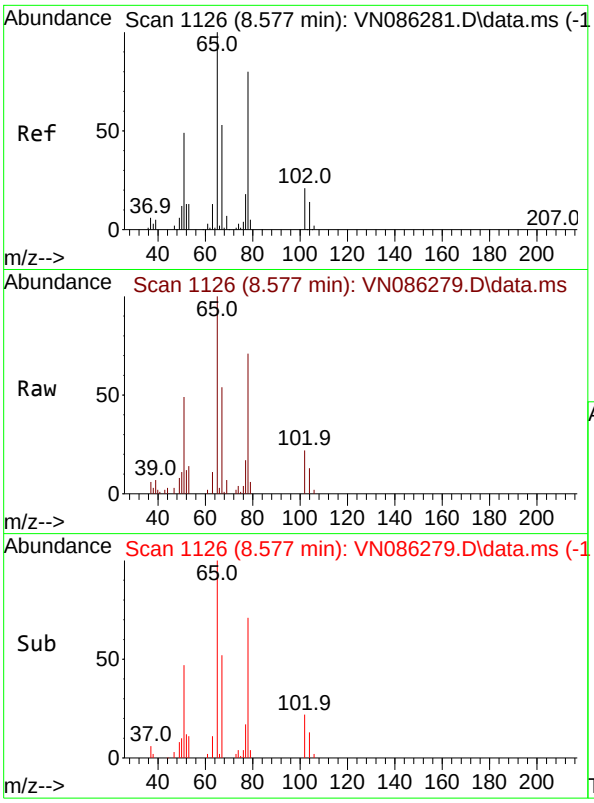


#32
1,1,1-Trichloroethane
Concen: 9.441 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 97 Resp: 48313

Ion	Ratio	Lower	Upper
97	100		
99	58.8	52.7	79.1
61	46.1	39.5	59.3





#33
1,2-Dichloroethane-d4
Concen: 10.272 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 65 Resp: 3777

Ion	Ratio	Lower	Upper
65	100		
67	53.8	0.0	106.0

Instrument :
MSVOA_N
ClientSampleId :
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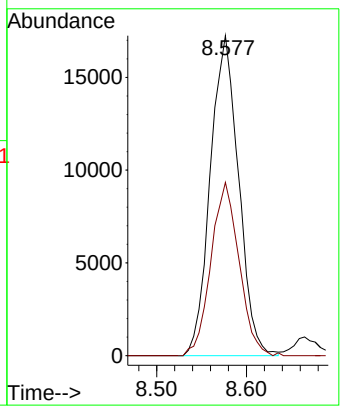
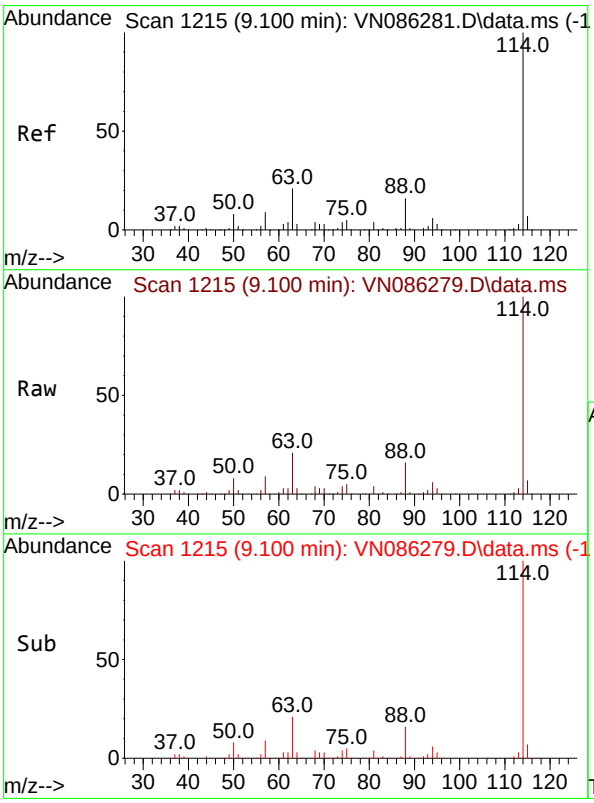
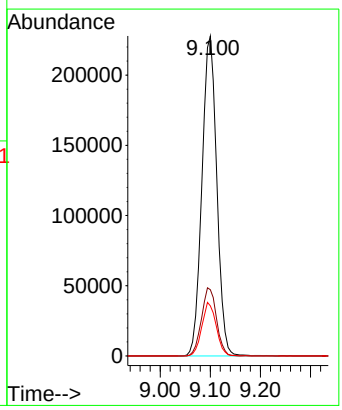


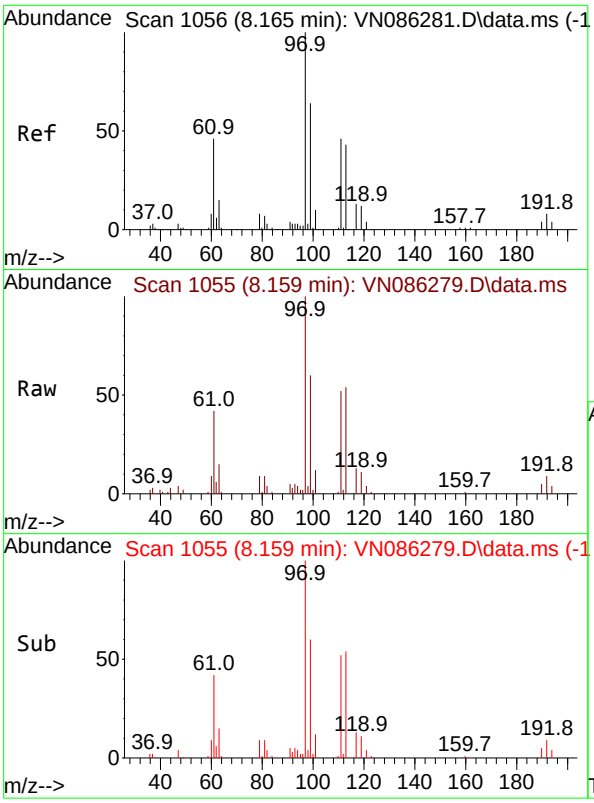


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:114 Resp: 468933

Ion	Ratio	Lower	Upper
114	100		
63	20.7	0.0	42.6
88	15.7	0.0	31.8

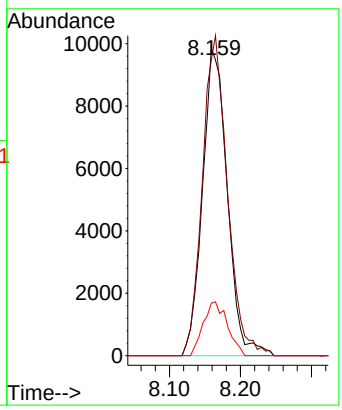




#35
Dibromofluoromethane
Concen: 10.985 ug/l
RT: 8.159 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:113 Resp: 2390

Ion	Ratio	Lower	Upper
113	100		
111	105.1	83.4	125.0
192	17.0	13.7	20.5



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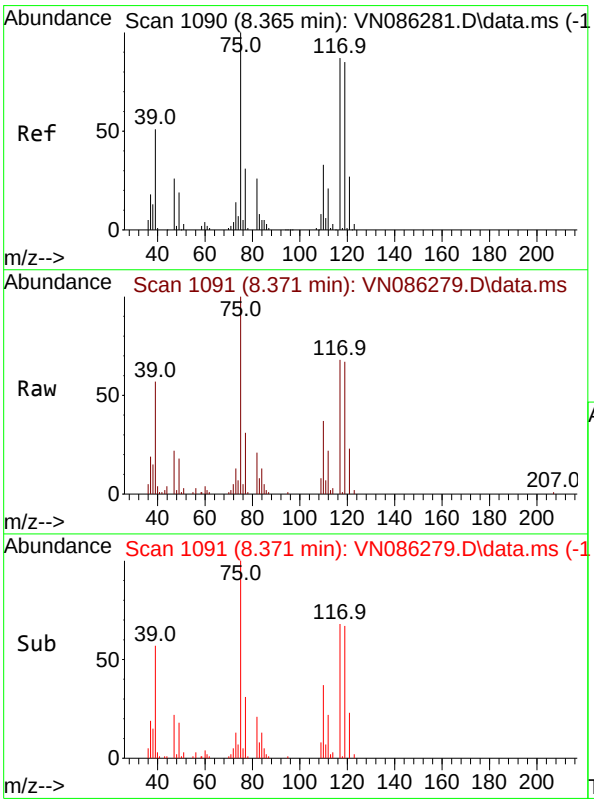
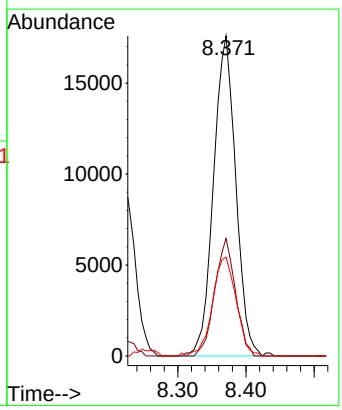
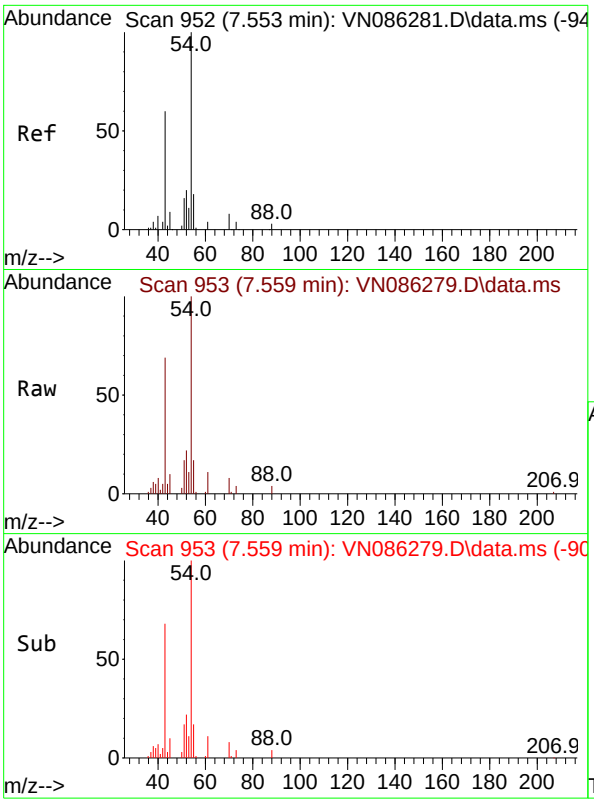


#36
1,1-Dichloropropene
Concen: 9.202 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 75 Resp: 39999

Ion	Ratio	Lower	Upper
75	100		
110	34.3	16.8	50.4
77	33.0	24.9	37.3





#37
Ethyl Acetate
Concen: 9.385 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 4295

Ion	Ratio	Lower	Upper
43	100		
61	14.6	11.1	16.7
70	11.3	9.2	13.8

Instrument :
MSVOA_N
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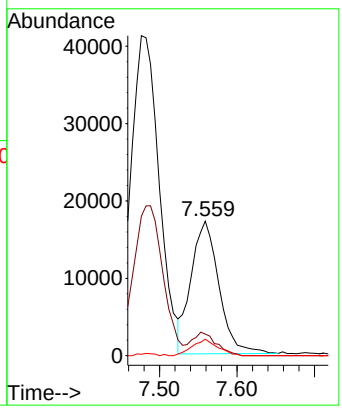
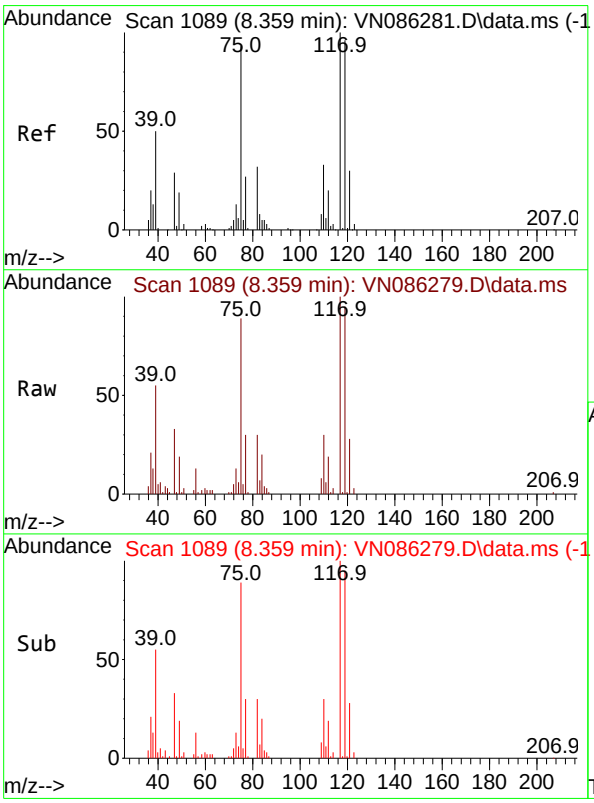
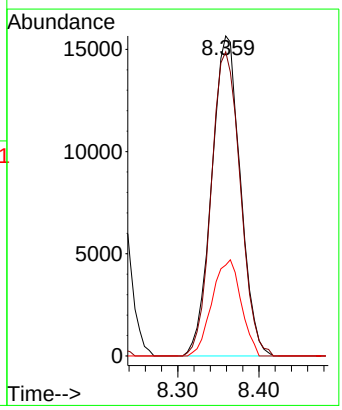


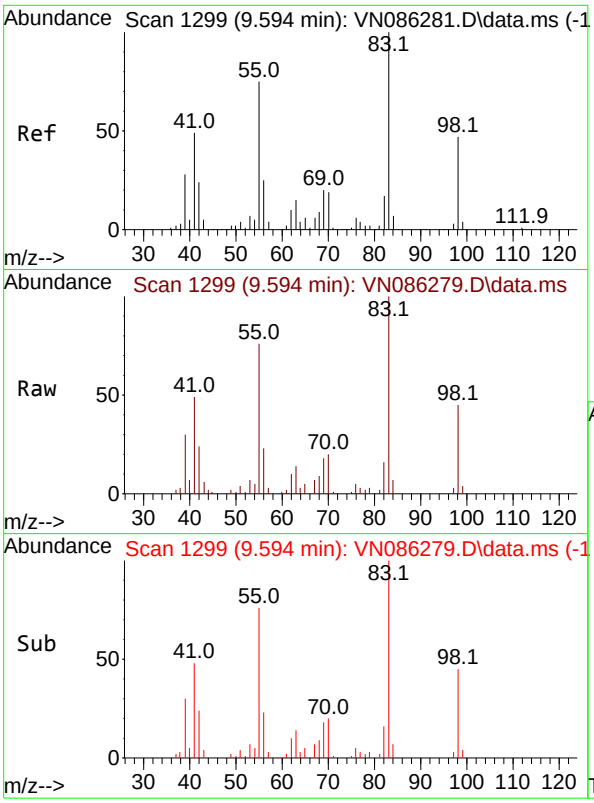


#38
Carbon Tetrachloride
Concen: 9.263 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:117 Resp: 38345

Ion	Ratio	Lower	Upper
117	100		
119	95.1	76.8	115.2
121	28.4	23.8	35.8

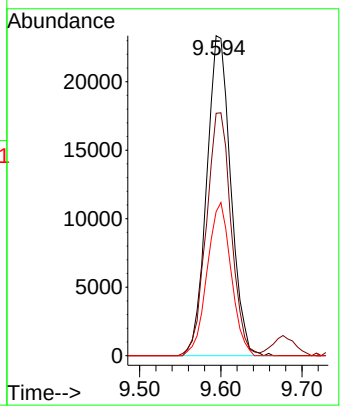




#39
Methylcyclohexane
Concen: 9.305 ug/l
RT: 9.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 83 Resp: 4807

Ion	Ratio	Lower	Upper
83	100		
55	75.8	59.8	89.8
98	45.0	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
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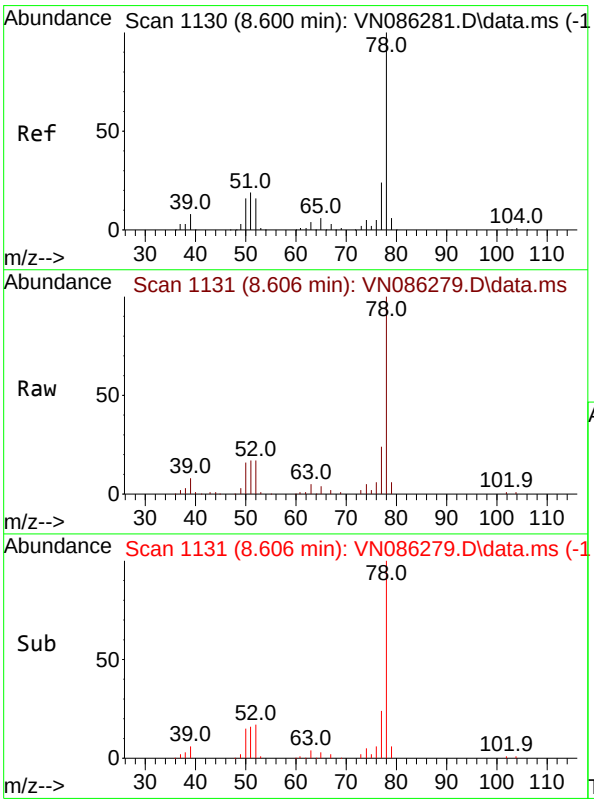
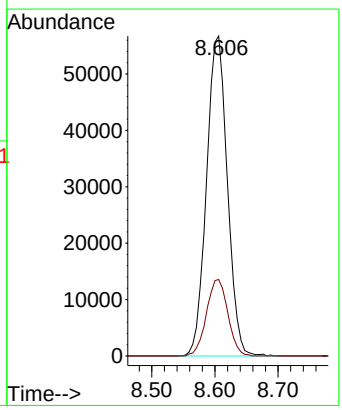
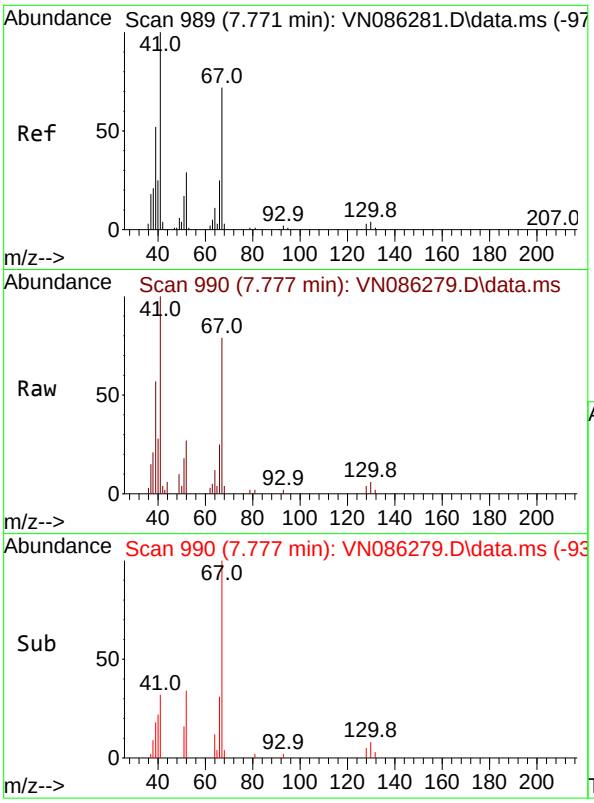


#40
Benzene
Concen: 9.352 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 78 Resp: 130256

Ion	Ratio	Lower	Upper
78	100		
77	23.9	19.4	29.2

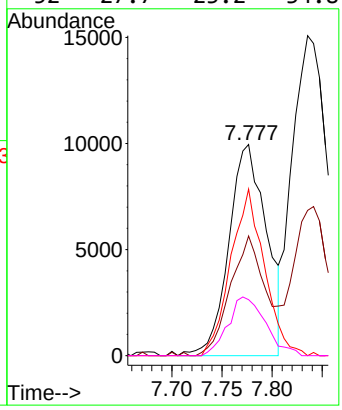




#41
Methacrylonitrile
Concen: 9.824 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 41 Resp: 2605

Ion	Ratio	Lower	Upper
41	100		
39	53.2	43.0	64.4
67	70.7	58.8	88.2
52	27.7	23.2	34.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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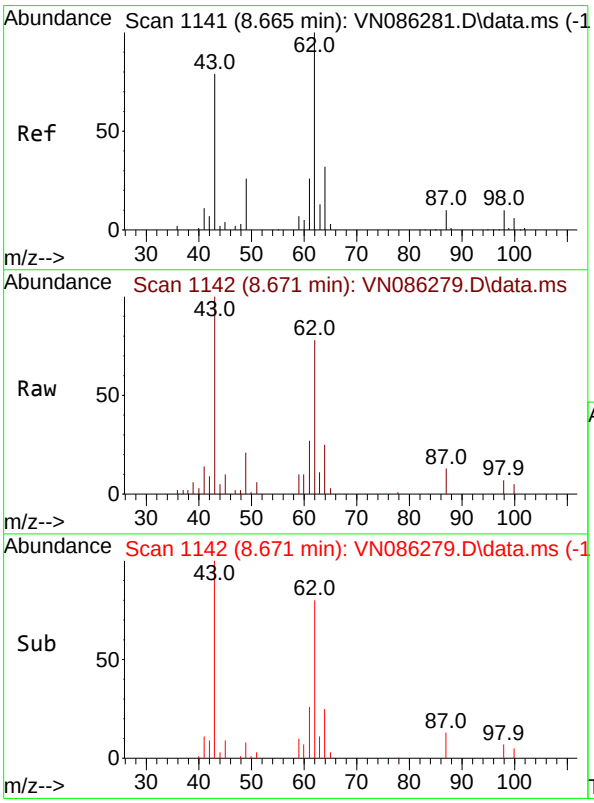
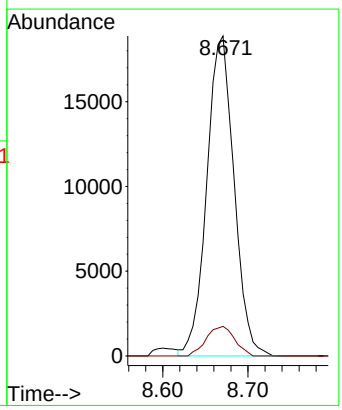
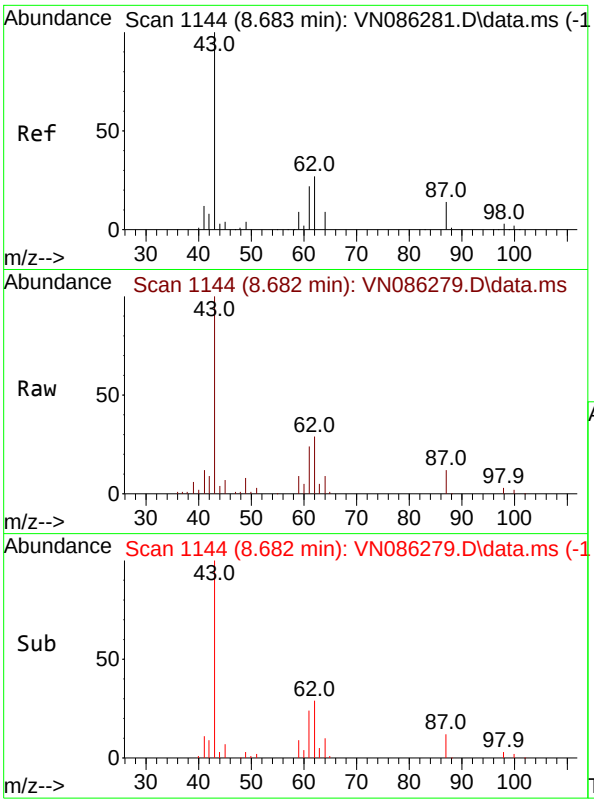


#42
1,2-Dichloroethane
Concen: 9.452 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 62 Resp: 41980

Ion	Ratio	Lower	Upper
62	100		
98	9.6	0.0	19.2





#43
Isopropyl Acetate
Concen: 9.381 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 9091

Ion	Ratio	Lower	Upper
43	100		
61	22.5	20.5	30.7
87	11.4	10.5	15.7

Instrument :
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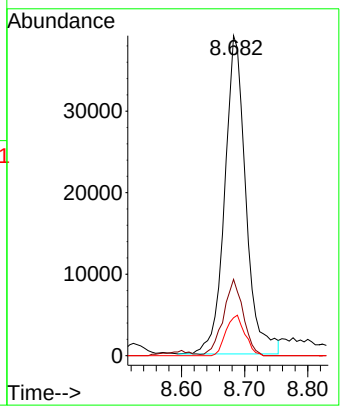
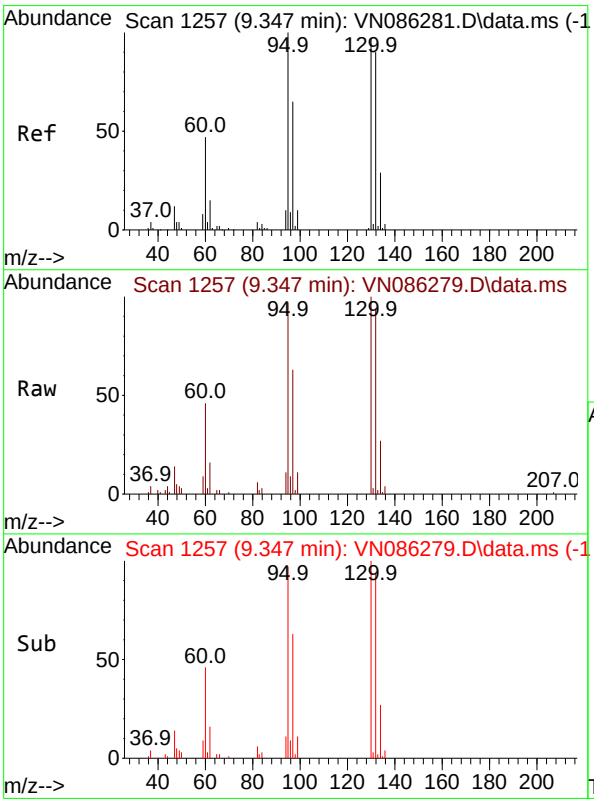
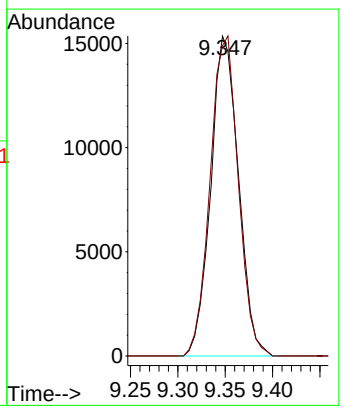


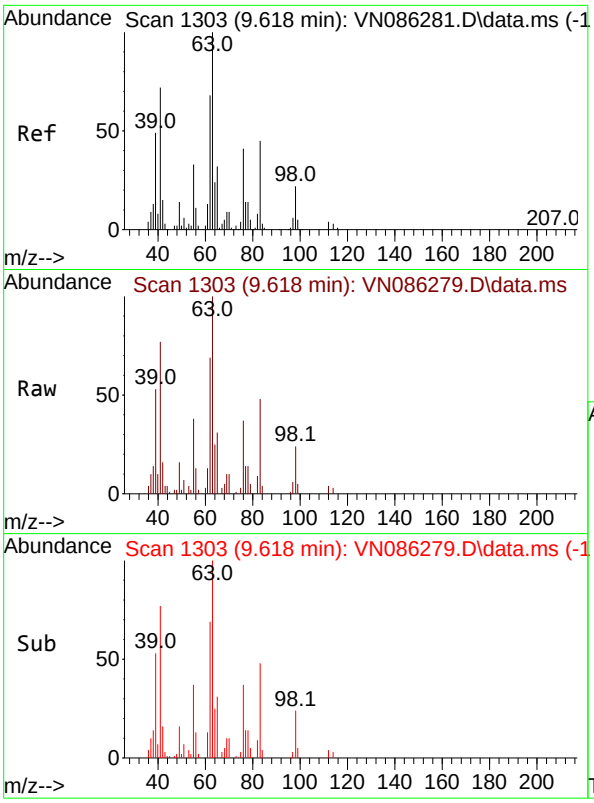


#44
Trichloroethene
Concen: 9.476 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:130 Resp: 31281

Ion	Ratio	Lower	Upper
130	100		
95	97.0	0.0	207.2





#45
1,2-Dichloropropane
Concen: 9.759 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 63 Resp: 3327

Ion	Ratio	Lower	Upper
63	100		
65	30.9	25.4	38.2

Instrument :
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ClientSampleId :
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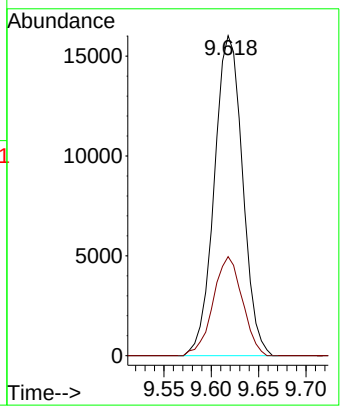
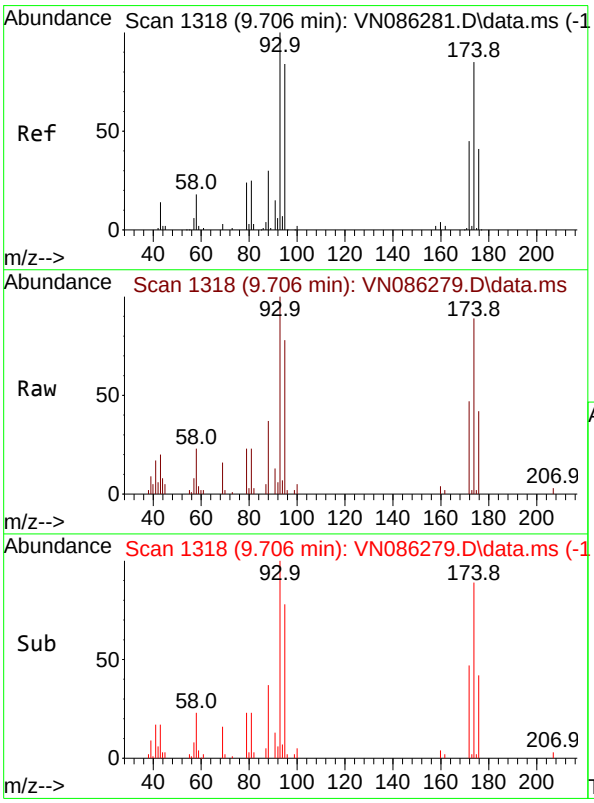
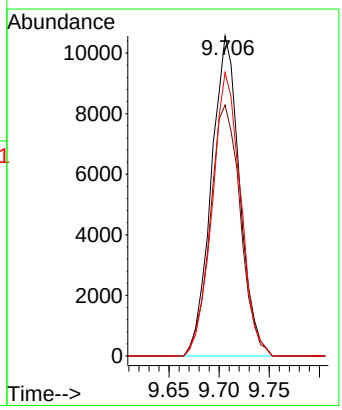


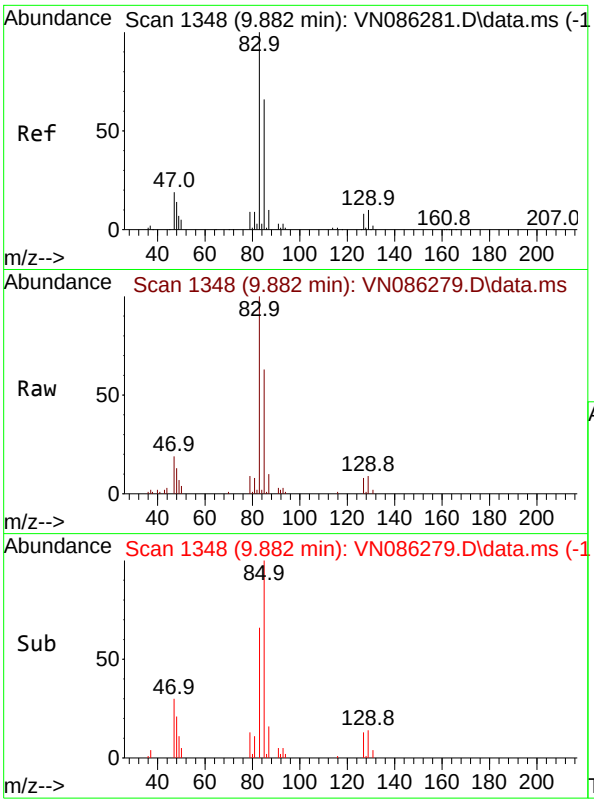


#46
Dibromomethane
Concen: 9.519 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 93 Resp: 20677

Ion	Ratio	Lower	Upper
93	100		
95	83.9	66.2	99.4
174	89.0	67.8	101.6

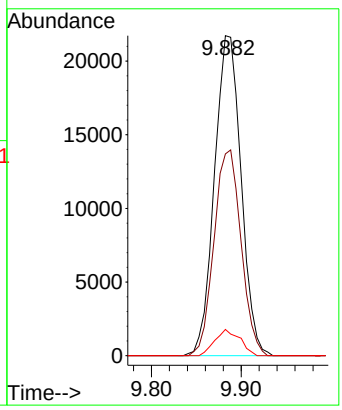




#47
Bromodichloromethane
Concen: 9.543 ug/l
RT: 9.882 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 83 Resp: 4477

Ion	Ratio	Lower	Upper
83	100		
85	63.0	52.6	78.8
127	8.2	6.1	9.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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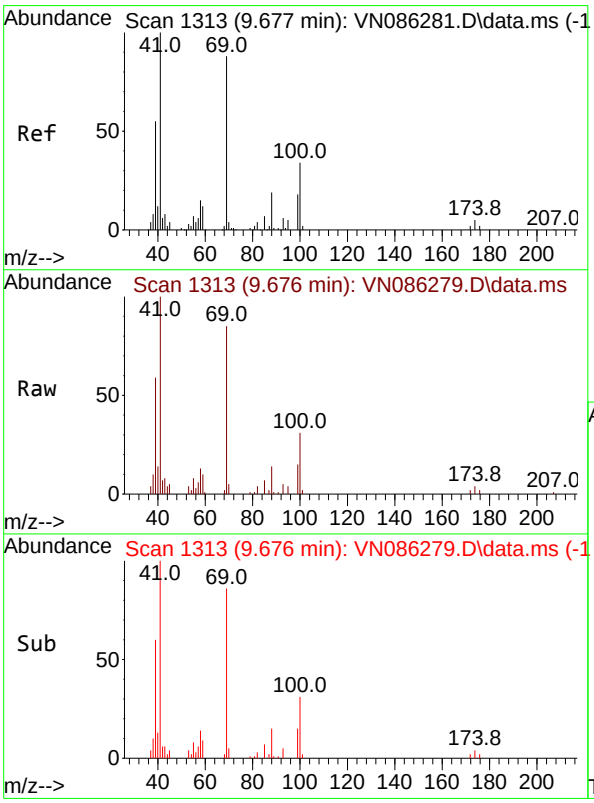
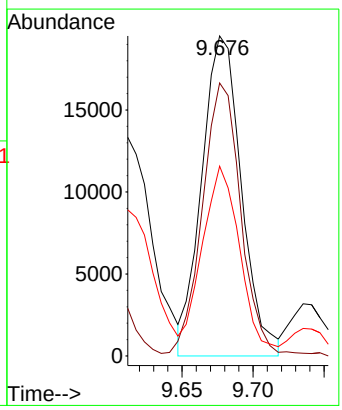
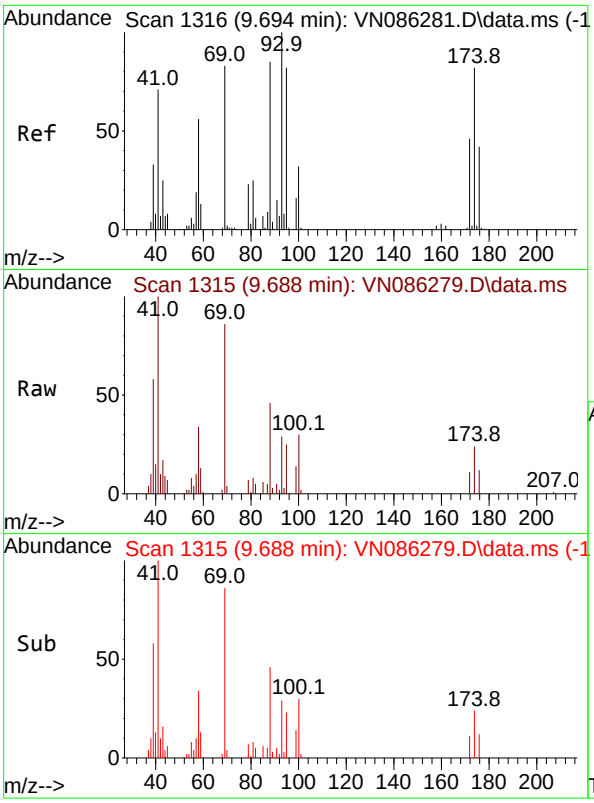


#48
Methyl methacrylate
Concen: 9.430 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 41 Resp: 37900

Ion	Ratio	Lower	Upper
41	100		
69	83.3	68.2	102.2
39	57.1	45.2	67.8

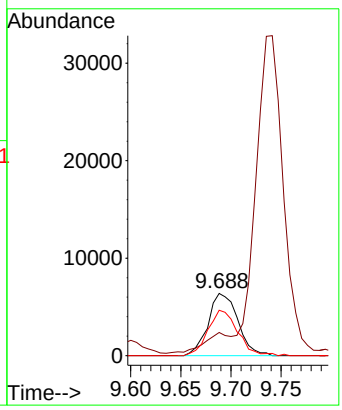




#49
1,4-Dioxane
Concen: 193.063 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 88 Resp: 1319

Ion	Ratio	Lower	Upper
88	100		
43	29.4	23.8	35.8
58	73.0	57.4	86.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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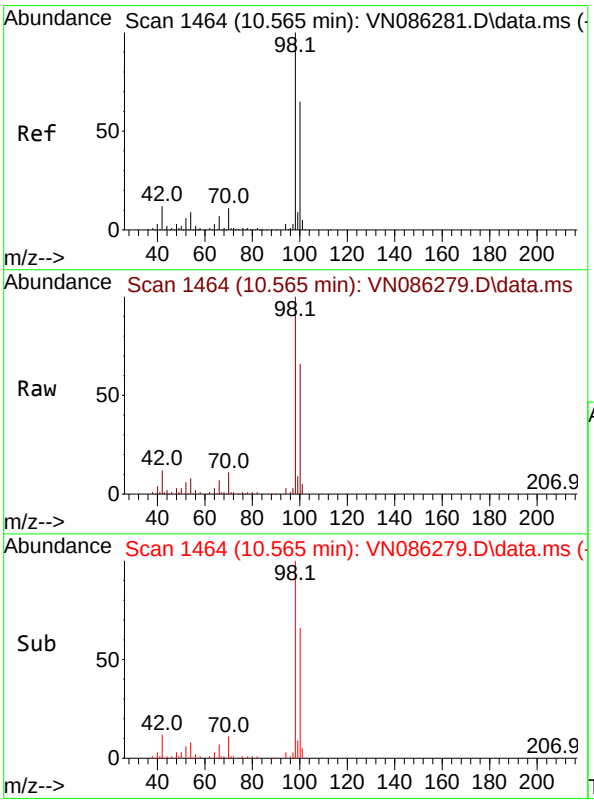
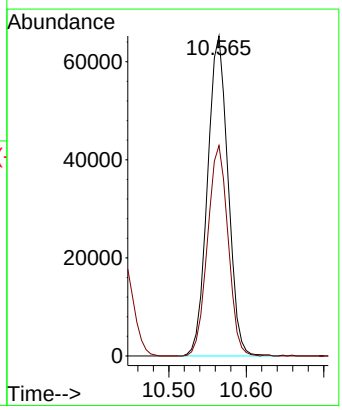
Supervised By :Semsettin Yesilyurt 04/16/2025

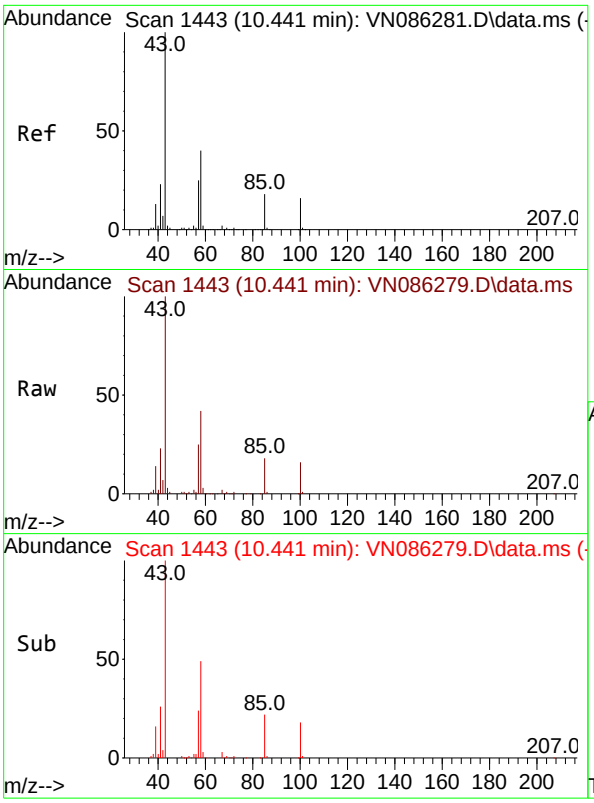


#50
Toluene-d8
Concen: 10.327 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 98 Resp: 120121

Ion	Ratio	Lower	Upper
98	100		
100	65.7	52.5	78.7





#51
4-Methyl-2-Pentanone
Concen: 47.916 ug/l
RT: 10.441 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 22454

Ion	Ratio	Lower	Upper
43	100		
58	41.3	32.2	48.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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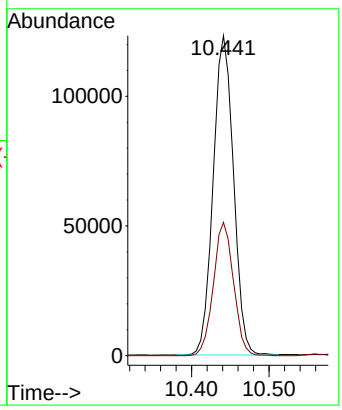
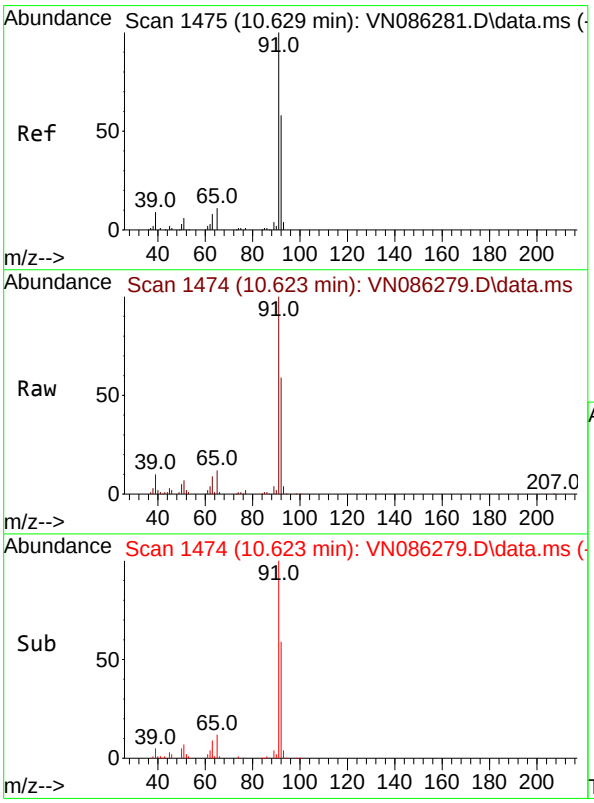
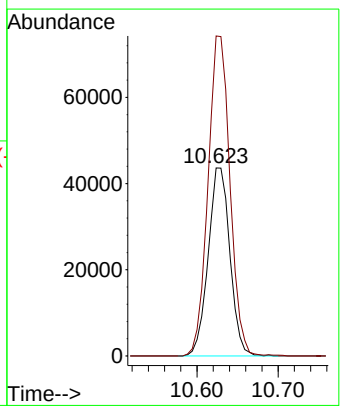


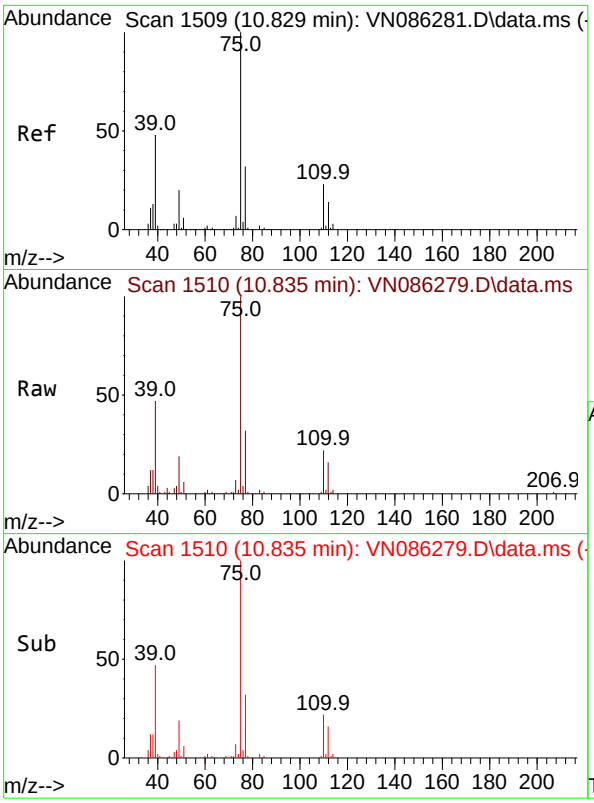


#52
Toluene
Concen: 9.330 ug/l
RT: 10.623 min Scan# 1474
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 92 Resp: 81084

Ion	Ratio	Lower	Upper
92	100		
91	172.3	137.3	205.9





#53
t-1,3-Dichloropropene
Concen: 9.454 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 75 Resp: 4951

Ion	Ratio	Lower	Upper
75	100		
77	31.9	25.4	38.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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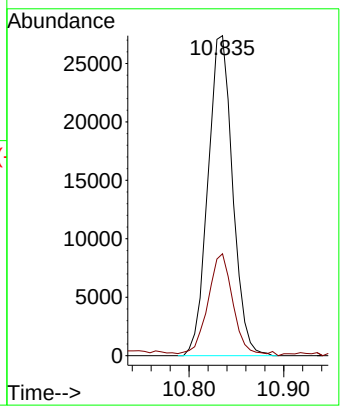
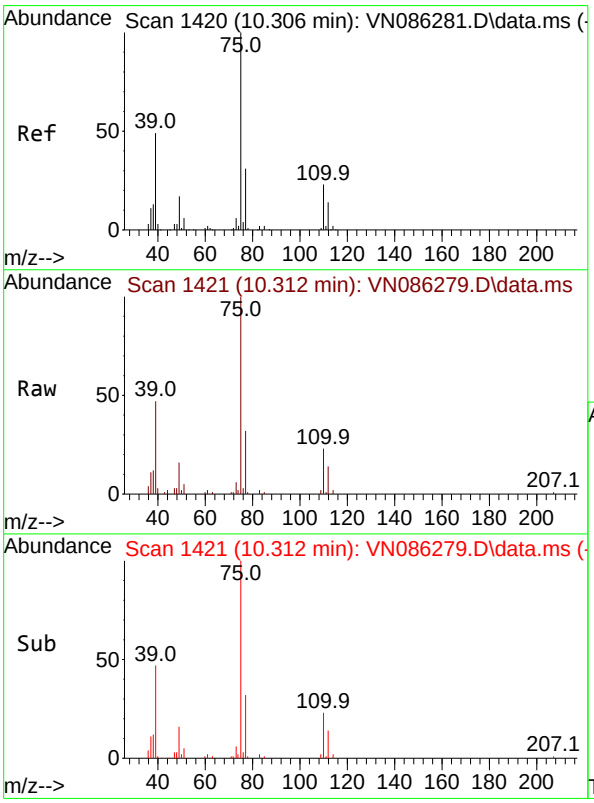
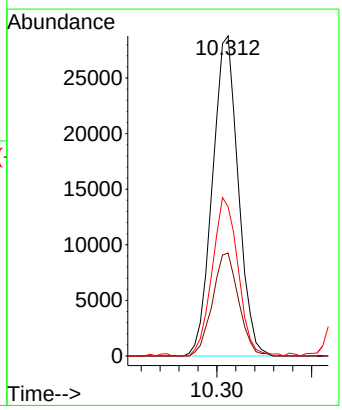


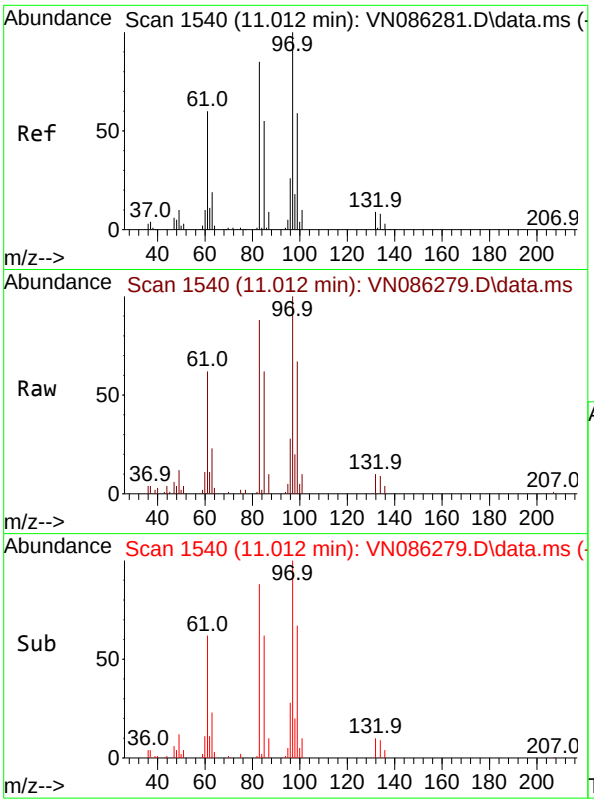


#54
cis-1,3-Dichloropropene
Concen: 9.459 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 75 Resp: 54411

Ion	Ratio	Lower	Upper
75	100		
77	32.1	25.2	37.8
39	46.6	39.3	58.9

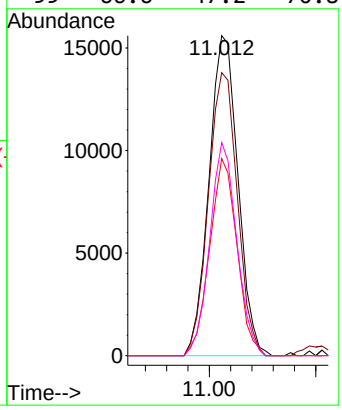




#55
1,1,2-Trichloroethane
Concen: 9.439 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 97 Resp: 2951

Ion	Ratio	Lower	Upper
97	100		
83	88.4	68.4	102.6
85	61.6	43.9	65.9
99	66.6	47.2	70.8



Instrument :
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ClientSampleId :
VSTDICC010

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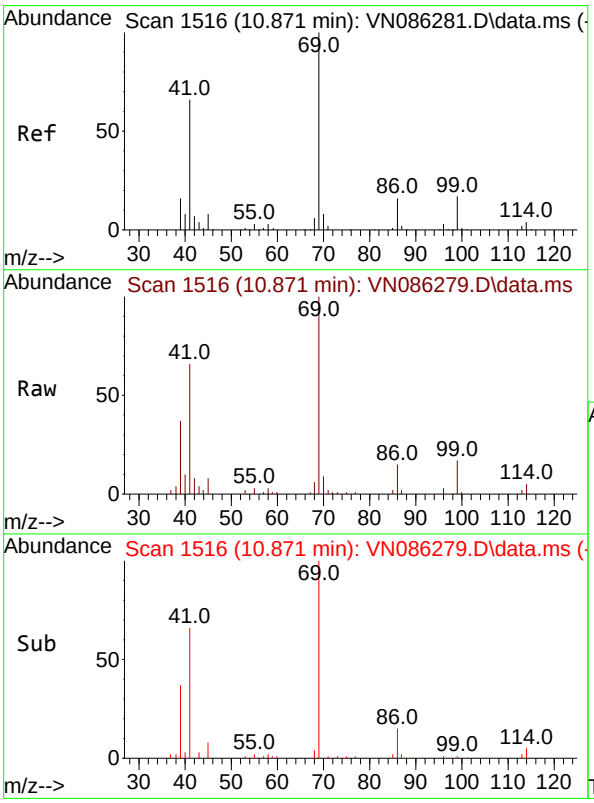
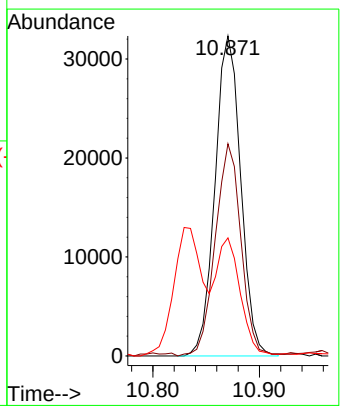
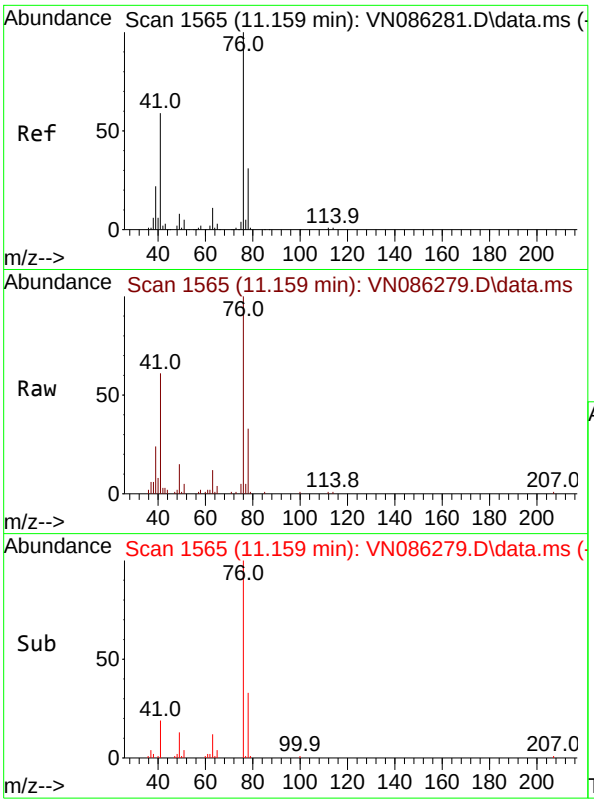


#56
Ethyl methacrylate
Concen: 9.431 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 69 Resp: 54203

Ion	Ratio	Lower	Upper
69	100		
41	66.4	51.7	77.5
39	34.5	26.3	39.5

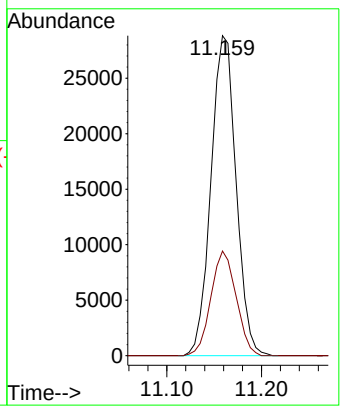




#57
1,3-Dichloropropane
Concen: 9.581 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 76 Resp: 5315

Ion	Ratio	Lower	Upper
76	100		
78	32.8	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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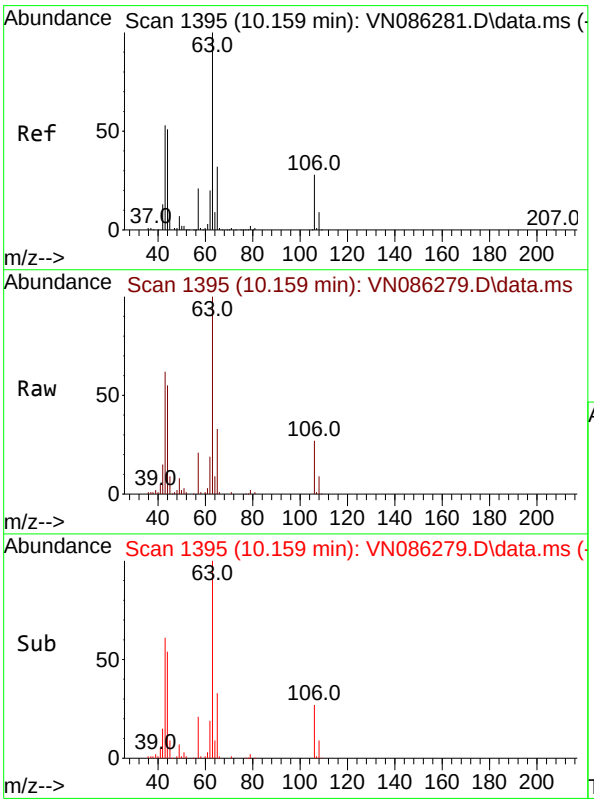
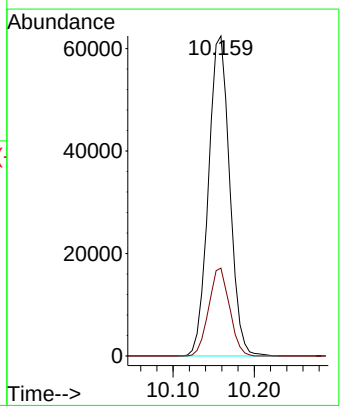
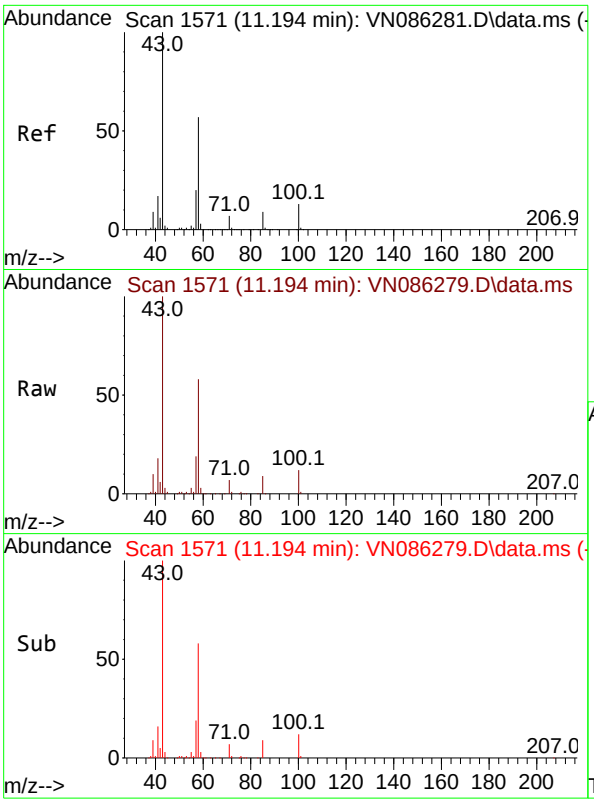


#58
2-Chloroethyl Vinyl ether
Concen: 41.526 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 63 Resp: 113279

Ion	Ratio	Lower	Upper
63	100		
106	26.9	22.2	33.2





#59
2-Hexanone
Concen: 47.941 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 16664

Ion	Ratio	Lower	Upper
43	100		
58	56.8	28.3	85.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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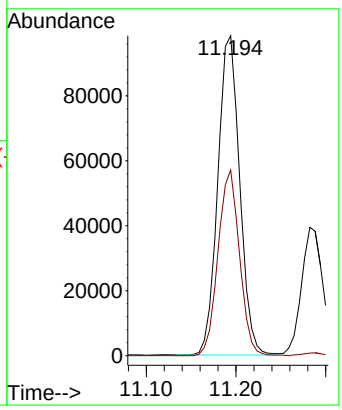
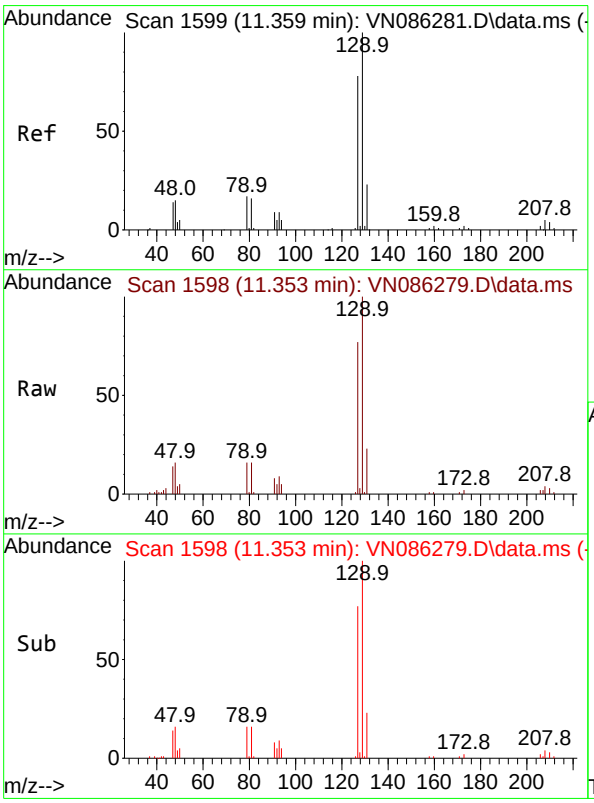
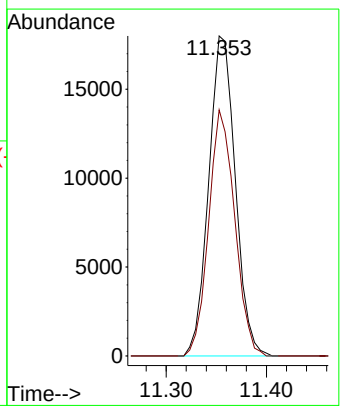


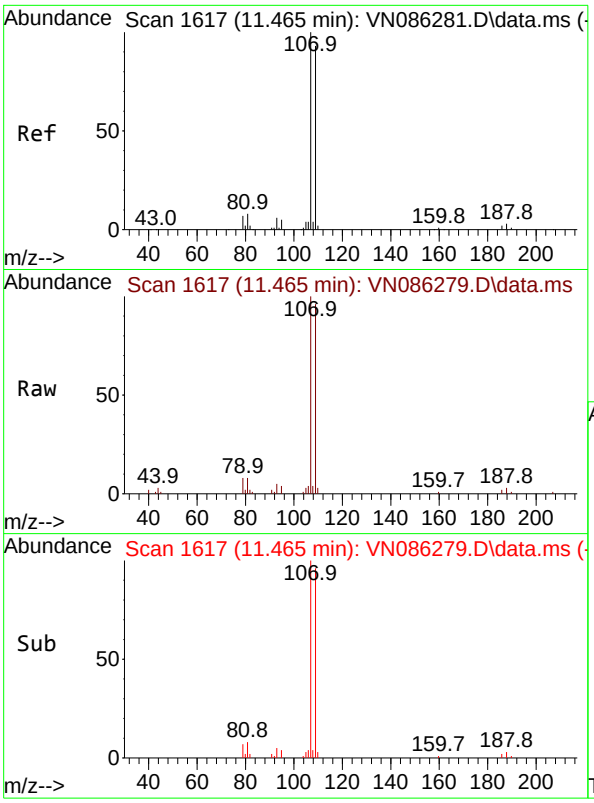


#60
Dibromochloromethane
Concen: 9.668 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:129 Resp: 33195

Ion	Ratio	Lower	Upper
129	100		
127	75.2	38.7	116.1





#61
1,2-Dibromoethane
Concen: 9.473 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:107 Resp: 2988

Ion	Ratio	Lower	Upper
107	100		
109	93.3	75.4	113.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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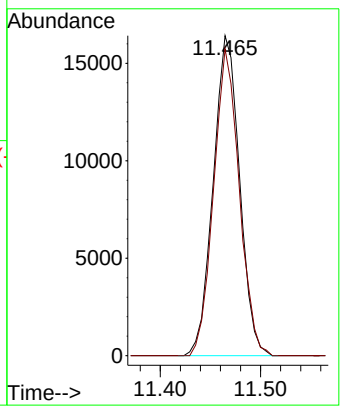
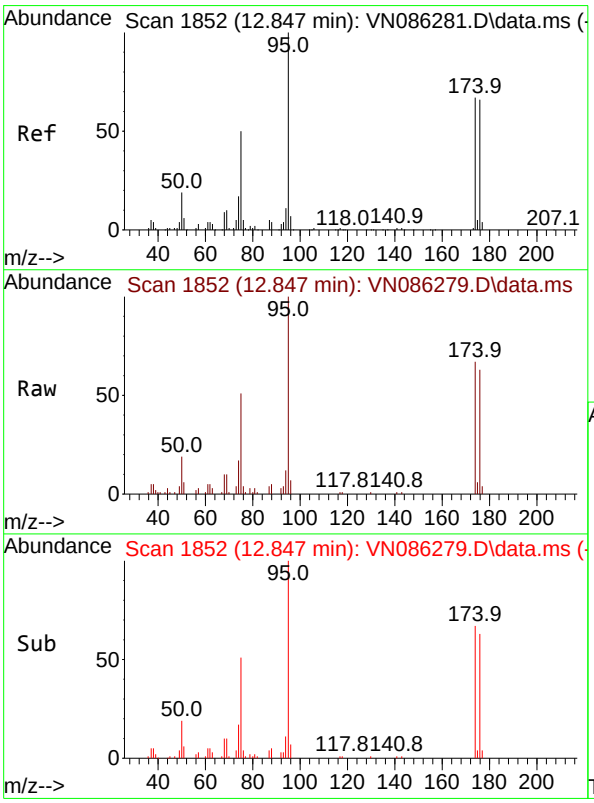
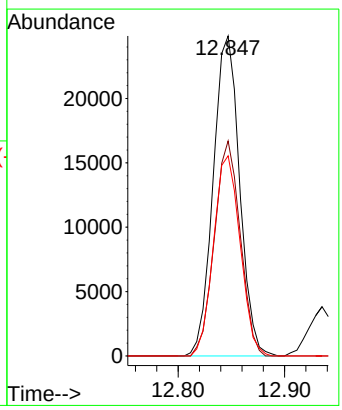


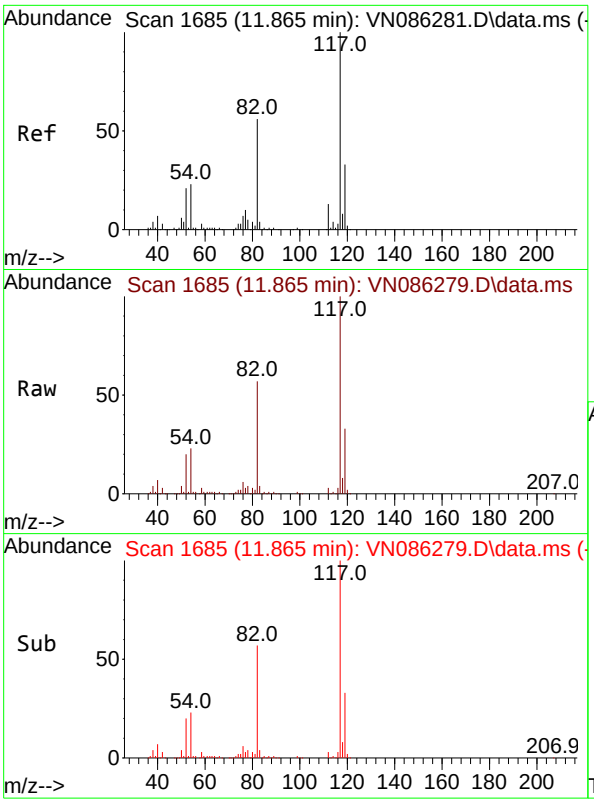


#62
4-Bromofluorobenzene
Concen: 10.086 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 95 Resp: 42791

Ion	Ratio	Lower	Upper
95	100		
174	65.7	0.0	133.4
176	63.0	0.0	129.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:117 Resp: 41100

Ion	Ratio	Lower	Upper
117	100		
82	57.4	44.7	67.1
119	32.6	26.4	39.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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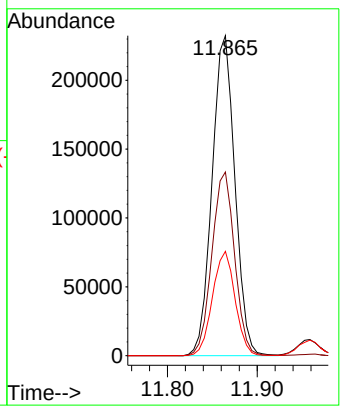
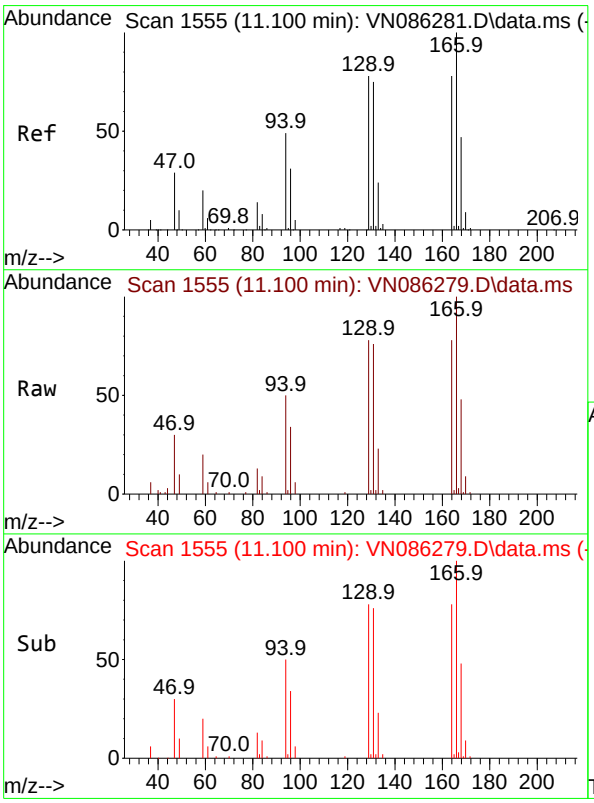
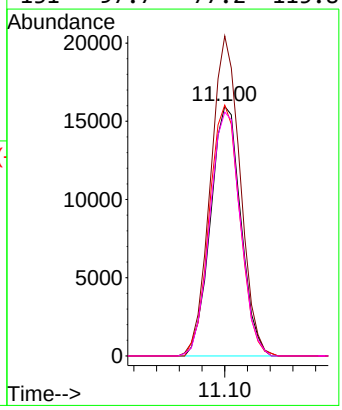


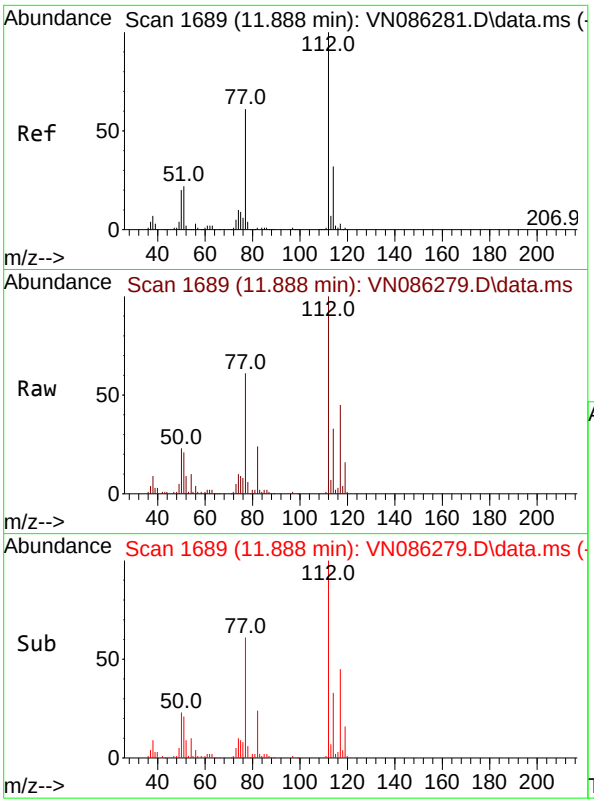


#64
Tetrachloroethene
Concen: 9.321 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:164 Resp: 29467

Ion	Ratio	Lower	Upper
164	100		
166	128.2	103.0	154.4
129	100.5	80.1	120.1
131	97.7	77.2	115.8





#65
Chlorobenzene
Concen: 9.485 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:112 Resp: 8699

Ion	Ratio	Lower	Upper
112	100		
114	32.7	25.4	38.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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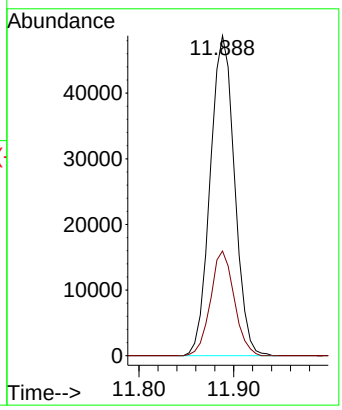
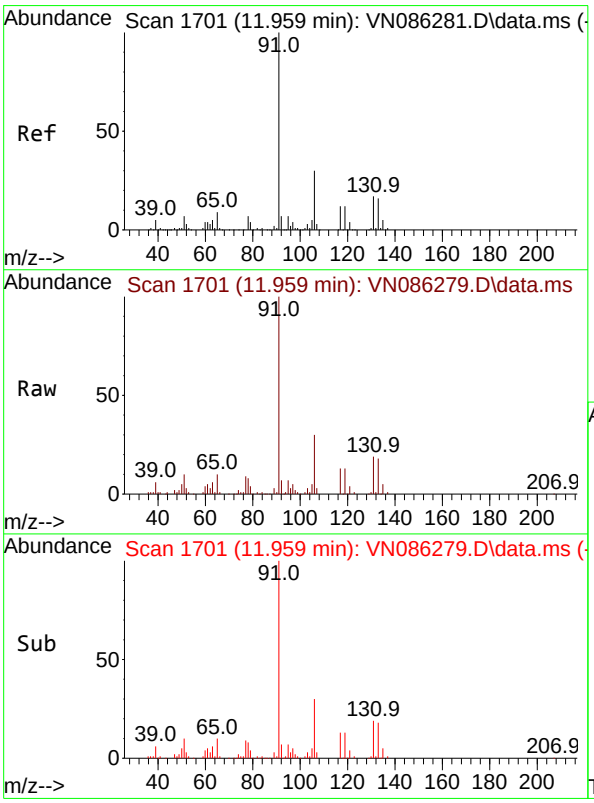
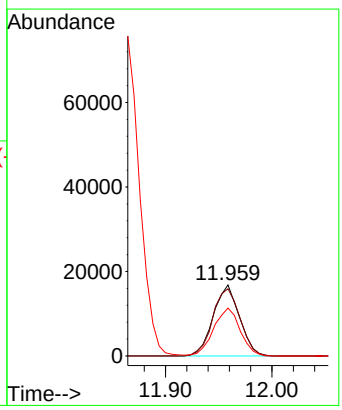


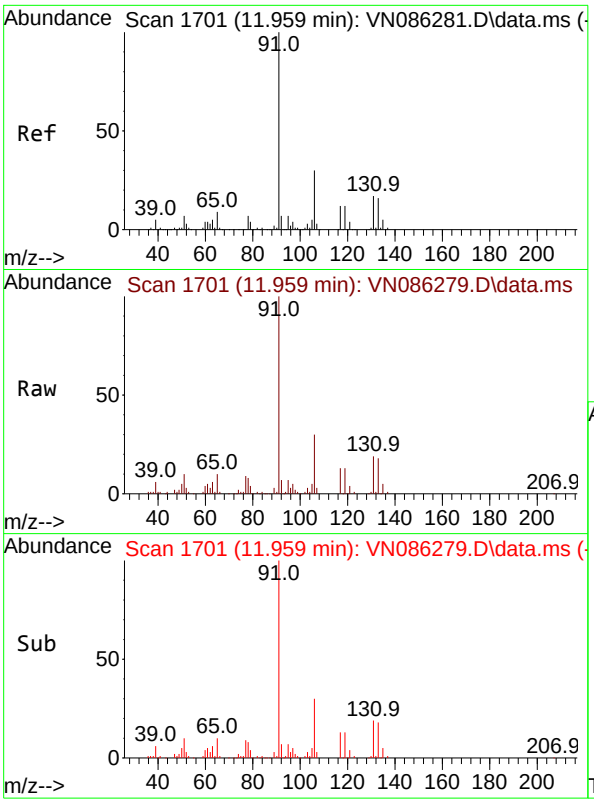


#66
1,1,1,2-Tetrachloroethane
Concen: 9.471 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:131 Resp: 28657

Ion	Ratio	Lower	Upper
131	100		
133	99.0	47.1	141.3
119	68.3	33.8	101.4

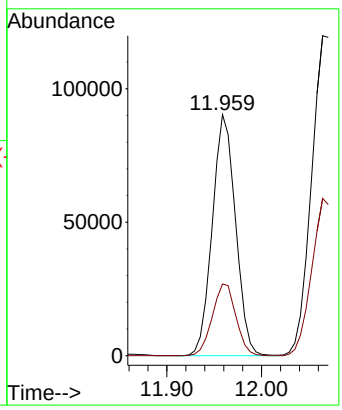




#67
Ethyl Benzene
Concen: 9.300 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 91 Resp: 15392

Ion	Ratio	Lower	Upper
91	100		
106	29.7	24.3	36.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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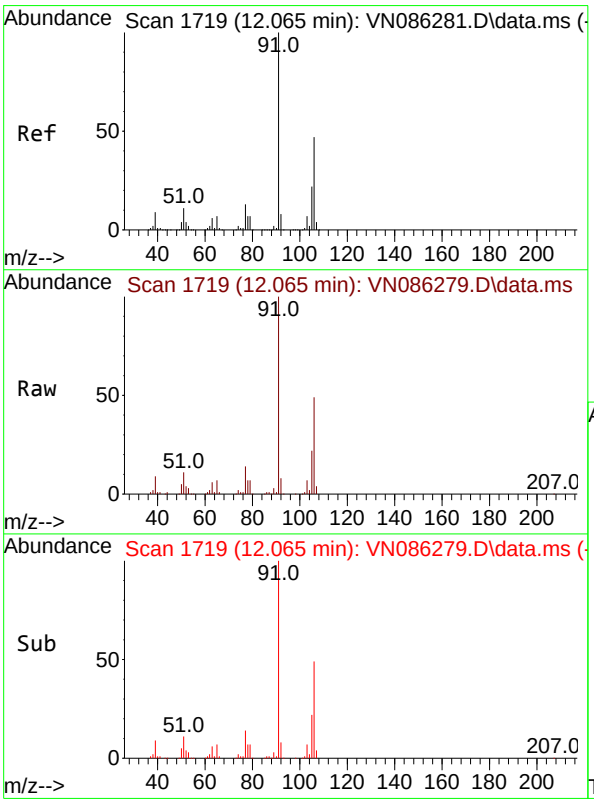
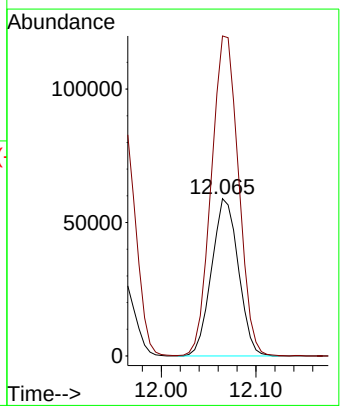
Supervised By :Semsettin Yesilyurt 04/16/2025

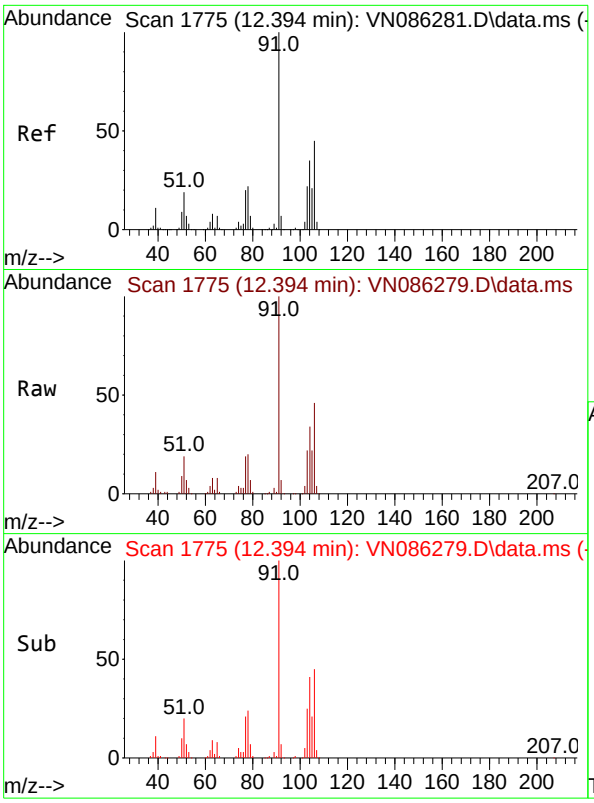


#68
m/p-Xylenes
Concen: 18.692 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:106 Resp: 115926

Ion	Ratio	Lower	Upper
106	100		
91	206.8	166.5	249.7





#69
o-Xylene
Concen: 9.508 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:106 Resp: 5831

Ion	Ratio	Lower	Upper
106	100		
91	218.3	109.7	329.0

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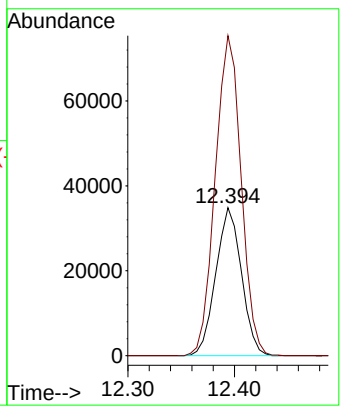
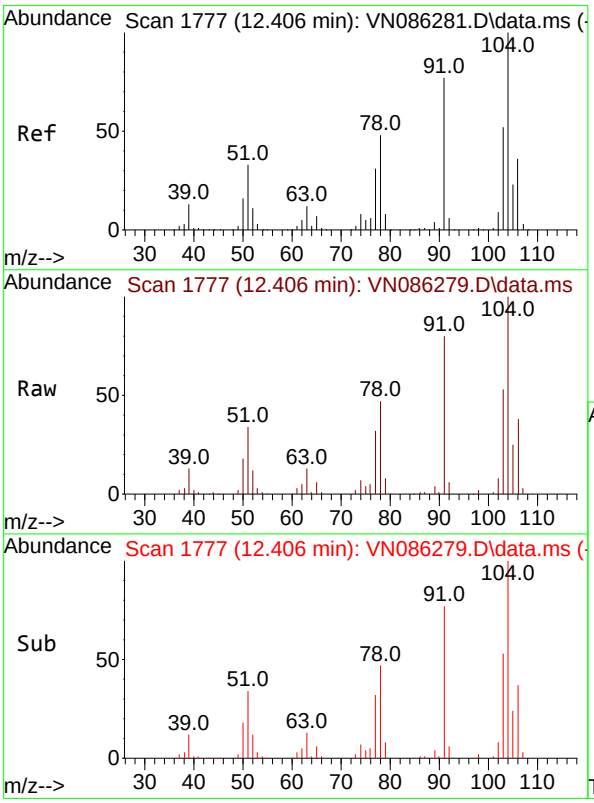
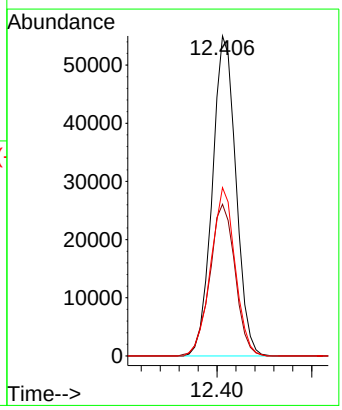


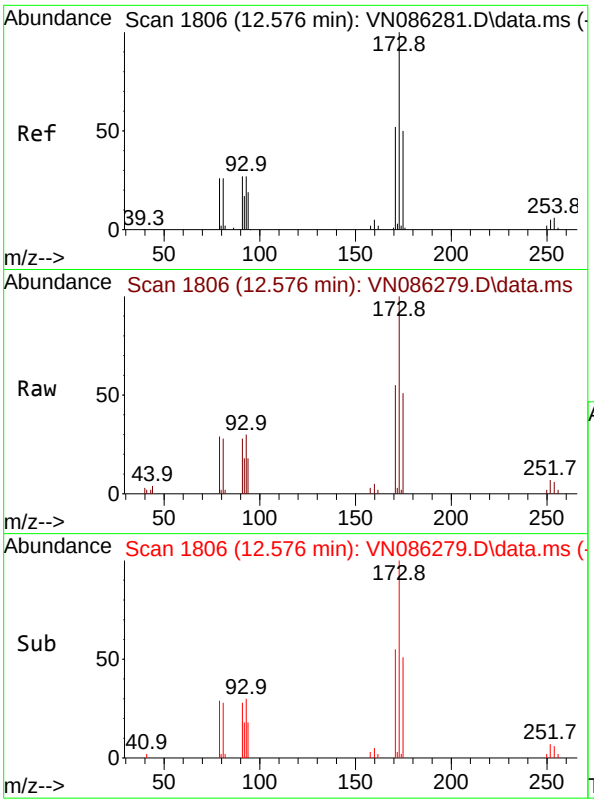


#70
Styrene
Concen: 9.301 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:104 Resp: 95045

Ion	Ratio	Lower	Upper
104	100		
78	50.8	40.6	61.0
103	54.2	43.6	65.4

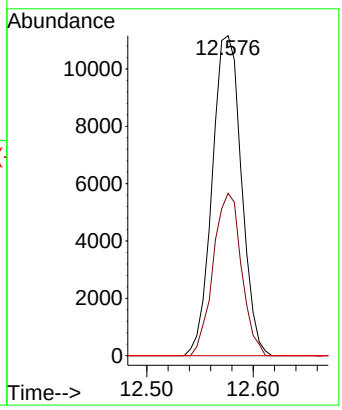




#71
Bromoform
Concen: 9.323 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:173 Resp: 2124

Ion	Ratio	Lower	Upper
173	100		
175	49.2	24.6	73.6
254	0.0	0.0	0.0



Instrument :
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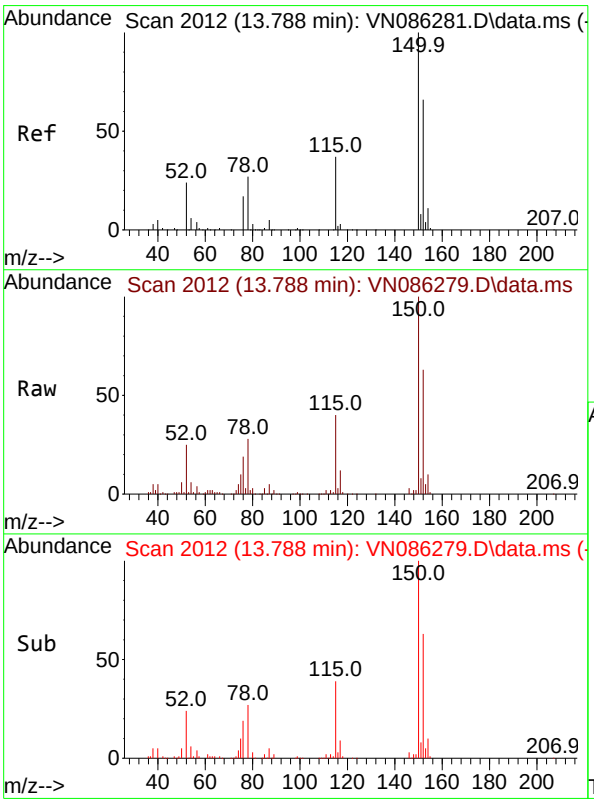
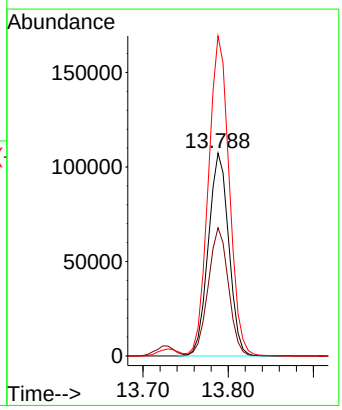
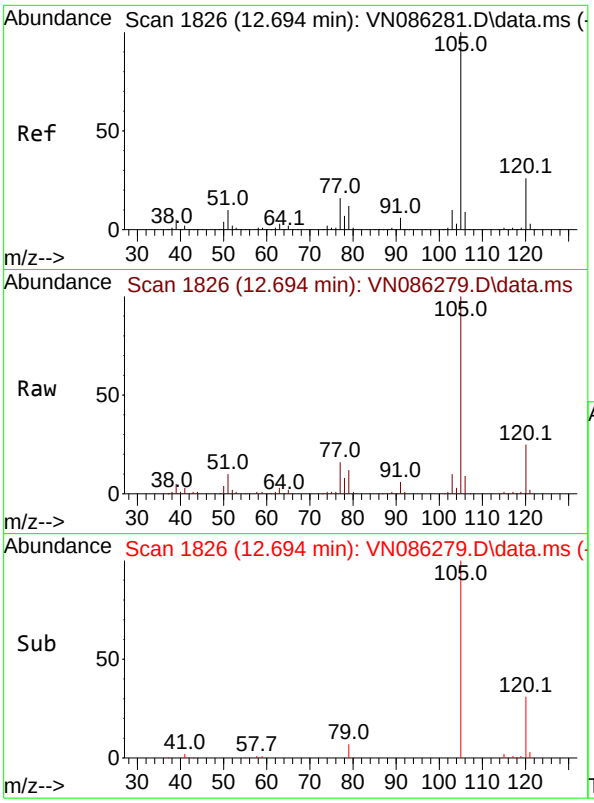


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:152 Resp: 178484

Ion	Ratio	Lower	Upper
152	100		
115	62.7	31.9	95.9
150	160.9	0.0	352.0





#73
Isopropylbenzene
Concen: 9.757 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:105 Resp: 14246

Ion	Ratio	Lower	Upper
105	100		
120	26.2	13.1	39.3

Instrument :
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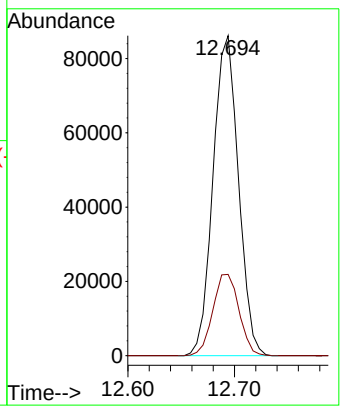
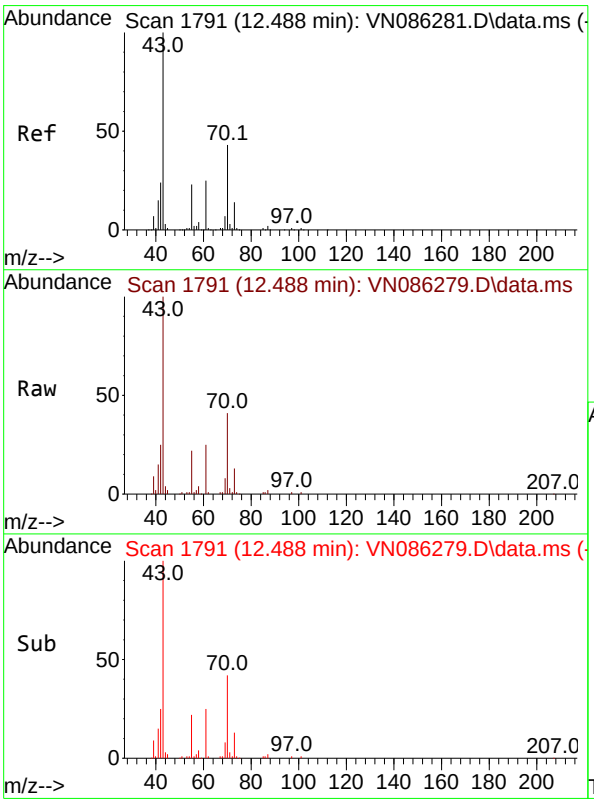
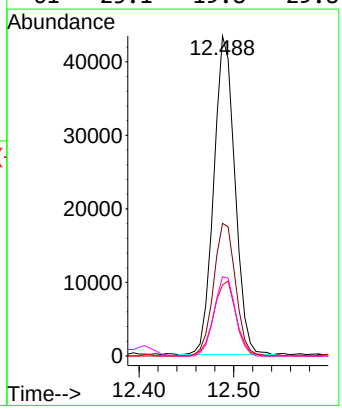


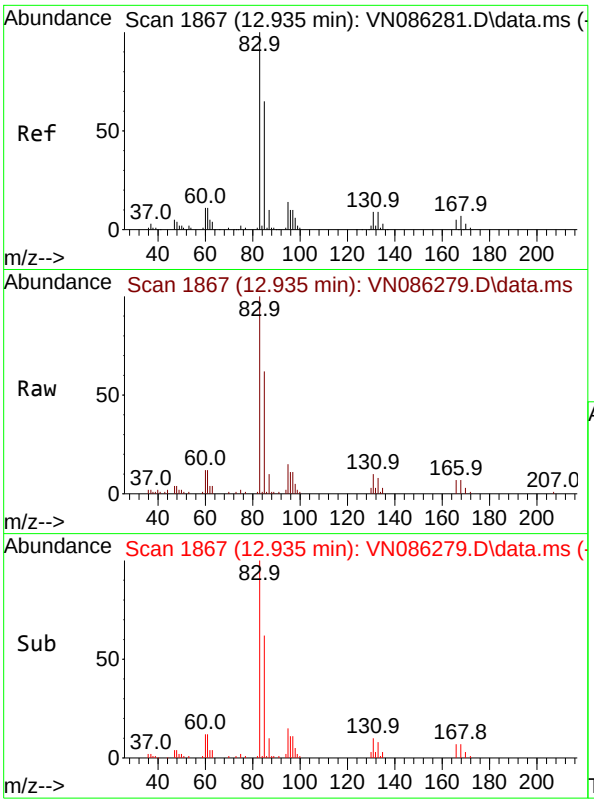


#74
N-amyl acetate
Concen: 9.228 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 43 Resp: 67074

Ion	Ratio	Lower	Upper
43	100		
70	43.2	35.0	52.4
55	25.2	19.0	28.4
61	25.1	19.8	29.8





#75
1,1,2,2-Tetrachloroethane
Concen: 10.045 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 83 Resp: 4216

Ion	Ratio	Lower	Upper
83	100		
131	9.3	4.7	14.1
85	65.2	32.7	98.1

Instrument :
MSVOA_N
ClientSampleId :
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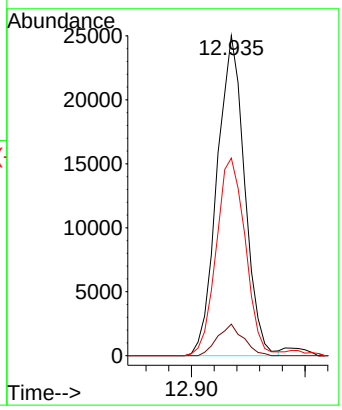
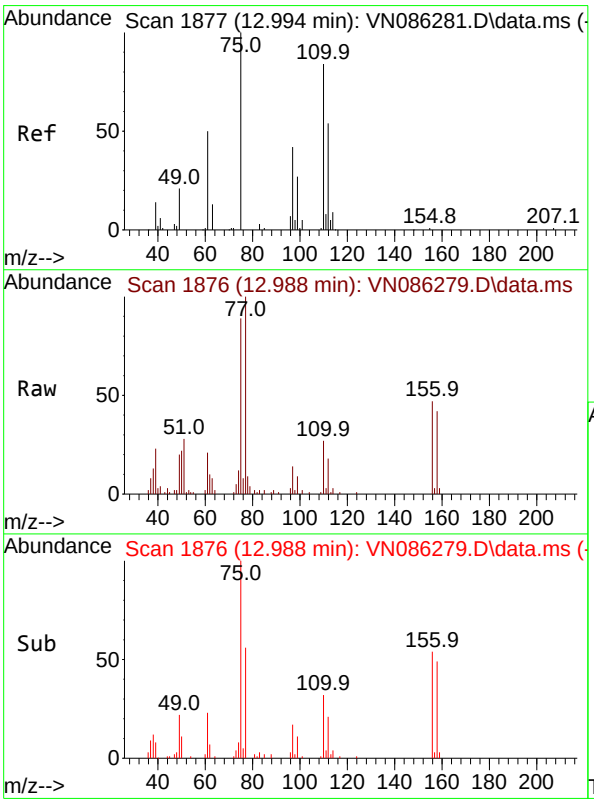
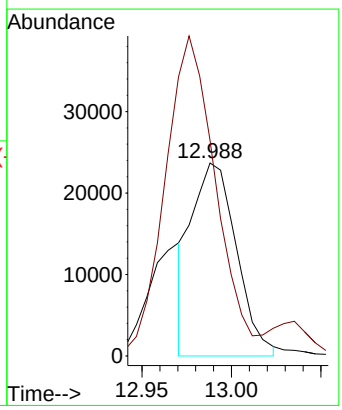


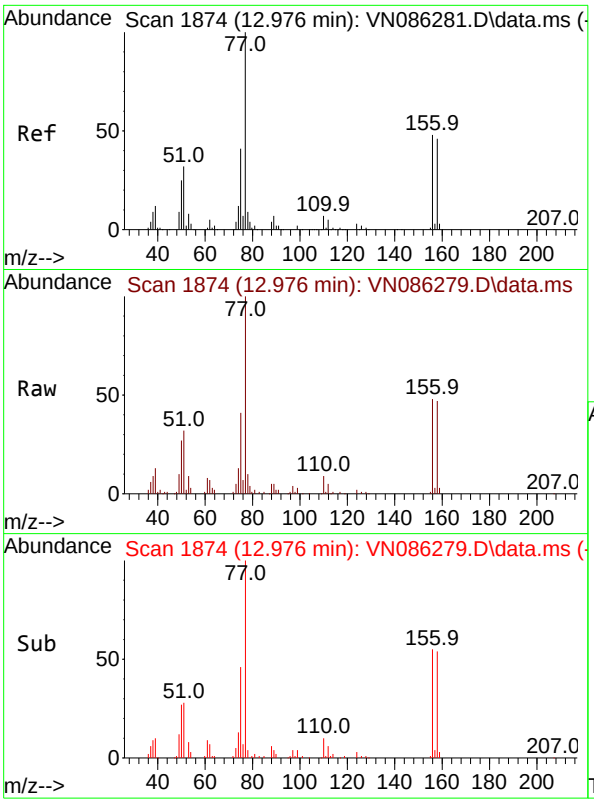


#76
1,2,3-Trichloropropane
Concen: 9.813 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 75 Resp: 41148

Ion	Ratio	Lower	Upper
75	100		
77	189.0	98.8	296.4





#77
Bromobenzene
Concen: 9.986 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:156 Resp: 3230

Ion	Ratio	Lower	Upper
156	100		
77	240.7	121.1	363.1
158	97.8	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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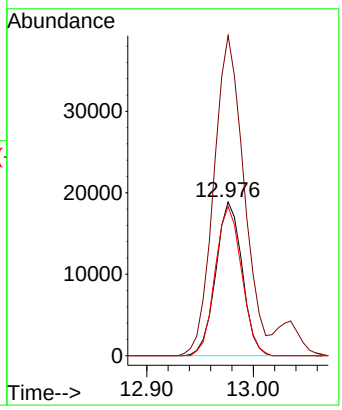
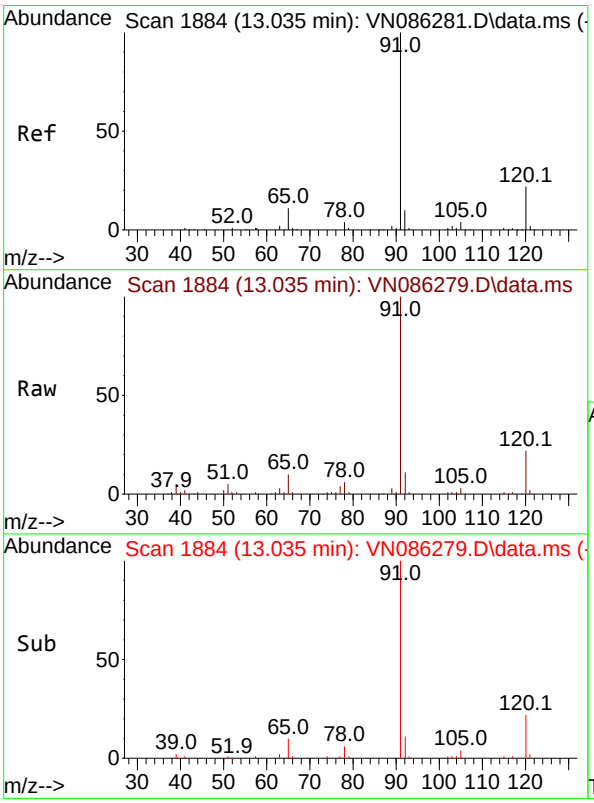
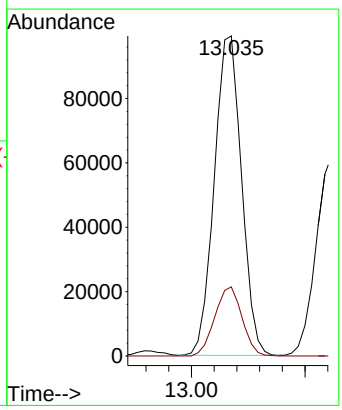


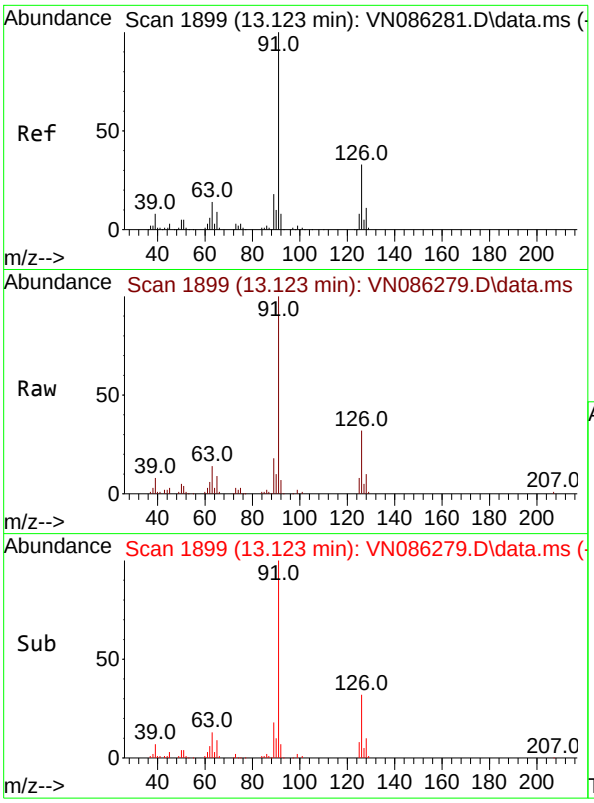


#78
n-propylbenzene
Concen: 9.605 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 91 Resp: 165250

Ion	Ratio	Lower	Upper
91	100		
120	21.6	11.1	33.3





#79
2-Chlorotoluene
Concen: 9.641 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 91 Resp: 10378

Ion	Ratio	Lower	Upper
91	100		
126	32.0	16.1	48.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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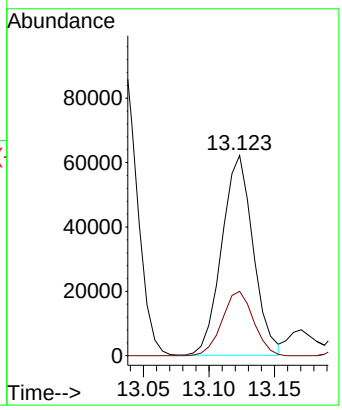
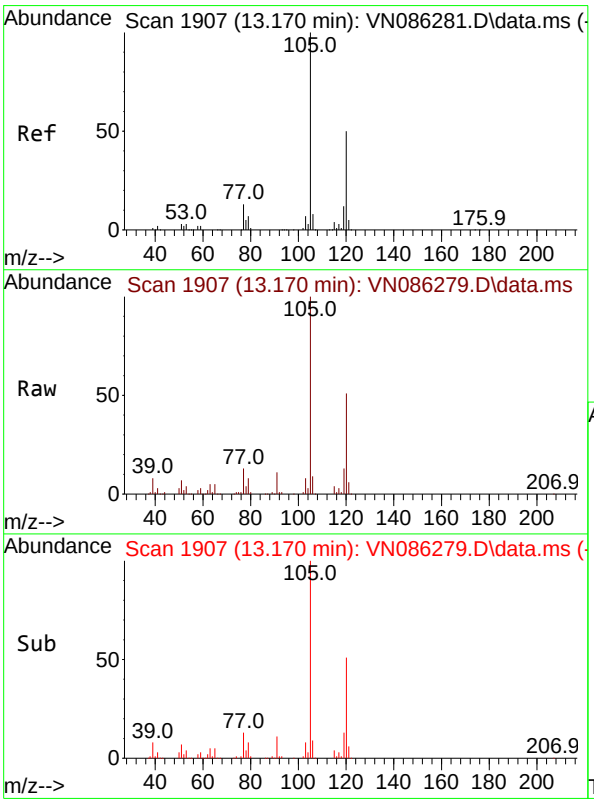
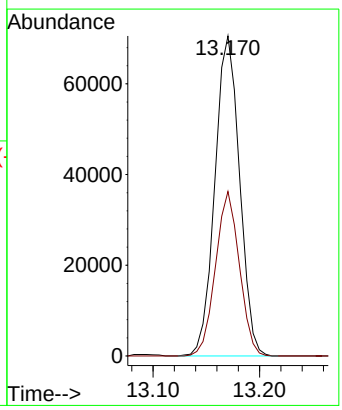


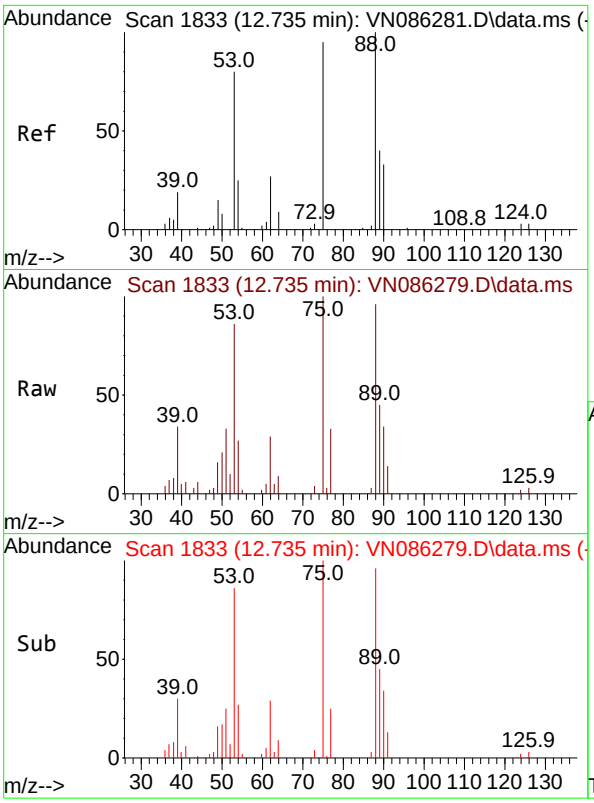


#80
1,3,5-Trimethylbenzene
Concen: 9.494 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:105 Resp: 113458

Ion	Ratio	Lower	Upper
105	100		
120	49.6	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 10.033 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 75 Resp: 1759

Ion	Ratio	Lower	Upper
75	100		
53	88.4	79.2	118.8
89	42.3	35.7	53.5

Instrument :
MSVOA_N
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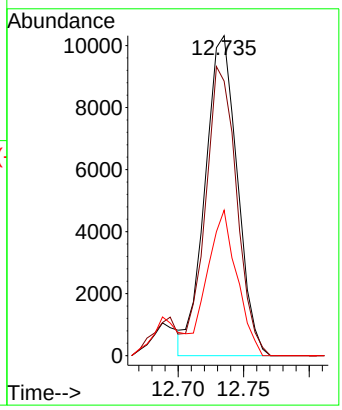
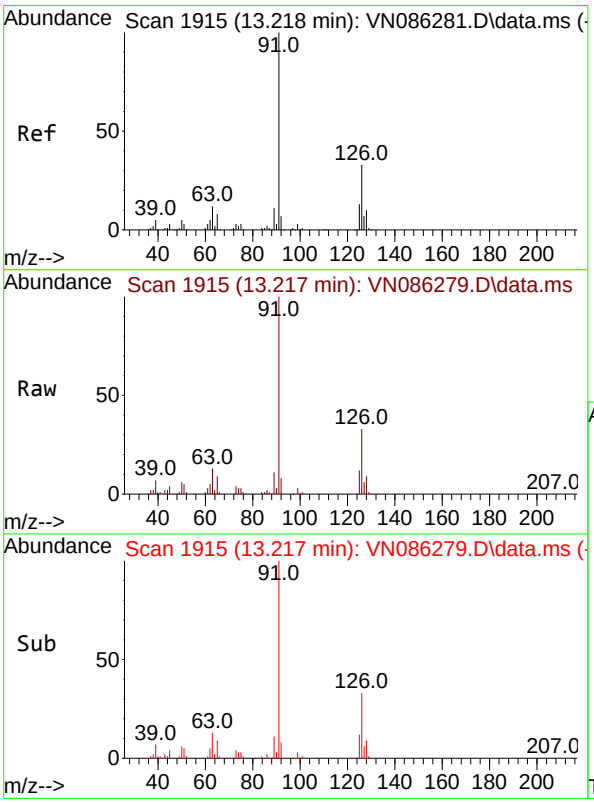
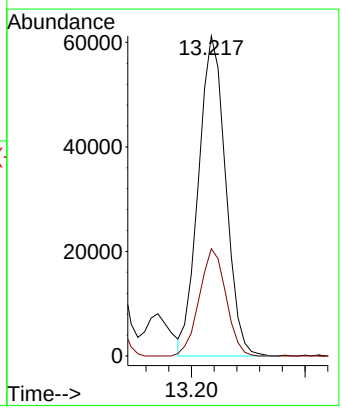


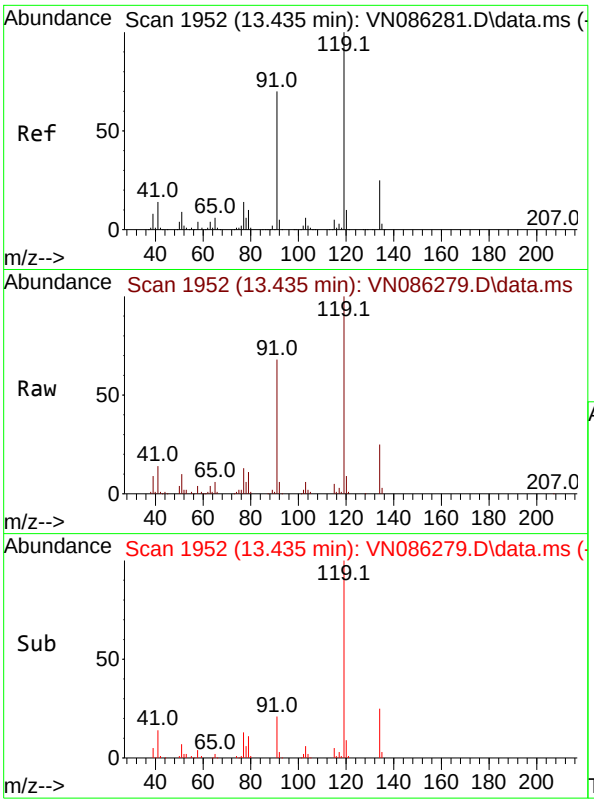


#82
4-Chlorotoluene
Concen: 9.518 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 91 Resp: 101784

Ion	Ratio	Lower	Upper
91	100		
126	32.9	16.2	48.6

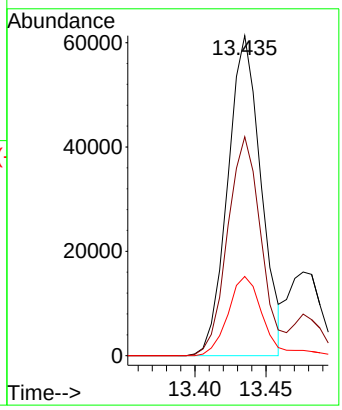




#83
tert-Butylbenzene
Concen: 9.636 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:119 Resp: 9977

Ion	Ratio	Lower	Upper
119	100		
91	69.4	34.4	103.3
134	26.2	13.0	39.0



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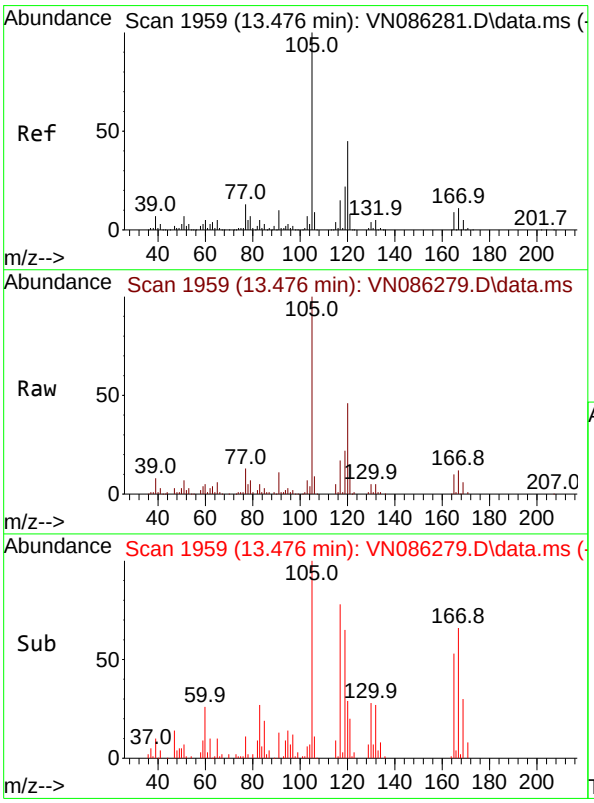
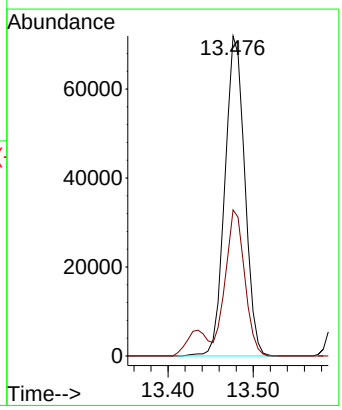
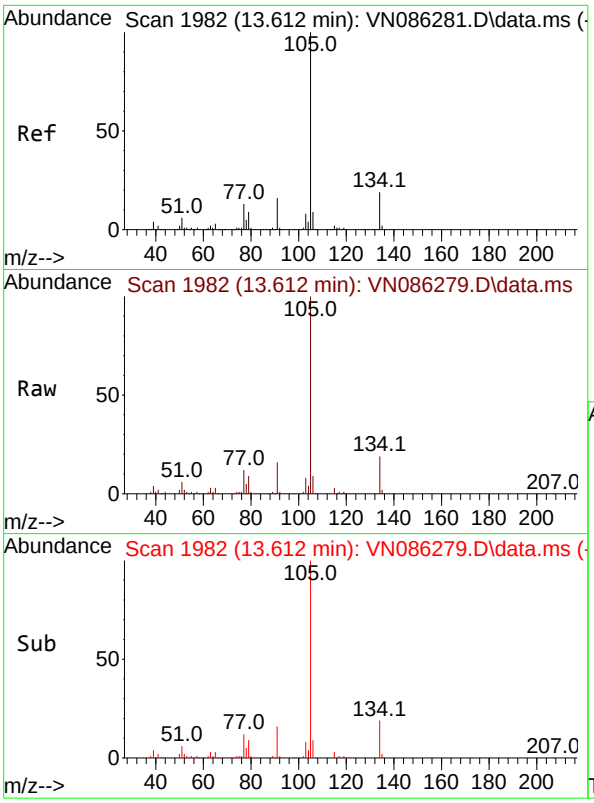


#84
1,2,4-Trimethylbenzene
Concen: 9.573 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:105 Resp: 116448

Ion	Ratio	Lower	Upper
105	100		
120	44.2	22.4	67.3





#85
sec-Butylbenzene
Concen: 9.686 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:105 Resp: 13910

Ion	Ratio	Lower	Upper
105	100		
134	19.9	9.7	29.1

Instrument :
MSVOA_N
ClientSampleId :
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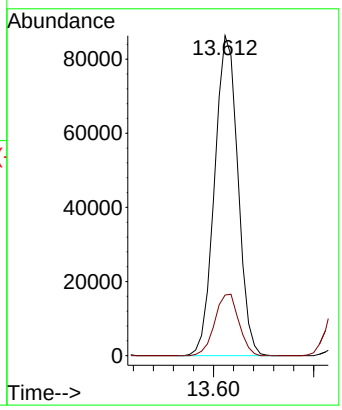
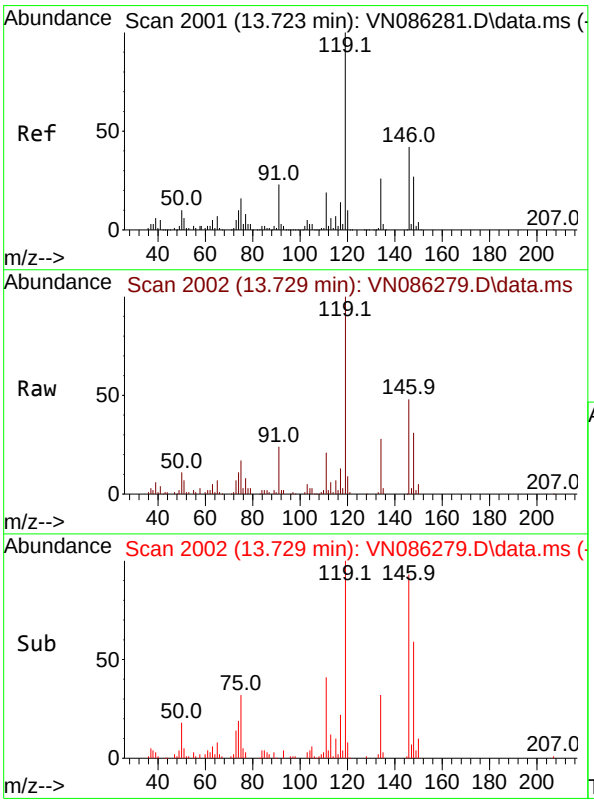
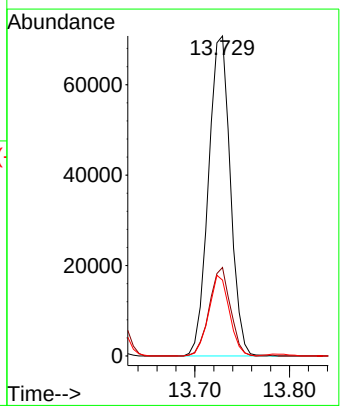


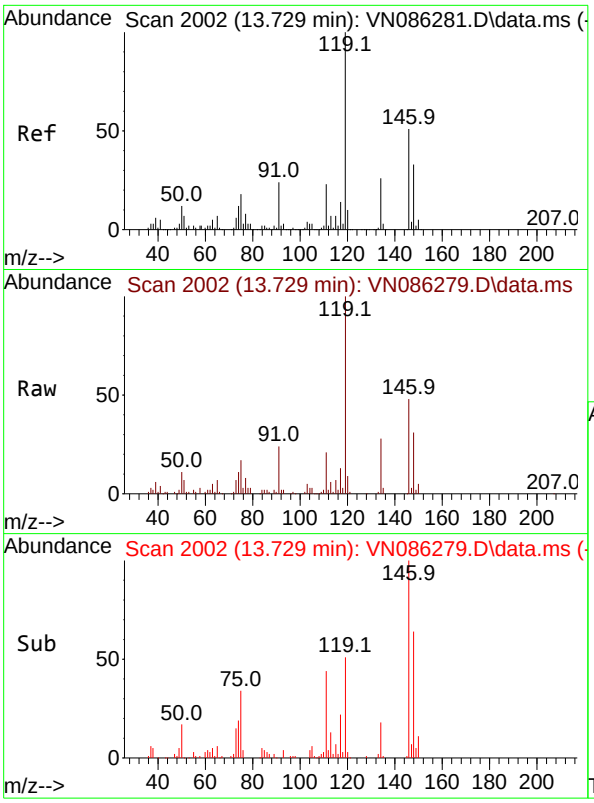


#86
p-Isopropyltoluene
Concen: 9.572 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:119 Resp: 113316

Ion	Ratio	Lower	Upper
119	100		
134	26.8	13.1	39.1
91	24.0	11.9	35.9

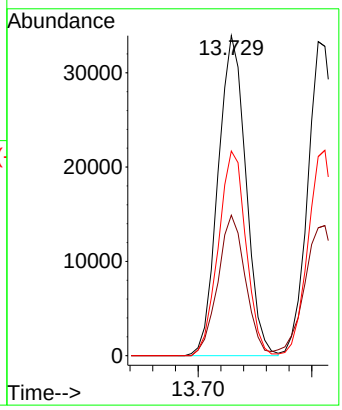




#87
1,3-Dichlorobenzene
Concen: 9.497 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:146 Resp: 5775

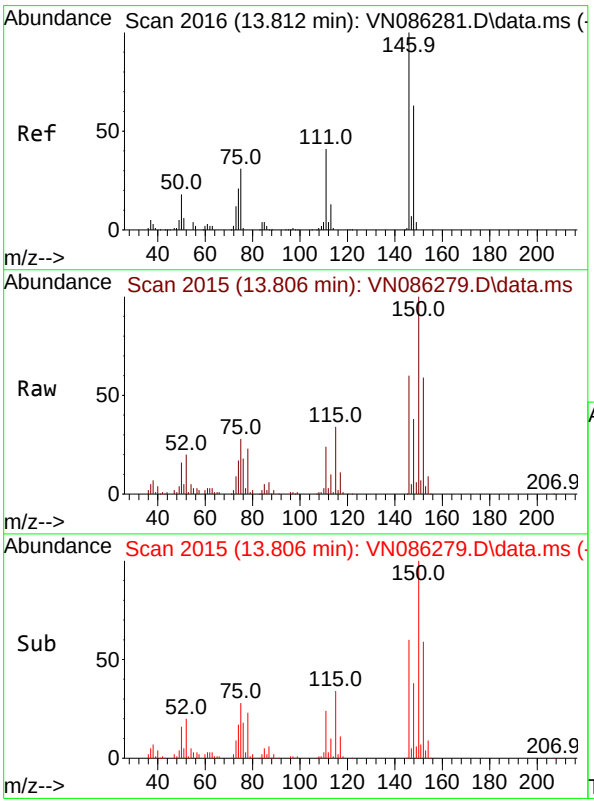
Ion	Ratio	Lower	Upper
146	100		
111	43.6	21.9	65.7
148	63.5	31.9	95.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

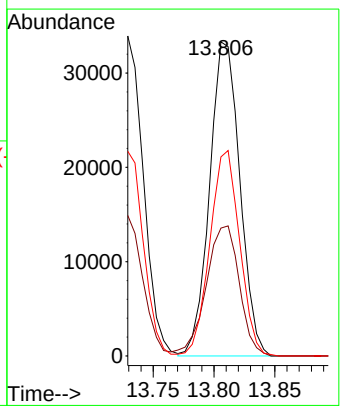
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

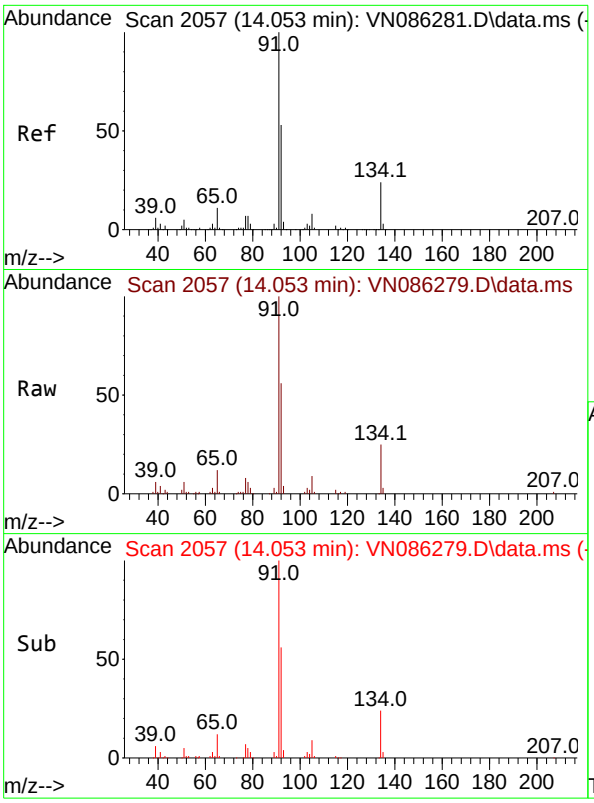


#88
1,4-Dichlorobenzene
Concen: 9.412 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:146 Resp: 57656

Ion	Ratio	Lower	Upper
146	100		
111	45.5	21.3	63.9
148	64.4	31.9	95.9





#89
n-Butylbenzene
Concen: 9.340 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

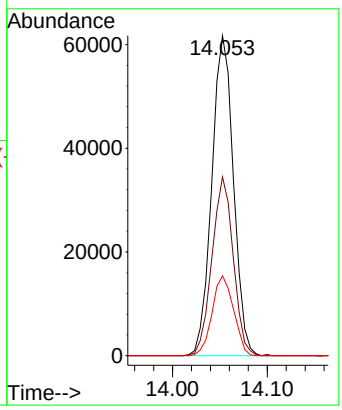
Tgt Ion: 91 Resp: 9801

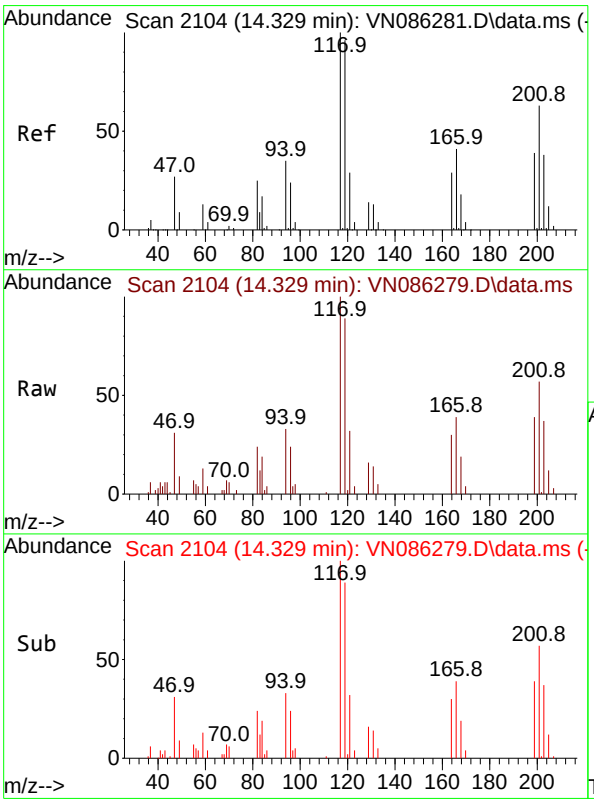
Ion	Ratio	Lower	Upper
91	100		
92	54.7	26.8	80.4
134	24.7	12.2	36.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

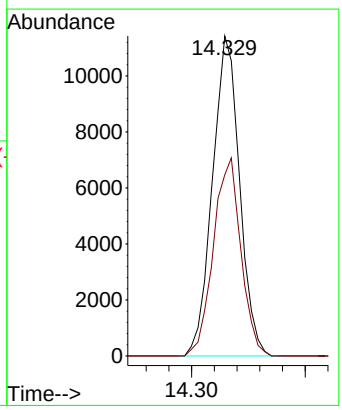


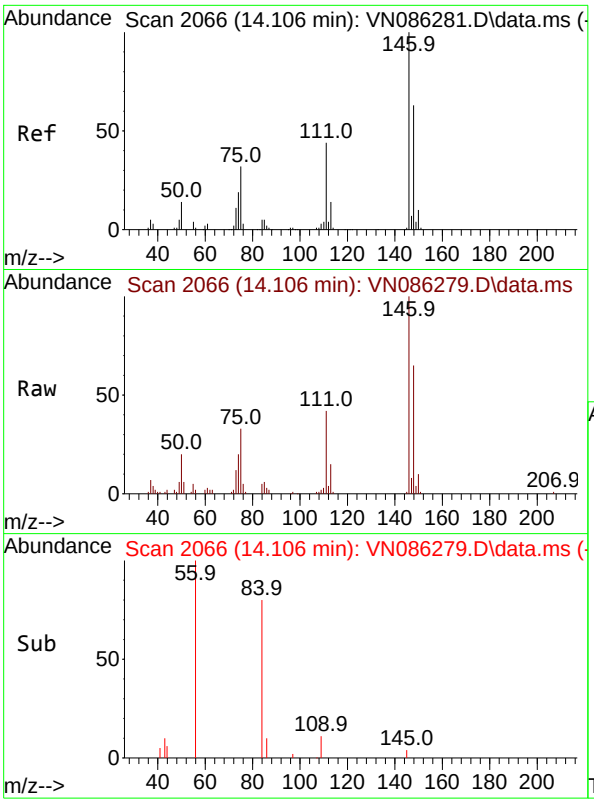


#90
Hexachloroethane
Concen: 9.503 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:117 Resp: 18922

Ion	Ratio	Lower	Upper
117	100		
201	62.8	31.4	94.2

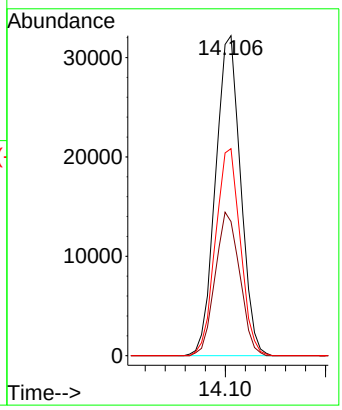




#91
1,2-Dichlorobenzene
Concen: 9.473 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:146 Resp: 5585

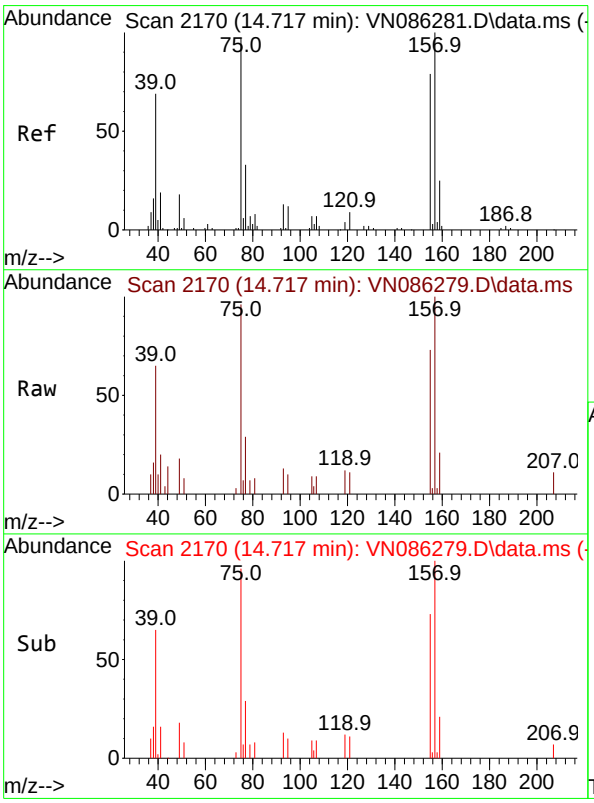
Ion	Ratio	Lower	Upper
146	100		
111	44.0	22.4	67.0
148	64.2	31.8	95.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

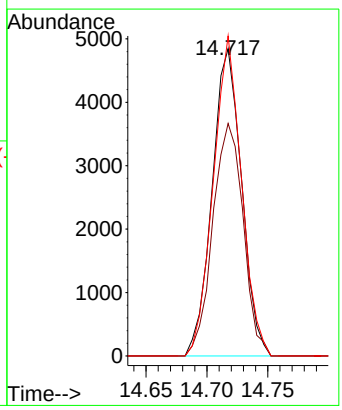
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

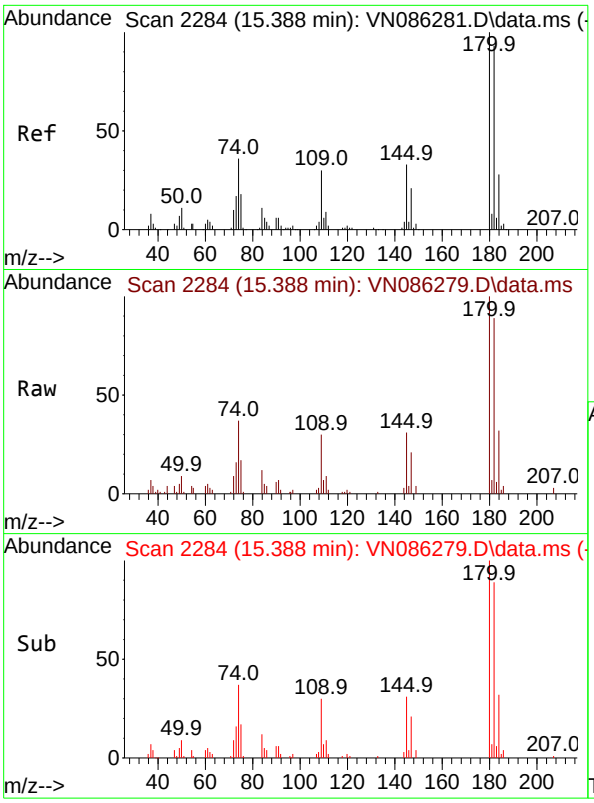


#92
1,2-Dibromo-3-Chloropropane
Concen: 9.646 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion: 75 Resp: 8165

Ion	Ratio	Lower	Upper
75	100		
155	78.1	40.3	120.9
157	99.5	49.0	147.2

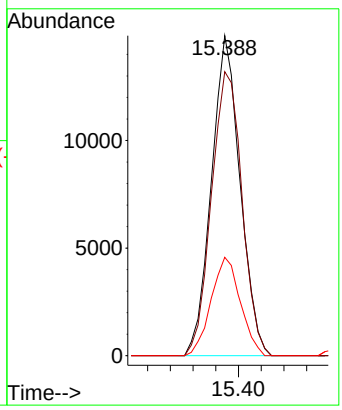




#93
1,2,4-Trichlorobenzene
Concen: 9.227 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:180 Resp: 2605

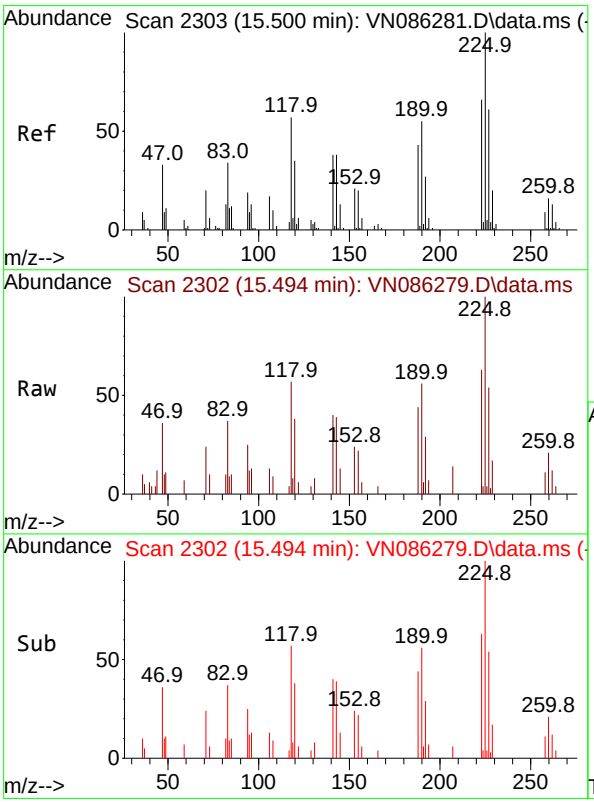
Ion	Ratio	Lower	Upper
180	100		
182	94.4	47.0	141.0
145	31.4	16.4	49.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

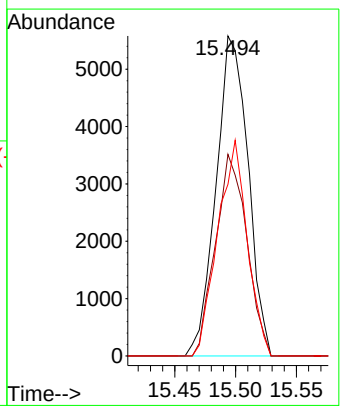
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

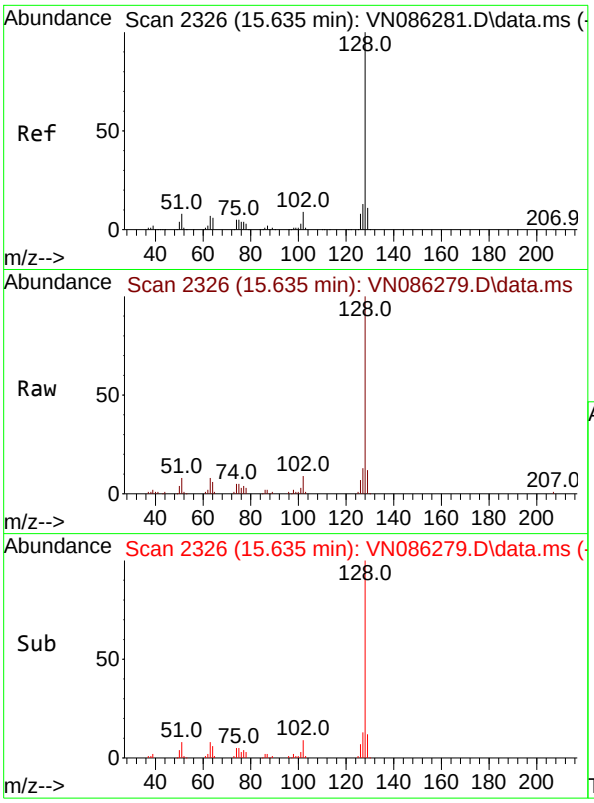


#94
Hexachlorobutadiene
Concen: 9.575 ug/l
RT: 15.494 min Scan# 2302
Delta R.T. -0.006 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:225 Resp: 10205

Ion	Ratio	Lower	Upper
225	100		
223	61.8	32.8	98.3
227	62.0	31.4	94.0

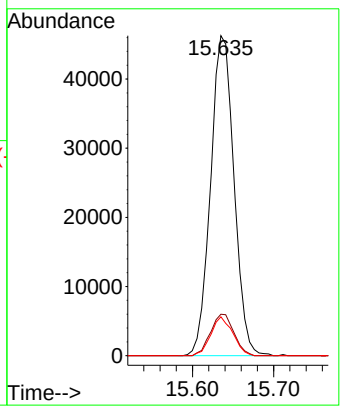




#95
Naphthalene
Concen: 9.277 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:128 Resp: 9284

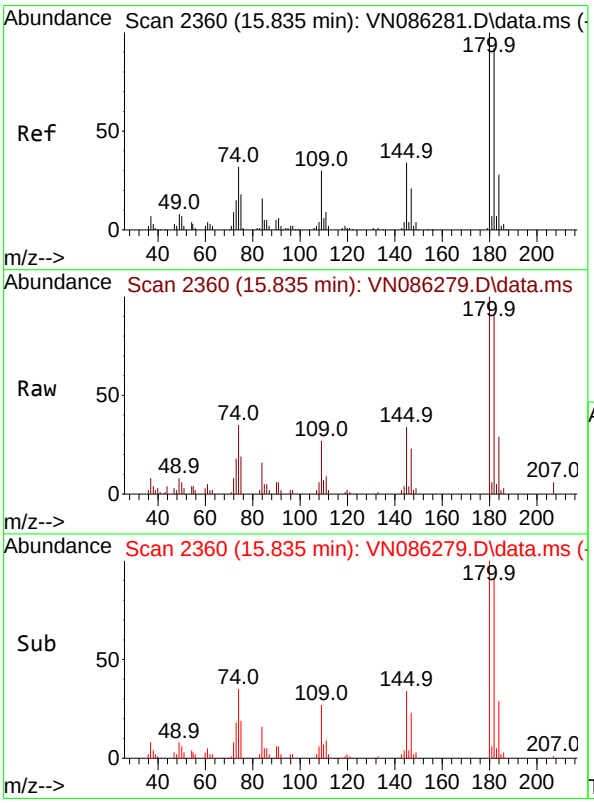
Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.2	15.4
129	11.4	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

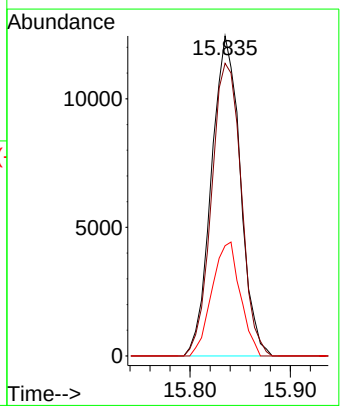
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025



#96
1,2,3-Trichlorobenzene
Concen: 9.308 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN086279.D
Acq: 15 Apr 2025 12:45

Tgt Ion:180 Resp: 24879

Ion	Ratio	Lower	Upper
180	100		
182	93.9	47.3	142.0
145	34.8	17.2	51.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086280.D
Acq On : 15 Apr 2025 13:09
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:57:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	217195	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	404366	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	355626	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	158232	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	61458	19.513	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	39.020%#		
35) Dibromofluoromethane	8.165	113	37195	19.819	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	39.640%#		
50) Toluene-d8	10.565	98	191691	19.112	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	38.220%#		
62) 4-Bromofluorobenzene	12.847	95	68030	18.596	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	37.200%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	54177	21.042	ug/l	99
3) Chloromethane	2.359	50	71193	19.026	ug/l	98
4) Vinyl Chloride	2.518	62	73472	20.576	ug/l	99
5) Bromomethane	2.959	94	34343	21.382	ug/l	98
6) Chloroethane	3.124	64	47157	19.732	ug/l	99
7) Trichlorofluoromethane	3.501	101	80568	20.369	ug/l	98
8) Diethyl Ether	3.959	74	36034	20.868	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.371	101	49252	20.584	ug/l	99
10) Methyl Iodide	4.589	142	55289	21.017	ug/l	99
11) Tert butyl alcohol	5.512	59	61718	107.400	ug/l	97
12) 1,1-Dichloroethene	4.348	96	51127	20.000	ug/l	98
13) Acrolein	4.183	56	28121	95.627	ug/l	99
14) Allyl chloride	5.024	41	89076	19.612	ug/l	99
15) Acrylonitrile	5.712	53	148850	104.781	ug/l	100
16) Acetone	4.424	43	122726	109.479	ug/l	98
17) Carbon Disulfide	4.712	76	149518	19.534	ug/l	100
18) Methyl Acetate	5.024	43	75070	19.857	ug/l	100
19) Methyl tert-butyl Ether	5.795	73	191056	20.332	ug/l	97
20) Methylene Chloride	5.277	84	58230	19.999	ug/l	98
21) trans-1,2-Dichloroethene	5.789	96	53894	20.165	ug/l	99
22) Diisopropyl ether	6.671	45	196831	19.911	ug/l	98
23) Vinyl Acetate	6.600	43	713534m	103.278	ug/l	
24) 1,1-Dichloroethane	6.565	63	104777	20.087	ug/l	99
25) 2-Butanone	7.477	43	202298	103.191	ug/l	99
26) 2,2-Dichloropropane	7.489	77	94147	20.159	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	66347	20.001	ug/l	99
28) Bromochloromethane	7.812	49	40391	18.263	ug/l	100
29) Tetrahydrofuran	7.836	42	136348	104.008	ug/l	99
30) Chloroform	7.965	83	103881	20.274	ug/l	100
31) Cyclohexane	8.253	56	101546	19.895	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	89173	20.344	ug/l	97
36) 1,1-Dichloropropene	8.365	75	75426	20.122	ug/l	99
37) Ethyl Acetate	7.553	43	79383	20.115	ug/l	99
38) Carbon Tetrachloride	8.359	117	72704	20.367	ug/l	99
39) Methylcyclohexane	9.594	83	88728	19.915	ug/l	98
40) Benzene	8.600	78	243918	20.310	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086280.D
Acq On : 15 Apr 2025 13:09
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 16 03:57:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	45760	20.007	ug/l		100
42) 1,2-Dichloroethane	8.665	62	77932	20.348	ug/l		100
43) Isopropyl Acetate	8.683	43	157753	20.921	ug/l		99
44) Trichloroethene	9.353	130	56926	19.998	ug/l		99
45) 1,2-Dichloropropane	9.618	63	59599	20.273	ug/l		98
46) Dibromomethane	9.706	93	38601	20.608	ug/l		98
47) Bromodichloromethane	9.888	83	82517	20.397	ug/l		98
48) Methyl methacrylate	9.677	41	69986	20.195	ug/l		99
49) 1,4-Dioxane	9.694	88	24362	413.277	ug/l		98
51) 4-Methyl-2-Pentanone	10.441	43	421471	104.297	ug/l		100
52) Toluene	10.630	92	152248	20.317	ug/l		99
53) t-1,3-Dichloropropene	10.830	75	92441	20.470	ug/l		100
54) cis-1,3-Dichloropropene	10.312	75	100415	20.245	ug/l		99
55) 1,1,2-Trichloroethane	11.012	97	53630	19.891	ug/l		97
56) Ethyl methacrylate	10.871	69	100712	20.321	ug/l		99
57) 1,3-Dichloropropane	11.159	76	97363	20.353	ug/l		98
58) 2-Chloroethyl Vinyl ether	10.159	63	222766	94.702	ug/l		100
59) 2-Hexanone	11.194	43	309954	103.408	ug/l		100
60) Dibromochloromethane	11.359	129	60596	20.467	ug/l		100
61) 1,2-Dibromoethane	11.465	107	56679	20.834	ug/l		99
64) Tetrachloroethene	11.100	164	55481	20.282	ug/l		97
65) Chlorobenzene	11.888	112	158917	20.024	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.959	131	52389	20.010	ug/l		98
67) Ethyl Benzene	11.959	91	288483	20.144	ug/l		99
68) m/p-Xylenes	12.071	106	215301	40.122	ug/l		99
69) o-Xylene	12.394	106	107161	20.193	ug/l		99
70) Styrene	12.406	104	177099	20.029	ug/l		99
71) Bromoform	12.576	173	39697	20.138	ug/l	#	98
73) Isopropylbenzene	12.694	105	264607	20.443	ug/l		99
74) N-amyl acetate	12.488	43	126575	19.643	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.935	83	76740	20.620	ug/l		99
76) 1,2,3-Trichloropropane	12.988	75	74829m	20.130	ug/l		
77) Bromobenzene	12.976	156	59889	20.882	ug/l		99
78) n-propylbenzene	13.029	91	307737	20.176	ug/l		100
79) 2-Chlorotoluene	13.124	91	193569	20.281	ug/l		99
80) 1,3,5-Trimethylbenzene	13.171	105	216364	20.423	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.735	75	31256m	20.104	ug/l		
82) 4-Chlorotoluene	13.218	91	192849	20.341	ug/l		99
83) tert-Butylbenzene	13.435	119	182683	19.901	ug/l		99
84) 1,2,4-Trimethylbenzene	13.476	105	217135	20.135	ug/l		100
85) sec-Butylbenzene	13.612	105	252593	19.838	ug/l		99
86) p-Isopropyltoluene	13.723	119	208256	19.844	ug/l		100
87) 1,3-Dichlorobenzene	13.729	146	107491	19.938	ug/l		99
88) 1,4-Dichlorobenzene	13.812	146	108412	19.964	ug/l		99
89) n-Butylbenzene	14.053	91	184852	19.871	ug/l		99
90) Hexachloroethane	14.329	117	35250	19.968	ug/l		95
91) 1,2-Dichlorobenzene	14.100	146	104185	19.932	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	15863	21.139	ug/l		97
93) 1,2,4-Trichlorobenzene	15.388	180	50179	20.048	ug/l		99
94) Hexachlorobutadiene	15.494	225	19024	20.135	ug/l		99
95) Naphthalene	15.635	128	183816	20.717	ug/l		100
96) 1,2,3-Trichlorobenzene	15.835	180	47425	20.013	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086280.D
Acq On : 15 Apr 2025 13:09
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:57:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 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\VN041525\
Data File : VN086280.D
Acq On : 15 Apr 2025 13:09
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 16 03:57:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

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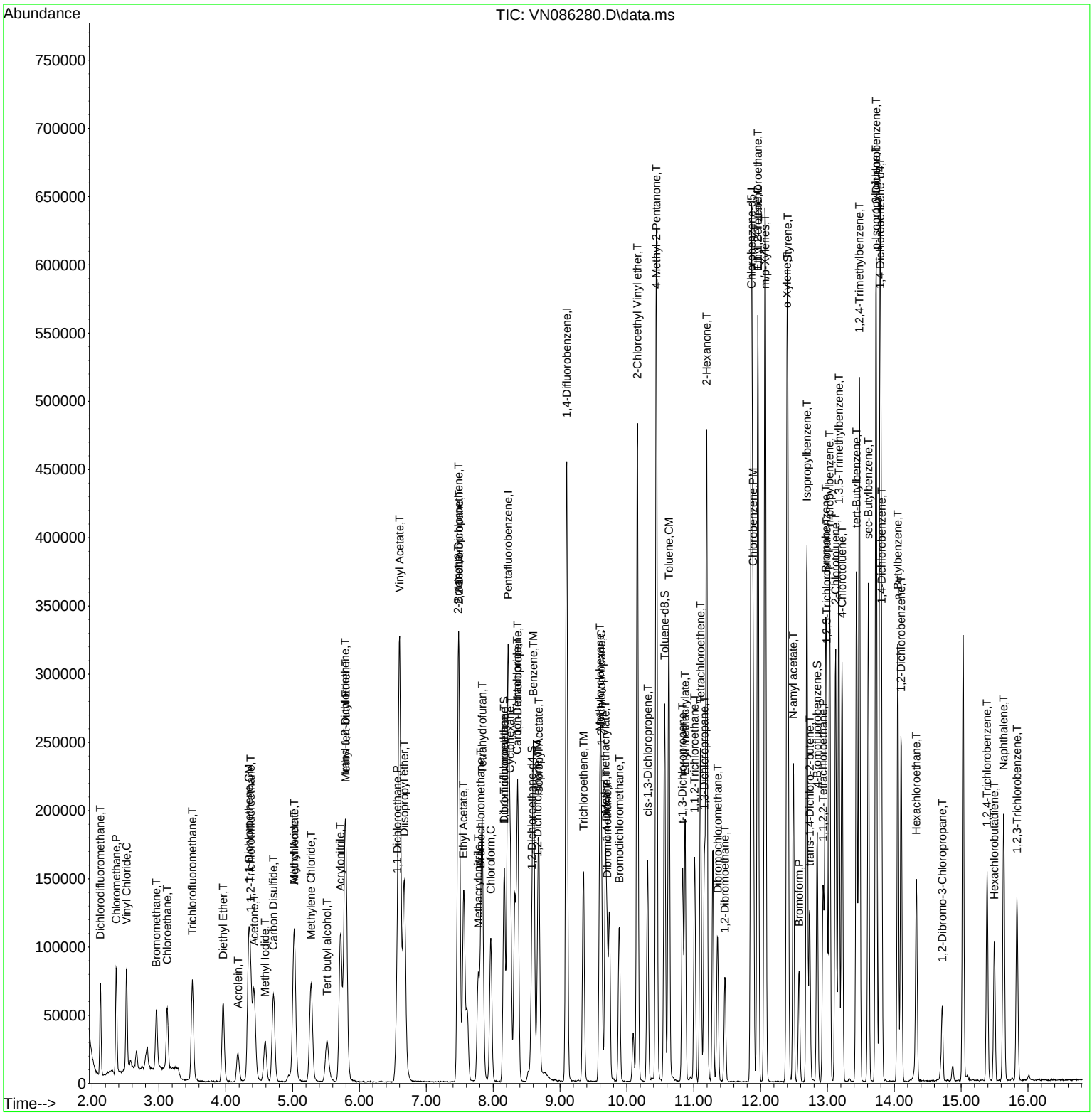
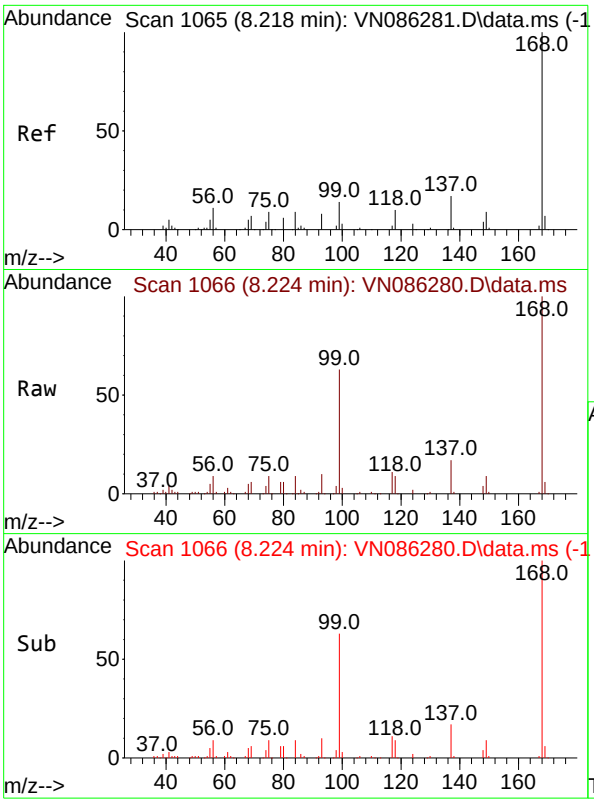
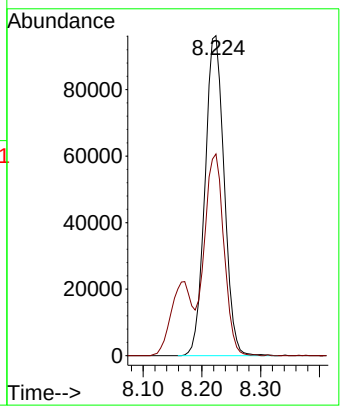




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:168 Resp: 21719

Ion	Ratio	Lower	Upper
168	100		
99	63.1	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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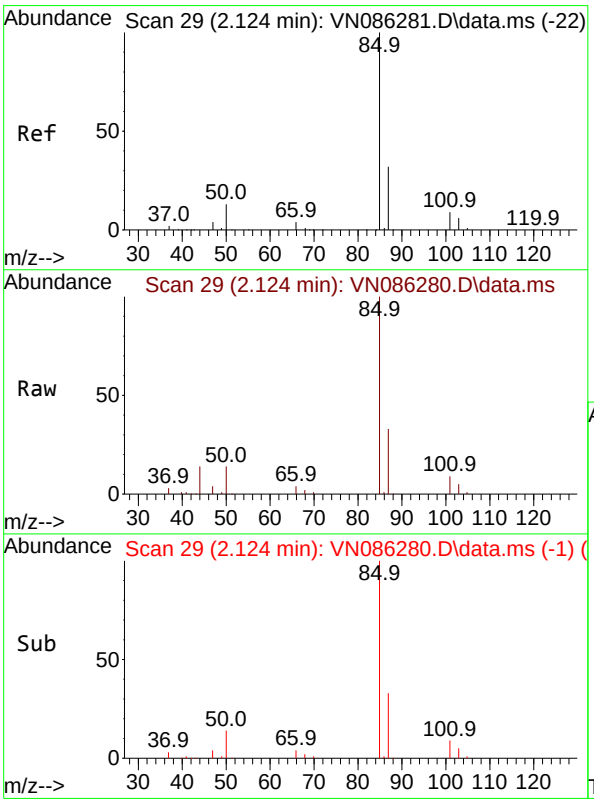
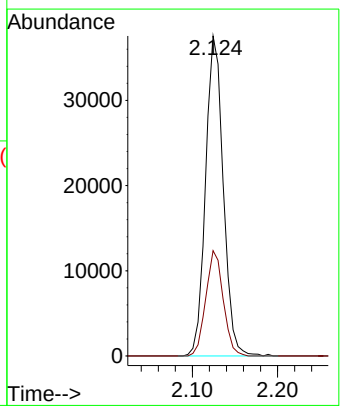
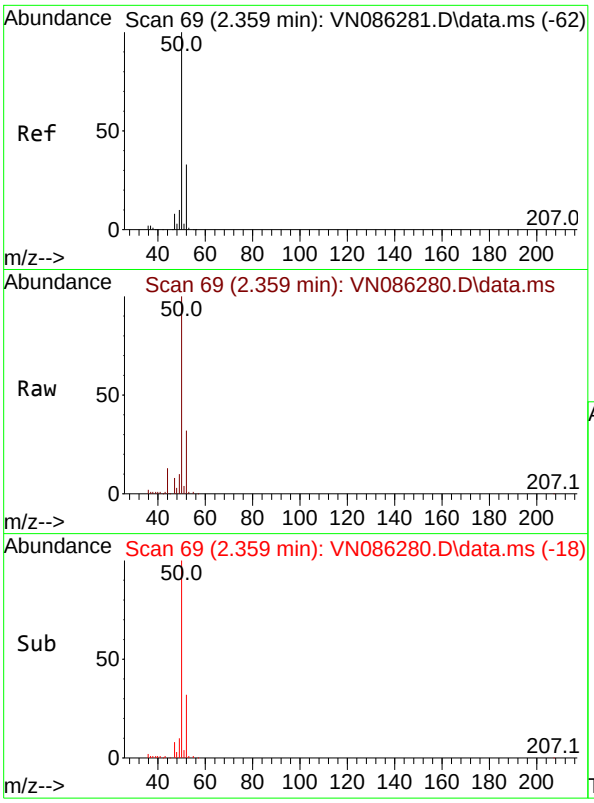


#2
Dichlorodifluoromethane
Concen: 21.042 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 85 Resp: 54177

Ion	Ratio	Lower	Upper
85	100		
87	32.9	16.3	48.8

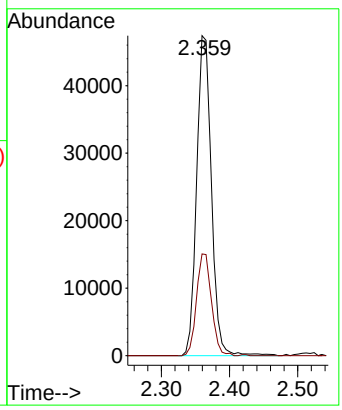




#3
Chloromethane
Concen: 19.026 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 50 Resp: 7119

Ion	Ratio	Lower	Upper
50	100		
52	31.8	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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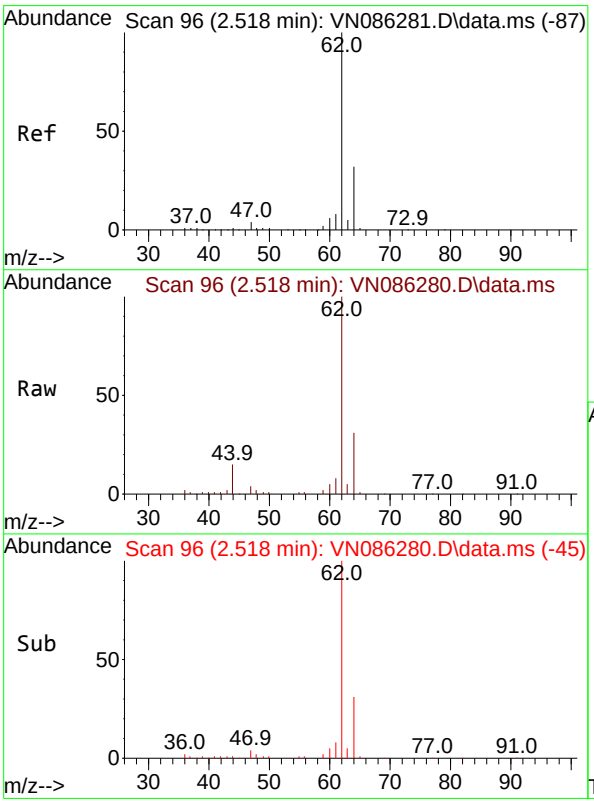
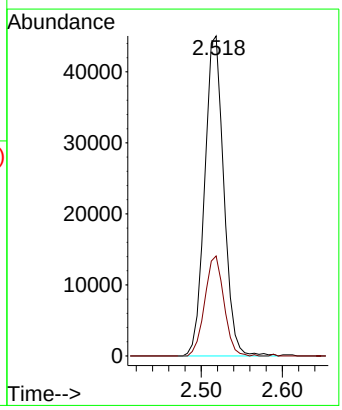
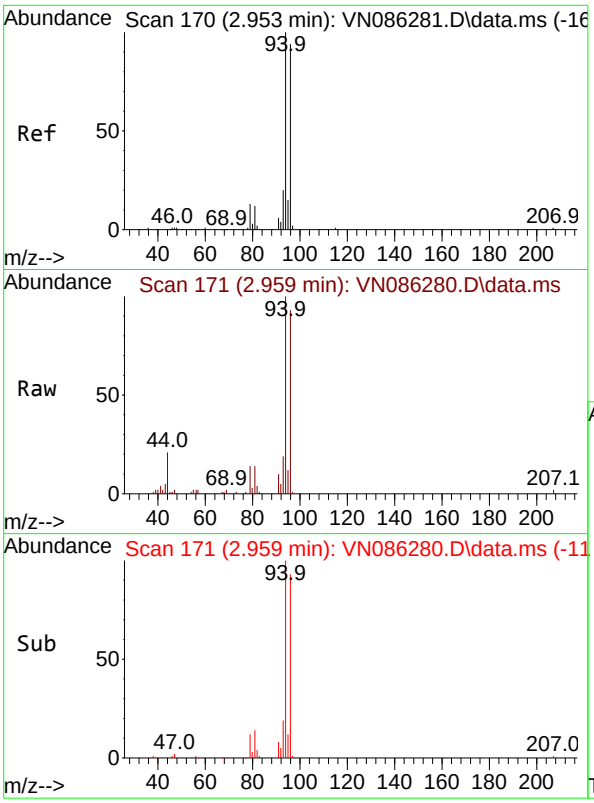


#4
Vinyl Chloride
Concen: 20.576 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 62 Resp: 73472

Ion	Ratio	Lower	Upper
62	100		
64	31.2	25.6	38.4





#5
Bromomethane
Concen: 21.382 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 94 Resp: 3434

Ion	Ratio	Lower	Upper
94	100		
96	92.0	75.2	112.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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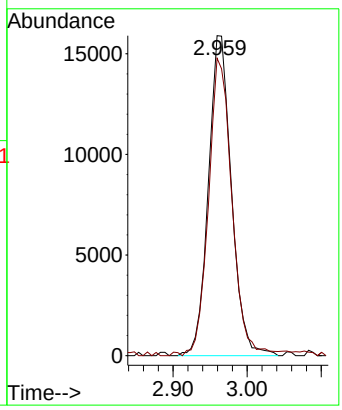
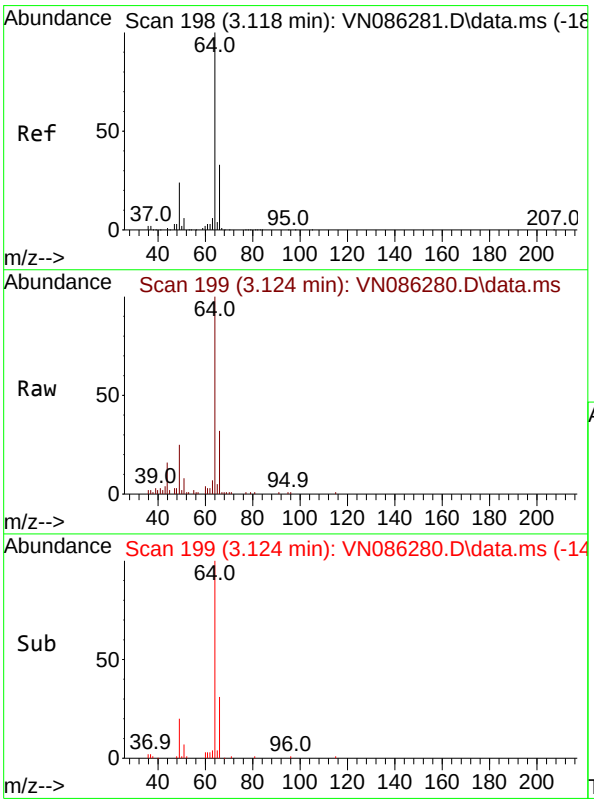
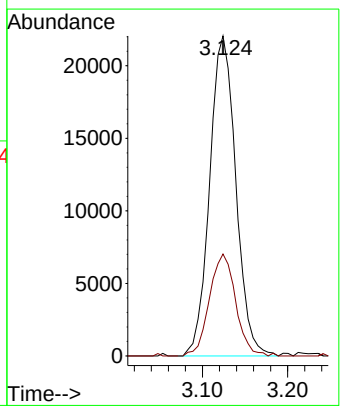


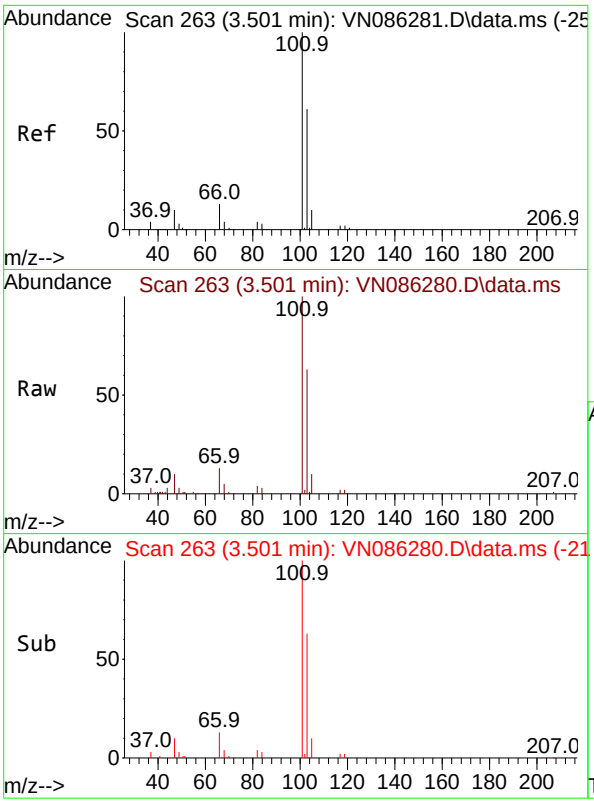


#6
Chloroethane
Concen: 19.732 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 64 Resp: 47157

Ion	Ratio	Lower	Upper
64	100		
66	31.9	26.2	39.2





#7
Trichlorofluoromethane
Concen: 20.369 ug/l
RT: 3.501 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:101 Resp: 8056

Ion	Ratio	Lower	Upper
101	100		
103	63.3	49.2	73.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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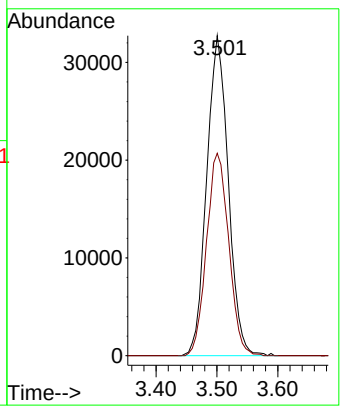
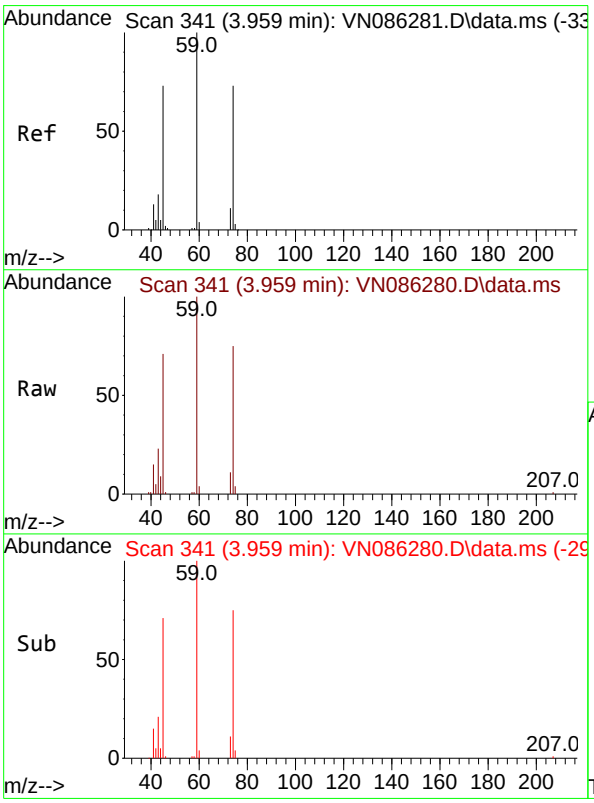
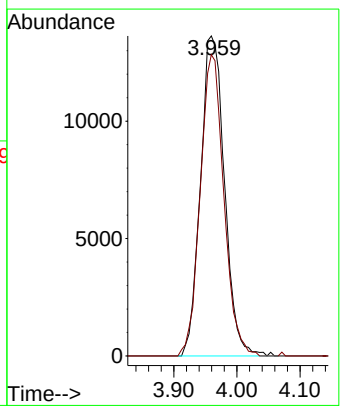


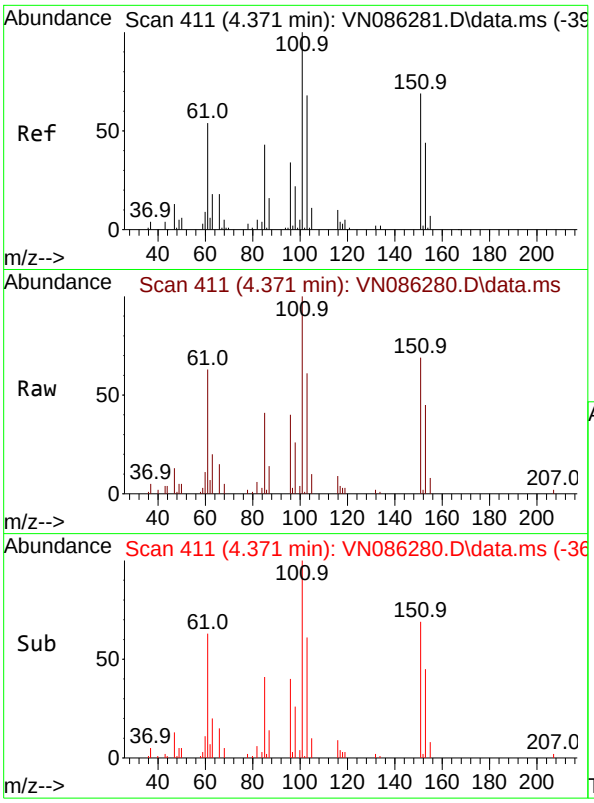


#8
Diethyl Ether
Concen: 20.868 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 74 Resp: 36034

Ion	Ratio	Lower	Upper
74	100		
45	92.5	48.0	144.2

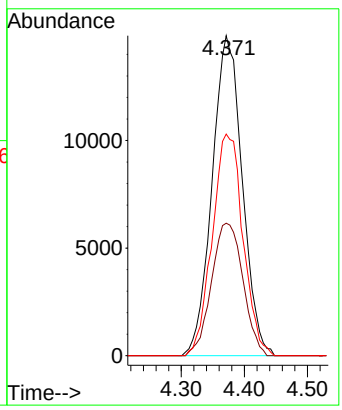




#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.584 ug/l
RT: 4.371 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:101 Resp: 4925

Ion	Ratio	Lower	Upper
101	100		
85	43.2	34.7	52.1
151	70.7	56.1	84.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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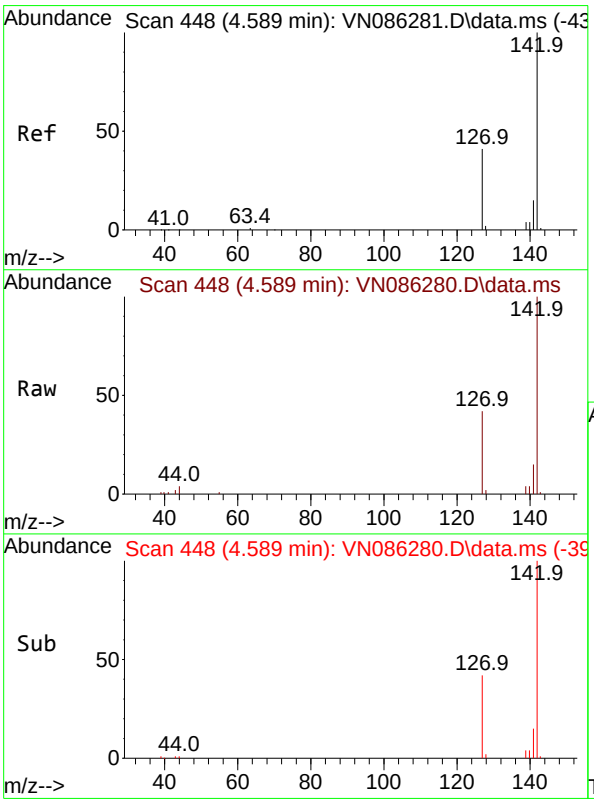
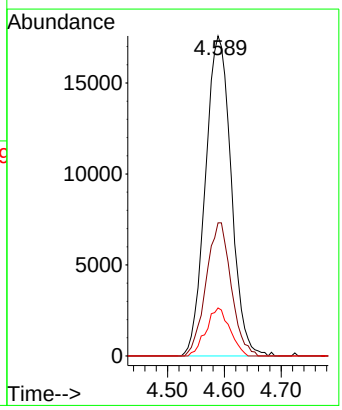
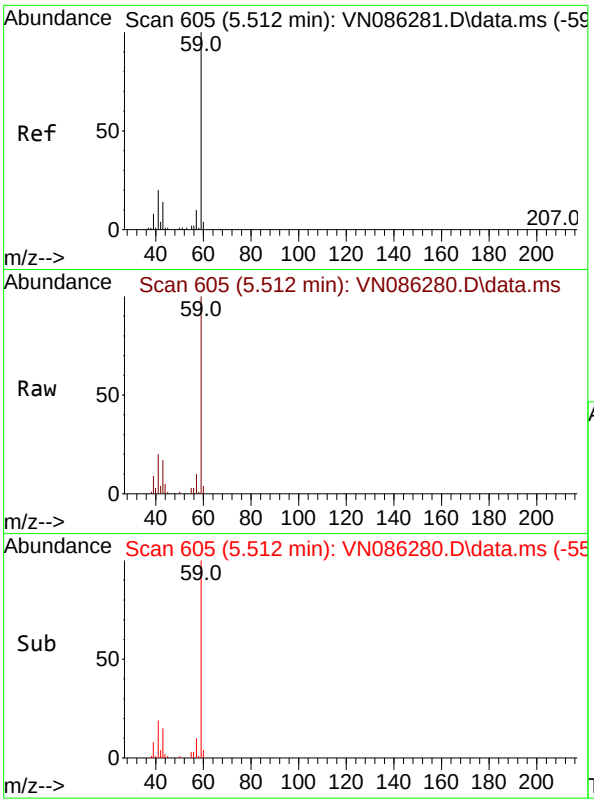


#10
Methyl Iodide
Concen: 21.017 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:142 Resp: 55289

Ion	Ratio	Lower	Upper
142	100		
127	41.6	32.7	49.1
141	15.0	11.7	17.5

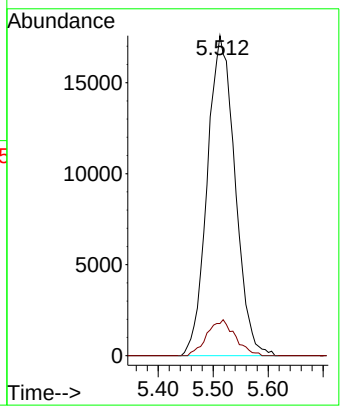




#11
Tert butyl alcohol
Concen: 107.400 ug/l
RT: 5.512 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 59 Resp: 6171

Ion	Ratio	Lower	Upper
59	100		
57	11.4	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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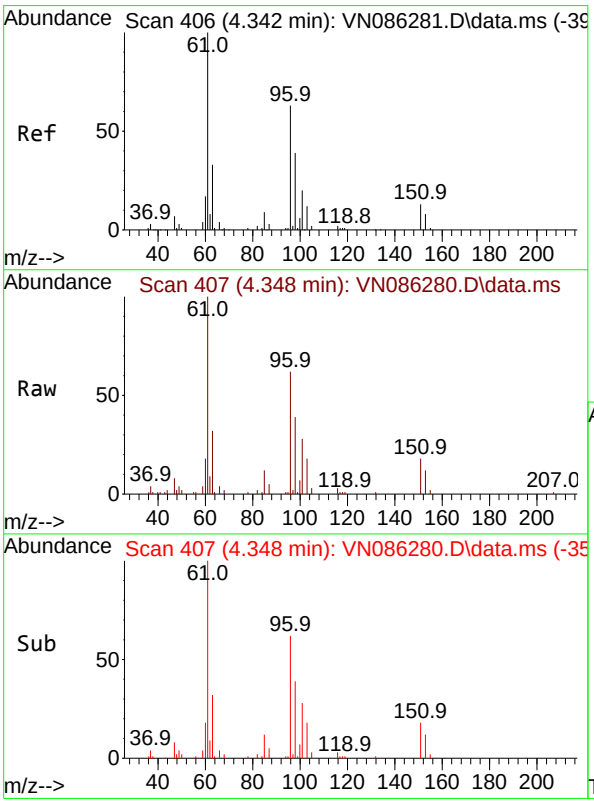
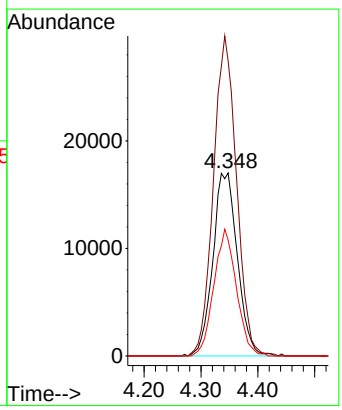
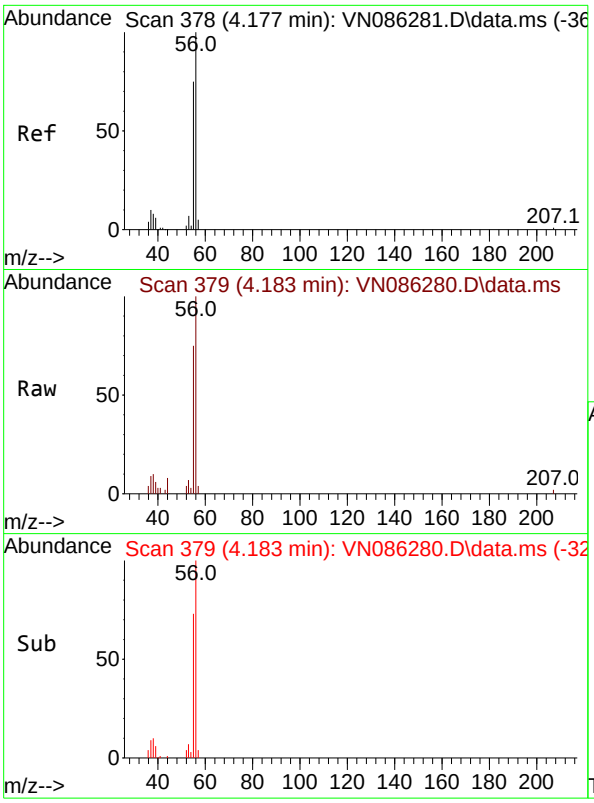


#12
1,1-Dichloroethene
Concen: 20.000 ug/l
RT: 4.348 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 96 Resp: 51127

Ion	Ratio	Lower	Upper
96	100		
61	161.3	126.6	189.8
98	63.4	49.6	74.4

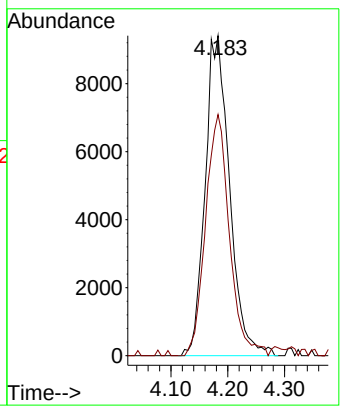




#13
Acrolein
Concen: 95.627 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 56 Resp: 2812

Ion	Ratio	Lower	Upper
56	100		
55	73.6	58.5	87.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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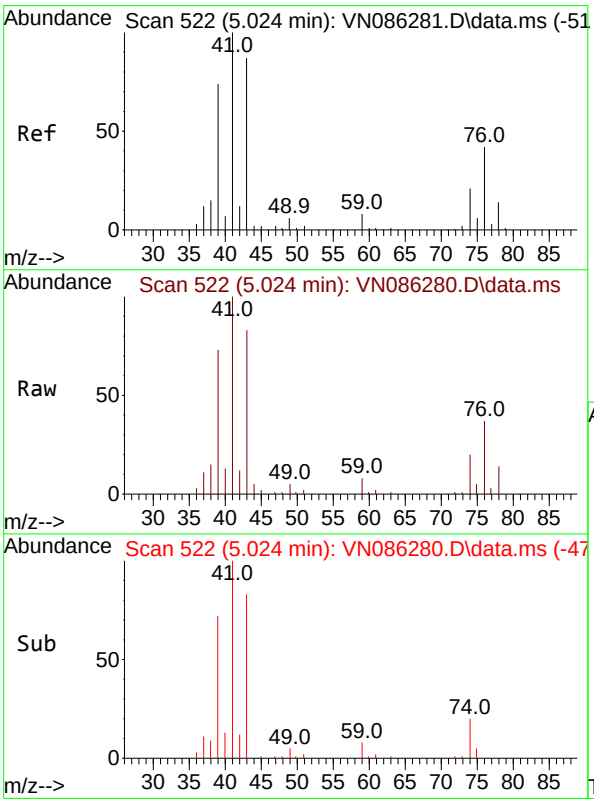
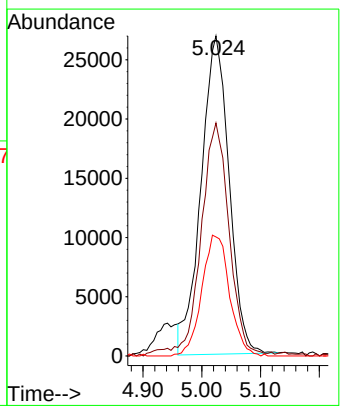
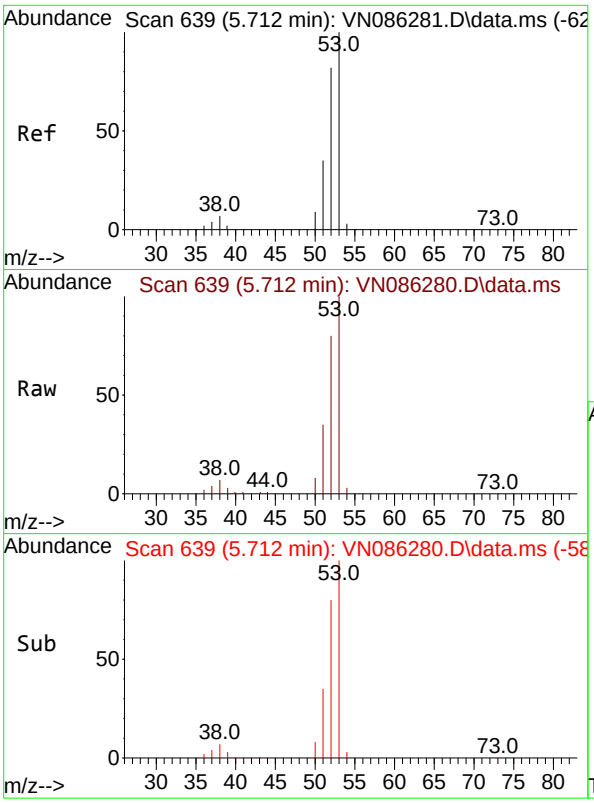


#14
Allyl chloride
Concen: 19.612 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 41 Resp: 89076

Ion	Ratio	Lower	Upper
41	100		
39	73.7	59.2	88.8
76	37.5	31.2	46.8

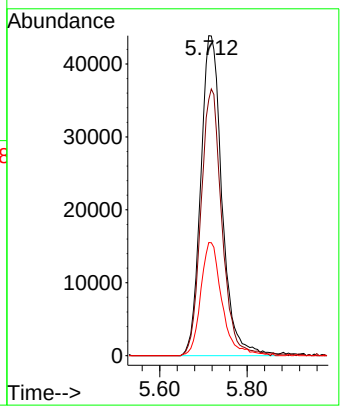




#15
Acrylonitrile
Concen: 104.781 ug/l
RT: 5.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 53 Resp: 14885

Ion	Ratio	Lower	Upper
53	100		
52	81.6	65.5	98.3
51	35.4	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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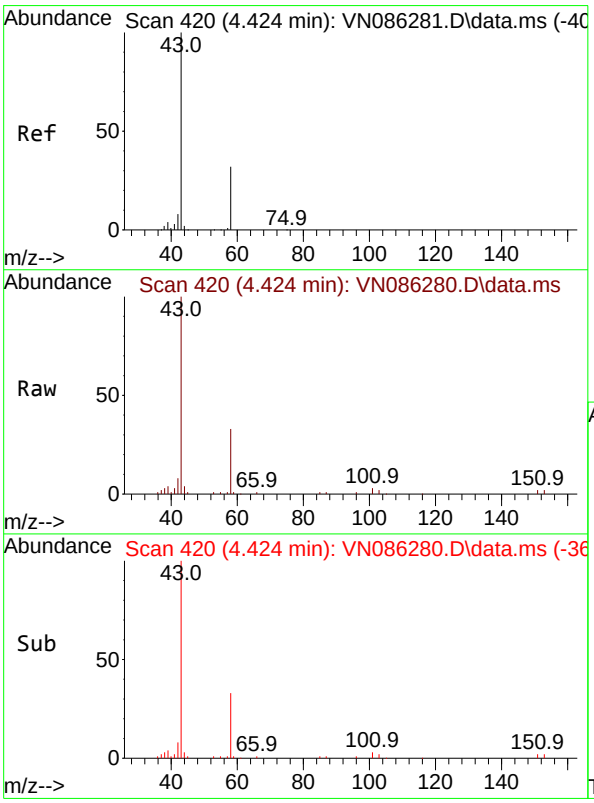
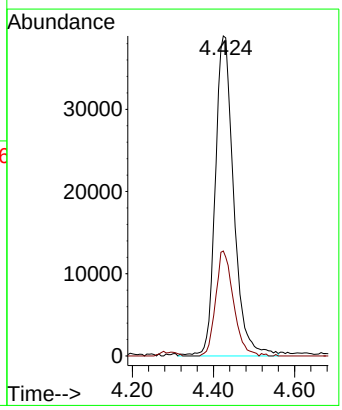
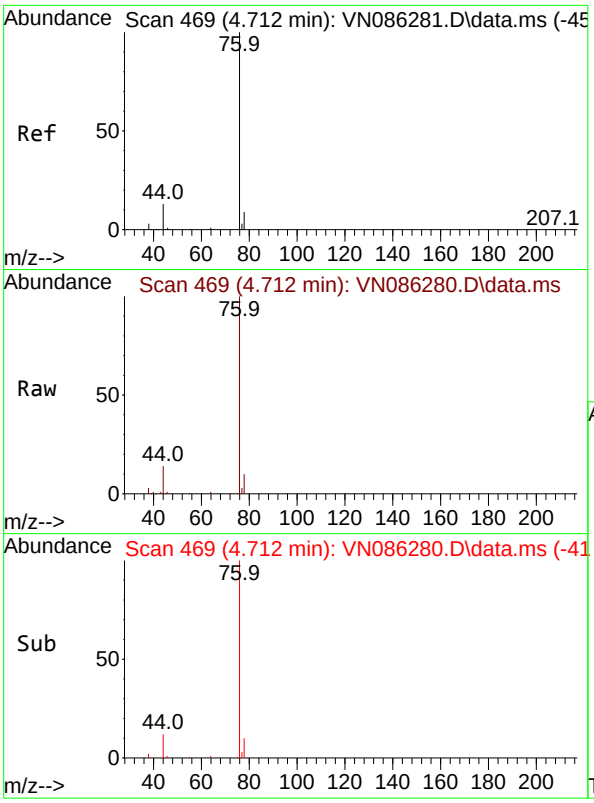


#16
Acetone
Concen: 109.479 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 122726

Ion	Ratio	Lower	Upper
43	100		
58	32.8	25.3	37.9

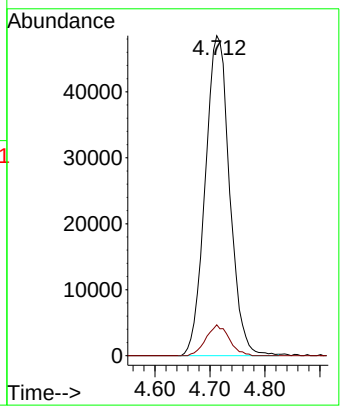




#17
Carbon Disulfide
Concen: 19.534 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 76 Resp: 14951

Ion	Ratio	Lower	Upper
76	100		
78	9.7	7.6	11.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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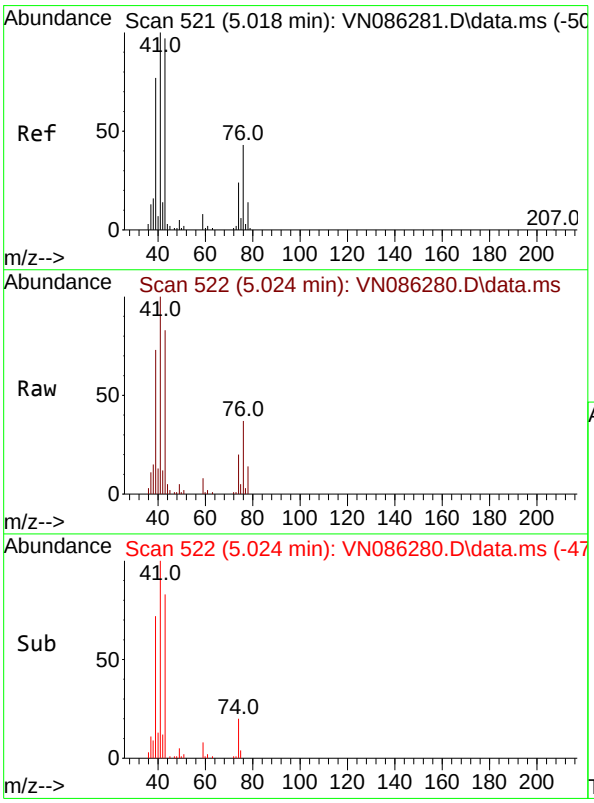
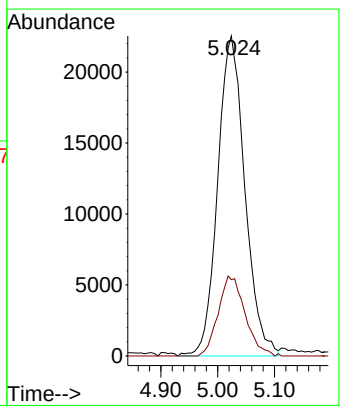
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

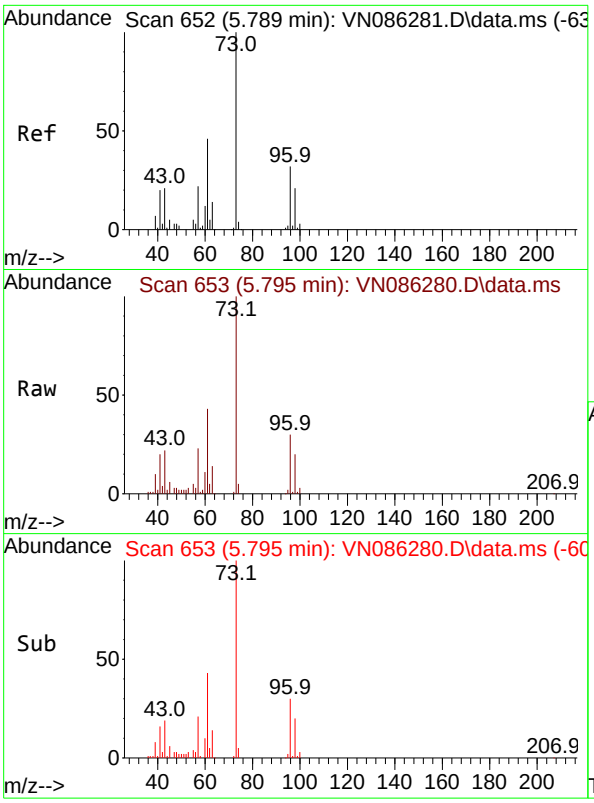


#18
Methyl Acetate
Concen: 19.857 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 75070

Ion	Ratio	Lower	Upper
43	100		
74	24.6	19.8	29.6

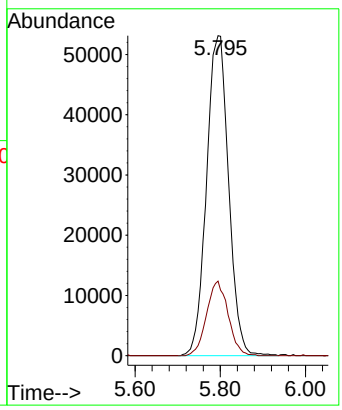




#19
Methyl tert-butyl Ether
Concen: 20.332 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 73 Resp: 19105

Ion	Ratio	Lower	Upper
73	100		
57	23.3	17.6	26.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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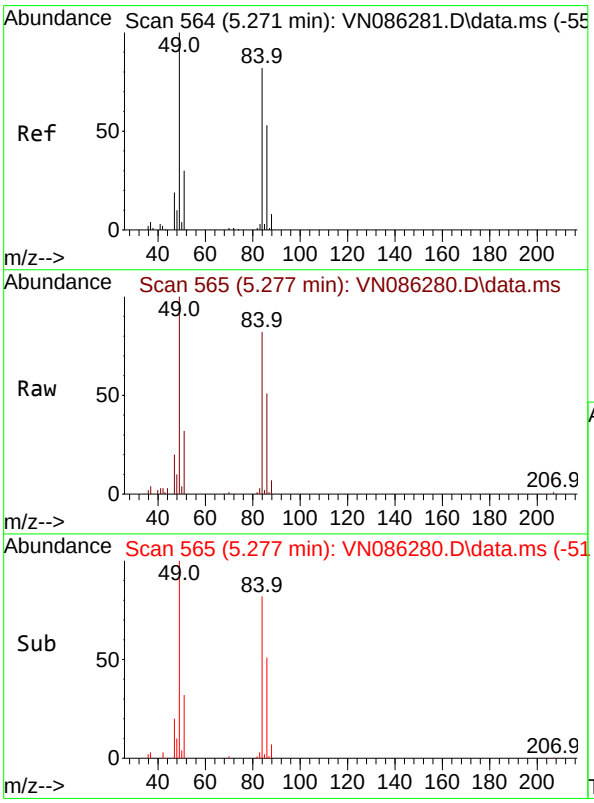
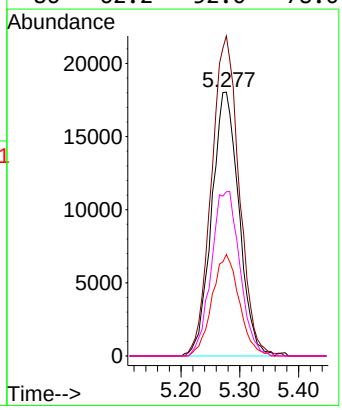
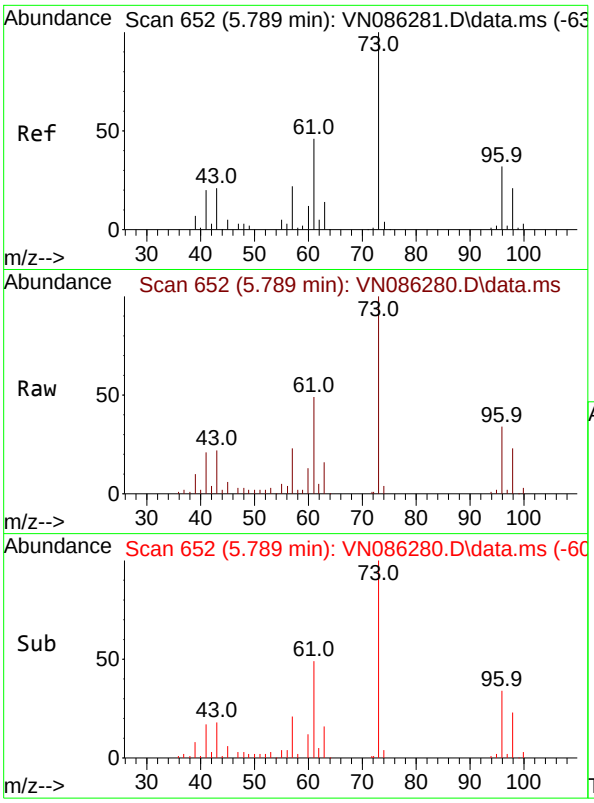


#20
Methylene Chloride
Concen: 19.999 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 84 Resp: 58230

Ion	Ratio	Lower	Upper
84	100		
49	121.3	98.2	147.2
51	38.5	29.8	44.6
86	62.2	52.0	78.0

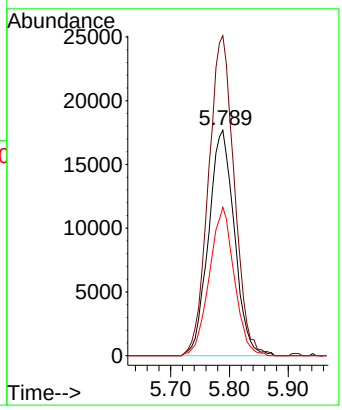




#21
trans-1,2-Dichloroethene
Concen: 20.165 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 96 Resp: 5389

Ion	Ratio	Lower	Upper
96	100		
61	141.9	114.6	171.8
98	65.8	51.2	76.8



Instrument :
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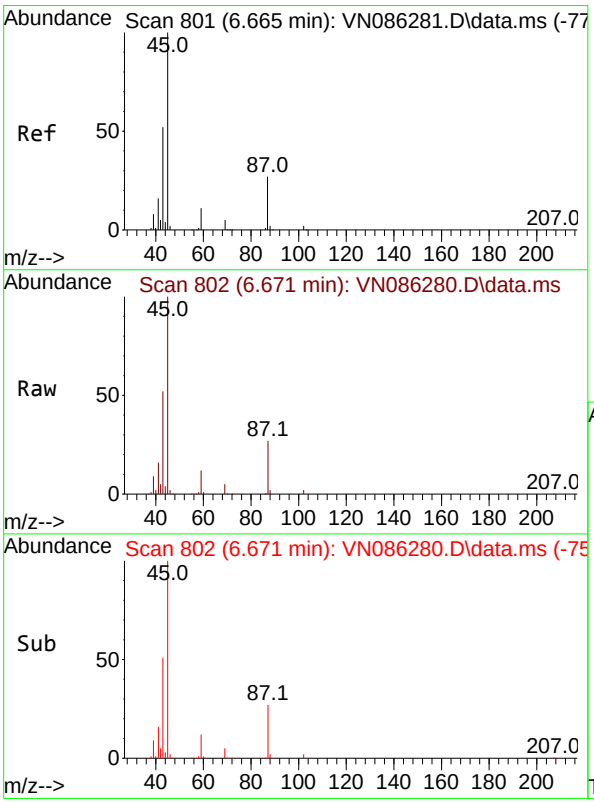
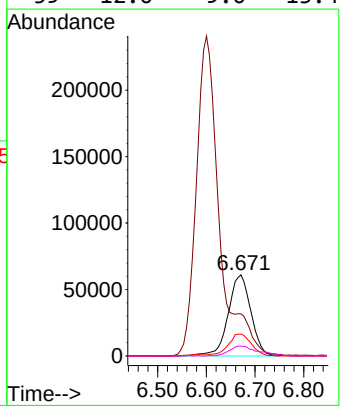
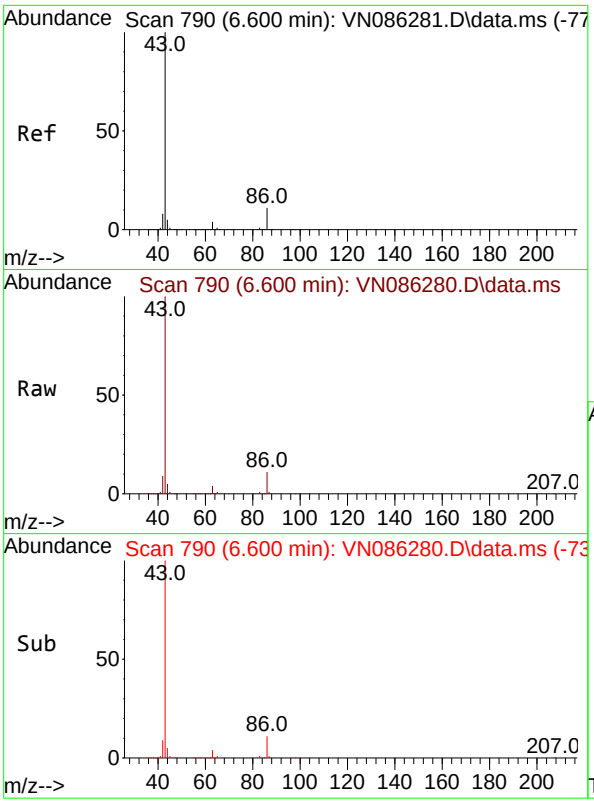


#22
Diisopropyl ether
Concen: 19.911 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 45 Resp: 196831

Ion	Ratio	Lower	Upper
45	100		
43	50.1	41.8	62.8
87	27.1	21.6	32.4
59	12.0	9.0	13.4





#23
Vinyl Acetate
Concen: 103.278 ug/l m
RT: 6.600 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 71353

Ion	Ratio	Lower	Upper
43	100		
86	10.8	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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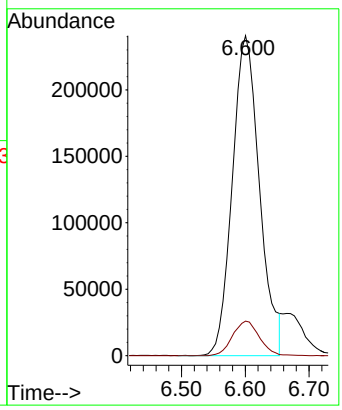
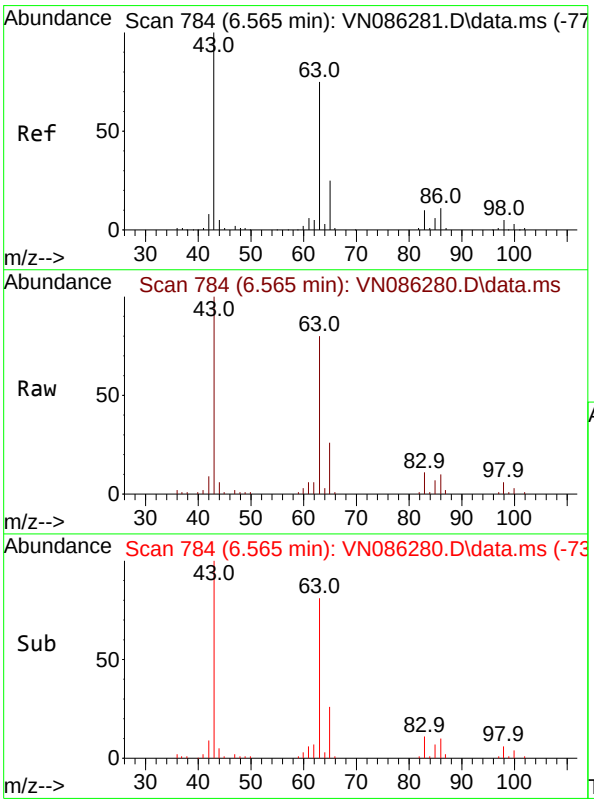
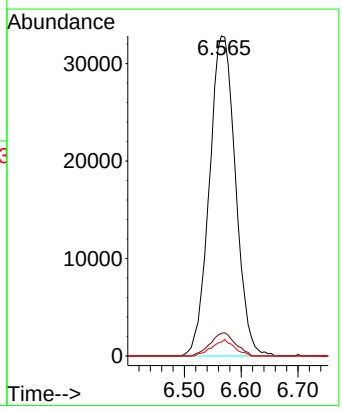


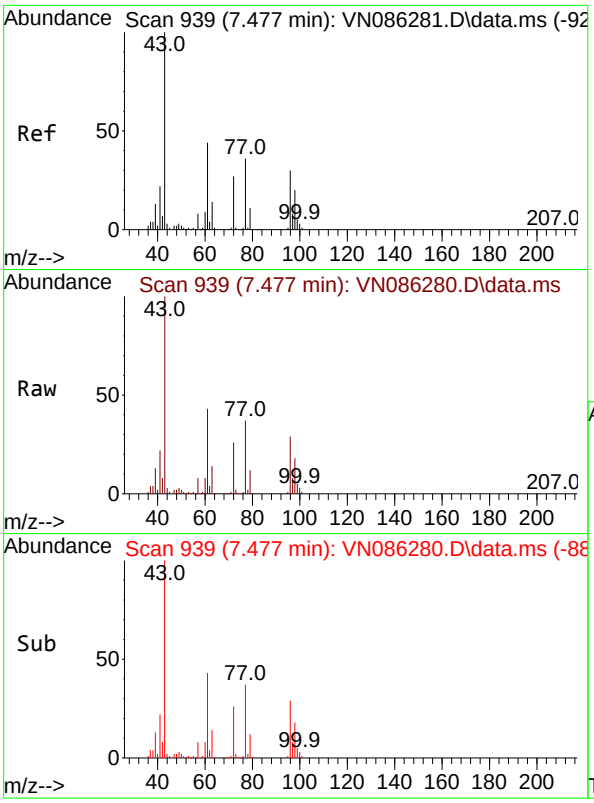


#24
1,1-Dichloroethane
Concen: 20.087 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 63 Resp: 104777

Ion	Ratio	Lower	Upper
63	100		
98	7.1	3.4	10.2
100	4.4	2.1	6.5





#25
2-Butanone
Concen: 103.191 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 20229

Ion	Ratio	Lower	Upper
43	100		
72	26.4	21.7	32.5

Instrument :
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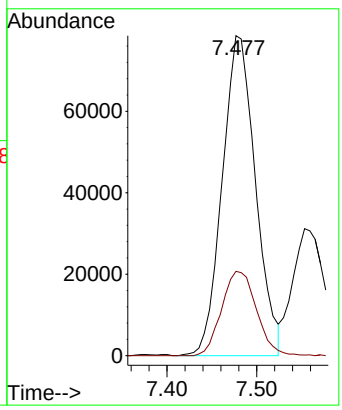
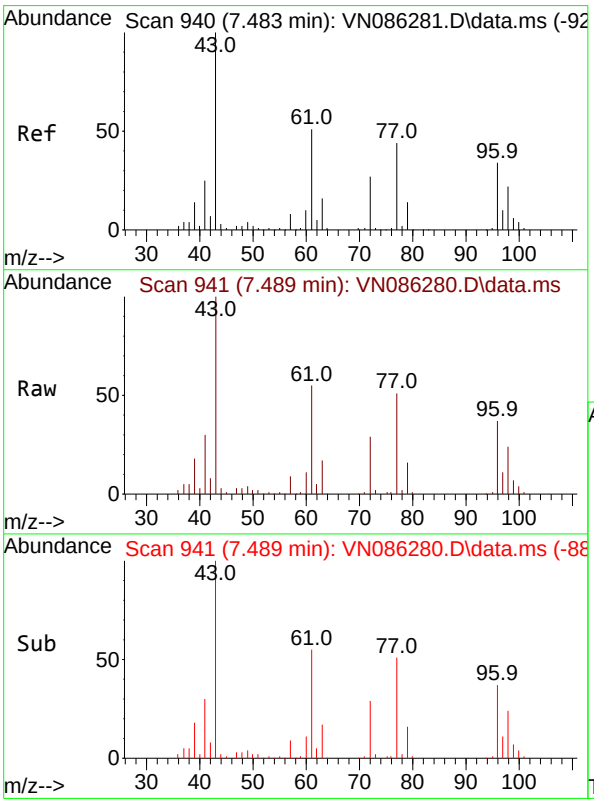
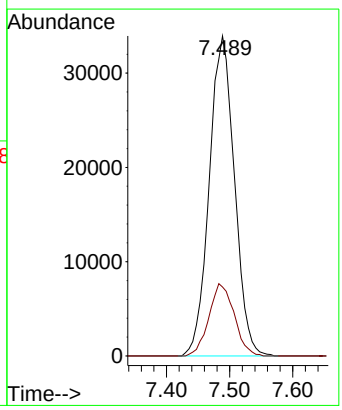


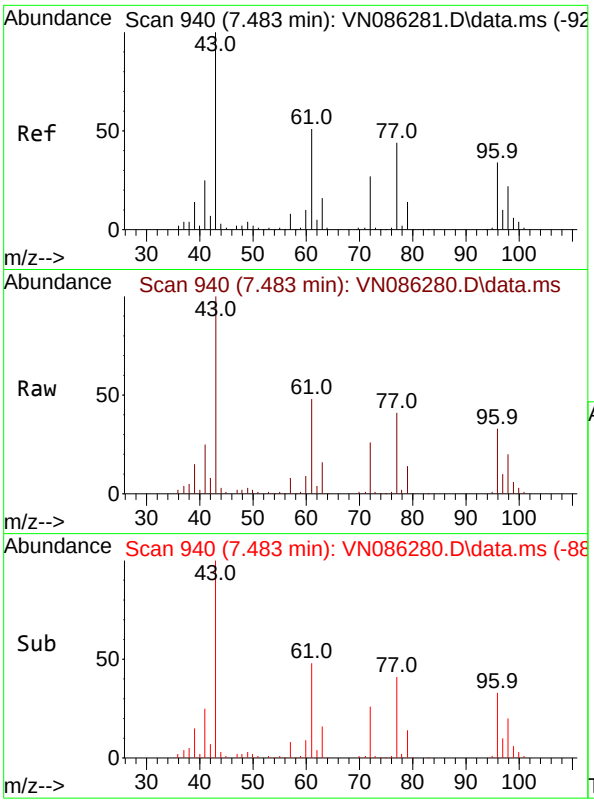


#26
2,2-Dichloropropane
Concen: 20.159 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 77 Resp: 94147

Ion	Ratio	Lower	Upper
77	100		
97	22.6	11.2	33.5





#27
cis-1,2-Dichloroethene
Concen: 20.001 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 96 Resp: 6634

Ion	Ratio	Lower	Upper
96	100		
61	150.6	0.0	299.0
98	64.3	0.0	129.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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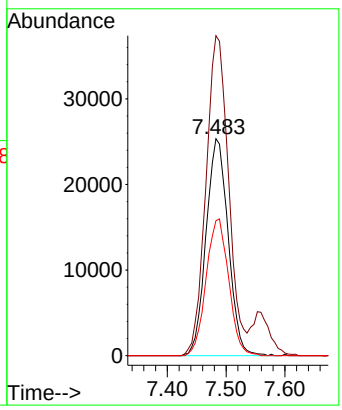
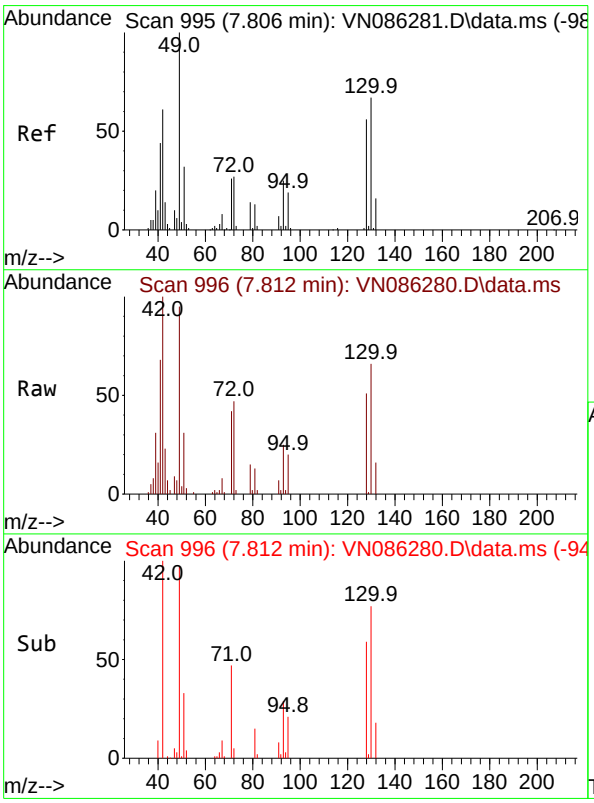
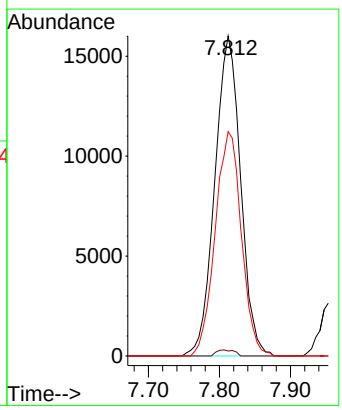


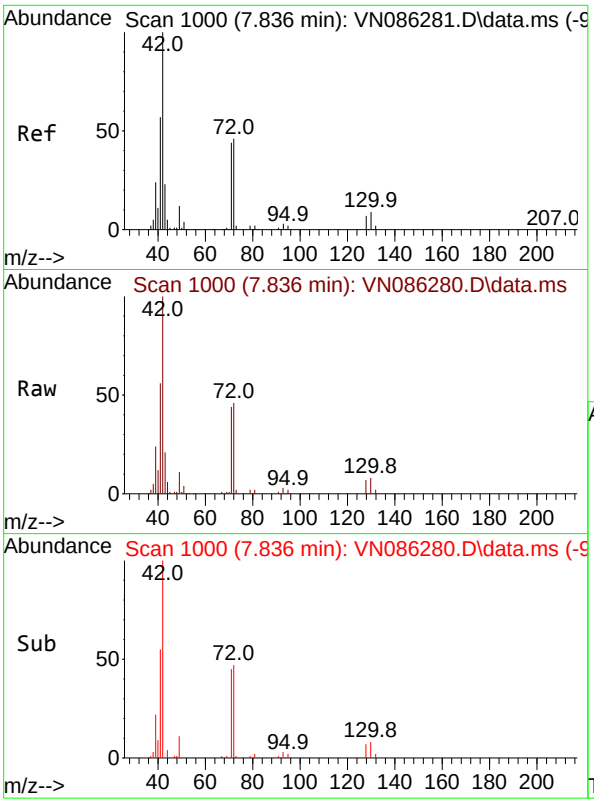


#28
Bromochloromethane
Concen: 18.263 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 49 Resp: 40391

Ion	Ratio	Lower	Upper
49	100		
129	1.3	0.0	3.4
130	71.2	57.1	85.7





#29
Tetrahydrofuran
Concen: 104.008 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 42 Resp: 13634

Ion	Ratio	Lower	Upper
42	100		
72	45.1	36.2	54.4
71	41.3	34.0	51.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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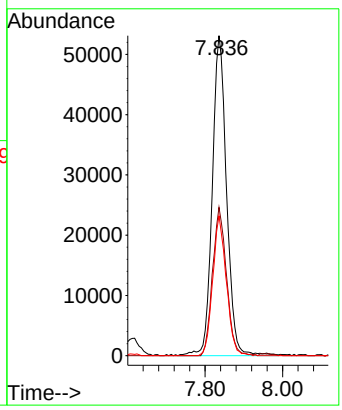
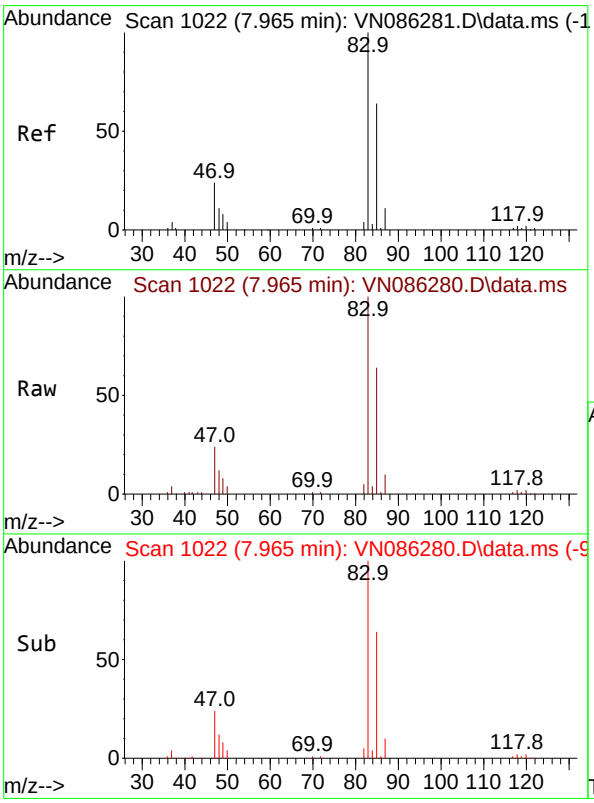
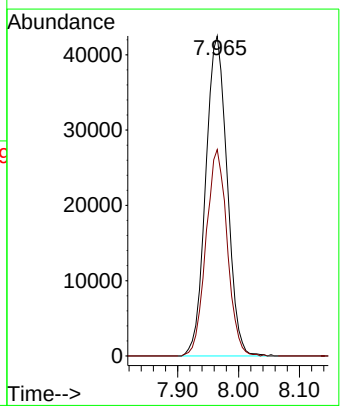


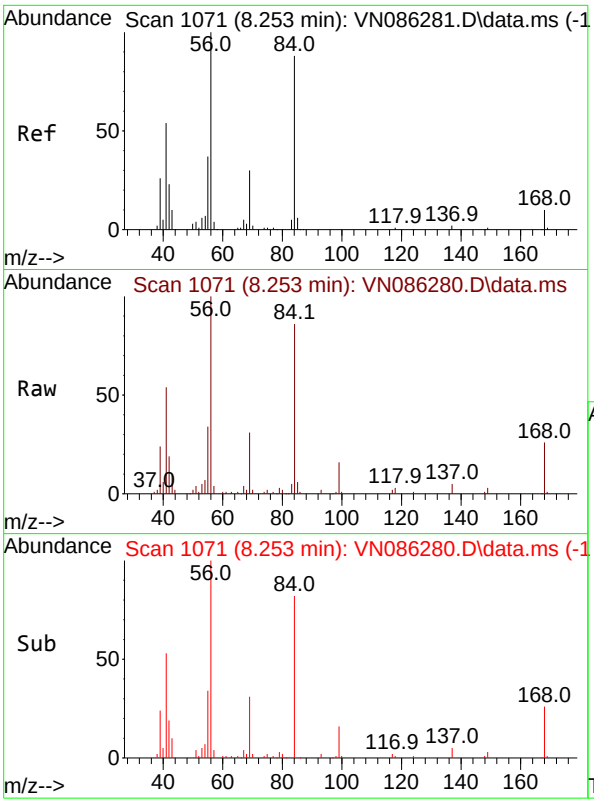


#30
Chloroform
Concen: 20.274 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 83 Resp: 103881

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.5	77.3

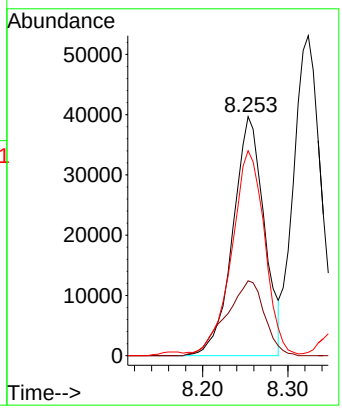




#31
Cyclohexane
Concen: 19.895 ug/l
RT: 8.253 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 56 Resp: 10154

Ion	Ratio	Lower	Upper
56	100		
69	31.3	24.2	36.2
84	84.2	70.3	105.5



Instrument :
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ClientSampleId :
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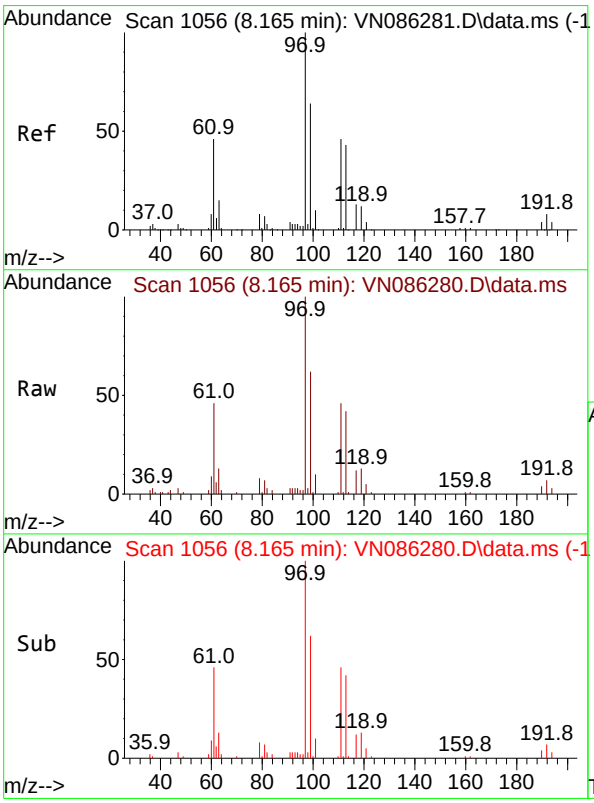
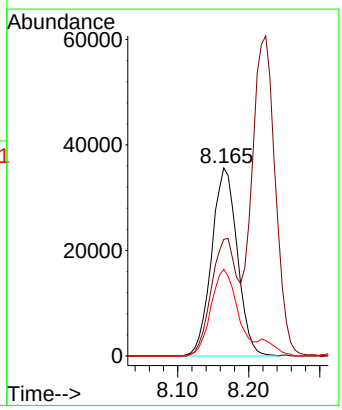
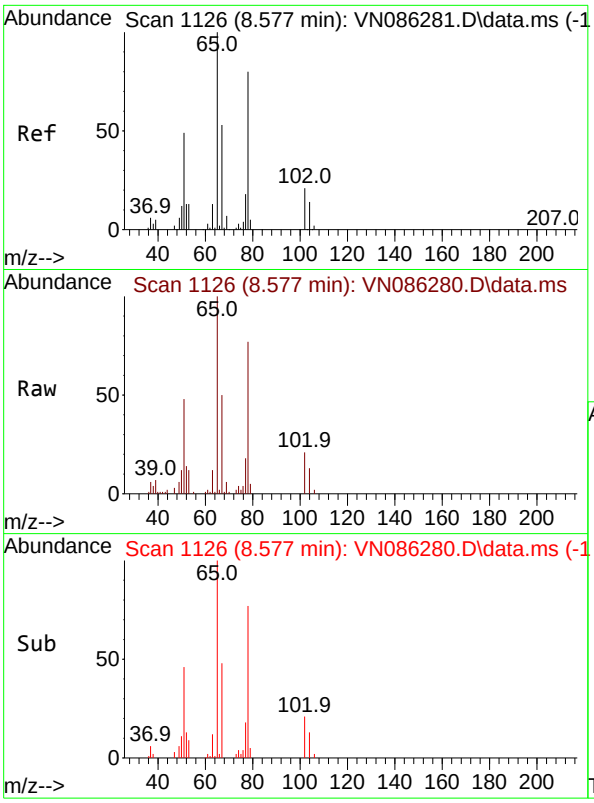


#32
1,1,1-Trichloroethane
Concen: 20.344 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 97 Resp: 89173

Ion	Ratio	Lower	Upper
97	100		
99	62.7	52.7	79.1
61	48.7	39.5	59.3





#33
1,2-Dichloroethane-d4
Concen: 19.513 ug/l
RT: 8.577 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 65 Resp: 6145

Ion	Ratio	Lower	Upper
65	100		
67	52.9	0.0	106.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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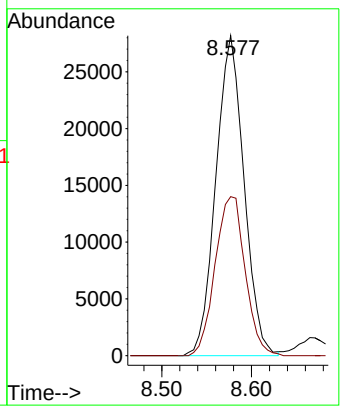
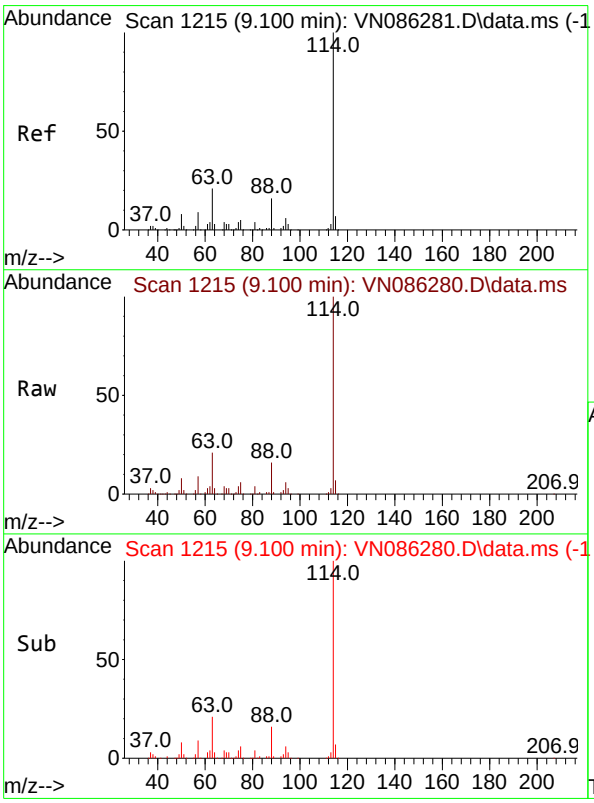
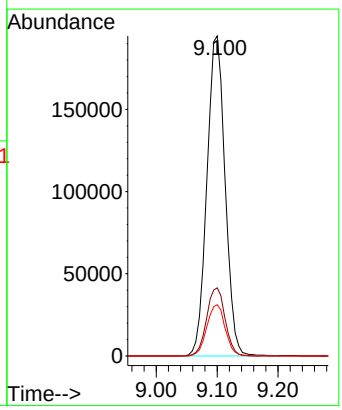


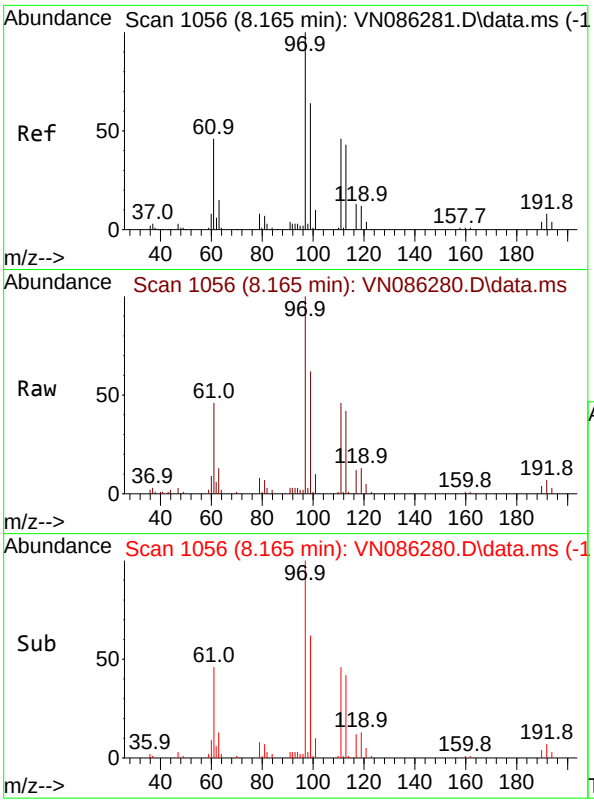


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:114 Resp: 404366

Ion	Ratio	Lower	Upper
114	100		
63	21.3	0.0	42.6
88	16.0	0.0	31.8

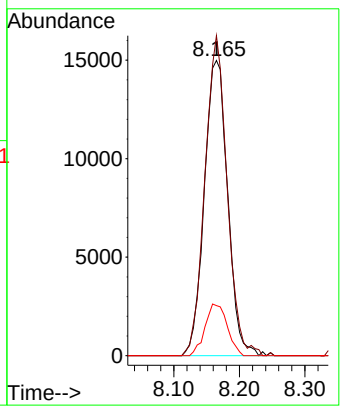




#35
Dibromofluoromethane
Concen: 19.819 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:113 Resp: 3719

Ion	Ratio	Lower	Upper
113	100		
111	102.8	83.4	125.0
192	16.5	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
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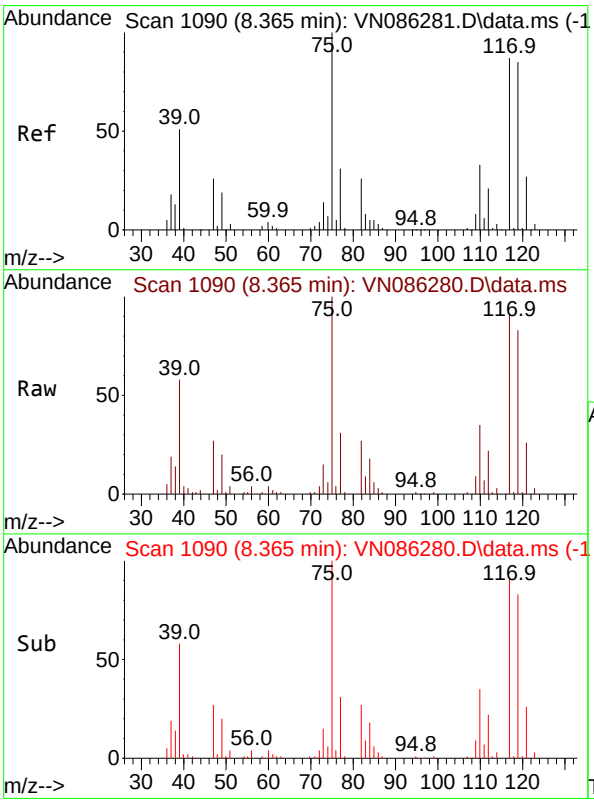
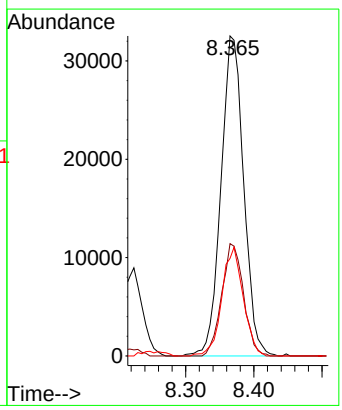
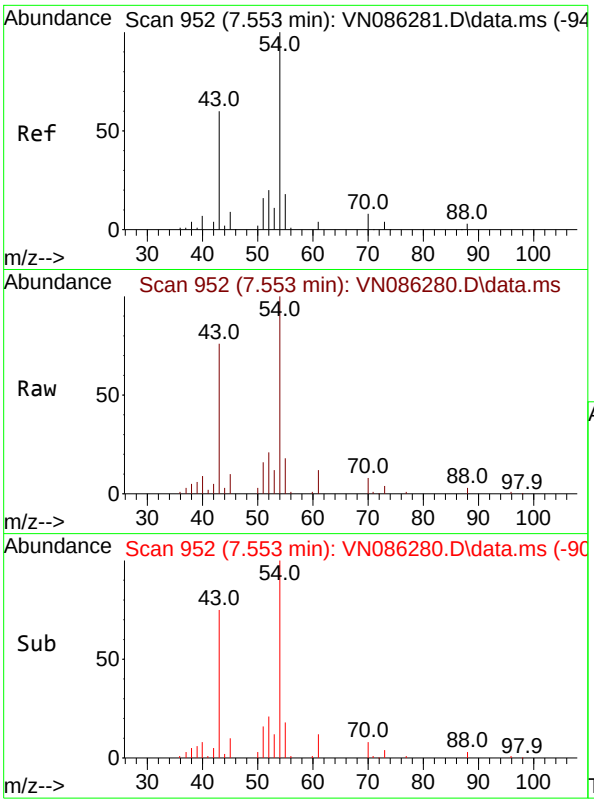


#36
1,1-Dichloropropene
Concen: 20.122 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 75 Resp: 75426

Ion	Ratio	Lower	Upper
75	100		
110	33.6	16.8	50.4
77	32.0	24.9	37.3

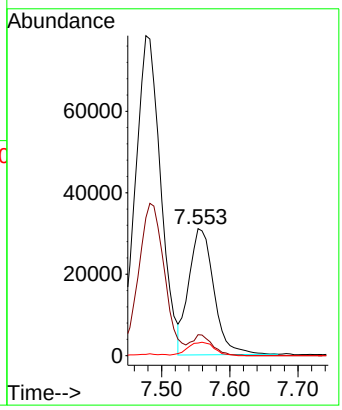




#37
Ethyl Acetate
Concen: 20.115 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 7938

Ion	Ratio	Lower	Upper
43	100		
61	13.7	11.1	16.7
70	11.2	9.2	13.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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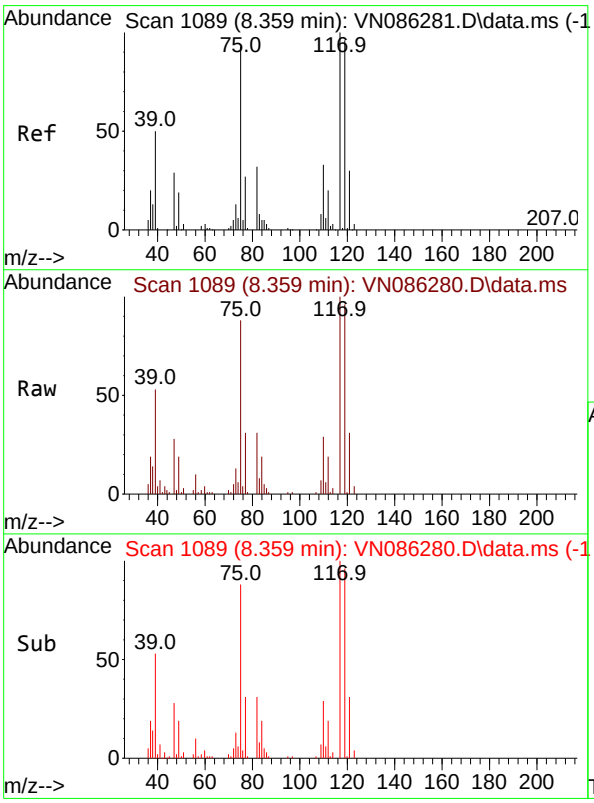
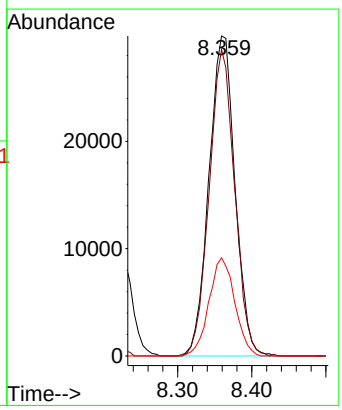
Supervised By :Semsettin Yesilyurt 04/16/2025

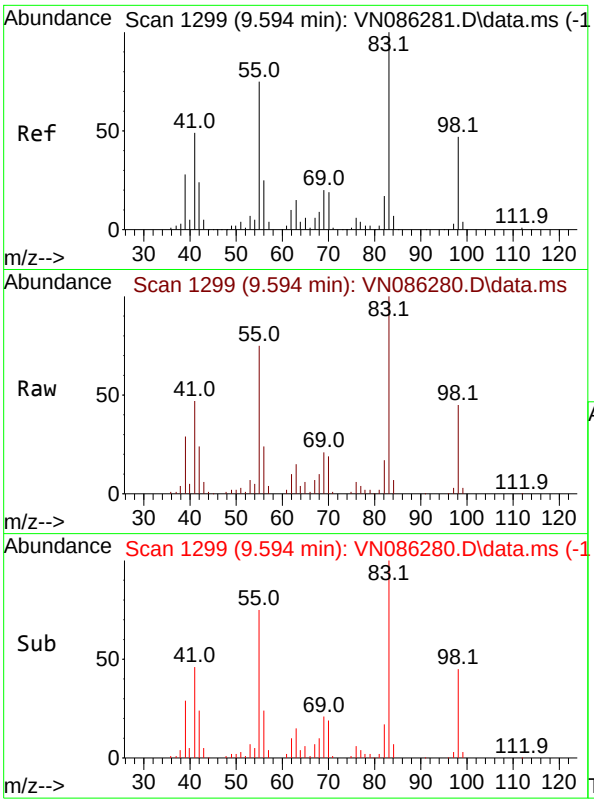


#38
Carbon Tetrachloride
Concen: 20.367 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:117 Resp: 72704

Ion	Ratio	Lower	Upper
117	100		
119	95.7	76.8	115.2
121	30.7	23.8	35.8

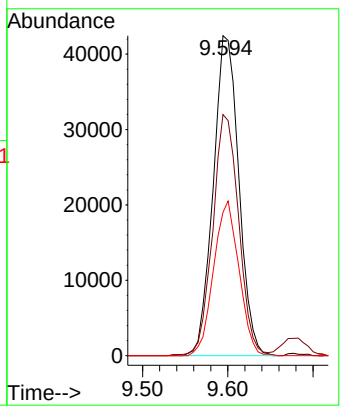




#39
Methylcyclohexane
Concen: 19.915 ug/l
RT: 9.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 83 Resp: 8872

Ion	Ratio	Lower	Upper
83	100		
55	75.0	59.8	89.8
98	44.8	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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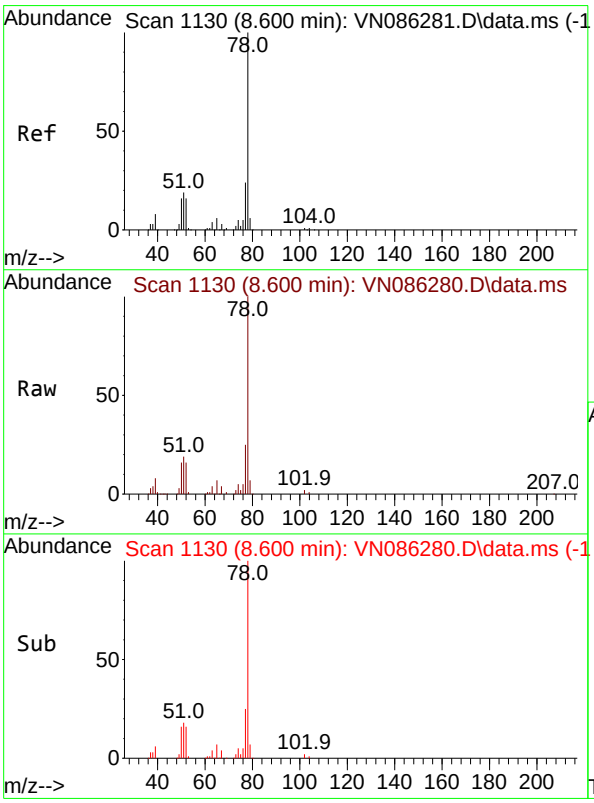
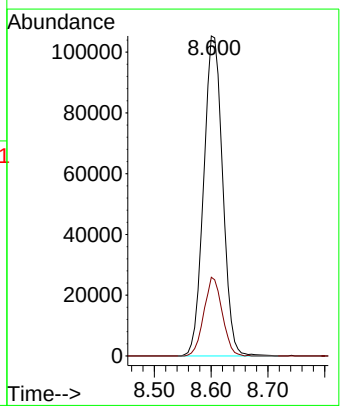
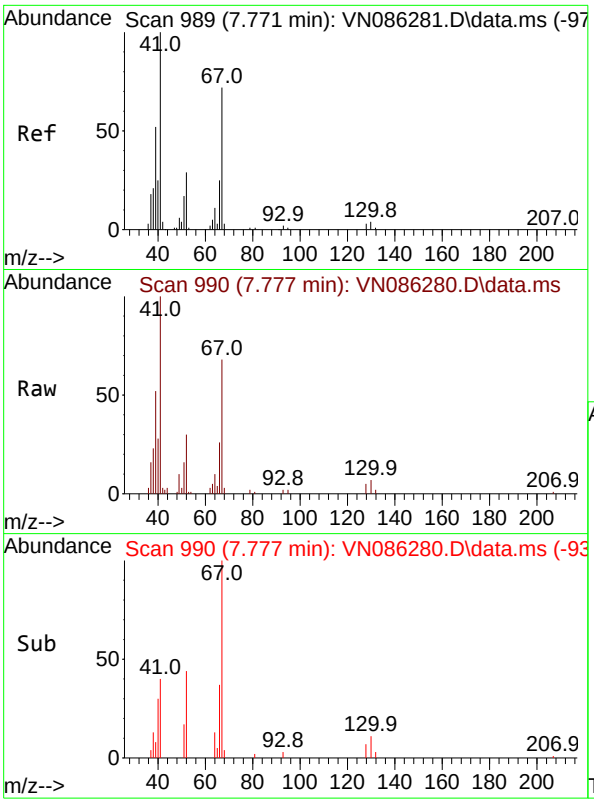


#40
Benzene
Concen: 20.310 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 78 Resp: 243918

Ion	Ratio	Lower	Upper
78	100		
77	24.6	19.4	29.2

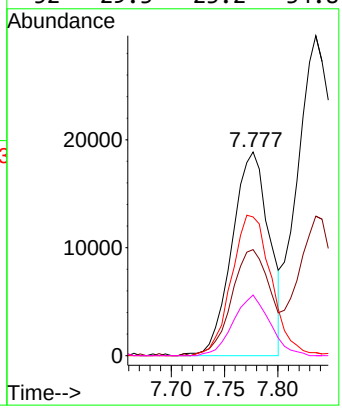




#41
Methacrylonitrile
Concen: 20.007 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 41 Resp: 4576

Ion	Ratio	Lower	Upper
41	100		
39	53.5	43.0	64.4
67	74.0	58.8	88.2
52	29.3	23.2	34.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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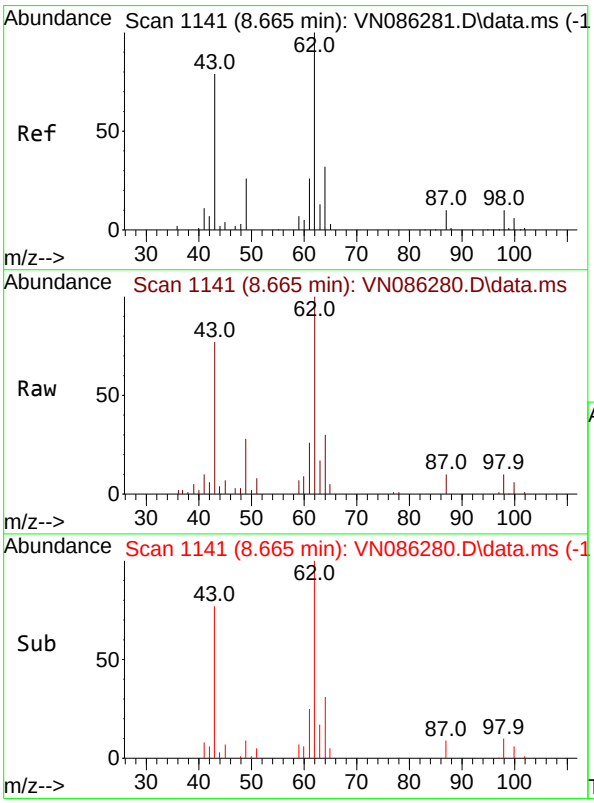
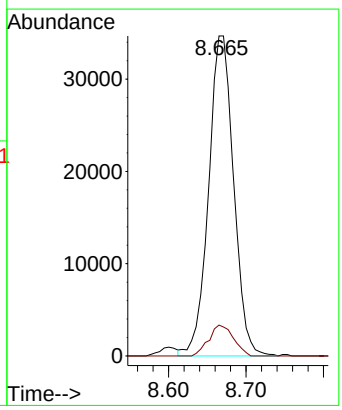
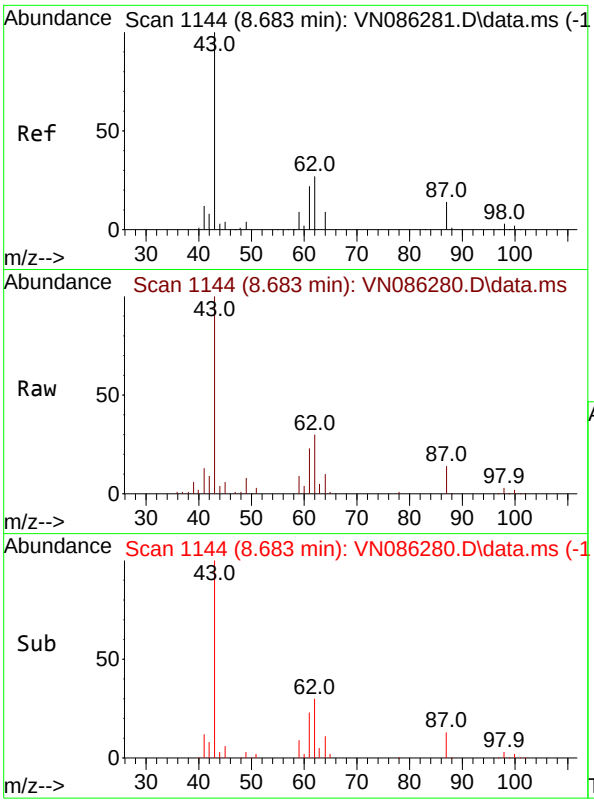


#42
1,2-Dichloroethane
Concen: 20.348 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 62 Resp: 77932

Ion	Ratio	Lower	Upper
62	100		
98	9.5	0.0	19.2





#43
Isopropyl Acetate
Concen: 20.921 ug/l
RT: 8.683 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 15775

Ion	Ratio	Lower	Upper
43	100		
61	24.6	20.5	30.7
87	12.9	10.5	15.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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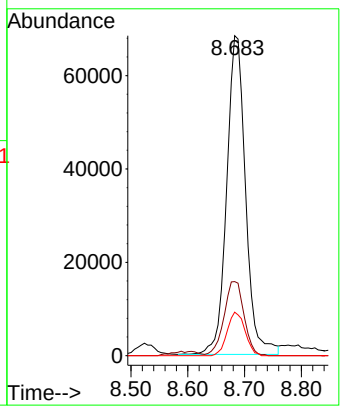
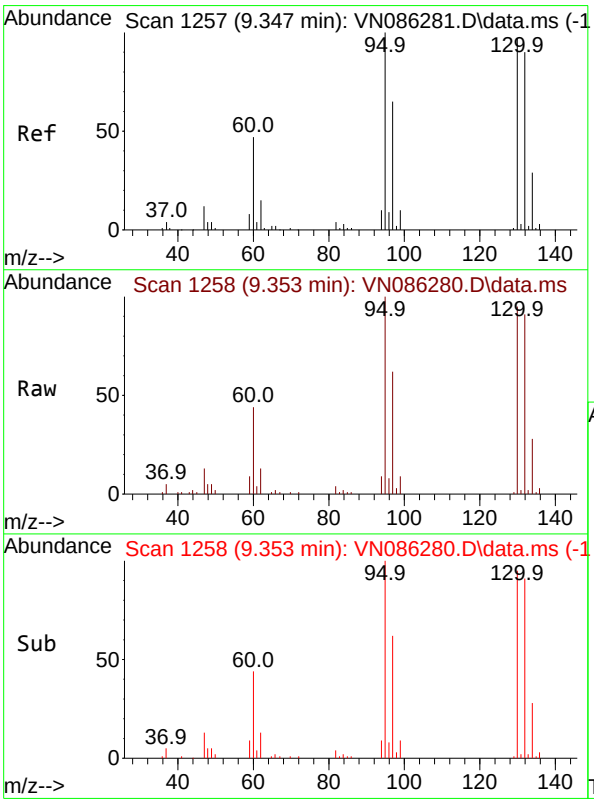
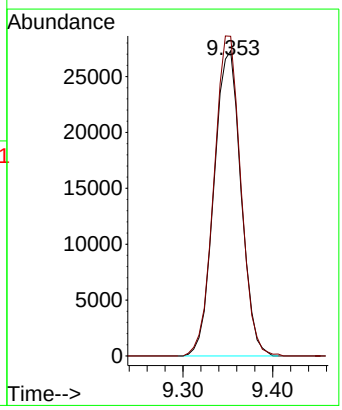


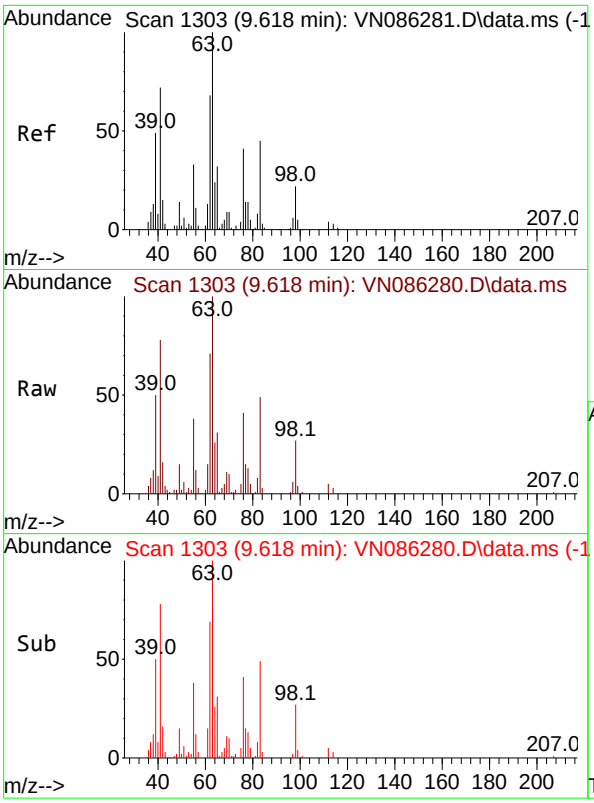


#44
Trichloroethene
Concen: 19.998 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:130 Resp: 56926

Ion	Ratio	Lower	Upper
130	100		
95	104.8	0.0	207.2





#45
1,2-Dichloropropane
Concen: 20.273 ug/l
RT: 9.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 63 Resp: 5959

Ion	Ratio	Lower	Upper
63	100		
65	30.8	25.4	38.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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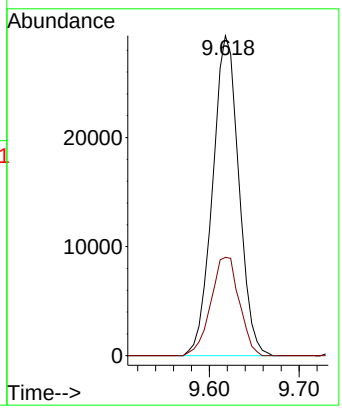
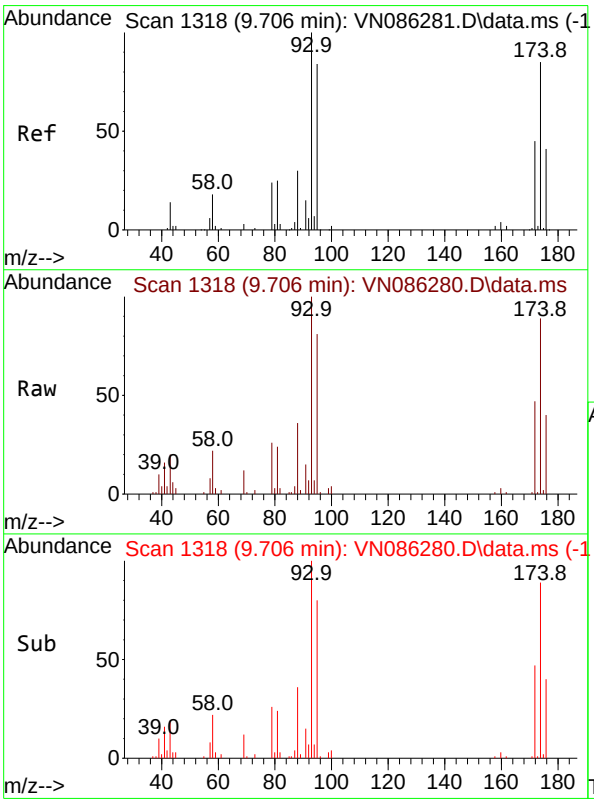
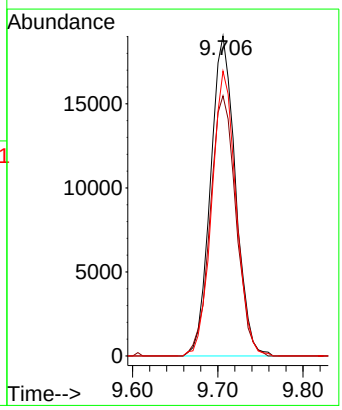


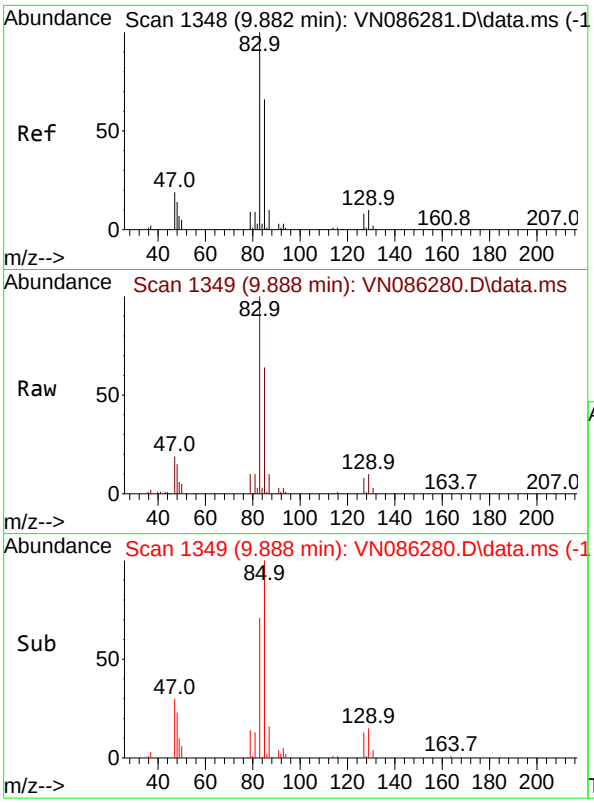


#46
Dibromomethane
Concen: 20.608 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 93 Resp: 38601

Ion	Ratio	Lower	Upper
93	100		
95	84.0	66.2	99.4
174	86.8	67.8	101.6

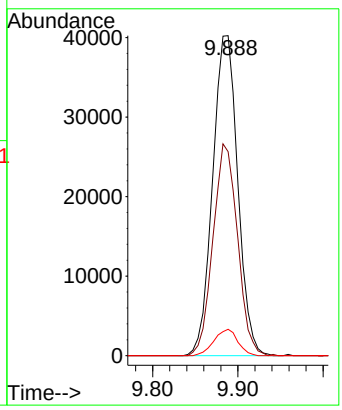




#47
Bromodichloromethane
Concen: 20.397 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 83 Resp: 8251

Ion	Ratio	Lower	Upper
83	100		
85	63.7	52.6	78.8
127	8.2	6.1	9.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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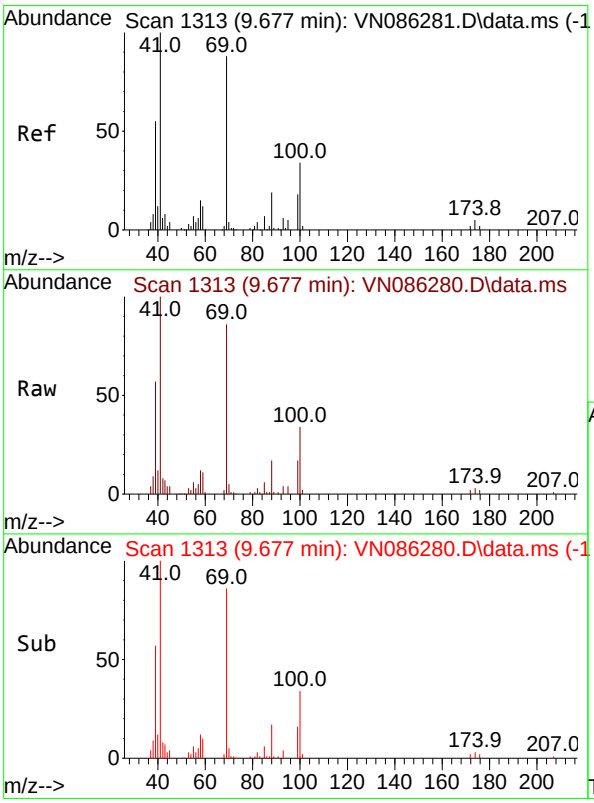
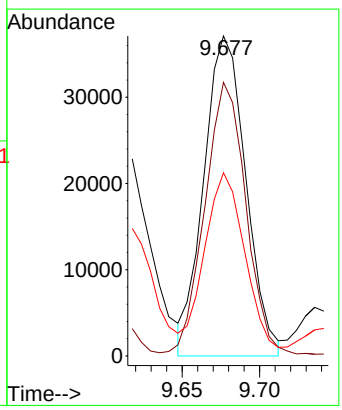
Supervised By :Semsettin Yesilyurt 04/16/2025

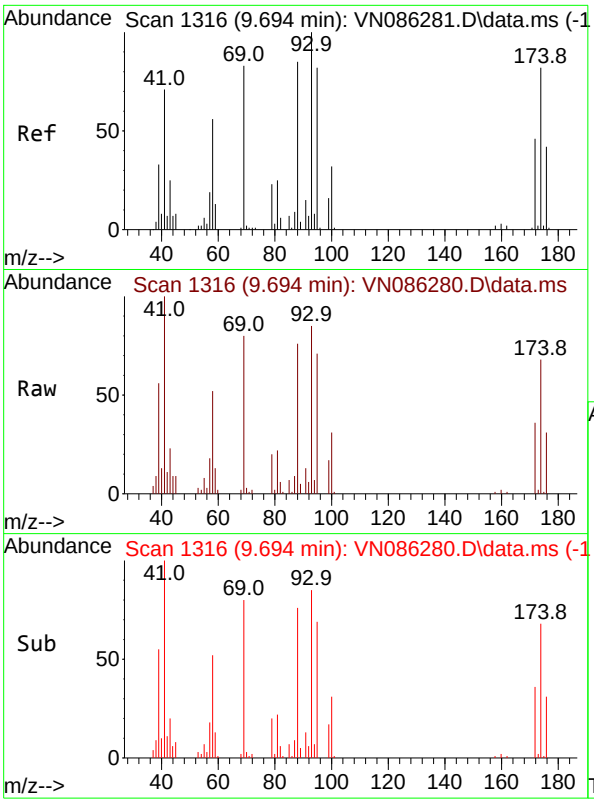


#48
Methyl methacrylate
Concen: 20.195 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 41 Resp: 69986

Ion	Ratio	Lower	Upper
41	100		
69	84.6	68.2	102.2
39	56.1	45.2	67.8





#49
1,4-Dioxane
Concen: 413.277 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 88 Resp: 2436

Ion	Ratio	Lower	Upper
88	100		
43	27.3	23.8	35.8
58	71.1	57.4	86.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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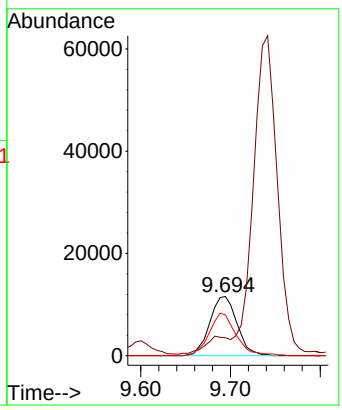
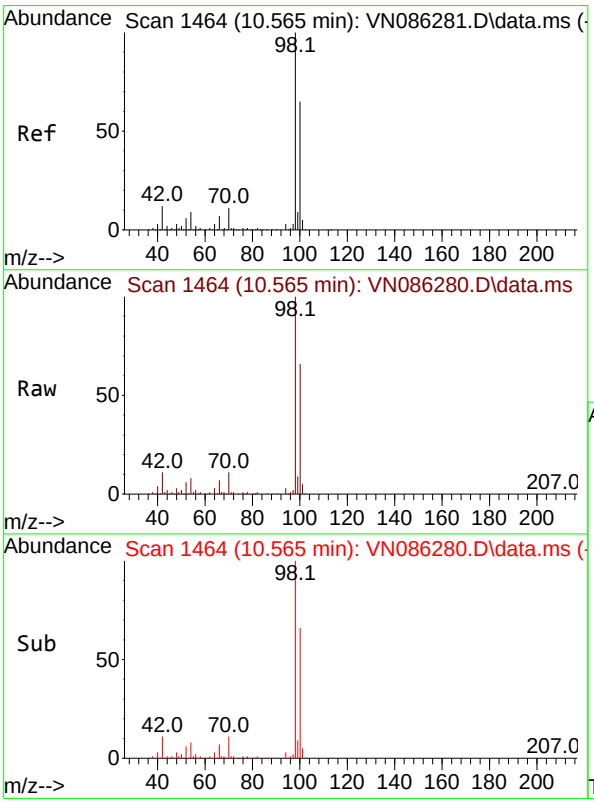
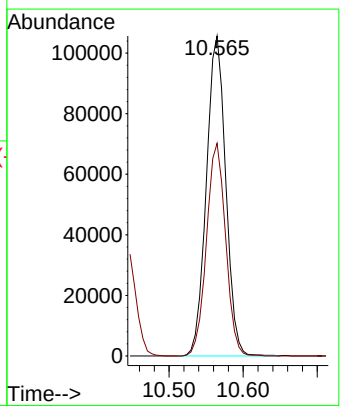


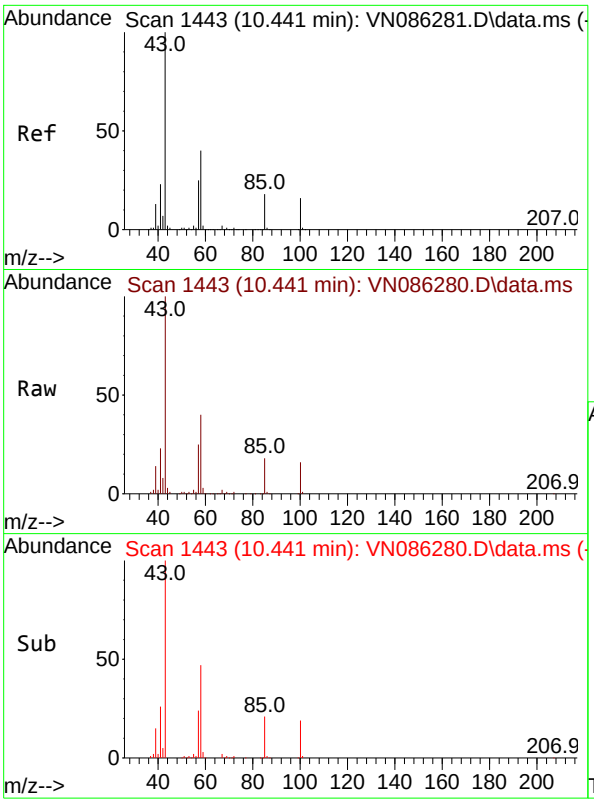


#50
Toluene-d8
Concen: 19.112 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 98 Resp: 191691

Ion	Ratio	Lower	Upper
98	100		
100	65.7	52.5	78.7

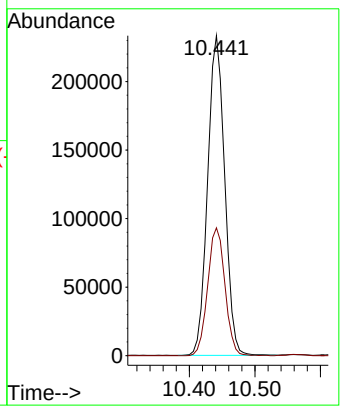




#51
4-Methyl-2-Pentanone
Concen: 104.297 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 42147

Ion	Ratio	Lower	Upper
43	100		
58	40.5	32.2	48.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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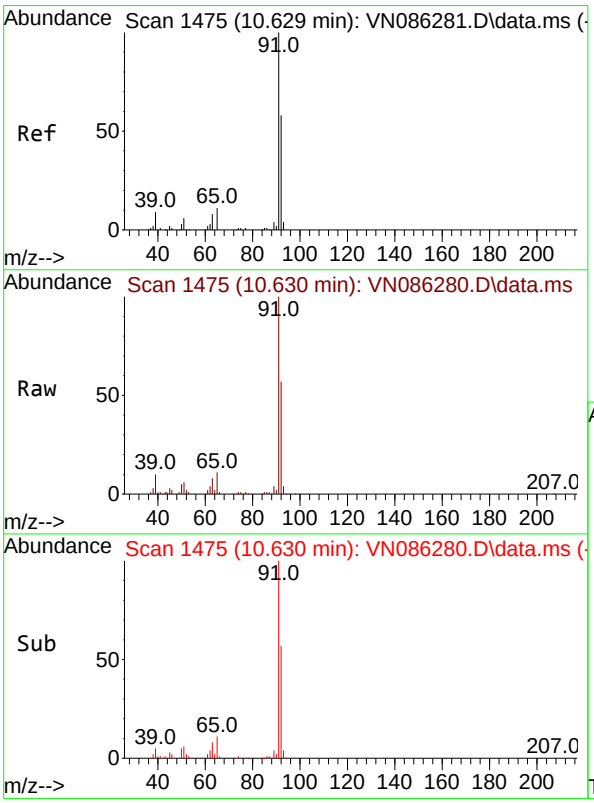
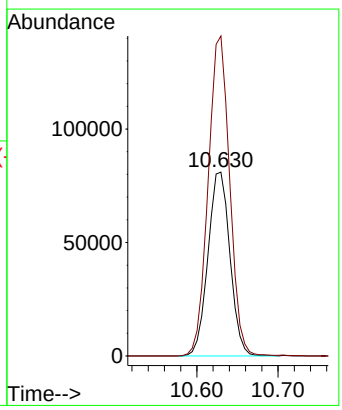
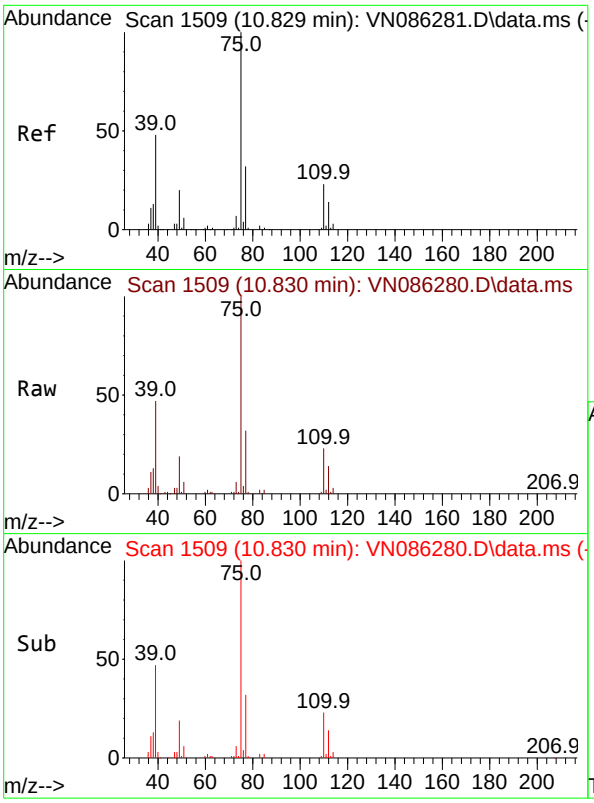


#52
Toluene
Concen: 20.317 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 92 Resp: 152248

Ion	Ratio	Lower	Upper
92	100		
91	170.4	137.3	205.9

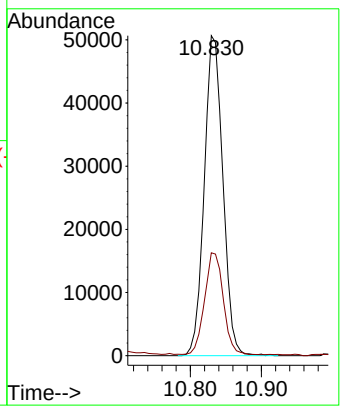




#53
t-1,3-Dichloropropene
Concen: 20.470 ug/l
RT: 10.830 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 75 Resp: 9244

Ion	Ratio	Lower	Upper
75	100		
77	31.8	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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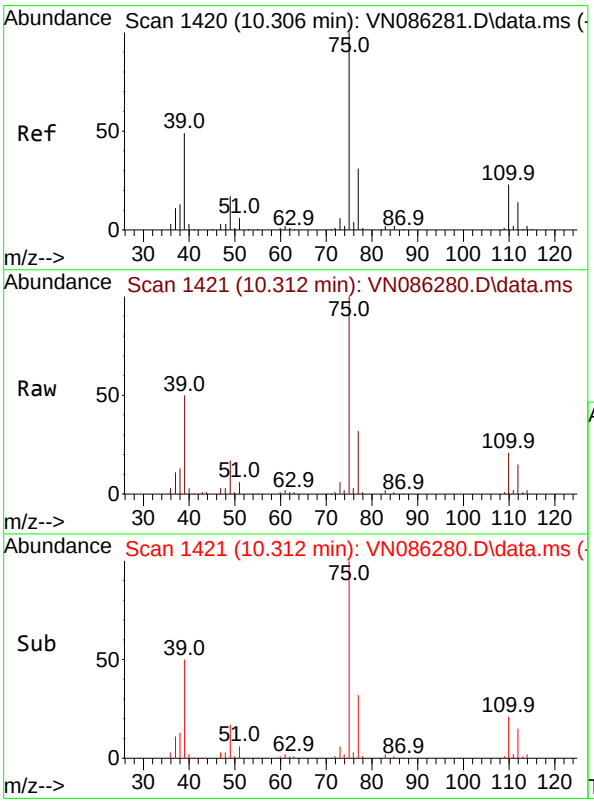
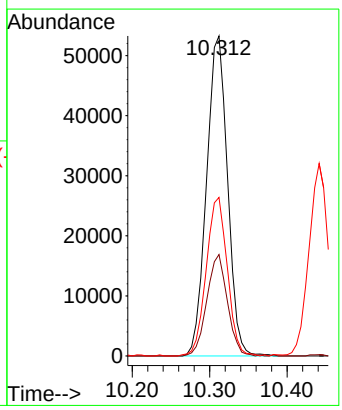
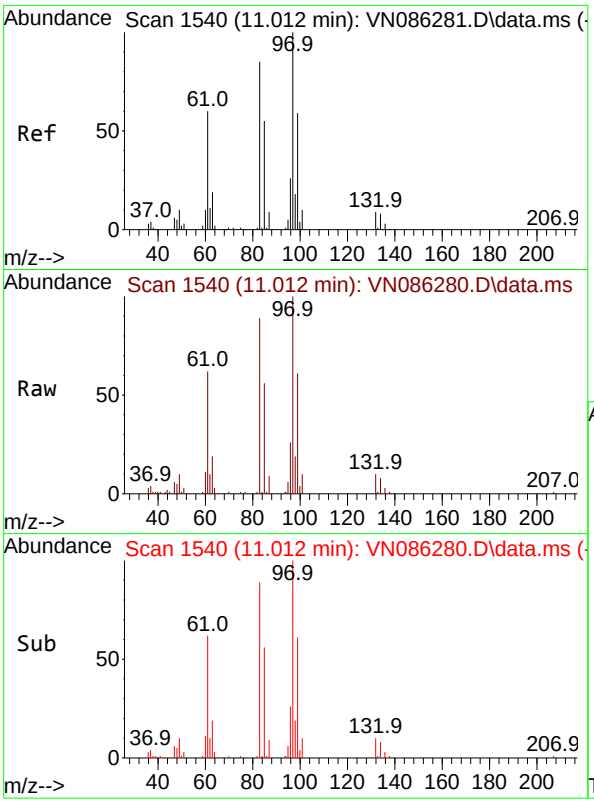


#54
cis-1,3-Dichloropropene
Concen: 20.245 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 75 Resp: 100415

Ion	Ratio	Lower	Upper
75	100		
77	31.7	25.2	37.8
39	49.5	39.3	58.9

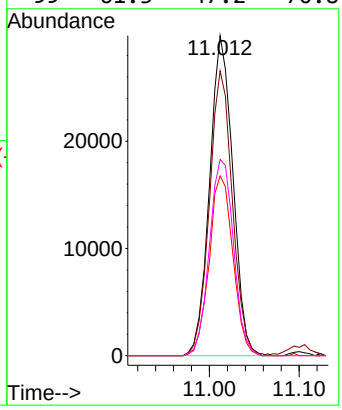




#55
1,1,2-Trichloroethane
Concen: 19.891 ug/l
RT: 11.012 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 97 Resp: 5363

Ion	Ratio	Lower	Upper
97	100		
83	89.0	68.4	102.6
85	56.2	43.9	65.9
99	61.3	47.2	70.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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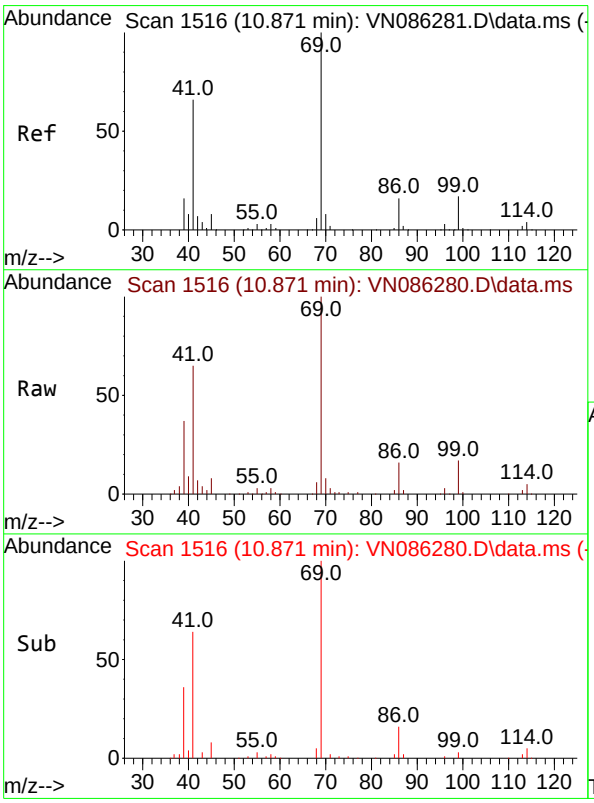
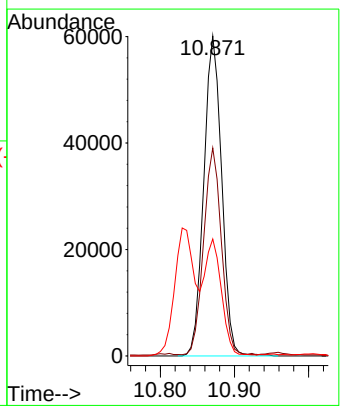
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

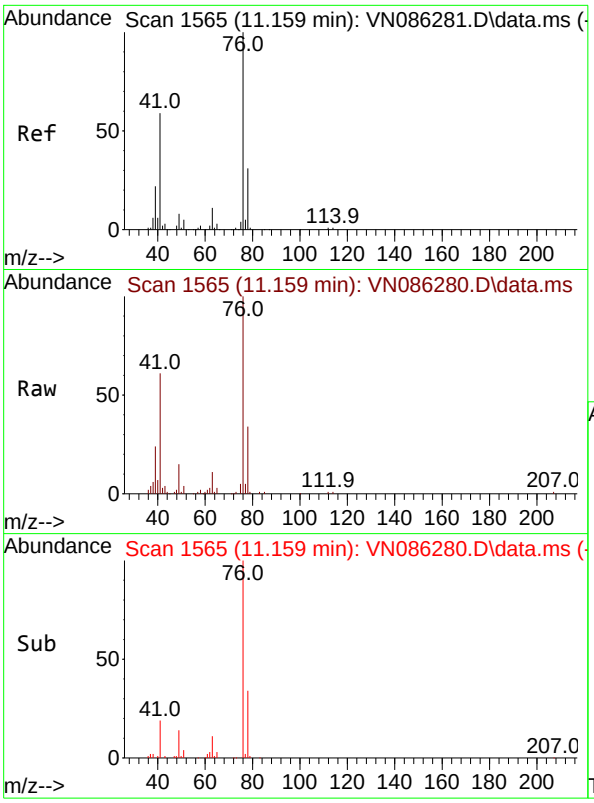


#56
Ethyl methacrylate
Concen: 20.321 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 69 Resp: 100712

Ion	Ratio	Lower	Upper
69	100		
41	63.7	51.7	77.5
39	33.6	26.3	39.5





#57
1,3-Dichloropropane
Concen: 20.353 ug/l
RT: 11.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 76 Resp: 9736

Ion	Ratio	Lower	Upper
76	100		
78	32.8	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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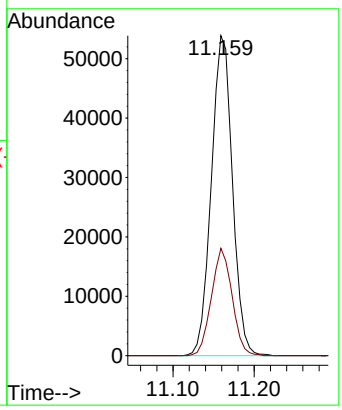
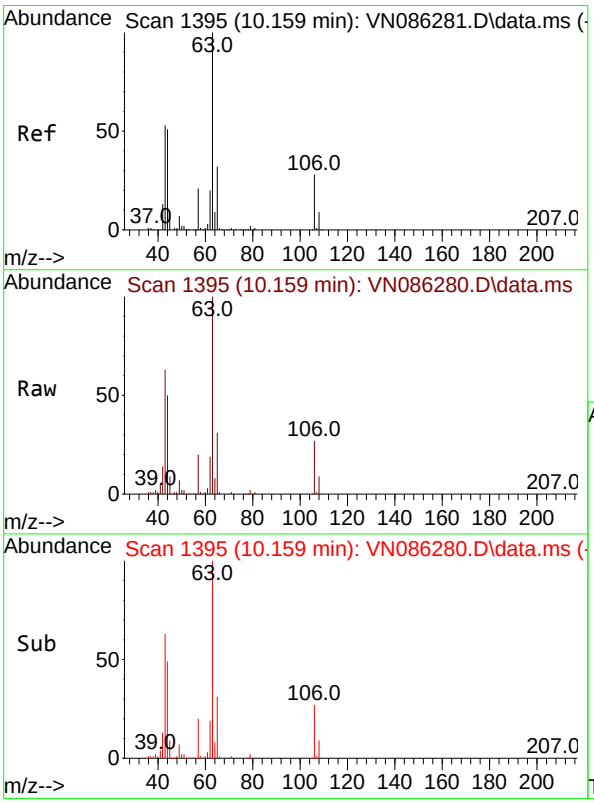
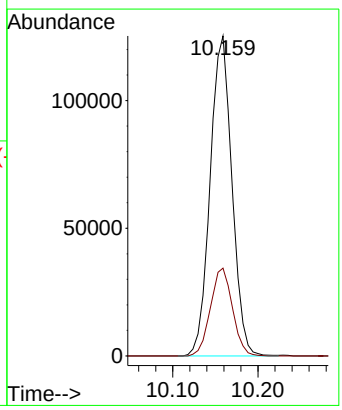


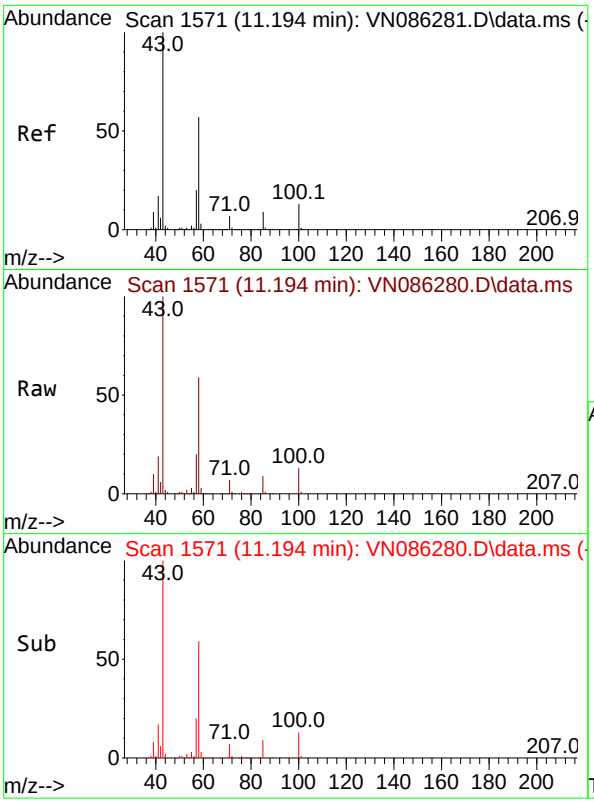


#58
2-Chloroethyl Vinyl ether
Concen: 94.702 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 63 Resp: 222766

Ion	Ratio	Lower	Upper
63	100		
106	27.6	22.2	33.2





#59
2-Hexanone
Concen: 103.408 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 30995

Ion	Ratio	Lower	Upper
43	100		
58	56.9	28.3	85.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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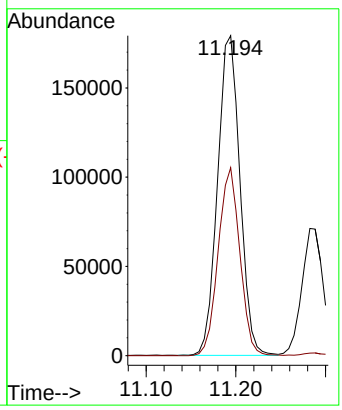
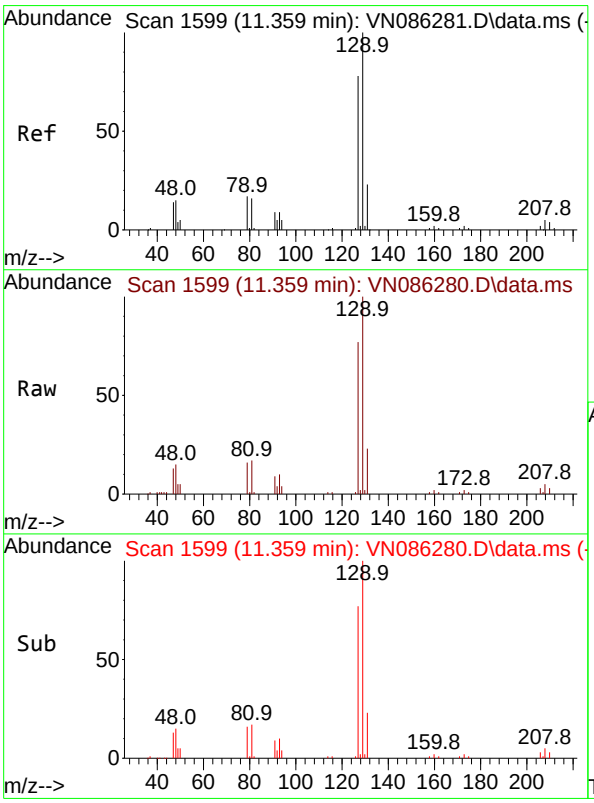
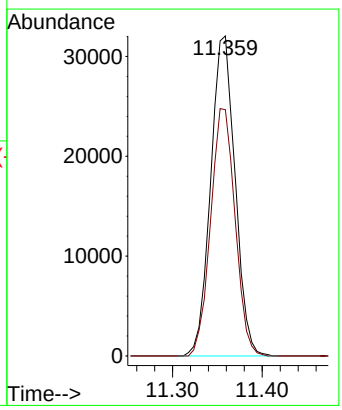


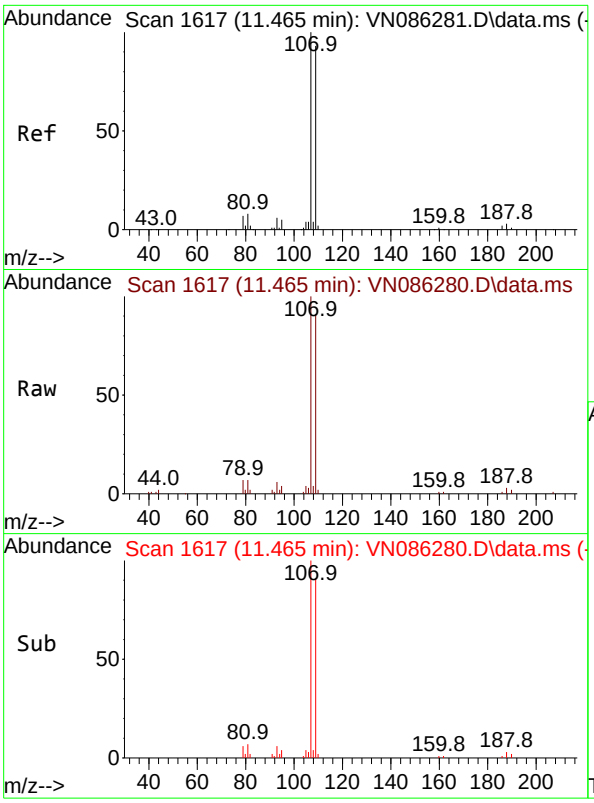


#60
Dibromochloromethane
Concen: 20.467 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:129 Resp: 60596

Ion	Ratio	Lower	Upper
129	100		
127	77.3	38.7	116.1





#61
1,2-Dibromoethane
Concen: 20.834 ug/l
RT: 11.465 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:107 Resp: 5667

Ion	Ratio	Lower	Upper
107	100		
109	93.2	75.4	113.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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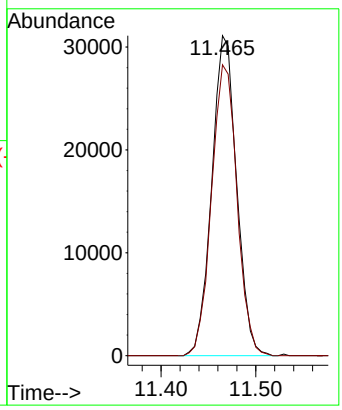
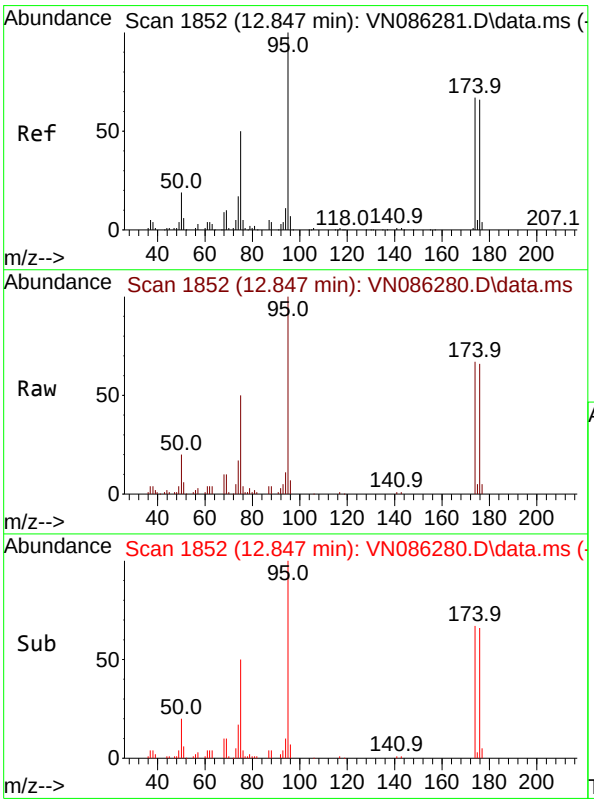
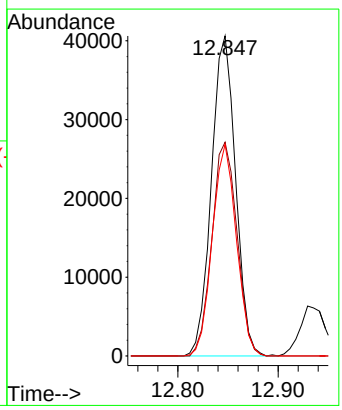


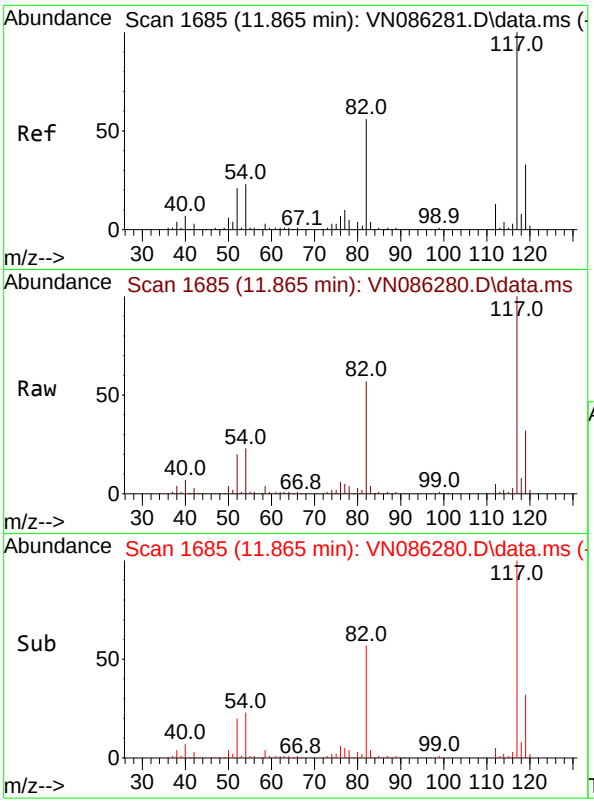


#62
4-Bromofluorobenzene
Concen: 18.596 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 95 Resp: 68030

Ion	Ratio	Lower	Upper
95	100		
174	69.5	0.0	133.4
176	66.0	0.0	129.2

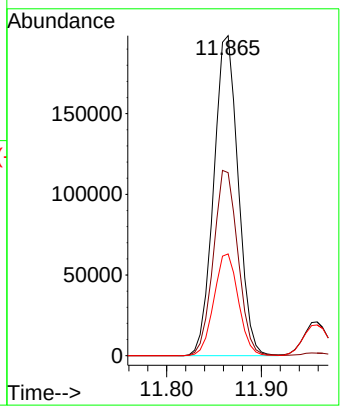




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:117 Resp: 35562

Ion	Ratio	Lower	Upper
117	100		
82	57.2	44.7	67.1
119	31.8	26.4	39.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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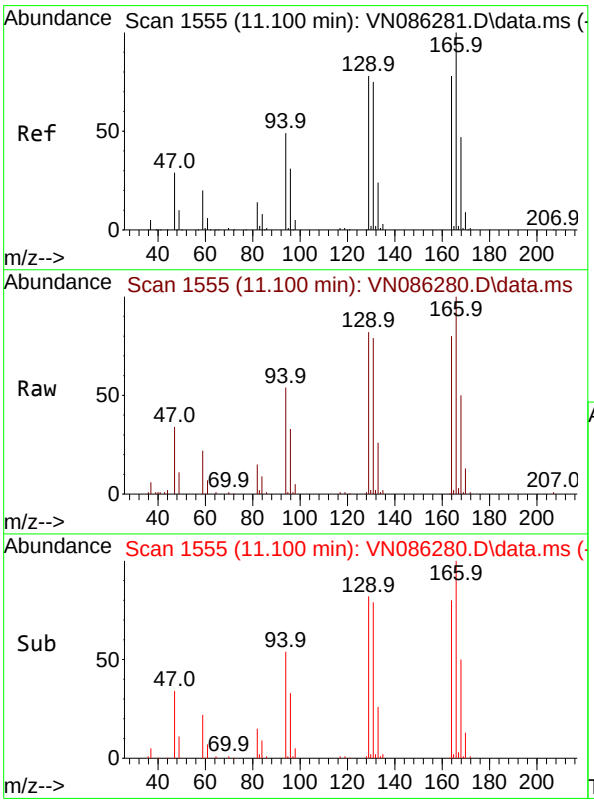
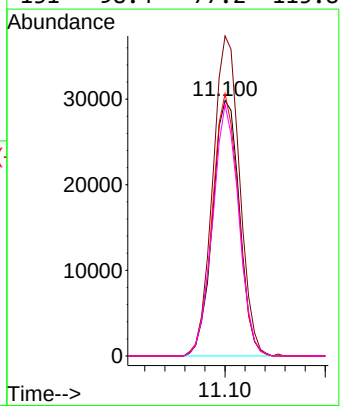
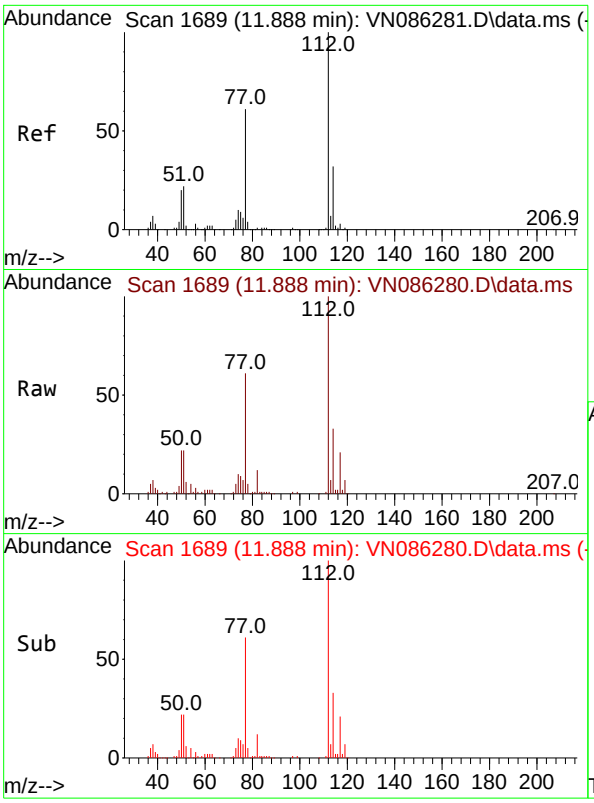


#64
Tetrachloroethene
Concen: 20.282 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:164 Resp: 55481

Ion	Ratio	Lower	Upper
164	100		
166	125.3	103.0	154.4
129	102.7	80.1	120.1
131	98.4	77.2	115.8

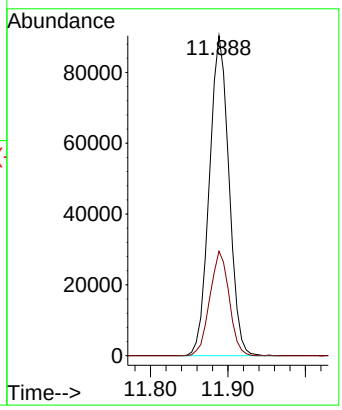




#65
Chlorobenzene
Concen: 20.024 ug/l
RT: 11.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:112 Resp: 15891

Ion	Ratio	Lower	Upper
112	100		
114	32.6	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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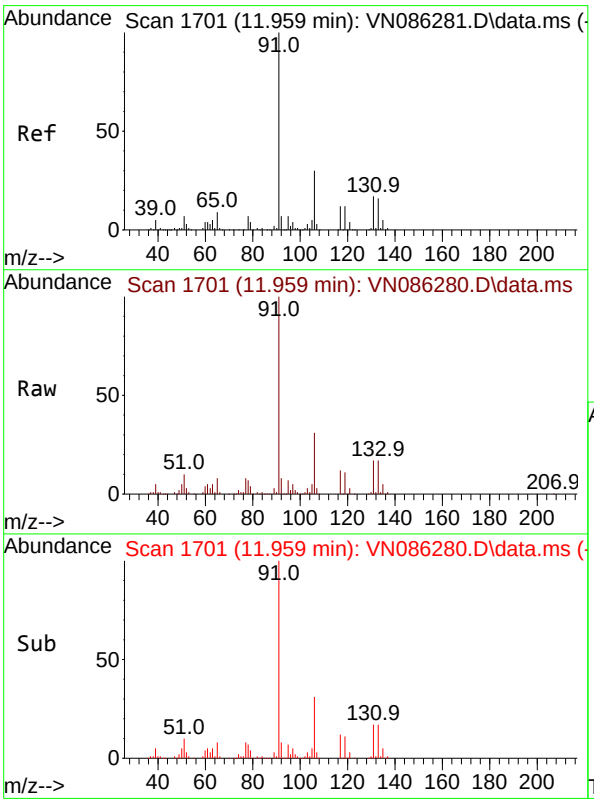
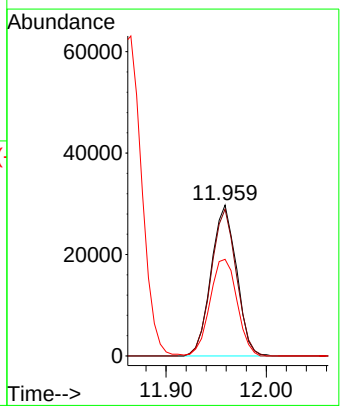
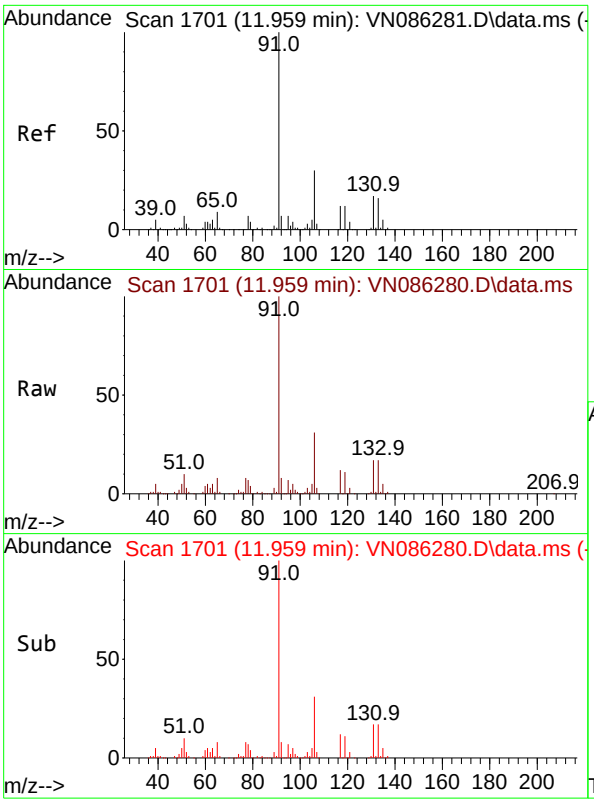


#66
1,1,1,2-Tetrachloroethane
Concen: 20.010 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:131 Resp: 52389

Ion	Ratio	Lower	Upper
131	100		
133	96.9	47.1	141.3
119	68.2	33.8	101.4

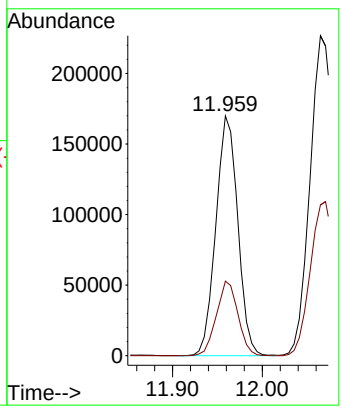




#67
Ethyl Benzene
Concen: 20.144 ug/l
RT: 11.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 91 Resp: 28848

Ion	Ratio	Lower	Upper
91	100		
106	31.1	24.3	36.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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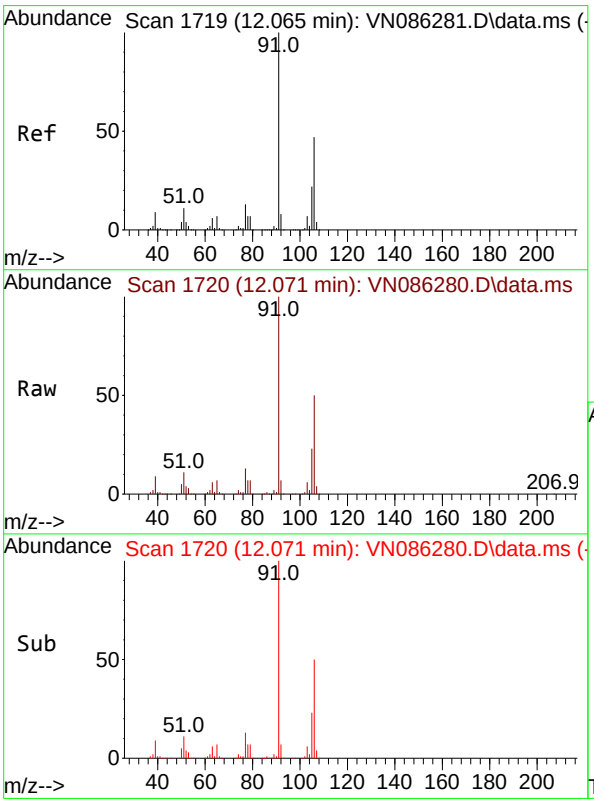
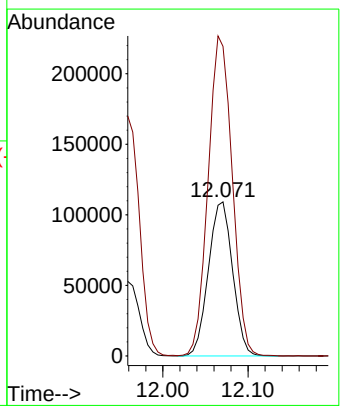
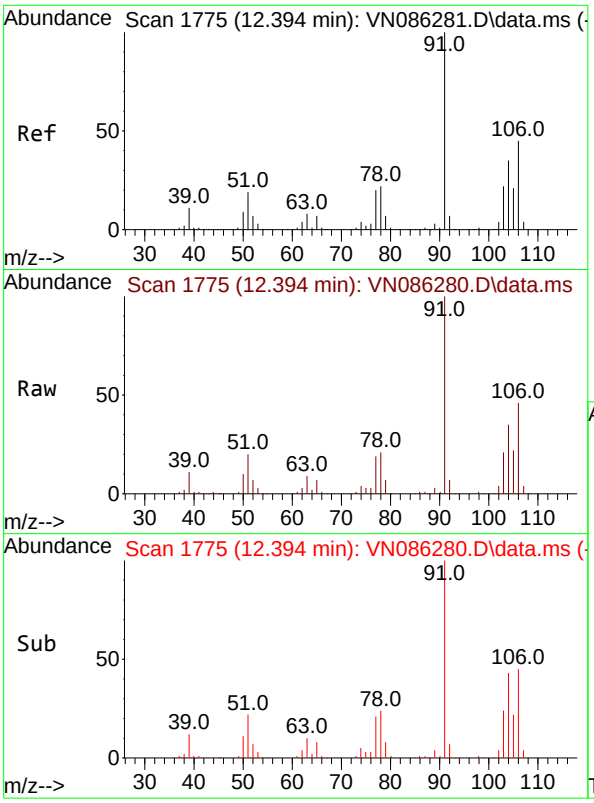


#68
m/p-Xylenes
Concen: 40.122 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:106 Resp: 215301

Ion	Ratio	Lower	Upper
106	100		
91	207.0	166.5	249.7





#69
o-Xylene
Concen: 20.193 ug/l
RT: 12.394 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:106 Resp: 10716

Ion	Ratio	Lower	Upper
106	100		
91	217.5	109.7	329.0

Instrument :
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ClientSampleId :
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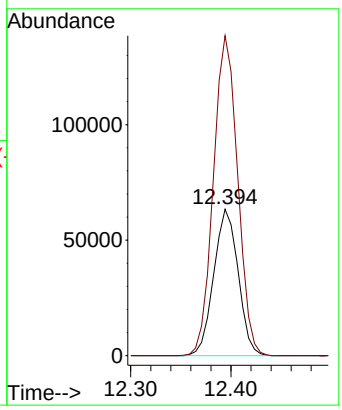
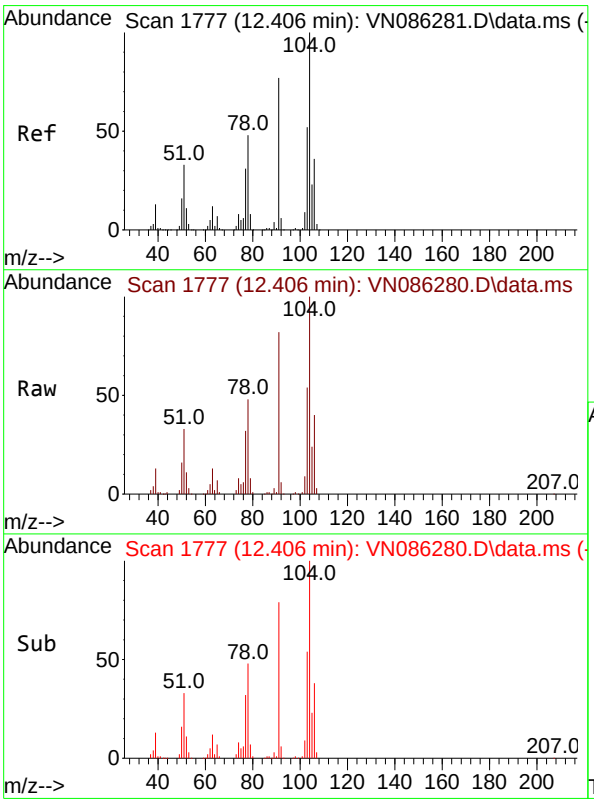
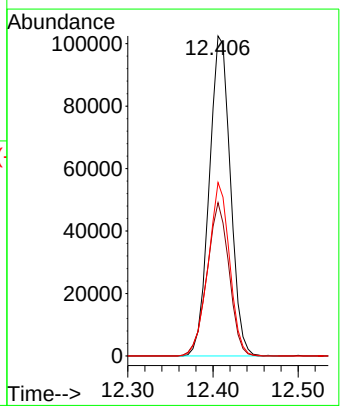


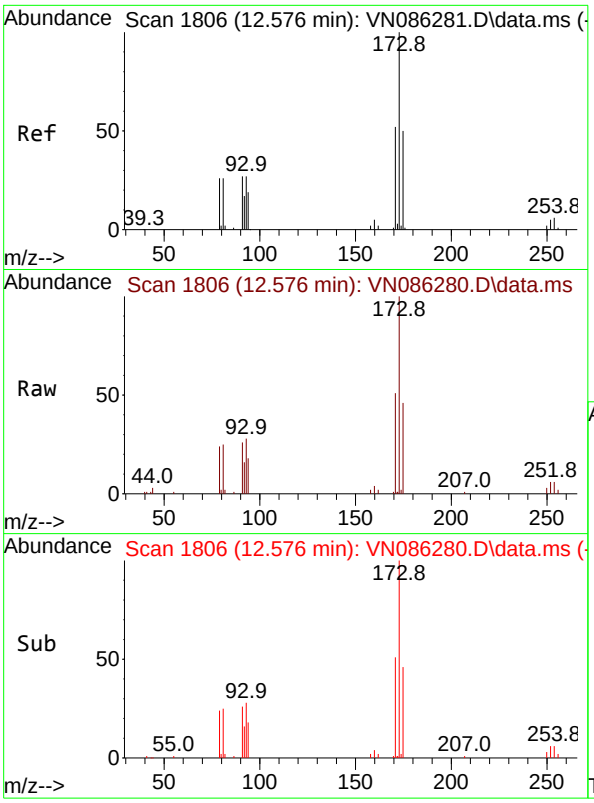


#70
Styrene
Concen: 20.029 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:104 Resp: 177099

Ion	Ratio	Lower	Upper
104	100		
78	49.8	40.6	61.0
103	55.0	43.6	65.4





#71
Bromoform
Concen: 20.138 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:173 Resp: 3969

Ion	Ratio	Lower	Upper
173	100		
175	47.5	24.6	73.6
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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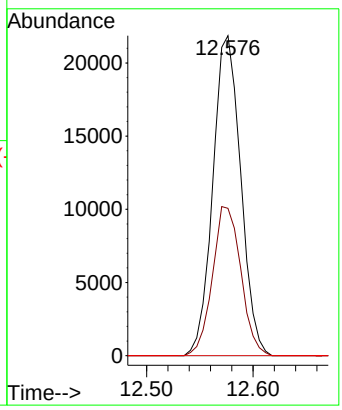
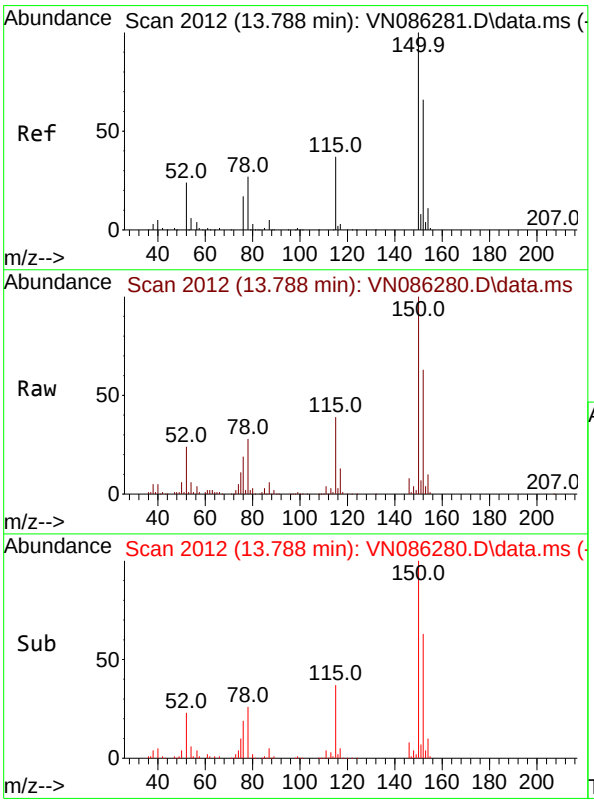
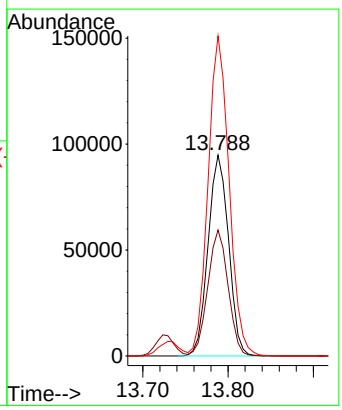


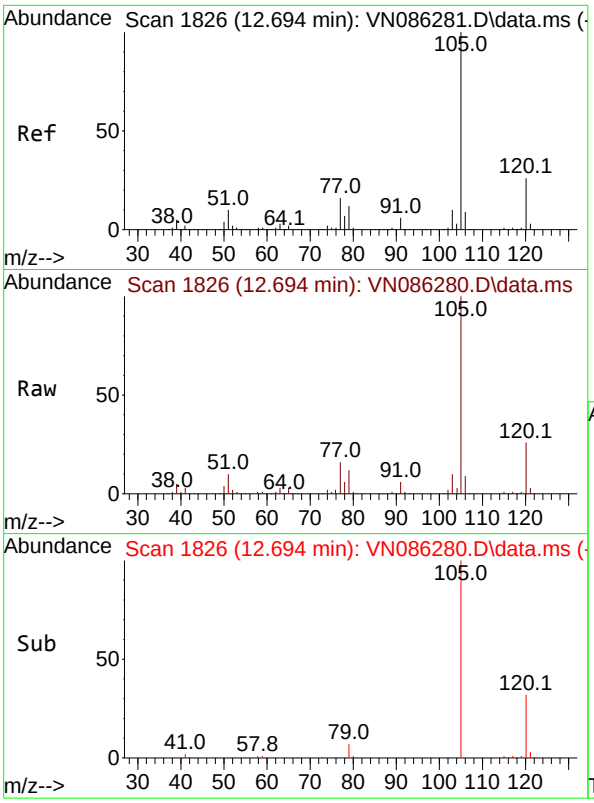


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:152 Resp: 158232

Ion	Ratio	Lower	Upper
152	100		
115	62.3	31.9	95.9
150	163.3	0.0	352.0





#73
Isopropylbenzene
Concen: 20.443 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:105 Resp: 26460

Ion	Ratio	Lower	Upper
105	100		
120	25.9	13.1	39.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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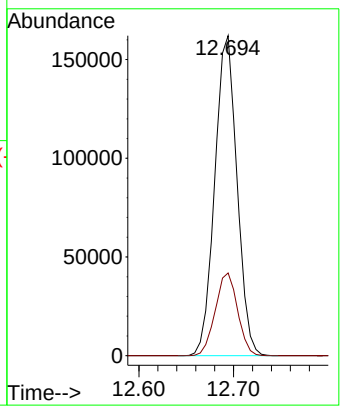
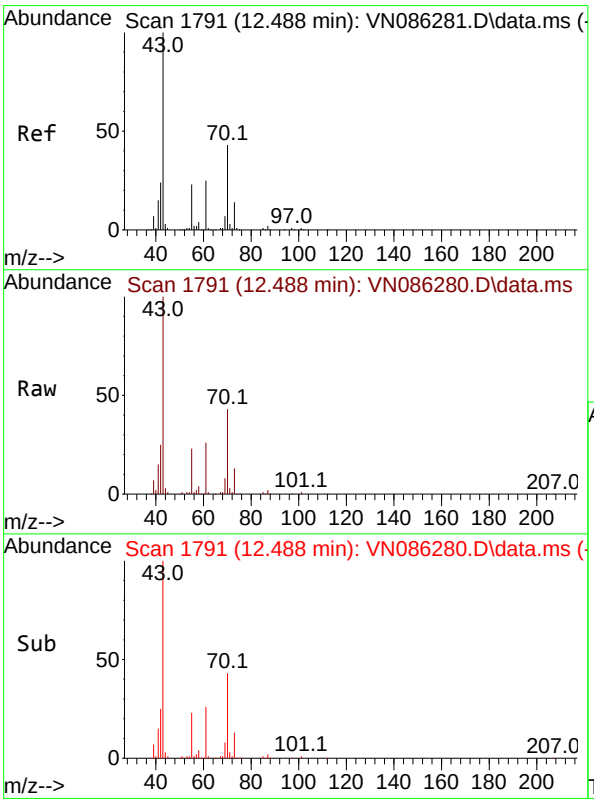
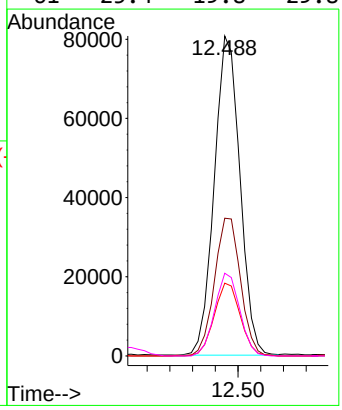


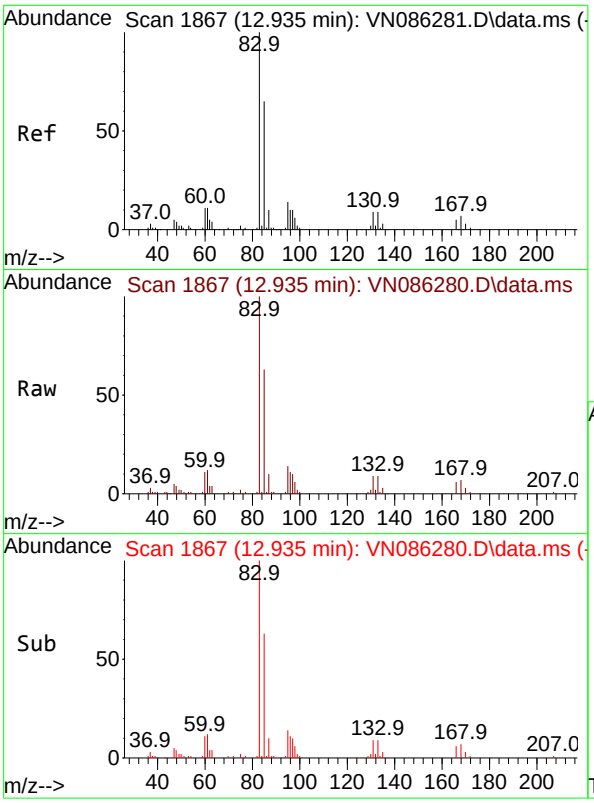


#74
N-amyl acetate
Concen: 19.643 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 43 Resp: 126575

Ion	Ratio	Lower	Upper
43	100		
70	43.8	35.0	52.4
55	23.3	19.0	28.4
61	25.4	19.8	29.8





#75
1,1,2,2-Tetrachloroethane
Concen: 20.620 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 83 Resp: 7674

Ion	Ratio	Lower	Upper
83	100		
131	8.8	4.7	14.1
85	64.3	32.7	98.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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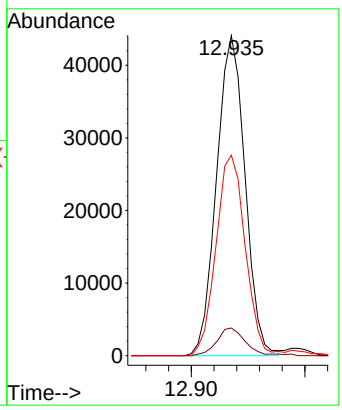
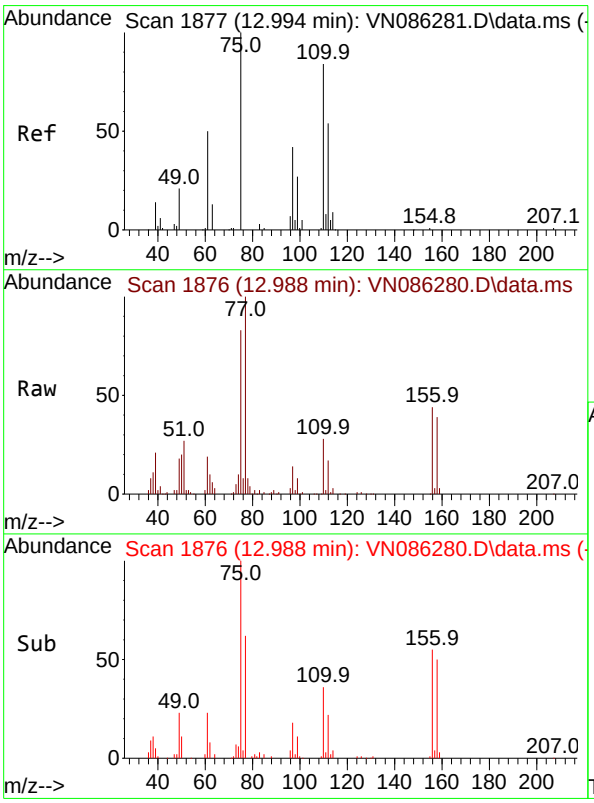
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

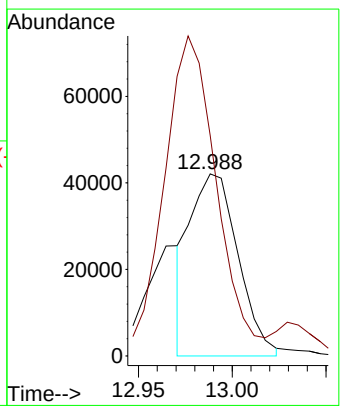


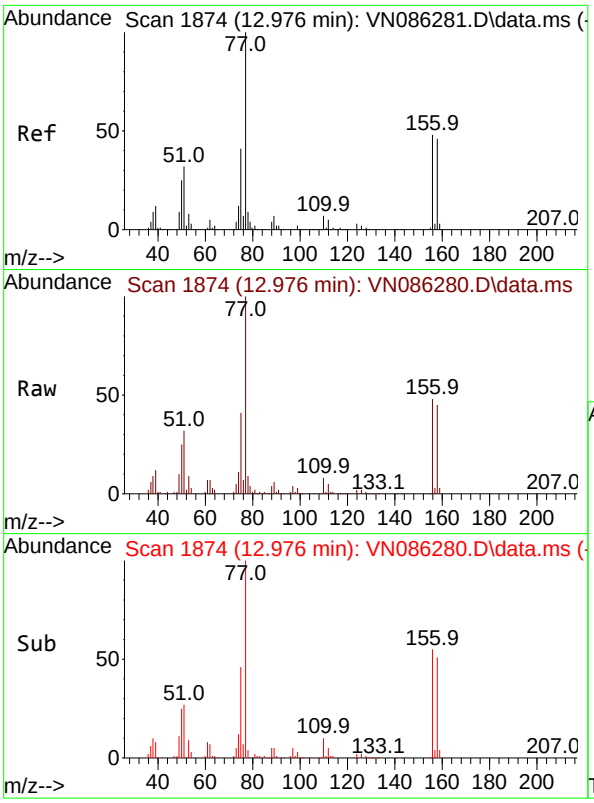


#76
1,2,3-Trichloropropane
Concen: 20.130 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 75 Resp: 74829

Ion	Ratio	Lower	Upper
75	100		
77	192.9	98.8	296.4





#77
Bromobenzene
Concen: 20.882 ug/l
RT: 12.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:156 Resp: 5988

Ion	Ratio	Lower	Upper
156	100		
77	241.1	121.1	363.1
158	95.0	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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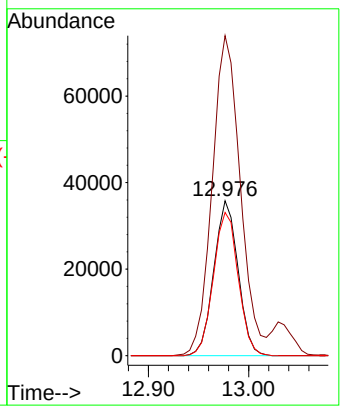
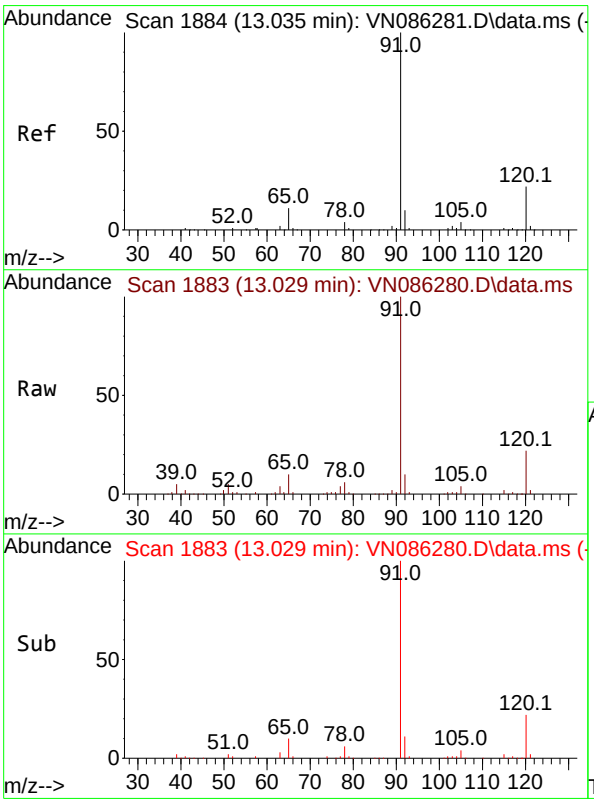
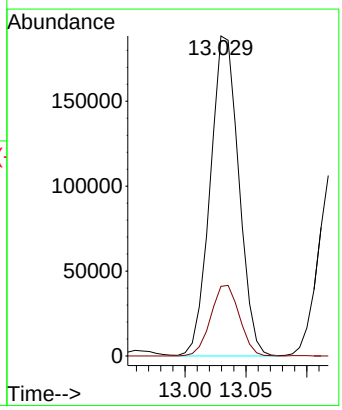


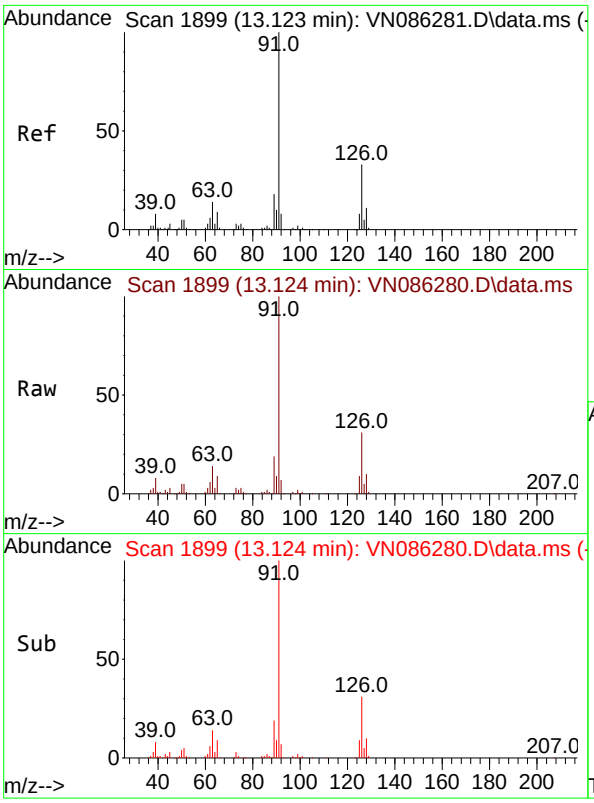


#78
n-propylbenzene
Concen: 20.176 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. -0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 91 Resp: 307737

Ion	Ratio	Lower	Upper
91	100		
120	22.1	11.1	33.3





#79
2-Chlorotoluene
Concen: 20.281 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 91 Resp: 19356

Ion	Ratio	Lower	Upper
91	100		
126	31.5	16.1	48.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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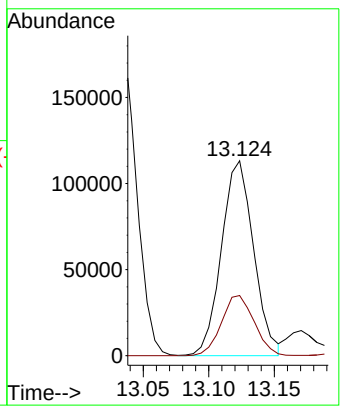
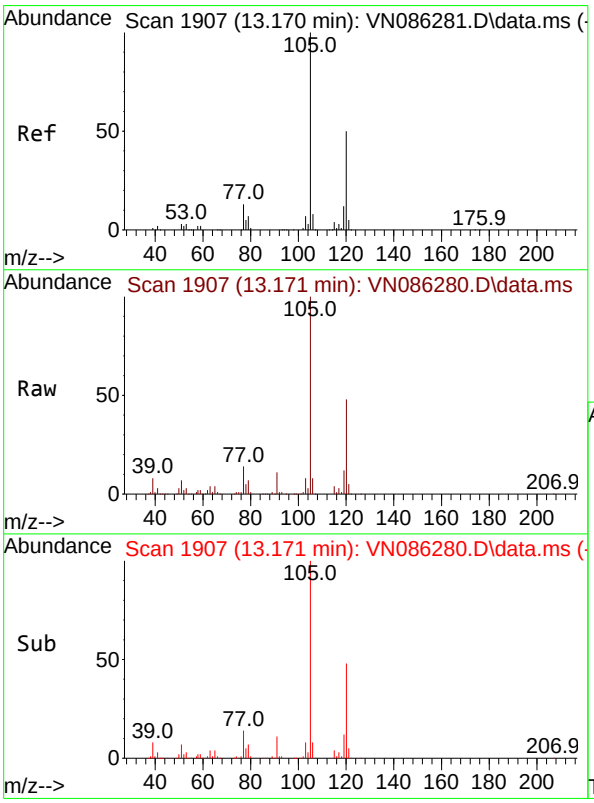
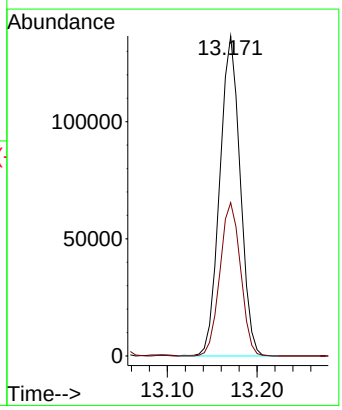


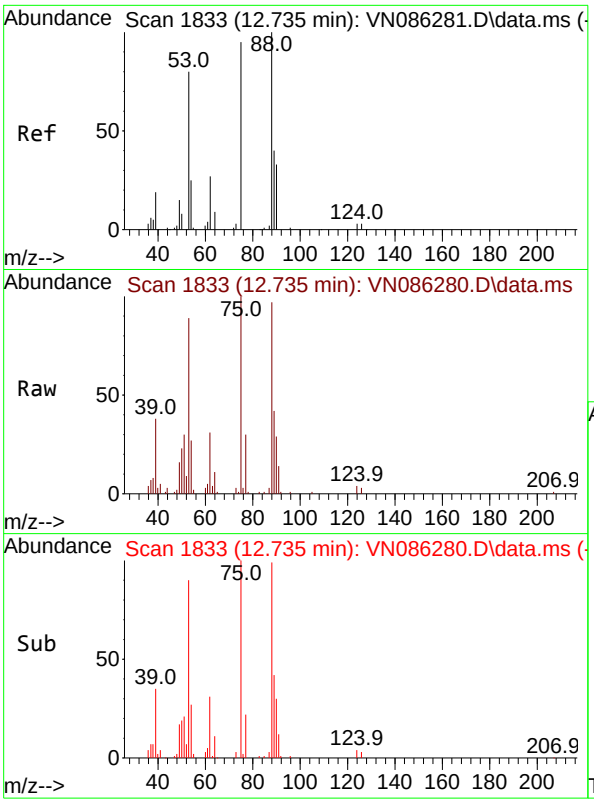


#80
1,3,5-Trimethylbenzene
Concen: 20.423 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:105 Resp: 216364

Ion	Ratio	Lower	Upper
105	100		
120	48.3	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 20.104 ug/l m
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 75 Resp: 3125

Ion	Ratio	Lower	Upper
75	100		
53	94.7	79.2	118.8
89	45.9	35.7	53.5

Instrument :
MSVOA_N
ClientSampleId :
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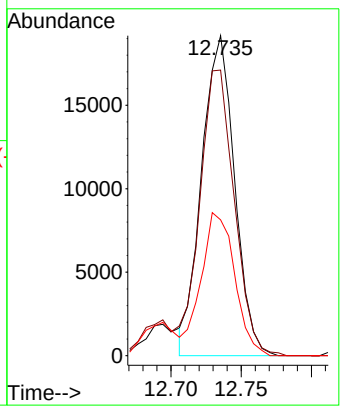
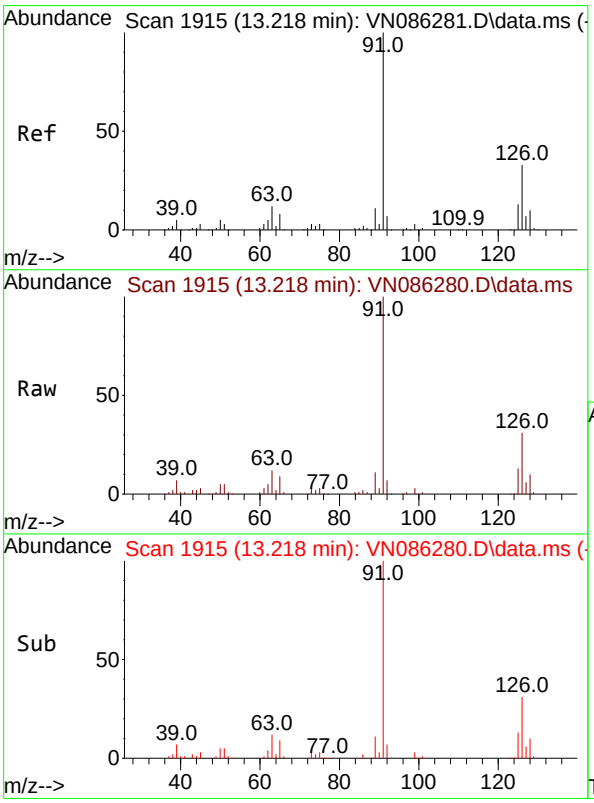
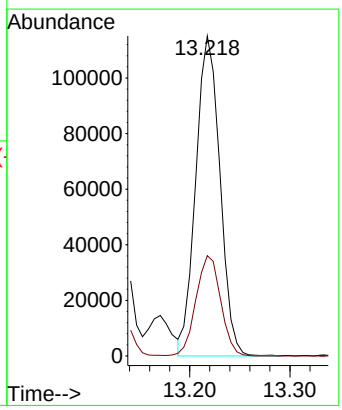


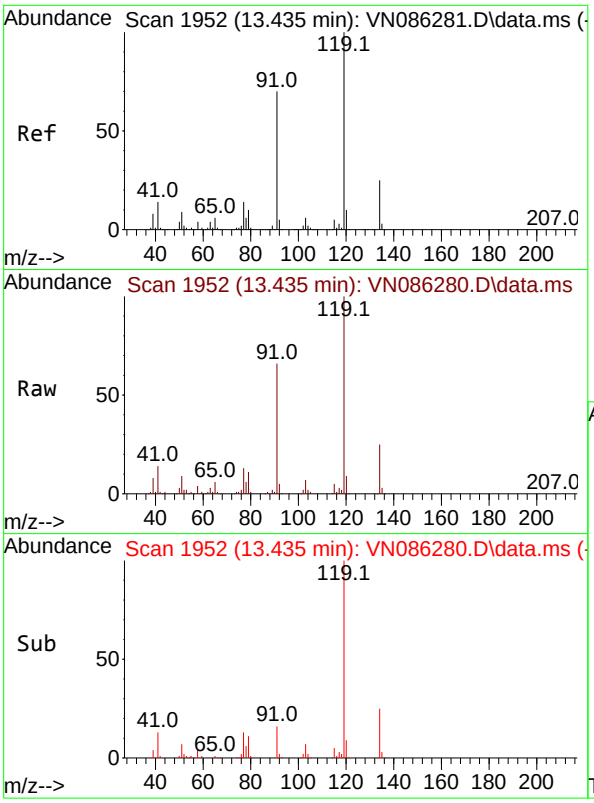


#82
4-Chlorotoluene
Concen: 20.341 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 91 Resp: 192849

Ion	Ratio	Lower	Upper
91	100		
126	32.0	16.2	48.6

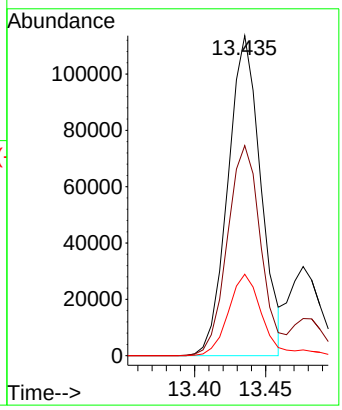




#83
tert-Butylbenzene
Concen: 19.901 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:119 Resp: 18268

Ion	Ratio	Lower	Upper
119	100		
91	67.6	34.4	103.3
134	26.5	13.0	39.0



Instrument :
MSVOA_N
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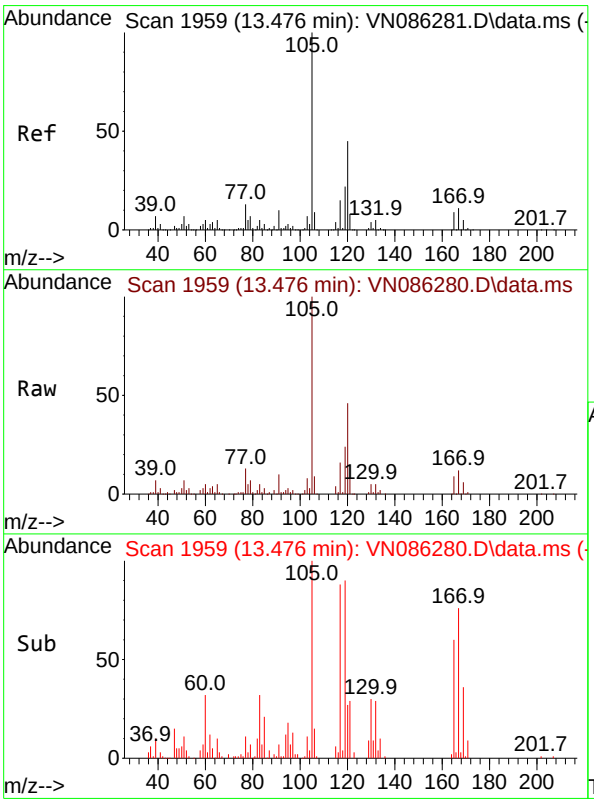
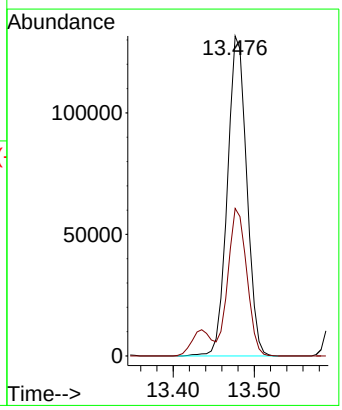
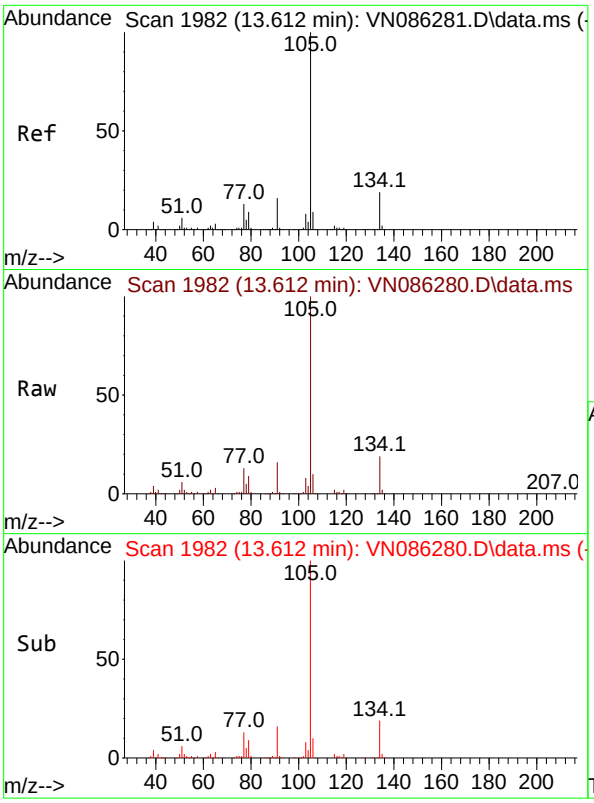


#84
1,2,4-Trimethylbenzene
Concen: 20.135 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:105 Resp: 217135

Ion	Ratio	Lower	Upper
105	100		
120	44.8	22.4	67.3

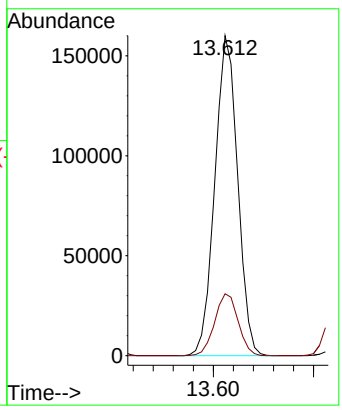




#85
sec-Butylbenzene
Concen: 19.838 ug/l
RT: 13.612 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:105 Resp: 25259

Ion	Ratio	Lower	Upper
105	100		
134	19.9	9.7	29.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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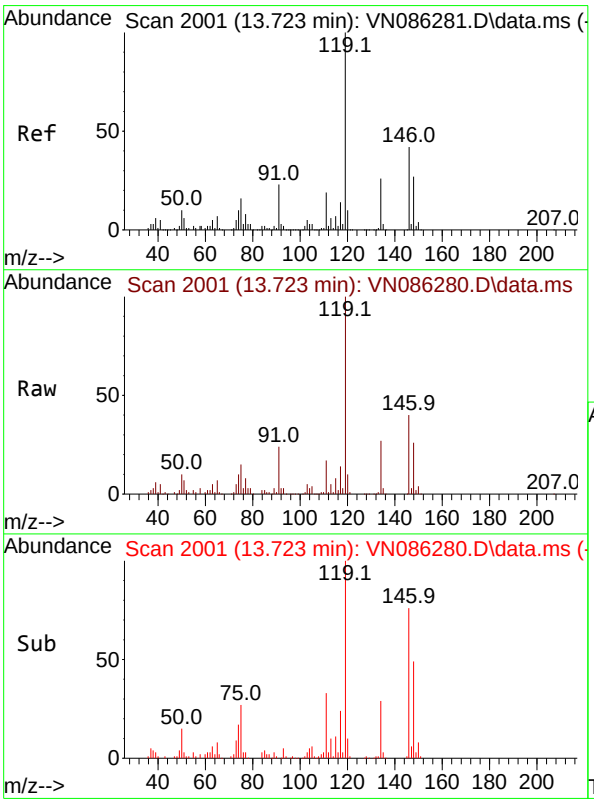
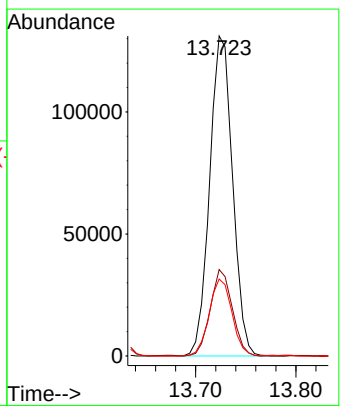
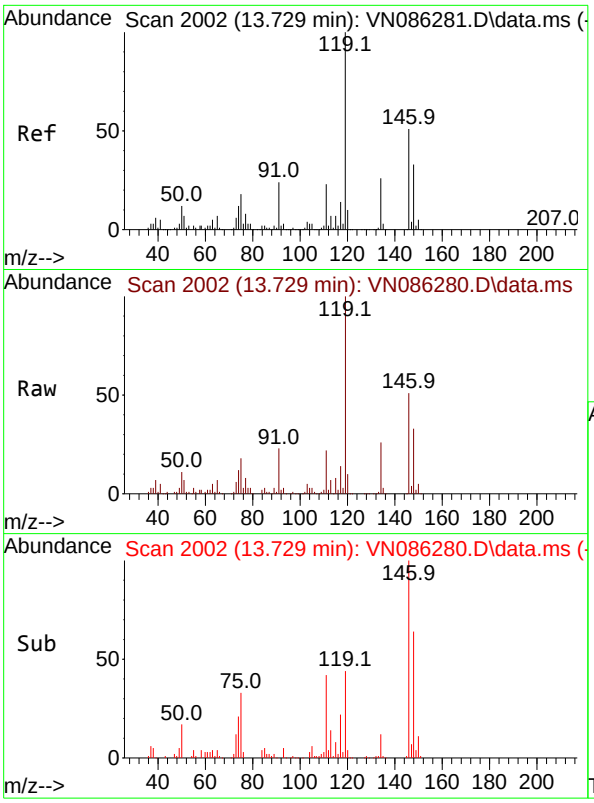


#86
p-Isopropyltoluene
Concen: 19.844 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:119 Resp: 208256

Ion	Ratio	Lower	Upper
119	100		
134	25.9	13.1	39.1
91	23.8	11.9	35.9

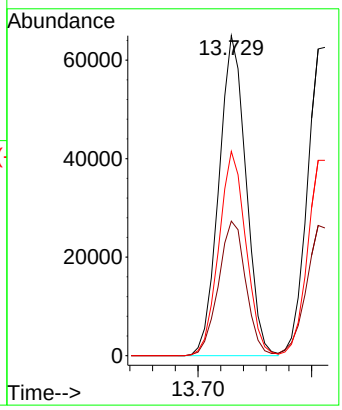




#87
1,3-Dichlorobenzene
Concen: 19.938 ug/l
RT: 13.729 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:146 Resp: 10749

Ion	Ratio	Lower	Upper
146	100		
111	42.6	21.9	65.7
148	64.0	31.9	95.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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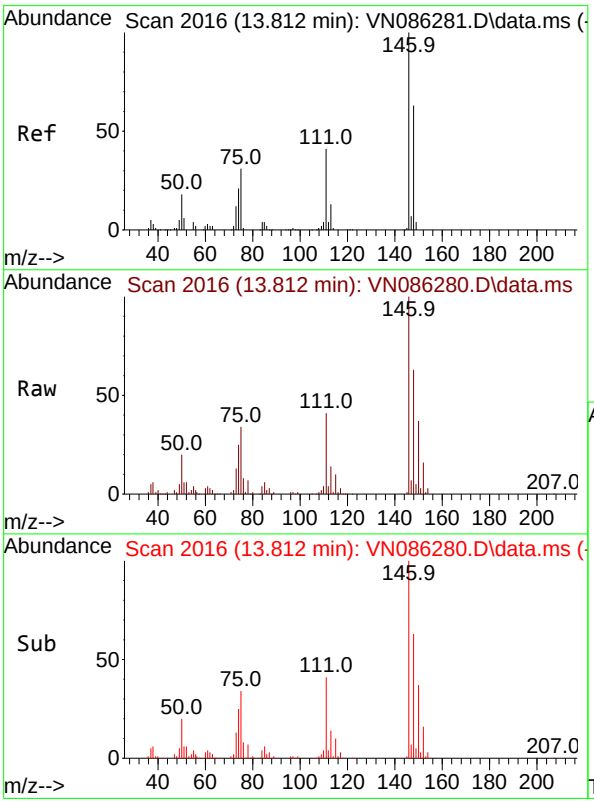
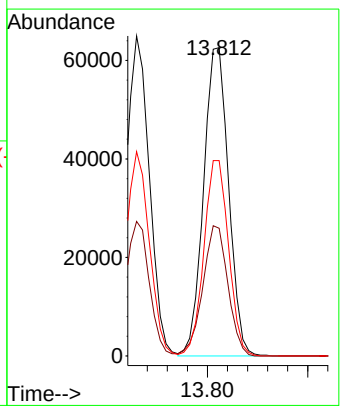
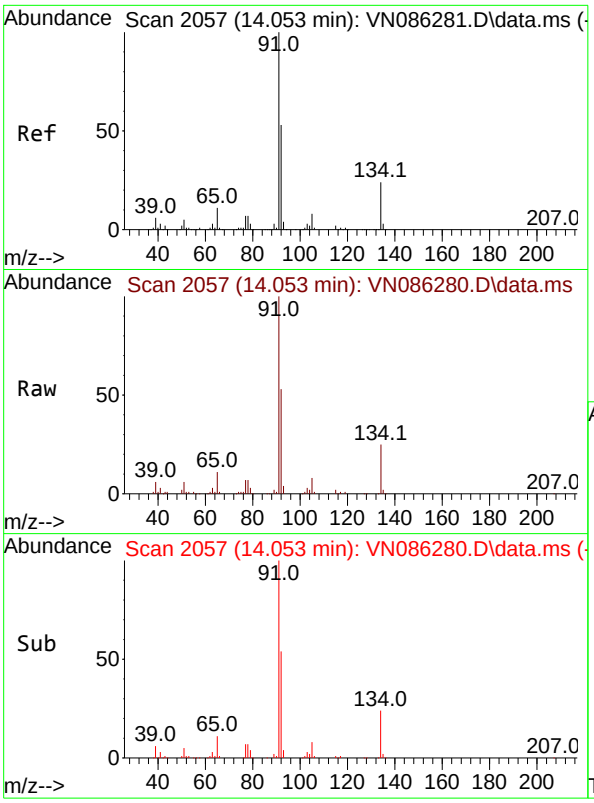


#88
1,4-Dichlorobenzene
Concen: 19.964 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:146 Resp: 108412

Ion	Ratio	Lower	Upper
146	100		
111	42.6	21.3	63.9
148	62.6	31.9	95.9





#89
n-Butylbenzene
Concen: 19.871 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 91 Resp: 18485

Ion	Ratio	Lower	Upper
91	100		
92	52.6	26.8	80.4
134	24.4	12.2	36.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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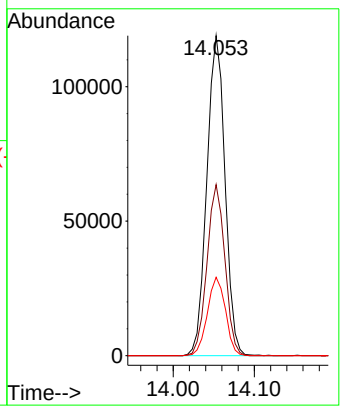
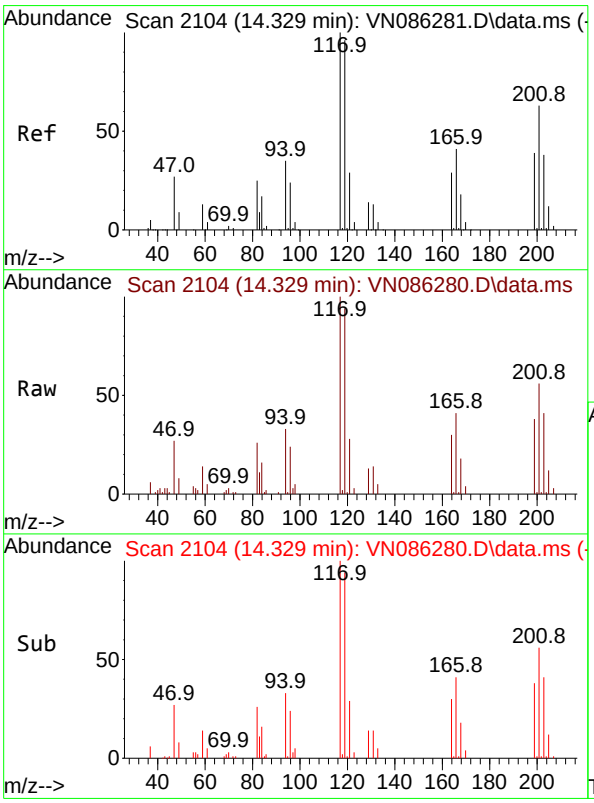
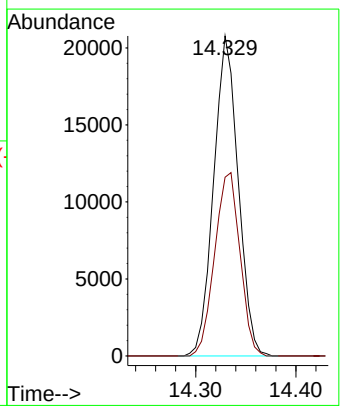


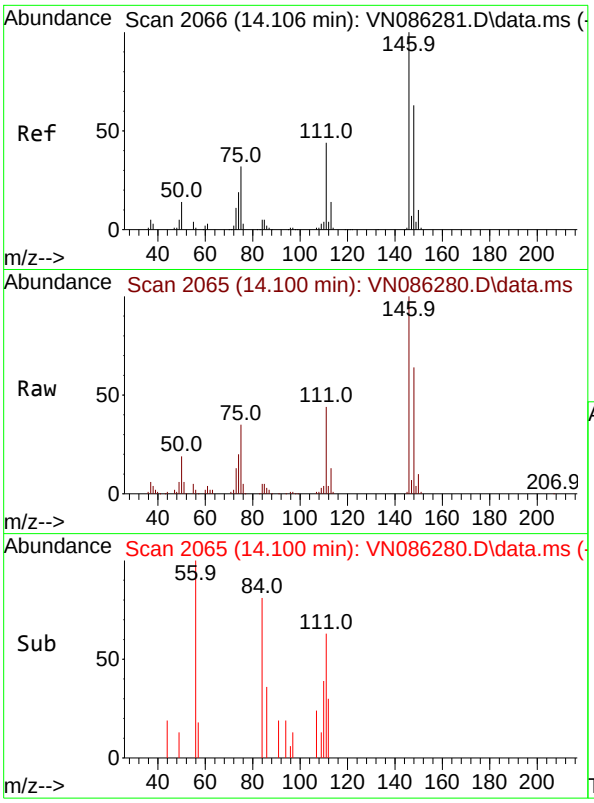


#90
Hexachloroethane
Concen: 19.968 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:117 Resp: 35250

Ion	Ratio	Lower	Upper
117	100		
201	59.3	31.4	94.2

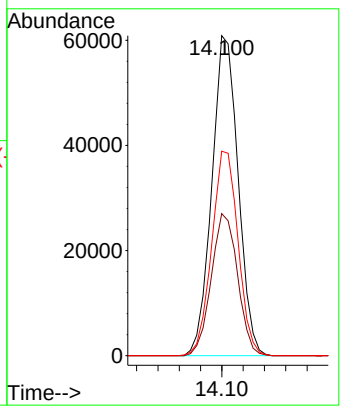




#91
1,2-Dichlorobenzene
Concen: 19.932 ug/l
RT: 14.100 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:146 Resp: 10418

Ion	Ratio	Lower	Upper
146	100		
111	44.5	22.4	67.0
148	64.1	31.8	95.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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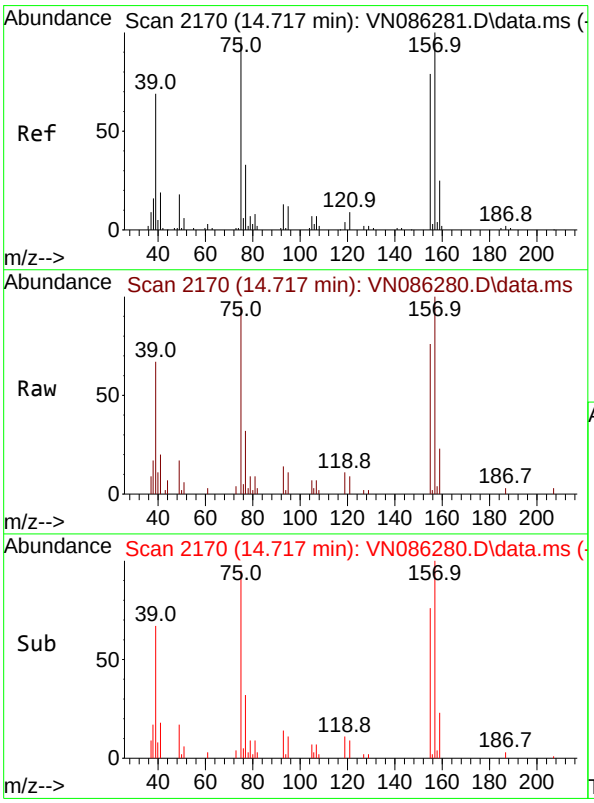
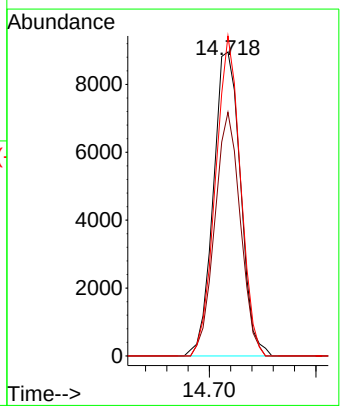
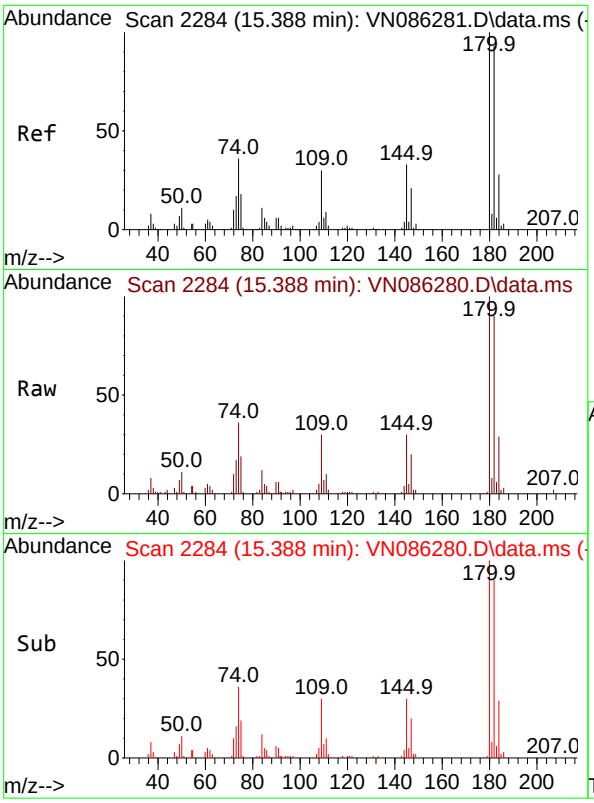


#92
1,2-Dibromo-3-Chloropropane
Concen: 21.139 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion: 75 Resp: 15863

Ion	Ratio	Lower	Upper
75	100		
155	75.5	40.3	120.9
157	96.5	49.0	147.2





#93
1,2,4-Trichlorobenzene
Concen: 20.048 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

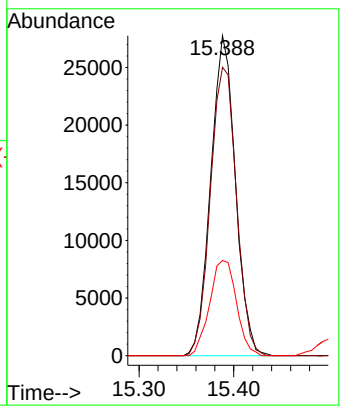
Tgt Ion:180 Resp: 5017

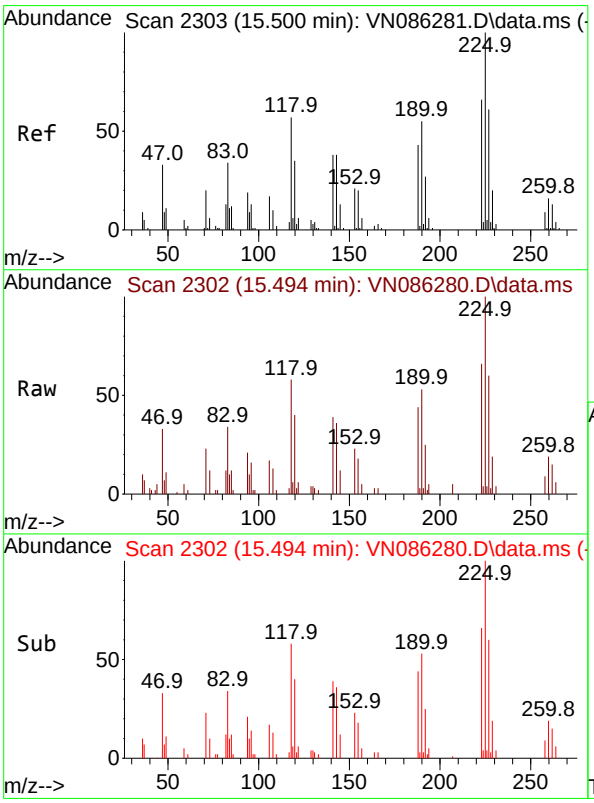
Ion	Ratio	Lower	Upper
180	100		
182	95.1	47.0	141.0
145	32.3	16.4	49.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

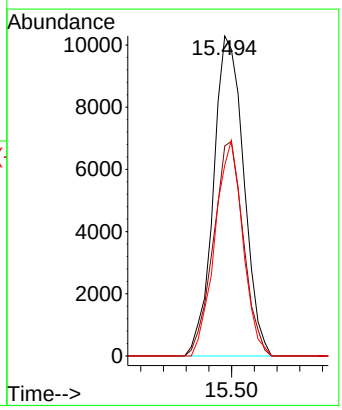


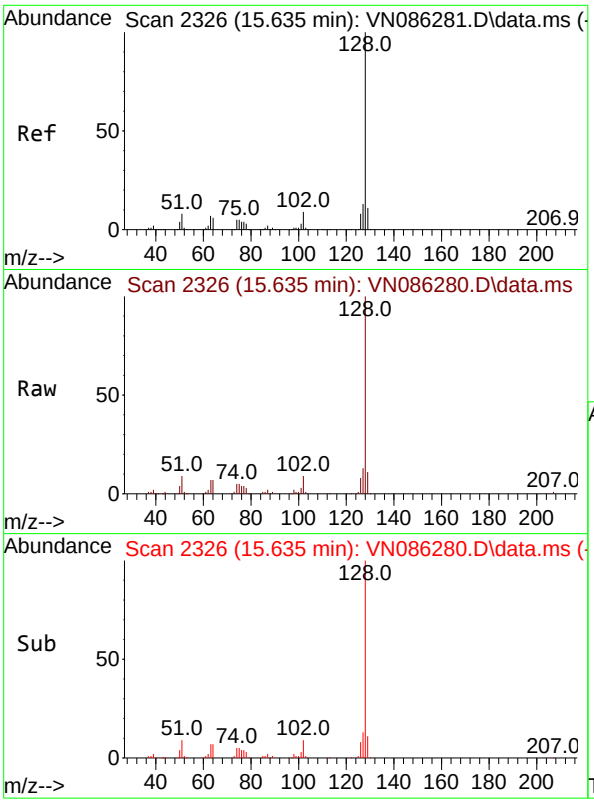


#94
Hexachlorobutadiene
Concen: 20.135 ug/l
RT: 15.494 min Scan# 2302
Delta R.T. -0.006 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:225 Resp: 19024

Ion	Ratio	Lower	Upper
225	100		
223	66.4	32.8	98.3
227	62.2	31.4	94.0

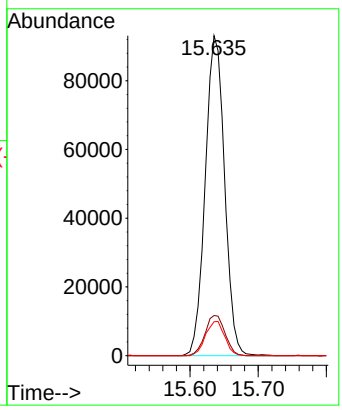




#95
Naphthalene
Concen: 20.717 ug/l
RT: 15.635 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:128 Resp: 18381

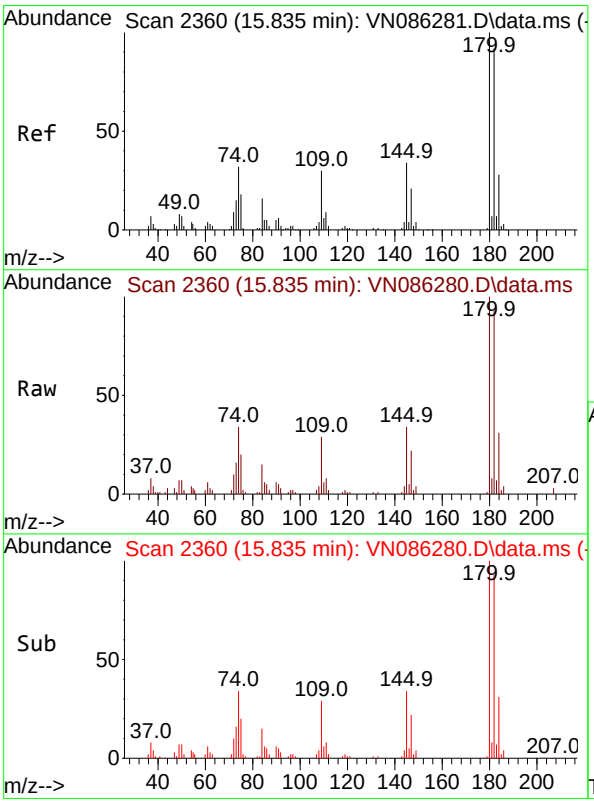
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.2	15.4
129	10.6	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

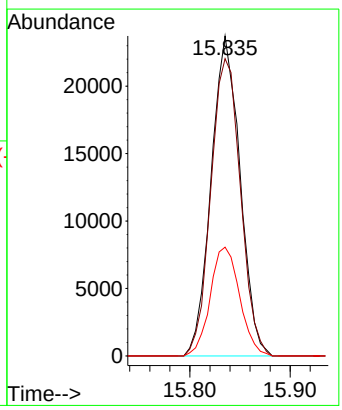
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025



#96
1,2,3-Trichlorobenzene
Concen: 20.013 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN086280.D
Acq: 15 Apr 2025 13:09

Tgt Ion:180 Resp: 47425

Ion	Ratio	Lower	Upper
180	100		
182	95.3	47.3	142.0
145	34.6	17.2	51.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086281.D
Acq On : 15 Apr 2025 13:51
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:57:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	223468	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	413969	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	367304	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	173703	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	160758	49.609	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 99.220%			
35) Dibromofluoromethane	8.165	113	88836	46.238	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.480%			
50) Toluene-d8	10.565	98	517785	50.426	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.860%			
62) 4-Bromofluorobenzene	12.847	95	190049	50.744	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 101.480%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	132017	49.836	ug/l	100
3) Chloromethane	2.359	50	168565	43.783	ug/l	100
4) Vinyl Chloride	2.518	62	176686	48.092	ug/l	100
5) Bromomethane	2.953	94	79546	48.135	ug/l	100
6) Chloroethane	3.118	64	111725	45.437	ug/l	100
7) Trichlorofluoromethane	3.501	101	192876	47.395	ug/l	100
8) Diethyl Ether	3.959	74	83664	47.092	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	117478	47.719	ug/l	100
10) Methyl Iodide	4.589	142	133779	49.427	ug/l	100
11) Tert butyl alcohol	5.512	59	138743	234.659	ug/l	100
12) 1,1-Dichloroethene	4.342	96	123106	46.805	ug/l	100
13) Acrolein	4.177	56	68075	246.717	ug/l	100
14) Allyl chloride	5.024	41	207525	44.409	ug/l	100
15) Acrylonitrile	5.712	53	354632	242.632	ug/l	100
16) Acetone	4.424	43	280935	250.761	ug/l	100
17) Carbon Disulfide	4.712	76	348133	44.205	ug/l	100
18) Methyl Acetate	5.018	43	174600	44.886	ug/l	100
19) Methyl tert-butyl Ether	5.789	73	449127	46.453	ug/l	100
20) Methylene Chloride	5.271	84	138293	46.163	ug/l	100
21) trans-1,2-Dichloroethene	5.789	96	128404	46.696	ug/l	100
22) Diisopropyl ether	6.665	45	471385	46.345	ug/l	100
23) Vinyl Acetate	6.600	43	1657348	233.153	ug/l	100
24) 1,1-Dichloroethane	6.565	63	253896	47.310	ug/l	100
25) 2-Butanone	7.477	43	475281	235.633	ug/l	100
26) 2,2-Dichloropropane	7.483	77	219735	45.729	ug/l	100
27) cis-1,2-Dichloroethene	7.483	96	159460	46.722	ug/l	100
28) Bromochloromethane	7.806	49	110726	48.660	ug/l	100
29) Tetrahydrofuran	7.836	42	313920	232.739	ug/l	100
30) Chloroform	7.965	83	246843	46.823	ug/l	100
31) Cyclohexane	8.253	56	238117	45.343	ug/l	100
32) 1,1,1-Trichloroethane	8.165	97	212021	47.013	ug/l	100
36) 1,1-Dichloropropene	8.365	75	183246	47.752	ug/l	100
37) Ethyl Acetate	7.553	43	184834	45.750	ug/l	100
38) Carbon Tetrachloride	8.359	117	175094	47.912	ug/l	100
39) Methylcyclohexane	9.594	83	216725	47.515	ug/l	100
40) Benzene	8.600	78	583316	47.443	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086281.D
Acq On : 15 Apr 2025 13:51
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 16 03:57:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	7.771	41	109214	46.643 ug/l		100
42) 1,2-Dichloroethane	8.665	62	183854	46.892 ug/l		100
43) Isopropyl Acetate	8.683	43	358327	49.550 ug/l		100
44) Trichloroethene	9.347	130	139993	48.039 ug/l		100
45) 1,2-Dichloropropane	9.618	63	144496	48.011 ug/l		100
46) Dibromomethane	9.706	93	93965	49.002 ug/l		100
47) Bromodichloromethane	9.882	83	196793	47.516 ug/l		100
48) Methyl methacrylate	9.677	41	163719	46.146 ug/l		100
49) 1,4-Dioxane	9.694	88	53851	892.337 ug/l		100
51) 4-Methyl-2-Pentanone	10.441	43	1000994	241.959 ug/l		100
52) Toluene	10.629	92	369349	48.144 ug/l		100
53) t-1,3-Dichloropropene	10.829	75	226518	48.996 ug/l		100
54) cis-1,3-Dichloropropene	10.306	75	238764	47.021 ug/l		100
55) 1,1,2-Trichloroethane	11.012	97	131721	47.721 ug/l		100
56) Ethyl methacrylate	10.871	69	239654	47.235 ug/l		100
57) 1,3-Dichloropropane	11.159	76	233548	47.689 ug/l		100
58) 2-Chloroethyl Vinyl ether	10.159	63	594475	246.859 ug/l		100
59) 2-Hexanone	11.194	43	734660	239.414 ug/l		100
60) Dibromochloromethane	11.359	129	146318	48.274 ug/l		100
61) 1,2-Dibromoethane	11.465	107	134281	48.213 ug/l		100
64) Tetrachloroethene	11.100	164	136116	48.177 ug/l		100
65) Chlorobenzene	11.888	112	385849	47.072 ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.959	131	127627	47.197 ug/l		100
67) Ethyl Benzene	11.959	91	704474	47.627 ug/l		100
68) m/p-Xylenes	12.065	106	533742	96.302 ug/l		100
69) o-Xylene	12.394	106	261904	47.783 ug/l		100
70) Styrene	12.406	104	447486	48.998 ug/l		100
71) Bromoform	12.576	173	95822	47.065 ug/l	#	100
73) Isopropylbenzene	12.694	105	647490	45.568 ug/l		100
74) N-amyl acetate	12.488	43	308916	43.670 ug/l		100
75) 1,1,2,2-Tetrachloroethane	12.935	83	179865	44.025 ug/l		100
76) 1,2,3-Trichloropropane	12.994	75	181010m	44.357 ug/l		
77) Bromobenzene	12.976	156	147720	46.919 ug/l		100
78) n-propylbenzene	13.035	91	779530	46.556 ug/l		100
79) 2-Chlorotoluene	13.123	91	479235	45.740 ug/l		100
80) 1,3,5-Trimethylbenzene	13.170	105	535465	46.042 ug/l		100
81) trans-1,4-Dichloro-2-b...	12.735	75	80078m	46.919 ug/l		
82) 4-Chlorotoluene	13.218	91	488049	46.893 ug/l		100
83) tert-Butylbenzene	13.435	119	452999	44.954 ug/l		100
84) 1,2,4-Trimethylbenzene	13.476	105	550727	46.521 ug/l		100
85) sec-Butylbenzene	13.612	105	653679	46.767 ug/l		100
86) p-Isopropyltoluene	13.723	119	548528	47.611 ug/l		100
87) 1,3-Dichlorobenzene	13.729	146	279645	47.249 ug/l		100
88) 1,4-Dichlorobenzene	13.812	146	280378	47.032 ug/l		100
89) n-Butylbenzene	14.053	91	492941	48.271 ug/l		100
90) Hexachloroethane	14.329	117	90009	46.447 ug/l		100
91) 1,2-Dichlorobenzene	14.106	146	270731	47.181 ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	38625	46.887 ug/l		100
93) 1,2,4-Trichlorobenzene	15.388	180	132919	48.375 ug/l		100
94) Hexachlorobutadiene	15.500	225	48694	46.947 ug/l		100
95) Naphthalene	15.635	128	464685	47.708 ug/l		100
96) 1,2,3-Trichlorobenzene	15.835	180	122910	47.249 ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086281.D
Acq On : 15 Apr 2025 13:51
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:57:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 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

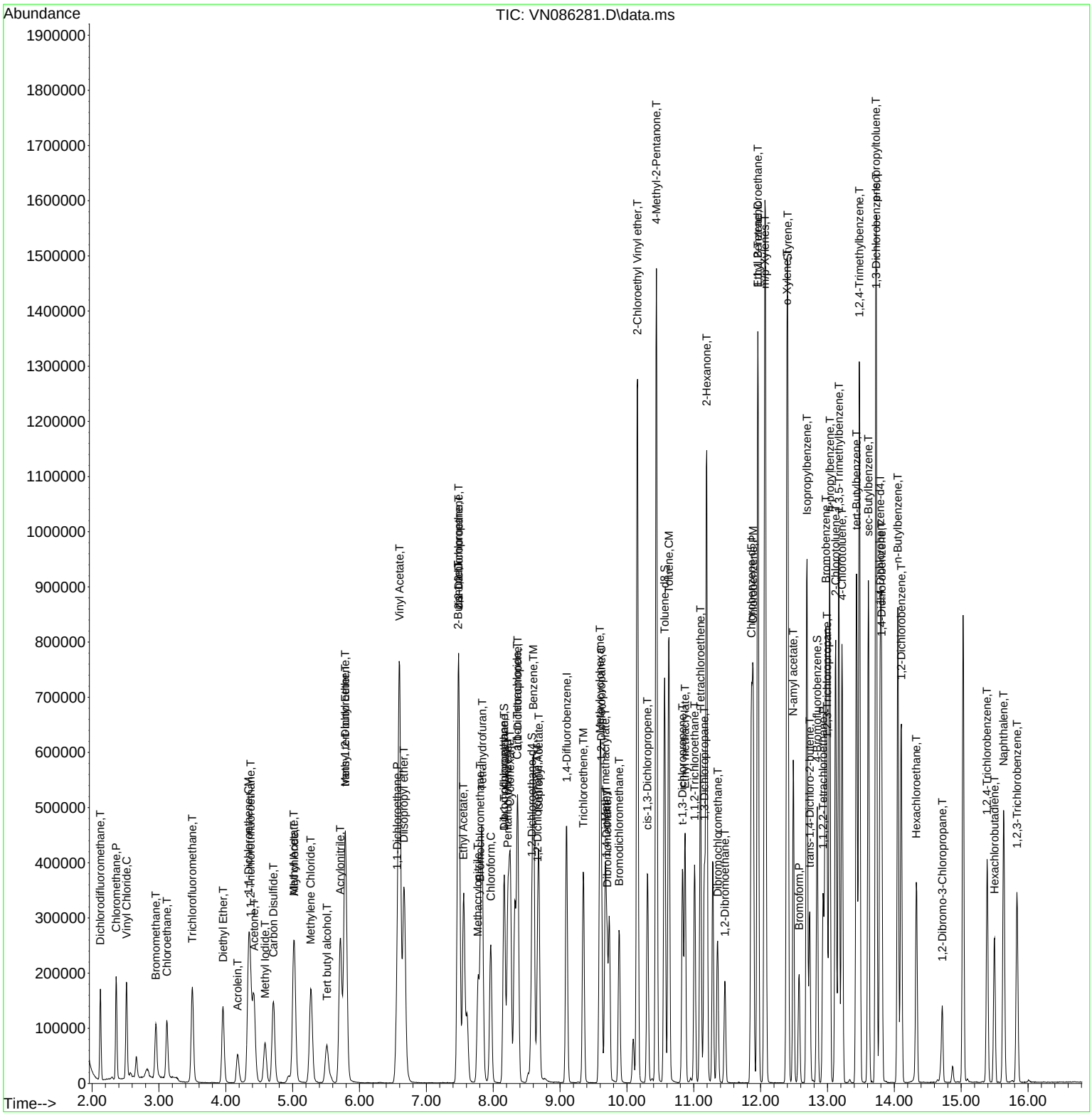
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086281.D
Acq On : 15 Apr 2025 13:51
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

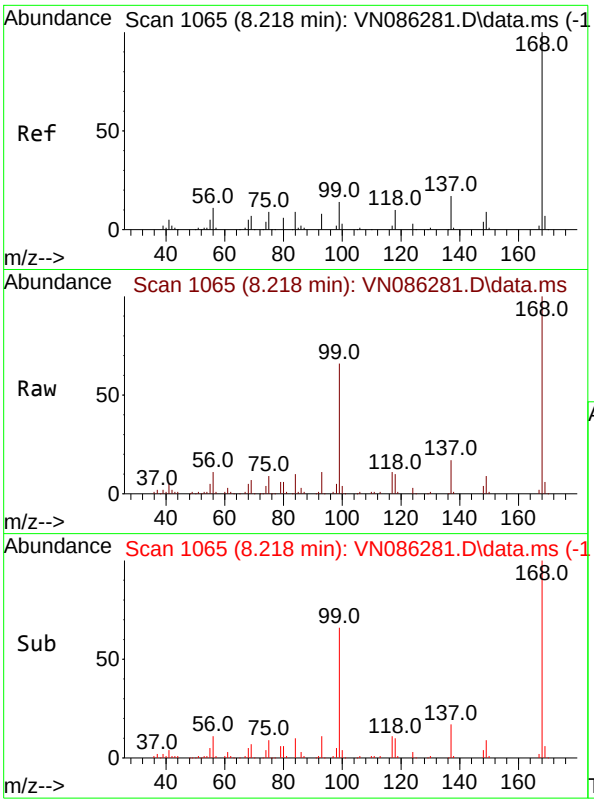
Quant Time: Apr 16 03:57:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

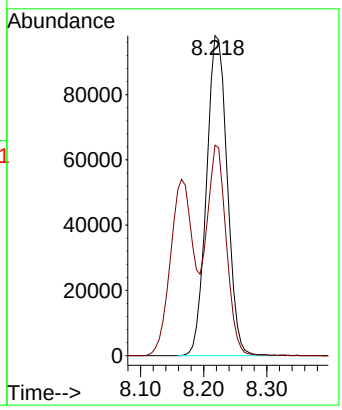




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:168 Resp: 22346

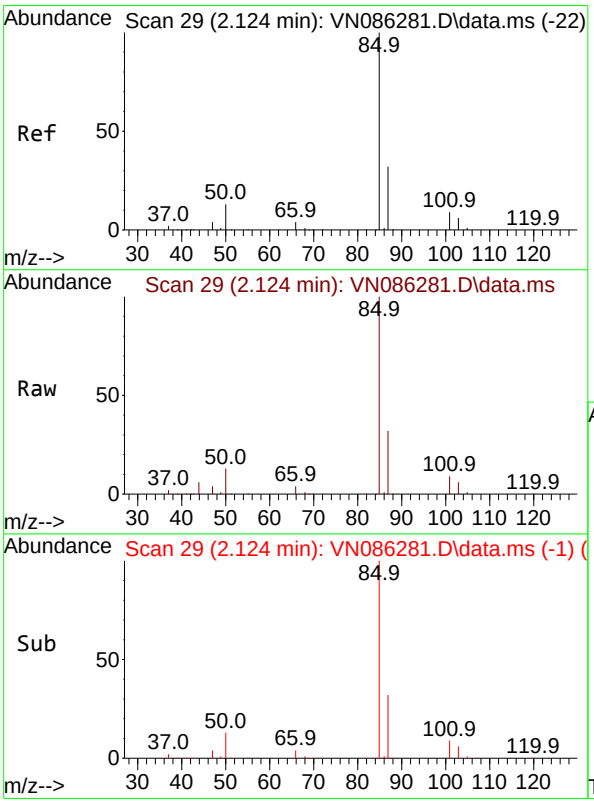
Ion	Ratio	Lower	Upper
168	100		
99	65.6	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

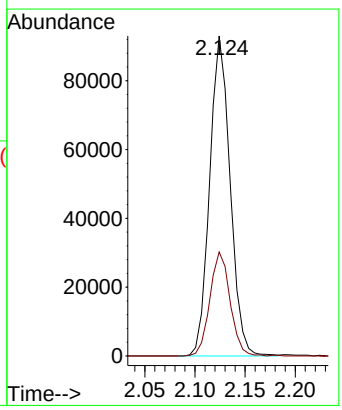
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

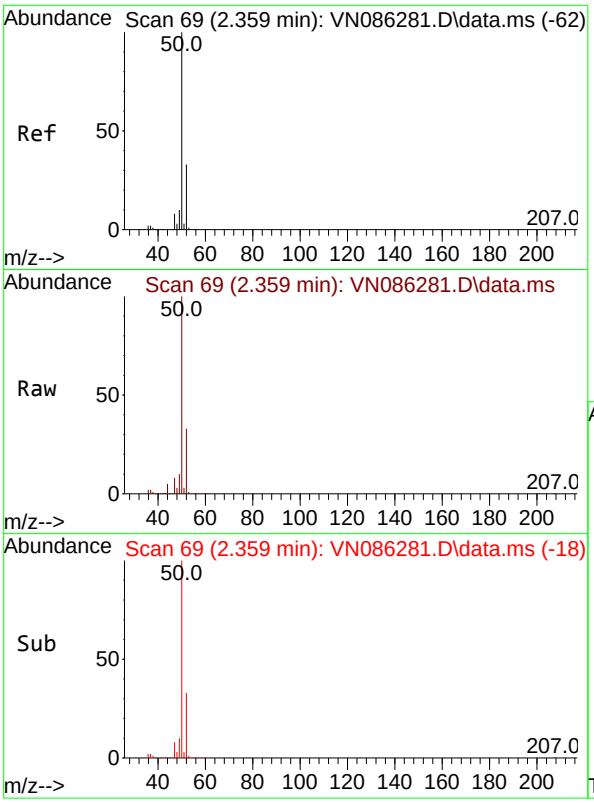


#2
Dichlorodifluoromethane
Concen: 49.836 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 85 Resp: 132017

Ion	Ratio	Lower	Upper
85	100		
87	32.5	16.3	48.8

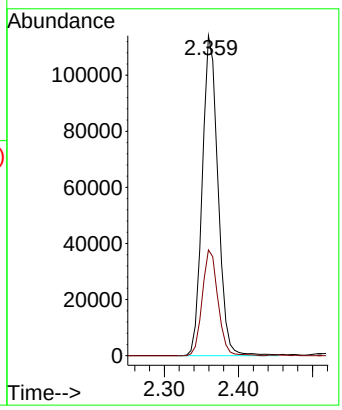




#3
Chloromethane
Concen: 43.783 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 50 Resp: 16856

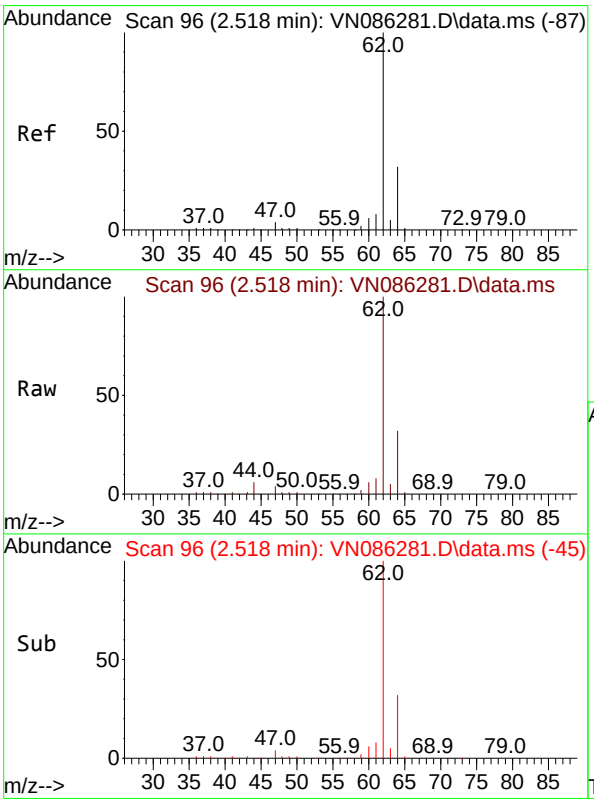
Ion	Ratio	Lower	Upper
50	100		
52	33.1	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

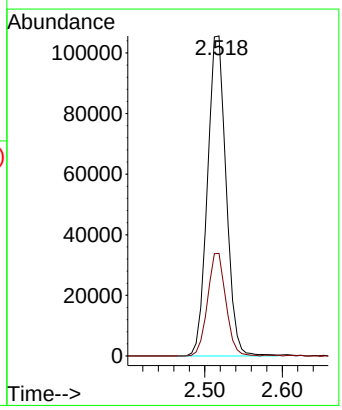
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

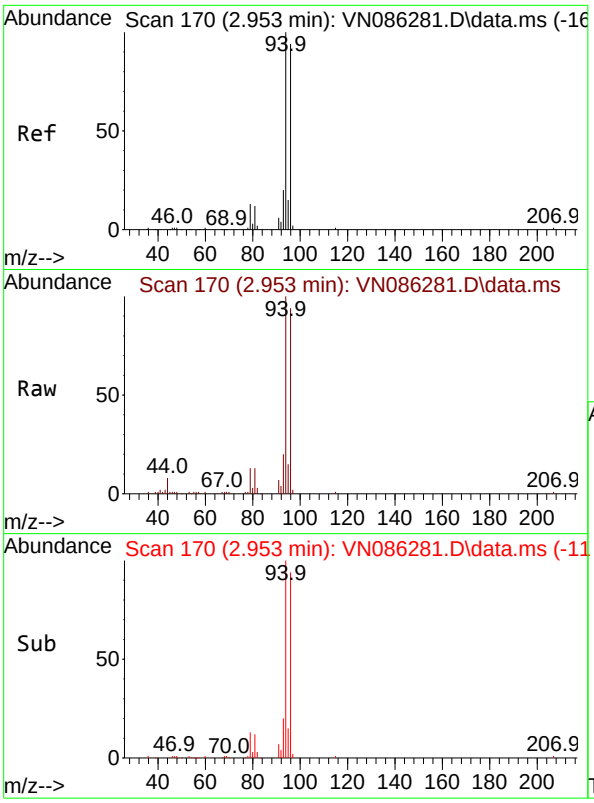


#4
Vinyl Chloride
Concen: 48.092 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 62 Resp: 176686

Ion	Ratio	Lower	Upper
62	100		
64	32.0	25.6	38.4

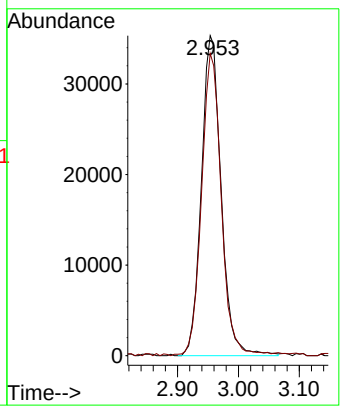




#5
Bromomethane
Concen: 48.135 ug/l
RT: 2.953 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 94 Resp: 7954

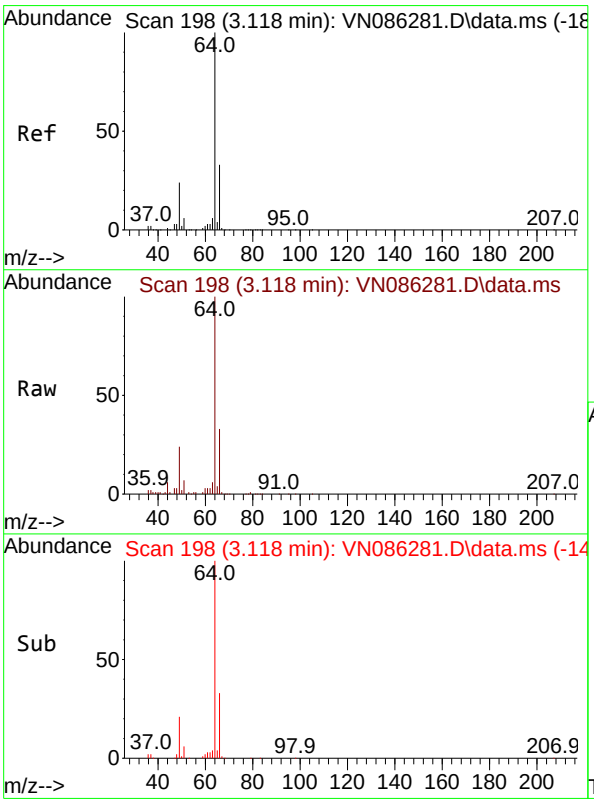
Ion	Ratio	Lower	Upper
94	100		
96	94.0	75.2	112.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

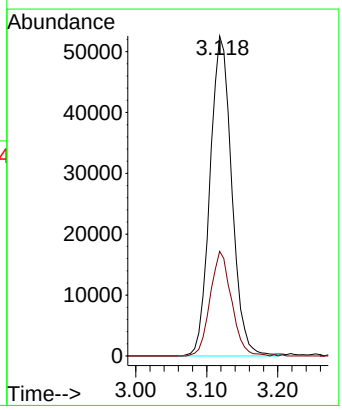
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

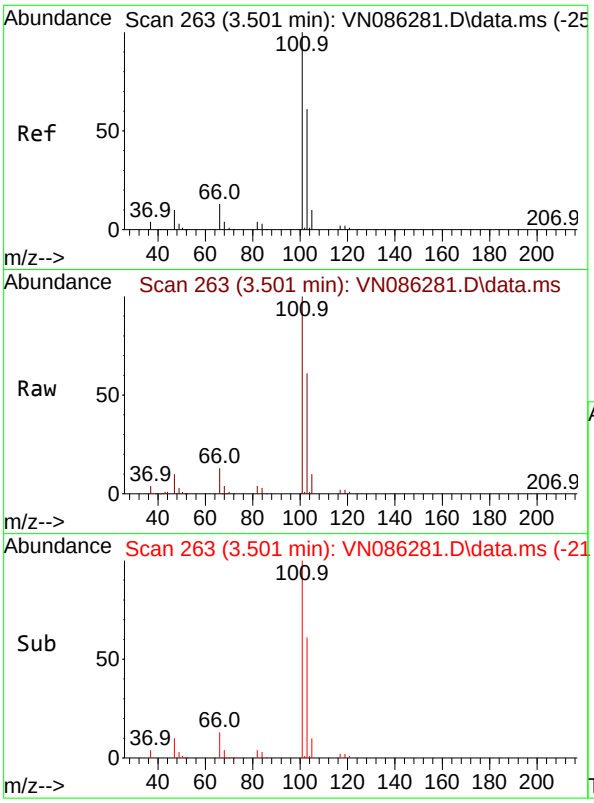


#6
Chloroethane
Concen: 45.437 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 64 Resp: 111725

Ion	Ratio	Lower	Upper
64	100		
66	32.7	26.2	39.2

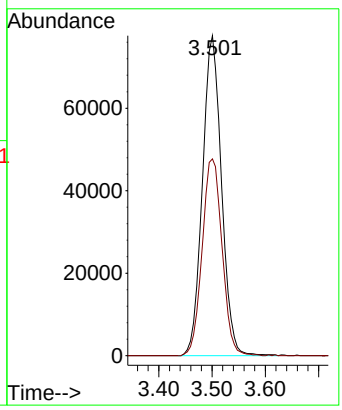




#7
Trichlorofluoromethane
Concen: 47.395 ug/l
RT: 3.501 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:101 Resp: 19287

Ion	Ratio	Lower	Upper
101	100		
103	61.5	49.2	73.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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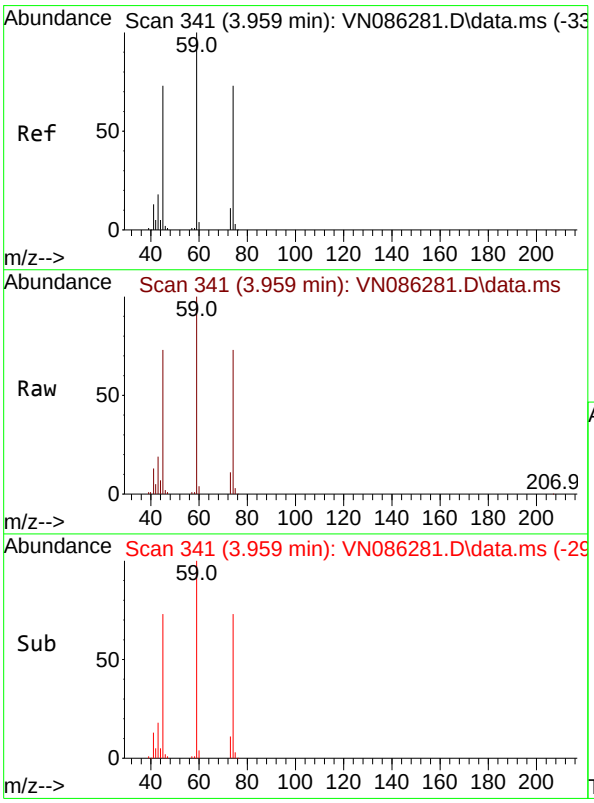
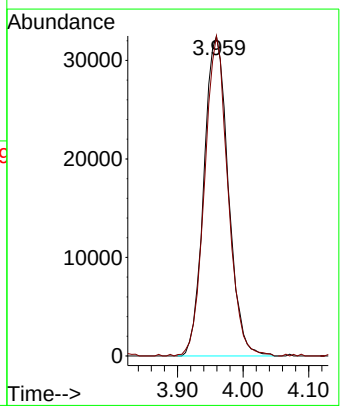
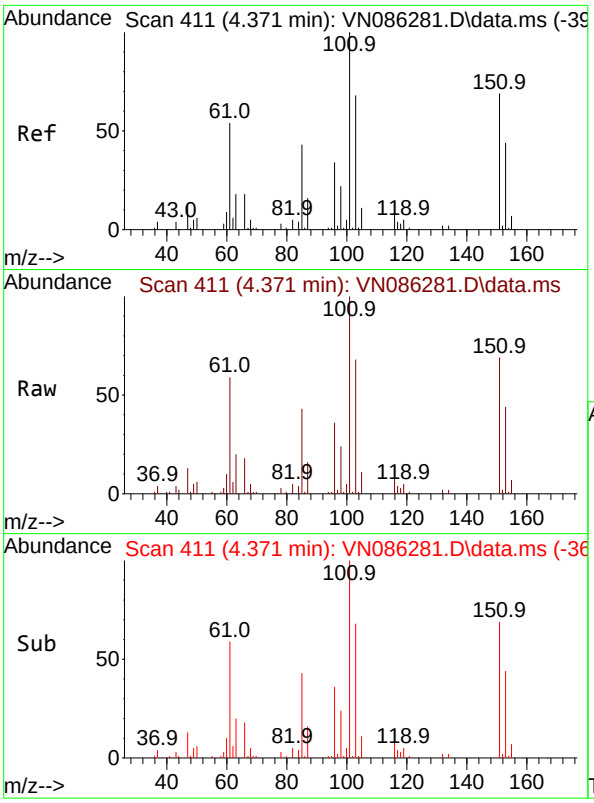


#8
Diethyl Ether
Concen: 47.092 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 74 Resp: 83664

Ion	Ratio	Lower	Upper
74	100		
45	96.1	48.0	144.2





#9
1,1,2-Trichlorotrifluoroethane
Concen: 47.719 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:101 Resp: 11747

Ion	Ratio	Lower	Upper
101	100		
85	43.4	34.7	52.1
151	70.1	56.1	84.1

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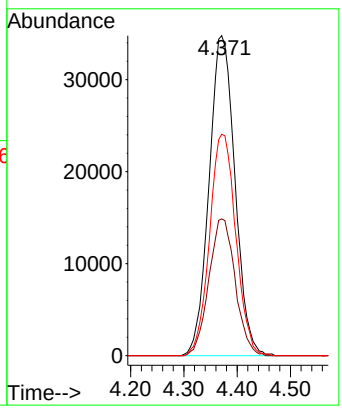
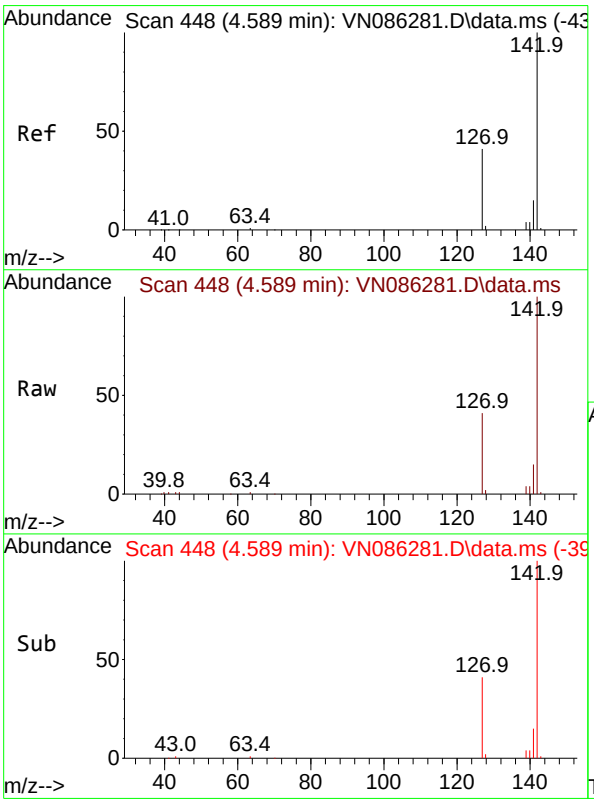
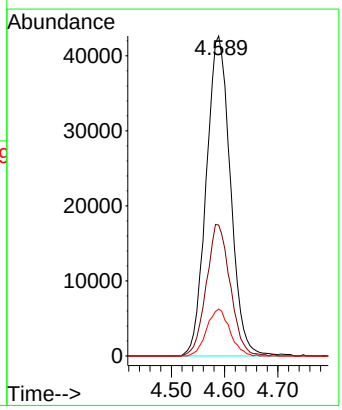


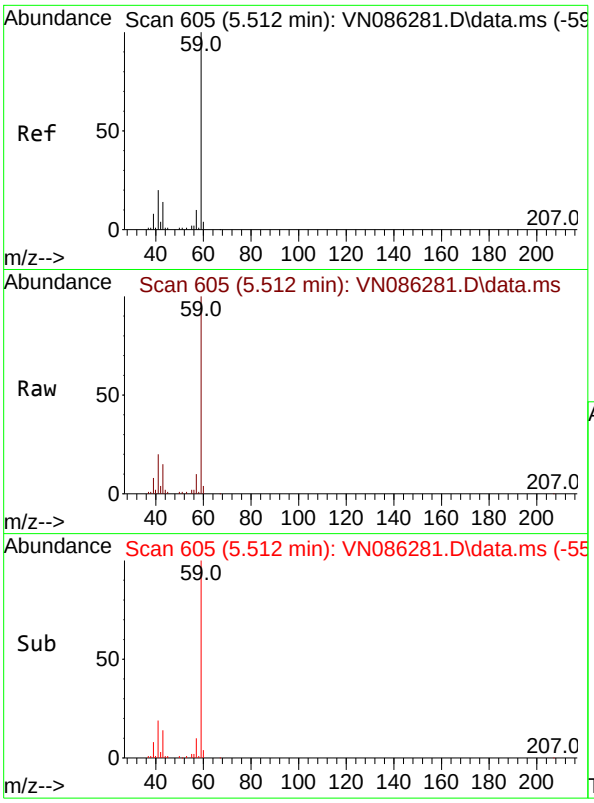


#10
Methyl Iodide
Concen: 49.427 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:142 Resp: 133779

Ion	Ratio	Lower	Upper
142	100		
127	40.9	32.7	49.1
141	14.6	11.7	17.5

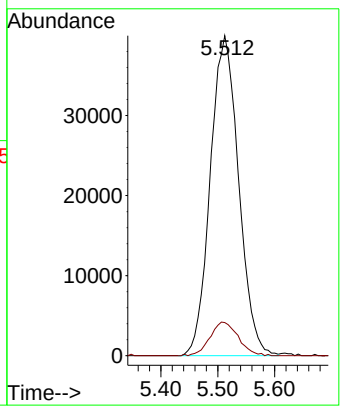




#11
Tert butyl alcohol
Concen: 234.659 ug/l
RT: 5.512 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 59 Resp: 13874

Ion	Ratio	Lower	Upper
59	100		
57	10.4	8.3	12.5



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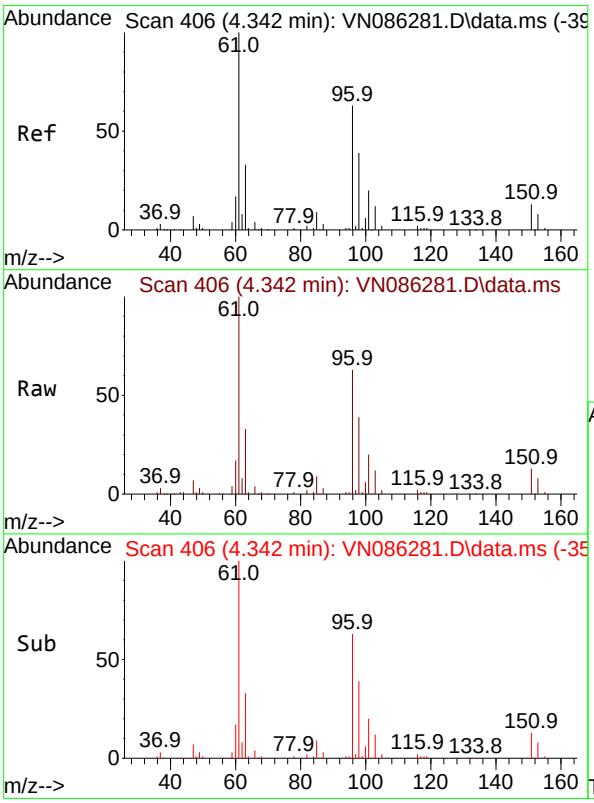
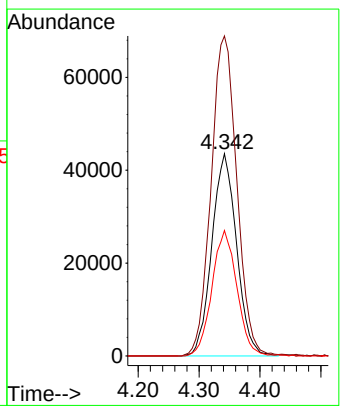
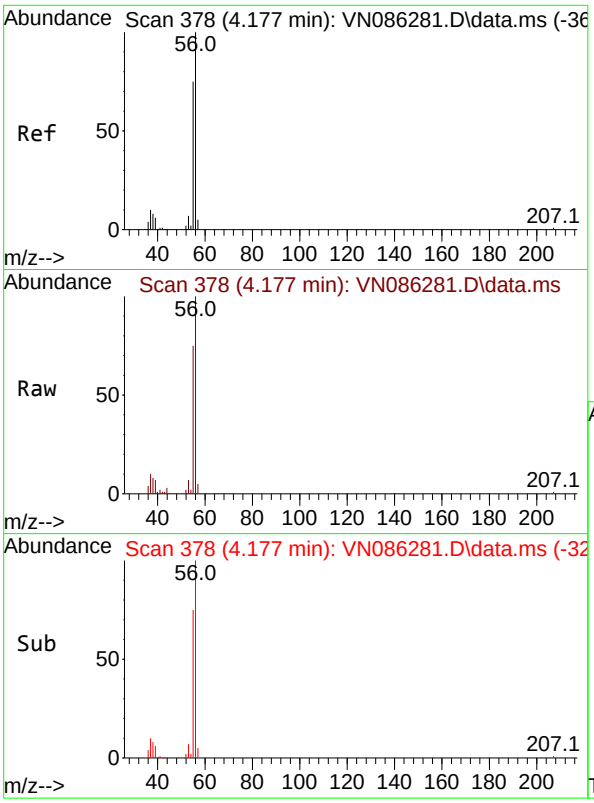


#12
1,1-Dichloroethene
Concen: 46.805 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 96 Resp: 123106

Ion	Ratio	Lower	Upper
96	100		
61	158.2	126.6	189.8
98	62.0	49.6	74.4

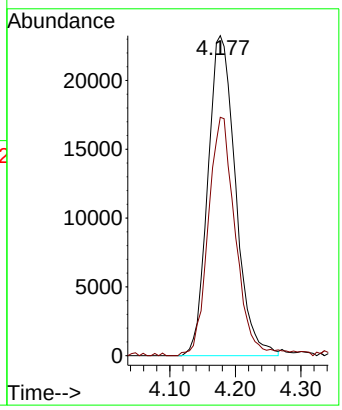




#13
Acrolein
Concen: 246.717 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 56 Resp: 6807

Ion	Ratio	Lower	Upper
56	100		
55	73.1	58.5	87.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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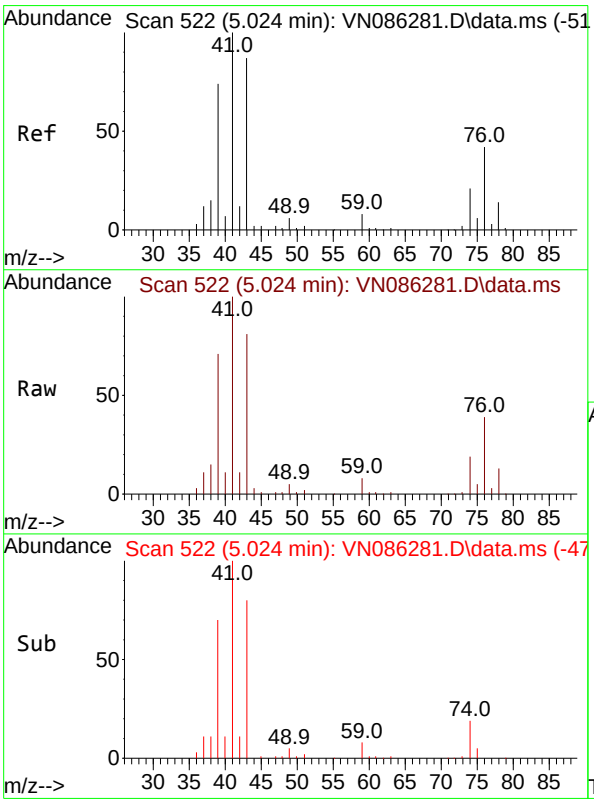
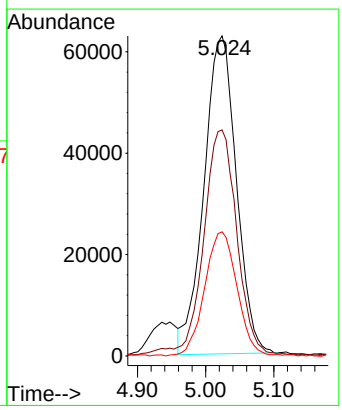
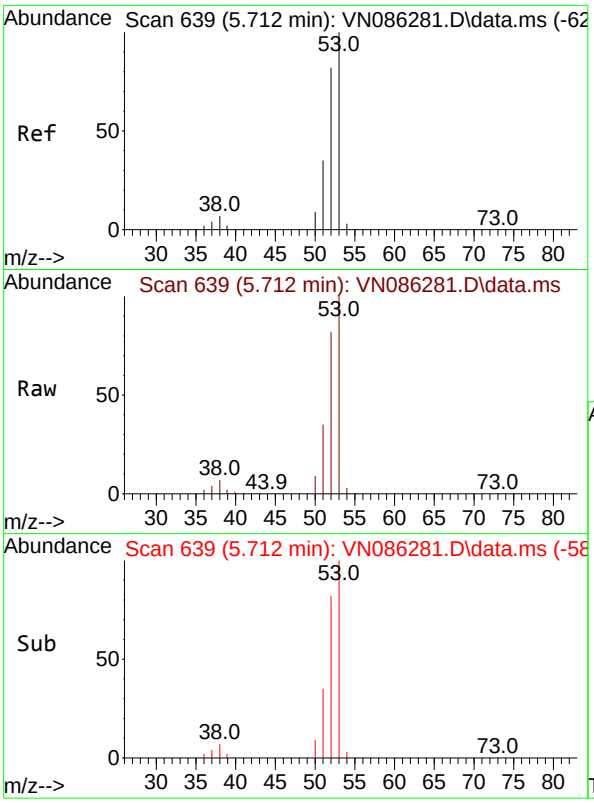


#14
Allyl chloride
Concen: 44.409 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 41 Resp: 207525

Ion	Ratio	Lower	Upper
41	100		
39	74.0	59.2	88.8
76	39.0	31.2	46.8

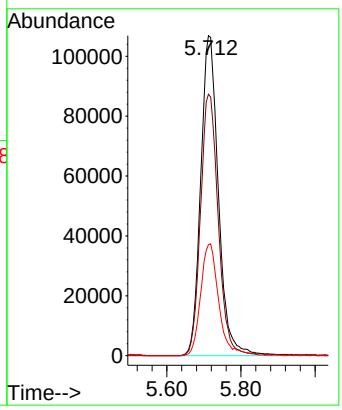




#15
Acrylonitrile
Concen: 242.632 ug/l
RT: 5.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 53 Resp: 35463

Ion	Ratio	Lower	Upper
53	100		
52	81.9	65.5	98.3
51	35.7	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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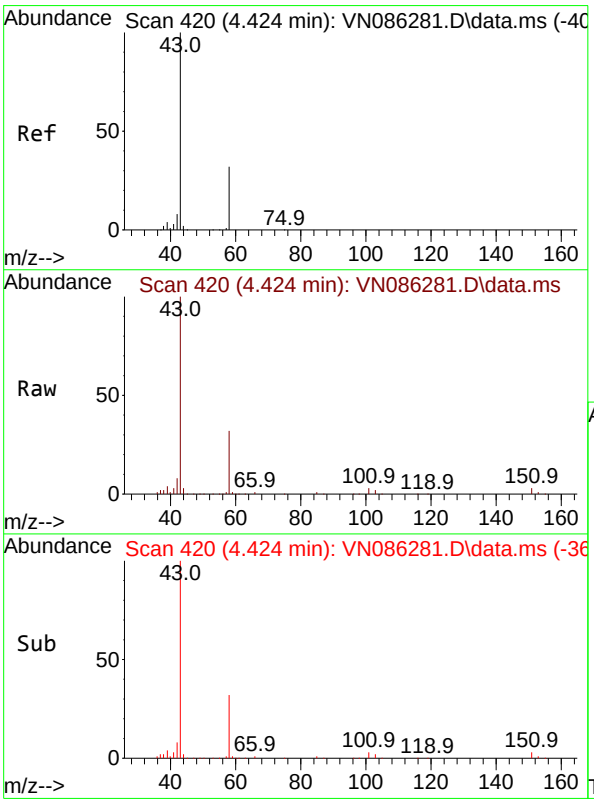
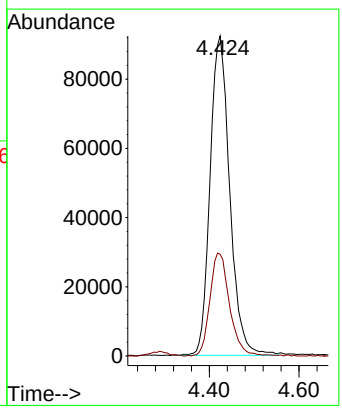
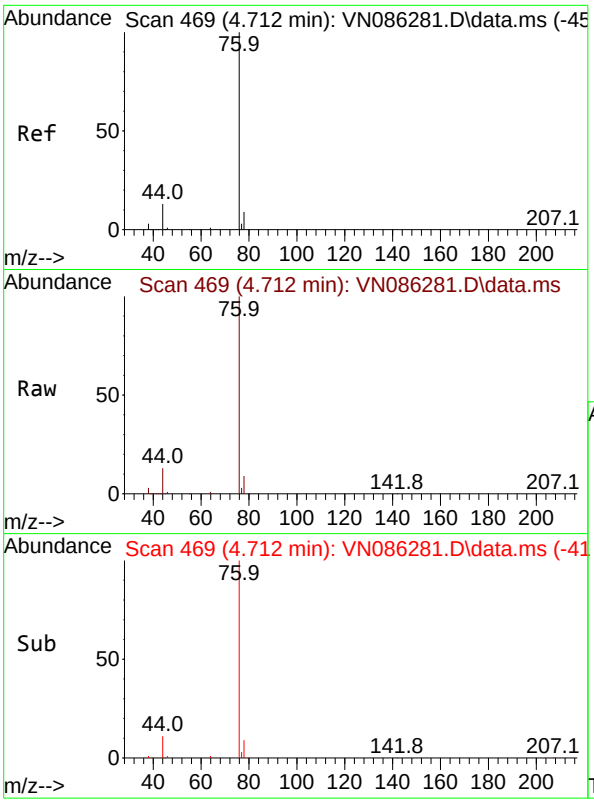


#16
Acetone
Concen: 250.761 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 280935

Ion	Ratio	Lower	Upper
43	100		
58	31.6	25.3	37.9

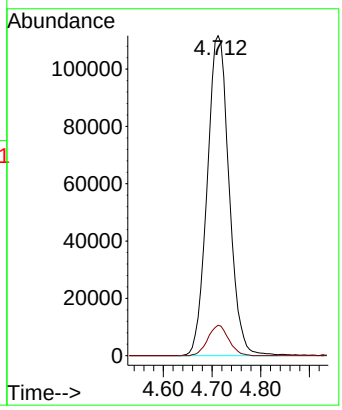




#17
Carbon Disulfide
Concen: 44.205 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 76 Resp: 34813

Ion	Ratio	Lower	Upper
76	100		
78	9.5	7.6	11.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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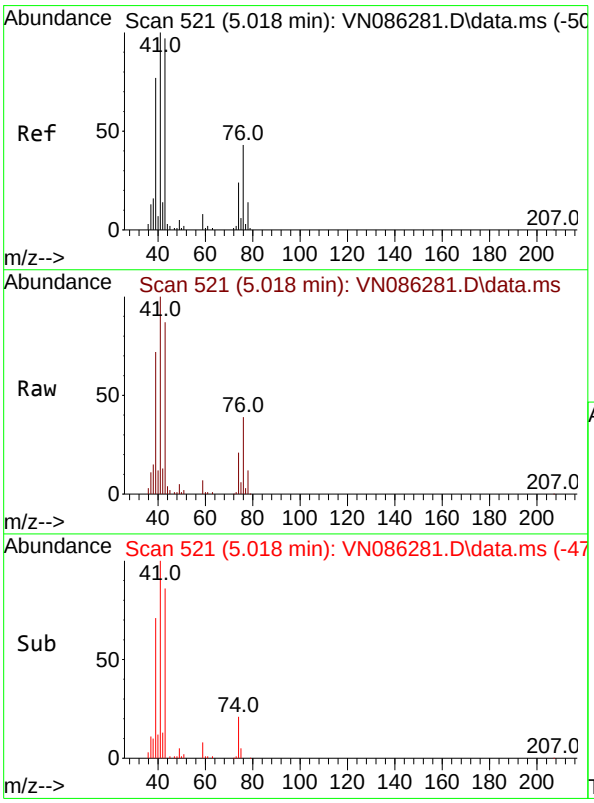
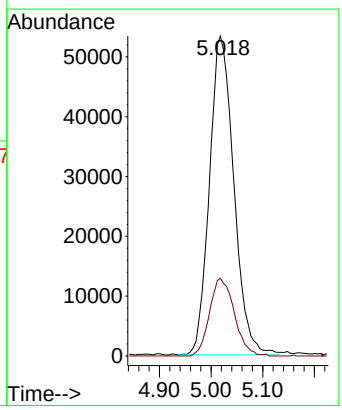
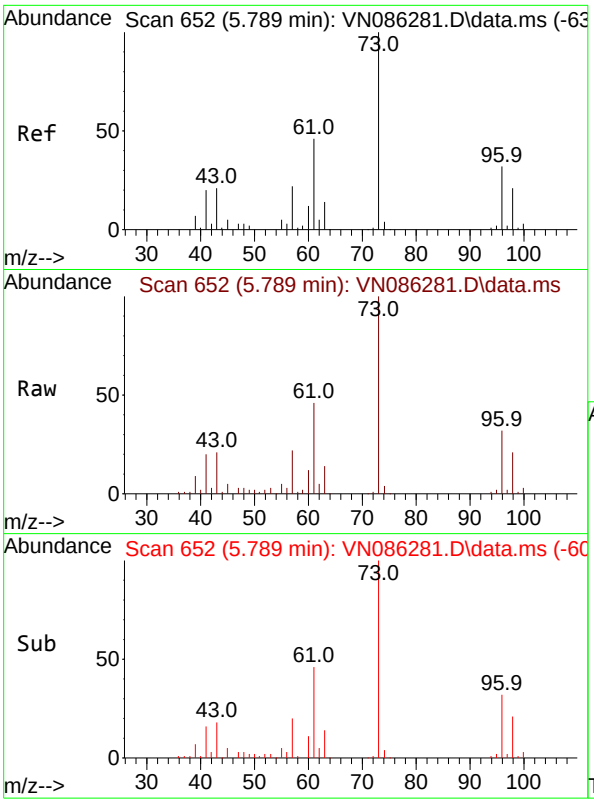


#18
Methyl Acetate
Concen: 44.886 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 174600

Ion	Ratio	Lower	Upper
43	100		
74	24.7	19.8	29.6

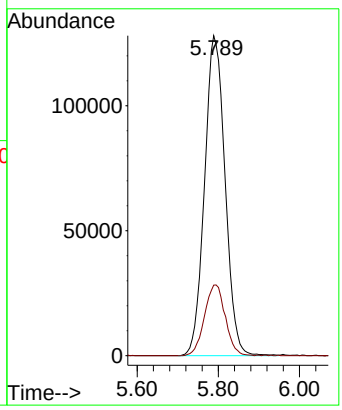




#19
Methyl tert-butyl Ether
Concen: 46.453 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 73 Resp: 44912

Ion	Ratio	Lower	Upper
73	100		
57	22.0	17.6	26.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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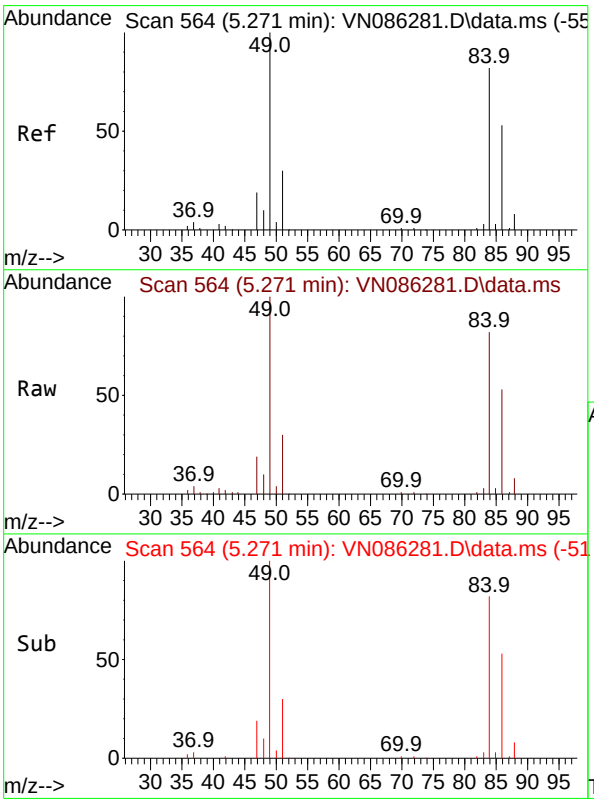
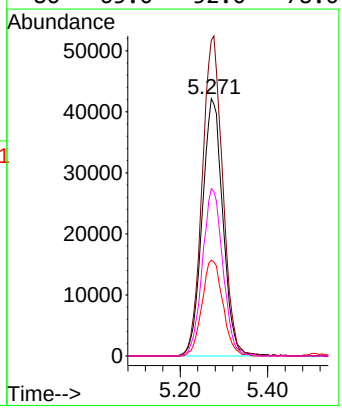
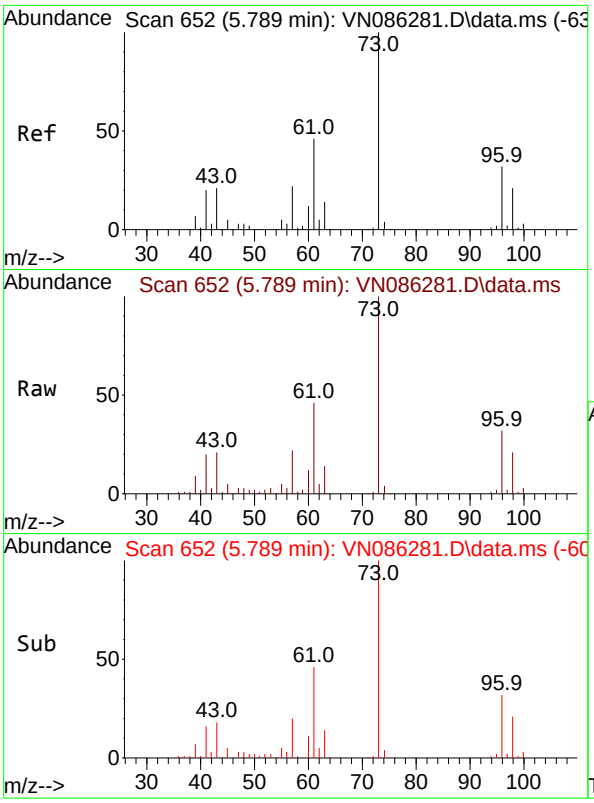


#20
Methylene Chloride
Concen: 46.163 ug/l
RT: 5.271 min Scan# 564
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 84 Resp: 138293

Ion	Ratio	Lower	Upper
84	100		
49	122.7	98.2	147.2
51	37.2	29.8	44.6
86	65.0	52.0	78.0

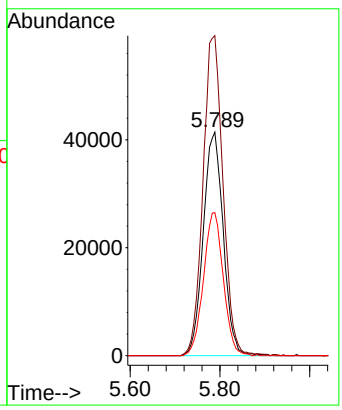




#21
trans-1,2-Dichloroethene
Concen: 46.696 ug/l
RT: 5.789 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 96 Resp: 12840

Ion	Ratio	Lower	Upper
96	100		
61	143.2	114.6	171.8
98	64.0	51.2	76.8



Instrument :
MSVOA_N
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VSTDICCC050

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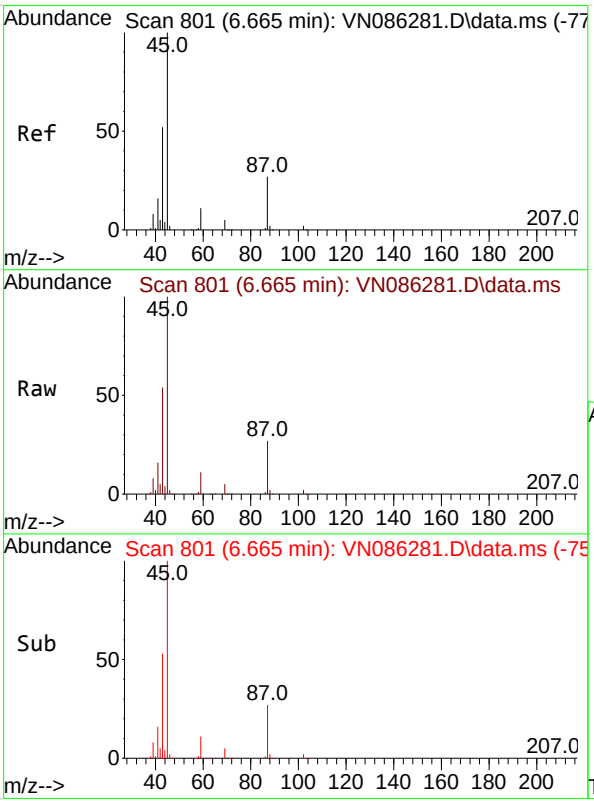
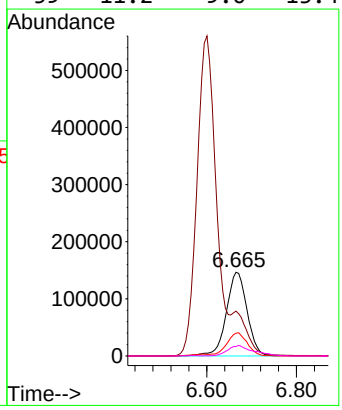
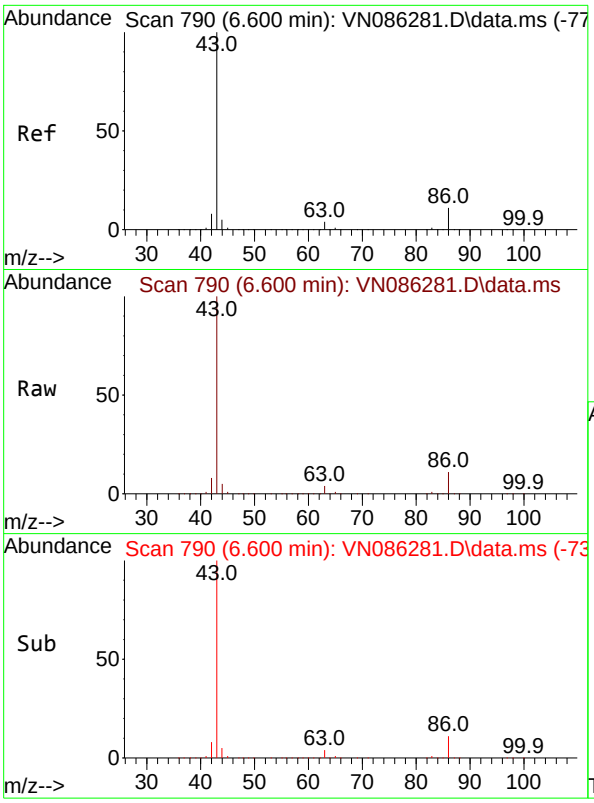


#22
Diisopropyl ether
Concen: 46.345 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 45 Resp: 471385

Ion	Ratio	Lower	Upper
45	100		
43	52.3	41.8	62.8
87	27.0	21.6	32.4
59	11.2	9.0	13.4





#23
Vinyl Acetate
Concen: 233.153 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 165734

Ion	Ratio	Lower	Upper
43	100		
86	10.8	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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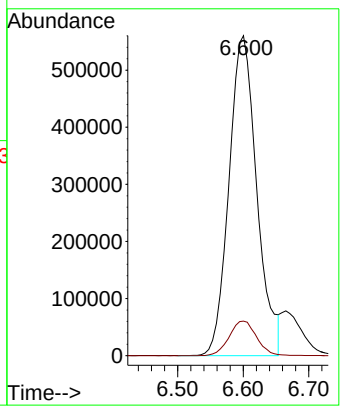
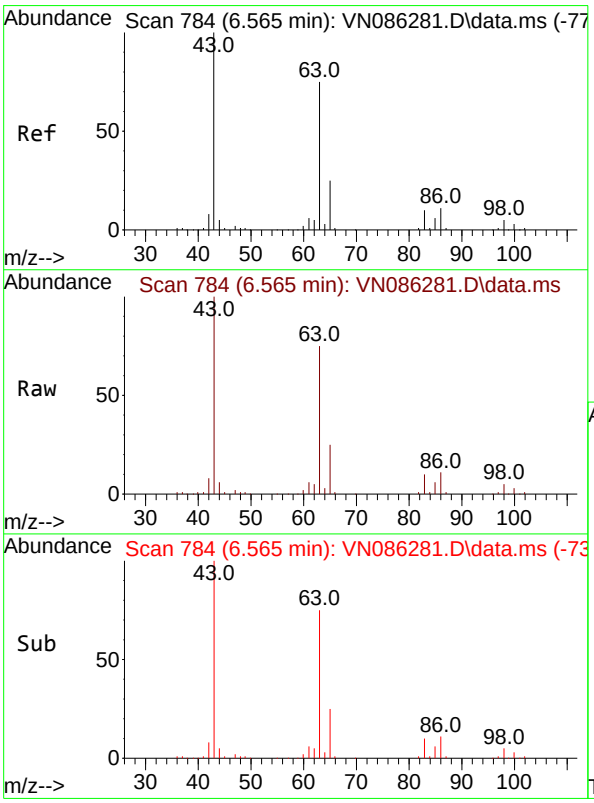
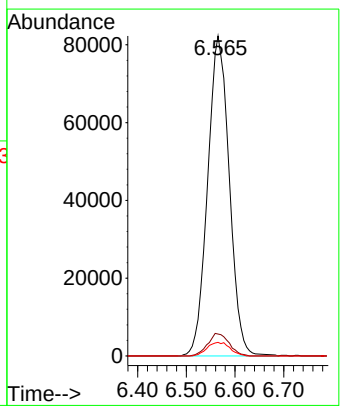


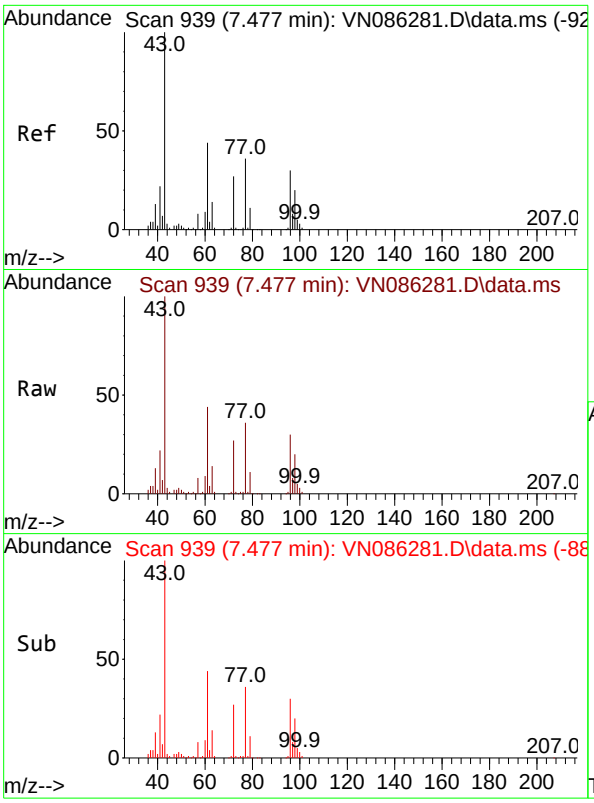


#24
1,1-Dichloroethane
Concen: 47.310 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 63 Resp: 253896

Ion	Ratio	Lower	Upper
63	100		
98	6.8	3.4	10.2
100	4.3	2.1	6.5





#25
2-Butanone
Concen: 235.633 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 47528

Ion	Ratio	Lower	Upper
43	100		
72	27.1	21.7	32.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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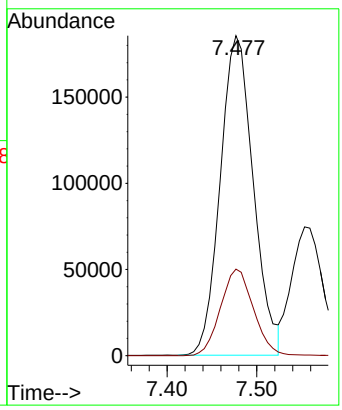
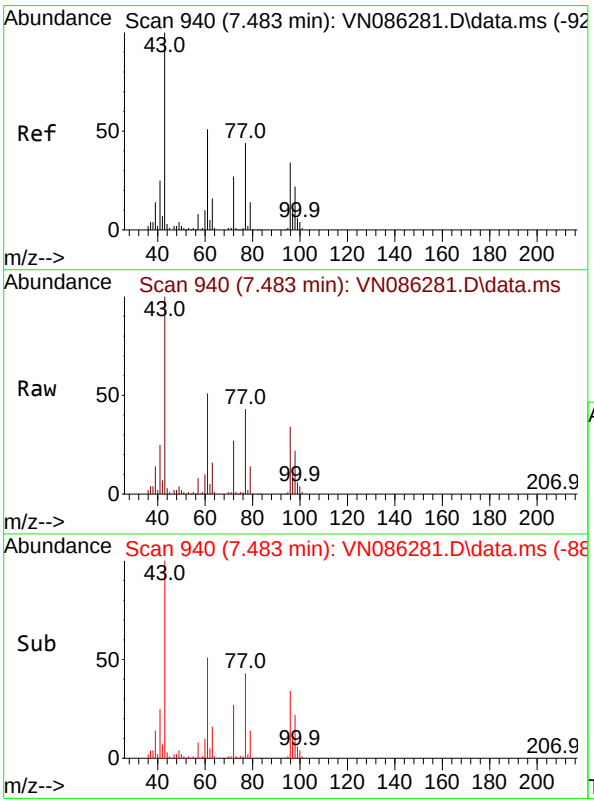
Supervised By :Semsettin Yesilyurt 04/16/2025

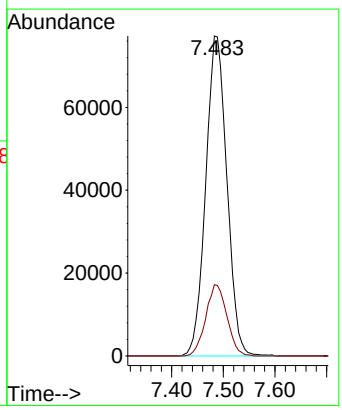


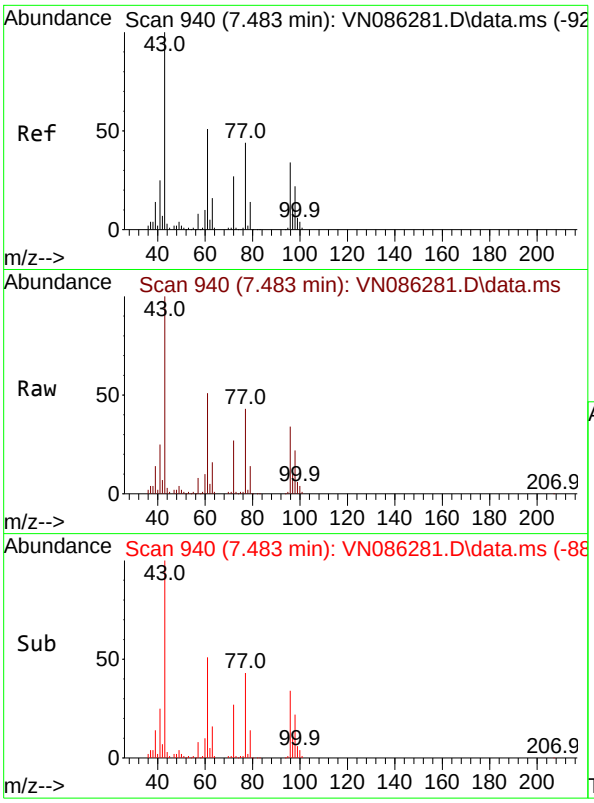


#26
2,2-Dichloropropane
Concen: 45.729 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 77 Resp: 219735

Ion	Ratio	Lower	Upper
77	100		
97	22.3	11.2	33.5





#27
cis-1,2-Dichloroethene
Concen: 46.722 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 96 Resp: 15946

Ion	Ratio	Lower	Upper
96	100		
61	149.5	0.0	299.0
98	64.8	0.0	129.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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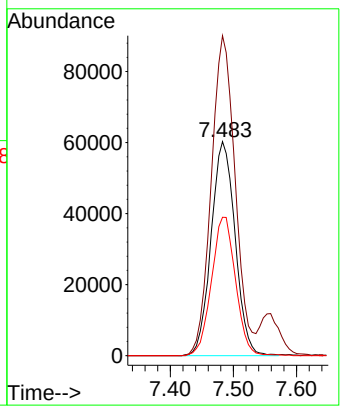
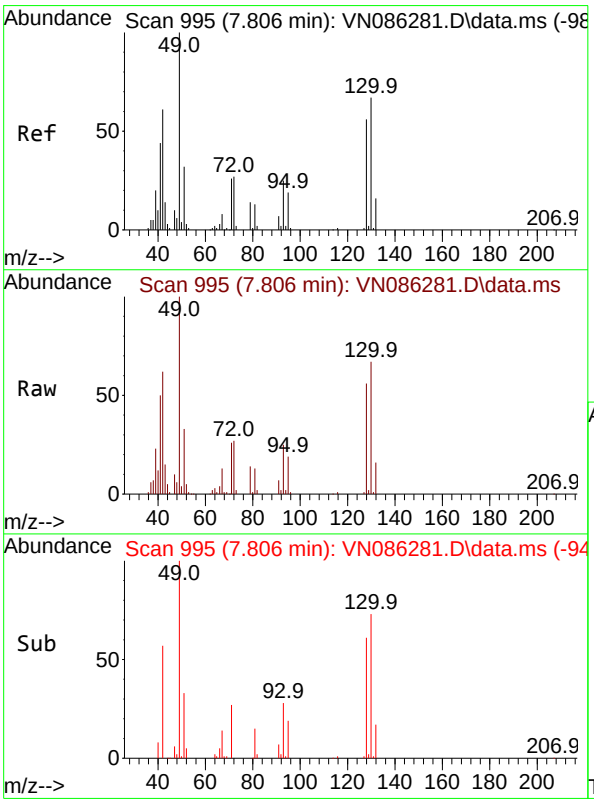
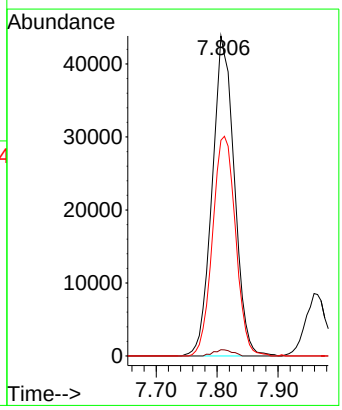


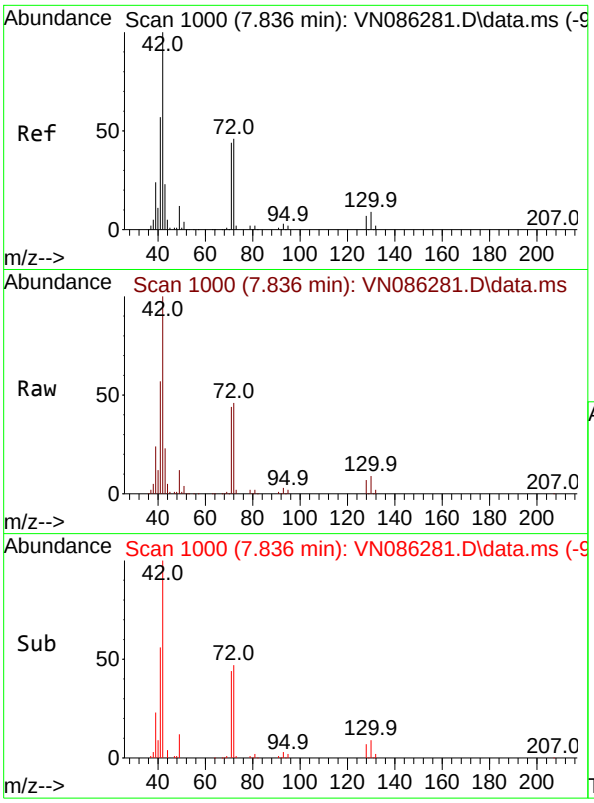


#28
Bromochloromethane
Concen: 48.660 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 49 Resp: 110726

Ion	Ratio	Lower	Upper
49	100		
129	1.7	0.0	3.4
130	71.4	57.1	85.7

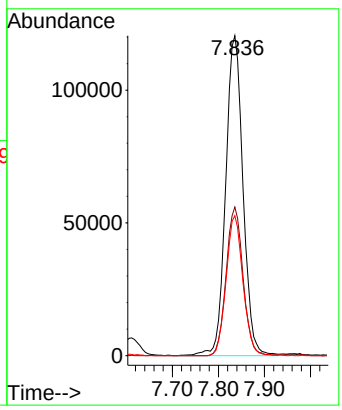




#29
Tetrahydrofuran
Concen: 232.739 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 42 Resp: 31392

Ion	Ratio	Lower	Upper
42	100		
72	45.3	36.2	54.4
71	42.5	34.0	51.0



Instrument :
MSVOA_N
ClientSampleId :
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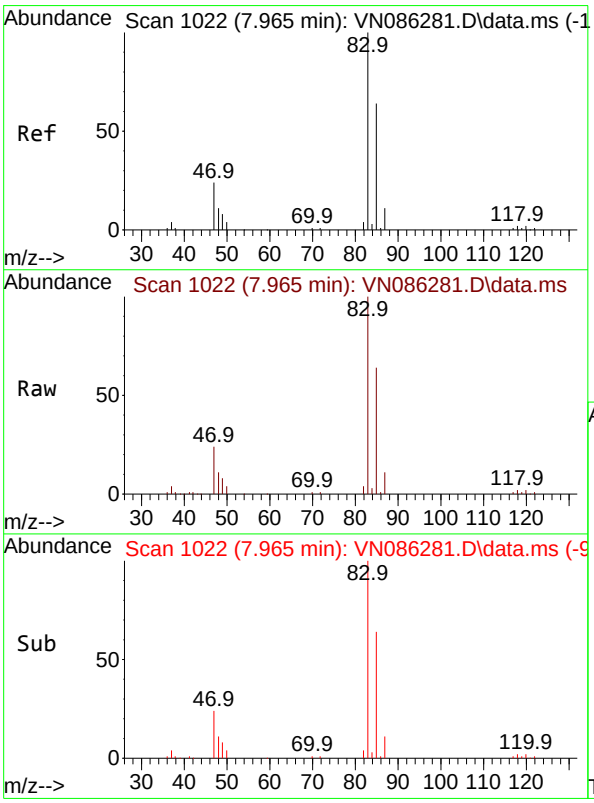
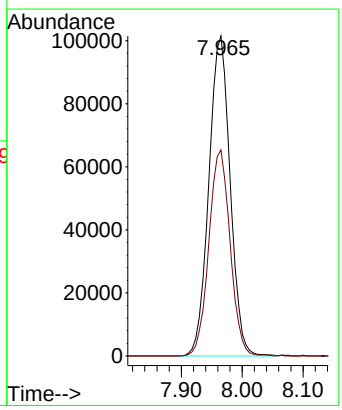
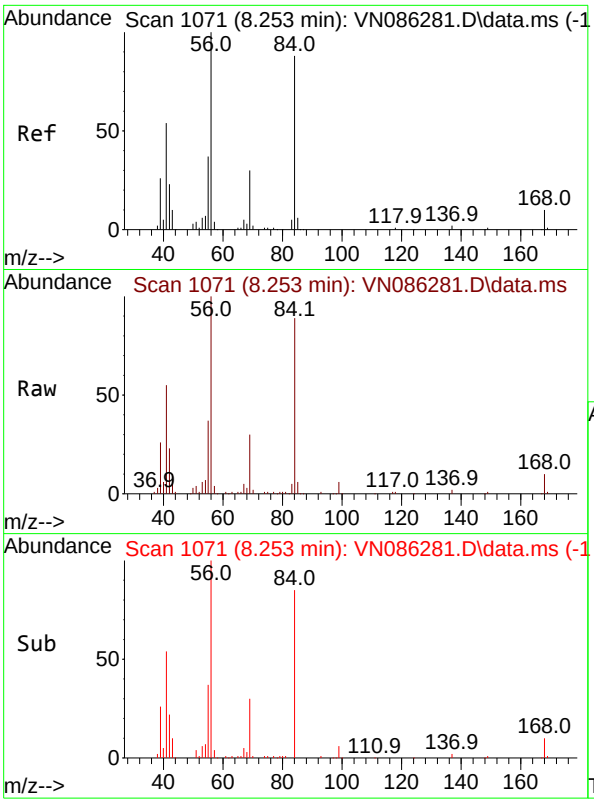


#30
Chloroform
Concen: 46.823 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 83 Resp: 246843

Ion	Ratio	Lower	Upper
83	100		
85	64.4	51.5	77.3

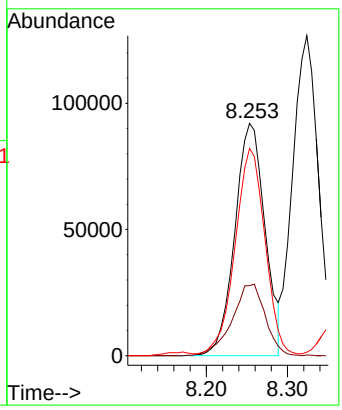




#31
Cyclohexane
Concen: 45.343 ug/l
RT: 8.253 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 56 Resp: 23811

Ion	Ratio	Lower	Upper
56	100		
69	30.2	24.2	36.2
84	87.9	70.3	105.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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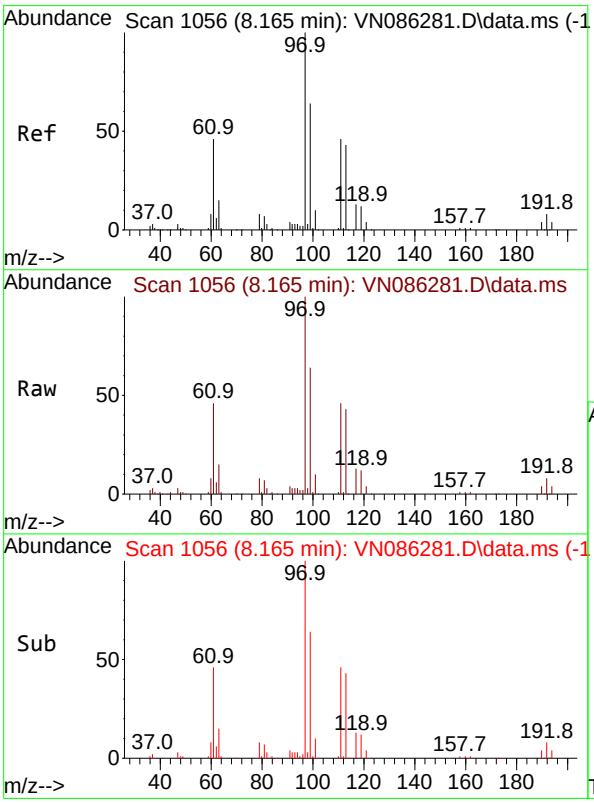
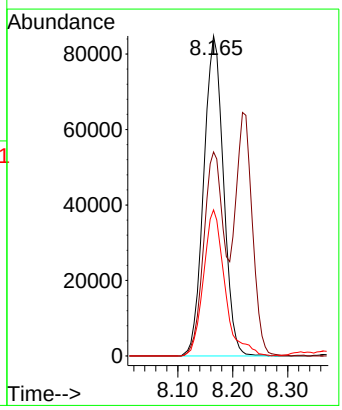
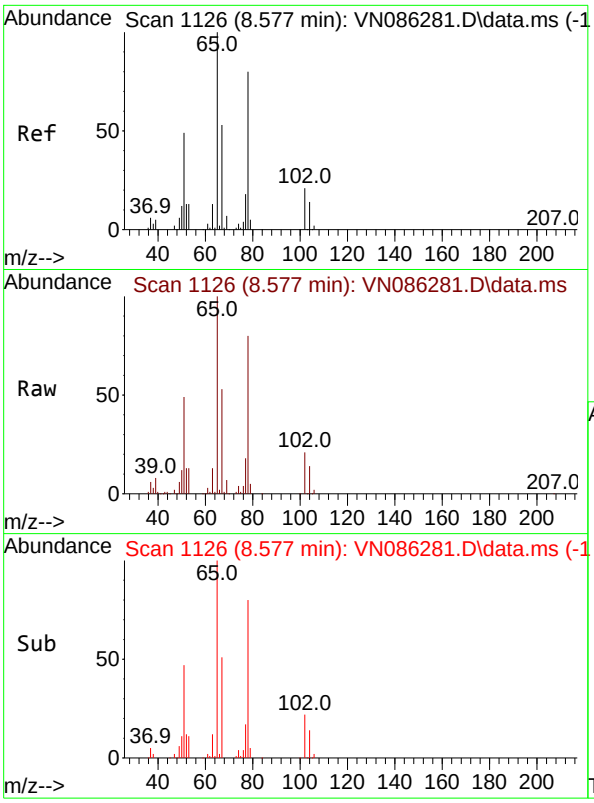


#32
1,1,1-Trichloroethane
Concen: 47.013 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 97 Resp: 212021

Ion	Ratio	Lower	Upper
97	100		
99	65.9	52.7	79.1
61	49.4	39.5	59.3

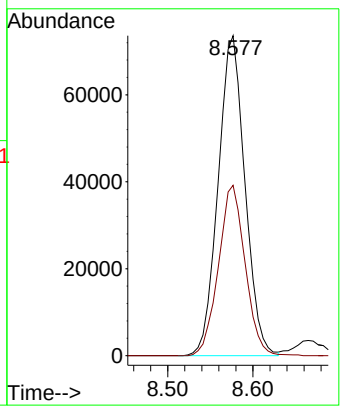




#33
1,2-Dichloroethane-d4
Concen: 49.609 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 65 Resp: 16075

Ion	Ratio	Lower	Upper
65	100		
67	53.0	0.0	106.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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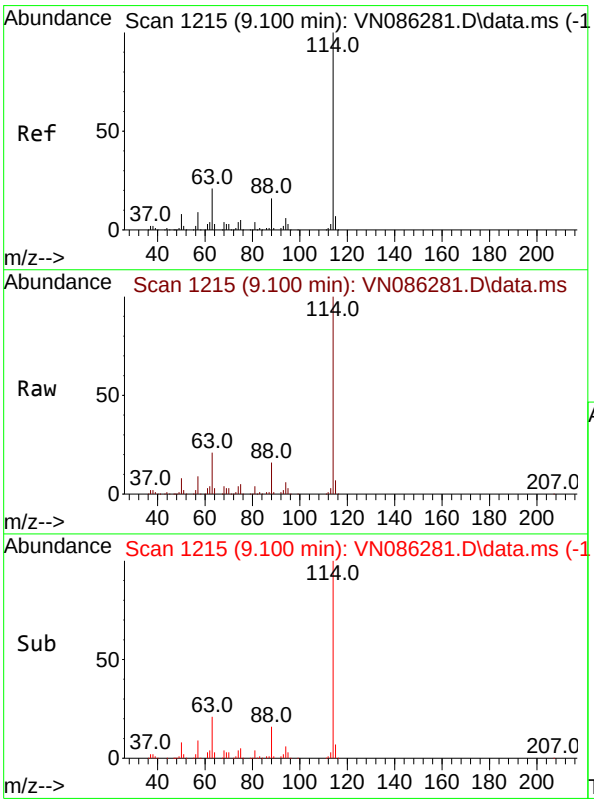
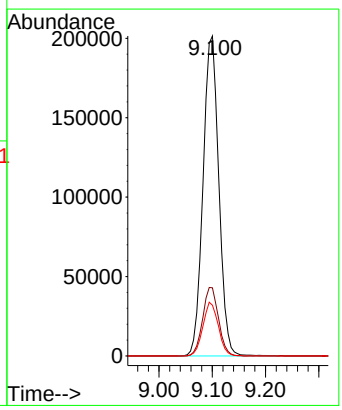
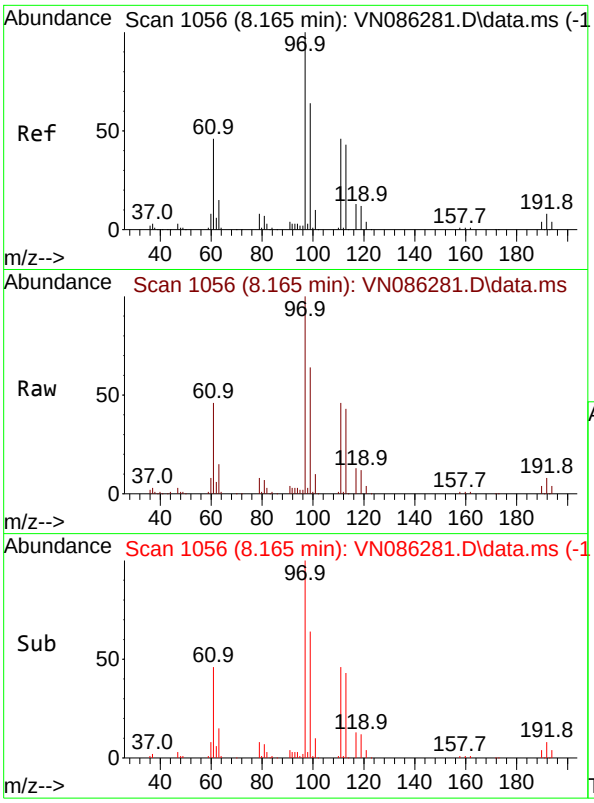


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:114 Resp: 413969

Ion	Ratio	Lower	Upper
114	100		
63	21.3	0.0	42.6
88	15.9	0.0	31.8

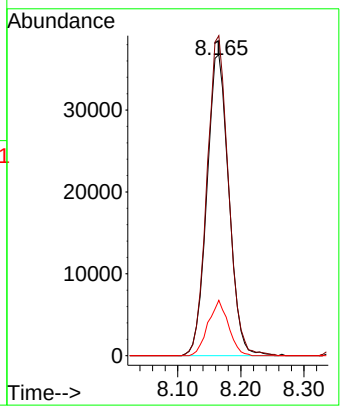




#35
Dibromofluoromethane
Concen: 46.238 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:113 Resp: 8883

Ion	Ratio	Lower	Upper
113	100		
111	104.2	83.4	125.0
192	17.1	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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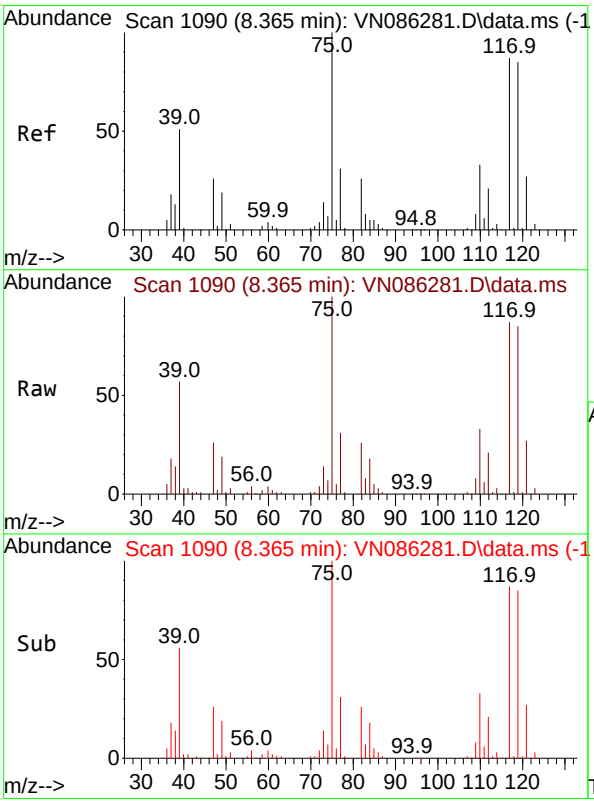
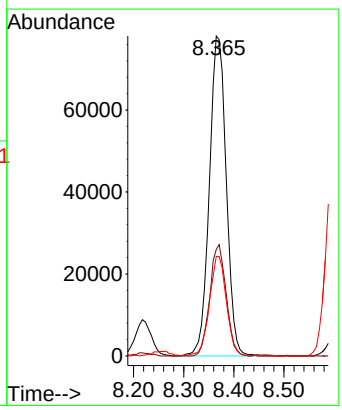
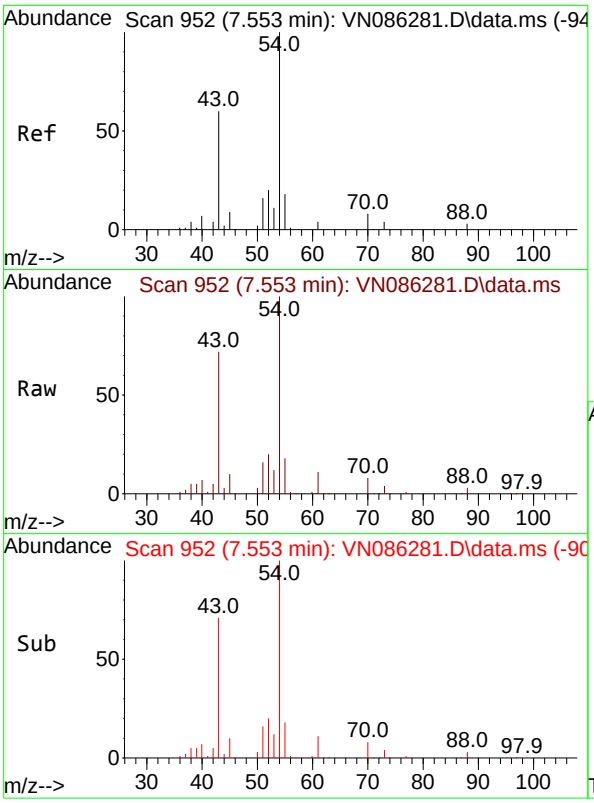


#36
1,1-Dichloropropene
Concen: 47.752 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 75 Resp: 183246

Ion	Ratio	Lower	Upper
75	100		
110	33.6	16.8	50.4
77	31.1	24.9	37.3

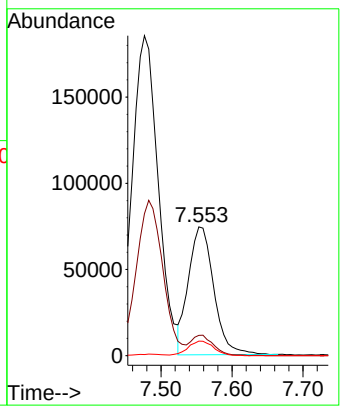




#37
Ethyl Acetate
Concen: 45.750 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 18483

Ion	Ratio	Lower	Upper
43	100		
61	13.9	11.1	16.7
70	11.5	9.2	13.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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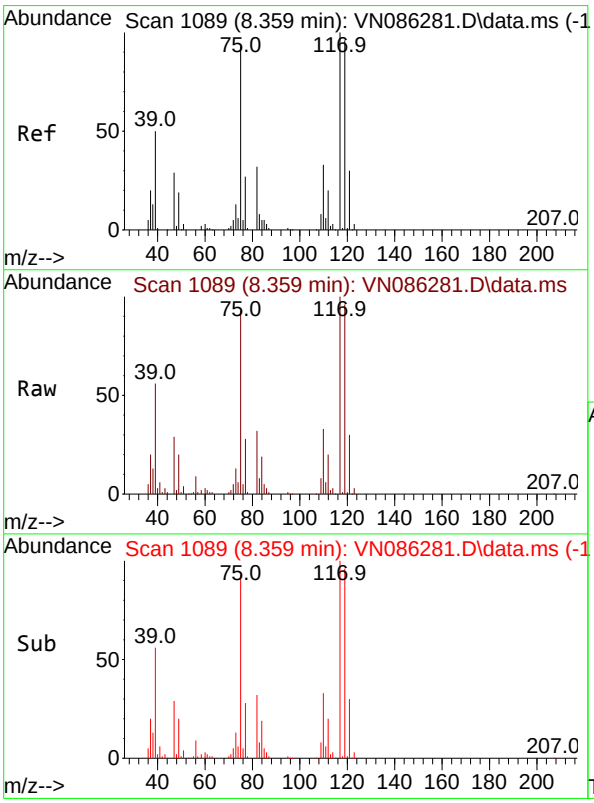
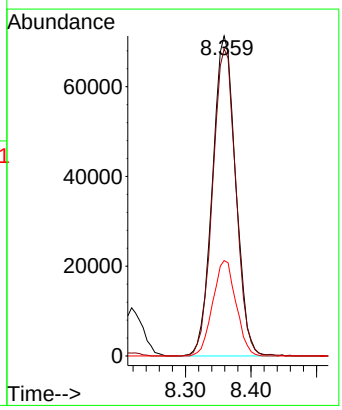
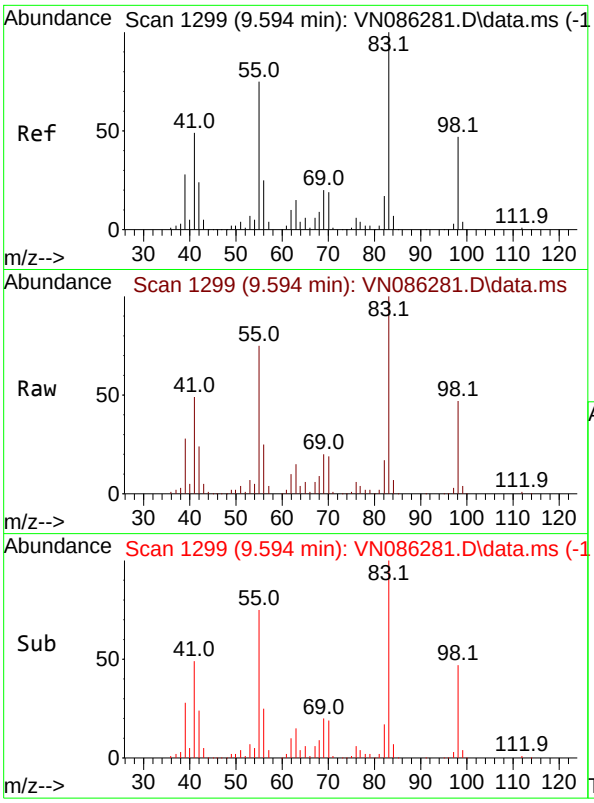


#38
Carbon Tetrachloride
Concen: 47.912 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:117 Resp: 175094

Ion	Ratio	Lower	Upper
117	100		
119	96.0	76.8	115.2
121	29.8	23.8	35.8

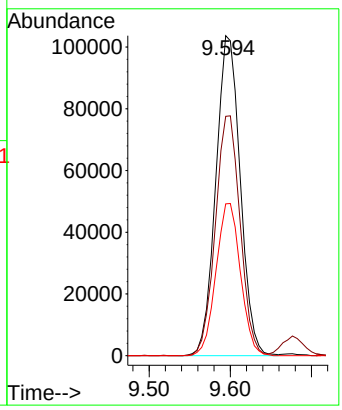




#39
Methylcyclohexane
Concen: 47.515 ug/l
RT: 9.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 83 Resp: 21672

Ion	Ratio	Lower	Upper
83	100		
55	74.8	59.8	89.8
98	47.4	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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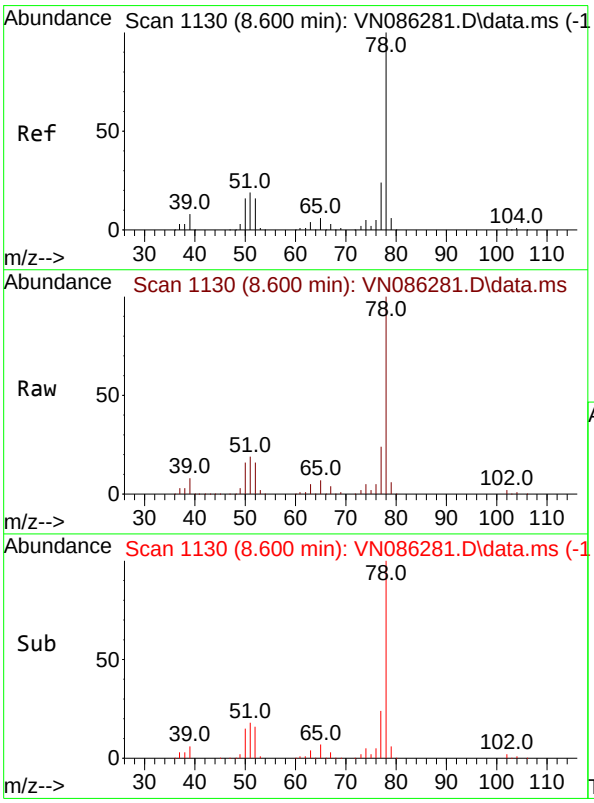
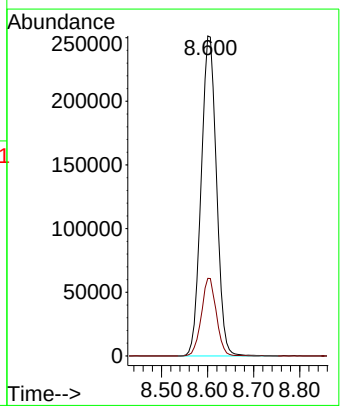
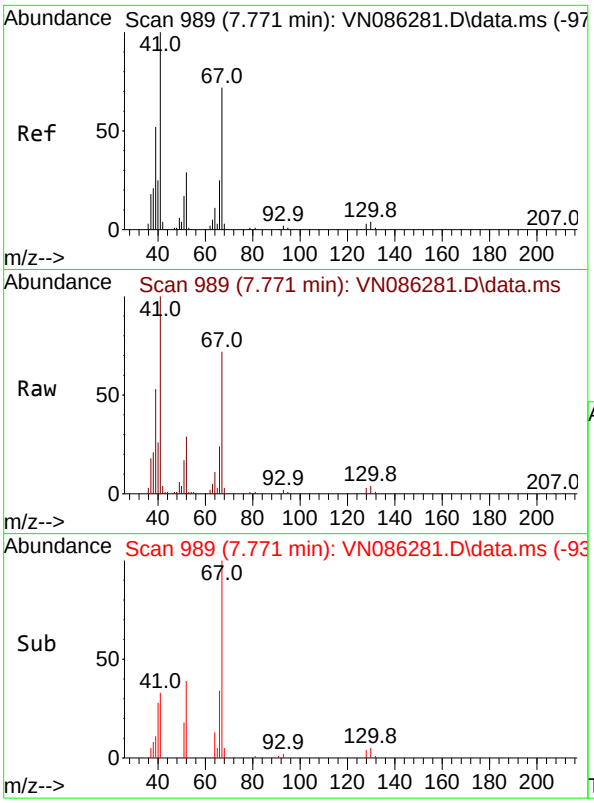


#40
Benzene
Concen: 47.443 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 78 Resp: 583316

Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.4	29.2

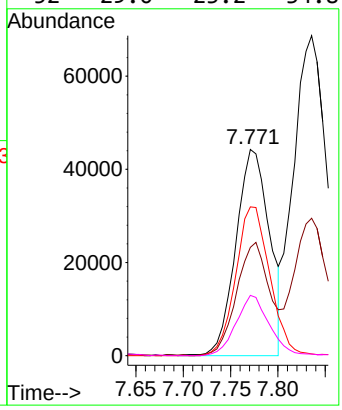




#41
Methacrylonitrile
Concen: 46.643 ug/l
RT: 7.771 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 41 Resp: 10921

Ion	Ratio	Lower	Upper
41	100		
39	53.7	43.0	64.4
67	73.5	58.8	88.2
52	29.0	23.2	34.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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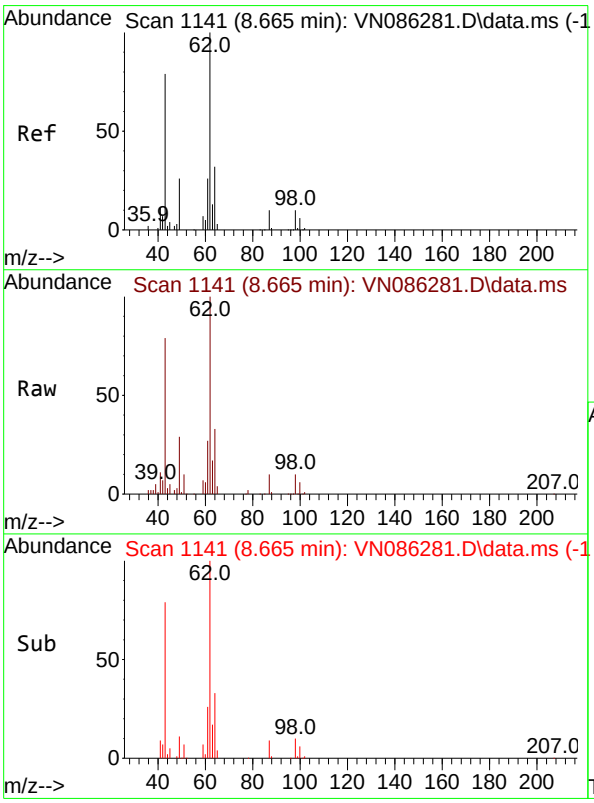
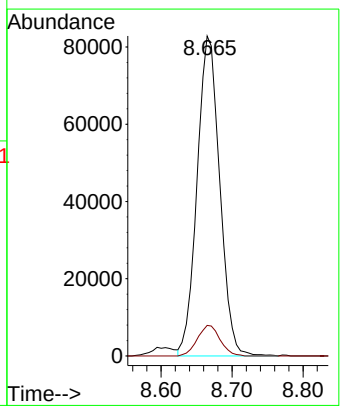
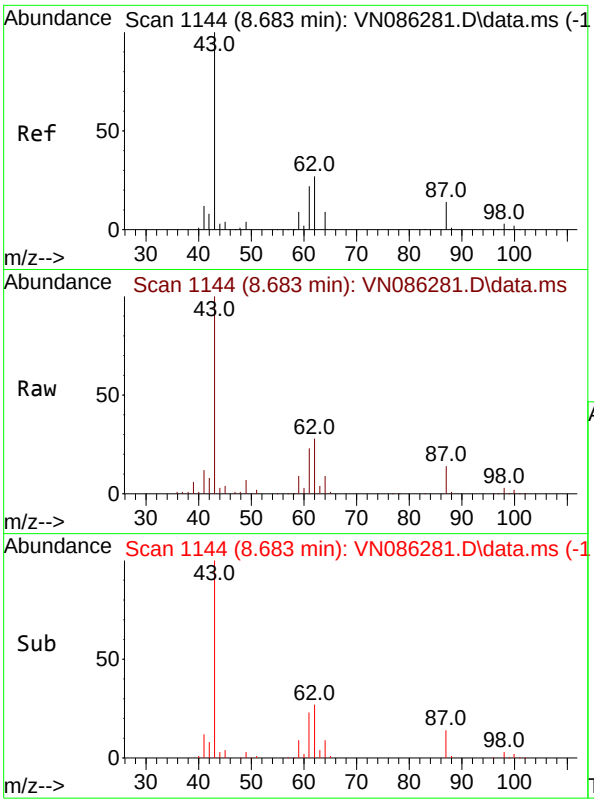


#42
1,2-Dichloroethane
Concen: 46.892 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 62 Resp: 183854

Ion	Ratio	Lower	Upper
62	100		
98	9.6	0.0	19.2





#43
Isopropyl Acetate
Concen: 49.550 ug/l
RT: 8.683 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 35832

Ion	Ratio	Lower	Upper
43	100		
61	25.6	20.5	30.7
87	13.1	10.5	15.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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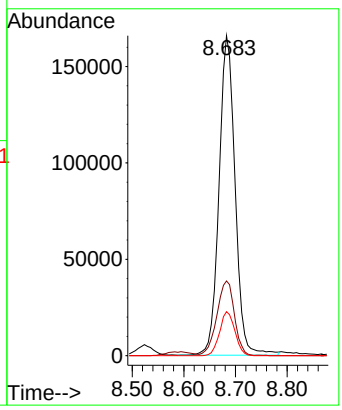
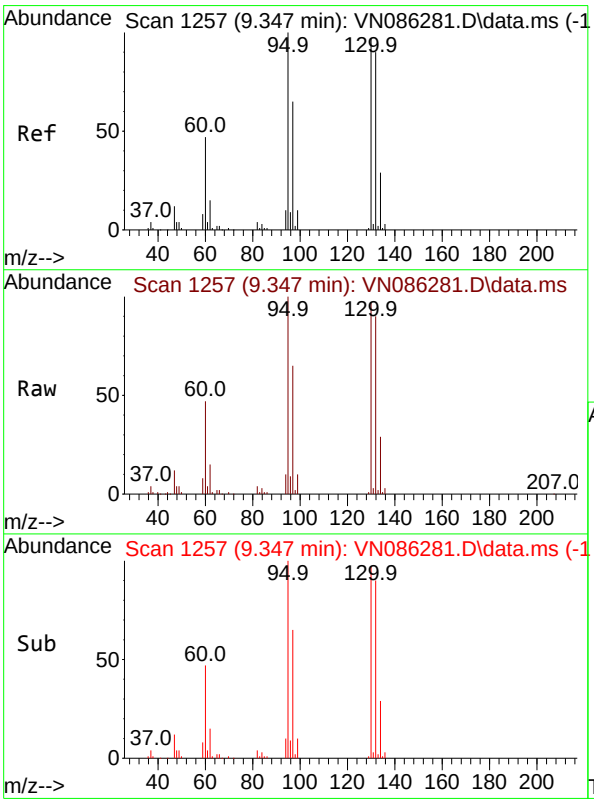
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

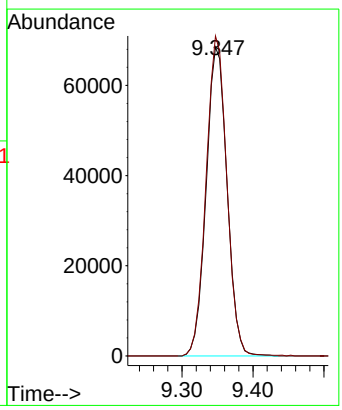


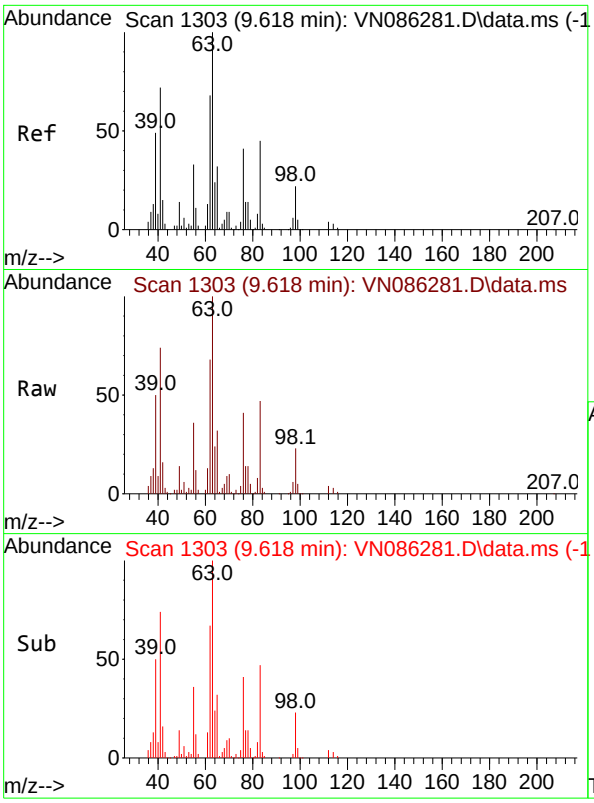


#44
Trichloroethene
Concen: 48.039 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:130 Resp: 139993

Ion	Ratio	Lower	Upper
130	100		
95	103.6	0.0	207.2





#45
1,2-Dichloropropane
Concen: 48.011 ug/l
RT: 9.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 63 Resp: 14449

Ion	Ratio	Lower	Upper
63	100		
65	31.8	25.4	38.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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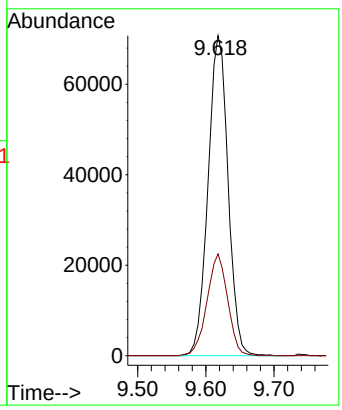
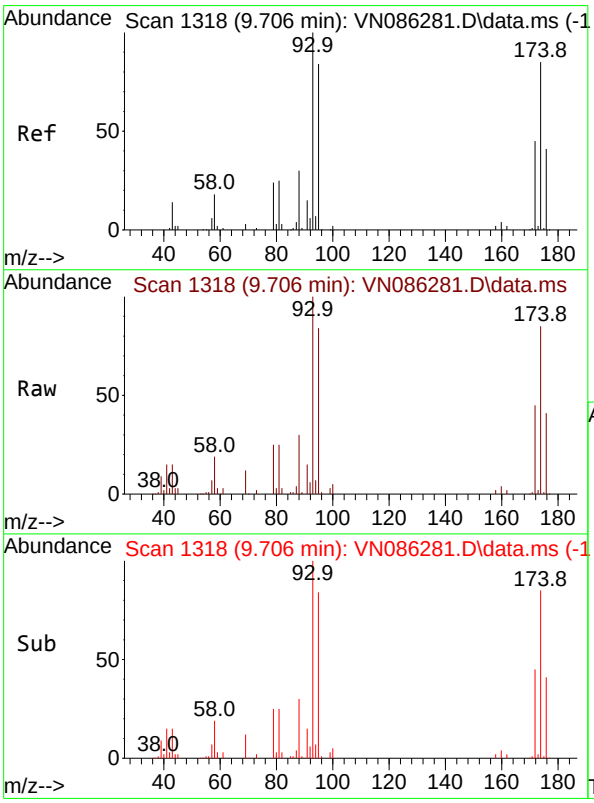
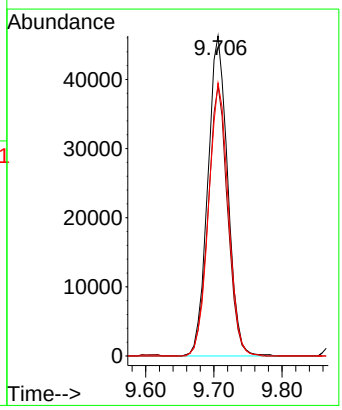


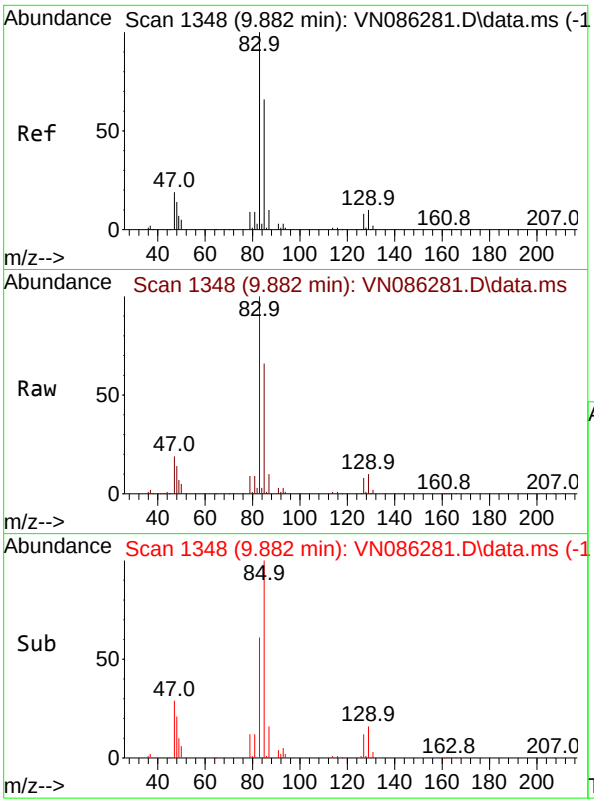


#46
Dibromomethane
Concen: 49.002 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 93 Resp: 93965

Ion	Ratio	Lower	Upper
93	100		
95	82.8	66.2	99.4
174	84.7	67.8	101.6

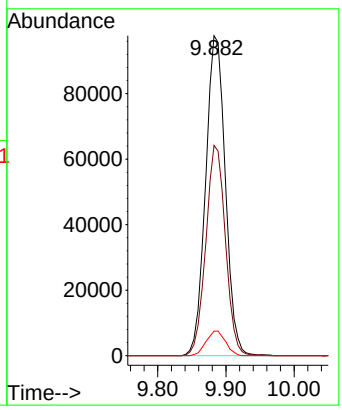




#47
Bromodichloromethane
Concen: 47.516 ug/l
RT: 9.882 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 83 Resp: 19679

Ion	Ratio	Lower	Upper
83	100		
85	65.7	52.6	78.8
127	7.6	6.1	9.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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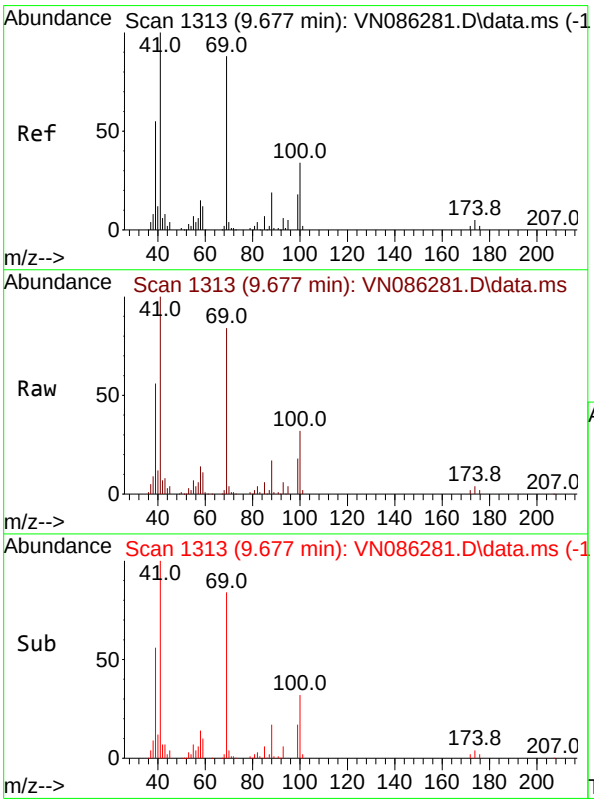
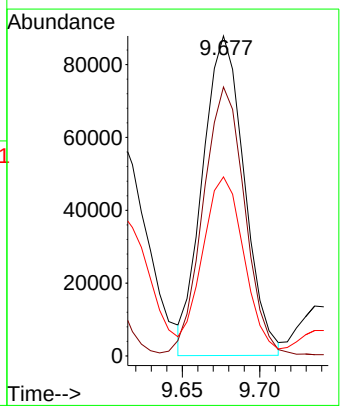
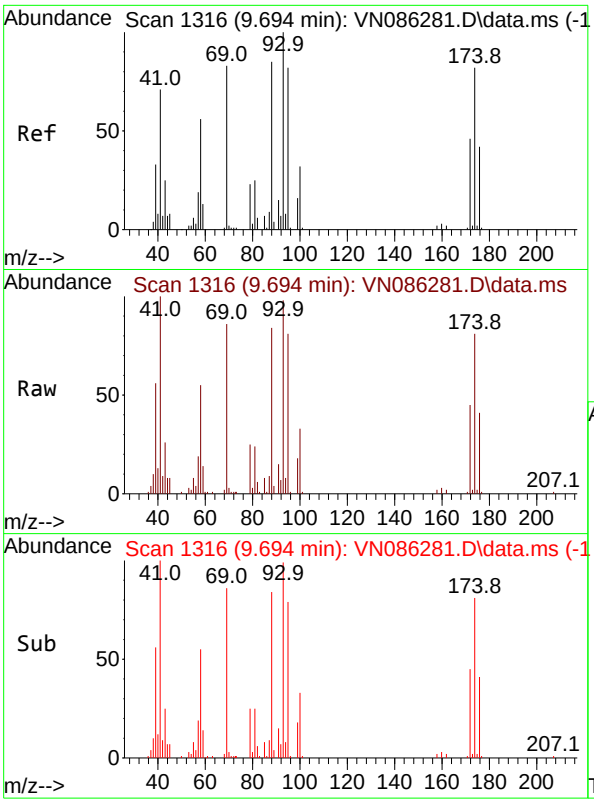


#48
Methyl methacrylate
Concen: 46.146 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 41 Resp: 163719

Ion	Ratio	Lower	Upper
41	100		
69	85.2	68.2	102.2
39	56.5	45.2	67.8





#49
1,4-Dioxane
Concen: 892.337 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 88 Resp: 5385

Ion	Ratio	Lower	Upper
88	100		
43	29.8	23.8	35.8
58	71.8	57.4	86.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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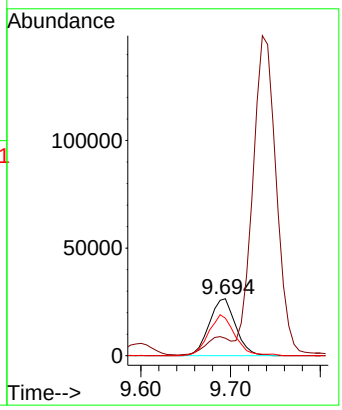
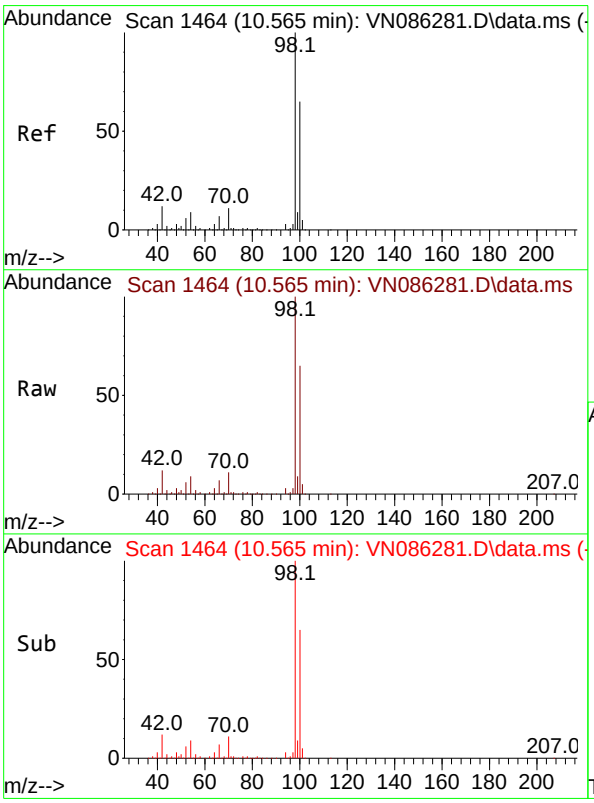
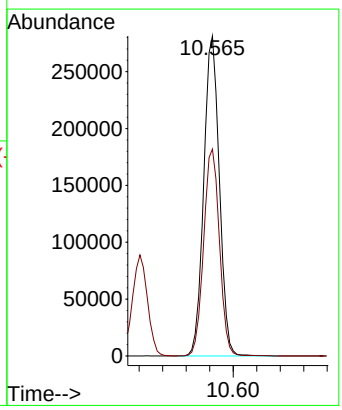


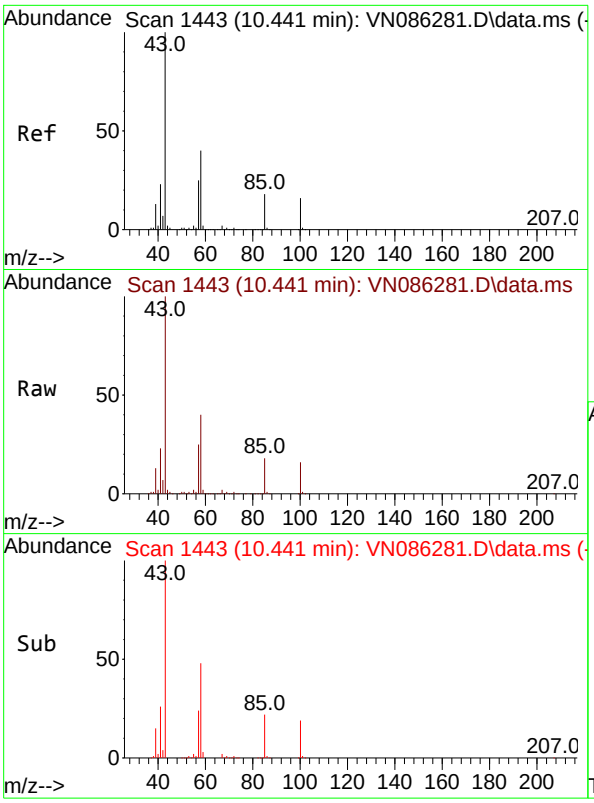


#50
Toluene-d8
Concen: 50.426 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 98 Resp: 517785

Ion	Ratio	Lower	Upper
98	100		
100	65.6	52.5	78.7

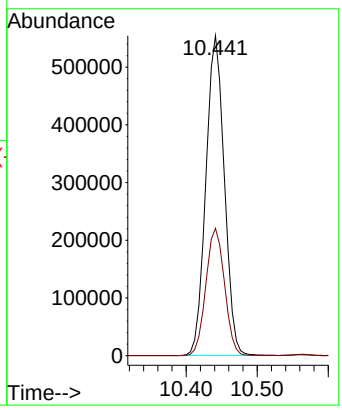




#51
4-Methyl-2-Pentanone
Concen: 241.959 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 100099

Ion	Ratio	Lower	Upper
43	100		
58	40.3	32.2	48.4



Instrument :
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ClientSampleId :
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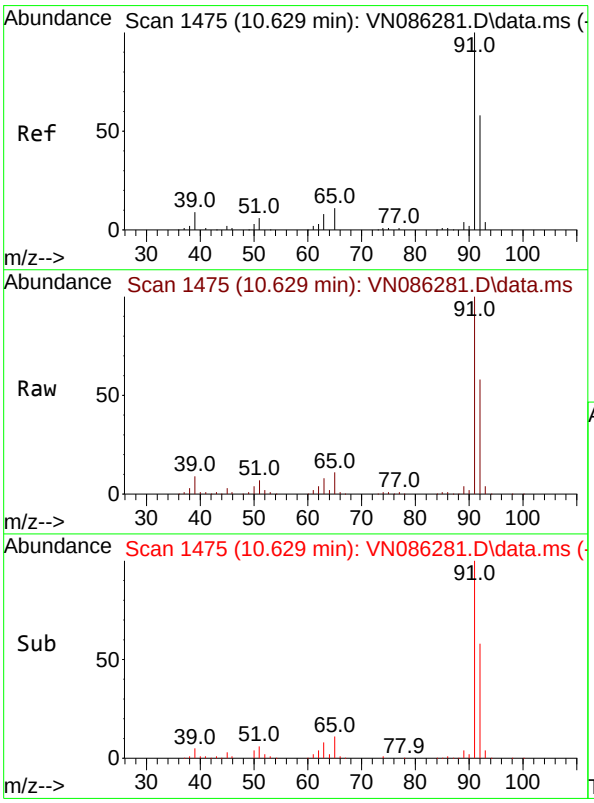
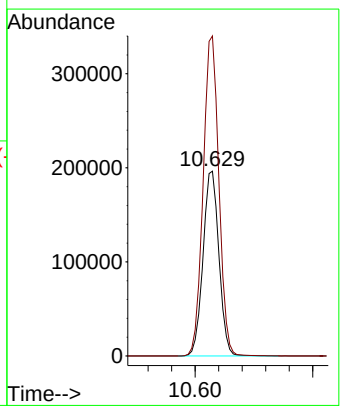
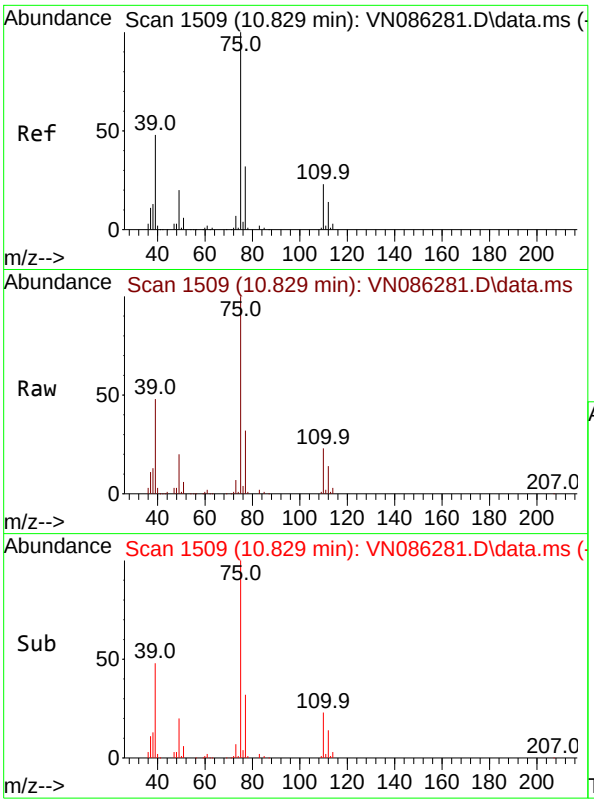


#52
Toluene
Concen: 48.144 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 92 Resp: 369349

Ion	Ratio	Lower	Upper
92	100		
91	171.6	137.3	205.9

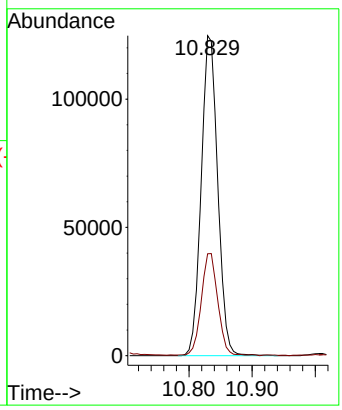




#53
t-1,3-Dichloropropene
Concen: 48.996 ug/l
RT: 10.829 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 75 Resp: 22651

Ion	Ratio	Lower	Upper
75	100		
77	31.7	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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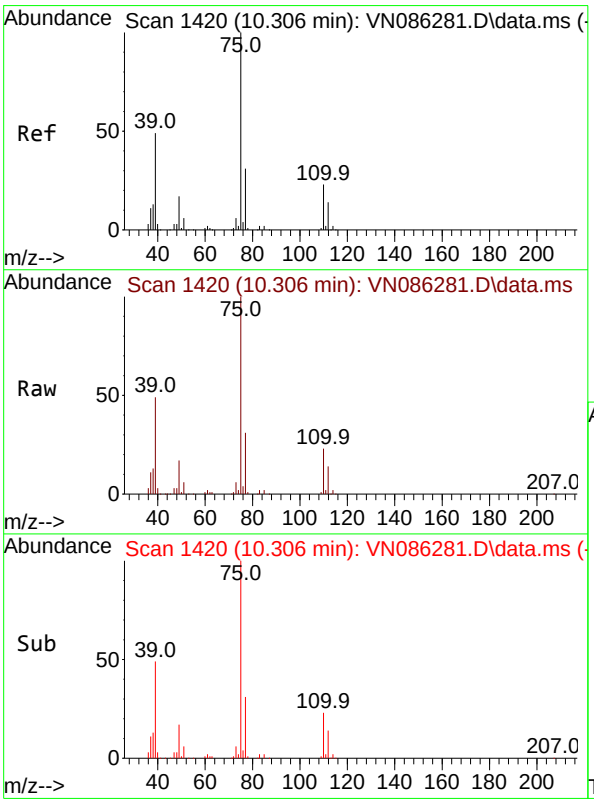
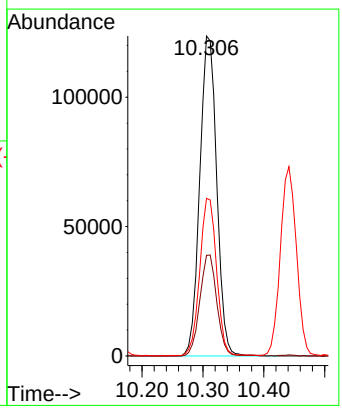
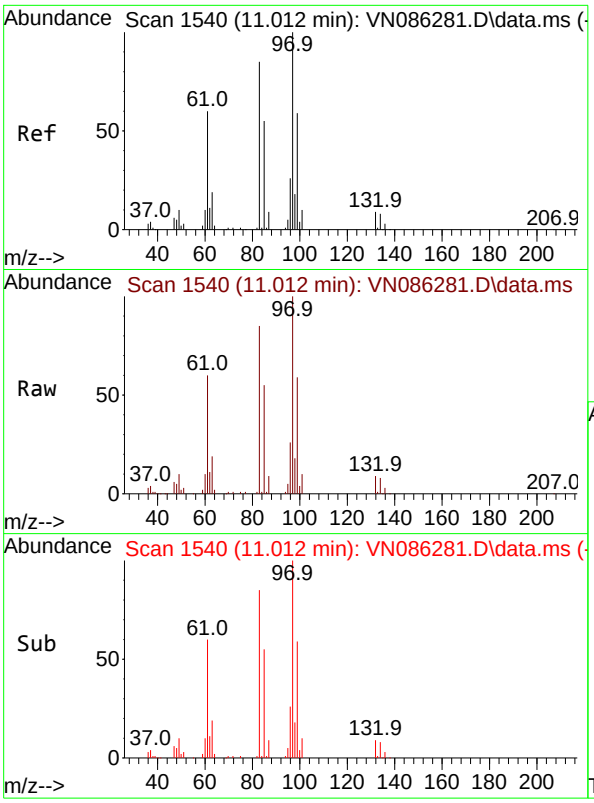


#54
cis-1,3-Dichloropropene
Concen: 47.021 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 75 Resp: 238764

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.2	37.8
39	49.1	39.3	58.9

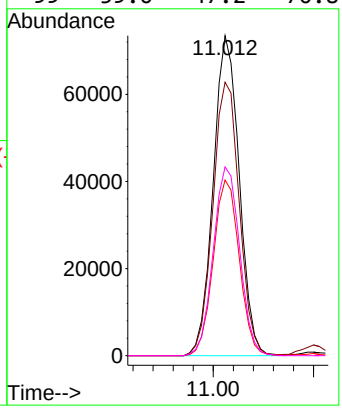




#55
1,1,2-Trichloroethane
Concen: 47.721 ug/l
RT: 11.012 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 97 Resp: 13172

Ion	Ratio	Lower	Upper
97	100		
83	85.5	68.4	102.6
85	54.9	43.9	65.9
99	59.0	47.2	70.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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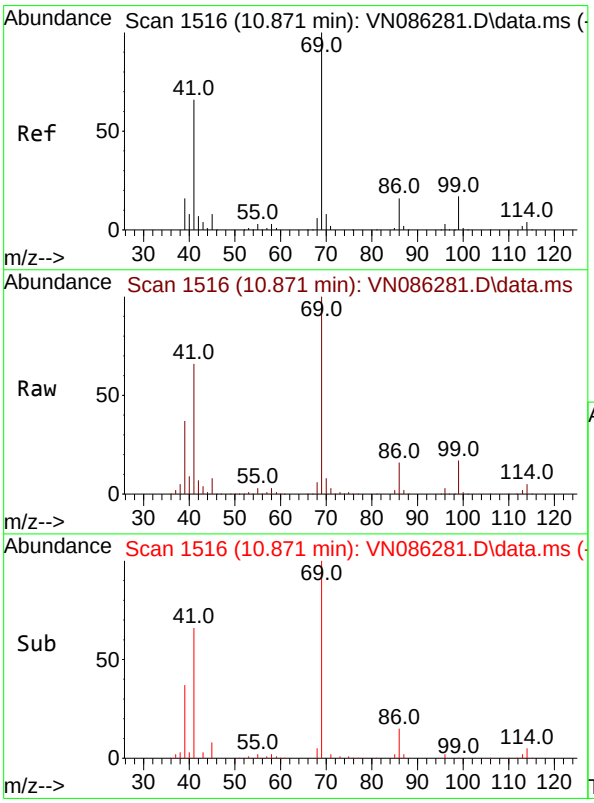
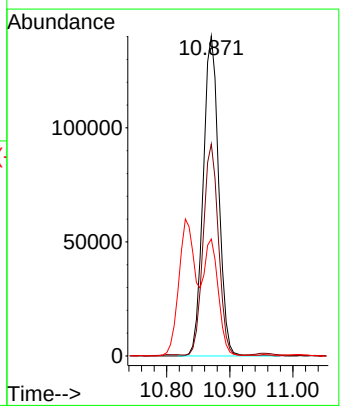
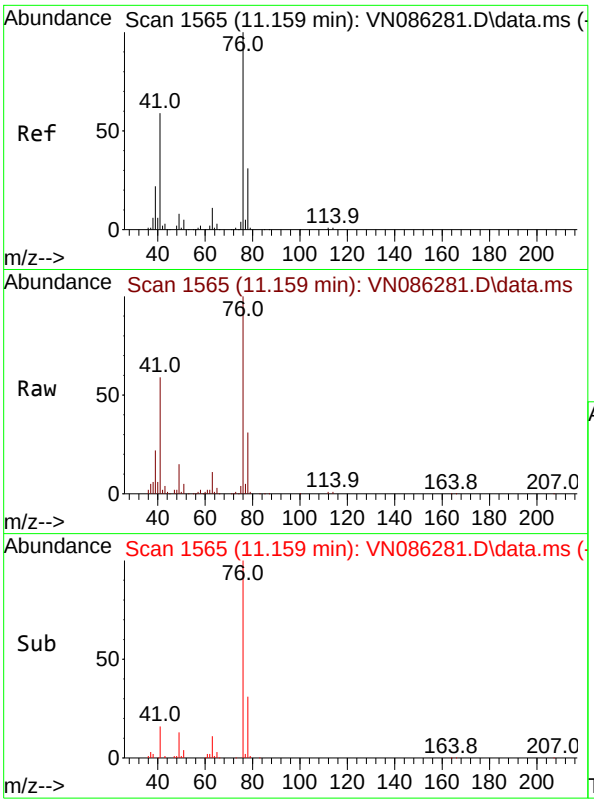


#56
Ethyl methacrylate
Concen: 47.235 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 69 Resp: 239654

Ion	Ratio	Lower	Upper
69	100		
41	64.6	51.7	77.5
39	32.9	26.3	39.5

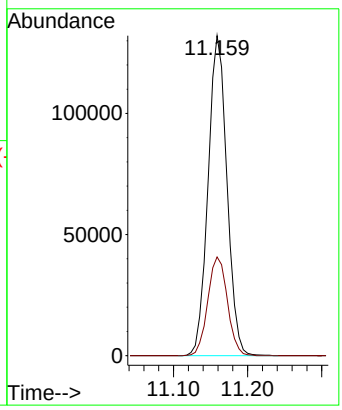




#57
1,3-Dichloropropane
Concen: 47.689 ug/l
RT: 11.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 76 Resp: 23354

Ion	Ratio	Lower	Upper
76	100		
78	32.0	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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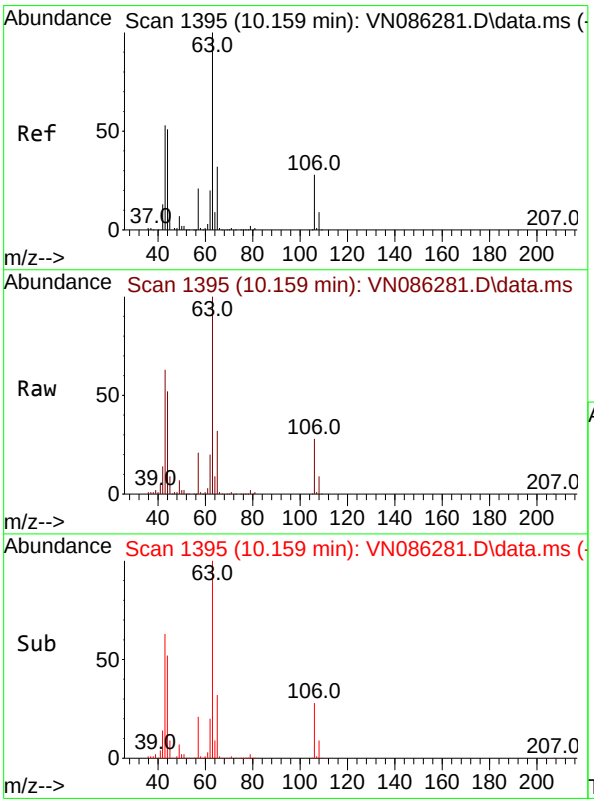
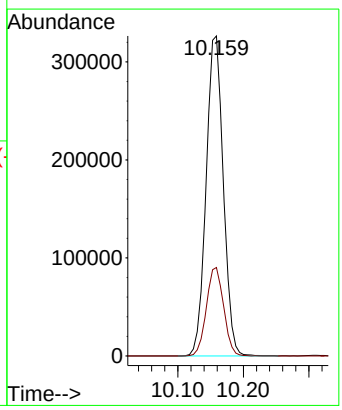
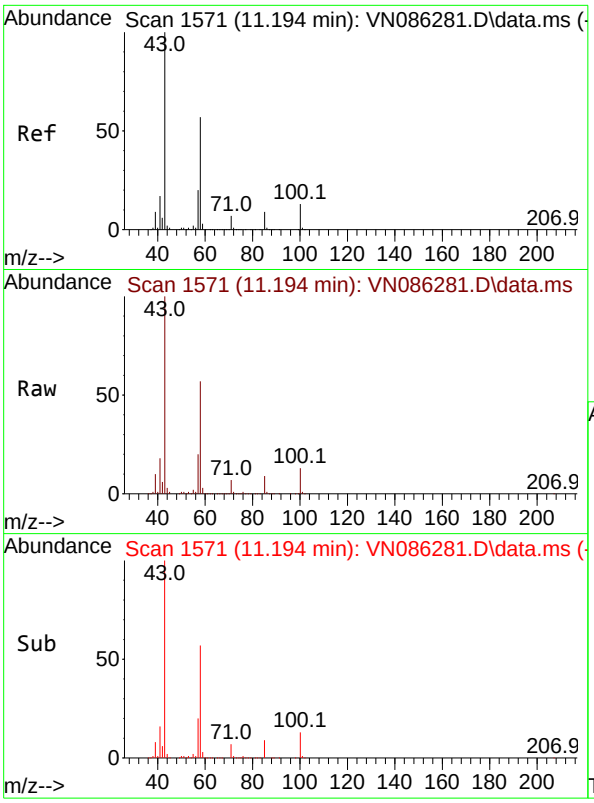


#58
2-Chloroethyl Vinyl ether
Concen: 246.859 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 63 Resp: 594475

Ion	Ratio	Lower	Upper
63	100		
106	27.7	22.2	33.2

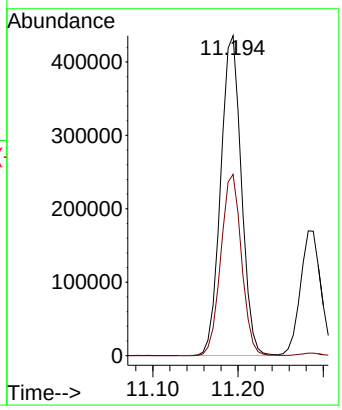




#59
2-Hexanone
Concen: 239.414 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 73466

Ion	Ratio	Lower	Upper
43	100		
58	56.7	28.3	85.0



Instrument :
MSVOA_N
ClientSampleId :
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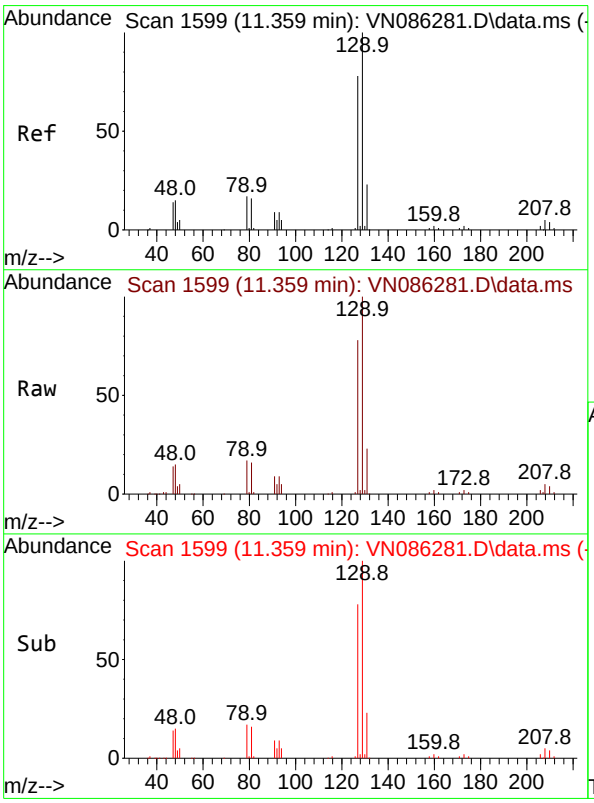
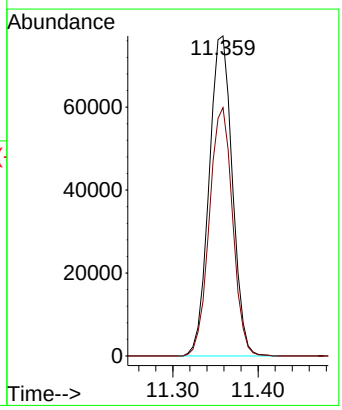
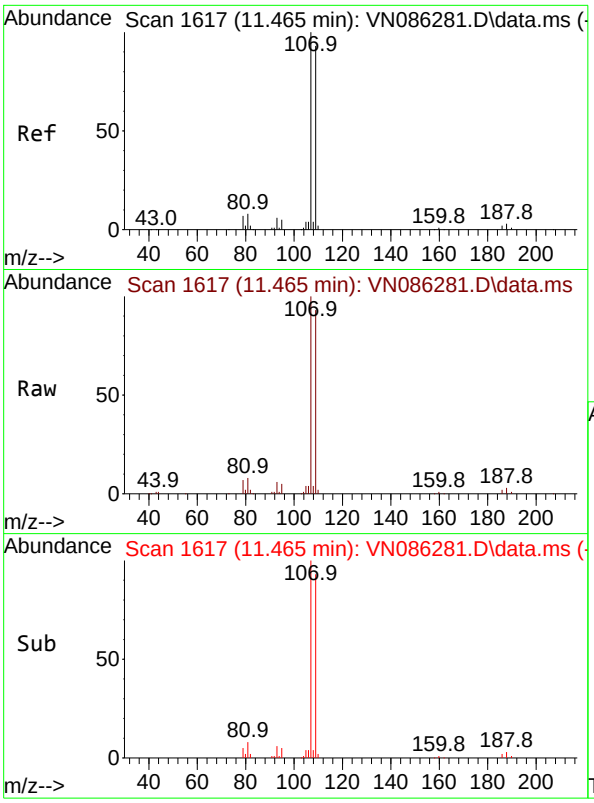


#60
Dibromochloromethane
Concen: 48.274 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:129 Resp: 146318

Ion	Ratio	Lower	Upper
129	100		
127	77.4	38.7	116.1





#61
1,2-Dibromoethane
Concen: 48.213 ug/l
RT: 11.465 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:107 Resp: 13428

Ion	Ratio	Lower	Upper
107	100		
109	94.2	75.4	113.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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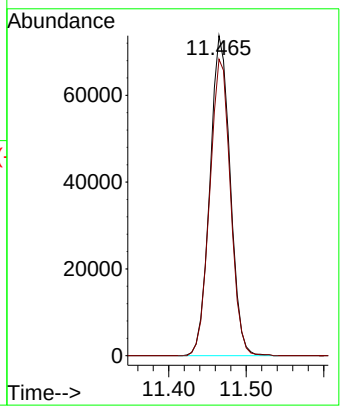
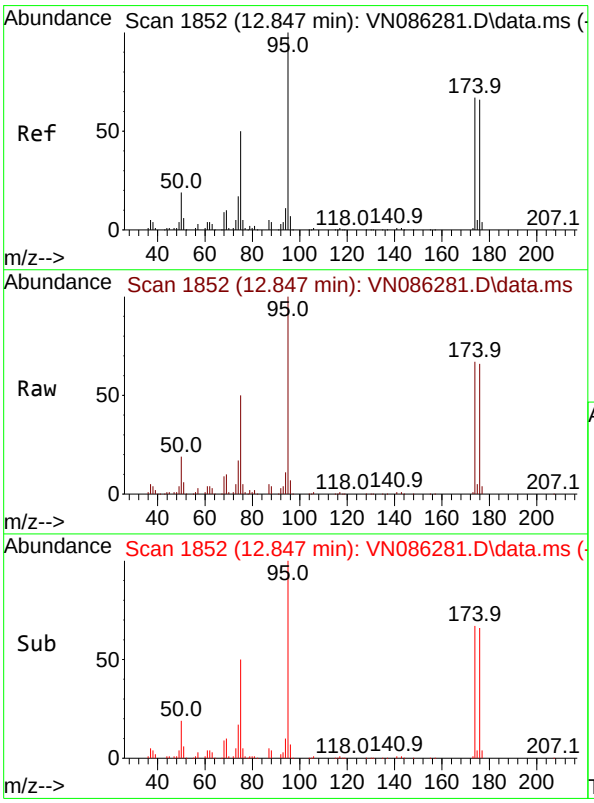
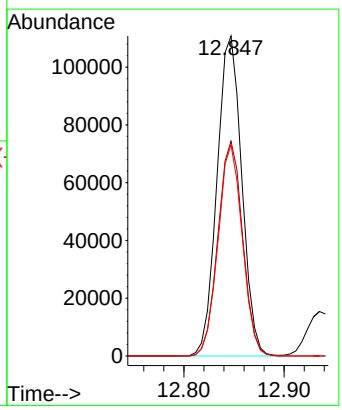


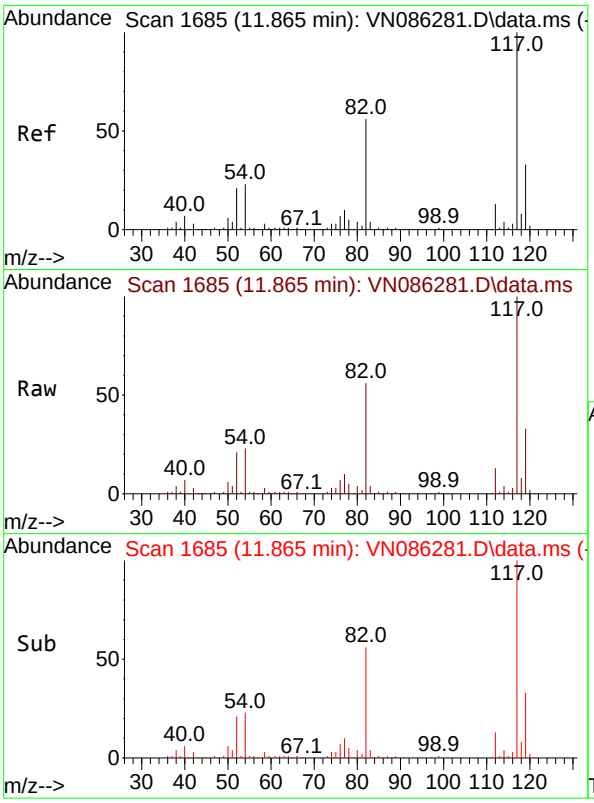


#62
4-Bromofluorobenzene
Concen: 50.744 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 95 Resp: 190049

Ion	Ratio	Lower	Upper
95	100		
174	66.7	0.0	133.4
176	64.6	0.0	129.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion:117 Resp: 36730

Ion	Ratio	Lower	Upper
117	100		
82	55.9	44.7	67.1
119	33.0	26.4	39.6

Manual Integrations
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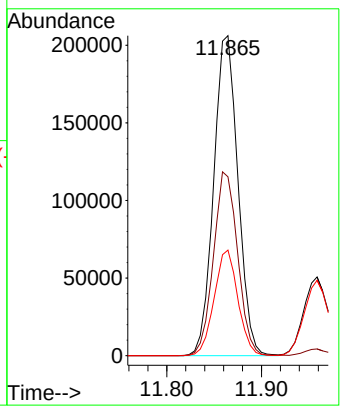
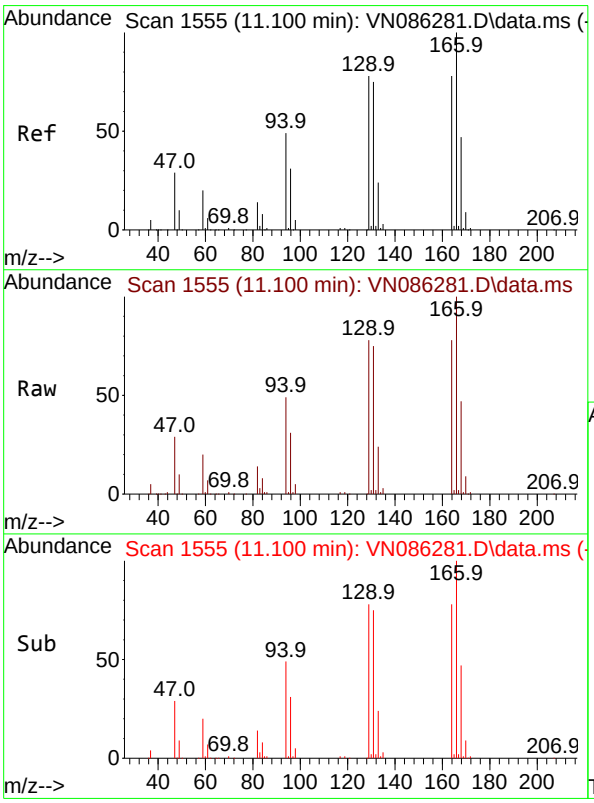
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

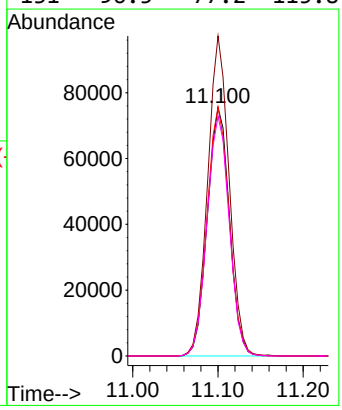


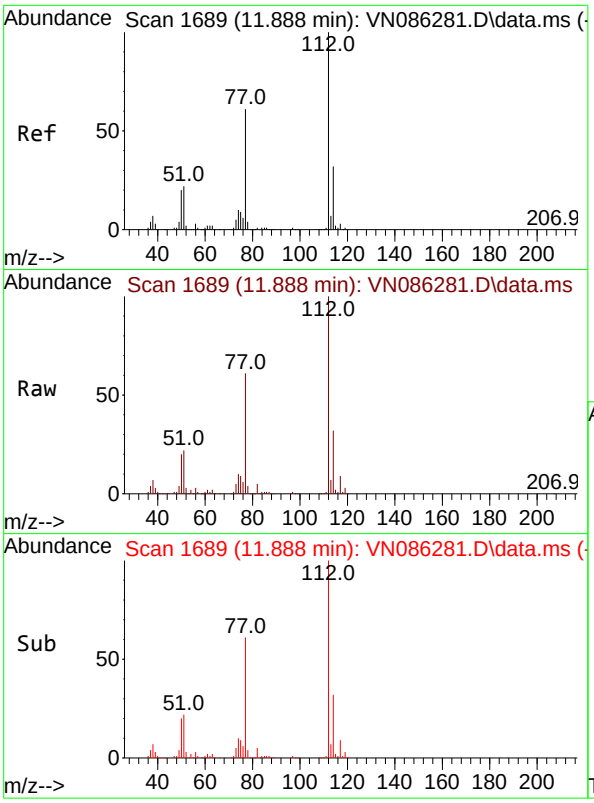


#64
Tetrachloroethene
Concen: 48.177 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:164 Resp: 136116

Ion	Ratio	Lower	Upper
164	100		
166	128.7	103.0	154.4
129	100.1	80.1	120.1
131	96.5	77.2	115.8

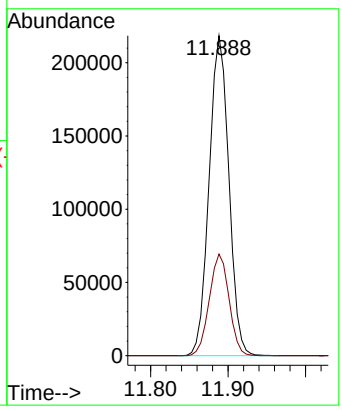




#65
Chlorobenzene
Concen: 47.072 ug/l
RT: 11.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:112 Resp: 38584

Ion	Ratio	Lower	Upper
112	100		
114	31.7	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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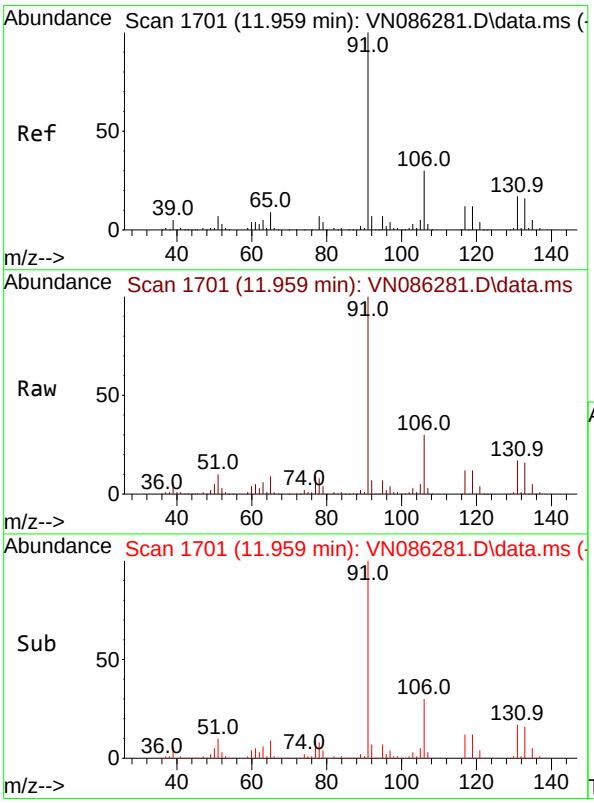
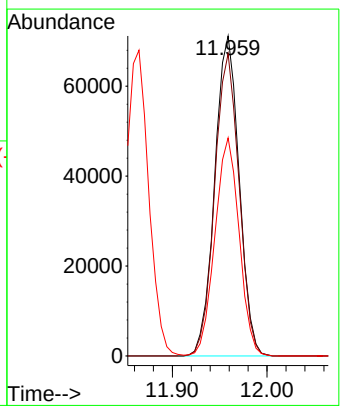
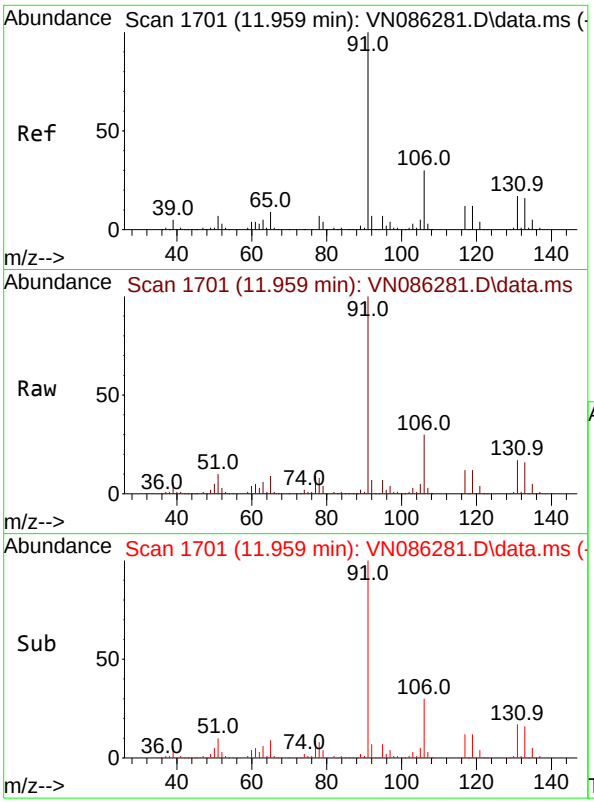


#66
1,1,1,2-Tetrachloroethane
Concen: 47.197 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:131 Resp: 127627

Ion	Ratio	Lower	Upper
131	100		
133	94.2	47.1	141.3
119	67.6	33.8	101.4

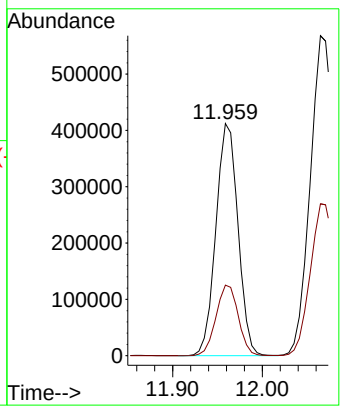




#67
Ethyl Benzene
Concen: 47.627 ug/l
RT: 11.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 91 Resp: 70447

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.3	36.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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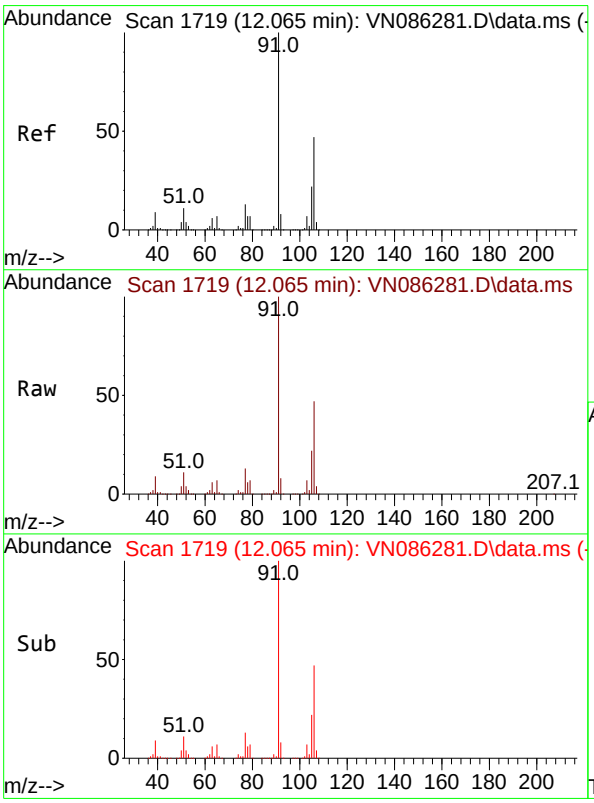
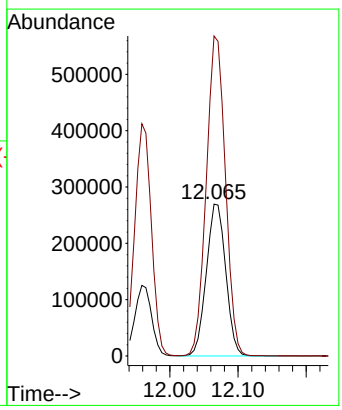
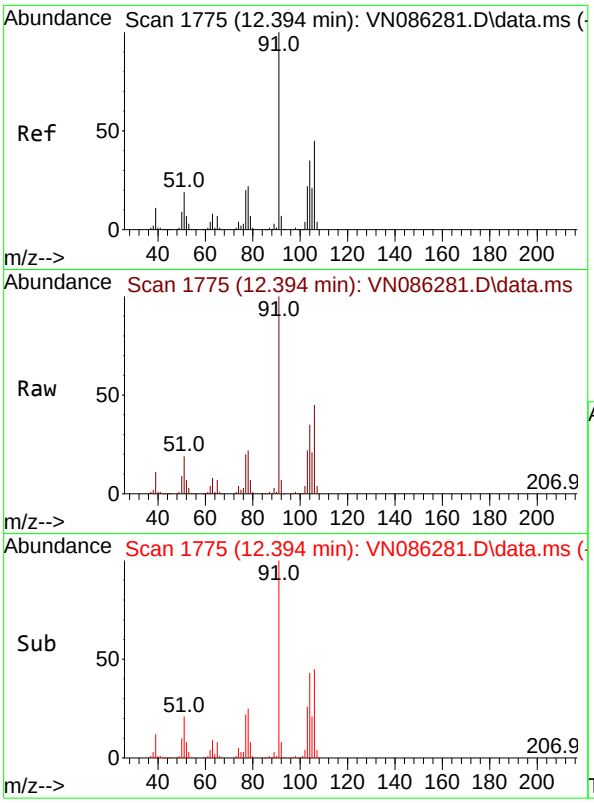


#68
m/p-Xylenes
Concen: 96.302 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:106 Resp: 533742

Ion	Ratio	Lower	Upper
106	100		
91	208.1	166.5	249.7





#69
o-Xylene
Concen: 47.783 ug/l
RT: 12.394 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:106 Resp: 26190

Ion	Ratio	Lower	Upper
106	100		
91	219.3	109.7	329.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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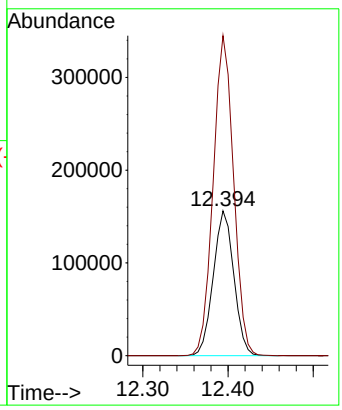
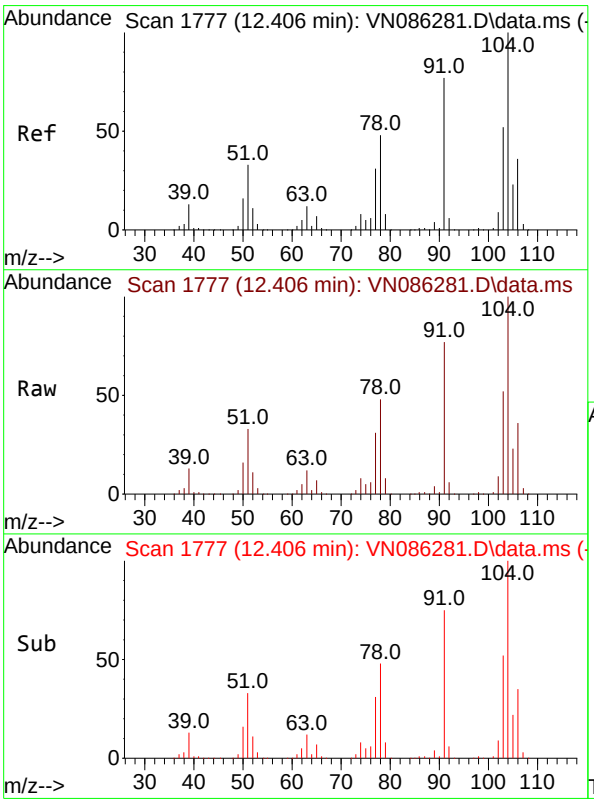
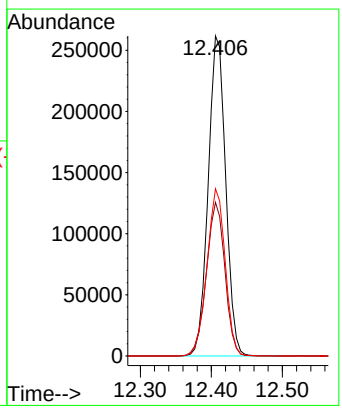


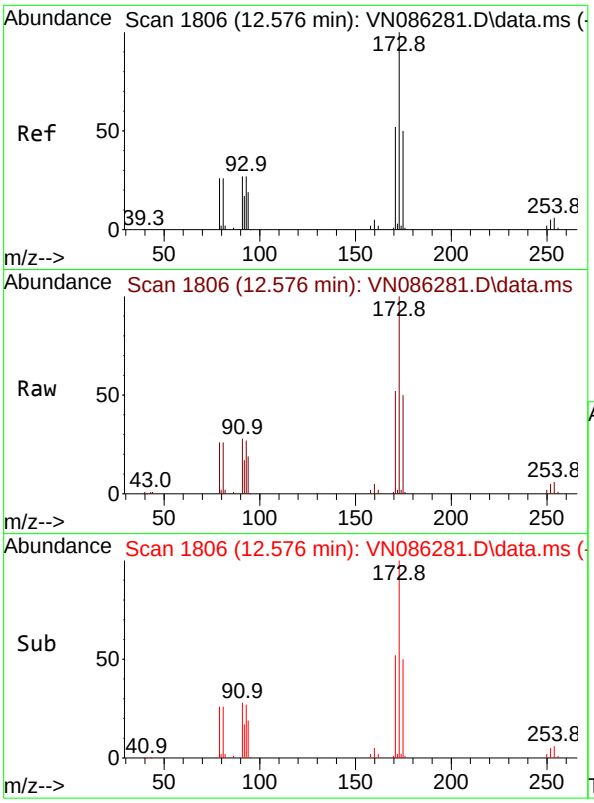


#70
Styrene
Concen: 48.998 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:104 Resp: 447486

Ion	Ratio	Lower	Upper
104	100		
78	50.8	40.6	61.0
103	54.5	43.6	65.4

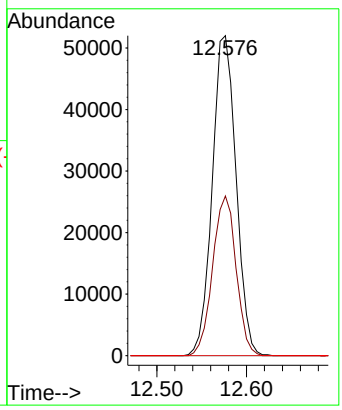




#71
Bromoform
Concen: 47.065 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:173 Resp: 9582

Ion	Ratio	Lower	Upper
173	100		
175	49.1	24.6	73.6
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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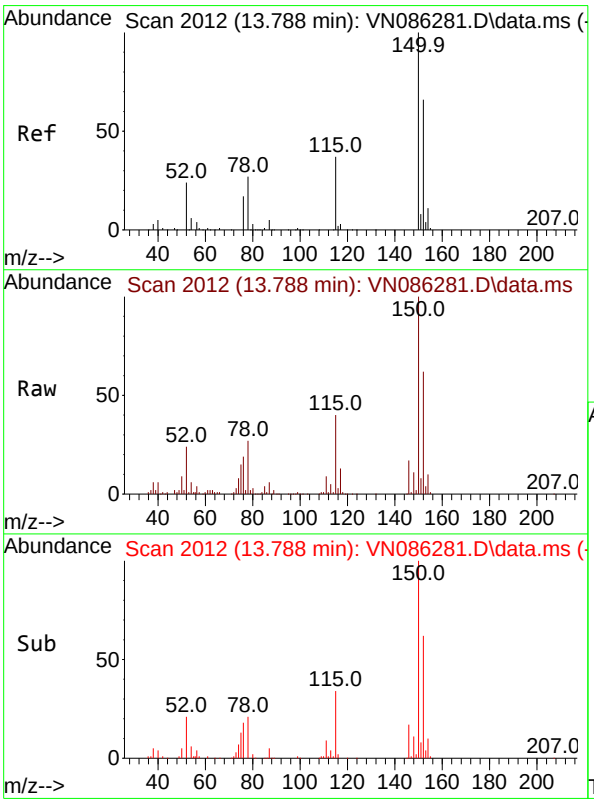
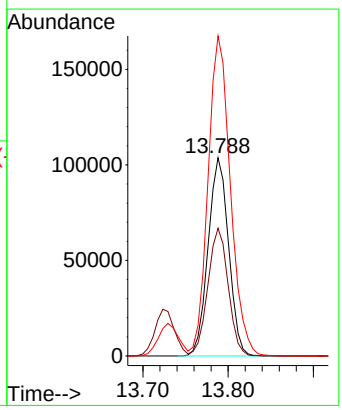
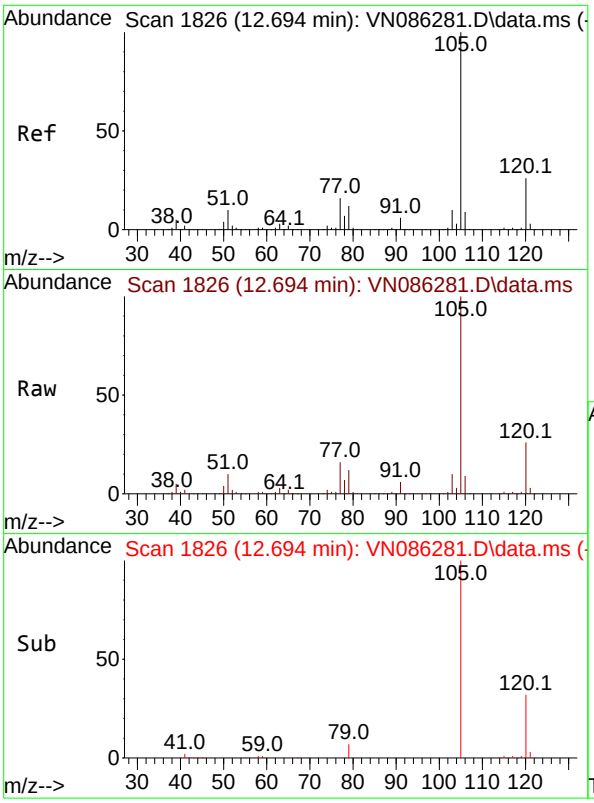


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:152 Resp: 173703

Ion	Ratio	Lower	Upper
152	100		
115	63.9	31.9	95.9
150	176.0	0.0	352.0

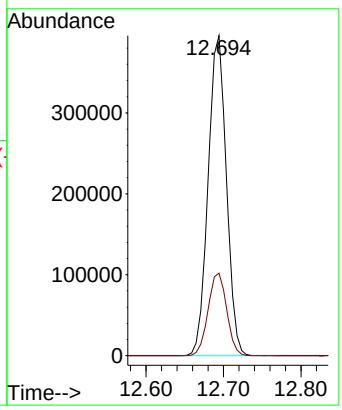




#73
Isopropylbenzene
Concen: 45.568 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:105 Resp: 64749

Ion	Ratio	Lower	Upper
105	100		
120	26.2	13.1	39.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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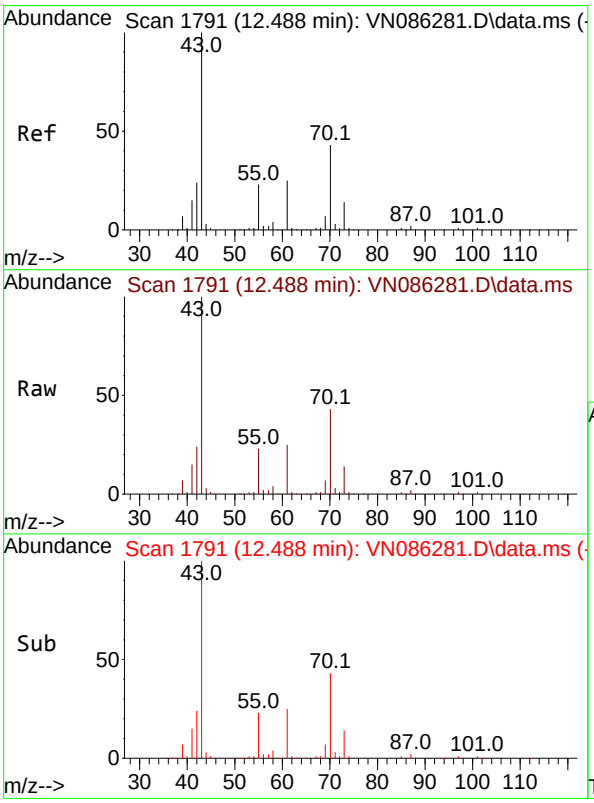
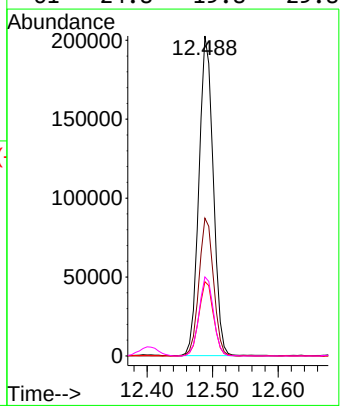
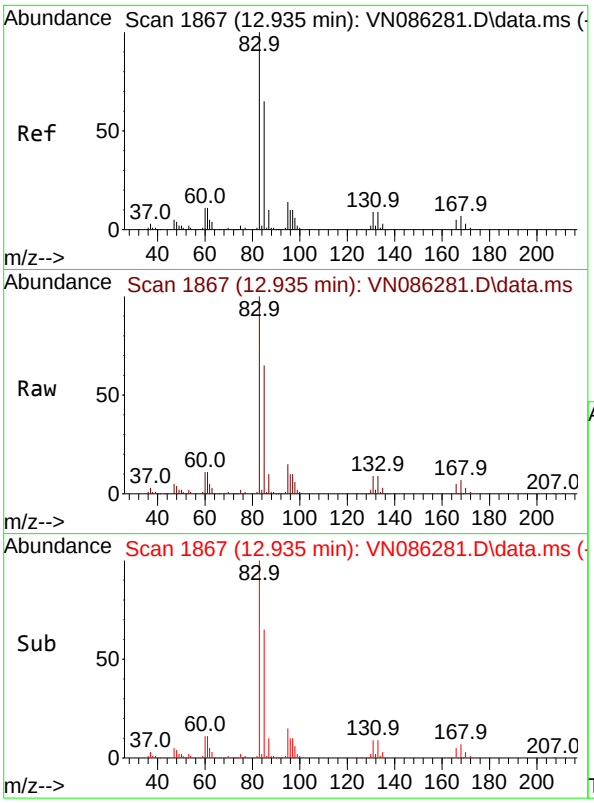


#74
N-amyl acetate
Concen: 43.670 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 43 Resp: 308916

Ion	Ratio	Lower	Upper
43	100		
70	43.7	35.0	52.4
55	23.7	19.0	28.4
61	24.8	19.8	29.8

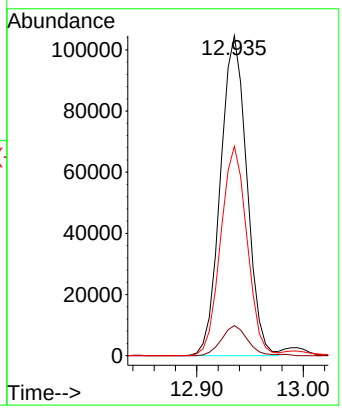




#75
1,1,2,2-Tetrachloroethane
Concen: 44.025 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 83 Resp: 17986

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.7	14.1
85	65.4	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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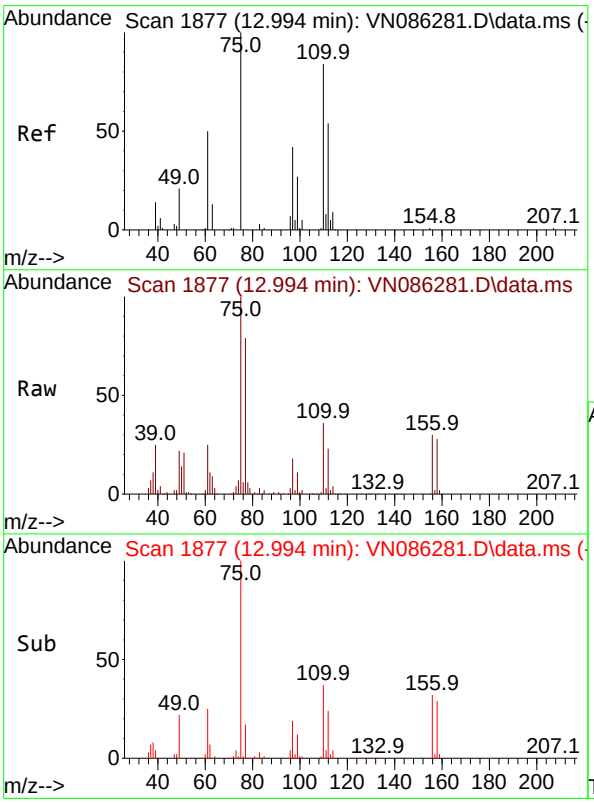
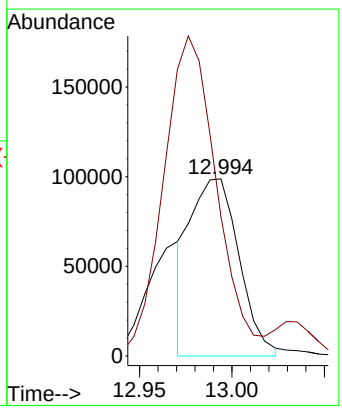
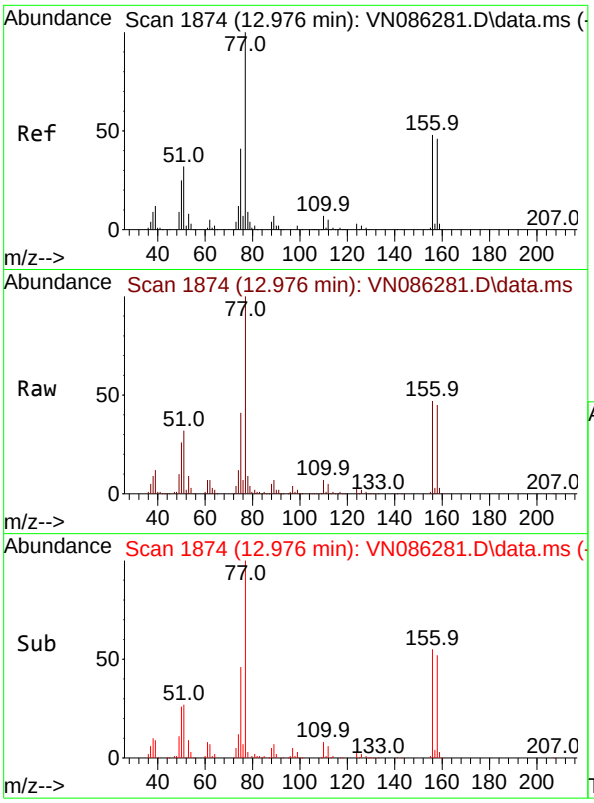


#76
1,2,3-Trichloropropane
Concen: 44.357 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 75 Resp: 181010

Ion	Ratio	Lower	Upper
75	100		
77	197.6	98.8	296.4





#77
Bromobenzene
Concen: 46.919 ug/l
RT: 12.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:156 Resp: 14772

Ion	Ratio	Lower	Upper
156	100		
77	242.1	121.1	363.1
158	95.7	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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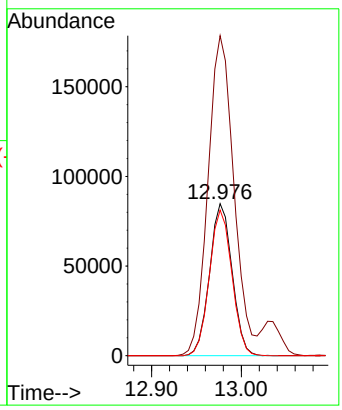
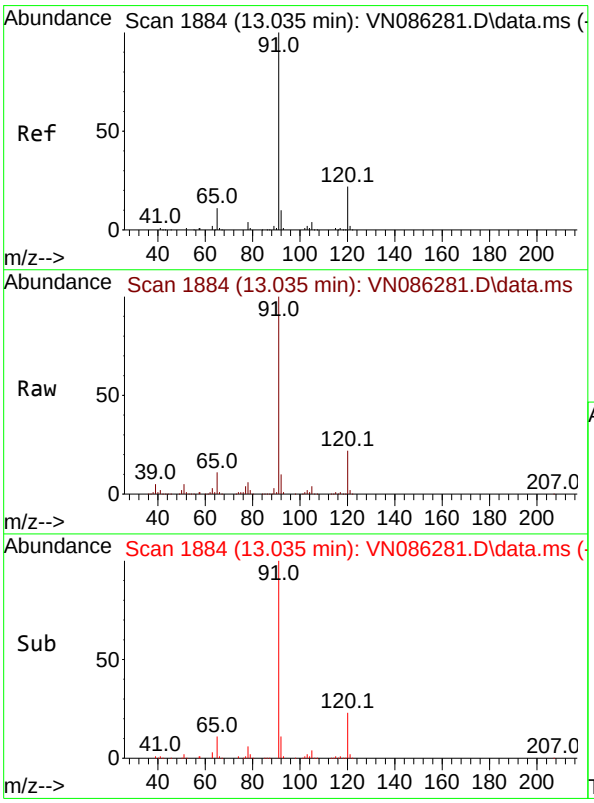
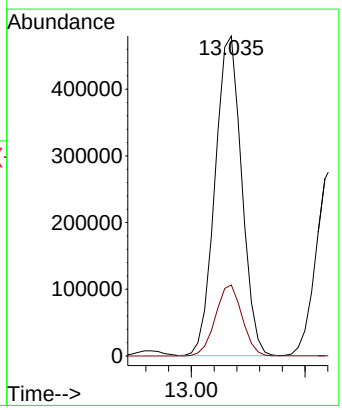


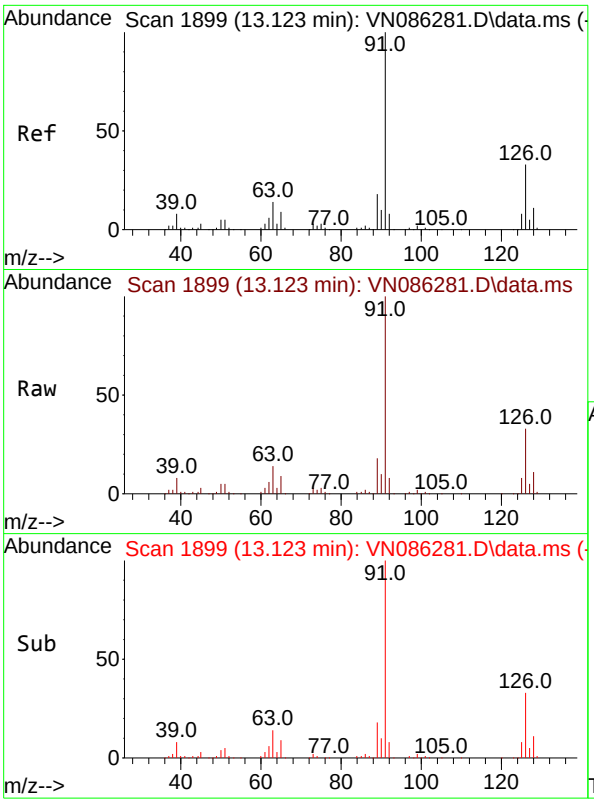


#78
n-propylbenzene
Concen: 46.556 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 91 Resp: 779530

Ion	Ratio	Lower	Upper
91	100		
120	22.2	11.1	33.3





#79
2-Chlorotoluene
Concen: 45.740 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 91 Resp: 47923

Ion	Ratio	Lower	Upper
91	100		
126	32.1	16.1	48.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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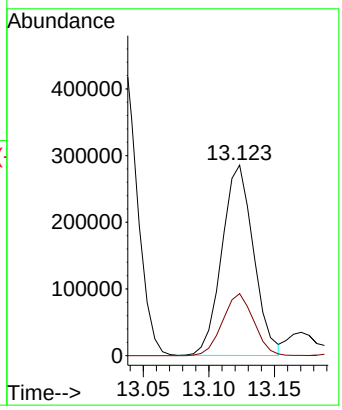
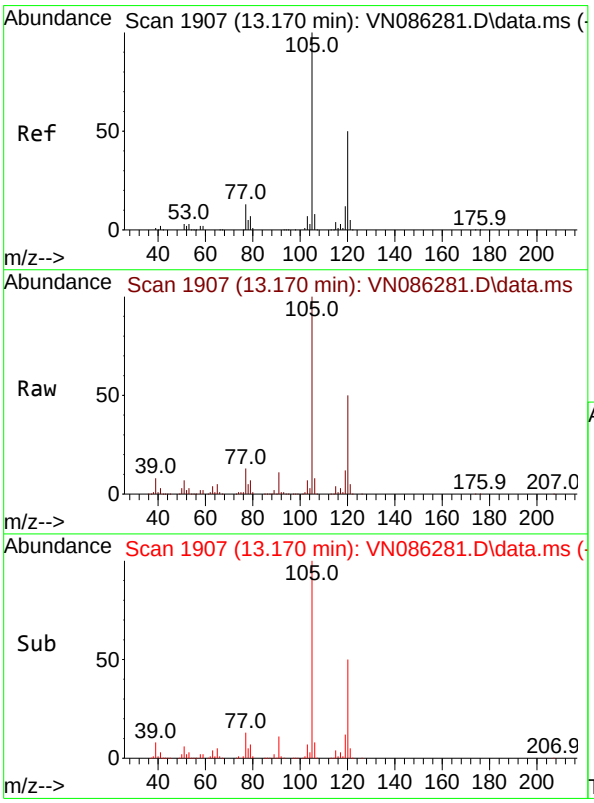
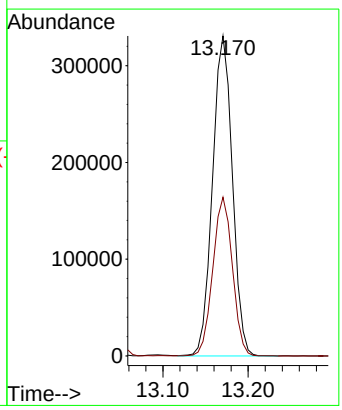


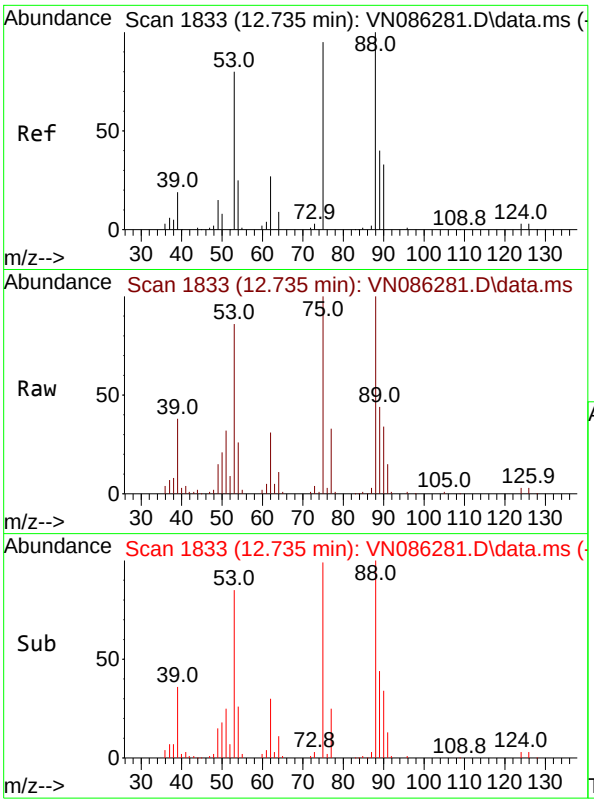


#80
1,3,5-Trimethylbenzene
Concen: 46.042 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:105 Resp: 535465

Ion	Ratio	Lower	Upper
105	100		
120	49.0	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 46.919 ug/l m
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

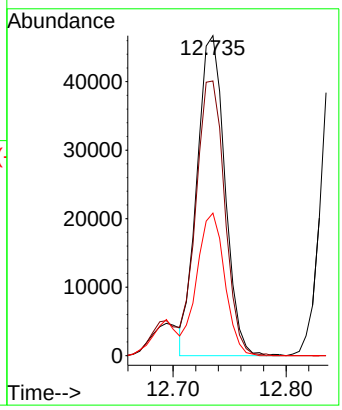
Tgt Ion: 75 Resp: 8007

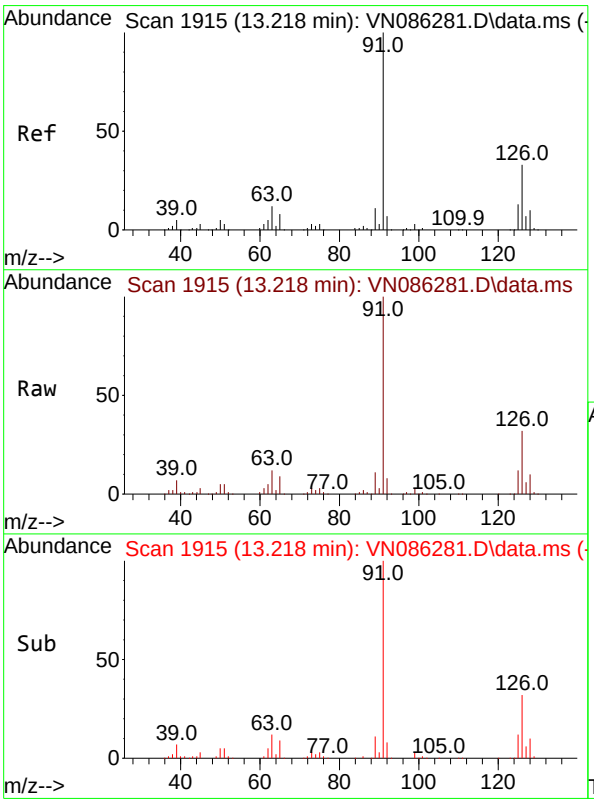
Ion	Ratio	Lower	Upper
75	100		
53	98.9	79.2	118.8
89	44.5	35.7	53.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

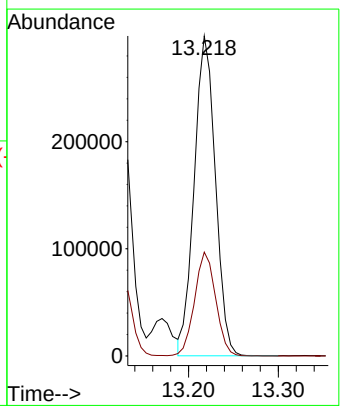


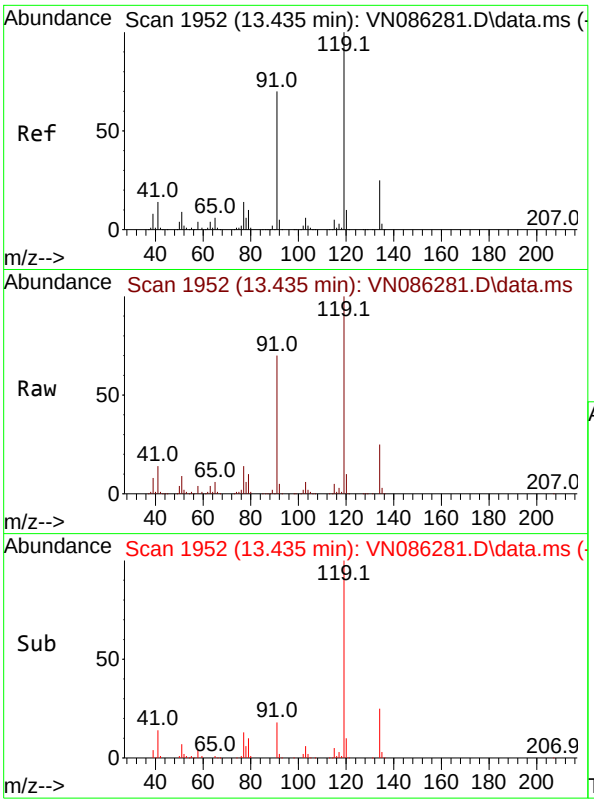


#82
4-Chlorotoluene
Concen: 46.893 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 91 Resp: 488049

Ion	Ratio	Lower	Upper
91	100		
126	32.4	16.2	48.6

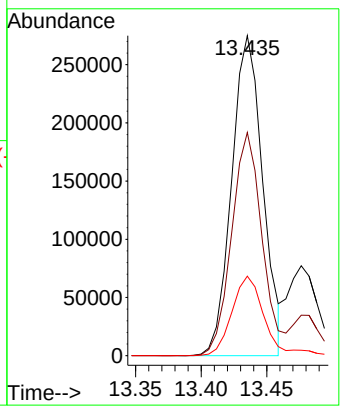




#83
tert-Butylbenzene
Concen: 44.954 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:119 Resp: 45299

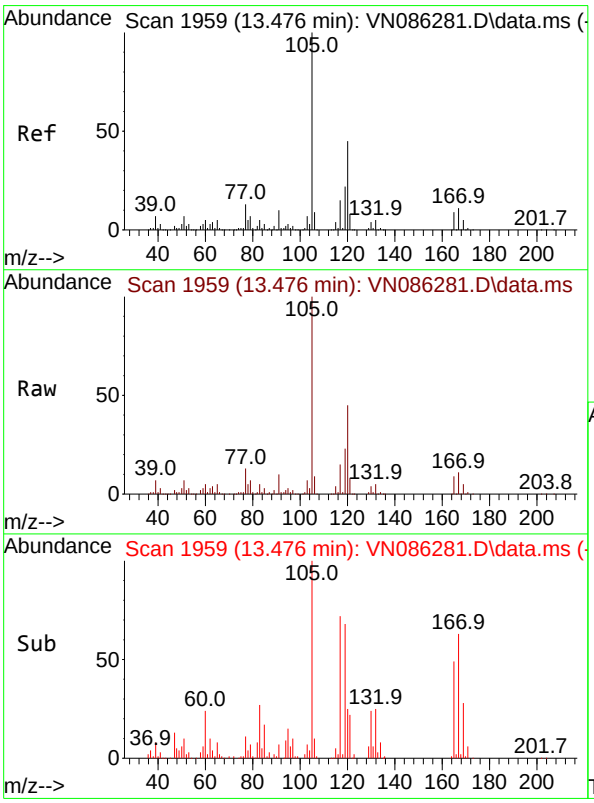
Ion	Ratio	Lower	Upper
119	100		
91	68.9	34.4	103.3
134	26.0	13.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

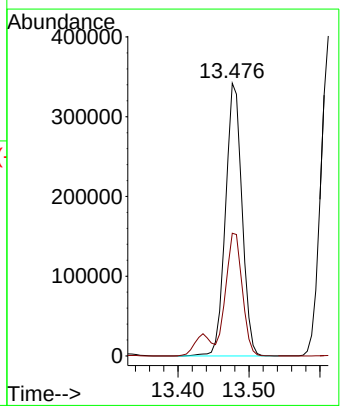
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

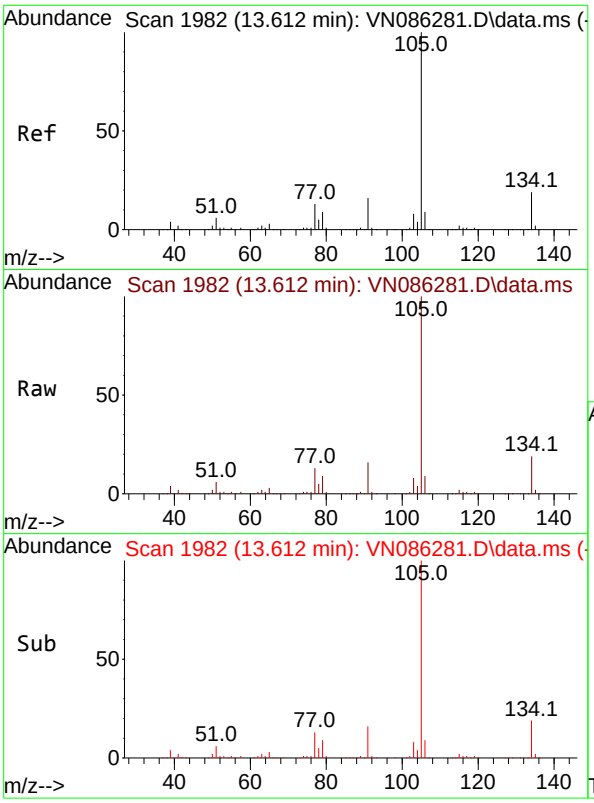


#84
1,2,4-Trimethylbenzene
Concen: 46.521 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:105 Resp: 550727

Ion	Ratio	Lower	Upper
105	100		
120	44.9	22.4	67.3





#85
sec-Butylbenzene
Concen: 46.767 ug/l
RT: 13.612 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

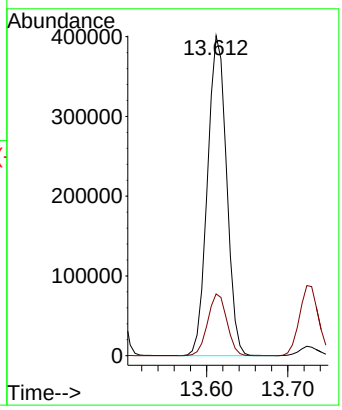
Tgt Ion:105 Resp: 65367

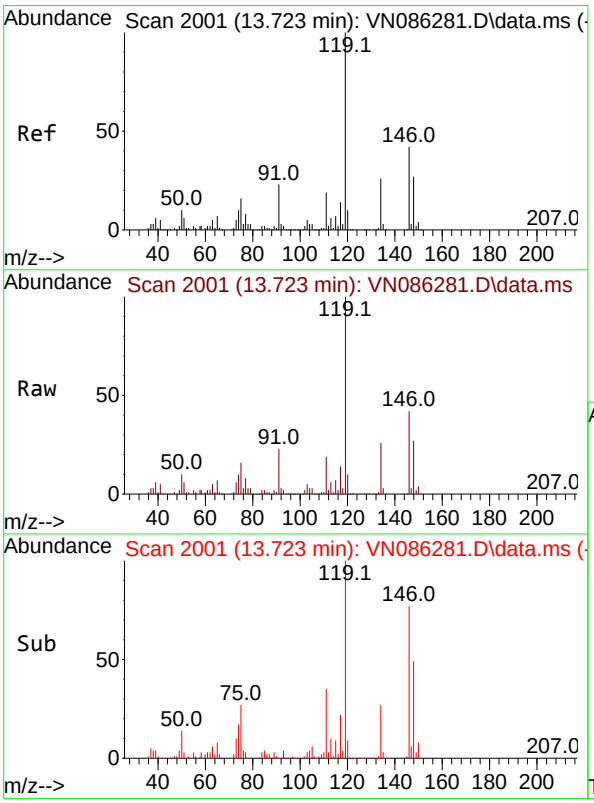
Ion	Ratio	Lower	Upper
105	100		
134	19.4	9.7	29.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

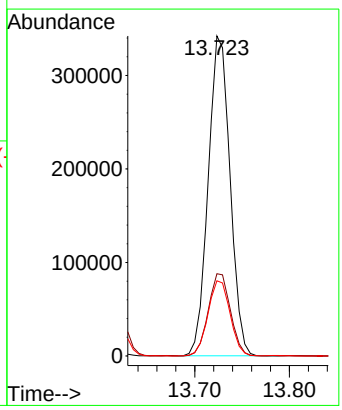


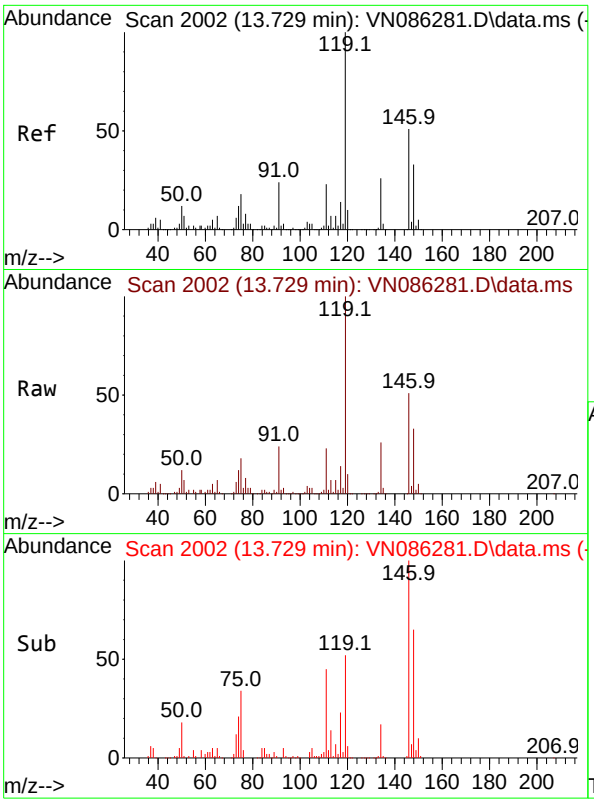


#86
p-Isopropyltoluene
Concen: 47.611 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:119 Resp: 548528

Ion	Ratio	Lower	Upper
119	100		
134	26.1	13.1	39.1
91	23.9	11.9	35.9

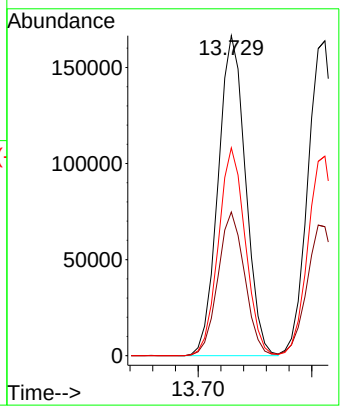




#87
1,3-Dichlorobenzene
Concen: 47.249 ug/l
RT: 13.729 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:146 Resp: 27964

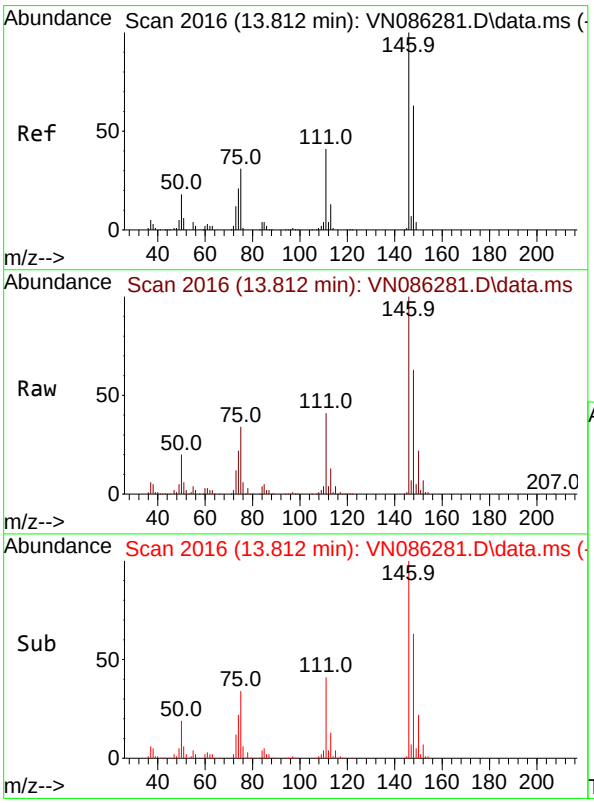
Ion	Ratio	Lower	Upper
146	100		
111	43.8	21.9	65.7
148	63.7	31.9	95.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

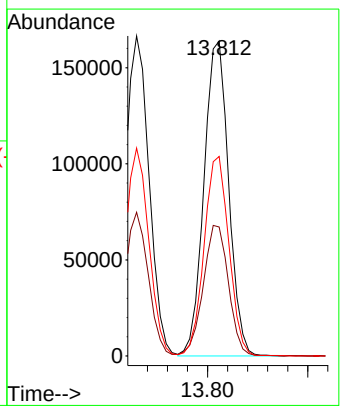
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

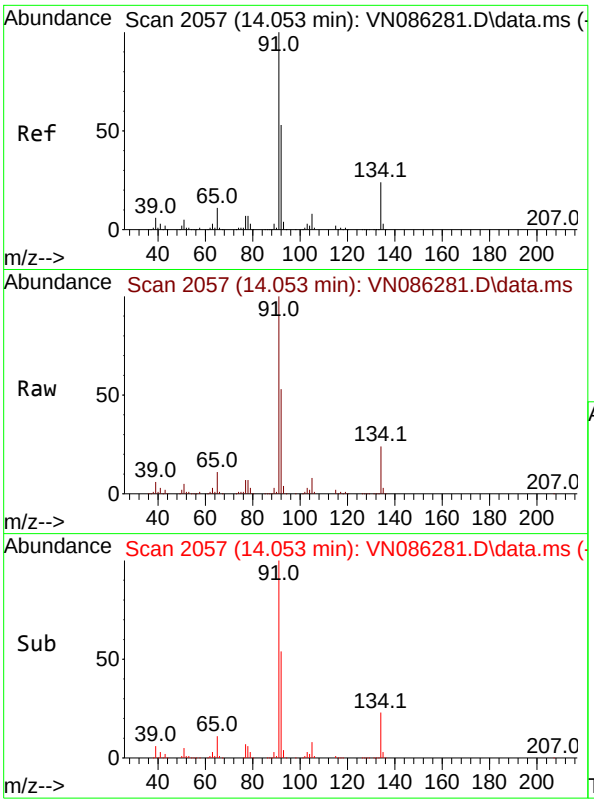


#88
1,4-Dichlorobenzene
Concen: 47.032 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:146 Resp: 280378

Ion	Ratio	Lower	Upper
146	100		
111	42.6	21.3	63.9
148	63.9	31.9	95.9





#89
n-Butylbenzene
Concen: 48.271 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

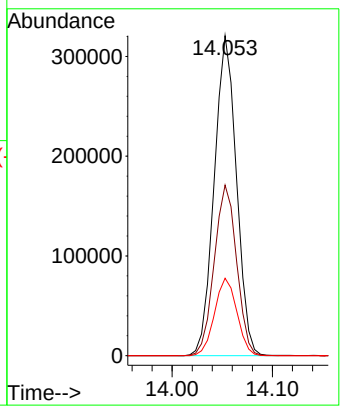
Tgt Ion: 91 Resp: 49294

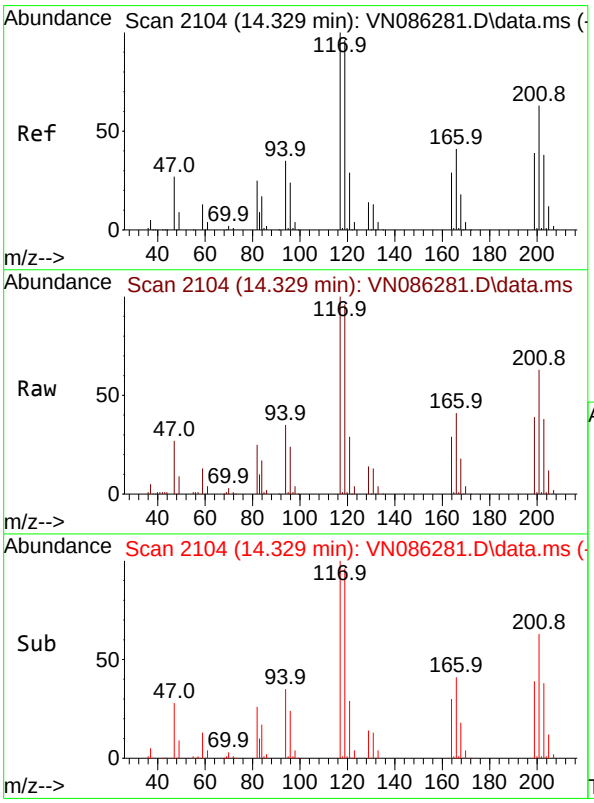
Ion	Ratio	Lower	Upper
91	100		
92	53.6	26.8	80.4
134	24.4	12.2	36.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

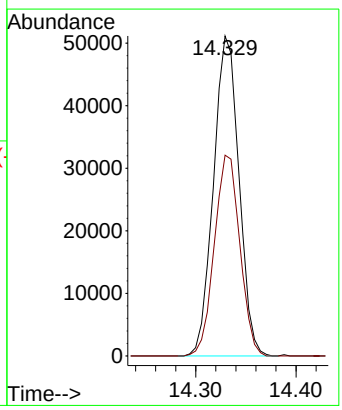


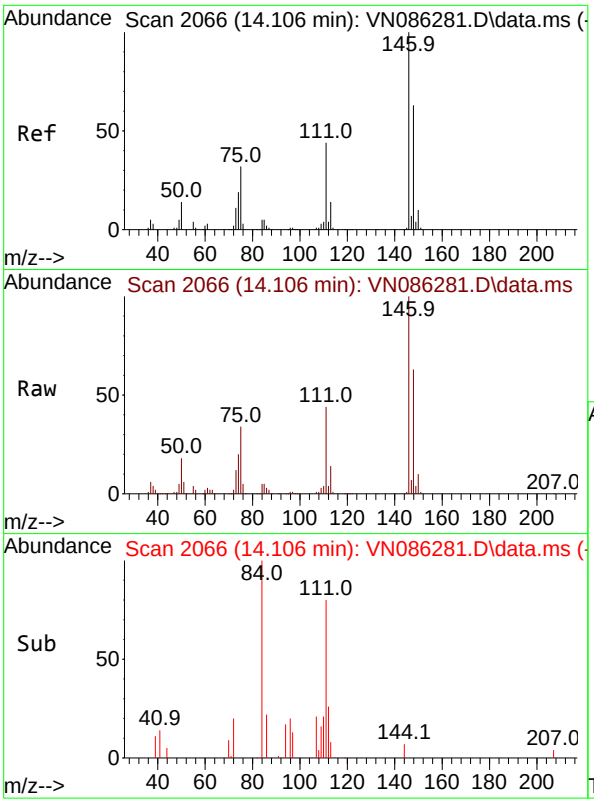


#90
Hexachloroethane
Concen: 46.447 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:117 Resp: 90009

Ion	Ratio	Lower	Upper
117	100		
201	62.8	31.4	94.2

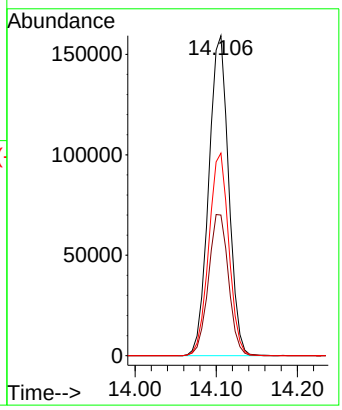




#91
1,2-Dichlorobenzene
Concen: 47.181 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:146 Resp: 27073

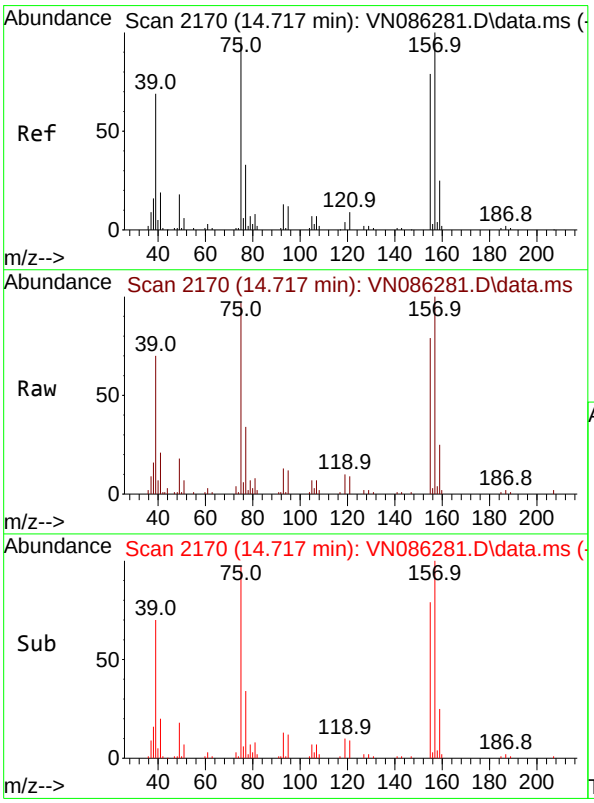
Ion	Ratio	Lower	Upper
146	100		
111	44.7	22.4	67.0
148	63.6	31.8	95.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

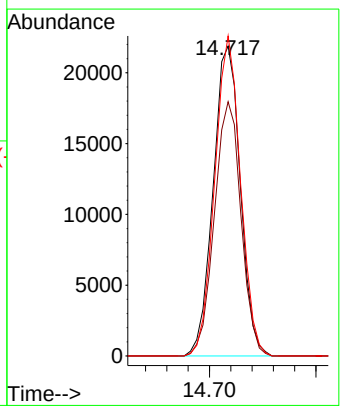
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

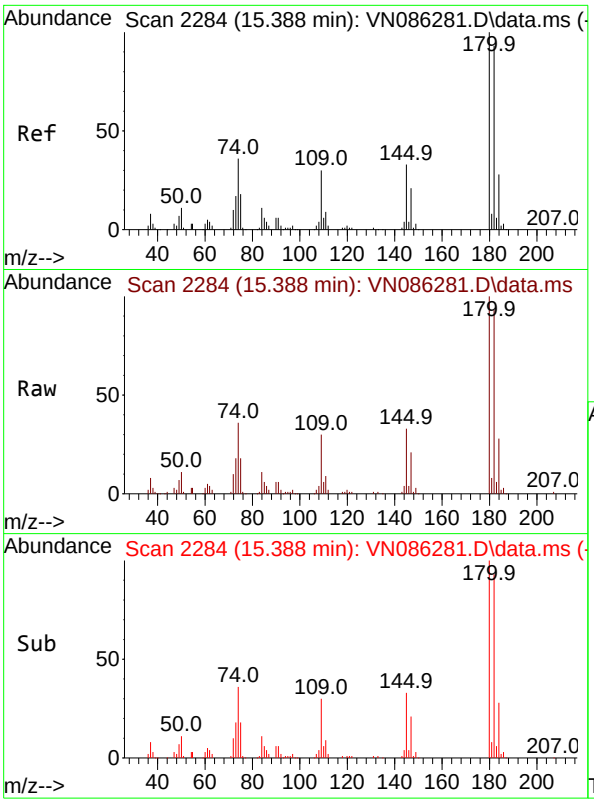


#92
1,2-Dibromo-3-Chloropropane
Concen: 46.887 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion: 75 Resp: 38625

Ion	Ratio	Lower	Upper
75	100		
155	80.6	40.3	120.9
157	98.1	49.0	147.2

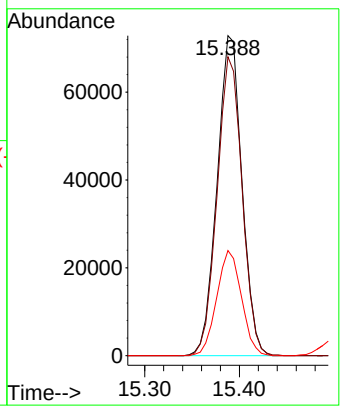




#93
1,2,4-Trichlorobenzene
Concen: 48.375 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:180 Resp: 13291

Ion	Ratio	Lower	Upper
180	100		
182	94.0	47.0	141.0
145	32.7	16.4	49.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

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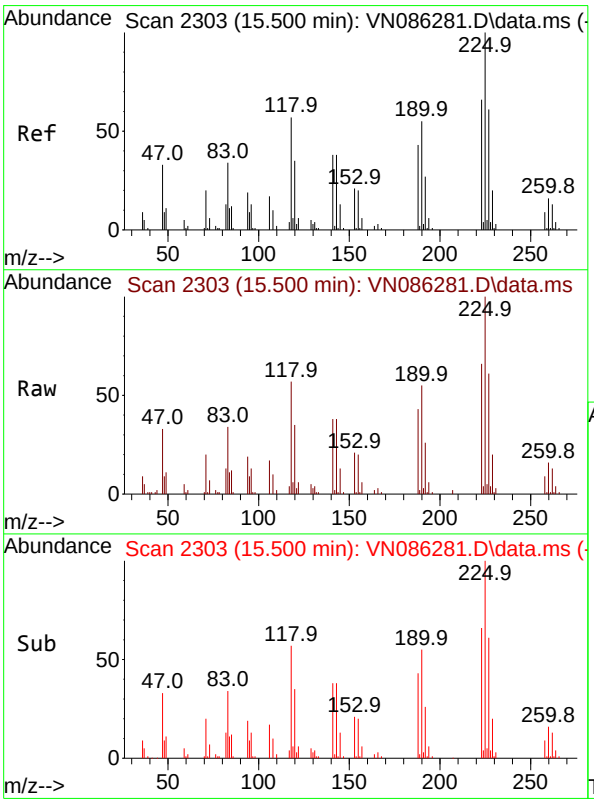
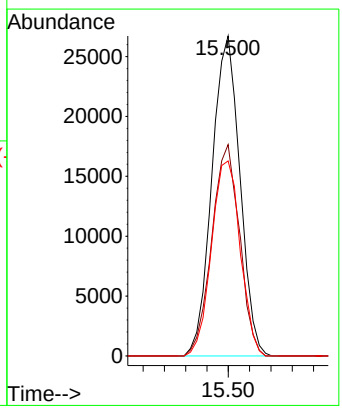
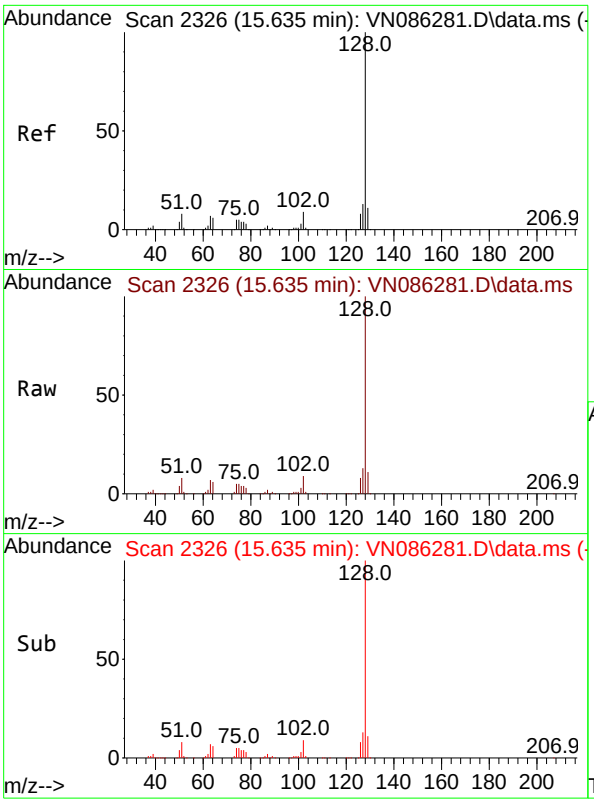


#94
Hexachlorobutadiene
Concen: 46.947 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:225 Resp: 48694

Ion	Ratio	Lower	Upper
225	100		
223	65.5	32.8	98.3
227	62.7	31.4	94.0

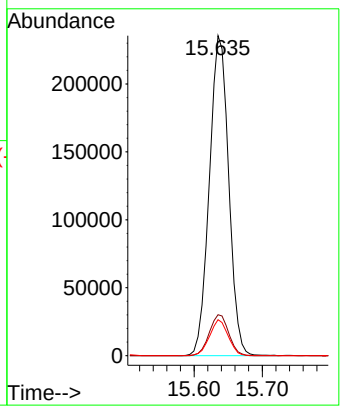




#95
Naphthalene
Concen: 47.708 ug/l
RT: 15.635 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:128 Resp: 46468

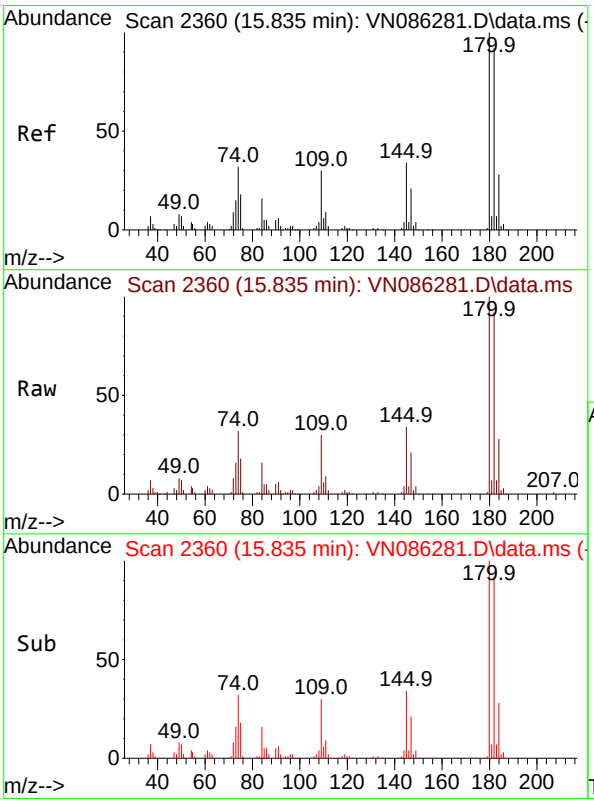
Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.2	15.4
129	10.8	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

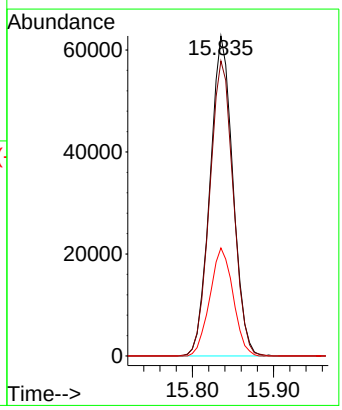
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025



#96
1,2,3-Trichlorobenzene
Concen: 47.249 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN086281.D
Acq: 15 Apr 2025 13:51

Tgt Ion:180 Resp: 122910

Ion	Ratio	Lower	Upper
180	100		
182	94.7	47.3	142.0
145	34.3	17.2	51.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086282.D
Acq On : 15 Apr 2025 14:29
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:58:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	228089	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	422902	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	380274	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	182297	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	322920	97.633	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 195.260%#			
35) Dibromofluoromethane	8.165	113	163696	83.402	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 166.800%#			
50) Toluene-d8	10.565	98	1046538	99.767	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 199.540%#			
62) 4-Bromofluorobenzene	12.847	95	394671	103.153	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 206.300%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	270450	100.025	ug/l	100
3) Chloromethane	2.359	50	362586	92.270	ug/l	99
4) Vinyl Chloride	2.512	62	359654	95.910	ug/l	99
5) Bromomethane	2.930	94	157044	93.105	ug/l	99
6) Chloroethane	3.106	64	232218	92.528	ug/l	98
7) Trichlorofluoromethane	3.494	101	398967	96.050	ug/l	97
8) Diethyl Ether	3.959	74	172130	94.924	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.371	101	242697	96.585	ug/l	99
10) Methyl Iodide	4.583	142	287740	104.156	ug/l	99
11) Tert butyl alcohol	5.518	59	262412	434.831	ug/l	99
12) 1,1-Dichloroethene	4.336	96	254035	94.627	ug/l	97
13) Acrolein	4.171	56	137131	502.553	ug/l	97
14) Allyl chloride	5.018	41	435112	91.225	ug/l	98
15) Acrylonitrile	5.712	53	713644	478.368	ug/l	99
16) Acetone	4.424	43	563323	498.290	ug/l	99
17) Carbon Disulfide	4.712	76	685619	85.294	ug/l	99
18) Methyl Acetate	5.018	43	374831	94.410	ug/l	99
19) Methyl tert-butyl Ether	5.794	73	918634	93.089	ug/l	99
20) Methylene Chloride	5.271	84	286733	93.774	ug/l	99
21) trans-1,2-Dichloroethene	5.783	96	264504	94.241	ug/l	100
22) Diisopropyl ether	6.665	45	970652	93.497	ug/l	99
23) Vinyl Acetate	6.600	43	3184505	438.915	ug/l	99
24) 1,1-Dichloroethane	6.565	63	525385	95.914	ug/l	100
25) 2-Butanone	7.477	43	958217	465.437	ug/l	99
26) 2,2-Dichloropropane	7.488	77	470852	96.005	ug/l	99
27) cis-1,2-Dichloroethene	7.482	96	328329	94.252	ug/l	100
28) Bromochloromethane	7.812	49	230762	99.357	ug/l	99
29) Tetrahydrofuran	7.835	42	623822	453.130	ug/l	100
30) Chloroform	7.959	83	503712	93.611	ug/l	100
31) Cyclohexane	8.253	56	484648	90.418	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	432964	94.058	ug/l	97
36) 1,1-Dichloropropene	8.365	75	378663	96.591	ug/l	100
37) Ethyl Acetate	7.553	43	371298	89.962	ug/l	100
38) Carbon Tetrachloride	8.359	117	360081	96.450	ug/l	99
39) Methylcyclohexane	9.600	83	448842	96.325	ug/l	98
40) Benzene	8.600	78	1193479	95.020	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086282.D
Acq On : 15 Apr 2025 14:29
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 16 03:58:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	219337	91.695	ug/l		100
42) 1,2-Dichloroethane	8.665	62	377081	94.143	ug/l		99
43) Isopropyl Acetate	8.682	43	704184	100.085	ug/l		100
44) Trichloroethene	9.347	130	288832	97.020	ug/l		98
45) 1,2-Dichloropropane	9.618	63	293625	95.501	ug/l		99
46) Dibromomethane	9.706	93	191324	97.667	ug/l		100
47) Bromodichloromethane	9.882	83	403514	95.372	ug/l		97
48) Methyl methacrylate	9.676	41	326384	90.052	ug/l		98
49) 1,4-Dioxane	9.688	88	98711	1601.137	ug/l		98
51) 4-Methyl-2-Pentanone	10.441	43	1989761	470.803	ug/l		99
52) Toluene	10.629	92	757019	96.592	ug/l		100
53) t-1,3-Dichloropropene	10.829	75	468739	99.248	ug/l		100
54) cis-1,3-Dichloropropene	10.312	75	496721	95.755	ug/l		99
55) 1,1,2-Trichloroethane	11.012	97	264481	93.795	ug/l		97
56) Ethyl methacrylate	10.870	69	494791	95.461	ug/l		100
57) 1,3-Dichloropropane	11.159	76	482562	96.455	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.159	63	1242387	505.011	ug/l		99
59) 2-Hexanone	11.194	43	1476474	470.996	ug/l		100
60) Dibromochloromethane	11.359	129	301498	97.371	ug/l		100
61) 1,2-Dibromoethane	11.465	107	273587	96.156	ug/l		100
64) Tetrachloroethene	11.100	164	281669	96.294	ug/l		97
65) Chlorobenzene	11.888	112	805194	94.881	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.959	131	264532	94.488	ug/l		100
67) Ethyl Benzene	11.959	91	1476238	96.398	ug/l		100
68) m/p-Xylenes	12.070	106	1117098	194.681	ug/l		98
69) o-Xylene	12.394	106	546019	96.221	ug/l		99
70) Styrene	12.406	104	947293	100.188	ug/l		100
71) Bromoform	12.576	173	201110	95.410	ug/l	#	99
73) Isopropylbenzene	12.694	105	1351009	90.597	ug/l		100
74) N-amyl acetate	12.488	43	641647	86.431	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.935	83	359278	83.793	ug/l		99
76) 1,2,3-Trichloropropane	12.988	75	379247m	88.555	ug/l		
77) Bromobenzene	12.976	156	303696	91.913	ug/l		98
78) n-propylbenzene	13.035	91	1640989	93.386	ug/l		99
79) 2-Chlorotoluene	13.123	91	1000943	91.031	ug/l		99
80) 1,3,5-Trimethylbenzene	13.170	105	1125981	92.254	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.735	75	175887m	98.197	ug/l		
82) 4-Chlorotoluene	13.217	91	1025113	93.852	ug/l		99
83) tert-Butylbenzene	13.435	119	975268	92.219	ug/l		98
84) 1,2,4-Trimethylbenzene	13.482	105	1150791	92.628	ug/l		100
85) sec-Butylbenzene	13.611	105	1359583	92.684	ug/l		99
86) p-Isopropyltoluene	13.723	119	1161224	96.040	ug/l		100
87) 1,3-Dichlorobenzene	13.729	146	586366	94.402	ug/l		100
88) 1,4-Dichlorobenzene	13.806	146	582329	93.077	ug/l		100
89) n-Butylbenzene	14.053	91	1061099	99.009	ug/l		99
90) Hexachloroethane	14.329	117	196292	96.516	ug/l		98
91) 1,2-Dichlorobenzene	14.106	146	547527	90.920	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	77795	89.984	ug/l		99
93) 1,2,4-Trichlorobenzene	15.388	180	281040	97.461	ug/l		100
94) Hexachlorobutadiene	15.500	225	101506	93.251	ug/l		99
95) Naphthalene	15.635	128	975079	95.390	ug/l		100
96) 1,2,3-Trichlorobenzene	15.835	180	258567	94.712	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086282.D
Acq On : 15 Apr 2025 14:29
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 03:58:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 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

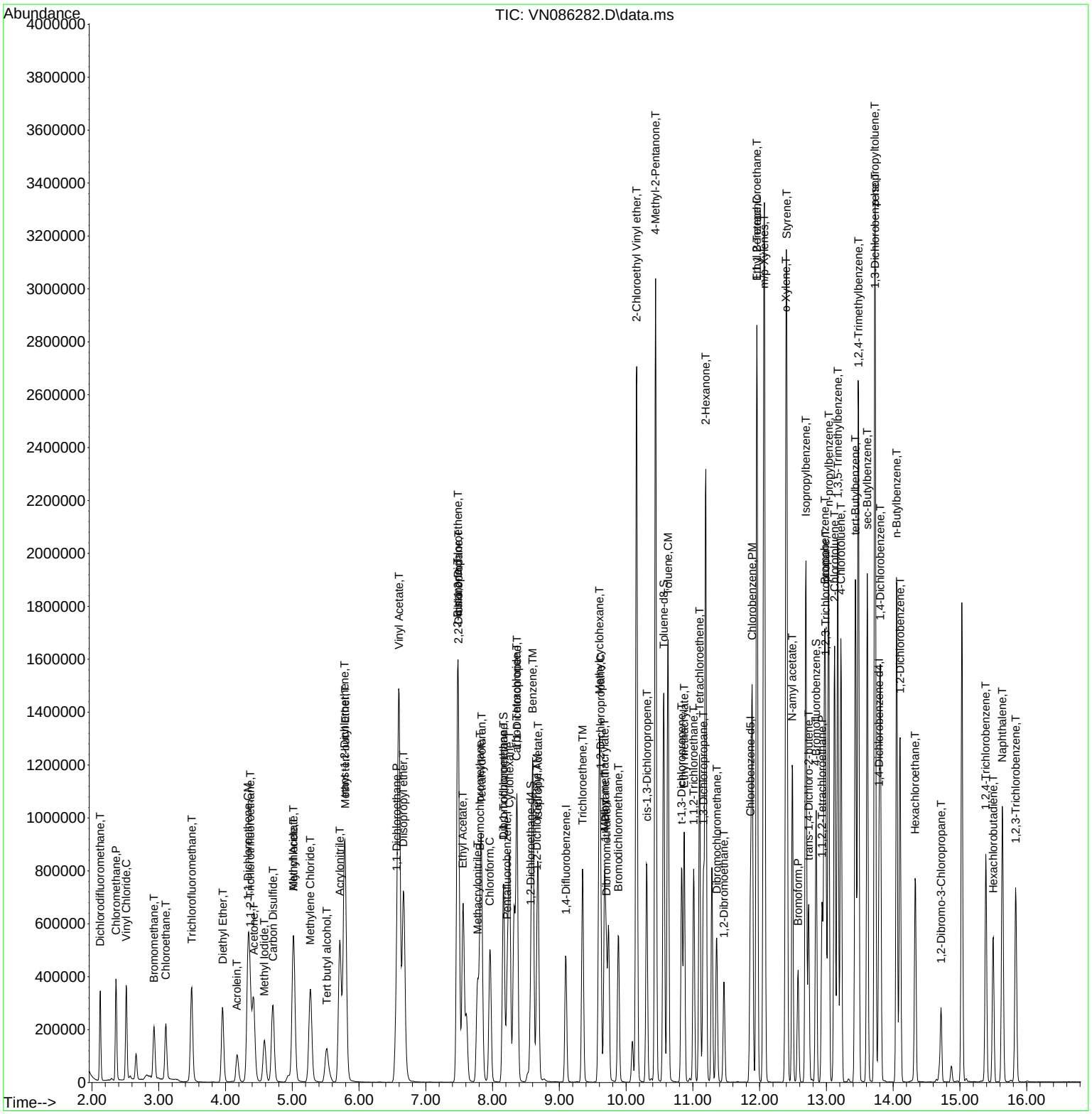
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086282.D
Acq On : 15 Apr 2025 14:29
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

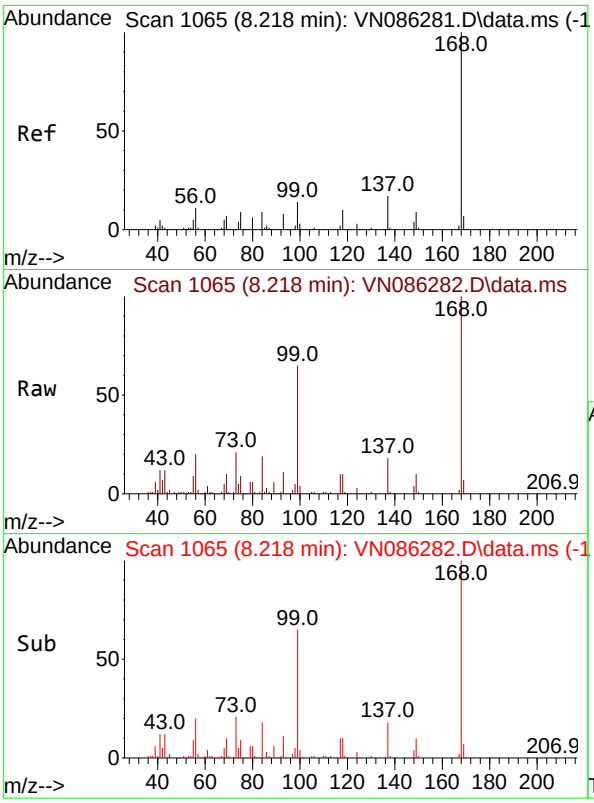
Quant Time: Apr 16 03:58:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 03:42:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

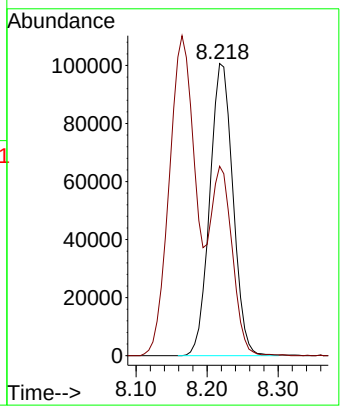




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:168 Resp: 22808

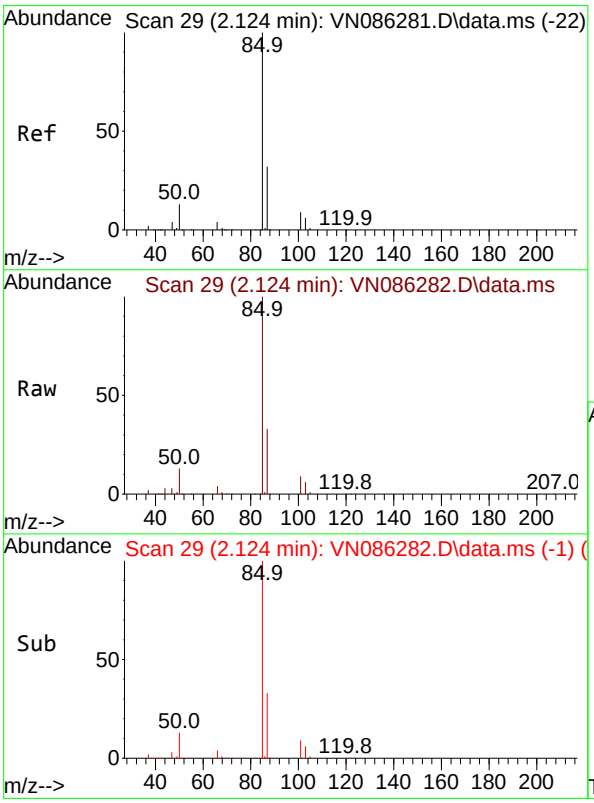
Ion	Ratio	Lower	Upper
168	100		
99	64.7	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

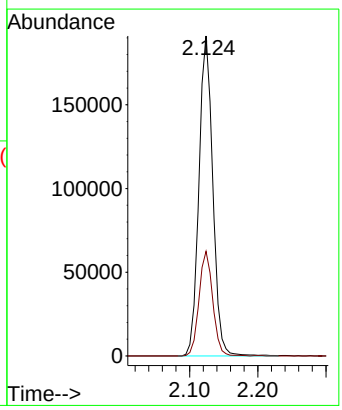
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

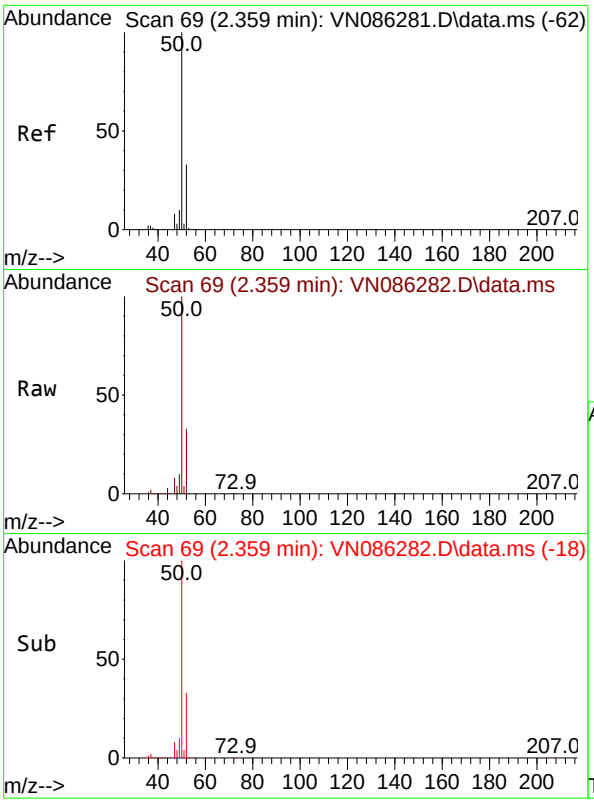


#2
Dichlorodifluoromethane
Concen: 100.025 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 85 Resp: 270450

Ion	Ratio	Lower	Upper
85	100		
87	32.7	16.3	48.8

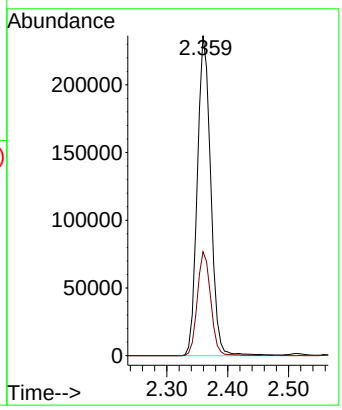




#3
Chloromethane
Concen: 92.270 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 50 Resp: 36258

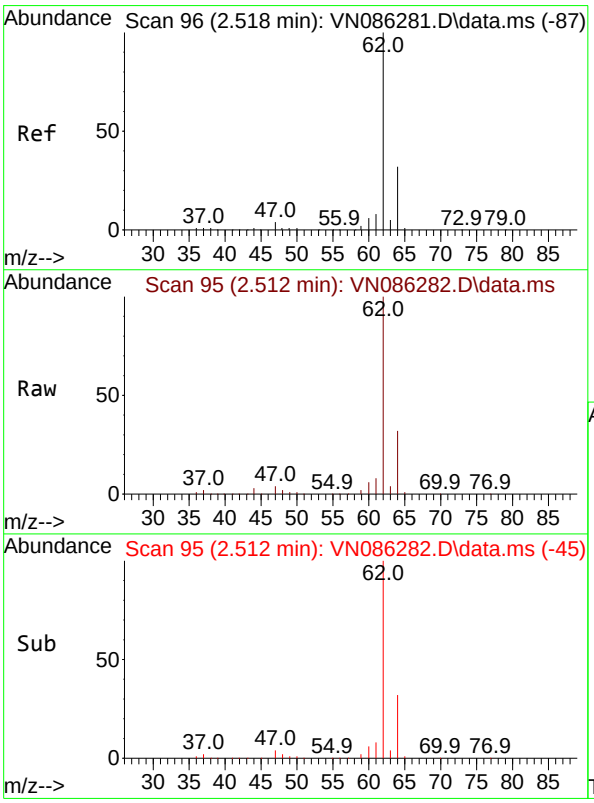
Ion	Ratio	Lower	Upper
50	100		
52	32.5	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

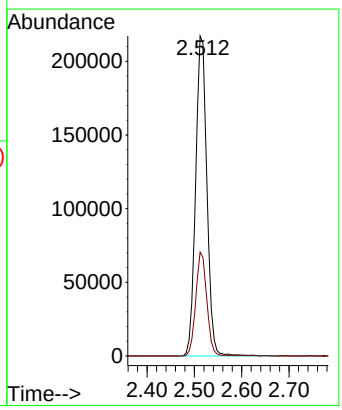
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

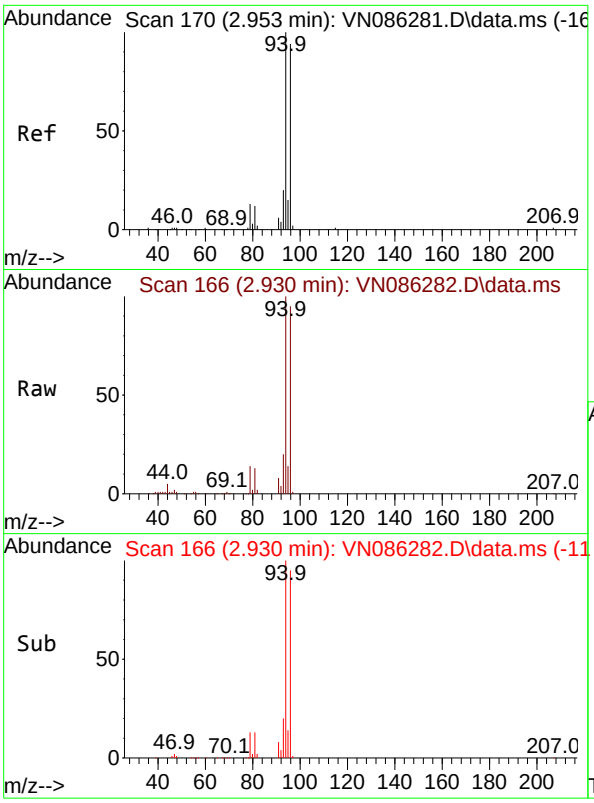


#4
Vinyl Chloride
Concen: 95.910 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 62 Resp: 359654

Ion	Ratio	Lower	Upper
62	100		
64	32.4	25.6	38.4

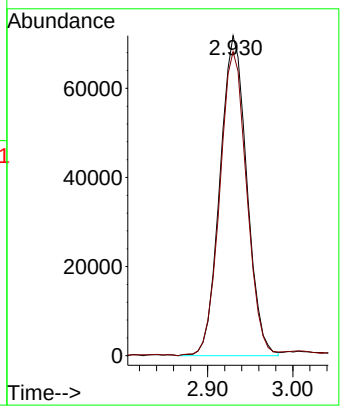




#5
Bromomethane
Concen: 93.105 ug/l
RT: 2.930 min Scan# 1
Delta R.T. -0.024 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 94 Resp: 15704

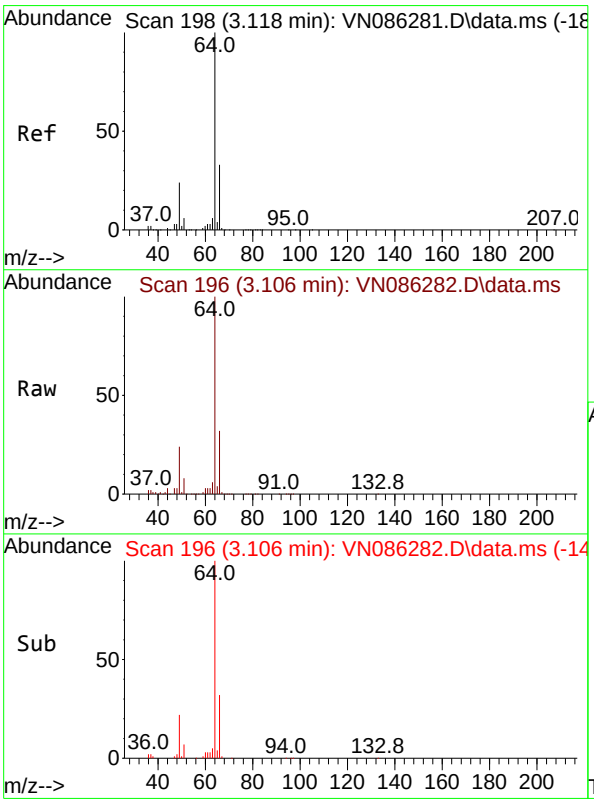
Ion	Ratio	Lower	Upper
94	100		
96	95.0	75.2	112.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

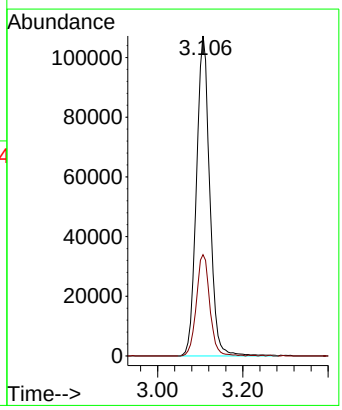
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

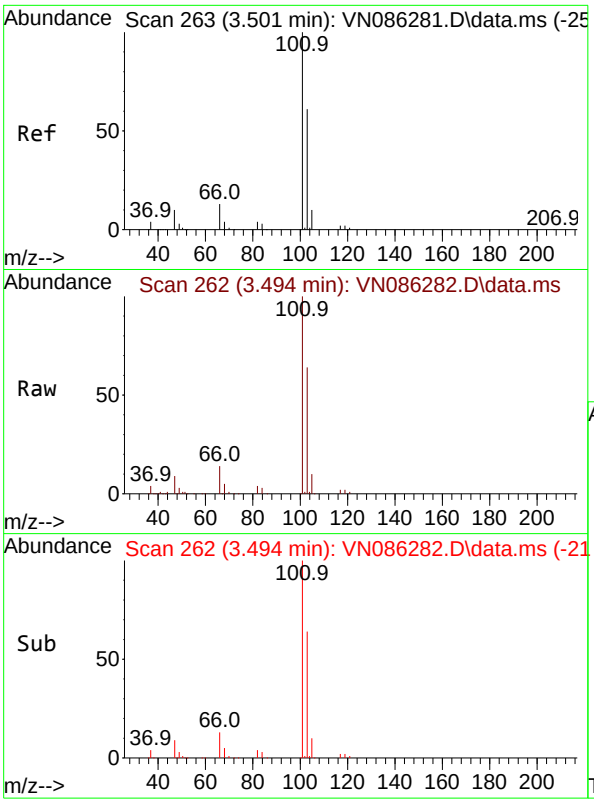


#6
Chloroethane
Concen: 92.528 ug/l
RT: 3.106 min Scan# 196
Delta R.T. -0.012 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 64 Resp: 232218

Ion	Ratio	Lower	Upper
64	100		
66	31.6	26.2	39.2

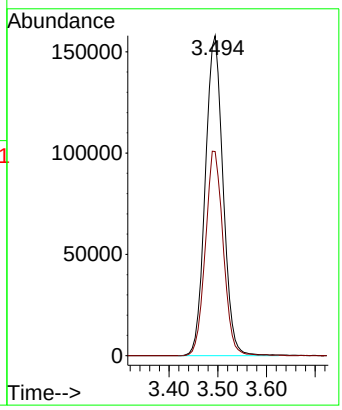




#7
Trichlorofluoromethane
Concen: 96.050 ug/l
RT: 3.494 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:101 Resp: 39896

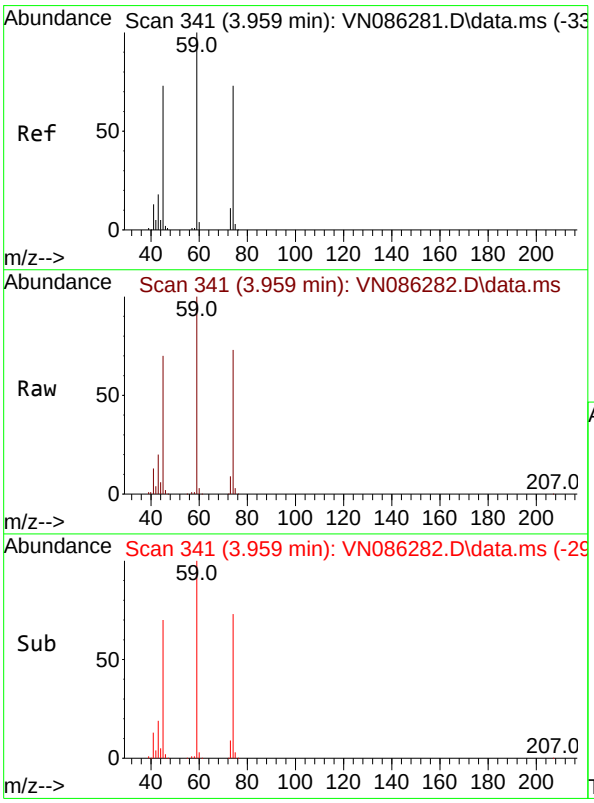
Ion	Ratio	Lower	Upper
101	100		
103	63.8	49.2	73.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

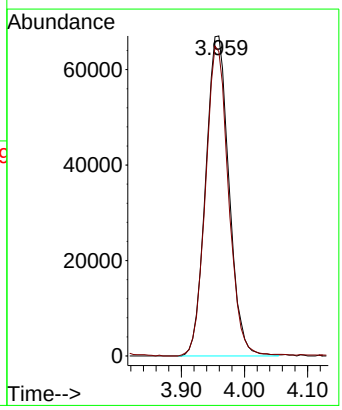
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

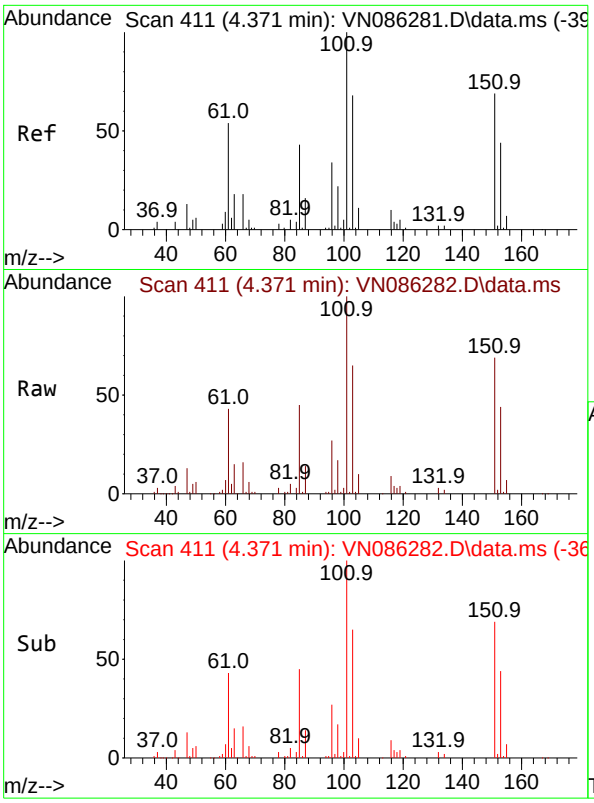


#8
Diethyl Ether
Concen: 94.924 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 74 Resp: 172130

Ion	Ratio	Lower	Upper
74	100		
45	95.3	48.0	144.2





#9
1,1,2-Trichlorotrifluoroethane
Concen: 96.585 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

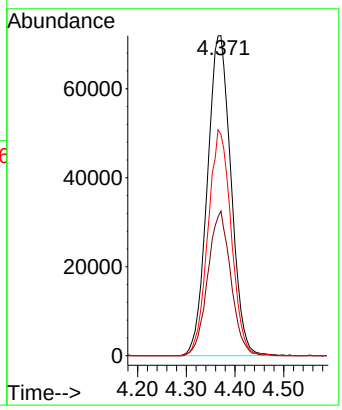
Tgt Ion:101 Resp: 24269

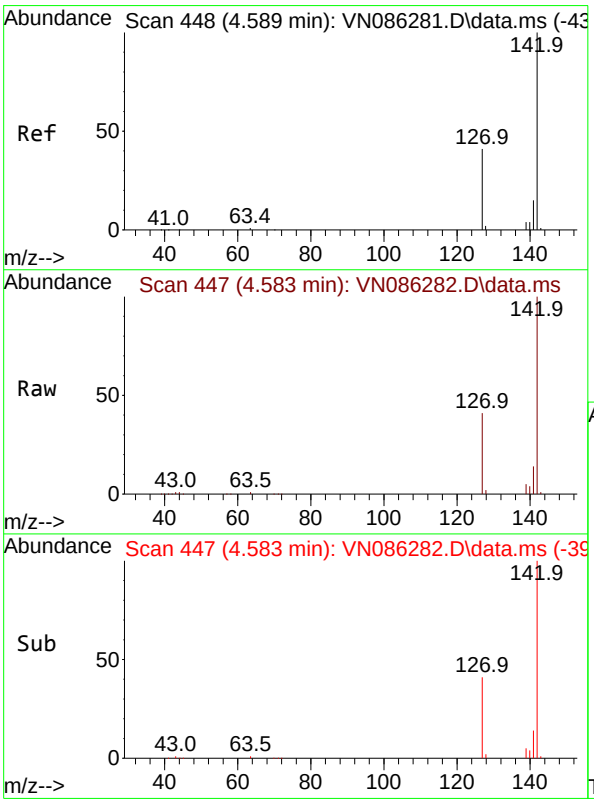
Ion	Ratio	Lower	Upper
101	100		
85	44.0	34.7	52.1
151	69.3	56.1	84.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

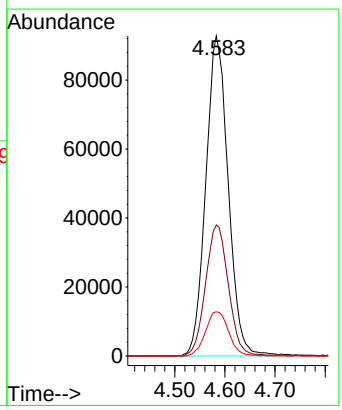


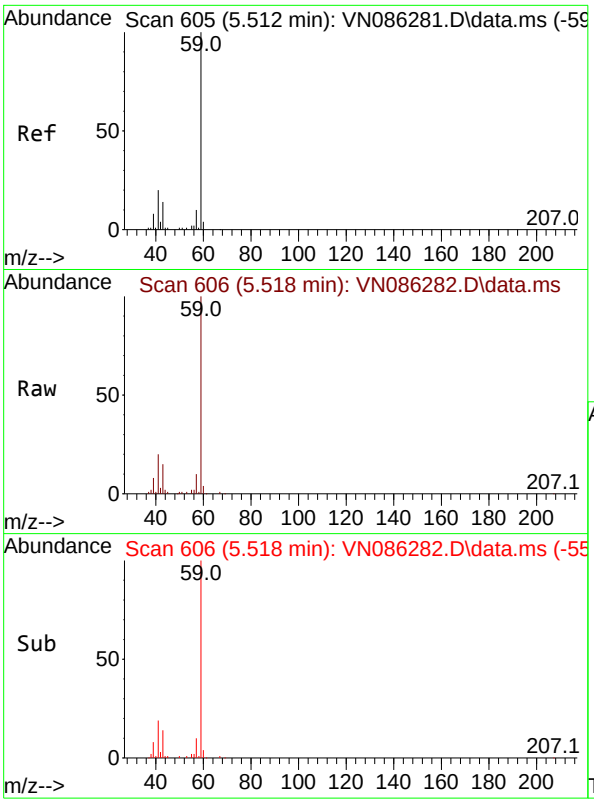


#10
Methyl Iodide
Concen: 104.156 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:142 Resp: 287740

Ion	Ratio	Lower	Upper
142	100		
127	41.0	32.7	49.1
141	13.8	11.7	17.5

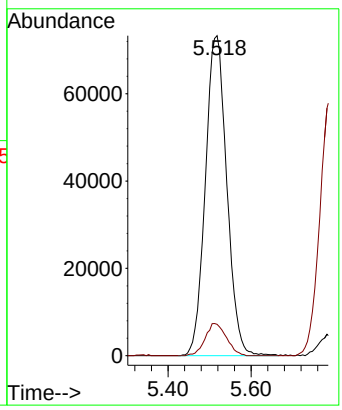




#11
Tert butyl alcohol
Concen: 434.831 ug/l
RT: 5.518 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 59 Resp: 26241

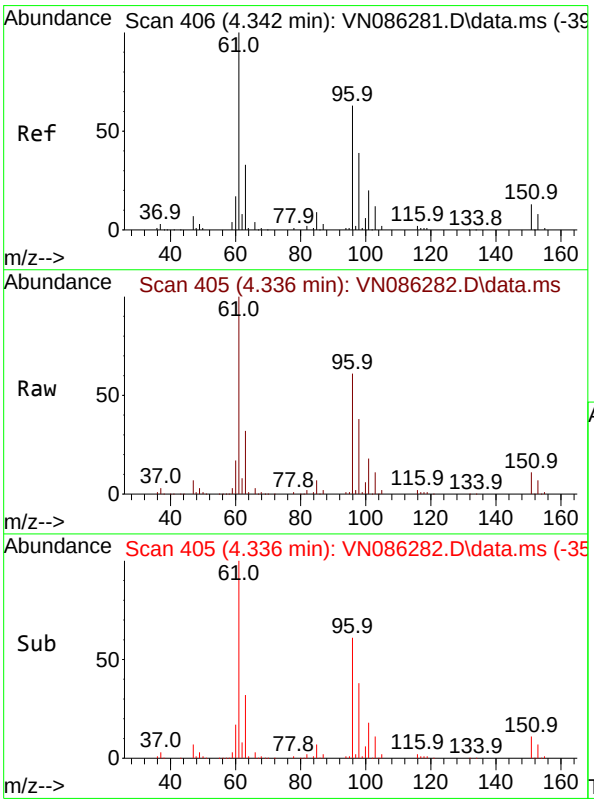
Ion	Ratio	Lower	Upper
59	100		
57	10.0	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

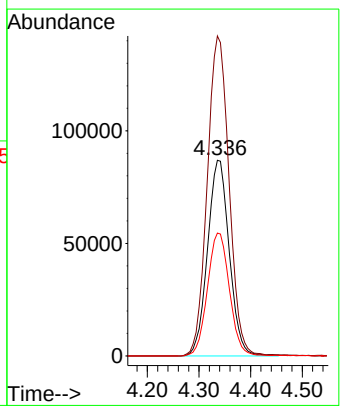
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

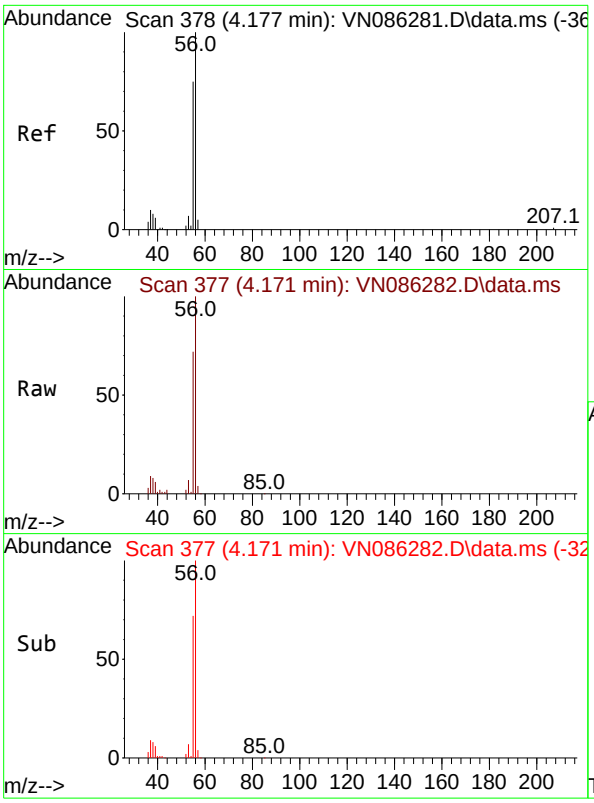


#12
1,1-Dichloroethene
Concen: 94.627 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 96 Resp: 254035

Ion	Ratio	Lower	Upper
96	100		
61	163.5	126.6	189.8
98	62.8	49.6	74.4

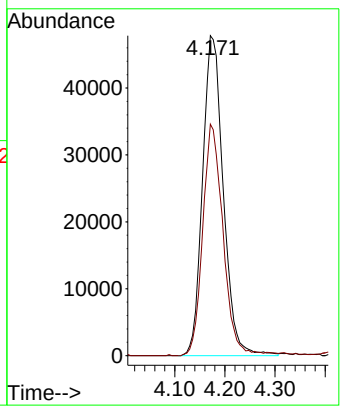




#13
Acrolein
Concen: 502.553 ug/l
RT: 4.171 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 56 Resp: 13713

Ion	Ratio	Lower	Upper
56	100		
55	70.6	58.5	87.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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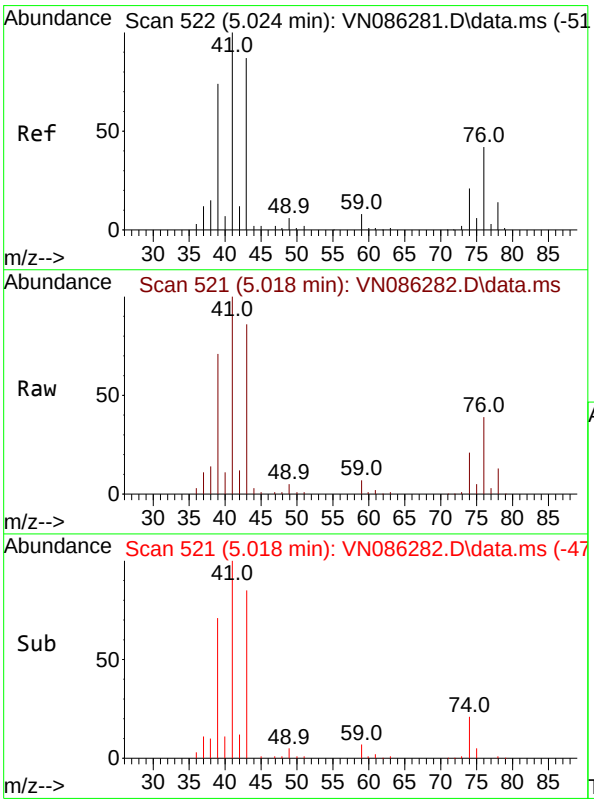
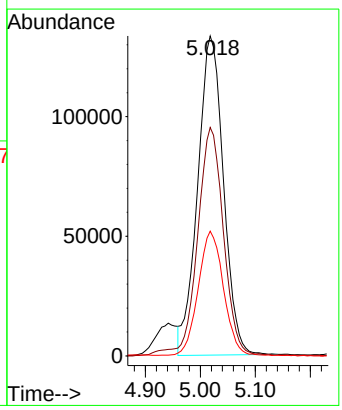
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

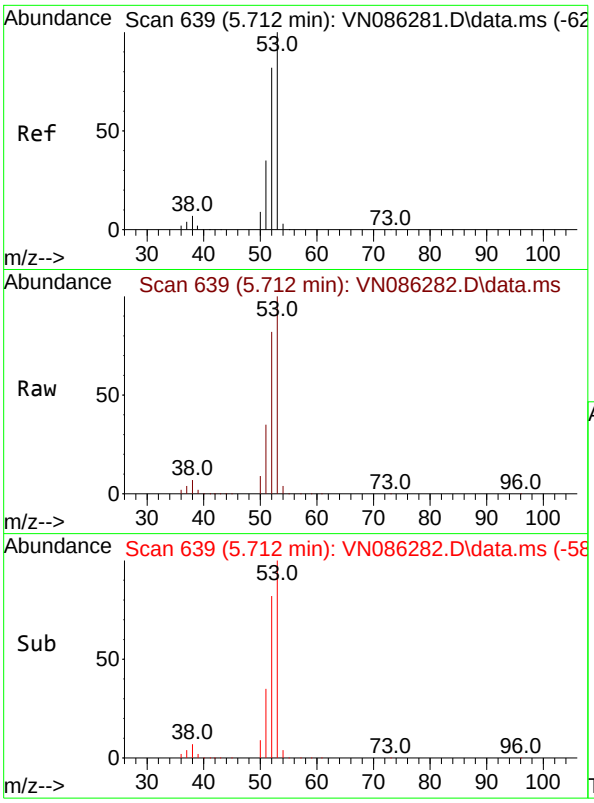


#14
Allyl chloride
Concen: 91.225 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 41 Resp: 435112

Ion	Ratio	Lower	Upper
41	100		
39	72.5	59.2	88.8
76	38.0	31.2	46.8

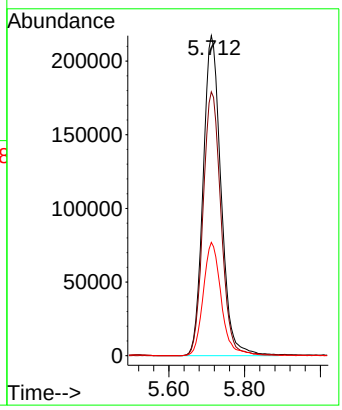




#15
Acrylonitrile
Concen: 478.368 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 53 Resp: 71364

Ion	Ratio	Lower	Upper
53	100		
52	82.8	65.5	98.3
51	35.8	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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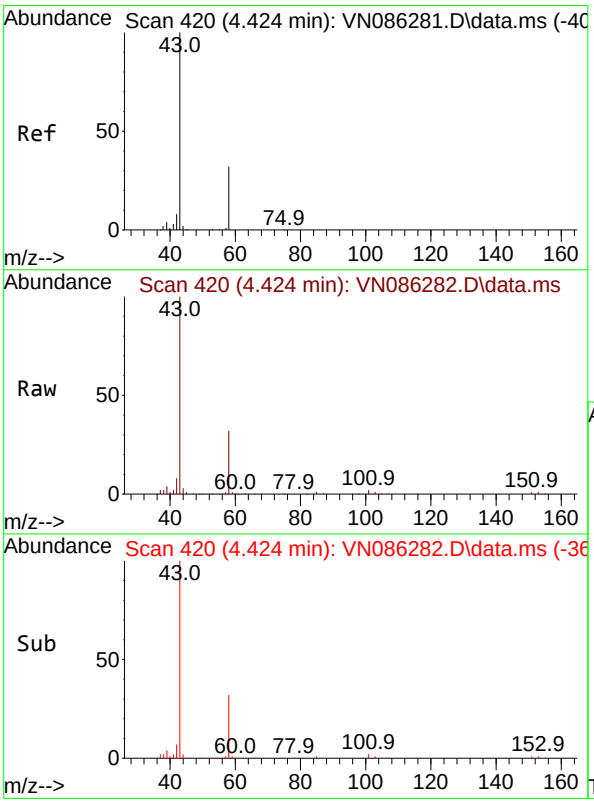
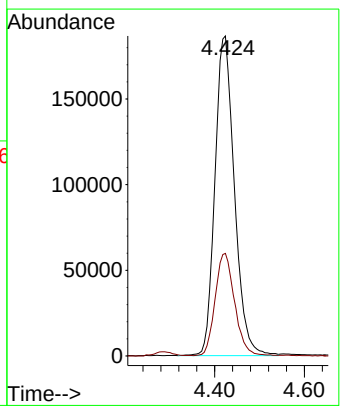
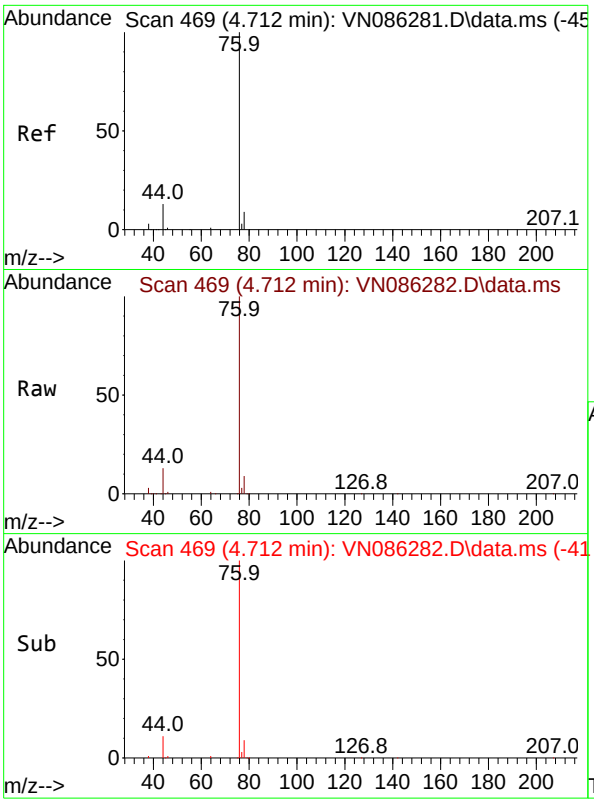


#16
Acetone
Concen: 498.290 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 563323

Ion	Ratio	Lower	Upper
43	100		
58	31.9	25.3	37.9

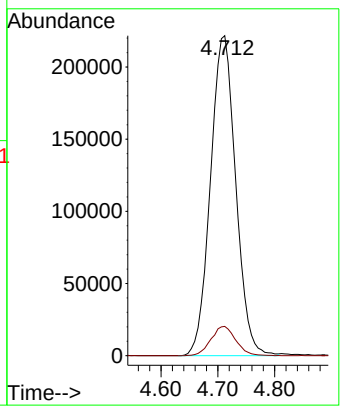




#17
Carbon Disulfide
Concen: 85.294 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 76 Resp: 68561

Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.6	11.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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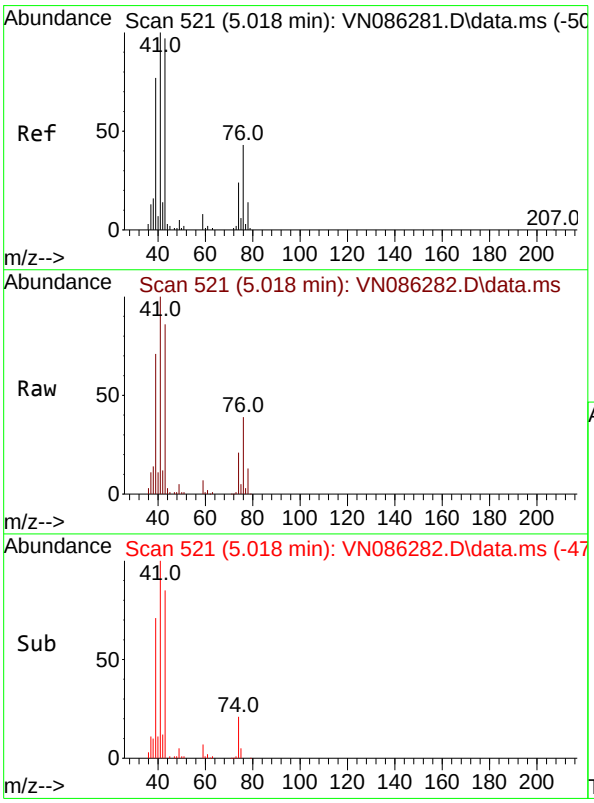
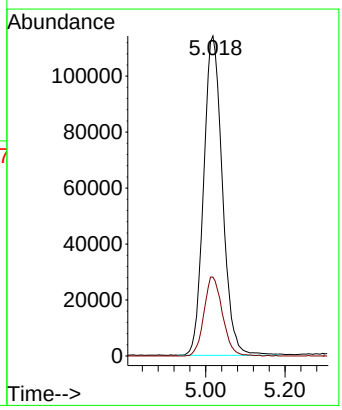
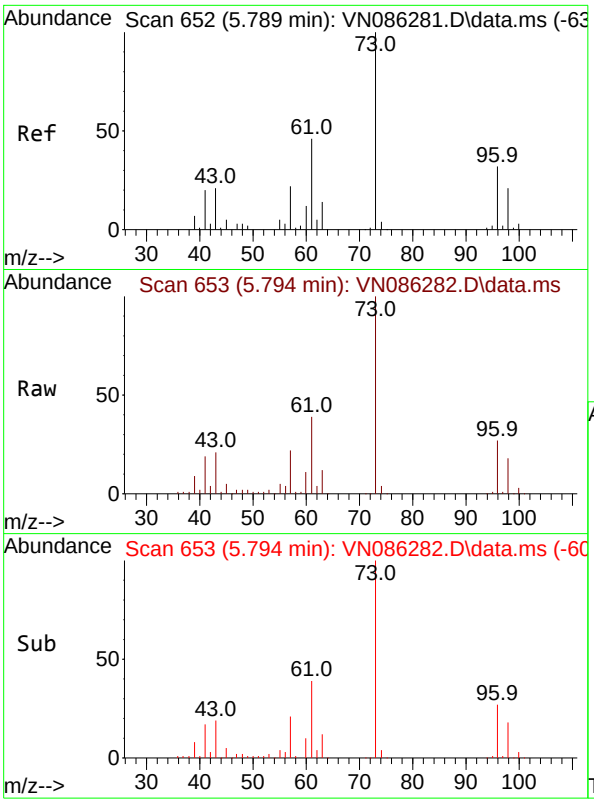


#18
Methyl Acetate
Concen: 94.410 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 374831

Ion	Ratio	Lower	Upper
43	100		
74	24.4	19.8	29.6





#19
Methyl tert-butyl Ether
Concen: 93.089 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 73 Resp: 91863

Ion	Ratio	Lower	Upper
73	100		
57	22.5	17.6	26.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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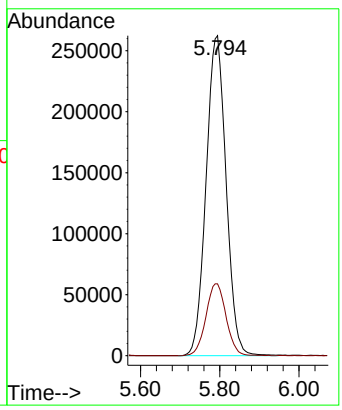
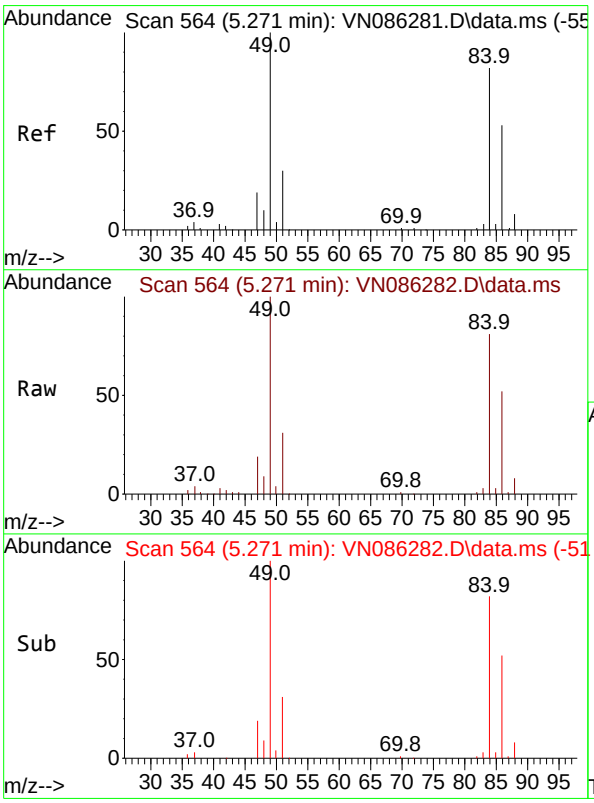
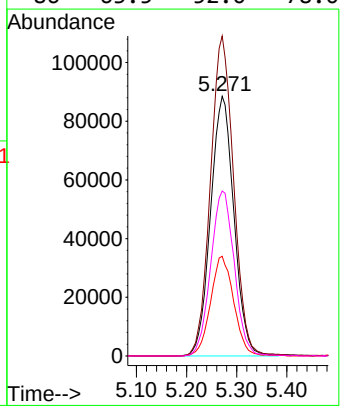


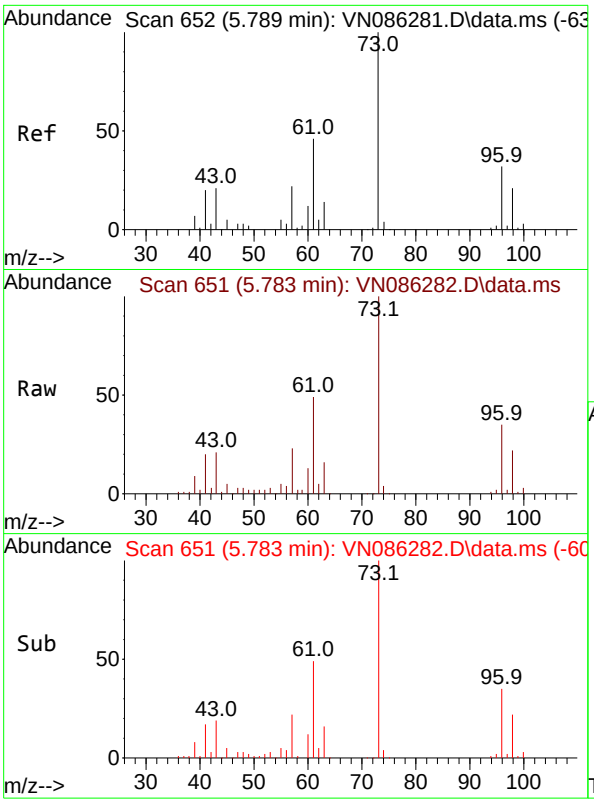


#20
Methylene Chloride
Concen: 93.774 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 84 Resp: 286733

Ion	Ratio	Lower	Upper
84	100		
49	123.2	98.2	147.2
51	38.4	29.8	44.6
86	63.5	52.0	78.0

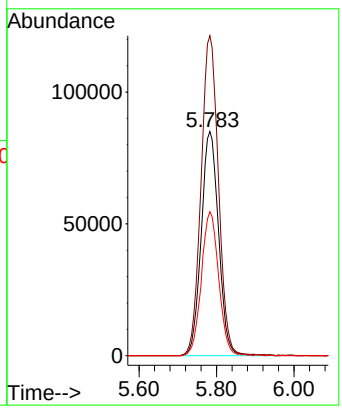




#21
trans-1,2-Dichloroethene
Concen: 94.241 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 96 Resp: 26450

Ion	Ratio	Lower	Upper
96	100		
61	142.8	114.6	171.8
98	64.3	51.2	76.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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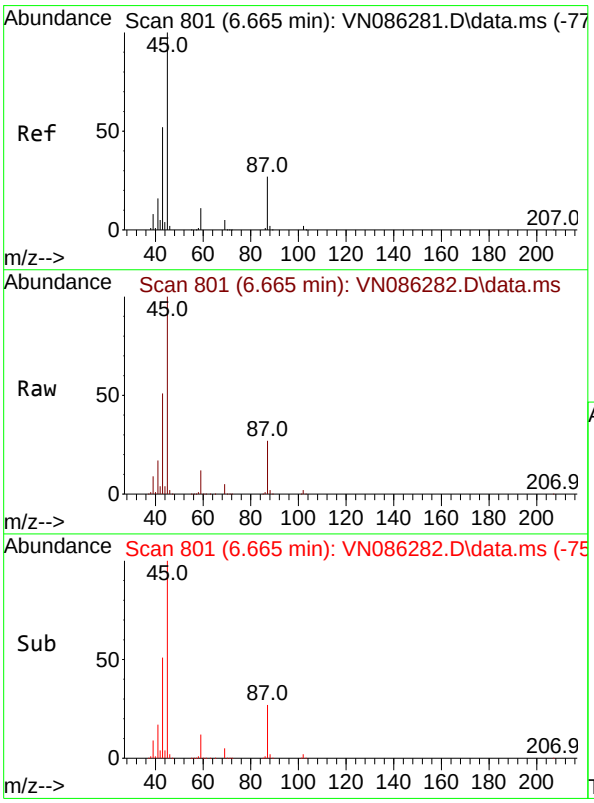
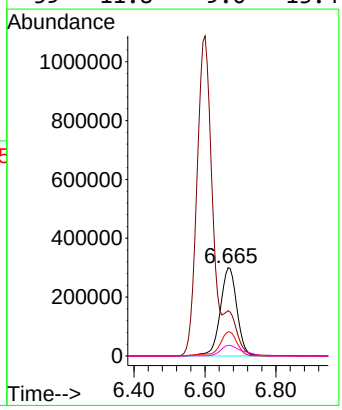
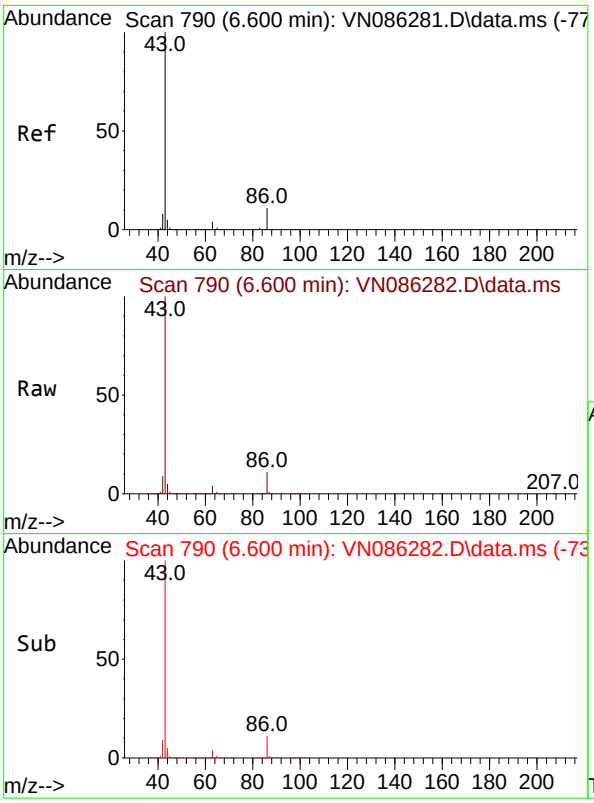


#22
Diisopropyl ether
Concen: 93.497 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 45 Resp: 970652

Ion	Ratio	Lower	Upper
45	100		
43	51.2	41.8	62.8
87	27.4	21.6	32.4
59	11.8	9.0	13.4





#23
Vinyl Acetate
Concen: 438.915 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 318450

Ion	Ratio	Lower	Upper
43	100		
86	11.0	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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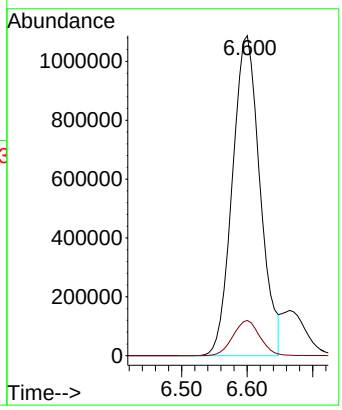
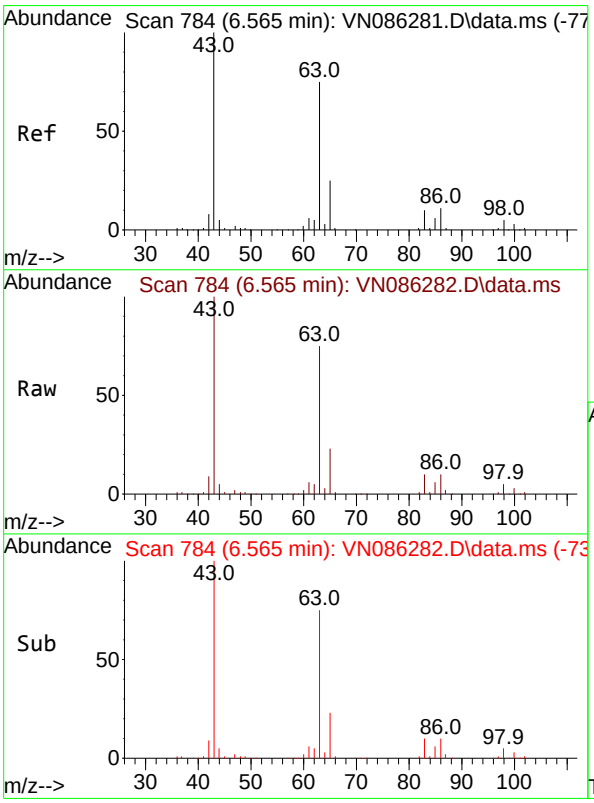
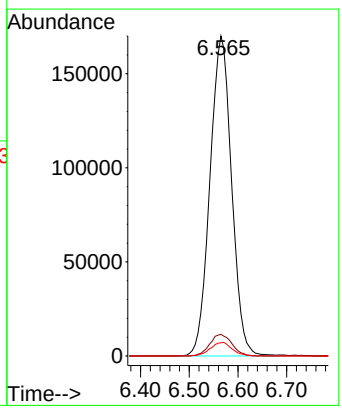


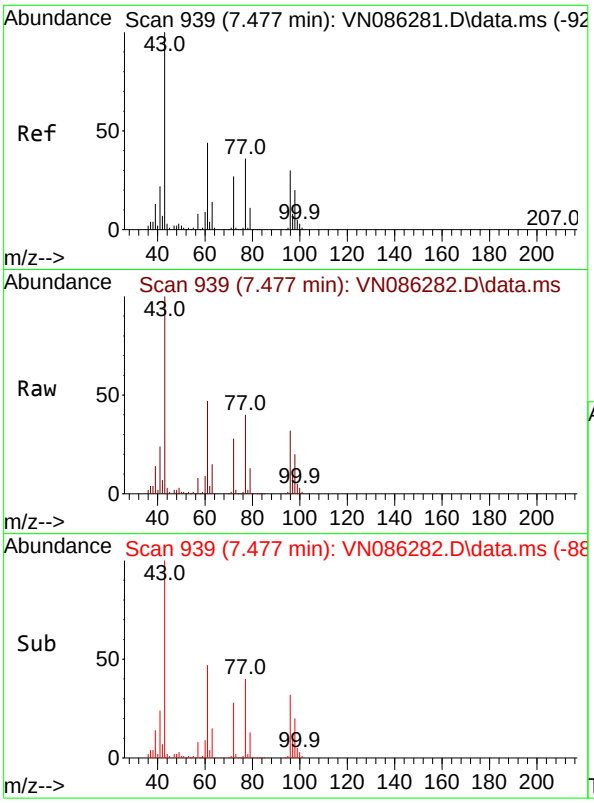


#24
1,1-Dichloroethane
Concen: 95.914 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 63 Resp: 525385

Ion	Ratio	Lower	Upper
63	100		
98	6.7	3.4	10.2
100	4.1	2.1	6.5





#25
2-Butanone
Concen: 465.437 ug/l
RT: 7.477 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 95821

Ion	Ratio	Lower	Upper
43	100		
72	27.6	21.7	32.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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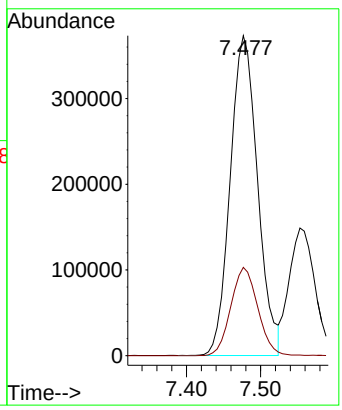
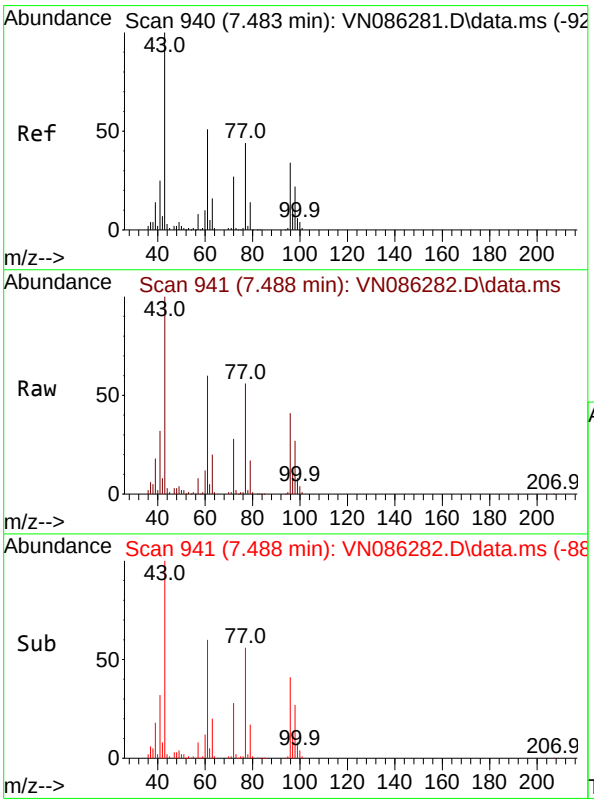
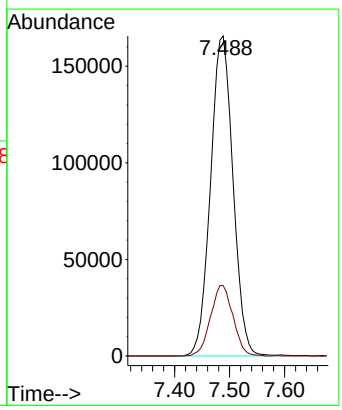


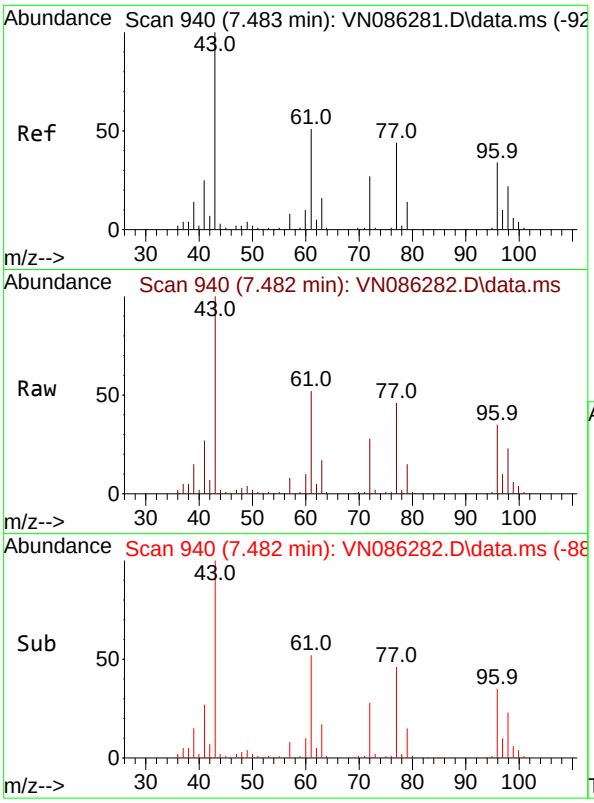


#26
2,2-Dichloropropane
Concen: 96.005 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 77 Resp: 470852

Ion	Ratio	Lower	Upper
77	100		
97	22.0	11.2	33.5

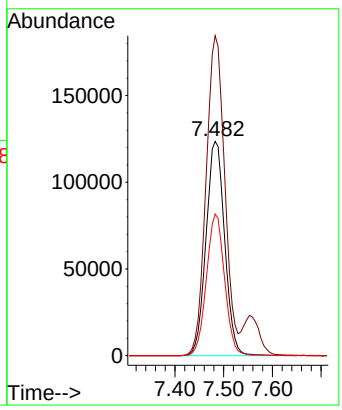




#27
cis-1,2-Dichloroethene
Concen: 94.252 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 96 Resp: 32832

Ion	Ratio	Lower	Upper
96	100		
61	149.2	0.0	299.0
98	64.6	0.0	129.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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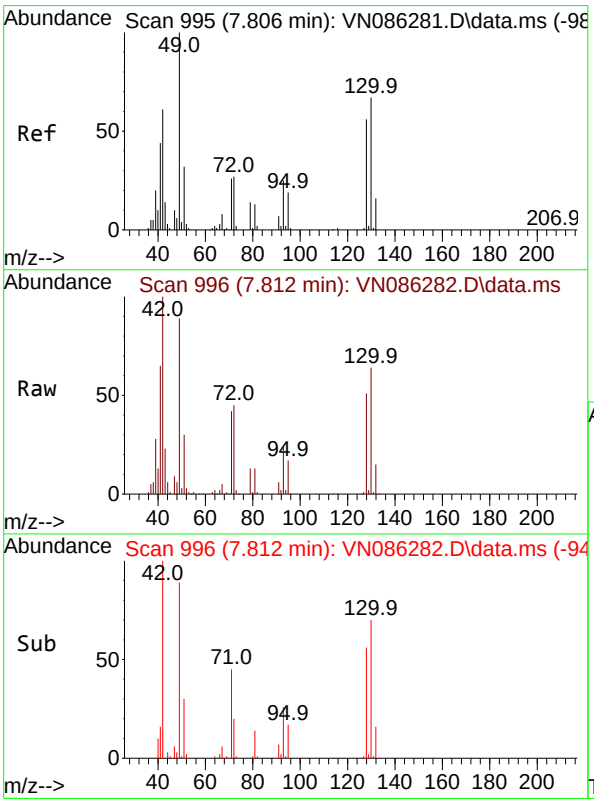
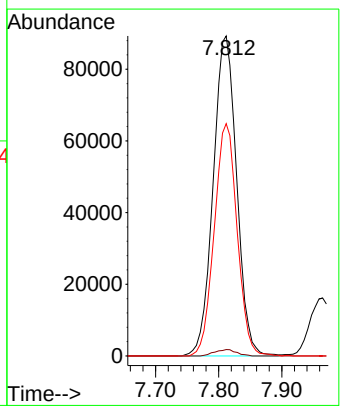
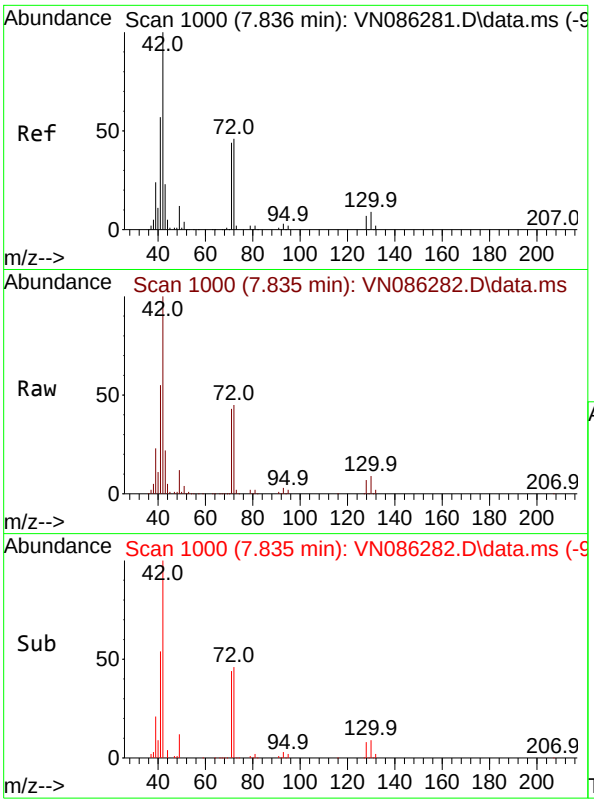


#28
Bromochloromethane
Concen: 99.357 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 49 Resp: 230762

Ion	Ratio	Lower	Upper
49	100		
129	1.9	0.0	3.4
130	70.7	57.1	85.7





#29
Tetrahydrofuran
Concen: 453.130 ug/l
RT: 7.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 42 Resp: 62382

Ion	Ratio	Lower	Upper
42	100		
72	45.1	36.2	54.4
71	42.2	34.0	51.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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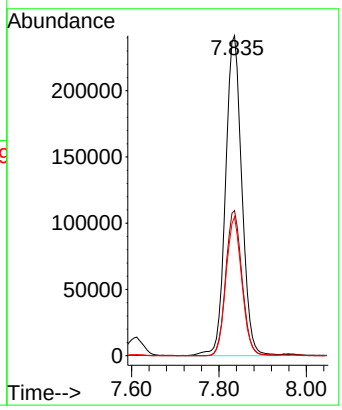
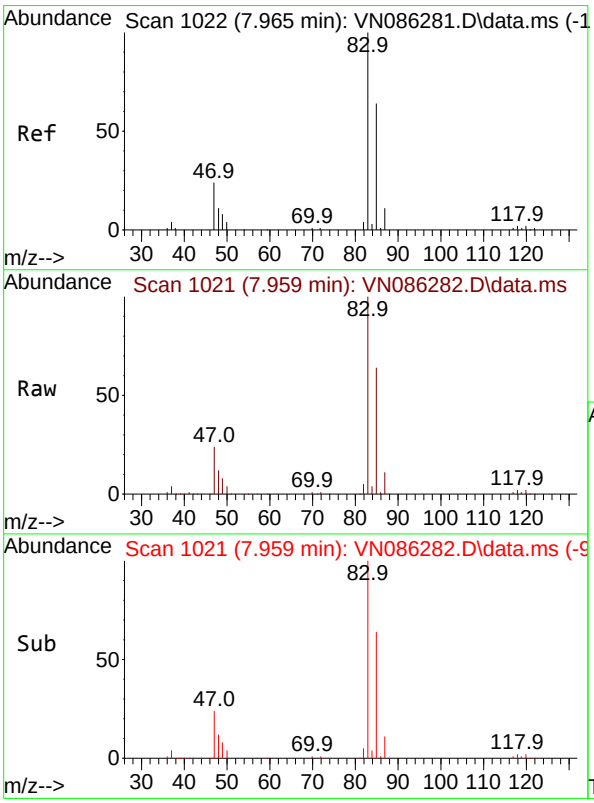
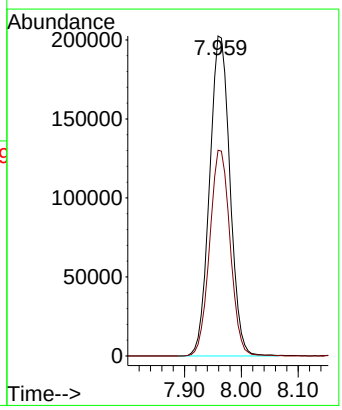


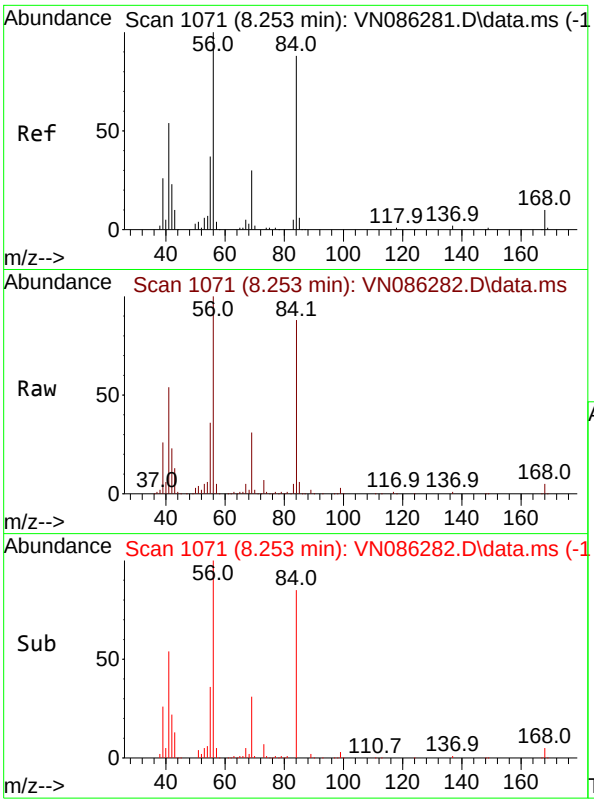


#30
Chloroform
Concen: 93.611 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 83 Resp: 503712

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.5	77.3





#31
Cyclohexane
Concen: 90.418 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 56 Resp: 48464

Ion	Ratio	Lower	Upper
56	100		
69	31.3	24.2	36.2
84	87.0	70.3	105.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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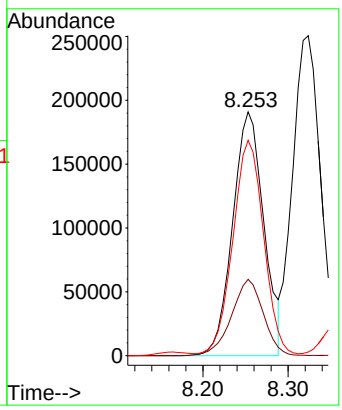
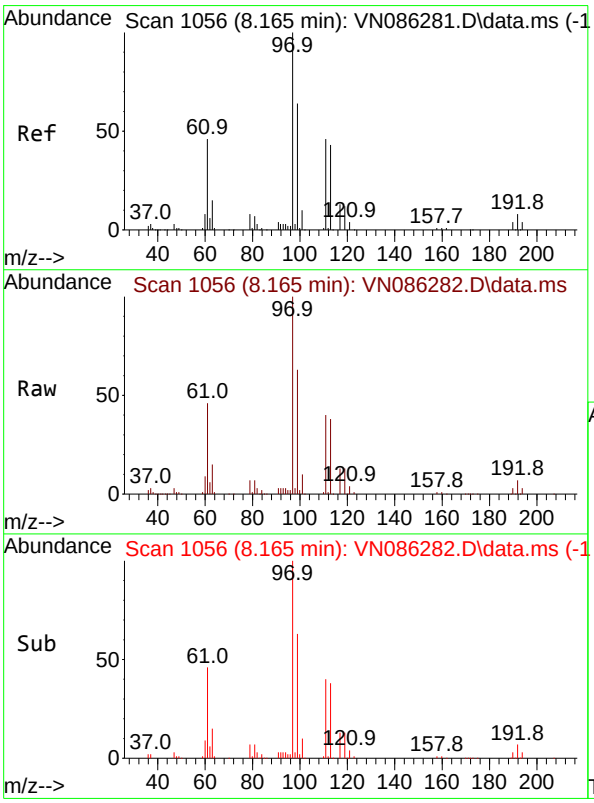
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

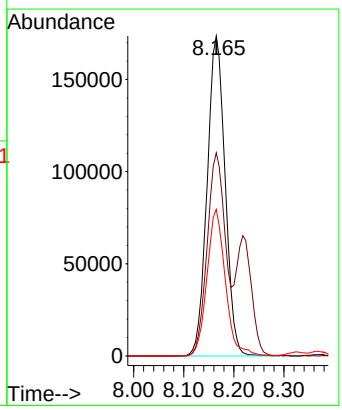


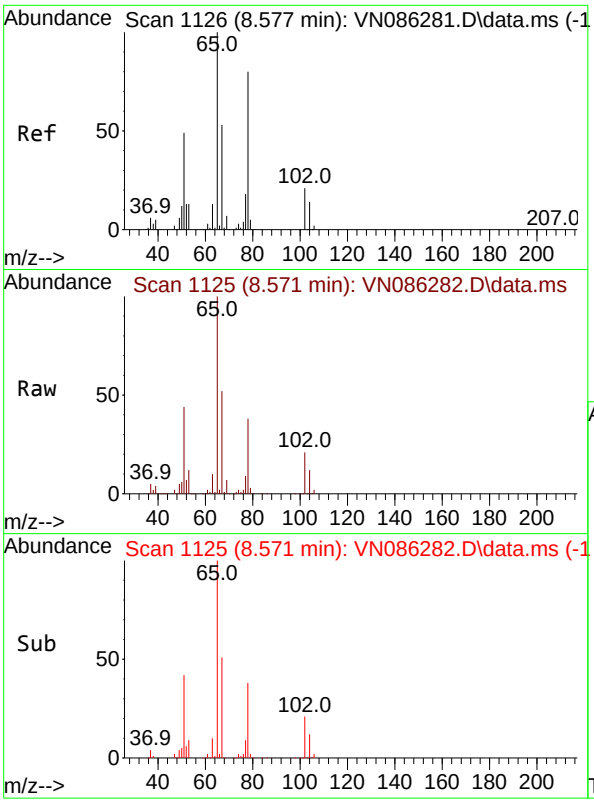


#32
1,1,1-Trichloroethane
Concen: 94.058 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 97 Resp: 432964

Ion	Ratio	Lower	Upper
97	100		
99	63.8	52.7	79.1
61	46.9	39.5	59.3

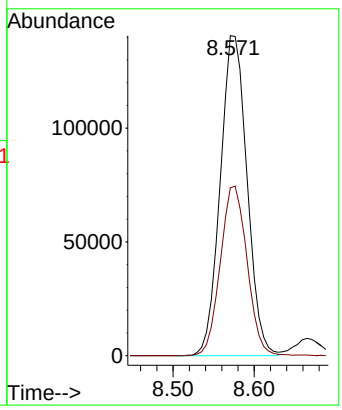




#33
1,2-Dichloroethane-d4
Concen: 97.633 ug/l
RT: 8.571 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 65 Resp: 32292

Ion	Ratio	Lower	Upper
65	100		
67	53.1	0.0	106.0



Instrument :
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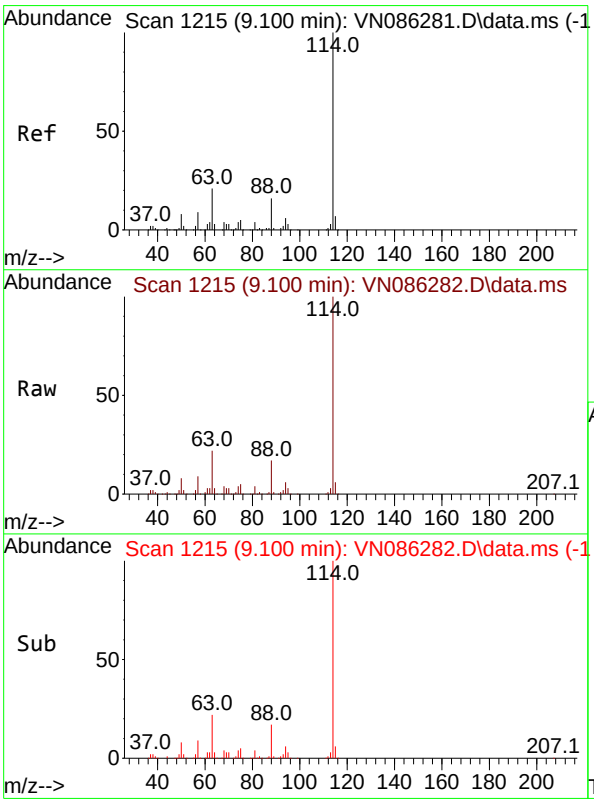
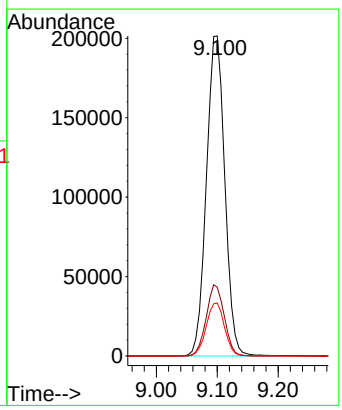
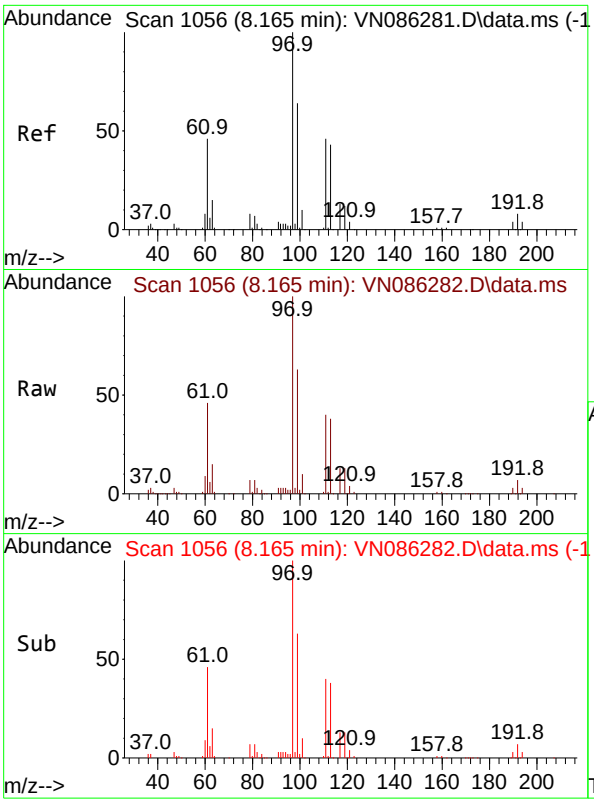


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:114 Resp: 422902

Ion	Ratio	Lower	Upper
114	100		
63	21.5	0.0	42.6
88	16.5	0.0	31.8

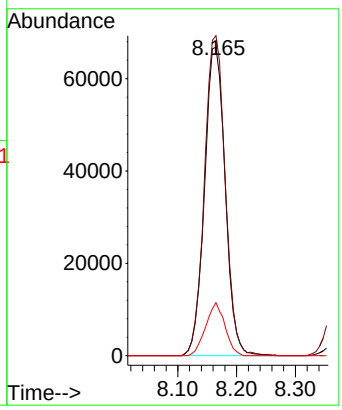




#35
Dibromofluoromethane
Concen: 83.402 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:113 Resp: 16369

Ion	Ratio	Lower	Upper
113	100		
111	103.9	83.4	125.0
192	16.0	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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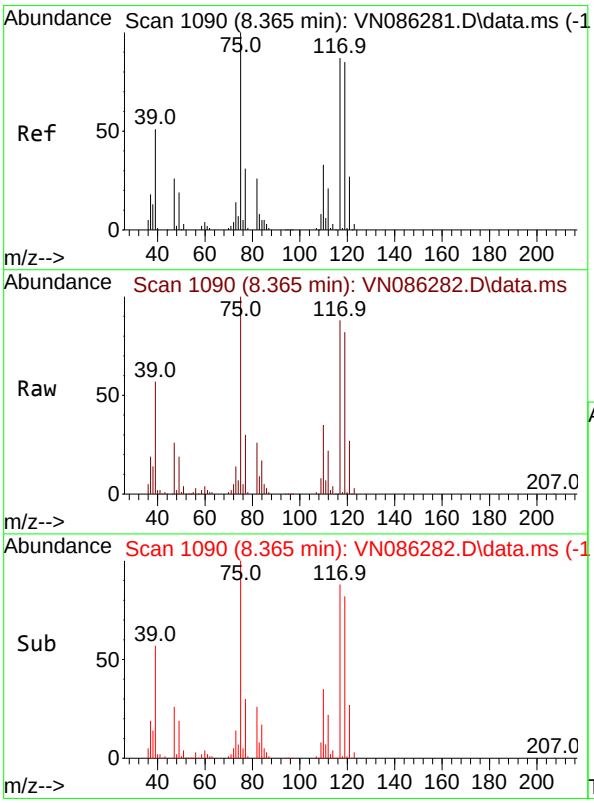
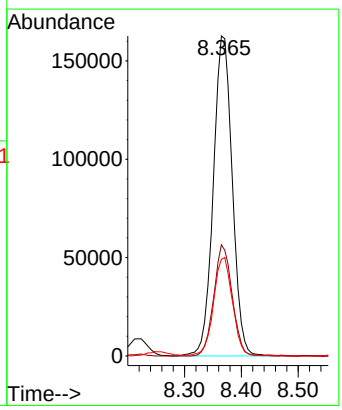
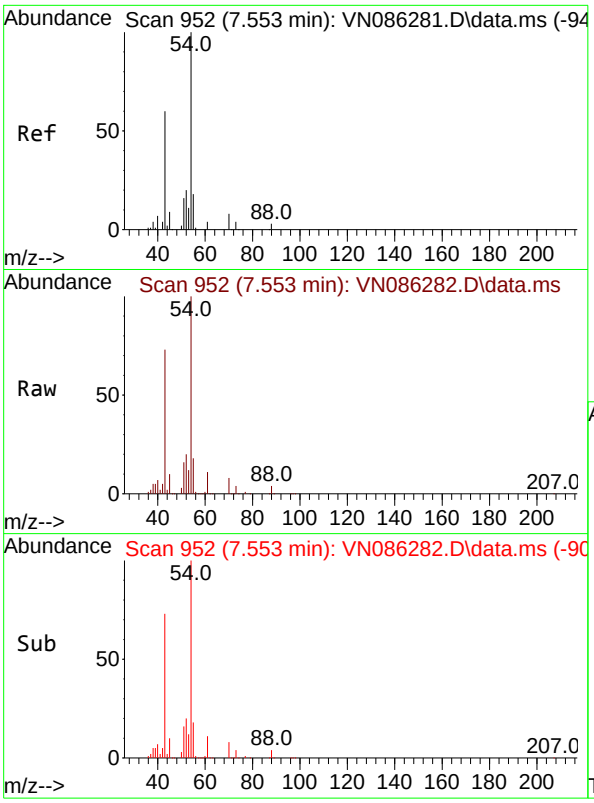


#36
1,1-Dichloropropene
Concen: 96.591 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 75 Resp: 378663

Ion	Ratio	Lower	Upper
75	100		
110	33.5	16.8	50.4
77	30.8	24.9	37.3





#37
Ethyl Acetate
Concen: 89.962 ug/l
RT: 7.553 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 37129

Ion	Ratio	Lower	Upper
43	100		
61	13.8	11.1	16.7
70	11.4	9.2	13.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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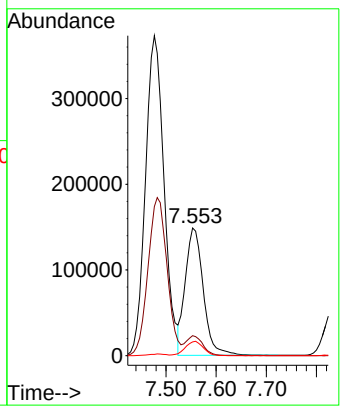
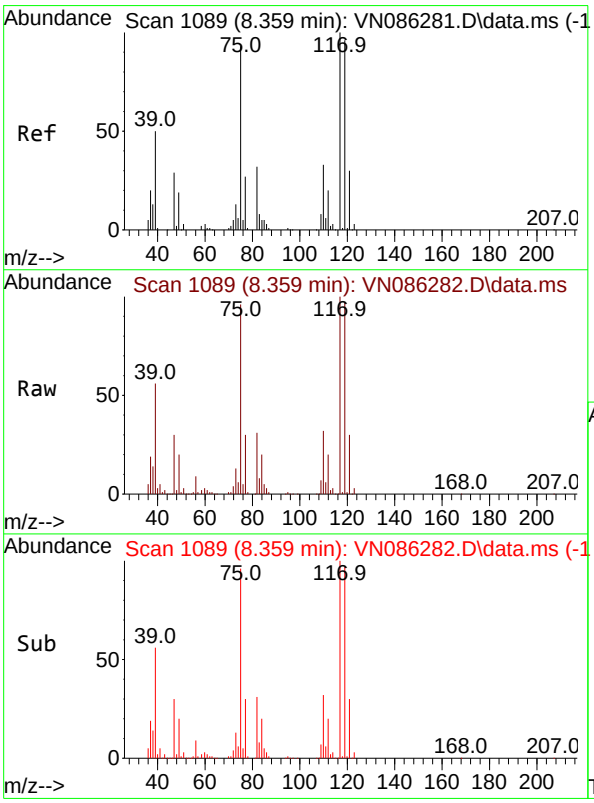
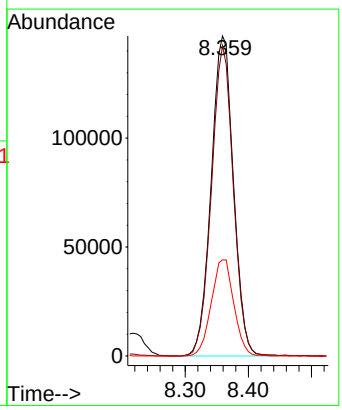


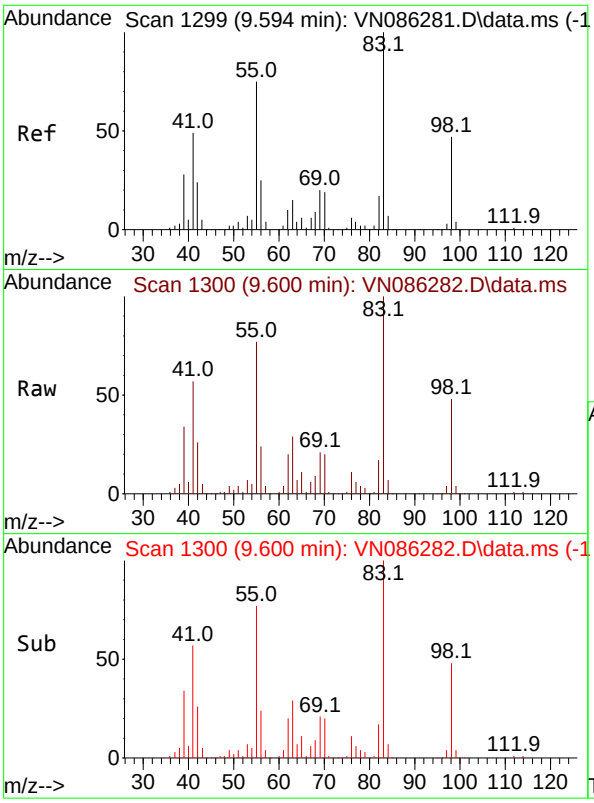


#38
Carbon Tetrachloride
Concen: 96.450 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:117 Resp: 360081

Ion	Ratio	Lower	Upper
117	100		
119	96.9	76.8	115.2
121	30.1	23.8	35.8





#39
Methylcyclohexane
Concen: 96.325 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 83 Resp: 44884

Ion	Ratio	Lower	Upper
83	100		
55	76.8	59.8	89.8
98	47.6	37.9	56.9

Instrument :
MSVOA_N
ClientSampleId :
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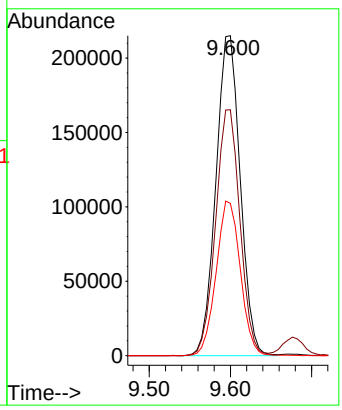
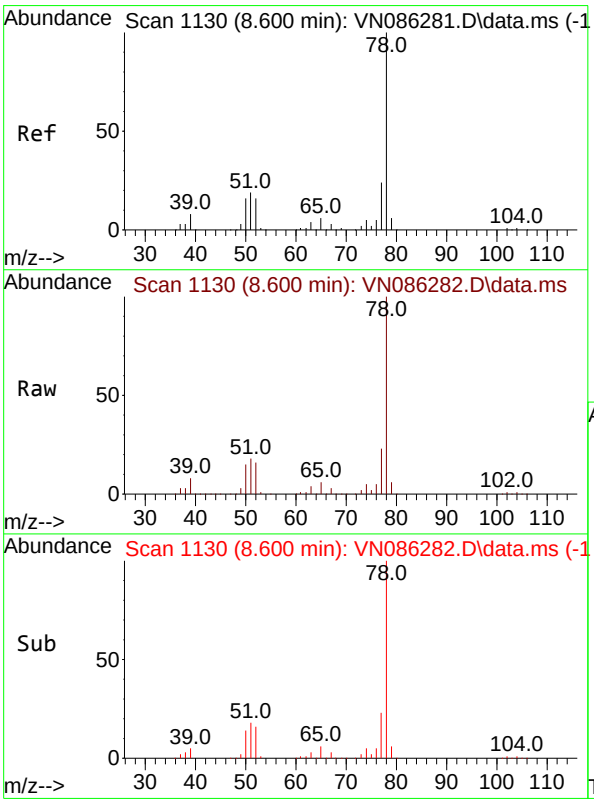
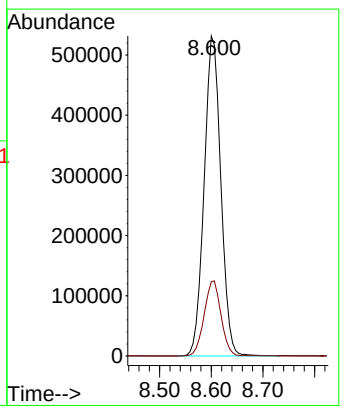


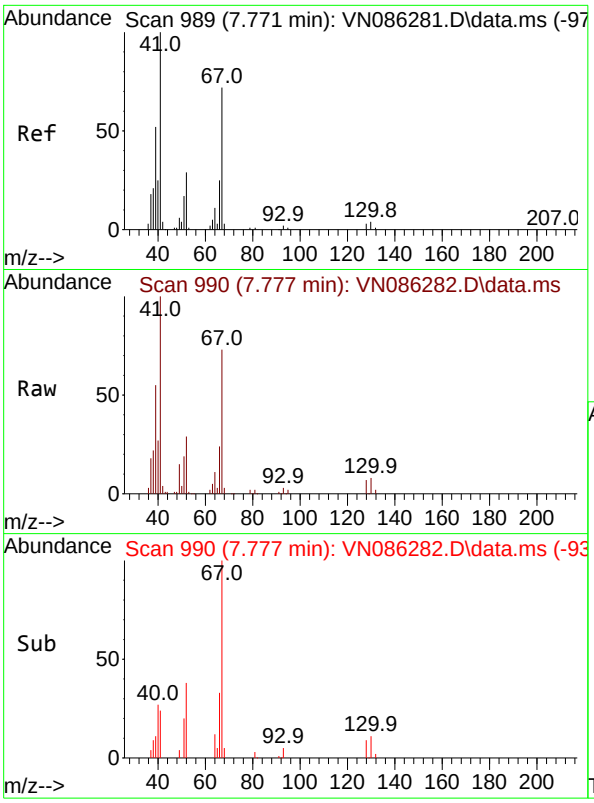


#40
Benzene
Concen: 95.020 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 78 Resp: 1193479

Ion	Ratio	Lower	Upper
78	100		
77	23.2	19.4	29.2

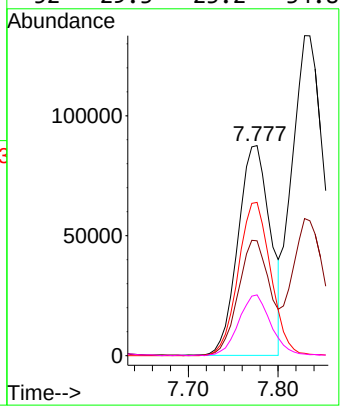




#41
Methacrylonitrile
Concen: 91.695 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 41 Resp: 21933

Ion	Ratio	Lower	Upper
41	100		
39	53.9	43.0	64.4
67	73.8	58.8	88.2
52	29.3	23.2	34.8



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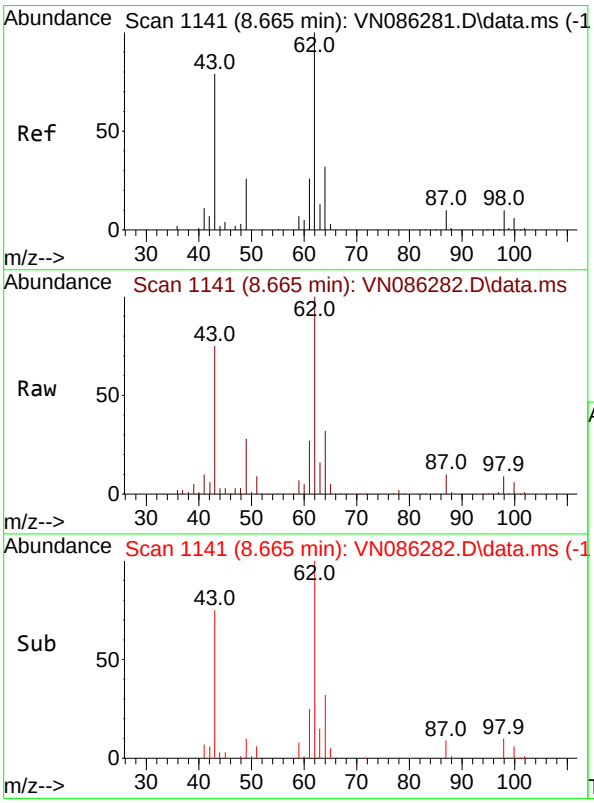
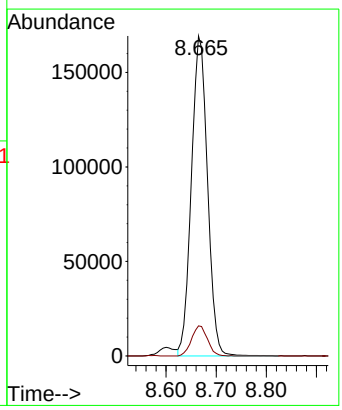
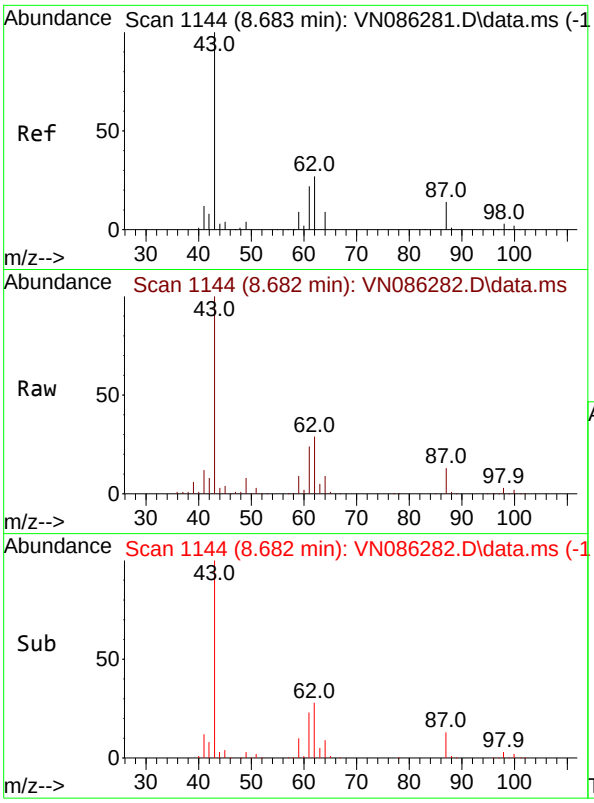


#42
1,2-Dichloroethane
Concen: 94.143 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 62 Resp: 377081

Ion	Ratio	Lower	Upper
62	100		
98	9.3	0.0	19.2





#43
Isopropyl Acetate
Concen: 100.085 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 70418

Ion	Ratio	Lower	Upper
43	100		
61	25.8	20.5	30.7
87	13.1	10.5	15.7

Instrument :
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VSTDICC100

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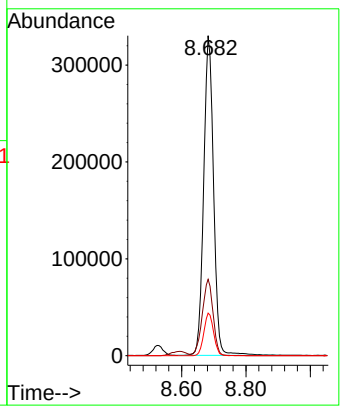
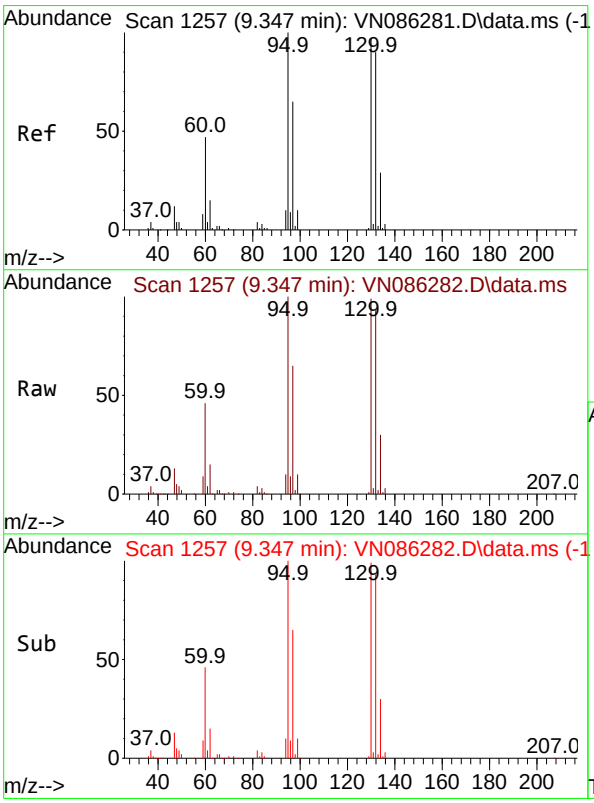
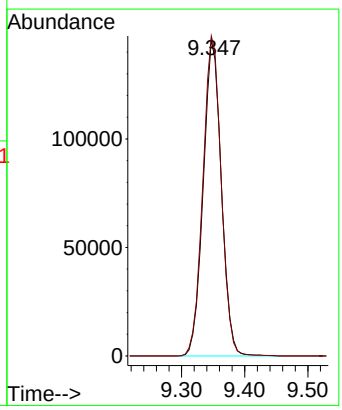


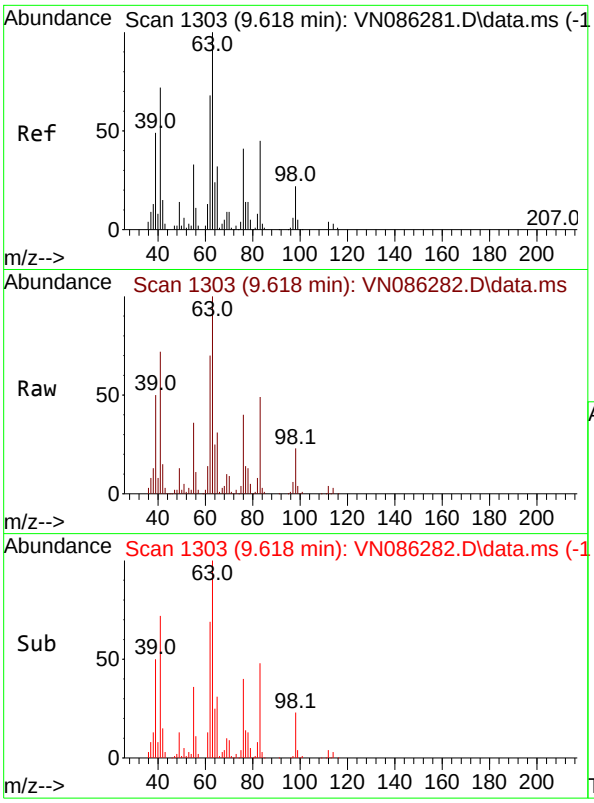


#44
Trichloroethene
Concen: 97.020 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:130 Resp: 288832

Ion	Ratio	Lower	Upper
130	100		
95	101.1	0.0	207.2

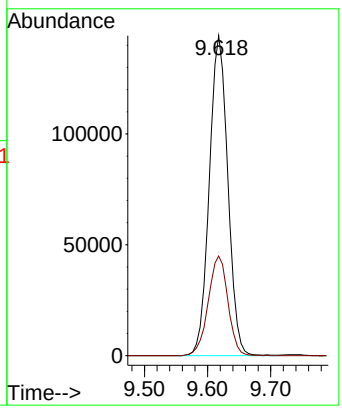




#45
1,2-Dichloropropane
Concen: 95.501 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 63 Resp: 29362

Ion	Ratio	Lower	Upper
63	100		
65	31.2	25.4	38.2



Instrument :
MSVOA_N
ClientSampleId :
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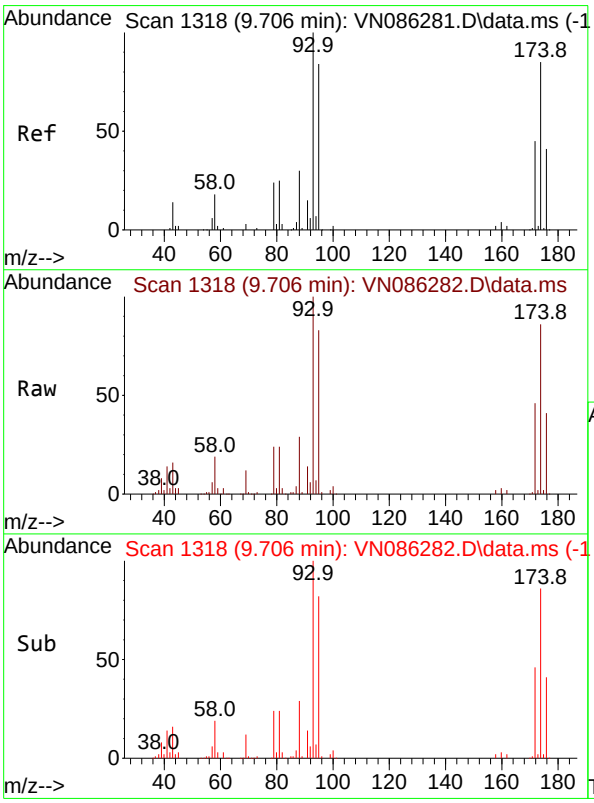
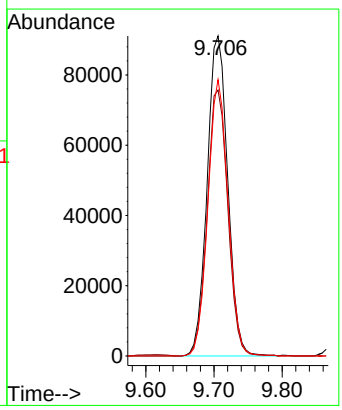
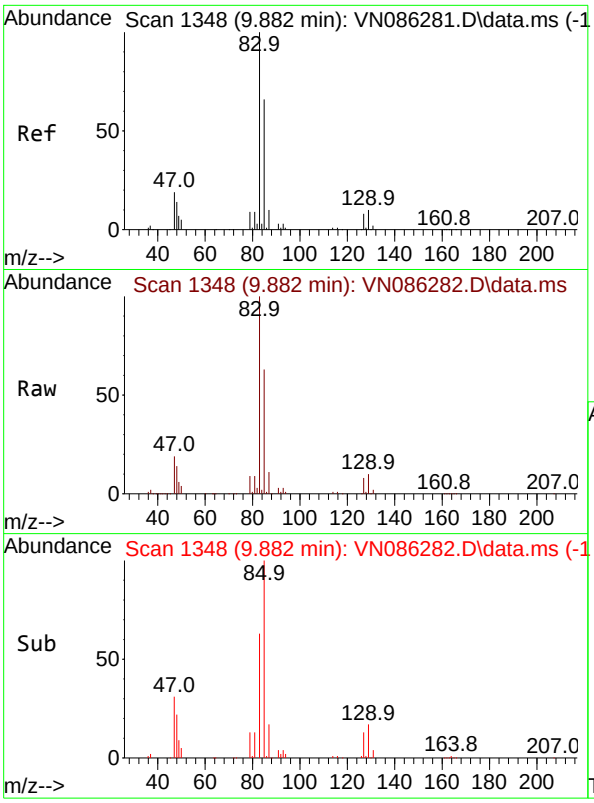


#46
Dibromomethane
Concen: 97.667 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 93 Resp: 191324

Ion	Ratio	Lower	Upper
93	100		
95	83.5	66.2	99.4
174	84.6	67.8	101.6

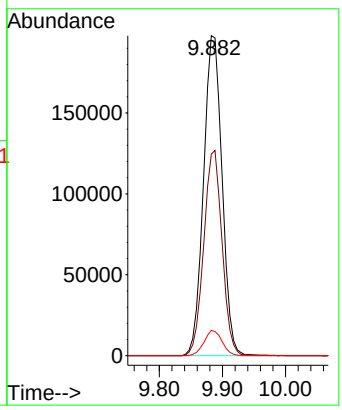




#47
Bromodichloromethane
Concen: 95.372 ug/l
RT: 9.882 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 83 Resp: 40351

Ion	Ratio	Lower	Upper
83	100		
85	63.0	52.6	78.8
127	7.9	6.1	9.1



Instrument :
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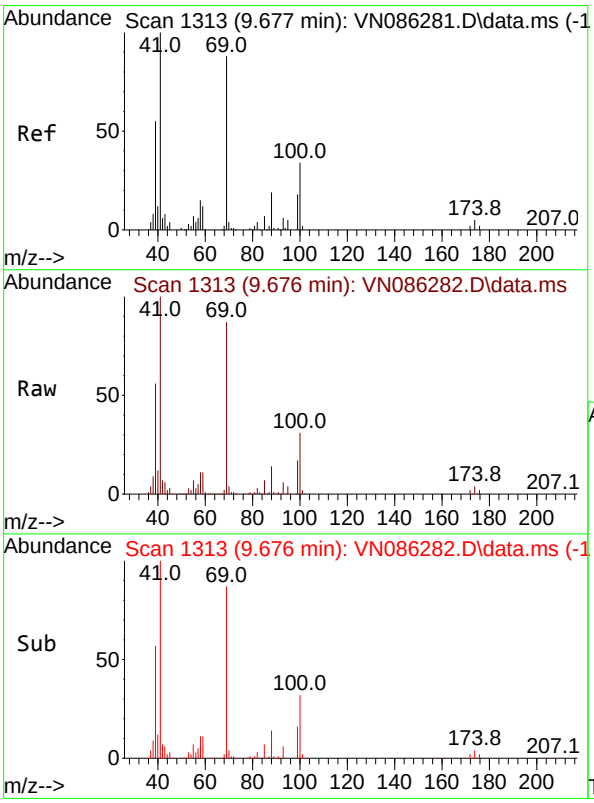
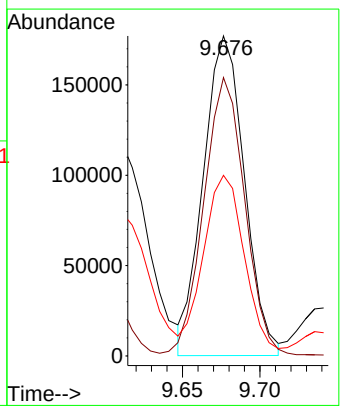
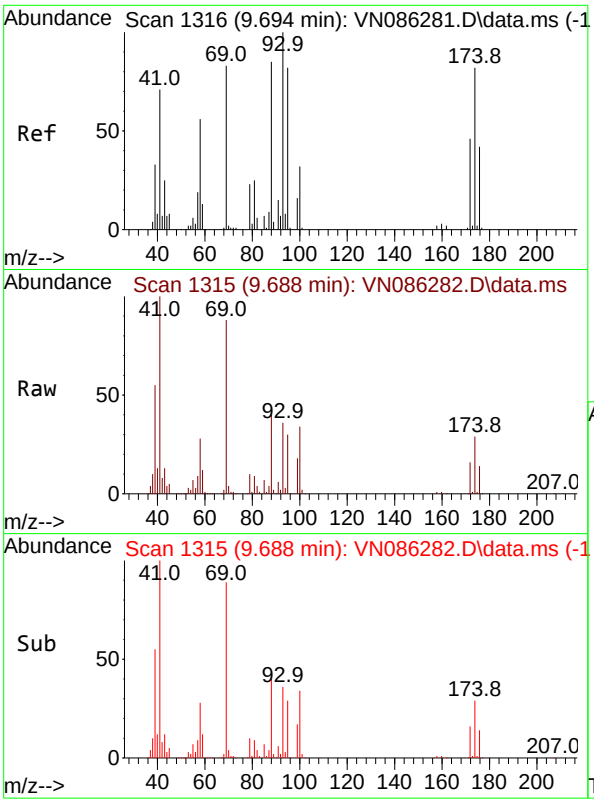


#48
Methyl methacrylate
Concen: 90.052 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 41 Resp: 326384

Ion	Ratio	Lower	Upper
41	100		
69	87.1	68.2	102.2
39	57.0	45.2	67.8





#49
1,4-Dioxane
Concen: 1601.137 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 88 Resp: 9871

Ion	Ratio	Lower	Upper
88	100		
43	27.4	23.8	35.8
58	73.1	57.4	86.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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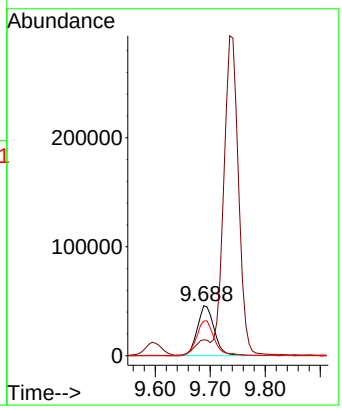
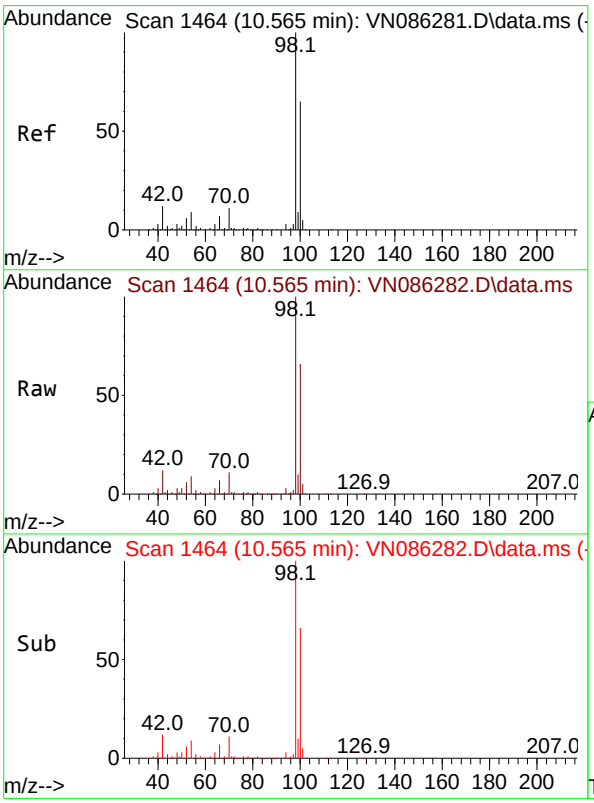
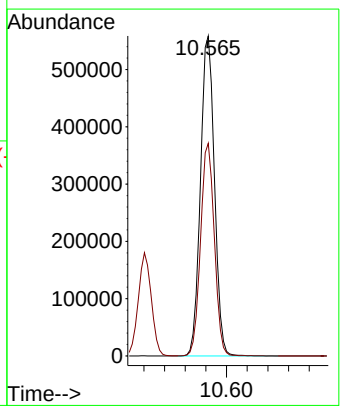


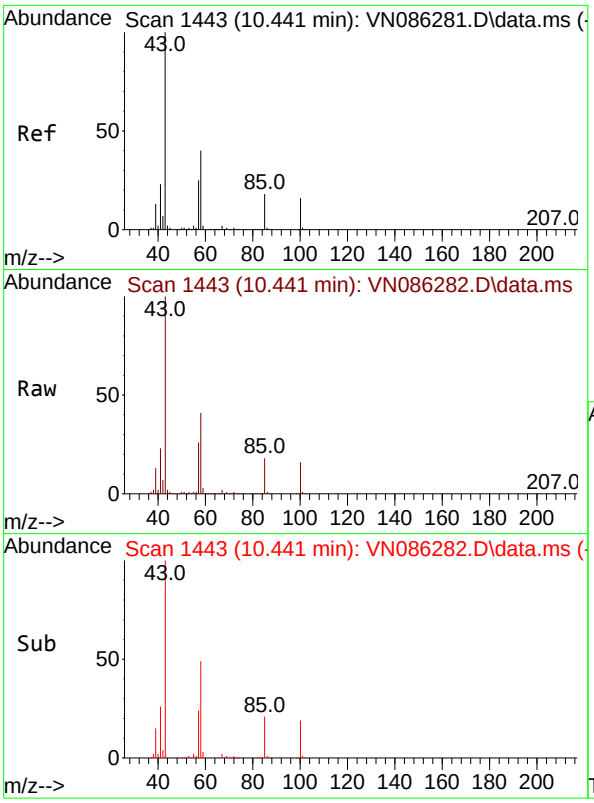


#50
Toluene-d8
Concen: 99.767 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 98 Resp: 1046538

Ion	Ratio	Lower	Upper
98	100		
100	65.4	52.5	78.7

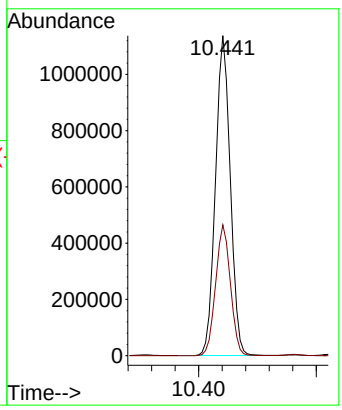




#51
4-Methyl-2-Pentanone
Concen: 470.803 ug/l
RT: 10.441 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 198976

Ion	Ratio	Lower	Upper
43	100		
58	40.8	32.2	48.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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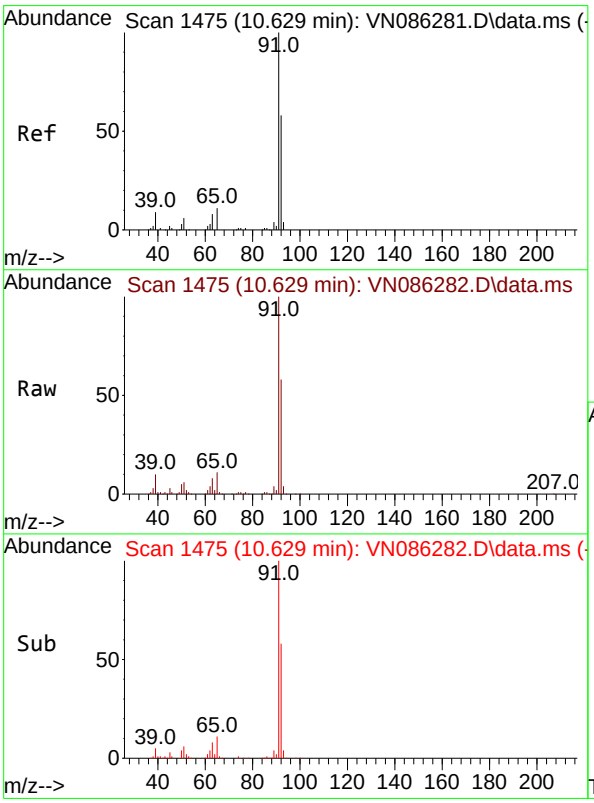
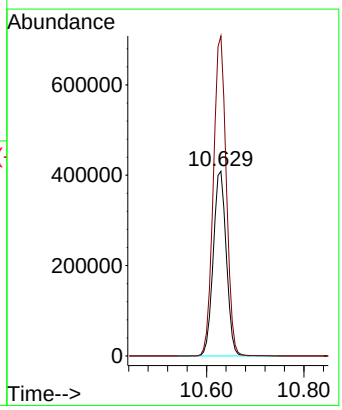
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

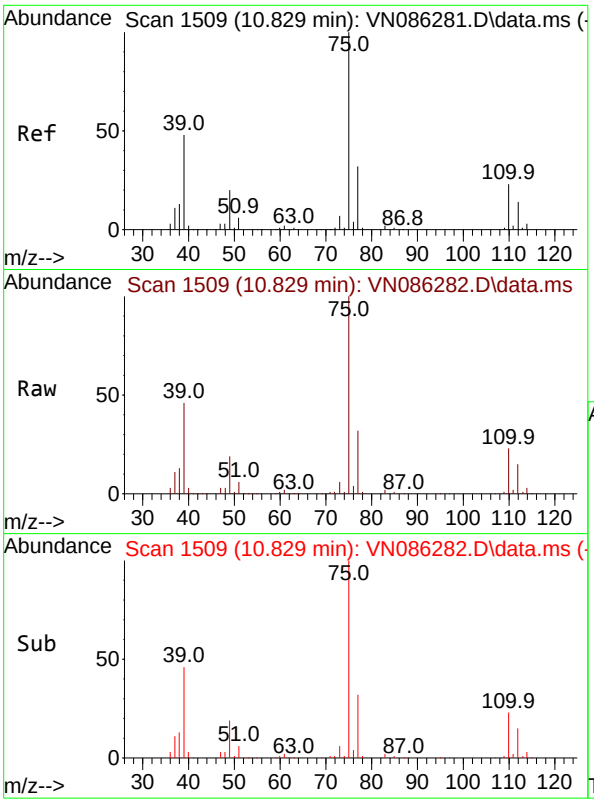


#52
Toluene
Concen: 96.592 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 92 Resp: 757019

Ion	Ratio	Lower	Upper
92	100		
91	171.5	137.3	205.9

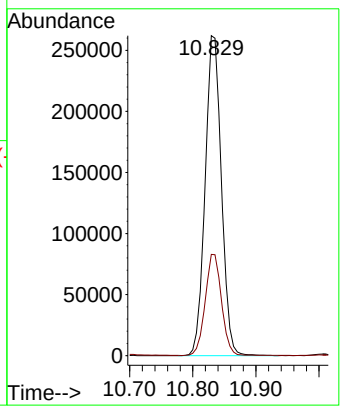




#53
t-1,3-Dichloropropene
Concen: 99.248 ug/l
RT: 10.829 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 75 Resp: 46873

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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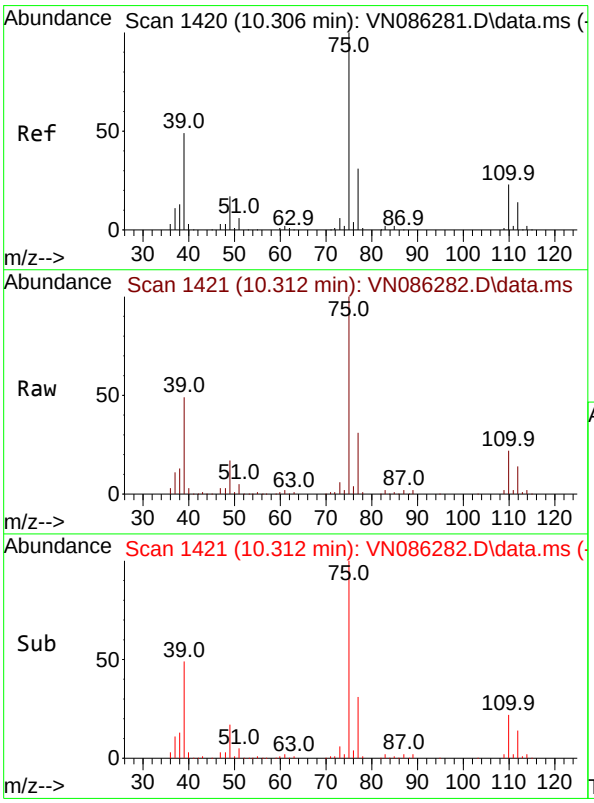
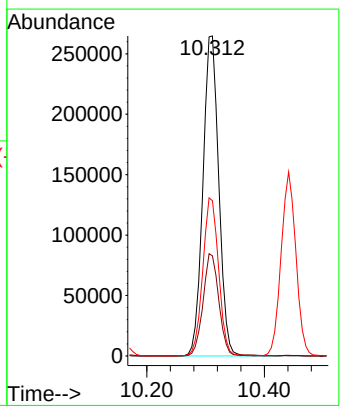
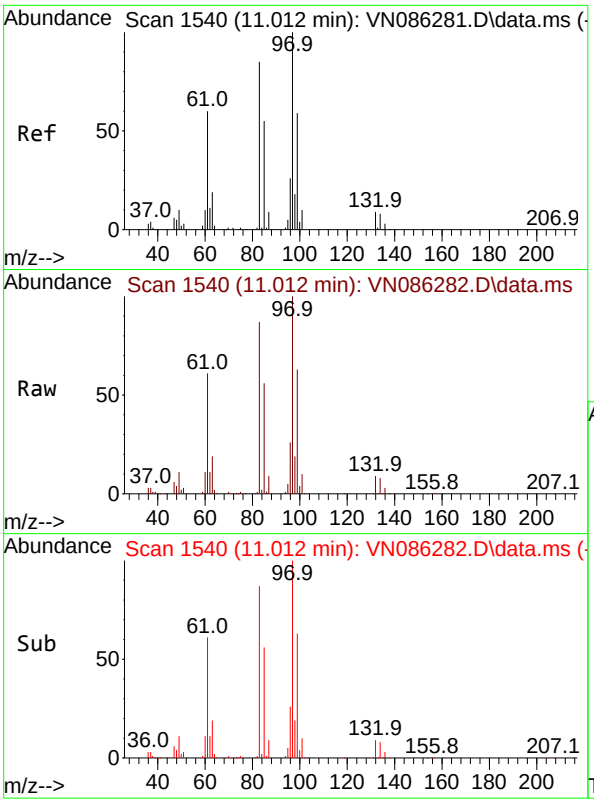


#54
cis-1,3-Dichloropropene
Concen: 95.755 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 75 Resp: 496721

Ion	Ratio	Lower	Upper
75	100		
77	31.3	25.2	37.8
39	48.4	39.3	58.9

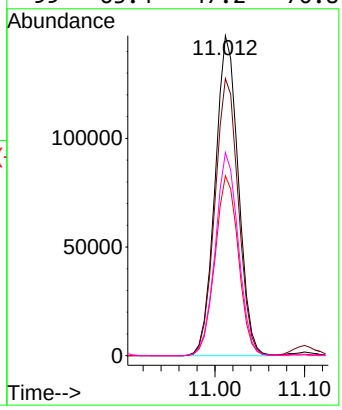




#55
1,1,2-Trichloroethane
Concen: 93.795 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 97 Resp: 26448

Ion	Ratio	Lower	Upper
97	100		
83	86.6	68.4	102.6
85	56.2	43.9	65.9
99	63.4	47.2	70.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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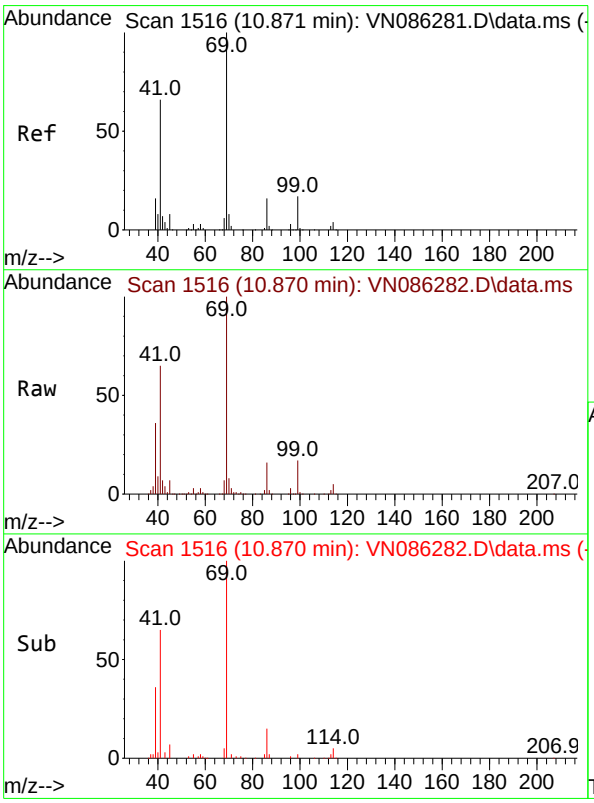
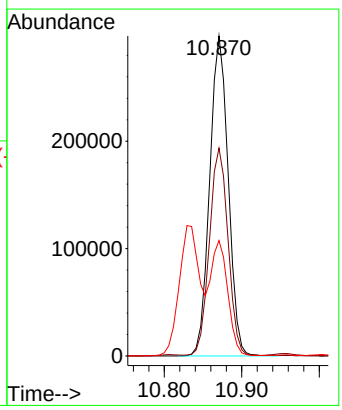
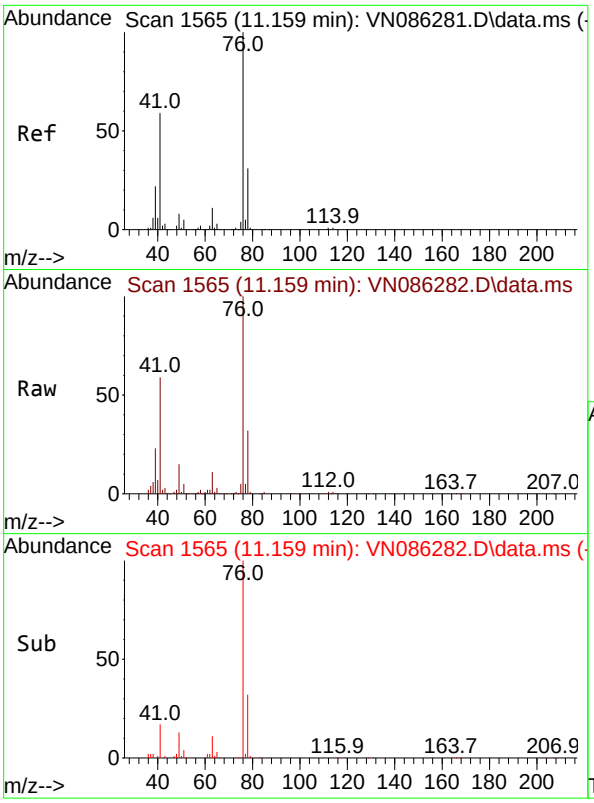


#56
Ethyl methacrylate
Concen: 95.461 ug/l
RT: 10.870 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 69 Resp: 494791

Ion	Ratio	Lower	Upper
69	100		
41	65.0	51.7	77.5
39	33.0	26.3	39.5

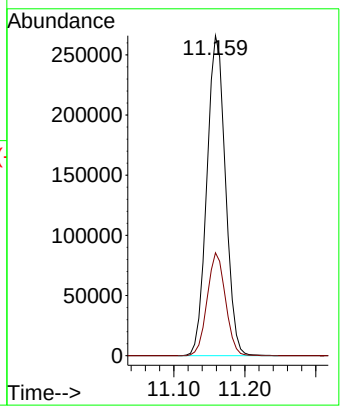




#57
1,3-Dichloropropane
Concen: 96.455 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 76 Resp: 48256

Ion	Ratio	Lower	Upper
76	100		
78	31.6	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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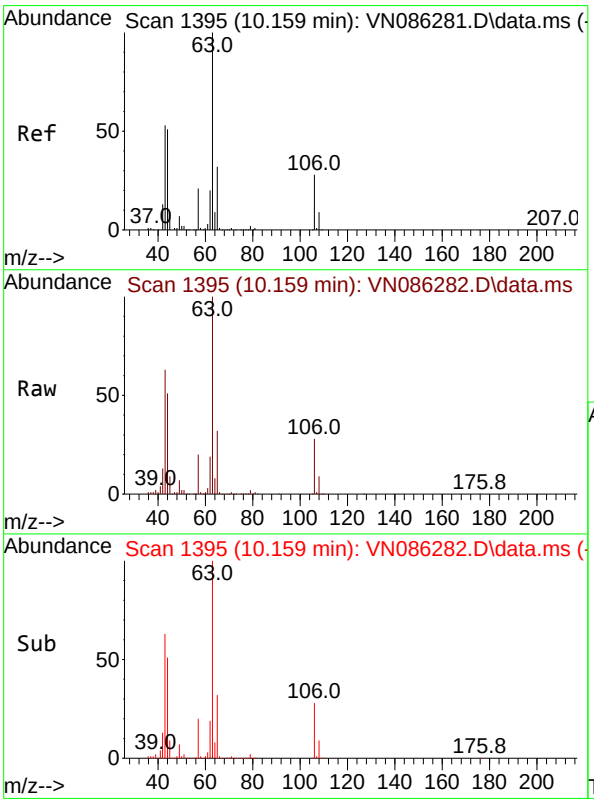
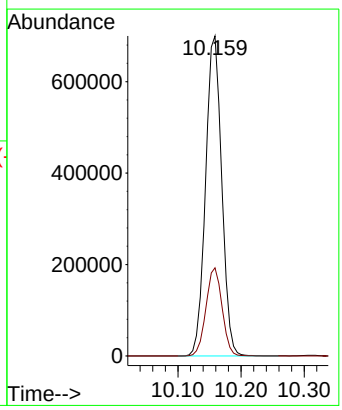
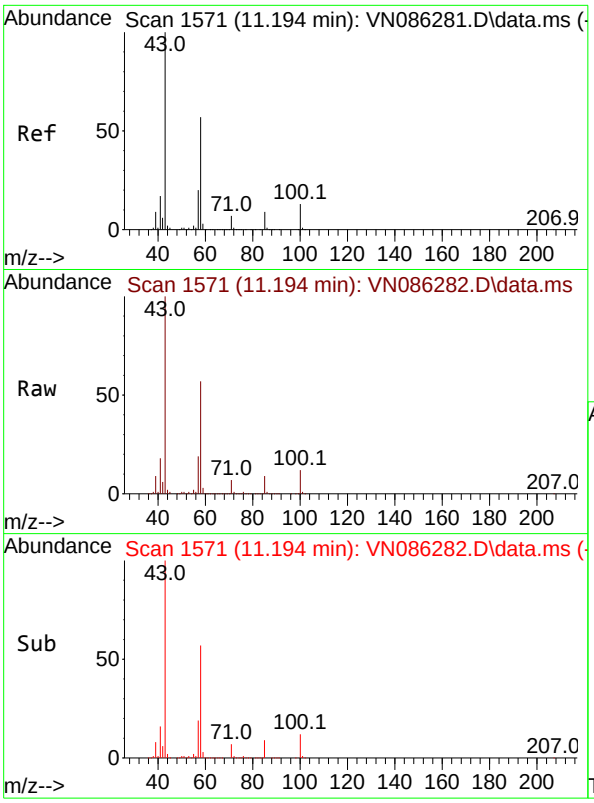


#58
2-Chloroethyl Vinyl ether
Concen: 505.011 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 63 Resp: 1242387

Ion	Ratio	Lower	Upper
63	100		
106	27.4	22.2	33.2





#59
2-Hexanone
Concen: 470.996 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 147647

Ion	Ratio	Lower	Upper
43	100		
58	57.0	28.3	85.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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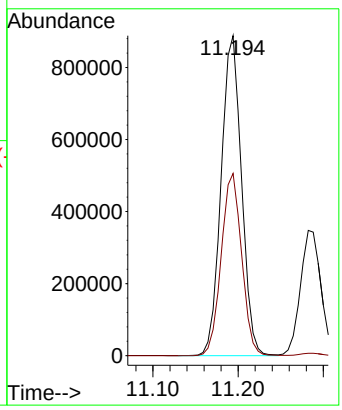
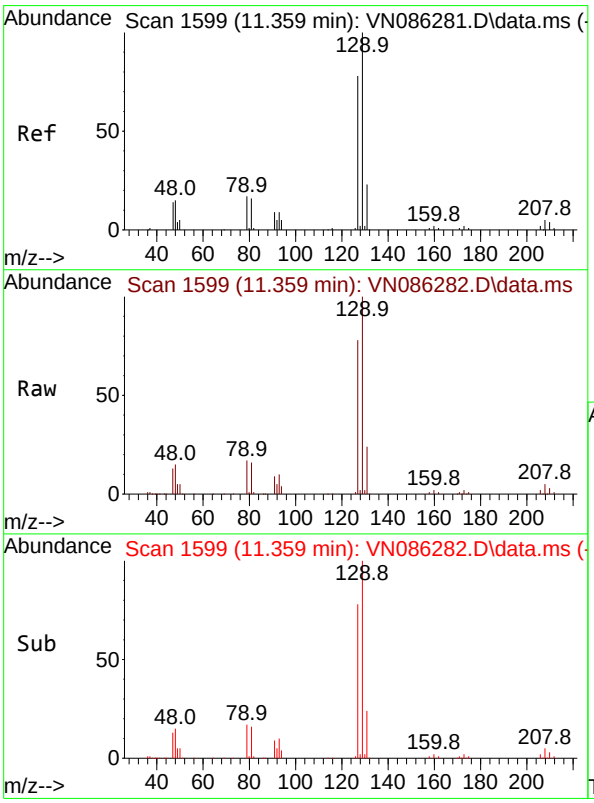
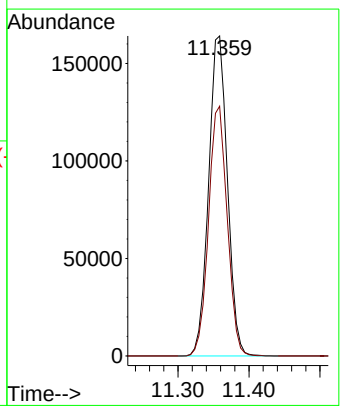


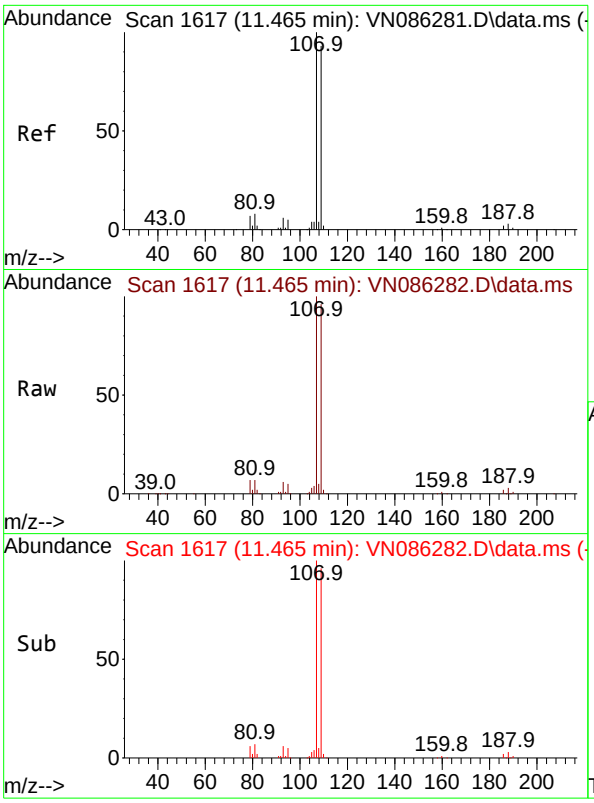


#60
Dibromochloromethane
Concen: 97.371 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:129 Resp: 301498

Ion	Ratio	Lower	Upper
129	100		
127	77.6	38.7	116.1





#61
1,2-Dibromoethane
Concen: 96.156 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:107 Resp: 27358

Ion	Ratio	Lower	Upper
107	100		
109	94.7	75.4	113.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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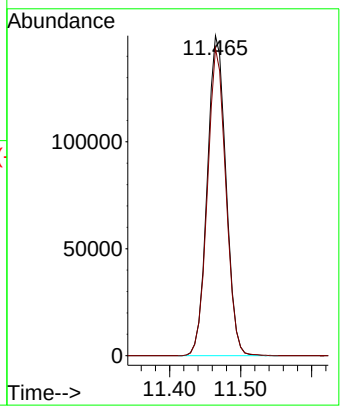
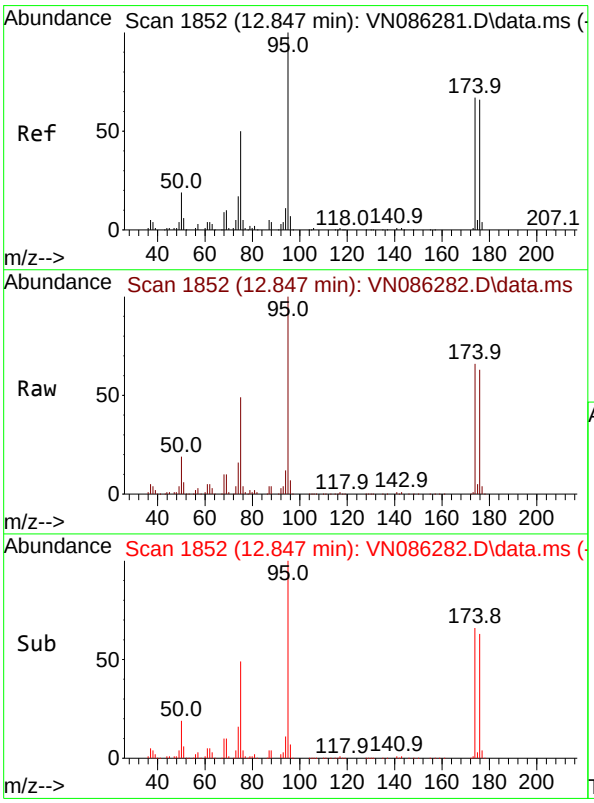
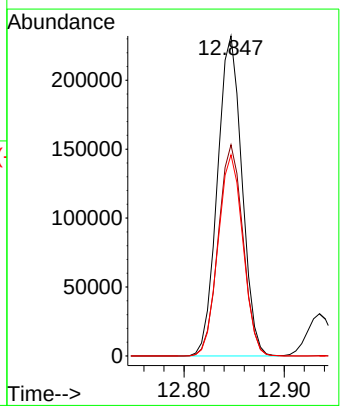


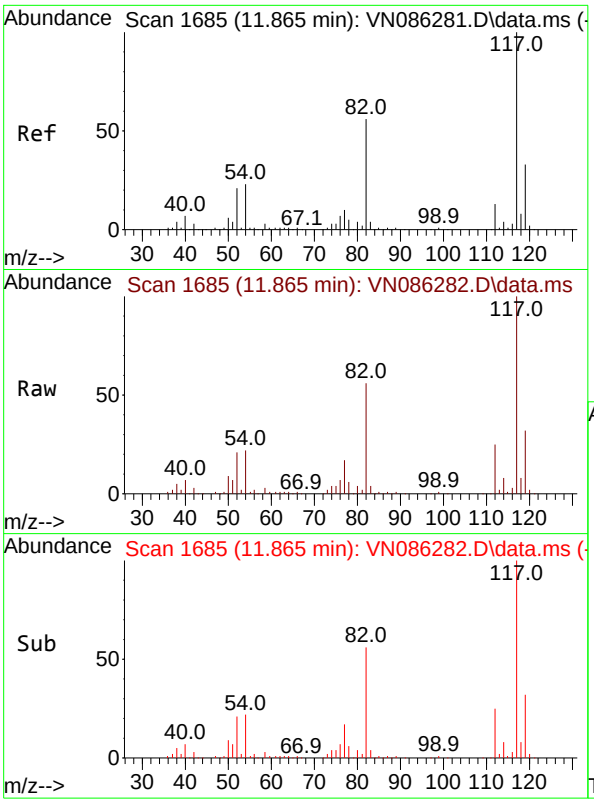


#62
4-Bromofluorobenzene
Concen: 103.153 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 95 Resp: 394671

Ion	Ratio	Lower	Upper
95	100		
174	66.4	0.0	133.4
176	63.6	0.0	129.2

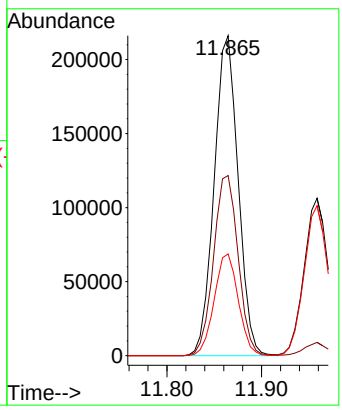




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:117 Resp: 38027

Ion	Ratio	Lower	Upper
117	100		
82	56.3	44.7	67.1
119	31.8	26.4	39.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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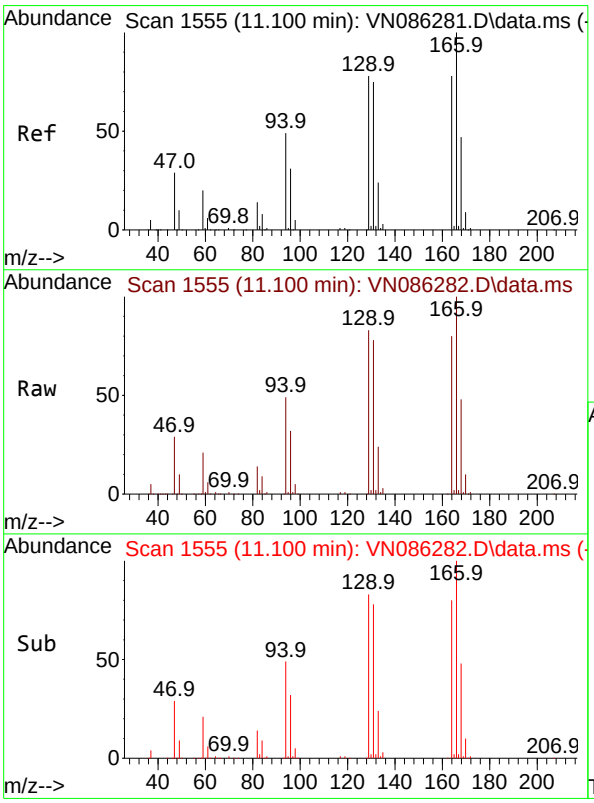
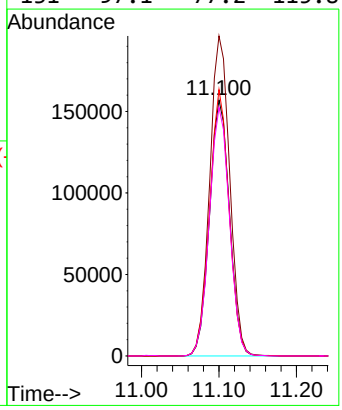
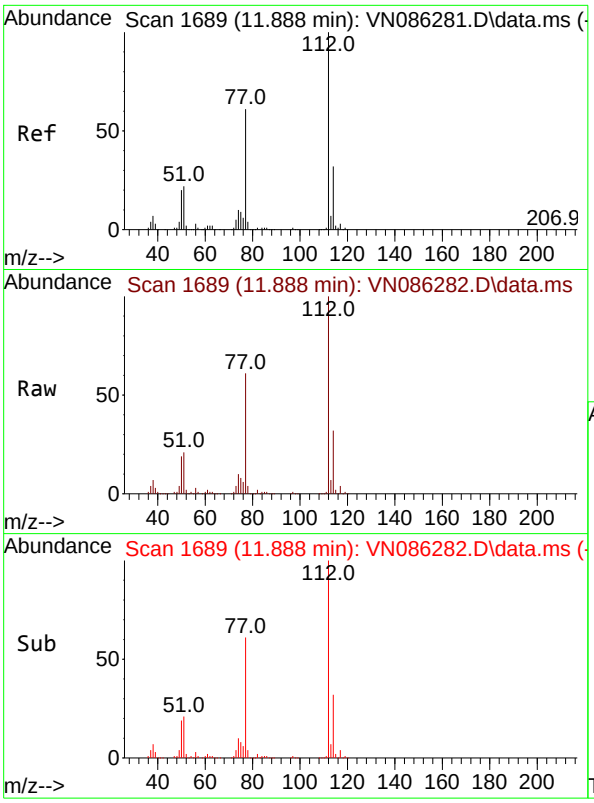


#64
Tetrachloroethene
Concen: 96.294 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:164 Resp: 281669

Ion	Ratio	Lower	Upper
164	100		
166	125.1	103.0	154.4
129	104.1	80.1	120.1
131	97.1	77.2	115.8

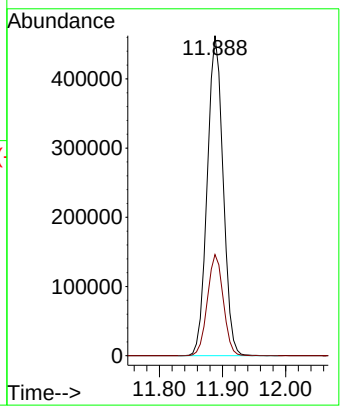




#65
Chlorobenzene
Concen: 94.881 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:112 Resp: 80519

Ion	Ratio	Lower	Upper
112	100		
114	31.6	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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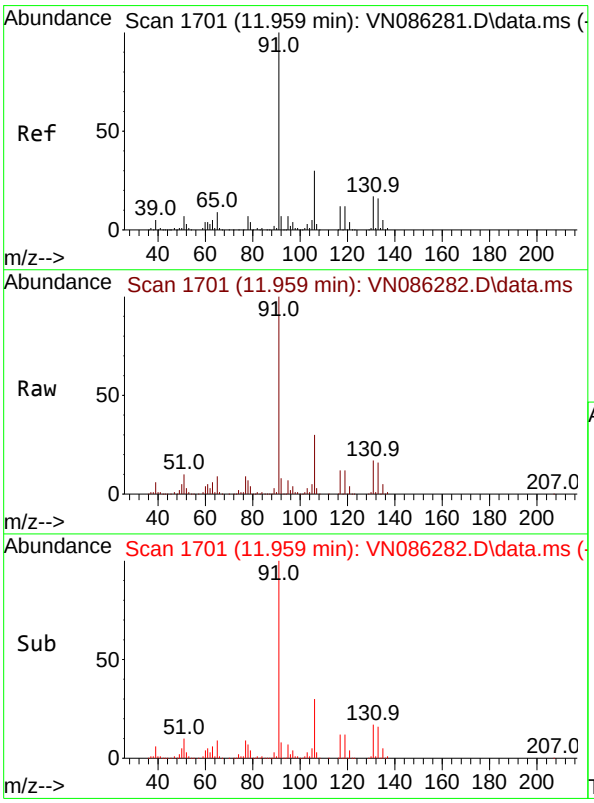
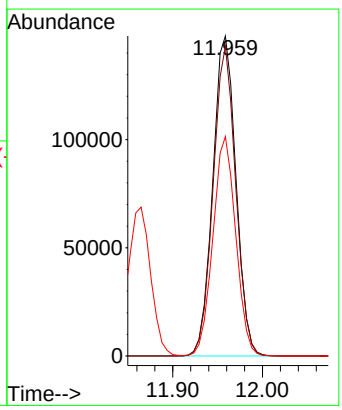
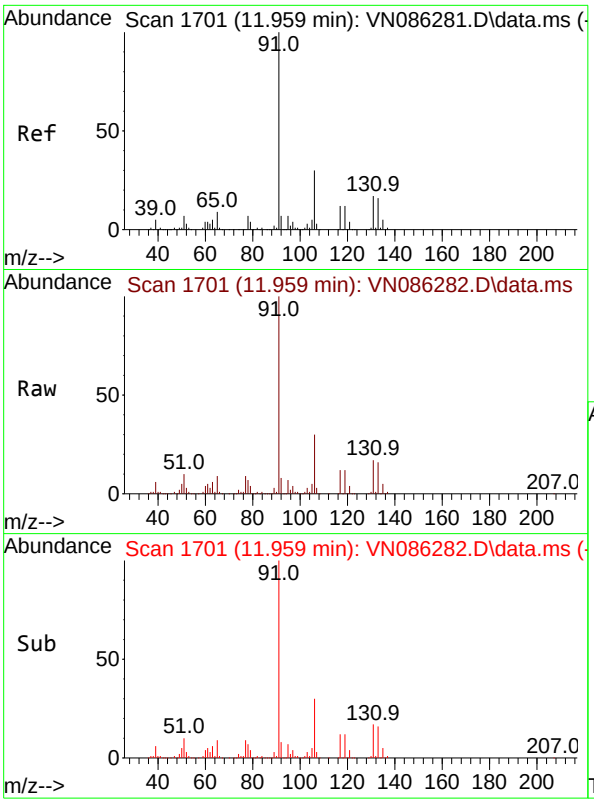


#66
1,1,1,2-Tetrachloroethane
Concen: 94.488 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:131 Resp: 264532

Ion	Ratio	Lower	Upper
131	100		
133	94.6	47.1	141.3
119	67.6	33.8	101.4

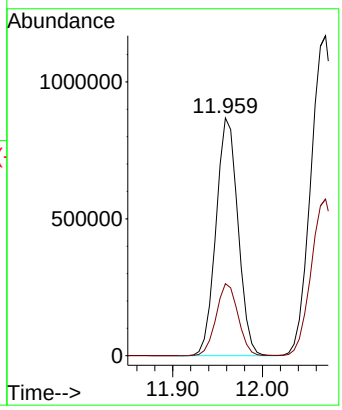




#67
Ethyl Benzene
Concen: 96.398 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 91 Resp: 147623

Ion	Ratio	Lower	Upper
91	100		
106	30.3	24.3	36.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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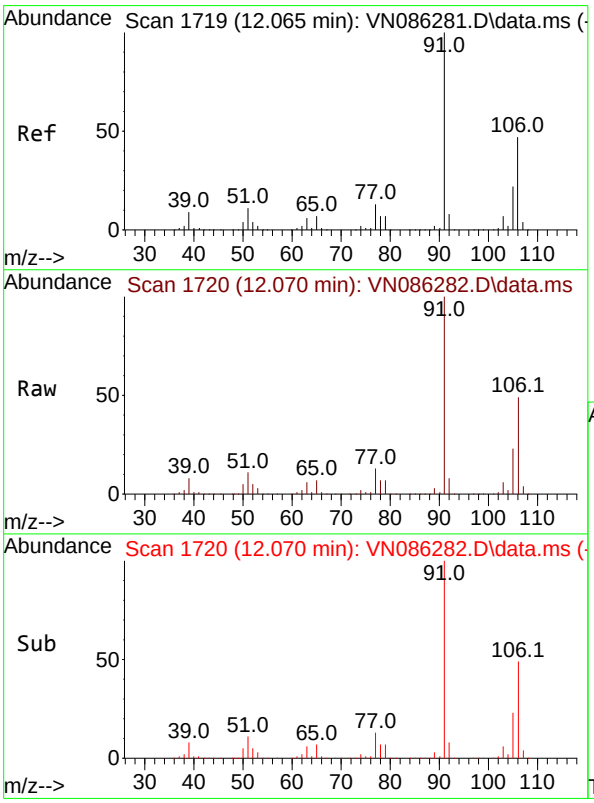
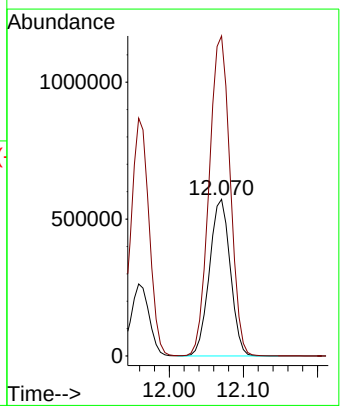
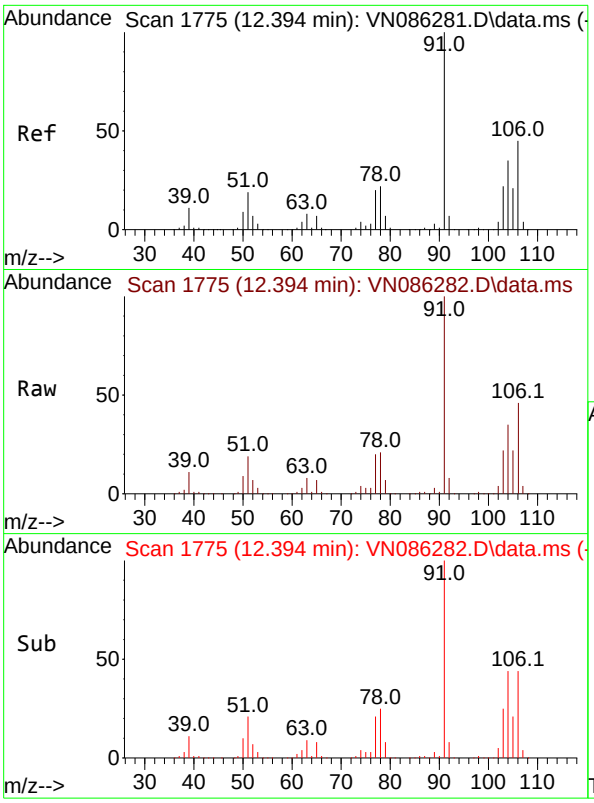


#68
m/p-Xylenes
Concen: 194.681 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:106 Resp: 1117098

Ion	Ratio	Lower	Upper
106	100		
91	205.7	166.5	249.7





#69
o-Xylene
Concen: 96.221 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:106 Resp: 54601

Ion	Ratio	Lower	Upper
106	100		
91	218.3	109.7	329.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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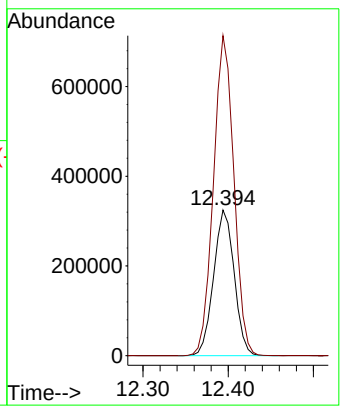
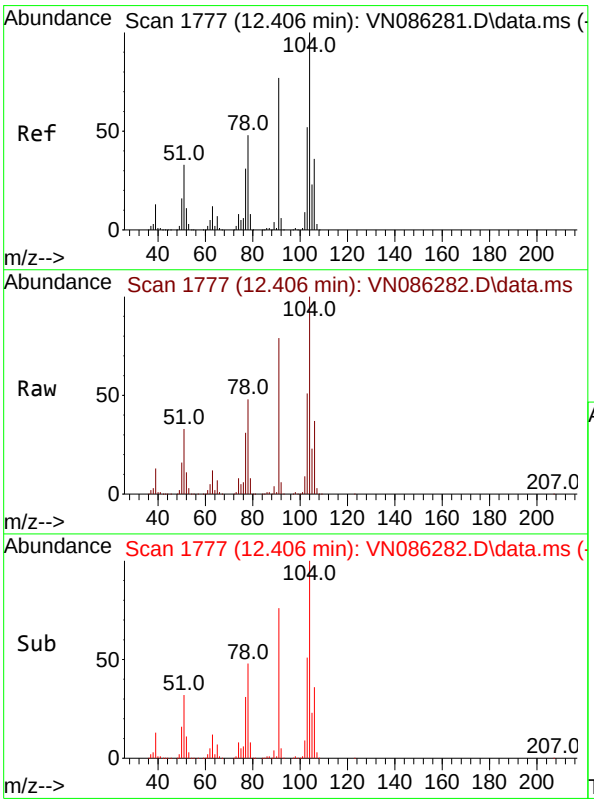
Supervised By :Semsettin Yesilyurt 04/16/2025

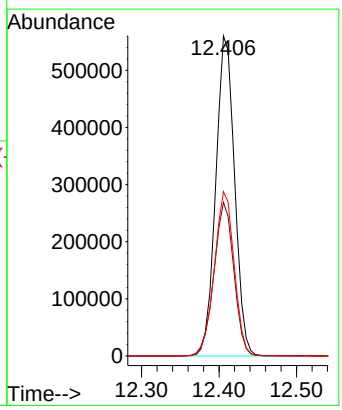


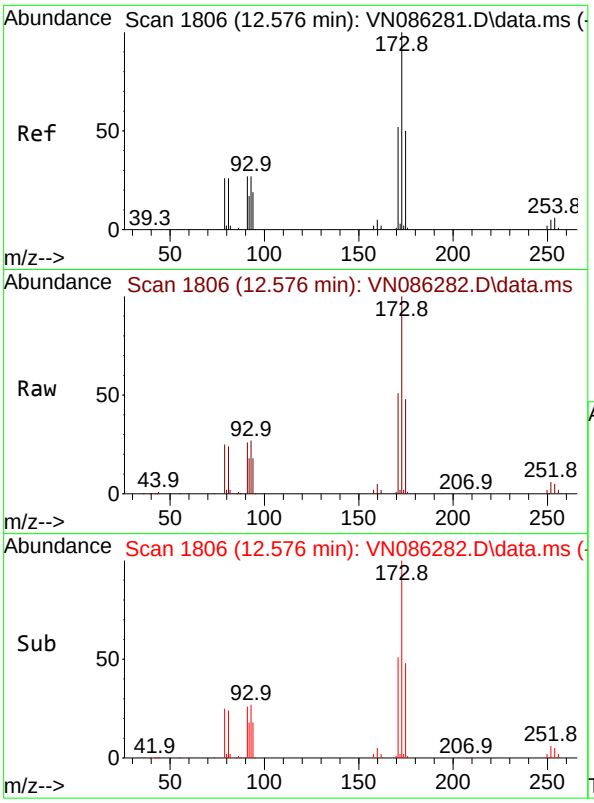


#70
Styrene
Concen: 100.188 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:104 Resp: 947293

Ion	Ratio	Lower	Upper
104	100		
78	50.7	40.6	61.0
103	54.0	43.6	65.4

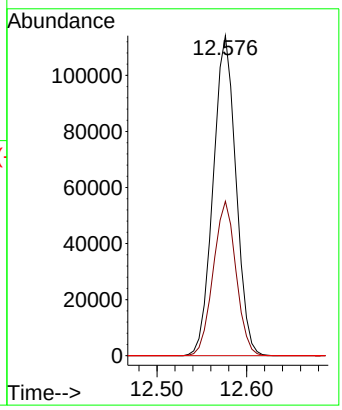




#71
Bromoform
Concen: 95.410 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:173 Resp: 20111

Ion	Ratio	Lower	Upper
173	100		
175	48.1	24.6	73.6
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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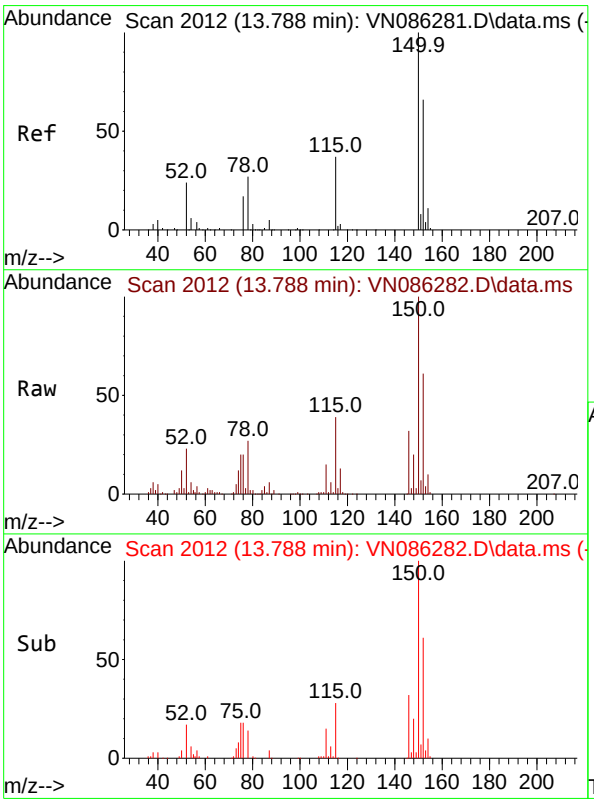
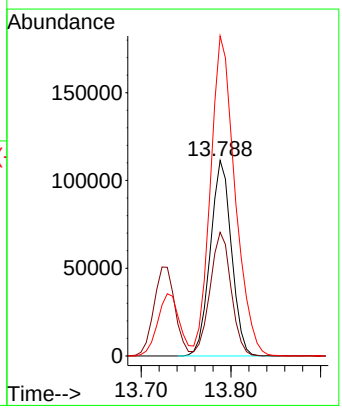
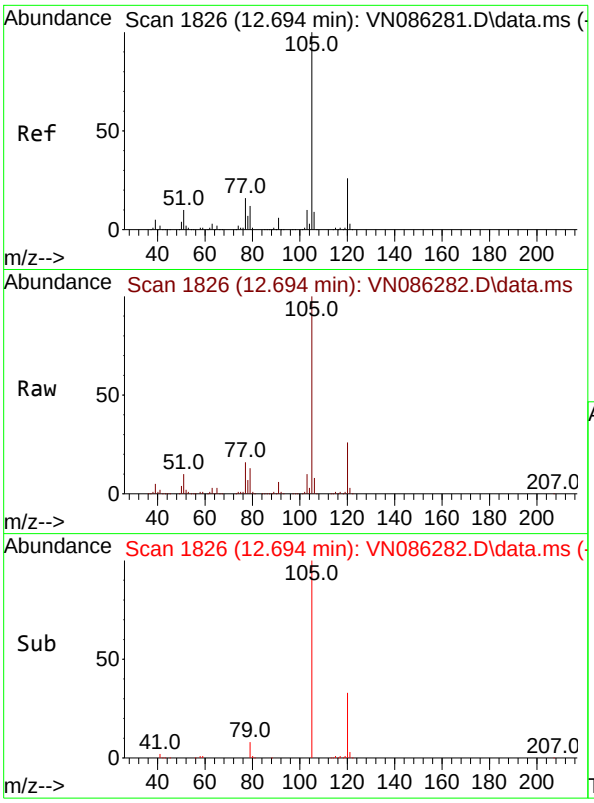


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:152 Resp: 182297

Ion	Ratio	Lower	Upper
152	100		
115	62.7	31.9	95.9
150	189.5	0.0	352.0

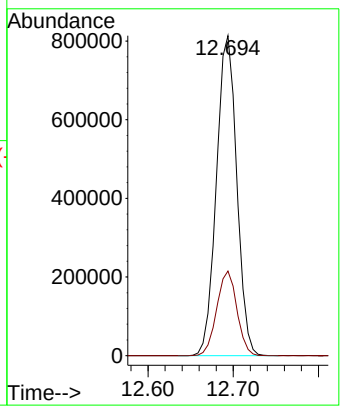




#73
Isopropylbenzene
Concen: 90.597 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:105 Resp: 135100

Ion	Ratio	Lower	Upper
105	100		
120	26.2	13.1	39.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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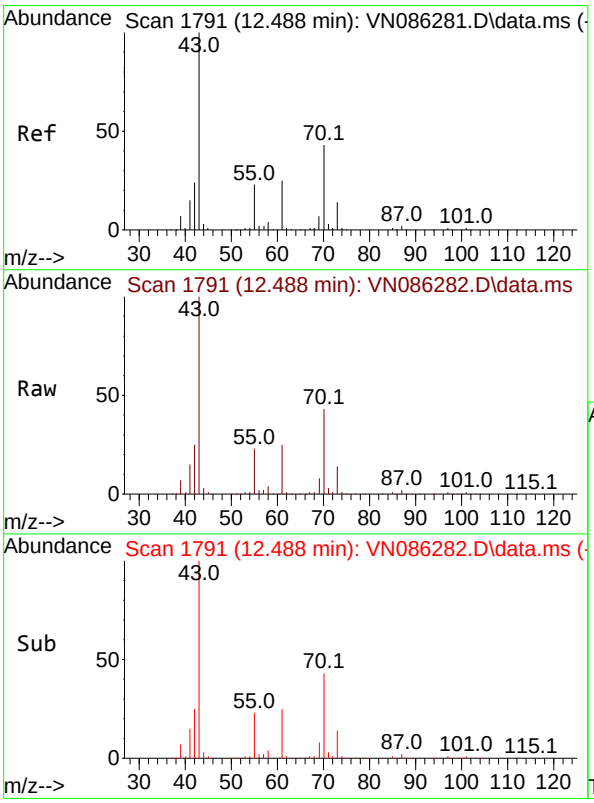
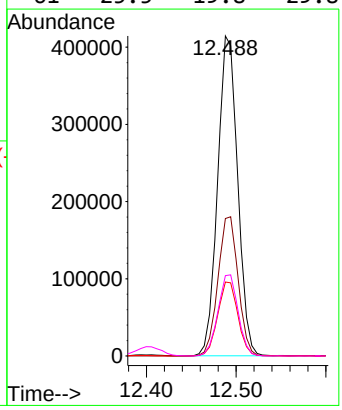
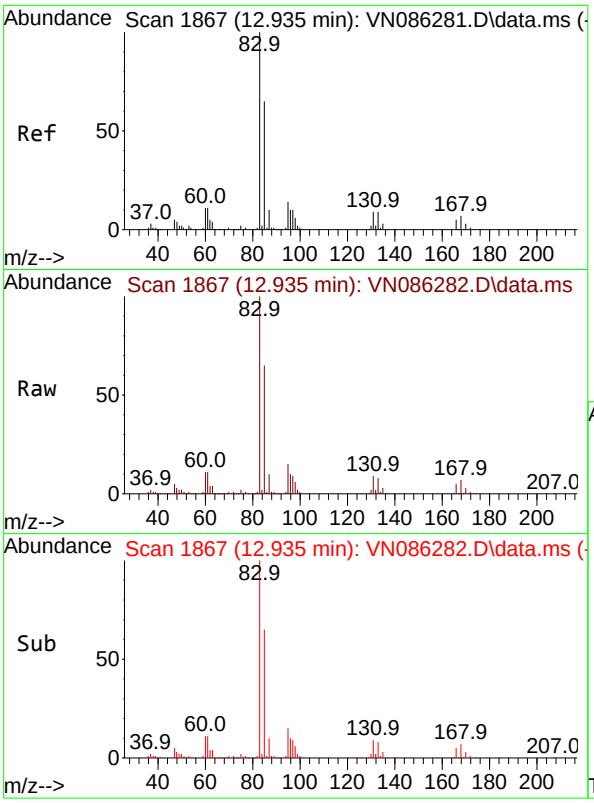


#74
N-amyl acetate
Concen: 86.431 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 641647

Ion	Ratio	Lower	Upper
43	100		
70	43.9	35.0	52.4
55	23.4	19.0	28.4
61	25.5	19.8	29.8





#75
1,1,2,2-Tetrachloroethane
Concen: 83.793 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 83 Resp: 35927

Ion	Ratio	Lower	Upper
83	100		
131	9.3	4.7	14.1
85	64.5	32.7	98.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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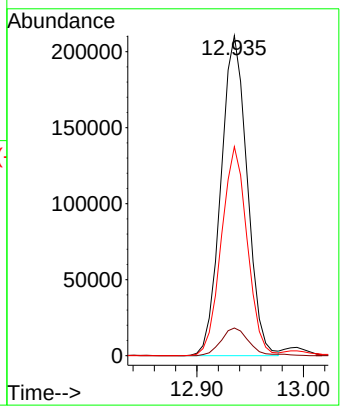
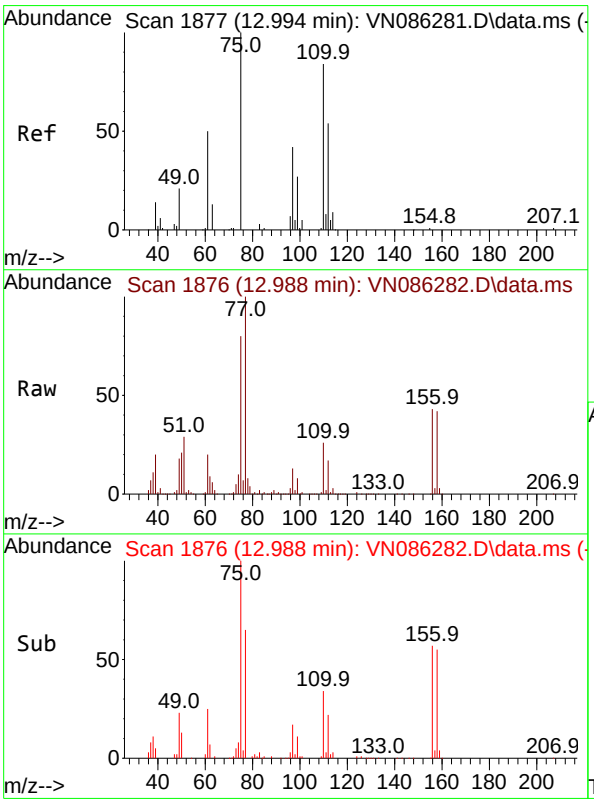
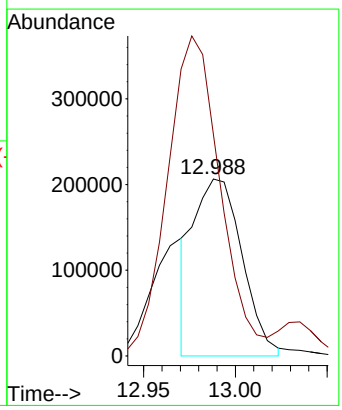


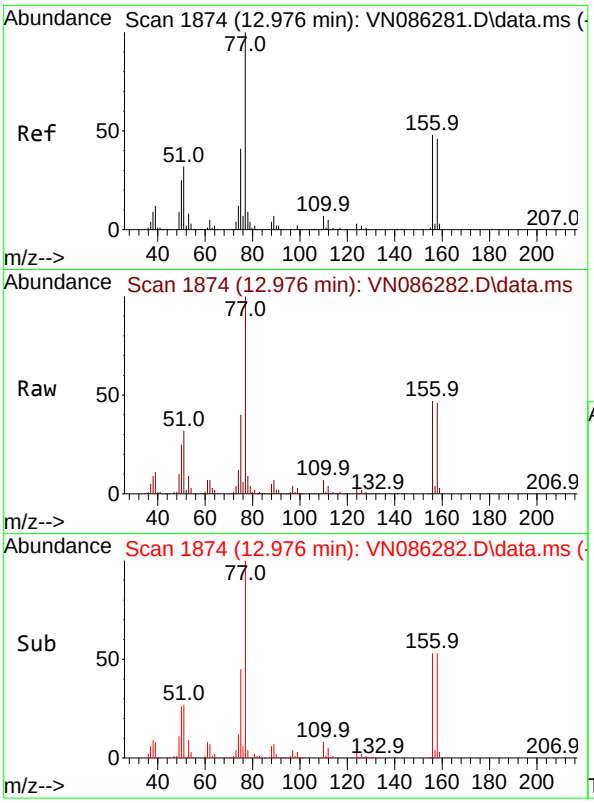


#76
1,2,3-Trichloropropane
Concen: 88.555 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 75 Resp: 379247

Ion	Ratio	Lower	Upper
75	100		
77	198.0	98.8	296.4





#77
Bromobenzene
Concen: 91.913 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:156 Resp: 30369

Ion	Ratio	Lower	Upper
156	100		
77	247.3	121.1	363.1
158	96.6	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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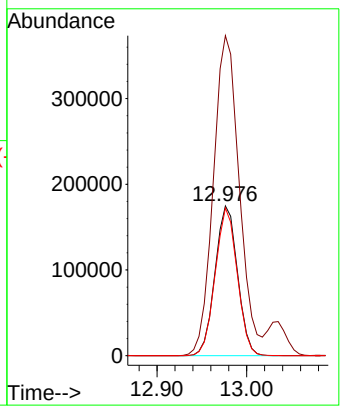
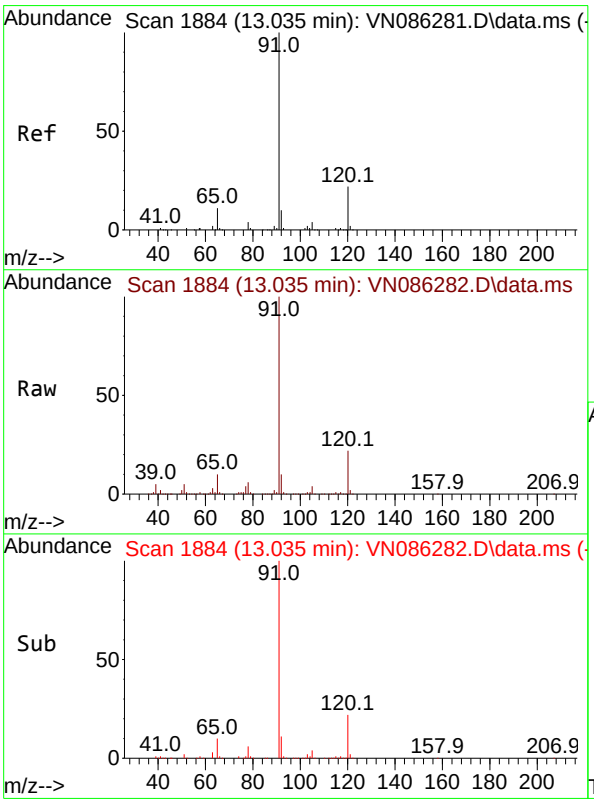
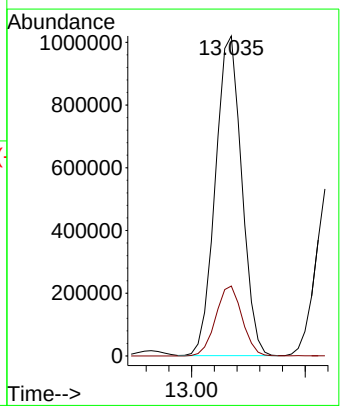


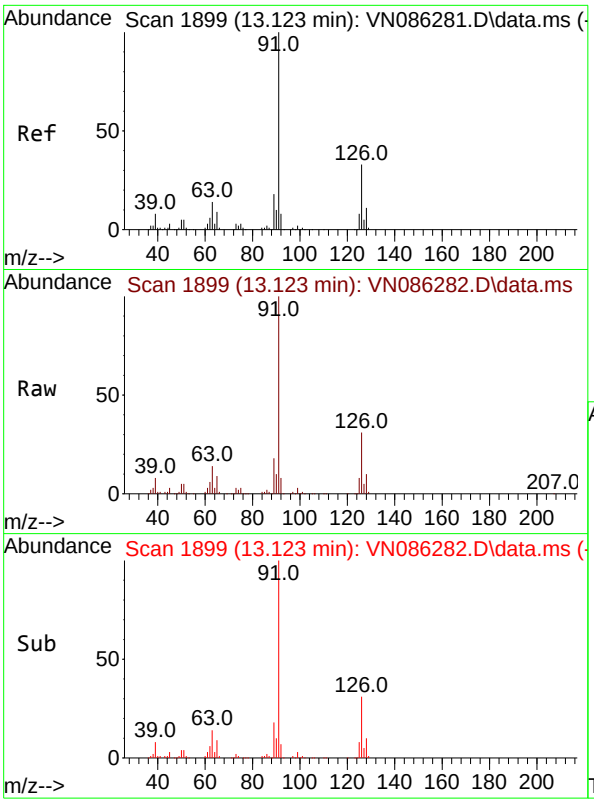


#78
n-propylbenzene
Concen: 93.386 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 91 Resp: 1640989

Ion	Ratio	Lower	Upper
91	100		
120	21.9	11.1	33.3

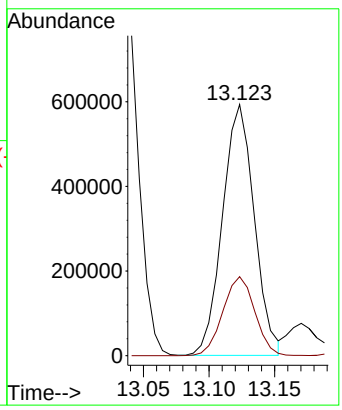




#79
2-Chlorotoluene
Concen: 91.031 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 91 Resp: 100094

Ion	Ratio	Lower	Upper
91	100		
126	31.7	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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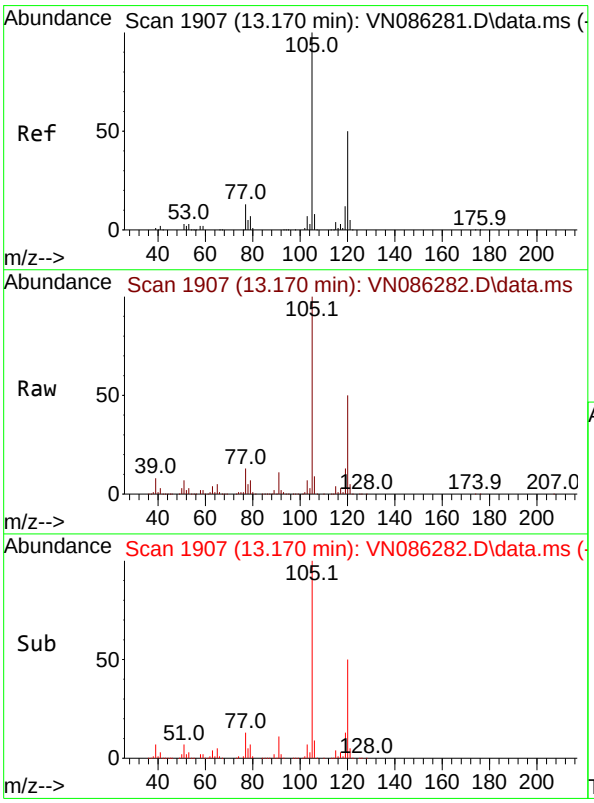
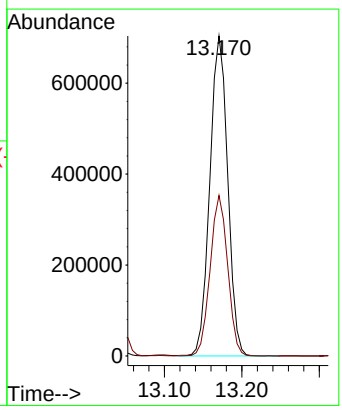
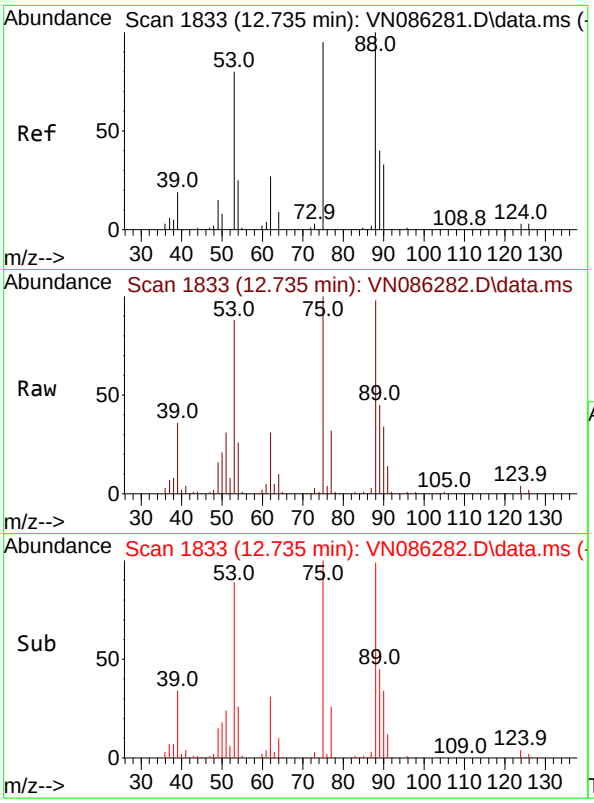


#80
1,3,5-Trimethylbenzene
Concen: 92.254 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:105 Resp: 1125981

Ion	Ratio	Lower	Upper
105	100		
120	49.3	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 98.197 ug/l m
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 75 Resp: 17588

Ion	Ratio	Lower	Upper
75	100		
53	96.2	79.2	118.8
89	42.8	35.7	53.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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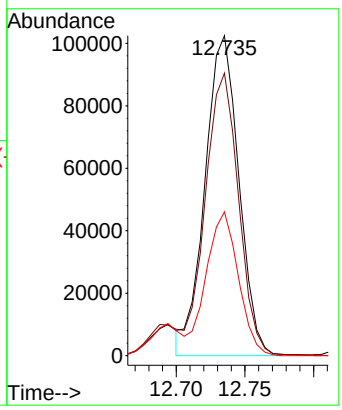
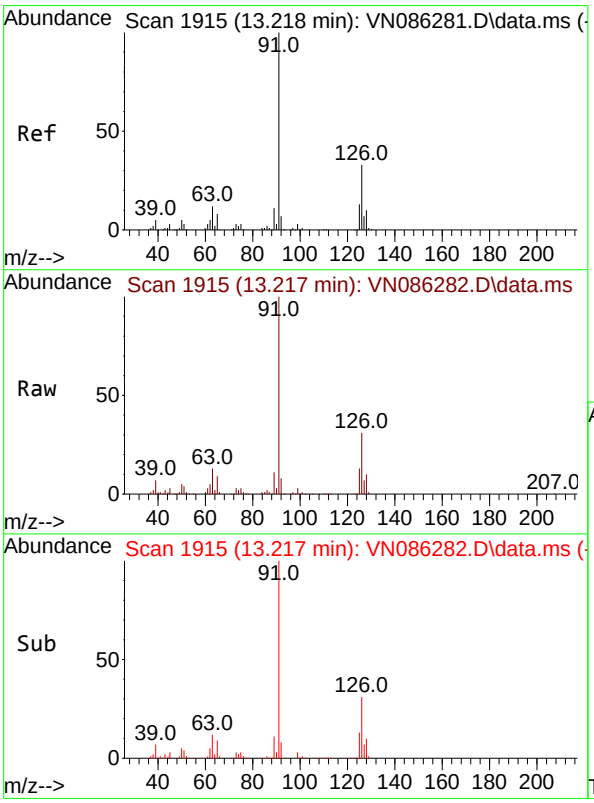
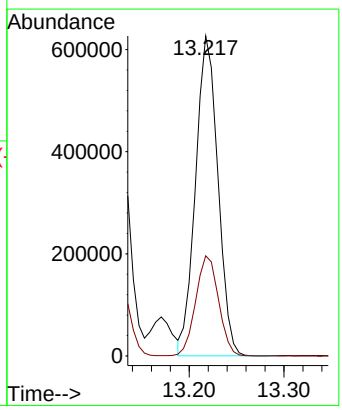


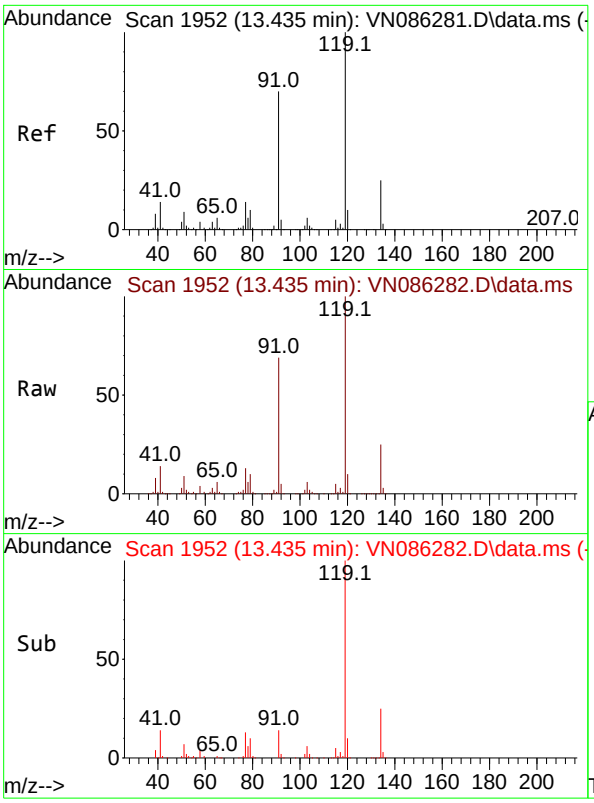


#82
4-Chlorotoluene
Concen: 93.852 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 91 Resp: 1025113

Ion	Ratio	Lower	Upper
91	100		
126	32.1	16.2	48.6

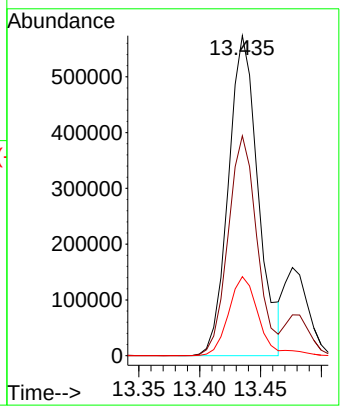




#83
tert-Butylbenzene
Concen: 92.219 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:119 Resp: 97526

Ion	Ratio	Lower	Upper
119	100		
91	66.8	34.4	103.3
134	25.1	13.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
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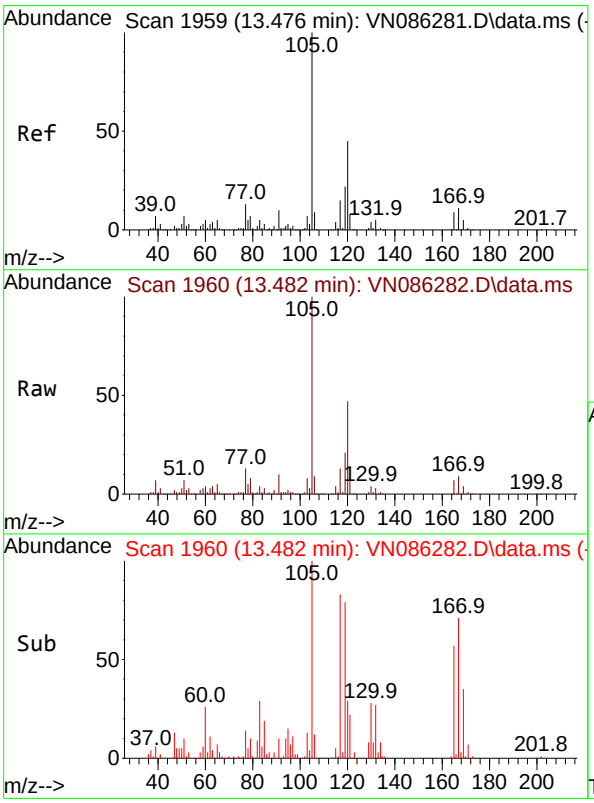
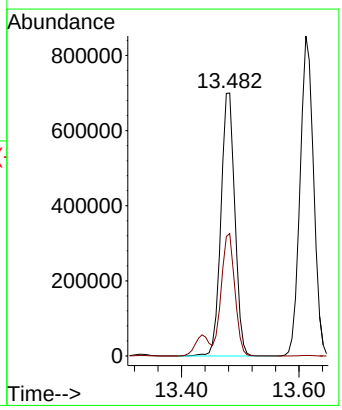
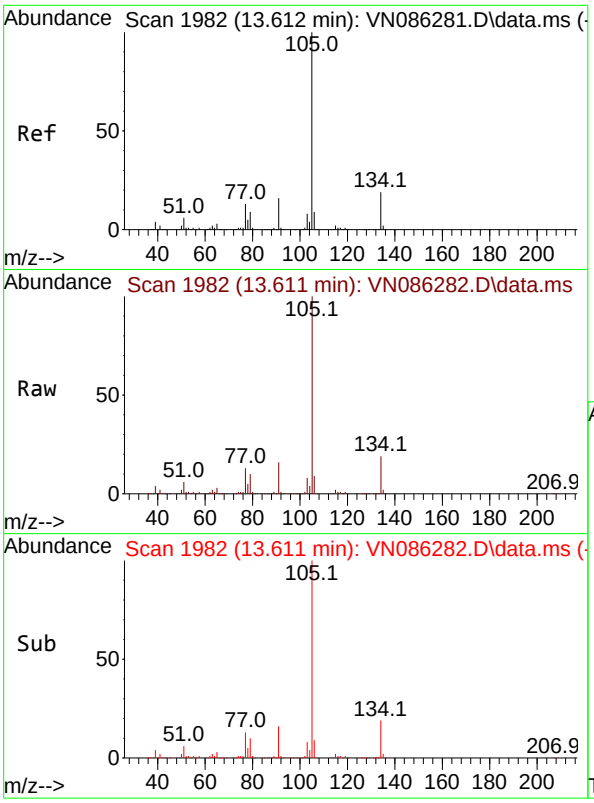


#84
1,2,4-Trimethylbenzene
Concen: 92.628 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:105 Resp: 1150791

Ion	Ratio	Lower	Upper
105	100		
120	45.2	22.4	67.3

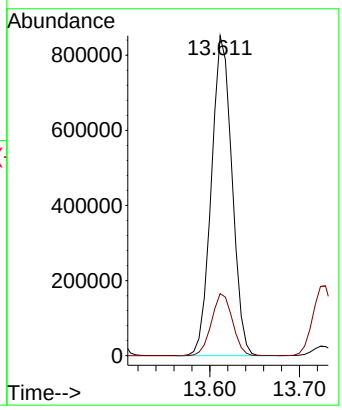




#85
sec-Butylbenzene
Concen: 92.684 ug/l
RT: 13.611 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:105 Resp: 135958

Ion	Ratio	Lower	Upper
105	100		
134	19.7	9.7	29.1



Instrument :
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ClientSampleId :
VSTDICC100

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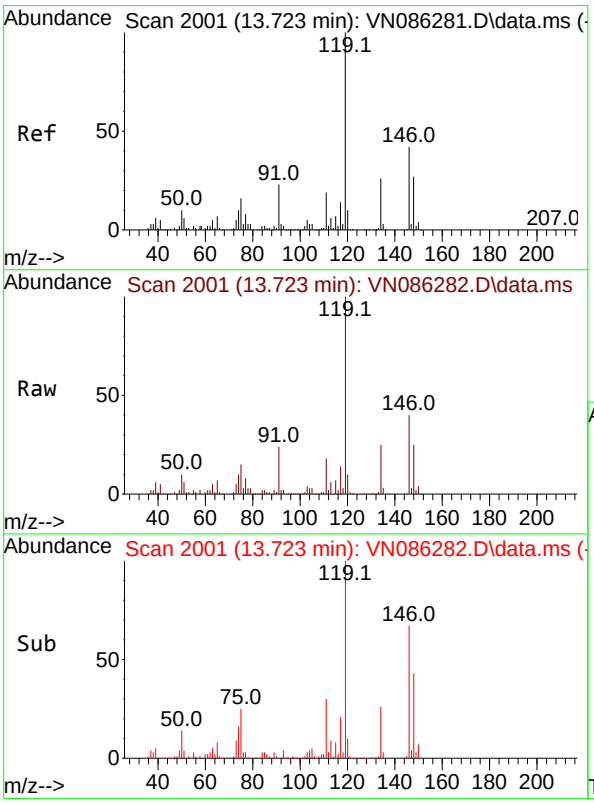
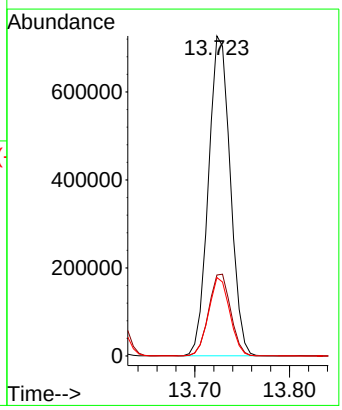
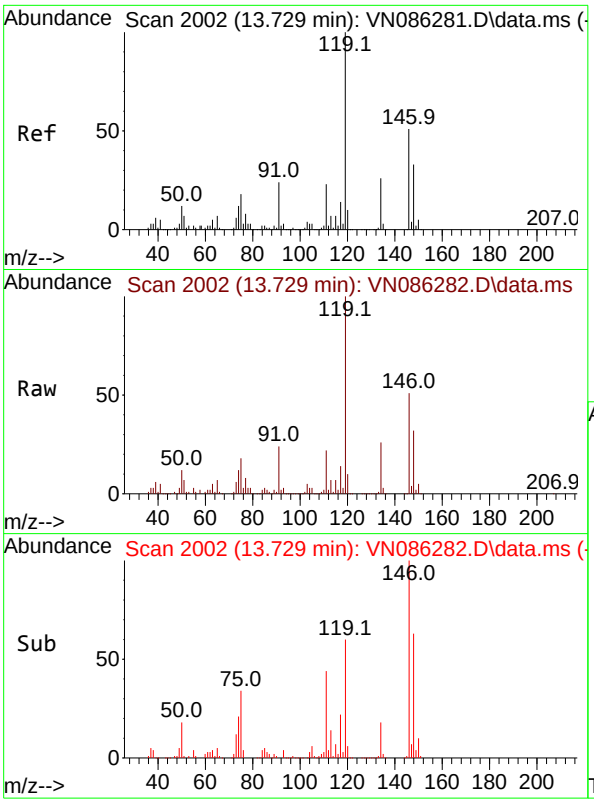


#86
p-Isopropyltoluene
Concen: 96.040 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:119 Resp: 1161224

Ion	Ratio	Lower	Upper
119	100		
134	25.8	13.1	39.1
91	23.8	11.9	35.9

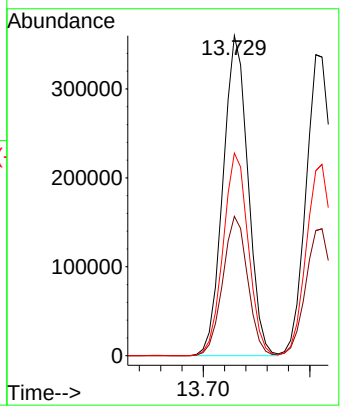




#87
1,3-Dichlorobenzene
Concen: 94.402 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:146 Resp: 58636

Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.9	65.7
148	63.6	31.9	95.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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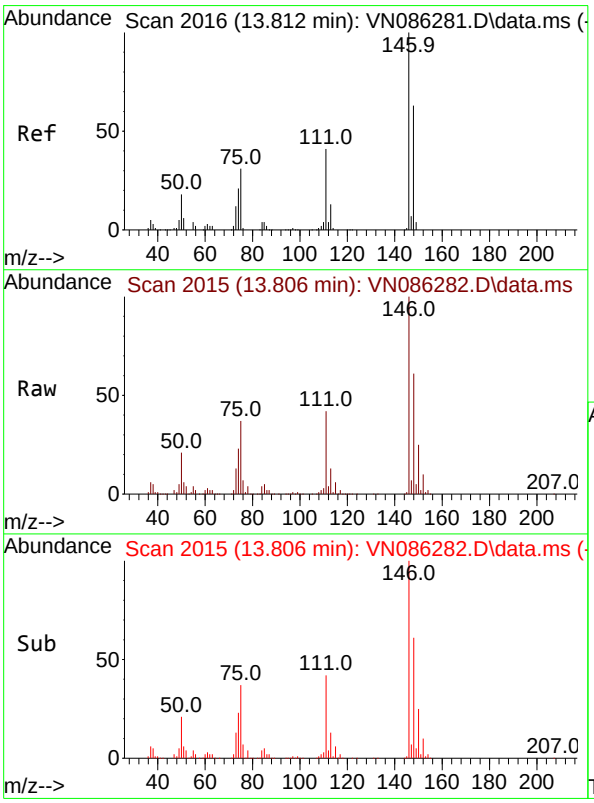
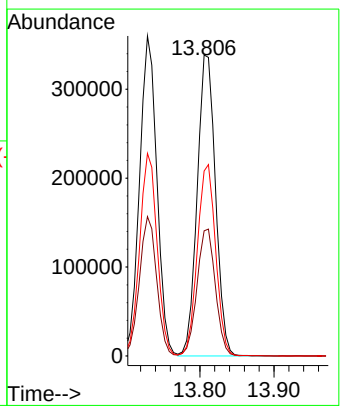
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

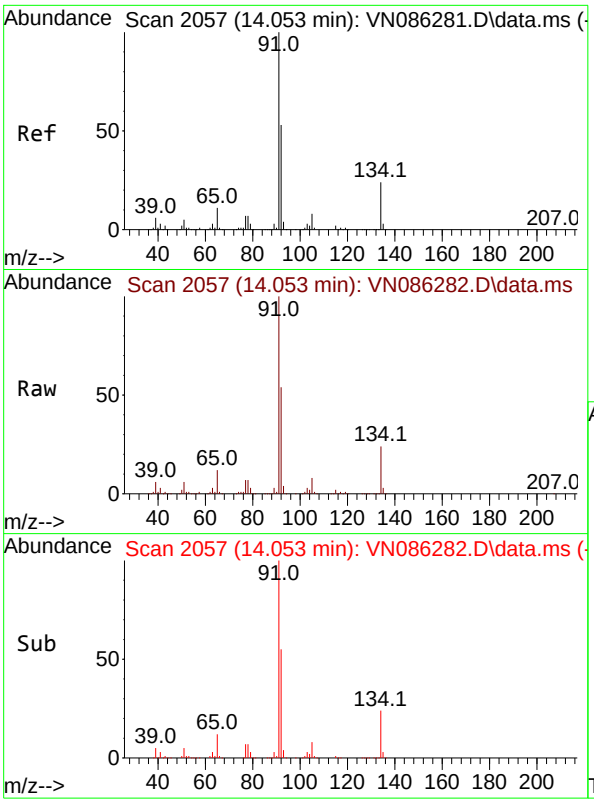


#88
1,4-Dichlorobenzene
Concen: 93.077 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:146 Resp: 582329

Ion	Ratio	Lower	Upper
146	100		
111	42.5	21.3	63.9
148	63.5	31.9	95.9

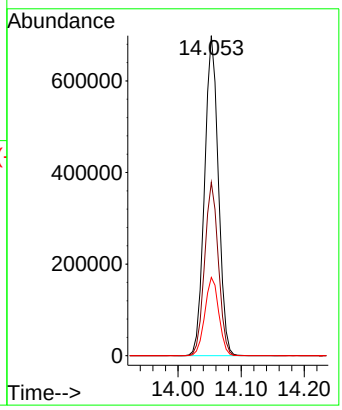




#89
n-Butylbenzene
Concen: 99.009 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 91 Resp: 106109

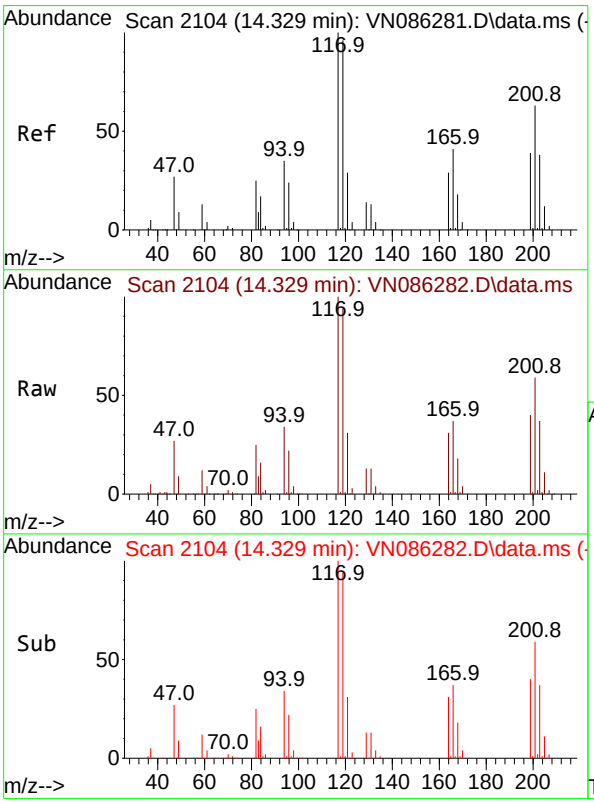
Ion	Ratio	Lower	Upper
91	100		
92	53.9	26.8	80.4
134	24.7	12.2	36.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

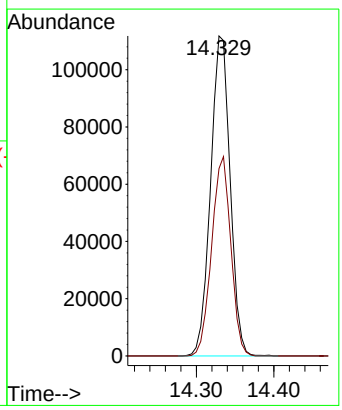
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

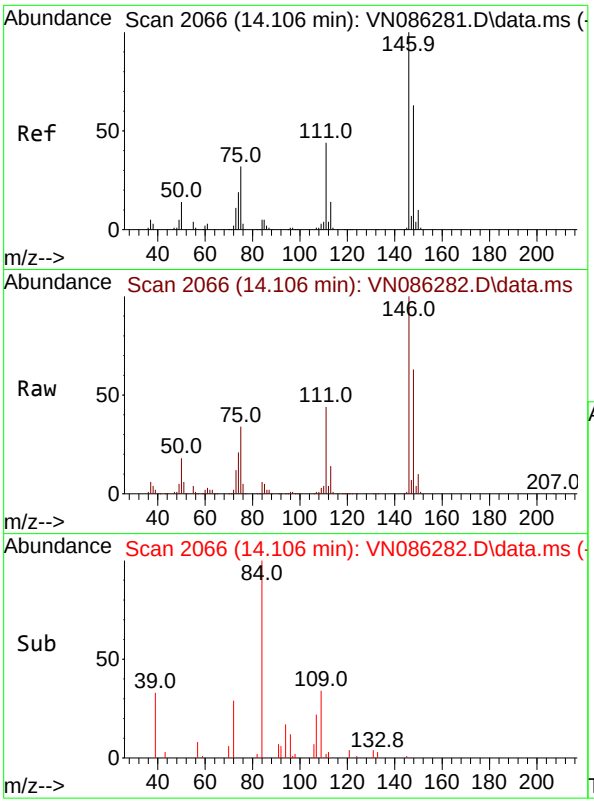


#90
Hexachloroethane
Concen: 96.516 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:117 Resp: 196292

Ion	Ratio	Lower	Upper
117	100		
201	61.2	31.4	94.2

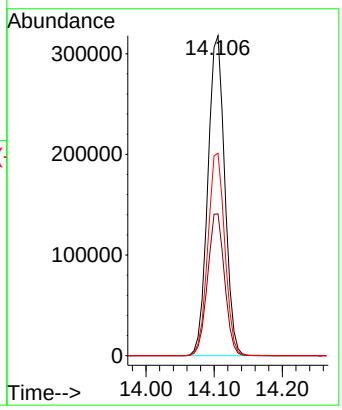




#91
1,2-Dichlorobenzene
Concen: 90.920 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:146 Resp: 54752

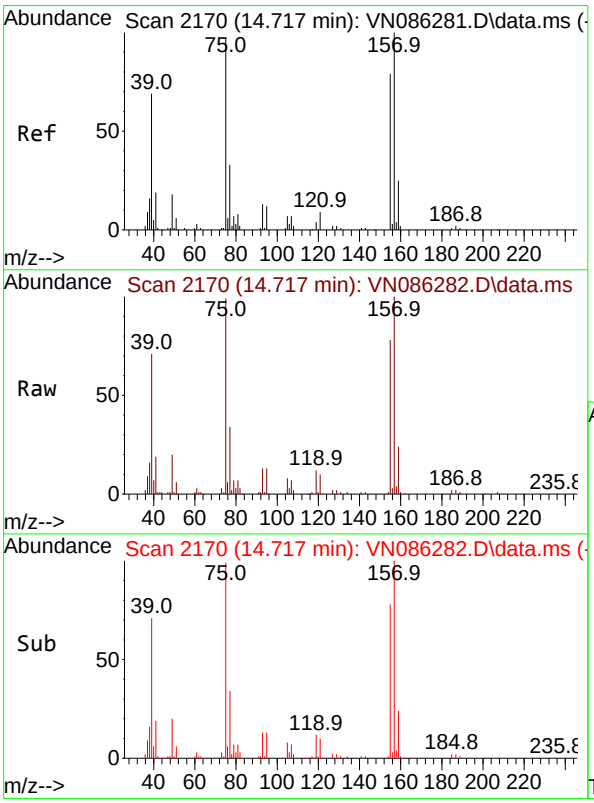
Ion	Ratio	Lower	Upper
146	100		
111	44.6	22.4	67.0
148	63.6	31.8	95.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

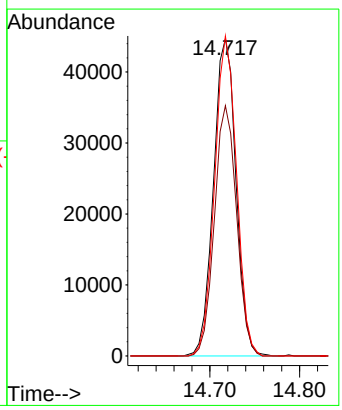
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

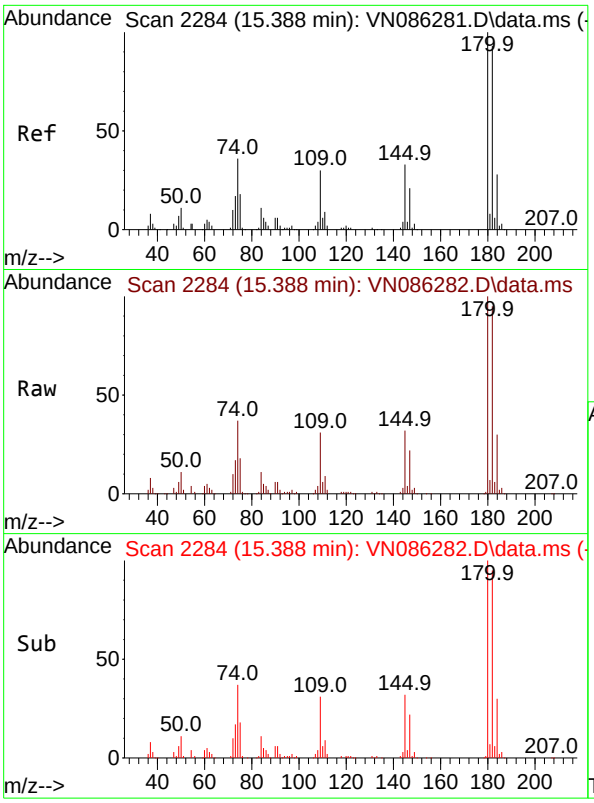


#92
1,2-Dibromo-3-Chloropropane
Concen: 89.984 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 75 Resp: 77795

Ion	Ratio	Lower	Upper
75	100		
155	77.9	40.3	120.9
157	98.1	49.0	147.2





#93
1,2,4-Trichlorobenzene
Concen: 97.461 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

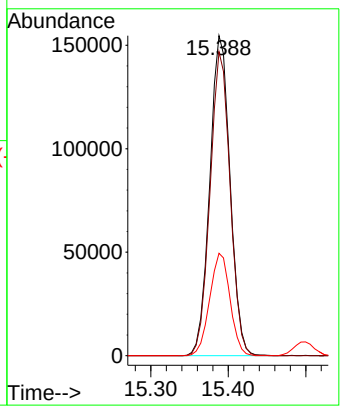
Tgt Ion:180 Resp: 28104

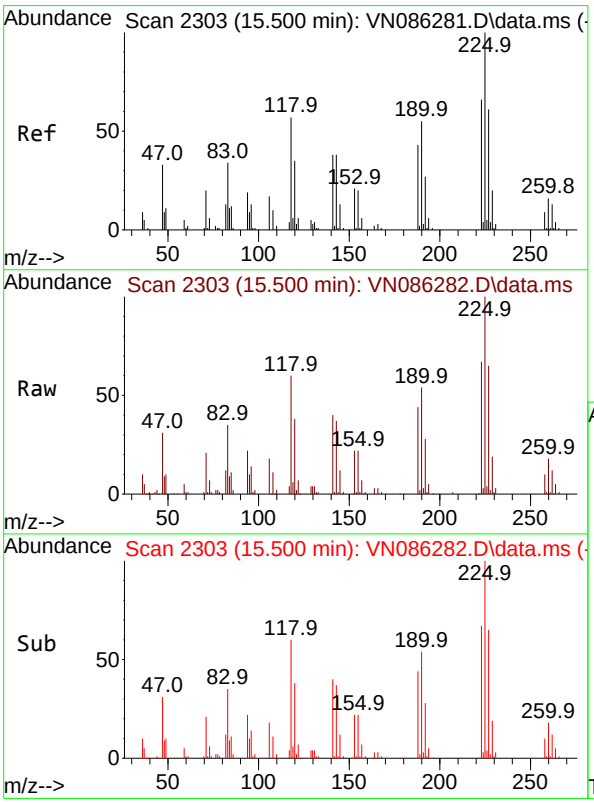
Ion	Ratio	Lower	Upper
180	100		
182	93.8	47.0	141.0
145	32.1	16.4	49.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

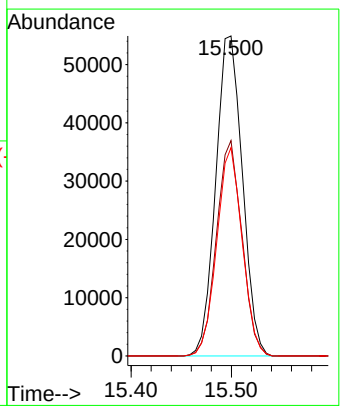


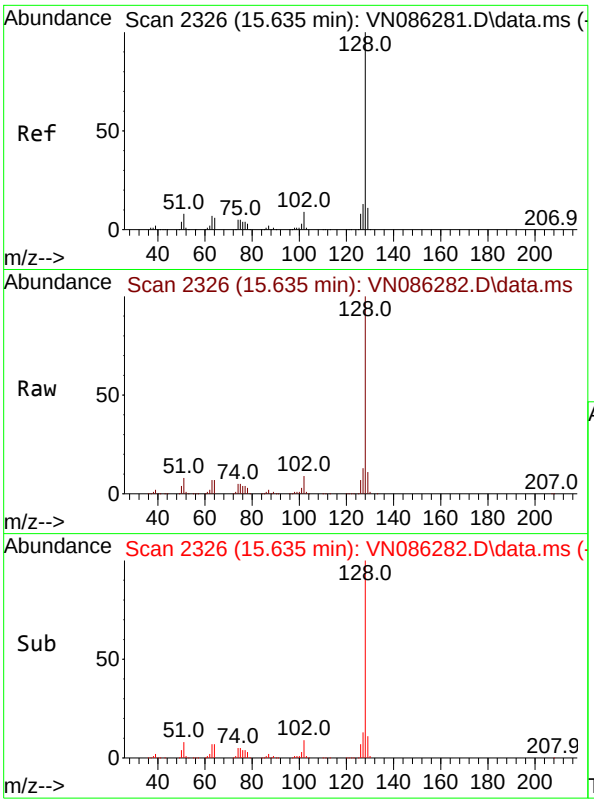


#94
Hexachlorobutadiene
Concen: 93.251 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:225 Resp: 101506

Ion	Ratio	Lower	Upper
225	100		
223	64.2	32.8	98.3
227	62.0	31.4	94.0

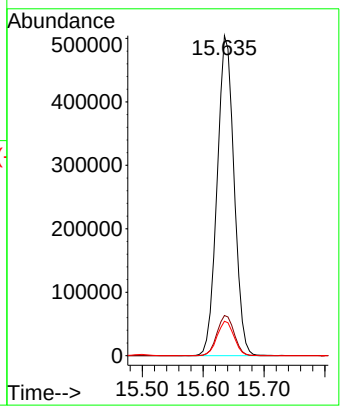




#95
Naphthalene
Concen: 95.390 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:128 Resp: 97507

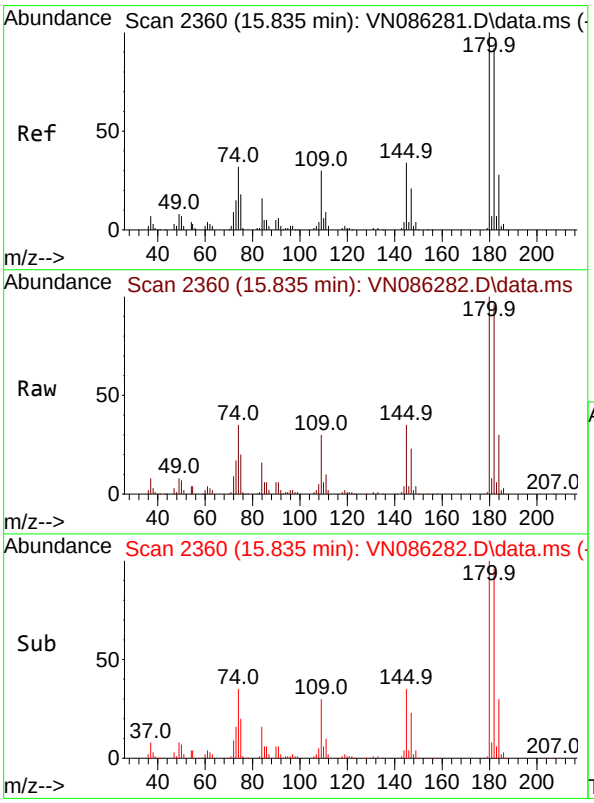
Ion	Ratio	Lower	Upper
128	100		
127	12.7	10.2	15.4
129	10.8	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

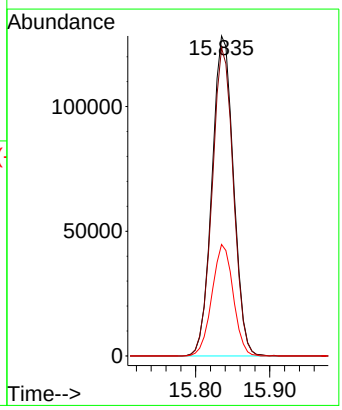
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025



#96
1,2,3-Trichlorobenzene
Concen: 94.712 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN086282.D
Acq: 15 Apr 2025 14:29

Tgt Ion:180 Resp: 258567

Ion	Ratio	Lower	Upper
180	100		
182	95.2	47.3	142.0
145	34.4	17.2	51.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	232806	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	435528	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	384601	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	173902	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	169181	50.114	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 100.220%			
35) Dibromofluoromethane	8.165	113	96752	47.865	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 95.740%			
50) Toluene-d8	10.565	98	542858	50.251	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.500%			
62) 4-Bromofluorobenzene	12.847	95	196820	49.950	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 99.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	138594	50.220	ug/l	100
3) Chloromethane	2.359	50	185786	46.321	ug/l	99
4) Vinyl Chloride	2.518	62	183873	48.040	ug/l	98
5) Bromomethane	2.953	94	88943	51.662	ug/l	98
6) Chloroethane	3.118	64	119261	46.557	ug/l	99
7) Trichlorofluoromethane	3.500	101	203630	48.030	ug/l	96
8) Diethyl Ether	3.959	74	88034	47.564	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.371	101	124024	48.357	ug/l	99
10) Methyl Iodide	4.589	142	148899	52.806	ug/l	98
11) Tert butyl alcohol	5.512	59	143880	233.586	ug/l	99
12) 1,1-Dichloroethene	4.336	96	129546	47.278	ug/l	98
13) Acrolein	4.177	56	72276	251.743	ug/l	99
14) Allyl chloride	5.024	41	220559	45.280	ug/l	99
15) Acrylonitrile	5.712	53	372009	244.312	ug/l	99
16) Acetone	4.424	43	297097	254.646	ug/l	100
17) Carbon Disulfide	4.712	76	360863	43.983	ug/l	99
18) Methyl Acetate	5.018	43	184731	45.586	ug/l	99
19) Methyl tert-butyl Ether	5.788	73	474584	47.117	ug/l	99
20) Methylene Chloride	5.271	84	145872	46.740	ug/l	100
21) trans-1,2-Dichloroethene	5.788	96	134526	46.960	ug/l	99
22) Diisopropyl ether	6.665	45	491946	46.426	ug/l	98
23) Vinyl Acetate	6.600	43	1738360	234.680	ug/l	100
24) 1,1-Dichloroethane	6.565	63	264324	47.277	ug/l	99
25) 2-Butanone	7.477	43	501652	238.732	ug/l	98
26) 2,2-Dichloropropane	7.488	77	233882	46.721	ug/l	99
27) cis-1,2-Dichloroethene	7.482	96	167485	47.105	ug/l	98
28) Bromochloromethane	7.812	49	113893	48.044	ug/l	100
29) Tetrahydrofuran	7.835	42	326414	232.296	ug/l	100
30) Chloroform	7.959	83	258393	47.047	ug/l	99
31) Cyclohexane	8.253	56	247077	45.162	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	222630	47.385	ug/l	97
36) 1,1-Dichloropropene	8.371	75	191295	47.382	ug/l	100
37) Ethyl Acetate	7.553	43	195455	45.984	ug/l	100
38) Carbon Tetrachloride	8.359	117	182531	47.475	ug/l	98
39) Methylcyclohexane	9.594	83	220275	45.902	ug/l	97
40) Benzene	8.600	78	610128	47.168	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	113052	45.892	ug/l		98
42) 1,2-Dichloroethane	8.665	62	195922	47.496	ug/l		100
43) Isopropyl Acetate	8.682	43	370579	48.649	ug/l		100
44) Trichloroethene	9.347	130	145334	47.403	ug/l		99
45) 1,2-Dichloropropane	9.618	63	149775	47.302	ug/l		98
46) Dibromomethane	9.706	93	98395	48.772	ug/l		100
47) Bromodichloromethane	9.882	83	207763	47.682	ug/l		99
48) Methyl methacrylate	9.676	41	170007	45.546	ug/l		98
49) 1,4-Dioxane	9.688	88	59040	929.893	ug/l		99
51) 4-Methyl-2-Pentanone	10.441	43	1036849	238.220	ug/l		99
52) Toluene	10.629	92	383010	47.453	ug/l		100
53) t-1,3-Dichloropropene	10.829	75	235221	48.360	ug/l		100
54) cis-1,3-Dichloropropene	10.306	75	250676	46.923	ug/l		98
55) 1,1,2-Trichloroethane	11.012	97	136227	46.911	ug/l		97
56) Ethyl methacrylate	10.871	69	253092	47.414	ug/l		99
57) 1,3-Dichloropropane	11.159	76	246129	47.770	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.159	63	612932	241.924	ug/l		99
59) 2-Hexanone	11.188	43	759846	235.364	ug/l		99
60) Dibromochloromethane	11.353	129	152321	47.767	ug/l		99
61) 1,2-Dibromoethane	11.465	107	139994	47.777	ug/l		100
64) Tetrachloroethene	11.100	164	140342	47.439	ug/l		99
65) Chlorobenzene	11.888	112	401122	46.735	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.959	131	133755	47.238	ug/l		99
67) Ethyl Benzene	11.959	91	730984	47.196	ug/l		100
68) m/p-Xylenes	12.070	106	551289	94.994	ug/l		100
69) o-Xylene	12.394	106	269992	47.043	ug/l		100
70) Styrene	12.406	104	460331	48.138	ug/l		100
71) Bromoform	12.576	173	101548	47.634	ug/l	#	98
73) Isopropylbenzene	12.694	105	667602	46.930	ug/l		100
74) N-amyl acetate	12.488	43	320394	45.241	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.935	83	186111	45.501	ug/l		100
76) 1,2,3-Trichloropropane	12.988	75	187464m	45.680	ug/l		
77) Bromobenzene	12.976	156	150856	47.860	ug/l		98
78) n-propylbenzene	13.029	91	794892	47.420	ug/l		99
79) 2-Chlorotoluene	13.123	91	493124	47.012	ug/l		99
80) 1,3,5-Trimethylbenzene	13.170	105	550039	47.241	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.735	75	84822m	49.639	ug/l		
82) 4-Chlorotoluene	13.217	91	495478	47.552	ug/l		99
83) tert-Butylbenzene	13.435	119	461626	45.757	ug/l		100
84) 1,2,4-Trimethylbenzene	13.476	105	561084	47.342	ug/l		100
85) sec-Butylbenzene	13.612	105	650246	46.468	ug/l		99
86) p-Isopropyltoluene	13.729	119	546663	47.395	ug/l		100
87) 1,3-Dichlorobenzene	13.729	146	278387	46.983	ug/l		99
88) 1,4-Dichlorobenzene	13.806	146	282403	47.319	ug/l		99
89) n-Butylbenzene	14.053	91	482335	47.178	ug/l		100
90) Hexachloroethane	14.329	117	92416	47.634	ug/l		99
91) 1,2-Dichlorobenzene	14.106	146	273135	47.545	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	39601	48.017	ug/l		99
93) 1,2,4-Trichlorobenzene	15.388	180	131639	47.854	ug/l		100
94) Hexachlorobutadiene	15.500	225	48079	46.301	ug/l		100
95) Naphthalene	15.635	128	472042	48.408	ug/l		100
96) 1,2,3-Trichlorobenzene	15.835	180	123220	47.314	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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

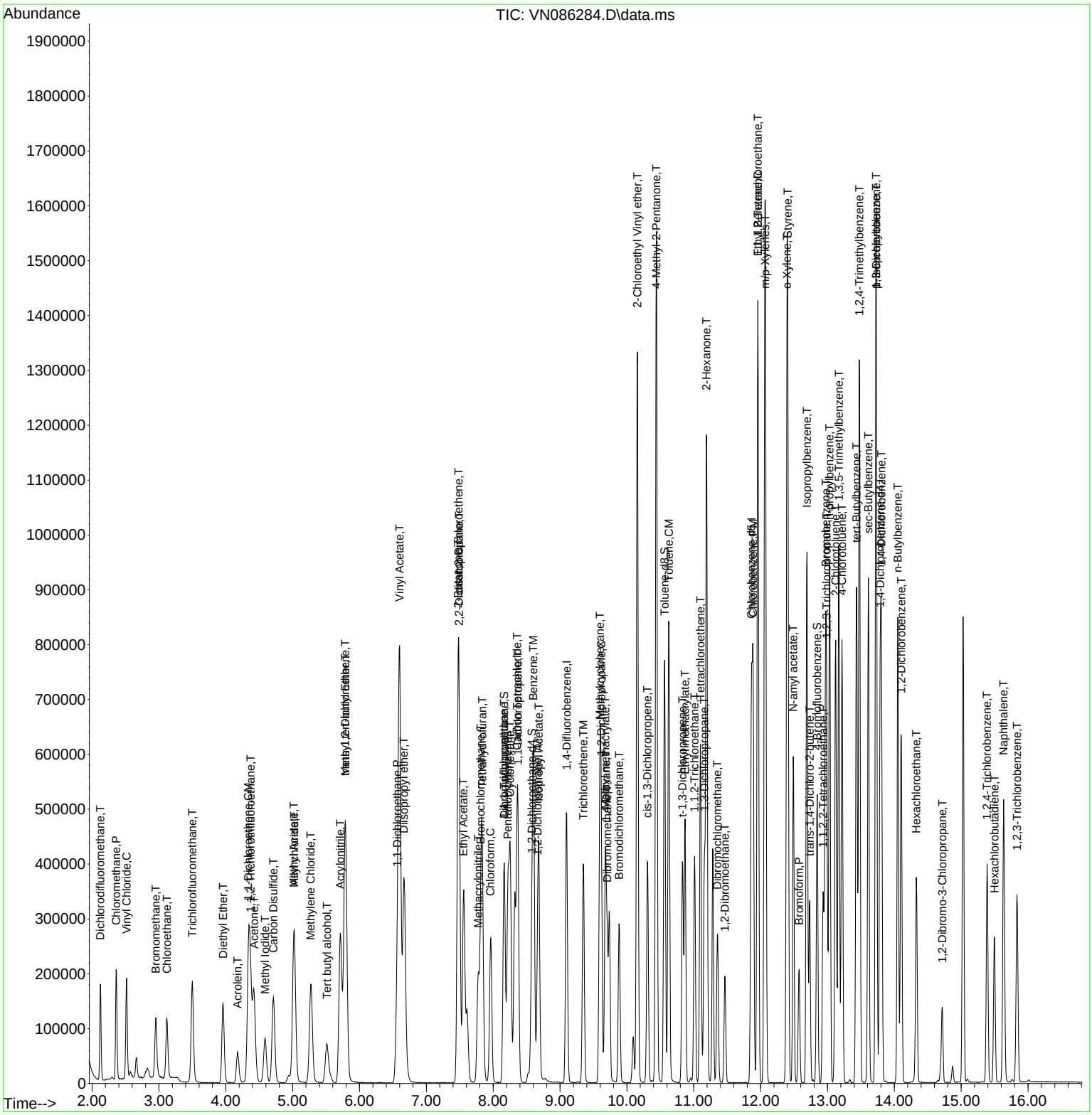
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

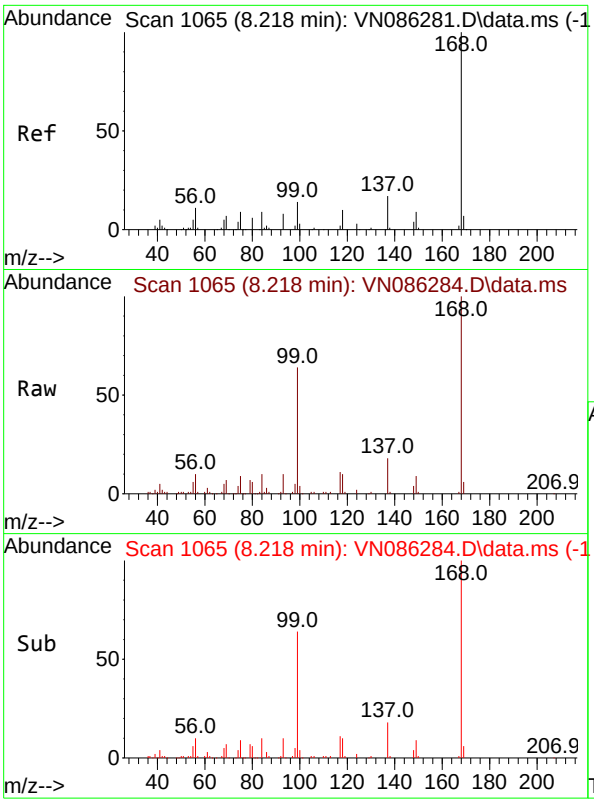
Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations APPROVED

Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

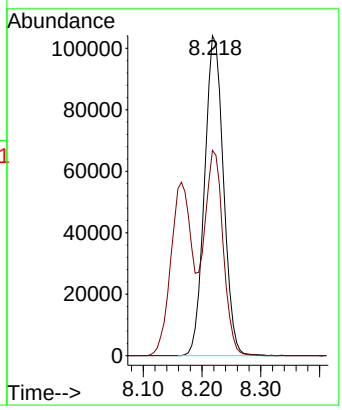




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:168 Resp: 23280

Ion	Ratio	Lower	Upper
168	100		
99	64.2	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
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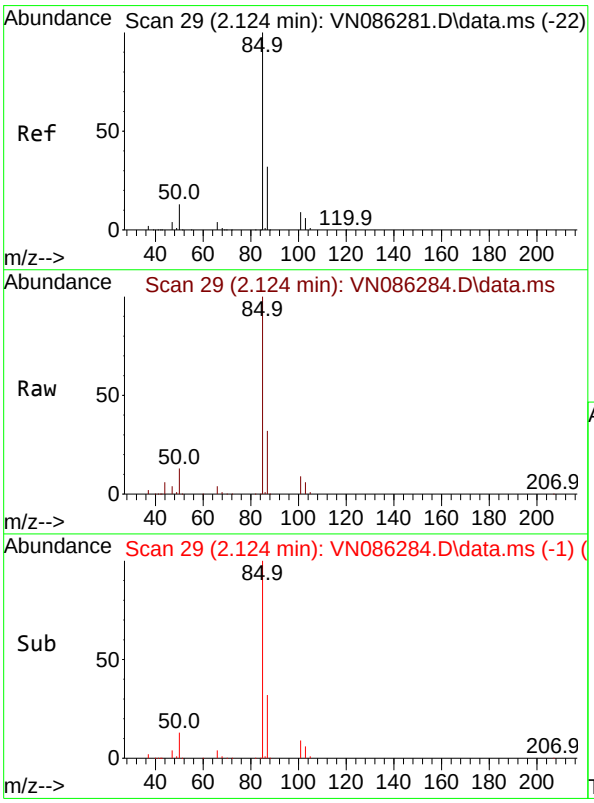
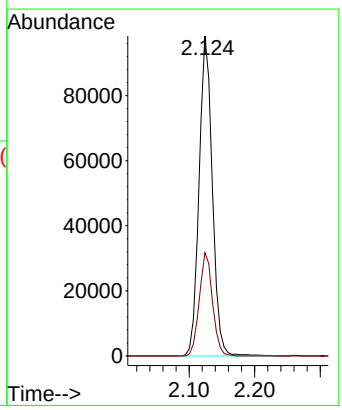
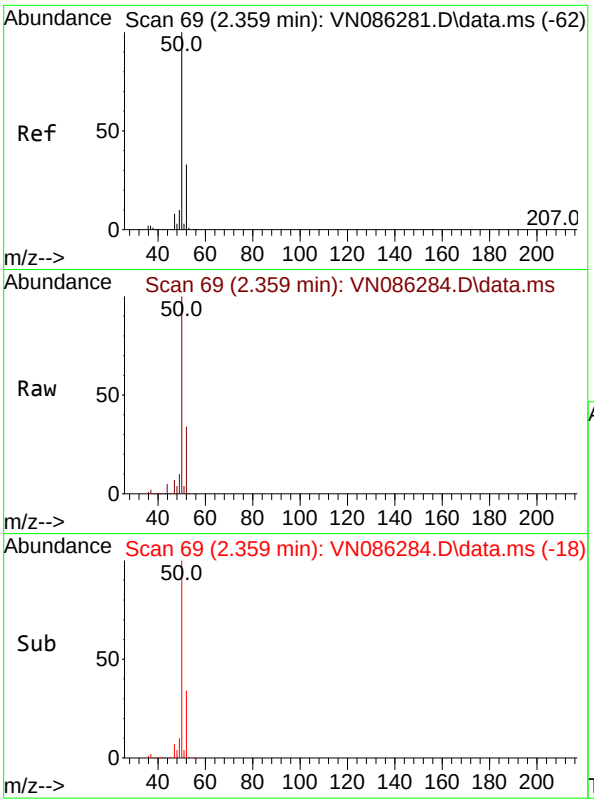


#2
Dichlorodifluoromethane
Concen: 50.220 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 85 Resp: 138594

Ion	Ratio	Lower	Upper
85	100		
87	32.2	16.3	48.8

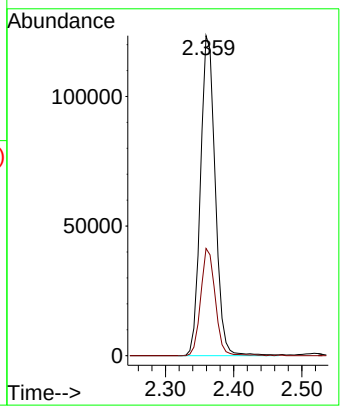




#3
Chloromethane
Concen: 46.321 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 50 Resp: 18578

Ion	Ratio	Lower	Upper
50	100		
52	33.5	26.5	39.7



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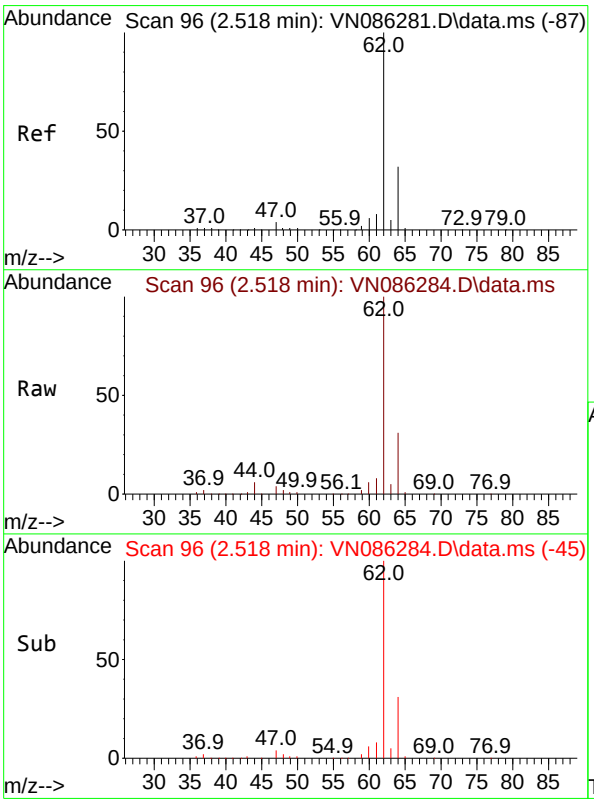
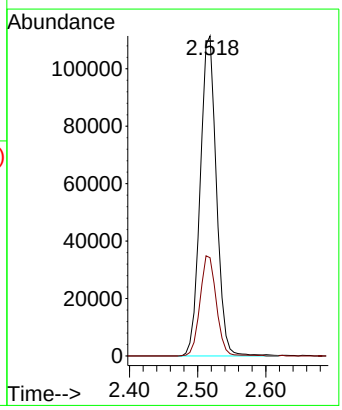
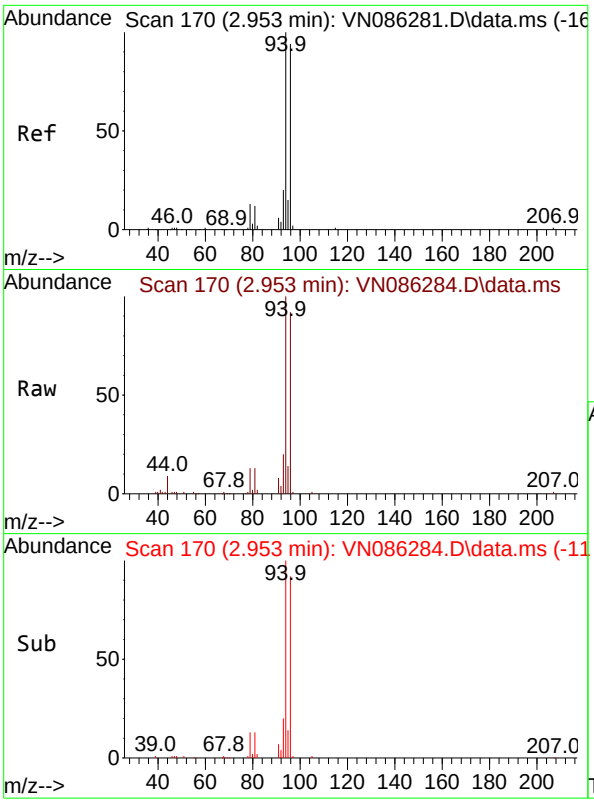


#4
Vinyl Chloride
Concen: 48.040 ug/l
RT: 2.518 min Scan# 96
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 62 Resp: 183873

Ion	Ratio	Lower	Upper
62	100		
64	30.7	25.6	38.4

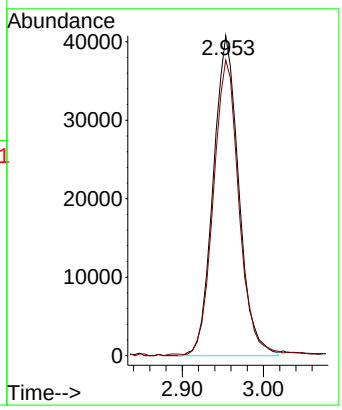




#5
Bromomethane
Concen: 51.662 ug/l
RT: 2.953 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 94 Resp: 8894

Ion	Ratio	Lower	Upper
94	100		
96	91.9	75.2	112.8



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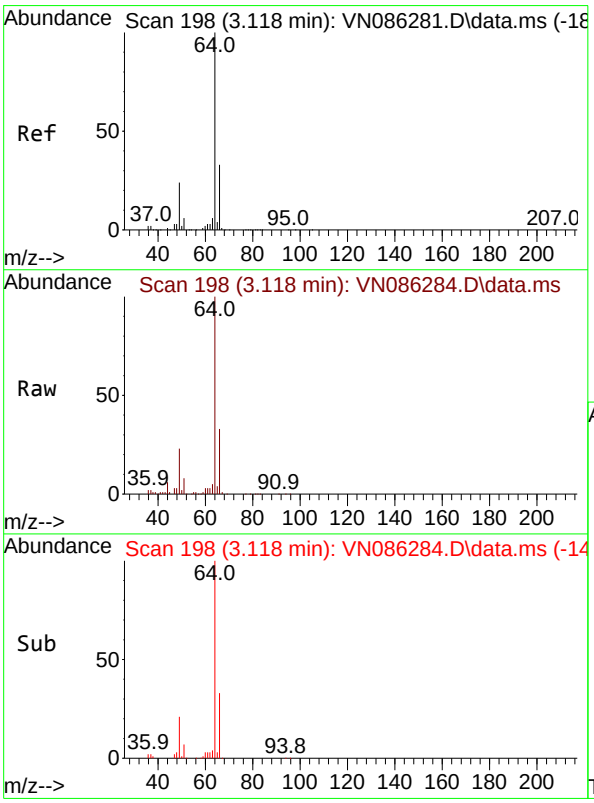
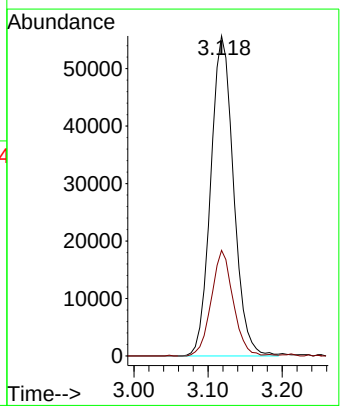
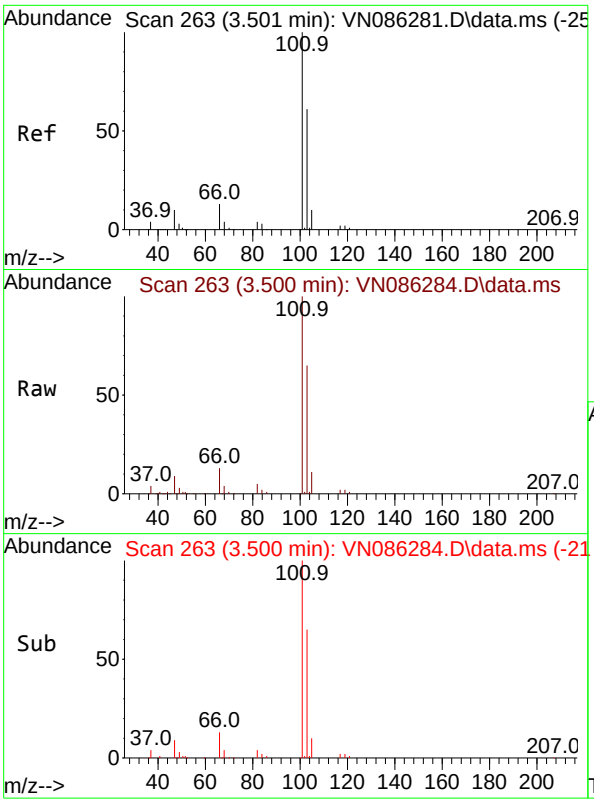


#6
Chloroethane
Concen: 46.557 ug/l
RT: 3.118 min Scan# 198
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 64 Resp: 119261

Ion	Ratio	Lower	Upper
64	100		
66	33.0	26.2	39.2

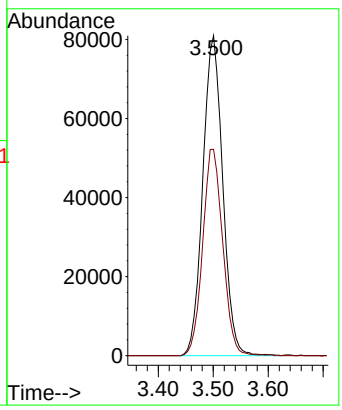




#7
Trichlorofluoromethane
Concen: 48.030 ug/l
RT: 3.500 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:101 Resp: 20363

Ion	Ratio	Lower	Upper
101	100		
103	64.5	49.2	73.8



Instrument :
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ClientSampleId :
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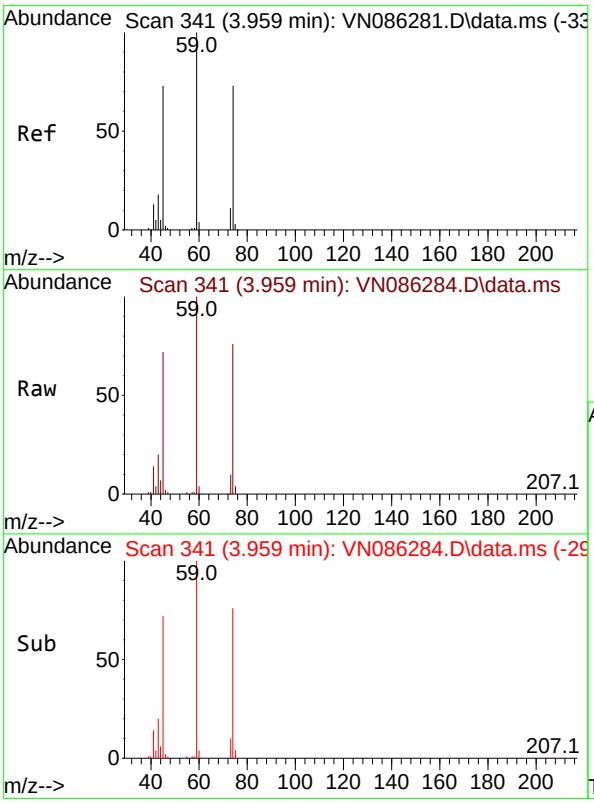
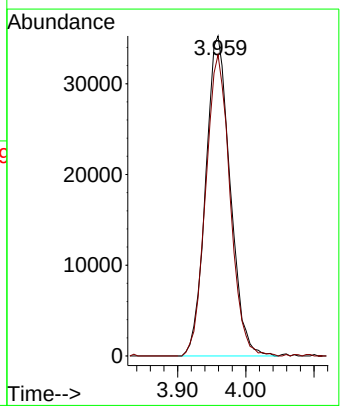
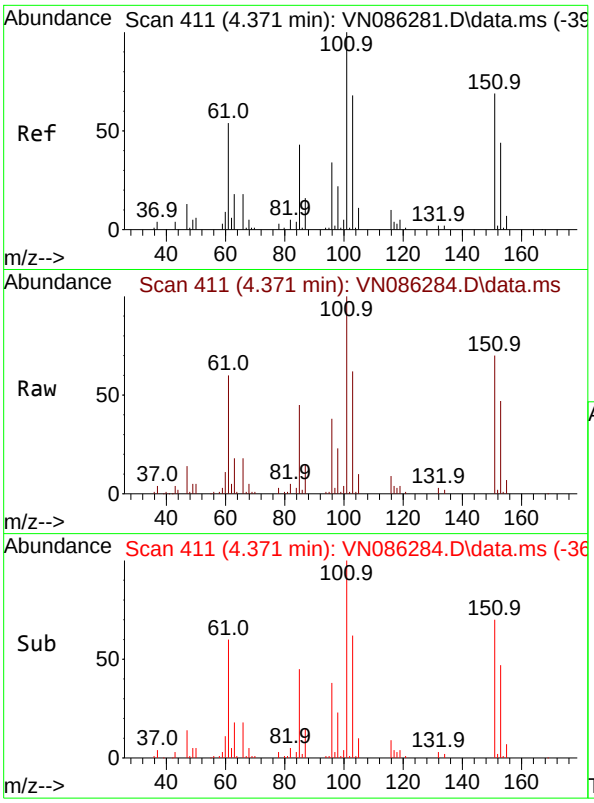


#8
Diethyl Ether
Concen: 47.564 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 74 Resp: 88034

Ion	Ratio	Lower	Upper
74	100		
45	93.5	48.0	144.2





#9
1,1,2-Trichlorotrifluoroethane
Concen: 48.357 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:101 Resp: 12402

Ion	Ratio	Lower	Upper
101	100		
85	43.4	34.7	52.1
151	69.3	56.1	84.1

Instrument :
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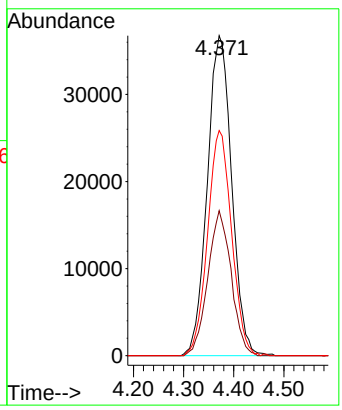
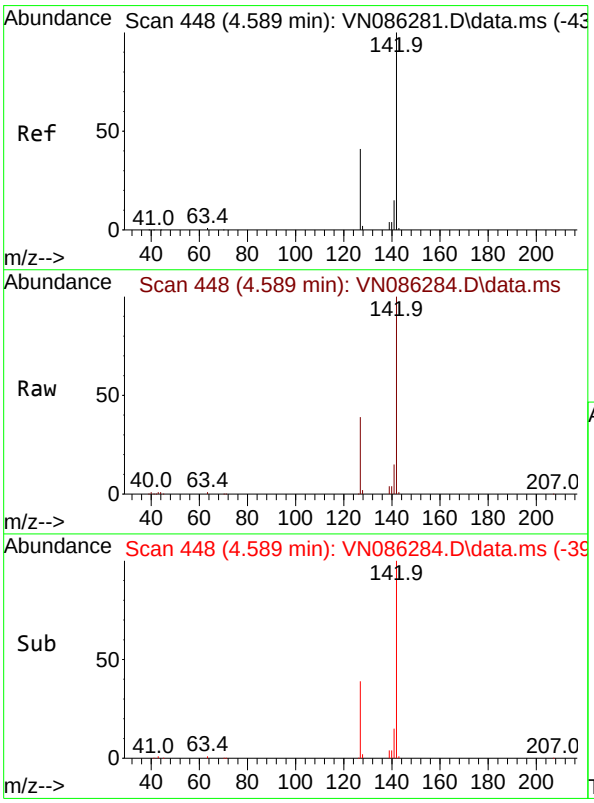
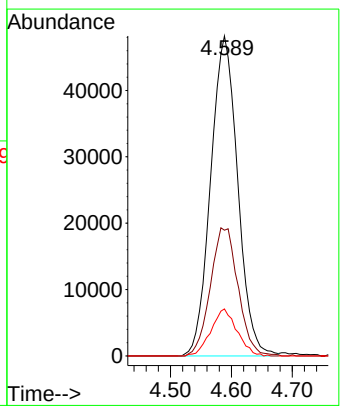


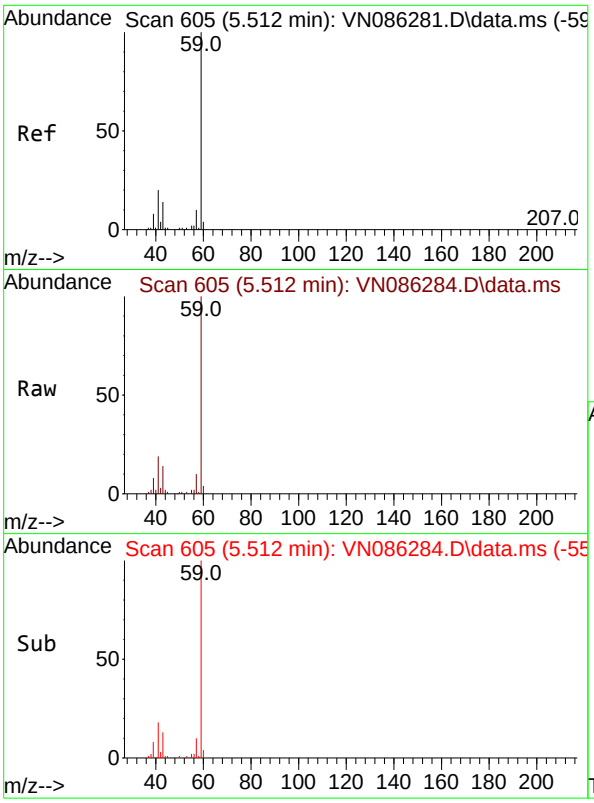


#10
Methyl Iodide
Concen: 52.806 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:142 Resp: 148899

Ion	Ratio	Lower	Upper
142	100		
127	39.3	32.7	49.1
141	14.7	11.7	17.5





#11
Tert butyl alcohol
Concen: 233.586 ug/l
RT: 5.512 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 59 Resp: 14388

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.3	12.5

Instrument :
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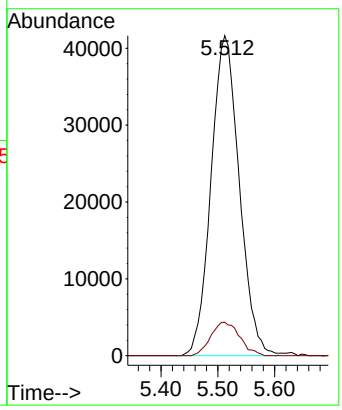
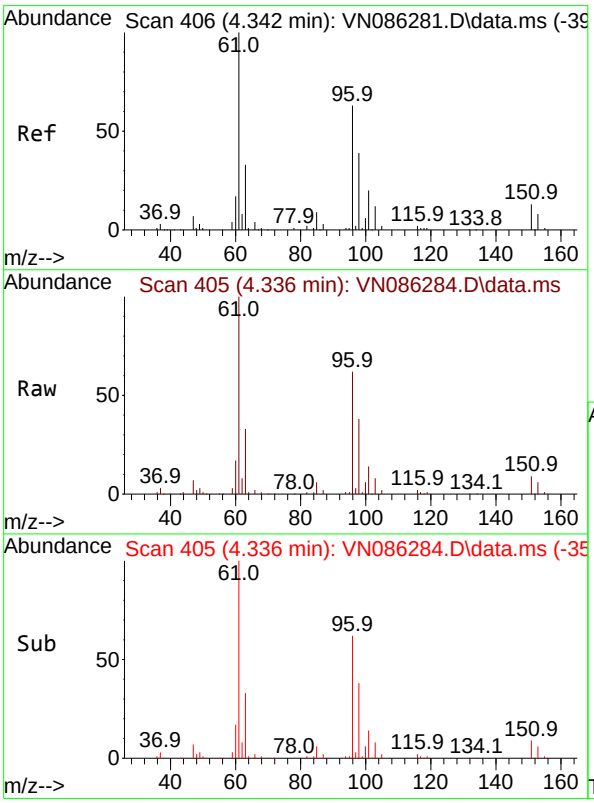
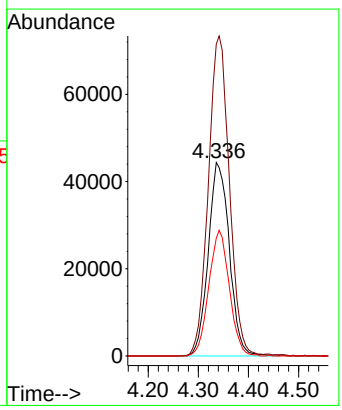


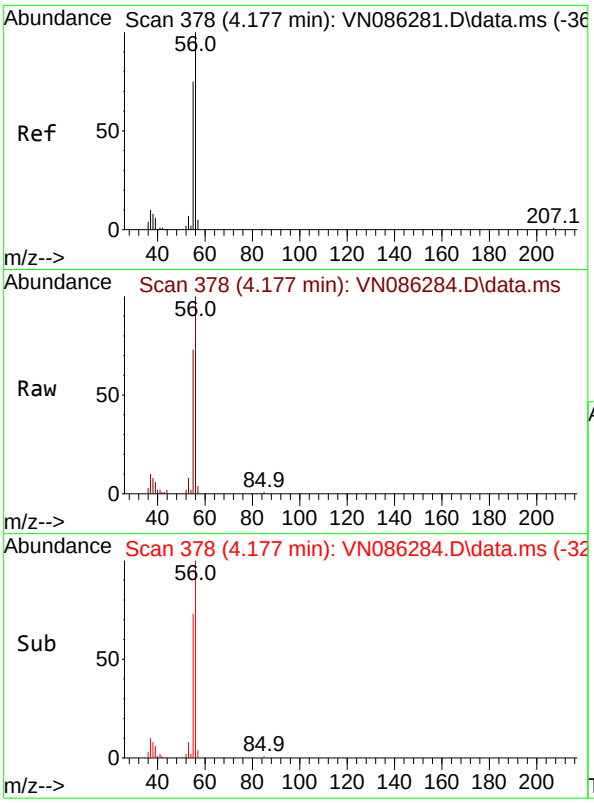


#12
1,1-Dichloroethene
Concen: 47.278 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 96 Resp: 129546

Ion	Ratio	Lower	Upper
96	100		
61	161.2	126.6	189.8
98	60.9	49.6	74.4

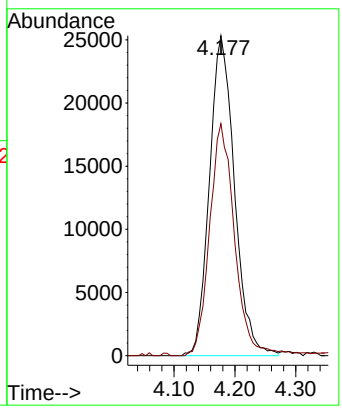




#13
Acrolein
Concen: 251.743 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 56 Resp: 7227

Ion	Ratio	Lower	Upper
56	100		
55	72.2	58.5	87.7



Instrument :
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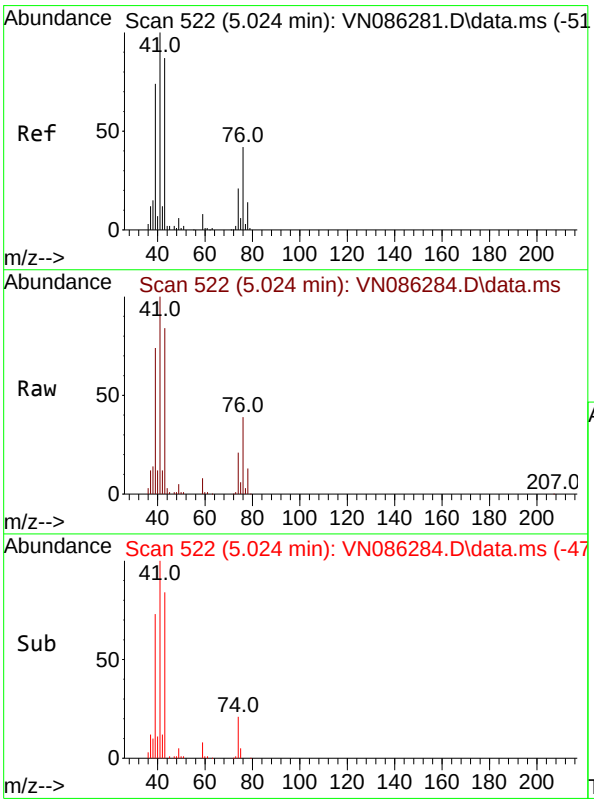
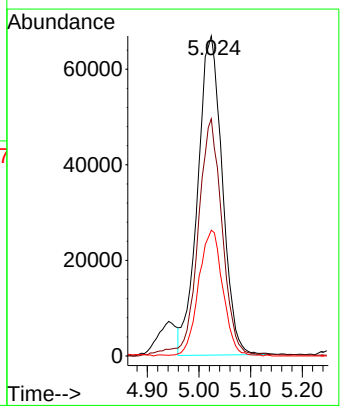
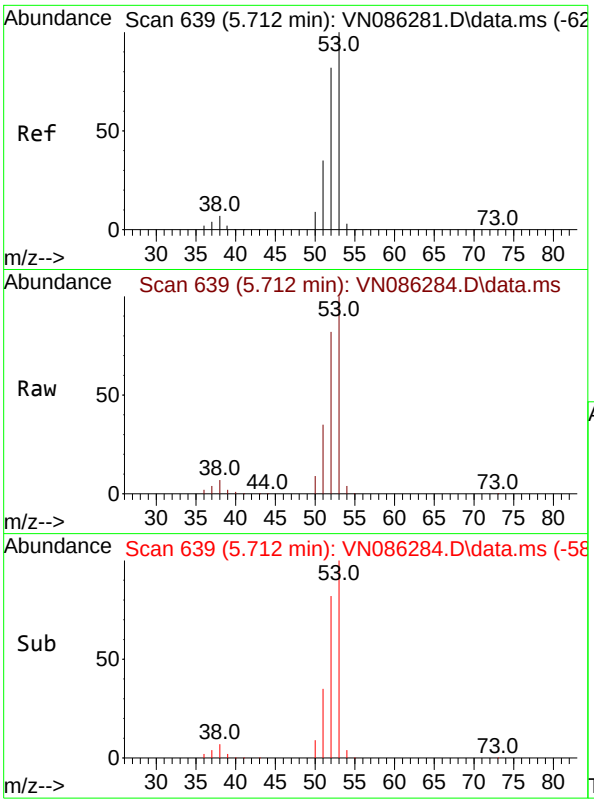


#14
Allyl chloride
Concen: 45.280 ug/l
RT: 5.024 min Scan# 522
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 41 Resp: 220559

Ion	Ratio	Lower	Upper
41	100		
39	73.3	59.2	88.8
76	39.0	31.2	46.8

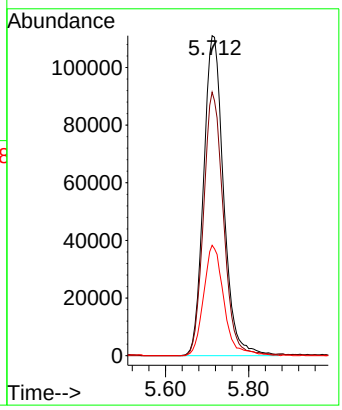




#15
Acrylonitrile
Concen: 244.312 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 53 Resp: 37200

Ion	Ratio	Lower	Upper
53	100		
52	81.4	65.5	98.3
51	34.9	28.6	42.8



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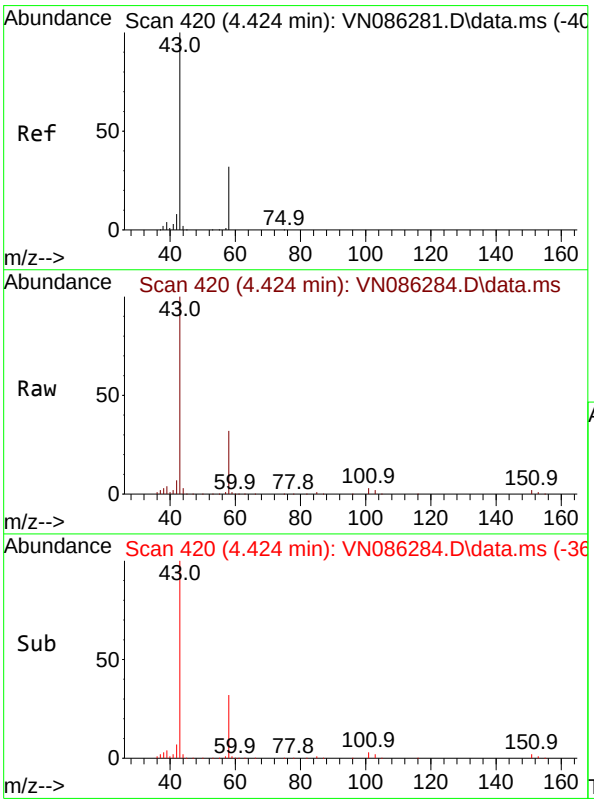
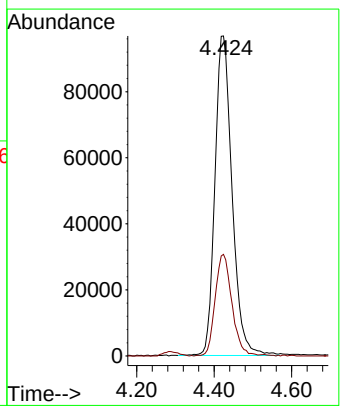
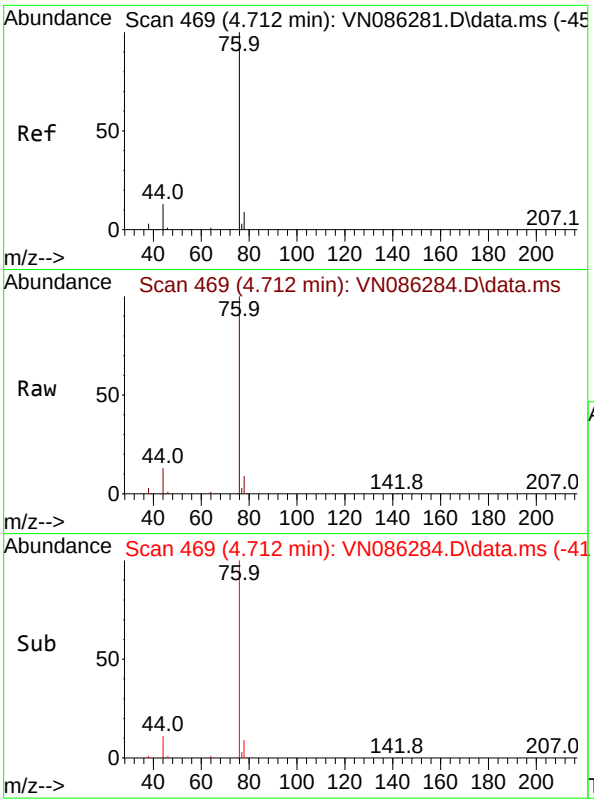


#16
Acetone
Concen: 254.646 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 297097

Ion	Ratio	Lower	Upper
43	100		
58	31.6	25.3	37.9

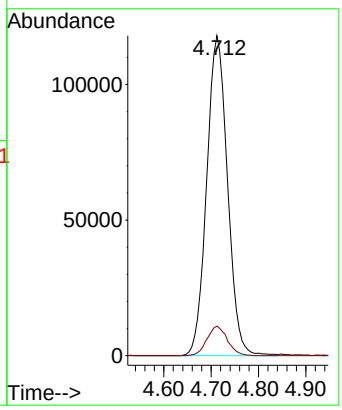




#17
Carbon Disulfide
Concen: 43.983 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 76 Resp: 36086

Ion	Ratio	Lower	Upper
76	100		
78	9.3	7.6	11.4



Instrument :
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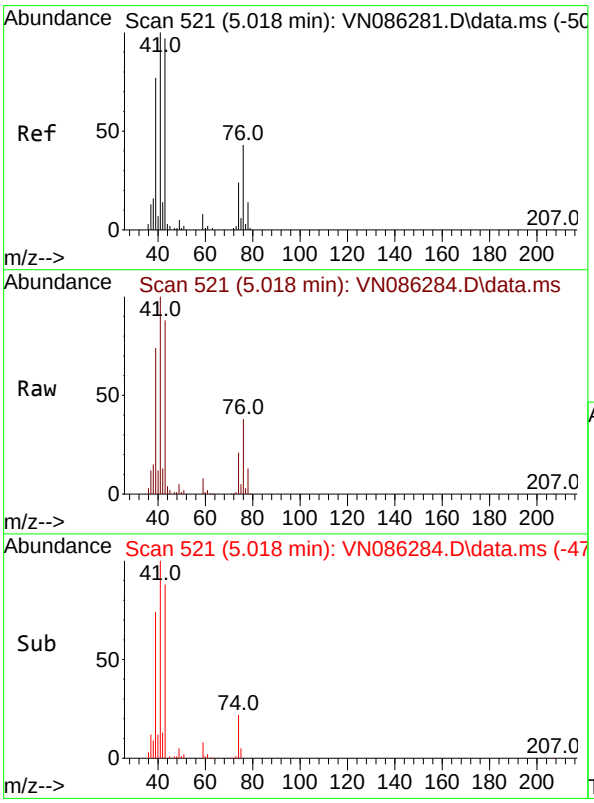
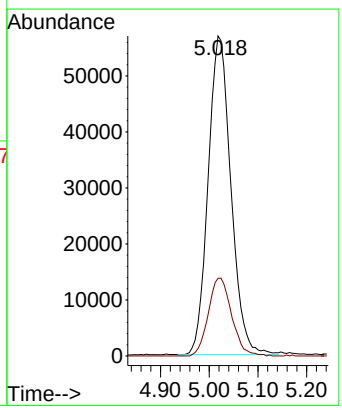
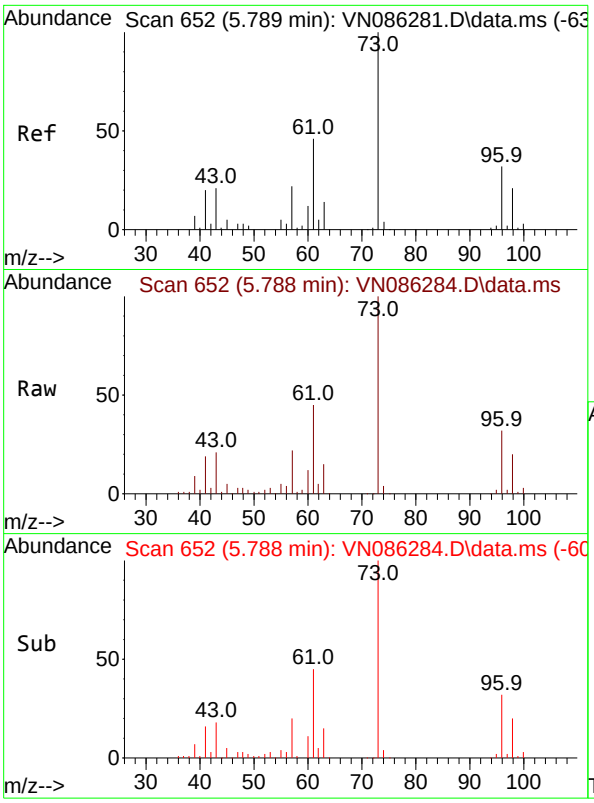


#18
Methyl Acetate
Concen: 45.586 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 184731

Ion	Ratio	Lower	Upper
43	100		
74	25.0	19.8	29.6





#19
Methyl tert-butyl Ether
Concen: 47.117 ug/l
RT: 5.788 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 73 Resp: 47458

Ion	Ratio	Lower	Upper
73	100		
57	21.7	17.6	26.4

Instrument :
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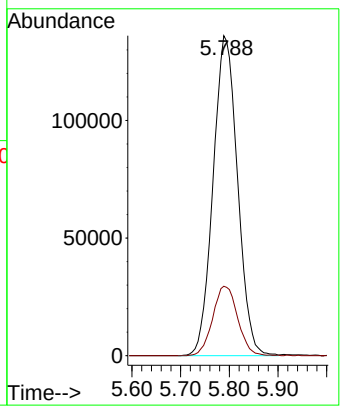
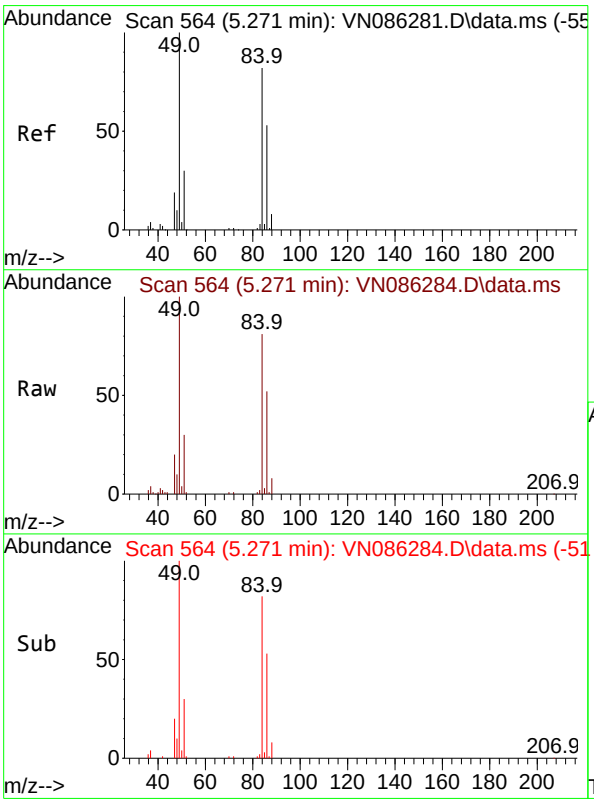
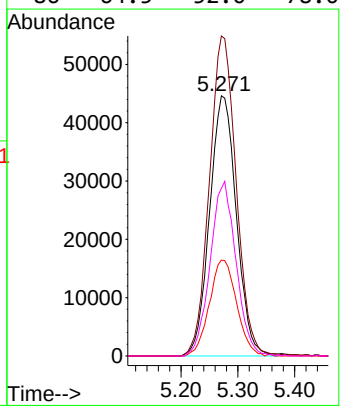


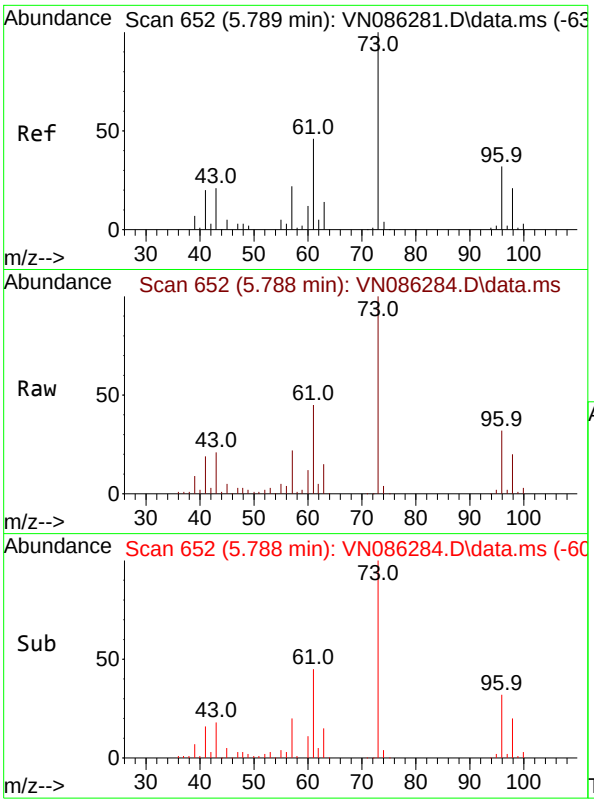


#20
Methylene Chloride
Concen: 46.740 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 84 Resp: 145872

Ion	Ratio	Lower	Upper
84	100		
49	123.0	98.2	147.2
51	36.9	29.8	44.6
86	64.5	52.0	78.0

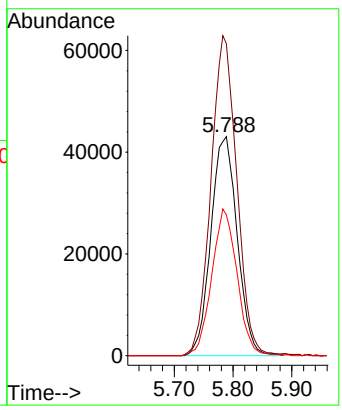




#21
trans-1,2-Dichloroethene
Concen: 46.960 ug/l
RT: 5.788 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 96 Resp: 13452

Ion	Ratio	Lower	Upper
96	100		
61	142.5	114.6	171.8
98	64.3	51.2	76.8



Instrument :
MSVOA_N
ClientSampleId :
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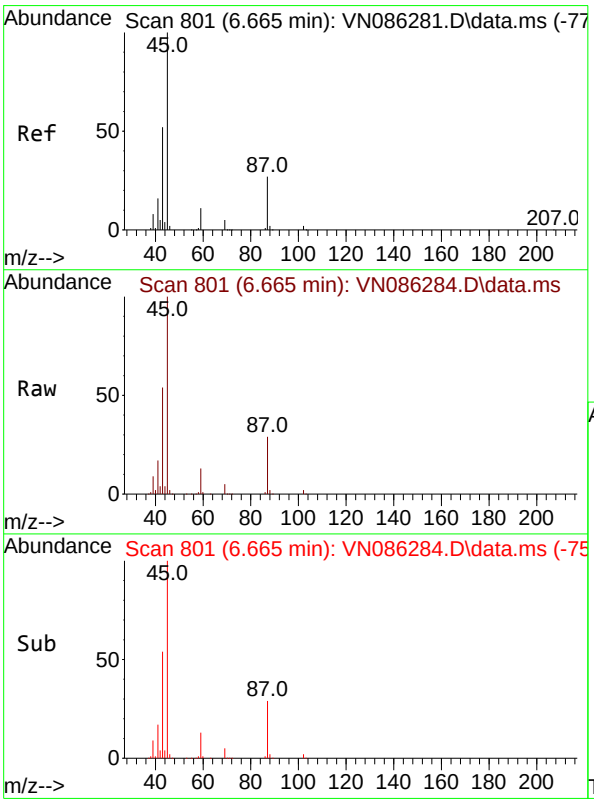
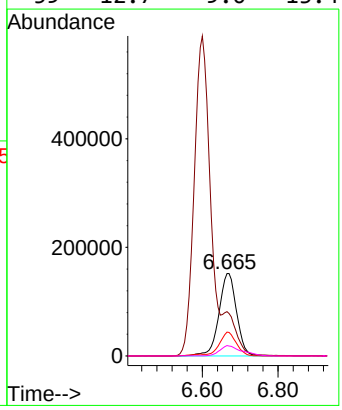
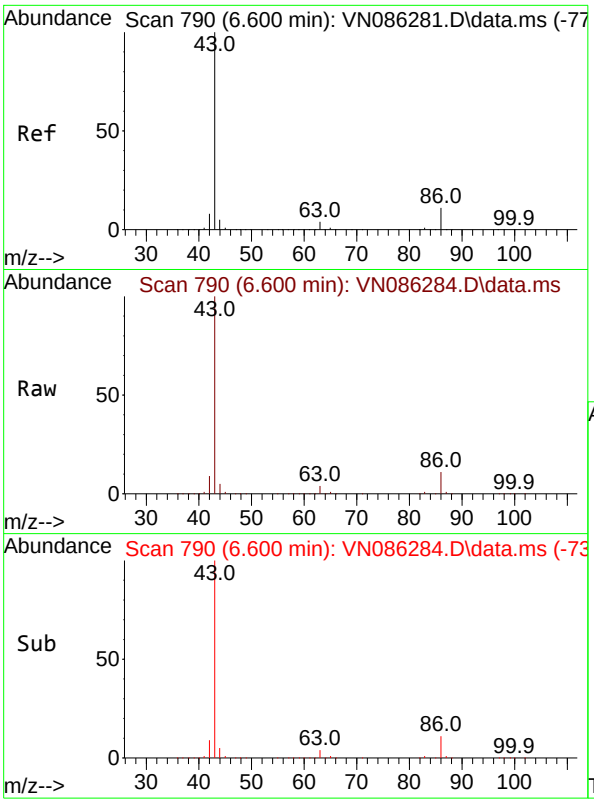


#22
Diisopropyl ether
Concen: 46.426 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 45 Resp: 491946

Ion	Ratio	Lower	Upper
45	100		
43	53.2	41.8	62.8
87	28.9	21.6	32.4
59	12.7	9.0	13.4





#23
Vinyl Acetate
Concen: 234.680 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 173836

Ion	Ratio	Lower	Upper
43	100		
86	10.9	8.6	13.0

Instrument :
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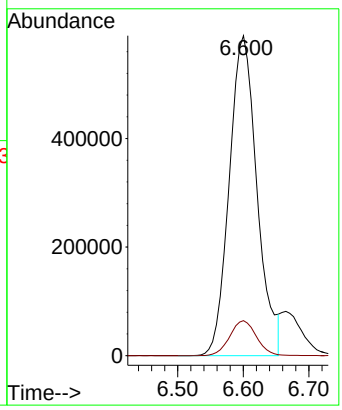
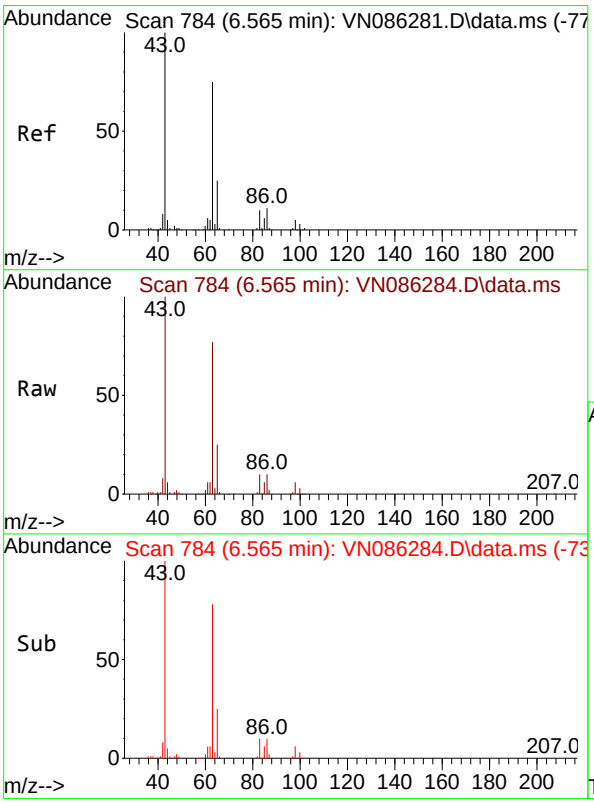
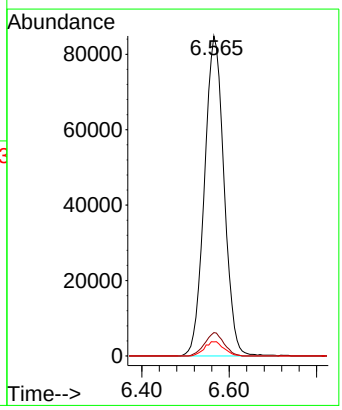


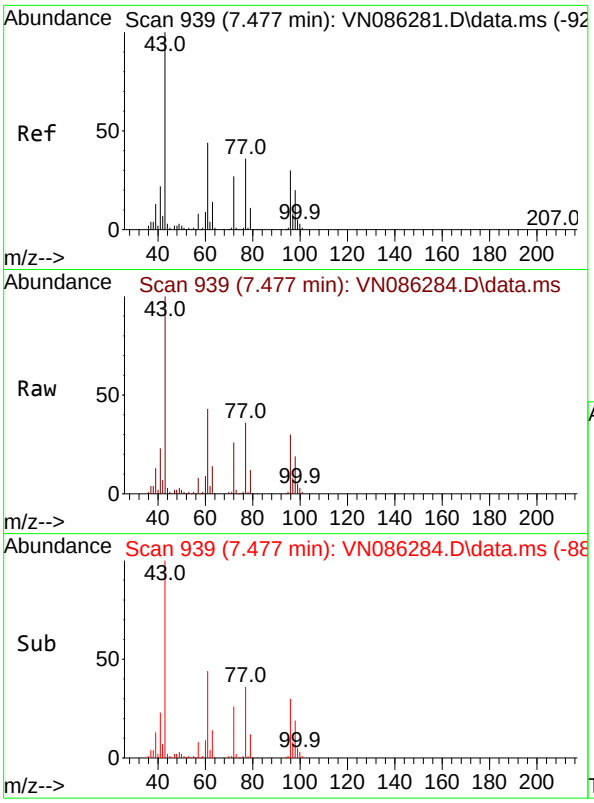


#24
1,1-Dichloroethane
Concen: 47.277 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 63 Resp: 264324

Ion	Ratio	Lower	Upper
63	100		
98	7.3	3.4	10.2
100	4.4	2.1	6.5





#25
2-Butanone
Concen: 238.732 ug/l
RT: 7.477 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 50165

Ion	Ratio	Lower	Upper
43	100		
72	26.2	21.7	32.5

Instrument :
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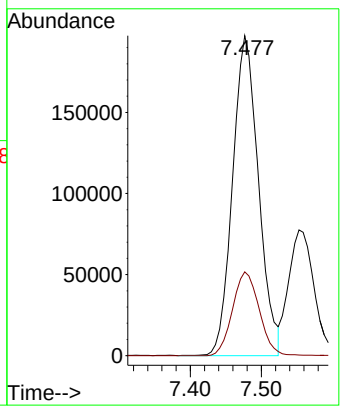
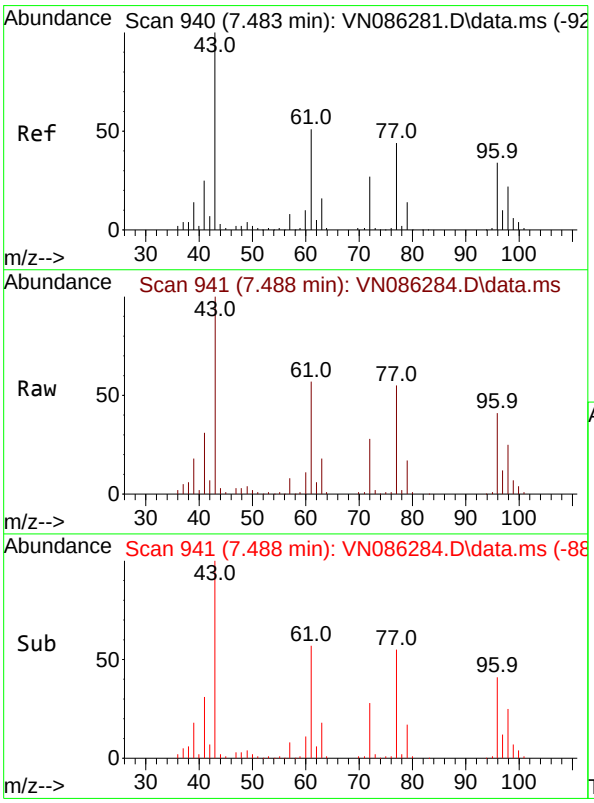
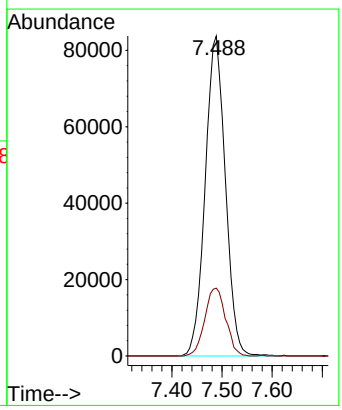


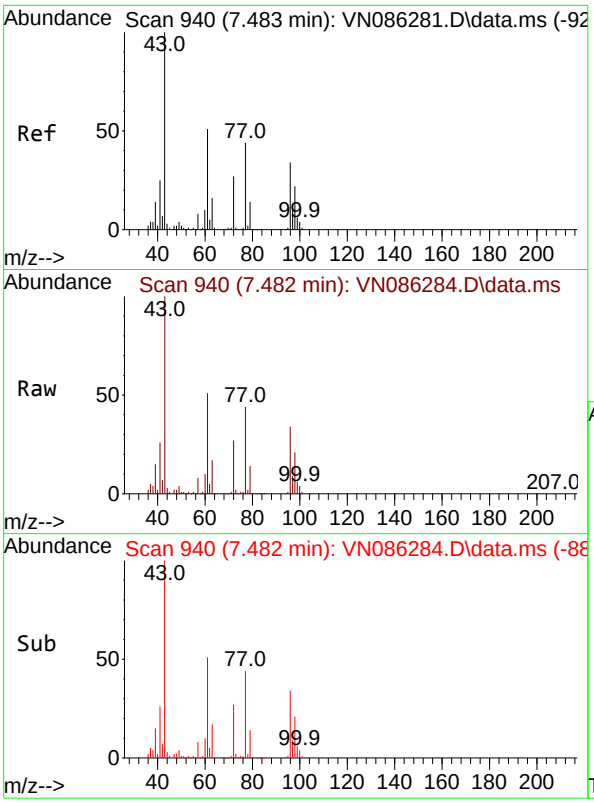


#26
2,2-Dichloropropane
Concen: 46.721 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 77 Resp: 233882

Ion	Ratio	Lower	Upper
77	100		
97	22.0	11.2	33.5

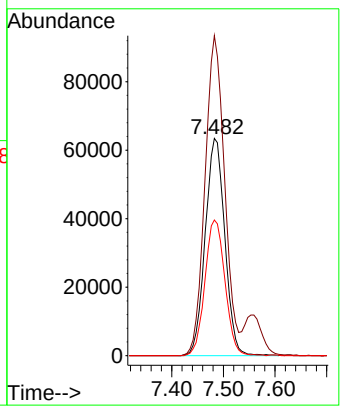




#27
cis-1,2-Dichloroethene
Concen: 47.105 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 96 Resp: 16748

Ion	Ratio	Lower	Upper
96	100		
61	146.5	0.0	299.0
98	63.7	0.0	129.6



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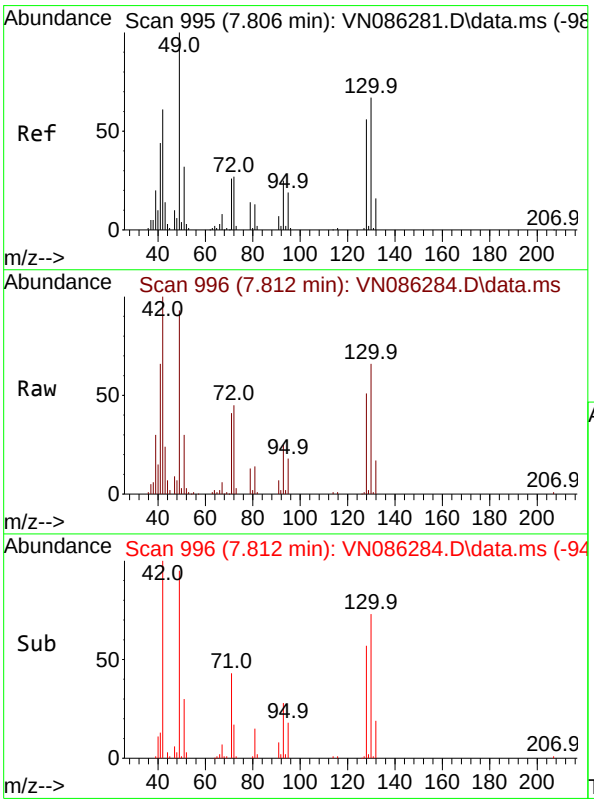
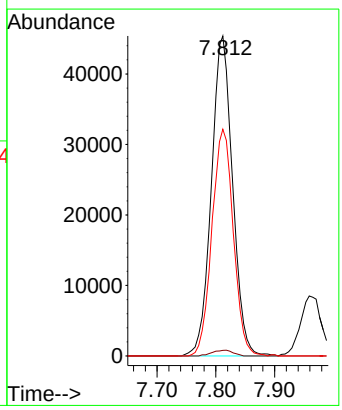
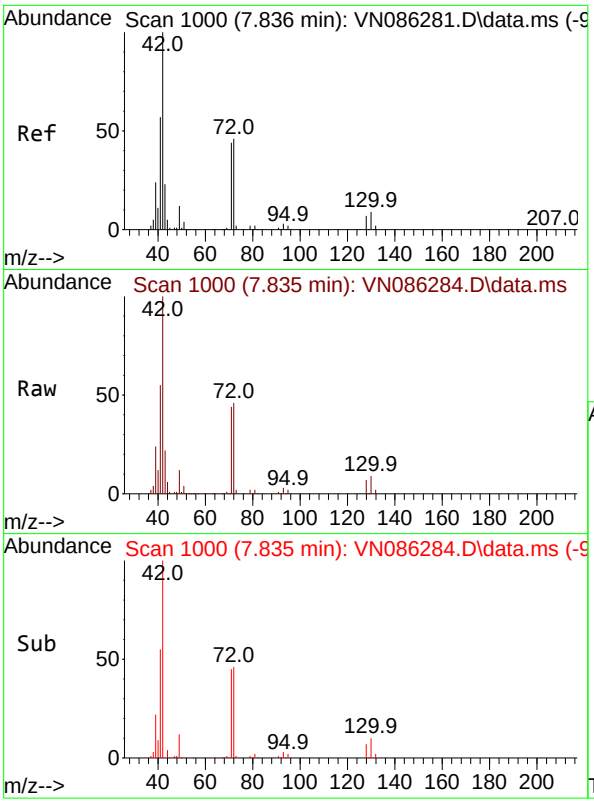


#28
Bromochloromethane
Concen: 48.044 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 49 Resp: 113893

Ion	Ratio	Lower	Upper
49	100		
129	1.8	0.0	3.4
130	71.3	57.1	85.7





#29
Tetrahydrofuran
Concen: 232.296 ug/l
RT: 7.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 42 Resp: 32641

Ion	Ratio	Lower	Upper
42	100		
72	45.5	36.2	54.4
71	42.7	34.0	51.0

Instrument :
MSVOA_N
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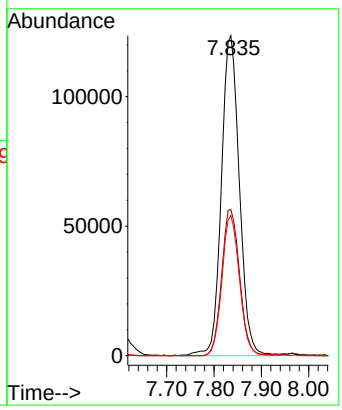
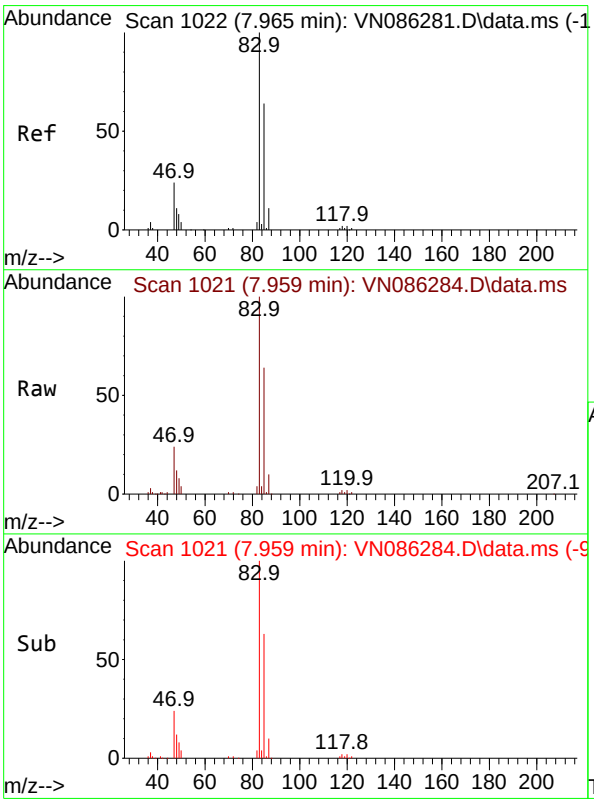
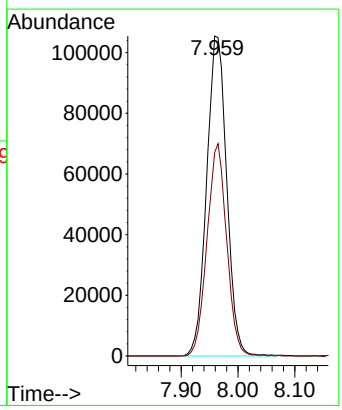


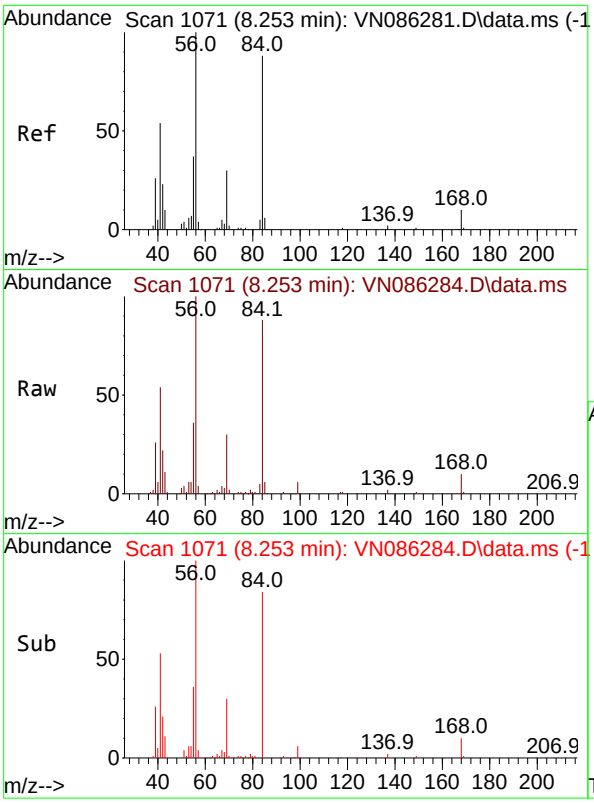


#30
Chloroform
Concen: 47.047 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. -0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 83 Resp: 258393

Ion	Ratio	Lower	Upper
83	100		
85	63.6	51.5	77.3

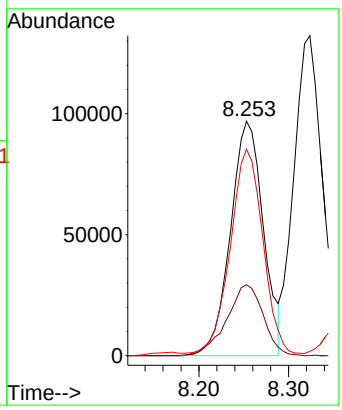




#31
Cyclohexane
Concen: 45.162 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 56 Resp: 24707

Ion	Ratio	Lower	Upper
56	100		
69	30.2	24.2	36.2
84	86.9	70.3	105.5



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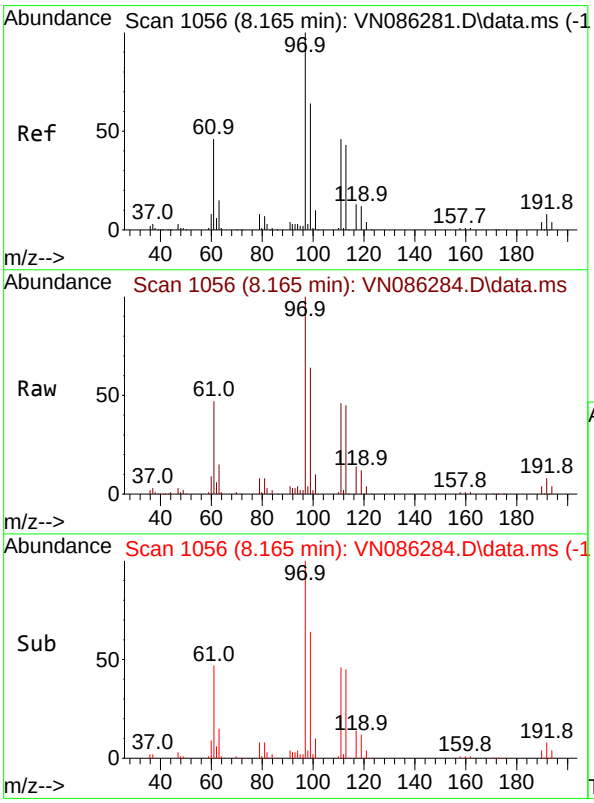
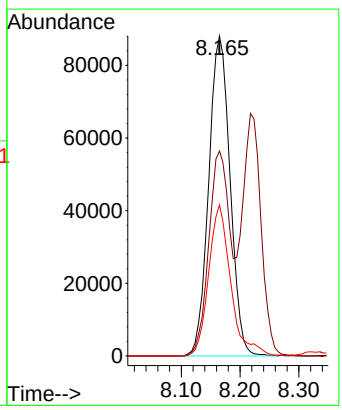
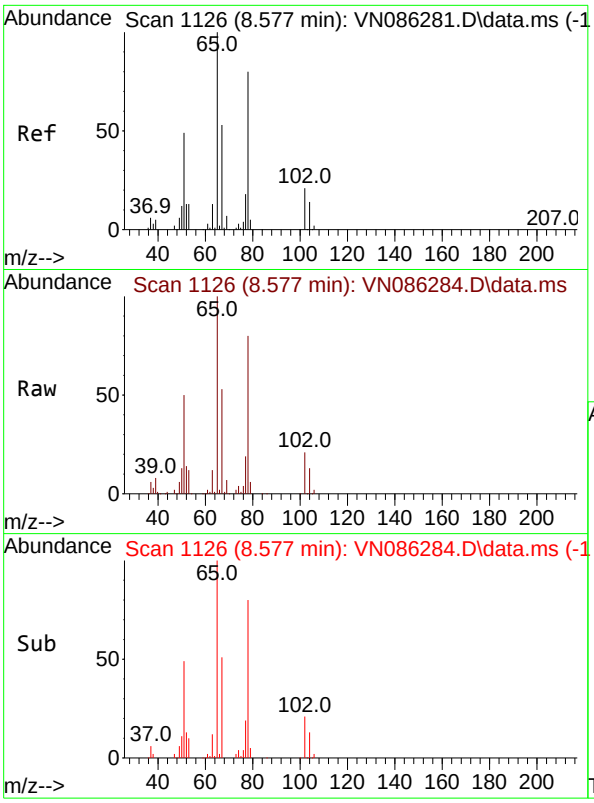


#32
1,1,1-Trichloroethane
Concen: 47.385 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 97 Resp: 222630

Ion	Ratio	Lower	Upper
97	100		
99	61.6	52.7	79.1
61	48.8	39.5	59.3





#33
1,2-Dichloroethane-d4
Concen: 50.114 ug/l
RT: 8.577 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 65 Resp: 16918

Ion	Ratio	Lower	Upper
65	100		
67	53.2	0.0	106.0

Instrument :
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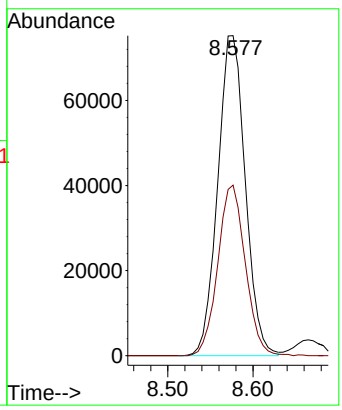
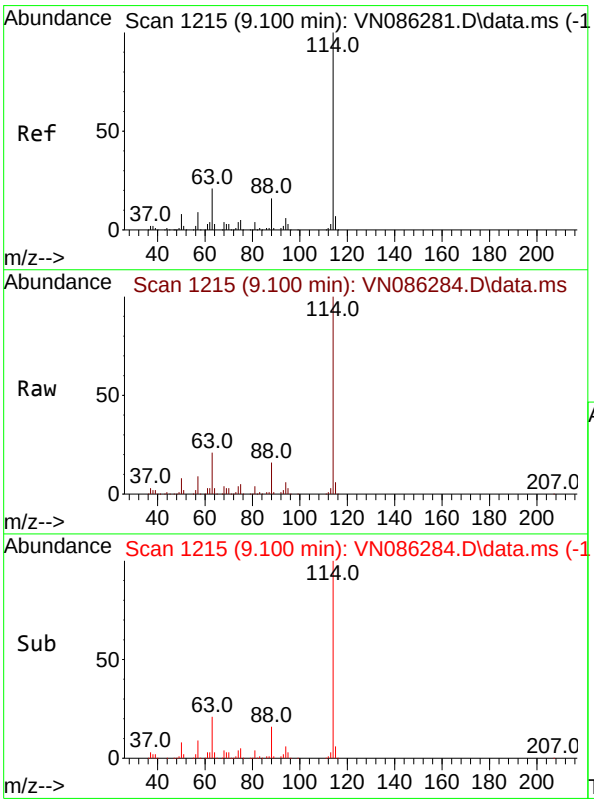
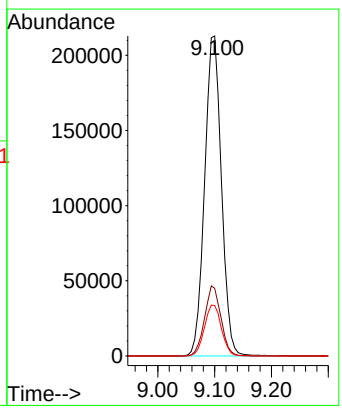


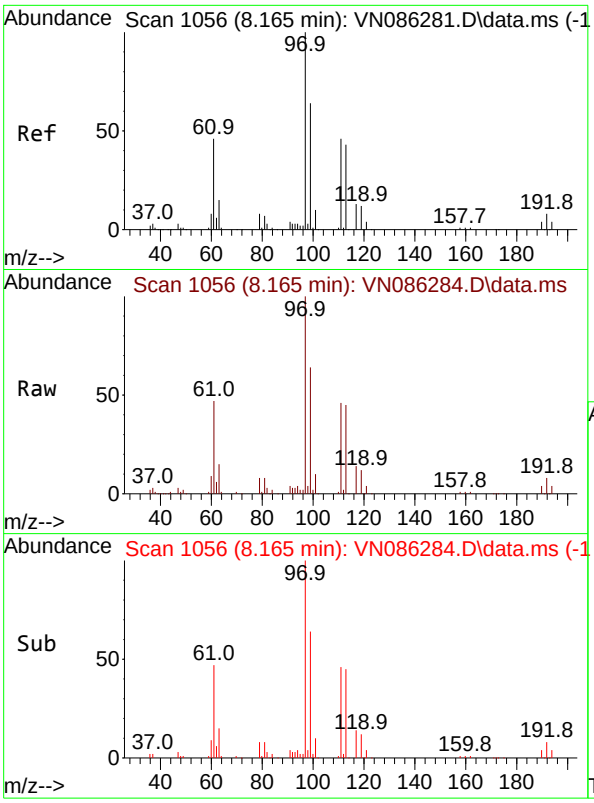


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:114 Resp: 435528

Ion	Ratio	Lower	Upper
114	100		
63	21.2	0.0	42.6
88	15.7	0.0	31.8

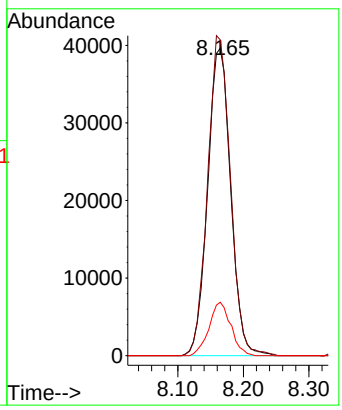




#35
Dibromofluoromethane
Concen: 47.865 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:113 Resp: 9675

Ion	Ratio	Lower	Upper
113	100		
111	103.1	83.4	125.0
192	16.5	13.7	20.5



Instrument :
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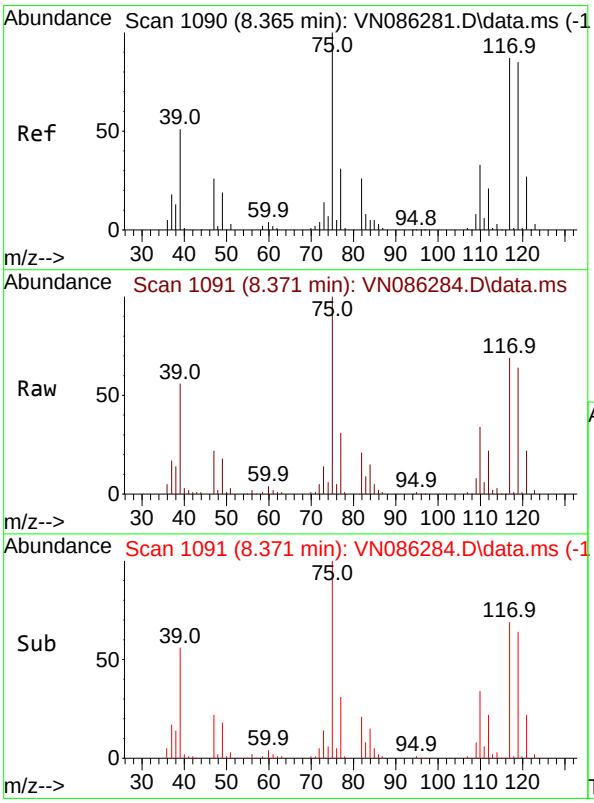
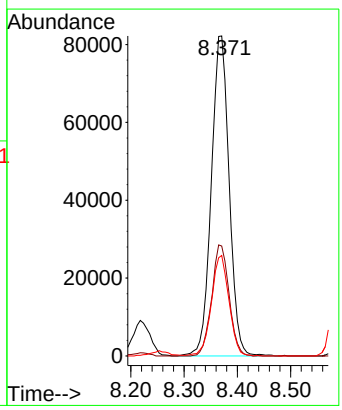
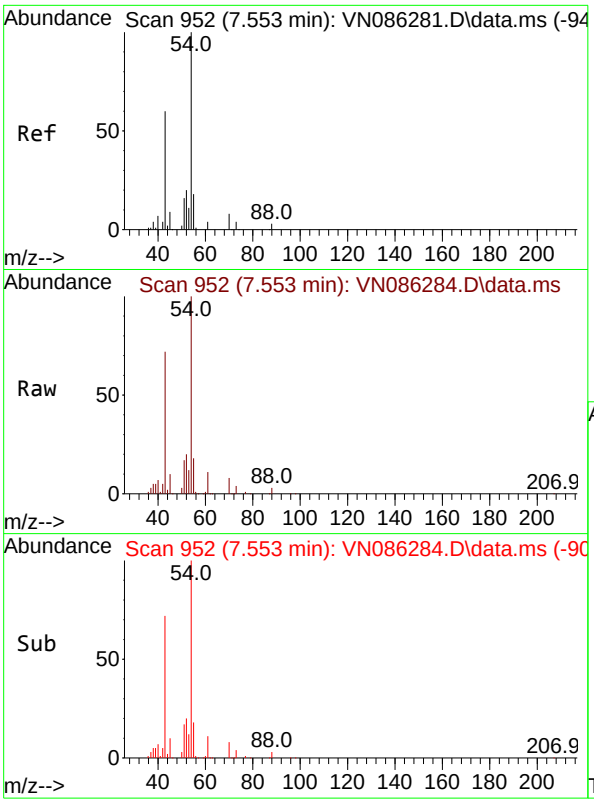


#36
1,1-Dichloropropene
Concen: 47.382 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 75 Resp: 191295

Ion	Ratio	Lower	Upper
75	100		
110	33.8	16.8	50.4
77	31.0	24.9	37.3





#37
Ethyl Acetate
Concen: 45.984 ug/l
RT: 7.553 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 19545

Ion	Ratio	Lower	Upper
43	100		
61	14.0	11.1	16.7
70	11.5	9.2	13.8

Instrument :
MSVOA_N
ClientSampleId :
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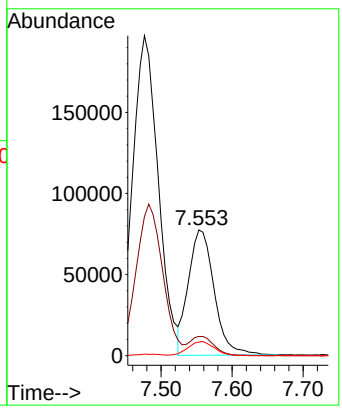
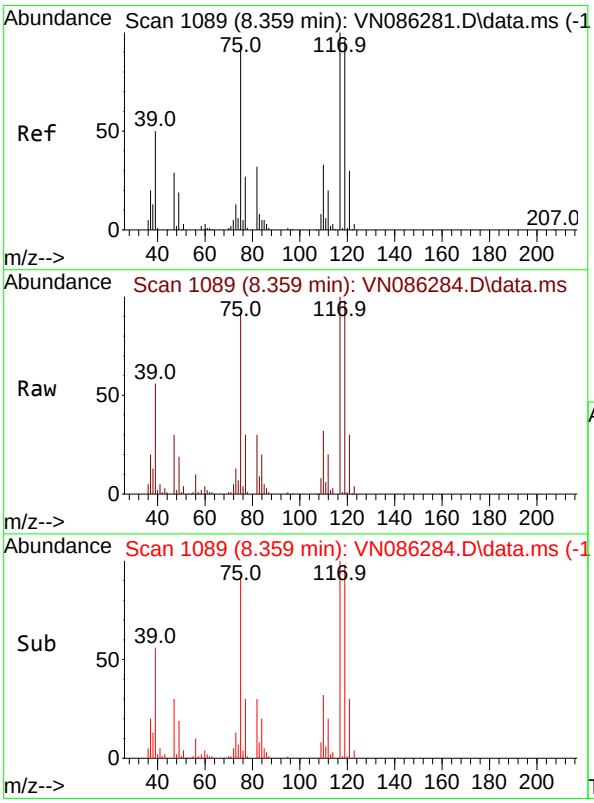
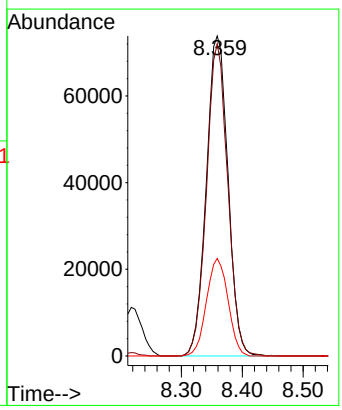


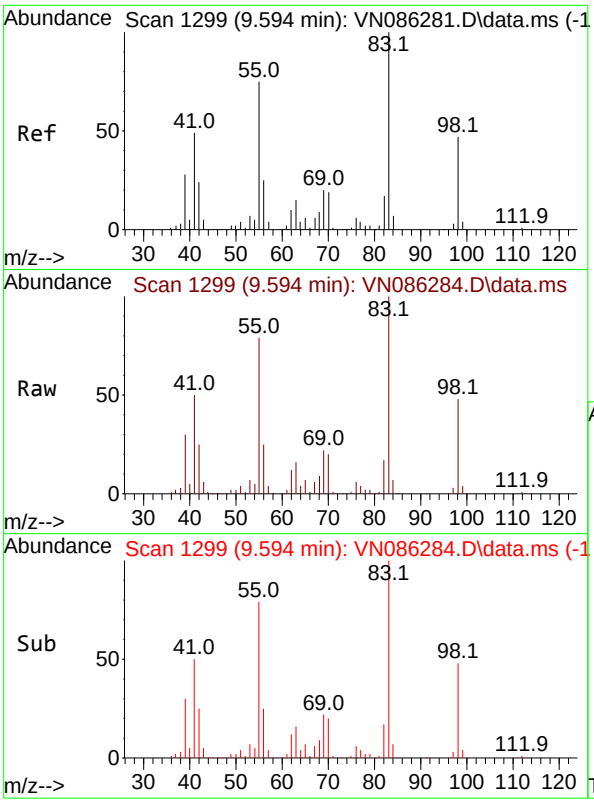


#38
Carbon Tetrachloride
Concen: 47.475 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:117 Resp: 182531

Ion	Ratio	Lower	Upper
117	100		
119	97.6	76.8	115.2
121	30.5	23.8	35.8





#39
Methylcyclohexane
Concen: 45.902 ug/l
RT: 9.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 83 Resp: 22027

Ion	Ratio	Lower	Upper
83	100		
55	78.7	59.8	89.8
98	48.1	37.9	56.9

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations
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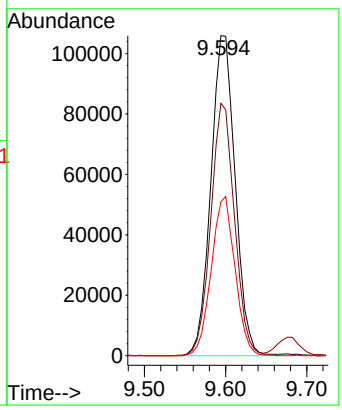
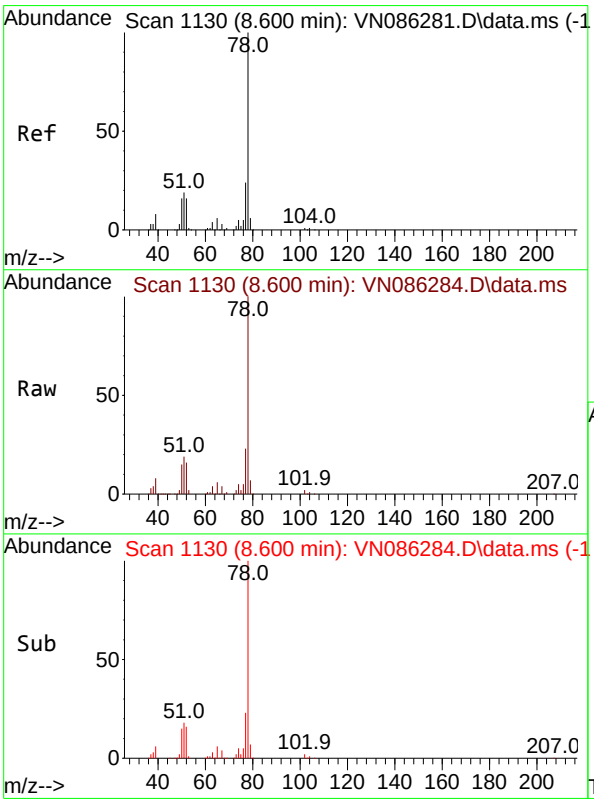
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

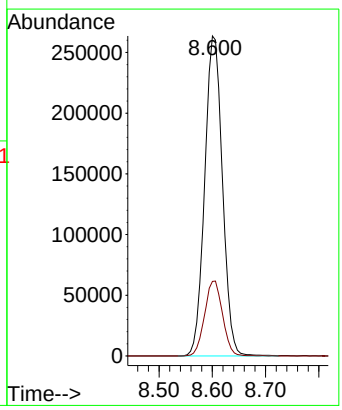


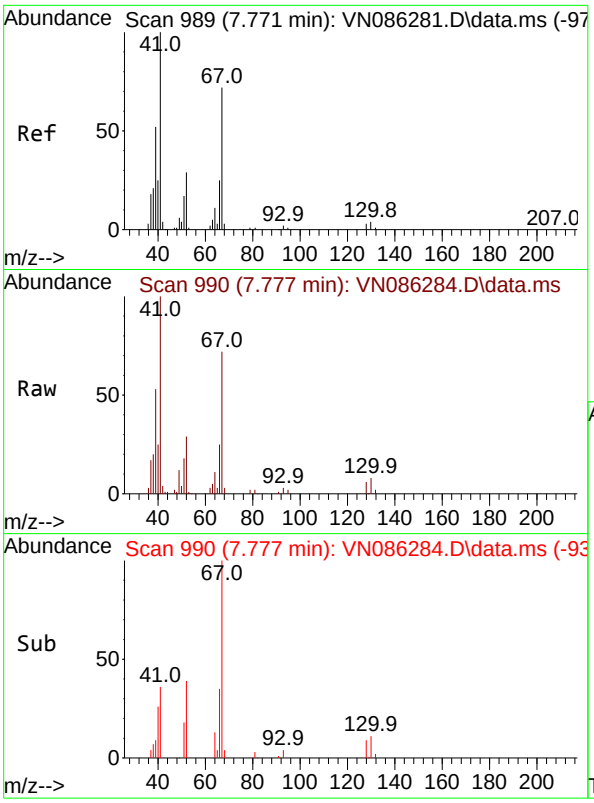


#40
Benzene
Concen: 47.168 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 78 Resp: 610128

Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.4	29.2

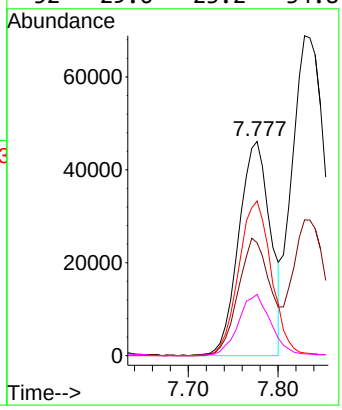




#41
Methacrylonitrile
Concen: 45.892 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 41 Resp: 11305

Ion	Ratio	Lower	Upper
41	100		
39	54.9	43.0	64.4
67	75.1	58.8	88.2
52	29.6	23.2	34.8



Instrument :
MSVOA_N
ClientSampleId :
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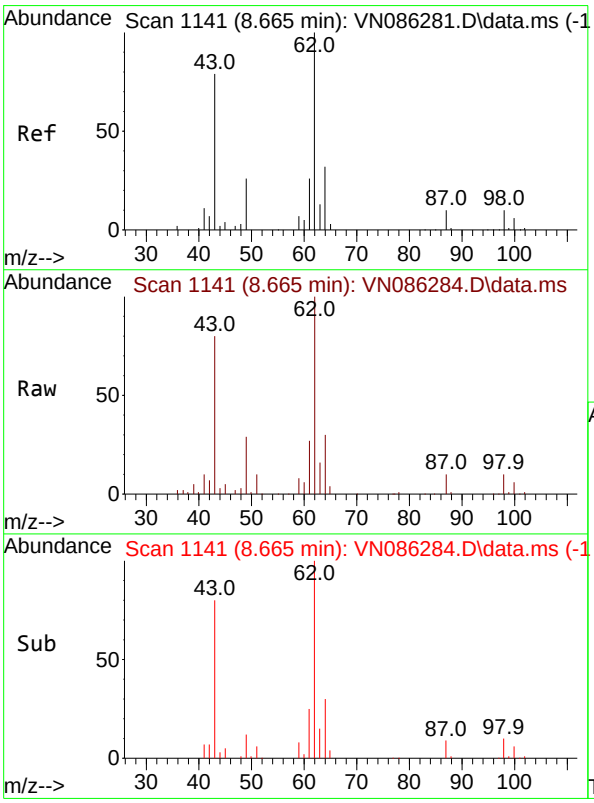
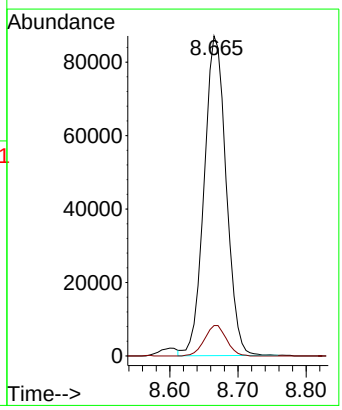
Supervised By :Semsettin Yesilyurt 04/16/2025

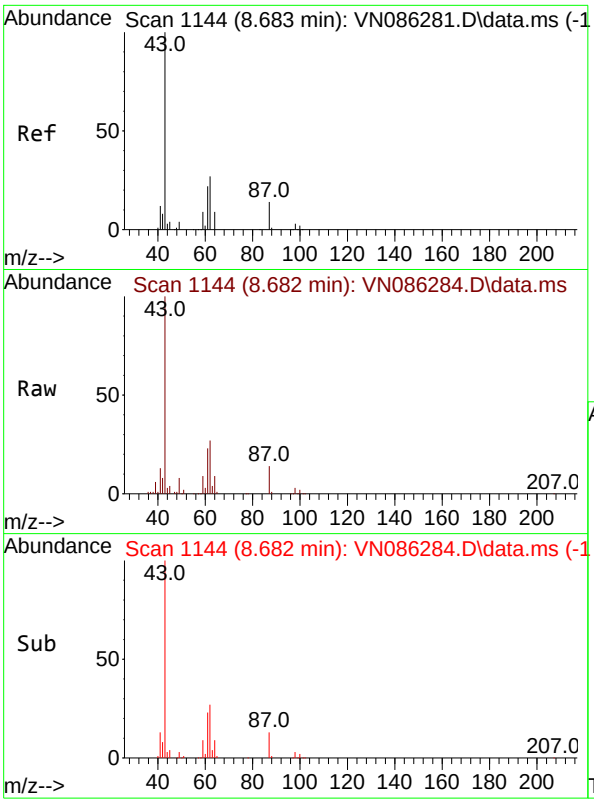


#42
1,2-Dichloroethane
Concen: 47.496 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 62 Resp: 195922

Ion	Ratio	Lower	Upper
62	100		
98	9.5	0.0	19.2





#43
Isopropyl Acetate
Concen: 48.649 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 37057

Ion	Ratio	Lower	Upper
43	100		
61	25.6	20.5	30.7
87	13.2	10.5	15.7

Instrument :
MSVOA_N
ClientSampleId :
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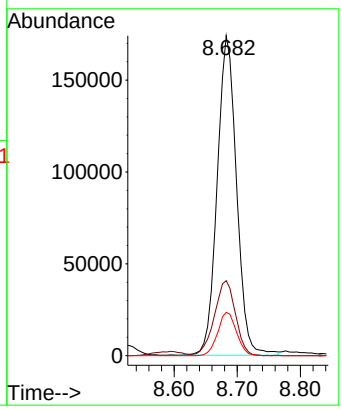
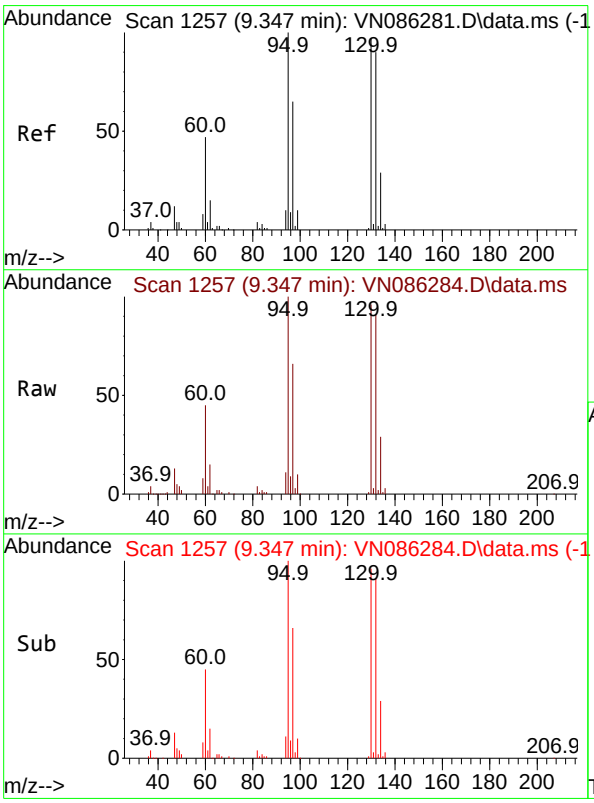
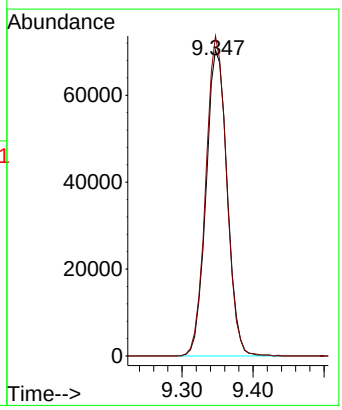


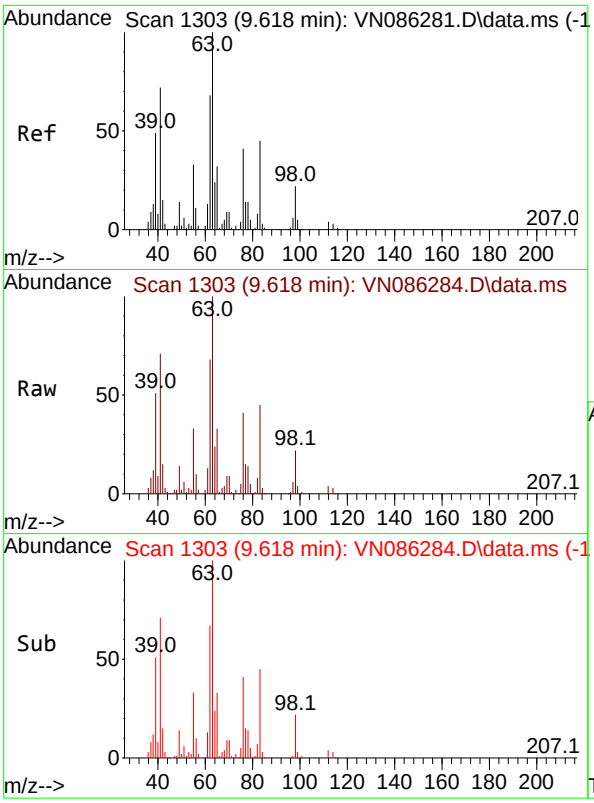


#44
Trichloroethene
Concen: 47.403 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:130 Resp: 145334

Ion	Ratio	Lower	Upper
130	100		
95	104.6	0.0	207.2





#45
1,2-Dichloropropane
Concen: 47.302 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 63 Resp: 14977

Ion	Ratio	Lower	Upper
63	100		
65	32.8	25.4	38.2

Instrument :
MSVOA_N
ClientSampleId :
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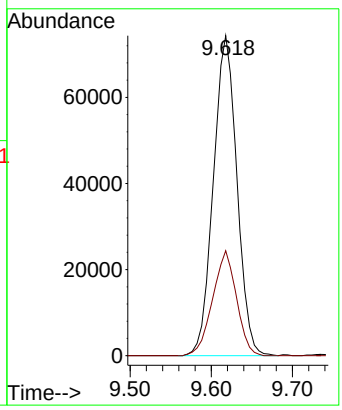
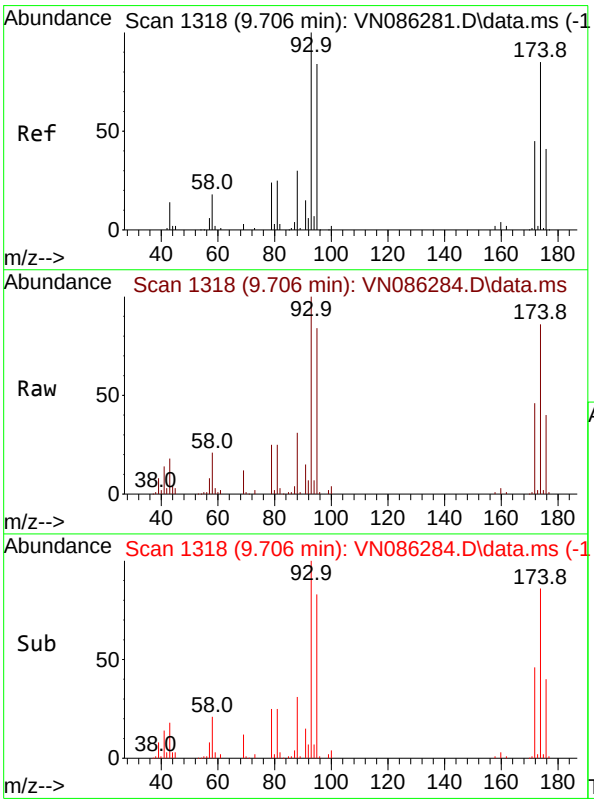
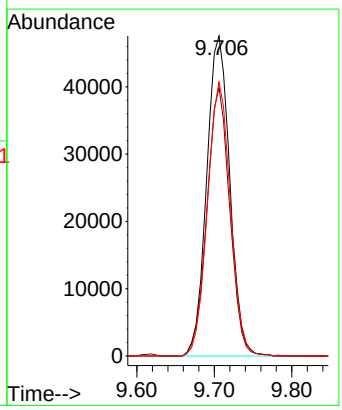


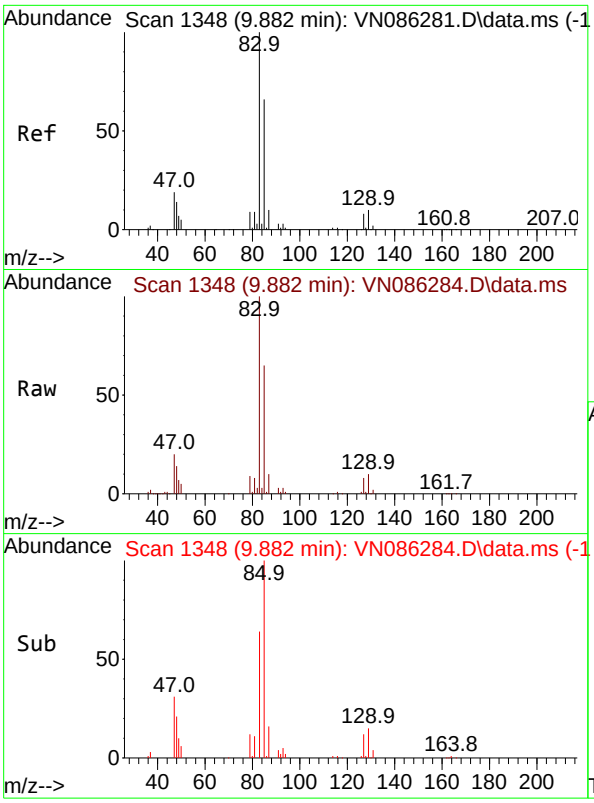


#46
Dibromomethane
Concen: 48.772 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 93 Resp: 98395

Ion	Ratio	Lower	Upper
93	100		
95	82.9	66.2	99.4
174	85.1	67.8	101.6

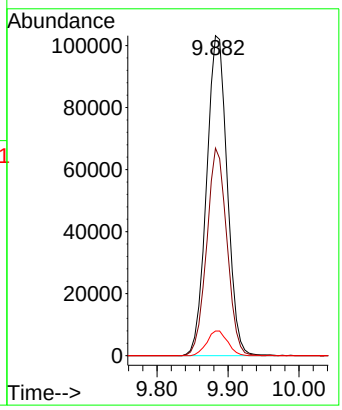




#47
Bromodichloromethane
Concen: 47.682 ug/l
RT: 9.882 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 83 Resp: 20776

Ion	Ratio	Lower	Upper
83	100		
85	64.9	52.6	78.8
127	7.7	6.1	9.1



Instrument :
MSVOA_N
ClientSampleId :
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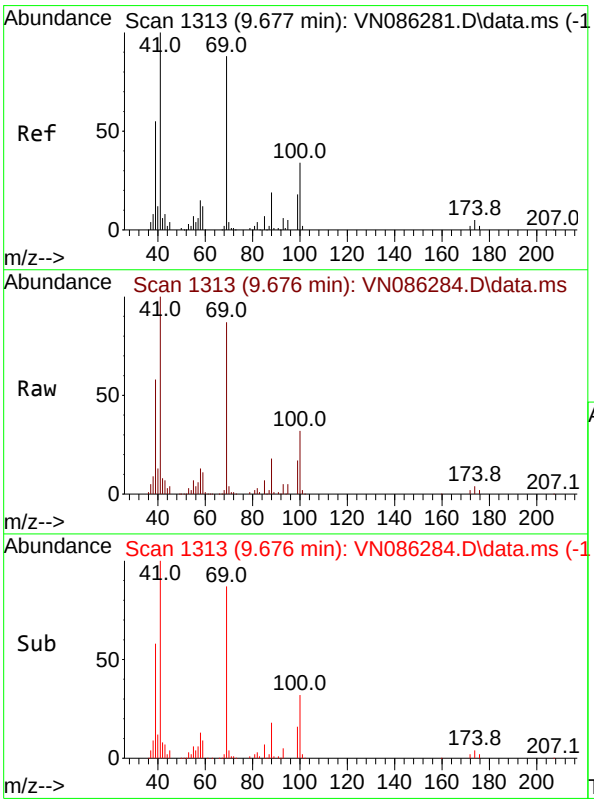
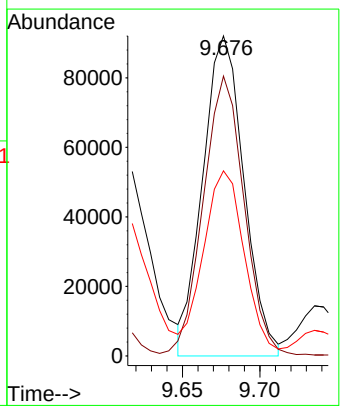
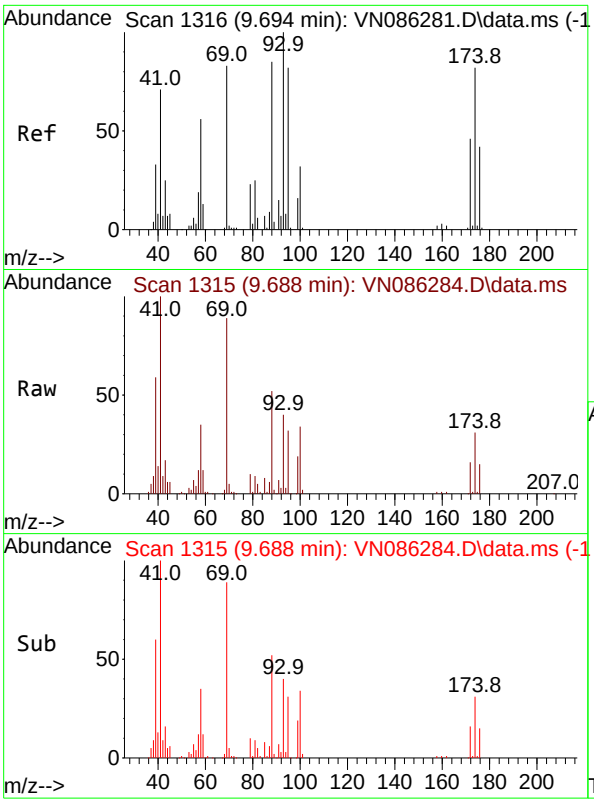


#48
Methyl methacrylate
Concen: 45.546 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 41 Resp: 170007

Ion	Ratio	Lower	Upper
41	100		
69	87.5	68.2	102.2
39	58.2	45.2	67.8





#49
1,4-Dioxane
Concen: 929.893 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 88 Resp: 5904

Ion	Ratio	Lower	Upper
88	100		
43	27.8	23.8	35.8
58	72.2	57.4	86.2

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations
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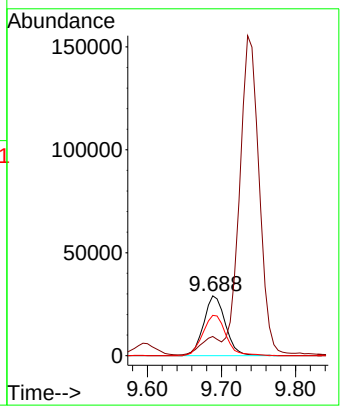
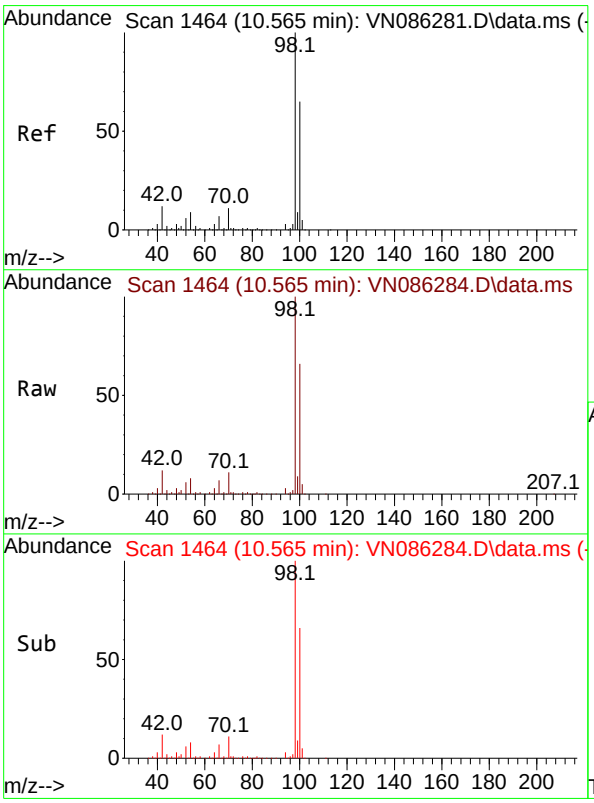
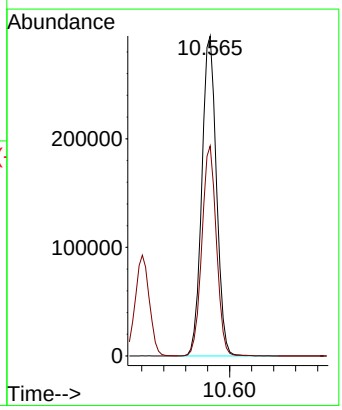


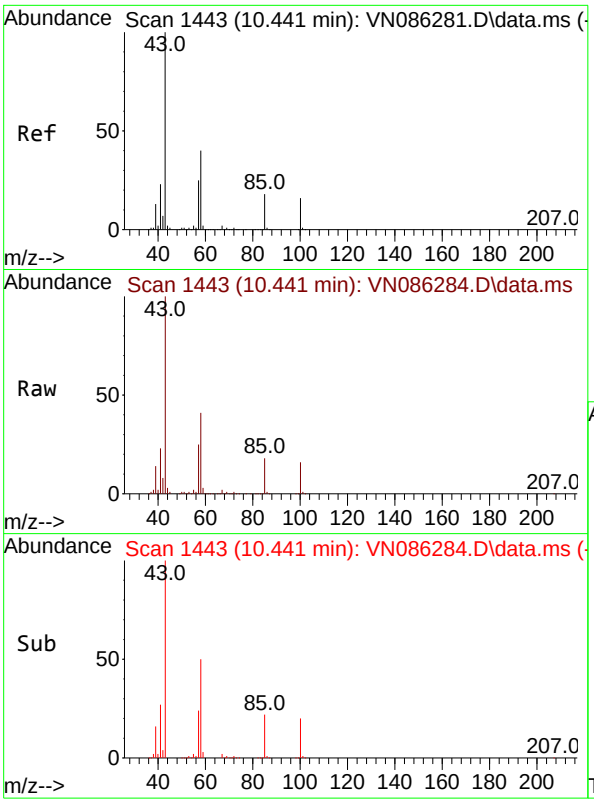


#50
Toluene-d8
Concen: 50.251 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 98 Resp: 542858

Ion	Ratio	Lower	Upper
98	100		
100	65.3	52.5	78.7

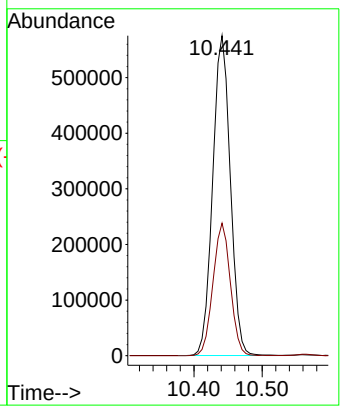




#51
4-Methyl-2-Pentanone
Concen: 238.220 ug/l
RT: 10.441 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 103684

Ion	Ratio	Lower	Upper
43	100		
58	40.8	32.2	48.4



Instrument :
MSVOA_N
ClientSampleId :
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Manual Integrations
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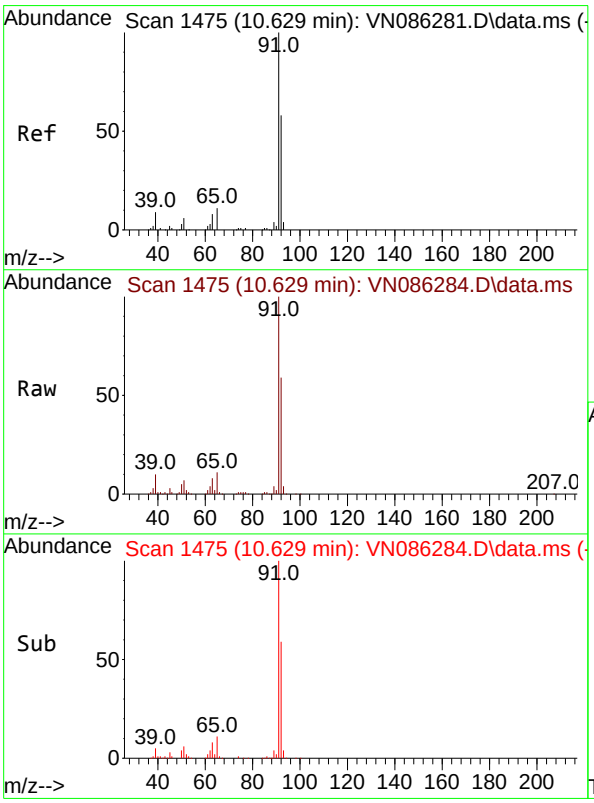
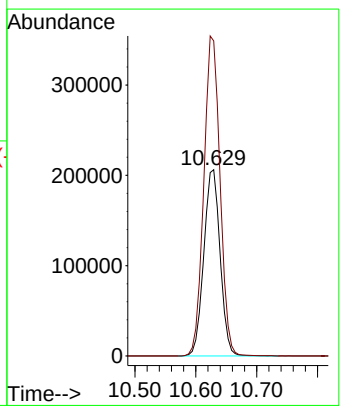
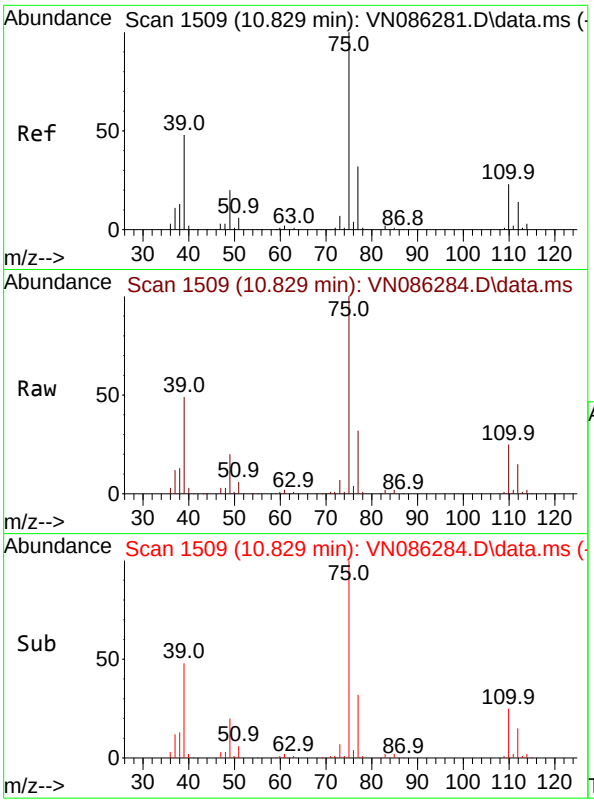


#52
Toluene
Concen: 47.453 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 92 Resp: 383010

Ion	Ratio	Lower	Upper
92	100		
91	171.3	137.3	205.9

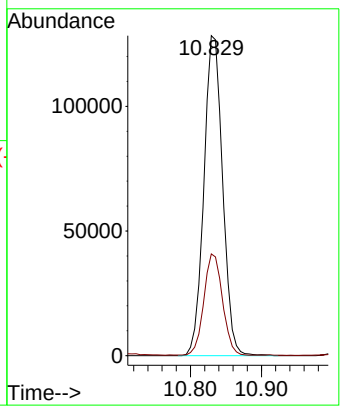




#53
t-1,3-Dichloropropene
Concen: 48.360 ug/l
RT: 10.829 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 75 Resp: 23522

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.4	38.0



Instrument :
MSVOA_N
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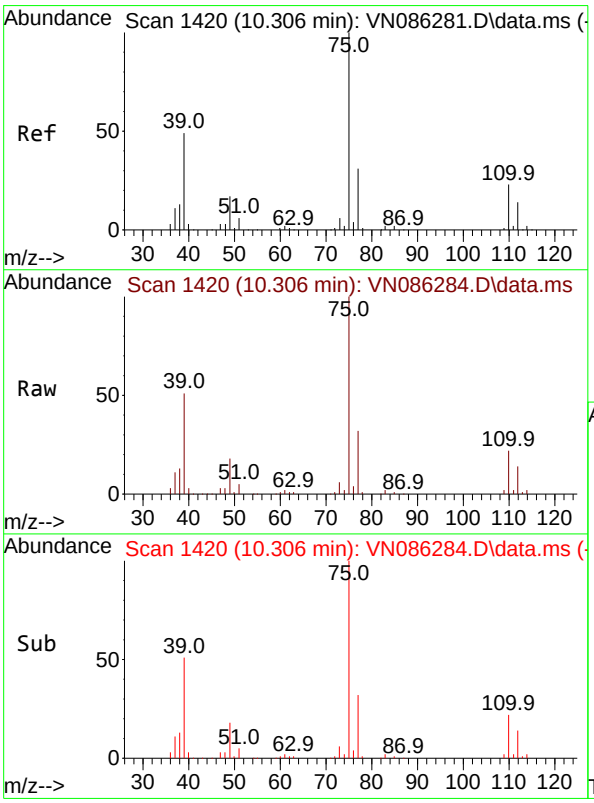
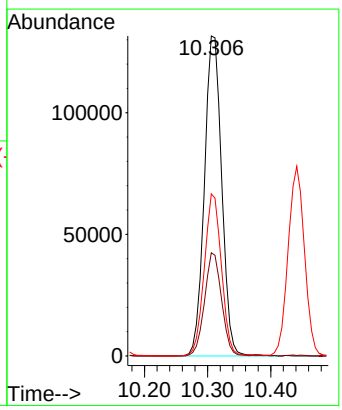
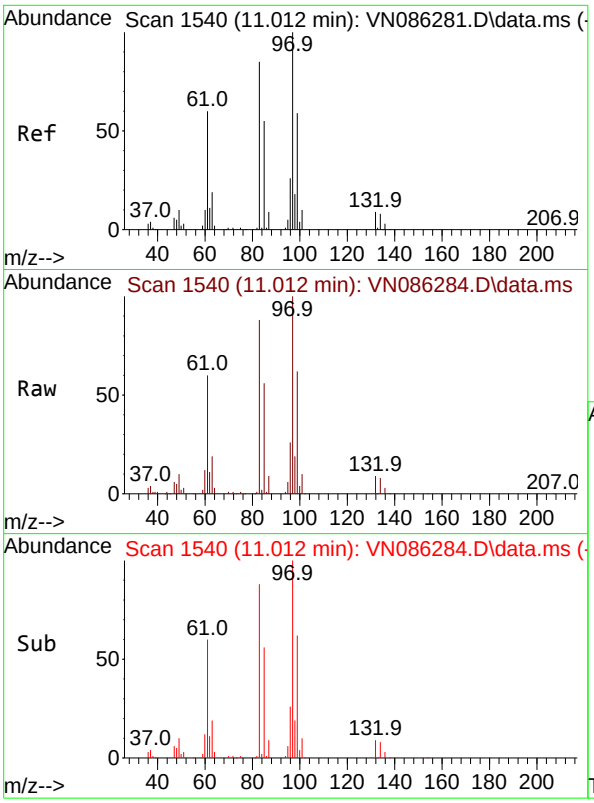


#54
cis-1,3-Dichloropropene
Concen: 46.923 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 75 Resp: 250676

Ion	Ratio	Lower	Upper
75	100		
77	32.3	25.2	37.8
39	50.7	39.3	58.9

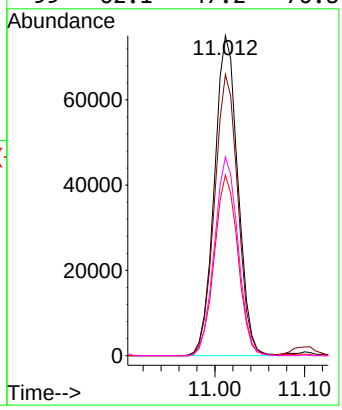




#55
1,1,2-Trichloroethane
Concen: 46.911 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 97 Resp: 13622

Ion	Ratio	Lower	Upper
97	100		
83	87.9	68.4	102.6
85	56.5	43.9	65.9
99	62.1	47.2	70.8



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MSVOA_N
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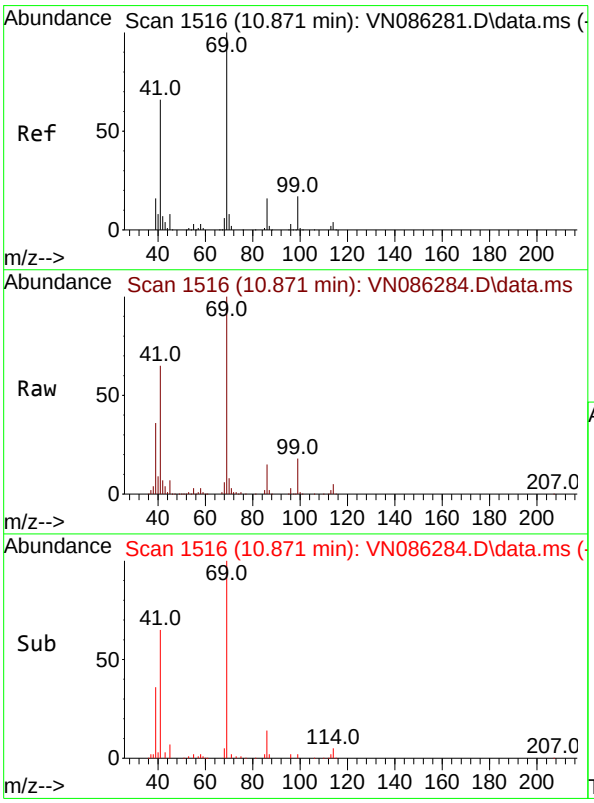
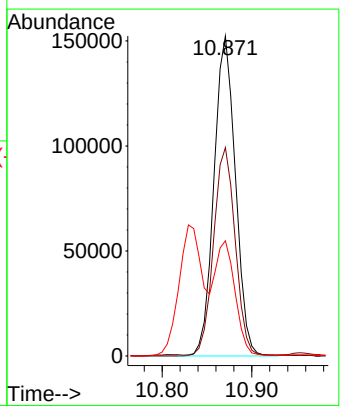
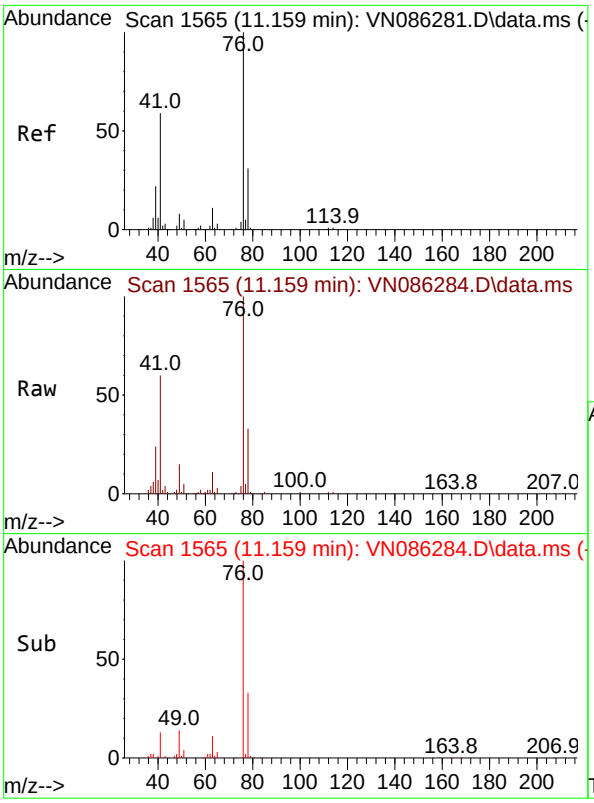


#56
Ethyl methacrylate
Concen: 47.414 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 69 Resp: 253092

Ion	Ratio	Lower	Upper
69	100		
41	65.3	51.7	77.5
39	33.1	26.3	39.5

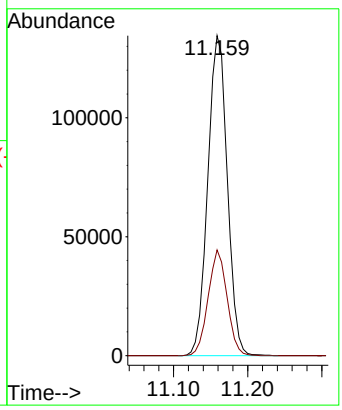




#57
1,3-Dichloropropane
Concen: 47.770 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 76 Resp: 24612

Ion	Ratio	Lower	Upper
76	100		
78	32.0	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
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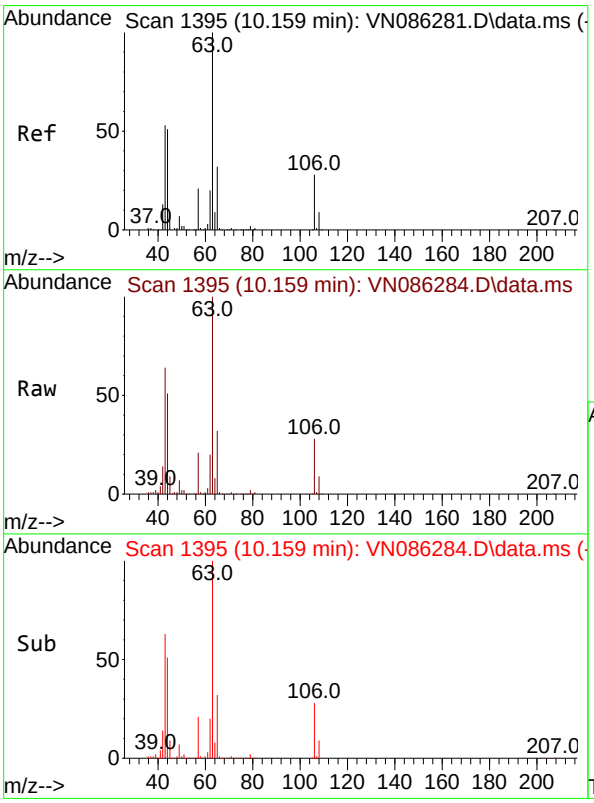
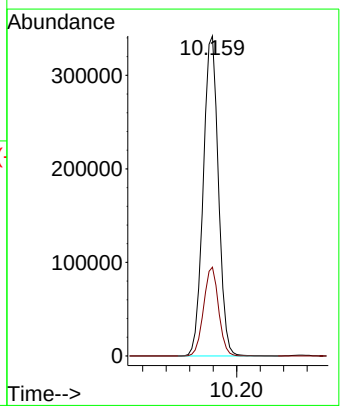
Supervised By :Semsettin Yesilyurt 04/16/2025

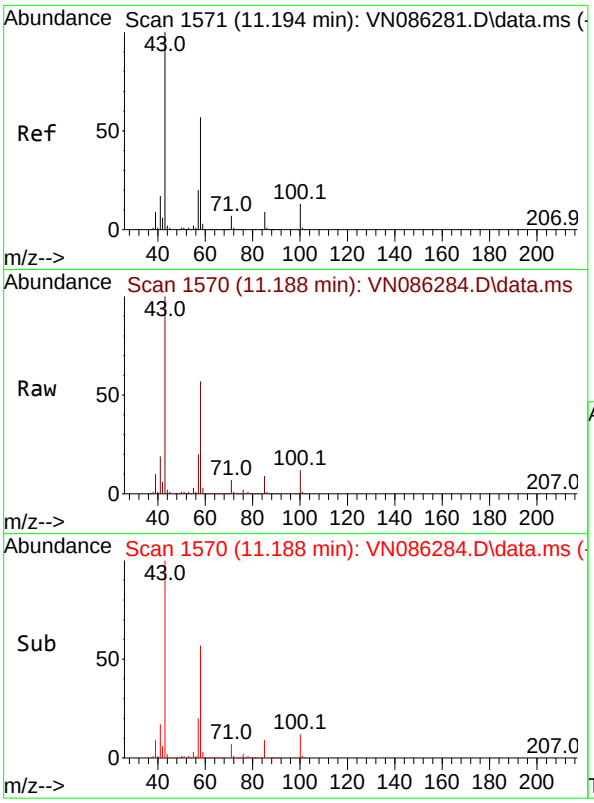


#58
2-Chloroethyl Vinyl ether
Concen: 241.924 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 63 Resp: 612932

Ion	Ratio	Lower	Upper
63	100		
106	27.4	22.2	33.2





#59
2-Hexanone
Concen: 235.364 ug/l
RT: 11.188 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 75984

Ion	Ratio	Lower	Upper
43	100		
58	57.3	28.3	85.0

Instrument :
MSVOA_N
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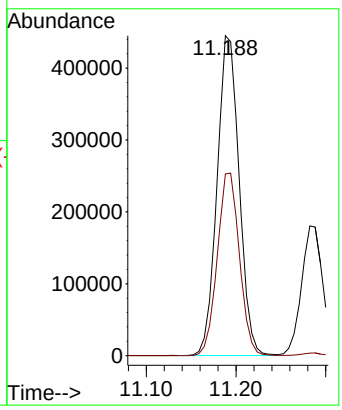
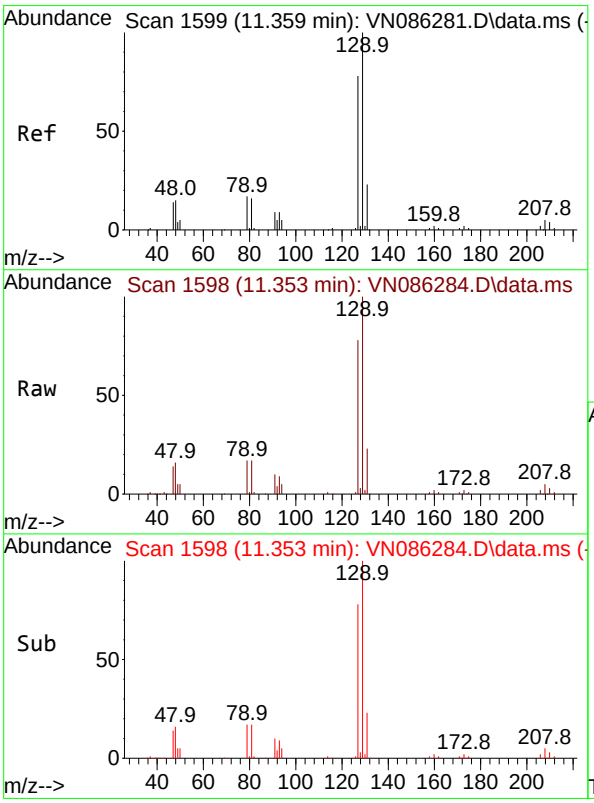
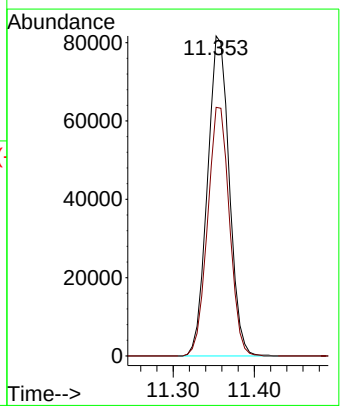


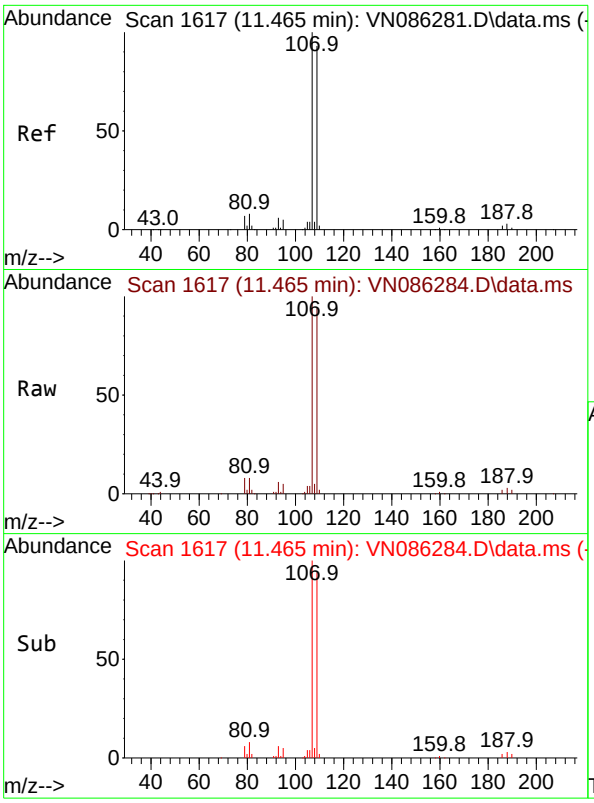


#60
Dibromochloromethane
Concen: 47.767 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:129 Resp: 152321

Ion	Ratio	Lower	Upper
129	100		
127	77.9	38.7	116.1





#61
1,2-Dibromoethane
Concen: 47.777 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:107 Resp: 13999

Ion	Ratio	Lower	Upper
107	100		
109	94.1	75.4	113.0

Instrument :
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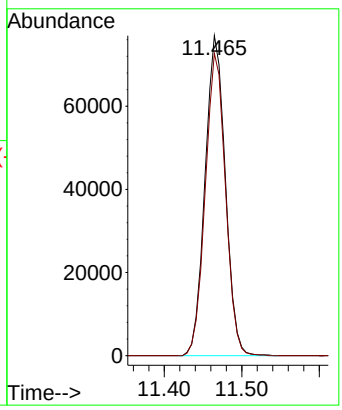
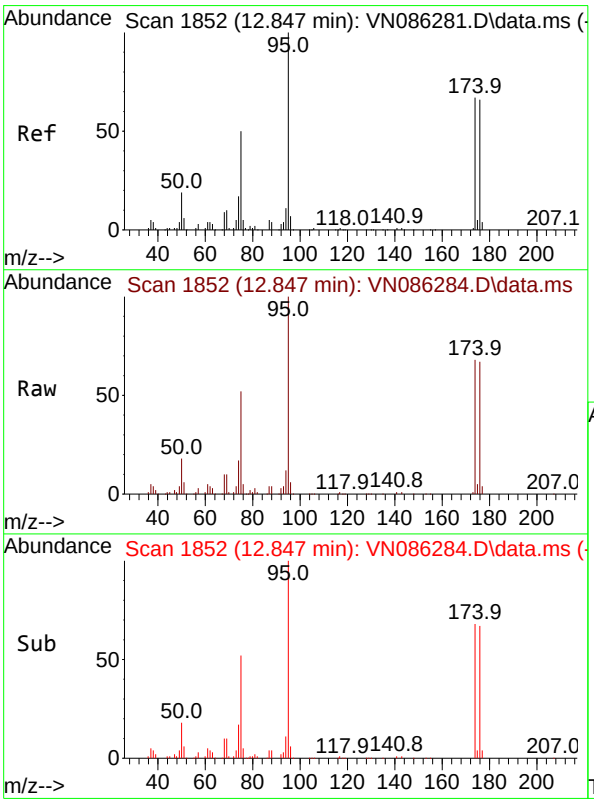
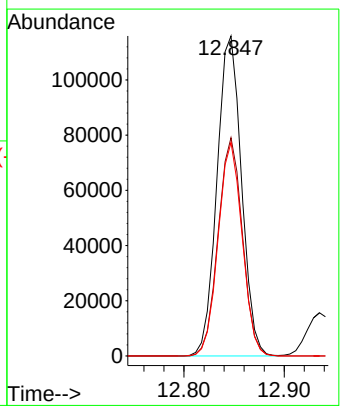


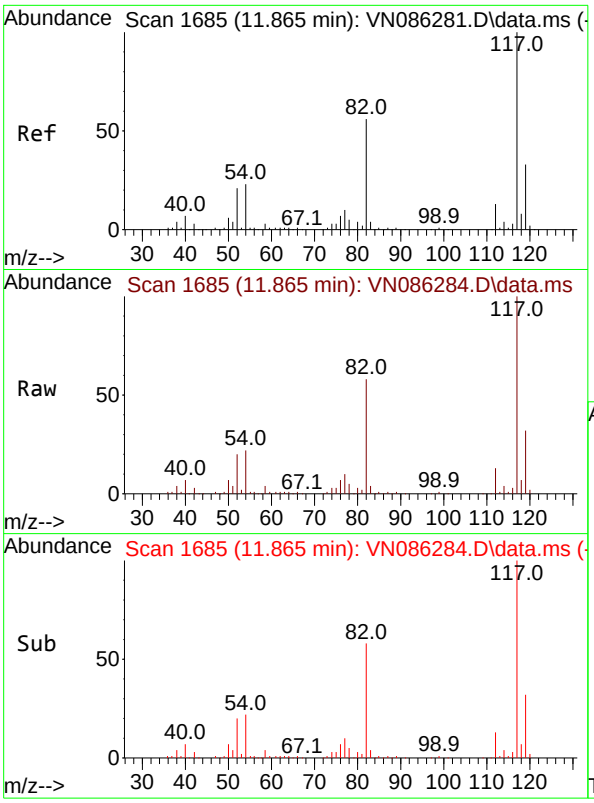


#62
4-Bromofluorobenzene
Concen: 49.950 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 95 Resp: 196820

Ion	Ratio	Lower	Upper
95	100		
174	67.3	0.0	133.4
176	65.1	0.0	129.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:117 Resp: 38460

Ion	Ratio	Lower	Upper
117	100		
82	57.9	44.7	67.1
119	32.4	26.4	39.6

Instrument :
MSVOA_N
ClientSampleId :
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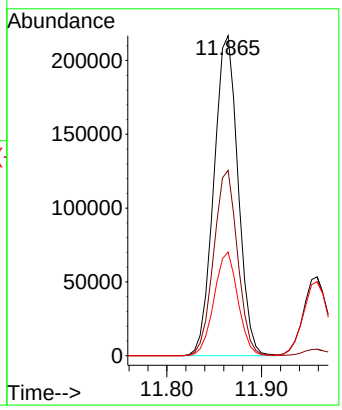
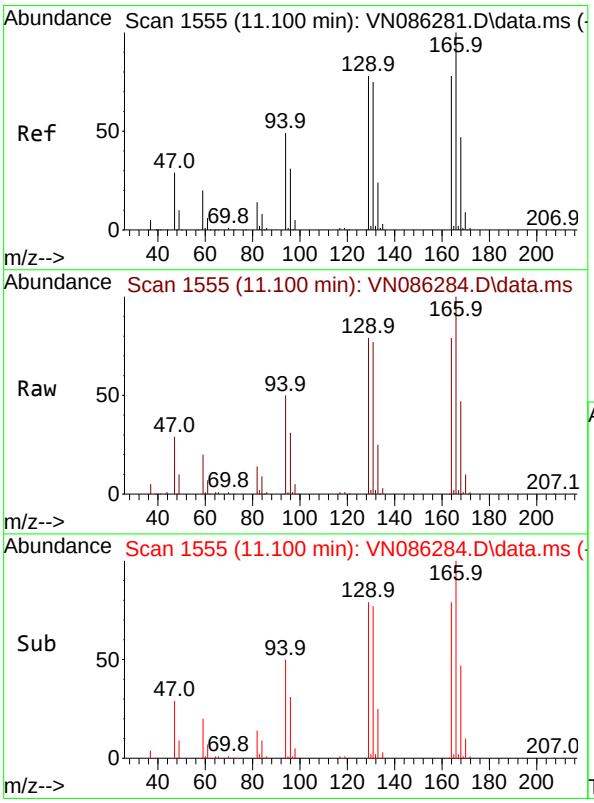
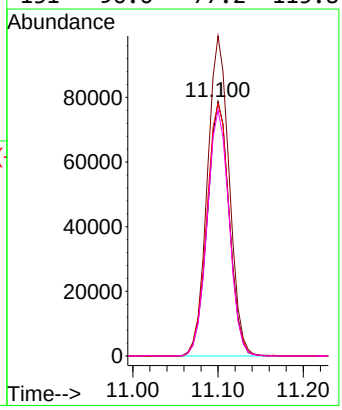


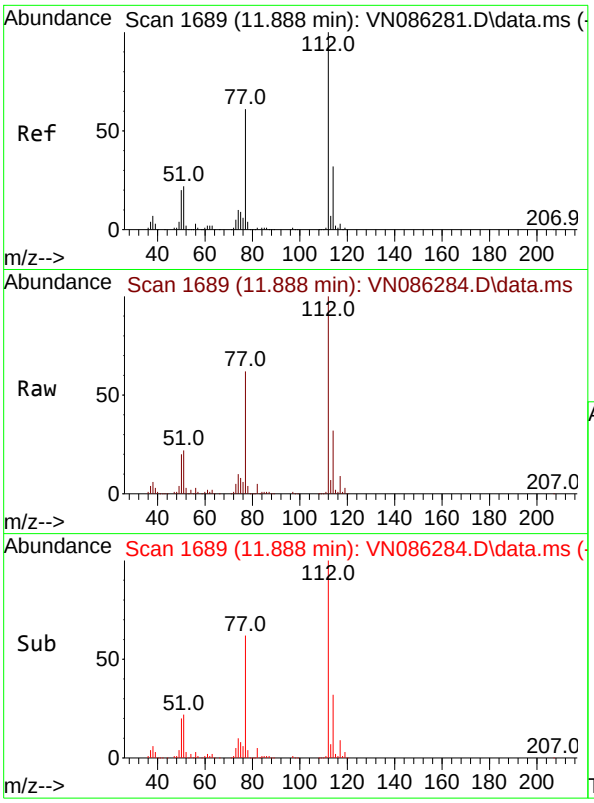


#64
Tetrachloroethene
Concen: 47.439 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:164 Resp: 140342

Ion	Ratio	Lower	Upper
164	100		
166	125.8	103.0	154.4
129	99.3	80.1	120.1
131	96.6	77.2	115.8

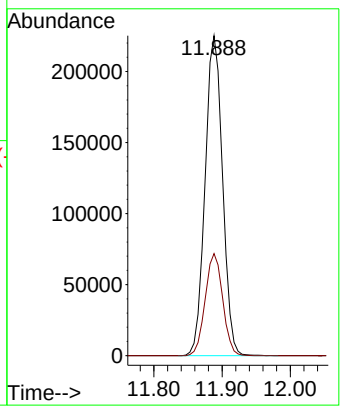




#65
Chlorobenzene
Concen: 46.735 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:112 Resp: 40112

Ion	Ratio	Lower	Upper
112	100		
114	31.9	25.4	38.0



Instrument :
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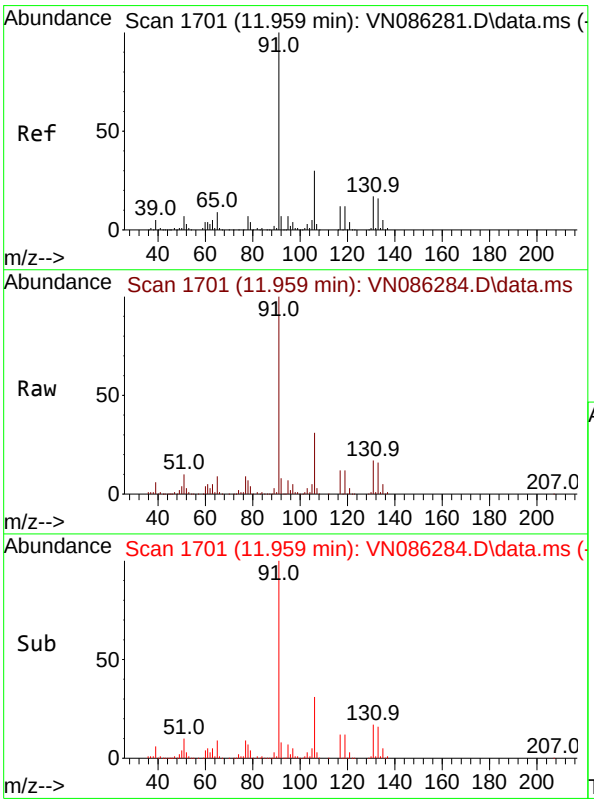
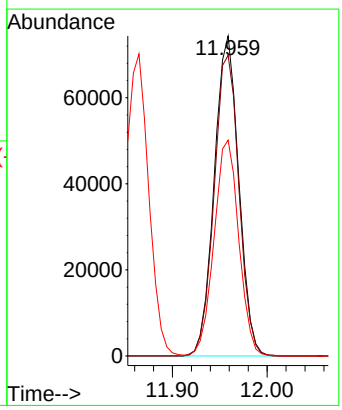
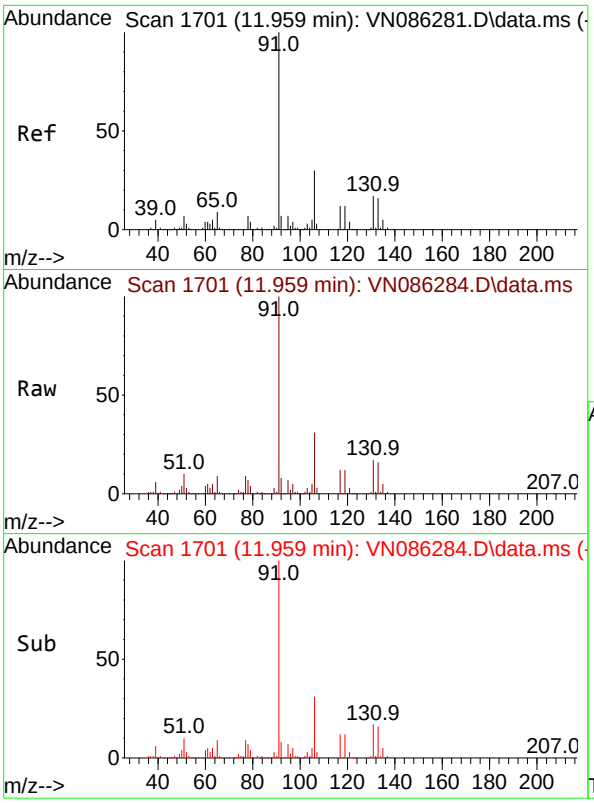


#66
1,1,1,2-Tetrachloroethane
Concen: 47.238 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:131 Resp: 133755

Ion	Ratio	Lower	Upper
131	100		
133	95.3	47.1	141.3
119	68.1	33.8	101.4

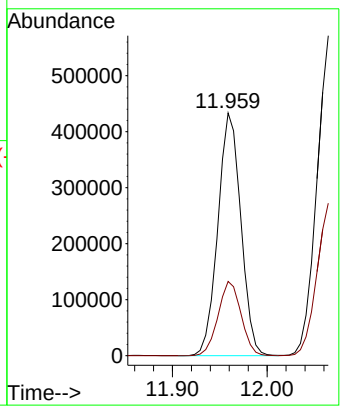




#67
Ethyl Benzene
Concen: 47.196 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 91 Resp: 73098

Ion	Ratio	Lower	Upper
91	100		
106	30.6	24.3	36.5



Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

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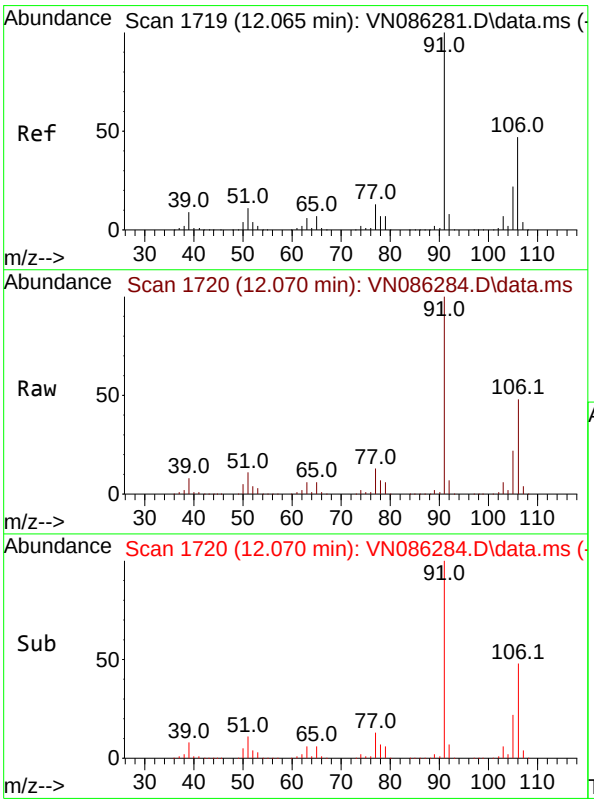
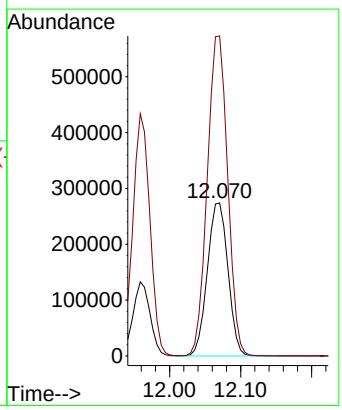
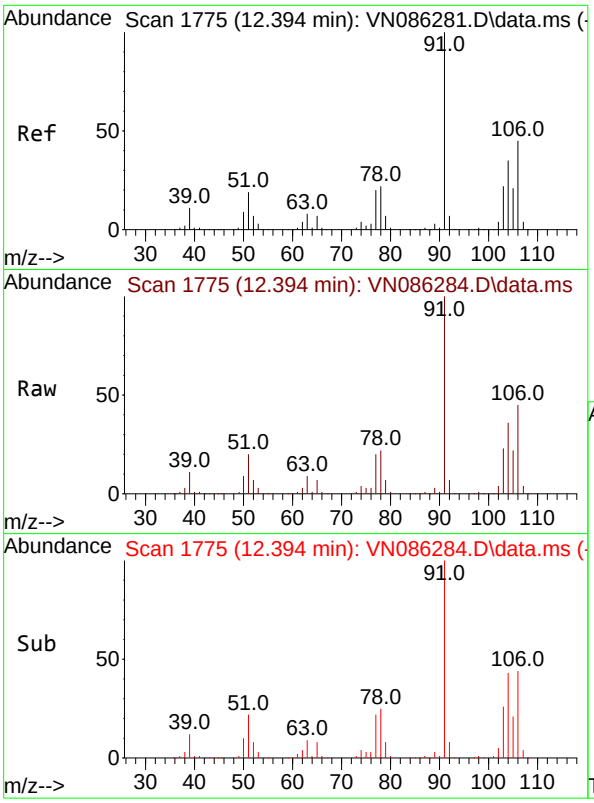


#68
m/p-Xylenes
Concen: 94.994 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:106 Resp: 551289

Ion	Ratio	Lower	Upper
106	100		
91	207.6	166.5	249.7





#69
o-Xylene
Concen: 47.043 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:106 Resp: 26999

Ion	Ratio	Lower	Upper
106	100		
91	219.8	109.7	329.0

Instrument :
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ClientSampleId :
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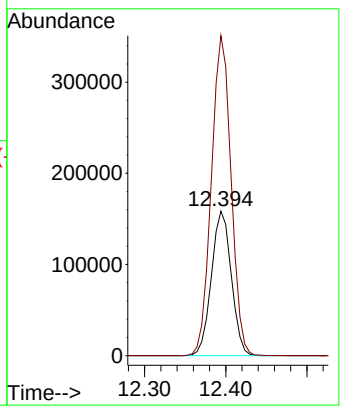
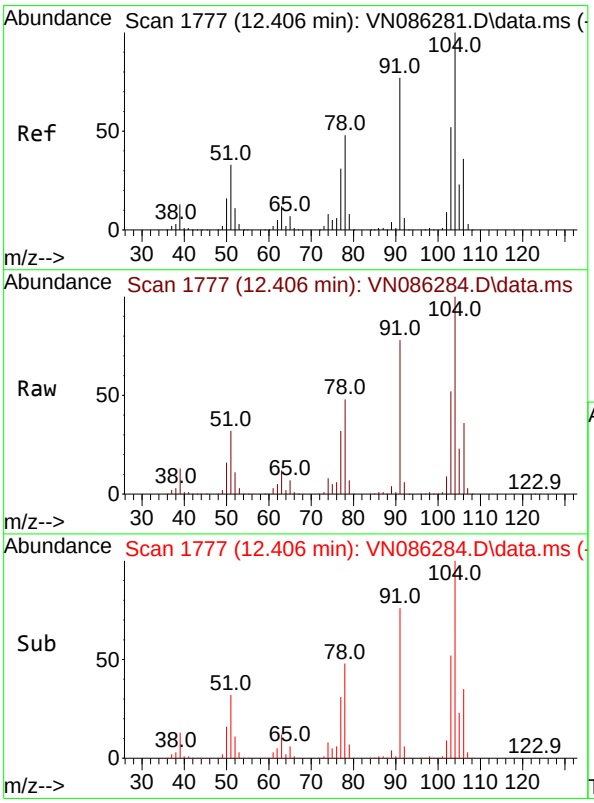
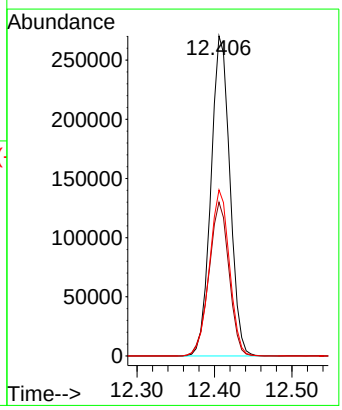


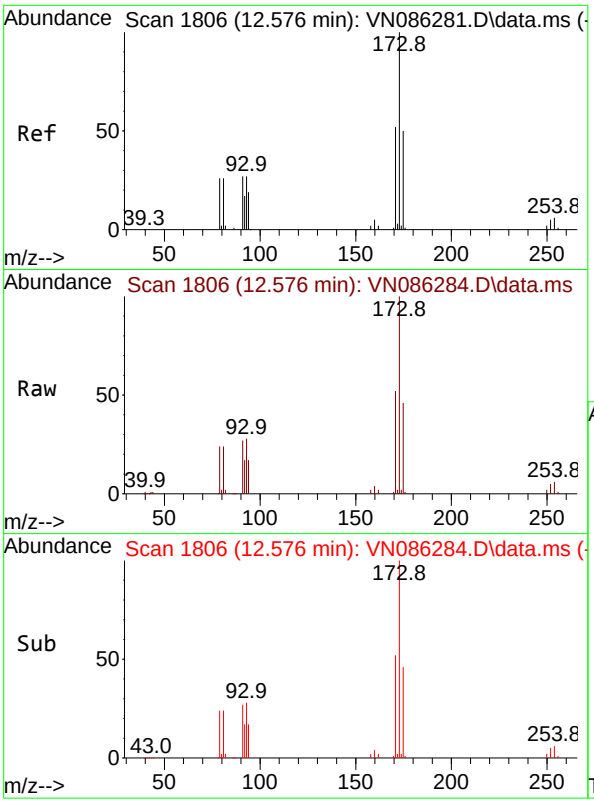


#70
Styrene
Concen: 48.138 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:104 Resp: 460331

Ion	Ratio	Lower	Upper
104	100		
78	50.6	40.6	61.0
103	54.7	43.6	65.4

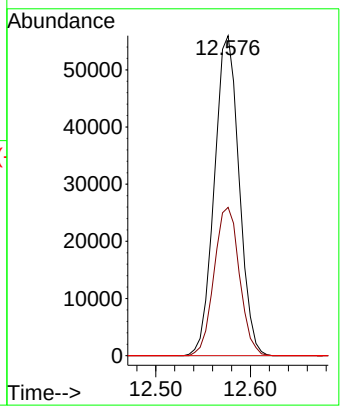




#71
Bromoform
Concen: 47.634 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:173 Resp: 10154

Ion	Ratio	Lower	Upper
173	100		
175	47.6	24.6	73.6
254	0.0	0.0	0.0



Instrument :
MSVOA_N
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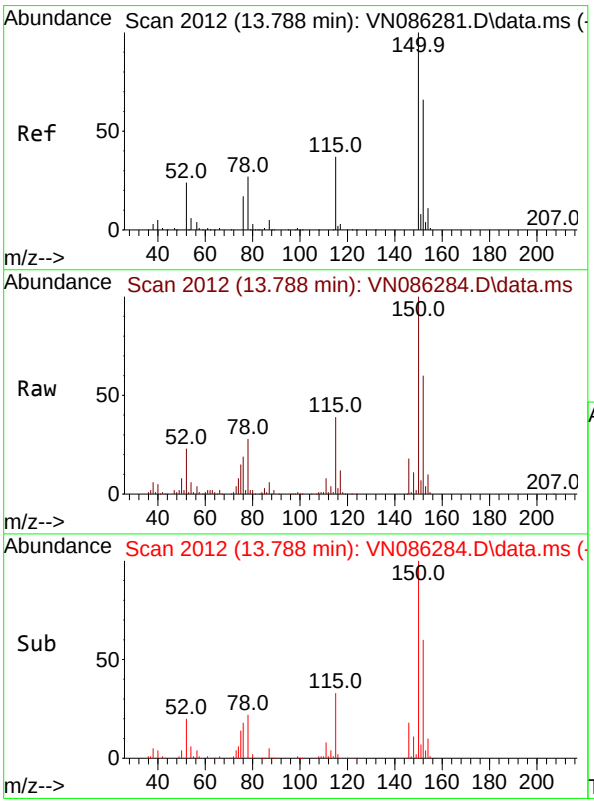
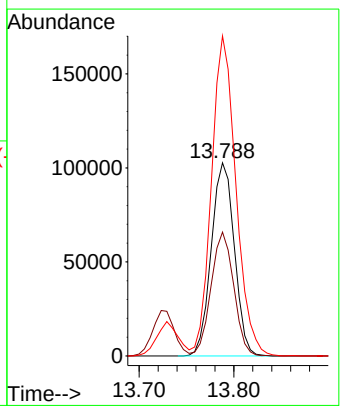
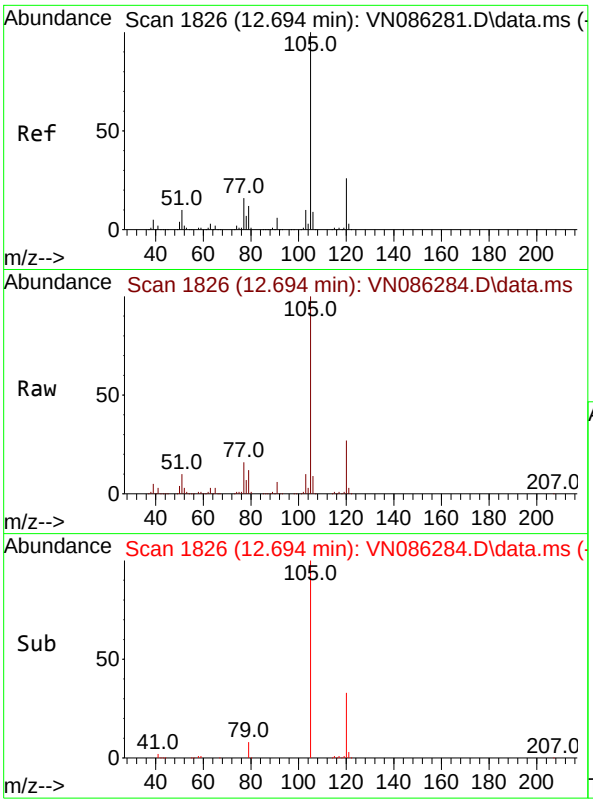


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:152 Resp: 173902

Ion	Ratio	Lower	Upper
152	100		
115	63.1	31.9	95.9
150	175.2	0.0	352.0

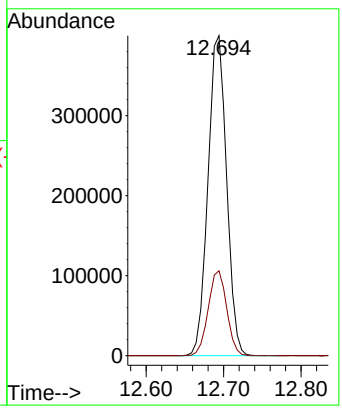




#73
Isopropylbenzene
Concen: 46.930 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:105 Resp: 66760

Ion	Ratio	Lower	Upper
105	100		
120	26.4	13.1	39.3



Instrument :
MSVOA_N
ClientSampleId :
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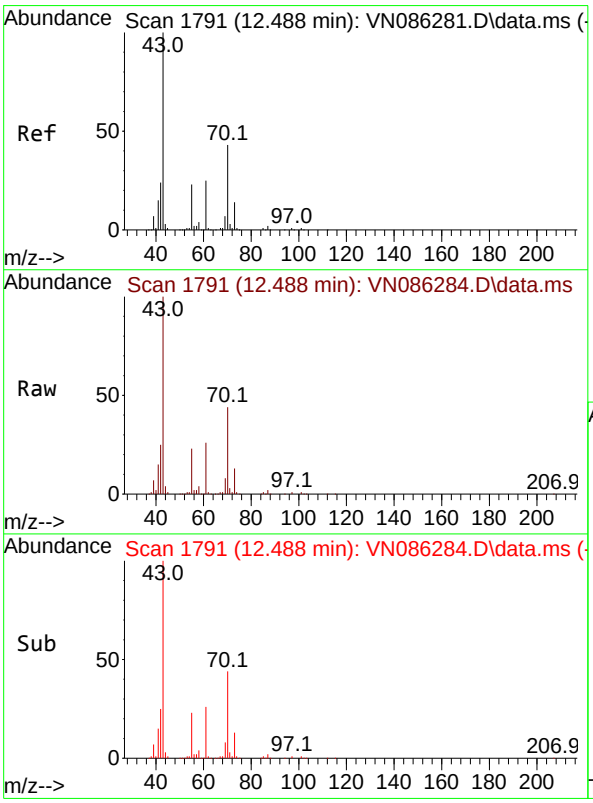
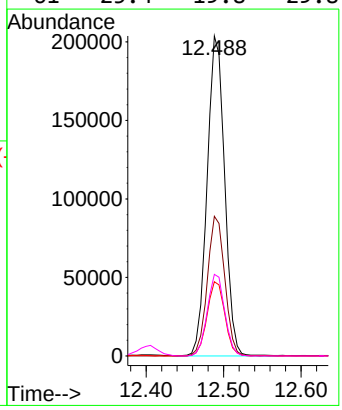
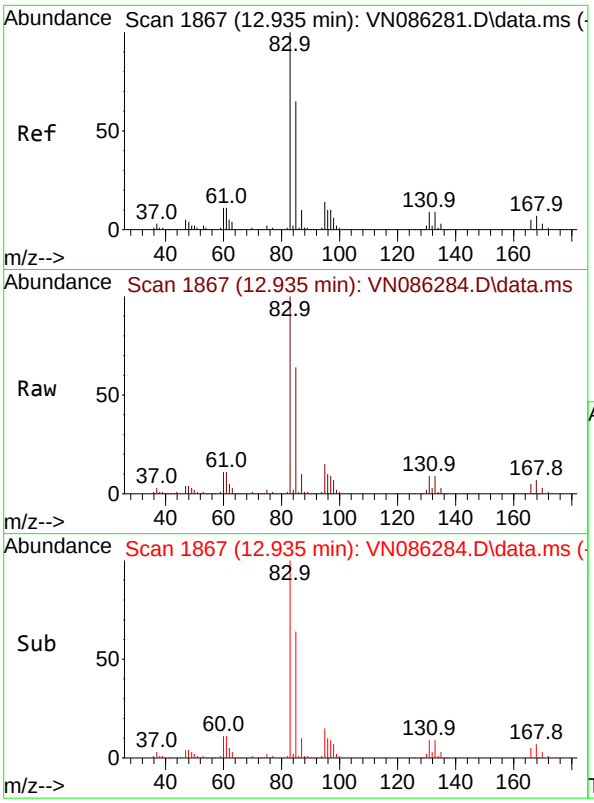


#74
N-amyl acetate
Concen: 45.241 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 43 Resp: 320394

Ion	Ratio	Lower	Upper
43	100		
70	43.4	35.0	52.4
55	23.5	19.0	28.4
61	25.4	19.8	29.8





#75
1,1,2,2-Tetrachloroethane
Concen: 45.501 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 83 Resp: 18611

Ion	Ratio	Lower	Upper
83	100		
131	9.1	4.7	14.1
85	65.1	32.7	98.1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations
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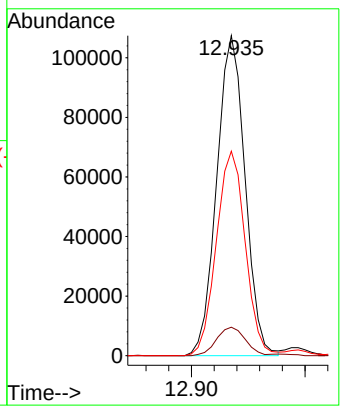
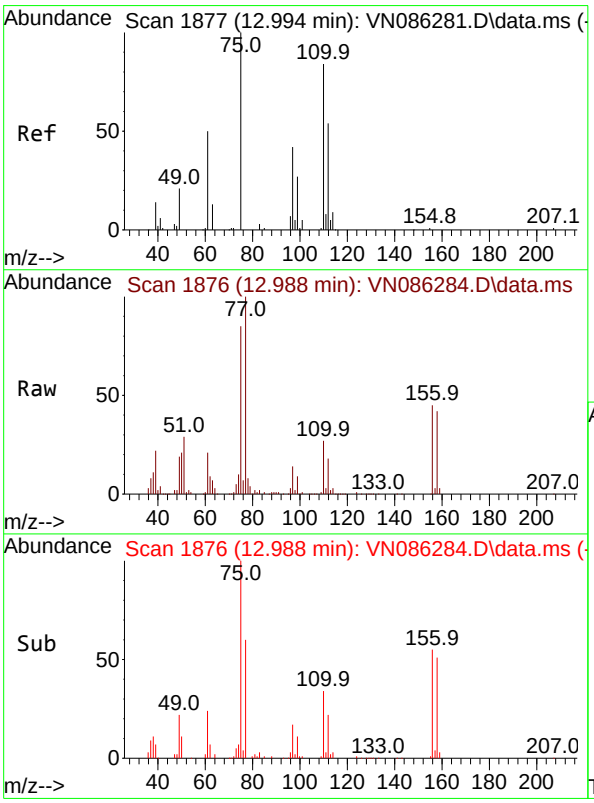
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025

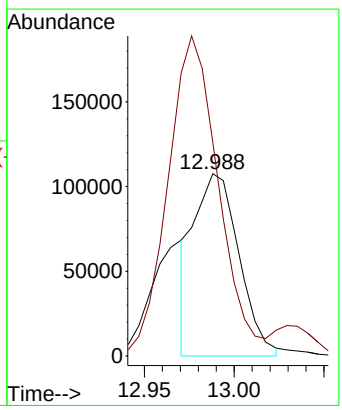


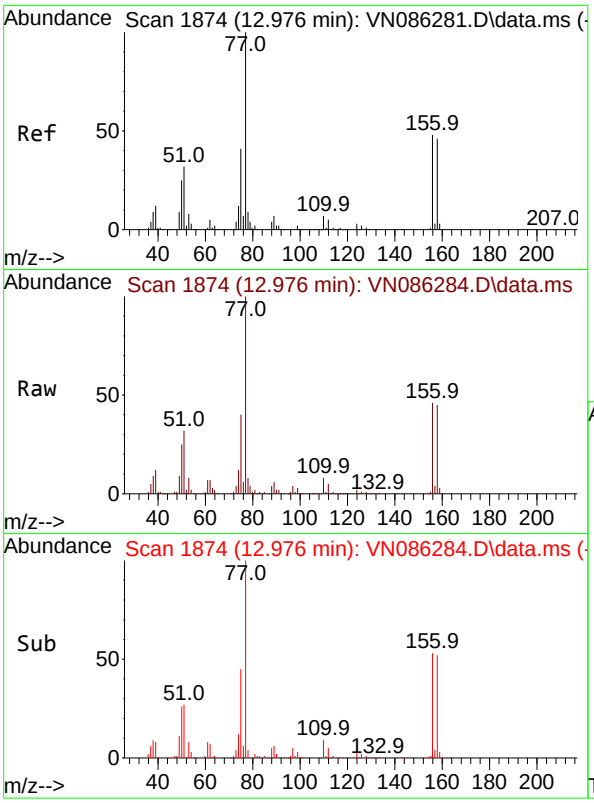


#76
1,2,3-Trichloropropane
Concen: 45.680 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 75 Resp: 187464

Ion	Ratio	Lower	Upper
75	100		
77	197.7	98.8	296.4





#77
Bromobenzene
Concen: 47.860 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:156 Resp: 15085

Ion	Ratio	Lower	Upper
156	100		
77	245.6	121.1	363.1
158	96.3	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

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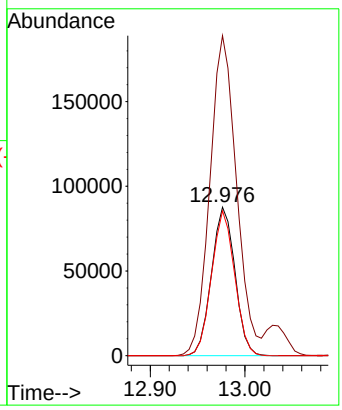
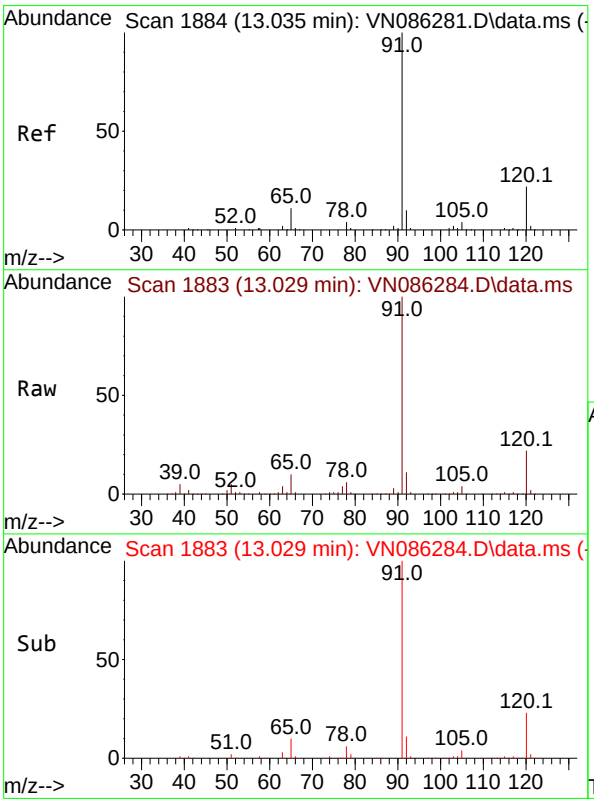
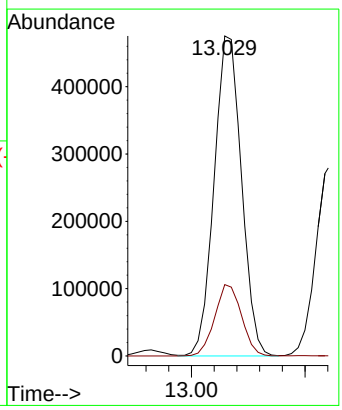


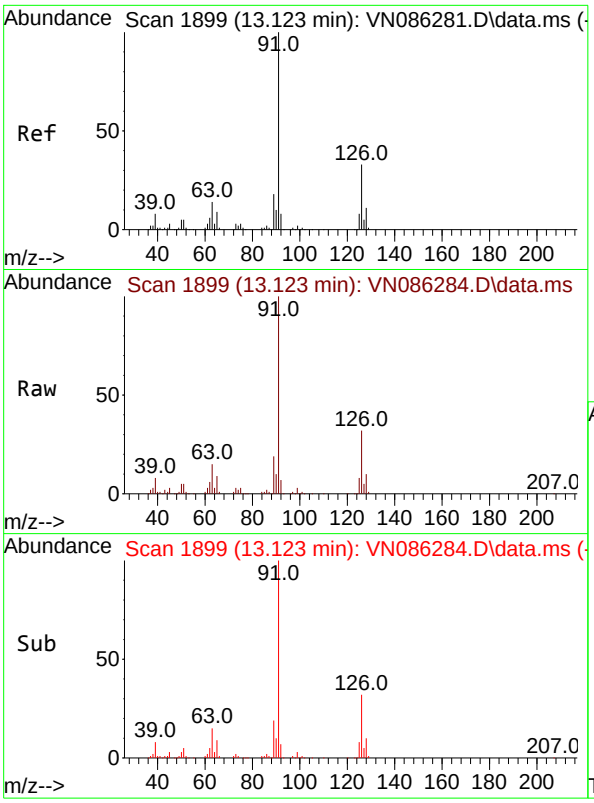


#78
n-propylbenzene
Concen: 47.420 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. -0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 91 Resp: 794892

Ion	Ratio	Lower	Upper
91	100		
120	21.8	11.1	33.3





#79
2-Chlorotoluene
Concen: 47.012 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 91 Resp: 49312

Ion	Ratio	Lower	Upper
91	100		
126	31.8	16.1	48.2

Instrument :
MSVOA_N
ClientSampleId :
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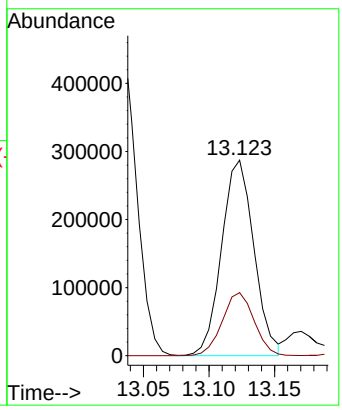
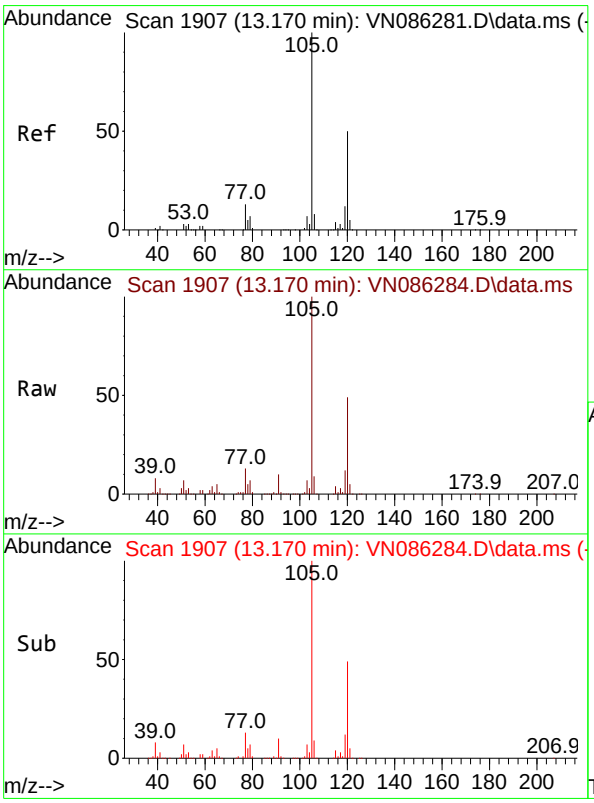
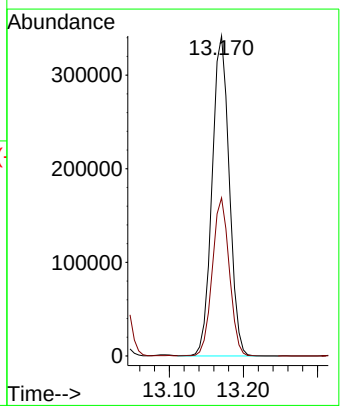


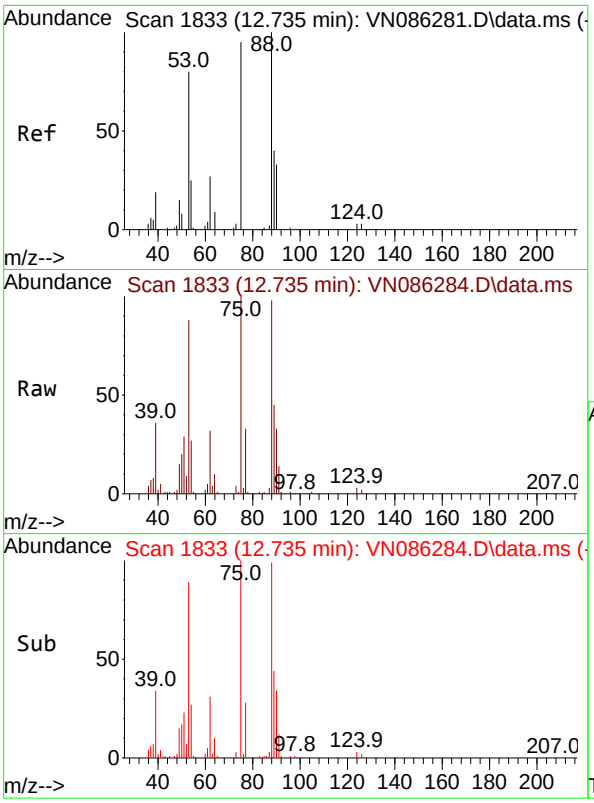


#80
1,3,5-Trimethylbenzene
Concen: 47.241 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:105 Resp: 550039

Ion	Ratio	Lower	Upper
105	100		
120	48.8	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 49.639 ug/l m
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 75 Resp: 8482

Ion	Ratio	Lower	Upper
75	100		
53	89.8	79.2	118.8
89	43.9	35.7	53.5

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

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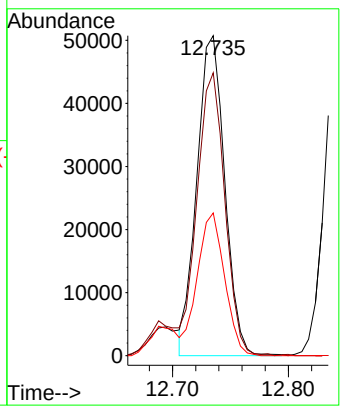
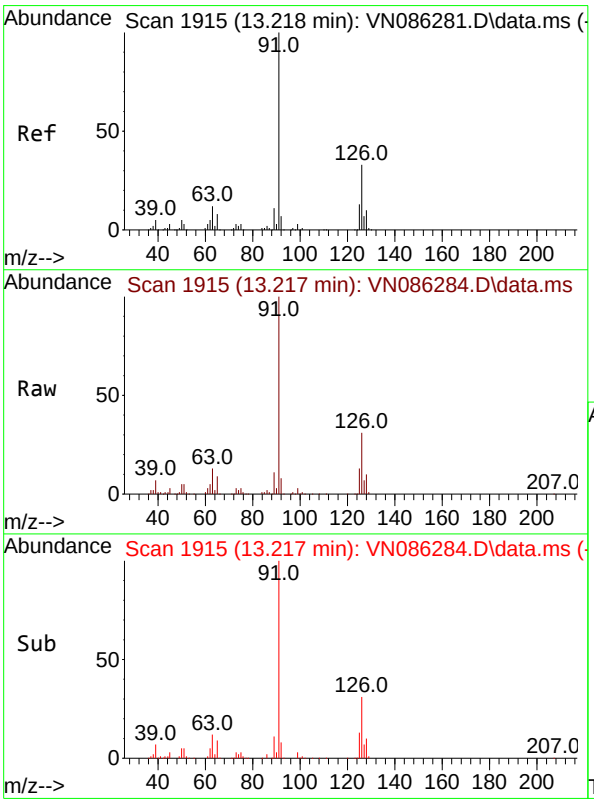
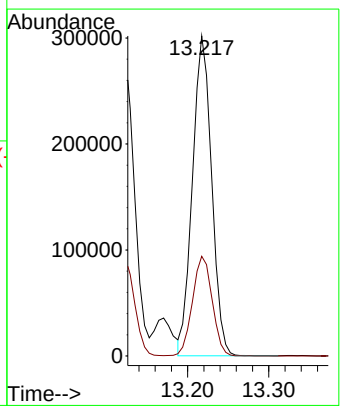


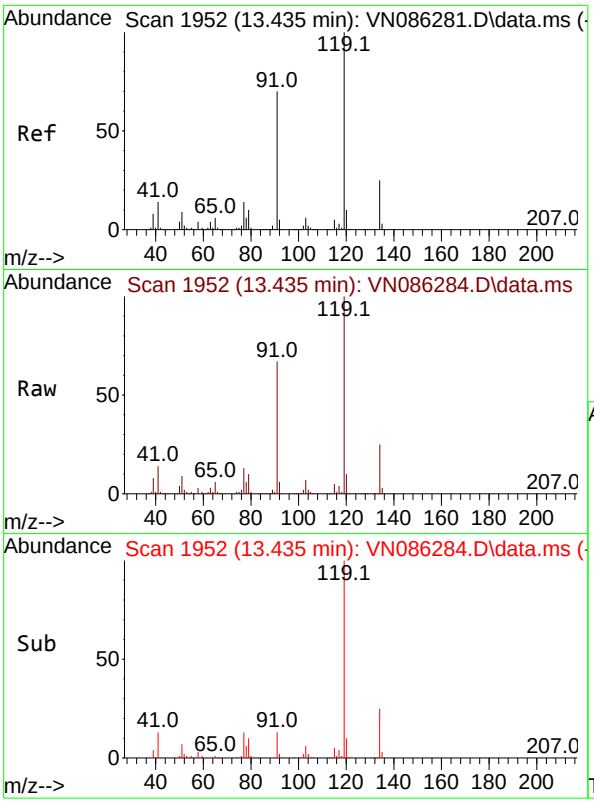


#82
4-Chlorotoluene
Concen: 47.552 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 91 Resp: 495478

Ion	Ratio	Lower	Upper
91	100		
126	32.1	16.2	48.6

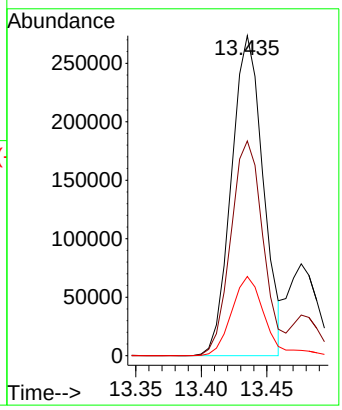




#83
tert-Butylbenzene
Concen: 45.757 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:119 Resp: 46162

Ion	Ratio	Lower	Upper
119	100		
91	68.8	34.4	103.3
134	25.9	13.0	39.0



Instrument :
MSVOA_N
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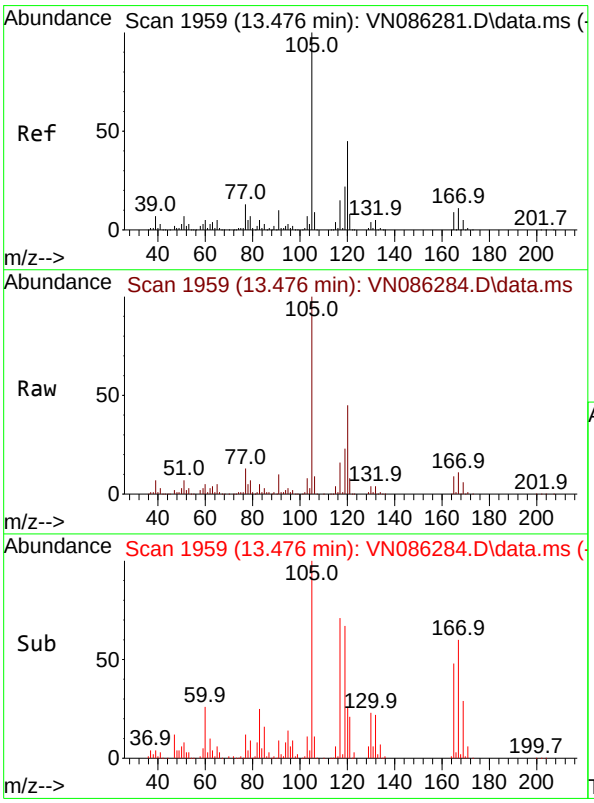
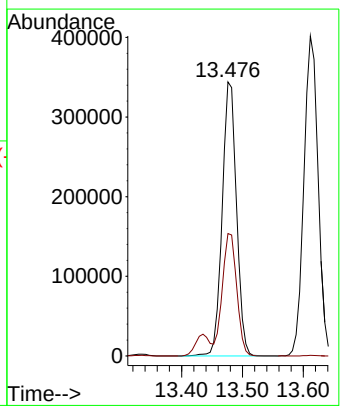
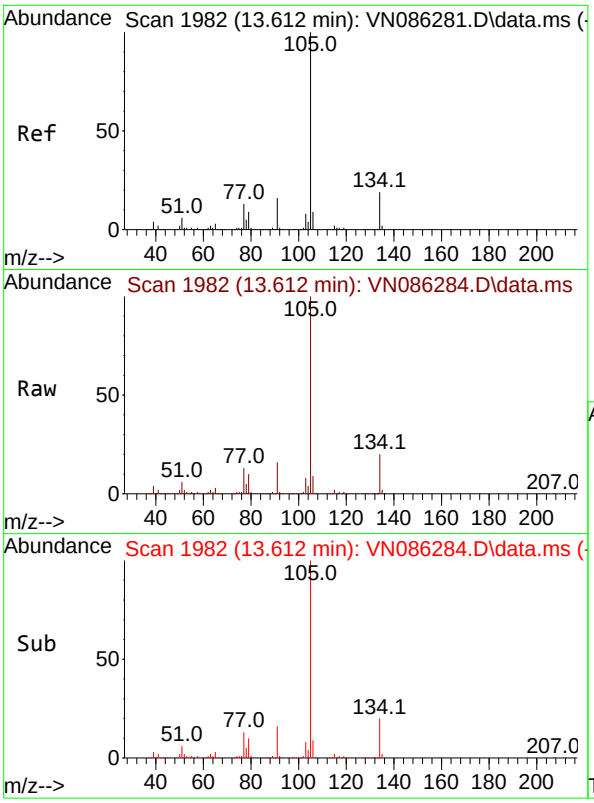


#84
1,2,4-Trimethylbenzene
Concen: 47.342 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:105 Resp: 561084

Ion	Ratio	Lower	Upper
105	100		
120	44.8	22.4	67.3

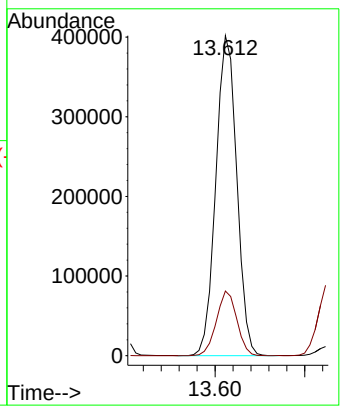




#85
sec-Butylbenzene
Concen: 46.468 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:105 Resp: 65024

Ion	Ratio	Lower	Upper
105	100		
134	19.7	9.7	29.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

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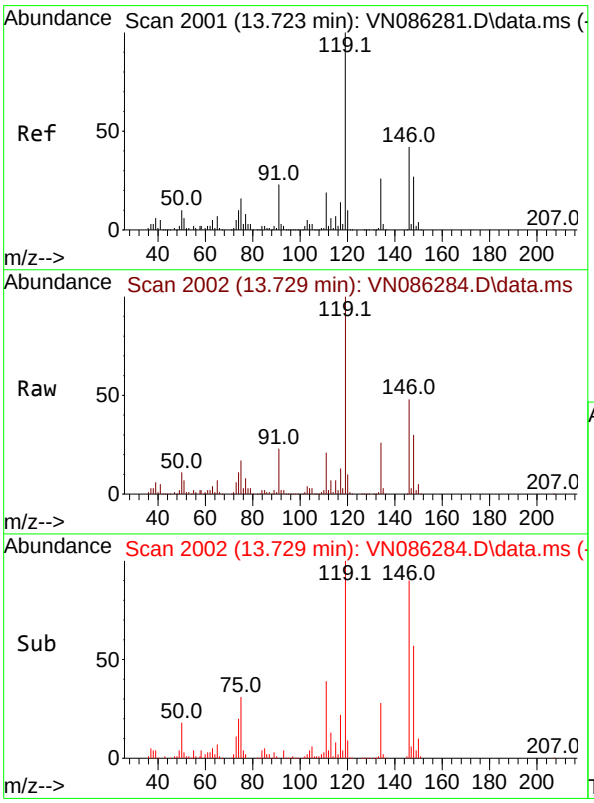
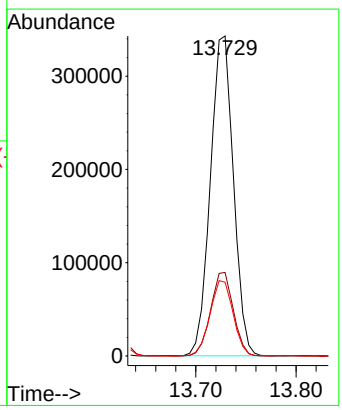
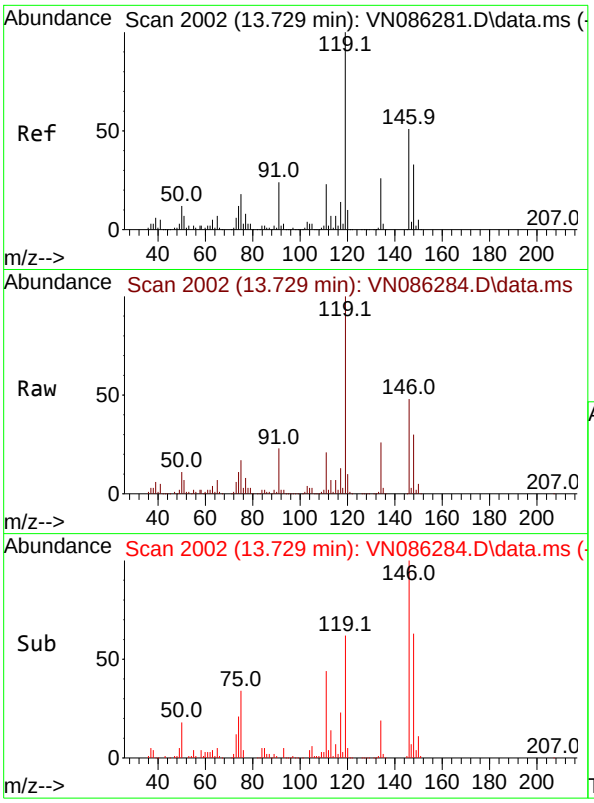


#86
p-Isopropyltoluene
Concen: 47.395 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:119 Resp: 546663

Ion	Ratio	Lower	Upper
119	100		
134	25.8	13.1	39.1
91	23.7	11.9	35.9

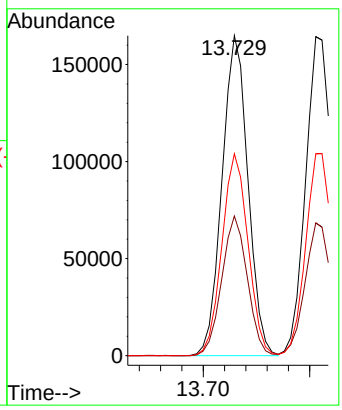




#87
1,3-Dichlorobenzene
Concen: 46.983 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:146 Resp: 27838

Ion	Ratio	Lower	Upper
146	100		
111	43.1	21.9	65.7
148	63.6	31.9	95.5



Instrument :
MSVOA_N
ClientSampleId :
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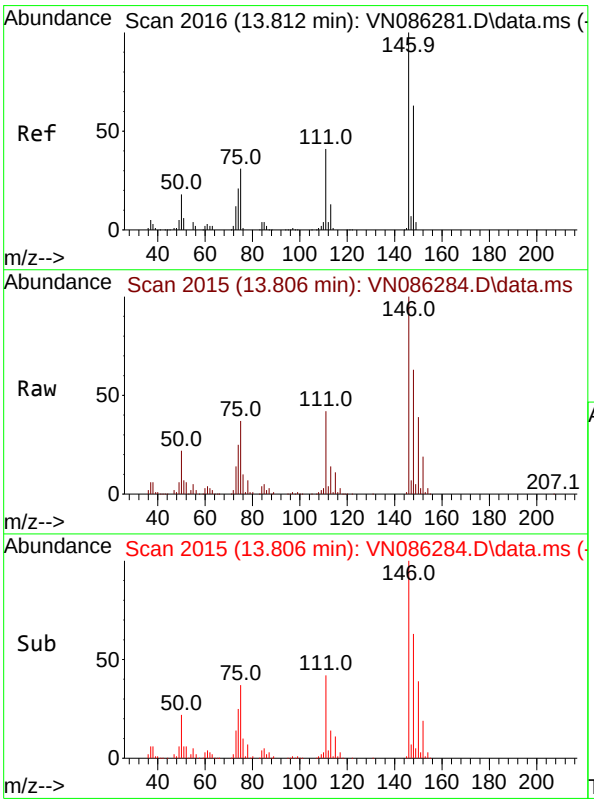
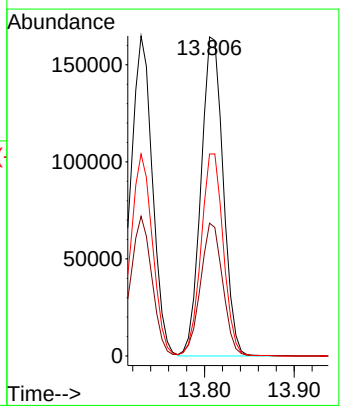
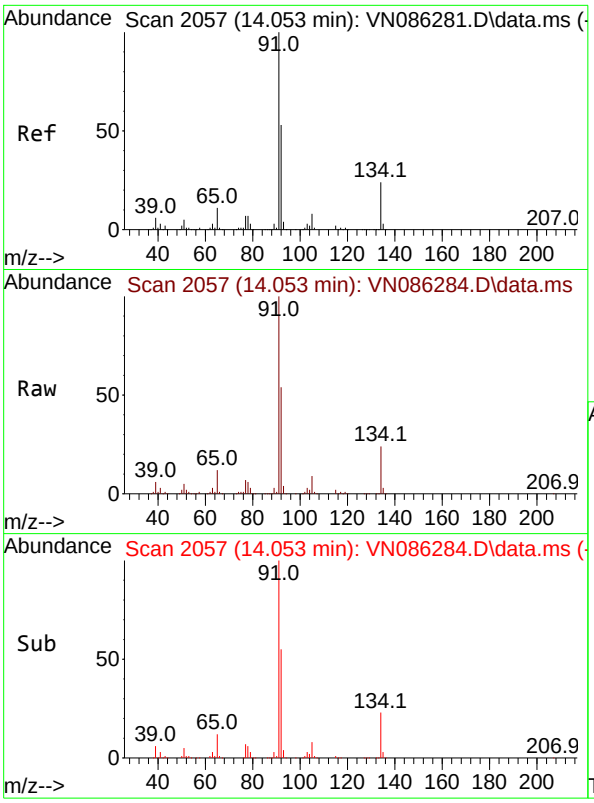


#88
1,4-Dichlorobenzene
Concen: 47.319 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:146 Resp: 282403

Ion	Ratio	Lower	Upper
146	100		
111	41.5	21.3	63.9
148	63.5	31.9	95.9





#89
n-Butylbenzene
Concen: 47.178 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 91 Resp: 48233

Ion	Ratio	Lower	Upper
91	100		
92	53.6	26.8	80.4
134	24.7	12.2	36.6

Instrument :
MSVOA_N
ClientSampleId :
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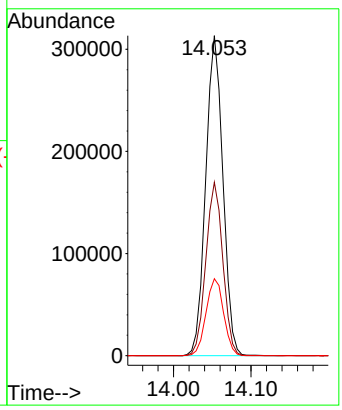
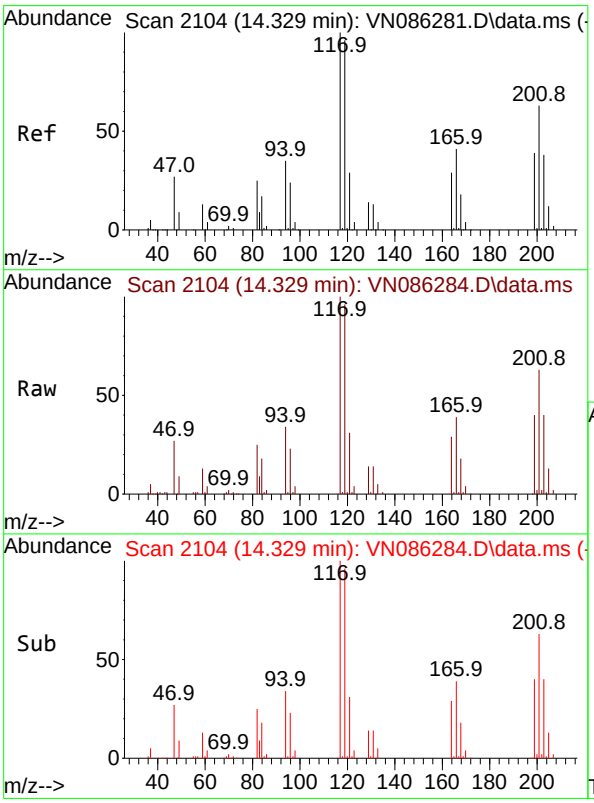
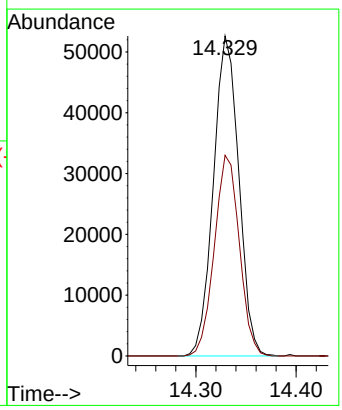


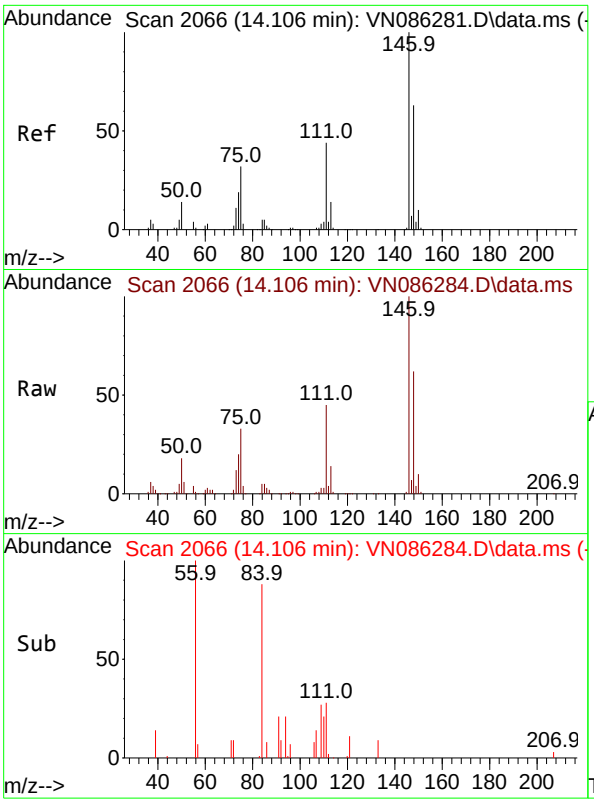


#90
Hexachloroethane
Concen: 47.634 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:117 Resp: 92416

Ion	Ratio	Lower	Upper
117	100		
201	61.9	31.4	94.2

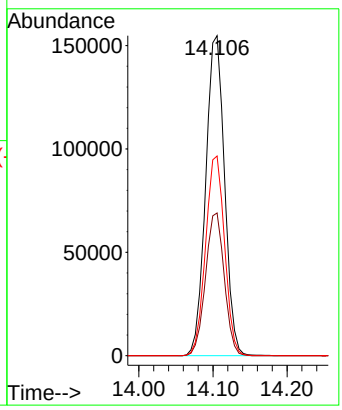




#91
1,2-Dichlorobenzene
Concen: 47.545 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:146 Resp: 27313

Ion	Ratio	Lower	Upper
146	100		
111	44.5	22.4	67.0
148	62.9	31.8	95.4



Instrument :
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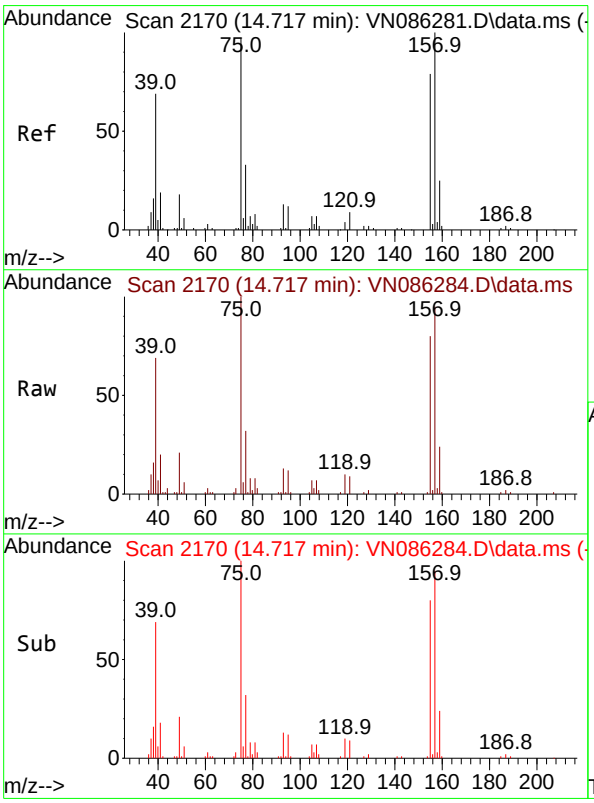
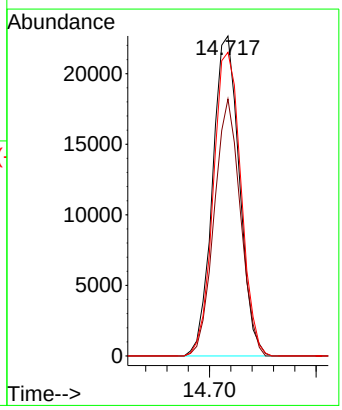
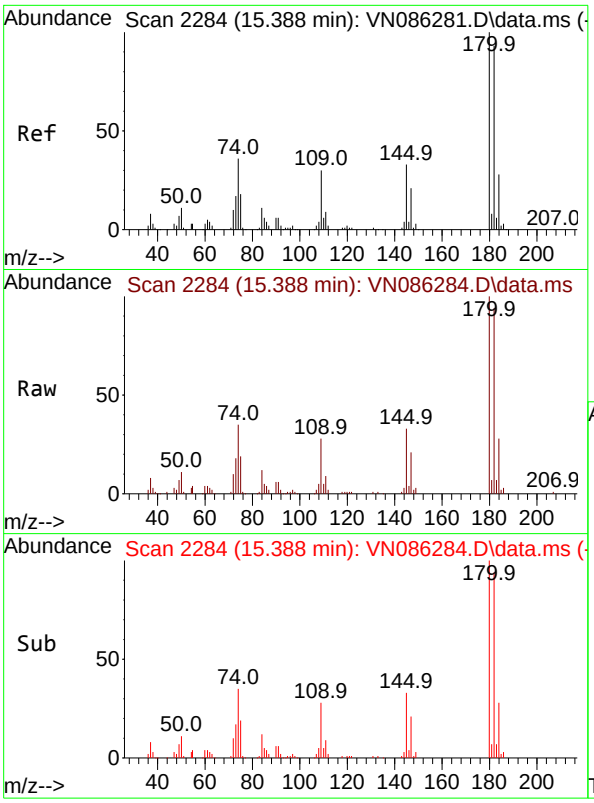


#92
1,2-Dibromo-3-Chloropropane
Concen: 48.017 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion: 75 Resp: 39601

Ion	Ratio	Lower	Upper
75	100		
155	78.6	40.3	120.9
157	97.8	49.0	147.2

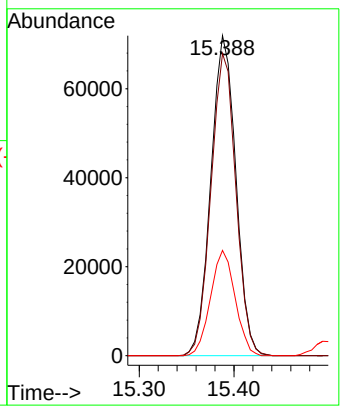




#93
1,2,4-Trichlorobenzene
Concen: 47.854 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:180 Resp: 13163

Ion	Ratio	Lower	Upper
180	100		
182	94.1	47.0	141.0
145	32.4	16.4	49.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations
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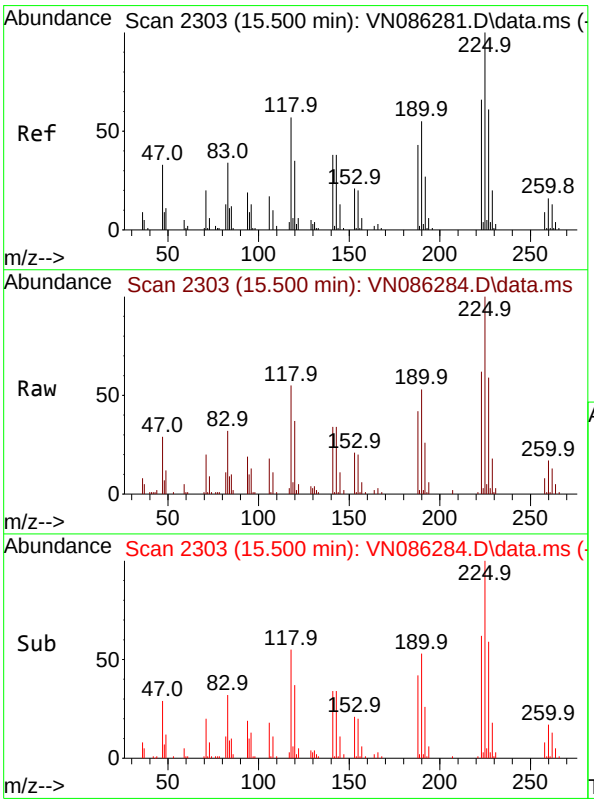
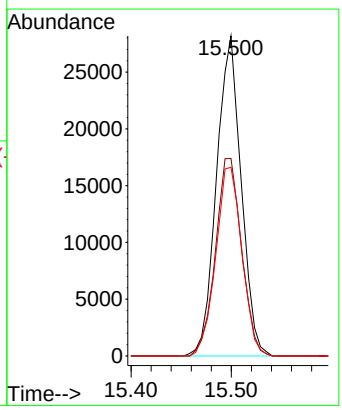
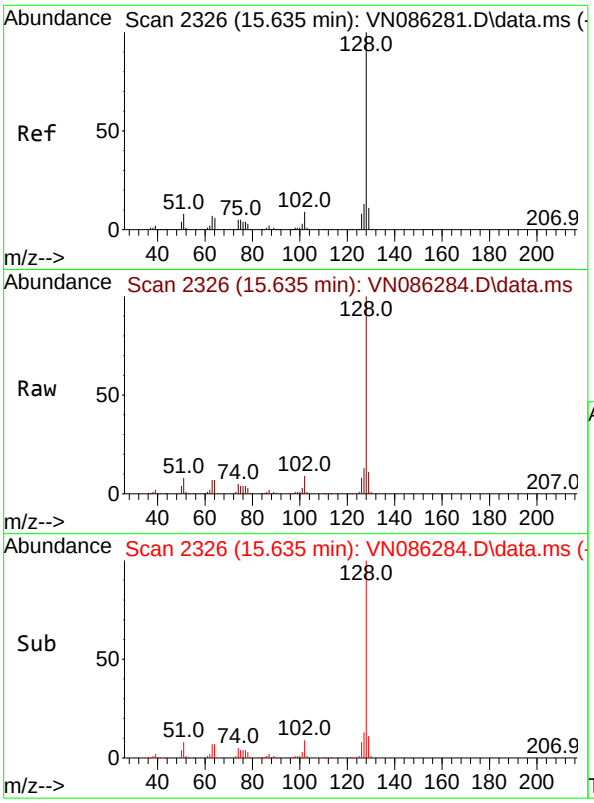


#94
Hexachlorobutadiene
Concen: 46.301 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:225 Resp: 48079

Ion	Ratio	Lower	Upper
225	100		
223	65.3	32.8	98.3
227	62.6	31.4	94.0

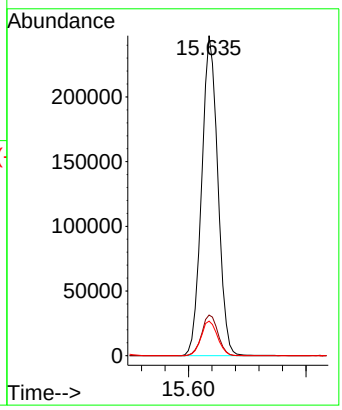




#95
Naphthalene
Concen: 48.408 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:128 Resp: 47204

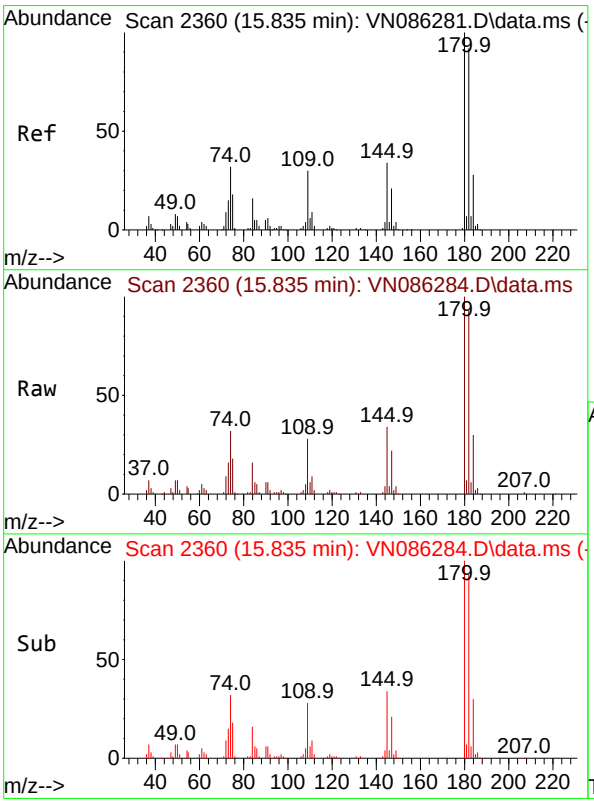
Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.2	15.4
129	10.9	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Manual Integrations
APPROVED

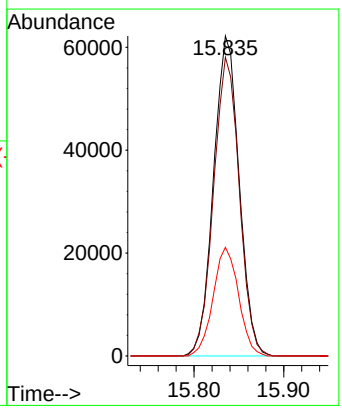
Reviewed By :John Carlone 04/16/2025
Supervised By :Semsettin Yesilyurt 04/16/2025



#96
1,2,3-Trichlorobenzene
Concen: 47.314 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN086284.D
Acq: 15 Apr 2025 15:30

Tgt Ion:180 Resp: 123220

Ion	Ratio	Lower	Upper
180	100		
182	93.8	47.3	142.0
145	33.7	17.2	51.5



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	104	0.00
2	T	Dichlorodifluoromethane	0.593	0.595	-0.3	105	0.00
3	P	Chloromethane	0.861	0.798	7.3	110	0.00
4	C	Vinyl Chloride	0.822	0.790	3.9#	104	0.00
5	T	Bromomethane	0.370	0.382	-3.2	112	0.00
6	T	Chloroethane	0.550	0.512	6.9	107	0.00
7	T	Trichlorofluoromethane	0.911	0.875	4.0	106	0.00
8	T	Diethyl Ether	0.398	0.378	5.0	105	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.551	0.533	3.3	106	0.00
10	T	Methyl Iodide	0.606	0.640	-5.6	111	0.00
11	T	Tert butyl alcohol	0.132	0.124	6.1	104	0.00
12	CM	1,1-Dichloroethene	0.588	0.556	5.4#	105	0.00
13	T	Acrolein	0.075	0.062	17.3	106	0.00
14	T	Allyl chloride	1.046	0.947	9.5	106	0.00
15	T	Acrylonitrile	0.327	0.320	2.1	105	0.00
16	T	Acetone	0.290	0.255	12.1	106	0.00
17	T	Carbon Disulfide	1.762	1.550	12.0	104	0.00
18	T	Methyl Acetate	0.870	0.793	8.9	106	0.00
19	T	Methyl tert-butyl Ether	2.163	2.039	5.7	106	0.00
20	T	Methylene Chloride	0.670	0.627	6.4	105	0.00
21	T	trans-1,2-Dichloroethene	0.615	0.578	6.0	105	0.00
22	T	Diisopropyl ether	2.276	2.113	7.2	104	0.00
23	T	Vinyl Acetate	1.591	1.493	6.2	105	0.00
24	P	1,1-Dichloroethane	1.201	1.135	5.5	104	0.00
25	T	2-Butanone	0.451	0.431	4.4	106	0.00
26	T	2,2-Dichloropropane	1.075	1.005	6.5	106	0.00
27	T	cis-1,2-Dichloroethene	0.764	0.719	5.9	105	0.00
28	T	Bromochloromethane	0.509	0.489	3.9	103	0.00
29	T	Tetrahydrofuran	0.302	0.280	7.3	104	0.00
30	C	Chloroform	1.180	1.110	5.9#	105	0.00
31	T	Cyclohexane	1.175	1.061	9.7	104	0.00
32	T	1,1,1-Trichloroethane	1.009	0.956	5.3	105	0.00
33	S	1,2-Dichloroethane-d4	0.725	0.727	-0.3	105	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
35	S	Dibromofluoromethane	0.232	0.222	4.3	109	0.00
36	T	1,1-Dichloropropene	0.463	0.439	5.2	104	0.00
37	T	Ethyl Acetate	0.488	0.449	8.0	106	0.00
38	T	Carbon Tetrachloride	0.441	0.419	5.0	104	0.00
39	T	Methylcyclohexane	0.551	0.506	8.2	102	0.00
40	TM	Benzene	1.485	1.401	5.7	105	0.00
41	T	Methacrylonitrile	0.283	0.260	8.1	104	0.00
42	TM	1,2-Dichloroethane	0.474	0.450	5.1	107	0.00
43	T	Isopropyl Acetate	1.177	0.851	27.7#	103	0.00
44	TM	Trichloroethene	0.352	0.334	5.1	104	0.00
45	C	1,2-Dichloropropane	0.364	0.344	5.5#	104	0.00
46	T	Dibromomethane	0.232	0.226	2.6	105	0.00
47	T	Bromodichloromethane	0.500	0.477	4.6	106	0.00
48	T	Methyl methacrylate	0.429	0.390	9.1	104	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	110	0.00
50	S	Toluene-d8	1.240	1.246	-0.5	105	0.00
51	T	4-Methyl-2-Pentanone	0.500	0.476	4.8	104	0.00
52	CM	Toluene	0.927	0.879	5.2#	104	0.00
53	T	t-1,3-Dichloropropene	0.558	0.540	3.2	104	0.00
54	T	cis-1,3-Dichloropropene	0.613	0.576	6.0	105	0.00
55	T	1,1,2-Trichloroethane	0.333	0.313	6.0	103	0.00
56	T	Ethyl methacrylate	0.613	0.581	5.2	106	0.00
57	T	1,3-Dichloropropane	0.592	0.565	4.6	105	0.00
58	T	2-Chloroethyl Vinyl ether	0.291	0.281	3.4	103	0.00
59	T	2-Hexanone	0.371	0.349	5.9	103	0.00
60	T	Dibromochloromethane	0.366	0.350	4.4	104	0.00
61	T	1,2-Dibromoethane	0.336	0.321	4.5	104	0.00
62	S	4-Bromofluorobenzene	0.452	0.452	0.0	104	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
64	T	Tetrachloroethene	0.385	0.365	5.2	103	0.00
65	PM	Chlorobenzene	1.116	1.043	6.5	104	0.00
66	T	1,1,1,2-Tetrachloroethane	0.368	0.348	5.4	105	0.00
67	C	Ethyl Benzene	2.014	1.901	5.6#	104	0.00
68	T	m/p-Xylenes	0.754	0.717	4.9	103	0.00
69	T	o-Xylene	0.746	0.702	5.9	103	0.00
70	T	Styrene	1.243	1.197	3.7	103	0.00
71	P	Bromoform	0.277	0.264	4.7	106	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
73	T	Isopropylbenzene	4.090	3.839	6.1	103	0.00
74	T	N-amyl acetate	2.036	1.842	9.5	104	0.00
75	P	1,1,2,2-Tetrachloroethane	1.176	1.070	9.0	103	0.00
76	T	1,2,3-Trichloropropane	1.180	1.078	8.6	104	0.00
77	T	Bromobenzene	0.906	0.867	4.3	102	0.00
78	T	n-propylbenzene	4.820	4.571	5.2	102	0.00
79	T	2-Chlorotoluene	3.016	2.836	6.0	103	0.00
80	T	1,3,5-Trimethylbenzene	3.348	3.163	5.5	103	0.00
81	T	trans-1,4-Dichloro-2-butene	0.491	0.488	0.6	106	0.00
82	T	4-Chlorotoluene	2.996	2.849	4.9	102	0.00
83	T	tert-Butylbenzene	2.901	2.655	8.5	102	0.00
84	T	1,2,4-Trimethylbenzene	3.408	3.226	5.3	102	0.00
85	T	sec-Butylbenzene	4.023	3.739	7.1	99	0.00
86	T	p-Isopropyltoluene	3.316	3.144	5.2	100	0.00
87	T	1,3-Dichlorobenzene	1.704	1.601	6.0	100	0.00
88	T	1,4-Dichlorobenzene	1.716	1.624	5.4	101	0.00
89	T	n-Butylbenzene	2.939	2.774	5.6	98	0.00
90	T	Hexachloroethane	0.558	0.531	4.8	103	0.00
91	T	1,2-Dichlorobenzene	1.652	1.571	4.9	101	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.237	0.228	3.8	103	0.00
93	T	1,2,4-Trichlorobenzene	0.791	0.757	4.3	99	0.00
94	T	Hexachlorobutadiene	0.299	0.276	7.7	99	0.00
95	T	Naphthalene	2.804	2.714	3.2	102	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	0.749	0.709	5.3	100	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\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	104	0.00
2	T	Dichlorodifluoromethane	50.000	50.220	-0.4	105	0.00
3	P	Chloromethane	50.000	46.321	7.4	110	0.00
4	C	Vinyl Chloride	50.000	48.040	3.9#	104	0.00
5	T	Bromomethane	50.000	51.662	-3.3	112	0.00
6	T	Chloroethane	50.000	46.557	6.9	107	0.00
7	T	Trichlorofluoromethane	50.000	48.030	3.9	106	0.00
8	T	Diethyl Ether	50.000	47.564	4.9	105	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	48.357	3.3	106	0.00
10	T	Methyl Iodide	50.000	52.806	-5.6	111	0.00
11	T	Tert butyl alcohol	250.000	233.586	6.6	104	0.00
12	CM	1,1-Dichloroethene	50.000	47.278	5.4#	105	0.00
13	T	Acrolein	250.000	251.743	-0.7	106	0.00
14	T	Allyl chloride	50.000	45.280	9.4	106	0.00
15	T	Acrylonitrile	250.000	244.312	2.3	105	0.00
16	T	Acetone	250.000	254.646	-1.9	106	0.00
17	T	Carbon Disulfide	50.000	43.983	12.0	104	0.00
18	T	Methyl Acetate	50.000	45.586	8.8	106	0.00
19	T	Methyl tert-butyl Ether	50.000	47.117	5.8	106	0.00
20	T	Methylene Chloride	50.000	46.740	6.5	105	0.00
21	T	trans-1,2-Dichloroethene	50.000	46.960	6.1	105	0.00
22	T	Diisopropyl ether	50.000	46.426	7.1	104	0.00
23	T	Vinyl Acetate	250.000	234.680	6.1	105	0.00
24	P	1,1-Dichloroethane	50.000	47.277	5.4	104	0.00
25	T	2-Butanone	250.000	238.732	4.5	106	0.00
26	T	2,2-Dichloropropane	50.000	46.721	6.6	106	0.00
27	T	cis-1,2-Dichloroethene	50.000	47.105	5.8	105	0.00
28	T	Bromochloromethane	50.000	48.044	3.9	103	0.00
29	T	Tetrahydrofuran	250.000	232.296	7.1	104	0.00
30	C	Chloroform	50.000	47.047	5.9#	105	0.00
31	T	Cyclohexane	50.000	45.162	9.7	104	0.00
32	T	1,1,1-Trichloroethane	50.000	47.385	5.2	105	0.00
33	S	1,2-Dichloroethane-d4	50.000	50.114	-0.2	105	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	105	0.00
35	S	Dibromofluoromethane	50.000	47.865	4.3	109	0.00
36	T	1,1-Dichloropropene	50.000	47.382	5.2	104	0.00
37	T	Ethyl Acetate	50.000	45.984	8.0	106	0.00
38	T	Carbon Tetrachloride	50.000	47.475	5.0	104	0.00
39	T	Methylcyclohexane	50.000	45.902	8.2	102	0.00
40	TM	Benzene	50.000	47.168	5.7	105	0.00
41	T	Methacrylonitrile	50.000	45.892	8.2	104	0.00
42	TM	1,2-Dichloroethane	50.000	47.496	5.0	107	0.00
43	T	Isopropyl Acetate	50.000	48.649	2.7	103	0.00
44	TM	Trichloroethene	50.000	47.403	5.2	104	0.00
45	C	1,2-Dichloropropane	50.000	47.302	5.4#	104	0.00
46	T	Dibromomethane	50.000	48.772	2.5	105	0.00
47	T	Bromodichloromethane	50.000	47.682	4.6	106	0.00
48	T	Methyl methacrylate	50.000	45.546	8.9	104	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	929.893	7.0	110	0.00
50	S	Toluene-d8	50.000	50.251	-0.5	105	0.00
51	T	4-Methyl-2-Pentanone	250.000	238.220	4.7	104	0.00
52	CM	Toluene	50.000	47.453	5.1#	104	0.00
53	T	t-1,3-Dichloropropene	50.000	48.360	3.3	104	0.00
54	T	cis-1,3-Dichloropropene	50.000	46.923	6.2	105	0.00
55	T	1,1,2-Trichloroethane	50.000	46.911	6.2	103	0.00
56	T	Ethyl methacrylate	50.000	47.414	5.2	106	0.00
57	T	1,3-Dichloropropane	50.000	47.770	4.5	105	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	241.924	3.2	103	0.00
59	T	2-Hexanone	250.000	235.364	5.9	103	0.00
60	T	Dibromochloromethane	50.000	47.767	4.5	104	0.00
61	T	1,2-Dibromoethane	50.000	47.777	4.4	104	0.00
62	S	4-Bromofluorobenzene	50.000	49.950	0.1	104	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	105	0.00
64	T	Tetrachloroethene	50.000	47.439	5.1	103	0.00
65	PM	Chlorobenzene	50.000	46.735	6.5	104	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	47.238	5.5	105	0.00
67	C	Ethyl Benzene	50.000	47.196	5.6#	104	0.00
68	T	m/p-Xylenes	100.000	94.994	5.0	103	0.00
69	T	o-Xylene	50.000	47.043	5.9	103	0.00
70	T	Styrene	50.000	48.138	3.7	103	0.00
71	P	Bromoform	50.000	47.634	4.7	106	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	100	0.00
73	T	Isopropylbenzene	50.000	46.930	6.1	103	0.00
74	T	N-amyl acetate	50.000	45.241	9.5	104	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	45.501	9.0	103	0.00
76	T	1,2,3-Trichloropropane	50.000	45.680	8.6	104	0.00
77	T	Bromobenzene	50.000	47.860	4.3	102	0.00
78	T	n-propylbenzene	50.000	47.420	5.2	102	0.00
79	T	2-Chlorotoluene	50.000	47.012	6.0	103	0.00
80	T	1,3,5-Trimethylbenzene	50.000	47.241	5.5	103	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	49.639	0.7	106	0.00
82	T	4-Chlorotoluene	50.000	47.552	4.9	102	0.00
83	T	tert-Butylbenzene	50.000	45.757	8.5	102	0.00
84	T	1,2,4-Trimethylbenzene	50.000	47.342	5.3	102	0.00
85	T	sec-Butylbenzene	50.000	46.468	7.1	99	0.00
86	T	p-Isopropyltoluene	50.000	47.395	5.2	100	0.00
87	T	1,3-Dichlorobenzene	50.000	46.983	6.0	100	0.00
88	T	1,4-Dichlorobenzene	50.000	47.319	5.4	101	0.00
89	T	n-Butylbenzene	50.000	47.178	5.6	98	0.00
90	T	Hexachloroethane	50.000	47.634	4.7	103	0.00
91	T	1,2-Dichlorobenzene	50.000	47.545	4.9	101	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	48.017	4.0	103	0.00
93	T	1,2,4-Trichlorobenzene	50.000	47.854	4.3	99	0.00
94	T	Hexachlorobutadiene	50.000	46.301	7.4	99	0.00
95	T	Naphthalene	50.000	48.408	3.2	102	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086284.D
Acq On : 15 Apr 2025 15:30
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN041525

Quant Time: Apr 16 04:30:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	47.314	5.4	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN086286.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG No.: Q1812

Instrument ID: MSVOA_N Calibration Date/Time: 04/16/2025 09:14

Lab File ID: VN086286.D Init. Calib. Date(s): 04/15/2025 04/15/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:29 14:29

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.593	0.593		0	20
Chloromethane	0.861	0.798	0.1	-7.32	20
Vinyl Chloride	0.822	0.791		-3.77	20
Bromomethane	0.370	0.377		1.89	20
Chloroethane	0.550	0.507		-7.82	20
Trichlorofluoromethane	0.911	0.878		-3.62	20
1,1,2-Trichlorotrifluoroethane	0.551	0.537		-2.54	20
1,1-Dichloroethene	0.588	0.555		-5.61	20
Acetone	0.290	0.254		-12.41	20
Carbon Disulfide	1.762	1.548		-12.15	20
Methyl tert-butyl Ether	2.163	2.003		-7.4	20
Methyl Acetate	0.870	0.791		-9.08	20
Methylene Chloride	0.670	0.625		-6.72	20
trans-1,2-Dichloroethene	0.615	0.577		-6.18	20
1,1-Dichloroethane	1.201	1.141	0.1	-5	20
Cyclohexane	1.175	1.068		-9.11	20
2-Butanone	0.451	0.427		-5.32	20
Carbon Tetrachloride	0.441	0.430		-2.49	20
cis-1,2-Dichloroethene	0.764	0.706		-7.59	20
Bromochloromethane	0.509	0.487		-4.32	20
Chloroform	1.180	1.101		-6.7	20
1,1,1-Trichloroethane	1.009	0.948		-6.05	20
Methylcyclohexane	0.551	0.536		-2.72	20
Benzene	1.485	1.423		-4.18	20
1,2-Dichloroethane	0.474	0.454		-4.22	20
Trichloroethene	0.352	0.351		-0.28	20
1,2-Dichloropropane	0.364	0.350		-3.85	20
Bromodichloromethane	0.500	0.486		-2.8	20
4-Methyl-2-Pentanone	0.500	0.480		-4	20
Toluene	0.927	0.895		-3.45	20
t-1,3-Dichloropropene	0.558	0.554		-0.72	20
cis-1,3-Dichloropropene	0.613	0.590		-3.75	20
1,1,2-Trichloroethane	0.333	0.318		-4.51	20
2-Hexanone	0.371	0.358		-3.5	20
Dibromochloromethane	0.366	0.357		-2.46	20
1,2-Dibromoethane	0.336	0.324		-3.57	20
Tetrachloroethene	0.385	0.380		-1.3	20
Chlorobenzene	1.116	1.063	0.3	-4.75	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q1812 SAS No.: Q1812 SDG No.: Q1812

Instrument ID: MSVOA_N Calibration Date/Time: 04/16/2025 09:14

Lab File ID: VN086286.D Init. Calib. Date(s): 04/15/2025 04/15/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:29 14:29

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	2.014	1.936		-3.87	20
m/p-Xylenes	0.754	0.733		-2.79	20
o-Xylene	0.746	0.712		-4.56	20
Styrene	1.243	1.220		-1.85	20
Bromoform	0.277	0.267	0.1	-3.61	20
Isopropylbenzene	4.090	3.825		-6.48	20
1,1,2,2-Tetrachloroethane	1.176	1.032	0.3	-12.24	20
1,3-Dichlorobenzene	1.704	1.646		-3.4	20
1,4-Dichlorobenzene	1.716	1.647		-4.02	20
1,2-Dichlorobenzene	1.652	1.575		-4.66	20
1,2-Dibromo-3-Chloropropane	0.237	0.229		-3.38	20
1,2,4-Trichlorobenzene	0.791	0.788		-0.38	20
1,2,3-Trichlorobenzene	0.749	0.719		-4.01	20
1,2-Dichloroethane-d4	0.725	0.697		-3.86	20
Dibromofluoromethane	0.232	0.214		-7.76	20
Toluene-d8	1.240	1.219		-1.69	20
4-Bromofluorobenzene	0.452	0.447		-1.11	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\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	235673	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	430893	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	383563	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	177295	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	164281	48.071	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 96.140%			
35) Dibromofluoromethane	8.165	113	92402	46.205	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.400%			
50) Toluene-d8	10.565	98	525438	49.161	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 98.320%			
62) 4-Bromofluorobenzene	12.847	95	192478	49.374	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 98.740%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	139730	50.015	ug/l	99
3) Chloromethane	2.359	50	187952	46.291	ug/l	99
4) Vinyl Chloride	2.512	62	186531	48.142	ug/l	99
5) Bromomethane	2.953	94	88918	51.019	ug/l	96
6) Chloroethane	3.118	64	119531	46.095	ug/l	99
7) Trichlorofluoromethane	3.500	101	206871	48.201	ug/l	97
8) Diethyl Ether	3.959	74	88542	47.257	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.371	101	126479	48.715	ug/l	99
10) Methyl Iodide	4.583	142	152531	53.436	ug/l	99
11) Tert butyl alcohol	5.512	59	150071	240.673	ug/l	100
12) 1,1-Dichloroethene	4.342	96	130797	47.154	ug/l	94
13) Acrolein	4.177	56	76094	262.459	ug/l	96
14) Allyl chloride	5.018	41	225300	45.690	ug/l	99
15) Acrylonitrile	5.712	53	371338	240.904	ug/l	100
16) Acetone	4.418	43	299320	253.403	ug/l	100
17) Carbon Disulfide	4.712	76	364873	43.931	ug/l	99
18) Methyl Acetate	5.018	43	186352	45.427	ug/l	100
19) Methyl tert-butyl Ether	5.788	73	472153	46.306	ug/l	100
20) Methylene Chloride	5.277	84	147320	46.630	ug/l	98
21) trans-1,2-Dichloroethene	5.783	96	135959	46.882	ug/l	100
22) Diisopropyl ether	6.665	45	498190	46.443	ug/l	99
23) Vinyl Acetate	6.600	43	1746712	232.938	ug/l	98
24) 1,1-Dichloroethane	6.571	63	268843	47.500	ug/l	99
25) 2-Butanone	7.477	43	503322	236.612	ug/l	98
26) 2,2-Dichloropropane	7.488	77	243488	48.048	ug/l	99
27) cis-1,2-Dichloroethene	7.482	96	166409	46.233	ug/l	100
28) Bromochloromethane	7.812	49	114783	47.831	ug/l	100
29) Tetrahydrofuran	7.835	42	330147	232.094	ug/l	99
30) Chloroform	7.959	83	259399	46.656	ug/l	98
31) Cyclohexane	8.253	56	251642	45.437	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	223386	46.967	ug/l	99
36) 1,1-Dichloropropene	8.371	75	193287	48.390	ug/l	100
37) Ethyl Acetate	7.553	43	193953	46.122	ug/l	98
38) Carbon Tetrachloride	8.359	117	185182	48.682	ug/l	98
39) Methylcyclohexane	9.600	83	230804	48.614	ug/l	99
40) Benzene	8.600	78	613264	47.920	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.771	41	114048	46.794	ug/l		100
42) 1,2-Dichloroethane	8.665	62	195800	47.977	ug/l		100
43) Isopropyl Acetate	8.682	43	362008	47.992	ug/l		98
44) Trichloroethene	9.347	130	151444	49.927	ug/l		100
45) 1,2-Dichloropropane	9.618	63	150667	48.096	ug/l		98
46) Dibromomethane	9.706	93	97743	48.970	ug/l		99
47) Bromodichloromethane	9.882	83	209384	48.571	ug/l		100
48) Methyl methacrylate	9.676	41	170133	46.070	ug/l		99
49) 1,4-Dioxane	9.688	88	59527	947.648	ug/l		98
51) 4-Methyl-2-Pentanone	10.441	43	1033728	240.057	ug/l		99
52) Toluene	10.623	92	385532	48.280	ug/l		99
53) t-1,3-Dichloropropene	10.835	75	238507	49.563	ug/l		100
54) cis-1,3-Dichloropropene	10.306	75	254333	48.119	ug/l		99
55) 1,1,2-Trichloroethane	11.012	97	137156	47.739	ug/l		96
56) Ethyl methacrylate	10.871	69	254512	48.193	ug/l		99
57) 1,3-Dichloropropane	11.159	76	246324	48.323	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.153	63	614176	245.023	ug/l		100
59) 2-Hexanone	11.194	43	771609	241.579	ug/l		100
60) Dibromochloromethane	11.353	129	153985	48.808	ug/l		99
61) 1,2-Dibromoethane	11.465	107	139475	48.111	ug/l		99
64) Tetrachloroethene	11.100	164	145847	49.433	ug/l		98
65) Chlorobenzene	11.888	112	407897	47.653	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.959	131	136092	48.194	ug/l		99
67) Ethyl Benzene	11.959	91	742623	48.077	ug/l		99
68) m/p-Xylenes	12.065	106	562291	97.152	ug/l		99
69) o-Xylene	12.394	106	272968	47.691	ug/l		99
70) Styrene	12.406	104	467765	49.048	ug/l		100
71) Bromoform	12.576	173	102569	48.243	ug/l	#	99
73) Isopropylbenzene	12.694	105	678138	46.758	ug/l		100
74) N-amyl acetate	12.488	43	317872	44.026	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.935	83	182886	43.857	ug/l		99
76) 1,2,3-Trichloropropane	12.988	75	188539m	45.063	ug/l		
77) Bromobenzene	12.976	156	152840	47.562	ug/l		99
78) n-propylbenzene	13.029	91	813823	47.620	ug/l		100
79) 2-Chlorotoluene	13.123	91	500975	46.847	ug/l		100
80) 1,3,5-Trimethylbenzene	13.170	105	560090	47.184	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.735	75	92189	52.918	ug/l		93
82) 4-Chlorotoluene	13.217	91	506641	47.693	ug/l		99
83) tert-Butylbenzene	13.435	119	467771	45.479	ug/l		98
84) 1,2,4-Trimethylbenzene	13.476	105	573671	47.478	ug/l		100
85) sec-Butylbenzene	13.611	105	679238	47.611	ug/l		100
86) p-Isopropyltoluene	13.729	119	571595	48.608	ug/l		100
87) 1,3-Dichlorobenzene	13.729	146	291794	48.303	ug/l		99
88) 1,4-Dichlorobenzene	13.812	146	291992	47.989	ug/l		99
89) n-Butylbenzene	14.053	91	513021	49.219	ug/l		99
90) Hexachloroethane	14.329	117	93202	47.120	ug/l		100
91) 1,2-Dichlorobenzene	14.106	146	279296	47.687	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	40668	48.367	ug/l		98
93) 1,2,4-Trichlorobenzene	15.388	180	139704	49.814	ug/l		99
94) Hexachlorobutadiene	15.500	225	52193	49.301	ug/l		99
95) Naphthalene	15.635	128	480514	48.334	ug/l		100
96) 1,2,3-Trichlorobenzene	15.835	180	127501	48.020	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

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

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

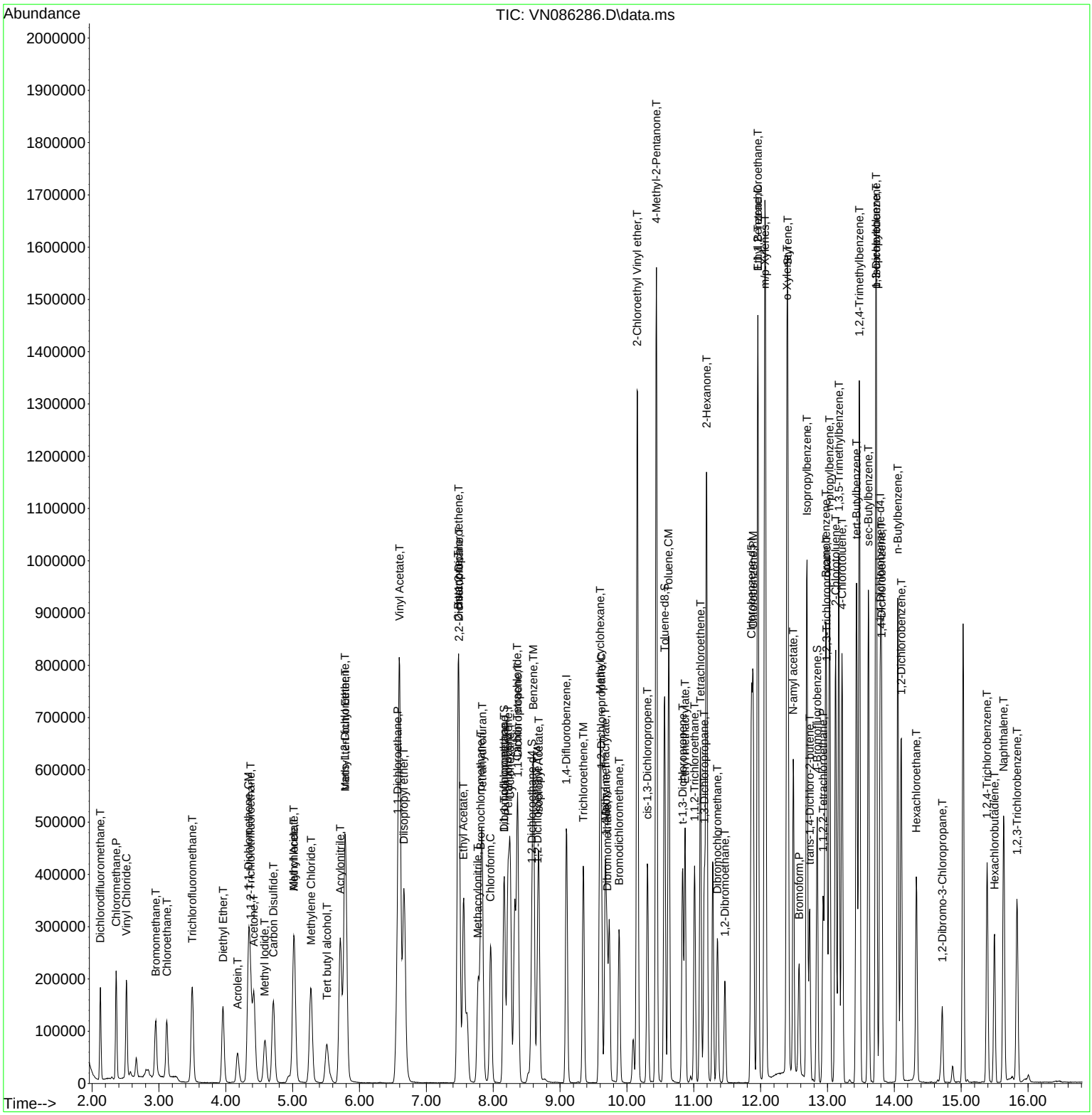
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

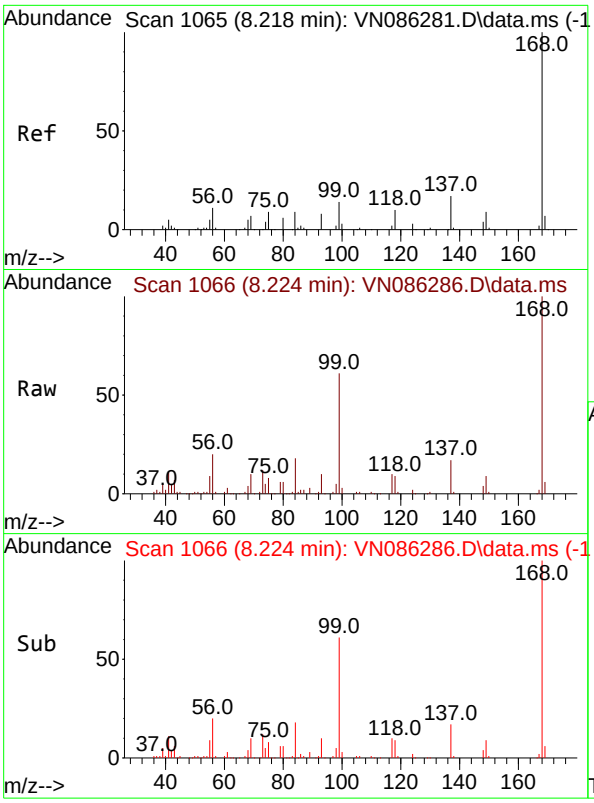
Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

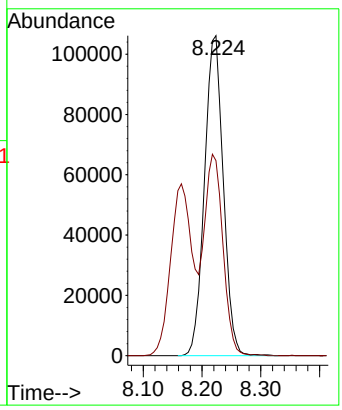




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:168 Resp: 23567

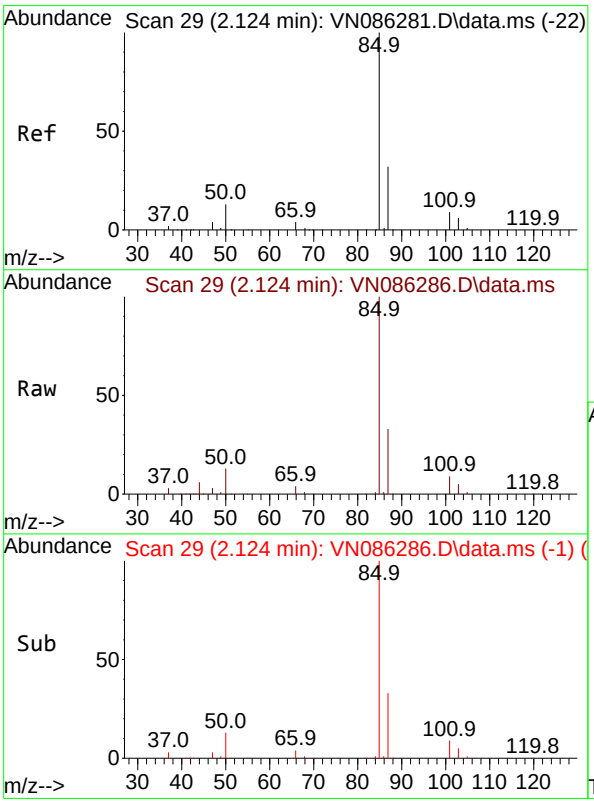
Ion	Ratio	Lower	Upper
168	100		
99	60.9	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

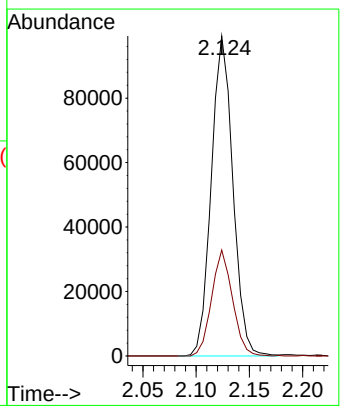
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

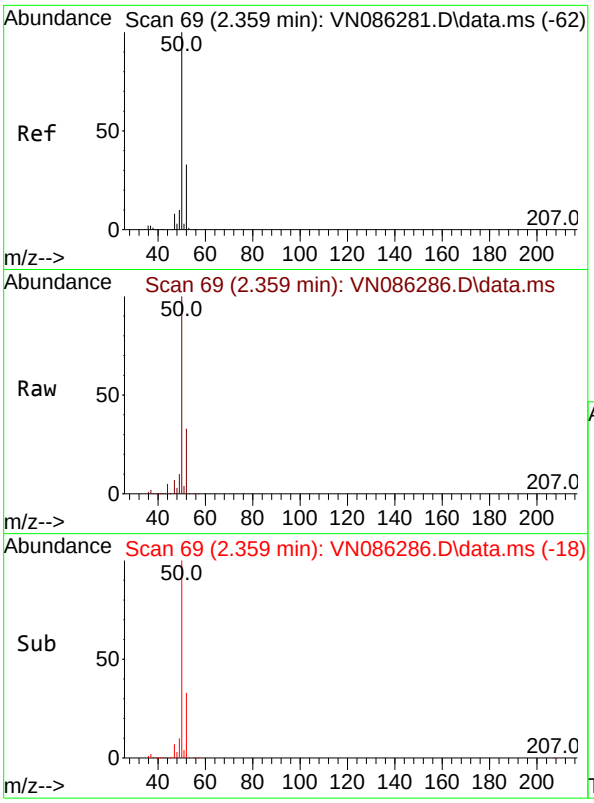


#2
Dichlorodifluoromethane
Concen: 50.015 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 85 Resp: 139730

Ion	Ratio	Lower	Upper
85	100		
87	33.1	16.3	48.8

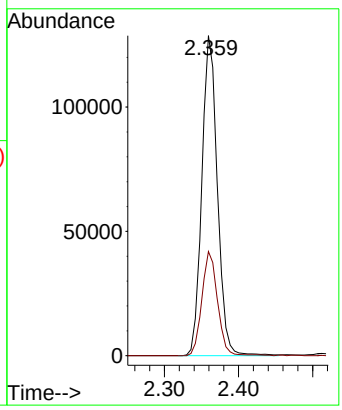




#3
Chloromethane
Concen: 46.291 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 50 Resp: 18795

Ion	Ratio	Lower	Upper
50	100		
52	32.5	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
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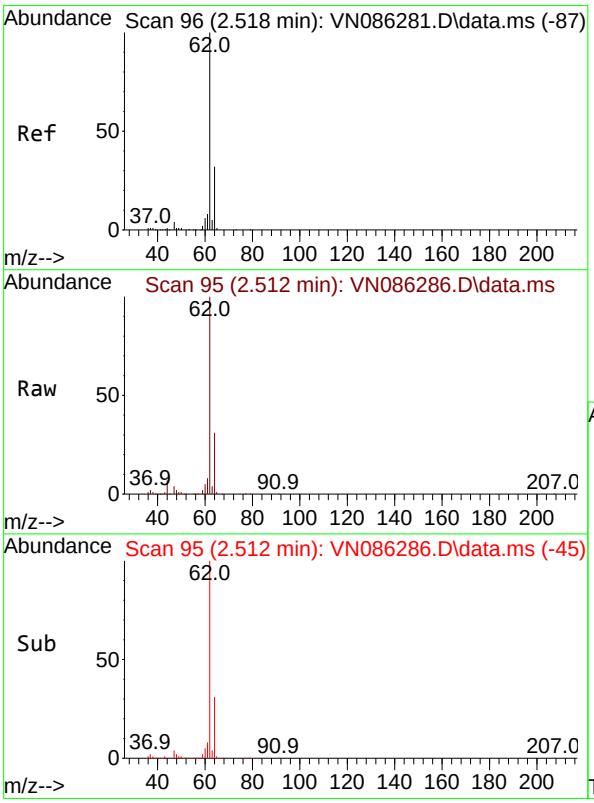
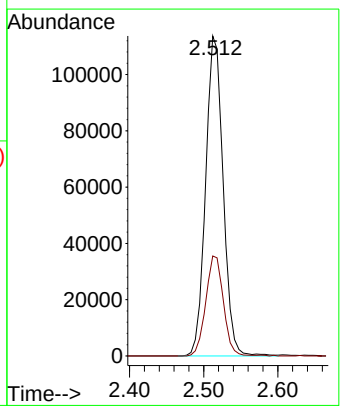
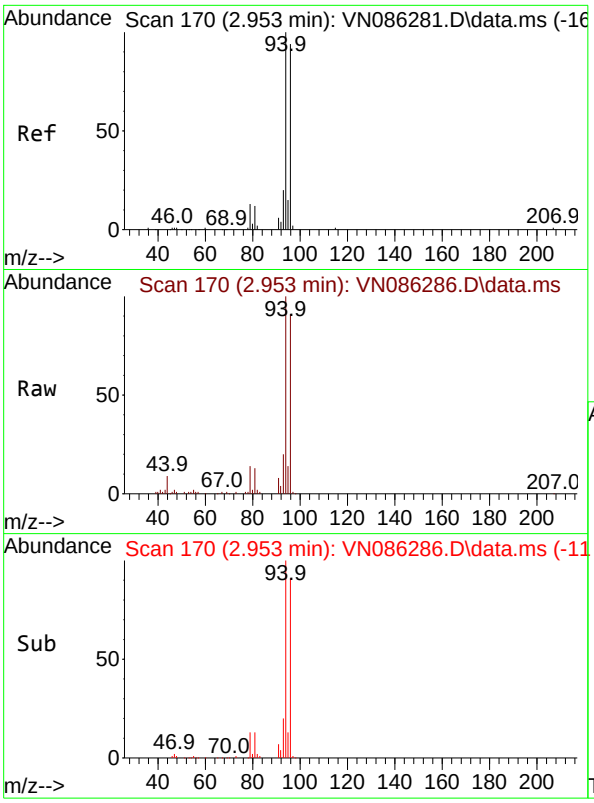


#4
Vinyl Chloride
Concen: 48.142 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 62 Resp: 186531

Ion	Ratio	Lower	Upper
62	100		
64	31.2	25.6	38.4





#5
Bromomethane
Concen: 51.019 ug/l
RT: 2.953 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 94 Resp: 8891

Ion	Ratio	Lower	Upper
94	100		
96	90.5	75.2	112.8

Instrument :
MSVOA_N
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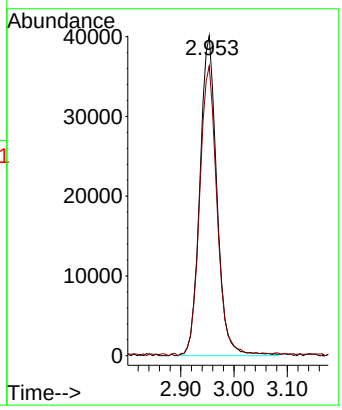
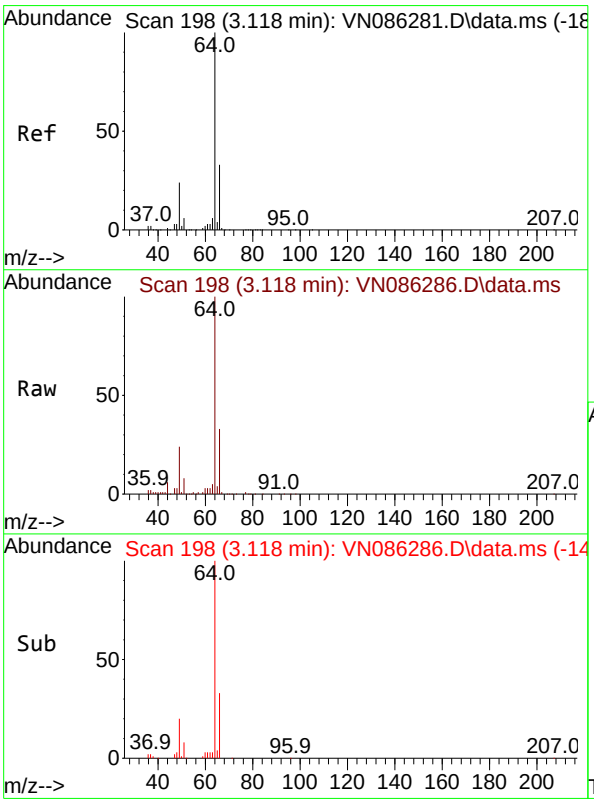
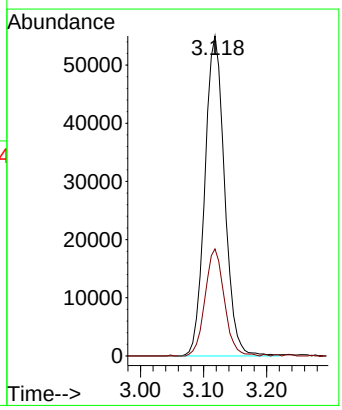


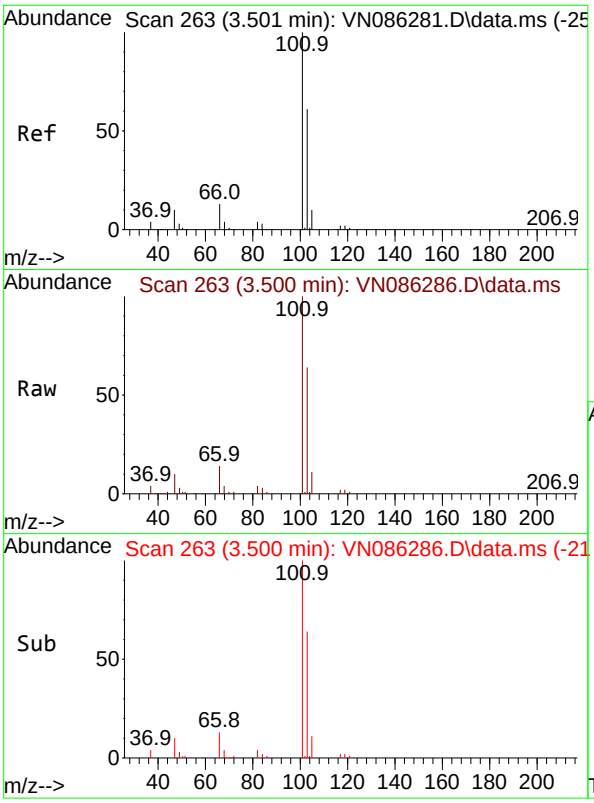


#6
Chloroethane
Concen: 46.095 ug/l
RT: 3.118 min Scan# 198
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 64 Resp: 119531

Ion	Ratio	Lower	Upper
64	100		
66	33.5	26.2	39.2

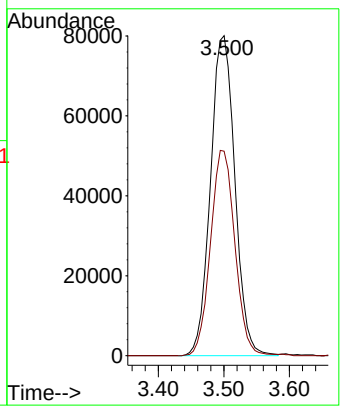




#7
Trichlorofluoromethane
Concen: 48.201 ug/l
RT: 3.500 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:101 Resp: 20687

Ion	Ratio	Lower	Upper
101	100		
103	63.9	49.2	73.8



Instrument :
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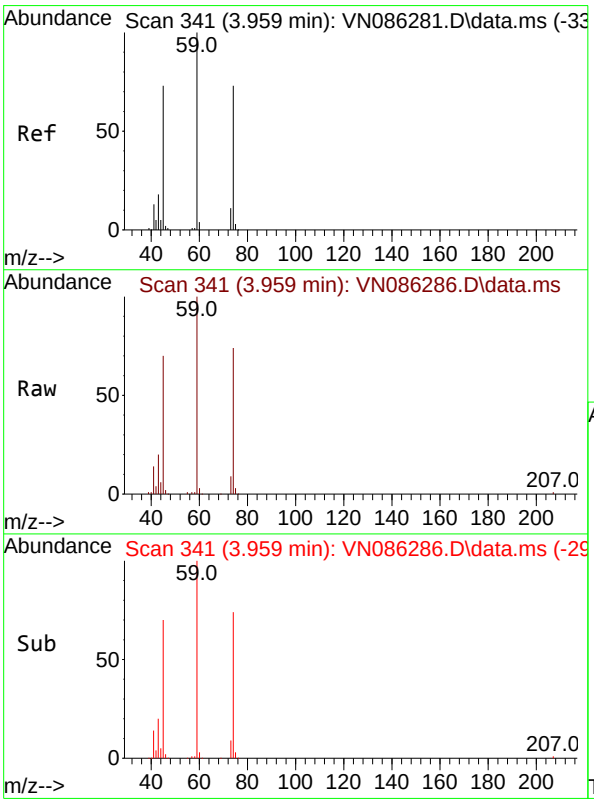
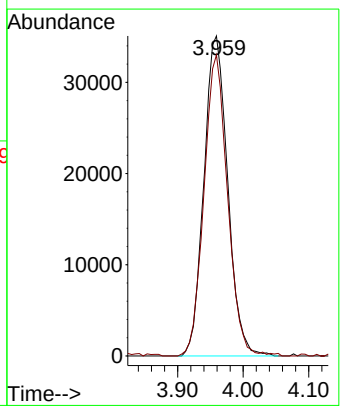
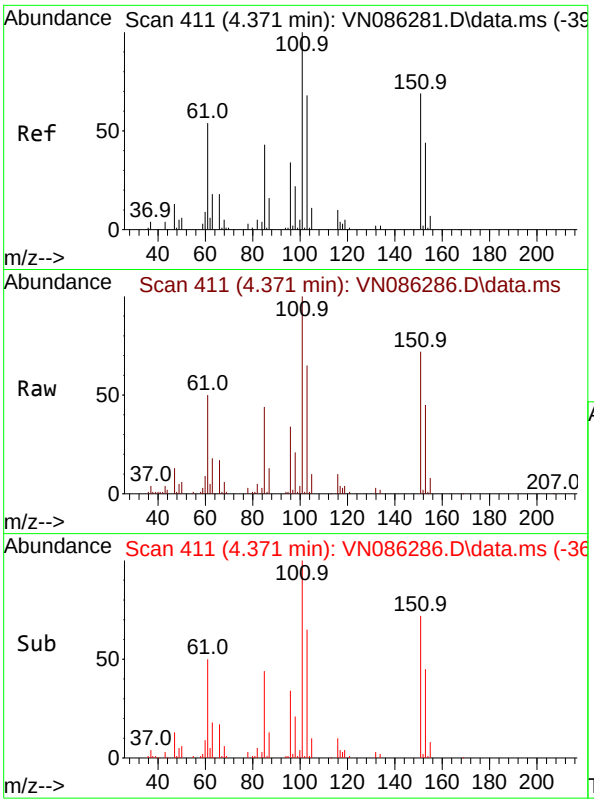


#8
Diethyl Ether
Concen: 47.257 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 74 Resp: 88542

Ion	Ratio	Lower	Upper
74	100		
45	93.4	48.0	144.2





#9
1,1,2-Trichlorotrifluoroethane
Concen: 48.715 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:101 Resp: 12647

Ion	Ratio	Lower	Upper
101	100		
85	43.9	34.7	52.1
151	70.5	56.1	84.1

Instrument :
MSVOA_N
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VSTDCCC050

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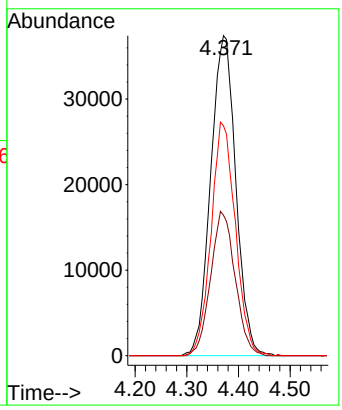
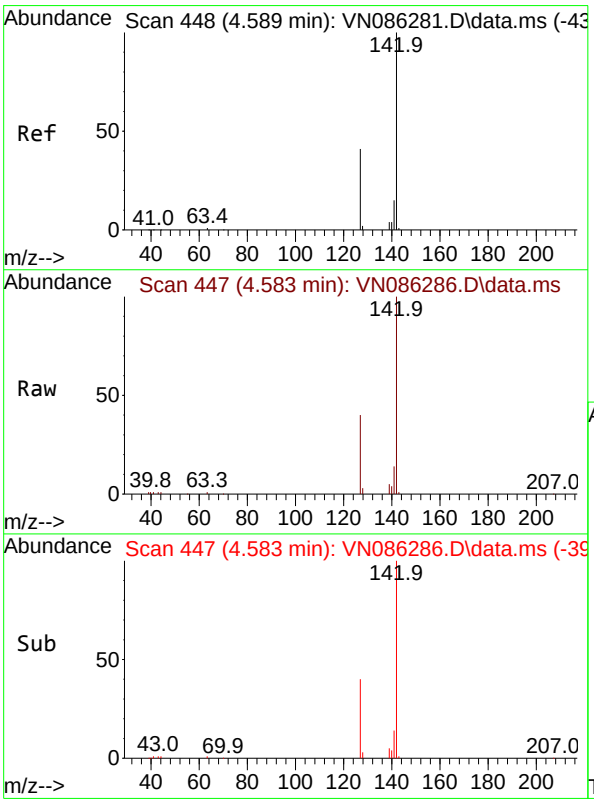
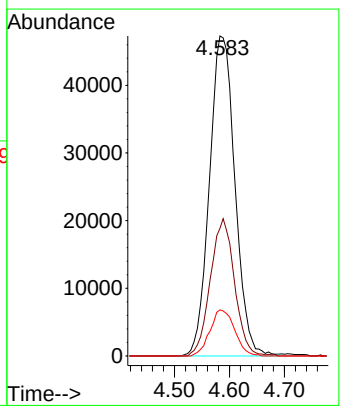


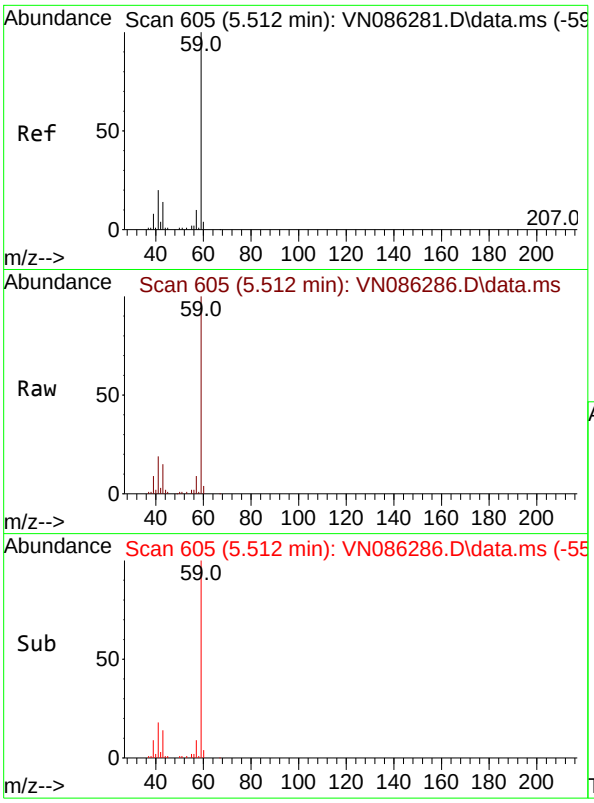


#10
Methyl Iodide
Concen: 53.436 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:142 Resp: 152531

Ion	Ratio	Lower	Upper
142	100		
127	39.9	32.7	49.1
141	14.4	11.7	17.5

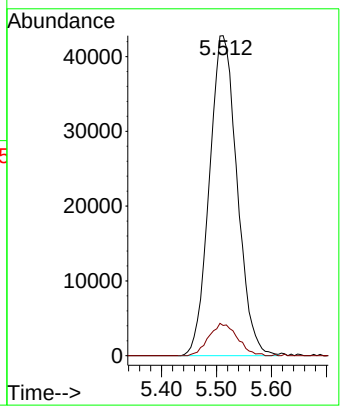




#11
Tert butyl alcohol
Concen: 240.673 ug/l
RT: 5.512 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 59 Resp: 15007

Ion	Ratio	Lower	Upper
59	100		
57	10.4	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
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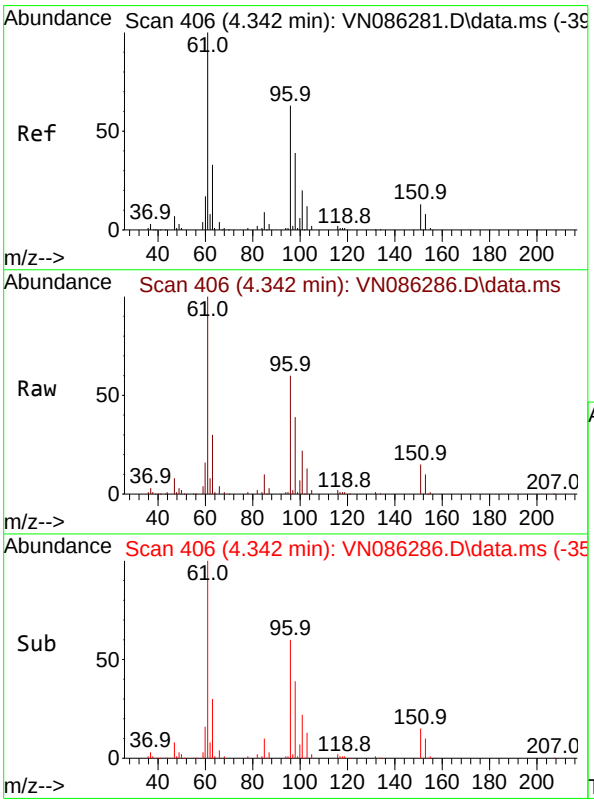
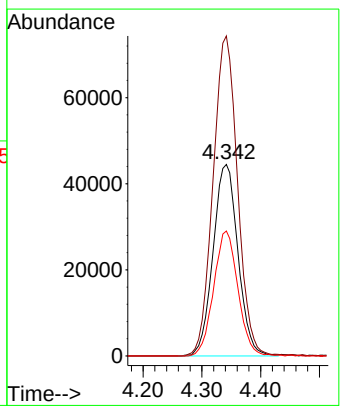
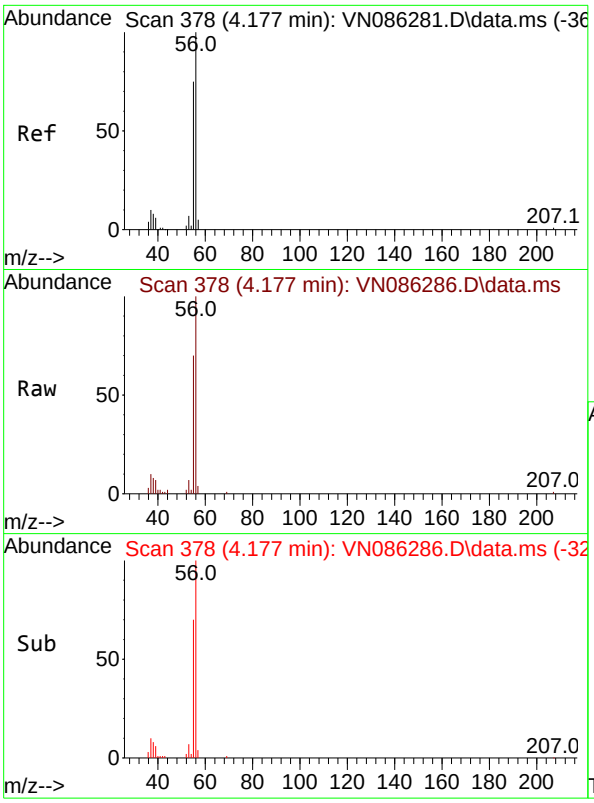


#12
1,1-Dichloroethene
Concen: 47.154 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 96 Resp: 130797

Ion	Ratio	Lower	Upper
96	100		
61	167.0	126.6	189.8
98	65.2	49.6	74.4

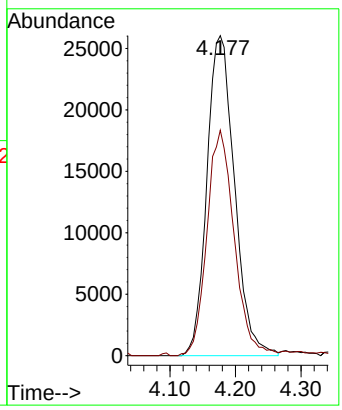




#13
Acrolein
Concen: 262.459 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 56 Resp: 7609

Ion	Ratio	Lower	Upper
56	100		
55	69.6	58.5	87.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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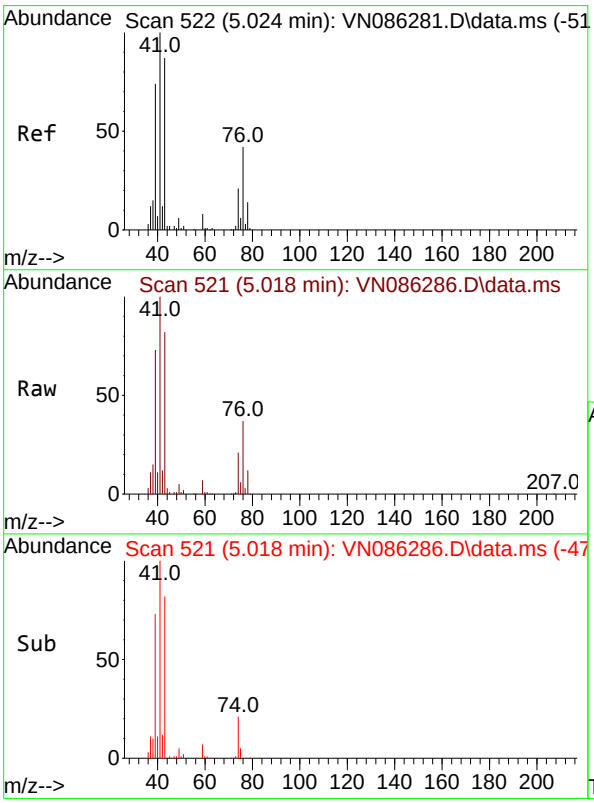
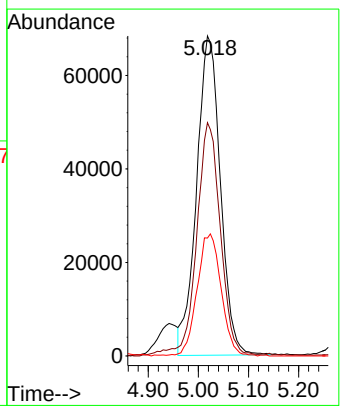
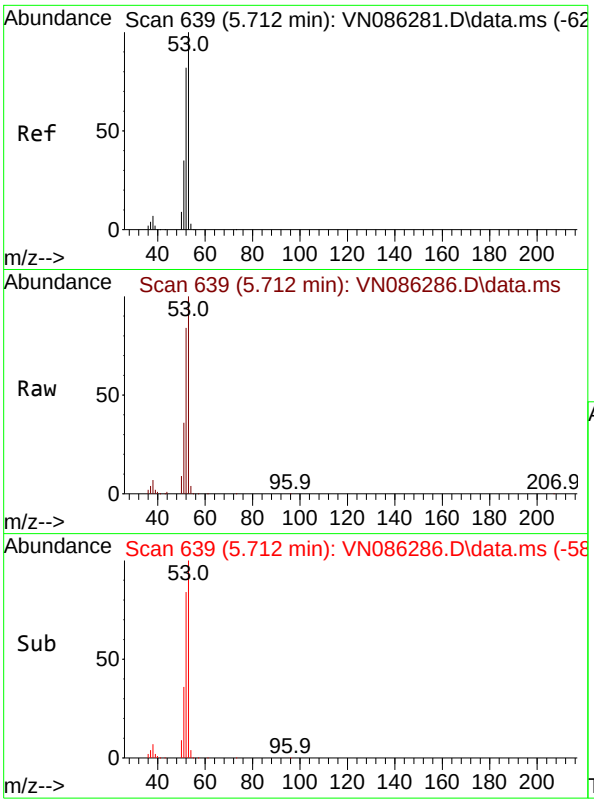


#14
Allyl chloride
Concen: 45.690 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 41 Resp: 225300

Ion	Ratio	Lower	Upper
41	100		
39	73.1	59.2	88.8
76	38.6	31.2	46.8

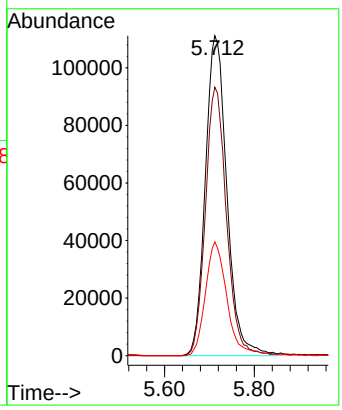




#15
Acrylonitrile
Concen: 240.904 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 53 Resp: 37133

Ion	Ratio	Lower	Upper
53	100		
52	82.0	65.5	98.3
51	35.6	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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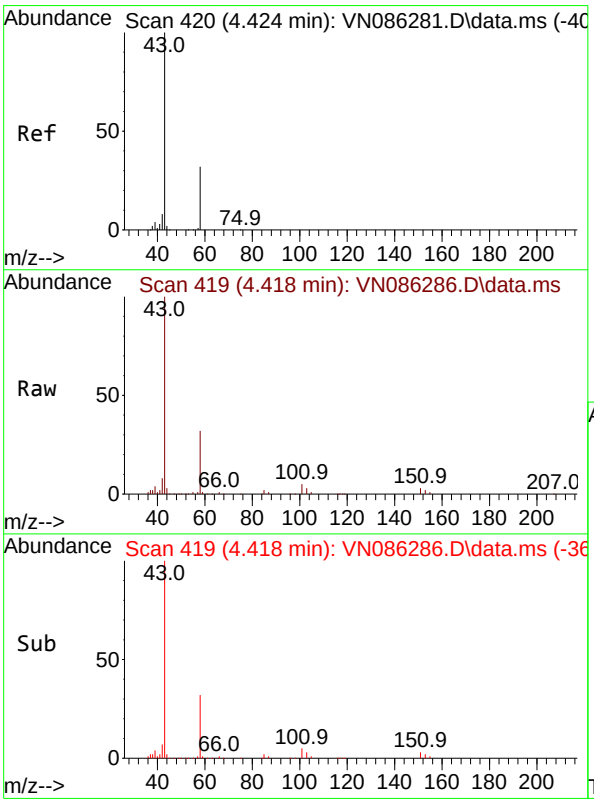
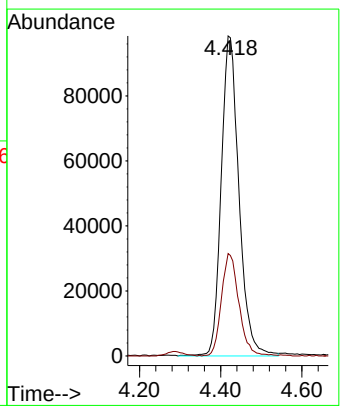
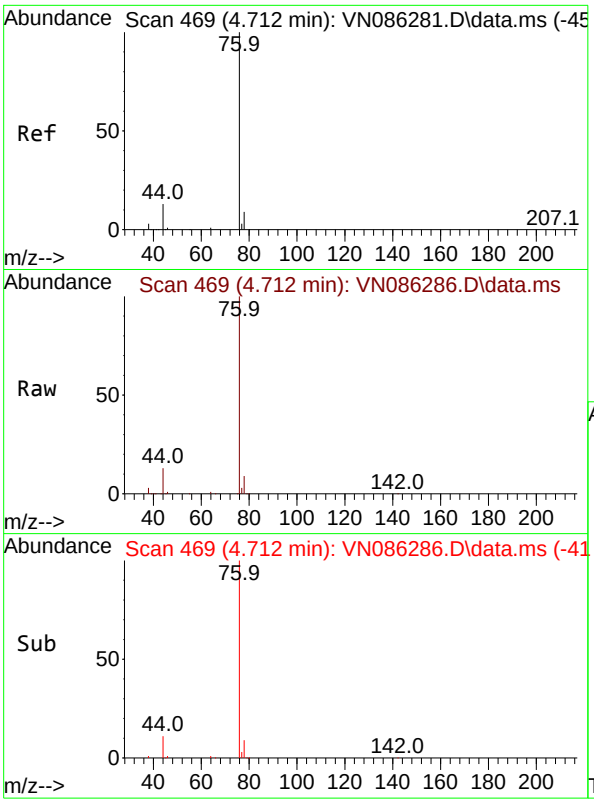


#16
Acetone
Concen: 253.403 ug/l
RT: 4.418 min Scan# 419
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 299320

Ion	Ratio	Lower	Upper
43	100		
58	31.8	25.3	37.9

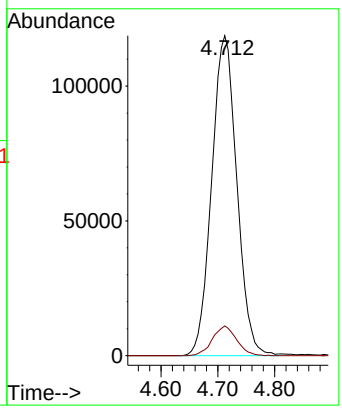




#17
Carbon Disulfide
Concen: 43.931 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 76 Resp: 36487

Ion	Ratio	Lower	Upper
76	100		
78	9.3	7.6	11.4



Instrument :
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ClientSampleId :
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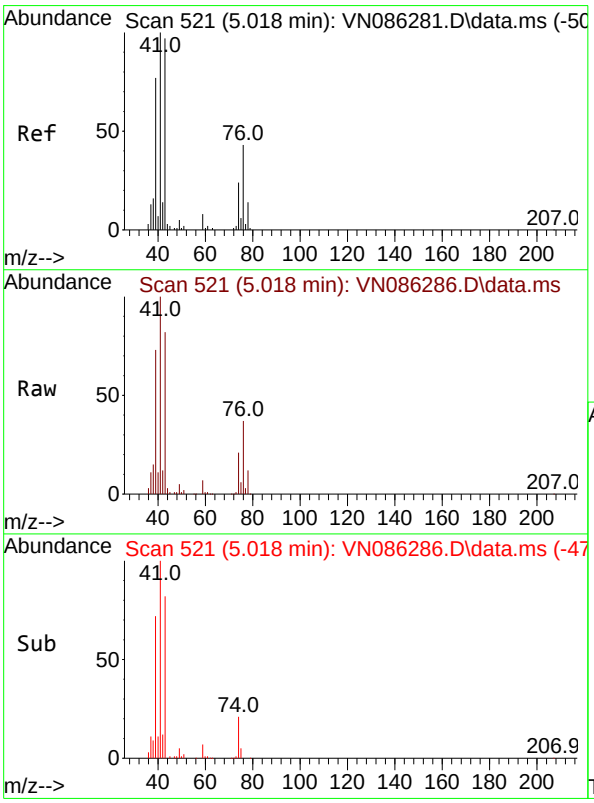
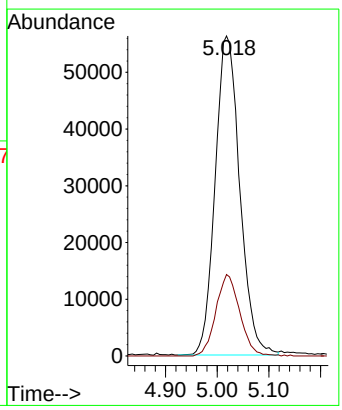
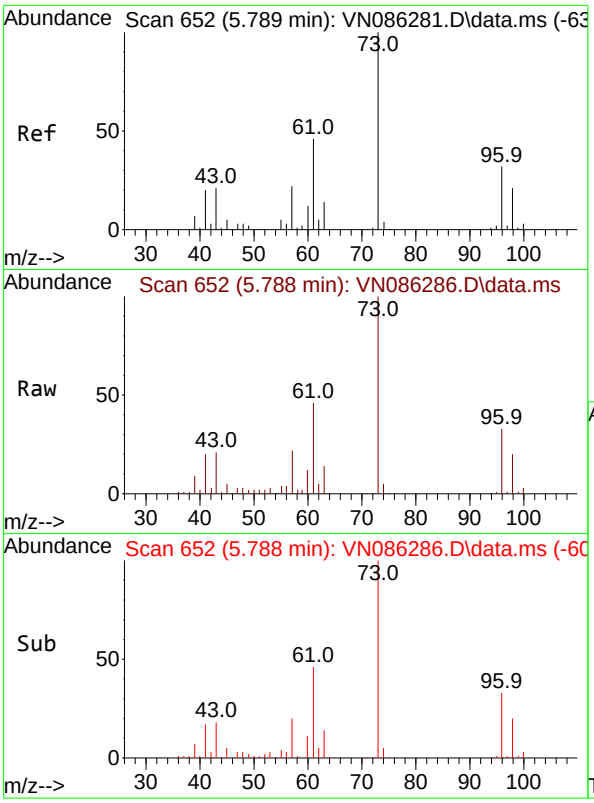


#18
Methyl Acetate
Concen: 45.427 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 186352

Ion	Ratio	Lower	Upper
43	100		
74	24.7	19.8	29.6





#19
Methyl tert-butyl Ether
Concen: 46.306 ug/l
RT: 5.788 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 73 Resp: 47215

Ion	Ratio	Lower	Upper
73	100		
57	22.2	17.6	26.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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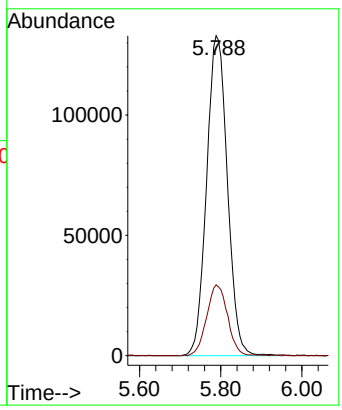
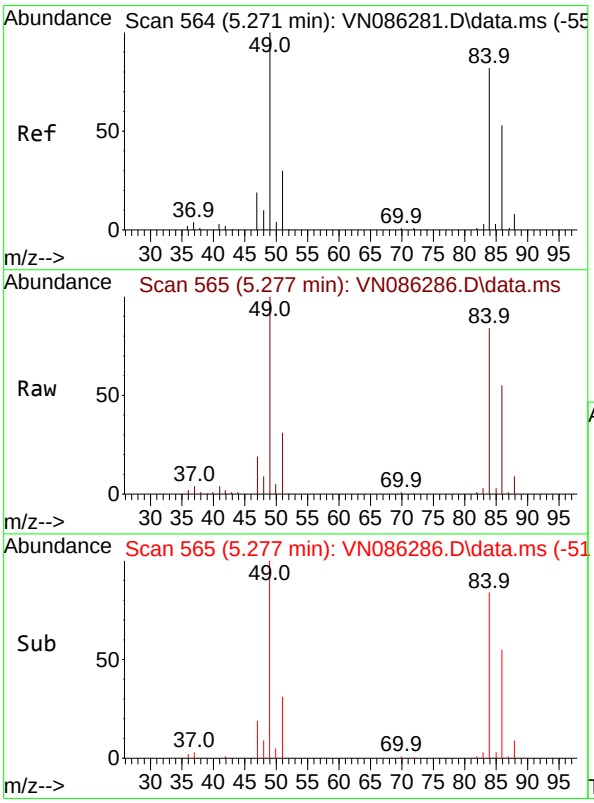
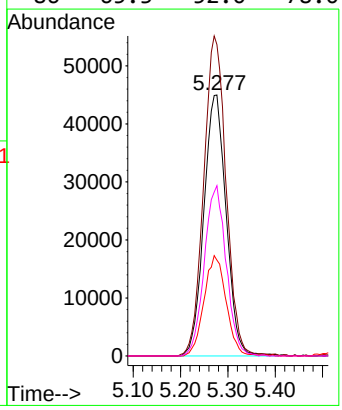


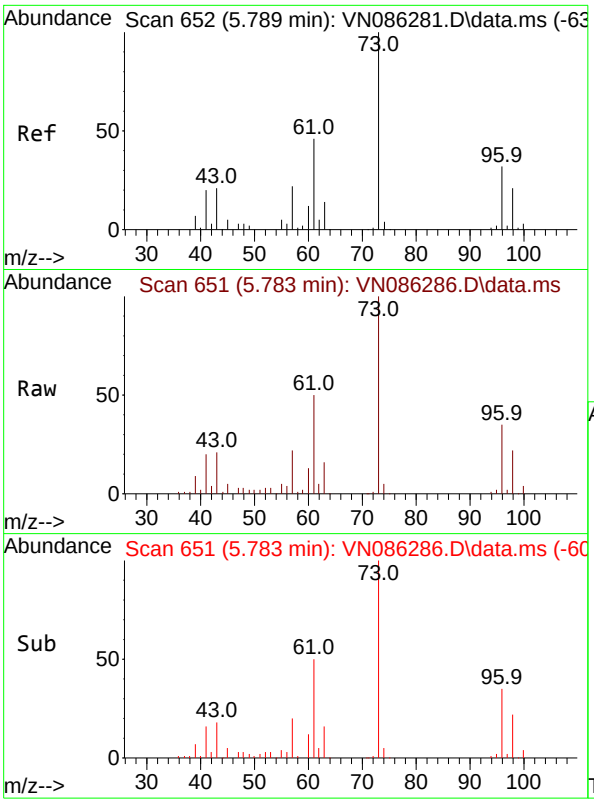


#20
Methylene Chloride
Concen: 46.630 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 84 Resp: 147320

Ion	Ratio	Lower	Upper
84	100		
49	119.3	98.2	147.2
51	36.8	29.8	44.6
86	65.3	52.0	78.0





#21
trans-1,2-Dichloroethene
Concen: 46.882 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 96 Resp: 13595

Ion	Ratio	Lower	Upper
96	100		
61	143.5	114.6	171.8
98	64.5	51.2	76.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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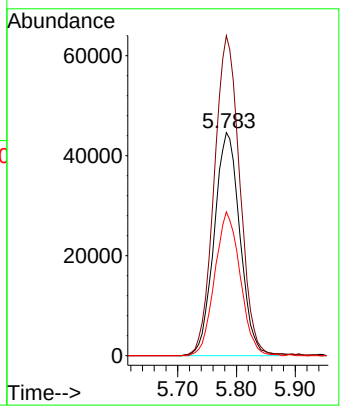
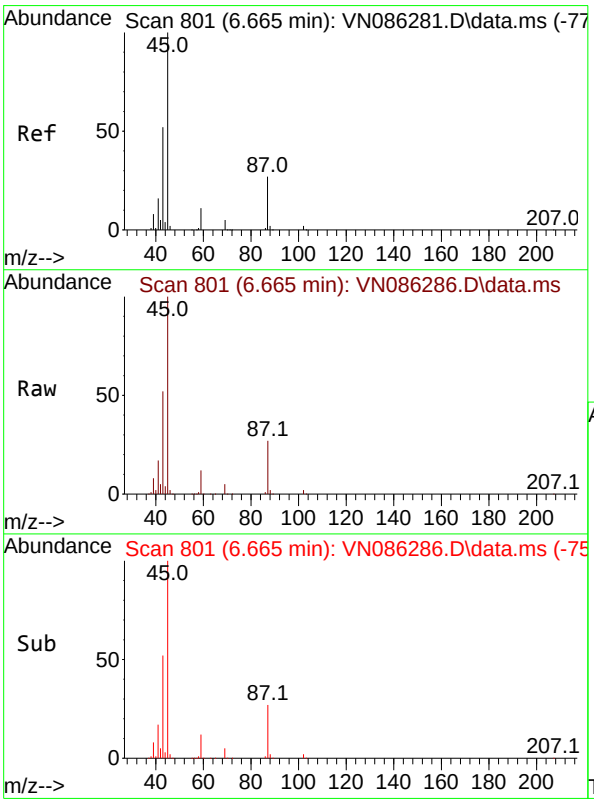
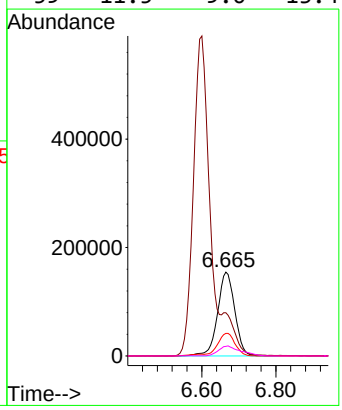


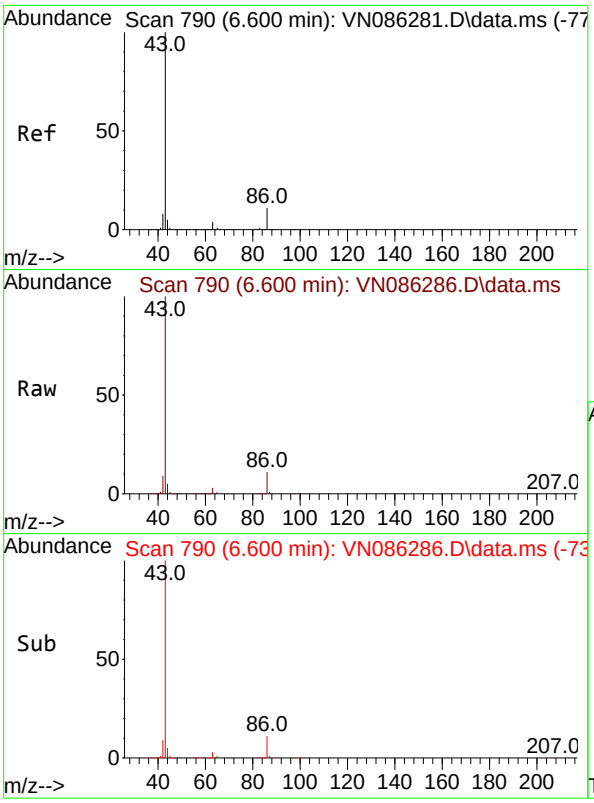


#22
Diisopropyl ether
Concen: 46.443 ug/l
RT: 6.665 min Scan# 801
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 45 Resp: 498190

Ion	Ratio	Lower	Upper
45	100		
43	51.0	41.8	62.8
87	27.0	21.6	32.4
59	11.5	9.0	13.4





#23
Vinyl Acetate
Concen: 232.938 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 174671

Ion	Ratio	Lower	Upper
43	100		
86	11.4	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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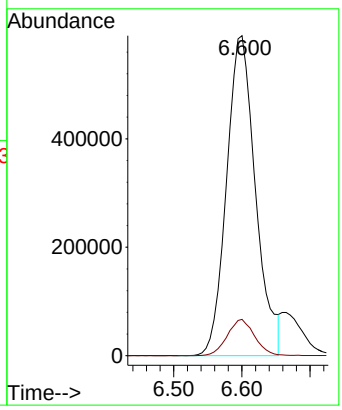
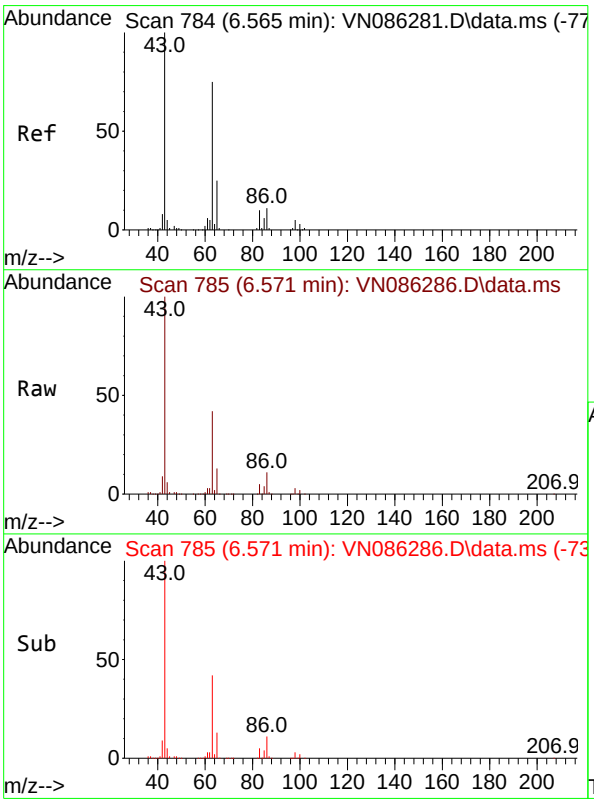
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

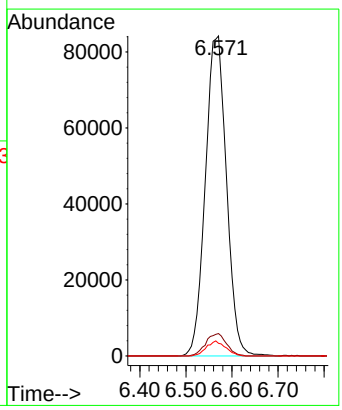


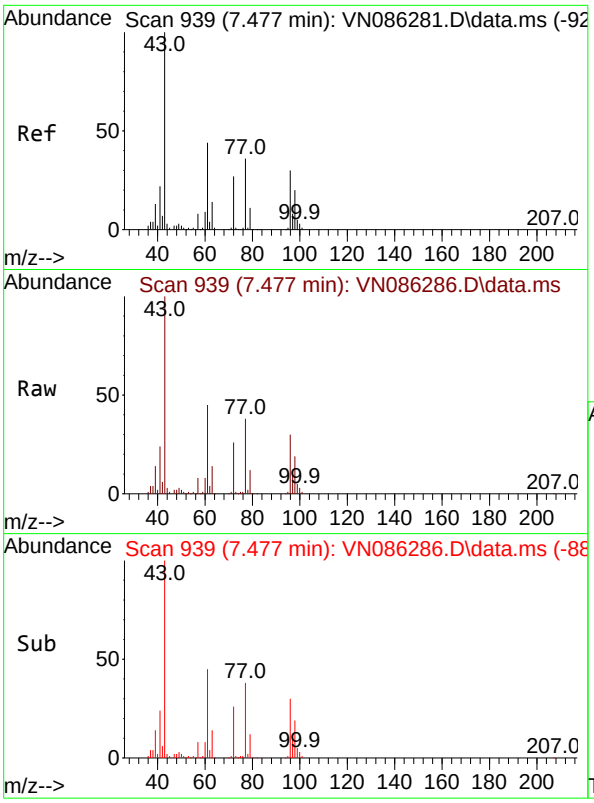


#24
1,1-Dichloroethane
Concen: 47.500 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 63 Resp: 268843

Ion	Ratio	Lower	Upper
63	100		
98	7.0	3.4	10.2
100	3.9	2.1	6.5





#25
2-Butanone
Concen: 236.612 ug/l
RT: 7.477 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 50332

Ion	Ratio	Lower	Upper
43	100		
72	26.2	21.7	32.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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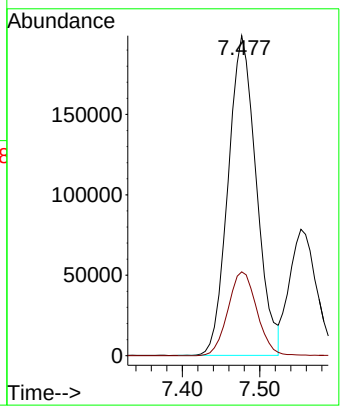
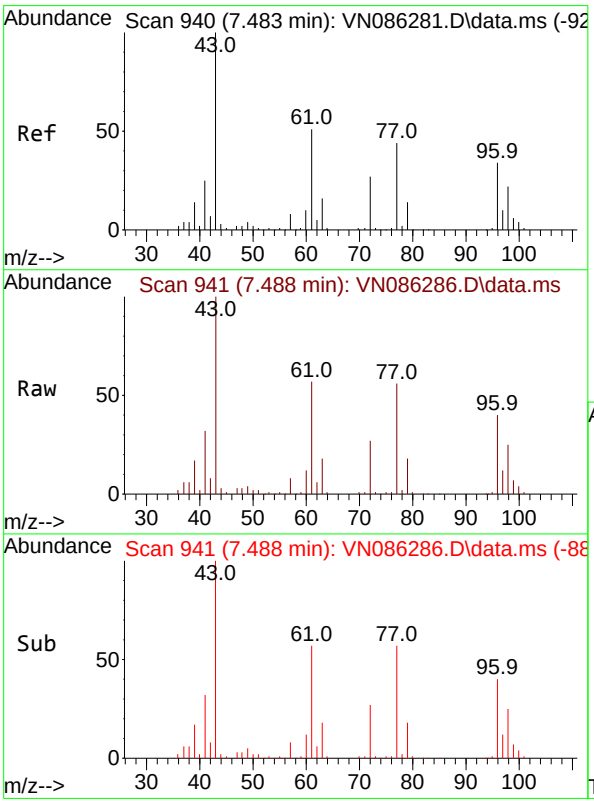
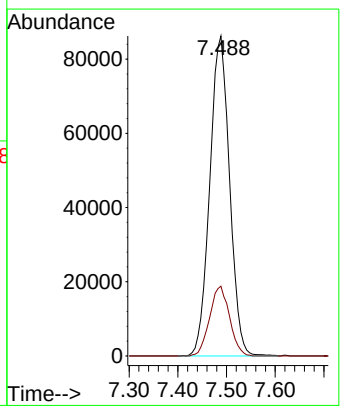


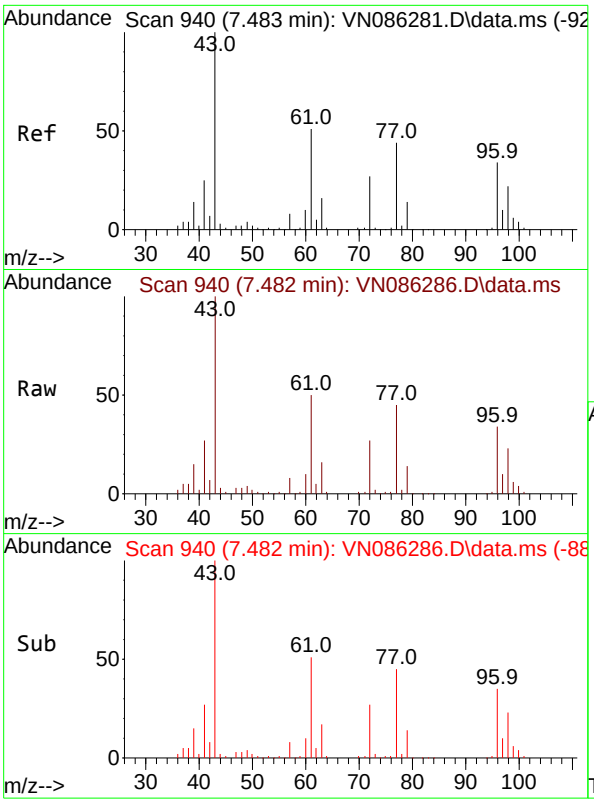


#26
2,2-Dichloropropane
Concen: 48.048 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 77 Resp: 243488

Ion	Ratio	Lower	Upper
77	100		
97	21.9	11.2	33.5





#27
cis-1,2-Dichloroethene
Concen: 46.233 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 96 Resp: 16640

Ion	Ratio	Lower	Upper
96	100		
61	149.8	0.0	299.0
98	65.4	0.0	129.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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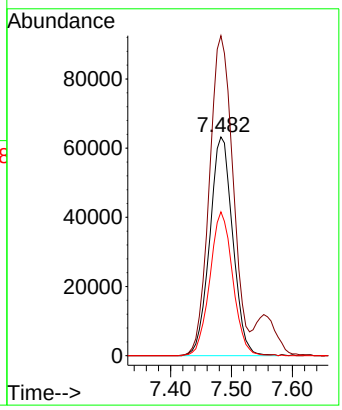
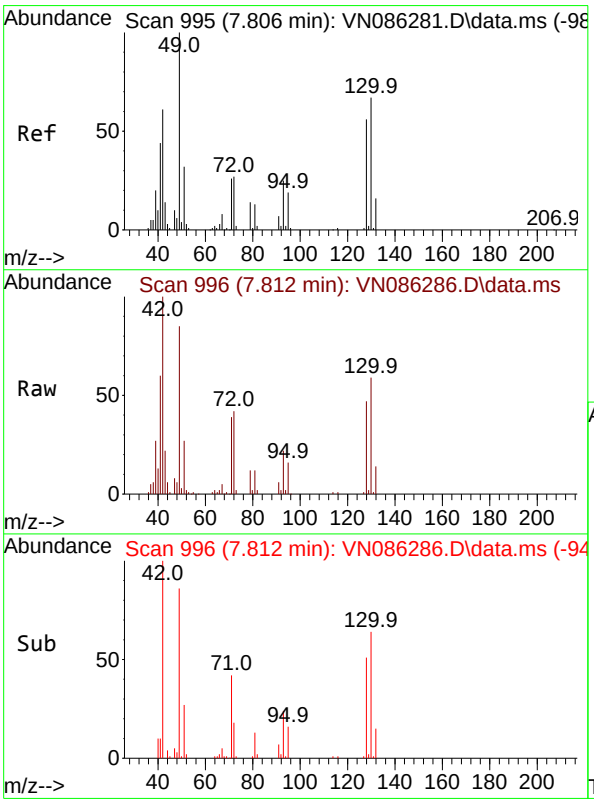
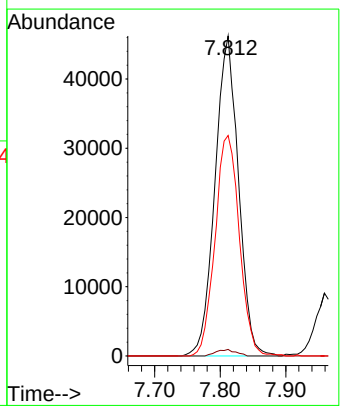


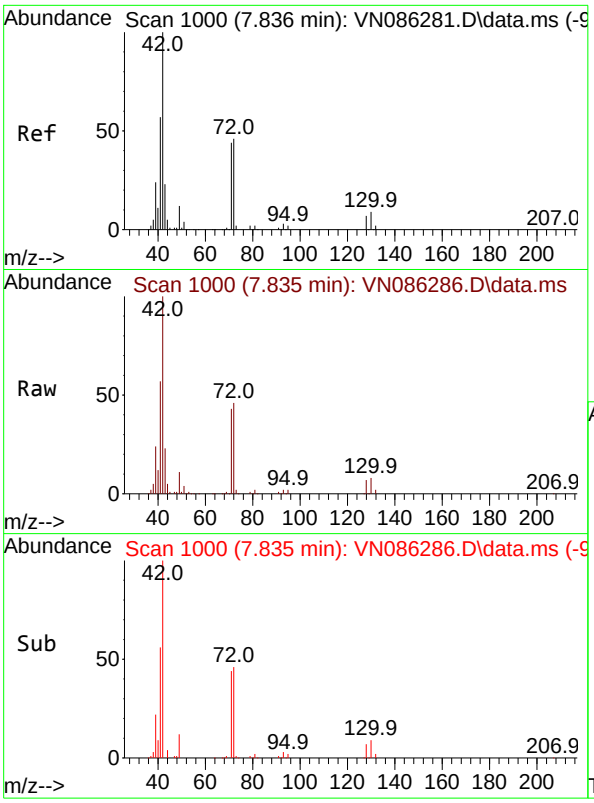


#28
Bromochloromethane
Concen: 47.831 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 49 Resp: 114783

Ion	Ratio	Lower	Upper
49	100		
129	1.7	0.0	3.4
130	71.2	57.1	85.7





#29
Tetrahydrofuran
Concen: 232.094 ug/l
RT: 7.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 42 Resp: 33014

Ion	Ratio	Lower	Upper
42	100		
72	44.8	36.2	54.4
71	42.0	34.0	51.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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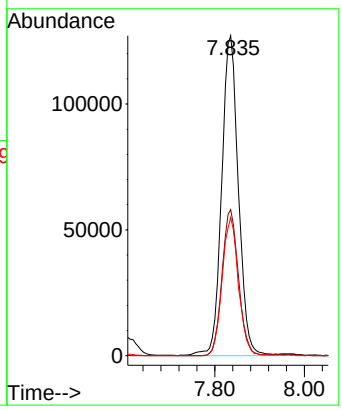
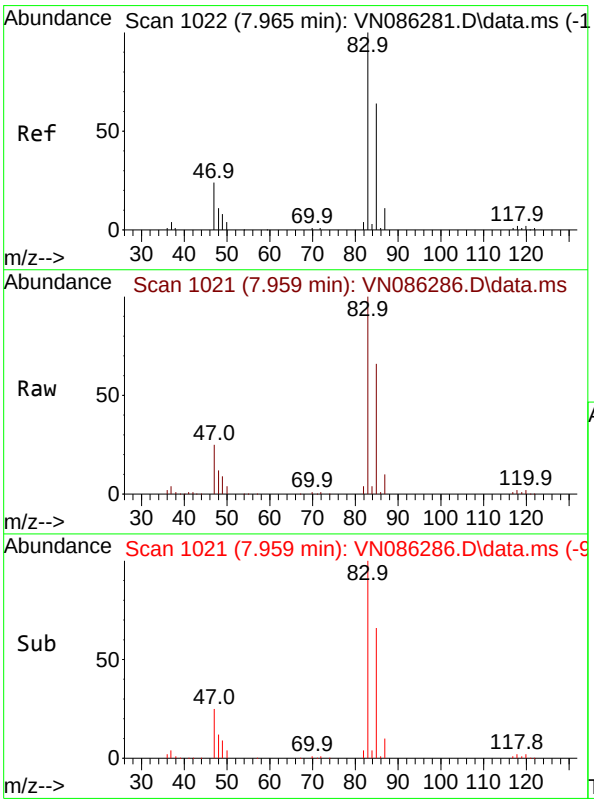
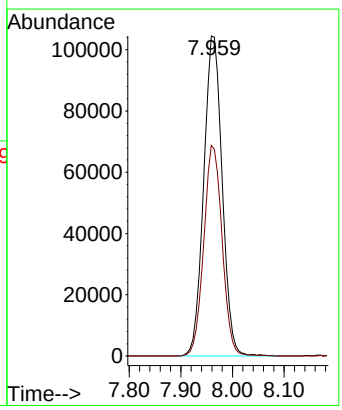


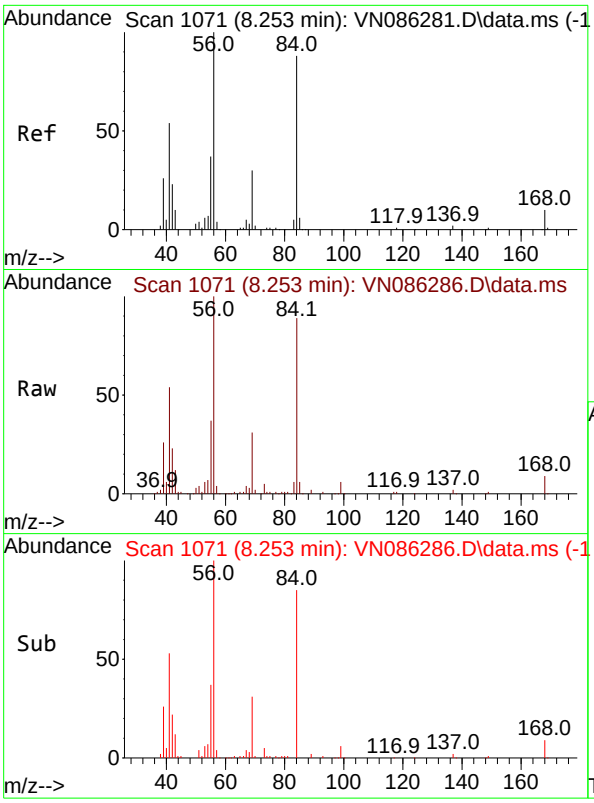


#30
Chloroform
Concen: 46.656 ug/l
RT: 7.959 min Scan# 1021
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 83 Resp: 259399

Ion	Ratio	Lower	Upper
83	100		
85	65.8	51.5	77.3





#31
Cyclohexane
Concen: 45.437 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 56 Resp: 25164

Ion	Ratio	Lower	Upper
56	100		
69	31.4	24.2	36.2
84	87.1	70.3	105.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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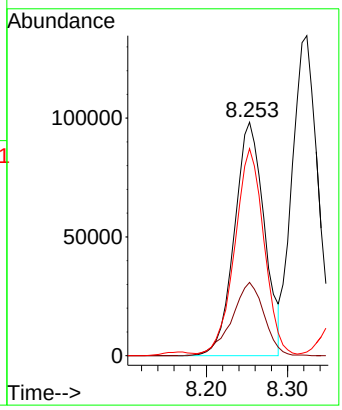
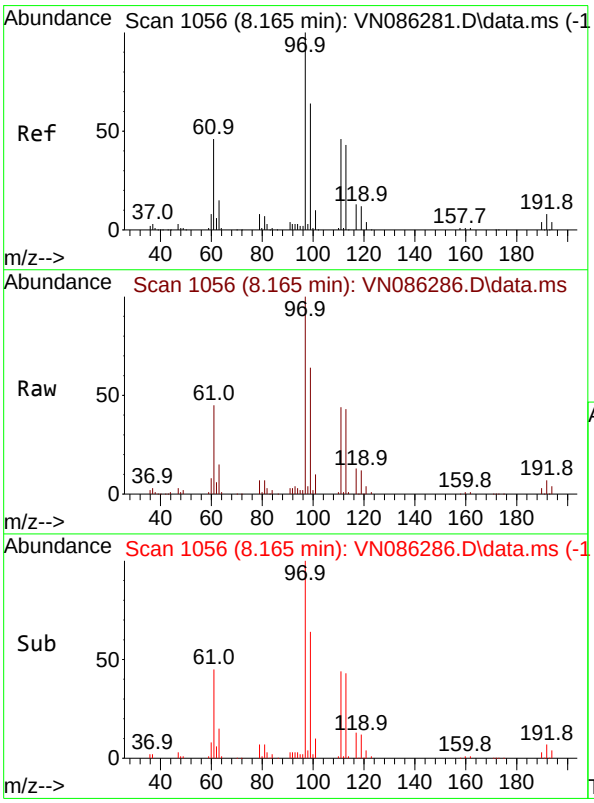
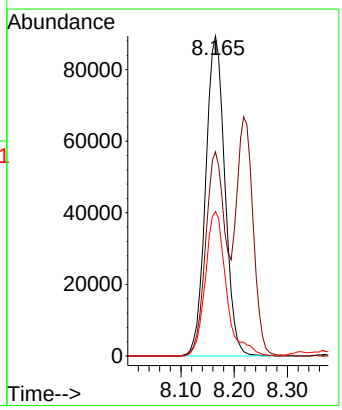


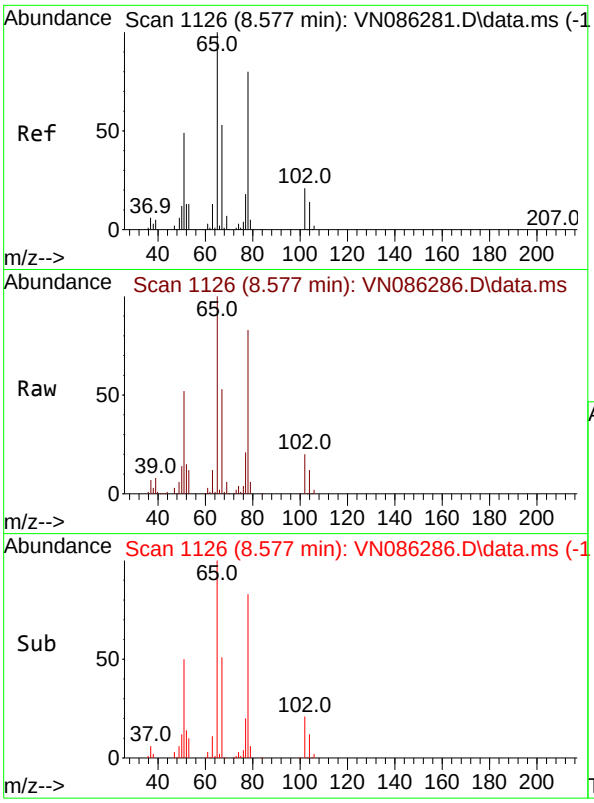


#32
1,1,1-Trichloroethane
Concen: 46.967 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 97 Resp: 223386

Ion	Ratio	Lower	Upper
97	100		
99	66.6	52.7	79.1
61	49.3	39.5	59.3





#33
1,2-Dichloroethane-d4
Concen: 48.071 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 65 Resp: 16428

Ion	Ratio	Lower	Upper
65	100		
67	53.0	0.0	106.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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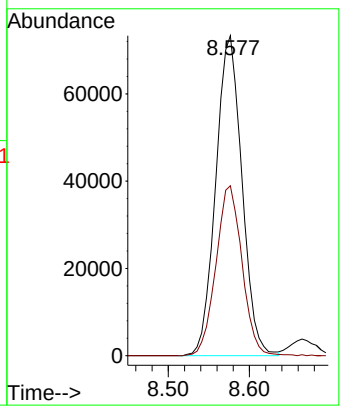
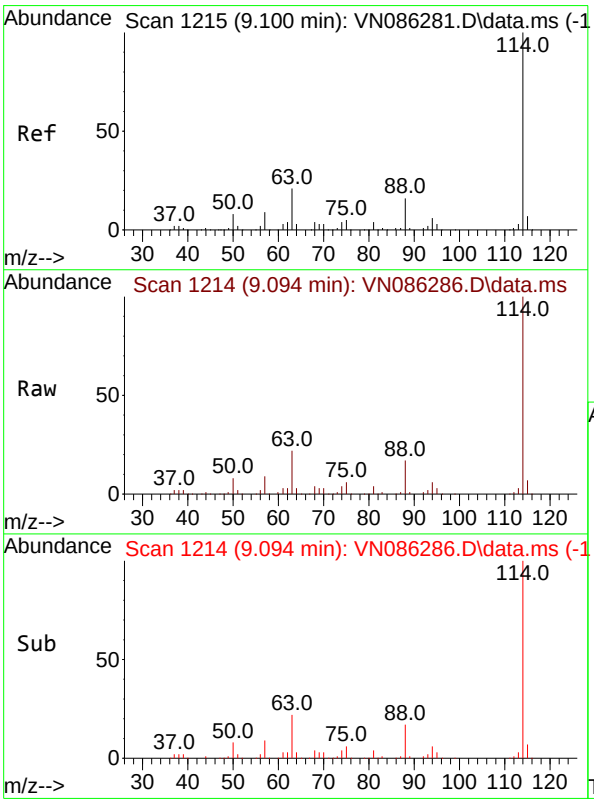
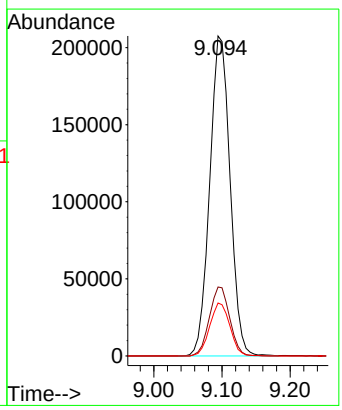


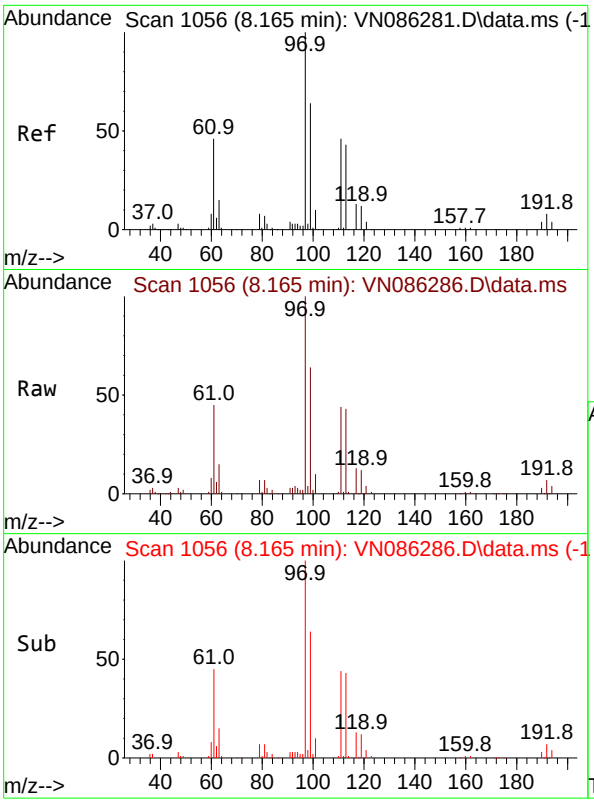


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:114 Resp: 430893

Ion	Ratio	Lower	Upper
114	100		
63	21.6	0.0	42.6
88	16.5	0.0	31.8

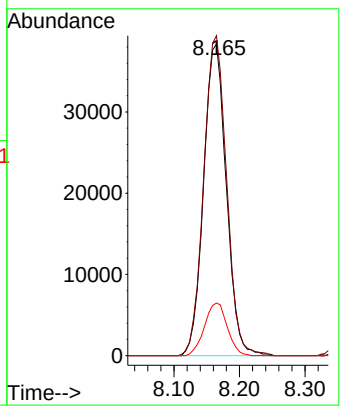




#35
Dibromofluoromethane
Concen: 46.205 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:113 Resp: 9240

Ion	Ratio	Lower	Upper
113	100		
111	103.7	83.4	125.0
192	16.9	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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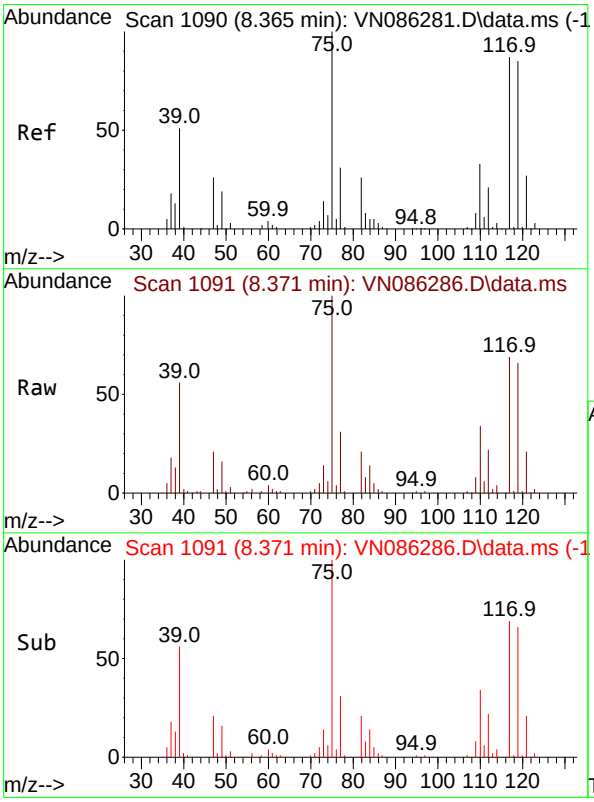
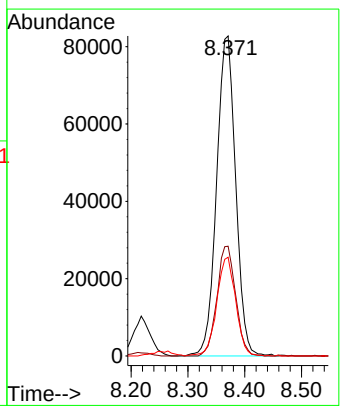
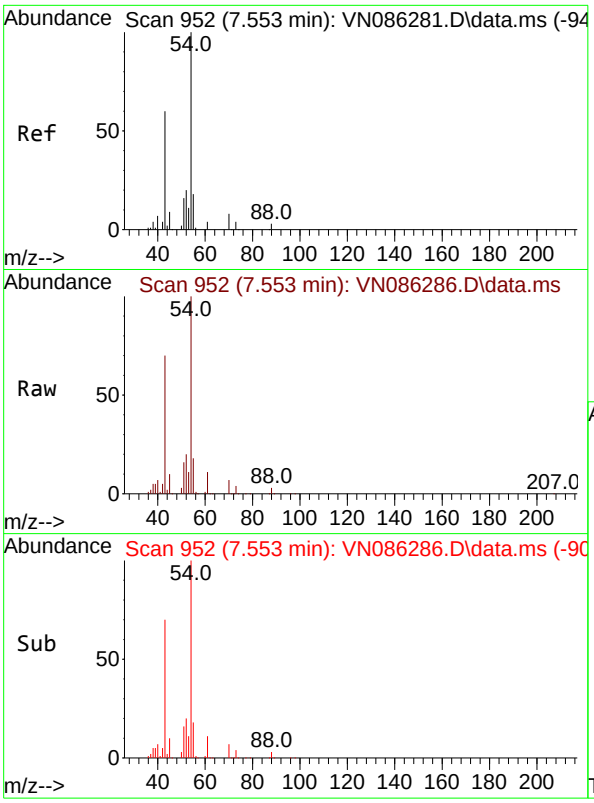


#36
1,1-Dichloropropene
Concen: 48.390 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 75 Resp: 193287

Ion	Ratio	Lower	Upper
75	100		
110	33.7	16.8	50.4
77	30.8	24.9	37.3





#37
Ethyl Acetate
Concen: 46.122 ug/l
RT: 7.553 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 19395

Ion	Ratio	Lower	Upper
43	100		
61	15.0	11.1	16.7
70	11.2	9.2	13.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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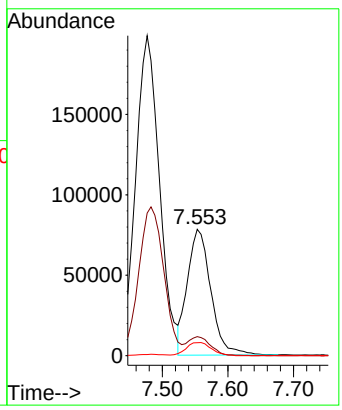
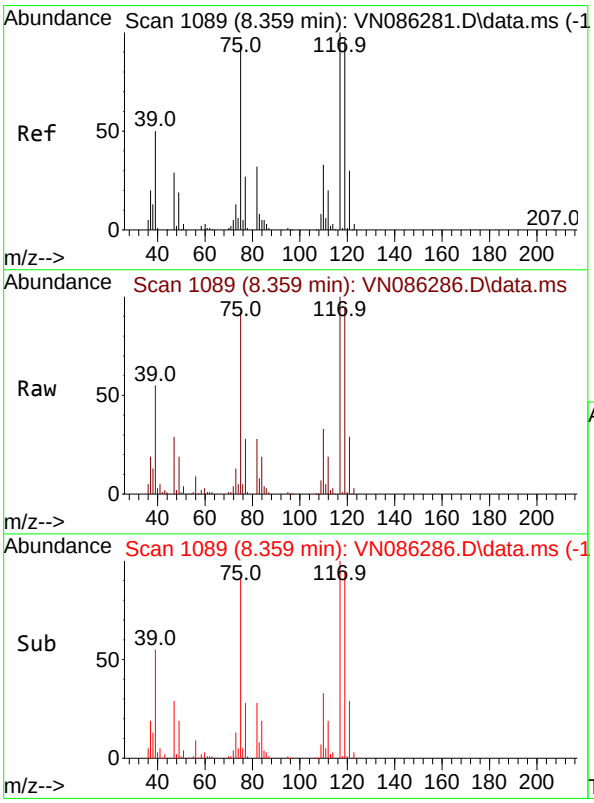
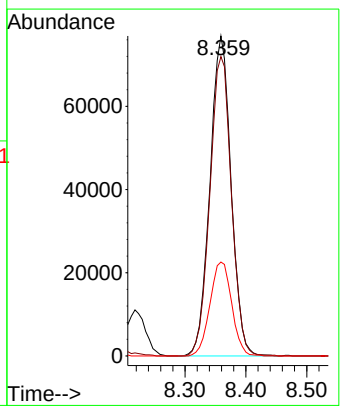


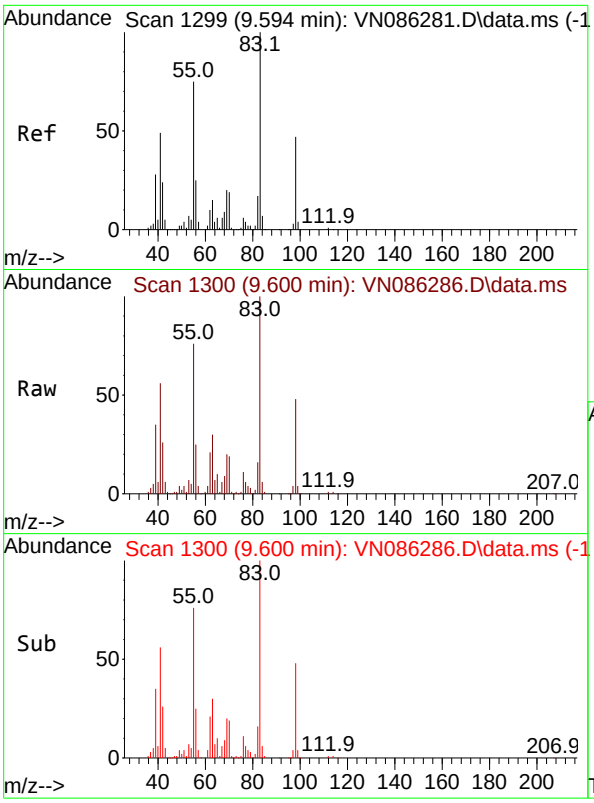


#38
Carbon Tetrachloride
Concen: 48.682 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:117 Resp: 185182

Ion	Ratio	Lower	Upper
117	100		
119	93.5	76.8	115.2
121	29.3	23.8	35.8

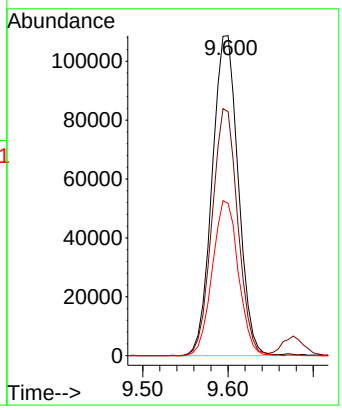




#39
Methylcyclohexane
Concen: 48.614 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 83 Resp: 23080

Ion	Ratio	Lower	Upper
83	100		
55	76.3	59.8	89.8
98	47.6	37.9	56.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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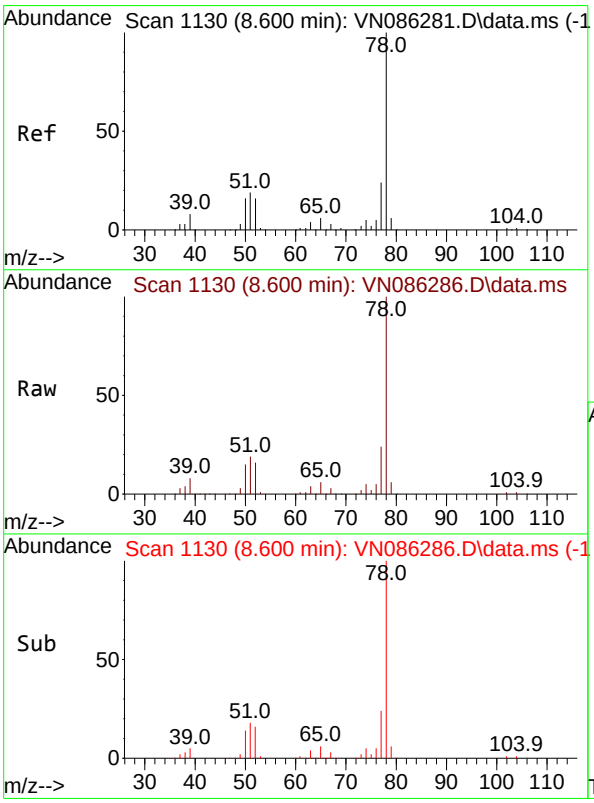
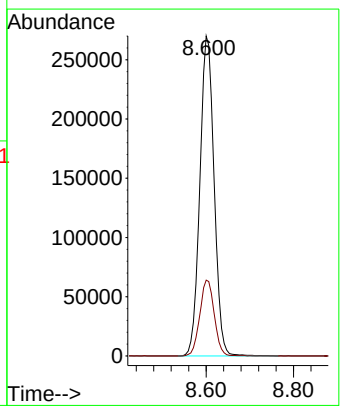
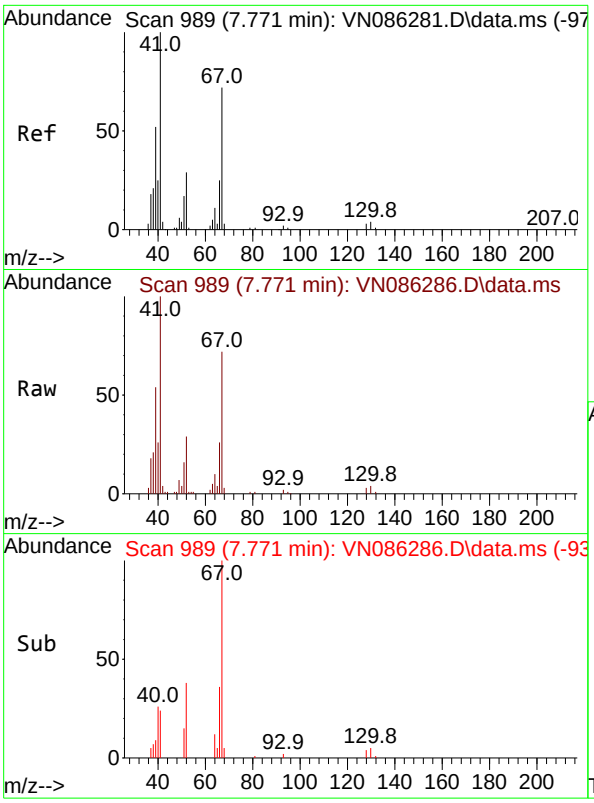


#40
Benzene
Concen: 47.920 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 78 Resp: 613264

Ion	Ratio	Lower	Upper
78	100		
77	23.7	19.4	29.2

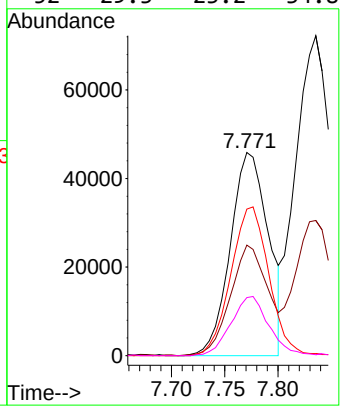




#41
Methacrylonitrile
Concen: 46.794 ug/l
RT: 7.771 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 41 Resp: 11404

Ion	Ratio	Lower	Upper
41	100		
39	53.5	43.0	64.4
67	73.4	58.8	88.2
52	29.3	23.2	34.8



Instrument :
MSVOA_N
ClientSampleId :
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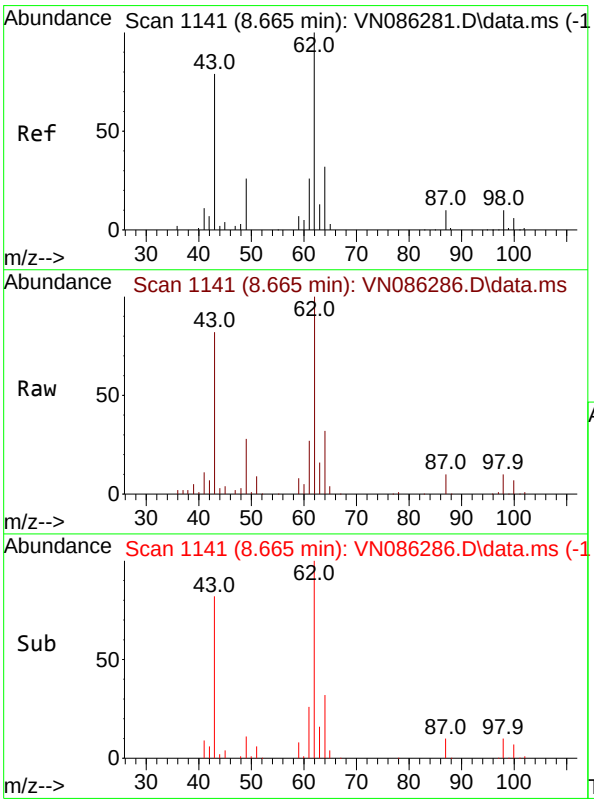
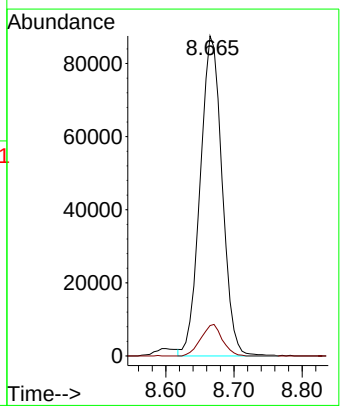
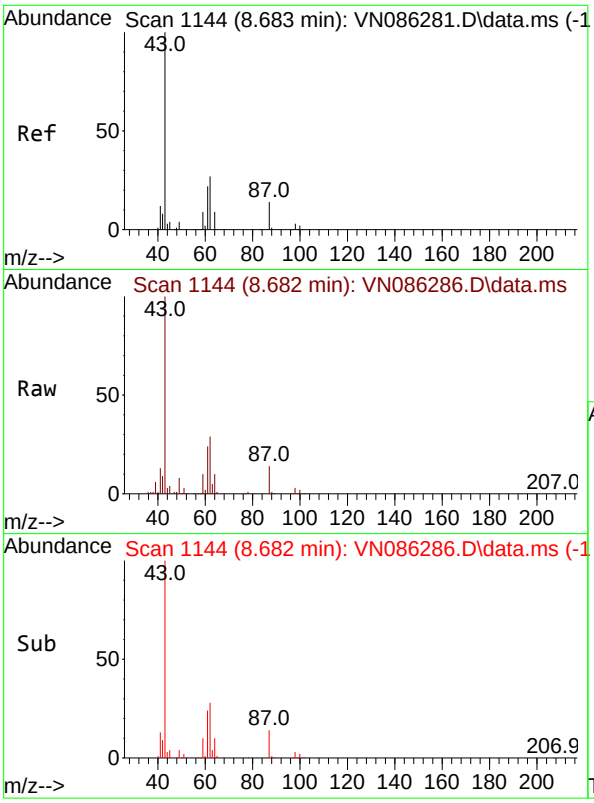


#42
1,2-Dichloroethane
Concen: 47.977 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 62 Resp: 195800

Ion	Ratio	Lower	Upper
62	100		
98	9.6	0.0	19.2





#43
Isopropyl Acetate
Concen: 47.992 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 36200

Ion	Ratio	Lower	Upper
43	100		
61	26.7	20.5	30.7
87	13.2	10.5	15.7

Instrument :
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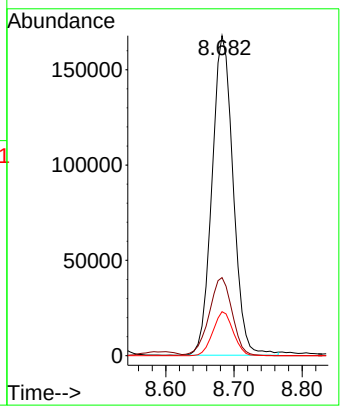
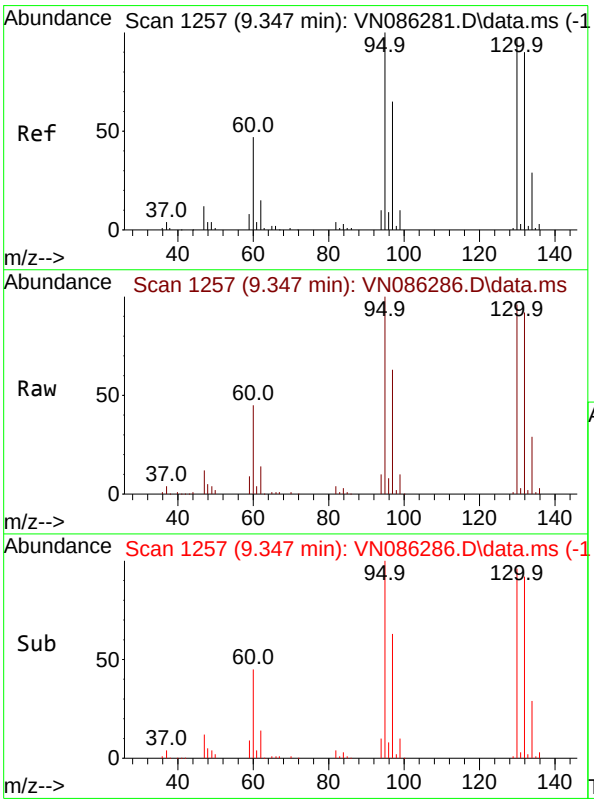
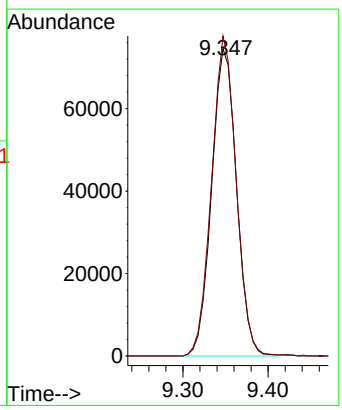


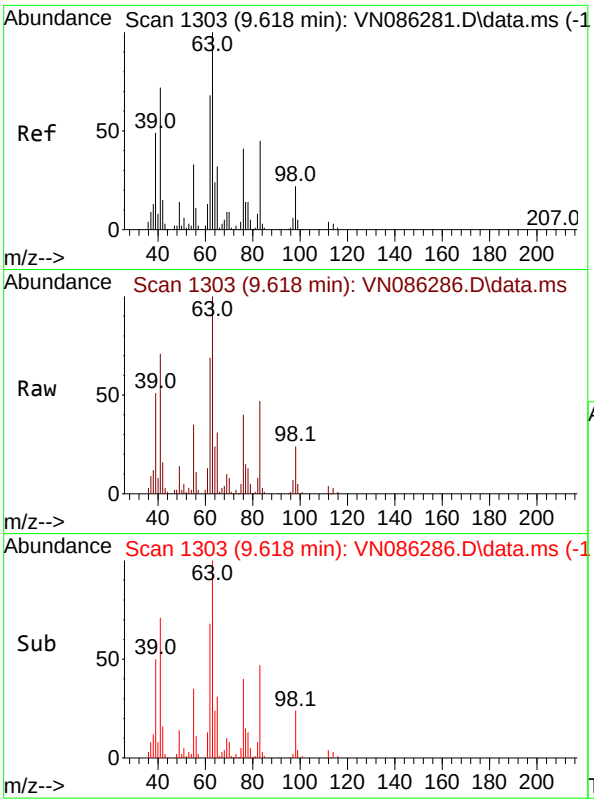


#44
Trichloroethene
Concen: 49.927 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:130 Resp: 151444

Ion	Ratio	Lower	Upper
130	100		
95	104.1	0.0	207.2





#45
1,2-Dichloropropane
Concen: 48.096 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 63 Resp: 15066

Ion	Ratio	Lower	Upper
63	100		
65	30.5	25.4	38.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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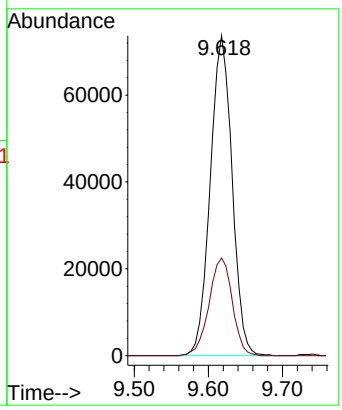
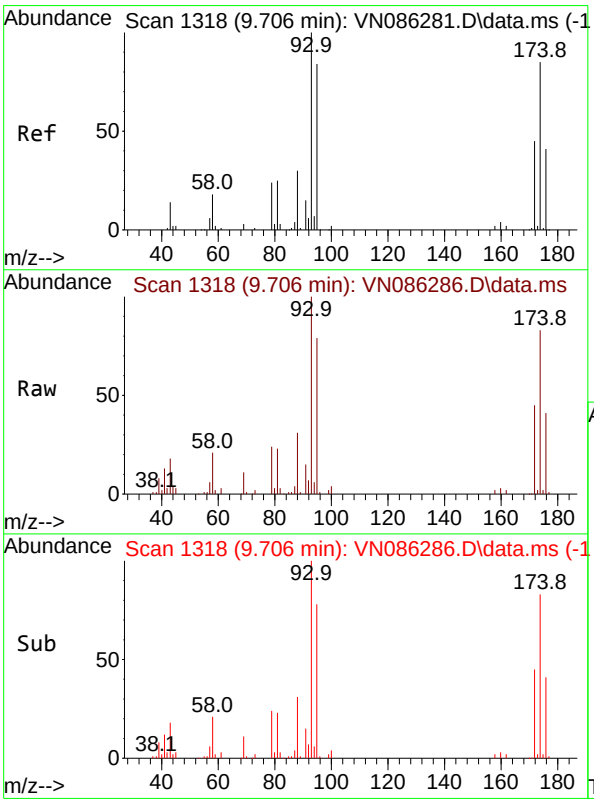
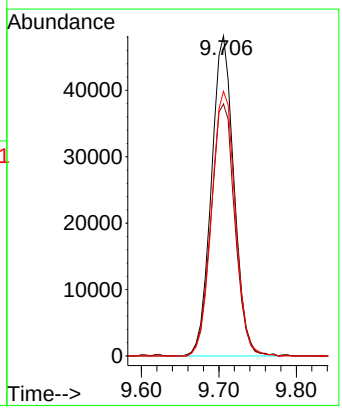


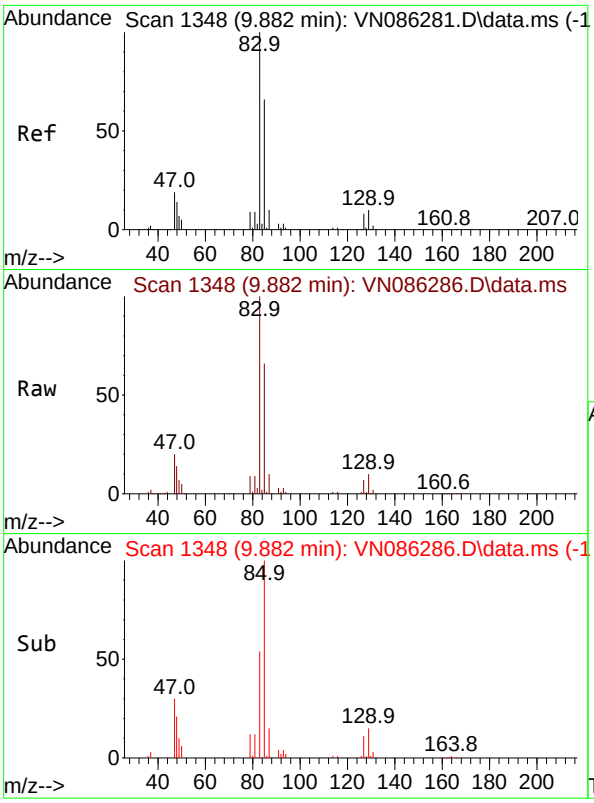


#46
Dibromomethane
Concen: 48.970 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 93 Resp: 97743

Ion	Ratio	Lower	Upper
93	100		
95	82.8	66.2	99.4
174	86.1	67.8	101.6

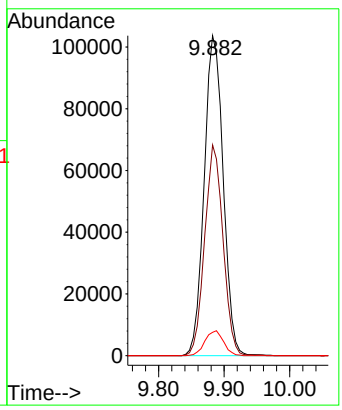




#47
Bromodichloromethane
Concen: 48.571 ug/l
RT: 9.882 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 83 Resp: 20938

Ion	Ratio	Lower	Upper
83	100		
85	65.9	52.6	78.8
127	7.3	6.1	9.1



Instrument :
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ClientSampleId :
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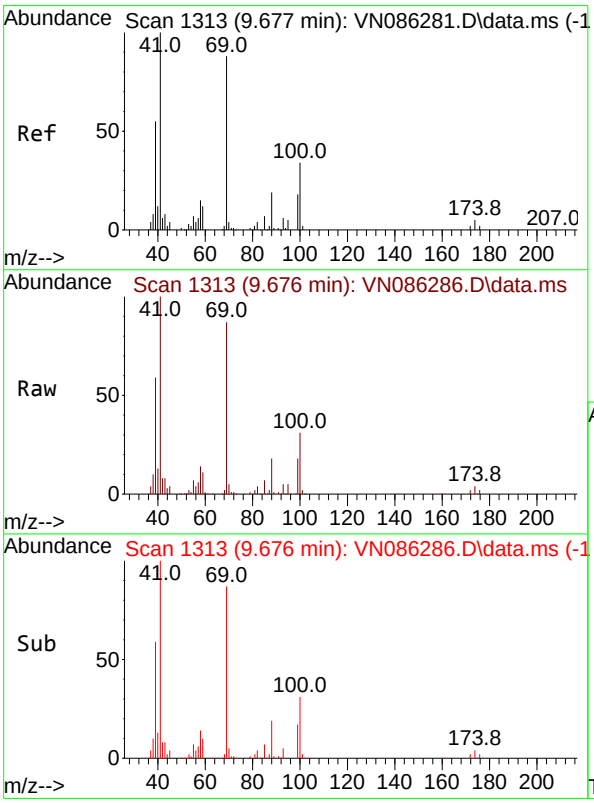
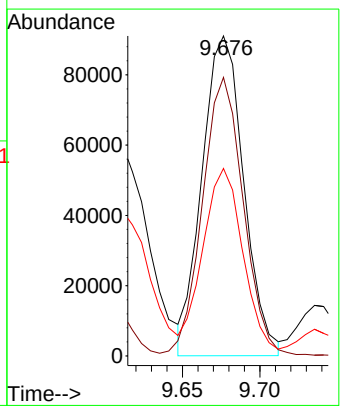
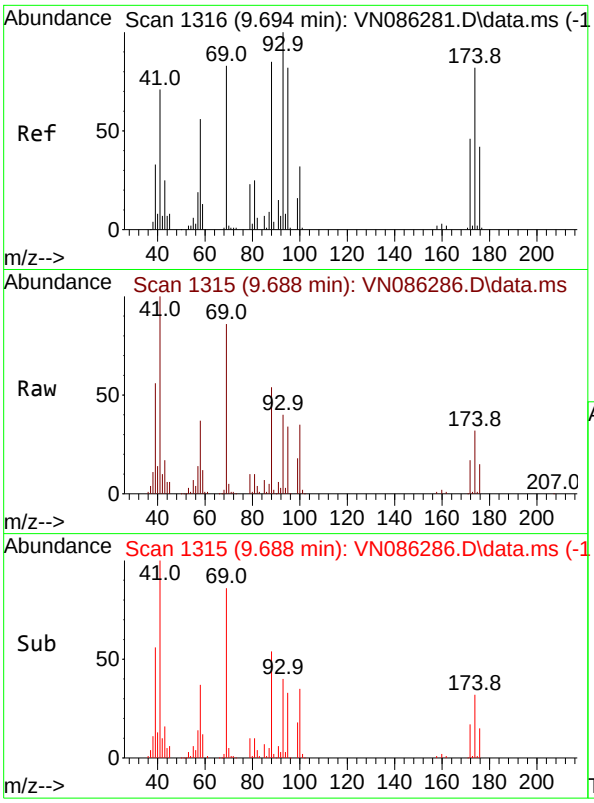


#48
Methyl methacrylate
Concen: 46.070 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 41 Resp: 170133

Ion	Ratio	Lower	Upper
41	100		
69	86.2	68.2	102.2
39	57.4	45.2	67.8

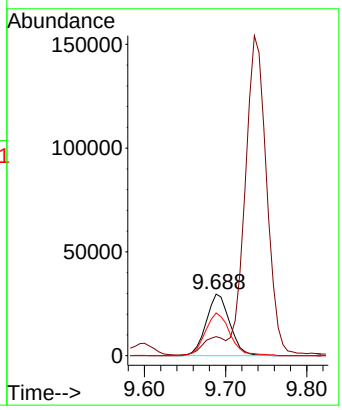




#49
1,4-Dioxane
Concen: 947.648 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 88 Resp: 5952

Ion	Ratio	Lower	Upper
88	100		
43	28.3	23.8	35.8
58	73.6	57.4	86.2



Instrument :
MSVOA_N
ClientSampleId :
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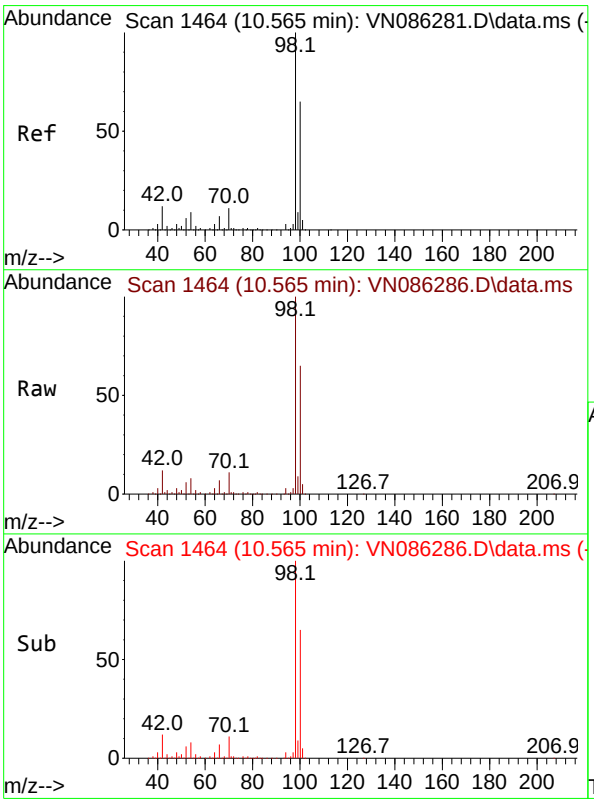
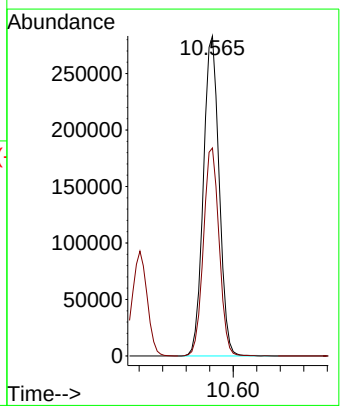
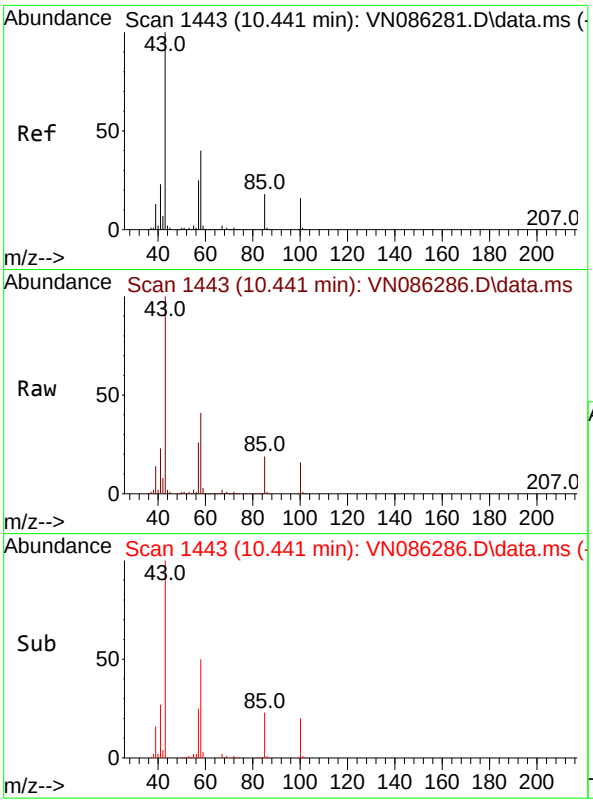


#50
Toluene-d8
Concen: 49.161 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 98 Resp: 525438

Ion	Ratio	Lower	Upper
98	100		
100	64.8	52.5	78.7





#51
4-Methyl-2-Pentanone
Concen: 240.057 ug/l
RT: 10.441 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 103372

Ion	Ratio	Lower	Upper
43	100		
58	40.8	32.2	48.4

Instrument :
MSVOA_N
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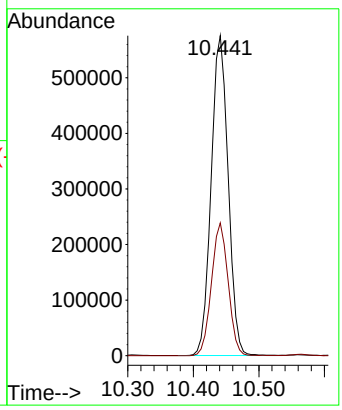
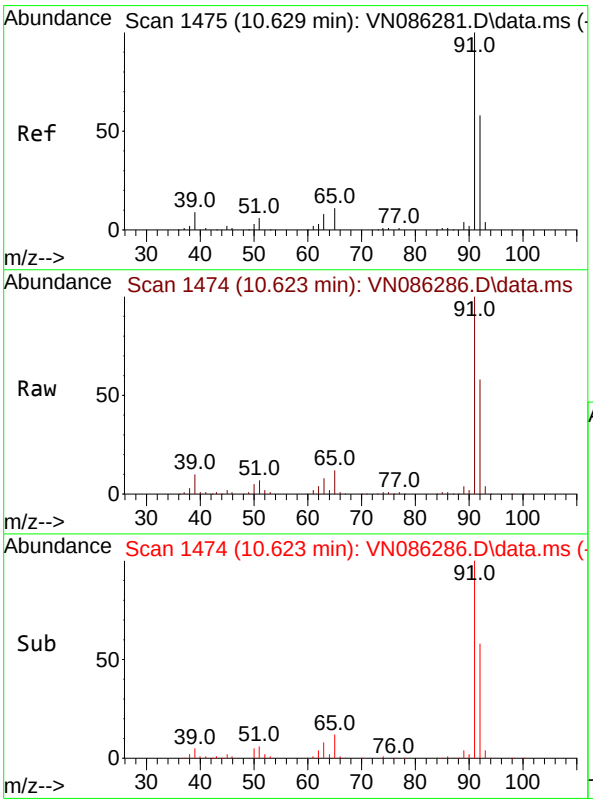
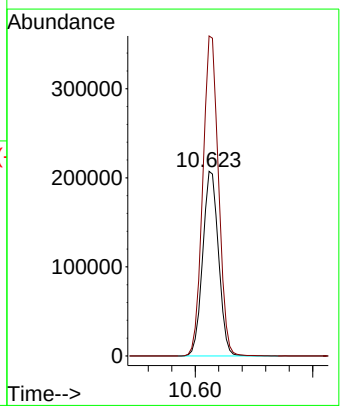


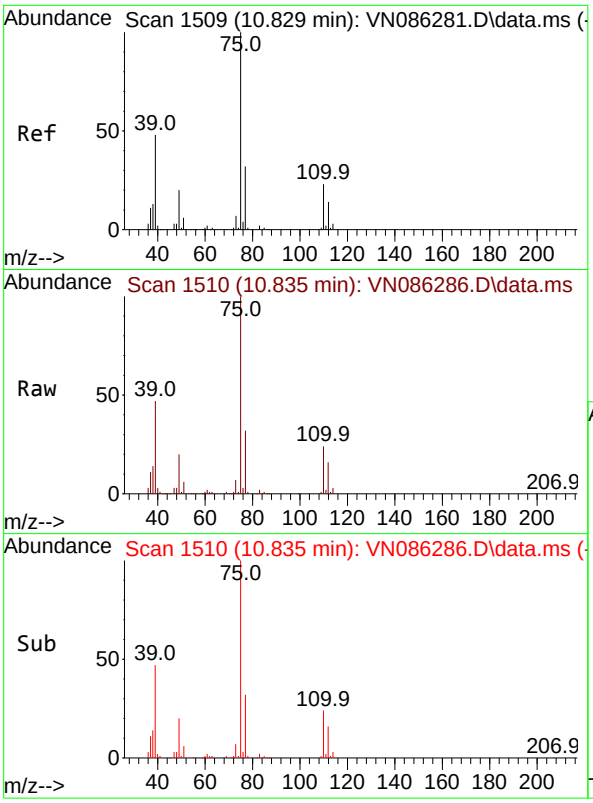


#52
Toluene
Concen: 48.280 ug/l
RT: 10.623 min Scan# 1474
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 92 Resp: 385532

Ion	Ratio	Lower	Upper
92	100		
91	172.4	137.3	205.9





#53
t-1,3-Dichloropropene
Concen: 49.563 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 75 Resp: 23850

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.4	38.0

Instrument :
MSVOA_N
ClientSampleId :
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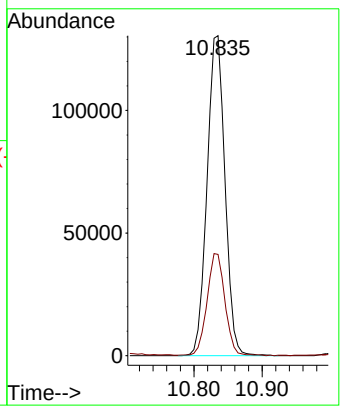
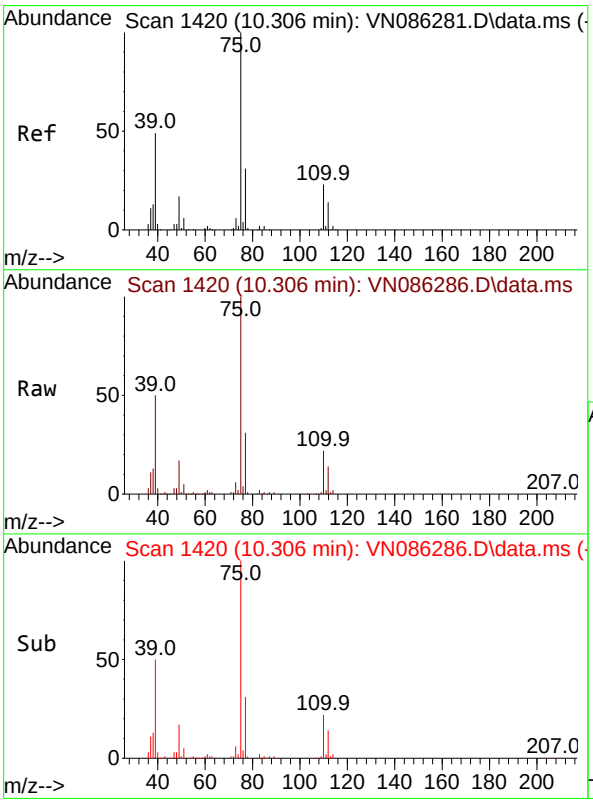
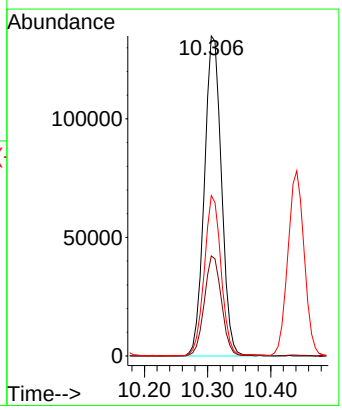


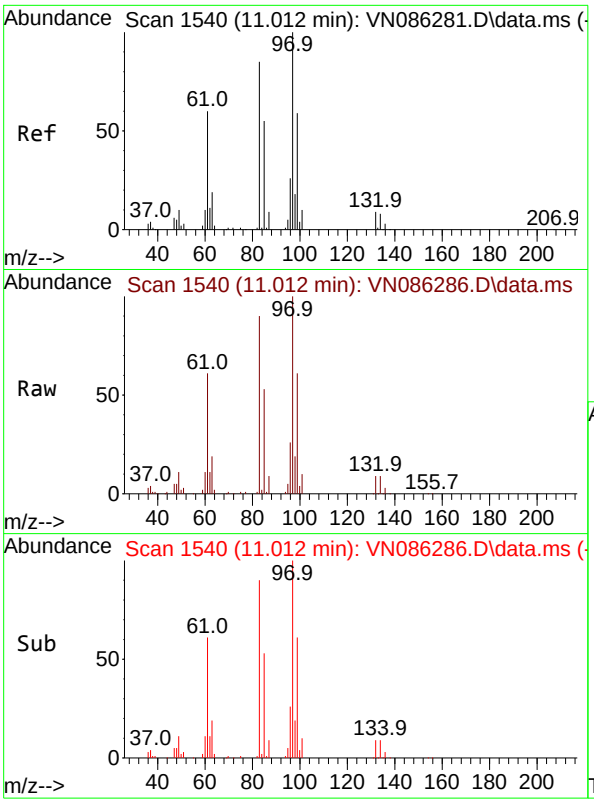


#54
cis-1,3-Dichloropropene
Concen: 48.119 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 75 Resp: 254333

Ion	Ratio	Lower	Upper
75	100		
77	31.3	25.2	37.8
39	49.9	39.3	58.9

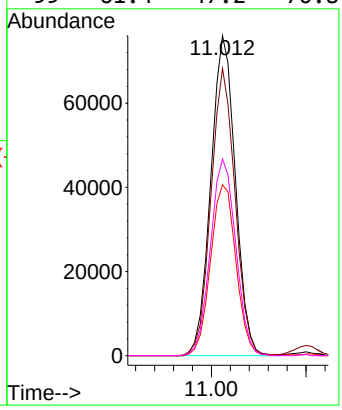




#55
1,1,2-Trichloroethane
Concen: 47.739 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 97 Resp: 13715

Ion	Ratio	Lower	Upper
97	100		
83	89.8	68.4	102.6
85	53.4	43.9	65.9
99	61.4	47.2	70.8



Instrument :
MSVOA_N
ClientSampleId :
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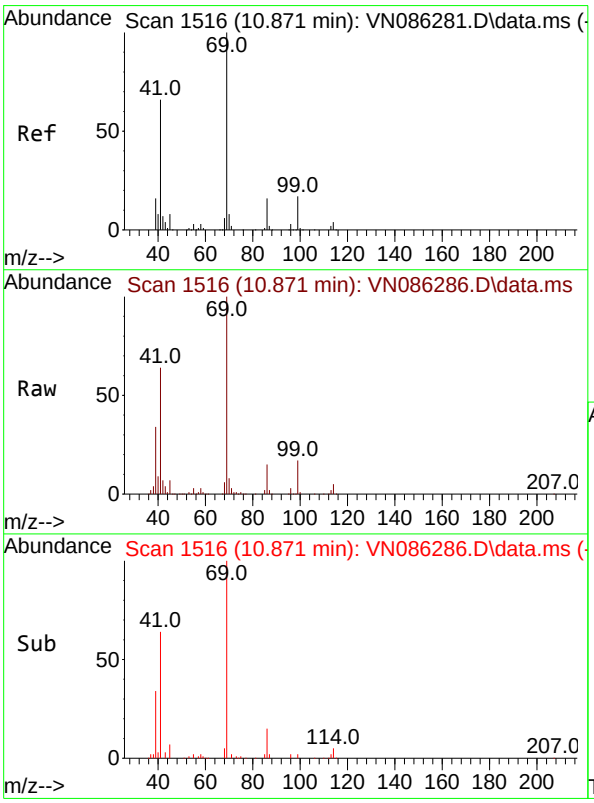
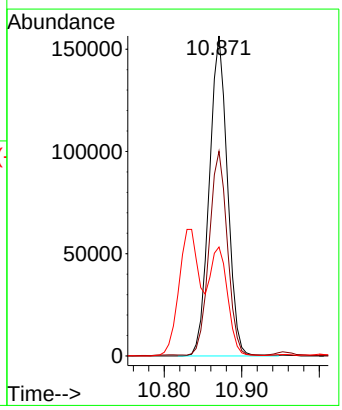
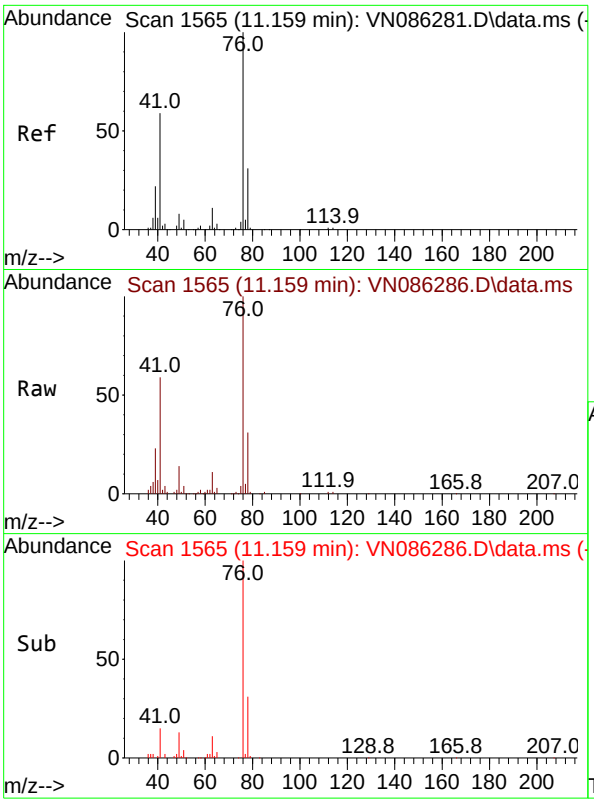


#56
Ethyl methacrylate
Concen: 48.193 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 69 Resp: 254512

Ion	Ratio	Lower	Upper
69	100		
41	63.8	51.7	77.5
39	32.6	26.3	39.5





#57
1,3-Dichloropropane
Concen: 48.323 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 76 Resp: 24632

Ion	Ratio	Lower	Upper
76	100		
78	32.0	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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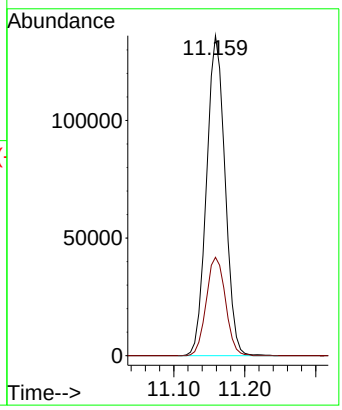
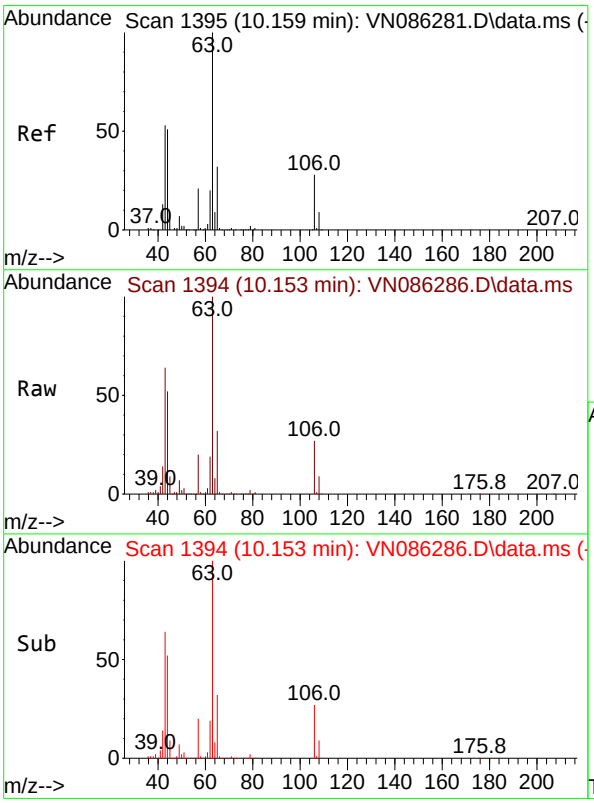
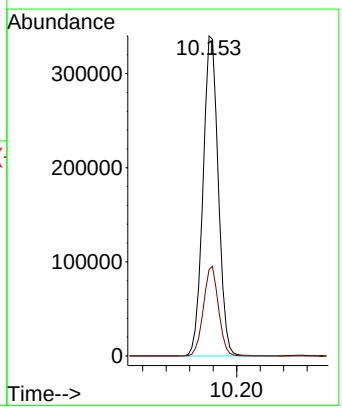


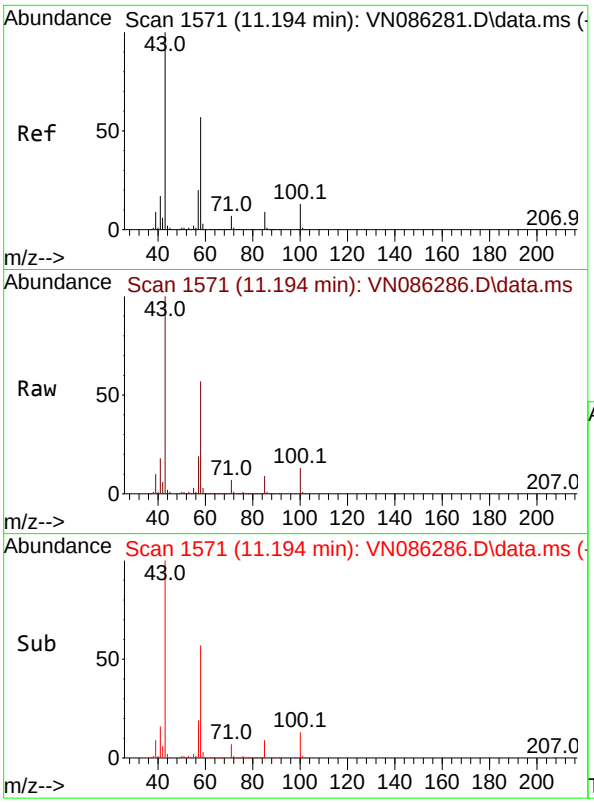


#58
2-Chloroethyl Vinyl ether
Concen: 245.023 ug/l
RT: 10.153 min Scan# 1394
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 63 Resp: 614176

Ion	Ratio	Lower	Upper
63	100		
106	27.6	22.2	33.2





#59
2-Hexanone
Concen: 241.579 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 77160

Ion	Ratio	Lower	Upper
43	100		
58	56.6	28.3	85.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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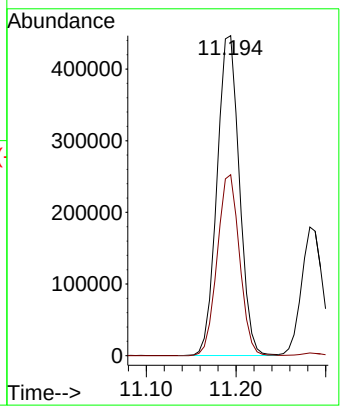
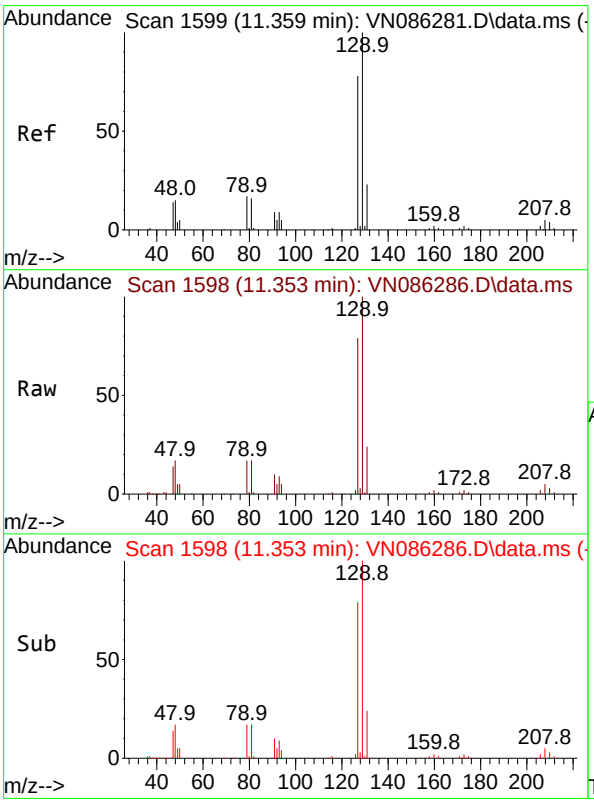
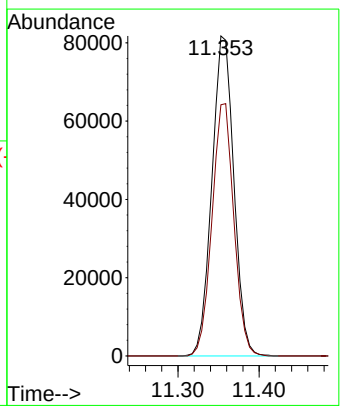


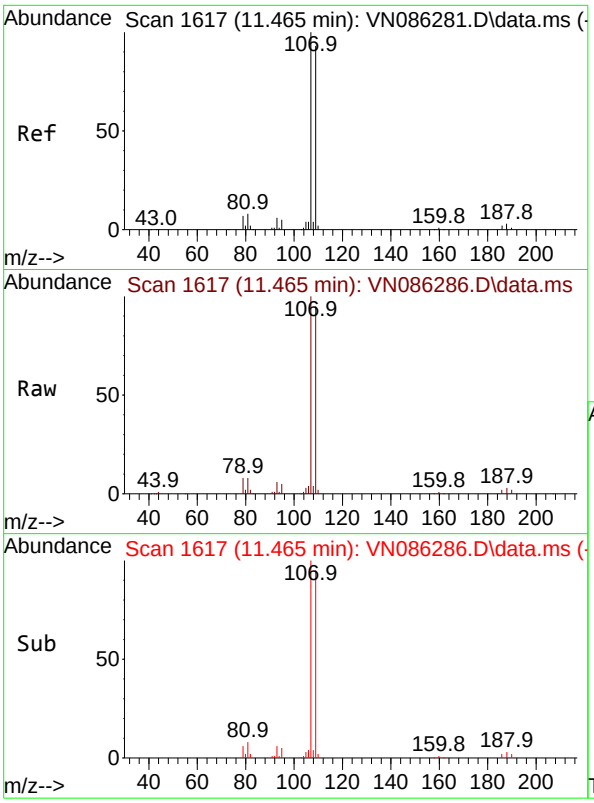


#60
Dibromochloromethane
Concen: 48.808 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:129 Resp: 153985

Ion	Ratio	Lower	Upper
129	100		
127	78.3	38.7	116.1





#61
1,2-Dibromoethane
Concen: 48.111 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:107 Resp: 13947

Ion	Ratio	Lower	Upper
107	100		
109	95.1	75.4	113.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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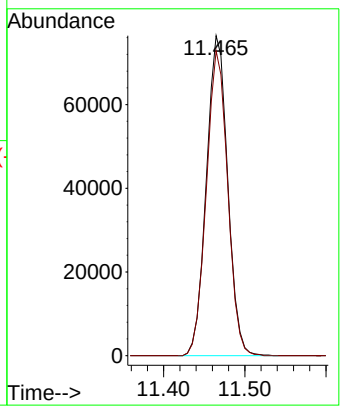
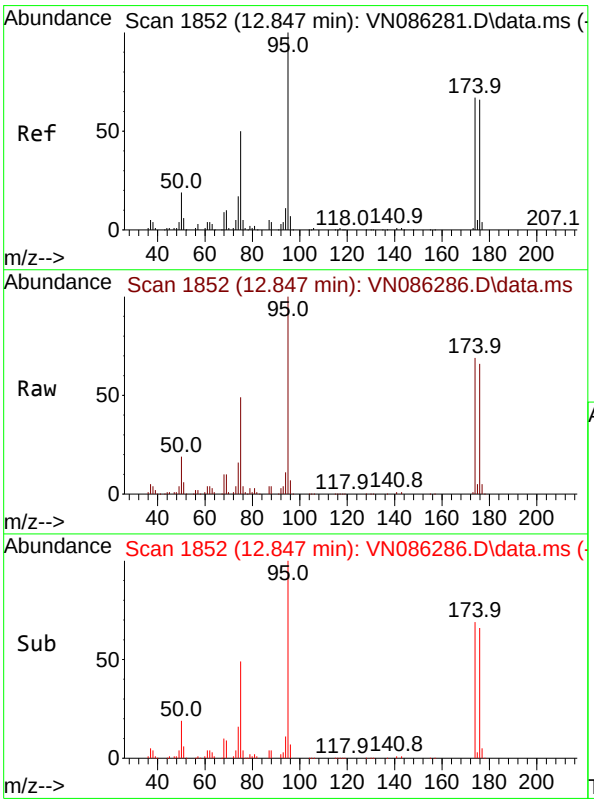
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

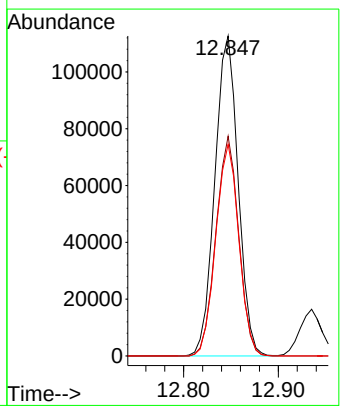


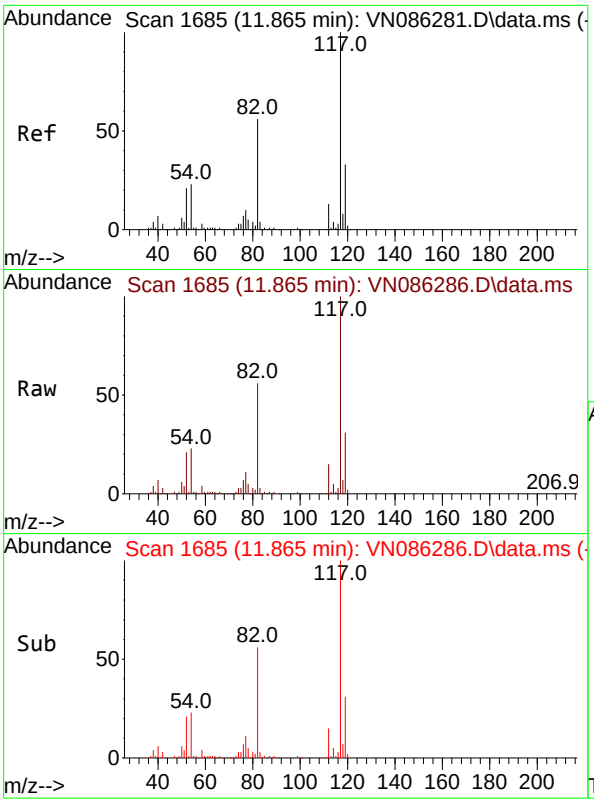


#62
4-Bromofluorobenzene
Concen: 49.374 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 95 Resp: 192478

Ion	Ratio	Lower	Upper
95	100		
174	67.1	0.0	133.4
176	65.4	0.0	129.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:117 Resp: 38356

Ion	Ratio	Lower	Upper
117	100		
82	55.7	44.7	67.1
119	31.0	26.4	39.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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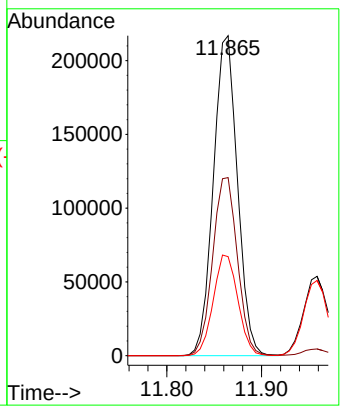
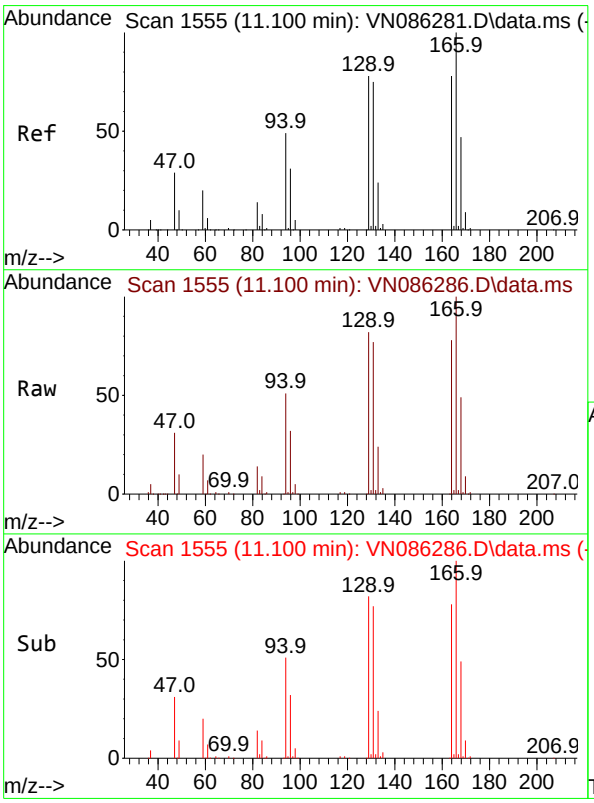
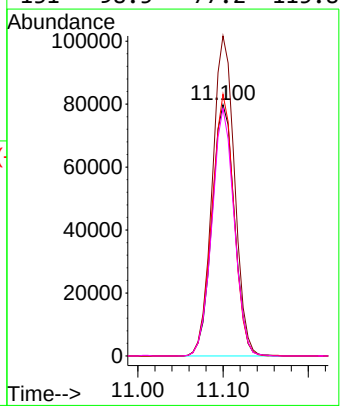


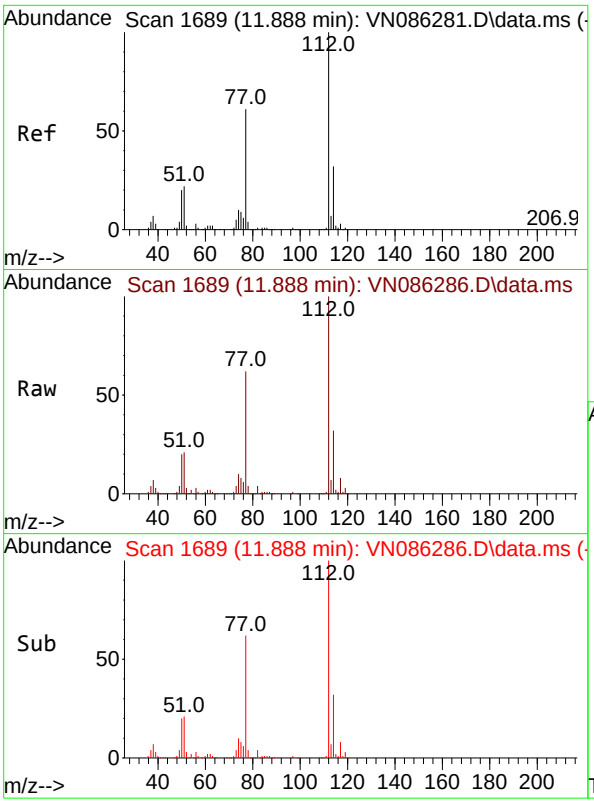


#64
Tetrachloroethene
Concen: 49.433 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:164 Resp: 145847

Ion	Ratio	Lower	Upper
164	100		
166	127.4	103.0	154.4
129	104.2	80.1	120.1
131	98.5	77.2	115.8





#65
Chlorobenzene
Concen: 47.653 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:112 Resp: 40789

Ion	Ratio	Lower	Upper
112	100		
114	31.8	25.4	38.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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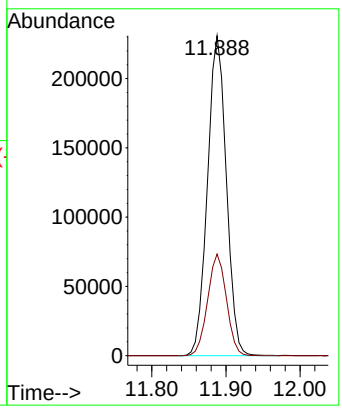
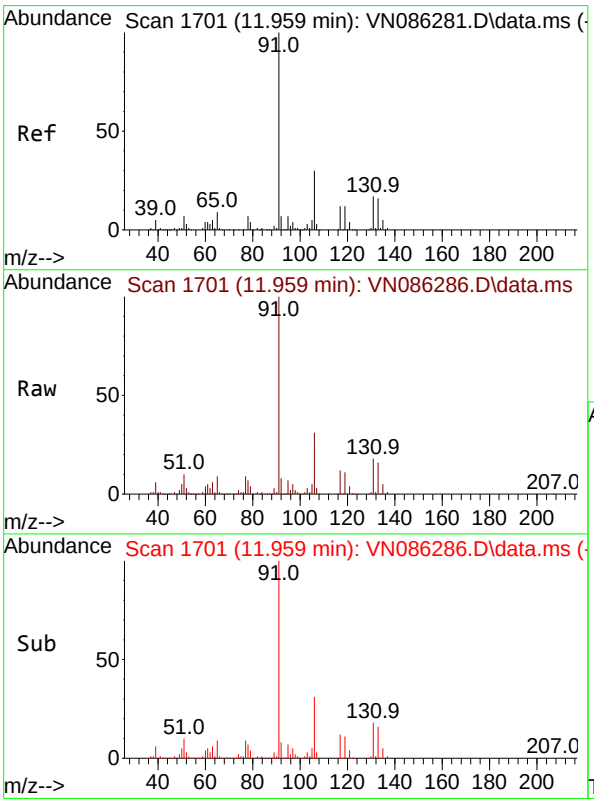
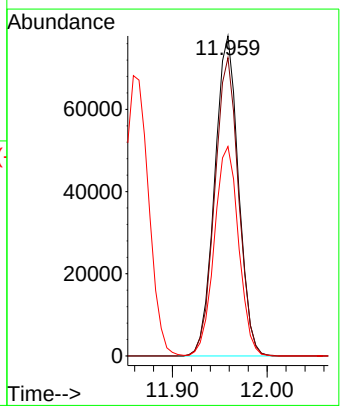


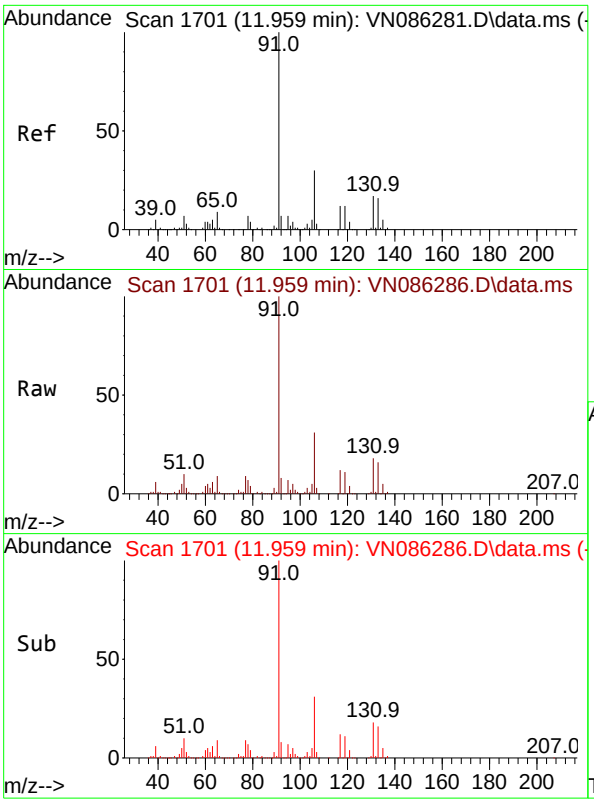


#66
1,1,1,2-Tetrachloroethane
Concen: 48.194 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:131 Resp: 136092

Ion	Ratio	Lower	Upper
131	100		
133	93.3	47.1	141.3
119	66.9	33.8	101.4

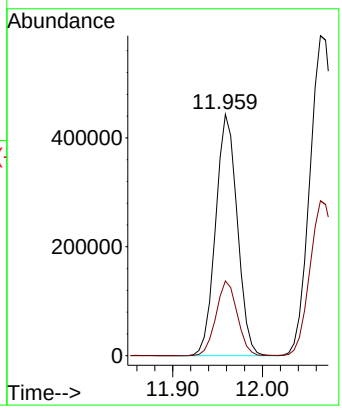




#67
Ethyl Benzene
Concen: 48.077 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 91 Resp: 74262

Ion	Ratio	Lower	Upper
91	100		
106	31.0	24.3	36.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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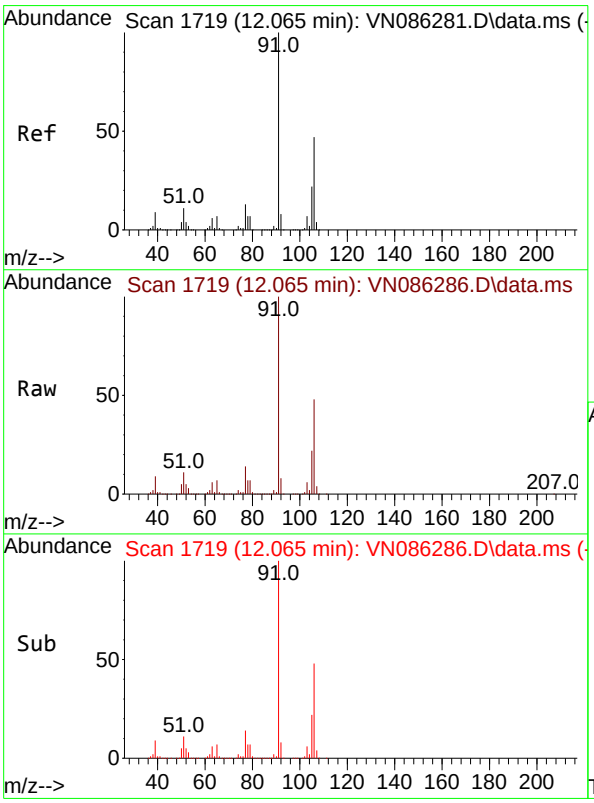
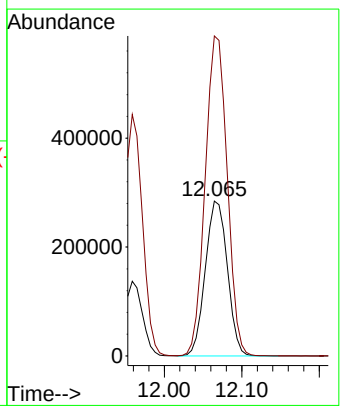
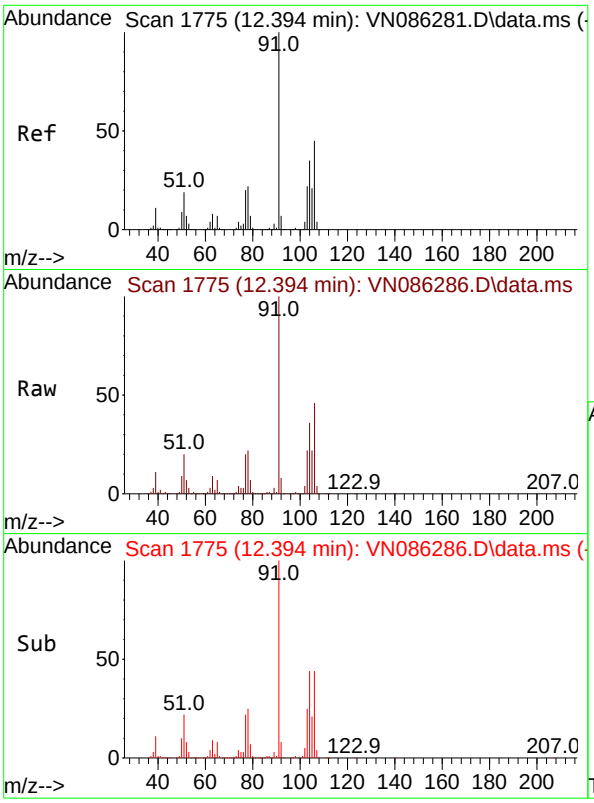


#68
m/p-Xylenes
Concen: 97.152 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:106 Resp: 562291

Ion	Ratio	Lower	Upper
106	100		
91	206.0	166.5	249.7





#69
o-Xylene
Concen: 47.691 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:106 Resp: 27296

Ion	Ratio	Lower	Upper
106	100		
91	217.6	109.7	329.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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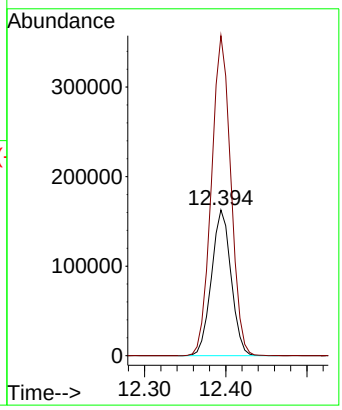
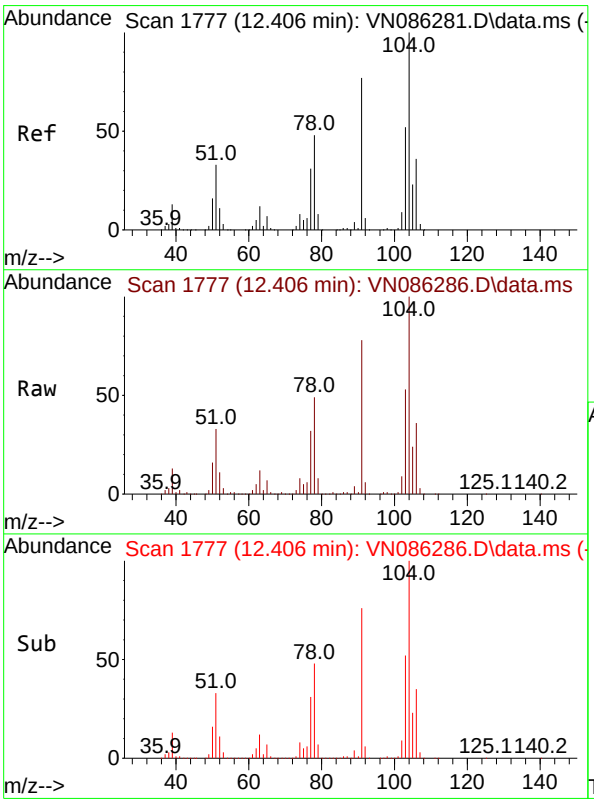
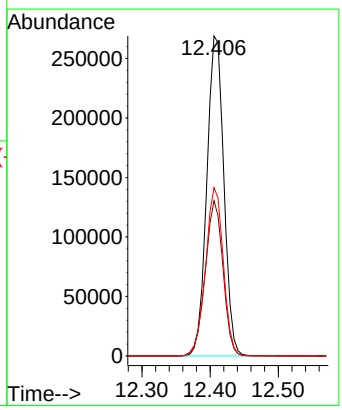


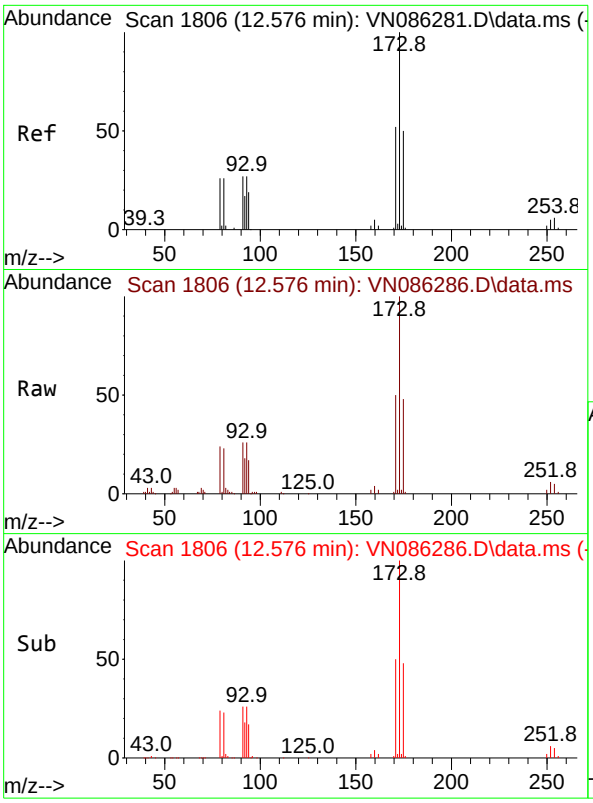


#70
Styrene
Concen: 49.048 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:104 Resp: 467765

Ion	Ratio	Lower	Upper
104	100		
78	50.7	40.6	61.0
103	54.6	43.6	65.4





#71
Bromoform
Concen: 48.243 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:173 Resp: 10256

Ion	Ratio	Lower	Upper
173	100		
175	48.4	24.6	73.6
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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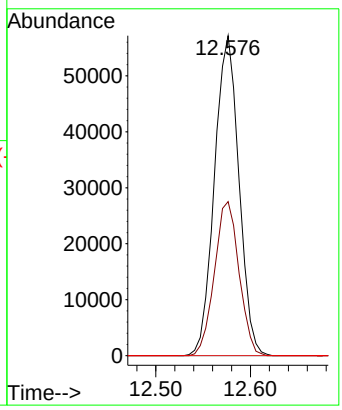
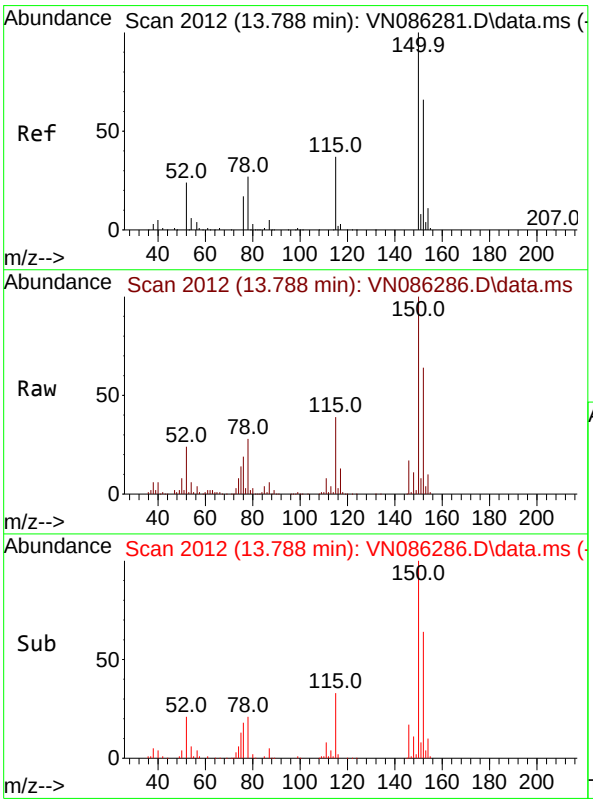
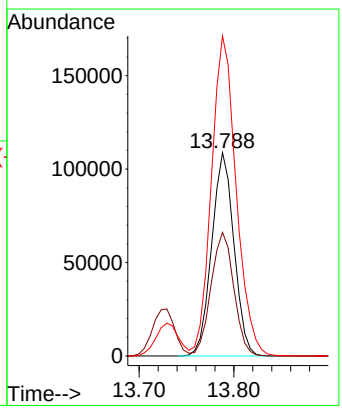


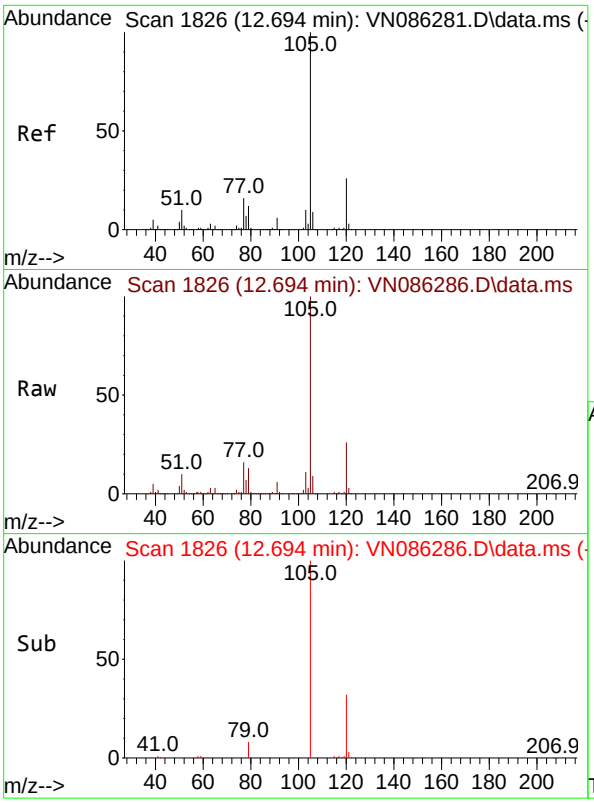


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:152 Resp: 177295

Ion	Ratio	Lower	Upper
152	100		
115	62.5	31.9	95.9
150	175.3	0.0	352.0

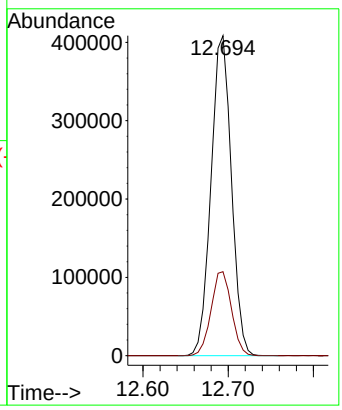




#73
Isopropylbenzene
Concen: 46.758 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:105 Resp: 67813

Ion	Ratio	Lower	Upper
105	100		
120	26.3	13.1	39.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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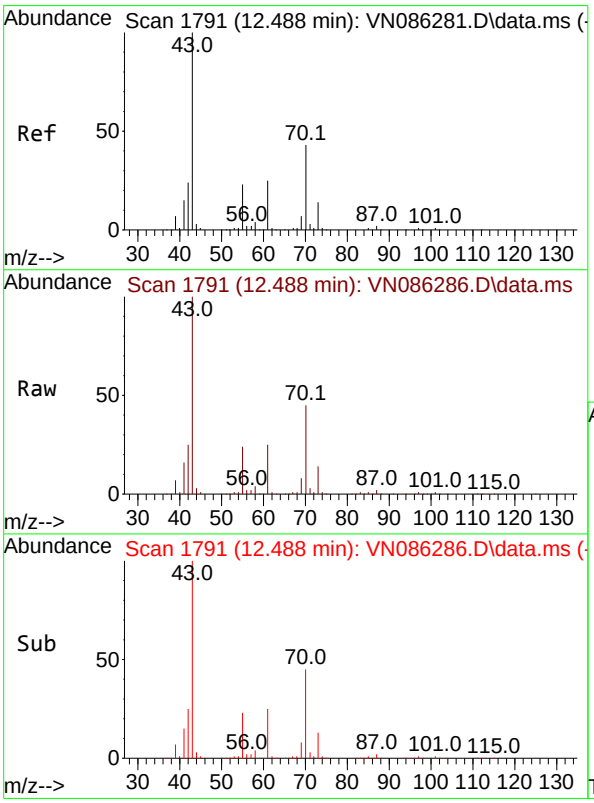
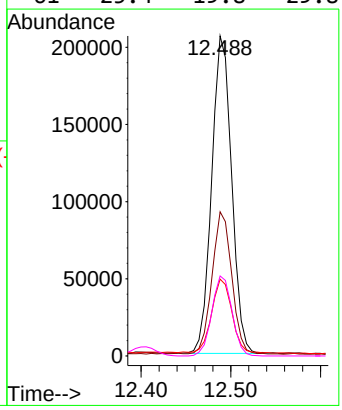
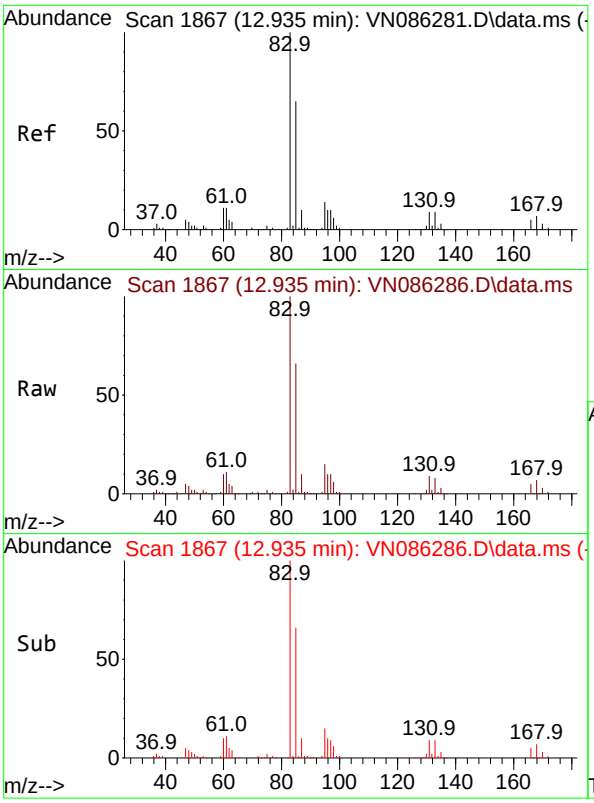


#74
N-amyl acetate
Concen: 44.026 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 43 Resp: 317872

Ion	Ratio	Lower	Upper
43	100		
70	44.5	35.0	52.4
55	24.5	19.0	28.4
61	25.4	19.8	29.8





#75
1,1,2,2-Tetrachloroethane
Concen: 43.857 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 83 Resp: 18288

Ion	Ratio	Lower	Upper
83	100		
131	9.1	4.7	14.1
85	64.2	32.7	98.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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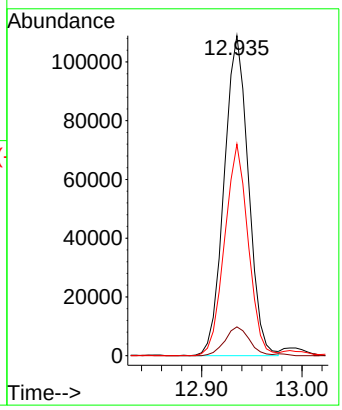
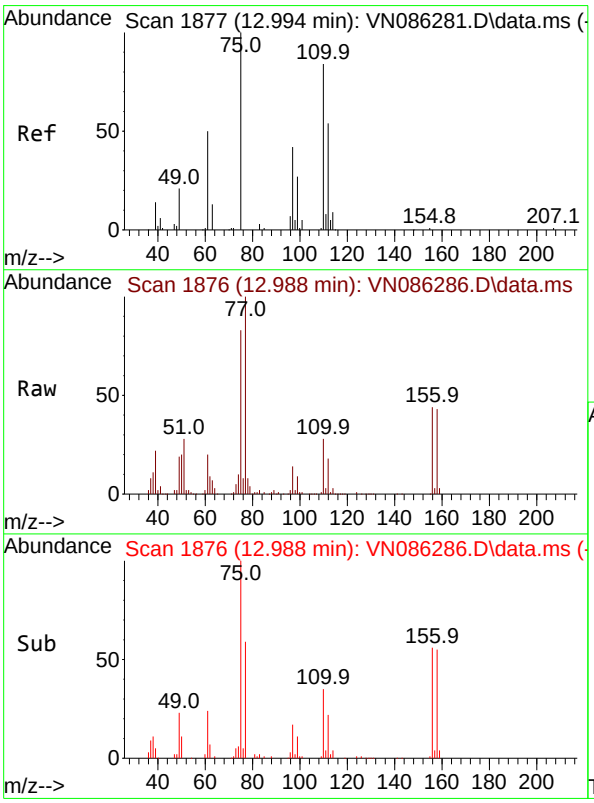
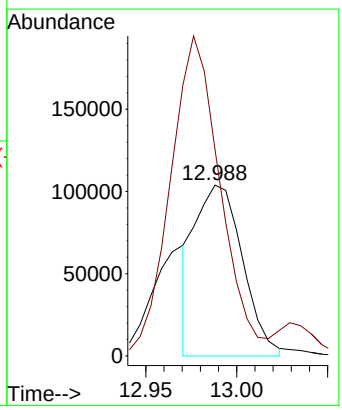


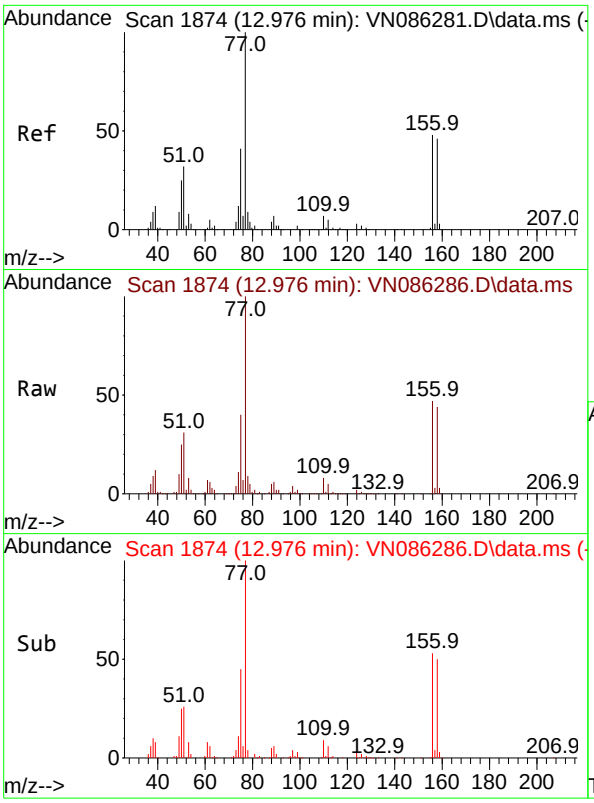


#76
1,2,3-Trichloropropane
Concen: 45.063 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 75 Resp: 188539

Ion	Ratio	Lower	Upper
75	100		
77	197.8	98.8	296.4





#77
Bromobenzene
Concen: 47.562 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:156 Resp: 15284

Ion	Ratio	Lower	Upper
156	100		
77	244.0	121.1	363.1
158	96.8	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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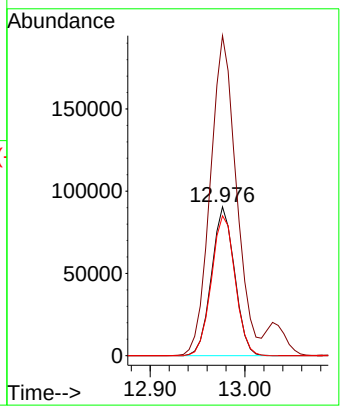
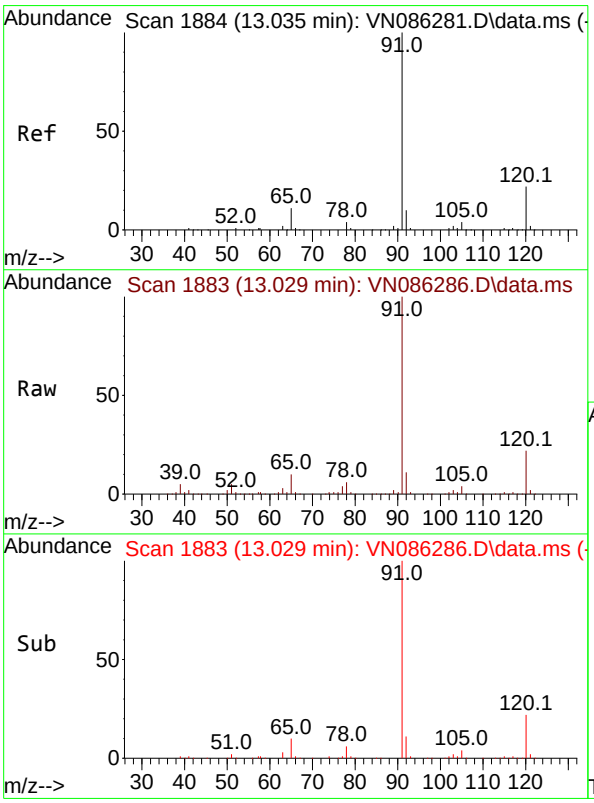
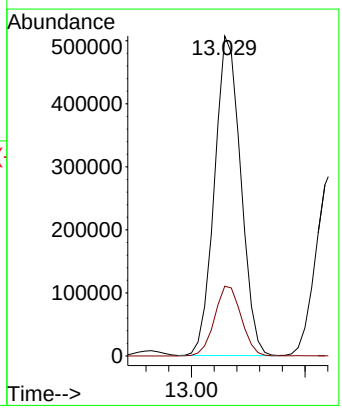


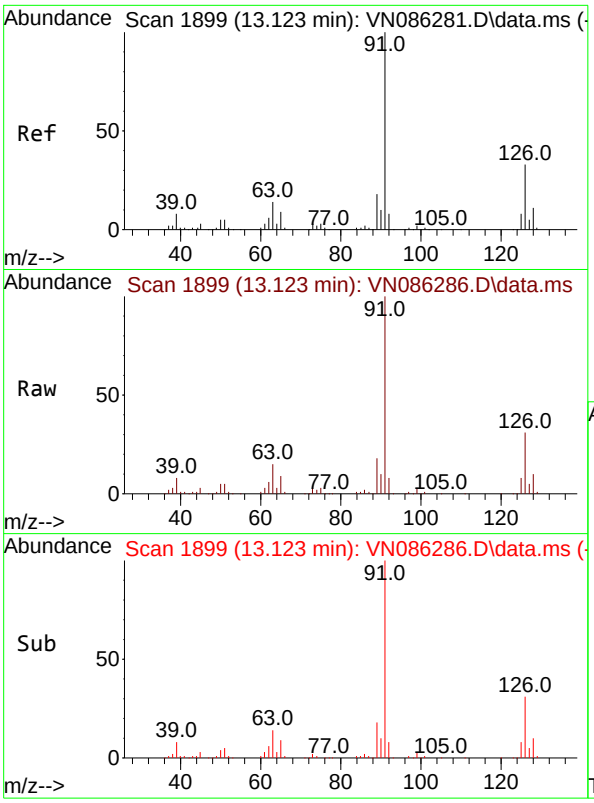


#78
n-propylbenzene
Concen: 47.620 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. -0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 91 Resp: 813823

Ion	Ratio	Lower	Upper
91	100		
120	22.2	11.1	33.3

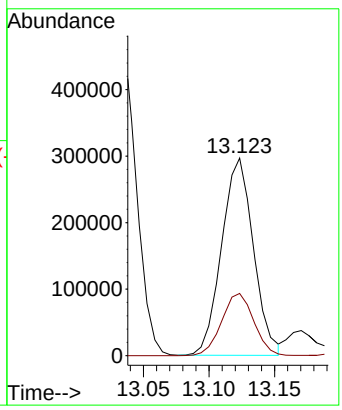




#79
2-Chlorotoluene
Concen: 46.847 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 91 Resp: 50097

Ion	Ratio	Lower	Upper
91	100		
126	32.0	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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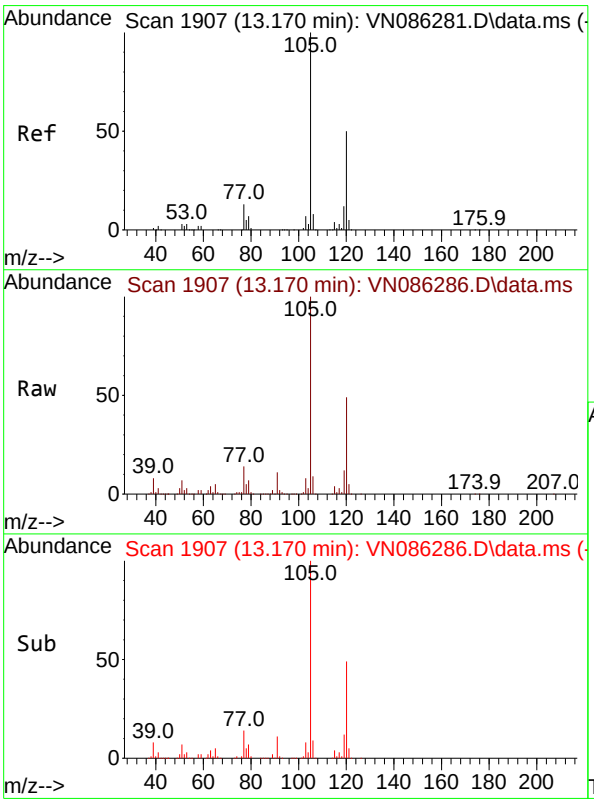
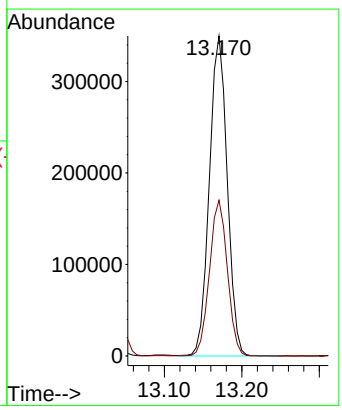
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

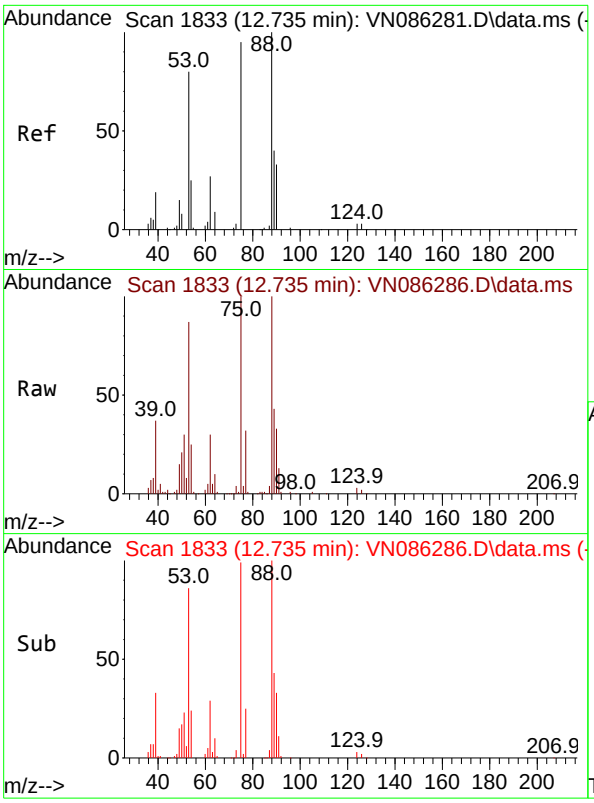


#80
1,3,5-Trimethylbenzene
Concen: 47.184 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:105 Resp: 560090

Ion	Ratio	Lower	Upper
105	100		
120	48.7	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 52.918 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 75 Resp: 9218

Ion	Ratio	Lower	Upper
75	100		
53	92.2	79.2	118.8
89	40.4	35.7	53.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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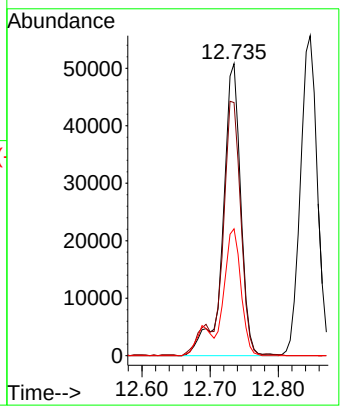
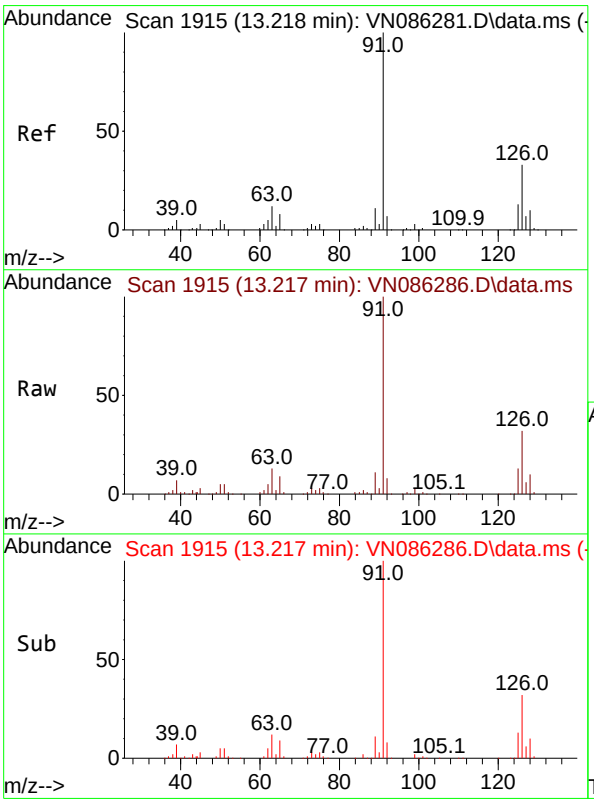
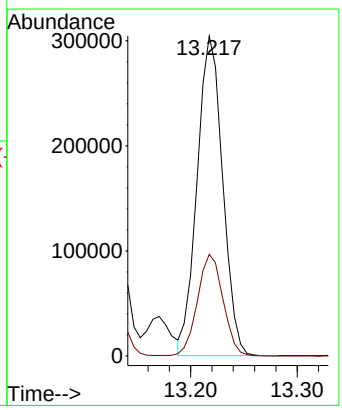


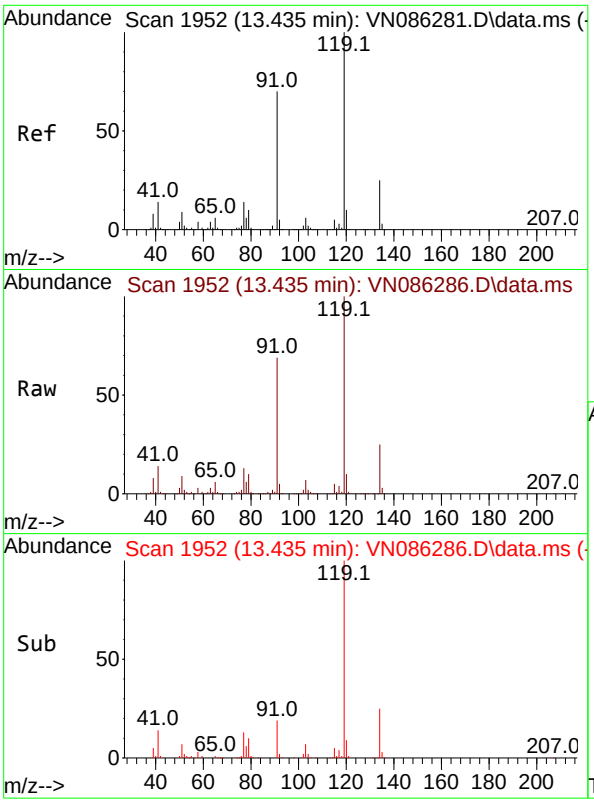


#82
4-Chlorotoluene
Concen: 47.693 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 91 Resp: 506641

Ion	Ratio	Lower	Upper
91	100		
126	31.9	16.2	48.6

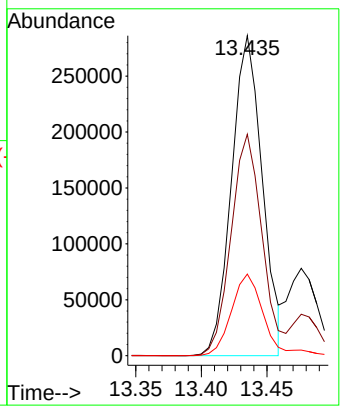




#83
tert-Butylbenzene
Concen: 45.479 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:119 Resp: 46777

Ion	Ratio	Lower	Upper
119	100		
91	70.2	34.4	103.3
134	26.7	13.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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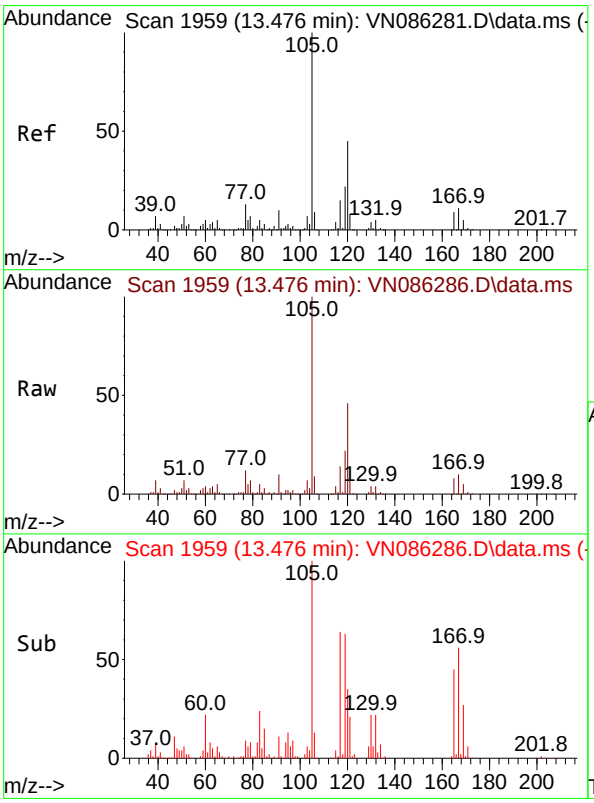
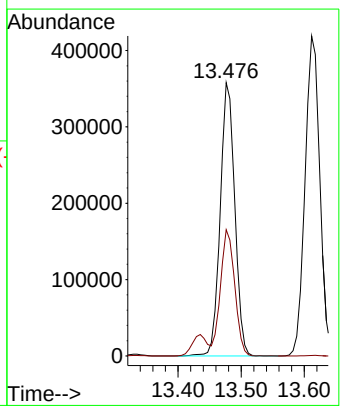
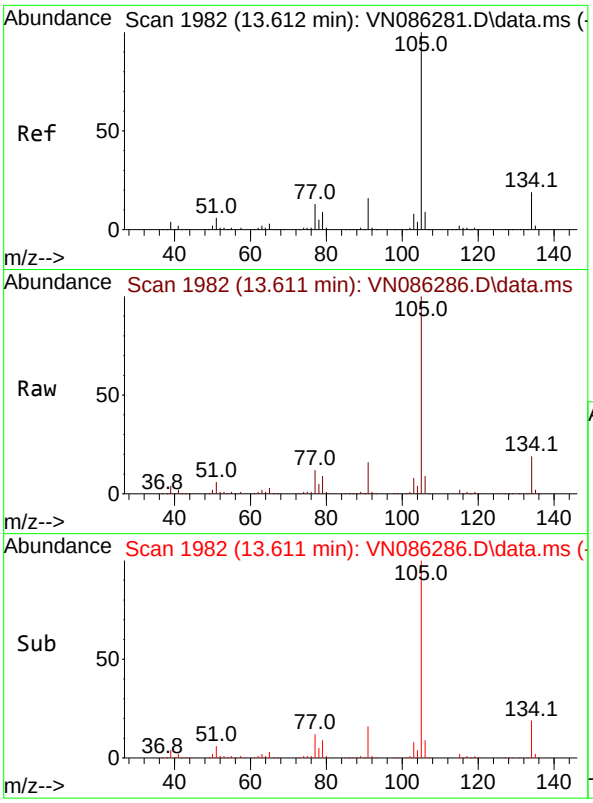


#84
1,2,4-Trimethylbenzene
Concen: 47.478 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:105 Resp: 573671

Ion	Ratio	Lower	Upper
105	100		
120	45.1	22.4	67.3





#85
sec-Butylbenzene
Concen: 47.611 ug/l
RT: 13.611 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:105 Resp: 67923

Ion	Ratio	Lower	Upper
105	100		
134	19.3	9.7	29.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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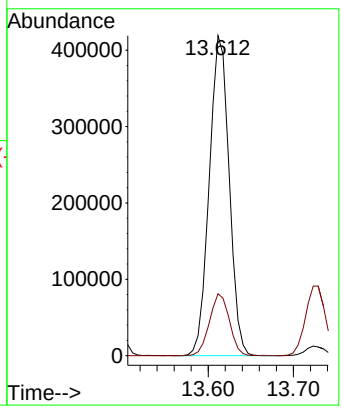
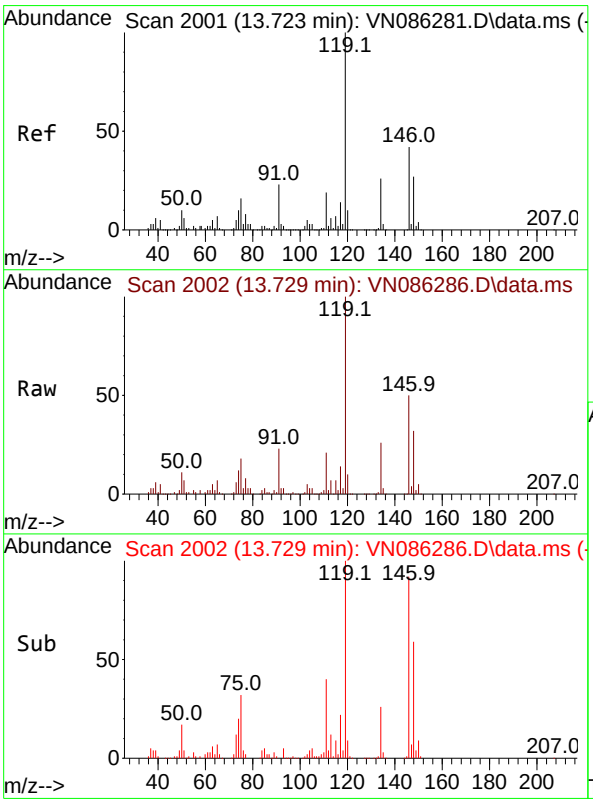
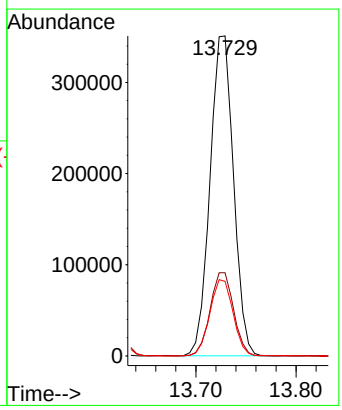


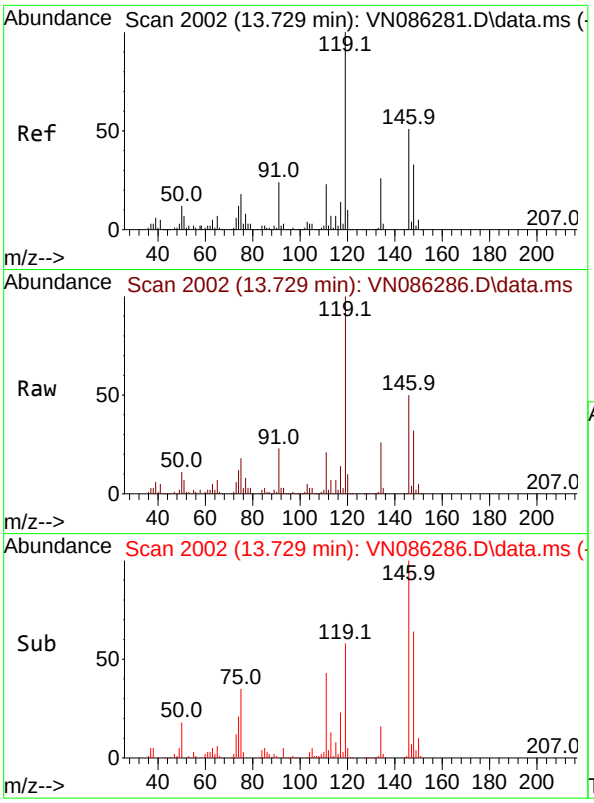


#86
p-Isopropyltoluene
Concen: 48.608 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:119 Resp: 571595

Ion	Ratio	Lower	Upper
119	100		
134	26.1	13.1	39.1
91	23.7	11.9	35.9

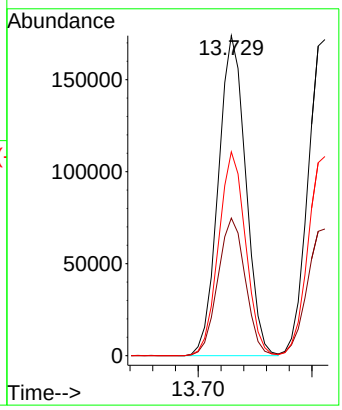




#87
1,3-Dichlorobenzene
Concen: 48.303 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:146 Resp: 29179

Ion	Ratio	Lower	Upper
146	100		
111	43.1	21.9	65.7
148	62.8	31.9	95.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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Reviewed By :John Carlone 04/17/2025
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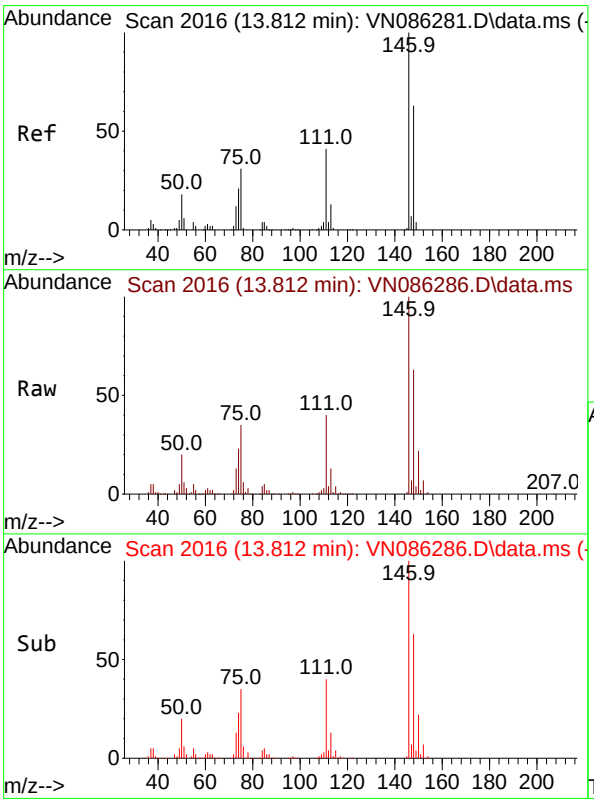
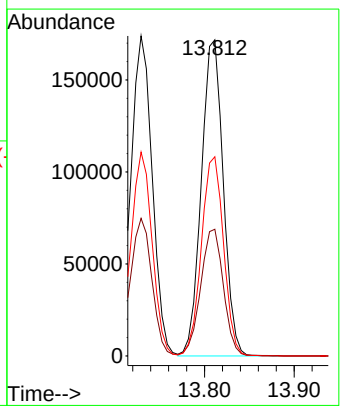
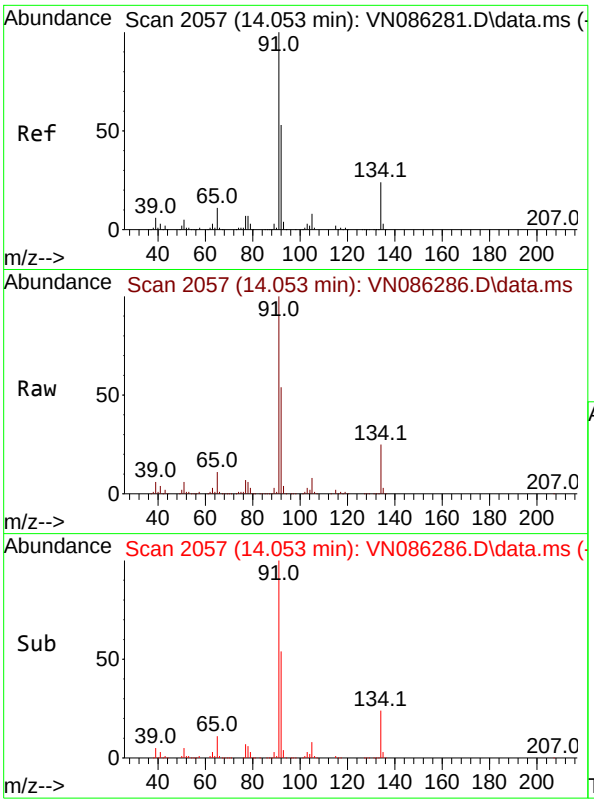


#88
1,4-Dichlorobenzene
Concen: 47.989 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:146 Resp: 291992

Ion	Ratio	Lower	Upper
146	100		
111	41.7	21.3	63.9
148	63.7	31.9	95.9

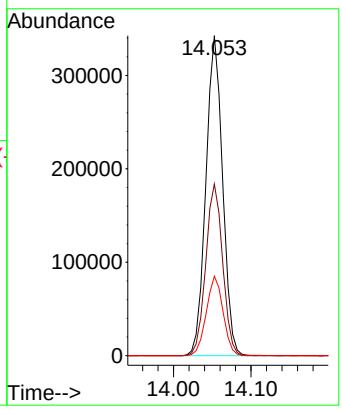




#89
n-Butylbenzene
Concen: 49.219 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 91 Resp: 51302

Ion	Ratio	Lower	Upper
91	100		
92	54.2	26.8	80.4
134	24.9	12.2	36.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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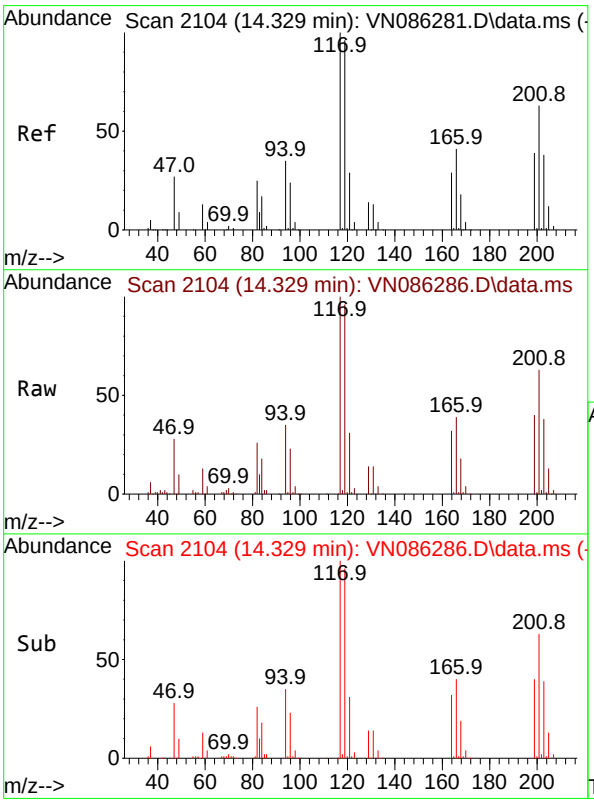
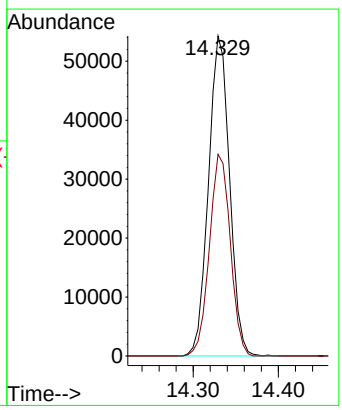
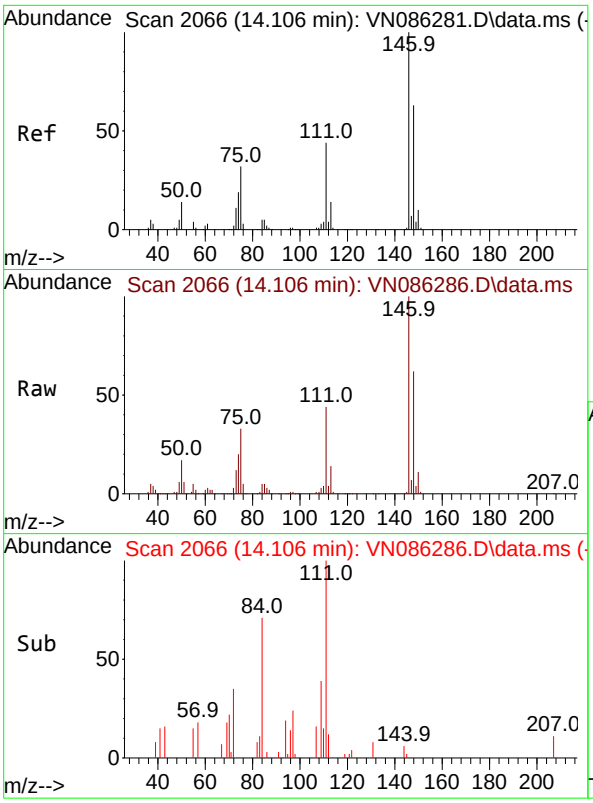


#90
Hexachloroethane
Concen: 47.120 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:117 Resp: 93202

Ion	Ratio	Lower	Upper
117	100		
201	62.5	31.4	94.2

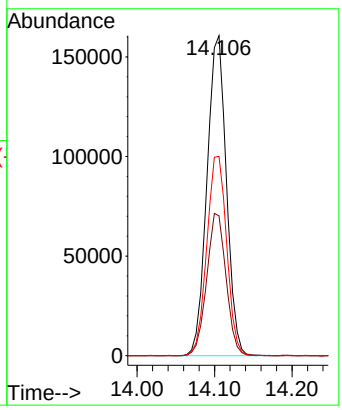




#91
1,2-Dichlorobenzene
Concen: 47.687 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:146 Resp: 27929

Ion	Ratio	Lower	Upper
146	100		
111	44.5	22.4	67.0
148	63.8	31.8	95.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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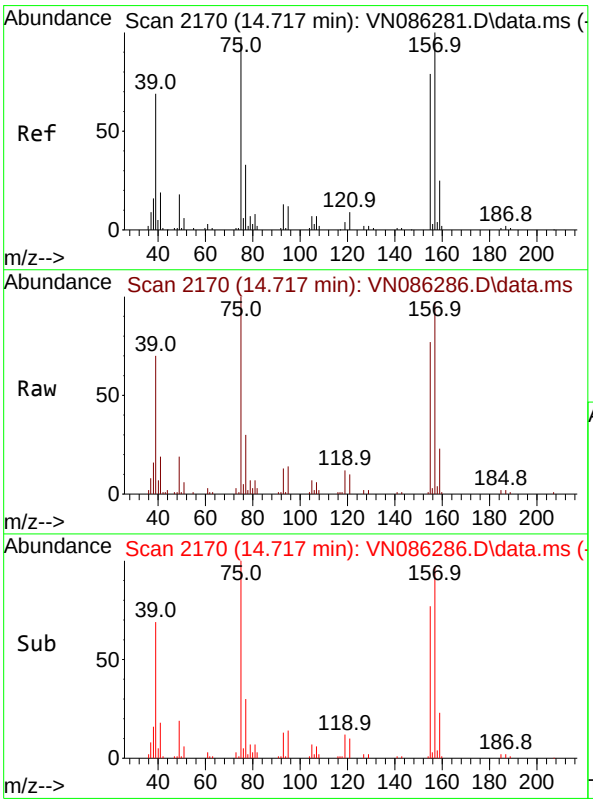
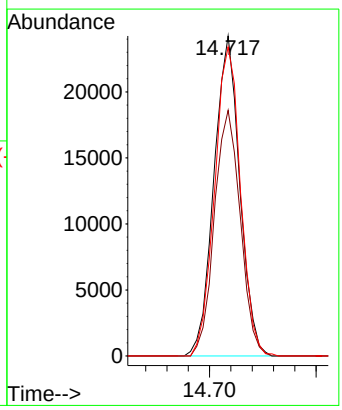
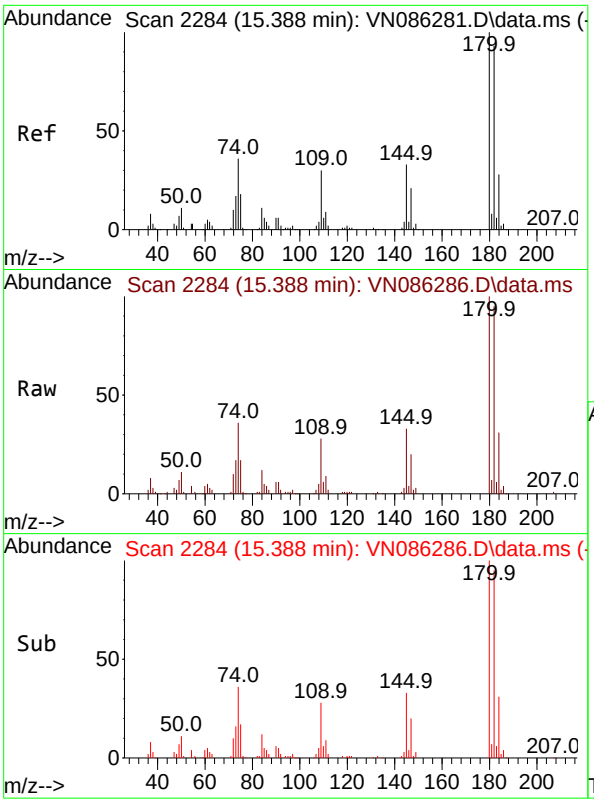


#92
1,2-Dibromo-3-Chloropropane
Concen: 48.367 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion: 75 Resp: 40668

Ion	Ratio	Lower	Upper
75	100		
155	77.2	40.3	120.9
157	97.0	49.0	147.2





#93
1,2,4-Trichlorobenzene
Concen: 49.814 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:180 Resp: 13970

Ion	Ratio	Lower	Upper
180	100		
182	95.3	47.0	141.0
145	32.3	16.4	49.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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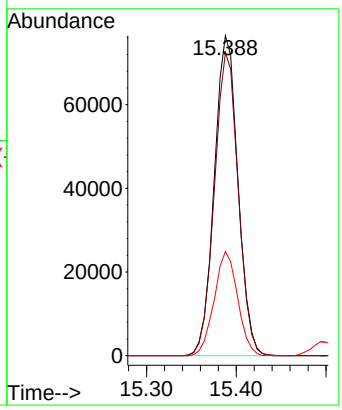
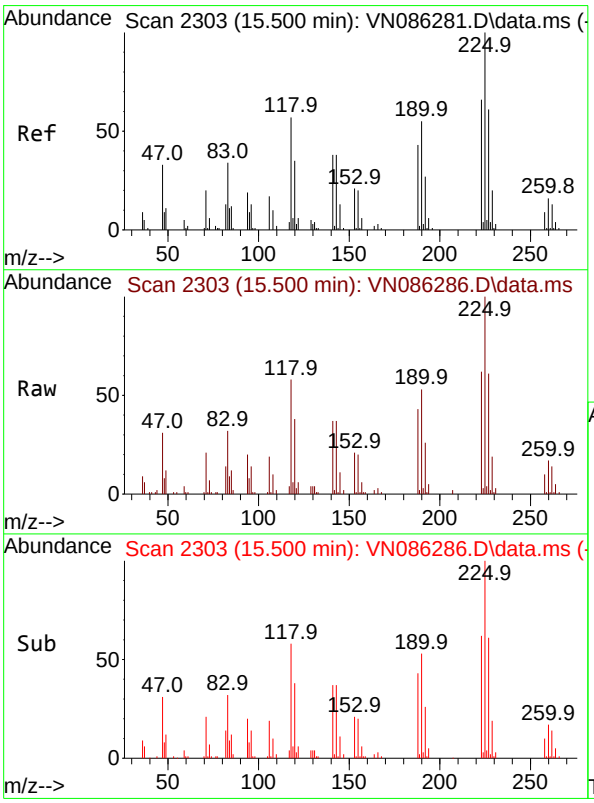
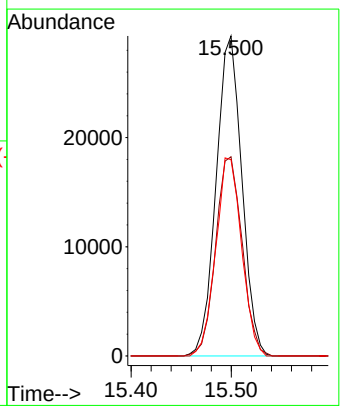


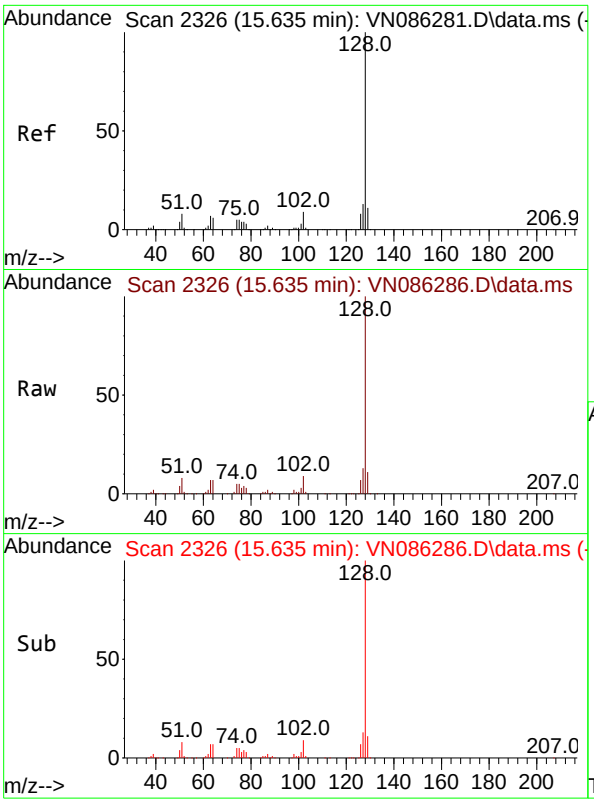


#94
Hexachlorobutadiene
Concen: 49.301 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:225 Resp: 52193

Ion	Ratio	Lower	Upper
225	100		
223	64.2	32.8	98.3
227	62.3	31.4	94.0

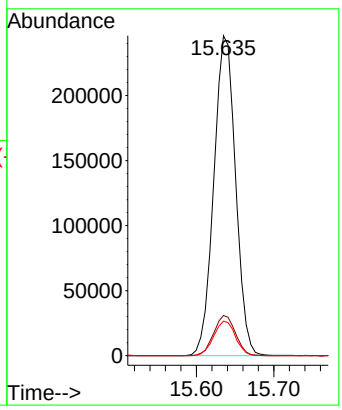




#95
Naphthalene
Concen: 48.334 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:128 Resp: 48051

Ion	Ratio	Lower	Upper
128	100		
127	12.6	10.2	15.4
129	10.8	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
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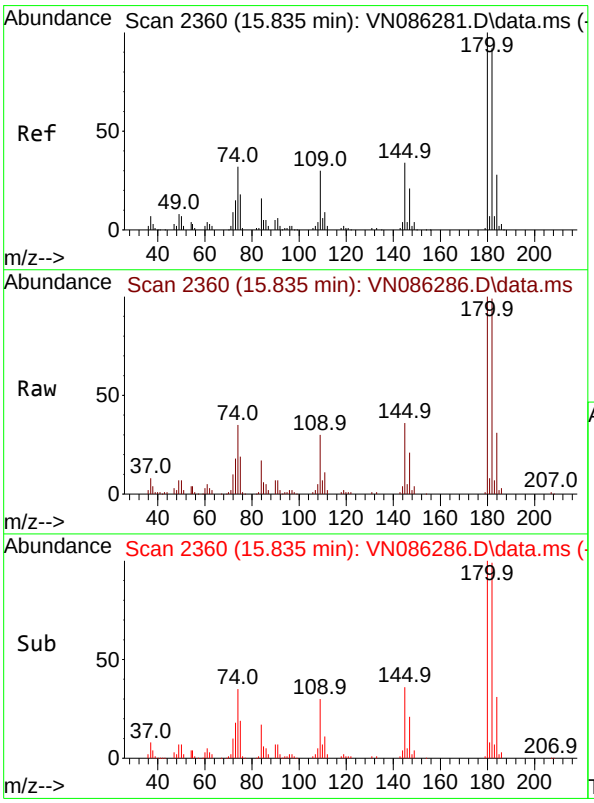
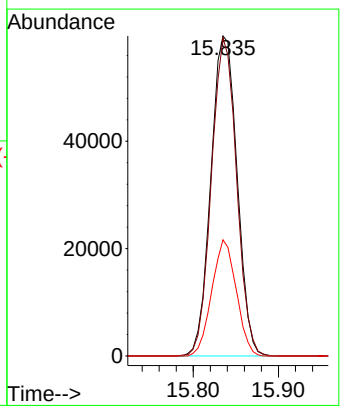


#96
1,2,3-Trichlorobenzene
Concen: 48.020 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN086286.D
Acq: 16 Apr 2025 09:14

Tgt Ion:180 Resp: 127501

Ion	Ratio	Lower	Upper
180	100		
182	95.4	47.3	142.0
145	33.9	17.2	51.5



Sample Results: **VN086286.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	105	0.00
2	T	Dichlorodifluoromethane	0.593	0.593	0.0	106	0.00
3	P	Chloromethane	0.861	0.798	7.3	112	0.00
4	C	Vinyl Chloride	0.822	0.791	3.8#	106	0.00
5	T	Bromomethane	0.370	0.377	-1.9	112	0.00
6	T	Chloroethane	0.550	0.507	7.8	107	0.00
7	T	Trichlorofluoromethane	0.911	0.878	3.6	107	0.00
8	T	Diethyl Ether	0.398	0.376	5.5	106	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.551	0.537	2.5	108	0.00
10	T	Methyl Iodide	0.606	0.647	-6.8	114	0.00
11	T	Tert butyl alcohol	0.132	0.127	3.8	108	0.00
12	CM	1,1-Dichloroethene	0.588	0.555	5.6#	106	0.00
13	T	Acrolein	0.075	0.065	13.3	112	0.00
14	T	Allyl chloride	1.046	0.956	8.6	109	0.00
15	T	Acrylonitrile	0.327	0.315	3.7	105	0.00
16	T	Acetone	0.290	0.254	12.4	107	0.00
17	T	Carbon Disulfide	1.762	1.548	12.1	105	0.00
18	T	Methyl Acetate	0.870	0.791	9.1	107	0.00
19	T	Methyl tert-butyl Ether	2.163	2.003	7.4	105	0.00
20	T	Methylene Chloride	0.670	0.625	6.7	107	0.00
21	T	trans-1,2-Dichloroethene	0.615	0.577	6.2	106	0.00
22	T	Diisopropyl ether	2.276	2.114	7.1	106	0.00
23	T	Vinyl Acetate	1.591	1.482	6.9	105	0.00
24	P	1,1-Dichloroethane	1.201	1.141	5.0	106	0.00
25	T	2-Butanone	0.451	0.427	5.3	106	0.00
26	T	2,2-Dichloropropane	1.075	1.033	3.9	111	0.00
27	T	cis-1,2-Dichloroethene	0.764	0.706	7.6	104	0.00
28	T	Bromochloromethane	0.509	0.487	4.3	104	0.00
29	T	Tetrahydrofuran	0.302	0.280	7.3	105	0.00
30	C	Chloroform	1.180	1.101	6.7#	105	0.00
31	T	Cyclohexane	1.175	1.068	9.1	106	0.00
32	T	1,1,1-Trichloroethane	1.009	0.948	6.0	105	0.00
33	S	1,2-Dichloroethane-d4	0.725	0.697	3.9	102	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	104	0.00
35	S	Dibromofluoromethane	0.232	0.214	7.8	104	0.00
36	T	1,1-Dichloropropene	0.463	0.449	3.0	105	0.00
37	T	Ethyl Acetate	0.488	0.450	7.8	105	0.00
38	T	Carbon Tetrachloride	0.441	0.430	2.5	106	0.00
39	T	Methylcyclohexane	0.551	0.536	2.7	106	0.00
40	TM	Benzene	1.485	1.423	4.2	105	0.00
41	T	Methacrylonitrile	0.283	0.265	6.4	104	0.00
42	TM	1,2-Dichloroethane	0.474	0.454	4.2	106	0.00
43	T	Isopropyl Acetate	1.177	0.840	28.6#	101	0.00
44	TM	Trichloroethene	0.352	0.351	0.3	108	0.00
45	C	1,2-Dichloropropane	0.364	0.350	3.8#	104	0.00
46	T	Dibromomethane	0.232	0.227	2.2	104	0.00
47	T	Bromodichloromethane	0.500	0.486	2.8	106	0.00
48	T	Methyl methacrylate	0.429	0.395	7.9	104	0.00

Sample Results: **VN086286.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	111	0.00
50	S	Toluene-d8	1.240	1.219	1.7	101	0.00
51	T	4-Methyl-2-Pentanone	0.500	0.480	4.0	103	0.00
52	CM	Toluene	0.927	0.895	3.5#	104	0.00
53	T	t-1,3-Dichloropropene	0.558	0.554	0.7	105	0.00
54	T	cis-1,3-Dichloropropene	0.613	0.590	3.8	107	0.00
55	T	1,1,2-Trichloroethane	0.333	0.318	4.5	104	0.00
56	T	Ethyl methacrylate	0.613	0.591	3.6	106	0.00
57	T	1,3-Dichloropropane	0.592	0.572	3.4	105	0.00
58	T	2-Chloroethyl Vinyl ether	0.291	0.285	2.1	103	0.00
59	T	2-Hexanone	0.371	0.358	3.5	105	0.00
60	T	Dibromochloromethane	0.366	0.357	2.5	105	0.00
61	T	1,2-Dibromoethane	0.336	0.324	3.6	104	0.00
62	S	4-Bromofluorobenzene	0.452	0.447	1.1	101	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
64	T	Tetrachloroethene	0.385	0.380	1.3	107	0.00
65	PM	Chlorobenzene	1.116	1.063	4.7	106	0.00
66	T	1,1,1,2-Tetrachloroethane	0.368	0.355	3.5	107	0.00
67	C	Ethyl Benzene	2.014	1.936	3.9#	105	0.00
68	T	m/p-Xylenes	0.754	0.733	2.8	105	0.00
69	T	o-Xylene	0.746	0.712	4.6	104	0.00
70	T	Styrene	1.243	1.220	1.9	105	0.00
71	P	Bromoform	0.277	0.267	3.6	107	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
73	T	Isopropylbenzene	4.090	3.825	6.5	105	0.00
74	T	N-amyl acetate	2.036	1.793	11.9	103	0.00
75	P	1,1,2,2-Tetrachloroethane	1.176	1.032	12.2	102	0.00
76	T	1,2,3-Trichloropropane	1.180	1.063	9.9	104	0.00
77	T	Bromobenzene	0.906	0.862	4.9	103	0.00
78	T	n-propylbenzene	4.820	4.590	4.8	104	0.00
79	T	2-Chlorotoluene	3.016	2.826	6.3	105	0.00
80	T	1,3,5-Trimethylbenzene	3.348	3.159	5.6	105	0.00
81	T	trans-1,4-Dichloro-2-butene	0.491	0.520	-5.9	115	0.00
82	T	4-Chlorotoluene	2.996	2.858	4.6	104	0.00
83	T	tert-Butylbenzene	2.901	2.638	9.1	103	0.00
84	T	1,2,4-Trimethylbenzene	3.408	3.236	5.0	104	0.00
85	T	sec-Butylbenzene	4.023	3.831	4.8	104	0.00
86	T	p-Isopropyltoluene	3.316	3.224	2.8	104	0.00
87	T	1,3-Dichlorobenzene	1.704	1.646	3.4	104	0.00
88	T	1,4-Dichlorobenzene	1.716	1.647	4.0	104	0.00
89	T	n-Butylbenzene	2.939	2.894	1.5	104	0.00
90	T	Hexachloroethane	0.558	0.526	5.7	104	0.00
91	T	1,2-Dichlorobenzene	1.652	1.575	4.7	103	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.237	0.229	3.4	105	0.00
93	T	1,2,4-Trichlorobenzene	0.791	0.788	0.4	105	0.00
94	T	Hexachlorobutadiene	0.299	0.294	1.7	107	0.00
95	T	Naphthalene	2.804	2.710	3.4	103	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	0.749	0.719	4.0	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN086286.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	105	0.00
2	T	Dichlorodifluoromethane	50.000	50.015	-0.0	106	0.00
3	P	Chloromethane	50.000	46.291	7.4	112	0.00
4	C	Vinyl Chloride	50.000	48.142	3.7#	106	0.00
5	T	Bromomethane	50.000	51.019	-2.0	112	0.00
6	T	Chloroethane	50.000	46.095	7.8	107	0.00
7	T	Trichlorofluoromethane	50.000	48.201	3.6	107	0.00
8	T	Diethyl Ether	50.000	47.257	5.5	106	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	48.715	2.6	108	0.00
10	T	Methyl Iodide	50.000	53.436	-6.9	114	0.00
11	T	Tert butyl alcohol	250.000	240.673	3.7	108	0.00
12	CM	1,1-Dichloroethene	50.000	47.154	5.7#	106	0.00
13	T	Acrolein	250.000	262.459	-5.0	112	0.00
14	T	Allyl chloride	50.000	45.690	8.6	109	0.00
15	T	Acrylonitrile	250.000	240.904	3.6	105	0.00
16	T	Acetone	250.000	253.403	-1.4	107	0.00
17	T	Carbon Disulfide	50.000	43.931	12.1	105	0.00
18	T	Methyl Acetate	50.000	45.427	9.1	107	0.00
19	T	Methyl tert-butyl Ether	50.000	46.306	7.4	105	0.00
20	T	Methylene Chloride	50.000	46.630	6.7	107	0.00
21	T	trans-1,2-Dichloroethene	50.000	46.882	6.2	106	0.00
22	T	Diisopropyl ether	50.000	46.443	7.1	106	0.00
23	T	Vinyl Acetate	250.000	232.938	6.8	105	0.00
24	P	1,1-Dichloroethane	50.000	47.500	5.0	106	0.00
25	T	2-Butanone	250.000	236.612	5.4	106	0.00
26	T	2,2-Dichloropropane	50.000	48.048	3.9	111	0.00
27	T	cis-1,2-Dichloroethene	50.000	46.233	7.5	104	0.00
28	T	Bromochloromethane	50.000	47.831	4.3	104	0.00
29	T	Tetrahydrofuran	250.000	232.094	7.2	105	0.00
30	C	Chloroform	50.000	46.656	6.7#	105	0.00
31	T	Cyclohexane	50.000	45.437	9.1	106	0.00
32	T	1,1,1-Trichloroethane	50.000	46.967	6.1	105	0.00
33	S	1,2-Dichloroethane-d4	50.000	48.071	3.9	102	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	104	0.00
35	S	Dibromofluoromethane	50.000	46.205	7.6	104	0.00
36	T	1,1-Dichloropropene	50.000	48.390	3.2	105	0.00
37	T	Ethyl Acetate	50.000	46.122	7.8	105	0.00
38	T	Carbon Tetrachloride	50.000	48.682	2.6	106	0.00
39	T	Methylcyclohexane	50.000	48.614	2.8	106	0.00
40	TM	Benzene	50.000	47.920	4.2	105	0.00
41	T	Methacrylonitrile	50.000	46.794	6.4	104	0.00
42	TM	1,2-Dichloroethane	50.000	47.977	4.0	106	0.00
43	T	Isopropyl Acetate	50.000	47.992	4.0	101	0.00
44	TM	Trichloroethene	50.000	49.927	0.1	108	0.00
45	C	1,2-Dichloropropane	50.000	48.096	3.8#	104	0.00
46	T	Dibromomethane	50.000	48.970	2.1	104	0.00
47	T	Bromodichloromethane	50.000	48.571	2.9	106	0.00
48	T	Methyl methacrylate	50.000	46.070	7.9	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	947.648	5.2	111	0.00
50	S	Toluene-d8	50.000	49.161	1.7	101	0.00
51	T	4-Methyl-2-Pentanone	250.000	240.057	4.0	103	0.00
52	CM	Toluene	50.000	48.280	3.4#	104	0.00
53	T	t-1,3-Dichloropropene	50.000	49.563	0.9	105	0.00
54	T	cis-1,3-Dichloropropene	50.000	48.119	3.8	107	0.00
55	T	1,1,2-Trichloroethane	50.000	47.739	4.5	104	0.00
56	T	Ethyl methacrylate	50.000	48.193	3.6	106	0.00
57	T	1,3-Dichloropropane	50.000	48.323	3.4	105	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	245.023	2.0	103	0.00
59	T	2-Hexanone	250.000	241.579	3.4	105	0.00
60	T	Dibromochloromethane	50.000	48.808	2.4	105	0.00
61	T	1,2-Dibromoethane	50.000	48.111	3.8	104	0.00
62	S	4-Bromofluorobenzene	50.000	49.374	1.3	101	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	104	0.00
64	T	Tetrachloroethene	50.000	49.433	1.1	107	0.00
65	PM	Chlorobenzene	50.000	47.653	4.7	106	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	48.194	3.6	107	0.00
67	C	Ethyl Benzene	50.000	48.077	3.8#	105	0.00
68	T	m/p-Xylenes	100.000	97.152	2.8	105	0.00
69	T	o-Xylene	50.000	47.691	4.6	104	0.00
70	T	Styrene	50.000	49.048	1.9	105	0.00
71	P	Bromoform	50.000	48.243	3.5	107	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	102	0.00
73	T	Isopropylbenzene	50.000	46.758	6.5	105	0.00
74	T	N-amyl acetate	50.000	44.026	11.9	103	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	43.857	12.3	102	0.00
76	T	1,2,3-Trichloropropane	50.000	45.063	9.9	104	0.00
77	T	Bromobenzene	50.000	47.562	4.9	103	0.00
78	T	n-propylbenzene	50.000	47.620	4.8	104	0.00
79	T	2-Chlorotoluene	50.000	46.847	6.3	105	0.00
80	T	1,3,5-Trimethylbenzene	50.000	47.184	5.6	105	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	52.918	-5.8	115	0.00
82	T	4-Chlorotoluene	50.000	47.693	4.6	104	0.00
83	T	tert-Butylbenzene	50.000	45.479	9.0	103	0.00
84	T	1,2,4-Trimethylbenzene	50.000	47.478	5.0	104	0.00
85	T	sec-Butylbenzene	50.000	47.611	4.8	104	0.00
86	T	p-Isopropyltoluene	50.000	48.608	2.8	104	0.00
87	T	1,3-Dichlorobenzene	50.000	48.303	3.4	104	0.00
88	T	1,4-Dichlorobenzene	50.000	47.989	4.0	104	0.00
89	T	n-Butylbenzene	50.000	49.219	1.6	104	0.00
90	T	Hexachloroethane	50.000	47.120	5.8	104	0.00
91	T	1,2-Dichlorobenzene	50.000	47.687	4.6	103	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	48.367	3.3	105	0.00
93	T	1,2,4-Trichlorobenzene	50.000	49.814	0.4	105	0.00
94	T	Hexachlorobutadiene	50.000	49.301	1.4	107	0.00
95	T	Naphthalene	50.000	48.334	3.3	103	0.00

Sample Results: **VN086286.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086286.D
Acq On : 16 Apr 2025 09:14
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Apr 17 03:04:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 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	48.020	4.0	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

QC SAMPLE DATA

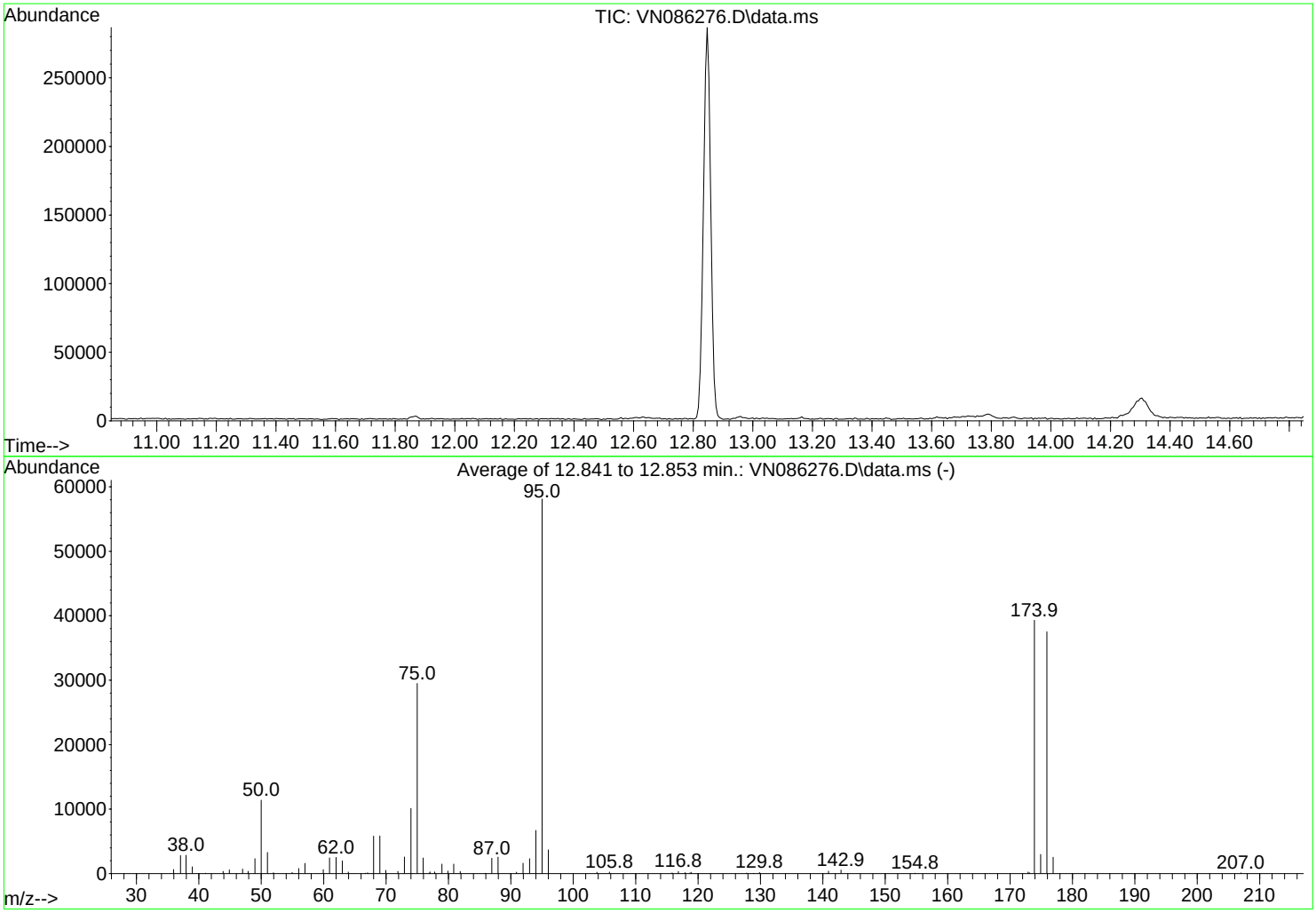
Sample Results: **VN086276.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041525\
Data File : VN086276.D
Acq On : 15 Apr 2025 10:47
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\82N041525W.M
Title : SW846 8260
Last Update : Wed Apr 16 04:19:23 2025



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	11398	PASS
75	95	30	60	50.8	29499	PASS
95	95	100	100	100.0	58112	PASS
96	95	5	9	6.3	3682	PASS
173	174	0.00	2	0.6	240	PASS
174	95	50	100	67.6	39296	PASS
175	174	5	9	7.6	2977	PASS
176	174	95	101	95.5	37528	PASS
177	176	5	9	6.7	2533	PASS

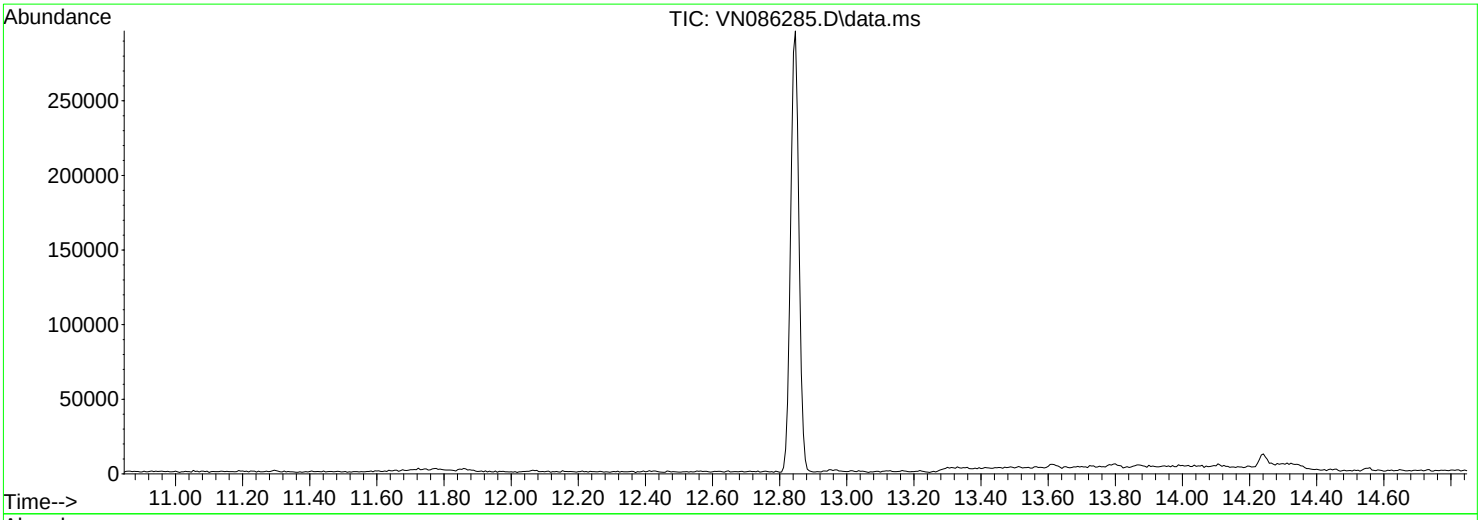
Sample Results: **VN086285.D**

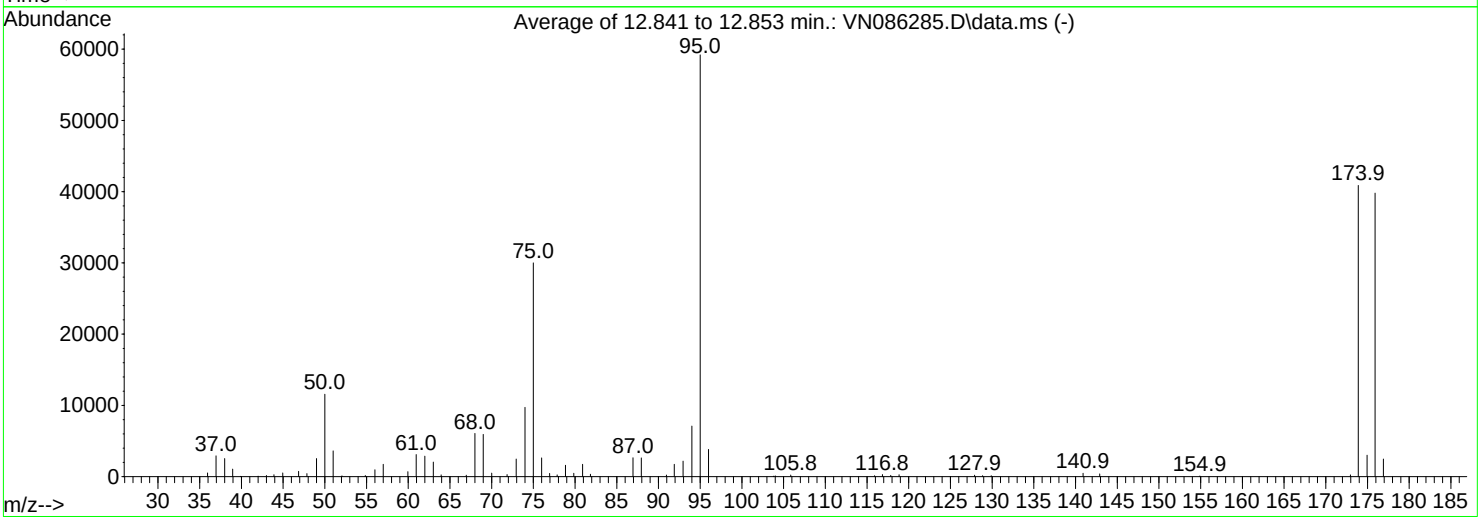
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086285.D
Acq On : 16 Apr 2025 08:38
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Title : SW846 8260
Last Update : Wed Apr 16 04:19:23 2025





AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1842

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	11559	PASS
75	95	30	60	50.7	30005	PASS
95	95	100	100	100.0	59203	PASS
96	95	5	9	6.5	3819	PASS
173	174	0.00	2	0.6	241	PASS
174	95	50	100	69.1	40880	PASS
175	174	5	9	7.4	3011	PASS
176	174	95	101	97.3	39787	PASS
177	176	5	9	6.2	2465	PASS

Raw Data: **VN086288.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:	VN0416WBL01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086288.D	1		04/16/25 10:12	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.22	U	0.22	1.00	ug/L
74-87-3	Chloromethane	0.32	U	0.32	1.00	ug/L
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.47	U	0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.33	U	0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
67-64-1	Acetone	1.50	U	1.50	5.00	ug/L
75-15-0	Carbon Disulfide	0.21	U	0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.27	U	0.27	1.00	ug/L
75-09-2	Methylene Chloride	0.28	U	0.28	1.00	ug/L
156-60-5	trans-1,2-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
110-82-7	Cyclohexane	1.50	U	1.50	5.00	ug/L
78-93-3	2-Butanone	0.98	U	0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
74-97-5	Bromochloromethane	0.22	U	0.22	1.00	ug/L
67-66-3	Chloroform	0.25	U	0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
108-87-2	Methylcyclohexane	0.16	U	0.16	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
78-87-5	1,2-Dichloropropane	0.20	U	0.20	1.00	ug/L
75-27-4	Bromodichloromethane	0.22	U	0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.68	U	0.68	5.00	ug/L
108-88-3	Toluene	0.14	U	0.14	1.00	ug/L

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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:	VN0416WBL01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086288.D	1		04/16/25 10:12	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.17	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.16	U	0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	0.89	U	0.89	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.15	U	0.15	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	0.13	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	0.24	U	0.24	2.00	ug/L
95-47-6	o-Xylene	0.12	U	0.12	1.00	ug/L
100-42-5	Styrene	0.15	U	0.15	1.00	ug/L
75-25-2	Bromoform	0.19	U	0.19	1.00	ug/L
98-82-8	Isopropylbenzene	0.12	U	0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.2		70 (74) - 130 (125)	98%	SPK: 50
1868-53-7	Dibromofluoromethane	55.0		70 (75) - 130 (124)	110%	SPK: 50
2037-26-5	Toluene-d8	50.6		70 (86) - 130 (113)	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.9		70 (77) - 130 (121)	100%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	216000	8.224			
540-36-3	1,4-Difluorobenzene	413000	9.1			
3114-55-4	Chlorobenzene-d5	375000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	162000	13.788			

Raw Data: **VN086288.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:	VN0416WBL01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086288.D	1		04/16/25 10:12	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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\VN041625\
Data File : VN086288.D
Acq On : 16 Apr 2025 10:12
Operator : JC\MD
Sample : VN0416WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Quant Time: Apr 17 05:35:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	215943	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	412690	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	374988	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	162383	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	153932	49.158	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 98.320%			
35) Dibromofluoromethane	8.165	113	105409	55.034	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 110.060%			
50) Toluene-d8	10.565	98	518345	50.637	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 101.280%			
62) 4-Bromofluorobenzene	12.847	95	186209	49.873	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 99.740%			

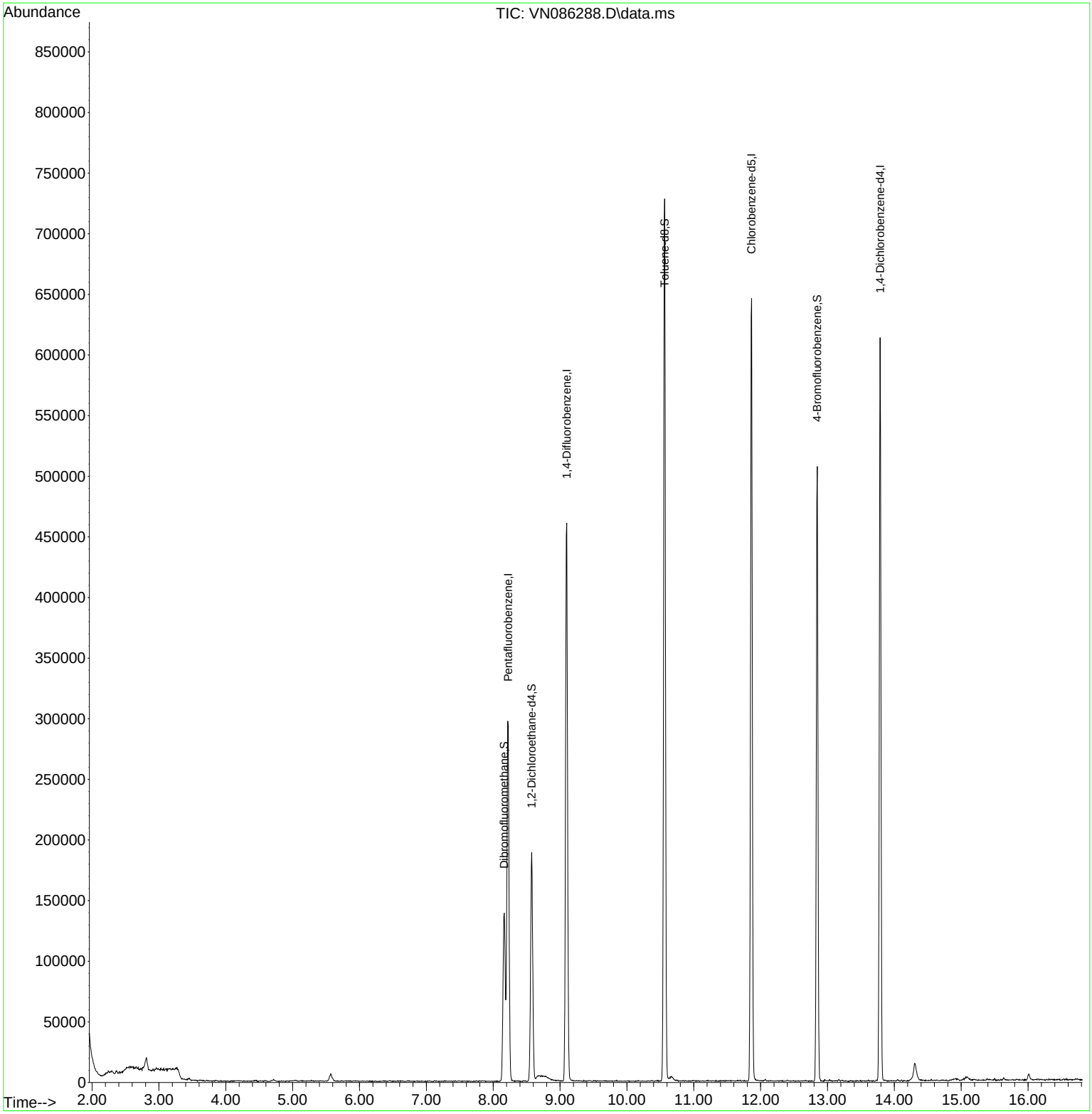
Target Compounds Qvalue

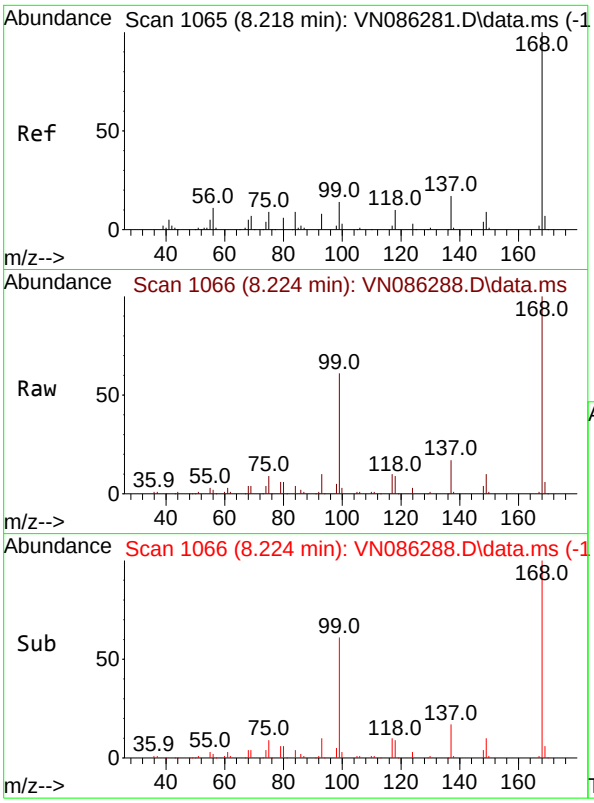
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086288.D
Acq On : 16 Apr 2025 10:12
Operator : JC\MD
Sample : VN0416WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Quant Time: Apr 17 05:35:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration



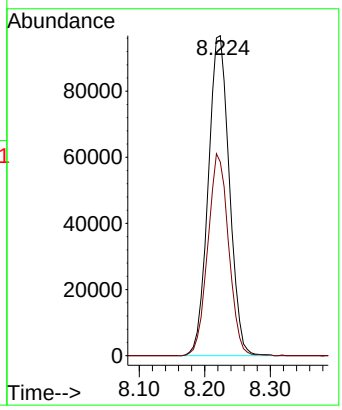


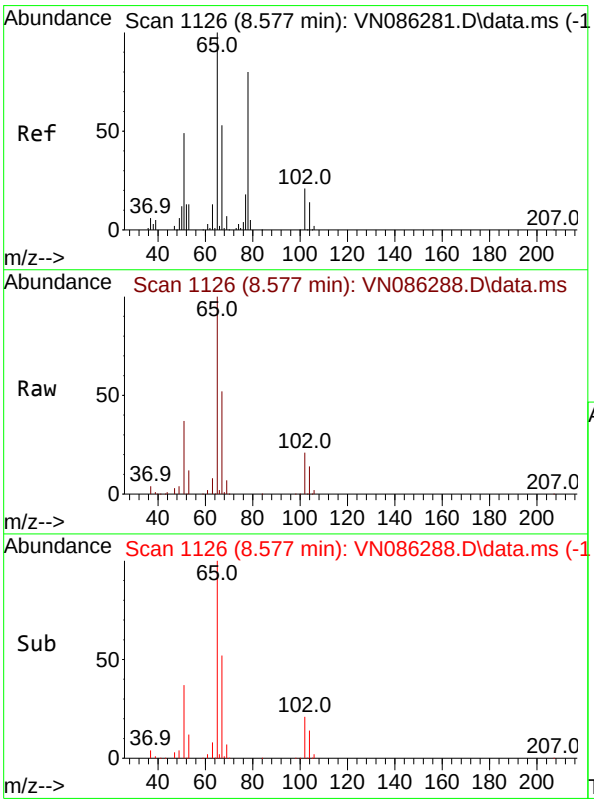
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086288.D
Acq: 16 Apr 2025 10:12

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Tgt Ion:168 Resp: 215943

Ion	Ratio	Lower	Upper
168	100		
99	60.5	52.5	78.7

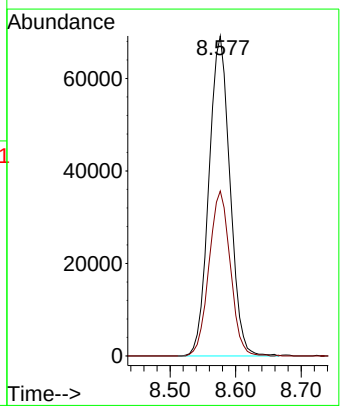


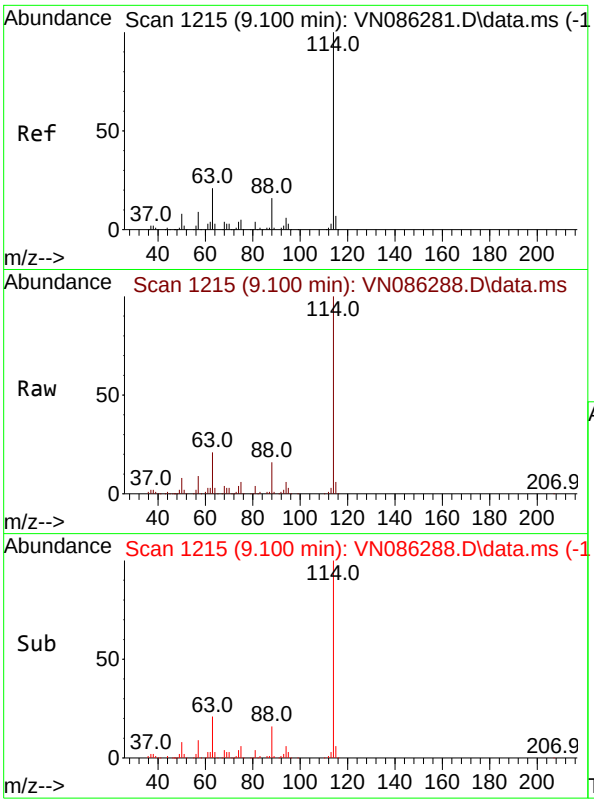


#33
1,2-Dichloroethane-d4
Concen: 49.158 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. -0.000 min
Lab File: VN086288.D
Acq: 16 Apr 2025 10:12

Tgt Ion: 65 Resp: 153932

Ion	Ratio	Lower	Upper
65	100		
67	52.1	0.0	106.0



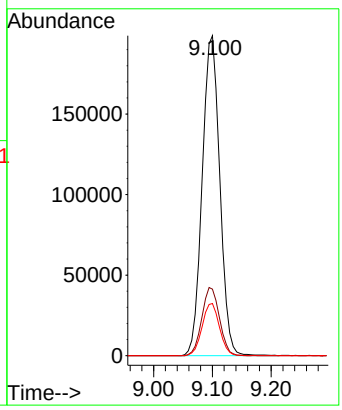


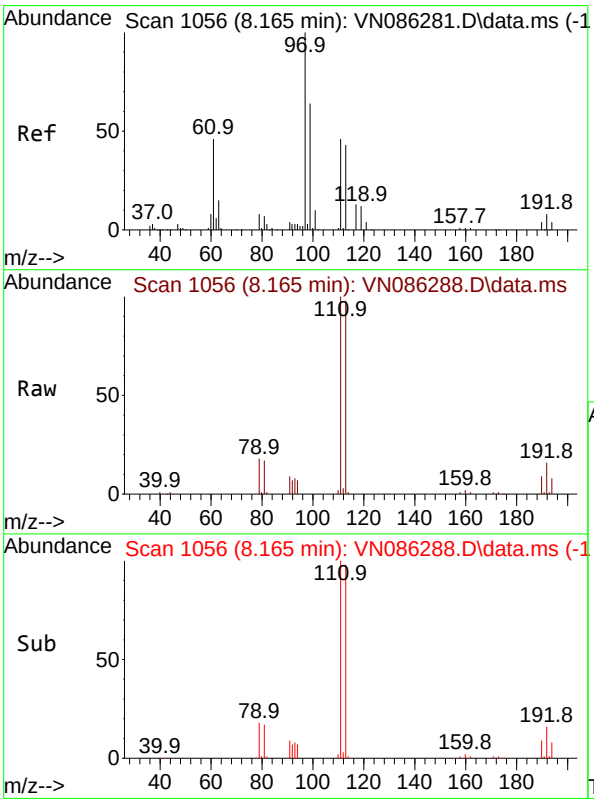
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086288.D
Acq: 16 Apr 2025 10:12

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Tgt Ion:114 Resp: 412690

Ion	Ratio	Lower	Upper
114	100		
63	20.8	0.0	42.6
88	16.3	0.0	31.8

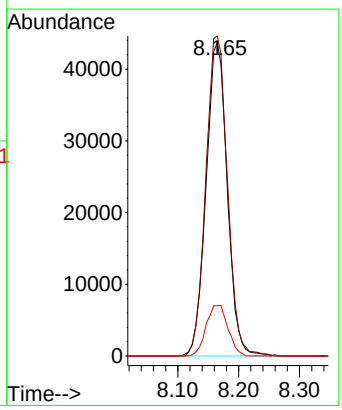


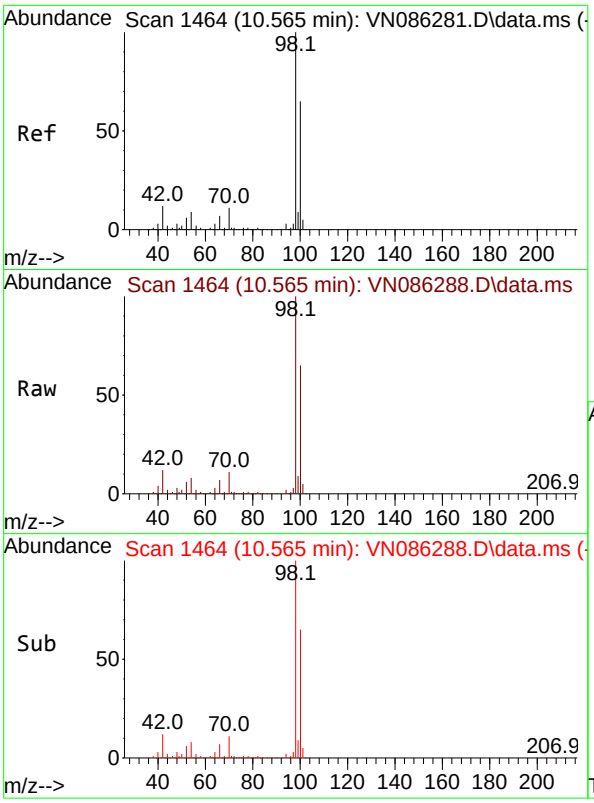


#35
Dibromofluoromethane
Concen: 55.034 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN086288.D
Acq: 16 Apr 2025 10:12

Tgt Ion:113 Resp: 105409

Ion	Ratio	Lower	Upper
113	100		
111	104.4	83.4	125.0
192	16.7	13.7	20.5



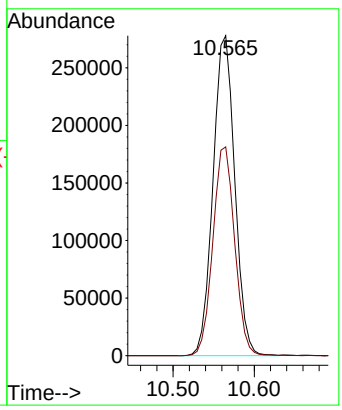


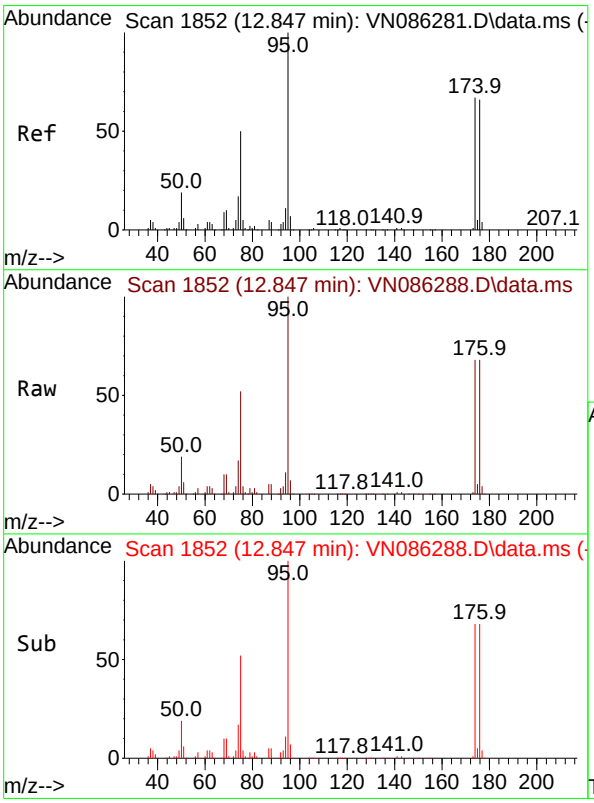
#50
Toluene-d8
Concen: 50.637 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086288.D
Acq: 16 Apr 2025 10:12

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Tgt Ion: 98 Resp: 518345

Ion	Ratio	Lower	Upper
98	100		
100	65.4	52.5	78.7

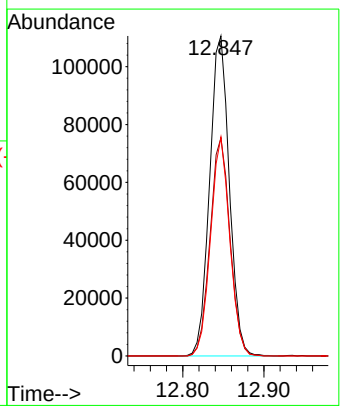


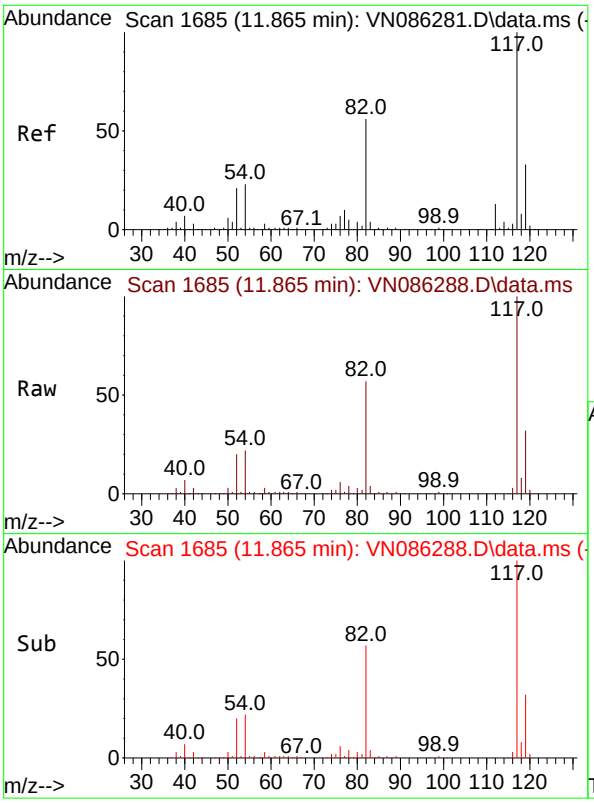


#62
4-Bromofluorobenzene
Concen: 49.873 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086288.D
Acq: 16 Apr 2025 10:12

Tgt Ion: 95 Resp: 186209

Ion	Ratio	Lower	Upper
95	100		
174	69.0	0.0	133.4
176	66.4	0.0	129.2



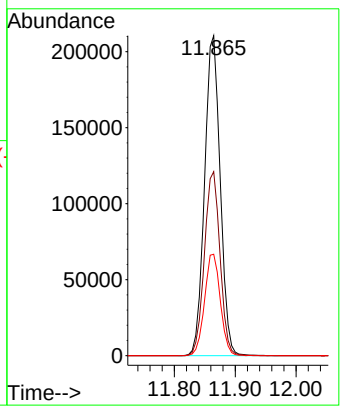


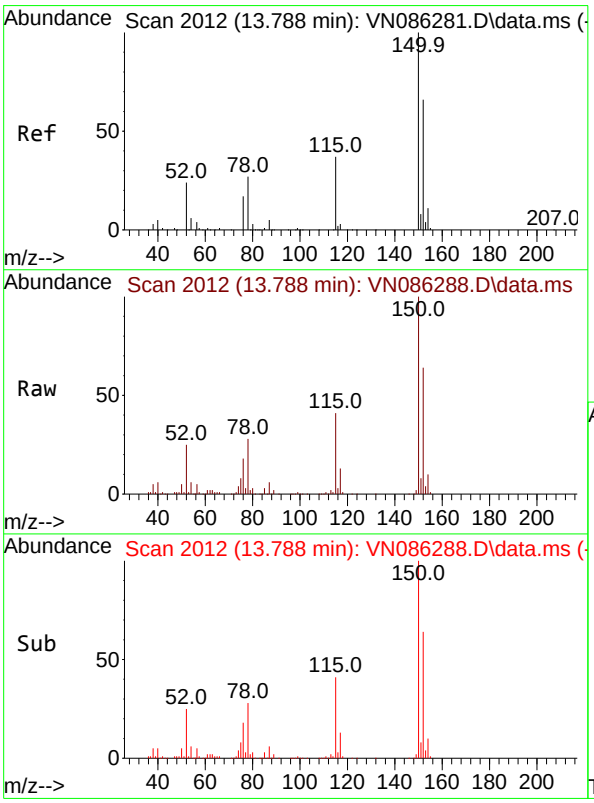
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086288.D
Acq: 16 Apr 2025 10:12

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Tgt Ion:117 Resp: 374988

Ion	Ratio	Lower	Upper
117	100		
82	57.5	44.7	67.1
119	31.7	26.4	39.6

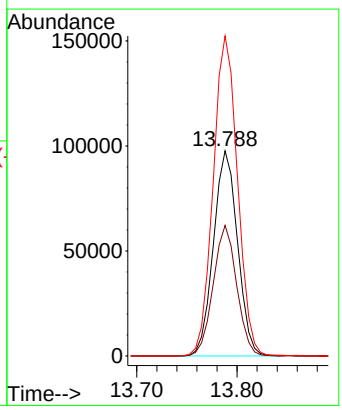




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN086288.D
Acq: 16 Apr 2025 10:12

Tgt Ion:152 Resp: 162383

Ion	Ratio	Lower	Upper
152	100		
115	62.1	31.9	95.9
150	158.0	0.0	352.0



Sample Results: **VN086288.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086288.D
Acq On : 16 Apr 2025 10:12
Operator : JC\MD
Sample : VN0416WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Title : SW846 8260

Signal : TIC: VN086288.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.812	141	146	152	rVB	10051	21819	1.60%	0.319%
2	5.571	606	615	624	rBV	6007	16547	1.22%	0.242%
3	8.165	1045	1056	1060	rBV2	138733	332011	24.38%	4.851%
4	8.218	1060	1065	1075	rVB	296631	660392	48.50%	9.649%
5	8.577	1114	1126	1136	rBV	188913	422458	31.02%	6.172%
6	9.100	1205	1215	1226	rBV	460481	955366	70.16%	13.959%
7	10.565	1455	1464	1473	rBV	727580	1361768	100.00%	19.897%
8	11.865	1675	1685	1697	rBV	645847	1161581	85.30%	16.972%
9	12.847	1844	1852	1859	rBV	507081	852848	62.63%	12.461%
10	13.788	2004	2012	2022	rBV	612956	1016506	74.65%	14.852%
11	14.306	2088	2100	2112	rVB7	13571	42934	3.15%	0.627%

Sum of corrected areas: 6844230

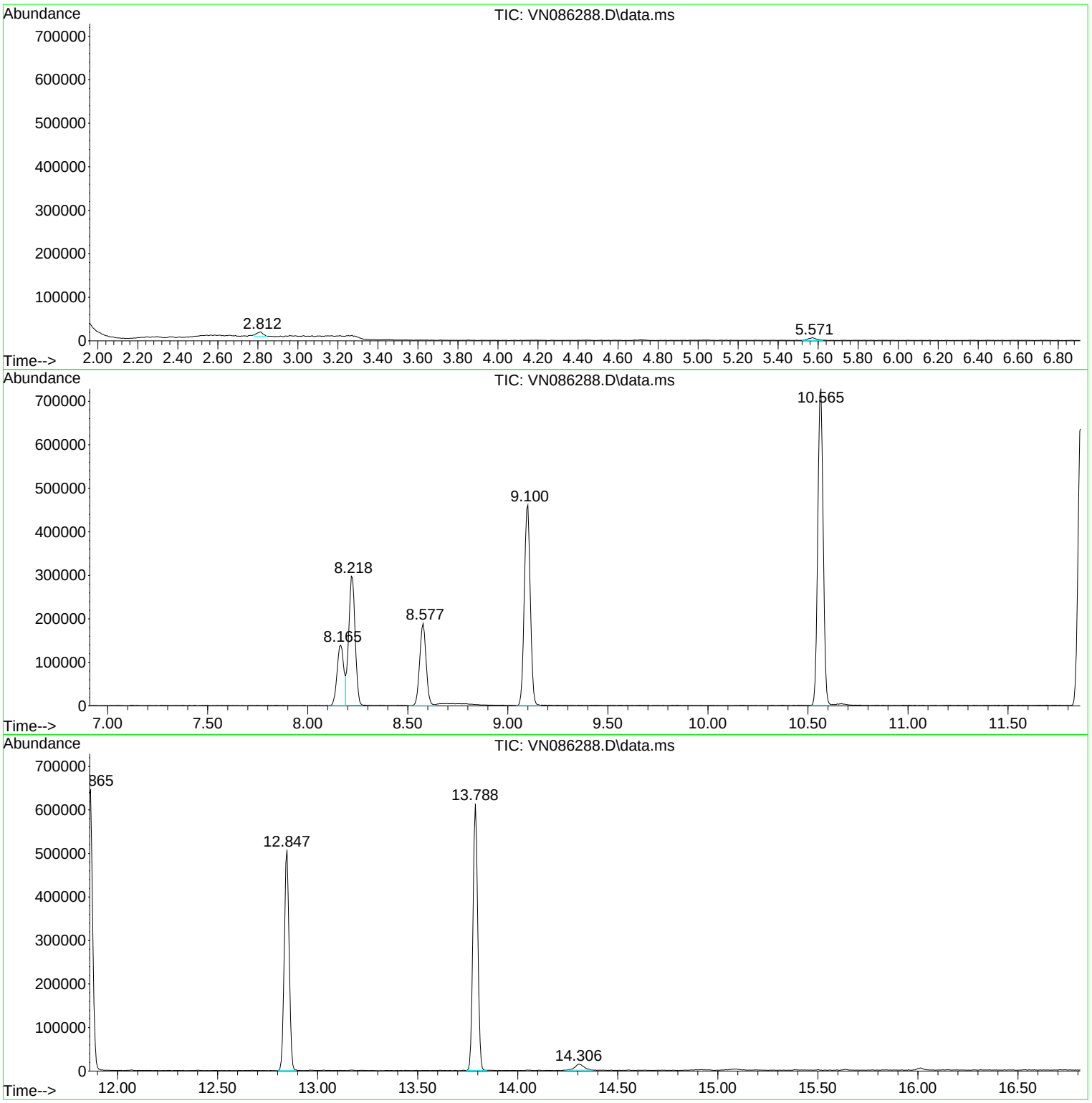
Sample Results: **VN086288.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086288.D
Acq On : 16 Apr 2025 10:12
Operator : JC\MD
Sample : VN0416WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VN086288.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086288.D
Acq On : 16 Apr 2025 10:12
Operator : JC\MD
Sample : VN0416WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086288.D
Acq On : 16 Apr 2025 10:12
Operator : JC\MD
Sample : VN0416WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Raw Data: **VN086289.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:	VN0416WBS01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086289.D	1		04/16/25 11:52	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	18.8		0.22	1.00	ug/L
74-87-3	Chloromethane	17.2		0.32	1.00	ug/L
75-01-4	Vinyl Chloride	17.8		0.26	1.00	ug/L
74-83-9	Bromomethane	19.7		1.40	5.00	ug/L
75-00-3	Chloroethane	17.3		0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	17.9		0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.2		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.1		0.23	1.00	ug/L
67-64-1	Acetone	100		1.50	5.00	ug/L
75-15-0	Carbon Disulfide	16.8		0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.5		0.16	1.00	ug/L
79-20-9	Methyl Acetate	17.3		0.27	1.00	ug/L
75-09-2	Methylene Chloride	17.1		0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	17.4		0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	17.7		0.23	1.00	ug/L
110-82-7	Cyclohexane	17.5		1.50	5.00	ug/L
78-93-3	2-Butanone	93.4		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	17.9		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	17.5		0.19	1.00	ug/L
74-97-5	Bromochloromethane	25.4		0.22	1.00	ug/L
67-66-3	Chloroform	17.5		0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	17.9		0.20	1.00	ug/L
108-87-2	Methylcyclohexane	18.1		0.16	1.00	ug/L
71-43-2	Benzene	17.9		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	17.7		0.22	1.00	ug/L
79-01-6	Trichloroethene	18.2		0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	17.8		0.20	1.00	ug/L
75-27-4	Bromodichloromethane	18.1		0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	89.9		0.68	5.00	ug/L
108-88-3	Toluene	18.0		0.14	1.00	ug/L

Raw Data: **VN086289.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:	VN0416WBS01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086289.D	1		04/16/25 11:52	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	18.2		0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	17.7		0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	17.9		0.21	1.00	ug/L
591-78-6	2-Hexanone	92.6		0.89	5.00	ug/L
124-48-1	Dibromochloromethane	18.0		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	18.1		0.15	1.00	ug/L
127-18-4	Tetrachloroethene	18.6		0.23	1.00	ug/L
108-90-7	Chlorobenzene	17.9		0.12	1.00	ug/L
100-41-4	Ethyl Benzene	18.0		0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	36.3		0.24	2.00	ug/L
95-47-6	o-Xylene	18.0		0.12	1.00	ug/L
100-42-5	Styrene	18.1		0.15	1.00	ug/L
75-25-2	Bromoform	18.1		0.19	1.00	ug/L
98-82-8	Isopropylbenzene	17.8		0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	17.1		0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.0		0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	17.9		0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	17.9		0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	18.7		0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	19.4		0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	19.0		0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.6		70 (74) - 130 (125)	101%	SPK: 50
1868-53-7	Dibromofluoromethane	50.4		70 (75) - 130 (124)	101%	SPK: 50
2037-26-5	Toluene-d8	50.8		70 (86) - 130 (113)	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.8		70 (77) - 130 (121)	100%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	283000	8.218			
540-36-3	1,4-Difluorobenzene	522000	9.094			
3114-55-4	Chlorobenzene-d5	460000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	209000	13.788			

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:	VN0416WBS01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086289.D	1		04/16/25 11:52	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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\VN041625\
Data File : VN086289.D
Acq On : 16 Apr 2025 11:52
Operator : JC\MD
Sample : VN0416WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 03:05:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	282564	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	522491	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	460155	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	208645	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	207315	50.596	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 101.200%			
35) Dibromofluoromethane	8.165	113	122233	50.406	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.820%			
50) Toluene-d8	10.565	98	658487	50.809	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 101.620%			
62) 4-Bromofluorobenzene	12.847	95	235301	49.777	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 99.560%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	62834	18.759	ug/l	98
3) Chloromethane	2.359	50	83619	17.177	ug/l	99
4) Vinyl Chloride	2.512	62	82618	17.784	ug/l	99
5) Bromomethane	2.959	94	41141	19.688	ug/l	99
6) Chloroethane	3.118	64	53710	17.275	ug/l	99
7) Trichlorofluoromethane	3.501	101	91973	17.873	ug/l	96
8) Diethyl Ether	3.959	74	40364	17.968	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.377	101	56567	18.172	ug/l	99
10) Methyl Iodide	4.583	142	66719	19.495	ug/l	100
11) Tert butyl alcohol	5.512	59	69597	93.093	ug/l	99
12) 1,1-Dichloroethene	4.342	96	56875	17.101	ug/l	90
13) Acrolein	4.183	56	33709	86.849	ug/l	98
14) Allyl chloride	5.024	41	108413	18.337	ug/l	93
15) Acrylonitrile	5.712	53	169017	91.453	ug/l	100
16) Acetone	4.424	43	149040	101.823	ug/l	99
17) Carbon Disulfide	4.712	76	167280	16.798	ug/l	97
18) Methyl Acetate	5.018	43	85073	17.297	ug/l	99
19) Methyl tert-butyl Ether	5.795	73	213988	17.504	ug/l	99
20) Methylene Chloride	5.277	84	64725	17.087	ug/l	91
21) trans-1,2-Dichloroethene	5.783	96	60388	17.368	ug/l	98
22) Diisopropyl ether	6.665	45	221304	17.207	ug/l	99
23) Vinyl Acetate	6.600	43	799295	88.904	ug/l	100
24) 1,1-Dichloroethane	6.565	63	120270	17.724	ug/l	99
25) 2-Butanone	7.477	43	238212	93.400	ug/l	99
26) 2,2-Dichloropropane	7.489	77	111024	18.273	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	75460	17.486	ug/l	98
28) Bromochloromethane	7.812	49	72980	25.364	ug/l	99
29) Tetrahydrofuran	7.836	42	150252	88.099	ug/l	99
30) Chloroform	7.965	83	116681	17.504	ug/l	100
31) Cyclohexane	8.253	56	116431	17.534	ug/l	98
32) 1,1,1-Trichloroethane	8.165	97	101815	17.854	ug/l	99
36) 1,1-Dichloropropene	8.371	75	87429	18.051	ug/l	99
37) Ethyl Acetate	7.553	43	90455	17.739	ug/l	98
38) Carbon Tetrachloride	8.359	117	82737	17.938	ug/l	100
39) Methylcyclohexane	9.600	83	104143	18.090	ug/l	99
40) Benzene	8.600	78	278025	17.916	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086289.D
Acq On : 16 Apr 2025 11:52
Operator : JC\MD
Sample : VN0416WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 03:05:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	51131	17.301	ug/l		97
42) 1,2-Dichloroethane	8.665	62	87802	17.743	ug/l		100
43) Isopropyl Acetate	8.683	43	172068	17.329	ug/l		99
44) Trichloroethene	9.347	130	66974	18.209	ug/l		98
45) 1,2-Dichloropropane	9.618	63	67554	17.784	ug/l		98
46) Dibromomethane	9.706	93	44348	18.324	ug/l		99
47) Bromodichloromethane	9.883	83	94506	18.079	ug/l		97
48) Methyl methacrylate	9.677	41	76692	17.127	ug/l		97
49) 1,4-Dioxane	9.694	88	27492	360.936	ug/l		99
51) 4-Methyl-2-Pentanone	10.441	43	469595	89.934	ug/l		99
52) Toluene	10.624	92	174573	18.029	ug/l		99
53) t-1,3-Dichloropropene	10.835	75	105914	18.151	ug/l		99
54) cis-1,3-Dichloropropene	10.306	75	113584	17.722	ug/l		98
55) 1,1,2-Trichloroethane	11.012	97	62343	17.895	ug/l		99
56) Ethyl methacrylate	10.871	69	113753	17.763	ug/l		99
57) 1,3-Dichloropropane	11.159	76	110884	17.939	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.159	63	225469	74.181	ug/l		100
59) 2-Hexanone	11.194	43	358683	92.611	ug/l		100
60) Dibromochloromethane	11.353	129	69031	18.045	ug/l		100
61) 1,2-Dibromoethane	11.465	107	63744	18.134	ug/l		99
64) Tetrachloroethene	11.100	164	65974	18.639	ug/l		98
65) Chlorobenzene	11.888	112	184055	17.923	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.959	131	60477	17.852	ug/l		99
67) Ethyl Benzene	11.959	91	332795	17.959	ug/l		99
68) m/p-Xylenes	12.065	106	252292	36.335	ug/l		97
69) o-Xylene	12.394	106	123540	17.991	ug/l		98
70) Styrene	12.412	104	207507	18.137	ug/l		99
71) Bromoform	12.576	173	46081	18.067	ug/l	#	98
73) Isopropylbenzene	12.694	105	304303	17.829	ug/l		99
74) N-amyl acetate	12.488	43	139157	16.378	ug/l		100
75) 1,1,2,2-Tetrachloroethane	12.935	83	83847	17.086	ug/l		98
76) 1,2,3-Trichloropropane	12.988	75	84064m	17.073	ug/l		
77) Bromobenzene	12.976	156	67868	17.946	ug/l		99
78) n-propylbenzene	13.035	91	362369	18.018	ug/l		99
79) 2-Chlorotoluene	13.123	91	223889	17.790	ug/l		99
80) 1,3,5-Trimethylbenzene	13.171	105	251187	17.981	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.735	75	39861	19.443	ug/l		94
82) 4-Chlorotoluene	13.218	91	222909	17.831	ug/l		99
83) tert-Butylbenzene	13.435	119	220122	18.186	ug/l		97
84) 1,2,4-Trimethylbenzene	13.476	105	254651	17.909	ug/l		99
85) sec-Butylbenzene	13.612	105	304877	18.159	ug/l		100
86) p-Isopropyltoluene	13.723	119	251538	18.177	ug/l		100
87) 1,3-Dichlorobenzene	13.729	146	127951	17.998	ug/l		99
88) 1,4-Dichlorobenzene	13.812	146	128408	17.933	ug/l		100
89) n-Butylbenzene	14.053	91	227898	18.579	ug/l		100
90) Hexachloroethane	14.329	117	41324	17.753	ug/l		98
91) 1,2-Dichlorobenzene	14.106	146	123552	17.926	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	18530	18.727	ug/l		98
93) 1,2,4-Trichlorobenzene	15.388	180	63878	19.355	ug/l		99
94) Hexachlorobutadiene	15.500	225	24374	19.564	ug/l		98
95) Naphthalene	15.635	128	222770	19.041	ug/l		100
96) 1,2,3-Trichlorobenzene	15.835	180	59442	19.024	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086289.D
Acq On : 16 Apr 2025 11:52
Operator : JC\MD
Sample : VN0416WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 17 03:05:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

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

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

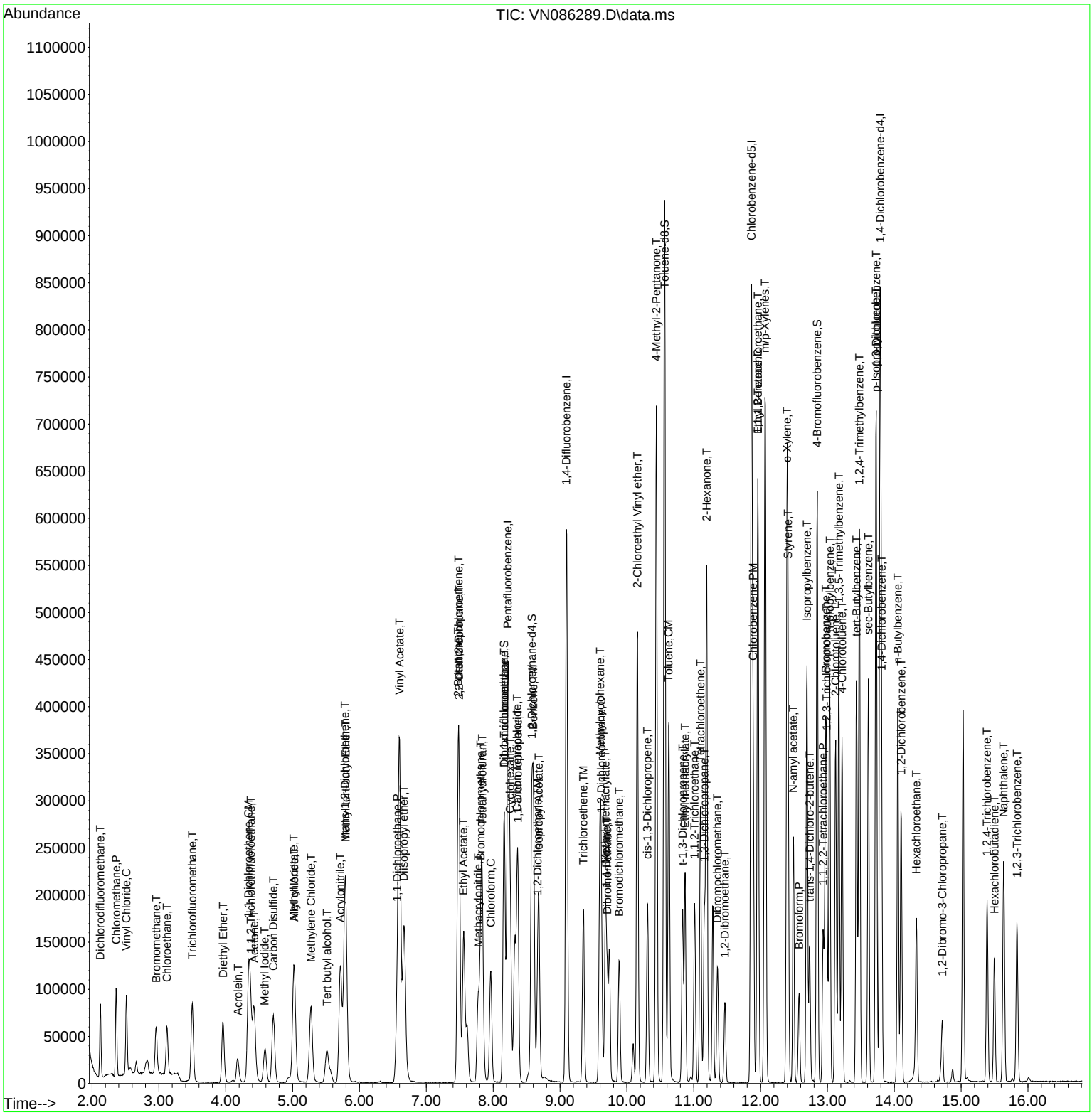
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086289.D
Acq On : 16 Apr 2025 11:52
Operator : JC\MD
Sample : VN0416WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

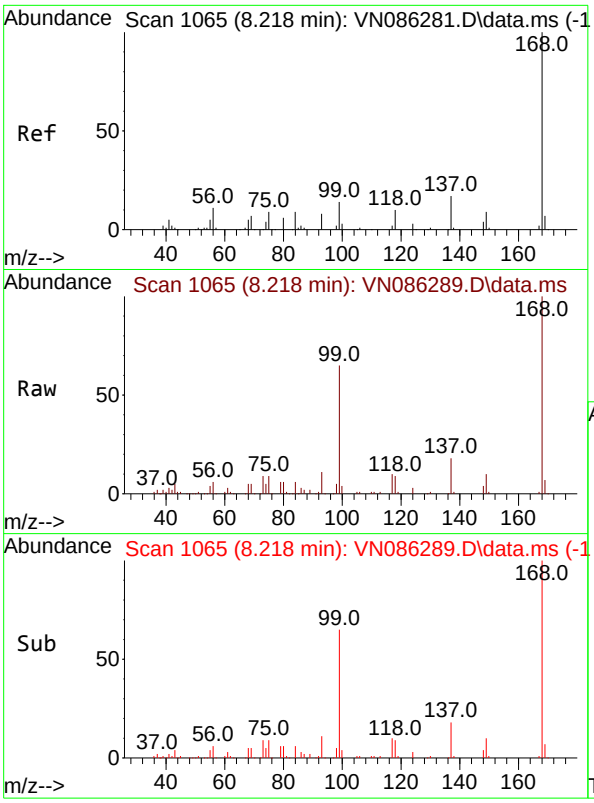
Quant Time: Apr 17 03:05:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

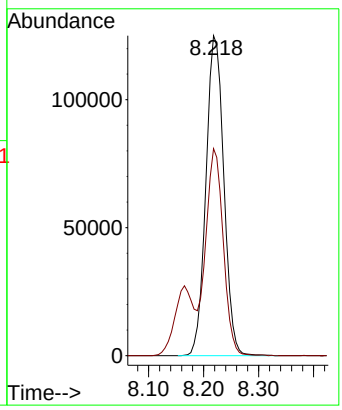




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:168 Resp: 28256

Ion	Ratio	Lower	Upper
168	100		
99	64.7	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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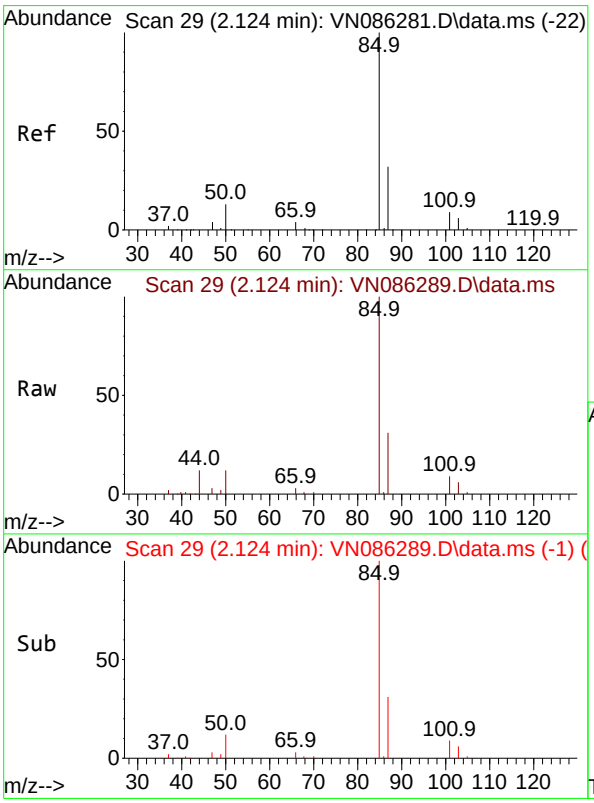
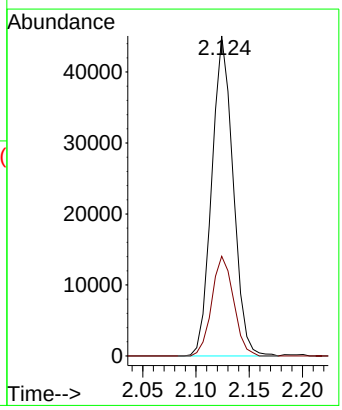
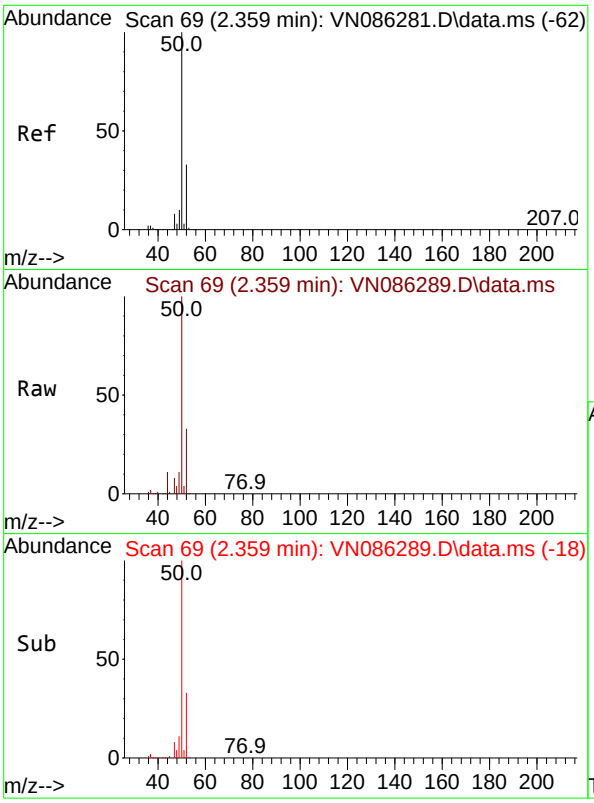


#2
Dichlorodifluoromethane
Concen: 18.759 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 85 Resp: 62834

Ion	Ratio	Lower	Upper
85	100		
87	31.2	16.3	48.8

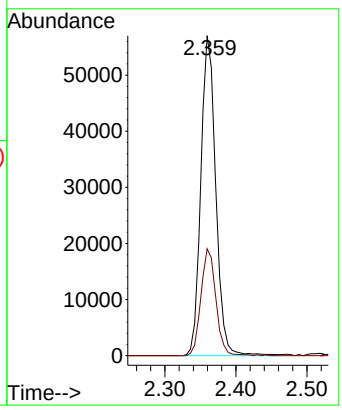




#3
Chloromethane
Concen: 17.177 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 50 Resp: 8361

Ion	Ratio	Lower	Upper
50	100		
52	33.4	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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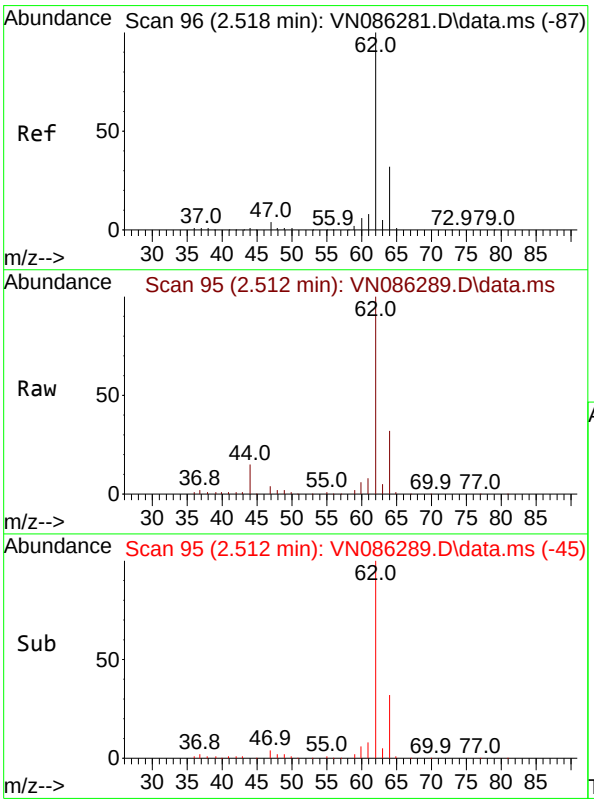
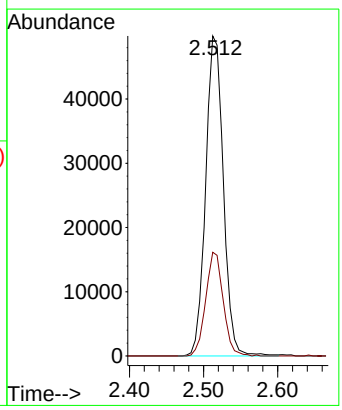
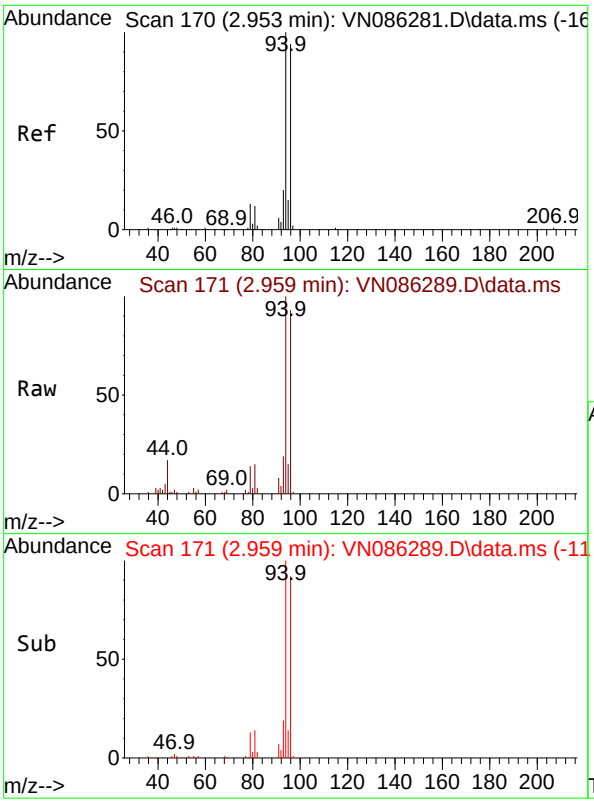


#4
Vinyl Chloride
Concen: 17.784 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 62 Resp: 82618

Ion	Ratio	Lower	Upper
62	100		
64	32.4	25.6	38.4

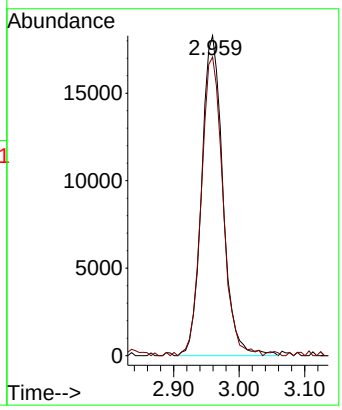




#5
Bromomethane
Concen: 19.688 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 94 Resp: 4114

Ion	Ratio	Lower	Upper
94	100		
96	93.4	75.2	112.8



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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Reviewed By :John Carlone 04/17/2025
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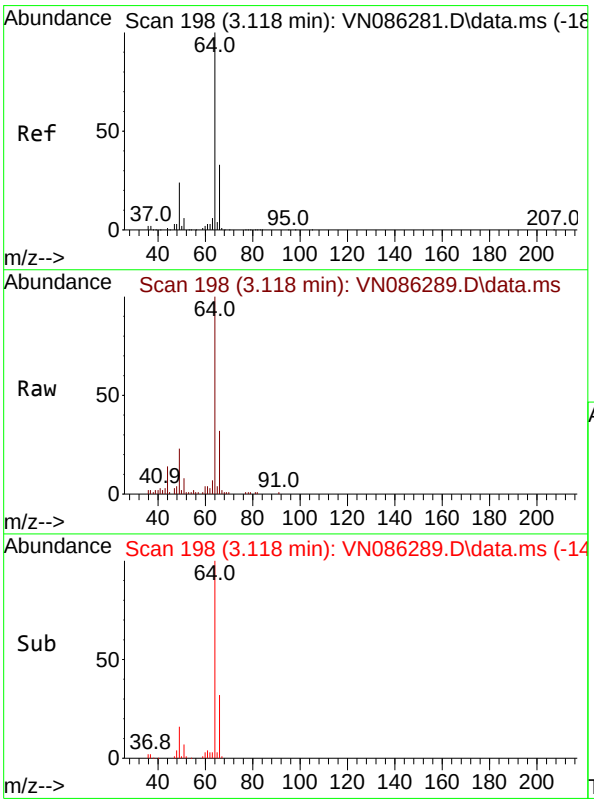
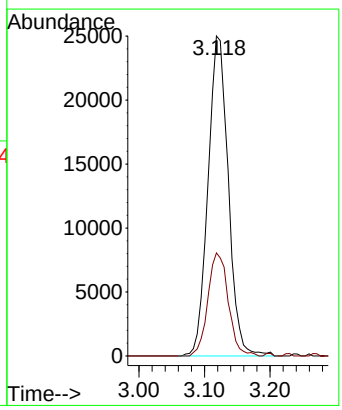
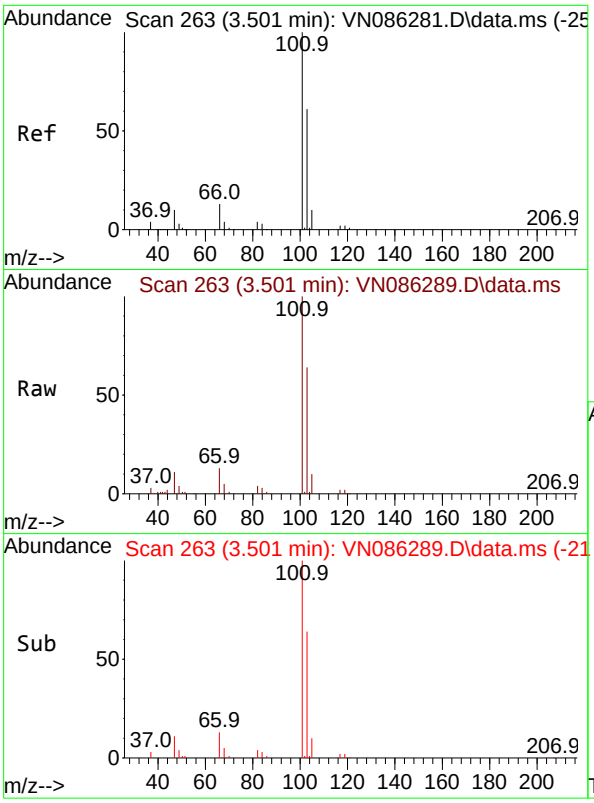


#6
Chloroethane
Concen: 17.275 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 64 Resp: 53710

Ion	Ratio	Lower	Upper
64	100		
66	32.2	26.2	39.2





#7
Trichlorofluoromethane
Concen: 17.873 ug/l
RT: 3.501 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:101 Resp: 9197

Ion	Ratio	Lower	Upper
101	100		
103	64.4	49.2	73.8

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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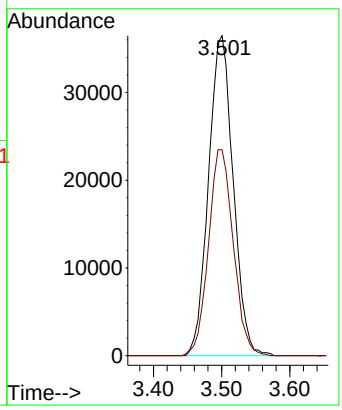
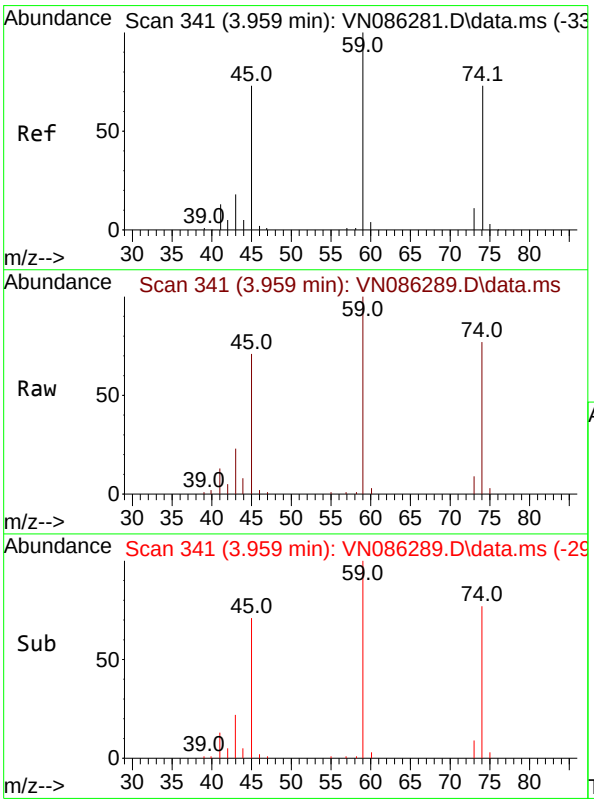
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

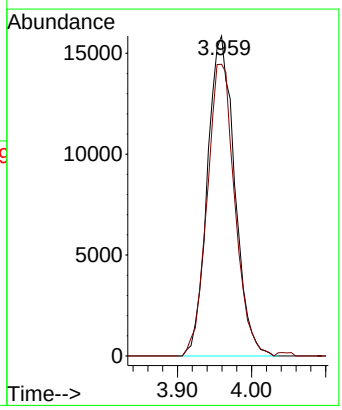


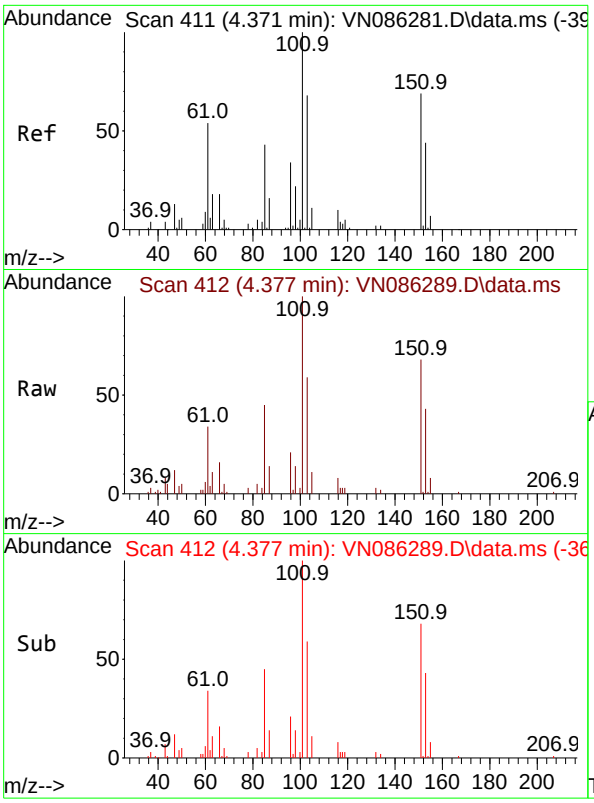


#8
Diethyl Ether
Concen: 17.968 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 74 Resp: 40364

Ion	Ratio	Lower	Upper
74	100		
45	93.0	48.0	144.2





#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.172 ug/l
RT: 4.377 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:101 Resp: 5656

Ion	Ratio	Lower	Upper
101	100		
85	45.0	34.7	52.1
151	70.7	56.1	84.1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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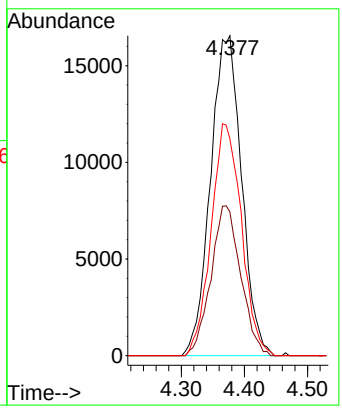
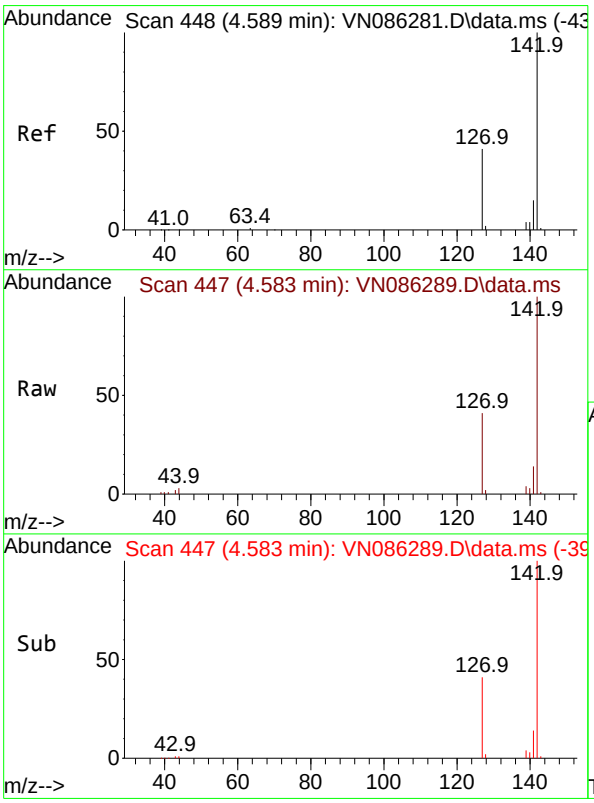
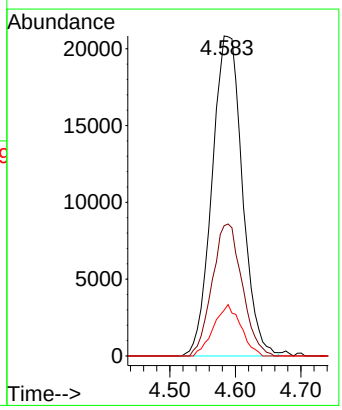


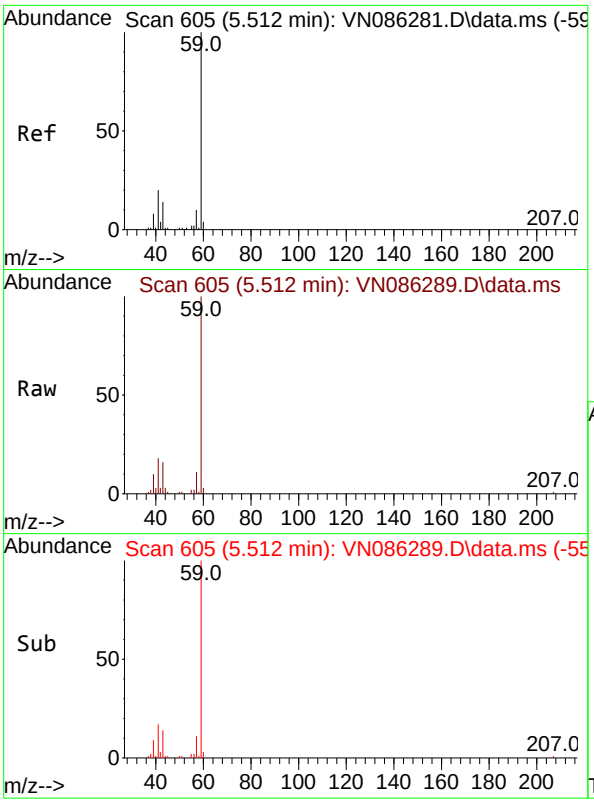


#10
Methyl Iodide
Concen: 19.495 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:142 Resp: 66719

Ion	Ratio	Lower	Upper
142	100		
127	40.7	32.7	49.1
141	14.3	11.7	17.5





#11
Tert butyl alcohol
Concen: 93.093 ug/l
RT: 5.512 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 59 Resp: 6959

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.3	12.5

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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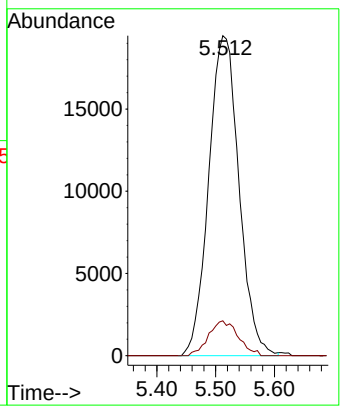
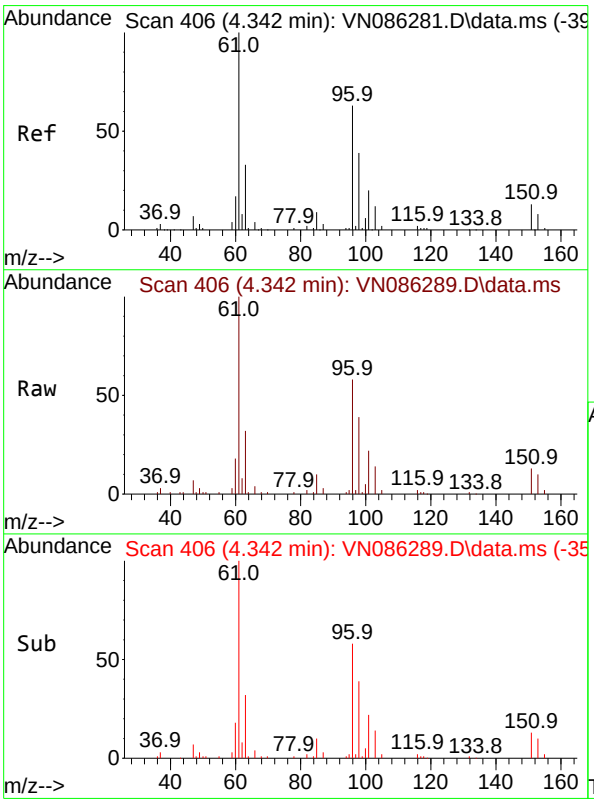
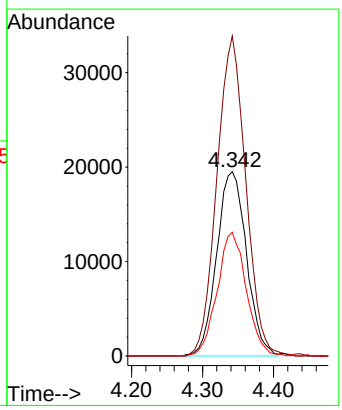


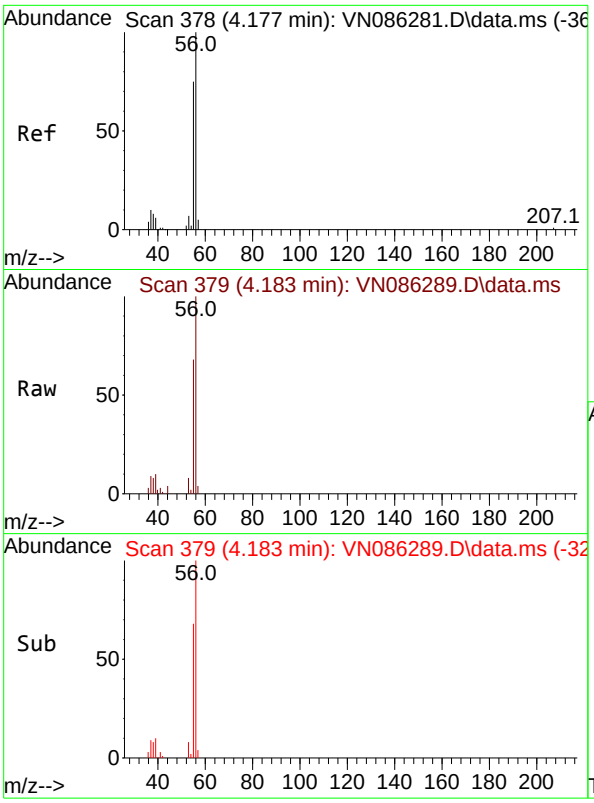


#12
1,1-Dichloroethene
Concen: 17.101 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 96 Resp: 56875

Ion	Ratio	Lower	Upper
96	100		
61	173.7	126.6	189.8
98	67.2	49.6	74.4

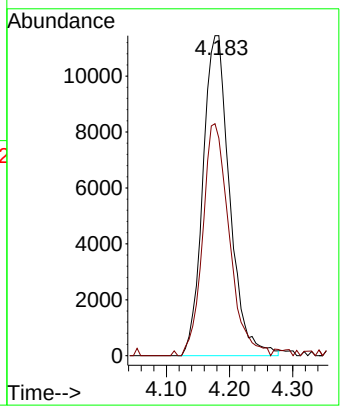




#13
Acrolein
Concen: 86.849 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 56 Resp: 3370

Ion	Ratio	Lower	Upper
56	100		
55	71.8	58.5	87.7



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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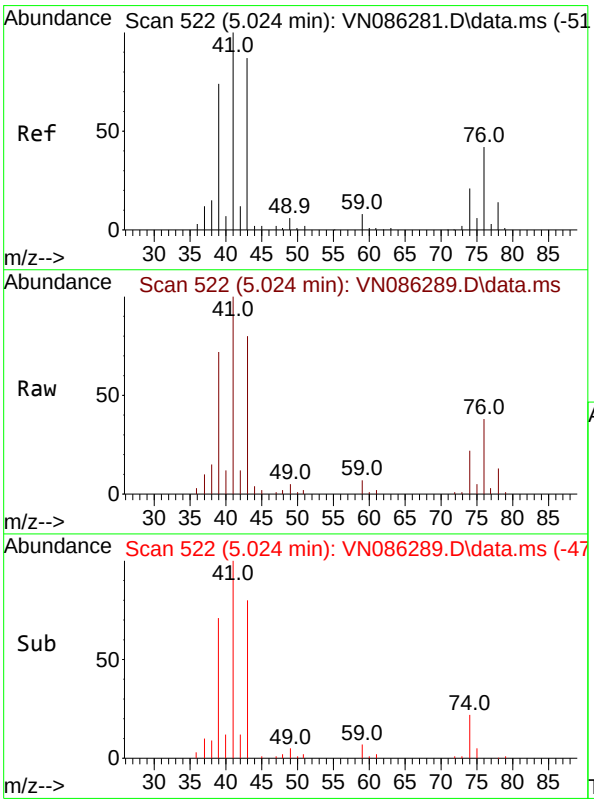
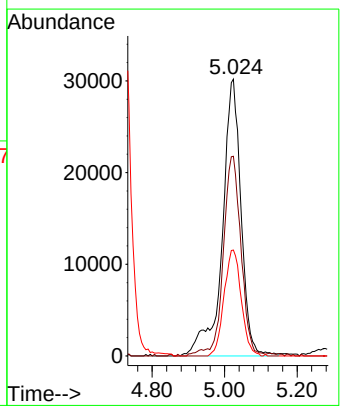
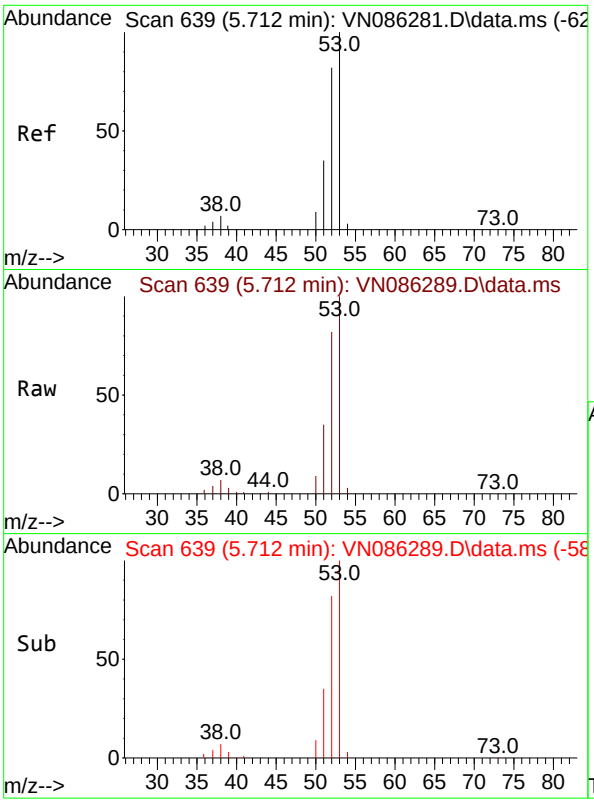


#14
Allyl chloride
Concen: 18.337 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 41 Resp: 108413

Ion	Ratio	Lower	Upper
41	100		
39	68.1	59.2	88.8
76	35.1	31.2	46.8

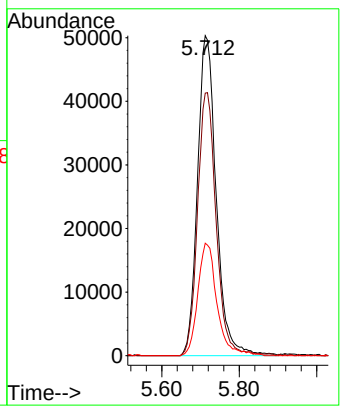




#15
Acrylonitrile
Concen: 91.453 ug/l
RT: 5.712 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 53 Resp: 16901

Ion	Ratio	Lower	Upper
53	100		
52	81.5	65.5	98.3
51	36.0	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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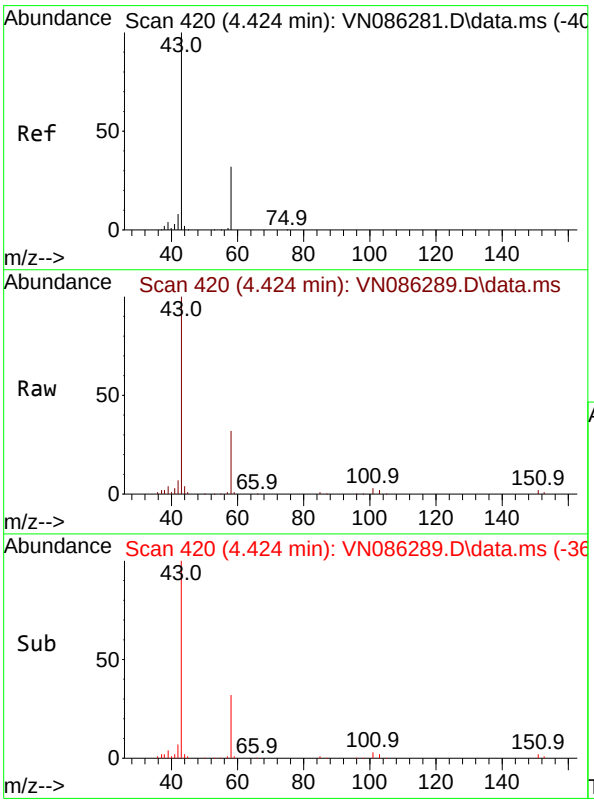
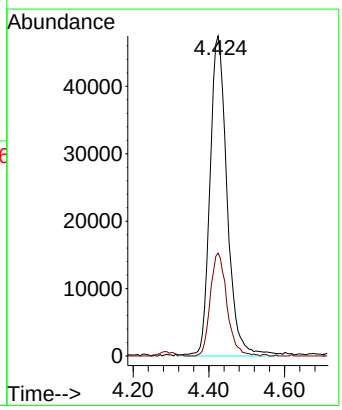
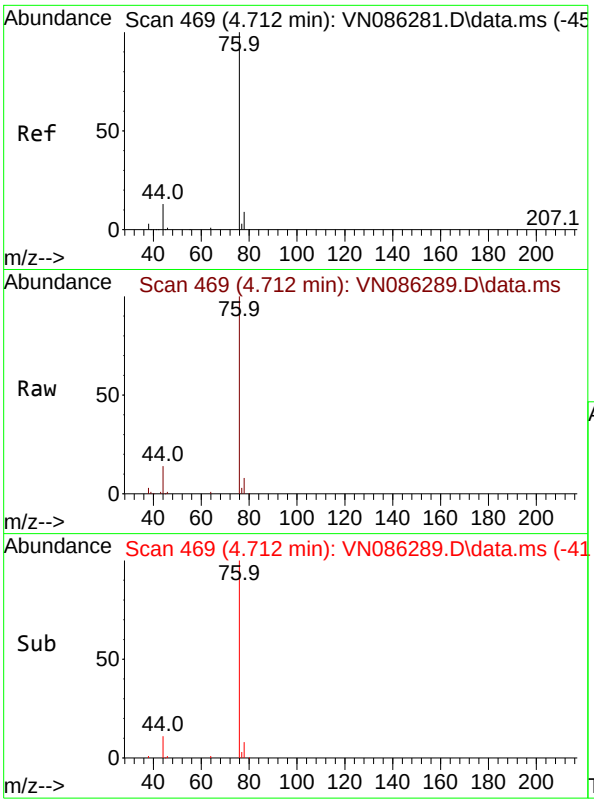


#16
Acetone
Concen: 101.823 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 149040

Ion	Ratio	Lower	Upper
43	100		
58	32.2	25.3	37.9

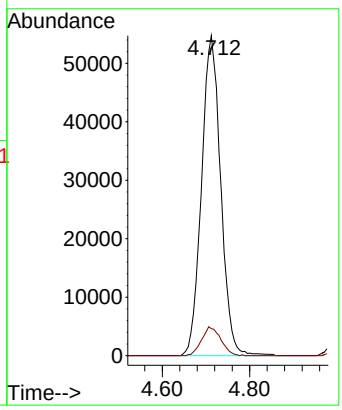




#17
Carbon Disulfide
Concen: 16.798 ug/l
RT: 4.712 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 76 Resp: 16728(

Ion	Ratio	Lower	Upper
76	100		
78	8.5	7.6	11.4



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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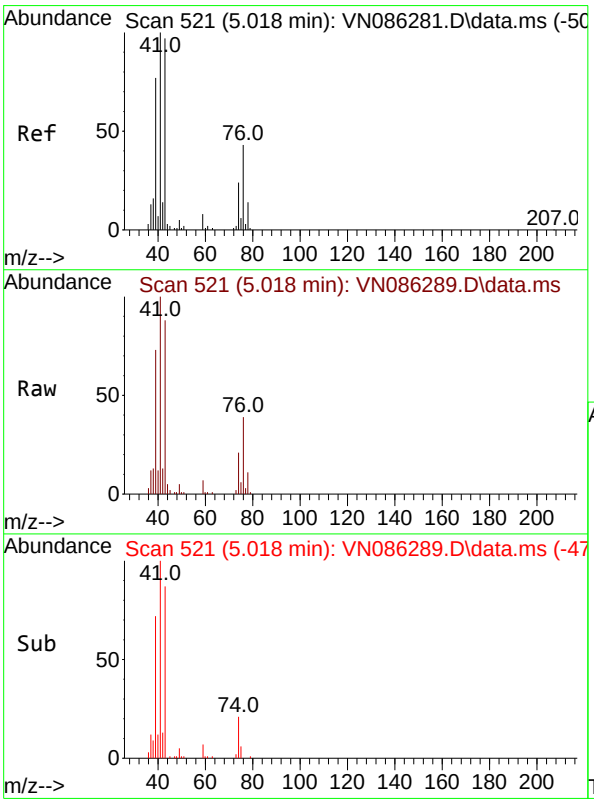
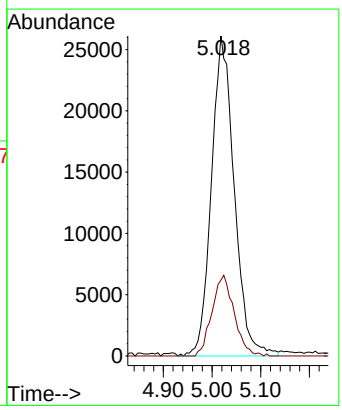
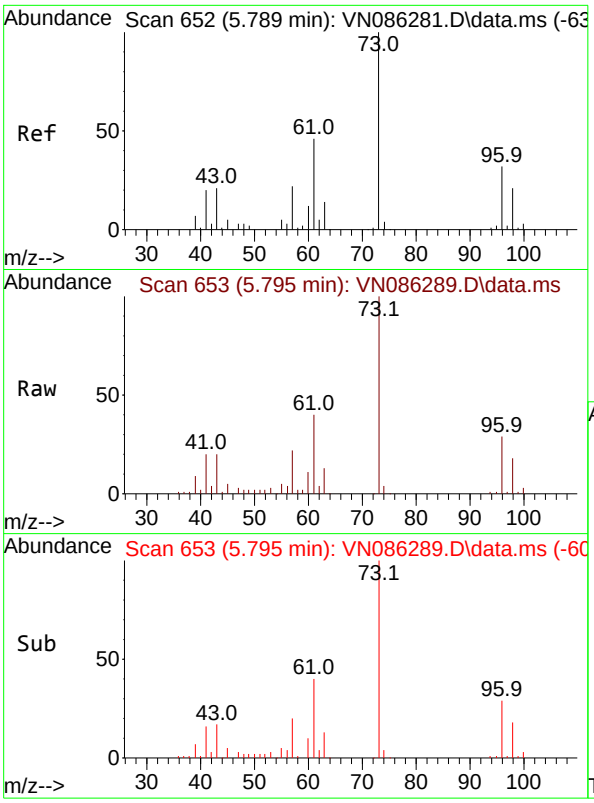


#18
Methyl Acetate
Concen: 17.297 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 85073

Ion	Ratio	Lower	Upper
43	100		
74	24.4	19.8	29.6





#19
Methyl tert-butyl Ether
Concen: 17.504 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 73 Resp: 21398

Ion	Ratio	Lower	Upper
73	100		
57	22.3	17.6	26.4

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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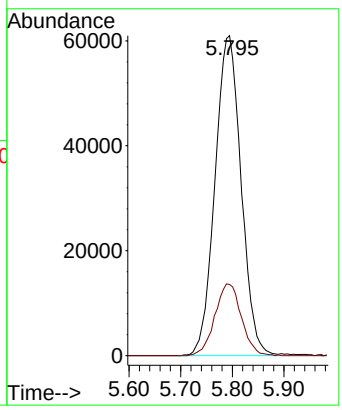
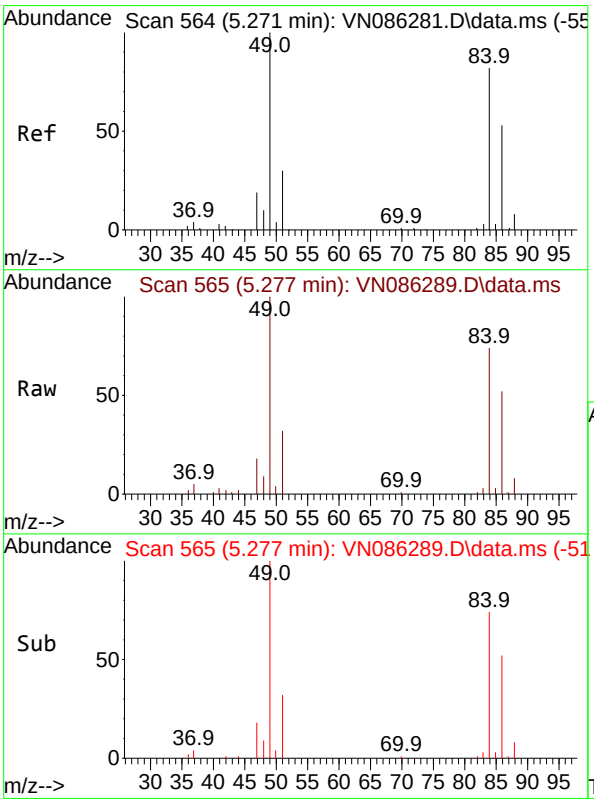
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

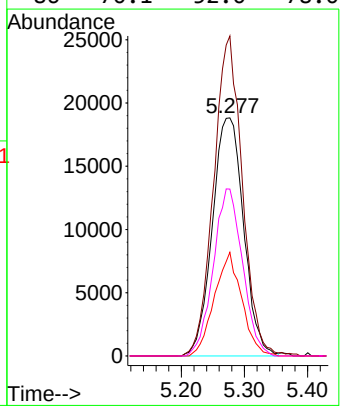


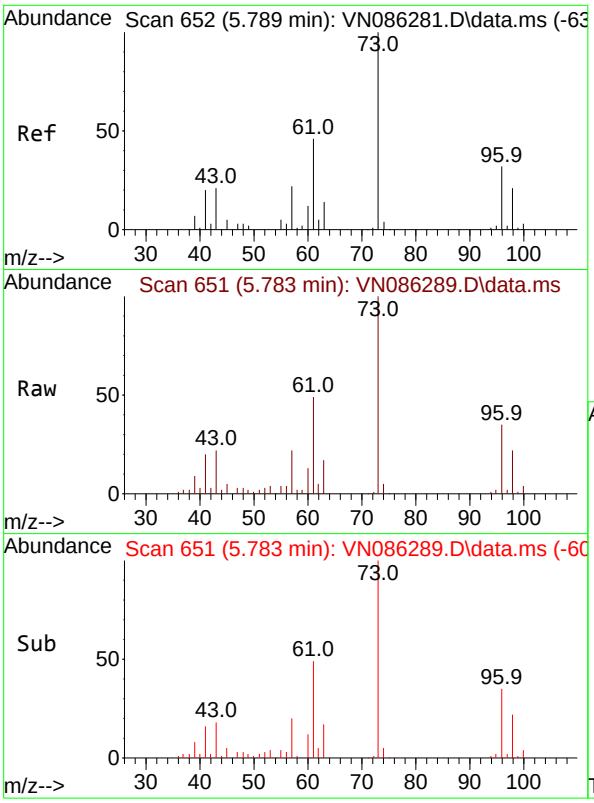


#20
Methylene Chloride
Concen: 17.087 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 84 Resp: 64725

Ion	Ratio	Lower	Upper
84	100		
49	134.4	98.2	147.2
51	43.6	29.8	44.6
86	70.1	52.0	78.0





#21
trans-1,2-Dichloroethene
Concen: 17.368 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 96 Resp: 6038

Ion	Ratio	Lower	Upper
96	100		
61	139.9	114.6	171.8
98	63.2	51.2	76.8

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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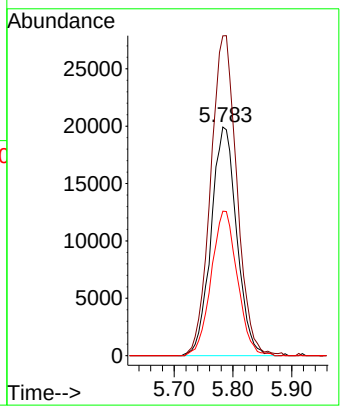
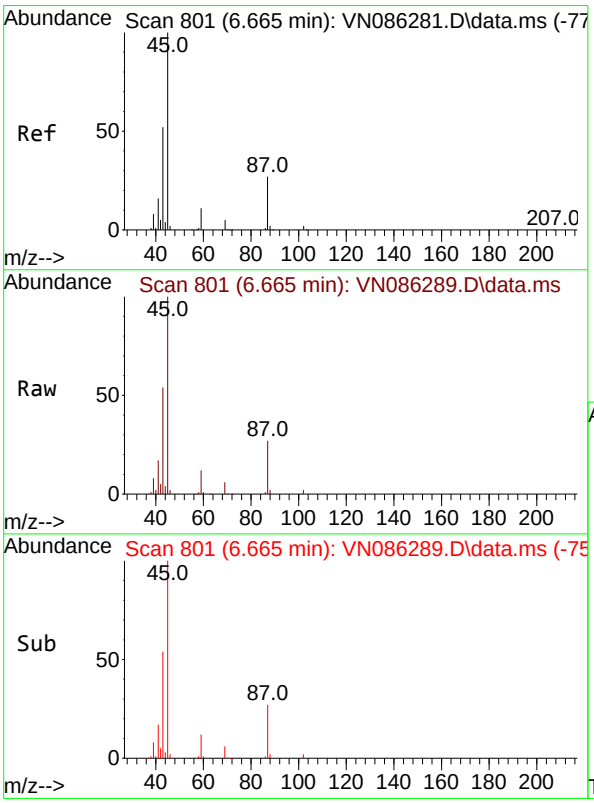
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

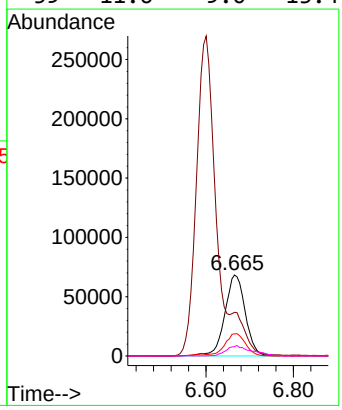


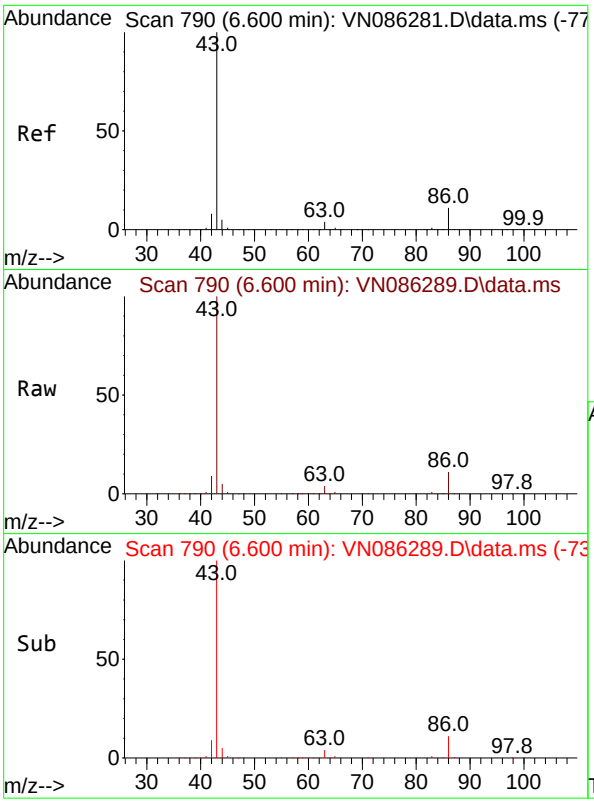


#22
Diisopropyl ether
Concen: 17.207 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 45 Resp: 221304

Ion	Ratio	Lower	Upper
45	100		
43	52.8	41.8	62.8
87	27.2	21.6	32.4
59	11.6	9.0	13.4





#23
Vinyl Acetate
Concen: 88.904 ug/l
RT: 6.600 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 79929

Ion	Ratio	Lower	Upper
43	100		
86	10.9	8.6	13.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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Reviewed By :John Carlone 04/17/2025
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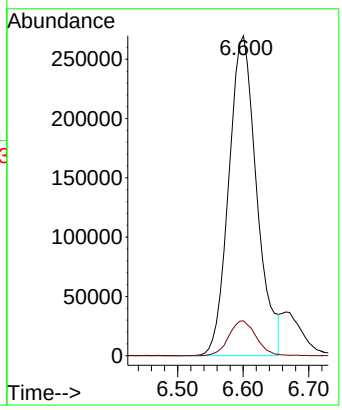
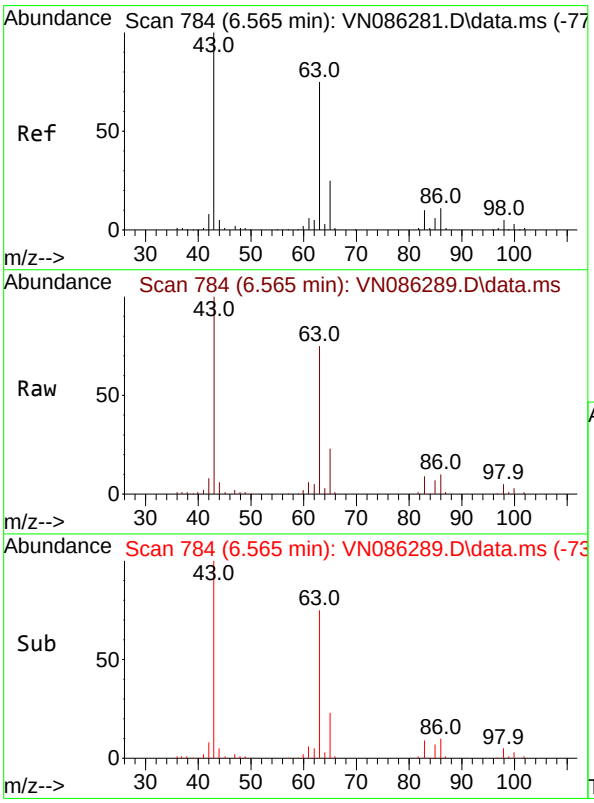
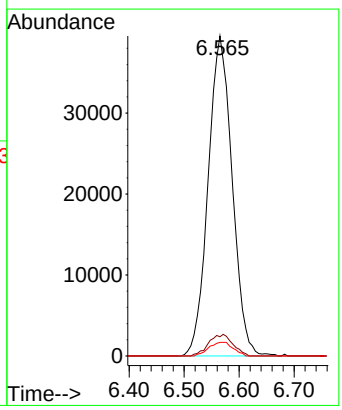


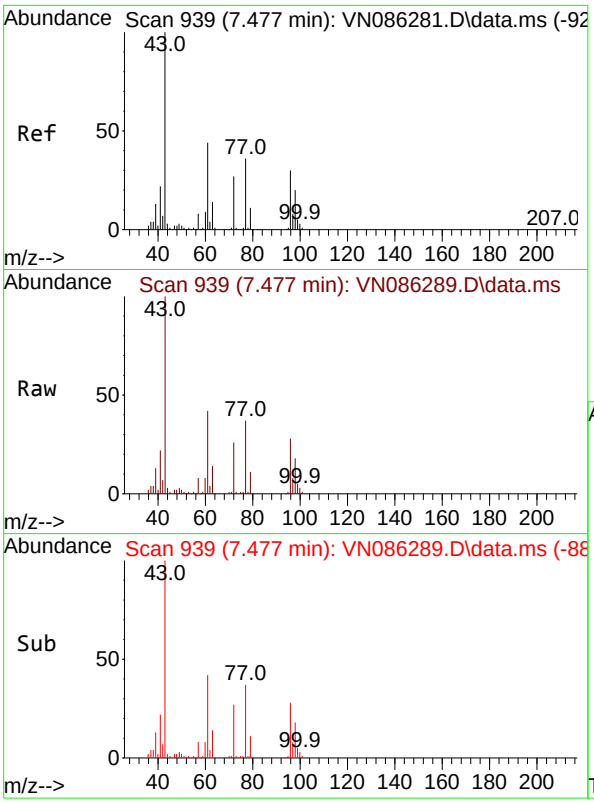


#24
1,1-Dichloroethane
Concen: 17.724 ug/l
RT: 6.565 min Scan# 784
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 63 Resp: 120270

Ion	Ratio	Lower	Upper
63	100		
98	6.0	3.4	10.2
100	4.2	2.1	6.5





#25
2-Butanone
Concen: 93.400 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 23821

Ion	Ratio	Lower	Upper
43	100		
72	26.5	21.7	32.5

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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Reviewed By :John Carlone 04/17/2025
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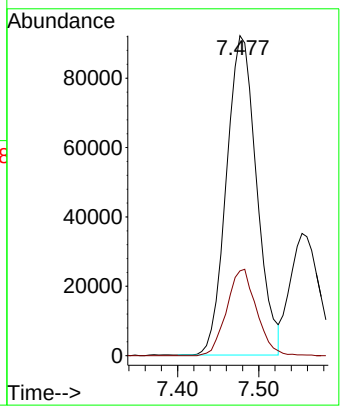
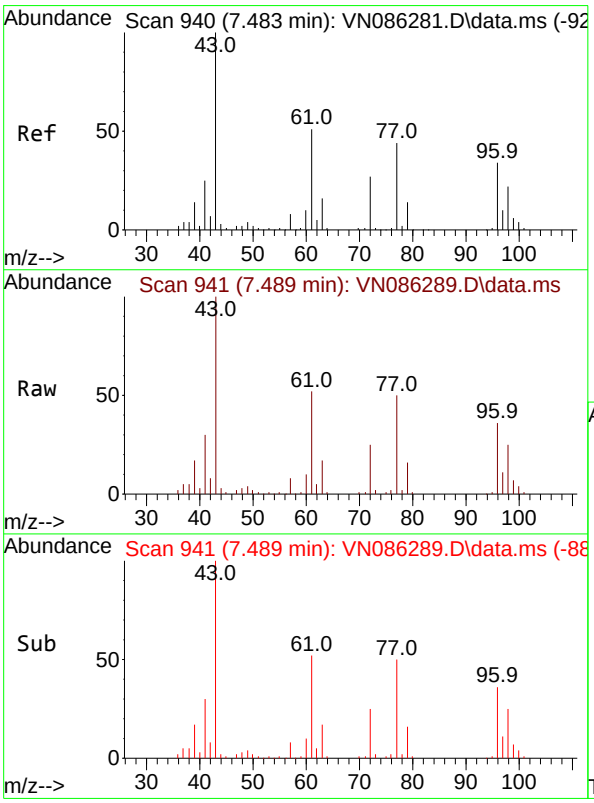
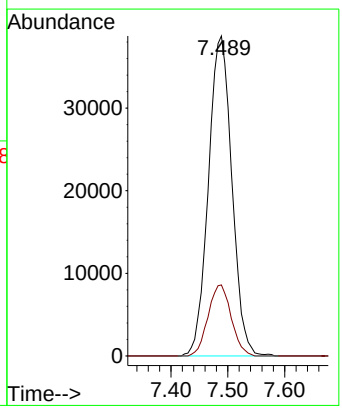


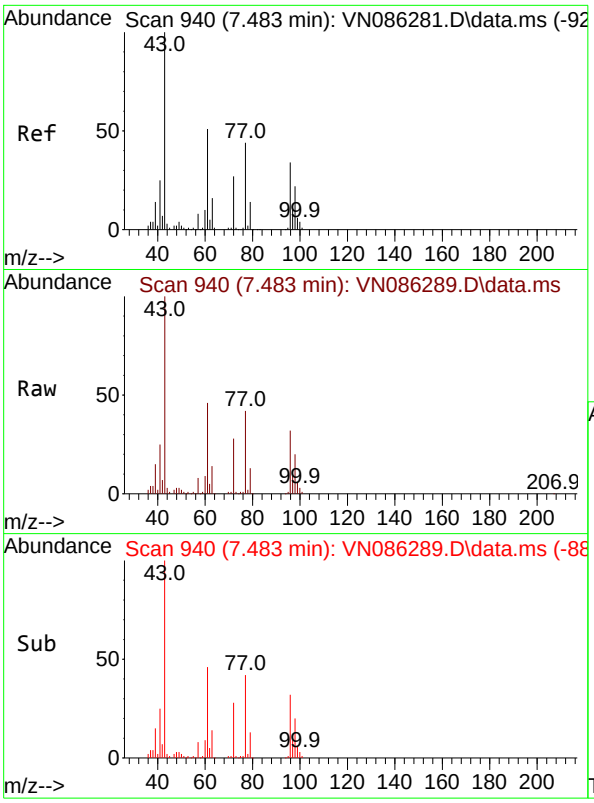


#26
2,2-Dichloropropane
Concen: 18.273 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 77 Resp: 111024

Ion	Ratio	Lower	Upper
77	100		
97	21.9	11.2	33.5





#27
cis-1,2-Dichloroethene
Concen: 17.486 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 96 Resp: 7546(

Ion	Ratio	Lower	Upper
96	100		
61	146.3	0.0	299.0
98	64.1	0.0	129.6

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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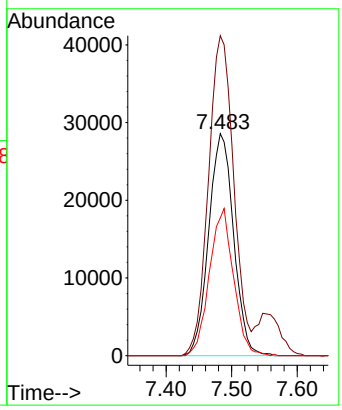
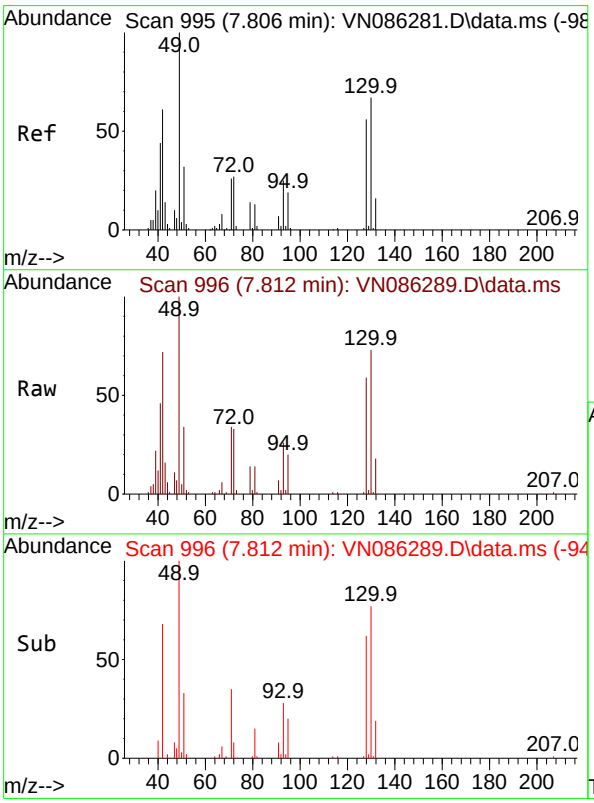
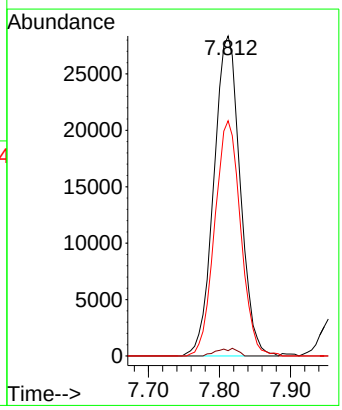


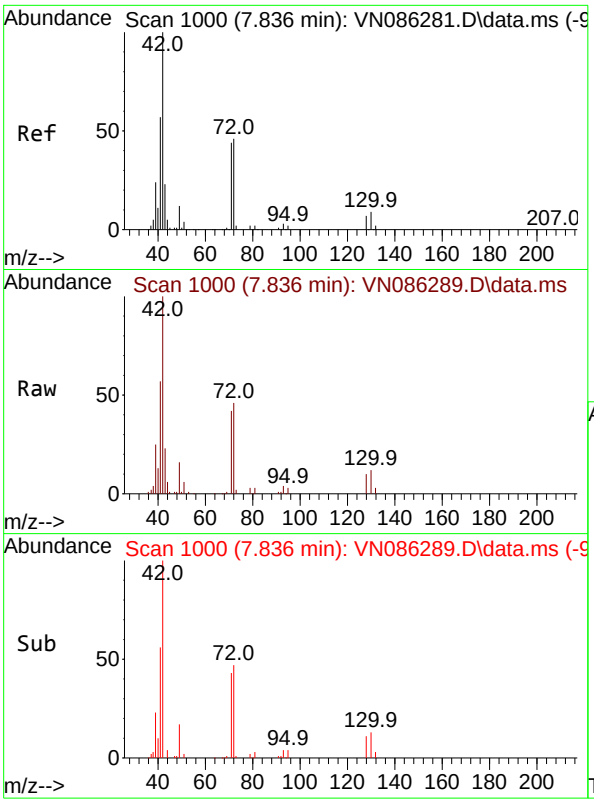


#28
Bromochloromethane
Concen: 25.364 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 49 Resp: 72980

Ion	Ratio	Lower	Upper
49	100		
129	1.9	0.0	3.4
130	72.5	57.1	85.7





#29
Tetrahydrofuran
Concen: 88.099 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 42 Resp: 15025

Ion	Ratio	Lower	Upper
42	100		
72	46.3	36.2	54.4
71	42.5	34.0	51.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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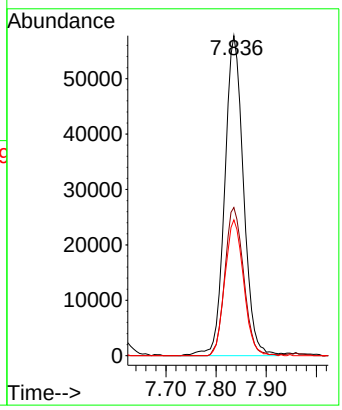
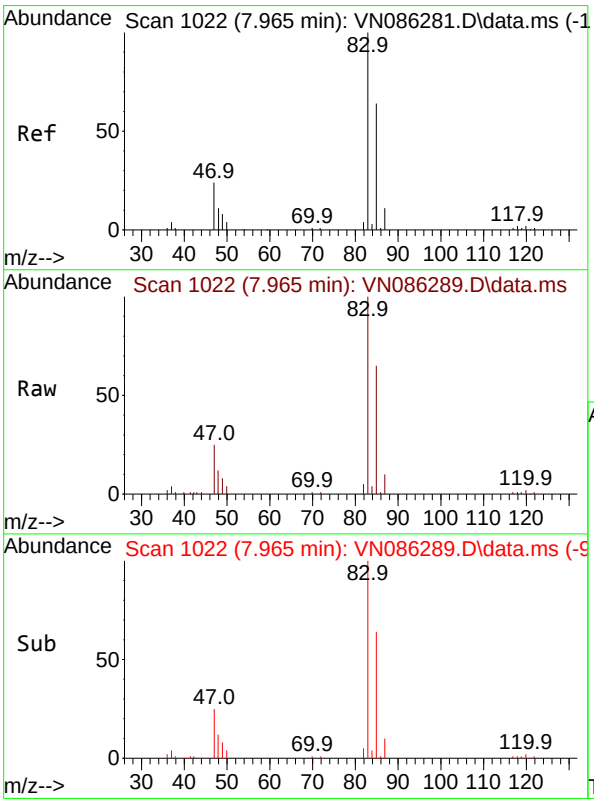
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

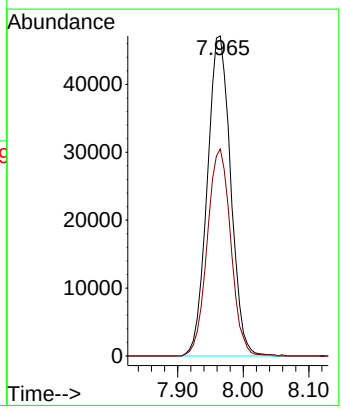


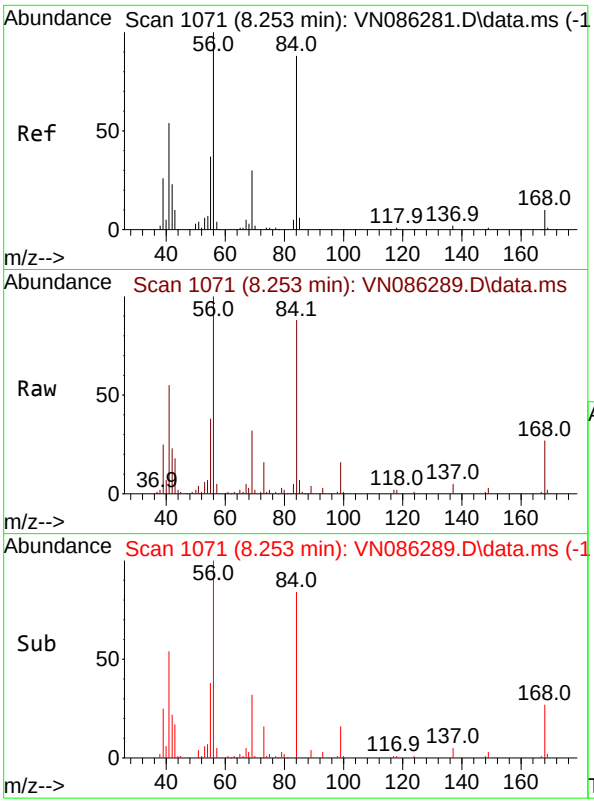


#30
Chloroform
Concen: 17.504 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 83 Resp: 116681

Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.5	77.3

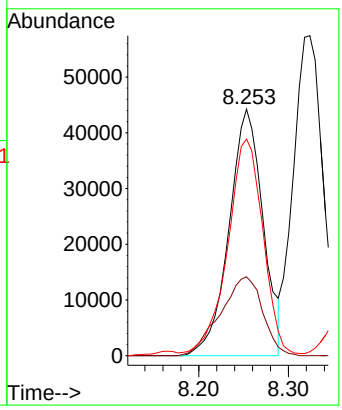




#31
Cyclohexane
Concen: 17.534 ug/l
RT: 8.253 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 56 Resp: 11643

Ion	Ratio	Lower	Upper
56	100		
69	32.0	24.2	36.2
84	86.7	70.3	105.5



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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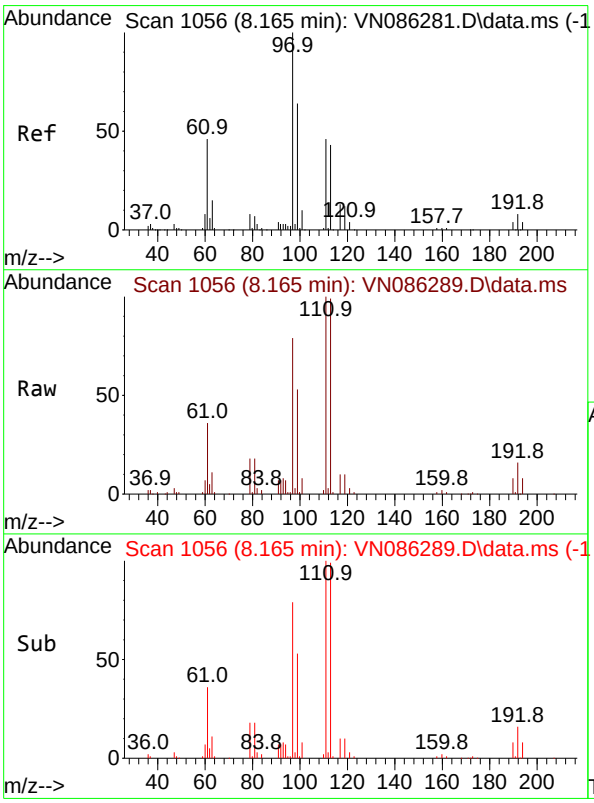
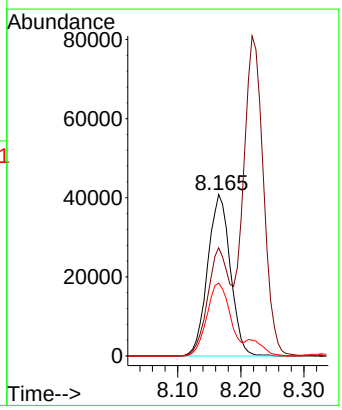
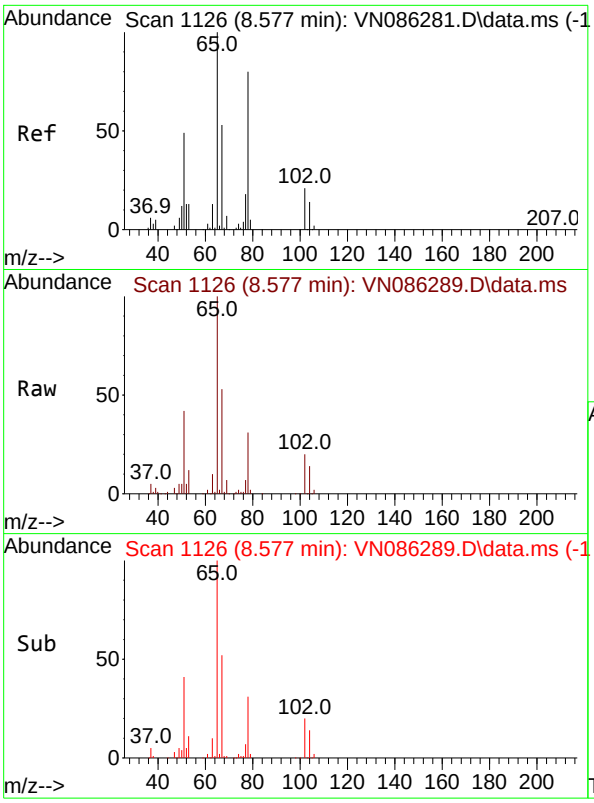


#32
1,1,1-Trichloroethane
Concen: 17.854 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 97 Resp: 101815

Ion	Ratio	Lower	Upper
97	100		
99	65.8	52.7	79.1
61	47.4	39.5	59.3

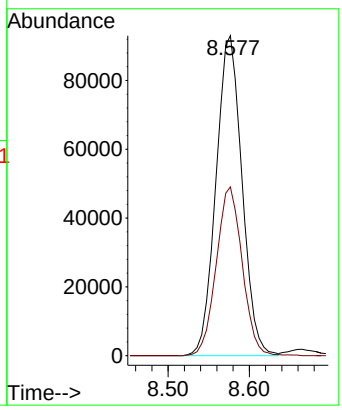




#33
1,2-Dichloroethane-d4
Concen: 50.596 ug/l
RT: 8.577 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 65 Resp: 20731

Ion	Ratio	Lower	Upper
65	100		
67	52.6	0.0	106.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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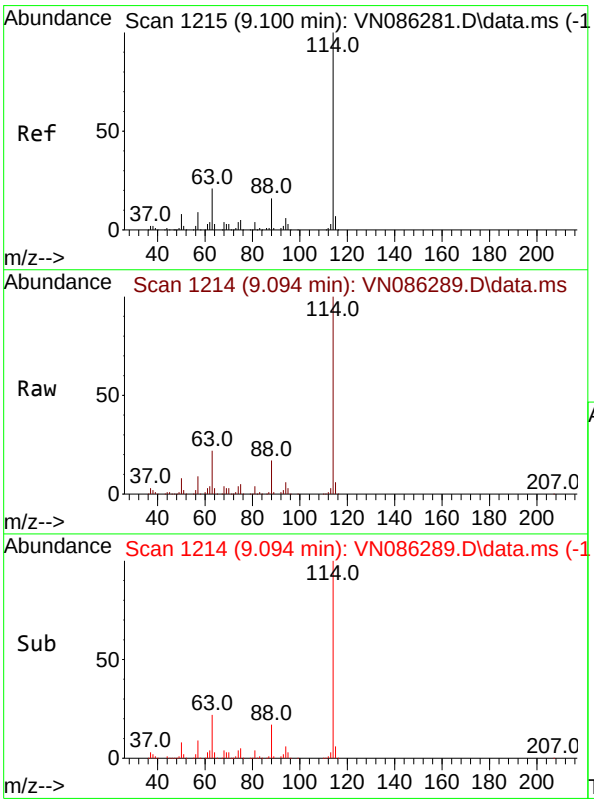
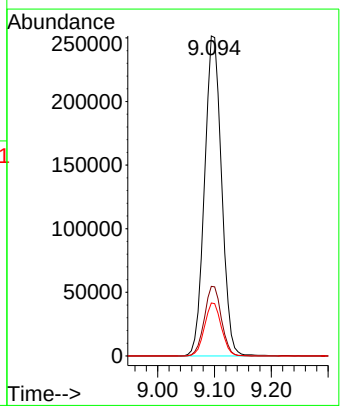
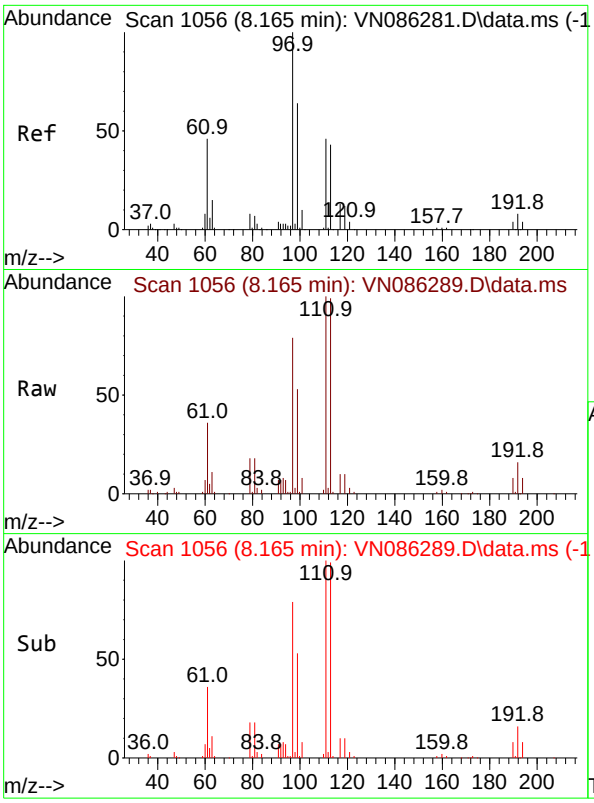


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. -0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:114 Resp: 522491

Ion	Ratio	Lower	Upper
114	100		
63	21.8	0.0	42.6
88	16.5	0.0	31.8

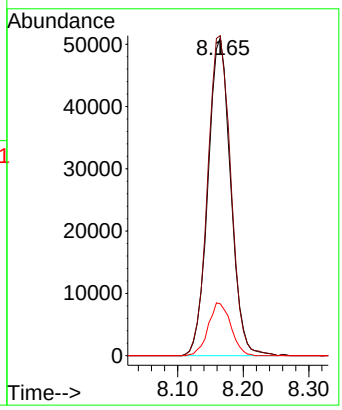




#35
Dibromofluoromethane
Concen: 50.406 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:113 Resp: 12223

Ion	Ratio	Lower	Upper
113	100		
111	103.0	83.4	125.0
192	16.6	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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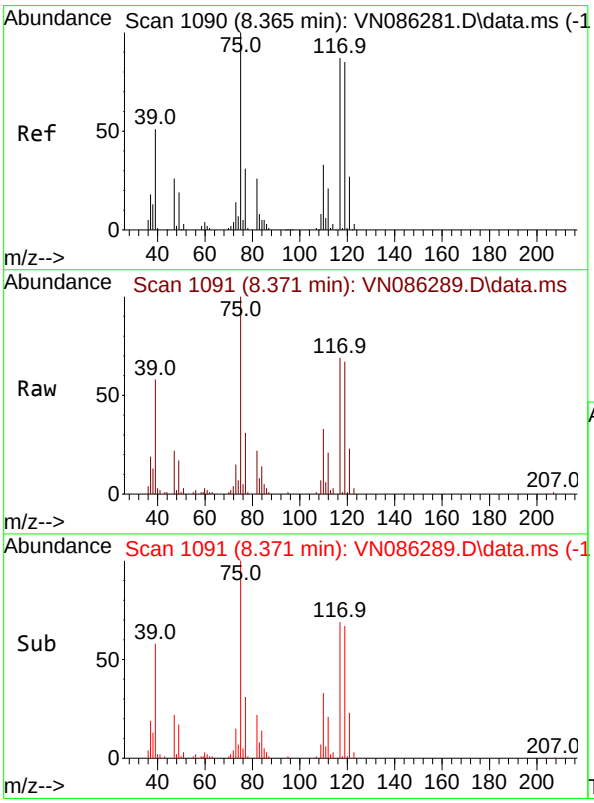
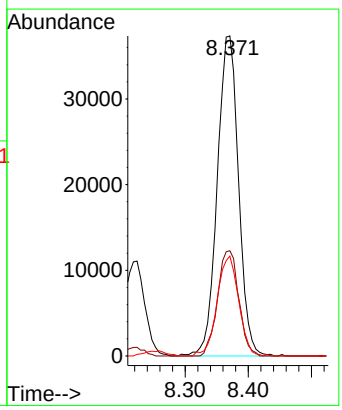
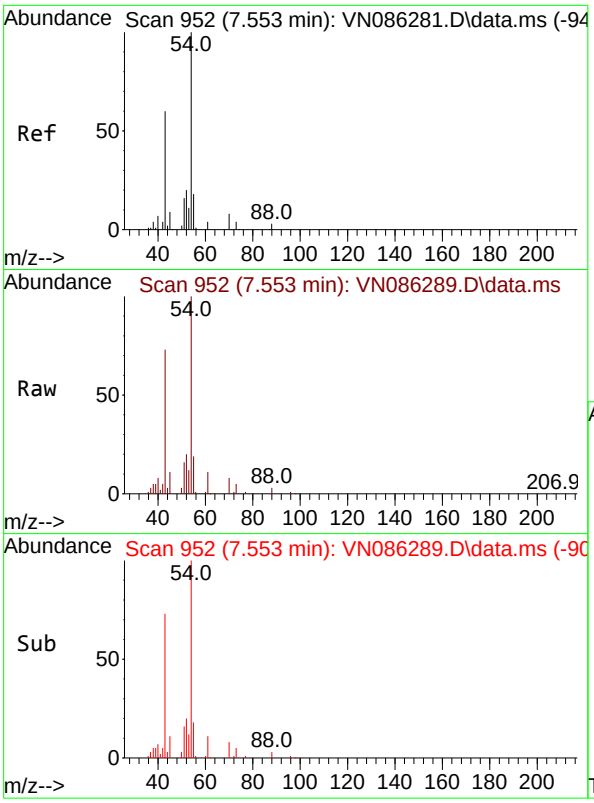


#36
1,1-Dichloropropene
Concen: 18.051 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 75 Resp: 87429

Ion	Ratio	Lower	Upper
75	100		
110	32.8	16.8	50.4
77	31.6	24.9	37.3





#37
Ethyl Acetate
Concen: 17.739 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 9045

Ion	Ratio	Lower	Upper
43	100		
61	15.0	11.1	16.7
70	11.0	9.2	13.8

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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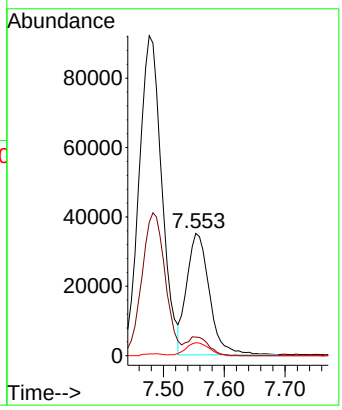
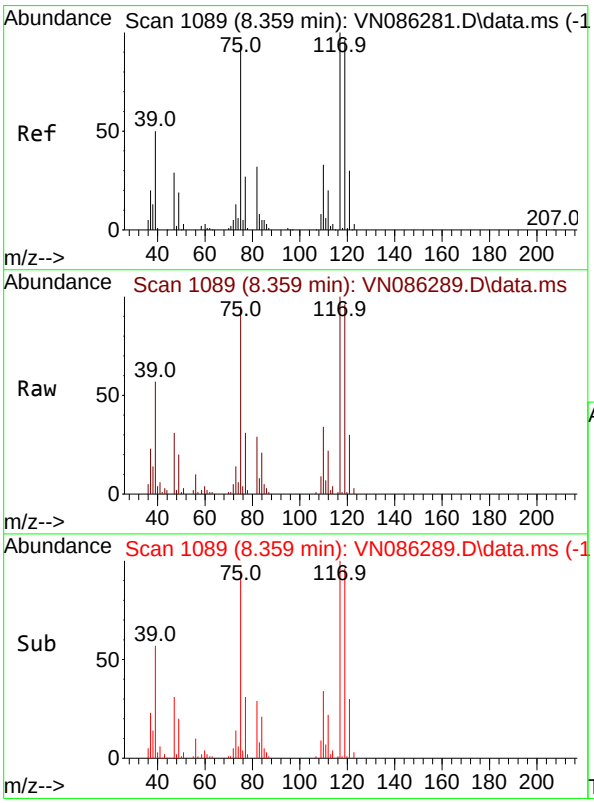
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

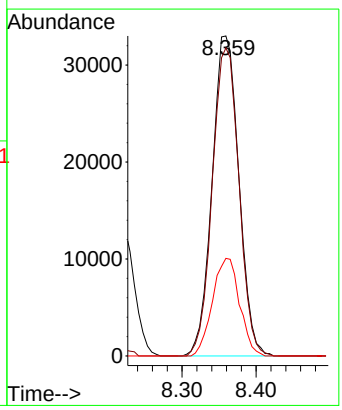


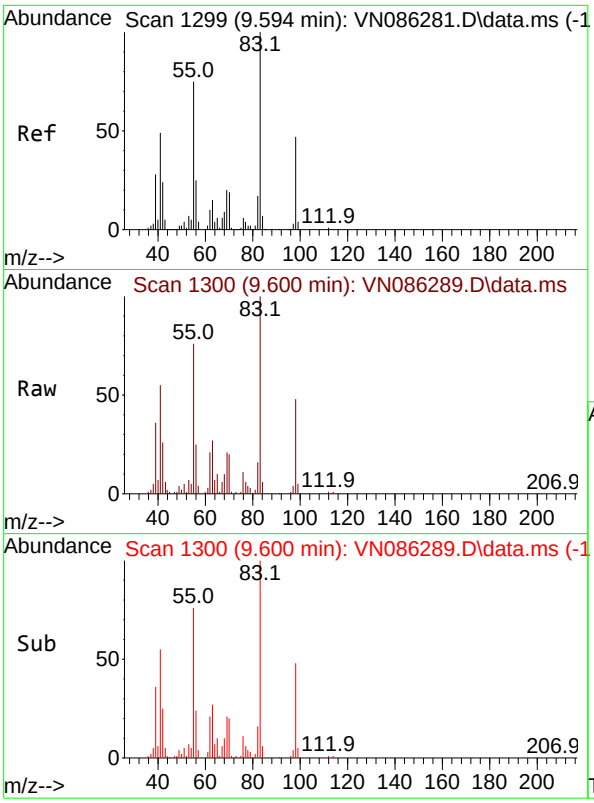


#38
Carbon Tetrachloride
Concen: 17.938 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:117 Resp: 82737

Ion	Ratio	Lower	Upper
117	100		
119	96.2	76.8	115.2
121	30.5	23.8	35.8





#39
Methylcyclohexane
Concen: 18.090 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 83 Resp: 10414

Ion	Ratio	Lower	Upper
83	100		
55	76.3	59.8	89.8
98	47.7	37.9	56.9

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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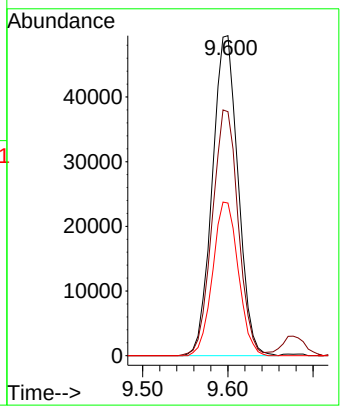
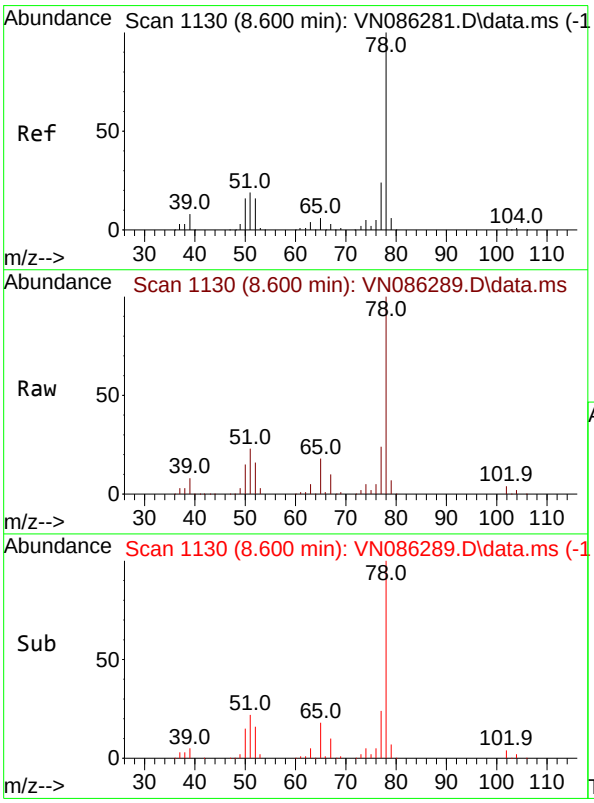
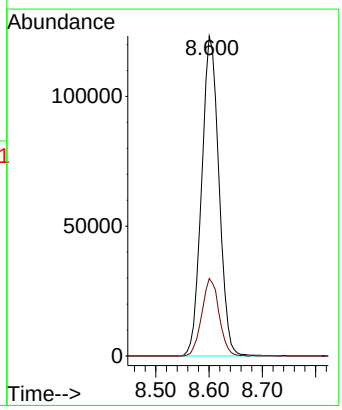


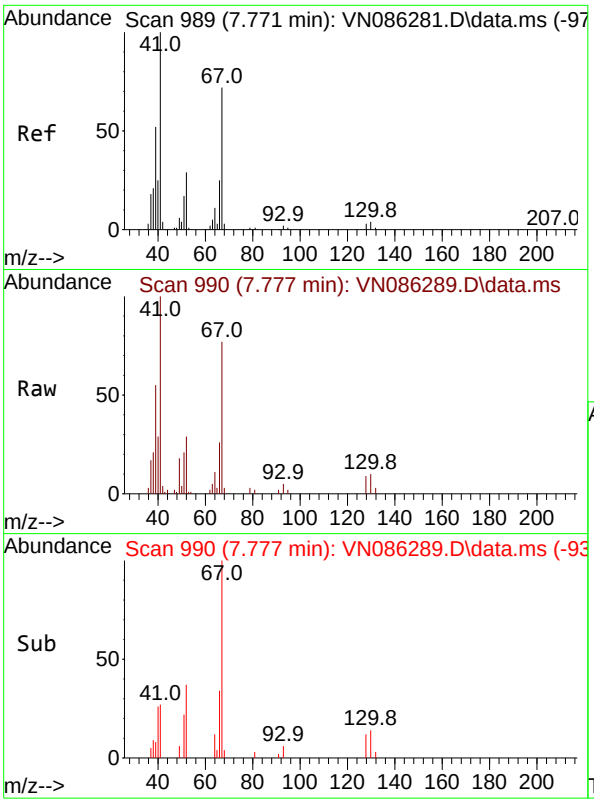


#40
Benzene
Concen: 17.916 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 78 Resp: 278025

Ion	Ratio	Lower	Upper
78	100		
77	24.2	19.4	29.2

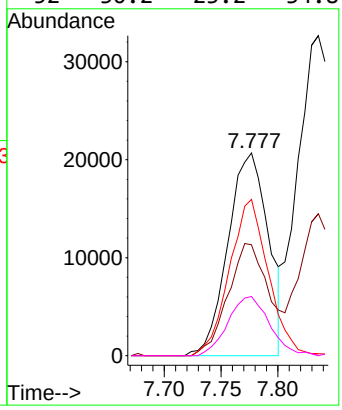




#41
Methacrylonitrile
Concen: 17.301 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 41 Resp: 5113

Ion	Ratio	Lower	Upper
41	100		
39	57.1	43.0	64.4
67	74.4	58.8	88.2
52	30.2	23.2	34.8



Instrument :
MSVOA_N
ClientSampleId :
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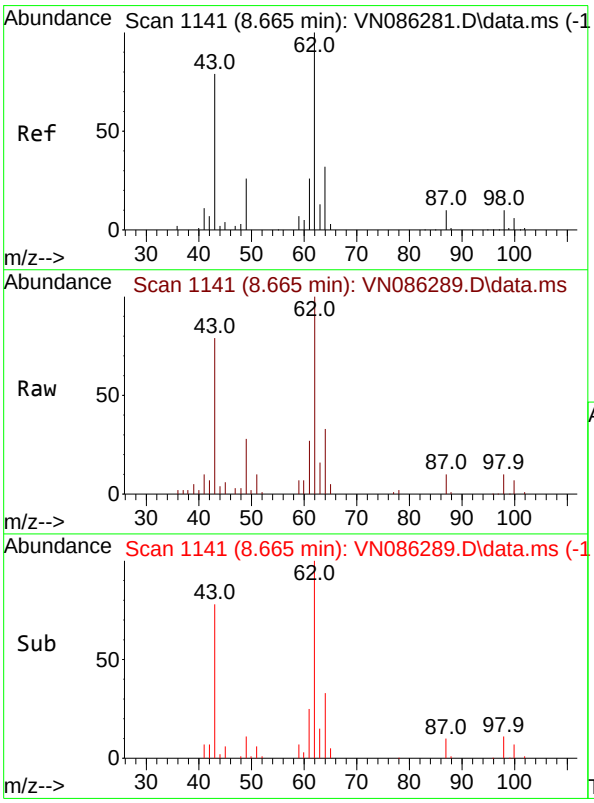
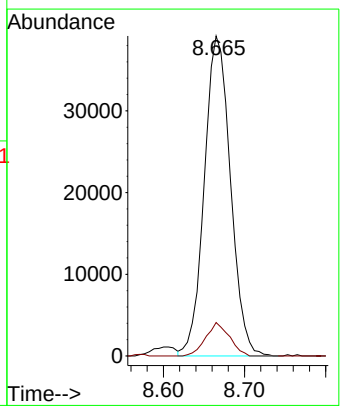
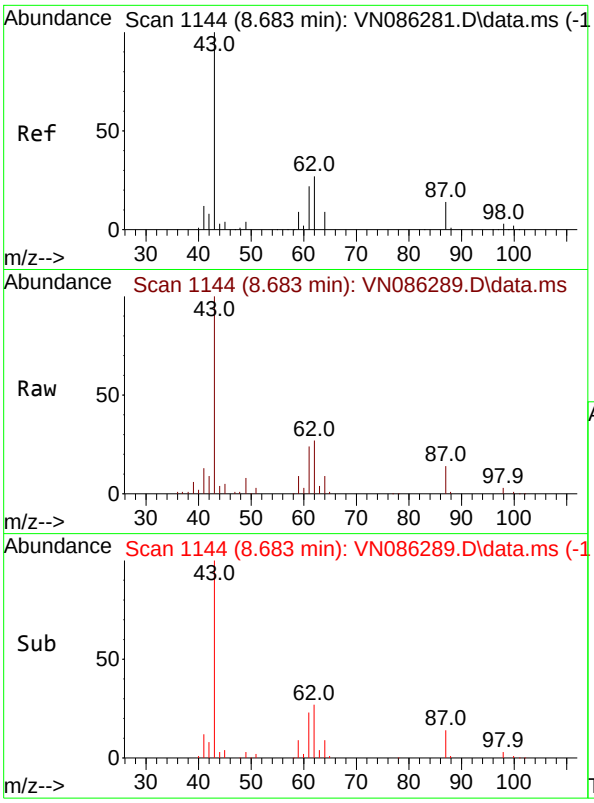


#42
1,2-Dichloroethane
Concen: 17.743 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 62 Resp: 87802

Ion	Ratio	Lower	Upper
62	100		
98	9.5	0.0	19.2





#43
Isopropyl Acetate
Concen: 17.329 ug/l
RT: 8.683 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 17206

Ion	Ratio	Lower	Upper
43	100		
61	24.8	20.5	30.7
87	12.9	10.5	15.7

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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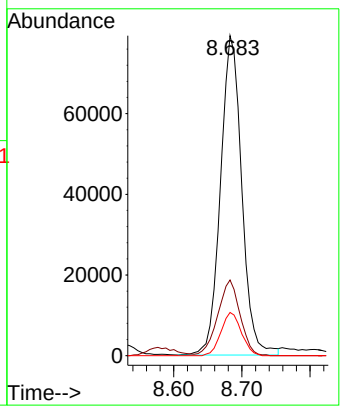
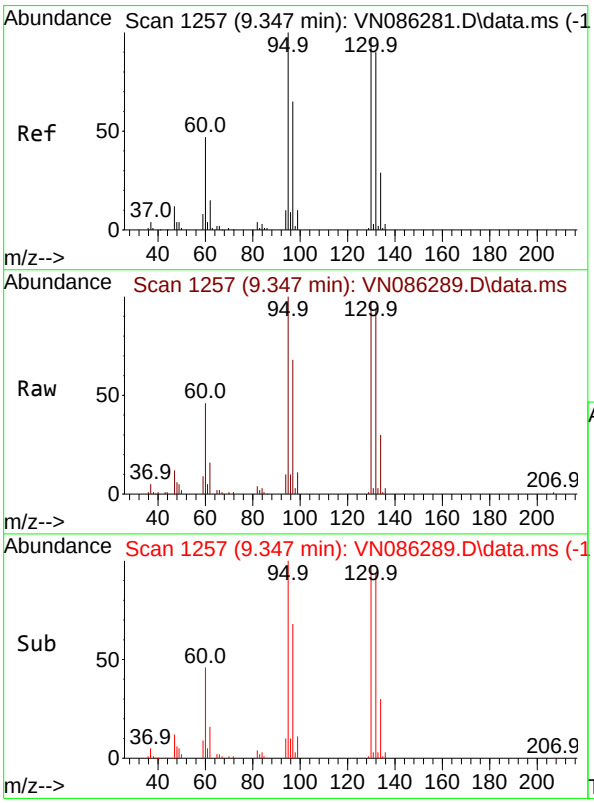
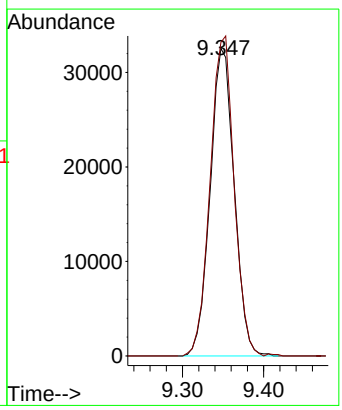


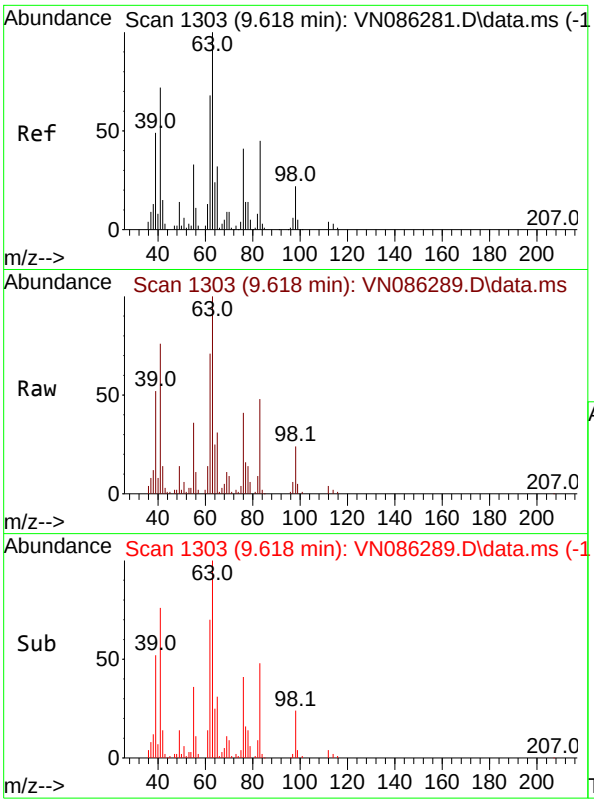


#44
Trichloroethene
Concen: 18.209 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:130 Resp: 66974

Ion	Ratio	Lower	Upper
130	100		
95	102.0	0.0	207.2





#45
1,2-Dichloropropane
Concen: 17.784 ug/l
RT: 9.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 63 Resp: 6755

Ion	Ratio	Lower	Upper
63	100		
65	30.8	25.4	38.2

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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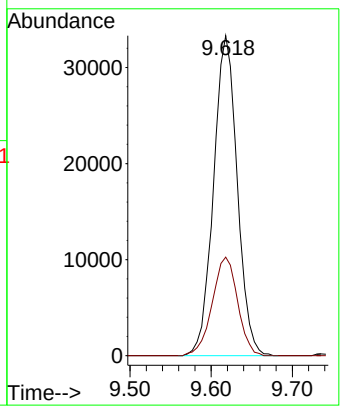
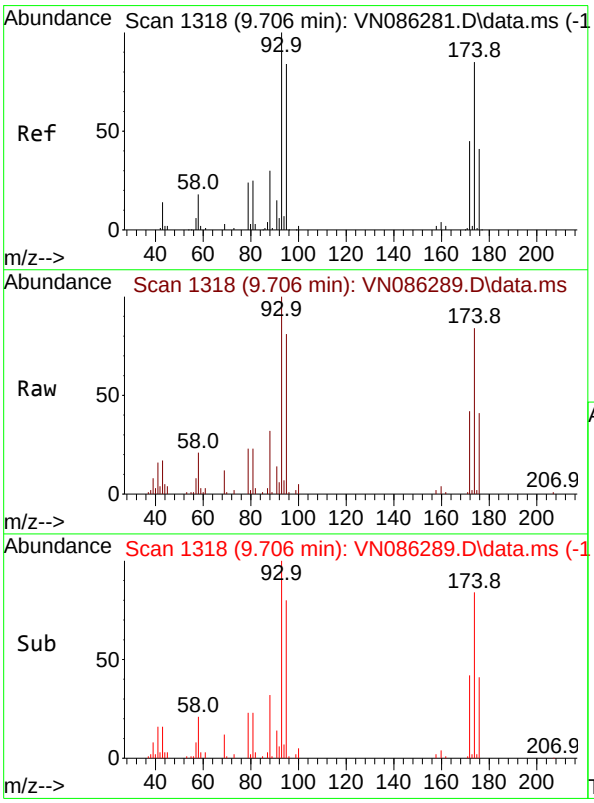
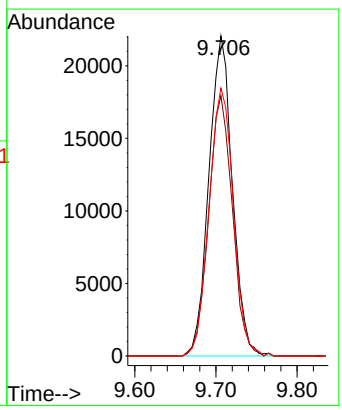


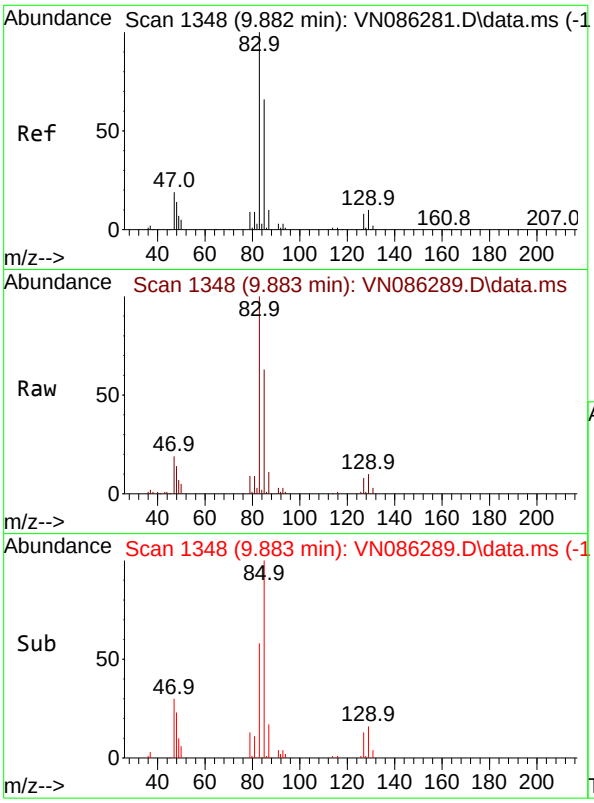


#46
Dibromomethane
Concen: 18.324 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 93 Resp: 44348

Ion	Ratio	Lower	Upper
93	100		
95	82.2	66.2	99.4
174	86.7	67.8	101.6

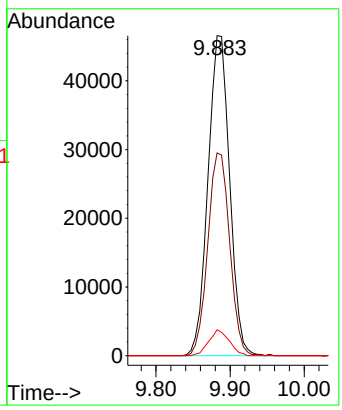




#47
Bromodichloromethane
Concen: 18.079 ug/l
RT: 9.883 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 83 Resp: 9450

Ion	Ratio	Lower	Upper
83	100		
85	63.4	52.6	78.8
127	8.1	6.1	9.1



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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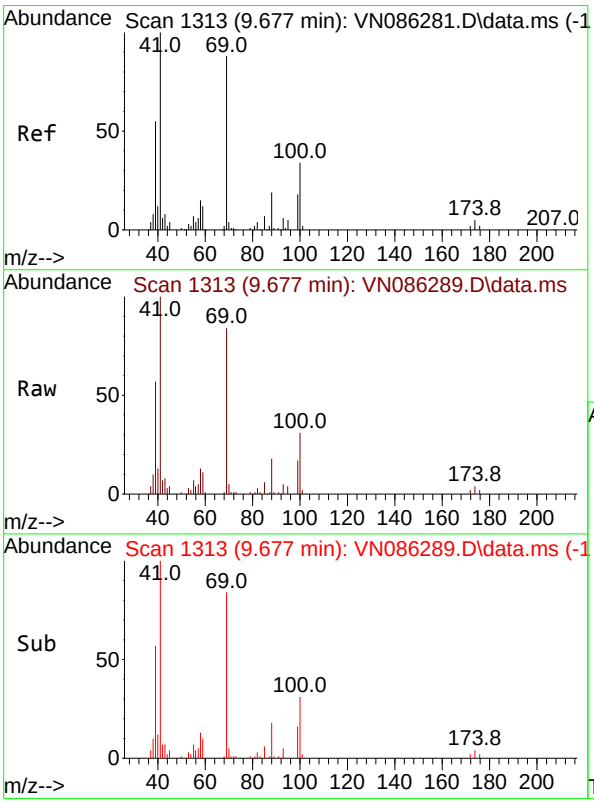
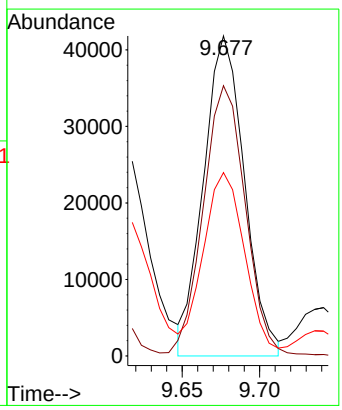
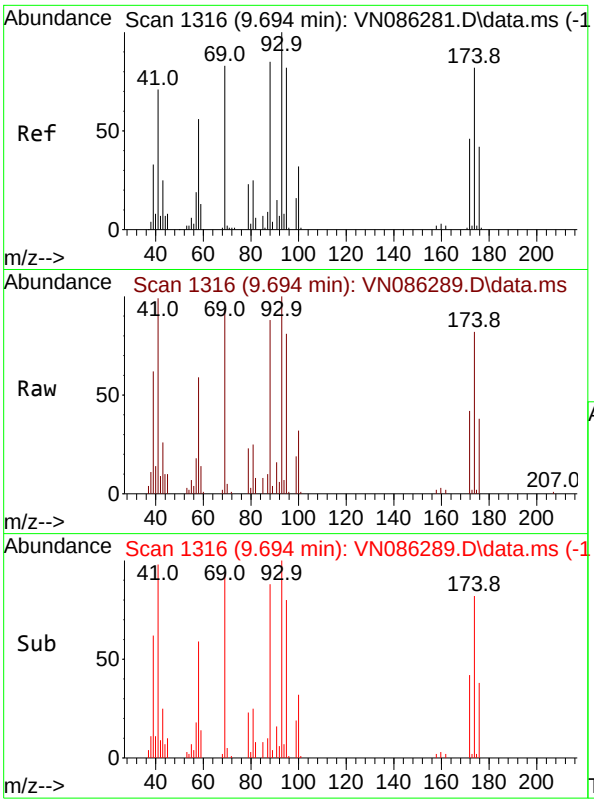


#48
Methyl methacrylate
Concen: 17.127 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 41 Resp: 76692

Ion	Ratio	Lower	Upper
41	100		
69	87.5	68.2	102.2
39	58.8	45.2	67.8

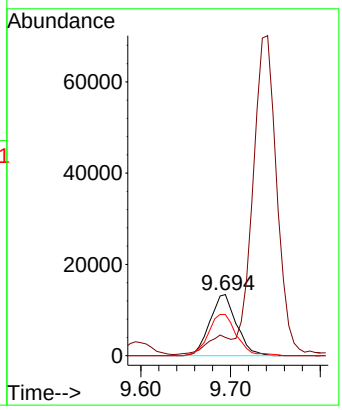




#49
1,4-Dioxane
Concen: 360.936 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 88 Resp: 2749

Ion	Ratio	Lower	Upper
88	100		
43	28.3	23.8	35.8
58	71.7	57.4	86.2



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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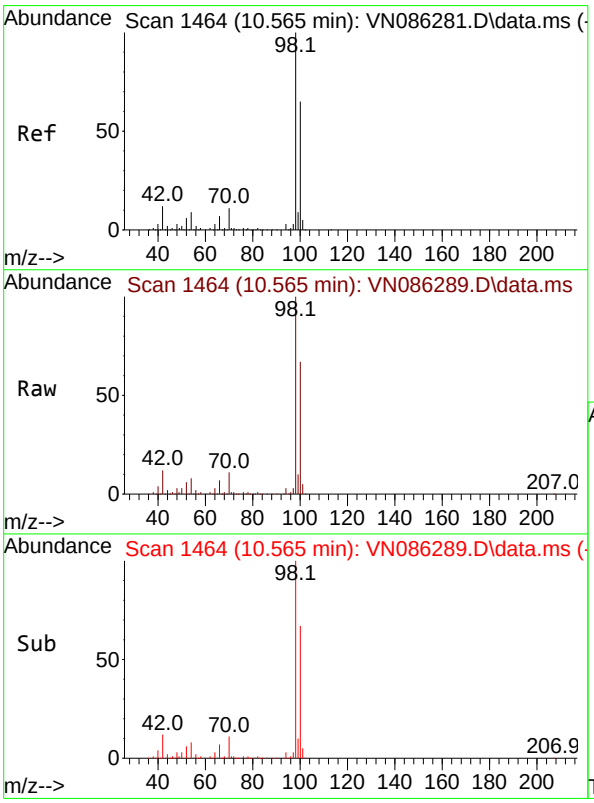
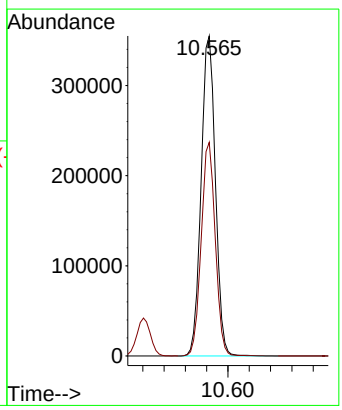
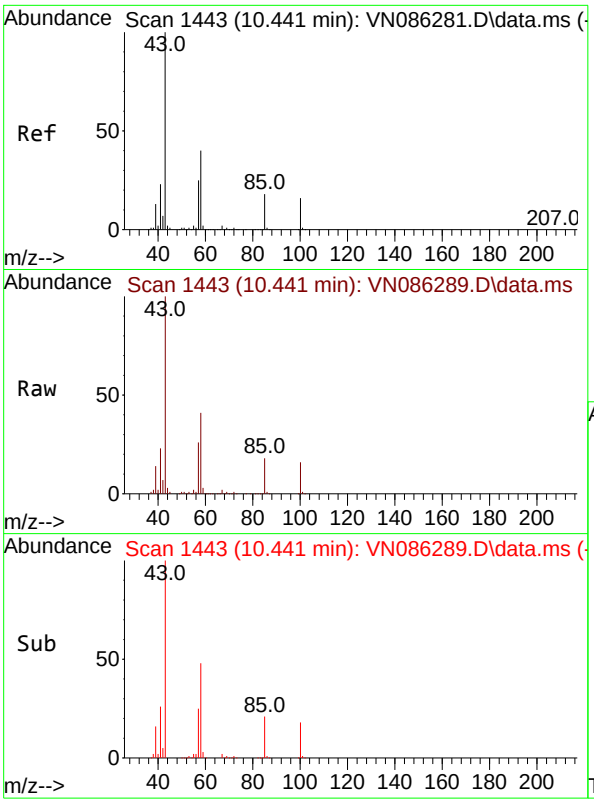


#50
Toluene-d8
Concen: 50.809 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 98 Resp: 658487

Ion	Ratio	Lower	Upper
98	100		
100	65.9	52.5	78.7

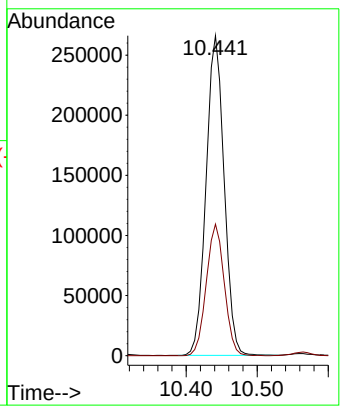




#51
4-Methyl-2-Pentanone
Concen: 89.934 ug/l
RT: 10.441 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 46959

Ion	Ratio	Lower	Upper
43	100		
58	41.1	32.2	48.4



Instrument :
MSVOA_N
ClientSampleId :
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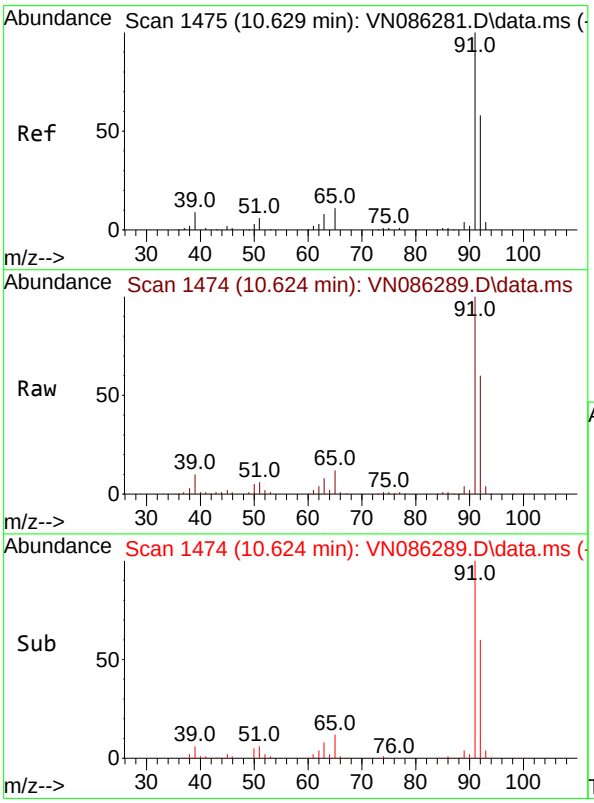
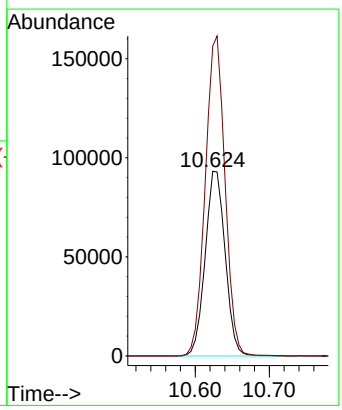
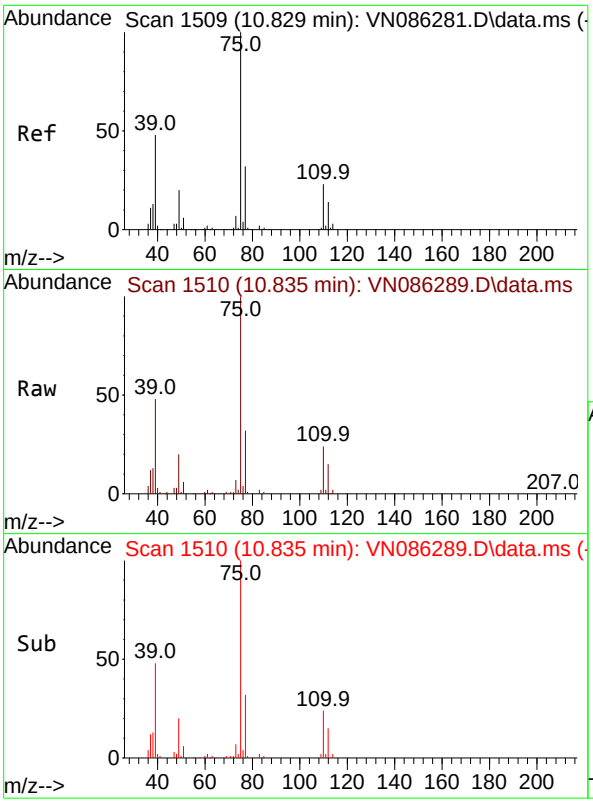


#52
Toluene
Concen: 18.029 ug/l
RT: 10.624 min Scan# 1474
Delta R.T. -0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 92 Resp: 174573

Ion	Ratio	Lower	Upper
92	100		
91	170.9	137.3	205.9

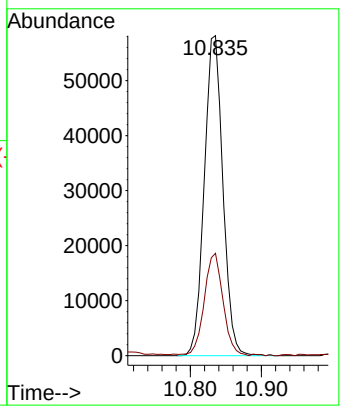




#53
t-1,3-Dichloropropene
Concen: 18.151 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 75 Resp: 10591

Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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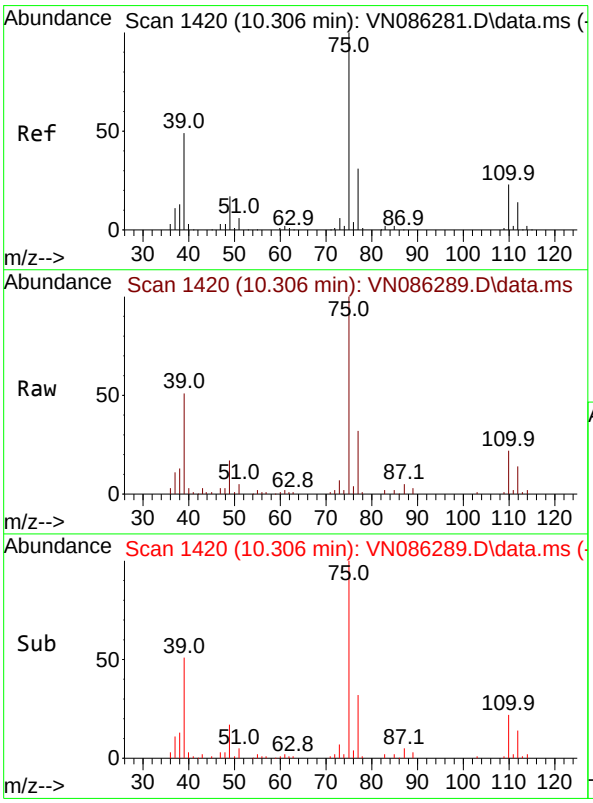
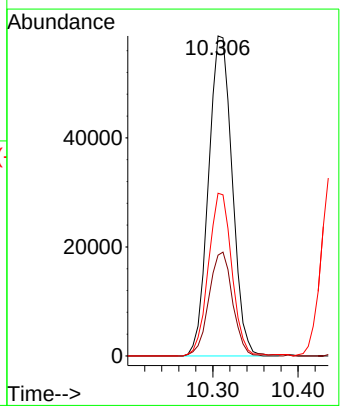
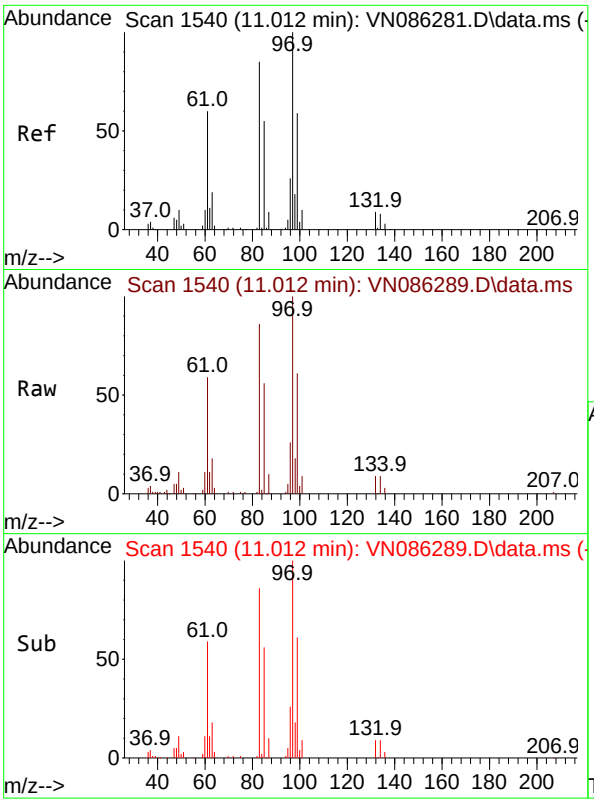


#54
cis-1,3-Dichloropropene
Concen: 17.722 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 75 Resp: 113584

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.2	37.8
39	50.9	39.3	58.9

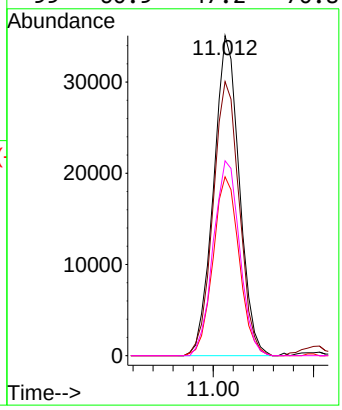




#55
1,1,2-Trichloroethane
Concen: 17.895 ug/l
RT: 11.012 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 97 Resp: 6234

Ion	Ratio	Lower	Upper
97	100		
83	85.6	68.4	102.6
85	55.9	43.9	65.9
99	60.9	47.2	70.8



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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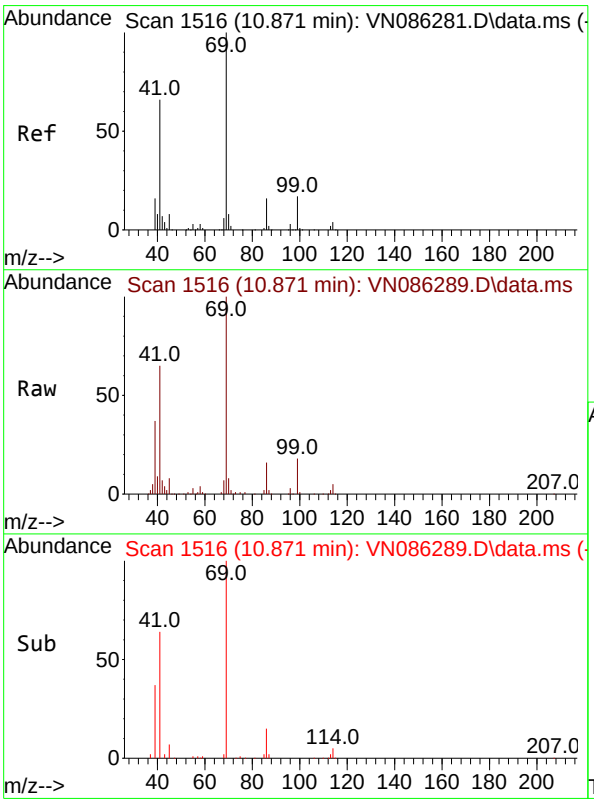
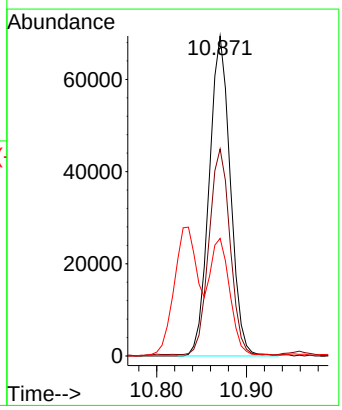
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

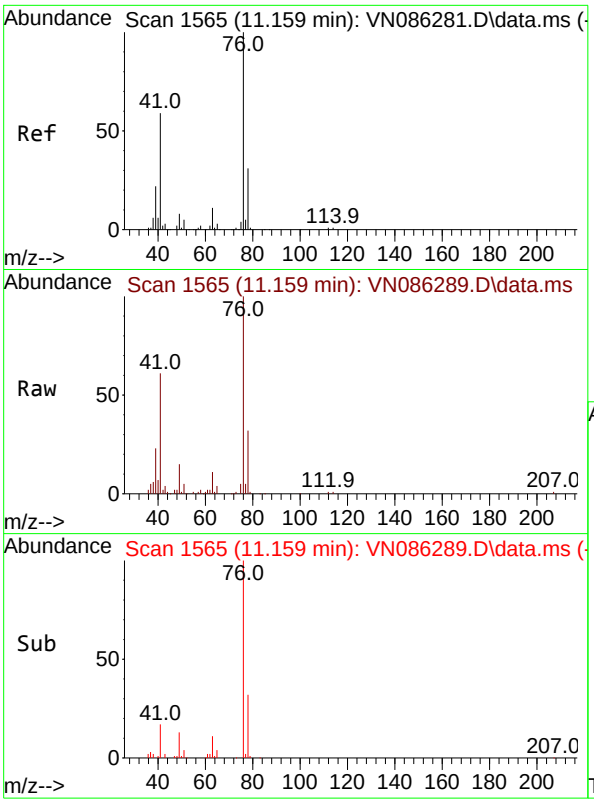


#56
Ethyl methacrylate
Concen: 17.763 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 69 Resp: 113753

Ion	Ratio	Lower	Upper
69	100		
41	64.4	51.7	77.5
39	33.9	26.3	39.5





#57
1,3-Dichloropropane
Concen: 17.939 ug/l
RT: 11.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 76 Resp: 11088

Ion	Ratio	Lower	Upper
76	100		
78	32.0	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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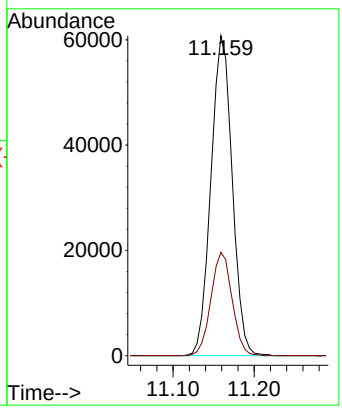
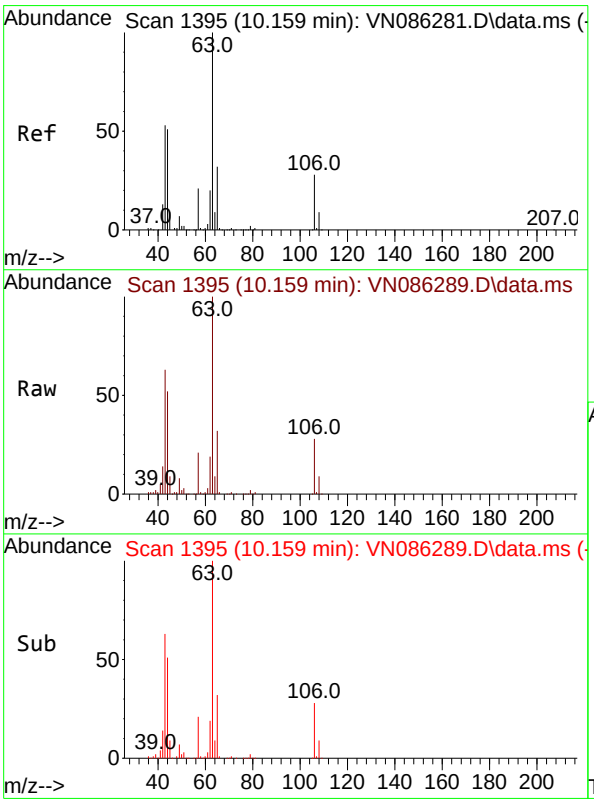
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

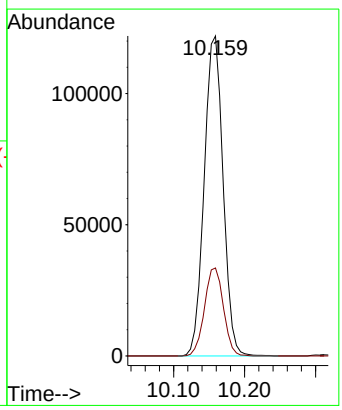


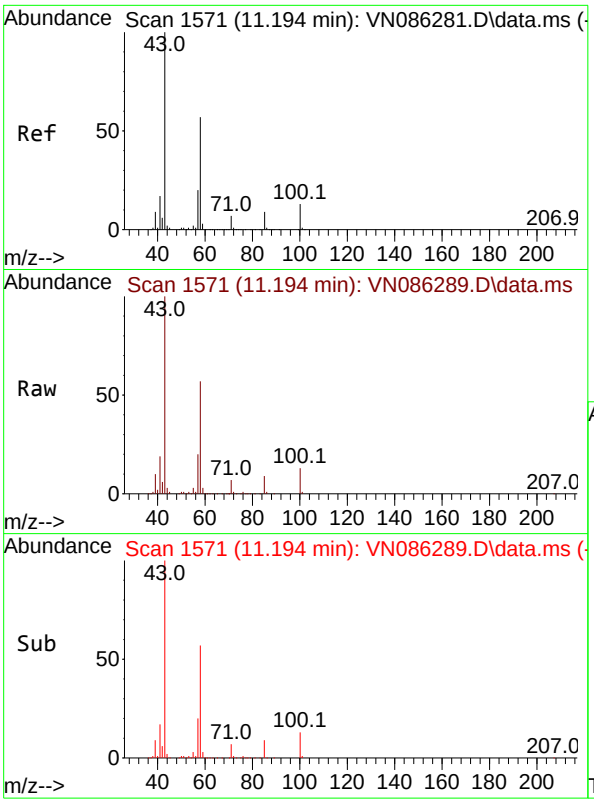


#58
2-Chloroethyl Vinyl ether
Concen: 74.181 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 63 Resp: 225469

Ion	Ratio	Lower	Upper
63	100		
106	27.6	22.2	33.2





#59
2-Hexanone
Concen: 92.611 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 35868

Ion	Ratio	Lower	Upper
43	100		
58	57.0	28.3	85.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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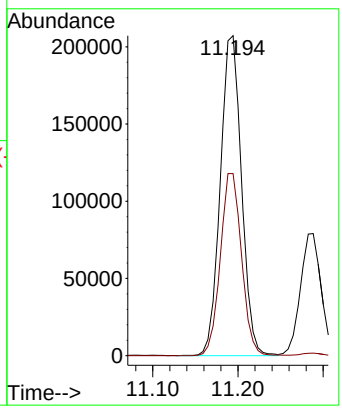
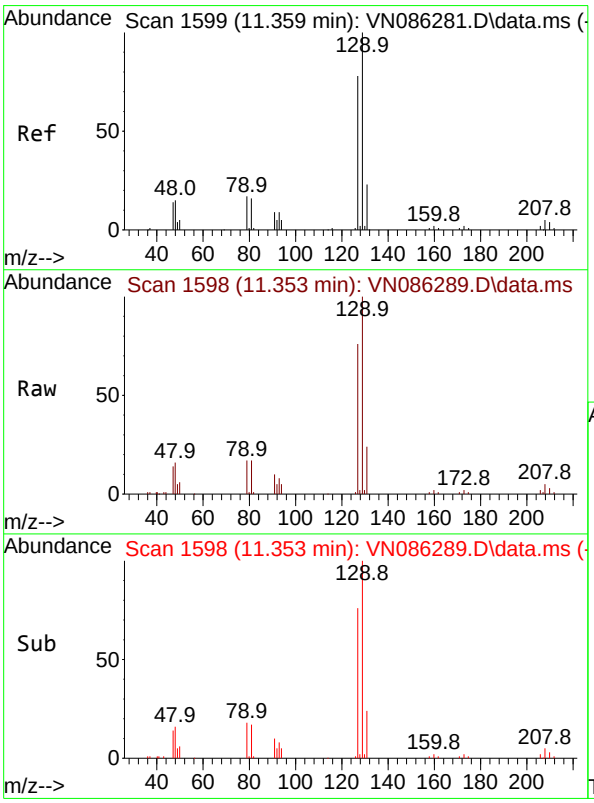
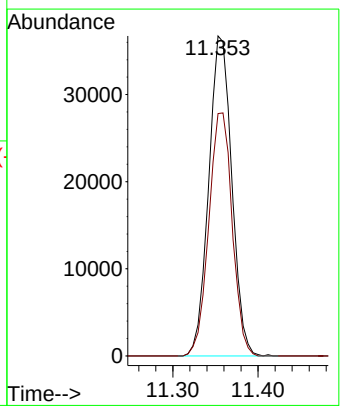


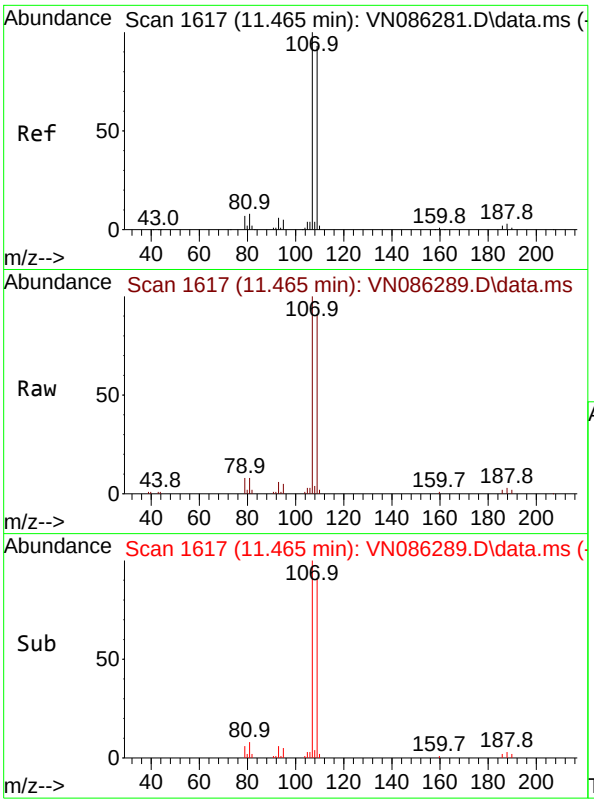


#60
Dibromochloromethane
Concen: 18.045 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:129 Resp: 69031

Ion	Ratio	Lower	Upper
129	100		
127	77.0	38.7	116.1





#61
1,2-Dibromoethane
Concen: 18.134 ug/l
RT: 11.465 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:107 Resp: 6374

Ion	Ratio	Lower	Upper
107	100		
109	93.0	75.4	113.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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Reviewed By :John Carlone 04/17/2025
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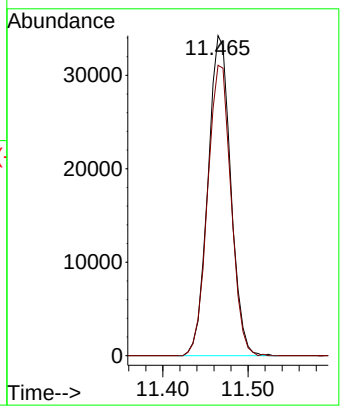
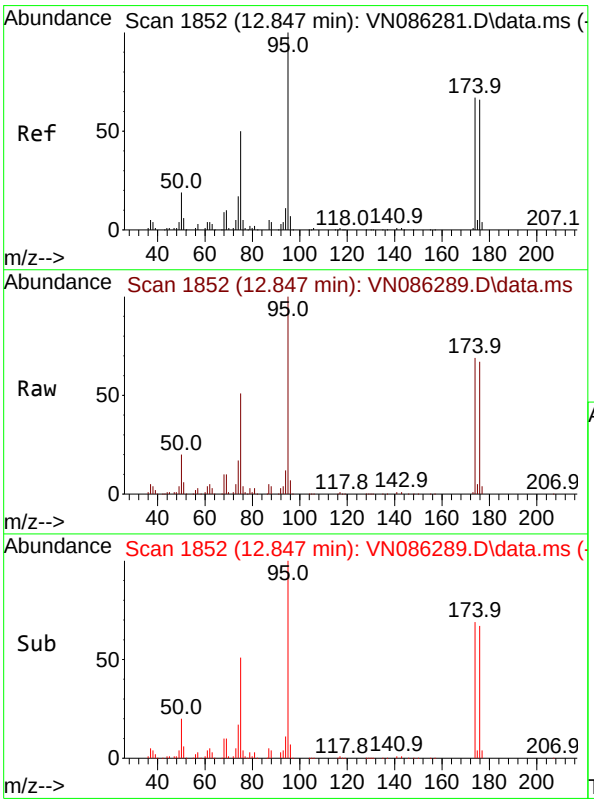
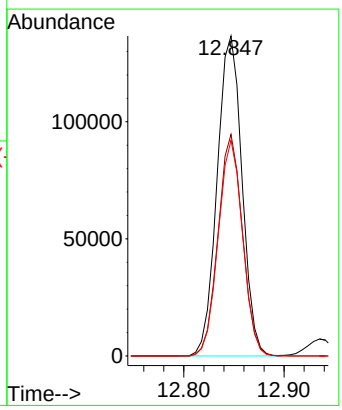


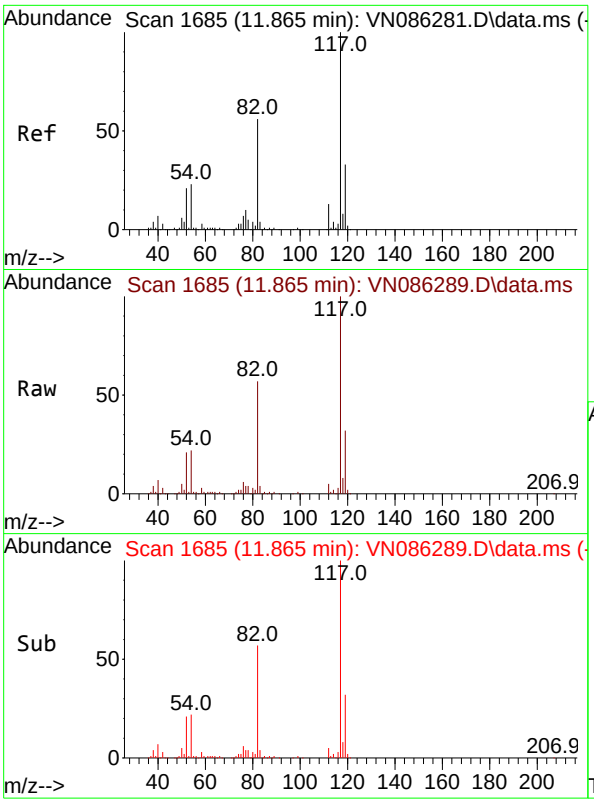


#62
4-Bromofluorobenzene
Concen: 49.777 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 95 Resp: 235301

Ion	Ratio	Lower	Upper
95	100		
174	67.8	0.0	133.4
176	66.0	0.0	129.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:117 Resp: 46015

Ion	Ratio	Lower	Upper
117	100		
82	57.0	44.7	67.1
119	31.6	26.4	39.6

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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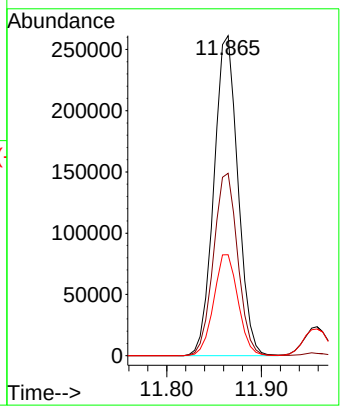
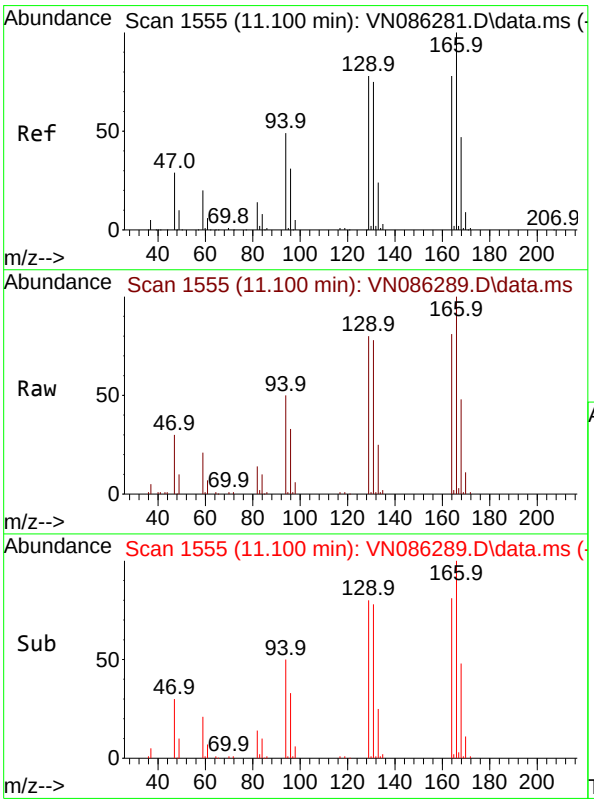
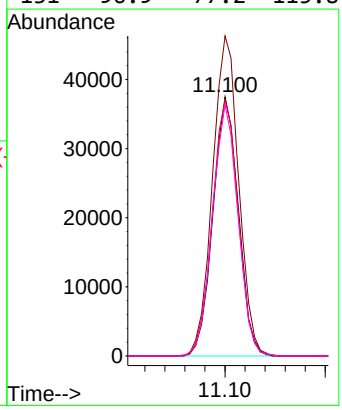


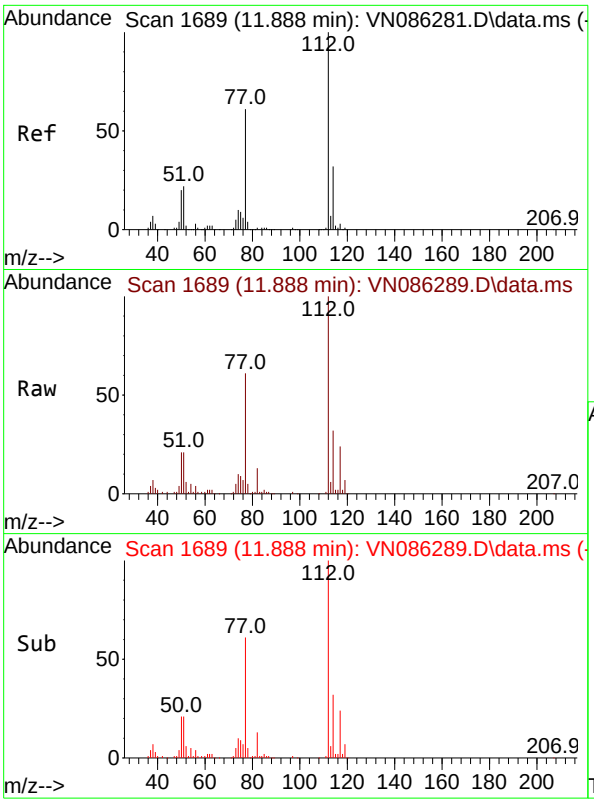


#64
Tetrachloroethene
Concen: 18.639 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:164 Resp: 65974

Ion	Ratio	Lower	Upper
164	100		
166	123.5	103.0	154.4
129	98.7	80.1	120.1
131	96.9	77.2	115.8

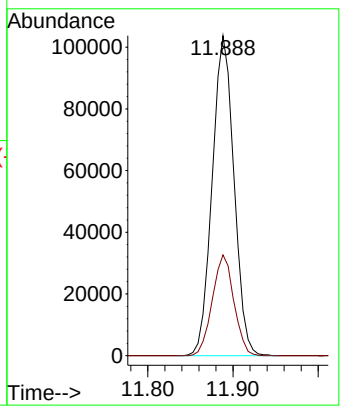




#65
Chlorobenzene
Concen: 17.923 ug/l
RT: 11.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:112 Resp: 18405

Ion	Ratio	Lower	Upper
112	100		
114	31.5	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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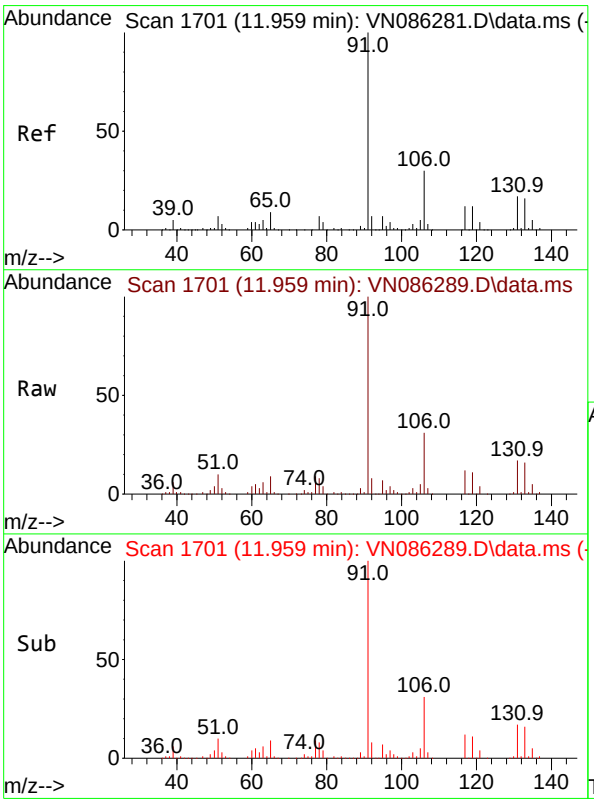
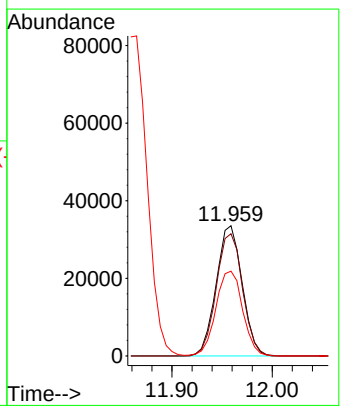
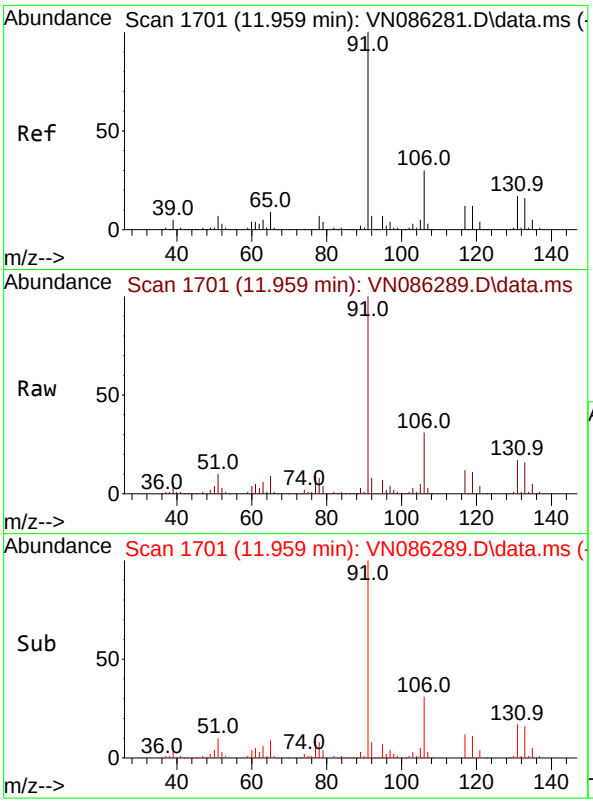


#66
1,1,1,2-Tetrachloroethane
Concen: 17.852 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:131 Resp: 60477

Ion	Ratio	Lower	Upper
131	100		
133	95.0	47.1	141.3
119	67.0	33.8	101.4





#67
Ethyl Benzene
Concen: 17.959 ug/l
RT: 11.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 91 Resp: 33279

Ion	Ratio	Lower	Upper
91	100		
106	31.1	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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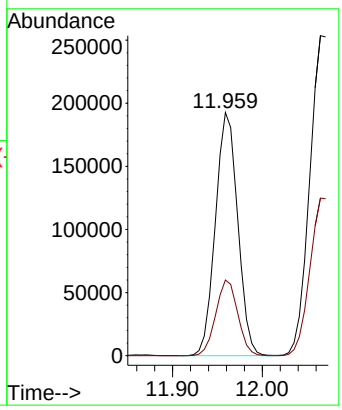
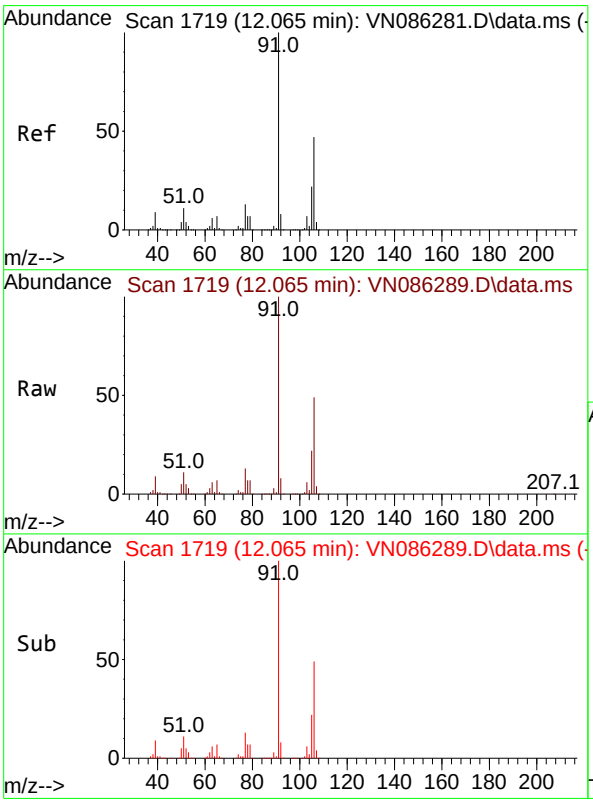
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

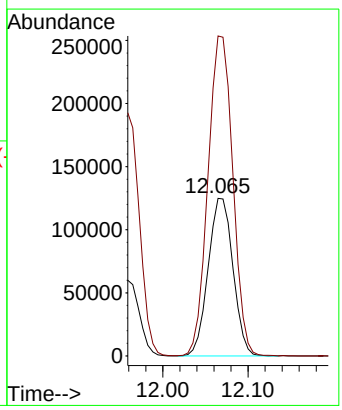


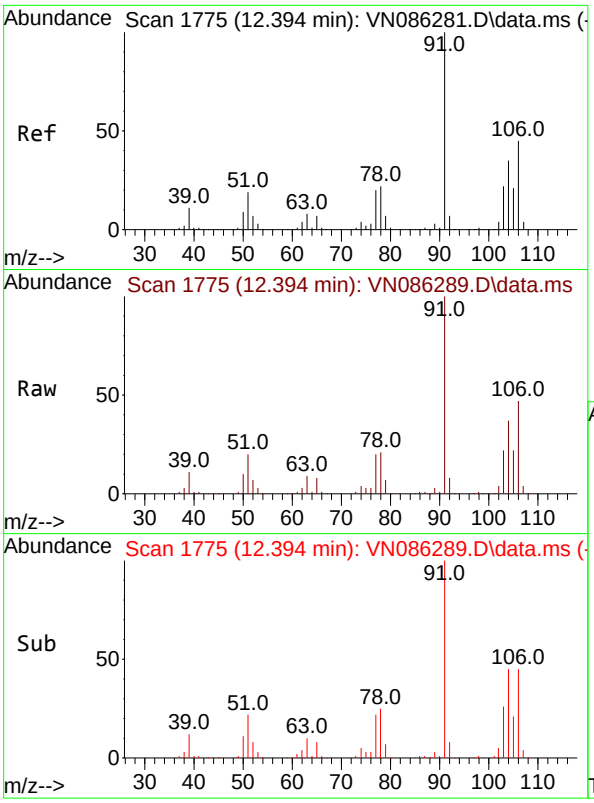


#68
m/p-Xylenes
Concen: 36.335 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:106 Resp: 252292

Ion	Ratio	Lower	Upper
106	100		
91	203.6	166.5	249.7





#69
o-Xylene
Concen: 17.991 ug/l
RT: 12.394 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:106 Resp: 12354

Ion	Ratio	Lower	Upper
106	100		
91	215.6	109.7	329.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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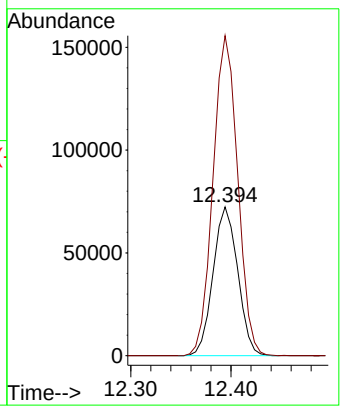
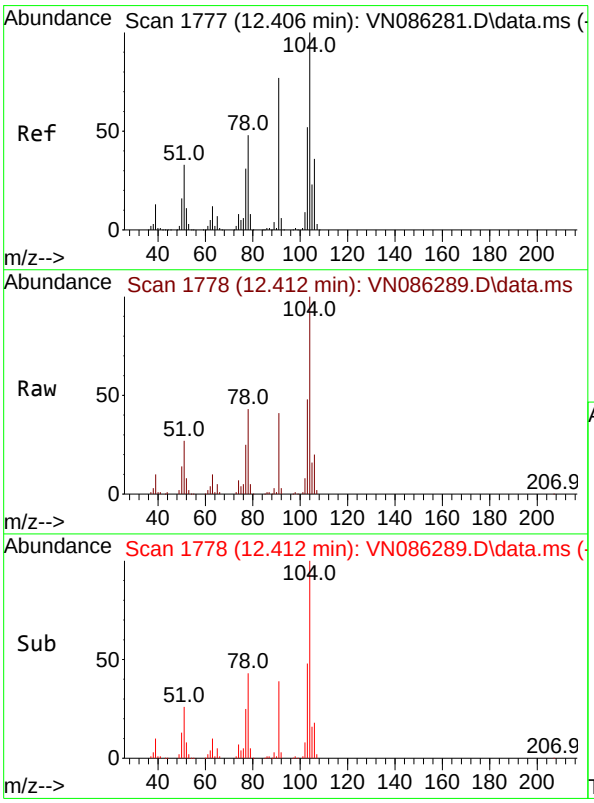
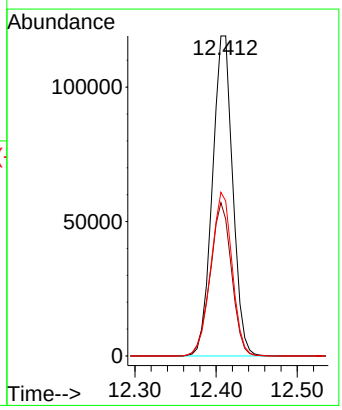


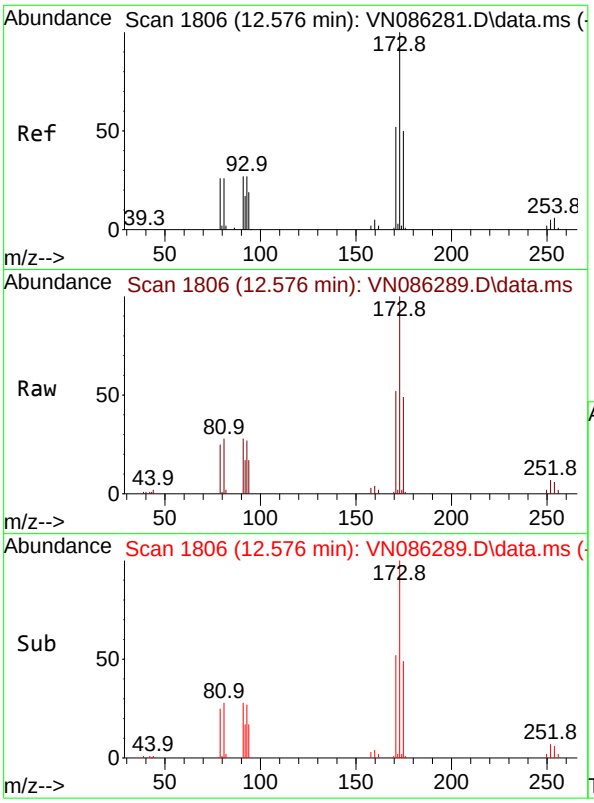


#70
Styrene
Concen: 18.137 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:104 Resp: 207507

Ion	Ratio	Lower	Upper
104	100		
78	50.0	40.6	61.0
103	53.6	43.6	65.4





#71
Bromoform
Concen: 18.067 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:173 Resp: 4608

Ion	Ratio	Lower	Upper
173	100		
175	47.9	24.6	73.6
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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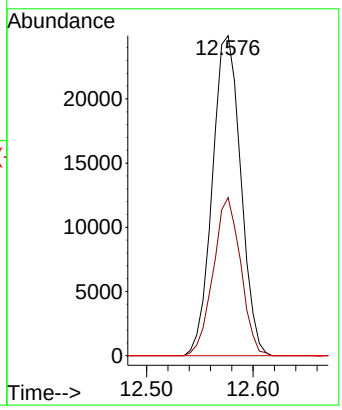
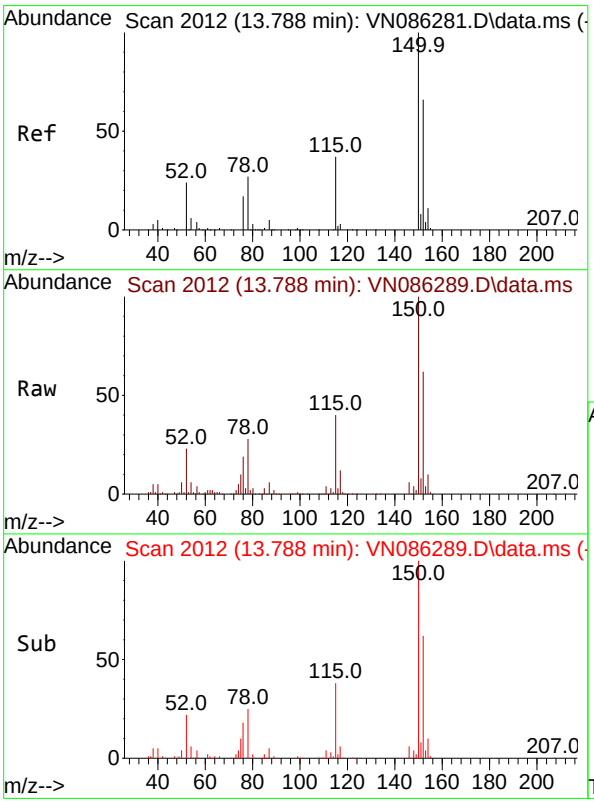
Supervised By :Mahesh Dadoda 04/17/2025

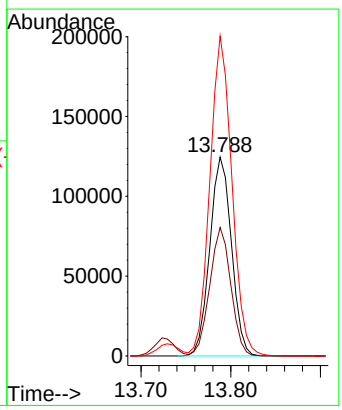


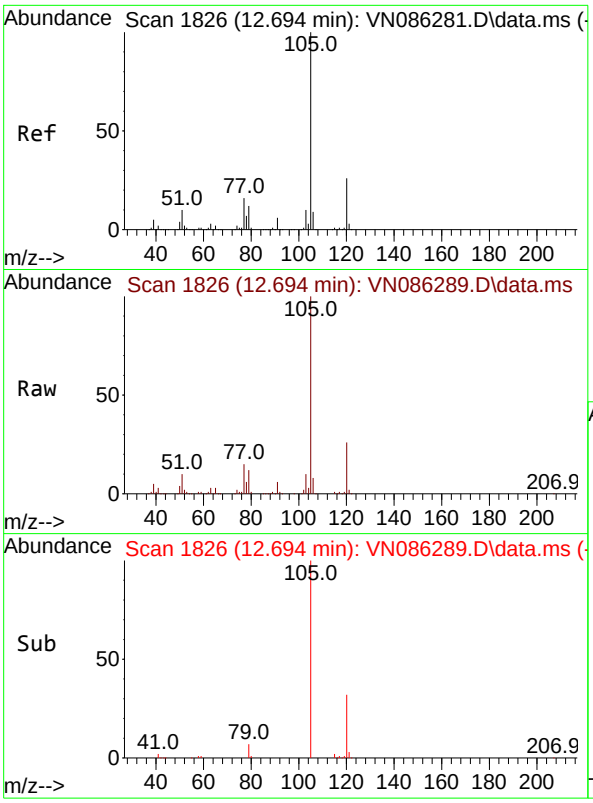


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:152 Resp: 208645

Ion	Ratio	Lower	Upper
152	100		
115	63.0	31.9	95.9
150	163.6	0.0	352.0





#73
Isopropylbenzene
Concen: 17.829 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:105 Resp: 30430

Ion	Ratio	Lower	Upper
105	100		
120	26.5	13.1	39.3

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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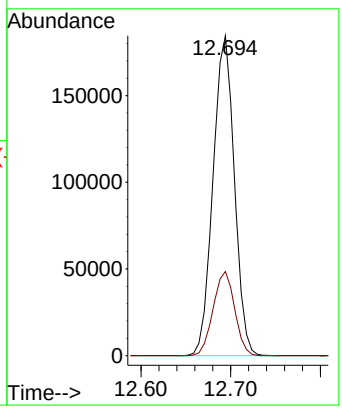
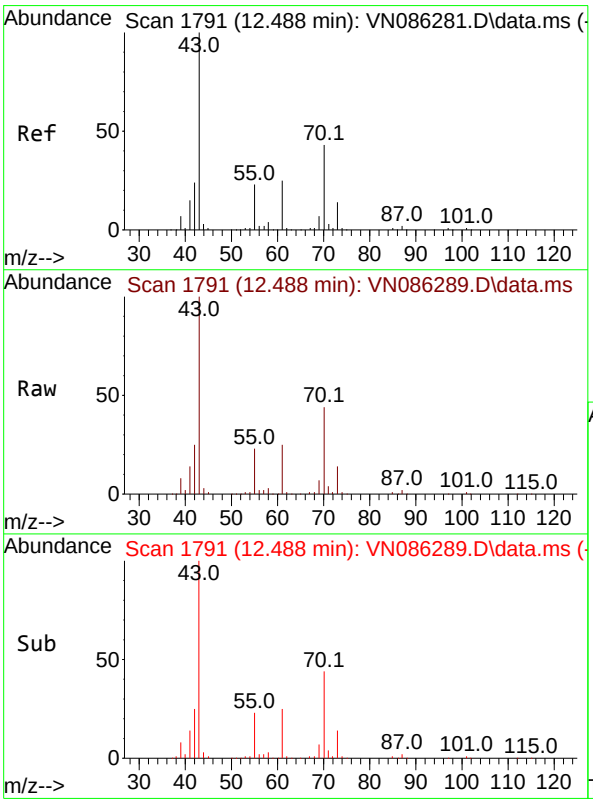
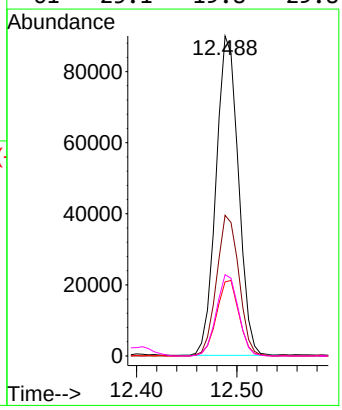


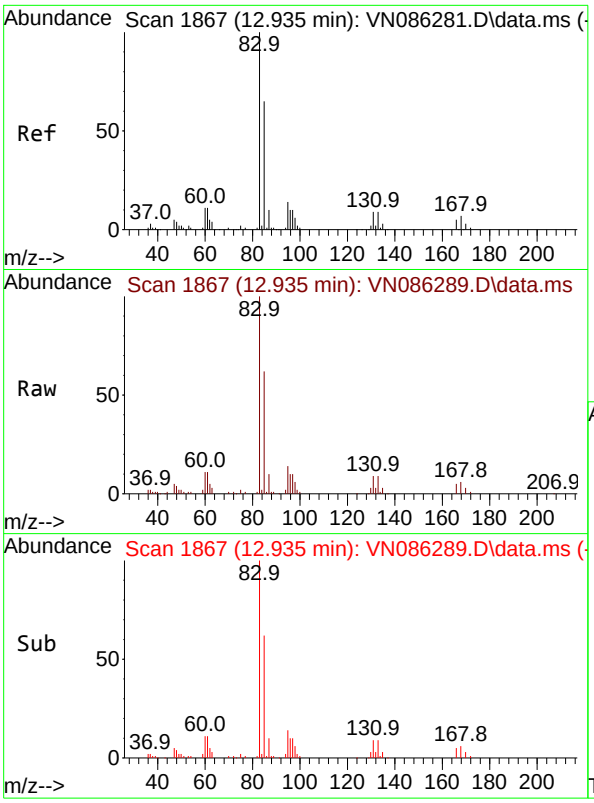


#74
N-amyl acetate
Concen: 16.378 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 43 Resp: 139157

Ion	Ratio	Lower	Upper
43	100		
70	44.0	35.0	52.4
55	23.8	19.0	28.4
61	25.1	19.8	29.8

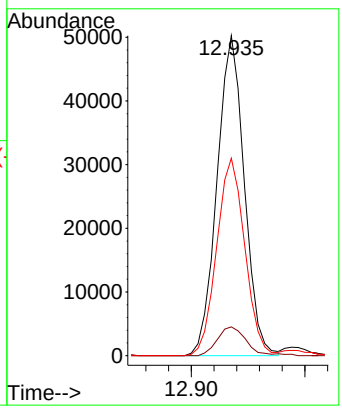




#75
1,1,2,2-Tetrachloroethane
Concen: 17.086 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 83 Resp: 8384

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.7	14.1
85	63.5	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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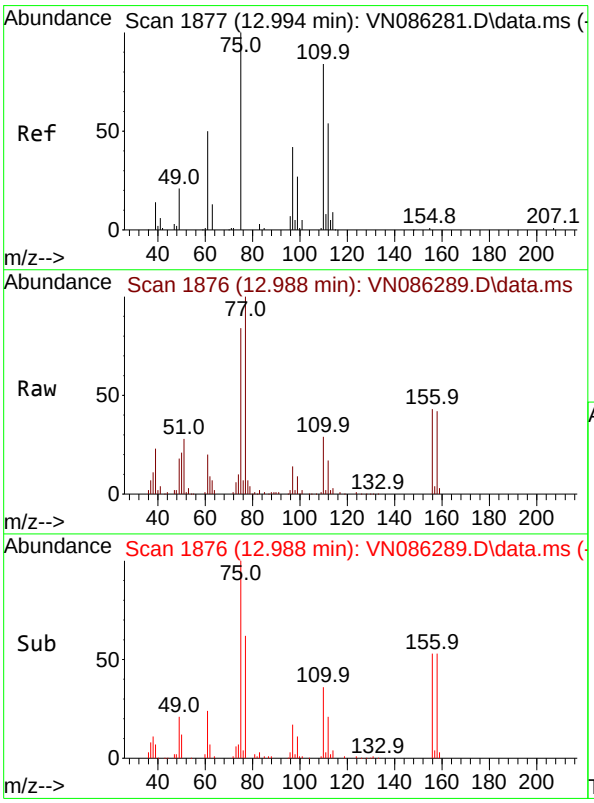
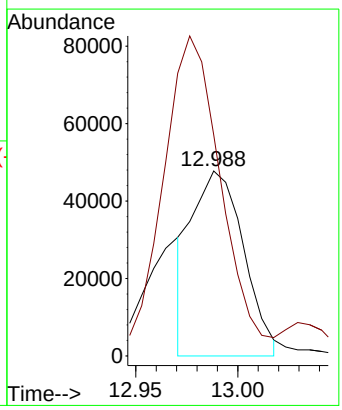
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

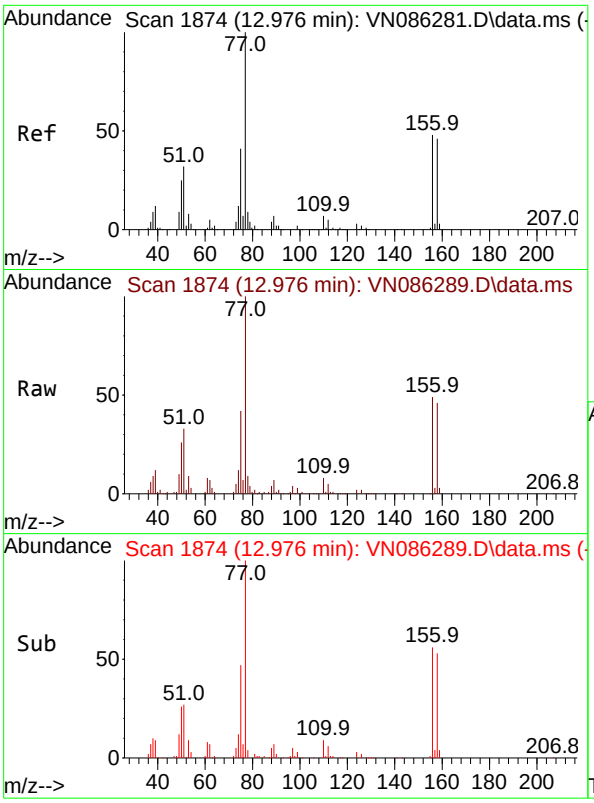


#76
1,2,3-Trichloropropane
Concen: 17.073 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 75 Resp: 84064

Ion	Ratio	Lower	Upper
75	100		
77	195.7	98.8	296.4





#77
Bromobenzene
Concen: 17.946 ug/l
RT: 12.976 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:156 Resp: 6786

Ion	Ratio	Lower	Upper
156	100		
77	242.4	121.1	363.1
158	97.6	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
APPROVED

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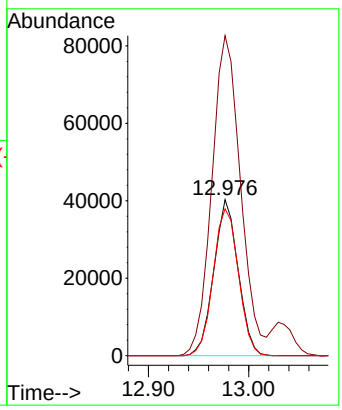
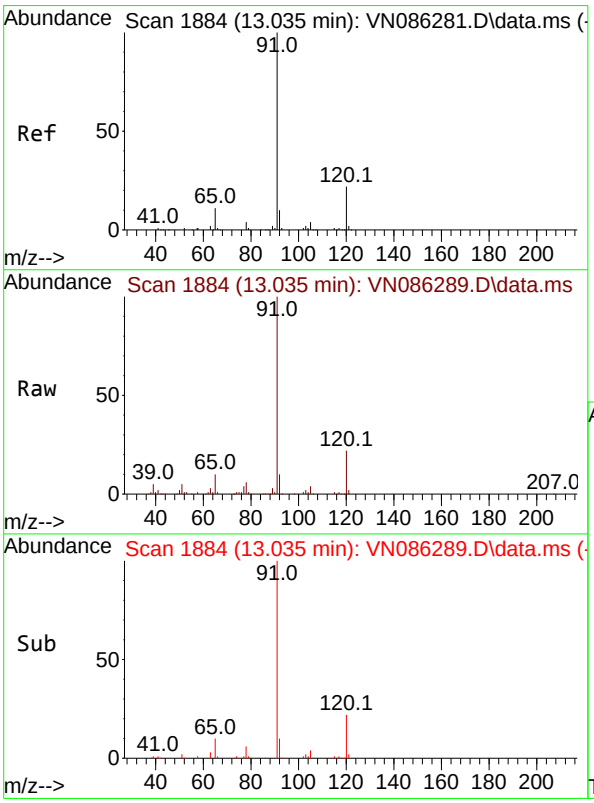
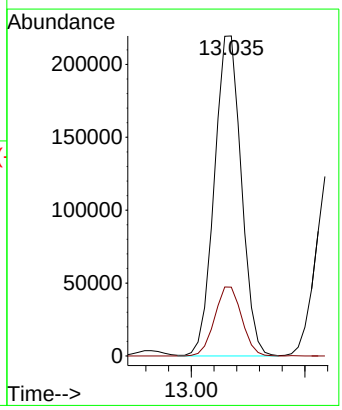


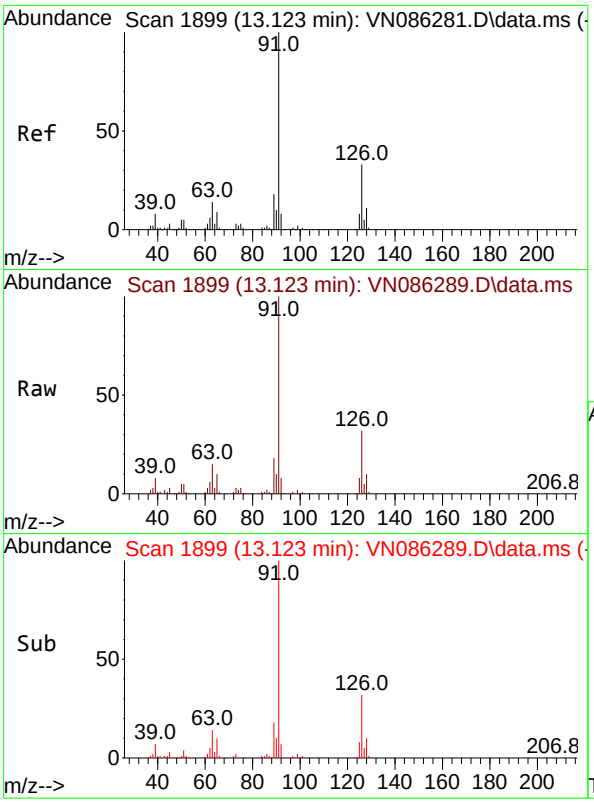


#78
n-propylbenzene
Concen: 18.018 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 91 Resp: 362369

Ion	Ratio	Lower	Upper
91	100		
120	21.6	11.1	33.3

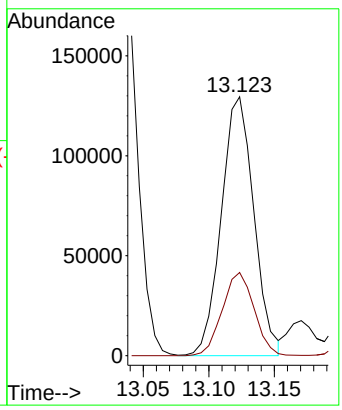




#79
2-Chlorotoluene
Concen: 17.790 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 91 Resp: 22388

Ion	Ratio	Lower	Upper
91	100		
126	31.4	16.1	48.2



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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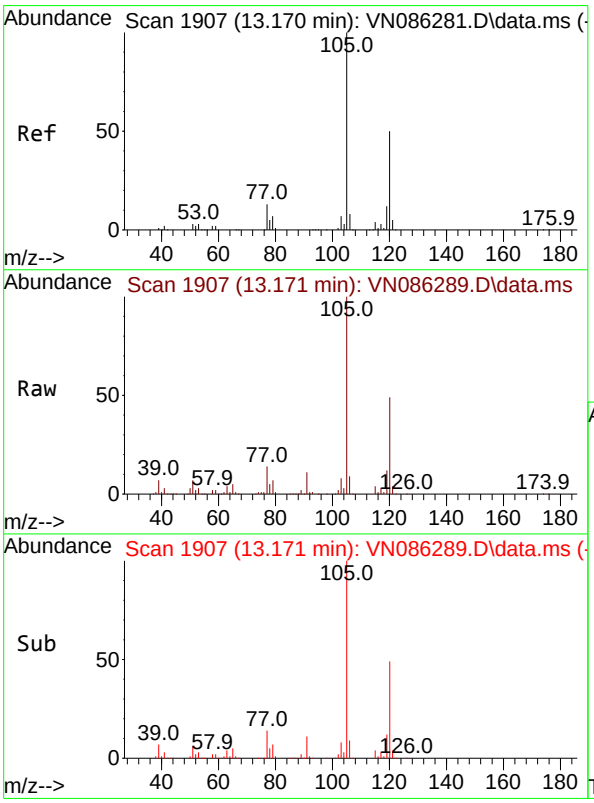
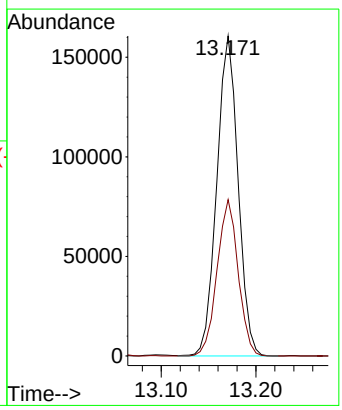
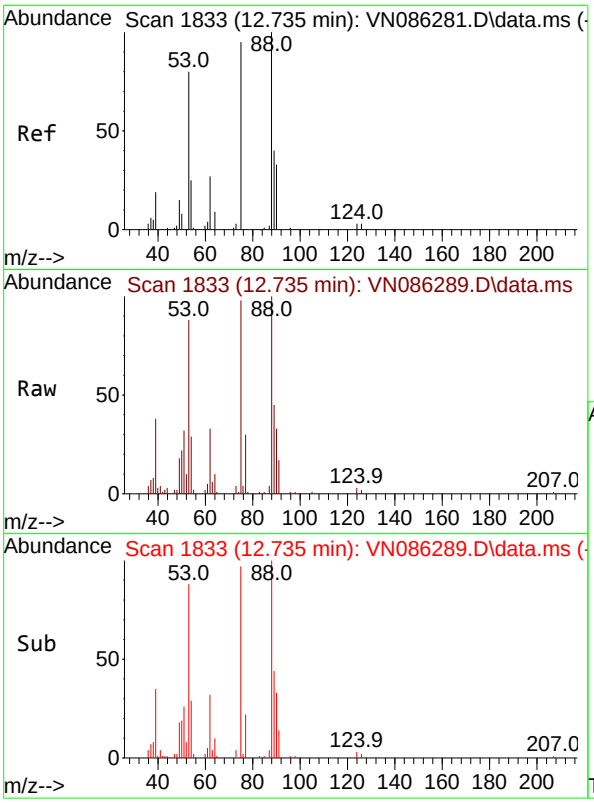


#80
1,3,5-Trimethylbenzene
Concen: 17.981 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:105 Resp: 251187

Ion	Ratio	Lower	Upper
105	100		
120	48.3	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 19.443 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 75 Resp: 3986

Ion	Ratio	Lower	Upper
75	100		
53	92.1	79.2	118.8
89	41.4	35.7	53.5

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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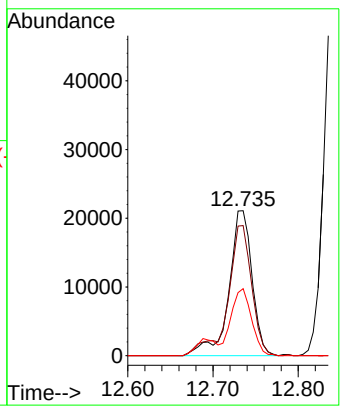
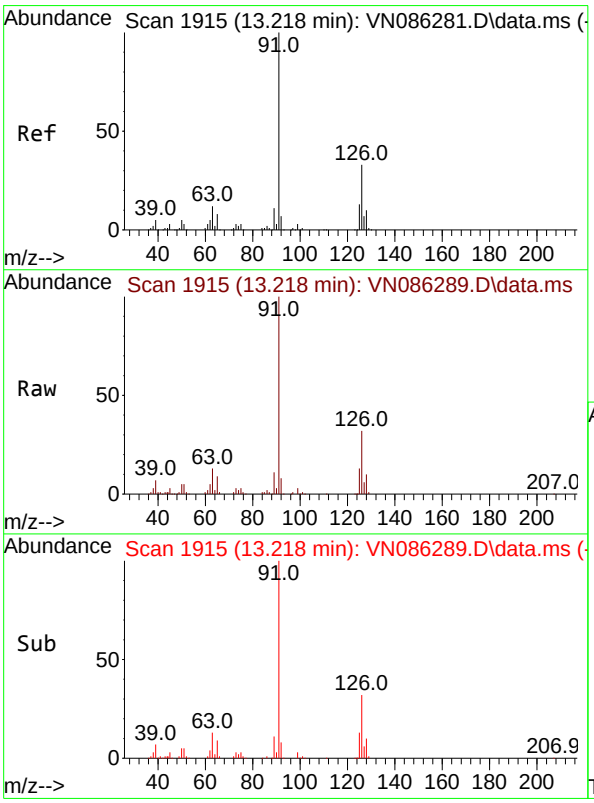
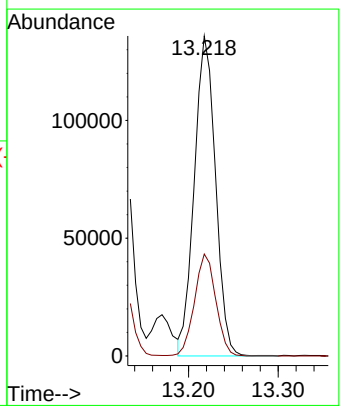


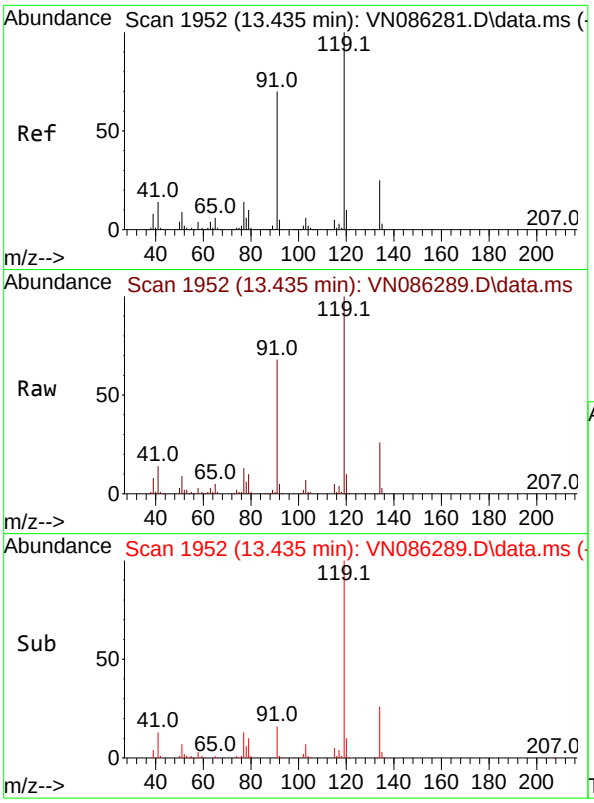


#82
4-Chlorotoluene
Concen: 17.831 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 91 Resp: 222909

Ion	Ratio	Lower	Upper
91	100		
126	32.0	16.2	48.6

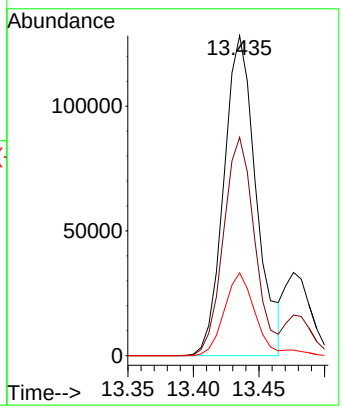




#83
tert-Butylbenzene
Concen: 18.186 ug/l
RT: 13.435 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:119 Resp: 22012

Ion	Ratio	Lower	Upper
119	100		
91	66.2	34.4	103.3
134	25.2	13.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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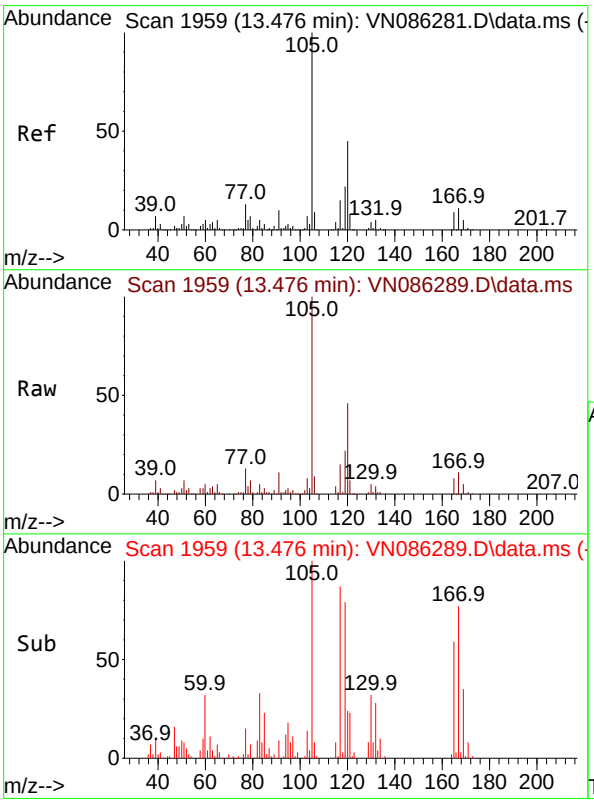
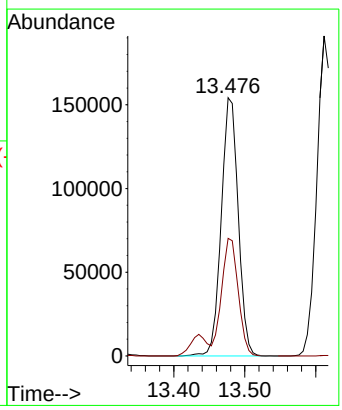
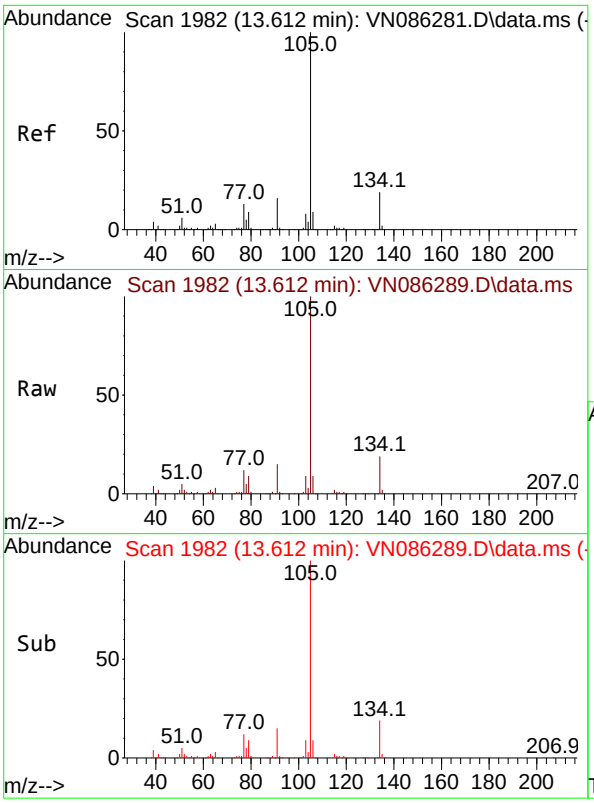


#84
1,2,4-Trimethylbenzene
Concen: 17.909 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:105 Resp: 254651

Ion	Ratio	Lower	Upper
105	100		
120	44.5	22.4	67.3





#85
sec-Butylbenzene
Concen: 18.159 ug/l
RT: 13.612 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:105 Resp: 30487

Ion	Ratio	Lower	Upper
105	100		
134	19.5	9.7	29.1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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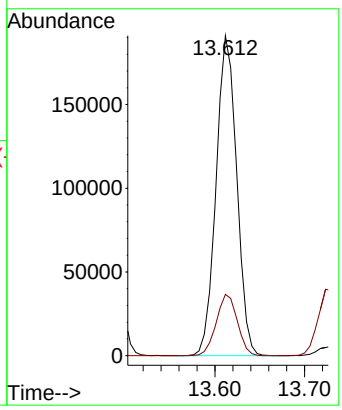
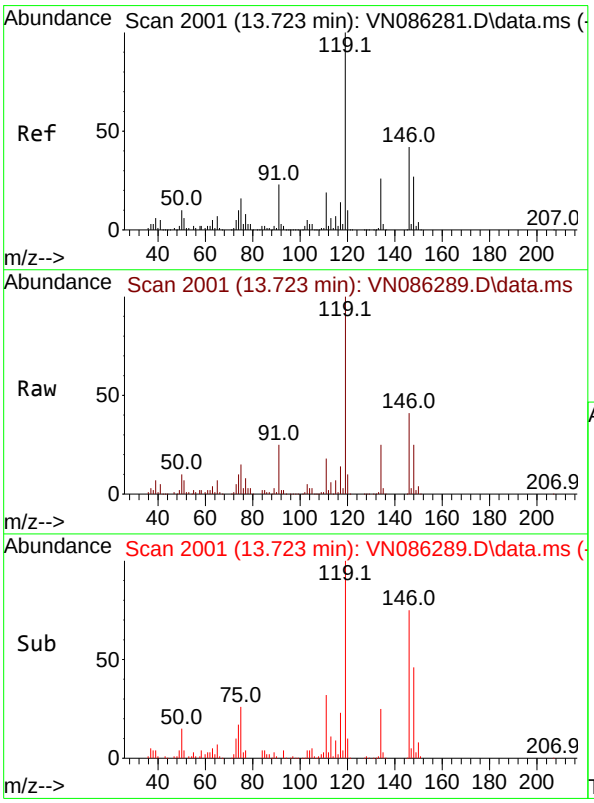
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

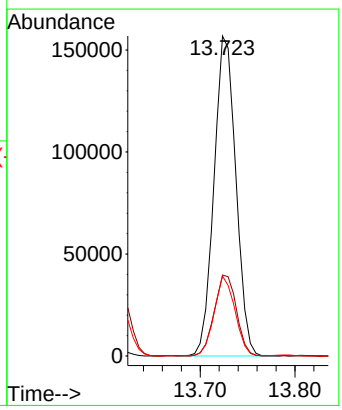


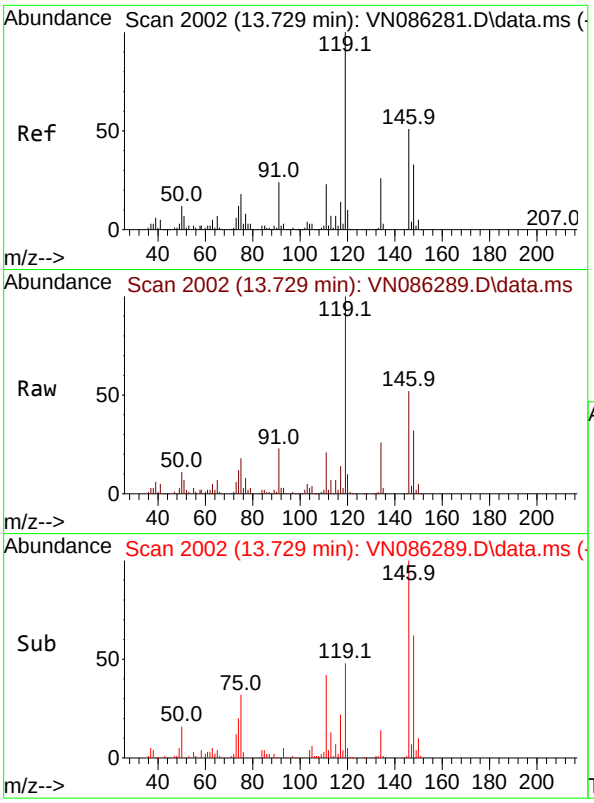


#86
p-Isopropyltoluene
Concen: 18.177 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:119 Resp: 251538

Ion	Ratio	Lower	Upper
119	100		
134	25.7	13.1	39.1
91	23.8	11.9	35.9





#87
1,3-Dichlorobenzene
Concen: 17.998 ug/l
RT: 13.729 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:146 Resp: 12795

Ion	Ratio	Lower	Upper
146	100		
111	42.7	21.9	65.7
148	63.3	31.9	95.5

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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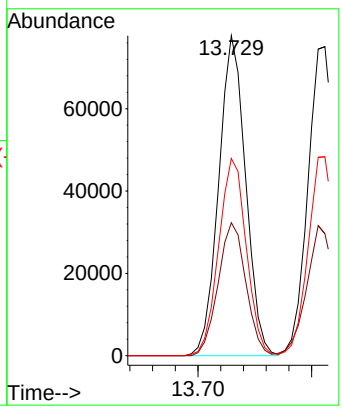
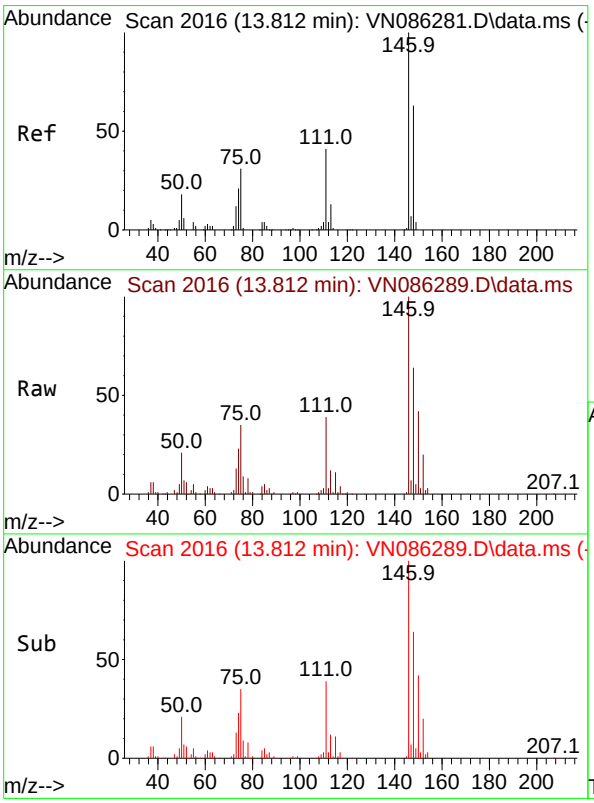
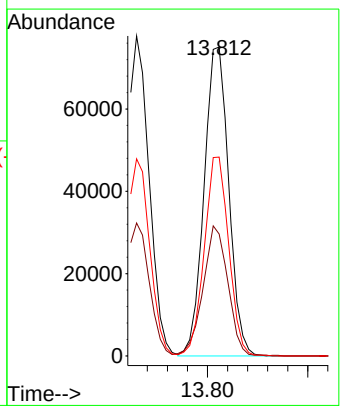


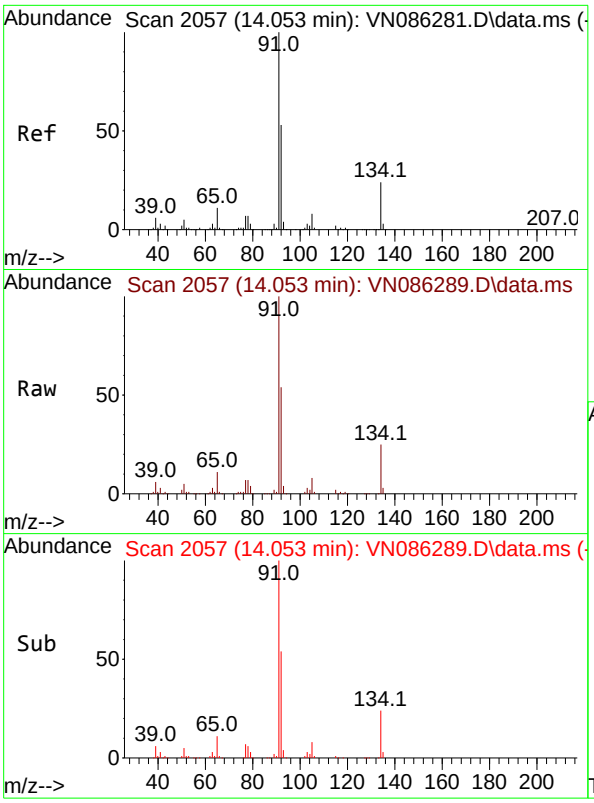


#88
1,4-Dichlorobenzene
Concen: 17.933 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:146 Resp: 128408

Ion	Ratio	Lower	Upper
146	100		
111	42.5	21.3	63.9
148	63.8	31.9	95.9





#89
n-Butylbenzene
Concen: 18.579 ug/l
RT: 14.053 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 91 Resp: 22789

Ion	Ratio	Lower	Upper
91	100		
92	53.4	26.8	80.4
134	24.6	12.2	36.6

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
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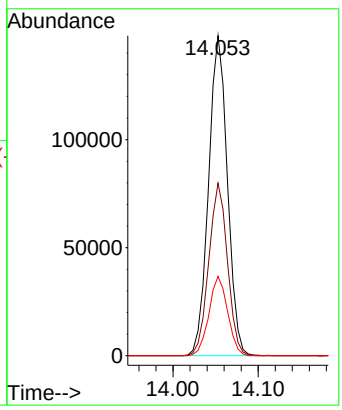
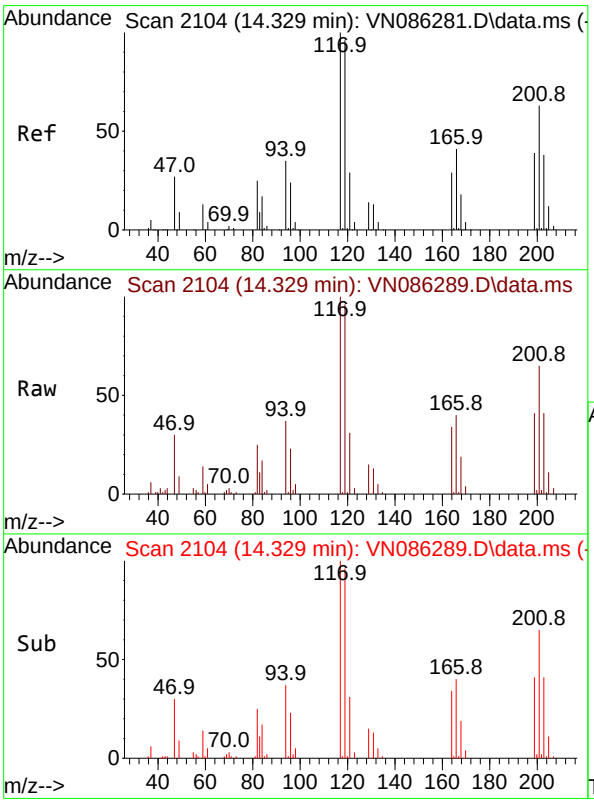
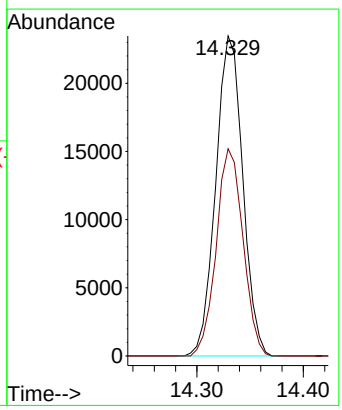


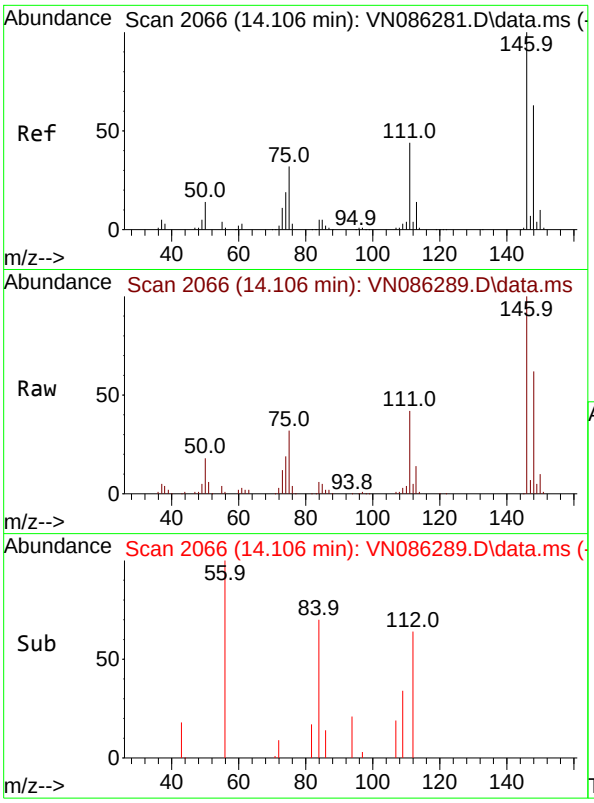


#90
Hexachloroethane
Concen: 17.753 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:117 Resp: 41324

Ion	Ratio	Lower	Upper
117	100		
201	64.1	31.4	94.2

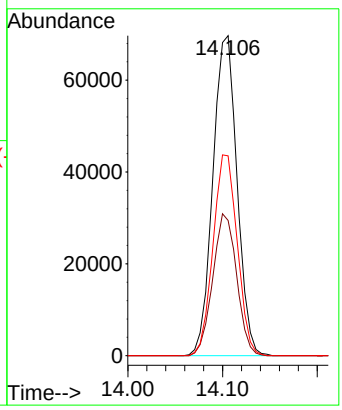




#91
1,2-Dichlorobenzene
Concen: 17.926 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:146 Resp: 12355

Ion	Ratio	Lower	Upper
146	100		
111	43.8	22.4	67.0
148	62.9	31.8	95.4



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

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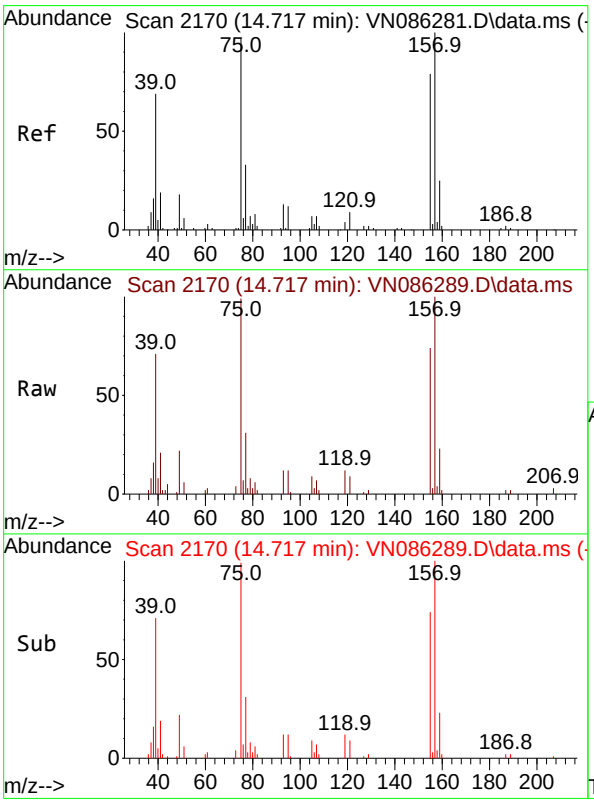
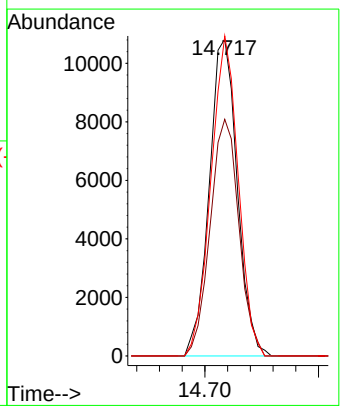
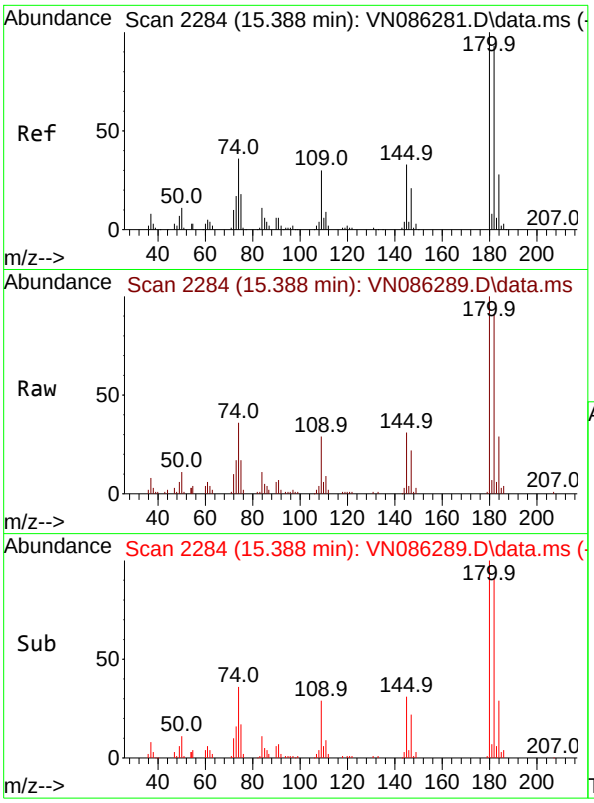


#92
1,2-Dibromo-3-Chloropropane
Concen: 18.727 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion: 75 Resp: 18530

Ion	Ratio	Lower	Upper
75	100		
155	76.7	40.3	120.9
157	98.3	49.0	147.2





#93
1,2,4-Trichlorobenzene
Concen: 19.355 ug/l
RT: 15.388 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

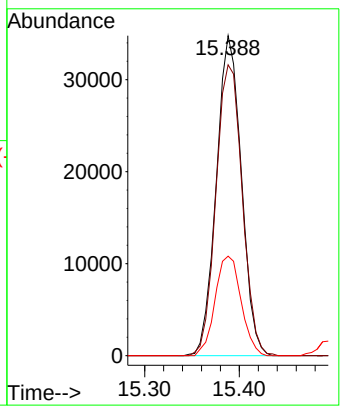
Tgt Ion:180 Resp: 6387

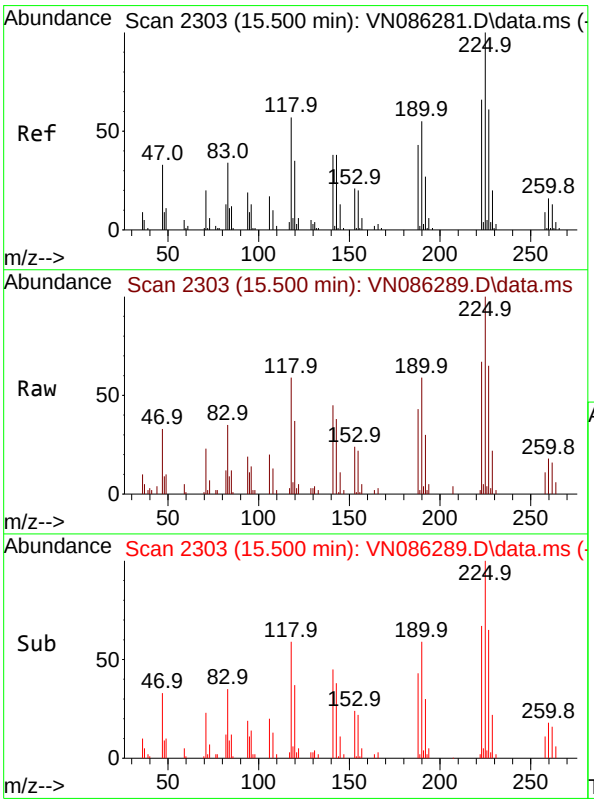
Ion	Ratio	Lower	Upper
180	100		
182	95.3	47.0	141.0
145	32.4	16.4	49.1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

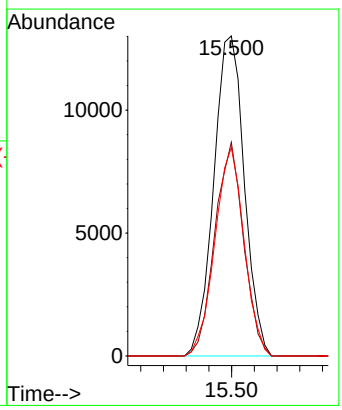


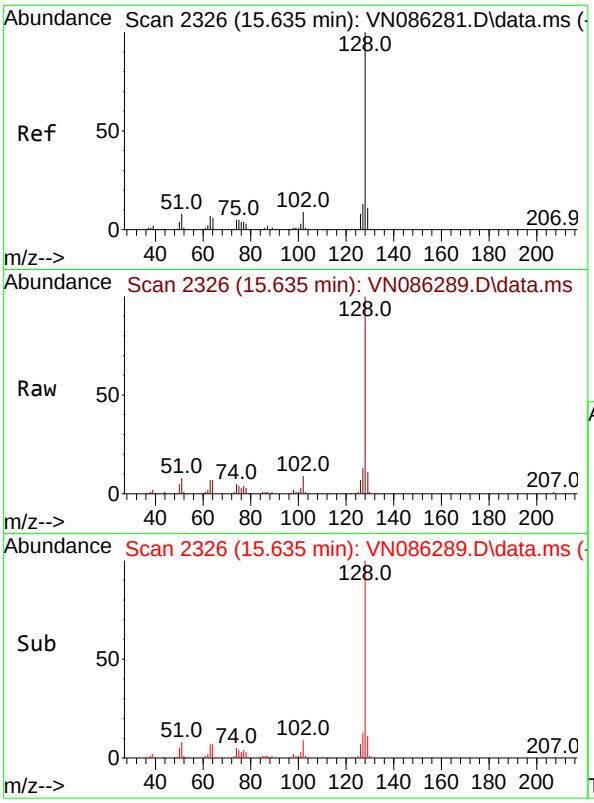


#94
Hexachlorobutadiene
Concen: 19.564 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:225 Resp: 24374

Ion	Ratio	Lower	Upper
225	100		
223	62.7	32.8	98.3
227	62.2	31.4	94.0

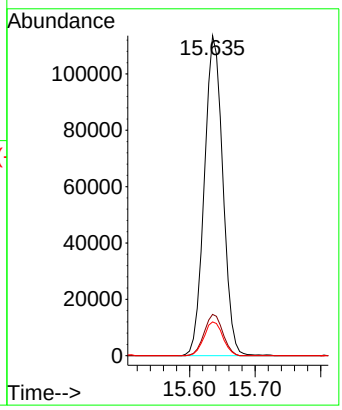




#95
Naphthalene
Concen: 19.041 ug/l
RT: 15.635 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:128 Resp: 22277

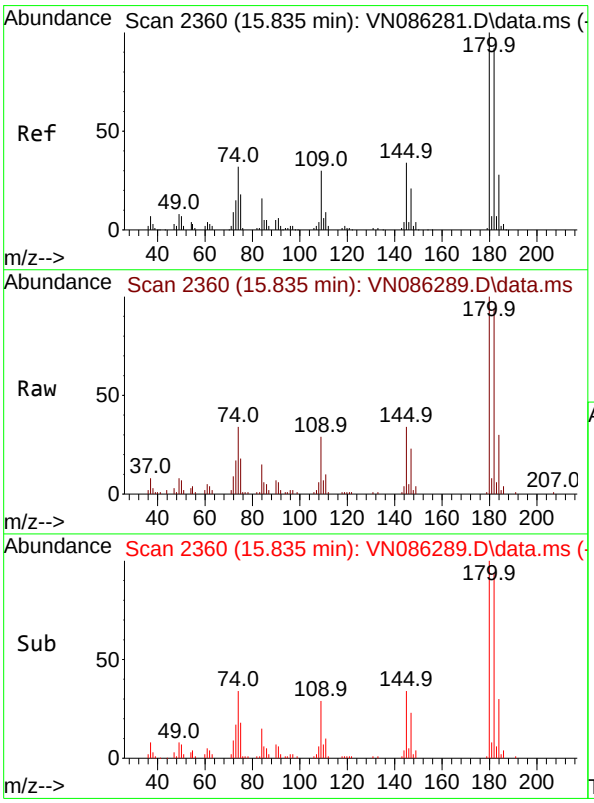
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.2	15.4
129	10.7	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBS01

Manual Integrations
APPROVED

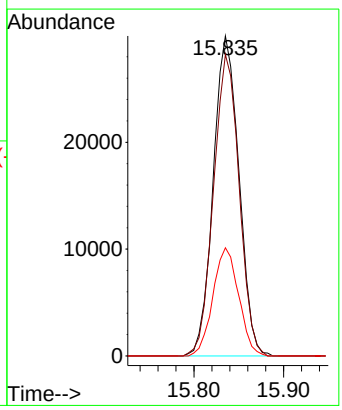
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 19.024 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. 0.000 min
Lab File: VN086289.D
Acq: 16 Apr 2025 11:52

Tgt Ion:180 Resp: 59442

Ion	Ratio	Lower	Upper
180	100		
182	93.9	47.3	142.0
145	33.9	17.2	51.5



Raw Data: **VN086292.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:	VN0416WBSD01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086292.D	1		04/16/25 13:14	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	20.7		0.22	1.00	ug/L
74-87-3	Chloromethane	19.2		0.32	1.00	ug/L
75-01-4	Vinyl Chloride	19.6		0.26	1.00	ug/L
74-83-9	Bromomethane	21.7		1.40	5.00	ug/L
75-00-3	Chloroethane	18.9		0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.9		0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.7		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.3		0.23	1.00	ug/L
67-64-1	Acetone	110		1.50	5.00	ug/L
75-15-0	Carbon Disulfide	18.3		0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	19.2		0.16	1.00	ug/L
79-20-9	Methyl Acetate	18.3		0.27	1.00	ug/L
75-09-2	Methylene Chloride	19.5		0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.4		0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.2		0.23	1.00	ug/L
110-82-7	Cyclohexane	19.2		1.50	5.00	ug/L
78-93-3	2-Butanone	98.0		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.9		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.2		0.19	1.00	ug/L
74-97-5	Bromochloromethane	22.3		0.22	1.00	ug/L
67-66-3	Chloroform	19.3		0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.5		0.20	1.00	ug/L
108-87-2	Methylcyclohexane	19.7		0.16	1.00	ug/L
71-43-2	Benzene	19.8		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.9		0.22	1.00	ug/L
79-01-6	Trichloroethene	20.0		0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.6		0.20	1.00	ug/L
75-27-4	Bromodichloromethane	19.8		0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	100		0.68	5.00	ug/L
108-88-3	Toluene	19.8		0.14	1.00	ug/L

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:	VN0416WBSD01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086292.D	1		04/16/25 13:14	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	19.9		0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.6		0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	19.7		0.21	1.00	ug/L
591-78-6	2-Hexanone	99.8		0.89	5.00	ug/L
124-48-1	Dibromochloromethane	20.1		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	20.2		0.15	1.00	ug/L
127-18-4	Tetrachloroethene	20.6		0.23	1.00	ug/L
108-90-7	Chlorobenzene	19.7		0.12	1.00	ug/L
100-41-4	Ethyl Benzene	19.9		0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	39.8		0.24	2.00	ug/L
95-47-6	o-Xylene	19.9		0.12	1.00	ug/L
100-42-5	Styrene	20.0		0.15	1.00	ug/L
75-25-2	Bromoform	20.3		0.19	1.00	ug/L
98-82-8	Isopropylbenzene	20.0		0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.8		0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.1		0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.9		0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	20.5		0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	20.7		0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	20.1		0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	19.8		0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.5		70 (74) - 130 (125)	107%	SPK: 50
1868-53-7	Dibromofluoromethane	55.7		70 (75) - 130 (124)	111%	SPK: 50
2037-26-5	Toluene-d8	54.6		70 (86) - 130 (113)	109%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.6		70 (77) - 130 (121)	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	223000	8.224			
540-36-3	1,4-Difluorobenzene	407000	9.1			
3114-55-4	Chlorobenzene-d5	359000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	161000	13.788			

Raw Data: **VN086292.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:	VN0416WBSD01	SDG No.:	Q1812
Lab Sample ID:	VN0416WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN086292.D	1		04/16/25 13:14	VN041625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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\VN041625\
Data File : VN086292.D
Acq On : 16 Apr 2025 13:14
Operator : JC\MD
Sample : VN0416WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 17 03:06:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	223172	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	407332	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	359125	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	160957	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	173008	53.460	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 106.920%			
35) Dibromofluoromethane	8.165	113	105236	55.666	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 111.340%			
50) Toluene-d8	10.565	98	551979	54.632	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 109.260%			
62) 4-Bromofluorobenzene	12.847	95	197374	53.558	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 107.120%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	54889	20.748	ug/l	98
3) Chloromethane	2.359	50	73640	19.153	ug/l	99
4) Vinyl Chloride	2.512	62	72012	19.627	ug/l	99
5) Bromomethane	2.959	94	35852	21.723	ug/l	99
6) Chloroethane	3.124	64	46393	18.893	ug/l	99
7) Trichlorofluoromethane	3.501	101	80825	19.887	ug/l	95
8) Diethyl Ether	3.959	74	34233	19.294	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	48530	19.739	ug/l	98
10) Methyl Iodide	4.589	142	59815	22.129	ug/l	98
11) Tert butyl alcohol	5.506	59	61056	103.402	ug/l	99
12) 1,1-Dichloroethene	4.342	96	50790	19.336	ug/l	97
13) Acrolein	4.177	56	37096	127.326	ug/l	97
14) Allyl chloride	5.024	41	85613	18.335	ug/l	98
15) Acrylonitrile	5.718	53	144663	99.107	ug/l	99
16) Acetone	4.424	43	122285	106.004	ug/l	98
17) Carbon Disulfide	4.712	76	143642	18.263	ug/l	100
18) Methyl Acetate	5.024	43	71275	18.348	ug/l	99
19) Methyl tert-butyl Ether	5.794	73	185776	19.240	ug/l	98
20) Methylene Chloride	5.277	84	58313	19.491	ug/l	97
21) trans-1,2-Dichloroethene	5.789	96	53284	19.403	ug/l	94
22) Diisopropyl ether	6.671	45	190187	18.723	ug/l	98
23) Vinyl Acetate	6.600	43	679753	95.728	ug/l	99
24) 1,1-Dichloroethane	6.571	63	102692	19.160	ug/l	99
25) 2-Butanone	7.477	43	197426	98.009	ug/l	99
26) 2,2-Dichloropropane	7.488	77	94224	19.635	ug/l	100
27) cis-1,2-Dichloroethene	7.483	96	65425	19.195	ug/l	99
28) Bromochloromethane	7.812	49	50709	22.314	ug/l	97
29) Tetrahydrofuran	7.835	42	128288	95.239	ug/l	99
30) Chloroform	7.965	83	101723	19.321	ug/l	99
31) Cyclohexane	8.253	56	100612	19.184	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	88042	19.548	ug/l	97
36) 1,1-Dichloropropene	8.371	75	74728	19.791	ug/l	100
37) Ethyl Acetate	7.559	43	78235	19.680	ug/l	98
38) Carbon Tetrachloride	8.359	117	71510	19.887	ug/l	99
39) Methylcyclohexane	9.600	83	88385	19.693	ug/l	98
40) Benzene	8.606	78	239253	19.776	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086292.D
Acq On : 16 Apr 2025 13:14
Operator : JC\MD
Sample : VN0416WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 17 03:06:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	46759	20.295	ug/l		98
42) 1,2-Dichloroethane	8.665	62	76607	19.857	ug/l		100
43) Isopropyl Acetate	8.682	43	152965	20.057	ug/l		98
44) Trichloroethene	9.347	130	57388	20.014	ug/l		96
45) 1,2-Dichloropropane	9.618	63	58148	19.636	ug/l		99
46) Dibromomethane	9.706	93	38369	20.335	ug/l		99
47) Bromodichloromethane	9.882	83	80669	19.795	ug/l		96
48) Methyl methacrylate	9.677	41	65898	18.877	ug/l		98
49) 1,4-Dioxane	9.694	88	24101	405.872	ug/l		99
51) 4-Methyl-2-Pentanone	10.441	43	407802	100.180	ug/l		99
52) Toluene	10.629	92	149726	19.835	ug/l		99
53) t-1,3-Dichloropropene	10.835	75	90396	19.871	ug/l		100
54) cis-1,3-Dichloropropene	10.312	75	97983	19.610	ug/l		99
55) 1,1,2-Trichloroethane	11.012	97	53405	19.663	ug/l		95
56) Ethyl methacrylate	10.871	69	97183	19.466	ug/l		99
57) 1,3-Dichloropropane	11.159	76	95407	19.799	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.159	63	238231	100.539	ug/l		100
59) 2-Hexanone	11.188	43	301404	99.823	ug/l		99
60) Dibromochloromethane	11.353	129	59988	20.114	ug/l		100
61) 1,2-Dibromoethane	11.465	107	55491	20.249	ug/l		99
64) Tetrachloroethene	11.100	164	56794	20.560	ug/l		95
65) Chlorobenzene	11.888	112	158263	19.747	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.959	131	50996	19.288	ug/l		96
67) Ethyl Benzene	11.959	91	287125	19.853	ug/l		100
68) m/p-Xylenes	12.065	106	215908	39.843	ug/l		99
69) o-Xylene	12.394	106	106641	19.899	ug/l		100
70) Styrene	12.406	104	178378	19.977	ug/l		100
71) Bromoform	12.576	173	40361	20.276	ug/l	#	97
73) Isopropylbenzene	12.694	105	262970	19.972	ug/l		100
74) N-amyl acetate	12.488	43	120719	18.417	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.935	83	74922	19.790	ug/l		100
76) 1,2,3-Trichloropropane	12.988	75	72842m	19.177	ug/l		
77) Bromobenzene	12.976	156	59625	20.438	ug/l		99
78) n-propylbenzene	13.029	91	310295	19.999	ug/l		100
79) 2-Chlorotoluene	13.123	91	193887	19.971	ug/l		100
80) 1,3,5-Trimethylbenzene	13.170	105	215520	19.999	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.729	75	35468	22.426	ug/l		92
82) 4-Chlorotoluene	13.217	91	194326	20.150	ug/l		99
83) tert-Butylbenzene	13.435	119	184001	19.705	ug/l		100
84) 1,2,4-Trimethylbenzene	13.476	105	219543	20.014	ug/l		99
85) sec-Butylbenzene	13.612	105	259844	20.062	ug/l		99
86) p-Isopropyltoluene	13.723	119	213950	20.041	ug/l		99
87) 1,3-Dichlorobenzene	13.729	146	110278	20.108	ug/l		99
88) 1,4-Dichlorobenzene	13.806	146	109730	19.865	ug/l		99
89) n-Butylbenzene	14.053	91	186077	19.664	ug/l		99
90) Hexachloroethane	14.329	117	34980	19.480	ug/l		98
91) 1,2-Dichlorobenzene	14.100	146	108953	20.491	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	15775	20.666	ug/l		96
93) 1,2,4-Trichlorobenzene	15.388	180	51282	20.142	ug/l		100
94) Hexachlorobutadiene	15.494	225	19936	20.743	ug/l		98
95) Naphthalene	15.635	128	179516	19.890	ug/l		99
96) 1,2,3-Trichlorobenzene	15.835	180	47677	19.779	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041625\
Data File : VN086292.D
Acq On : 16 Apr 2025 13:14
Operator : JC\MD
Sample : VN0416WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 17 03:06:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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Supervised By :Mahesh Dadoda 04/17/2025

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\VN041625\
Data File : VN086292.D
Acq On : 16 Apr 2025 13:14
Operator : JC\MD
Sample : VN0416WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 17 03:06:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N041525W.M
Quant Title : SW846 8260
QLast Update : Wed Apr 16 04:19:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations APPROVED

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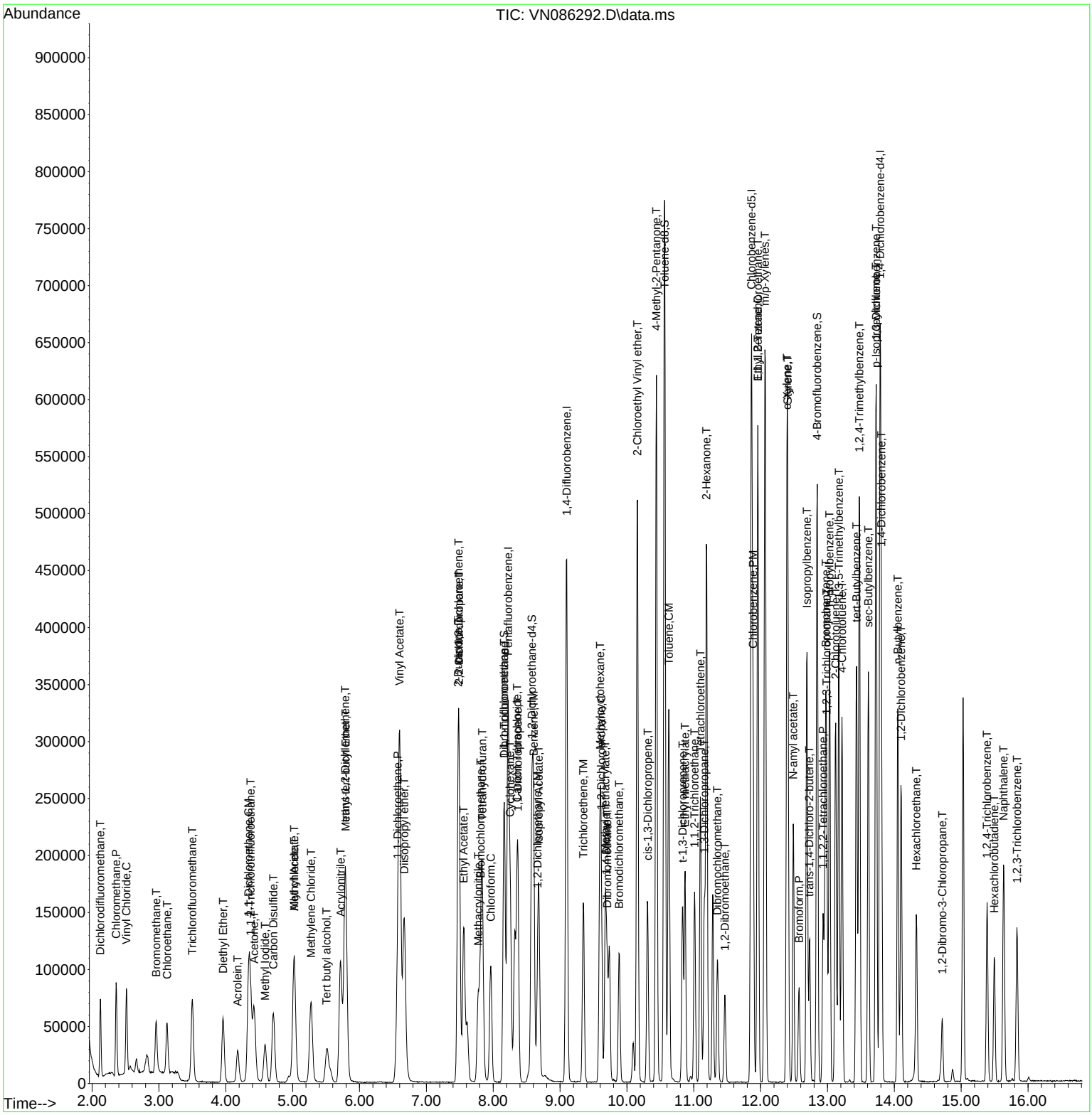
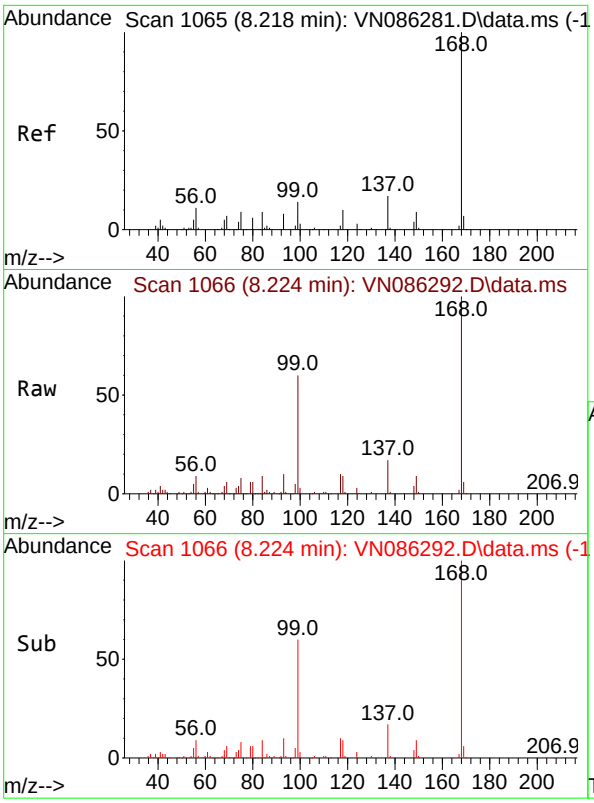
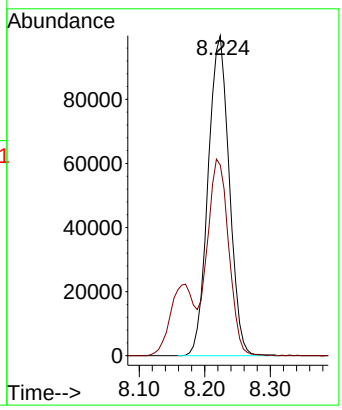




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:168 Resp: 22317

Ion	Ratio	Lower	Upper
168	100		
99	59.6	52.5	78.7



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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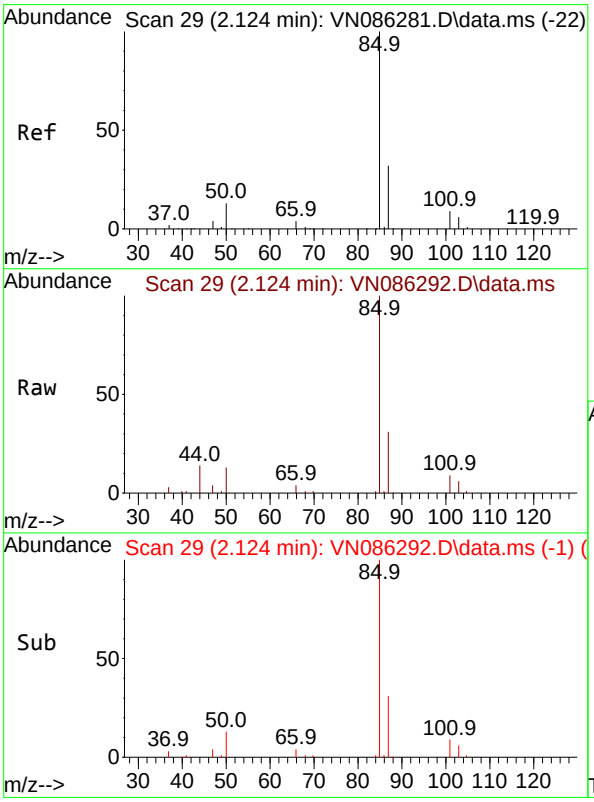
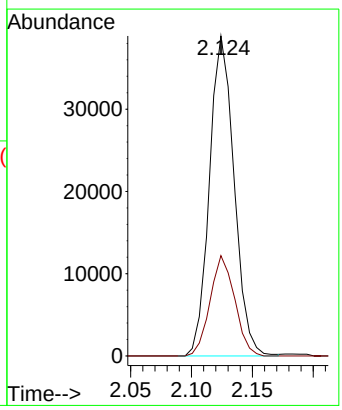
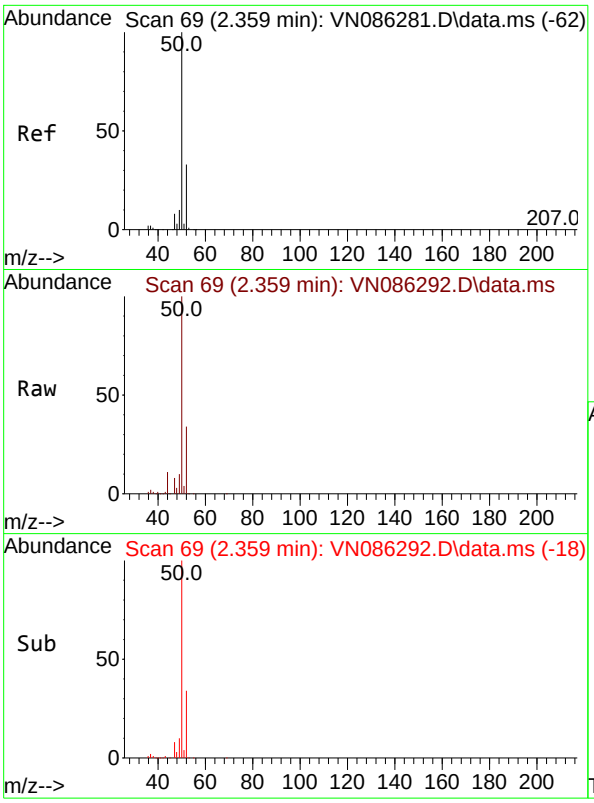


#2
Dichlorodifluoromethane
Concen: 20.748 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 85 Resp: 54889

Ion	Ratio	Lower	Upper
85	100		
87	31.3	16.3	48.8

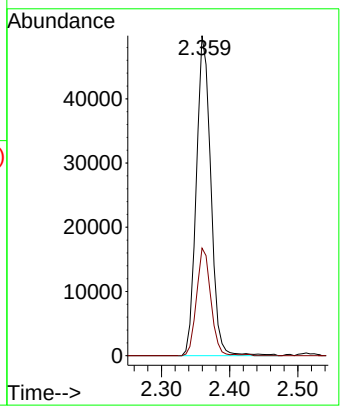




#3
Chloromethane
Concen: 19.153 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 50 Resp: 7364

Ion	Ratio	Lower	Upper
50	100		
52	33.6	26.5	39.7



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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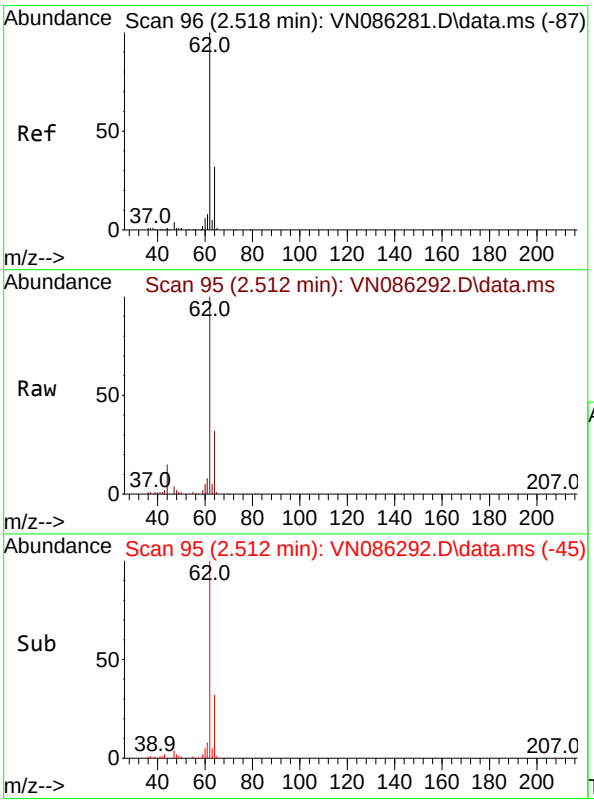
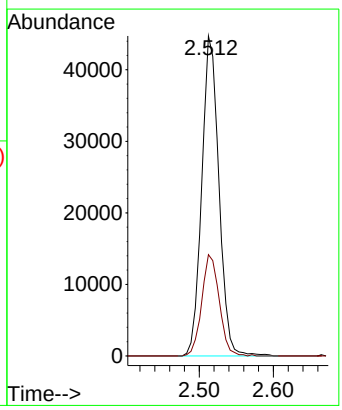
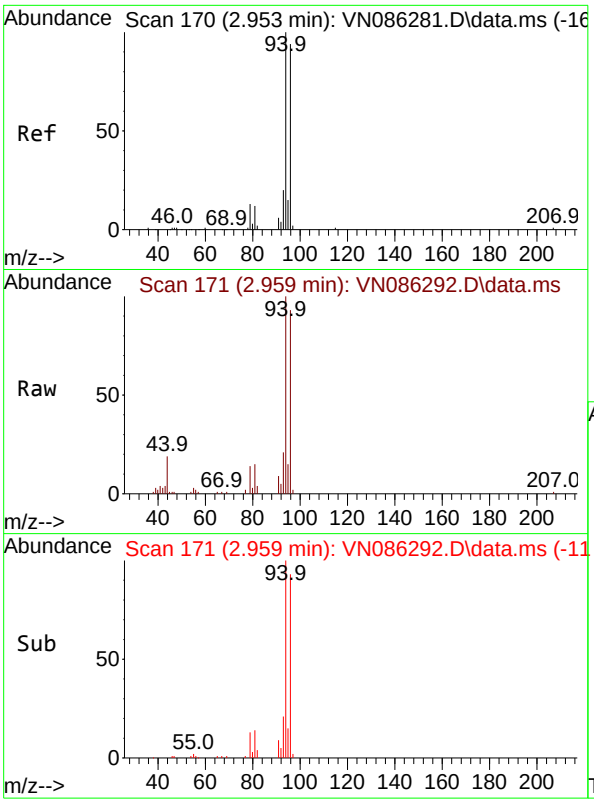


#4
Vinyl Chloride
Concen: 19.627 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 62 Resp: 72012

Ion	Ratio	Lower	Upper
62	100		
64	31.7	25.6	38.4

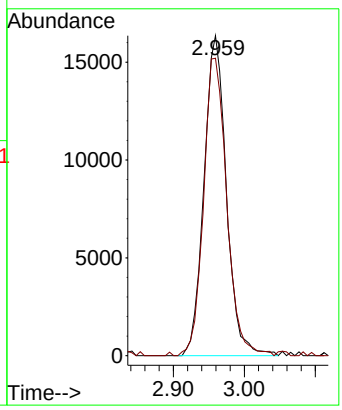




#5
Bromomethane
Concen: 21.723 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 94 Resp: 3585

Ion	Ratio	Lower	Upper
94	100		
96	93.0	75.2	112.8



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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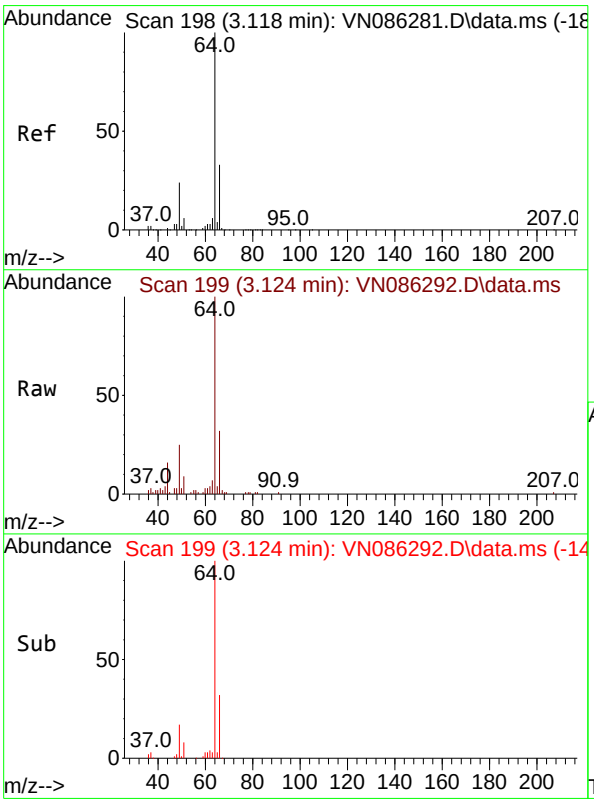
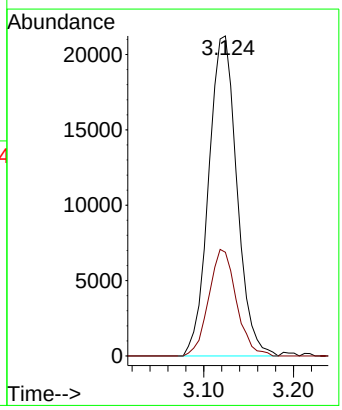
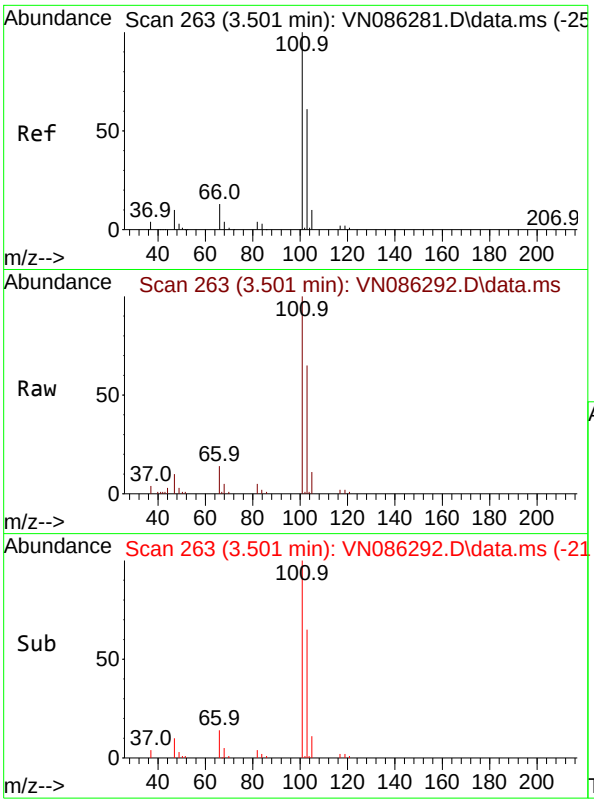


#6
Chloroethane
Concen: 18.893 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 64 Resp: 46393

Ion	Ratio	Lower	Upper
64	100		
66	32.4	26.2	39.2





#7
Trichlorofluoromethane
Concen: 19.887 ug/l
RT: 3.501 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:101 Resp: 8082

Ion	Ratio	Lower	Upper
101	100		
103	65.5	49.2	73.8

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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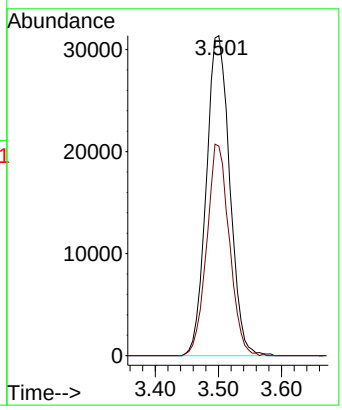
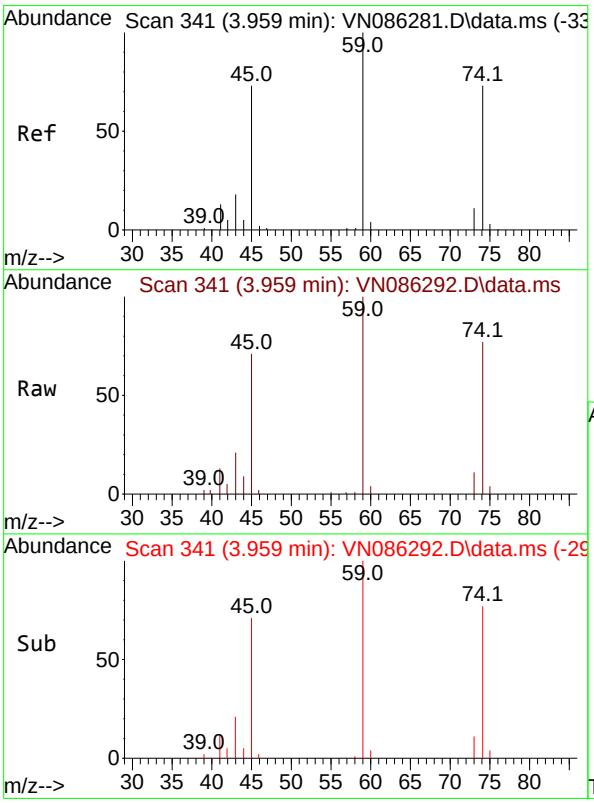
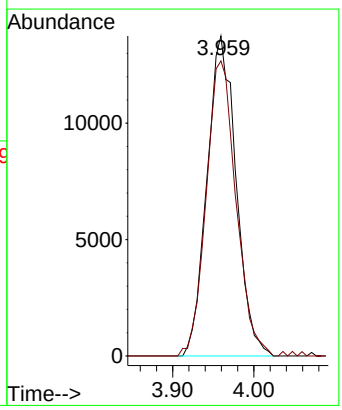


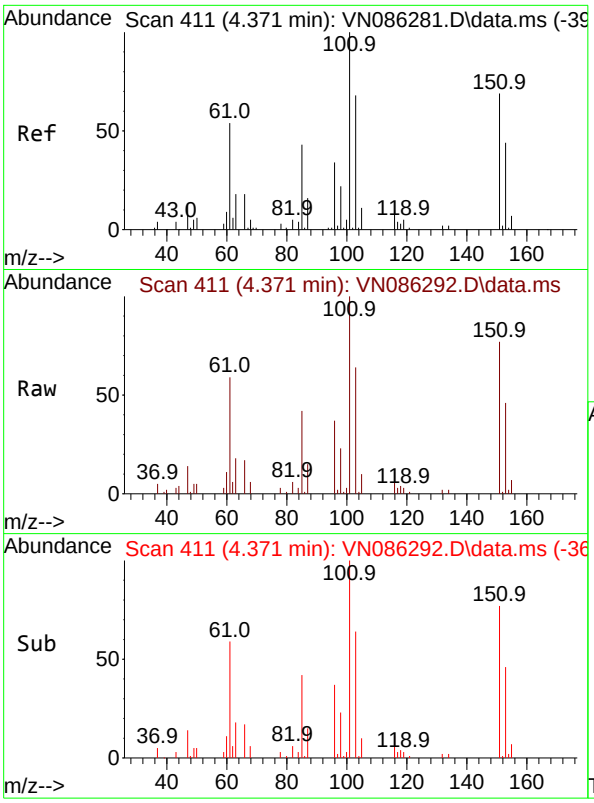


#8
Diethyl Ether
Concen: 19.294 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 74 Resp: 34233

Ion	Ratio	Lower	Upper
74	100		
45	94.4	48.0	144.2





#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.739 ug/l
RT: 4.371 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:101 Resp: 4853

Ion	Ratio	Lower	Upper
101	100		
85	44.0	34.7	52.1
151	72.7	56.1	84.1

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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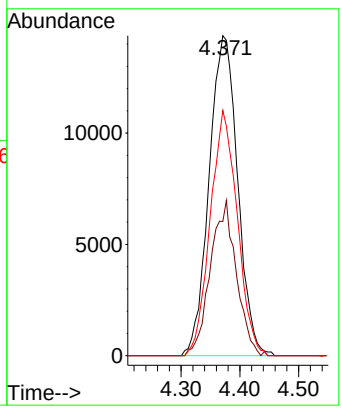
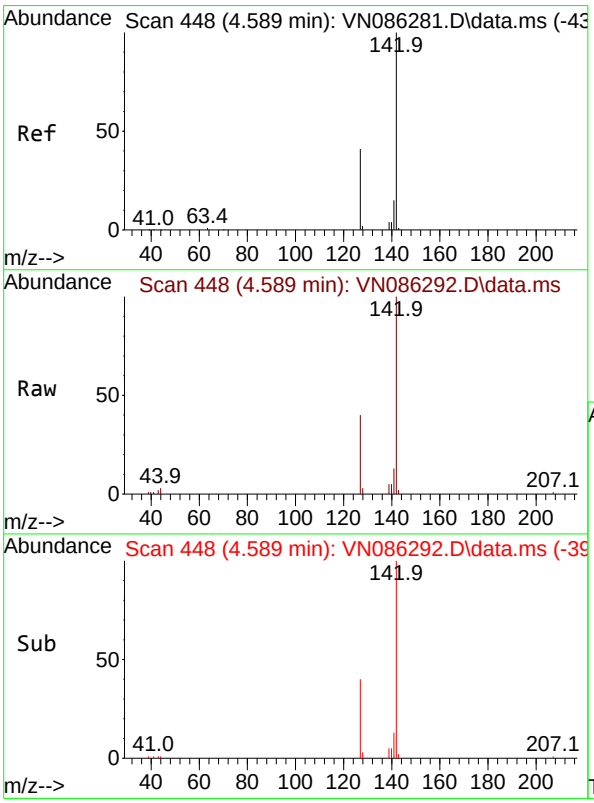
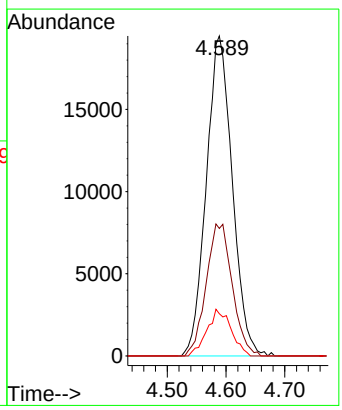


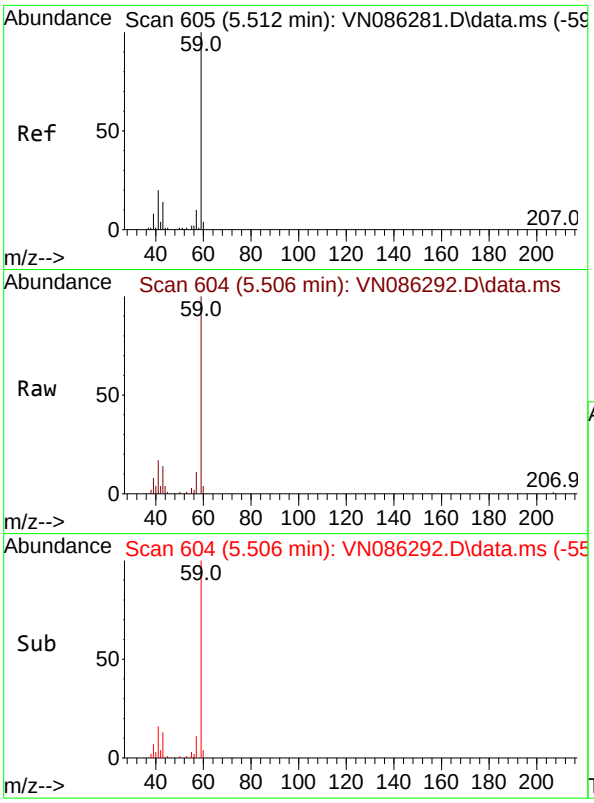


#10
Methyl Iodide
Concen: 22.129 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:142 Resp: 59815

Ion	Ratio	Lower	Upper
142	100		
127	39.9	32.7	49.1
141	13.2	11.7	17.5

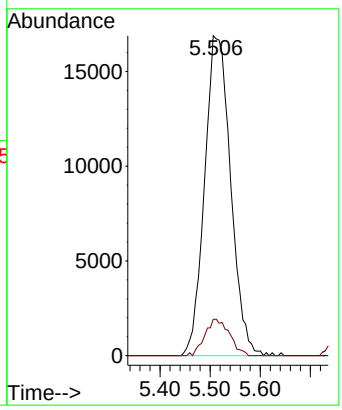




#11
Tert butyl alcohol
Concen: 103.402 ug/l
RT: 5.506 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 59 Resp: 6105

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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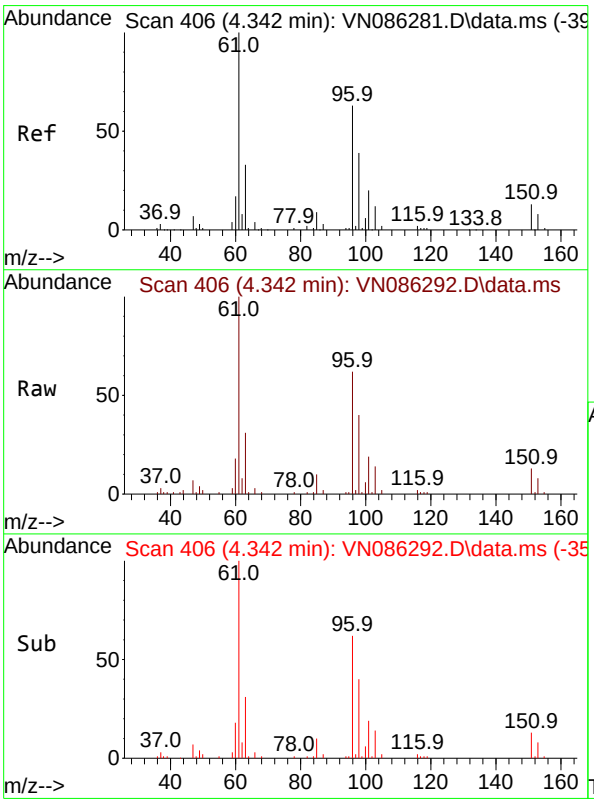
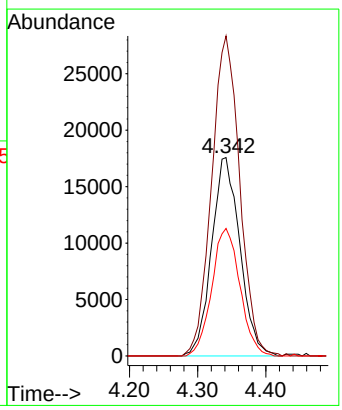
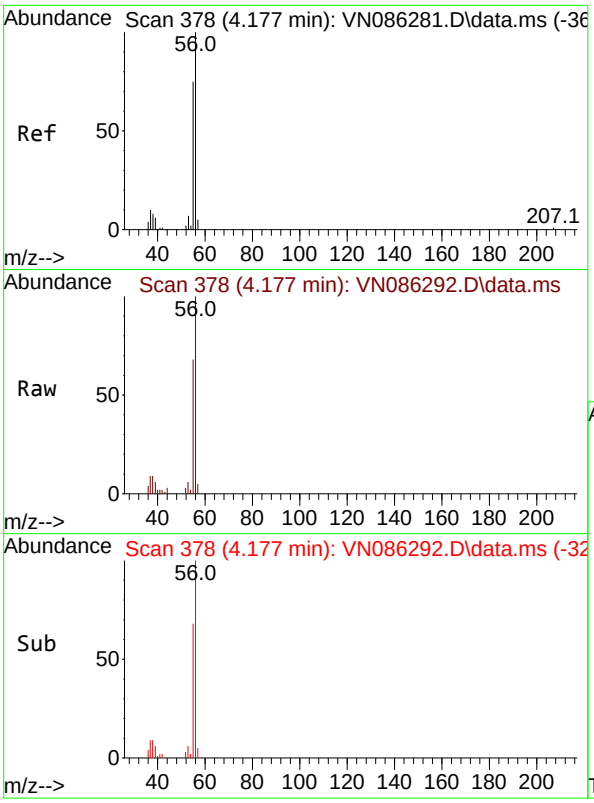


#12
1,1-Dichloroethene
Concen: 19.336 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 96 Resp: 50790

Ion	Ratio	Lower	Upper
96	100		
61	161.3	126.6	189.8
98	64.3	49.6	74.4

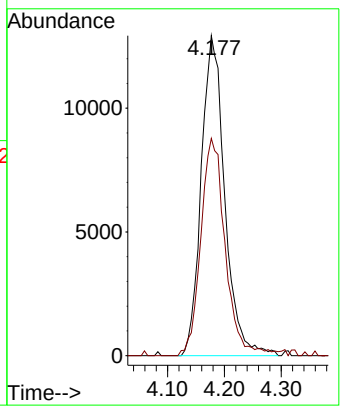




#13
Acrolein
Concen: 127.326 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 56 Resp: 3709

Ion	Ratio	Lower	Upper
56	100		
55	70.7	58.5	87.7



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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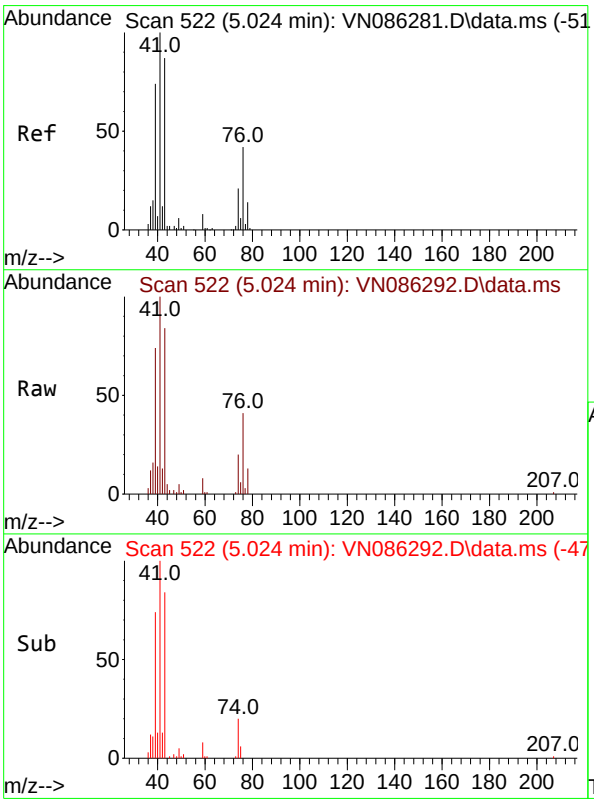
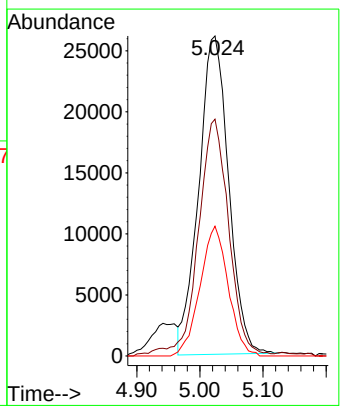
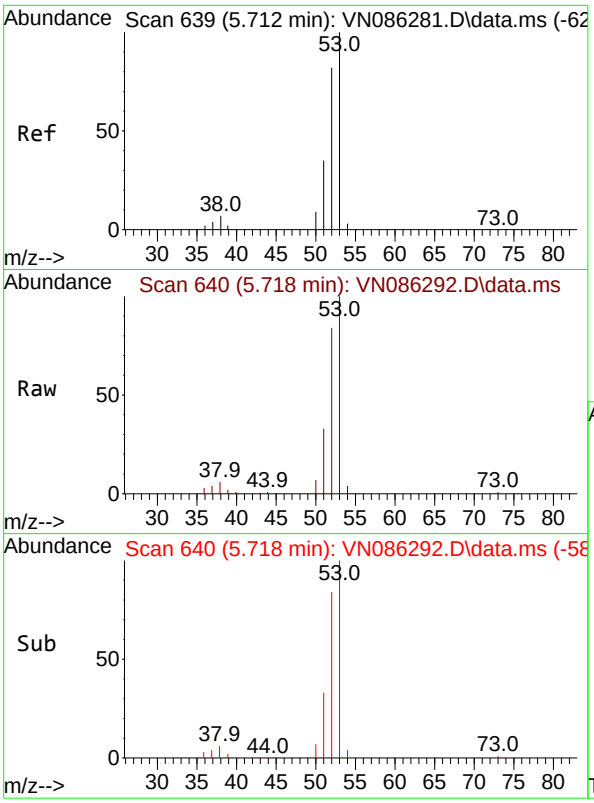


#14
Allyl chloride
Concen: 18.335 ug/l
RT: 5.024 min Scan# 522
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 41 Resp: 85613

Ion	Ratio	Lower	Upper
41	100		
39	76.2	59.2	88.8
76	38.5	31.2	46.8





#15
Acrylonitrile
Concen: 99.107 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 53 Resp: 14466

Ion	Ratio	Lower	Upper
53	100		
52	81.6	65.5	98.3
51	34.8	28.6	42.8

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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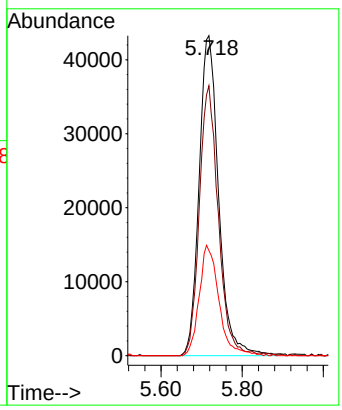
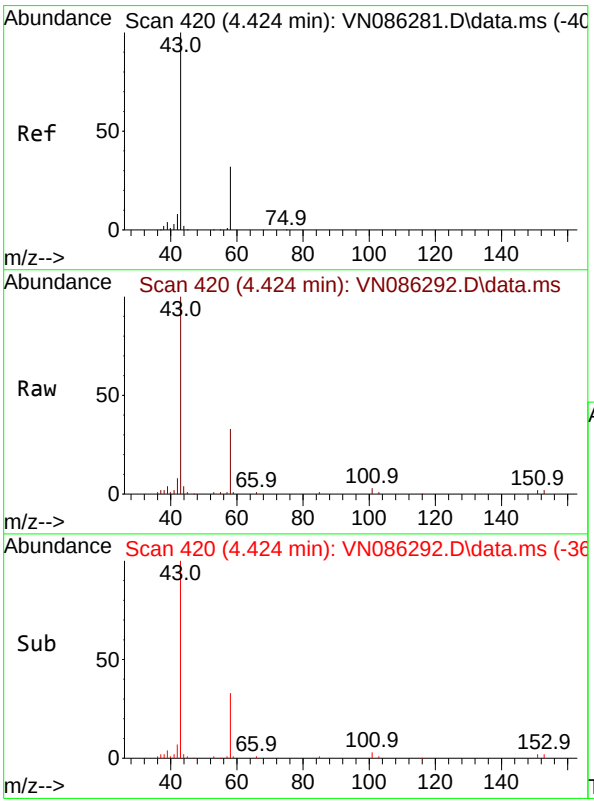
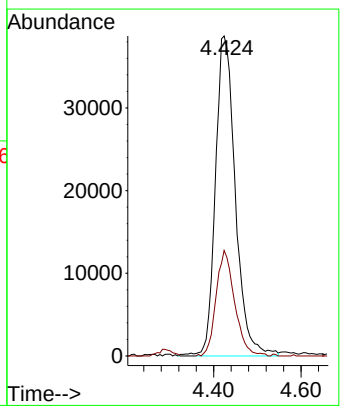


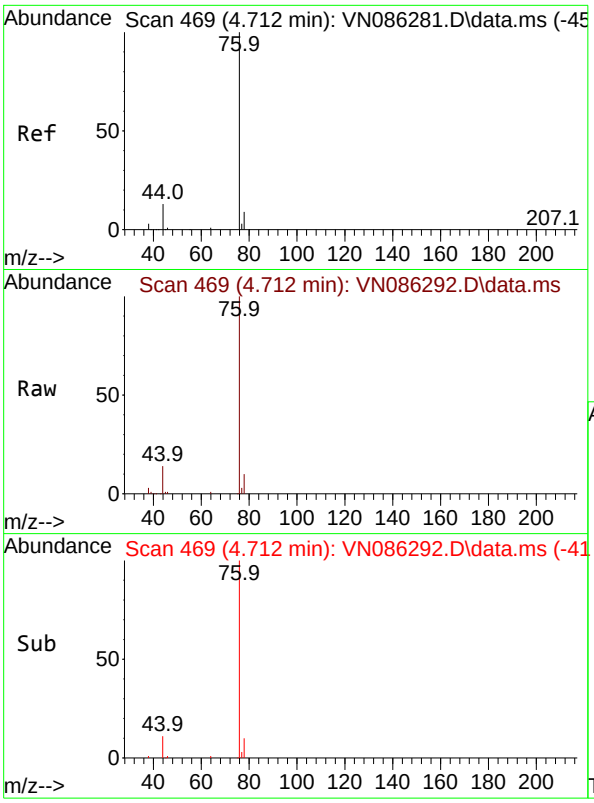


#16
Acetone
Concen: 106.004 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 122285

Ion	Ratio	Lower	Upper
43	100		
58	32.9	25.3	37.9

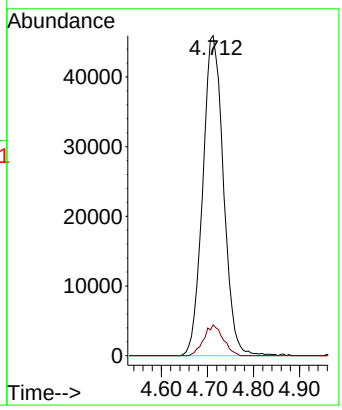




#17
Carbon Disulfide
Concen: 18.263 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 76 Resp: 14364

Ion	Ratio	Lower	Upper
76	100		
78	9.6	7.6	11.4



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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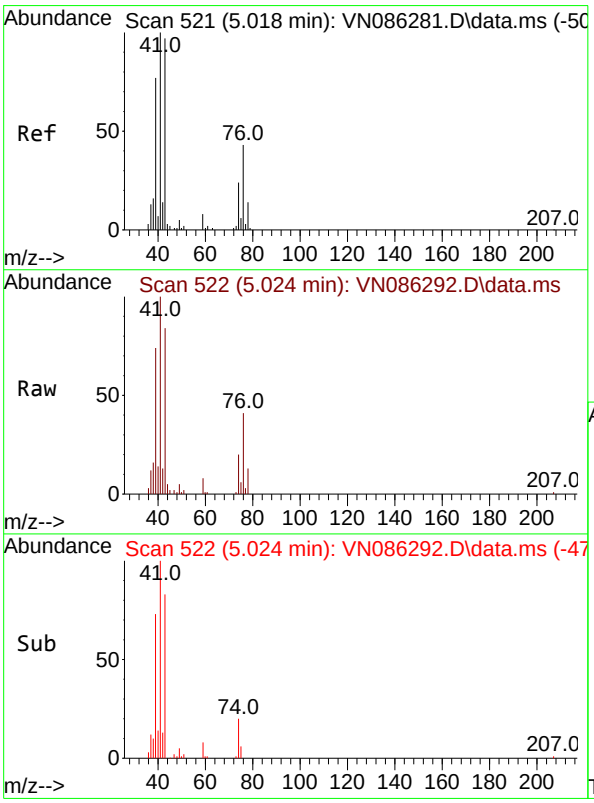
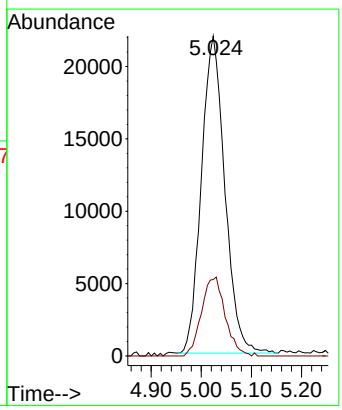
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

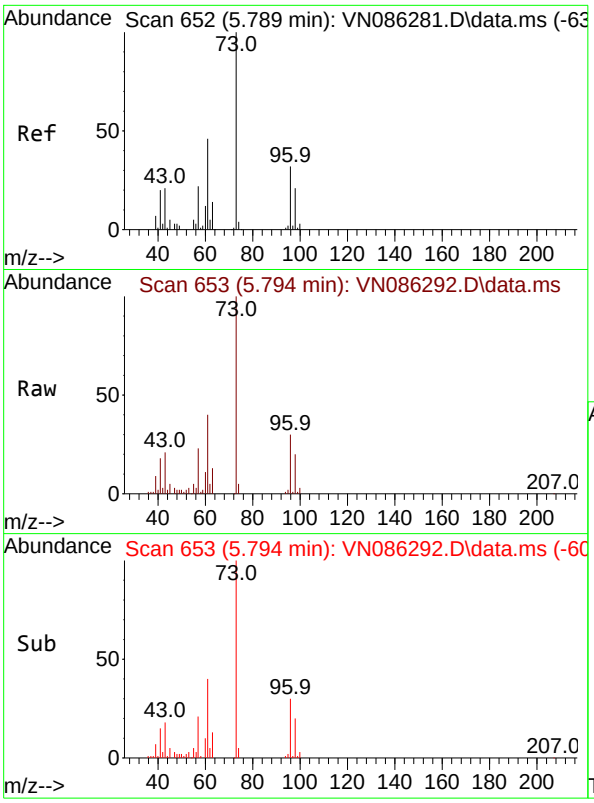


#18
Methyl Acetate
Concen: 18.348 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 71275

Ion	Ratio	Lower	Upper
43	100		
74	25.0	19.8	29.6

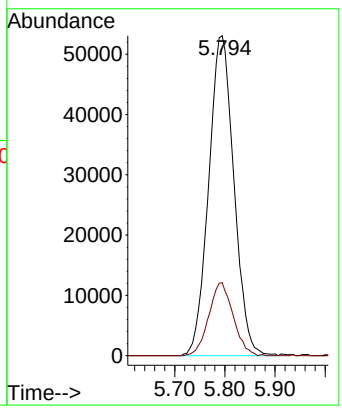




#19
Methyl tert-butyl Ether
Concen: 19.240 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 73 Resp: 18577

Ion	Ratio	Lower	Upper
73	100		
57	22.8	17.6	26.4



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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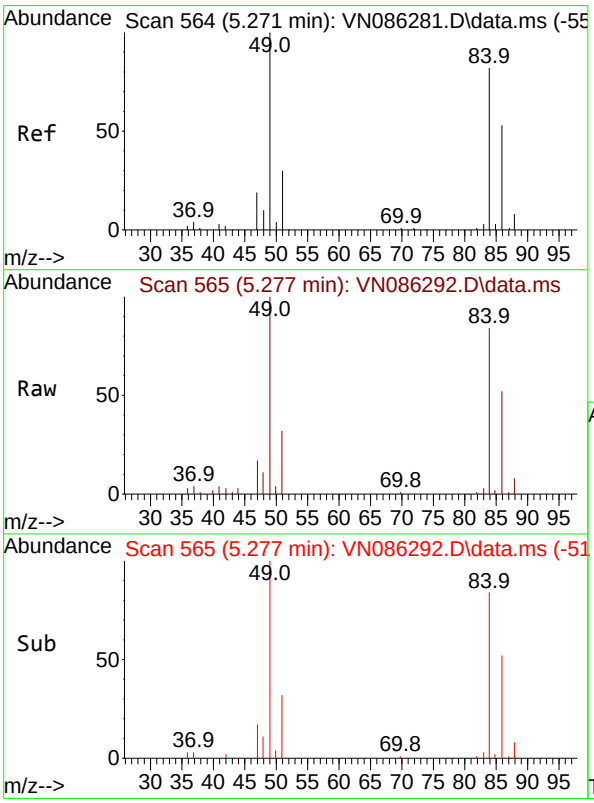
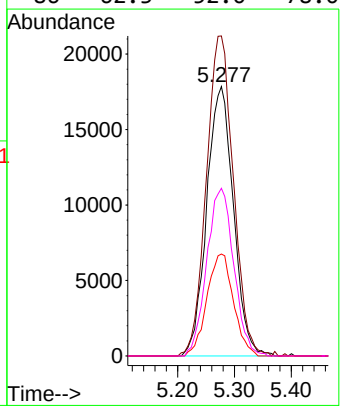
Supervised By :Mahesh Dadoda 04/17/2025

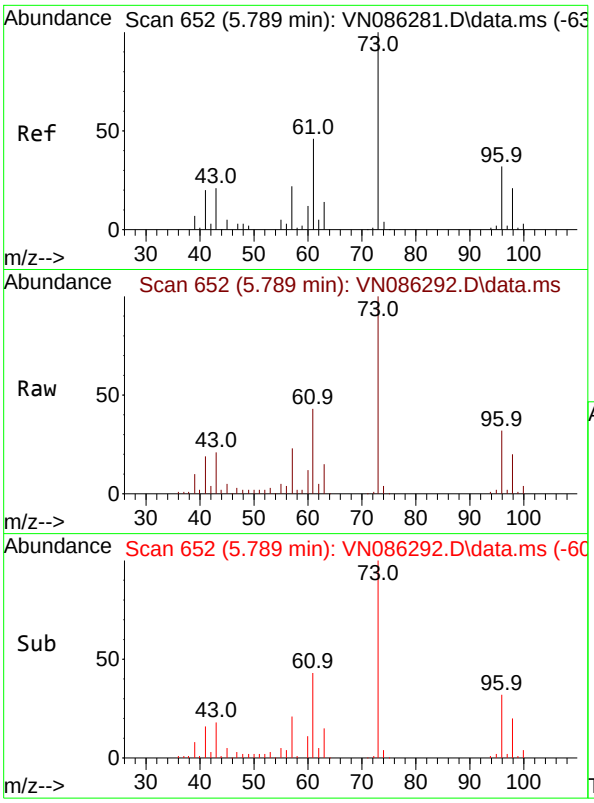


#20
Methylene Chloride
Concen: 19.491 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 84 Resp: 58313

Ion	Ratio	Lower	Upper
84	100		
49	118.8	98.2	147.2
51	37.8	29.8	44.6
86	62.3	52.0	78.0

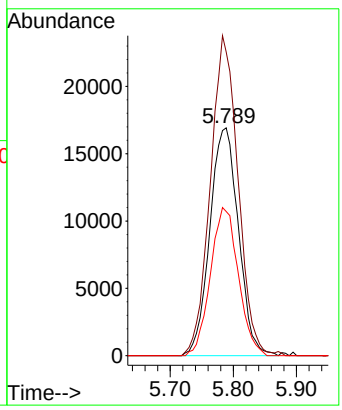




#21
trans-1,2-Dichloroethene
Concen: 19.403 ug/l
RT: 5.789 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 96 Resp: 5328

Ion	Ratio	Lower	Upper
96	100		
61	133.3	114.6	171.8
98	63.3	51.2	76.8



Instrument :
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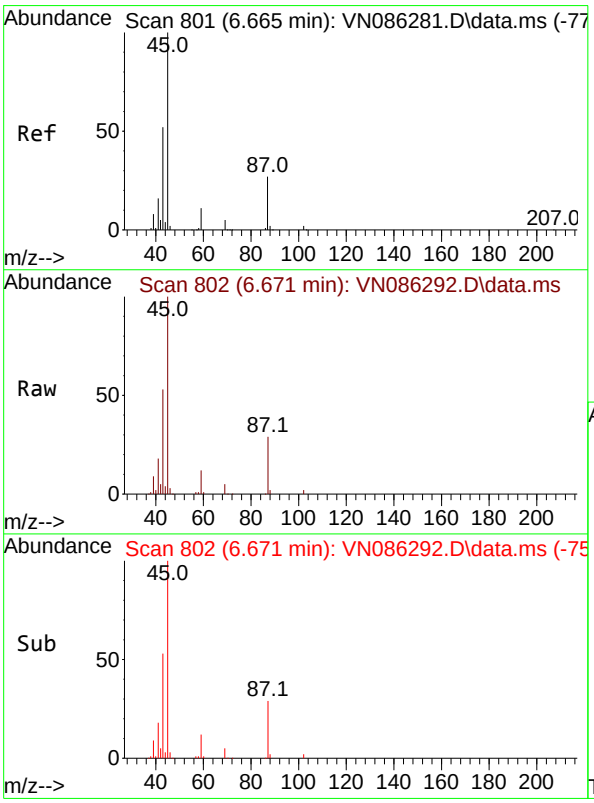
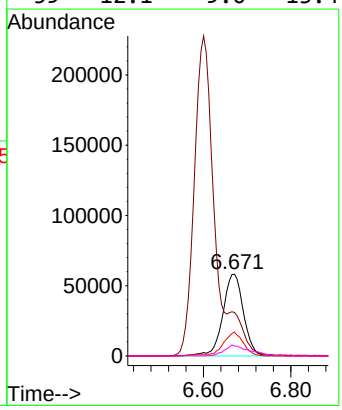
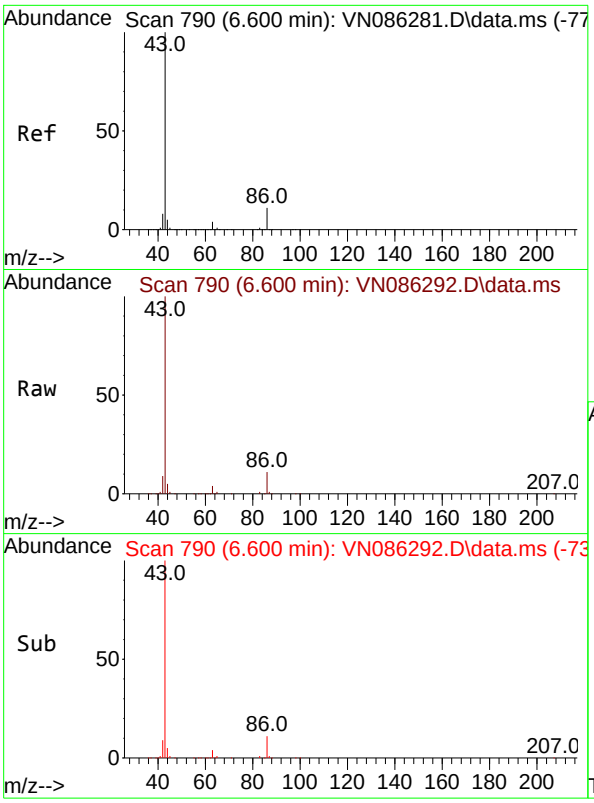


#22
Diisopropyl ether
Concen: 18.723 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 45 Resp: 190187

Ion	Ratio	Lower	Upper
45	100		
43	52.2	41.8	62.8
87	29.3	21.6	32.4
59	12.1	9.0	13.4





#23
Vinyl Acetate
Concen: 95.728 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 67975

Ion	Ratio	Lower	Upper
43	100		
86	11.2	8.6	13.0

Instrument :
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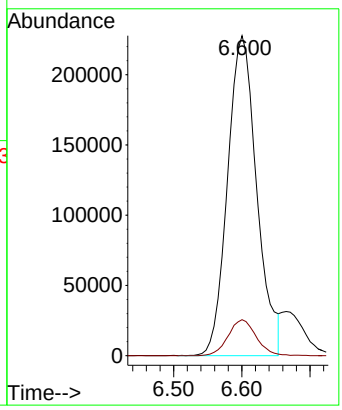
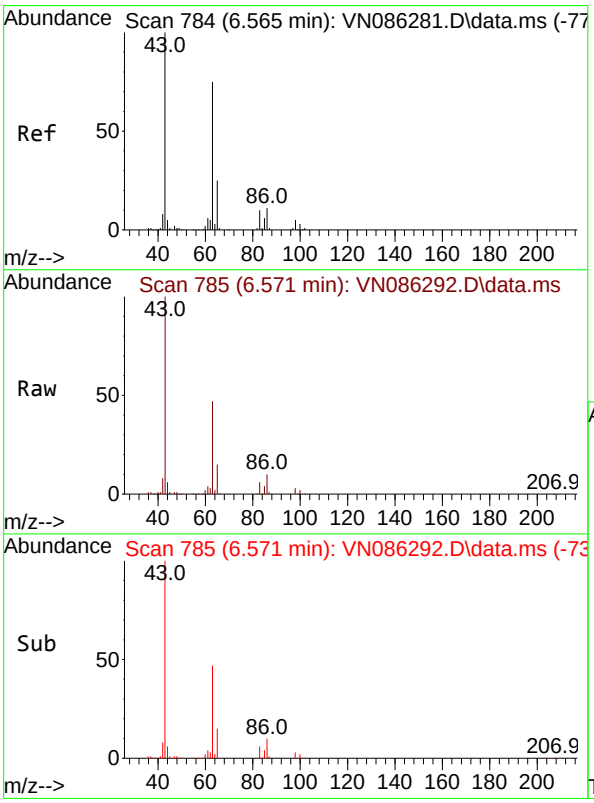
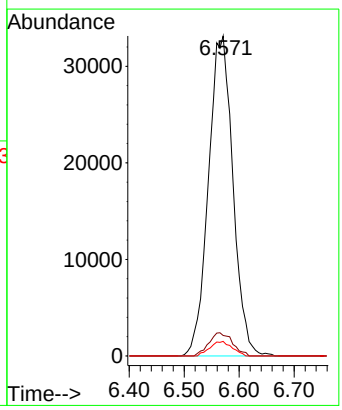


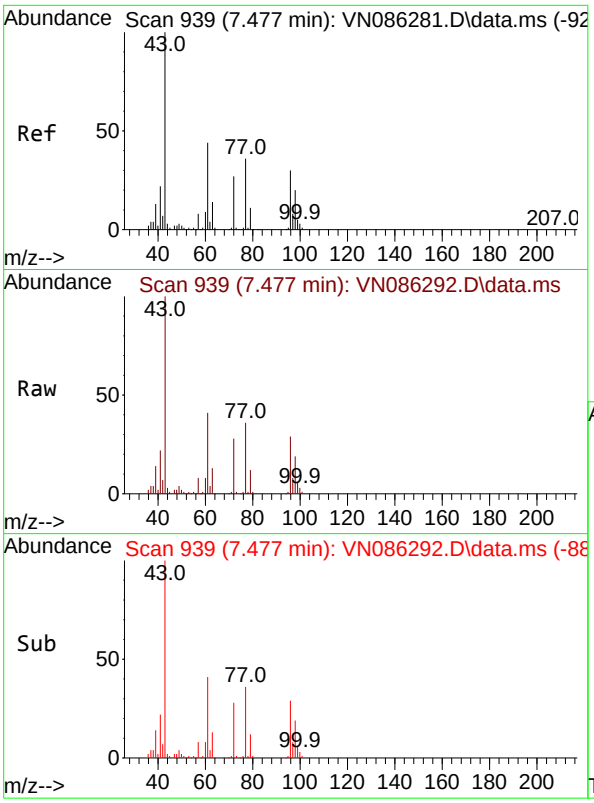


#24
1,1-Dichloroethane
Concen: 19.160 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 63 Resp: 102692

Ion	Ratio	Lower	Upper
63	100		
98	6.4	3.4	10.2
100	4.5	2.1	6.5





#25
2-Butanone
Concen: 98.009 ug/l
RT: 7.477 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 19742

Ion	Ratio	Lower	Upper
43	100		
72	27.5	21.7	32.5

Instrument :
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ClientSampleId :
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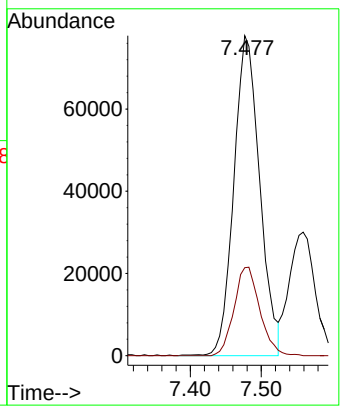
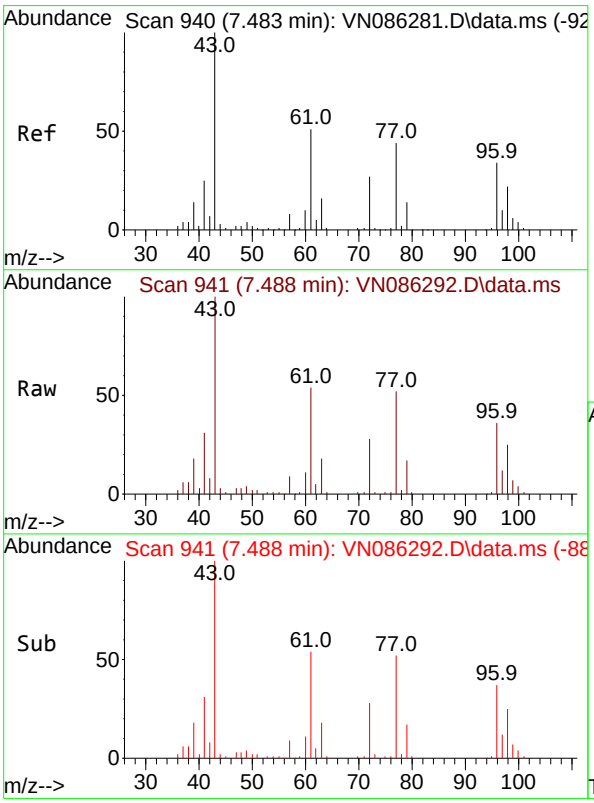
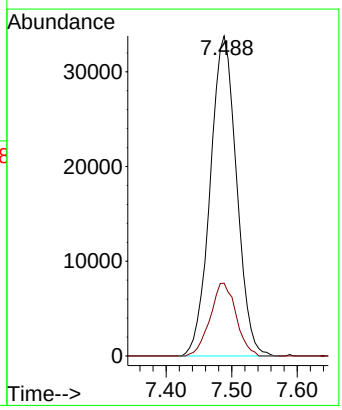


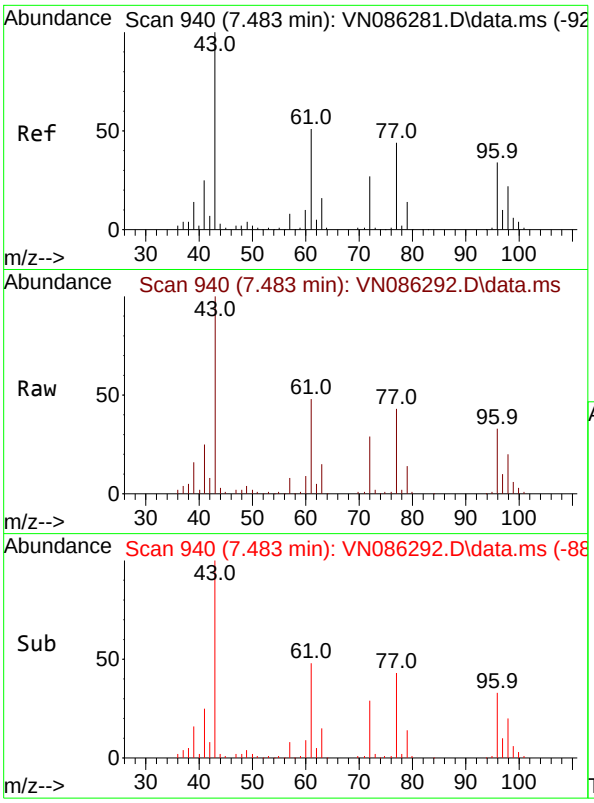


#26
2,2-Dichloropropane
Concen: 19.635 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 77 Resp: 94224

Ion	Ratio	Lower	Upper
77	100		
97	22.4	11.2	33.5





#27
cis-1,2-Dichloroethene
Concen: 19.195 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 96 Resp: 6542

Ion	Ratio	Lower	Upper
96	100		
61	148.1	0.0	299.0
98	63.5	0.0	129.6

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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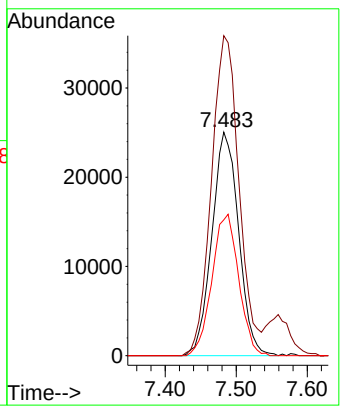
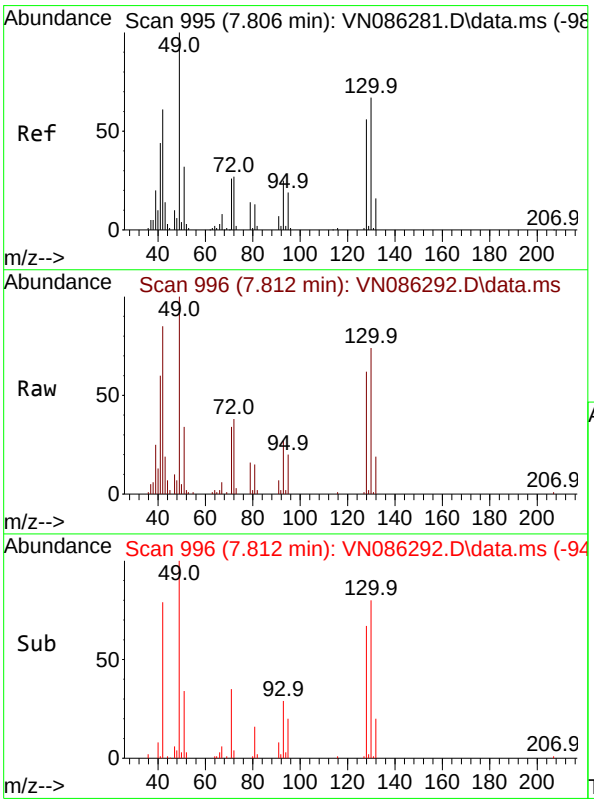
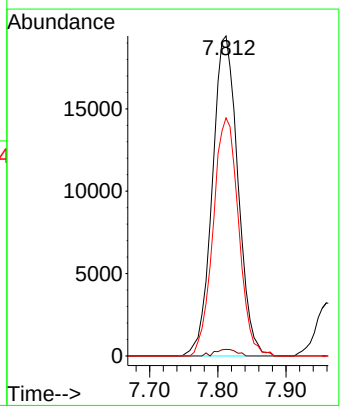


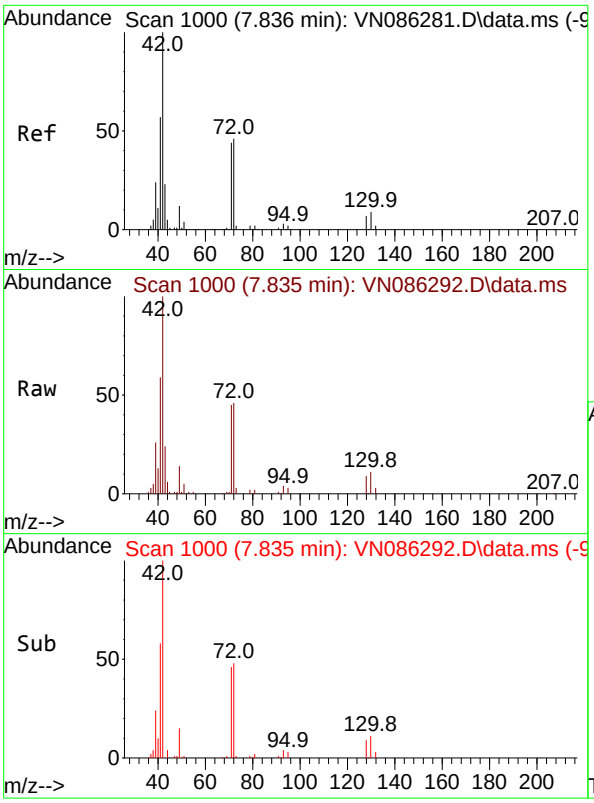


#28
Bromochloromethane
Concen: 22.314 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 49 Resp: 50709

Ion	Ratio	Lower	Upper
49	100		
129	1.8	0.0	3.4
130	74.0	57.1	85.7





#29
Tetrahydrofuran
Concen: 95.239 ug/l
RT: 7.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 42 Resp: 12828

Ion	Ratio	Lower	Upper
42	100		
72	45.9	36.2	54.4
71	42.3	34.0	51.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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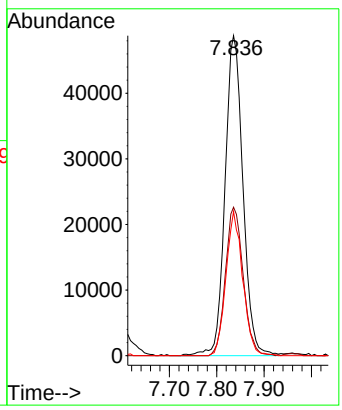
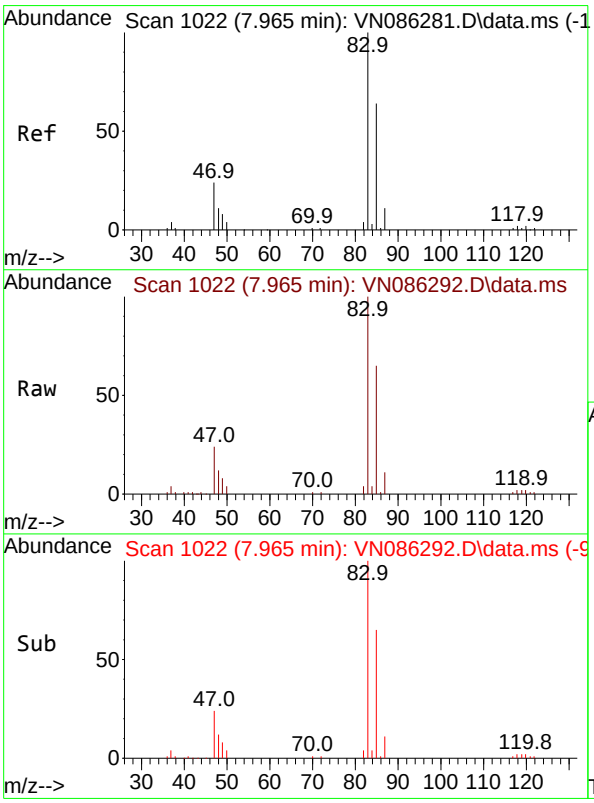
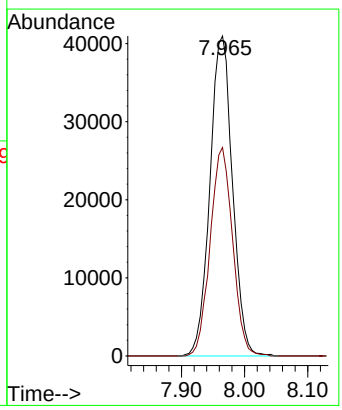


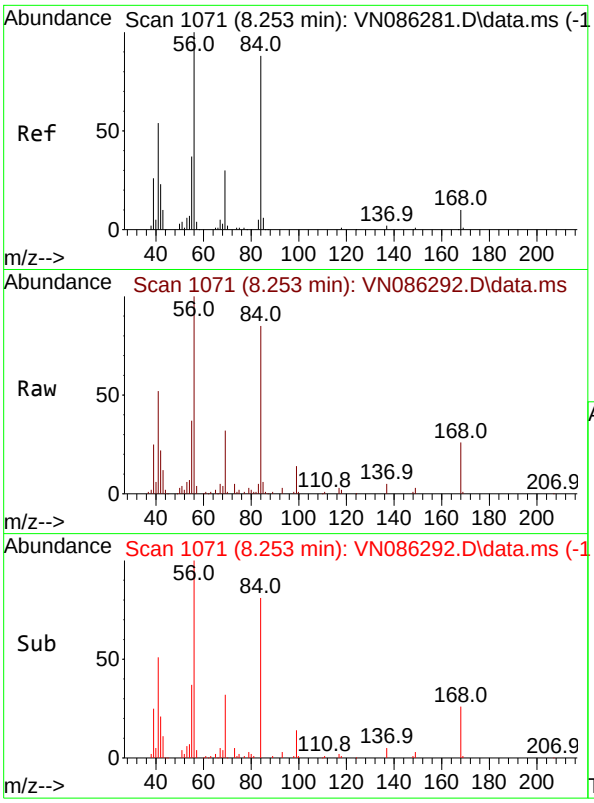


#30
Chloroform
Concen: 19.321 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 83 Resp: 101723

Ion	Ratio	Lower	Upper
83	100		
85	65.2	51.5	77.3

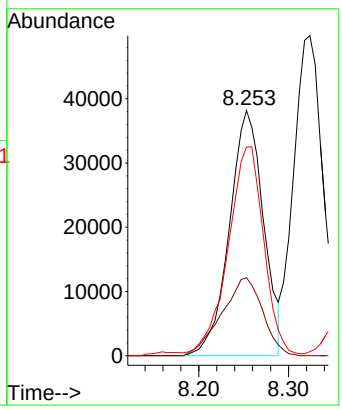




#31
Cyclohexane
Concen: 19.184 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 56 Resp: 10061

Ion	Ratio	Lower	Upper
56	100		
69	31.8	24.2	36.2
84	83.8	70.3	105.5



Instrument :
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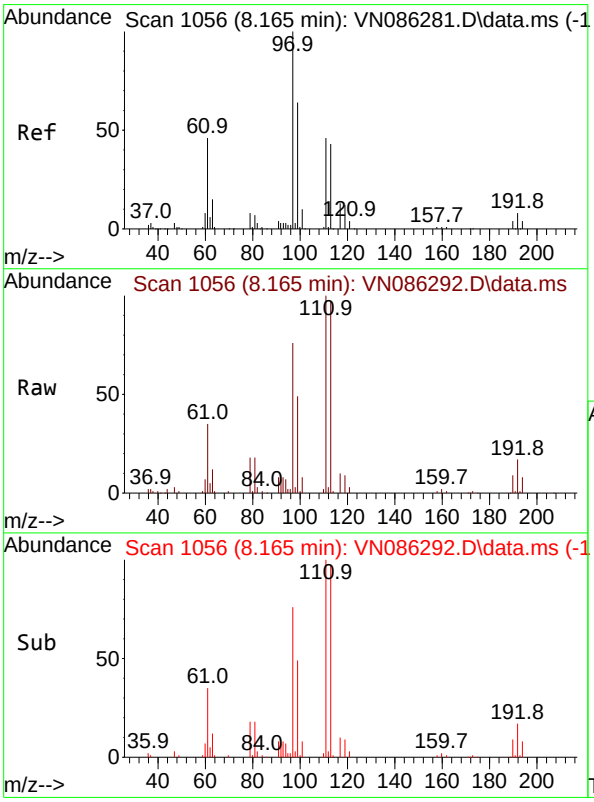
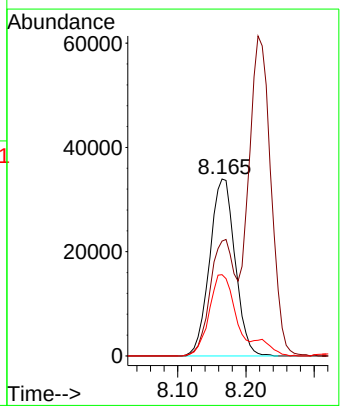
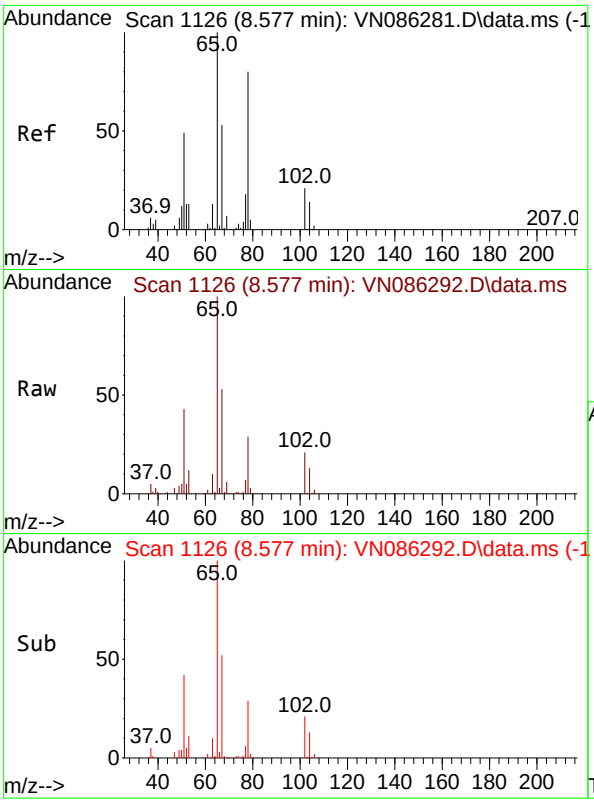


#32
1,1,1-Trichloroethane
Concen: 19.548 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 97 Resp: 88042

Ion	Ratio	Lower	Upper
97	100		
99	64.2	52.7	79.1
61	47.2	39.5	59.3

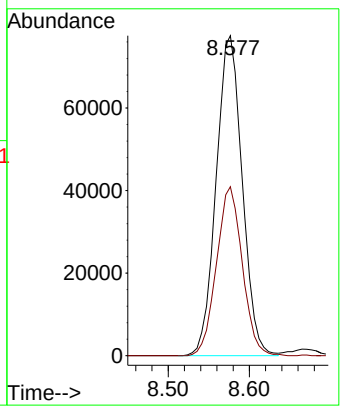




#33
1,2-Dichloroethane-d4
Concen: 53.460 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 65 Resp: 17300

Ion	Ratio	Lower	Upper
65	100		
67	52.2	0.0	106.0



Instrument :
MSVOA_N
ClientSampleId :
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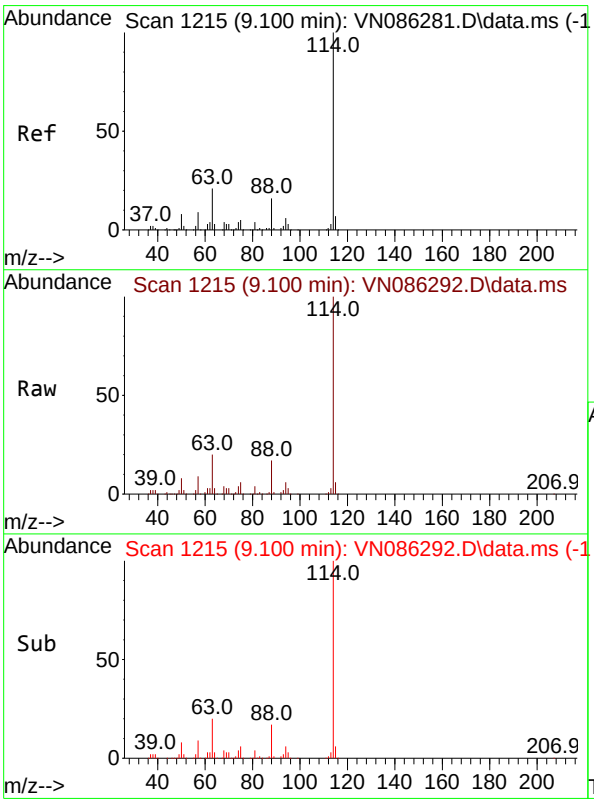
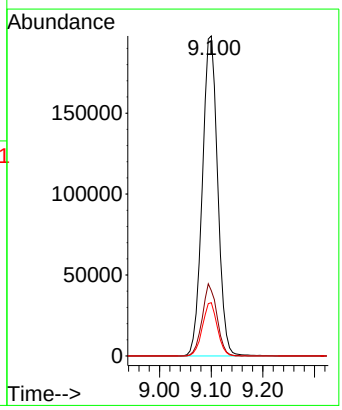
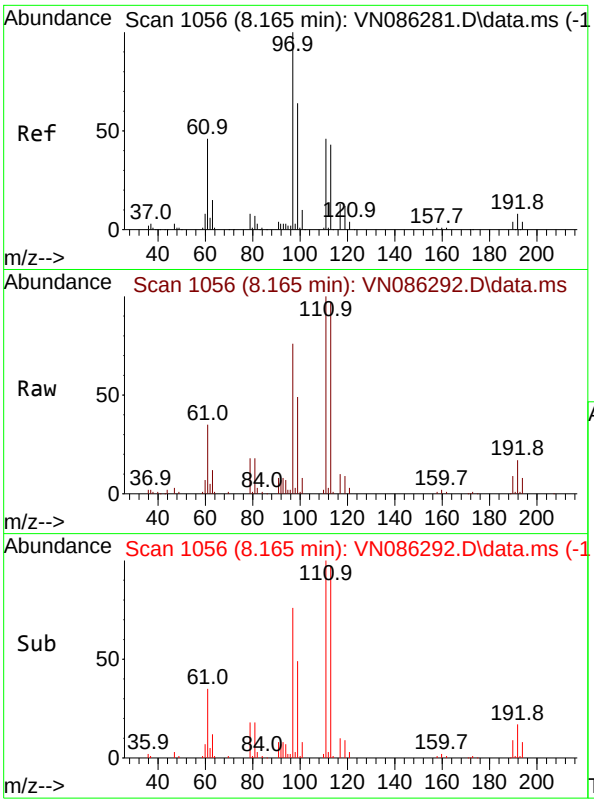


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:114 Resp: 407332

Ion	Ratio	Lower	Upper
114	100		
63	20.4	0.0	42.6
88	16.7	0.0	31.8

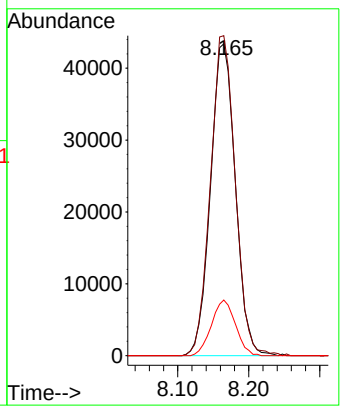




#35
Dibromofluoromethane
Concen: 55.666 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:113 Resp: 10523

Ion	Ratio	Lower	Upper
113	100		
111	102.5	83.4	125.0
192	17.3	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
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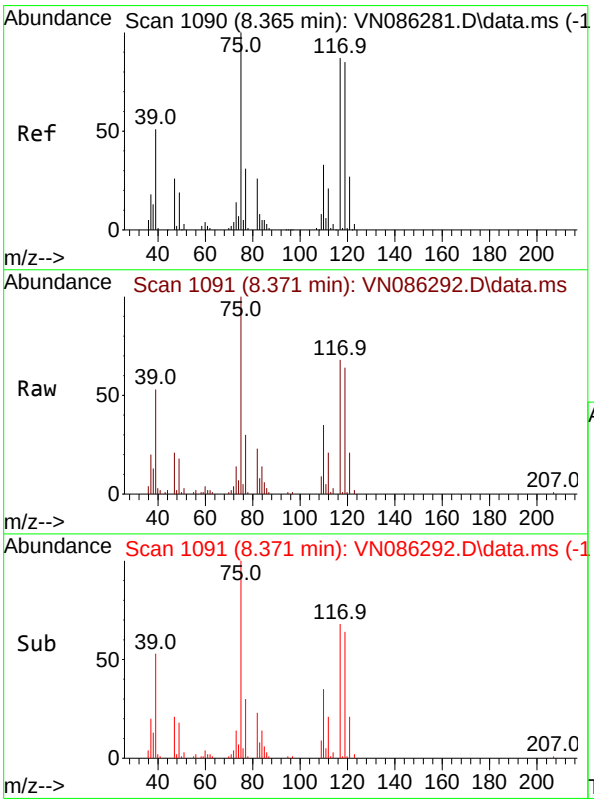
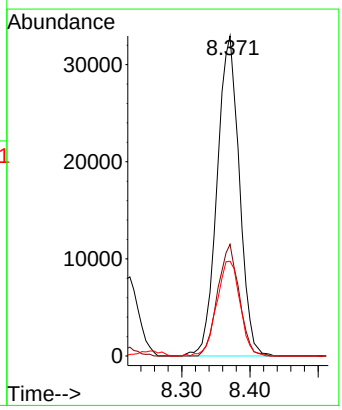
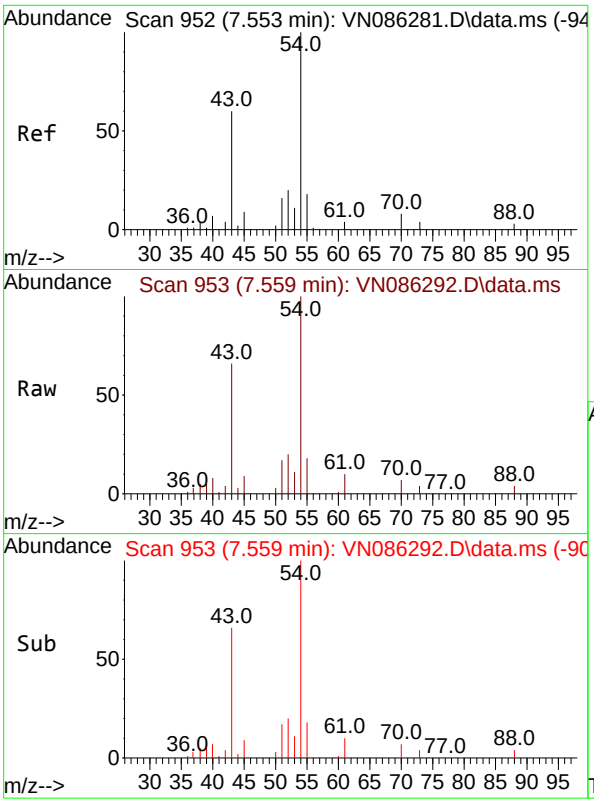


#36
1,1-Dichloropropene
Concen: 19.791 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 75 Resp: 74728

Ion	Ratio	Lower	Upper
75	100		
110	33.9	16.8	50.4
77	31.2	24.9	37.3

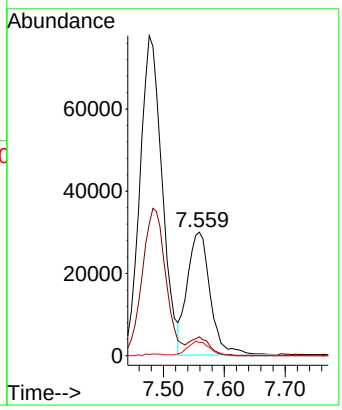




#37
Ethyl Acetate
Concen: 19.680 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 7823

Ion	Ratio	Lower	Upper
43	100		
61	13.1	11.1	16.7
70	11.1	9.2	13.8



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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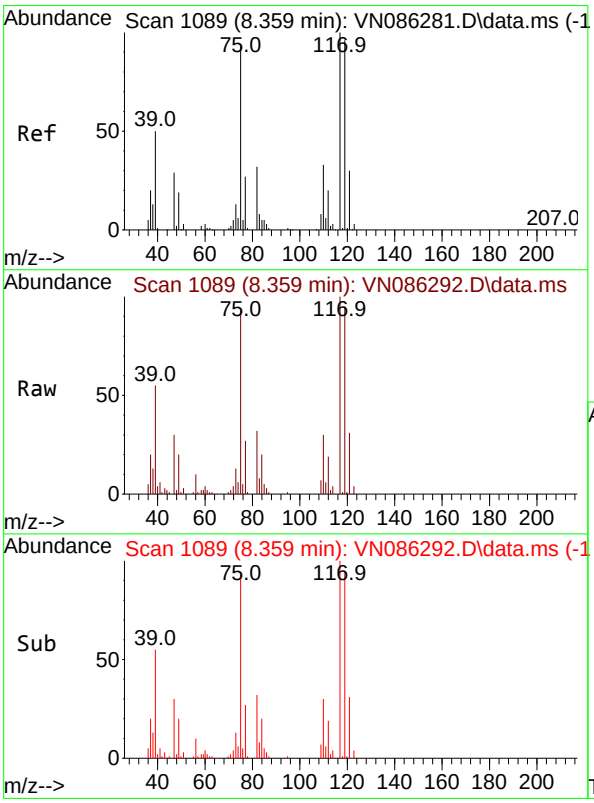
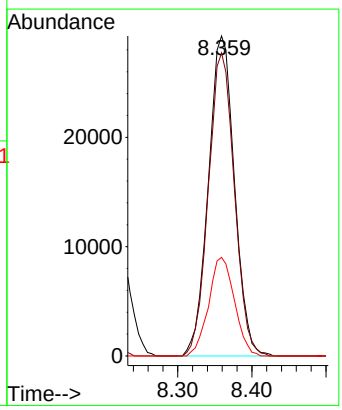
Supervised By :Mahesh Dadoda 04/17/2025

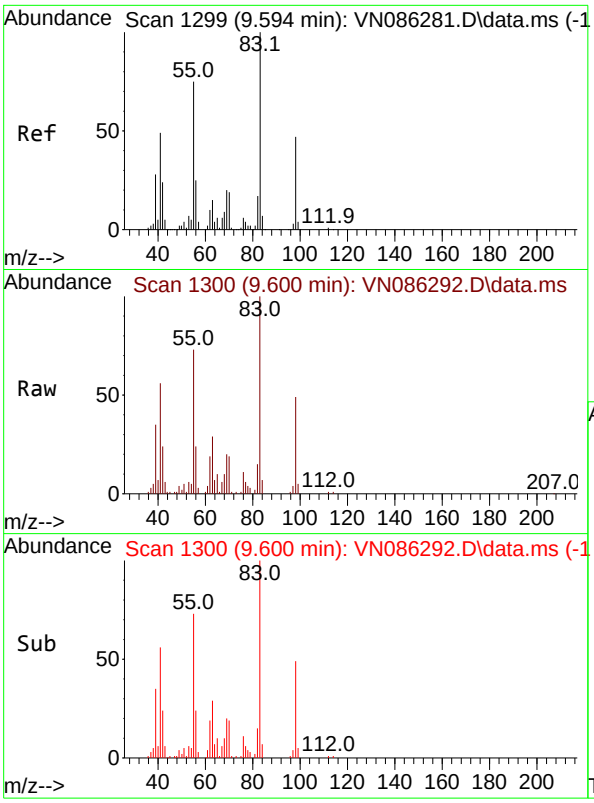


#38
Carbon Tetrachloride
Concen: 19.887 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:117 Resp: 71510

Ion	Ratio	Lower	Upper
117	100		
119	94.7	76.8	115.2
121	30.8	23.8	35.8





#39
Methylcyclohexane
Concen: 19.693 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 83 Resp: 8838

Ion	Ratio	Lower	Upper
83	100		
55	73.5	59.8	89.8
98	49.4	37.9	56.9

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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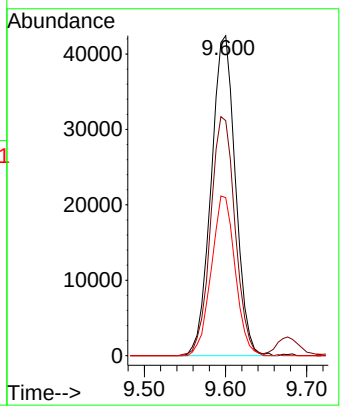
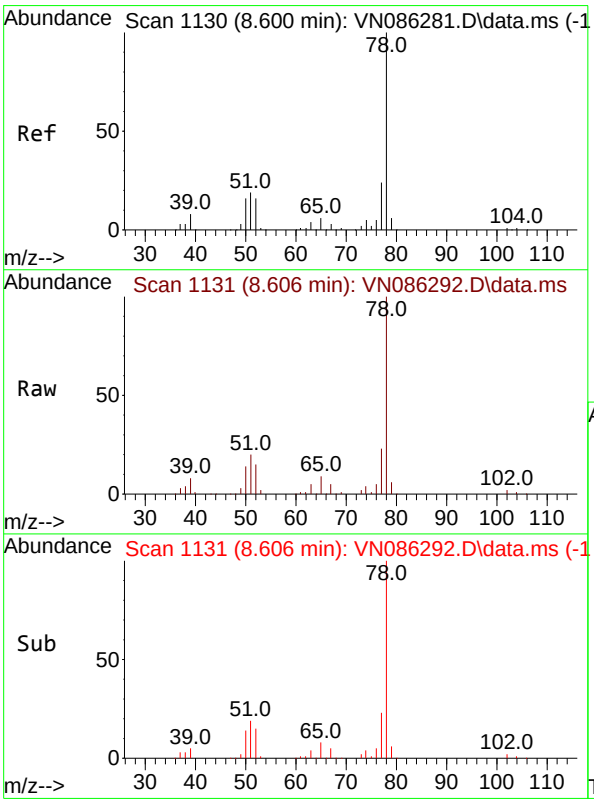
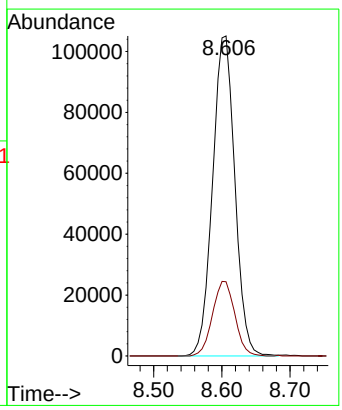


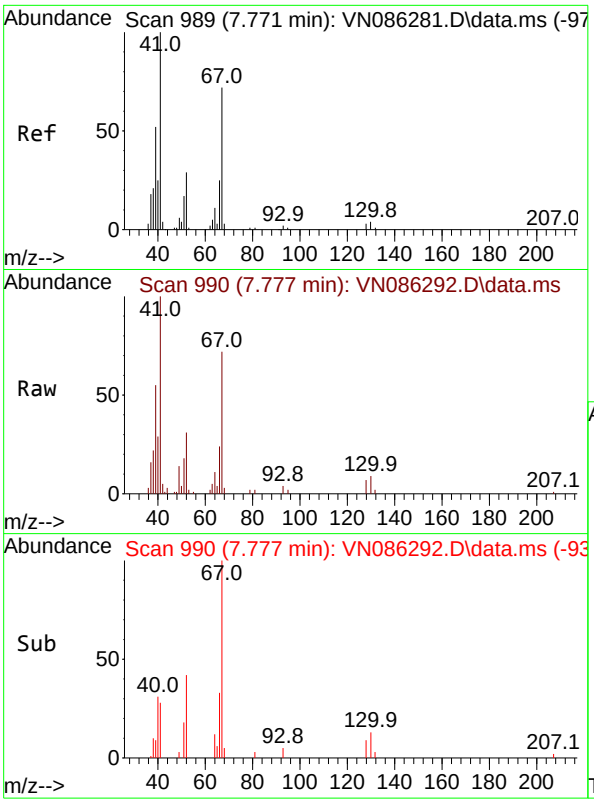


#40
Benzene
Concen: 19.776 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 78 Resp: 239253

Ion	Ratio	Lower	Upper
78	100		
77	23.2	19.4	29.2

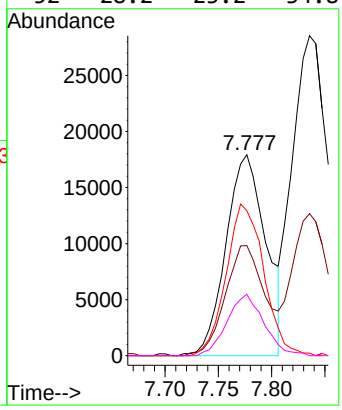




#41
Methacrylonitrile
Concen: 20.295 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 41 Resp: 4675

Ion	Ratio	Lower	Upper
41	100		
39	54.4	43.0	64.4
67	71.4	58.8	88.2
52	28.2	23.2	34.8



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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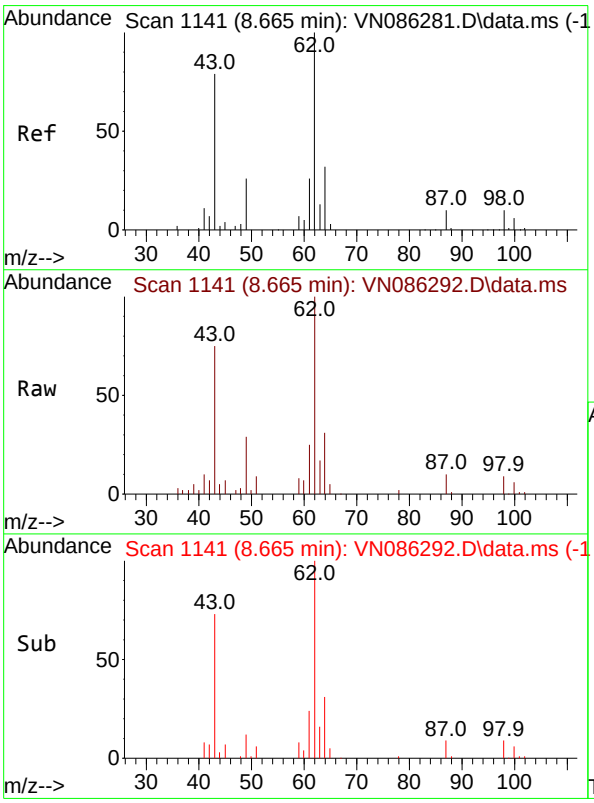
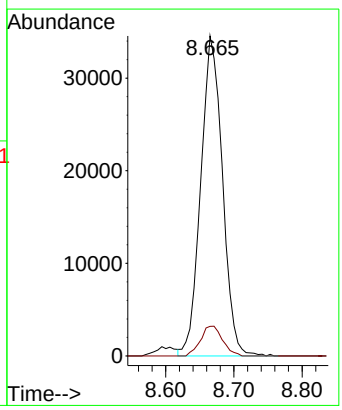
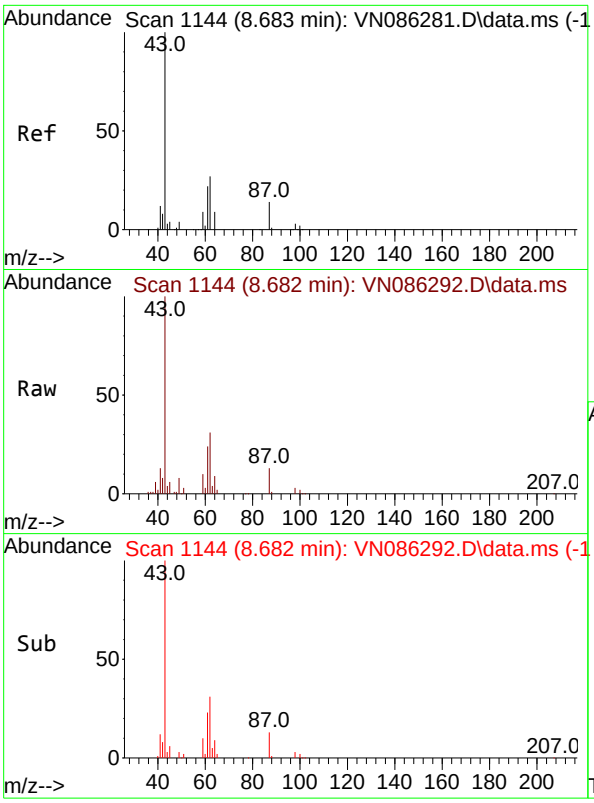


#42
1,2-Dichloroethane
Concen: 19.857 ug/l
RT: 8.665 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 62 Resp: 76607

Ion	Ratio	Lower	Upper
62	100		
98	9.5	0.0	19.2





#43
Isopropyl Acetate
Concen: 20.057 ug/l
RT: 8.682 min Scan# 1
Delta R.T. -0.001 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 15296

Ion	Ratio	Lower	Upper
43	100		
61	24.7	20.5	30.7
87	12.2	10.5	15.7

Instrument :
MSVOA_N
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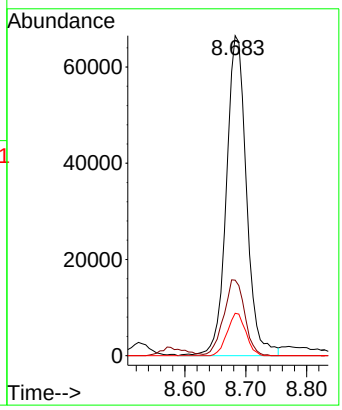
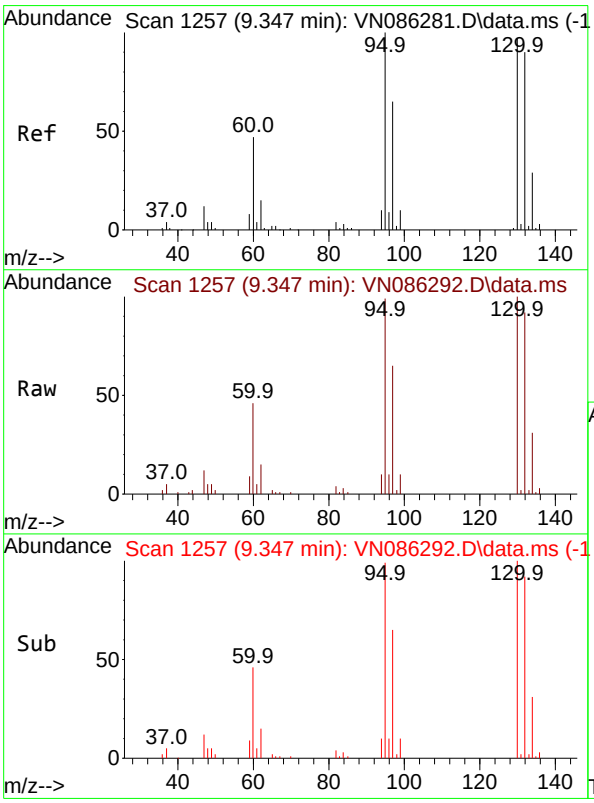
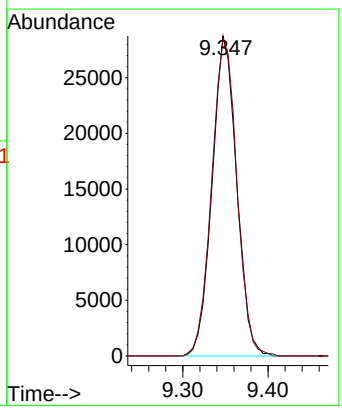


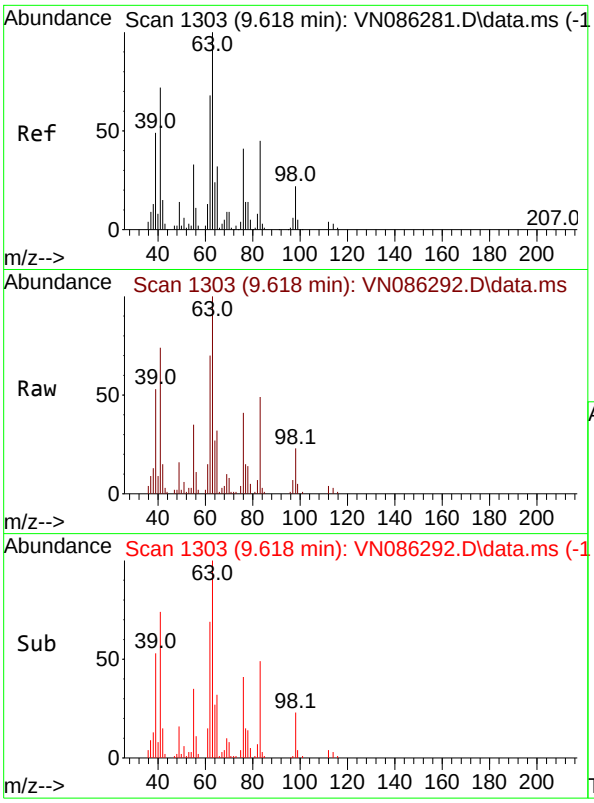


#44
Trichloroethene
Concen: 20.014 ug/l
RT: 9.347 min Scan# 1257
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:130 Resp: 57388

Ion	Ratio	Lower	Upper
130	100		
95	99.3	0.0	207.2

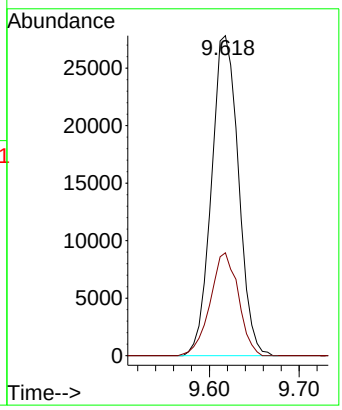




#45
1,2-Dichloropropane
Concen: 19.636 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 63 Resp: 5814

Ion	Ratio	Lower	Upper
63	100		
65	32.1	25.4	38.2



Instrument :
MSVOA_N
ClientSampleId :
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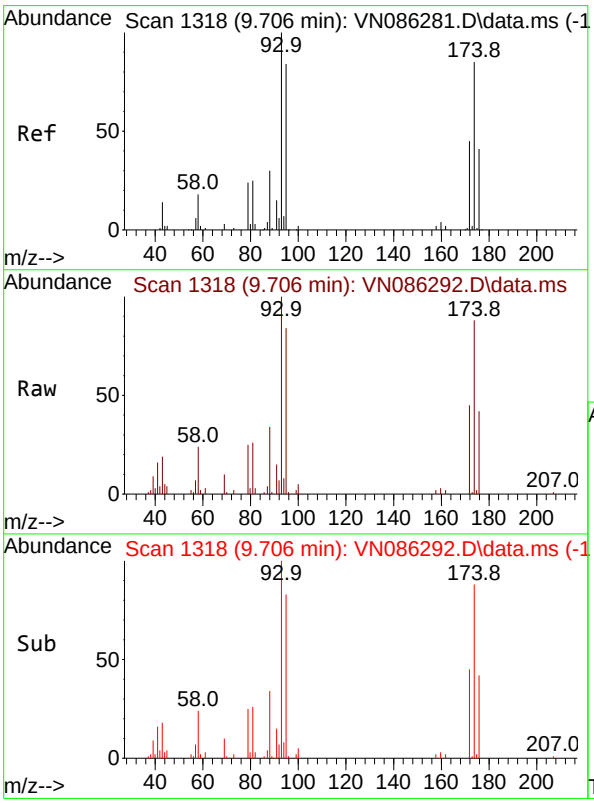
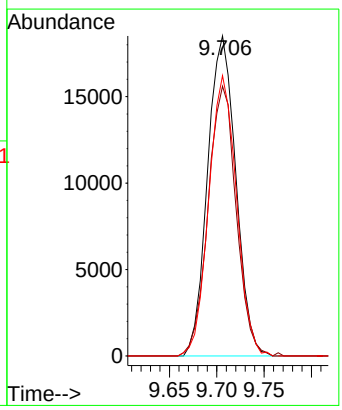
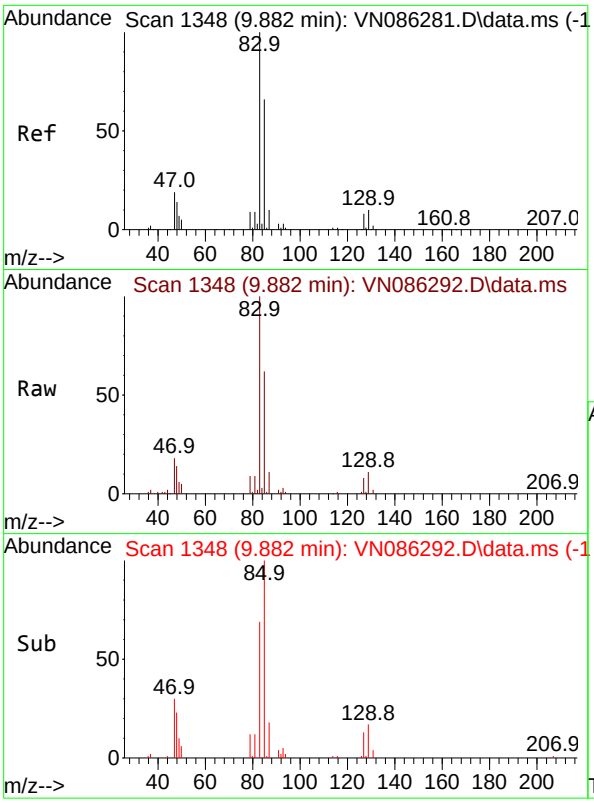


#46
Dibromomethane
Concen: 20.335 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 93 Resp: 38369

Ion	Ratio	Lower	Upper
93	100		
95	84.1	66.2	99.4
174	86.1	67.8	101.6

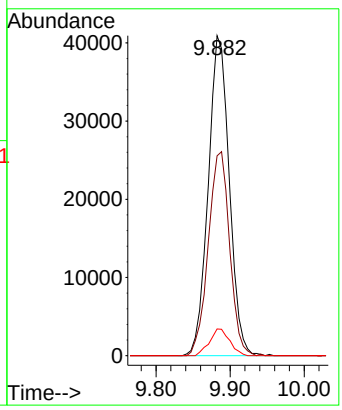




#47
Bromodichloromethane
Concen: 19.795 ug/l
RT: 9.882 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 83 Resp: 8066

Ion	Ratio	Lower	Upper
83	100		
85	62.5	52.6	78.8
127	8.4	6.1	9.1



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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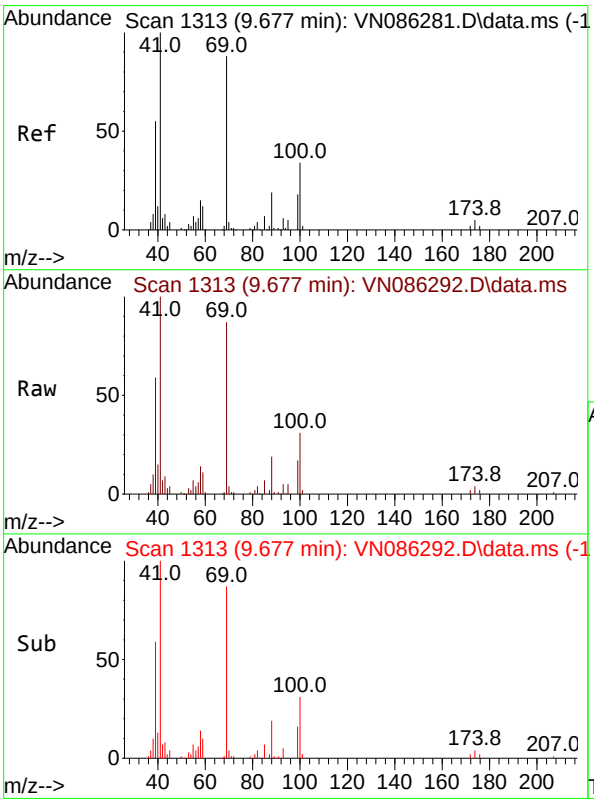
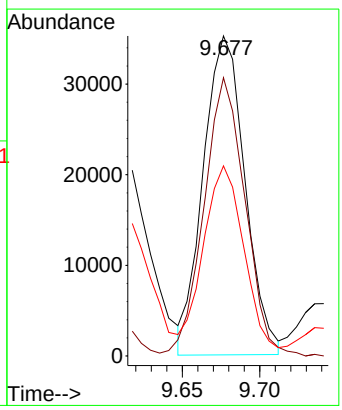
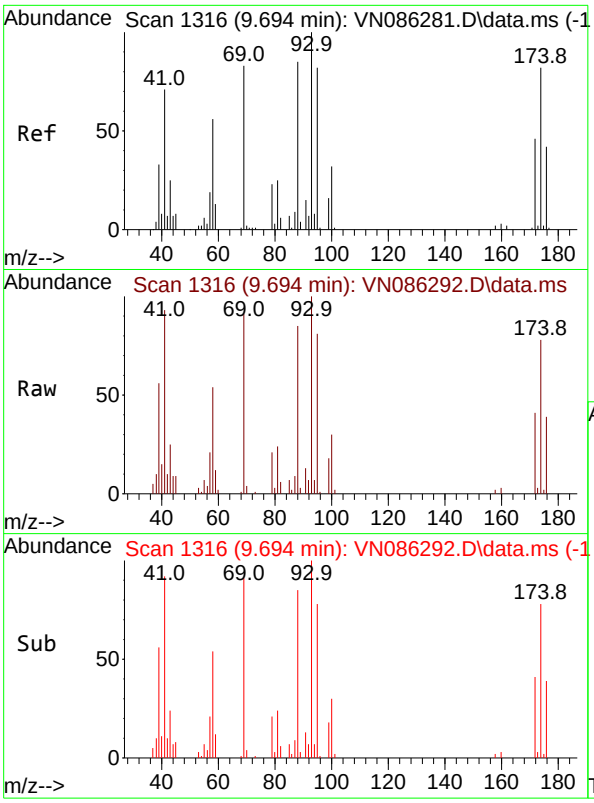


#48
Methyl methacrylate
Concen: 18.877 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 41 Resp: 65898

Ion	Ratio	Lower	Upper
41	100		
69	86.1	68.2	102.2
39	58.9	45.2	67.8

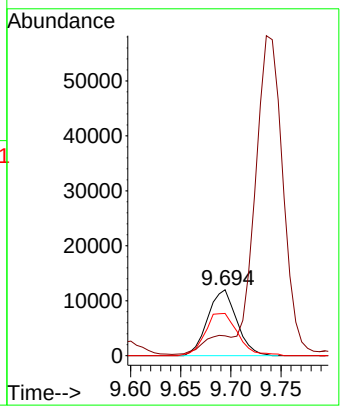




#49
1,4-Dioxane
Concen: 405.872 ug/l
RT: 9.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 88 Resp: 2410

Ion	Ratio	Lower	Upper
88	100		
43	28.5	23.8	35.8
58	72.4	57.4	86.2



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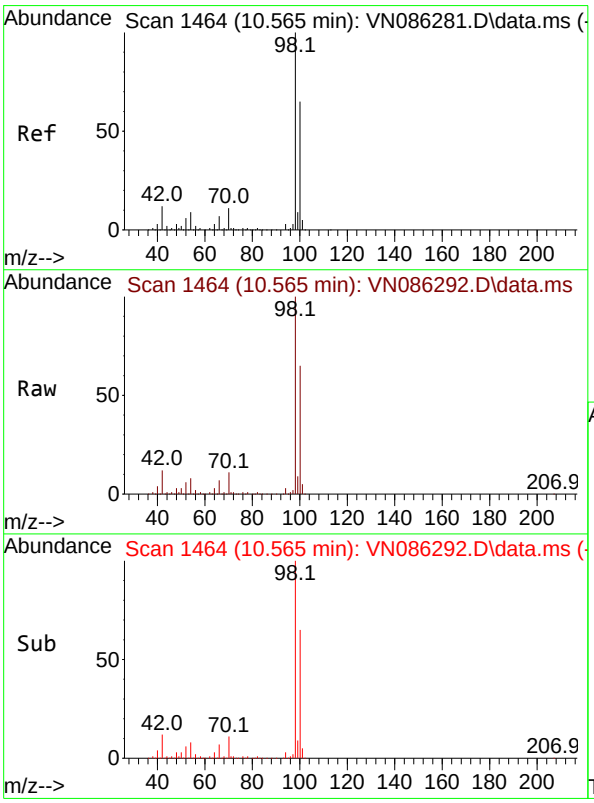
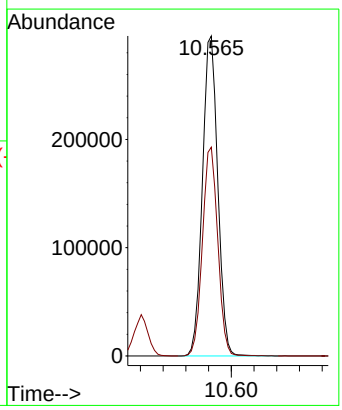
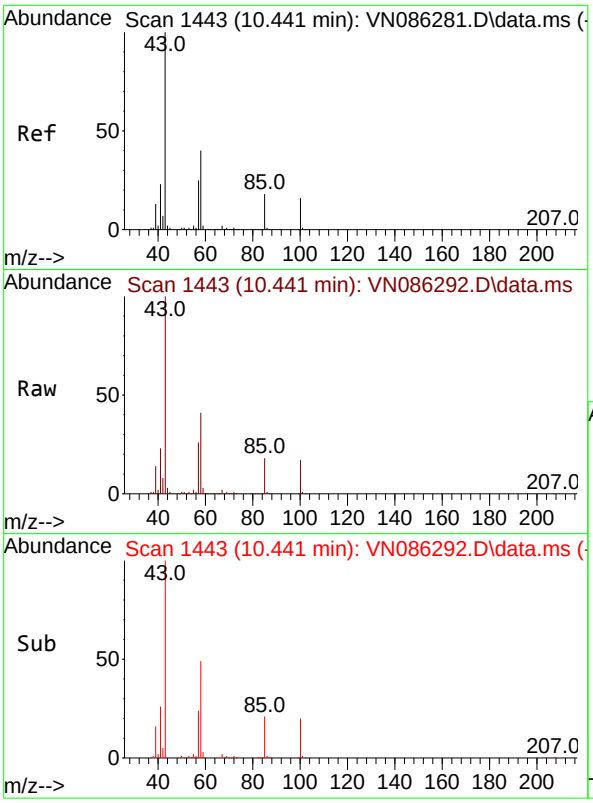


#50
Toluene-d8
Concen: 54.632 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 98 Resp: 551979

Ion	Ratio	Lower	Upper
98	100		
100	65.2	52.5	78.7





#51
4-Methyl-2-Pentanone
Concen: 100.180 ug/l
RT: 10.441 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 40780

Ion	Ratio	Lower	Upper
43	100		
58	41.1	32.2	48.4

Instrument :
MSVOA_N
ClientSampleId :
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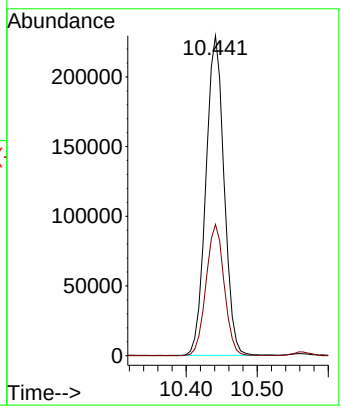
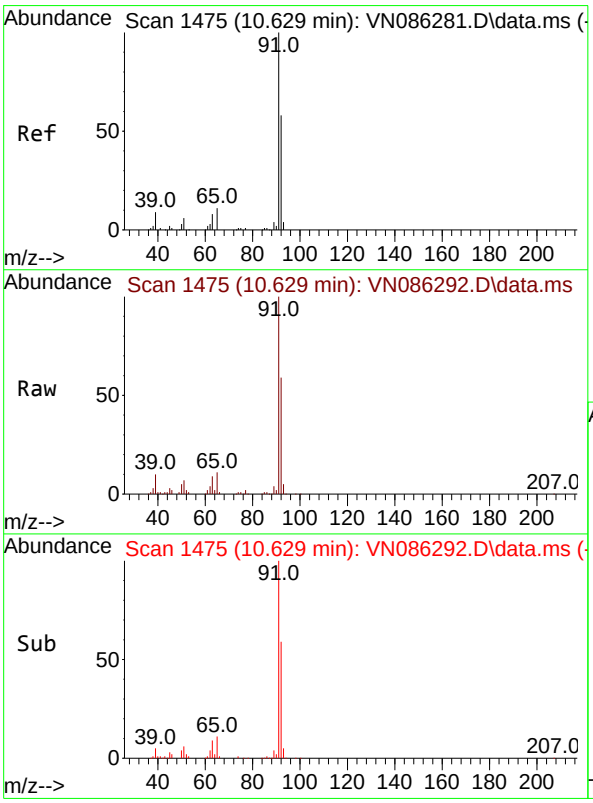
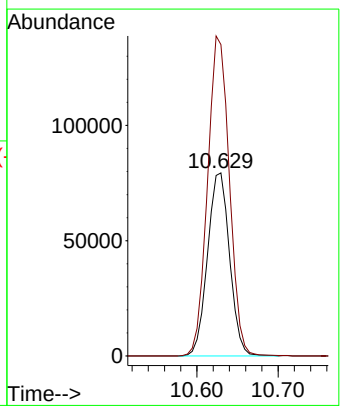


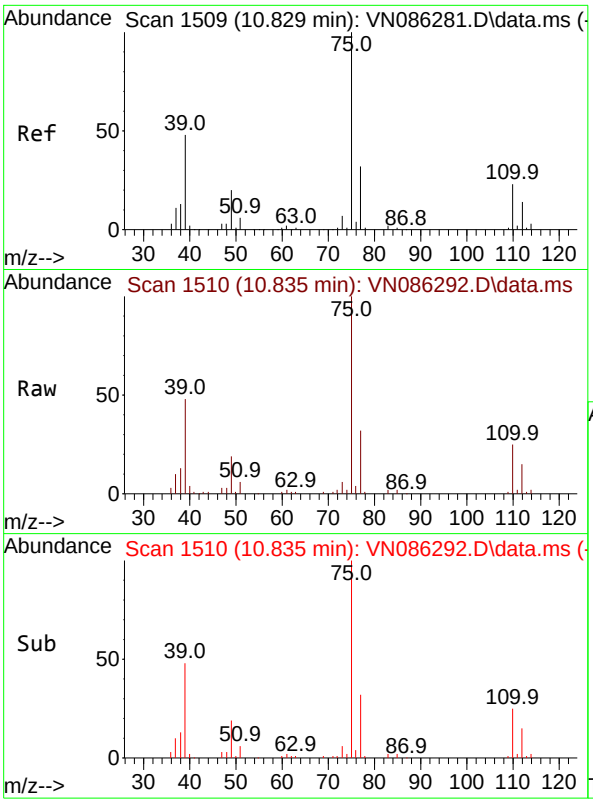


#52
Toluene
Concen: 19.835 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 92 Resp: 149726

Ion	Ratio	Lower	Upper
92	100		
91	173.0	137.3	205.9

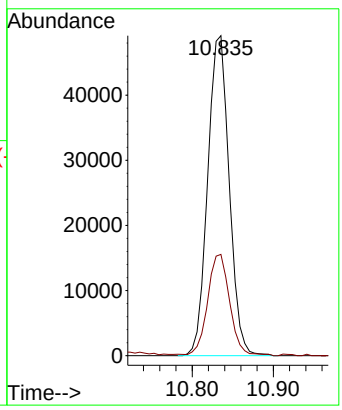




#53
t-1,3-Dichloropropene
Concen: 19.871 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 75 Resp: 9039

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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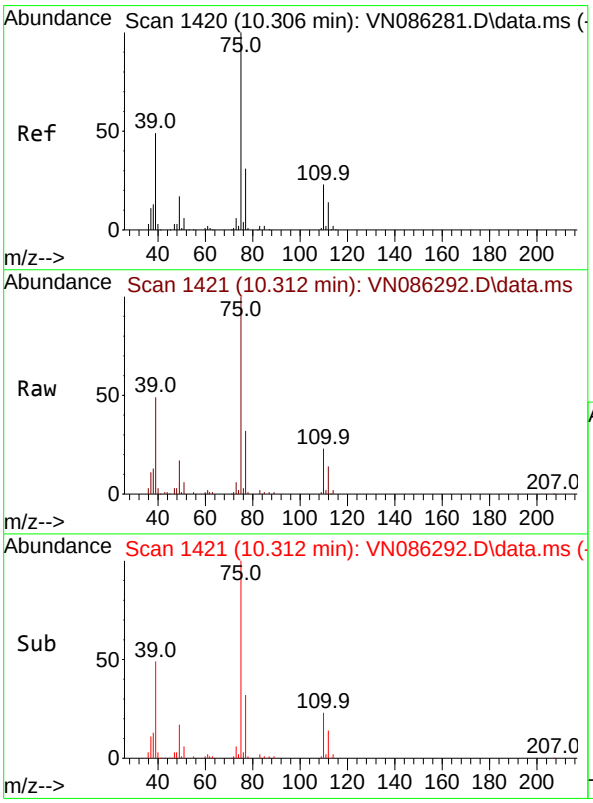
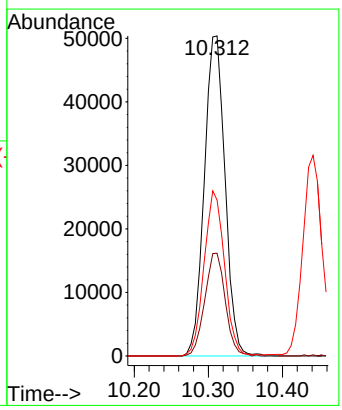
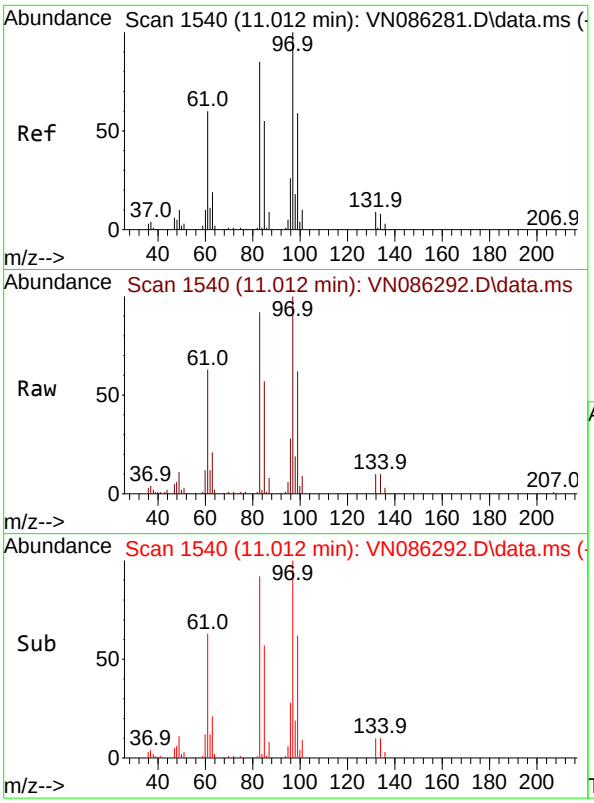


#54
cis-1,3-Dichloropropene
Concen: 19.610 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 75 Resp: 97983

Ion	Ratio	Lower	Upper
75	100		
77	32.1	25.2	37.8
39	48.7	39.3	58.9

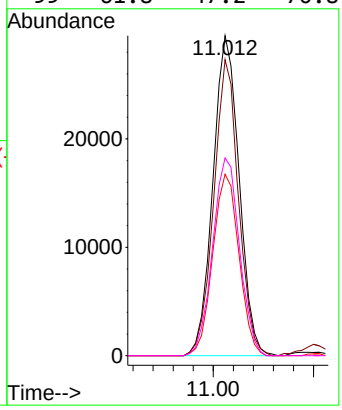




#55
1,1,2-Trichloroethane
Concen: 19.663 ug/l
RT: 11.012 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 97 Resp: 5340

Ion	Ratio	Lower	Upper
97	100		
83	92.5	68.4	102.6
85	56.7	43.9	65.9
99	61.8	47.2	70.8



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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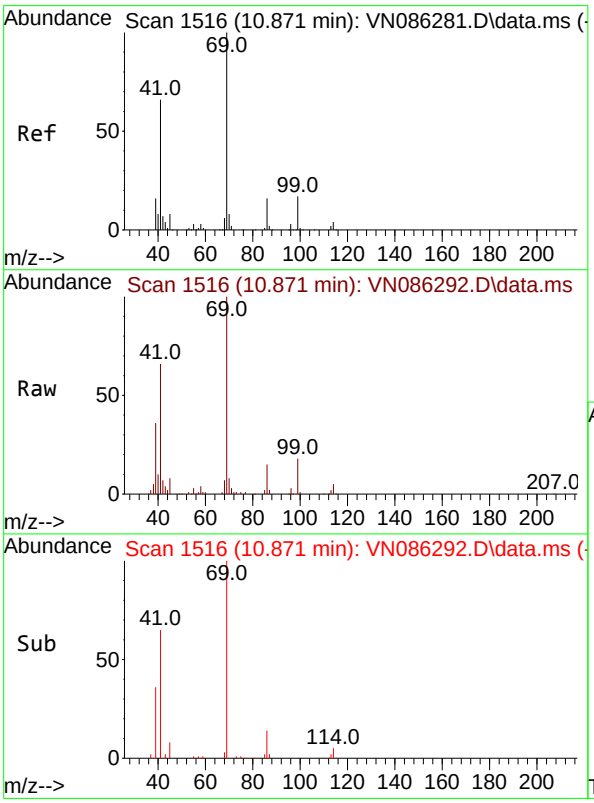
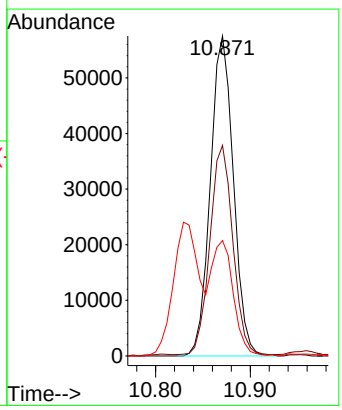
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

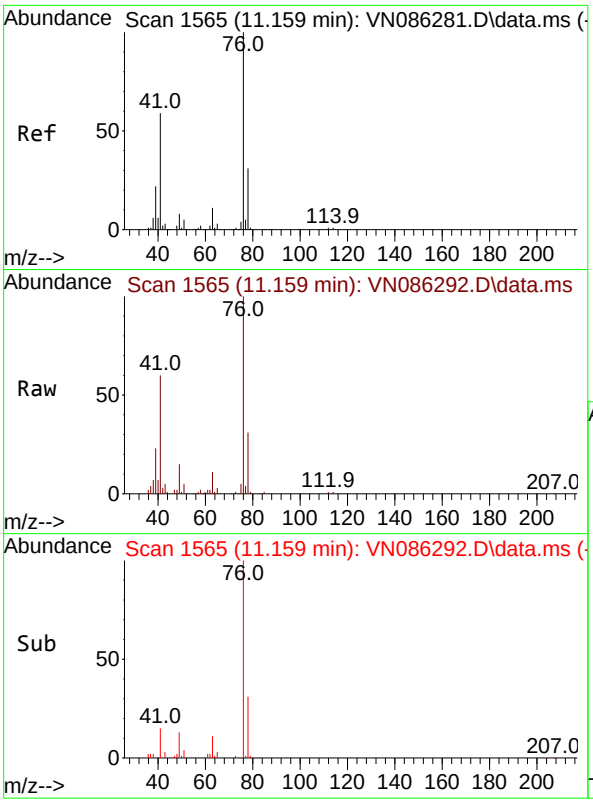


#56
Ethyl methacrylate
Concen: 19.466 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 69 Resp: 97183

Ion	Ratio	Lower	Upper
69	100		
41	65.4	51.7	77.5
39	34.2	26.3	39.5





#57
1,3-Dichloropropane
Concen: 19.799 ug/l
RT: 11.159 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 76 Resp: 9540

Ion	Ratio	Lower	Upper
76	100		
78	32.5	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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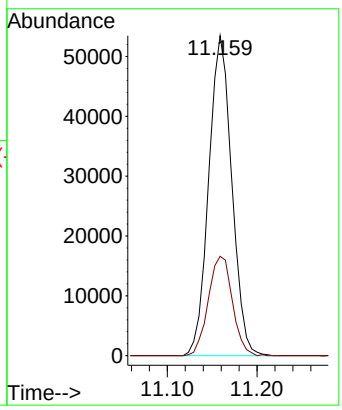
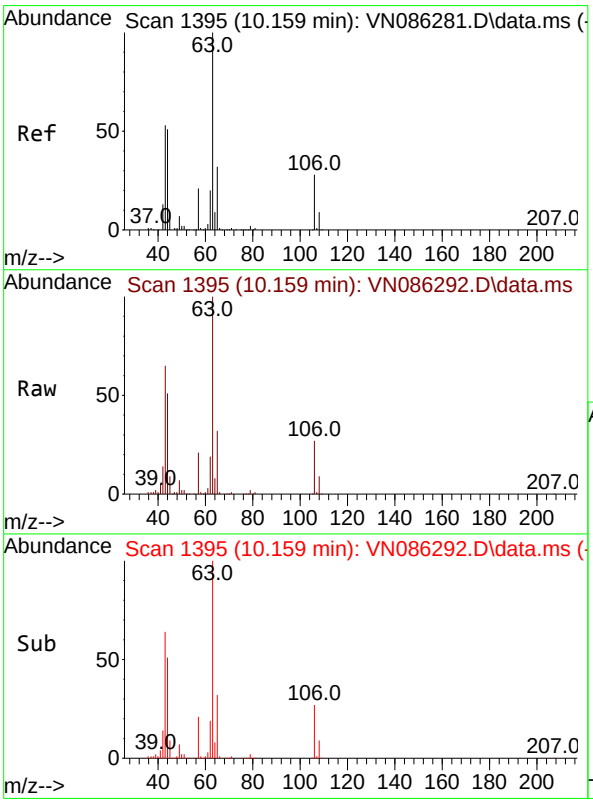
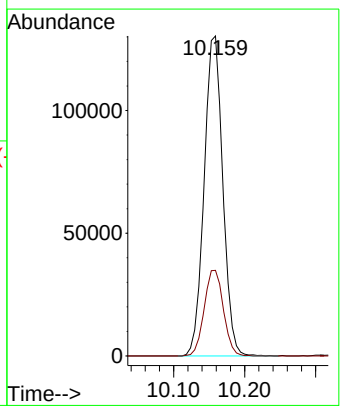


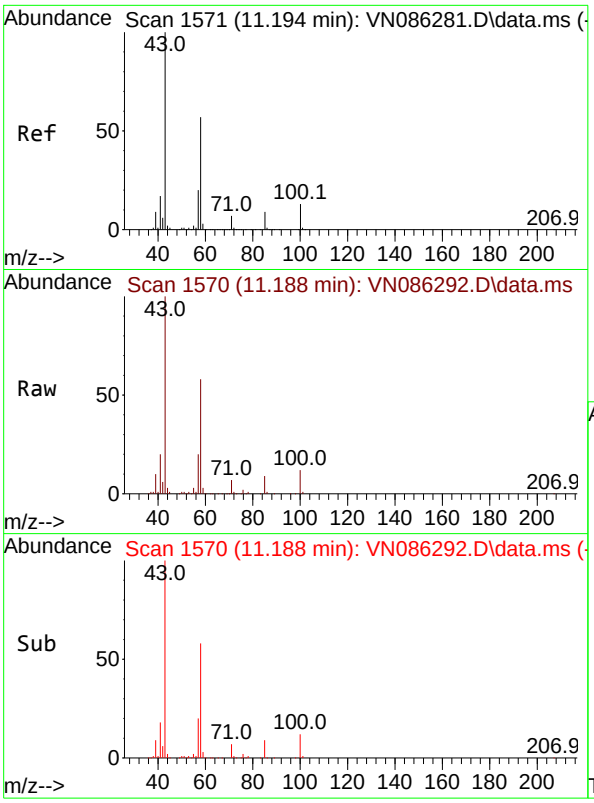


#58
2-Chloroethyl Vinyl ether
Concen: 100.539 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 63 Resp: 238231

Ion	Ratio	Lower	Upper
63	100		
106	27.5	22.2	33.2





#59
2-Hexanone
Concen: 99.823 ug/l
RT: 11.188 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 30140

Ion	Ratio	Lower	Upper
43	100		
58	57.3	28.3	85.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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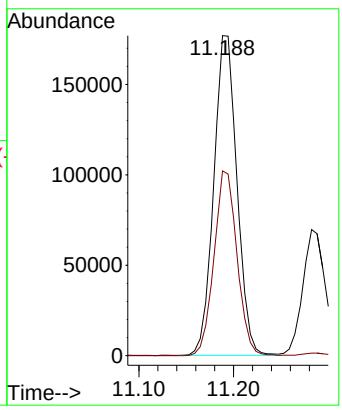
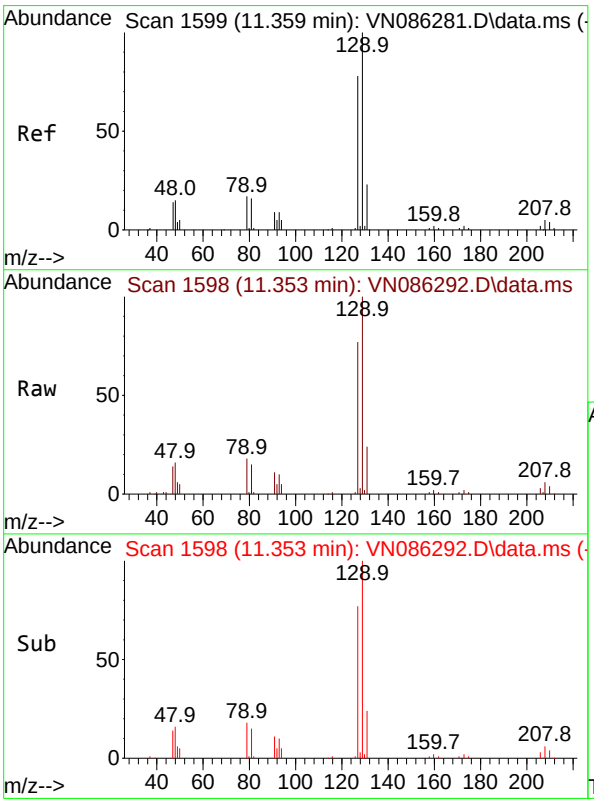
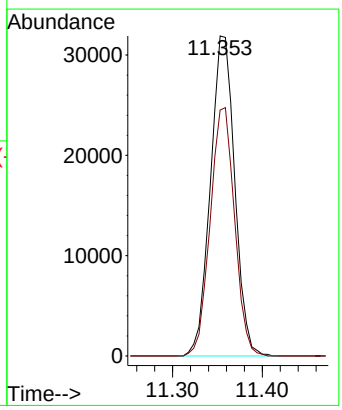


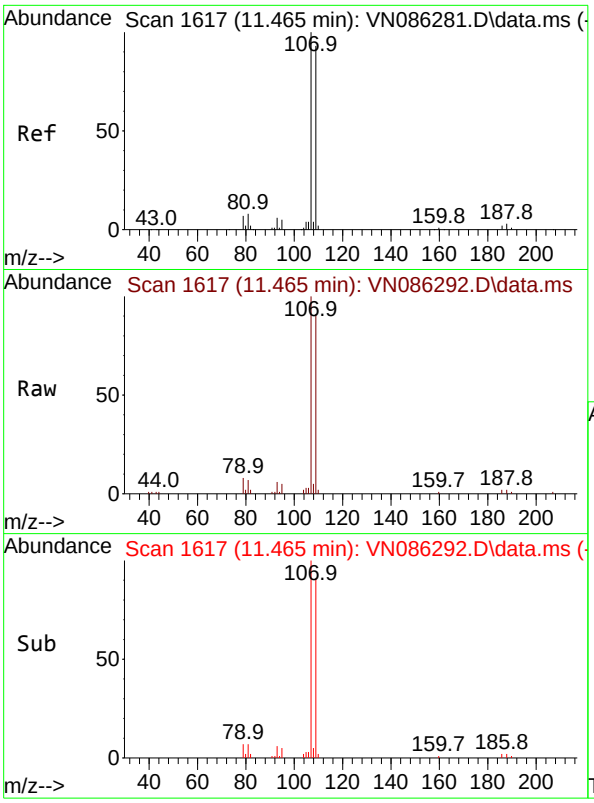


#60
Dibromochloromethane
Concen: 20.114 ug/l
RT: 11.353 min Scan# 1598
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:129 Resp: 59988

Ion	Ratio	Lower	Upper
129	100		
127	77.6	38.7	116.1

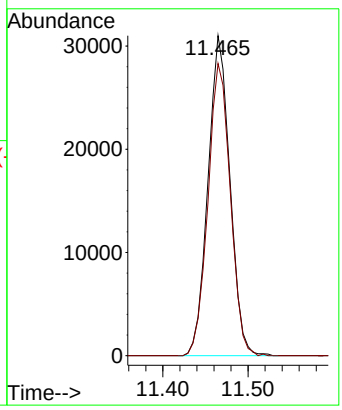




#61
1,2-Dibromoethane
Concen: 20.249 ug/l
RT: 11.465 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:107 Resp: 5549

Ion	Ratio	Lower	Upper
107	100		
109	93.0	75.4	113.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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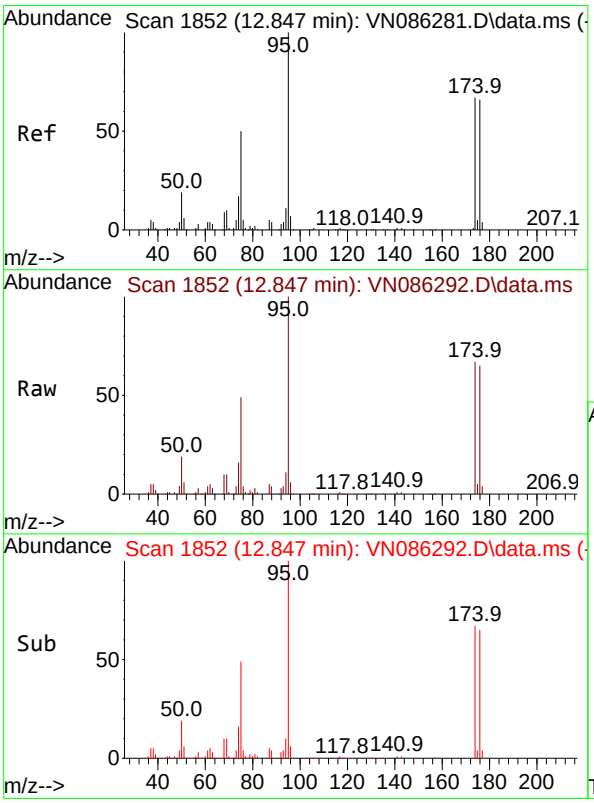
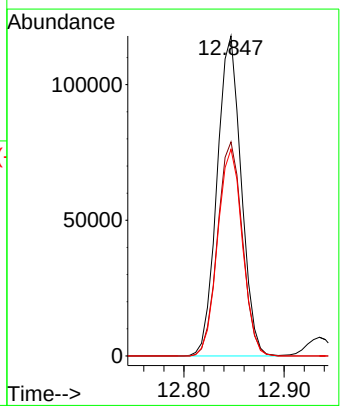
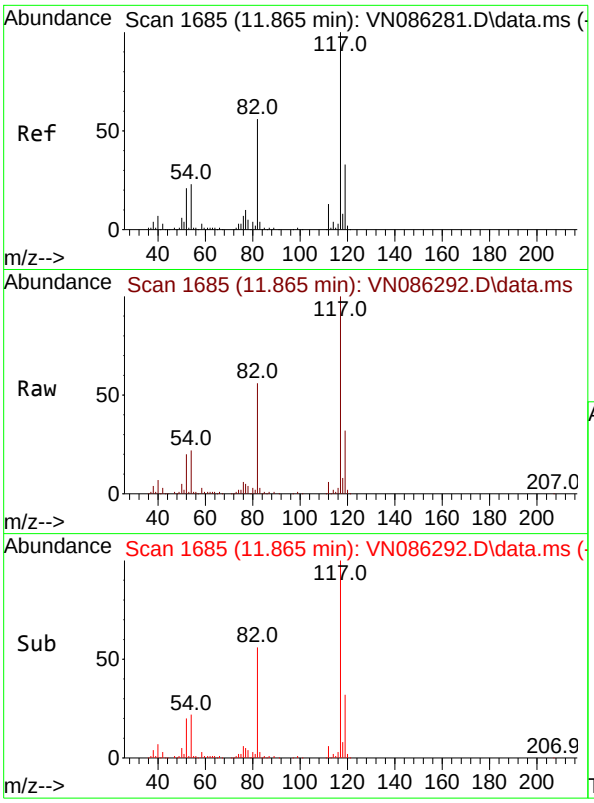


#62
4-Bromofluorobenzene
Concen: 53.558 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 95 Resp: 197374

Ion	Ratio	Lower	Upper
95	100		
174	68.6	0.0	133.4
176	66.2	0.0	129.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Tgt Ion:117 Resp: 35912

Ion	Ratio	Lower	Upper
117	100		
82	56.3	44.7	67.1
119	31.6	26.4	39.6

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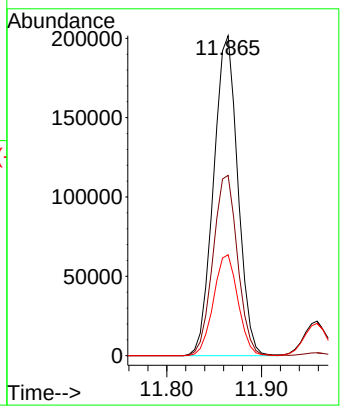
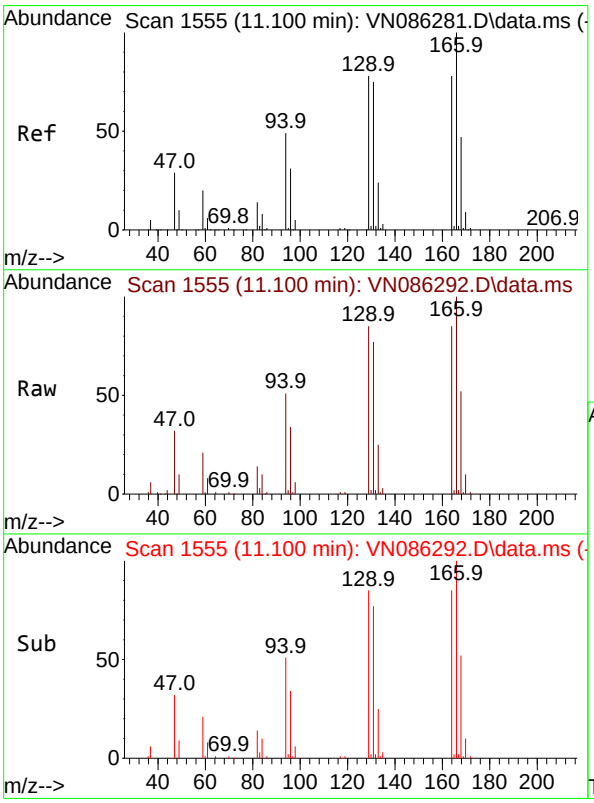
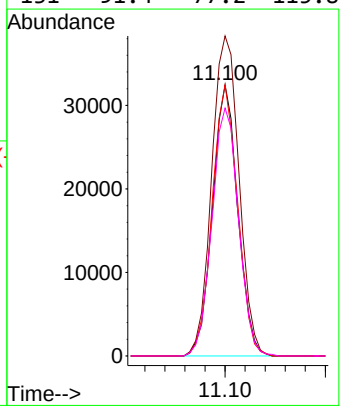


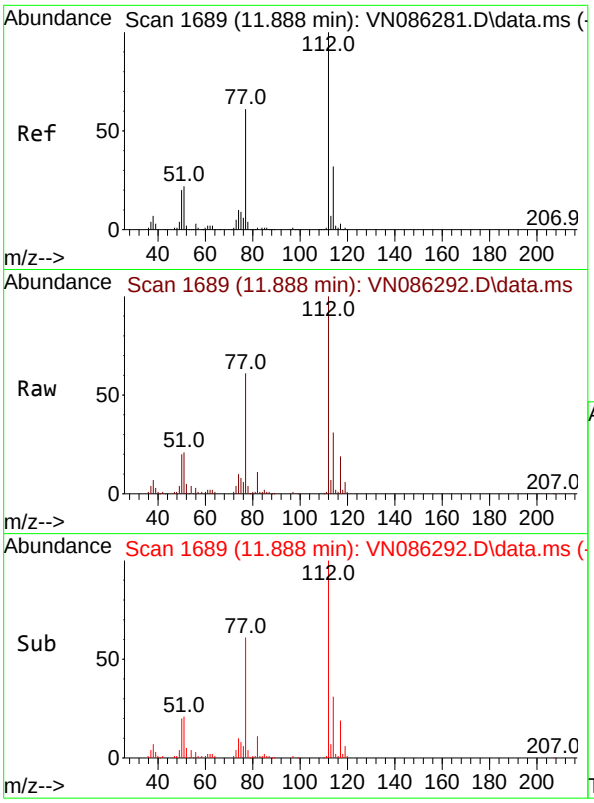


#64
Tetrachloroethene
Concen: 20.560 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:164 Resp: 56794

Ion	Ratio	Lower	Upper
164	100		
166	118.0	103.0	154.4
129	100.0	80.1	120.1
131	91.4	77.2	115.8

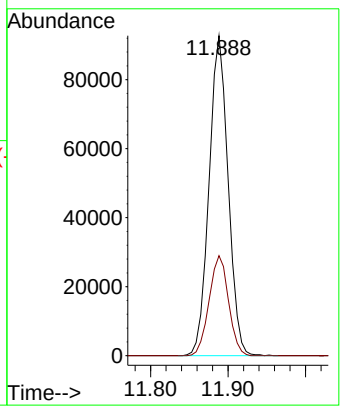




#65
Chlorobenzene
Concen: 19.747 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:112 Resp: 15826

Ion	Ratio	Lower	Upper
112	100		
114	31.3	25.4	38.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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Reviewed By :John Carlone 04/17/2025
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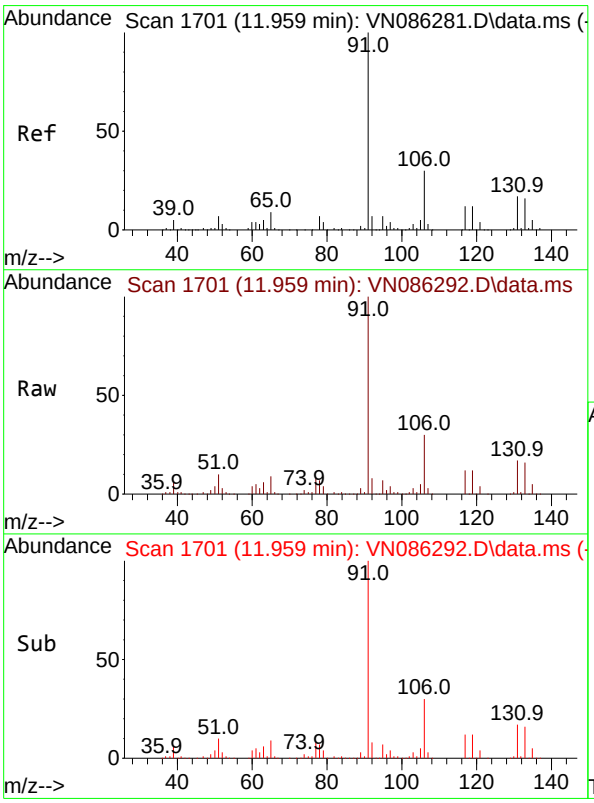
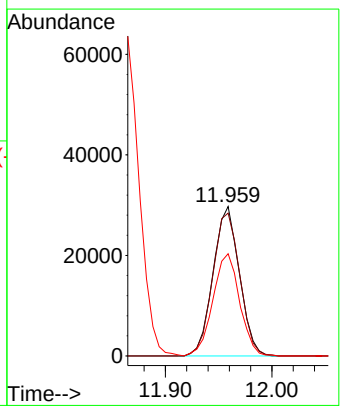
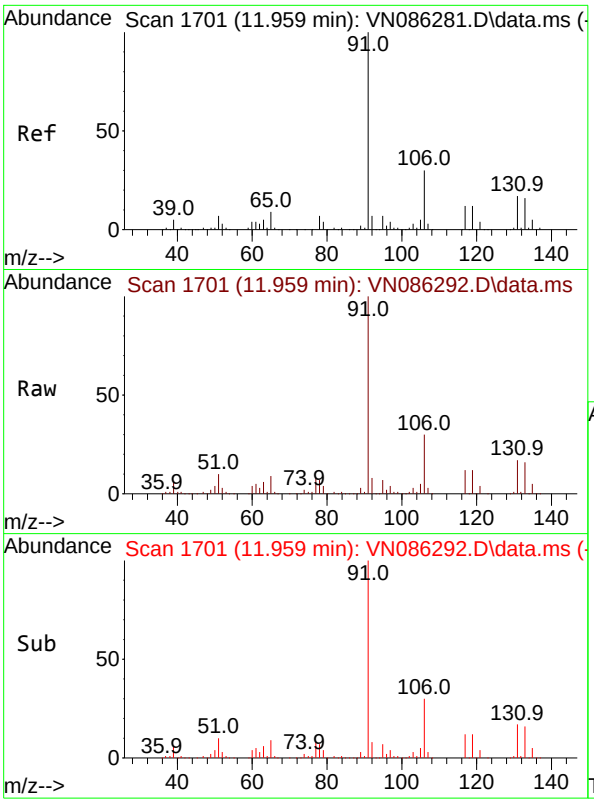


#66
1,1,1,2-Tetrachloroethane
Concen: 19.288 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:131 Resp: 50996

Ion	Ratio	Lower	Upper
131	100		
133	98.7	47.1	141.3
119	69.4	33.8	101.4





#67
Ethyl Benzene
Concen: 19.853 ug/l
RT: 11.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 91 Resp: 28712

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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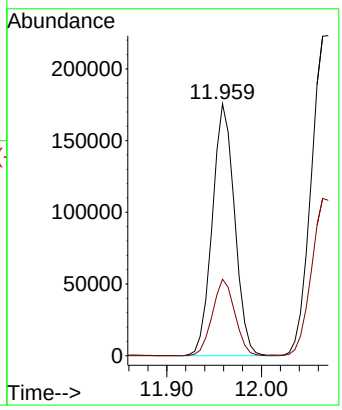
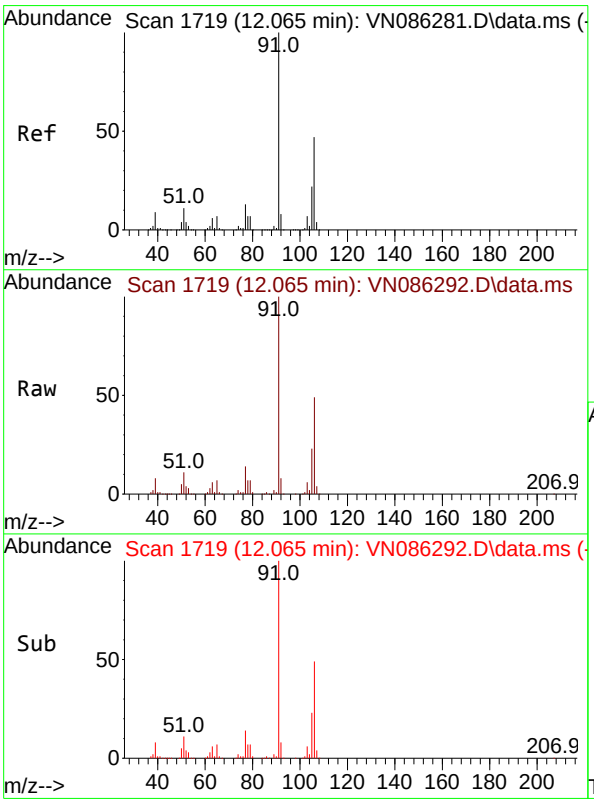
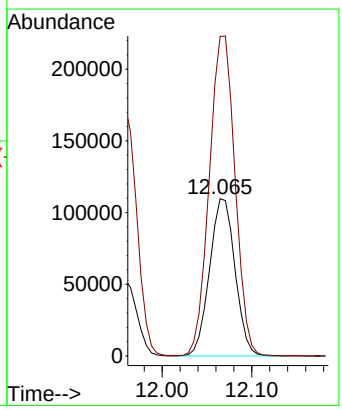


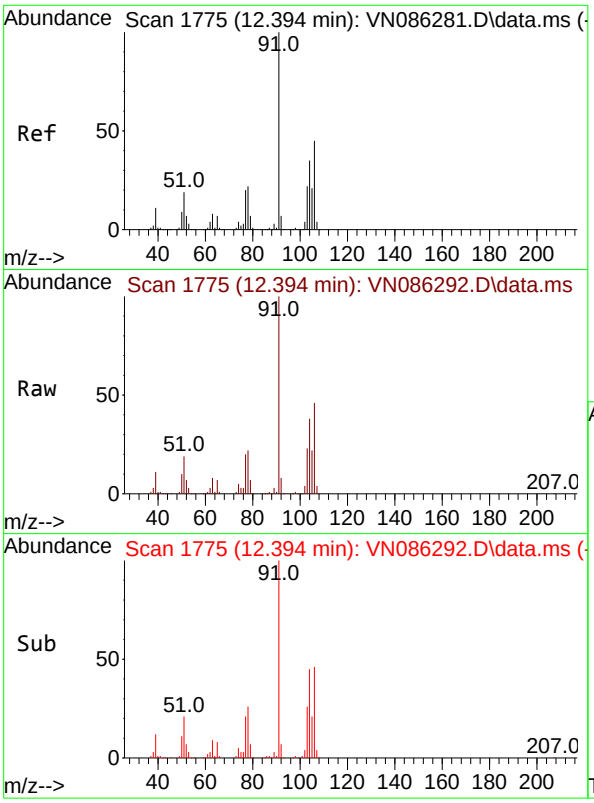


#68
m/p-Xylenes
Concen: 39.843 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:106 Resp: 215908

Ion	Ratio	Lower	Upper
106	100		
91	206.2	166.5	249.7





#69
o-Xylene
Concen: 19.899 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:106 Resp: 10664

Ion	Ratio	Lower	Upper
106	100		
91	218.6	109.7	329.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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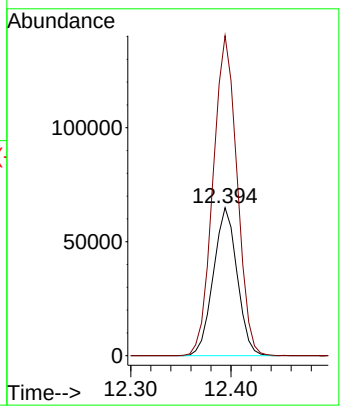
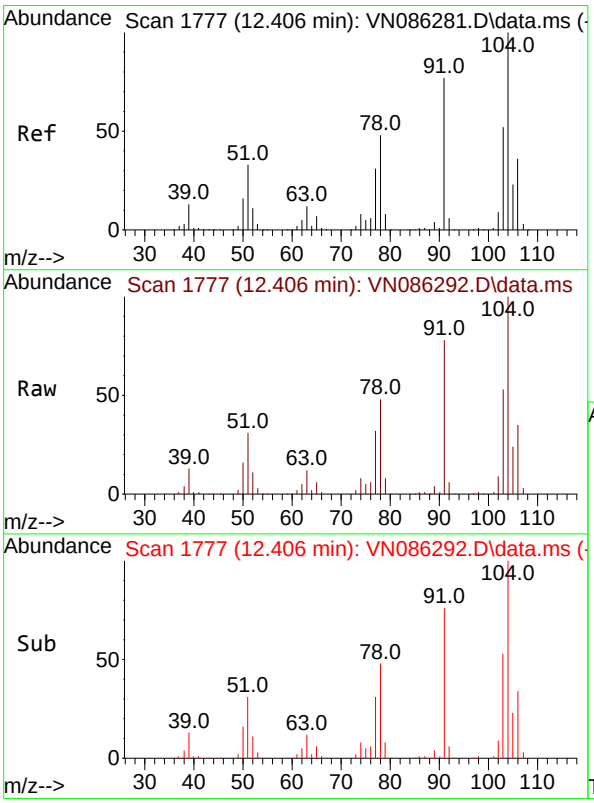
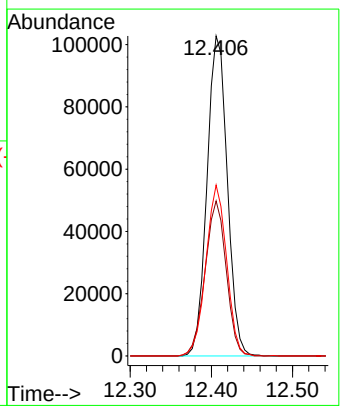


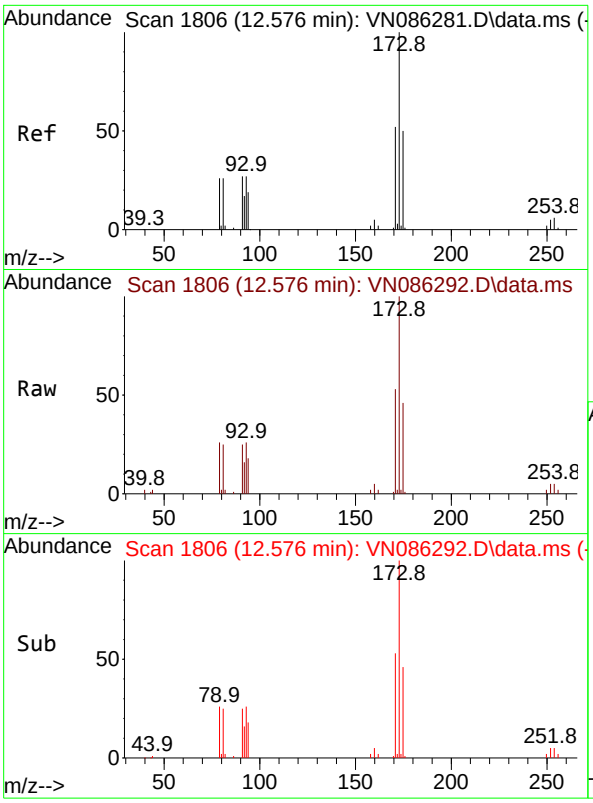


#70
Styrene
Concen: 19.977 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:104 Resp: 178378

Ion	Ratio	Lower	Upper
104	100		
78	50.6	40.6	61.0
103	54.5	43.6	65.4





#71
Bromoform
Concen: 20.276 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:173 Resp: 4036

Ion	Ratio	Lower	Upper
173	100		
175	47.4	24.6	73.6
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
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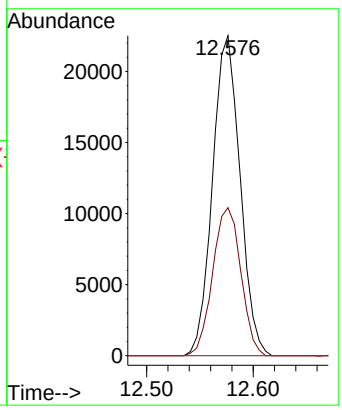
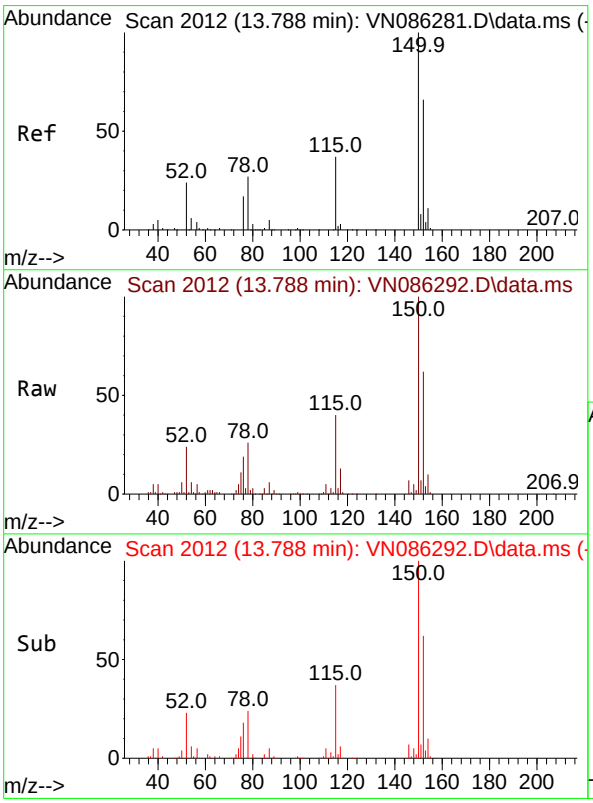
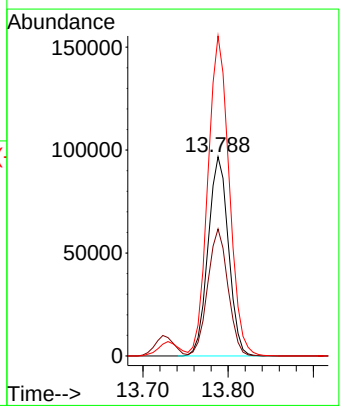


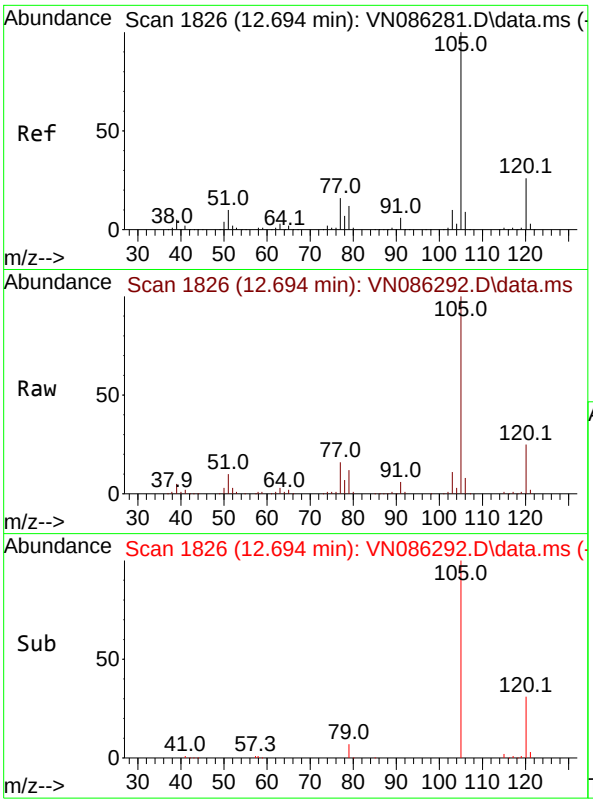


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:152 Resp: 160957

Ion	Ratio	Lower	Upper
152	100		
115	63.4	31.9	95.9
150	167.6	0.0	352.0

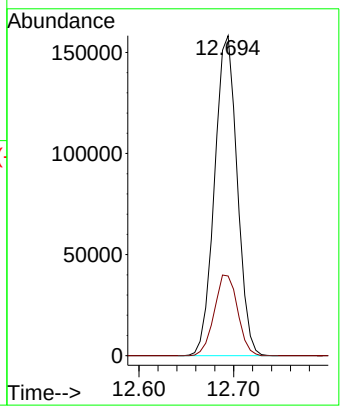




#73
Isopropylbenzene
Concen: 19.972 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:105 Resp: 26297

Ion	Ratio	Lower	Upper
105	100		
120	26.0	13.1	39.3



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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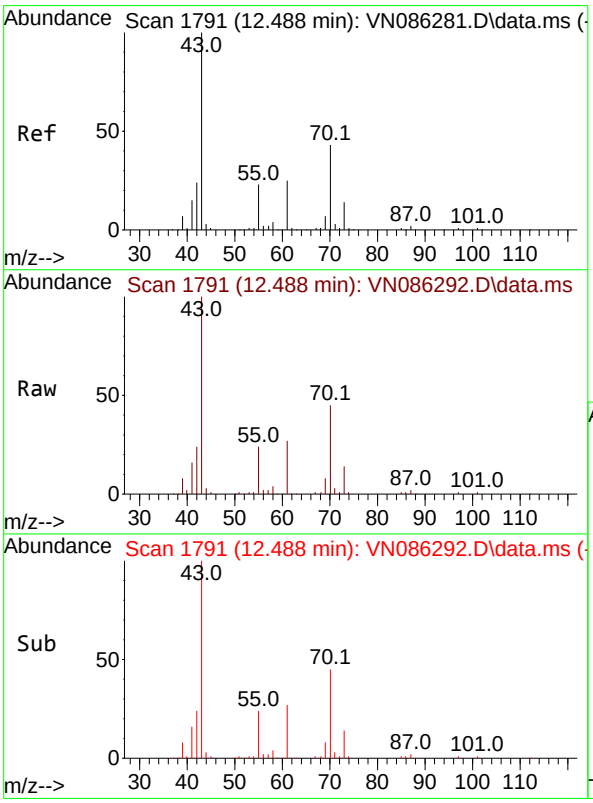
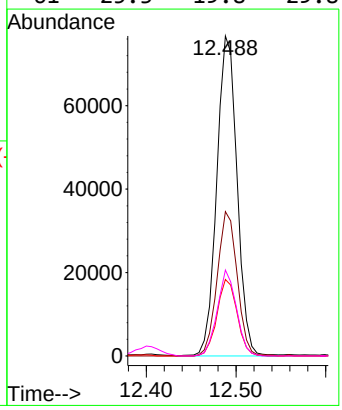
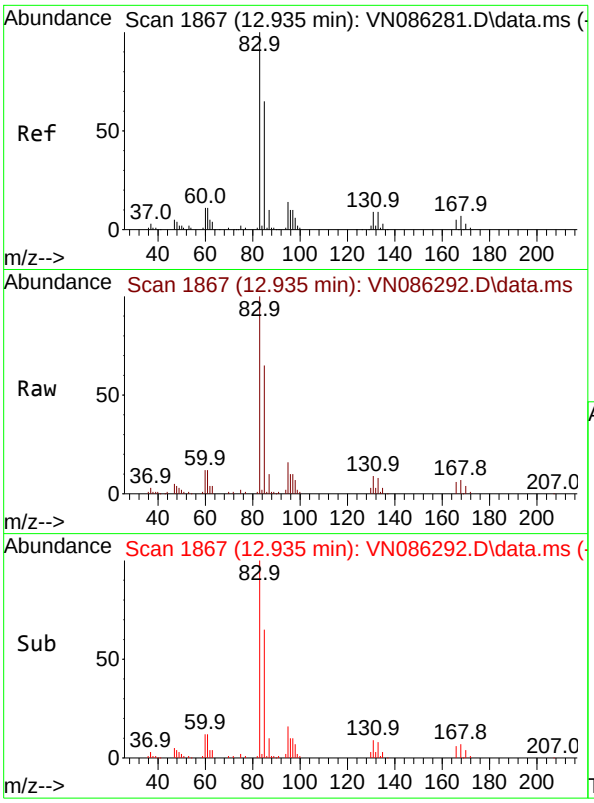


#74
N-amyl acetate
Concen: 18.417 ug/l
RT: 12.488 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 43 Resp: 120719

Ion	Ratio	Lower	Upper
43	100		
70	44.2	35.0	52.4
55	23.7	19.0	28.4
61	25.3	19.8	29.8

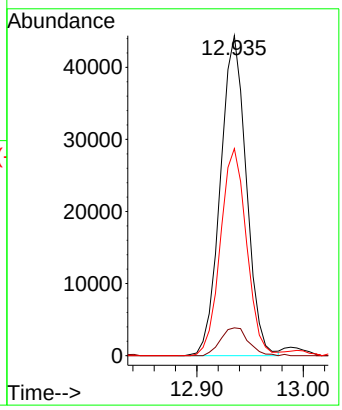




#75
1,1,2,2-Tetrachloroethane
Concen: 19.790 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 83 Resp: 7492

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.7	14.1
85	65.3	32.7	98.1



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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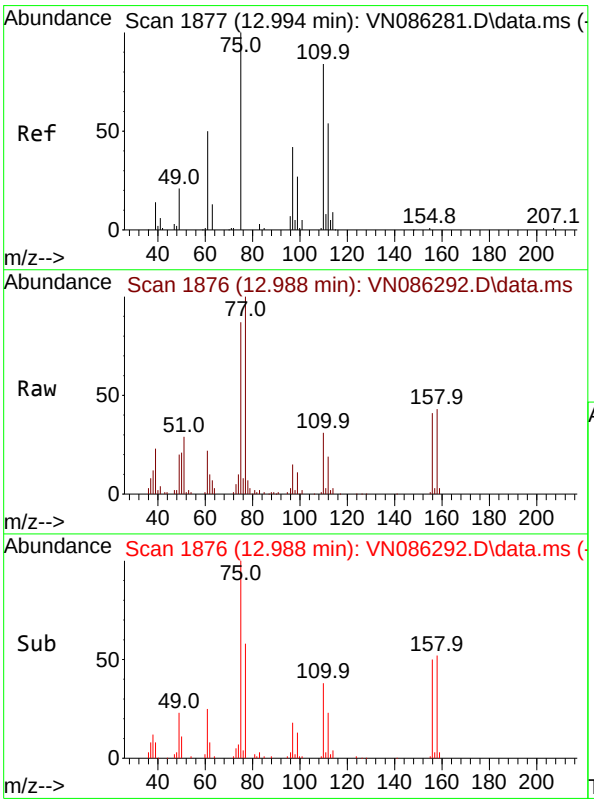
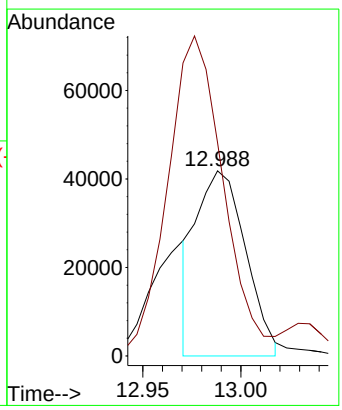
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

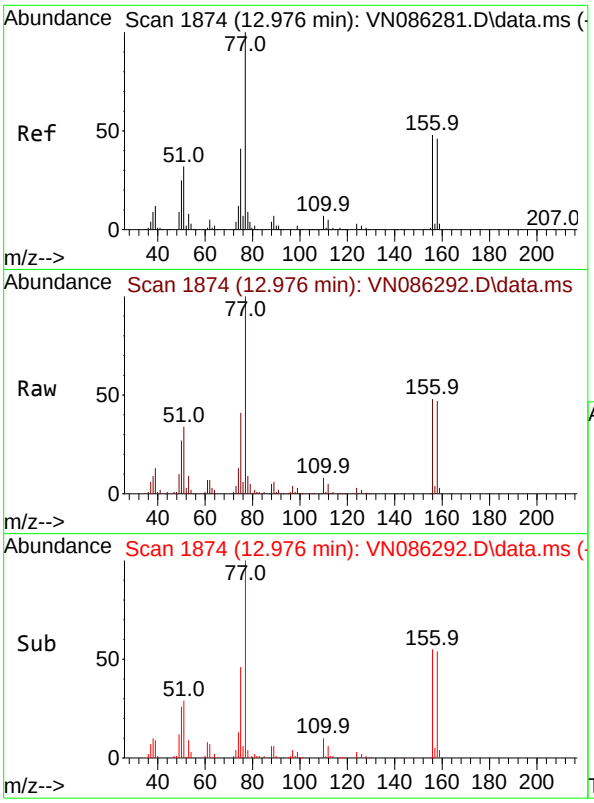


#76
1,2,3-Trichloropropane
Concen: 19.177 ug/l m
RT: 12.988 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 75 Resp: 72842

Ion	Ratio	Lower	Upper
75	100		
77	197.4	98.8	296.4





#77
Bromobenzene
Concen: 20.438 ug/l
RT: 12.976 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:156 Resp: 5962

Ion	Ratio	Lower	Upper
156	100		
77	241.2	121.1	363.1
158	98.2	47.9	143.6

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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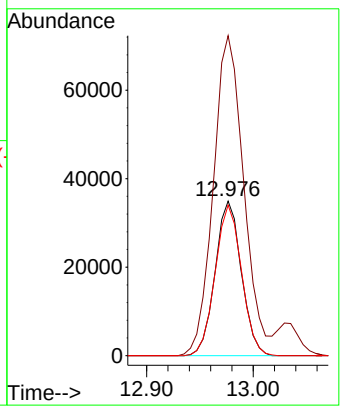
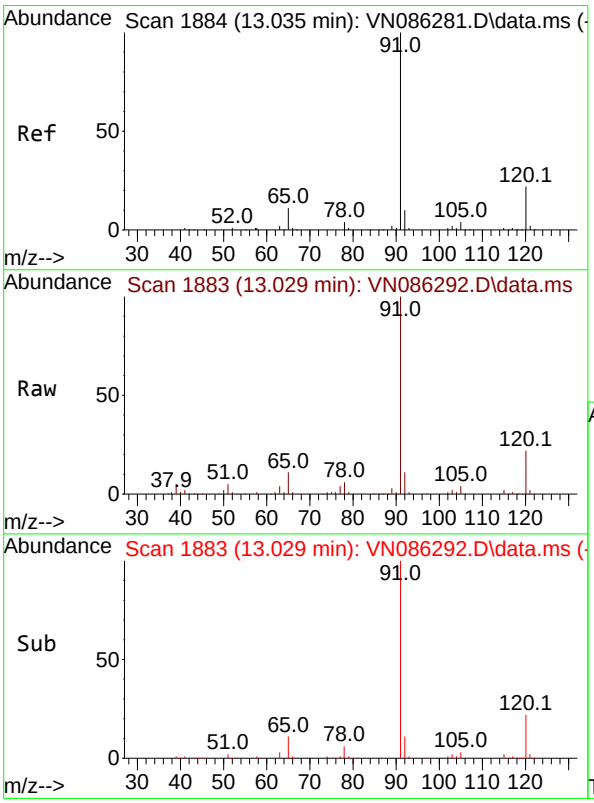
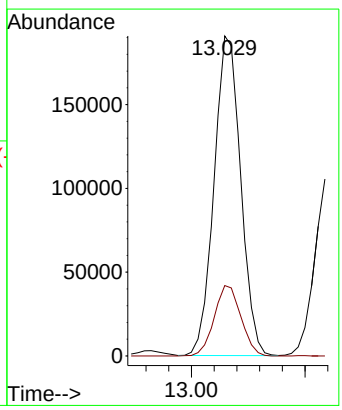


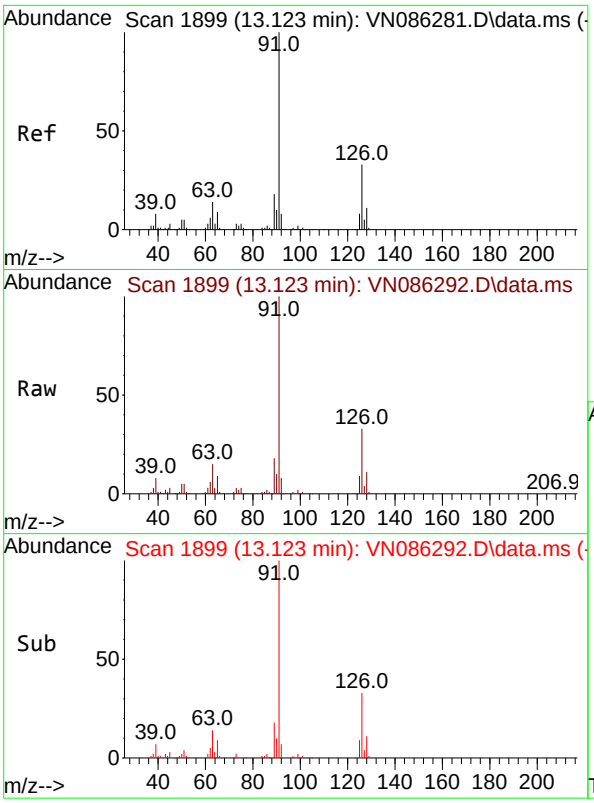


#78
n-propylbenzene
Concen: 19.999 ug/l
RT: 13.029 min Scan# 1883
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 91 Resp: 310295

Ion	Ratio	Lower	Upper
91	100		
120	22.1	11.1	33.3





#79
2-Chlorotoluene
Concen: 19.971 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 91 Resp: 19388

Ion	Ratio	Lower	Upper
91	100		
126	32.1	16.1	48.2

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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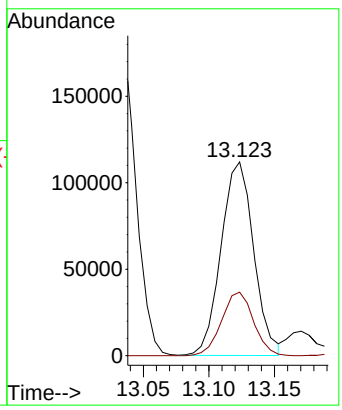
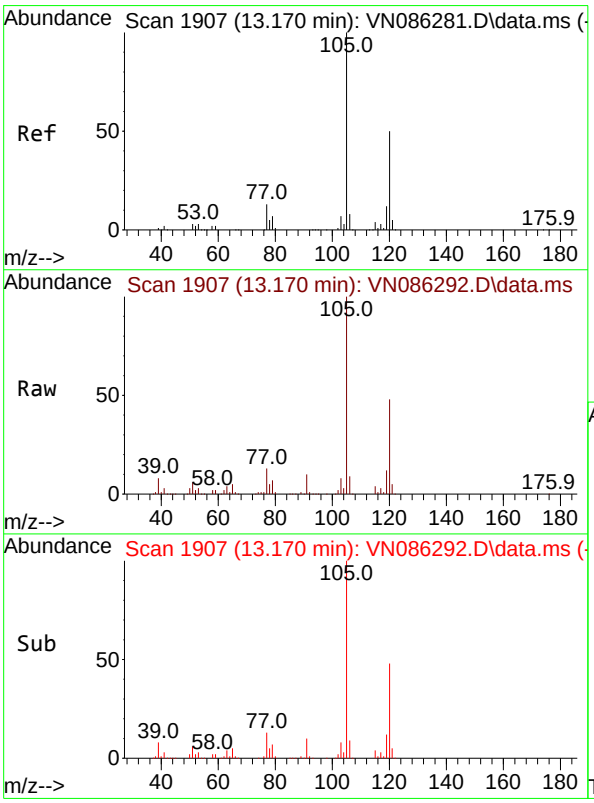
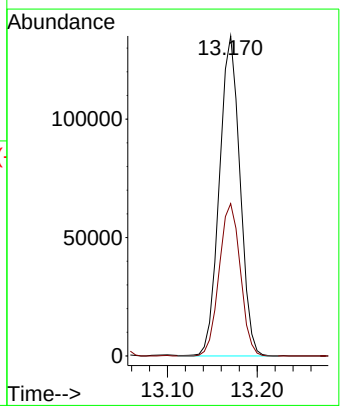


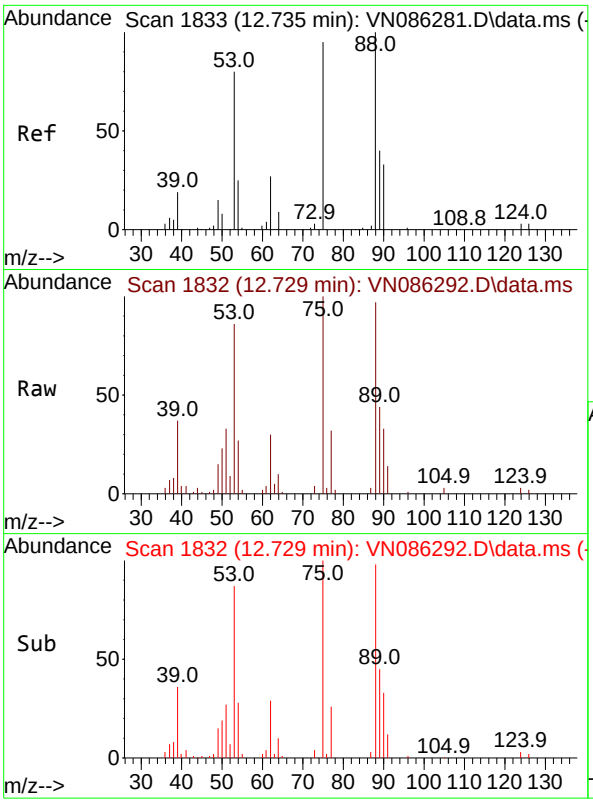


#80
1,3,5-Trimethylbenzene
Concen: 19.999 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:105 Resp: 215520

Ion	Ratio	Lower	Upper
105	100		
120	48.8	24.5	73.5





#81
trans-1,4-Dichloro-2-butene
Concen: 22.426 ug/l
RT: 12.729 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 75 Resp: 3546

Ion	Ratio	Lower	Upper
75	100		
53	90.4	79.2	118.8
89	40.6	35.7	53.5

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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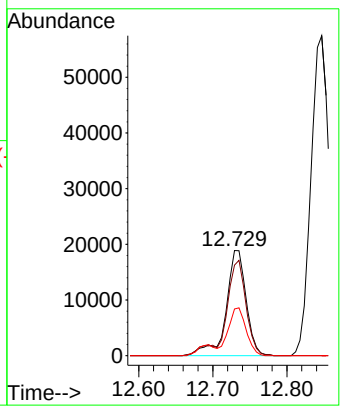
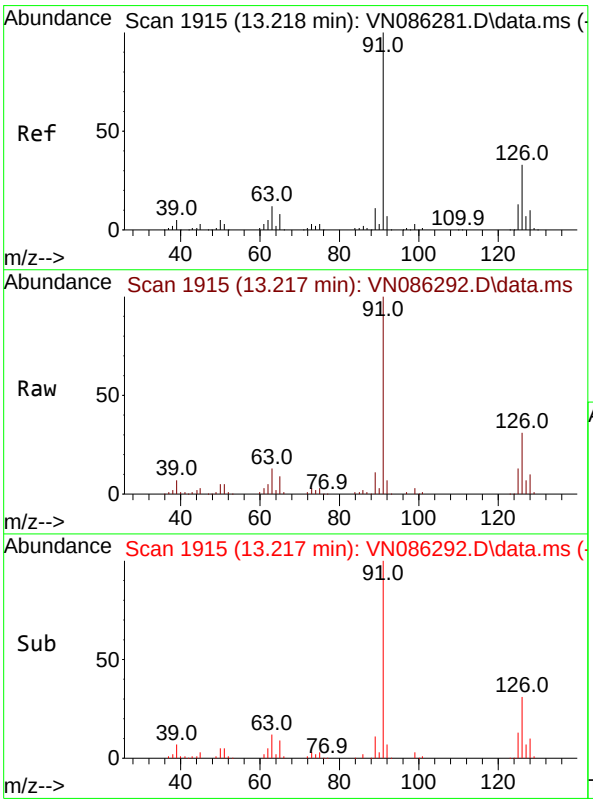
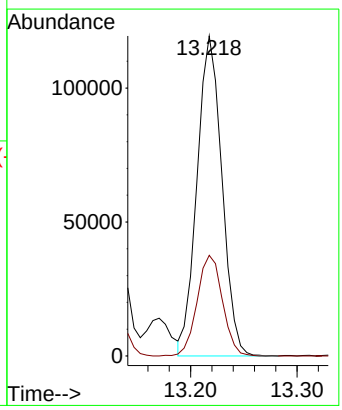


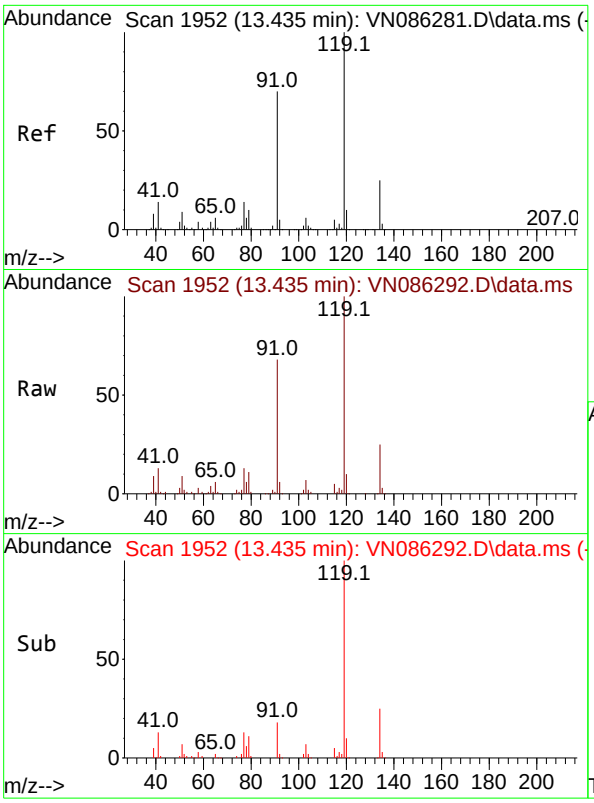


#82
4-Chlorotoluene
Concen: 20.150 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 91 Resp: 194326

Ion	Ratio	Lower	Upper
91	100		
126	32.0	16.2	48.6





#83
tert-Butylbenzene
Concen: 19.705 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:119 Resp: 18400

Ion	Ratio	Lower	Upper
119	100		
91	68.8	34.4	103.3
134	25.8	13.0	39.0

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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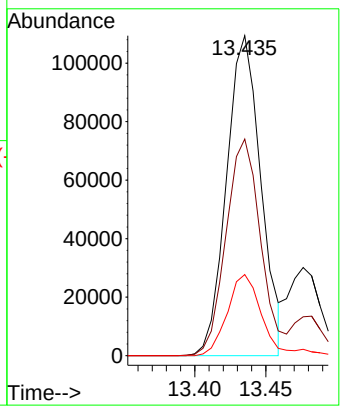
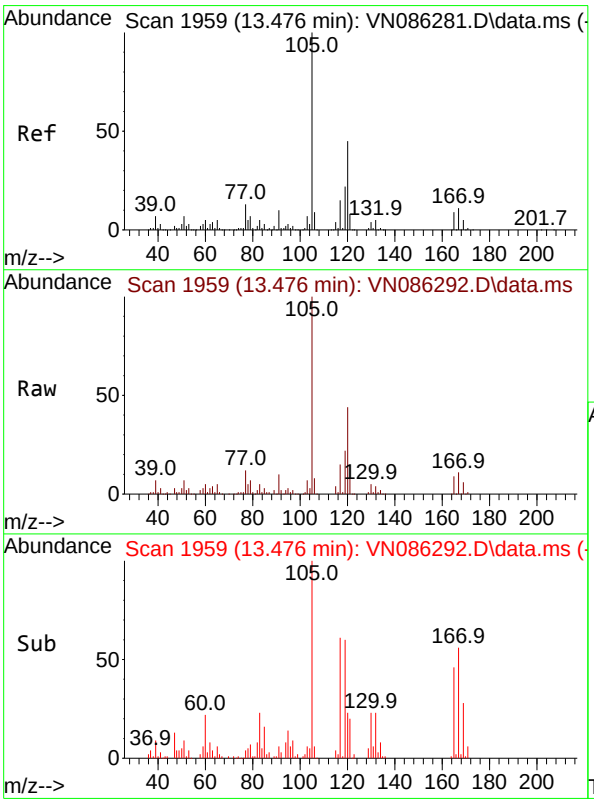
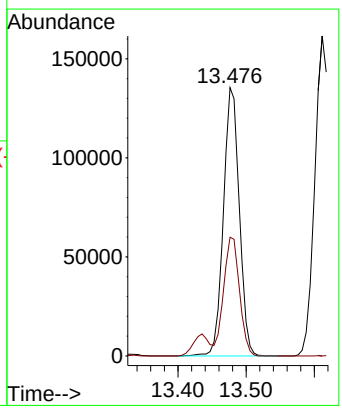


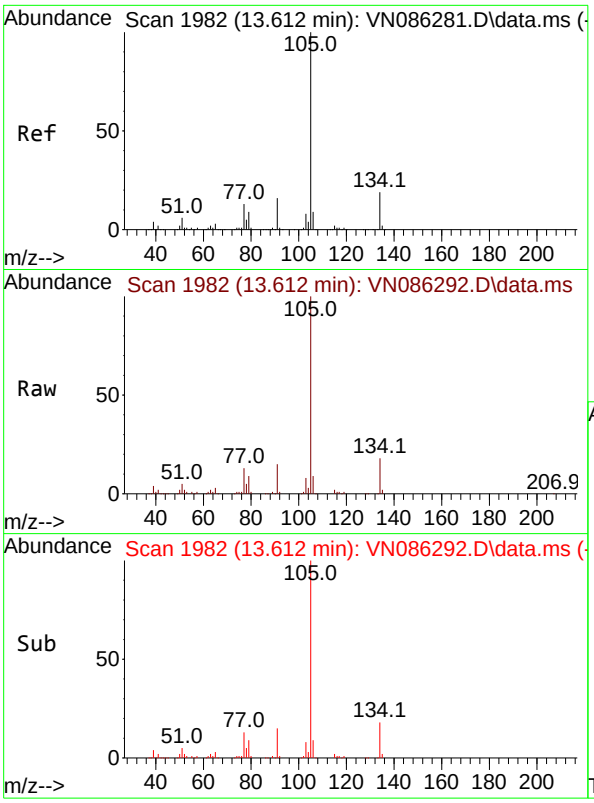


#84
1,2,4-Trimethylbenzene
Concen: 20.014 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:105 Resp: 219543

Ion	Ratio	Lower	Upper
105	100		
120	44.1	22.4	67.3

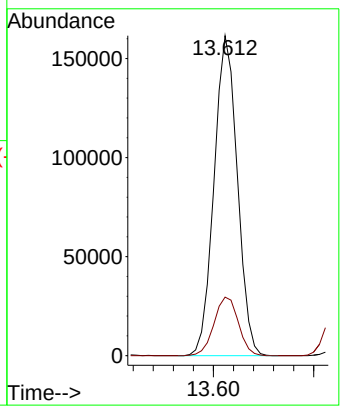




#85
sec-Butylbenzene
Concen: 20.062 ug/l
RT: 13.612 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:105 Resp: 25984

Ion	Ratio	Lower	Upper
105	100		
134	19.1	9.7	29.1



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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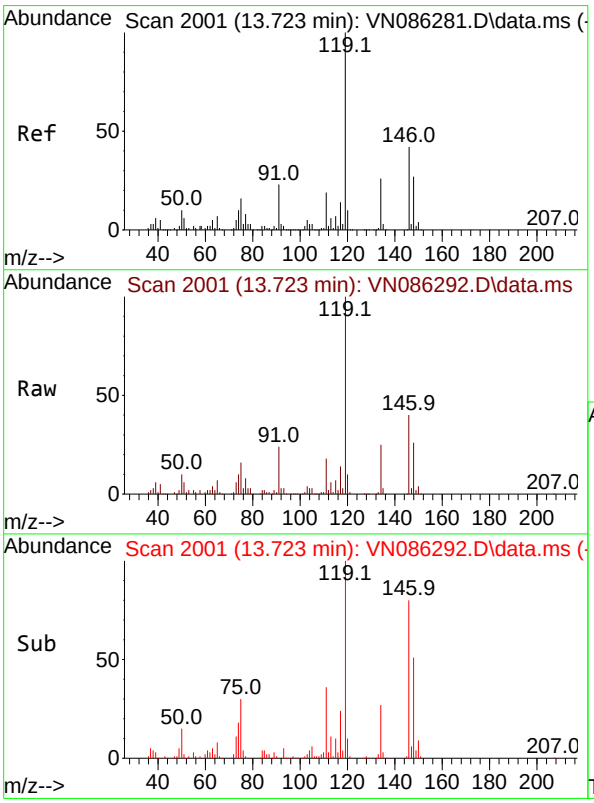
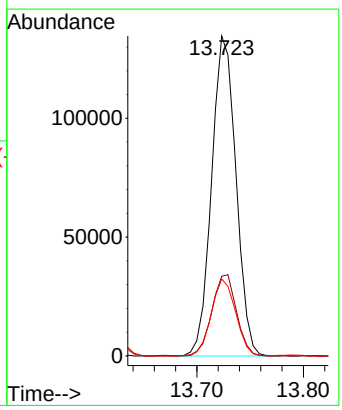
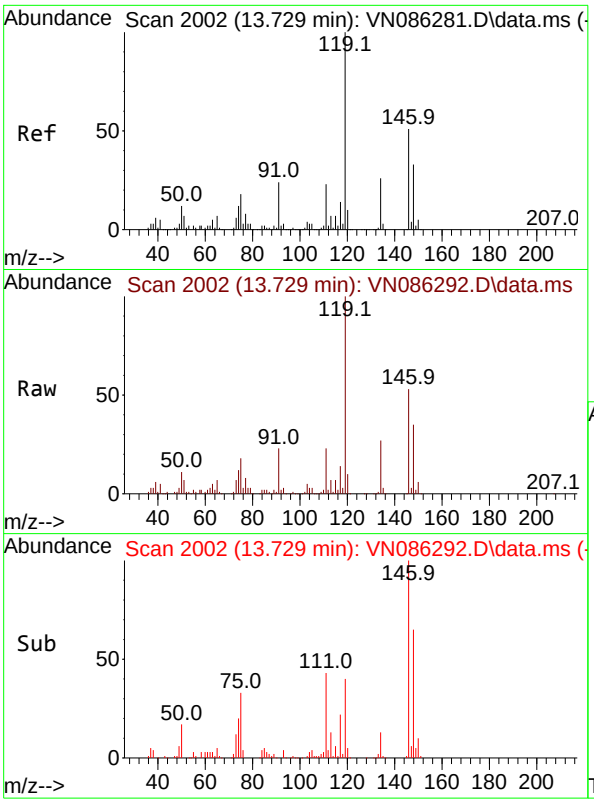


#86
p-Isopropyltoluene
Concen: 20.041 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:119 Resp: 213950

Ion	Ratio	Lower	Upper
119	100		
134	25.7	13.1	39.1
91	24.0	11.9	35.9





#87
1,3-Dichlorobenzene
Concen: 20.108 ug/l
RT: 13.729 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:146 Resp: 11027

Ion	Ratio	Lower	Upper
146	100		
111	42.6	21.9	65.7
148	64.6	31.9	95.5

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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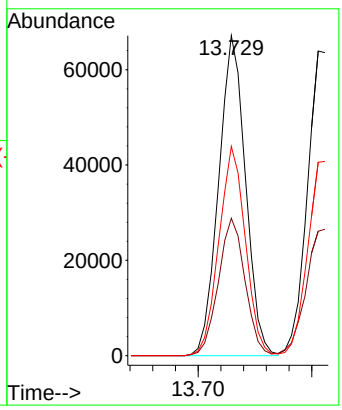
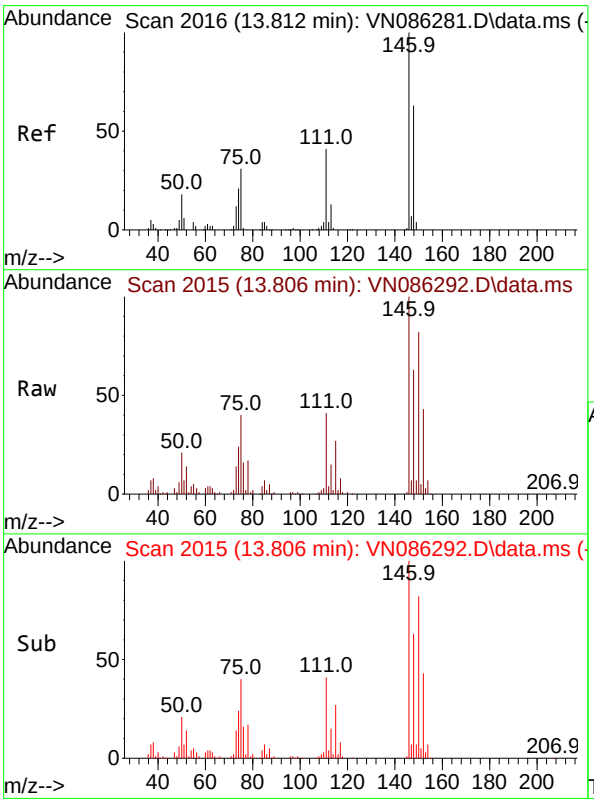
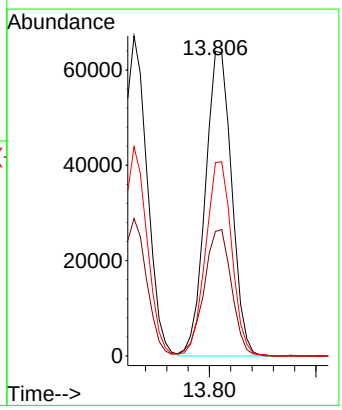


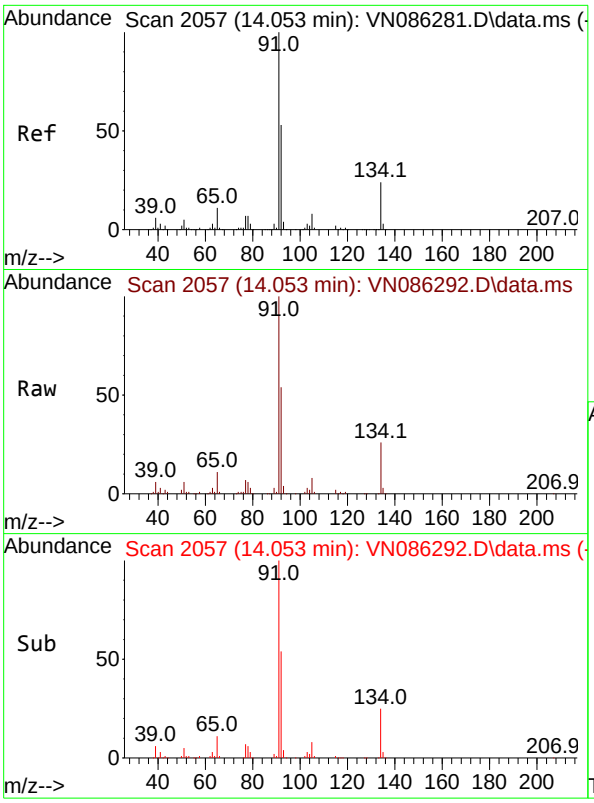


#88
1,4-Dichlorobenzene
Concen: 19.865 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:146 Resp: 109730

Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.3	63.9
148	63.5	31.9	95.9





#89
n-Butylbenzene
Concen: 19.664 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 91 Resp: 18607

Ion	Ratio	Lower	Upper
91	100		
92	54.6	26.8	80.4
134	24.9	12.2	36.6

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
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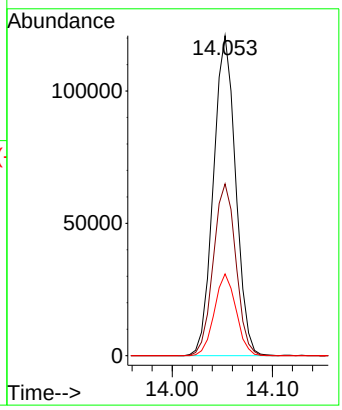
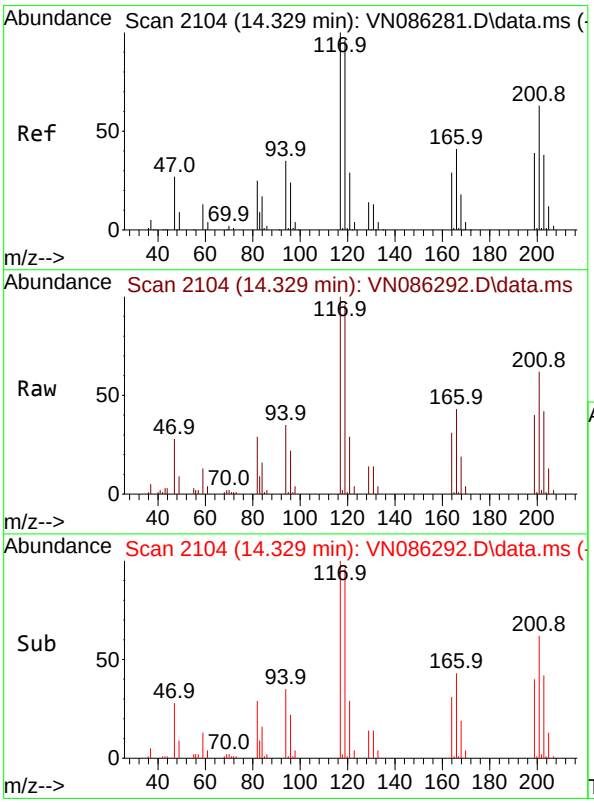
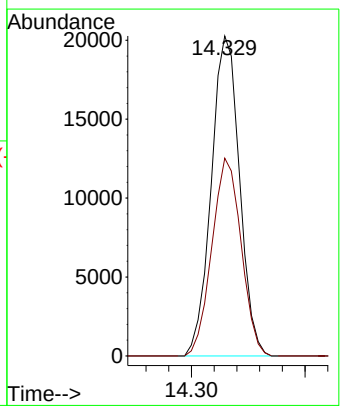


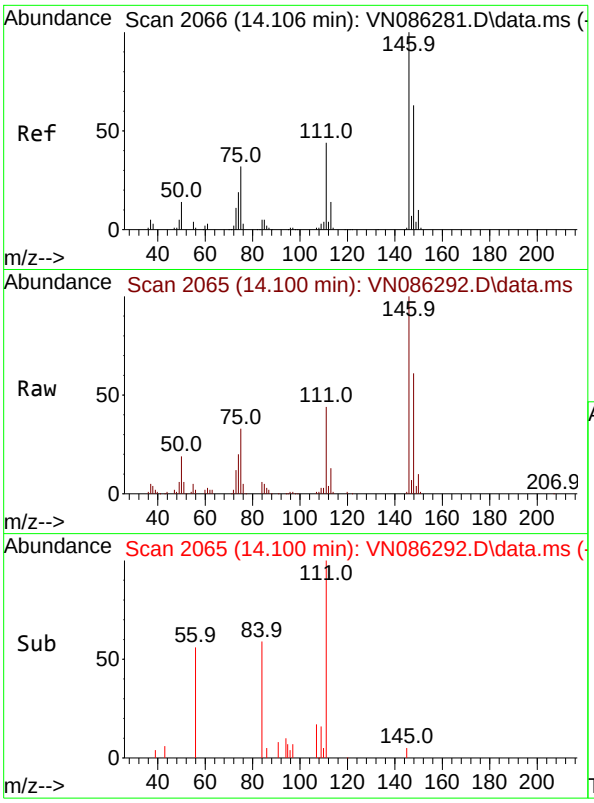


#90
Hexachloroethane
Concen: 19.480 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:117 Resp: 34980

Ion	Ratio	Lower	Upper
117	100		
201	64.0	31.4	94.2





#91
1,2-Dichlorobenzene
Concen: 20.491 ug/l
RT: 14.100 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:146 Resp: 10895

Ion	Ratio	Lower	Upper
146	100		
111	43.7	22.4	67.0
148	63.2	31.8	95.4

Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

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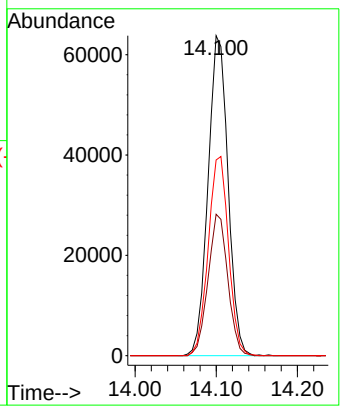
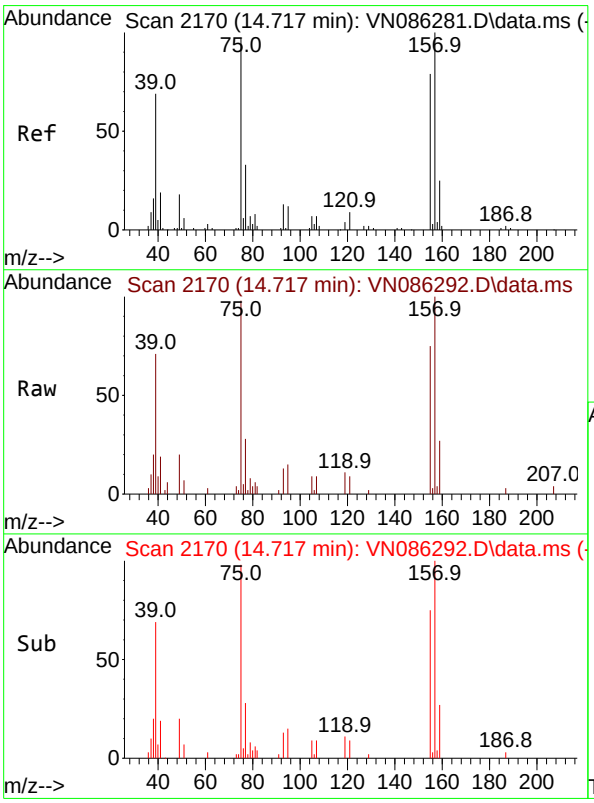
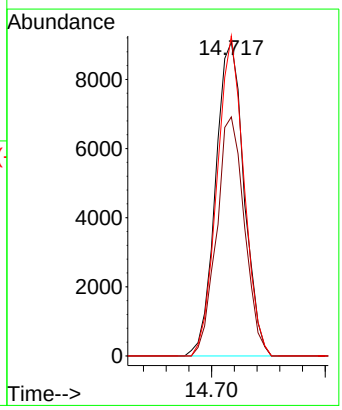


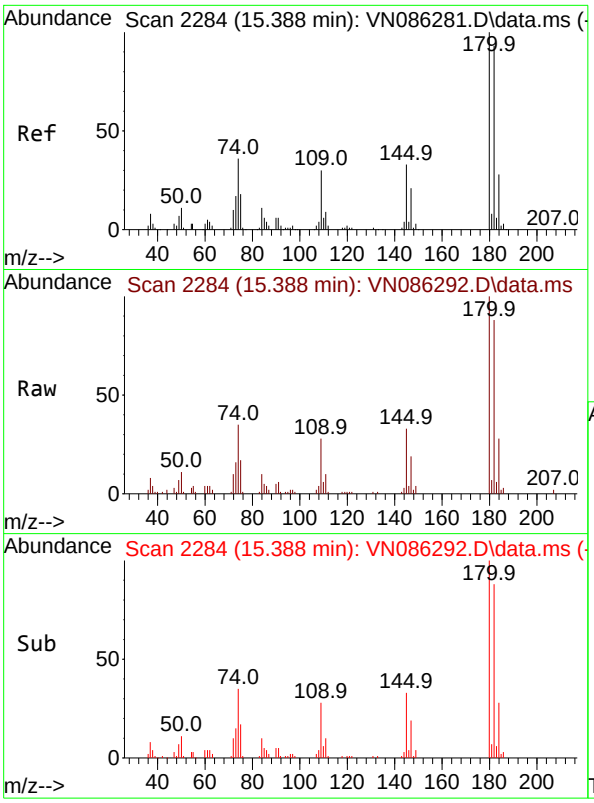


#92
1,2-Dibromo-3-Chloropropane
Concen: 20.666 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion: 75 Resp: 15775

Ion	Ratio	Lower	Upper
75	100		
155	74.7	40.3	120.9
157	96.4	49.0	147.2

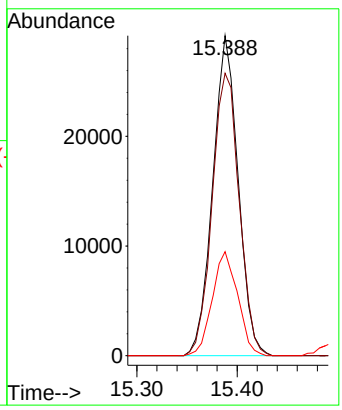




#93
1,2,4-Trichlorobenzene
Concen: 20.142 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:180 Resp: 5128

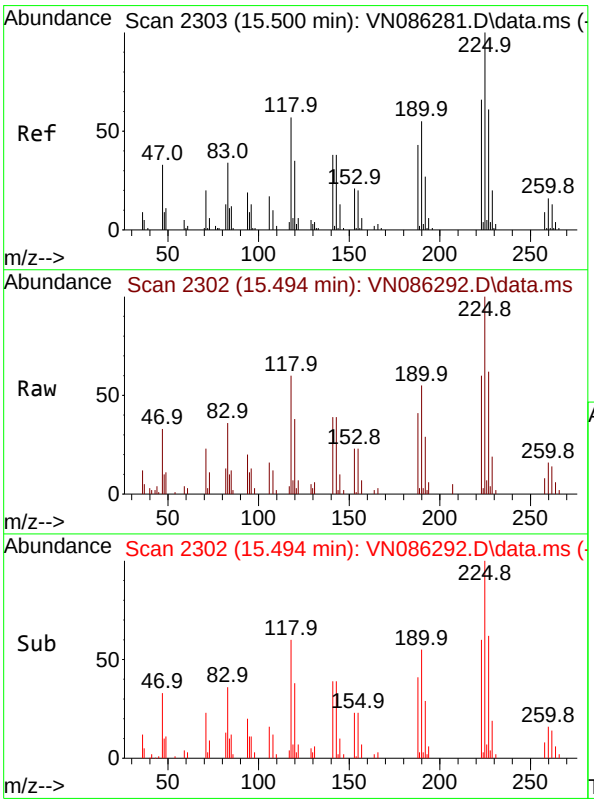
Ion	Ratio	Lower	Upper
180	100		
182	93.9	47.0	141.0
145	32.6	16.4	49.1



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
APPROVED

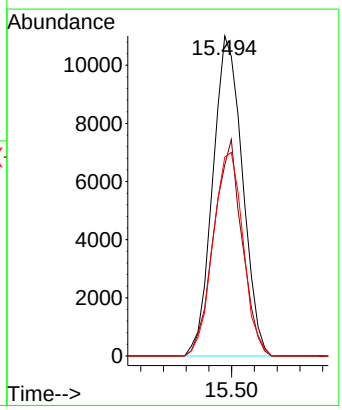
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025

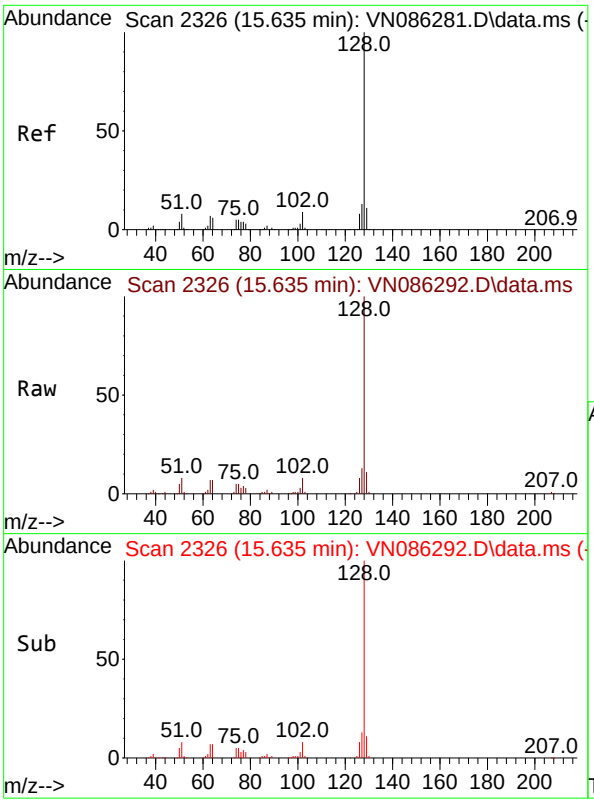


#94
Hexachlorobutadiene
Concen: 20.743 ug/l
RT: 15.494 min Scan# 2302
Delta R.T. -0.006 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:225 Resp: 19936

Ion	Ratio	Lower	Upper
225	100		
223	64.5	32.8	98.3
227	64.7	31.4	94.0

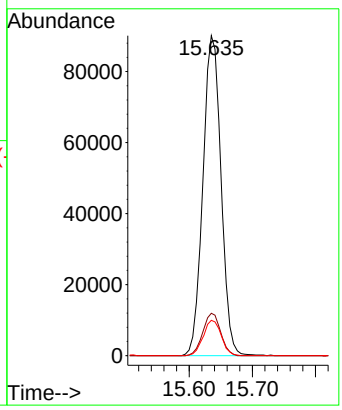




#95
Naphthalene
Concen: 19.890 ug/l
RT: 15.635 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:128 Resp: 17951

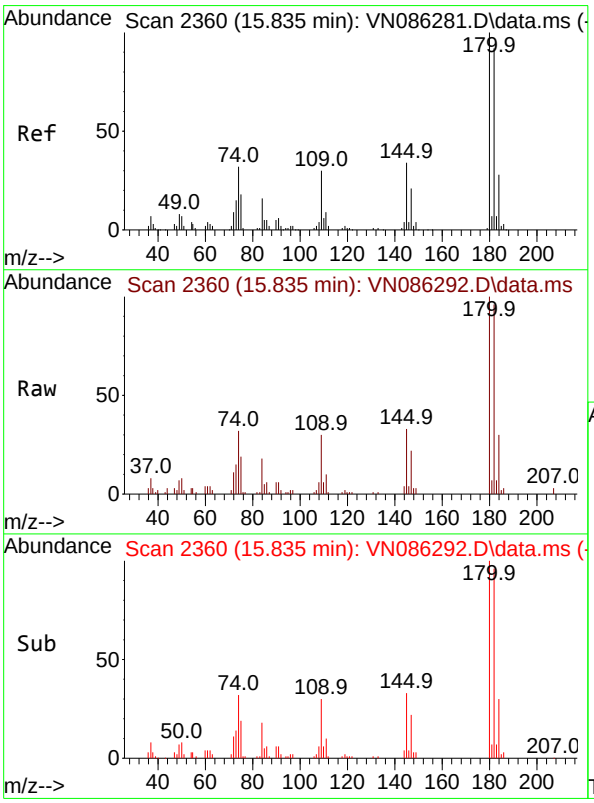
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.2	15.4
129	11.0	8.6	13.0



Instrument :
MSVOA_N
ClientSampleId :
VN0416WBSD01

Manual Integrations
APPROVED

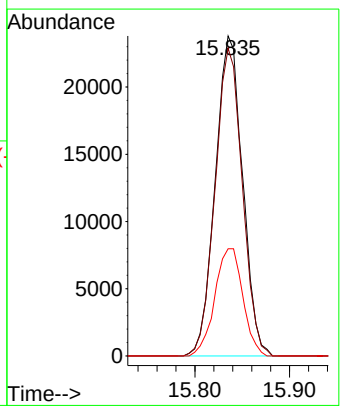
Reviewed By :John Carlone 04/17/2025
Supervised By :Mahesh Dadoda 04/17/2025



#96
1,2,3-Trichlorobenzene
Concen: 19.779 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.000 min
Lab File: VN086292.D
Acq: 16 Apr 2025 13:14

Tgt Ion:180 Resp: 47677

Ion	Ratio	Lower	Upper
180	100		
182	95.9	47.3	142.0
145	34.4	17.2	51.5



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

Manual Integration Report

Sequence:	VN041525	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VN086277.D	1,2,3-Trichloropropane	JOHN	4/16/2025 9:06:57 AM	SAM	4/16/2025 3:43:50 PM	Peak Integrated by Software
VSTDICC001	VN086277.D	1,4-Dichlorobenzene	JOHN	4/16/2025 9:06:57 AM	SAM	4/16/2025 3:43:50 PM	Peak Integrated by Software
VSTDICC001	VN086277.D	Acetone	JOHN	4/16/2025 9:06:57 AM	SAM	4/16/2025 3:43:50 PM	Peak Integrated by Software
VSTDICC005	VN086278.D	1,2,3-Trichloropropane	JOHN	4/16/2025 9:07:03 AM	SAM	4/16/2025 3:44:01 PM	Peak Integrated by Software
VSTDICC005	VN086278.D	trans-1,4-Dichloro-2-but ene	JOHN	4/16/2025 9:07:03 AM	SAM	4/16/2025 3:44:01 PM	Peak Integrated by Software
VSTDICC005	VN086278.D	Vinyl Acetate	JOHN	4/16/2025 9:07:03 AM	SAM	4/16/2025 3:44:01 PM	Peak Integrated by Software
VSTDICC010	VN086279.D	1,2,3-Trichloropropane	JOHN	4/16/2025 9:07:07 AM	SAM	4/16/2025 3:44:03 PM	Peak Integrated by Software
VSTDICC010	VN086279.D	Allyl chloride	JOHN	4/16/2025 9:07:07 AM	SAM	4/16/2025 3:44:03 PM	Peak Integrated by Software
VSTDICC020	VN086280.D	1,2,3-Trichloropropane	JOHN	4/16/2025 9:07:11 AM	SAM	4/16/2025 3:44:07 PM	Peak Integrated by Software
VSTDICC020	VN086280.D	trans-1,4-Dichloro-2-but ene	JOHN	4/16/2025 9:07:11 AM	SAM	4/16/2025 3:44:07 PM	Peak Integrated by Software
VSTDICC020	VN086280.D	Vinyl Acetate	JOHN	4/16/2025 9:07:11 AM	SAM	4/16/2025 3:44:07 PM	Peak Integrated by Software
VSTDICCC050	VN086281.D	1,2,3-Trichloropropane	JOHN	4/16/2025 9:07:15 AM	SAM	4/16/2025 3:44:11 PM	Peak Integrated by Software
VSTDICCC050	VN086281.D	trans-1,4-Dichloro-2-but ene	JOHN	4/16/2025 9:07:15 AM	SAM	4/16/2025 3:44:11 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN041525	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN086282.D	1,2,3-Trichloropropane	JOHN	4/16/2025 9:07:19 AM	SAM	4/16/2025 3:44:11 PM	Peak Integrated by Software
VSTDICC100	VN086282.D	trans-1,4-Dichloro-2-but ene	JOHN	4/16/2025 9:07:19 AM	SAM	4/16/2025 3:44:11 PM	Peak Integrated by Software
VSTDICV050	VN086284.D	1,2,3-Trichloropropane	JOHN	4/16/2025 9:07:24 AM	SAM	4/16/2025 3:44:13 PM	Peak Integrated by Software
VSTDICV050	VN086284.D	trans-1,4-Dichloro-2-but ene	JOHN	4/16/2025 9:07:24 AM	SAM	4/16/2025 3:44:13 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN041625	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN086286.D	1,2,3-Trichloropropane	JOHN	4/17/2025 9:04:20 AM	MMDadoda	4/17/2025 1:41:47 PM	Peak Integrated by Software
VN0416WBS01	VN086289.D	1,2,3-Trichloropropane	JOHN	4/17/2025 9:04:25 AM	MMDadoda	4/17/2025 1:41:48 PM	Peak Integrated by Software
VN0416WBSD01	VN086292.D	1,2,3-Trichloropropane	JOHN	4/17/2025 9:04:34 AM	MMDadoda	4/17/2025 1:41:55 PM	Peak Integrated by Software
VSTDCCC050	VN086311.D	1,2,3-Trichloropropane	JOHN	4/17/2025 9:05:10 AM	MMDadoda	4/17/2025 1:42:00 PM	Peak Integrated by Software

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN041525

Review By	John Carlone	Review On	4/16/2025 9:07:40 AM				
Supervise By	Semsettin Yesilyurt	Supervise On	4/16/2025 3:44:21 PM				
SubDirectory	VN041525	HP Acquire Method	MSVOA_N		HP Processing Method	82N041525W.M	

STD. NAME	STD REF.#
Tune/Reschk	VP133665
Initial Calibration Stds	VP133667,VP133668,VP133669,VP133670,VP133671,VP133672
CCC	
Internal Standard/PEM	VP131746
ICV/I.BLK	VP133673
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN086276.D	15 Apr 2025 10:47	JC\MD	Ok
2	VSTDICC001	VN086277.D	15 Apr 2025 11:29	JC\MD	Ok,M
3	VSTDICC005	VN086278.D	15 Apr 2025 12:21	JC\MD	Ok,M
4	VSTDICC010	VN086279.D	15 Apr 2025 12:45	JC\MD	Ok,M
5	VSTDICC020	VN086280.D	15 Apr 2025 13:09	JC\MD	Ok,M
6	VSTDICCC050	VN086281.D	15 Apr 2025 13:51	JC\MD	Ok,M
7	VSTDICC100	VN086282.D	15 Apr 2025 14:29	JC\MD	Ok,M
8	VIBLK	VN086283.D	15 Apr 2025 15:06	JC\MD	Ok
9	VSTDICV050	VN086284.D	15 Apr 2025 15:30	JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN041625

Review By	John Carlone	Review On	4/17/2025 9:07:56 AM		
Supervise By	Mahesh Dadoda	Supervise On	4/17/2025 1:42:06 PM		
SubDirectory	VN041625	HP Acquire Method		HP Processing Method	82N041525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133674
Initial Calibration Stds	
CCC	VP133675,VP133676
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN086285.D	16 Apr 2025 08:38	JC\MD	Ok
2	VSTDCCC050	VN086286.D	16 Apr 2025 09:14	JC\MD	Ok,M
3	VN0416MBL01	VN086287.D	16 Apr 2025 09:48	JC\MD	Ok
4	VN0416WBL01	VN086288.D	16 Apr 2025 10:12	JC\MD	Ok
5	VN0416WBS01	VN086289.D	16 Apr 2025 11:52	JC\MD	Ok,M
6	VN0416WBS02	VN086290.D	16 Apr 2025 12:26	JC\MD	Not Ok
7	IBLK	VN086291.D	16 Apr 2025 12:50	JC\MD	Ok
8	VN0416WBSD01	VN086292.D	16 Apr 2025 13:14	JC\MD	Ok,M
9	Q1812-02	VN086293.D	16 Apr 2025 13:38	JC\MD	Ok
10	Q1812-03	VN086294.D	16 Apr 2025 14:02	JC\MD	Ok
11	Q1812-01	VN086295.D	16 Apr 2025 14:26	JC\MD	Ok
12	Q1793-02	VN086296.D	16 Apr 2025 14:50	JC\MD	Ok
13	Q1793-03	VN086297.D	16 Apr 2025 15:14	JC\MD	Ok
14	Q1793-04	VN086298.D	16 Apr 2025 15:39	JC\MD	Ok
15	Q1793-01	VN086299.D	16 Apr 2025 16:03	JC\MD	Ok
16	Q1760-07MEDL	VN086300.D	16 Apr 2025 16:27	JC\MD	Ok
17	IBLK	VN086301.D	16 Apr 2025 16:51	JC\MD	Ok
18	Q1760-07ME	VN086302.D	16 Apr 2025 17:15	JC\MD	Dilution
19	IBLK	VN086303.D	16 Apr 2025 17:39	JC\MD	Ok
20	VN0416MBS01	VN086304.D	16 Apr 2025 18:03	JC\MD	Ok,M
21	Q1791-14	VN086305.D	16 Apr 2025 18:27	JC\MD	Ok

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN041625

Review By	John Carlone	Review On	4/17/2025 9:07:56 AM		
Supervise By	Mahesh Dadoda	Supervise On	4/17/2025 1:42:06 PM		
SubDirectory	VN041625	HP Acquire Method		HP Processing Method	82N041525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133674
Initial Calibration Stds	
CCC	VP133675,VP133676
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1791-09	VN086306.D	16 Apr 2025 18:51	JC\MD	Ok
23	Q1791-10	VN086307.D	16 Apr 2025 19:16	JC\MD	Ok
24	Q1791-11	VN086308.D	16 Apr 2025 19:40	JC\MD	Ok
25	Q1791-13	VN086309.D	16 Apr 2025 20:04	JC\MD	Ok
26	Q1791-12	VN086310.D	16 Apr 2025 20:28	JC\MD	Ok
27	VSTDCCC050	VN086311.D	16 Apr 2025 20:52	JC\MD	Not Ok

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN041525

Review By	John Carlone	Review On	4/16/2025 9:07:40 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/16/2025 3:44:21 PM		
SubDirectory	VN041525	HP Acquire Method	MSVOA_N	HP Processing Method	82N041525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133665
Initial Calibration Stds	VP133667,VP133668,VP133669,VP133670,VP133671,VP133672
CCC	
Internal Standard/PEM	VP131746
ICV/I.BLK	VP133673
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN086276.D	15 Apr 2025 10:47		JC\MD	Ok
2	VSTDICC001	VSTDICC001	VN086277.D	15 Apr 2025 11:29		JC\MD	Ok,M
3	VSTDICC005	VSTDICC005	VN086278.D	15 Apr 2025 12:21	Comp.#13,16 is on Linear Regression	JC\MD	Ok,M
4	VSTDICC010	VSTDICC010	VN086279.D	15 Apr 2025 12:45	Comp.#43 is on Quadratic Regression	JC\MD	Ok,M
5	VSTDICC020	VSTDICC020	VN086280.D	15 Apr 2025 13:09		JC\MD	Ok,M
6	VSTDICCC050	VSTDICCC050	VN086281.D	15 Apr 2025 13:51		JC\MD	Ok,M
7	VSTDICC100	VSTDICC100	VN086282.D	15 Apr 2025 14:29		JC\MD	Ok,M
8	VIBLK	VIBLK	VN086283.D	15 Apr 2025 15:06		JC\MD	Ok
9	VSTDICV050	ICVVN041525	VN086284.D	15 Apr 2025 15:30		JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN041625

Review By	John Carlone	Review On	4/17/2025 9:07:56 AM		
Supervise By	Mahesh Dadoda	Supervise On	4/17/2025 1:42:06 PM		
SubDirectory	VN041625	HP Acquire Method		HP Processing Method	82N041525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133674
Initial Calibration Stds	
CCC	VP133675,VP133676
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	VN086285.D	16 Apr 2025 08:38		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN086286.D	16 Apr 2025 09:14	pH#Lot#V12668	JC\MD	Ok,M
3	VN0416MBL01	VN0416MBL01	VN086287.D	16 Apr 2025 09:48		JC\MD	Ok
4	VN0416WBL01	VN0416WBL01	VN086288.D	16 Apr 2025 10:12		JC\MD	Ok
5	VN0416WBS01	VN0416WBS01	VN086289.D	16 Apr 2025 11:52		JC\MD	Ok,M
6	VN0416WBS02	VN0416WBS02	VN086290.D	16 Apr 2025 12:26	Surrogate Fail	JC\MD	Not Ok
7	IBLK	IBLK	VN086291.D	16 Apr 2025 12:50		JC\MD	Ok
8	VN0416WBSD01	VN0416WBSD01	VN086292.D	16 Apr 2025 13:14		JC\MD	Ok,M
9	Q1812-02	RINSE-EB-TANK-0415	VN086293.D	16 Apr 2025 13:38	vial A pH<2	JC\MD	Ok
10	Q1812-03	RINSE-EB-PUMP-0415	VN086294.D	16 Apr 2025 14:02	vial A pH<2	JC\MD	Ok
11	Q1812-01	TB01-041525	VN086295.D	16 Apr 2025 14:26	vial A pH<2 TB	JC\MD	Ok
12	Q1793-02	Storage-Blank-WATER-	VN086296.D	16 Apr 2025 14:50	vial A pH<2	JC\MD	Ok
13	Q1793-03	Storage-Blank-WATER-	VN086297.D	16 Apr 2025 15:14	vial A pH<2	JC\MD	Ok
14	Q1793-04	Storage-Blank-SAMPLE	VN086298.D	16 Apr 2025 15:39	vial A pH<2	JC\MD	Ok
15	Q1793-01	Storage-Blank-SOIL-RE	VN086299.D	16 Apr 2025 16:03	vial A pH<2	JC\MD	Ok
16	Q1760-07MEDL	TP-15-VOCMEDL	VN086300.D	16 Apr 2025 16:27		JC\MD	Ok
17	IBLK	IBLK	VN086301.D	16 Apr 2025 16:51		JC\MD	Ok
18	Q1760-07ME	TP-15-VOCME	VN086302.D	16 Apr 2025 17:15	Need 10X	JC\MD	Dilution

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN041625

Review By	John Carlone	Review On	4/17/2025 9:07:56 AM		
Supervise By	Mahesh Dadoda	Supervise On	4/17/2025 1:42:06 PM		
SubDirectory	VN041625	HP Acquire Method		HP Processing Method	82N041525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133674
Initial Calibration Stds	
CCC	VP133675,VP133676
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	IBLK	IBLK	VN086303.D	16 Apr 2025 17:39		JC\MD	Ok
20	VN0416MBS01	VN0416MBS01	VN086304.D	16 Apr 2025 18:03		JC\MD	Ok,M
21	Q1791-14	VB16164	VN086305.D	16 Apr 2025 18:27	vial A pH<2	JC\MD	Ok
22	Q1791-09	VB16193	VN086306.D	16 Apr 2025 18:51	vial A pH<2	JC\MD	Ok
23	Q1791-10	280722	VN086307.D	16 Apr 2025 19:16	vial A pH<2	JC\MD	Ok
24	Q1791-11	280791	VN086308.D	16 Apr 2025 19:40	vial A pH<2	JC\MD	Ok
25	Q1791-13	279312	VN086309.D	16 Apr 2025 20:04	vial A pH<2	JC\MD	Ok
26	Q1791-12	V1207	VN086310.D	16 Apr 2025 20:28	vial A pH<2	JC\MD	Ok
27	VSTDCCC050	VSTDCCC050EC	VN086311.D	16 Apr 2025 20:52	Out of Tune	JC\MD	Not Ok

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q1812

Test : VOC-TCLVOA-10

Prepbatch ID :

Sequence ID/Qc Batch ID: VN041625,

Standard ID :
VP131746,VP131767,VP132035,VP132096,VP133174,VP133342,VP133544,VP133674,VP133675,VP133676,

Chemical ID :
V13391,V13457,V13460,V13465,V13466,V13706,V14154,V14289,V14431,V14435,V14501,V14502,V14523,V14524,V14613,V14614,V14615,V14630,V14631,V14632,V14633,V14719,V14720,V14726,V14744,V14753,V14804,V14805,V14842,V14883,V14896,V14897,V14898,V14899,W3112,

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

VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP131746	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/23/2024

FROM 0.50000ml of V14289 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP131767	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/27/2024

FROM 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1810	8260 Working Std(2-CVE)-800ppm	VP132035	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/12/2024

FROM 1.00000ml of V14630 + 1.00000ml of V14631 + 1.00000ml of V14632 + 1.00000ml of V14633 + 46.00000ml of V14614 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
719	8260 Working STD (BCM)-First source, 400PPM	VP132096	12/12/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/19/2024

FROM 1.00000ml of V13465 + 1.00000ml of V13466 + 1.50000ml of V13457 + 1.50000ml of V13460 + 20.00000ml of V14614 = 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
617	8260 Surrogate, 400PPM	VP133174	02/27/2025	08/27/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 03/04/2025

FROM 0.40000ml of V13706 + 24.60000ml of V14613 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP133342	03/18/2025	04/17/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 03/20/2025

FROM 1.00000ml of V14896 + 1.00000ml of V14897 + 1.00000ml of V14898 + 1.00000ml of V14899 + 21.00000ml of V14883 = 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
257	8260 Calibration Working STD Mix-First source, 160PPM	VP133544	04/01/2025	05/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 0.40000ml of V14842 + 1.00000ml of V14431 + 1.00000ml of V14435 + 1.00000ml of V14501 + 1.00000ml of V14502 + 1.00000ml of V14523 + 1.00000ml of V14524 + 1.00000ml of V14726 + 1.00000ml of V14744 + 1.00000ml of V14753 + 1.00000ml of V14804 + 1.00000ml of V14805 + 1.50000ml of V14719 + 1.50000ml of V14720 + 10.60000ml of V14615 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP133674	04/16/2025	04/17/2025	John Carlone	None	None	Mahesh Dadoda 04/18/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP131767 = 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	VP133675	04/16/2025	04/17/2025	John Carlone	None	None	Mahesh Dadoda 04/18/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133342 + 0.01250ml of VP133544 = 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	VP133676	04/16/2025	04/17/2025	John Carlone	None	None	Mahesh Dadoda 04/18/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133342 + 0.01250ml of VP133544 = 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	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13457

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	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13460

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	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13465

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	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13466

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]	A0196865	02/27/2026	02/27/2025 / SAM	04/12/2023 / SAM	V13706

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CHEMICAL RECEIPT LOG BOOK

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)	22L0562016	05/18/2025	11/18/2024 / pedro	02/06/2024 / SAM	V14154

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	11/22/2025	11/22/2024 / SAM	04/15/2024 / SAM	V14289

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	09/20/2025	03/20/2025 / SAM	08/15/2024 / SAM	V14431

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	09/20/2025	03/20/2025 / SAM	08/15/2024 / SAM	V14435

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	09/20/2025	03/20/2025 / SAM	09/17/2024 / SAM	V14501

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	09/20/2025	03/20/2025 / SAM	09/17/2024 / SAM	V14502

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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	09/20/2025	03/20/2025 / SAM	09/18/2024 / SAM	V14523

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	09/20/2025	03/20/2025 / SAM	09/18/2024 / SAM	V14524

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)	22L0562016	08/27/2025	02/27/2025 / SAM	11/26/2024 / SAM	V14613

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)	22L0562016	06/10/2025	12/10/2024 / SAM	11/26/2024 / SAM	V14614

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)	22L0562016	09/19/2025	03/19/2025 / SAM	11/26/2024 / SAM	V14615

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14630

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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	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14631

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14632

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14633

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	09/20/2025	03/20/2025 / SAM	12/17/2024 / SAM	V14719

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	09/20/2025	03/20/2025 / SAM	12/17/2024 / SAM	V14720

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	07/30/2025	01/30/2025 / SAM	12/17/2024 / SAM	V14726

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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	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	08/27/2025	02/27/2025 / SAM	12/17/2024 / SAM	V14744

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	07/30/2025	01/30/2025 / SAM	12/17/2024 / SAM	V14753

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	09/20/2025	03/20/2025 / SAM	01/08/2025 / SAM	V14804

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	09/20/2025	03/20/2025 / SAM	01/08/2025 / SAM	V14805

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	08/27/2025	02/27/2025 / SAM	01/21/2025 / SAM	V14842

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)	22L0562016	10/25/2025	02/19/2025 / Jaswal	04/22/2024 / Jaswal	V14883

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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)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14896

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14897

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14898

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14899

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

12 Bottles

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
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	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
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

James Ethier

Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Bottles

avantor™ | J.T.Baker®

Material No.: 9077-02
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Certificate of Analysis

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Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

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Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Bottles

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Material No.: 9077-02
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Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
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Titrable Acid (µeq/g)	≤ 0.3	0.2
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
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500 Series for Drinking Water
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James Ethier

Jamie Ethier
Vice President Global Quality

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

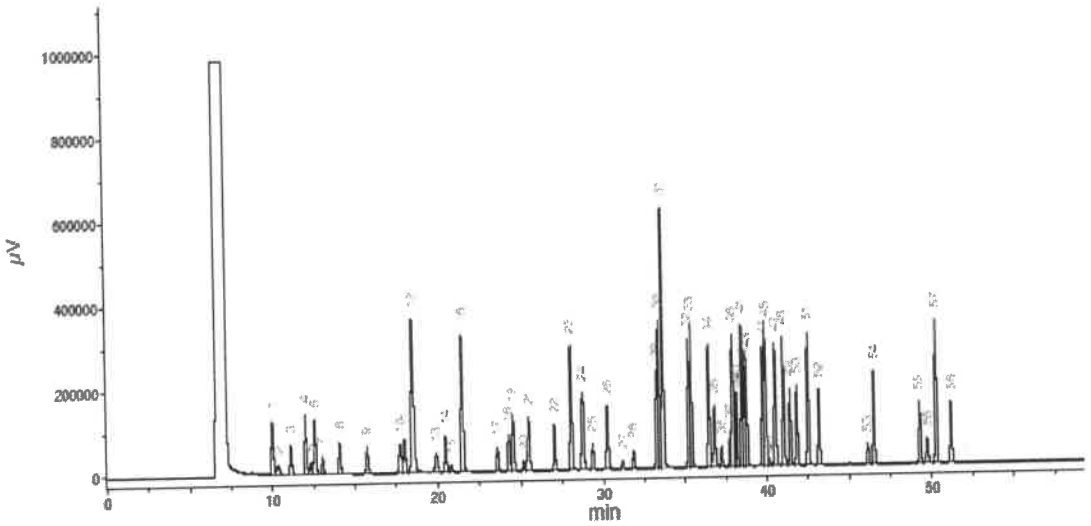
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, 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

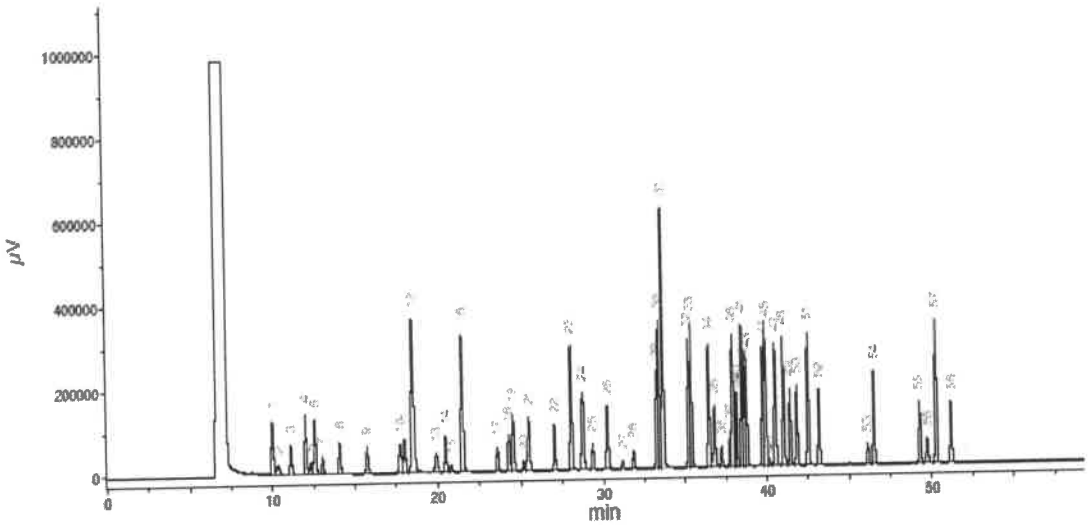
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, 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.

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

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Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Exp 03/18/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

5 vial

Part Number:	91980
Lot Number:	031725
Description:	Acrolein
Expiration Date:	041725
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): **Lot#**
Water 072324Q

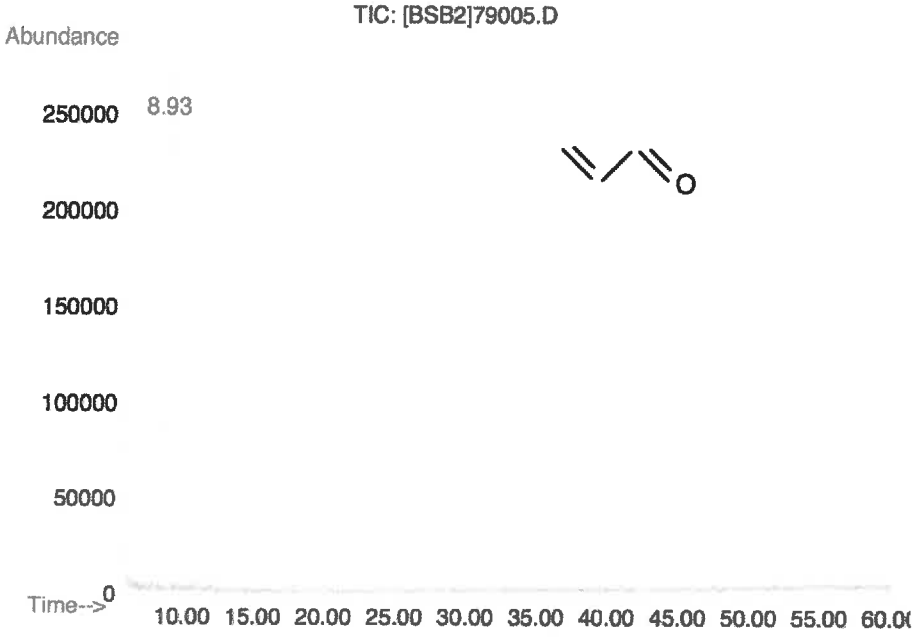
V14895 to V14899

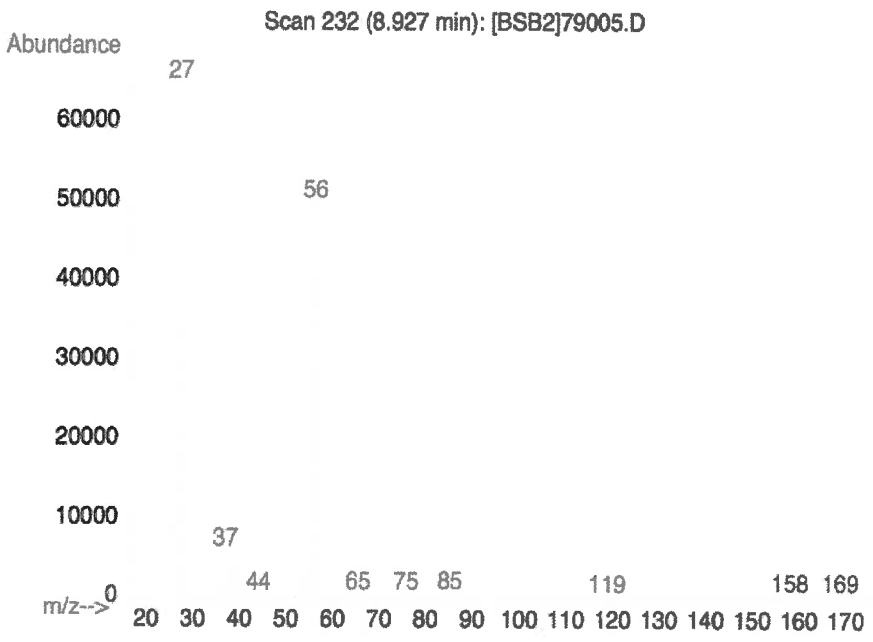
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By:	Lawrence Barry	031725 DATE
Reviewed By:	Pedro L. Rentas	031725 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	0.05170	5004.1	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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- **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 WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		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)
Water	CAS#: 7732-18-5	> 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

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.
Hazardous Decomposition products	Carbon oxides

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

Water CAS#: 7732-18-5 TWA: 500 ppm

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	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

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	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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CERTIFIED WEIGHT REPORT

5 vial

Part Number:	91980
Lot Number:	031725
Description:	Acrolein
Expiration Date:	041725
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): **Lot#**
Water 072324Q

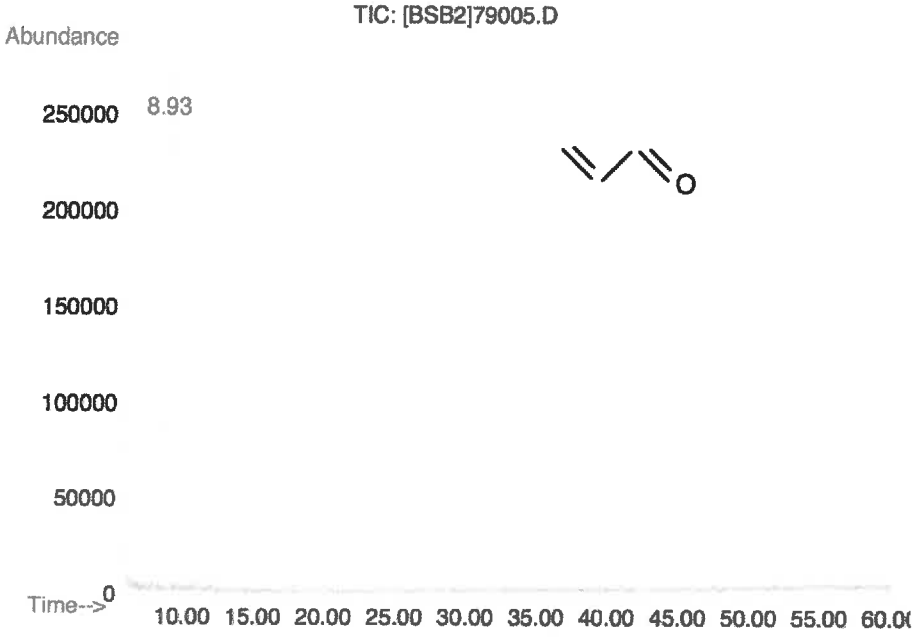
V14895 to V14899

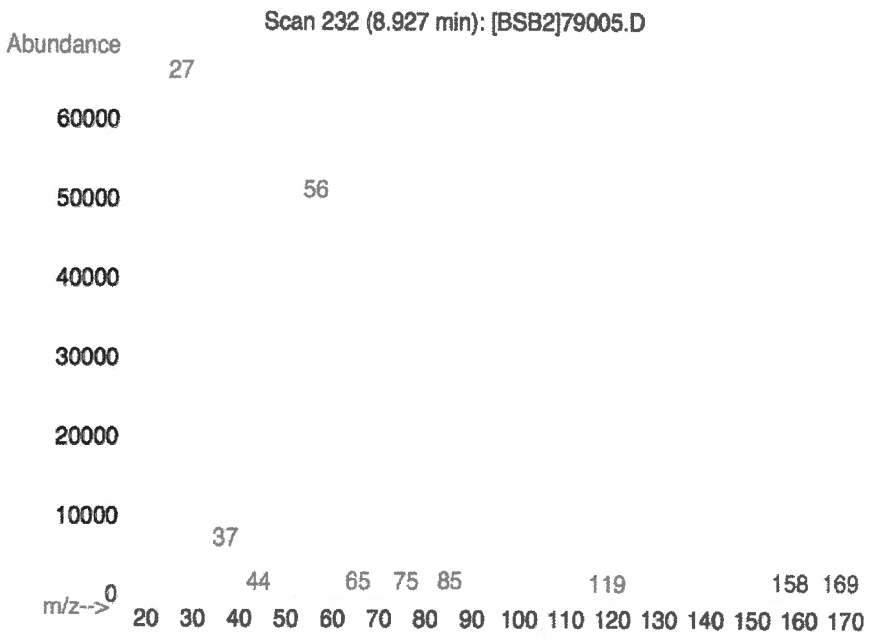
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By:	Lawrence Barry	031725 DATE
Reviewed By:	Pedro L. Rentas	031725 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	0.05170	5004.1	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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Safety Data Sheet (SDS) GHS/OSHA Compliant

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Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		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)
Water	CAS#: 7732-18-5	> 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

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.
Hazardous Decomposition products	Carbon oxides

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

Water CAS#: 7732-18-5 TWA: 500 ppm

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	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

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	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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5 vial

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Description:	Acrolein
Expiration Date:	041725
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): **Lot#**
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V14895 to V14899

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

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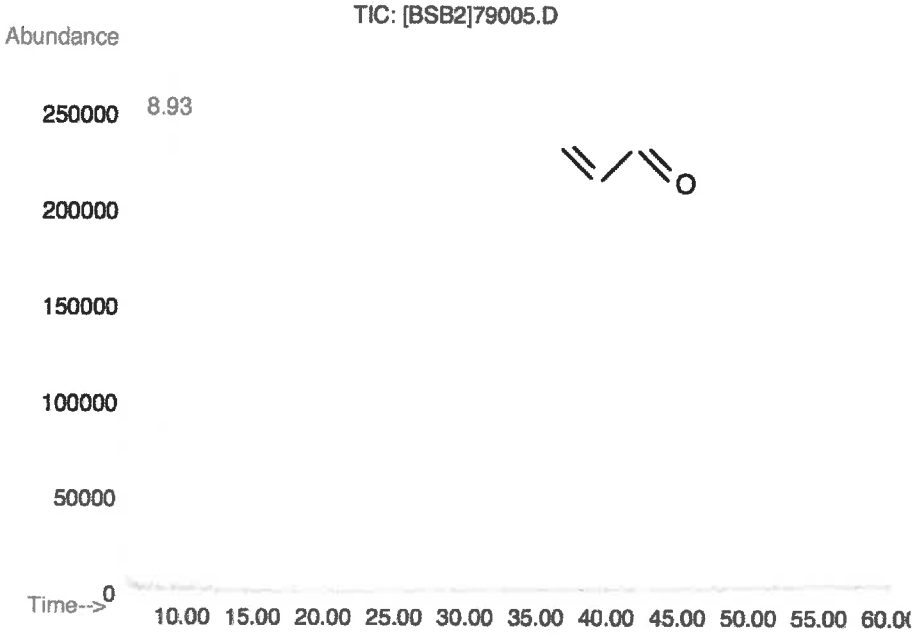

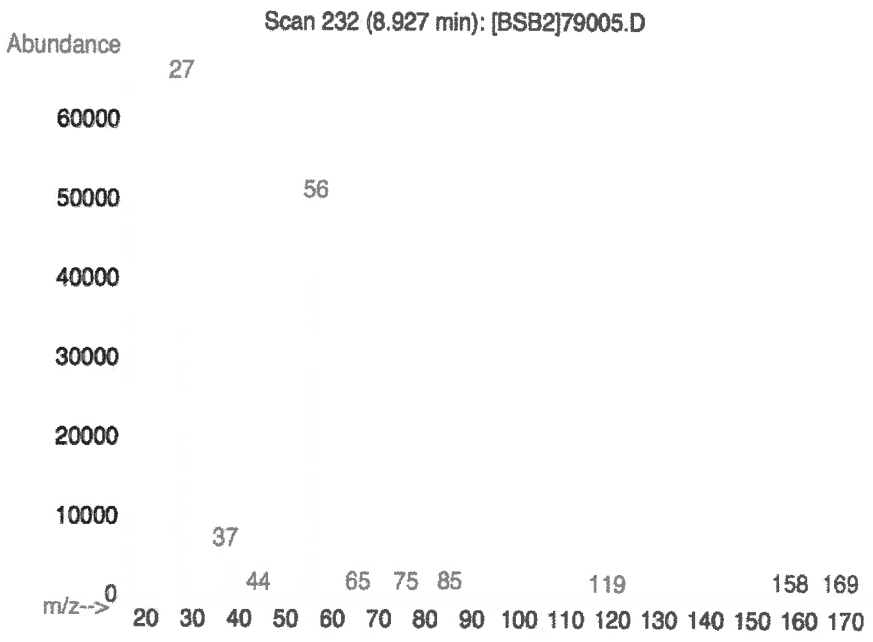

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Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

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Hazardous Decomposition products	Carbon oxides

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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.

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Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
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Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

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	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 Material 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

Exp 03/18/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

5 vial

Part Number:	91980
Lot Number:	031725
Description:	Acrolein
Expiration Date:	041725
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): **Lot#**
Water 072324Q

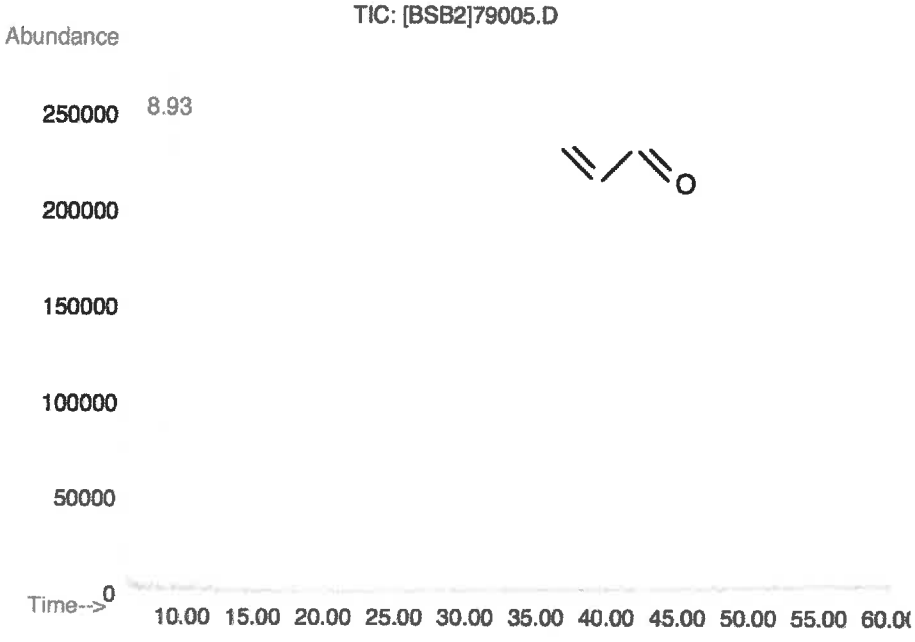
V14895 to V14899

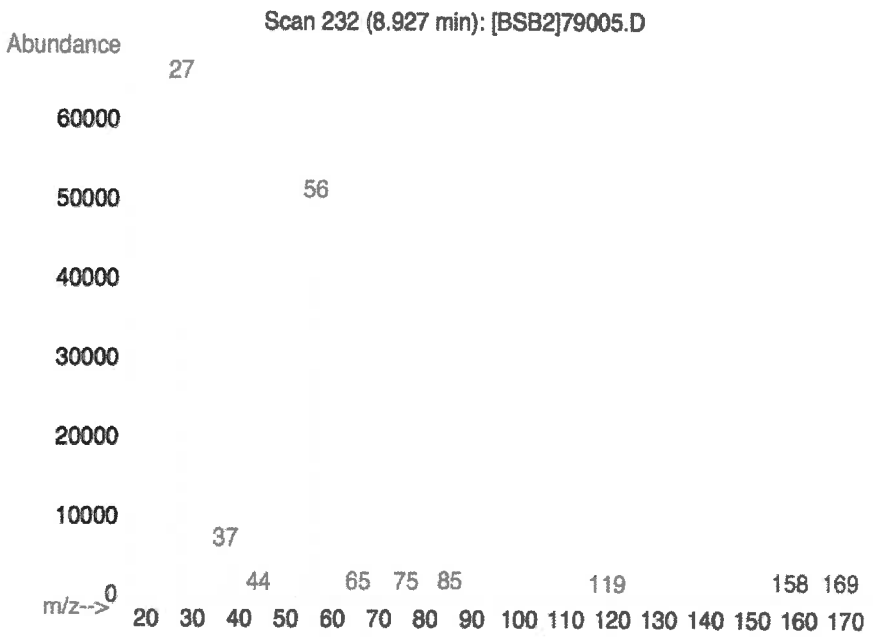
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By:	Lawrence Barry	031725 DATE
Reviewed By:	Pedro L. Rentas	031725 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	0.05170	5004.1	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.





- **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 WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		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)
Water	CAS#: 7732-18-5	> 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

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.
Hazardous Decomposition products	Carbon oxides

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

Water CAS#: 7732-18-5 TWA: 500 ppm

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	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

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Phone: 203-281-2917
FAX: 203-281-2922

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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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

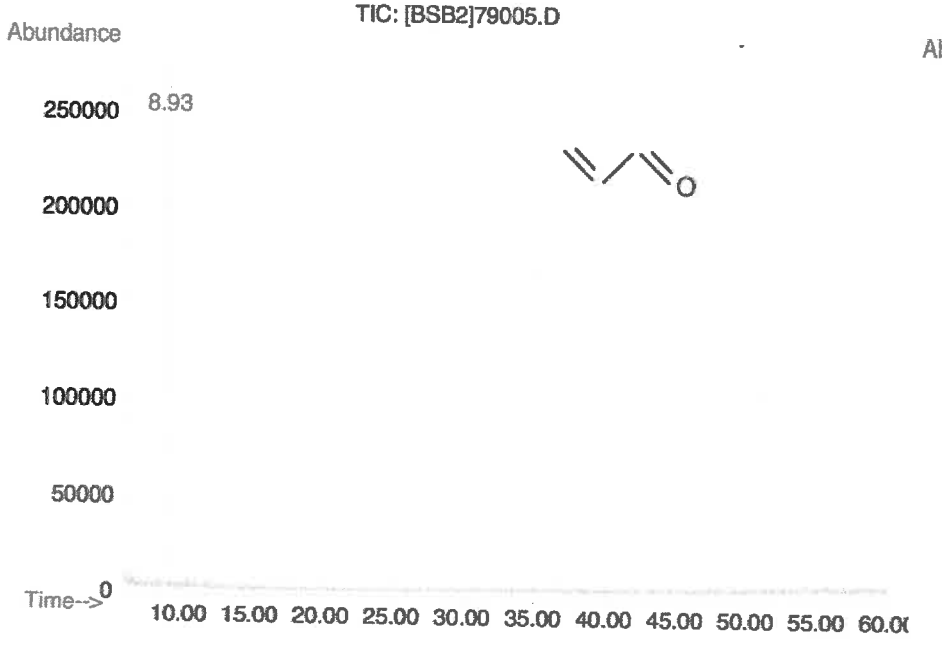
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

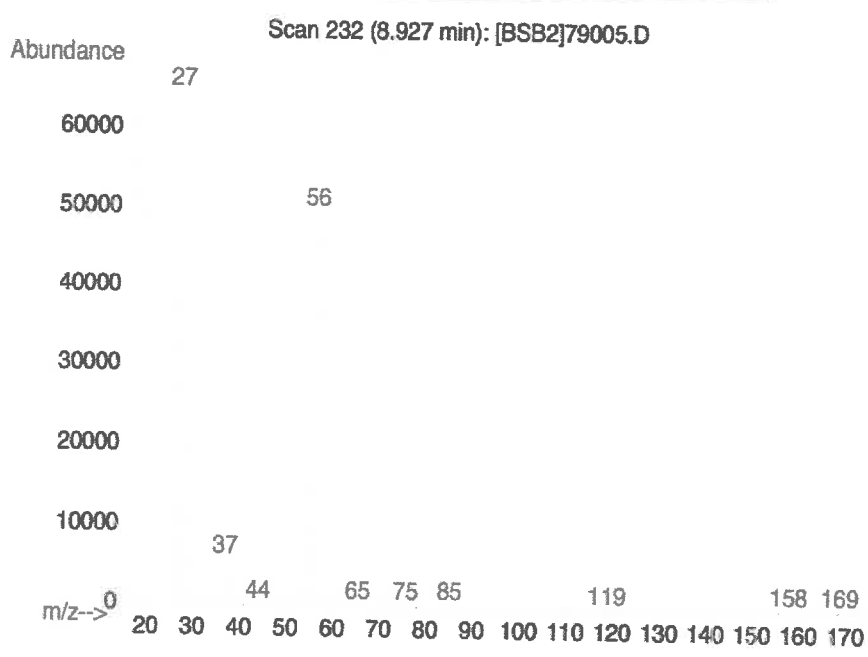
Formulated By: Justin Dippold 091424 DATE

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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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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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

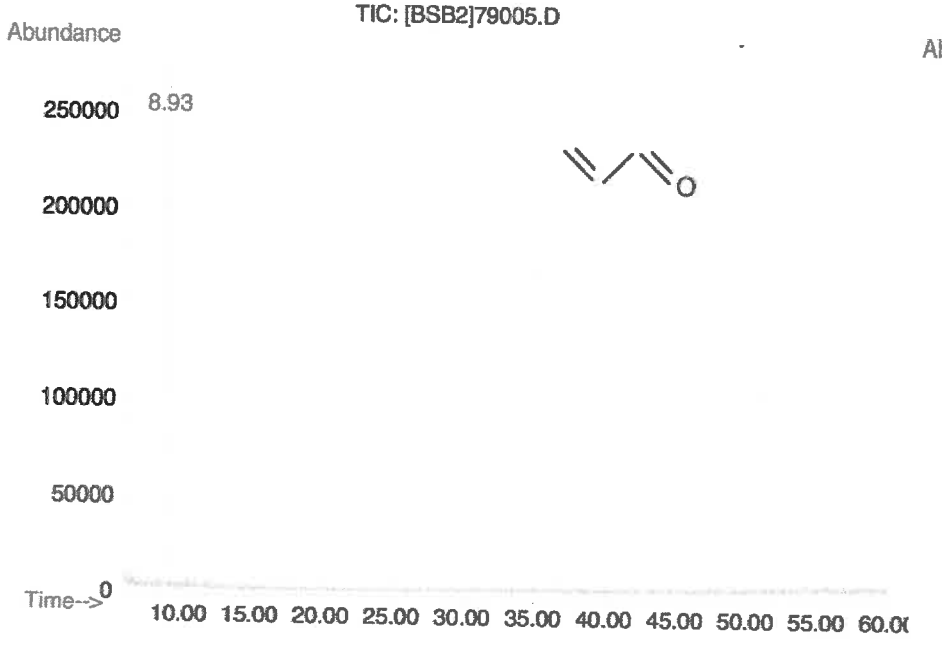
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

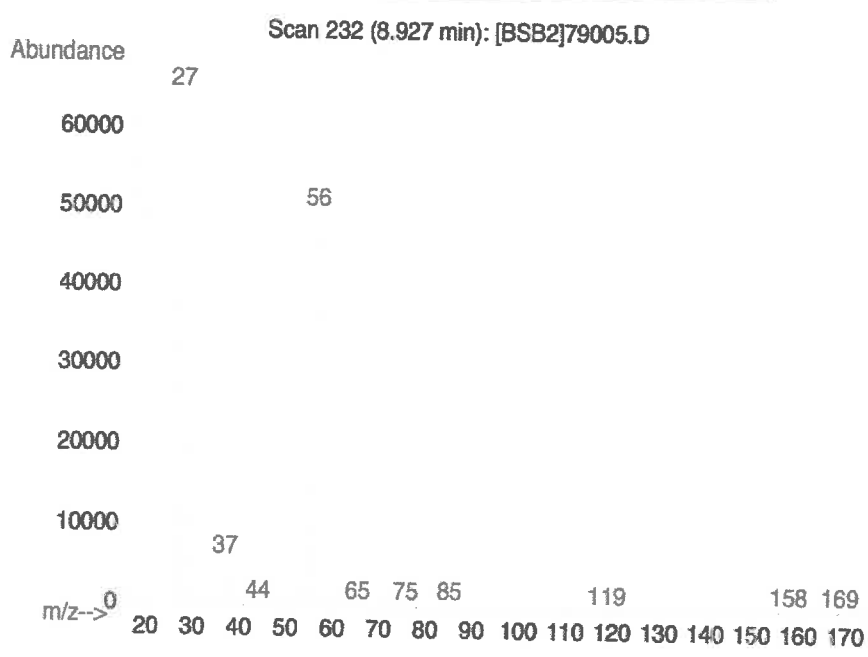
Formulated By: Justin Dippold 091424 DATE

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 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

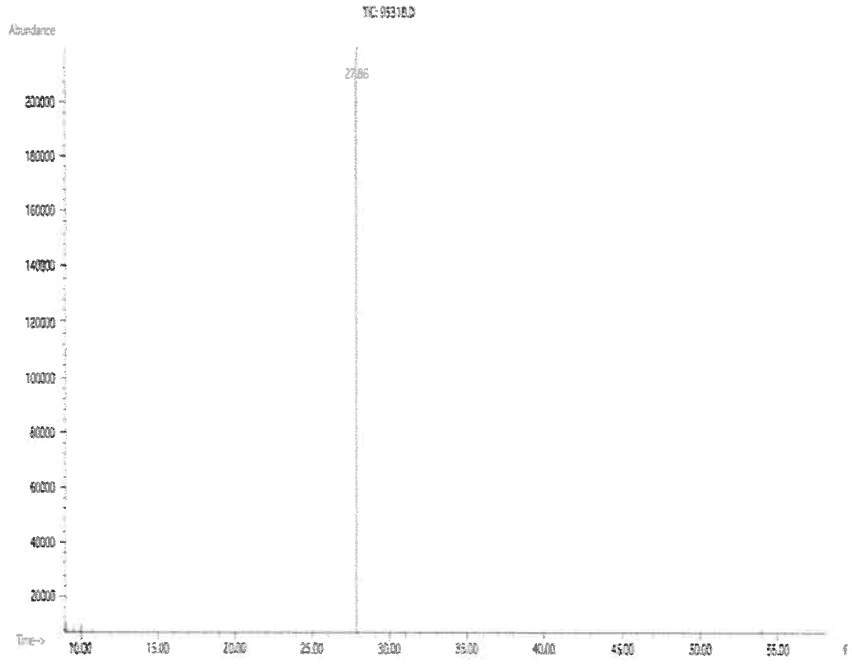
V14630 to V14649

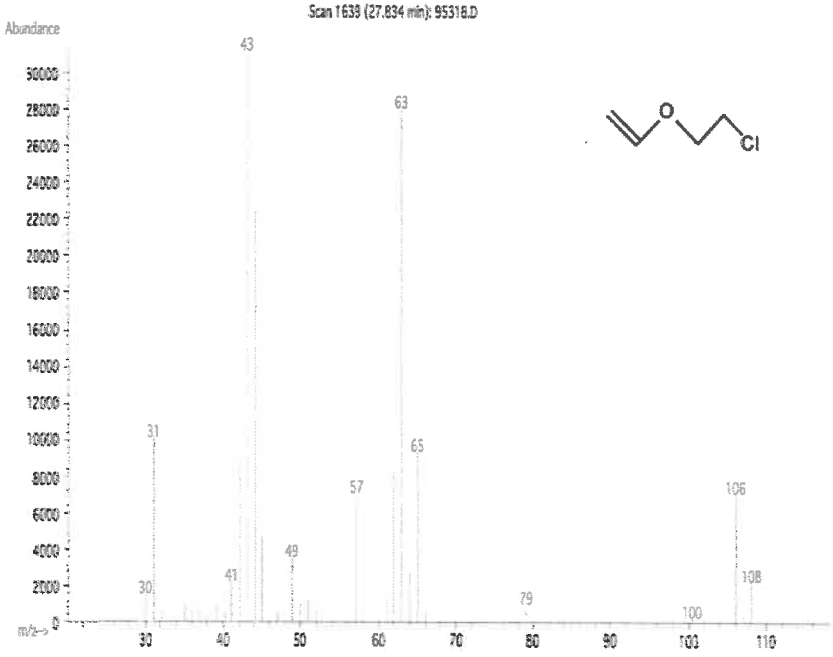
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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

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

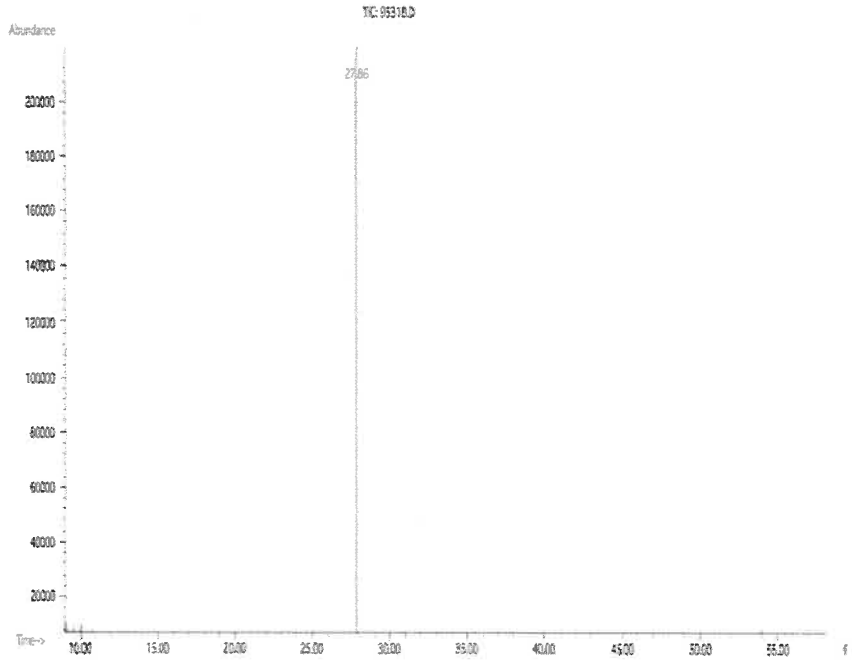
V14630 to V14649

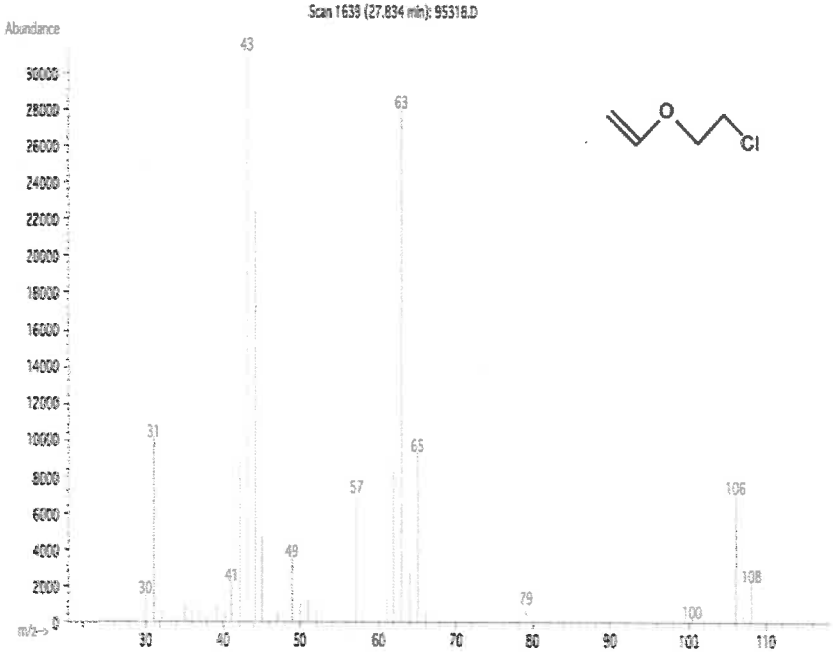
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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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

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
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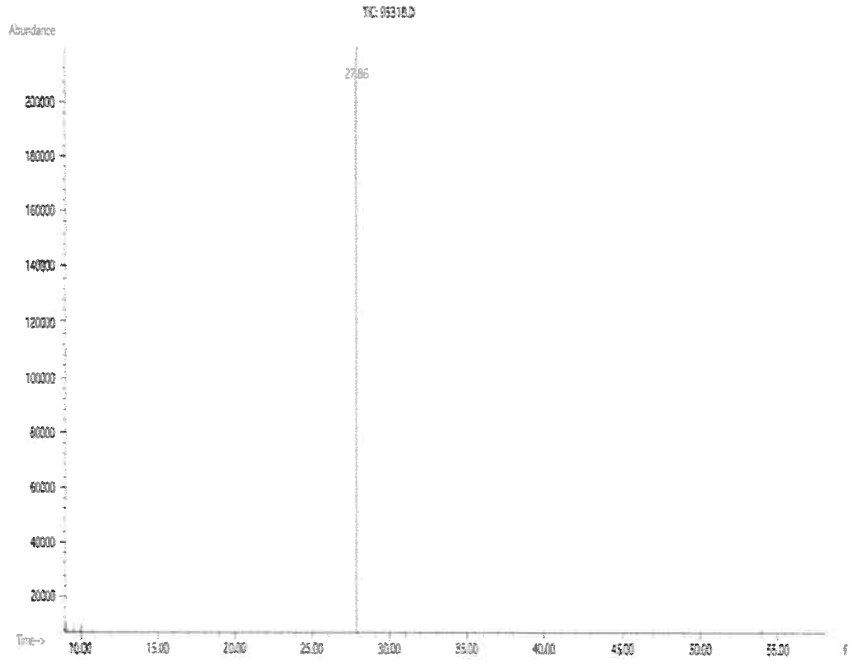
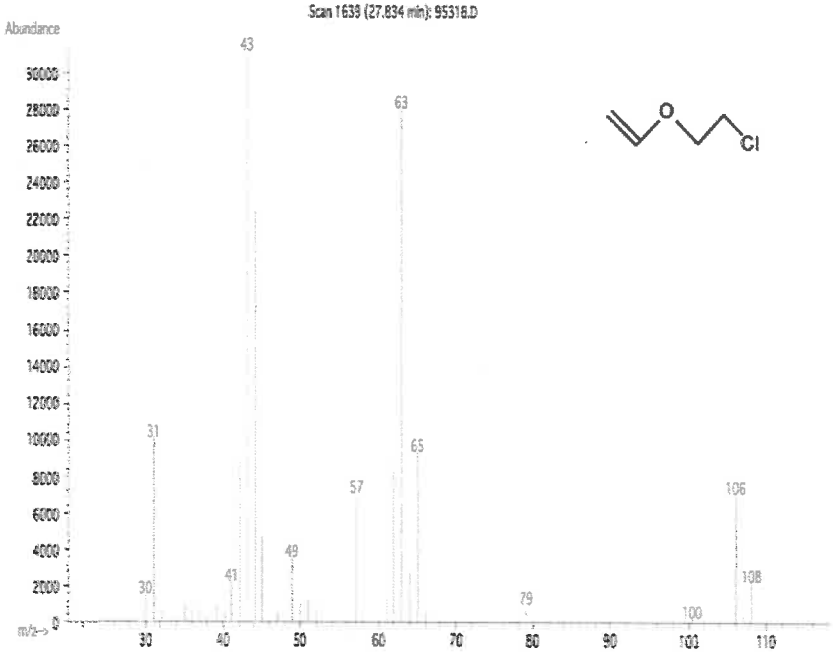
Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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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

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Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
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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
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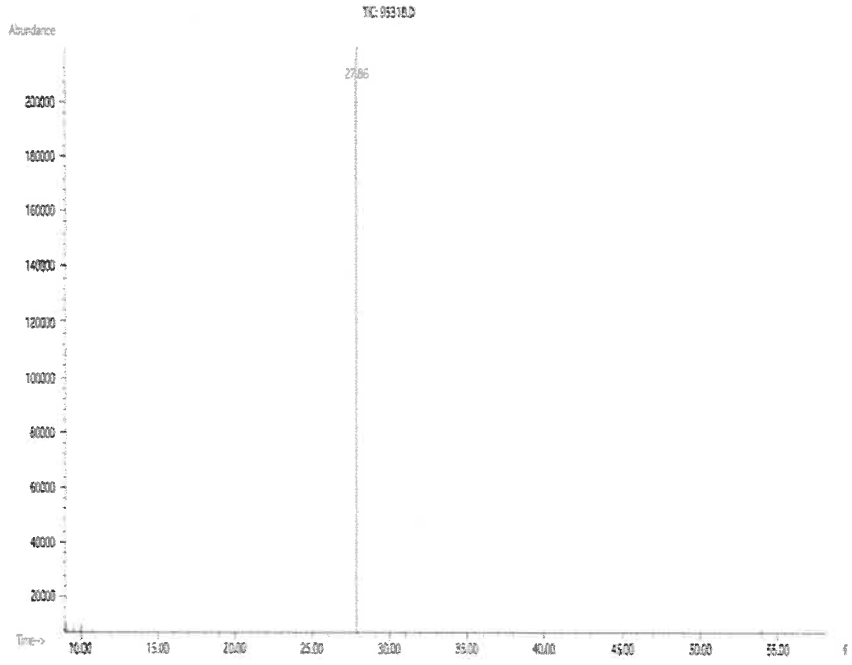
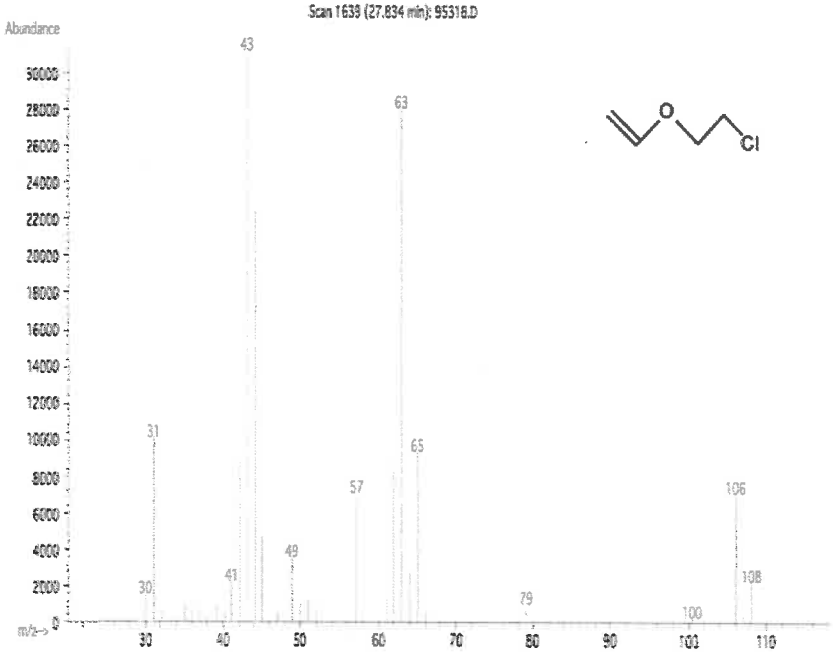
Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Signal Word: DANGER

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Components (Specific Chemical Identity; Common Name(s))			% (optional)
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Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
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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. : 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.)

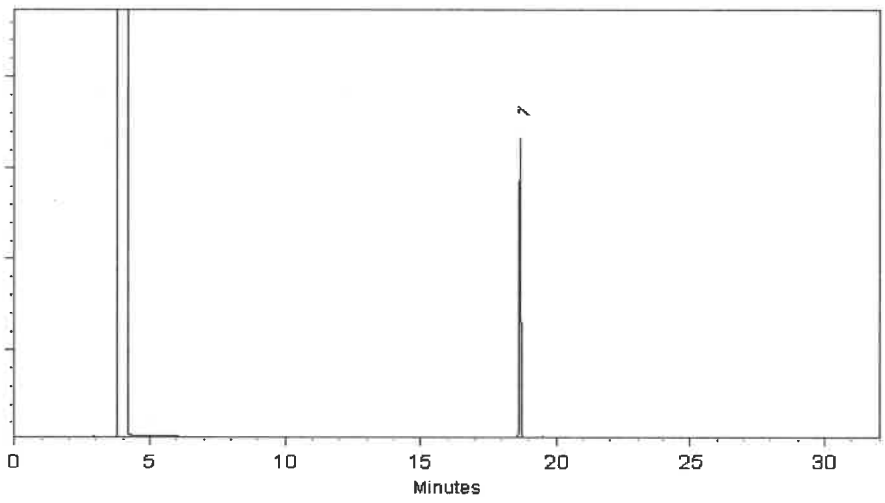
Inj. Temp:
200°C

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.

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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.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 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	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* 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.)

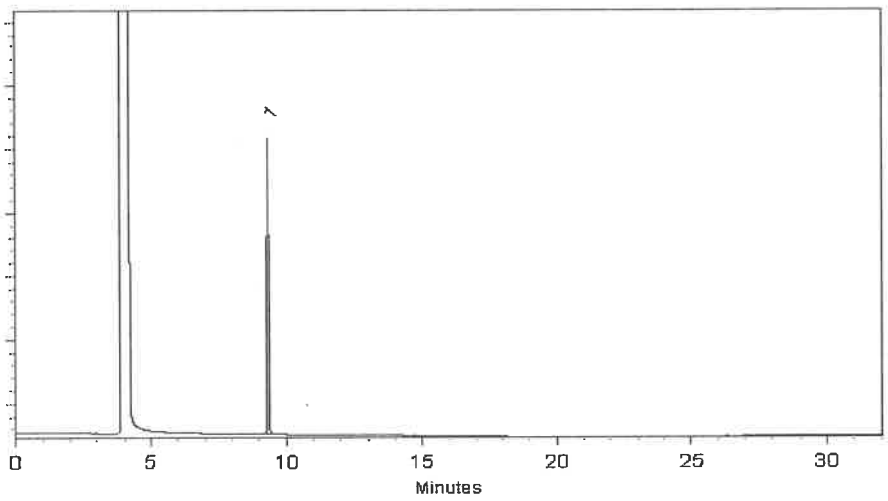
Inj. Temp:
200°C

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.

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

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:

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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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$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  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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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 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	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* 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.)

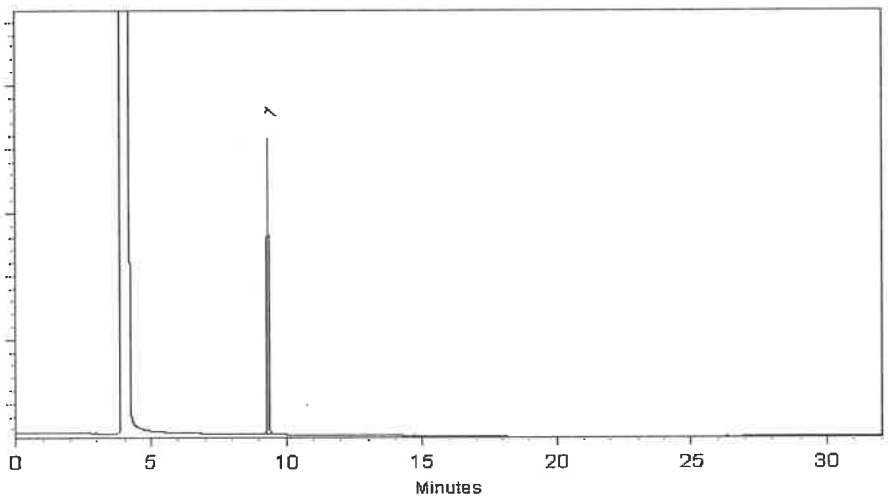
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

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:

- 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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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 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	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* 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.)

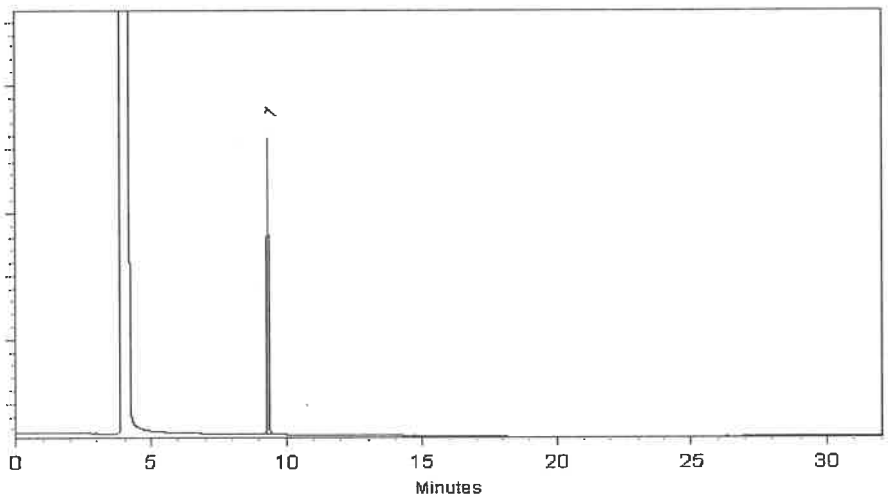
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

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:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 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	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* 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.)

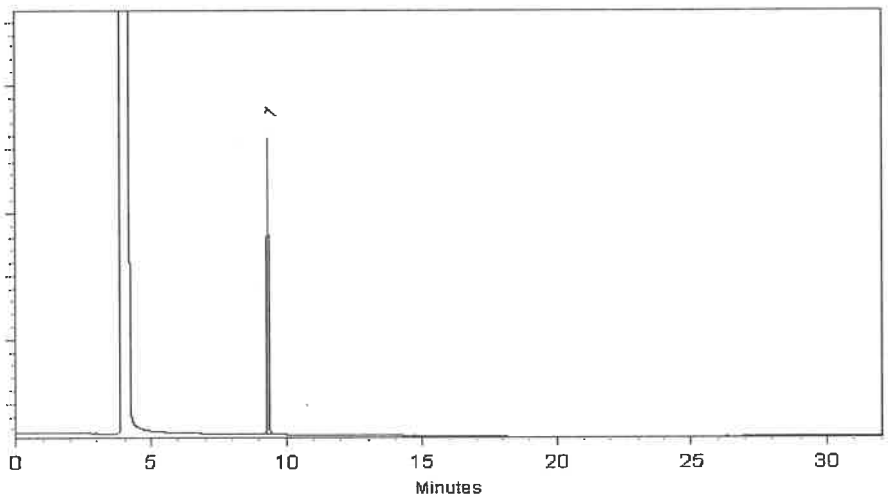
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

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:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Catalog No. : 555582 **Lot No.:** A0196865

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 : April 30, 2026 **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-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023 **Balance:** 1127510105

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:

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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.

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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. : 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.)

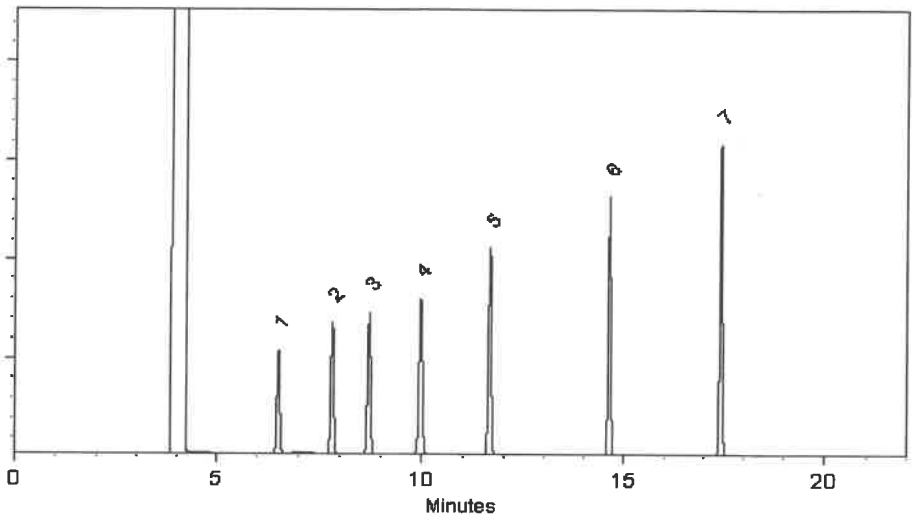
Inj. Temp:
200°C

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.
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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. : 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:

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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.)

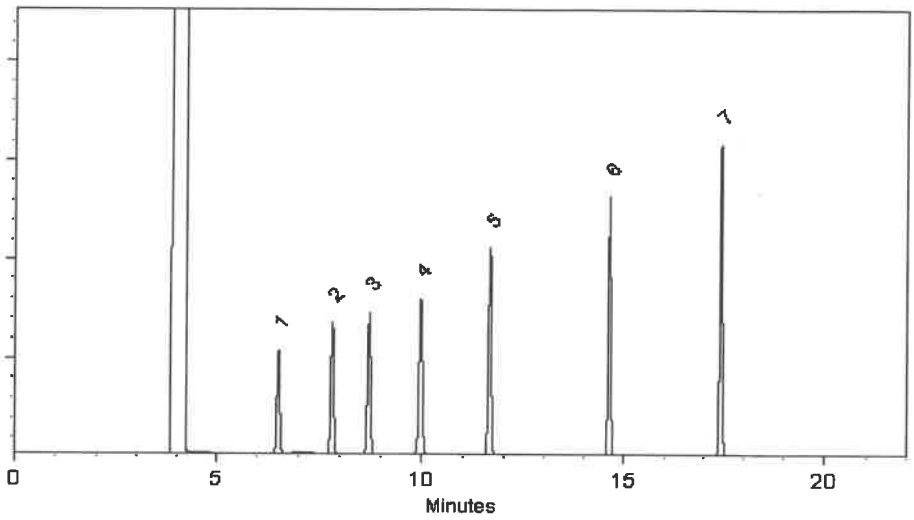
Inj. Temp:
200°C

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.
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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:

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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:

- 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. : 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.)

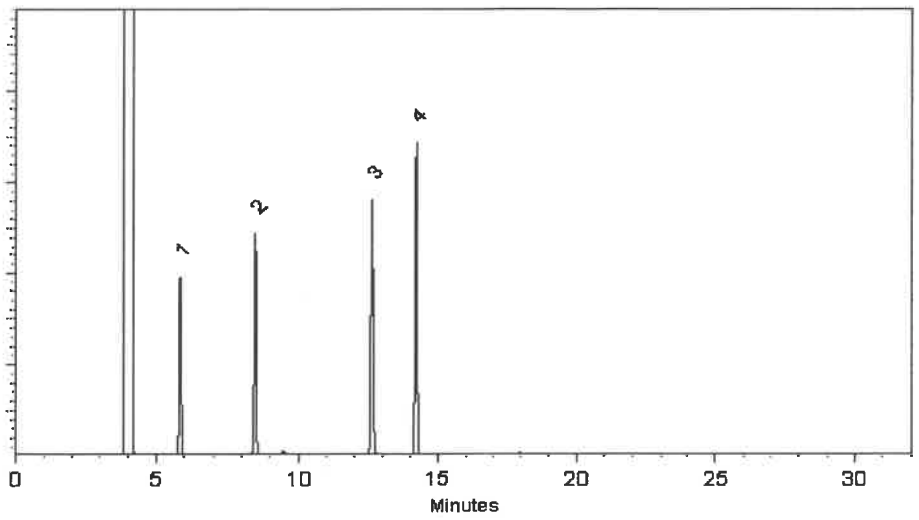
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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.

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:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  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. : 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.)

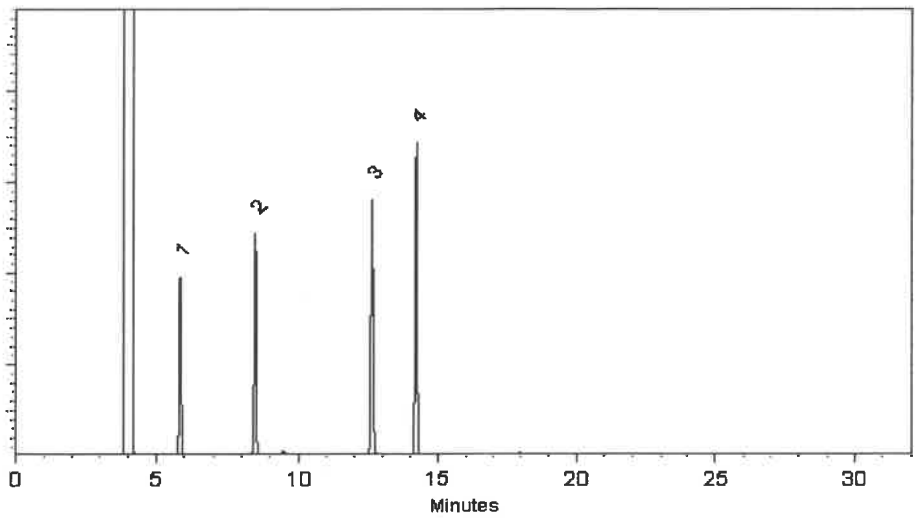
Inj. Temp:
200°C

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:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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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.)

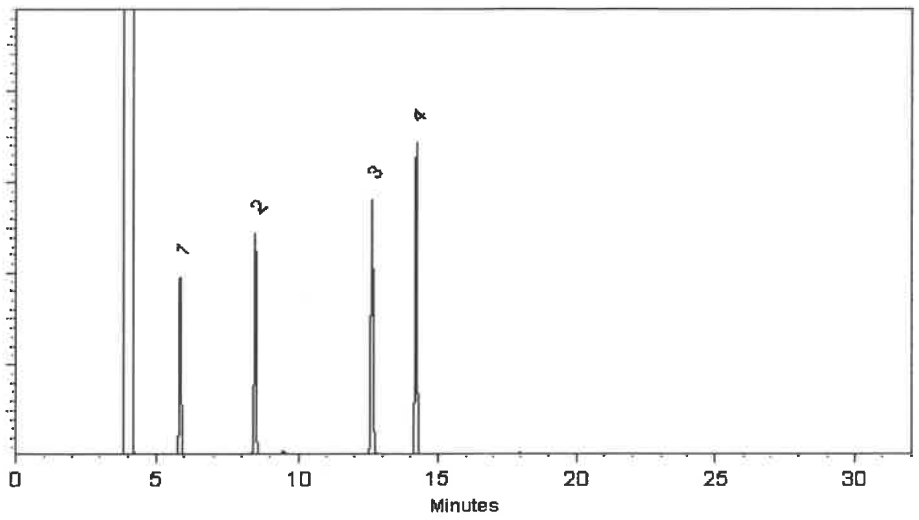
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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.

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:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  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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Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 Vial

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chromatographic plus

V14727 to
V14756

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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.

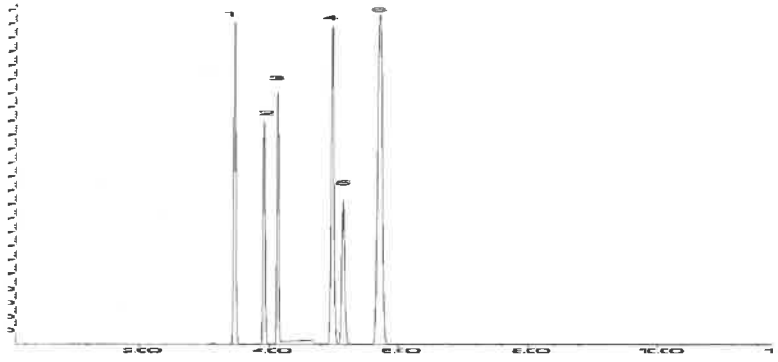
Inj. Temp:
200°C

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:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  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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CERTIFIED REFERENCE MATERIAL

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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.

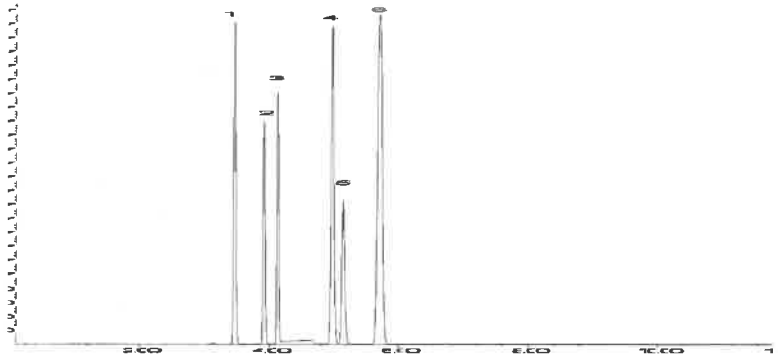
Inj. Temp:
200°C

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.
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J14842 to 14846

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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.)

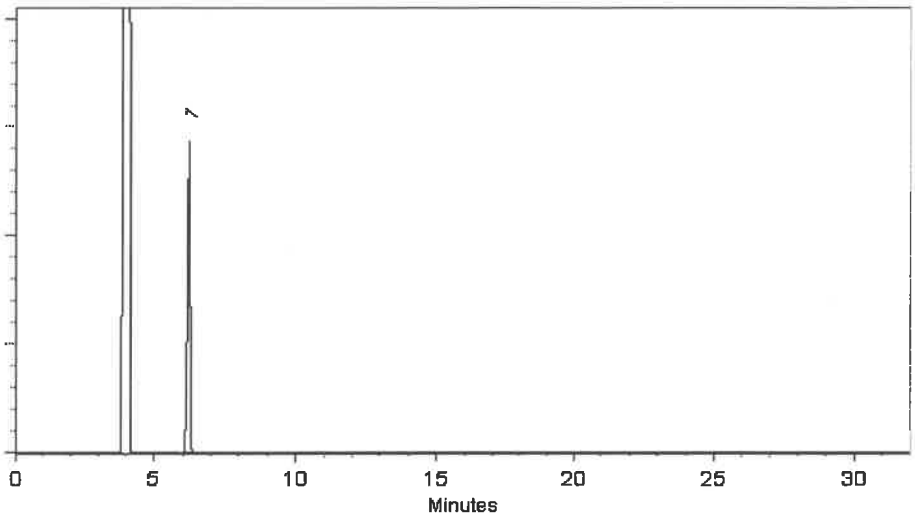
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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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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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.)

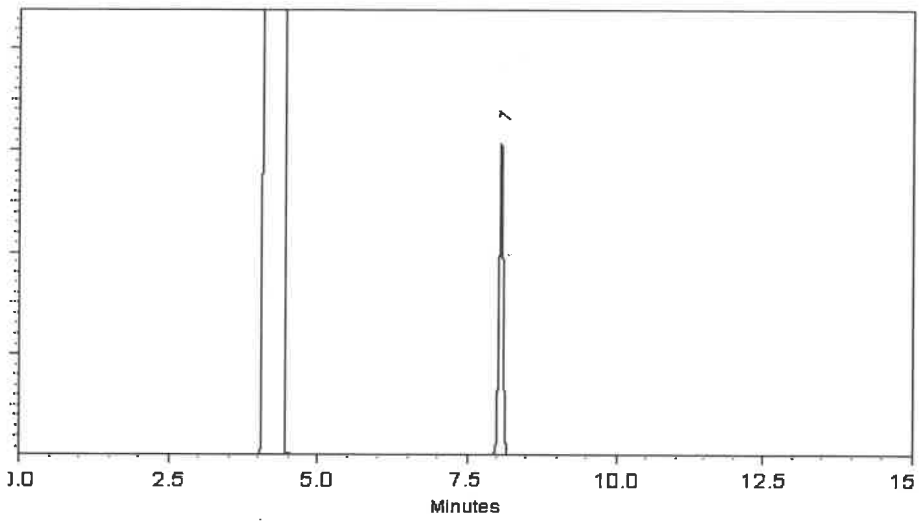
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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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.

Zoviny Rec 01/08/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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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.)

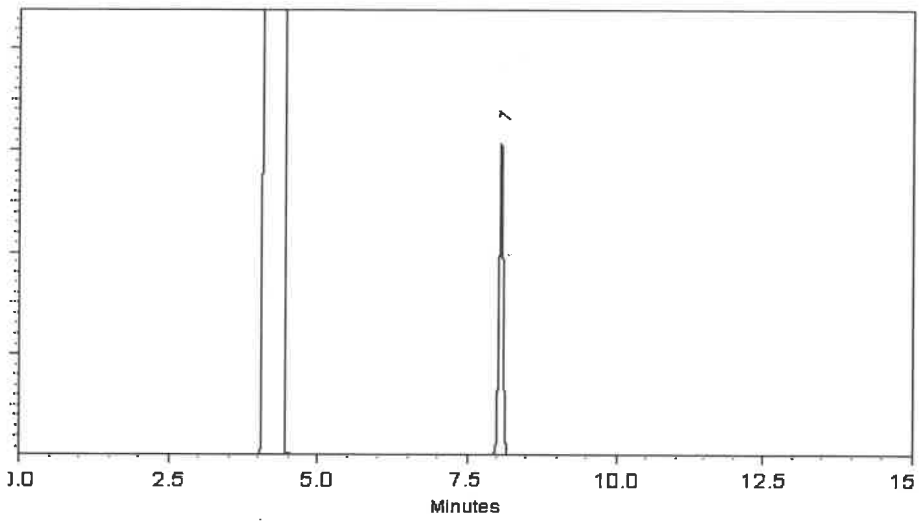
Inj. Temp:
200°C

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.
- 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

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
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	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
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

James T Ethier
Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

V14883
V14884

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Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

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. Q1812
COC Number 2046603

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite #100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Yurkanin John.Yurkanin@Jacobs.com
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D3868221 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) Rush TAT (48 hr) 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)
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced ☐ US EPA CLP
- ☐ NYS ASP A ☐ NYS ASP B
- ☐ Other
- ☐ EDD FORMAT

ANALYSIS

1. TCL VOCs (8260D)
2. TCL SVOCs (8270E)
3. TAL Metals (6020B/7470A)
4. TPH - GRO (8015M)
5. TPH - DRO/ORO (8015M)
6. TPH Ext.
7. TAL
8.
9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								A/E	E	B/E	A/E	E	E				← Specify Preservatives A-HCl D-NaOH B-HN03 E-ICE C-H2SO4 F-OTHER
1.	TB01-041525	DI		X	4/15/25	1100	2	✓									
2.	RINSE-EB-TANK-041525	W		X	4/15/25	1120	8	✓	✓	✓	✓	✓	✓				
3.	RINSE-EB-PUMP-041525	W		X	4/15/25	1135	8	✓	✓	✓	✓	✓	✓				
4.																	
5.																	
6.																	
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.	4/15/25 1640	1. YG 4/15/25 16:10
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 5.5 °C
Comments:

Page ____ of

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

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

Laboratory Certification

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

QA Control Code: A2070148

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1812 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : John Ynfante
Invoice Name : JACOBS Engineering Grou
Invoice Contact : John Ynfante

Order Date : 4/15/2025 4:26:00 PM
Project Name : Former Schlumberger STC
Receive DateTime : 4/15/2025 4:10:00 PM
Purchase Order :

Project Mgr : Yazmeen
Report Type : Level 4
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff : 4/16/2025 9:55:15 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD		FAX DATE	DUE DATES
Q1812-01	TB01-041525	Water	04/15/2025	11:00						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	
Q1812-02	RINSE-EB-TANK-041525	Water	04/15/2025	11:20						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	
Q1812-03	RINSE-EB-PUMP-041525	Water	04/15/2025	11:35						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	

Relinguished By :
Date / Time : 4 15 25 16:30

Received By :
Date / Time : 4.15.25 16:30

Storage Area : **VOA Refridgerator Room**