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

DATA PACKAGE

VOLATILE ORGANICS

PROJECT NAME : NJ WASTE WATER PT

ALLIANCE TECHNICAL GROUP, LLC - NEWARK

284 Sheffiled Stree

Suite 1

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : Q3015

ATTENTION : Mohammad Ahmed

Laboratory Certification ID # 20012

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Cover Page

Order ID : Q3015

Project ID : NJ Waste Water PT

Client : Alliance Technical Group, LLC - Newark

Lab Sample Number	Client Sample Number
Q3015-01	WP0925-PT-VOA-WP
Q3015-02	WP0925-PT-VOA-WP
Q3015-03	WP0925-PT-BN-WP
Q3015-04	WP0925-PT-BN-WP
Q3015-05	WP0925-PT-BN-WP
Q3015-06	WP0925-PT-ACIDS-WP
Q3015-07	WP0925-PT-ACIDS-WP
Q3015-08	WP0925-PT-ACIDS-WP
Q3015-09	WP0925-PT-PEST-WP
Q3015-10	WP0925-PT-PEST-WP
Q3015-11	WP0925-PT-CHLR-WP
Q3015-12	WP0925-PT-CHLR-WP
Q3015-13	WP0925-PT-TXP-WP
Q3015-14	WP0925-PT-TXP-WP
Q3015-15	WP0925-PT-PCBW-WP
Q3015-16	WP0925-PT-PCBW-WP
Q3015-17	WP0925-PT-HERB-WP
Q3015-18	WP0925-RR-GAS-WP
Q3015-19	WP0925-RR-DIES-WP
Q3015-20	WP0925-RR-8011-WP
Q3015-21	WP0925-RR-PAH-WP
Q3015-22	WP0925-RR-TRIAZINE-WP

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

Signature : _____

Date: 9/25/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Alliance Technical Group, LLC - Newark
Project Name: NJ Waste Water PT
Project # N/A
Order ID # Q3015
Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:
2 Water samples were received on 09/04/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: VOCMS Group1. This data package contains results for VOCMS Group1.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868. The analysis of VOCMS Group1 was based on method 624.1.

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

E. Additional Comments:

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 <35% 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 > 35% 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.

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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

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q3015 MATRIX: Water

METHOD: 624.1

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

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

NA NO YES

ADDITIONAL COMMENTS:

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 <35% 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 > 35% for the Initial Calibration curve for SW-846 analysis.

_____ _____

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3015

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

QA Review Signature: SOHIL JODHANI **Date:** 09/25/2025

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LAB CHRONICLE

OrderID:	Q3015	**OrderDate:**	9/4/2025 10:14:00 AM
Client:	Alliance Technical Group, LLC - Newark	**Project:**	NJ Waste Water PT
Contact:	Mohammad Ahmed	**Location:**	QA Office,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3015-01	**WP0925-PT-VOA-WP**	**Water**			**09/02/25**			**09/04/25**
			VOCMS Group1	8260-Low			09/16/25	
Q3015-02	**WP0925-PT-VOA-WP**	**Water**			**09/02/25**			**09/04/25**
			VOCMS Group1	624.1			09/17/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3015

Client: Alliance Technical Group, LLC - Newark

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**WP0925-PT-VOA-WP**							
Q3015-02	WP0925-PT-VOA-WP	Water	Chloromethane	0.71	J	0.64	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Vinyl Chloride	49.1		0.83	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Bromomethane	32.7		0.80	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	1,1-Dichloroethene	68.8		0.76	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Acetone	130		4.60	25.0	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Methyl tert-Butyl Ether	87.7		0.77	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Methylene Chloride	68.4		0.86	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	trans-1,2-Dichloroethene	78.8		0.82	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	2-Butanone	140		2.00	25.0	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	cis-1,2-Dichloroethene	110		0.80	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Chloroform	86.4		0.55	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Benzene	100		0.45	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	1,2-Dichloroethane	29.3		0.50	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Trichloroethene	87.6		0.49	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Dibromomethane	110		0.59	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Bromodichloromethane	15.3		0.64	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Toluene	32.2		0.46	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	t-1,3-Dichloropropene	55.8		0.72	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	cis-1,3-Dichloropropene	90.1		0.67	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	1,1,2-Trichloroethane	97.4		0.45	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	2-Hexanone	86.6		3.20	25.0	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Dibromochloromethane	65.7		0.66	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	1,2-Dibromoethane	30.9		0.56	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Tetrachloroethene	73.0		0.84	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Chlorobenzene	21.8		0.47	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	1,1,1,2-Tetrachloroethane	51.2		0.62	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Ethyl Benzene	45.6		0.56	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Total Xylenes	250		1.97	15.0	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	m/p-Xylenes	110		1.30	10.0	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	o-Xylene	140		0.67	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Bromoform	17.1		0.94	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	1,1,2,2-Tetrachloroethane	66.6		0.44	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	1,2,3-Trichloropropane	83.6		0.62	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	1,4-Dichlorobenzene	110		0.81	5.00	ug/L
Q3015-02	WP0925-PT-VOA-WP	Water	Naphthalene	76.0		1.00	5.00	ug/L

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Hit Summary Sheet
SW-846

SDG No.: Q3015

Client: Alliance Technical Group, LLC - Newark

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
			Total Voc :	2450				
			Total Concentration:	2450				

QC SUMMARY

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Surrogate Summary

SDG No.: Q3015

Client: Alliance Technical Group, LLC - Newark

Analytical Method: SW624.1

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q3015-02	WP0925-PT-VOA-WP	1,2-Dichloroethane-d4	30	28.4	95		91	110
		Toluene-d8	30	28.6	95		91	112
		4-Bromofluorobenzene	30	28.0	93		63	112
VN0917WBL01	VN0917WBL01	1,2-Dichloroethane-d4	30	28.8	96		91	110
		Toluene-d8	30	28.9	96		91	112
		4-Bromofluorobenzene	30	26.4	88		63	112
VN0917WBS01	VN0917WBS01	1,2-Dichloroethane-d4	30	30.0	100		91	110
		Toluene-d8	30	29.8	99		91	112
		4-Bromofluorobenzene	30	30.4	101		63	112
VN0917WBSD0	VN0917WBSD01	1,2-Dichloroethane-d4	30	28.8	96		91	110
		Toluene-d8	30	29.4	98		91	112
		4-Bromofluorobenzene	30	30.4	101		63	112

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3015 **Analytical Method:** SW624.1

Client: Alliance Technical Group, LLC - Newa **Datafile :** VN087870.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0917WBS01	Dichlorodifluoromethane	20	20.2	ug/L	101			72	118	
	Chloromethane	20	16.7	ug/L	84			1	205	
	Vinyl Chloride	20	16.9	ug/L	85			5	195	
	Ethyl Acetate	20	17.6	ug/L	88			68	140	
	Bromomethane	20	15.0	ug/L	75			15	185	
	Chloroethane	20	15.8	ug/L	79			40	160	
	Trichlorofluoromethane	20	18.3	ug/L	92			50	150	
	1,1,2-Trichlorotrifluoroethane	20	19.5	ug/L	98			64	127	
	1,1-Dichloroethene	20	18.2	ug/L	91			50	150	
	Acrolein	100	120	ug/L	120			60	140	
	Acrylonitrile	100	98.6	ug/L	99			60	140	
	Acetone	100	92.4	ug/L	92			41	148	
	Carbon disulfide	20	17.7	ug/L	89			76	107	
	Methyl tert-butyl Ether	20	20.5	ug/L	103			82	114	
	Methylene Chloride	20	19.7	ug/L	99			60	140	
	trans-1,2-Dichloroethene	20	20.3	ug/L	102			70	130	
	Vinyl Acetate	100	85.6	ug/L	86			25	181	
	1,1-Dichloroethane	20	19.8	ug/L	99			70	130	
	2-Butanone	100	94.9	ug/L	95			69	129	
	Carbon Tetrachloride	20	19.6	ug/L	98			70	130	
	2,2-Dichloropropane	20	20.8	ug/L	104			62	139	
	cis-1,2-Dichloroethene	20	20.1	ug/L	101			81	112	
	Chloroform	20	20.1	ug/L	101			70	135	
	1,1,1-Trichloroethane	20	19.8	ug/L	99			70	130	
	1,1-Dichloropropene	20	19.0	ug/L	95			70	139	
	Benzene	20	18.8	ug/L	94			65	135	
	1,2-Dichloroethane	20	18.6	ug/L	93			70	130	
	Trichloroethene	20	20.2	ug/L	101			65	135	
	1,2-Dichloropropane	20	18.9	ug/L	95			35	165	
	Dibromomethane	20	18.4	ug/L	92			72	138	
	Bromodichloromethane	20	18.8	ug/L	94			65	135	
	4-Methyl-2-Pentanone	100	94.5	ug/L	95			73	131	
	Toluene	20	19.6	ug/L	98			70	130	
	t-1,3-Dichloropropene	20	18.4	ug/L	92			50	150	
	cis-1,3-Dichloropropene	20	18.5	ug/L	93			25	175	
	1,1,2-Trichloroethane	20	18.9	ug/L	95			70	130	
	1,3-Dichloropropane	20	19.2	ug/L	96			70	141	
	2-Chloroethyl vinyl ether	100	83.8	ug/L	84			1	225	
	2-Hexanone	100	92.4	ug/L	92			72	128	
	Dibromochloromethane	20	20.0	ug/L	100			70	135	
	1,2-Dibromoethane	20	18.9	ug/L	95			86	114	
	Tetrachloroethene	20	22.6	ug/L	113			70	130	
	Chlorobenzene	20	20.7	ug/L	104			65	135	
	1,1,1,2-Tetrachloroethane	20	20.5	ug/L	103			63	138	
	Ethyl Benzene	20	20.2	ug/L	101			60	140	
	m/p-Xylenes	40	40.8	ug/L	102			87	111	
	o-Xylene	20	20.2	ug/L	101			87	111	
	Styrene	20	19.5	ug/L	98			85	106	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3015 **Analytical Method:** SW624.1

Client: Alliance Technical Group, LLC - Newa **Datafile :** VN087870.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0917WBS01	Bromoform	20	20.2	ug/L	101			70	130	
	Isopropylbenzene	20	21.1	ug/L	106			86	112	
	1,1,2,2-Tetrachloroethane	20	19.9	ug/L	100			60	140	
	1,2,3-Trichloropropane	20	19.6	ug/L	98			61	148	
	Bromobenzene	20	20.5	ug/L	103			59	142	
	N-propylbenzene	20	20.7	ug/L	104			67	139	
	2-Chlorotoluene	20	20.2	ug/L	101			66	138	
	1,3,5-Trimethylbenzene	20	20.6	ug/L	103			66	139	
	4-Chlorotoluene	20	20.3	ug/L	102			66	141	
	1,2,4-Trimethylbenzene	20	20.2	ug/L	101			63	142	
	Sec-butylbenzene	20	21.4	ug/L	107			63	144	
	p-Isopropyltoluene	20	22.1	ug/L	111			57	147	
	1,3-Dichlorobenzene	20	21.6	ug/L	108			70	130	
	1,4-Dichlorobenzene	20	21.7	ug/L	109			65	135	
	n-Butylbenzene	20	22.0	ug/L	110			49	157	
	1,2-Dichlorobenzene	20	21.6	ug/L	108			65	135	
	1,2-Dibromo-3-Chloropropane	20	20.0	ug/L	100			69	122	
	1,2,4-Trichlorobenzene	20	22.0	ug/L	110			61	118	
	Hexachlorobutadiene	20	27.0	ug/L	135			16	187	
	Naphthalene	20	20.3	ug/L	102			45	152	
	1,2,3-Trichlorobenzene	20	22.0	ug/L	110			38	159	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3015 **Analytical Method:** SW624.1

Client: Alliance Technical Group, LLC - New **Datafile :** VN087871.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0917WBSD01	Dichlorodifluoromethane	20	20.1	ug/L	101	0		72	118	20
	Chloromethane	20	16.4	ug/L	82	2		1	205	20
	Vinyl Chloride	20	15.8	ug/L	79	7		5	195	20
	Ethyl Acetate	20	19.5	ug/L	98	11		68	140	20
	Bromomethane	20	14.3	ug/L	72	4		15	185	20
	Chloroethane	20	14.7	ug/L	74	7		40	160	20
	Trichlorofluoromethane	20	18.0	ug/L	90	2		50	150	20
	1,1,2-Trichlorotrifluoroethane	20	19.2	ug/L	96	2		64	127	20
	1,1-Dichloroethene	20	16.7	ug/L	84	8		50	150	20
	Acrolein	100	120	ug/L	120	0		60	140	20
	Acrylonitrile	100	99.8	ug/L	100	1		60	140	20
	Acetone	100	89.7	ug/L	90	2		41	148	20
	Carbon disulfide	20	17.0	ug/L	85	5		76	107	20
	Methyl tert-butyl Ether	20	20.4	ug/L	102	1		82	114	20
	Methylene Chloride	20	20.5	ug/L	103	4		60	140	20
	trans-1,2-Dichloroethene	20	18.8	ug/L	94	8		70	130	20
	Vinyl Acetate	100	100	ug/L	100	15		25	181	20
	1,1-Dichloroethane	20	19.9	ug/L	100	1		70	130	20
	2-Butanone	100	96.7	ug/L	97	2		69	129	20
	Carbon Tetrachloride	20	20.2	ug/L	101	3		70	130	20
	2,2-Dichloropropane	20	20.2	ug/L	101	3		62	139	20
	cis-1,2-Dichloroethene	20	19.9	ug/L	100	1		81	112	20
	Chloroform	20	19.7	ug/L	99	2		70	135	20
	1,1,1-Trichloroethane	20	20.4	ug/L	102	3		70	130	20
	1,1-Dichloropropene	20	18.5	ug/L	93	2		70	139	20
	Benzene	20	18.9	ug/L	95	1		65	135	20
	1,2-Dichloroethane	20	18.6	ug/L	93	0		70	130	20
	Trichloroethene	20	20.4	ug/L	102	1		65	135	20
	1,2-Dichloropropane	20	19.0	ug/L	95	0		35	165	20
	Dibromomethane	20	19.0	ug/L	95	3		72	138	20
	Bromodichloromethane	20	19.1	ug/L	96	2		65	135	20
	4-Methyl-2-Pentanone	100	99.6	ug/L	100	5		73	131	20
	Toluene	20	19.8	ug/L	99	1		70	130	20
	t-1,3-Dichloropropene	20	19.1	ug/L	96	4		50	150	20
	cis-1,3-Dichloropropene	20	19.0	ug/L	95	2		25	175	20
	1,1,2-Trichloroethane	20	20.3	ug/L	102	7		70	130	20
	1,3-Dichloropropane	20	19.1	ug/L	96	0		70	141	20
	2-Chloroethyl vinyl ether	100	92.5	ug/L	93	10		1	225	20
	2-Hexanone	100	99.3	ug/L	99	7		72	128	20
	Dibromochloromethane	20	20.6	ug/L	103	3		70	135	20
	1,2-Dibromoethane	20	20.1	ug/L	101	6		86	114	20
	Tetrachloroethene	20	22.3	ug/L	112	1		70	130	20
	Chlorobenzene	20	20.8	ug/L	104	0		65	135	20
	1,1,1,2-Tetrachloroethane	20	21.5	ug/L	108	5		63	138	20
	Ethyl Benzene	20	20.1	ug/L	101	0		60	140	20
	m/p-Xylenes	40	41.8	ug/L	104	2		87	111	20
	o-Xylene	20	20.3	ug/L	102	1		87	111	20
	Styrene	20	19.7	ug/L	99	1		85	106	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3015 **Analytical Method:** SW624.1

Client: Alliance Technical Group, LLC - Newa **Datafile :** VN087871.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0917WBSD01	Bromoform	20	20.9	ug/L	104	3		70	130	20
	Isopropylbenzene	20	21.2	ug/L	106	0		86	112	20
	1,1,2,2-Tetrachloroethane	20	21.4	ug/L	107	7		60	140	20
	1,2,3-Trichloropropane	20	17.7	ug/L	89	10		61	148	20
	Bromobenzene	20	21.6	ug/L	108	5		59	142	20
	N-propylbenzene	20	20.9	ug/L	104	0		67	139	20
	2-Chlorotoluene	20	20.8	ug/L	104	3		66	138	20
	1,3,5-Trimethylbenzene	20	21.7	ug/L	109	6		66	139	20
	4-Chlorotoluene	20	20.9	ug/L	104	2		66	141	20
	1,2,4-Trimethylbenzene	20	20.2	ug/L	101	0		63	142	20
	Sec-butylbenzene	20	22.0	ug/L	110	3		63	144	20
	p-Isopropyltoluene	20	22.5	ug/L	113	2		57	147	20
	1,3-Dichlorobenzene	20	21.4	ug/L	107	1		70	130	20
	1,4-Dichlorobenzene	20	21.8	ug/L	109	0		65	135	20
	n-Butylbenzene	20	22.5	ug/L	113	3		49	157	20
	1,2-Dichlorobenzene	20	22.0	ug/L	110	2		65	135	20
	1,2-Dibromo-3-Chloropropane	20	21.7	ug/L	109	9		69	122	20
	1,2,4-Trichlorobenzene	20	23.2	ug/L	116	5		61	118	20
	Hexachlorobutadiene	20	27.7	ug/L	139	3		16	187	20
	Naphthalene	20	21.6	ug/L	108	6		45	152	20
	1,2,3-Trichlorobenzene	20	23.2	ug/L	116	5		38	159	20

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VOLATILE METHOD BLANK SUMMARY

Client ID: VN0917WBL01

Lab Name: Alliance Contract: ALLI03

Lab Code: ACE SDG NO.: Q3015

Lab File ID: VN087872.D Lab Sample ID: VN0917WBL01

Date Analyzed: 09/17/2025 Time Analyzed: 12:03

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
VN0917WBS01	VN0917WBS01	VN087870.D	09/17/2025
VN0917WBSD01	VN0917WBSD01	VN087871.D	09/17/2025
WP0925-PT-VOA-WP	Q3015-02	VN087873.D	09/17/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance | Contract: ALLI03

Lab Code: ACE | SDG NO.: Q3015

Lab File ID: VN087713.D | BFB Injection Date: 09/04/2025

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

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.1
75	30.0 - 60.0% of mass 95	57.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.9 (1.3) 1
174	50.0 - 100.0% of mass 95	67
175	5.0 - 9.0% of mass 174	5.4 (8.1) 1
176	95.0 - 101.0% of mass 174	65.8 (98.3) 1
177	5.0 - 9.0% of mass 176	4.7 (7.1) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC005	VSTDICC005	VN087725.D	09/04/2025	16:23
VSTDICCC020	VSTDICCC020	VN087726.D	09/04/2025	16:44
VSTDICC050	VSTDICC050	VN087727.D	09/04/2025	17:05
VSTDICC100	VSTDICC100	VN087728.D	09/04/2025	17:25
VSTDICC150	VSTDICC150	VN087729.D	09/04/2025	17:46

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance | Contract: ALLI03

Lab Code: ACE | SDG NO.: Q3015

Lab File ID: VN087868.D | BFB Injection Date: 09/17/2025

Instrument ID: MSVOA_N | BFB Injection Time: 08:24

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23
75	30.0 - 60.0% of mass 95	56.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.8 (1.1) 1
174	50.0 - 100.0% of mass 95	72.7
175	5.0 - 9.0% of mass 174	4.7 (6.4) 1
176	95.0 - 101.0% of mass 174	70.5 (97) 1
177	5.0 - 9.0% of mass 176	4.2 (5.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC020	VSTDCCC020	VN087869.D	09/17/2025	09:42
VN0917WBS01	VN0917WBS01	VN087870.D	09/17/2025	10:55
VN0917WBSD01	VN0917WBSD01	VN087871.D	09/17/2025	11:30
VN0917WBL01	VN0917WBL01	VN087872.D	09/17/2025	12:03
WP0925-PT-VOA-WP	Q3015-02	VN087873.D	09/17/2025	12:38

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: ALLI03

Lab Code: ACE SDG NO.: Q3015

Lab File ID: VN087869.D Date Analyzed: 09/17/2025

Instrument ID: MSVOA_N Time Analyzed: 09:42

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	52147	7.79	281875	9.08	258937	11.84
UPPER LIMIT	104294	8.294	563750	9.583	517874	12.341
LOWER LIMIT	26073.5	7.294	140938	8.583	129469	11.341
EPA SAMPLE NO.						
WP0925-PT-VOA-WP	56339	7.80	293605	9.08	277718	11.85
VN0917WBL01	50672	7.80	260263	9.08	234698	11.85
VN0917WBS01	53476	7.79	296032	9.08	268776	11.85
VN0917WBSD01	52165	7.79	278561	9.08	250388	11.85

IS1 = Bromochloromethane
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.

SAMPLE DATA

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

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	09/02/25
Project:	NJ Waste Water PT	Date Received:	09/04/25
Client Sample ID:	WP0925-PT-VOA-WP	SDG No.:	Q3015
Lab Sample ID:	Q3015-02	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087873.D	1	09/17/25 12:38	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.77	U	0.77	5.00	ug/L
74-87-3	Chloromethane	0.71	J	0.64	5.00	ug/L
75-01-4	Vinyl Chloride	49.1		0.83	5.00	ug/L
74-83-9	Bromomethane	32.7		0.80	5.00	ug/L
75-00-3	Chloroethane	2.30	U	2.30	5.00	ug/L
75-69-4	Trichlorofluoromethane	0.80	U	0.80	5.00	ug/L
75-35-4	1,1-Dichloroethene	68.8		0.76	5.00	ug/L
107-02-8	Acrolein	6.60	U	6.60	25.0	ug/L
107-13-1	Acrylonitrile	2.80	U	2.80	25.0	ug/L
67-64-1	Acetone	130		4.60	25.0	ug/L
75-15-0	Carbon Disulfide	0.82	U	0.82	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	87.7		0.77	5.00	ug/L
75-09-2	Methylene Chloride	68.4		0.86	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	78.8		0.82	5.00	ug/L
108-05-4	Vinyl Acetate	3.20	U	3.20	25.0	ug/L
75-34-3	1,1-Dichloroethane	0.68	U	0.68	5.00	ug/L
78-93-3	2-Butanone	140		2.00	25.0	ug/L
56-23-5	Carbon Tetrachloride	0.74	U	0.74	5.00	ug/L
594-20-7	2,2-Dichloropropane	0.66	U	0.66	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	110		0.80	5.00	ug/L
67-66-3	Chloroform	86.4		0.55	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.63	U	0.63	5.00	ug/L
563-58-6	1,1-Dichloropropene	0.63	U	0.63	5.00	ug/L
71-43-2	Benzene	100		0.45	5.00	ug/L
107-06-2	1,2-Dichloroethane	29.3		0.50	5.00	ug/L
79-01-6	Trichloroethene	87.6		0.49	5.00	ug/L
78-87-5	1,2-Dichloropropane	0.46	U	0.46	5.00	ug/L
74-95-3	Dibromomethane	110		0.59	5.00	ug/L
75-27-4	Bromodichloromethane	15.3		0.64	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	3.00	U	3.00	25.0	ug/L

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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	09/02/25
Project:	NJ Waste Water PT	Date Received:	09/04/25
Client Sample ID:	WP0925-PT-VOA-WP	SDG No.:	Q3015
Lab Sample ID:	Q3015-02	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087873.D	1	09/17/25 12:38	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-88-3	Toluene	32.2		0.46	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	55.8		0.72	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	90.1		0.67	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	97.4		0.45	5.00	ug/L
142-28-9	1,3-Dichloropropane	0.44	U	0.44	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	4.60	U	4.60	25.0	ug/L
591-78-6	2-Hexanone	86.6		3.20	25.0	ug/L
124-48-1	Dibromochloromethane	65.7		0.66	5.00	ug/L
106-93-4	1,2-Dibromoethane	30.9		0.56	5.00	ug/L
127-18-4	Tetrachloroethene	73.0		0.84	5.00	ug/L
108-90-7	Chlorobenzene	21.8		0.47	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	51.2		0.62	5.00	ug/L
67-72-1	Hexachloroethane	0.98	U	0.98	5.00	ug/L
100-41-4	Ethyl Benzene	45.6		0.56	5.00	ug/L
179601-23-1	m/p-Xylenes	110		1.30	10.0	ug/L
1330-20-7	Total Xylenes	250		1.97	15.0	ug/L
95-47-6	o-Xylene	140		0.67	5.00	ug/L
100-42-5	Styrene	0.72	U	0.72	5.00	ug/L
75-25-2	Bromoform	17.1		0.94	5.00	ug/L
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	66.6		0.44	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	83.6		0.62	5.00	ug/L
108-86-1	Bromobenzene	0.59	U	0.59	5.00	ug/L
103-65-1	n-propylbenzene	0.67	U	0.67	5.00	ug/L
95-49-8	2-Chlorotoluene	0.64	U	0.64	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.59	U	0.59	5.00	ug/L
106-43-4	4-Chlorotoluene	0.62	U	0.62	5.00	ug/L
98-06-6	tert-butylbenzene	0.71	U	0.71	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.77	U	0.77	5.00	ug/L
135-98-8	sec-Butylbenzene	0.64	U	0.64	5.00	ug/L
99-87-6	p-Isopropyltoluene	0.70	U	0.70	5.00	ug/L

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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	09/02/25
Project:	NJ Waste Water PT	Date Received:	09/04/25
Client Sample ID:	WP0925-PT-VOA-WP	SDG No.:	Q3015
Lab Sample ID:	Q3015-02	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087873.D	1	09/17/25 12:38	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
541-73-1	1,3-Dichlorobenzene	0.67	U	0.67	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	110		0.81	5.00	ug/L
104-51-8	n-Butylbenzene	0.82	U	0.82	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.67	U	0.67	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.86	U	0.86	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	1.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	0.68	U	0.68	5.00	ug/L
91-20-3	Naphthalene	76.0		1.00	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	28.4		91 - 110	95%	SPK: 30
2037-26-5	Toluene-d8	28.6		91 - 112	95%	SPK: 30
460-00-4	4-Bromofluorobenzene	28.0		63 - 112	93%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	56300	7.8			
540-36-3	1,4-Difluorobenzene	294000	9.083			
3114-55-4	Chlorobenzene-d5	278000	11.847			

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\VN091725\
Data File : VN087873.D
Acq On : 17 Sep 2025 12:38
Operator : JC\MD
Sample : Q3015-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Quant Time: Sep 18 03:09:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

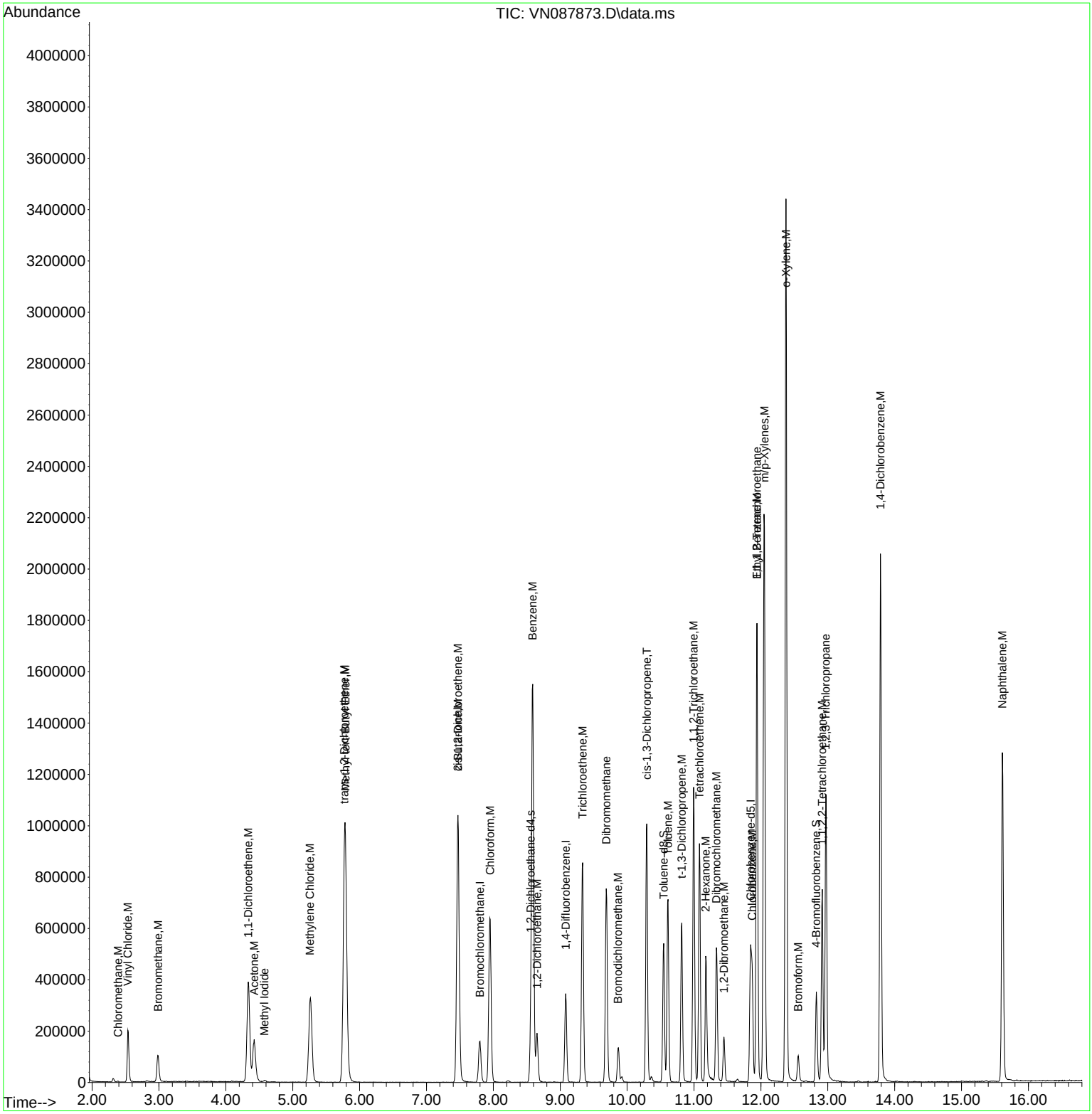
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.800	128	56339	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.083	114	293605	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.847	117	277718	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.559	65	136600	28.384	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 94.600%				
60) 4-Bromofluorobenzene	12.829	95	125042	28.002	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 93.333%				
63) Toluene-d8	10.547	98	368817	28.556	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 95.200%				
Target Compounds							Qvalue
3) Chloromethane	2.389	50	2591	0.705	ug/l		91
4) Vinyl Chloride	2.536	62	204214	49.148	ug/l		94
5) Bromomethane	2.989	94	79770	32.725	ug/l		93
10) 1,1-Dichloroethene	4.336	96	233860	68.759	ug/l		92
11) Methyl Iodide	4.577	142	10703	4.446	ug/l		92
15) Acetone	4.424	58	90366	128.362	ug/l		96
18) Methylene Chloride	5.259	84	263442	68.379	ug/l		93
19) trans-1,2-Dichloroethene	5.771	96	273470	78.838	ug/l		97
22) cis-1,2-Dichloroethene	7.471	96	465431	110.544	ug/l		89
24) Methyl tert-Butyl Ether	5.789	73	1064902	87.701	ug/l		98
25) Chloroform	7.953	83	632447	86.368	ug/l		92
30) 2-Butanone	7.471	43	444515	135.233	ug/l		100
34) Benzene	8.588	78	1568048	101.679	ug/l	#	93
36) 1,2-Dichloroethane	8.653	62	170670	29.299	ug/l		100
37) Trichloroethene	9.335	130	302114	87.638	ug/l		96
40) Dibromomethane	9.688	93	336001	114.310	ug/l		97
41) Bromodichloromethane	9.865	83	91988	15.311	ug/l		93
48) t-1,3-Dichloropropene	10.818	75	347914	55.757	ug/l		99
49) cis-1,3-Dichloropropene	10.294	75	575902	90.110	ug/l		93
50) 1,1,2-Trichloroethane	10.994	97	369634	97.362	ug/l		96
53) Dibromochloromethane	11.335	129	279580	65.679	ug/l		89
54) 1,2-Dibromoethane	11.447	107	122131	30.916	ug/l		98
56) Bromoform	12.559	173	47416	17.057	ug/l		99
59) 2-Hexanone	11.177	43	371792	86.647	ug/l		99
61) Tetrachloroethene	11.082	164	201804	72.984	ug/l		94
62) Toluene	10.612	91	541334	32.225	ug/l		99
64) Chlorobenzene	11.871	112	225101	21.833	ug/l		96
65) 1,1,1,2-Tetrachloroethane	11.941	131	185864	51.203	ug/l		96
66) Ethyl Benzene	11.941	91	827192	45.643	ug/l		95
67) m/p-Xylenes	12.053	106	720077	107.037	ug/l		95
68) o-Xylene	12.376	106	937122	143.670	ug/l		97
71) 1,1,2,2-Tetrachloroethane	12.918	83	395797	66.568	ug/l		100
72) 1,2,3-Trichloropropane	12.970	75	487981	83.587	ug/l		1
84) 1,4-Dichlorobenzene	13.788	146	845011	108.066	ug/l		98
91) Naphthalene	15.611	128	1171082	76.014	ug/l		99

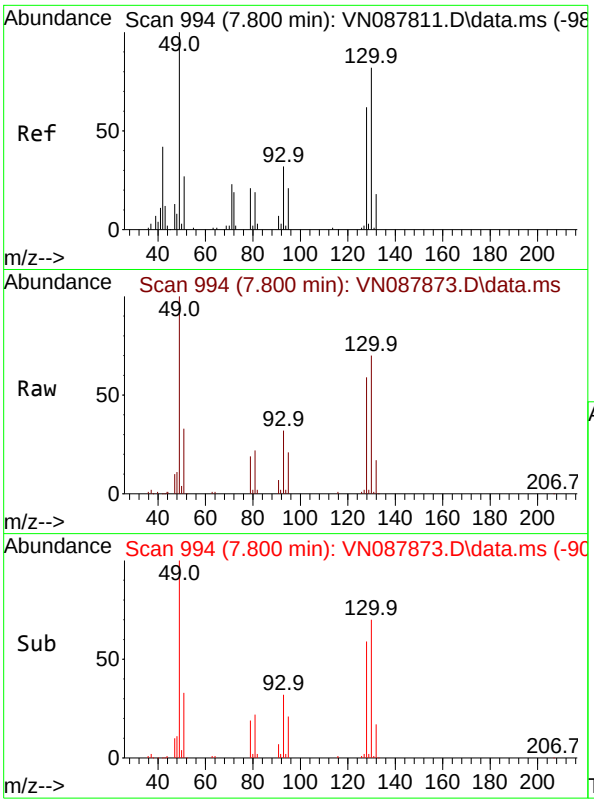
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087873.D
Acq On : 17 Sep 2025 12:38
Operator : JC\MD
Sample : Q3015-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Quant Time: Sep 18 03:09:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration



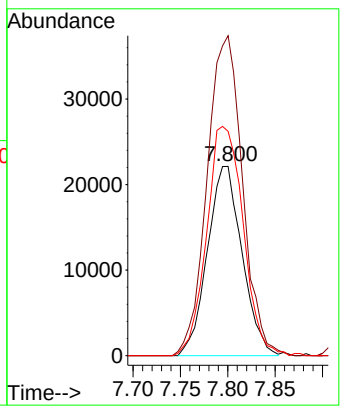


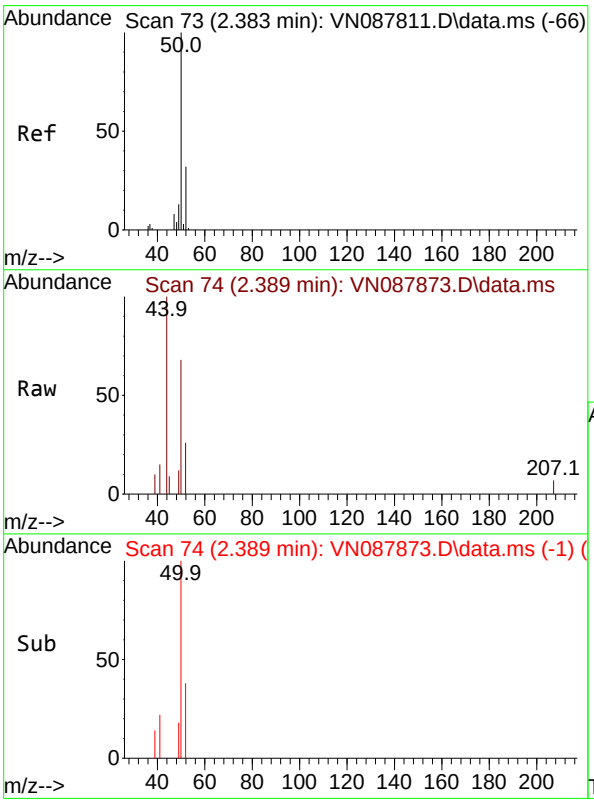
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.800 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion:128 Resp: 56339

Ion	Ratio	Lower	Upper
128	100		
49	172.7	0.0	464.3
130	127.7	0.0	300.5

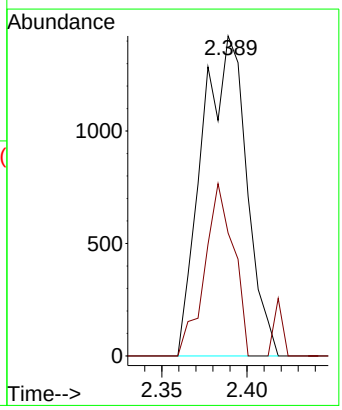


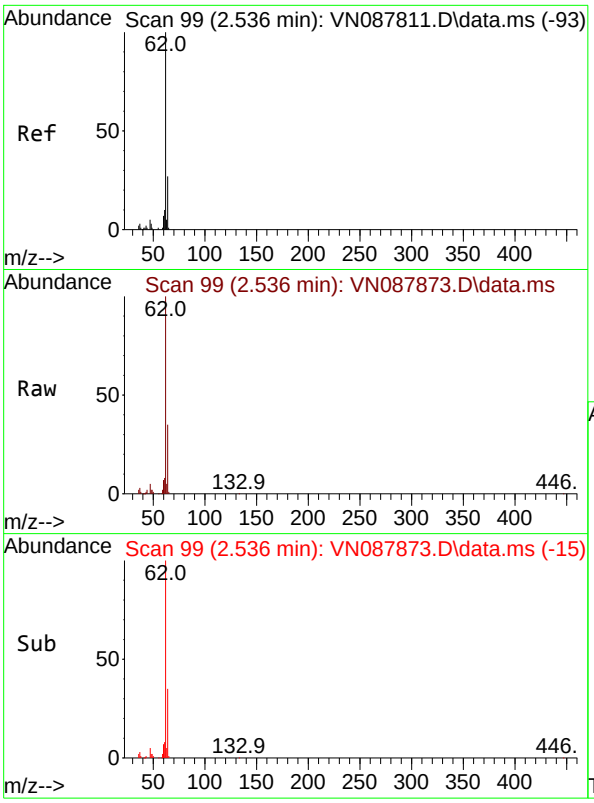


#3
Chloromethane
Concen: 0.705 ug/l
RT: 2.389 min Scan# 74
Delta R.T. 0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 50 Resp: 2591

Ion	Ratio	Lower	Upper
50	100		
52	38.4	26.6	40.0



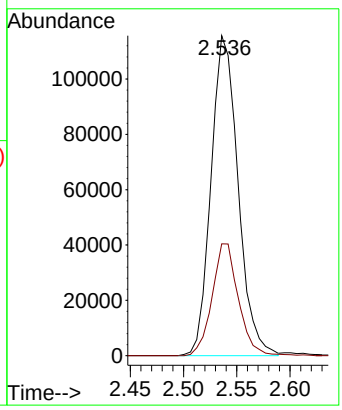


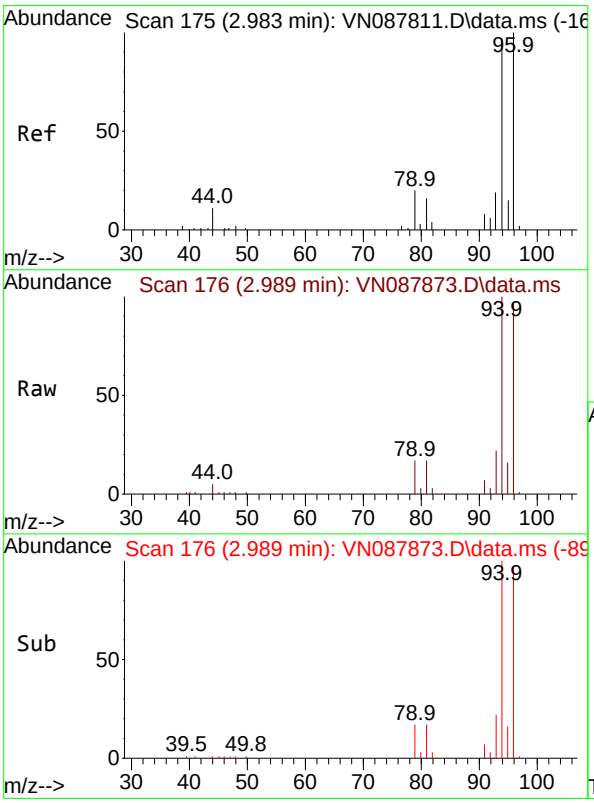
#4
Vinyl Chloride
Concen: 49.148 ug/l
RT: 2.536 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 62 Resp: 204214

Ion	Ratio	Lower	Upper
62	100		
64	35.0	25.5	38.3

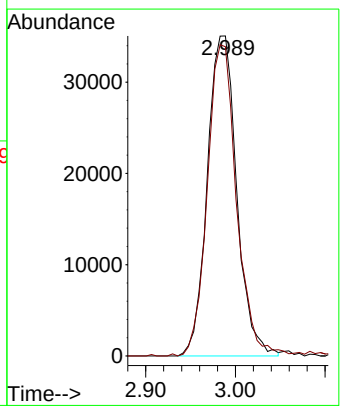


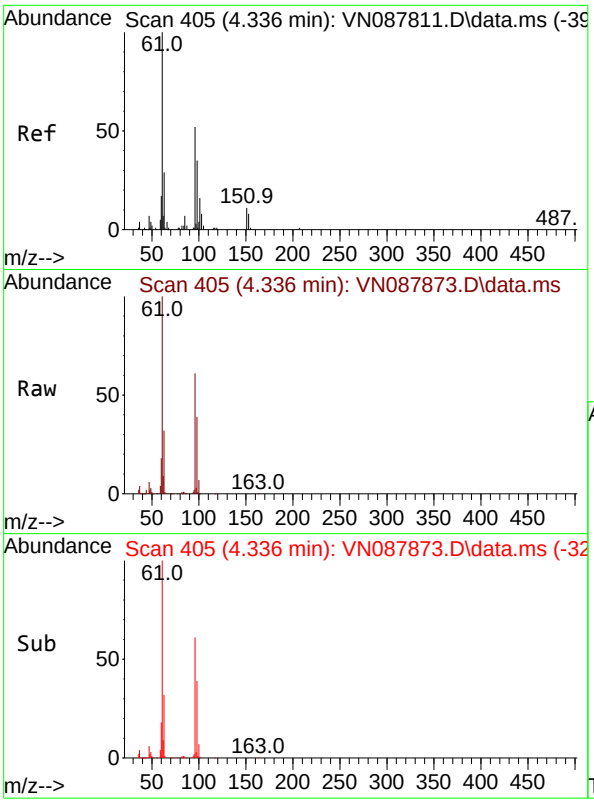


#5
Bromomethane
Concen: 32.725 ug/l
RT: 2.989 min Scan# 176
Delta R.T. 0.012 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 94 Resp: 79770

Ion	Ratio	Lower	Upper
94	100		
96	96.6	72.2	108.4



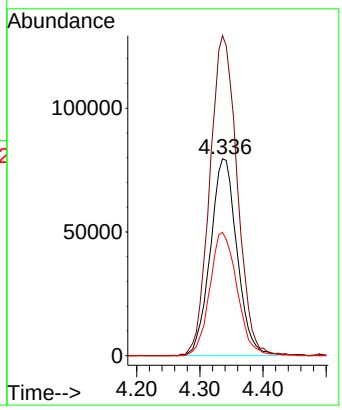


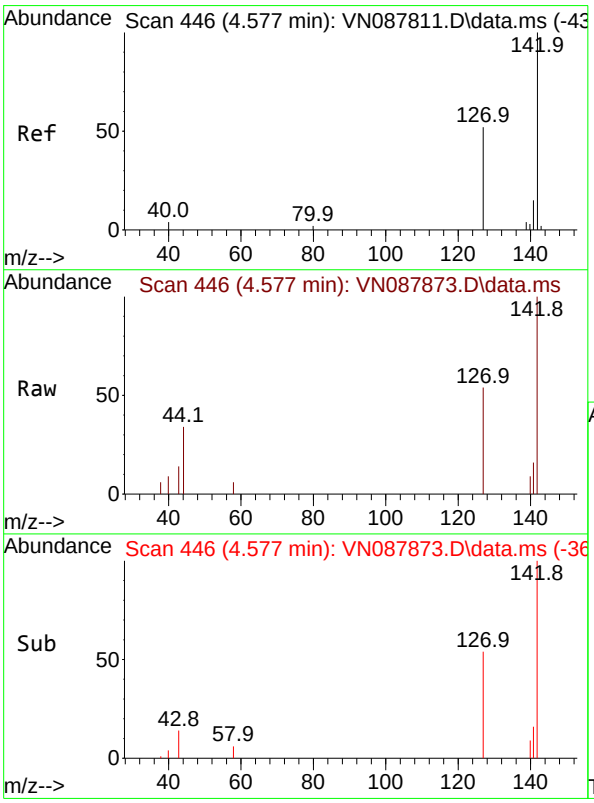
#10
1,1-Dichloroethene
Concen: 68.759 ug/l
RT: 4.336 min Scan# 4(
Delta R.T. -0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 96 Resp: 233860

Ion	Ratio	Lower	Upper
96	100		
61	162.6	135.9	203.9
98	62.7	59.2	88.8

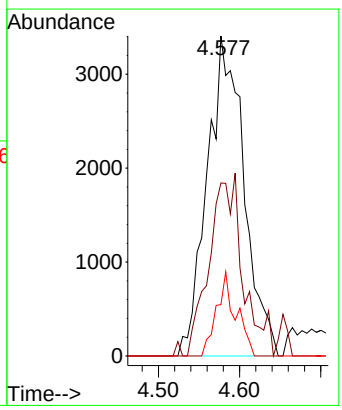


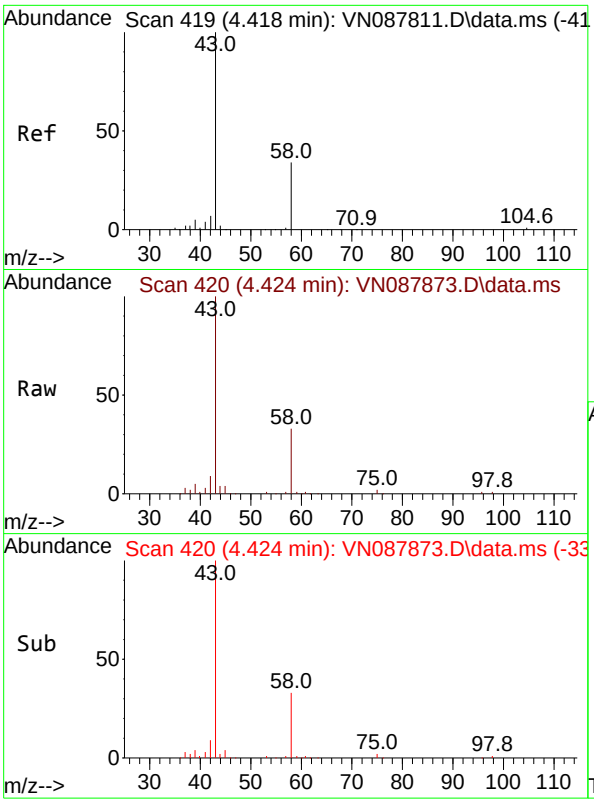


#11
Methyl Iodide
Concen: 4.446 ug/l
RT: 4.577 min Scan# 446
Delta R.T. -0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:142 Resp: 10703

Ion	Ratio	Lower	Upper
142	100		
127	49.2	27.9	83.7
141	16.1	9.6	28.8



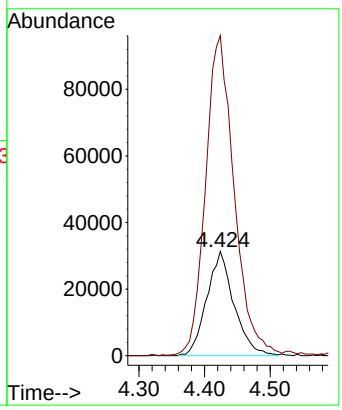


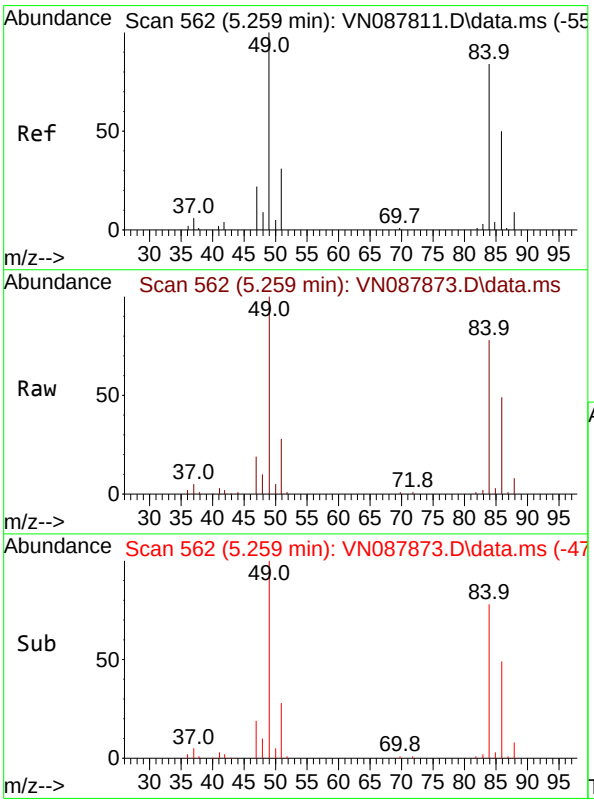
#15
Acetone
Concen: 128.362 ug/l
RT: 4.424 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 58 Resp: 90366

Ion	Ratio	Lower	Upper
58	100		
43	305.1	250.6	376.0

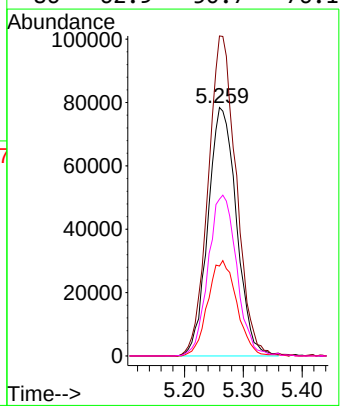


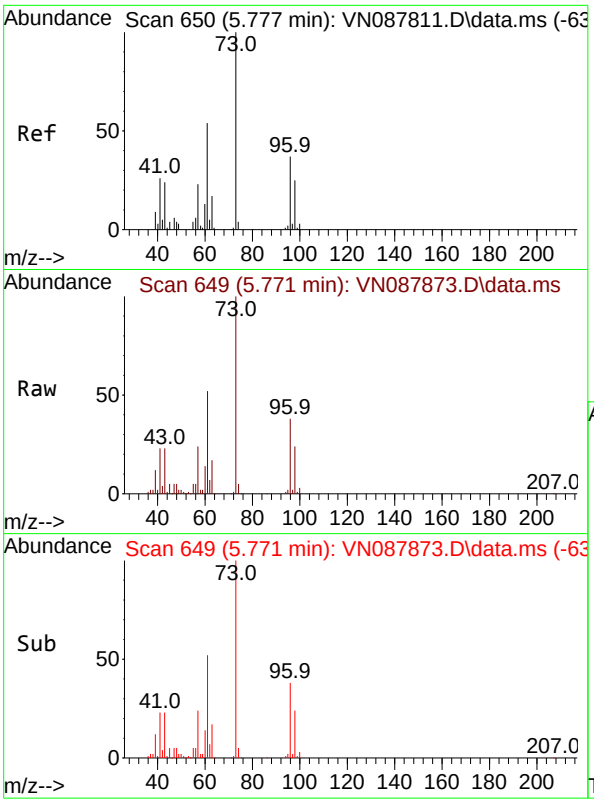


#18
Methylene Chloride
Concen: 68.379 ug/l
RT: 5.259 min Scan# 562
Delta R.T. -0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 84 Resp: 263442

Ion	Ratio	Lower	Upper
84	100		
49	128.8	114.1	171.1
51	36.2	30.2	45.4
86	62.9	50.7	76.1



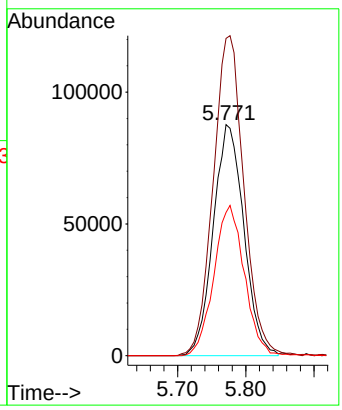


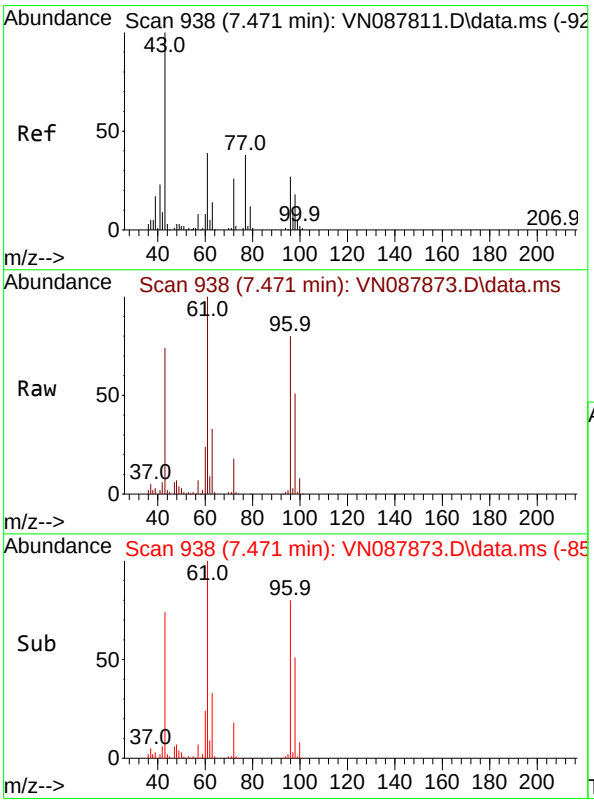
#19
trans-1,2-Dichloroethene
Concen: 78.838 ug/l
RT: 5.771 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 96 Resp: 273470

Ion	Ratio	Lower	Upper
96	100		
61	137.2	106.4	159.6
98	62.0	48.9	73.3

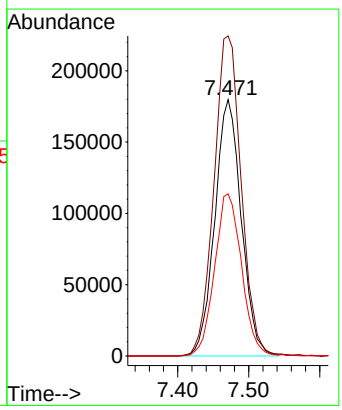


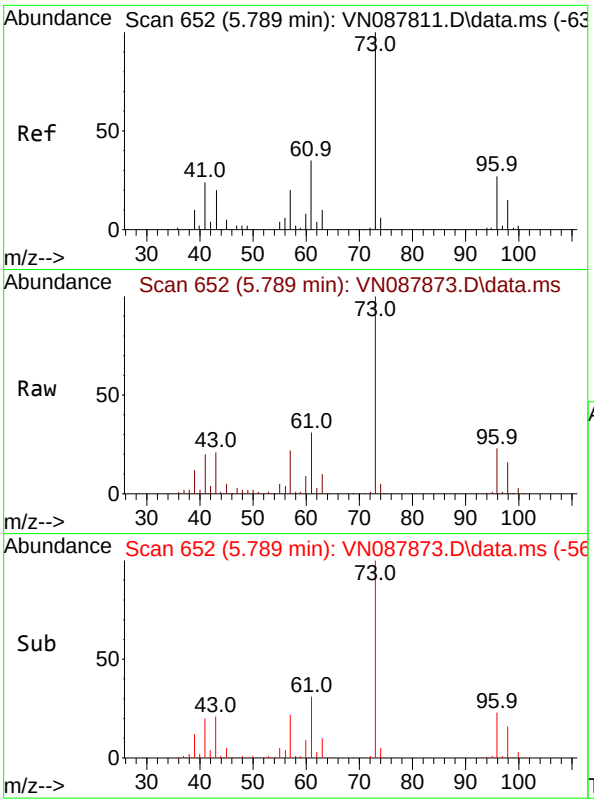


#22
cis-1,2-Dichloroethene
Concen: 110.544 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 96 Resp: 465431

Ion	Ratio	Lower	Upper
96	100		
61	128.7	118.2	177.2
98	64.3	51.6	77.4



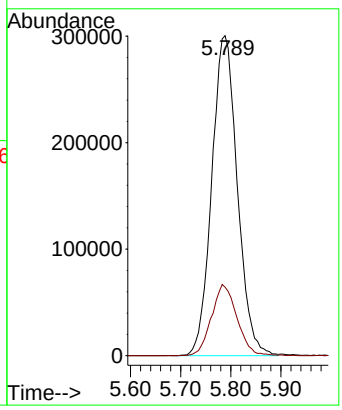


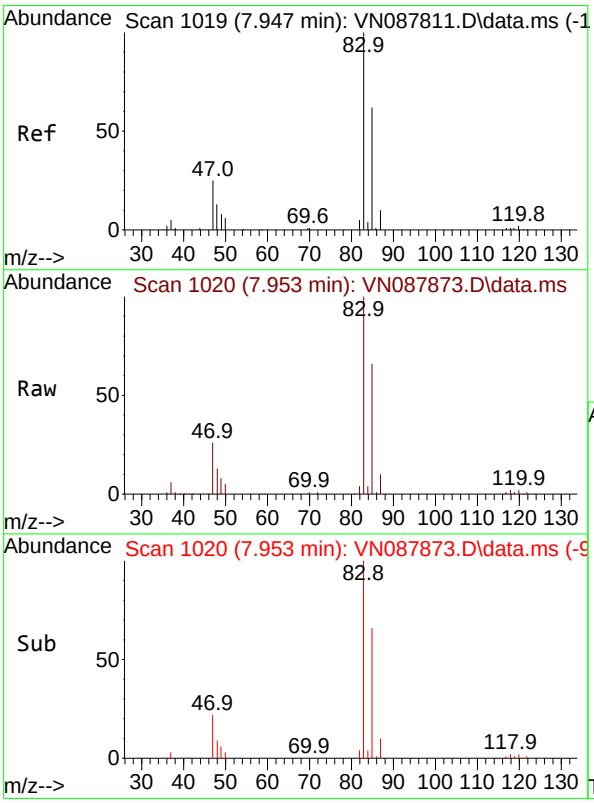
#24
Methyl tert-Butyl Ether
Concen: 87.701 ug/l
RT: 5.789 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 73 Resp: 1064902

Ion	Ratio	Lower	Upper
73	100		
43	21.9	16.8	25.2

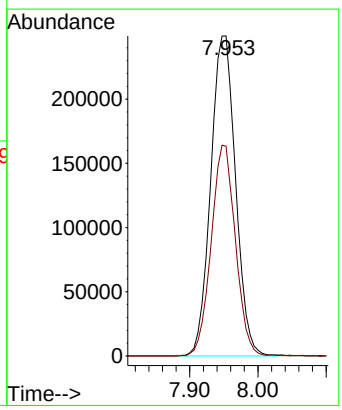


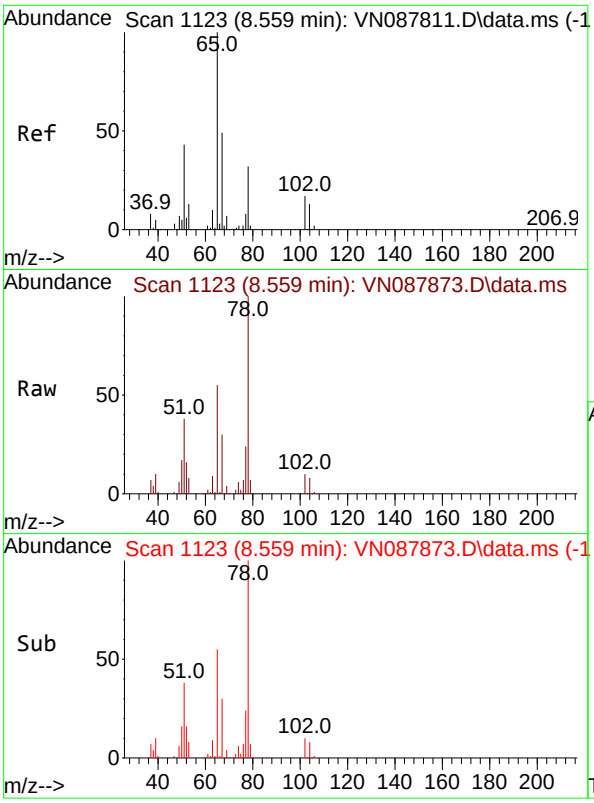


#25
Chloroform
Concen: 86.368 ug/l
RT: 7.953 min Scan# 1020
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 83 Resp: 632447

Ion	Ratio	Lower	Upper
83	100		
85	65.5	47.7	71.5



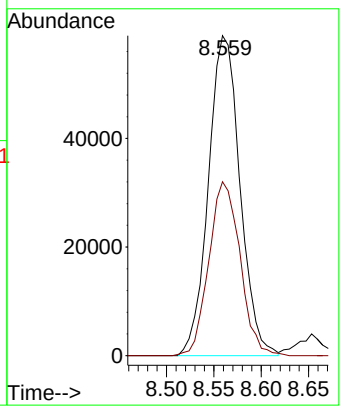


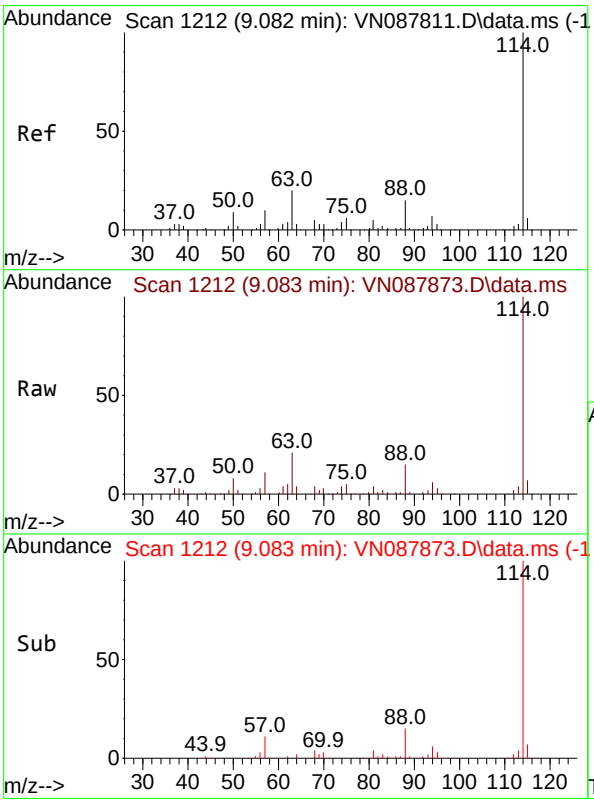
#27
1,2-Dichloroethane-d4
Concen: 28.384 ug/l
RT: 8.559 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 65 Resp: 136600

Ion	Ratio	Lower	Upper
65	100		
67	53.8	39.6	59.4

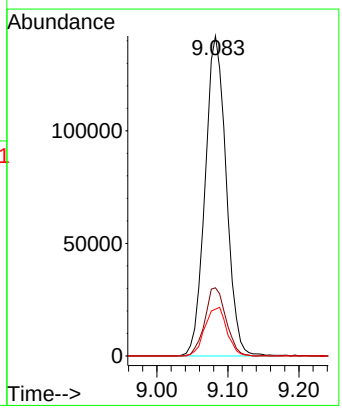


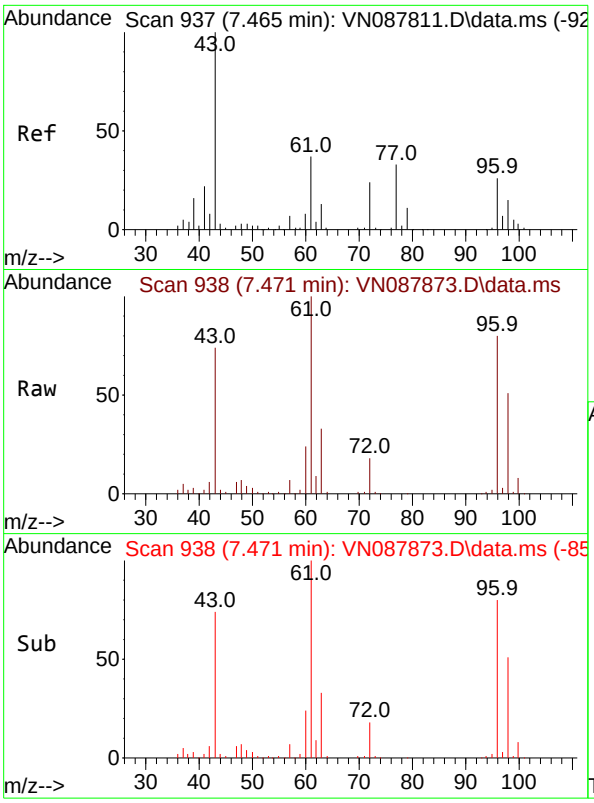


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.083 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:114 Resp: 293605

Ion	Ratio	Lower	Upper
114	100		
63	21.4	18.3	27.5
88	15.8	12.4	18.6



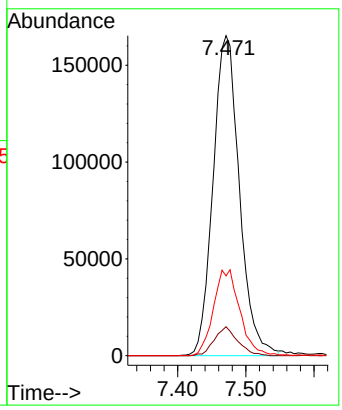


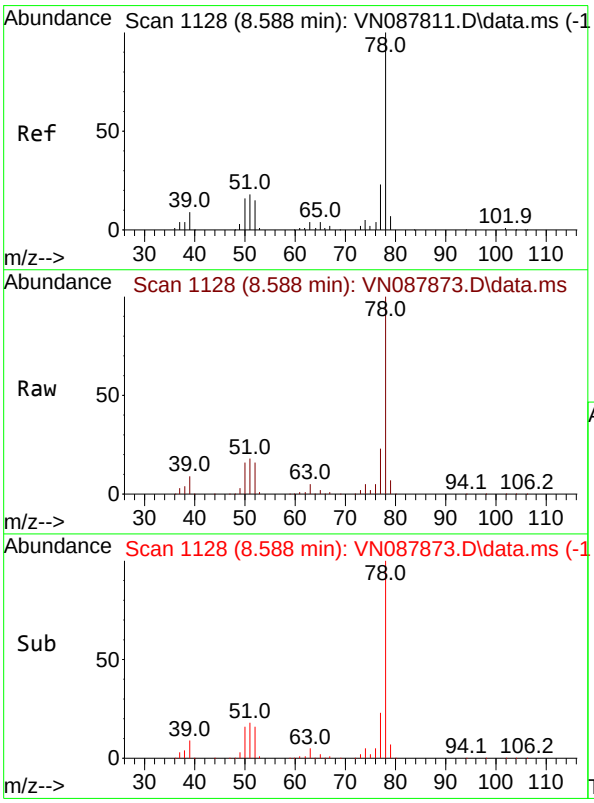
#30
2-Butanone
Concen: 135.233 ug/l
RT: 7.471 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 43 Resp: 444515

Ion	Ratio	Lower	Upper
43	100		
57	8.0	6.3	9.5
72	26.8	21.4	32.2

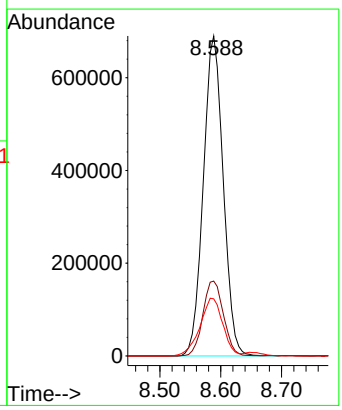


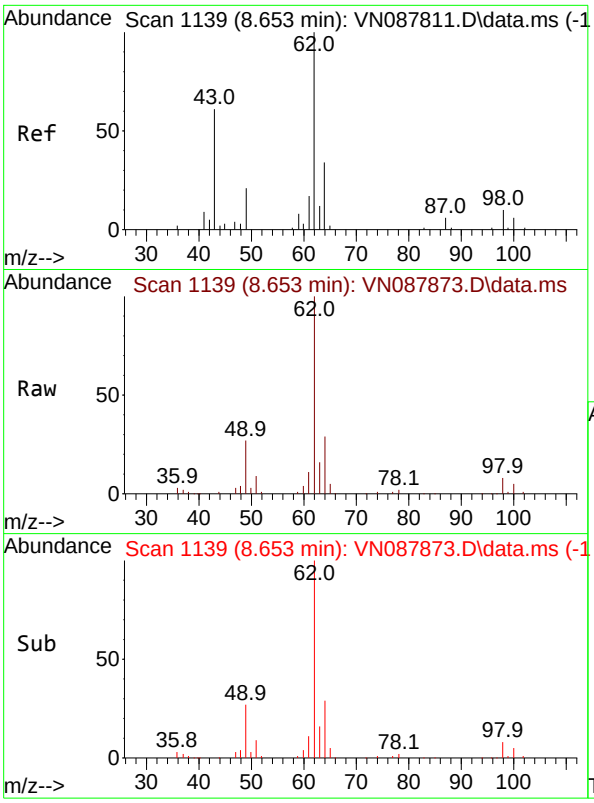


#34
Benzene
Concen: 101.679 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 78 Resp: 1568048

Ion	Ratio	Lower	Upper
78	100		
77	23.4	20.3	30.5
51	17.8	18.0	27.0#



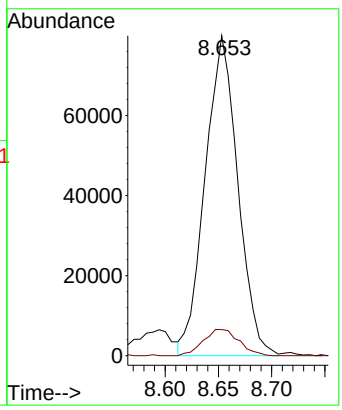


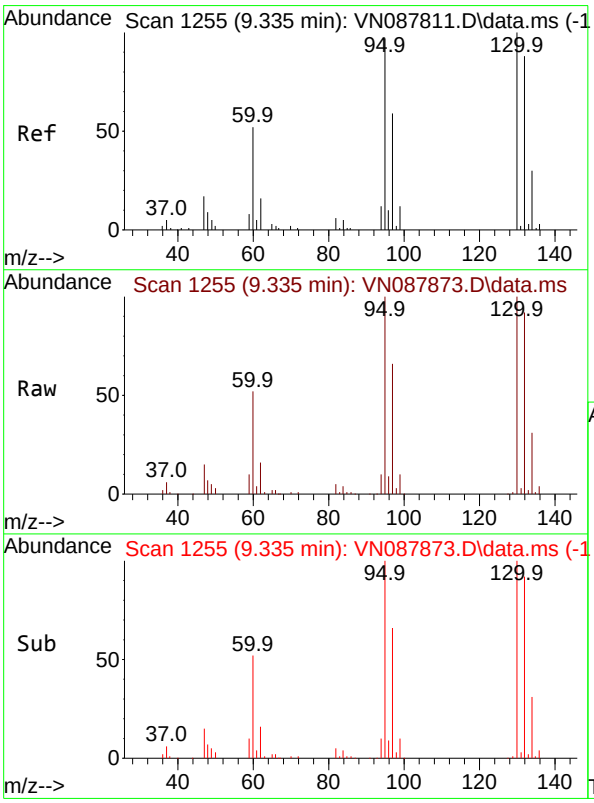
#36
1,2-Dichloroethane
Concen: 29.299 ug/l
RT: 8.653 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 62 Resp: 170670

Ion	Ratio	Lower	Upper
62	100		
98	8.9	7.2	10.8

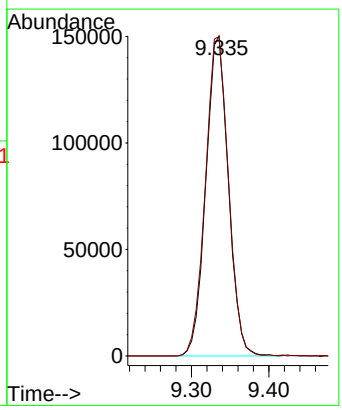


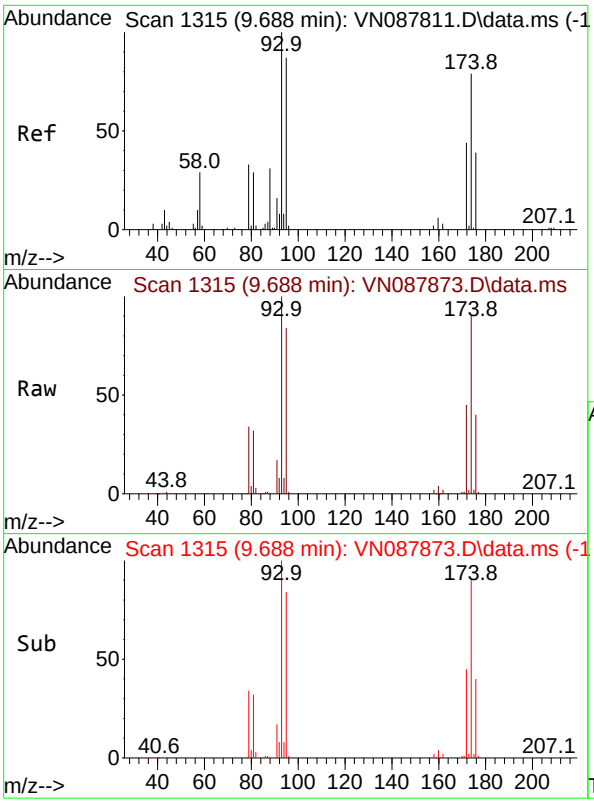


#37
Trichloroethene
Concen: 87.638 ug/l
RT: 9.335 min Scan# 1255
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:130 Resp: 302114

Ion	Ratio	Lower	Upper
130	100		
95	99.8	82.7	124.1



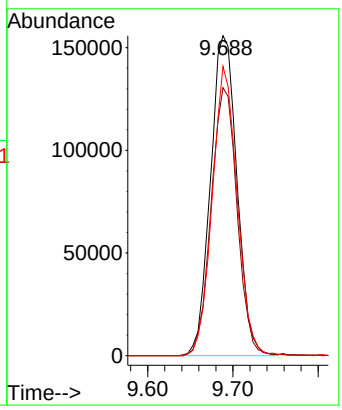


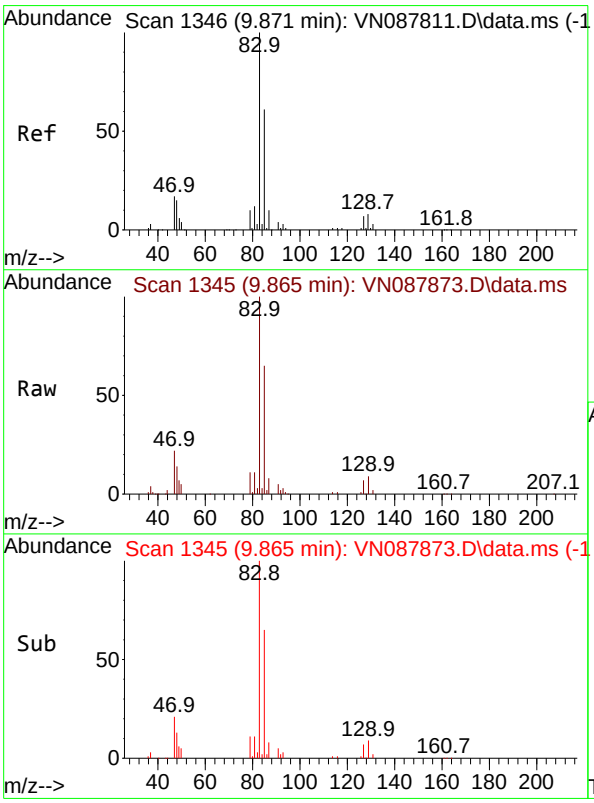
#40
Dibromomethane
Concen: 114.310 ug/l
RT: 9.688 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 93 Resp: 336001

Ion	Ratio	Lower	Upper
93	100		
95	82.1	0.0	168.4
174	85.4	0.0	162.8

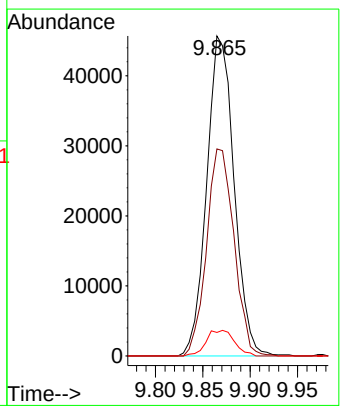


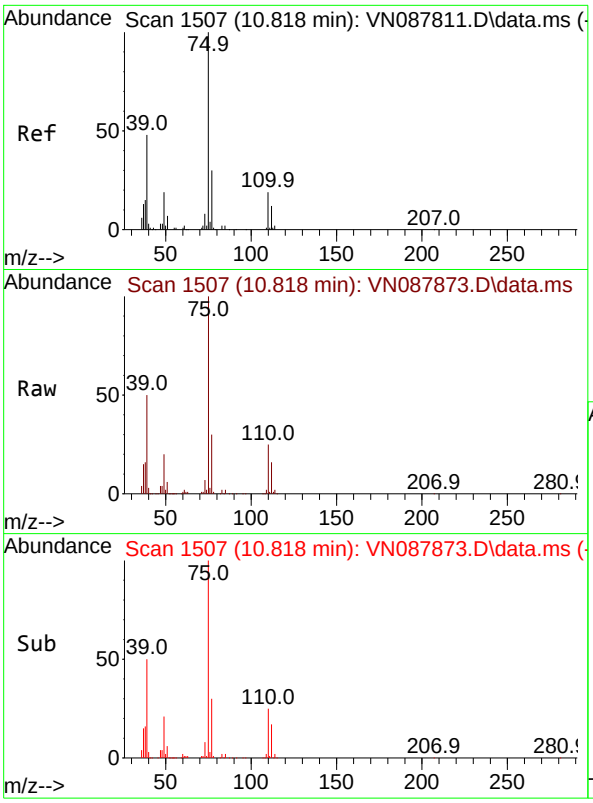


#41
Bromodichloromethane
Concen: 15.311 ug/l
RT: 9.865 min Scan# 1345
Delta R.T. -0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 83 Resp: 91988

Ion	Ratio	Lower	Upper
83	100		
85	64.7	47.3	70.9
127	7.3	5.2	7.8



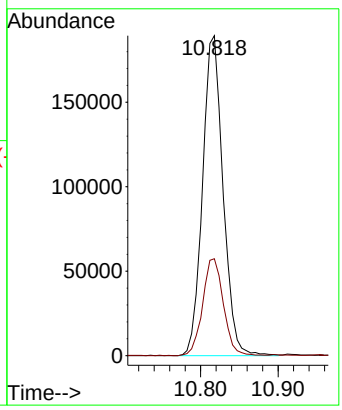


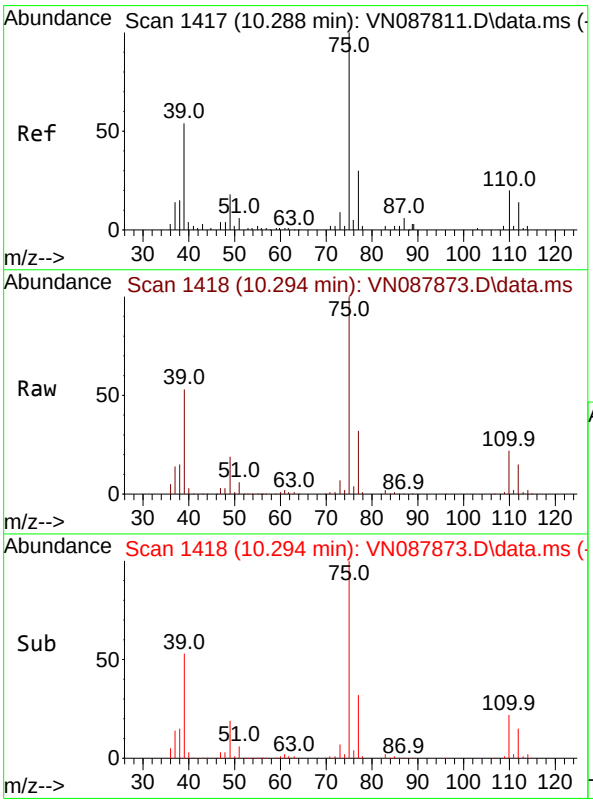
#48
t-1,3-Dichloropropene
Concen: 55.757 ug/l
RT: 10.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 75 Resp: 347914

Ion	Ratio	Lower	Upper
75	100		
77	30.3	24.7	37.1

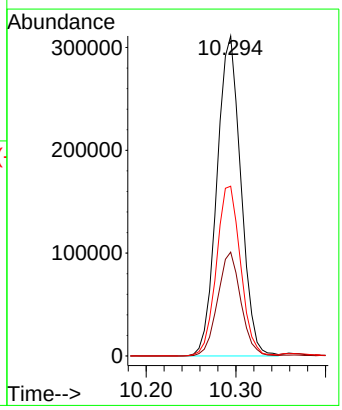


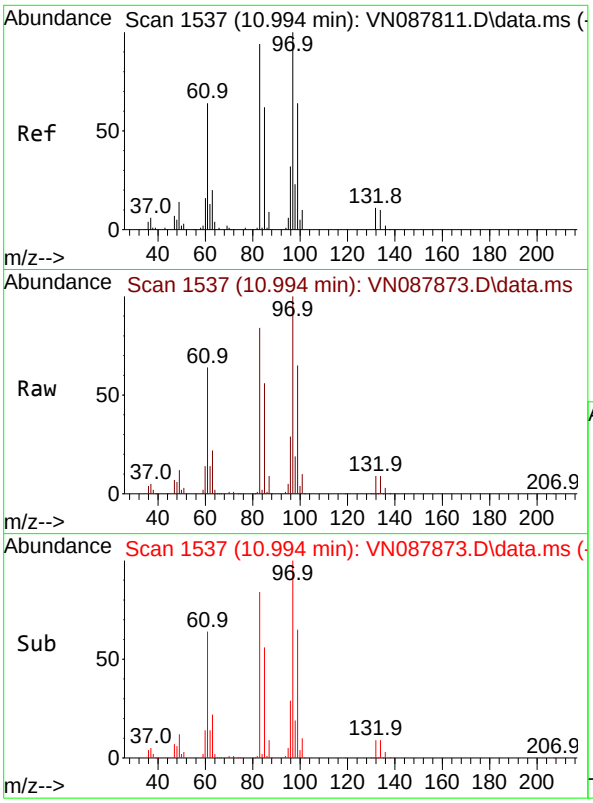


#49
cis-1,3-Dichloropropene
Concen: 90.110 ug/l
RT: 10.294 min Scan# 1418
Delta R.T. 0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 75 Resp: 575902

Ion	Ratio	Lower	Upper
75	100		
77	32.4	27.8	41.6
39	53.0	47.6	71.4



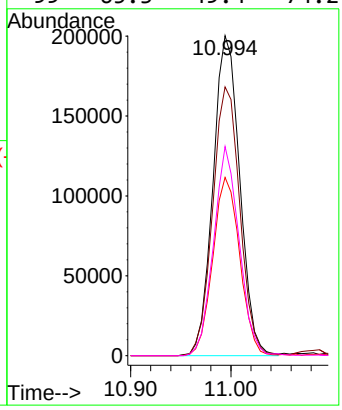


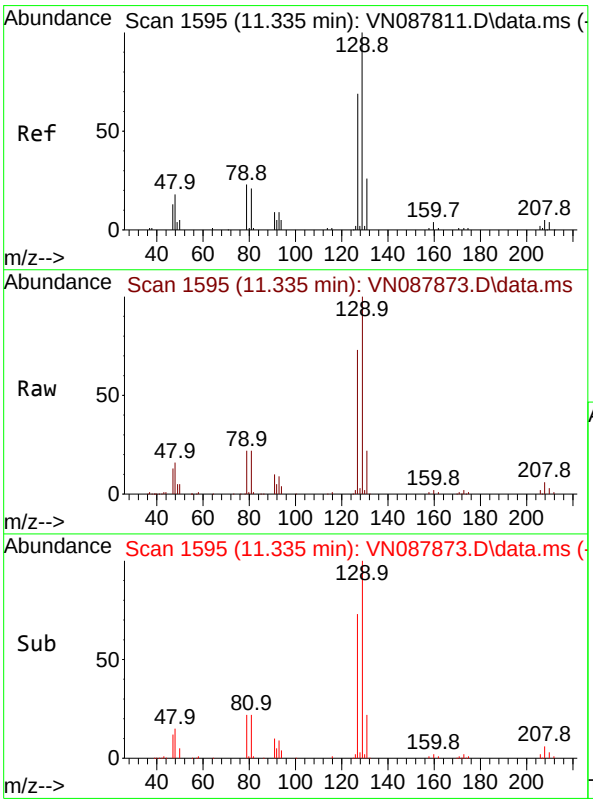
#50
1,1,2-Trichloroethane
Concen: 97.362 ug/l
RT: 10.994 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 97 Resp: 369634

Ion	Ratio	Lower	Upper
97	100		
83	84.0	70.5	105.7
85	55.7	46.3	69.5
99	65.3	49.4	74.2

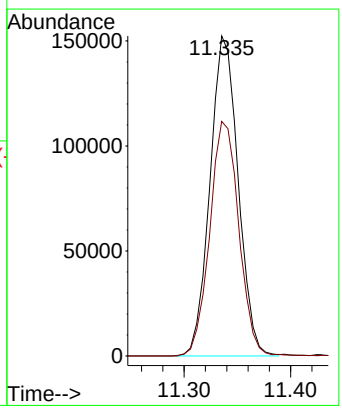


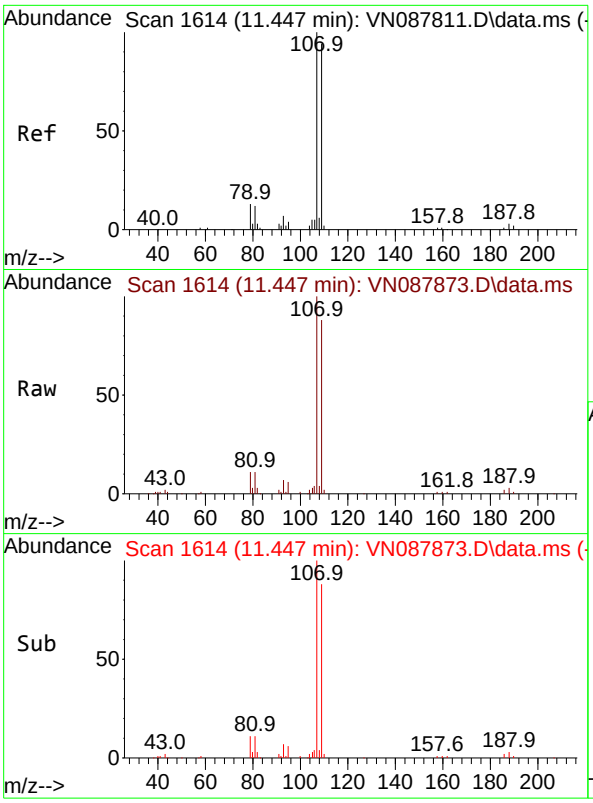


#53
Dibromochloromethane
Concen: 65.679 ug/l
RT: 11.335 min Scan# 1595
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:129 Resp: 279580

Ion	Ratio	Lower	Upper
129	100		
127	75.4	42.6	128.0



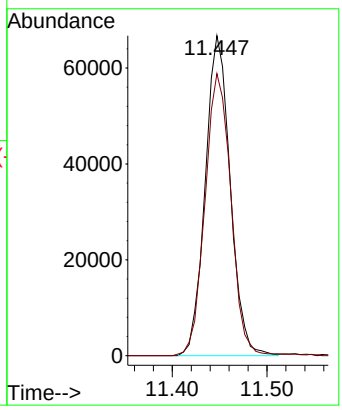


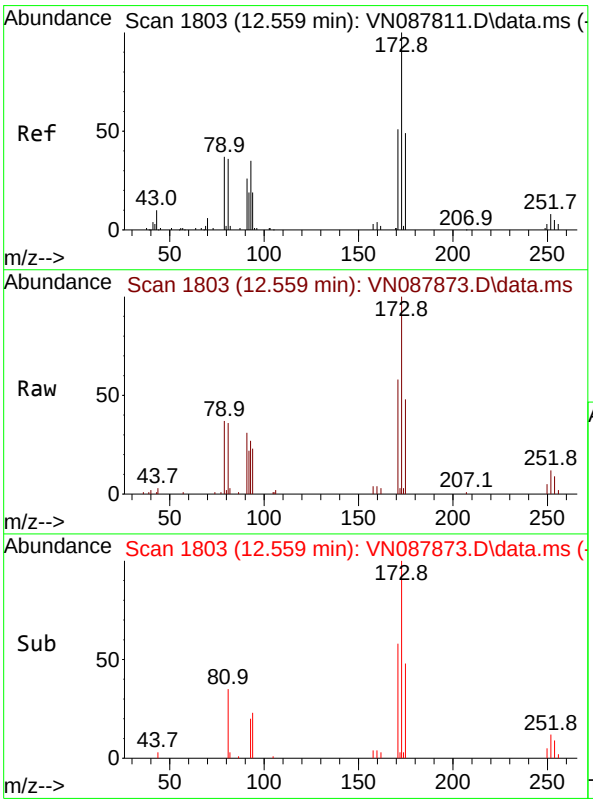
#54
1,2-Dibromoethane
Concen: 30.916 ug/l
RT: 11.447 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion:107 Resp: 122131

Ion	Ratio	Lower	Upper
107	100		
109	91.4	74.6	112.0

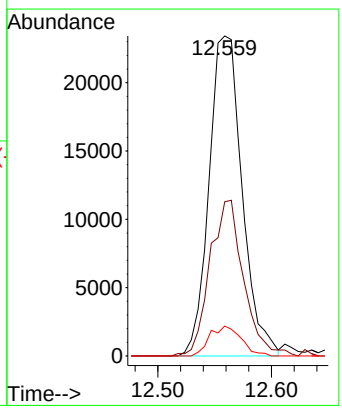


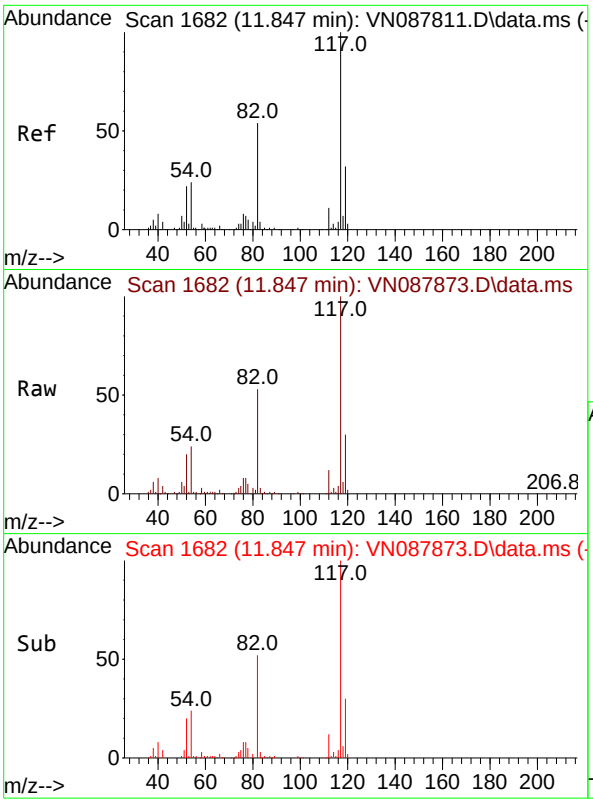


#56
Bromoform
Concen: 17.057 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:173 Resp: 47416

Ion	Ratio	Lower	Upper
173	100		
175	48.9	39.8	59.6
254	8.9	6.2	9.4



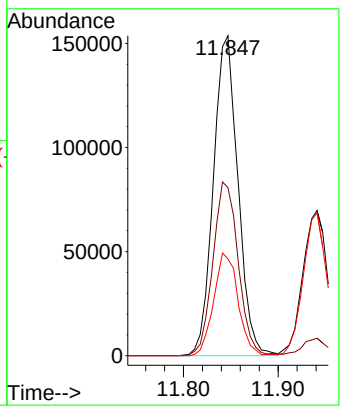


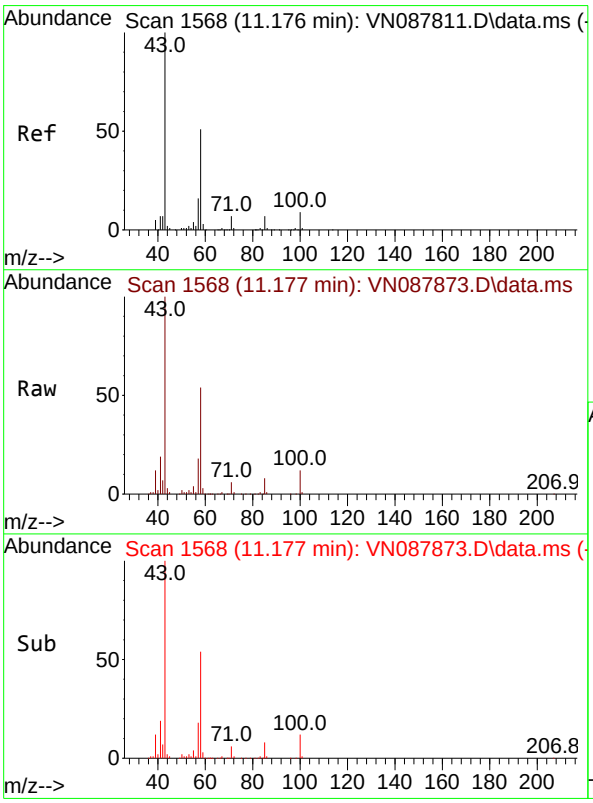
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion:117 Resp: 277718

Ion	Ratio	Lower	Upper
117	100		
82	55.5	45.9	68.9
119	31.8	25.3	37.9

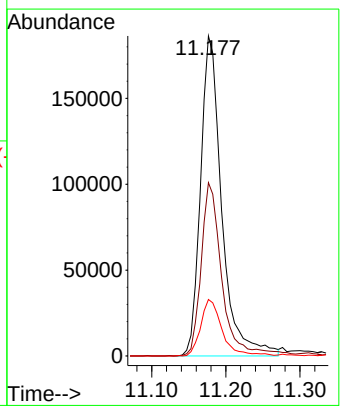


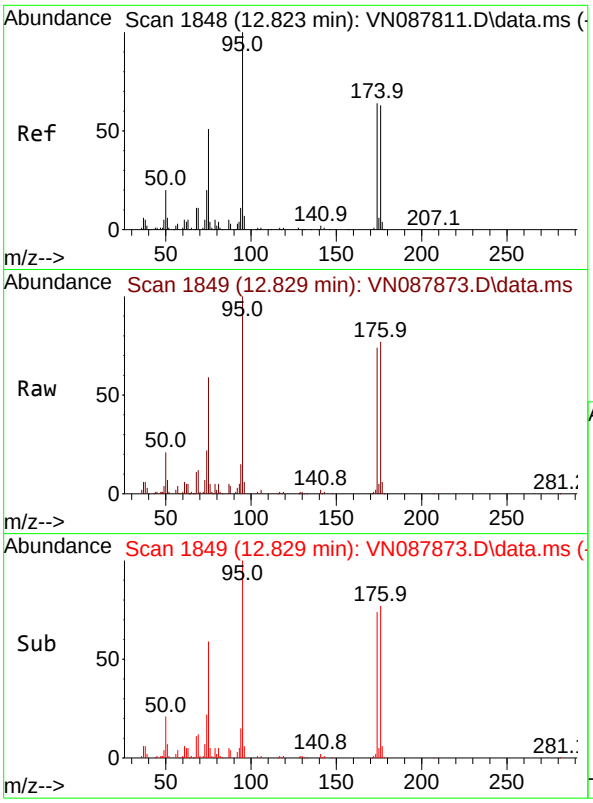


#59
2-Hexanone
Concen: 86.647 ug/l
RT: 11.177 min Scan# 1568
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 43 Resp: 371792

Ion	Ratio	Lower	Upper
43	100		
58	50.6	40.2	60.4
57	17.8	13.7	20.5



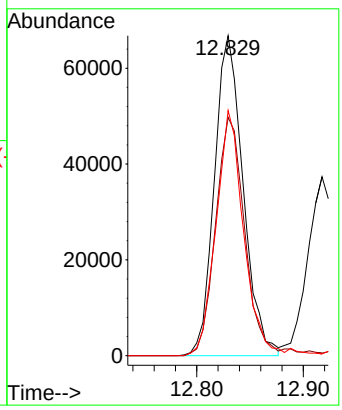


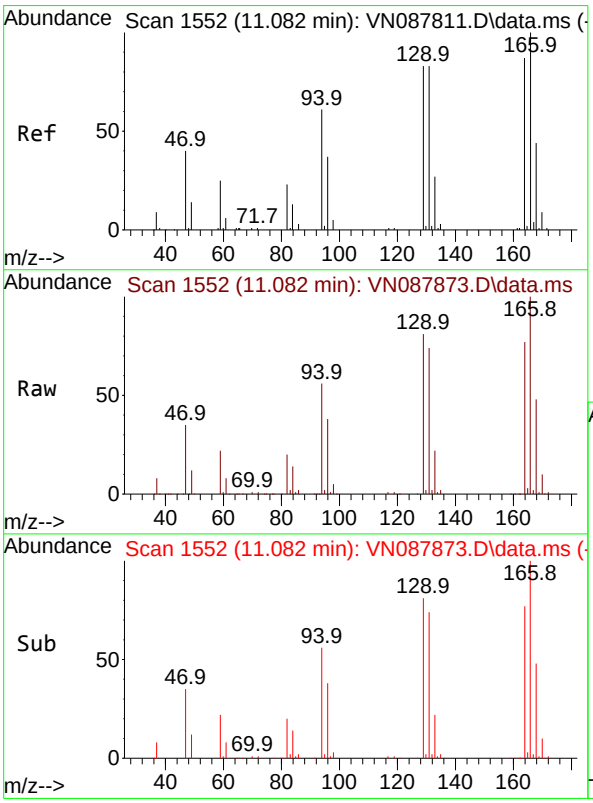
#60
4-Bromofluorobenzene
Concen: 28.002 ug/l
RT: 12.829 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 95 Resp: 125042

Ion	Ratio	Lower	Upper
95	100		
174	75.0	55.4	83.0
176	73.4	51.5	77.3

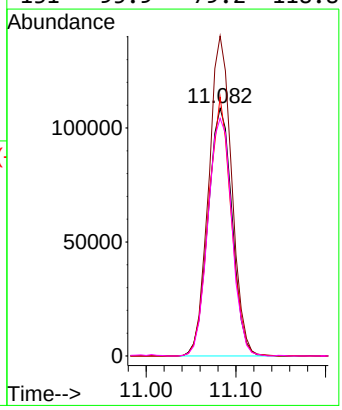


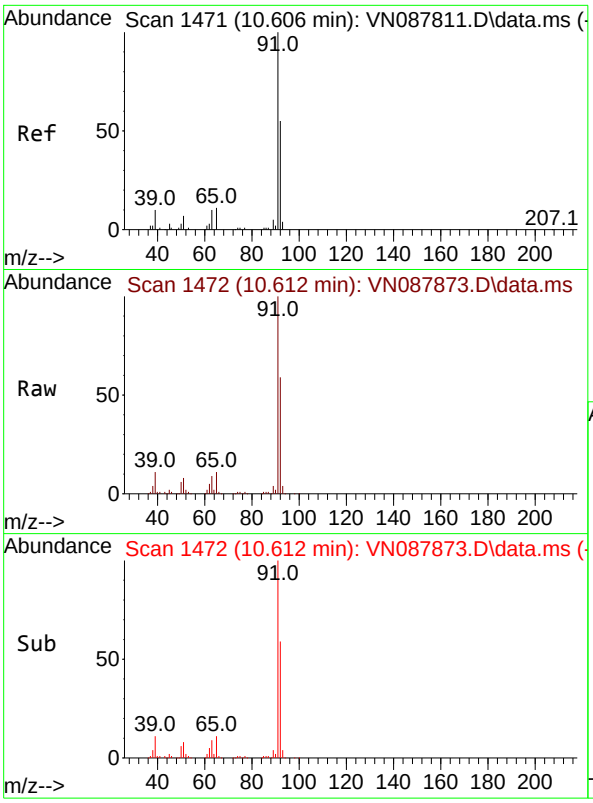


#61
Tetrachloroethene
Concen: 72.984 ug/l
RT: 11.082 min Scan# 1552
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:164 Resp: 201804

Ion	Ratio	Lower	Upper
164	100		
166	129.2	97.3	145.9
129	104.5	78.6	117.8
131	95.9	79.2	118.8



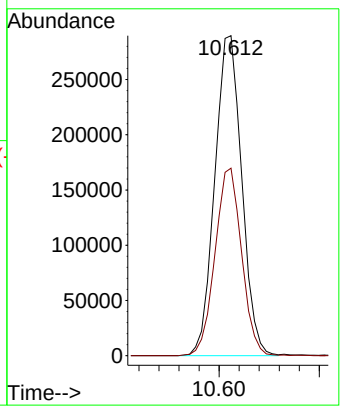


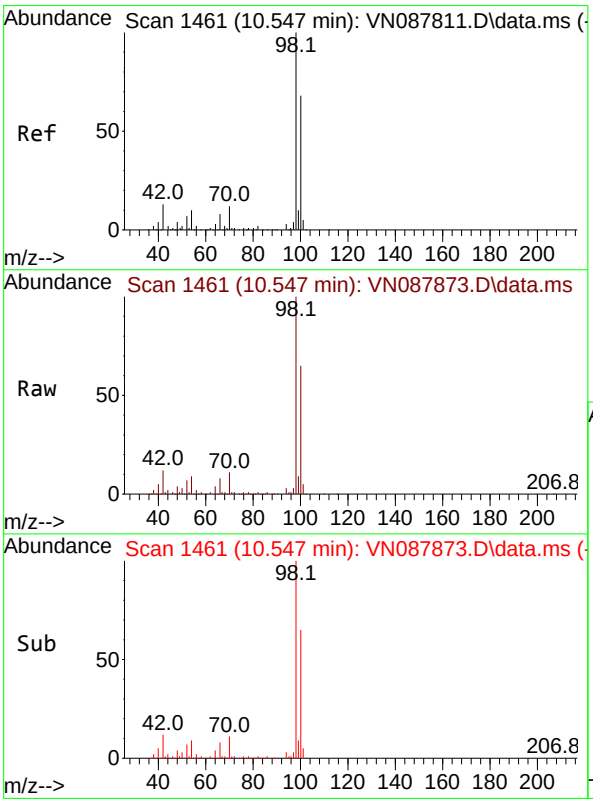
#62
Toluene
Concen: 32.225 ug/l
RT: 10.612 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 91 Resp: 541334

Ion	Ratio	Lower	Upper
91	100		
92	57.7	45.4	68.0

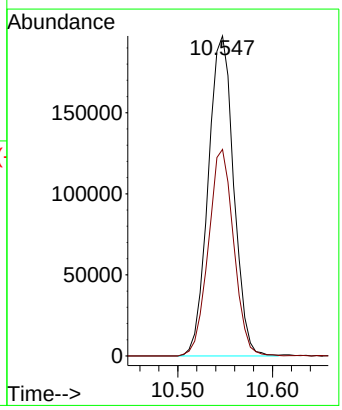


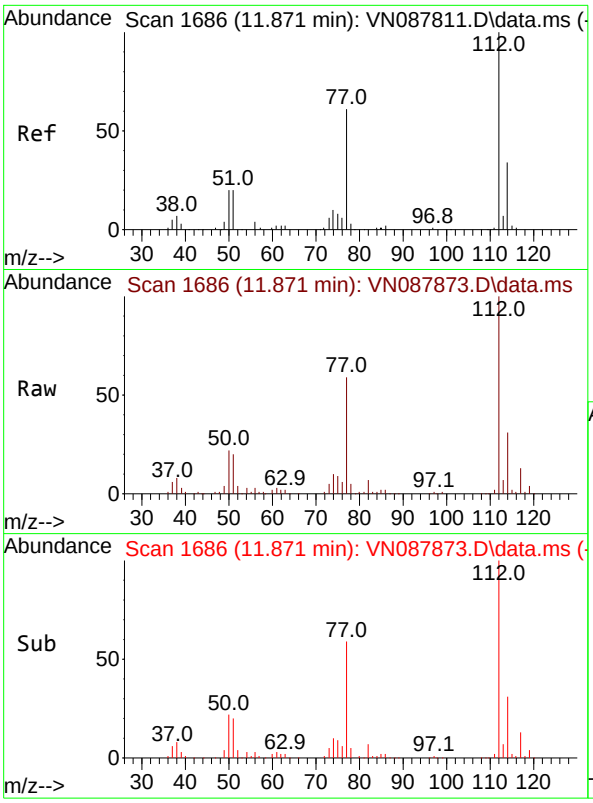


#63
Toluene-d8
Concen: 28.556 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 98 Resp: 368817

Ion	Ratio	Lower	Upper
98	100		
100	64.2	50.6	76.0



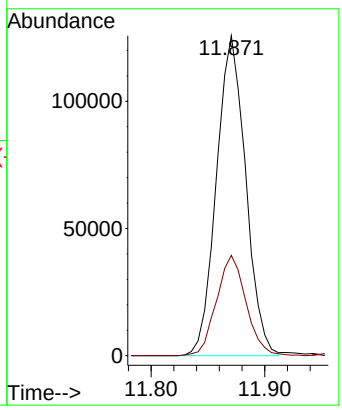


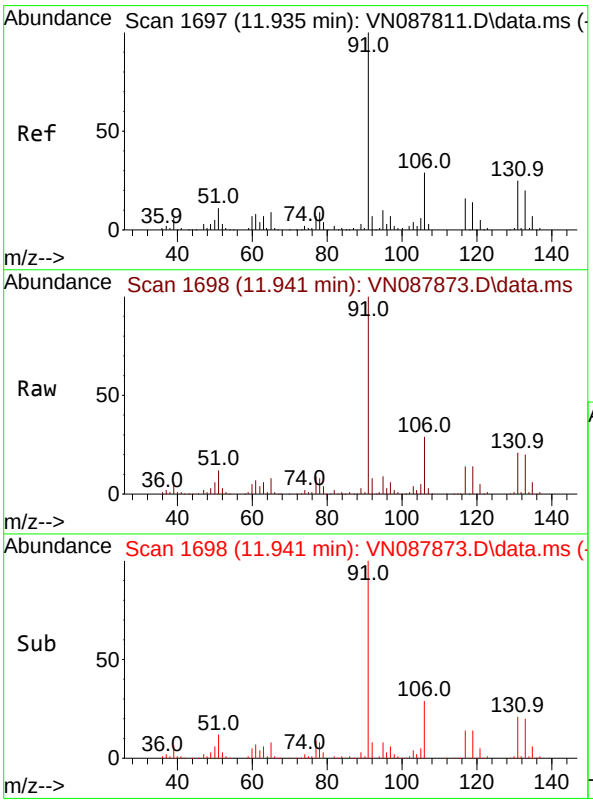
#64
Chlorobenzene
Concen: 21.833 ug/l
RT: 11.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion:112 Resp: 225101

Ion	Ratio	Lower	Upper
112	100		
114	31.4	23.5	35.3

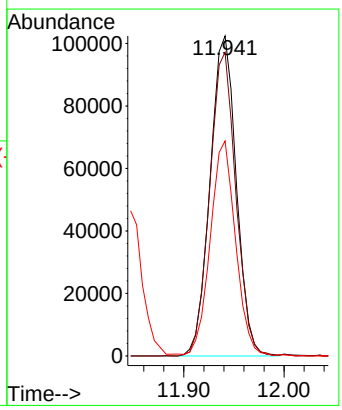


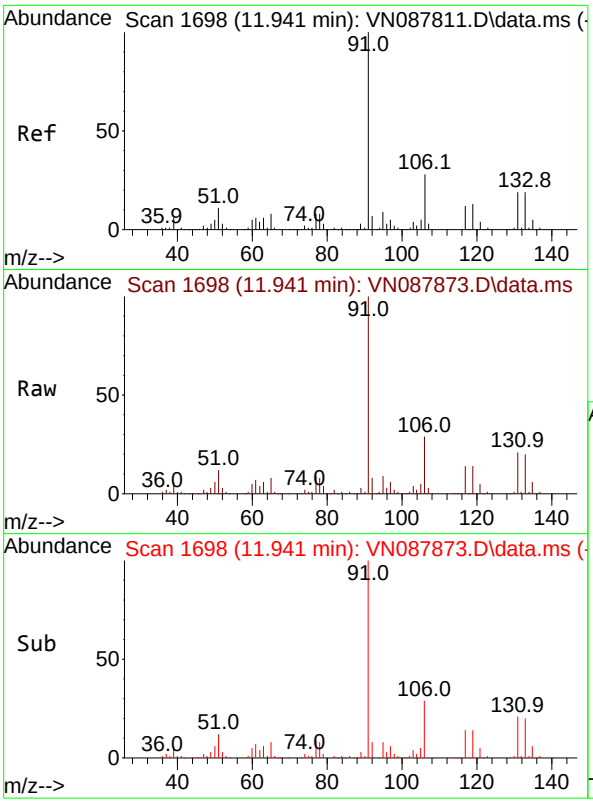


#65
1,1,1,2-Tetrachloroethane
Concen: 51.203 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:131 Resp: 185864

Ion	Ratio	Lower	Upper
131	100		
133	94.6	0.0	195.8
119	64.9	0.0	139.0



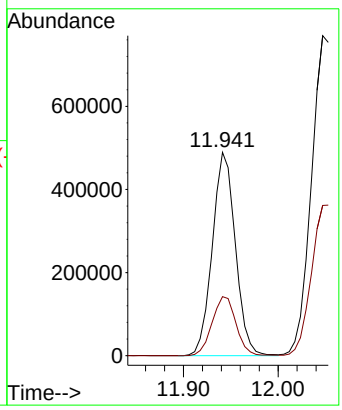


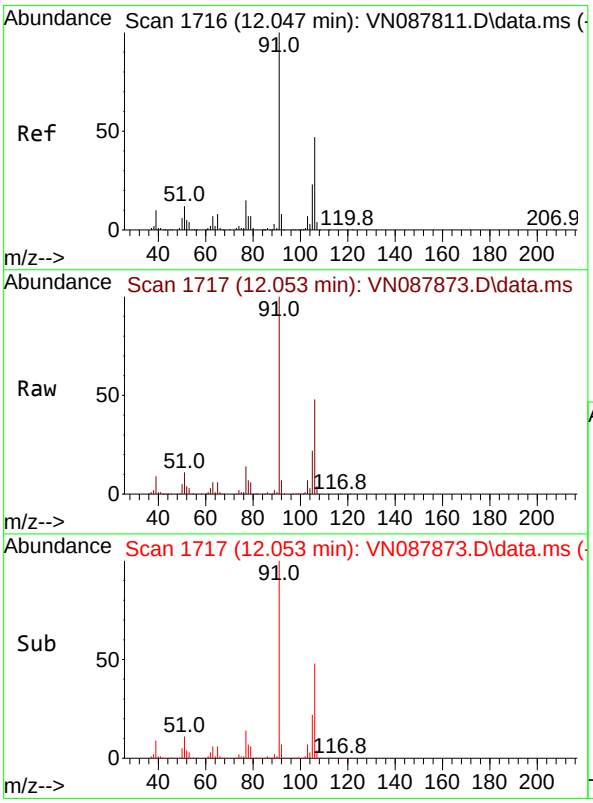
#66
Ethyl Benzene
Concen: 45.643 ug/l
RT: 11.941 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 91 Resp: 827192

Ion	Ratio	Lower	Upper
91	100		
106	29.0	21.3	31.9

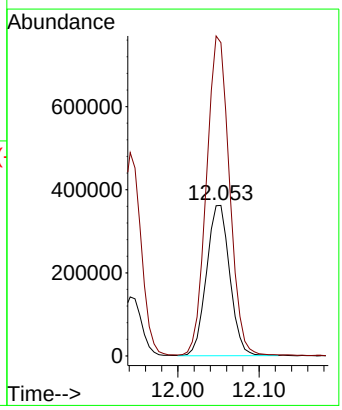


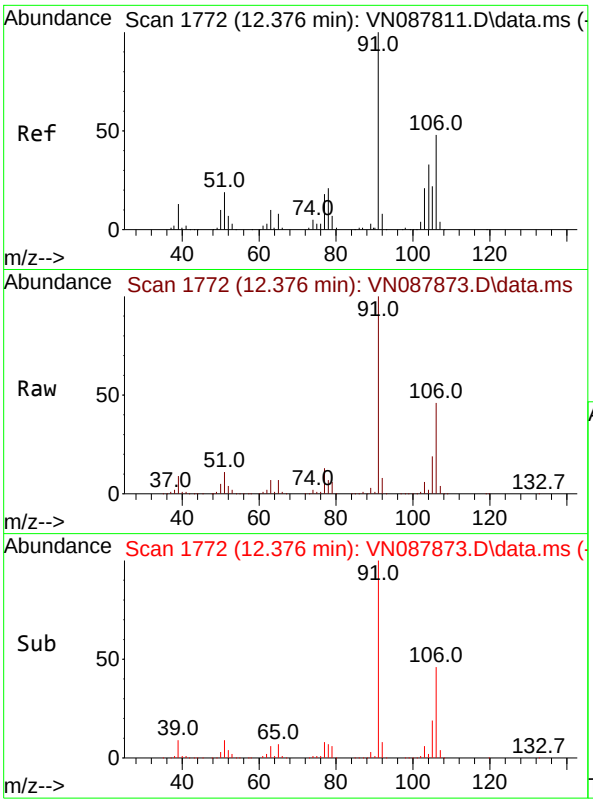


#67
m/p-Xylenes
Concen: 107.037 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.006 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:106 Resp: 720077

Ion	Ratio	Lower	Upper
106	100		
91	209.4	174.3	261.5



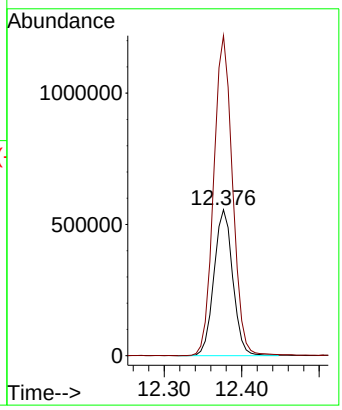


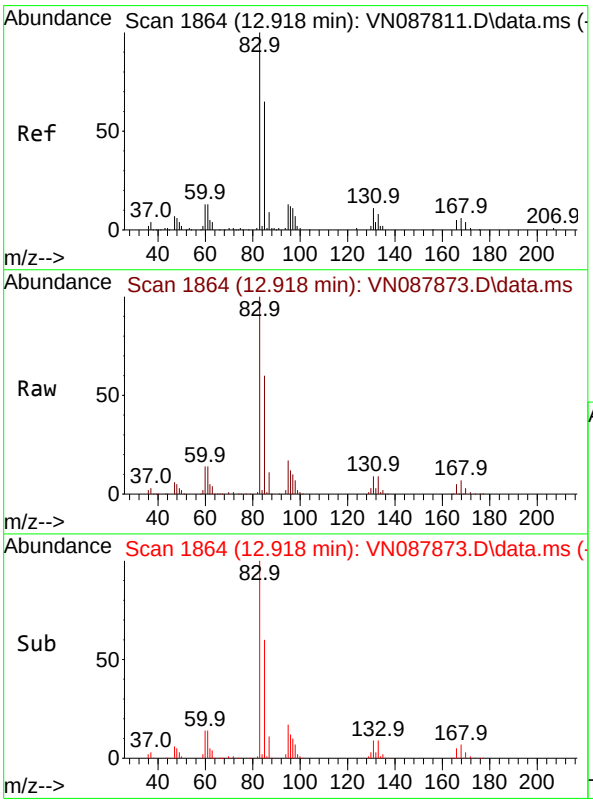
#68
o-Xylene
Concen: 143.670 ug/l
RT: 12.376 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion:106 Resp: 937122

Ion	Ratio	Lower	Upper
106	100		
91	219.9	107.7	323.3

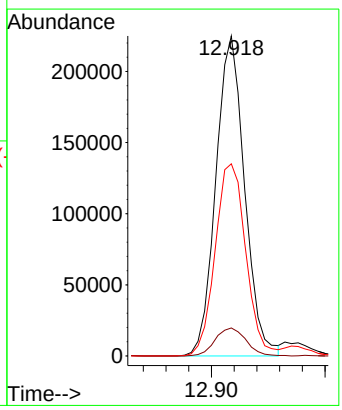


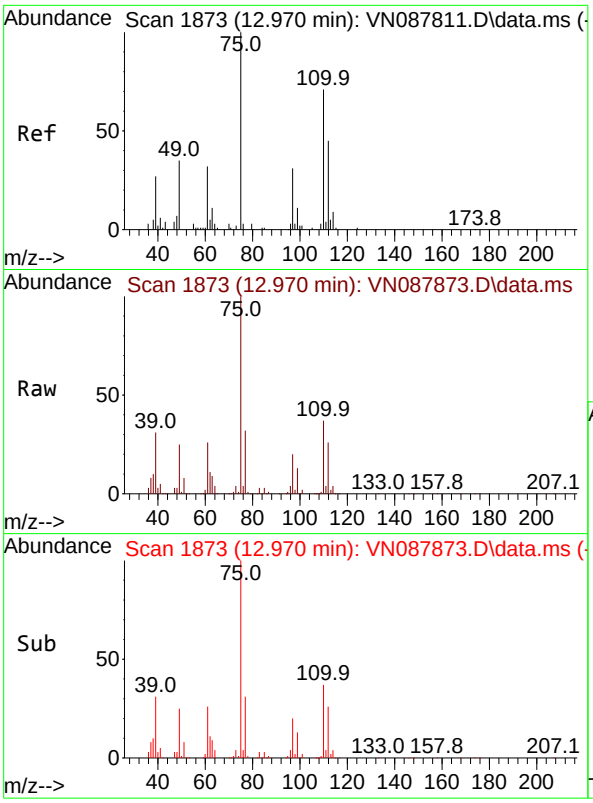


#71
1,1,2,2-Tetrachloroethane
Concen: 66.568 ug/l
RT: 12.918 min Scan# 1864
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion: 83 Resp: 395797

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.3
85	64.0	31.9	95.7



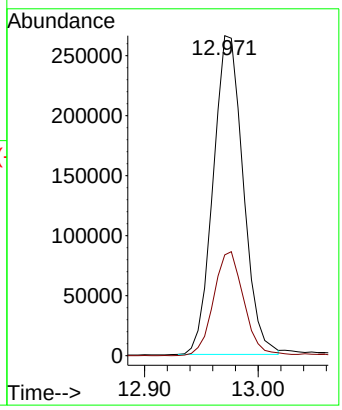


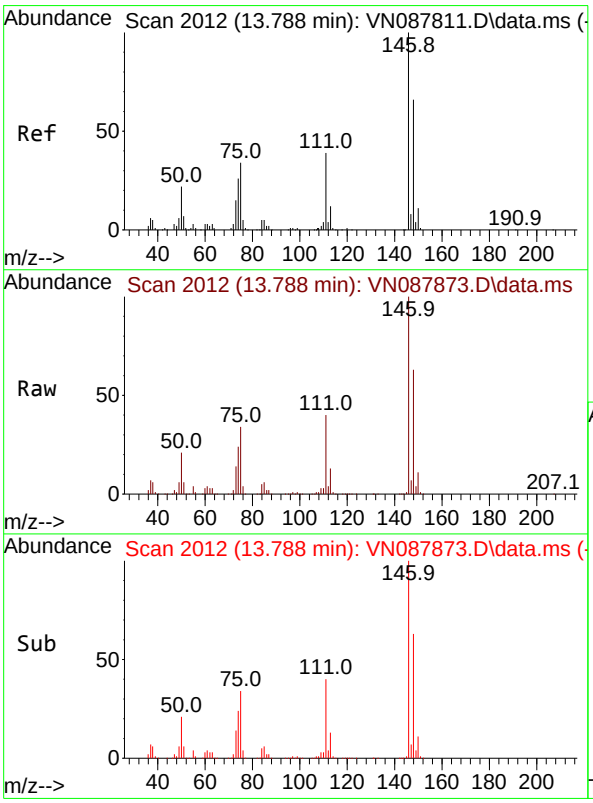
#72
1,2,3-Trichloropropane
Concen: 83.587 ug/l
RT: 12.970 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion: 75 Resp: 487981

Ion	Ratio	Lower	Upper
75	100		
77	32.9	0.0	378.8

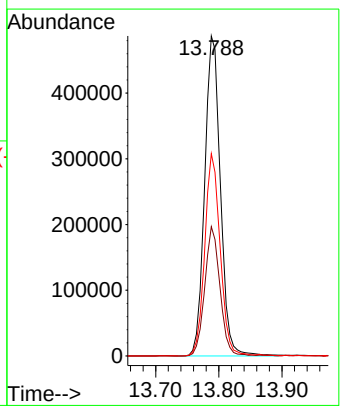


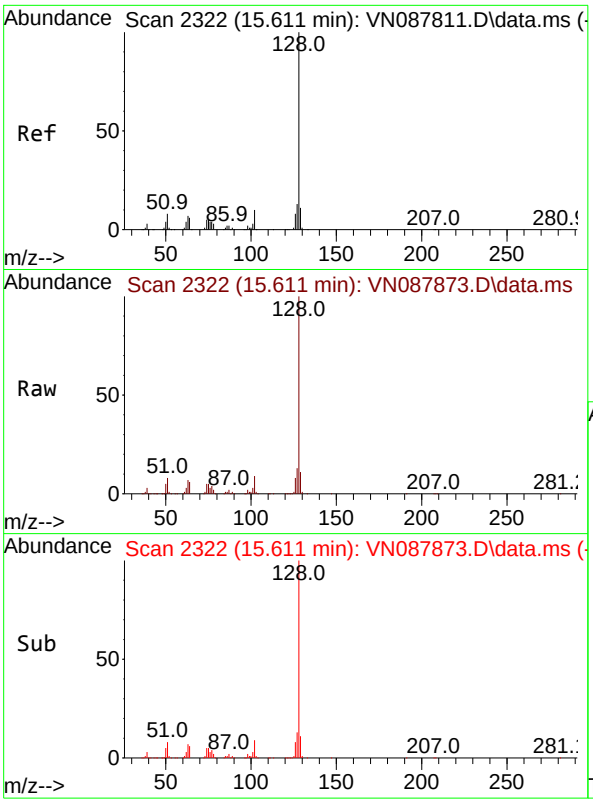


#84
1,4-Dichlorobenzene
Concen: 108.066 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Tgt Ion:146 Resp: 845011

Ion	Ratio	Lower	Upper
146	100		
111	38.8	20.2	60.5
148	61.8	31.5	94.5



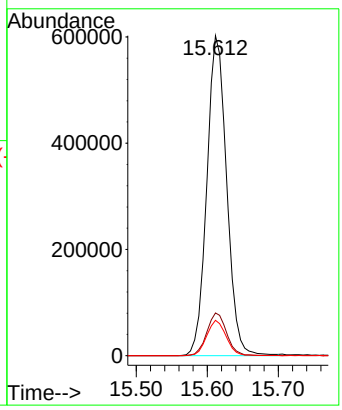


#91
Naphthalene
Concen: 76.014 ug/l
RT: 15.611 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087873.D
Acq: 17 Sep 2025 12:38

Instrument :
MSVOA_N
ClientSampleId :
WP0925-PT-VOA-WP

Tgt Ion:128 Resp: 1171082

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.2	15.4
129	10.9	8.3	12.5



CALIBRATION SUMMARY

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: Alliance Contract: ALLI03

Lab Code: ACE SDG No.: Q3015

Instrument ID: MSVOA_N Calibration Date(s): 09/04/2025 09/04/2025

Heated Purge: (Y/N) N Calibration Time(s): 16:23 17:46

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

LAB FILE ID: RRF005 = VN087725.D RRF020 = VN087726.D RRF050 = VN087727.D
RRF100 = VN087728.D RRF150 = VN087729.D RRF =

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	1.642	1.750	2.035	2.008	1.888		1.865	9
Chloromethane	1.939	1.792	2.026	2.037	1.992		1.957	5.1
Vinyl Chloride	2.110	2.001	2.388	2.315	2.249		2.213	7.1
Ethyl Acetate	0.673	0.647	0.704	0.704	0.703		0.686	3.8
Bromomethane	1.293	1.108	1.325	1.377	1.387		1.298	8.7
Chloroethane	1.599	1.358	1.577	1.521	1.506		1.512	6.2
Trichlorofluoromethane	3.241	2.904	3.445	3.355	3.271		3.243	6.3
1,1,2-Trichlorotrifluoroethane	1.776	1.591	1.904	1.779	1.733		1.757	6.4
1,1-Dichloroethene	1.836	1.575	1.915	1.883	1.846		1.811	7.5
Acrolein	0.523	0.431	0.496	0.518	0.518		0.497	7.7
Acrylonitrile	1.167	1.051	1.253	1.274	1.263		1.202	7.9
Acetone	0.487	0.319	0.366	0.355	0.349		0.375	17.3
Carbon Disulfide	4.965	4.353	5.190	5.135	5.219		4.972	7.2
Methyl tert-Butyl Ether	5.787	5.537	6.897	6.968	7.139		6.466	11.5
Methylene Chloride	2.174	1.759	2.150	2.090	2.084		2.052	8.2
trans-1,2-Dichloroethene	1.709	1.652	1.947	1.965	1.962		1.847	8.3
Vinyl Acetate	1.035	1.002	1.168	1.220	1.186		1.122	8.6
1,1-Dichloroethane	3.750	3.277	3.899	3.878	3.823		3.725	6.9
2-Butanone	0.348	0.303	0.339	0.348	0.342		0.336	5.6
Carbon Tetrachloride	0.526	0.466	0.530	0.533	0.522		0.515	5.5
2,2-Dichloropropane	0.613	0.495	0.606	0.616	0.609		0.588	8.8
cis-1,2-Dichloroethene	2.078	1.988	2.367	2.370	2.406		2.242	8.6
Chloroform	3.785	3.484	4.143	4.049	4.035		3.899	6.9
1,1,1-Trichloroethane	0.599	0.582	0.635	0.647	0.628		0.618	4.4
1,1-Dichloropropene	0.462	0.448	0.506	0.516	0.505		0.488	6.2
Benzene	1.514	1.442	1.630	1.657	1.636		1.576	5.9
1,2-Dichloroethane	0.595	0.554	0.609	0.618	0.600		0.595	4.1
Trichloroethene	0.352	0.323	0.364	0.366	0.357		0.352	5
1,2-Dichloropropane	0.394	0.374	0.407	0.428	0.415		0.404	5
Dibromomethane	0.301	0.275	0.307	0.315	0.304		0.300	5.1

* 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.

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: ALLI03

Lab Code: ACE SDG No.: Q3015

Instrument ID: MSVOA_N Calibration Date(s): 09/04/2025 09/04/2025

Heated Purge: (Y/N) N Calibration Time(s): 16:23 17:46

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

LAB FILE ID: RRF005 = VN087725.D RRF020 = VN087726.D RRF050 = VN087727.D
RRF100 = VN087728.D RRF150 = VN087729.D RRF =

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	$\overline{RRF}$	% RSD
Bromodichloromethane	0.612	0.570	0.616	0.647	0.624		0.614	4.5
4-Methyl-2-Pentanone	0.666	0.655	0.734	0.754	0.738		0.709	6.4
Toluene	1.705	1.673	1.868	1.935	1.893		1.815	6.5
t-1,3-Dichloropropene	0.594	0.556	0.653	0.696	0.689		0.638	9.5
cis-1,3-Dichloropropene	0.607	0.566	0.678	0.712	0.702		0.653	9.7
1,1,2-Trichloroethane	0.388	0.354	0.399	0.401	0.398		0.388	5.1
1,3-Dichloropropane	0.636	0.623	0.694	0.719	0.695		0.674	6.2
2-Chloroethyl vinyl ether	0.310	0.319	0.339	0.377	0.384		0.346	9.7
2-Hexanone	0.334	0.419	0.508	0.533	0.523		0.464	18.4
Dibromochloromethane	0.420	0.369	0.454	0.468	0.464		0.435	9.5
1,2-Dibromoethane	0.386	0.363	0.421	0.423	0.425		0.404	6.9
Tetrachloroethene	0.312	0.279	0.297	0.306	0.300		0.299	4.2
Chlorobenzene	1.063	1.006	1.127	1.191	1.182		1.114	7.1
1,1,1,2-Tetrachloroethane	0.395	0.354	0.399	0.411	0.401		0.392	5.7
Ethyl Benzene	1.736	1.744	2.042	2.145	2.122		1.958	10.3
m/p-Xylenes	0.629	0.642	0.776	0.800	0.785		0.727	11.5
o-Xylene	0.603	0.639	0.731	0.774	0.776		0.705	11.2
Styrene	0.997	1.076	1.311	1.375	1.364		1.225	14.3
Bromoform	0.265	0.242	0.289	0.312	0.313		0.284	10.8
Isopropylbenzene	1.538	1.555	1.896	1.984	1.960		1.787	12.4
1,1,2,2-Tetrachloroethane	0.616	0.605	0.666	0.670	0.655		0.642	4.6
1,2,3-Trichloropropane	0.672	0.640	0.612	0.625	0.605		0.631	4.3
Bromobenzene	0.429	0.393	0.442	0.464	0.457		0.437	6.4
n-propylbenzene	1.942	2.018	2.404	2.485	2.423		2.254	11.3
2-Chlorotoluene	1.178	1.243	1.456	1.465	1.442		1.357	10
1,3,5-Trimethylbenzene	1.292	1.352	1.616	1.666	1.617		1.509	11.5
4-Chlorotoluene	1.091	1.260	1.493	1.505	1.490		1.368	13.6
1,2,4-Trimethylbenzene	1.292	1.405	1.677	1.697	1.663		1.547	12
sec-Butylbenzene	1.629	1.677	1.986	2.034	1.966		1.858	10.2
p-Isopropyltoluene	1.311	1.361	1.655	1.693	1.637		1.531	11.8

* 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.

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: ALLI03

Lab Code: ACE SDG No.: Q3015

Instrument ID: MSVOA_N Calibration Date(s): 09/04/2025 09/04/2025

Heated Purge: (Y/N) N Calibration Time(s): 16:23 17:46

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

LAB FILE ID: RRF005 = VN087725.D RRF020 = VN087726.D RRF050 = VN087727.D
RRF100 = VN087728.D RRF150 = VN087729.D RRF =

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	$\overline{RRF}$	% RSD
1,3-Dichlorobenzene	0.762	0.789	0.888	0.900	0.874		0.843	7.5
1,4-Dichlorobenzene	0.778	0.776	0.895	0.908	0.867		0.845	7.5
n-Butylbenzene	1.249	1.282	1.609	1.636	1.583		1.472	12.9
1,2-Dichlorobenzene	0.718	0.733	0.839	0.855	0.828		0.795	8.1
1,2-Dibromo-3-Chloropropane	0.123	0.139	0.146	0.154	0.152		0.143	8.9
1,2,4-Trichlorobenzene	0.410	0.400	0.471	0.491	0.488		0.452	9.7
Hexachlorobutadiene	0.146	0.146	0.155	0.160	0.152		0.152	4
Naphthalene	1.306	1.443	1.764	1.891	1.918		1.664	16.5
1,2,3-Trichlorobenzene	0.410	0.400	0.471	0.491	0.488		0.452	9.7
1,2-Dichloroethane-d4	2.618	2.509	2.604	2.499	2.583		2.563	2.2
Toluene-d8	1.403	1.411	1.392	1.402	1.369		1.395	1.2
4-Bromofluorobenzene	0.454	0.489	0.475	0.501	0.492		0.482	3.8

* 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 : 624N090425W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Fri Sep 05 03:29:53 2025
Response Via : Initial Calibration

Calibration Files
5 =VN087725.D 20 =VN087726.D 50 =VN087727.D 100 =VN087728.D 150 =VN087729.D

		Compound	5	20	50	100	150	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------						
2)	M	Dichlorodifluoro...	1.642	1.750	2.035	2.008	1.888	1.865	9.01
3)	M	Chloromethane	1.939	1.792	2.026	2.037	1.992	1.957	5.12
4)	M	Vinyl Chloride	2.110	2.001	2.388	2.315	2.249	2.213	7.09
5)	M	Bromomethane	1.293	1.108	1.325	1.377	1.387	1.298	8.72
6)	M	Chloroethane	1.599	1.358	1.577	1.521	1.506	1.512	6.25
7)	M	Trichlorofluorom...	3.241	2.904	3.445	3.355	3.271	3.243	6.34
8)	T	Diethyl Ether	1.457	1.168	1.441	1.379	1.403	1.370	8.52
9)		1,1,2-Trichlorot...	1.776	1.591	1.904	1.779	1.733	1.757	6.40
10)	M	1,1-Dichloroethene	1.836	1.575	1.915	1.883	1.846	1.811	7.50
11)		Methyl Iodide	0.809	0.935	1.355	1.579	1.732	1.282	31.21
12)		Methyl Acetate	2.516	2.540	2.953	2.978	2.972	2.792	8.63
13)	M	Acrolein	0.523	0.431	0.496	0.518	0.518	0.497	7.67
14)	M	Acrylonitrile	1.167	1.051	1.253	1.274	1.263	1.202	7.87
15)	M	Acetone	0.487	0.319	0.366	0.355	0.349	0.375	17.29
16)	M	Carbon Disulfide	4.965	4.353	5.190	5.135	5.219	4.972	7.24
17)		Allyl chloride	3.004	2.541	3.014	3.085	3.147	2.958	8.13
18)	M	Methylene Chloride	2.174	1.759	2.150	2.090	2.084	2.052	8.19
19)	M	trans-1,2-Dichlo...	1.709	1.652	1.947	1.965	1.962	1.847	8.31
20)	T	Diisopropyl ether	6.079	5.922	7.317	7.335	7.360	6.802	10.80
21)	M	1,1-Dichloroethane	3.750	3.277	3.899	3.878	3.823	3.725	6.90
22)	M	cis-1,2-Dichloro...	2.078	1.988	2.367	2.370	2.406	2.242	8.64
23)	M	tert-Butyl Alcohol	0.422	0.383	0.436	0.436	0.448	0.425	5.94
24)	M	Methyl tert-Buty...	5.787	5.537	6.897	6.968	7.139	6.466	11.51
25)	M	Chloroform	3.785	3.484	4.143	4.049	4.035	3.899	6.85
26)		Cyclohexane	2.568	2.447	3.169	3.015	2.984	2.837	10.98
27)	s	1,2-Dichloroetha...	2.618	2.509	2.604	2.499	2.583	2.563	2.15
28)	I	1,4-Difluorobenzene	----------ISTD----------						
29)		1,1-Dichloropropene	0.462	0.448	0.506	0.516	0.505	0.488	6.20
30)	M	2-Butanone	0.348	0.303	0.339	0.348	0.342	0.336	5.65
31)		2,2-Dichloropropane	0.613	0.495	0.606	0.616	0.609	0.588	8.81
32)	M	1,1,1-Trichloroe...	0.599	0.582	0.635	0.647	0.628	0.618	4.35
33)	M	Carbon Tetrachlo...	0.526	0.466	0.530	0.533	0.522	0.515	5.45
34)	M	Benzene	1.514	1.442	1.630	1.657	1.636	1.576	5.91
35)		Methacrylonitrile	0.313	0.344	0.357	0.377	0.365	0.351	6.95
36)	M	1,2-Dichloroethane	0.595	0.554	0.609	0.618	0.600	0.595	4.15
37)	M	Trichloroethene	0.352	0.323	0.364	0.366	0.357	0.352	4.96
38)		Methylcyclohexane	0.523	0.476	0.561	0.576	0.548	0.537	7.24
39)	M	1,2-Dichloropropane	0.394	0.374	0.407	0.428	0.415	0.404	5.03
40)		Dibromomethane	0.301	0.275	0.307	0.315	0.304	0.300	5.06
41)	M	Bromodichloromet...	0.612	0.570	0.616	0.647	0.624	0.614	4.54
42)	M	Vinyl Acetate	1.035	1.002	1.168	1.220	1.186	1.122	8.64
43)		Ethyl Acetate	0.673	0.647	0.704	0.704	0.703	0.686	3.78
44)		Isopropyl Acetate	0.957	0.995	1.115	1.175	1.137	1.076	8.78
45)	T	1,4-Dioxane	0.006	0.007	0.007	0.007	0.007	0.007	7.51
46)		Methyl methacrylate	0.457	0.443	0.514	0.544	0.521	0.496	8.79
47)		n-amyl Acetate	0.748	0.518	0.763	0.791	0.816	0.727	16.47
48)	M	t-1,3-Dichloropr...	0.594	0.556	0.653	0.696	0.689	0.638	9.53
49)	T	cis-1,3-Dichloro...	0.607	0.566	0.678	0.712	0.702	0.653	9.73
50)	M	1,1,2-Trichloroe...	0.388	0.354	0.399	0.401	0.398	0.388	5.07
51)		Ethyl methacrylate	0.434	0.513	0.662	0.703	0.706	0.604	20.43
52)		1,3-Dichloropropane	0.636	0.623	0.694	0.719	0.695	0.674	6.16
53)	M	Dibromochloromet...	0.420	0.369	0.454	0.468	0.464	0.435	9.54
54)	M	1,2-Dibromoethane	0.386	0.363	0.421	0.423	0.425	0.404	6.91
55)	M	2-Chloroethyl vi...	0.310	0.319	0.339	0.377	0.384	0.346	9.67
56)	M	Bromoform	0.265	0.242	0.289	0.312	0.313	0.284	10.82

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 624N090425W.M

57)	I	Chlorobenzene-d5	----------ISTD----------						
58)	M	4-Methyl-2-Penta...	0.666	0.655	0.734	0.754	0.738	0.709	6.43
59)	M	2-Hexanone	0.334	0.419	0.508	0.533	0.523	0.464	18.40
60)	S	4-Bromofluoroben...	0.454	0.489	0.475	0.501	0.492	0.482	3.78
61)	M	Tetrachloroethene	0.312	0.279	0.297	0.306	0.300	0.299	4.22
62)	M	Toluene	1.705	1.673	1.868	1.935	1.893	1.815	6.50
63)	S	Toluene-d8	1.403	1.411	1.392	1.402	1.369	1.395	1.16
64)	M	Chlorobenzene	1.063	1.006	1.127	1.191	1.182	1.114	7.10
65)		1,1,1,2-Tetrachl...	0.395	0.354	0.399	0.411	0.401	0.392	5.66
66)	M	Ethyl Benzene	1.736	1.744	2.042	2.145	2.122	1.958	10.34
67)	M	m/p-Xylenes	0.629	0.642	0.776	0.800	0.785	0.727	11.50
68)	M	o-Xylene	0.603	0.639	0.731	0.774	0.776	0.705	11.24
69)	M	Styrene	0.997	1.076	1.311	1.375	1.364	1.225	14.33
70)		Isopropylbenzene	1.538	1.555	1.896	1.984	1.960	1.787	12.39
71)	M	1,1,2,2-Tetrachl...	0.616	0.605	0.666	0.670	0.655	0.642	4.63
72)		1,2,3-Trichlorop...	0.672	0.640	0.612	0.625	0.605	0.631	4.26
73)		Bromobenzene	0.429	0.393	0.442	0.464	0.457	0.437	6.40
74)		n-propylbenzene	1.942	2.018	2.404	2.485	2.423	2.254	11.26
75)		2-Chlorotoluene	1.178	1.243	1.456	1.465	1.442	1.357	10.00
76)		1,3,5-Trimethylb...	1.292	1.352	1.616	1.666	1.617	1.509	11.46
77)		t-1,4-Dichloro-2...	0.155	0.182	0.224	0.247	0.257	0.213	20.35
78)		4-Chlorotoluene	1.091	1.260	1.493	1.505	1.490	1.368	13.57
79)		tert-butylbenzene	1.073	1.133	1.357	1.393	1.360	1.263	11.75
80)		1,2,4-Trimethylb...	1.292	1.405	1.677	1.697	1.663	1.547	12.01
81)		sec-Butylbenzene	1.629	1.677	1.986	2.034	1.966	1.858	10.21
82)		p-Isopropyltoluene	1.311	1.361	1.655	1.693	1.637	1.531	11.78
83)	M	1,3-Dichlorobenzene	0.762	0.789	0.888	0.900	0.874	0.843	7.45
84)	M	1,4-Dichlorobenzene	0.778	0.776	0.895	0.908	0.867	0.845	7.52
85)		n-Butylbenzene	1.249	1.282	1.609	1.636	1.583	1.472	12.88
86)	T	Hexachloroethane	0.287	0.286	0.328	0.330	0.324	0.311	7.24
87)	M	1,2-Dichlorobenzene	0.718	0.733	0.839	0.855	0.828	0.795	8.07
88)		1,2-Dibromo-3-Ch...	0.123	0.139	0.146	0.154	0.152	0.143	8.87
89)		1,2,4-Trichlorob...	0.410	0.400	0.471	0.491	0.488	0.452	9.70
90)		Hexachlorobutadiene	0.146	0.146	0.155	0.160	0.152	0.152	3.95
91)	M	Naphthalene	1.306	1.443	1.764	1.891	1.918	1.664	16.54
92)		1,2,3-Trichlorob...	0.410	0.400	0.471	0.491	0.488	0.452	9.70

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087725.D
Acq On : 04 Sep 2025 16:23
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 05 02:55:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.800	128	42575	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.082	114	216859	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.841	117	197903	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.559	65	111481	29.081	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 96.933%				
60) 4-Bromofluorobenzene	12.829	95	89929	26.721	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 89.067%				
63) Toluene-d8	10.547	98	277568	30.356	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 101.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.142	85	11648	4.330	ug/l		98
3) Chloromethane	2.383	50	13757	5.010	ug/l		97
4) Vinyl Chloride	2.542	62	14969	5.086	ug/l		96
5) Bromomethane	2.977	94	9176	5.656	ug/l	#	80
6) Chloroethane	3.136	64	11348	5.889	ug/l		95
7) Trichlorofluoromethane	3.512	101	22997	5.390	ug/l		92
8) Diethyl Ether	3.965	74	10337m	5.839	ug/l		
9) 1,1,2-Trichlorotrifluo...	4.371	101	12605m	5.679	ug/l		
10) 1,1-Dichloroethene	4.330	96	13028	5.695	ug/l	#	69
11) Methyl Iodide	4.594	142	5738m	3.195	ug/l		
12) Methyl Acetate	5.024	43	17852	4.306	ug/l		99
13) Acrolein	4.183	56	18545	28.610	ug/l	#	68
14) Acrylonitrile	5.712	53	41406	23.088	ug/l		66
15) Acetone	4.418	58	17262m	33.931	ug/l		
16) Carbon Disulfide	4.694	76	35228	5.033	ug/l		97
17) Allyl chloride	5.012	41	21319m	4.722	ug/l		
18) Methylene Chloride	5.265	84	15429	5.346	ug/l		94
19) trans-1,2-Dichloroethene	5.771	96	12127m	4.541	ug/l		
20) Diisopropyl ether	6.659	45	43135	4.193	ug/l	#	97
21) 1,1-Dichloroethane	6.553	63	26606	4.973	ug/l		95
22) cis-1,2-Dichloroethene	7.477	96	14747	4.514	ug/l		91
23) tert-Butyl Alcohol	5.524	59	14989m	20.107	ug/l		
24) Methyl tert-Butyl Ether	5.777	73	41065m	4.097	ug/l		
25) Chloroform	7.947	83	26857	4.769	ug/l		89
26) Cyclohexane	8.241	56	18224	4.308	ug/l	#	95
29) 1,1-Dichloropropene	8.347	75	16714	4.808	ug/l		81
30) 2-Butanone	7.471	43	62809	24.948	ug/l		94
31) 2,2-Dichloropropane	7.482	77	22147m	5.085	ug/l		
32) 1,1,1-Trichloroethane	8.147	97	21664	4.859	ug/l		97
33) Carbon Tetrachloride	8.347	117	18997	5.178	ug/l		91
34) Benzene	8.588	78	54727	4.965	ug/l	#	82
35) Methacrylonitrile	7.765	41	11323	4.140	ug/l		82
36) 1,2-Dichloroethane	8.647	62	21499	4.893	ug/l	#	88
37) Trichloroethene	9.335	130	12724	5.242	ug/l		91
38) Methylcyclohexane	9.582	83	18908	4.768	ug/l		96
39) 1,2-Dichloropropane	9.600	63	14250	5.045	ug/l		94
40) Dibromomethane	9.688	93	10862	5.143	ug/l		97
41) Bromodichloromethane	9.871	83	22133	5.018	ug/l		96
42) Vinyl Acetate	6.594	43	187082	22.588	ug/l	#	92

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087725.D
Acq On : 04 Sep 2025 16:23
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 05 02:55:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.553	43	24321	4.902	ug/l		98
44) Isopropyl Acetate	8.677	43	34598	4.192	ug/l	#	73
45) 1,4-Dioxane	9.688	88	4349	82.302	ug/l	#	52
46) Methyl methacrylate	9.665	41	16516m	4.275	ug/l		
47) n-amyl Acetate	12.900	43	27025m	5.631	ug/l		
48) t-1,3-Dichloropropene	10.812	75	21459	4.564	ug/l		93
49) cis-1,3-Dichloropropene	10.288	75	21937	4.623	ug/l	#	93
50) 1,1,2-Trichloroethane	10.994	97	14010	5.222	ug/l	#	91
51) Ethyl methacrylate	10.859	69	15678	3.425	ug/l		96
52) 1,3-Dichloropropane	11.141	76	23001	4.782	ug/l		100
53) Dibromochloromethane	11.335	129	15190	4.974	ug/l		86
54) 1,2-Dibromoethane	11.447	107	13958	4.937	ug/l		97
55) 2-Chloroethyl vinyl ether	10.141	63	55971	22.629	ug/l		96
56) Bromoform	12.559	173	9575	4.732	ug/l	#	94
58) 4-Methyl-2-Pentanone	10.429	43	109790	22.421	ug/l		99
59) 2-Hexanone	11.182	43	55125	16.623	ug/l		100
61) Tetrachloroethene	11.082	164	10301	5.392	ug/l		92
62) Toluene	10.606	91	56231	4.722	ug/l		99
64) Chlorobenzene	11.870	112	35078	4.801	ug/l		94
65) 1,1,1,2-Tetrachloroethane	11.941	131	13029	5.065	ug/l		95
66) Ethyl Benzene	11.947	91	57255	4.362	ug/l		94
67) m/p-Xylenes	12.047	106	41515	8.594	ug/l		97
68) o-Xylene	12.376	106	19899	4.176	ug/l		87
69) Styrene	12.388	104	32885	4.057	ug/l		99
70) Isopropylbenzene	12.676	105	50734	4.232	ug/l		99
71) 1,1,2,2-Tetrachloroethane	12.917	83	20319	4.858	ug/l		100
72) 1,2,3-Trichloropropane	12.976	75	22173m	5.682	ug/l		
73) Bromobenzene	12.964	156	14160	4.997	ug/l		93
74) n-propylbenzene	13.012	91	64047	4.247	ug/l		97
75) 2-Chlorotoluene	13.100	91	38851	4.188	ug/l		97
76) 1,3,5-Trimethylbenzene	13.153	105	42622	4.143	ug/l		99
77) t-1,4-Dichloro-2-butene	12.723	75	5106	3.485	ug/l		92
78) 4-Chlorotoluene	13.200	91	35970	3.810	ug/l		99
79) tert-butylbenzene	13.417	119	35406	4.085	ug/l		96
80) 1,2,4-Trimethylbenzene	13.459	105	42618	4.107	ug/l		98
81) sec-Butylbenzene	13.594	105	53746	4.253	ug/l		99
82) p-Isopropyltoluene	13.706	119	43232	4.132	ug/l		97
83) 1,3-Dichlorobenzene	13.712	146	25121	4.627	ug/l		95
84) 1,4-Dichlorobenzene	13.794	146	25650	4.693	ug/l		95
85) n-Butylbenzene	14.029	91	41201	4.055	ug/l		99
86) Hexachloroethane	14.311	117	9454	4.553	ug/l		98
87) 1,2-Dichlorobenzene	14.082	146	23694	4.602	ug/l		94
88) 1,2-Dibromo-3-Chloropr...	14.700	75	4041m	3.875	ug/l		
89) 1,2,4-Trichlorobenzene	15.811	180	13520	4.443	ug/l		93
90) Hexachlorobutadiene	15.470	225	4812	4.125	ug/l		90
91) Naphthalene	15.617	128	43072	3.756	ug/l	#	91
92) 1,2,3-Trichlorobenzene	15.811	180	13520	4.443	ug/l		93

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

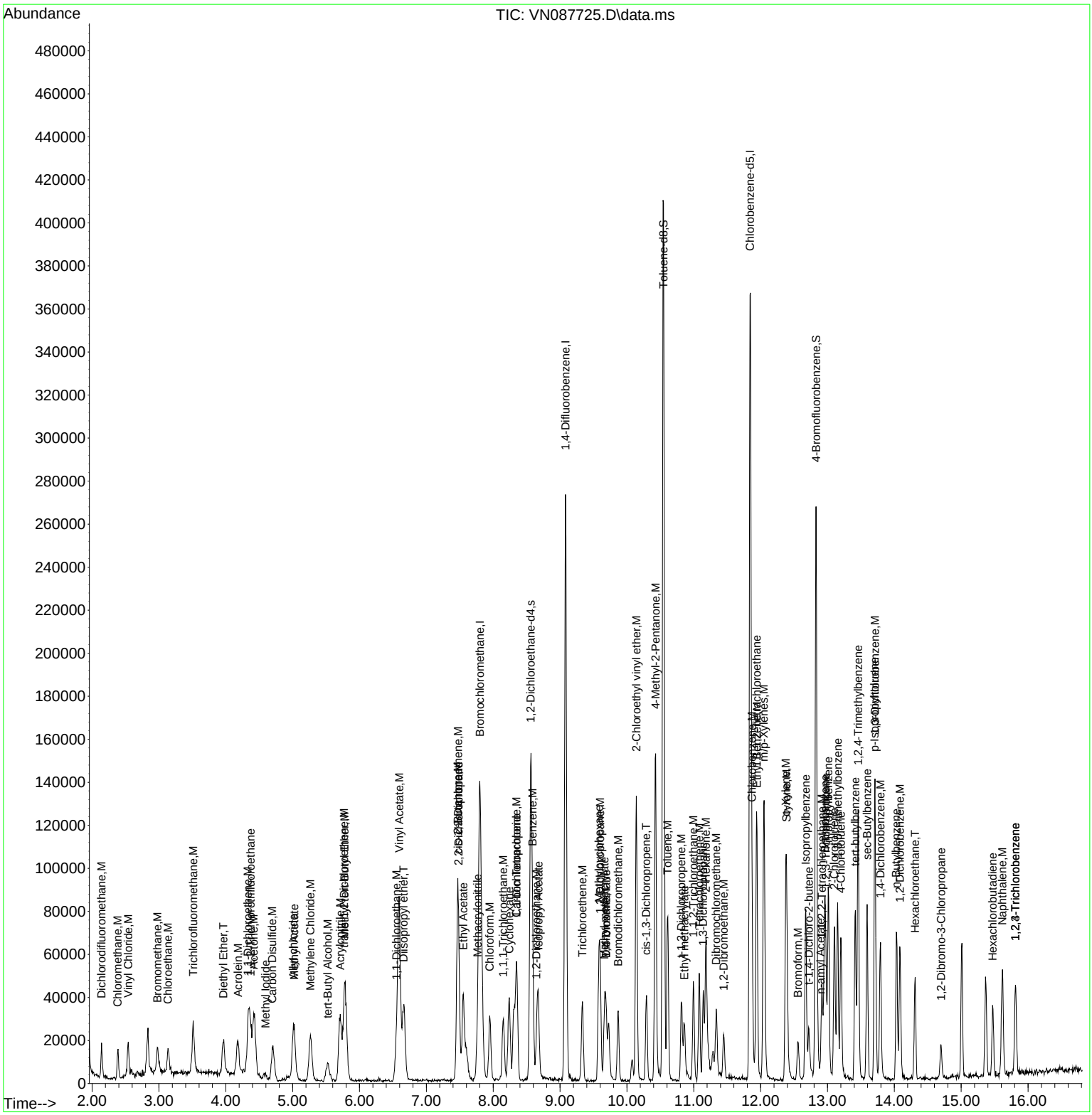
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087725.D
Acq On : 04 Sep 2025 16:23
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 14 Sample Multiplier: 1

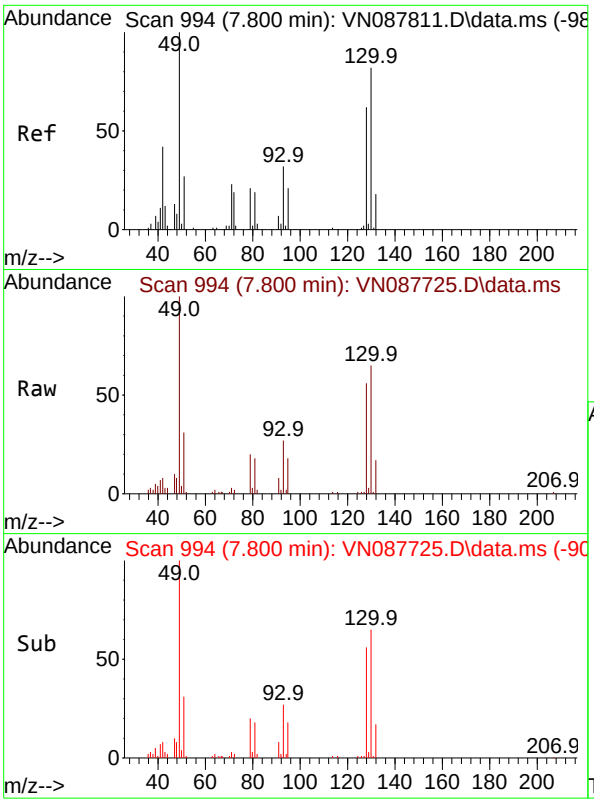
Quant Time: Sep 05 02:55:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

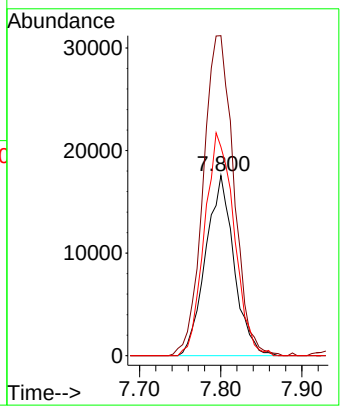




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.800 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:128 Resp: 4257

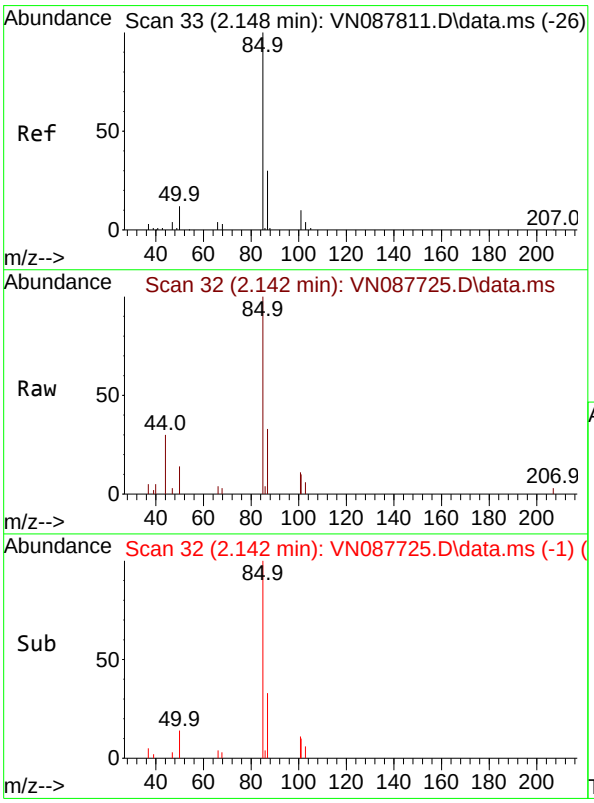
Ion	Ratio	Lower	Upper
128	100		
49	191.5	0.0	464.3
130	129.0	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

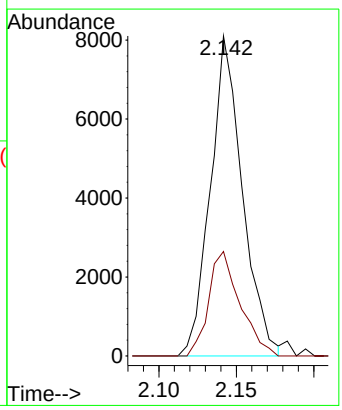
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

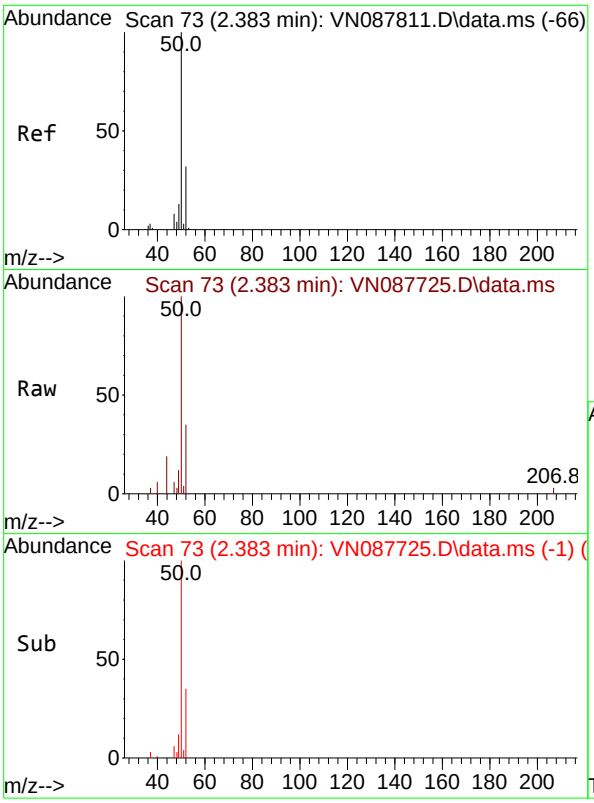


#2
Dichlorodifluoromethane
Concen: 4.330 ug/l
RT: 2.142 min Scan# 32
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 85 Resp: 11648

Ion	Ratio	Lower	Upper
85	100		
87	32.6	16.8	50.4

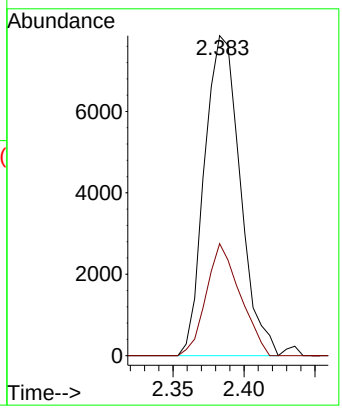




#3
Chloromethane
Concen: 5.010 ug/l
RT: 2.383 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 50 Resp: 1375

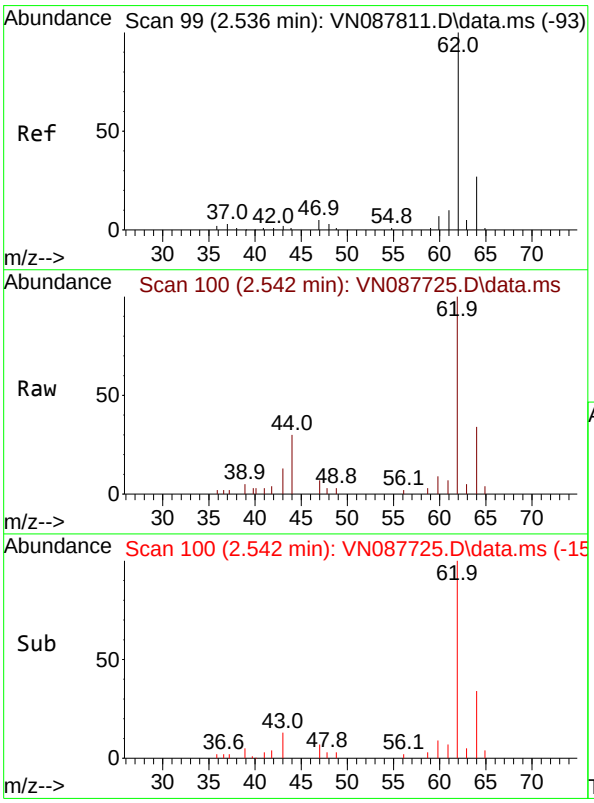
Ion	Ratio	Lower	Upper
50	100		
52	35.0	26.6	40.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

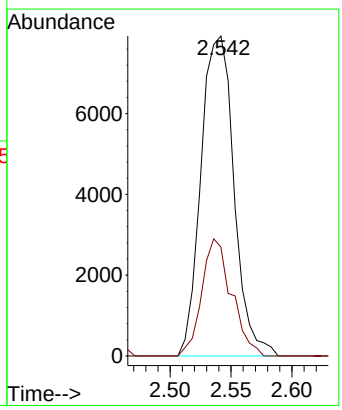
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

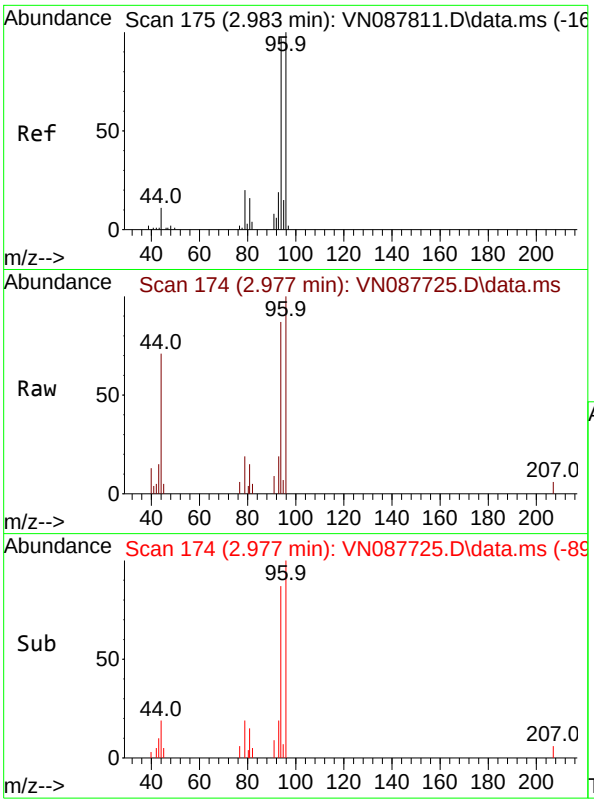


#4
Vinyl Chloride
Concen: 5.086 ug/l
RT: 2.542 min Scan# 100
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 62 Resp: 14969

Ion	Ratio	Lower	Upper
62	100		
64	34.0	25.5	38.3

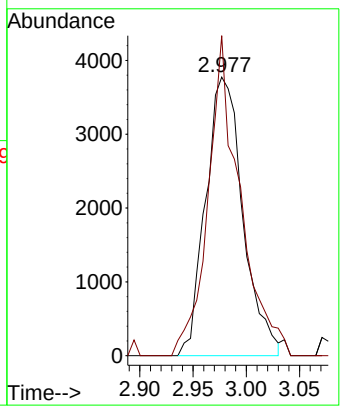




#5
Bromomethane
Concen: 5.656 ug/l
RT: 2.977 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 94 Resp: 917

Ion	Ratio	Lower	Upper
94	100		
96	109.4	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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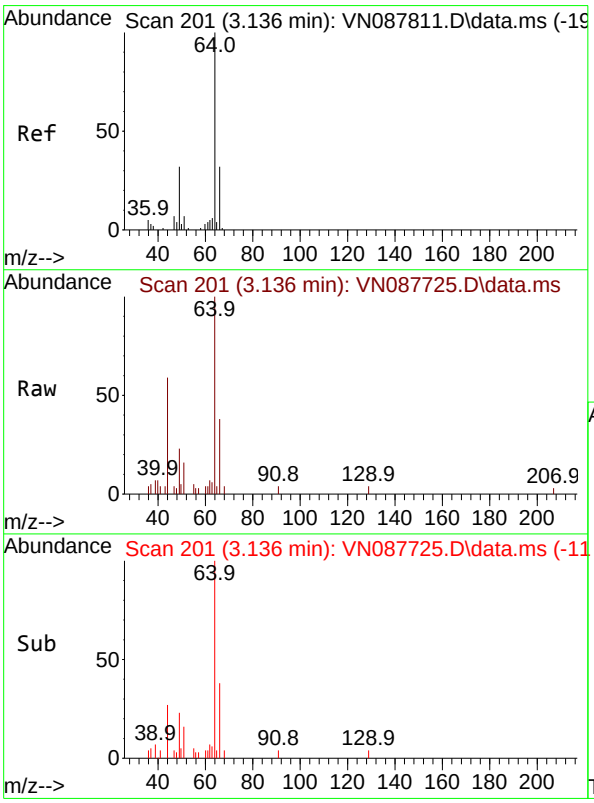
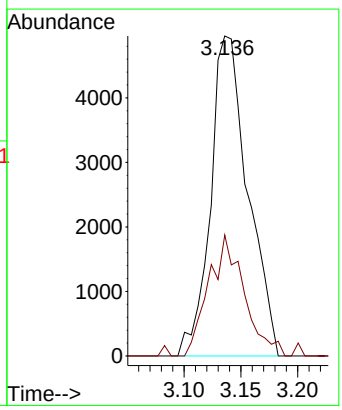
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

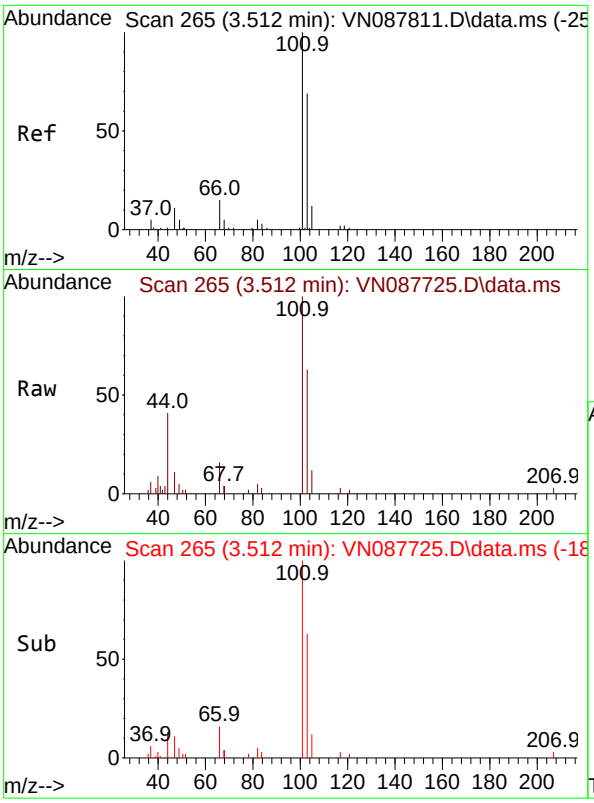


#6
Chloroethane
Concen: 5.889 ug/l
RT: 3.136 min Scan# 201
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 64 Resp: 11348

Ion	Ratio	Lower	Upper
64	100		
66	37.8	32.8	49.2

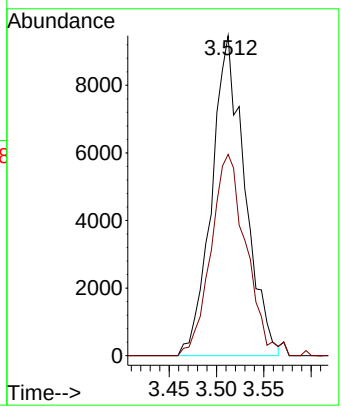




#7
Trichlorofluoromethane
Concen: 5.390 ug/l
RT: 3.512 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:101 Resp: 2299

Ion	Ratio	Lower	Upper
101	100		
103	62.9	45.7	68.5



Instrument :
MSVOA_N
ClientSampleId :
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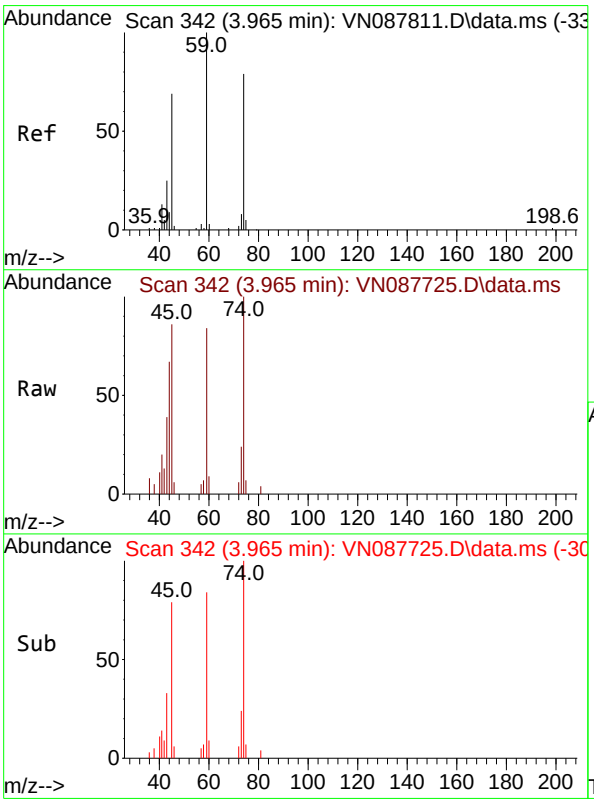
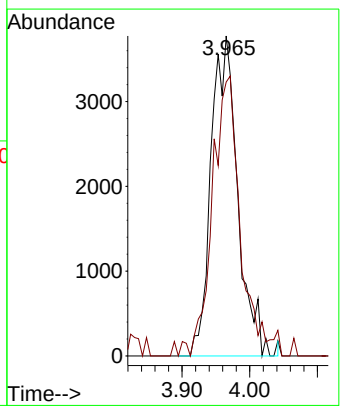
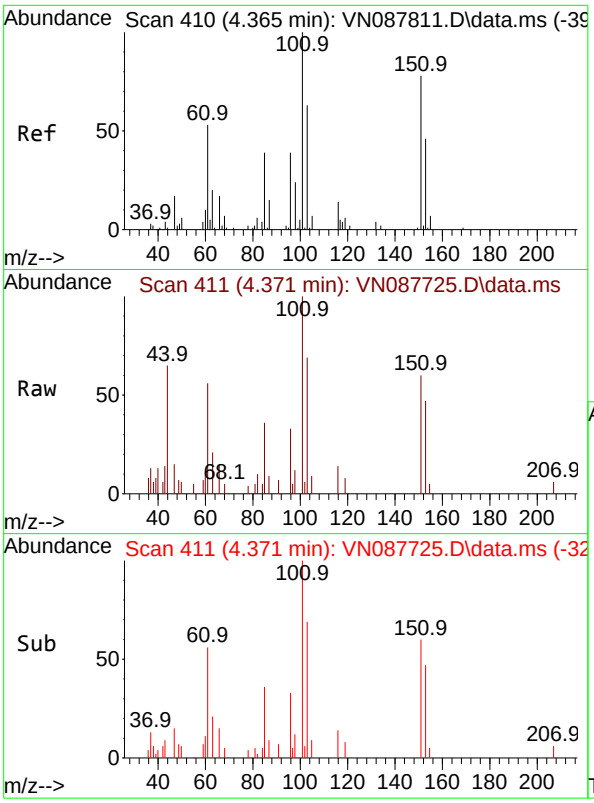


#8
Diethyl Ether
Concen: 5.839 ug/l m
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 74 Resp: 10337

Ion	Ratio	Lower	Upper
74	100		
45	88.9	20.4	183.8

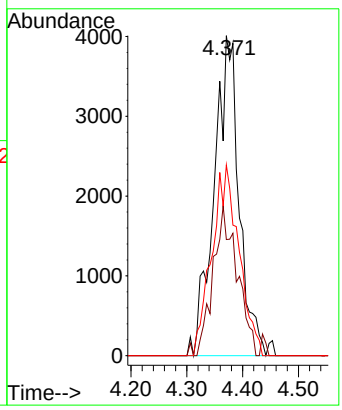




#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.679 ug/l m
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:101 Resp: 1260

Ion	Ratio	Lower	Upper
101	100		
85	25.4	0.0	95.6
151	63.9	0.0	85.8



Instrument :
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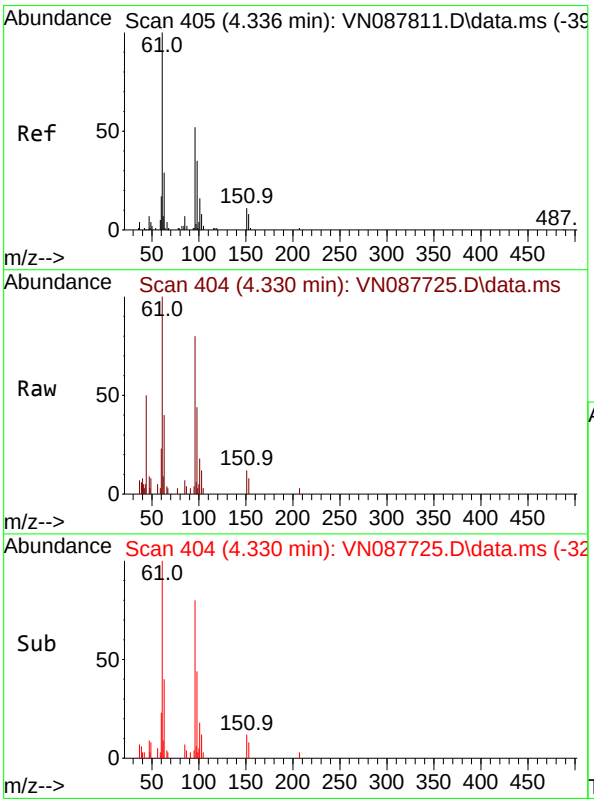
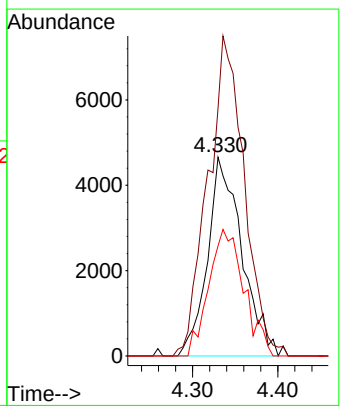
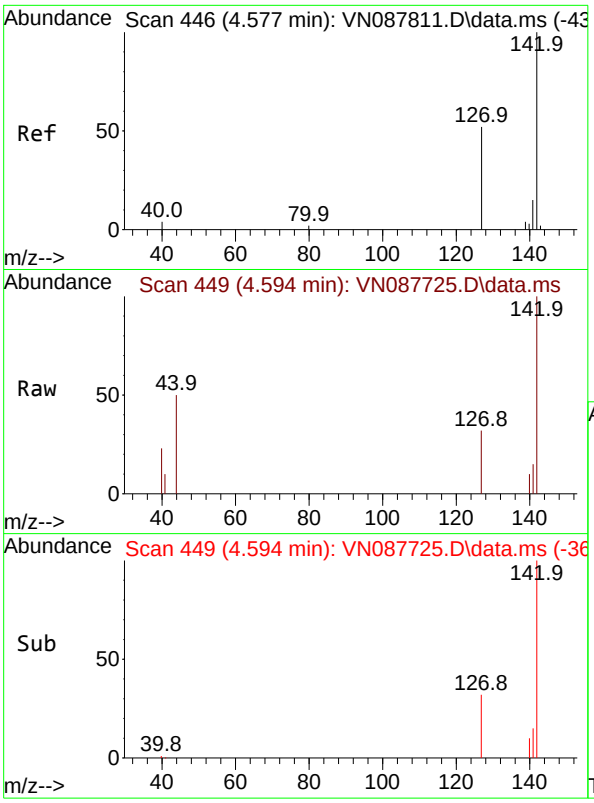


#10
1,1-Dichloroethene
Concen: 5.695 ug/l
RT: 4.330 min Scan# 404
Delta R.T. -0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 96 Resp: 13028

Ion	Ratio	Lower	Upper
96	100		
61	121.4	135.9	203.9#
98	55.4	59.2	88.8#

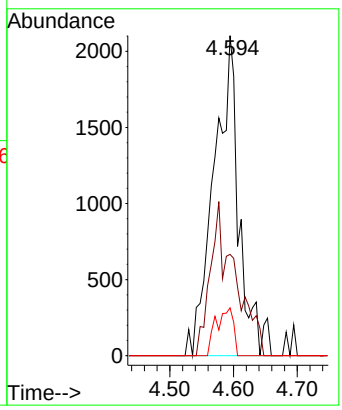




#11
Methyl Iodide
Concen: 3.195 ug/l m
RT: 4.594 min Scan# 44
Delta R.T. 0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:142 Resp: 573

Ion	Ratio	Lower	Upper
142	100		
127	31.7	27.9	83.7
141	14.9	9.6	28.8



Instrument :
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ClientSampleId :
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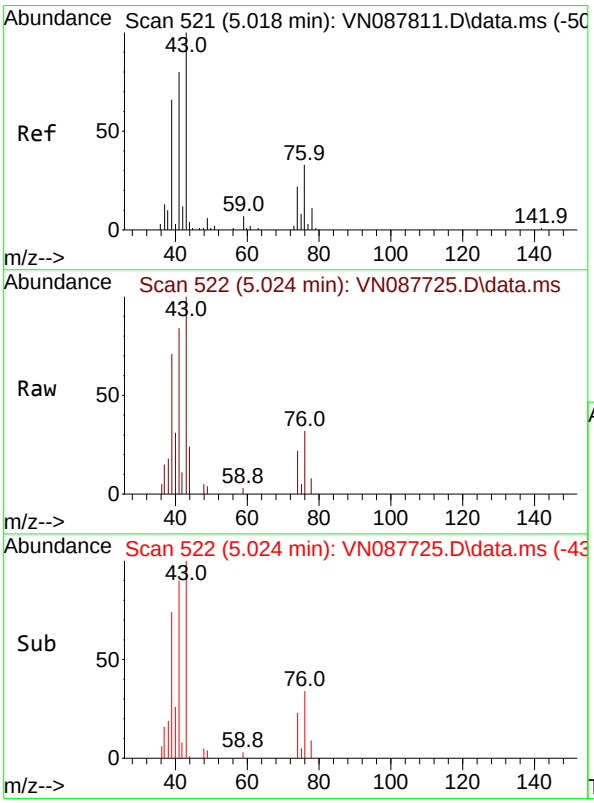
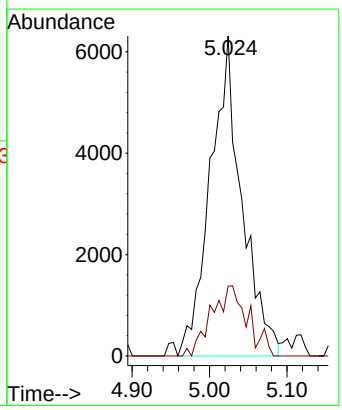
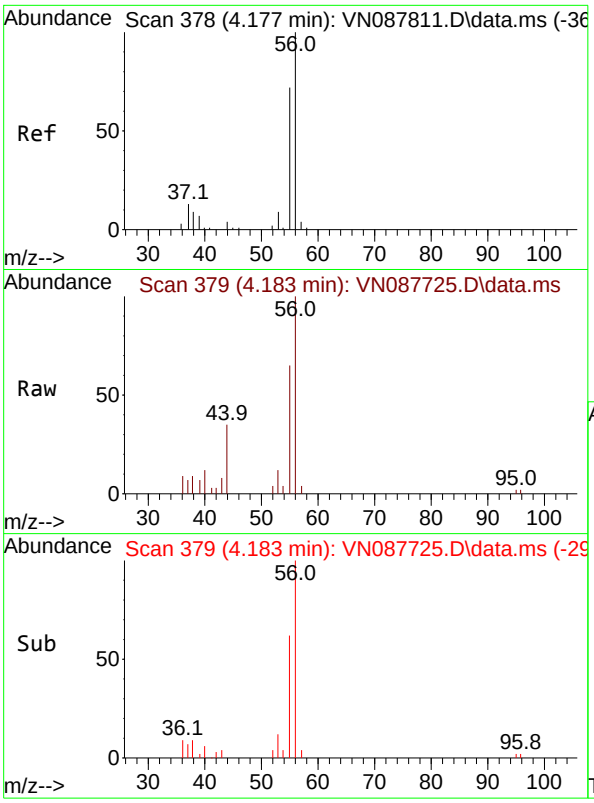


#12
Methyl Acetate
Concen: 4.306 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 43 Resp: 17852

Ion	Ratio	Lower	Upper
43	100		
74	22.2	17.5	26.3

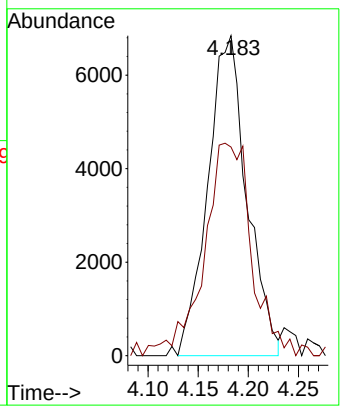




#13
Acrolein
Concen: 28.610 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 56 Resp: 1854

Ion	Ratio	Lower	Upper
56	100		
55	54.7	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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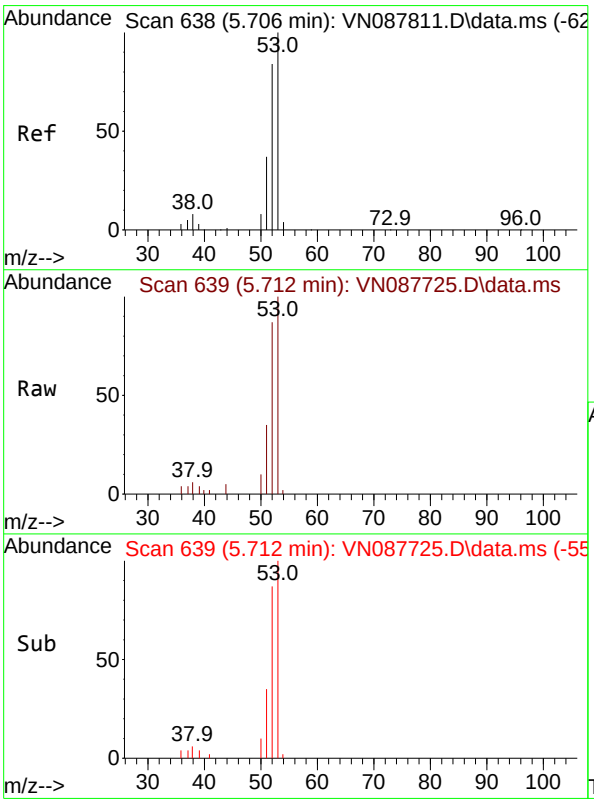
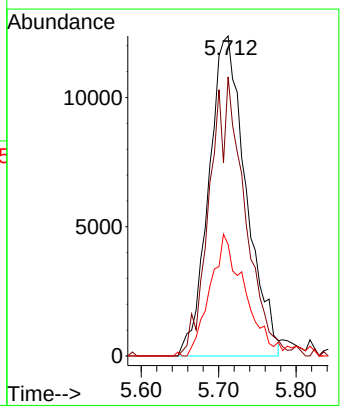
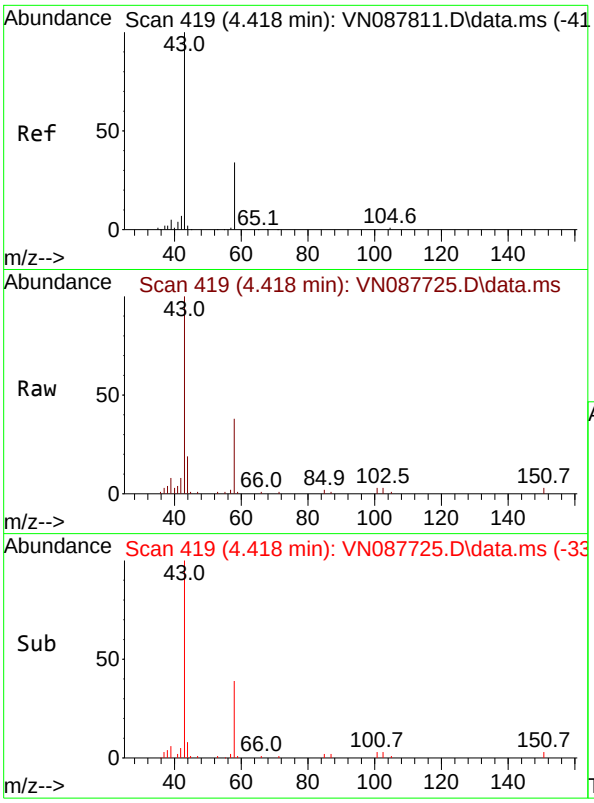


#14
Acrylonitrile
Concen: 23.088 ug/l
RT: 5.712 min Scan# 639
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 53 Resp: 41406

Ion	Ratio	Lower	Upper
53	100		
52	45.8	40.9	122.7
51	24.9	18.1	54.1





#15
Acetone
Concen: 33.931 ug/l m
RT: 4.418 min Scan# 41
Delta R.T. -0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 58 Resp: 1726

Ion	Ratio	Lower	Upper
58	100		
43	265.7	250.6	376.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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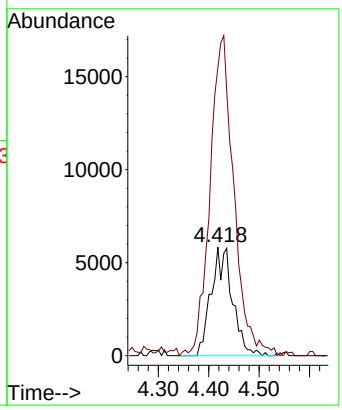
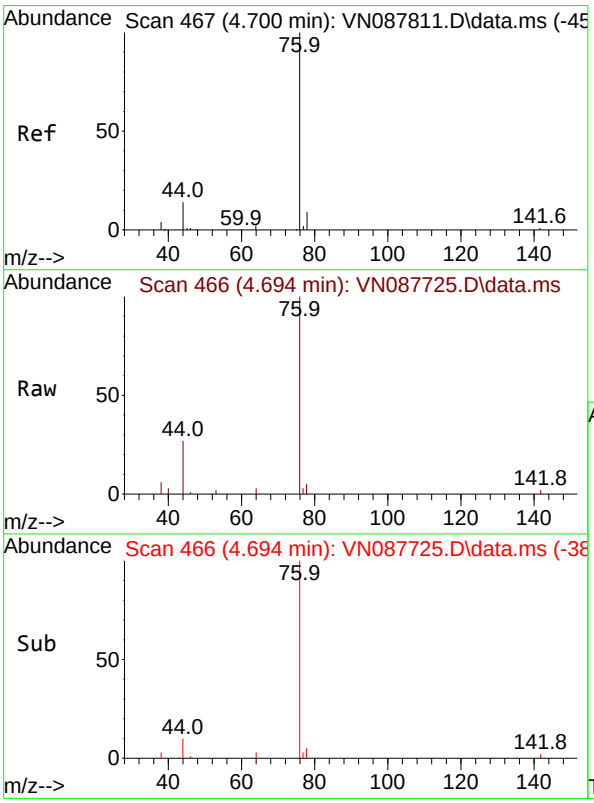
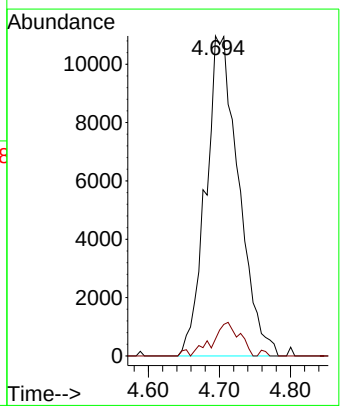


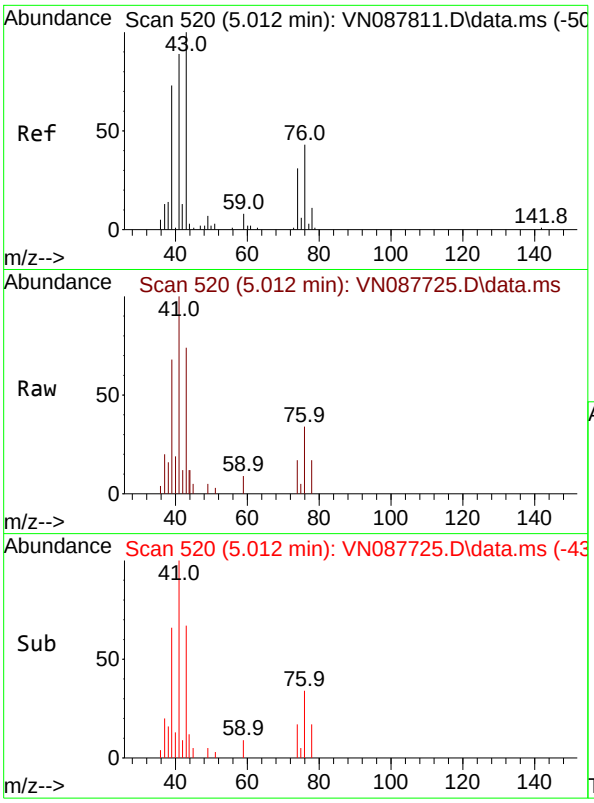


#16
Carbon Disulfide
Concen: 5.033 ug/l
RT: 4.694 min Scan# 466
Delta R.T. -0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 76 Resp: 35228

Ion	Ratio	Lower	Upper
76	100		
78	5.3	5.0	7.6

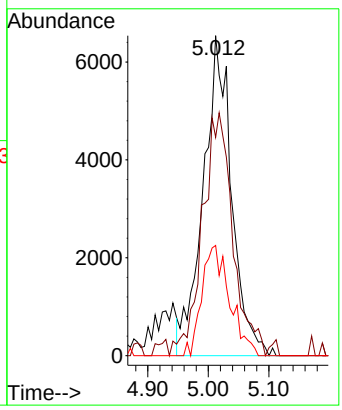




#17
Allyl chloride
Concen: 4.722 ug/l m
RT: 5.012 min Scan# 5
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 41 Resp: 2131

Ion	Ratio	Lower	Upper
41	100		
39	68.2	36.7	110.1
76	34.5	18.3	54.8



Instrument :
MSVOA_N
ClientSampleId :
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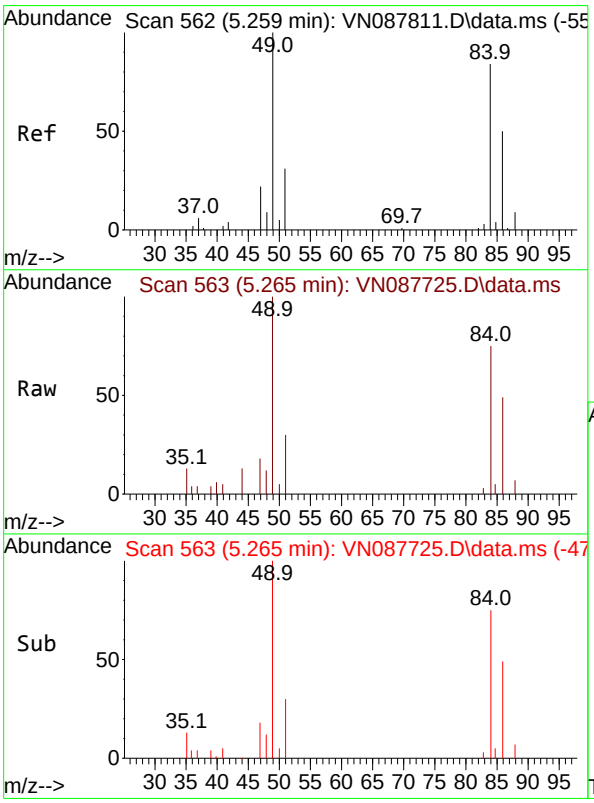
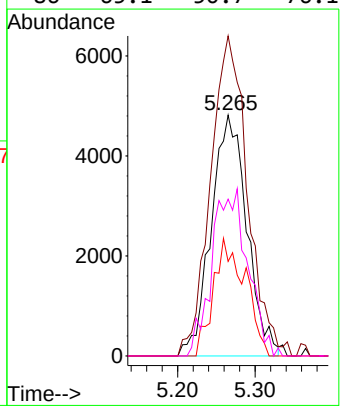
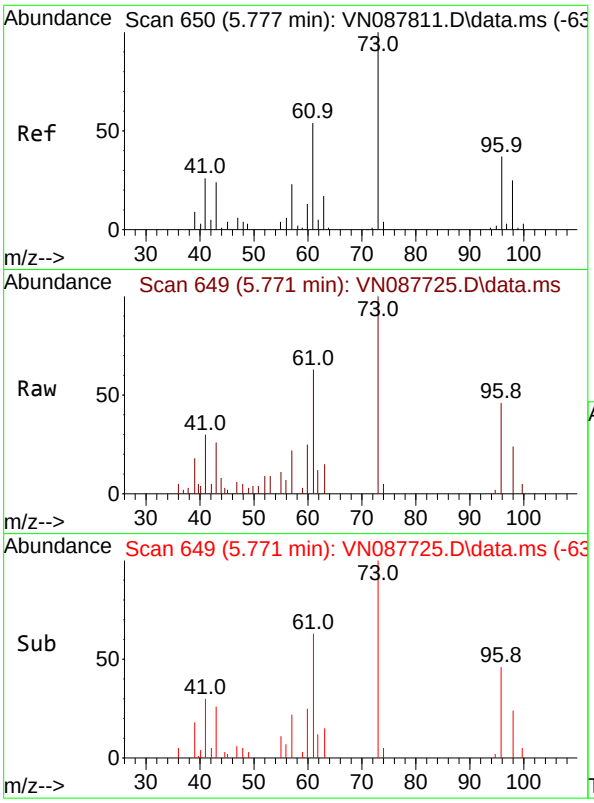


#18
Methylene Chloride
Concen: 5.346 ug/l
RT: 5.265 min Scan# 563
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 84 Resp: 15429

Ion	Ratio	Lower	Upper
84	100		
49	132.9	114.1	171.1
51	39.2	30.2	45.4
86	65.1	50.7	76.1

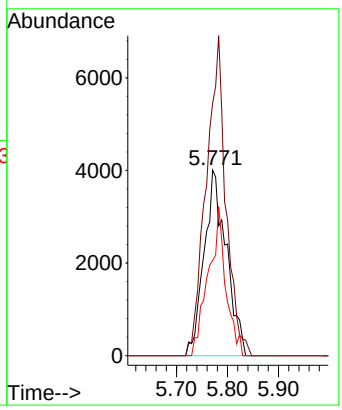




#19
trans-1,2-Dichloroethene
Concen: 4.541 ug/l m
RT: 5.771 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 96 Resp: 1212

Ion	Ratio	Lower	Upper
96	100		
61	136.0	106.4	159.6
98	51.3	48.9	73.3



Instrument :
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ClientSampleId :
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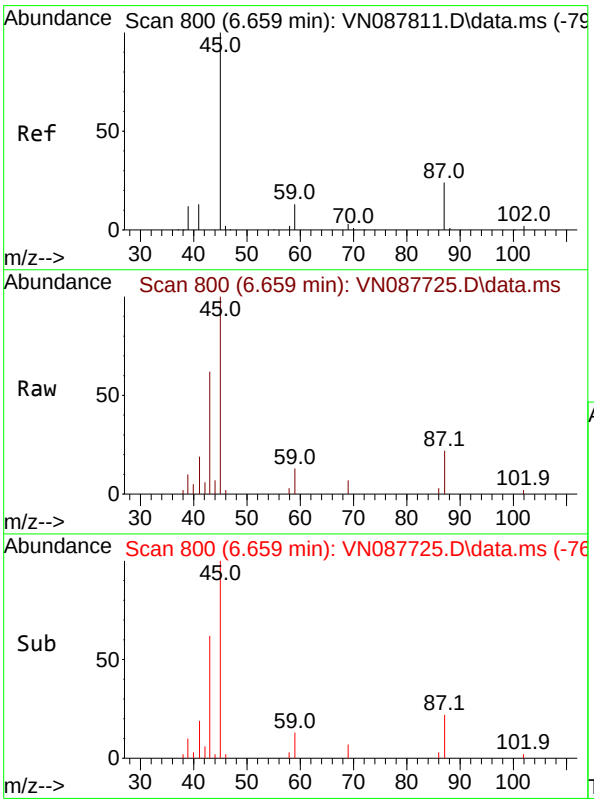
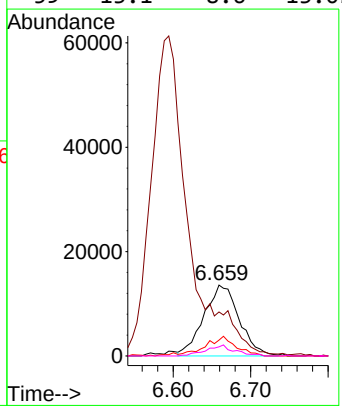
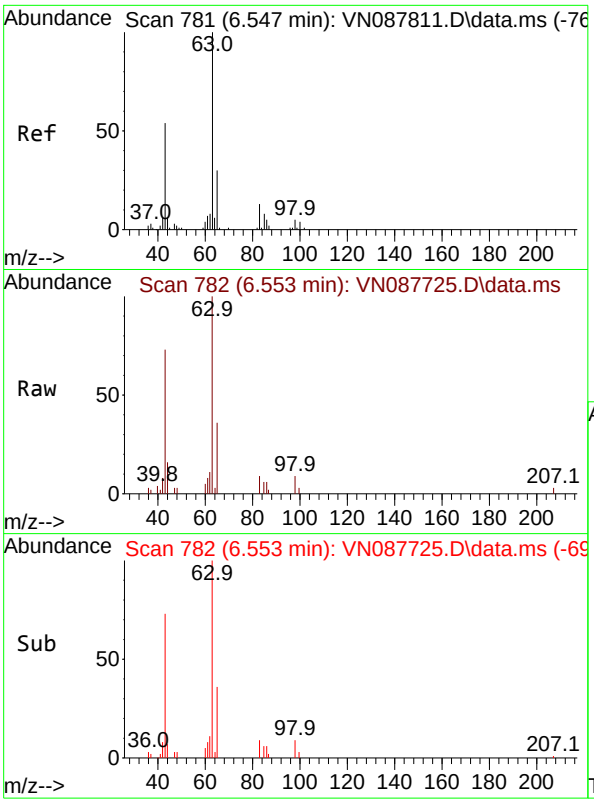


#20
Diisopropyl ether
Concen: 4.193 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 45 Resp: 43135

Ion	Ratio	Lower	Upper
45	100		
43	60.1	49.5	74.3
87	22.6	18.8	28.2
59	13.1	8.6	13.0#

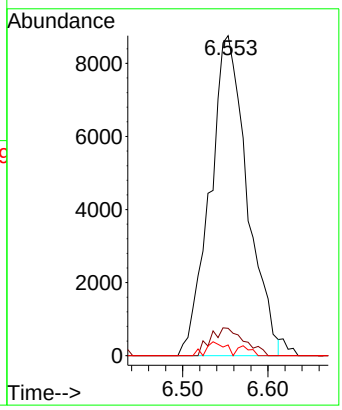




#21
1,1-Dichloroethane
Concen: 4.973 ug/l
RT: 6.553 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 63 Resp: 2660

Ion	Ratio	Lower	Upper
63	100		
98	8.5	2.9	8.8
100	3.3	1.8	5.3



Instrument :
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ClientSampleId :
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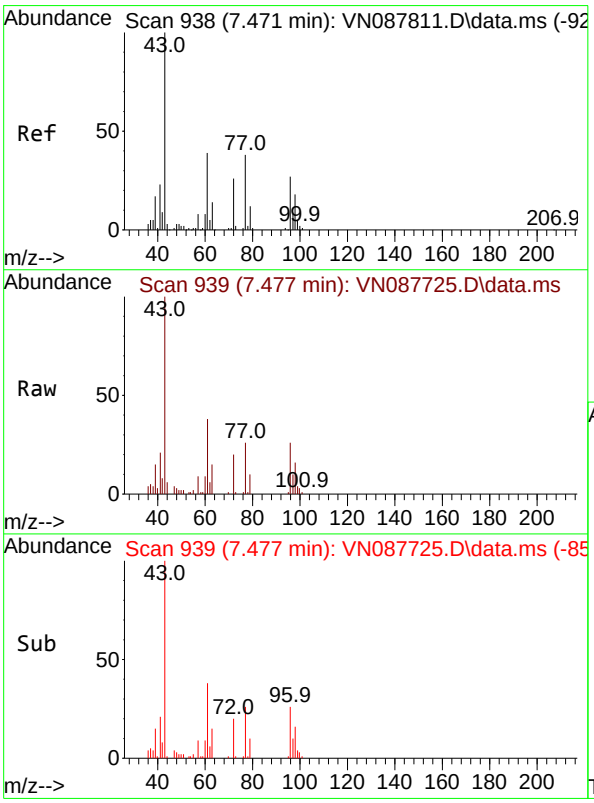
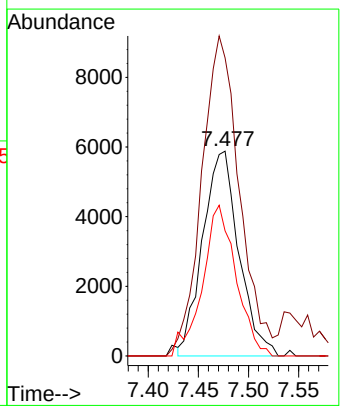
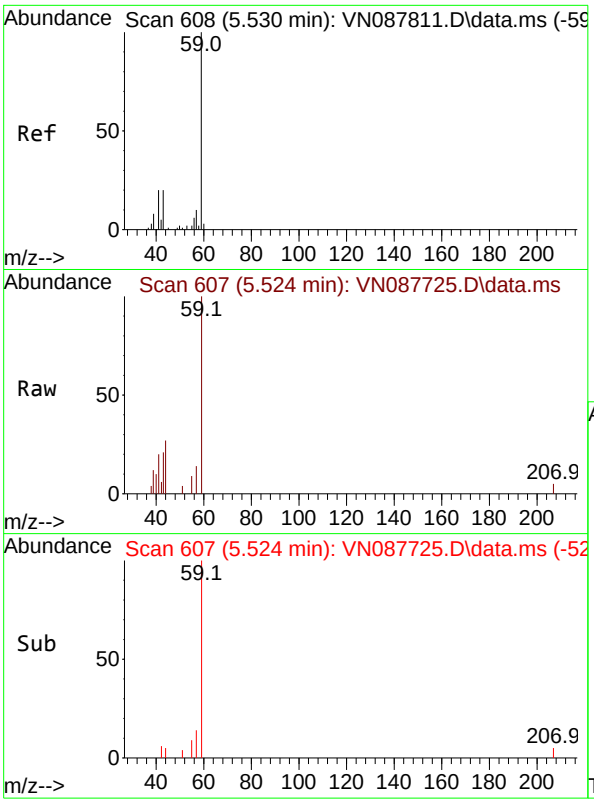


#22
cis-1,2-Dichloroethene
Concen: 4.514 ug/l
RT: 7.477 min Scan# 939
Delta R.T. 0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 96 Resp: 14747

Ion	Ratio	Lower	Upper
96	100		
61	162.9	118.2	177.2
98	65.6	51.6	77.4

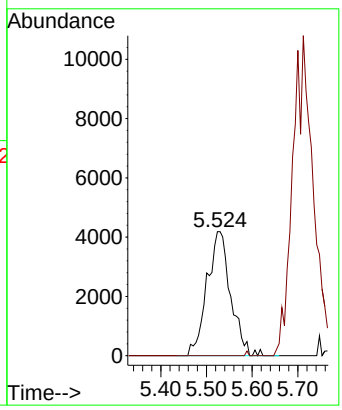




#23
tert-Butyl Alcohol
Concen: 20.107 ug/l m
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 59 Resp: 1498

Ion	Ratio	Lower	Upper
59	100		
52	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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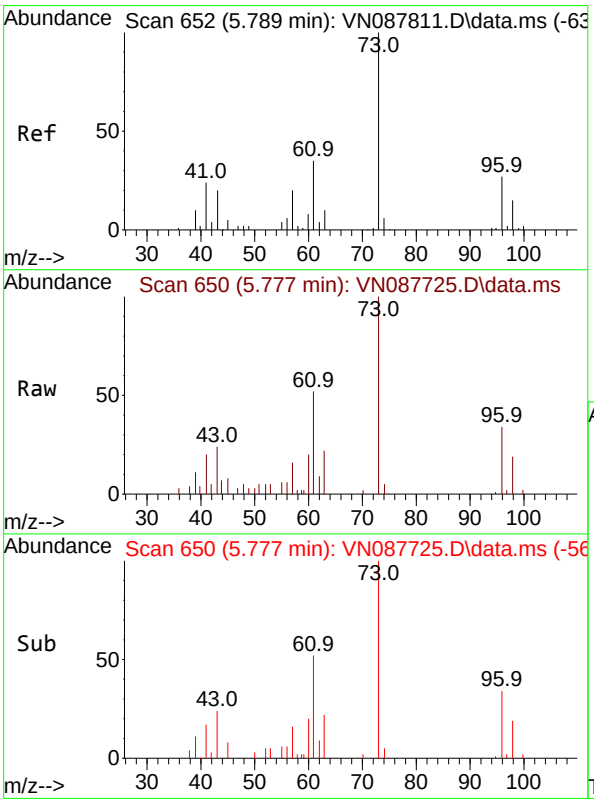
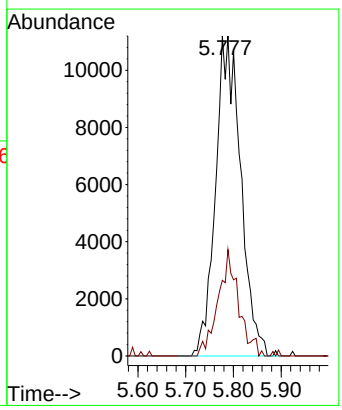
Supervised By :Mahesh Dadoda 09/05/2025

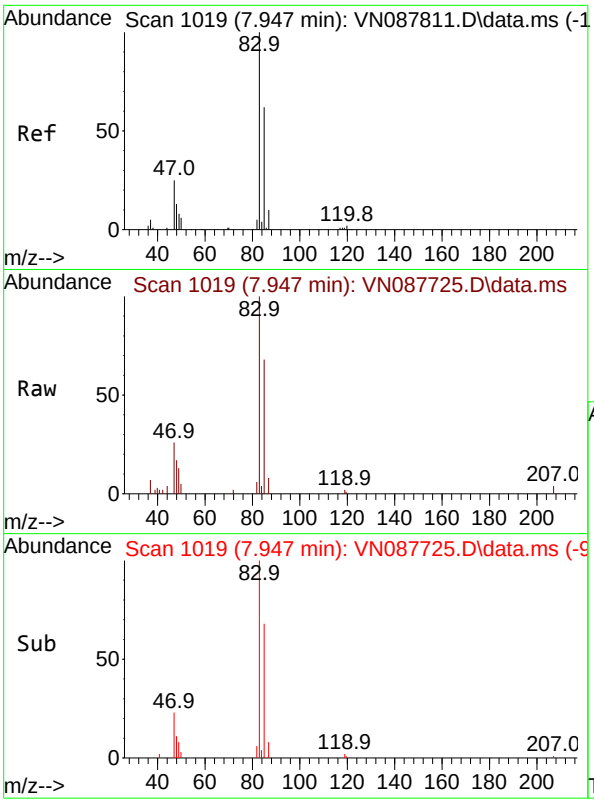


#24
Methyl tert-Butyl Ether
Concen: 4.097 ug/l m
RT: 5.777 min Scan# 650
Delta R.T. -0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 73 Resp: 41065

Ion	Ratio	Lower	Upper
73	100		
43	16.3	16.8	25.2#

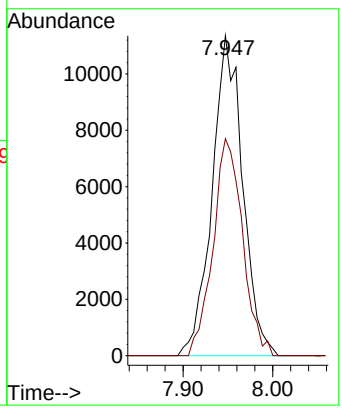




#25
Chloroform
Concen: 4.769 ug/l
RT: 7.947 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 83 Resp: 2685

Ion	Ratio	Lower	Upper
83	100		
85	67.8	47.7	71.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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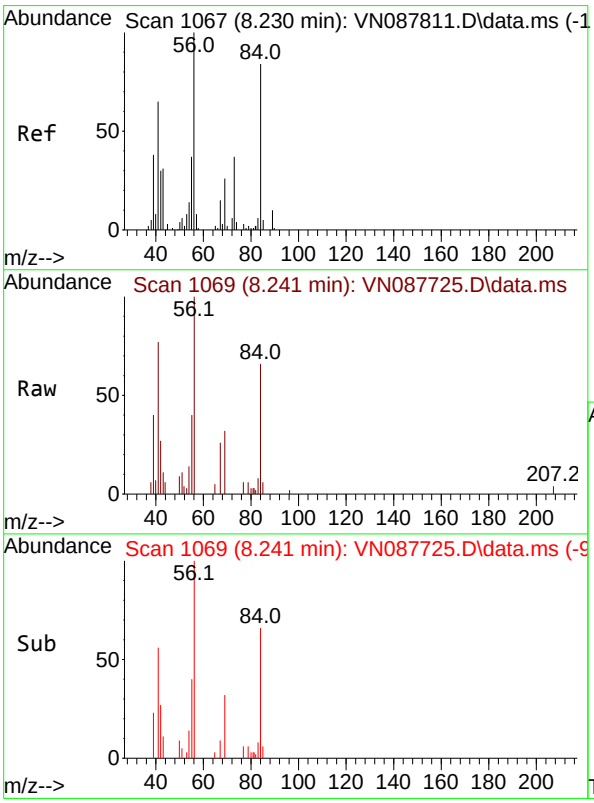
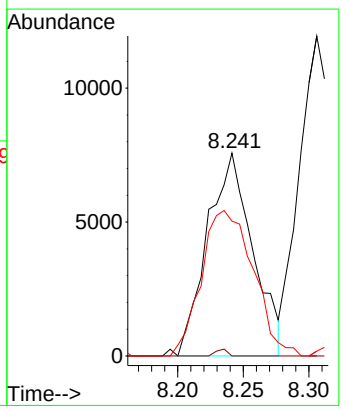
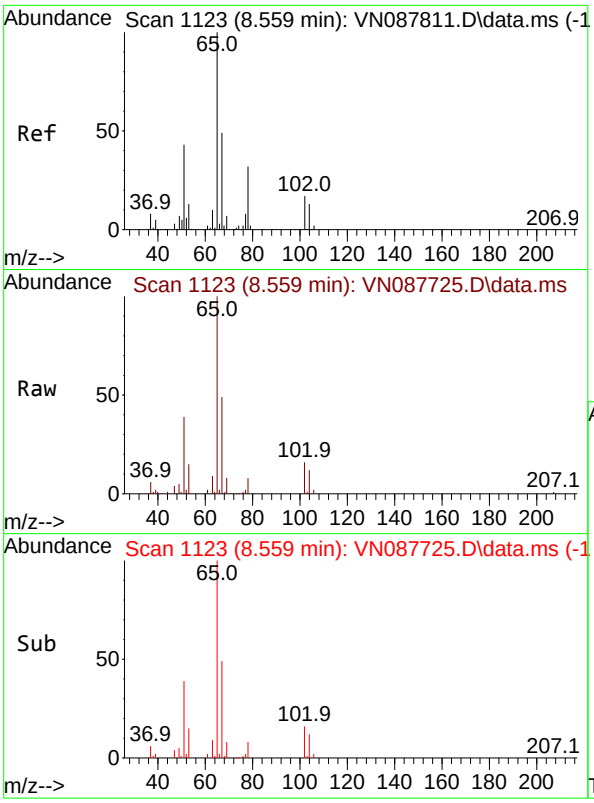


#26
Cyclohexane
Concen: 4.308 ug/l
RT: 8.241 min Scan# 1069
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 56 Resp: 18224

Ion	Ratio	Lower	Upper
56	100		
89	0.9	0.0	0.0#
84	82.1	69.4	104.2





#27
1,2-Dichloroethane-d4
Concen: 29.081 ug/l
RT: 8.559 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 65 Resp: 11148

Ion	Ratio	Lower	Upper
65	100		
67	51.4	39.6	59.4

Instrument :
MSVOA_N
ClientSampleId :
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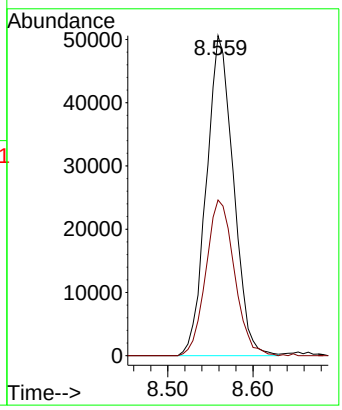
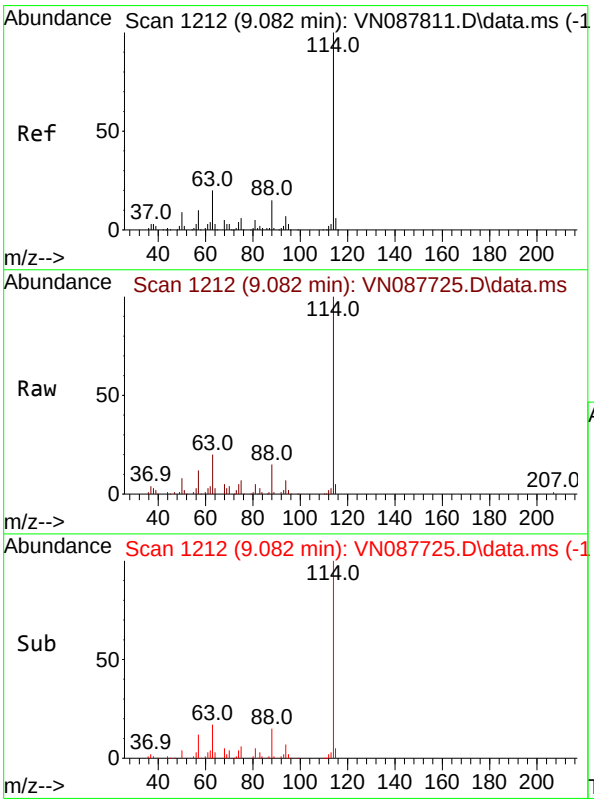
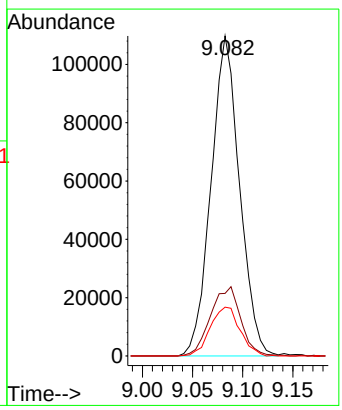


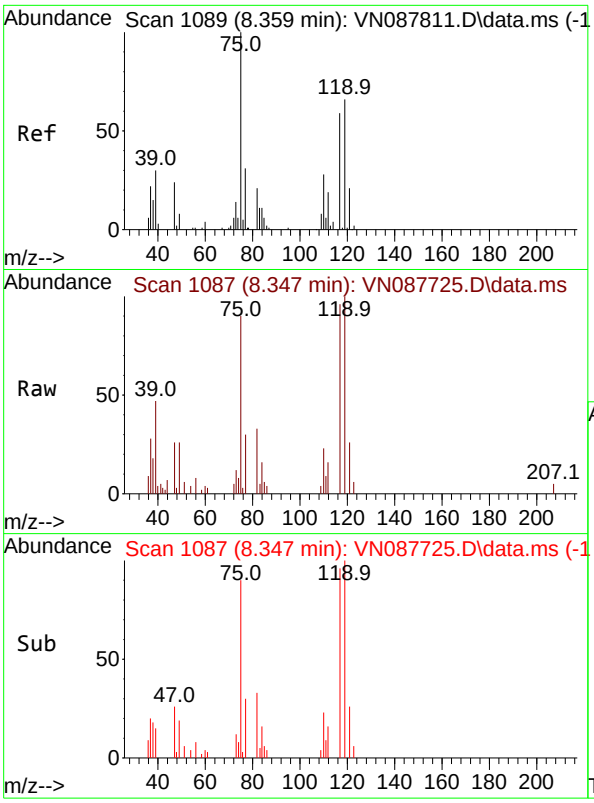


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:114 Resp: 216859

Ion	Ratio	Lower	Upper
114	100		
63	22.9	18.3	27.5
88	15.9	12.4	18.6

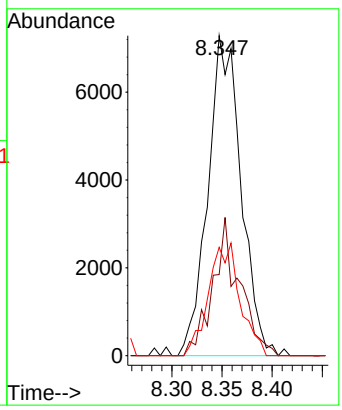




#29
1,1-Dichloropropene
Concen: 4.808 ug/l
RT: 8.347 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 75 Resp: 1671

Ion	Ratio	Lower	Upper
75	100		
110	22.6	0.0	64.4
77	19.5	0.0	62.2



Instrument :
MSVOA_N
ClientSampleId :
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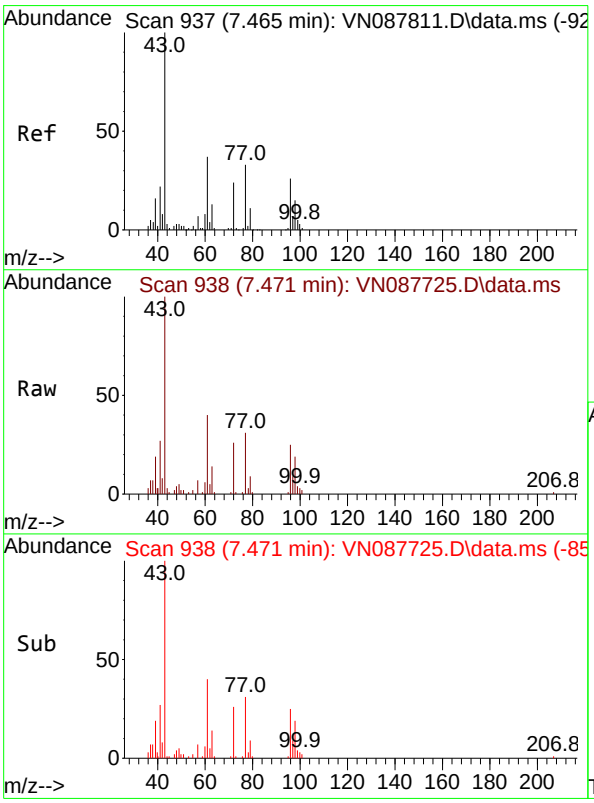
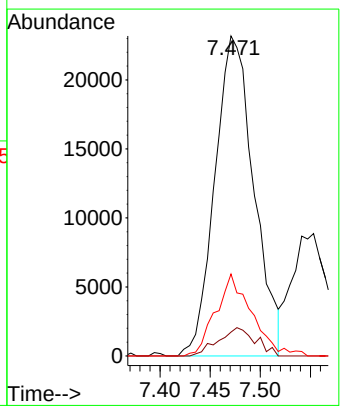
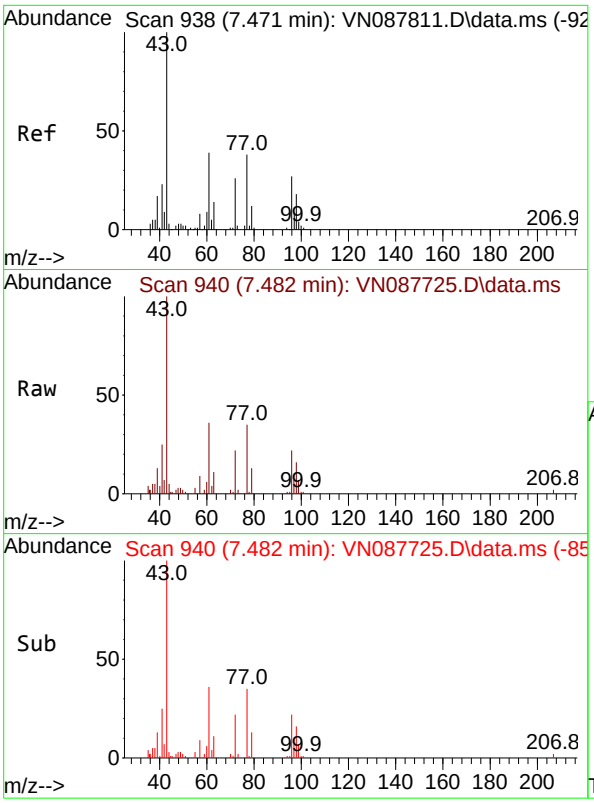


#30
2-Butanone
Concen: 24.948 ug/l
RT: 7.471 min Scan# 938
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 43 Resp: 62809

Ion	Ratio	Lower	Upper
43	100		
57	7.1	6.3	9.5
72	22.8	21.4	32.2

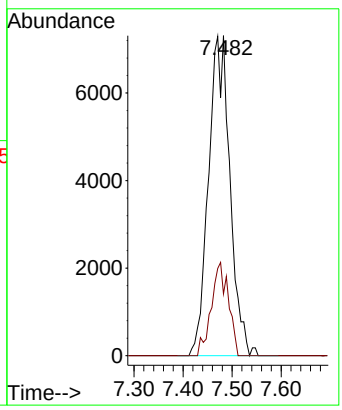




#31
2,2-Dichloropropane
Concen: 5.085 ug/l m
RT: 7.482 min Scan# 94
Delta R.T. 0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 77 Resp: 2214

Ion	Ratio	Lower	Upper
77	100		
97	22.0	17.1	25.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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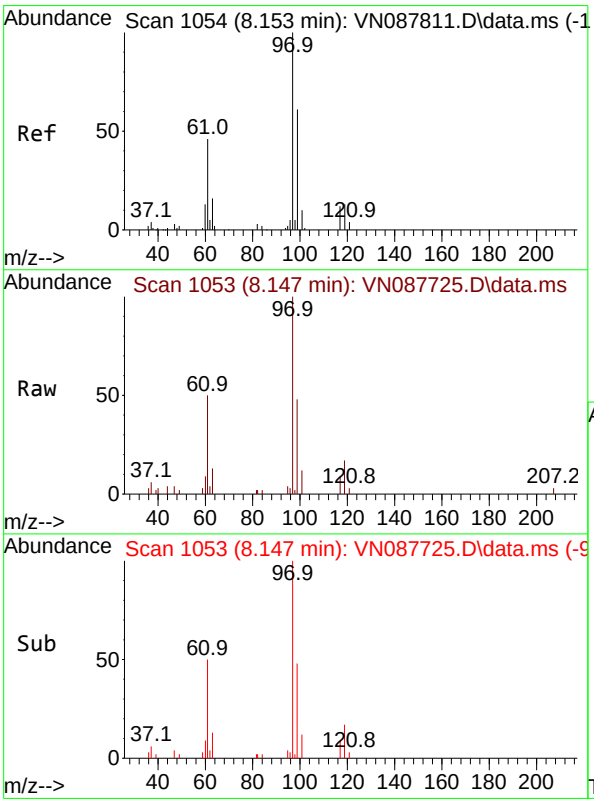
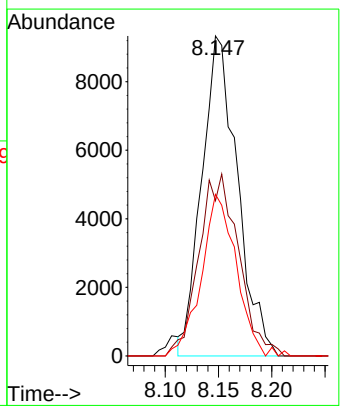
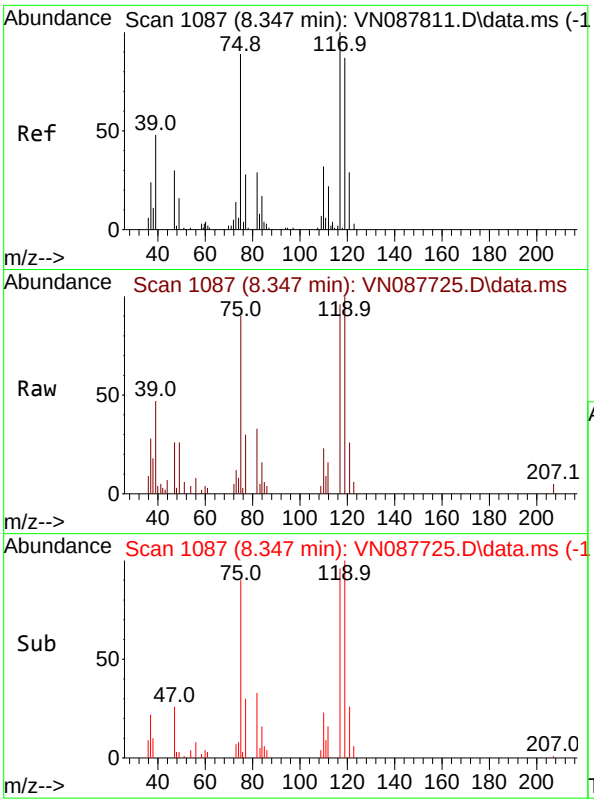


#32
1,1,1-Trichloroethane
Concen: 4.859 ug/l
RT: 8.147 min Scan# 1053
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 97 Resp: 21664

Ion	Ratio	Lower	Upper
97	100		
99	63.3	52.2	78.4
61	49.2	37.9	56.9

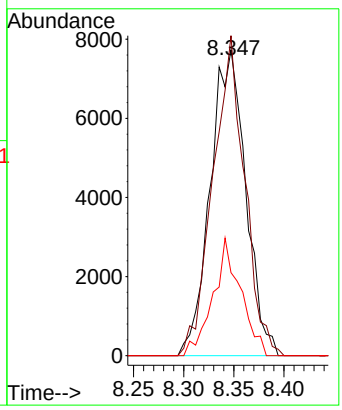




#33
Carbon Tetrachloride
Concen: 5.178 ug/l
RT: 8.347 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:117 Resp: 1899

Ion	Ratio	Lower	Upper
117	100		
119	104.6	77.3	115.9
121	27.2	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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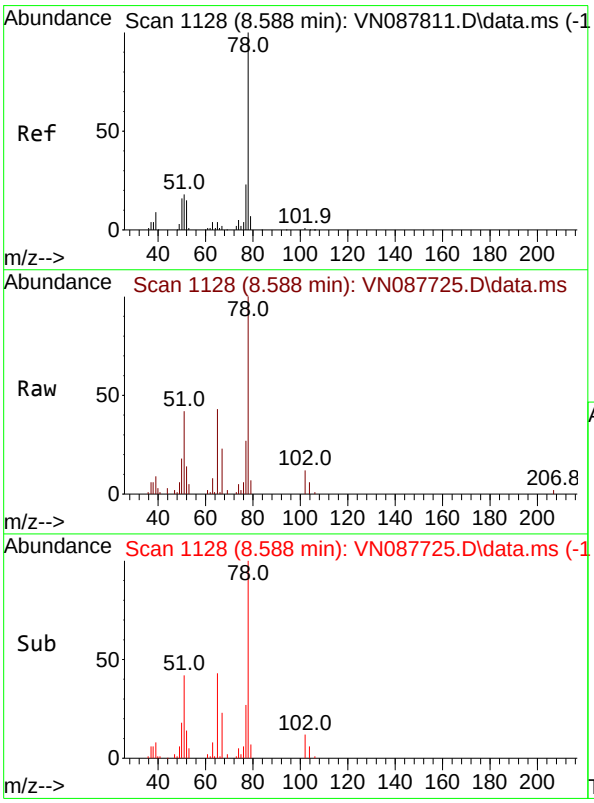
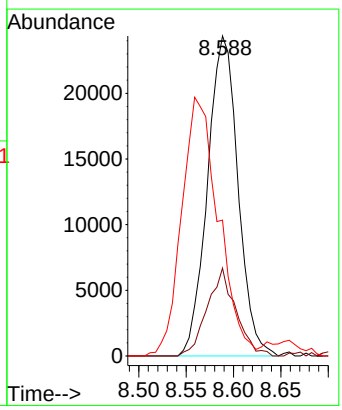
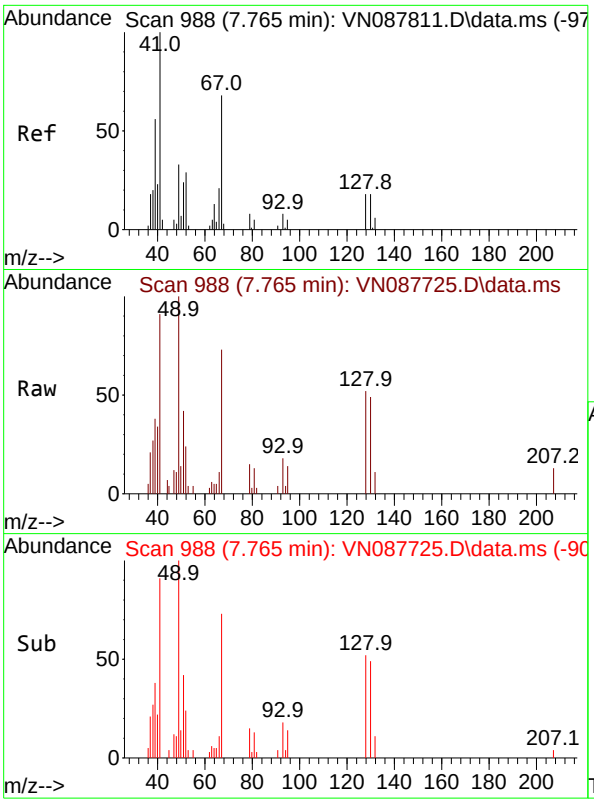


#34
Benzene
Concen: 4.965 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 78 Resp: 54727

Ion	Ratio	Lower	Upper
78	100		
77	27.4	20.3	30.5
51	38.7	18.0	27.0#

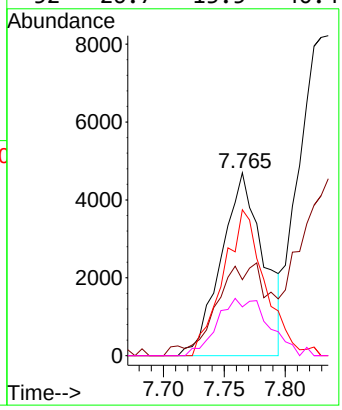




#35
Methacrylonitrile
Concen: 4.140 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 41 Resp: 1132

Ion	Ratio	Lower	Upper
41	100		
39	36.2	27.1	81.2
67	79.7	32.1	96.5
52	26.7	13.5	40.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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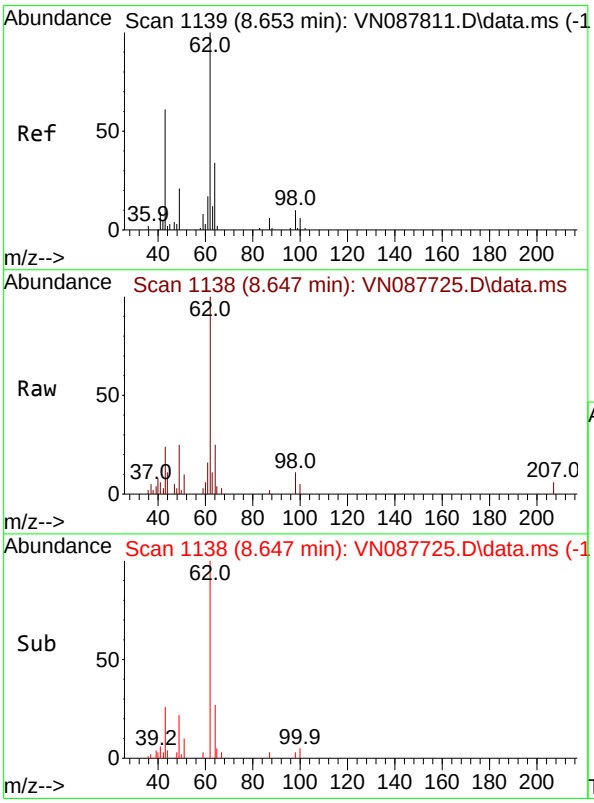
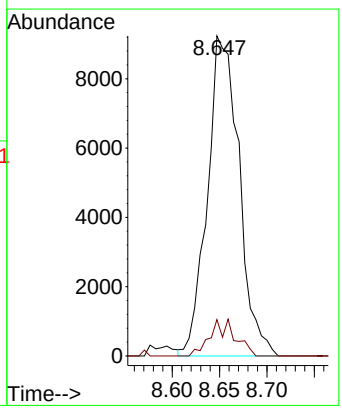
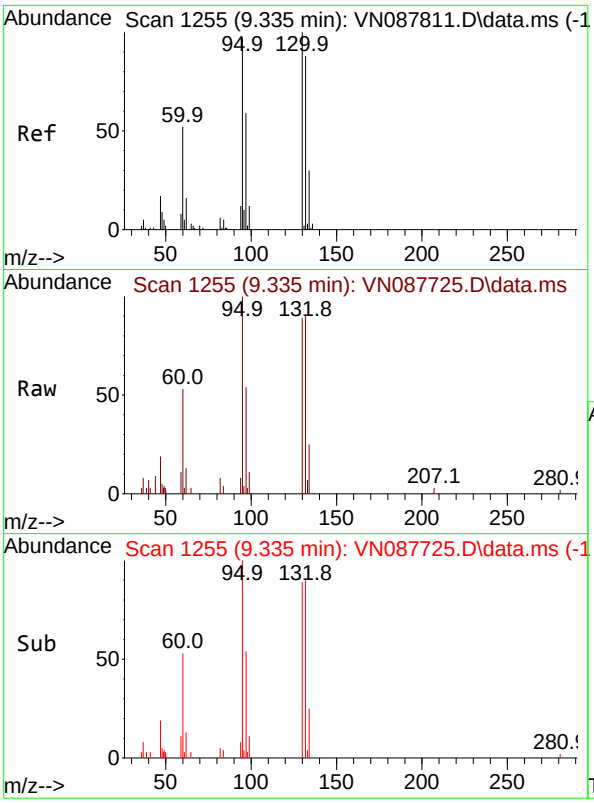


#36
1,2-Dichloroethane
Concen: 4.893 ug/l
RT: 8.647 min Scan# 1138
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 62 Resp: 21499

Ion	Ratio	Lower	Upper
62	100		
98	4.8	7.2	10.8#

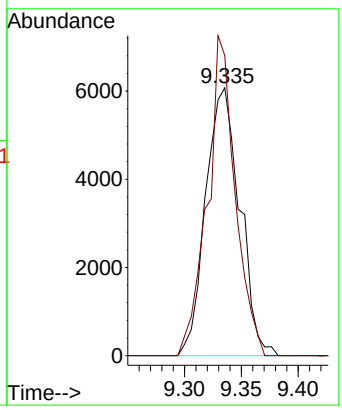




#37
Trichloroethene
Concen: 5.242 ug/l
RT: 9.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:130 Resp: 1272

Ion	Ratio	Lower	Upper
130	100		
95	112.1	82.7	124.1



Instrument :
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ClientSampleId :
VSTDICC005

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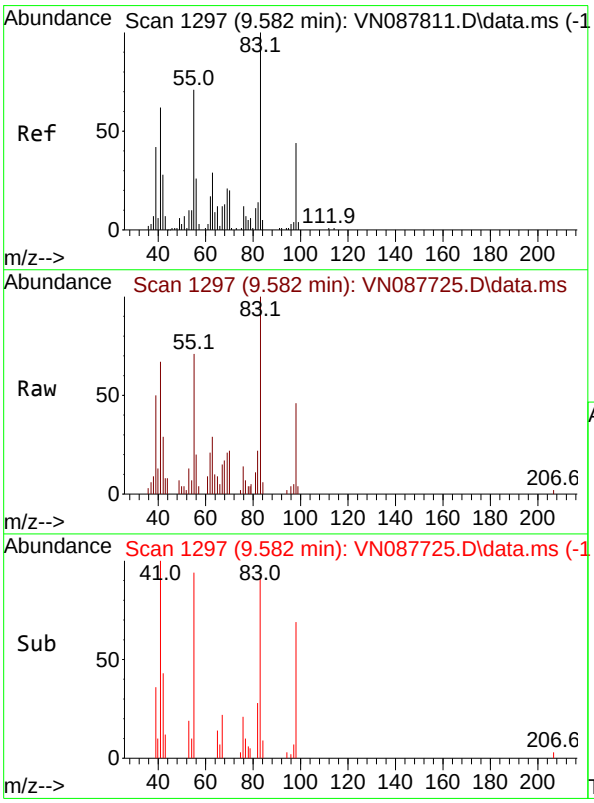
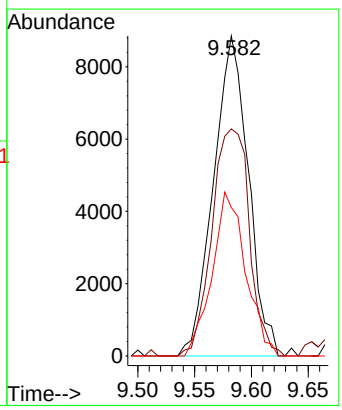
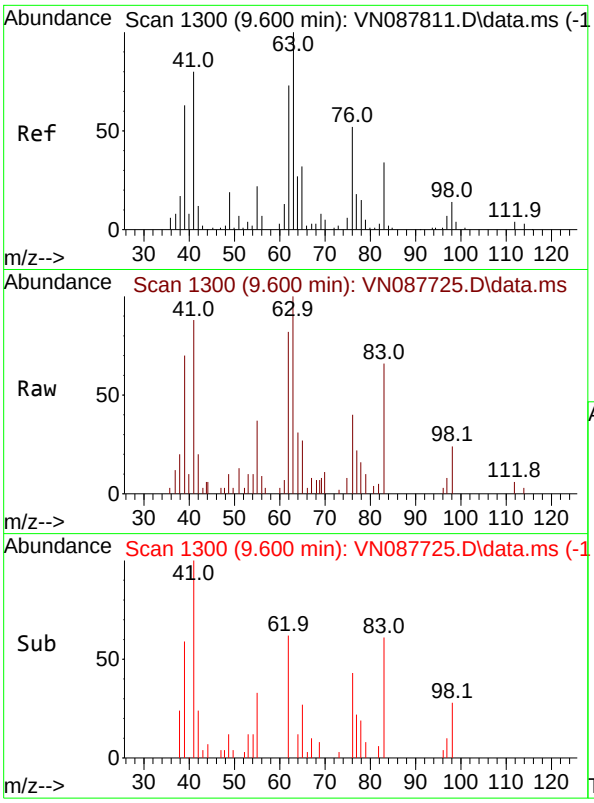


#38
Methylcyclohexane
Concen: 4.768 ug/l
RT: 9.582 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 83 Resp: 18908

Ion	Ratio	Lower	Upper
83	100		
55	76.1	40.4	121.1
98	49.3	24.0	72.0

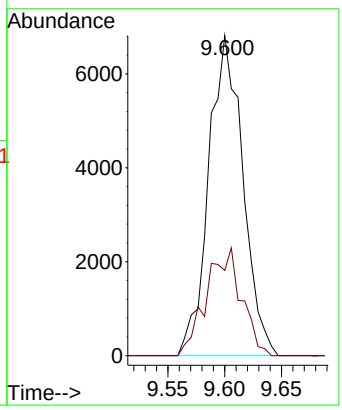




#39
1,2-Dichloropropane
Concen: 5.045 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 63 Resp: 1425

Ion	Ratio	Lower	Upper
63	100		
65	26.7	24.1	36.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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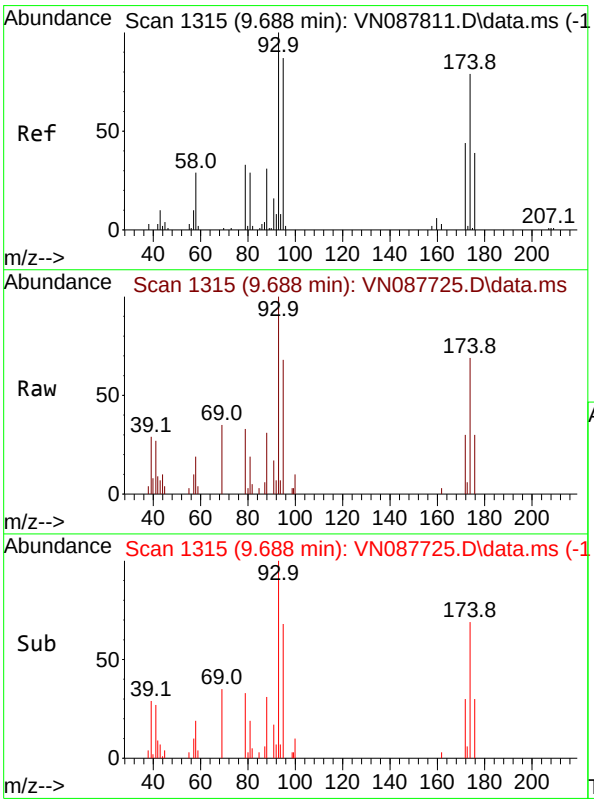
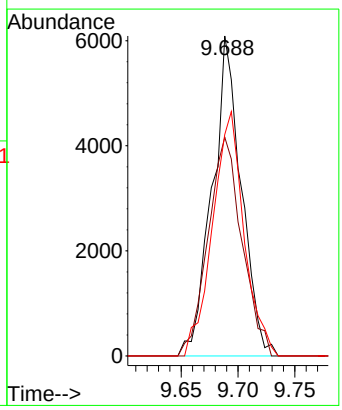
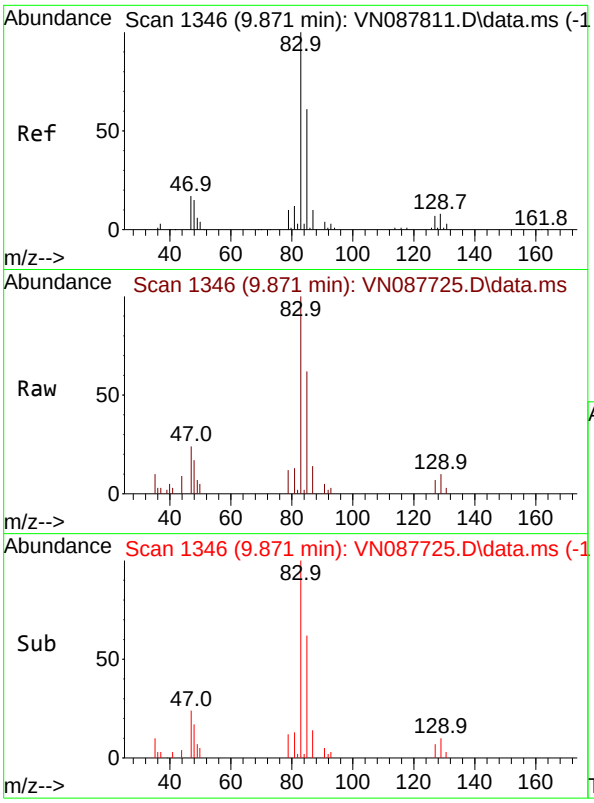


#40
Dibromomethane
Concen: 5.143 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 93 Resp: 10862

Ion	Ratio	Lower	Upper
93	100		
95	79.4	0.0	168.4
174	82.3	0.0	162.8

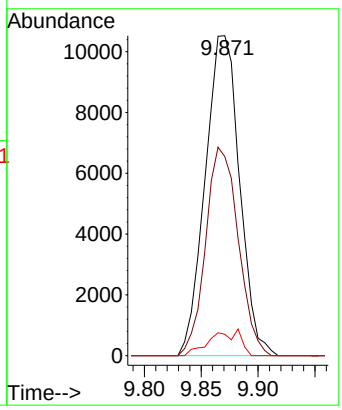




#41
Bromodichloromethane
Concen: 5.018 ug/l
RT: 9.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 83 Resp: 2213

Ion	Ratio	Lower	Upper
83	100		
85	62.3	47.3	70.9
127	6.7	5.2	7.8



Instrument :
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ClientSampleId :
VSTDICC005

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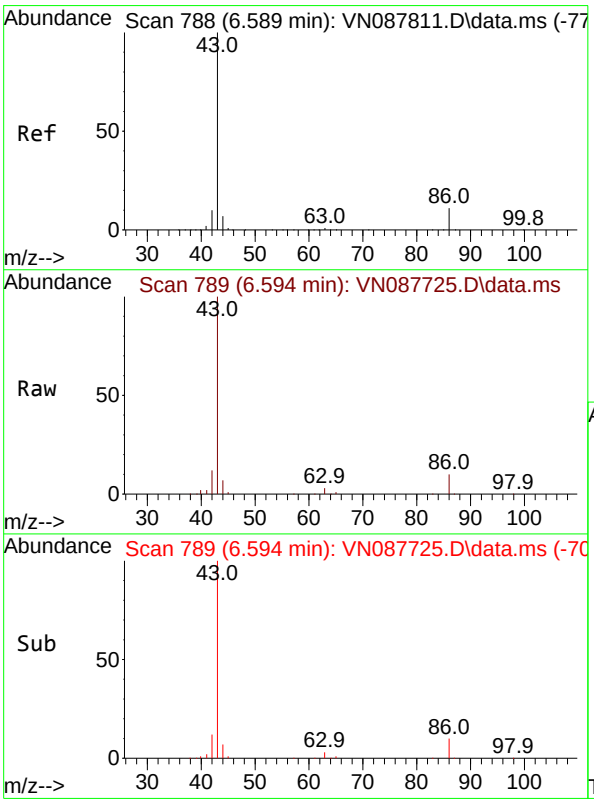
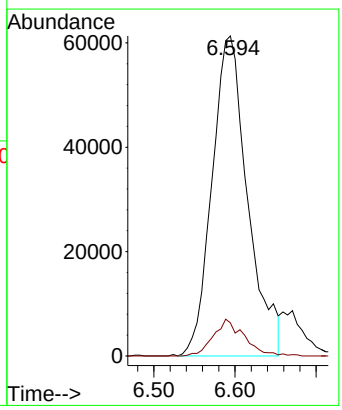
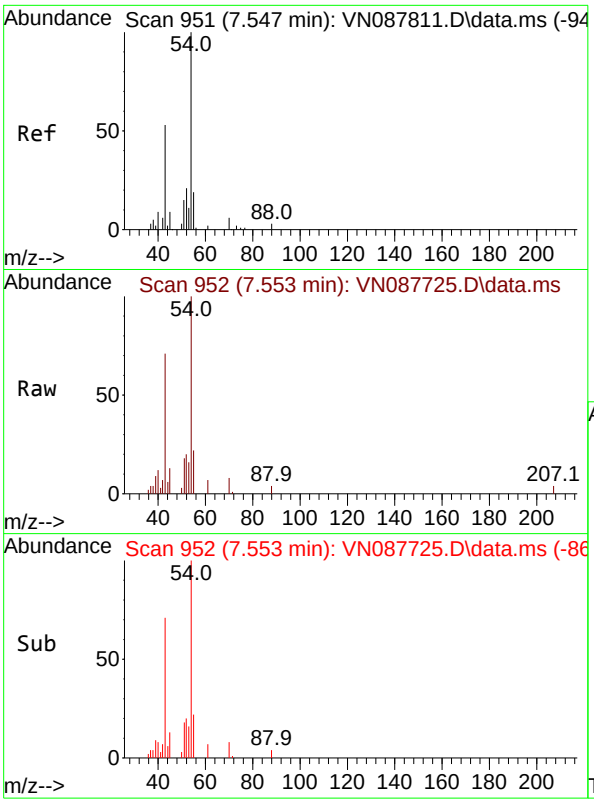


#42
Vinyl Acetate
Concen: 22.588 ug/l
RT: 6.594 min Scan# 789
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 43 Resp: 187082

Ion	Ratio	Lower	Upper
43	100		
86	6.7	7.7	11.5#





#43
Ethyl Acetate
Concen: 4.902 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 43 Resp: 2432

Ion	Ratio	Lower	Upper
43	100		
45	12.3	10.5	15.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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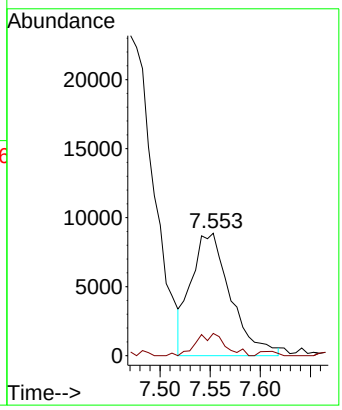
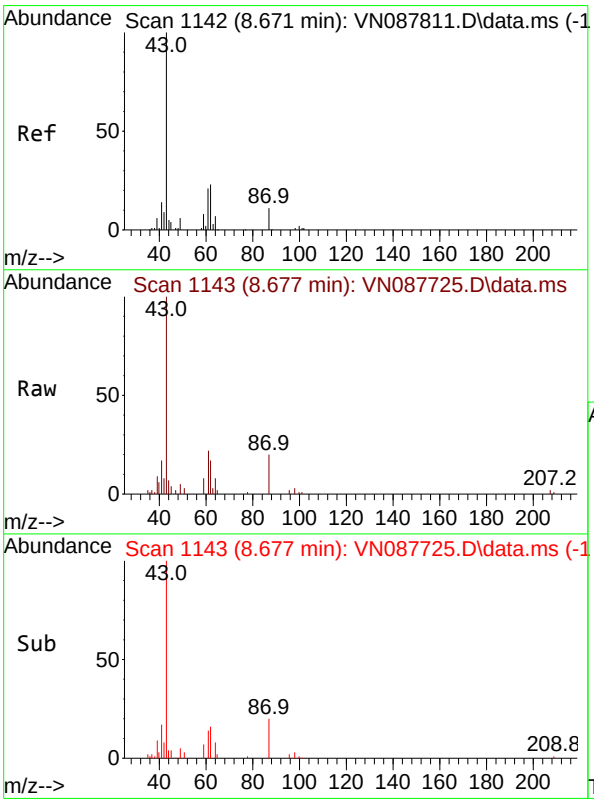
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

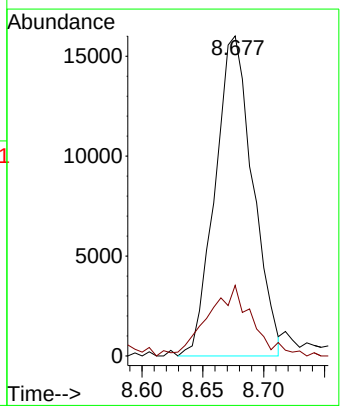


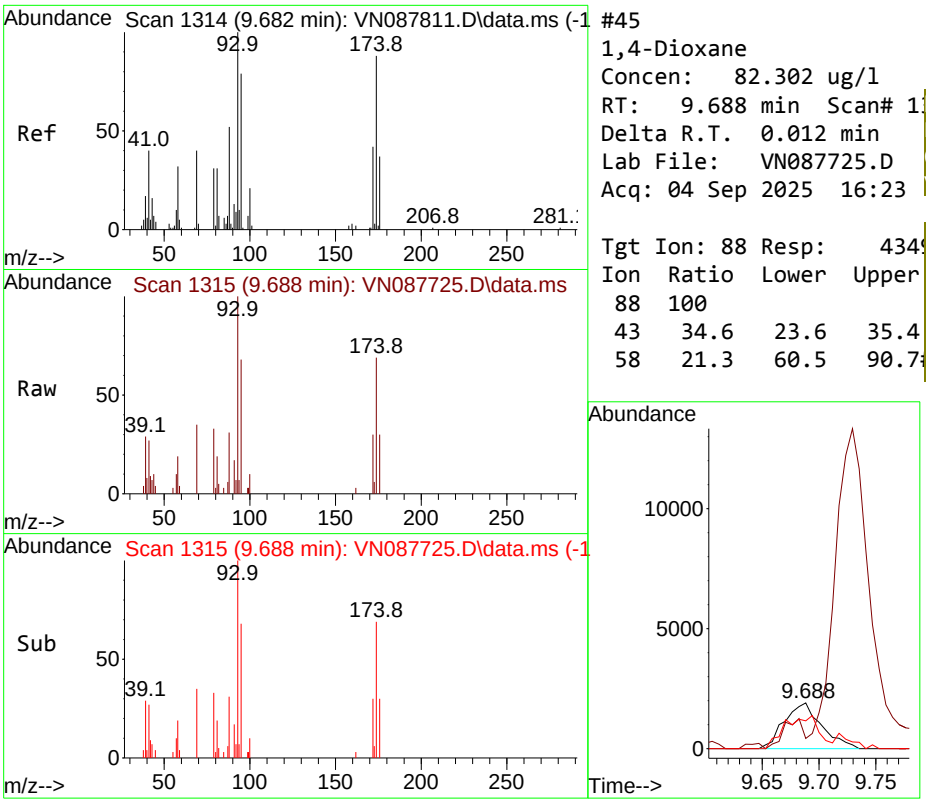


#44
Isopropyl Acetate
Concen: 4.192 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 43 Resp: 34598

Ion	Ratio	Lower	Upper
43	100		
61	10.9	19.5	29.3#





#45
1,4-Dioxane
Concen: 82.302 ug/l
RT: 9.688 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 88 Resp: 434

Ion	Ratio	Lower	Upper
88	100		
43	34.6	23.6	35.4
58	21.3	60.5	90.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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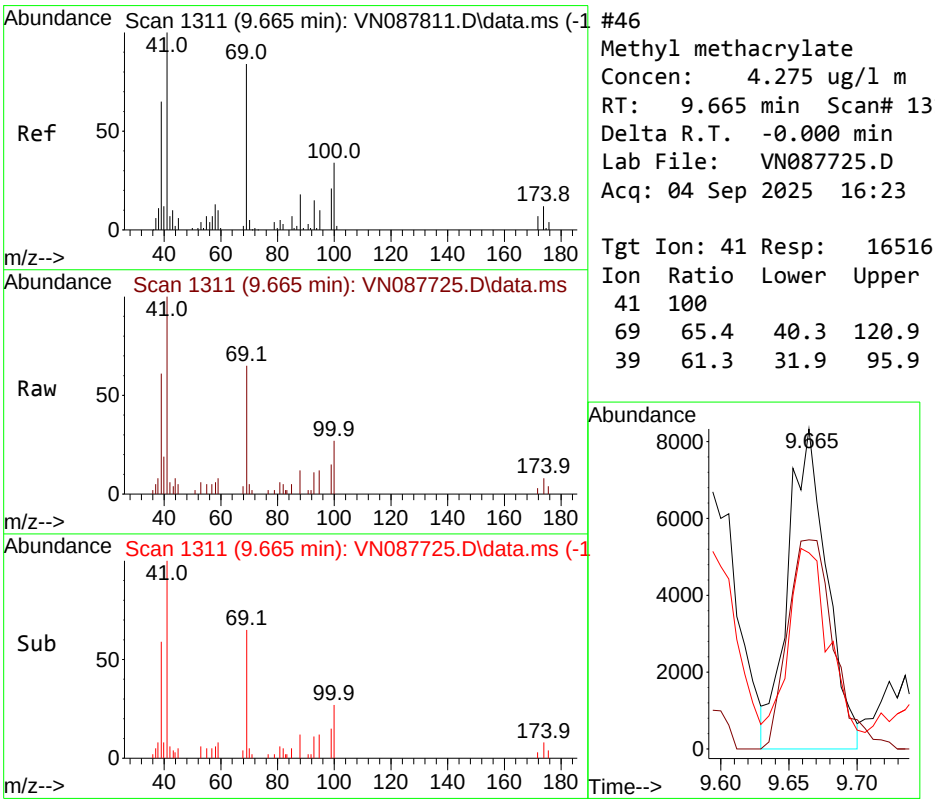
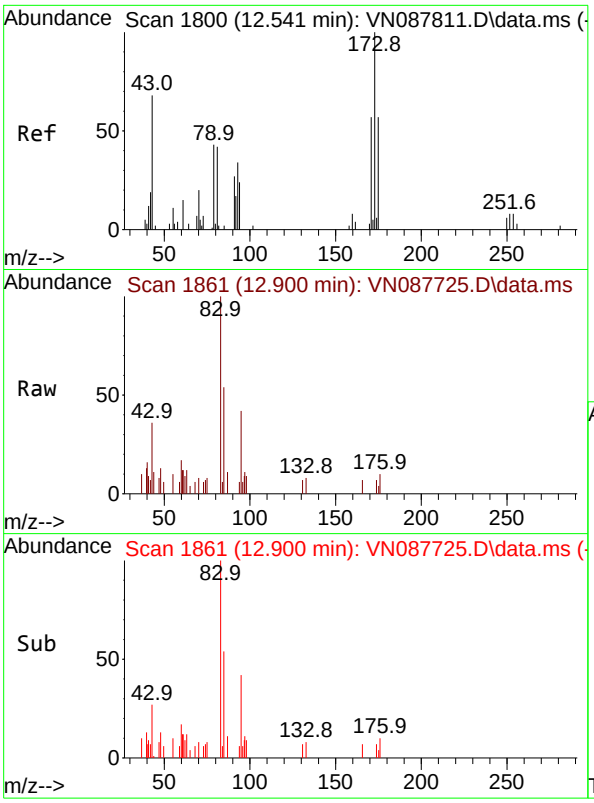


#46
Methyl methacrylate
Concen: 4.275 ug/l m
RT: 9.665 min Scan# 1311
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 41 Resp: 16516

Ion	Ratio	Lower	Upper
41	100		
69	65.4	40.3	120.9
39	61.3	31.9	95.9



#47
n-amyl Acetate
Concen: 5.631 ug/l m
RT: 12.900 min Scan# 1
Delta R.T. 0.229 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 43 Resp: 2702

Ion	Ratio	Lower	Upper
43	100		
55	0.3	0.7	1.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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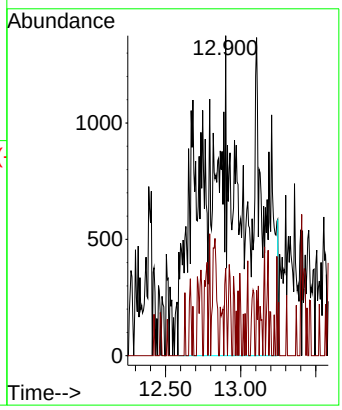
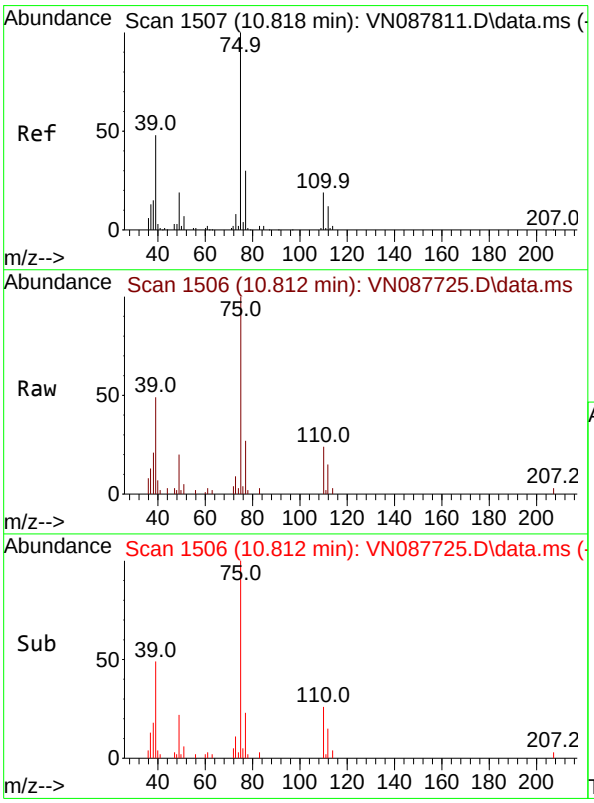
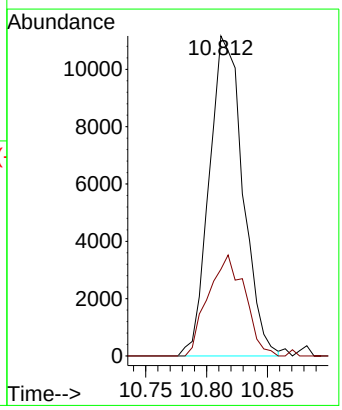


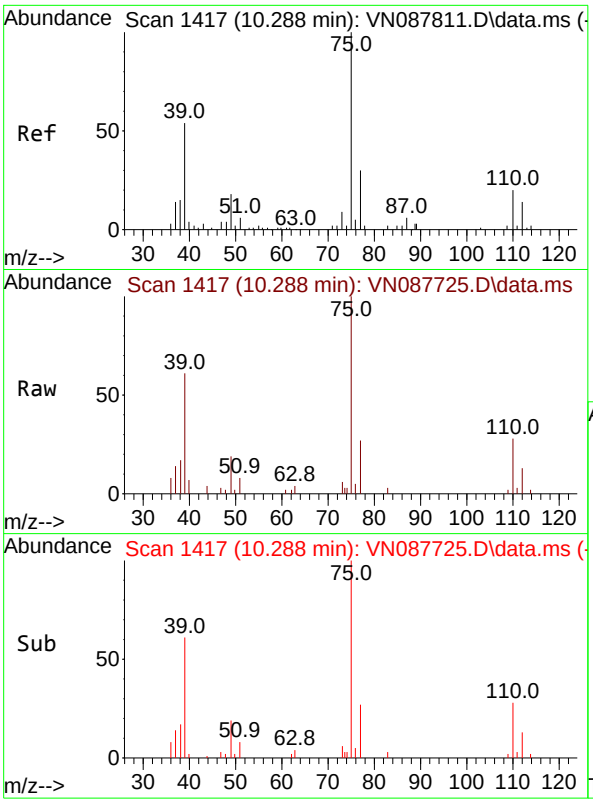


#48
t-1,3-Dichloropropene
Concen: 4.564 ug/l
RT: 10.812 min Scan# 1506
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 75 Resp: 21459

Ion	Ratio	Lower	Upper
75	100		
77	27.1	24.7	37.1

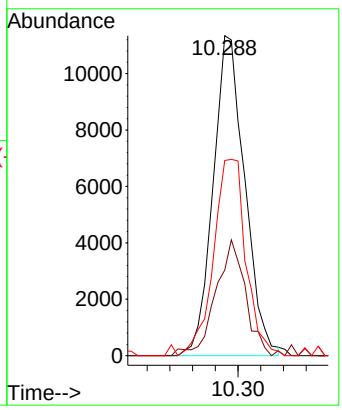




#49
cis-1,3-Dichloropropene
Concen: 4.623 ug/l
RT: 10.288 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 75 Resp: 2193

Ion	Ratio	Lower	Upper
75	100		
77	25.2	27.8	41.6#
39	61.0	47.6	71.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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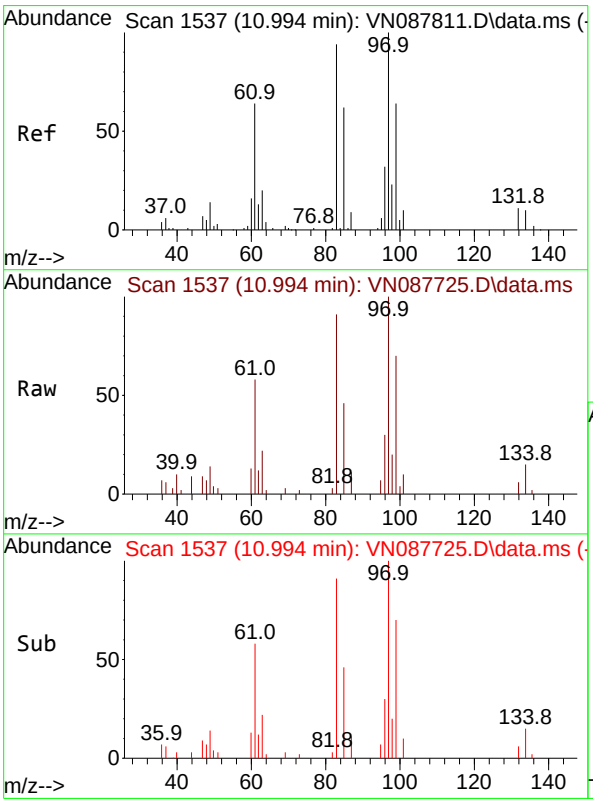
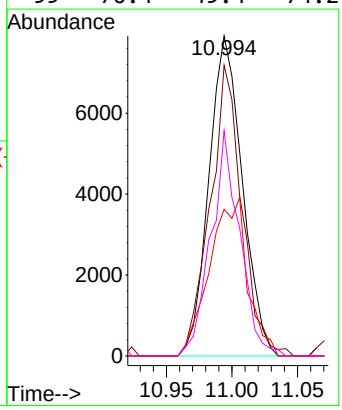
Supervised By :Mahesh Dadoda 09/05/2025

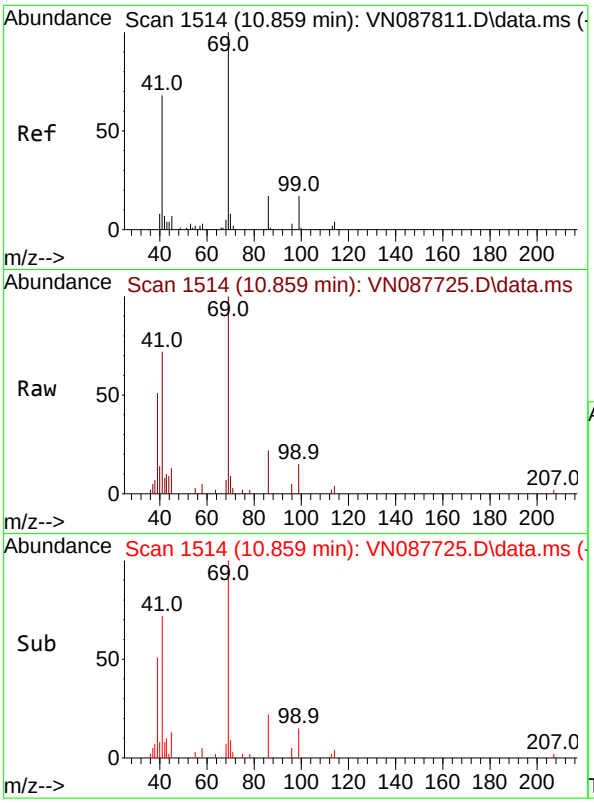


#50
1,1,2-Trichloroethane
Concen: 5.222 ug/l
RT: 10.994 min Scan# 1537
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 97 Resp: 14010

Ion	Ratio	Lower	Upper
97	100		
83	90.8	70.5	105.7
85	45.9	46.3	69.5#
99	70.4	49.4	74.2

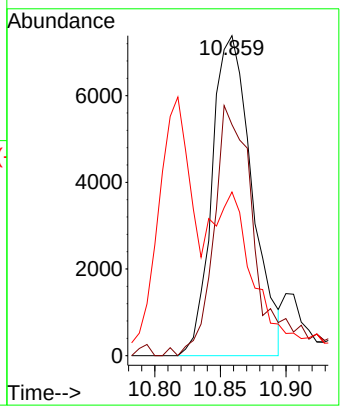




#51
Ethyl methacrylate
Concen: 3.425 ug/l
RT: 10.859 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 69 Resp: 1567

Ion	Ratio	Lower	Upper
69	100		
41	72.2	33.7	101.0
39	41.3	20.3	60.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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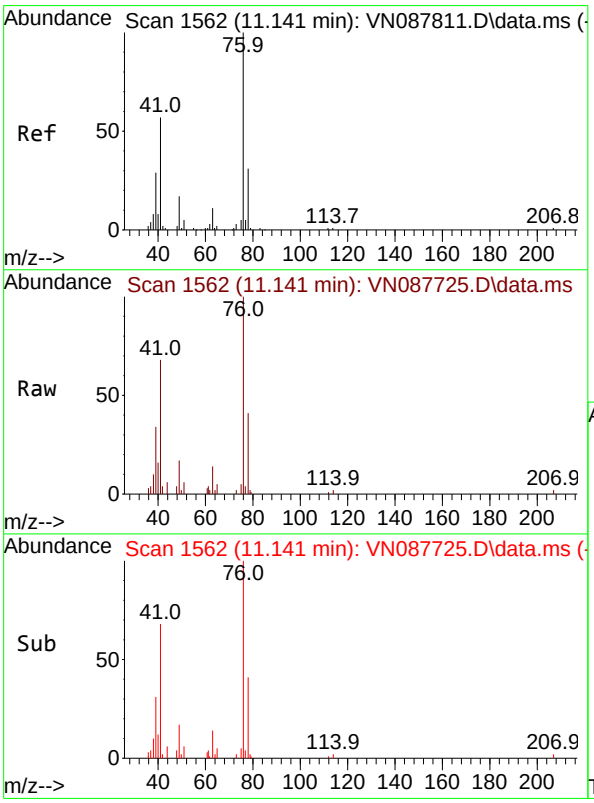
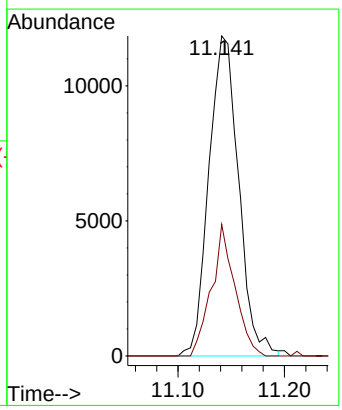
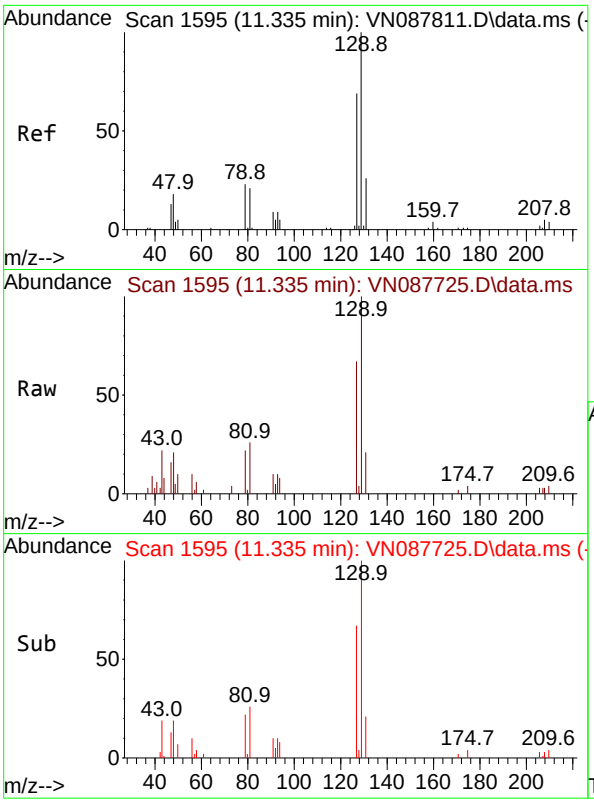


#52
1,3-Dichloropropane
Concen: 4.782 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 76 Resp: 23001

Ion	Ratio	Lower	Upper
76	100		
78	32.4	0.0	65.2

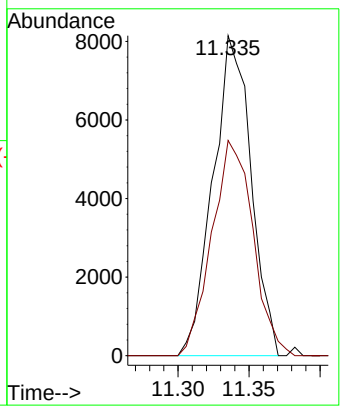




#53
Dibromochloromethane
Concen: 4.974 ug/l
RT: 11.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:129 Resp: 1519

Ion	Ratio	Lower	Upper
129	100		
127	72.6	42.6	128.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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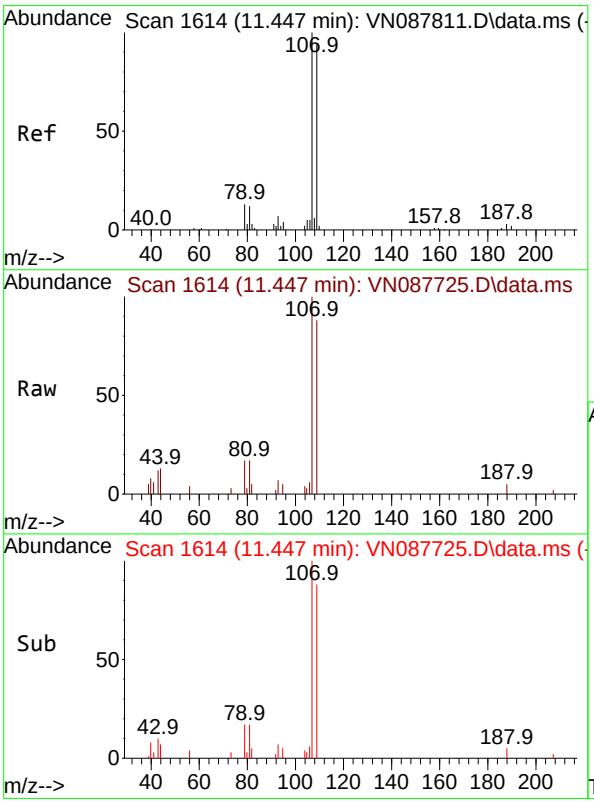
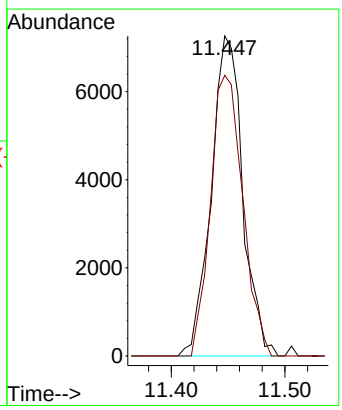
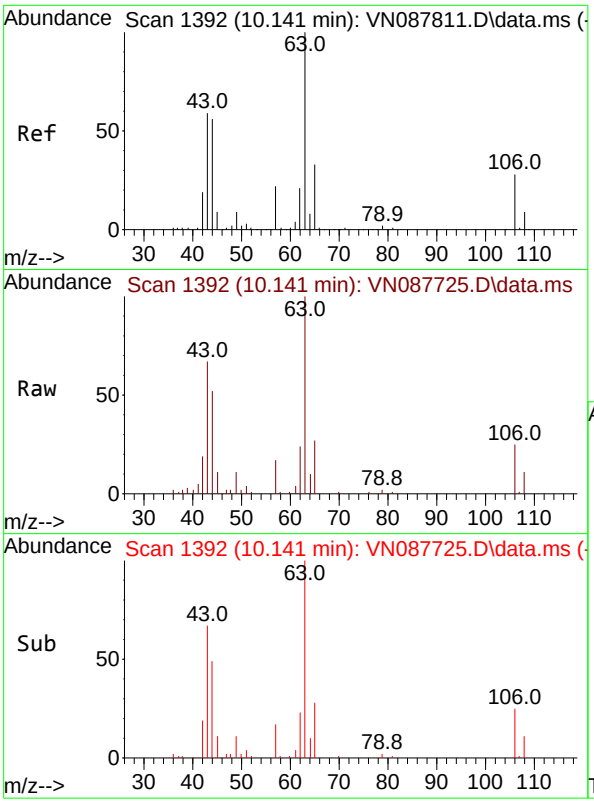


#54
1,2-Dibromoethane
Concen: 4.937 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:107 Resp: 13958

Ion	Ratio	Lower	Upper
107	100		
109	90.3	74.6	112.0

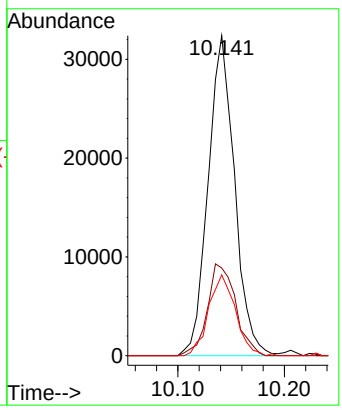




#55
2-Chloroethyl vinyl ether
Concen: 22.629 ug/l
RT: 10.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 63 Resp: 5597

Ion	Ratio	Lower	Upper
63	100		
65	30.4	26.6	40.0
106	25.5	21.1	31.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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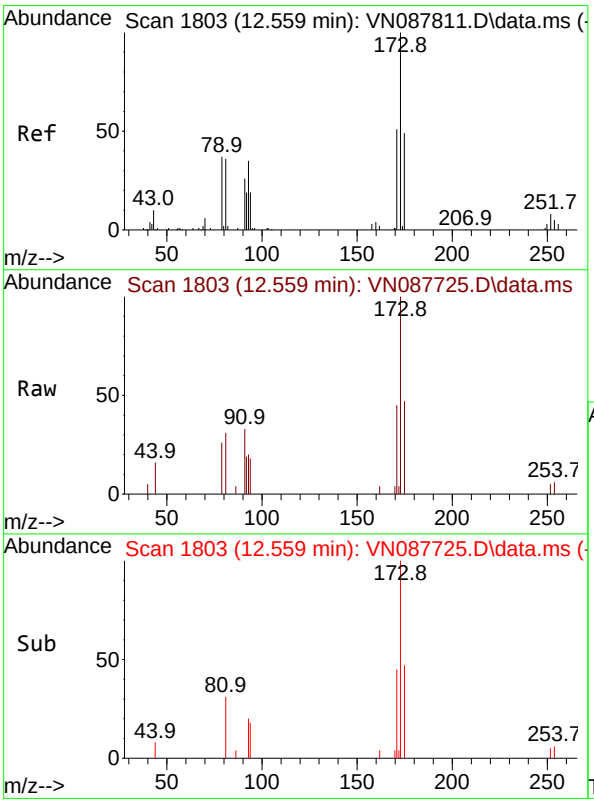
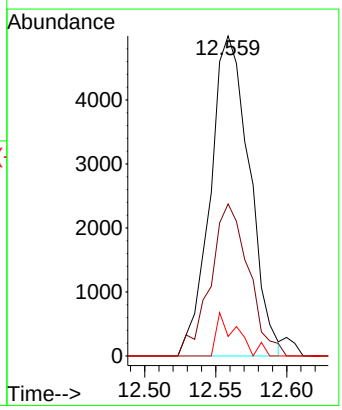
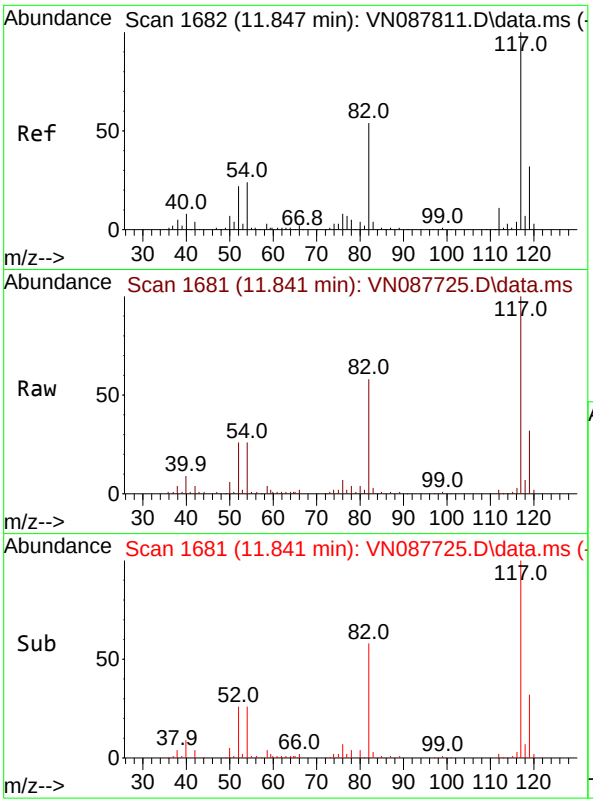


#56
Bromoform
Concen: 4.732 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:173 Resp: 9575

Ion	Ratio	Lower	Upper
173	100		
175	46.5	39.8	59.6
254	3.6	6.2	9.4#

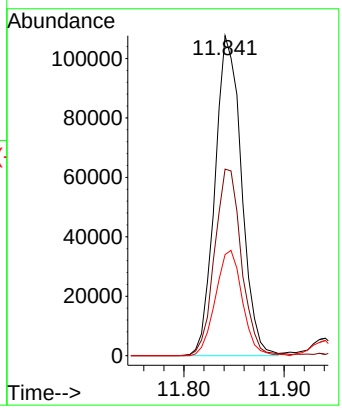




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:117 Resp: 19790

Ion	Ratio	Lower	Upper
117	100		
82	59.0	45.9	68.9
119	33.2	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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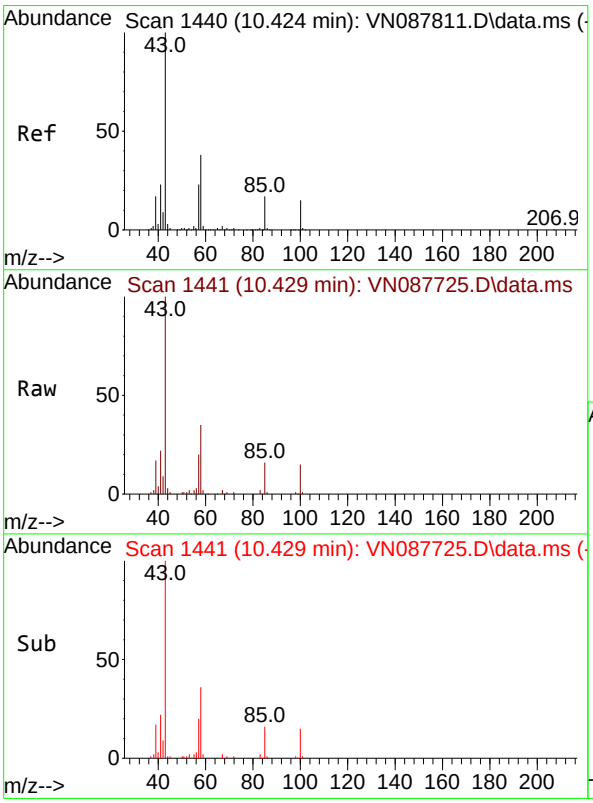
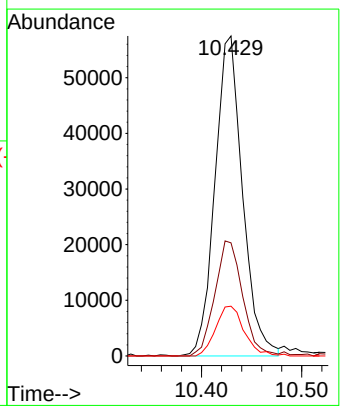
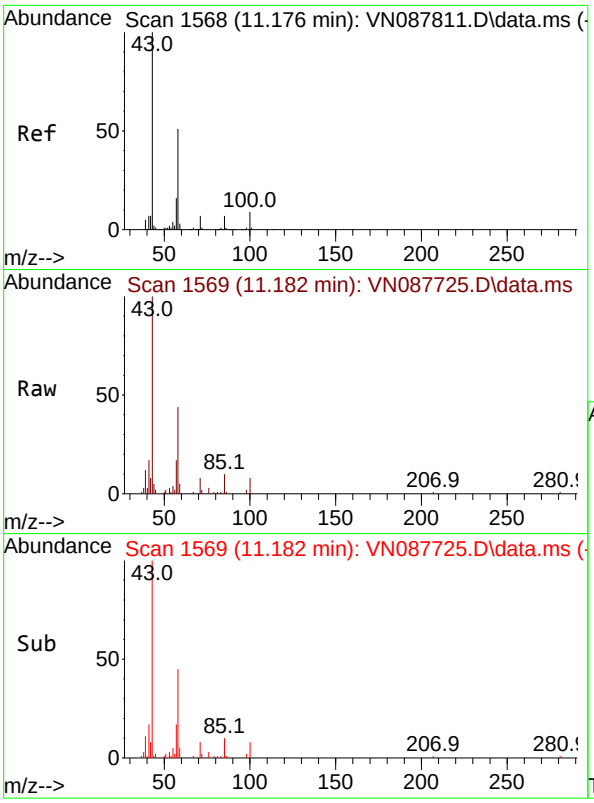


#58
4-Methyl-2-Pentanone
Concen: 22.421 ug/l
RT: 10.429 min Scan# 1441
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 43 Resp: 109790

Ion	Ratio	Lower	Upper
43	100		
58	36.1	29.6	44.4
85	16.0	13.0	19.4

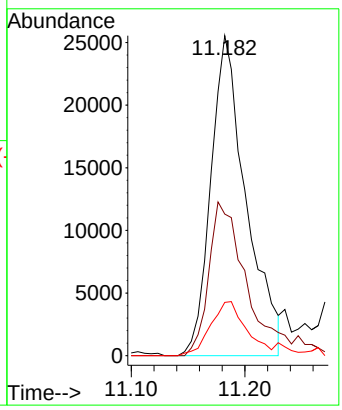




#59
2-Hexanone
Concen: 16.623 ug/l
RT: 11.182 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 43 Resp: 5512

Ion	Ratio	Lower	Upper
43	100		
58	50.7	40.2	60.4
57	17.1	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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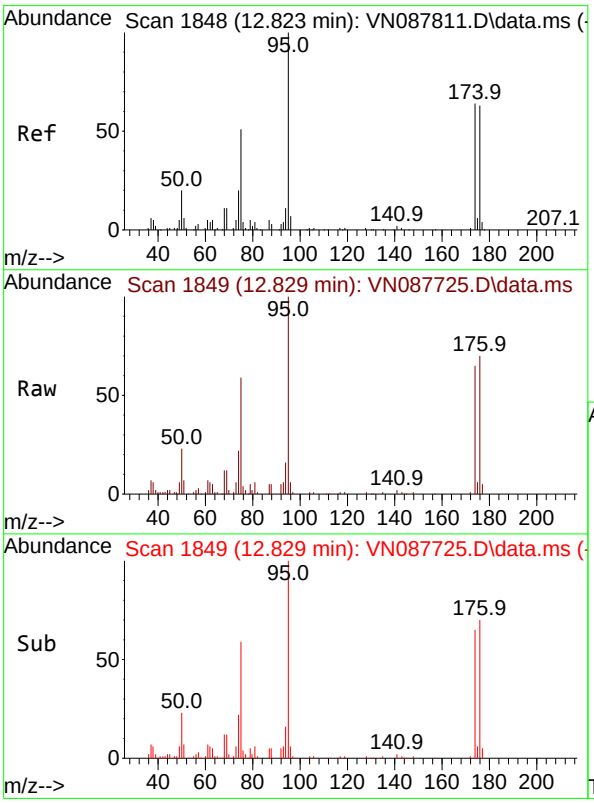
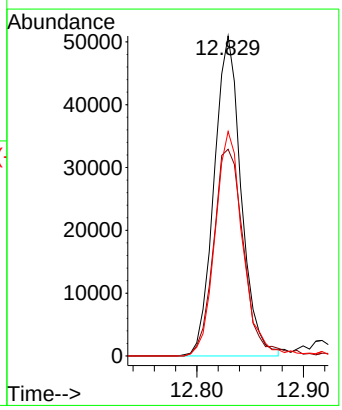
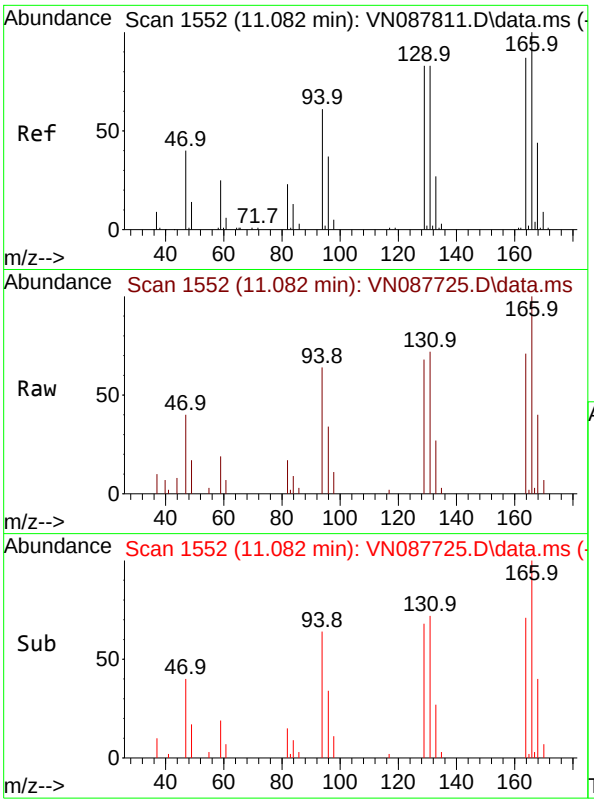


#60
4-Bromofluorobenzene
Concen: 26.721 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 95 Resp: 89929

Ion	Ratio	Lower	Upper
95	100		
174	70.0	55.4	83.0
176	71.1	51.5	77.3

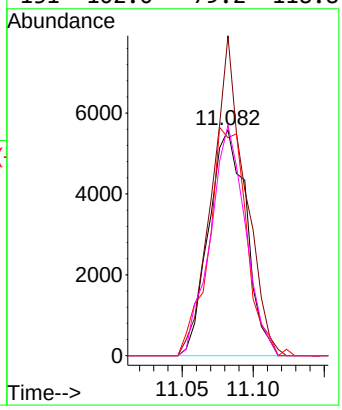




#61
Tetrachloroethene
Concen: 5.392 ug/l
RT: 11.082 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:164 Resp: 1030

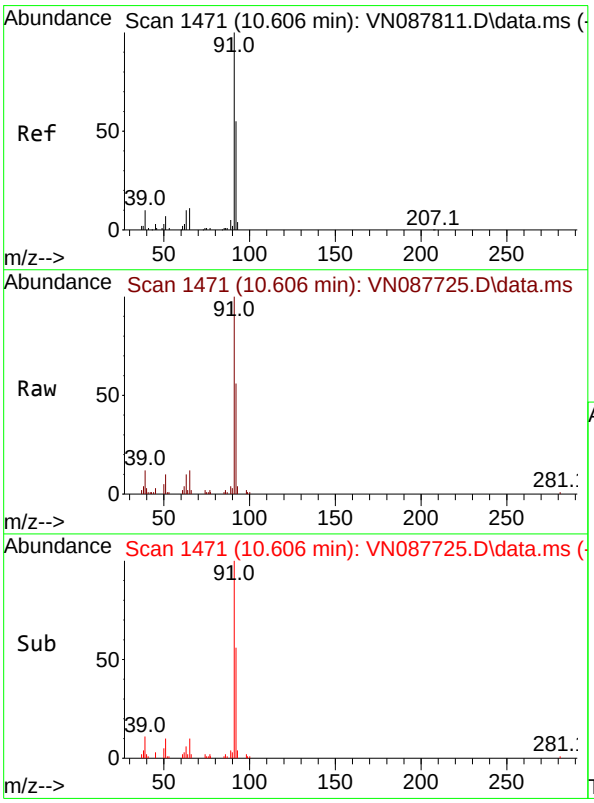
Ion	Ratio	Lower	Upper
164	100		
166	141.8	97.3	145.9
129	96.6	78.6	117.8
131	102.0	79.2	118.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

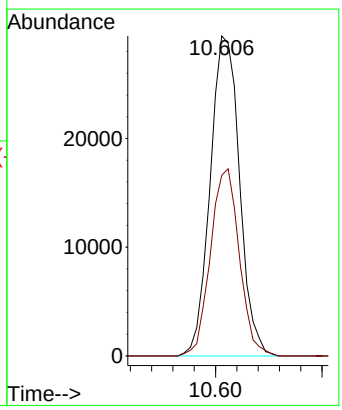
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

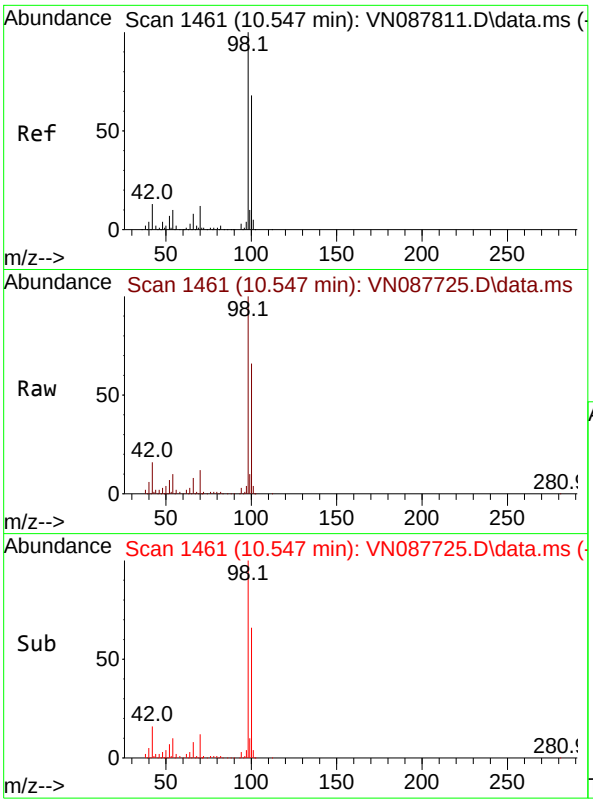


#62
Toluene
Concen: 4.722 ug/l
RT: 10.606 min Scan# 1471
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 91 Resp: 56231

Ion	Ratio	Lower	Upper
91	100		
92	57.5	45.4	68.0





#63
Toluene-d8
Concen: 30.356 ug/l
RT: 10.547 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 98 Resp: 27756

Ion	Ratio	Lower	Upper
98	100		
100	65.7	50.6	76.0

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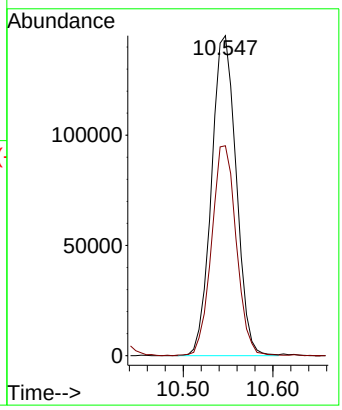
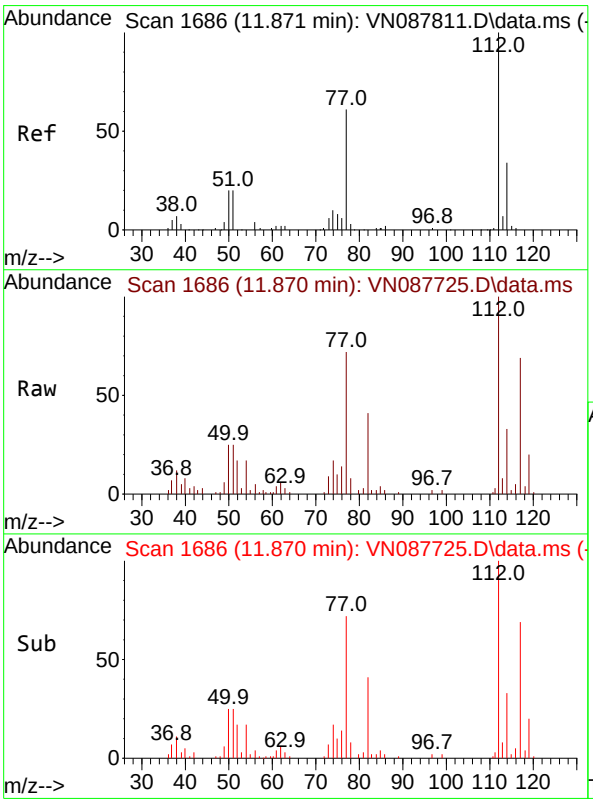
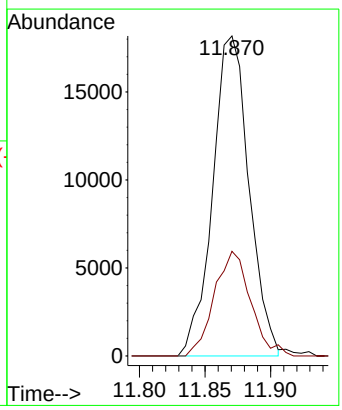


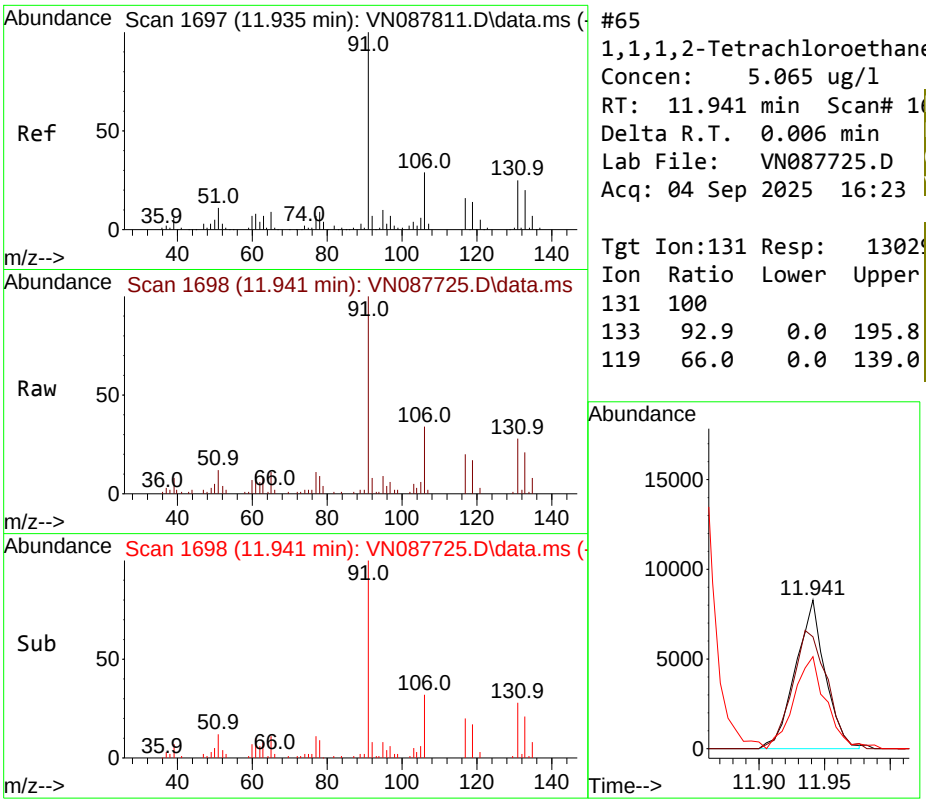


#64
Chlorobenzene
Concen: 4.801 ug/l
RT: 11.870 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:112 Resp: 35078

Ion	Ratio	Lower	Upper
112	100		
114	32.7	23.5	35.3





#65
1,1,1,2-Tetrachloroethane
Concen: 5.065 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:131 Resp: 1302

Ion	Ratio	Lower	Upper
131	100		
133	92.9	0.0	195.8
119	66.0	0.0	139.0

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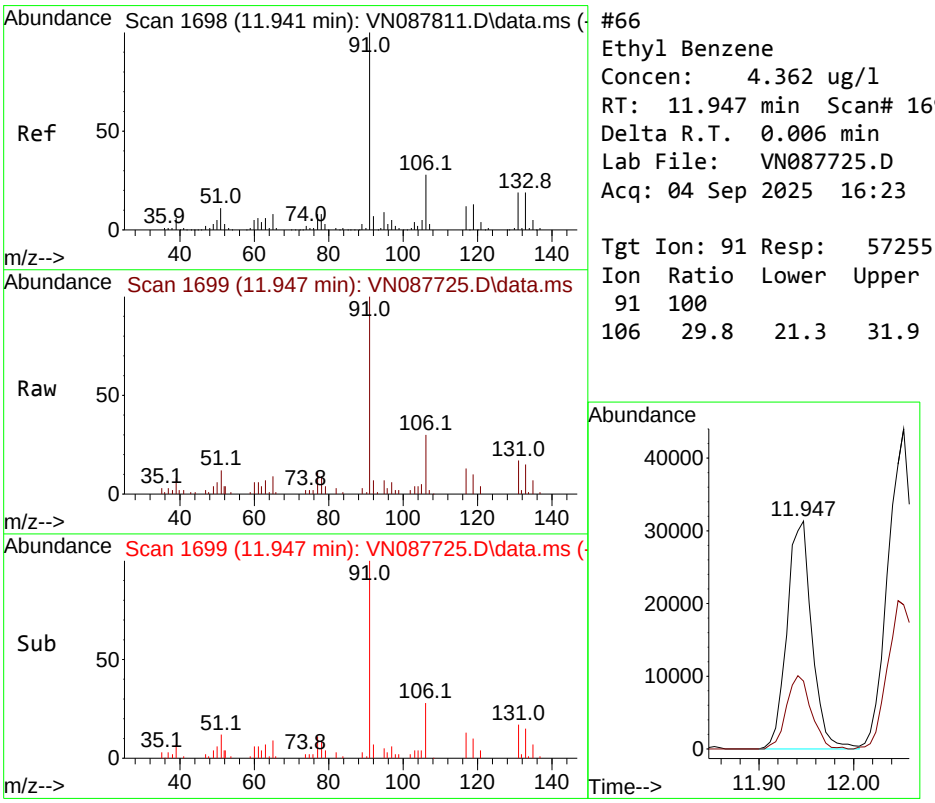
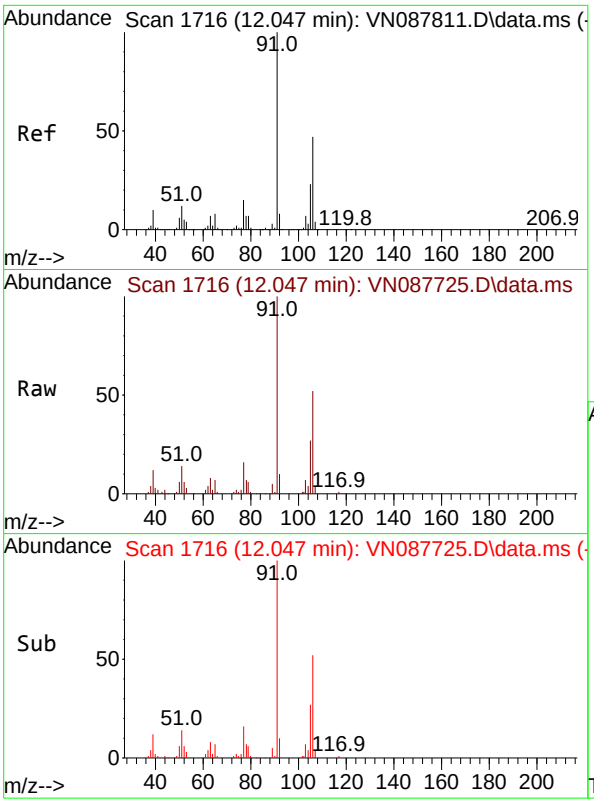


#66
Ethyl Benzene
Concen: 4.362 ug/l
RT: 11.947 min Scan# 1699
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 91 Resp: 57255

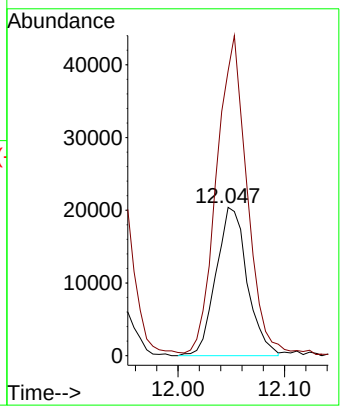
Ion	Ratio	Lower	Upper
91	100		
106	29.8	21.3	31.9



#67
m/p-Xylenes
Concen: 8.594 ug/l
RT: 12.047 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:106 Resp: 4151

Ion	Ratio	Lower	Upper
106	100		
91	212.4	174.3	261.5



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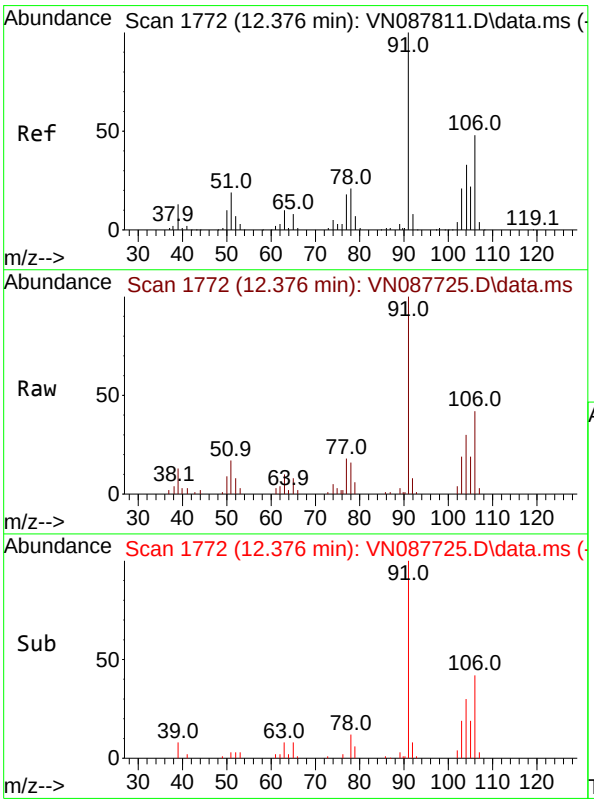
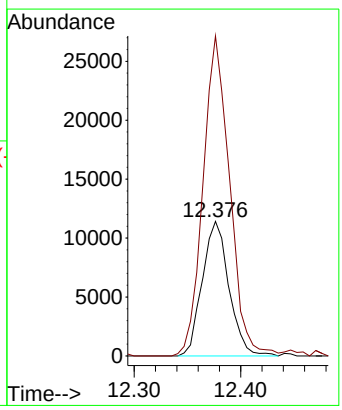
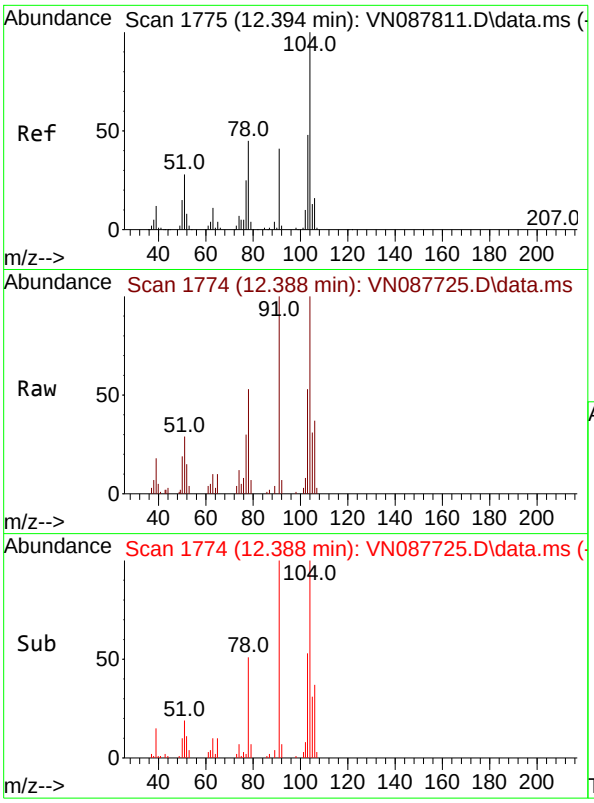


#68
o-Xylene
Concen: 4.176 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:106 Resp: 19899

Ion	Ratio	Lower	Upper
106	100		
91	236.6	107.7	323.3





#69
Styrene
Concen: 4.057 ug/l
RT: 12.388 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:104 Resp: 3288

Ion	Ratio	Lower	Upper
104	100		
78	50.7	41.0	61.6
103	56.5	44.6	66.8

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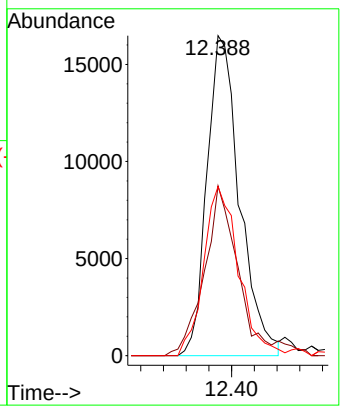
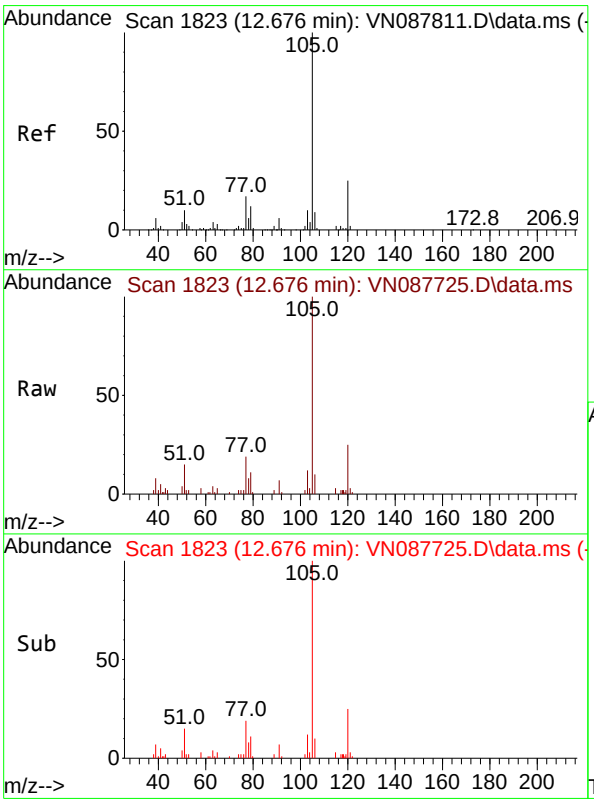
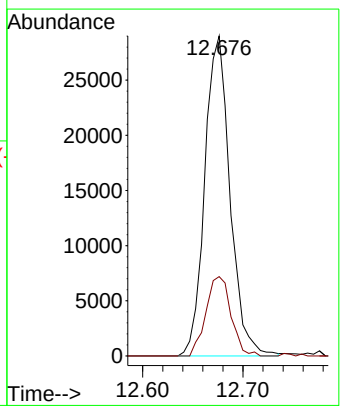


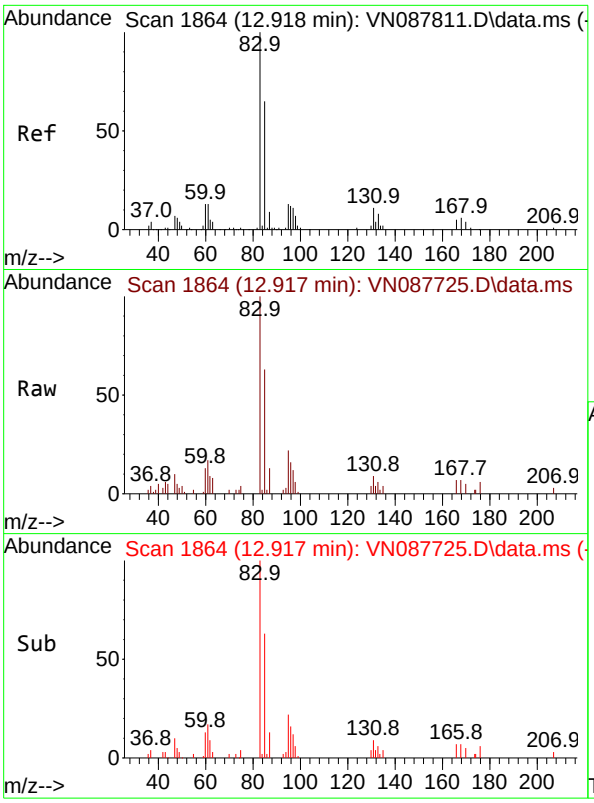


#70
Isopropylbenzene
Concen: 4.232 ug/l
RT: 12.676 min Scan# 1823
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:105 Resp: 50734

Ion	Ratio	Lower	Upper
105	100		
120	24.3	17.4	32.4

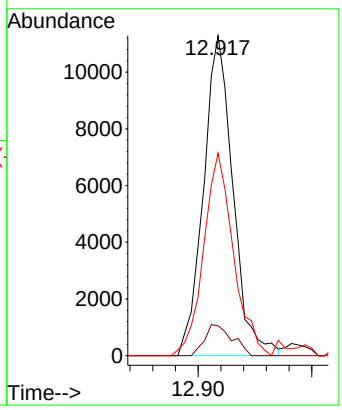




#71
1,1,2,2-Tetrachloroethane
Concen: 4.858 ug/l
RT: 12.917 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 83 Resp: 2031

Ion	Ratio	Lower	Upper
83	100		
131	9.0	4.8	14.3
85	63.9	31.9	95.7



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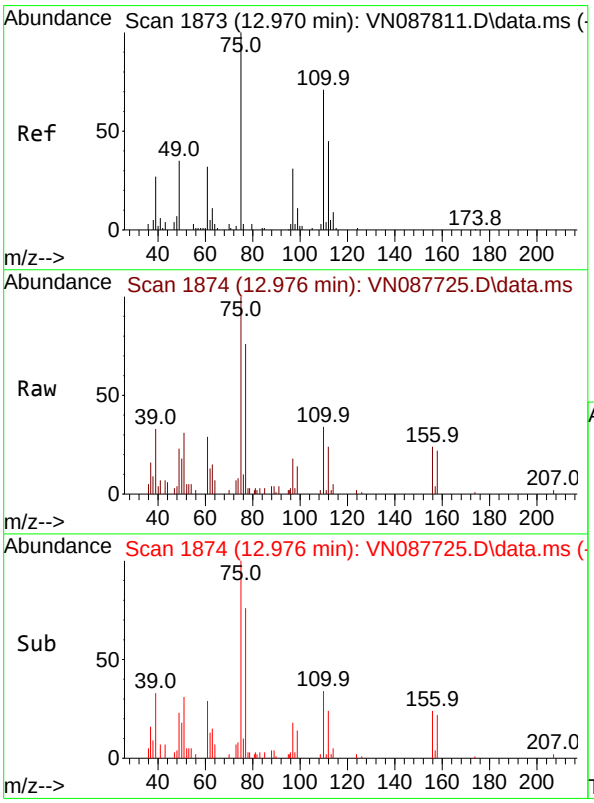
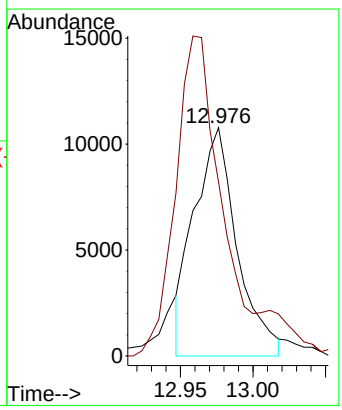
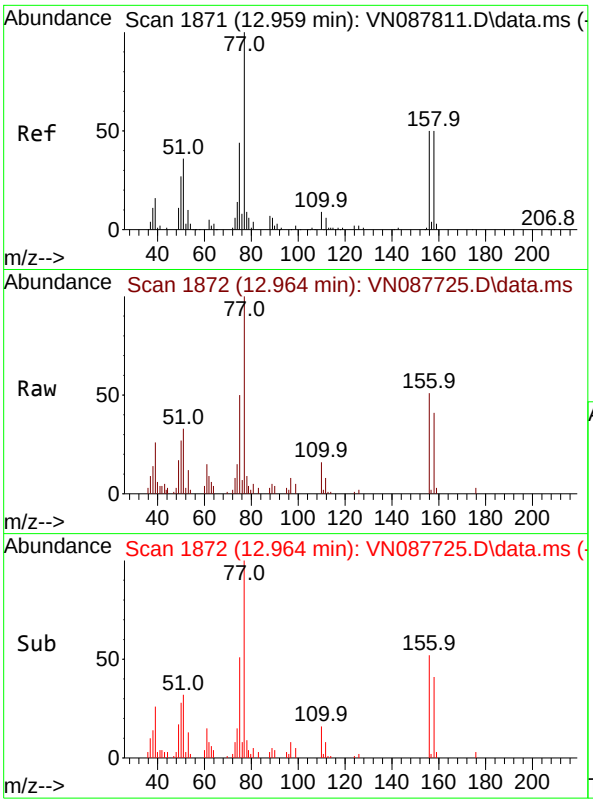


#72
1,2,3-Trichloropropane
Concen: 5.682 ug/l m
RT: 12.976 min Scan# 1874
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 75 Resp: 22173

Ion	Ratio	Lower	Upper
75	100		
77	144.7	0.0	378.8

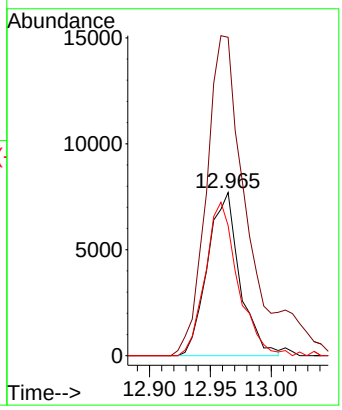




#73
Bromobenzene
Concen: 4.997 ug/l
RT: 12.964 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:156 Resp: 1416

Ion	Ratio	Lower	Upper
156	100		
77	226.6	0.0	484.2
158	94.6	0.0	186.2



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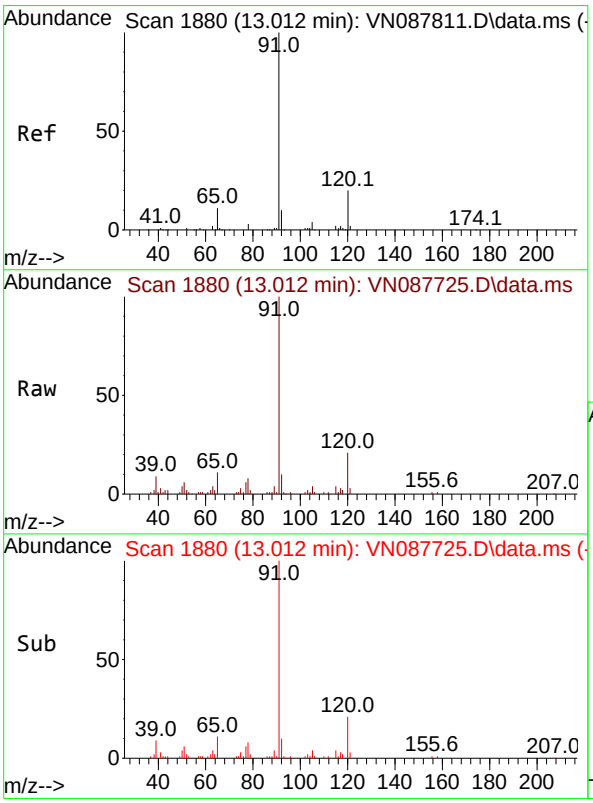
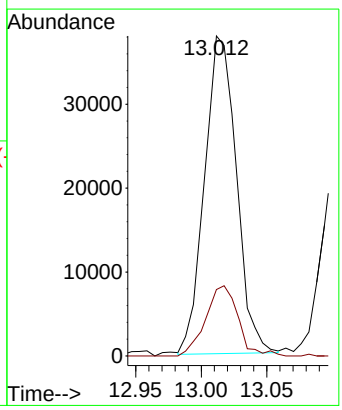
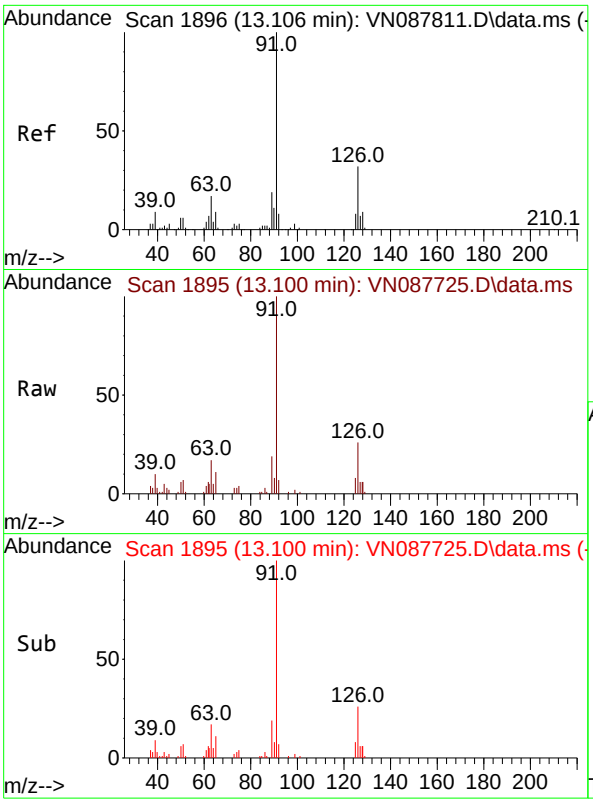


#74
n-propylbenzene
Concen: 4.247 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 91 Resp: 64047

Ion	Ratio	Lower	Upper
91	100		
120	22.5	0.0	42.2





#75
2-Chlorotoluene
Concen: 4.188 ug/l
RT: 13.100 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 91 Resp: 3885

Ion	Ratio	Lower	Upper
91	100		
126	31.9	0.0	60.4

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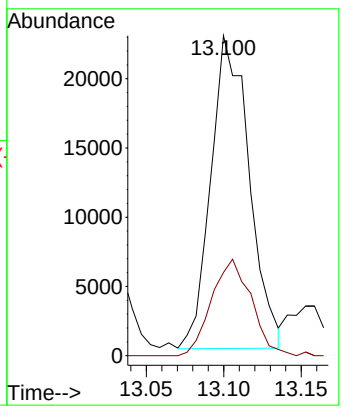
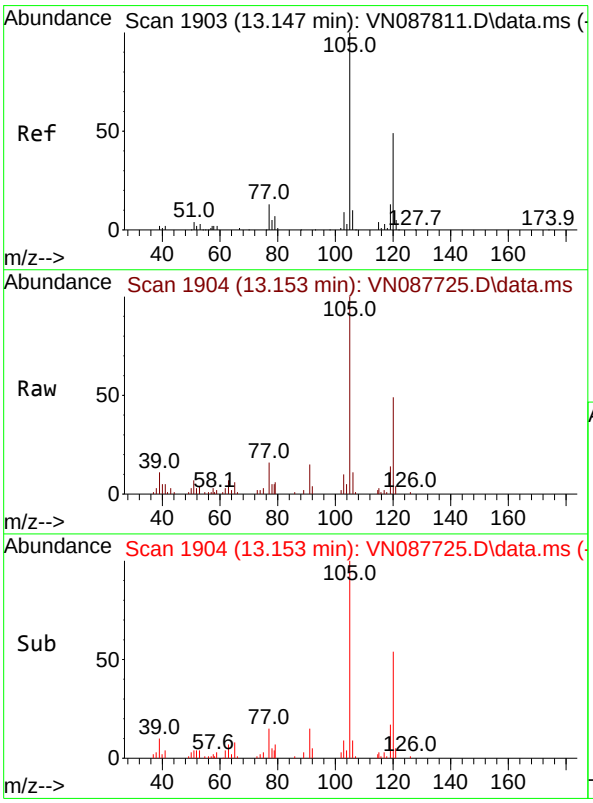
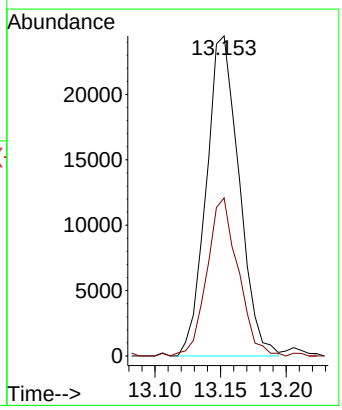


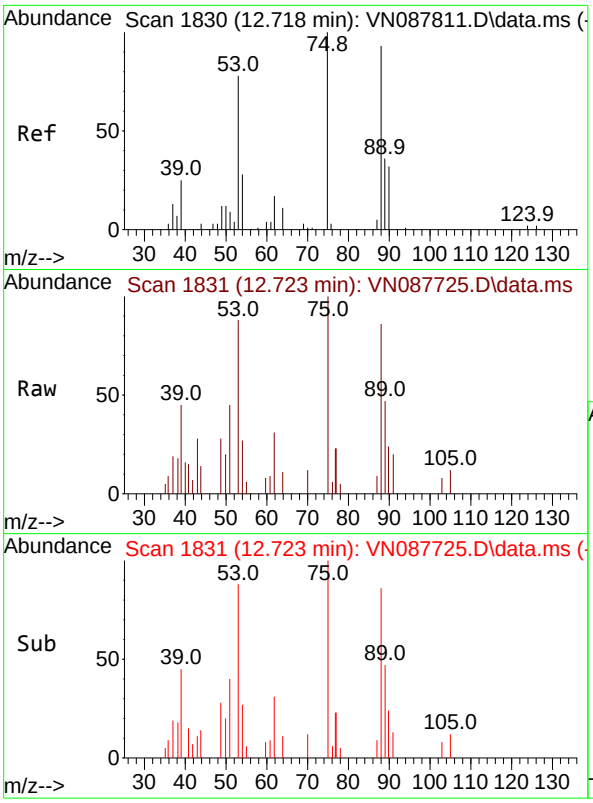


#76
1,3,5-Trimethylbenzene
Concen: 4.143 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:105 Resp: 42622

Ion	Ratio	Lower	Upper
105	100		
120	46.8	0.0	92.6

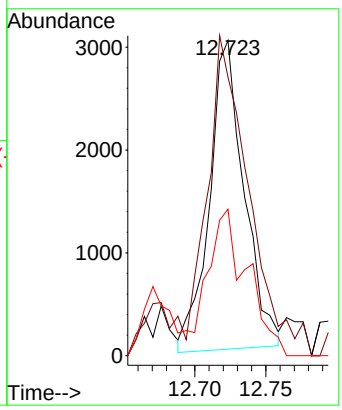




#77
t-1,4-Dichloro-2-butene
Concen: 3.485 ug/l
RT: 12.723 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 75 Resp: 510

Ion	Ratio	Lower	Upper
75	100		
53	83.3	45.3	135.9
89	42.8	18.8	56.3



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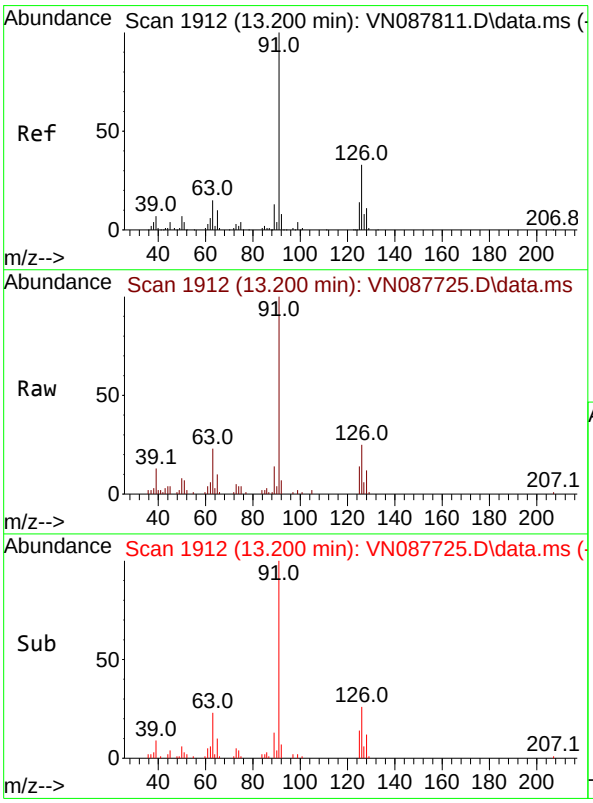
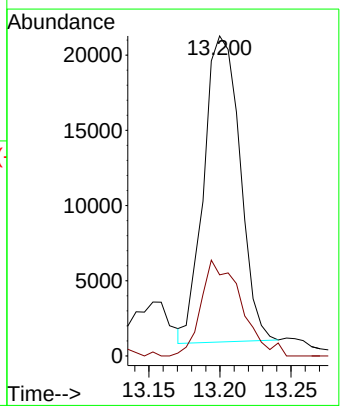
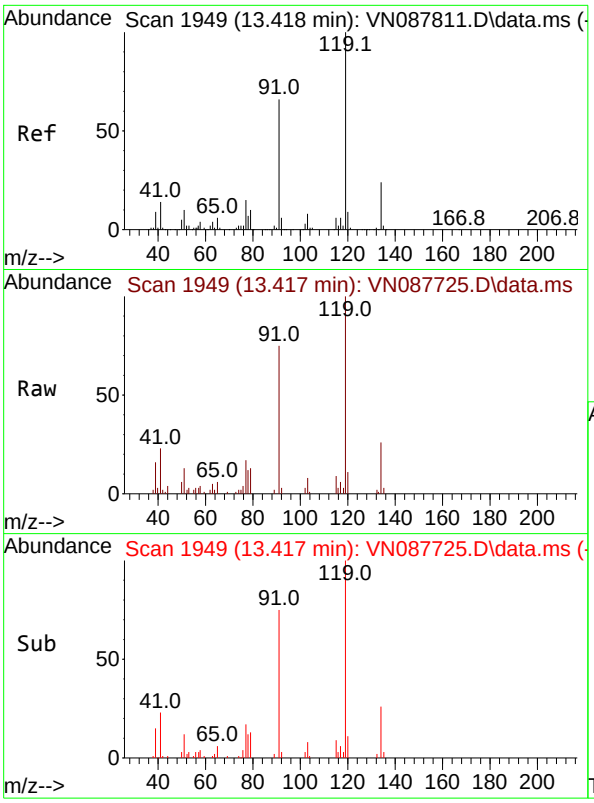


#78
4-Chlorotoluene
Concen: 3.810 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 91 Resp: 35970

Ion	Ratio	Lower	Upper
91	100		
126	33.8	0.0	67.0

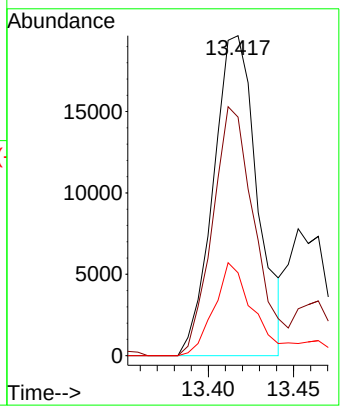




#79
tert-butylbenzene
Concen: 4.085 ug/l
RT: 13.417 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:119 Resp: 3540

Ion	Ratio	Lower	Upper
119	100		
91	74.8	0.0	142.6
134	24.9	0.0	47.2



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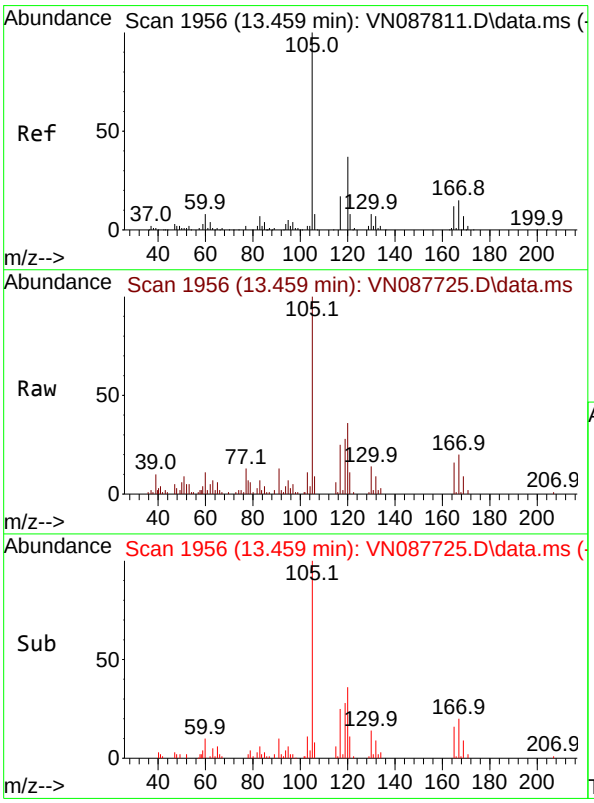
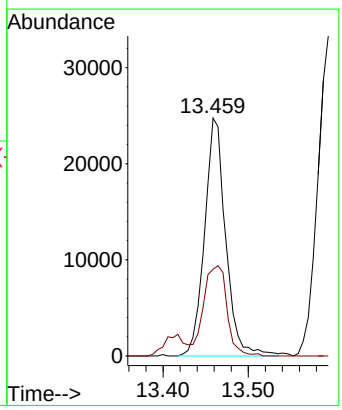
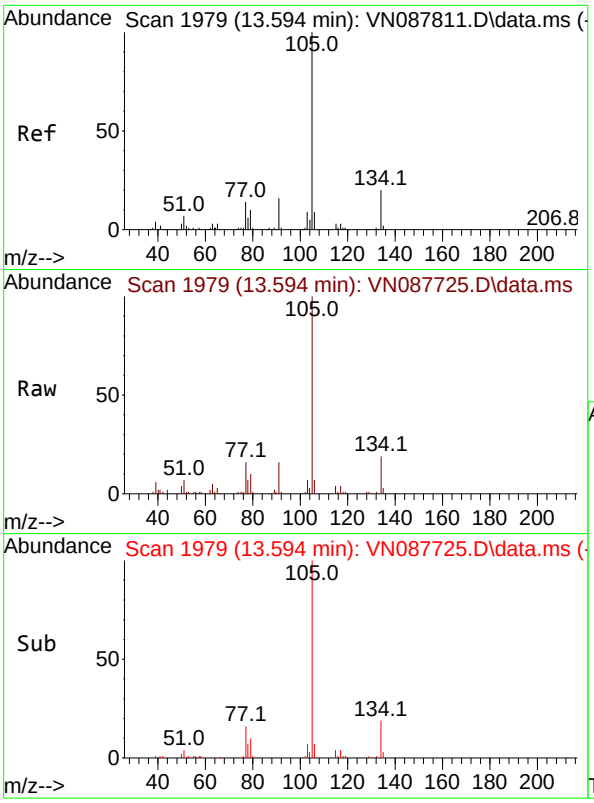


#80
1,2,4-Trimethylbenzene
Concen: 4.107 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:105 Resp: 42618

Ion	Ratio	Lower	Upper
105	100		
120	42.2	0.0	86.6

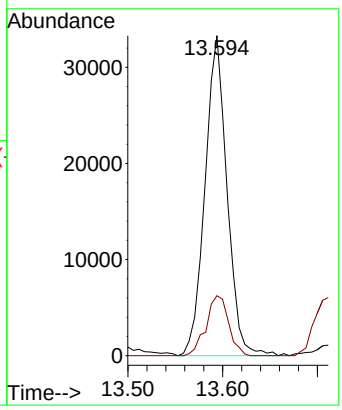




#81
sec-Butylbenzene
Concen: 4.253 ug/l
RT: 13.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:105 Resp: 5374

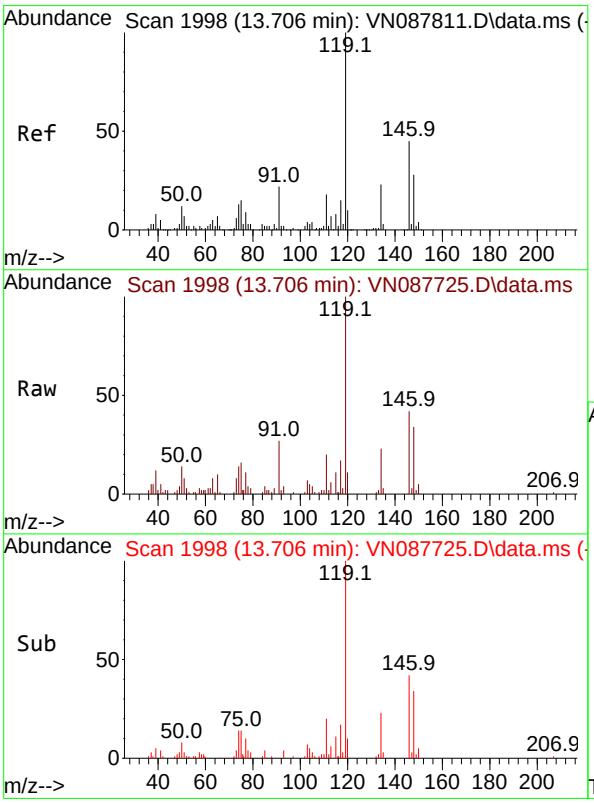
Ion	Ratio	Lower	Upper
105	100		
134	19.1	0.0	37.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

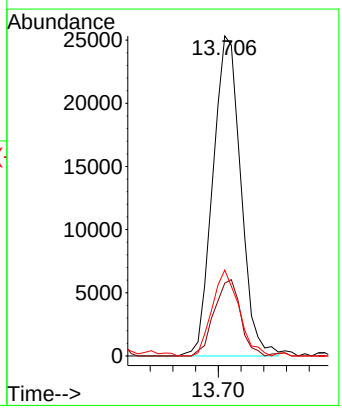
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

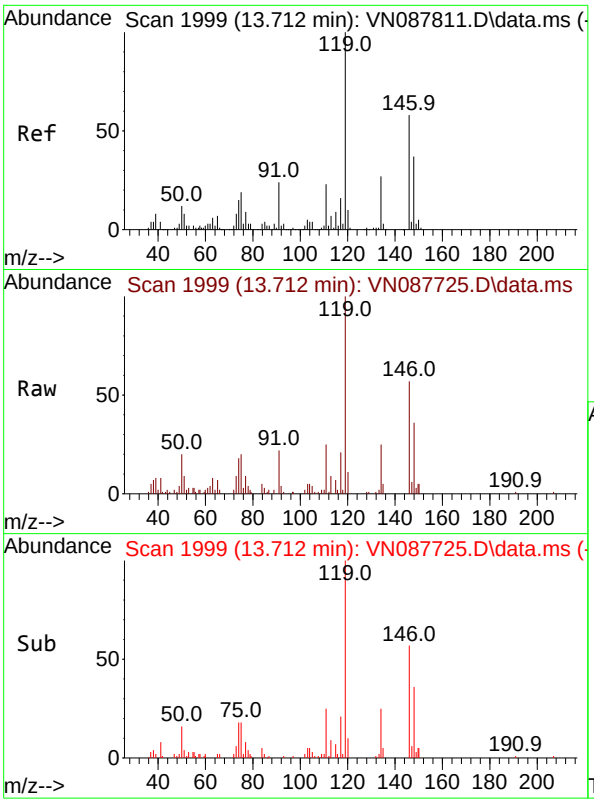


#82
p-Isopropyltoluene
Concen: 4.132 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:119 Resp: 43232

Ion	Ratio	Lower	Upper
119	100		
134	22.4	0.0	49.4
91	25.7	0.0	52.2

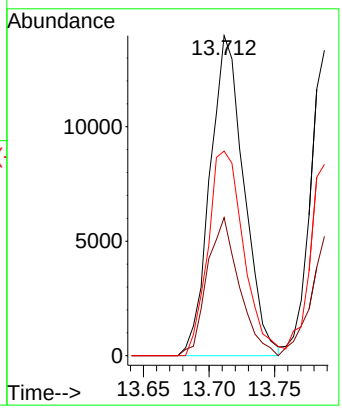




#83
1,3-Dichlorobenzene
Concen: 4.627 ug/l
RT: 13.712 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:146 Resp: 2512

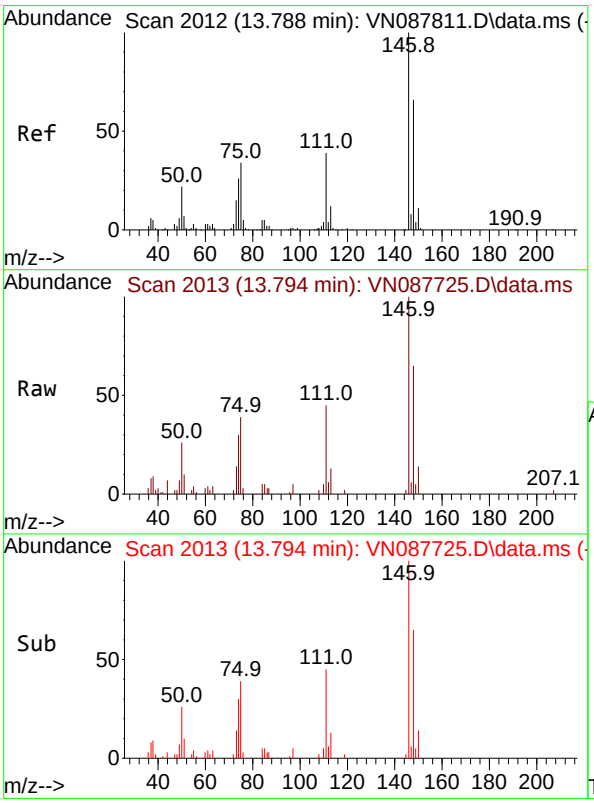
Ion	Ratio	Lower	Upper
146	100		
111	41.0	21.1	63.4
148	67.9	31.0	93.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

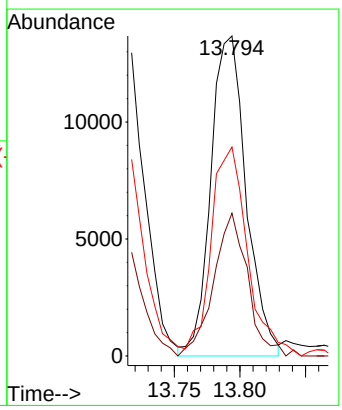
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

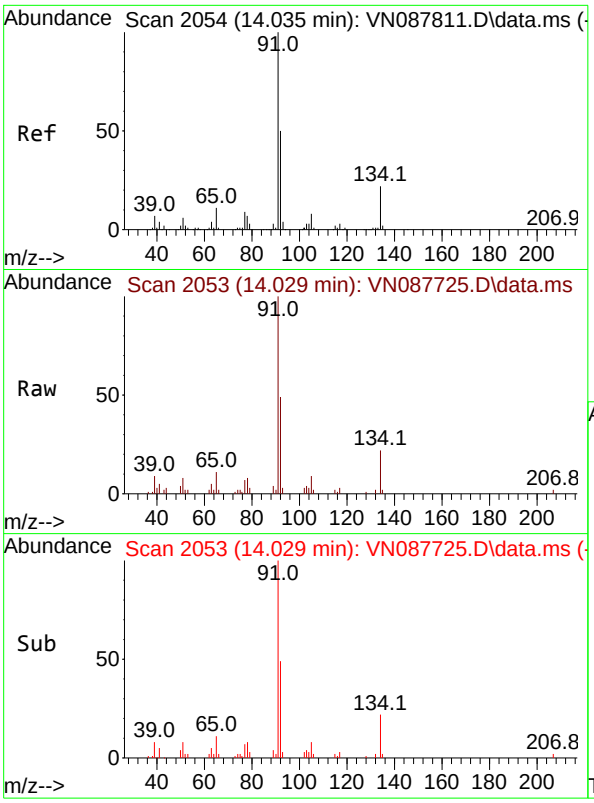


#84
1,4-Dichlorobenzene
Concen: 4.693 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:146 Resp: 25650

Ion	Ratio	Lower	Upper
146	100		
111	42.6	20.2	60.5
148	66.9	31.5	94.5

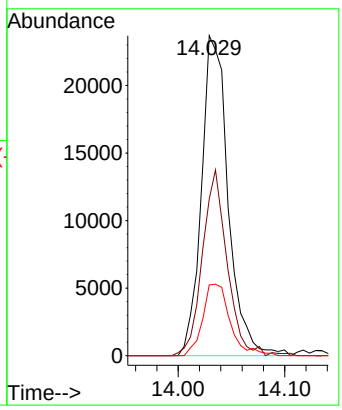




#85
n-Butylbenzene
Concen: 4.055 ug/l
RT: 14.029 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 91 Resp: 4120

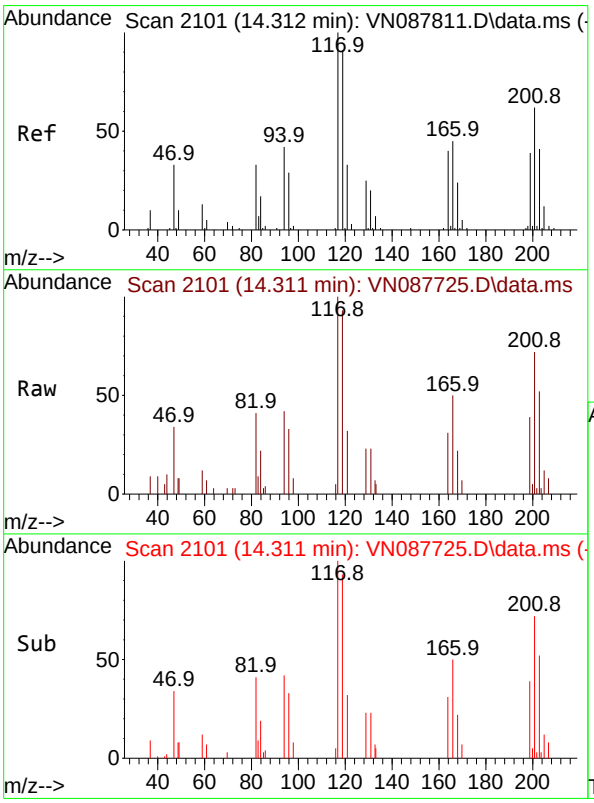
Ion	Ratio	Lower	Upper
91	100		
92	52.9	0.0	104.0
134	23.1	0.0	46.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

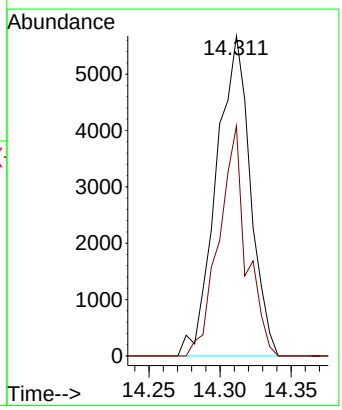
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

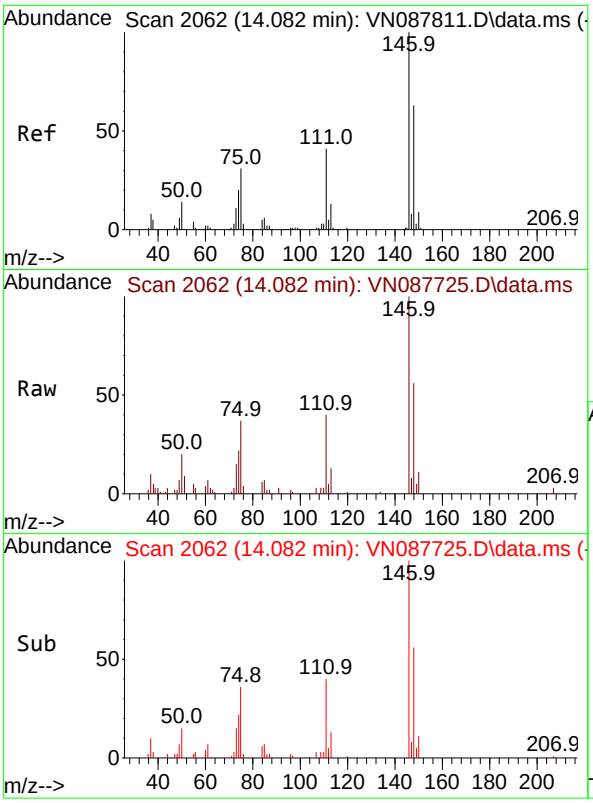


#86
Hexachloroethane
Concen: 4.553 ug/l
RT: 14.311 min Scan# 2101
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:117 Resp: 9454

Ion	Ratio	Lower	Upper
117	100		
201	58.2	29.9	89.7

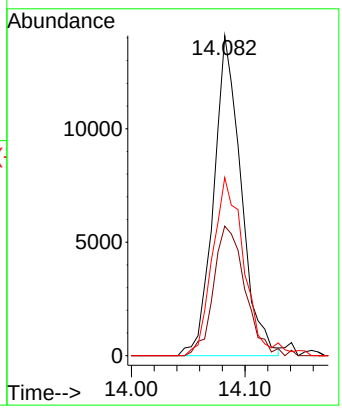




#87
1,2-Dichlorobenzene
Concen: 4.602 ug/l
RT: 14.082 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:146 Resp: 2369

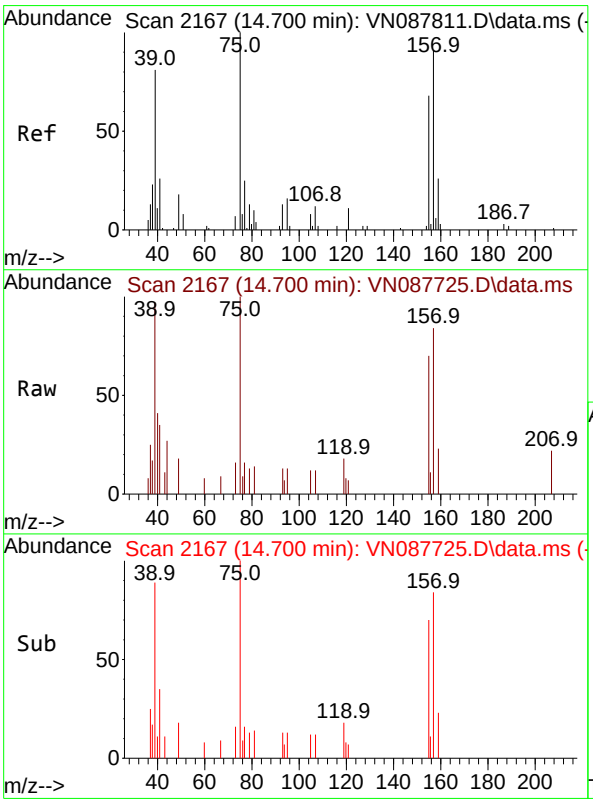
Ion	Ratio	Lower	Upper
146	100		
111	46.3	21.5	64.5
148	62.1	33.4	100.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

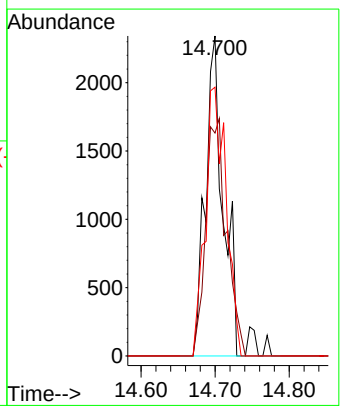
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

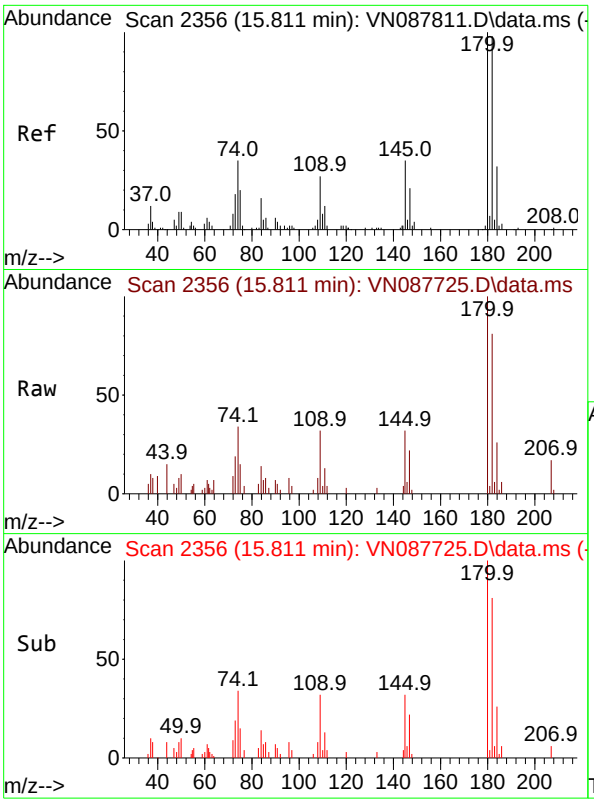


#88
1,2-Dibromo-3-Chloropropane
Concen: 3.875 ug/l m
RT: 14.700 min Scan# 2167
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion: 75 Resp: 4041

Ion	Ratio	Lower	Upper
75	100		
155	84.0	53.0	79.4#
157	94.5	72.2	108.4

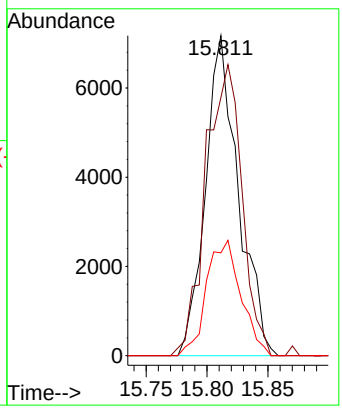




#89
1,2,4-Trichlorobenzene
Concen: 4.443 ug/l
RT: 15.811 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:180 Resp: 1352

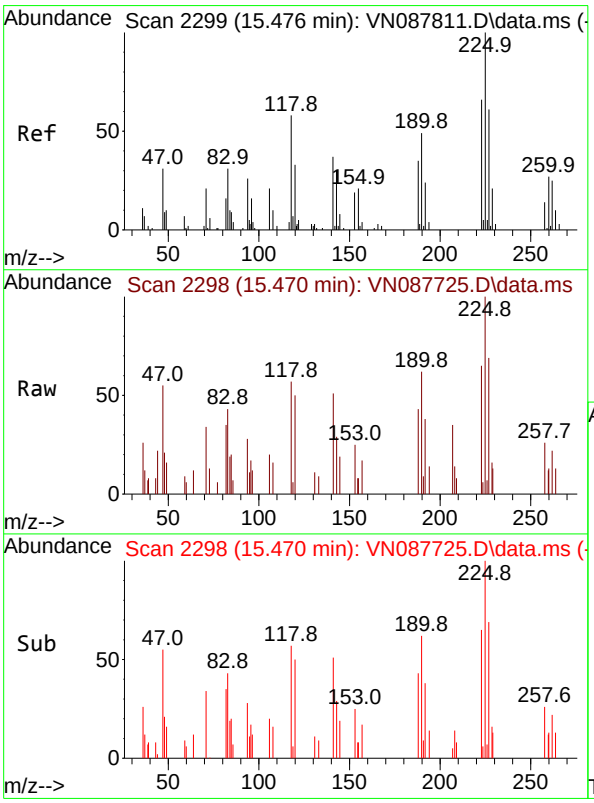
Ion	Ratio	Lower	Upper
180	100		
182	99.9	74.6	111.8
145	37.6	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

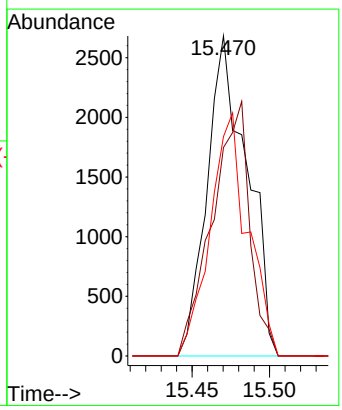
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

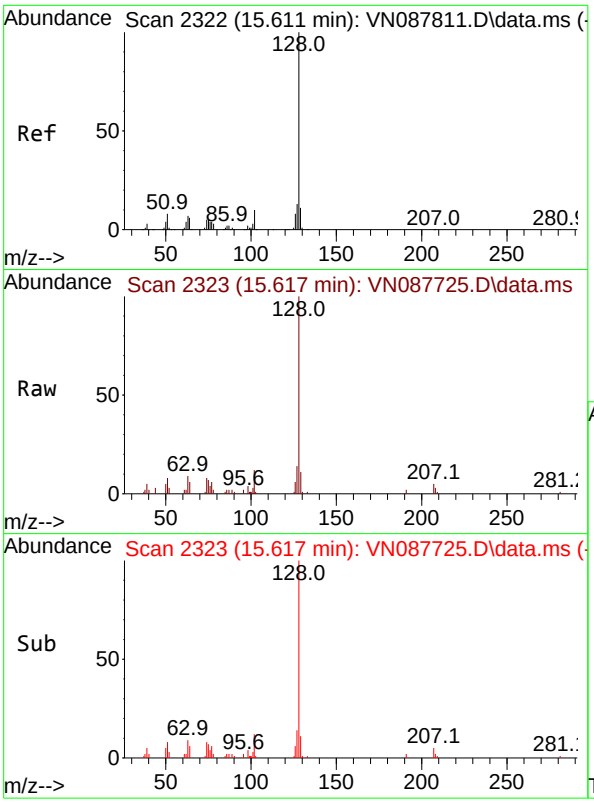


#90
Hexachlorobutadiene
Concen: 4.125 ug/l
RT: 15.470 min Scan# 2298
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:225 Resp: 4812

Ion	Ratio	Lower	Upper
225	100		
223	74.5	0.0	118.2
227	71.1	0.0	139.0

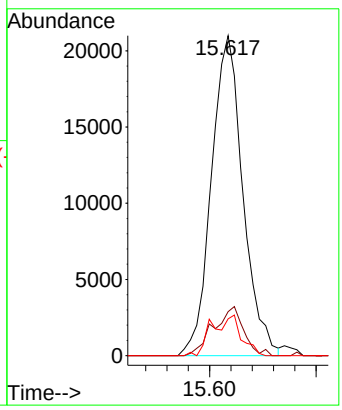




#91
Naphthalene
Concen: 3.756 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:128 Resp: 4307

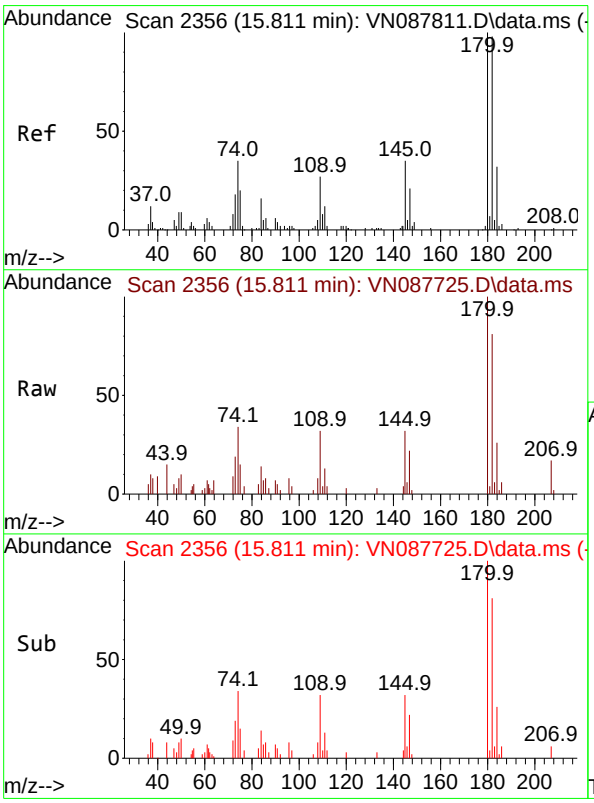
Ion	Ratio	Lower	Upper
128	100		
127	10.0	10.2	15.4#
129	6.4	8.3	12.5#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

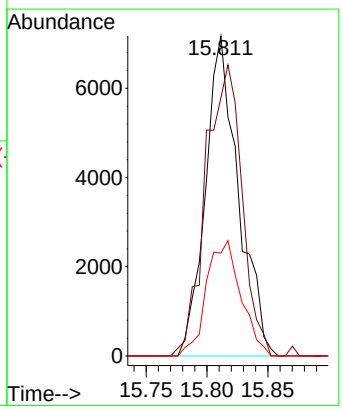
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025



#92
1,2,3-Trichlorobenzene
Concen: 4.443 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. -0.000 min
Lab File: VN087725.D
Acq: 04 Sep 2025 16:23

Tgt Ion:180 Resp: 13520

Ion	Ratio	Lower	Upper
180	100		
182	99.9	0.0	186.4
145	37.6	0.0	68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087726.D
Acq On : 04 Sep 2025 16:44
Operator : JC\MD
Sample : VSTDICCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Quant Time: Sep 05 02:56:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.794	128	42809	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.083	114	211459	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.841	117	198266	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.559	65	107398	27.862	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 92.867%			
60) 4-Bromofluorobenzene	12.829	95	96997	28.768	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 95.900%			
63) Toluene-d8	10.547	98	279660	30.528	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 101.767%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	49949	18.465	ug/l	100
3) Chloromethane	2.383	50	51138	18.521	ug/l	100
4) Vinyl Chloride	2.542	62	57095	19.294	ug/l	100
5) Bromomethane	2.977	94	31609	19.377	ug/l	100
6) Chloroethane	3.142	64	38748	19.998	ug/l	100
7) Trichlorofluoromethane	3.512	101	82866	19.315	ug/l	100
8) Diethyl Ether	3.954	74	33334	18.728	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	45396	20.339	ug/l	100
10) 1,1-Dichloroethene	4.342	96	44944	19.539	ug/l	100
11) Methyl Iodide	4.583	142	26688	14.779	ug/l	100
12) Methyl Acetate	5.018	43	72499	17.391	ug/l	100
13) Acrolein	4.177	56	61563	94.456	ug/l	100
14) Acrylonitrile	5.718	53	149903m	83.131	ug/l	
15) Acetone	4.430	58	45452	88.853	ug/l	100
16) Carbon Disulfide	4.706	76	124233	17.652	ug/l	100
17) Allyl chloride	5.018	41	72506	15.970	ug/l	100
18) Methylene Chloride	5.265	84	50199	17.300	ug/l	100
19) trans-1,2-Dichloroethene	5.777	96	47153m	17.562	ug/l	
20) Diisopropyl ether	6.659	45	169008	16.339	ug/l	100
21) 1,1-Dichloroethane	6.553	63	93521	17.386	ug/l	100
22) cis-1,2-Dichloroethene	7.465	96	56746	17.275	ug/l	100
23) tert-Butyl Alcohol	5.530	59	54584	72.820	ug/l #	100
24) Methyl tert-Butyl Ether	5.789	73	158036	15.680	ug/l	100
25) Chloroform	7.953	83	99433	17.558	ug/l	100
26) Cyclohexane	8.241	56	69837	16.417	ug/l #	100
29) 1,1-Dichloropropene	8.353	75	63171	18.638	ug/l	100
30) 2-Butanone	7.471	43	213338	86.904	ug/l	100
31) 2,2-Dichloropropane	7.471	77	69833	16.445	ug/l	100
32) 1,1,1-Trichloroethane	8.153	97	81988	18.860	ug/l	100
33) Carbon Tetrachloride	8.341	117	65653	18.352	ug/l	100
34) Benzene	8.588	78	203295	18.914	ug/l	100
35) Methacrylonitrile	7.765	41	48528	18.198	ug/l	100
36) 1,2-Dichloroethane	8.653	62	78112	18.230	ug/l	100
37) Trichloroethene	9.336	130	45484	19.215	ug/l	100
38) Methylcyclohexane	9.583	83	67168	17.371	ug/l	100
39) 1,2-Dichloropropane	9.600	63	52783	19.162	ug/l	100
40) Dibromomethane	9.688	93	38777	18.828	ug/l	100
41) Bromodichloromethane	9.871	83	80402	18.694	ug/l	100
42) Vinyl Acetate	6.589	43	706403	87.467	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087726.D
Acq On : 04 Sep 2025 16:44
Operator : JC\MD
Sample : VSTDICCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Quant Time: Sep 05 02:56:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.547	43	91142	18.839	ug/l	100
44) Isopropyl Acetate	8.677	43	140215	17.422	ug/l	100
45) 1,4-Dioxane	9.677	88	18742	363.739	ug/l	100
46) Methyl methacrylate	9.665	41	62431	16.572	ug/l	100
47) n-amyl Acetate	12.671	43	73018m	15.604	ug/l	
48) t-1,3-Dichloropropene	10.818	75	78438	17.108	ug/l	100
49) cis-1,3-Dichloropropene	10.288	75	79831	17.252	ug/l	100
50) 1,1,2-Trichloroethane	10.994	97	49901	19.075	ug/l	100
51) Ethyl methacrylate	10.853	69	72347	16.207	ug/l	100
52) 1,3-Dichloropropane	11.141	76	87839	18.729	ug/l	100
53) Dibromochloromethane	11.335	129	51982	17.456	ug/l	100
54) 1,2-Dibromoethane	11.447	107	51152	18.556	ug/l	100
55) 2-Chloroethyl vinyl ether	10.141	63	225137	93.348	ug/l	100
56) Bromoform	12.559	173	34081	17.274	ug/l	100
58) 4-Methyl-2-Pentanone	10.424	43	432636	88.189	ug/l	100
59) 2-Hexanone	11.177	43	276879	83.339	ug/l	100
61) Tetrachloroethene	11.082	164	36848	19.253	ug/l	100
62) Toluene	10.612	91	221067	18.530	ug/l	100
64) Chlorobenzene	11.871	112	132910	18.156	ug/l	100
65) 1,1,1,2-Tetrachloroethane	11.935	131	46772	18.150	ug/l	100
66) Ethyl Benzene	11.941	91	230526	17.532	ug/l	100
67) m/p-Xylenes	12.047	106	169788	35.082	ug/l	100
68) o-Xylene	12.377	106	84505	17.701	ug/l	100
69) Styrene	12.388	104	142280	17.520	ug/l	100
70) Isopropylbenzene	12.676	105	205573	17.117	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.918	83	79973	19.086	ug/l	100
72) 1,2,3-Trichloropropane	12.971	75	84570m	21.633	ug/l	
73) Bromobenzene	12.953	156	51969	18.305	ug/l	100
74) n-propylbenzene	13.012	91	266688	17.651	ug/l	100
75) 2-Chlorotoluene	13.106	91	164311	17.679	ug/l	100
76) 1,3,5-Trimethylbenzene	13.153	105	178698	17.339	ug/l	100
77) t-1,4-Dichloro-2-butene	12.718	75	24084	16.407	ug/l	100
78) 4-Chlorotoluene	13.200	91	166605	17.614	ug/l	100
79) tert-butylbenzene	13.418	119	149770	17.250	ug/l	100
80) 1,2,4-Trimethylbenzene	13.459	105	185683	17.861	ug/l	100
81) sec-Butylbenzene	13.594	105	221613	17.504	ug/l	100
82) p-Isopropyltoluene	13.706	119	179893	17.164	ug/l	100
83) 1,3-Dichlorobenzene	13.712	146	104338	19.181	ug/l	100
84) 1,4-Dichlorobenzene	13.788	146	102608	18.737	ug/l	100
85) n-Butylbenzene	14.035	91	169464	16.646	ug/l	100
86) Hexachloroethane	14.312	117	37845	18.193	ug/l	100
87) 1,2-Dichlorobenzene	14.082	146	96835	18.773	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	14.694	75	18320	17.534	ug/l	100
89) 1,2,4-Trichlorobenzene	15.812	180	52849	17.337	ug/l	100
90) Hexachlorobutadiene	15.470	225	19260	16.481	ug/l	100
91) Naphthalene	15.612	128	190673	16.595	ug/l	100
92) 1,2,3-Trichlorobenzene	15.812	180	52849	17.337	ug/l	100

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

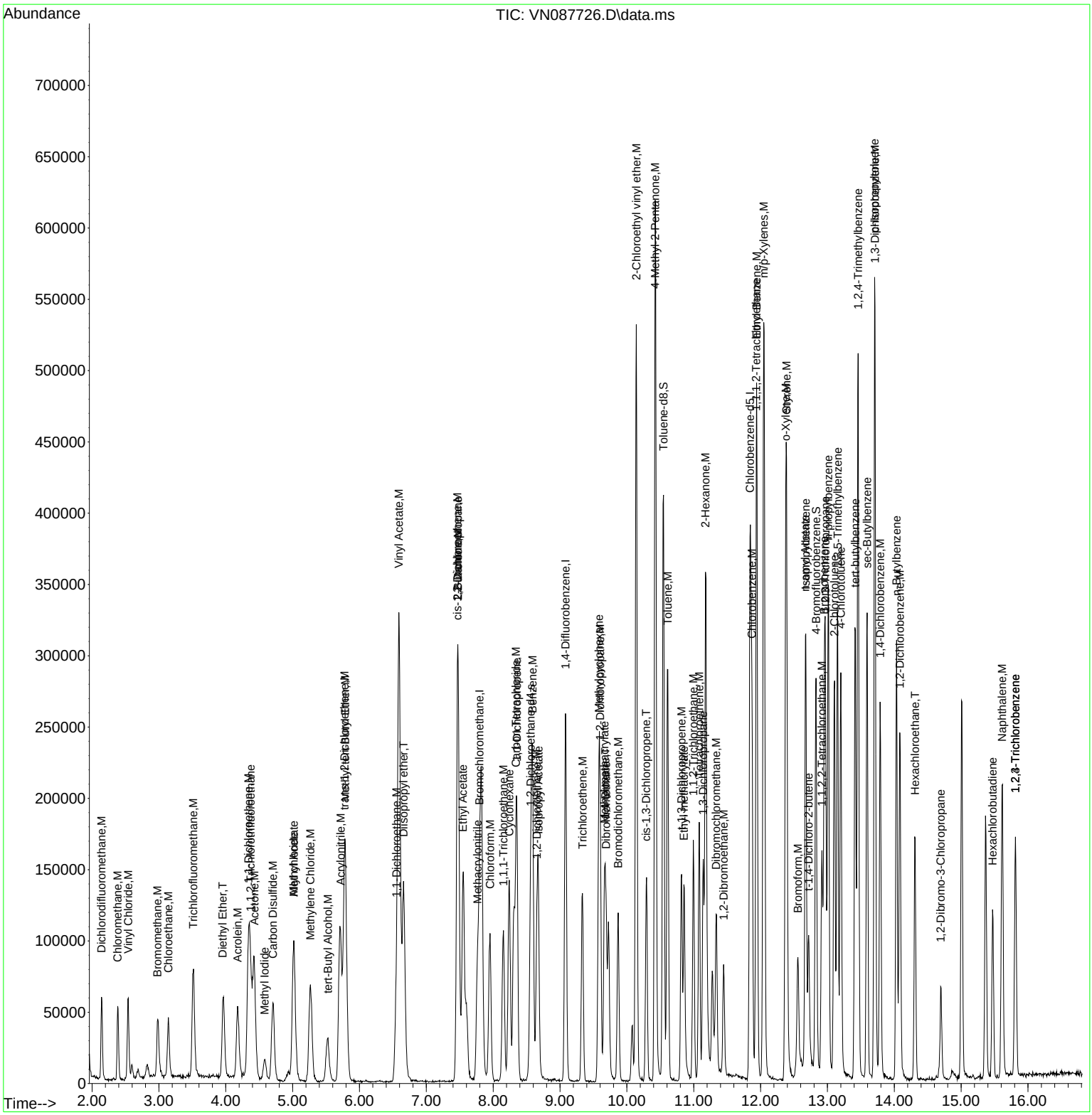
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087726.D
Acq On : 04 Sep 2025 16:44
Operator : JC\MD
Sample : VSTDICCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 15 Sample Multiplier: 1

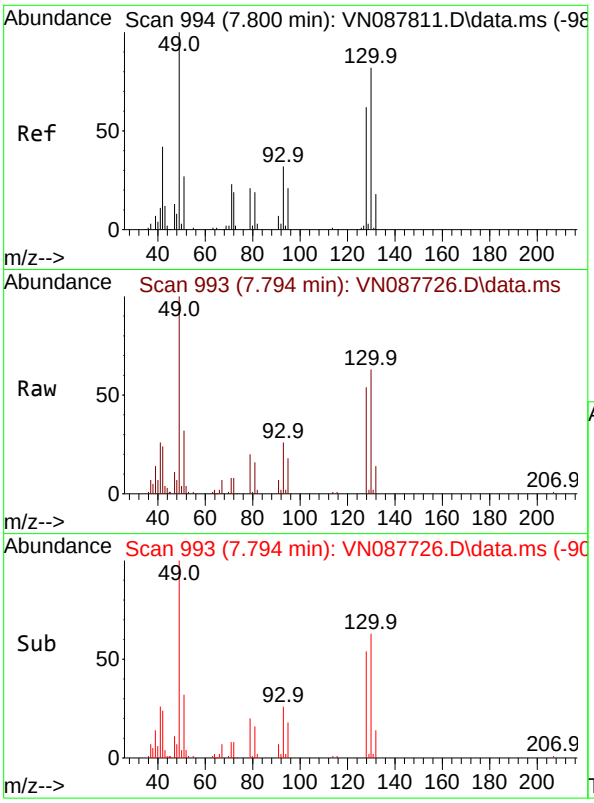
Quant Time: Sep 05 02:56:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

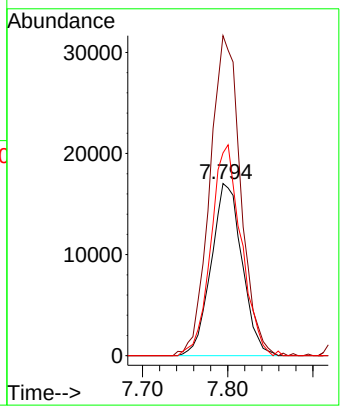




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.794 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:128 Resp: 4280

Ion	Ratio	Lower	Upper
128	100		
49	185.7	0.0	464.3
130	120.2	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations
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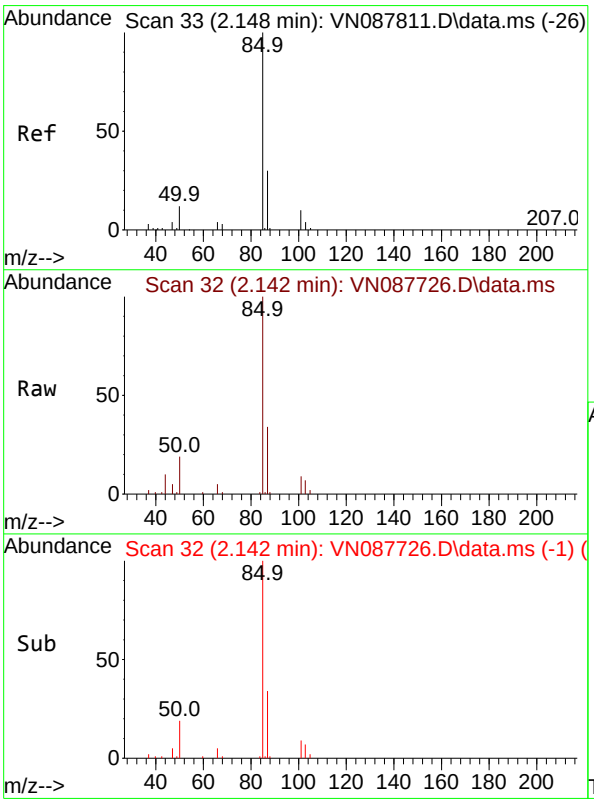
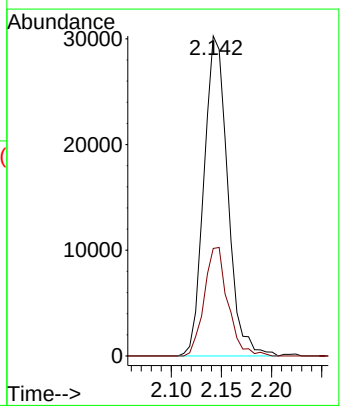
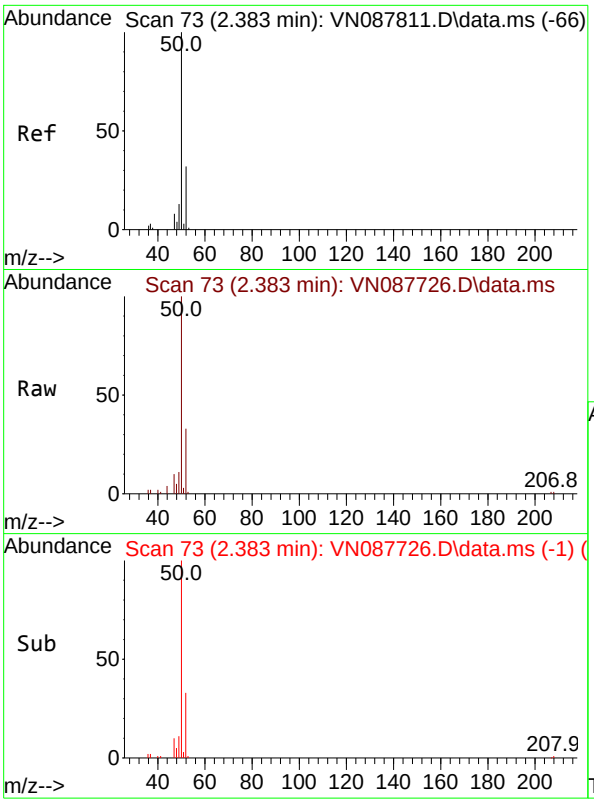


#2
Dichlorodifluoromethane
Concen: 18.465 ug/l
RT: 2.142 min Scan# 32
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 85 Resp: 49949

Ion	Ratio	Lower	Upper
85	100		
87	33.6	16.8	50.4

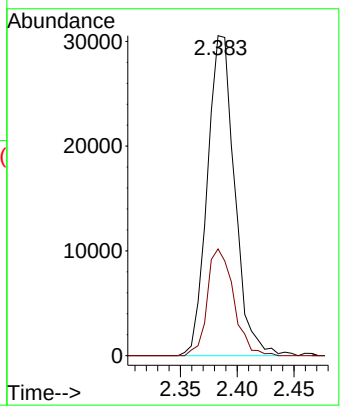




#3
Chloromethane
Concen: 18.521 ug/l
RT: 2.383 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 50 Resp: 5113

Ion	Ratio	Lower	Upper
50	100		
52	33.3	26.6	40.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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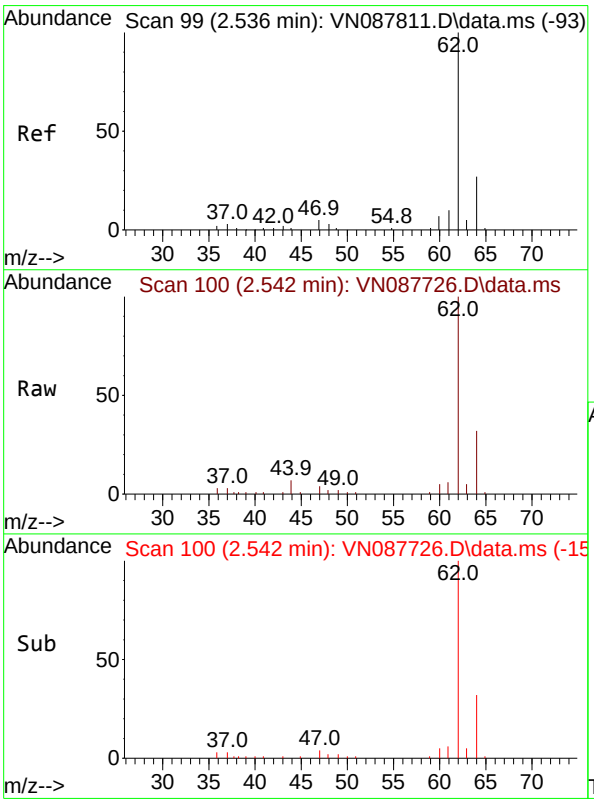
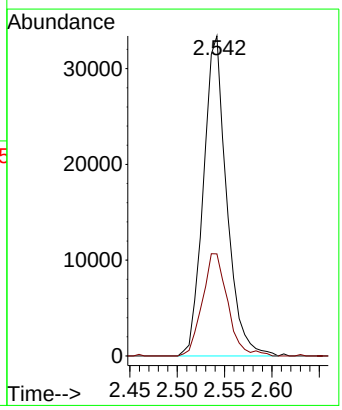
Supervised By :Mahesh Dadoda 09/05/2025

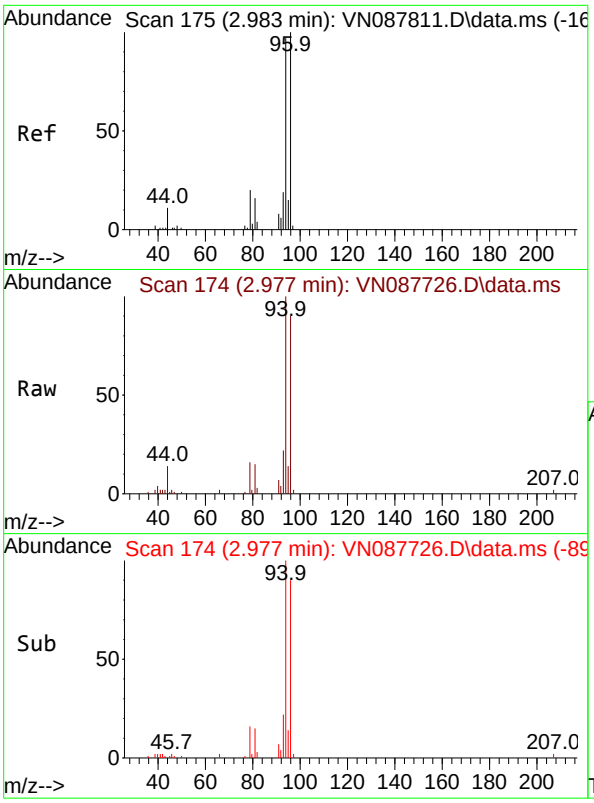


#4
Vinyl Chloride
Concen: 19.294 ug/l
RT: 2.542 min Scan# 100
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 62 Resp: 57095

Ion	Ratio	Lower	Upper
62	100		
64	31.9	25.5	38.3

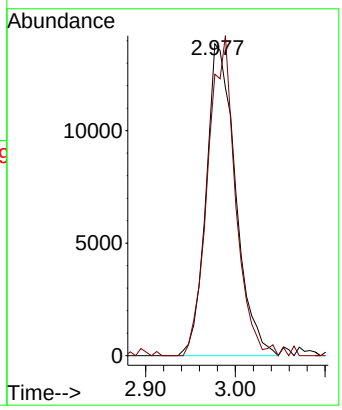




#5
Bromomethane
Concen: 19.377 ug/l
RT: 2.977 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 94 Resp: 3160

Ion	Ratio	Lower	Upper
94	100		
96	90.3	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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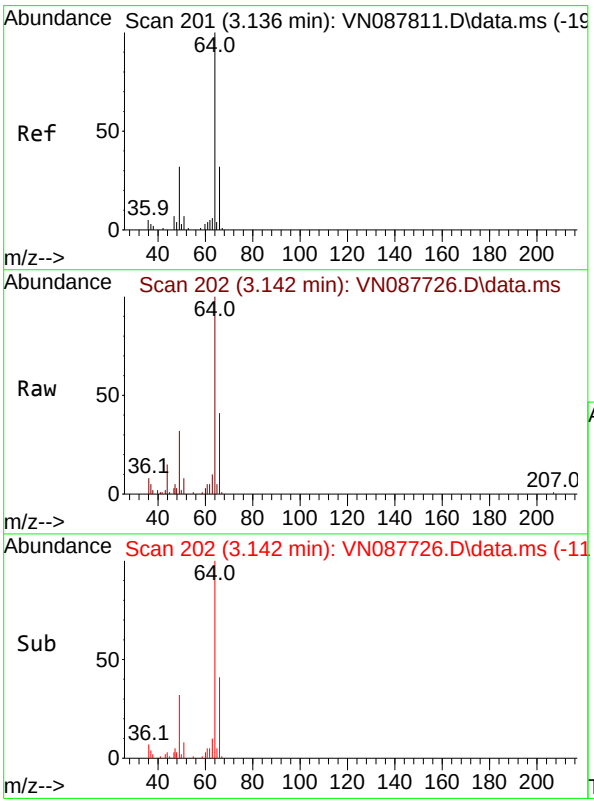
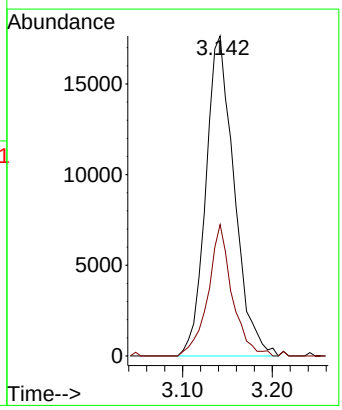
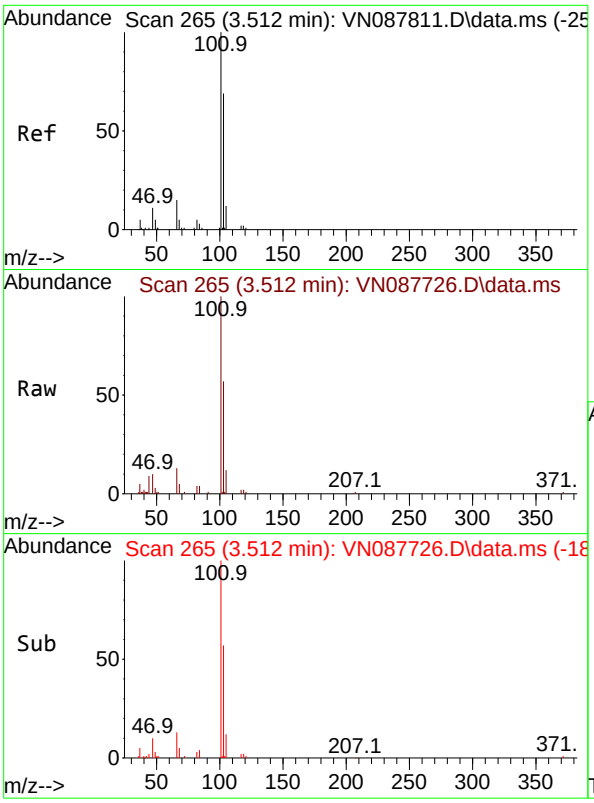


#6
Chloroethane
Concen: 19.998 ug/l
RT: 3.142 min Scan# 202
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 64 Resp: 38748

Ion	Ratio	Lower	Upper
64	100		
66	41.0	32.8	49.2

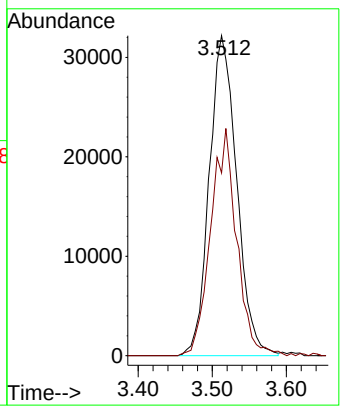




#7
Trichlorofluoromethane
Concen: 19.315 ug/l
RT: 3.512 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:101 Resp: 8286

Ion	Ratio	Lower	Upper
101	100		
103	57.1	45.7	68.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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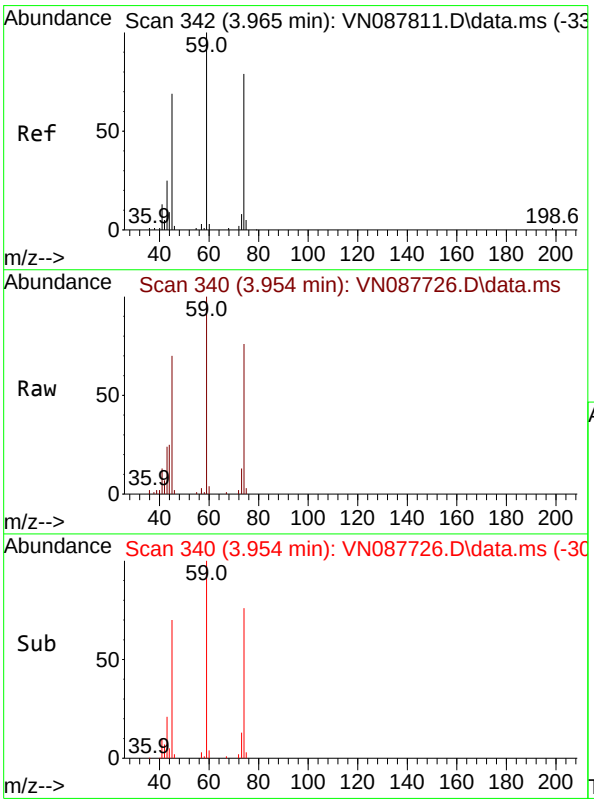
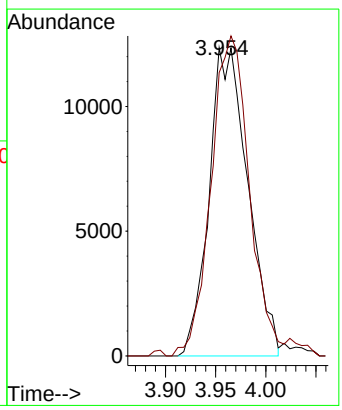
Supervised By :Mahesh Dadoda 09/05/2025

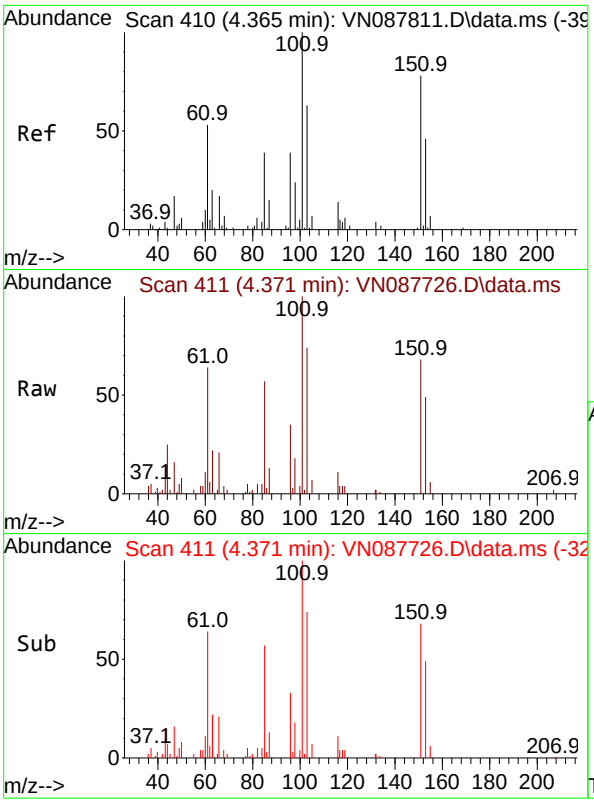


#8
Diethyl Ether
Concen: 18.728 ug/l
RT: 3.954 min Scan# 340
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 74 Resp: 33334

Ion	Ratio	Lower	Upper
74	100		
45	102.1	20.4	183.8

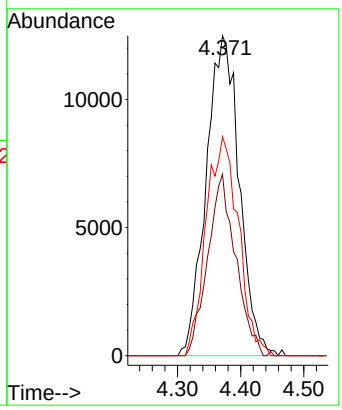




#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.339 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:101 Resp: 4539

Ion	Ratio	Lower	Upper
101	100		
85	47.8	0.0	95.6
151	42.9	0.0	85.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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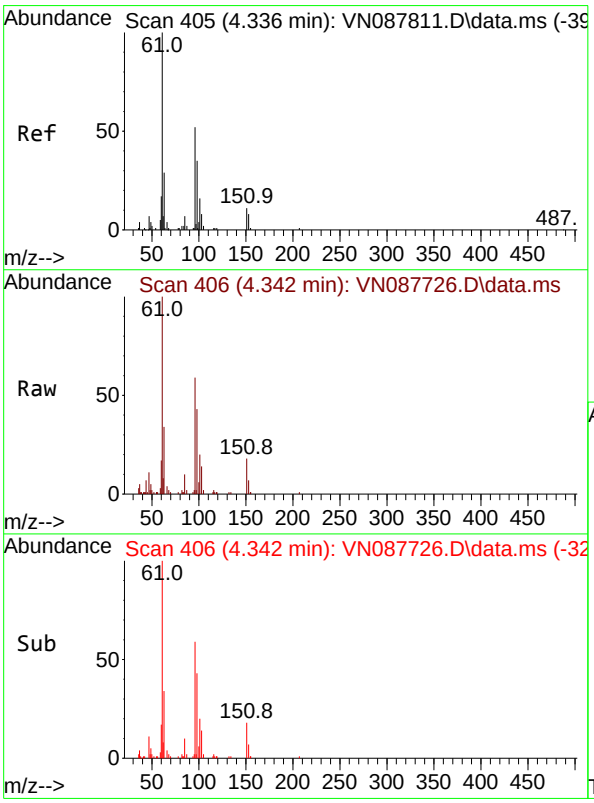
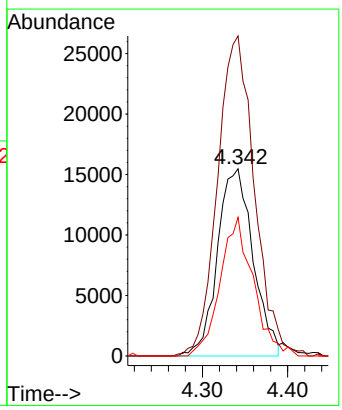
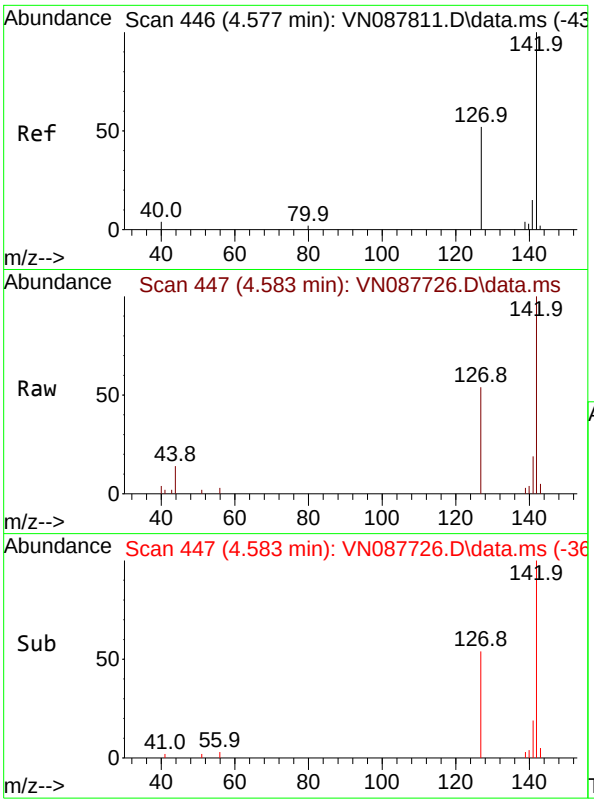


#10
1,1-Dichloroethene
Concen: 19.539 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 96 Resp: 44944

Ion	Ratio	Lower	Upper
96	100		
61	169.9	135.9	203.9
98	74.0	59.2	88.8

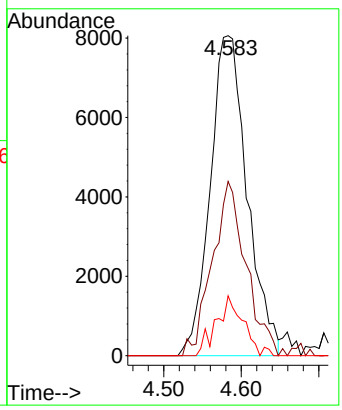




#11
Methyl Iodide
Concen: 14.779 ug/l
RT: 4.583 min Scan# 44
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:142 Resp: 2668

Ion	Ratio	Lower	Upper
142	100		
127	55.8	27.9	83.7
141	19.2	9.6	28.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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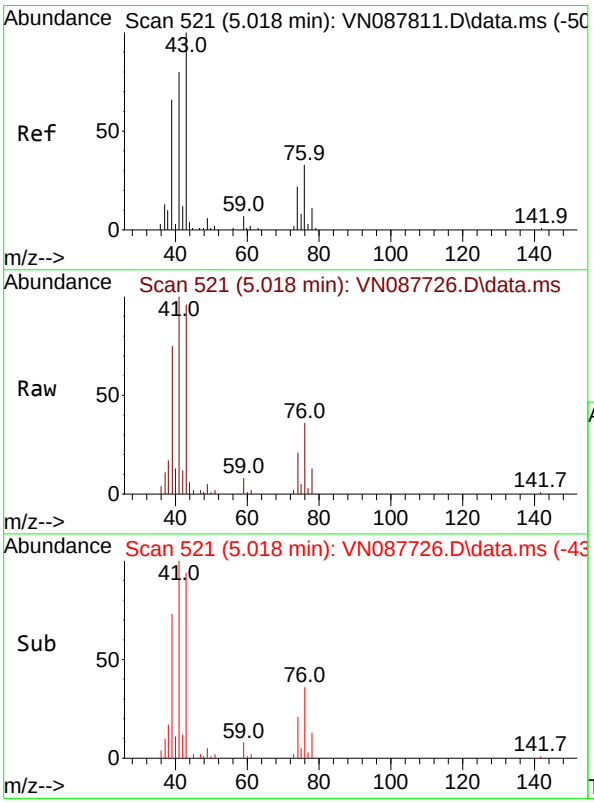
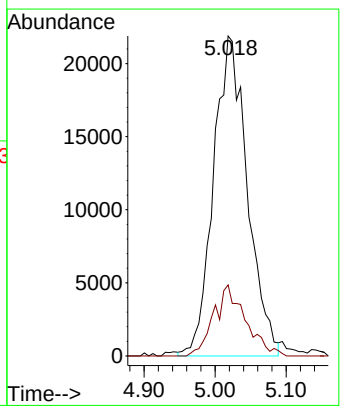
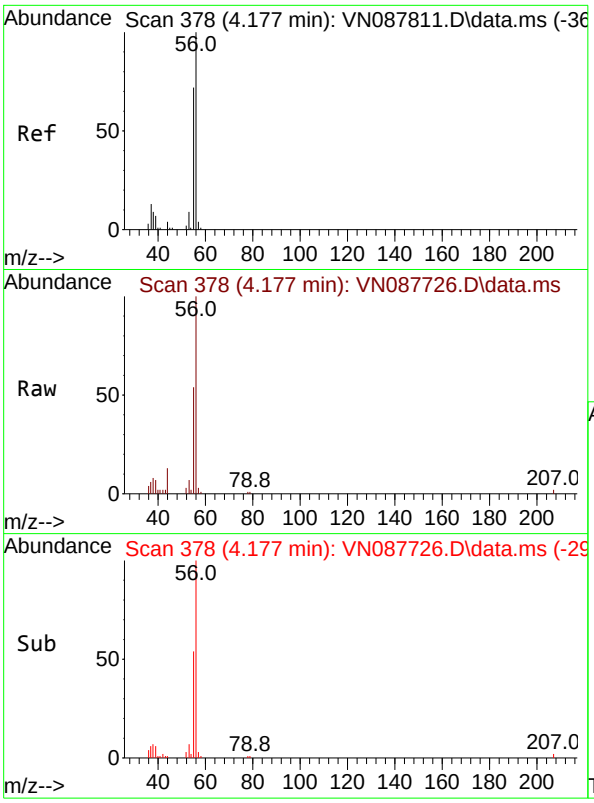


#12
Methyl Acetate
Concen: 17.391 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 43 Resp: 72499

Ion	Ratio	Lower	Upper
43	100		
74	21.9	17.5	26.3

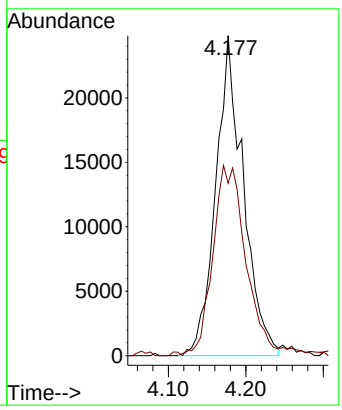




#13
Acrolein
Concen: 94.456 ug/l
RT: 4.177 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 56 Resp: 6156

Ion	Ratio	Lower	Upper
56	100		
55	35.7	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations
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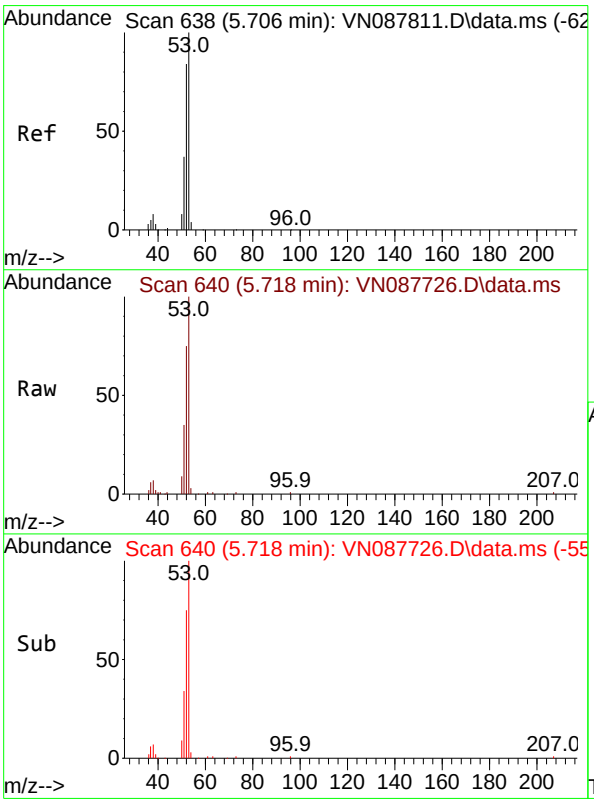
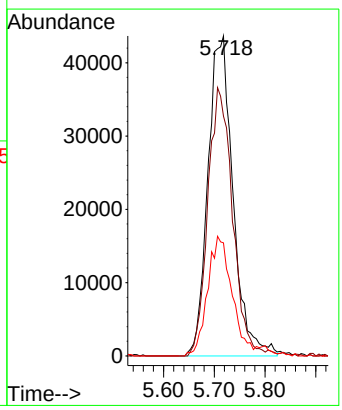
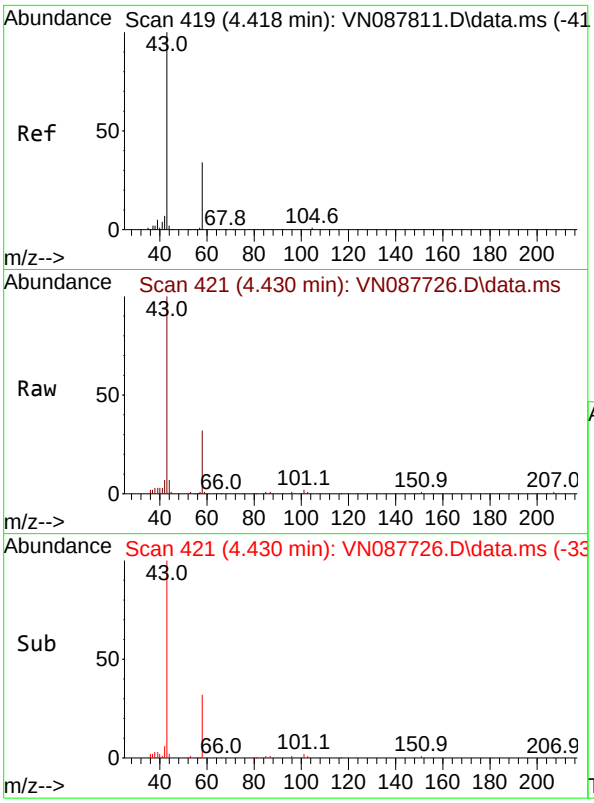


#14
Acrylonitrile
Concen: 83.131 ug/l m
RT: 5.718 min Scan# 640
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 53 Resp: 149903

Ion	Ratio	Lower	Upper
53	100		
52	82.3	40.9	122.7
51	36.3	18.1	54.1

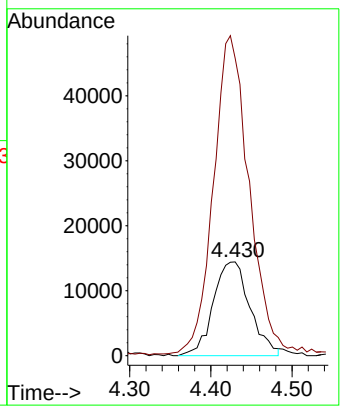




#15
Acetone
Concen: 88.853 ug/l
RT: 4.430 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 58 Resp: 4545

Ion	Ratio	Lower	Upper
58	100		
43	313.3	250.6	376.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations
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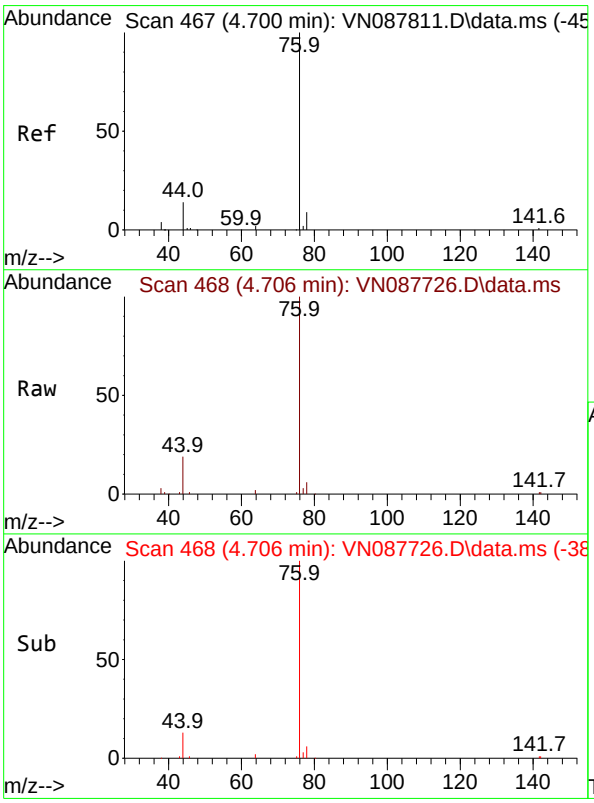
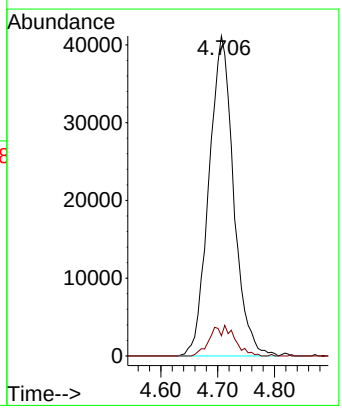
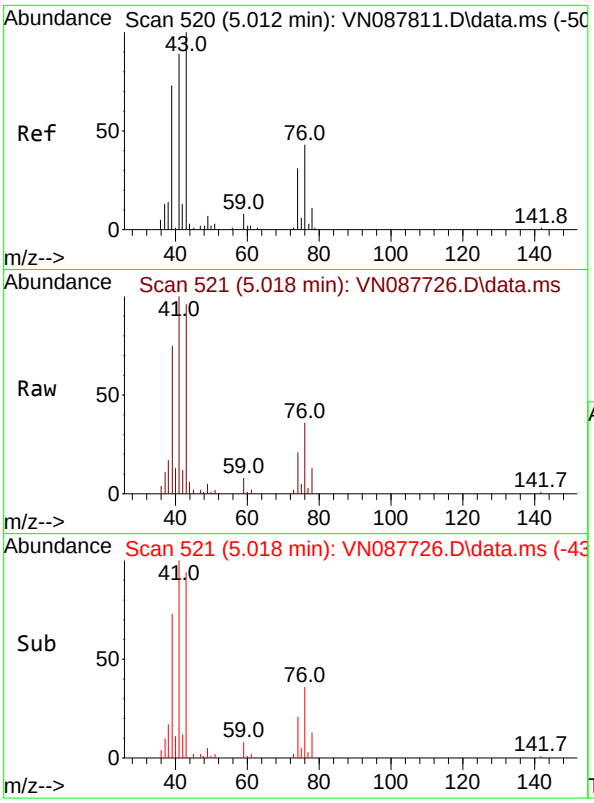


#16
Carbon Disulfide
Concen: 17.652 ug/l
RT: 4.706 min Scan# 468
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 76 Resp: 124233

Ion	Ratio	Lower	Upper
76	100		
78	6.3	5.0	7.6

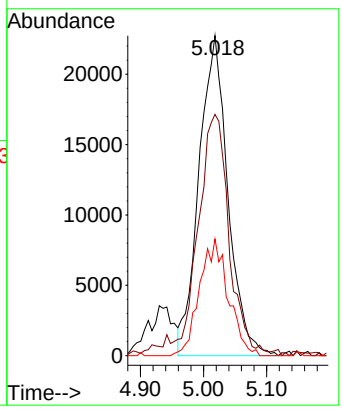




#17
Allyl chloride
Concen: 15.970 ug/l
RT: 5.018 min Scan# 5
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 41 Resp: 7250

Ion	Ratio	Lower	Upper
41	100		
39	73.4	36.7	110.1
76	36.5	18.3	54.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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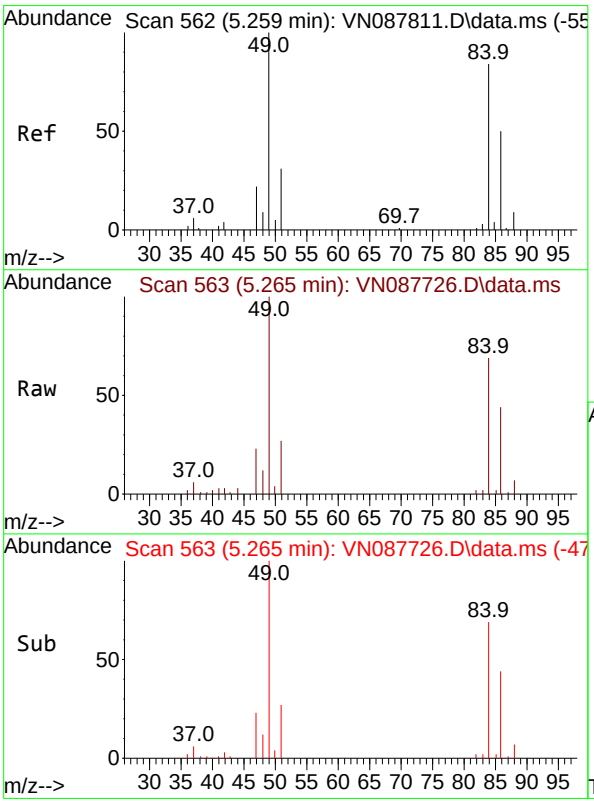
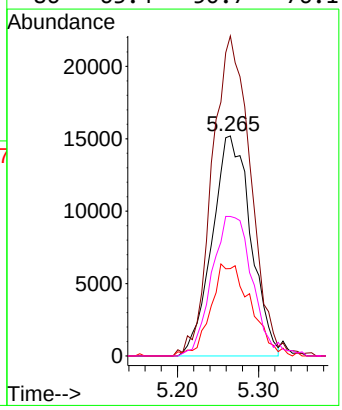
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

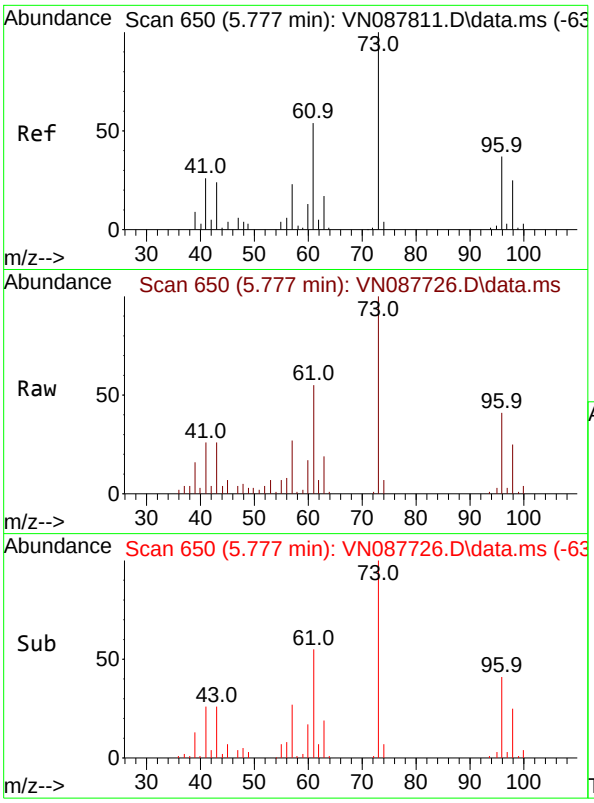


#18
Methylene Chloride
Concen: 17.300 ug/l
RT: 5.265 min Scan# 563
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 84 Resp: 50199

Ion	Ratio	Lower	Upper
84	100		
49	142.6	114.1	171.1
51	37.8	30.2	45.4
86	63.4	50.7	76.1

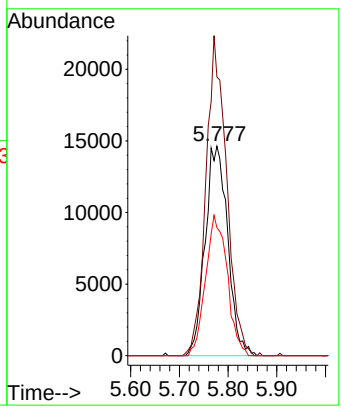




#19
trans-1,2-Dichloroethene
Concen: 17.562 ug/l m
RT: 5.777 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 96 Resp: 4715

Ion	Ratio	Lower	Upper
96	100		
61	133.0	106.4	159.6
98	61.1	48.9	73.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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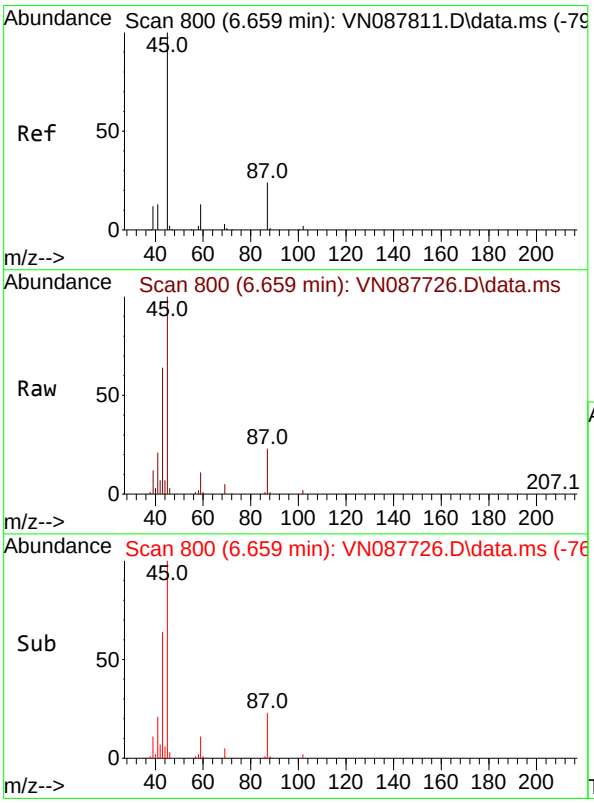
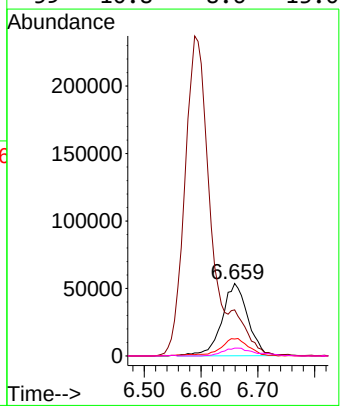
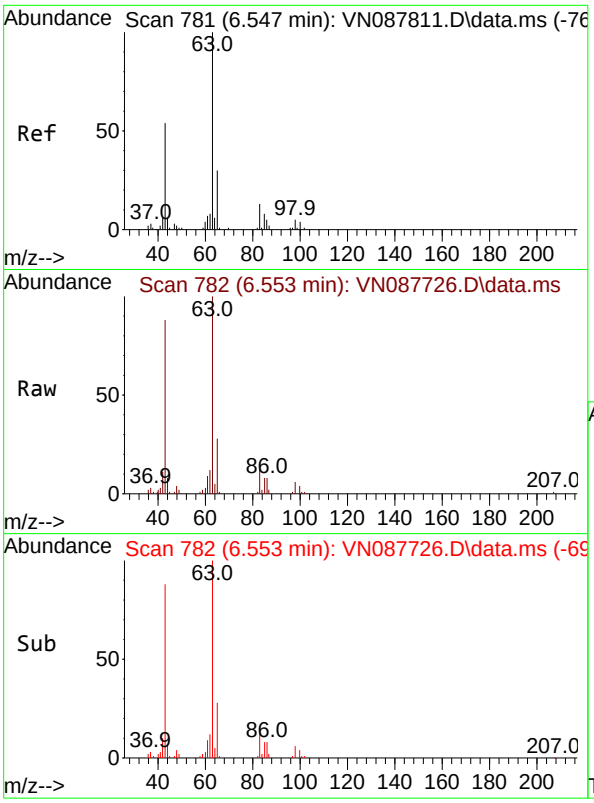


#20
Diisopropyl ether
Concen: 16.339 ug/l
RT: 6.659 min Scan# 800
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 45 Resp: 169008

Ion	Ratio	Lower	Upper
45	100		
43	61.9	49.5	74.3
87	23.5	18.8	28.2
59	10.8	8.6	13.0

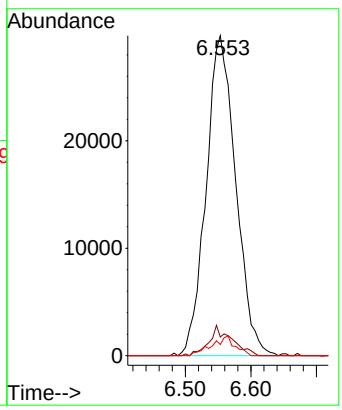




#21
1,1-Dichloroethane
Concen: 17.386 ug/l
RT: 6.553 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 63 Resp: 9352

Ion	Ratio	Lower	Upper
63	100		
98	5.9	2.9	8.8
100	3.5	1.8	5.3



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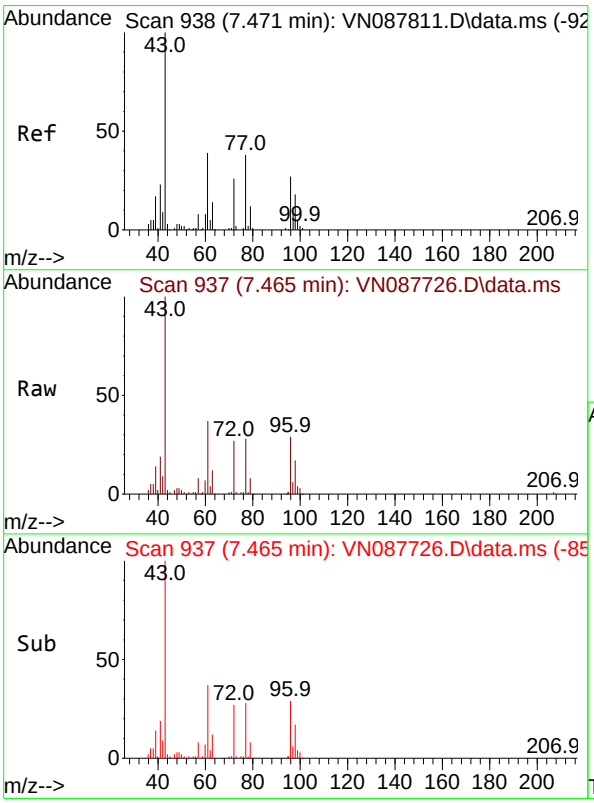
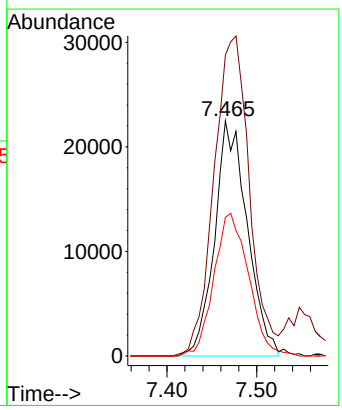
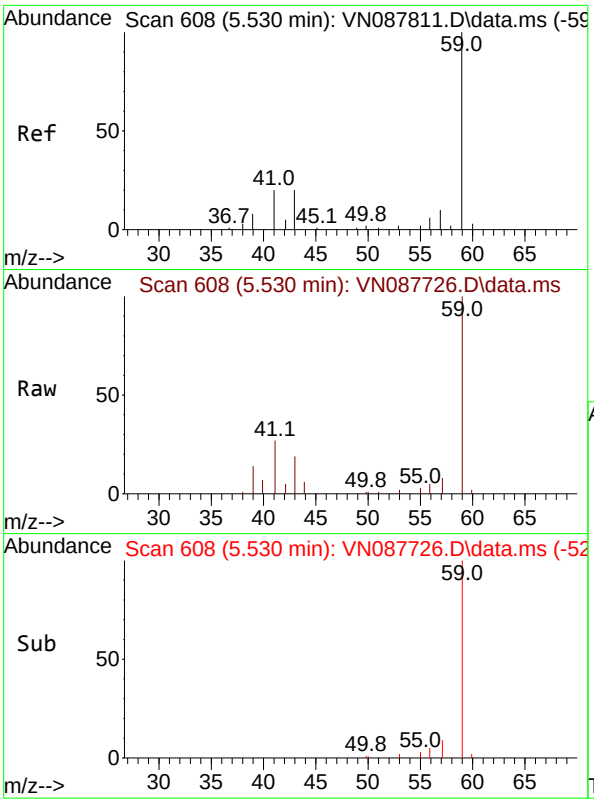


#22
cis-1,2-Dichloroethene
Concen: 17.275 ug/l
RT: 7.465 min Scan# 937
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 96 Resp: 56746

Ion	Ratio	Lower	Upper
96	100		
61	147.7	118.2	177.2
98	64.5	51.6	77.4

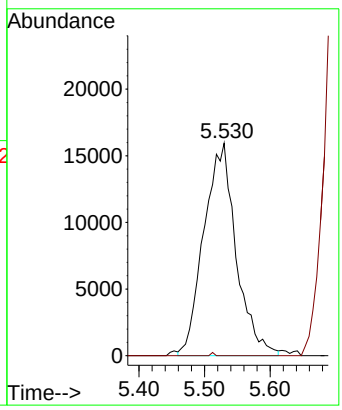




#23
tert-Butyl Alcohol
Concen: 72.820 ug/l
RT: 5.530 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 59 Resp: 5458

Ion	Ratio	Lower	Upper
59	100		
52	0.0	0.0	0.0



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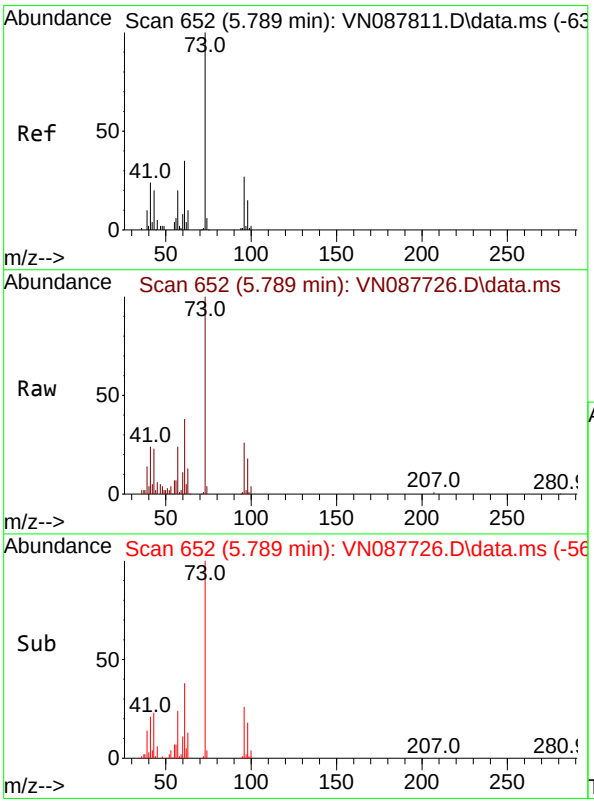
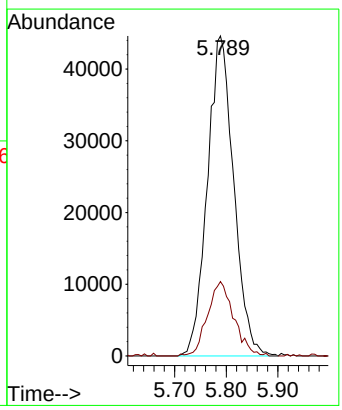
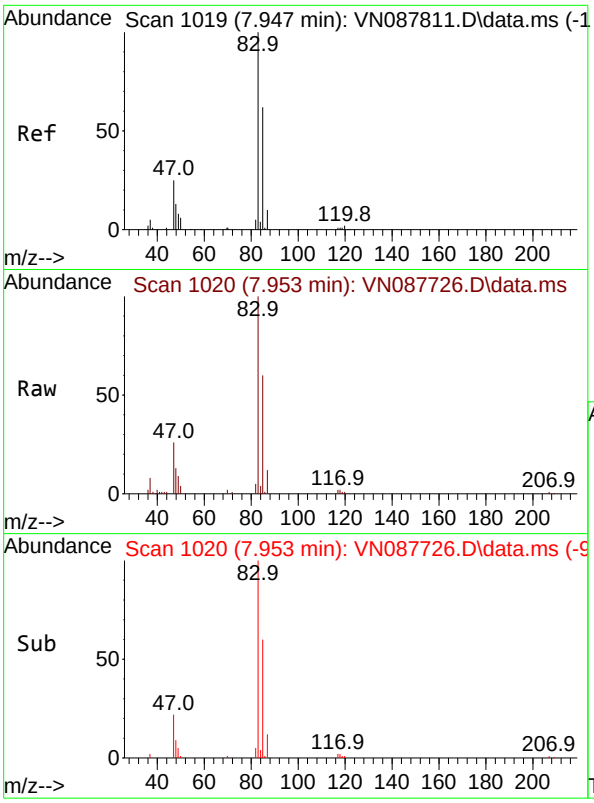


#24
Methyl tert-Butyl Ether
Concen: 15.680 ug/l
RT: 5.789 min Scan# 652
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 73 Resp: 158036

Ion	Ratio	Lower	Upper
73	100		
43	21.0	16.8	25.2

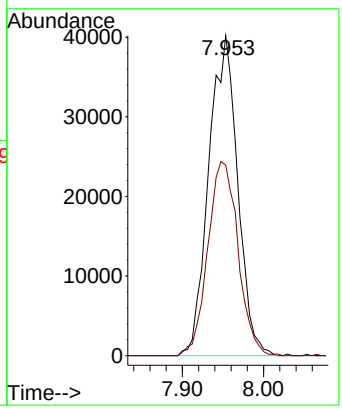




#25
Chloroform
Concen: 17.558 ug/l
RT: 7.953 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 83 Resp: 9943

Ion	Ratio	Lower	Upper
83	100		
85	59.6	47.7	71.5



Instrument :
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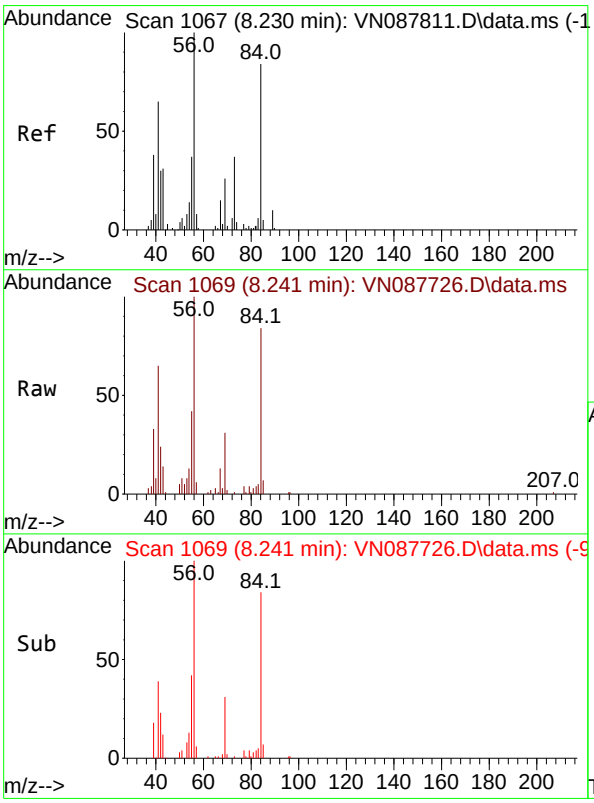
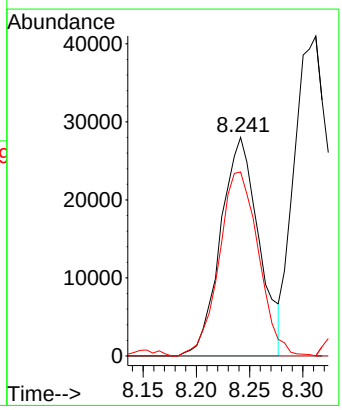
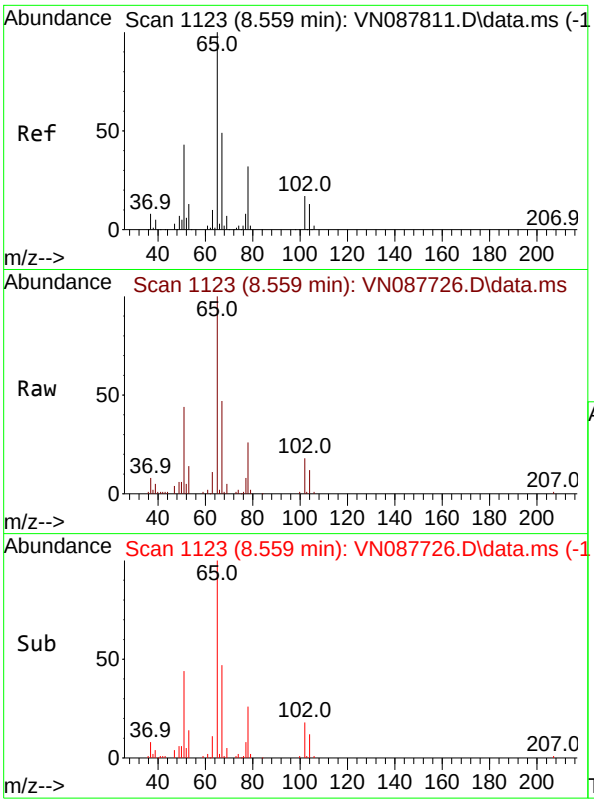


#26
Cyclohexane
Concen: 16.417 ug/l
RT: 8.241 min Scan# 1069
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 56 Resp: 69837

Ion	Ratio	Lower	Upper
56	100		
89	0.0	0.0	0.0
84	86.8	69.4	104.2

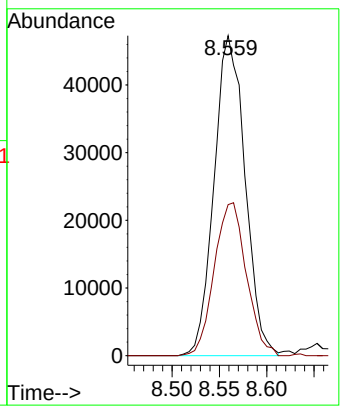




#27
1,2-Dichloroethane-d4
Concen: 27.862 ug/l
RT: 8.559 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 65 Resp: 10739

Ion	Ratio	Lower	Upper
65	100		
67	49.5	39.6	59.4



Instrument :
MSVOA_N
ClientSampleId :
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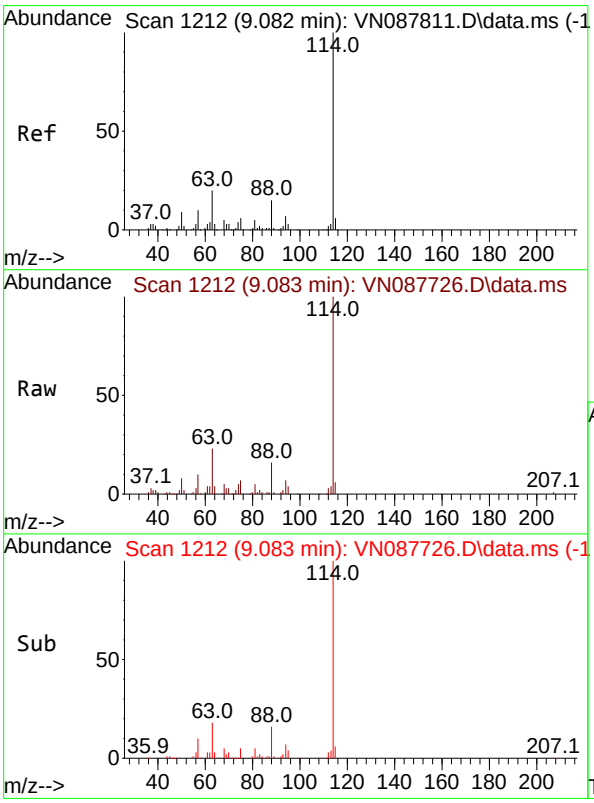
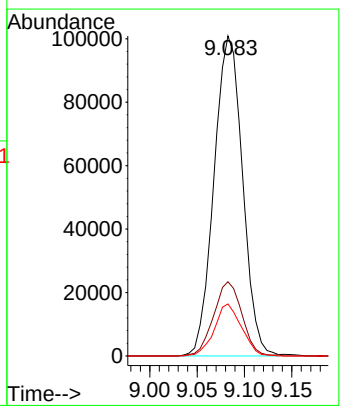
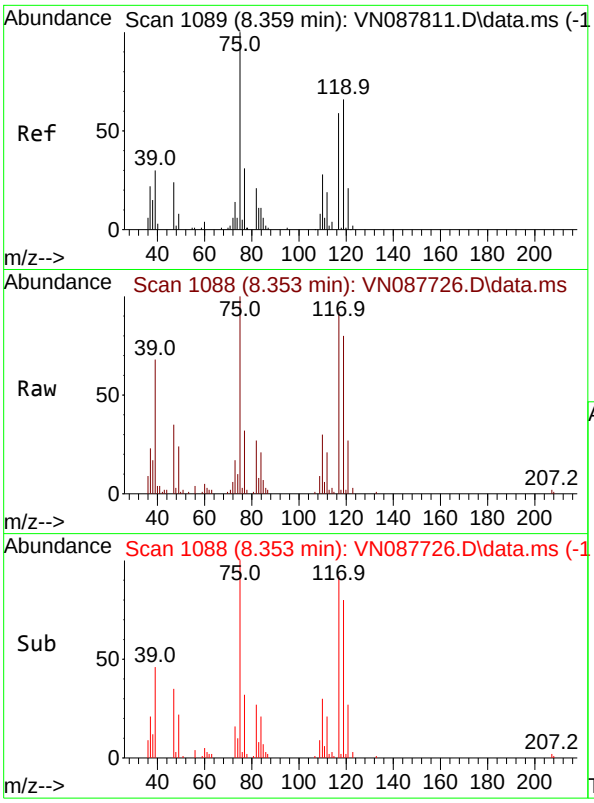


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.083 min Scan# 1212
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:114 Resp: 211459

Ion	Ratio	Lower	Upper
114	100		
63	22.9	18.3	27.5
88	15.5	12.4	18.6

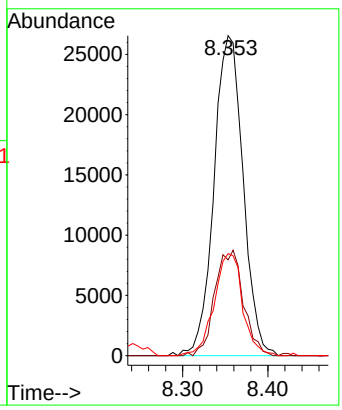




#29
1,1-Dichloropropene
Concen: 18.638 ug/l
RT: 8.353 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 75 Resp: 6317

Ion	Ratio	Lower	Upper
75	100		
110	32.2	0.0	64.4
77	31.1	0.0	62.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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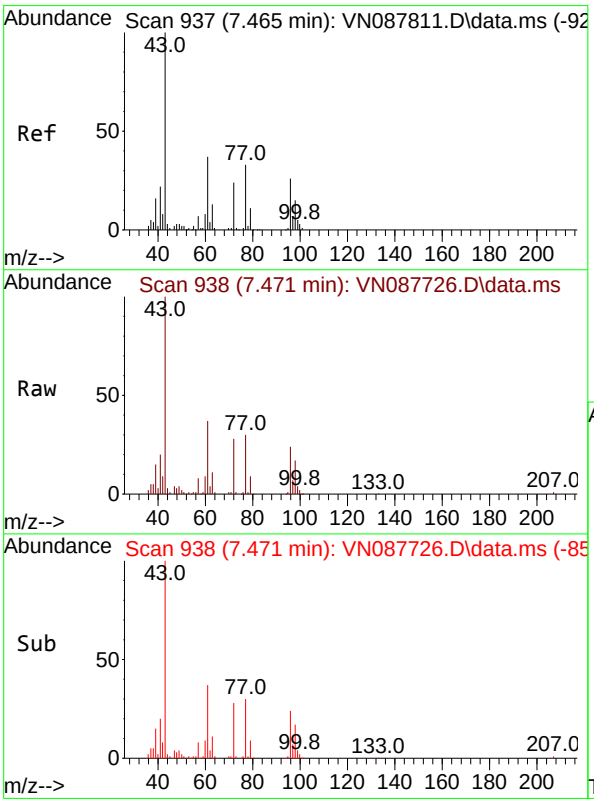
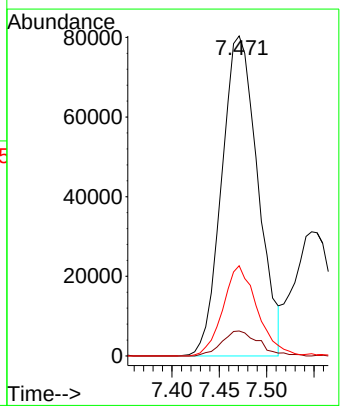
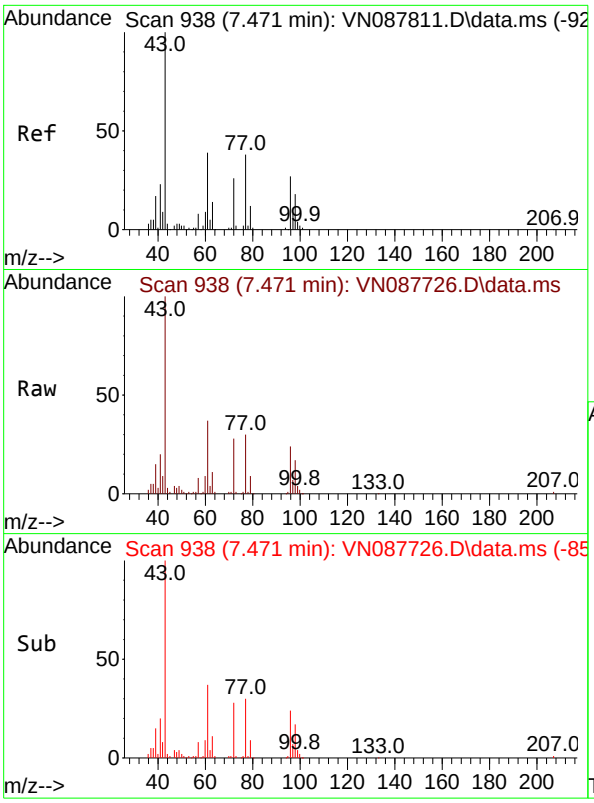


#30
2-Butanone
Concen: 86.904 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 43 Resp: 213338

Ion	Ratio	Lower	Upper
43	100		
57	7.9	6.3	9.5
72	26.8	21.4	32.2

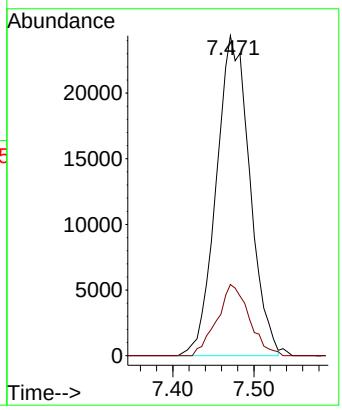




#31
2,2-Dichloropropane
Concen: 16.445 ug/l
RT: 7.471 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 77 Resp: 6983

Ion	Ratio	Lower	Upper
77	100		
97	21.4	17.1	25.7



Instrument :
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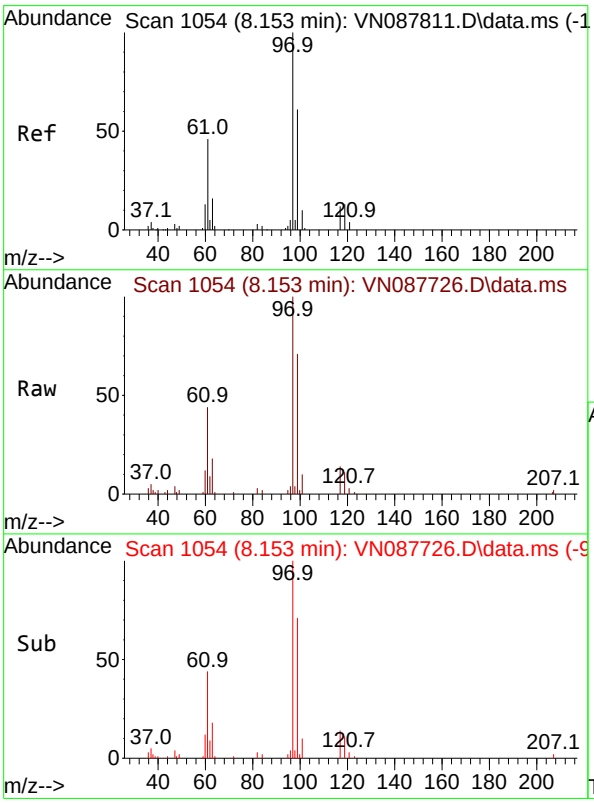
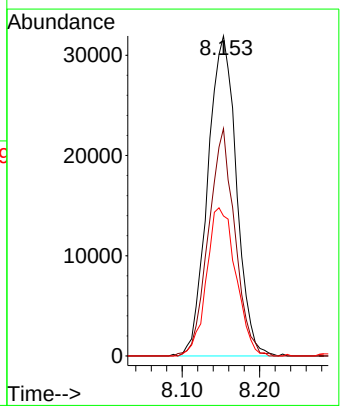
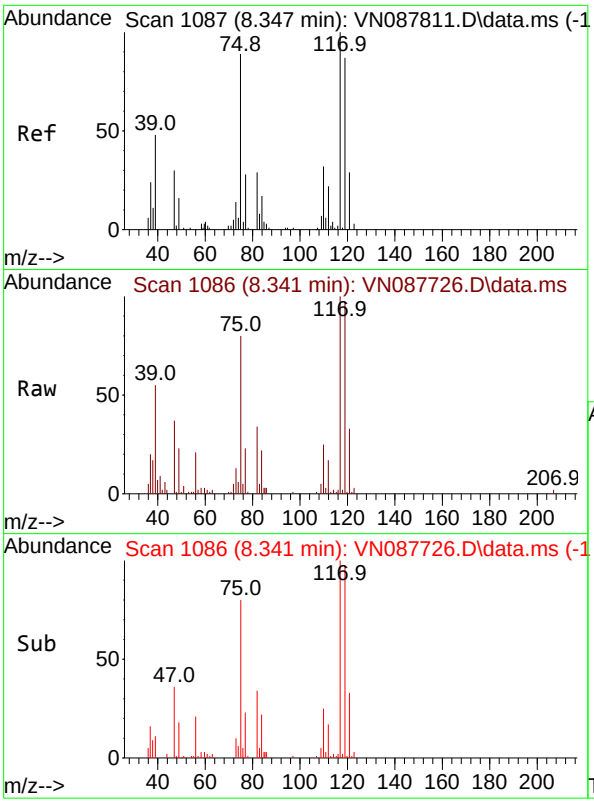


#32
1,1,1-Trichloroethane
Concen: 18.860 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 97 Resp: 81988

Ion	Ratio	Lower	Upper
97	100		
99	65.3	52.2	78.4
61	47.4	37.9	56.9

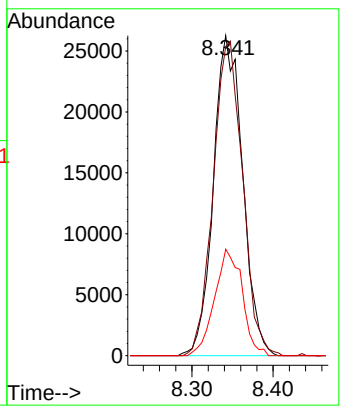




#33
Carbon Tetrachloride
Concen: 18.352 ug/l
RT: 8.341 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:117 Resp: 6565

Ion	Ratio	Lower	Upper
117	100		
119	96.6	77.3	115.9
121	33.2	26.6	39.8



Instrument :
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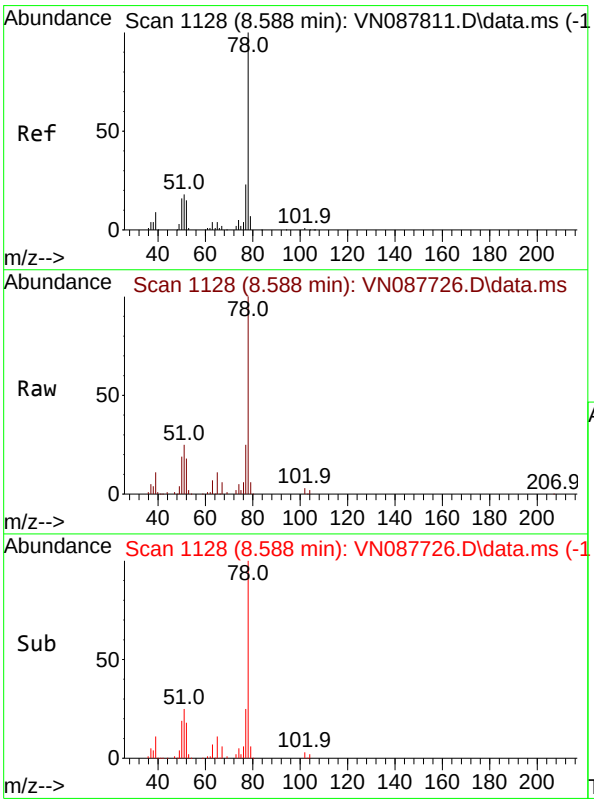
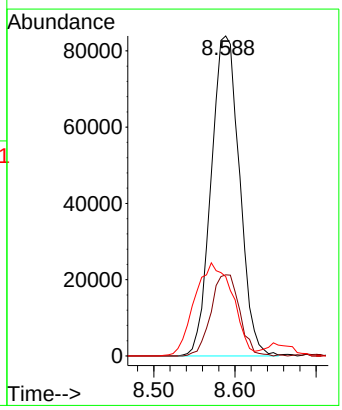
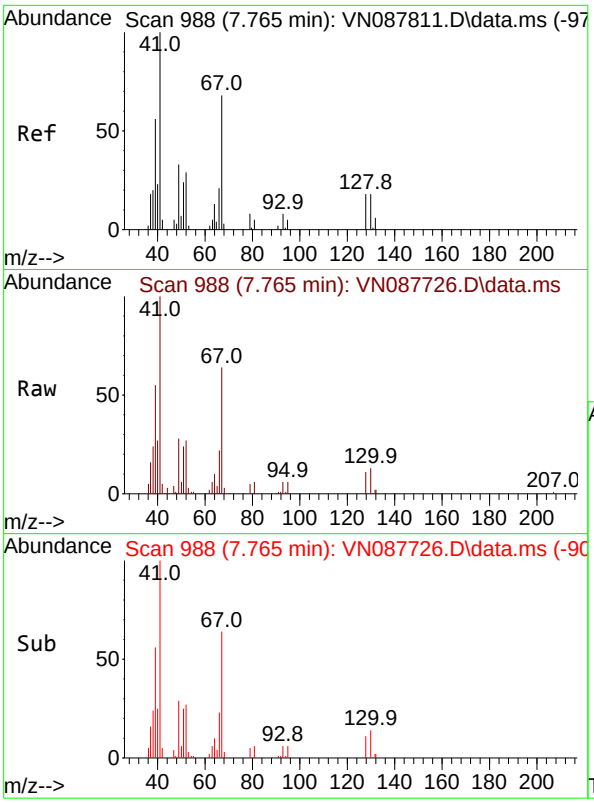


#34
Benzene
Concen: 18.914 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 78 Resp: 203295

Ion	Ratio	Lower	Upper
78	100		
77	25.4	20.3	30.5
51	22.5	18.0	27.0

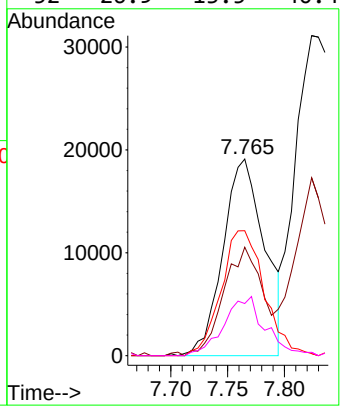




#35
Methacrylonitrile
Concen: 18.198 ug/l
RT: 7.765 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 41 Resp: 4852

Ion	Ratio	Lower	Upper
41	100		
39	54.1	27.1	81.2
67	64.3	32.1	96.5
52	26.9	13.5	40.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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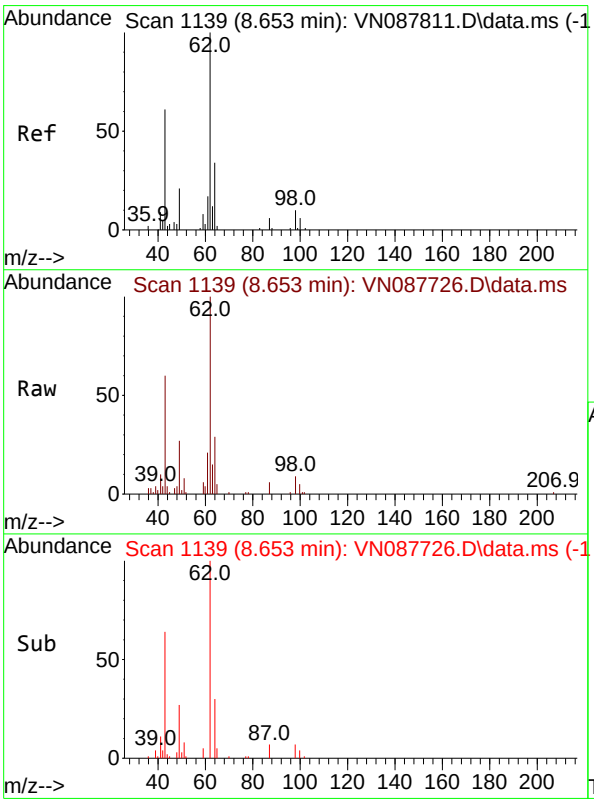
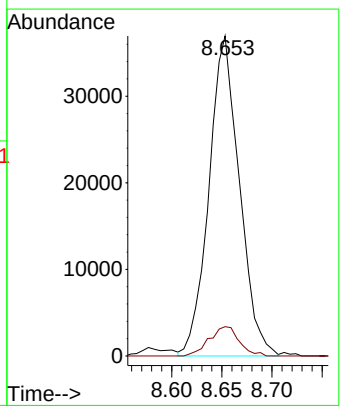
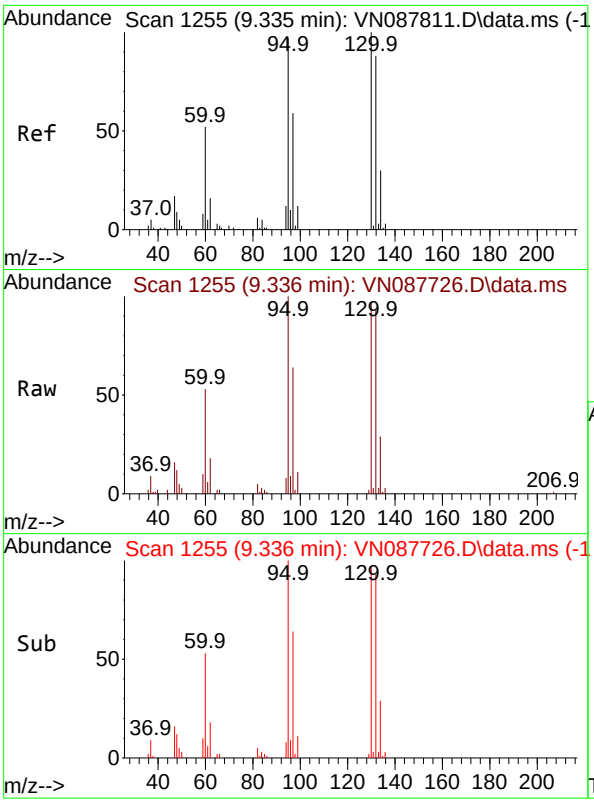


#36
1,2-Dichloroethane
Concen: 18.230 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 62 Resp: 78112

Ion	Ratio	Lower	Upper
62	100		
98	9.0	7.2	10.8

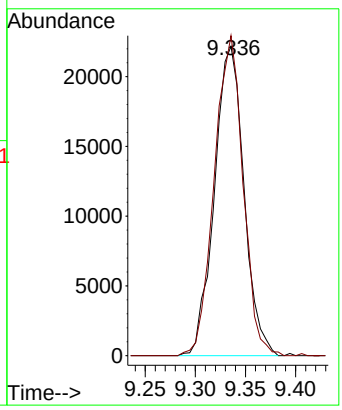




#37
Trichloroethene
Concen: 19.215 ug/l
RT: 9.336 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:130 Resp: 4548

Ion	Ratio	Lower	Upper
130	100		
95	103.4	82.7	124.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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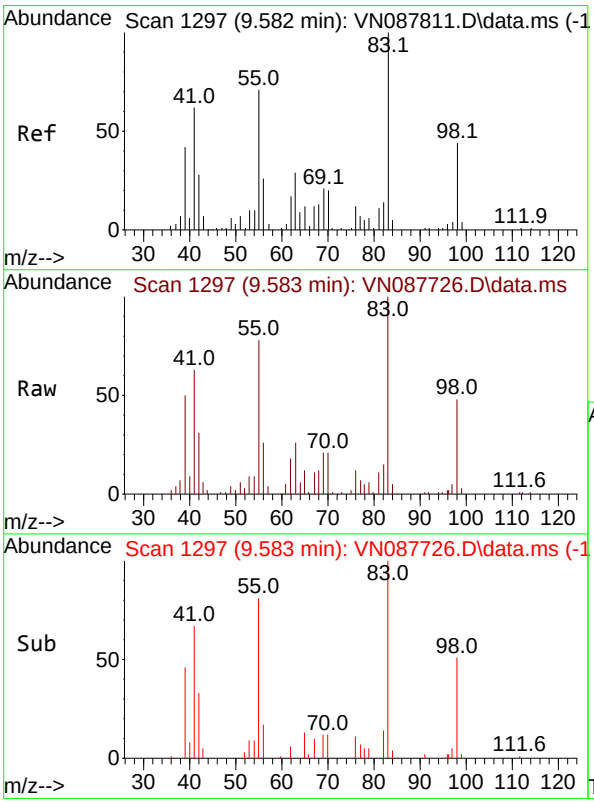
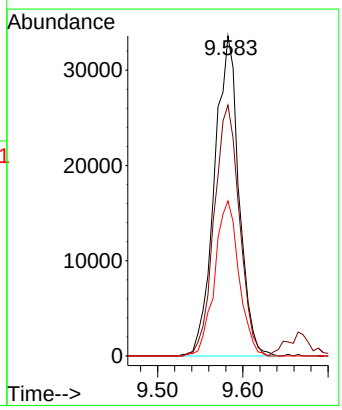
Supervised By :Mahesh Dadoda 09/05/2025

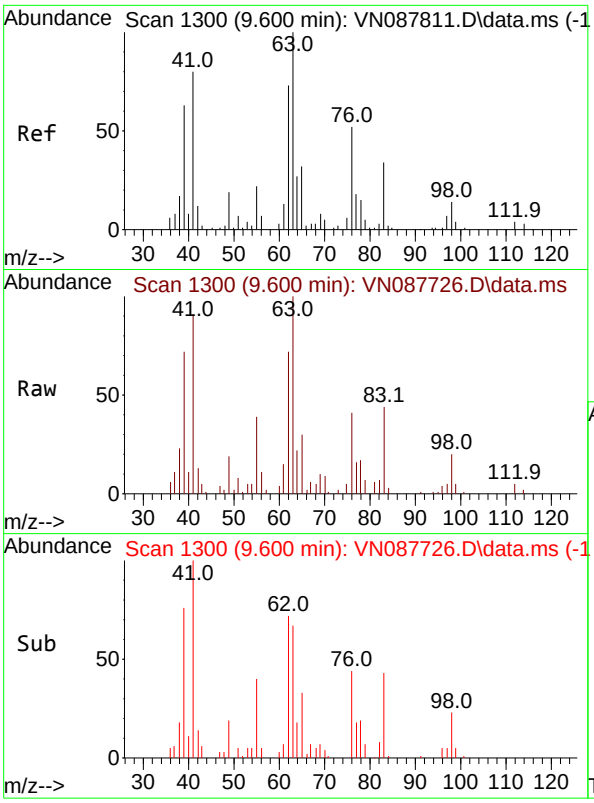


#38
Methylcyclohexane
Concen: 17.371 ug/l
RT: 9.583 min Scan# 1297
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 83 Resp: 67168

Ion	Ratio	Lower	Upper
83	100		
55	80.7	40.4	121.1
98	48.0	24.0	72.0

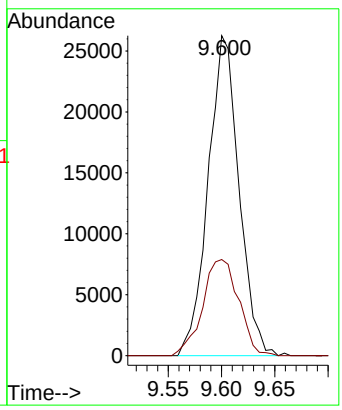




#39
1,2-Dichloropropane
Concen: 19.162 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 63 Resp: 5278

Ion	Ratio	Lower	Upper
63	100		
65	30.1	24.1	36.1



Instrument :
MSVOA_N
ClientSampleId :
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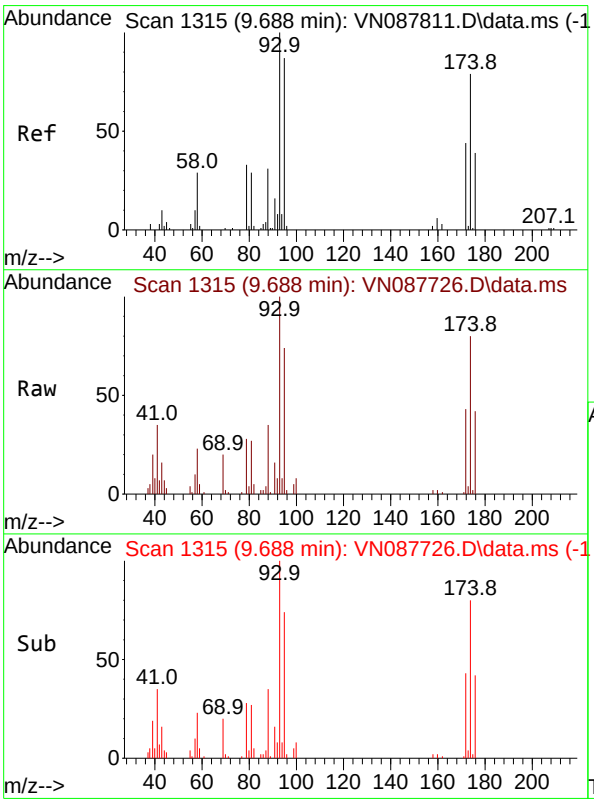
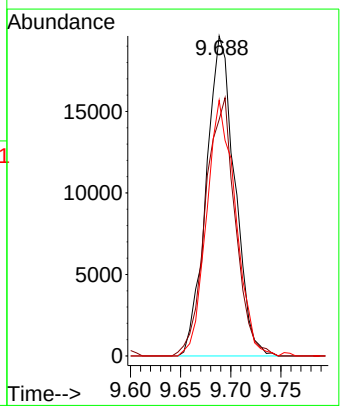
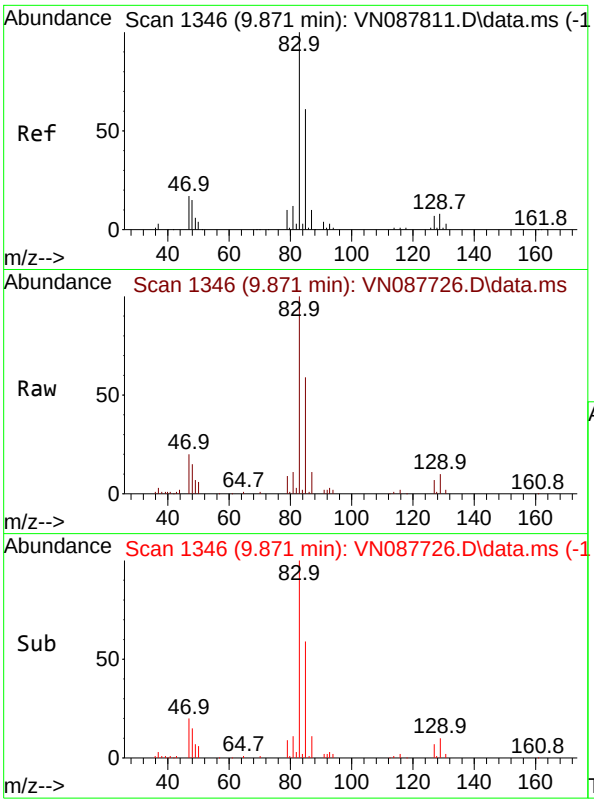


#40
Dibromomethane
Concen: 18.828 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 93 Resp: 38777

Ion	Ratio	Lower	Upper
93	100		
95	84.2	0.0	168.4
174	81.4	0.0	162.8

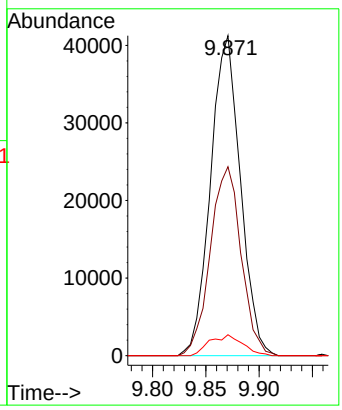




#41
Bromodichloromethane
Concen: 18.694 ug/l
RT: 9.871 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 83 Resp: 8040

Ion	Ratio	Lower	Upper
83	100		
85	59.1	47.3	70.9
127	6.5	5.2	7.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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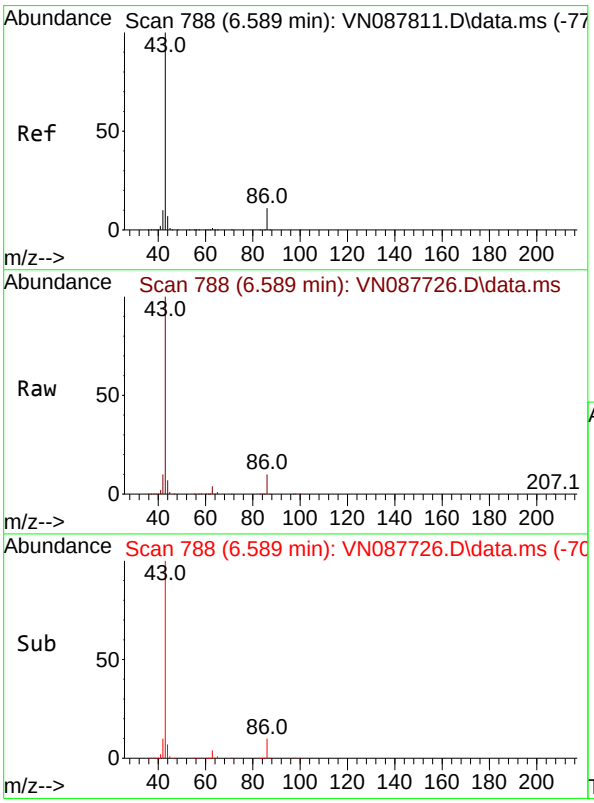
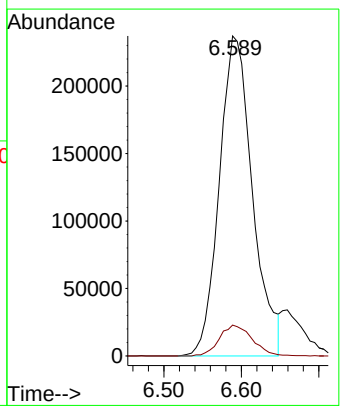
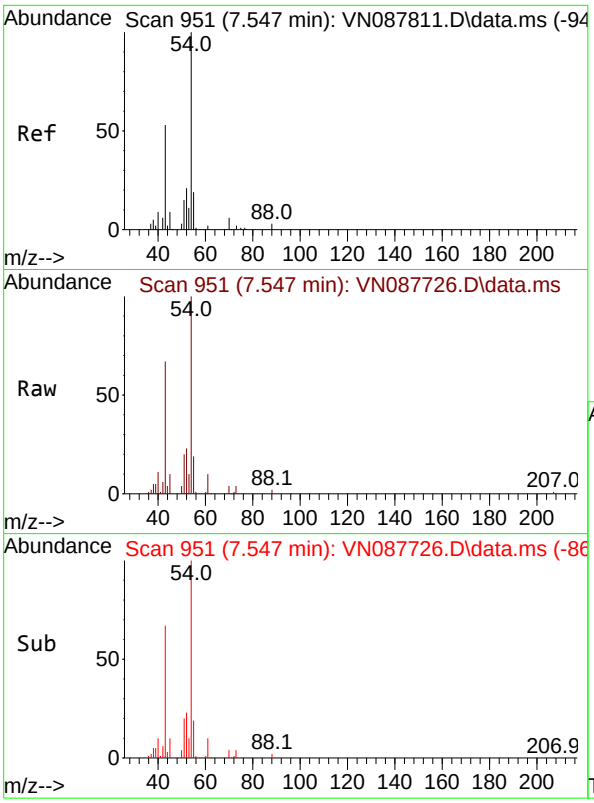


#42
Vinyl Acetate
Concen: 87.467 ug/l
RT: 6.589 min Scan# 788
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 43 Resp: 706403

Ion	Ratio	Lower	Upper
43	100		
86	9.6	7.7	11.5

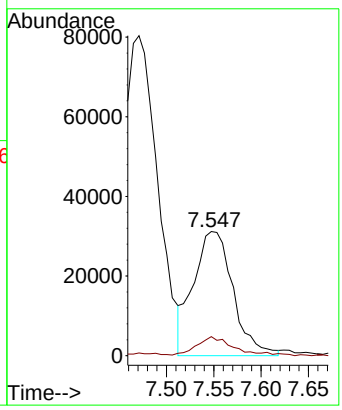




#43
Ethyl Acetate
Concen: 18.839 ug/l
RT: 7.547 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 43 Resp: 9114

Ion	Ratio	Lower	Upper
43	100		
45	13.1	10.5	15.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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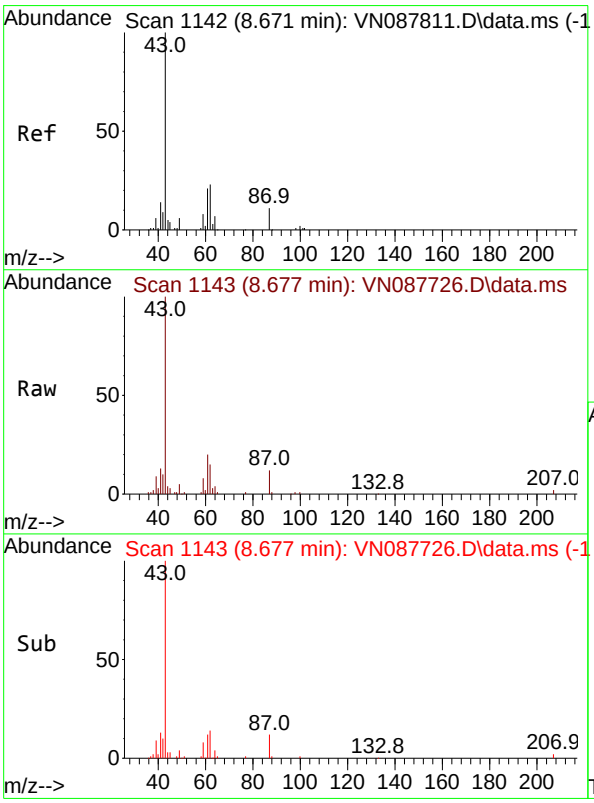
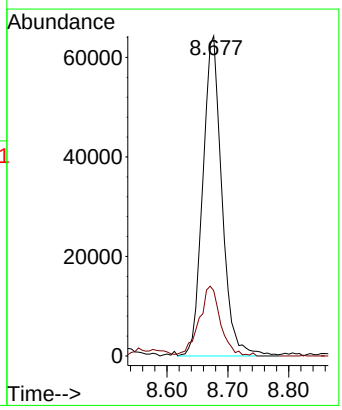
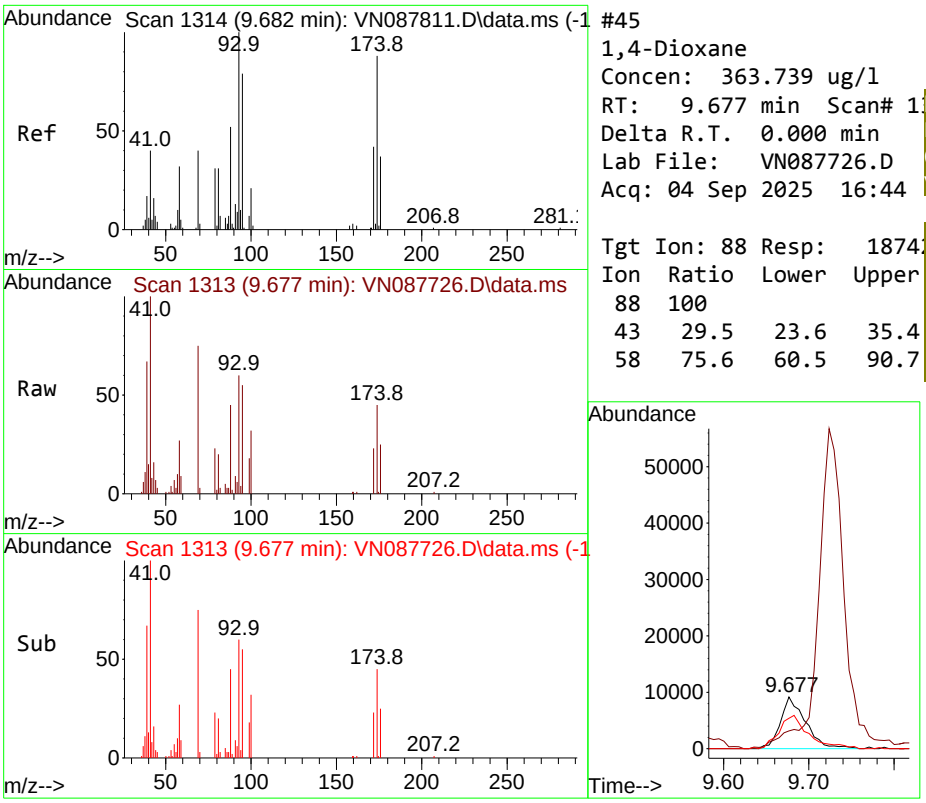


#44
Isopropyl Acetate
Concen: 17.422 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 43 Resp: 140215

Ion	Ratio	Lower	Upper
43	100		
61	24.4	19.5	29.3





#45
1,4-Dioxane
Concen: 363.739 ug/l
RT: 9.677 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 88 Resp: 1874

Ion	Ratio	Lower	Upper
88	100		
43	29.5	23.6	35.4
58	75.6	60.5	90.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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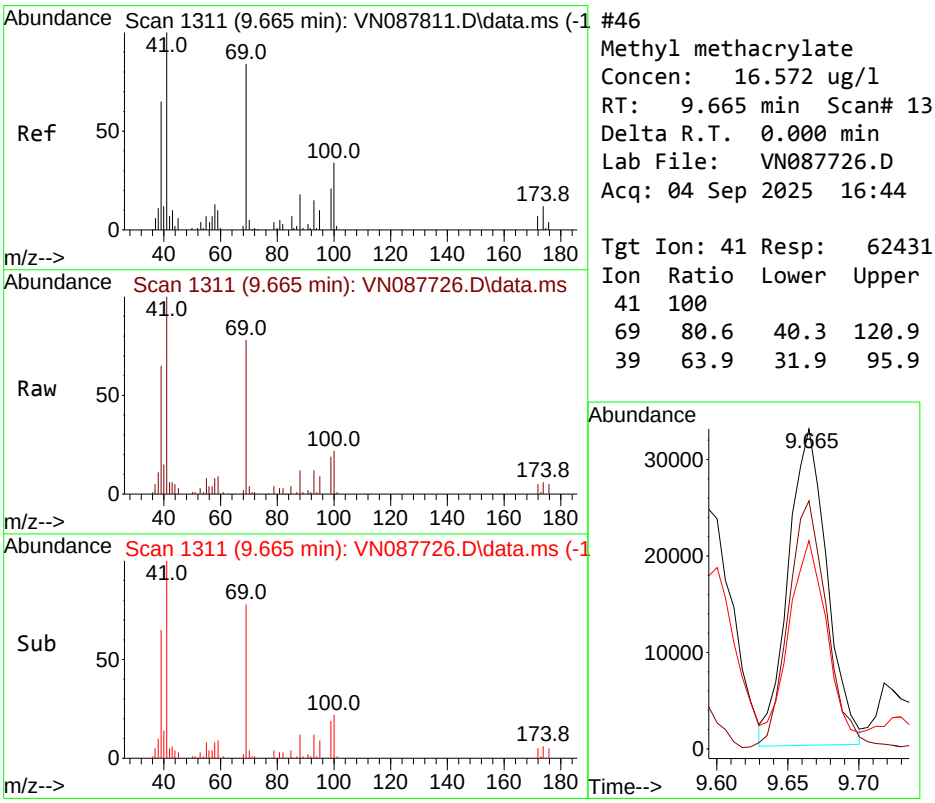
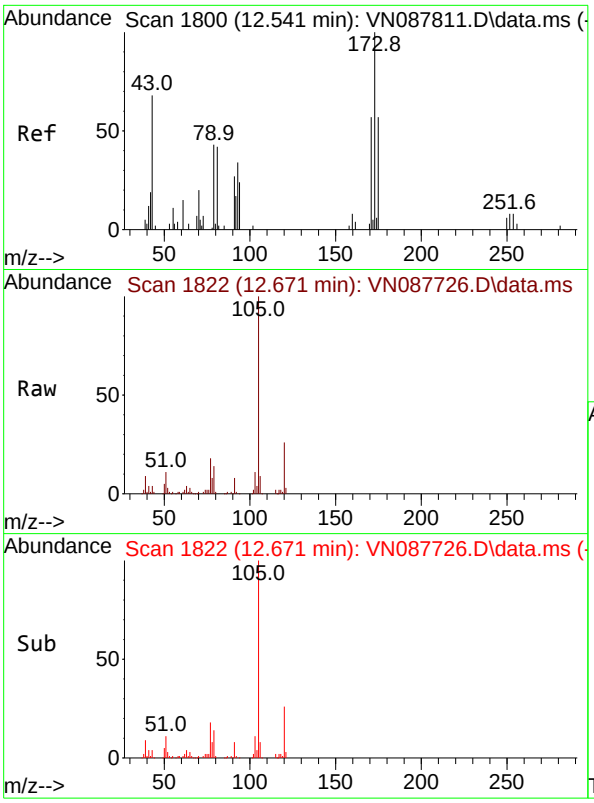
Supervised By :Mahesh Dadoda 09/05/2025



#46
Methyl methacrylate
Concen: 16.572 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 41 Resp: 62431

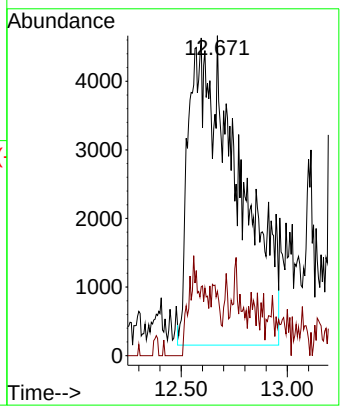
Ion	Ratio	Lower	Upper
41	100		
69	80.6	40.3	120.9
39	63.9	31.9	95.9



#47
n-amyl Acetate
Concen: 15.604 ug/l m
RT: 12.671 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 43 Resp: 7301

Ion	Ratio	Lower	Upper
43	100		
55	0.0	0.7	1.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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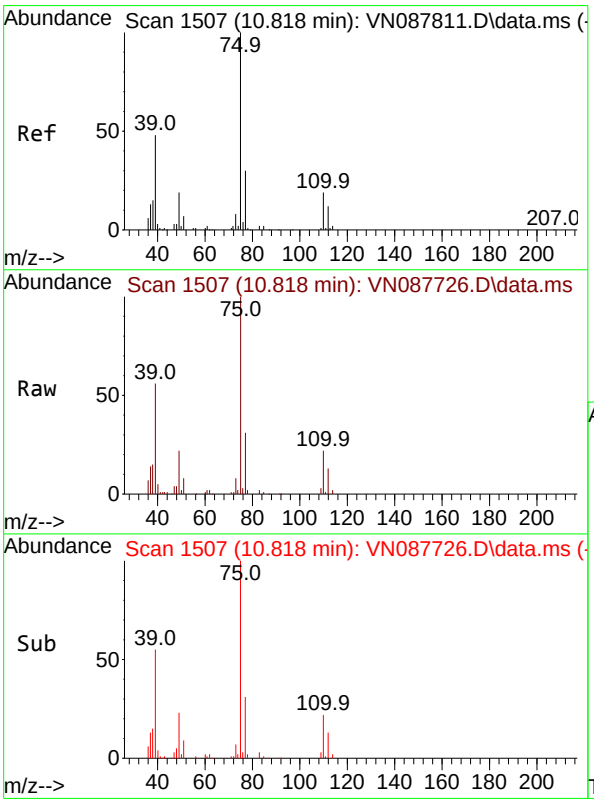
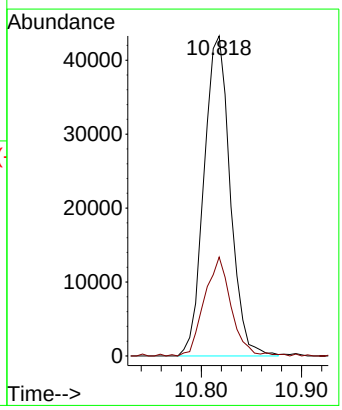
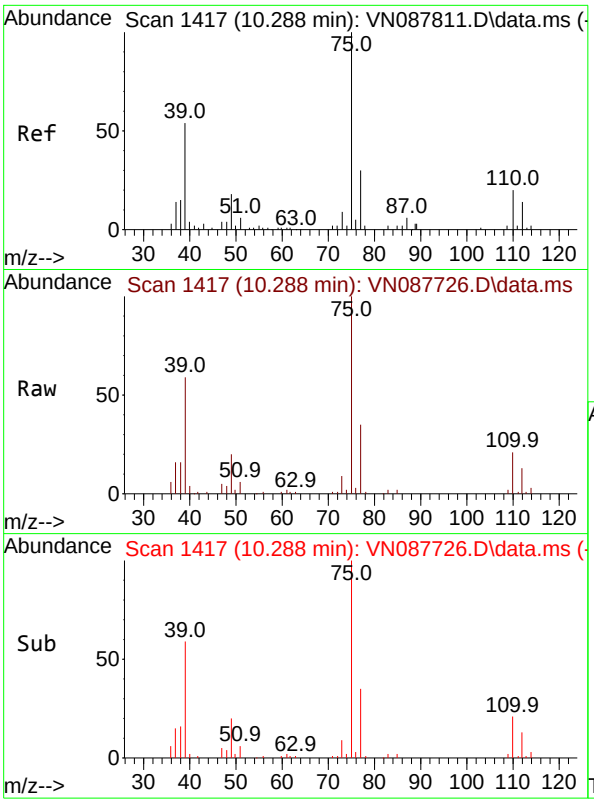


#48
t-1,3-Dichloropropene
Concen: 17.108 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 75 Resp: 78438

Ion	Ratio	Lower	Upper
75	100		
77	30.9	24.7	37.1

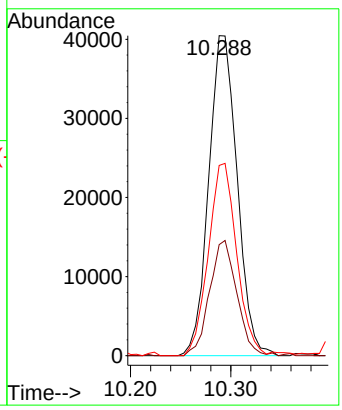




#49
cis-1,3-Dichloropropene
Concen: 17.252 ug/l
RT: 10.288 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 75 Resp: 7983

Ion	Ratio	Lower	Upper
75	100		
77	34.7	27.8	41.6
39	59.5	47.6	71.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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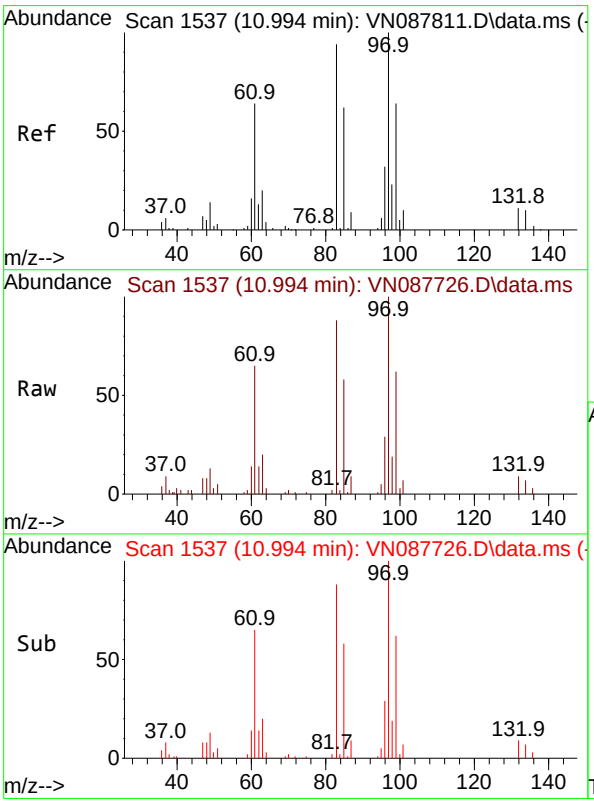
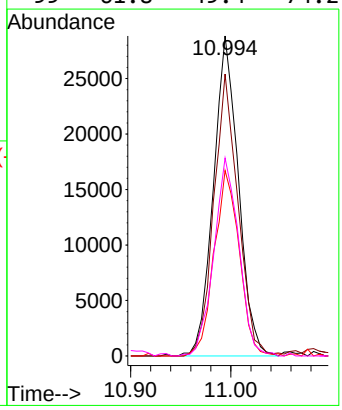
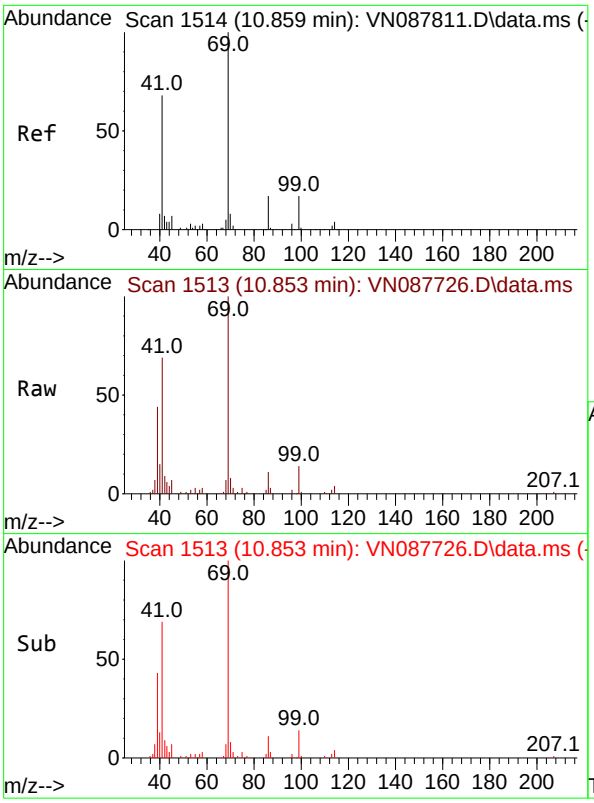


#50
1,1,2-Trichloroethane
Concen: 19.075 ug/l
RT: 10.994 min Scan# 1537
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 97 Resp: 49901

Ion	Ratio	Lower	Upper
97	100		
83	88.1	70.5	105.7
85	57.9	46.3	69.5
99	61.8	49.4	74.2

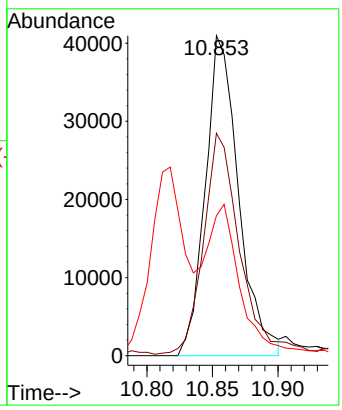




#51
Ethyl methacrylate
Concen: 16.207 ug/l
RT: 10.853 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 69 Resp: 7234

Ion	Ratio	Lower	Upper
69	100		
41	67.3	33.7	101.0
39	40.6	20.3	60.9



Instrument :
MSVOA_N
ClientSampleId :
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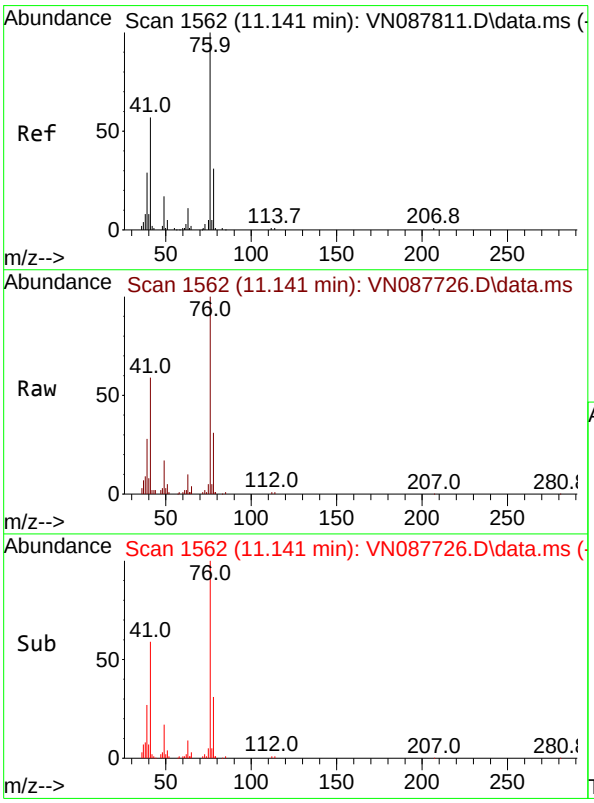
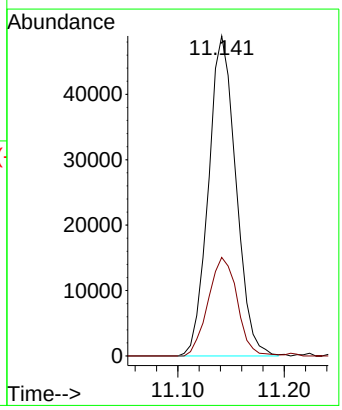
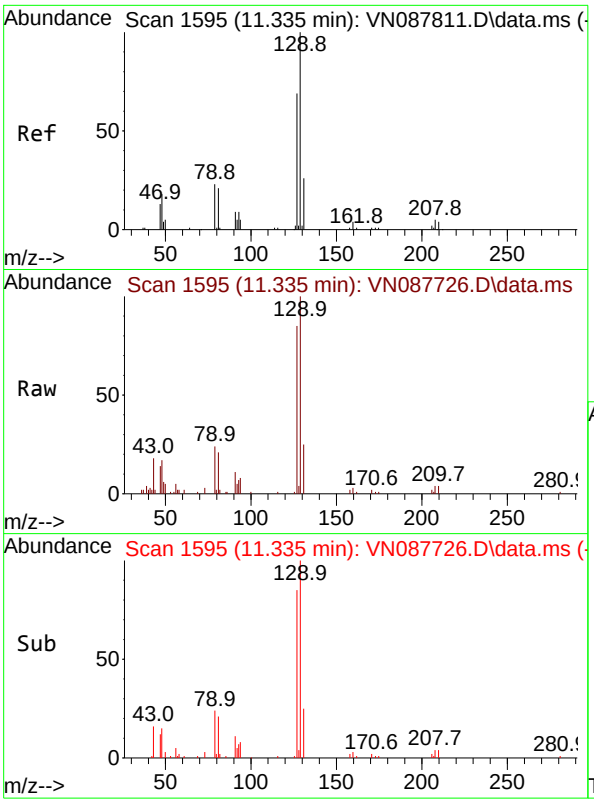


#52
1,3-Dichloropropane
Concen: 18.729 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 76 Resp: 87839

Ion	Ratio	Lower	Upper
76	100		
78	32.6	0.0	65.2

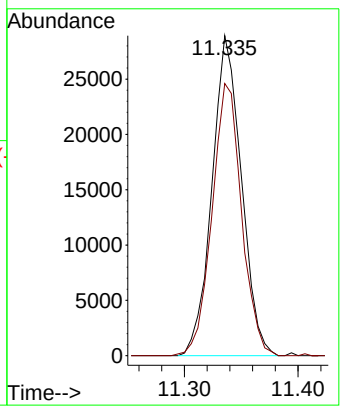




#53
Dibromochloromethane
Concen: 17.456 ug/l
RT: 11.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:129 Resp: 5198

Ion	Ratio	Lower	Upper
129	100		
127	85.3	42.6	128.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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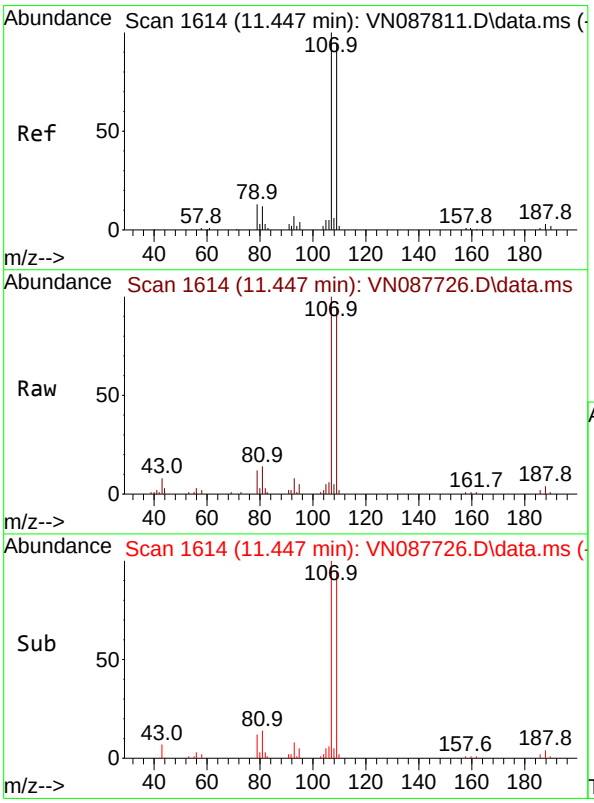
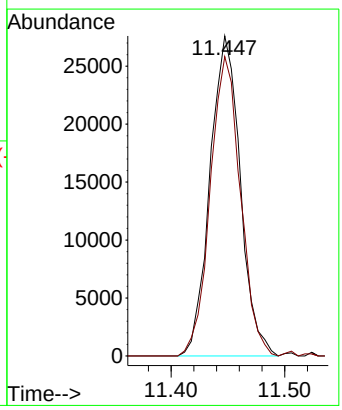
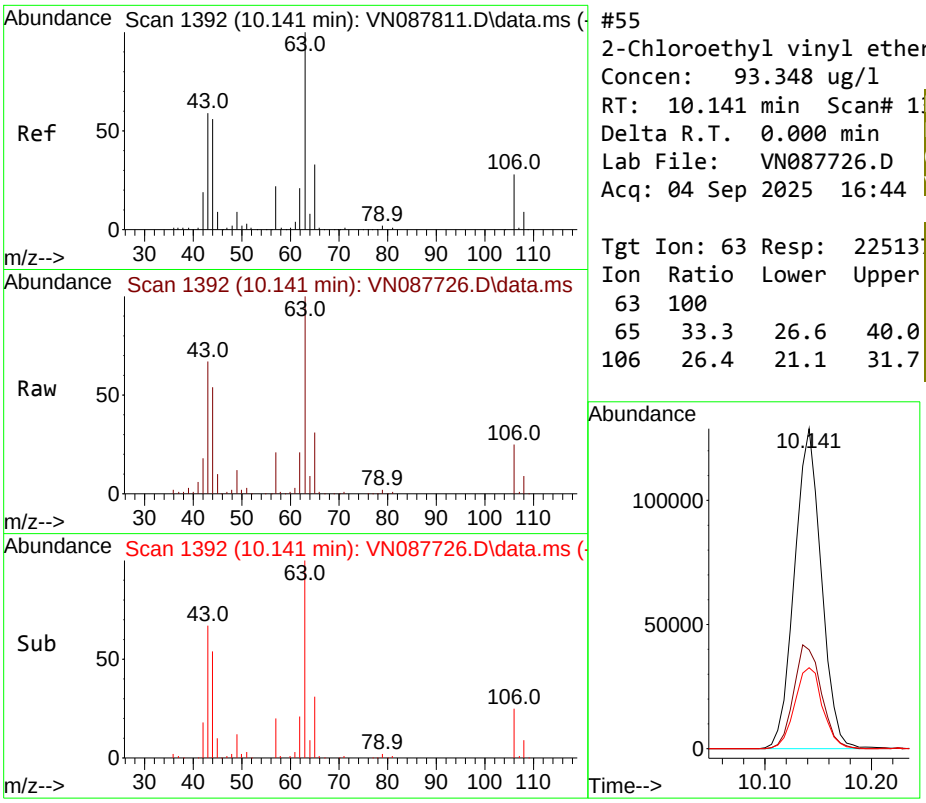


#54
1,2-Dibromoethane
Concen: 18.556 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:107 Resp: 51152

Ion	Ratio	Lower	Upper
107	100		
109	93.3	74.6	112.0





#55
2-Chloroethyl vinyl ether
Concen: 93.348 ug/l
RT: 10.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 63 Resp: 22513

Ion	Ratio	Lower	Upper
63	100		
65	33.3	26.6	40.0
106	26.4	21.1	31.7

Instrument :
MSVOA_N
ClientSampleId :
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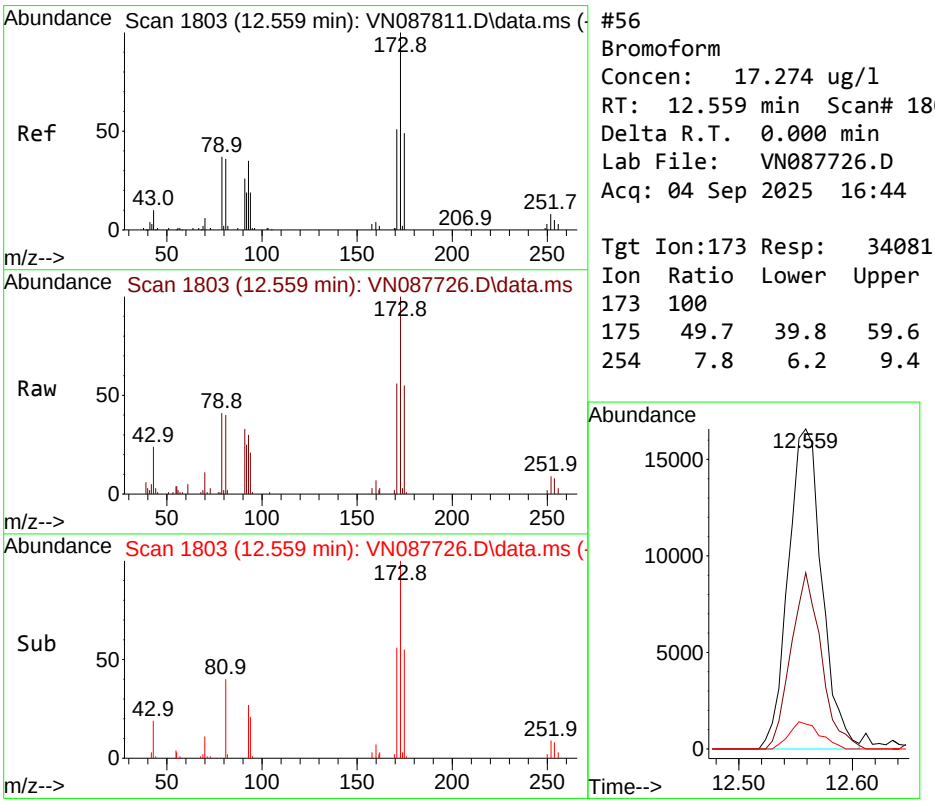
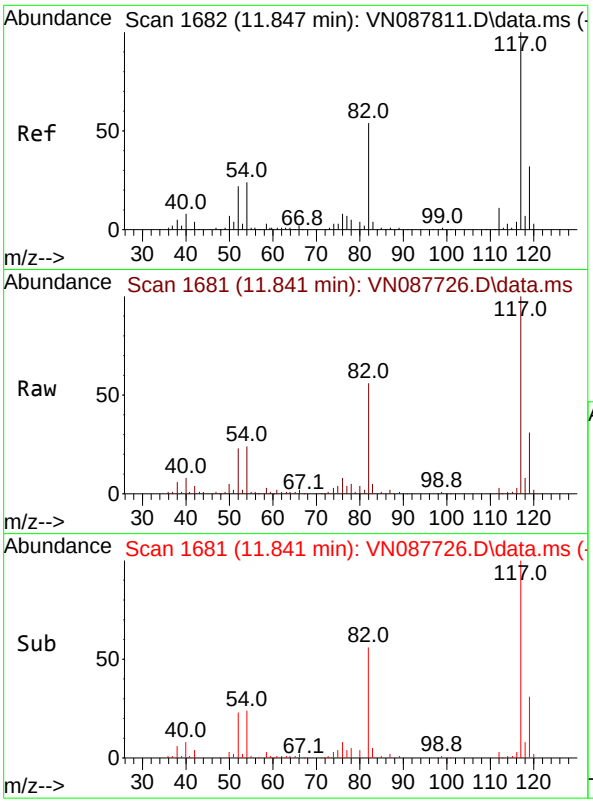


#56
Bromoform
Concen: 17.274 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:173 Resp: 34081

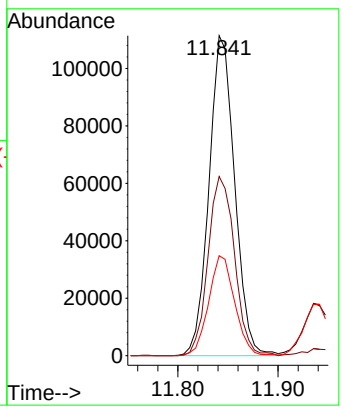
Ion	Ratio	Lower	Upper
173	100		
175	49.7	39.8	59.6
254	7.8	6.2	9.4



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.841 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:117 Resp: 19826

Ion	Ratio	Lower	Upper
117	100		
82	57.4	45.9	68.9
119	31.6	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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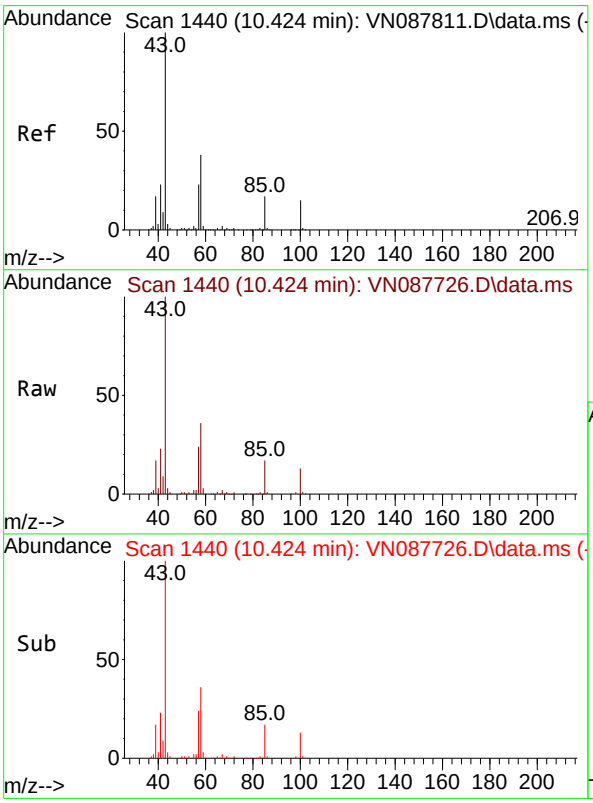
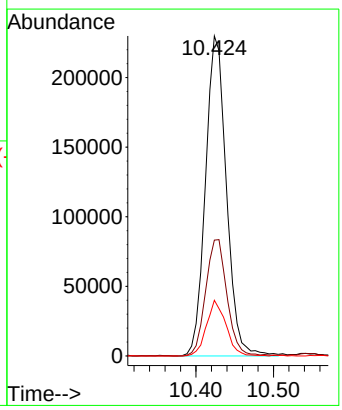
Supervised By :Mahesh Dadoda 09/05/2025

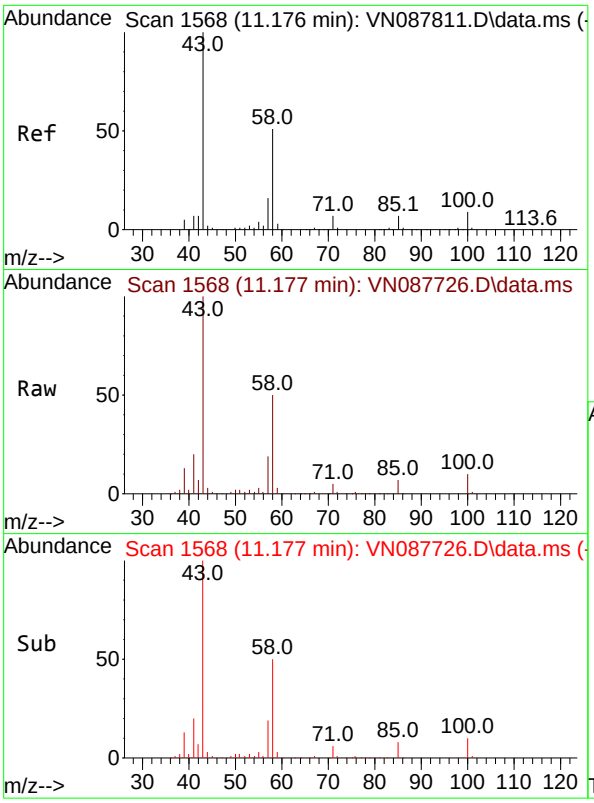


#58
4-Methyl-2-Pentanone
Concen: 88.189 ug/l
RT: 10.424 min Scan# 1440
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 43 Resp: 432636

Ion	Ratio	Lower	Upper
43	100		
58	37.0	29.6	44.4
85	16.2	13.0	19.4

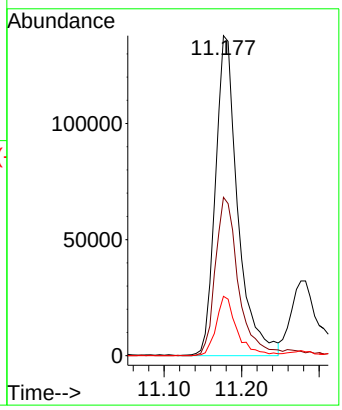




#59
2-Hexanone
Concen: 83.339 ug/l
RT: 11.177 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 43 Resp: 27687

Ion	Ratio	Lower	Upper
43	100		
58	50.3	40.2	60.4
57	17.1	13.7	20.5



Instrument :
MSVOA_N
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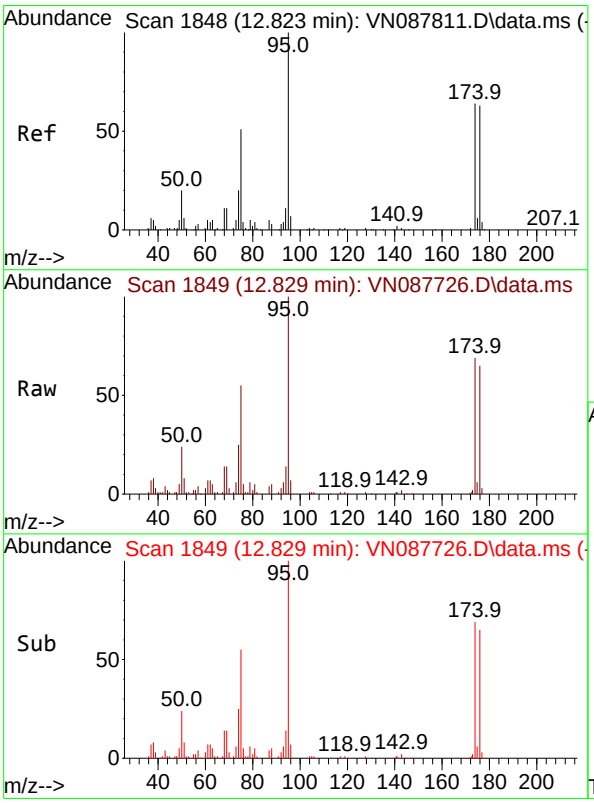
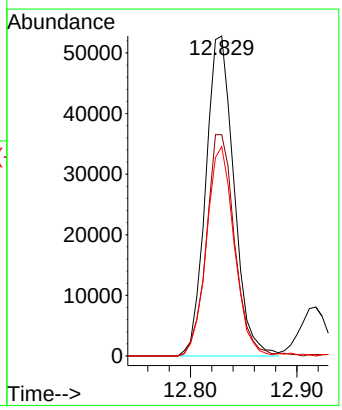
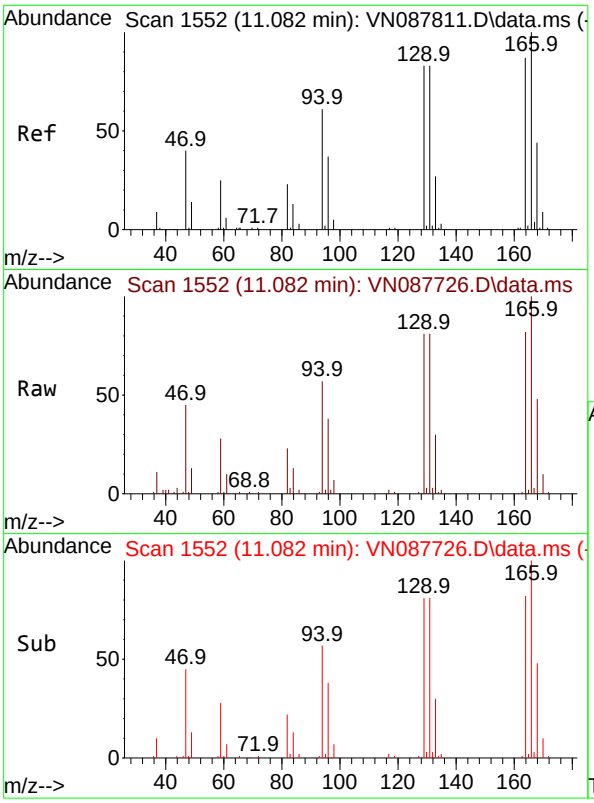


#60
4-Bromofluorobenzene
Concen: 28.768 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 95 Resp: 96997

Ion	Ratio	Lower	Upper
95	100		
174	69.2	55.4	83.0
176	64.4	51.5	77.3

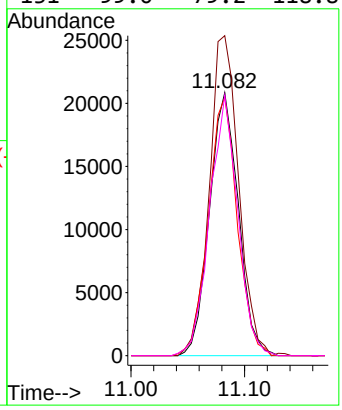




#61
Tetrachloroethene
Concen: 19.253 ug/l
RT: 11.082 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:164 Resp: 3684

Ion	Ratio	Lower	Upper
164	100		
166	121.6	97.3	145.9
129	98.2	78.6	117.8
131	99.0	79.2	118.8



Instrument :
MSVOA_N
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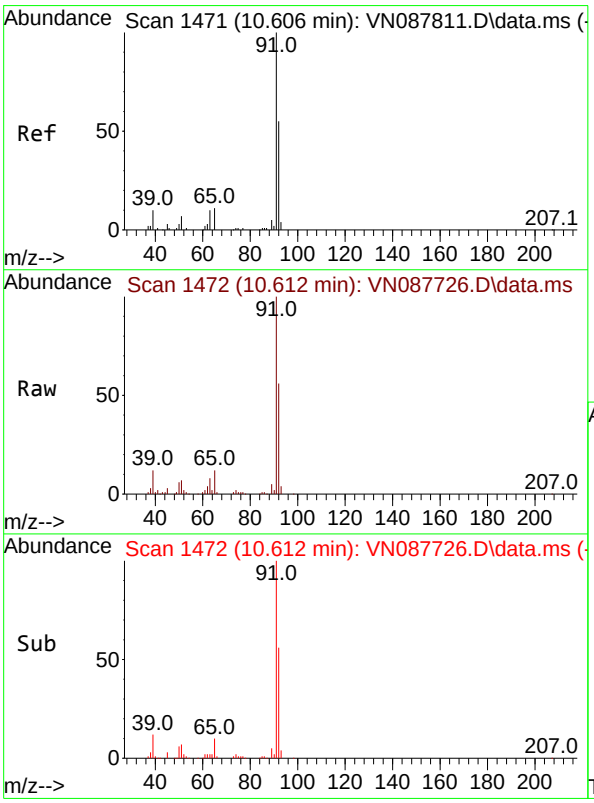
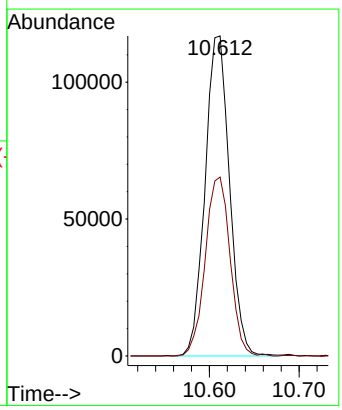
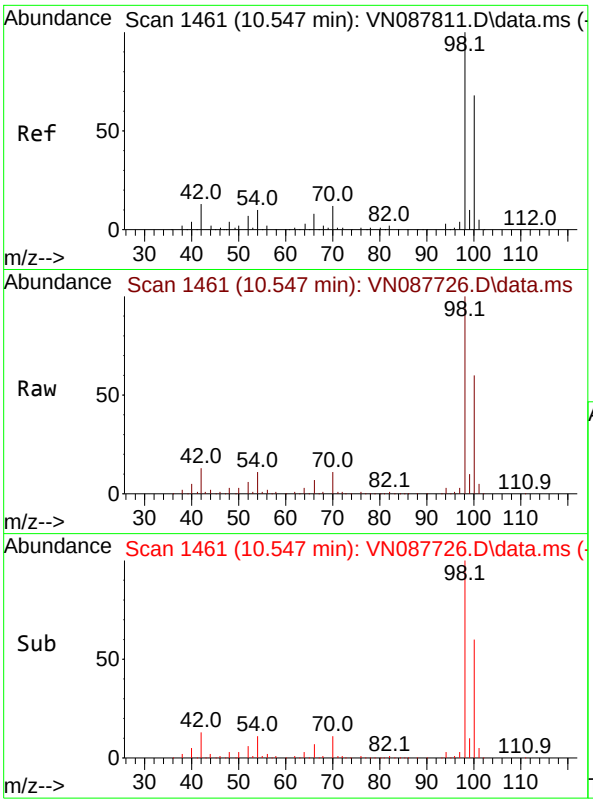


#62
Toluene
Concen: 18.530 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 91 Resp: 221067

Ion	Ratio	Lower	Upper
91	100		
92	56.7	45.4	68.0

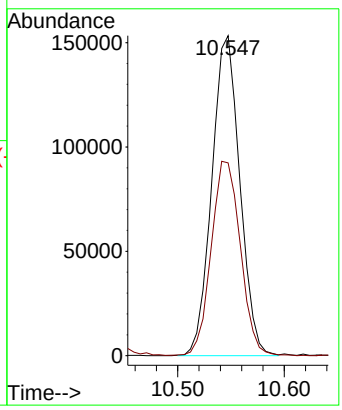




#63
Toluene-d8
Concen: 30.528 ug/l
RT: 10.547 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 98 Resp: 27966

Ion	Ratio	Lower	Upper
98	100		
100	63.3	50.6	76.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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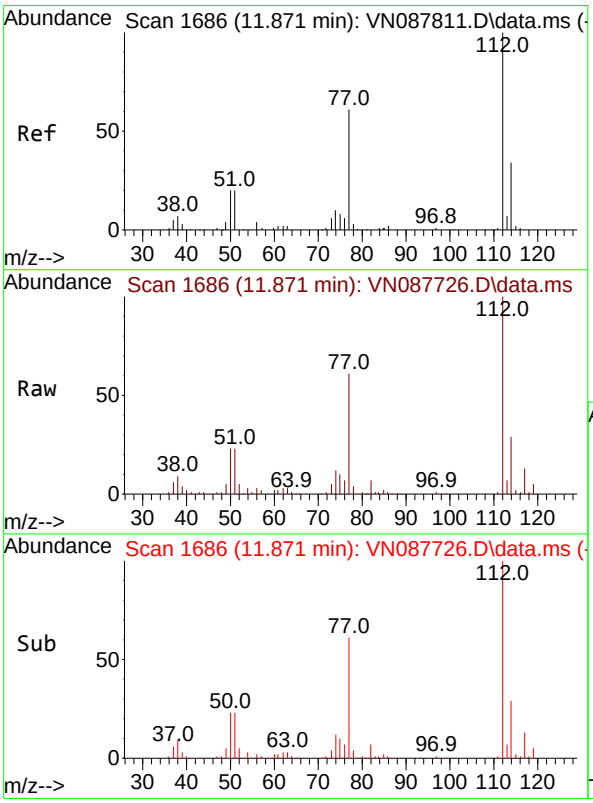
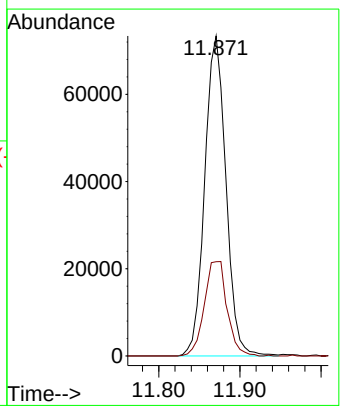
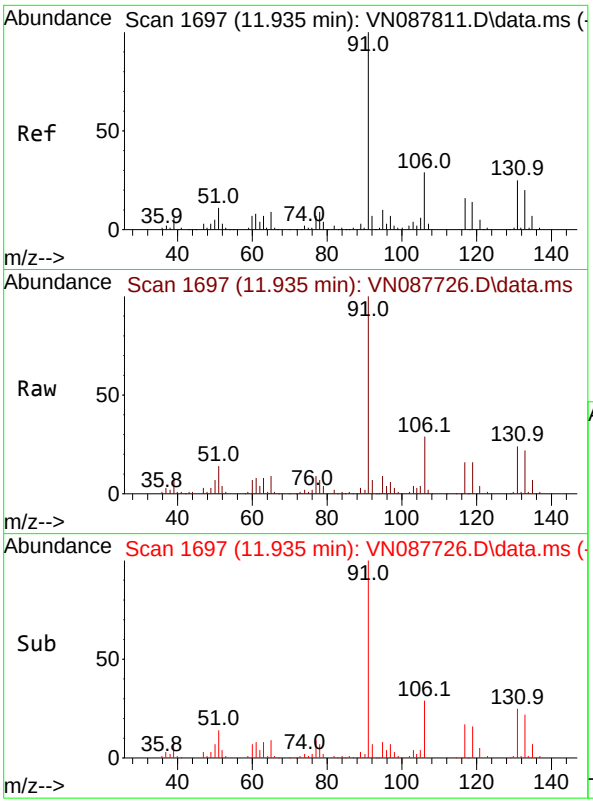


#64
Chlorobenzene
Concen: 18.156 ug/l
RT: 11.871 min Scan# 1686
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:112 Resp: 132910

Ion	Ratio	Lower	Upper
112	100		
114	29.4	23.5	35.3





#65
1,1,1,2-Tetrachloroethane
Concen: 18.150 ug/l
RT: 11.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:131 Resp: 4677

Ion	Ratio	Lower	Upper
131	100		
133	97.9	0.0	195.8
119	69.5	0.0	139.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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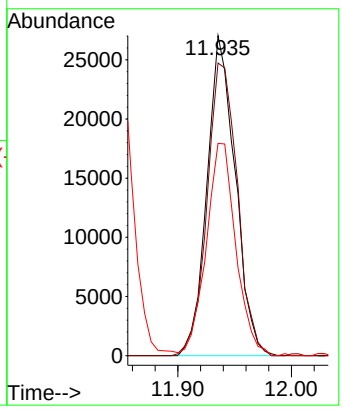
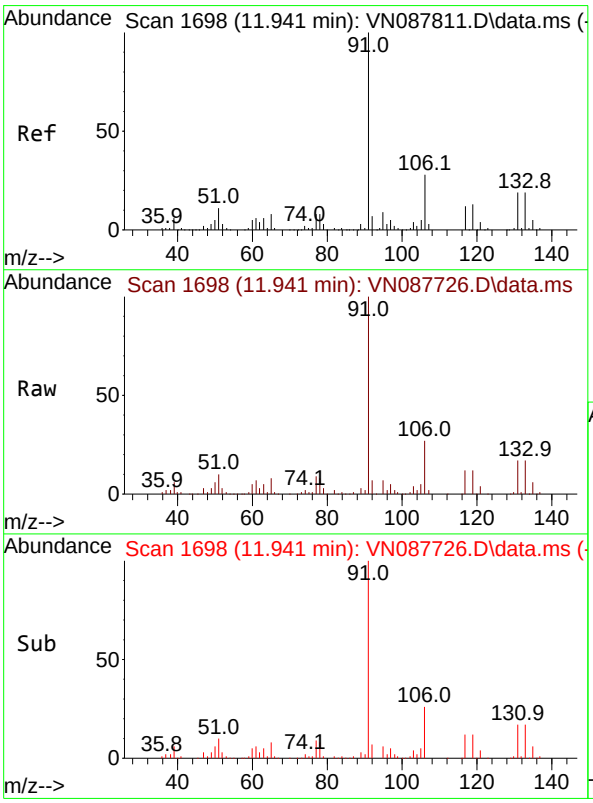
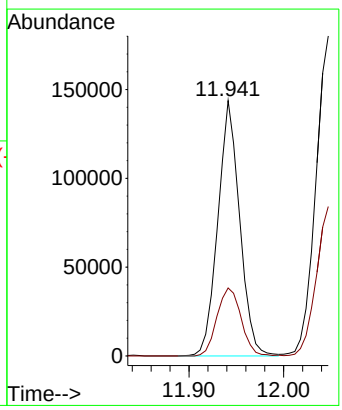


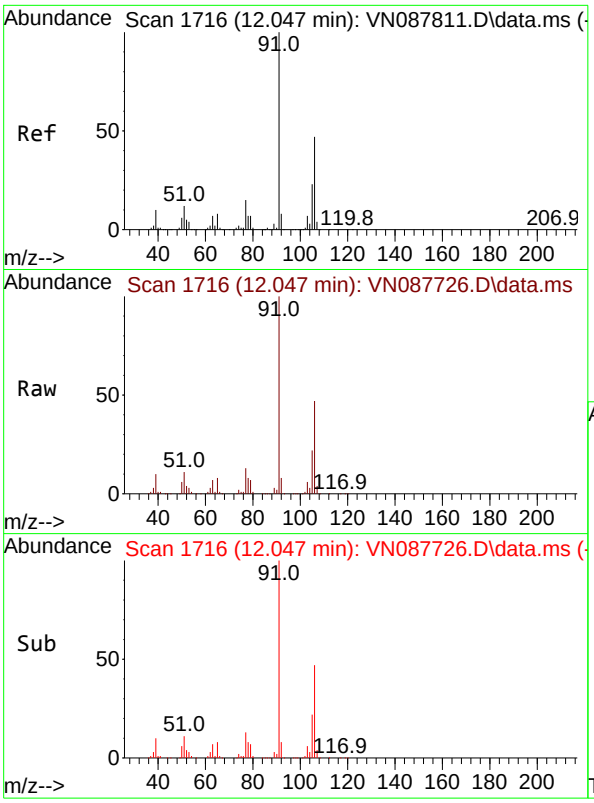


#66
Ethyl Benzene
Concen: 17.532 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 91 Resp: 230526

Ion	Ratio	Lower	Upper
91	100		
106	26.6	21.3	31.9





#67
m/p-Xylenes
Concen: 35.082 ug/l
RT: 12.047 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:106 Resp: 16978

Ion	Ratio	Lower	Upper
106	100		
91	217.9	174.3	261.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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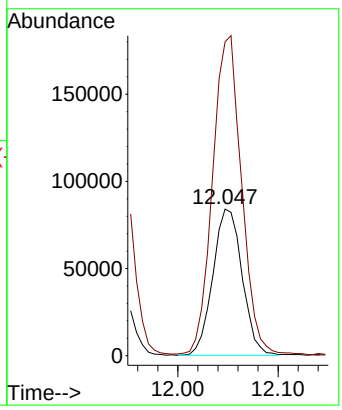
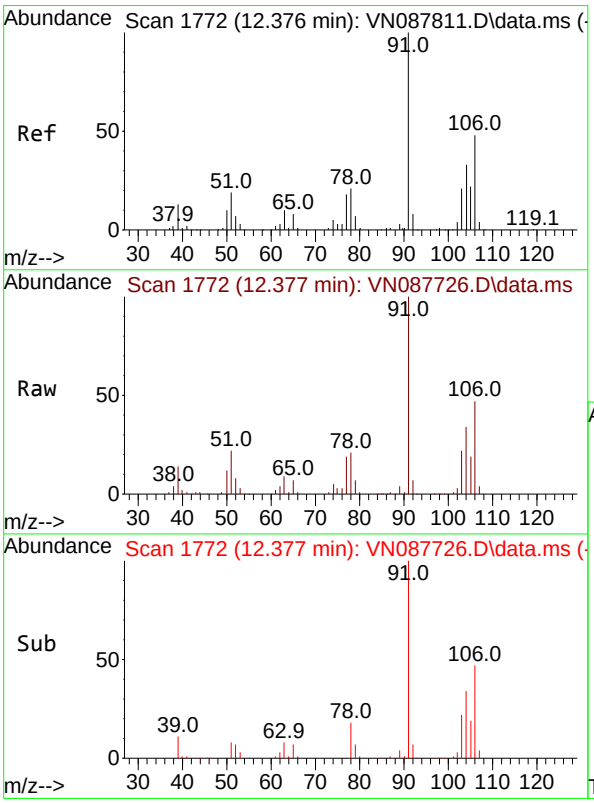
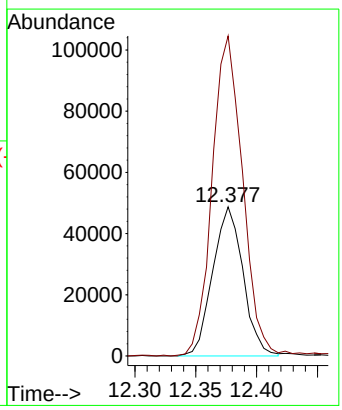


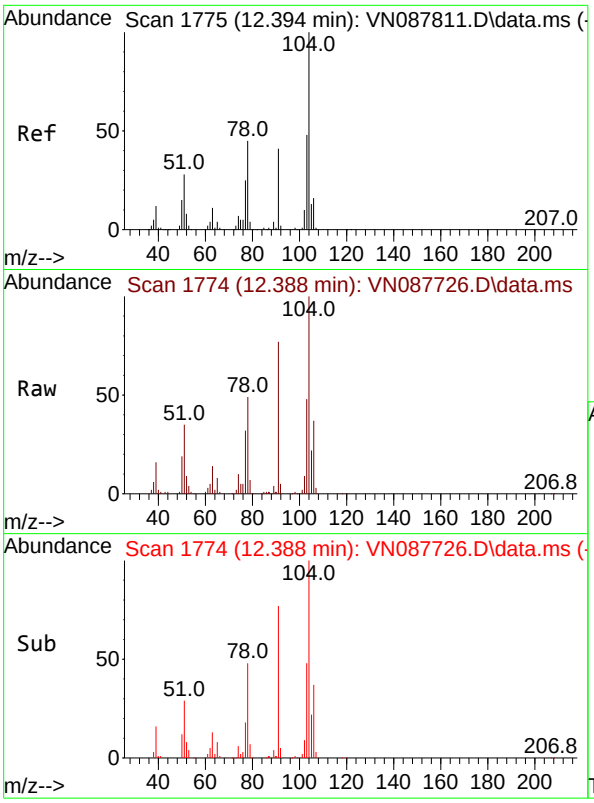


#68
o-Xylene
Concen: 17.701 ug/l
RT: 12.377 min Scan# 1772
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:106 Resp: 84505

Ion	Ratio	Lower	Upper
106	100		
91	215.5	107.7	323.3

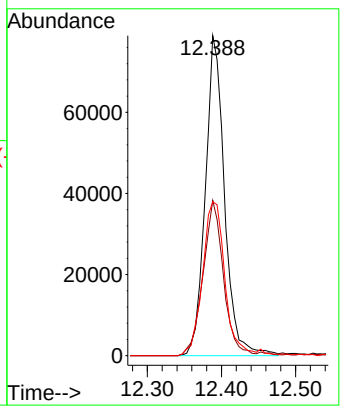




#69
Styrene
Concen: 17.520 ug/l
RT: 12.388 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:104 Resp: 14228

Ion	Ratio	Lower	Upper
104	100		
78	51.3	41.0	61.6
103	55.7	44.6	66.8



Instrument :
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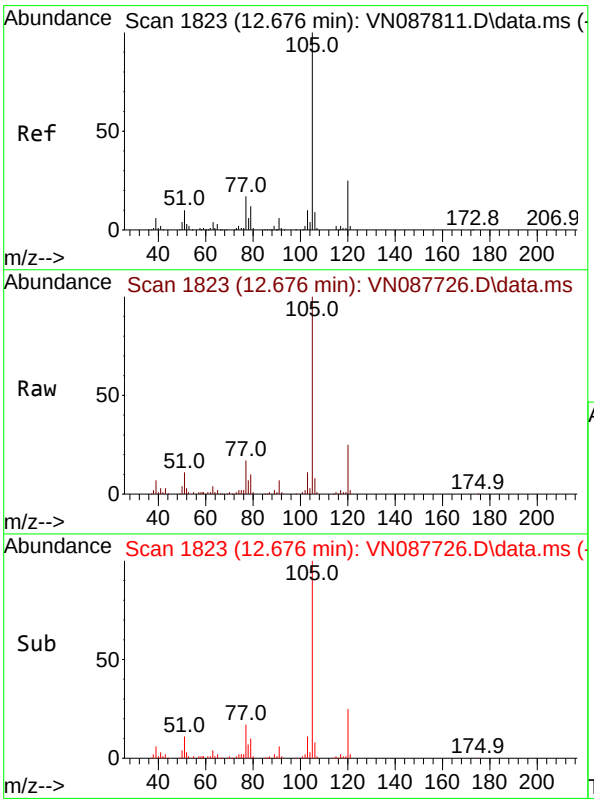
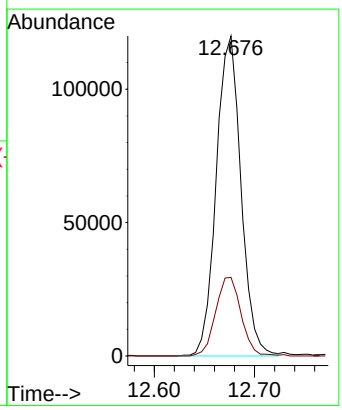
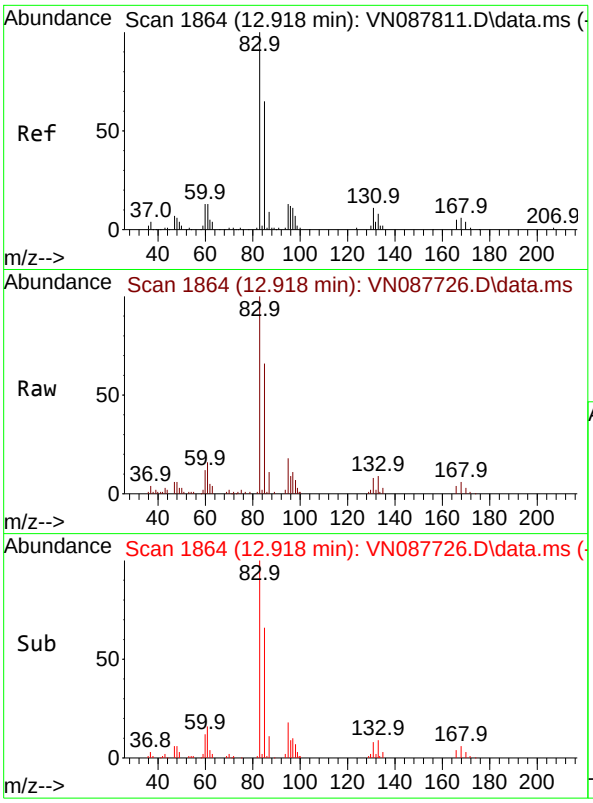


#70
Isopropylbenzene
Concen: 17.117 ug/l
RT: 12.676 min Scan# 1823
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:105 Resp: 205573

Ion	Ratio	Lower	Upper
105	100		
120	24.9	17.4	32.4

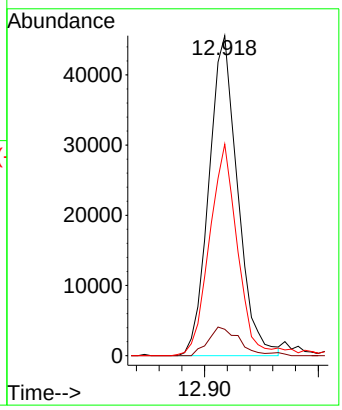




#71
1,1,2,2-Tetrachloroethane
Concen: 19.086 ug/l
RT: 12.918 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 83 Resp: 7997

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.3
85	63.8	31.9	95.7



Instrument :
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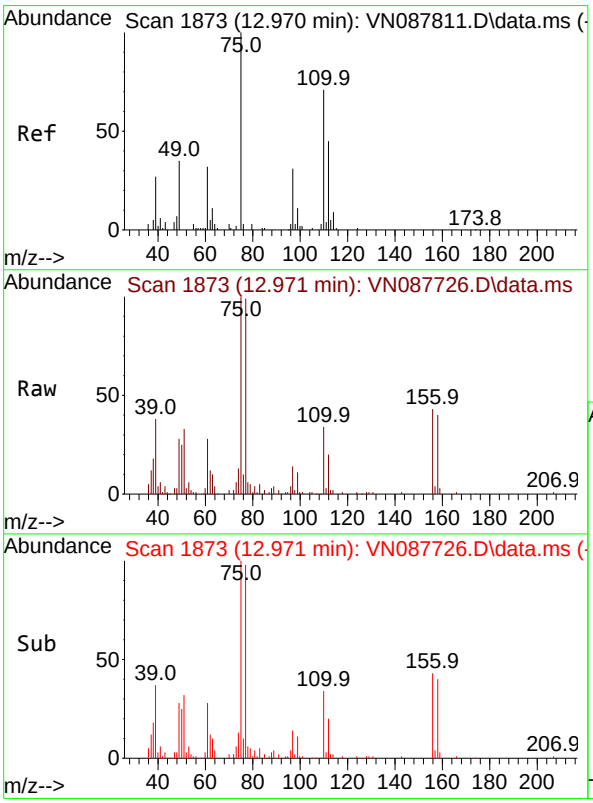
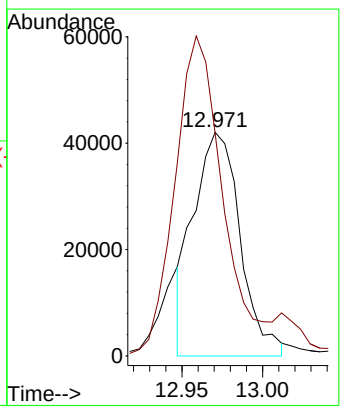
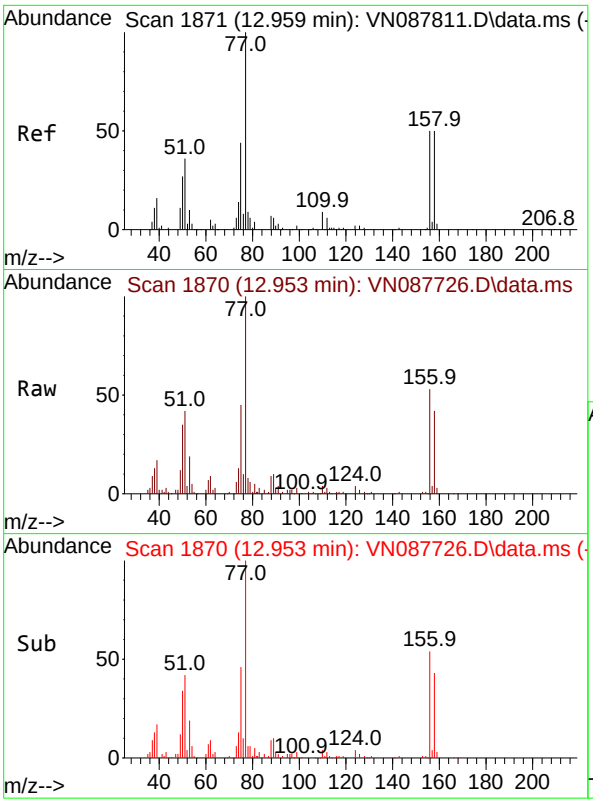


#72
1,2,3-Trichloropropane
Concen: 21.633 ug/l m
RT: 12.971 min Scan# 1873
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 75 Resp: 84570

Ion	Ratio	Lower	Upper
75	100		
77	148.7	0.0	378.8

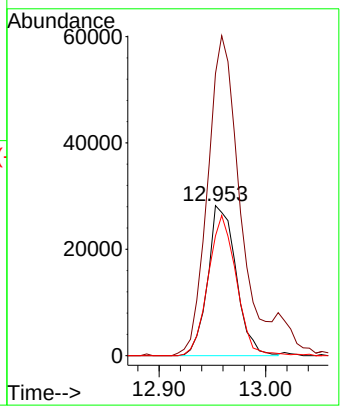




#73
Bromobenzene
Concen: 18.305 ug/l
RT: 12.953 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:156 Resp: 5196

Ion	Ratio	Lower	Upper
156	100		
77	242.1	0.0	484.2
158	93.1	0.0	186.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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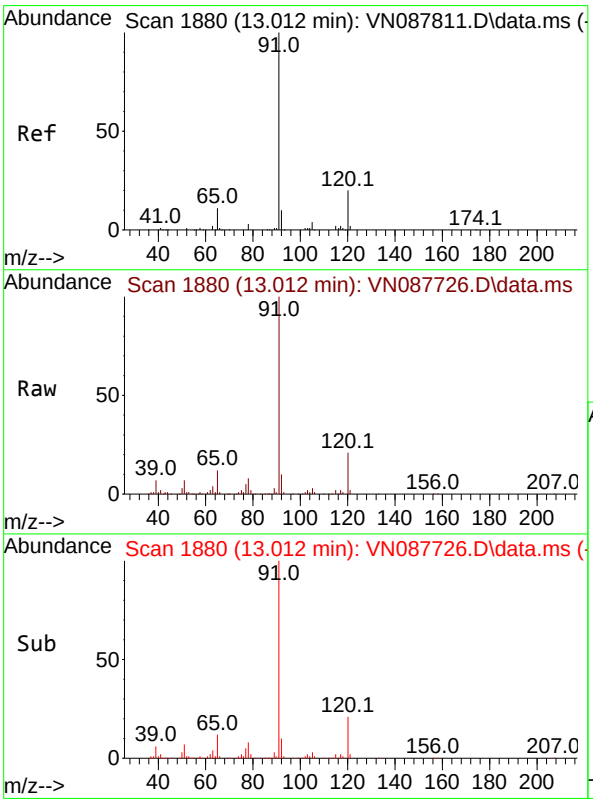
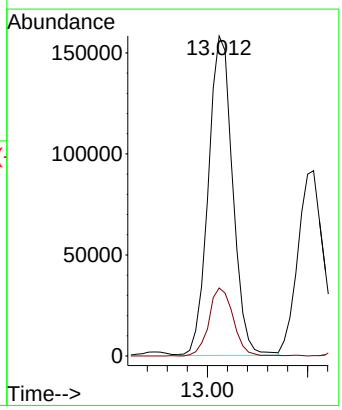
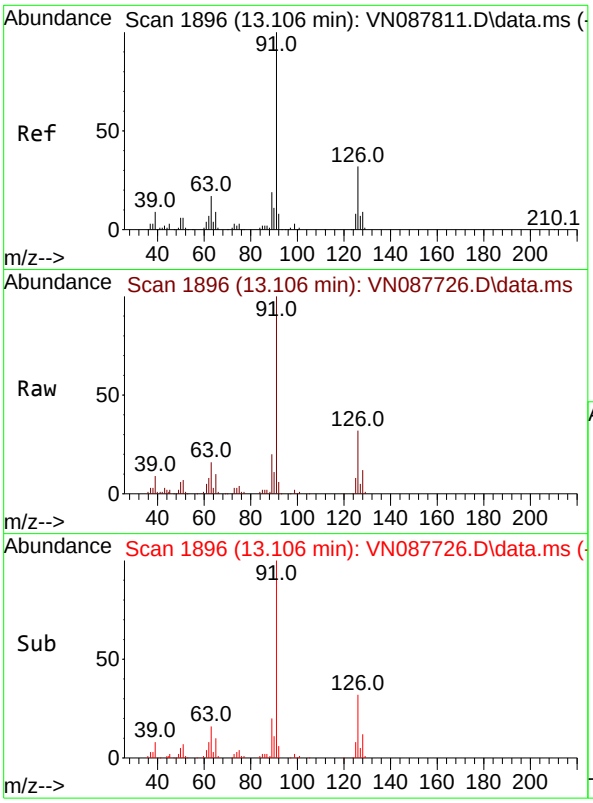


#74
n-propylbenzene
Concen: 17.651 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 91 Resp: 266688

Ion	Ratio	Lower	Upper
91	100		
120	21.1	0.0	42.2

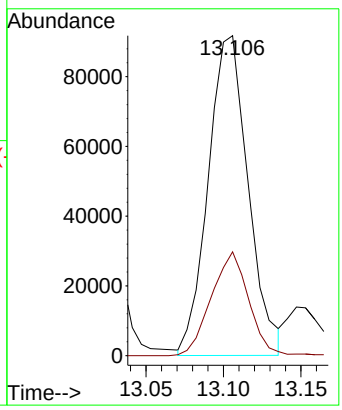




#75
2-Chlorotoluene
Concen: 17.679 ug/l
RT: 13.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 91 Resp: 16431

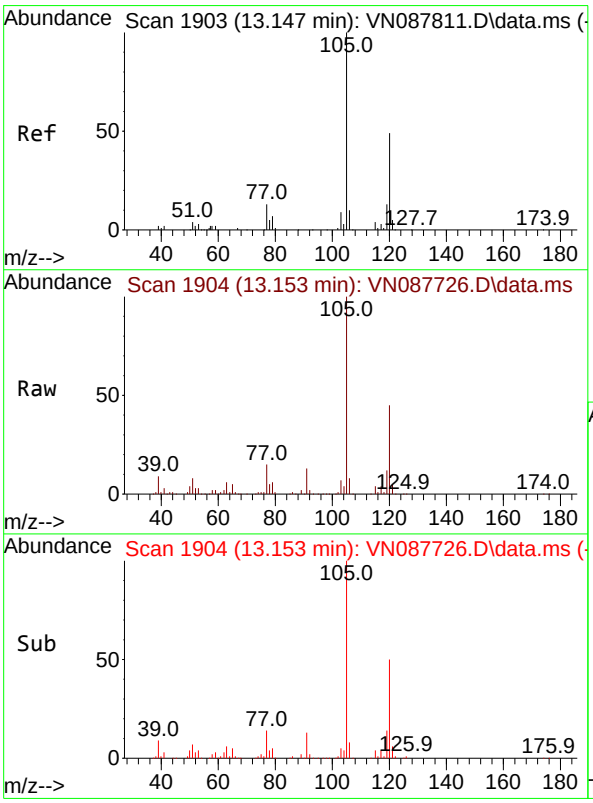
Ion	Ratio	Lower	Upper
91	100		
126	30.2	0.0	60.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations
APPROVED

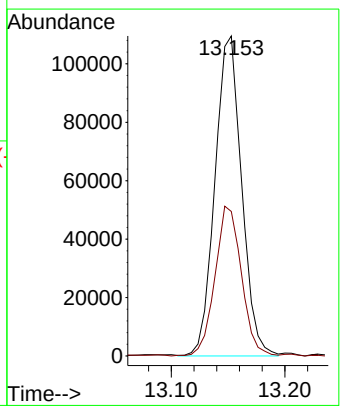
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

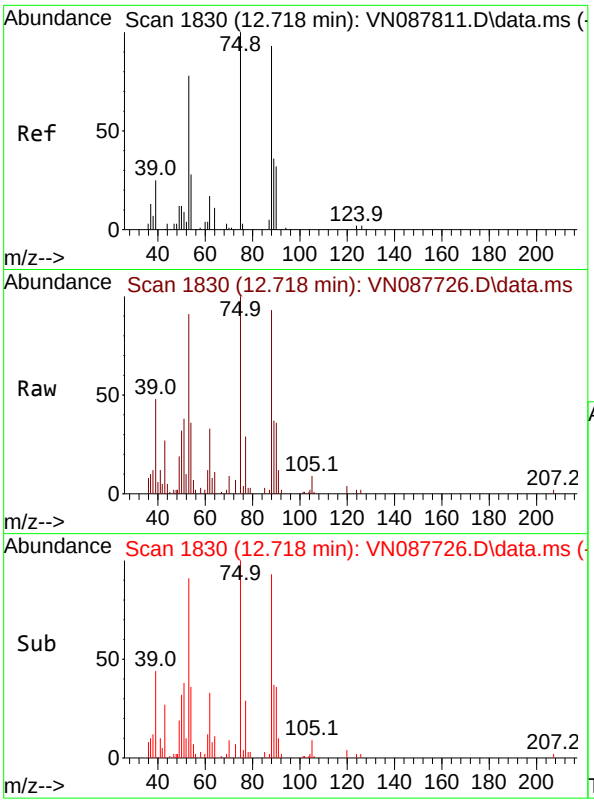


#76
1,3,5-Trimethylbenzene
Concen: 17.339 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:105 Resp: 178698

Ion	Ratio	Lower	Upper
105	100		
120	46.3	0.0	92.6

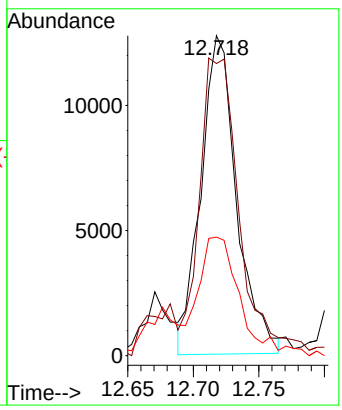




#77
t-1,4-Dichloro-2-butene
Concen: 16.407 ug/l
RT: 12.718 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 75 Resp: 2408

Ion	Ratio	Lower	Upper
75	100		
53	90.6	45.3	135.9
89	37.5	18.8	56.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations
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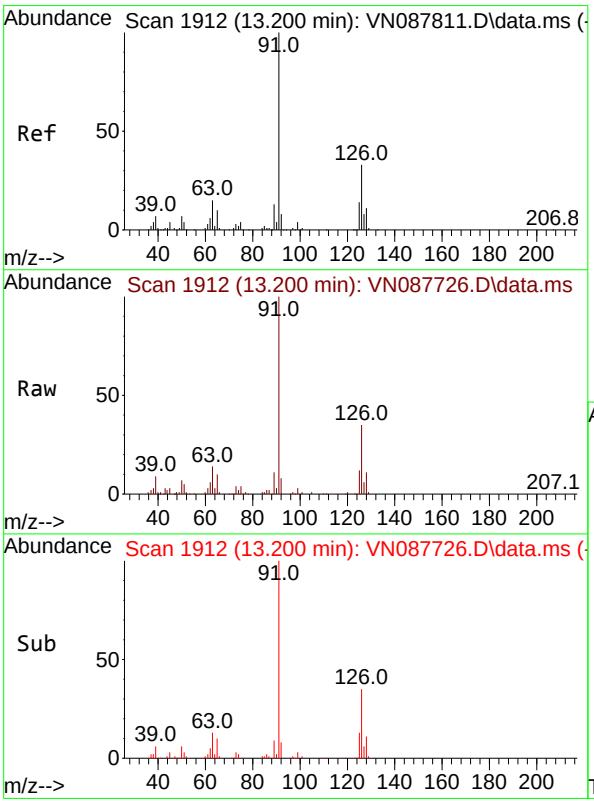
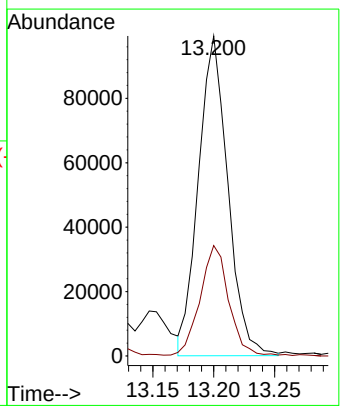
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

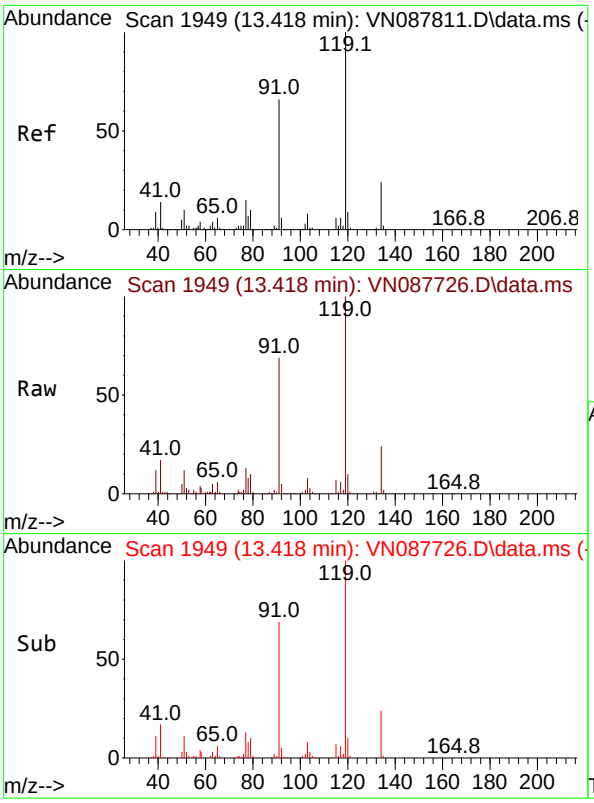


#78
4-Chlorotoluene
Concen: 17.614 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 91 Resp: 166605

Ion	Ratio	Lower	Upper
91	100		
126	33.5	0.0	67.0

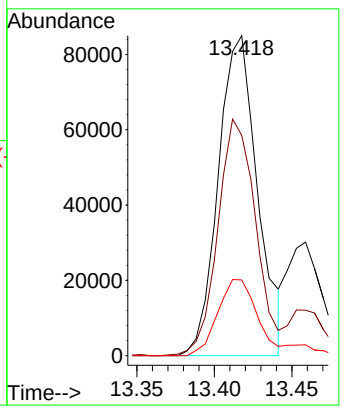




#79
tert-butylbenzene
Concen: 17.250 ug/l
RT: 13.418 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:119 Resp: 14977

Ion	Ratio	Lower	Upper
119	100		
91	71.3	0.0	142.6
134	23.6	0.0	47.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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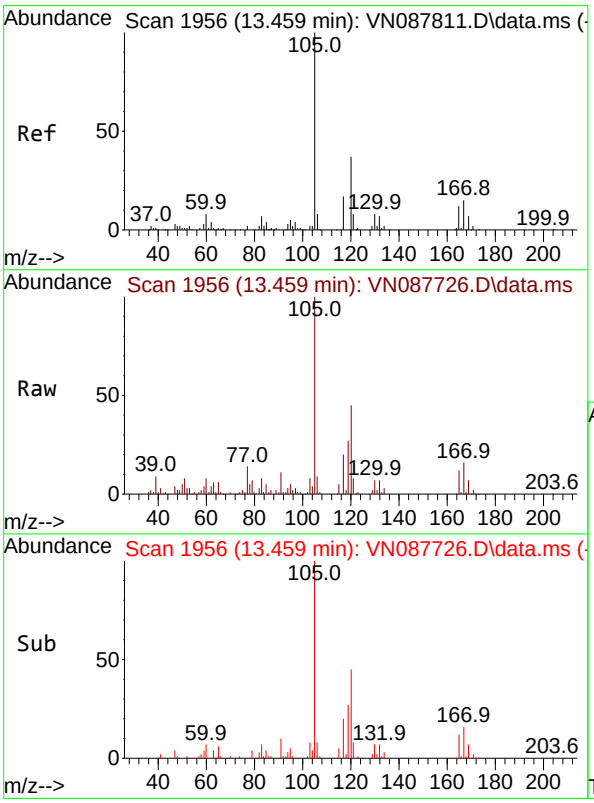
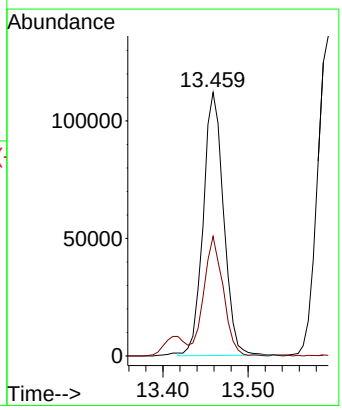
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

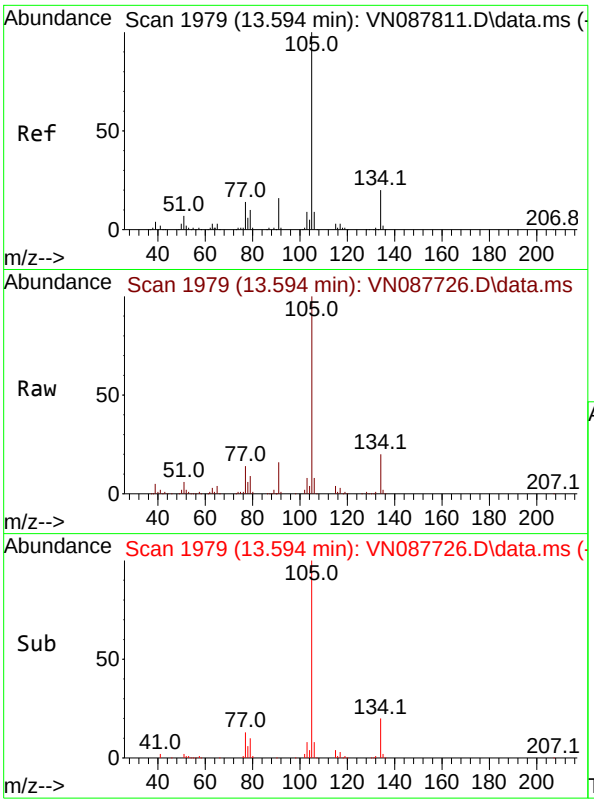


#80
1,2,4-Trimethylbenzene
Concen: 17.861 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:105 Resp: 185683

Ion	Ratio	Lower	Upper
105	100		
120	43.3	0.0	86.6

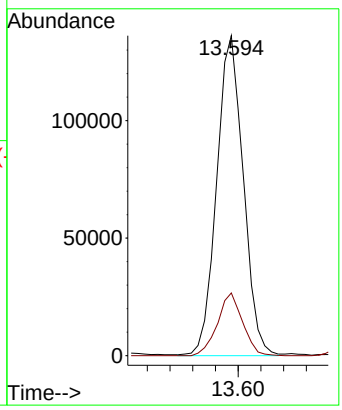




#81
sec-Butylbenzene
Concen: 17.504 ug/l
RT: 13.594 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:105 Resp: 22161

Ion	Ratio	Lower	Upper
105	100		
134	18.5	0.0	37.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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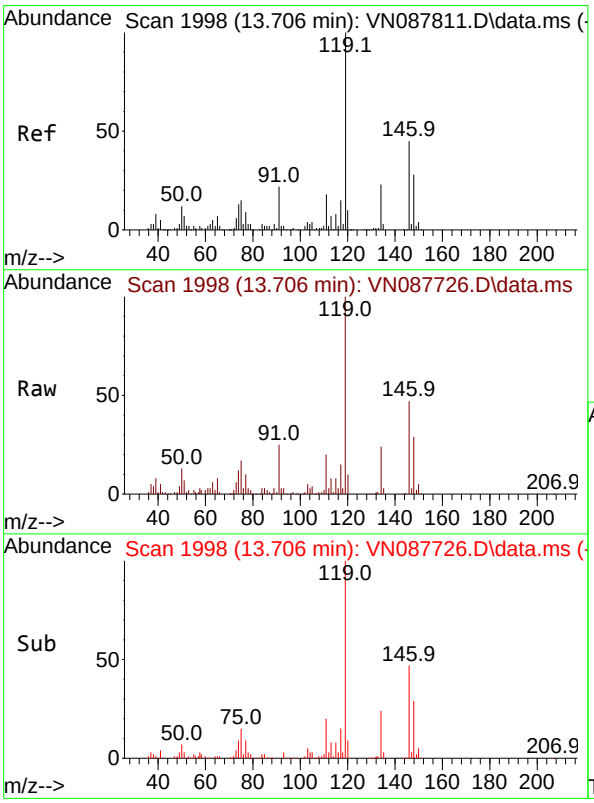
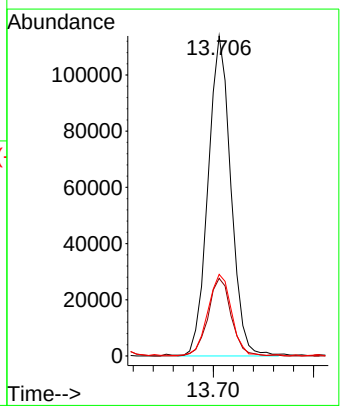
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

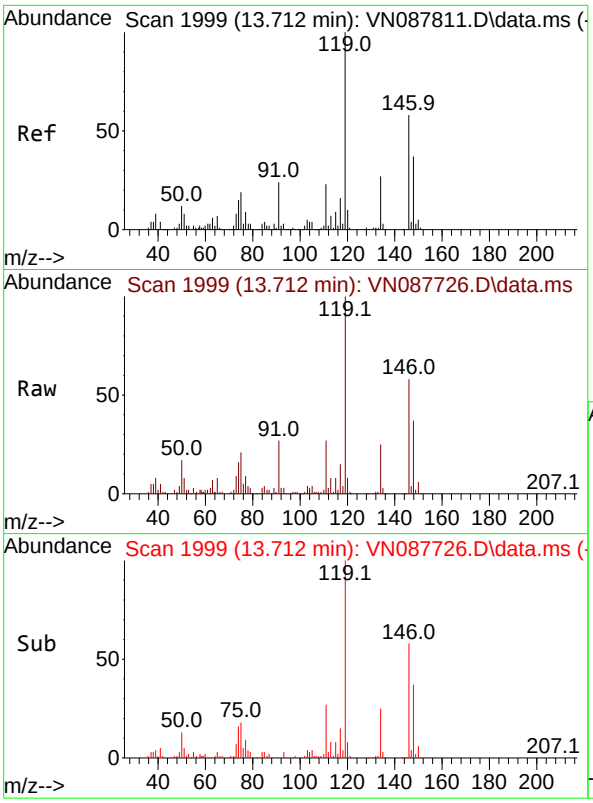


#82
p-Isopropyltoluene
Concen: 17.164 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:119 Resp: 179893

Ion	Ratio	Lower	Upper
119	100		
134	24.7	0.0	49.4
91	26.1	0.0	52.2

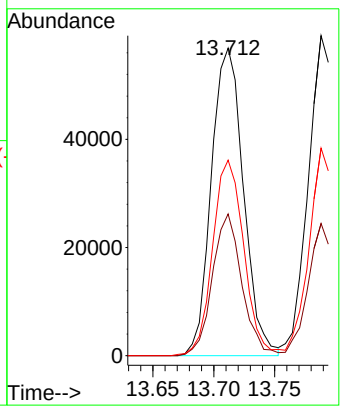




#83
1,3-Dichlorobenzene
Concen: 19.181 ug/l
RT: 13.712 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:146 Resp: 10433

Ion	Ratio	Lower	Upper
146	100		
111	42.3	21.1	63.4
148	62.0	31.0	93.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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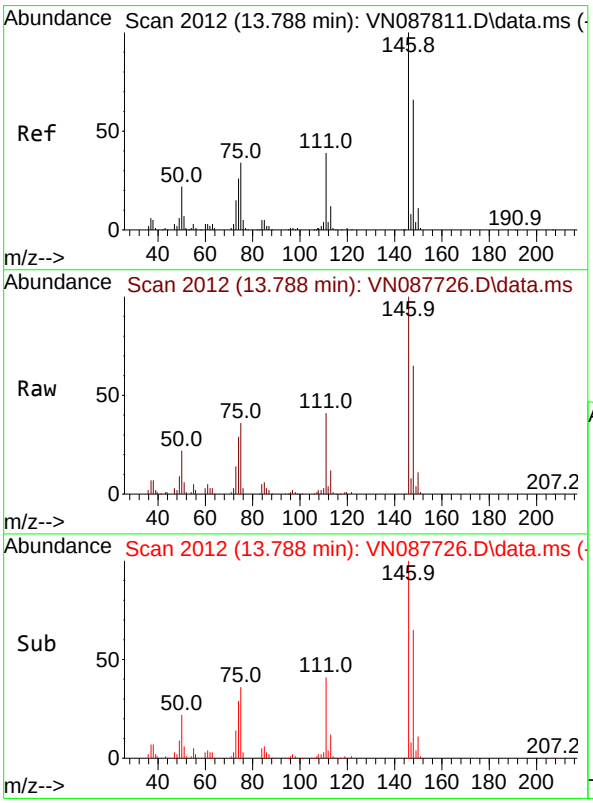
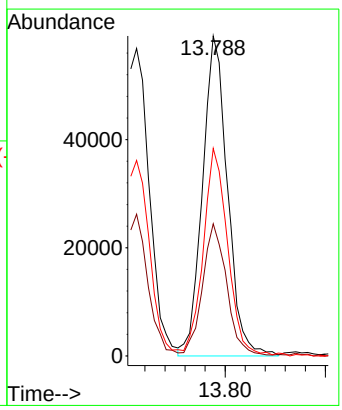
Supervised By :Mahesh Dadoda 09/05/2025

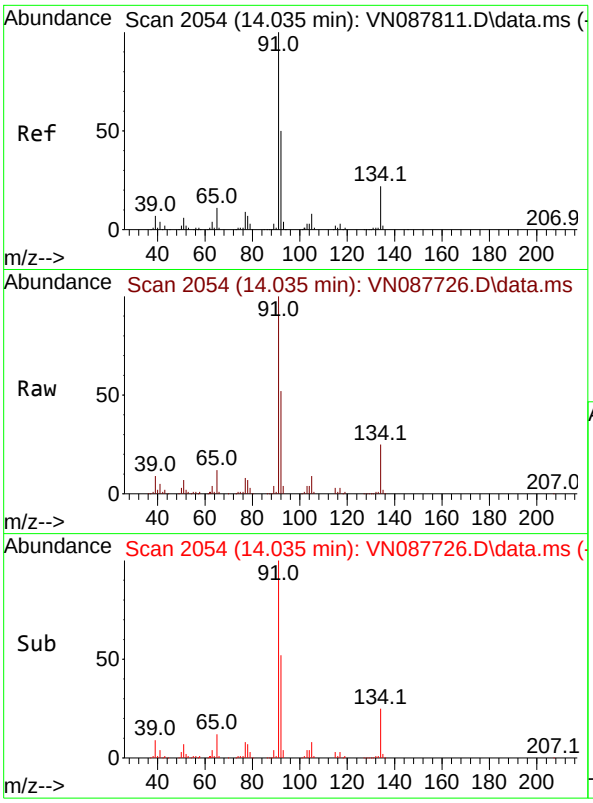


#84
1,4-Dichlorobenzene
Concen: 18.737 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:146 Resp: 102608

Ion	Ratio	Lower	Upper
146	100		
111	40.3	20.2	60.5
148	63.0	31.5	94.5

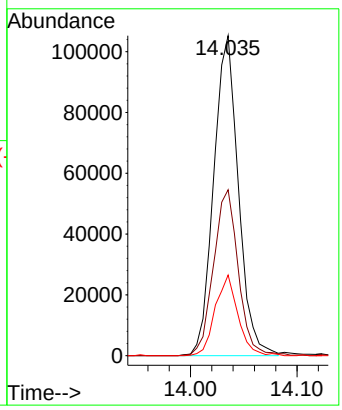




#85
n-Butylbenzene
Concen: 16.646 ug/l
RT: 14.035 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 91 Resp: 16946

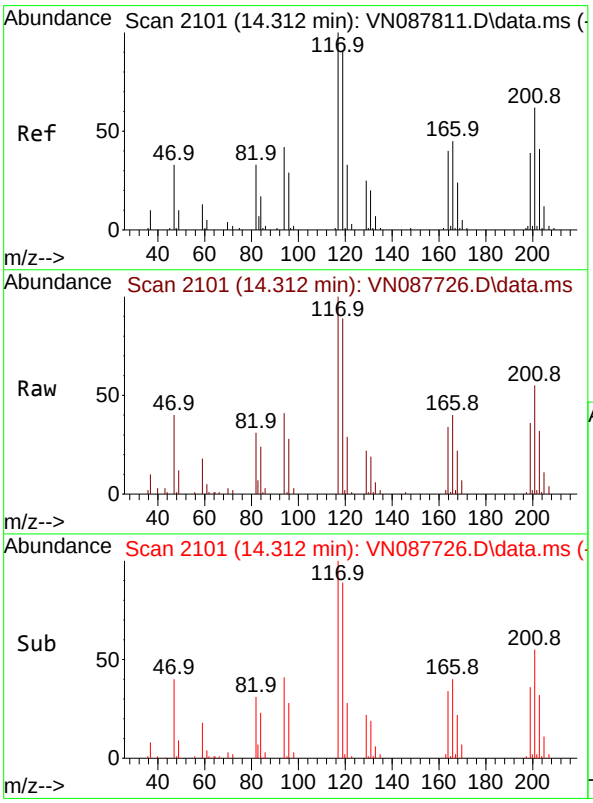
Ion	Ratio	Lower	Upper
91	100		
92	52.0	0.0	104.0
134	23.0	0.0	46.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

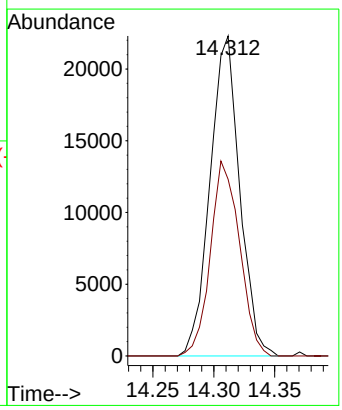
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

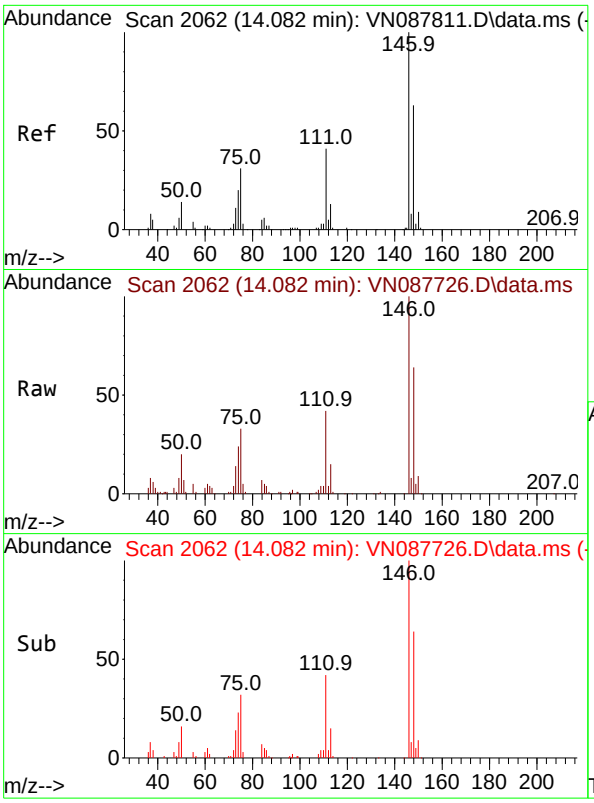


#86
Hexachloroethane
Concen: 18.193 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:117 Resp: 37845

Ion	Ratio	Lower	Upper
117	100		
201	59.8	29.9	89.7

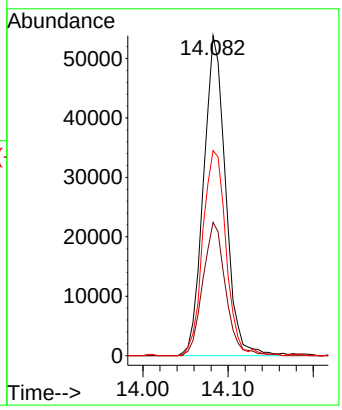




#87
1,2-Dichlorobenzene
Concen: 18.773 ug/l
RT: 14.082 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:146 Resp: 9683

Ion	Ratio	Lower	Upper
146	100		
111	43.0	21.5	64.5
148	66.7	33.4	100.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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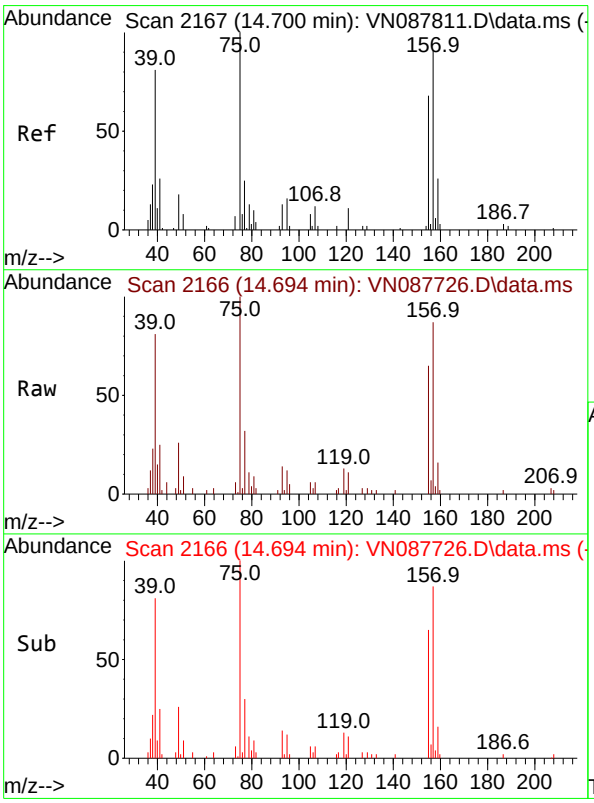
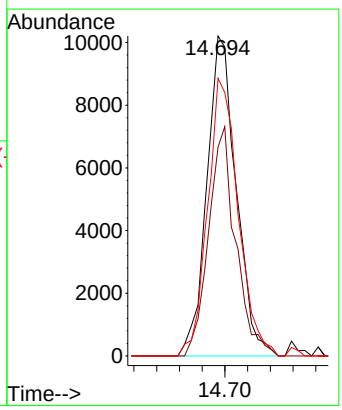
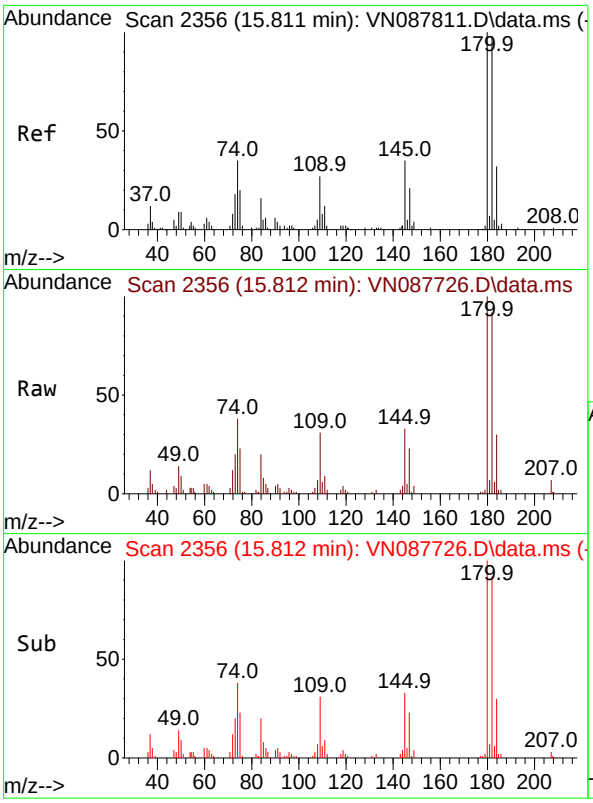


#88
1,2-Dibromo-3-Chloropropane
Concen: 17.534 ug/l
RT: 14.694 min Scan# 2166
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion: 75 Resp: 18320

Ion	Ratio	Lower	Upper
75	100		
155	66.2	53.0	79.4
157	90.3	72.2	108.4

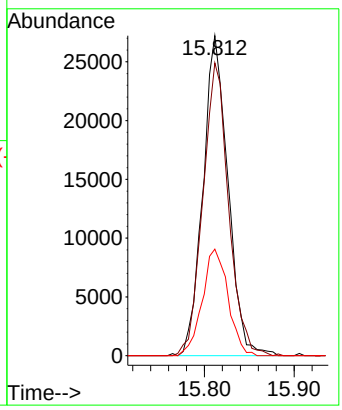




#89
1,2,4-Trichlorobenzene
Concen: 17.337 ug/l
RT: 15.812 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:180 Resp: 5284

Ion	Ratio	Lower	Upper
180	100		
182	93.2	74.6	111.8
145	34.2	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

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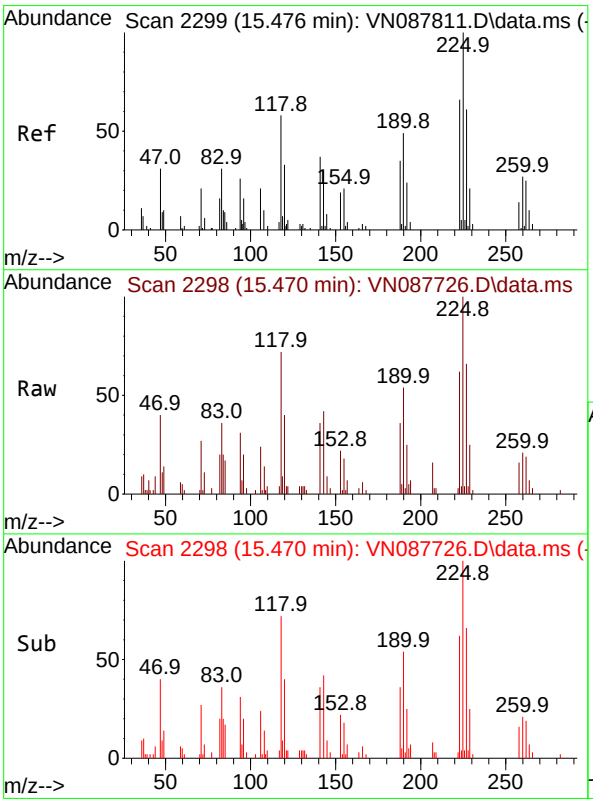
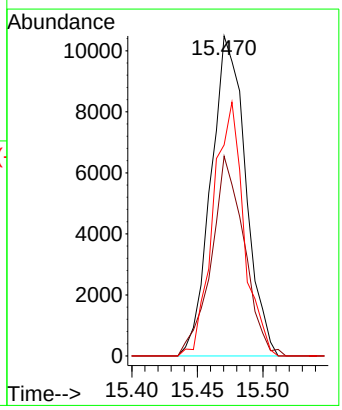
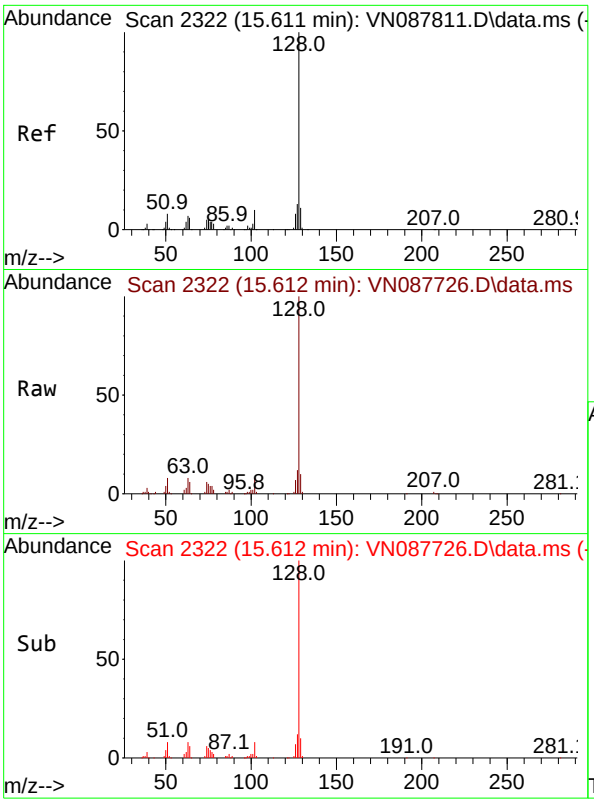


#90
Hexachlorobutadiene
Concen: 16.481 ug/l
RT: 15.470 min Scan# 2298
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:225 Resp: 19260

Ion	Ratio	Lower	Upper
225	100		
223	59.1	0.0	118.2
227	69.5	0.0	139.0

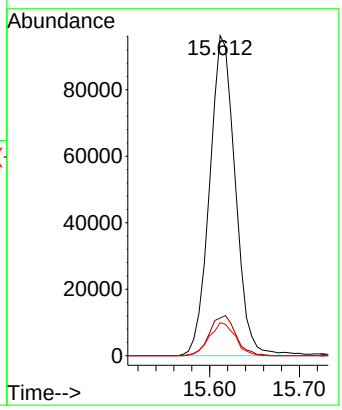




#91
Naphthalene
Concen: 16.595 ug/l
RT: 15.612 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:128 Resp: 19067

Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.2	15.4
129	10.4	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 09/05/2025
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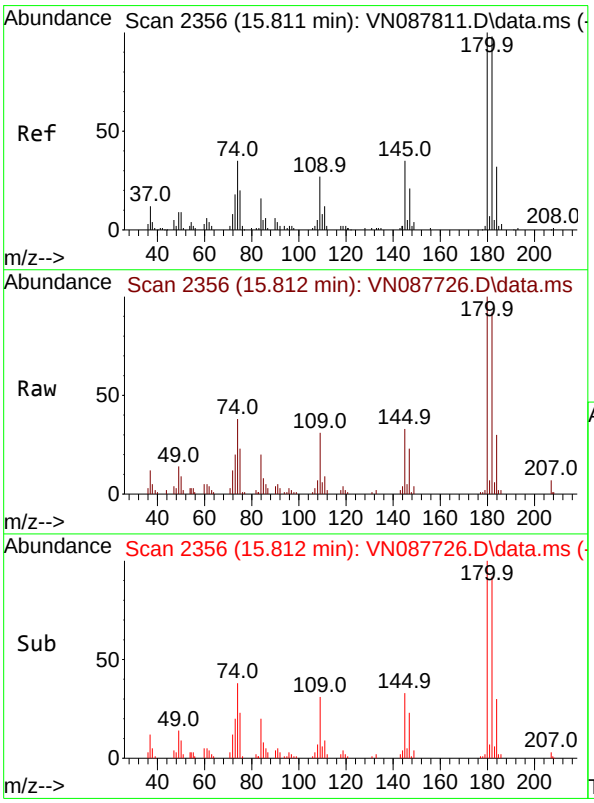
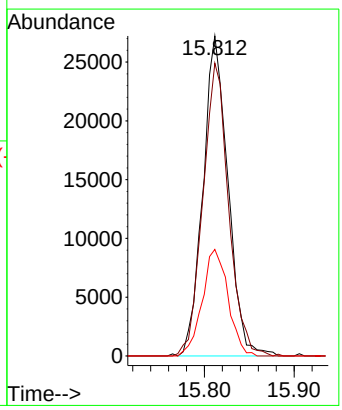


#92
1,2,3-Trichlorobenzene
Concen: 17.337 ug/l
RT: 15.812 min Scan# 2356
Delta R.T. 0.000 min
Lab File: VN087726.D
Acq: 04 Sep 2025 16:44

Tgt Ion:180 Resp: 52849

Ion	Ratio	Lower	Upper
180	100		
182	93.2	0.0	186.4
145	34.2	0.0	68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087727.D
Acq On : 04 Sep 2025 17:05
Operator : JC\MD
Sample : VSTDICC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Quant Time: Sep 05 02:57:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.800	128	44084	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.082	114	235930	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.841	117	223338	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.565	65	114806	28.923	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 96.400%				
60) 4-Bromofluorobenzene	12.829	95	106071	27.928	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 93.100%				
63) Toluene-d8	10.547	98	310800	30.119	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 100.400%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.142	85	149532	53.681	ug/l		98
3) Chloromethane	2.383	50	148881	52.361	ug/l		98
4) Vinyl Chloride	2.536	62	175465	57.579	ug/l		94
5) Bromomethane	2.977	94	97326	57.939	ug/l		97
6) Chloroethane	3.142	64	115833	58.053	ug/l		88
7) Trichlorofluoromethane	3.512	101	253094	57.285	ug/l		93
8) Diethyl Ether	3.965	74	105850	57.749	ug/l		96
9) 1,1,2-Trichlorotrifluo...	4.365	101	139857	60.848	ug/l		78
10) 1,1-Dichloroethene	4.336	96	140735	59.413	ug/l		94
11) Methyl Iodide	4.577	142	99554	53.536	ug/l		91
12) Methyl Acetate	5.018	43	216966	50.540	ug/l		95
13) Acrolein	4.177	56	182140	271.375	ug/l	#	41
14) Acrylonitrile	5.706	53	460378	247.925	ug/l		97
15) Acetone	4.424	58	134357	255.056	ug/l		97
16) Carbon Disulfide	4.706	76	381348	52.616	ug/l	#	95
17) Allyl chloride	5.018	41	221421	47.360	ug/l		97
18) Methylene Chloride	5.265	84	157997	52.875	ug/l		88
19) trans-1,2-Dichloroethene	5.777	96	143067	51.744	ug/l		94
20) Diisopropyl ether	6.659	45	537577	50.467	ug/l		97
21) 1,1-Dichloroethane	6.559	63	286450	51.711	ug/l		94
22) cis-1,2-Dichloroethene	7.471	96	173910	51.413	ug/l		96
23) tert-Butyl Alcohol	5.530	59	160023	207.312	ug/l	#	100
24) Methyl tert-Butyl Ether	5.789	73	506717	48.821	ug/l		96
25) Chloroform	7.947	83	304392	52.195	ug/l		95
26) Cyclohexane	8.241	56	232867	53.159	ug/l	#	95
29) 1,1-Dichloropropene	8.353	75	199005	52.624	ug/l		100
30) 2-Butanone	7.471	43	666350	243.287	ug/l		97
31) 2,2-Dichloropropane	7.477	77	238304	50.297	ug/l		99
32) 1,1,1-Trichloroethane	8.153	97	249576	51.457	ug/l		98
33) Carbon Tetrachloride	8.347	117	208479	52.233	ug/l		96
34) Benzene	8.588	78	640994	53.450	ug/l		95
35) Methacrylonitrile	7.759	41	140382	47.182	ug/l		98
36) 1,2-Dichloroethane	8.653	62	239430	50.083	ug/l		98
37) Trichloroethene	9.335	130	142957	54.130	ug/l		97
38) Methylcyclohexane	9.582	83	220447	51.099	ug/l		98
39) 1,2-Dichloropropane	9.600	63	159981	52.056	ug/l		99
40) Dibromomethane	9.688	93	120754	52.549	ug/l		99
41) Bromodichloromethane	9.871	83	242124	50.456	ug/l		97
42) Vinyl Acetate	6.589	43	2296328	254.840	ug/l		100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087727.D
Acq On : 04 Sep 2025 17:05
Operator : JC\MD
Sample : VSTDICC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 05 02:57:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.547	43	276887	51.296	ug/l	98
44) Isopropyl Acetate	8.677	43	438553	48.838	ug/l	99
45) 1,4-Dioxane	9.677	88	53248	926.233	ug/l	95
46) Methyl methacrylate	9.659	41	202256	48.120	ug/l	98
47) n-amyl Acetate	12.500	43	299916m	57.443	ug/l	
48) t-1,3-Dichloropropene	10.818	75	256762	50.194	ug/l	96
49) cis-1,3-Dichloropropene	10.294	75	266622	51.643	ug/l	95
50) 1,1,2-Trichloroethane	10.994	97	156835	53.732	ug/l	98
51) Ethyl methacrylate	10.859	69	260502	52.305	ug/l	97
52) 1,3-Dichloropropane	11.141	76	273053	52.180	ug/l	100
53) Dibromochloromethane	11.341	129	178488	53.720	ug/l	94
54) 1,2-Dibromoethane	11.447	107	165403	53.777	ug/l	100
55) 2-Chloroethyl vinyl ether	10.141	63	667057	247.892	ug/l	99
56) Bromoform	12.559	173	113619	51.614	ug/l	100
58) 4-Methyl-2-Pentanone	10.424	43	1366907	247.352	ug/l	100
59) 2-Hexanone	11.176	43	945587	252.664	ug/l	98
61) Tetrachloroethene	11.082	164	110439	51.225	ug/l	98
62) Toluene	10.606	91	695370	51.744	ug/l	99
64) Chlorobenzene	11.871	112	419478	50.870	ug/l	95
65) 1,1,1,2-Tetrachloroethane	11.941	131	148563	51.179	ug/l	97
66) Ethyl Benzene	11.941	91	760061	51.315	ug/l	95
67) m/p-Xylenes	12.047	106	578021	106.025	ug/l	94
68) o-Xylene	12.376	106	272027	50.584	ug/l	94
69) Styrene	12.388	104	488107	53.357	ug/l	100
70) Isopropylbenzene	12.670	105	705735	52.168	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.918	83	247798	52.498	ug/l	98
72) 1,2,3-Trichloropropane	12.970	75	227694m	51.707	ug/l	
73) Bromobenzene	12.959	156	164633	51.479	ug/l	97
74) n-propylbenzene	13.012	91	894796	52.574	ug/l	100
75) 2-Chlorotoluene	13.100	91	542010	51.771	ug/l	98
76) 1,3,5-Trimethylbenzene	13.147	105	601688	51.829	ug/l	98
77) t-1,4-Dichloro-2-butene	12.718	75	83260	50.352	ug/l	85
78) 4-Chlorotoluene	13.200	91	555670	52.151	ug/l	97
79) tert-butylbenzene	13.417	119	505286	51.663	ug/l	96
80) 1,2,4-Trimethylbenzene	13.459	105	624111	53.295	ug/l	99
81) sec-Butylbenzene	13.594	105	739231	51.833	ug/l	98
82) p-Isopropyltoluene	13.706	119	616043	52.179	ug/l	98
83) 1,3-Dichlorobenzene	13.712	146	330543	53.944	ug/l	98
84) 1,4-Dichlorobenzene	13.788	146	332962	53.977	ug/l	99
85) n-Butylbenzene	14.035	91	598838	52.220	ug/l	99
86) Hexachloroethane	14.312	117	122090	52.103	ug/l	98
87) 1,2-Dichlorobenzene	14.082	146	312431	53.771	ug/l	97
88) 1,2-Dibromo-3-Chloropr...	14.700	75	54360	46.188	ug/l	93
89) 1,2,4-Trichlorobenzene	15.811	180	175450	51.096	ug/l	96
90) Hexachlorobutadiene	15.470	225	57621	43.773	ug/l	92
91) Naphthalene	15.611	128	656553	50.727	ug/l	99
92) 1,2,3-Trichlorobenzene	15.811	180	175450	51.096	ug/l	96

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

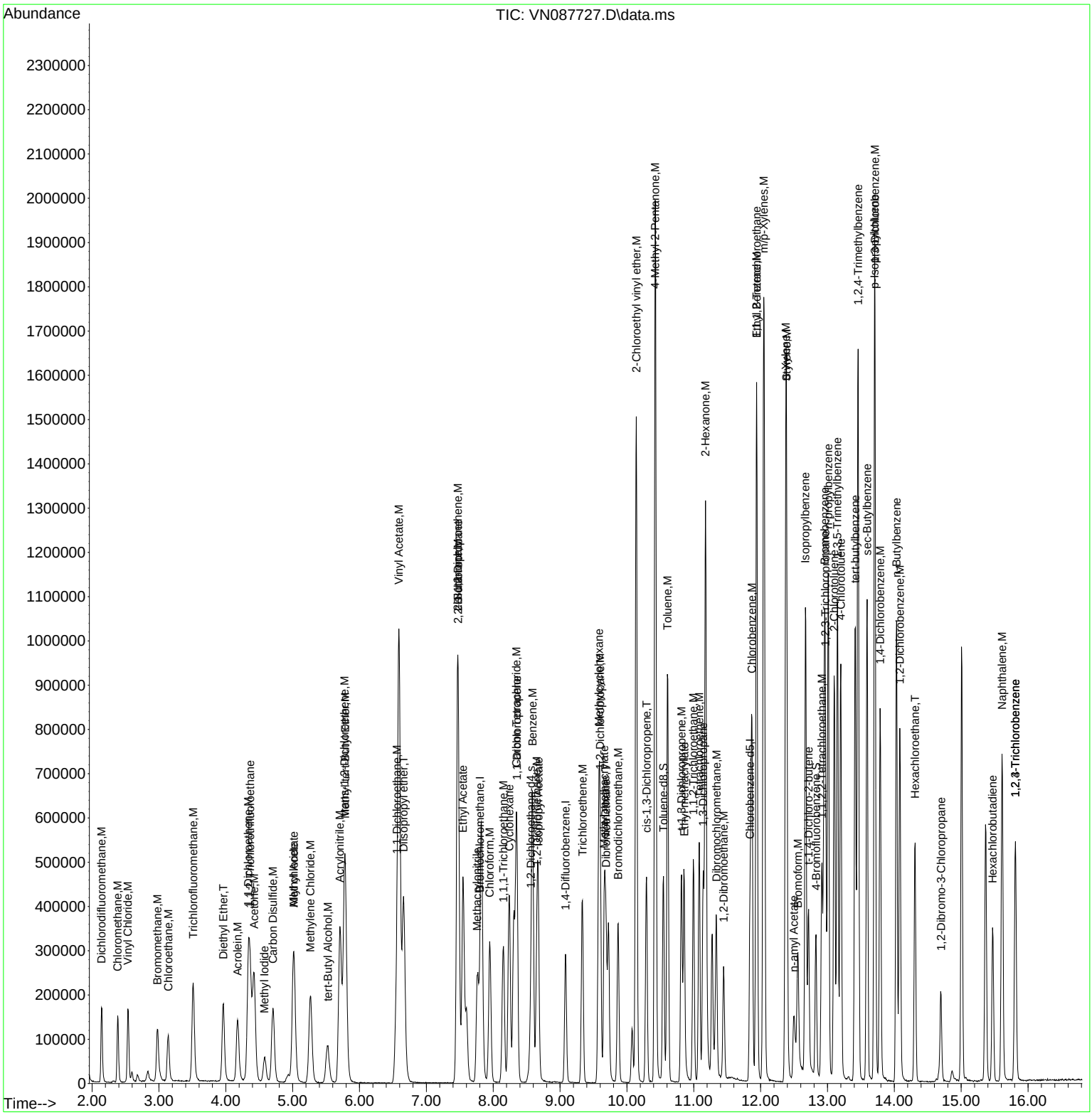
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087727.D
Acq On : 04 Sep 2025 17:05
Operator : JC\MD
Sample : VSTDICC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 16 Sample Multiplier: 1

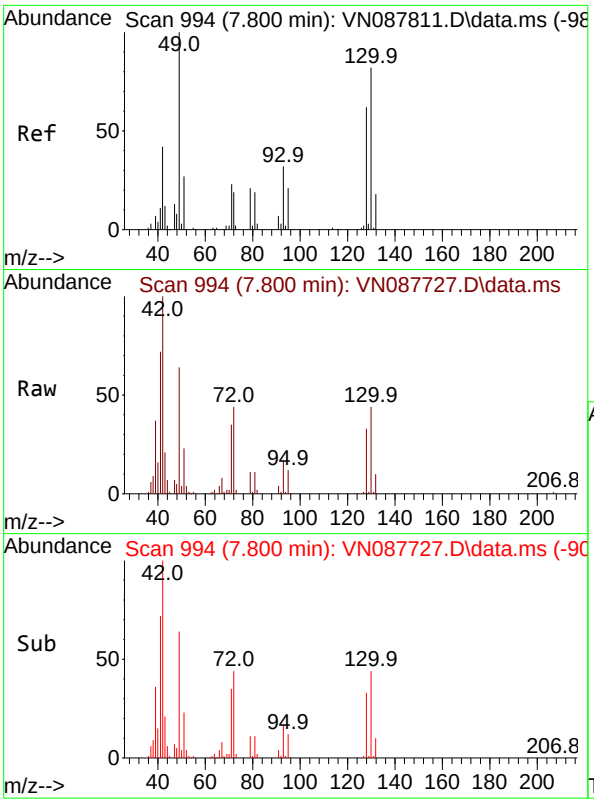
Quant Time: Sep 05 02:57:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

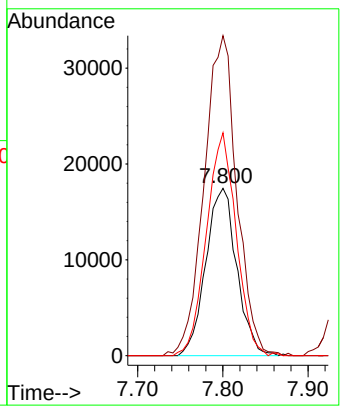




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.800 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:128 Resp: 4408

Ion	Ratio	Lower	Upper
128	100		
49	202.0	0.0	464.3
130	127.8	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
APPROVED

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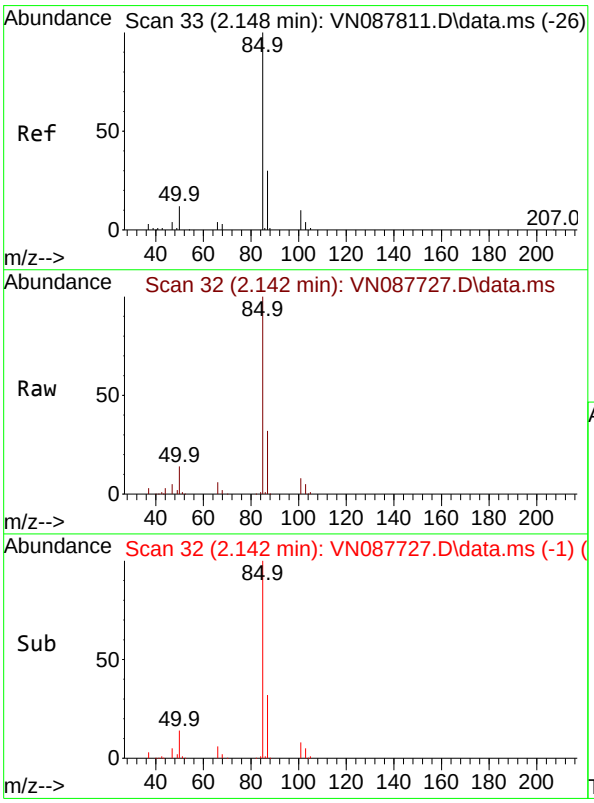
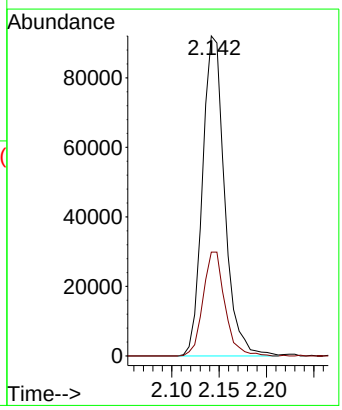
Supervised By :Mahesh Dadoda 09/05/2025

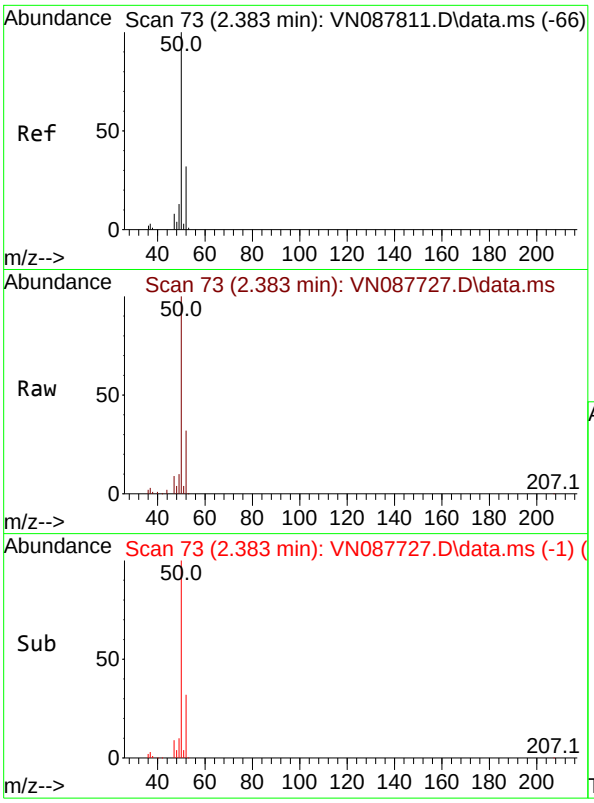


#2
Dichlorodifluoromethane
Concen: 53.681 ug/l
RT: 2.142 min Scan# 32
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 85 Resp: 149532

Ion	Ratio	Lower	Upper
85	100		
87	32.4	16.8	50.4

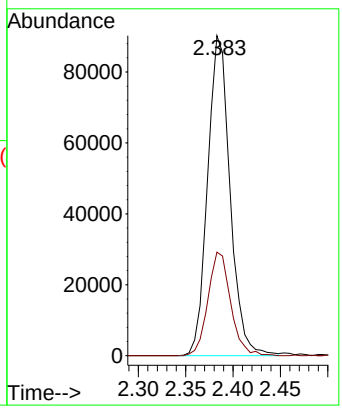




#3
Chloromethane
Concen: 52.361 ug/l
RT: 2.383 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 50 Resp: 14888

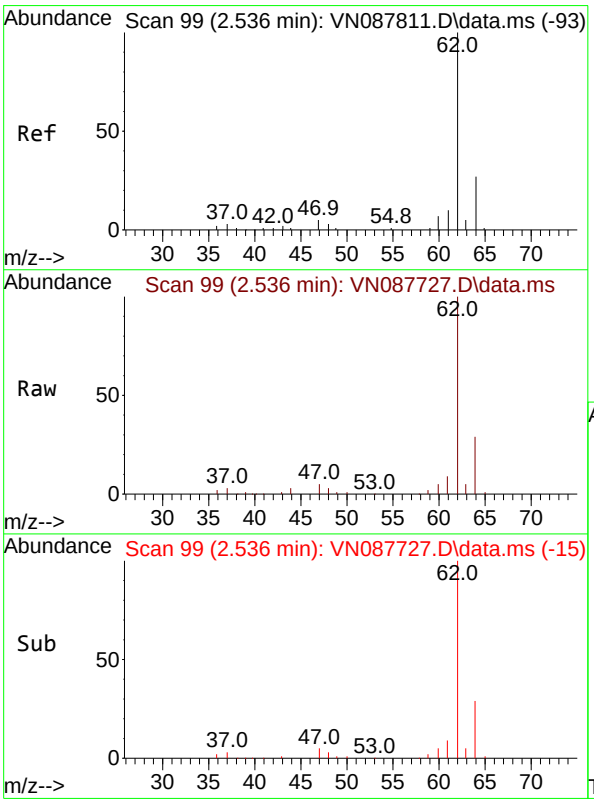
Ion	Ratio	Lower	Upper
50	100		
52	32.4	26.6	40.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
APPROVED

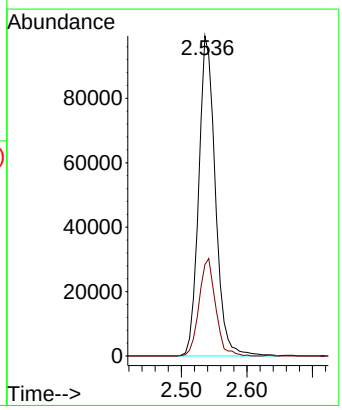
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

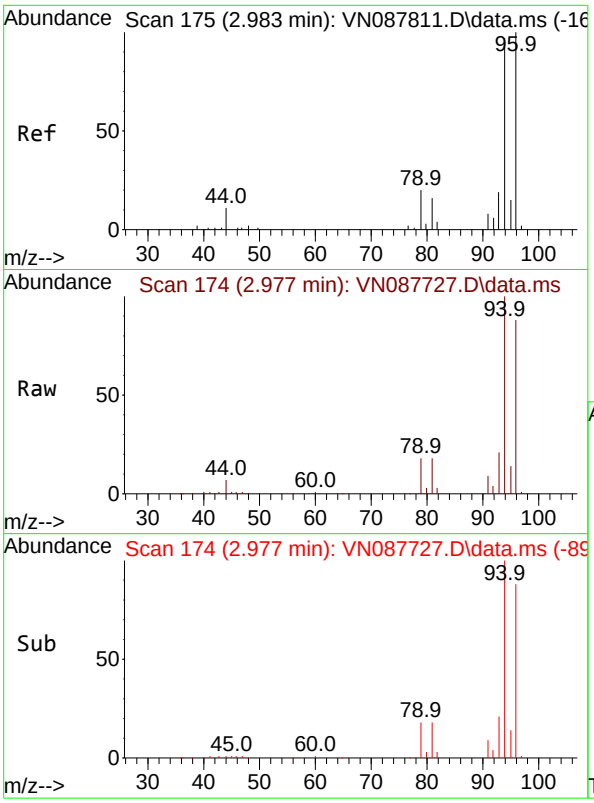


#4
Vinyl Chloride
Concen: 57.579 ug/l
RT: 2.536 min Scan# 99
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 62 Resp: 175465

Ion	Ratio	Lower	Upper
62	100		
64	28.6	25.5	38.3

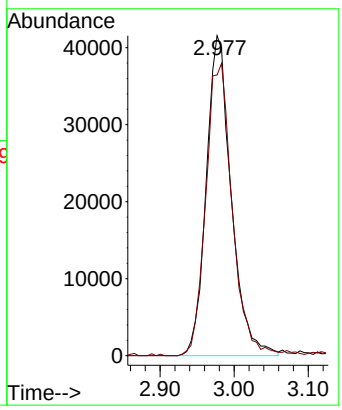




#5
Bromomethane
Concen: 57.939 ug/l
RT: 2.977 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 94 Resp: 9732

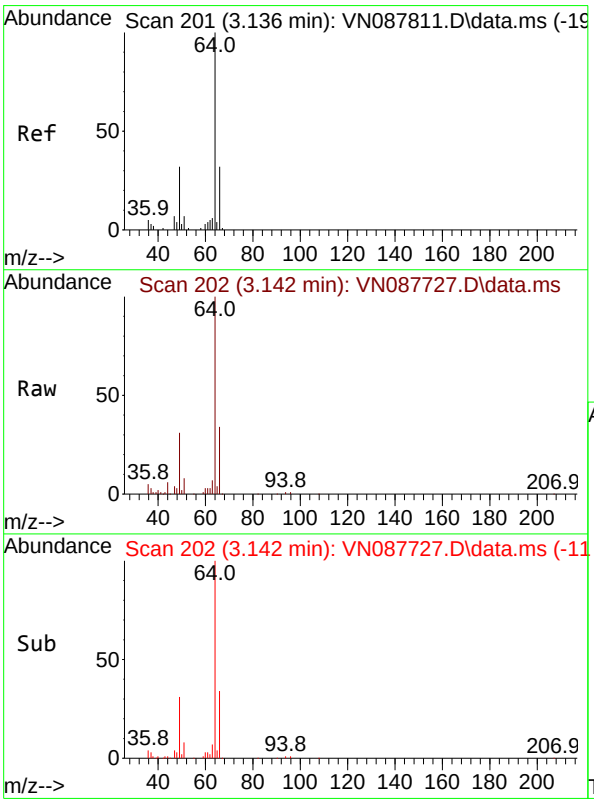
Ion	Ratio	Lower	Upper
94	100		
96	87.7	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
APPROVED

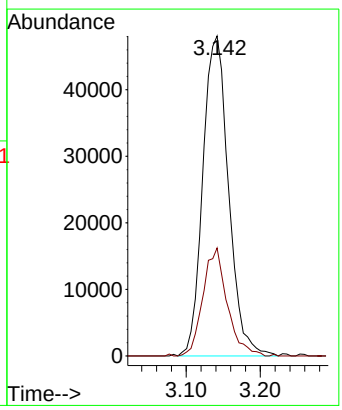
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

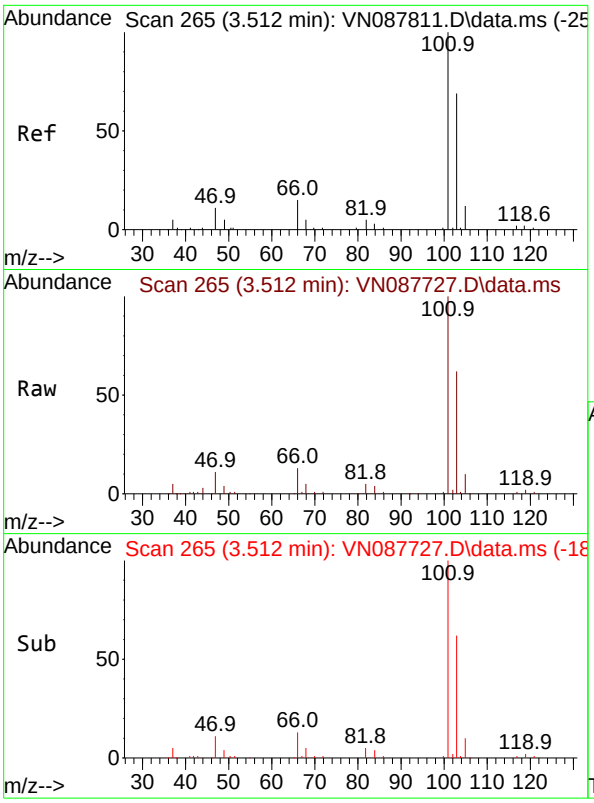


#6
Chloroethane
Concen: 58.053 ug/l
RT: 3.142 min Scan# 202
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 64 Resp: 115833

Ion	Ratio	Lower	Upper
64	100		
66	33.8	32.8	49.2

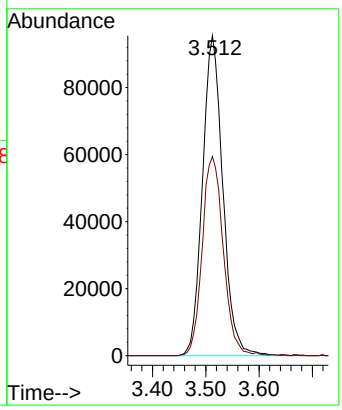




#7
Trichlorofluoromethane
Concen: 57.285 ug/l
RT: 3.512 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:101 Resp: 25309

Ion	Ratio	Lower	Upper
101	100		
103	62.3	45.7	68.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations APPROVED

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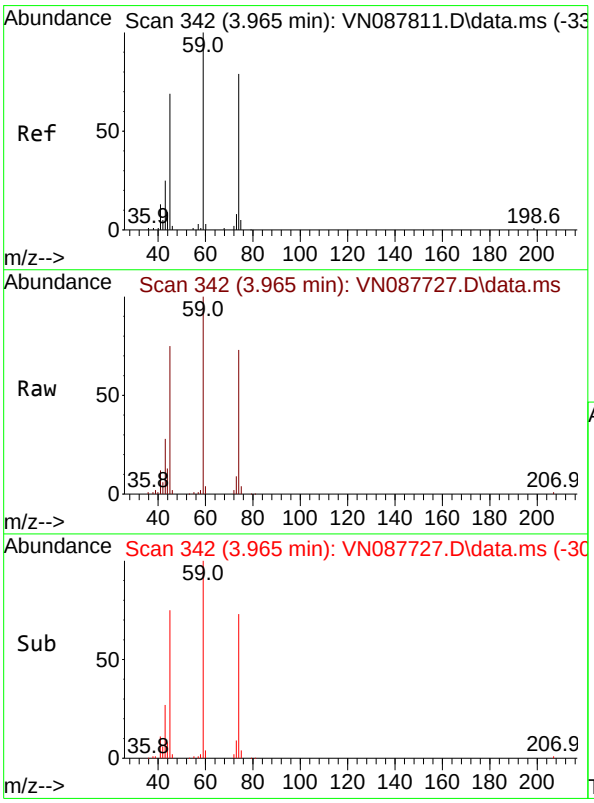
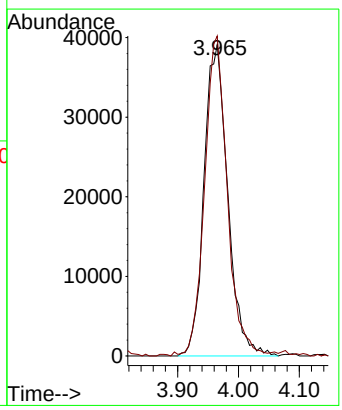
Supervised By :Mahesh Dadoda 09/05/2025

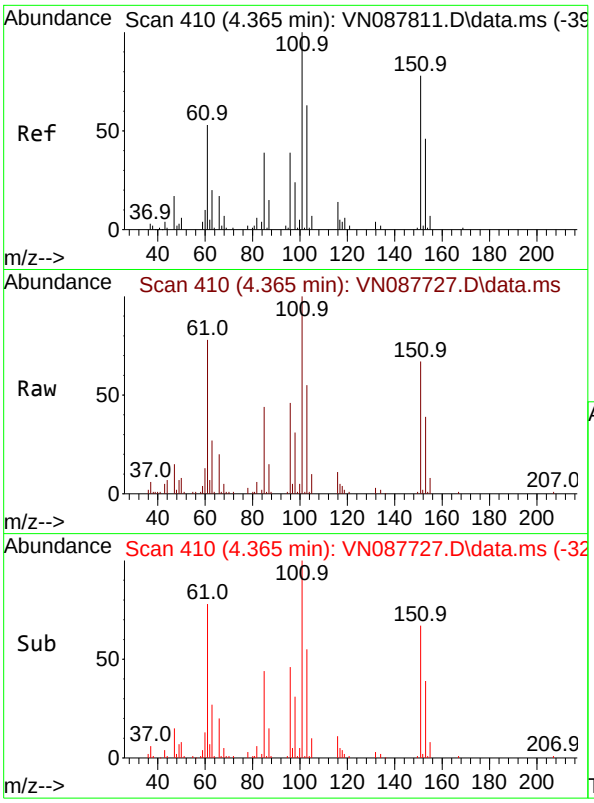


#8
Diethyl Ether
Concen: 57.749 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 74 Resp: 105850

Ion	Ratio	Lower	Upper
74	100		
45	97.9	20.4	183.8





#9
1,1,2-Trichlorotrifluoroethane
Concen: 60.848 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:101 Resp: 13985

Ion	Ratio	Lower	Upper
101	100		
85	44.4	0.0	95.6
151	68.6	0.0	85.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
APPROVED

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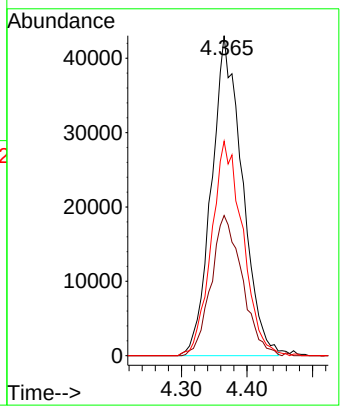
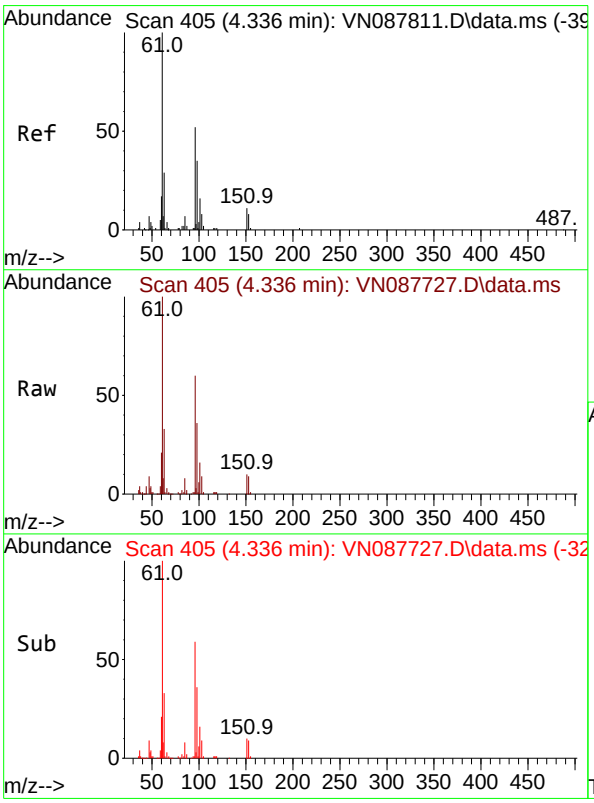
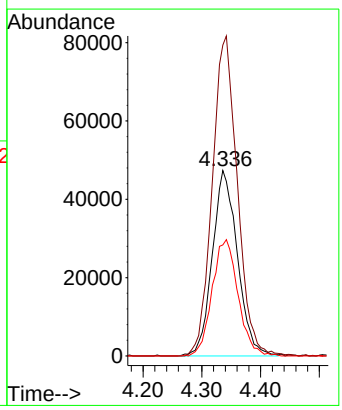


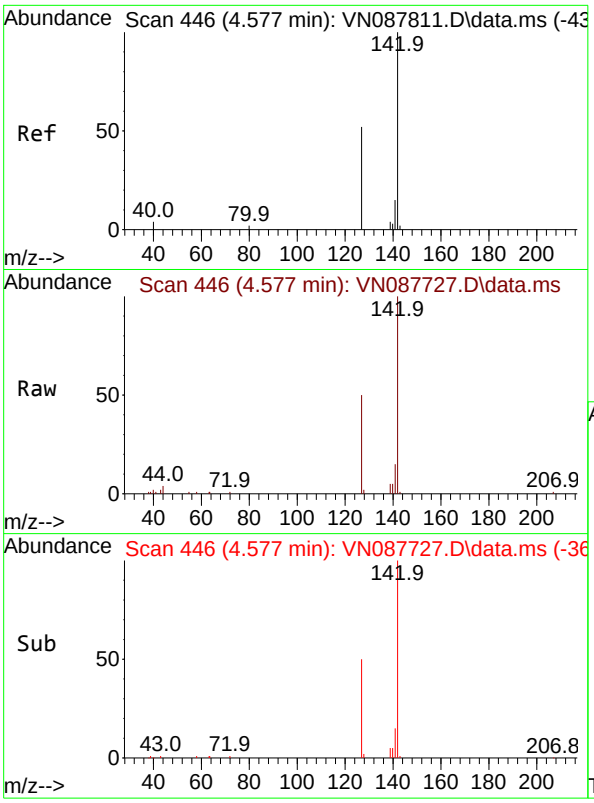


#10
1,1-Dichloroethene
Concen: 59.413 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 96 Resp: 140735

Ion	Ratio	Lower	Upper
96	100		
61	167.7	135.9	203.9
98	59.9	59.2	88.8

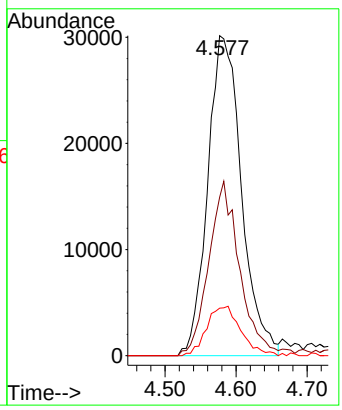




#11
Methyl Iodide
Concen: 53.536 ug/l
RT: 4.577 min Scan# 44
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:142 Resp: 9955

Ion	Ratio	Lower	Upper
142	100		
127	49.6	27.9	83.7
141	15.1	9.6	28.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
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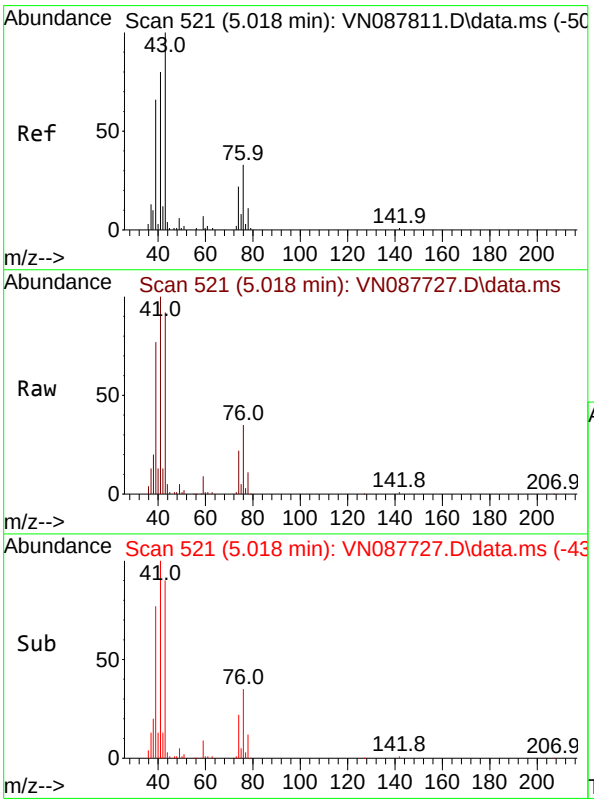
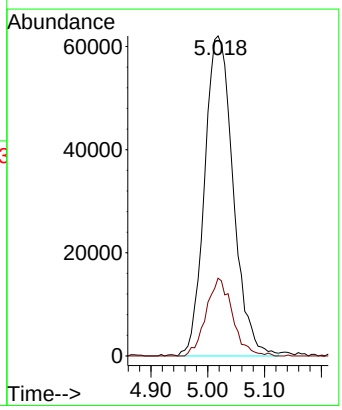
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

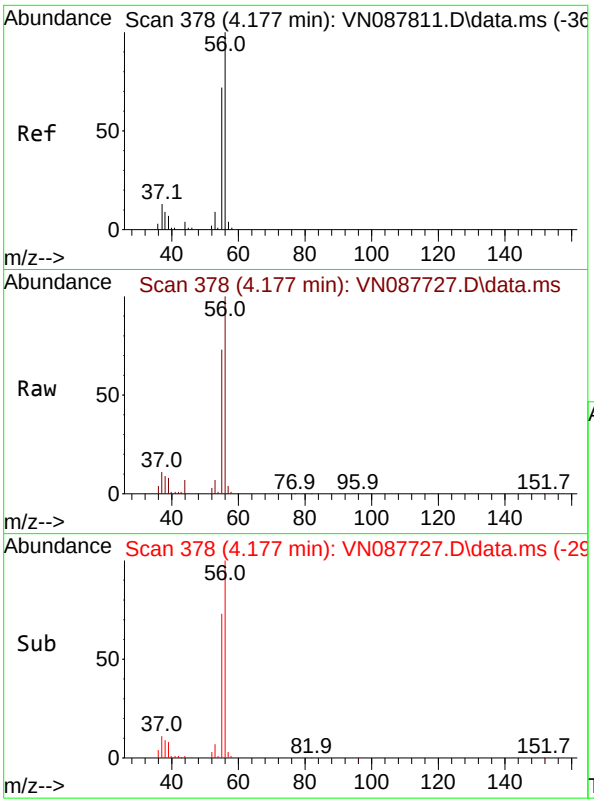


#12
Methyl Acetate
Concen: 50.540 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 43 Resp: 216966

Ion	Ratio	Lower	Upper
43	100		
74	24.4	17.5	26.3

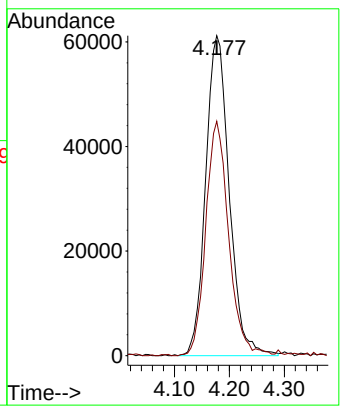




#13
Acrolein
Concen: 271.375 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 56 Resp: 18214

Ion	Ratio	Lower	Upper
56	100		
55	70.3	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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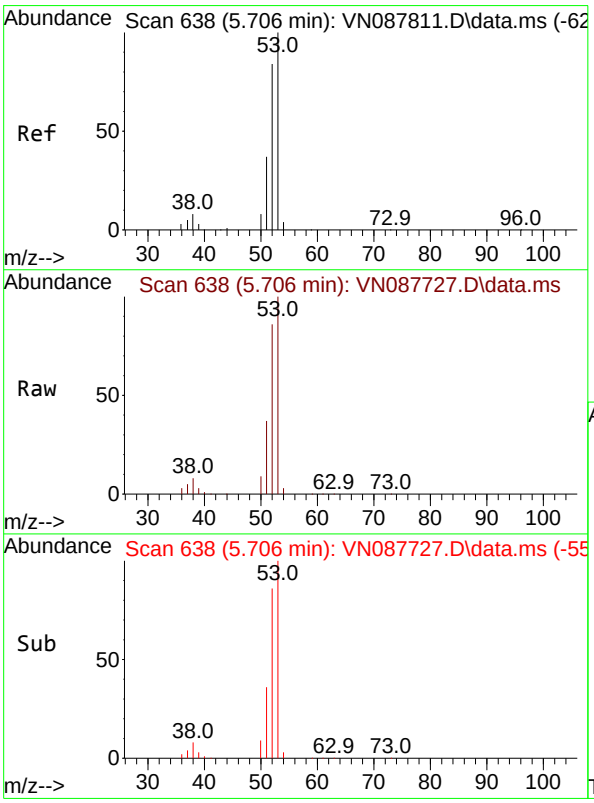
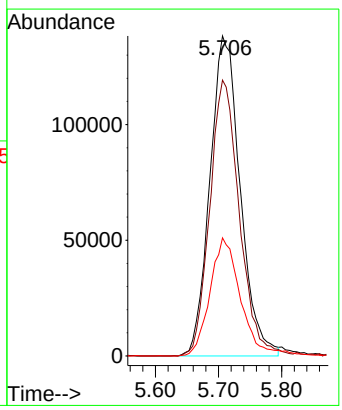
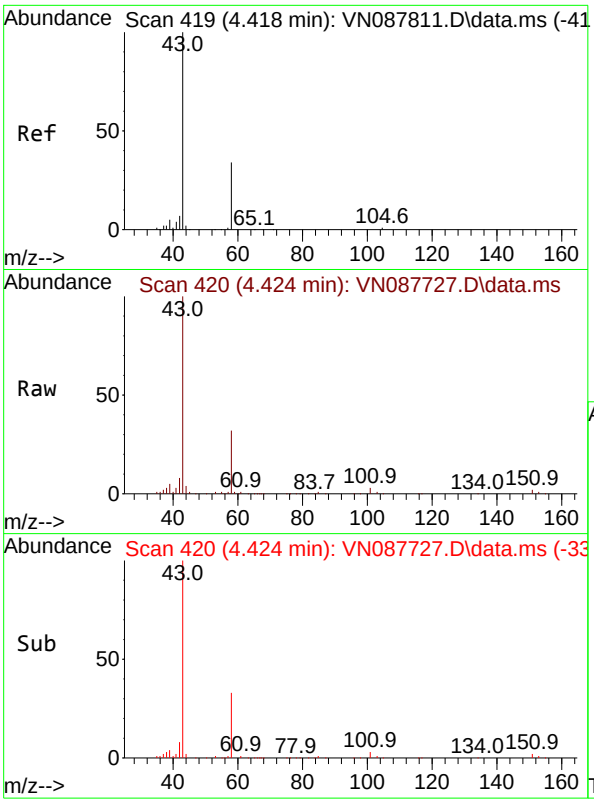


#14
Acrylonitrile
Concen: 247.925 ug/l
RT: 5.706 min Scan# 638
Delta R.T. -0.012 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 53 Resp: 460378

Ion	Ratio	Lower	Upper
53	100		
52	84.1	40.9	122.7
51	37.5	18.1	54.1

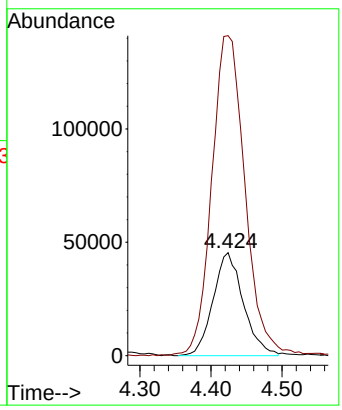




#15
Acetone
Concen: 255.056 ug/l
RT: 4.424 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 58 Resp: 13435

Ion	Ratio	Lower	Upper
58	100		
43	308.0	250.6	376.0



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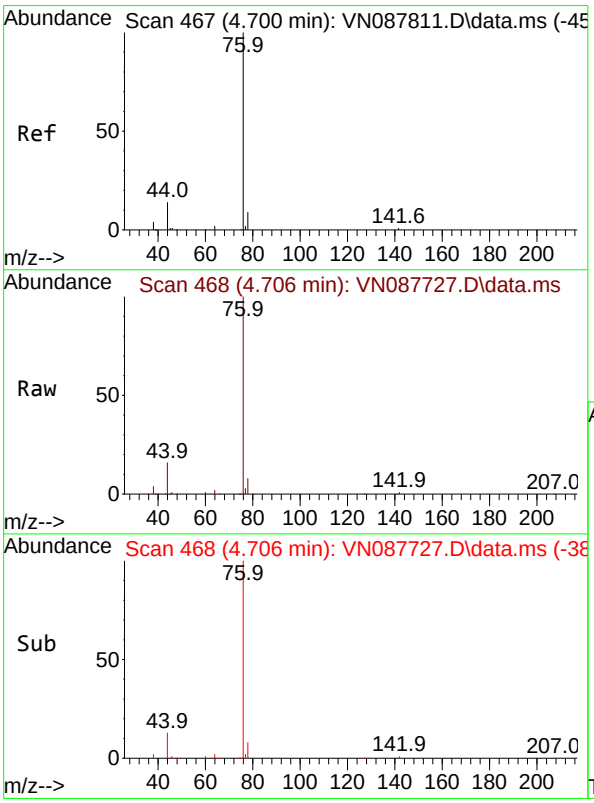
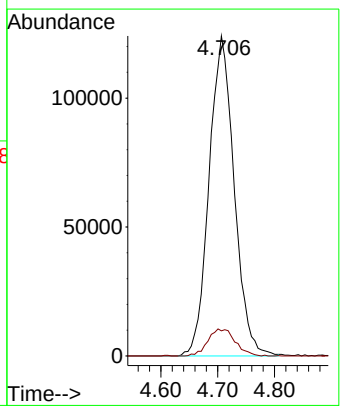
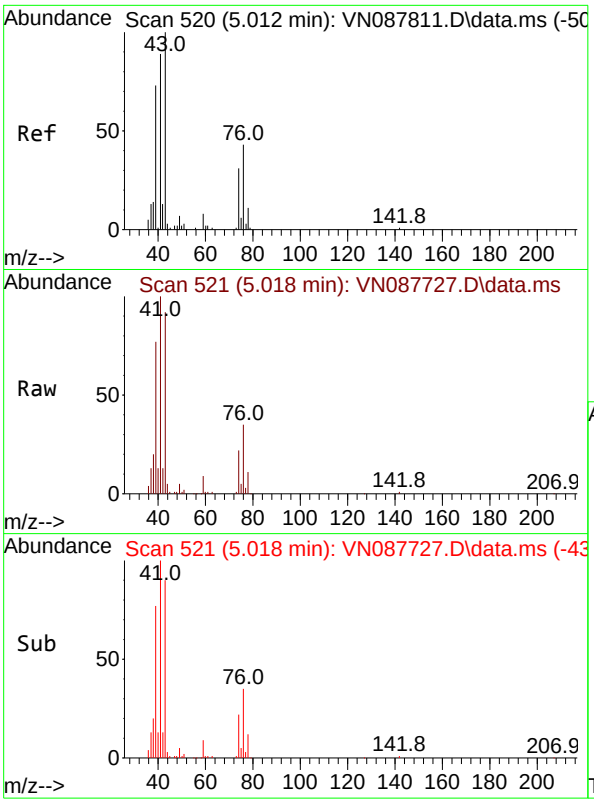


#16
Carbon Disulfide
Concen: 52.616 ug/l
RT: 4.706 min Scan# 468
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 76 Resp: 381348

Ion	Ratio	Lower	Upper
76	100		
78	7.9	5.0	7.6#

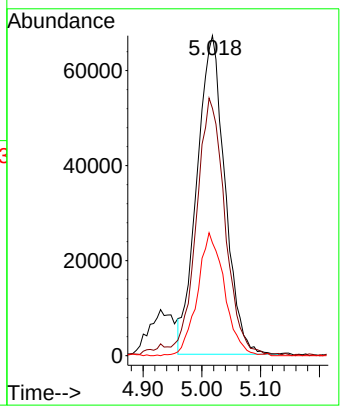




#17
Allyl chloride
Concen: 47.360 ug/l
RT: 5.018 min Scan# 5
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 41 Resp: 22142

Ion	Ratio	Lower	Upper
41	100		
39	76.9	36.7	110.1
76	35.4	18.3	54.8



Instrument :
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ClientSampleId :
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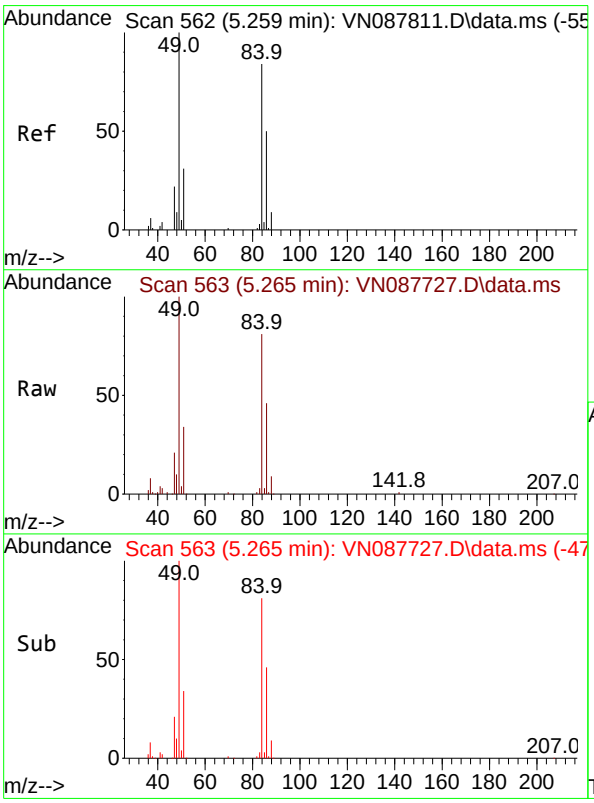
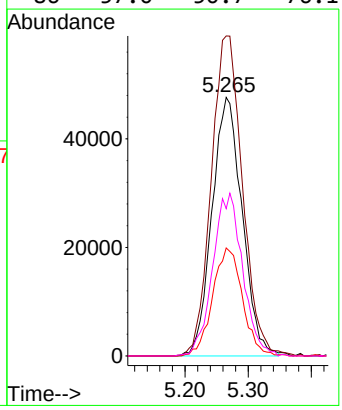
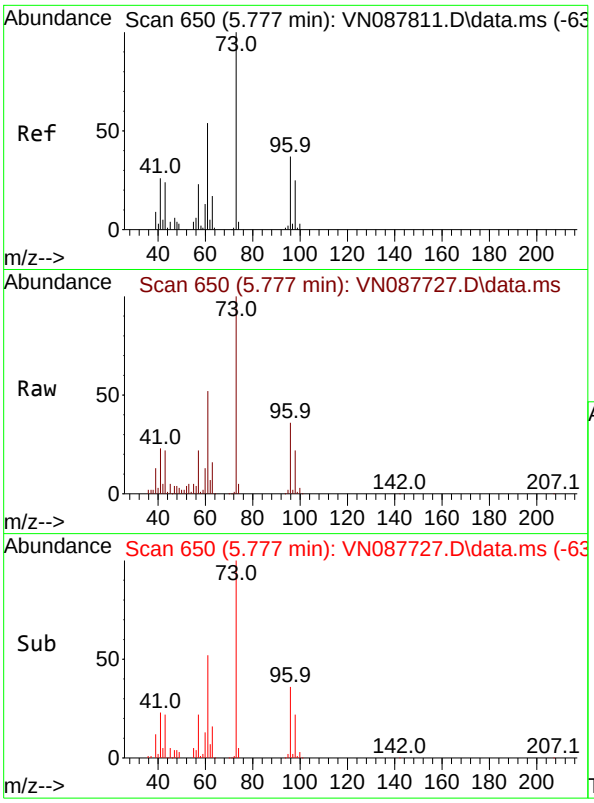


#18
Methylene Chloride
Concen: 52.875 ug/l
RT: 5.265 min Scan# 563
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 84 Resp: 157997

Ion	Ratio	Lower	Upper
84	100		
49	123.4	114.1	171.1
51	41.8	30.2	45.4
86	57.0	50.7	76.1

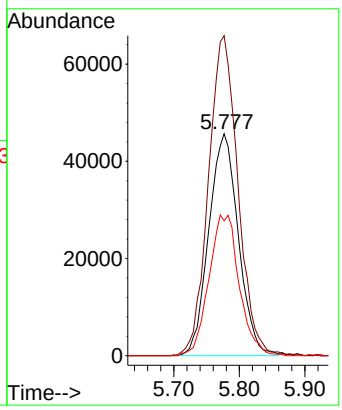




#19
trans-1,2-Dichloroethene
Concen: 51.744 ug/l
RT: 5.777 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 96 Resp: 14306

Ion	Ratio	Lower	Upper
96	100		
61	143.7	106.4	159.6
98	60.8	48.9	73.3



Instrument :
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ClientSampleId :
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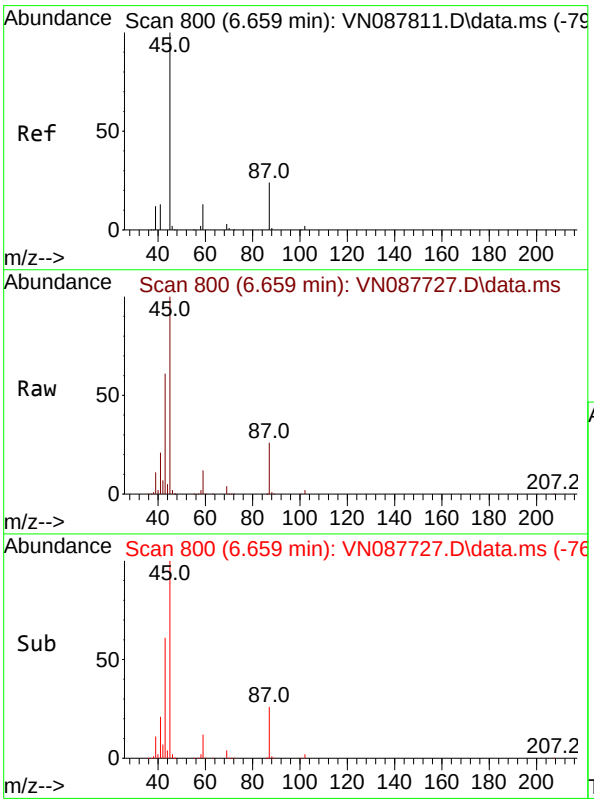
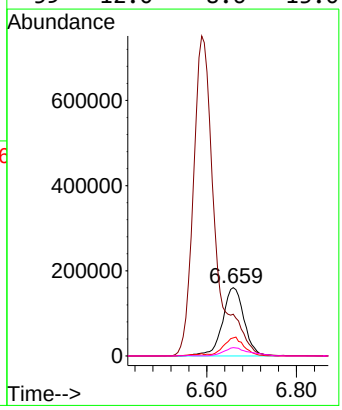
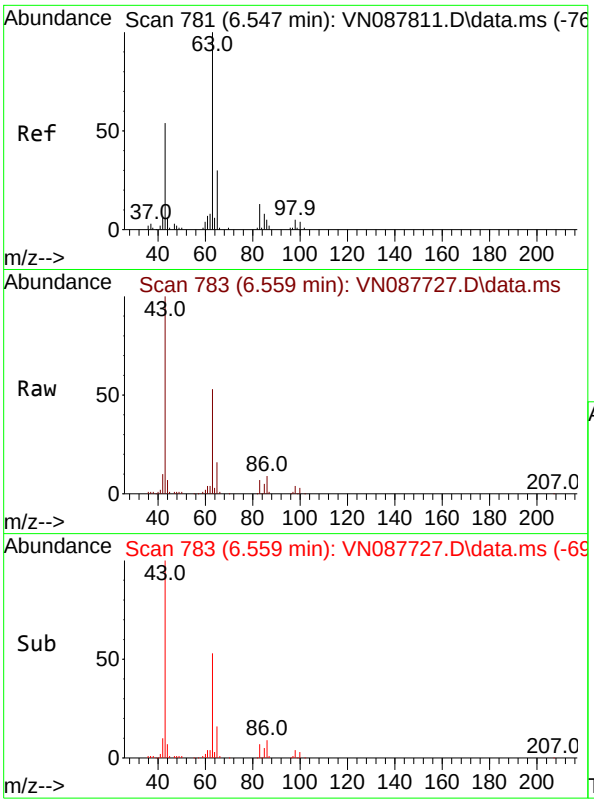


#20
Diisopropyl ether
Concen: 50.467 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 45 Resp: 537577

Ion	Ratio	Lower	Upper
45	100		
43	60.4	49.5	74.3
87	26.5	18.8	28.2
59	12.0	8.6	13.0

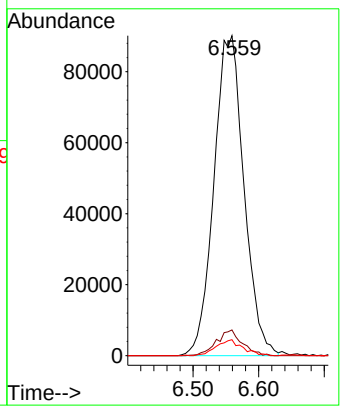




#21
1,1-Dichloroethane
Concen: 51.711 ug/l
RT: 6.559 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 63 Resp: 28645

Ion	Ratio	Lower	Upper
63	100		
98	8.0	2.9	8.8
100	5.0	1.8	5.3



Instrument :
MSVOA_N
ClientSampleId :
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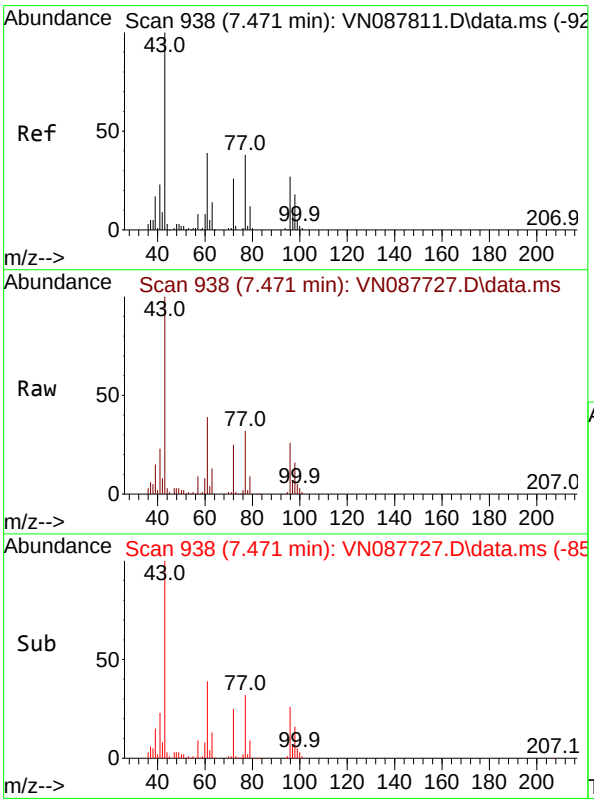
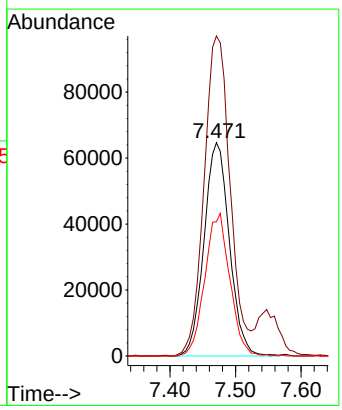
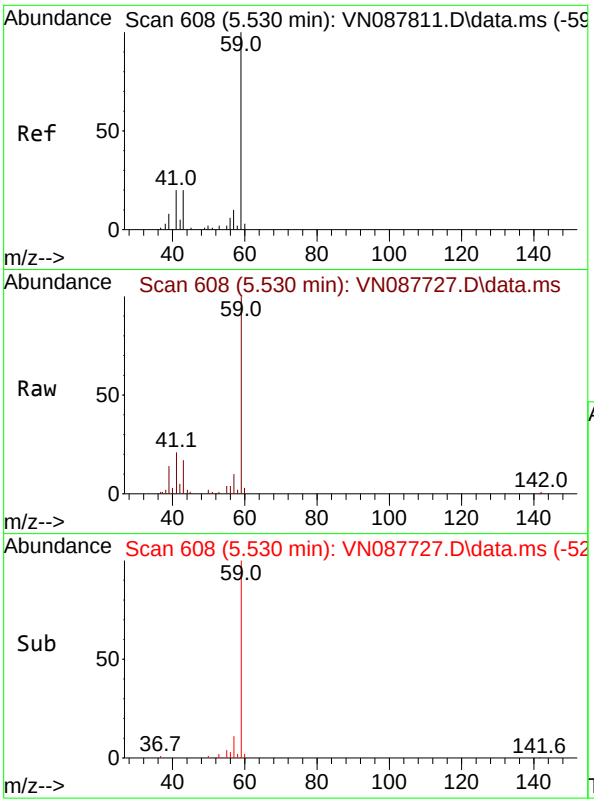


#22
cis-1,2-Dichloroethene
Concen: 51.413 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 96 Resp: 173910

Ion	Ratio	Lower	Upper
96	100		
61	154.3	118.2	177.2
98	65.7	51.6	77.4





#23
tert-Butyl Alcohol
Concen: 207.312 ug/l
RT: 5.530 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 59 Resp: 16002

Ion	Ratio	Lower	Upper
59	100		
52	0.1	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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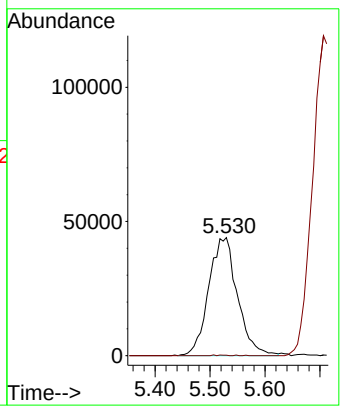
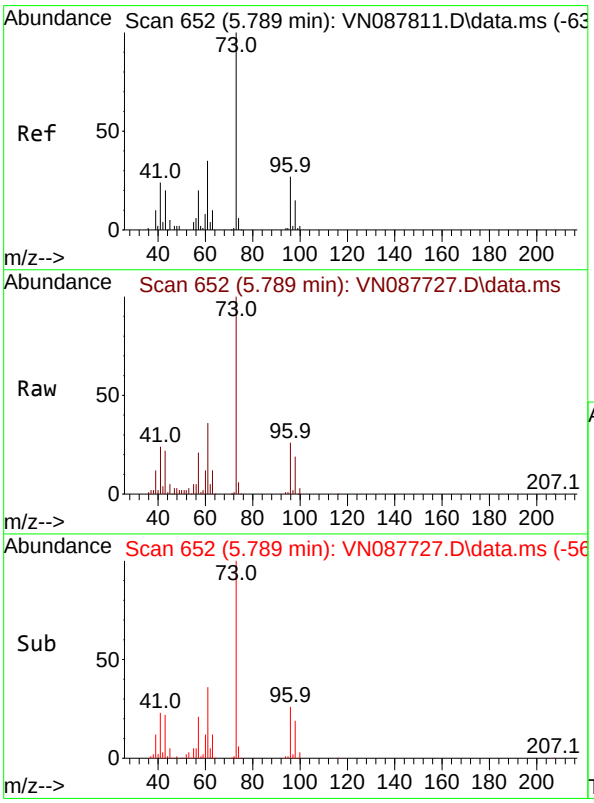
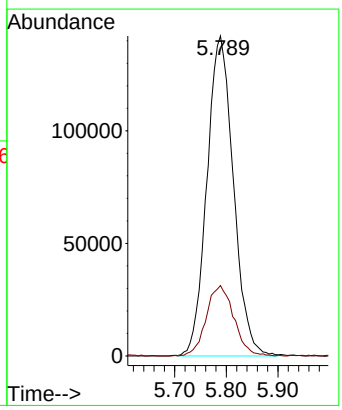


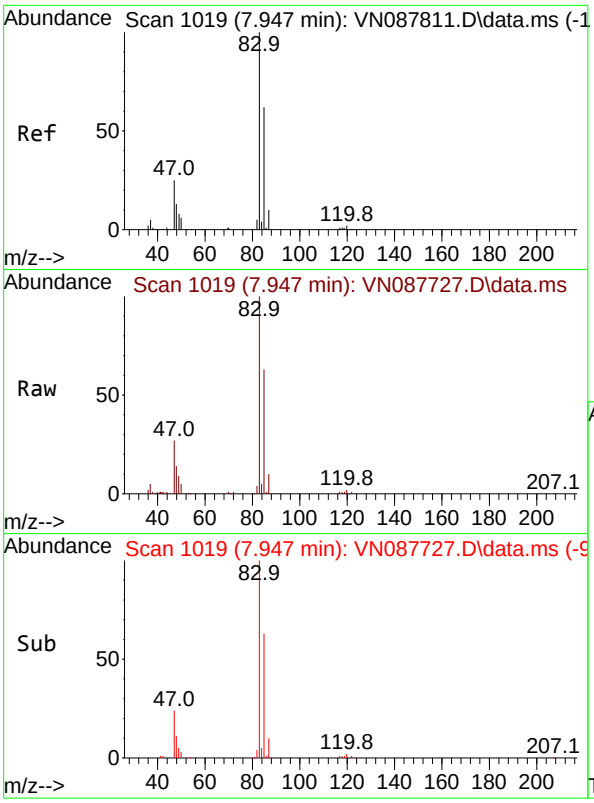


#24
Methyl tert-Butyl Ether
Concen: 48.821 ug/l
RT: 5.789 min Scan# 652
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 73 Resp: 506717

Ion	Ratio	Lower	Upper
73	100		
43	22.8	16.8	25.2





#25
Chloroform
Concen: 52.195 ug/l
RT: 7.947 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 83 Resp: 30439

Ion	Ratio	Lower	Upper
83	100		
85	63.3	47.7	71.5

Instrument :
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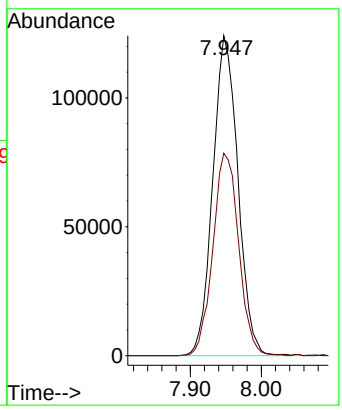
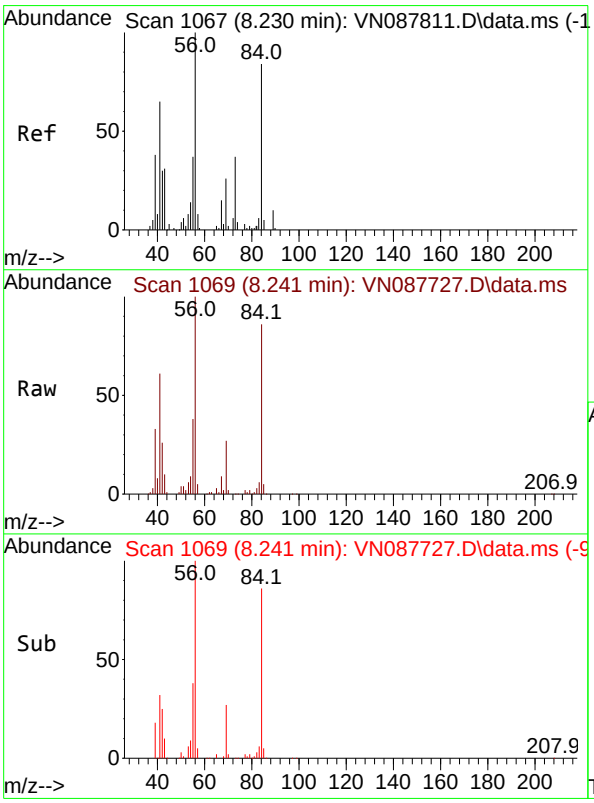
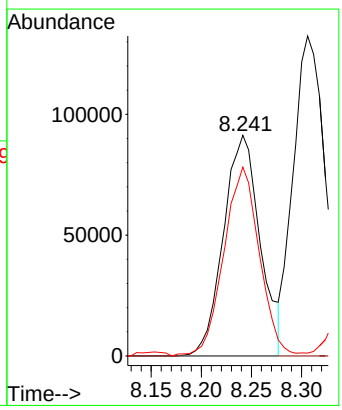


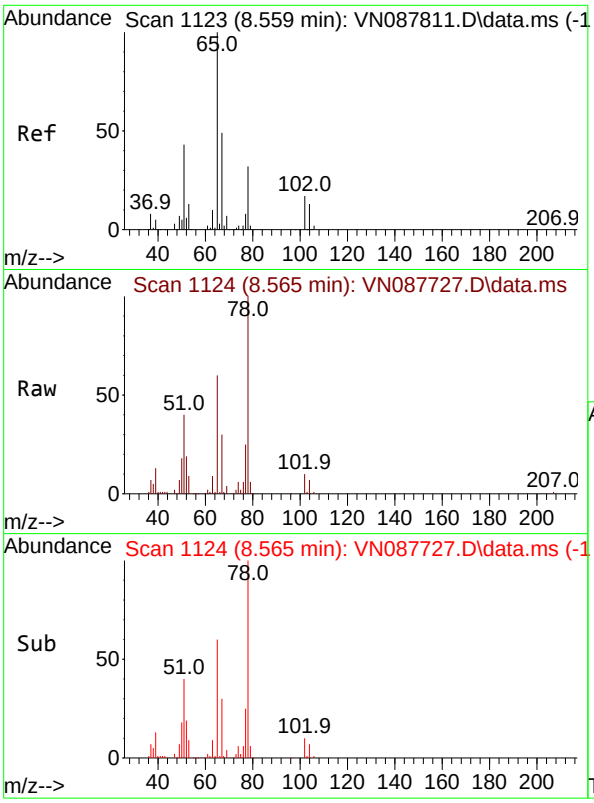


#26
Cyclohexane
Concen: 53.159 ug/l
RT: 8.241 min Scan# 1069
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 56 Resp: 232867

Ion	Ratio	Lower	Upper
56	100		
89	0.0	0.0	0.0
84	82.5	69.4	104.2

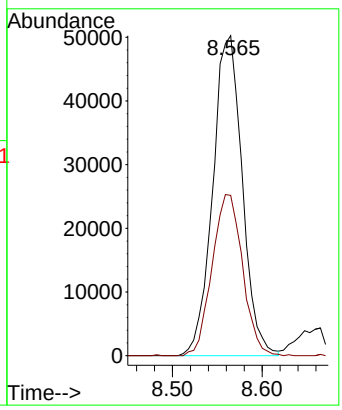




#27
1,2-Dichloroethane-d4
Concen: 28.923 ug/l
RT: 8.565 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 65 Resp: 11480

Ion	Ratio	Lower	Upper
65	100		
67	51.9	39.6	59.4



Instrument :
MSVOA_N
ClientSampleId :
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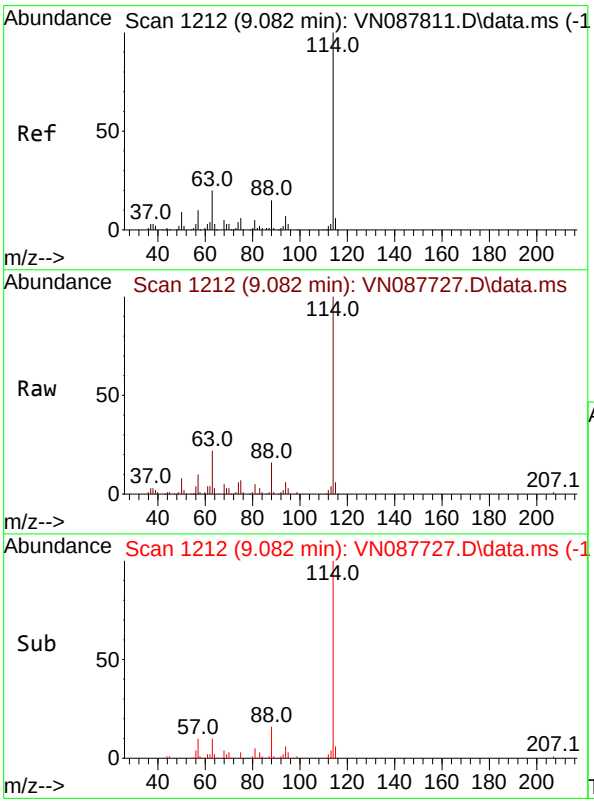
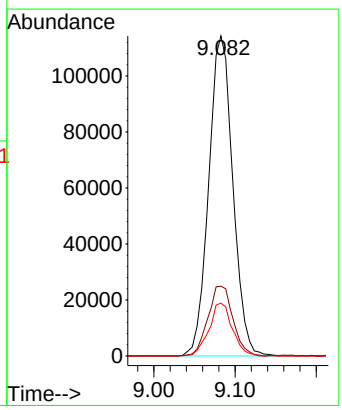
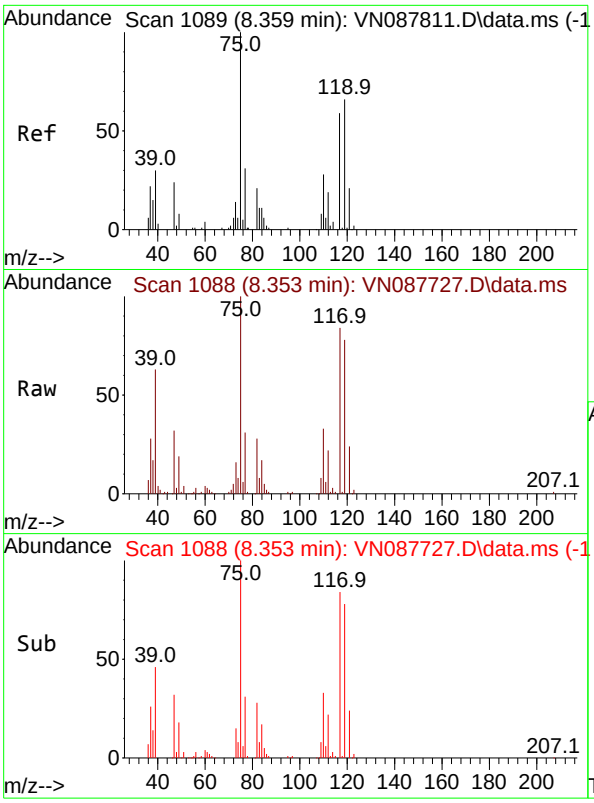


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:114 Resp: 235930

Ion	Ratio	Lower	Upper
114	100		
63	22.6	18.3	27.5
88	15.9	12.4	18.6

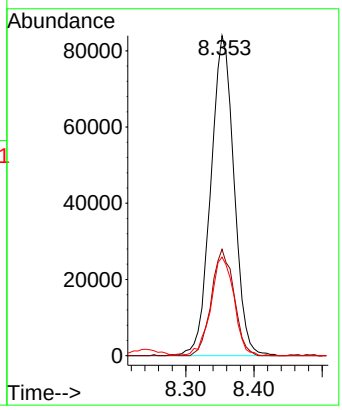




#29
1,1-Dichloropropene
Concen: 52.624 ug/l
RT: 8.353 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 75 Resp: 19900

Ion	Ratio	Lower	Upper
75	100		
110	32.3	0.0	64.4
77	30.7	0.0	62.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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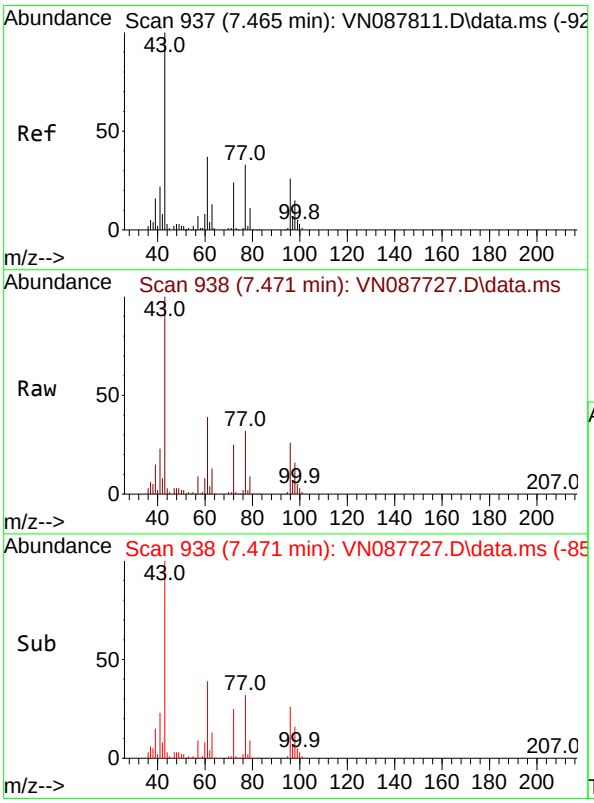
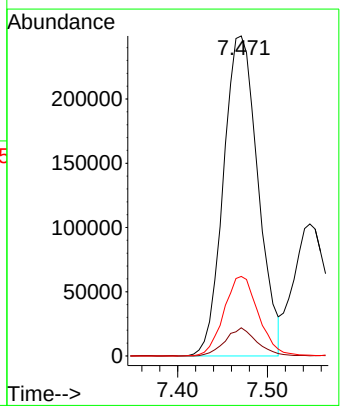
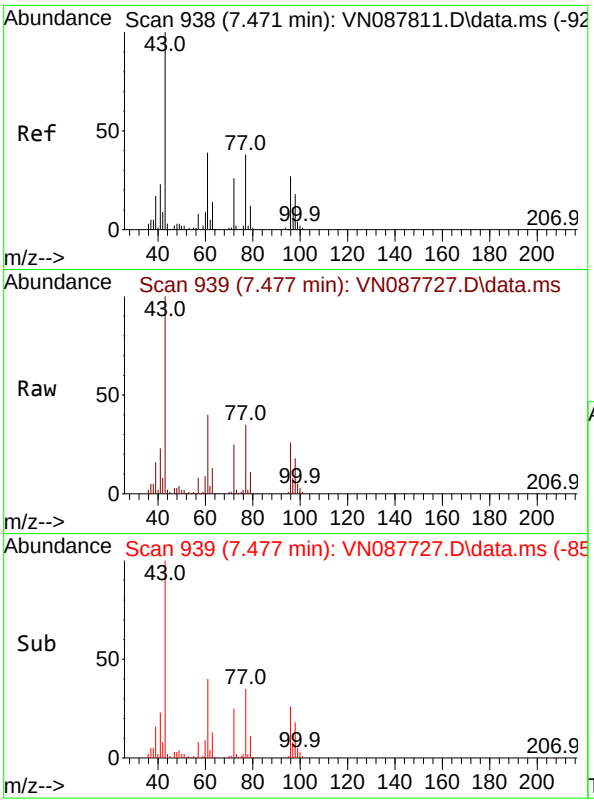


#30
2-Butanone
Concen: 243.287 ug/l
RT: 7.471 min Scan# 938
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 43 Resp: 666350

Ion	Ratio	Lower	Upper
43	100		
57	8.0	6.3	9.5
72	24.9	21.4	32.2

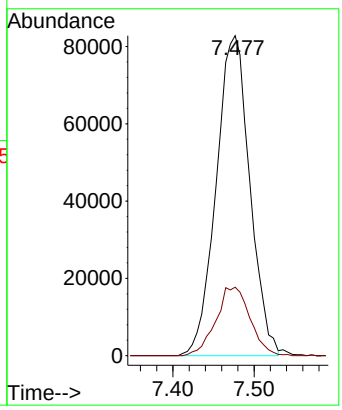




#31
2,2-Dichloropropane
Concen: 50.297 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 77 Resp: 23830

Ion	Ratio	Lower	Upper
77	100		
97	21.8	17.1	25.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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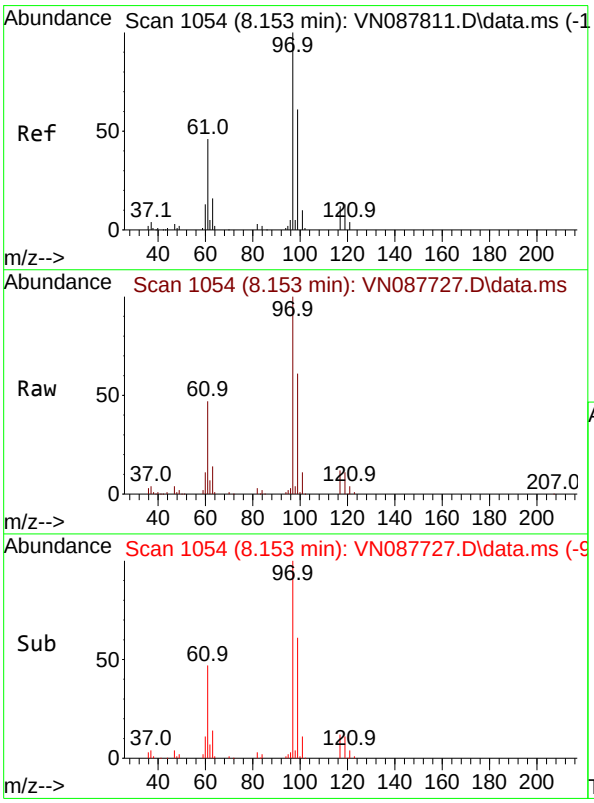
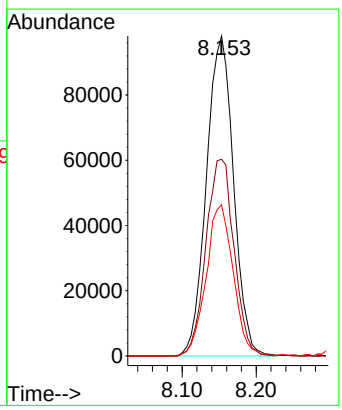
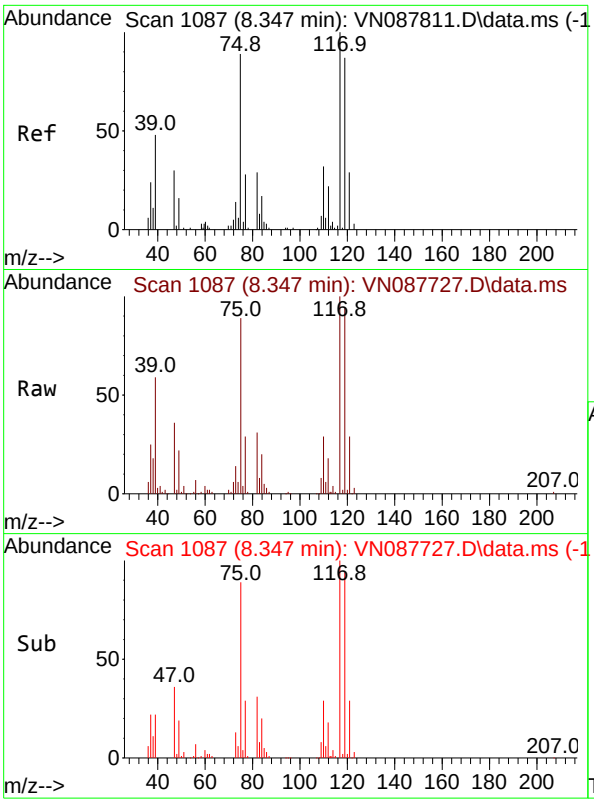


#32
1,1,1-Trichloroethane
Concen: 51.457 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 97 Resp: 249576

Ion	Ratio	Lower	Upper
97	100		
99	63.4	52.2	78.4
61	47.2	37.9	56.9

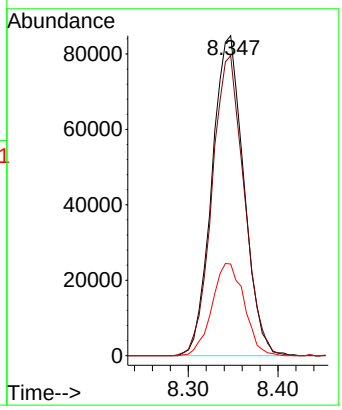




#33
Carbon Tetrachloride
Concen: 52.233 ug/l
RT: 8.347 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:117 Resp: 20847

Ion	Ratio	Lower	Upper
117	100		
119	93.5	77.3	115.9
121	28.6	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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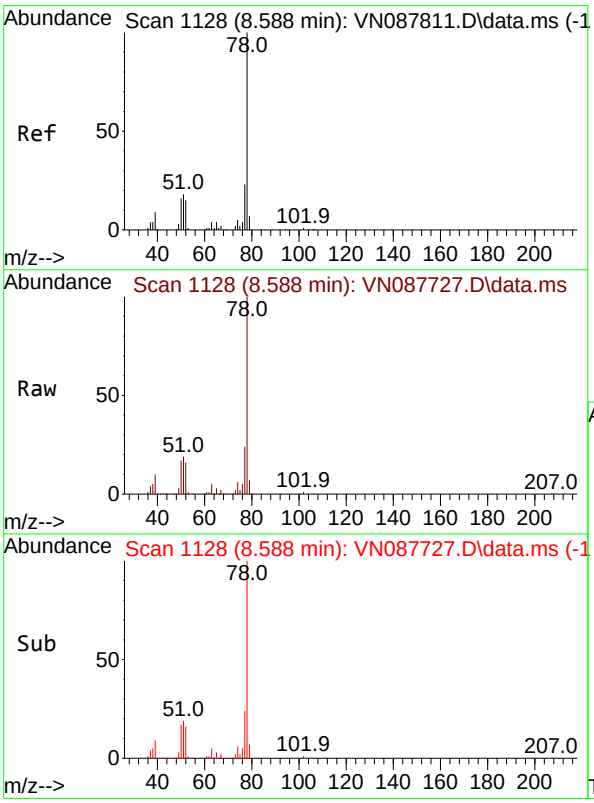
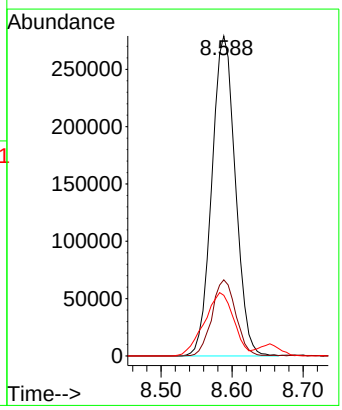
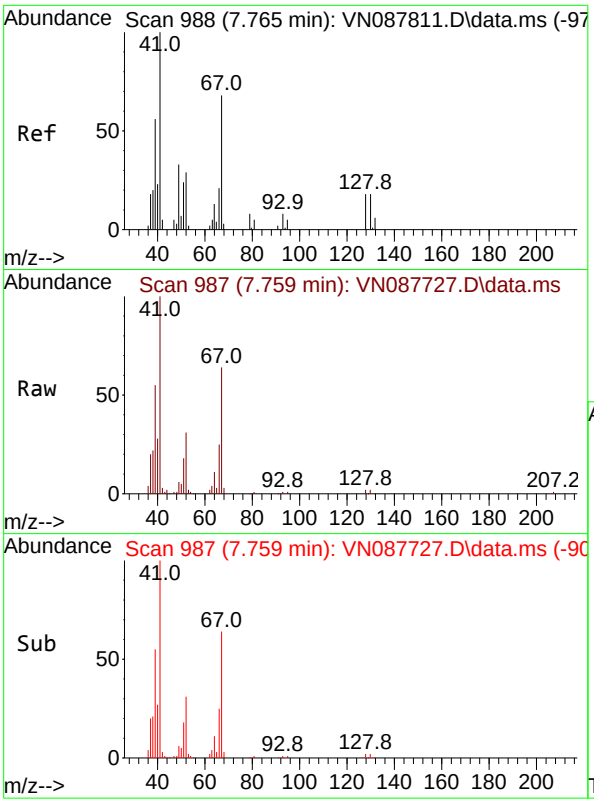


#34
Benzene
Concen: 53.450 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 78 Resp: 640994

Ion	Ratio	Lower	Upper
78	100		
77	23.8	20.3	30.5
51	18.7	18.0	27.0

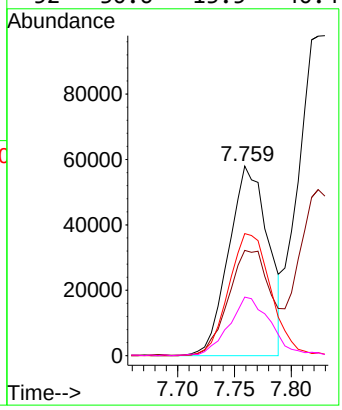




#35
Methacrylonitrile
Concen: 47.182 ug/l
RT: 7.759 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 41 Resp: 14038

Ion	Ratio	Lower	Upper
41	100		
39	55.1	27.1	81.2
67	64.4	32.1	96.5
52	30.6	13.5	40.4



Instrument :
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ClientSampleId :
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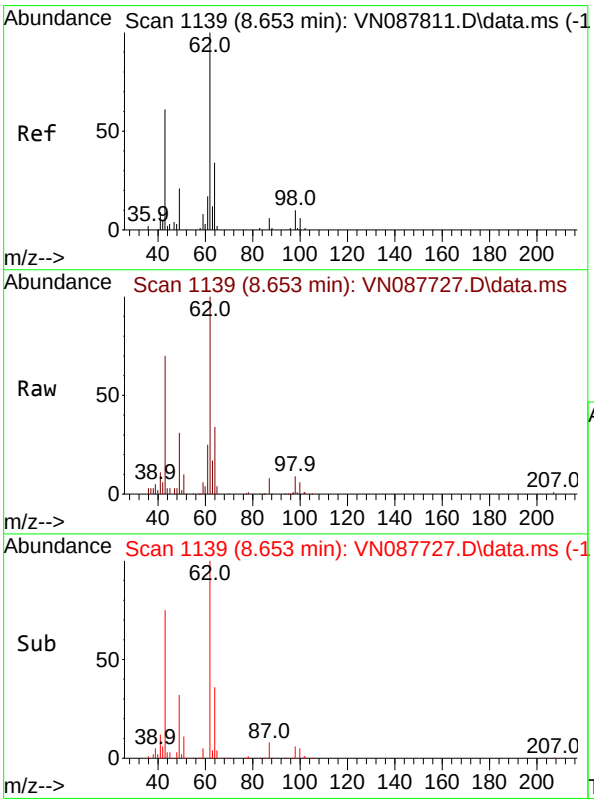
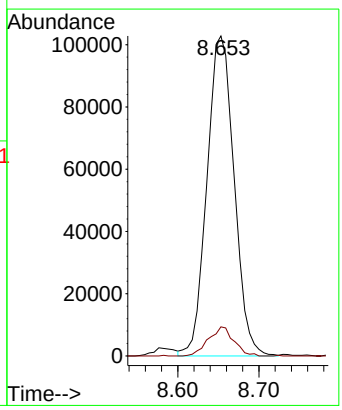
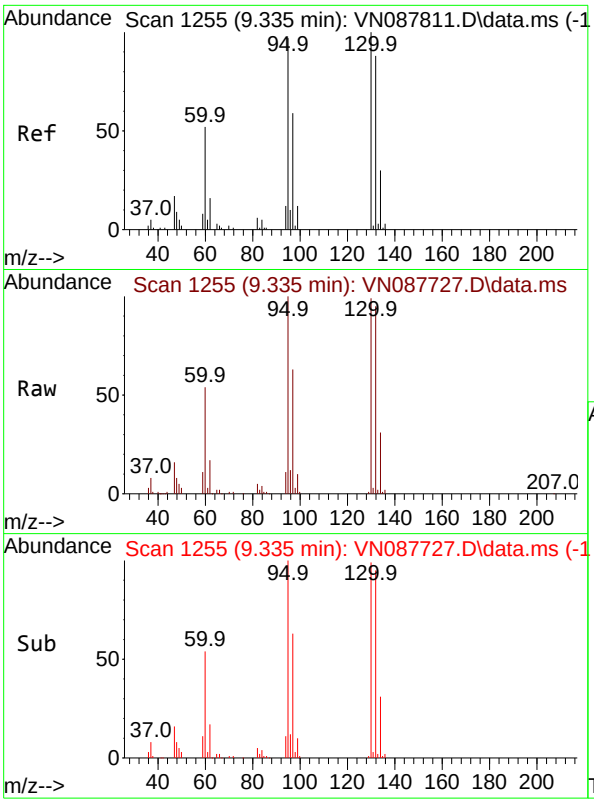


#36
1,2-Dichloroethane
Concen: 50.083 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 62 Resp: 239430

Ion	Ratio	Lower	Upper
62	100		
98	8.3	7.2	10.8

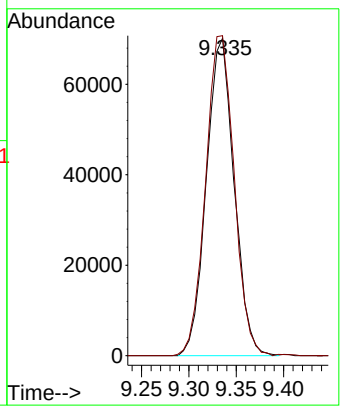




#37
Trichloroethene
Concen: 54.130 ug/l
RT: 9.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:130 Resp: 14295

Ion	Ratio	Lower	Upper
130	100		
95	100.4	82.7	124.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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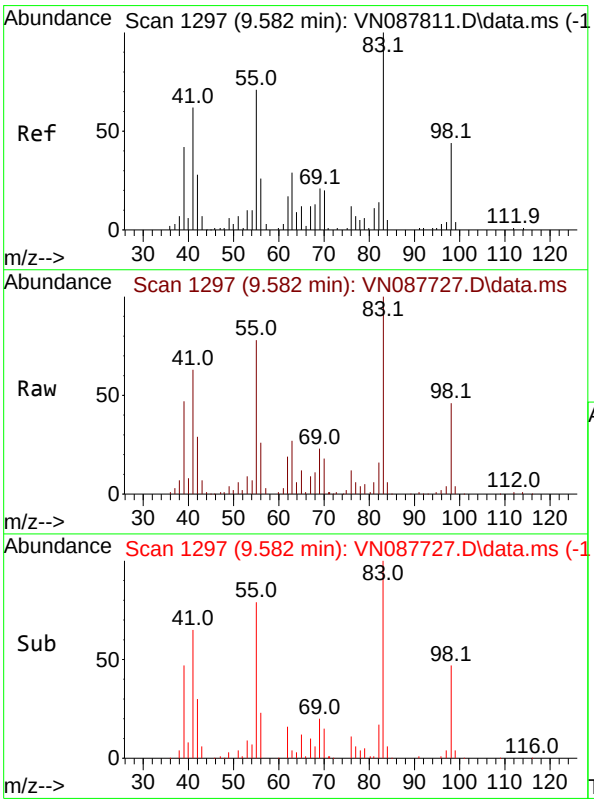
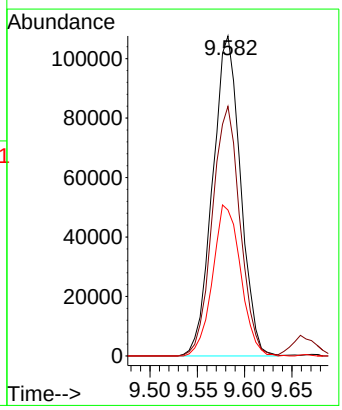
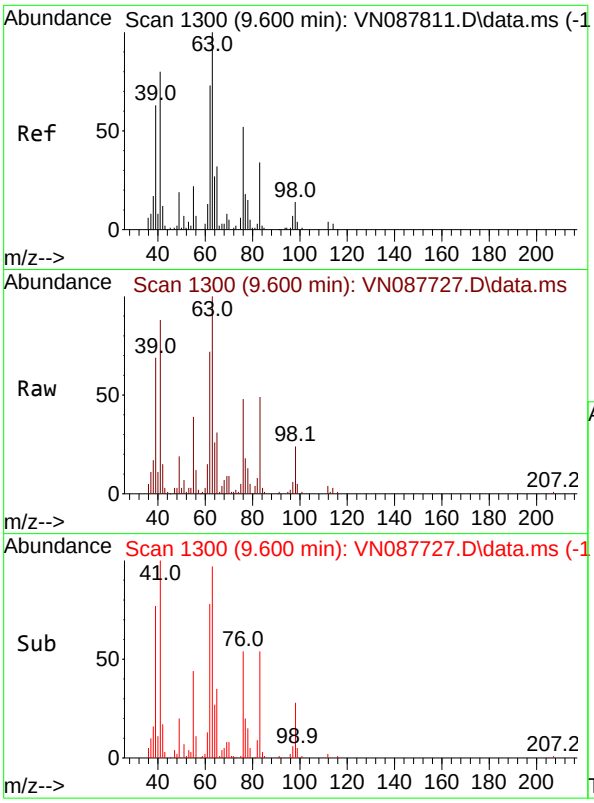


#38
Methylcyclohexane
Concen: 51.099 ug/l
RT: 9.582 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 83 Resp: 220447

Ion	Ratio	Lower	Upper
83	100		
55	77.7	40.4	121.1
98	47.4	24.0	72.0

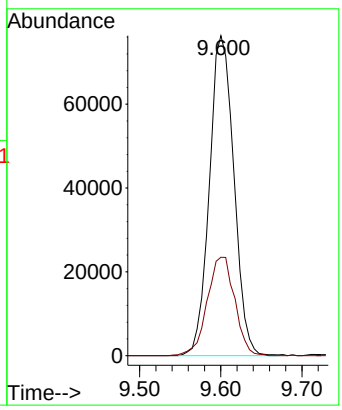




#39
1,2-Dichloropropane
Concen: 52.056 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 63 Resp: 15998

Ion	Ratio	Lower	Upper
63	100		
65	30.8	24.1	36.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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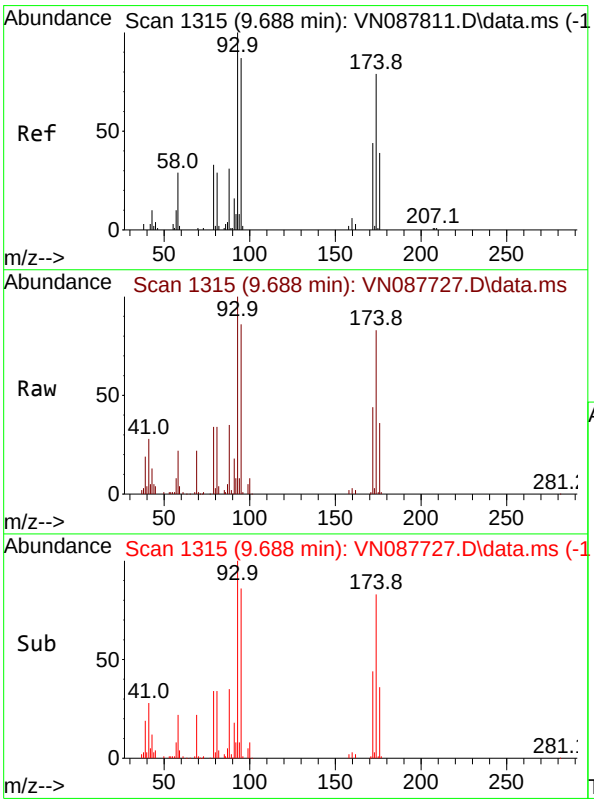
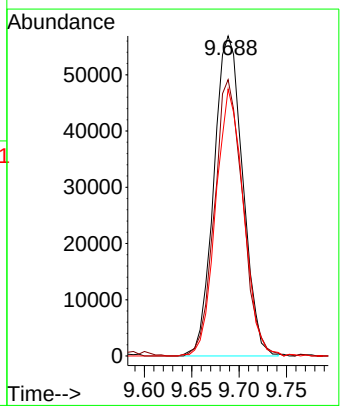
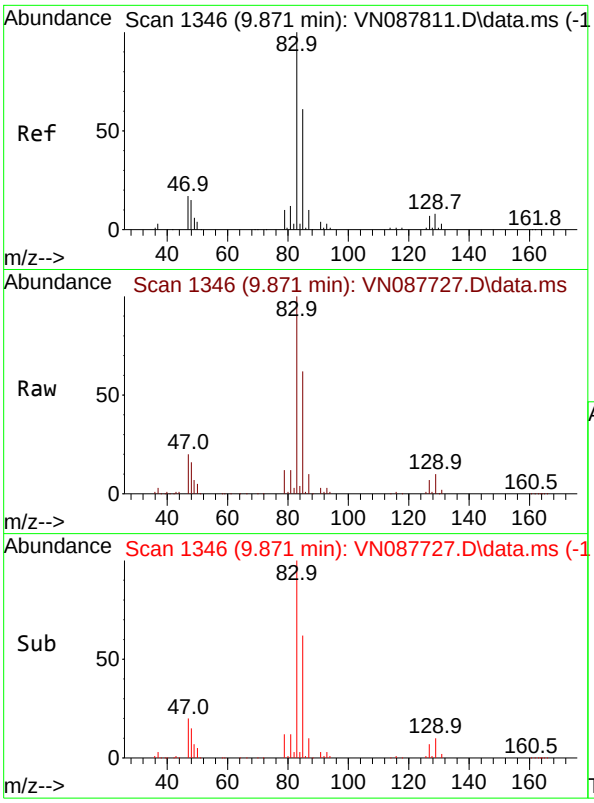


#40
Dibromomethane
Concen: 52.549 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 93 Resp: 120754

Ion	Ratio	Lower	Upper
93	100		
95	84.5	0.0	168.4
174	80.2	0.0	162.8

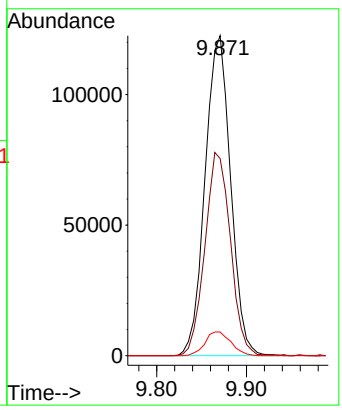




#41
Bromodichloromethane
Concen: 50.456 ug/l
RT: 9.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 83 Resp: 24212

Ion	Ratio	Lower	Upper
83	100		
85	61.4	47.3	70.9
127	7.4	5.2	7.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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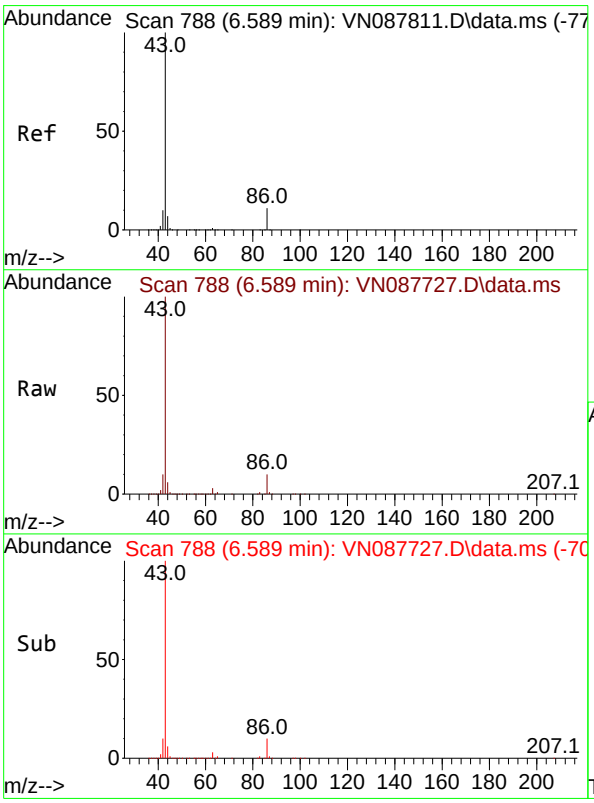
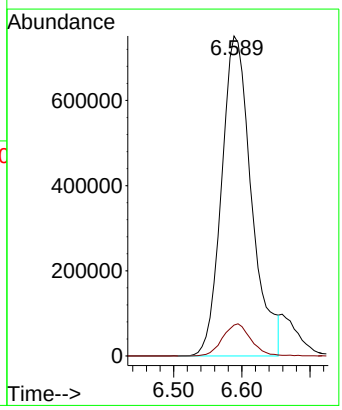
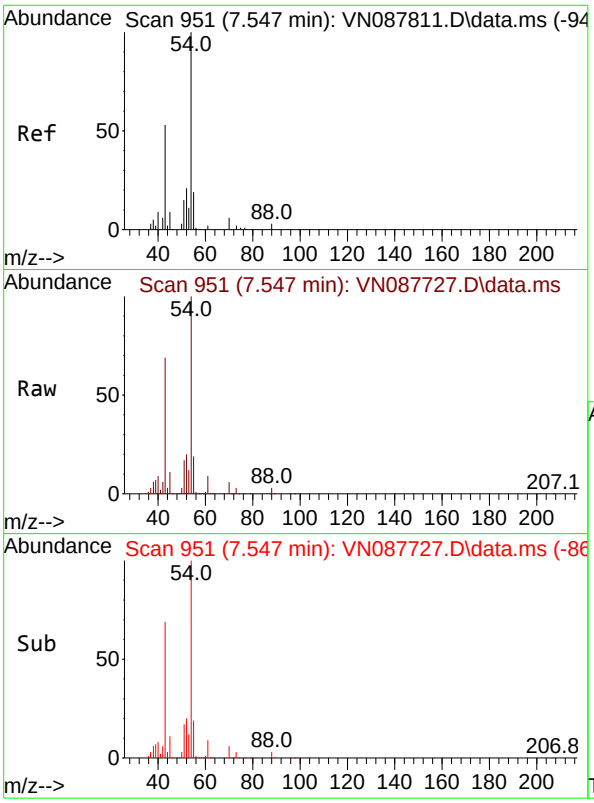


#42
Vinyl Acetate
Concen: 254.840 ug/l
RT: 6.589 min Scan# 788
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 43 Resp: 2296328

Ion	Ratio	Lower	Upper
43	100		
86	9.4	7.7	11.5





#43
Ethyl Acetate
Concen: 51.296 ug/l
RT: 7.547 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 43 Resp: 27688

Ion	Ratio	Lower	Upper
43	100		
45	14.0	10.5	15.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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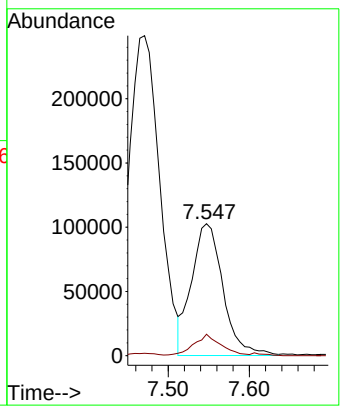
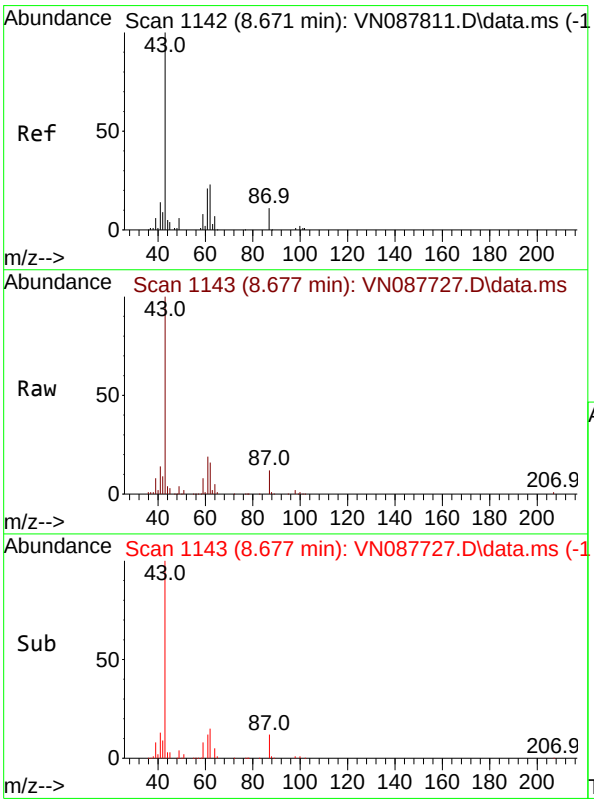
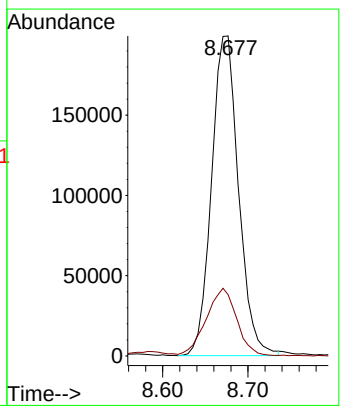


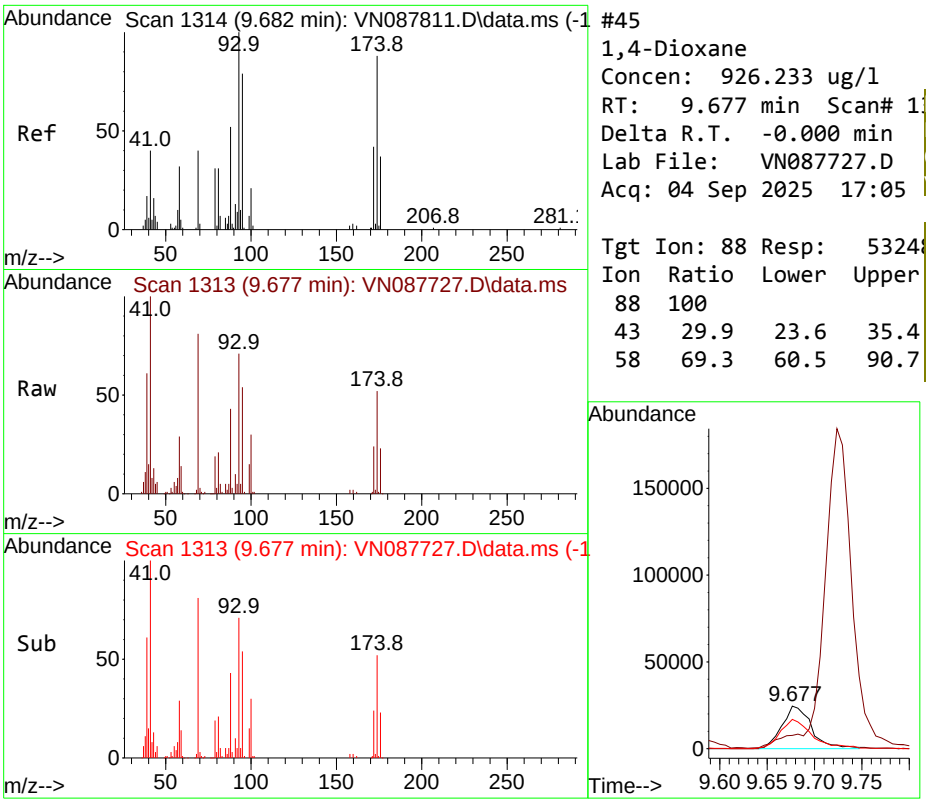


#44
Isopropyl Acetate
Concen: 48.838 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 43 Resp: 438553

Ion	Ratio	Lower	Upper
43	100		
61	24.0	19.5	29.3





#45
1,4-Dioxane
Concen: 926.233 ug/l
RT: 9.677 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 88 Resp: 5324

Ion	Ratio	Lower	Upper
88	100		
43	29.9	23.6	35.4
58	69.3	60.5	90.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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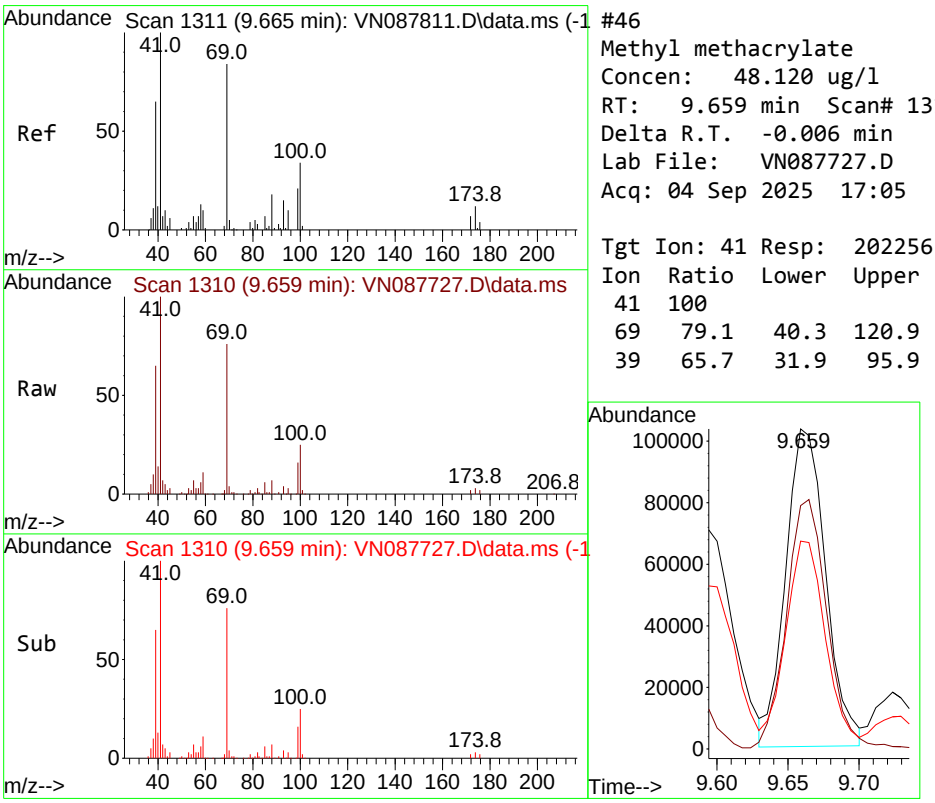
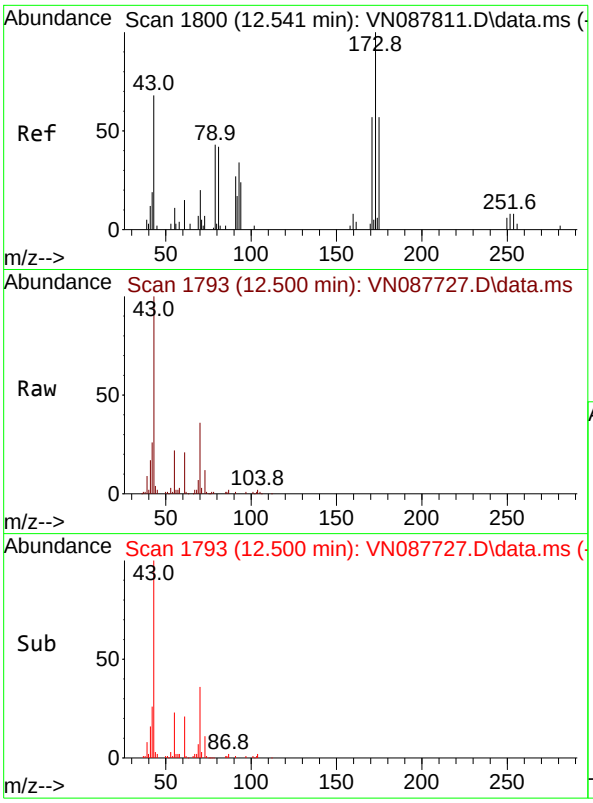


#46
Methyl methacrylate
Concen: 48.120 ug/l
RT: 9.659 min Scan# 1310
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 41 Resp: 202256

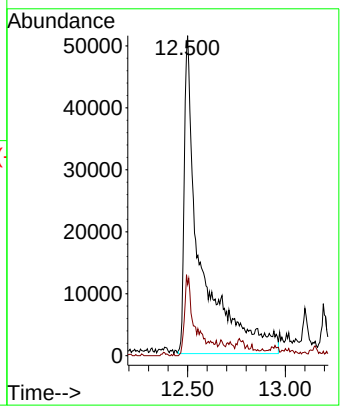
Ion	Ratio	Lower	Upper
41	100		
69	79.1	40.3	120.9
39	65.7	31.9	95.9



#47
n-amyl Acetate
Concen: 57.443 ug/l m
RT: 12.500 min Scan# 1
Delta R.T. -0.171 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 43 Resp: 29991

Ion	Ratio	Lower	Upper
43	100		
55	0.4	0.7	1.1#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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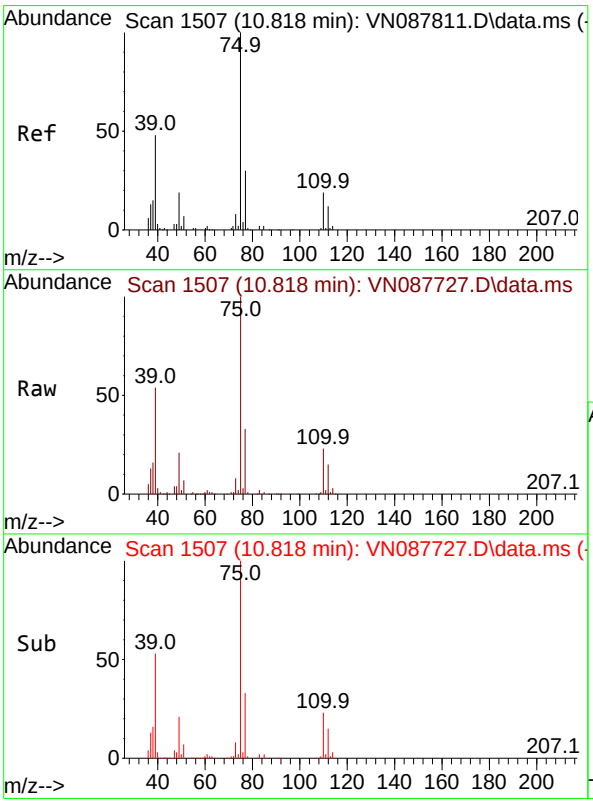
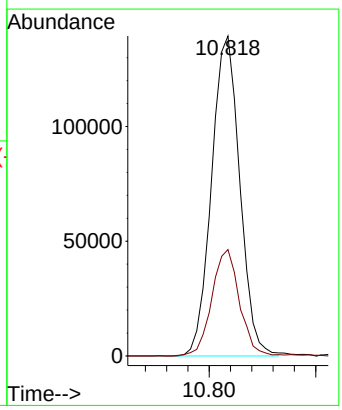
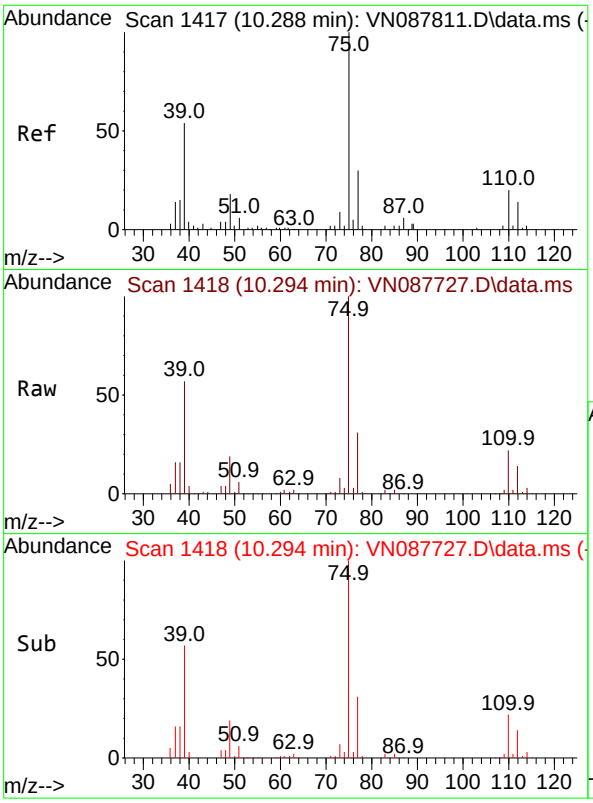


#48
t-1,3-Dichloropropene
Concen: 50.194 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 75 Resp: 256762

Ion	Ratio	Lower	Upper
75	100		
77	33.1	24.7	37.1

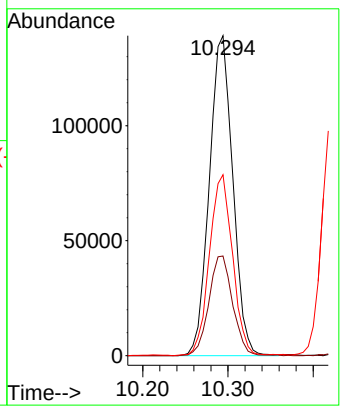




#49
cis-1,3-Dichloropropene
Concen: 51.643 ug/l
RT: 10.294 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 75 Resp: 26662

Ion	Ratio	Lower	Upper
75	100		
77	31.1	27.8	41.6
39	56.4	47.6	71.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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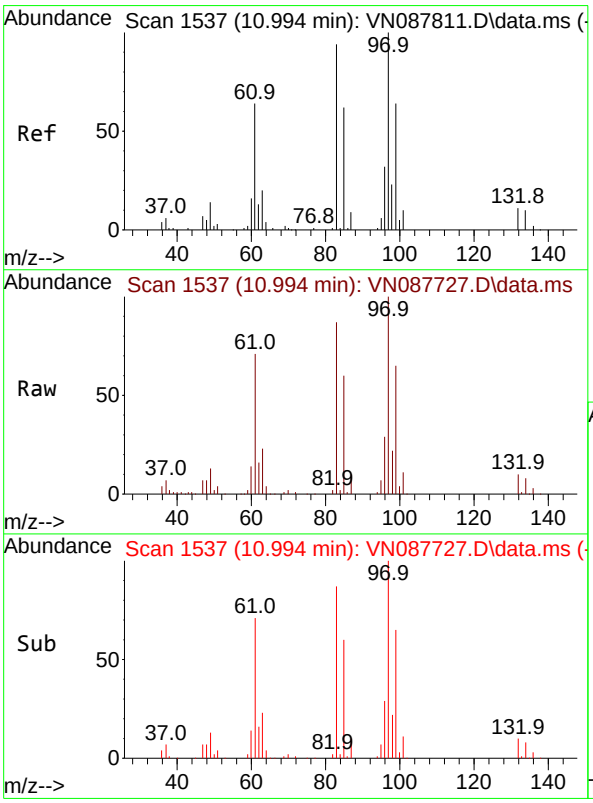
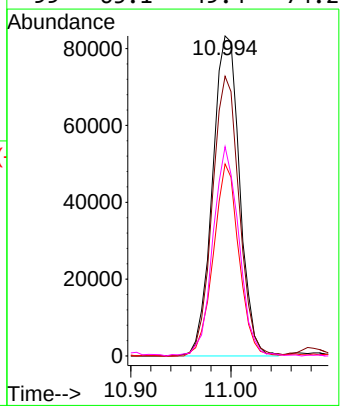
Supervised By :Mahesh Dadoda 09/05/2025

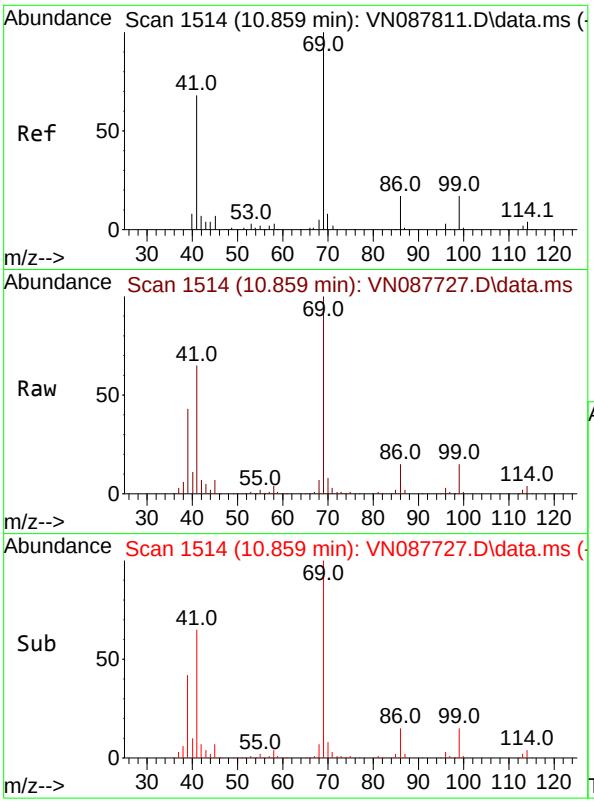


#50
1,1,2-Trichloroethane
Concen: 53.732 ug/l
RT: 10.994 min Scan# 1537
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 97 Resp: 156835

Ion	Ratio	Lower	Upper
97	100		
83	87.2	70.5	105.7
85	60.0	46.3	69.5
99	65.1	49.4	74.2

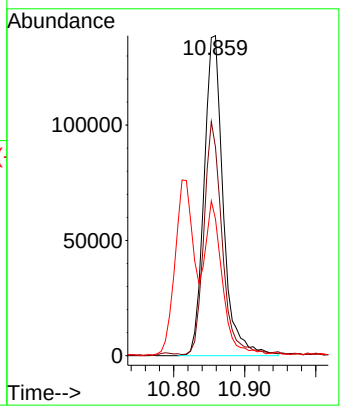




#51
Ethyl methacrylate
Concen: 52.305 ug/l
RT: 10.859 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 69 Resp: 26050

Ion	Ratio	Lower	Upper
69	100		
41	64.5	33.7	101.0
39	41.9	20.3	60.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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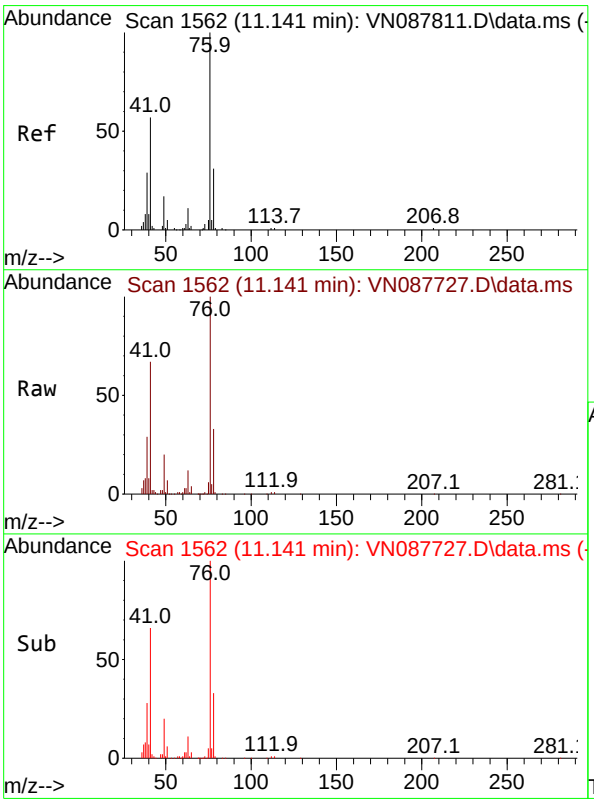
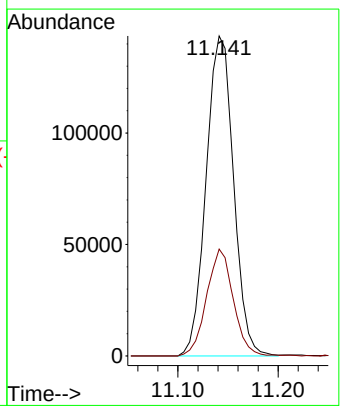
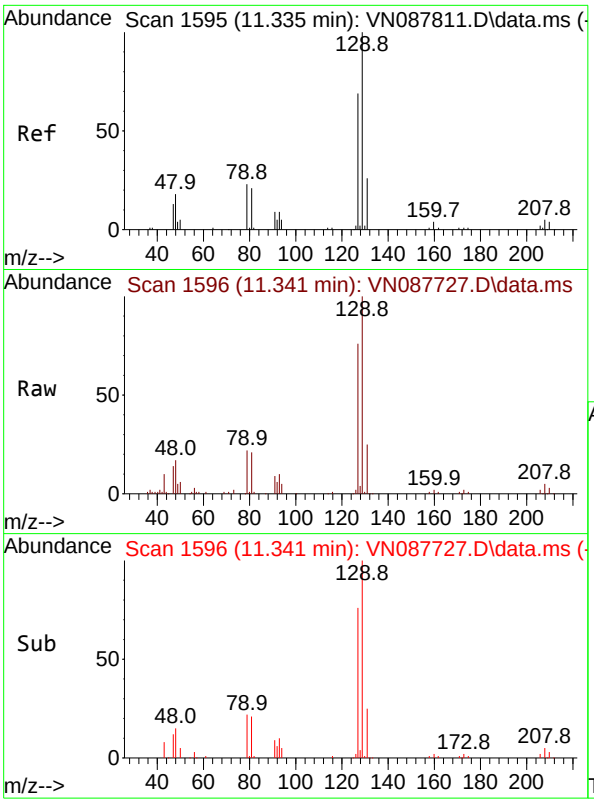


#52
1,3-Dichloropropane
Concen: 52.180 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 76 Resp: 273053

Ion	Ratio	Lower	Upper
76	100		
78	32.3	0.0	65.2

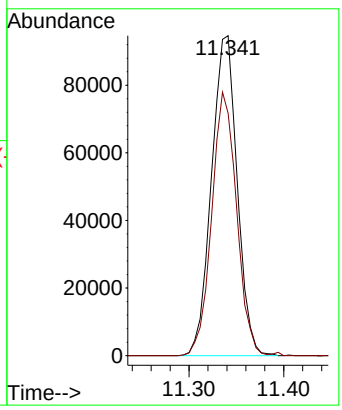




#53
Dibromochloromethane
Concen: 53.720 ug/l
RT: 11.341 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:129 Resp: 17848

Ion	Ratio	Lower	Upper
129	100		
127	79.6	42.6	128.0



Instrument :
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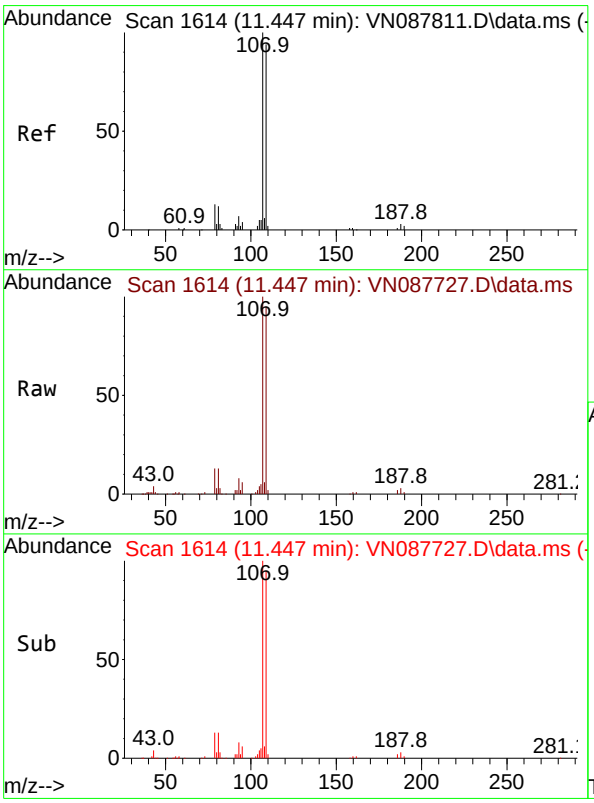
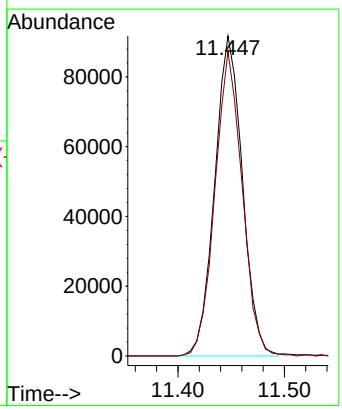
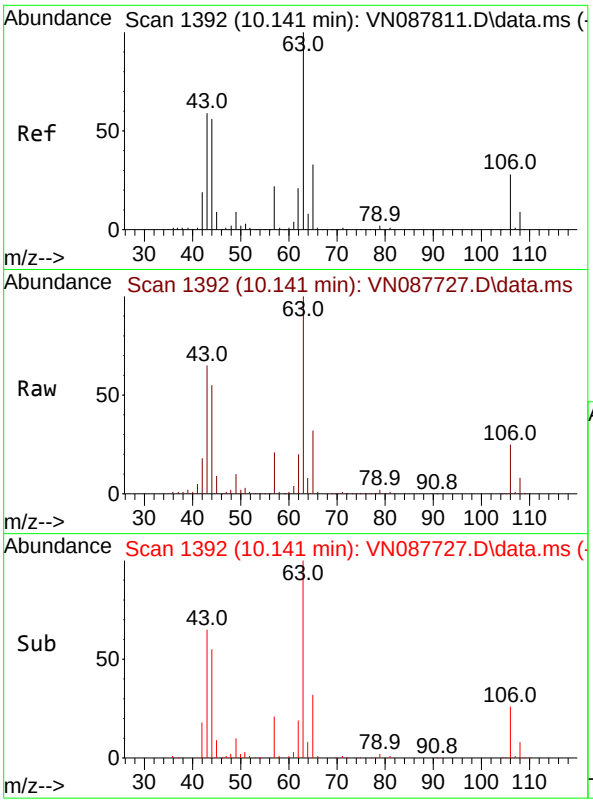


#54
1,2-Dibromoethane
Concen: 53.777 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:107 Resp: 165403

Ion	Ratio	Lower	Upper
107	100		
109	93.5	74.6	112.0

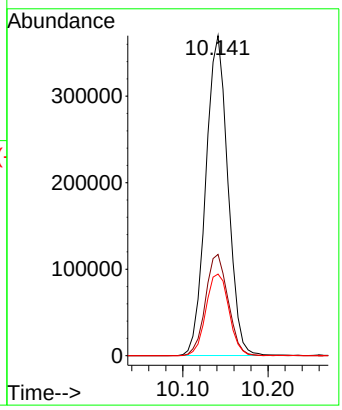




#55
2-Chloroethyl vinyl ether
Concen: 247.892 ug/l
RT: 10.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 63 Resp: 66705

Ion	Ratio	Lower	Upper
63	100		
65	32.3	26.6	40.0
106	26.7	21.1	31.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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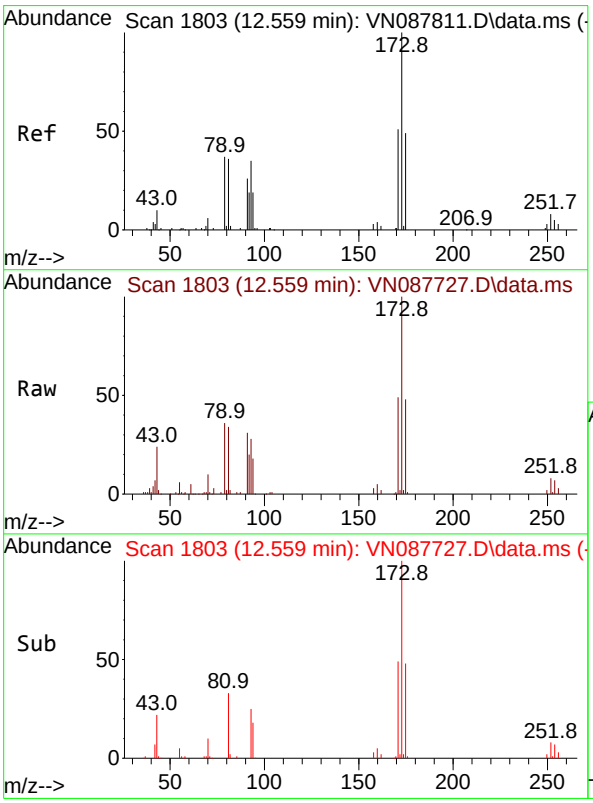
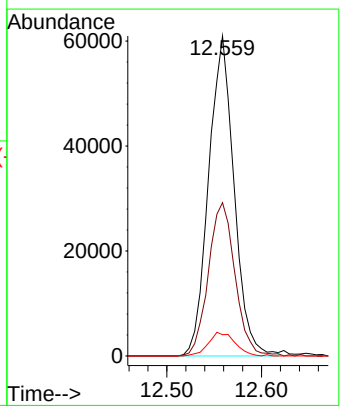
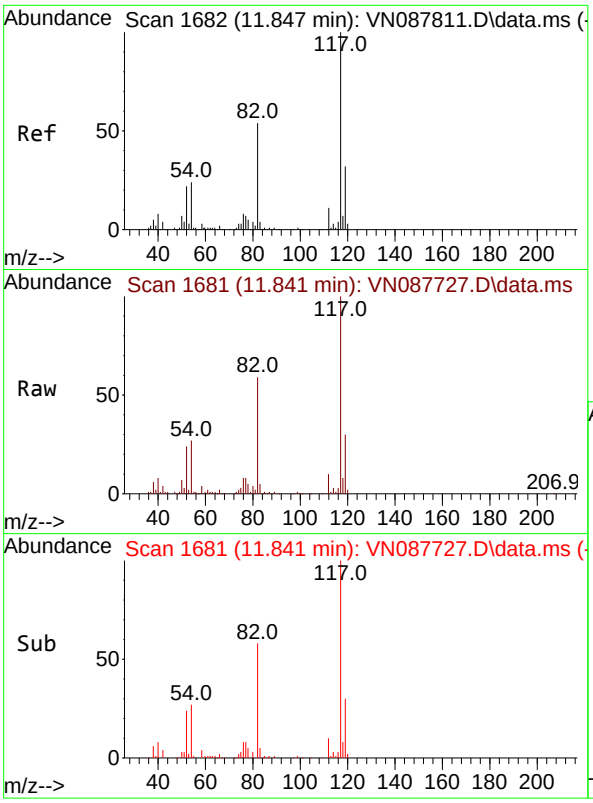


#56
Bromoform
Concen: 51.614 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:173 Resp: 113619

Ion	Ratio	Lower	Upper
173	100		
175	50.0	39.8	59.6
254	7.7	6.2	9.4

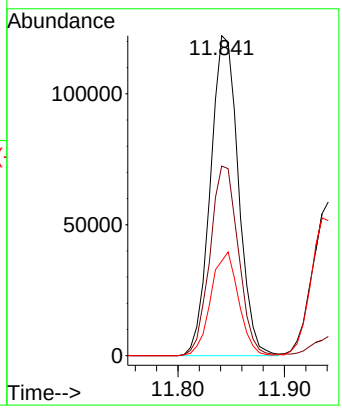




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:117 Resp: 22333

Ion	Ratio	Lower	Upper
117	100		
82	60.1	45.9	68.9
119	32.1	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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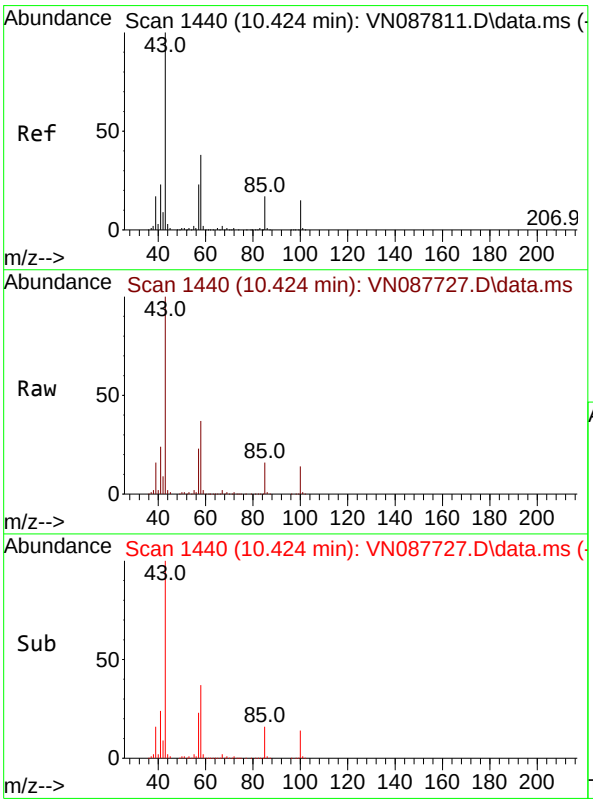
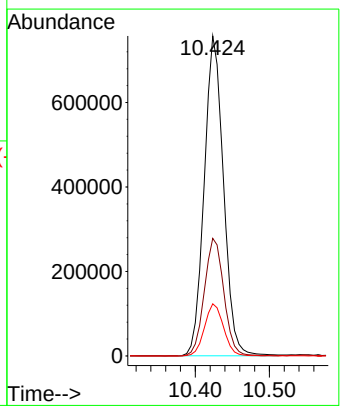
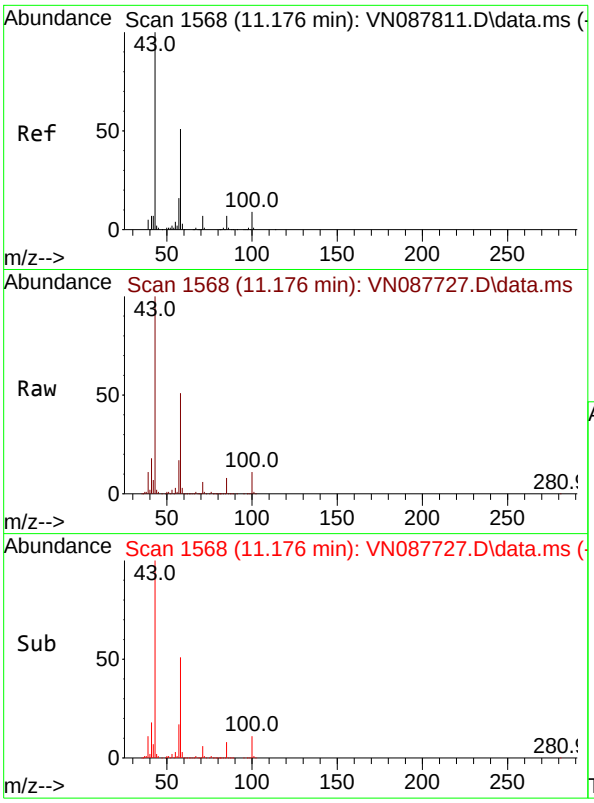


#58
4-Methyl-2-Pentanone
Concen: 247.352 ug/l
RT: 10.424 min Scan# 1440
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 43 Resp: 1366907

Ion	Ratio	Lower	Upper
43	100		
58	37.4	29.6	44.4
85	16.2	13.0	19.4

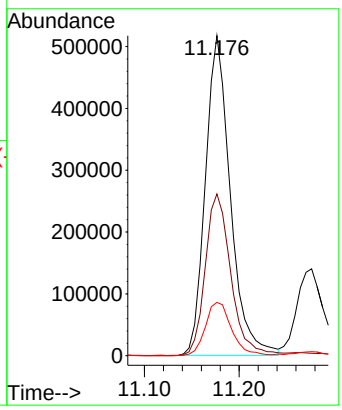




#59
2-Hexanone
Concen: 252.664 ug/l
RT: 11.176 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 43 Resp: 94558

Ion	Ratio	Lower	Upper
43	100		
58	52.0	40.2	60.4
57	17.6	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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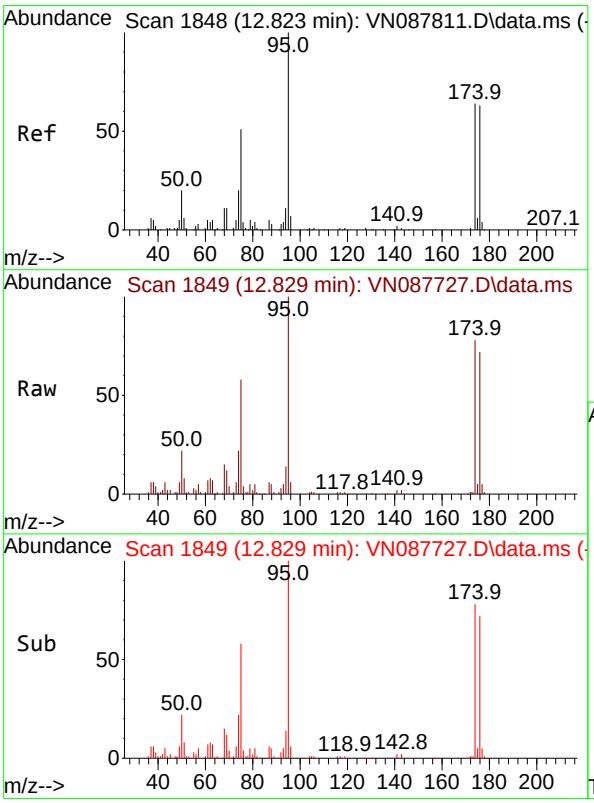
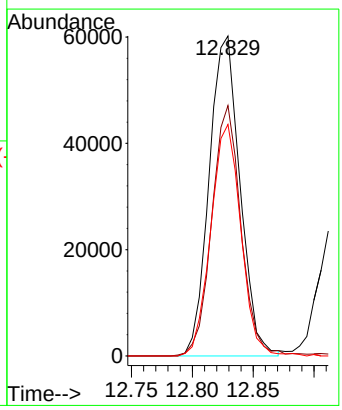
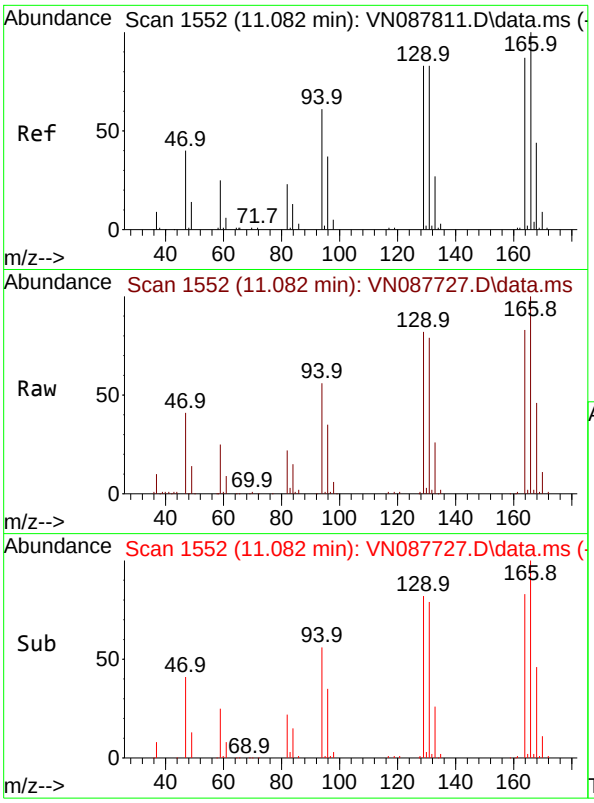


#60
4-Bromofluorobenzene
Concen: 27.928 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 95 Resp: 106071

Ion	Ratio	Lower	Upper
95	100		
174	73.8	55.4	83.0
176	70.2	51.5	77.3

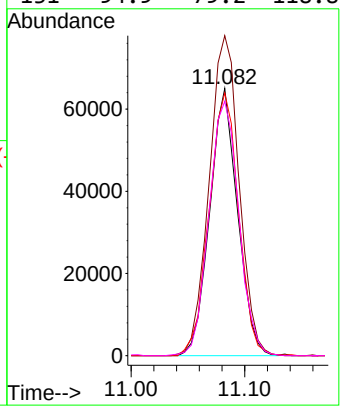




#61
Tetrachloroethene
Concen: 51.225 ug/l
RT: 11.082 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:164 Resp: 11043

Ion	Ratio	Lower	Upper
164	100		
166	119.5	97.3	145.9
129	98.4	78.6	117.8
131	94.9	79.2	118.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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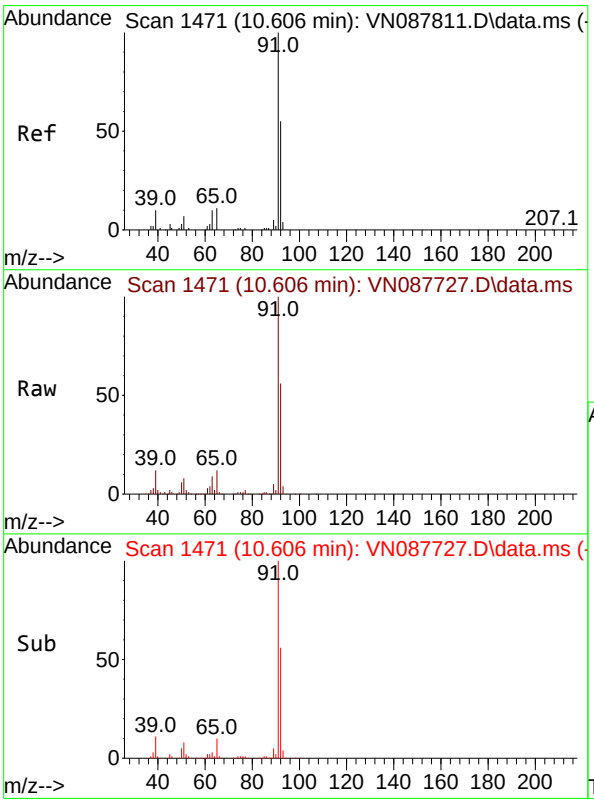
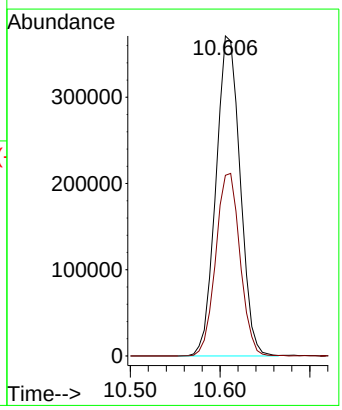
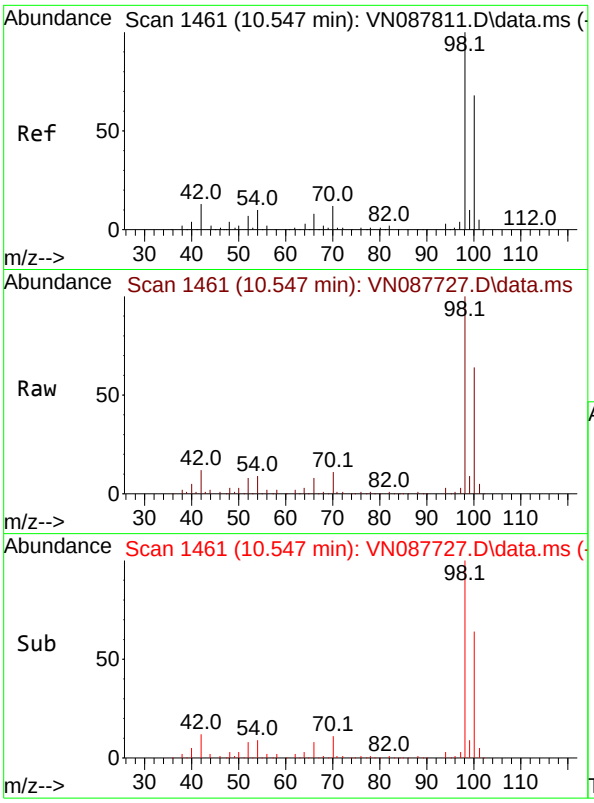


#62
Toluene
Concen: 51.744 ug/l
RT: 10.606 min Scan# 1471
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 91 Resp: 695370

Ion	Ratio	Lower	Upper
91	100		
92	57.2	45.4	68.0

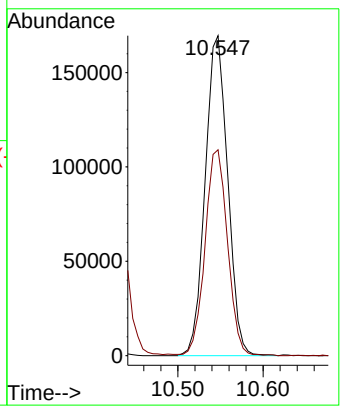




#63
Toluene-d8
Concen: 30.119 ug/l
RT: 10.547 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 98 Resp: 31080

Ion	Ratio	Lower	Upper
98	100		
100	64.4	50.6	76.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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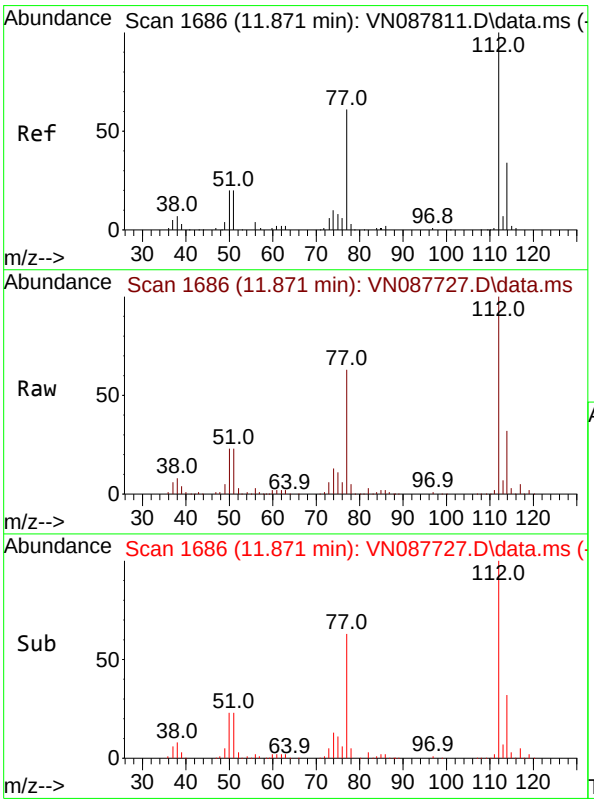
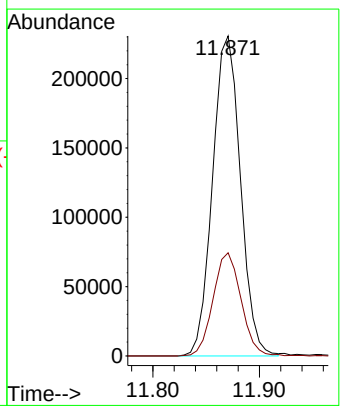
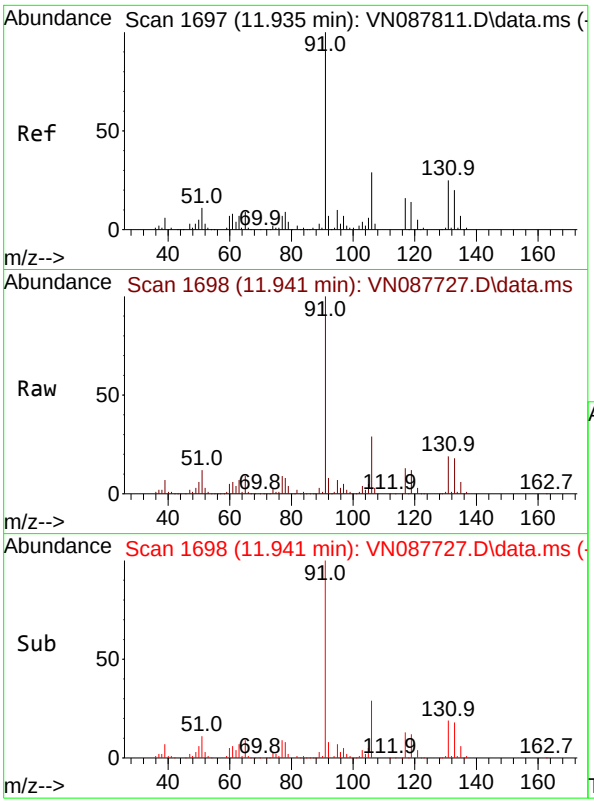


#64
Chlorobenzene
Concen: 50.870 ug/l
RT: 11.871 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:112 Resp: 419478

Ion	Ratio	Lower	Upper
112	100		
114	32.2	23.5	35.3





#65
1,1,1,2-Tetrachloroethane
Concen: 51.179 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:131 Resp: 14856

Ion	Ratio	Lower	Upper
131	100		
133	95.7	0.0	195.8
119	65.6	0.0	139.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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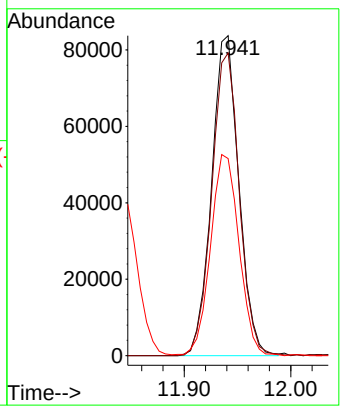
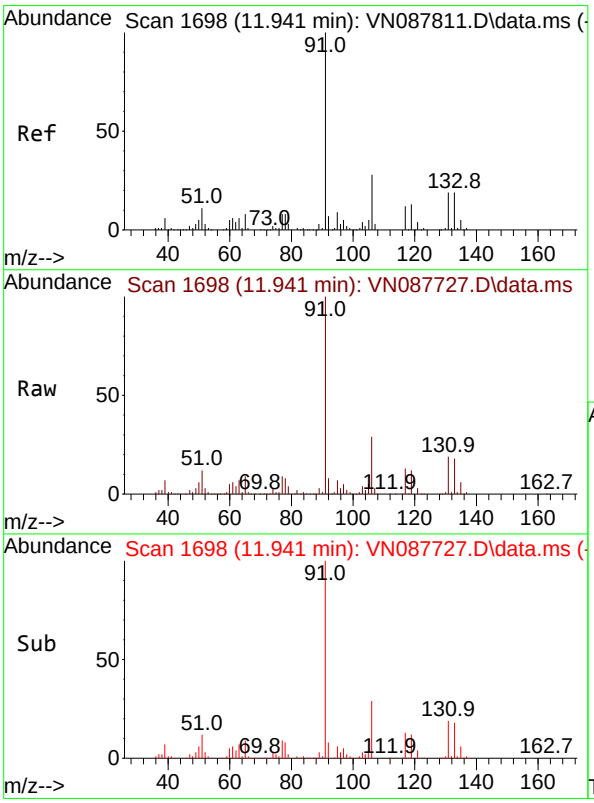
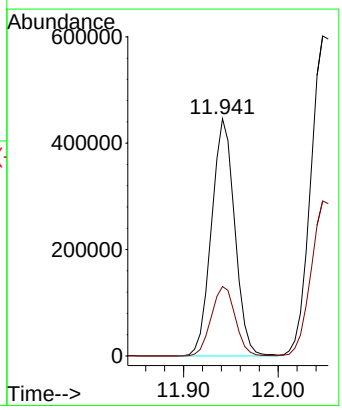


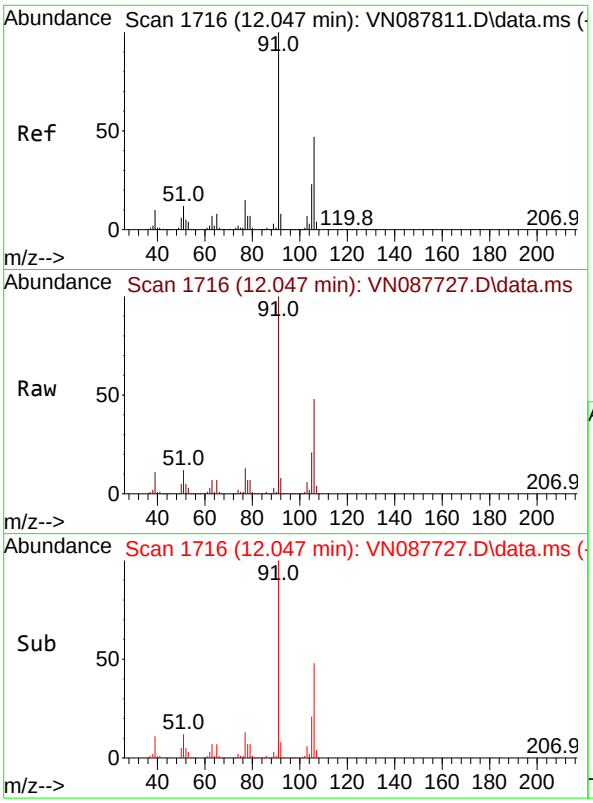


#66
Ethyl Benzene
Concen: 51.315 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 91 Resp: 760061

Ion	Ratio	Lower	Upper
91	100		
106	29.3	21.3	31.9

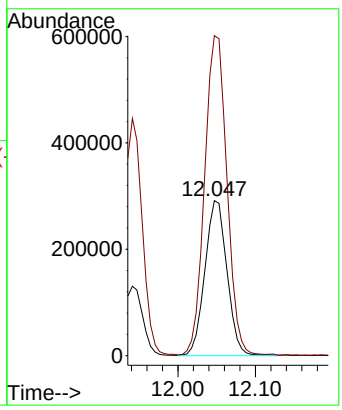




#67
m/p-Xylenes
Concen: 106.025 ug/l
RT: 12.047 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:106 Resp: 57802

Ion	Ratio	Lower	Upper
106	100		
91	208.5	174.3	261.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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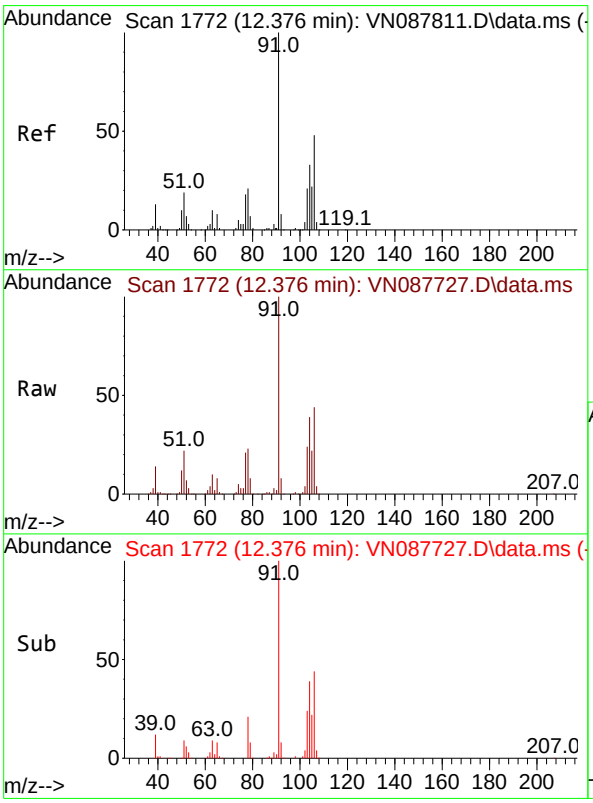
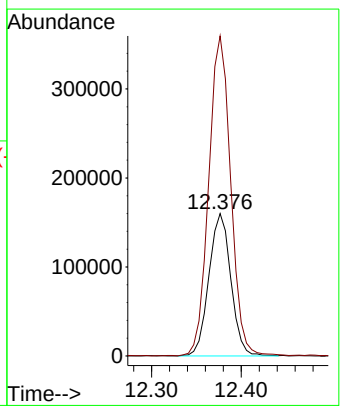
Supervised By :Mahesh Dadoda 09/05/2025

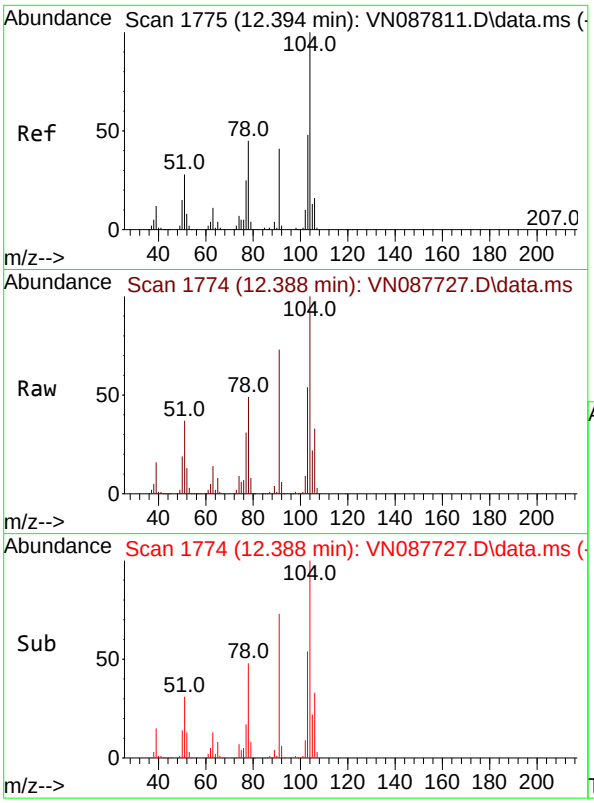


#68
o-Xylene
Concen: 50.584 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:106 Resp: 272027

Ion	Ratio	Lower	Upper
106	100		
91	224.9	107.7	323.3

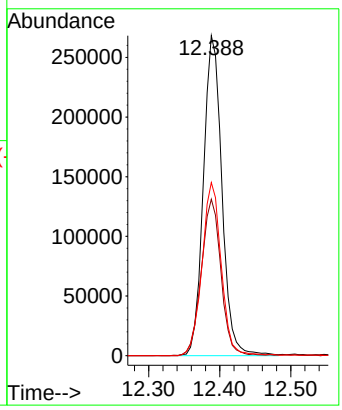




#69
Styrene
Concen: 53.357 ug/l
RT: 12.388 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:104 Resp: 48810

Ion	Ratio	Lower	Upper
104	100		
78	51.5	41.0	61.6
103	55.9	44.6	66.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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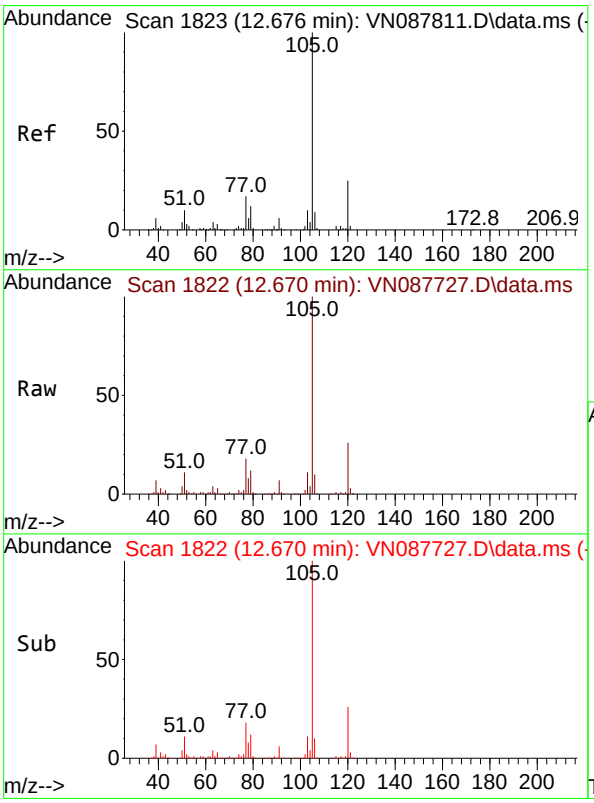
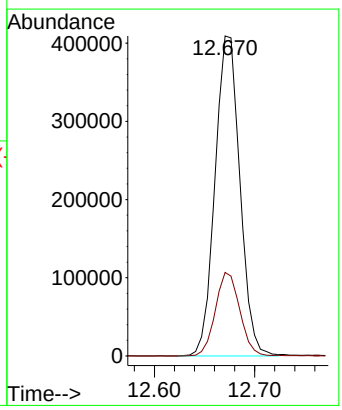
Supervised By :Mahesh Dadoda 09/05/2025

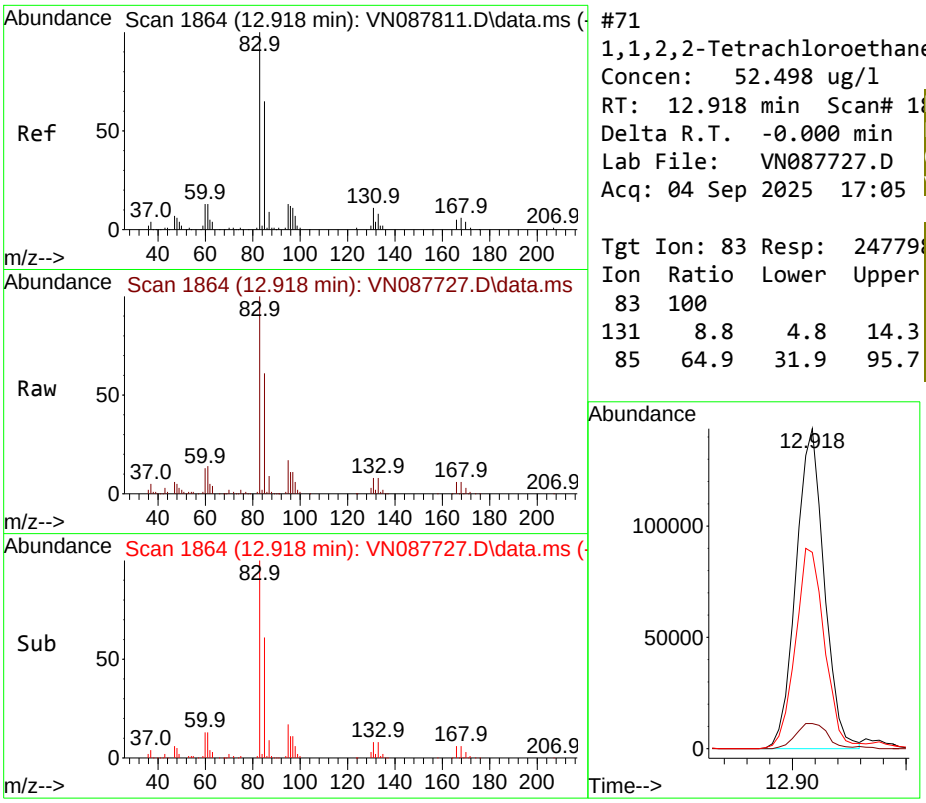


#70
Isopropylbenzene
Concen: 52.168 ug/l
RT: 12.670 min Scan# 1822
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:105 Resp: 705735

Ion	Ratio	Lower	Upper
105	100		
120	25.5	17.4	32.4





#71
1,1,2,2-Tetrachloroethane
Concen: 52.498 ug/l
RT: 12.918 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 83 Resp: 24779

Ion	Ratio	Lower	Upper
83	100		
131	8.8	4.8	14.3
85	64.9	31.9	95.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
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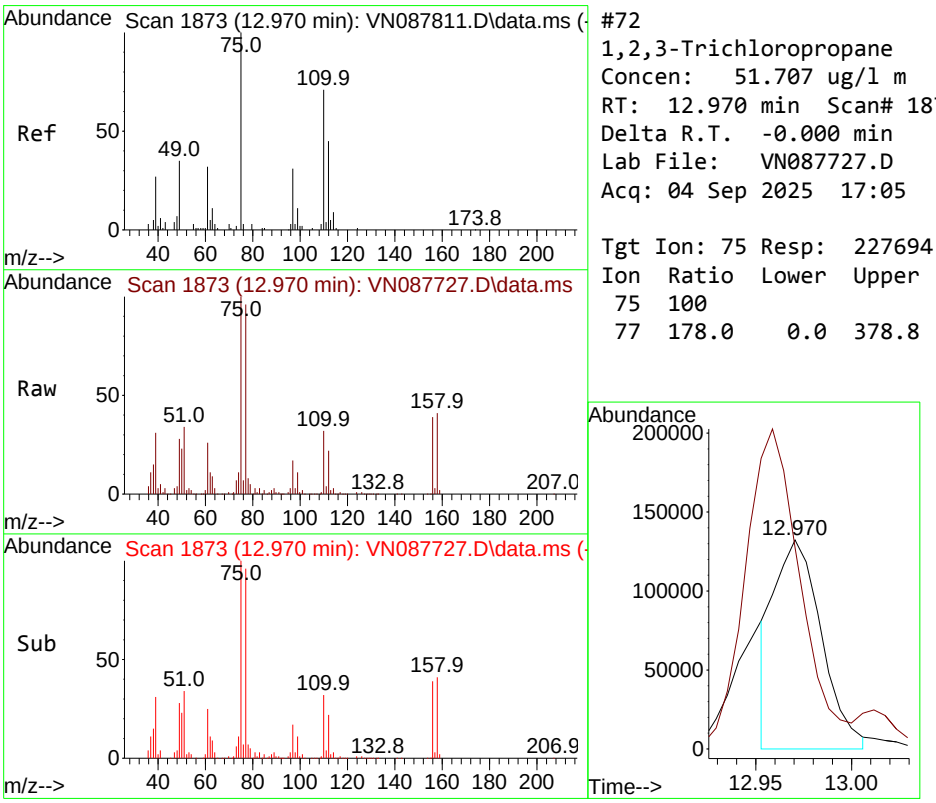
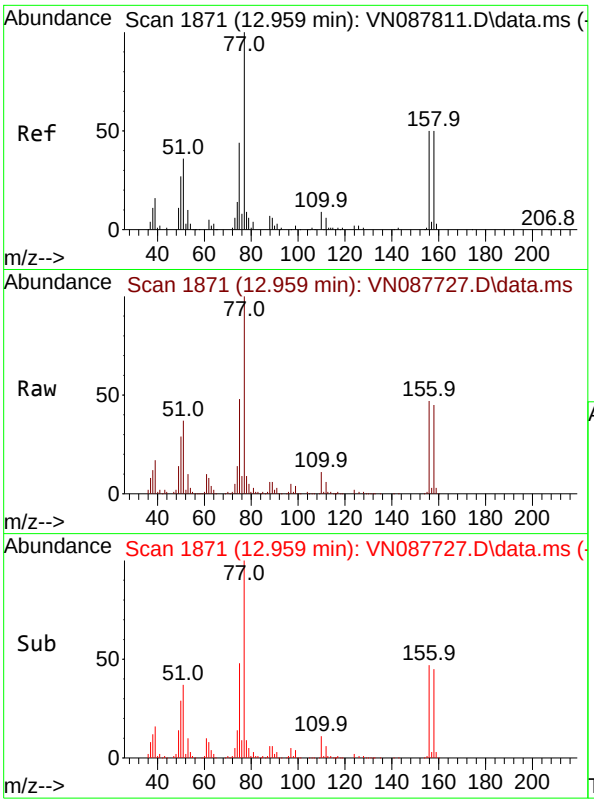
Supervised By :Mahesh Dadoda 09/05/2025



#72
1,2,3-Trichloropropane
Concen: 51.707 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 75 Resp: 227694

Ion	Ratio	Lower	Upper
75	100		
77	178.0	0.0	378.8



#73
Bromobenzene
Concen: 51.479 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:156 Resp: 16463

Ion	Ratio	Lower	Upper
156	100		
77	246.1	0.0	484.2
158	98.6	0.0	186.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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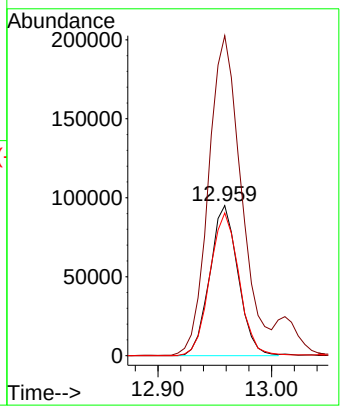
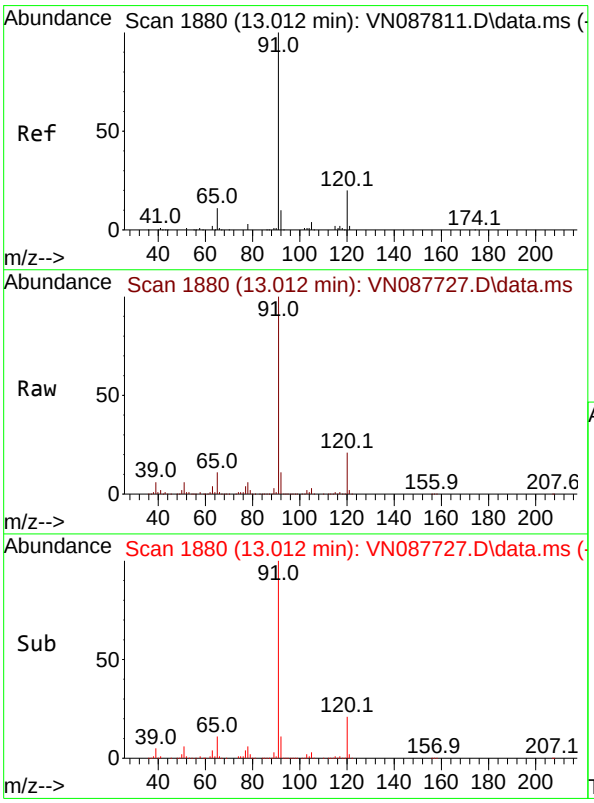
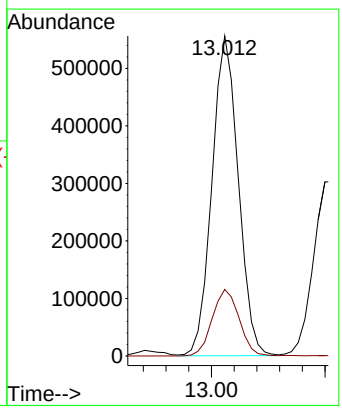


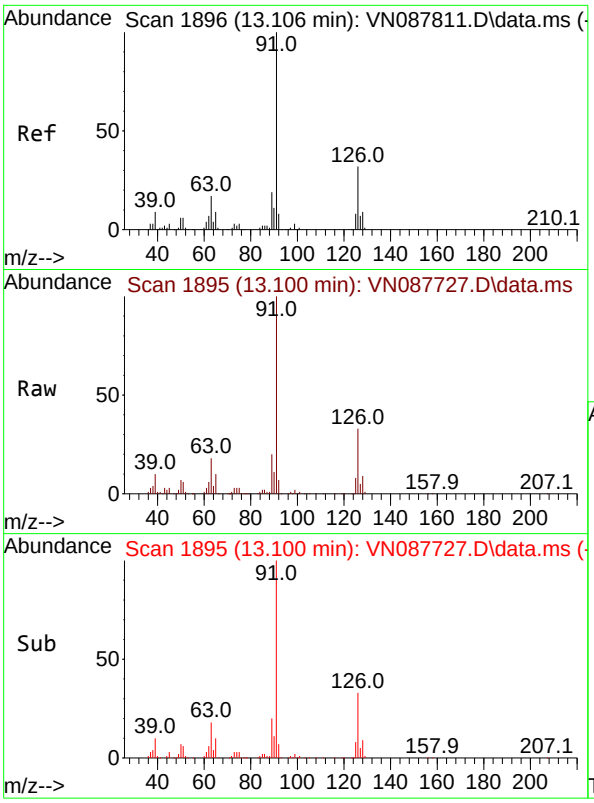


#74
n-propylbenzene
Concen: 52.574 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 91 Resp: 894796

Ion	Ratio	Lower	Upper
91	100		
120	21.1	0.0	42.2

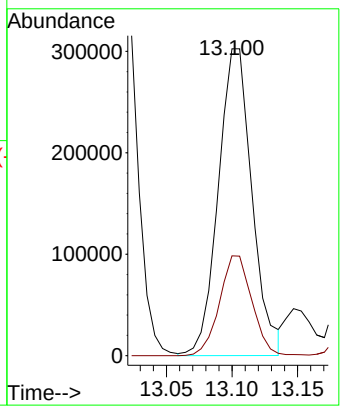




#75
2-Chlorotoluene
Concen: 51.771 ug/l
RT: 13.100 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 91 Resp: 54201

Ion	Ratio	Lower	Upper
91	100		
126	31.4	0.0	60.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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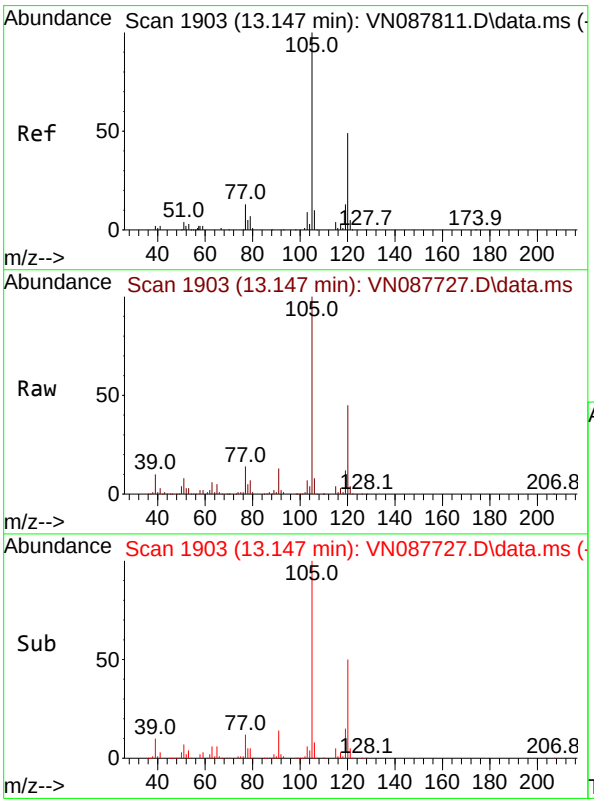
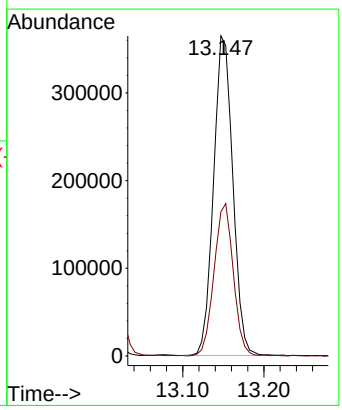
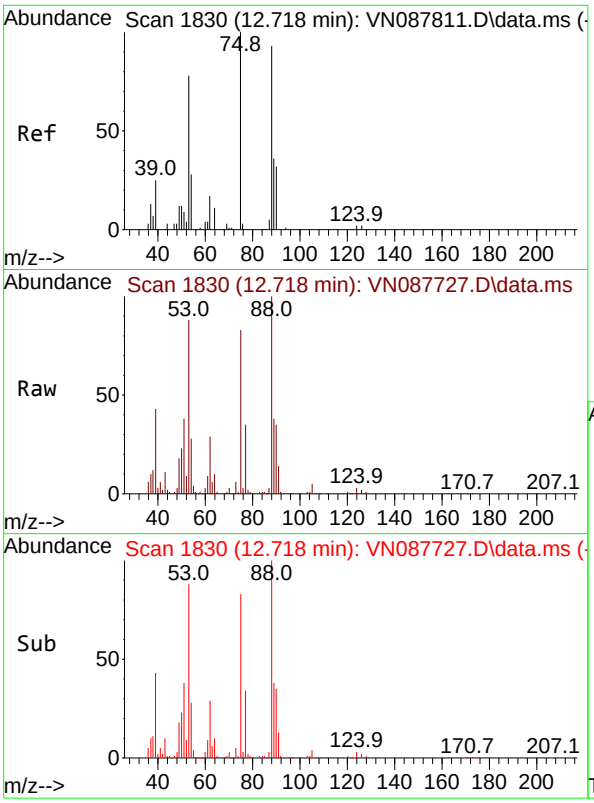


#76
1,3,5-Trimethylbenzene
Concen: 51.829 ug/l
RT: 13.147 min Scan# 1903
Delta R.T. -0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:105 Resp: 601688

Ion	Ratio	Lower	Upper
105	100		
120	47.7	0.0	92.6





#77
t-1,4-Dichloro-2-butene
Concen: 50.352 ug/l
RT: 12.718 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 75 Resp: 8326

Ion	Ratio	Lower	Upper
75	100		
53	105.0	45.3	135.9
89	46.7	18.8	56.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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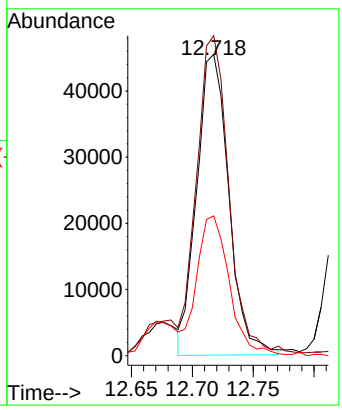
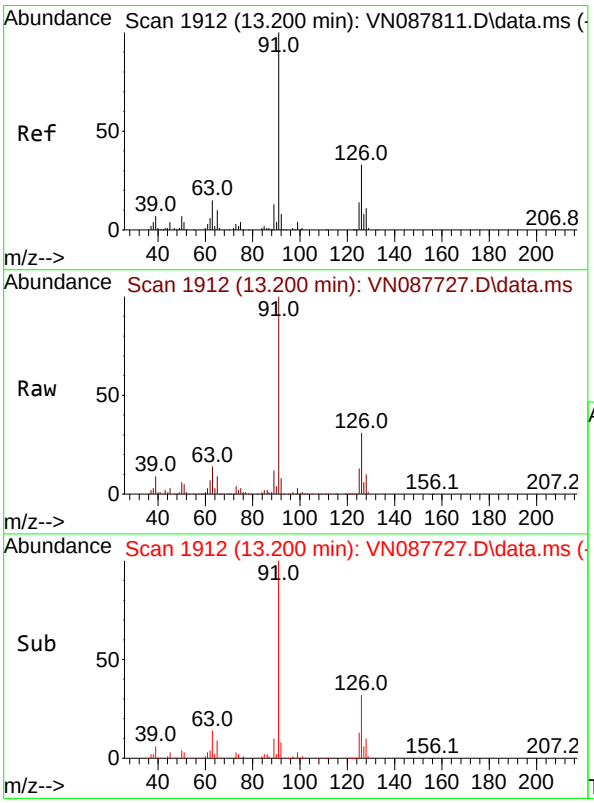
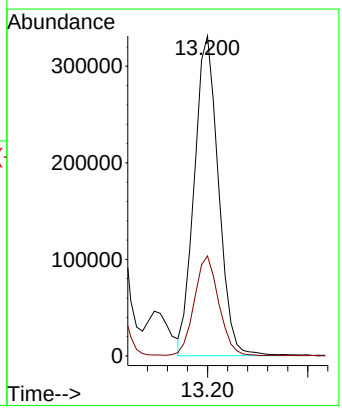


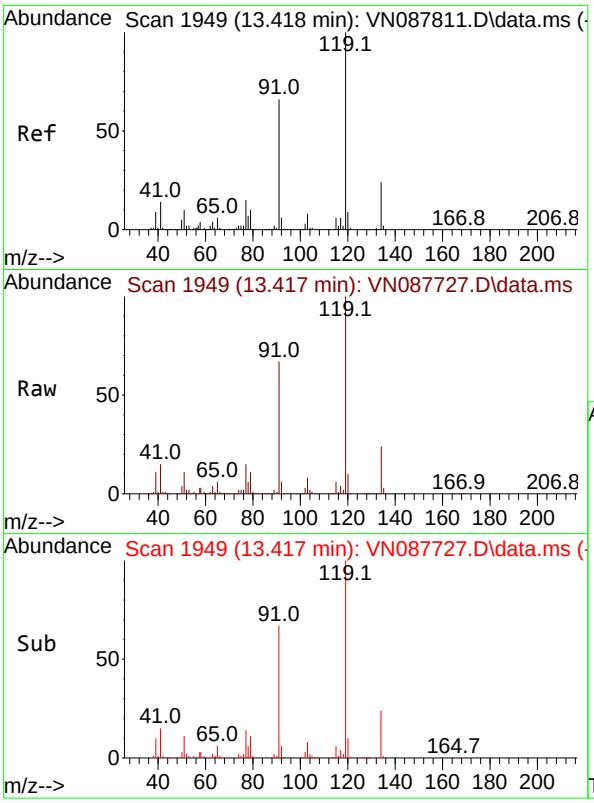


#78
4-Chlorotoluene
Concen: 52.151 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 91 Resp: 555670

Ion	Ratio	Lower	Upper
91	100		
126	31.9	0.0	67.0

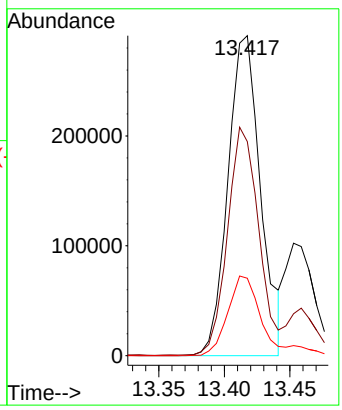




#79
tert-butylbenzene
Concen: 51.663 ug/l
RT: 13.417 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:119 Resp: 50528

Ion	Ratio	Lower	Upper
119	100		
91	67.8	0.0	142.6
134	24.4	0.0	47.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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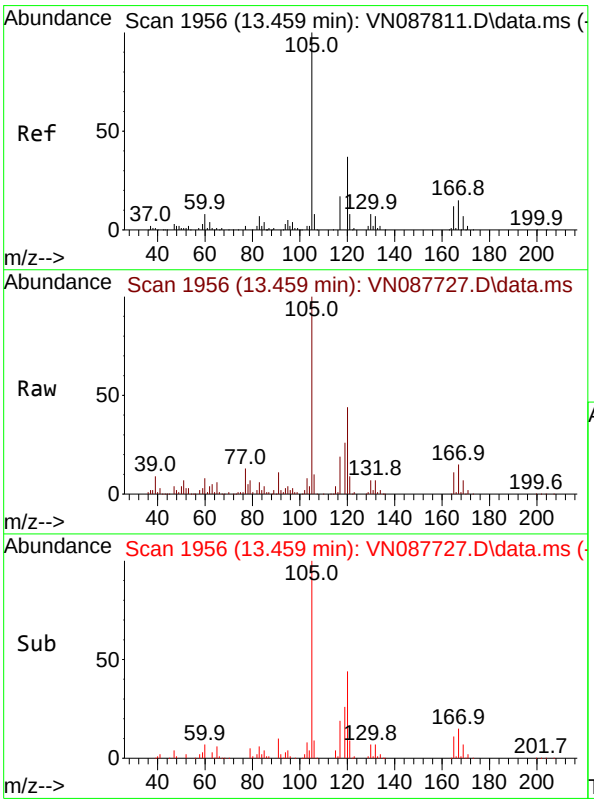
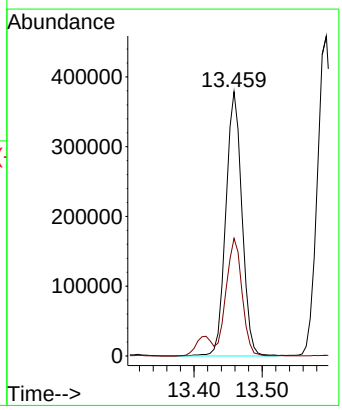
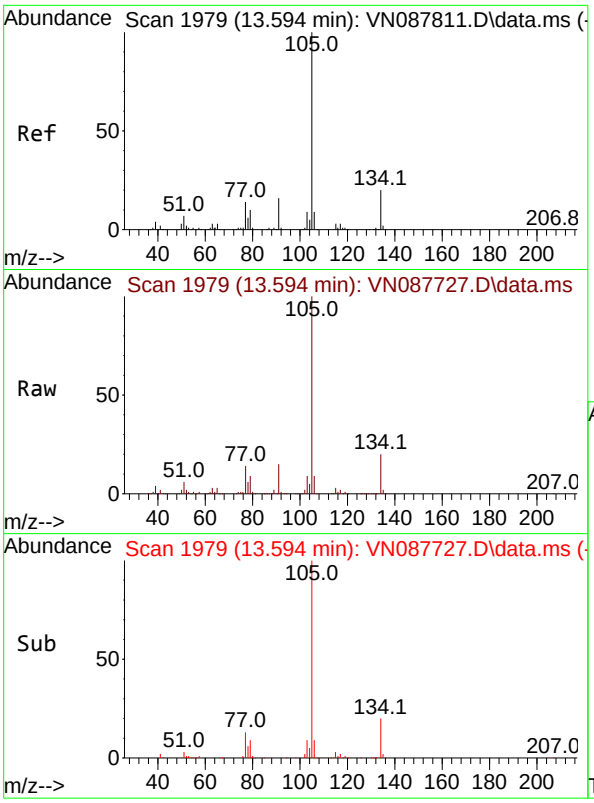


#80
1,2,4-Trimethylbenzene
Concen: 53.295 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:105 Resp: 624111

Ion	Ratio	Lower	Upper
105	100		
120	43.7	0.0	86.6





#81
sec-Butylbenzene
Concen: 51.833 ug/l
RT: 13.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:105 Resp: 73923

Ion	Ratio	Lower	Upper
105	100		
134	19.3	0.0	37.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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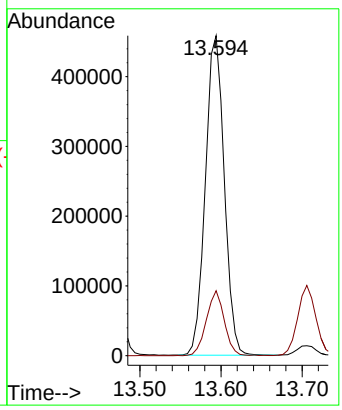
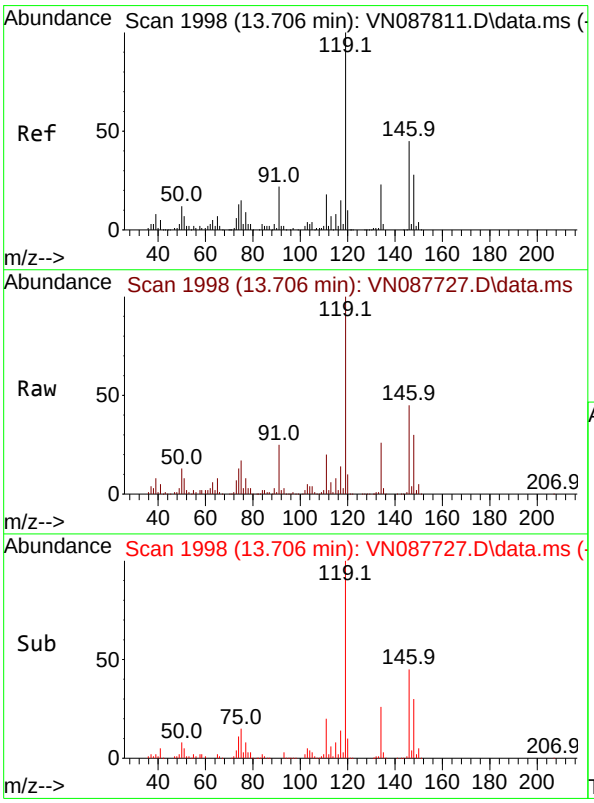
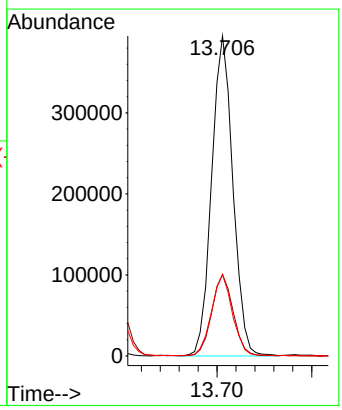


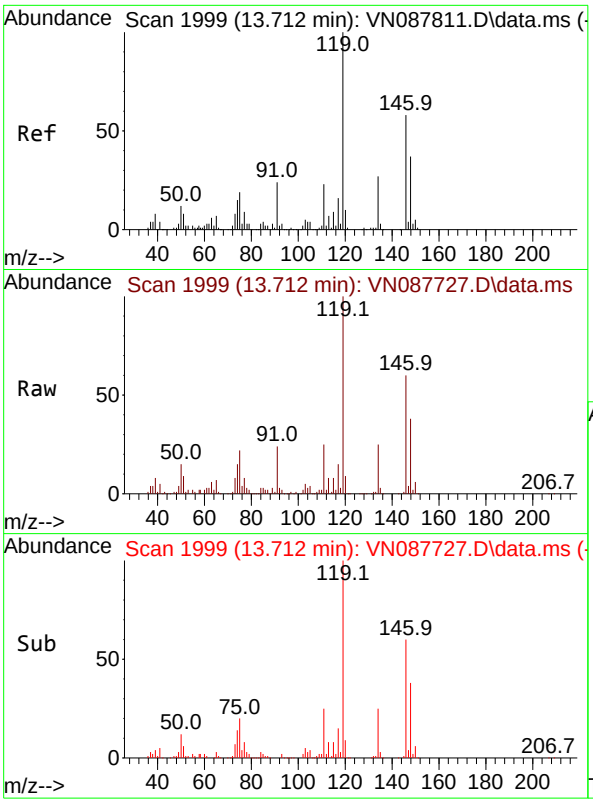


#82
p-Isopropyltoluene
Concen: 52.179 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:119 Resp: 616043

Ion	Ratio	Lower	Upper
119	100		
134	25.5	0.0	49.4
91	25.0	0.0	52.2

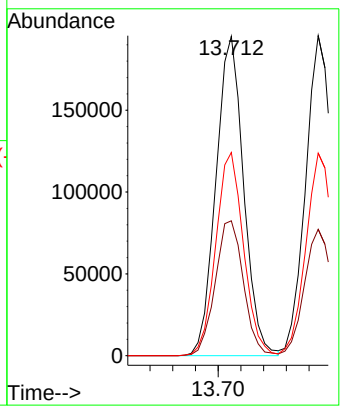




#83
1,3-Dichlorobenzene
Concen: 53.944 ug/l
RT: 13.712 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:146 Resp: 33054

Ion	Ratio	Lower	Upper
146	100		
111	43.1	21.1	63.4
148	63.7	31.0	93.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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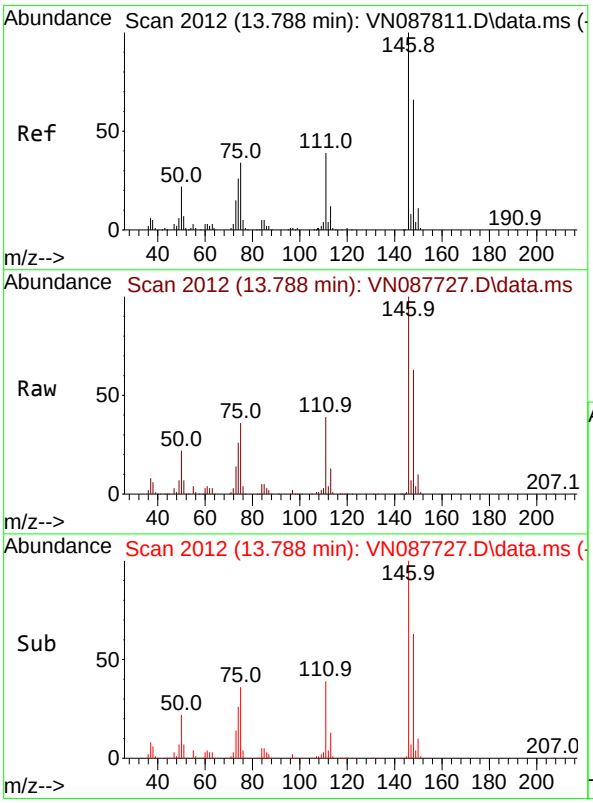
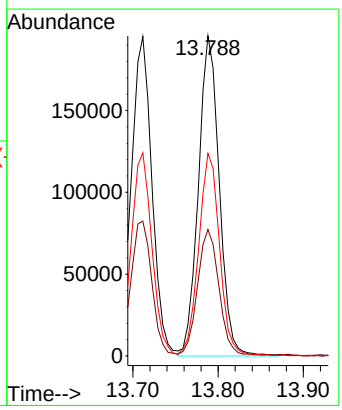
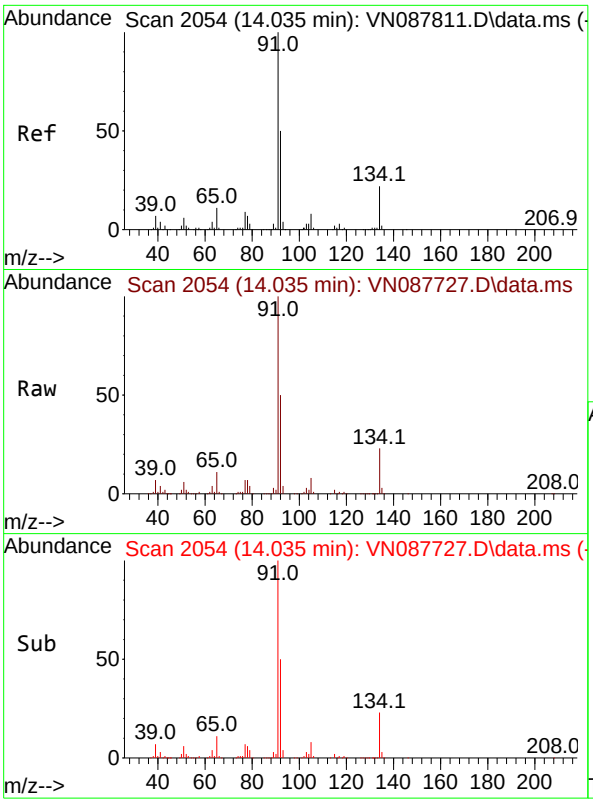


#84
1,4-Dichlorobenzene
Concen: 53.977 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:146 Resp: 332962

Ion	Ratio	Lower	Upper
146	100		
111	40.7	20.2	60.5
148	63.6	31.5	94.5





#85
n-Butylbenzene
Concen: 52.220 ug/l
RT: 14.035 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 91 Resp: 59883

Ion	Ratio	Lower	Upper
91	100		
92	51.6	0.0	104.0
134	23.5	0.0	46.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

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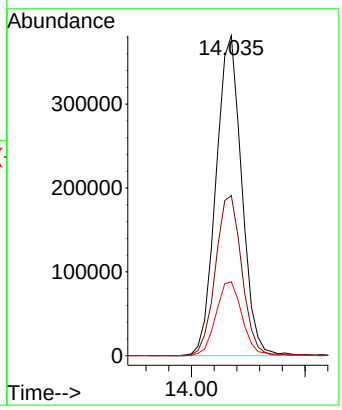
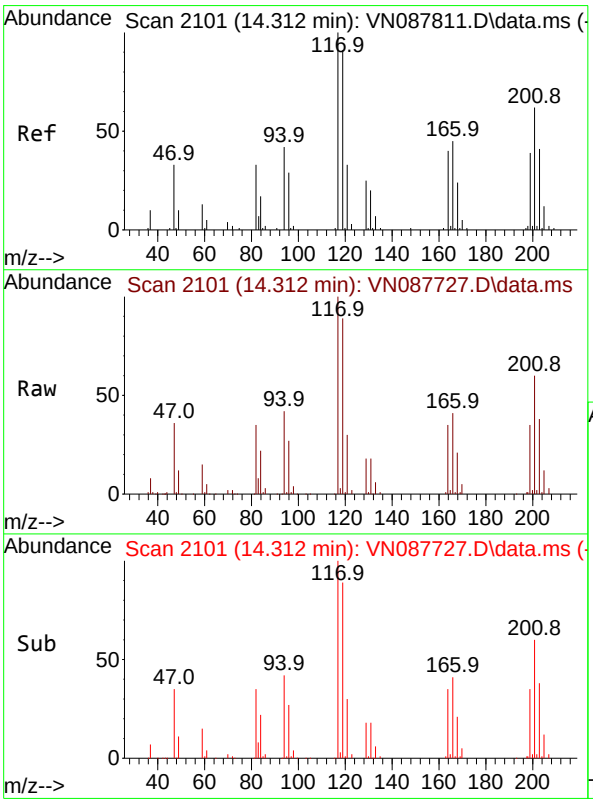
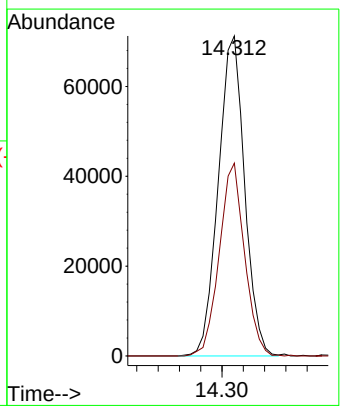


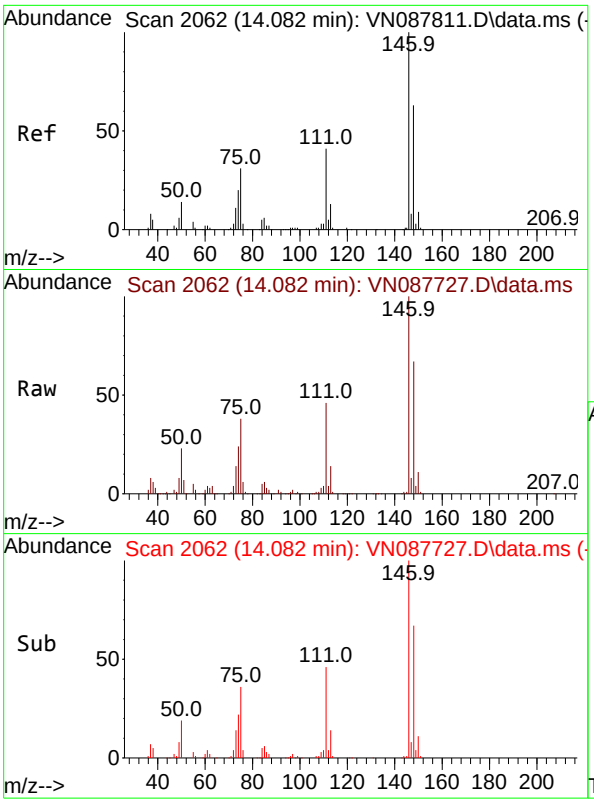


#86
Hexachloroethane
Concen: 52.103 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:117 Resp: 122090

Ion	Ratio	Lower	Upper
117	100		
201	57.9	29.9	89.7

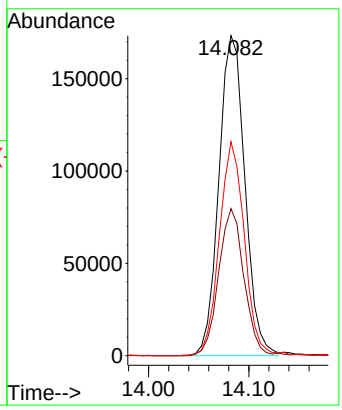




#87
1,2-Dichlorobenzene
Concen: 53.771 ug/l
RT: 14.082 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:146 Resp: 31243

Ion	Ratio	Lower	Upper
146	100		
111	44.5	21.5	64.5
148	63.9	33.4	100.1



Instrument :
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ClientSampleId :
VSTDICC050

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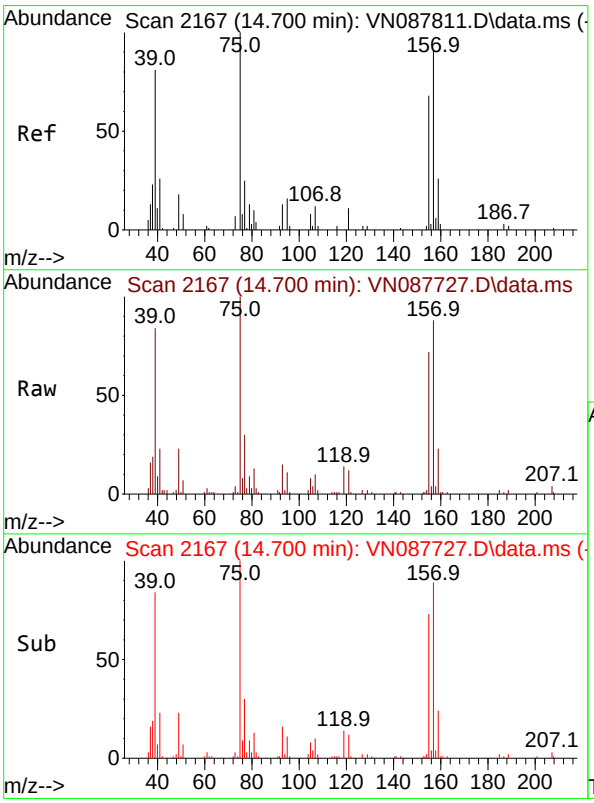
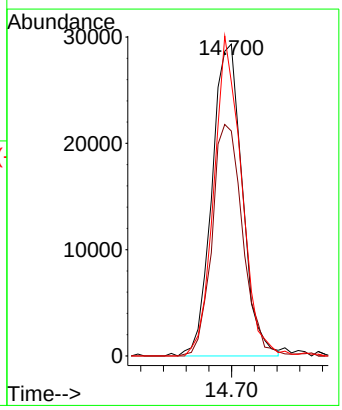
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

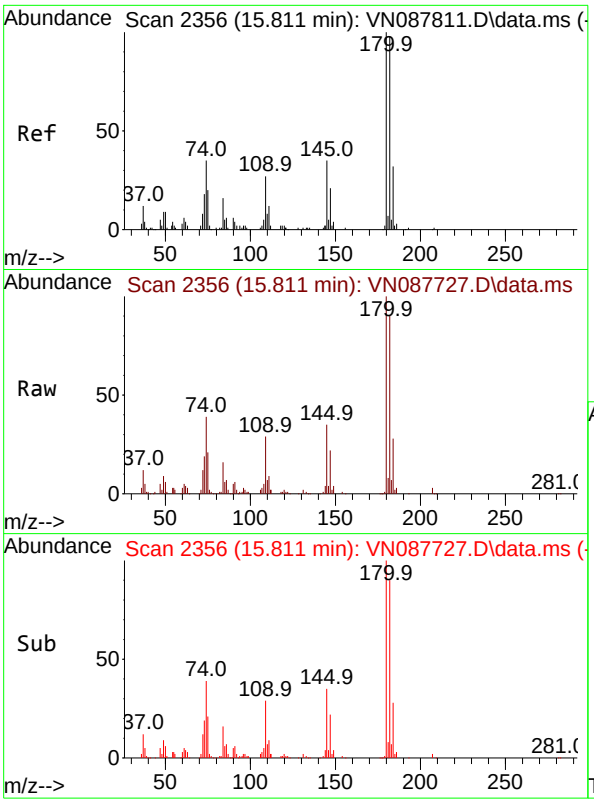


#88
1,2-Dibromo-3-Chloropropane
Concen: 46.188 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.006 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion: 75 Resp: 54360

Ion	Ratio	Lower	Upper
75	100		
155	75.3	53.0	79.4
157	93.3	72.2	108.4

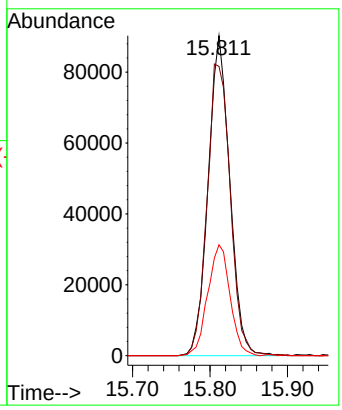




#89
1,2,4-Trichlorobenzene
Concen: 51.096 ug/l
RT: 15.811 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:180 Resp: 17545

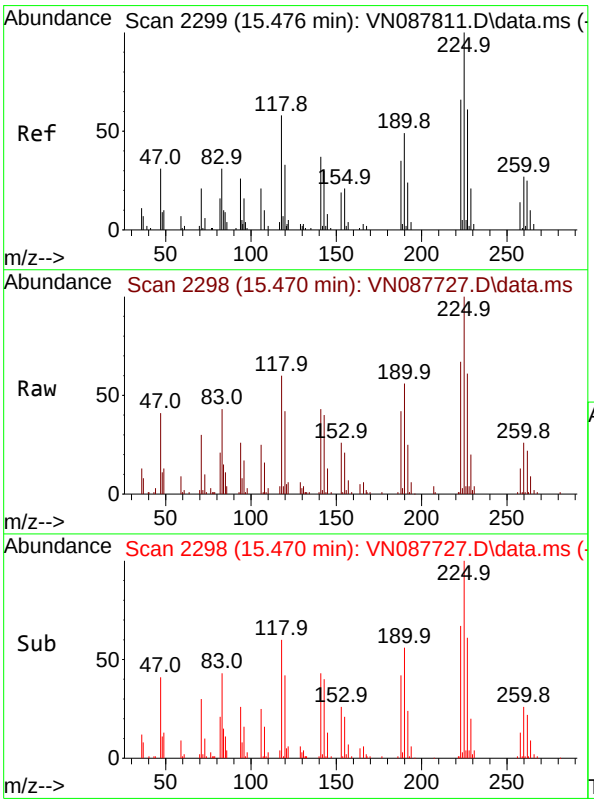
Ion	Ratio	Lower	Upper
180	100		
182	97.3	74.6	111.8
145	35.7	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
APPROVED

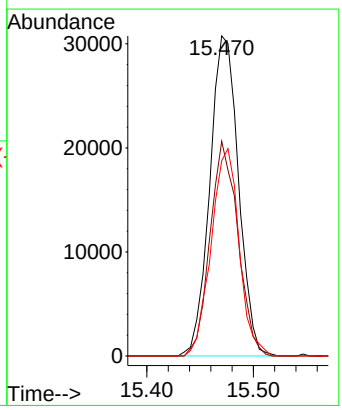
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

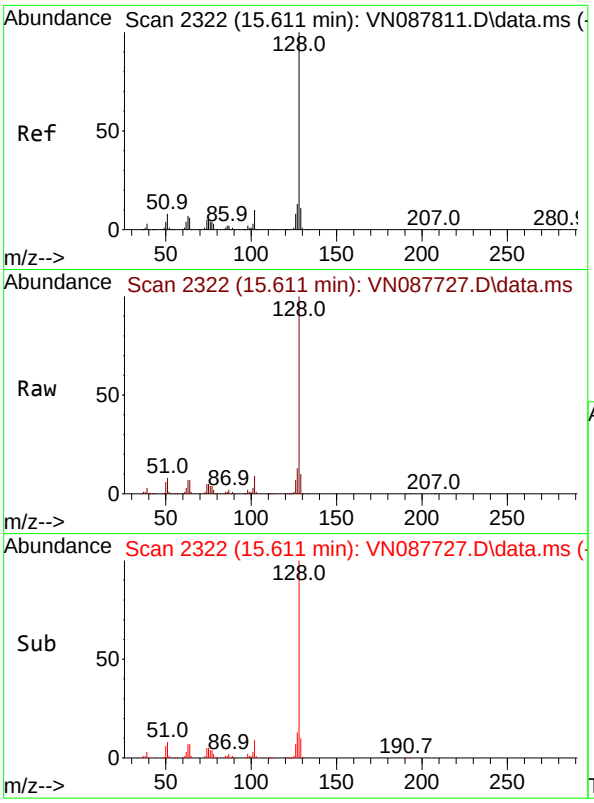


#90
Hexachlorobutadiene
Concen: 43.773 ug/l
RT: 15.470 min Scan# 2298
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:225 Resp: 57621

Ion	Ratio	Lower	Upper
225	100		
223	64.8	0.0	118.2
227	63.0	0.0	139.0

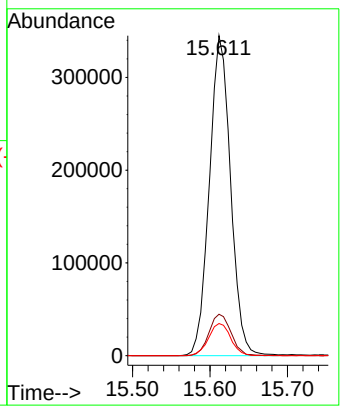




#91
Naphthalene
Concen: 50.727 ug/l
RT: 15.611 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:128 Resp: 65655

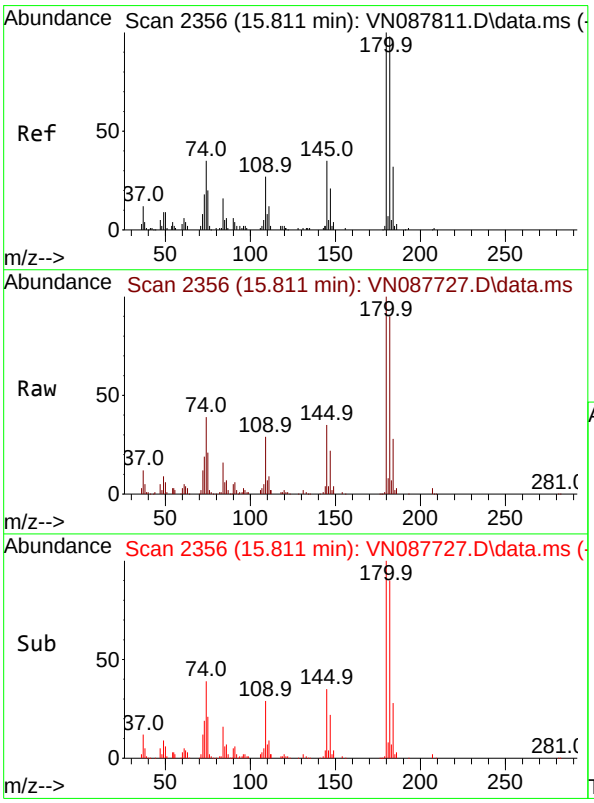
Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.2	15.4
129	10.5	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
APPROVED

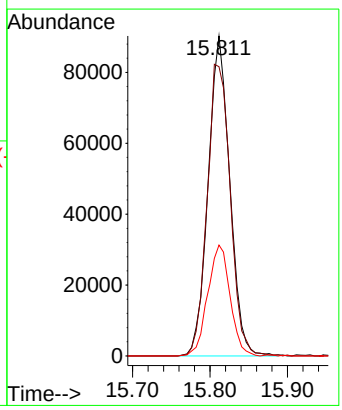
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025



#92
1,2,3-Trichlorobenzene
Concen: 51.096 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. -0.000 min
Lab File: VN087727.D
Acq: 04 Sep 2025 17:05

Tgt Ion:180 Resp: 175450

Ion	Ratio	Lower	Upper
180	100		
182	97.3	0.0	186.4
145	35.7	0.0	68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087728.D
Acq On : 04 Sep 2025 17:25
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Quant Time: Sep 05 02:58:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.800	128	46852	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.082	114	242946	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.847	117	230623	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.559	65	117102	27.758	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 92.533%				
60) 4-Bromofluorobenzene	12.823	95	115538	29.459	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 98.200%				
63) Toluene-d8	10.547	98	323414	30.351	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 101.167%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.142	85	313567	105.918	ug/l		98
3) Chloromethane	2.383	50	318166	105.287	ug/l		96
4) Vinyl Chloride	2.536	62	361611	111.652	ug/l		98
5) Bromomethane	2.965	94	215103	120.487	ug/l		94
6) Chloroethane	3.130	64	237607	112.048	ug/l		88
7) Trichlorofluoromethane	3.512	101	524031	111.602	ug/l		87
8) Diethyl Ether	3.959	74	215410	110.579	ug/l		98
9) 1,1,2-Trichlorotrifluo...	4.365	101	277895	113.762	ug/l		42
10) 1,1-Dichloroethene	4.336	96	294057	116.806	ug/l		92
11) Methyl Iodide	4.583	142	246645	124.799	ug/l		90
12) Methyl Acetate	5.018	43	465095	101.938	ug/l		99
13) Acrolein	4.177	56	404438m	566.983	ug/l		
14) Acrylonitrile	5.712	53	995146	504.249	ug/l		99
15) Acetone	4.424	58	276885	494.569	ug/l		84
16) Carbon Disulfide	4.706	76	801928	104.109	ug/l	#	91
17) Allyl chloride	5.012	41	481807	96.965	ug/l		92
18) Methylene Chloride	5.265	84	326426	102.788	ug/l		94
19) trans-1,2-Dichloroethene	5.777	96	306937	104.453	ug/l		94
20) Diisopropyl ether	6.659	45	1145464	101.181	ug/l		95
21) 1,1-Dichloroethane	6.553	63	605635	102.873	ug/l		97
22) cis-1,2-Dichloroethene	7.471	96	370129	102.956	ug/l		96
23) tert-Butyl Alcohol	5.530	59	340216	414.715	ug/l	#	100
24) Methyl tert-Butyl Ether	5.789	73	1088266	98.657	ug/l		97
25) Chloroform	7.947	83	632337	102.023	ug/l		95
26) Cyclohexane	8.235	56	470916	101.149	ug/l	#	99
29) 1,1-Dichloropropene	8.353	75	418041	107.353	ug/l		99
30) 2-Butanone	7.471	43	1409990	499.926	ug/l		98
31) 2,2-Dichloropropane	7.477	77	498763	102.230	ug/l		99
32) 1,1,1-Trichloroethane	8.153	97	524015	104.920	ug/l		99
33) Carbon Tetrachloride	8.341	117	431973	105.102	ug/l		98
34) Benzene	8.588	78	1341472	108.630	ug/l		96
35) Methacrylonitrile	7.765	41	305644	99.759	ug/l		96
36) 1,2-Dichloroethane	8.653	62	500793	101.728	ug/l		99
37) Trichloroethene	9.335	130	296546	109.044	ug/l		97
38) Methylcyclohexane	9.582	83	466295	104.964	ug/l		97
39) 1,2-Dichloropropane	9.600	63	346311	109.431	ug/l		98
40) Dibromomethane	9.688	93	255456	107.958	ug/l		98
41) Bromodichloromethane	9.871	83	524173	106.078	ug/l		96
42) Vinyl Acetate	6.588	43	4938740	532.259	ug/l		100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087728.D
Acq On : 04 Sep 2025 17:25
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 05 02:58:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.547	43	570267	102.596	ug/l		99
44) Isopropyl Acetate	8.671	43	951384	102.889	ug/l		99
45) 1,4-Dioxane	9.682	88	116145	1961.964	ug/l	#	81
46) Methyl methacrylate	9.665	41	440189	101.703	ug/l		97
47) n-amyl Acetate	12.488	43	640178m	119.074	ug/l		
48) t-1,3-Dichloropropene	10.818	75	563552	106.986	ug/l		99
49) cis-1,3-Dichloropropene	10.294	75	576775	108.492	ug/l		93
50) 1,1,2-Trichloroethane	10.994	97	324897	108.095	ug/l		97
51) Ethyl methacrylate	10.853	69	569562	111.057	ug/l		96
52) 1,3-Dichloropropane	11.141	76	582005	108.009	ug/l		100
53) Dibromochloromethane	11.341	129	378765	110.707	ug/l		93
54) 1,2-Dibromoethane	11.447	107	342831	108.245	ug/l		100
55) 2-Chloroethyl vinyl ether	10.141	63	1528234	551.521	ug/l		99
56) Bromoform	12.559	173	252313	111.308	ug/l		99
58) 4-Methyl-2-Pentanone	10.424	43	2897553	507.772	ug/l		99
59) 2-Hexanone	11.176	43	2049165	530.247	ug/l		97
61) Tetrachloroethene	11.082	164	234889	105.508	ug/l		94
62) Toluene	10.612	91	1487570	107.196	ug/l		99
64) Chlorobenzene	11.870	112	915703	107.540	ug/l		94
65) 1,1,1,2-Tetrachloroethane	11.941	131	316148	105.470	ug/l		97
66) Ethyl Benzene	11.941	91	1649107	107.822	ug/l		94
67) m/p-Xylenes	12.047	106	1230087	218.504	ug/l		96
68) o-Xylene	12.376	106	594671	107.086	ug/l		95
69) Styrene	12.388	104	1056802	111.873	ug/l		99
70) Isopropylbenzene	12.670	105	1525065	109.171	ug/l		98
71) 1,1,2,2-Tetrachloroethane	12.917	83	514778	105.616	ug/l		100
72) 1,2,3-Trichloropropane	12.970	75	480400m	105.647	ug/l		
73) Bromobenzene	12.959	156	356832	108.052	ug/l		98
74) n-propylbenzene	13.012	91	1910176	108.687	ug/l		100
75) 2-Chlorotoluene	13.100	91	1125992	104.153	ug/l		97
76) 1,3,5-Trimethylbenzene	13.153	105	1280589	106.824	ug/l		98
77) t-1,4-Dichloro-2-butene	12.717	75	189778	111.145	ug/l		85
78) 4-Chlorotoluene	13.200	91	1157012	105.159	ug/l		98
79) tert-butylbenzene	13.417	119	1071115	106.056	ug/l		98
80) 1,2,4-Trimethylbenzene	13.459	105	1304823	107.903	ug/l		98
81) sec-Butylbenzene	13.594	105	1563520	106.168	ug/l		98
82) p-Isopropyltoluene	13.706	119	1301395	106.747	ug/l		97
83) 1,3-Dichlorobenzene	13.712	146	691902	109.350	ug/l		99
84) 1,4-Dichlorobenzene	13.788	146	697980	109.576	ug/l		100
85) n-Butylbenzene	14.035	91	1257557	106.198	ug/l		99
86) Hexachloroethane	14.311	117	253844	104.907	ug/l		98
87) 1,2-Dichlorobenzene	14.082	146	657359	109.561	ug/l		96
88) 1,2-Dibromo-3-Chloropr...	14.694	75	118055	97.139	ug/l		93
89) 1,2,4-Trichlorobenzene	15.811	180	377288	106.405	ug/l		99
90) Hexachlorobutadiene	15.476	225	122782	90.327	ug/l		94
91) Naphthalene	15.611	128	1453918	108.784	ug/l		99
92) 1,2,3-Trichlorobenzene	15.811	180	377288	106.405	ug/l		99

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

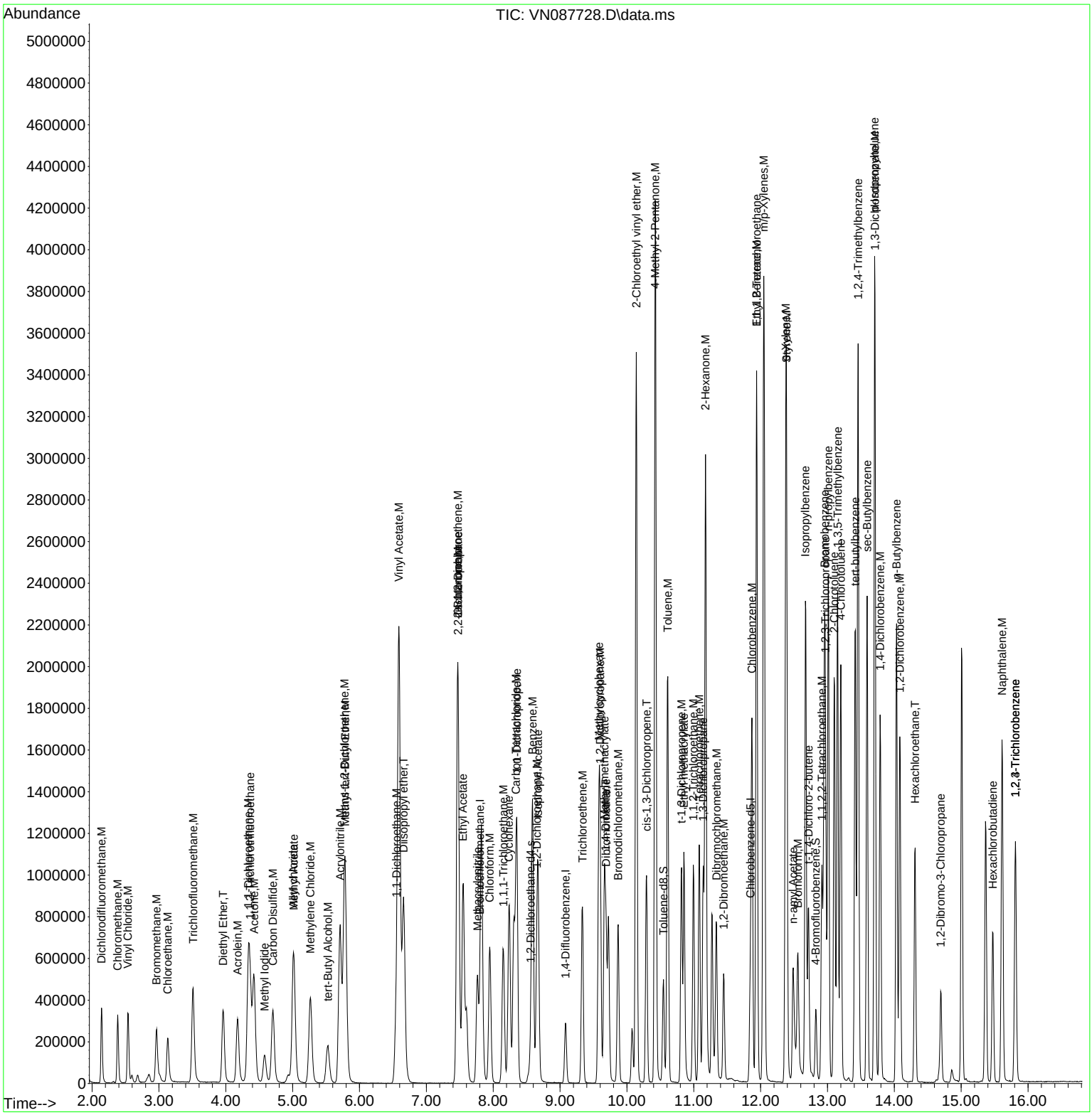
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087728.D
Acq On : 04 Sep 2025 17:25
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 17 Sample Multiplier: 1

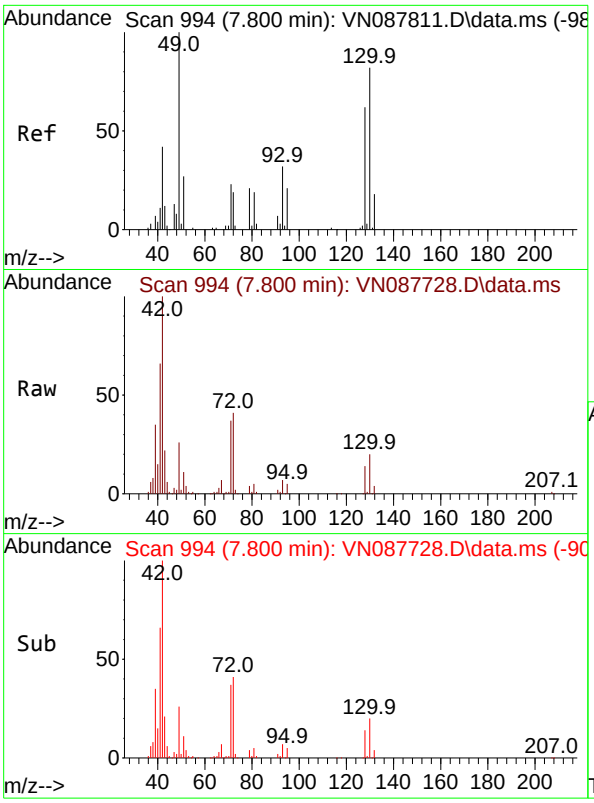
Quant Time: Sep 05 02:58:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

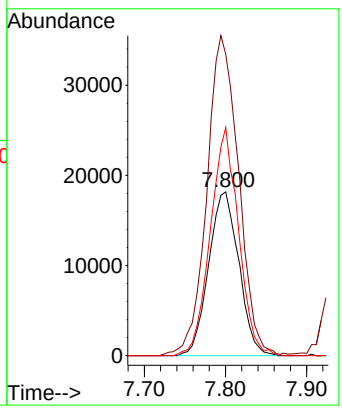




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.800 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:128 Resp: 4685

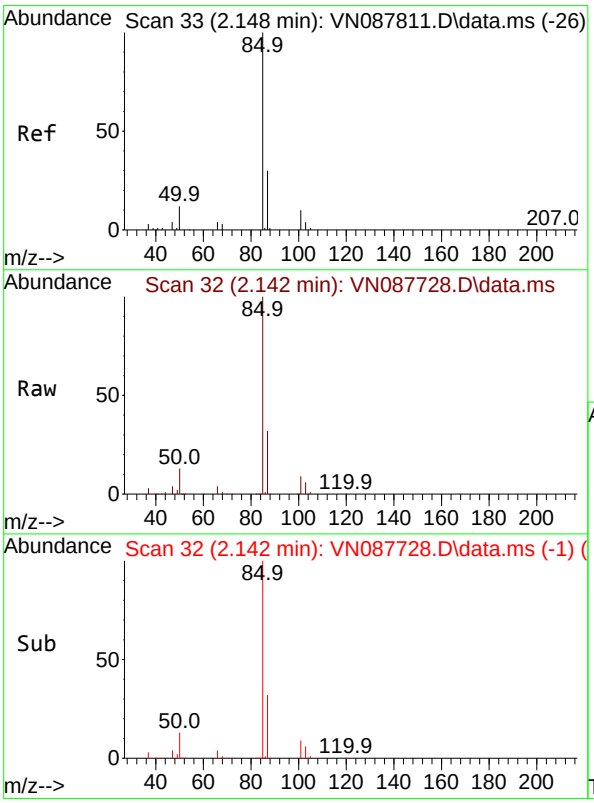
Ion	Ratio	Lower	Upper
128	100		
49	206.0	0.0	464.3
130	130.5	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

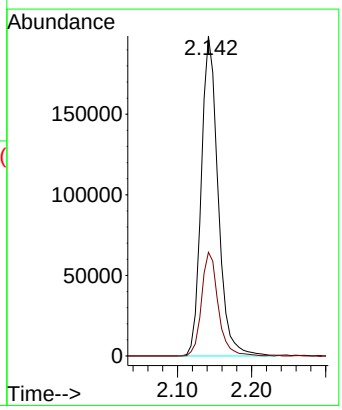
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

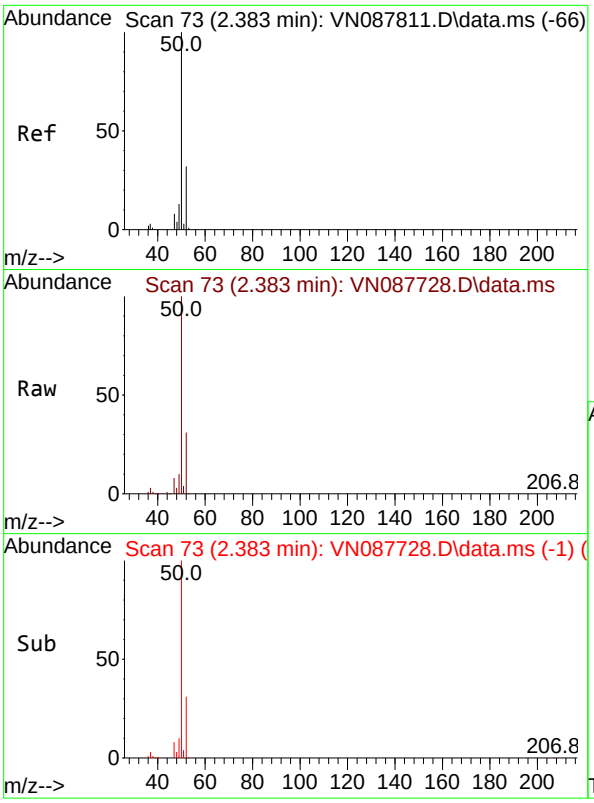


#2
Dichlorodifluoromethane
Concen: 105.918 ug/l
RT: 2.142 min Scan# 32
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 85 Resp: 313567

Ion	Ratio	Lower	Upper
85	100		
87	32.4	16.8	50.4

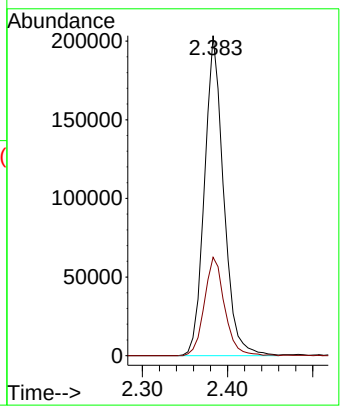




#3
Chloromethane
Concen: 105.287 ug/l
RT: 2.383 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 50 Resp: 31816

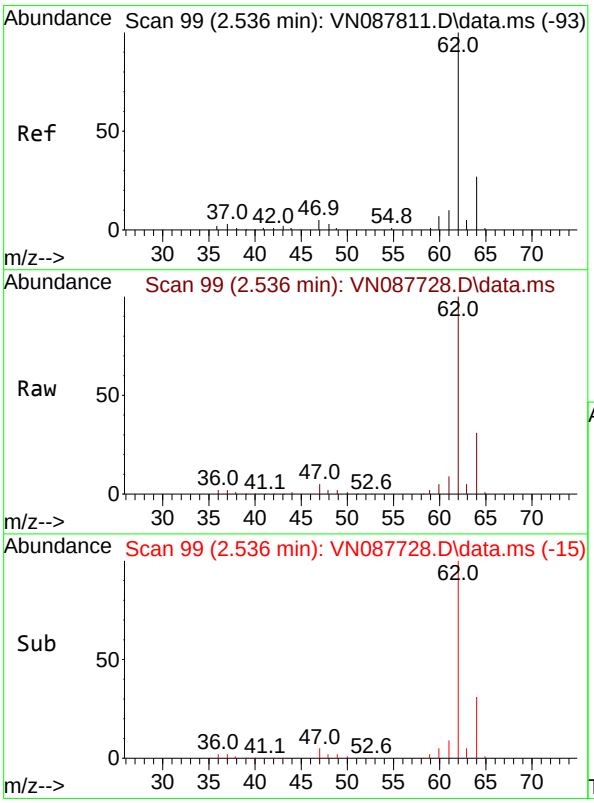
Ion	Ratio	Lower	Upper
50	100		
52	30.8	26.6	40.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

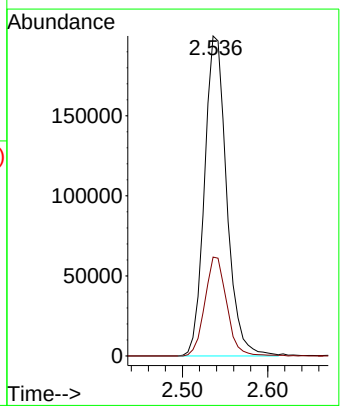
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

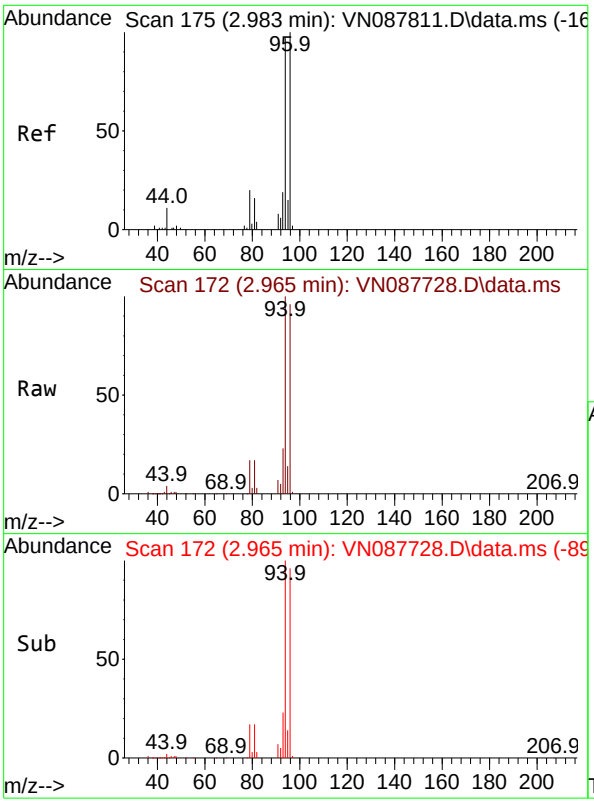


#4
Vinyl Chloride
Concen: 111.652 ug/l
RT: 2.536 min Scan# 99
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 62 Resp: 361611

Ion	Ratio	Lower	Upper
62	100		
64	30.9	25.5	38.3

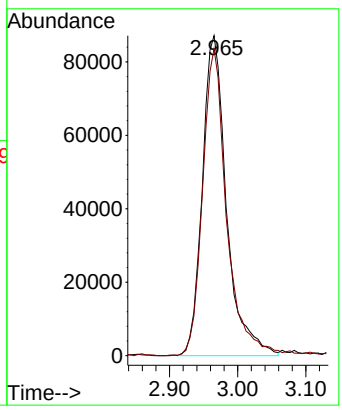




#5
Bromomethane
Concen: 120.487 ug/l
RT: 2.965 min Scan# 1
Delta R.T. -0.012 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 94 Resp: 21510

Ion	Ratio	Lower	Upper
94	100		
96	95.7	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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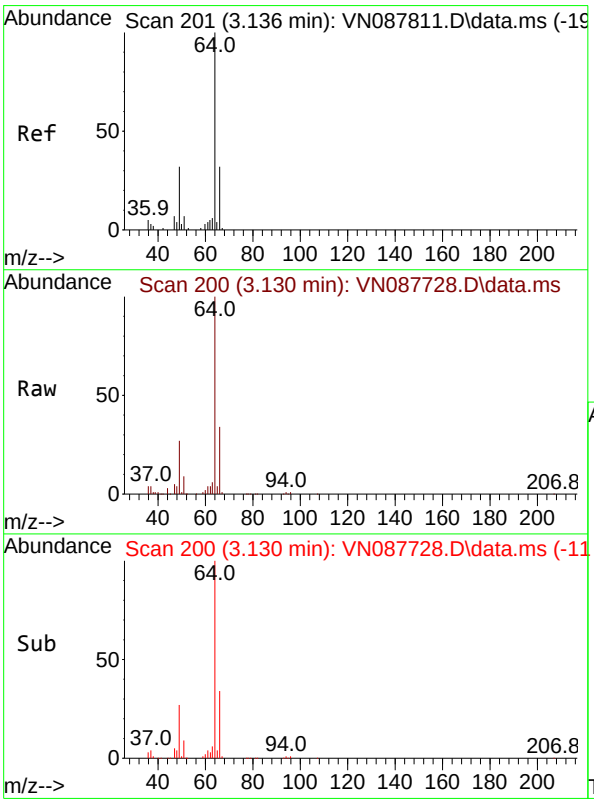
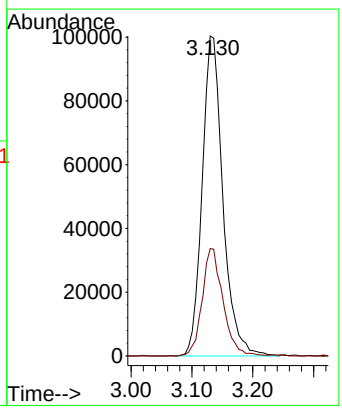
Supervised By :Mahesh Dadoda 09/05/2025

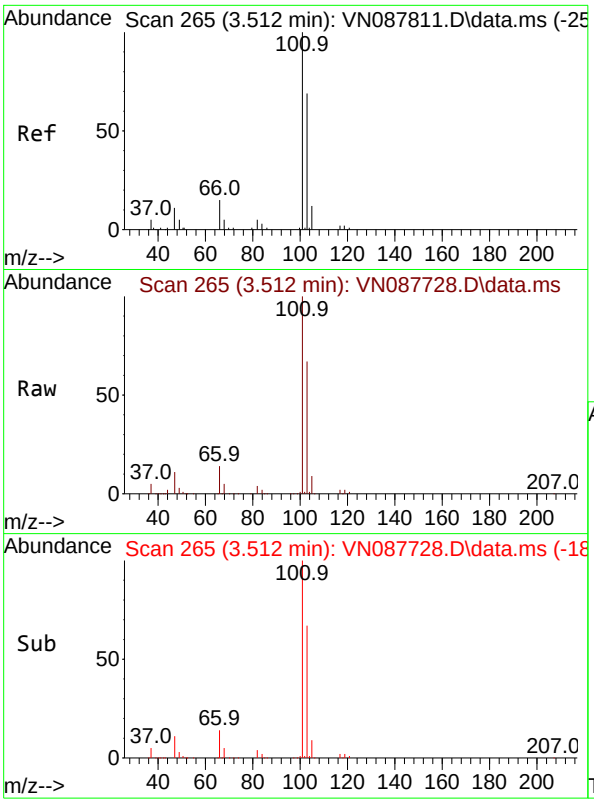


#6
Chloroethane
Concen: 112.048 ug/l
RT: 3.130 min Scan# 200
Delta R.T. -0.012 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 64 Resp: 237607

Ion	Ratio	Lower	Upper
64	100		
66	33.6	32.8	49.2

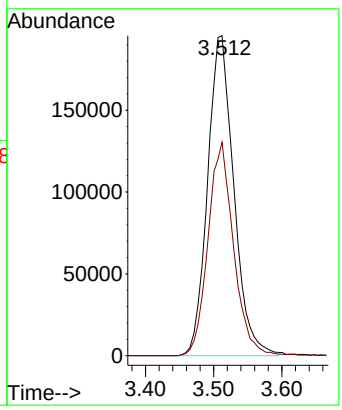




#7
Trichlorofluoromethane
Concen: 111.602 ug/l
RT: 3.512 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:101 Resp: 52403

Ion	Ratio	Lower	Upper
101	100		
103	66.7	45.7	68.5



Instrument :
MSVOA_N
ClientSampleId :
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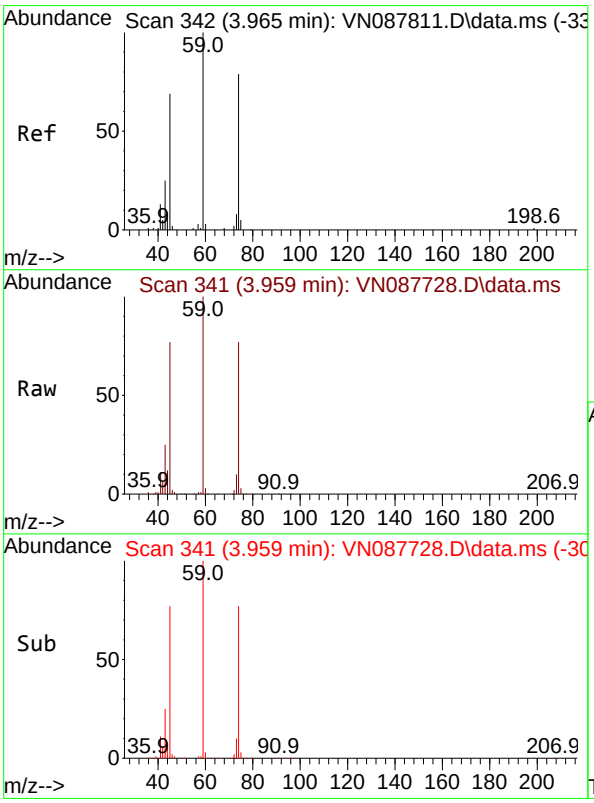
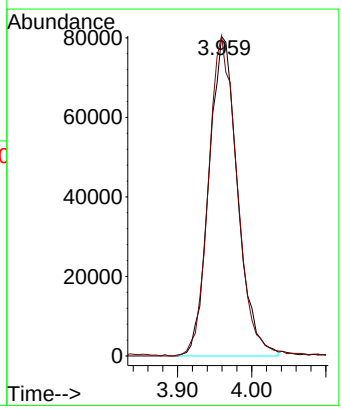
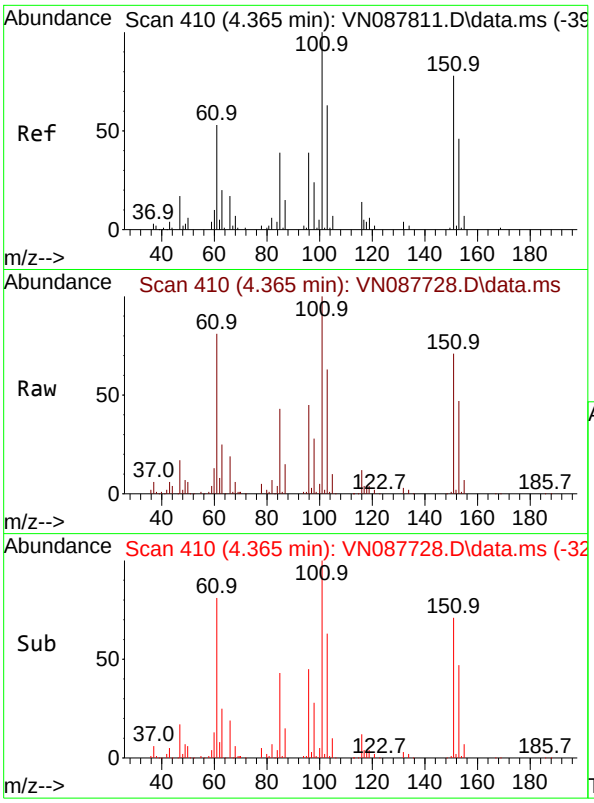


#8
Diethyl Ether
Concen: 110.579 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 74 Resp: 215410

Ion	Ratio	Lower	Upper
74	100		
45	100.1	20.4	183.8

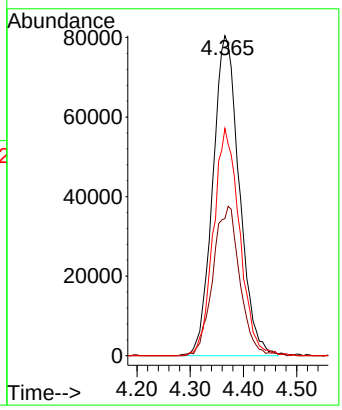




#9
1,1,2-Trichlorotrifluoroethane
Concen: 113.762 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:101 Resp: 27789

Ion	Ratio	Lower	Upper
101	100		
85	0.1	0.0	95.6
151	70.1	0.0	85.8



Instrument :
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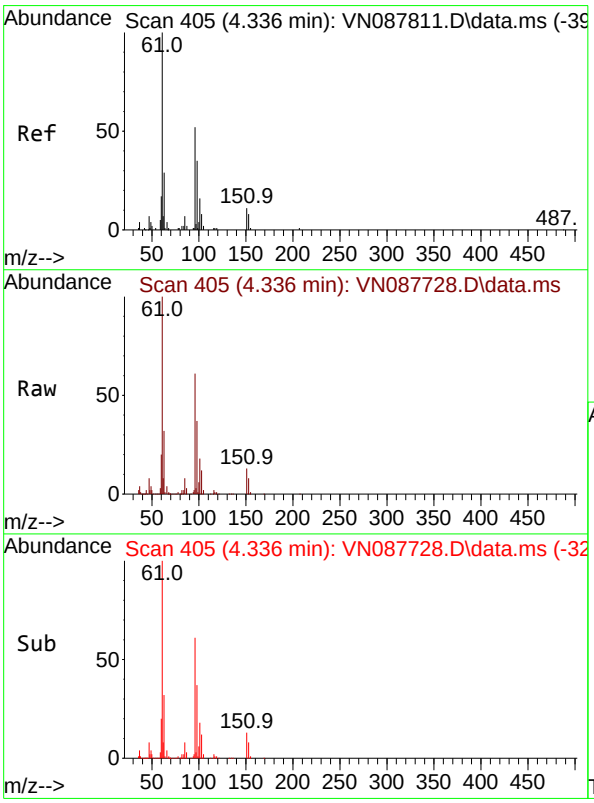
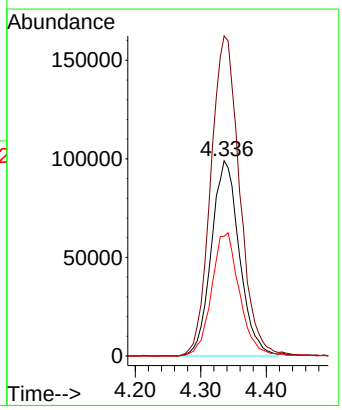
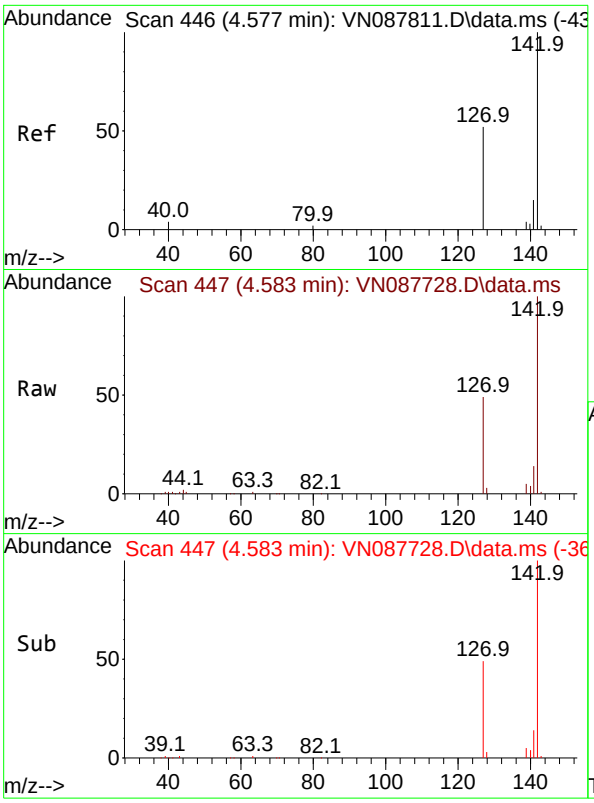


#10
1,1-Dichloroethene
Concen: 116.806 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 96 Resp: 294057

Ion	Ratio	Lower	Upper
96	100		
61	164.0	135.9	203.9
98	61.4	59.2	88.8

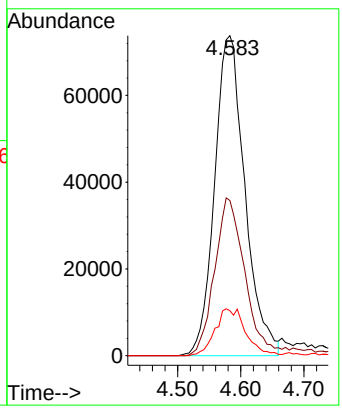




#11
Methyl Iodide
Concen: 124.799 ug/l
RT: 4.583 min Scan# 44
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:142 Resp: 24664

Ion	Ratio	Lower	Upper
142	100		
127	48.3	27.9	83.7
141	14.1	9.6	28.8



Instrument :
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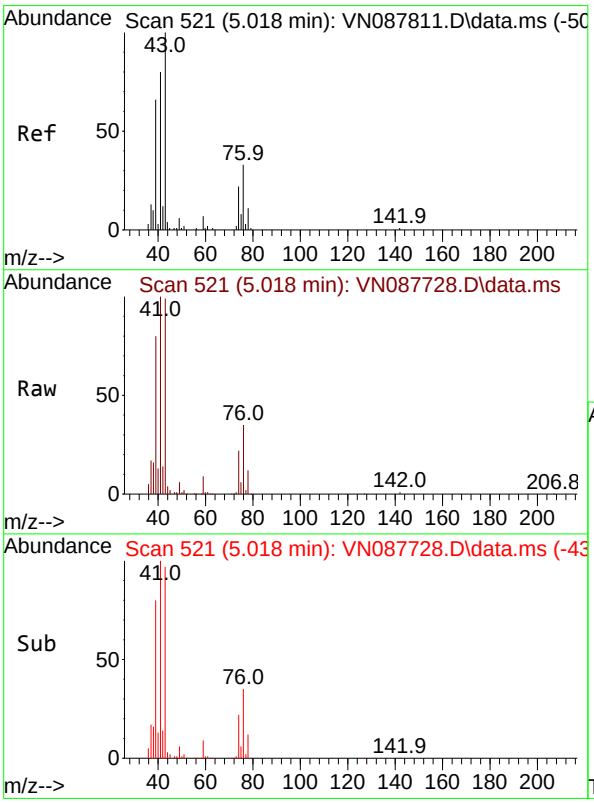
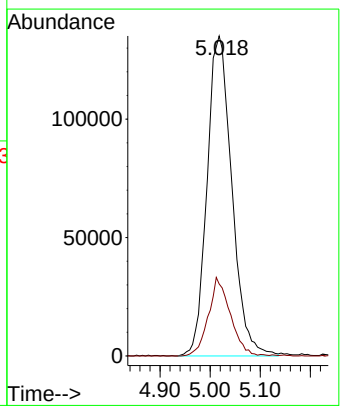
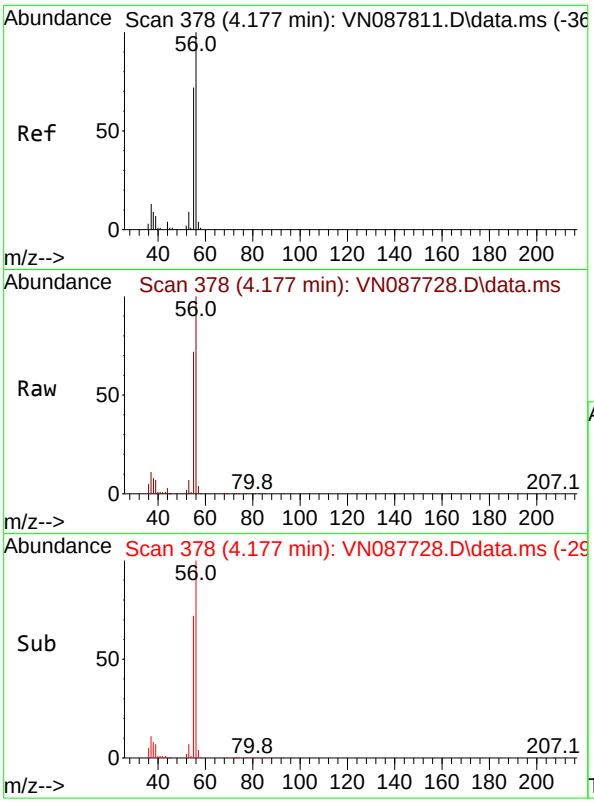


#12
Methyl Acetate
Concen: 101.938 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 43 Resp: 465095

Ion	Ratio	Lower	Upper
43	100		
74	22.5	17.5	26.3

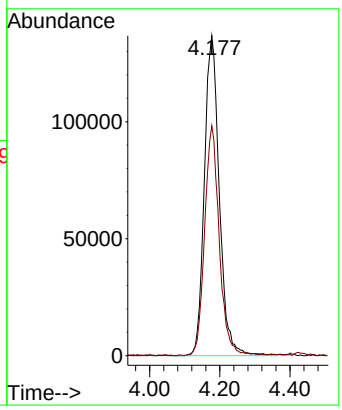




#13
Acrolein
Concen: 566.983 ug/l m
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 56 Resp: 40443

Ion	Ratio	Lower	Upper
56	100		
55	0.1	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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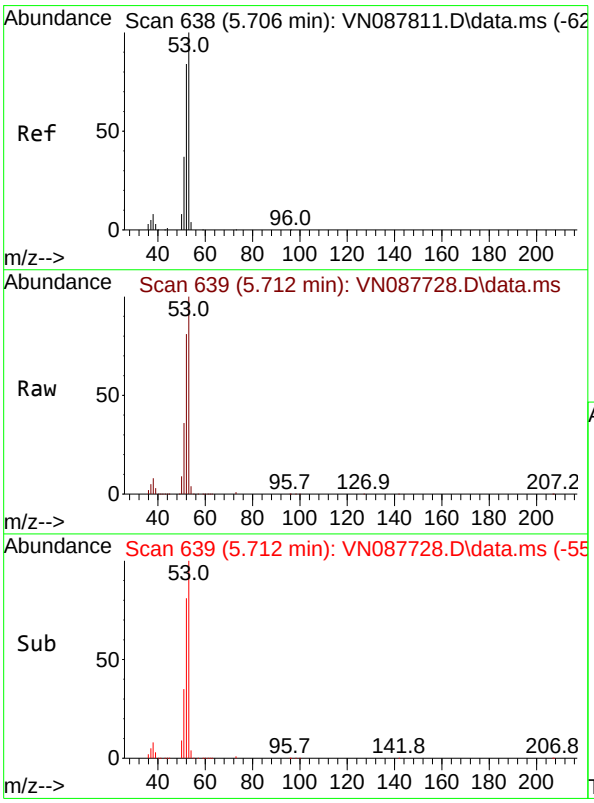
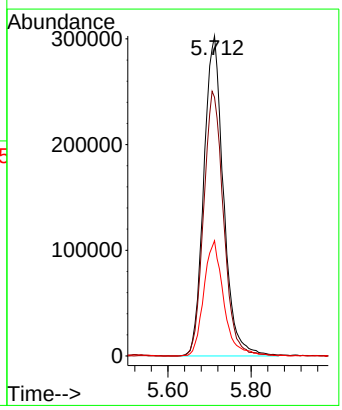
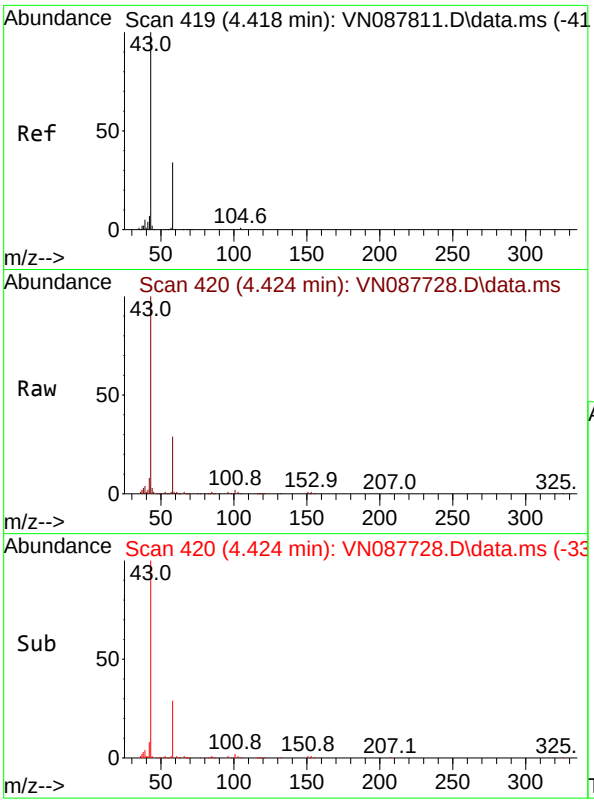


#14
Acrylonitrile
Concen: 504.249 ug/l
RT: 5.712 min Scan# 639
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 53 Resp: 995146

Ion	Ratio	Lower	Upper
53	100		
52	82.9	40.9	122.7
51	35.8	18.1	54.1

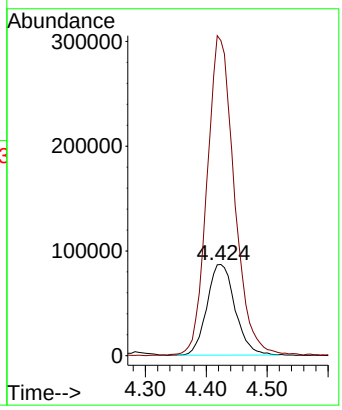




#15
Acetone
Concen: 494.569 ug/l
RT: 4.424 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 58 Resp: 27688

Ion	Ratio	Lower	Upper
58	100		
43	345.9	250.6	376.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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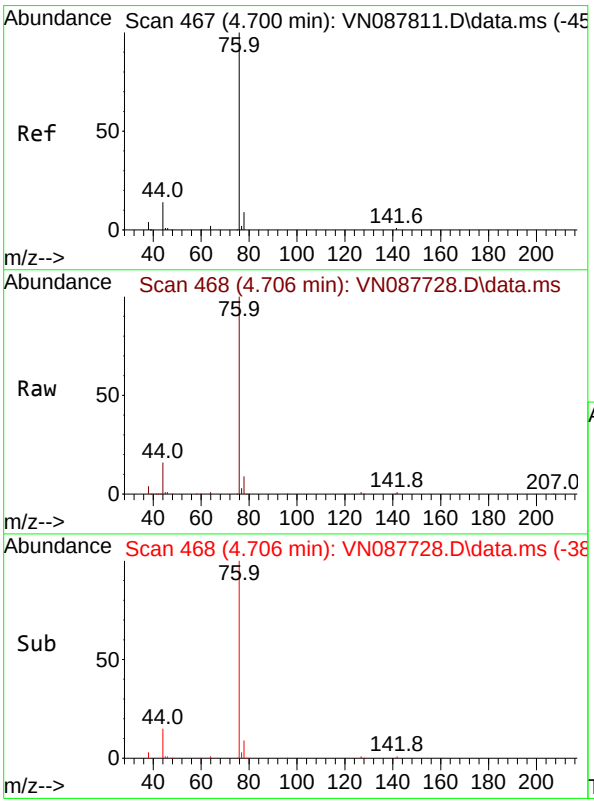
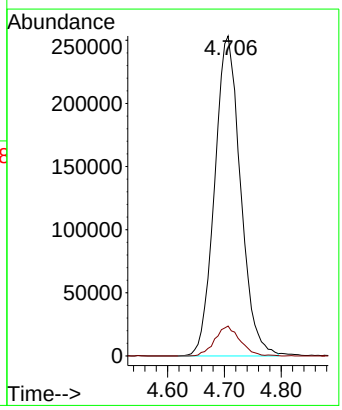
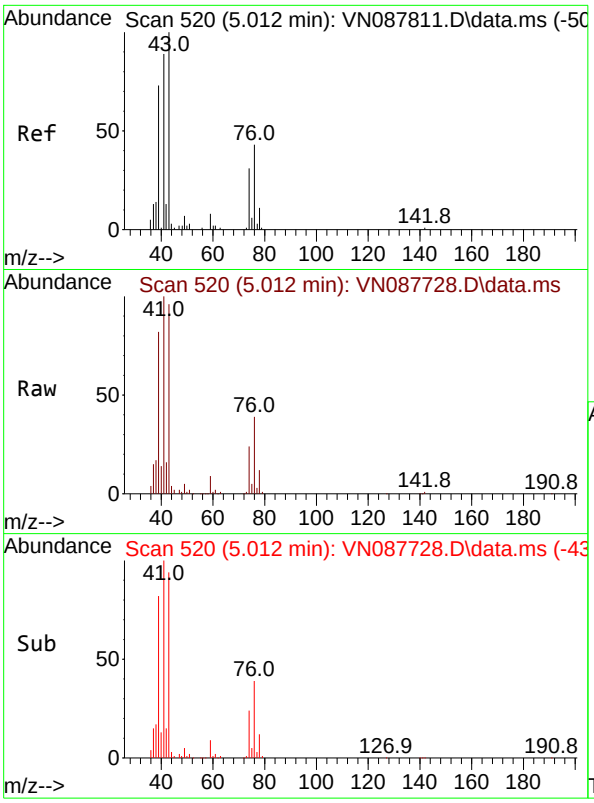


#16
Carbon Disulfide
Concen: 104.109 ug/l
RT: 4.706 min Scan# 468
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 76 Resp: 801928

Ion	Ratio	Lower	Upper
76	100		
78	9.3	5.0	7.6#

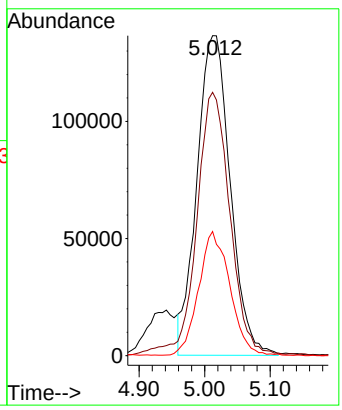




#17
Allyl chloride
Concen: 96.965 ug/l
RT: 5.012 min Scan# 5
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 41 Resp: 48180

Ion	Ratio	Lower	Upper
41	100		
39	82.0	36.7	110.1
76	38.5	18.3	54.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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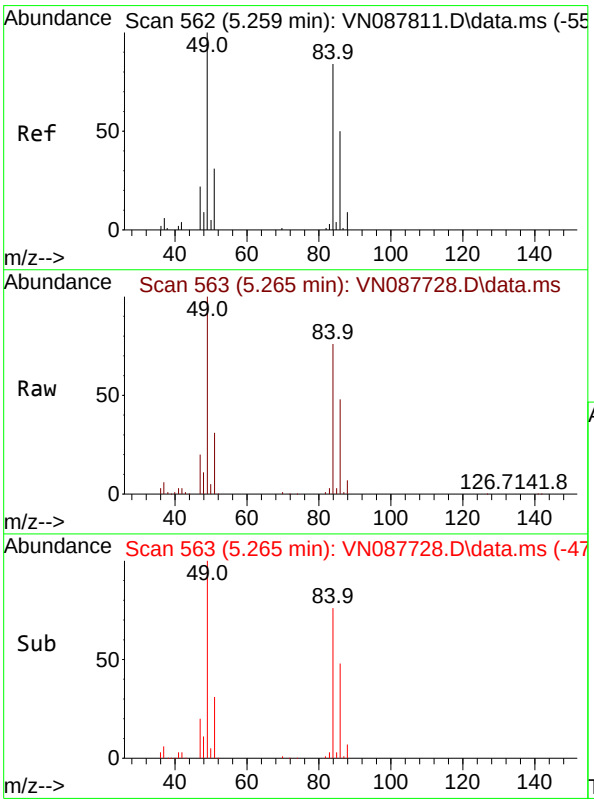
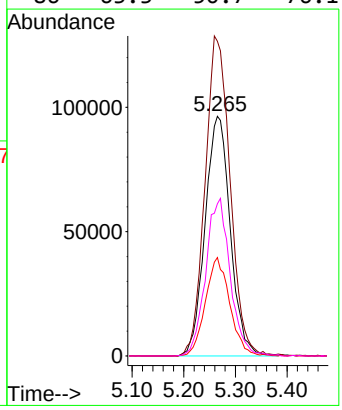
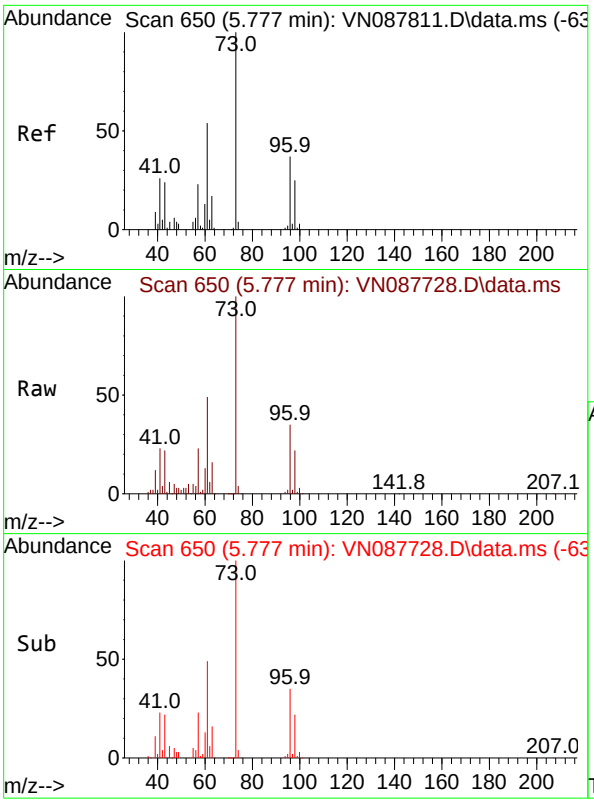


#18
Methylene Chloride
Concen: 102.788 ug/l
RT: 5.265 min Scan# 563
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 84 Resp: 326426

Ion	Ratio	Lower	Upper
84	100		
49	131.3	114.1	171.1
51	41.1	30.2	45.4
86	63.3	50.7	76.1

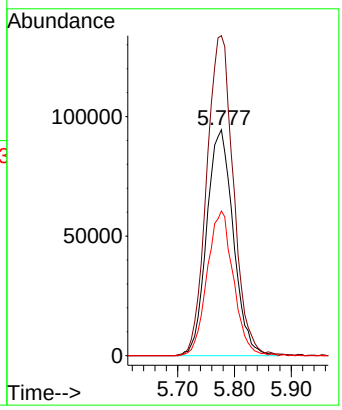




#19
trans-1,2-Dichloroethene
Concen: 104.453 ug/l
RT: 5.777 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 96 Resp: 30693

Ion	Ratio	Lower	Upper
96	100		
61	141.2	106.4	159.6
98	64.0	48.9	73.3



Instrument :
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ClientSampleId :
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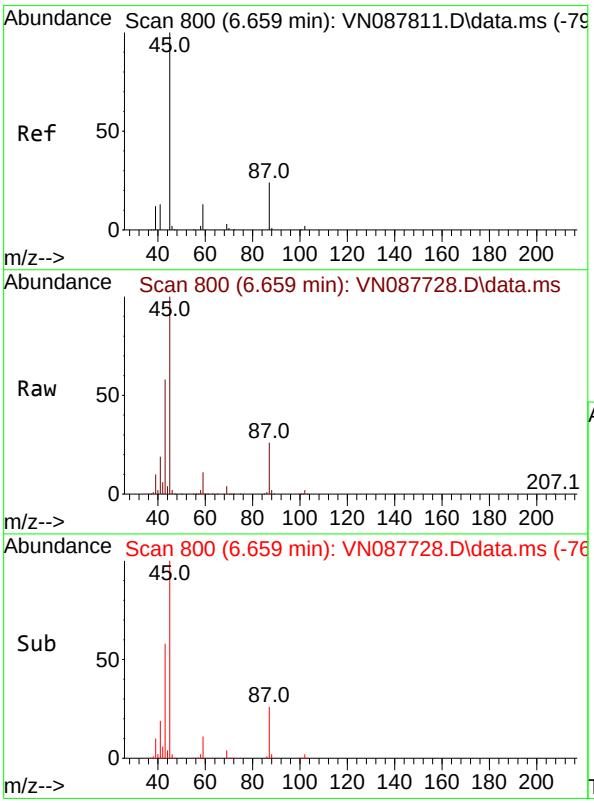
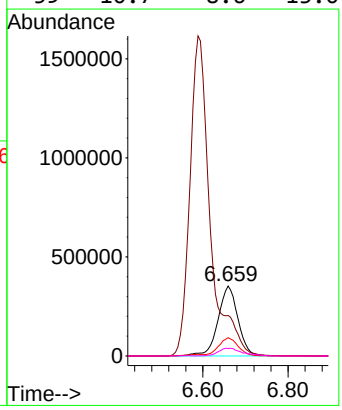
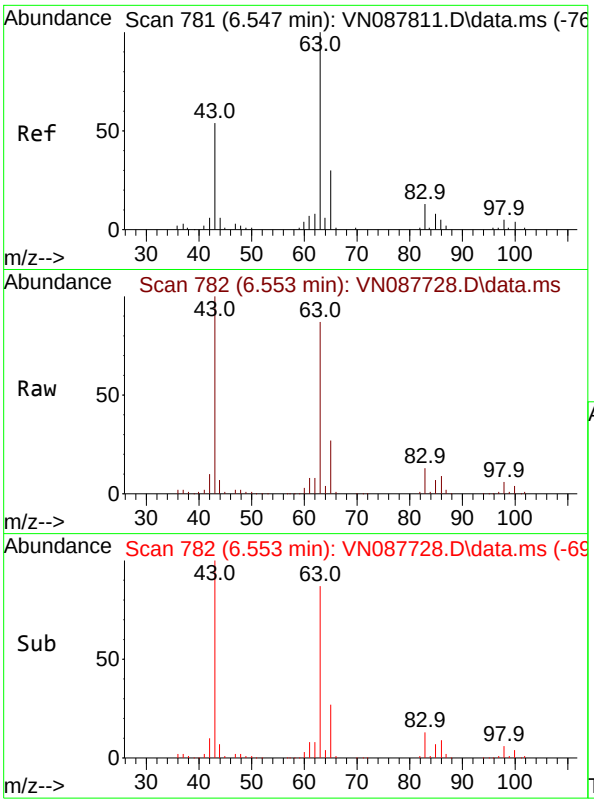


#20
Diisopropyl ether
Concen: 101.181 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 45 Resp: 1145464

Ion	Ratio	Lower	Upper
45	100		
43	57.3	49.5	74.3
87	26.2	18.8	28.2
59	10.7	8.6	13.0

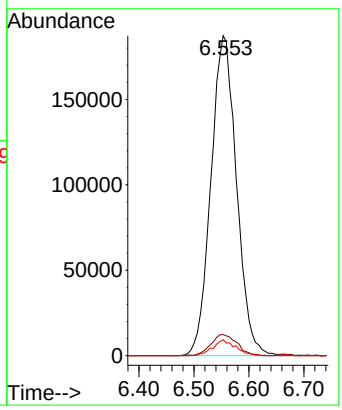




#21
1,1-Dichloroethane
Concen: 102.873 ug/l
RT: 6.553 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 63 Resp: 60563

Ion	Ratio	Lower	Upper
63	100		
98	6.6	2.9	8.8
100	5.0	1.8	5.3



Instrument :
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ClientSampleId :
VSTDICC100

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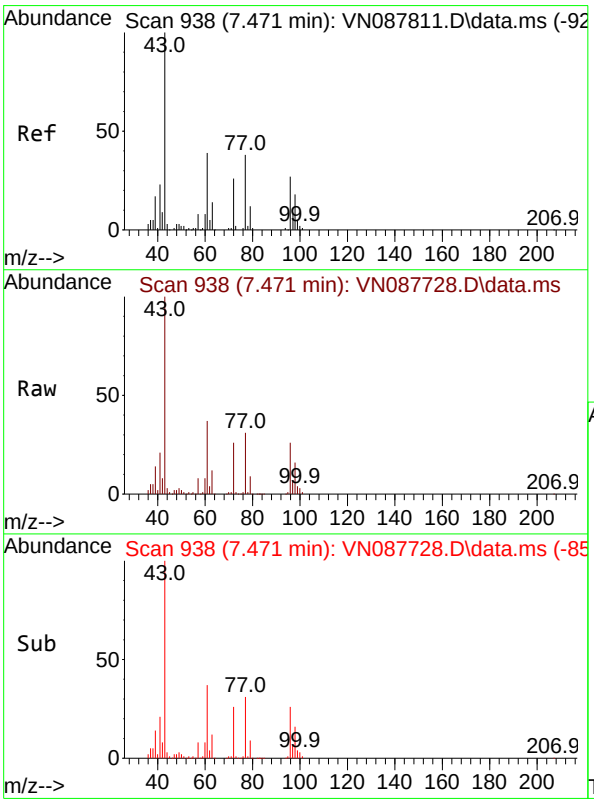
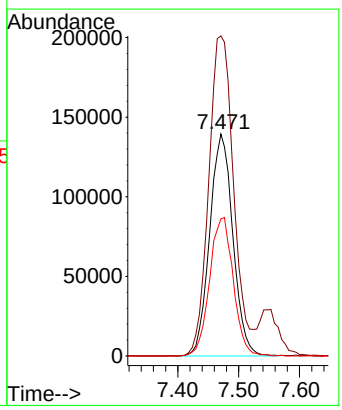
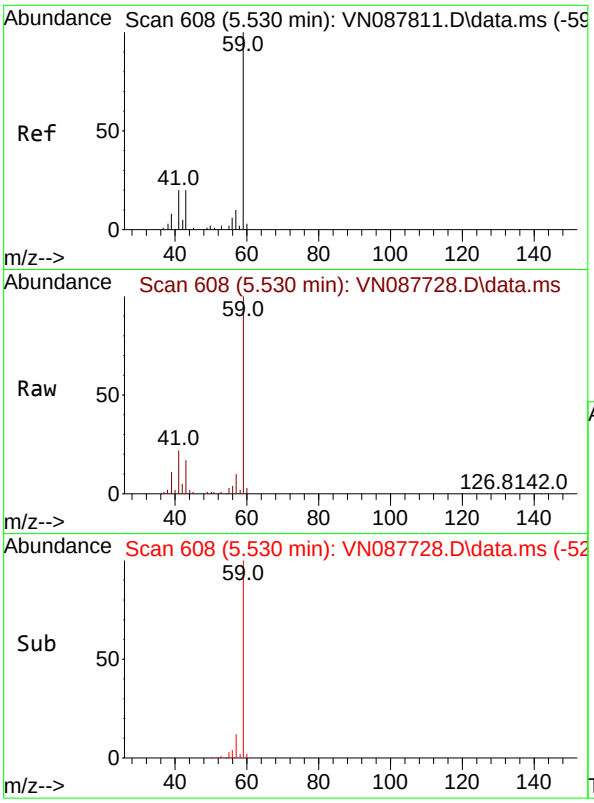


#22
cis-1,2-Dichloroethene
Concen: 102.956 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 96 Resp: 370129

Ion	Ratio	Lower	Upper
96	100		
61	154.4	118.2	177.2
98	63.2	51.6	77.4

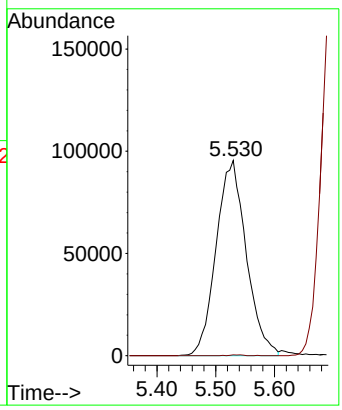




#23
tert-Butyl Alcohol
Concen: 414.715 ug/l
RT: 5.530 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 59 Resp: 34021

Ion	Ratio	Lower	Upper
59	100		
52	0.1	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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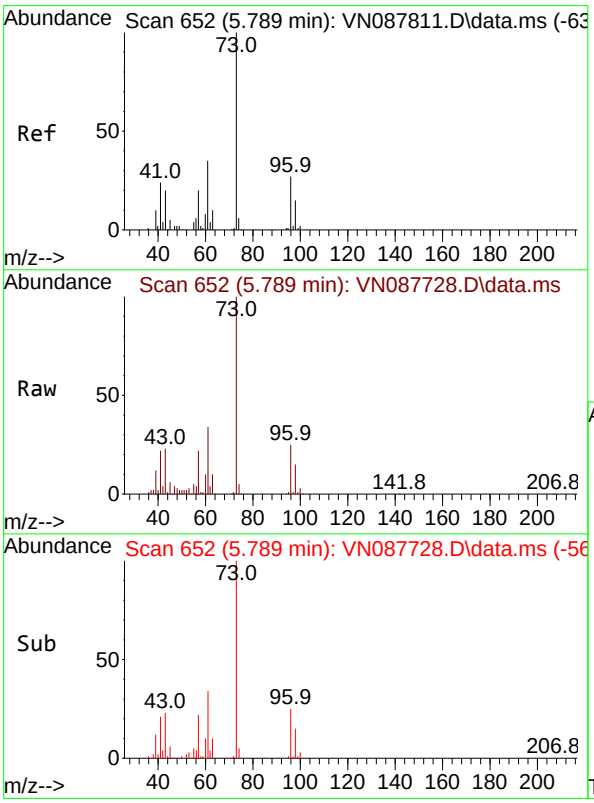
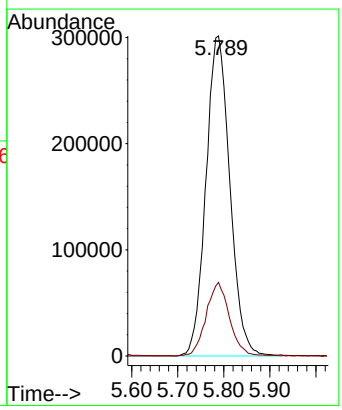
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

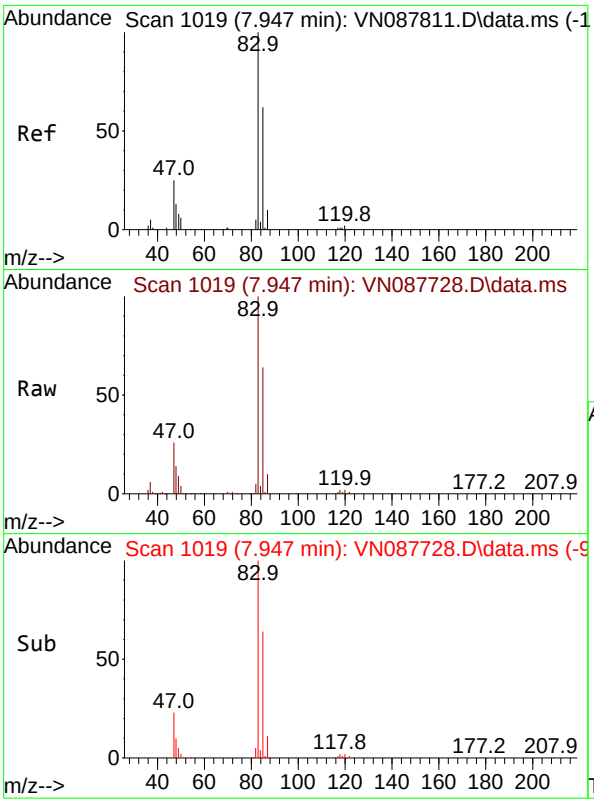


#24
Methyl tert-Butyl Ether
Concen: 98.657 ug/l
RT: 5.789 min Scan# 652
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 73 Resp: 1088266

Ion	Ratio	Lower	Upper
73	100		
43	22.5	16.8	25.2





#25
Chloroform
Concen: 102.023 ug/l
RT: 7.947 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 83 Resp: 63233

Ion	Ratio	Lower	Upper
83	100		
85	63.4	47.7	71.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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Reviewed By :Semsettin Yesilyurt 09/05/2025
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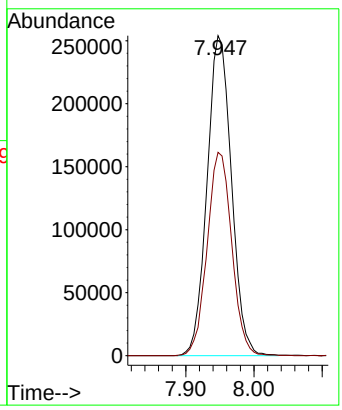
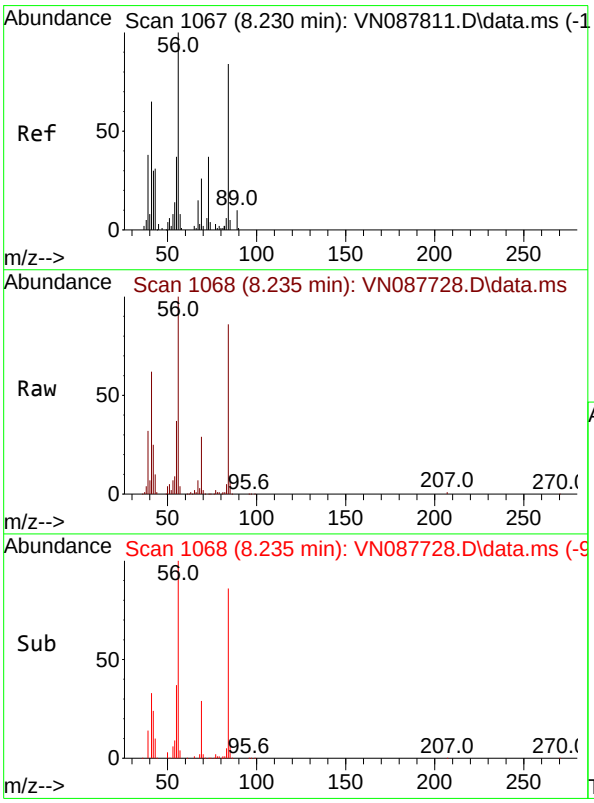
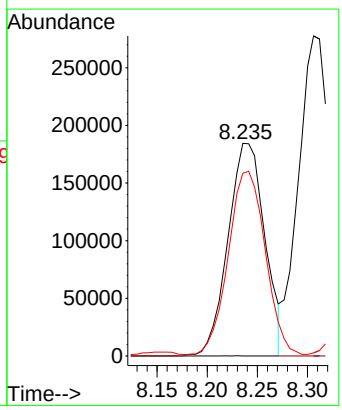


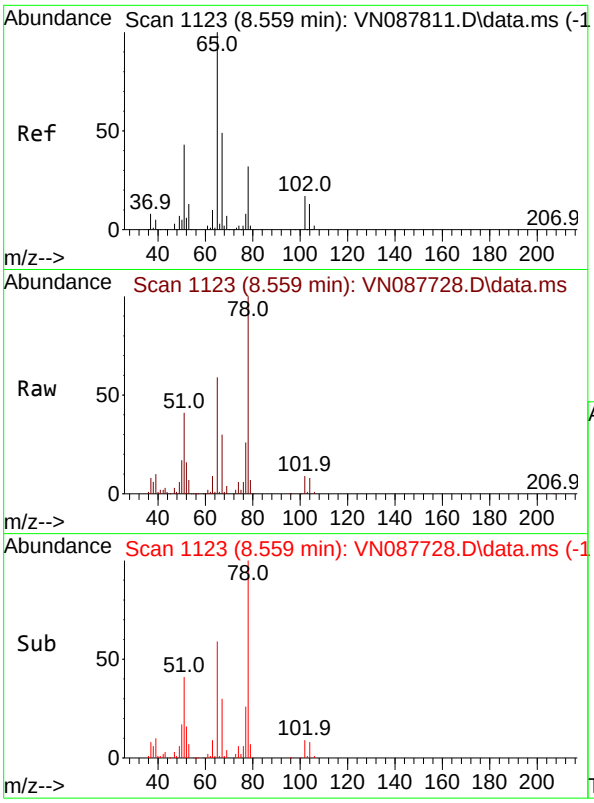


#26
Cyclohexane
Concen: 101.149 ug/l
RT: 8.235 min Scan# 1068
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 56 Resp: 470916

Ion	Ratio	Lower	Upper
56	100		
89	0.0	0.0	0.0#
84	88.1	69.4	104.2





#27
1,2-Dichloroethane-d4
Concen: 27.758 ug/l
RT: 8.559 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 65 Resp: 11710

Ion	Ratio	Lower	Upper
65	100		
67	51.7	39.6	59.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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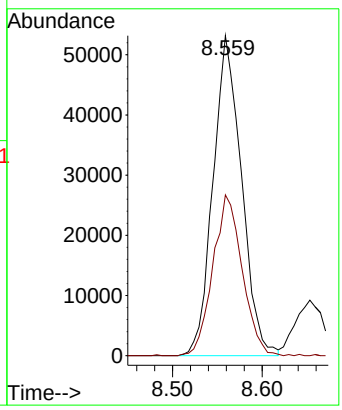
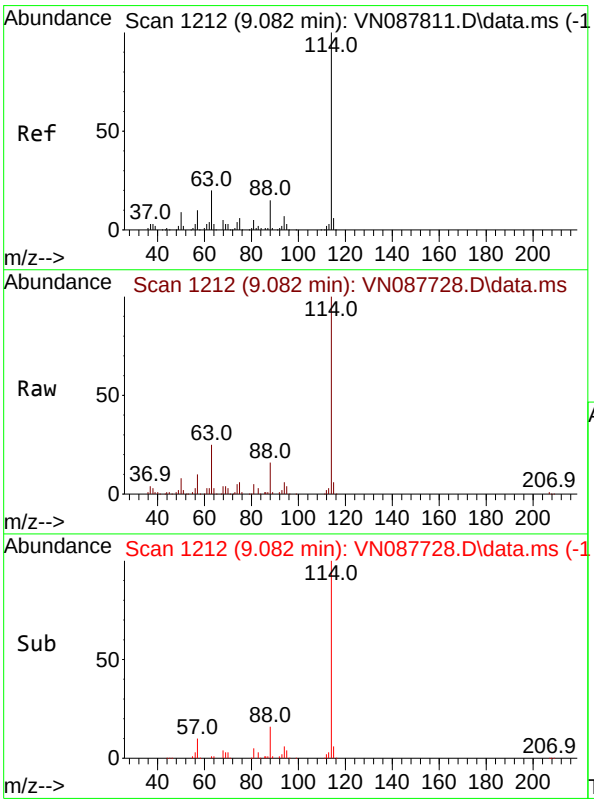
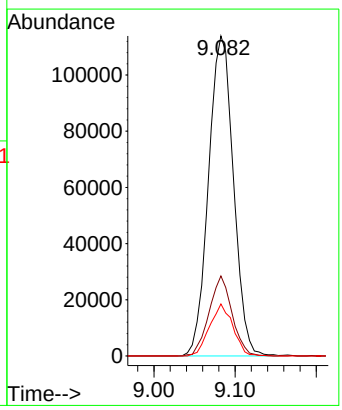


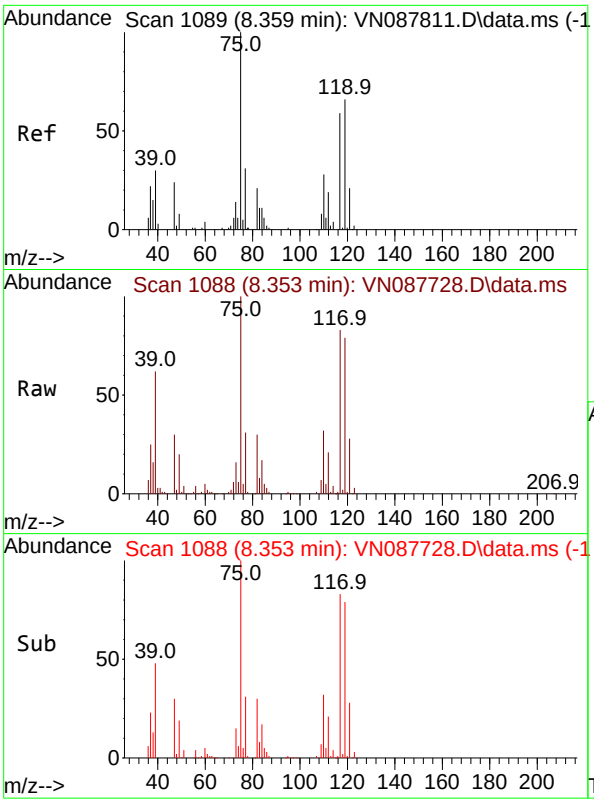


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:114 Resp: 242946

Ion	Ratio	Lower	Upper
114	100		
63	23.1	18.3	27.5
88	15.2	12.4	18.6





#29
1,1-Dichloropropene
Concen: 107.353 ug/l
RT: 8.353 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 75 Resp: 41804

Ion	Ratio	Lower	Upper
75	100		
110	31.7	0.0	64.4
77	30.1	0.0	62.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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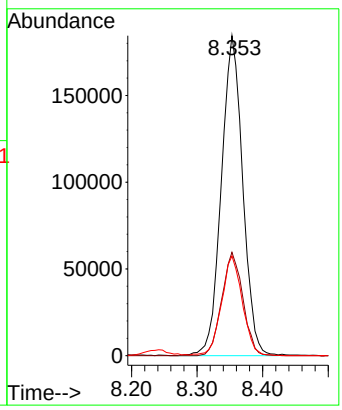
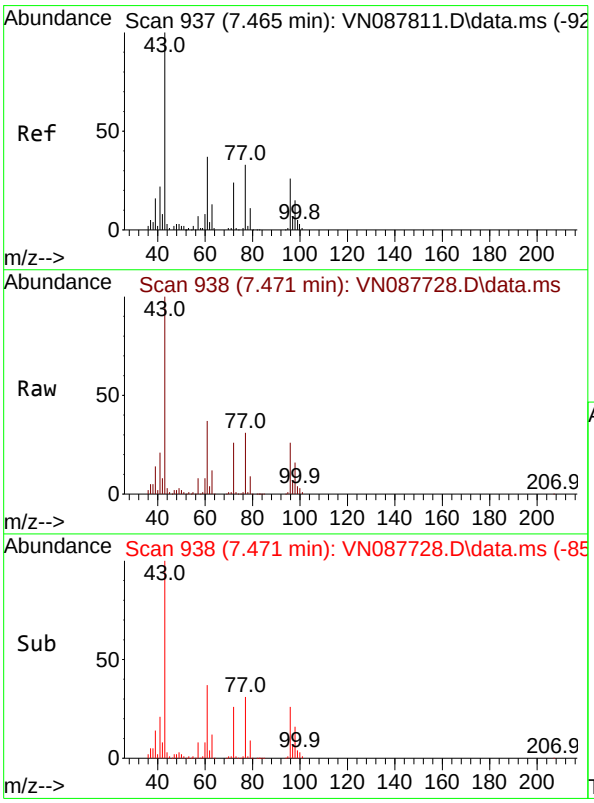
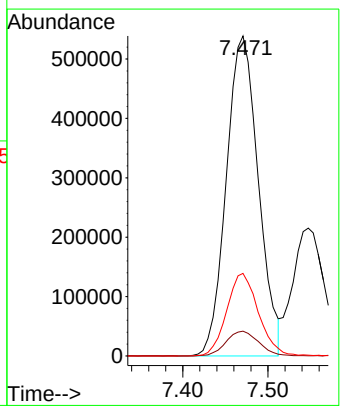


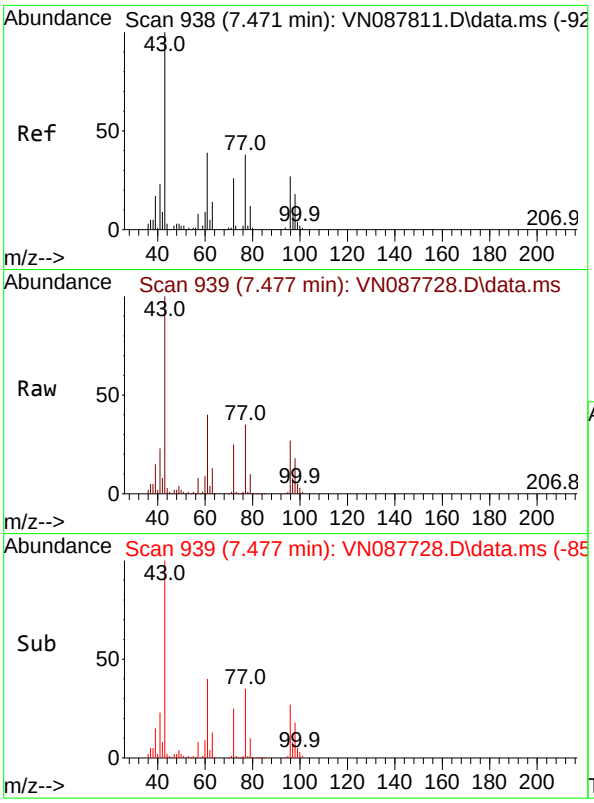


#30
2-Butanone
Concen: 499.926 ug/l
RT: 7.471 min Scan# 938
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 43 Resp: 1409990

Ion	Ratio	Lower	Upper
43	100		
57	7.9	6.3	9.5
72	25.5	21.4	32.2

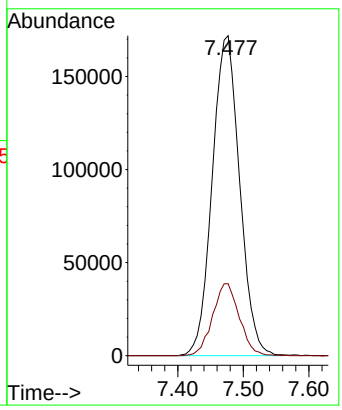




#31
2,2-Dichloropropane
Concen: 102.230 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 77 Resp: 49876

Ion	Ratio	Lower	Upper
77	100		
97	21.9	17.1	25.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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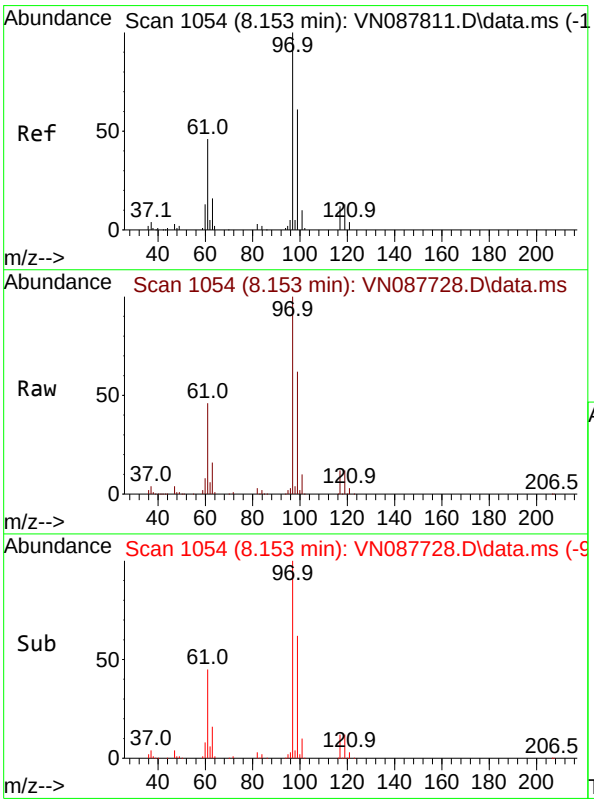
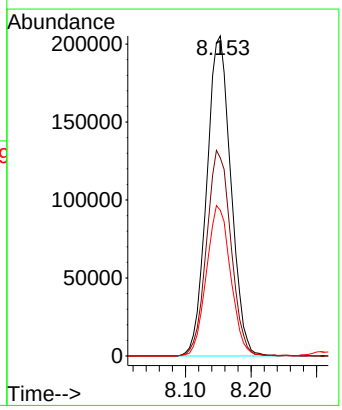
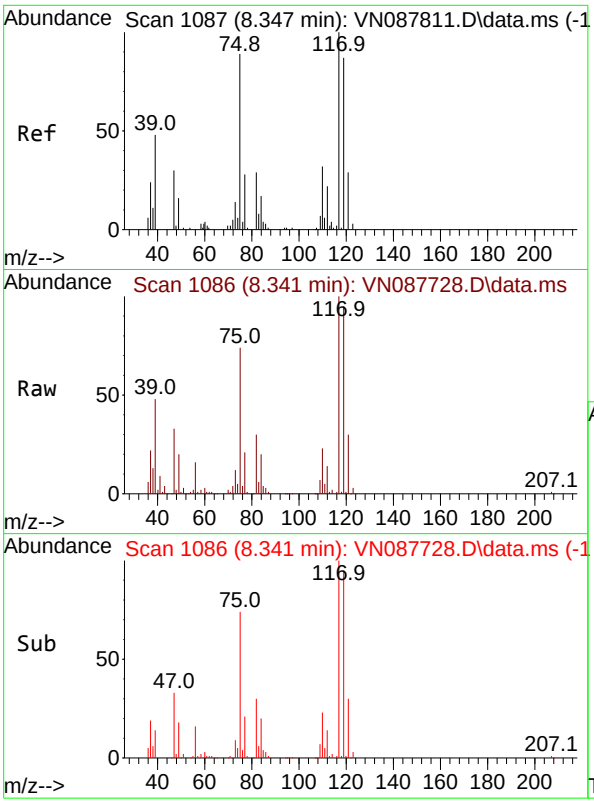


#32
1,1,1-Trichloroethane
Concen: 104.920 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 97 Resp: 524015

Ion	Ratio	Lower	Upper
97	100		
99	64.8	52.2	78.4
61	47.1	37.9	56.9

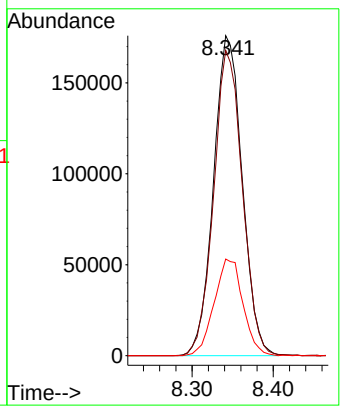




#33
Carbon Tetrachloride
Concen: 105.102 ug/l
RT: 8.341 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:117 Resp: 43197

Ion	Ratio	Lower	Upper
117	100		
119	95.3	77.3	115.9
121	30.2	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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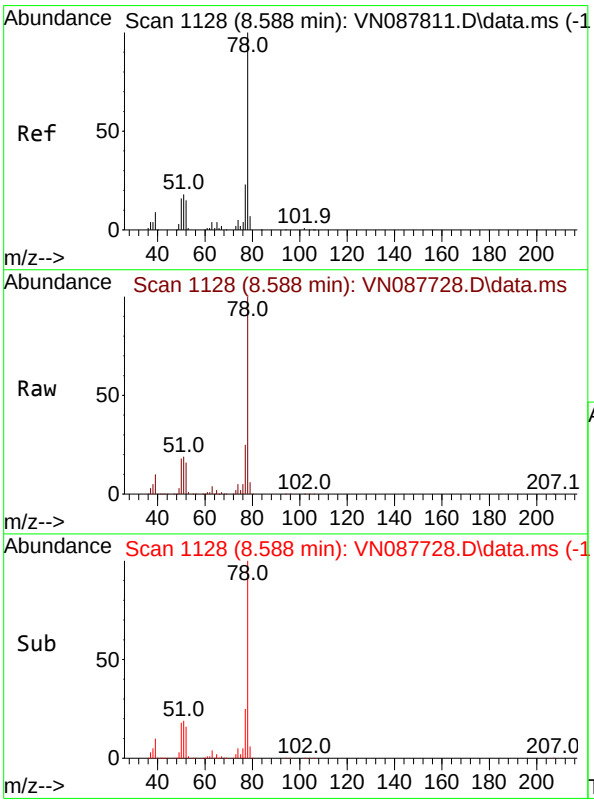
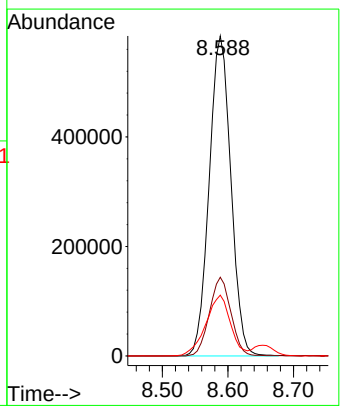
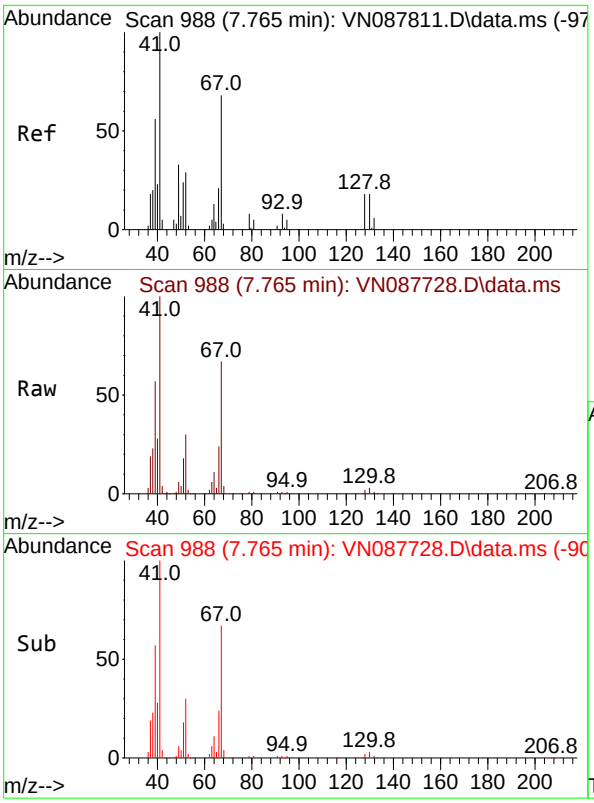


#34
Benzene
Concen: 108.630 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 78 Resp: 1341472

Ion	Ratio	Lower	Upper
78	100		
77	24.6	20.3	30.5
51	18.9	18.0	27.0

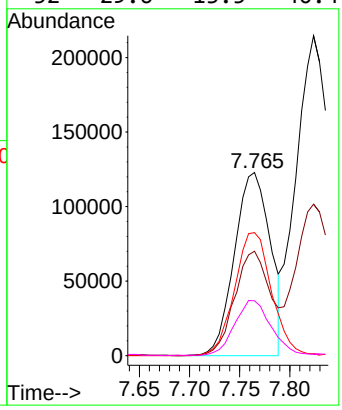




#35
Methacrylonitrile
Concen: 99.759 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 41 Resp: 30564

Ion	Ratio	Lower	Upper
41	100		
39	57.0	27.1	81.2
67	67.2	32.1	96.5
52	29.6	13.5	40.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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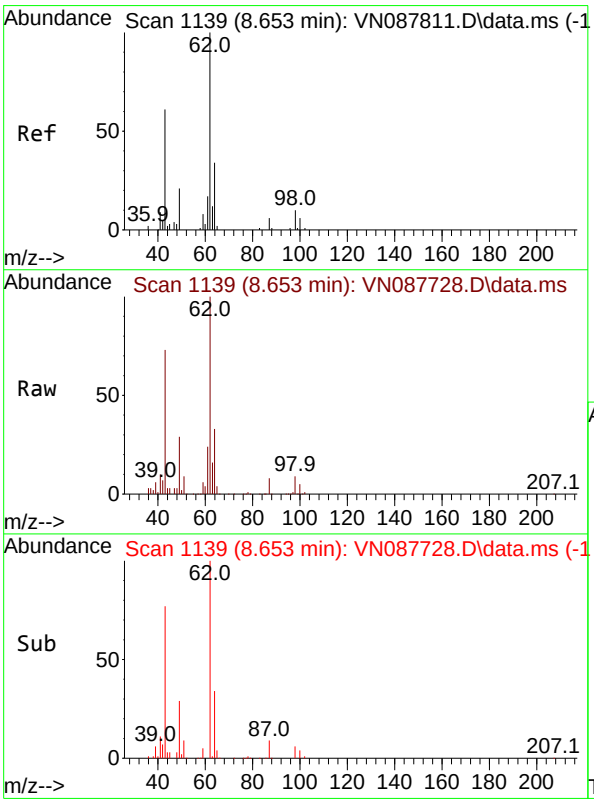
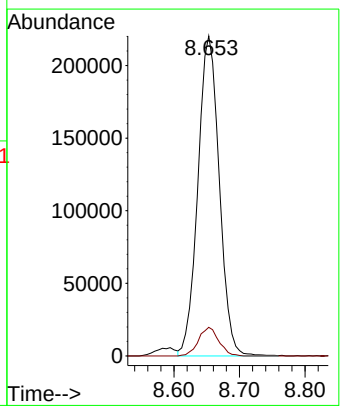
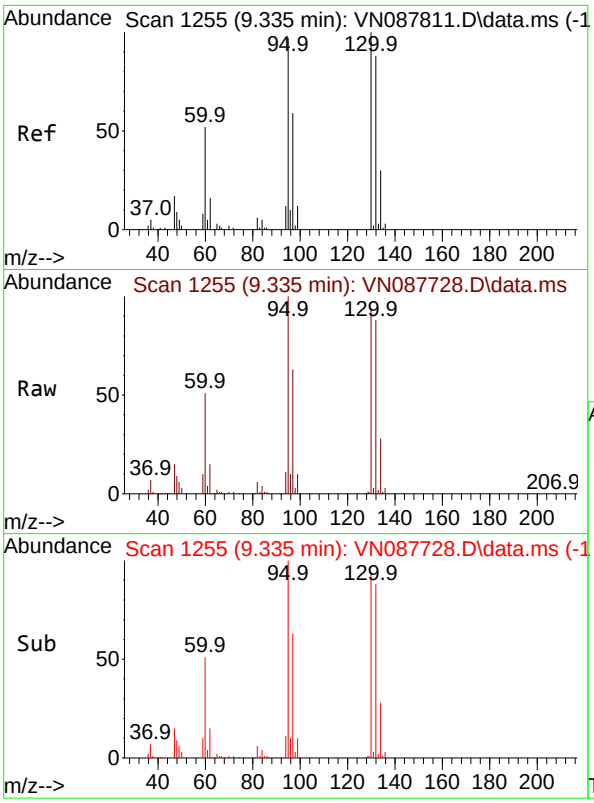


#36
1,2-Dichloroethane
Concen: 101.728 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 62 Resp: 500793

Ion	Ratio	Lower	Upper
62	100		
98	8.5	7.2	10.8

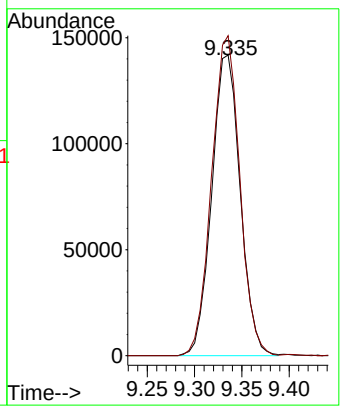




#37
Trichloroethene
Concen: 109.044 ug/l
RT: 9.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:130 Resp: 29654

Ion	Ratio	Lower	Upper
130	100		
95	106.5	82.7	124.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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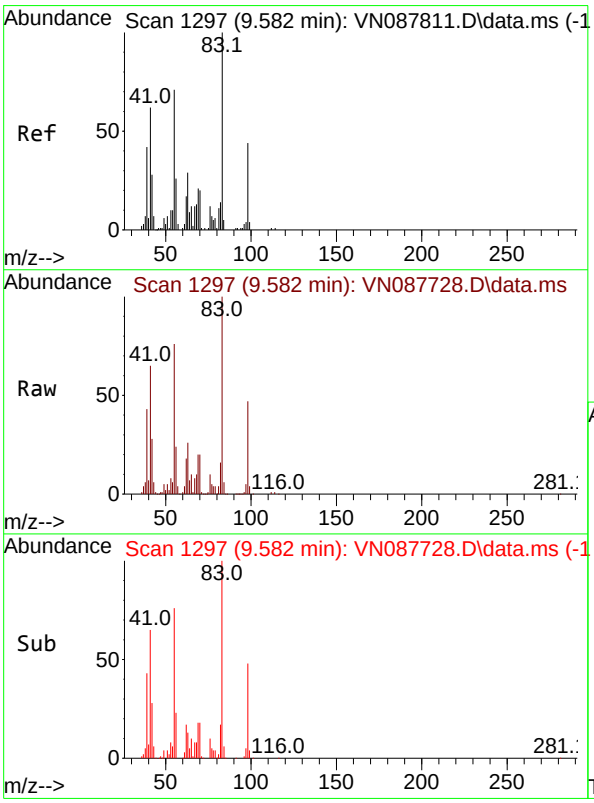
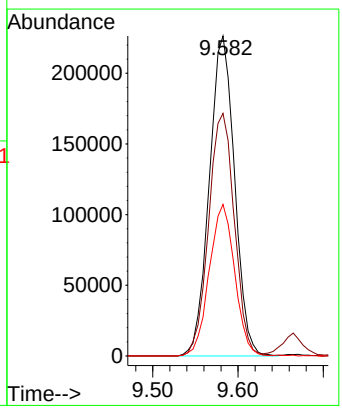
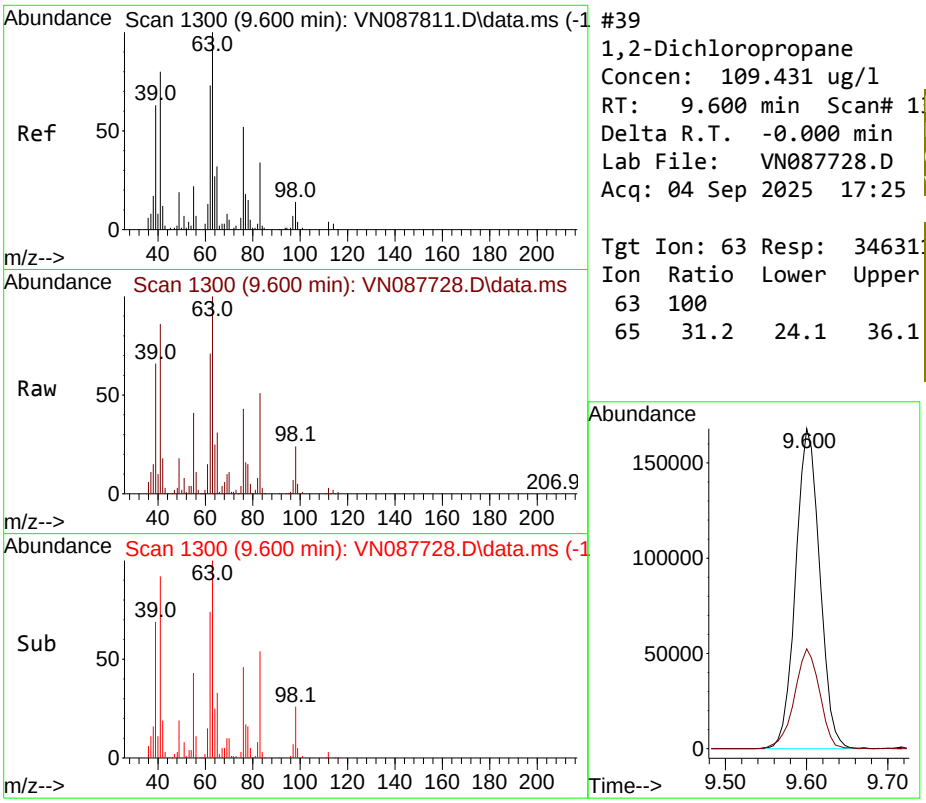


#38
Methylcyclohexane
Concen: 104.964 ug/l
RT: 9.582 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 83 Resp: 466295

Ion	Ratio	Lower	Upper
83	100		
55	77.2	40.4	121.1
98	47.6	24.0	72.0





#39
1,2-Dichloropropane
Concen: 109.431 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 63 Resp: 34631

Ion	Ratio	Lower	Upper
63	100		
65	31.2	24.1	36.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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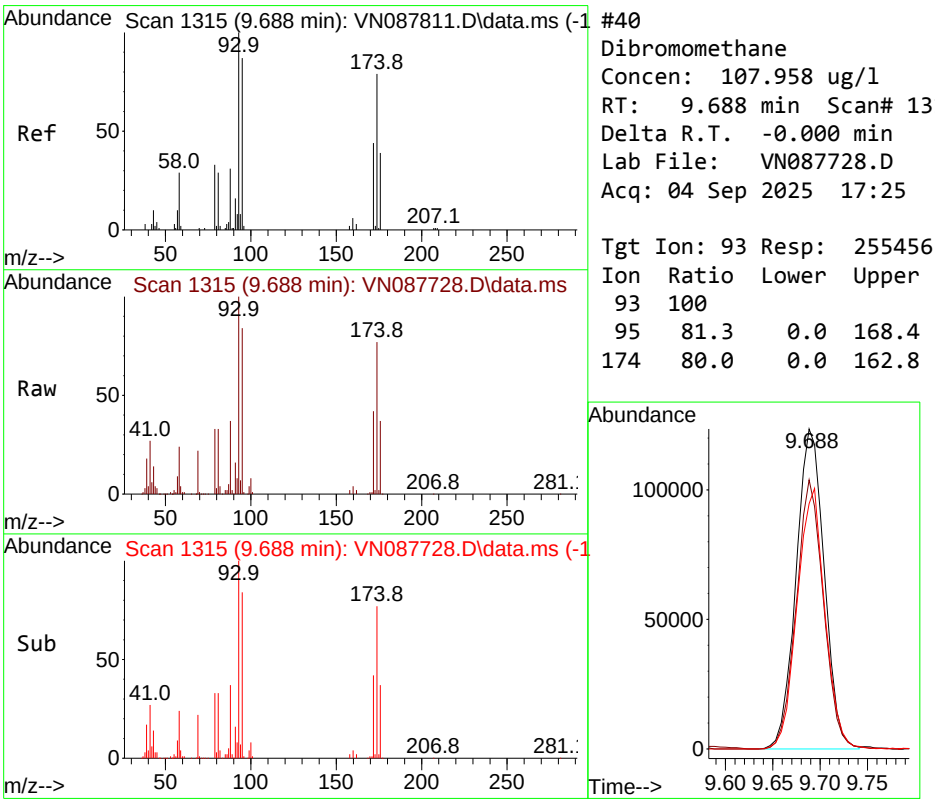
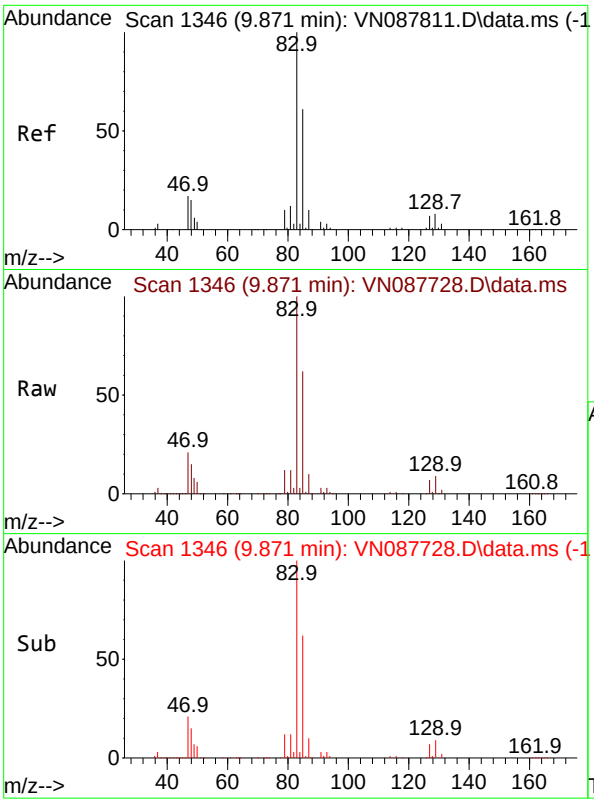


#40
Dibromomethane
Concen: 107.958 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 93 Resp: 255456

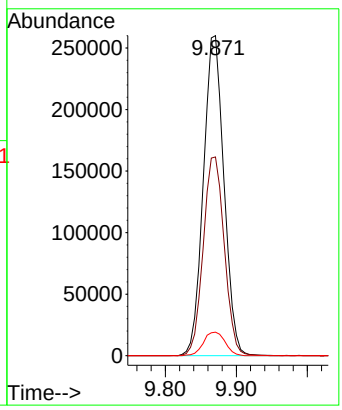
Ion	Ratio	Lower	Upper
93	100		
95	81.3	0.0	168.4
174	80.0	0.0	162.8



#41
Bromodichloromethane
Concen: 106.078 ug/l
RT: 9.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 83 Resp: 52417

Ion	Ratio	Lower	Upper
83	100		
85	62.1	47.3	70.9
127	7.4	5.2	7.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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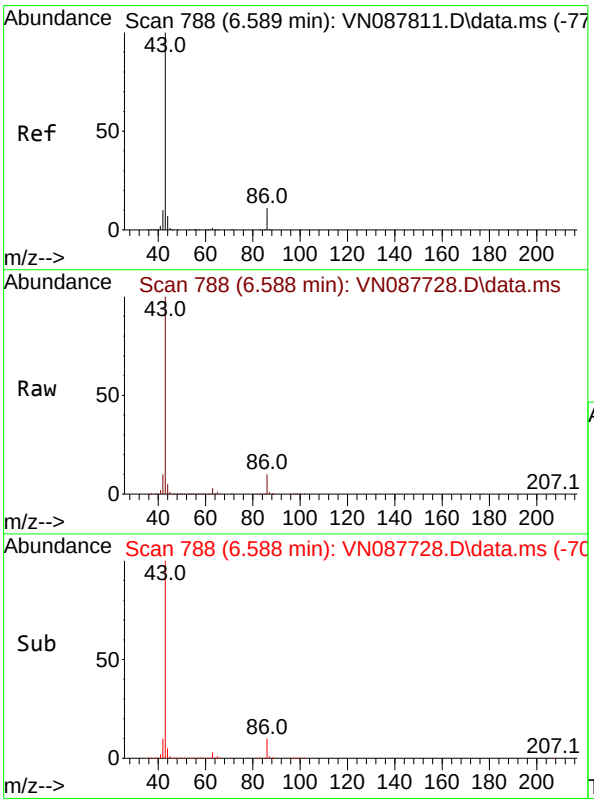
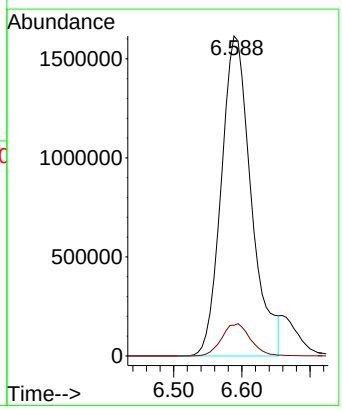
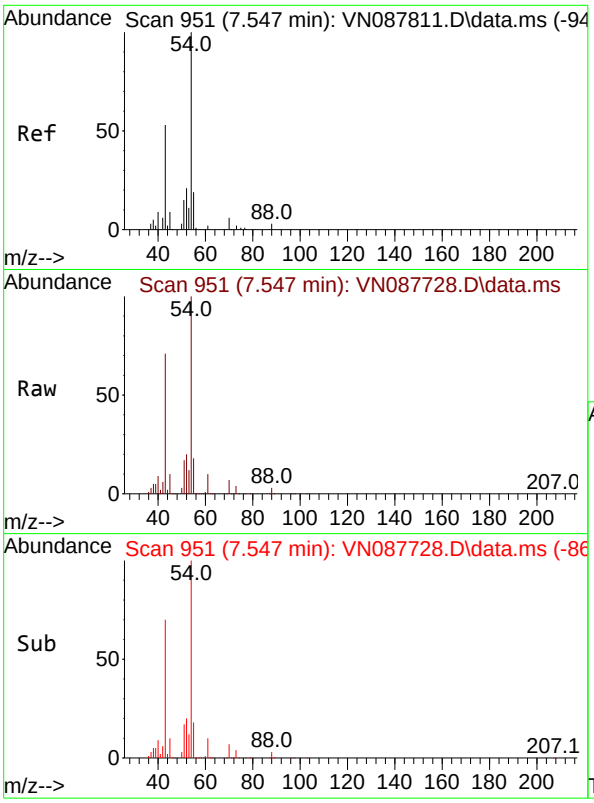


#42
Vinyl Acetate
Concen: 532.259 ug/l
RT: 6.588 min Scan# 788
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 43 Resp: 4938740

Ion	Ratio	Lower	Upper
43	100		
86	9.7	7.7	11.5

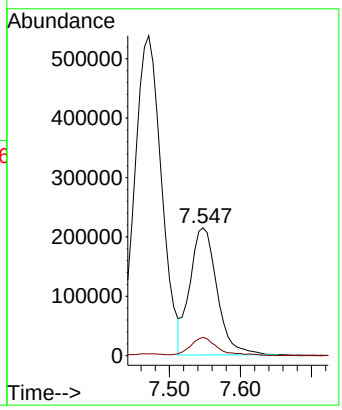




#43
Ethyl Acetate
Concen: 102.596 ug/l
RT: 7.547 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 43 Resp: 57026

Ion	Ratio	Lower	Upper
43	100		
45	12.5	10.5	15.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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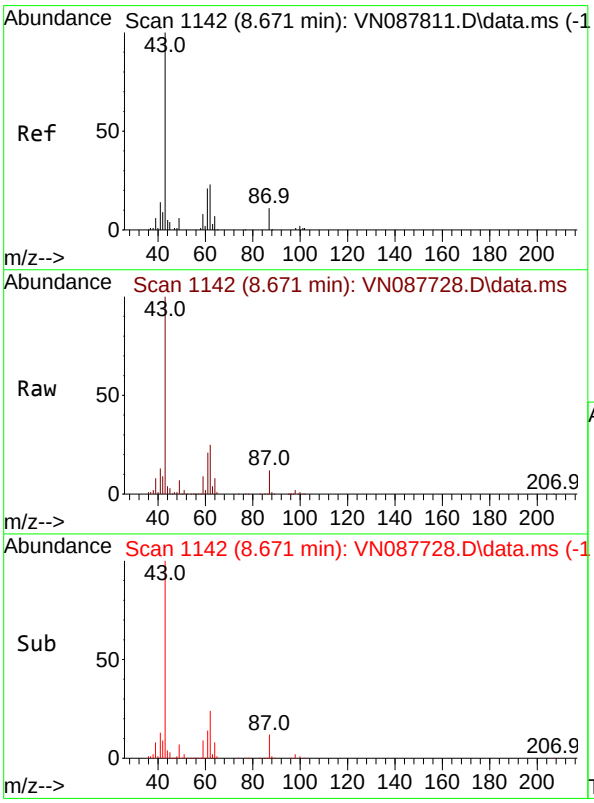
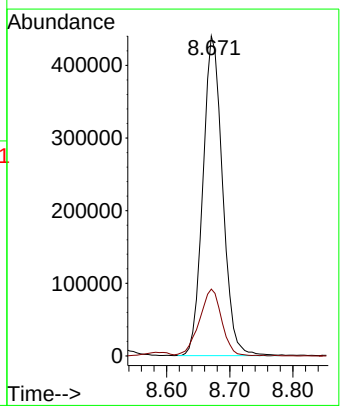
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

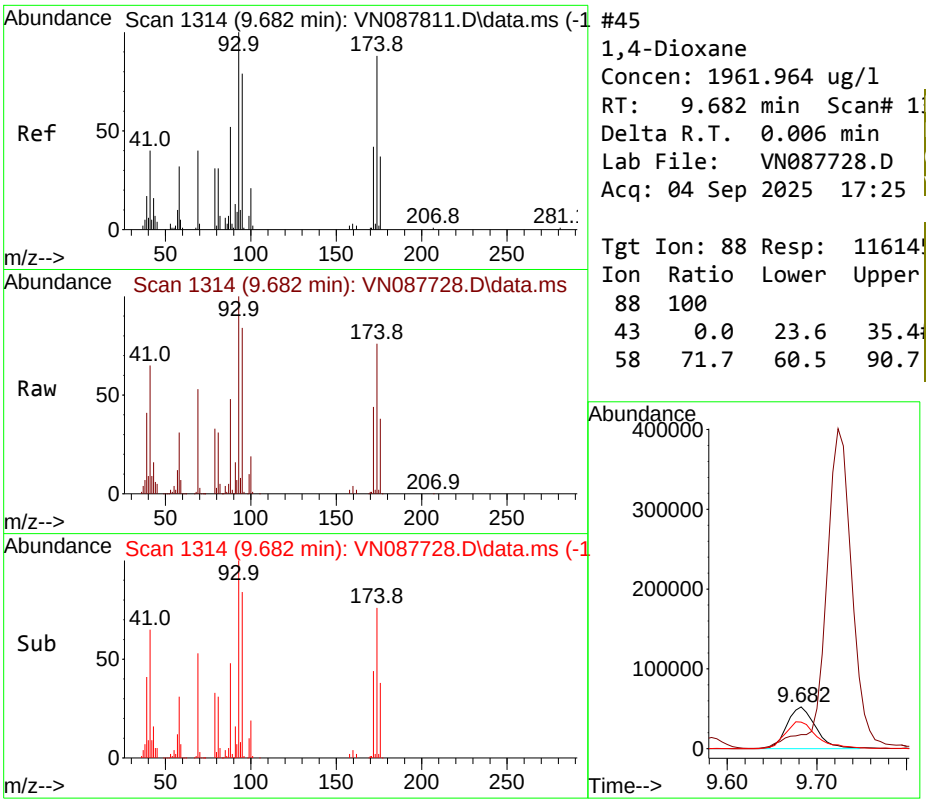


#44
Isopropyl Acetate
Concen: 102.889 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 43 Resp: 951384

Ion	Ratio	Lower	Upper
43	100		
61	23.8	19.5	29.3





#45
1,4-Dioxane
Concen: 1961.964 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 88 Resp: 11614

Ion	Ratio	Lower	Upper
88	100		
43	0.0	23.6	35.4
58	71.7	60.5	90.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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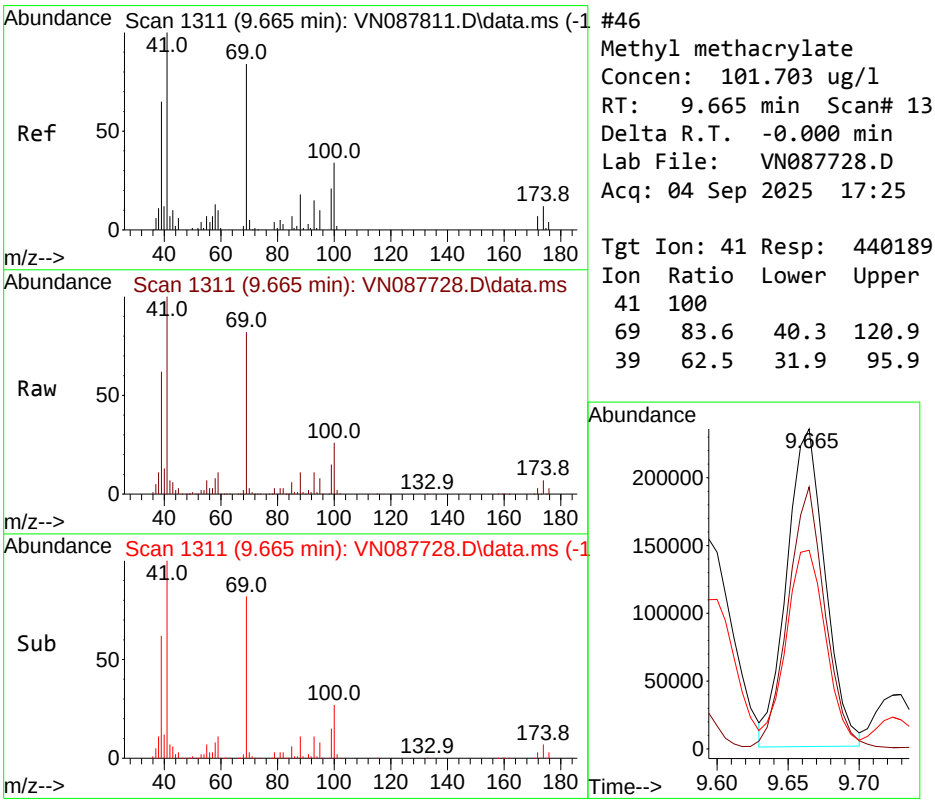
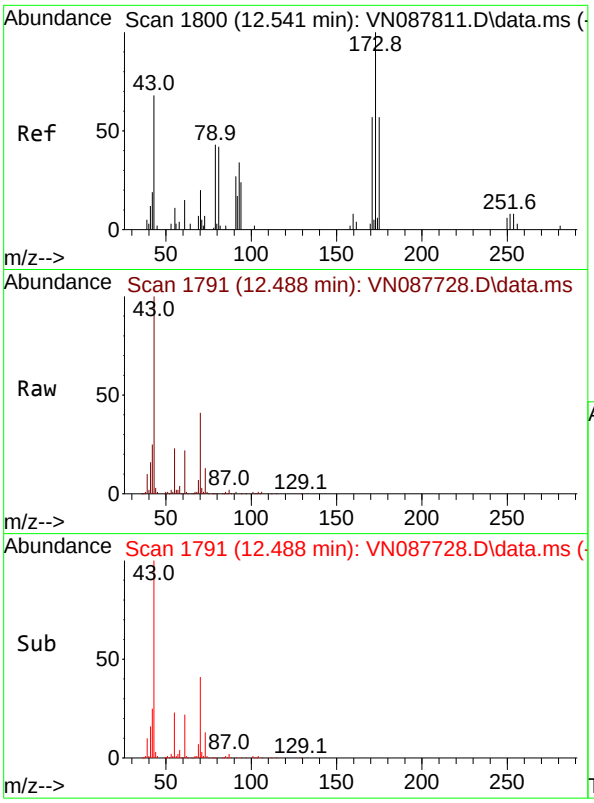


#46
Methyl methacrylate
Concen: 101.703 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 41 Resp: 440189

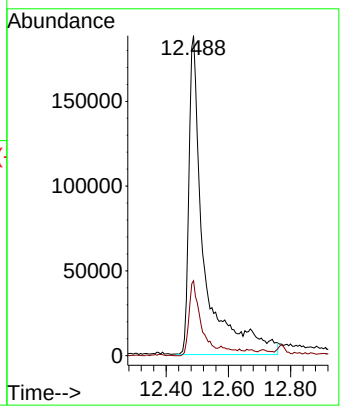
Ion	Ratio	Lower	Upper
41	100		
69	83.6	40.3	120.9
39	62.5	31.9	95.9



#47
n-amyl Acetate
Concen: 119.074 ug/l m
RT: 12.488 min Scan# 1
Delta R.T. -0.183 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 43 Resp: 64017

Ion	Ratio	Lower	Upper
43	100		
55	0.1	0.7	1.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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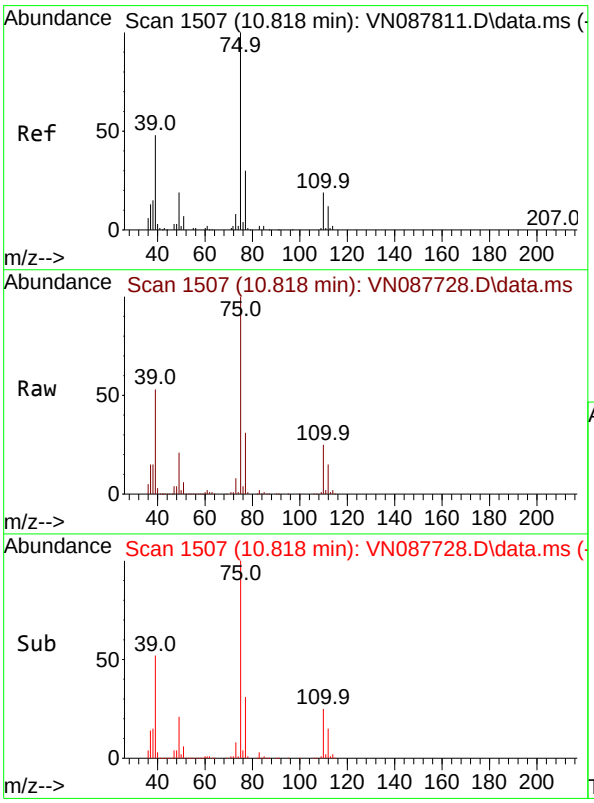
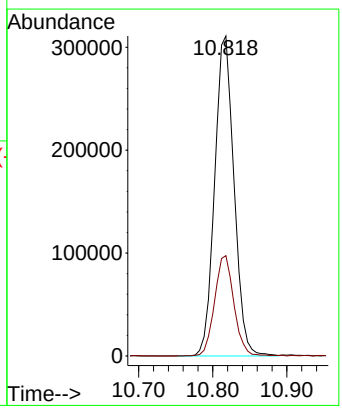
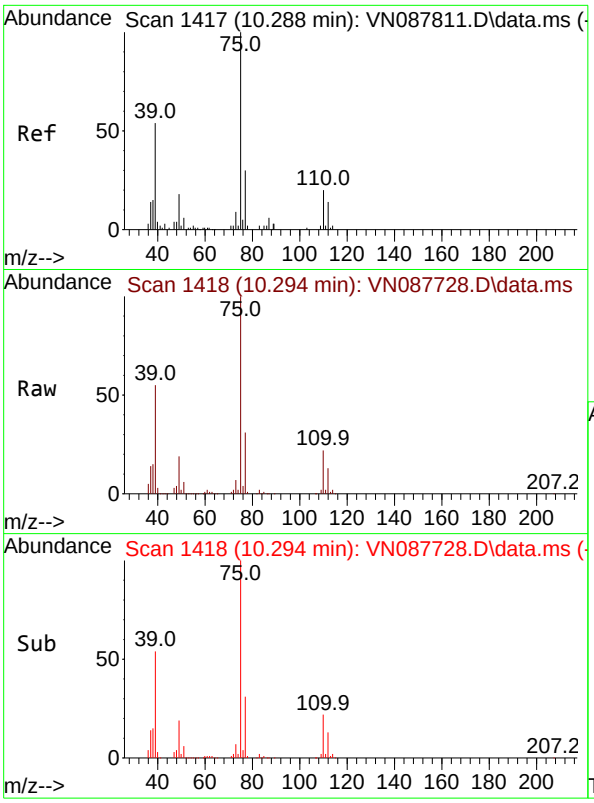


#48
t-1,3-Dichloropropene
Concen: 106.986 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 75 Resp: 563552

Ion	Ratio	Lower	Upper
75	100		
77	31.3	24.7	37.1





#49
cis-1,3-Dichloropropene
Concen: 108.492 ug/l
RT: 10.294 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 75 Resp: 57677

Ion	Ratio	Lower	Upper
75	100		
77	31.0	27.8	41.6
39	54.5	47.6	71.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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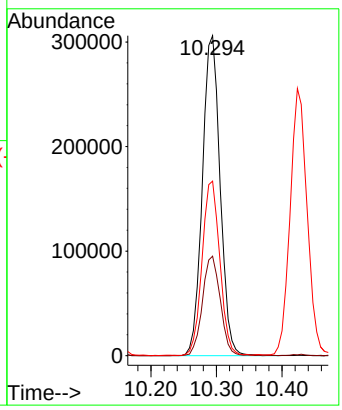
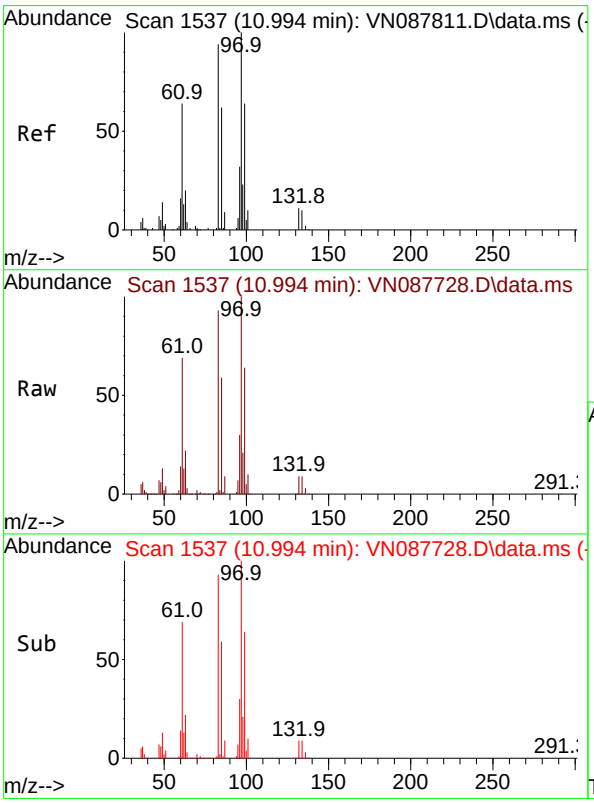
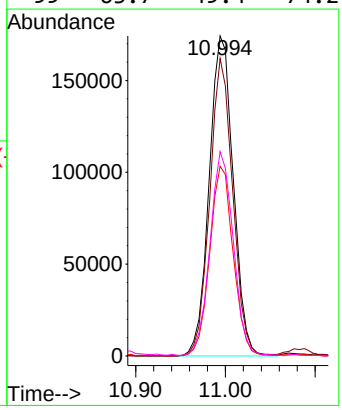


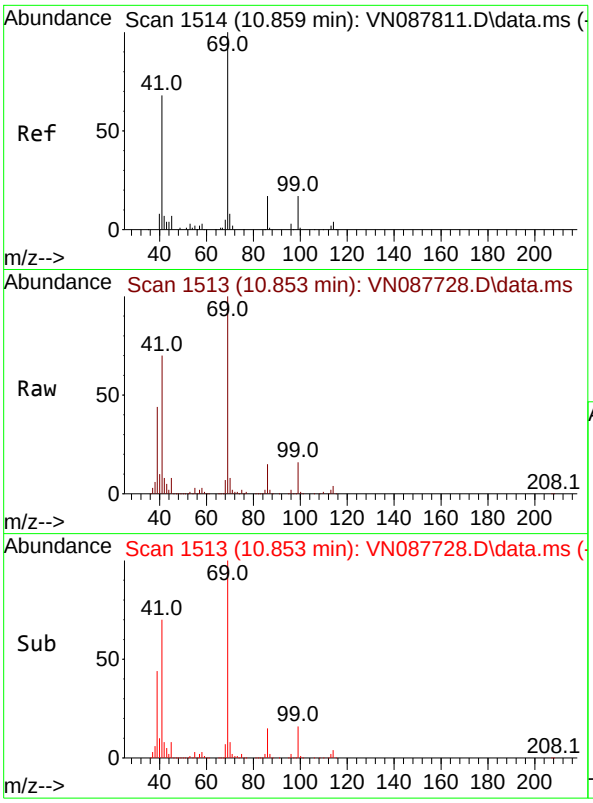


#50
1,1,2-Trichloroethane
Concen: 108.095 ug/l
RT: 10.994 min Scan# 1537
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 97 Resp: 324897

Ion	Ratio	Lower	Upper
97	100		
83	92.9	70.5	105.7
85	59.1	46.3	69.5
99	63.7	49.4	74.2

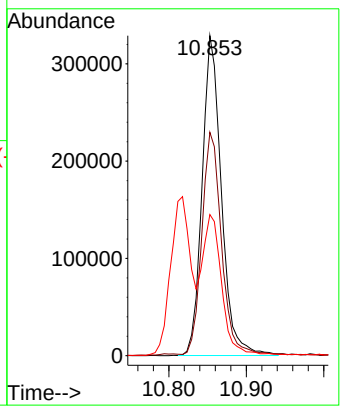




#51
Ethyl methacrylate
Concen: 111.057 ug/l
RT: 10.853 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 69 Resp: 56956

Ion	Ratio	Lower	Upper
69	100		
41	69.4	33.7	101.0
39	43.8	20.3	60.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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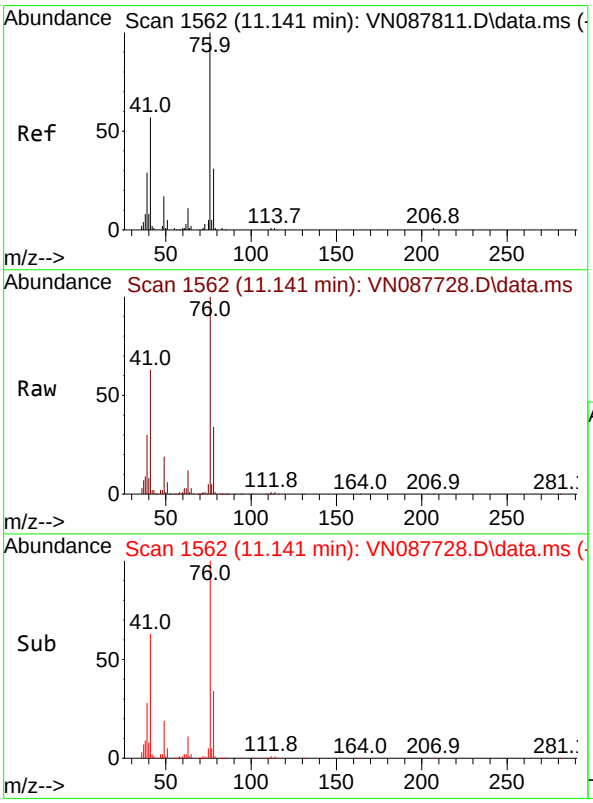
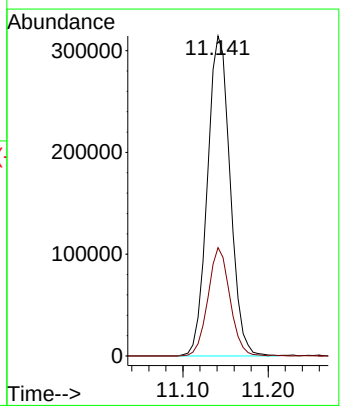
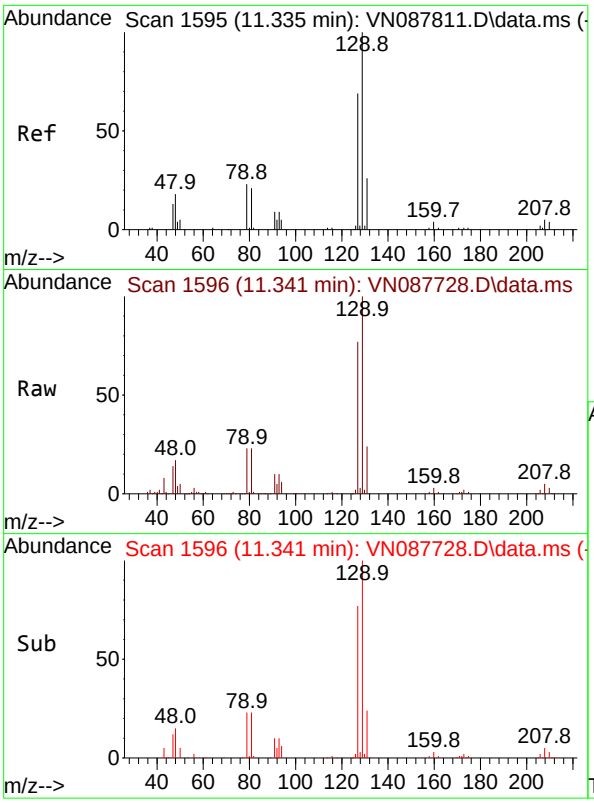


#52
1,3-Dichloropropane
Concen: 108.009 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 76 Resp: 582005

Ion	Ratio	Lower	Upper
76	100		
78	32.7	0.0	65.2

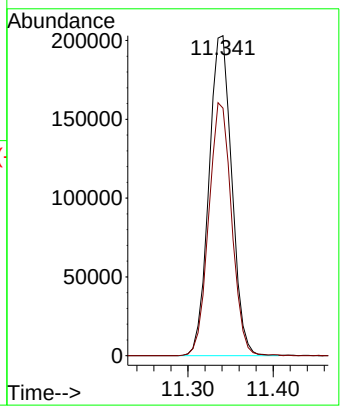




#53
Dibromochloromethane
Concen: 110.707 ug/l
RT: 11.341 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:129 Resp: 37876

Ion	Ratio	Lower	Upper
129	100		
127	78.8	42.6	128.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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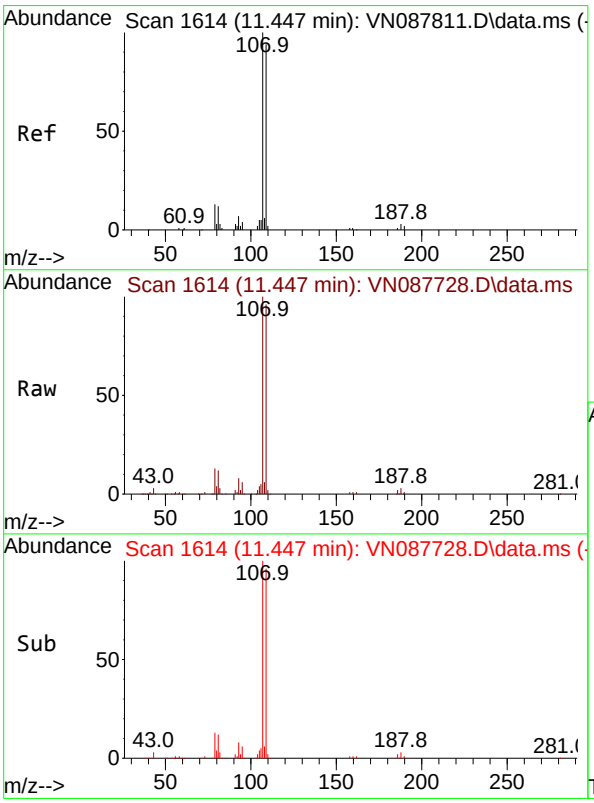
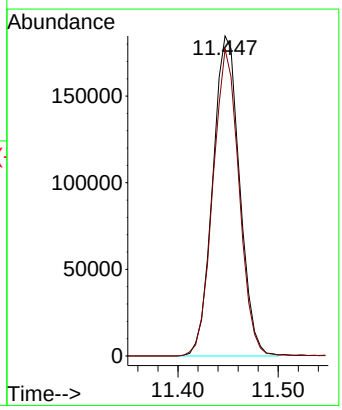
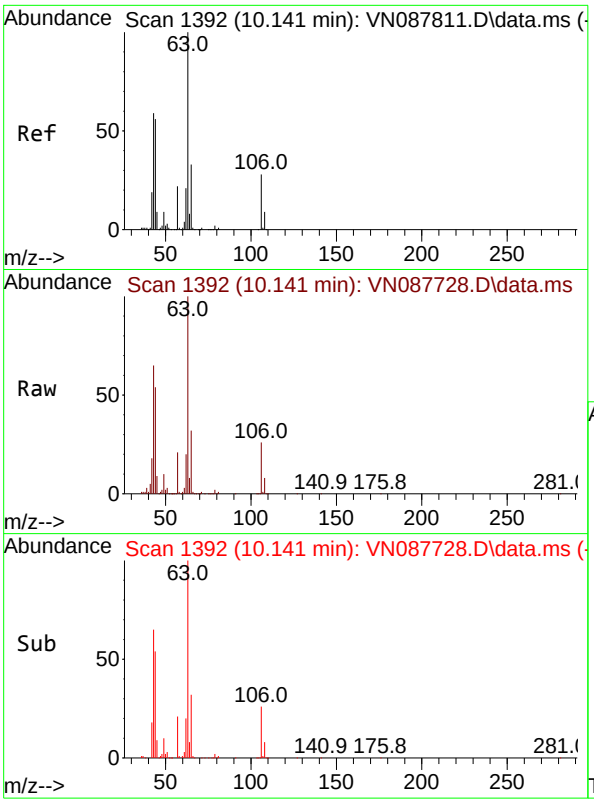


#54
1,2-Dibromoethane
Concen: 108.245 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:107 Resp: 342831

Ion	Ratio	Lower	Upper
107	100		
109	93.4	74.6	112.0





#55
2-Chloroethyl vinyl ether
Concen: 551.521 ug/l
RT: 10.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 63 Resp: 152823

Ion	Ratio	Lower	Upper
63	100		
65	32.1	26.6	40.0
106	26.5	21.1	31.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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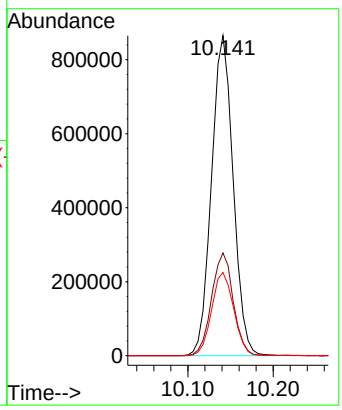
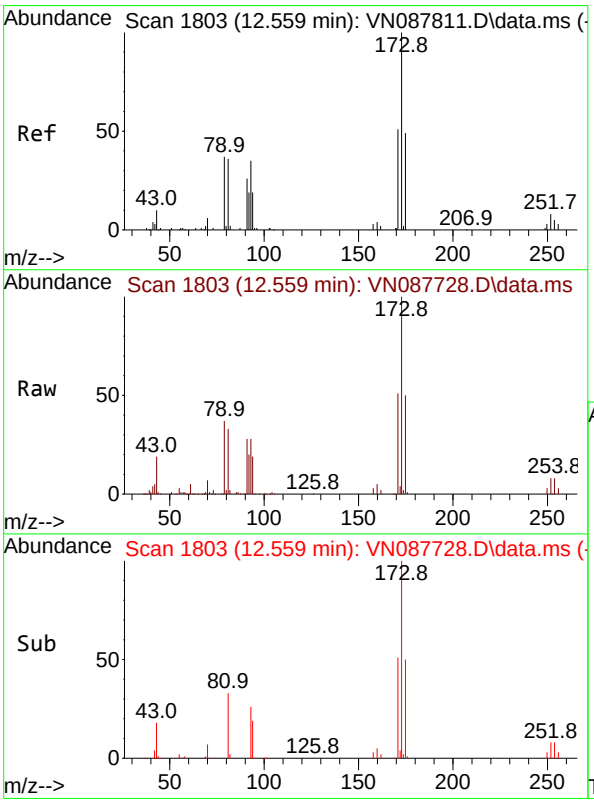
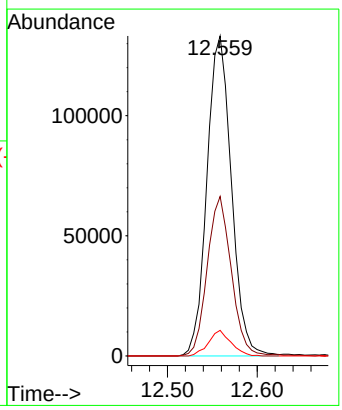


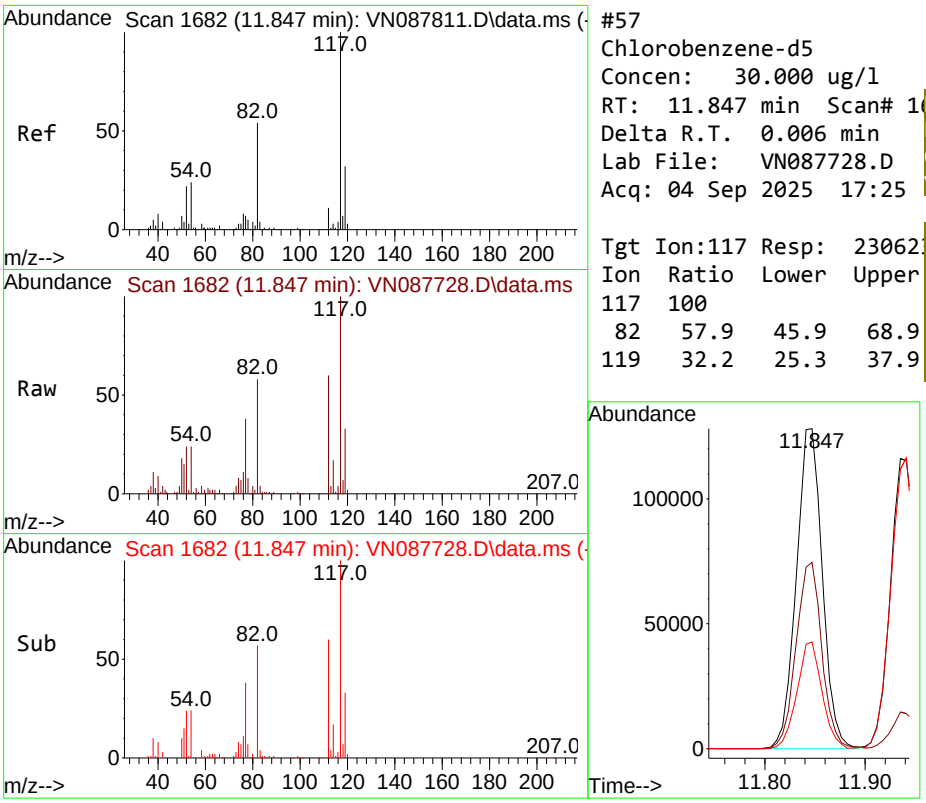


#56
Bromoform
Concen: 111.308 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:173 Resp: 252313

Ion	Ratio	Lower	Upper
173	100		
175	48.8	39.8	59.6
254	7.4	6.2	9.4





#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:117 Resp: 23062

Ion	Ratio	Lower	Upper
117	100		
82	57.9	45.9	68.9
119	32.2	25.3	37.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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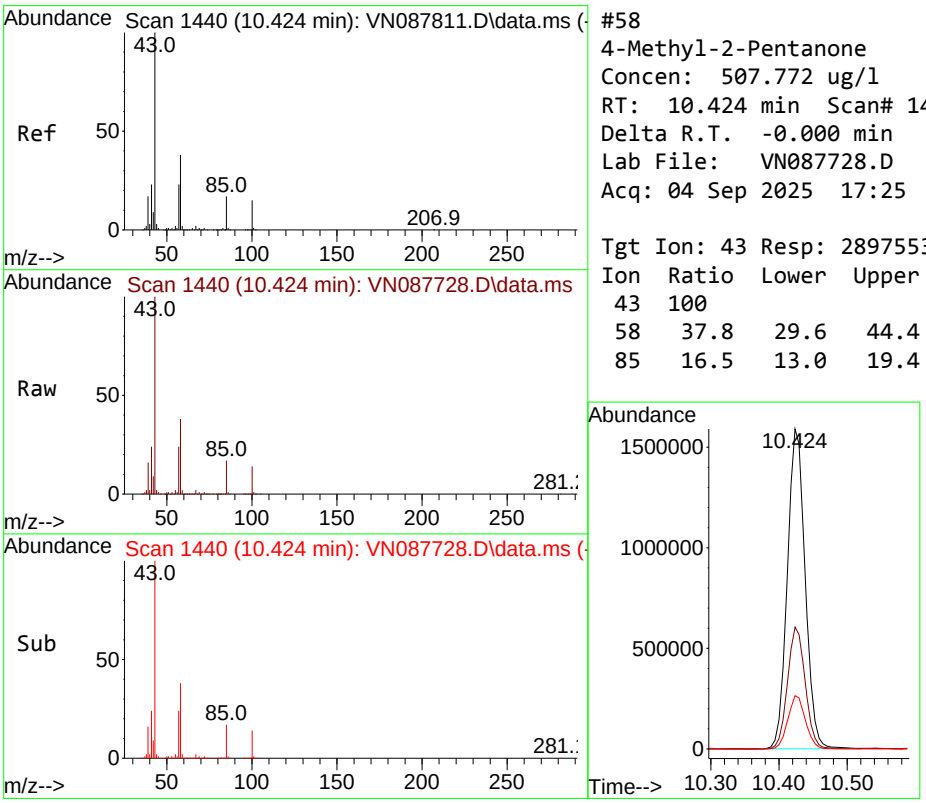
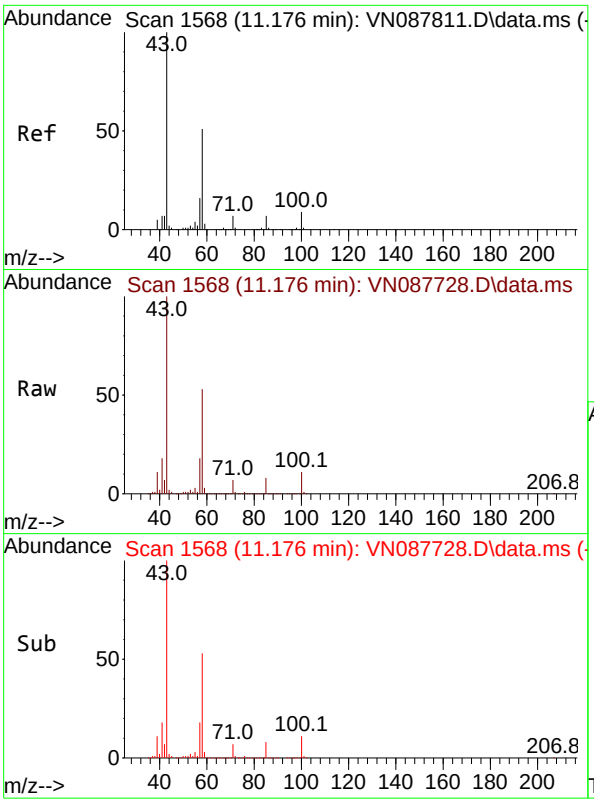


#58
4-Methyl-2-Pentanone
Concen: 507.772 ug/l
RT: 10.424 min Scan# 1440
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 43 Resp: 2897553

Ion	Ratio	Lower	Upper
43	100		
58	37.8	29.6	44.4
85	16.5	13.0	19.4



#59
2-Hexanone
Concen: 530.247 ug/l
RT: 11.176 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 43 Resp: 204916

Ion	Ratio	Lower	Upper
43	100		
58	52.6	40.2	60.4
57	18.3	13.7	20.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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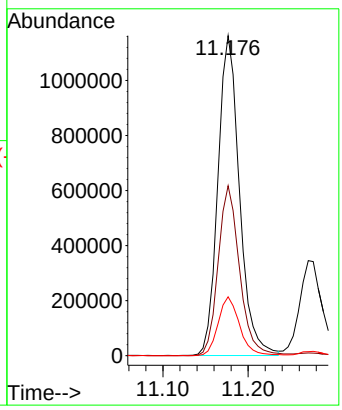
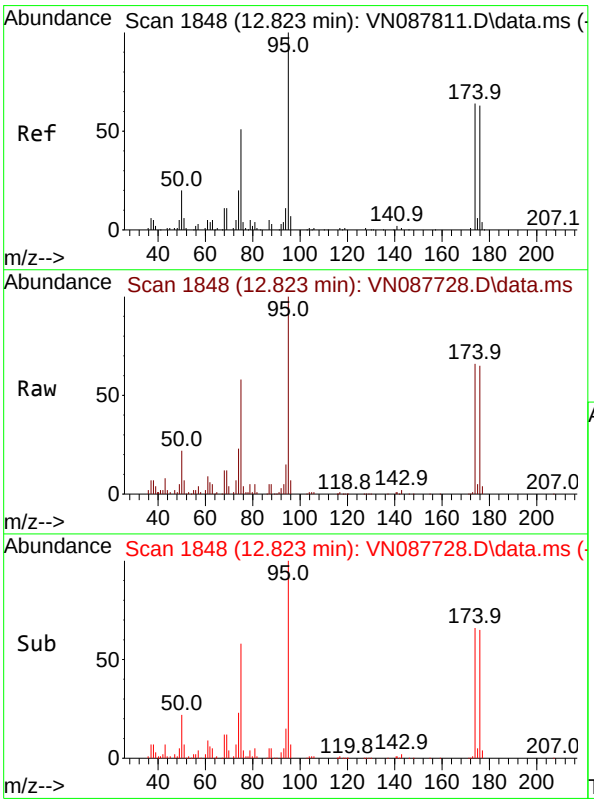
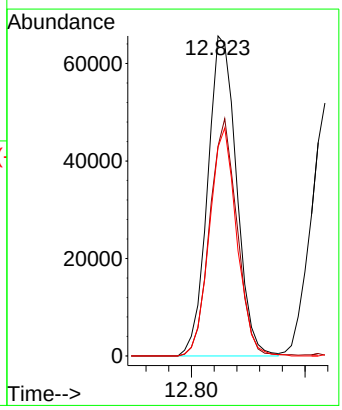


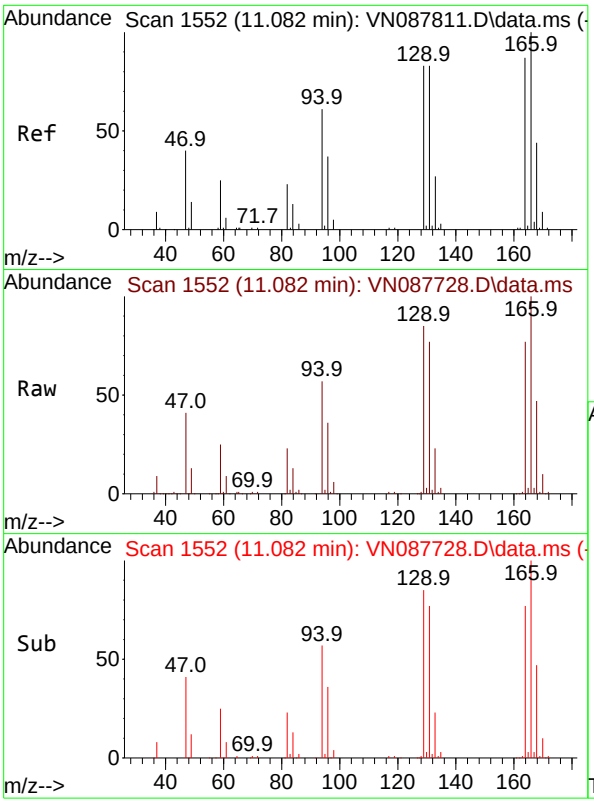


#60
4-Bromofluorobenzene
Concen: 29.459 ug/l
RT: 12.823 min Scan# 1848
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 95 Resp: 115538

Ion	Ratio	Lower	Upper
95	100		
174	70.2	55.4	83.0
176	67.8	51.5	77.3

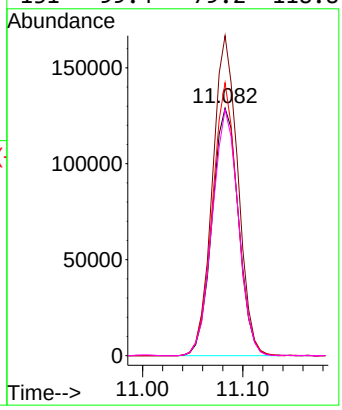




#61
Tetrachloroethene
Concen: 105.508 ug/l
RT: 11.082 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:164 Resp: 23488

Ion	Ratio	Lower	Upper
164	100		
166	129.3	97.3	145.9
129	110.3	78.6	117.8
131	99.4	79.2	118.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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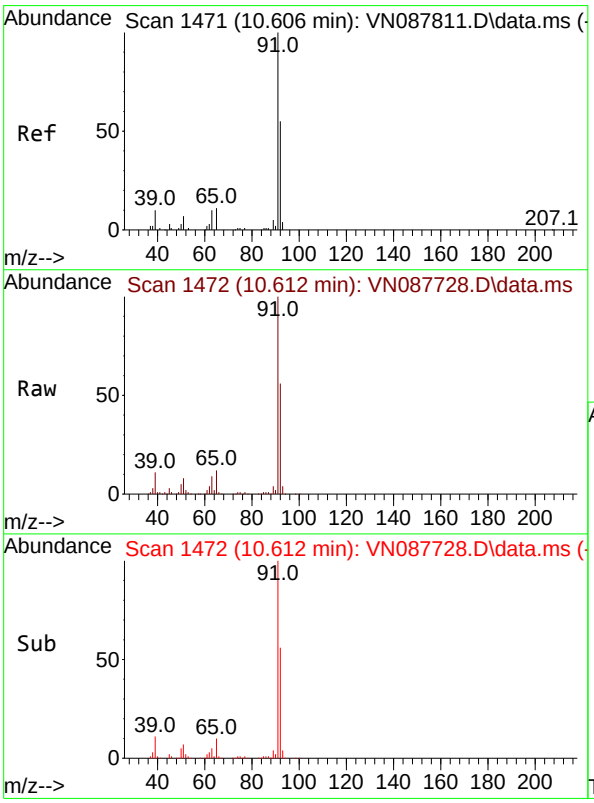
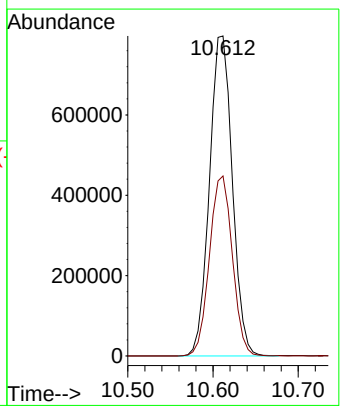
Supervised By :Mahesh Dadoda 09/05/2025

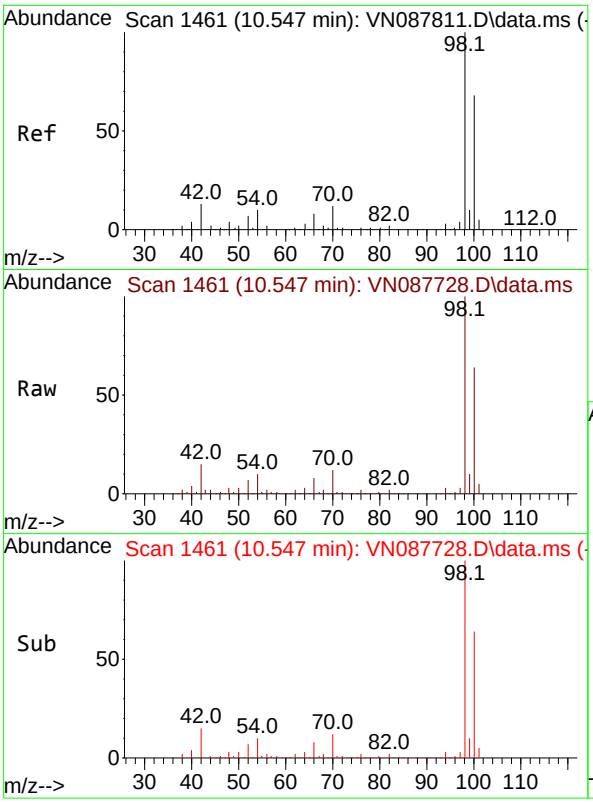


#62
Toluene
Concen: 107.196 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 91 Resp: 1487570

Ion	Ratio	Lower	Upper
91	100		
92	56.3	45.4	68.0

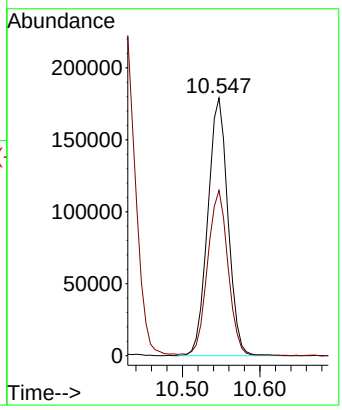




#63
Toluene-d8
Concen: 30.351 ug/l
RT: 10.547 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 98 Resp: 32341

Ion	Ratio	Lower	Upper
98	100		
100	64.0	50.6	76.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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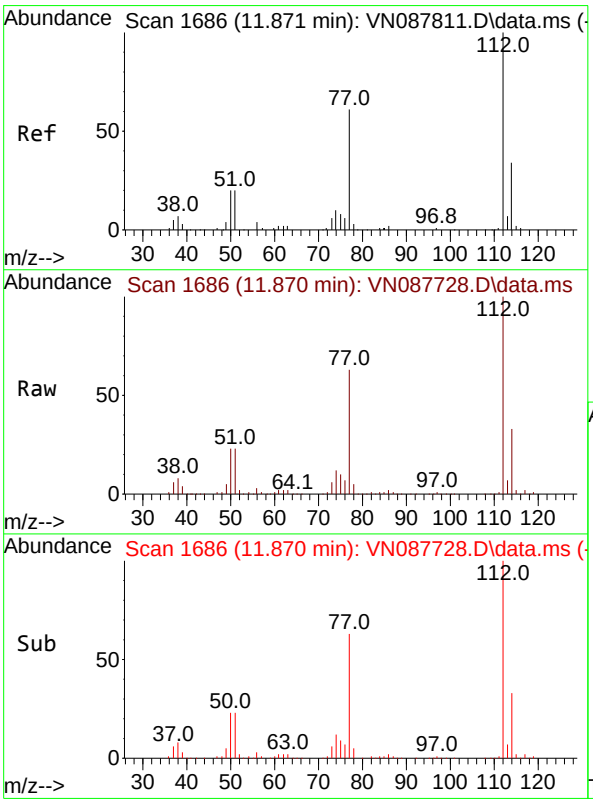
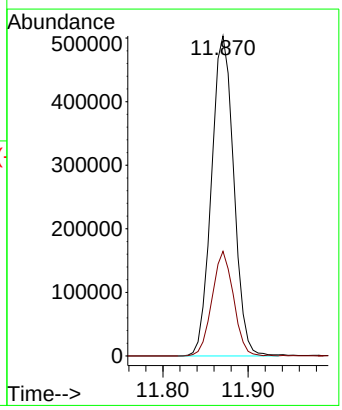
Supervised By :Mahesh Dadoda 09/05/2025

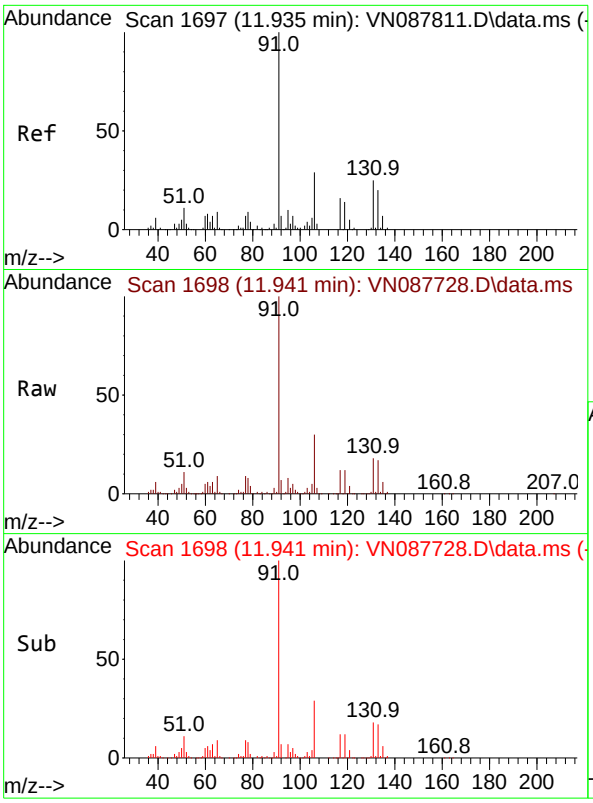


#64
Chlorobenzene
Concen: 107.540 ug/l
RT: 11.870 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:112 Resp: 915703

Ion	Ratio	Lower	Upper
112	100		
114	32.7	23.5	35.3

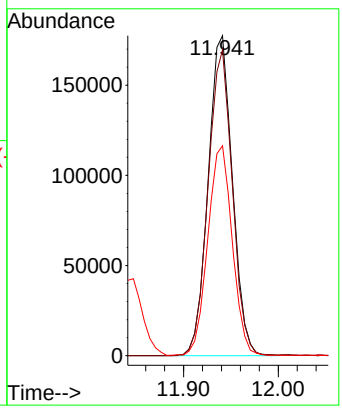




#65
1,1,1,2-Tetrachloroethane
Concen: 105.470 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:131 Resp: 31614

Ion	Ratio	Lower	Upper
131	100		
133	95.4	0.0	195.8
119	66.1	0.0	139.0



Instrument :
MSVOA_N
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VSTDICC100

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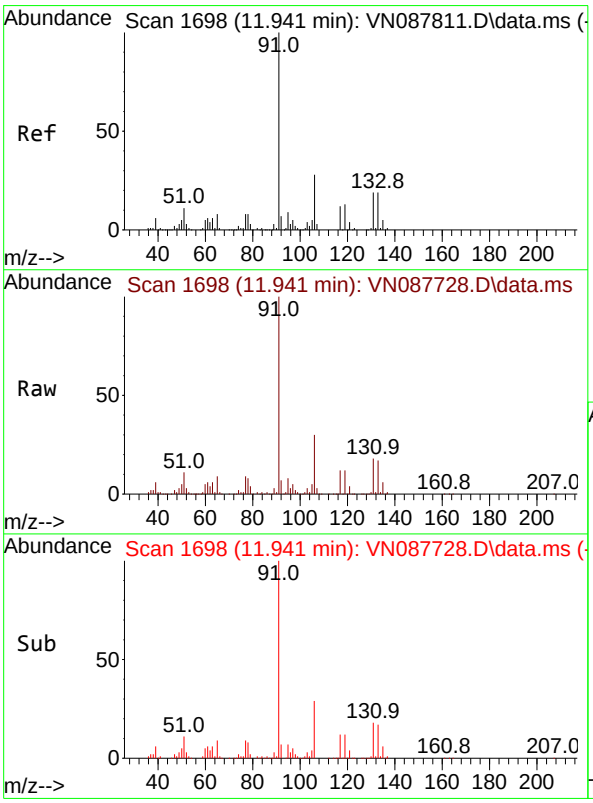
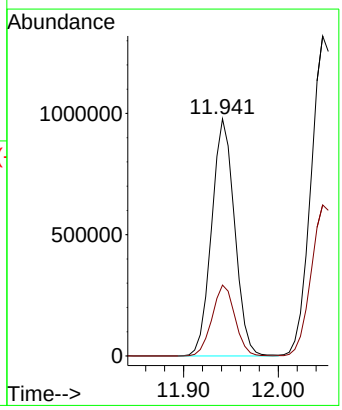
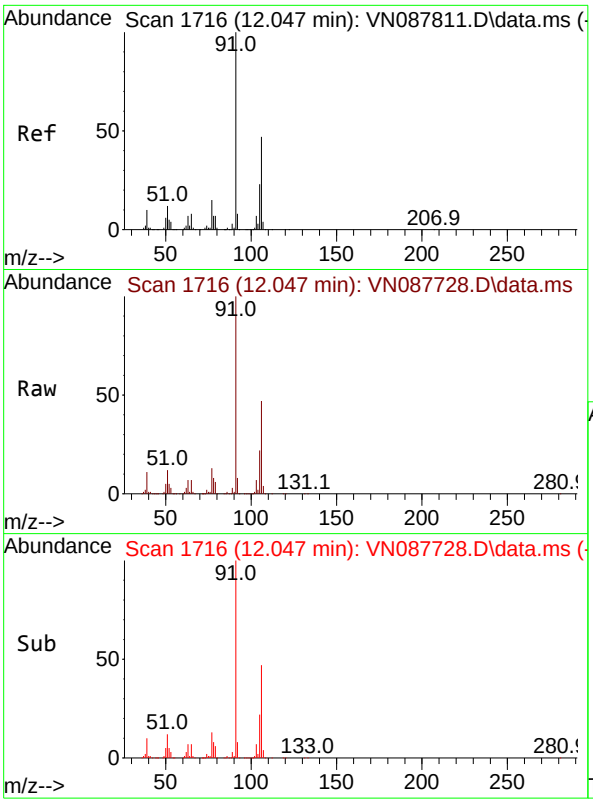


#66
Ethyl Benzene
Concen: 107.822 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 91 Resp: 1649107

Ion	Ratio	Lower	Upper
91	100		
106	29.9	21.3	31.9





#67
m/p-Xylenes
Concen: 218.504 ug/l
RT: 12.047 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:106 Resp: 123008

Ion	Ratio	Lower	Upper
106	100		
91	211.2	174.3	261.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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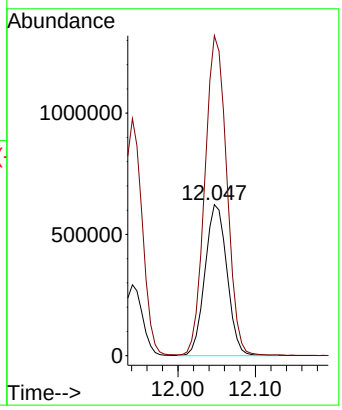
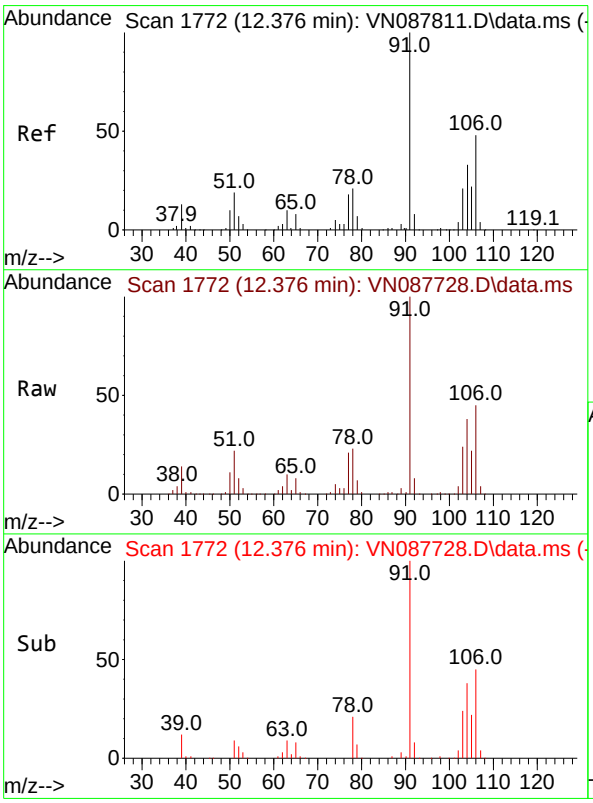
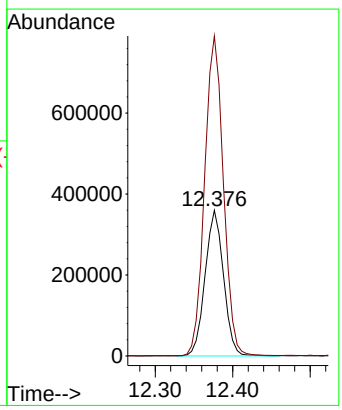


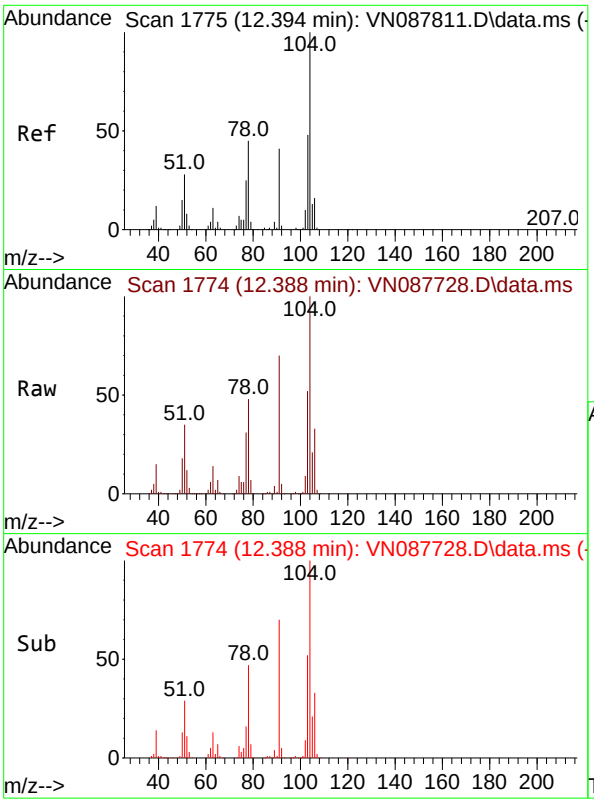


#68
o-Xylene
Concen: 107.086 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:106 Resp: 594671

Ion	Ratio	Lower	Upper
106	100		
91	223.9	107.7	323.3

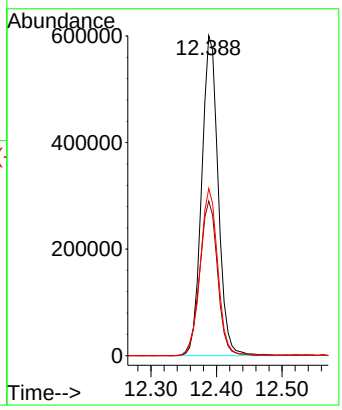




#69
Styrene
Concen: 111.873 ug/l
RT: 12.388 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:104 Resp: 105680

Ion	Ratio	Lower	Upper
104	100		
78	52.1	41.0	61.6
103	55.2	44.6	66.8



Instrument :
MSVOA_N
ClientSampleId :
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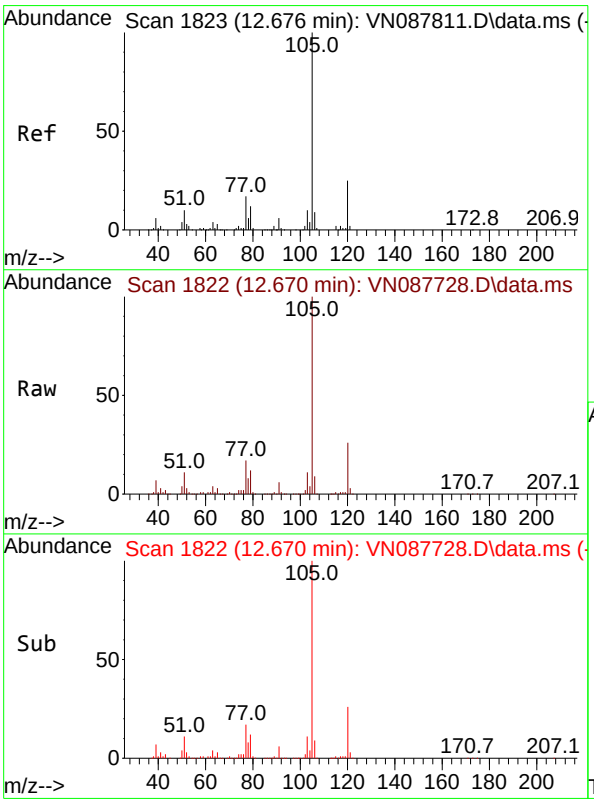
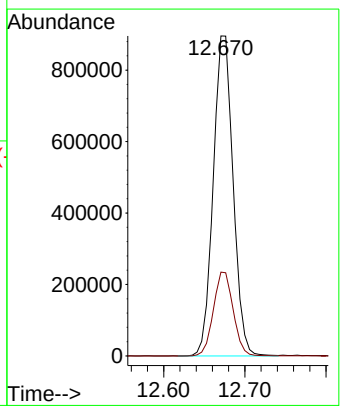
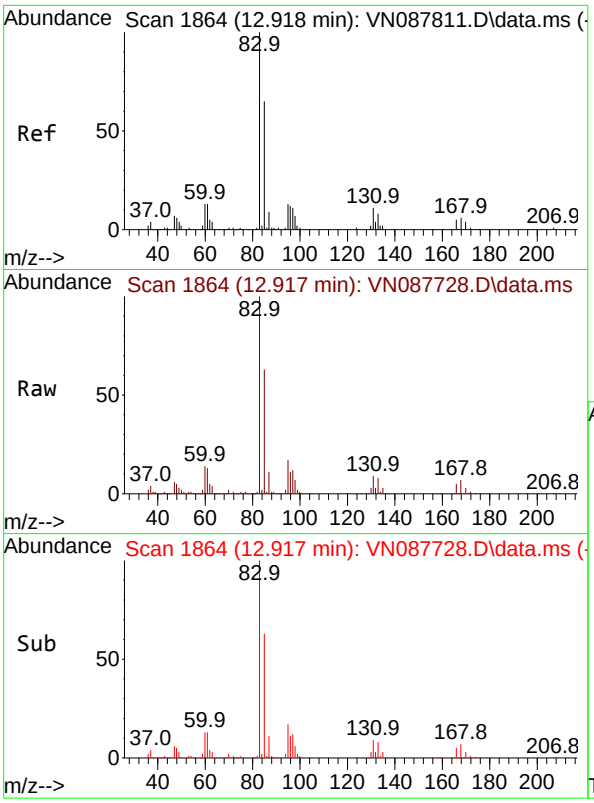


#70
Isopropylbenzene
Concen: 109.171 ug/l
RT: 12.670 min Scan# 1822
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:105 Resp: 1525065

Ion	Ratio	Lower	Upper
105	100		
120	26.1	17.4	32.4

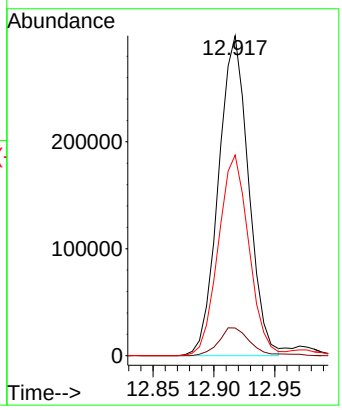




#71
1,1,2,2-Tetrachloroethane
Concen: 105.616 ug/l
RT: 12.917 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 83 Resp: 51477

Ion	Ratio	Lower	Upper
83	100		
131	8.8	4.8	14.3
85	63.8	31.9	95.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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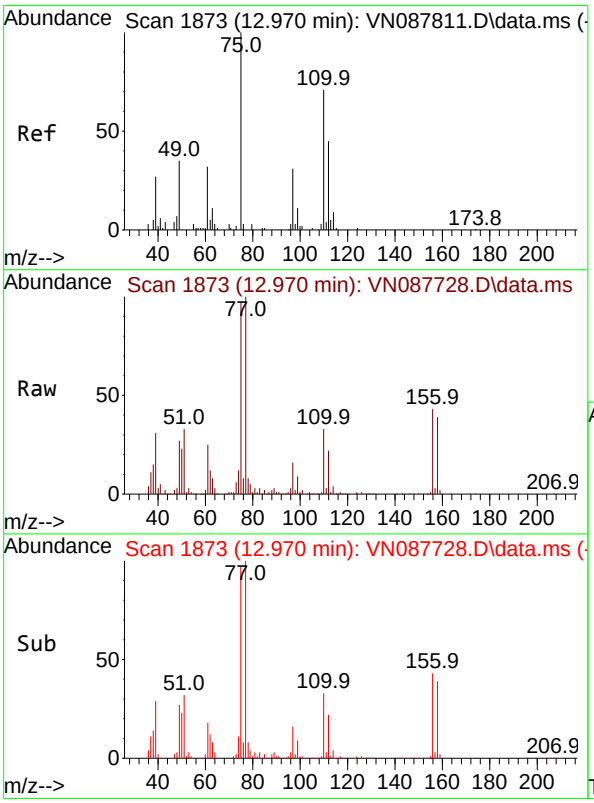
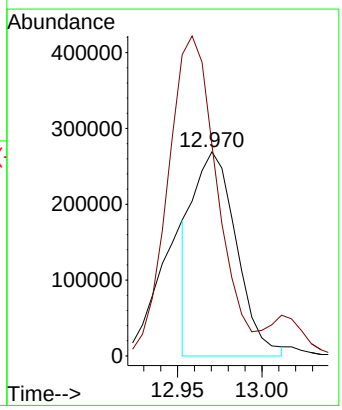
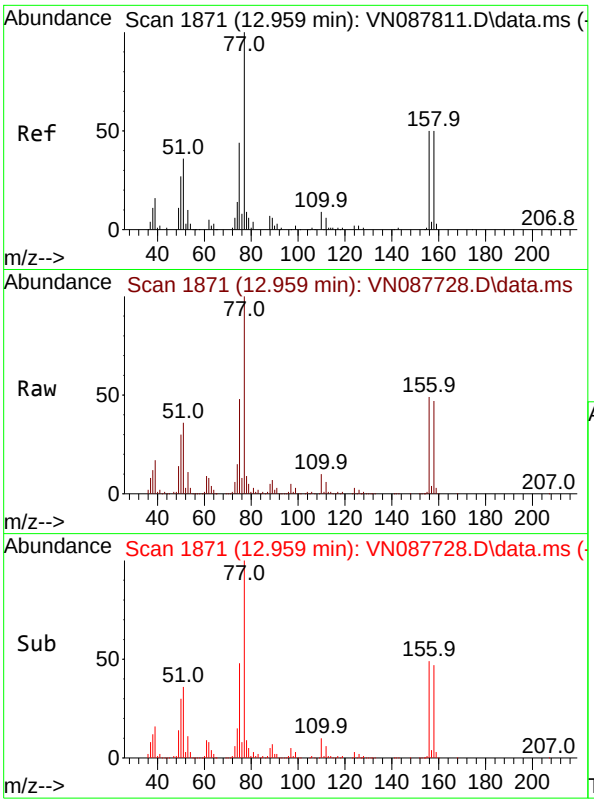


#72
1,2,3-Trichloropropane
Concen: 105.647 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 75 Resp: 480400

Ion	Ratio	Lower	Upper
75	100		
77	177.7	0.0	378.8





#73
Bromobenzene
Concen: 108.052 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:156 Resp: 35683

Ion	Ratio	Lower	Upper
156	100		
77	239.2	0.0	484.2
158	95.9	0.0	186.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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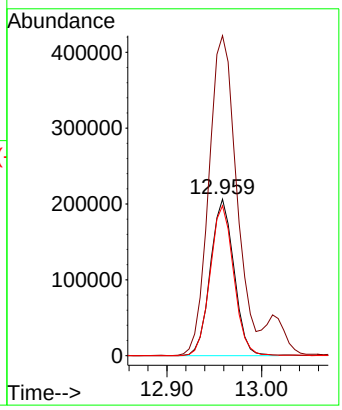
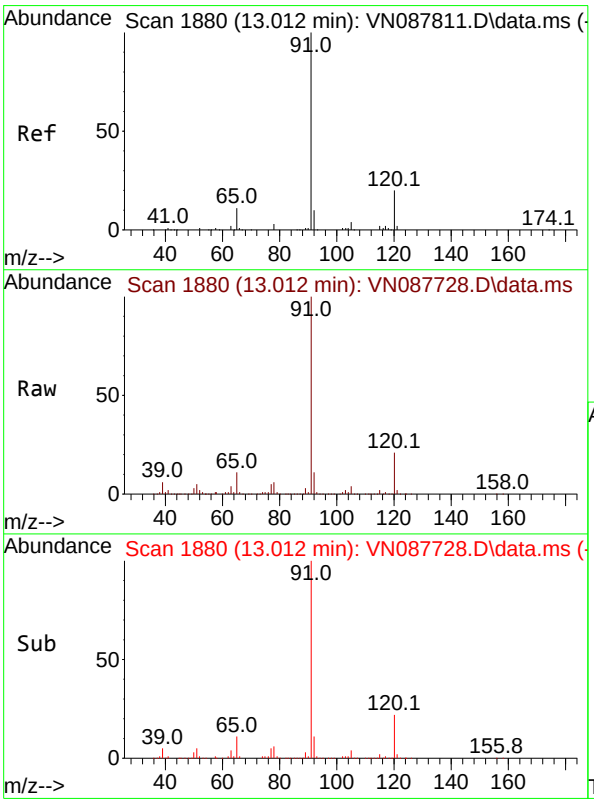
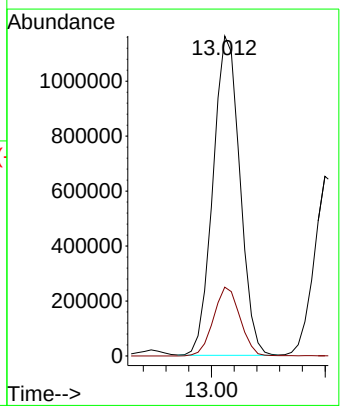


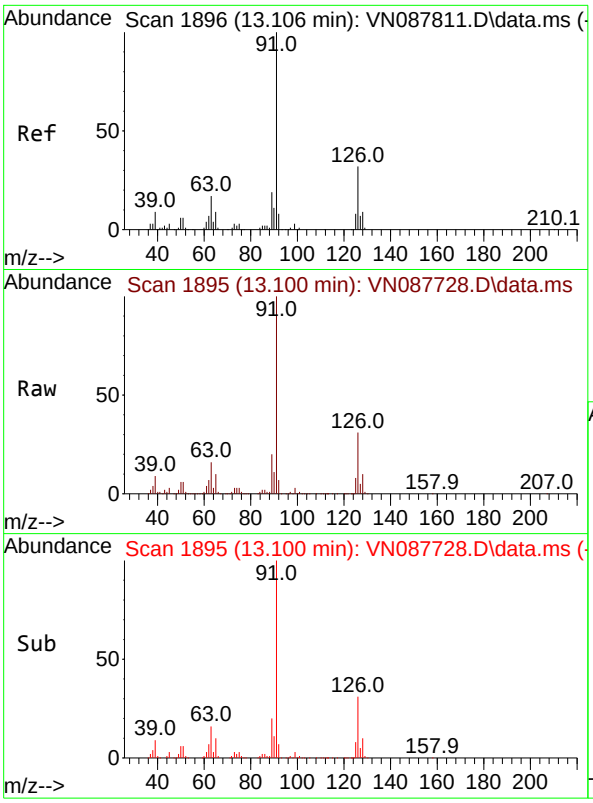


#74
n-propylbenzene
Concen: 108.687 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 91 Resp: 1910176

Ion	Ratio	Lower	Upper
91	100		
120	21.3	0.0	42.2

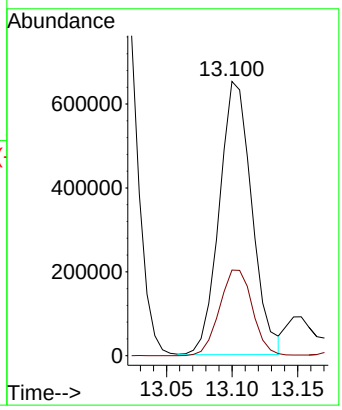




#75
2-Chlorotoluene
Concen: 104.153 ug/l
RT: 13.100 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 91 Resp: 112599

Ion	Ratio	Lower	Upper
91	100		
126	31.8	0.0	60.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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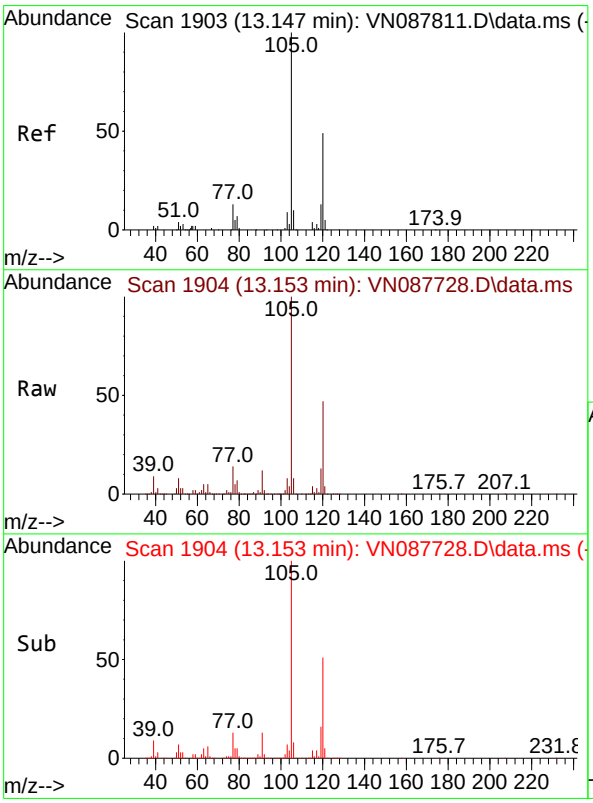
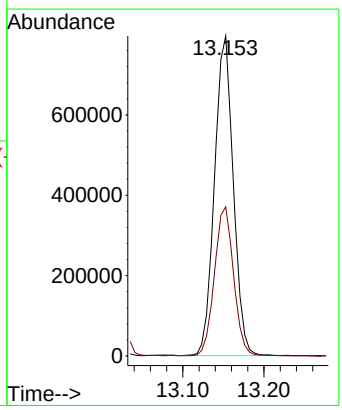
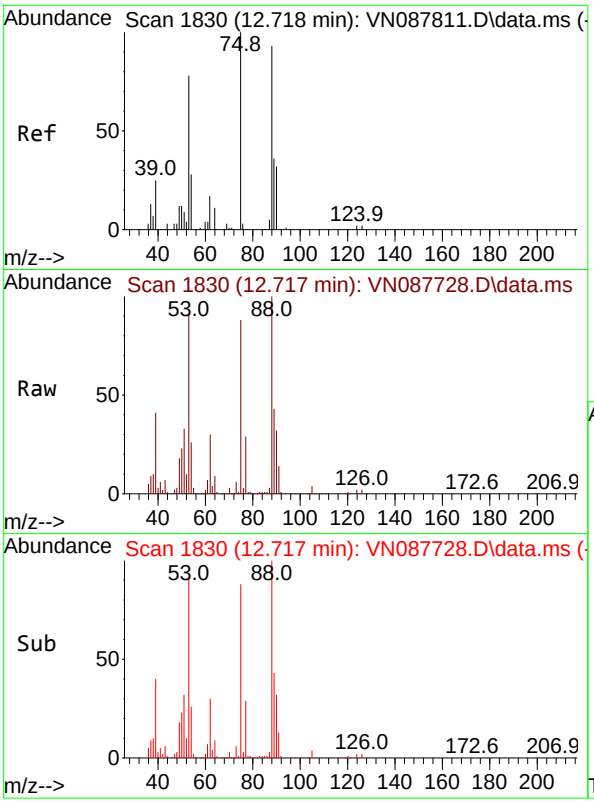


#76
1,3,5-Trimethylbenzene
Concen: 106.824 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:105 Resp: 1280589

Ion	Ratio	Lower	Upper
105	100		
120	47.7	0.0	92.6

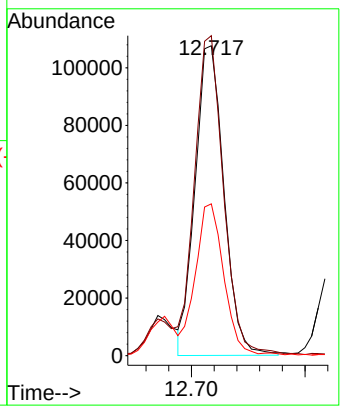




#77
t-1,4-Dichloro-2-butene
Concen: 111.145 ug/l
RT: 12.717 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 75 Resp: 18977

Ion	Ratio	Lower	Upper
75	100		
53	103.0	45.3	135.9
89	48.8	18.8	56.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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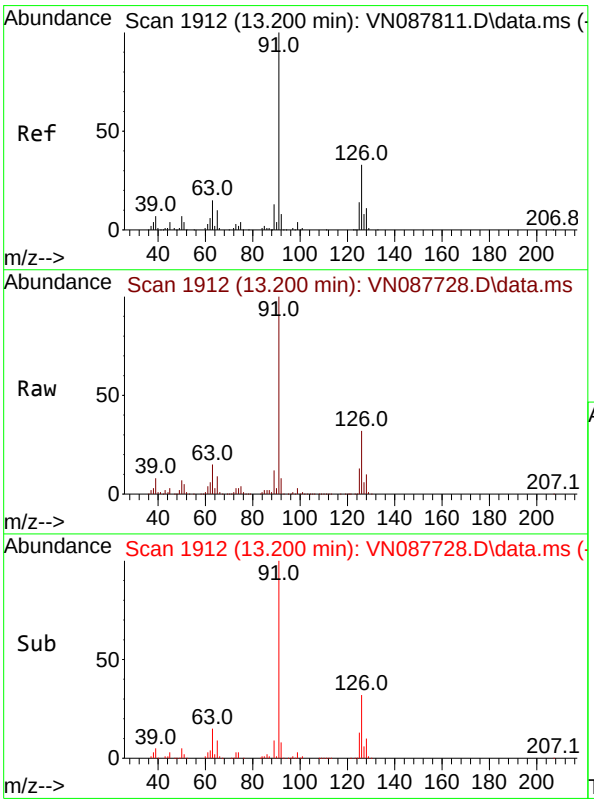
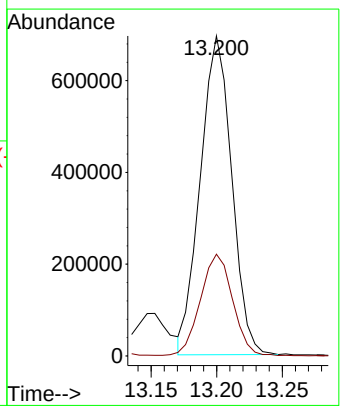
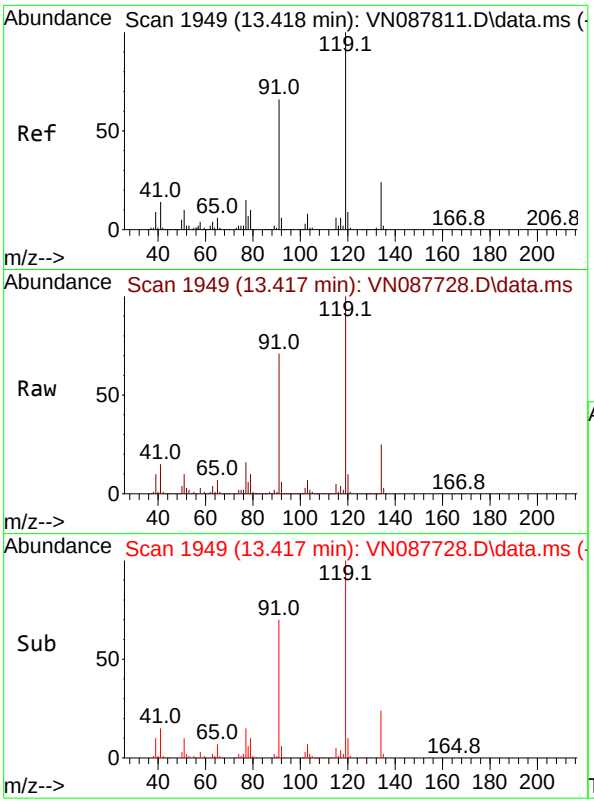


#78
4-Chlorotoluene
Concen: 105.159 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 91 Resp: 1157012

Ion	Ratio	Lower	Upper
91	100		
126	32.5	0.0	67.0

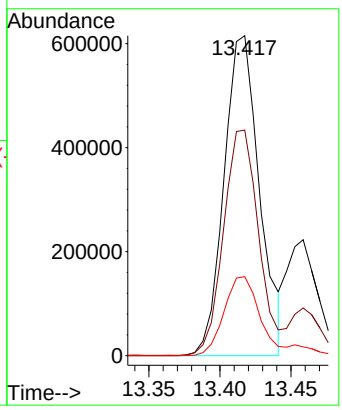




#79
tert-butylbenzene
Concen: 106.056 ug/l
RT: 13.417 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:119 Resp: 107111

Ion	Ratio	Lower	Upper
119	100		
91	69.2	0.0	142.6
134	24.8	0.0	47.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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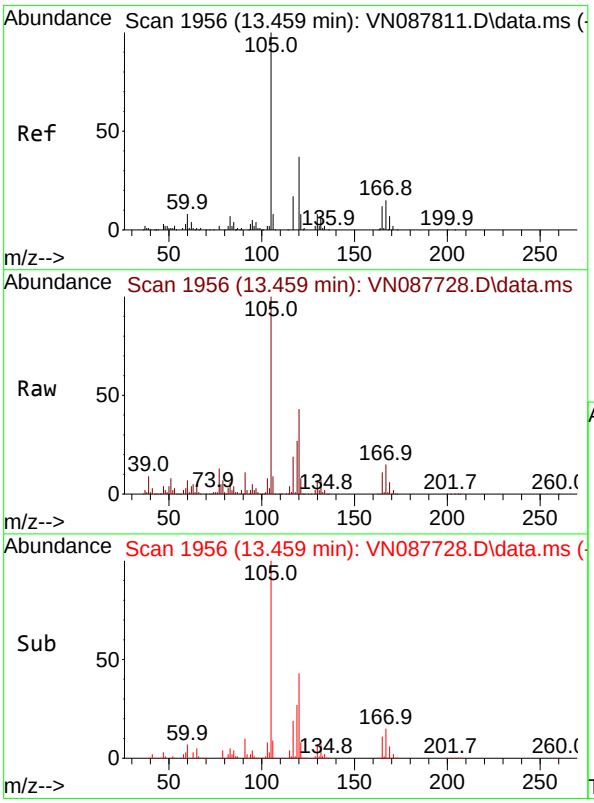
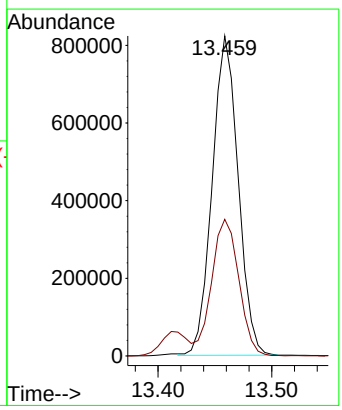
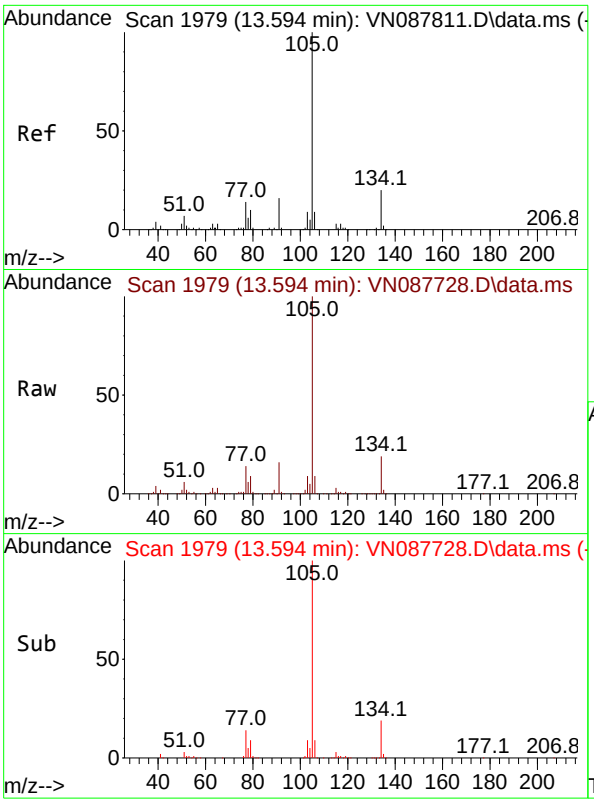


#80
1,2,4-Trimethylbenzene
Concen: 107.903 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:105 Resp: 1304823

Ion	Ratio	Lower	Upper
105	100		
120	44.9	0.0	86.6

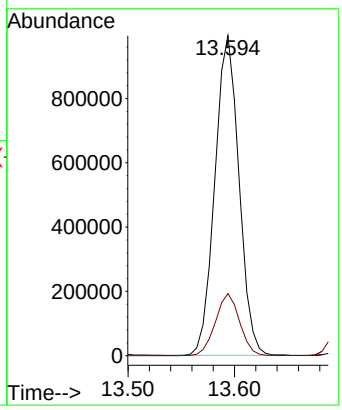




#81
sec-Butylbenzene
Concen: 106.168 ug/l
RT: 13.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:105 Resp: 156352

Ion	Ratio	Lower	Upper
105	100		
134	19.5	0.0	37.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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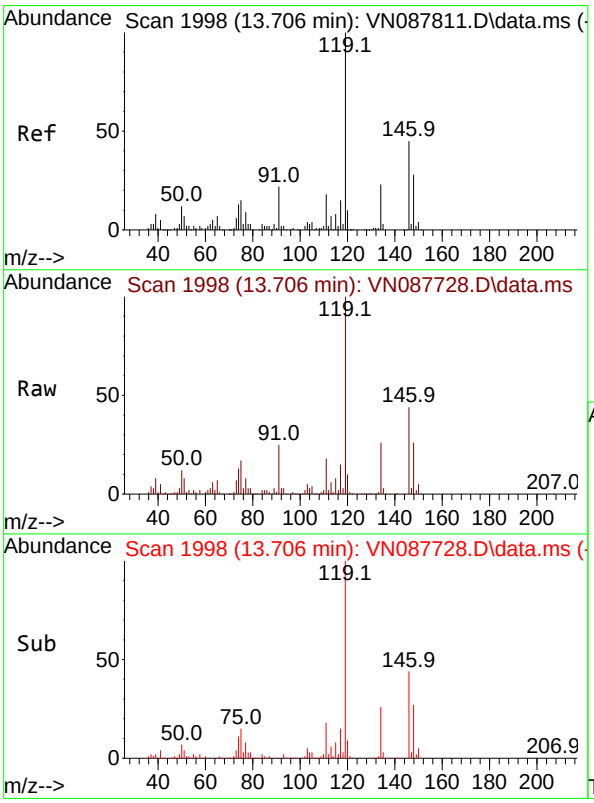
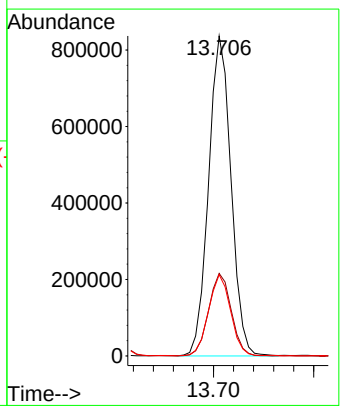
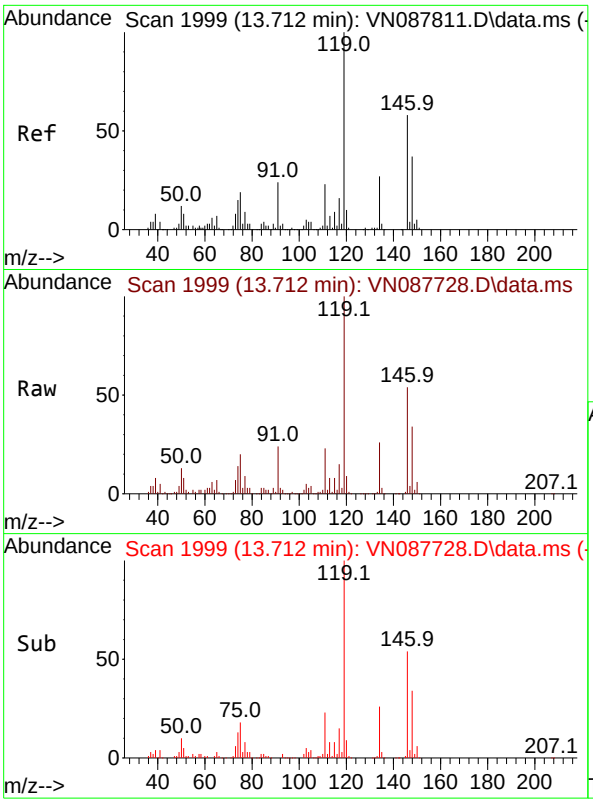


#82
p-Isopropyltoluene
Concen: 106.747 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:119 Resp: 1301395

Ion	Ratio	Lower	Upper
119	100		
134	26.1	0.0	49.4
91	24.8	0.0	52.2

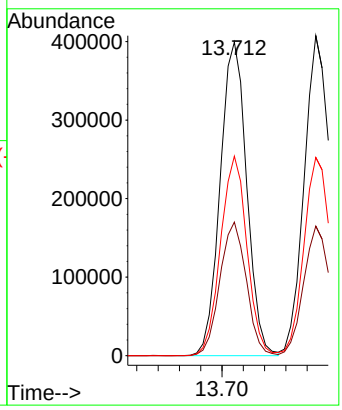




#83
1,3-Dichlorobenzene
Concen: 109.350 ug/l
RT: 13.712 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:146 Resp: 69190

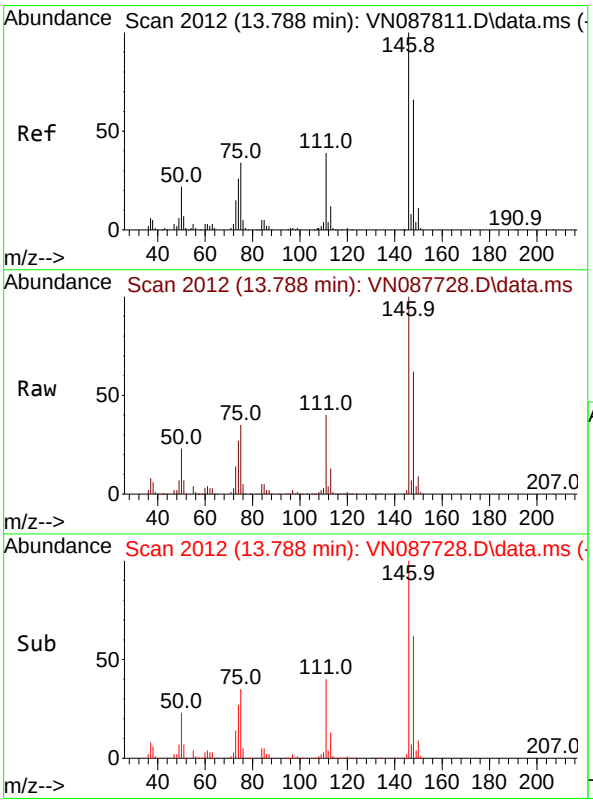
Ion	Ratio	Lower	Upper
146	100		
111	42.5	21.1	63.4
148	63.3	31.0	93.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

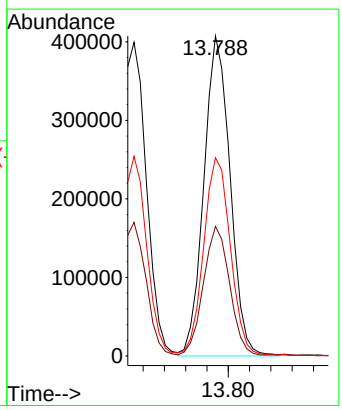
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

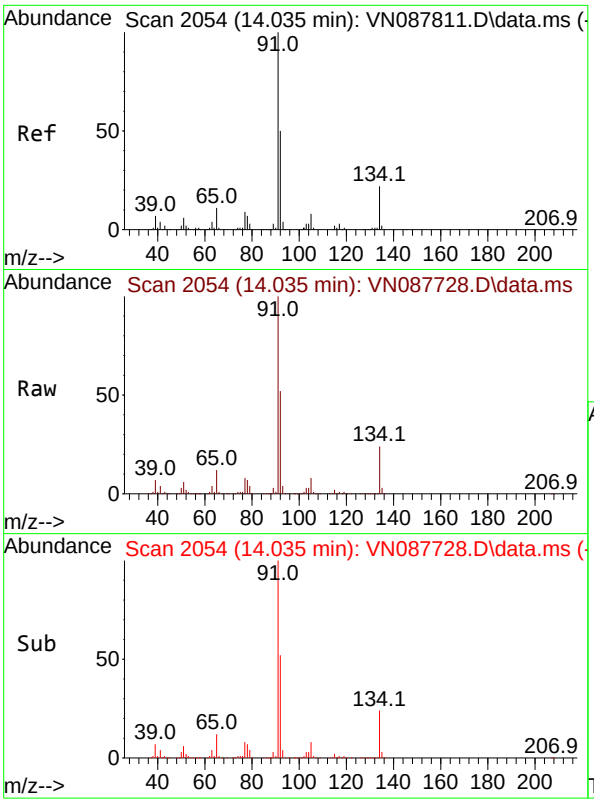


#84
1,4-Dichlorobenzene
Concen: 109.576 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:146 Resp: 697980

Ion	Ratio	Lower	Upper
146	100		
111	40.7	20.2	60.5
148	63.2	31.5	94.5

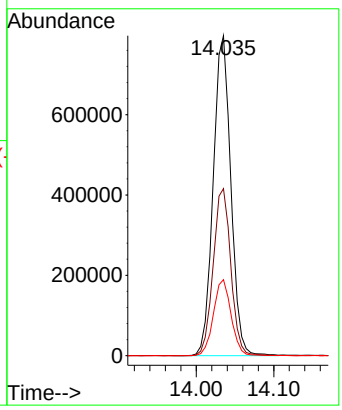




#85
n-Butylbenzene
Concen: 106.198 ug/l
RT: 14.035 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 91 Resp: 125755

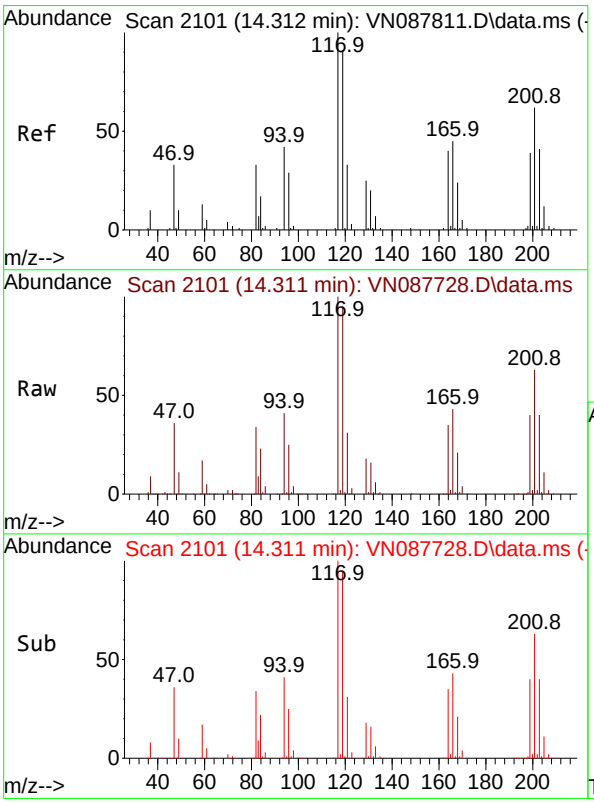
Ion	Ratio	Lower	Upper
91	100		
92	52.3	0.0	104.0
134	23.9	0.0	46.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

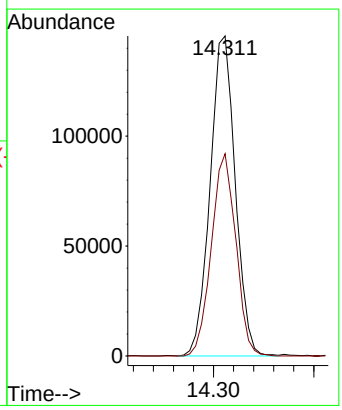
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

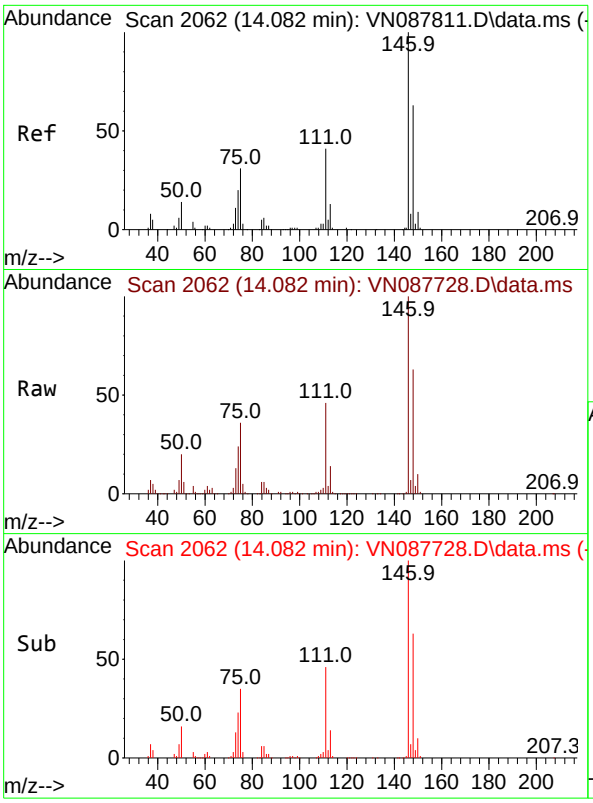


#86
Hexachloroethane
Concen: 104.907 ug/l
RT: 14.311 min Scan# 2101
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:117 Resp: 253844

Ion	Ratio	Lower	Upper
117	100		
201	61.4	29.9	89.7

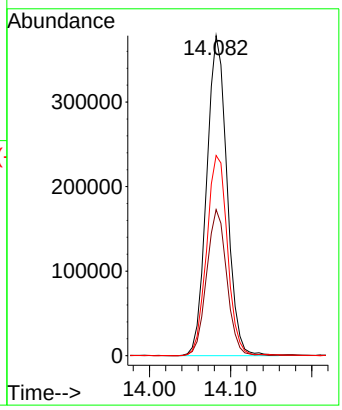




#87
1,2-Dichlorobenzene
Concen: 109.561 ug/l
RT: 14.082 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:146 Resp: 65735

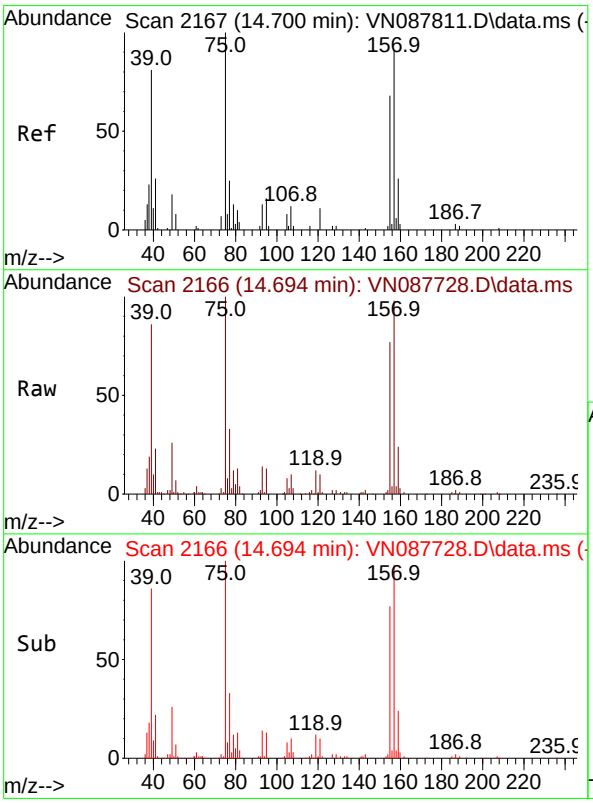
Ion	Ratio	Lower	Upper
146	100		
111	45.4	21.5	64.5
148	64.0	33.4	100.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

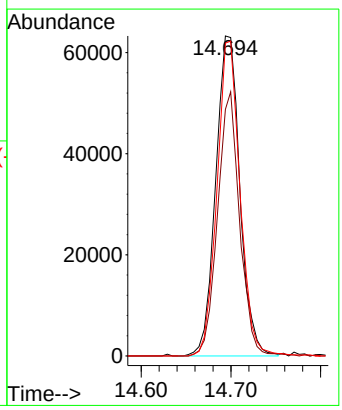
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

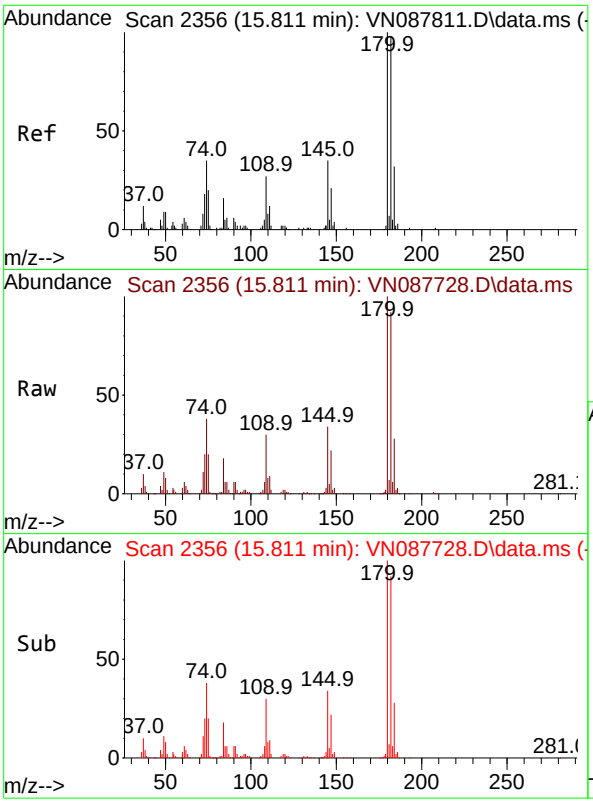


#88
1,2-Dibromo-3-Chloropropane
Concen: 97.139 ug/l
RT: 14.694 min Scan# 2166
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion: 75 Resp: 118055

Ion	Ratio	Lower	Upper
75	100		
155	75.3	53.0	79.4
157	94.3	72.2	108.4

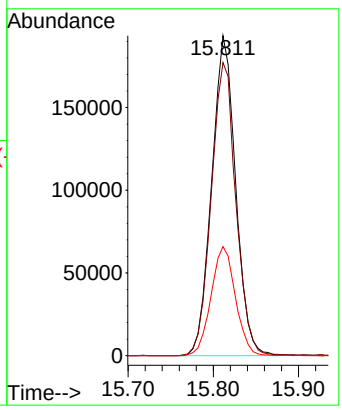




#89
1,2,4-Trichlorobenzene
Concen: 106.405 ug/l
RT: 15.811 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:180 Resp: 37728

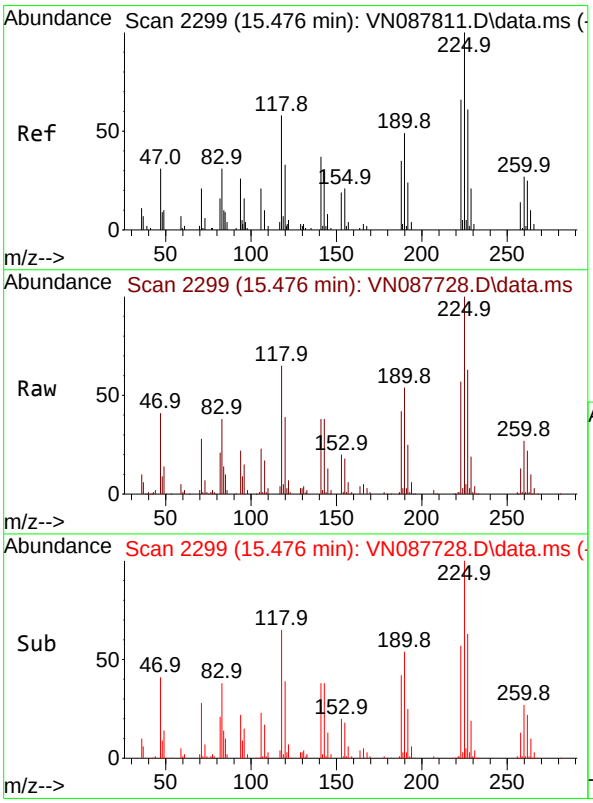
Ion	Ratio	Lower	Upper
180	100		
182	94.3	74.6	111.8
145	34.7	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

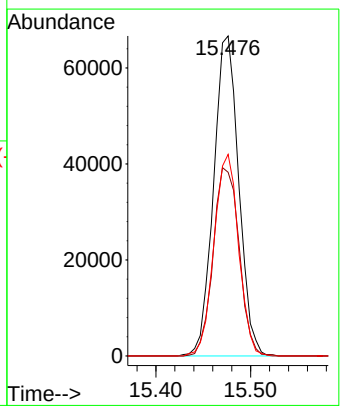
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

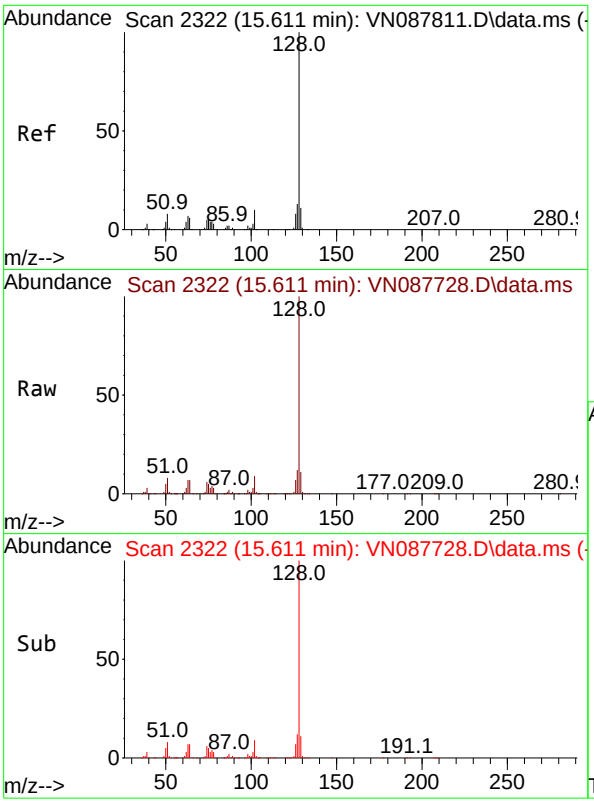


#90
Hexachlorobutadiene
Concen: 90.327 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.006 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:225 Resp: 122782

Ion	Ratio	Lower	Upper
225	100		
223	60.8	0.0	118.2
227	61.8	0.0	139.0

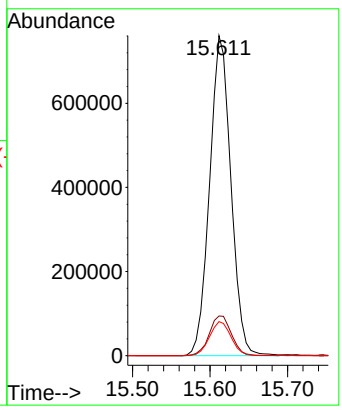




#91
Naphthalene
Concen: 108.784 ug/l
RT: 15.611 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:128 Resp: 145391

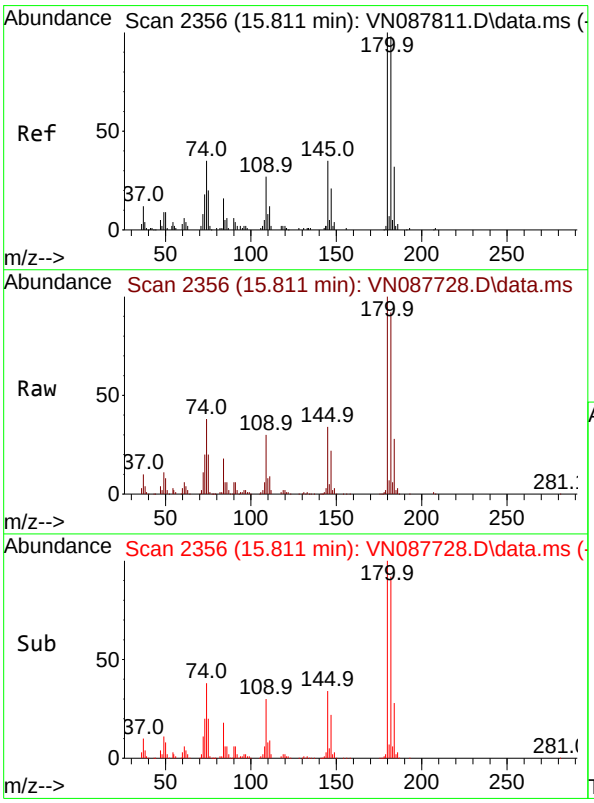
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.2	15.4
129	10.8	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

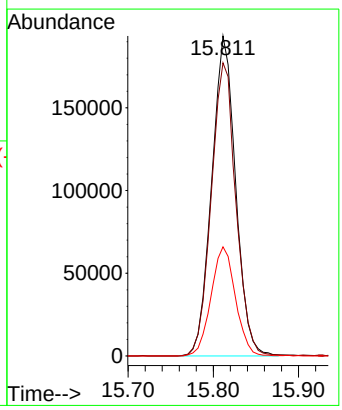
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025



#92
1,2,3-Trichlorobenzene
Concen: 106.405 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. -0.000 min
Lab File: VN087728.D
Acq: 04 Sep 2025 17:25

Tgt Ion:180 Resp: 377288

Ion	Ratio	Lower	Upper
180	100		
182	94.3	0.0	186.4
145	34.7	0.0	68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087729.D
Acq On : 04 Sep 2025 17:46
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Quant Time: Sep 05 03:00:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.800	128	48732	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.082	114	256987	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.841	117	242434	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.559	65	125853	28.682	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 95.600%				
60) 4-Bromofluorobenzene	12.829	95	119357	28.950	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 96.500%				
63) Toluene-d8	10.547	98	331838	29.625	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 98.733%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.142	85	460014	149.391	ug/l		99
3) Chloromethane	2.383	50	485468	154.452	ug/l		99
4) Vinyl Chloride	2.536	62	548014	162.679	ug/l		97
5) Bromomethane	2.953	94	338024	182.035	ug/l		96
6) Chloroethane	3.124	64	366963	166.372	ug/l	#	85
7) Trichlorofluoromethane	3.506	101	797041	163.196	ug/l		91
8) Diethyl Ether	3.959	74	341803	168.693	ug/l		96
9) 1,1,2-Trichlorotrifluo...	4.359	101	422322	166.217	ug/l		78
10) 1,1-Dichloroethene	4.336	96	449863	171.802	ug/l		95
11) Methyl Iodide	4.577	142	421989	205.284	ug/l		90
12) Methyl Acetate	5.012	43	724097	152.583	ug/l		100
13) Acrolein	4.177	56	630478m	849.771	ug/l		
14) Acrylonitrile	5.706	53	1538968	749.724	ug/l		98
15) Acetone	4.424	58	425162	730.123	ug/l		90
16) Carbon Disulfide	4.700	76	1271777m	158.737	ug/l		
17) Allyl chloride	5.012	41	766742	148.357	ug/l		92
18) Methylene Chloride	5.259	84	507725	153.709	ug/l		91
19) trans-1,2-Dichloroethene	5.771	96	477957	156.377	ug/l		96
20) Diisopropyl ether	6.659	45	1793426	152.305	ug/l		94
21) 1,1-Dichloroethane	6.553	63	931404	152.104	ug/l		97
22) cis-1,2-Dichloroethene	7.471	96	586326	156.802	ug/l		99
23) tert-Butyl Alcohol	5.530	59	545385	639.163	ug/l	#	100
24) Methyl tert-Butyl Ether	5.789	73	1739496	151.610	ug/l		98
25) Chloroform	7.947	83	983285	152.526	ug/l		95
26) Cyclohexane	8.241	56	727166	150.164	ug/l	#	99
29) 1,1-Dichloropropene	8.353	75	648804	157.510	ug/l		99
30) 2-Butanone	7.471	43	2196856	736.360	ug/l		98
31) 2,2-Dichloropropane	7.477	77	781979	151.522	ug/l		100
32) 1,1,1-Trichloroethane	8.153	97	806677	152.690	ug/l		99
33) Carbon Tetrachloride	8.341	117	670757	154.283	ug/l		97
34) Benzene	8.588	78	2101924	160.910	ug/l		95
35) Methacrylonitrile	7.759	41	468477	144.552	ug/l		97
36) 1,2-Dichloroethane	8.653	62	770632	147.988	ug/l		100
37) Trichloroethene	9.335	130	458415	159.355	ug/l		94
38) Methylcyclohexane	9.582	83	704436	149.907	ug/l		98
39) 1,2-Dichloropropane	9.600	63	532904	159.192	ug/l		100
40) Dibromomethane	9.688	93	390063	155.837	ug/l		99
41) Bromodichloromethane	9.871	83	801266	153.294	ug/l	#	94
42) Vinyl Acetate	6.588	43	7618340	776.186	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087729.D
Acq On : 04 Sep 2025 17:46
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Quant Time: Sep 05 03:00:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.547	43	903610	153.686	ug/l		98
44) Isopropyl Acetate	8.671	43	1460618	149.330	ug/l		100
45) 1,4-Dioxane	9.682	88	187970	3001.771	ug/l	#	91
46) Methyl methacrylate	9.665	41	670040	146.351	ug/l		100
47) n-amyl Acetate	12.482	43	1048336m	184.337	ug/l		
48) t-1,3-Dichloropropene	10.818	75	885111	158.851	ug/l		97
49) cis-1,3-Dichloropropene	10.294	75	901540	160.315	ug/l		94
50) 1,1,2-Trichloroethane	10.994	97	511317	160.824	ug/l		98
51) Ethyl methacrylate	10.853	69	906831	167.159	ug/l		94
52) 1,3-Dichloropropane	11.141	76	893642	156.782	ug/l		100
53) Dibromochloromethane	11.335	129	596338	164.776	ug/l		92
54) 1,2-Dibromoethane	11.447	107	546357	163.081	ug/l		100
55) 2-Chloroethyl vinyl ether	10.141	63	2464831	840.927	ug/l		98
56) Bromoform	12.559	173	402223	167.746	ug/l		97
58) 4-Methyl-2-Pentanone	10.424	43	4473520	745.754	ug/l		99
59) 2-Hexanone	11.176	43	3170935	780.545	ug/l		97
61) Tetrachloroethene	11.082	164	363806	155.454	ug/l		97
62) Toluene	10.612	91	2294262	157.273	ug/l		99
64) Chlorobenzene	11.870	112	1432339	160.019	ug/l		97
65) 1,1,1,2-Tetrachloroethane	11.941	131	486507	154.396	ug/l		98
66) Ethyl Benzene	11.941	91	2571632	159.947	ug/l		95
67) m/p-Xylenes	12.047	106	1904203	321.770	ug/l		95
68) o-Xylene	12.376	106	940685	161.143	ug/l		95
69) Styrene	12.388	104	1653060	166.468	ug/l		99
70) Isopropylbenzene	12.670	105	2375492	161.764	ug/l		99
71) 1,1,2,2-Tetrachloroethane	12.917	83	793928	154.952	ug/l		100
72) 1,2,3-Trichloropropane	12.970	75	732764m	153.295	ug/l		
73) Bromobenzene	12.959	156	553482	159.435	ug/l		98
74) n-propylbenzene	13.012	91	2937041	158.973	ug/l		99
75) 2-Chlorotoluene	13.106	91	1747793	153.793	ug/l		97
76) 1,3,5-Trimethylbenzene	13.153	105	1960149	155.546	ug/l		99
77) t-1,4-Dichloro-2-butene	12.717	75	311177	173.364	ug/l		89
78) 4-Chlorotoluene	13.200	91	1806216	156.166	ug/l		97
79) tert-butylbenzene	13.417	119	1648726	155.295	ug/l		97
80) 1,2,4-Trimethylbenzene	13.459	105	2015689	158.567	ug/l		99
81) sec-Butylbenzene	13.594	105	2383484	153.961	ug/l		99
82) p-Isopropyltoluene	13.706	119	1983862	154.798	ug/l		98
83) 1,3-Dichlorobenzene	13.712	146	1059997	159.363	ug/l		99
84) 1,4-Dichlorobenzene	13.788	146	1050951	156.951	ug/l		98
85) n-Butylbenzene	14.035	91	1919423	154.195	ug/l		100
86) Hexachloroethane	14.311	117	392690	154.382	ug/l		99
87) 1,2-Dichlorobenzene	14.082	146	1004257	159.224	ug/l		97
88) 1,2-Dibromo-3-Chloropr...	14.694	75	184176	144.163	ug/l		93
89) 1,2,4-Trichlorobenzene	15.811	180	591983	158.821	ug/l		97
90) Hexachlorobutadiene	15.470	225	183756	128.598	ug/l		95
91) Naphthalene	15.611	128	2324387	165.441	ug/l		99
92) 1,2,3-Trichlorobenzene	15.811	180	591983	158.821	ug/l		97

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

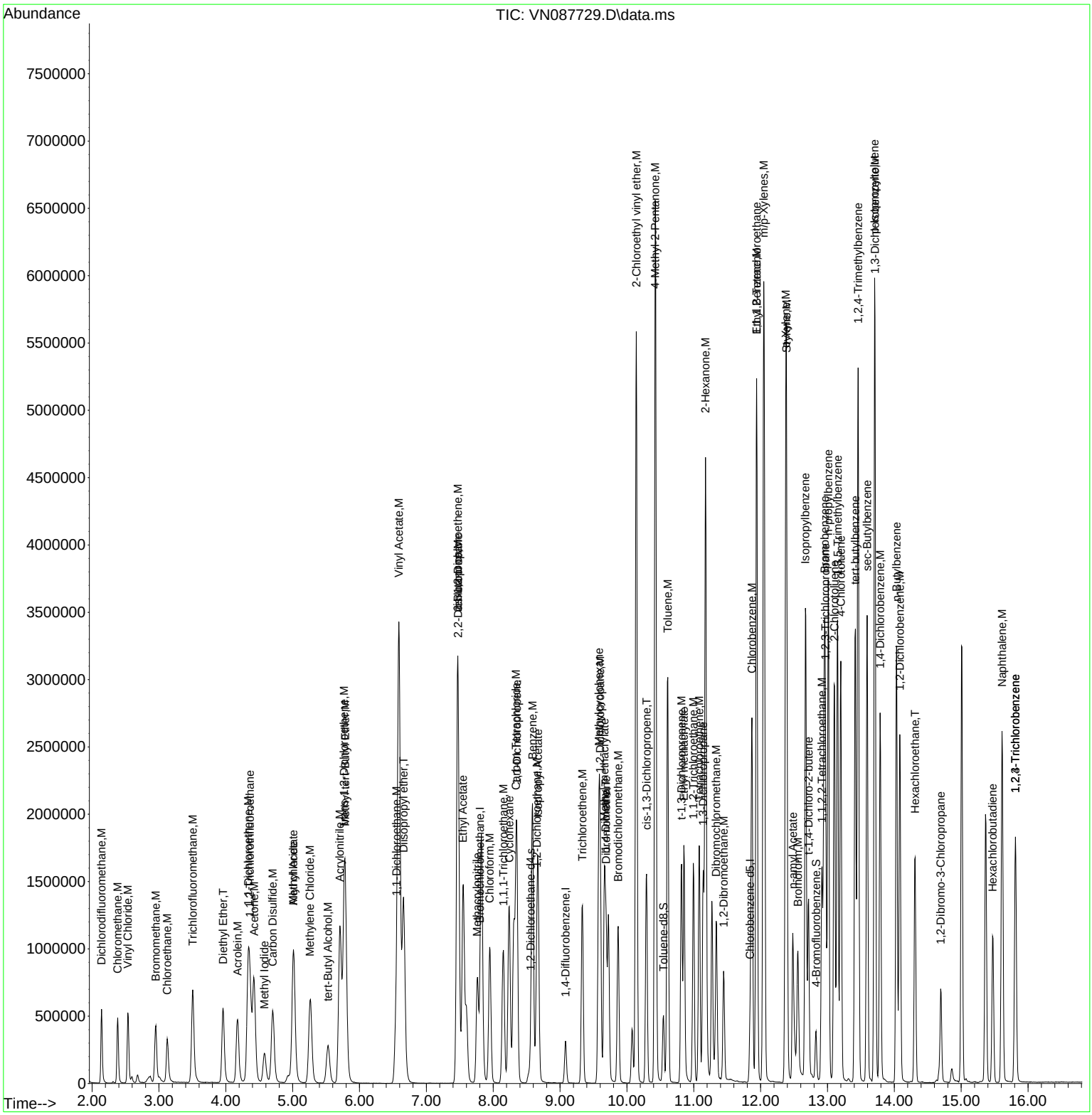
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087729.D
Acq On : 04 Sep 2025 17:46
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 18 Sample Multiplier: 1

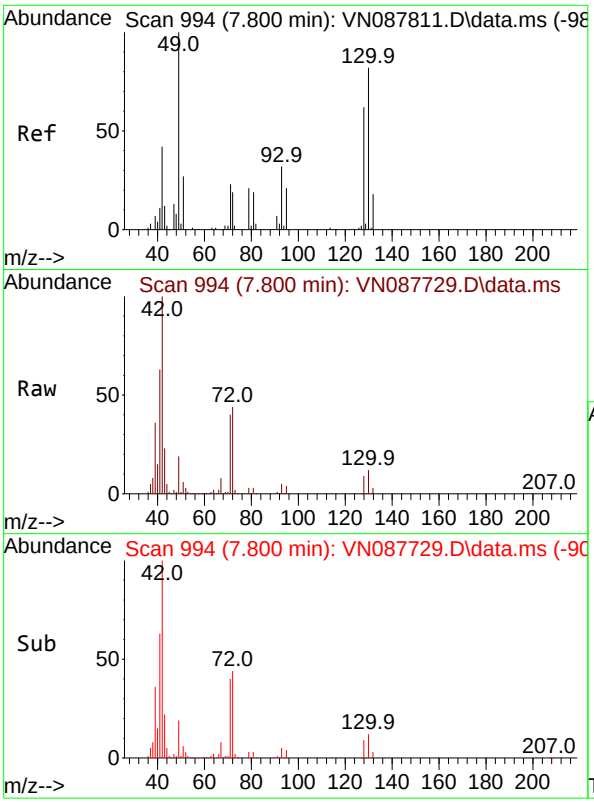
Quant Time: Sep 05 03:00:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 02:54:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

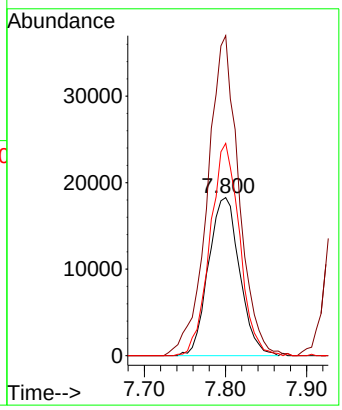




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.800 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:128 Resp: 4873

Ion	Ratio	Lower	Upper
128	100		
49	204.4	0.0	464.3
130	127.8	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 09/05/2025
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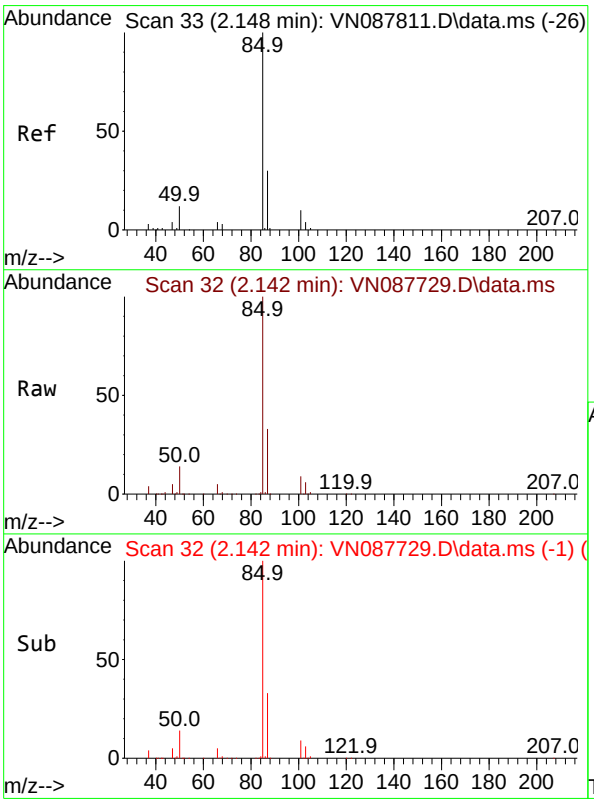
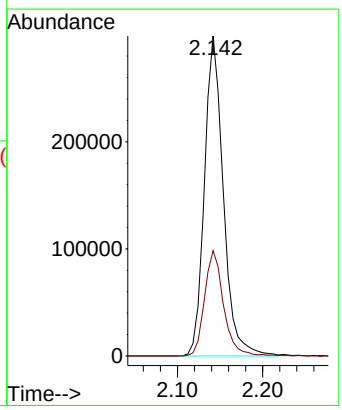
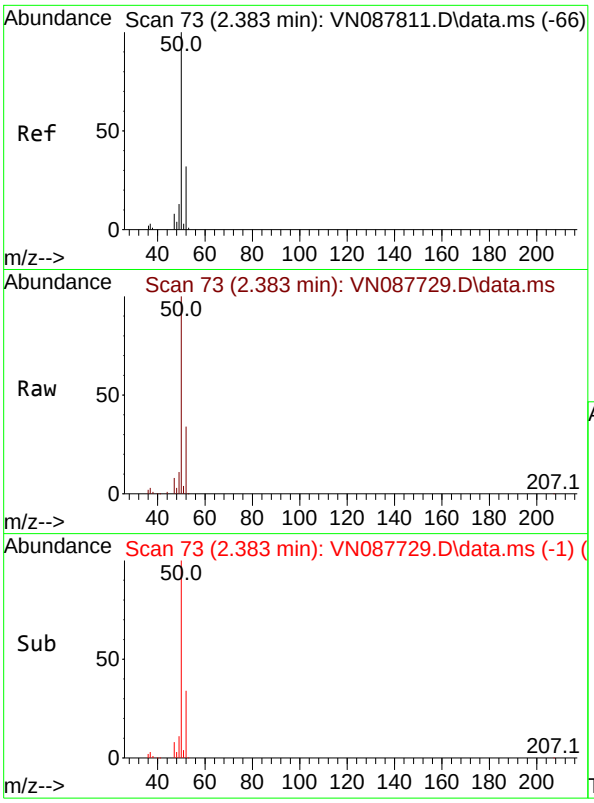


#2
Dichlorodifluoromethane
Concen: 149.391 ug/l
RT: 2.142 min Scan# 32
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 85 Resp: 460014

Ion	Ratio	Lower	Upper
85	100		
87	32.9	16.8	50.4

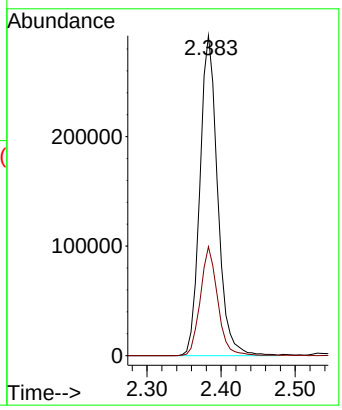




#3
Chloromethane
Concen: 154.452 ug/l
RT: 2.383 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 50 Resp: 48546

Ion	Ratio	Lower	Upper
50	100		
52	34.0	26.6	40.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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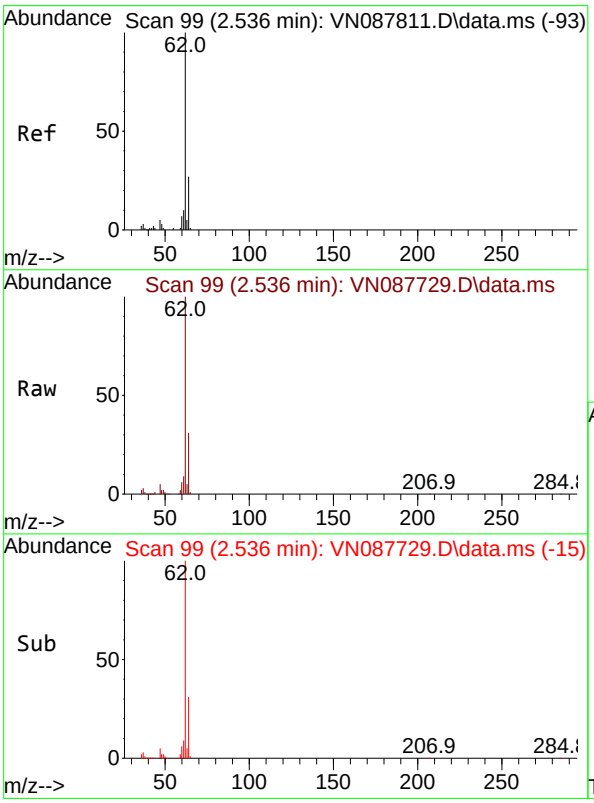
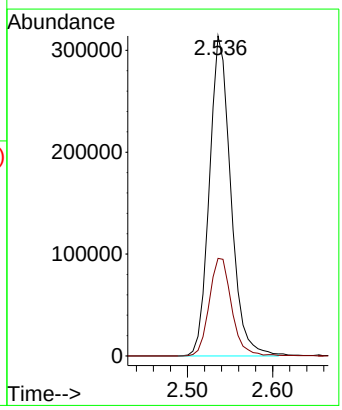
Supervised By :Mahesh Dadoda 09/05/2025

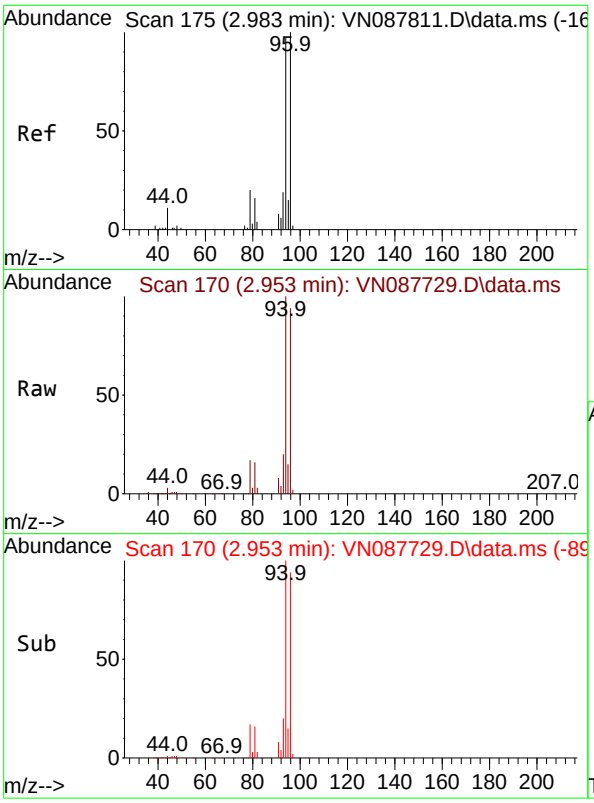


#4
Vinyl Chloride
Concen: 162.679 ug/l
RT: 2.536 min Scan# 99
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 62 Resp: 548014

Ion	Ratio	Lower	Upper
62	100		
64	30.5	25.5	38.3

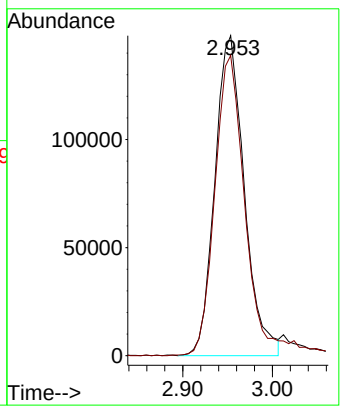




#5
Bromomethane
Concen: 182.035 ug/l
RT: 2.953 min Scan# 1
Delta R.T. -0.024 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 94 Resp: 33802

Ion	Ratio	Lower	Upper
94	100		
96	93.6	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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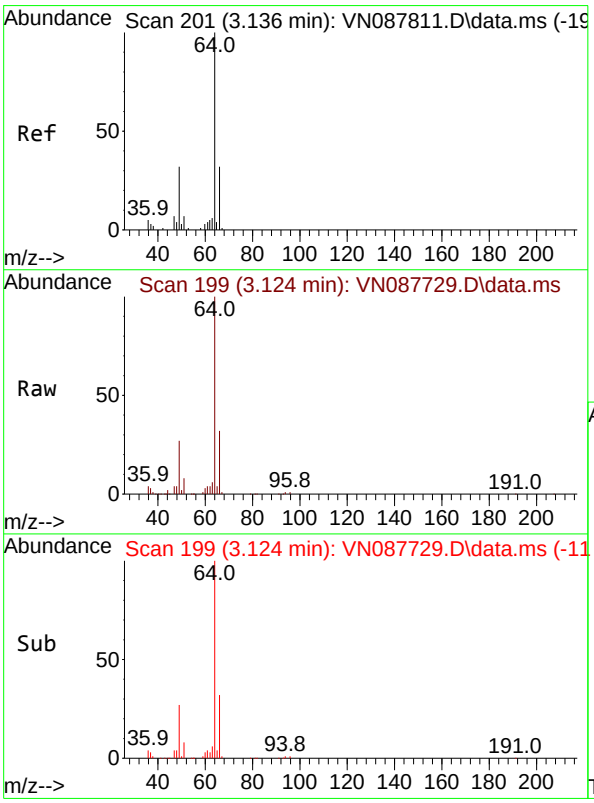
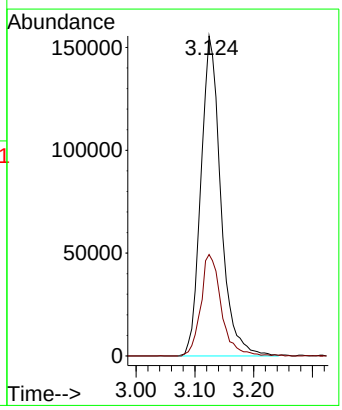
Supervised By :Mahesh Dadoda 09/05/2025

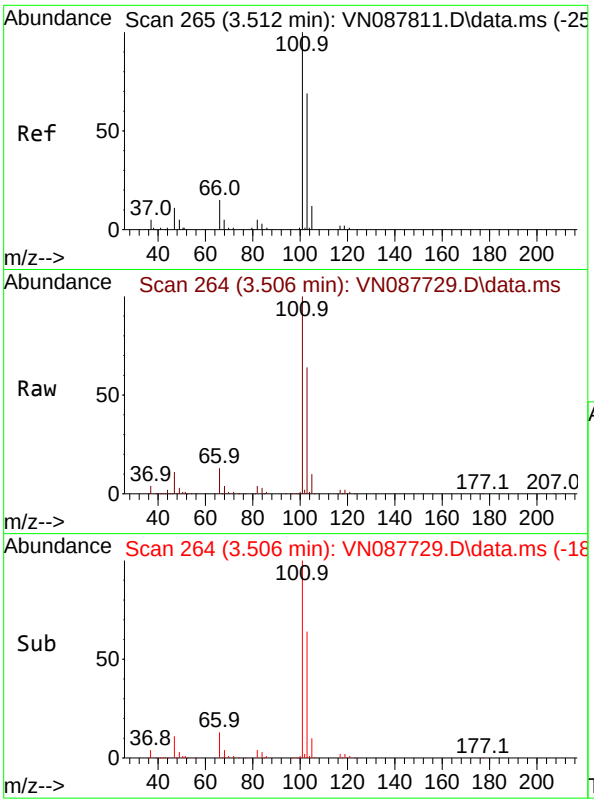


#6
Chloroethane
Concen: 166.372 ug/l
RT: 3.124 min Scan# 199
Delta R.T. -0.018 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 64 Resp: 366963

Ion	Ratio	Lower	Upper
64	100		
66	31.7	32.8	49.2#

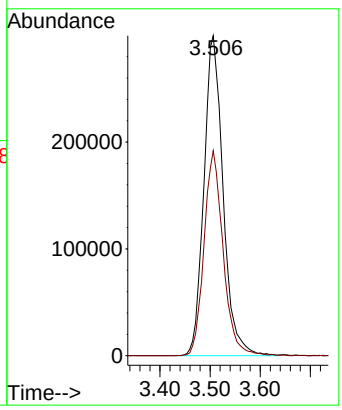




#7
Trichlorofluoromethane
Concen: 163.196 ug/l
RT: 3.506 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:101 Resp: 79704

Ion	Ratio	Lower	Upper
101	100		
103	63.9	45.7	68.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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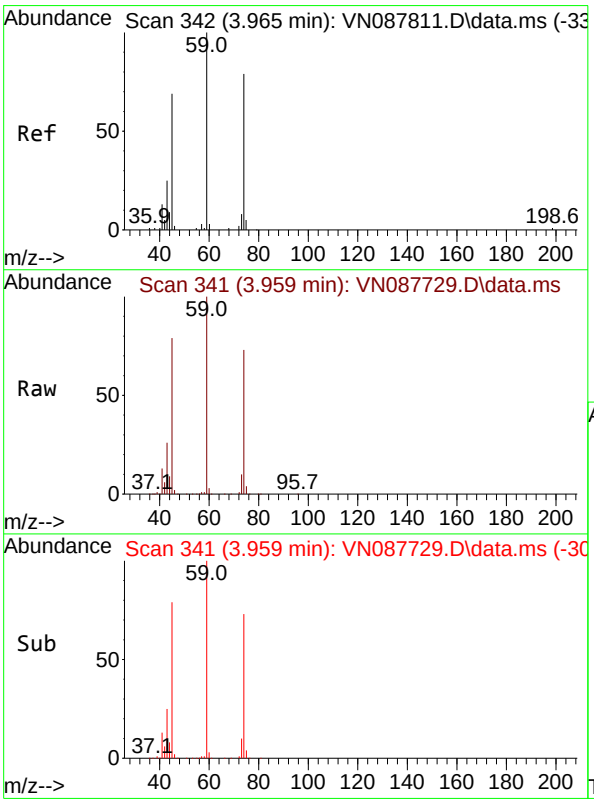
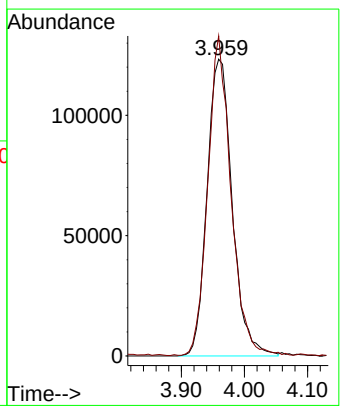
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

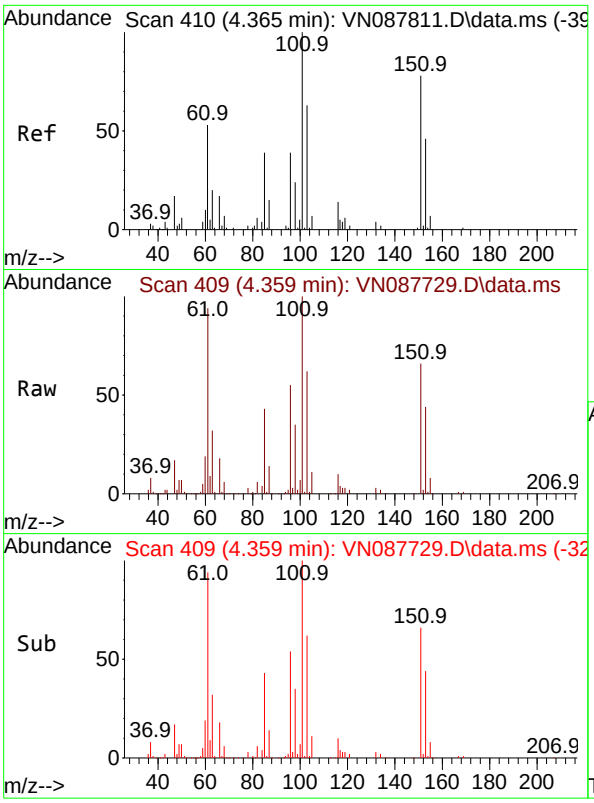


#8
Diethyl Ether
Concen: 168.693 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 74 Resp: 341803

Ion	Ratio	Lower	Upper
74	100		
45	98.5	20.4	183.8

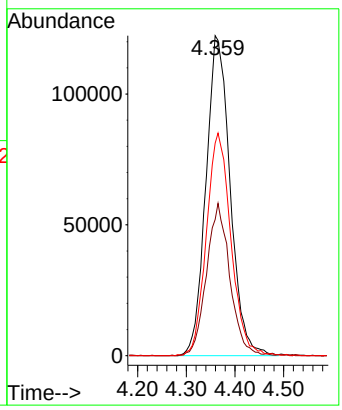




#9
1,1,2-Trichlorotrifluoroethane
Concen: 166.217 ug/l
RT: 4.359 min Scan# 4
Delta R.T. -0.012 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:101 Resp: 42232

Ion	Ratio	Lower	Upper
101	100		
85	45.7	0.0	95.6
151	70.3	0.0	85.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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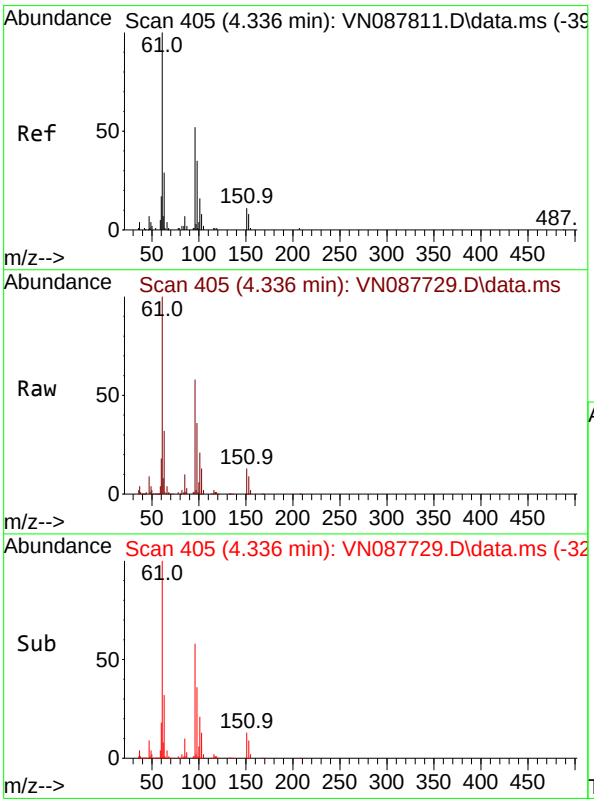
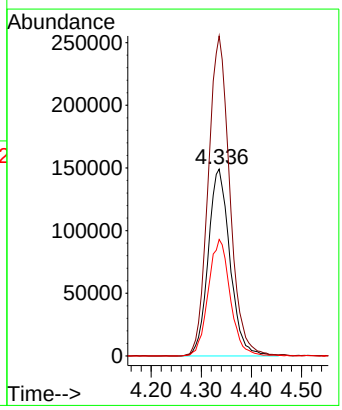
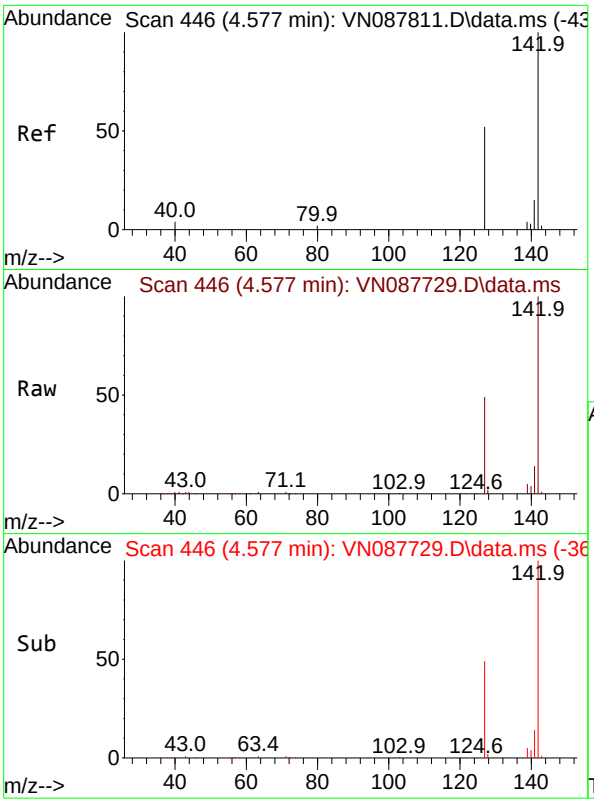


#10
1,1-Dichloroethene
Concen: 171.802 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 96 Resp: 449863

Ion	Ratio	Lower	Upper
96	100		
61	171.2	135.9	203.9
98	62.3	59.2	88.8

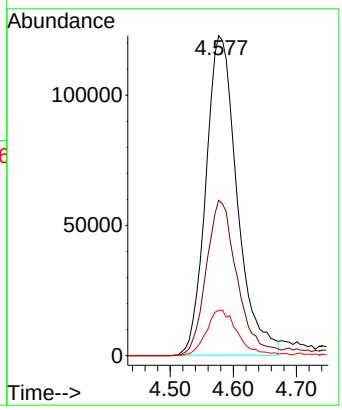




#11
Methyl Iodide
Concen: 205.284 ug/l
RT: 4.577 min Scan# 44
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:142 Resp: 42198

Ion	Ratio	Lower	Upper
142	100		
127	48.5	27.9	83.7
141	14.1	9.6	28.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

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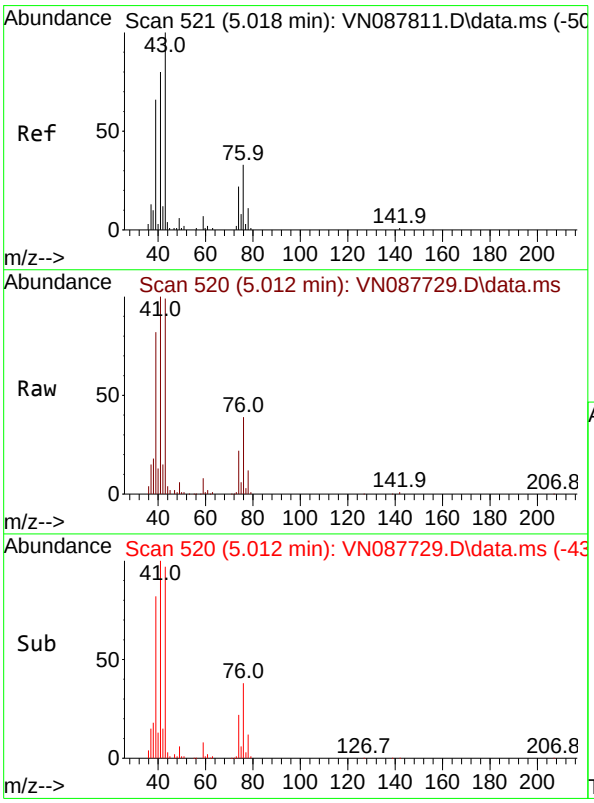
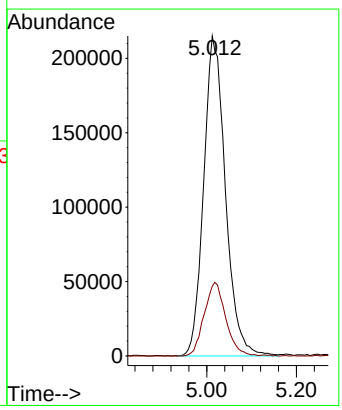
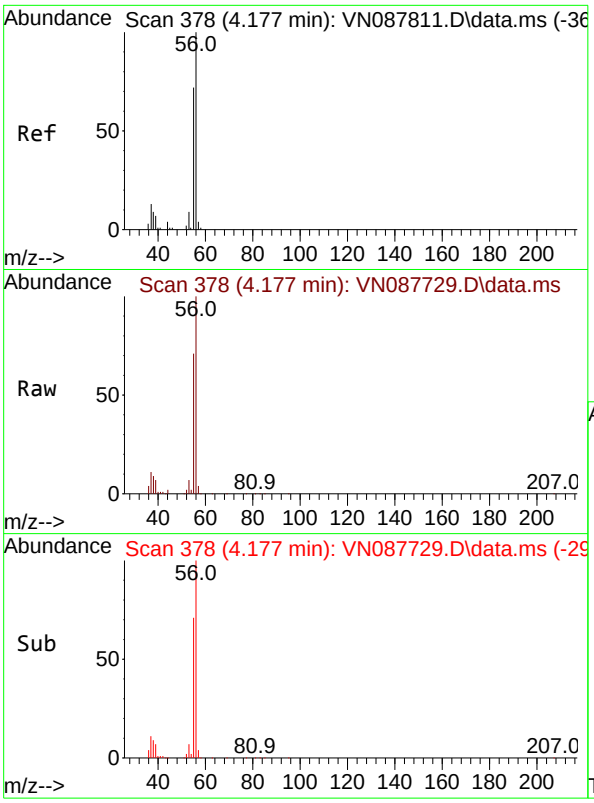


#12
Methyl Acetate
Concen: 152.583 ug/l
RT: 5.012 min Scan# 520
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 43 Resp: 724097

Ion	Ratio	Lower	Upper
43	100		
74	21.8	17.5	26.3

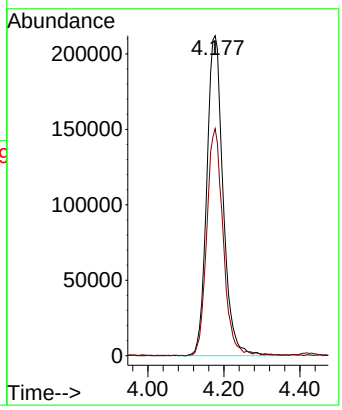




#13
Acrolein
Concen: 849.771 ug/l m
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 56 Resp: 63047

Ion	Ratio	Lower	Upper
56	100		
55	0.1	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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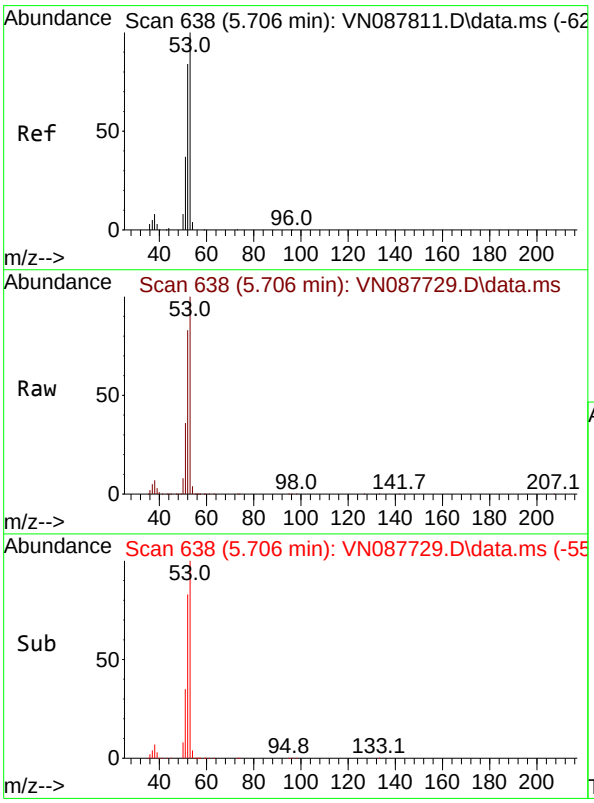
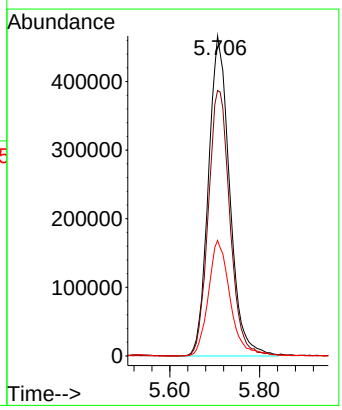
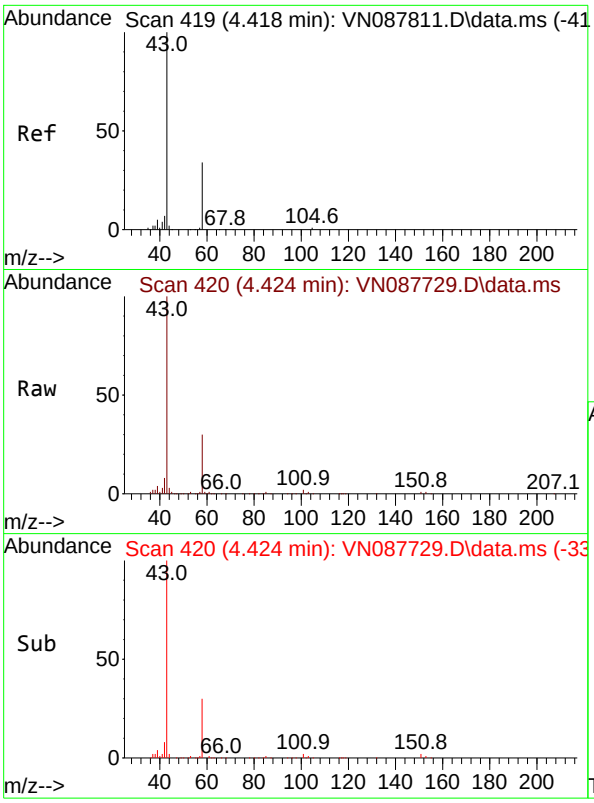


#14
Acrylonitrile
Concen: 749.724 ug/l
RT: 5.706 min Scan# 638
Delta R.T. -0.012 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 53 Resp: 1538968

Ion	Ratio	Lower	Upper
53	100		
52	84.3	40.9	122.7
51	37.0	18.1	54.1

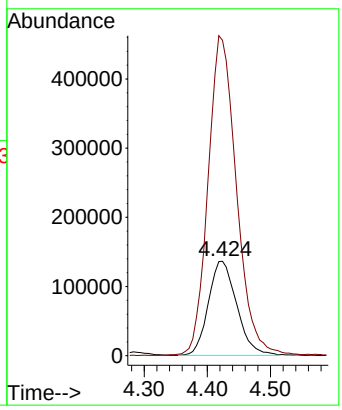




#15
Acetone
Concen: 730.123 ug/l
RT: 4.424 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 58 Resp: 42516

Ion	Ratio	Lower	Upper
58	100		
43	333.3	250.6	376.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

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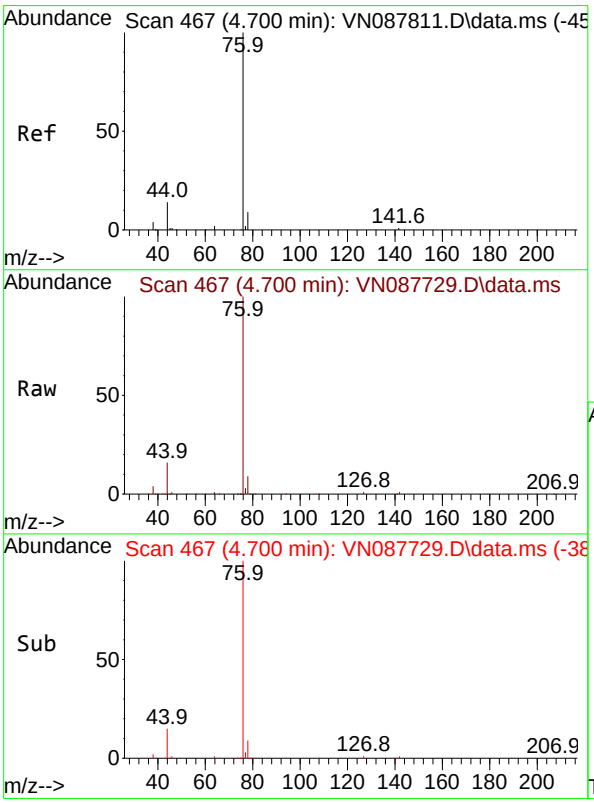
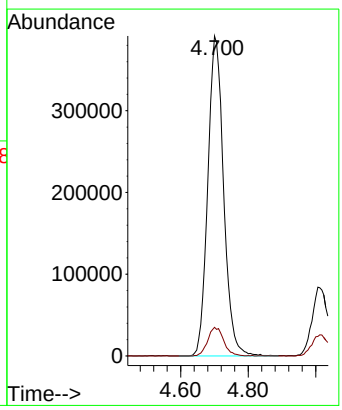
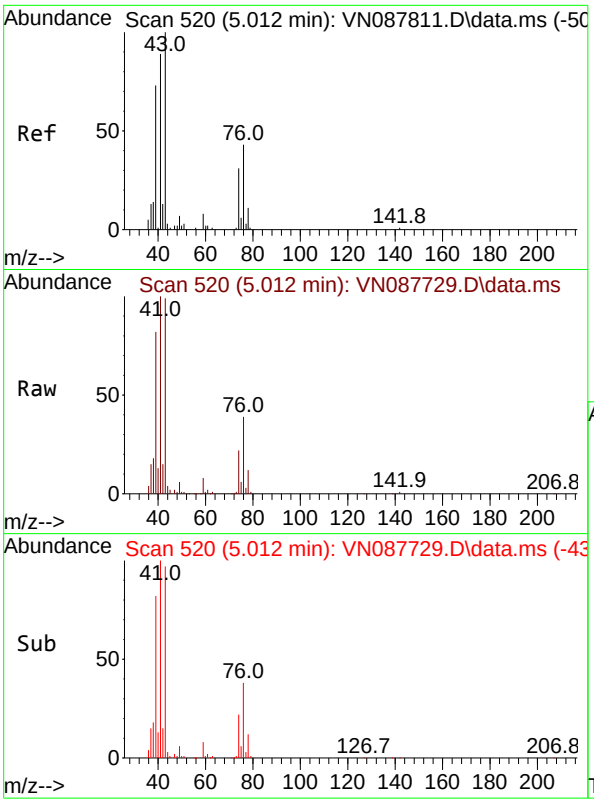


#16
Carbon Disulfide
Concen: 158.737 ug/l m
RT: 4.700 min Scan# 467
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 76 Resp: 1271777

Ion	Ratio	Lower	Upper
76	100		
78	9.0	5.0	7.6#

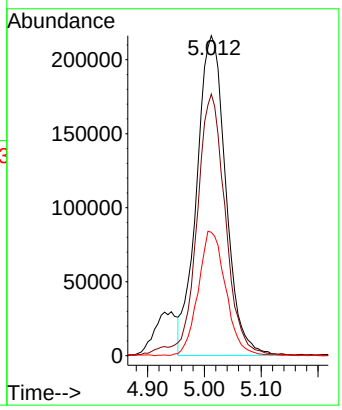




#17
Allyl chloride
Concen: 148.357 ug/l
RT: 5.012 min Scan# 5
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 41 Resp: 76674

Ion	Ratio	Lower	Upper
41	100		
39	81.7	36.7	110.1
76	38.5	18.3	54.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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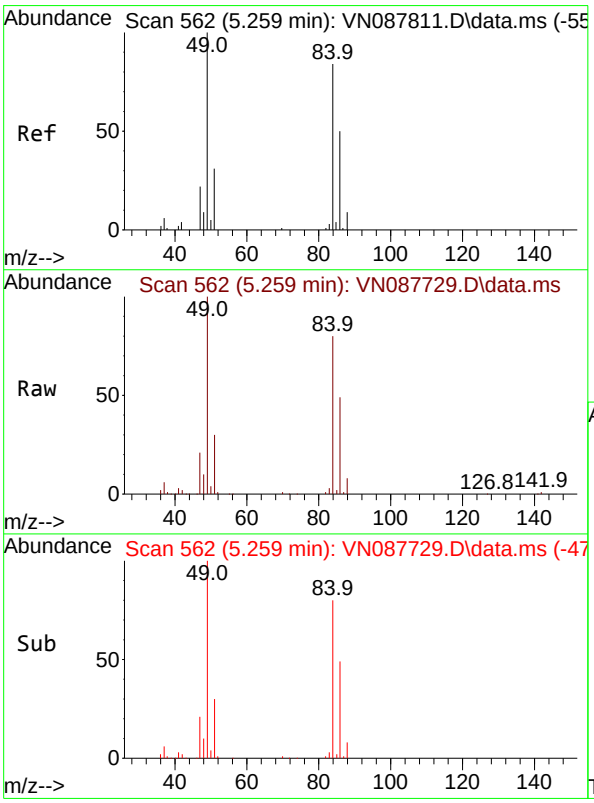
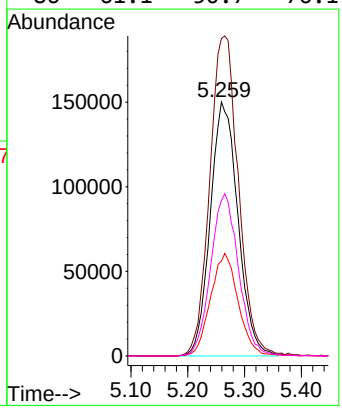
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

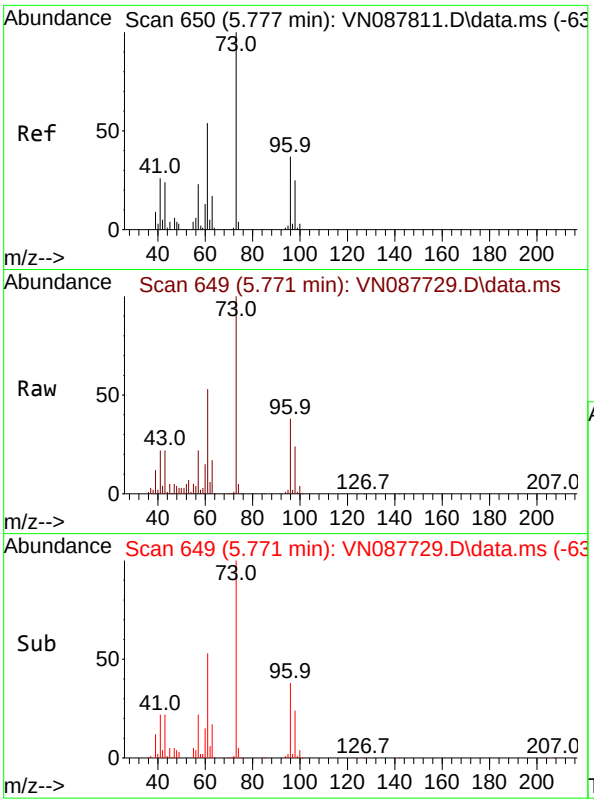


#18
Methylene Chloride
Concen: 153.709 ug/l
RT: 5.259 min Scan# 562
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 84 Resp: 507725

Ion	Ratio	Lower	Upper
84	100		
49	124.9	114.1	171.1
51	37.3	30.2	45.4
86	61.1	50.7	76.1

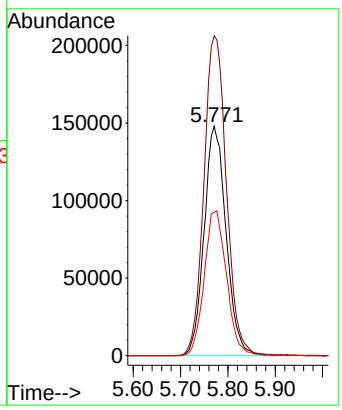




#19
trans-1,2-Dichloroethene
Concen: 156.377 ug/l
RT: 5.771 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 96 Resp: 47795

Ion	Ratio	Lower	Upper
96	100		
61	139.5	106.4	159.6
98	62.5	48.9	73.3



Instrument :
MSVOA_N
ClientSampleId :
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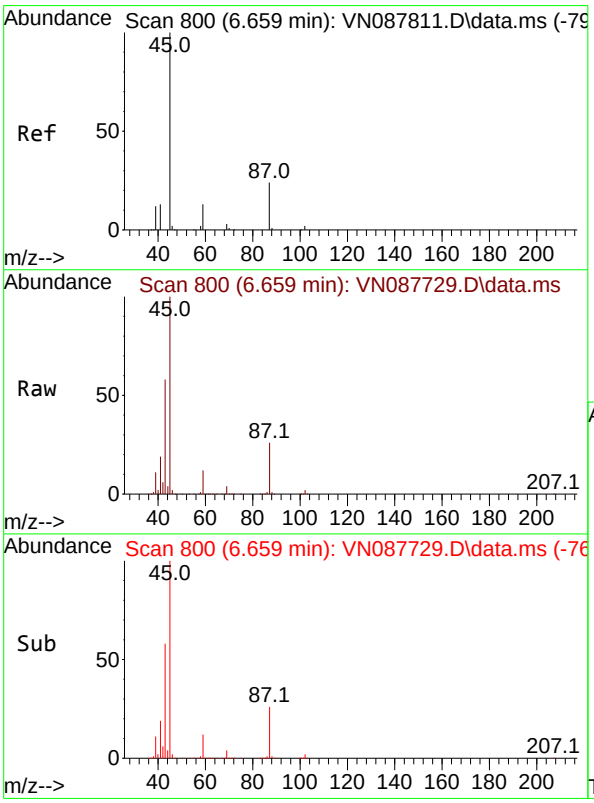
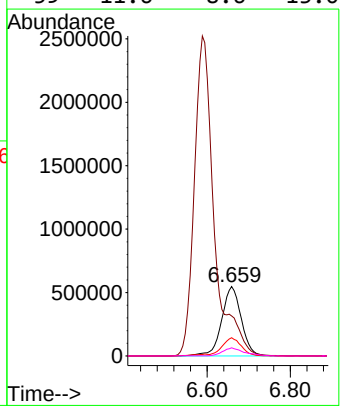
Supervised By :Mahesh Dadoda 09/05/2025

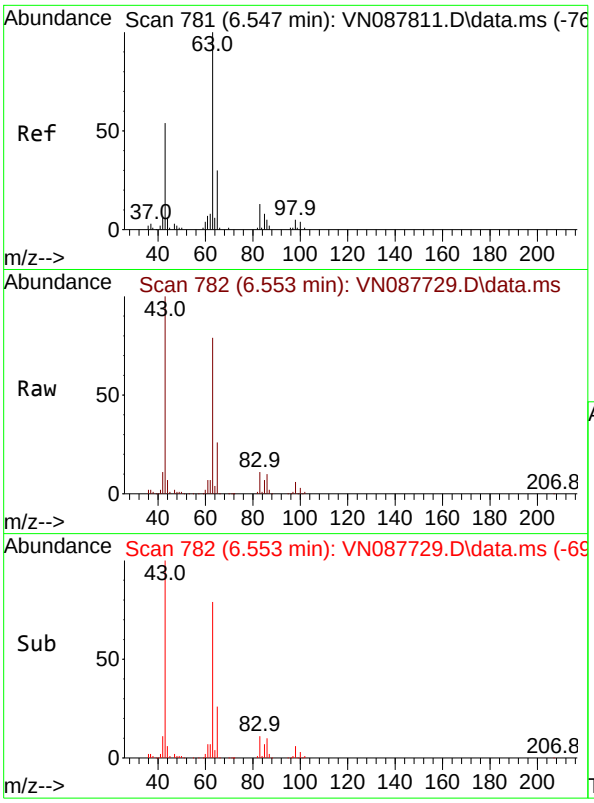


#20
Diisopropyl ether
Concen: 152.305 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 45 Resp: 1793426

Ion	Ratio	Lower	Upper
45	100		
43	57.1	49.5	74.3
87	26.1	18.8	28.2
59	11.6	8.6	13.0

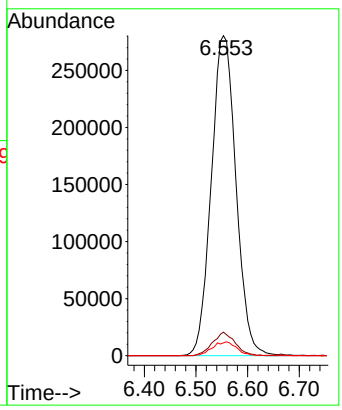




#21
1,1-Dichloroethane
Concen: 152.104 ug/l
RT: 6.553 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 63 Resp: 93140

Ion	Ratio	Lower	Upper
63	100		
98	7.4	2.9	8.8
100	4.0	1.8	5.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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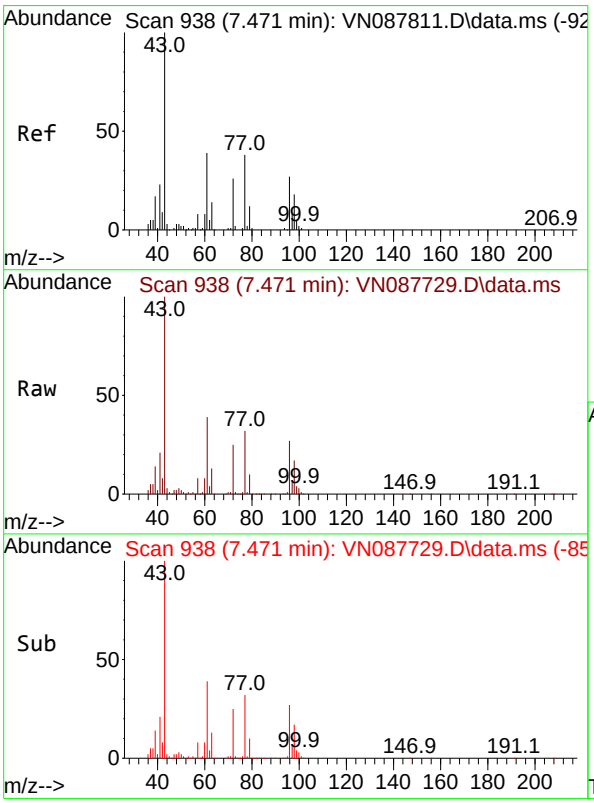
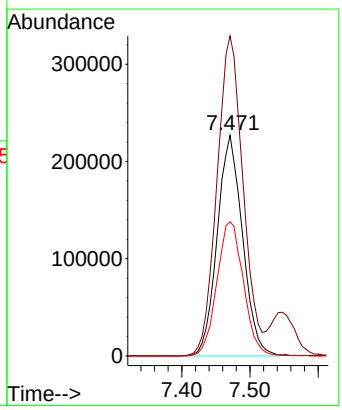
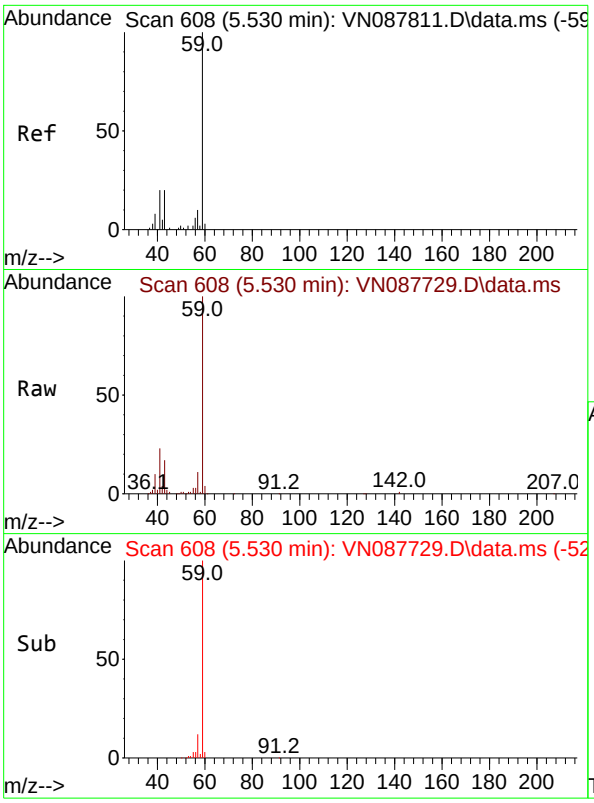


#22
cis-1,2-Dichloroethene
Concen: 156.802 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 96 Resp: 586326

Ion	Ratio	Lower	Upper
96	100		
61	149.1	118.2	177.2
98	63.7	51.6	77.4





#23
tert-Butyl Alcohol
Concen: 639.163 ug/l
RT: 5.530 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 59 Resp: 54538

Ion	Ratio	Lower	Upper
59	100		
52	0.1	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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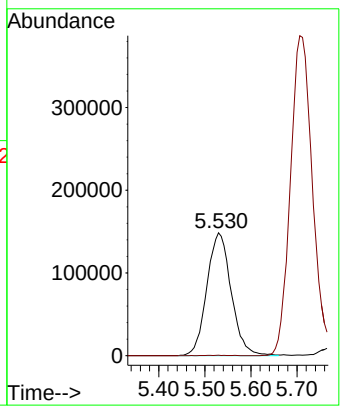
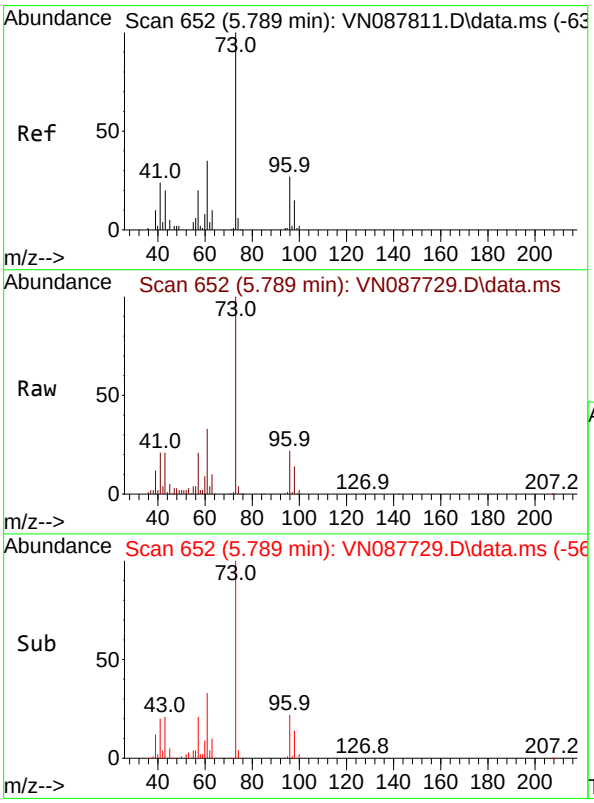
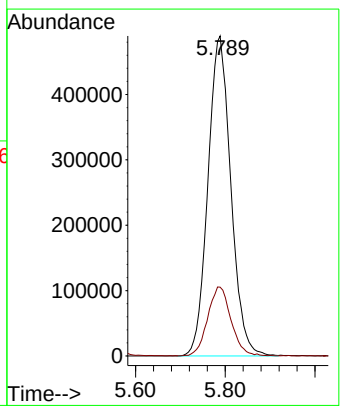


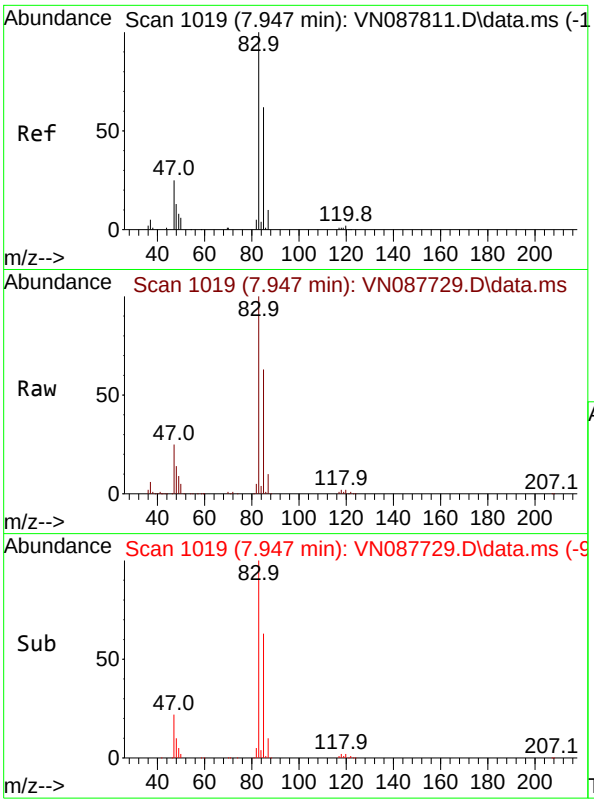


#24
Methyl tert-Butyl Ether
Concen: 151.610 ug/l
RT: 5.789 min Scan# 652
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 73 Resp: 1739496

Ion	Ratio	Lower	Upper
73	100		
43	21.9	16.8	25.2

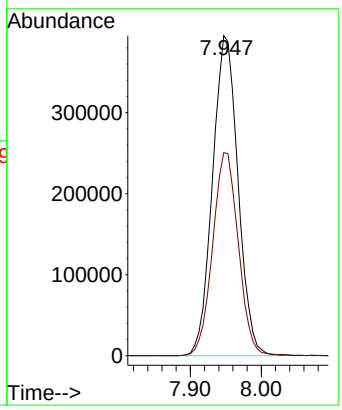




#25
Chloroform
Concen: 152.526 ug/l
RT: 7.947 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 83 Resp: 98328

Ion	Ratio	Lower	Upper
83	100		
85	63.4	47.7	71.5



Instrument :
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ClientSampleId :
VSTDICC150

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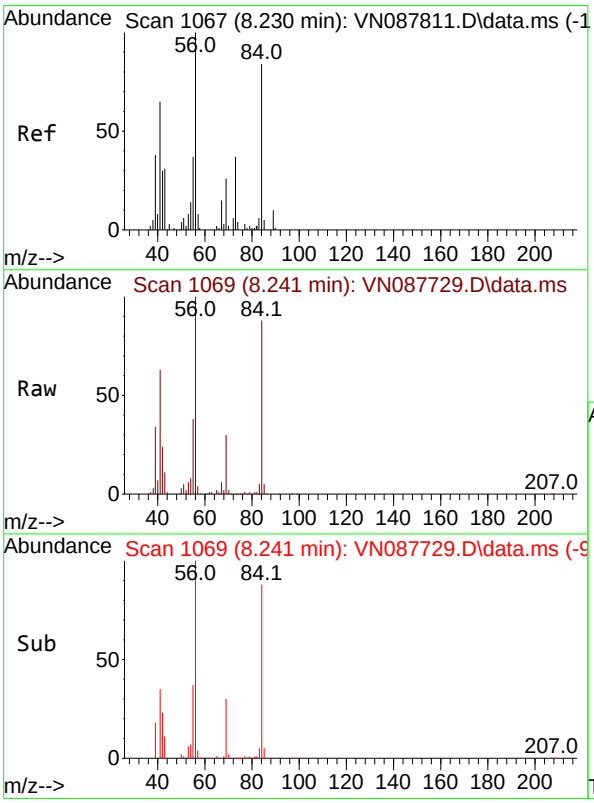
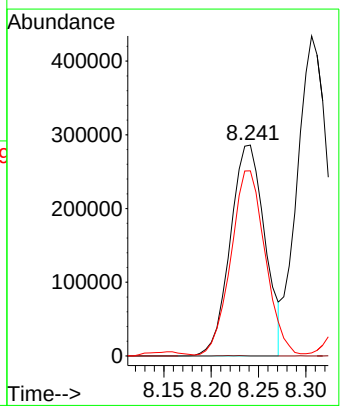
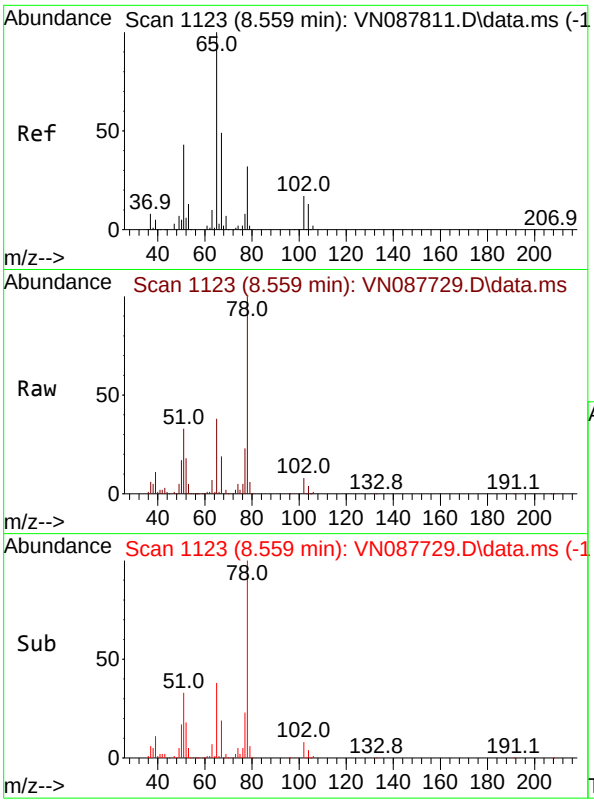


#26
Cyclohexane
Concen: 150.164 ug/l
RT: 8.241 min Scan# 1069
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 56 Resp: 727166

Ion	Ratio	Lower	Upper
56	100		
89	0.1	0.0	0.0#
84	87.6	69.4	104.2

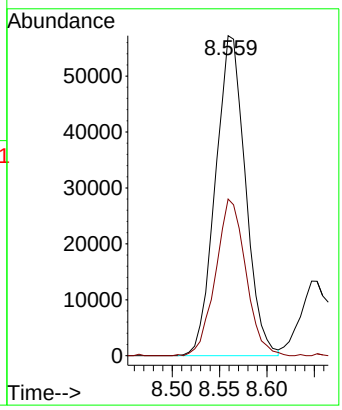




#27
1,2-Dichloroethane-d4
Concen: 28.682 ug/l
RT: 8.559 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 65 Resp: 12585

Ion	Ratio	Lower	Upper
65	100		
67	49.2	39.6	59.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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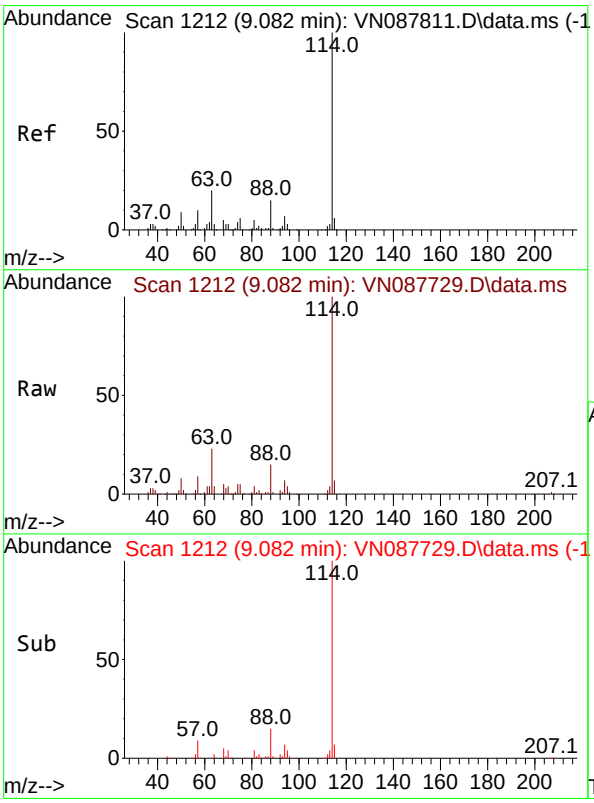
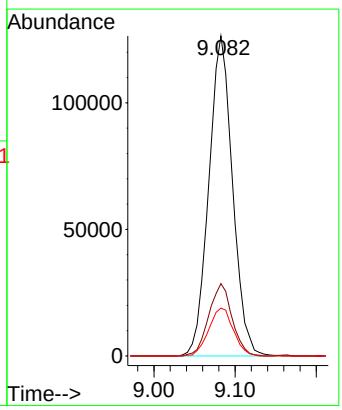
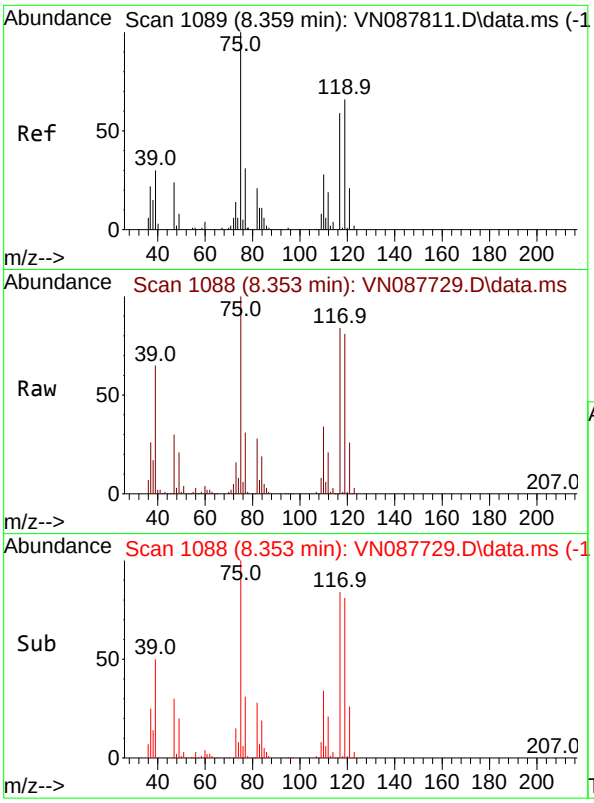


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:114 Resp: 256987

Ion	Ratio	Lower	Upper
114	100		
63	22.2	18.3	27.5
88	15.5	12.4	18.6

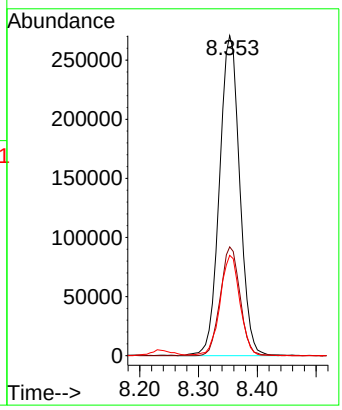




#29
1,1-Dichloropropene
Concen: 157.510 ug/l
RT: 8.353 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 75 Resp: 64880

Ion	Ratio	Lower	Upper
75	100		
110	32.9	0.0	64.4
77	30.8	0.0	62.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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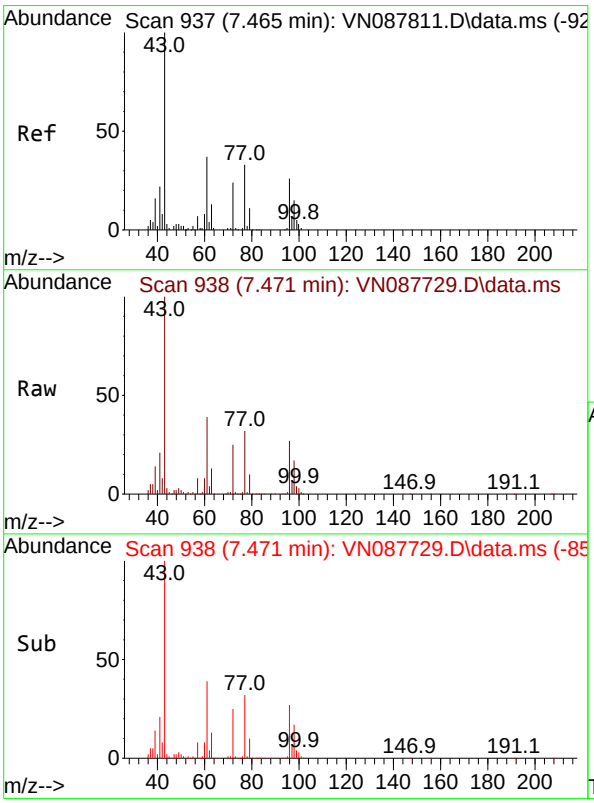
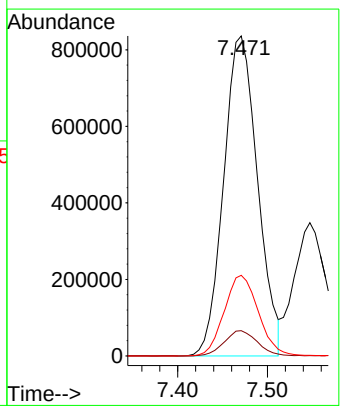
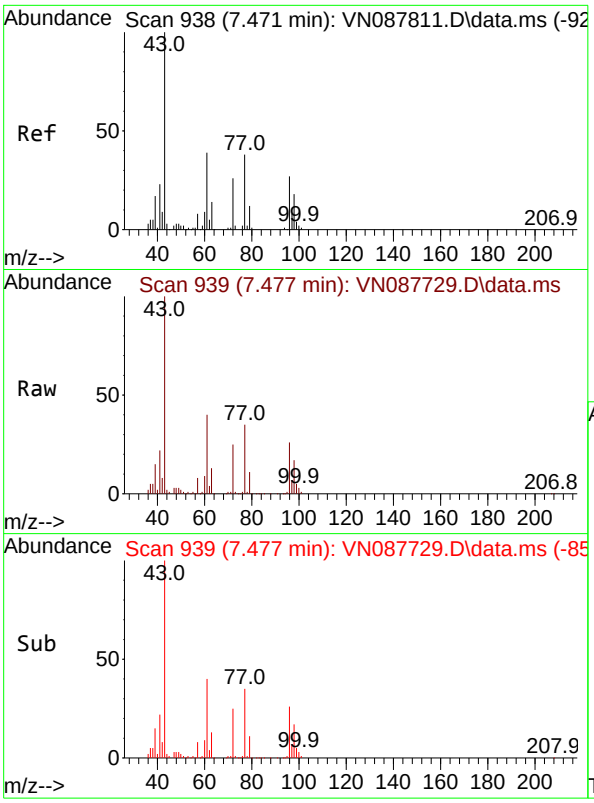


#30
2-Butanone
Concen: 736.360 ug/l
RT: 7.471 min Scan# 938
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 43 Resp: 2196856

Ion	Ratio	Lower	Upper
43	100		
57	7.7	6.3	9.5
72	25.5	21.4	32.2

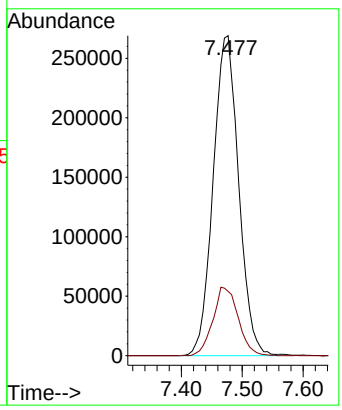




#31
2,2-Dichloropropane
Concen: 151.522 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 77 Resp: 78197

Ion	Ratio	Lower	Upper
77	100		
97	21.2	17.1	25.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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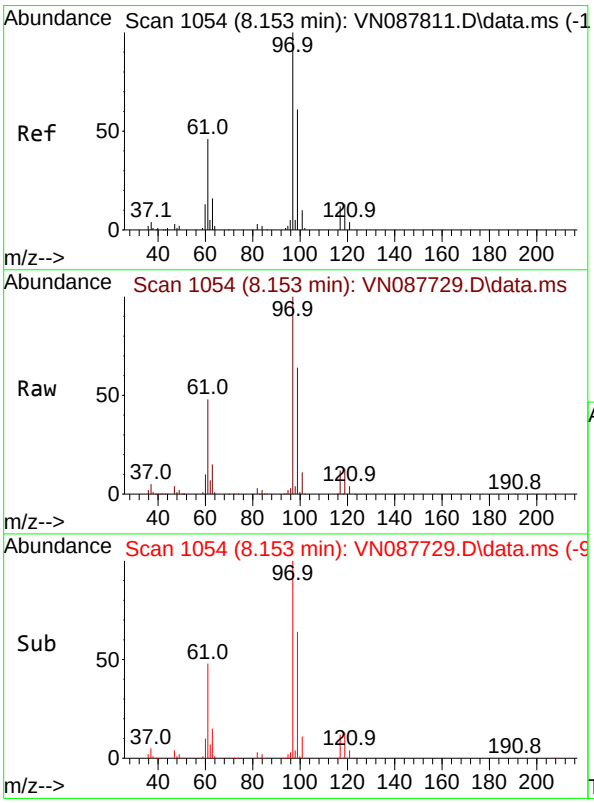
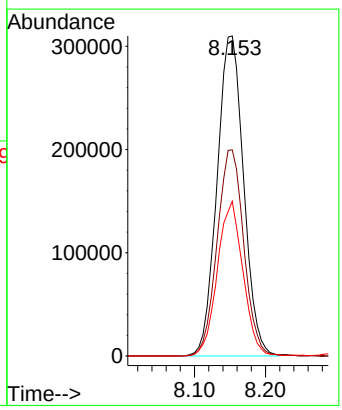
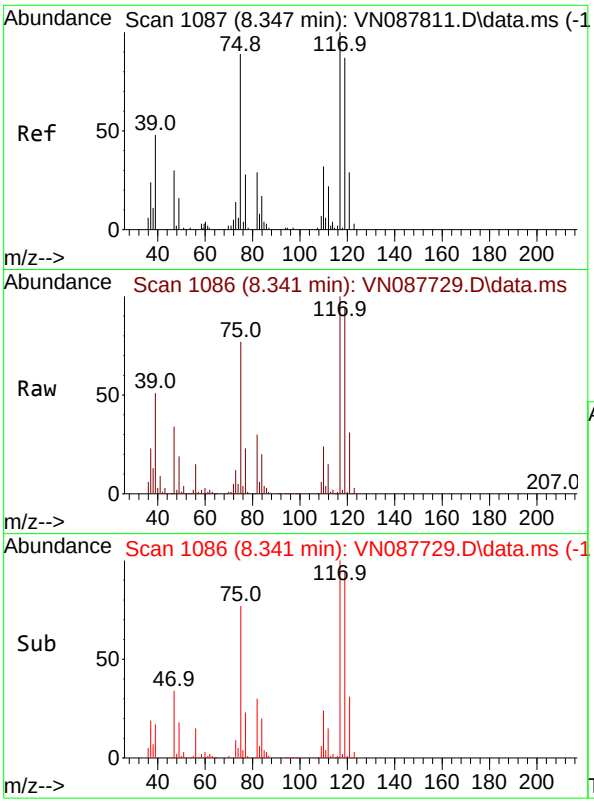


#32
1,1,1-Trichloroethane
Concen: 152.690 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 97 Resp: 806677

Ion	Ratio	Lower	Upper
97	100		
99	64.7	52.2	78.4
61	46.5	37.9	56.9

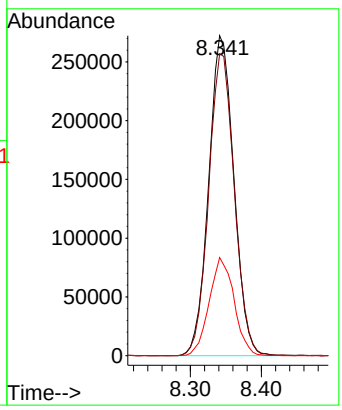




#33
Carbon Tetrachloride
Concen: 154.283 ug/l
RT: 8.341 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:117 Resp: 67075

Ion	Ratio	Lower	Upper
117	100		
119	94.3	77.3	115.9
121	30.6	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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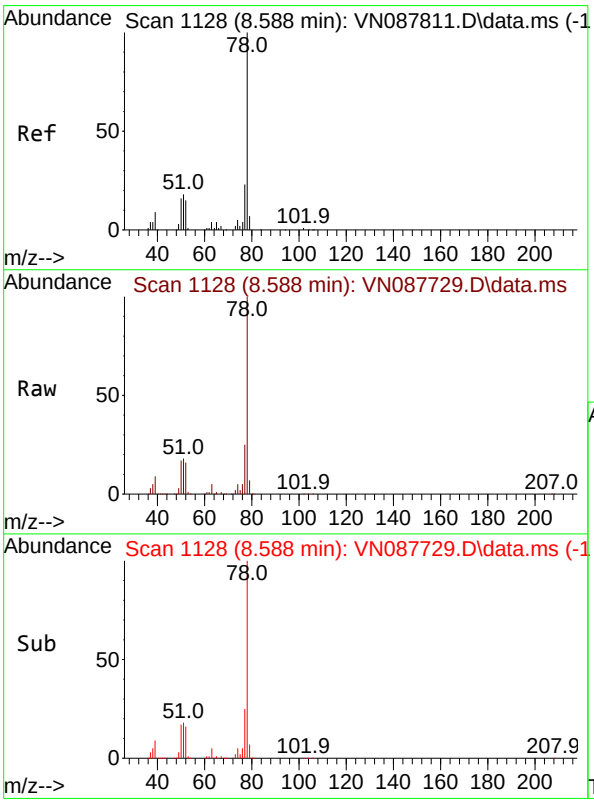
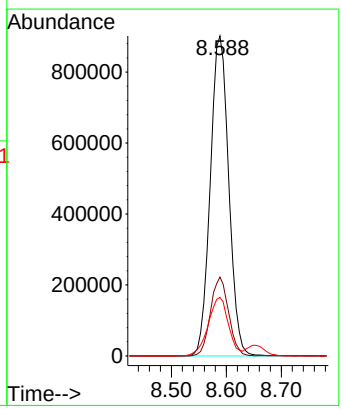
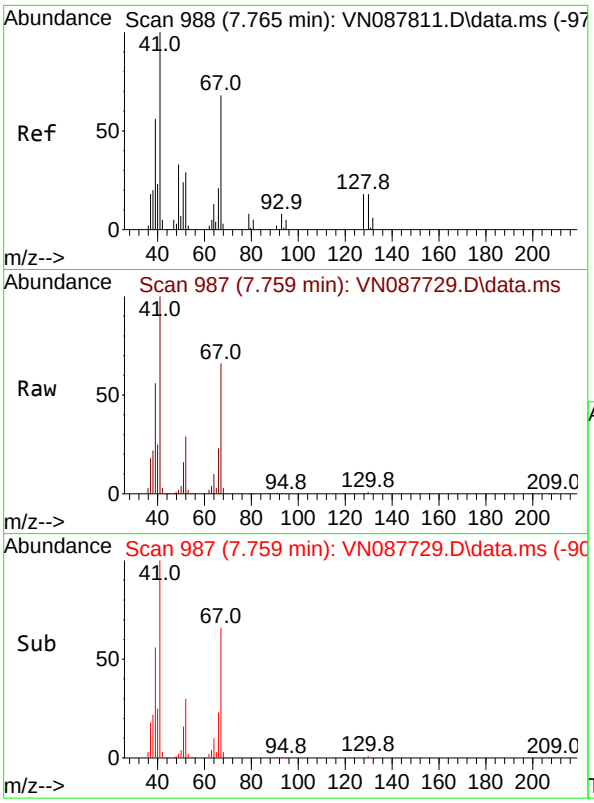


#34
Benzene
Concen: 160.910 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 78 Resp: 2101924

Ion	Ratio	Lower	Upper
78	100		
77	24.7	20.3	30.5
51	18.2	18.0	27.0

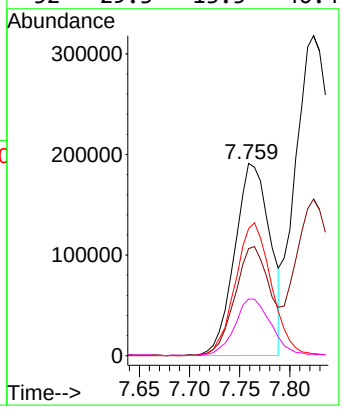




#35
Methacrylonitrile
Concen: 144.552 ug/l
RT: 7.759 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 41 Resp: 46847

Ion	Ratio	Lower	Upper
41	100		
39	55.7	27.1	81.2
67	66.2	32.1	96.5
52	29.3	13.5	40.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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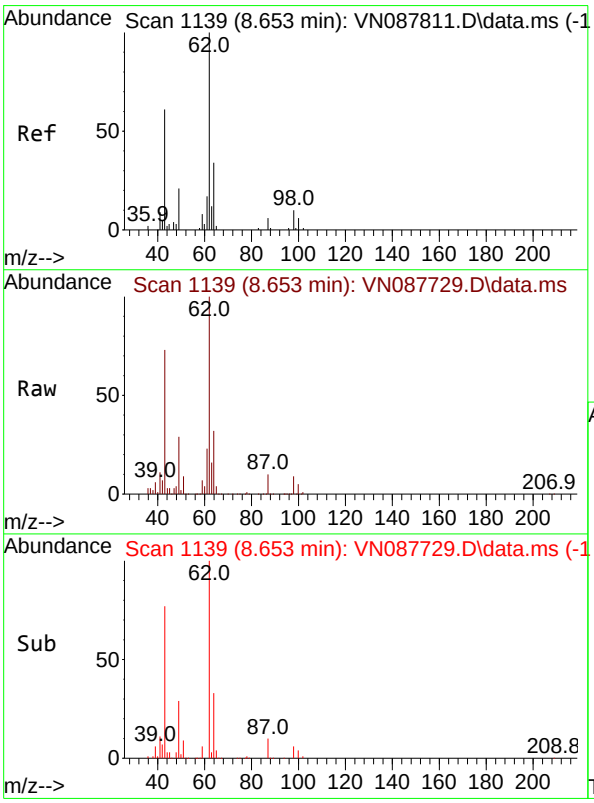
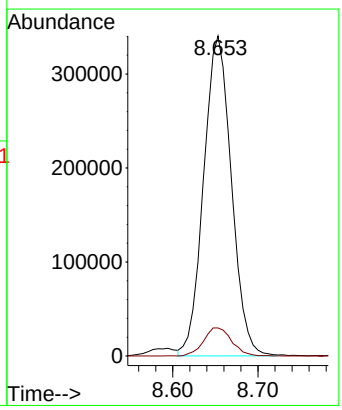
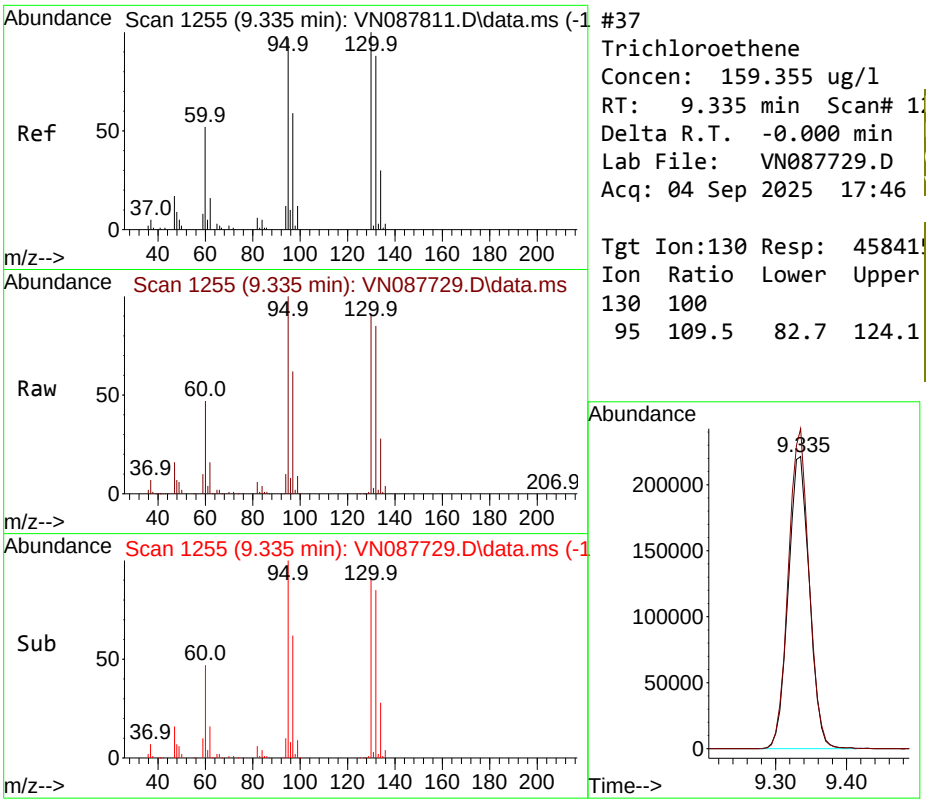


#36
1,2-Dichloroethane
Concen: 147.988 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 62 Resp: 770632

Ion	Ratio	Lower	Upper
62	100		
98	8.9	7.2	10.8





#37
Trichloroethene
Concen: 159.355 ug/l
RT: 9.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:130 Resp: 45841

Ion	Ratio	Lower	Upper
130	100		
95	109.5	82.7	124.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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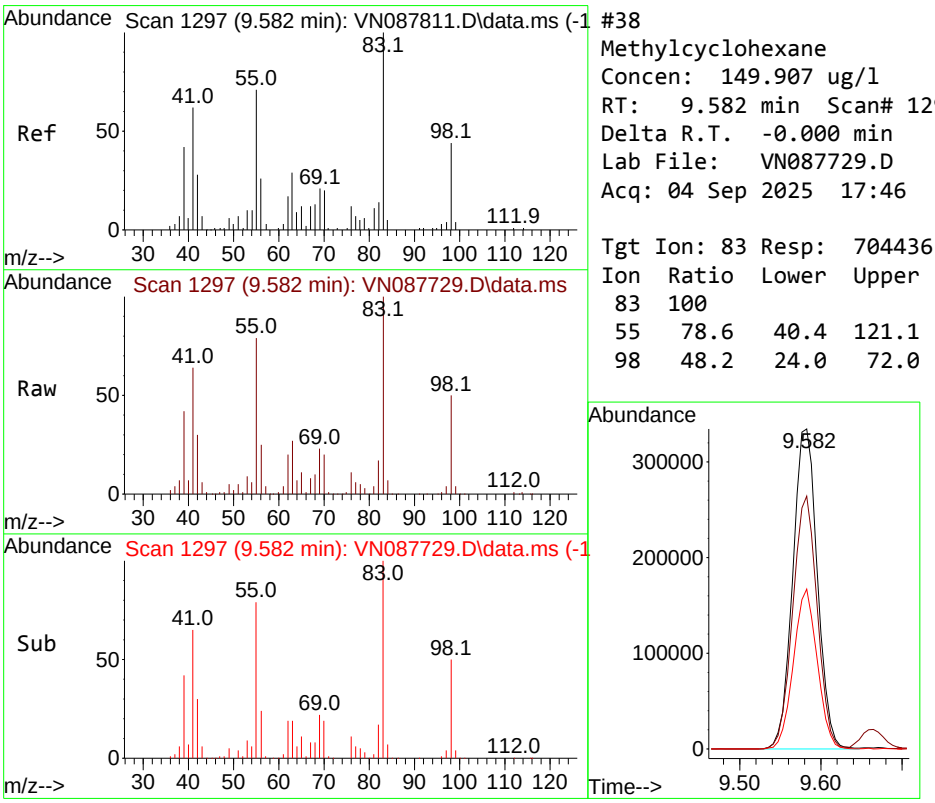
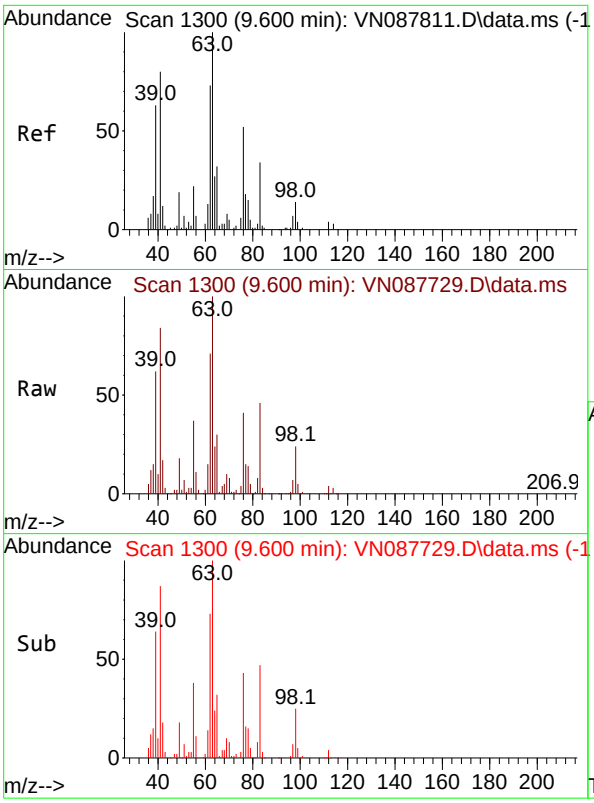
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025



#38
Methylcyclohexane
Concen: 149.907 ug/l
RT: 9.582 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 83 Resp: 704436

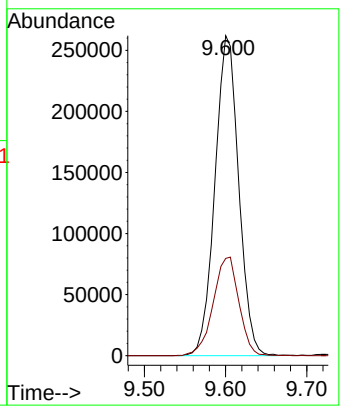
Ion	Ratio	Lower	Upper
83	100		
55	78.6	40.4	121.1
98	48.2	24.0	72.0



#39
1,2-Dichloropropane
Concen: 159.192 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 63 Resp: 53290

Ion	Ratio	Lower	Upper
63	100		
65	30.3	24.1	36.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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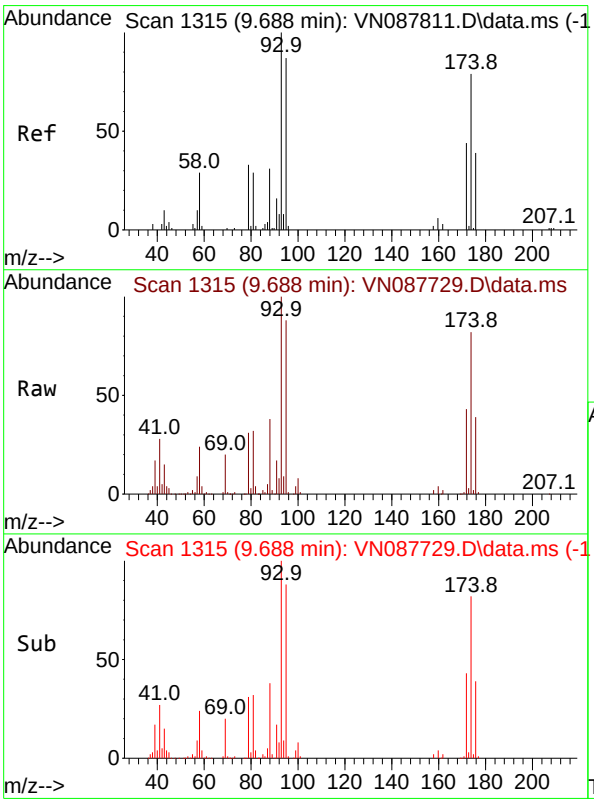
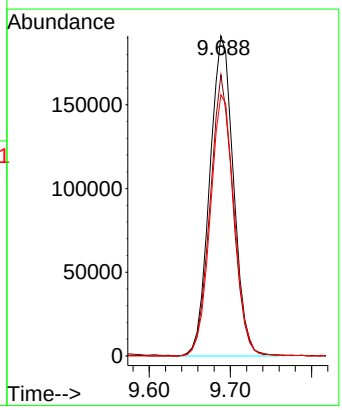
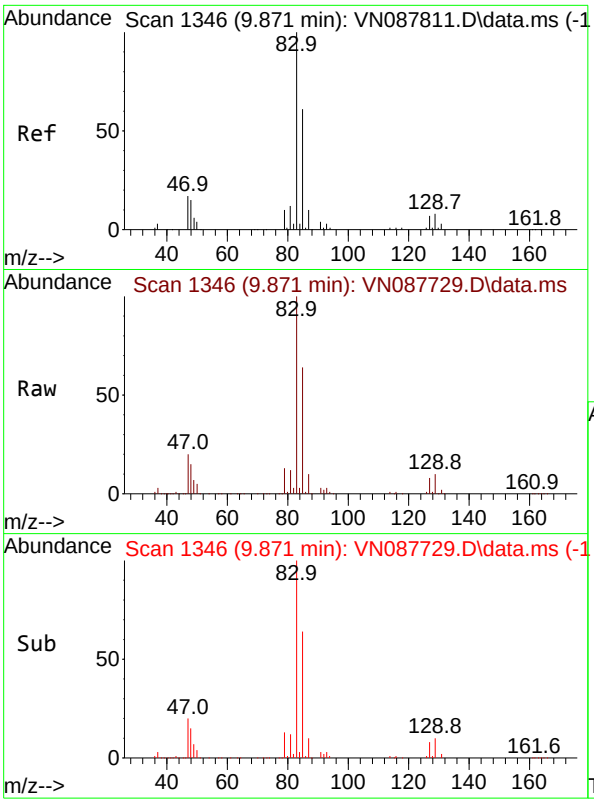


#40
Dibromomethane
Concen: 155.837 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 93 Resp: 390063

Ion	Ratio	Lower	Upper
93	100		
95	84.4	0.0	168.4
174	82.4	0.0	162.8

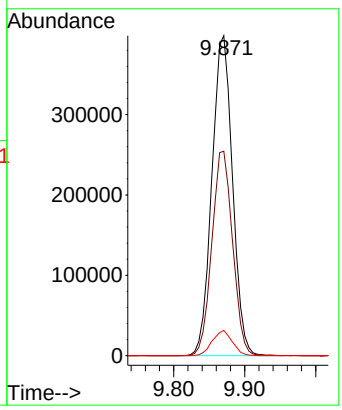




#41
Bromodichloromethane
Concen: 153.294 ug/l
RT: 9.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 83 Resp: 80126

Ion	Ratio	Lower	Upper
83	100		
85	63.9	47.3	70.9
127	7.9	5.2	7.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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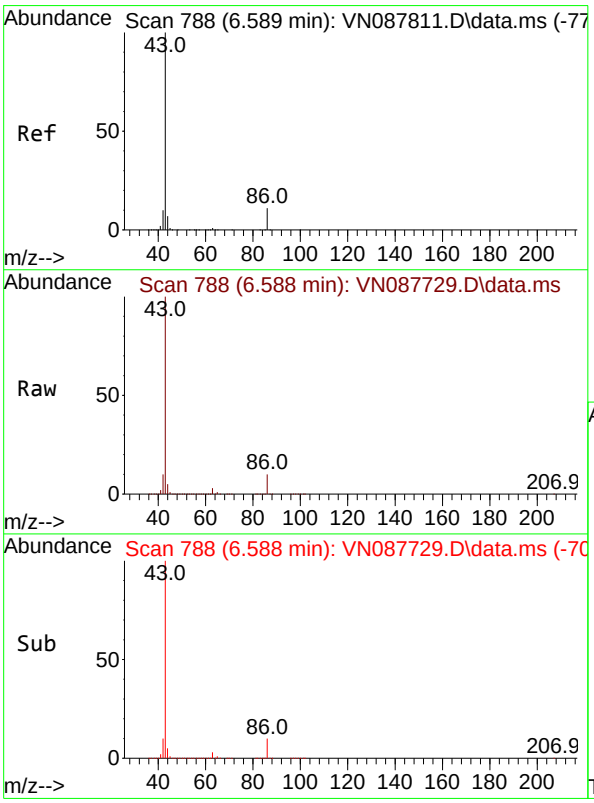
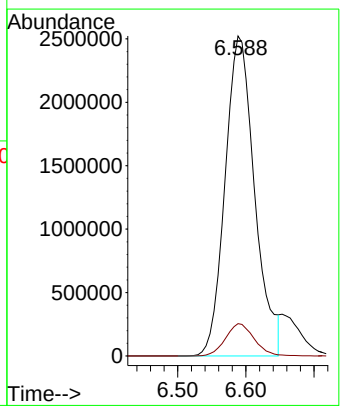
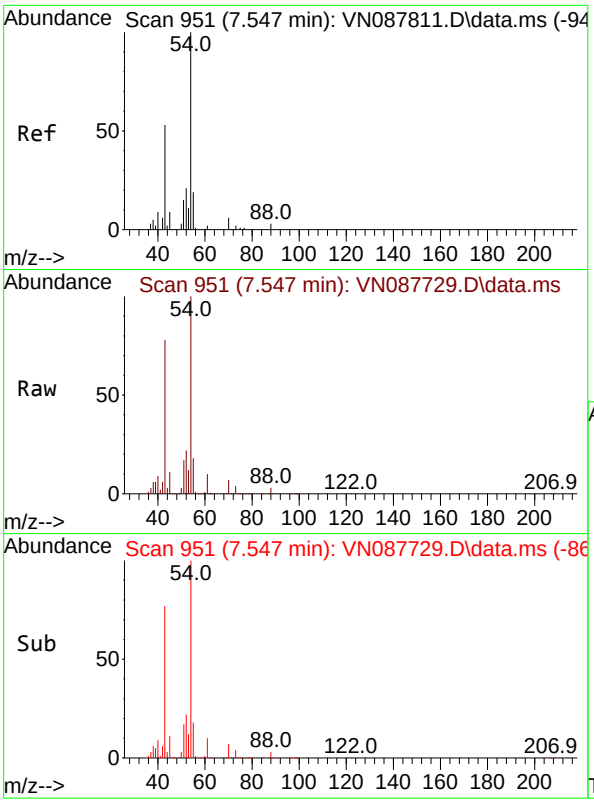


#42
Vinyl Acetate
Concen: 776.186 ug/l
RT: 6.588 min Scan# 788
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 43 Resp: 7618340

Ion	Ratio	Lower	Upper
43	100		
86	9.8	7.7	11.5





#43
Ethyl Acetate
Concen: 153.686 ug/l
RT: 7.547 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 43 Resp: 90361

Ion	Ratio	Lower	Upper
43	100		
45	12.1	10.5	15.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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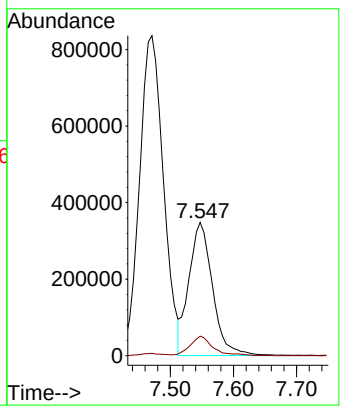
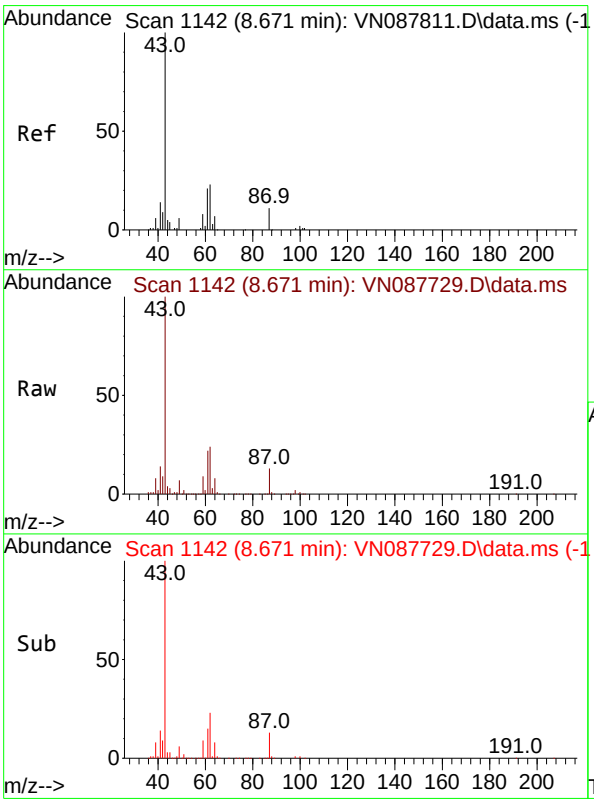
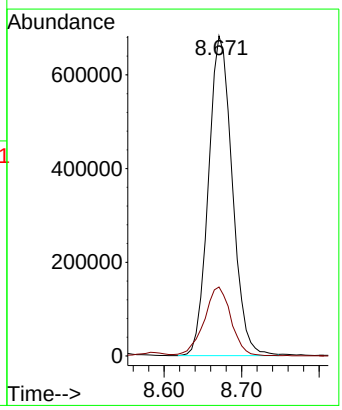


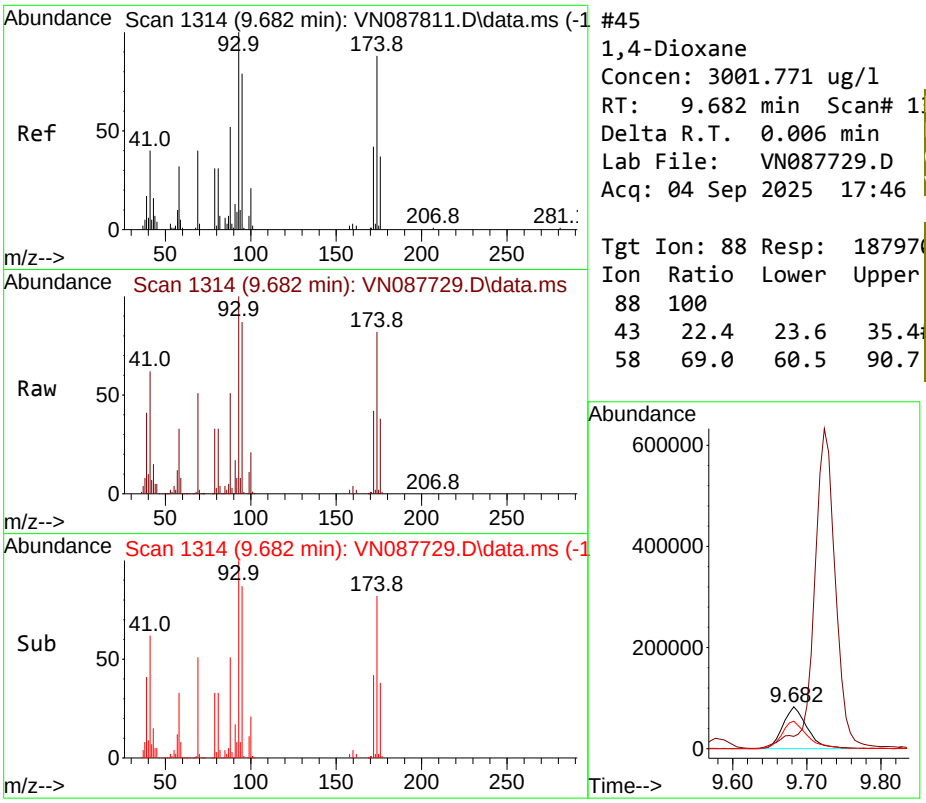


#44
Isopropyl Acetate
Concen: 149.330 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 43 Resp: 1460618

Ion	Ratio	Lower	Upper
43	100		
61	24.4	19.5	29.3





#45
1,4-Dioxane
Concen: 3001.771 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 88 Resp: 18797

Ion	Ratio	Lower	Upper
88	100		
43	22.4	23.6	35.4
58	69.0	60.5	90.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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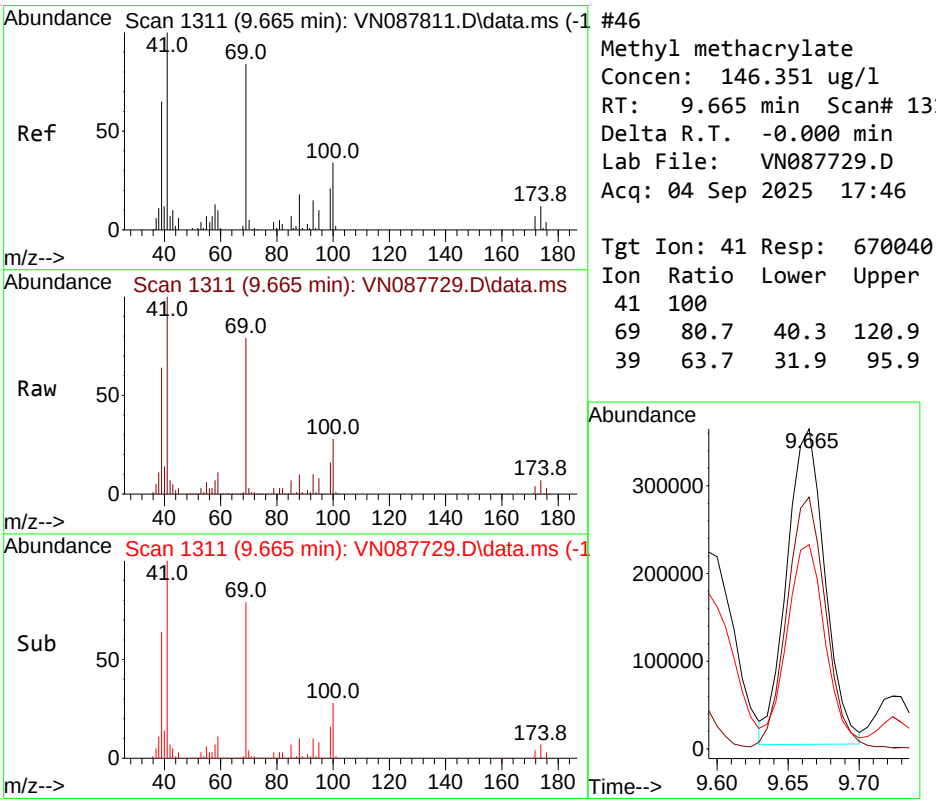
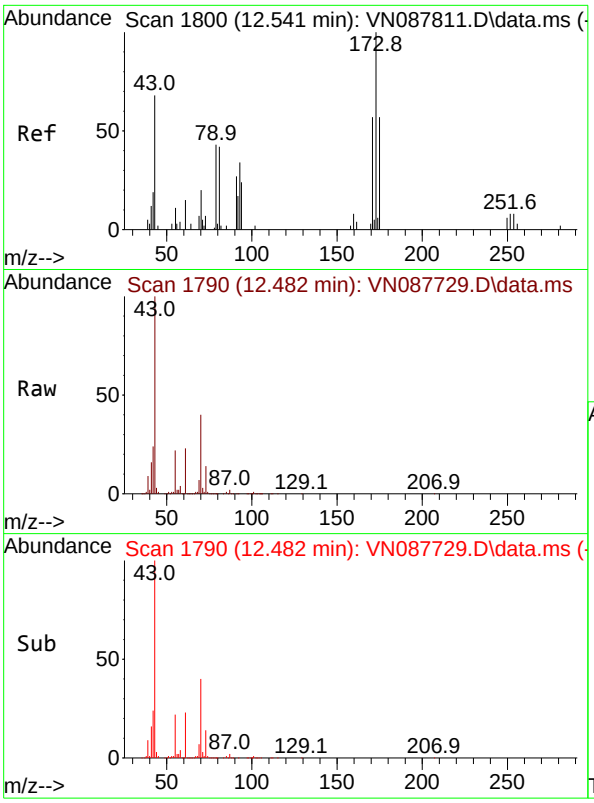
Supervised By :Mahesh Dadoda 09/05/2025



#46
Methyl methacrylate
Concen: 146.351 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 41 Resp: 670040

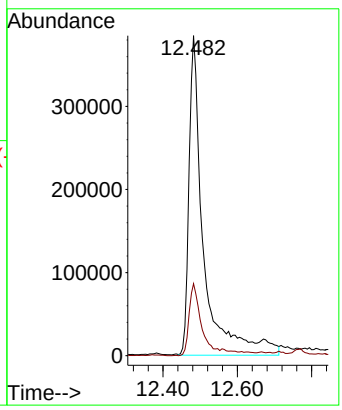
Ion	Ratio	Lower	Upper
41	100		
69	80.7	40.3	120.9
39	63.7	31.9	95.9



#47
n-amyl Acetate
Concen: 184.337 ug/l m
RT: 12.482 min Scan# 1
Delta R.T. -0.188 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 43 Resp: 104833

Ion	Ratio	Lower	Upper
43	100		
55	0.1	0.7	1.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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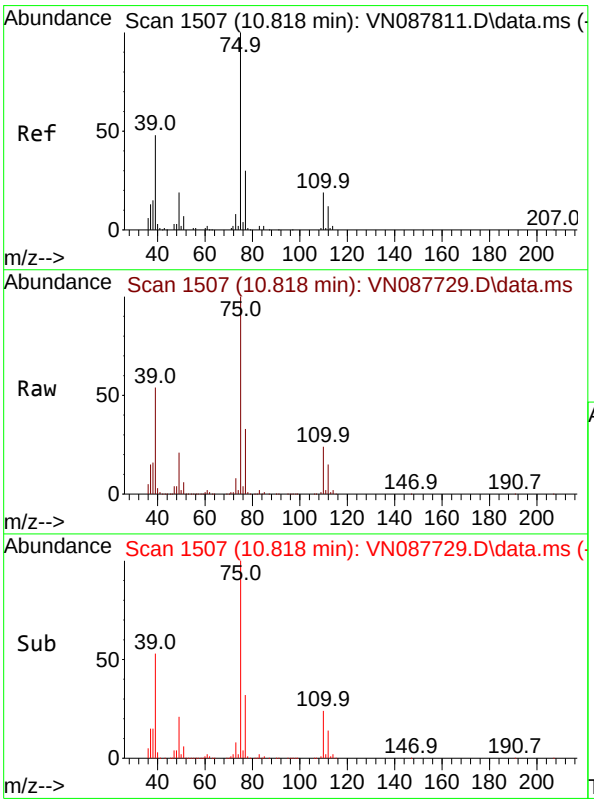
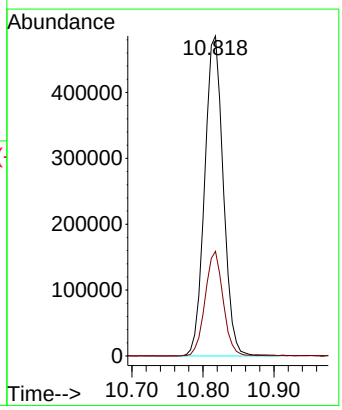
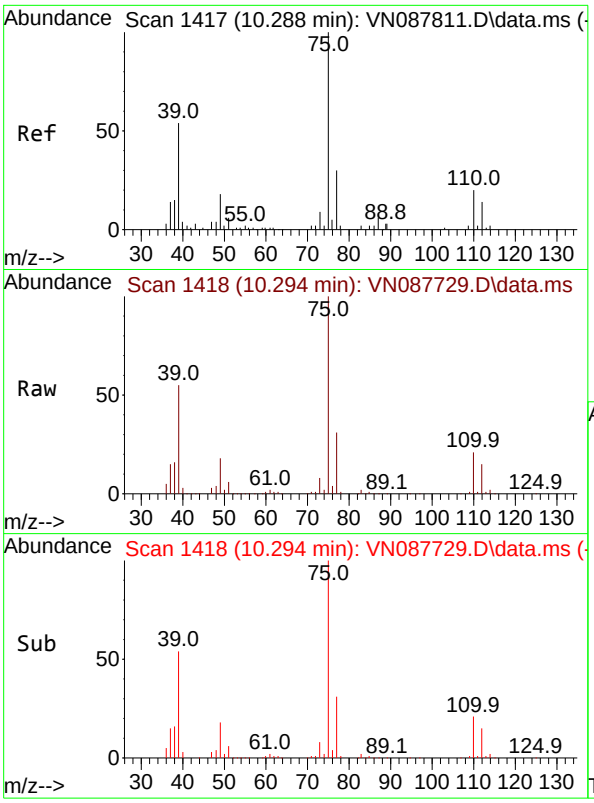


#48
t-1,3-Dichloropropene
Concen: 158.851 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 75 Resp: 885111

Ion	Ratio	Lower	Upper
75	100		
77	32.7	24.7	37.1

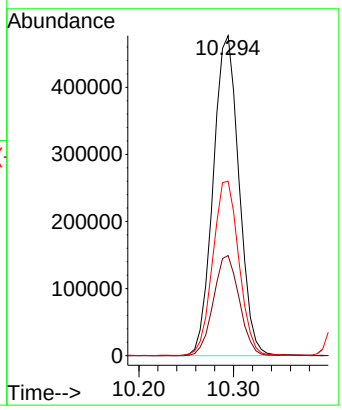




#49
cis-1,3-Dichloropropene
Concen: 160.315 ug/l
RT: 10.294 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 75 Resp: 90154

Ion	Ratio	Lower	Upper
75	100		
77	31.3	27.8	41.6
39	54.5	47.6	71.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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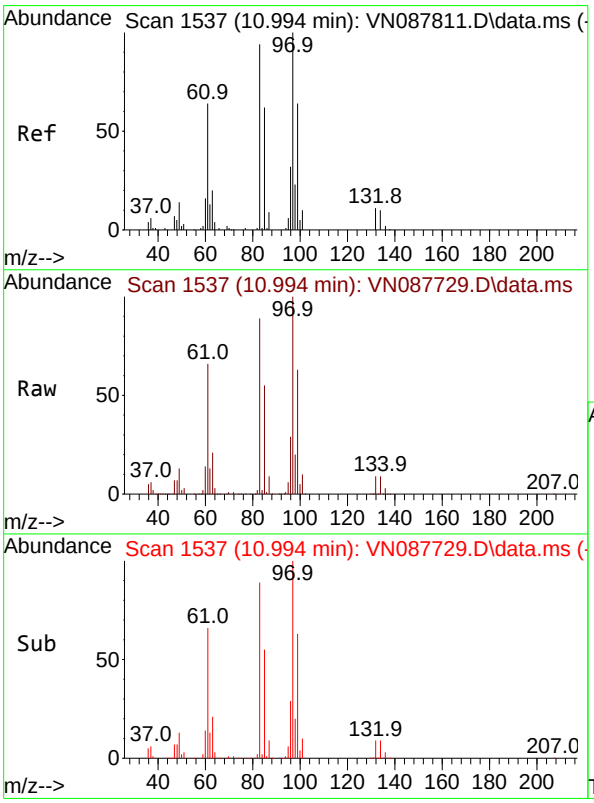
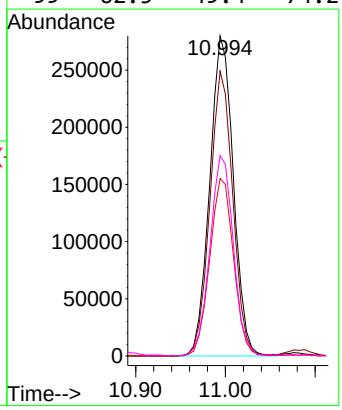
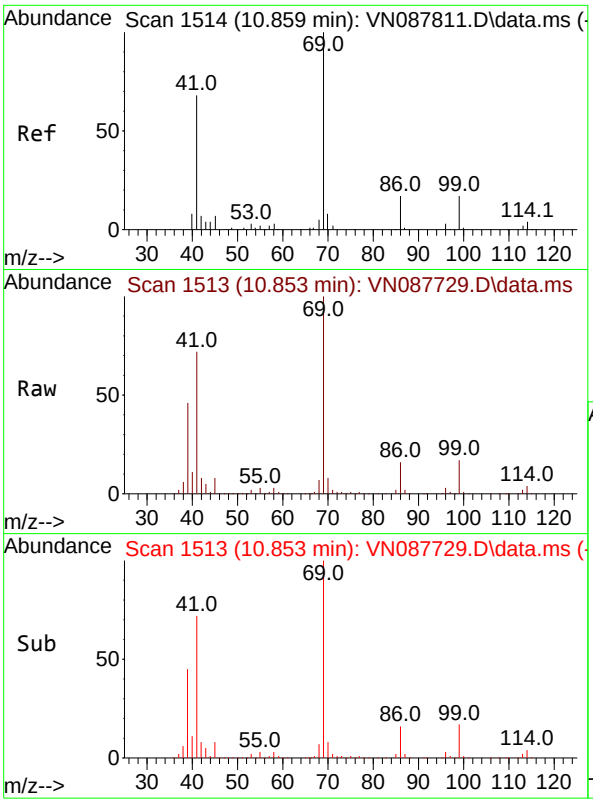


#50
1,1,2-Trichloroethane
Concen: 160.824 ug/l
RT: 10.994 min Scan# 1537
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 97 Resp: 511317

Ion	Ratio	Lower	Upper
97	100		
83	89.0	70.5	105.7
85	55.4	46.3	69.5
99	62.5	49.4	74.2

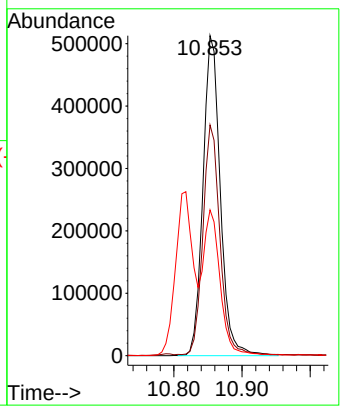




#51
Ethyl methacrylate
Concen: 167.159 ug/l
RT: 10.853 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 69 Resp: 90683

Ion	Ratio	Lower	Upper
69	100		
41	71.7	33.7	101.0
39	45.3	20.3	60.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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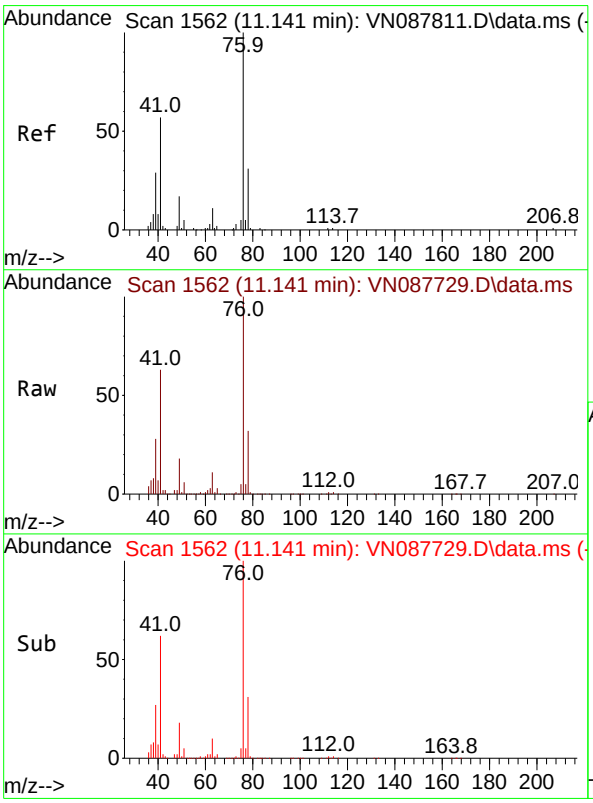
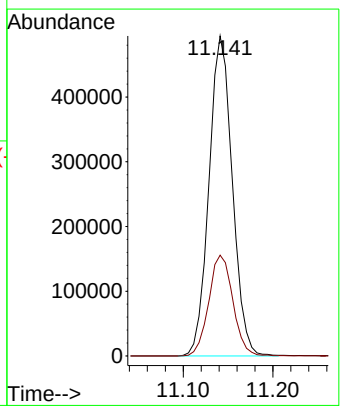
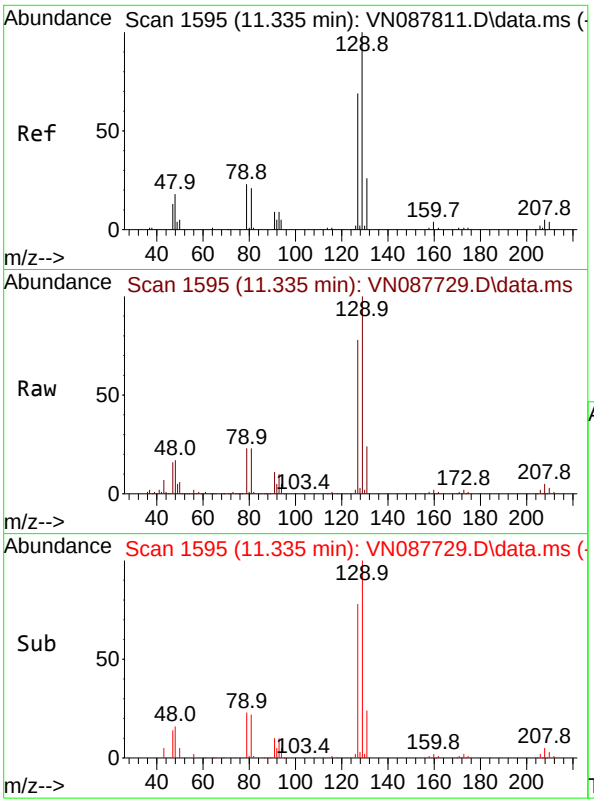


#52
1,3-Dichloropropane
Concen: 156.782 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 76 Resp: 893642

Ion	Ratio	Lower	Upper
76	100		
78	32.4	0.0	65.2

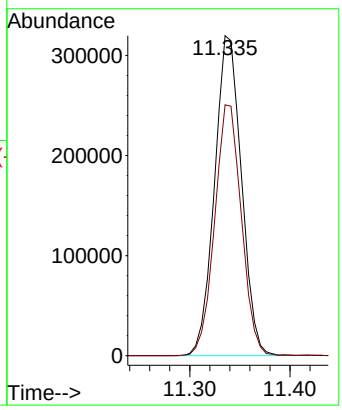




#53
Dibromochloromethane
Concen: 164.776 ug/l
RT: 11.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:129 Resp: 59633

Ion	Ratio	Lower	Upper
129	100		
127	77.7	42.6	128.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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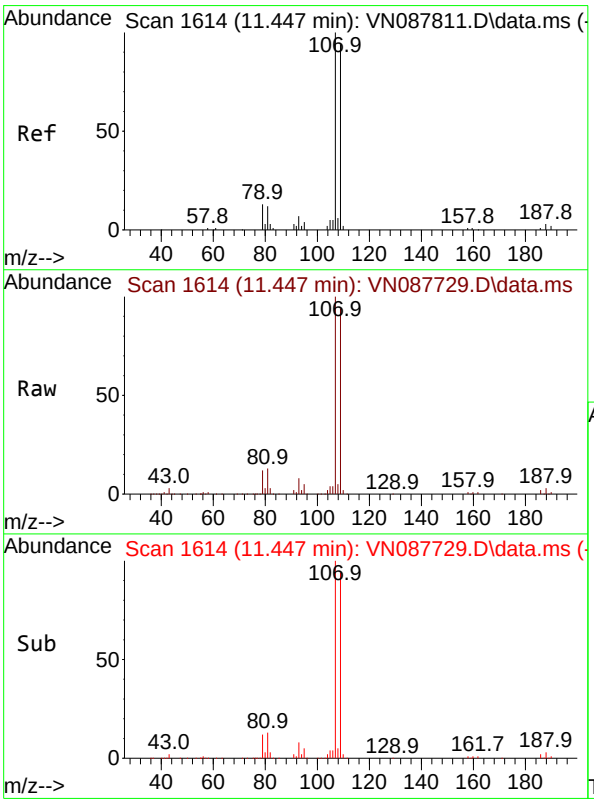
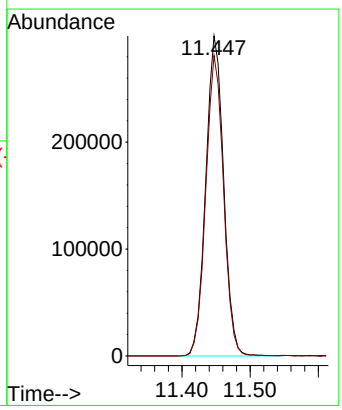
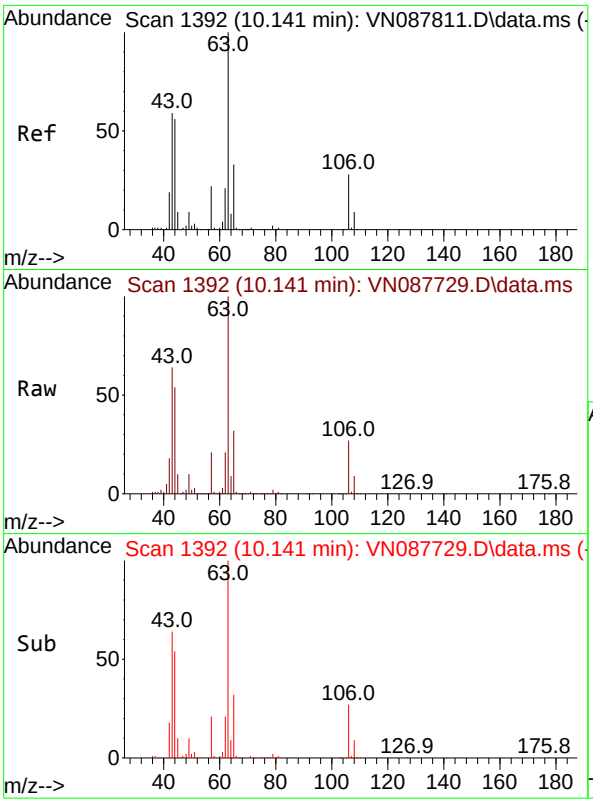


#54
1,2-Dibromoethane
Concen: 163.081 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:107 Resp: 546357

Ion	Ratio	Lower	Upper
107	100		
109	93.3	74.6	112.0

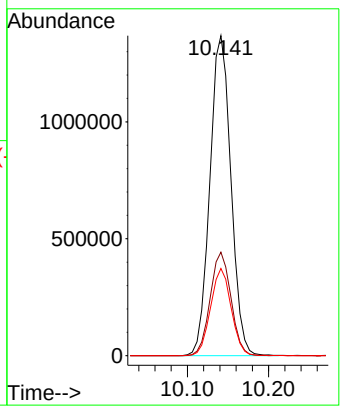




#55
2-Chloroethyl vinyl ether
Concen: 840.927 ug/l
RT: 10.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 63 Resp: 246483

Ion	Ratio	Lower	Upper
63	100		
65	32.0	26.6	40.0
106	26.7	21.1	31.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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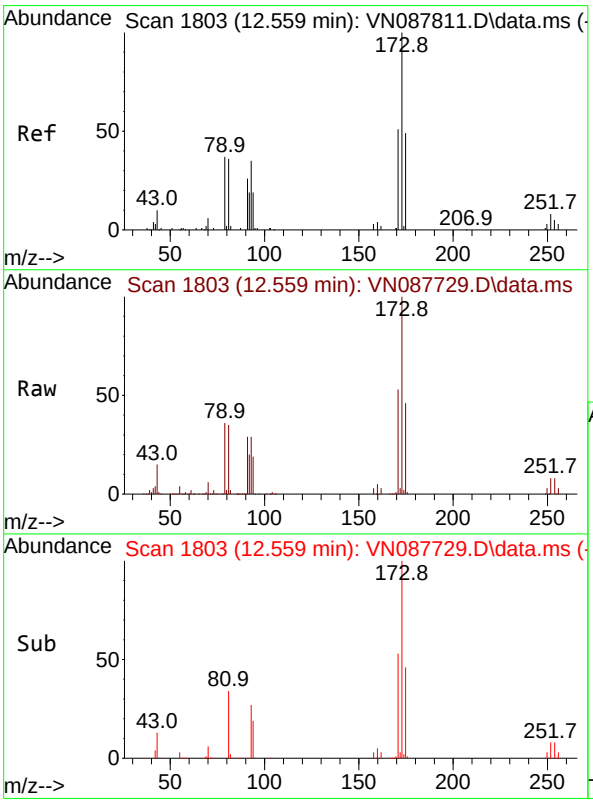
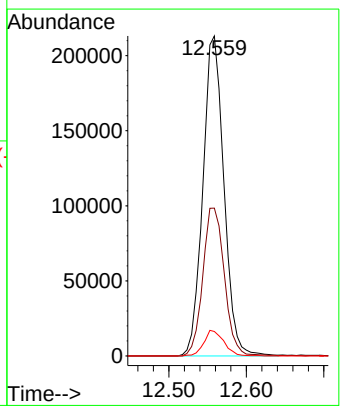
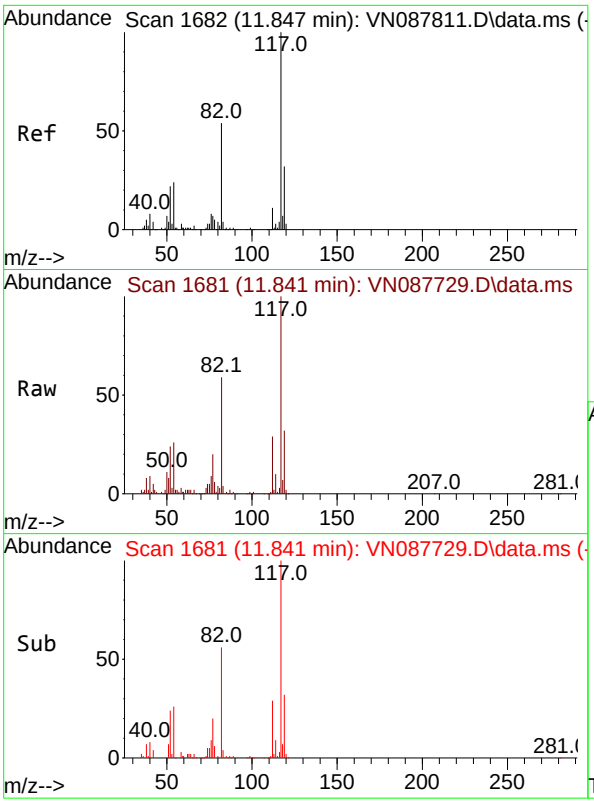


#56
Bromoform
Concen: 167.746 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:173 Resp: 402223

Ion	Ratio	Lower	Upper
173	100		
175	47.4	39.8	59.6
254	7.6	6.2	9.4

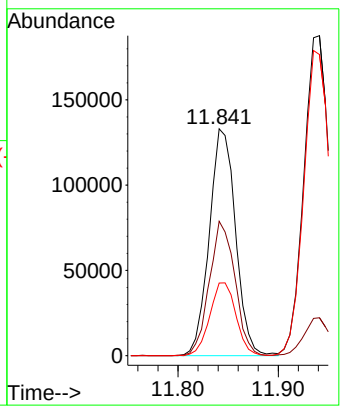




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:117 Resp: 24243

Ion	Ratio	Lower	Upper
117	100		
82	57.7	45.9	68.9
119	32.0	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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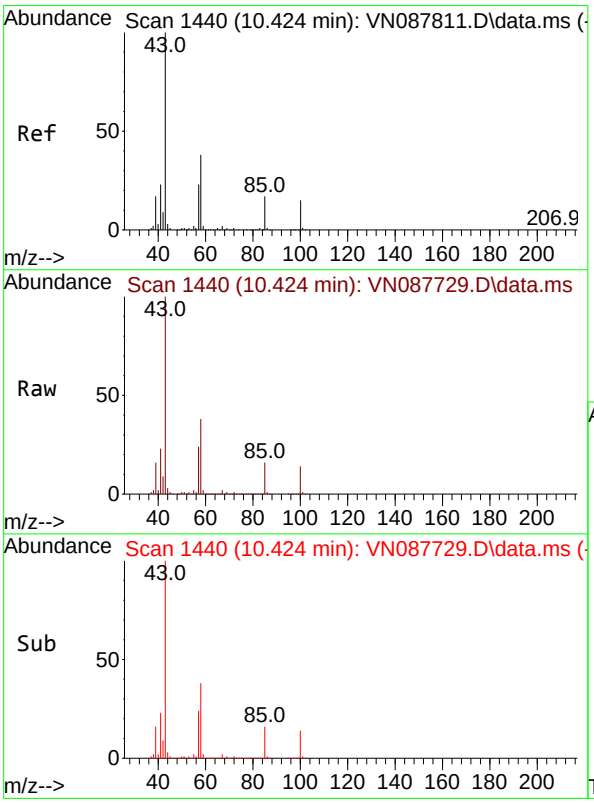
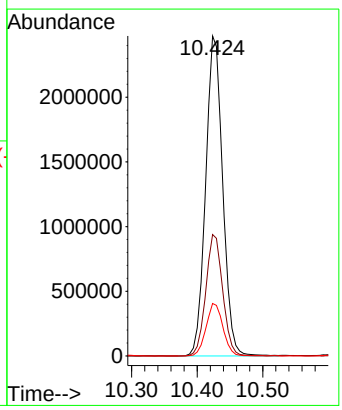
Supervised By :Mahesh Dadoda 09/05/2025

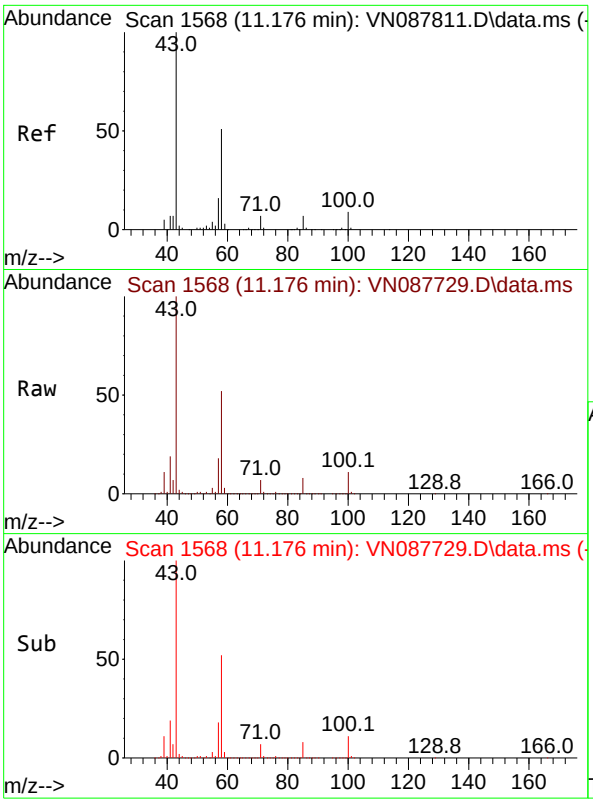


#58
4-Methyl-2-Pentanone
Concen: 745.754 ug/l
RT: 10.424 min Scan# 1440
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 43 Resp: 4473520

Ion	Ratio	Lower	Upper
43	100		
58	37.7	29.6	44.4
85	16.3	13.0	19.4

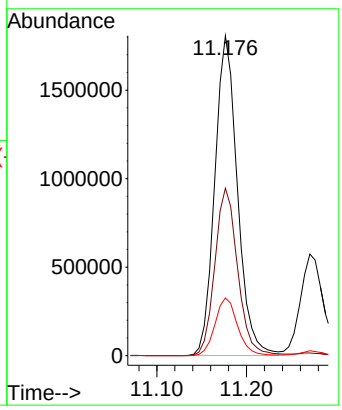




#59
2-Hexanone
Concen: 780.545 ug/l
RT: 11.176 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 43 Resp: 317093

Ion	Ratio	Lower	Upper
43	100		
58	52.7	40.2	60.4
57	18.1	13.7	20.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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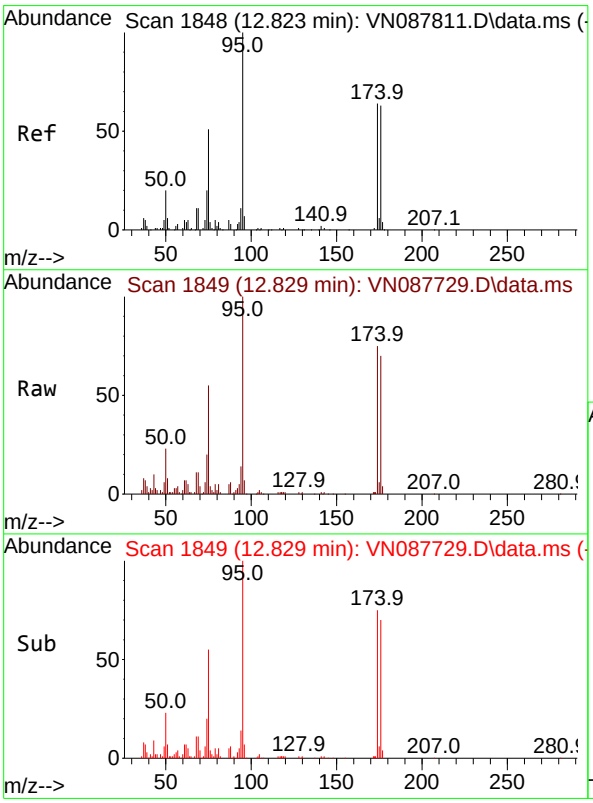
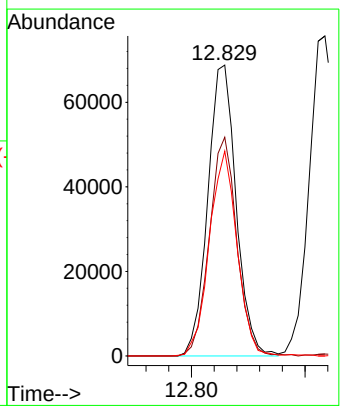
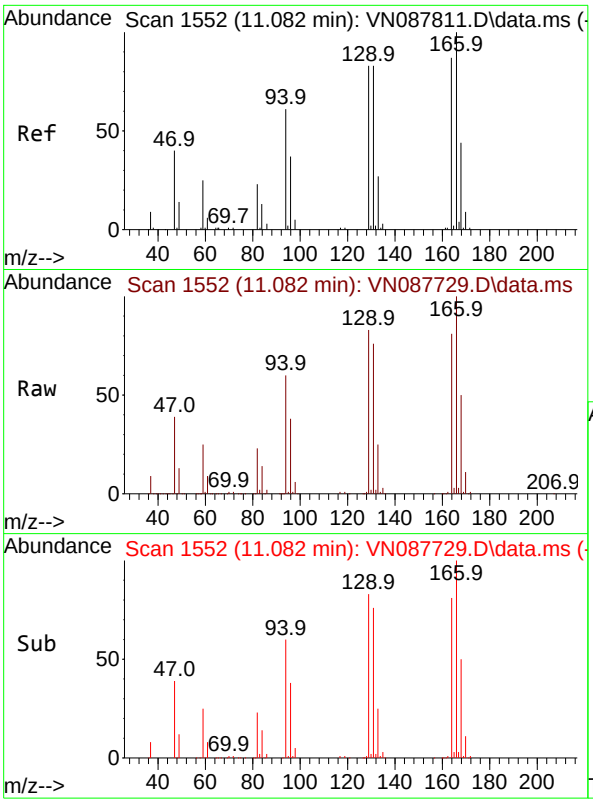


#60
4-Bromofluorobenzene
Concen: 28.950 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 95 Resp: 119357

Ion	Ratio	Lower	Upper
95	100		
174	72.9	55.4	83.0
176	68.1	51.5	77.3

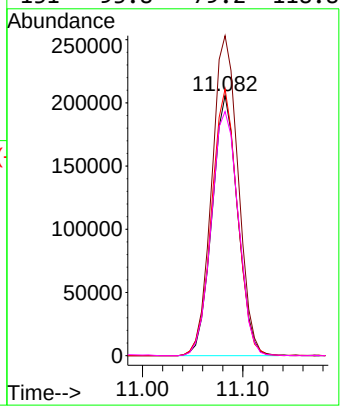




#61
Tetrachloroethene
Concen: 155.454 ug/l
RT: 11.082 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:164 Resp: 36380

Ion	Ratio	Lower	Upper
164	100		
166	123.0	97.3	145.9
129	102.5	78.6	117.8
131	93.8	79.2	118.8



Instrument :
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ClientSampleId :
VSTDICC150

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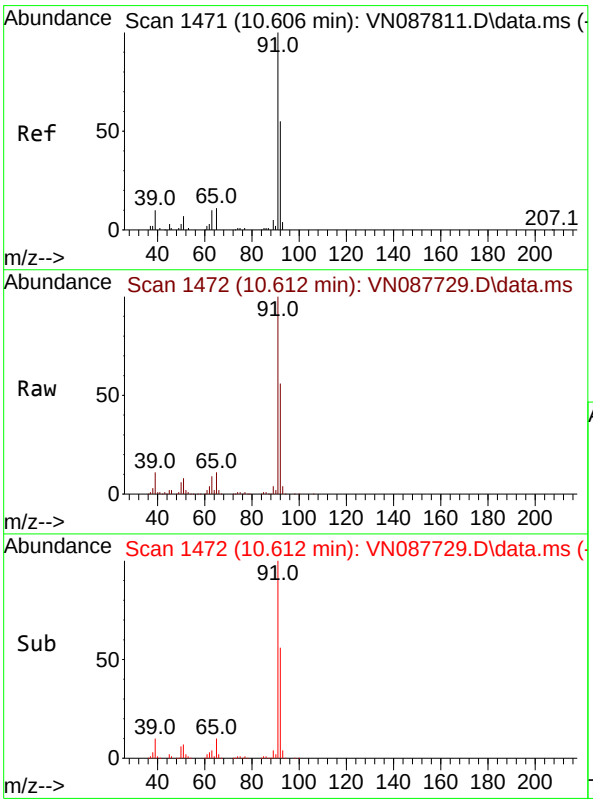
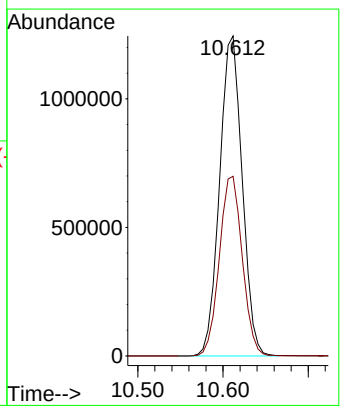
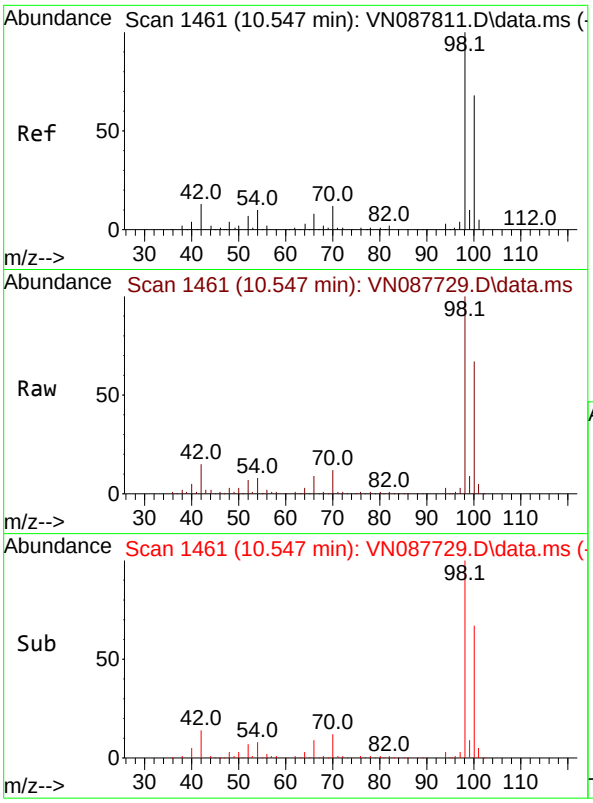


#62
Toluene
Concen: 157.273 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 91 Resp: 2294262

Ion	Ratio	Lower	Upper
91	100		
92	57.1	45.4	68.0

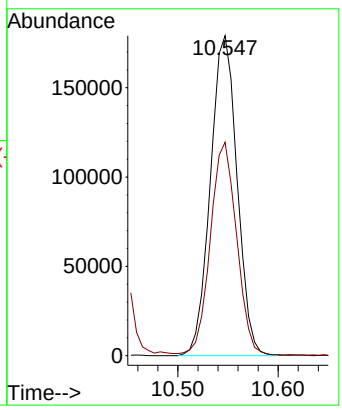




#63
Toluene-d8
Concen: 29.625 ug/l
RT: 10.547 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 98 Resp: 33183

Ion	Ratio	Lower	Upper
98	100		
100	66.0	50.6	76.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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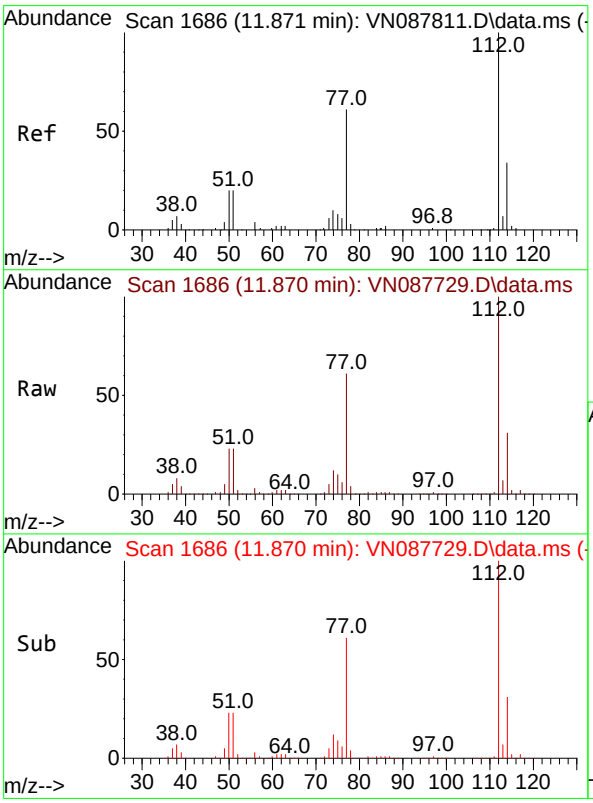
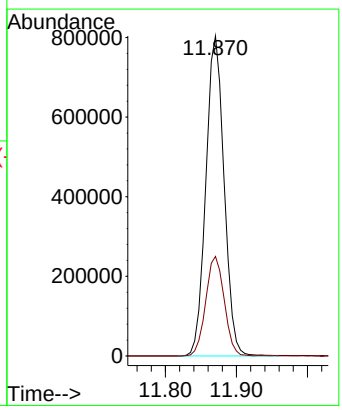
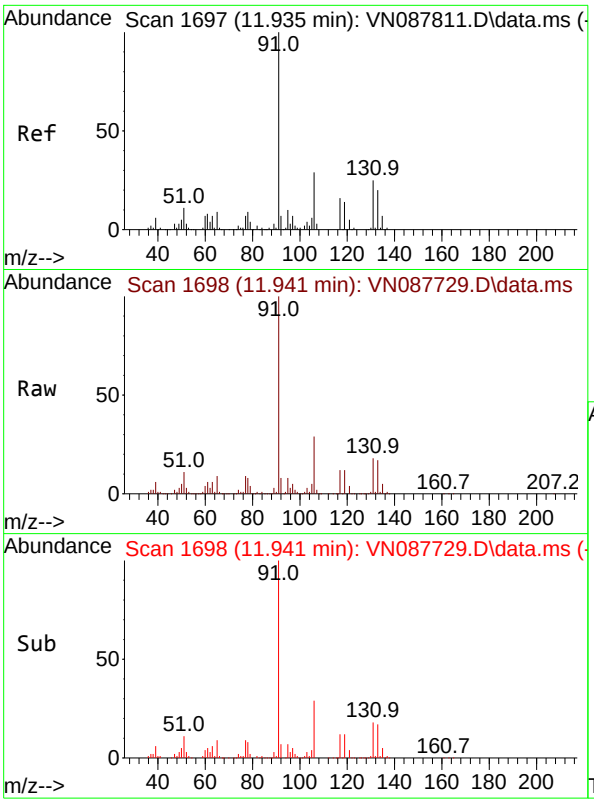


#64
Chlorobenzene
Concen: 160.019 ug/l
RT: 11.870 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:112 Resp: 1432339

Ion	Ratio	Lower	Upper
112	100		
114	31.1	23.5	35.3

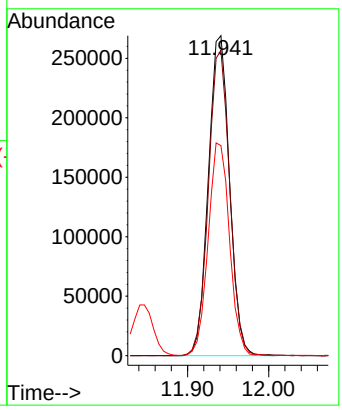




#65
1,1,1,2-Tetrachloroethane
Concen: 154.396 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:131 Resp: 48650

Ion	Ratio	Lower	Upper
131	100		
133	96.0	0.0	195.8
119	67.1	0.0	139.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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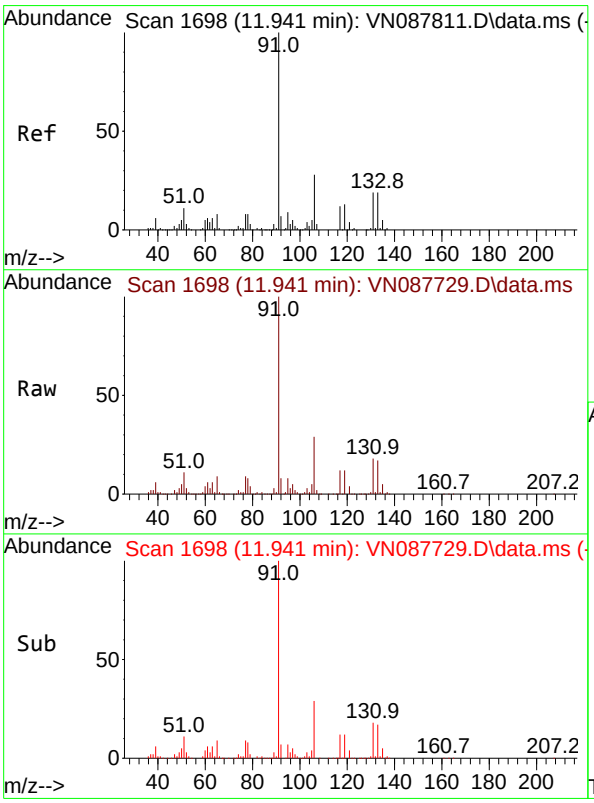
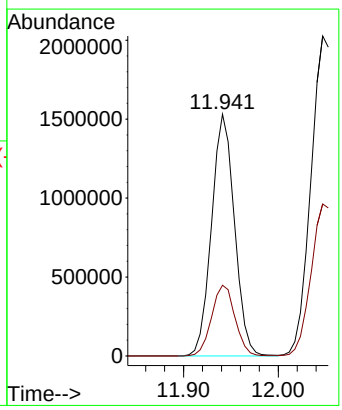
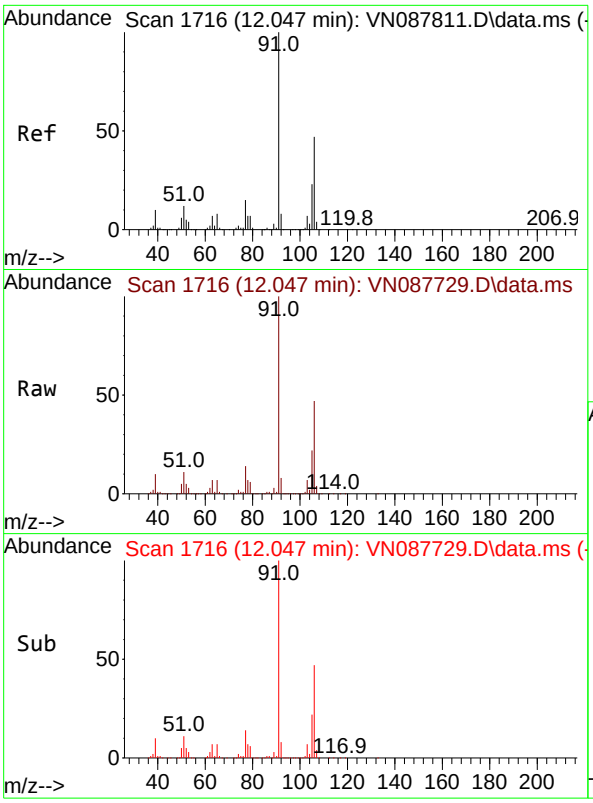


#66
Ethyl Benzene
Concen: 159.947 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 91 Resp: 2571632

Ion	Ratio	Lower	Upper
91	100		
106	29.3	21.3	31.9

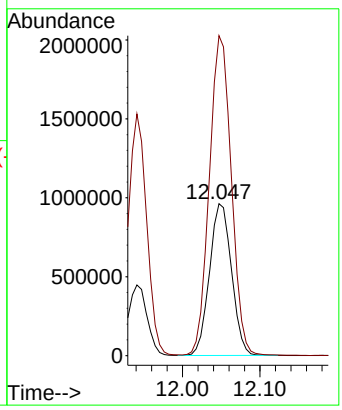




#67
m/p-Xylenes
Concen: 321.770 ug/l
RT: 12.047 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:106 Resp: 190420

Ion	Ratio	Lower	Upper
106	100		
91	209.6	174.3	261.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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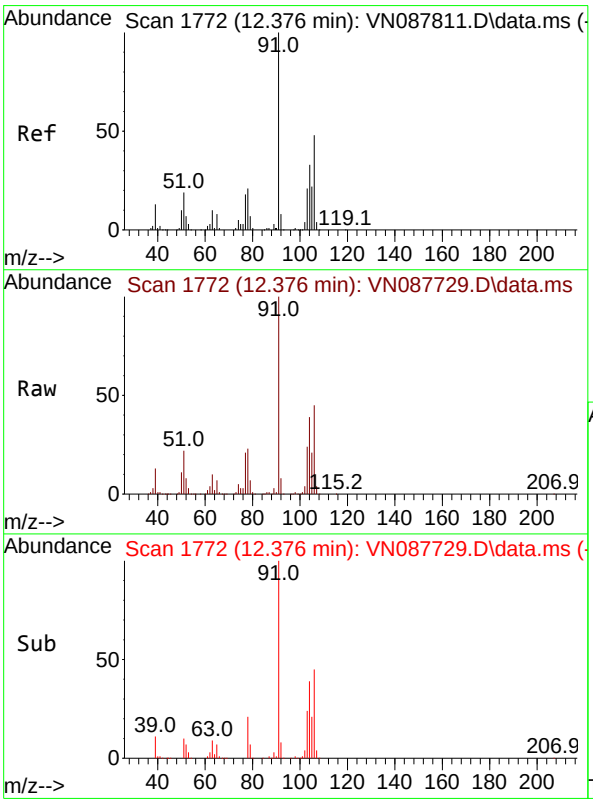
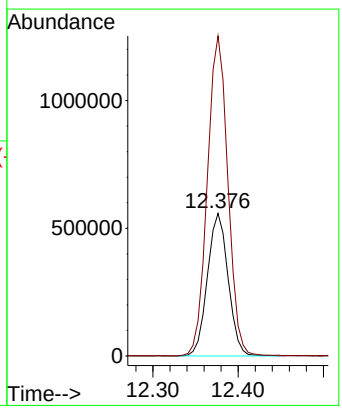
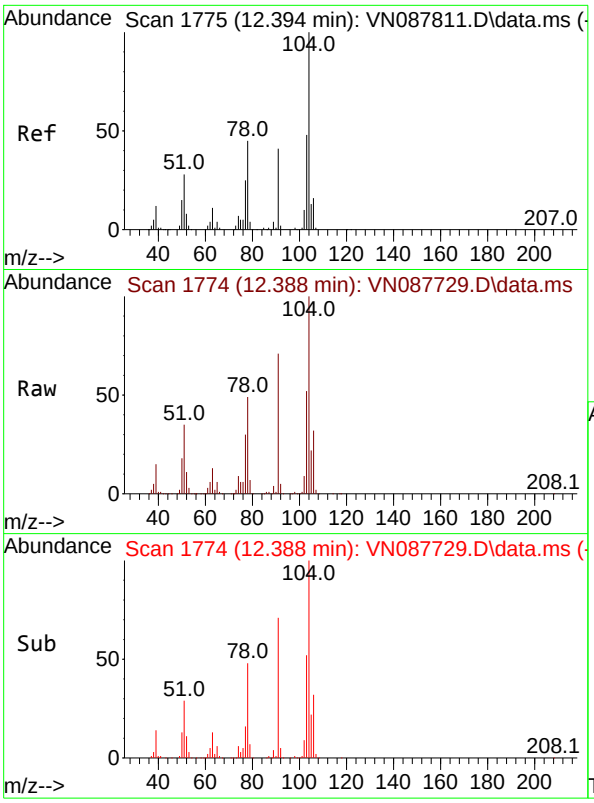


#68
o-Xylene
Concen: 161.143 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:106 Resp: 940685

Ion	Ratio	Lower	Upper
106	100		
91	222.9	107.7	323.3

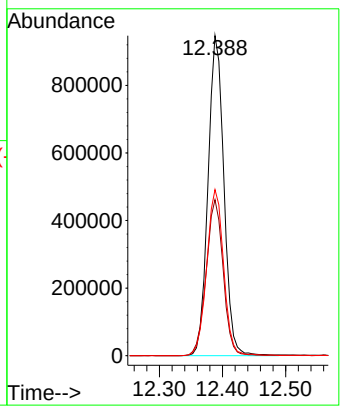




#69
Styrene
Concen: 166.468 ug/l
RT: 12.388 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:104 Resp: 165306

Ion	Ratio	Lower	Upper
104	100		
78	52.0	41.0	61.6
103	55.1	44.6	66.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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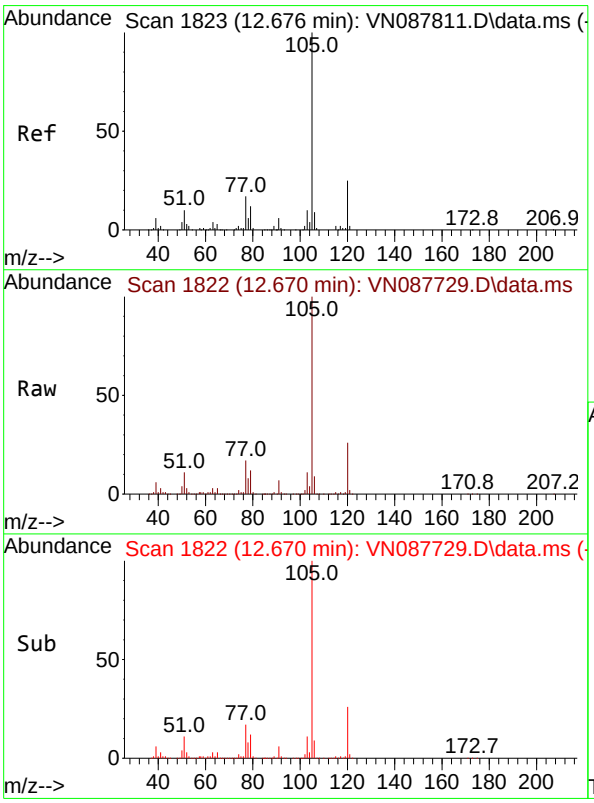
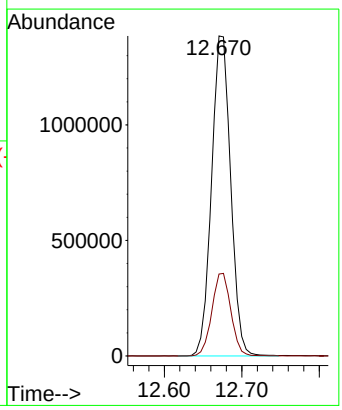
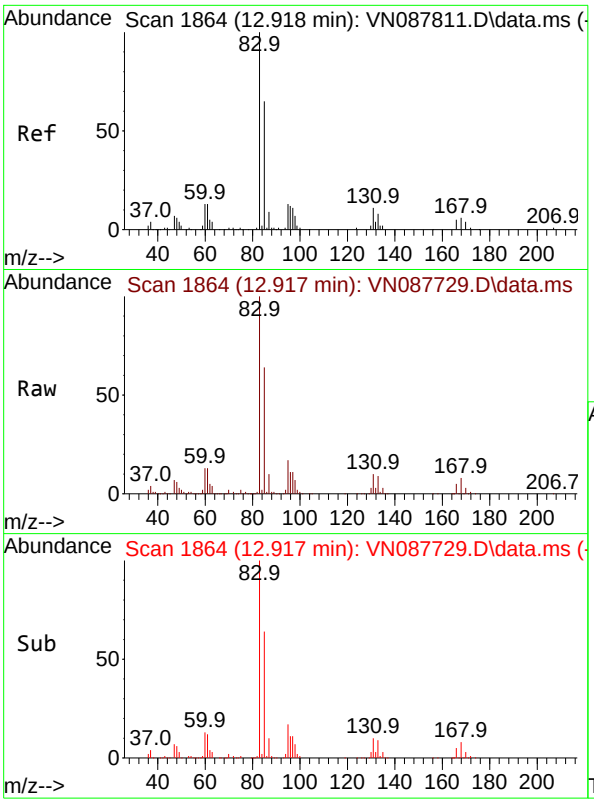


#70
Isopropylbenzene
Concen: 161.764 ug/l
RT: 12.670 min Scan# 1822
Delta R.T. -0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:105 Resp: 2375492

Ion	Ratio	Lower	Upper
105	100		
120	25.6	17.4	32.4

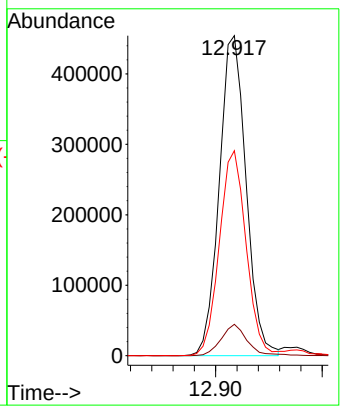




#71
1,1,2,2-Tetrachloroethane
Concen: 154.952 ug/l
RT: 12.917 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 83 Resp: 79392

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.3
85	63.7	31.9	95.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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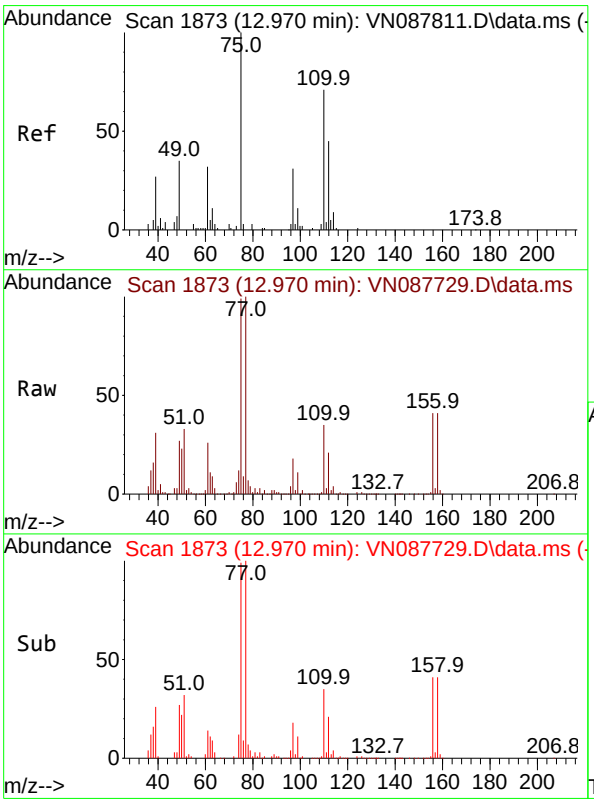
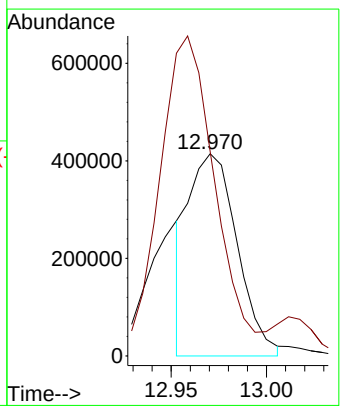
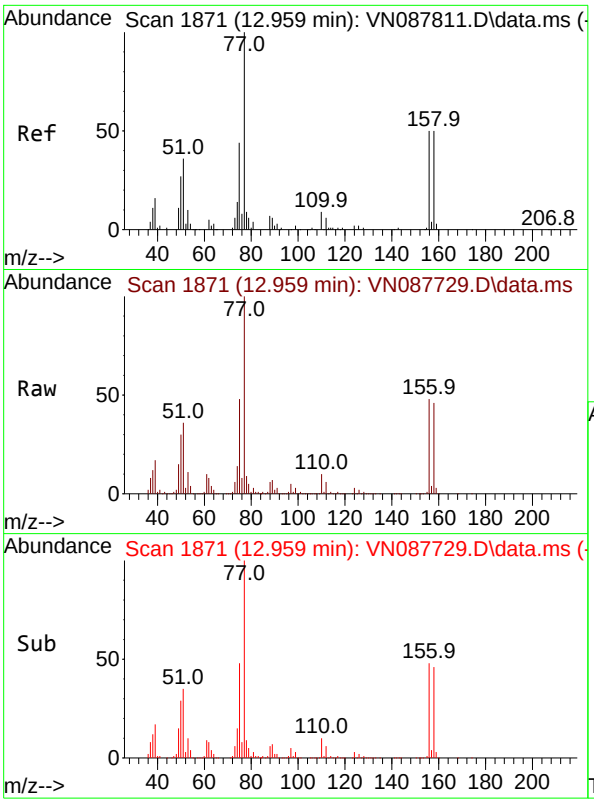


#72
1,2,3-Trichloropropane
Concen: 153.295 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 75 Resp: 732764

Ion	Ratio	Lower	Upper
75	100		
77	180.6	0.0	378.8





#73
Bromobenzene
Concen: 159.435 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:156 Resp: 55348

Ion	Ratio	Lower	Upper
156	100		
77	239.1	0.0	484.2
158	95.3	0.0	186.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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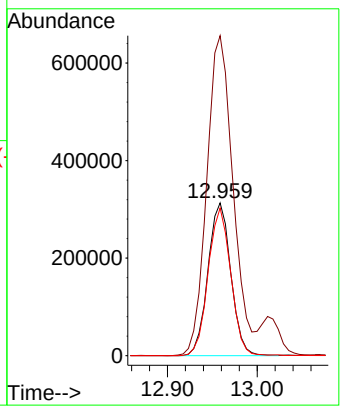
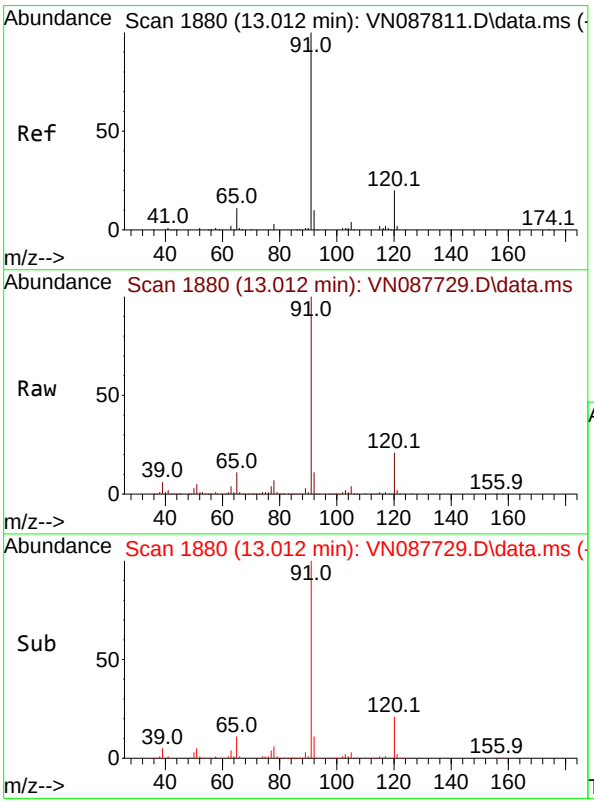
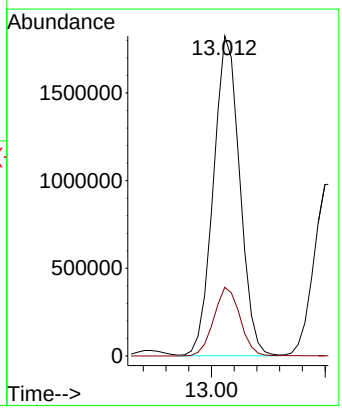


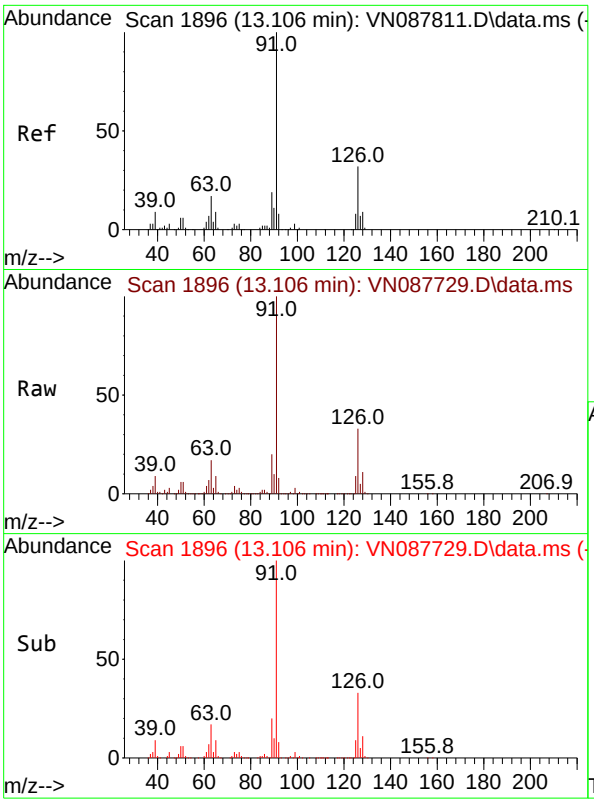


#74
n-propylbenzene
Concen: 158.973 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 91 Resp: 2937041

Ion	Ratio	Lower	Upper
91	100		
120	21.4	0.0	42.2

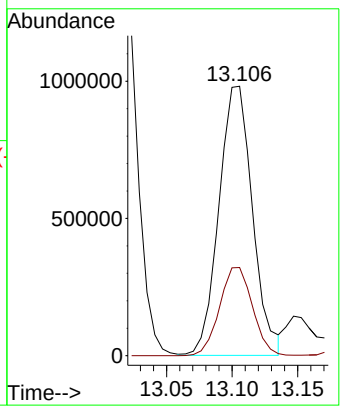




#75
2-Chlorotoluene
Concen: 153.793 ug/l
RT: 13.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 91 Resp: 174779

Ion	Ratio	Lower	Upper
91	100		
126	32.1	0.0	60.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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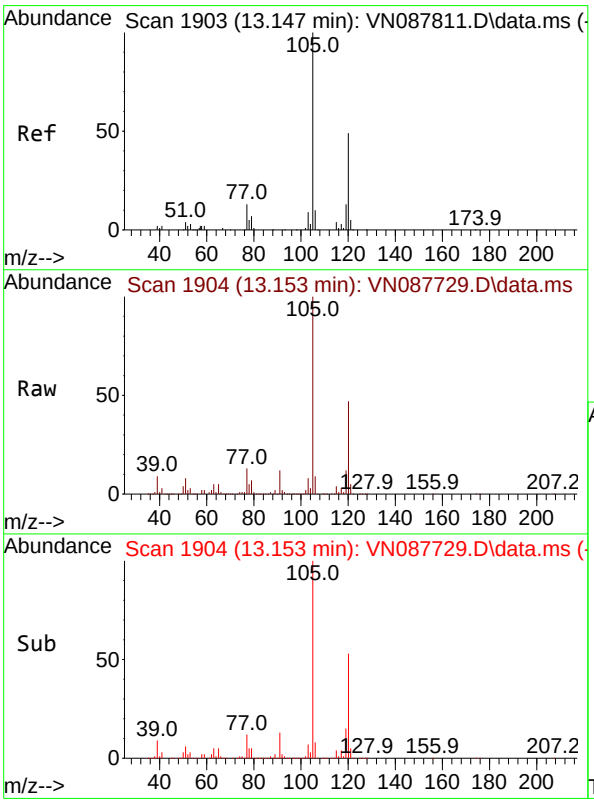
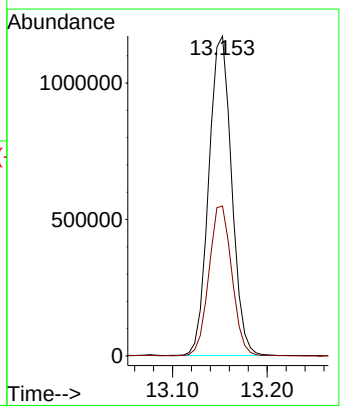
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

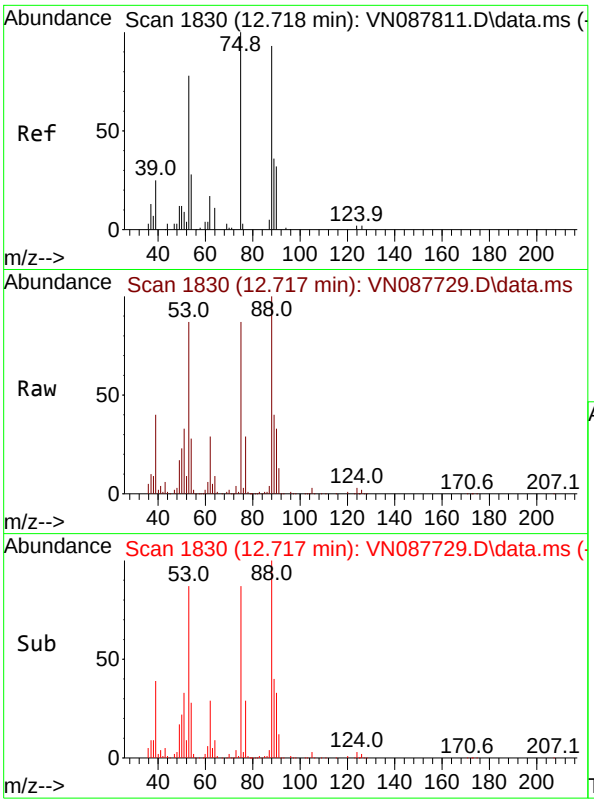


#76
1,3,5-Trimethylbenzene
Concen: 155.546 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:105 Resp: 1960149

Ion	Ratio	Lower	Upper
105	100		
120	47.3	0.0	92.6

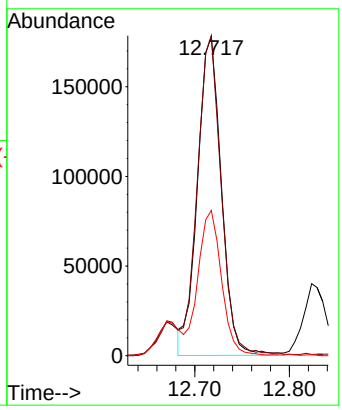




#77
t-1,4-Dichloro-2-butene
Concen: 173.364 ug/l
RT: 12.717 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 75 Resp: 31117

Ion	Ratio	Lower	Upper
75	100		
53	100.2	45.3	135.9
89	45.7	18.8	56.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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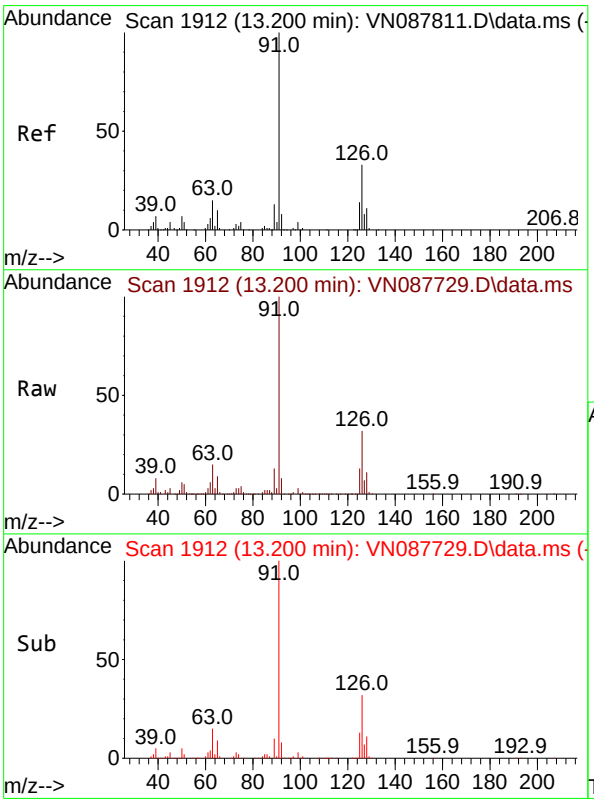
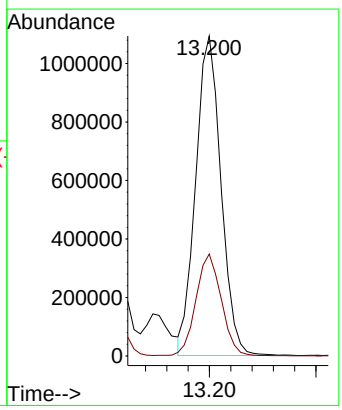
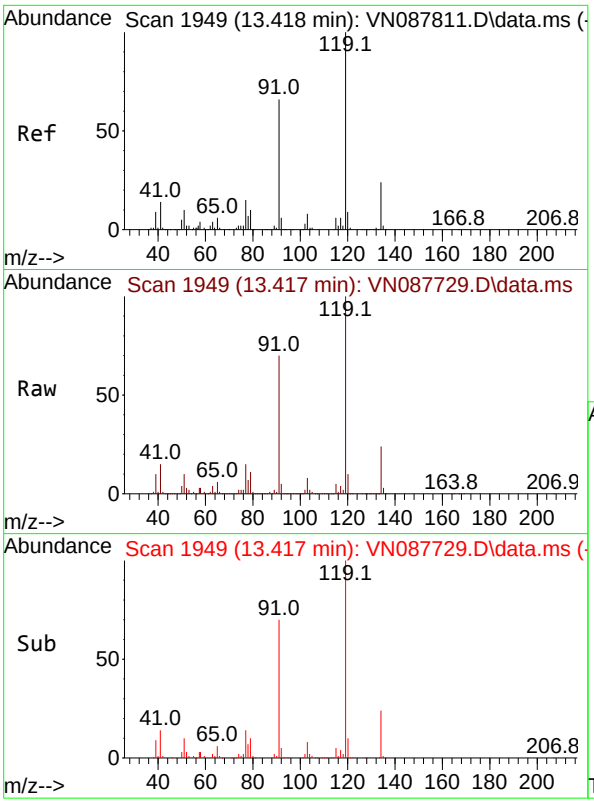


#78
4-Chlorotoluene
Concen: 156.166 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 91 Resp: 1806216

Ion	Ratio	Lower	Upper
91	100		
126	31.7	0.0	67.0

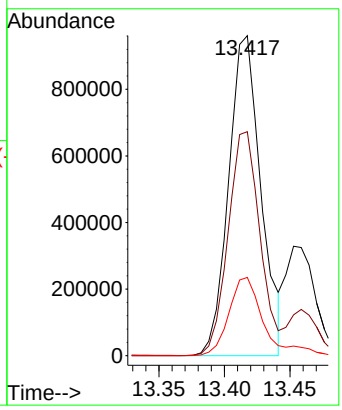




#79
tert-butylbenzene
Concen: 155.295 ug/l
RT: 13.417 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:119 Resp: 164872

Ion	Ratio	Lower	Upper
119	100		
91	68.9	0.0	142.6
134	24.4	0.0	47.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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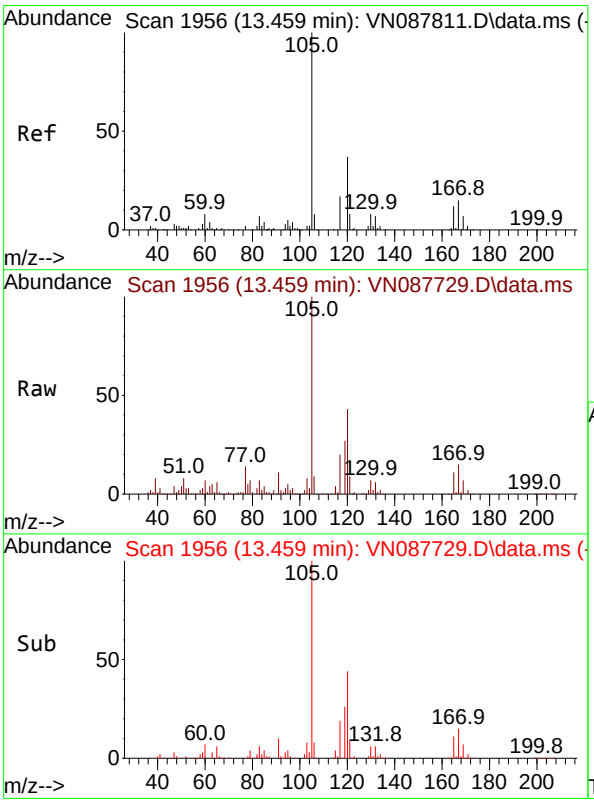
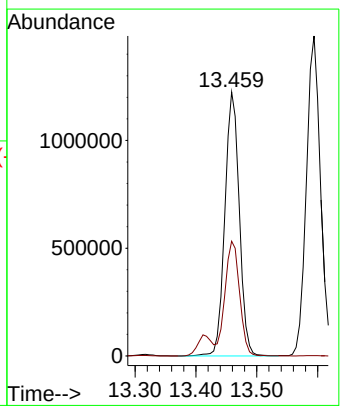
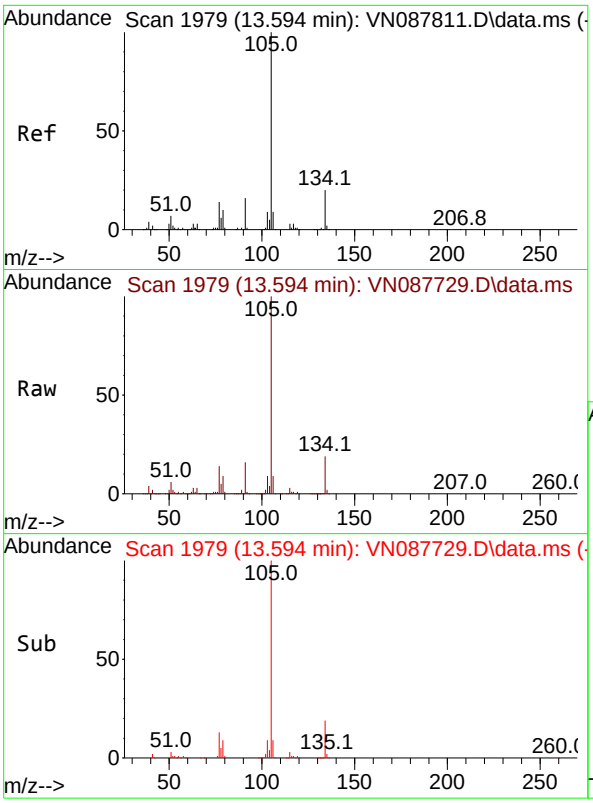


#80
1,2,4-Trimethylbenzene
Concen: 158.567 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:105 Resp: 2015689

Ion	Ratio	Lower	Upper
105	100		
120	44.1	0.0	86.6

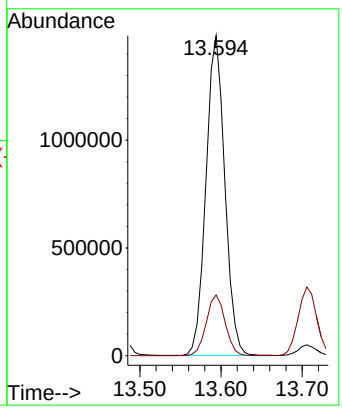




#81
sec-Butylbenzene
Concen: 153.961 ug/l
RT: 13.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:105 Resp: 238348

Ion	Ratio	Lower	Upper
105	100		
134	19.1	0.0	37.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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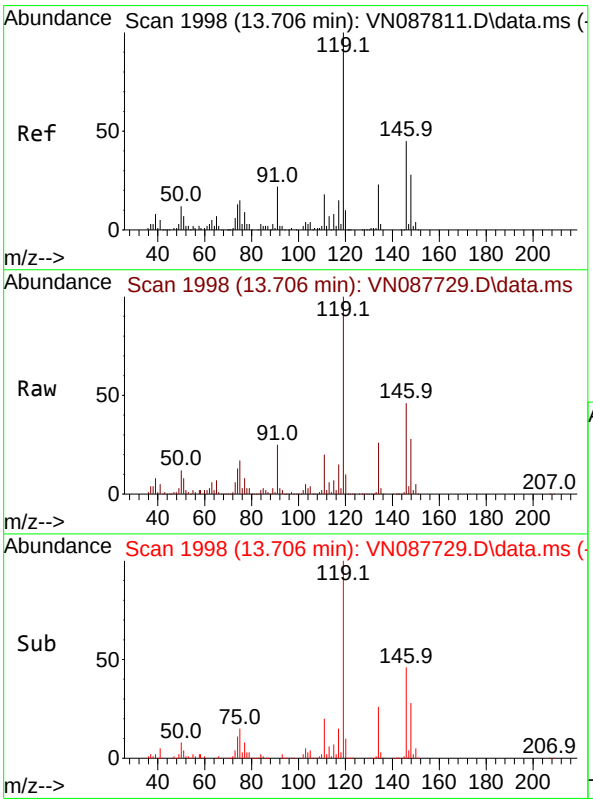
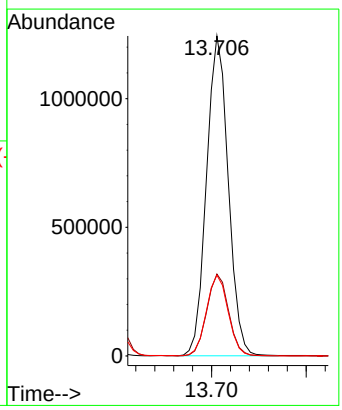
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

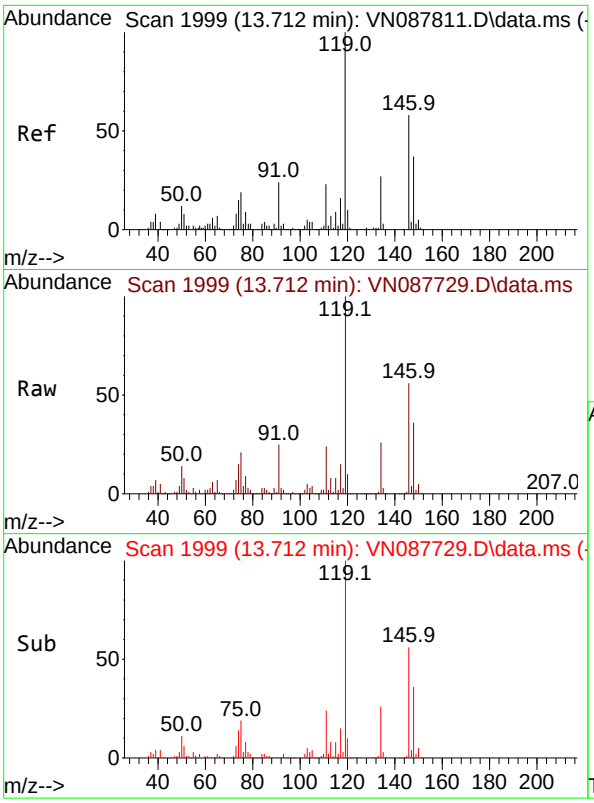


#82
p-Isopropyltoluene
Concen: 154.798 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:119 Resp: 1983862

Ion	Ratio	Lower	Upper
119	100		
134	25.7	0.0	49.4
91	25.2	0.0	52.2

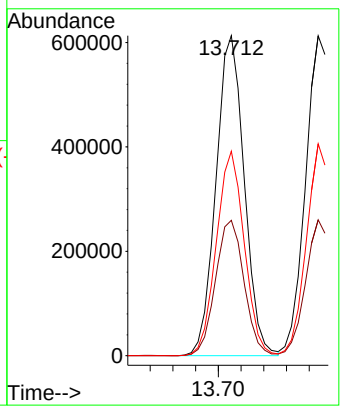




#83
1,3-Dichlorobenzene
Concen: 159.363 ug/l
RT: 13.712 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:146 Resp: 105999

Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.1	63.4
148	63.1	31.0	93.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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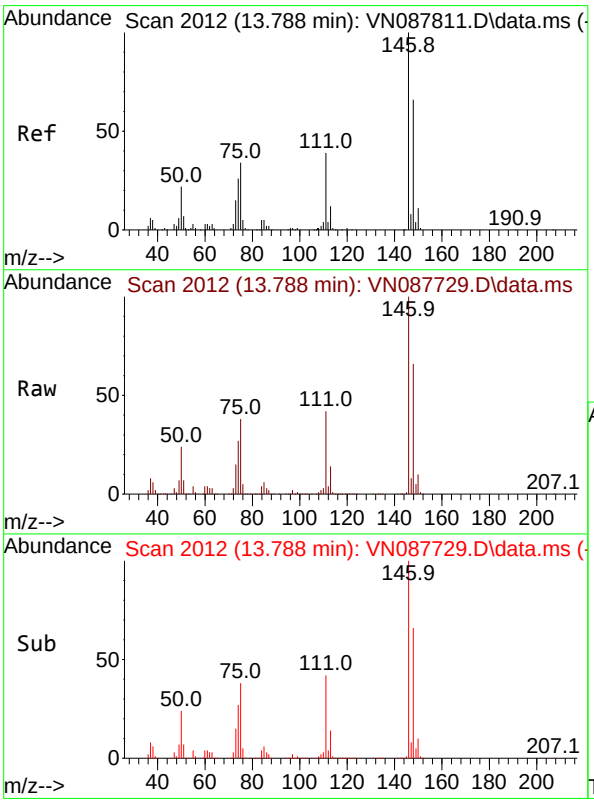
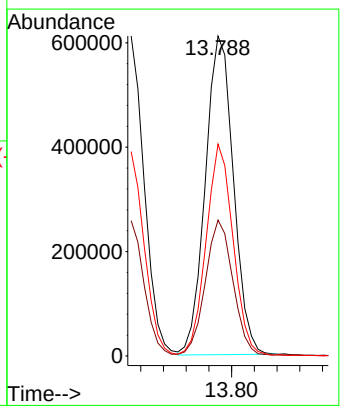
Supervised By :Mahesh Dadoda 09/05/2025

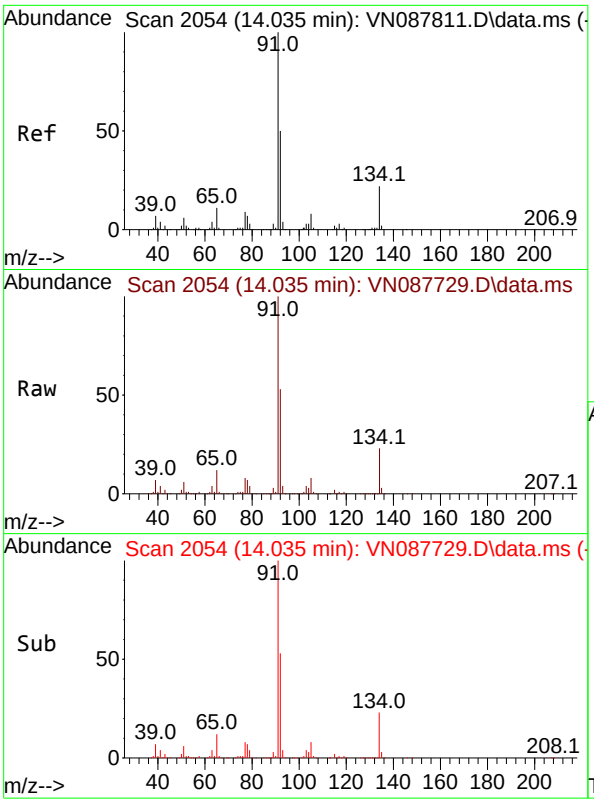


#84
1,4-Dichlorobenzene
Concen: 156.951 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:146 Resp: 1050951

Ion	Ratio	Lower	Upper
146	100		
111	41.9	20.2	60.5
148	63.8	31.5	94.5

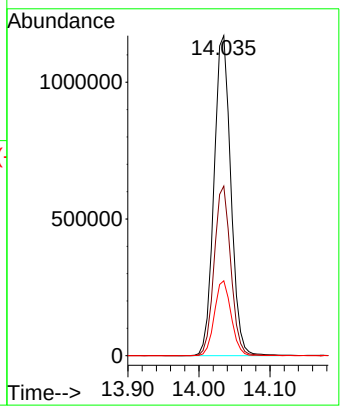




#85
n-Butylbenzene
Concen: 154.195 ug/l
RT: 14.035 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 91 Resp: 191942

Ion	Ratio	Lower	Upper
91	100		
92	52.2	0.0	104.0
134	23.2	0.0	46.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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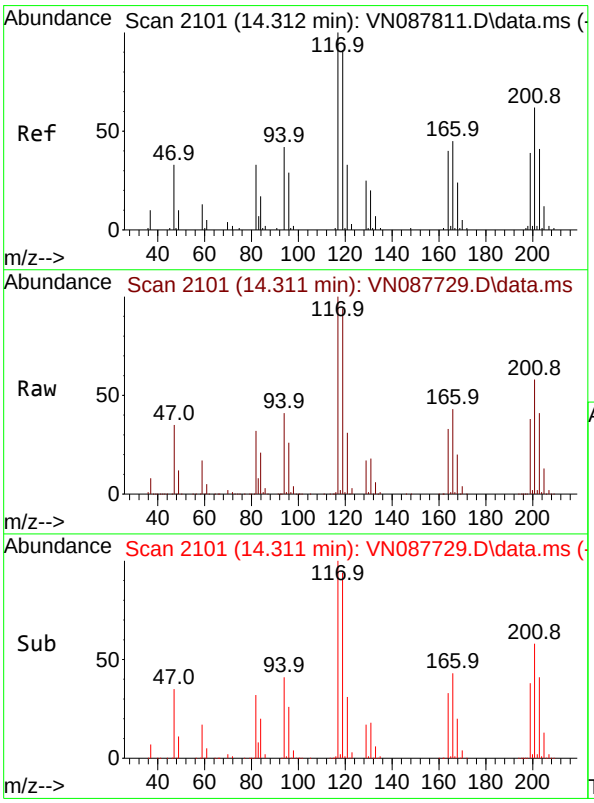
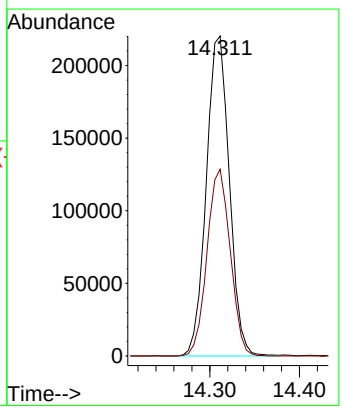
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

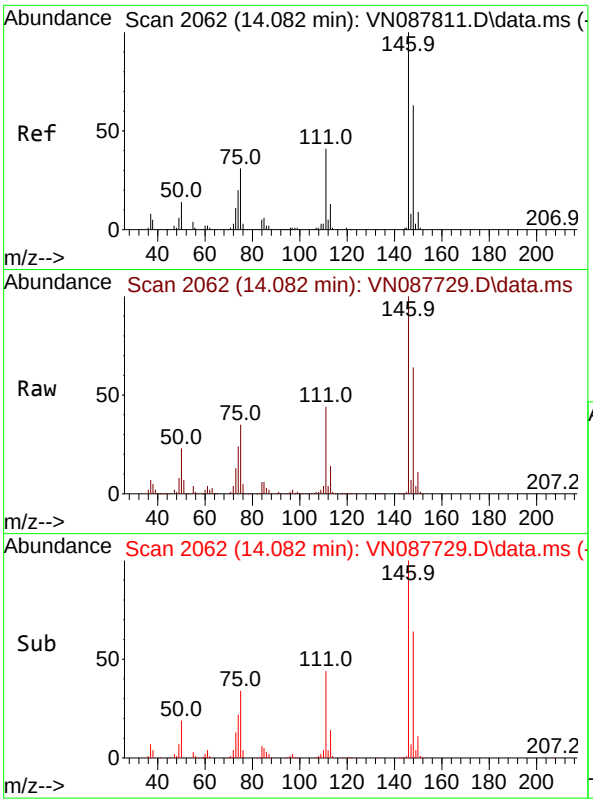


#86
Hexachloroethane
Concen: 154.382 ug/l
RT: 14.311 min Scan# 2101
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:117 Resp: 392690

Ion	Ratio	Lower	Upper
117	100		
201	58.8	29.9	89.7

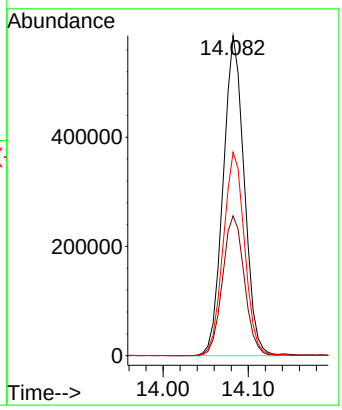




#87
1,2-Dichlorobenzene
Concen: 159.224 ug/l
RT: 14.082 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:146 Resp: 100425

Ion	Ratio	Lower	Upper
146	100		
111	45.3	21.5	64.5
148	64.8	33.4	100.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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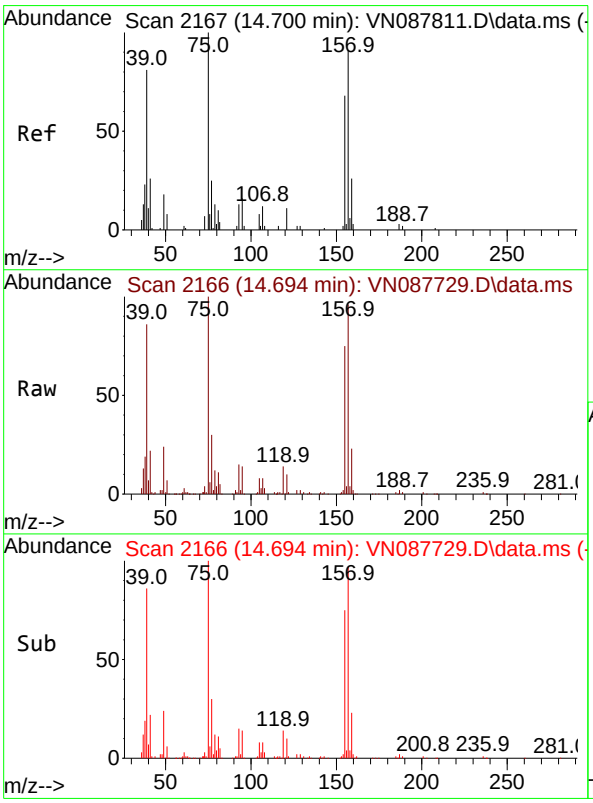
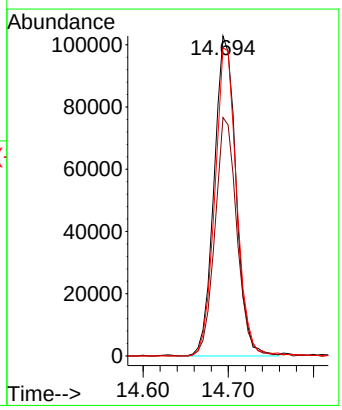
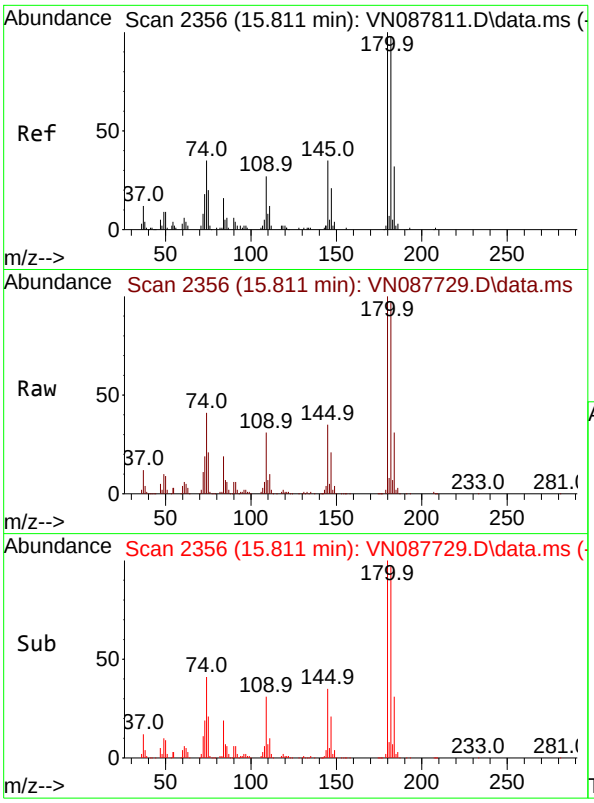


#88
1,2-Dibromo-3-Chloropropane
Concen: 144.163 ug/l
RT: 14.694 min Scan# 2166
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion: 75 Resp: 184176

Ion	Ratio	Lower	Upper
75	100		
155	74.2	53.0	79.4
157	95.2	72.2	108.4

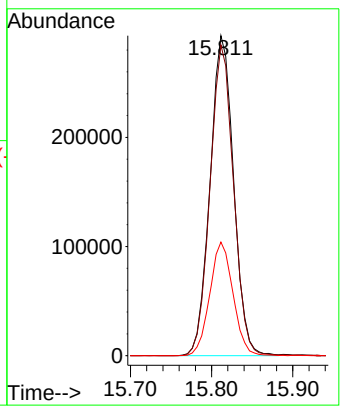




#89
1,2,4-Trichlorobenzene
Concen: 158.821 ug/l
RT: 15.811 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:180 Resp: 59198

Ion	Ratio	Lower	Upper
180	100		
182	96.4	74.6	111.8
145	35.0	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
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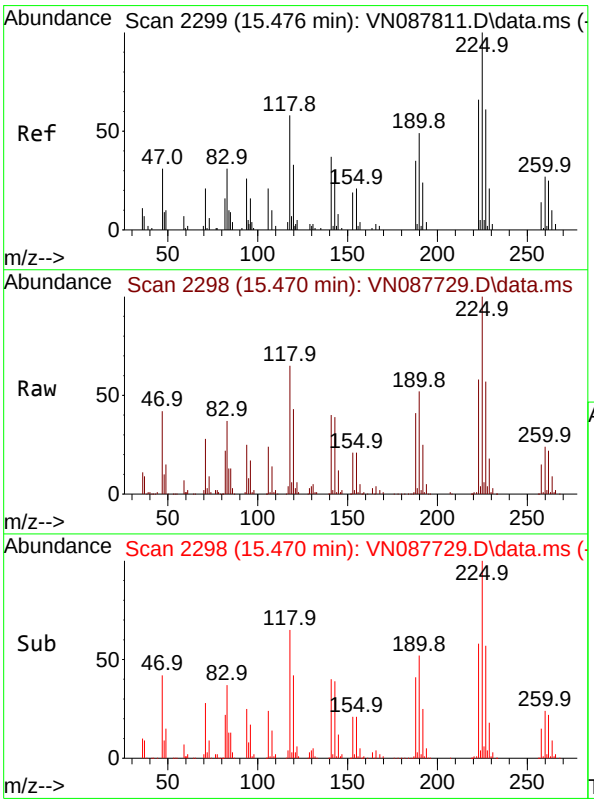
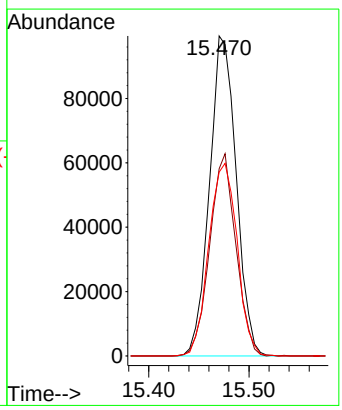
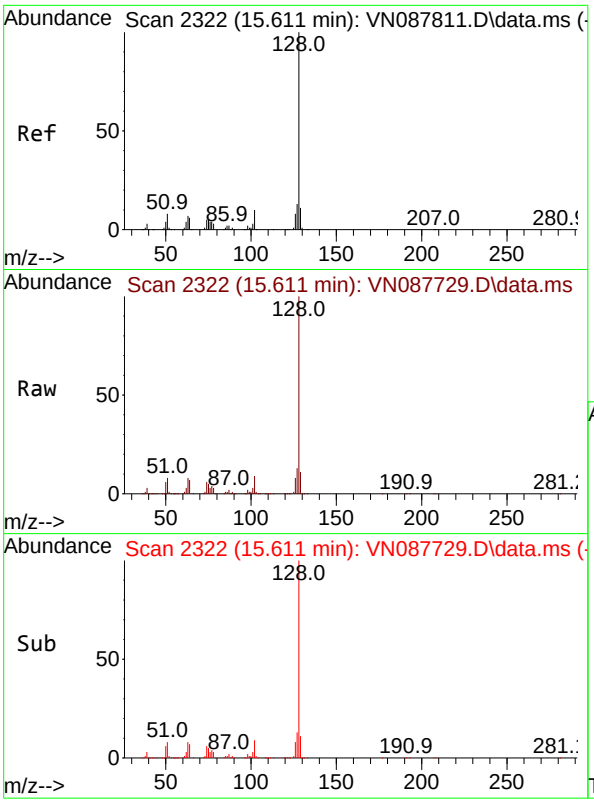


#90
Hexachlorobutadiene
Concen: 128.598 ug/l
RT: 15.470 min Scan# 2298
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:225 Resp: 183756

Ion	Ratio	Lower	Upper
225	100		
223	62.0	0.0	118.2
227	64.0	0.0	139.0

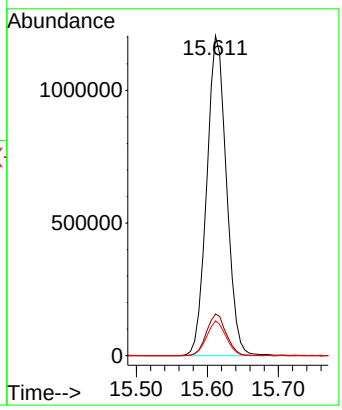




#91
Naphthalene
Concen: 165.441 ug/l
RT: 15.611 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:128 Resp: 232438

Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.2	15.4
129	10.7	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

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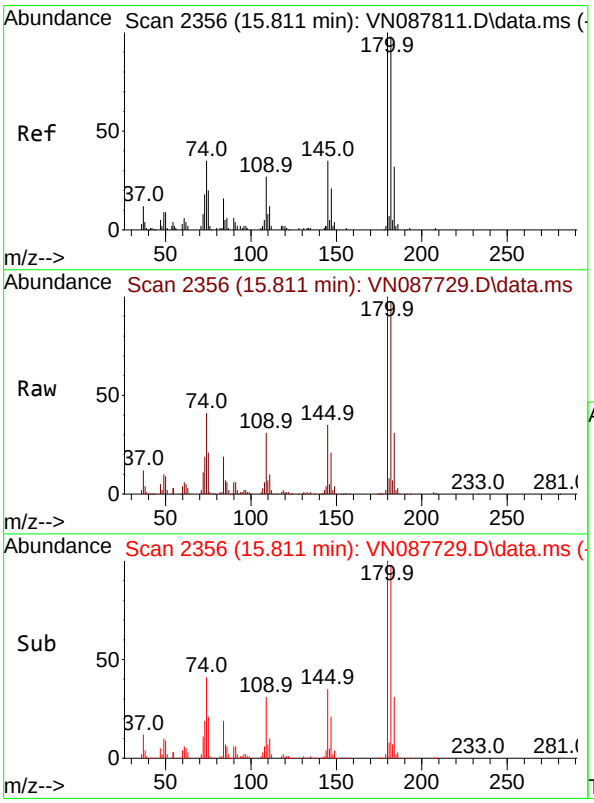
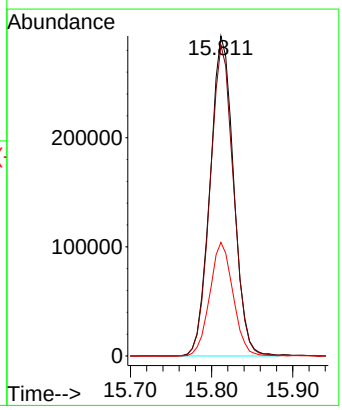
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025



#92
1,2,3-Trichlorobenzene
Concen: 158.821 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. -0.000 min
Lab File: VN087729.D
Acq: 04 Sep 2025 17:46

Tgt Ion:180 Resp: 591983

Ion	Ratio	Lower	Upper
180	100		
182	96.4	0.0	186.4
145	35.0	0.0	68.4



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Data File : VN087731.D
Acq On : 04 Sep 2025 18:28
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Quant Time: Sep 05 03:32:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.800	128	45925	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.082	114	235644	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.841	117	221185	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.565	65	118609	30.234	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.767%				
60) 4-Bromofluorobenzene	12.829	95	103848	29.200	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 97.333%				
63) Toluene-d8	10.547	98	305314	29.682	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 98.933%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.148	85	52434	18.370	ug/l		100
3) Chloromethane	2.383	50	54083	18.050	ug/l		91
4) Vinyl Chloride	2.536	62	59288	17.504	ug/l		99
5) Bromomethane	2.989	94	35460	17.846	ug/l		95
6) Chloroethane	3.136	64	39572	17.094	ug/l	#	77
7) Trichlorofluoromethane	3.512	101	85267	17.175	ug/l		86
8) Diethyl Ether	3.959	74	36966	17.632	ug/l		99
9) 1,1,2-Trichlorotrifluo...	4.371	101	46222	17.189	ug/l		97
10) 1,1-Dichloroethene	4.342	96	48502	17.494	ug/l	#	89
11) Methyl Iodide	4.594	142	29628m	15.097	ug/l		
12) Methyl Acetate	5.012	43	78049	18.262	ug/l		98
13) Acrolein	4.177	56	69346m	91.132	ug/l		
14) Acrylonitrile	5.712	53	162624	88.404	ug/l		99
15) Acetone	4.424	58	48575	84.645	ug/l		81
16) Carbon Disulfide	4.712	76	136485	17.930	ug/l	#	94
17) Allyl chloride	5.012	41	77276	17.065	ug/l		94
18) Methylene Chloride	5.265	84	55915	17.804	ug/l		89
19) trans-1,2-Dichloroethene	5.777	96	49711	17.581	ug/l		93
20) Diisopropyl ether	6.653	45	173212	16.633	ug/l	#	99
21) 1,1-Dichloroethane	6.553	63	100521	17.627	ug/l		97
22) cis-1,2-Dichloroethene	7.471	96	59360	17.296	ug/l		95
23) tert-Butyl Alcohol	5.518	59	58538	90.020	ug/l	#	100
24) Methyl tert-Butyl Ether	5.789	73	171206	17.297	ug/l	#	83
25) Chloroform	7.947	83	103557	17.349	ug/l		94
26) Cyclohexane	8.235	56	75387	17.359	ug/l	#	100
29) 1,1-Dichloropropene	8.347	75	65482	17.099	ug/l		99
30) 2-Butanone	7.471	43	231480	87.744	ug/l		97
31) 2,2-Dichloropropane	7.477	77	78485	17.001	ug/l	#	78
32) 1,1,1-Trichloroethane	8.153	97	85693	17.650	ug/l		98
33) Carbon Tetrachloride	8.347	117	69645	17.204	ug/l	#	93
34) Benzene	8.588	78	218694	17.669	ug/l		93
35) Methacrylonitrile	7.765	41	51135	18.531	ug/l		93
36) 1,2-Dichloroethane	8.653	62	82106	17.562	ug/l		99
37) Trichloroethene	9.341	130	45924	16.598	ug/l		92
38) Methylcyclohexane	9.582	83	70612	16.745	ug/l		99
39) 1,2-Dichloropropane	9.600	63	54676	17.248	ug/l	#	83
40) Dibromomethane	9.682	93	42325	17.941	ug/l		97
41) Bromodichloromethane	9.871	83	83672	17.353	ug/l	#	85
42) Vinyl Acetate	6.594	43	777536	88.211	ug/l		100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087731.D
Acq On : 04 Sep 2025 18:28
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

Quant Time: Sep 05 03:32:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.547	43	93344	17.318	ug/l		98
44) Isopropyl Acetate	8.671	43	147433	17.448	ug/l		98
45) 1,4-Dioxane	9.682	88	18809	352.976	ug/l	#	53
46) Methyl methacrylate	9.665	41	67807	17.410	ug/l		93
47) n-amyl Acetate	12.570	43	86602m	15.166	ug/l		
48) t-1,3-Dichloropropene	10.818	75	85569	17.087	ug/l		97
49) cis-1,3-Dichloropropene	10.294	75	88428	17.239	ug/l		98
50) 1,1,2-Trichloroethane	10.994	97	53774	17.648	ug/l		89
51) Ethyl methacrylate	10.853	69	82131	17.320	ug/l		94
52) 1,3-Dichloropropane	11.141	76	93581	17.687	ug/l		100
53) Dibromochloromethane	11.335	129	59265	17.347	ug/l		92
54) 1,2-Dibromoethane	11.447	107	54662	17.241	ug/l		99
55) 2-Chloroethyl vinyl ether	10.141	63	233941	86.104	ug/l		99
56) Bromoform	12.559	173	39062	17.508	ug/l		96
58) 4-Methyl-2-Pentanone	10.424	43	460953	88.138	ug/l		99
59) 2-Hexanone	11.182	43	291153	85.197	ug/l		98
61) Tetrachloroethene	11.082	164	38600	17.528	ug/l		95
62) Toluene	10.612	91	238533	17.829	ug/l		98
64) Chlorobenzene	11.870	112	142733	17.382	ug/l		99
65) 1,1,1,2-Tetrachloroethane	11.935	131	49466	17.110	ug/l		97
66) Ethyl Benzene	11.941	91	250582	17.361	ug/l		93
67) m/p-Xylenes	12.047	106	185180	34.562	ug/l		95
68) o-Xylene	12.376	106	90271	17.377	ug/l		98
69) Styrene	12.394	104	151670	16.798	ug/l		98
70) Isopropylbenzene	12.670	105	224221	17.022	ug/l		99
71) 1,1,2,2-Tetrachloroethane	12.912	83	83832	17.703	ug/l		98
72) 1,2,3-Trichloropropane	12.970	75	79021m	16.995	ug/l		
73) Bromobenzene	12.959	156	55283	17.154	ug/l		96
74) n-propylbenzene	13.012	91	284881	17.141	ug/l		99
75) 2-Chlorotoluene	13.106	91	171781	17.173	ug/l		96
76) 1,3,5-Trimethylbenzene	13.153	105	193466	17.393	ug/l		97
77) t-1,4-Dichloro-2-butene	12.717	75	23921	15.243	ug/l		75
78) 4-Chlorotoluene	13.200	91	184349	18.280	ug/l		96
79) tert-butylbenzene	13.412	119	162429	17.436	ug/l		96
80) 1,2,4-Trimethylbenzene	13.459	105	195624	17.154	ug/l		98
81) sec-Butylbenzene	13.594	105	238215	17.385	ug/l		98
82) p-Isopropyltoluene	13.706	119	195729	17.337	ug/l		99
83) 1,3-Dichlorobenzene	13.712	146	106089	17.075	ug/l		98
84) 1,4-Dichlorobenzene	13.788	146	107657	17.287	ug/l		98
85) n-Butylbenzene	14.035	91	188710	17.390	ug/l		98
86) Hexachloroethane	14.312	117	41219	17.975	ug/l		99
87) 1,2-Dichlorobenzene	14.082	146	105569	18.016	ug/l		96
88) 1,2-Dibromo-3-Chloropr...	14.694	75	19130	18.204	ug/l		96
89) 1,2,4-Trichlorobenzene	15.811	180	58341	17.505	ug/l		98
90) Hexachlorobutadiene	15.470	225	20419	18.275	ug/l		95
91) Naphthalene	15.617	128	208469	16.990	ug/l		99
92) 1,2,3-Trichlorobenzene	15.811	180	58341	17.505	ug/l		98

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

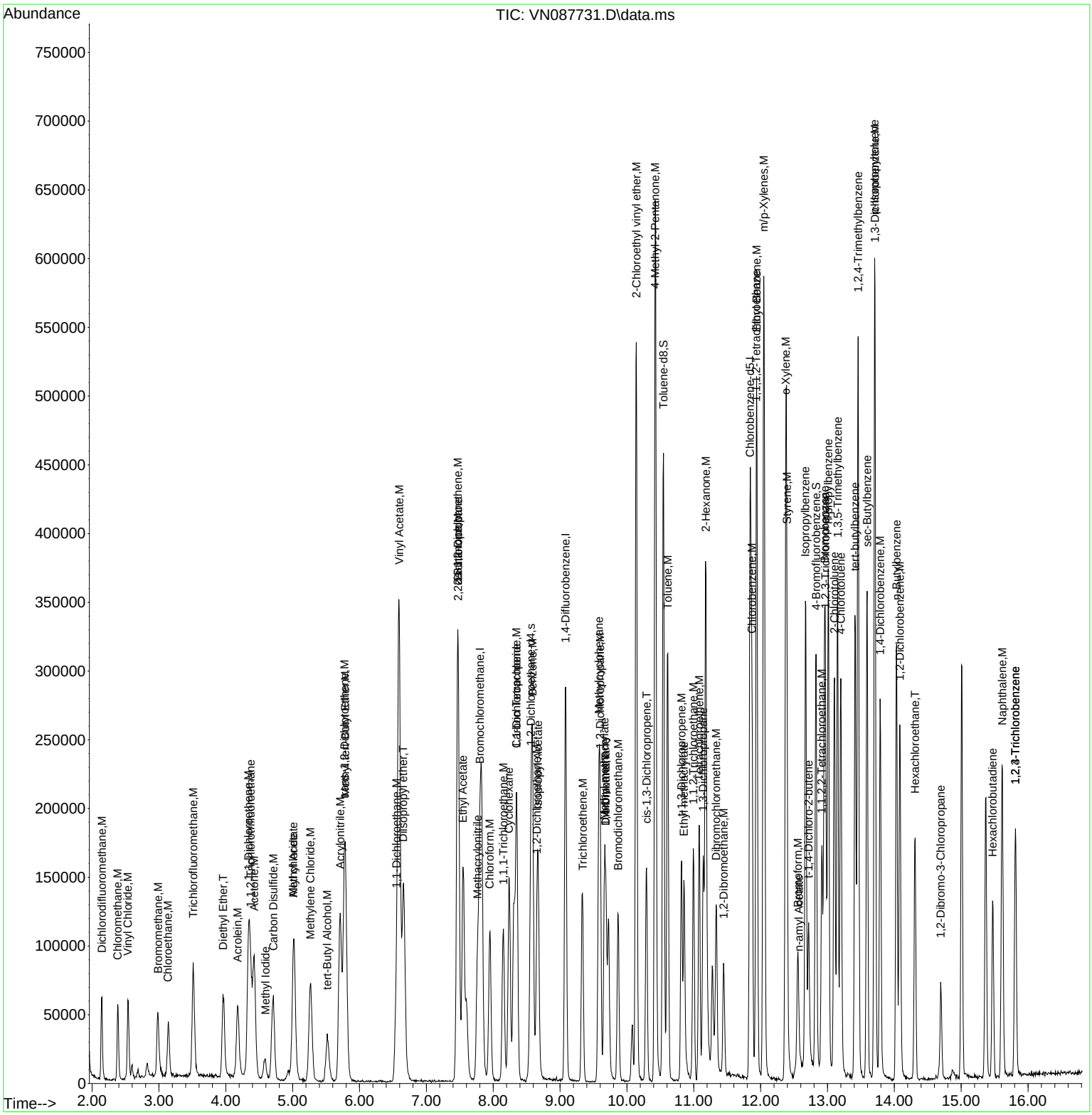
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087731.D
Acq On : 04 Sep 2025 18:28
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

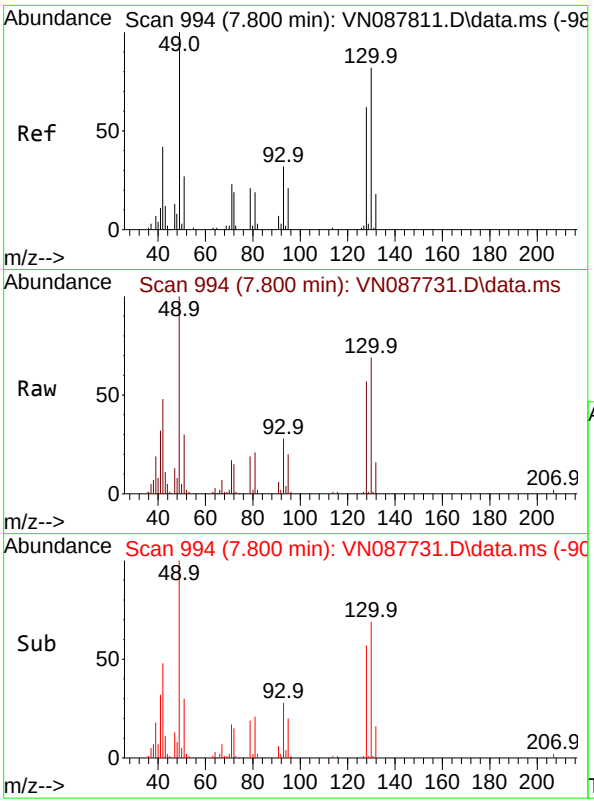
Quant Time: Sep 05 03:32:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

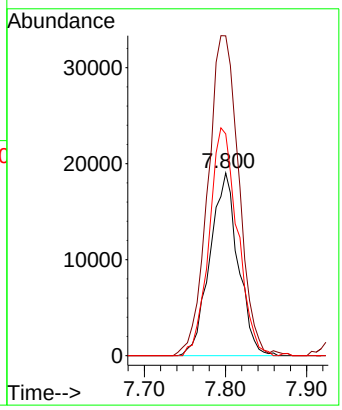




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.800 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:128 Resp: 4592

Ion	Ratio	Lower	Upper
128	100		
49	191.5	0.0	464.3
130	125.8	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations
APPROVED

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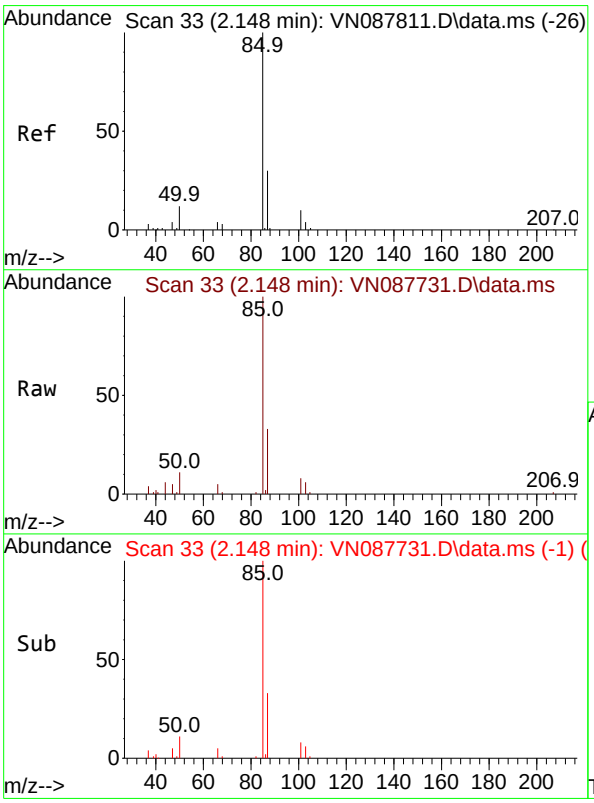
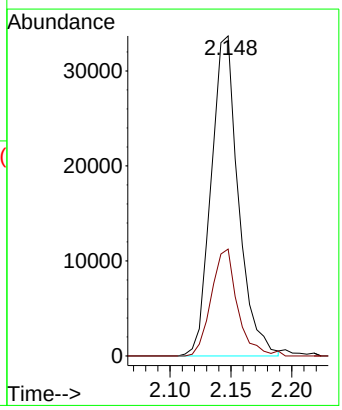
Supervised By :Mahesh Dadoda 09/05/2025

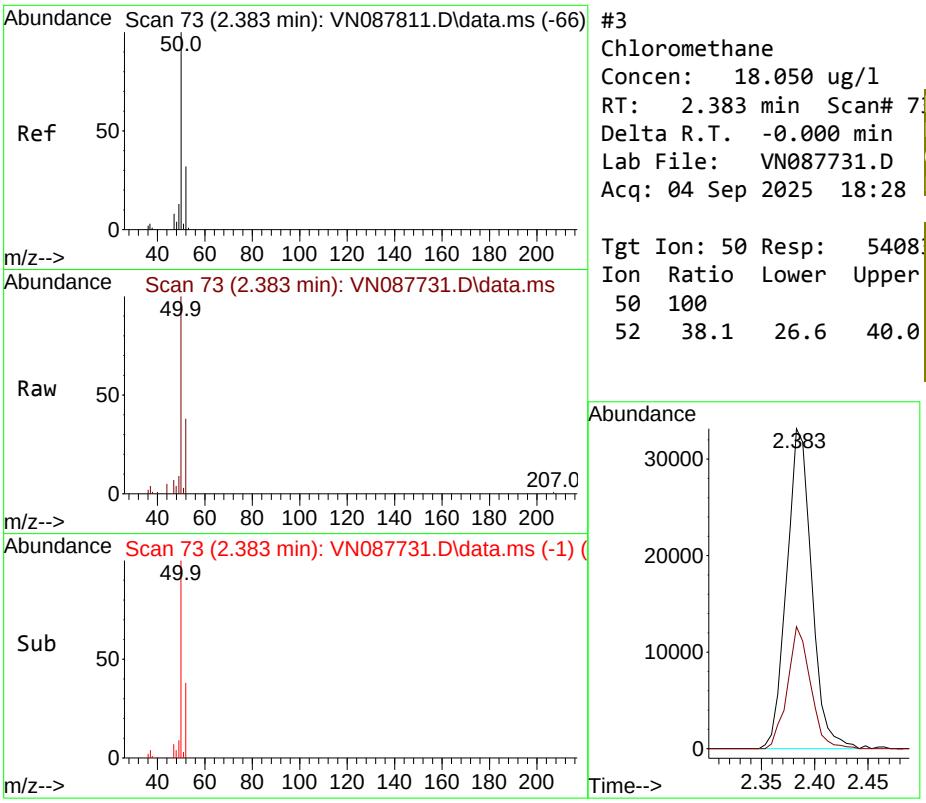


#2
Dichlorodifluoromethane
Concen: 18.370 ug/l
RT: 2.148 min Scan# 33
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 85 Resp: 52434

Ion	Ratio	Lower	Upper
85	100		
87	33.4	16.8	50.4





#3
Chloromethane
Concen: 18.050 ug/l
RT: 2.383 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

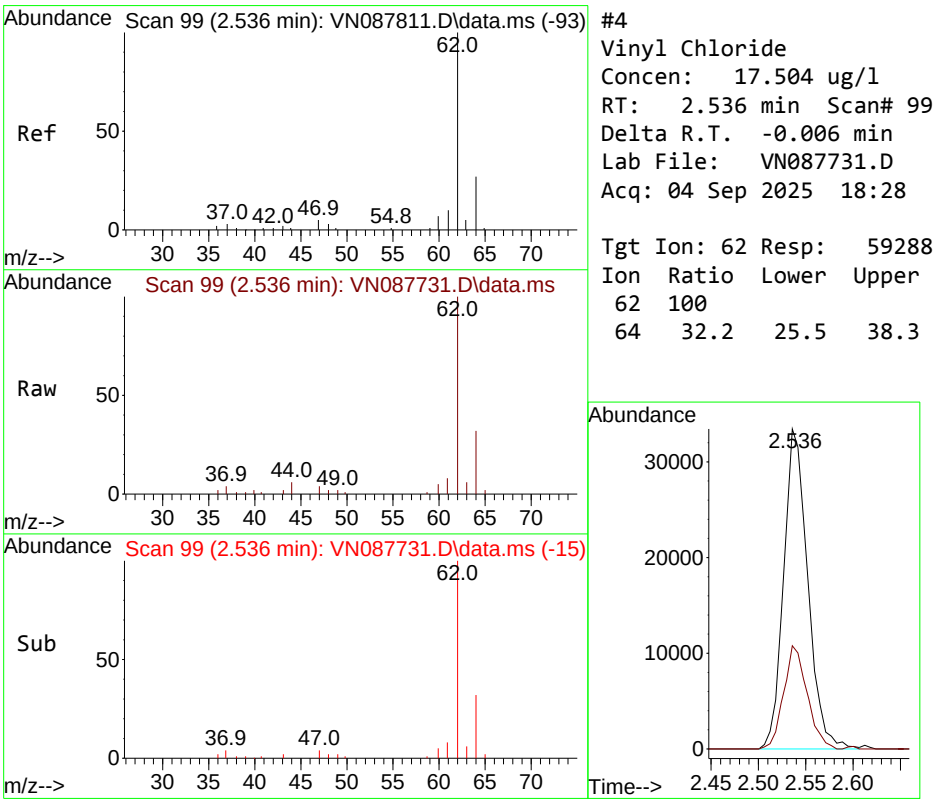
Tgt Ion: 50 Resp: 5408

Ion	Ratio	Lower	Upper
50	100		
52	38.1	26.6	40.0

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations
APPROVED

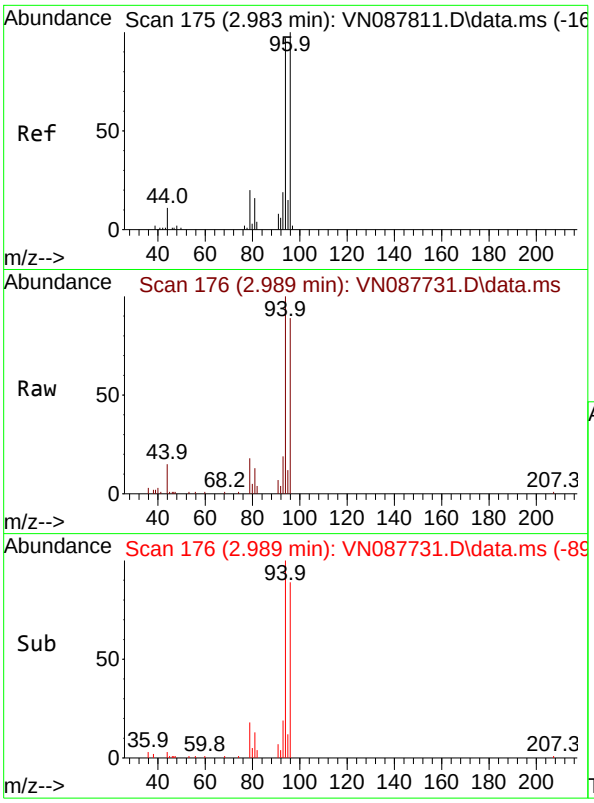
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025



#4
Vinyl Chloride
Concen: 17.504 ug/l
RT: 2.536 min Scan# 99
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 62 Resp: 59288

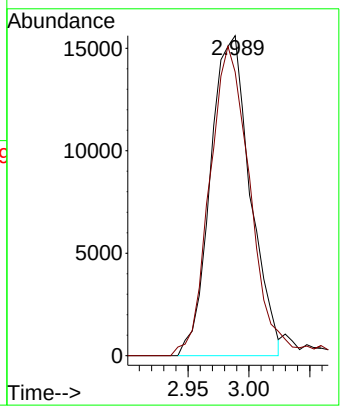
Ion	Ratio	Lower	Upper
62	100		
64	32.2	25.5	38.3



#5
Bromomethane
Concen: 17.846 ug/l
RT: 2.989 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 94 Resp: 3546

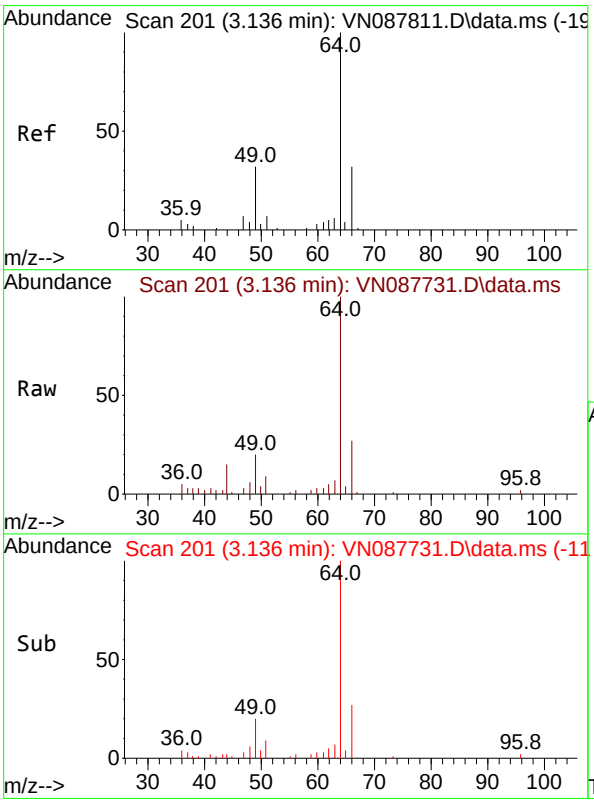
Ion	Ratio	Lower	Upper
94	100		
96	86.0	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations
APPROVED

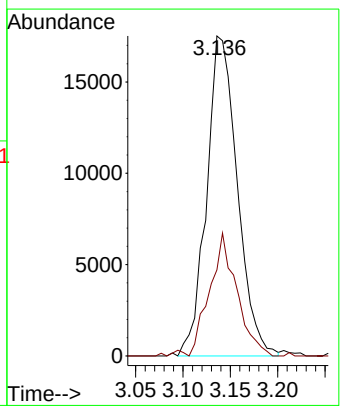
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

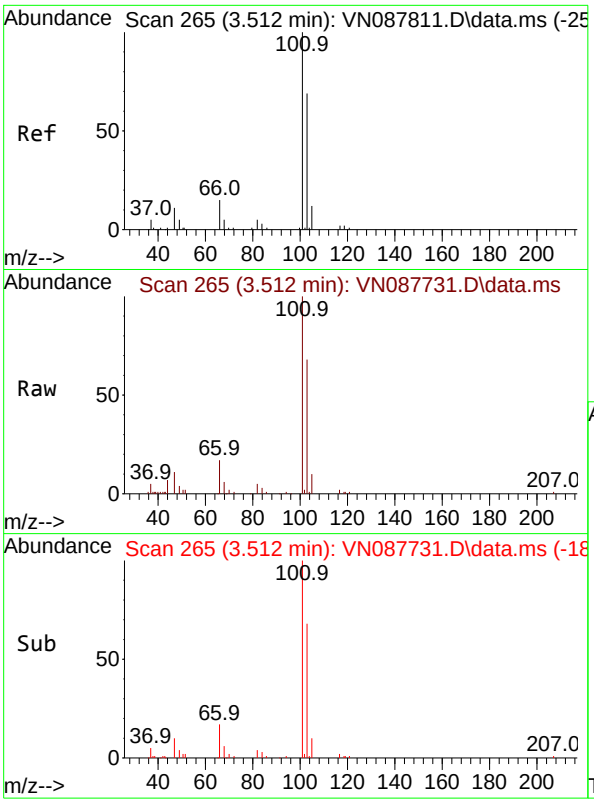


#6
Chloroethane
Concen: 17.094 ug/l
RT: 3.136 min Scan# 201
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 64 Resp: 39572

Ion	Ratio	Lower	Upper
64	100		
66	26.9	32.8	49.2#





#7
Trichlorofluoromethane
Concen: 17.175 ug/l
RT: 3.512 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

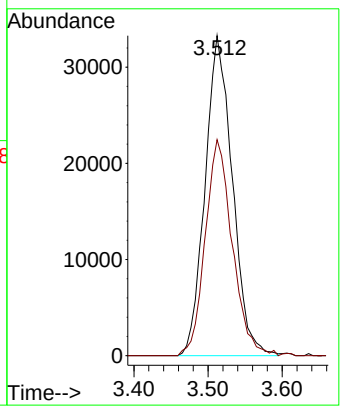
Tgt Ion:101 Resp: 8526

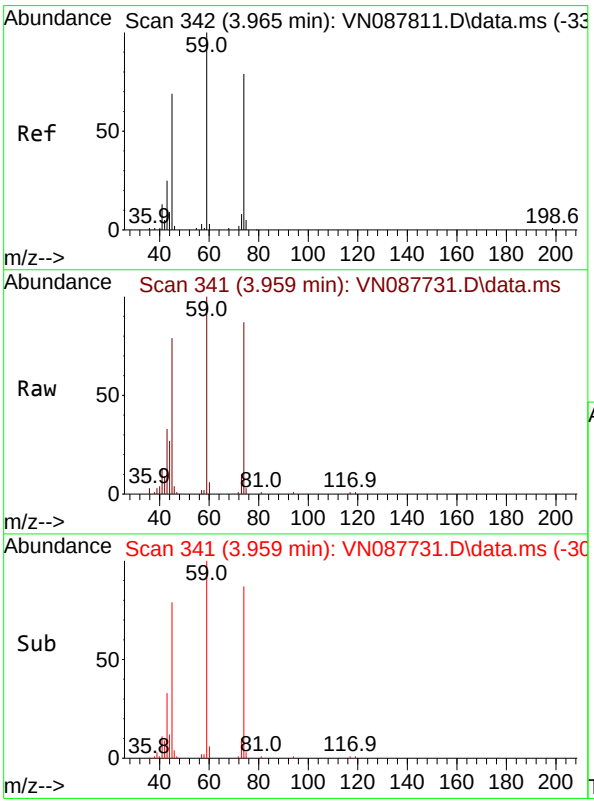
Ion	Ratio	Lower	Upper
101	100		
103	67.5	45.7	68.5

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

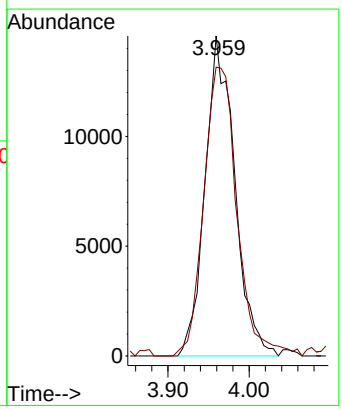


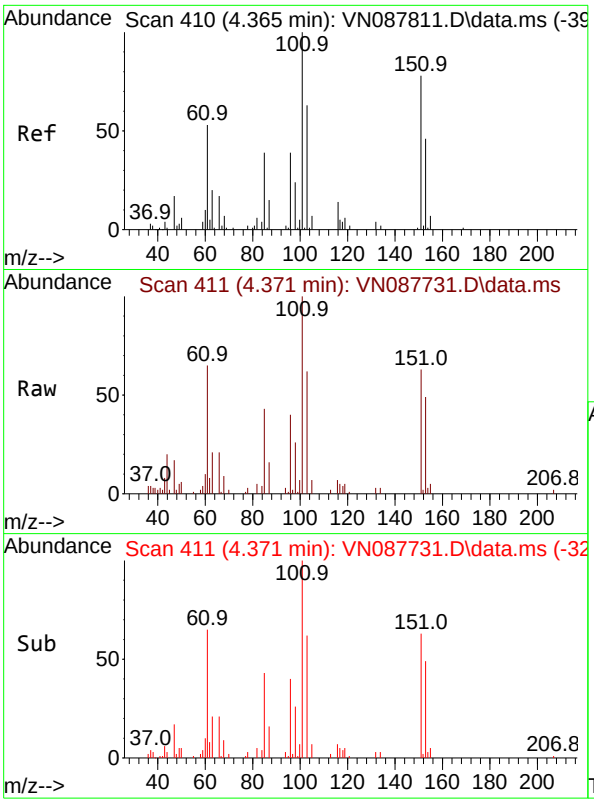


#8
Diethyl Ether
Concen: 17.632 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 74 Resp: 36966

Ion	Ratio	Lower	Upper
74	100		
45	100.9	20.4	183.8





#9
1,1,2-Trichlorotrifluoroethane
Concen: 17.189 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:101 Resp: 4622

Ion	Ratio	Lower	Upper
101	100		
85	46.9	0.0	95.6
151	40.1	0.0	85.8

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/05/2025
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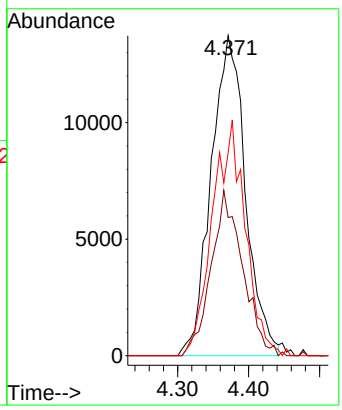
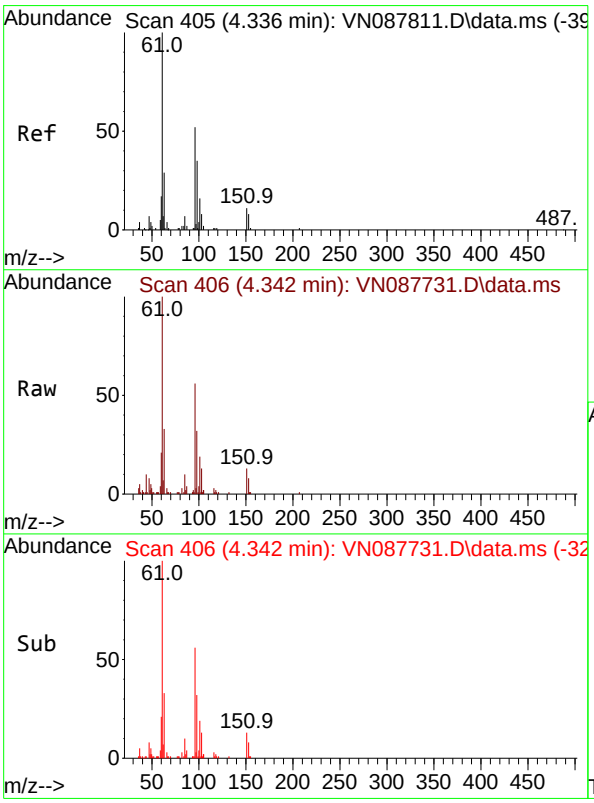
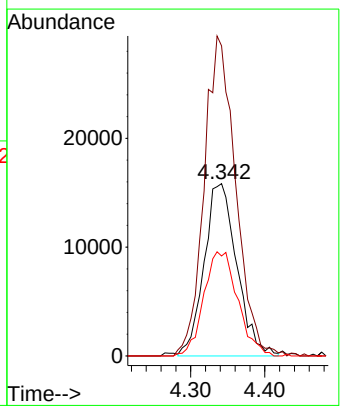


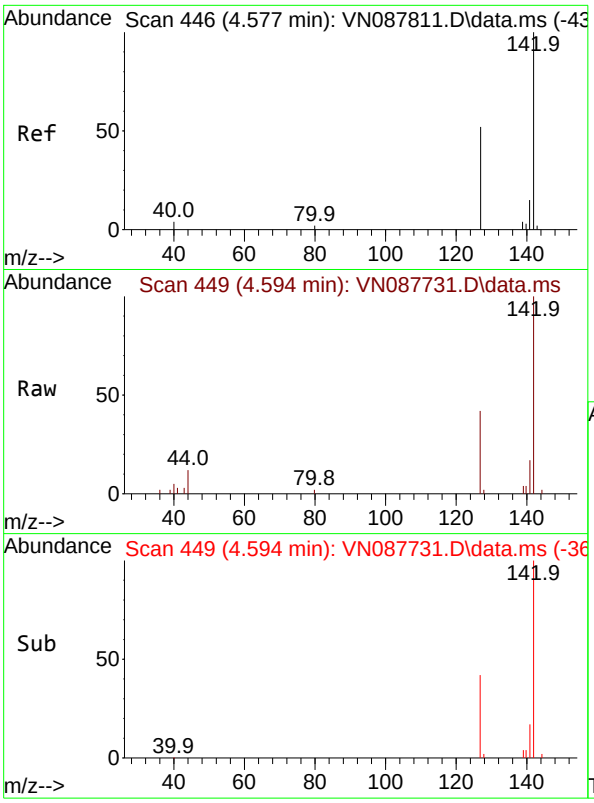


#10
1,1-Dichloroethene
Concen: 17.494 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 96 Resp: 48502

Ion	Ratio	Lower	Upper
96	100		
61	179.9	135.9	203.9
98	58.6	59.2	88.8#

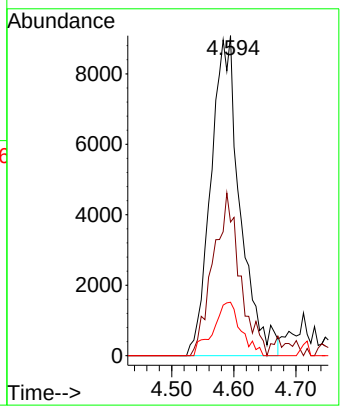




#11
Methyl Iodide
Concen: 15.097 ug/l m
RT: 4.594 min Scan# 44
Delta R.T. 0.012 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:142 Resp: 2962

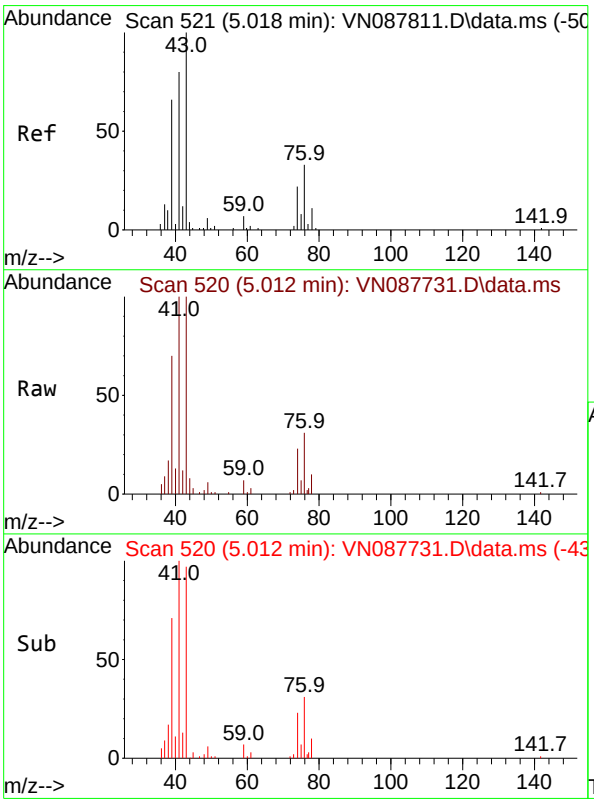
Ion	Ratio	Lower	Upper
142	100		
127	41.7	27.9	83.7
141	16.7	9.6	28.8



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations
APPROVED

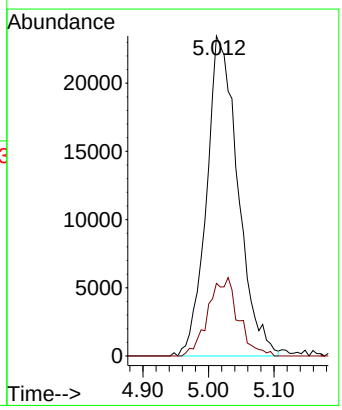
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

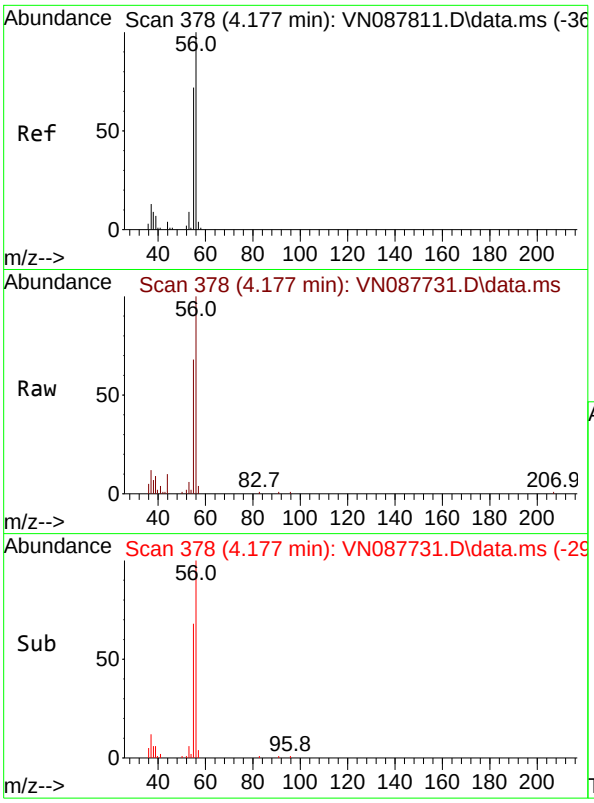


#12
Methyl Acetate
Concen: 18.262 ug/l
RT: 5.012 min Scan# 520
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 43 Resp: 78049

Ion	Ratio	Lower	Upper
43	100		
74	22.9	17.5	26.3

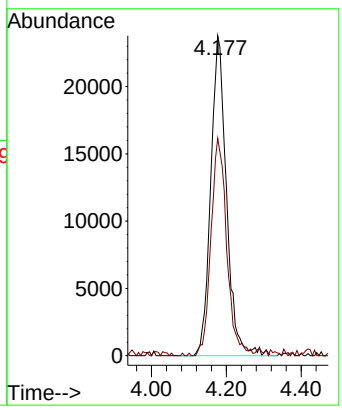




#13
Acrolein
Concen: 91.132 ug/l m
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 56 Resp: 6934

Ion	Ratio	Lower	Upper
56	100		
55	0.3	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
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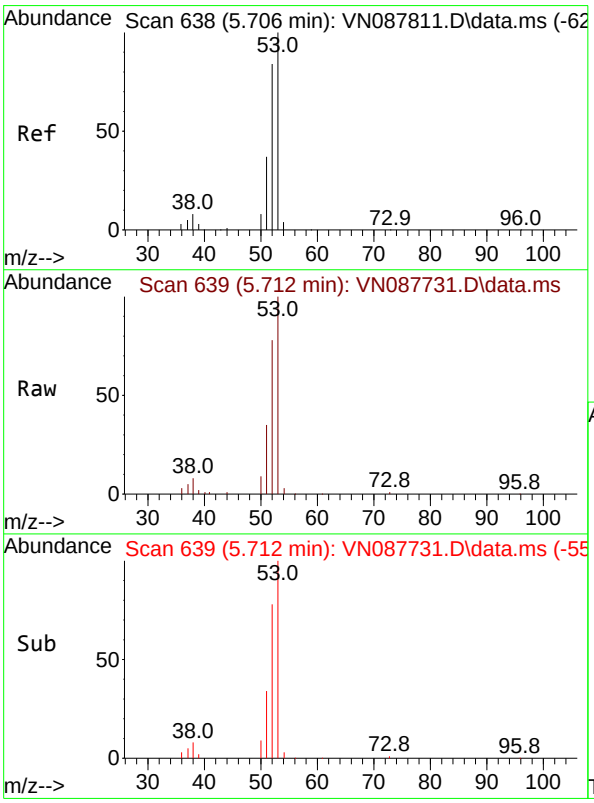
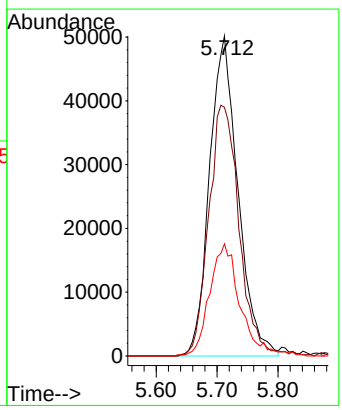
Supervised By :Mahesh Dadoda 09/05/2025

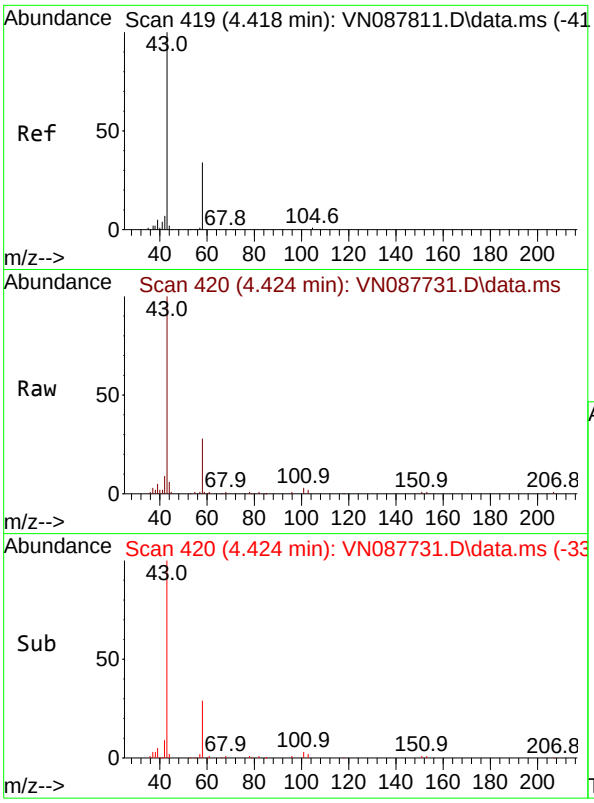


#14
Acrylonitrile
Concen: 88.404 ug/l
RT: 5.712 min Scan# 639
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 53 Resp: 162624

Ion	Ratio	Lower	Upper
53	100		
52	82.7	40.9	122.7
51	35.6	18.1	54.1

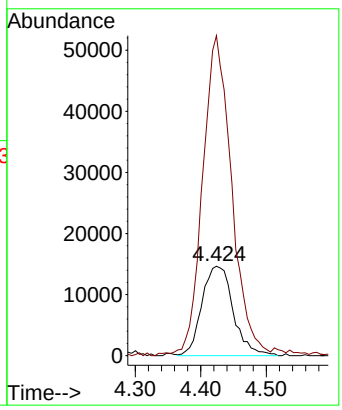




#15
Acetone
Concen: 84.645 ug/l
RT: 4.424 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 58 Resp: 4857

Ion	Ratio	Lower	Upper
58	100		
43	351.1	250.6	376.0



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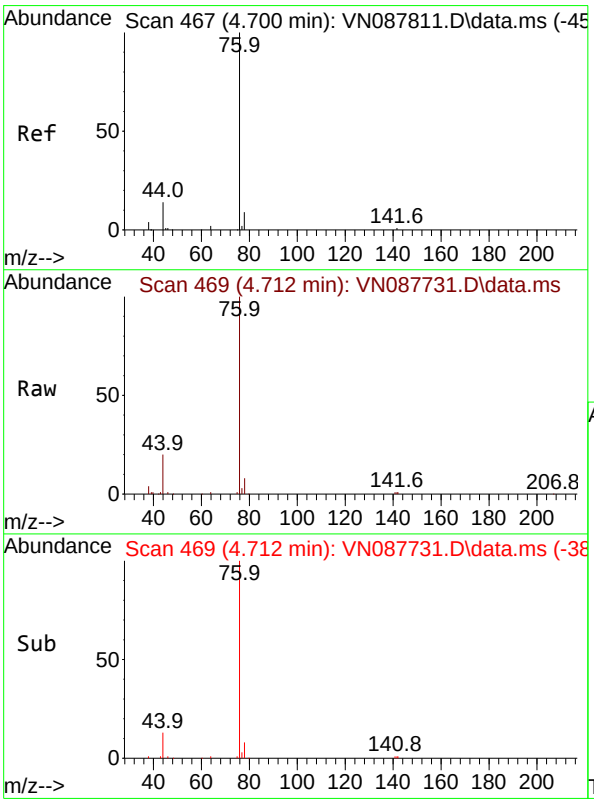
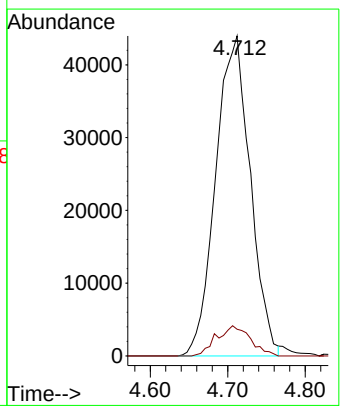
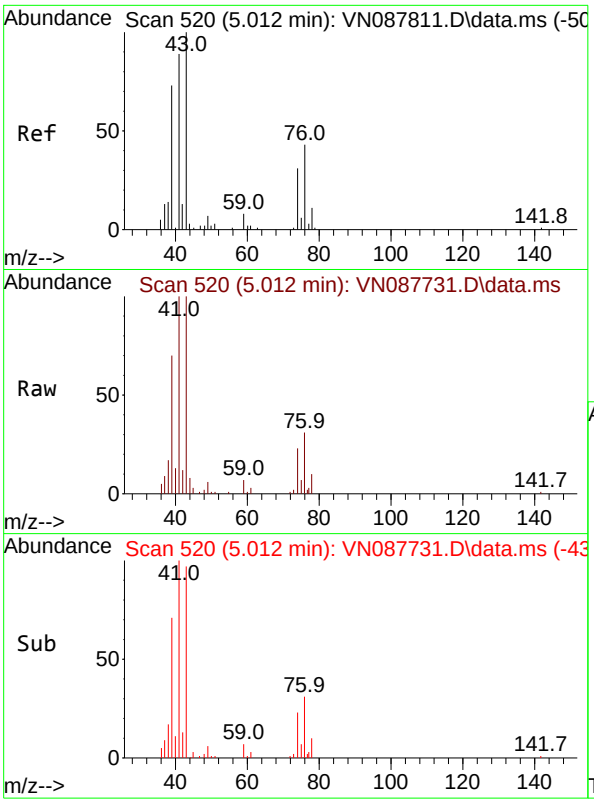


#16
Carbon Disulfide
Concen: 17.930 ug/l
RT: 4.712 min Scan# 469
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 76 Resp: 136485

Ion	Ratio	Lower	Upper
76	100		
78	8.4	5.0	7.6#

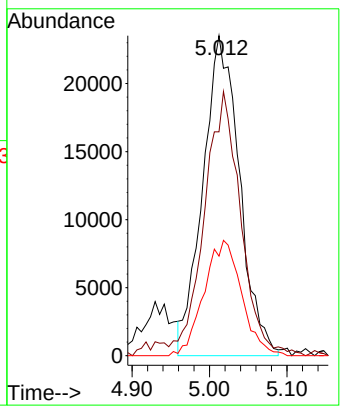




#17
Allyl chloride
Concen: 17.065 ug/l
RT: 5.012 min Scan# 5
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 41 Resp: 7727

Ion	Ratio	Lower	Upper
41	100		
39	68.5	36.7	110.1
76	33.2	18.3	54.8



Instrument :
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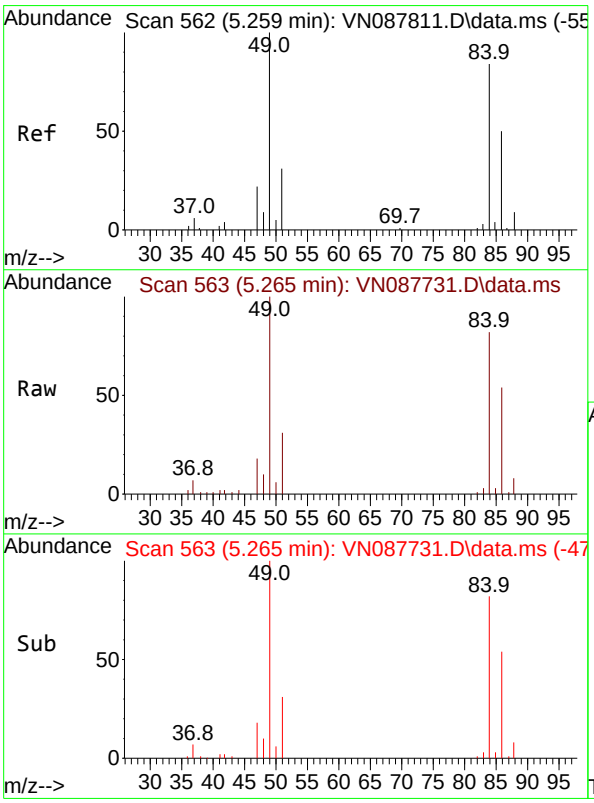
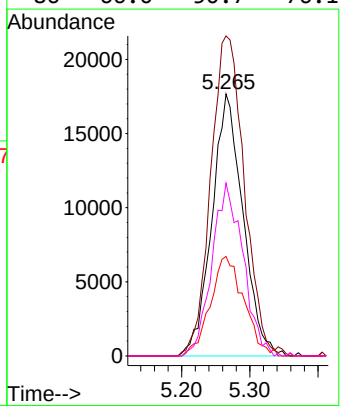
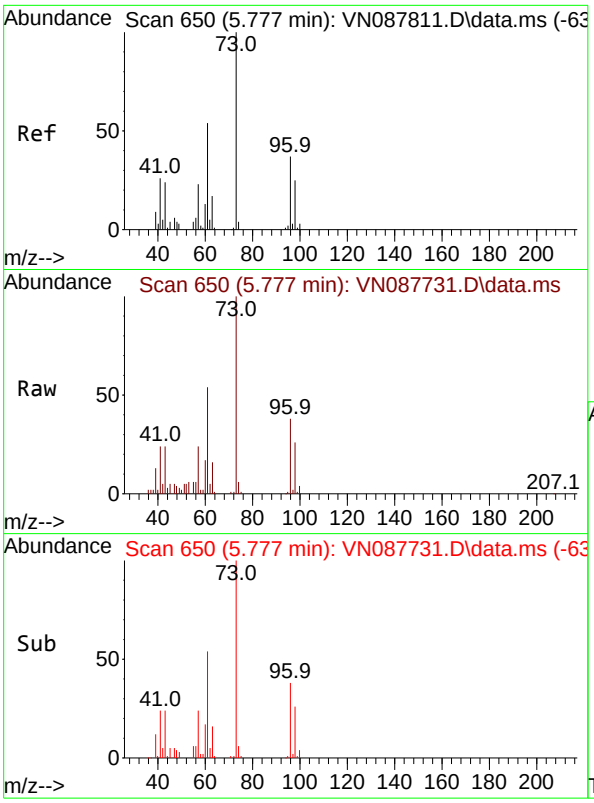


#18
Methylene Chloride
Concen: 17.804 ug/l
RT: 5.265 min Scan# 563
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 84 Resp: 55915

Ion	Ratio	Lower	Upper
84	100		
49	122.2	114.1	171.1
51	38.0	30.2	45.4
86	66.0	50.7	76.1

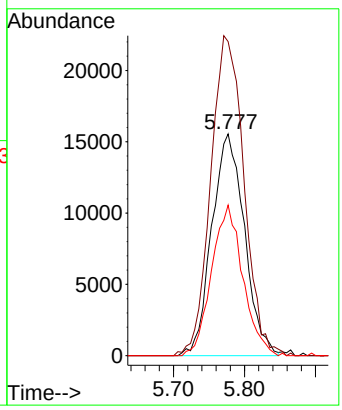




#19
trans-1,2-Dichloroethene
Concen: 17.581 ug/l
RT: 5.777 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 96 Resp: 4971

Ion	Ratio	Lower	Upper
96	100		
61	139.8	106.4	159.6
98	67.9	48.9	73.3



Instrument :
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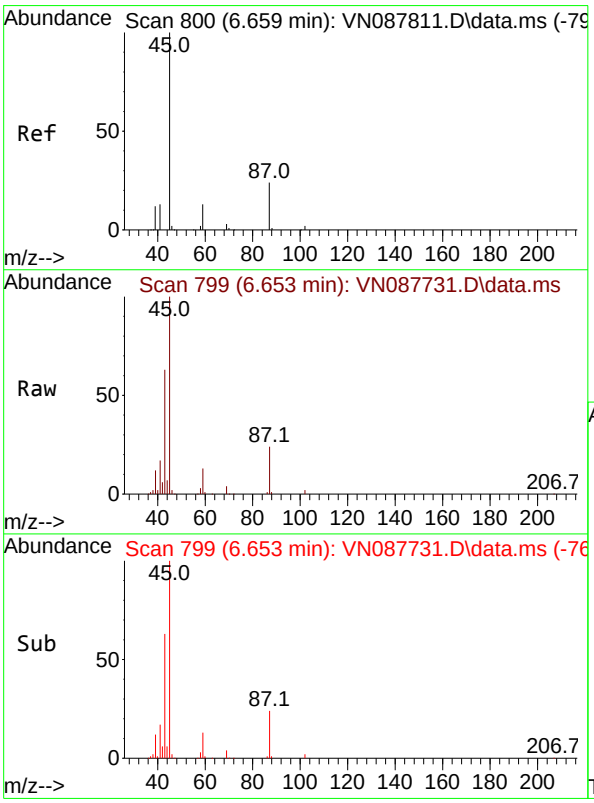
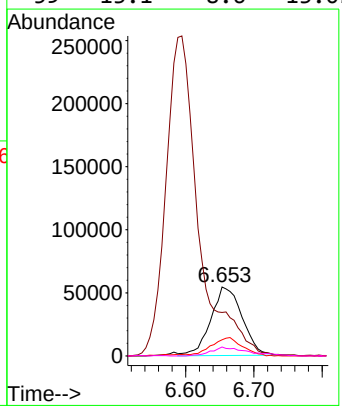
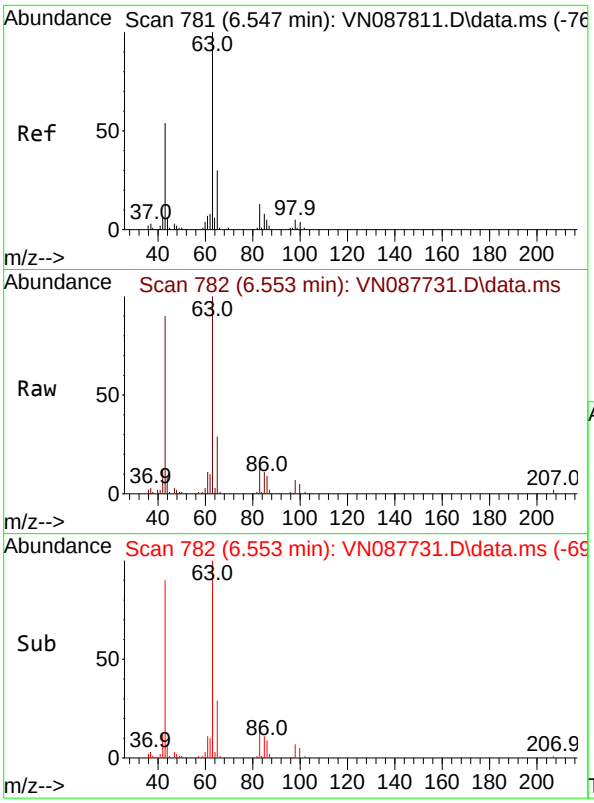


#20
Diisopropyl ether
Concen: 16.633 ug/l
RT: 6.653 min Scan# 799
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 45 Resp: 173212

Ion	Ratio	Lower	Upper
45	100		
43	61.5	49.5	74.3
87	23.4	18.8	28.2
59	13.1	8.6	13.0#

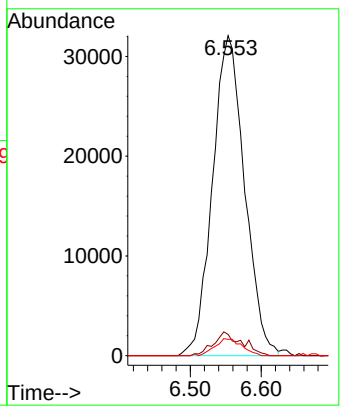




#21
1,1-Dichloroethane
Concen: 17.627 ug/l
RT: 6.553 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 63 Resp: 10052

Ion	Ratio	Lower	Upper
63	100		
98	6.7	2.9	8.8
100	5.1	1.8	5.3



Instrument :
MSVOA_N
ClientSampleId :
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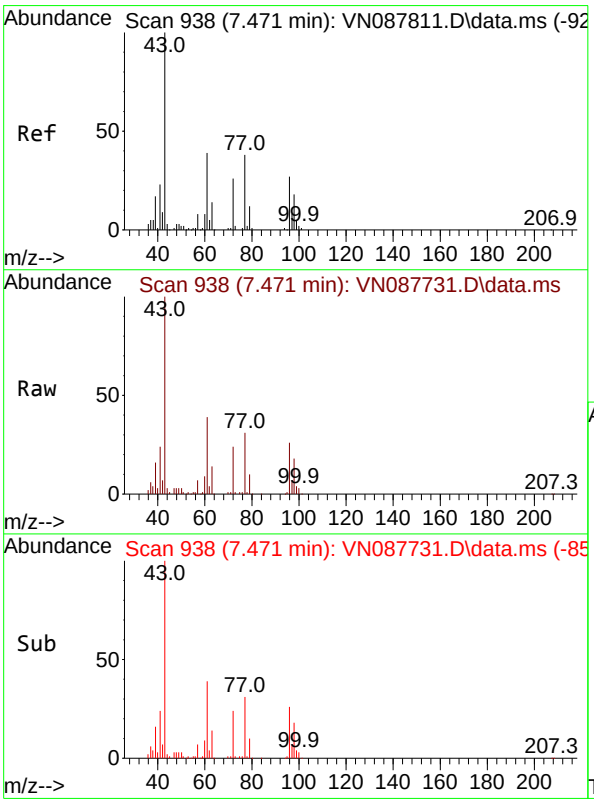
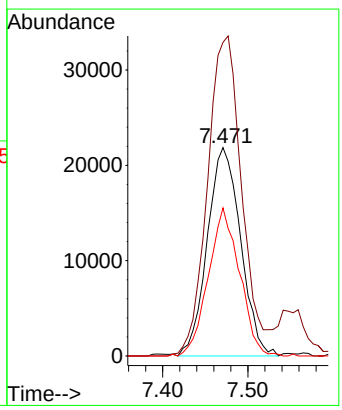
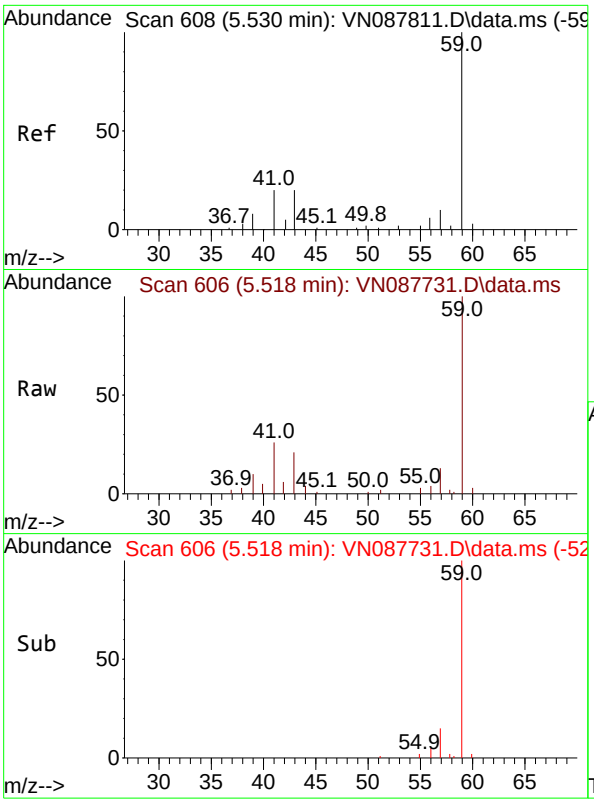


#22
cis-1,2-Dichloroethene
Concen: 17.296 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 96 Resp: 59360

Ion	Ratio	Lower	Upper
96	100		
61	155.8	118.2	177.2
98	66.3	51.6	77.4

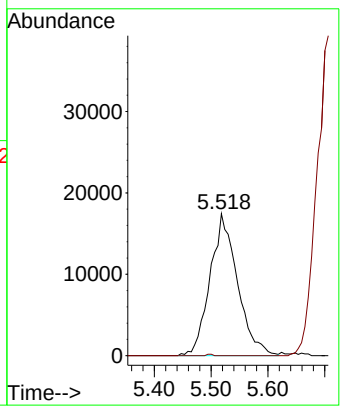




#23
tert-Butyl Alcohol
Concen: 90.020 ug/l
RT: 5.518 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 59 Resp: 5853

Ion	Ratio	Lower	Upper
59	100		
52	0.2	0.0	0.0#



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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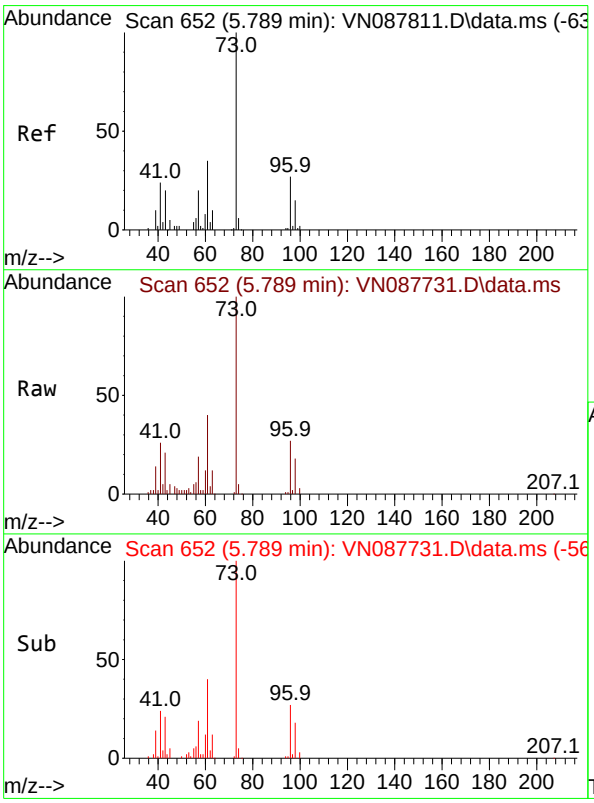
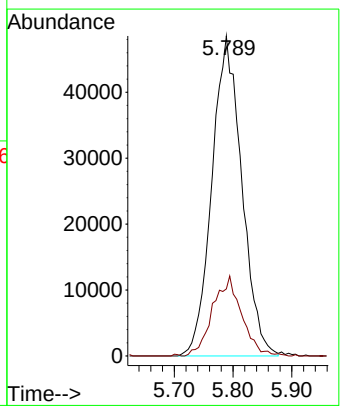
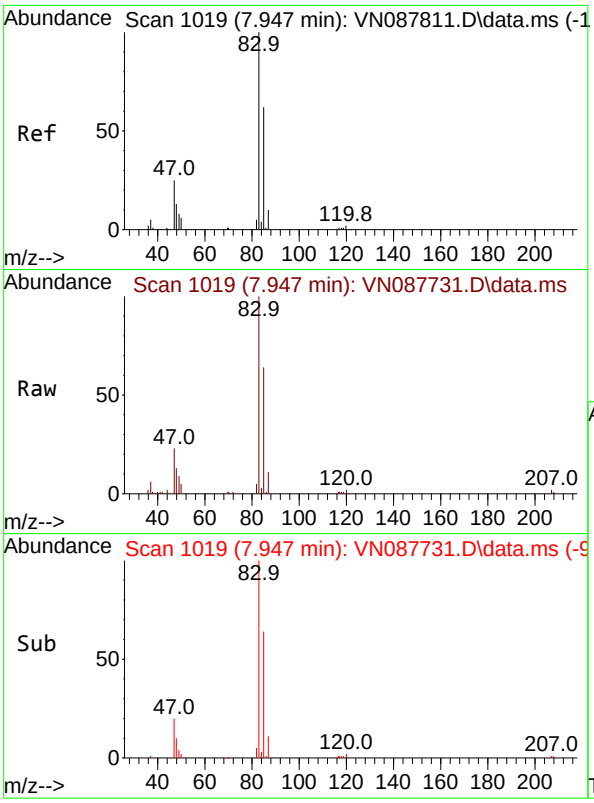


#24
Methyl tert-Butyl Ether
Concen: 17.297 ug/l
RT: 5.789 min Scan# 652
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 73 Resp: 171206

Ion	Ratio	Lower	Upper
73	100		
43	13.2	16.8	25.2#

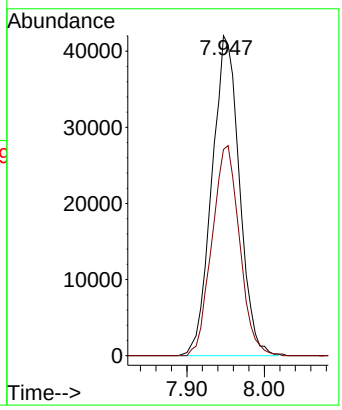




#25
Chloroform
Concen: 17.349 ug/l
RT: 7.947 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 83 Resp: 10355

Ion	Ratio	Lower	Upper
83	100		
85	64.5	47.7	71.5



Instrument :
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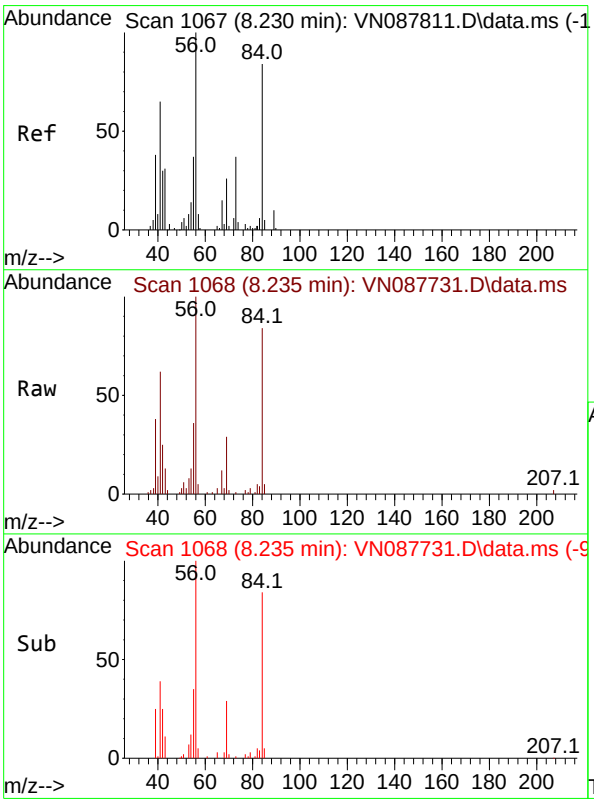
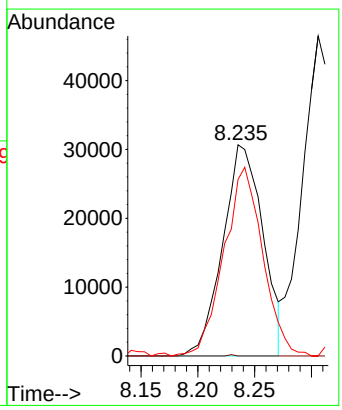
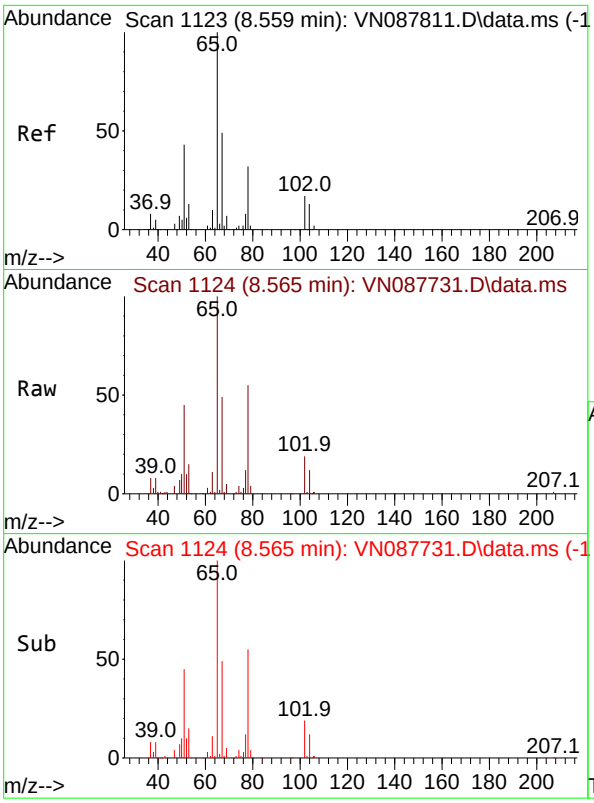


#26
Cyclohexane
Concen: 17.359 ug/l
RT: 8.235 min Scan# 1068
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 56 Resp: 75387

Ion	Ratio	Lower	Upper
56	100		
89	0.0	0.0	0.0
84	86.5	69.4	104.2

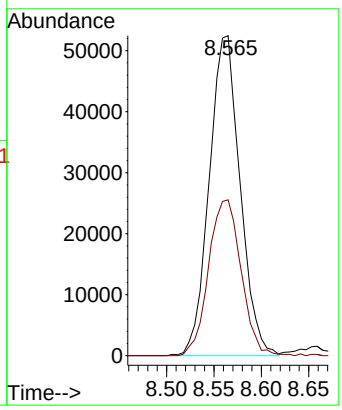




#27
1,2-Dichloroethane-d4
Concen: 30.234 ug/l
RT: 8.565 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 65 Resp: 11860

Ion	Ratio	Lower	Upper
65	100		
67	51.2	39.6	59.4



Instrument :
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ClientSampleId :
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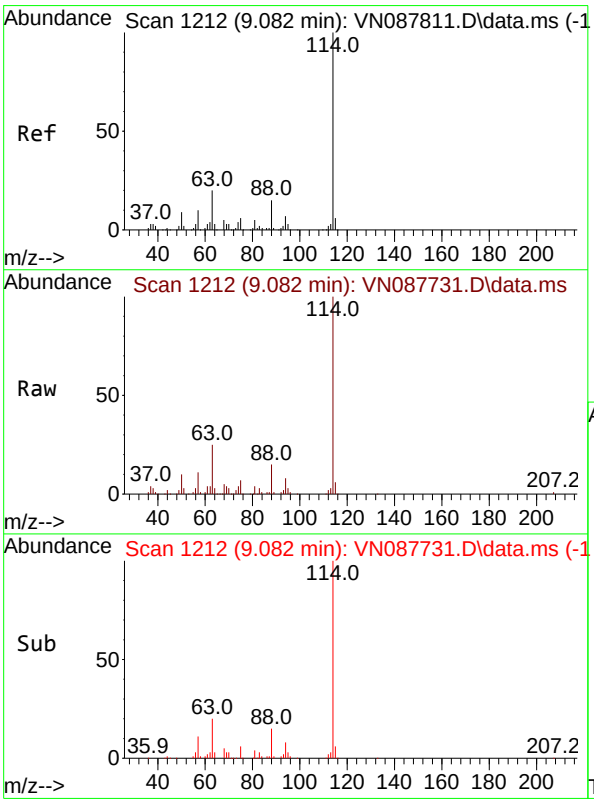
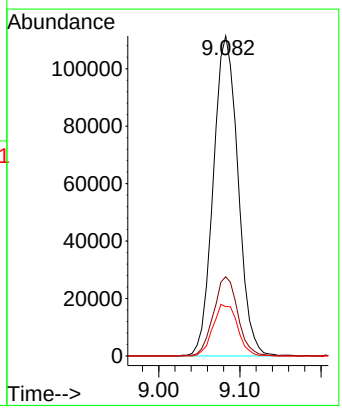
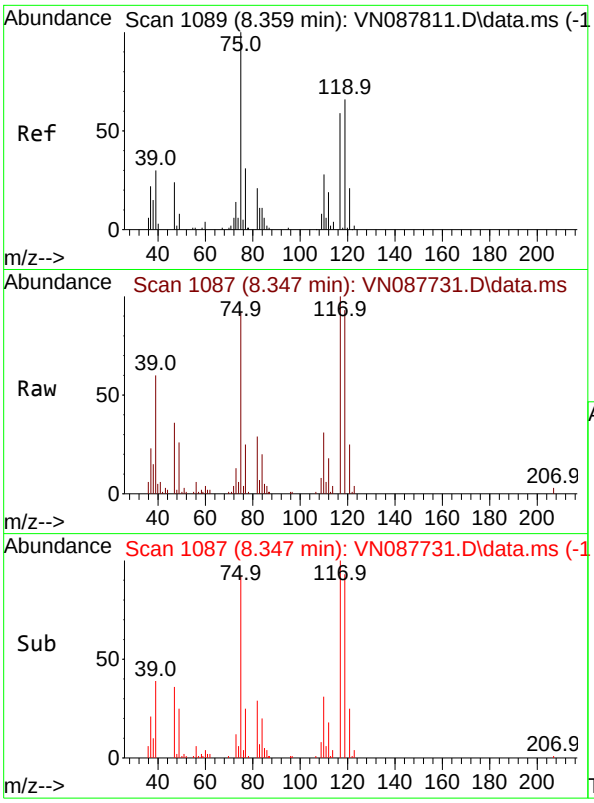


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:114 Resp: 235644

Ion	Ratio	Lower	Upper
114	100		
63	24.3	18.3	27.5
88	16.0	12.4	18.6

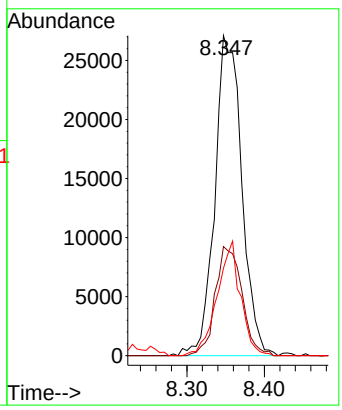




#29
1,1-Dichloropropene
Concen: 17.099 ug/l
RT: 8.347 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 75 Resp: 6548

Ion	Ratio	Lower	Upper
75	100		
110	33.8	0.0	64.4
77	31.1	0.0	62.2



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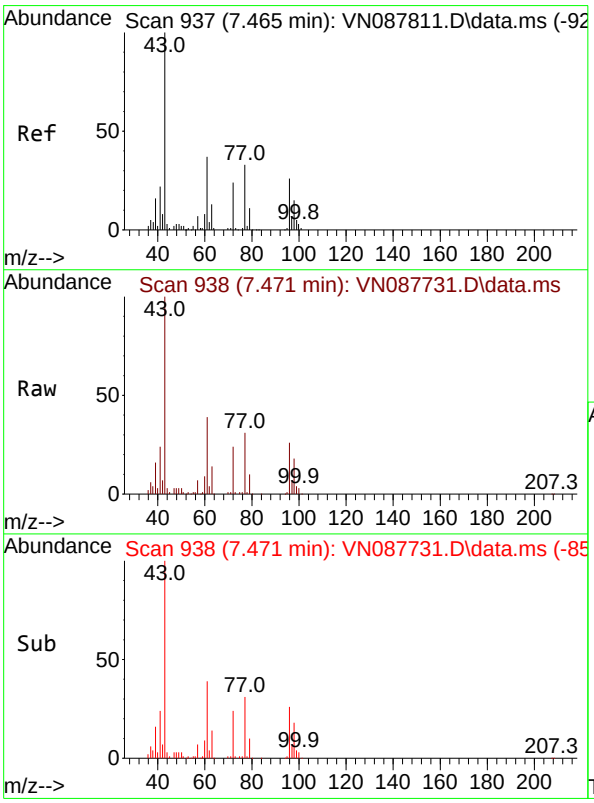
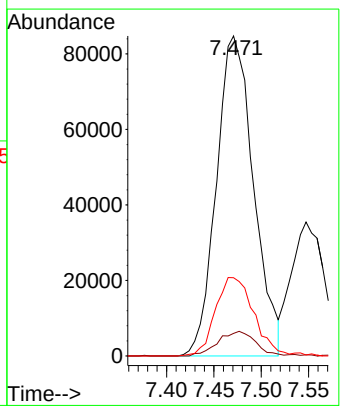
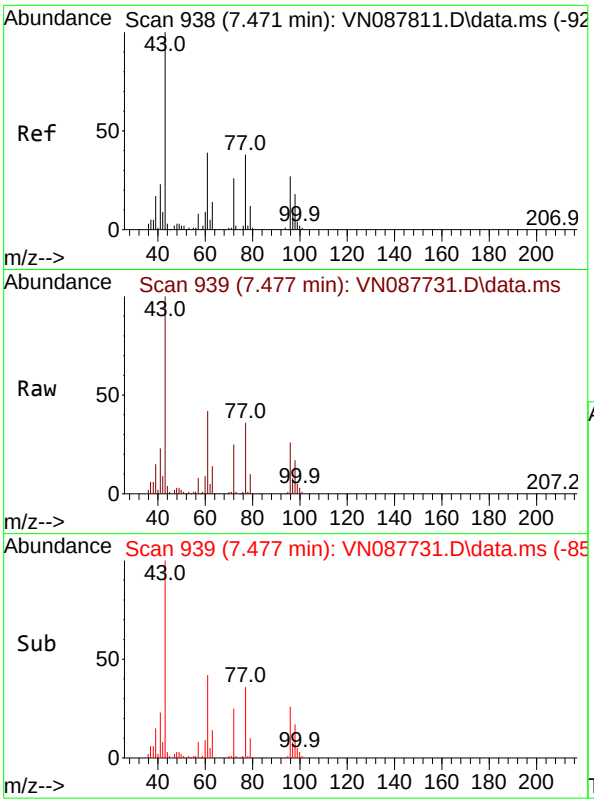


#30
2-Butanone
Concen: 87.744 ug/l
RT: 7.471 min Scan# 938
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 43 Resp: 231480

Ion	Ratio	Lower	Upper
43	100		
57	7.7	6.3	9.5
72	25.2	21.4	32.2





#31
2,2-Dichloropropane
Concen: 17.001 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 77 Resp: 7848

Ion	Ratio	Lower	Upper
77	100		
97	11.0	17.1	25.7

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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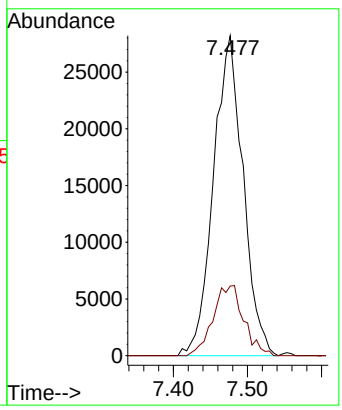
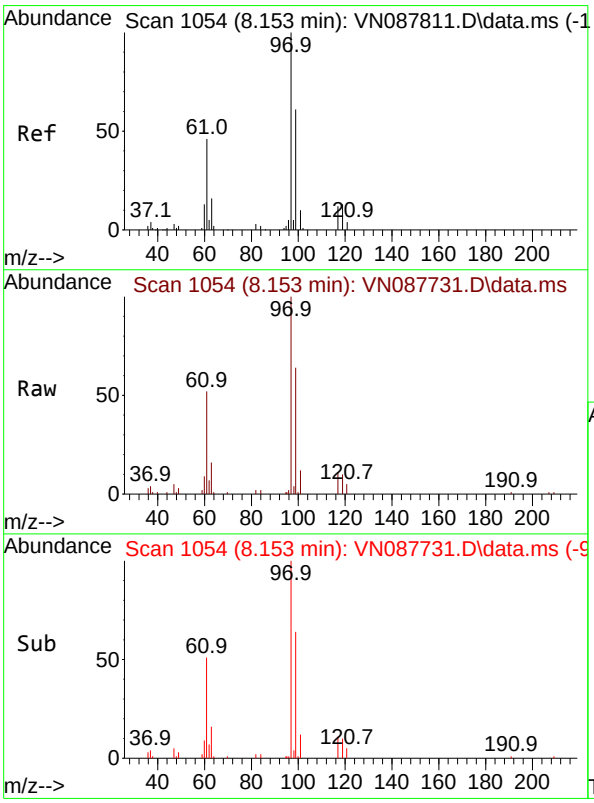
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

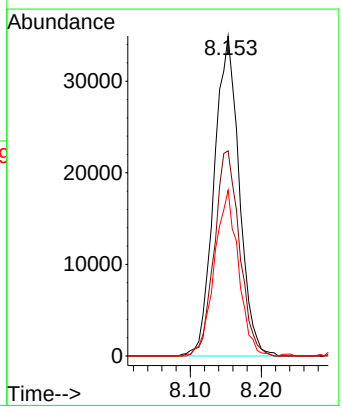


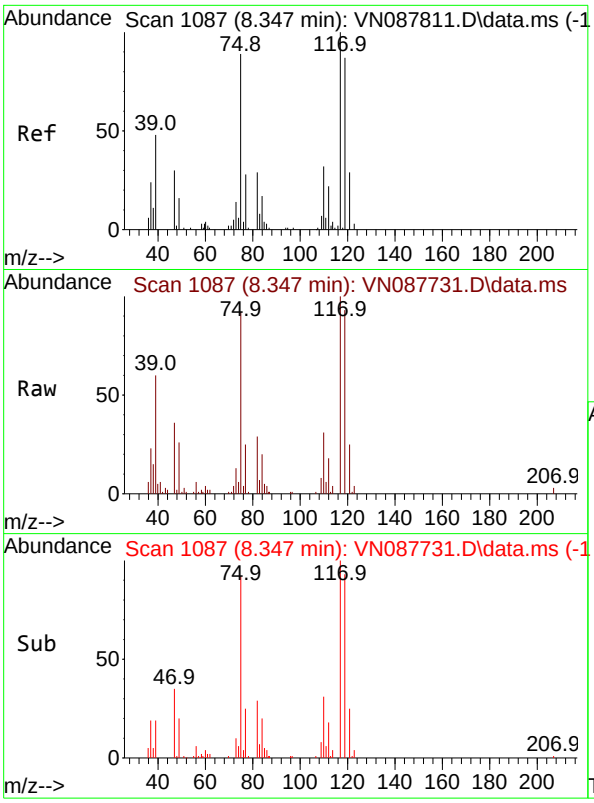


#32
1,1,1-Trichloroethane
Concen: 17.650 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 97 Resp: 85693

Ion	Ratio	Lower	Upper
97	100		
99	64.4	52.2	78.4
61	49.5	37.9	56.9

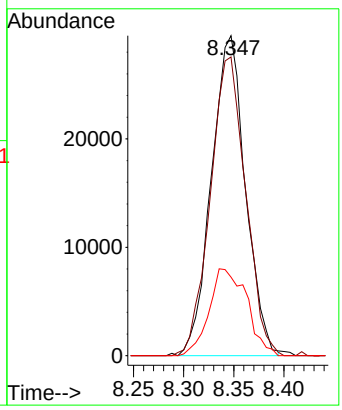




#33
Carbon Tetrachloride
Concen: 17.204 ug/l
RT: 8.347 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:117 Resp: 6964

Ion	Ratio	Lower	Upper
117	100		
119	92.4	77.3	115.9
121	24.6	26.6	39.8



Instrument :
MSVOA_N
ClientSampleId :
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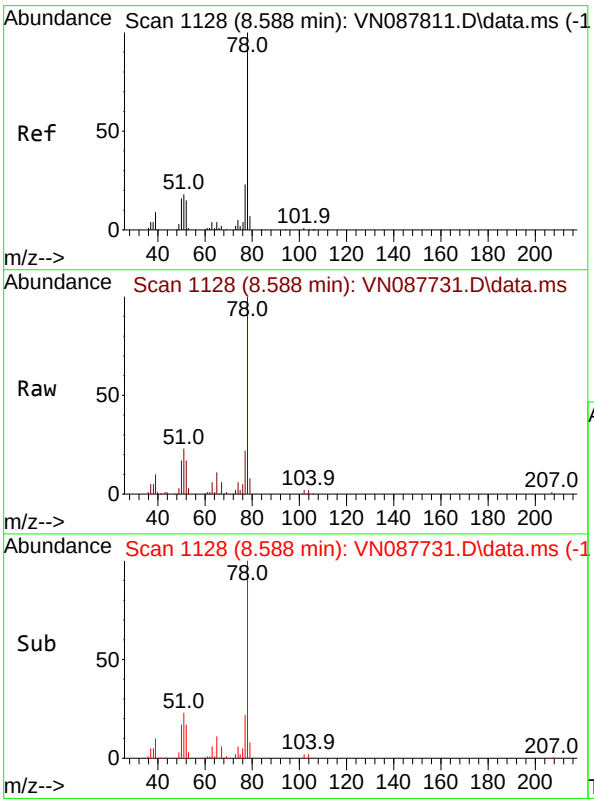
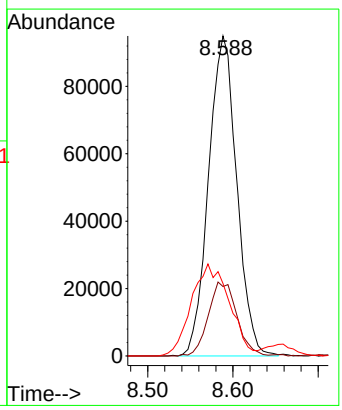
Supervised By :Mahesh Dadoda 09/05/2025

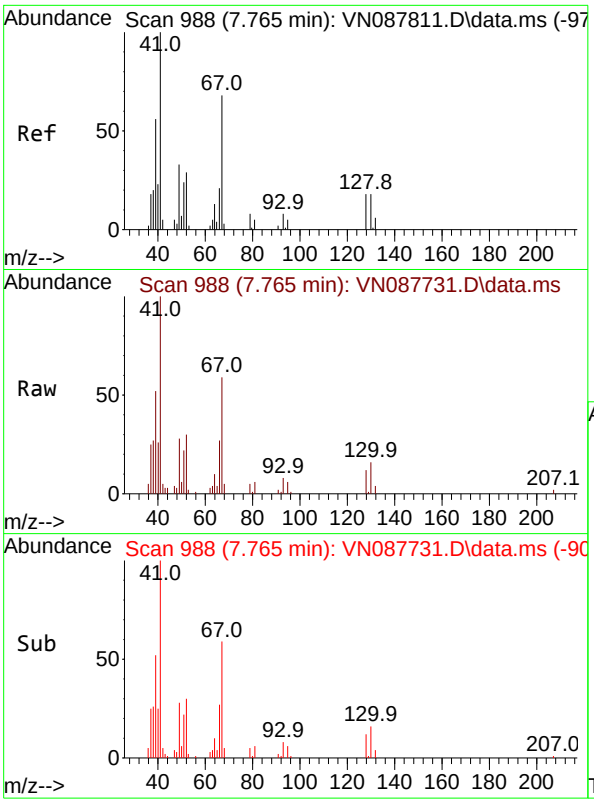


#34
Benzene
Concen: 17.669 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 78 Resp: 218694

Ion	Ratio	Lower	Upper
78	100		
77	21.7	20.3	30.5
51	19.1	18.0	27.0

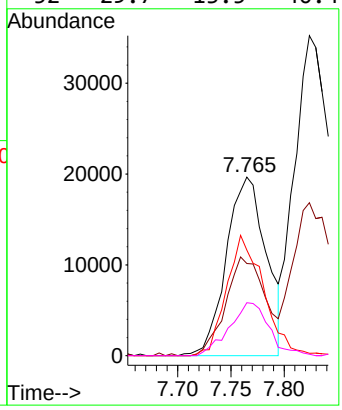




#35
Methacrylonitrile
Concen: 18.531 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 41 Resp: 5113

Ion	Ratio	Lower	Upper
41	100		
39	48.8	27.1	81.2
67	59.1	32.1	96.5
52	29.7	13.5	40.4



Instrument :
MSVOA_N
ClientSampleId :
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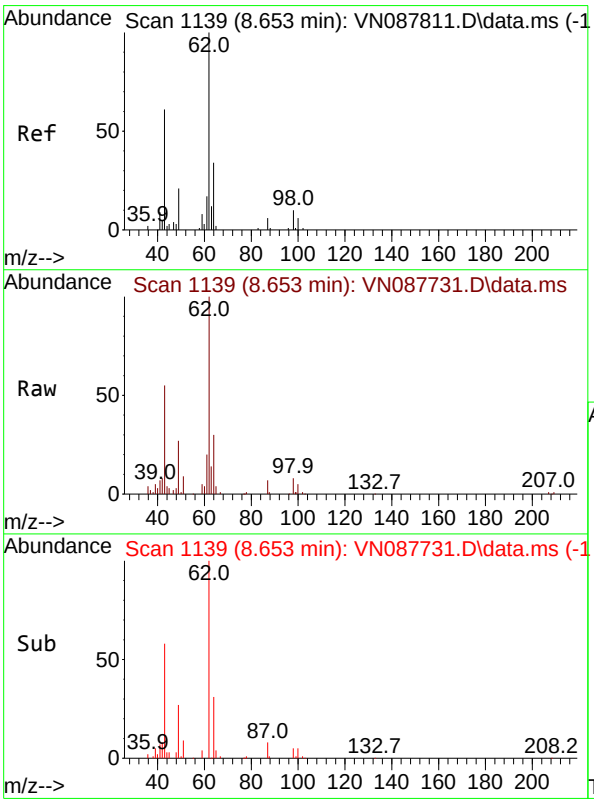
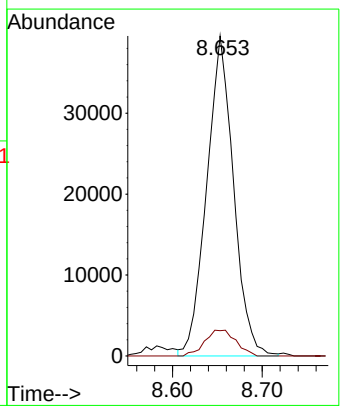
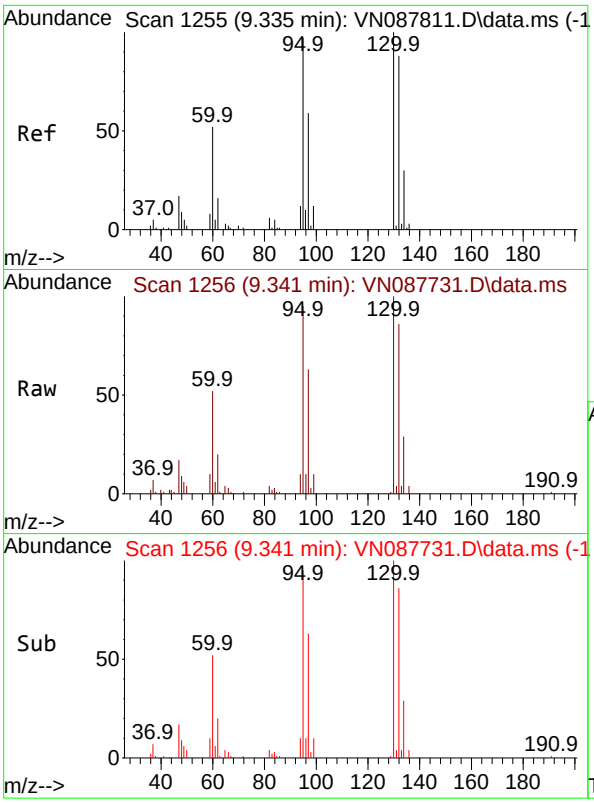


#36
1,2-Dichloroethane
Concen: 17.562 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 62 Resp: 82106

Ion	Ratio	Lower	Upper
62	100		
98	9.4	7.2	10.8

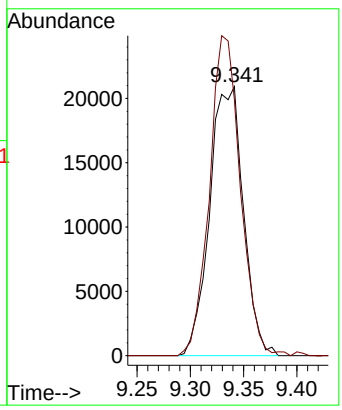




#37
Trichloroethene
Concen: 16.598 ug/l
RT: 9.341 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:130 Resp: 4592

Ion	Ratio	Lower	Upper
130	100		
95	95.3	82.7	124.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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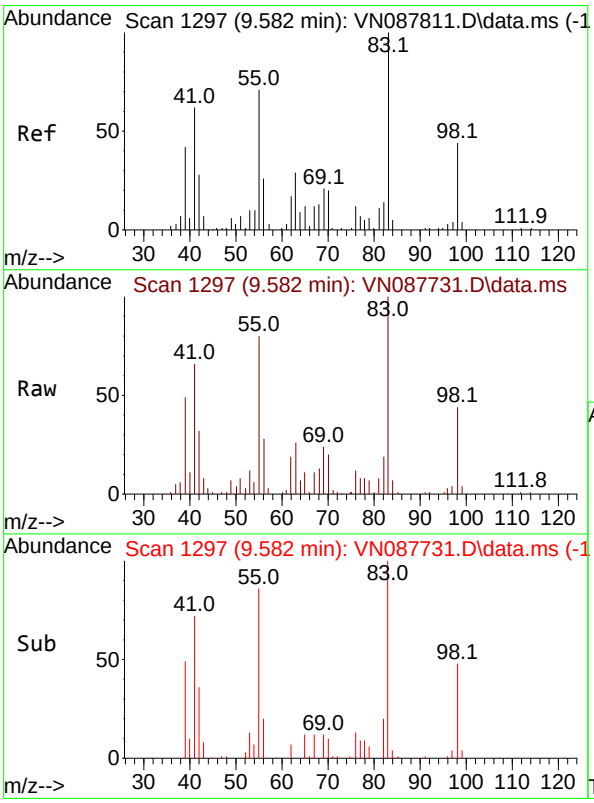
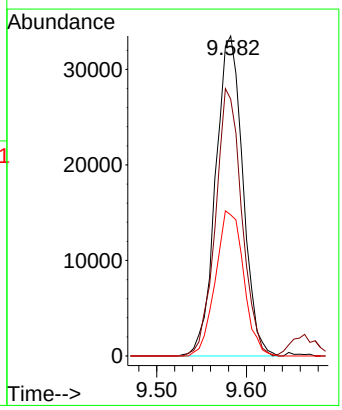
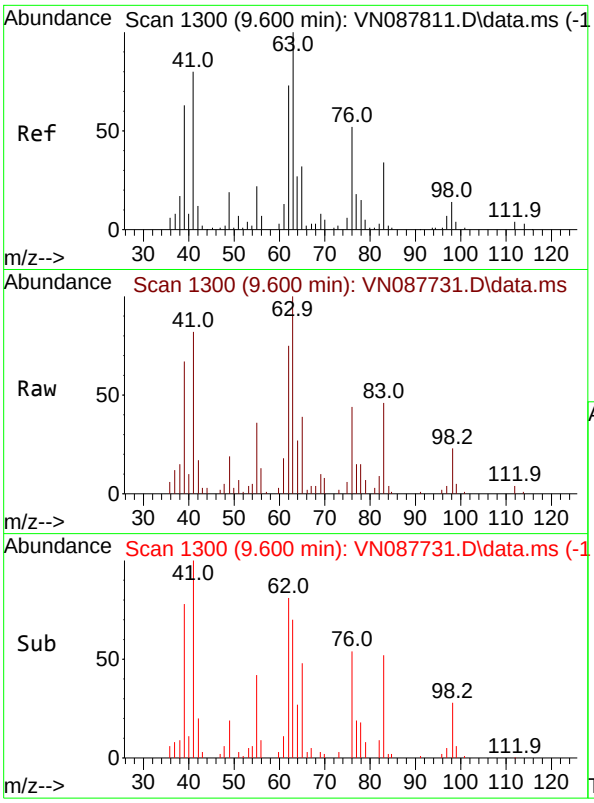


#38
Methylcyclohexane
Concen: 16.745 ug/l
RT: 9.582 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 83 Resp: 70612

Ion	Ratio	Lower	Upper
83	100		
55	80.5	40.4	121.1
98	46.9	24.0	72.0





#39
1,2-Dichloropropane
Concen: 17.248 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 63 Resp: 5467

Ion	Ratio	Lower	Upper
63	100		
65	39.2	24.1	36.1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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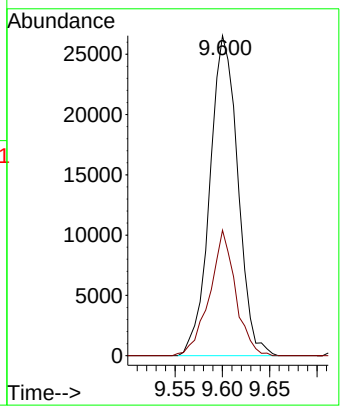
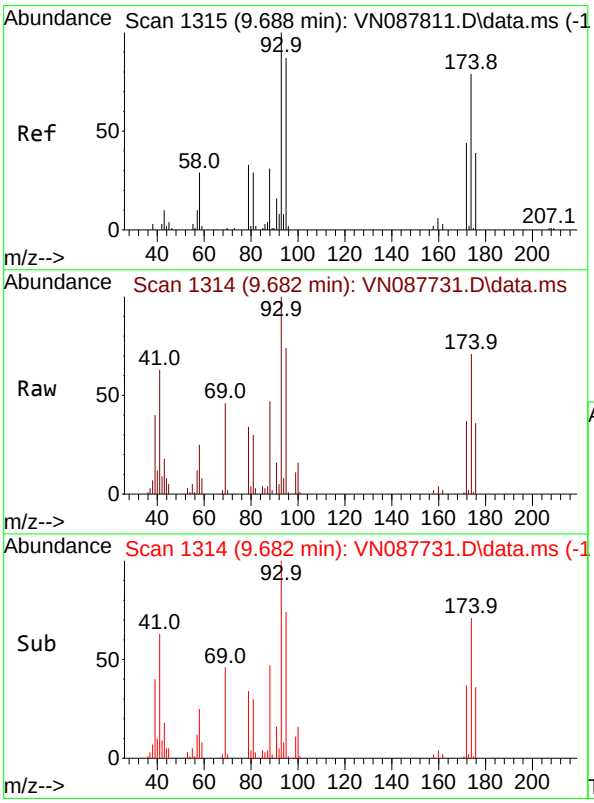
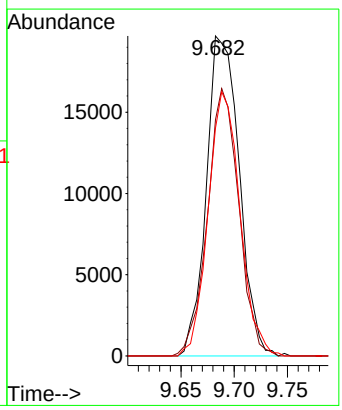


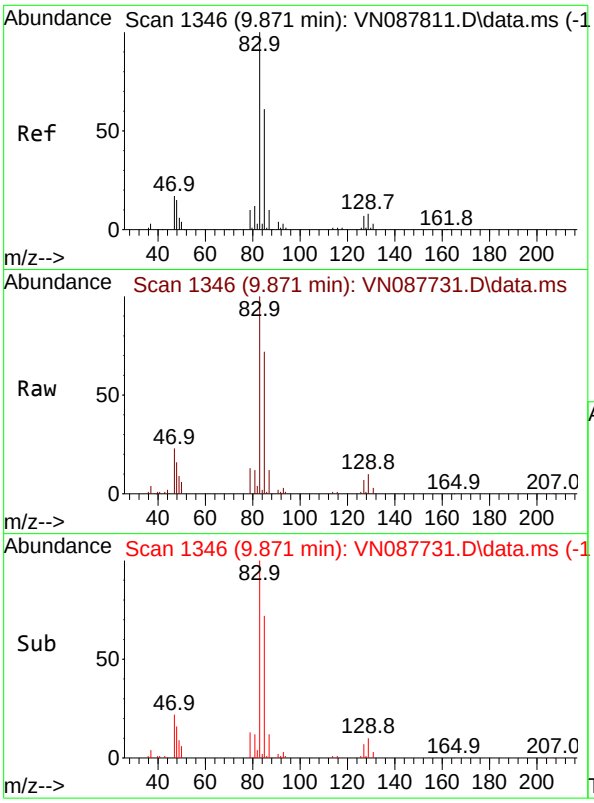


#40
Dibromomethane
Concen: 17.941 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 93 Resp: 42325

Ion	Ratio	Lower	Upper
93	100		
95	79.7	0.0	168.4
174	79.8	0.0	162.8





#41
Bromodichloromethane
Concen: 17.353 ug/l
RT: 9.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 83 Resp: 8367

Ion	Ratio	Lower	Upper
83	100		
85	71.7	47.3	70.9
127	7.4	5.2	7.8

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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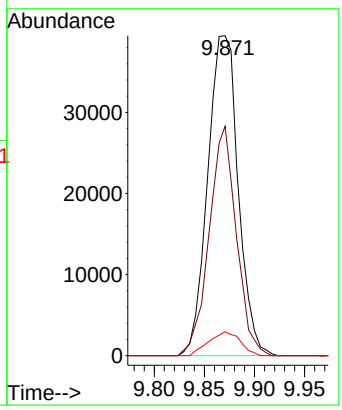
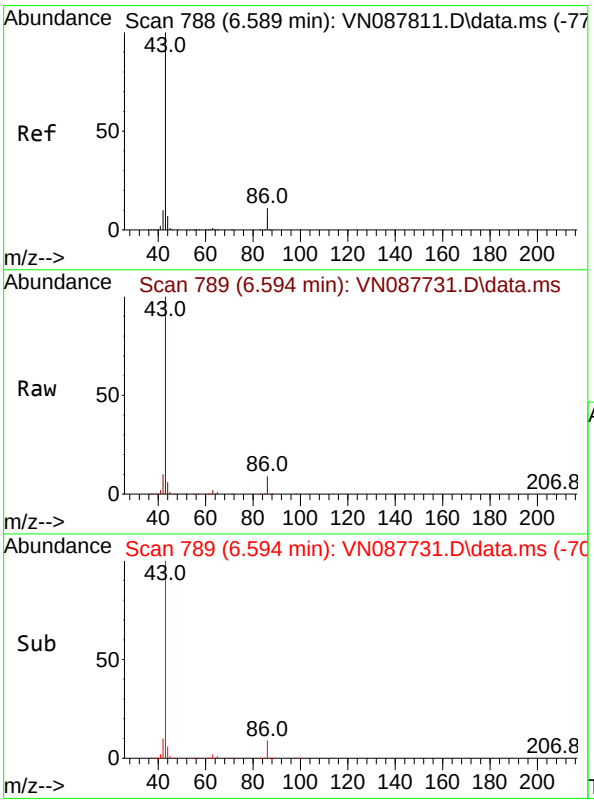
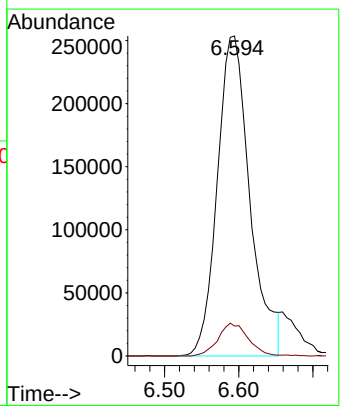


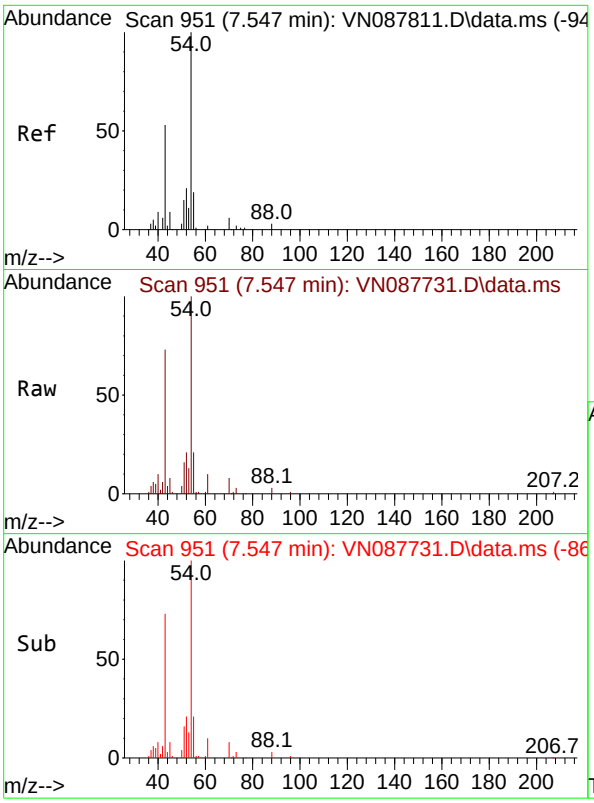


#42
Vinyl Acetate
Concen: 88.211 ug/l
RT: 6.594 min Scan# 789
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 43 Resp: 777536

Ion	Ratio	Lower	Upper
43	100		
86	9.4	7.7	11.5





#43
Ethyl Acetate
Concen: 17.318 ug/l
RT: 7.547 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 43 Resp: 9334

Ion	Ratio	Lower	Upper
43	100		
45	12.3	10.5	15.7

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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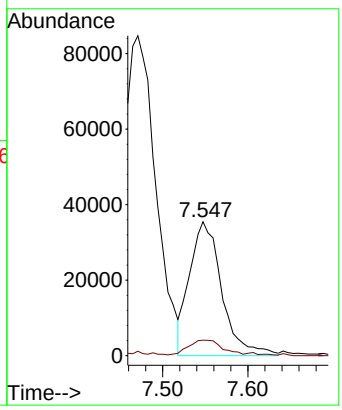
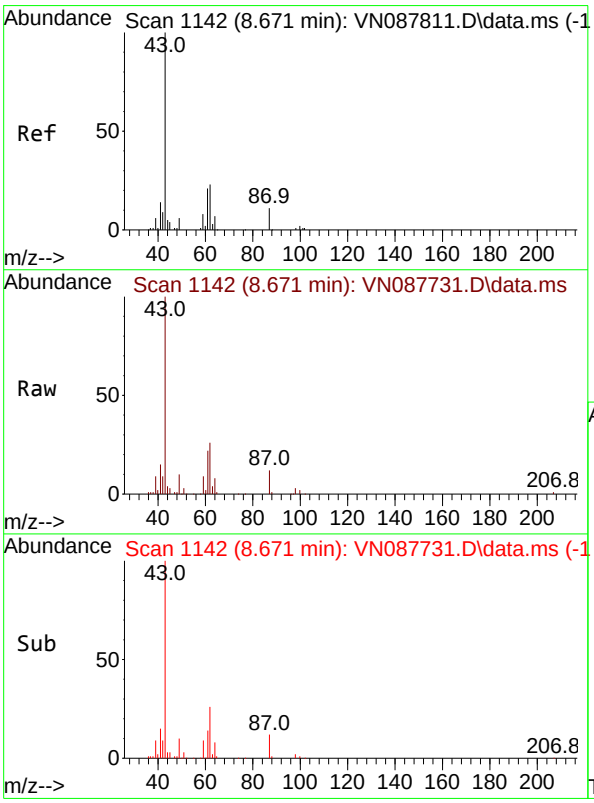
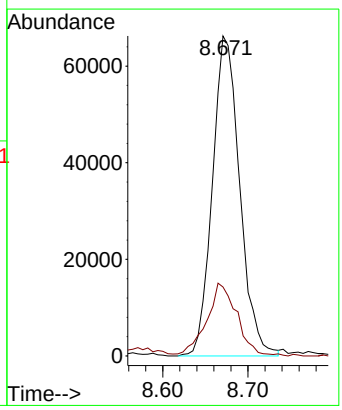


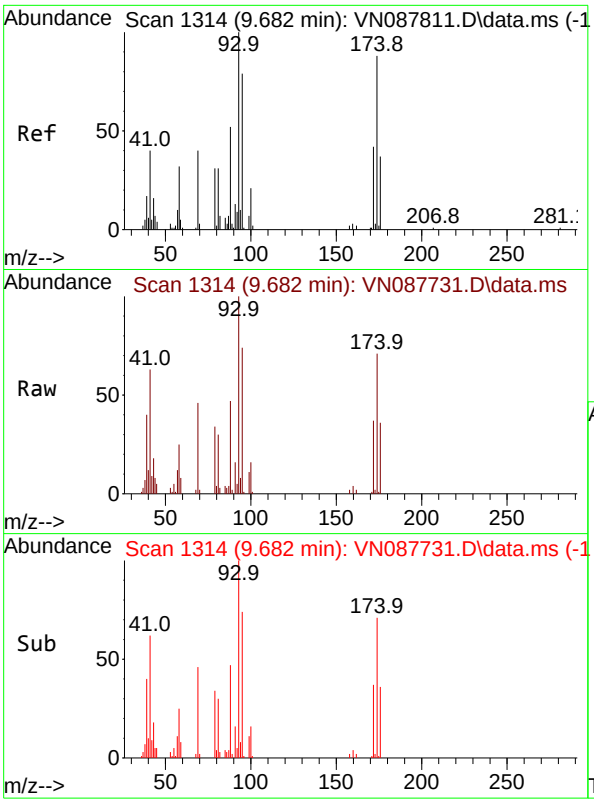


#44
Isopropyl Acetate
Concen: 17.448 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 43 Resp: 147433

Ion	Ratio	Lower	Upper
43	100		
61	25.2	19.5	29.3

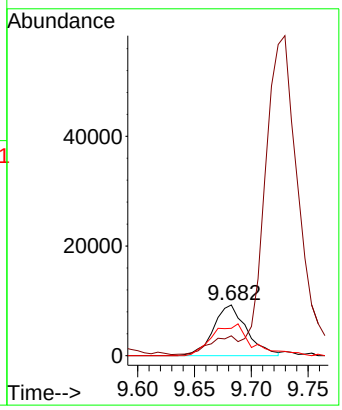




#45
1,4-Dioxane
Concen: 352.976 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 88 Resp: 1880

Ion	Ratio	Lower	Upper
88	100		
43	30.6	23.6	35.4
58	20.9	60.5	90.7



Instrument :
MSVOA_N
ClientSampleId :
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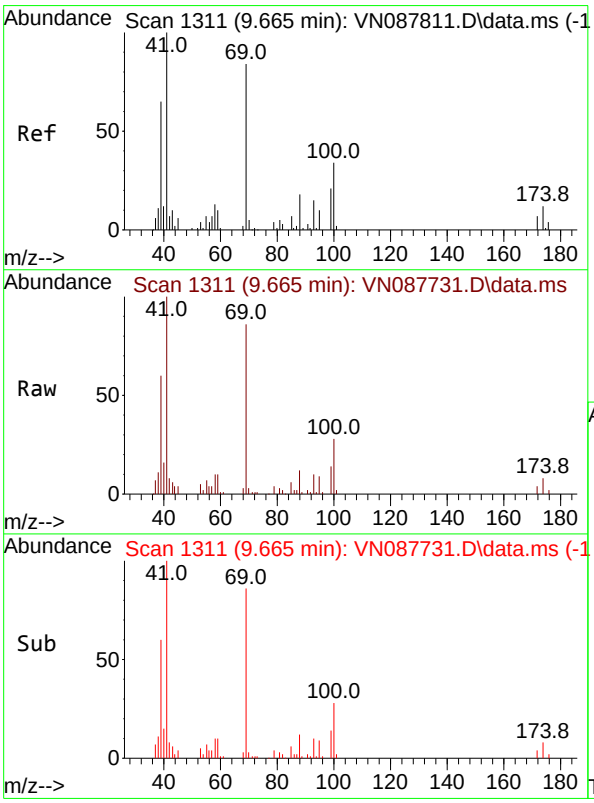
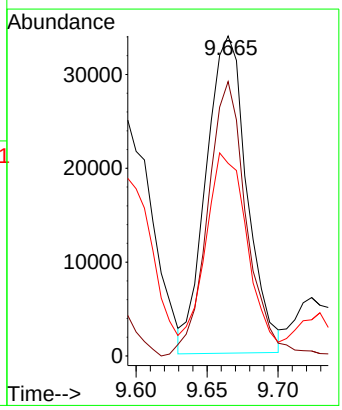
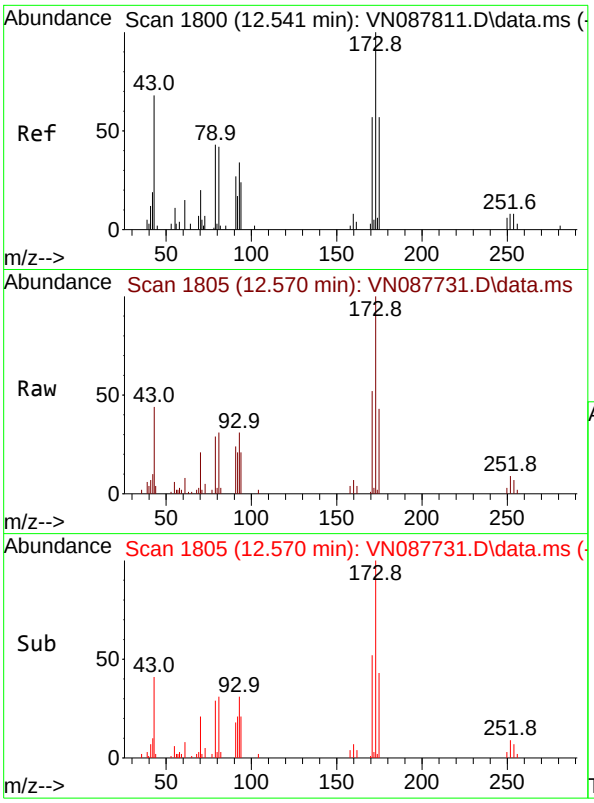


#46
Methyl methacrylate
Concen: 17.410 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 41 Resp: 67807

Ion	Ratio	Lower	Upper
41	100		
69	89.5	40.3	120.9
39	60.9	31.9	95.9

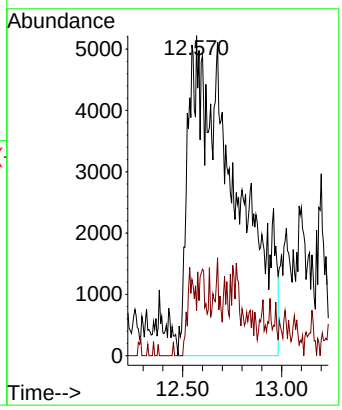




#47
n-amyl Acetate
Concen: 15.166 ug/l m
RT: 12.570 min Scan# 1
Delta R.T. -0.100 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 43 Resp: 8660

Ion	Ratio	Lower	Upper
43	100		
55	1.3	0.7	1.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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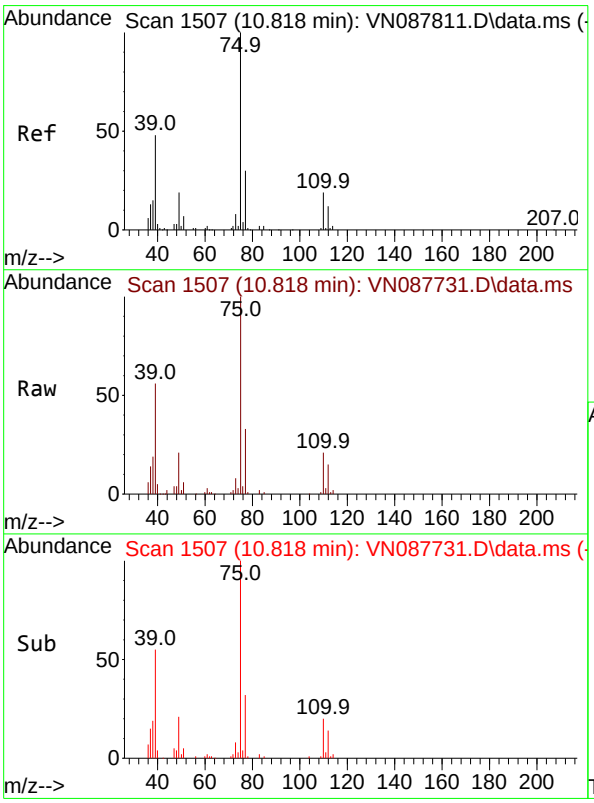
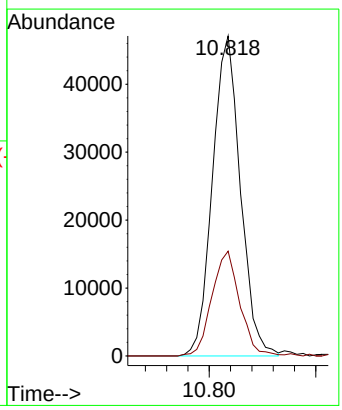
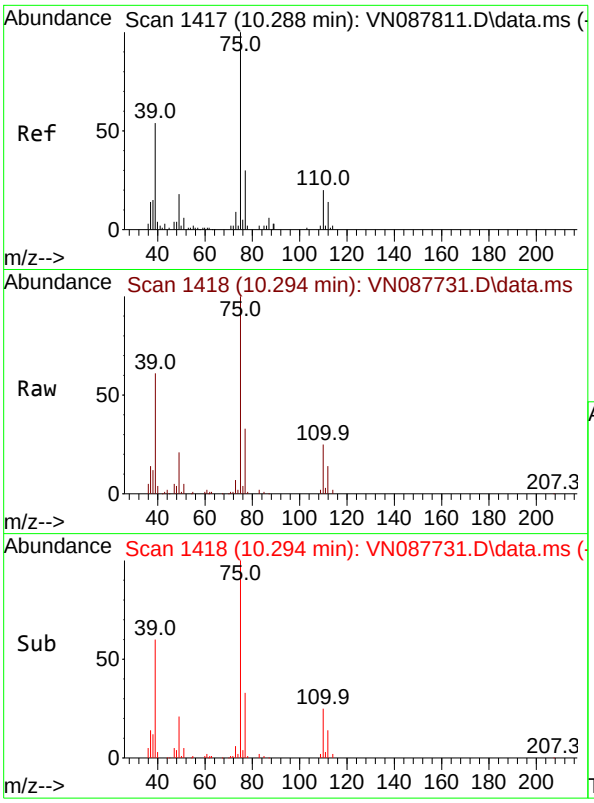


#48
t-1,3-Dichloropropene
Concen: 17.087 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 75 Resp: 85569

Ion	Ratio	Lower	Upper
75	100		
77	32.8	24.7	37.1

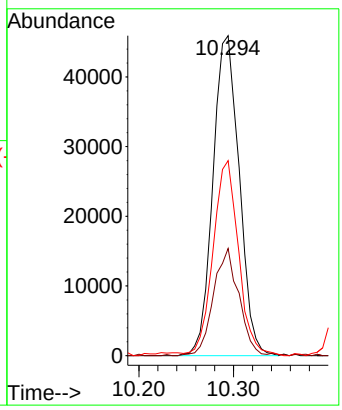




#49
cis-1,3-Dichloropropene
Concen: 17.239 ug/l
RT: 10.294 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 75 Resp: 8842

Ion	Ratio	Lower	Upper
75	100		
77	33.5	27.8	41.6
39	60.5	47.6	71.4



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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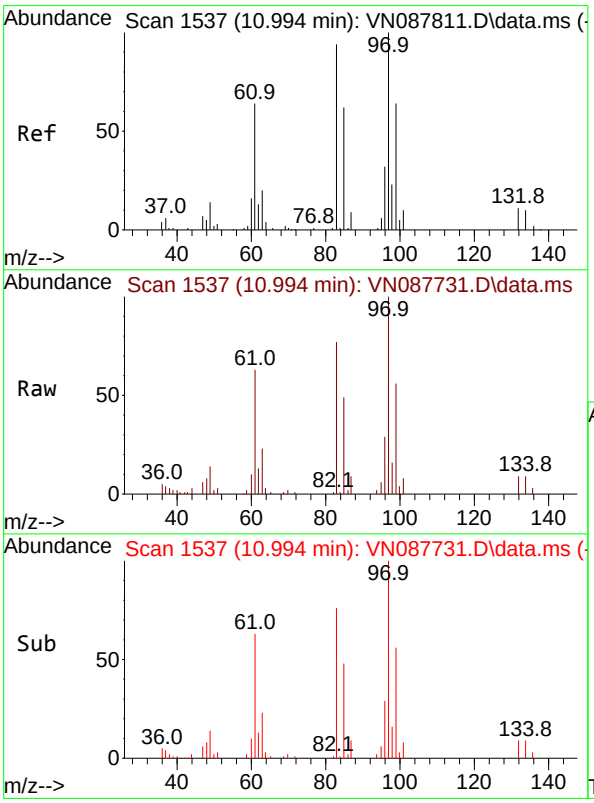
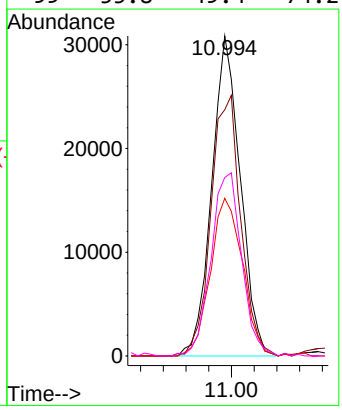
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

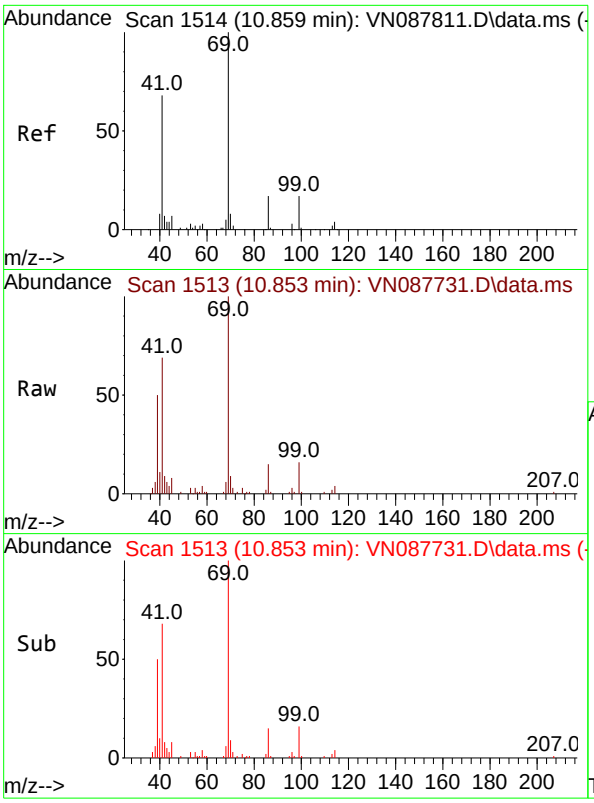


#50
1,1,2-Trichloroethane
Concen: 17.648 ug/l
RT: 10.994 min Scan# 1537
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 97 Resp: 53774

Ion	Ratio	Lower	Upper
97	100		
83	77.0	70.5	105.7
85	49.3	46.3	69.5
99	55.8	49.4	74.2

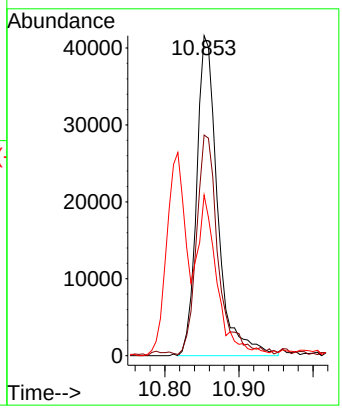




#51
Ethyl methacrylate
Concen: 17.320 ug/l
RT: 10.853 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 69 Resp: 8213

Ion	Ratio	Lower	Upper
69	100		
41	68.5	33.7	101.0
39	49.3	20.3	60.9



Instrument :
MSVOA_N
ClientSampleId :
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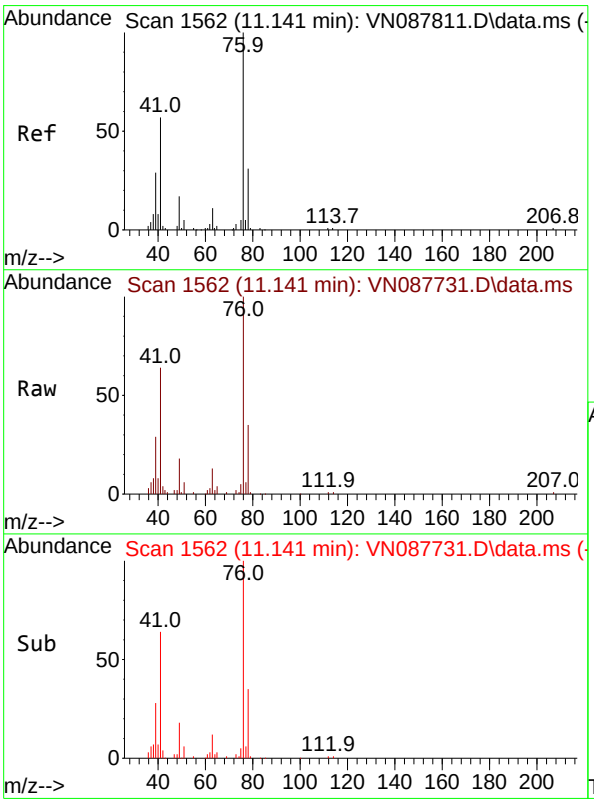
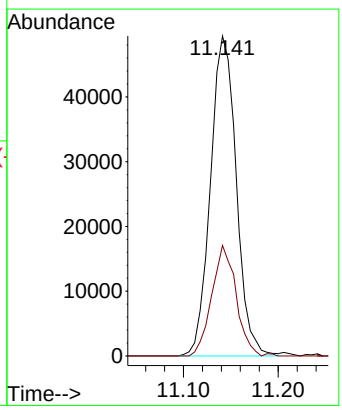
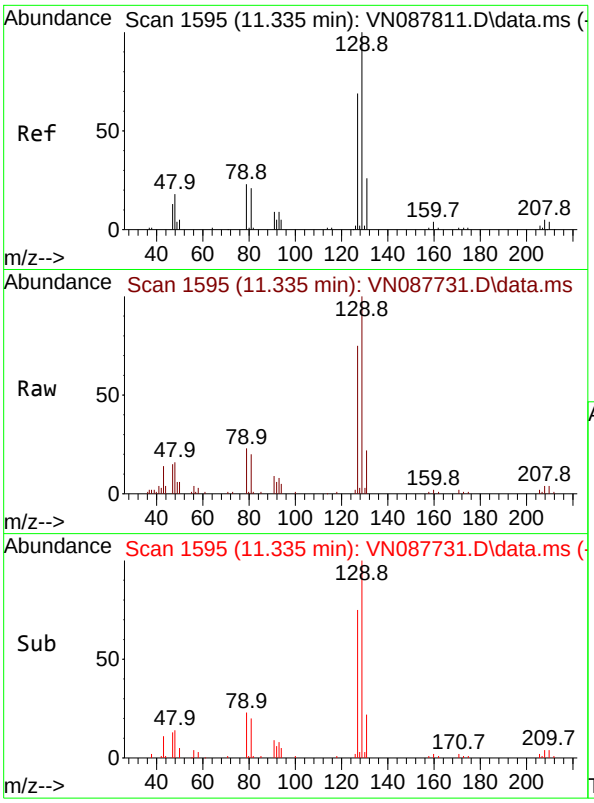


#52
1,3-Dichloropropane
Concen: 17.687 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 76 Resp: 93581

Ion	Ratio	Lower	Upper
76	100		
78	32.4	0.0	65.2

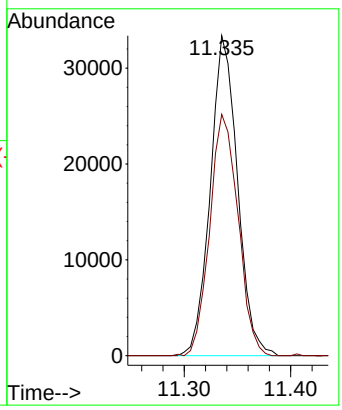




#53
Dibromochloromethane
Concen: 17.347 ug/l
RT: 11.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:129 Resp: 5926

Ion	Ratio	Lower	Upper
129	100		
127	78.2	42.6	128.0



Instrument :
MSVOA_N
ClientSampleId :
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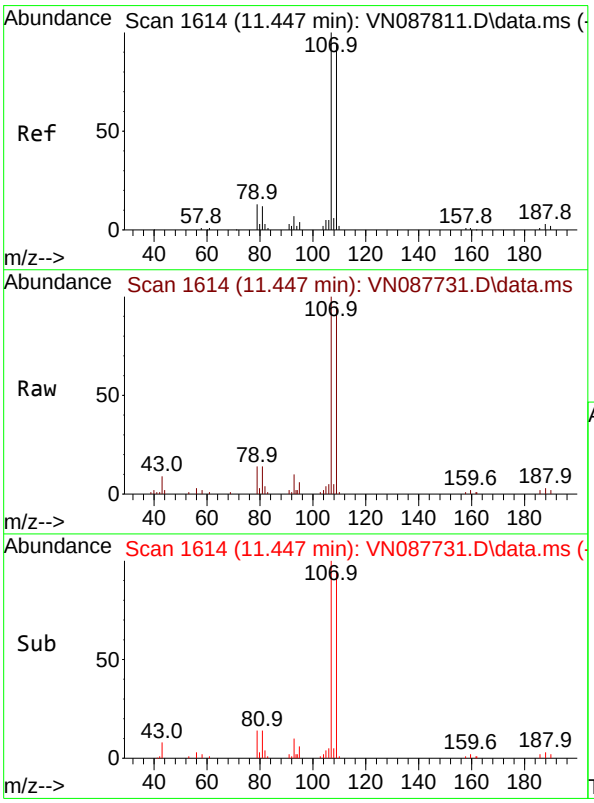
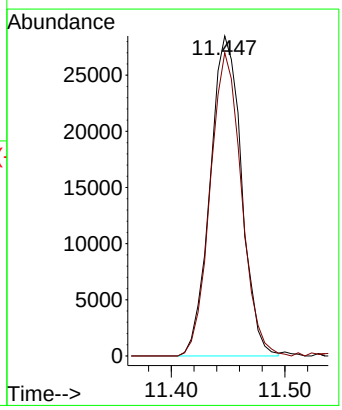
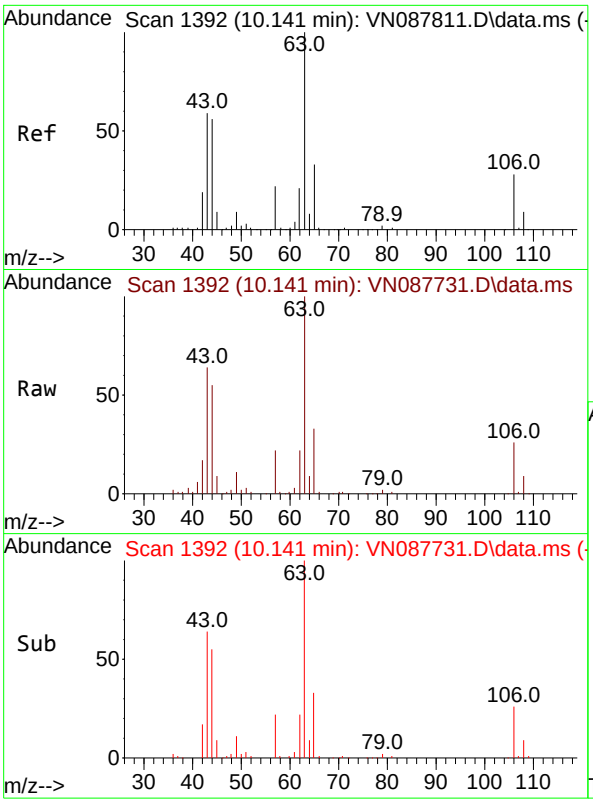


#54
1,2-Dibromoethane
Concen: 17.241 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:107 Resp: 54662

Ion	Ratio	Lower	Upper
107	100		
109	94.2	74.6	112.0

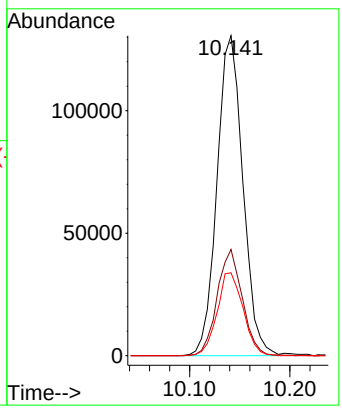




#55
2-Chloroethyl vinyl ether
Concen: 86.104 ug/l
RT: 10.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 63 Resp: 23394

Ion	Ratio	Lower	Upper
63	100		
65	32.1	26.6	40.0
106	26.0	21.1	31.7



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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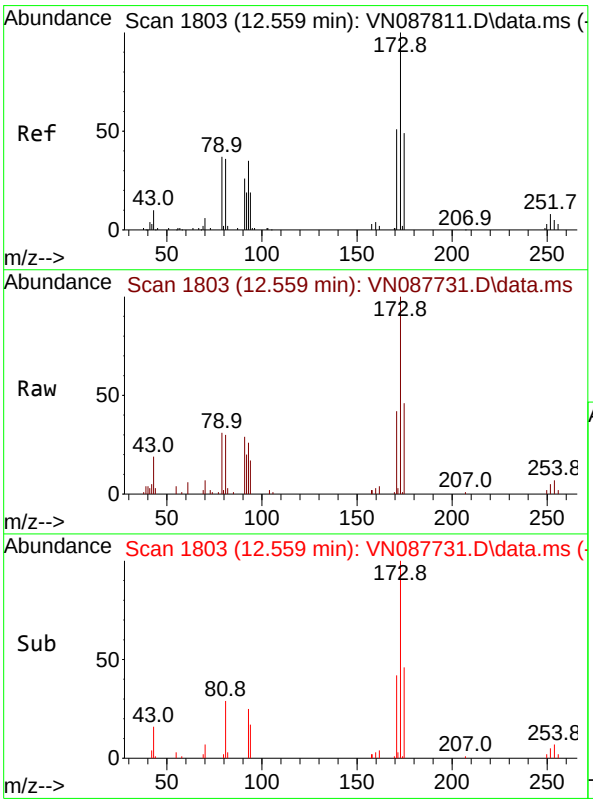
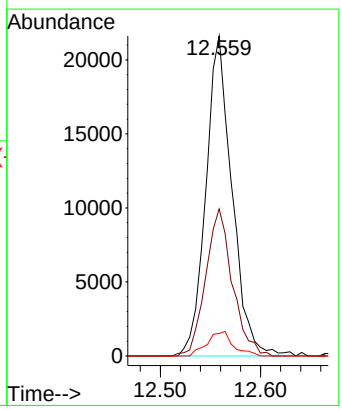
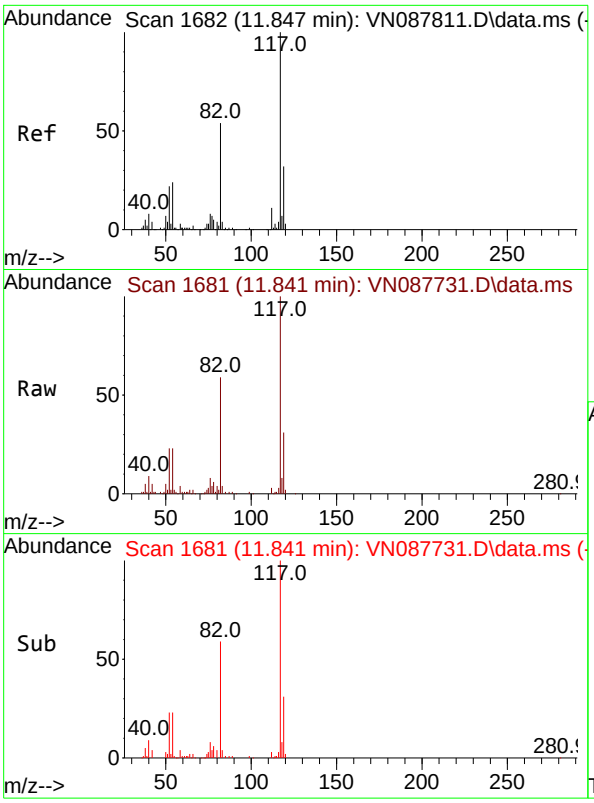


#56
Bromoform
Concen: 17.508 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:173 Resp: 39062

Ion	Ratio	Lower	Upper
173	100		
175	46.8	39.8	59.6
254	7.7	6.2	9.4

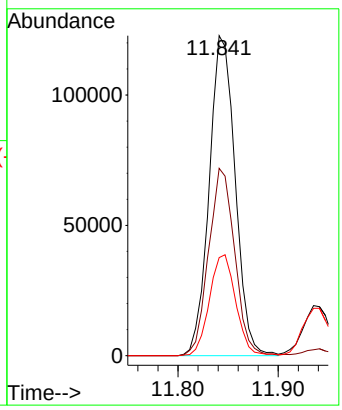




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:117 Resp: 22118

Ion	Ratio	Lower	Upper
117	100		
82	58.7	45.9	68.9
119	31.9	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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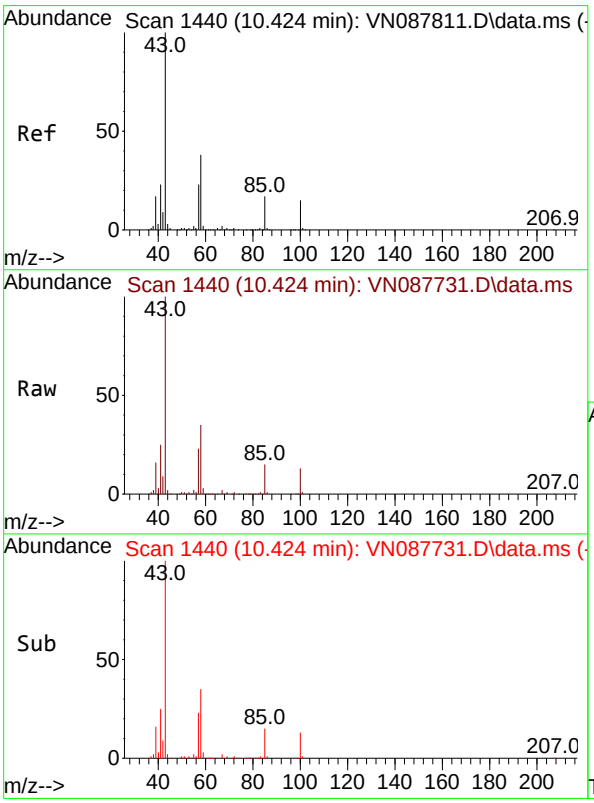
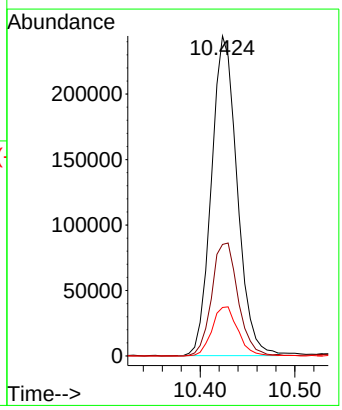
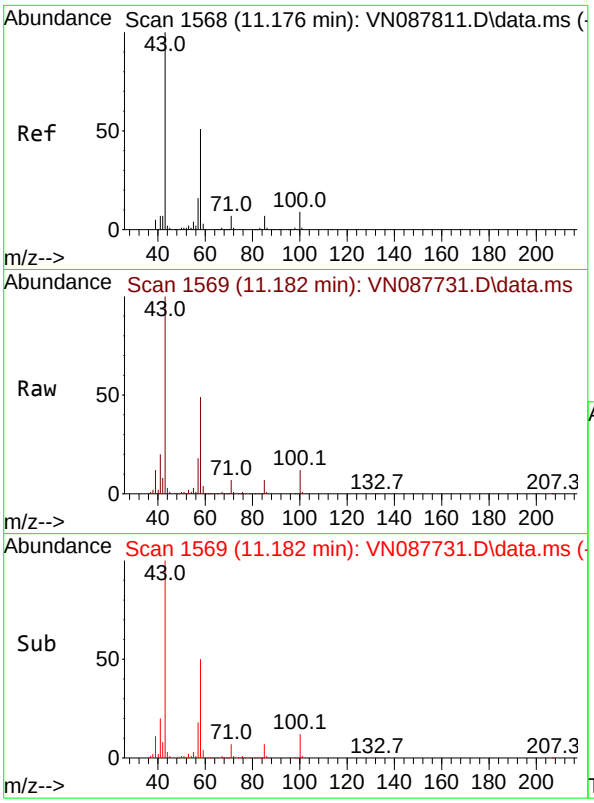


#58
4-Methyl-2-Pentanone
Concen: 88.138 ug/l
RT: 10.424 min Scan# 1440
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 43 Resp: 460953

Ion	Ratio	Lower	Upper
43	100		
58	36.2	29.6	44.4
85	15.5	13.0	19.4





#59
2-Hexanone
Concen: 85.197 ug/l
RT: 11.182 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 43 Resp: 29115

Ion	Ratio	Lower	Upper
43	100		
58	52.0	40.2	60.4
57	17.4	13.7	20.5

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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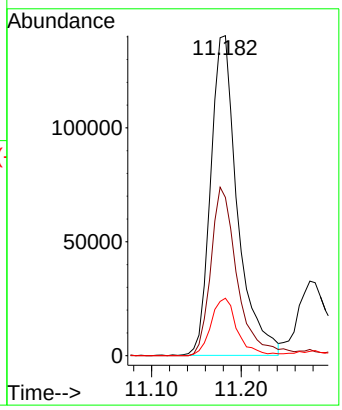
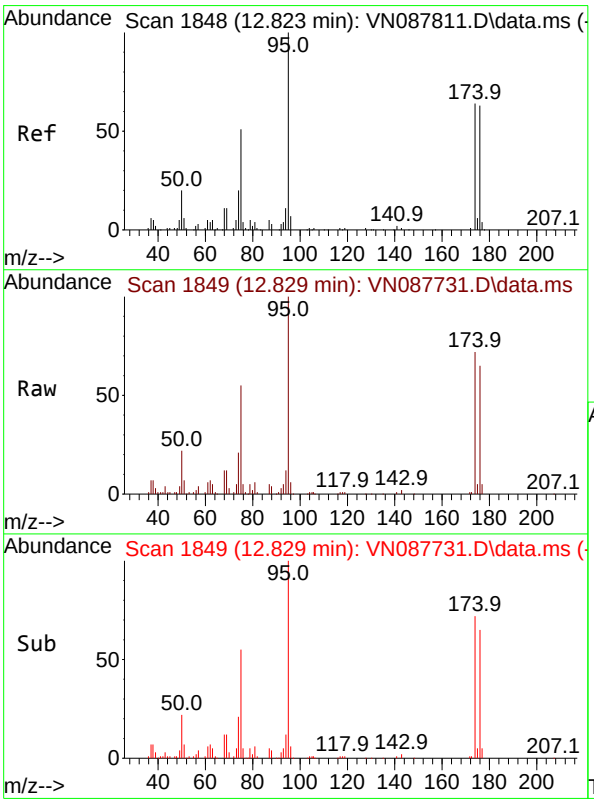
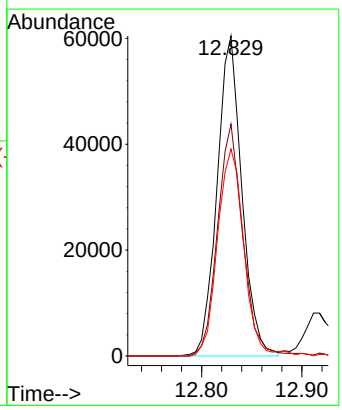


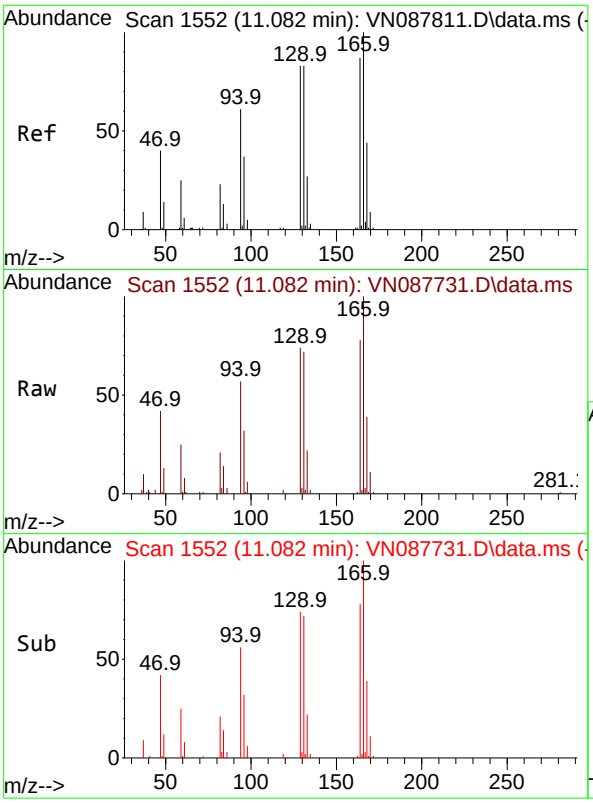


#60
4-Bromofluorobenzene
Concen: 29.200 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 95 Resp: 103848

Ion	Ratio	Lower	Upper
95	100		
174	73.4	55.4	83.0
176	67.6	51.5	77.3

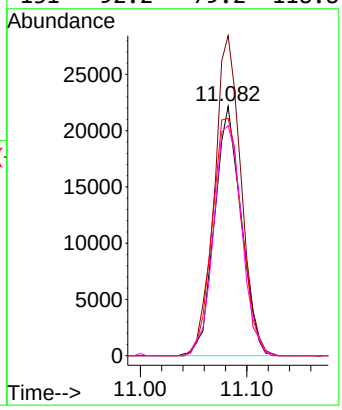




#61
Tetrachloroethene
Concen: 17.528 ug/l
RT: 11.082 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:164 Resp: 3860

Ion	Ratio	Lower	Upper
164	100		
166	128.3	97.3	145.9
129	95.2	78.6	117.8
131	92.2	79.2	118.8



Instrument :
MSVOA_N
ClientSampleId :
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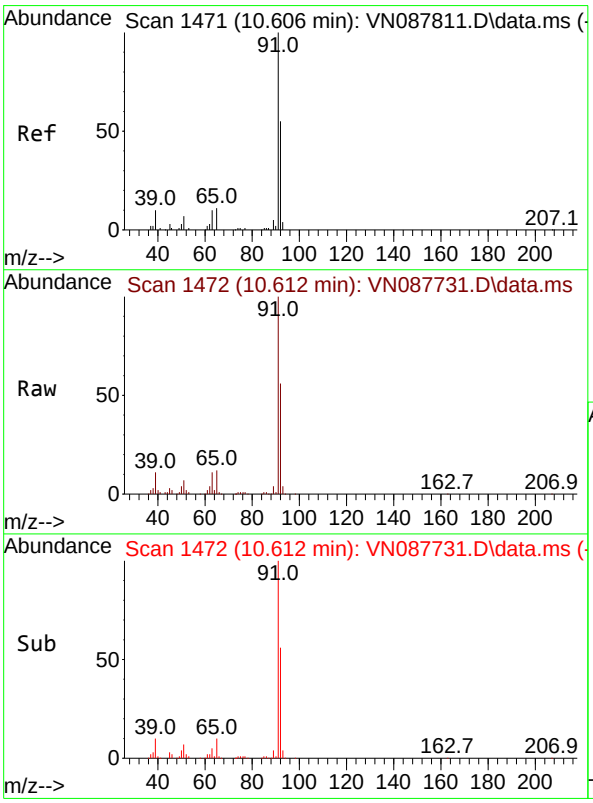
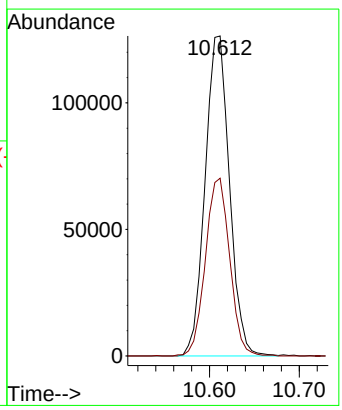
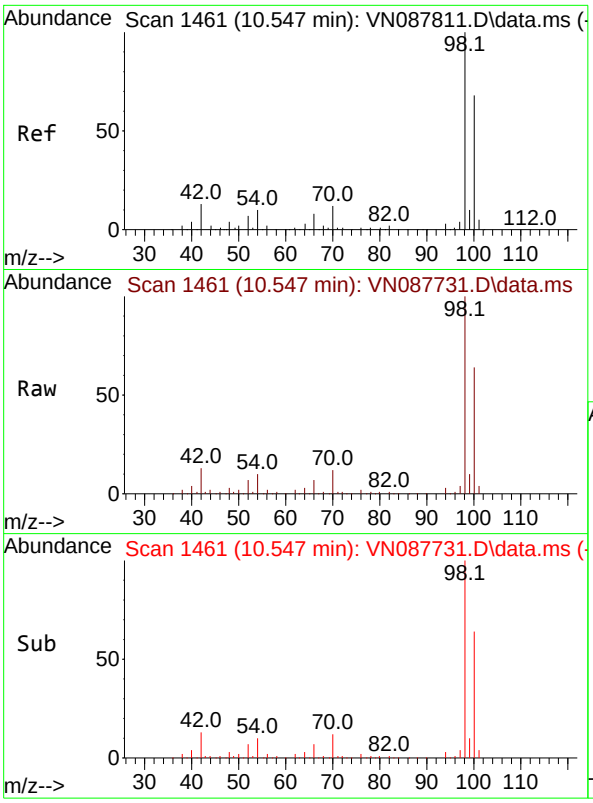


#62
Toluene
Concen: 17.829 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 91 Resp: 238533

Ion	Ratio	Lower	Upper
91	100		
92	55.3	45.4	68.0

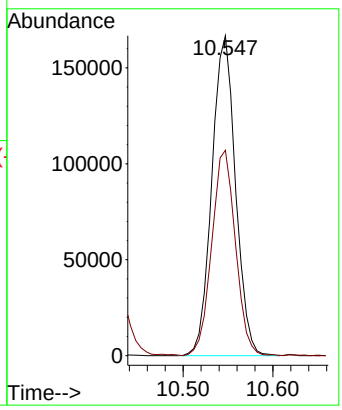




#63
Toluene-d8
Concen: 29.682 ug/l
RT: 10.547 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 98 Resp: 30531

Ion	Ratio	Lower	Upper
98	100		
100	64.3	50.6	76.0



Instrument :
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ClientSampleId :
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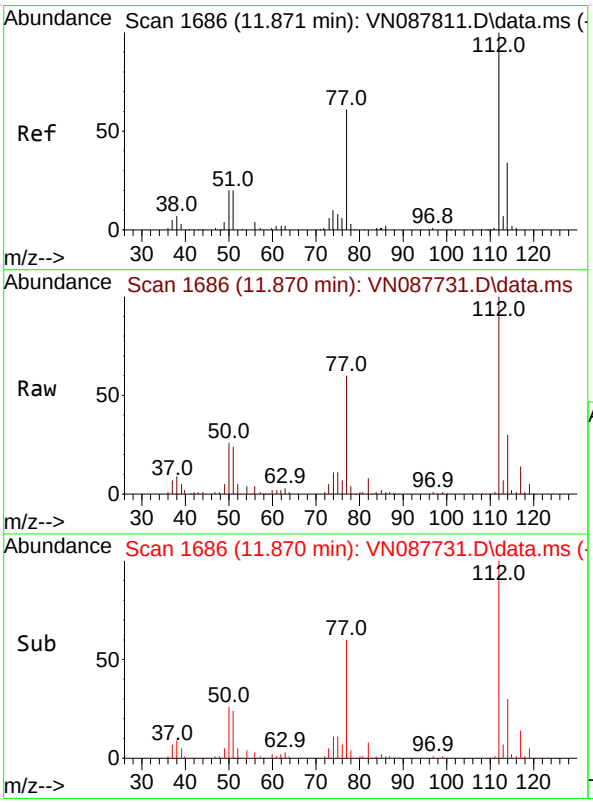
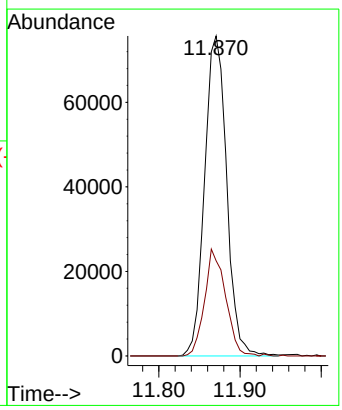
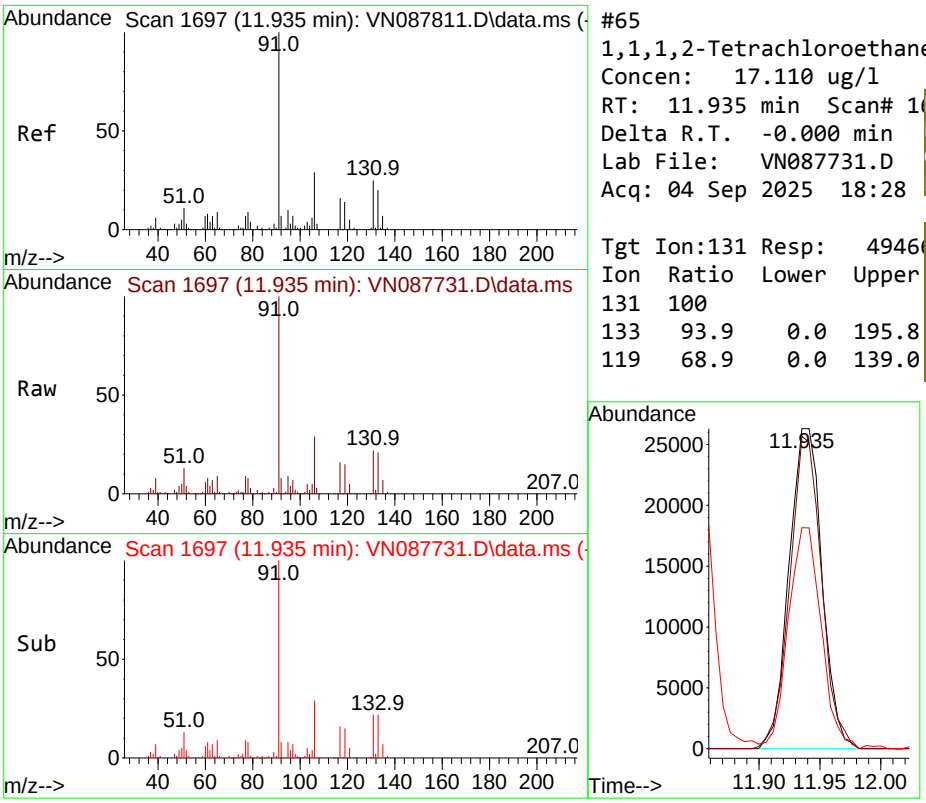


#64
Chlorobenzene
Concen: 17.382 ug/l
RT: 11.870 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:112 Resp: 142733

Ion	Ratio	Lower	Upper
112	100		
114	29.8	23.5	35.3





#65
1,1,1,2-Tetrachloroethane
Concen: 17.110 ug/l
RT: 11.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:131 Resp: 4946

Ion	Ratio	Lower	Upper
131	100		
133	93.9	0.0	195.8
119	68.9	0.0	139.0

Instrument :
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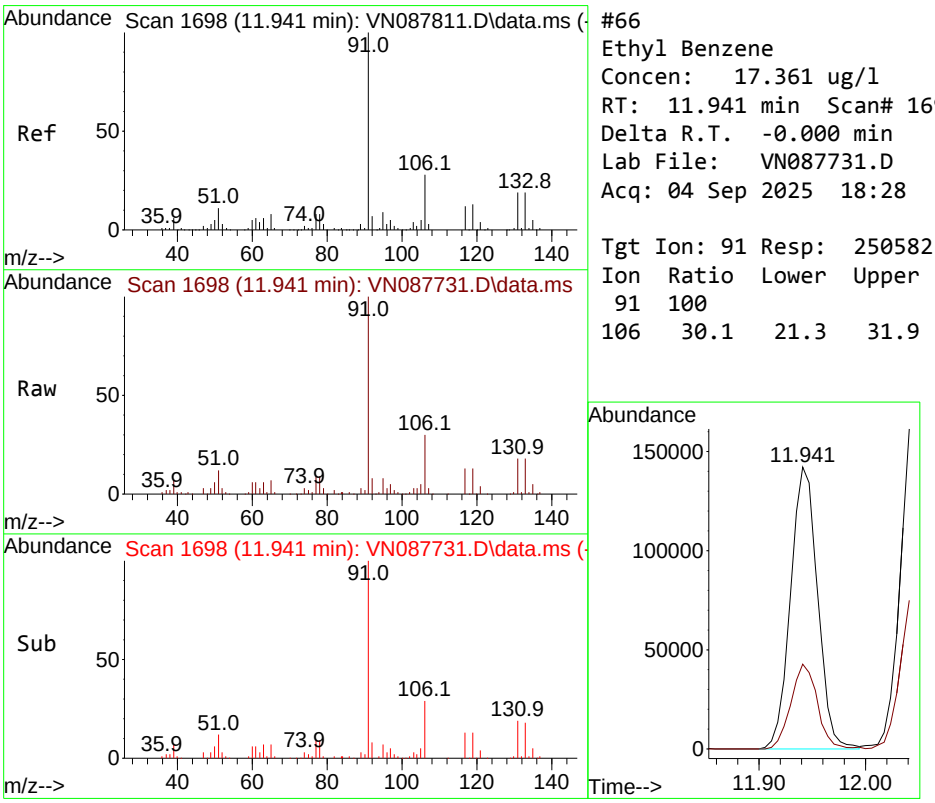
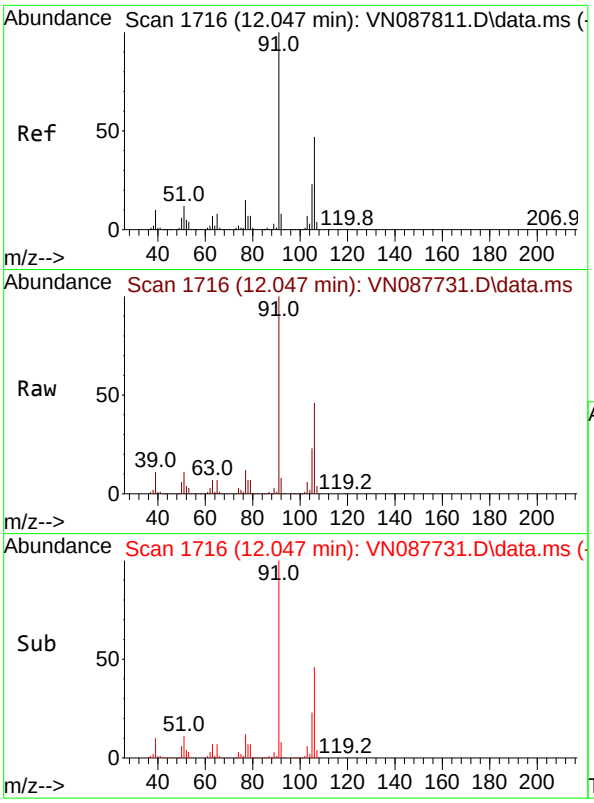


#66
Ethyl Benzene
Concen: 17.361 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 91 Resp: 250582

Ion	Ratio	Lower	Upper
91	100		
106	30.1	21.3	31.9



#67
m/p-Xylenes
Concen: 34.562 ug/l
RT: 12.047 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:106 Resp: 18518

Ion	Ratio	Lower	Upper
106	100		
91	210.2	174.3	261.5

Instrument :
MSVOA_N
ClientSampleId :
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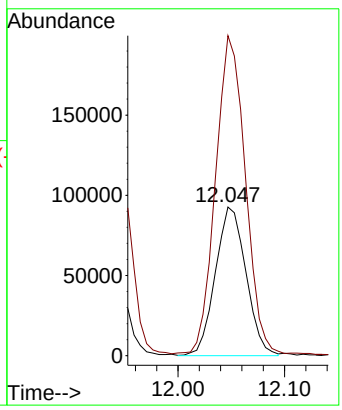
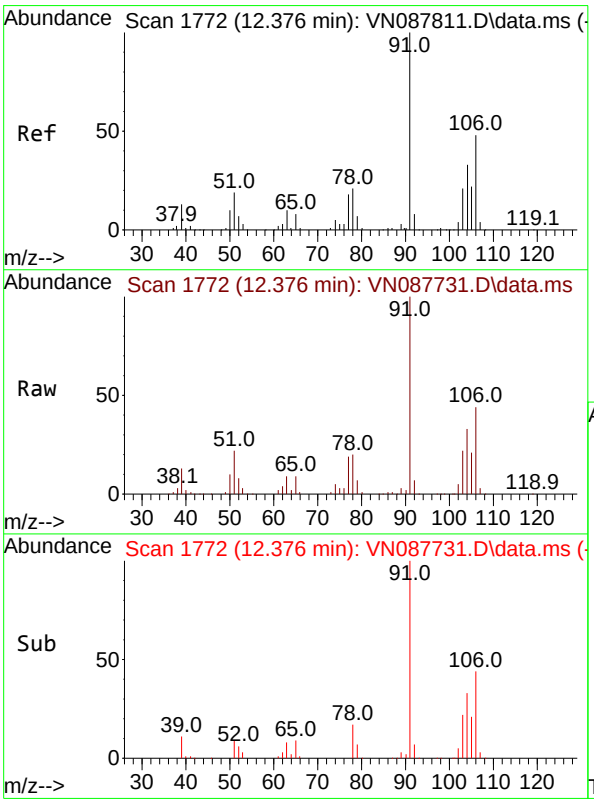
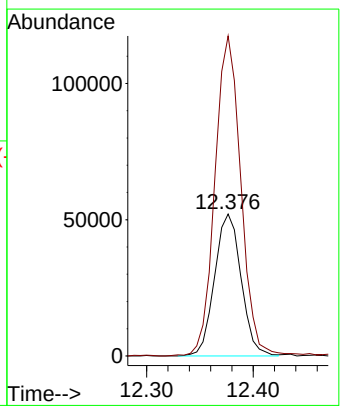


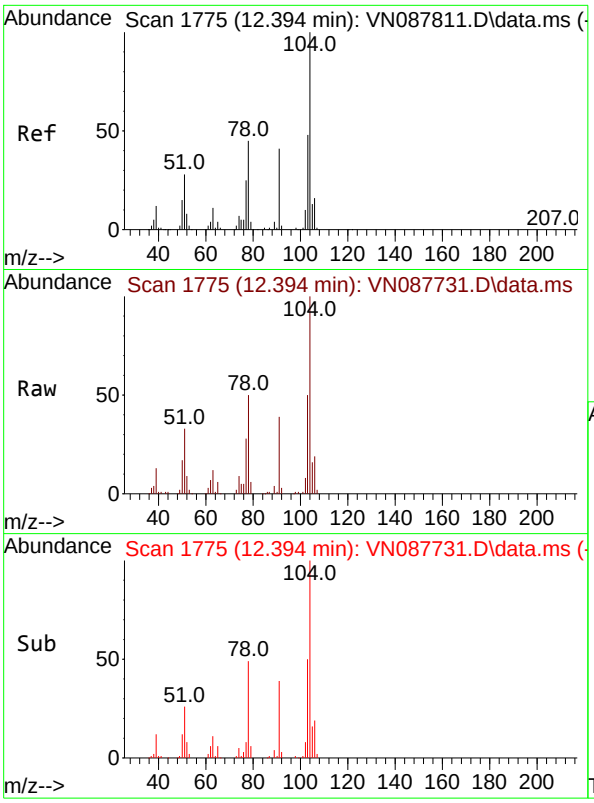


#68
o-Xylene
Concen: 17.377 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:106 Resp: 90271

Ion	Ratio	Lower	Upper
106	100		
91	218.2	107.7	323.3

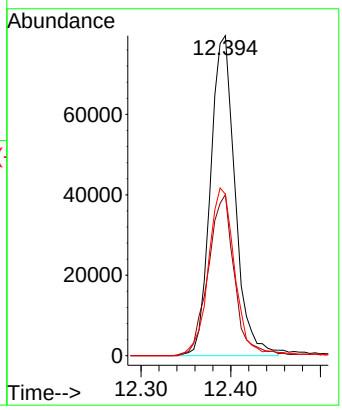




#69
Styrene
Concen: 16.798 ug/l
RT: 12.394 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:104 Resp: 15167

Ion	Ratio	Lower	Upper
104	100		
78	53.5	41.0	61.6
103	55.1	44.6	66.8



Instrument :
MSVOA_N
ClientSampleId :
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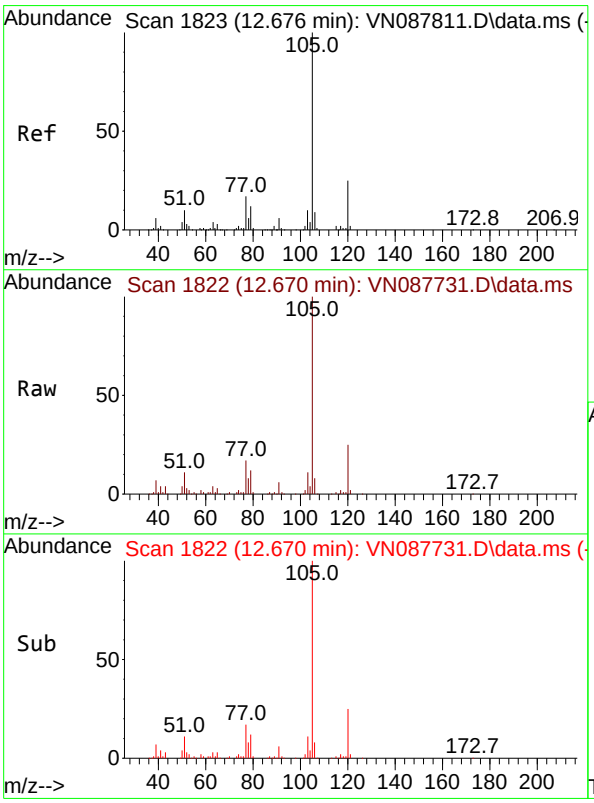
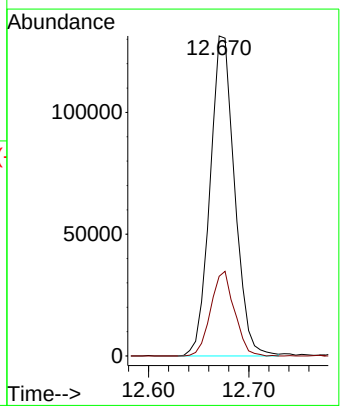
Supervised By :Mahesh Dadoda 09/05/2025

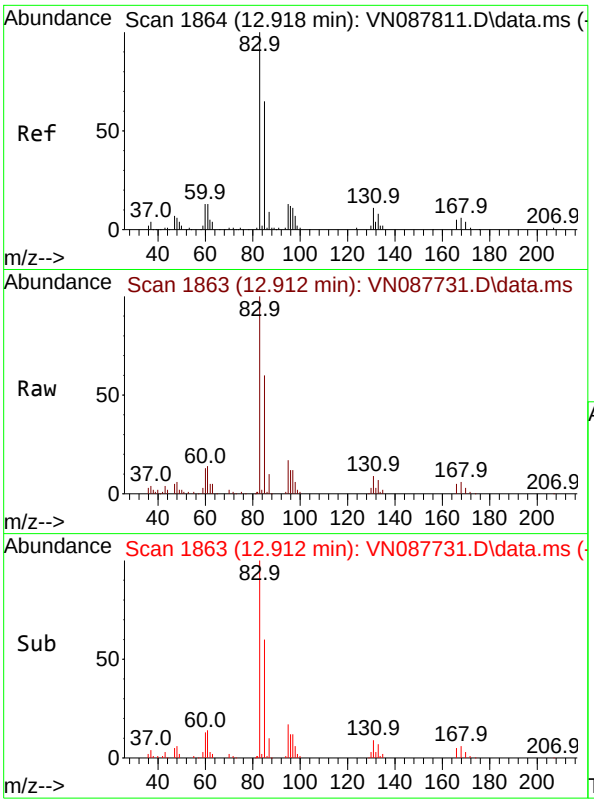


#70
Isopropylbenzene
Concen: 17.022 ug/l
RT: 12.670 min Scan# 1822
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:105 Resp: 224221

Ion	Ratio	Lower	Upper
105	100		
120	25.4	17.4	32.4

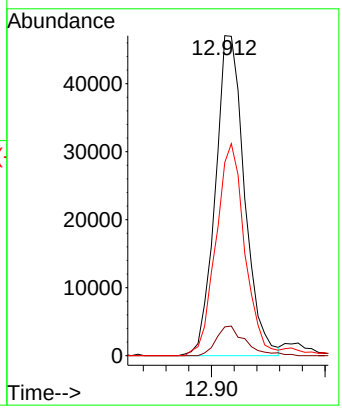




#71
1,1,2,2-Tetrachloroethane
Concen: 17.703 ug/l
RT: 12.912 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 83 Resp: 8383

Ion	Ratio	Lower	Upper
83	100		
131	9.3	4.8	14.3
85	65.5	31.9	95.7



Instrument :
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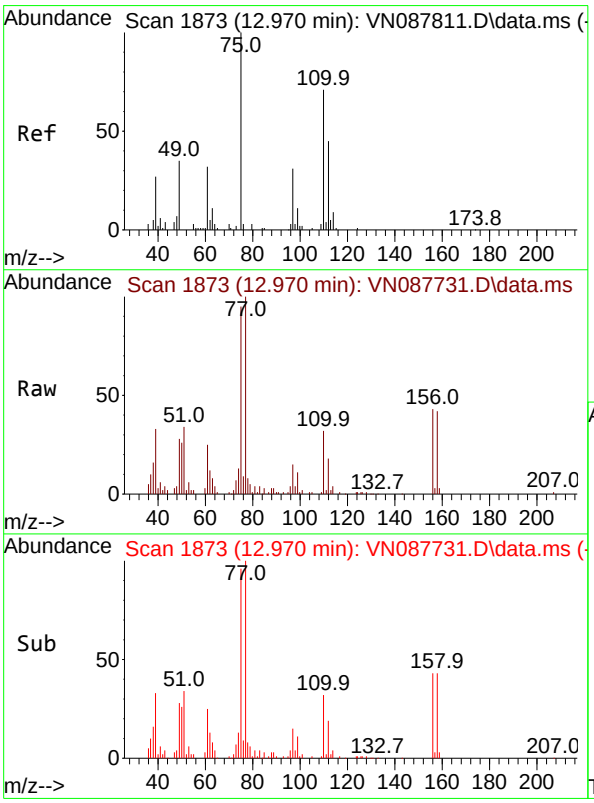
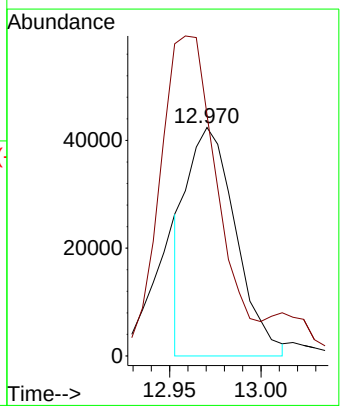
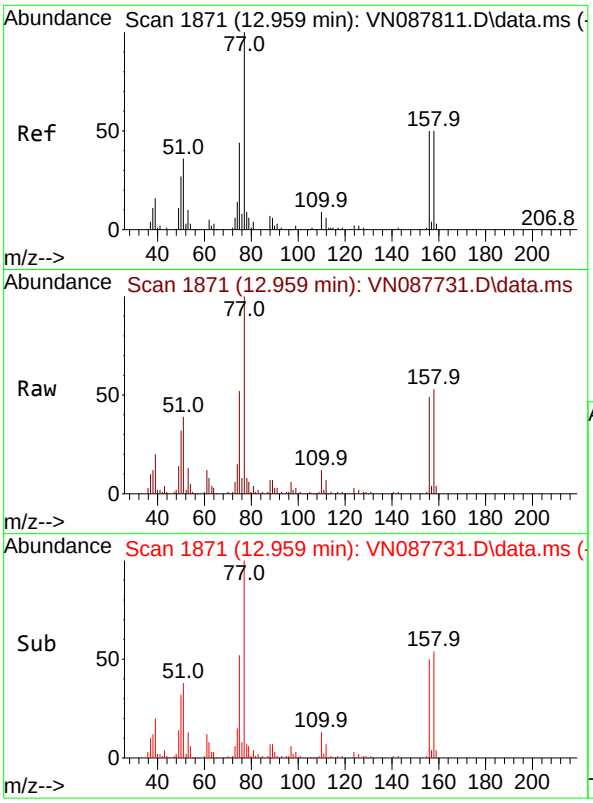


#72
1,2,3-Trichloropropane
Concen: 16.995 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 75 Resp: 79021

Ion	Ratio	Lower	Upper
75	100		
77	165.8	0.0	378.8

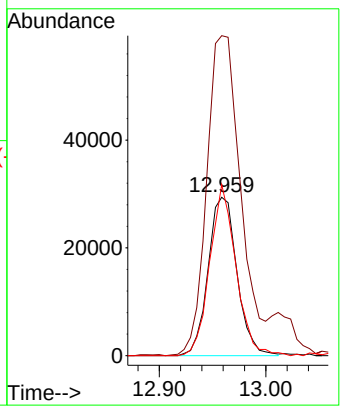




#73
Bromobenzene
Concen: 17.154 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:156 Resp: 5528

Ion	Ratio	Lower	Upper
156	100		
77	237.0	0.0	484.2
158	98.0	0.0	186.2



Instrument :
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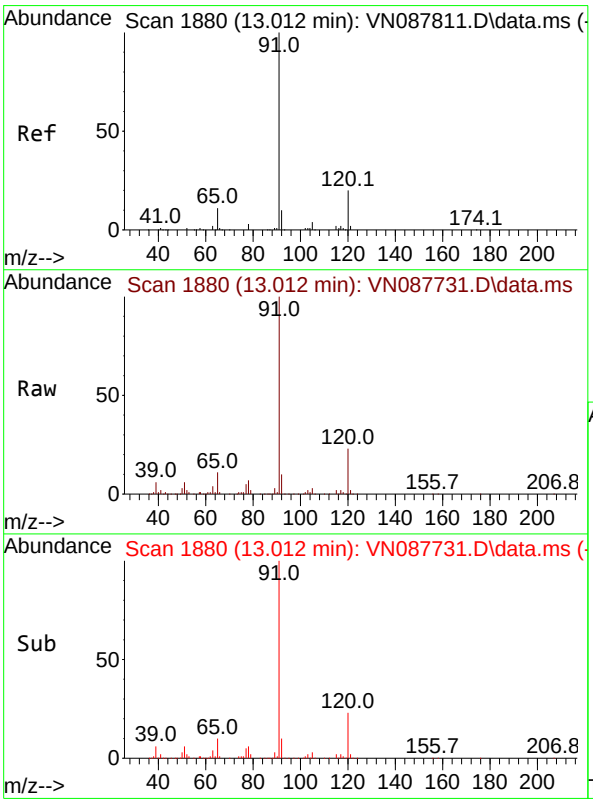
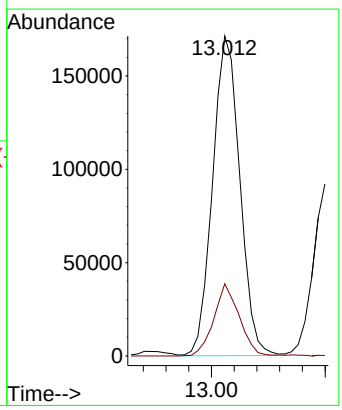
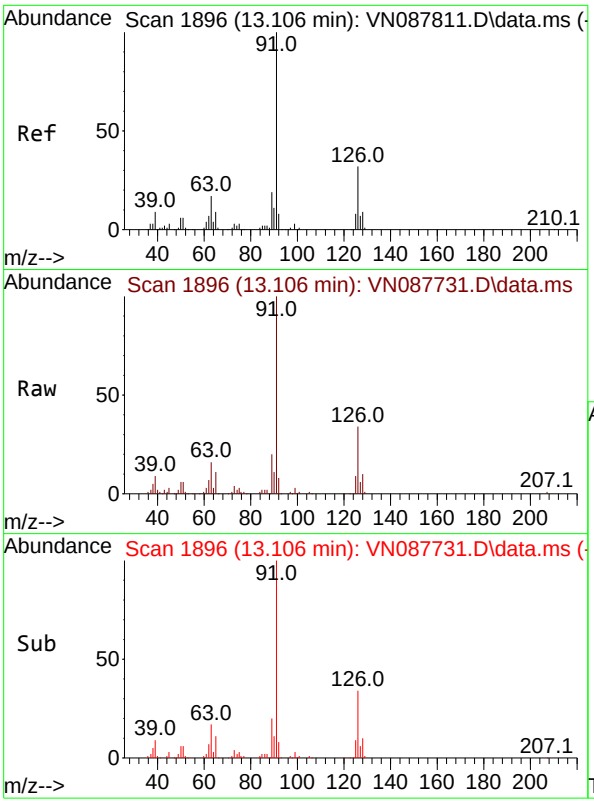


#74
n-propylbenzene
Concen: 17.141 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 91 Resp: 284881

Ion	Ratio	Lower	Upper
91	100		
120	20.8	0.0	42.2

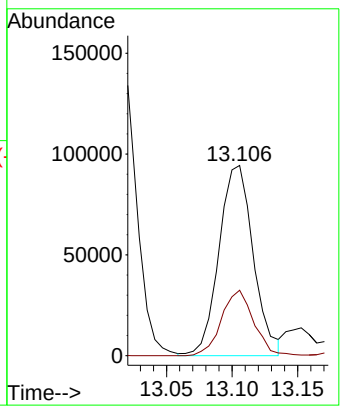




#75
2-Chlorotoluene
Concen: 17.173 ug/l
RT: 13.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 91 Resp: 17178

Ion	Ratio	Lower	Upper
91	100		
126	32.4	0.0	60.4



Instrument :
MSVOA_N
ClientSampleId :
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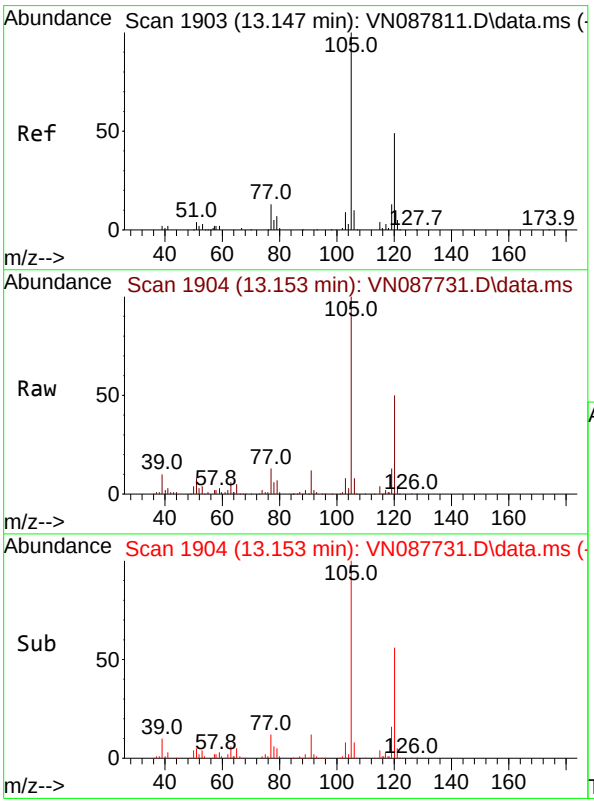
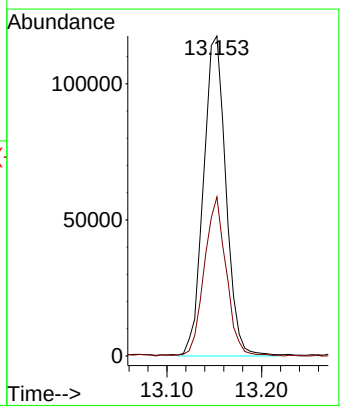
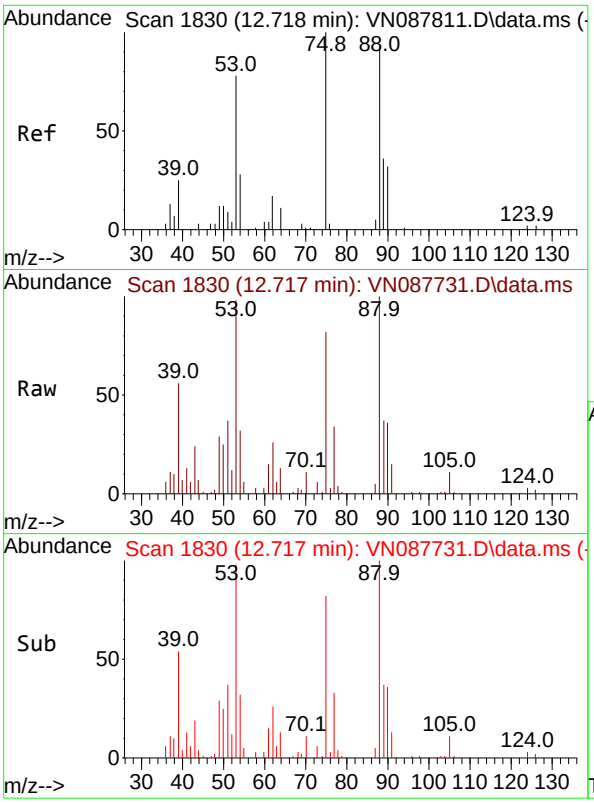


#76
1,3,5-Trimethylbenzene
Concen: 17.393 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:105 Resp: 193466

Ion	Ratio	Lower	Upper
105	100		
120	48.5	0.0	92.6

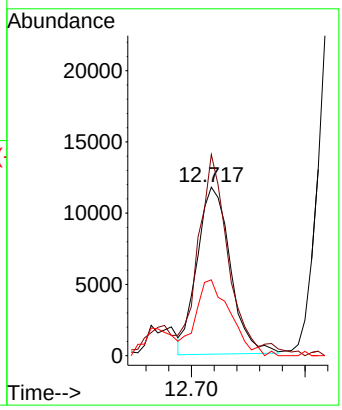




#77
t-1,4-Dichloro-2-butene
Concen: 15.243 ug/l
RT: 12.717 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 75 Resp: 2392

Ion	Ratio	Lower	Upper
75	100		
53	118.3	45.3	135.9
89	46.1	18.8	56.3



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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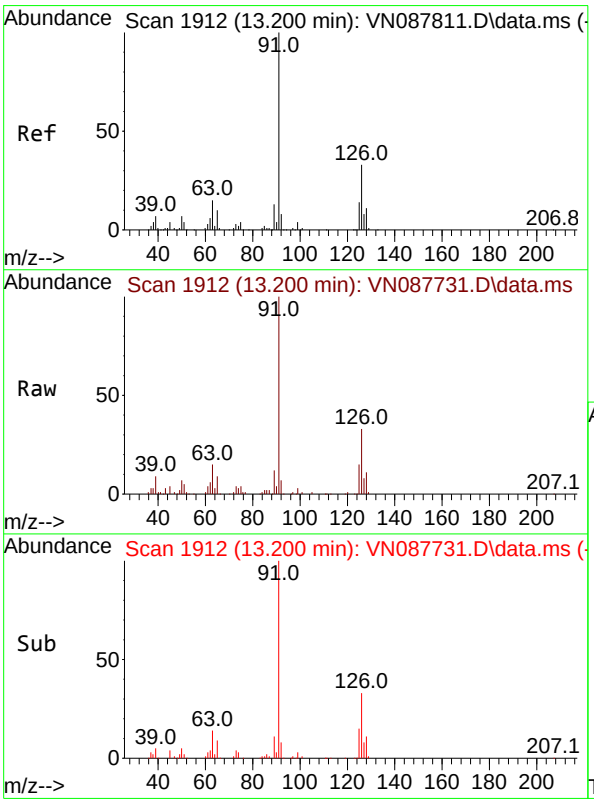
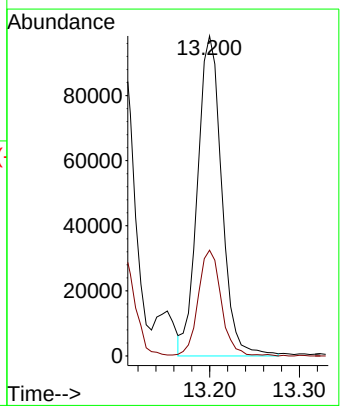
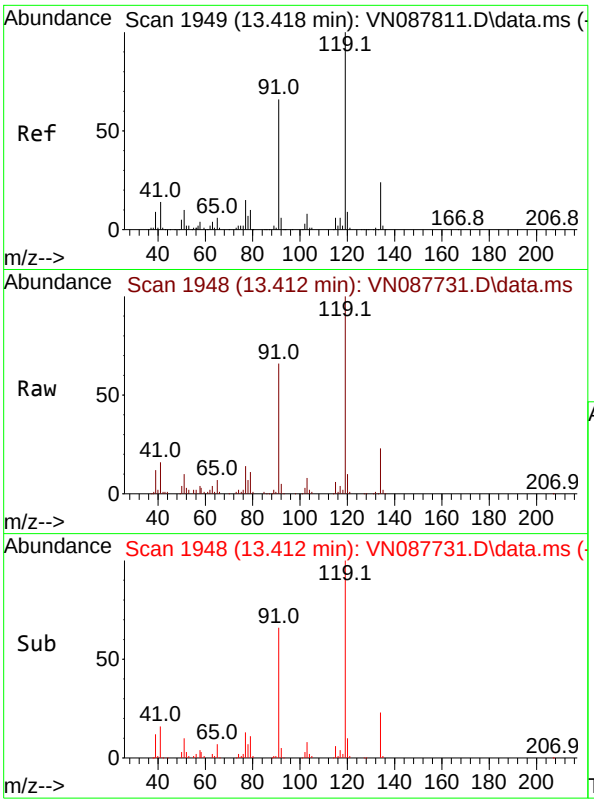


#78
4-Chlorotoluene
Concen: 18.280 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 91 Resp: 184349

Ion	Ratio	Lower	Upper
91	100		
126	31.2	0.0	67.0

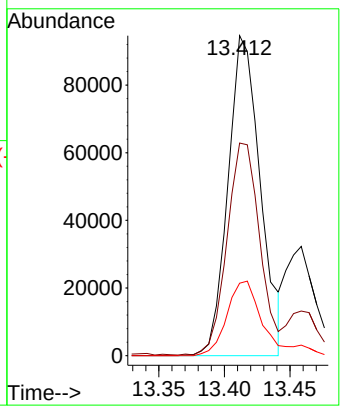




#79
tert-butylbenzene
Concen: 17.436 ug/l
RT: 13.412 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:119 Resp: 16242

Ion	Ratio	Lower	Upper
119	100		
91	66.9	0.0	142.6
134	24.5	0.0	47.2



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

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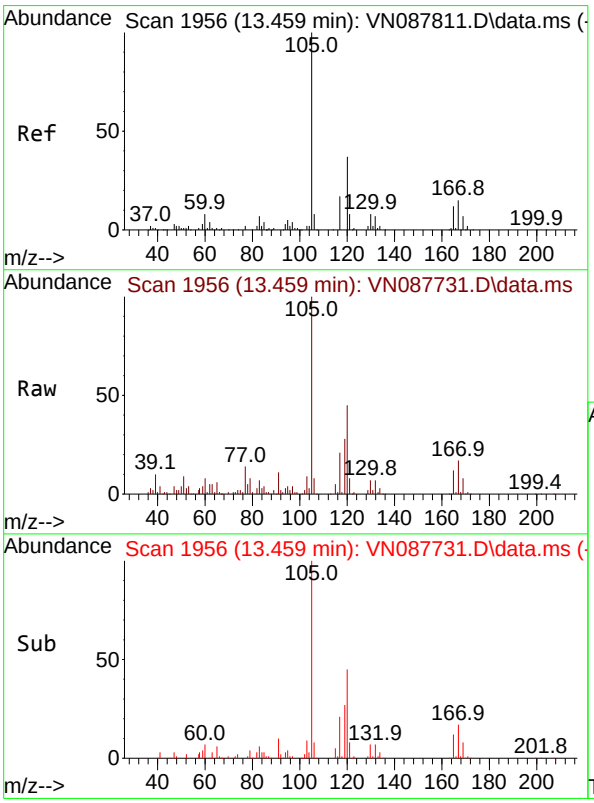
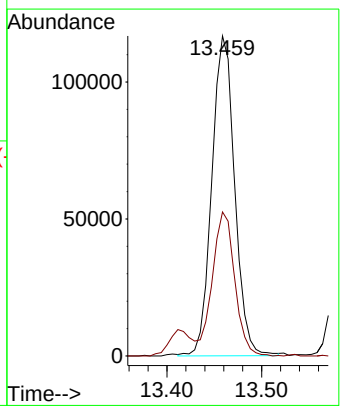
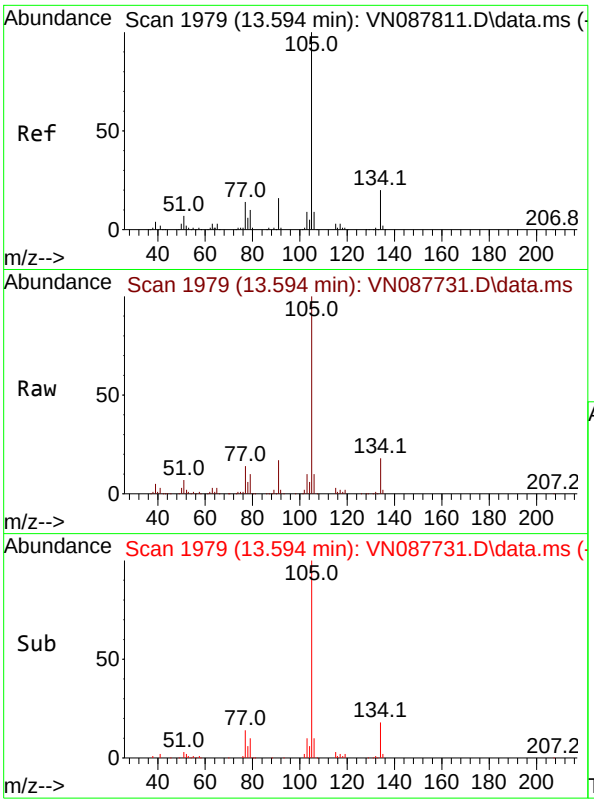


#80
1,2,4-Trimethylbenzene
Concen: 17.154 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:105 Resp: 195624

Ion	Ratio	Lower	Upper
105	100		
120	44.4	0.0	86.6

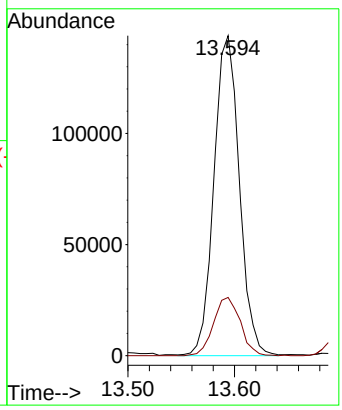




#81
sec-Butylbenzene
Concen: 17.385 ug/l
RT: 13.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:105 Resp: 23821

Ion	Ratio	Lower	Upper
105	100		
134	19.2	0.0	37.0



Instrument :
MSVOA_N
ClientSampleId :
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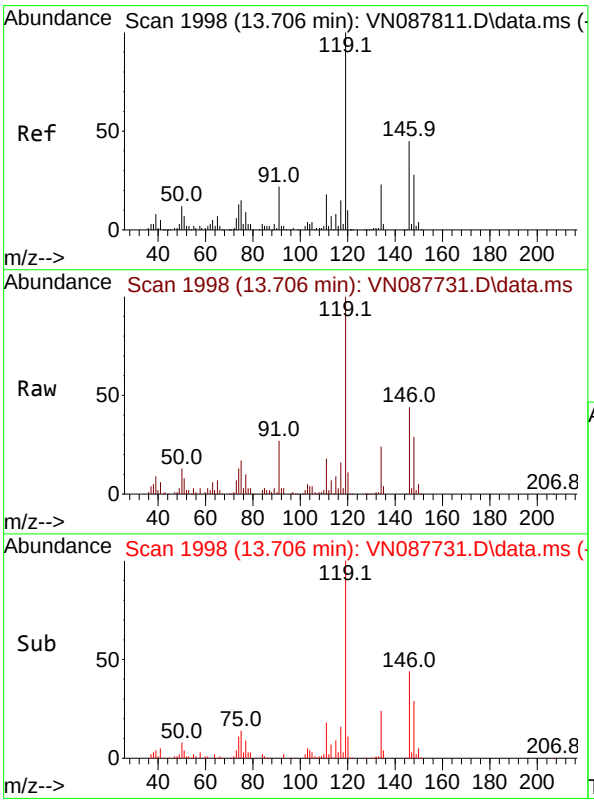
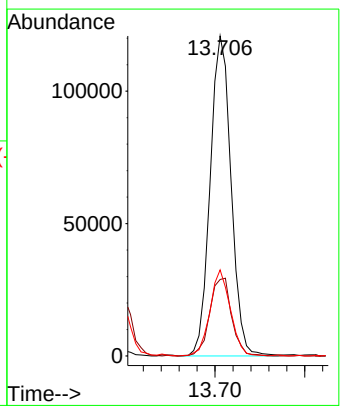
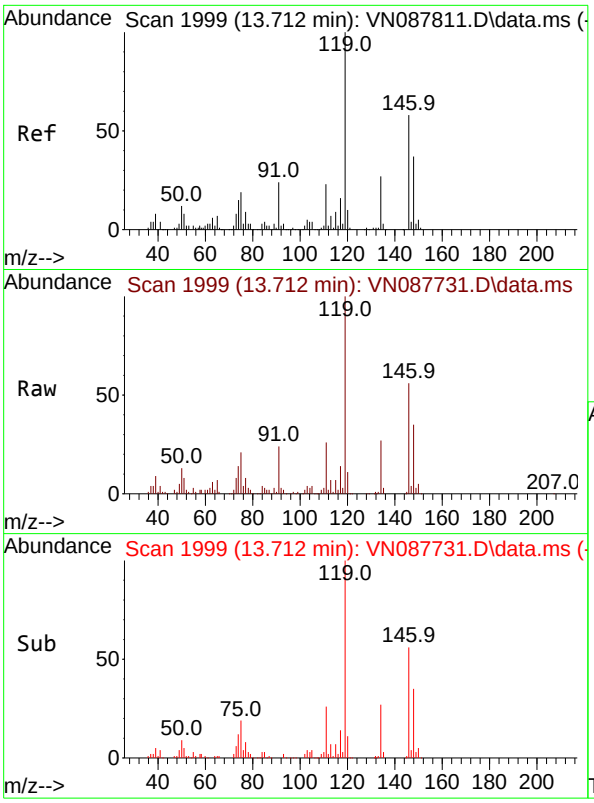


#82
p-Isopropyltoluene
Concen: 17.337 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:119 Resp: 195729

Ion	Ratio	Lower	Upper
119	100		
134	25.3	0.0	49.4
91	26.2	0.0	52.2

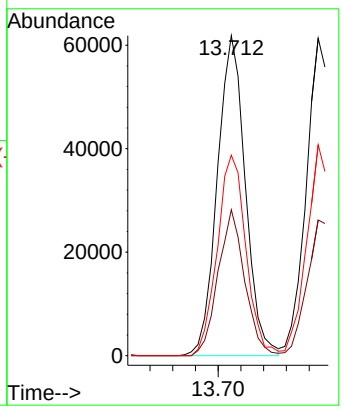




#83
1,3-Dichlorobenzene
Concen: 17.075 ug/l
RT: 13.712 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:146 Resp: 10608

Ion	Ratio	Lower	Upper
146	100		
111	43.4	21.1	63.4
148	64.2	31.0	93.0



Instrument :
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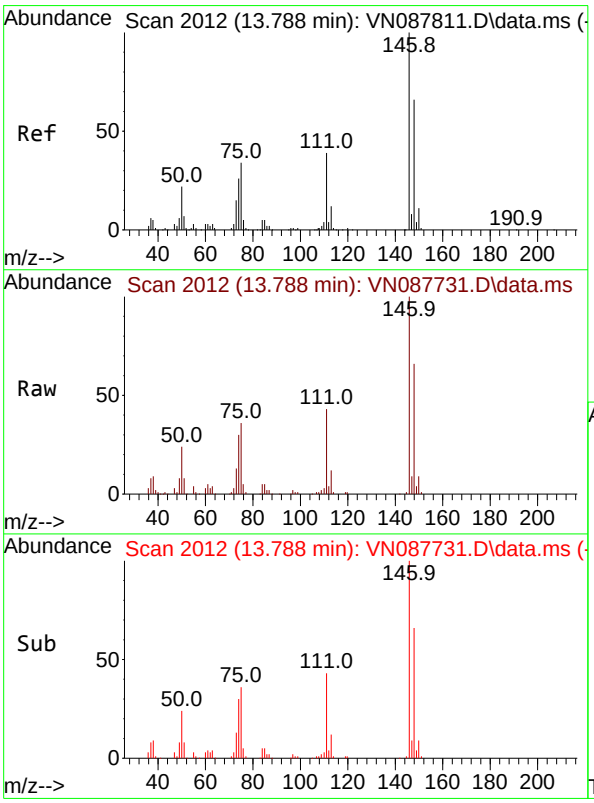
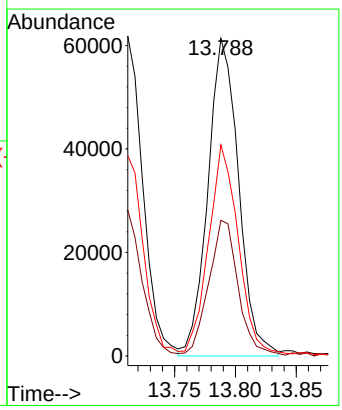
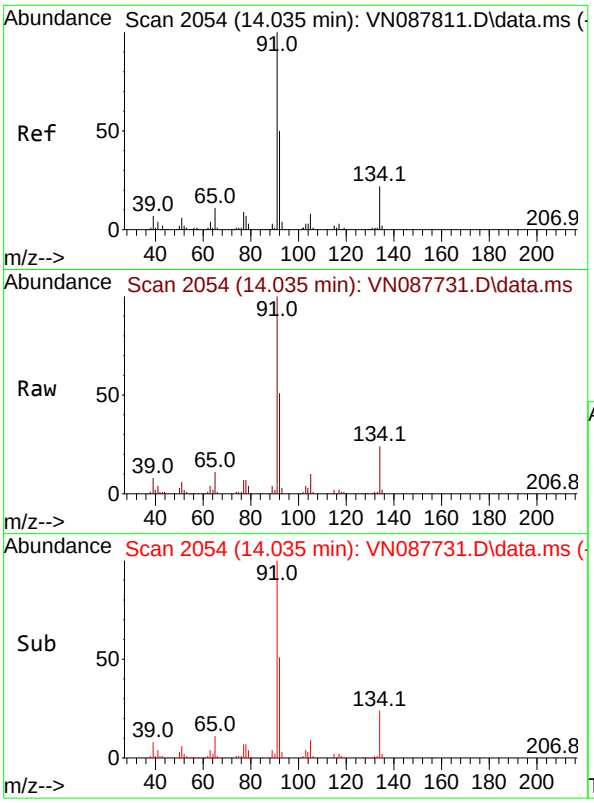


#84
1,4-Dichlorobenzene
Concen: 17.287 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:146 Resp: 107657

Ion	Ratio	Lower	Upper
146	100		
111	41.2	20.2	60.5
148	64.6	31.5	94.5

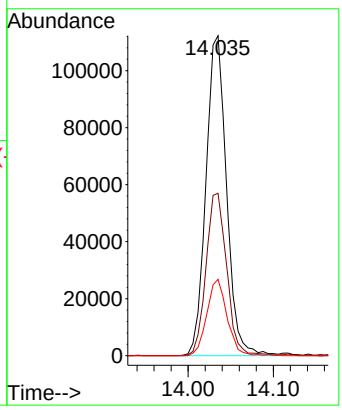




#85
n-Butylbenzene
Concen: 17.390 ug/l
RT: 14.035 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 91 Resp: 18871

Ion	Ratio	Lower	Upper
91	100		
92	50.4	0.0	104.0
134	23.3	0.0	46.0



Instrument :
MSVOA_N
ClientSampleId :
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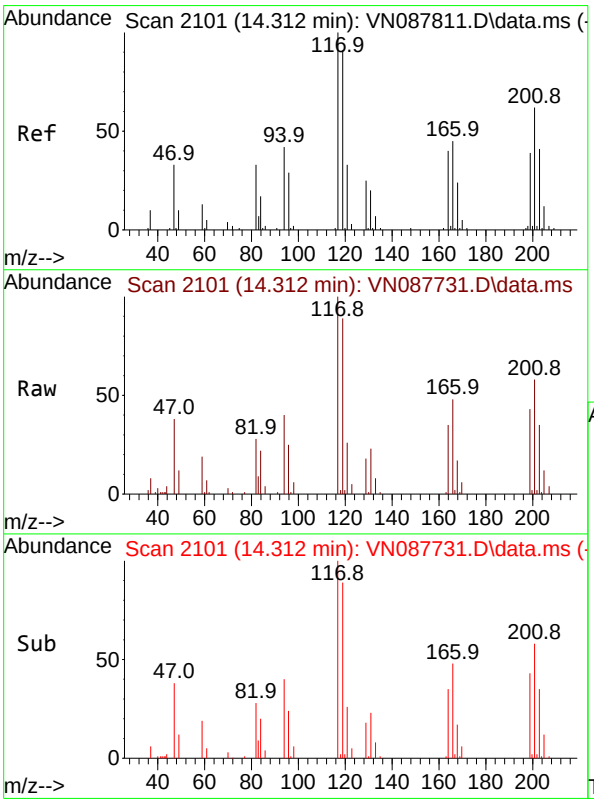
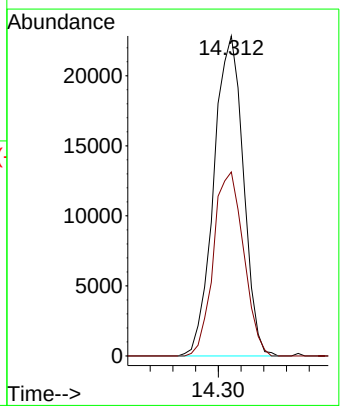
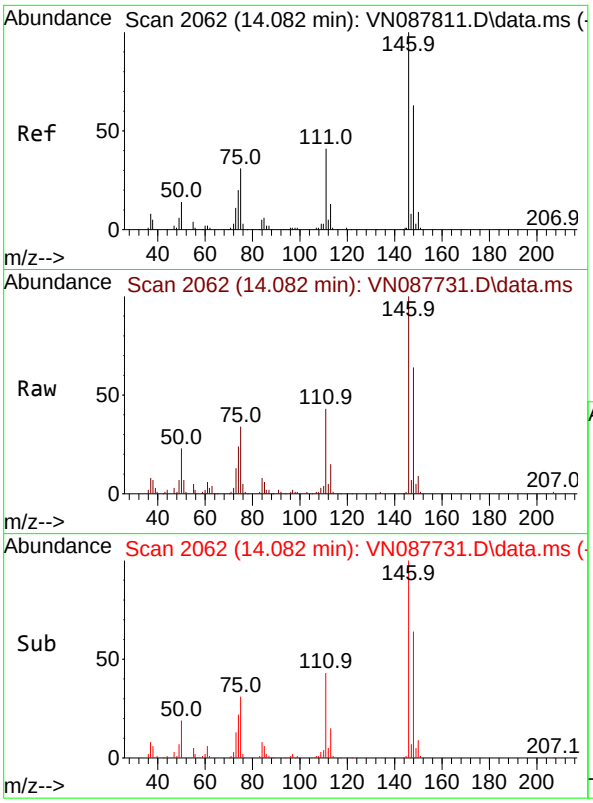


#86
Hexachloroethane
Concen: 17.975 ug/l
RT: 14.312 min Scan# 2101
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:117 Resp: 41219

Ion	Ratio	Lower	Upper
117	100		
201	58.7	29.9	89.7

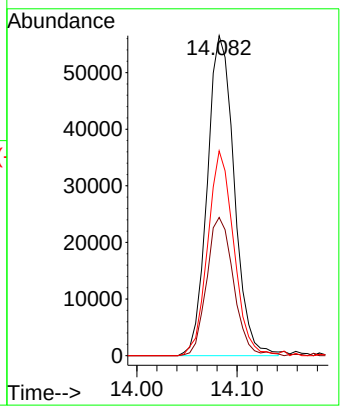




#87
1,2-Dichlorobenzene
Concen: 18.016 ug/l
RT: 14.082 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:146 Resp: 10556

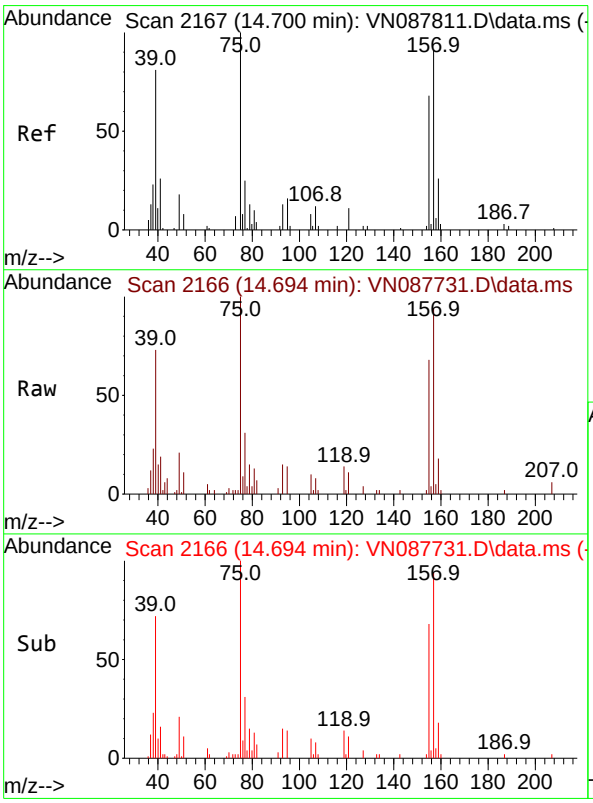
Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.5	64.5
148	62.1	33.4	100.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations APPROVED

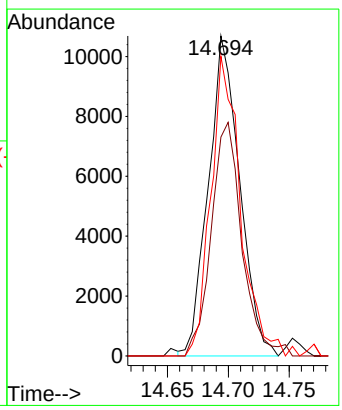
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

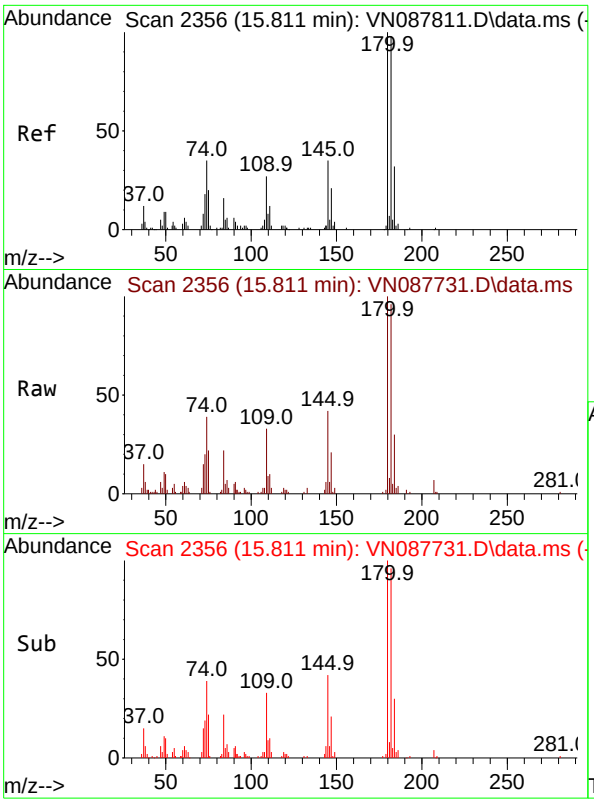


#88
1,2-Dibromo-3-Chloropropane
Concen: 18.204 ug/l
RT: 14.694 min Scan# 2166
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion: 75 Resp: 19130

Ion	Ratio	Lower	Upper
75	100		
155	70.9	53.0	79.4
157	87.6	72.2	108.4

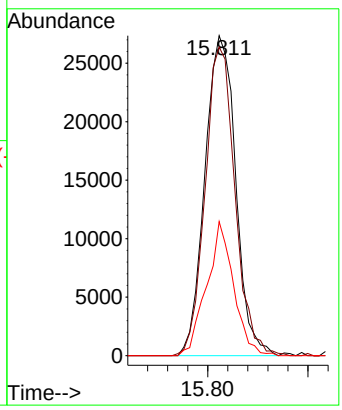




#89
1,2,4-Trichlorobenzene
Concen: 17.505 ug/l
RT: 15.811 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:180 Resp: 5834

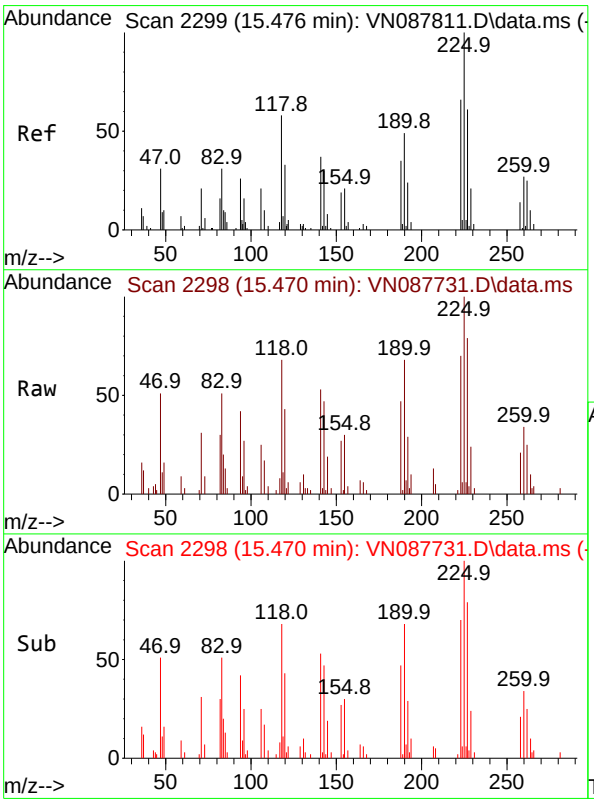
Ion	Ratio	Lower	Upper
180	100		
182	93.7	74.6	111.8
145	36.6	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations
APPROVED

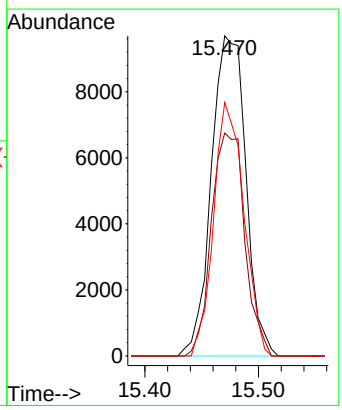
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025

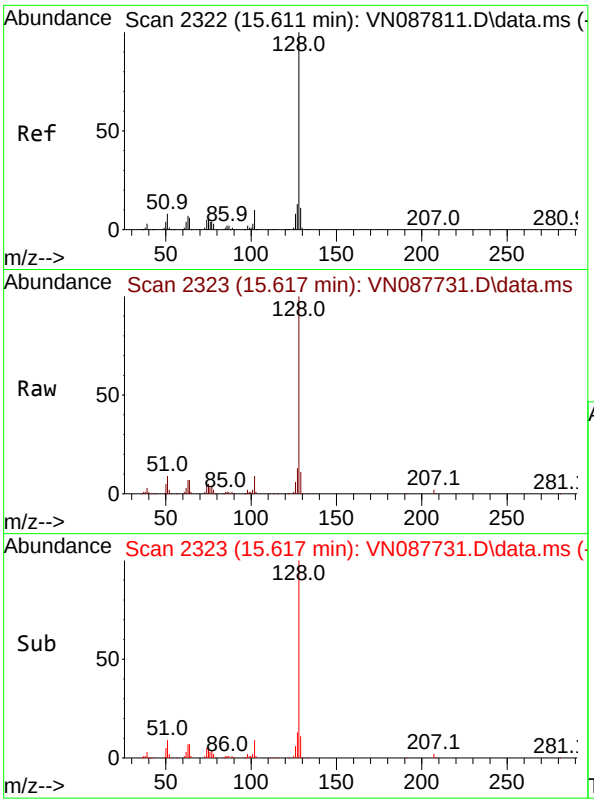


#90
Hexachlorobutadiene
Concen: 18.275 ug/l
RT: 15.470 min Scan# 2298
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:225 Resp: 20419

Ion	Ratio	Lower	Upper
225	100		
223	67.2	0.0	118.2
227	69.7	0.0	139.0

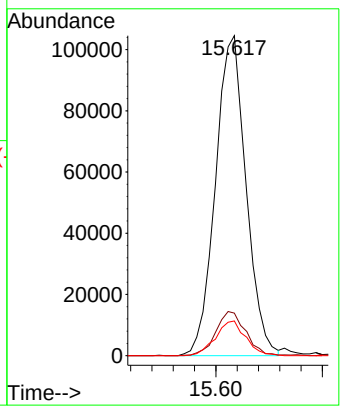




#91
Naphthalene
Concen: 16.990 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:128 Resp: 20846

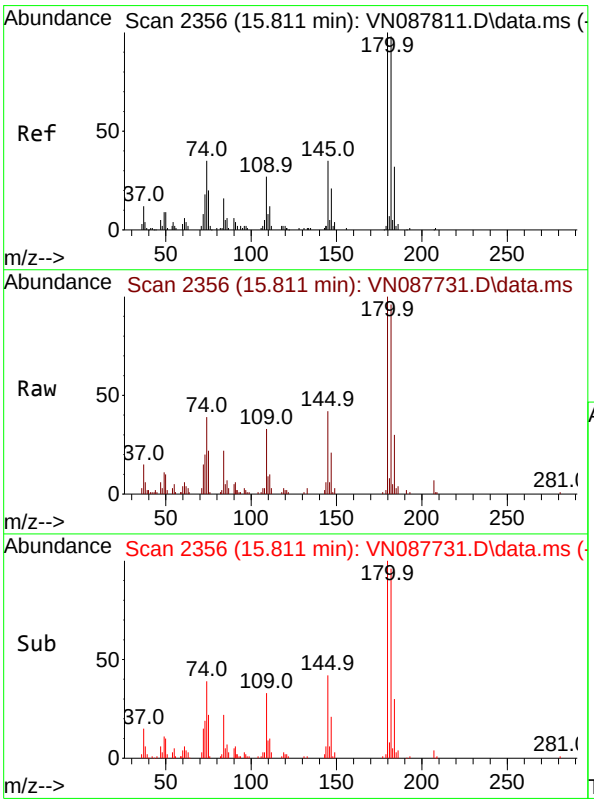
Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.2	15.4
129	10.7	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Manual Integrations
APPROVED

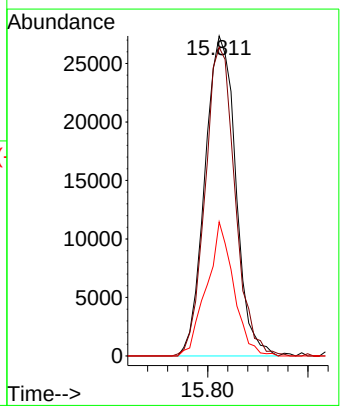
Reviewed By :Semsettin Yesilyurt 09/05/2025
Supervised By :Mahesh Dadoda 09/05/2025



#92
1,2,3-Trichlorobenzene
Concen: 17.505 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. -0.000 min
Lab File: VN087731.D
Acq: 04 Sep 2025 18:28

Tgt Ion:180 Resp: 58341

Ion	Ratio	Lower	Upper
180	100		
182	93.7	0.0	186.4
145	36.6	0.0	68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087731.D
Acq On : 04 Sep 2025 18:28
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Quant Time: Sep 05 03:32:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 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	Bromochloromethane	1.000	1.000	0.0	107	0.00
2	M	Dichlorodifluoromethane	1.865	1.713	8.2	105	0.00
3	M	Chloromethane	1.957	1.766	9.8	106	0.00
4	M	Vinyl Chloride	2.213	1.936	12.5	104	0.00
5	M	Bromomethane	1.298	1.158	10.8	112	0.01
6	M	Chloroethane	1.512	1.292	14.6	102	0.00
7	M	Trichlorofluoromethane	3.243	2.785	14.1	103	0.00
8	T	Diethyl Ether	1.370	1.207	11.9	111	0.00
9		1,1,2-Trichlorotrifluoroeth	1.757	1.510	14.1	102	0.00
10	M	1,1-Dichloroethene	1.811	1.584	12.5	108	0.00
11		Methyl Iodide	1.282	0.968	24.5	111	0.01
12		Methyl Acetate	2.792	2.549	8.7	108	0.00
13	M	Acrolein	0.497	0.453	8.9	113	0.00
14	M	Acrylonitrile	1.202	1.062	11.6	108	0.00
15	M	Acetone	0.375	0.317	15.5	107	0.00
16	M	Carbon Disulfide	4.972	4.458	10.3	110	0.00
17		Allyl chloride	2.958	2.524	14.7	107	0.00
18	M	Methylene Chloride	2.052	1.826	11.0	111	0.00
19	M	trans-1,2-Dichloroethene	1.847	1.624	12.1	105	0.00
20	T	Diisopropyl ether	6.802	5.657	16.8	102	0.00
21	M	1,1-Dichloroethane	3.725	3.283	11.9	107	0.00
22	M	cis-1,2-Dichloroethene	2.242	1.939	13.5	105	0.00
23	M	tert-Butyl Alcohol	0.425	0.382	10.1	107	-0.01
24	M	Methyl tert-Butyl Ether	6.466	5.592	13.5	108	0.00
25	M	Chloroform	3.899	3.382	13.3	104	0.00
26		Cyclohexane	2.837	2.462	13.2	108	0.00
27	s	1,2-Dichloroethane-d4	2.563	2.583	-0.8	110	0.00
28	I	1,4-Difluorobenzene	1.000	1.000	0.0	111	0.00
29		1,1-Dichloropropene	0.488	0.417	14.5	104	0.00
30	M	2-Butanone	0.336	0.295	12.2	109	0.00
31		2,2-Dichloropropane	0.588	0.500	15.0	112	0.00
32	M	1,1,1-Trichloroethane	0.618	0.545	11.8	105	0.00
33	M	Carbon Tetrachloride	0.515	0.443	14.0	106	0.00
34	M	Benzene	1.576	1.392	11.7	108	0.00
35		Methacrylonitrile	0.351	0.326	7.1	105	0.00
36	M	1,2-Dichloroethane	0.595	0.523	12.1	105	0.00
37	M	Trichloroethene	0.352	0.292	17.0	101	0.00
38		Methylcyclohexane	0.537	0.449	16.4	105	0.00
39	M	1,2-Dichloropropane	0.404	0.348	13.9	104	0.00
40		Dibromomethane	0.300	0.269	10.3	109	0.00
41	M	Bromodichloromethane	0.614	0.533	13.2	104	0.00
42	M	Vinyl Acetate	1.122	0.990	11.8	110	0.00
43		Ethyl Acetate	0.686	0.594	13.4	102	0.00
44		Isopropyl Acetate	1.076	0.938	12.8	105	0.00
45	T	1,4-Dioxane	0.007	0.006	14.3	100	0.00
46		Methyl methacrylate	0.496	0.432	12.9	109	0.00
47		n-amyl Acetate	0.727	0.551	24.2	119	-0.10
48	M	t-1,3-Dichloropropene	0.638	0.545	14.6	109	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087731.D
Acq On : 04 Sep 2025 18:28
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Quant Time: Sep 05 03:32:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 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	cis-1,3-Dichloropropene	0.653	0.563	13.8	111	0.00
50	M	1,1,2-Trichloroethane	0.388	0.342	11.9	108	0.00
51		Ethyl methacrylate	0.604	0.523	13.4	114	0.00
52		1,3-Dichloropropane	0.674	0.596	11.6	107	0.00
53	M	Dibromochloromethane	0.435	0.377	13.3	114	0.00
54	M	1,2-Dibromoethane	0.404	0.348	13.9	107	0.00
55	M	2-Chloroethyl vinyl ether	0.346	0.298	13.9	104	0.00
56	M	Bromoform	0.284	0.249	12.3	115	0.00
57	I	Chlorobenzene-d5	1.000	1.000	0.0	112	0.00
58	M	4-Methyl-2-Pentanone	0.709	0.625	11.8	107	0.00
59	M	2-Hexanone	0.464	0.395	14.9	105	0.00
60	S	4-Bromofluorobenzene	0.482	0.470	2.5	107	0.00
61	M	Tetrachloroethene	0.299	0.262	12.4	105	0.00
62	M	Toluene	1.815	1.618	10.9	108	0.00
63	S	Toluene-d8	1.395	1.380	1.1	109	0.00
64	M	Chlorobenzene	1.114	0.968	13.1	107	0.00
65		1,1,1,2-Tetrachloroethane	0.392	0.335	14.5	106	0.00
66	M	Ethyl Benzene	1.958	1.699	13.2	109	0.00
67	M	m/p-Xylenes	0.727	0.628	13.6	109	0.00
68	M	o-Xylene	0.705	0.612	13.2	107	0.00
69	M	Styrene	1.225	1.029	16.0	107	0.00
70		Isopropylbenzene	1.787	1.521	14.9	109	0.00
71	M	1,1,2,2-Tetrachloroethane	0.642	0.569	11.4	105	0.00
72		1,2,3-Trichloropropane	0.631	0.536	15.1	93	0.00
73		Bromobenzene	0.437	0.375	14.2	106	0.00
74		n-propylbenzene	2.254	1.932	14.3	107	0.00
75		2-Chlorotoluene	1.357	1.165	14.1	105	0.00
76		1,3,5-Trimethylbenzene	1.509	1.312	13.1	108	0.00
77		t-1,4-Dichloro-2-butene	0.213	0.162	23.9	99	0.00
78		4-Chlorotoluene	1.368	1.250	8.6	111	0.00
79		tert-butylbenzene	1.263	1.102	12.7	108	0.00
80		1,2,4-Trimethylbenzene	1.547	1.327	14.2	105	0.00
81		sec-Butylbenzene	1.858	1.615	13.1	107	0.00
82		p-Isopropyltoluene	1.531	1.327	13.3	109	0.00
83	M	1,3-Dichlorobenzene	0.843	0.719	14.7	102	0.00
84	M	1,4-Dichlorobenzene	0.845	0.730	13.6	105	0.00
85		n-Butylbenzene	1.472	1.280	13.0	111	0.00
86	T	Hexachloroethane	0.311	0.280	10.0	109	0.00
87	M	1,2-Dichlorobenzene	0.795	0.716	9.9	109	0.00
88		1,2-Dibromo-3-Chloropropane	0.143	0.130	9.1	104	0.00
89		1,2,4-Trichlorobenzene	0.452	0.396	12.4	110	0.00
90		Hexachlorobutadiene	0.152	0.138	9.2	106	0.00
91	M	Naphthalene	1.664	1.414	15.0	109	0.00
92		1,2,3-Trichlorobenzene	0.452	0.396	12.4	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087731.D
Acq On : 04 Sep 2025 18:28
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Quant Time: Sep 05 03:32:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 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	Bromochloromethane	30.000	30.000	0.0	107	0.00
2	M	Dichlorodifluoromethane	20.000	18.370	8.1	105	0.00
3	M	Chloromethane	20.000	18.050	9.7	106	0.00
4	M	Vinyl Chloride	20.000	17.504	12.5	104	0.00
5	M	Bromomethane	20.000	17.846	10.8	112	0.01
6	M	Chloroethane	20.000	17.094	14.5	102	0.00
7	M	Trichlorofluoromethane	20.000	17.175	14.1	103	0.00
8	T	Diethyl Ether	20.000	17.632	11.8	111	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	17.189	14.1	102	0.00
10	M	1,1-Dichloroethene	20.000	17.494	12.5	108	0.00
11		Methyl Iodide	20.000	15.097	24.5	111	0.01
12		Methyl Acetate	20.000	18.262	8.7	108	0.00
13	M	Acrolein	100.000	91.132	8.9	113	0.00
14	M	Acrylonitrile	100.000	88.404	11.6	108	0.00
15	M	Acetone	100.000	84.645	15.4	107	0.00
16	M	Carbon Disulfide	20.000	17.930	10.4	110	0.00
17		Allyl chloride	20.000	17.065	14.7	107	0.00
18	M	Methylene Chloride	20.000	17.804	11.0	111	0.00
19	M	trans-1,2-Dichloroethene	20.000	17.581	12.1	105	0.00
20	T	Diisopropyl ether	20.000	16.633	16.8	102	0.00
21	M	1,1-Dichloroethane	20.000	17.627	11.9	107	0.00
22	M	cis-1,2-Dichloroethene	20.000	17.296	13.5	105	0.00
23	M	tert-Butyl Alcohol	100.000	90.020	10.0	107	-0.01
24	M	Methyl tert-Butyl Ether	20.000	17.297	13.5	108	0.00
25	M	Chloroform	20.000	17.349	13.3	104	0.00
26		Cyclohexane	20.000	17.359	13.2	108	0.00
27	s	1,2-Dichloroethane-d4	30.000	30.234	-0.8	110	0.00
28	I	1,4-Difluorobenzene	30.000	30.000	0.0	111	0.00
29		1,1-Dichloropropene	20.000	17.099	14.5	104	0.00
30	M	2-Butanone	100.000	87.744	12.3	109	0.00
31		2,2-Dichloropropane	20.000	17.001	15.0	112	0.00
32	M	1,1,1-Trichloroethane	20.000	17.650	11.8	105	0.00
33	M	Carbon Tetrachloride	20.000	17.204	14.0	106	0.00
34	M	Benzene	20.000	17.669	11.7	108	0.00
35		Methacrylonitrile	20.000	18.531	7.3	105	0.00
36	M	1,2-Dichloroethane	20.000	17.562	12.2	105	0.00
37	M	Trichloroethene	20.000	16.598	17.0	101	0.00
38		Methylcyclohexane	20.000	16.745	16.3	105	0.00
39	M	1,2-Dichloropropane	20.000	17.248	13.8	104	0.00
40		Dibromomethane	20.000	17.941	10.3	109	0.00
41	M	Bromodichloromethane	20.000	17.353	13.2	104	0.00
42	M	Vinyl Acetate	100.000	88.211	11.8	110	0.00
43		Ethyl Acetate	20.000	17.318	13.4	102	0.00
44		Isopropyl Acetate	20.000	17.448	12.8	105	0.00
45	T	1,4-Dioxane	400.000	352.976	11.8	100	0.00
46		Methyl methacrylate	20.000	17.410	13.0	109	0.00
47		n-amyl Acetate	20.000	15.166	24.2	119	-0.10
48	M	t-1,3-Dichloropropene	20.000	17.087	14.6	109	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087731.D
Acq On : 04 Sep 2025 18:28
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN090425

Quant Time: Sep 05 03:32:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 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	cis-1,3-Dichloropropene	20.000	17.239	13.8	111	0.00
50	M	1,1,2-Trichloroethane	20.000	17.648	11.8	108	0.00
51		Ethyl methacrylate	20.000	17.320	13.4	114	0.00
52		1,3-Dichloropropane	20.000	17.687	11.6	107	0.00
53	M	Dibromochloromethane	20.000	17.347	13.3	114	0.00
54	M	1,2-Dibromoethane	20.000	17.241	13.8	107	0.00
55	M	2-Chloroethyl vinyl ether	100.000	86.104	13.9	104	0.00
56	M	Bromoform	20.000	17.508	12.5	115	0.00
57	I	Chlorobenzene-d5	30.000	30.000	0.0	112	0.00
58	M	4-Methyl-2-Pentanone	100.000	88.138	11.9	107	0.00
59	M	2-Hexanone	100.000	85.197	14.8	105	0.00
60	S	4-Bromofluorobenzene	30.000	29.200	2.7	107	0.00
61	M	Tetrachloroethene	20.000	17.528	12.4	105	0.00
62	M	Toluene	20.000	17.829	10.9	108	0.00
63	S	Toluene-d8	30.000	29.682	1.1	109	0.00
64	M	Chlorobenzene	20.000	17.382	13.1	107	0.00
65		1,1,1,2-Tetrachloroethane	20.000	17.110	14.5	106	0.00
66	M	Ethyl Benzene	20.000	17.361	13.2	109	0.00
67	M	m/p-Xylenes	40.000	34.562	13.6	109	0.00
68	M	o-Xylene	20.000	17.377	13.1	107	0.00
69	M	Styrene	20.000	16.798	16.0	107	0.00
70		Isopropylbenzene	20.000	17.022	14.9	109	0.00
71	M	1,1,2,2-Tetrachloroethane	20.000	17.703	11.5	105	0.00
72		1,2,3-Trichloropropane	20.000	16.995	15.0	93	0.00
73		Bromobenzene	20.000	17.154	14.2	106	0.00
74		n-propylbenzene	20.000	17.141	14.3	107	0.00
75		2-Chlorotoluene	20.000	17.173	14.1	105	0.00
76		1,3,5-Trimethylbenzene	20.000	17.393	13.0	108	0.00
77		t-1,4-Dichloro-2-butene	20.000	15.243	23.8	99	0.00
78		4-Chlorotoluene	20.000	18.280	8.6	111	0.00
79		tert-butylbenzene	20.000	17.436	12.8	108	0.00
80		1,2,4-Trimethylbenzene	20.000	17.154	14.2	105	0.00
81		sec-Butylbenzene	20.000	17.385	13.1	107	0.00
82		p-Isopropyltoluene	20.000	17.337	13.3	109	0.00
83	M	1,3-Dichlorobenzene	20.000	17.075	14.6	102	0.00
84	M	1,4-Dichlorobenzene	20.000	17.287	13.6	105	0.00
85		n-Butylbenzene	20.000	17.390	13.0	111	0.00
86	T	Hexachloroethane	20.000	17.975	10.1	109	0.00
87	M	1,2-Dichlorobenzene	20.000	18.016	9.9	109	0.00
88		1,2-Dibromo-3-Chloropropane	20.000	18.204	9.0	104	0.00
89		1,2,4-Trichlorobenzene	20.000	17.505	12.5	110	0.00
90		Hexachlorobutadiene	20.000	18.275	8.6	106	0.00
91	M	Naphthalene	20.000	16.990	15.1	109	0.00
92		1,2,3-Trichlorobenzene	20.000	17.505	12.5	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance | Contract: ALLI03
Lab Code: ACE | SDG No.: Q3015
Instrument ID: MSVOA_N | Calibration Date/Time: 09/17/2025 09:42
Lab File ID: VN087869.D | Init. Calib. Date(s): 09/04/2025 09/04/2025
Heated Purge: (Y/N) N | Init. Calib. Time(s): 16:23 17:46
GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.865	1.833		-1.72	
Chloromethane	1.957	1.487		-24.02	
Vinyl Chloride	2.213	1.692	0.1	-23.54	
Ethyl Acetate	0.686	0.591		-13.85	
Bromomethane	1.298	0.922	0.1	-28.97	
Chloroethane	1.512	1.076		-28.84	
Trichlorofluoromethane	3.243	2.707		-16.53	
1,1,2-Trichlorotrifluoroethane	1.757	1.557		-11.38	
1,1-Dichloroethene	1.811	1.471	0.1	-18.77	
Acrolein	0.497	0.578		16.3	
Acrylonitrile	1.202	1.090		-9.32	
Acetone	0.375	0.315		-16	
Carbon Disulfide	4.972	4.145		-16.63	
Methyl tert-Butyl Ether	6.466	6.174		-4.52	
Methylene Chloride	2.052	1.906		-7.11	
trans-1,2-Dichloroethene	1.847	1.654		-10.45	
Vinyl Acetate	1.122	0.929		-17.2	
1,1-Dichloroethane	3.725	3.405	0.2	-8.59	
2-Butanone	0.336	0.296		-11.9	
Carbon Tetrachloride	0.515	0.484	0.1	-6.02	
2,2-Dichloropropane	0.588	0.608		3.4	
cis-1,2-Dichloroethene	2.242	2.095		-6.56	
Chloroform	3.899	3.643	0.2	-6.57	
1,1,1-Trichloroethane	0.618	0.585	0.1	-5.34	
1,1-Dichloropropene	0.488	0.435		-10.86	
Benzene	1.576	1.389	0.5	-11.86	
1,2-Dichloroethane	0.595	0.532	0.1	-10.59	
Trichloroethene	0.352	0.336	0.3	-4.55	
1,2-Dichloropropane	0.404	0.353		-12.62	
Dibromomethane	0.300	0.267		-11	
Bromodichloromethane	0.614	0.543	0.2	-11.56	
4-Methyl-2-Pentanone	0.709	0.635		-10.44	
Toluene	1.815	1.660	0.4	-8.54	
t-1,3-Dichloropropene	0.638	0.544	0.1	-14.73	
cis-1,3-Dichloropropene	0.653	0.584	0.2	-10.57	
1,1,2-Trichloroethane	0.388	0.361	0.1	-6.96	
1,3-Dichloropropane	0.674	0.588		-12.76	
2-Chloroethyl vinyl ether	0.346	0.310		-10.4	

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: Alliance | Contract: ALLI03
Lab Code: ACE | SDG No.: Q3015
Instrument ID: MSVOA_N | Calibration Date/Time: 09/17/2025 09:42
Lab File ID: VN087869.D | Init. Calib. Date(s): 09/04/2025 09/04/2025
Heated Purge: (Y/N) N | Init. Calib. Time(s): 16:23 17:46
GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
2-Hexanone	0.464	0.410		-11.64	
Dibromochloromethane	0.435	0.404	0.1	-7.13	
1,2-Dibromoethane	0.404	0.365		-9.65	
Tetrachloroethene	0.299	0.295	0.2	-1.34	
Chlorobenzene	1.114	1.042	0.5	-6.46	
1,1,1,2-Tetrachloroethane	0.392	0.377		-3.83	
Ethyl Benzene	1.958	1.821	0.1	-7	
m/p-Xylenes	0.727	0.678	0.3	-6.74	
o-Xylene	0.705	0.643	0.3	-8.79	
Styrene	1.225	1.108	0.3	-9.55	
Bromoform	0.284	0.265	0.1	-6.69	
Isopropylbenzene	1.787	1.706		-4.53	
1,1,2,2-Tetrachloroethane	0.642	0.598	0.3	-6.85	
1,2,3-Trichloropropane	0.631	0.561		-11.09	
Bromobenzene	0.437	0.413		-5.49	
n-propylbenzene	2.254	2.140		-5.06	
2-Chlorotoluene	1.357	1.275		-6.04	
1,3,5-Trimethylbenzene	1.509	1.446		-4.18	
4-Chlorotoluene	1.368	1.243		-9.14	
1,2,4-Trimethylbenzene	1.547	1.455		-5.95	
sec-Butylbenzene	1.858	1.868		0.54	
p-Isopropyltoluene	1.531	1.554		1.5	
1,3-Dichlorobenzene	0.843	0.828	0.2	-1.78	
1,4-Dichlorobenzene	0.845	0.856	0.2	1.3	
n-Butylbenzene	1.472	1.461		-0.75	
1,2-Dichlorobenzene	0.795	0.815	0.2	2.52	
1,2-Dibromo-3-Chloropropane	0.143	0.132		-7.69	
1,2,4-Trichlorobenzene	0.452	0.458	0.2	1.33	
Hexachlorobutadiene	0.152	0.173		13.82	
Naphthalene	1.664	1.553		-6.67	
1,2,3-Trichlorobenzene	0.452	0.458		1.33	
1,2-Dichloroethane-d4	2.563	2.512	0.01	-1.99	
Toluene-d8	1.395	1.343	0.01	-3.73	
4-Bromofluorobenzene	0.482	0.479	0.2	-0.62	

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\VN091725\
Data File : VN087869.D
Acq On : 17 Sep 2025 09:42
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 03:06:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.794	128	52147	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.083	114	281875	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.841	117	258937	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.559	65	130992	29.406	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 98.033%				
60) 4-Bromofluorobenzene	12.829	95	123908	29.761	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 99.200%				
63) Toluene-d8	10.547	98	347757	28.879	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 96.267%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.148	85	63728	19.663	ug/l		97
3) Chloromethane	2.383	50	51699	15.195	ug/l		97
4) Vinyl Chloride	2.536	62	58815	15.293	ug/l		92
5) Bromomethane	2.977	94	32049	14.205	ug/l		96
6) Chloroethane	3.136	64	37417	14.235	ug/l	#	79
7) Trichlorofluoromethane	3.512	101	94114	16.695	ug/l		87
8) Diethyl Ether	3.959	74	34918	14.668	ug/l		92
9) 1,1,2-Trichlorotrifluo...	4.371	101	54116	17.723	ug/l		60
10) 1,1-Dichloroethene	4.336	96	51148	16.247	ug/l		94
11) Methyl Iodide	4.583	142	27462	12.324	ug/l		87
12) Methyl Acetate	5.018	43	93838	19.337	ug/l		95
13) Acrolein	4.177	56	100412	116.214	ug/l	#	38
14) Acrylonitrile	5.712	53	189426	90.687	ug/l		97
15) Acetone	4.424	58	54742	84.010	ug/l		95
16) Carbon Disulfide	4.700	76	144116	16.674	ug/l	#	93
17) Allyl chloride	5.018	41	88841m	17.278	ug/l		
18) Methylene Chloride	5.265	84	66255	18.580	ug/l		90
19) trans-1,2-Dichloroethene	5.765	96	57498	17.909	ug/l		96
20) Diisopropyl ether	6.659	45	211964	17.926	ug/l	#	96
21) 1,1-Dichloroethane	6.553	63	118384	18.283	ug/l		95
22) cis-1,2-Dichloroethene	7.471	96	72845	18.692	ug/l		100
23) tert-Butyl Alcohol	5.518	59	68111	92.244	ug/l	#	100
24) Methyl tert-Butyl Ether	5.783	73	214645	19.098	ug/l	#	80
25) Chloroform	7.947	83	126632	18.683	ug/l		88
26) Cyclohexane	8.236	56	91476	18.551	ug/l	#	98
29) 1,1-Dichloropropene	8.347	75	81669	17.828	ug/l		97
30) 2-Butanone	7.465	43	278175	88.150	ug/l		99
31) 2,2-Dichloropropane	7.471	77	114169	20.675	ug/l	#	78
32) 1,1,1-Trichloroethane	8.153	97	109869	18.918	ug/l		96
33) Carbon Tetrachloride	8.341	117	91042	18.801	ug/l		89
34) Benzene	8.588	78	260993	17.628	ug/l	#	91
35) Methacrylonitrile	7.759	41	56919	17.244	ug/l		96
36) 1,2-Dichloroethane	8.653	62	99931	17.869	ug/l		98
37) Trichloroethene	9.335	130	63179	19.090	ug/l		93
38) Methylcyclohexane	9.583	83	93569	18.550	ug/l		95
39) 1,2-Dichloropropane	9.600	63	66336	17.494	ug/l		90
40) Dibromomethane	9.688	93	50151	17.772	ug/l		96
41) Bromodichloromethane	9.871	83	102024	17.689	ug/l	#	93
42) Vinyl Acetate	6.589	43	873112	82.808	ug/l		98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087869.D
Acq On : 17 Sep 2025 09:42
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 03:06:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.547	43	111034	17.221	ug/l		99
44) Isopropyl Acetate	8.671	43	173222	17.138	ug/l		99
45) 1,4-Dioxane	9.677	88	22600	354.558	ug/l	#	79
46) Methyl methacrylate	9.665	41	78333	16.814	ug/l		93
47) n-amyl Acetate	12.618	43	103656m	15.176	ug/l		
48) t-1,3-Dichloropropene	10.818	75	102141	17.051	ug/l		100
49) cis-1,3-Dichloropropene	10.294	75	109669	17.874	ug/l		96
50) 1,1,2-Trichloroethane	10.994	97	67907	18.631	ug/l		97
51) Ethyl methacrylate	10.853	69	96353	16.987	ug/l		94
52) 1,3-Dichloropropane	11.141	76	110479	17.456	ug/l		98
53) Dibromochloromethane	11.335	129	75842	18.558	ug/l		91
54) 1,2-Dibromoethane	11.447	107	68595	18.087	ug/l		97
55) 2-Chloroethyl vinyl ether	10.141	63	290841	89.490	ug/l		98
56) Bromoform	12.565	173	49888	18.693	ug/l		97
58) 4-Methyl-2-Pentanone	10.424	43	548165	89.532	ug/l		99
59) 2-Hexanone	11.177	43	353570	88.377	ug/l		96
61) Tetrachloroethene	11.082	164	50927	19.754	ug/l		96
62) Toluene	10.606	91	286562	18.296	ug/l		100
64) Chlorobenzene	11.871	112	179893	18.713	ug/l		99
65) 1,1,1,2-Tetrachloroethane	11.941	131	65113	19.239	ug/l		98
66) Ethyl Benzene	11.941	91	314293m	18.600	ug/l		
67) m/p-Xylenes	12.053	106	233991	37.305	ug/l		93
68) o-Xylene	12.376	106	110935	18.241	ug/l		95
69) Styrene	12.394	104	191265	18.095	ug/l		97
70) Isopropylbenzene	12.671	105	294417	19.093	ug/l		97
71) 1,1,2,2-Tetrachloroethane	12.918	83	103192	18.614	ug/l		99
72) 1,2,3-Trichloropropane	12.971	75	96909m	17.804	ug/l		
73) Bromobenzene	12.959	156	71265	18.889	ug/l		92
74) n-propylbenzene	13.012	91	369477	18.990	ug/l		100
75) 2-Chlorotoluene	13.100	91	220111	18.796	ug/l		96
76) 1,3,5-Trimethylbenzene	13.153	105	249532	19.162	ug/l		95
77) t-1,4-Dichloro-2-butene	12.718	75	34144m	18.585	ug/l		
78) 4-Chlorotoluene	13.200	91	214620	18.179	ug/l		97
79) tert-butylbenzene	13.418	119	217594	19.953	ug/l		95
80) 1,2,4-Trimethylbenzene	13.459	105	251183	18.815	ug/l		96
81) sec-Butylbenzene	13.594	105	322425	20.100	ug/l		97
82) p-Isopropyltoluene	13.706	119	268282	20.299	ug/l		97
83) 1,3-Dichlorobenzene	13.712	146	142978	19.657	ug/l		100
84) 1,4-Dichlorobenzene	13.788	146	147719	20.261	ug/l		99
85) n-Butylbenzene	14.035	91	252165	19.849	ug/l		99
86) Hexachloroethane	14.306	117	53724	20.013	ug/l		94
87) 1,2-Dichlorobenzene	14.082	146	140678	20.507	ug/l		94
88) 1,2-Dibromo-3-Chloropr...	14.700	75	22720	18.468	ug/l		89
89) 1,2,4-Trichlorobenzene	15.812	180	78987	20.244	ug/l		95
90) Hexachlorobutadiene	15.470	225	29826	22.803	ug/l		94
91) Naphthalene	15.612	128	268102	18.665	ug/l		98
92) 1,2,3-Trichlorobenzene	15.812	180	78987	20.244	ug/l		95

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

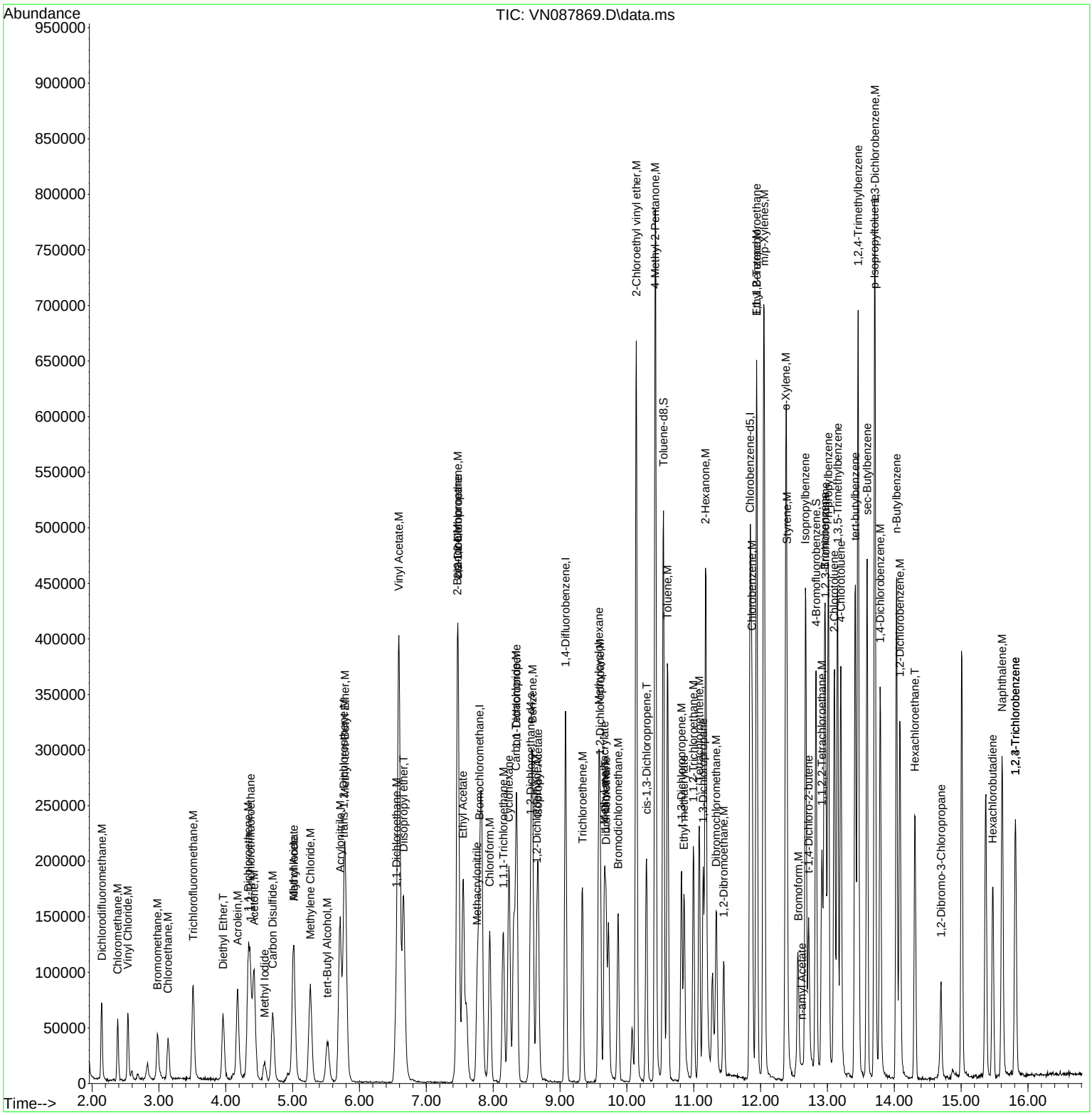
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087869.D
Acq On : 17 Sep 2025 09:42
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

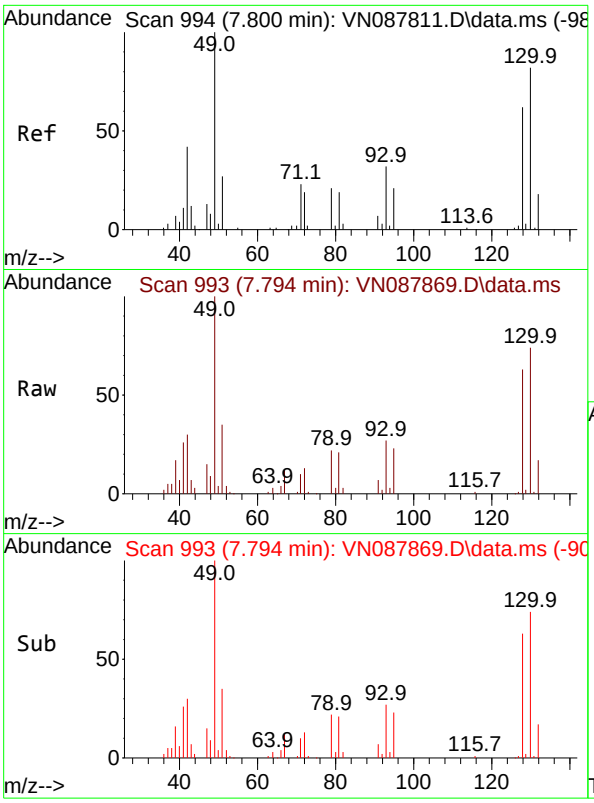
Quant Time: Sep 18 03:06:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

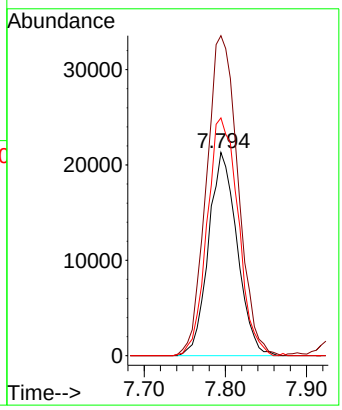




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.794 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:128 Resp: 5214

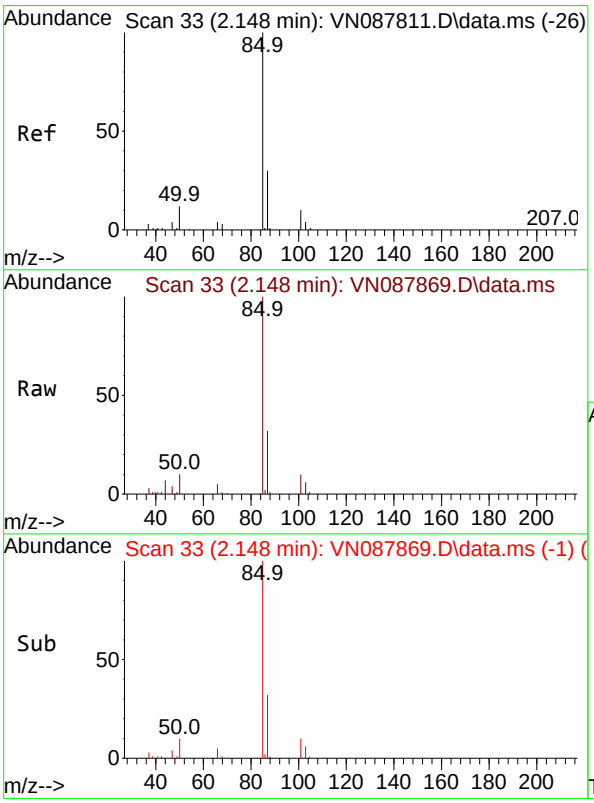
Ion	Ratio	Lower	Upper
128	100		
49	174.3	0.0	464.3
130	127.3	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations
APPROVED

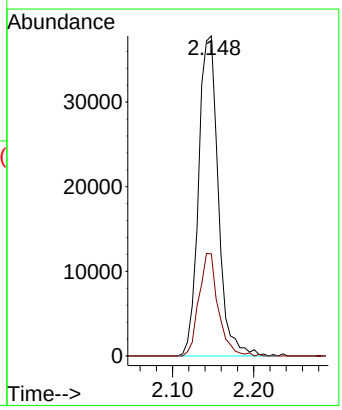
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

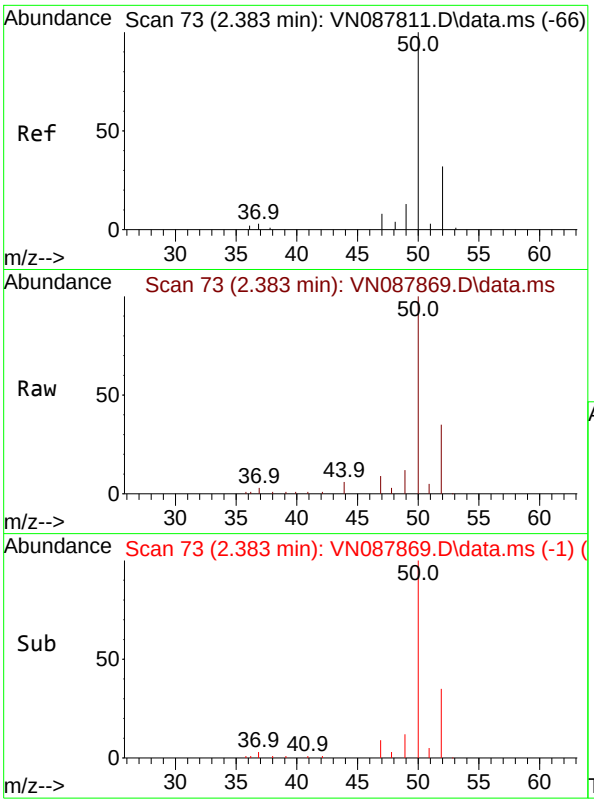


#2
Dichlorodifluoromethane
Concen: 19.663 ug/l
RT: 2.148 min Scan# 33
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 85 Resp: 63728

Ion	Ratio	Lower	Upper
85	100		
87	31.9	16.8	50.4

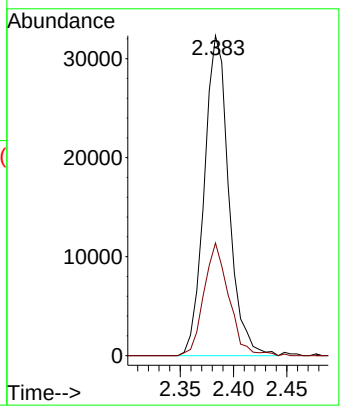




#3
Chloromethane
Concen: 15.195 ug/l
RT: 2.383 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 50 Resp: 5169

Ion	Ratio	Lower	Upper
50	100		
52	35.2	26.6	40.0



Instrument :
MSVOA_N
ClientSampleId :
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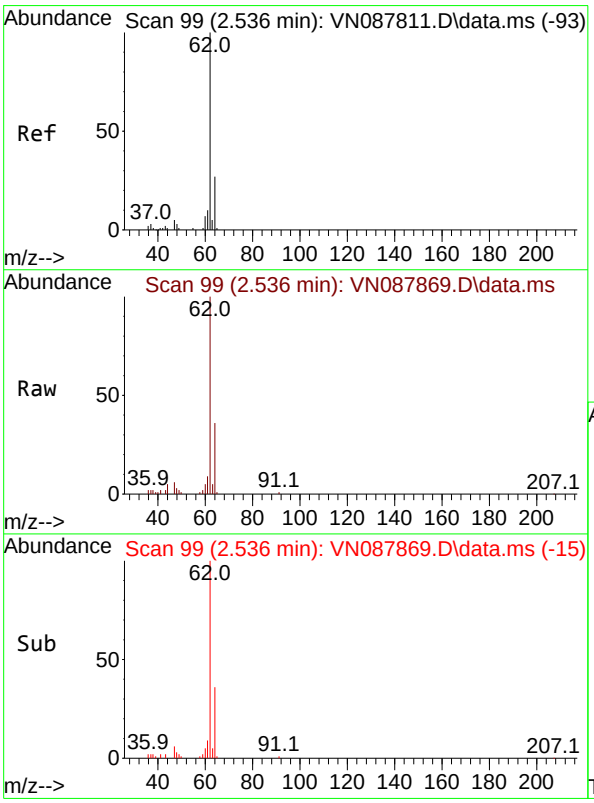
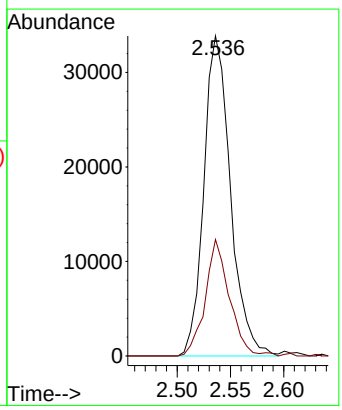
Supervised By :Mahesh Dadoda 09/18/2025

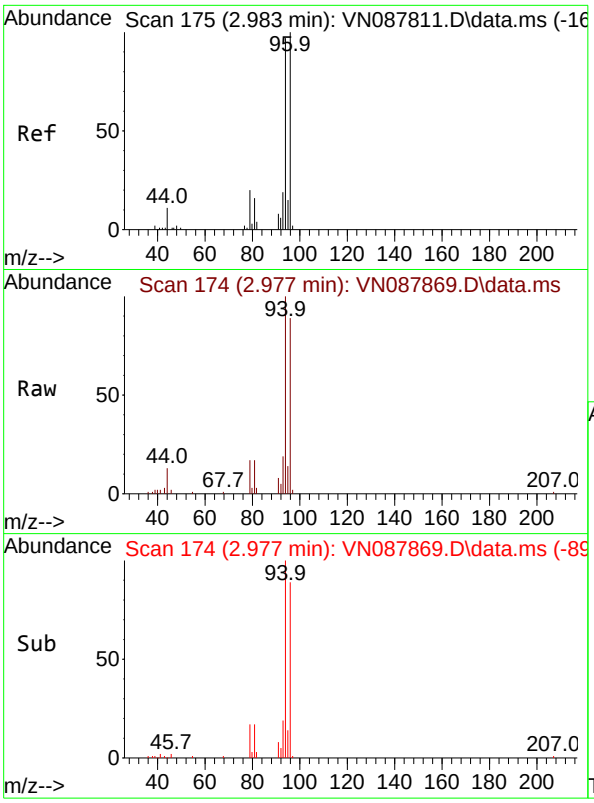


#4
Vinyl Chloride
Concen: 15.293 ug/l
RT: 2.536 min Scan# 99
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 62 Resp: 58815

Ion	Ratio	Lower	Upper
62	100		
64	36.4	25.5	38.3

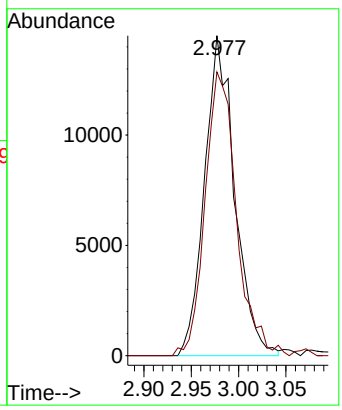




#5
Bromomethane
Concen: 14.205 ug/l
RT: 2.977 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 94 Resp: 3204

Ion	Ratio	Lower	Upper
94	100		
96	86.2	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

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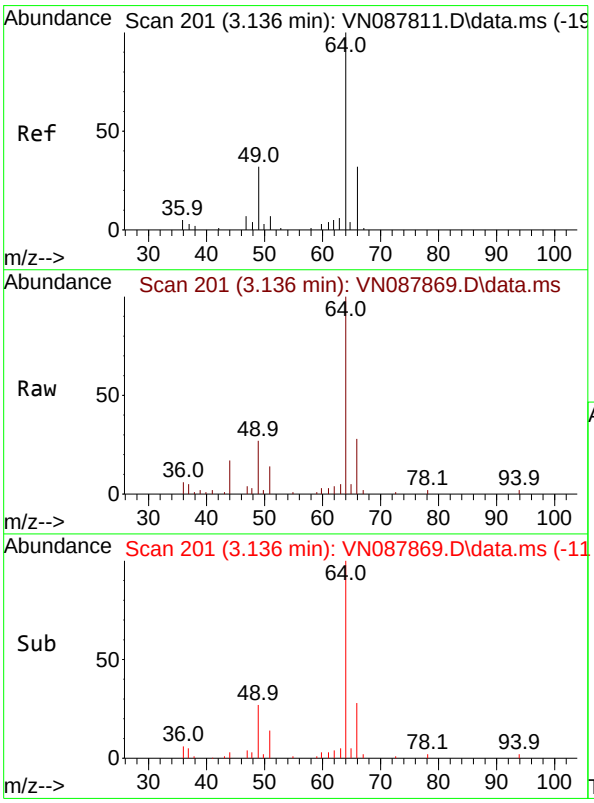
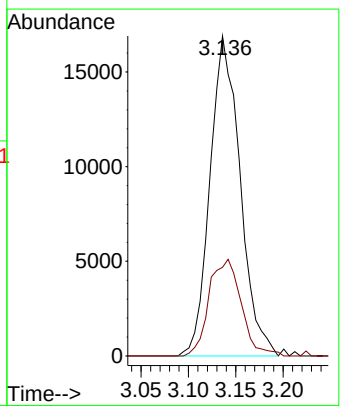
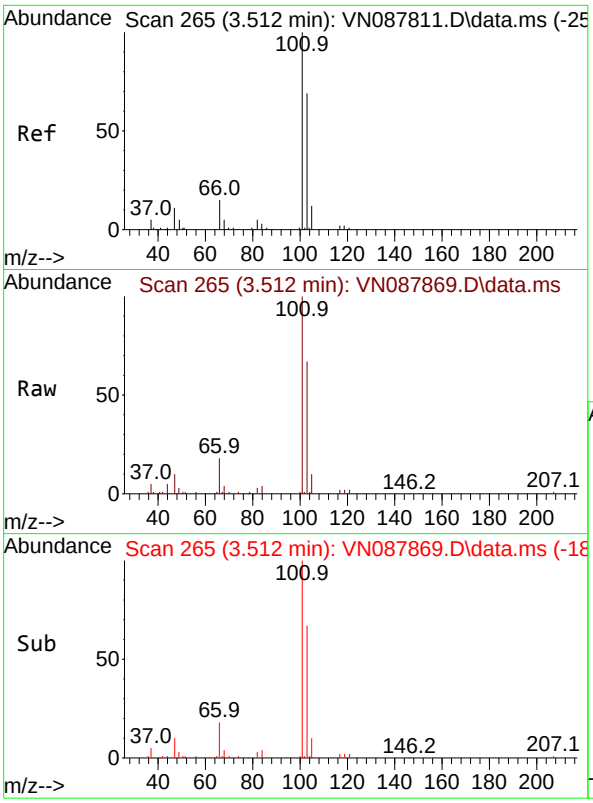


#6
Chloroethane
Concen: 14.235 ug/l
RT: 3.136 min Scan# 201
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 64 Resp: 37417

Ion	Ratio	Lower	Upper
64	100		
66	27.7	32.8	49.2#





#7
Trichlorofluoromethane
Concen: 16.695 ug/l
RT: 3.512 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:101 Resp: 9411

Ion	Ratio	Lower	Upper
101	100		
103	67.0	45.7	68.5

Instrument :
MSVOA_N
ClientSampleId :
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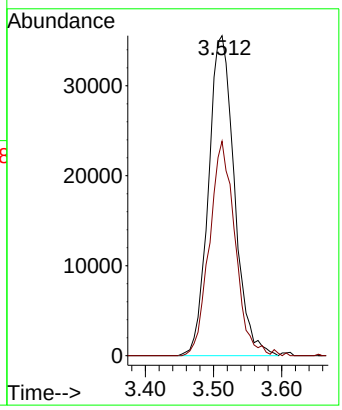
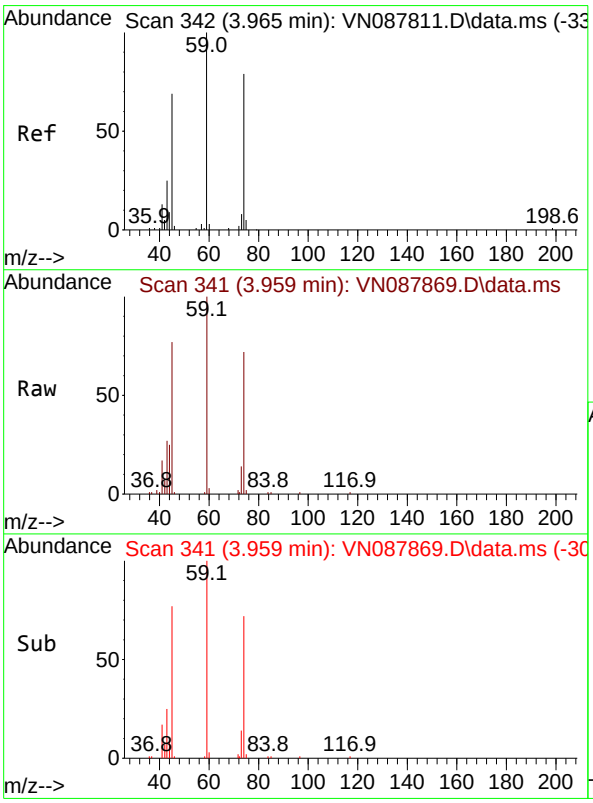
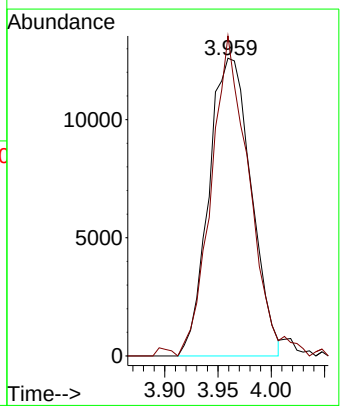


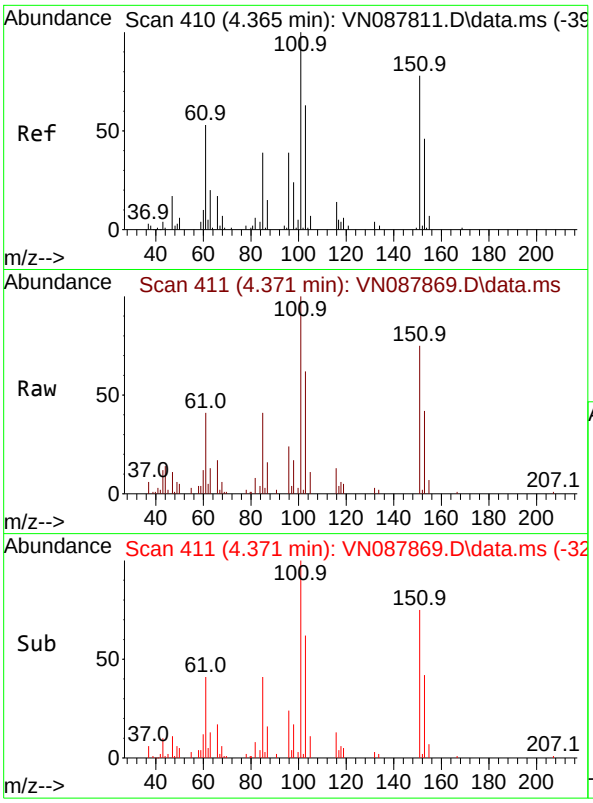


#8
Diethyl Ether
Concen: 14.668 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 74 Resp: 34918

Ion	Ratio	Lower	Upper
74	100		
45	94.1	20.4	183.8





#9
1,1,2-Trichlorotrifluoroethane
Concen: 17.723 ug/l
RT: 4.371 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Tgt Ion:101 Resp: 5411

Ion	Ratio	Lower	Upper
101	100		
85	22.7	0.0	95.6
151	70.4	0.0	85.8

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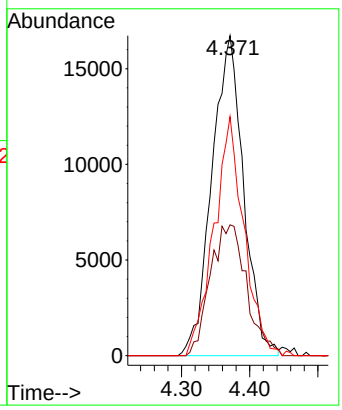
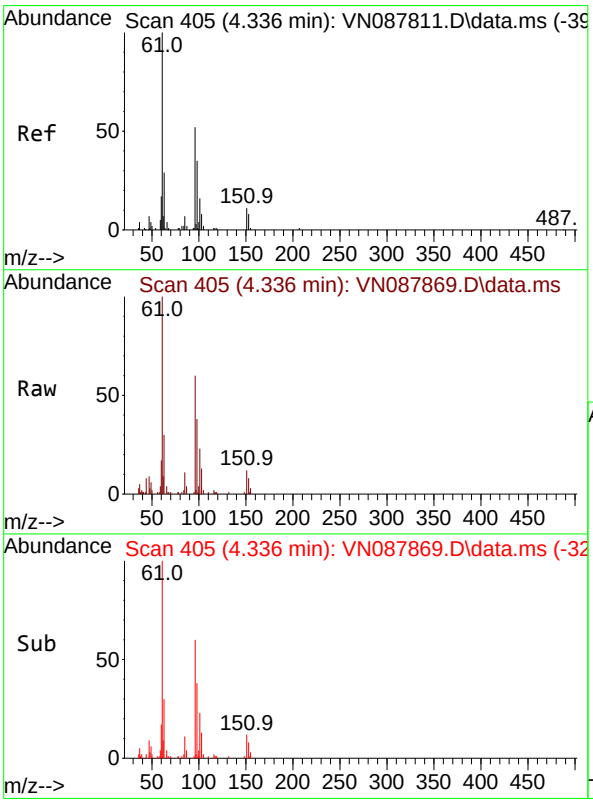
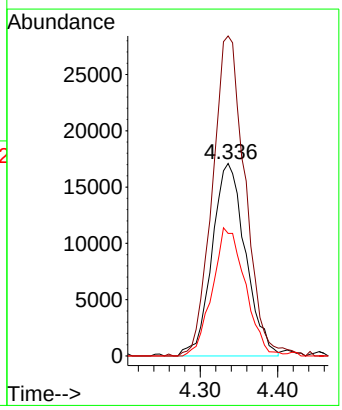


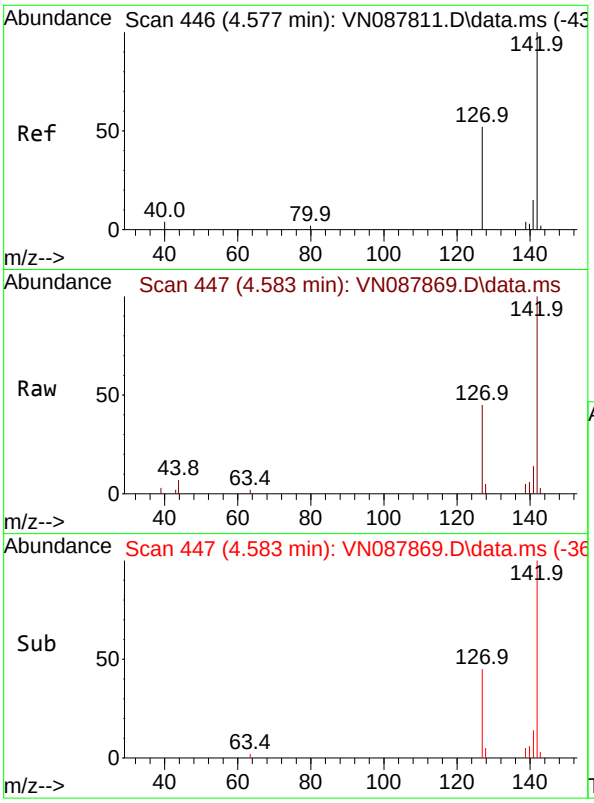


#10
1,1-Dichloroethene
Concen: 16.247 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 96 Resp: 51148

Ion	Ratio	Lower	Upper
96	100		
61	166.2	135.9	203.9
98	63.7	59.2	88.8





#11
Methyl Iodide
Concen: 12.324 ug/l
RT: 4.583 min Scan# 44
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:142 Resp: 2746

Ion	Ratio	Lower	Upper
142	100		
127	45.9	27.9	83.7
141	14.4	9.6	28.8

Instrument :
MSVOA_N
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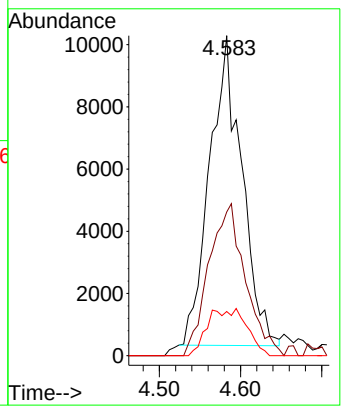
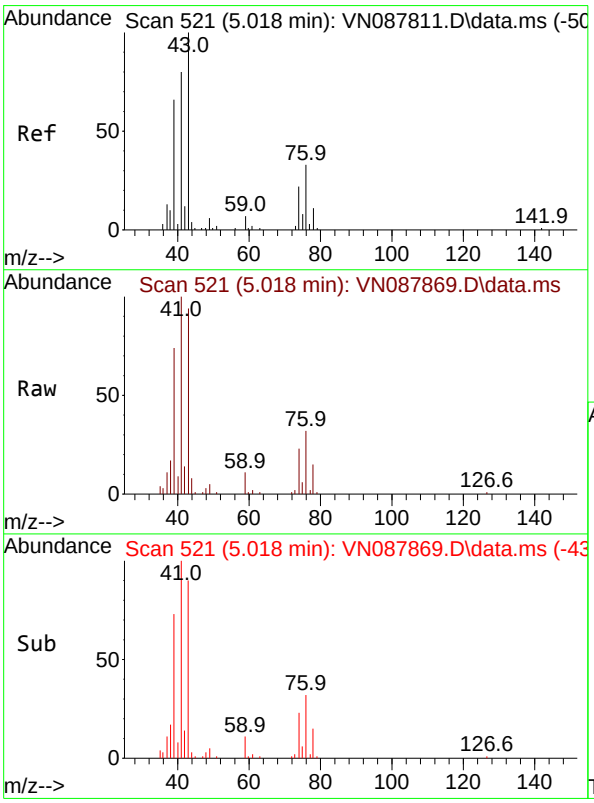
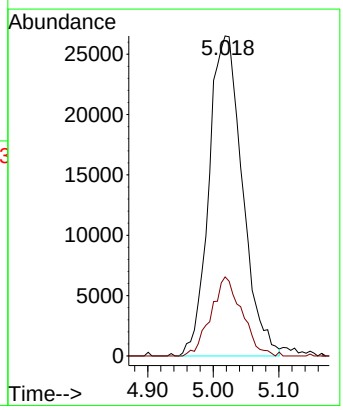


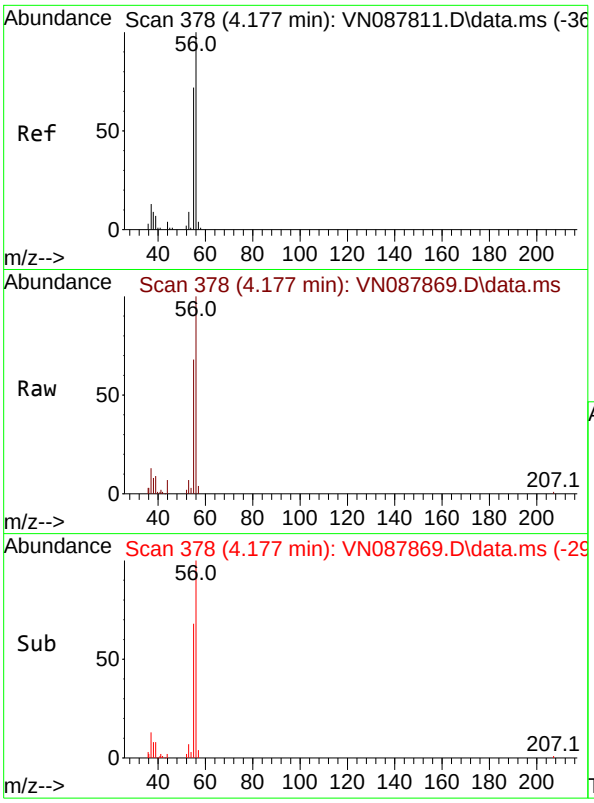


#12
Methyl Acetate
Concen: 19.337 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 43 Resp: 93838

Ion	Ratio	Lower	Upper
43	100		
74	24.4	17.5	26.3

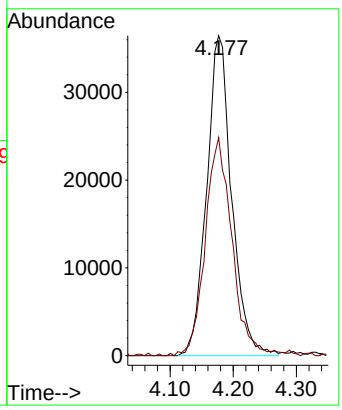




#13
Acrolein
Concen: 116.214 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 56 Resp: 10041

Ion	Ratio	Lower	Upper
56	100		
55	72.1	28.6	42.8



Instrument :
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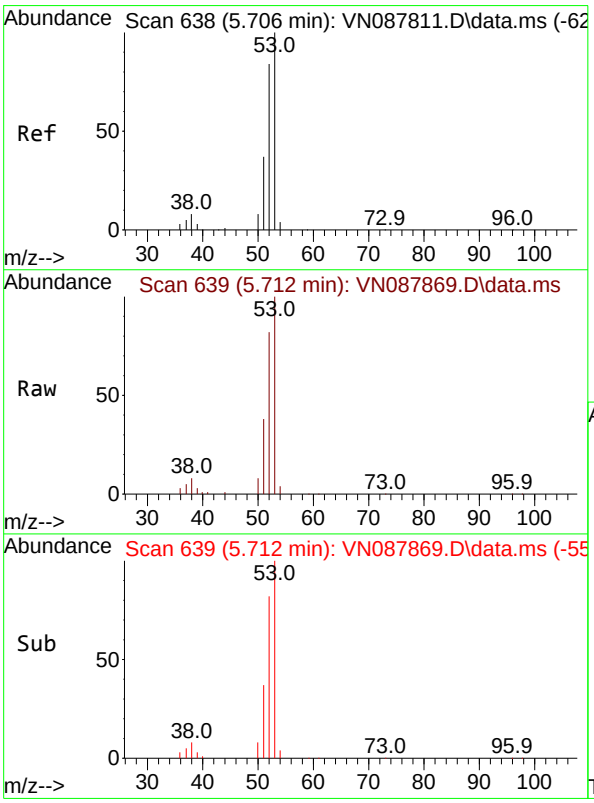
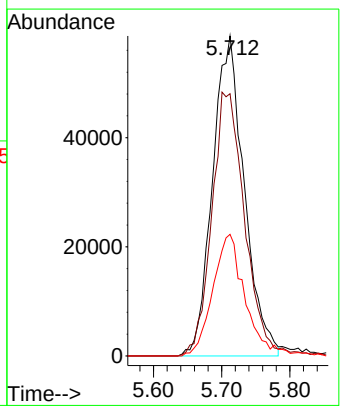
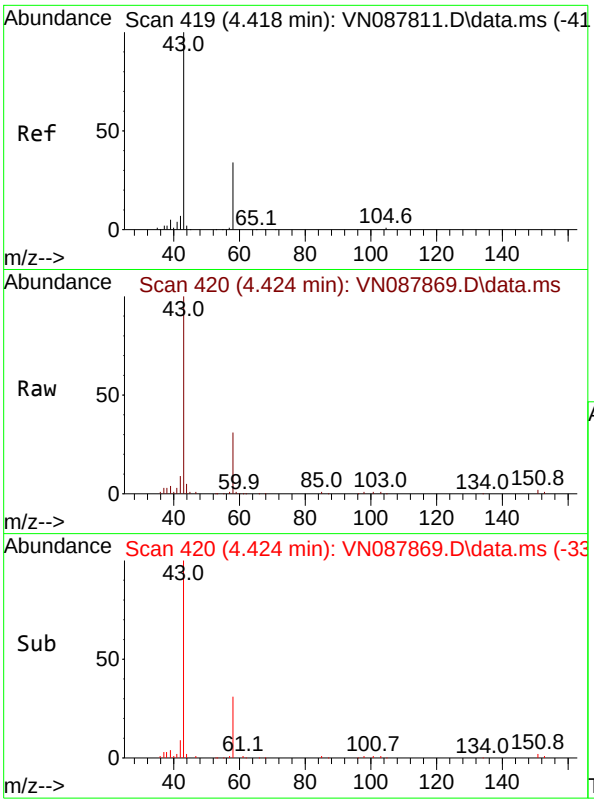


#14
Acrylonitrile
Concen: 90.687 ug/l
RT: 5.712 min Scan# 639
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 53 Resp: 189426

Ion	Ratio	Lower	Upper
53	100		
52	84.7	40.9	122.7
51	37.4	18.1	54.1





#15
Acetone
Concen: 84.010 ug/l
RT: 4.424 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 58 Resp: 5474

Ion	Ratio	Lower	Upper
58	100		
43	323.8	250.6	376.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

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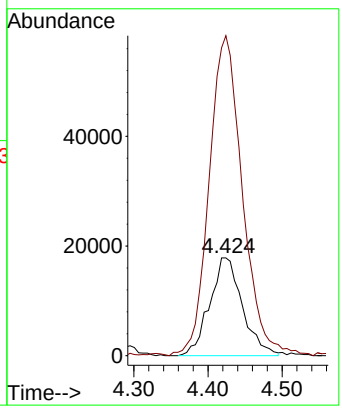
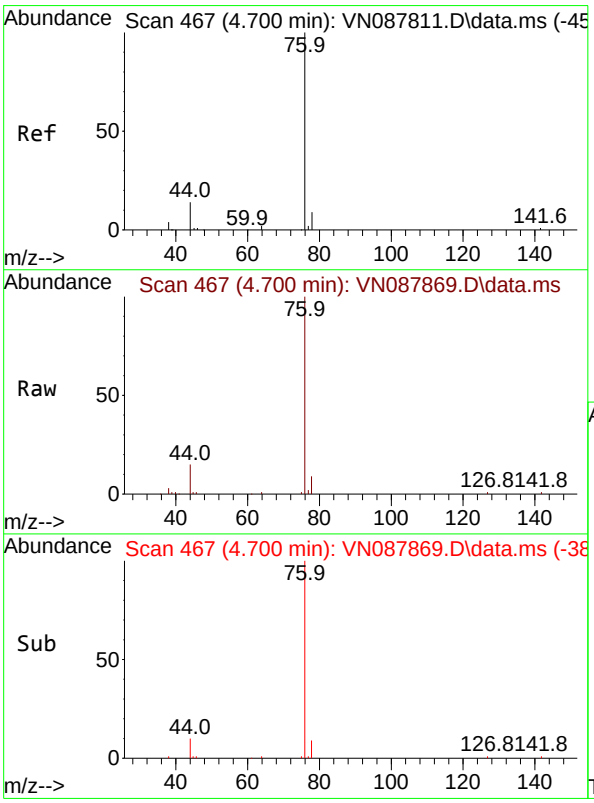
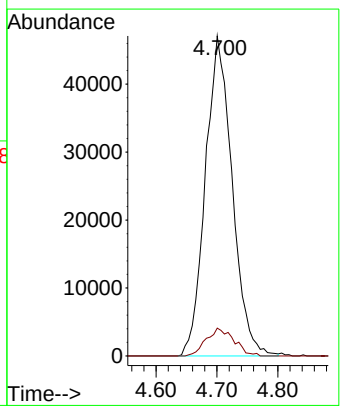


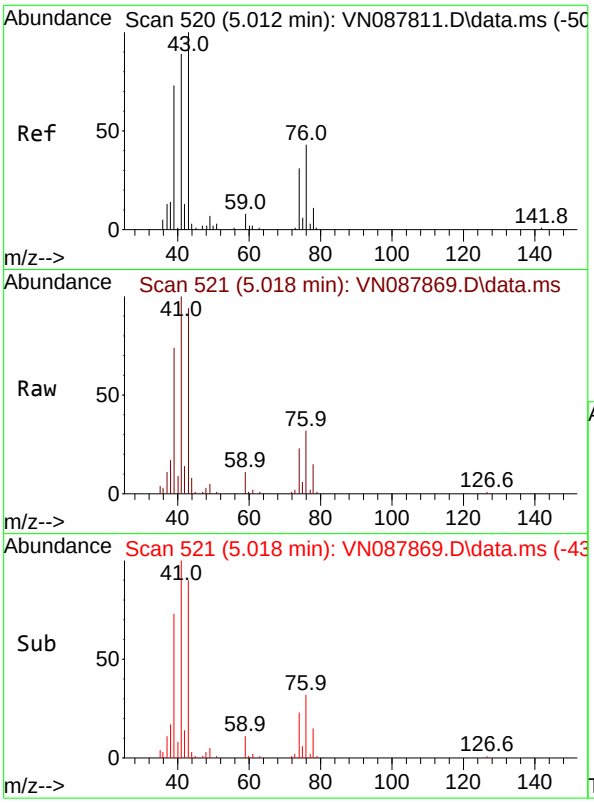


#16
Carbon Disulfide
Concen: 16.674 ug/l
RT: 4.700 min Scan# 467
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 76 Resp: 144116

Ion	Ratio	Lower	Upper
76	100		
78	8.7	5.0	7.6#

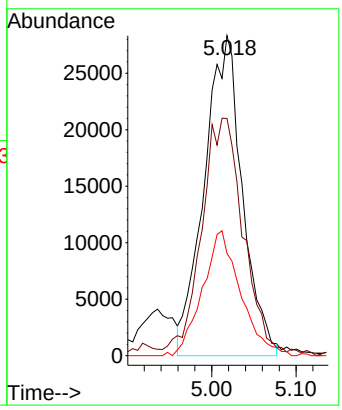




#17
Allyl chloride
Concen: 17.278 ug/l m
RT: 5.018 min Scan# 5
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 41 Resp: 8884

Ion	Ratio	Lower	Upper
41	100		
39	74.1	36.7	110.1
76	31.9	18.3	54.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

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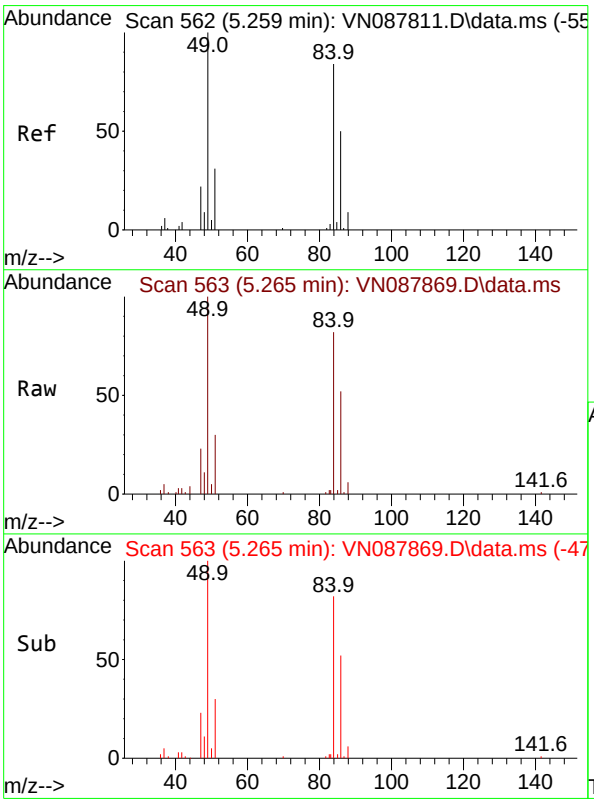
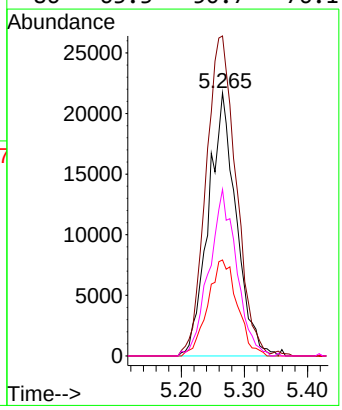
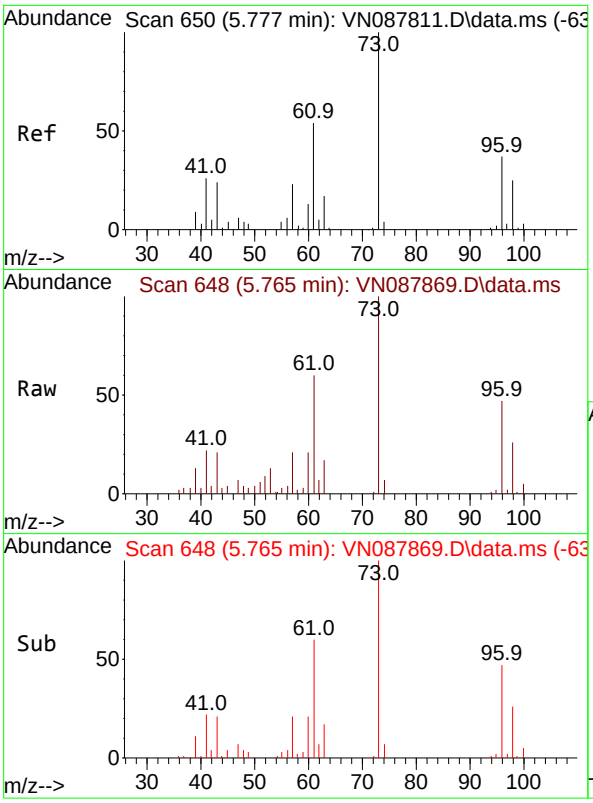


#18
Methylene Chloride
Concen: 18.580 ug/l
RT: 5.265 min Scan# 563
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 84 Resp: 66255

Ion	Ratio	Lower	Upper
84	100		
49	121.6	114.1	171.1
51	36.5	30.2	45.4
86	63.3	50.7	76.1

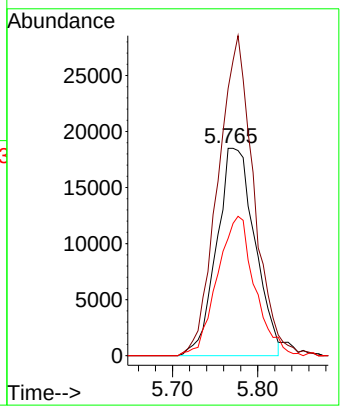




#19
trans-1,2-Dichloroethene
Concen: 17.909 ug/l
RT: 5.765 min Scan# 64
Delta R.T. -0.012 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 96 Resp: 5749

Ion	Ratio	Lower	Upper
96	100		
61	128.8	106.4	159.6
98	56.6	48.9	73.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

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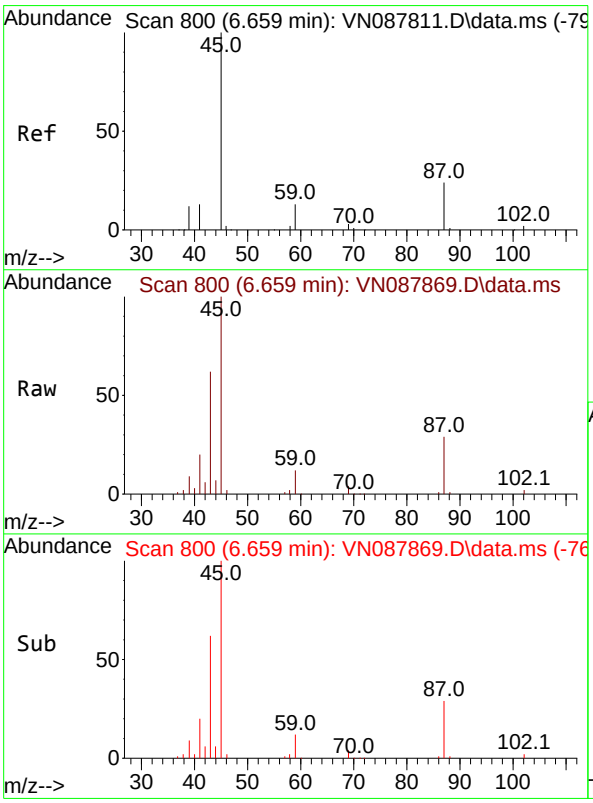
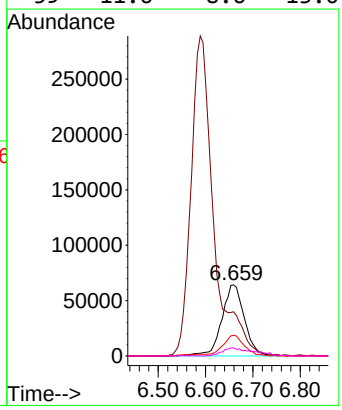
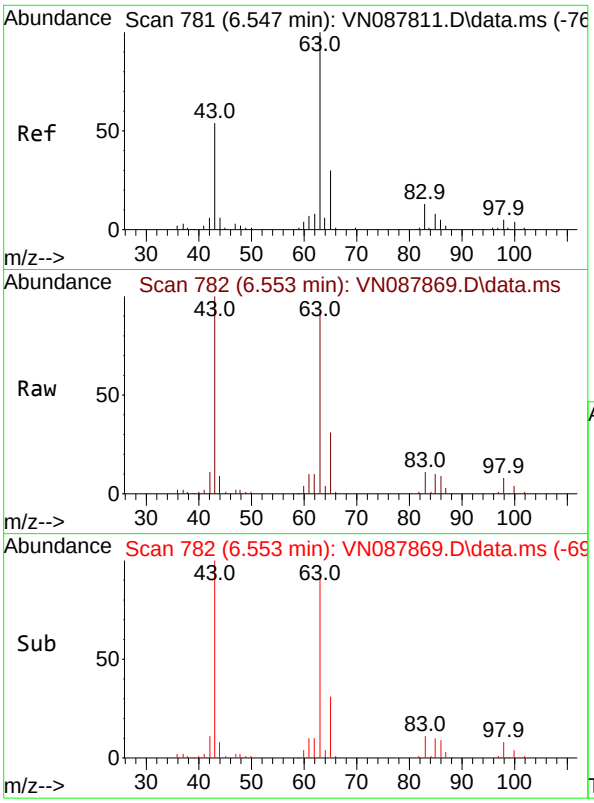


#20
Diisopropyl ether
Concen: 17.926 ug/l
RT: 6.659 min Scan# 800
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 45 Resp: 211964

Ion	Ratio	Lower	Upper
45	100		
43	60.1	49.5	74.3
87	28.9	18.8	28.2#
59	11.6	8.6	13.0

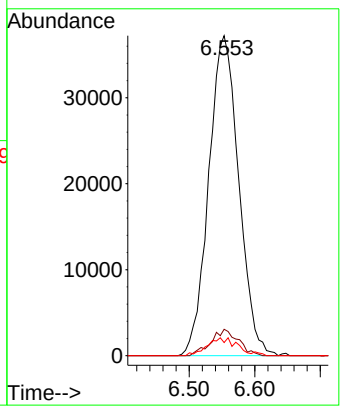




#21
1,1-Dichloroethane
Concen: 18.283 ug/l
RT: 6.553 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 63 Resp: 11838

Ion	Ratio	Lower	Upper
63	100		
98	8.2	2.9	8.8
100	4.1	1.8	5.3



Instrument :
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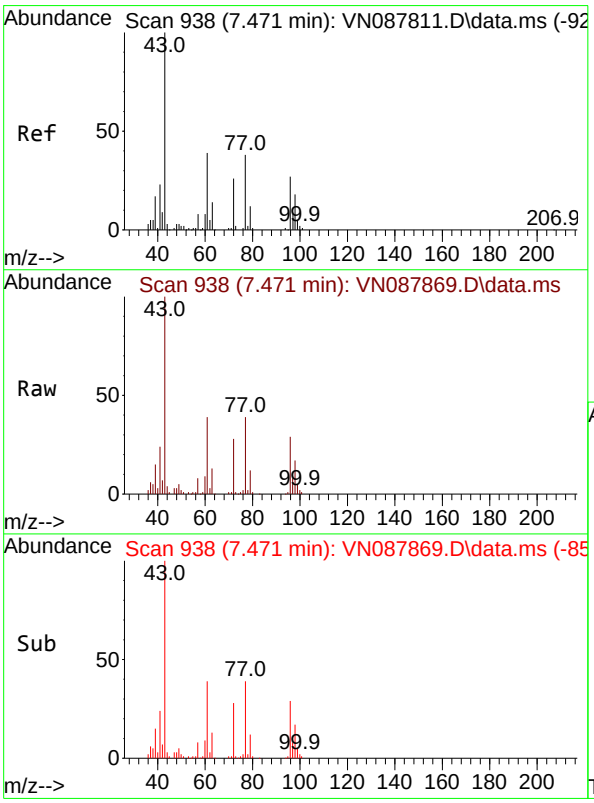
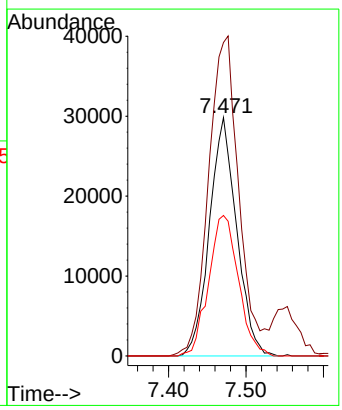
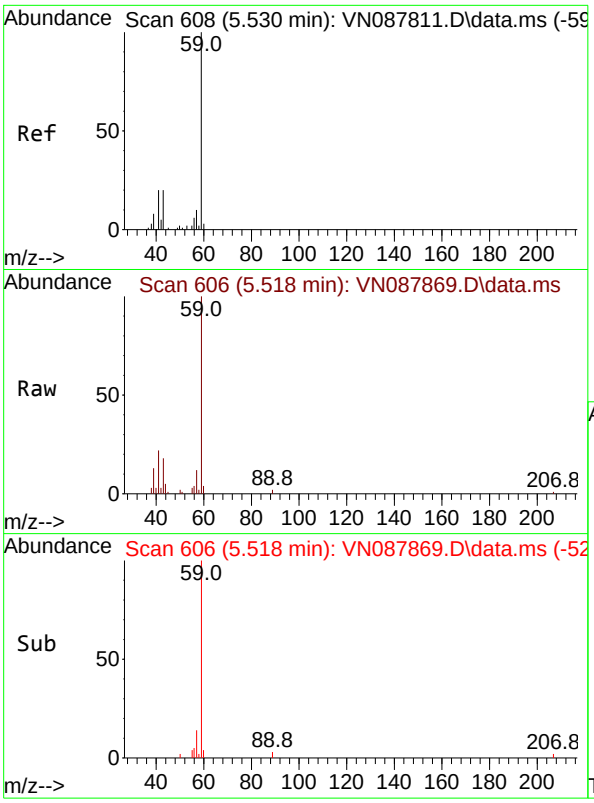


#22
cis-1,2-Dichloroethene
Concen: 18.692 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 96 Resp: 72845

Ion	Ratio	Lower	Upper
96	100		
61	147.1	118.2	177.2
98	64.5	51.6	77.4





#23
tert-Butyl Alcohol
Concen: 92.244 ug/l
RT: 5.518 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 59 Resp: 6811

Ion	Ratio	Lower	Upper
59	100		
52	0.0	0.0	0.0

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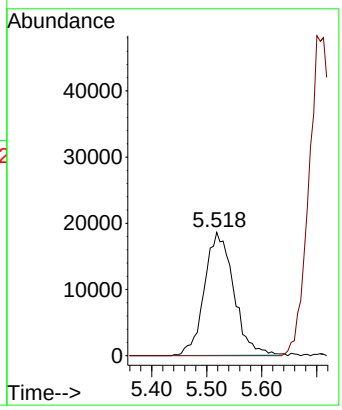
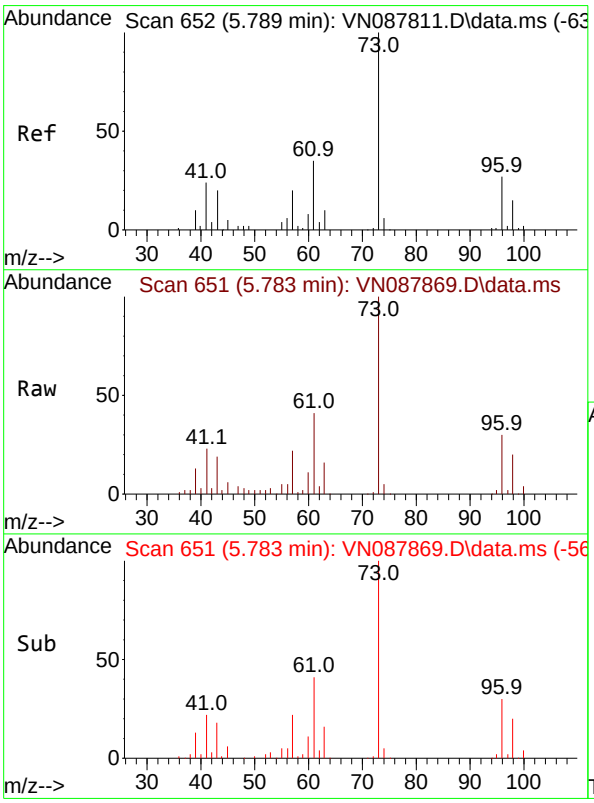
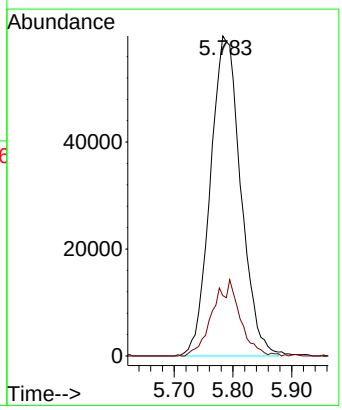


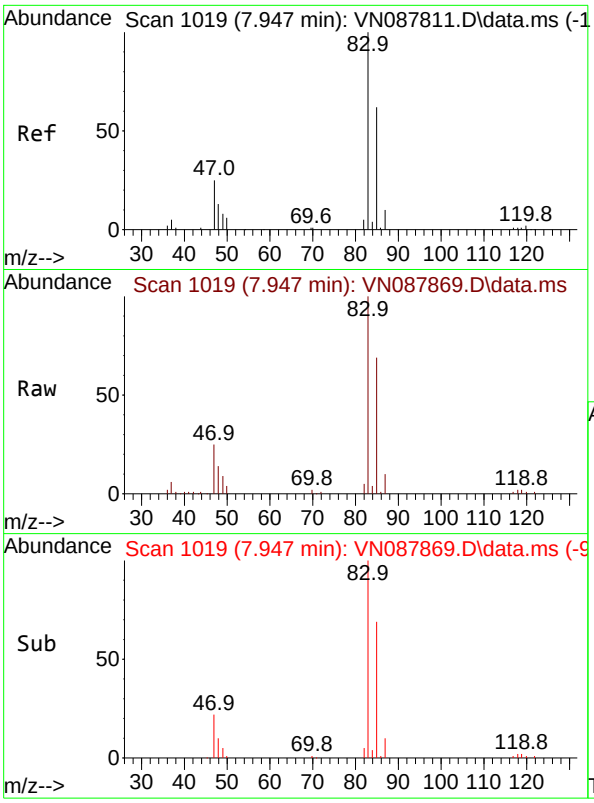


#24
Methyl tert-Butyl Ether
Concen: 19.098 ug/l
RT: 5.783 min Scan# 651
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 73 Resp: 214645

Ion	Ratio	Lower	Upper
73	100		
43	11.7	16.8	25.2#





#25
Chloroform
Concen: 18.683 ug/l
RT: 7.947 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 83 Resp: 12663

Ion	Ratio	Lower	Upper
83	100		
85	69.0	47.7	71.5

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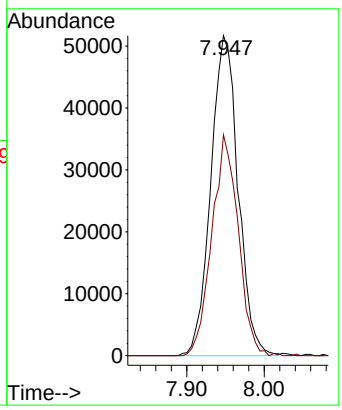
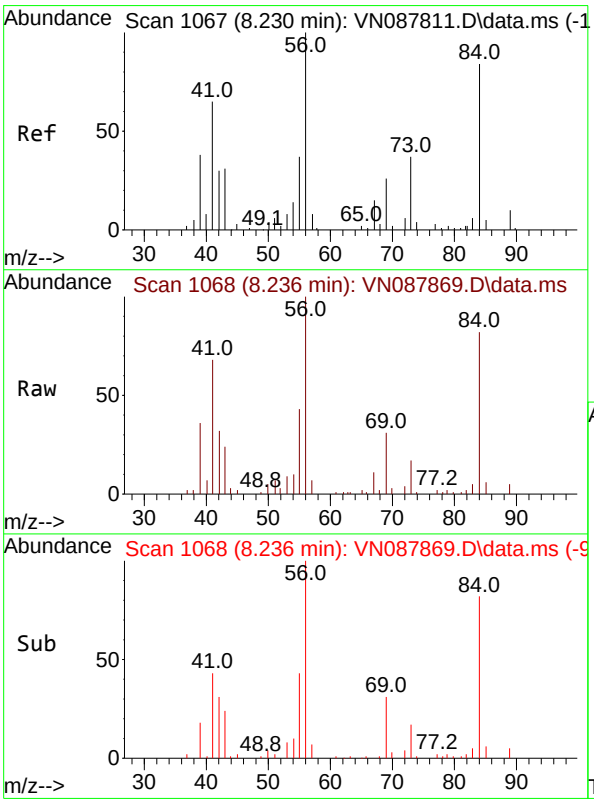
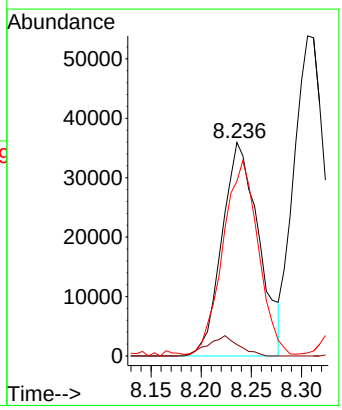


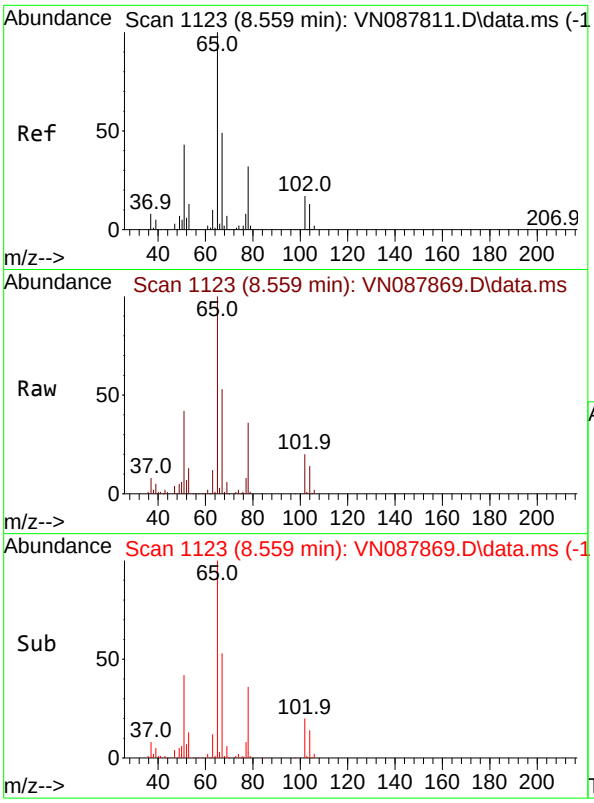


#26
Cyclohexane
Concen: 18.551 ug/l
RT: 8.236 min Scan# 1068
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 56 Resp: 91476

Ion	Ratio	Lower	Upper
56	100		
89	8.0	0.0	0.0#
84	88.6	69.4	104.2

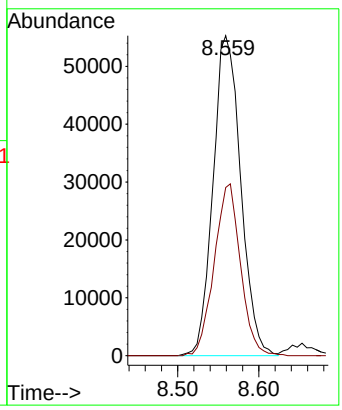




#27
1,2-Dichloroethane-d4
Concen: 29.406 ug/l
RT: 8.559 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 65 Resp: 13099

Ion	Ratio	Lower	Upper
65	100		
67	51.0	39.6	59.4



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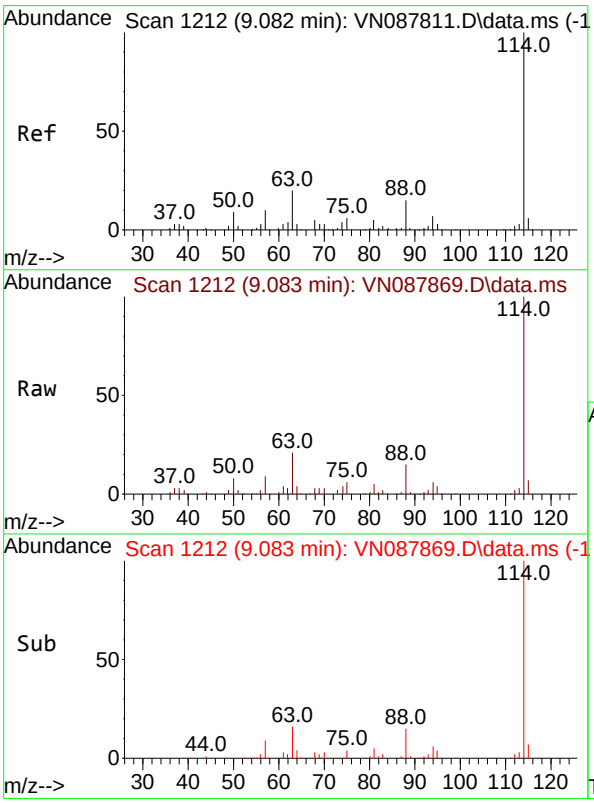
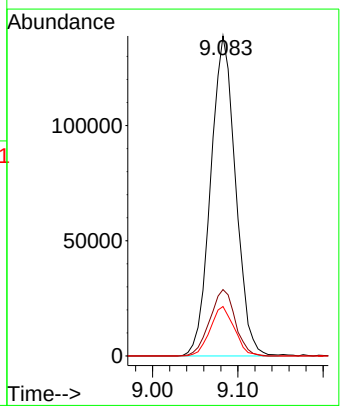
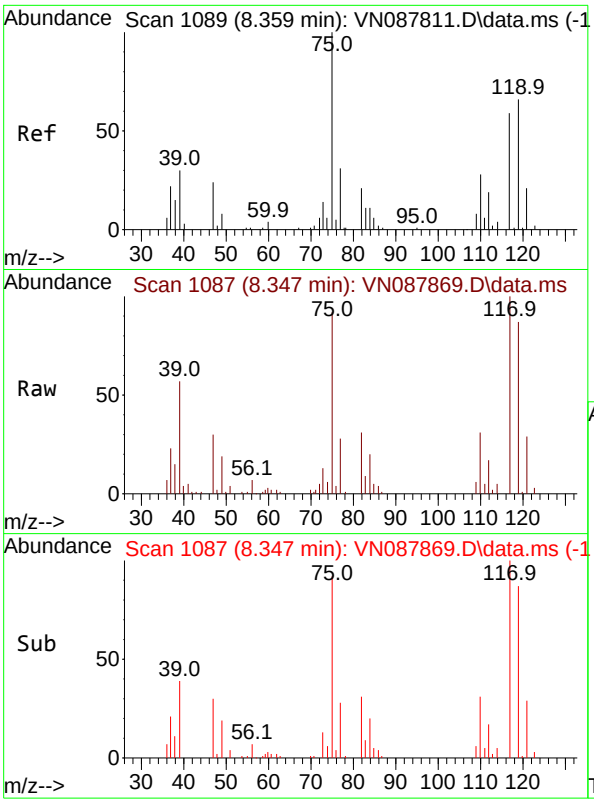


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.083 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:114 Resp: 281875

Ion	Ratio	Lower	Upper
114	100		
63	21.1	18.3	27.5
88	15.0	12.4	18.6

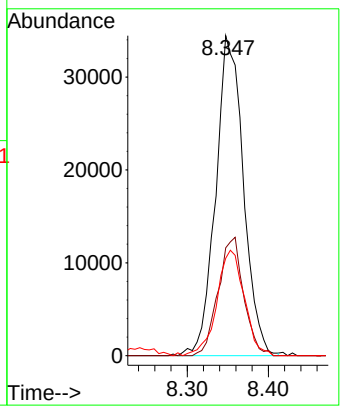




#29
1,1-Dichloropropene
Concen: 17.828 ug/l
RT: 8.347 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 75 Resp: 8166

Ion	Ratio	Lower	Upper
75	100		
110	33.8	0.0	64.4
77	32.6	0.0	62.2



Instrument :
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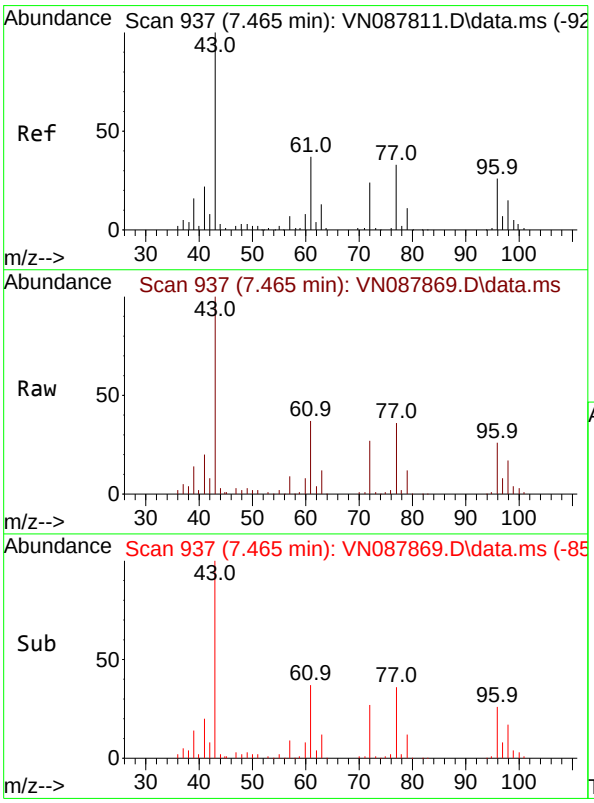
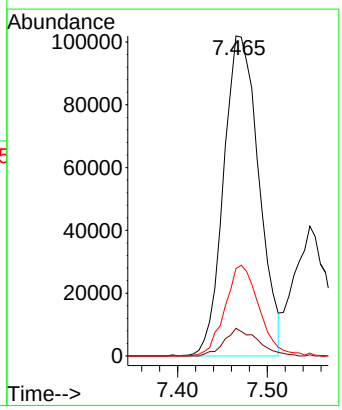
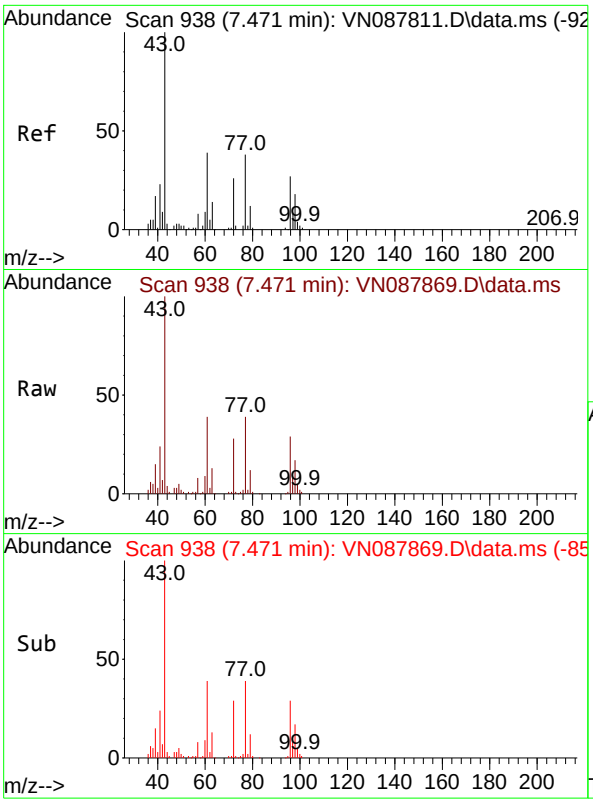


#30
2-Butanone
Concen: 88.150 ug/l
RT: 7.465 min Scan# 937
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 43 Resp: 278175

Ion	Ratio	Lower	Upper
43	100		
57	8.2	6.3	9.5
72	27.5	21.4	32.2





#31
2,2-Dichloropropane
Concen: 20.675 ug/l
RT: 7.471 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 77 Resp: 11416

Ion	Ratio	Lower	Upper
77	100		
97	10.8	17.1	25.7

Instrument :
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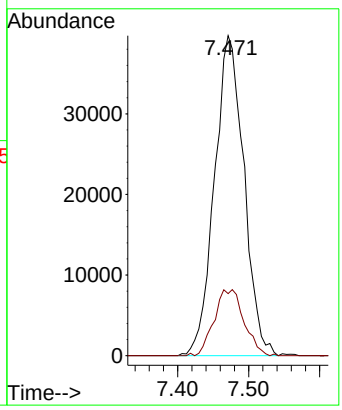
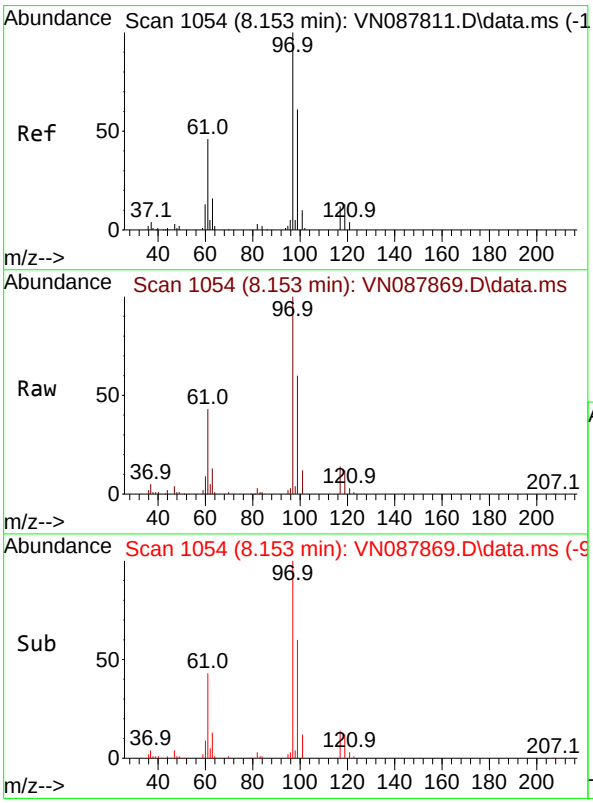
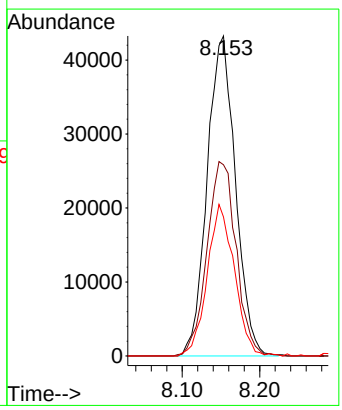


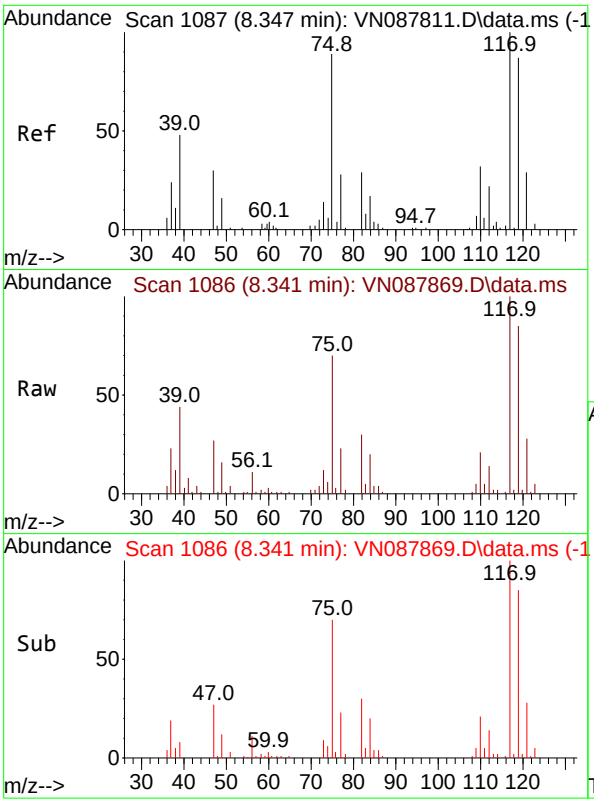


#32
1,1,1-Trichloroethane
Concen: 18.918 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 97 Resp: 109869

Ion	Ratio	Lower	Upper
97	100		
99	62.3	52.2	78.4
61	45.2	37.9	56.9

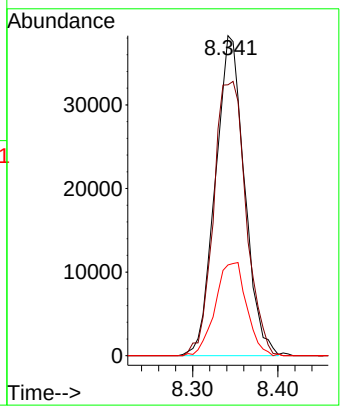




#33
Carbon Tetrachloride
Concen: 18.801 ug/l
RT: 8.341 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:117 Resp: 9104

Ion	Ratio	Lower	Upper
117	100		
119	84.7	77.3	115.9
121	28.4	26.6	39.8



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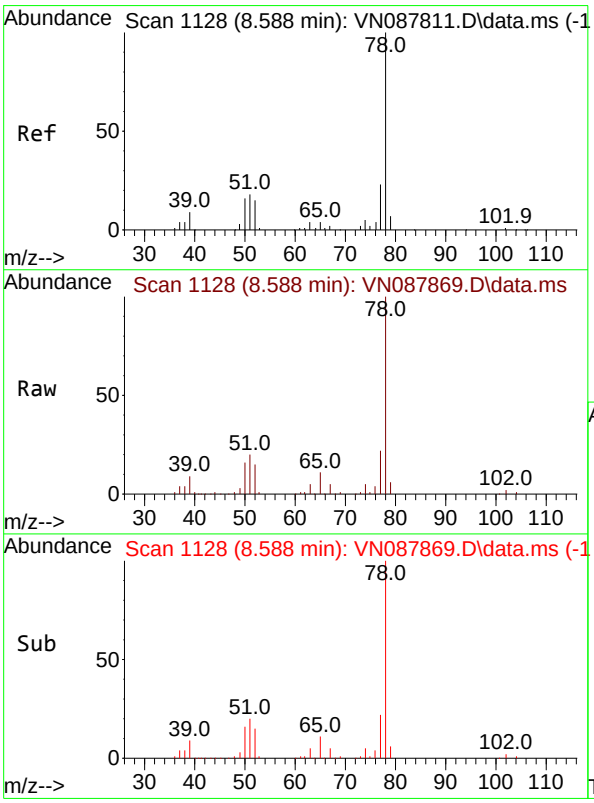
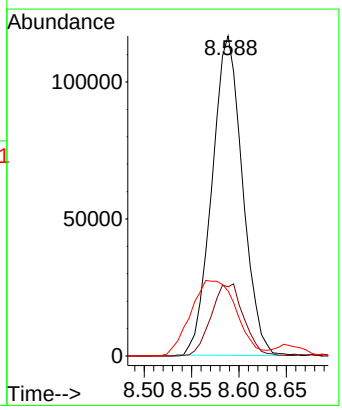
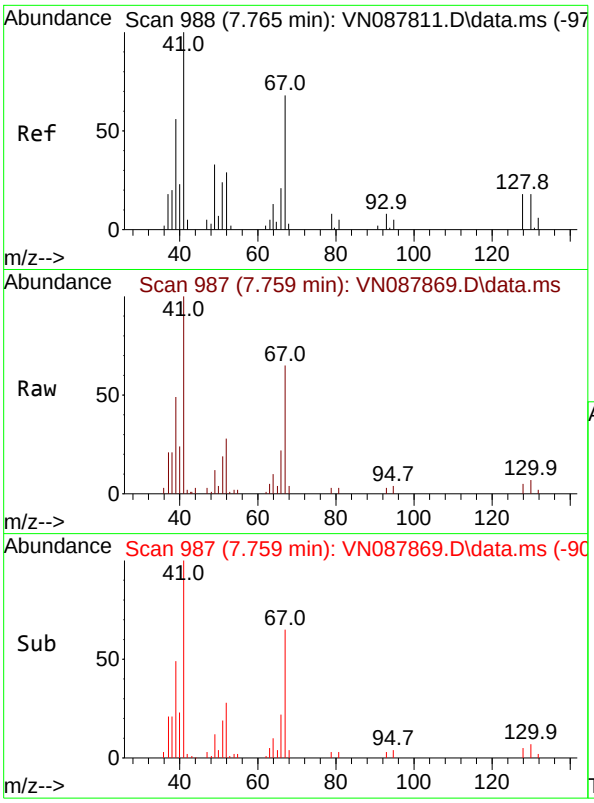


#34
Benzene
Concen: 17.628 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 78 Resp: 260993

Ion	Ratio	Lower	Upper
78	100		
77	21.7	20.3	30.5
51	17.7	18.0	27.0#

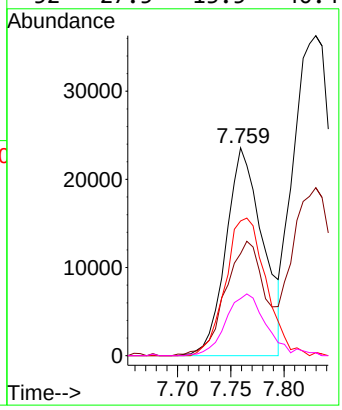




#35
Methacrylonitrile
Concen: 17.244 ug/l
RT: 7.759 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 41 Resp: 5691

Ion	Ratio	Lower	Upper
41	100		
39	48.3	27.1	81.2
67	64.8	32.1	96.5
52	27.5	13.5	40.4



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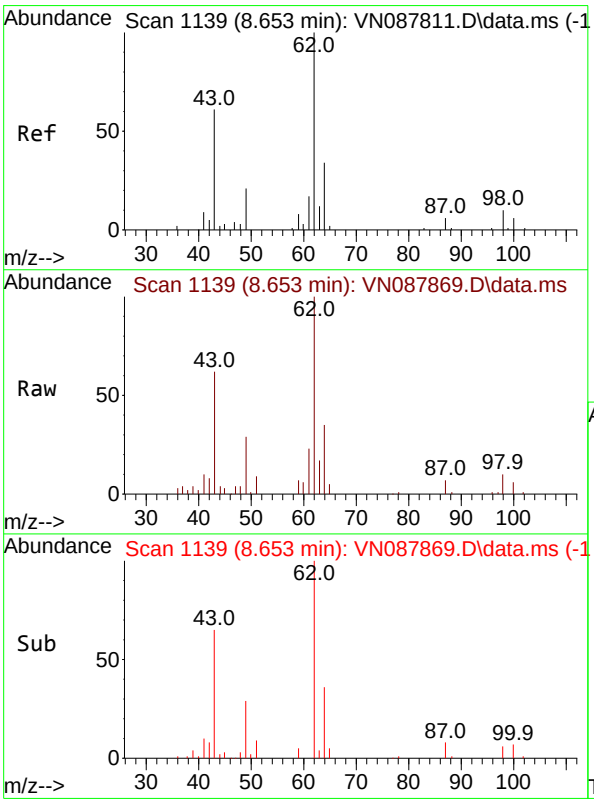
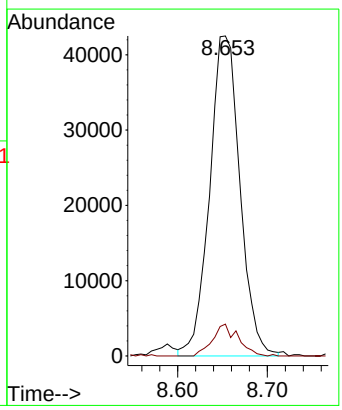
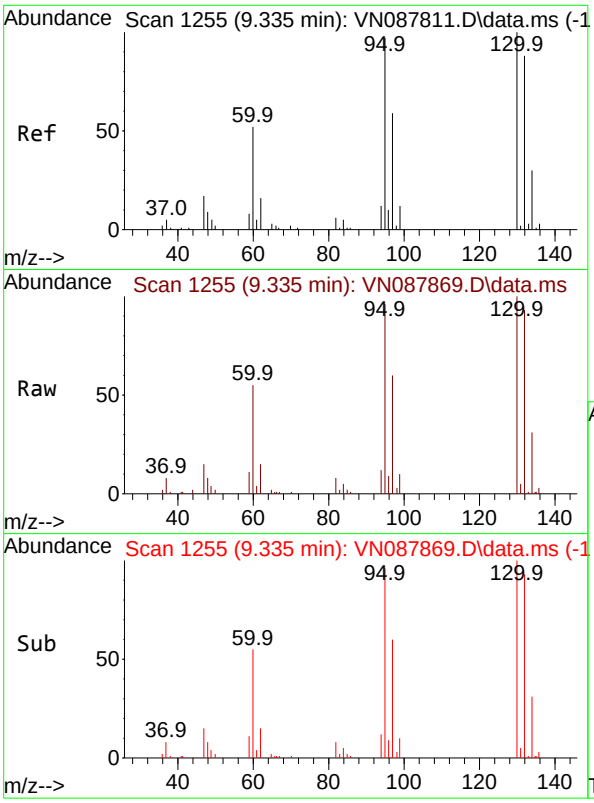


#36
1,2-Dichloroethane
Concen: 17.869 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 62 Resp: 99931

Ion	Ratio	Lower	Upper
62	100		
98	8.4	7.2	10.8

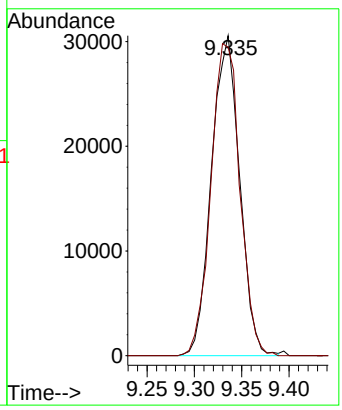




#37
Trichloroethene
Concen: 19.090 ug/l
RT: 9.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:130 Resp: 6317

Ion	Ratio	Lower	Upper
130	100		
95	96.4	82.7	124.1



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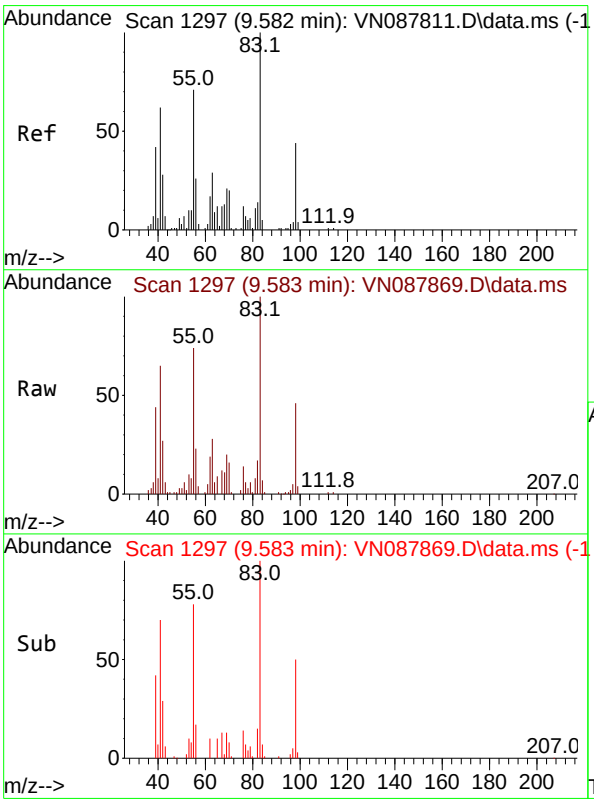
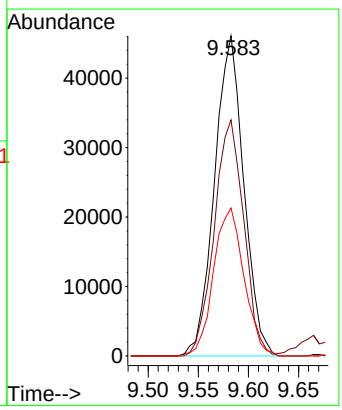
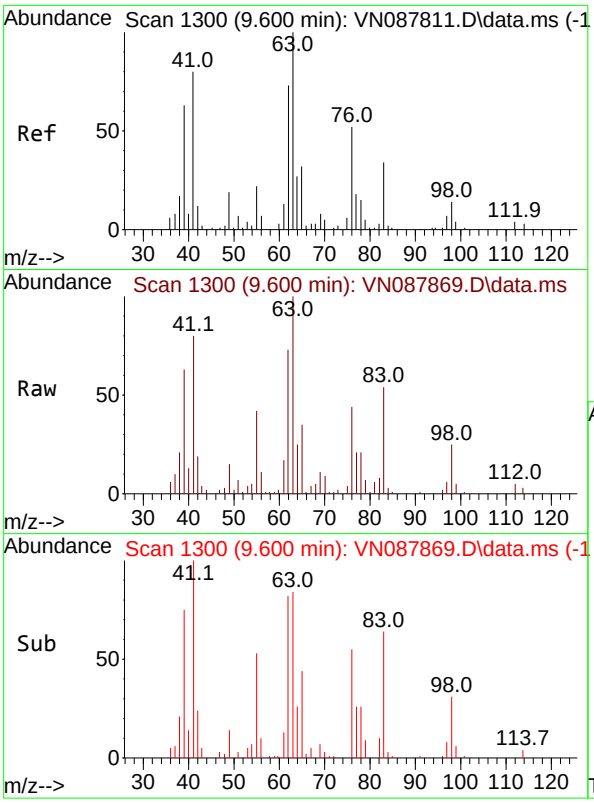


#38
Methylcyclohexane
Concen: 18.550 ug/l
RT: 9.583 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 83 Resp: 93569

Ion	Ratio	Lower	Upper
83	100		
55	74.3	40.4	121.1
98	47.9	24.0	72.0

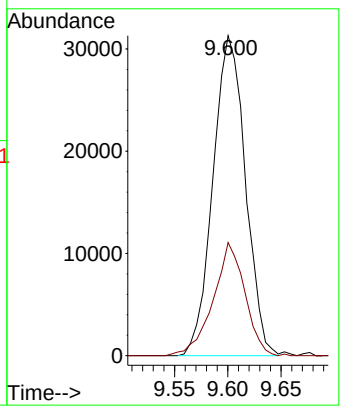




#39
1,2-Dichloropropane
Concen: 17.494 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 63 Resp: 6633

Ion	Ratio	Lower	Upper
63	100		
65	35.4	24.1	36.1



Instrument :
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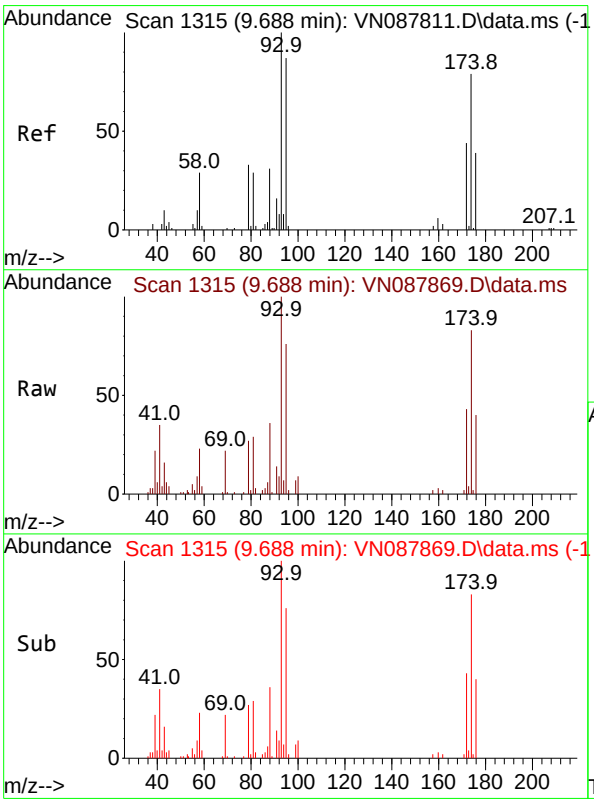
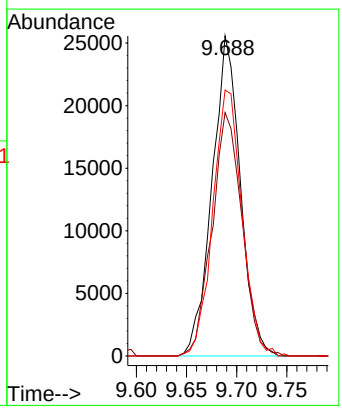
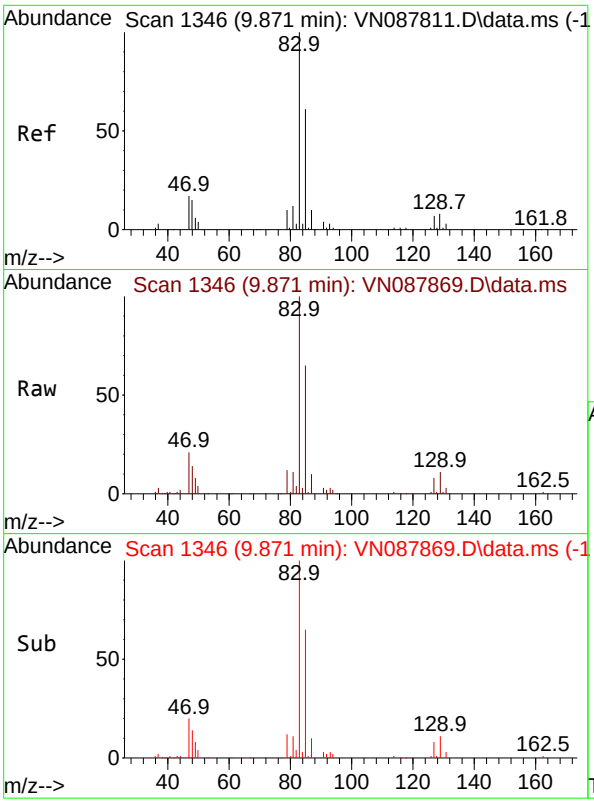


#40
Dibromomethane
Concen: 17.772 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 93 Resp: 50151

Ion	Ratio	Lower	Upper
93	100		
95	80.6	0.0	168.4
174	85.7	0.0	162.8

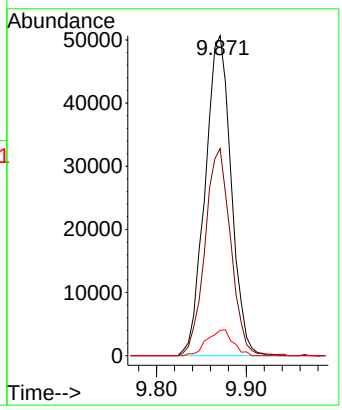




#41
Bromodichloromethane
Concen: 17.689 ug/l
RT: 9.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 83 Resp: 10202

Ion	Ratio	Lower	Upper
83	100		
85	64.7	47.3	70.9
127	7.9	5.2	7.8



Instrument :
MSVOA_N
ClientSampleId :
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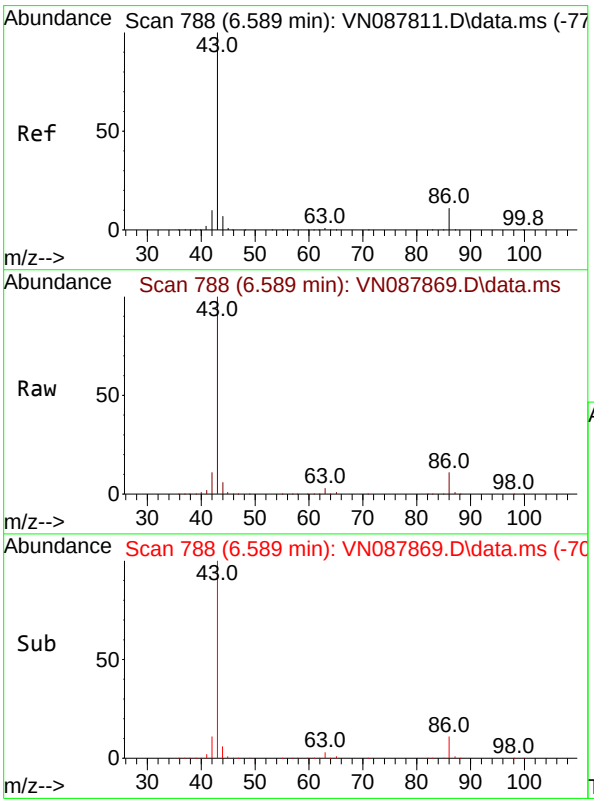
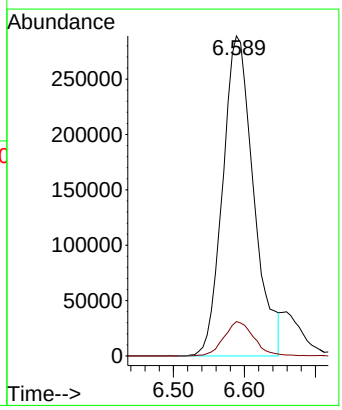
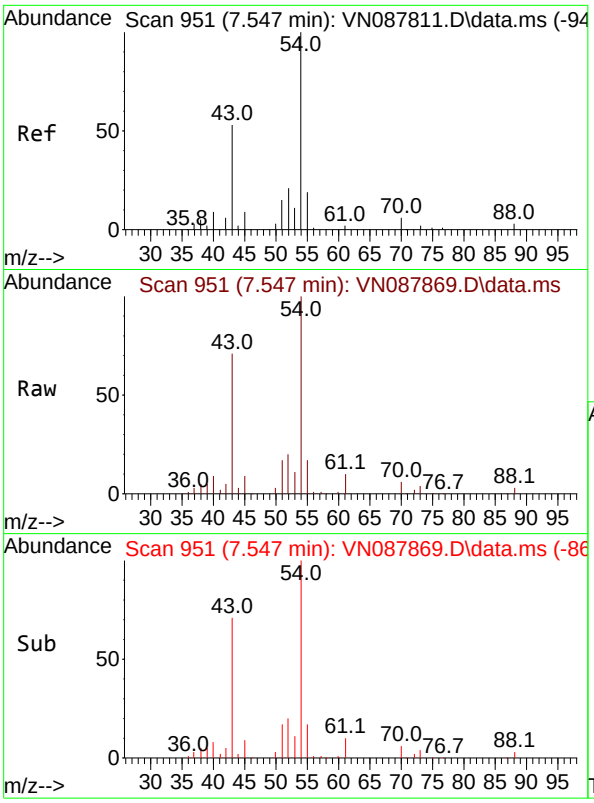


#42
Vinyl Acetate
Concen: 82.808 ug/l
RT: 6.589 min Scan# 788
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 43 Resp: 873112

Ion	Ratio	Lower	Upper
43	100		
86	10.4	7.7	11.5

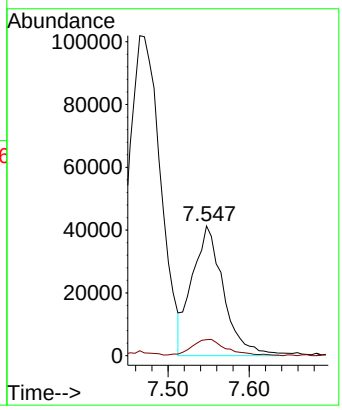




#43
Ethyl Acetate
Concen: 17.221 ug/l
RT: 7.547 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 43 Resp: 11103

Ion	Ratio	Lower	Upper
43	100		
45	13.6	10.5	15.7



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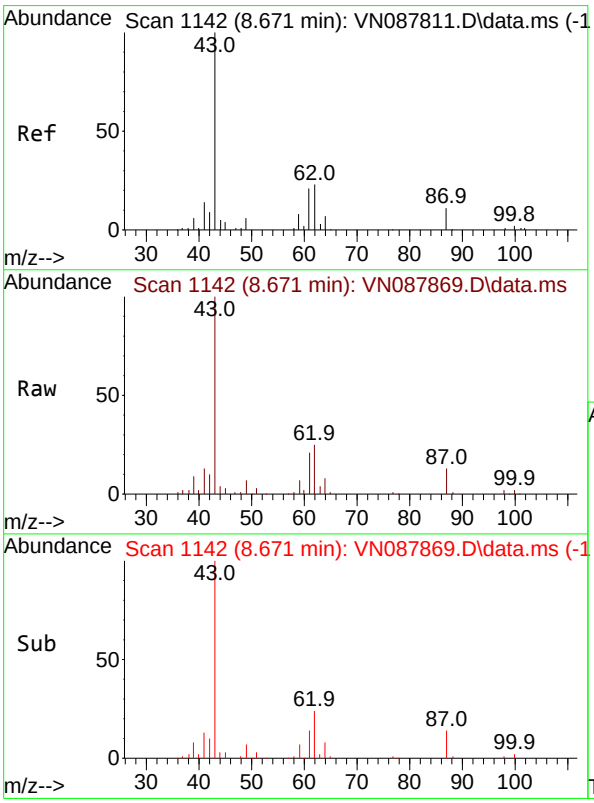
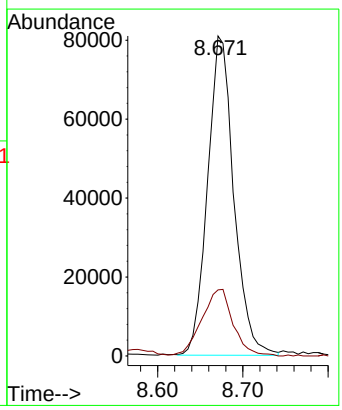
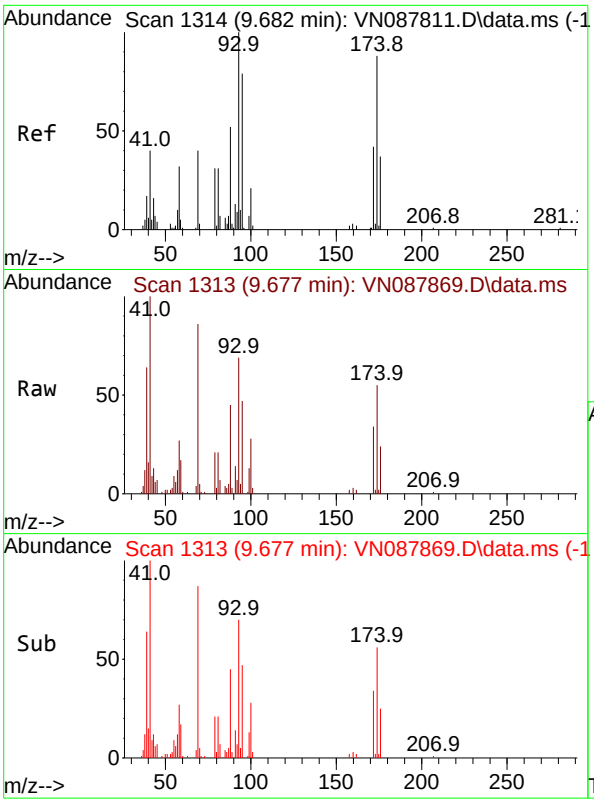


#44
Isopropyl Acetate
Concen: 17.138 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 43 Resp: 173222

Ion	Ratio	Lower	Upper
43	100		
61	24.9	19.5	29.3





#45
1,4-Dioxane
Concen: 354.558 ug/l
RT: 9.677 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 88 Resp: 2260

Ion	Ratio	Lower	Upper
88	100		
43	4.5	23.6	35.4
58	65.7	60.5	90.7

Instrument :
MSVOA_N
ClientSampleId :
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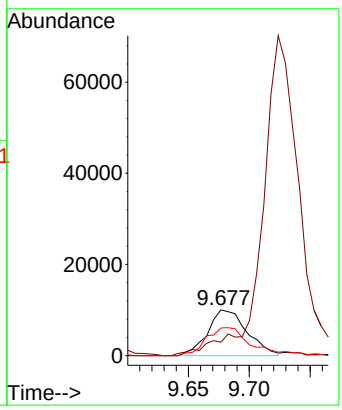
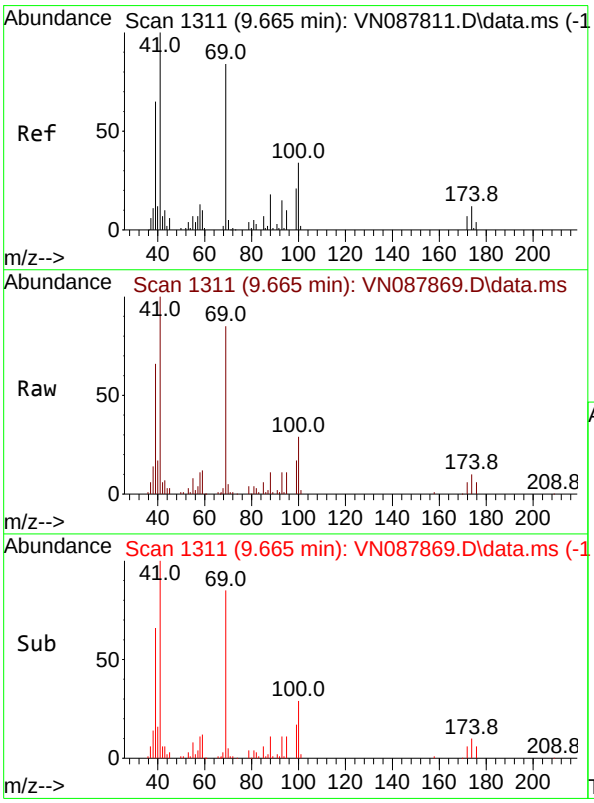
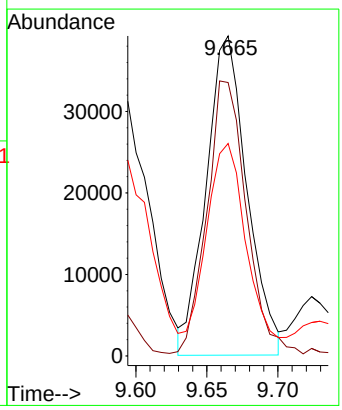


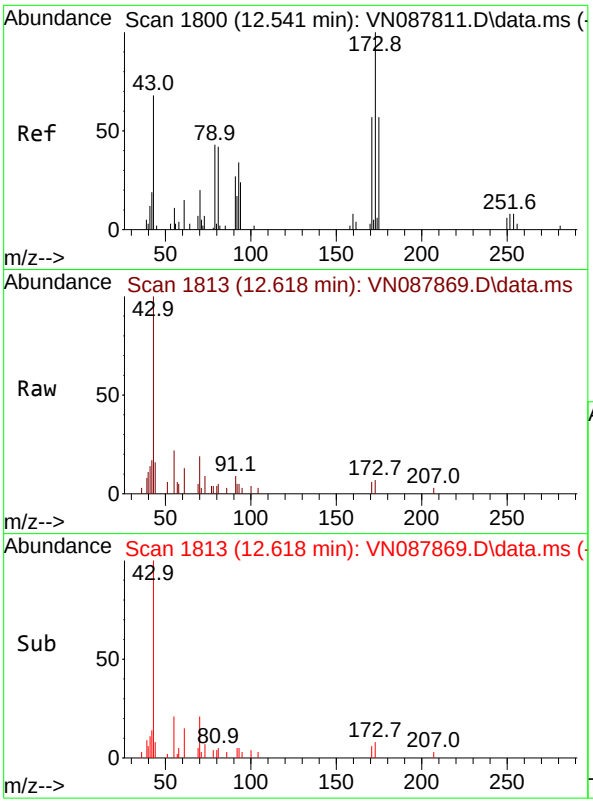


#46
Methyl methacrylate
Concen: 16.814 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 41 Resp: 78333

Ion	Ratio	Lower	Upper
41	100		
69	90.9	40.3	120.9
39	65.5	31.9	95.9

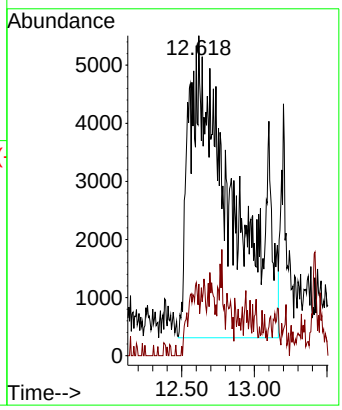




#47
n-amyl Acetate
Concen: 15.176 ug/l m
RT: 12.618 min Scan# 1
Delta R.T. -0.053 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 43 Resp: 10365

Ion	Ratio	Lower	Upper
43	100		
55	0.3	0.7	1.1#



Instrument :
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ClientSampleId :
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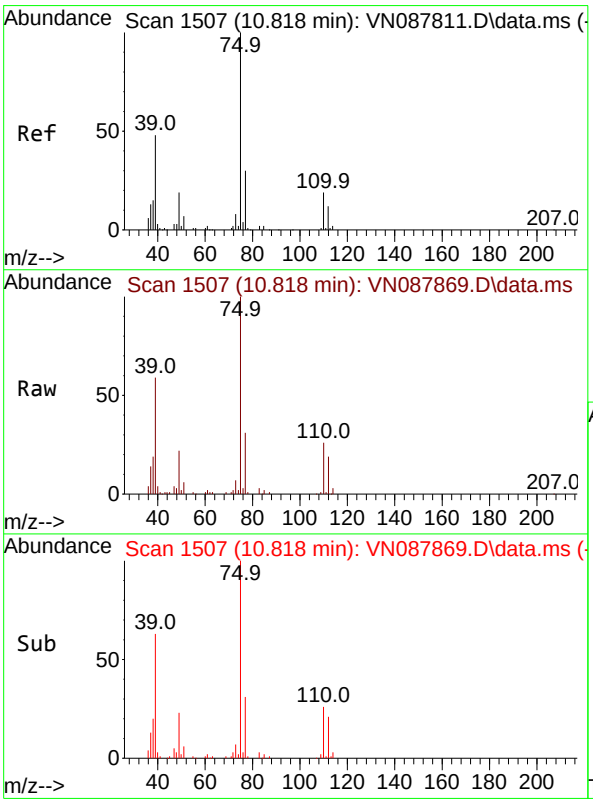
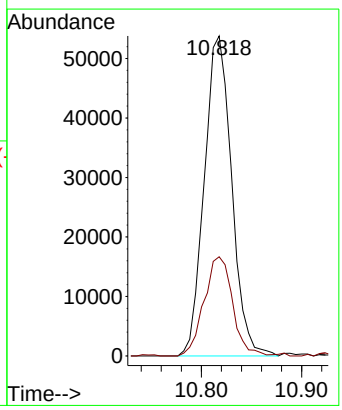
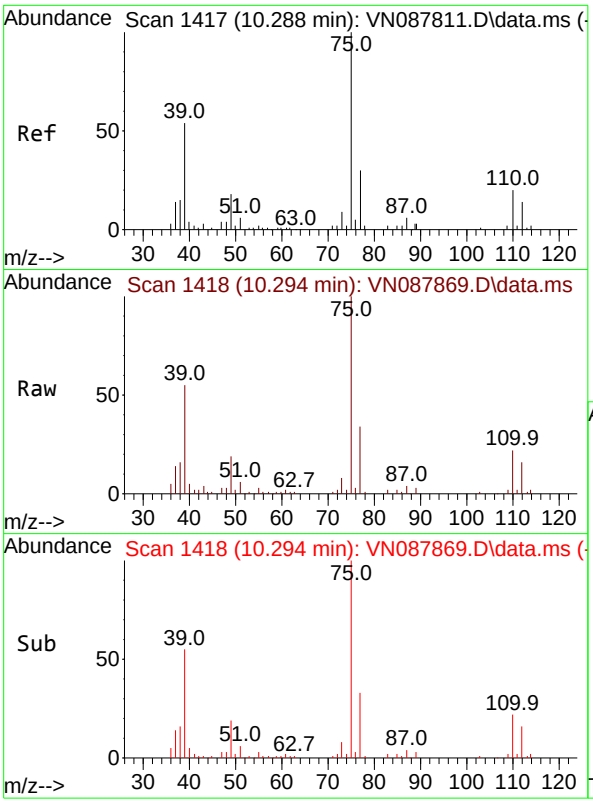


#48
t-1,3-Dichloropropene
Concen: 17.051 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 75 Resp: 102141

Ion	Ratio	Lower	Upper
75	100		
77	31.0	24.7	37.1

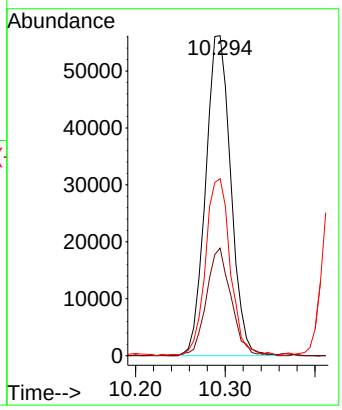




#49
cis-1,3-Dichloropropene
Concen: 17.874 ug/l
RT: 10.294 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 75 Resp: 10966

Ion	Ratio	Lower	Upper
75	100		
77	33.6	27.8	41.6
39	55.3	47.6	71.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

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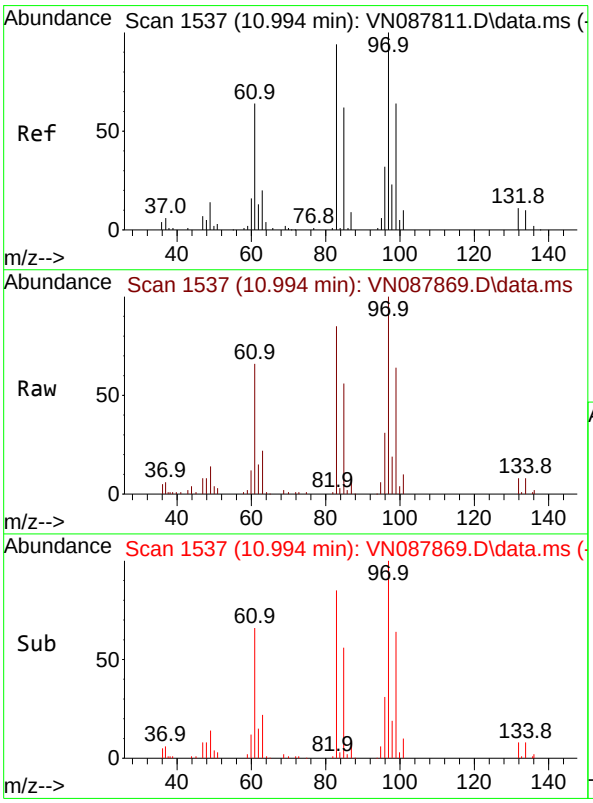
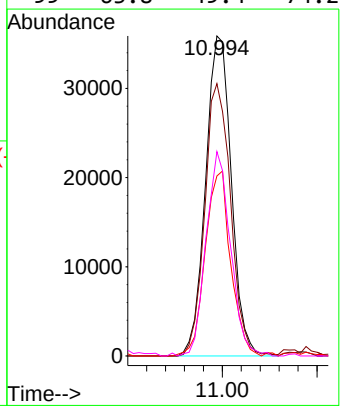
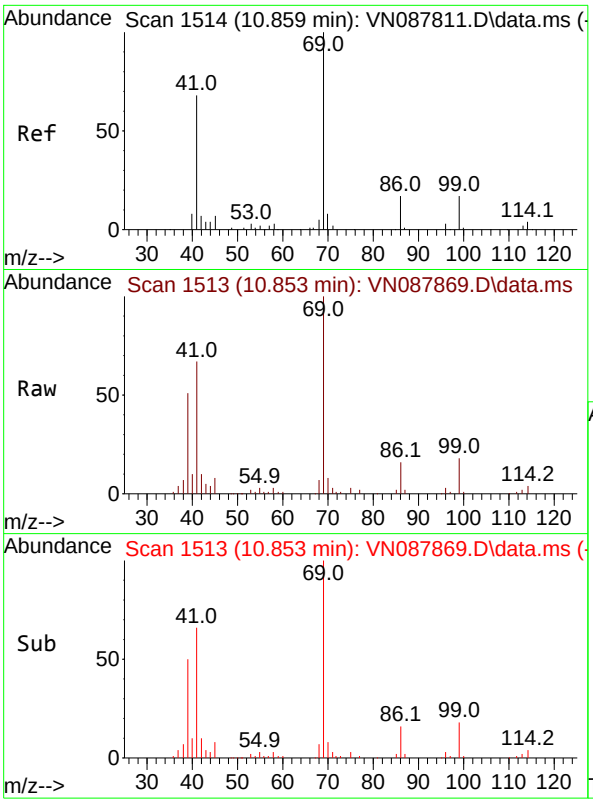


#50
1,1,2-Trichloroethane
Concen: 18.631 ug/l
RT: 10.994 min Scan# 1537
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 97 Resp: 67907

Ion	Ratio	Lower	Upper
97	100		
83	85.1	70.5	105.7
85	56.3	46.3	69.5
99	63.8	49.4	74.2

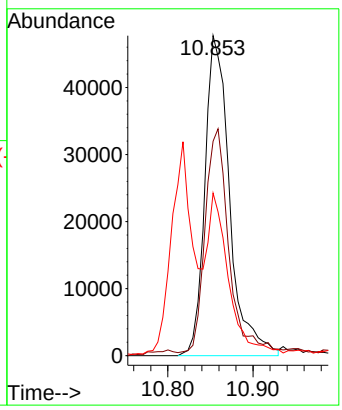




#51
Ethyl methacrylate
Concen: 16.987 ug/l
RT: 10.853 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 69 Resp: 9635

Ion	Ratio	Lower	Upper
69	100		
41	66.1	33.7	101.0
39	48.8	20.3	60.9



Instrument :
MSVOA_N
ClientSampleId :
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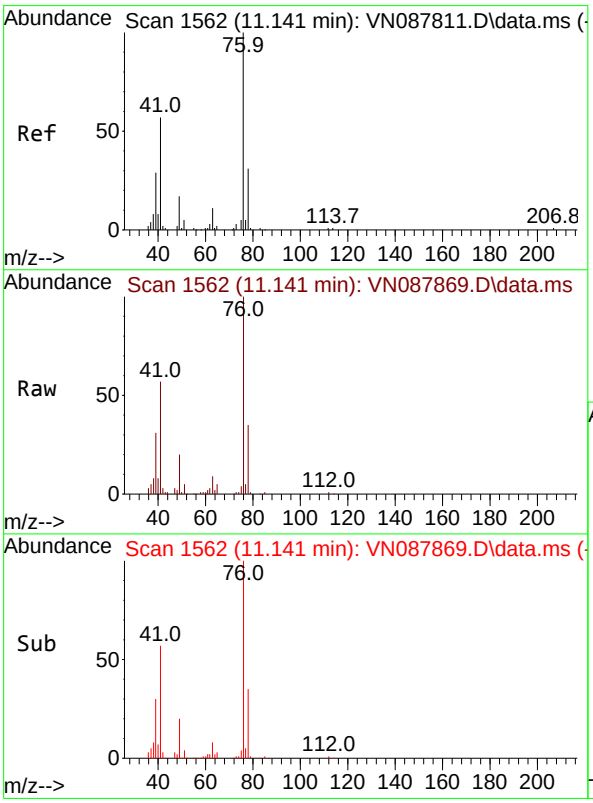
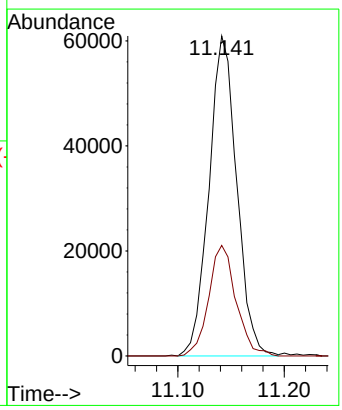
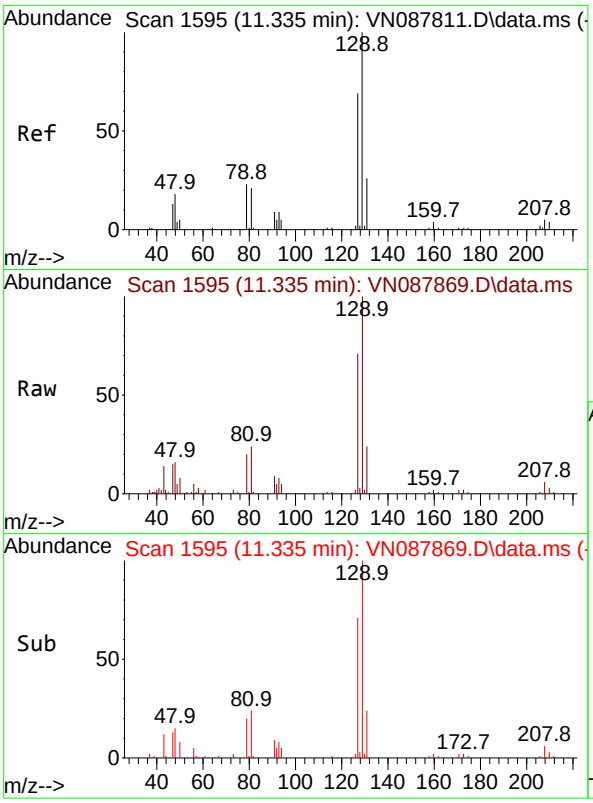


#52
1,3-Dichloropropane
Concen: 17.456 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 76 Resp: 110479

Ion	Ratio	Lower	Upper
76	100		
78	33.6	0.0	65.2

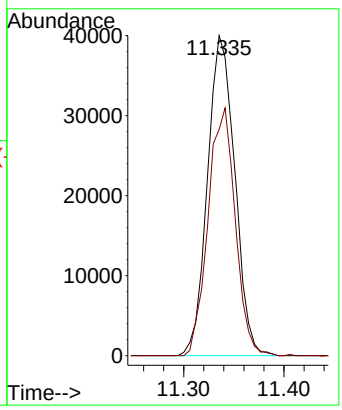




#53
Dibromochloromethane
Concen: 18.558 ug/l
RT: 11.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:129 Resp: 7584

Ion	Ratio	Lower	Upper
129	100		
127	77.0	42.6	128.0



Instrument :
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ClientSampleId :
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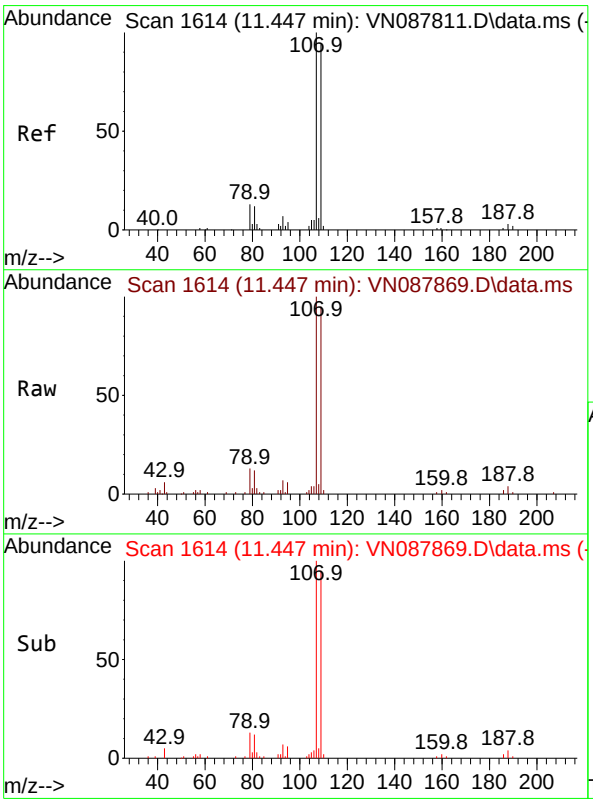
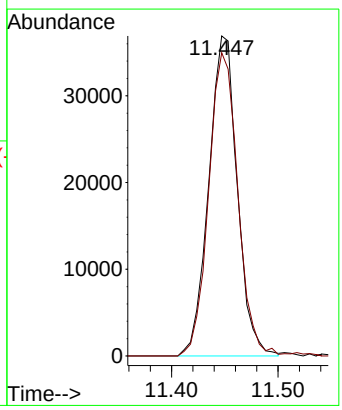
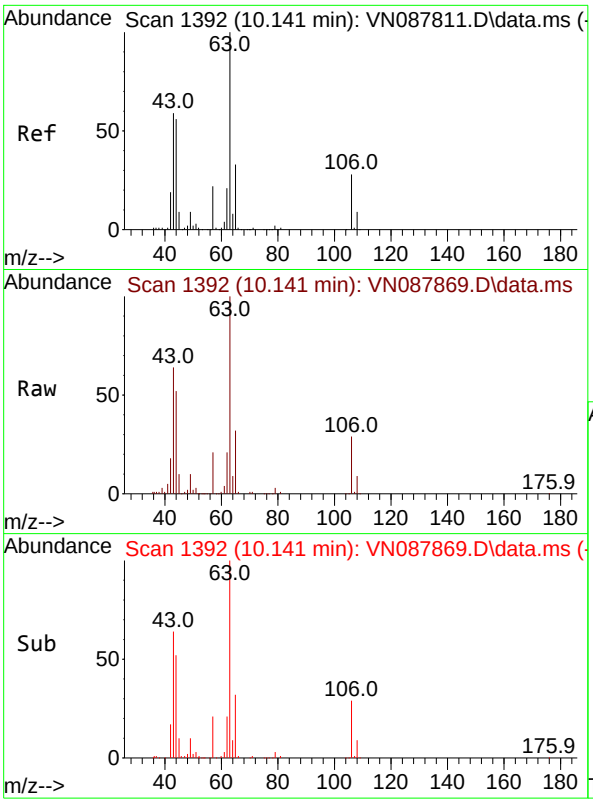


#54
1,2-Dibromoethane
Concen: 18.087 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:107 Resp: 68595

Ion	Ratio	Lower	Upper
107	100		
109	96.6	74.6	112.0





#55
2-Chloroethyl vinyl ether
Concen: 89.490 ug/l
RT: 10.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Tgt Ion: 63 Resp: 29084

Ion	Ratio	Lower	Upper
63	100		
65	32.4	26.6	40.0
106	28.2	21.1	31.7

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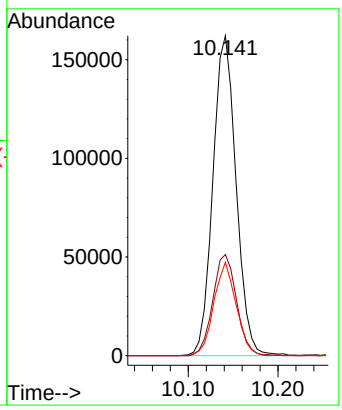
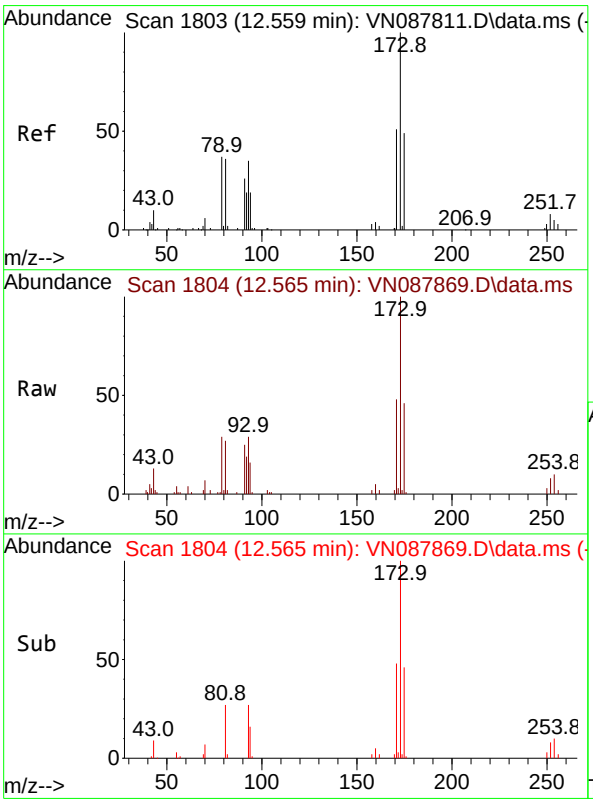
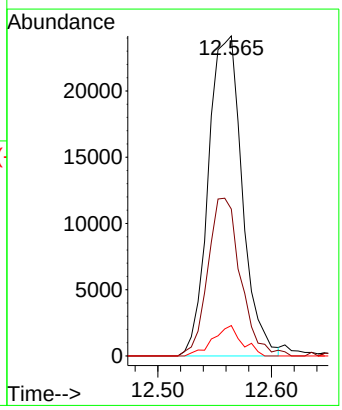


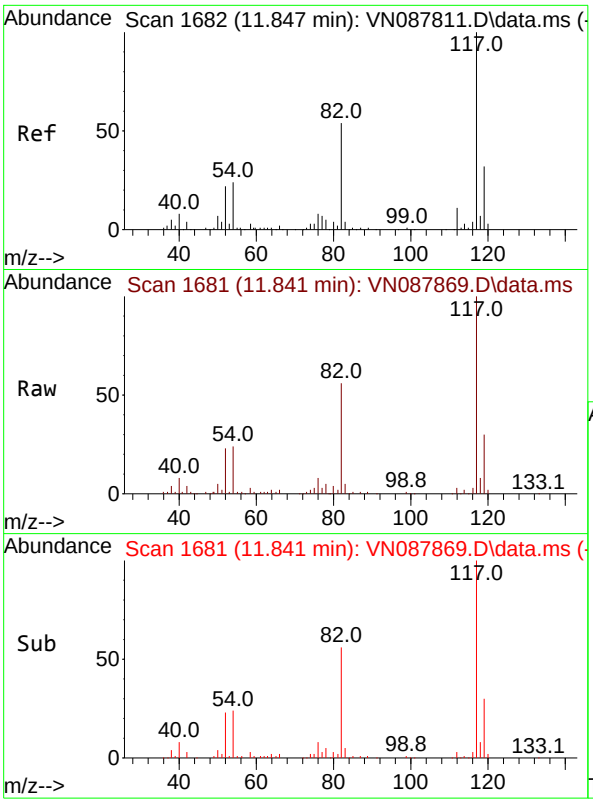


#56
Bromoform
Concen: 18.693 ug/l
RT: 12.565 min Scan# 1804
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:173 Resp: 49888

Ion	Ratio	Lower	Upper
173	100		
175	47.2	39.8	59.6
254	8.2	6.2	9.4

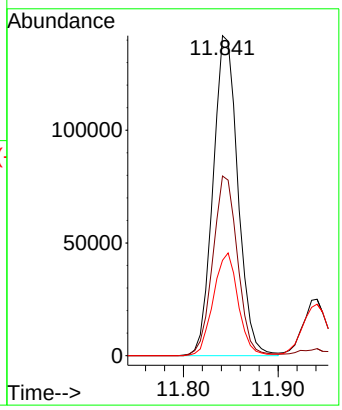




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.841 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:117 Resp: 25893

Ion	Ratio	Lower	Upper
117	100		
82	56.0	45.9	68.9
119	32.1	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

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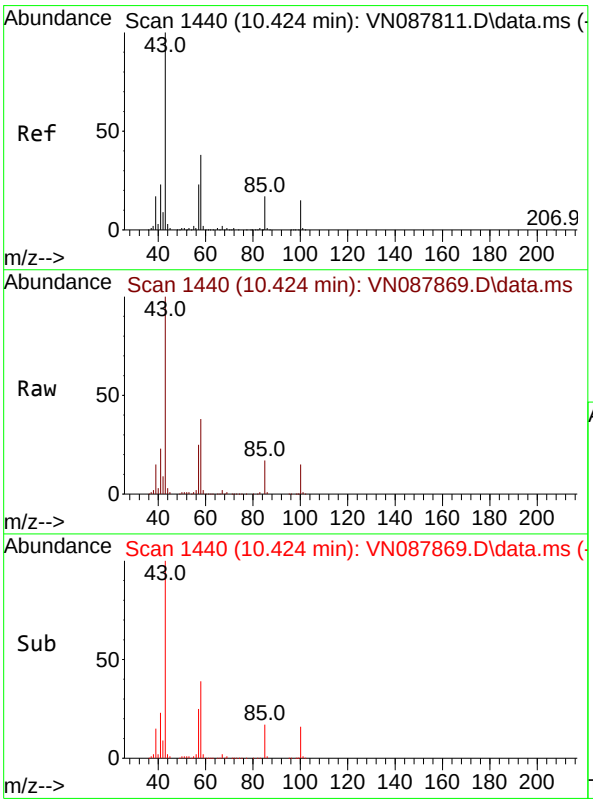
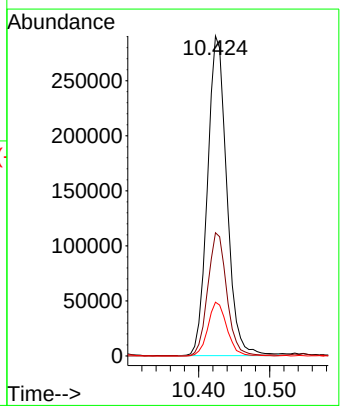
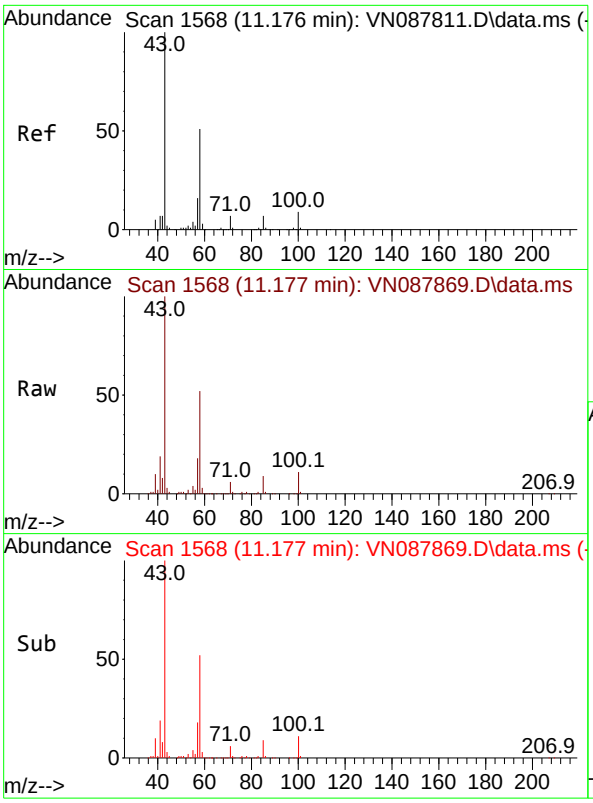


#58
4-Methyl-2-Pentanone
Concen: 89.532 ug/l
RT: 10.424 min Scan# 1440
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 43 Resp: 548165

Ion	Ratio	Lower	Upper
43	100		
58	37.8	29.6	44.4
85	16.6	13.0	19.4





#59
2-Hexanone
Concen: 88.377 ug/l
RT: 11.177 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 43 Resp: 35357

Ion	Ratio	Lower	Upper
43	100		
58	53.8	40.2	60.4
57	17.8	13.7	20.5

Instrument :
MSVOA_N
ClientSampleId :
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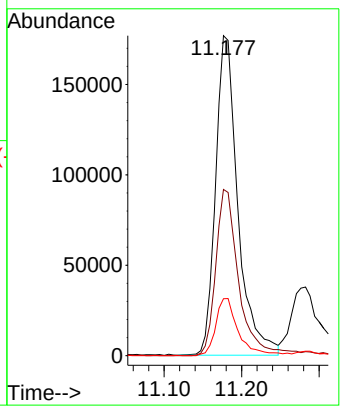
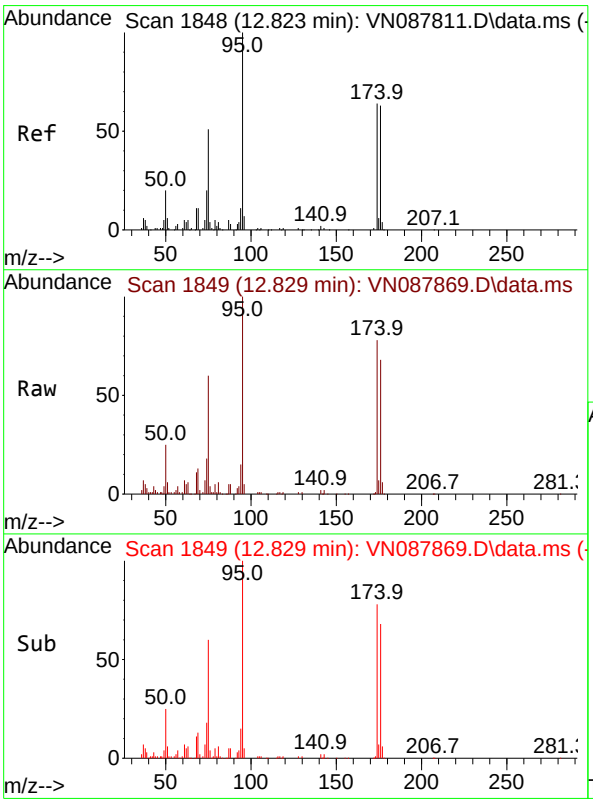
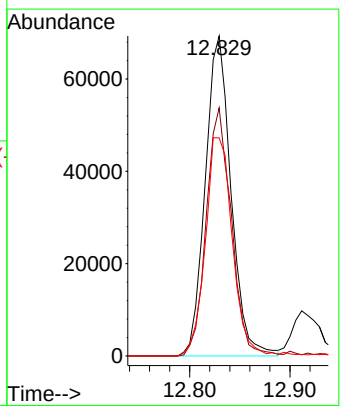


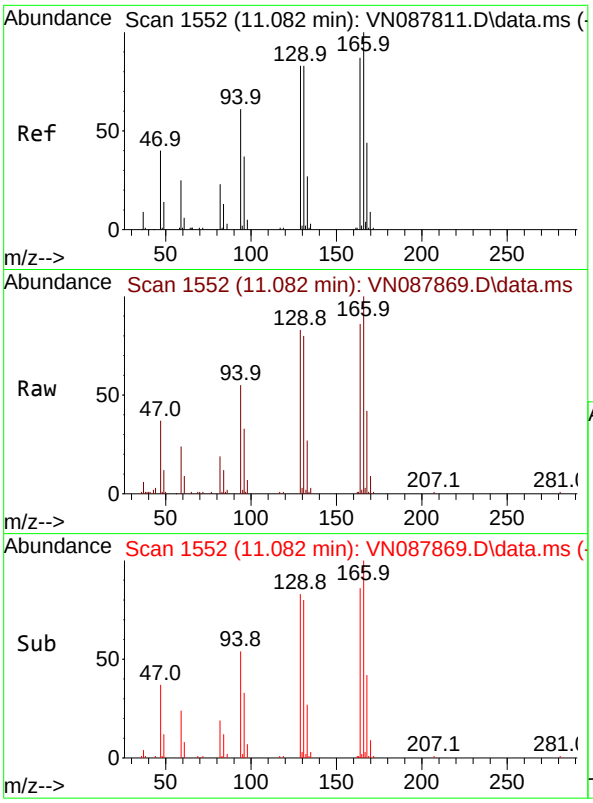


#60
4-Bromofluorobenzene
Concen: 29.761 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 95 Resp: 123908

Ion	Ratio	Lower	Upper
95	100		
174	75.2	55.4	83.0
176	71.4	51.5	77.3

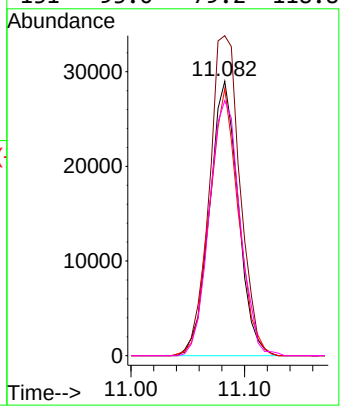




#61
Tetrachloroethene
Concen: 19.754 ug/l
RT: 11.082 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:164 Resp: 5092

Ion	Ratio	Lower	Upper
164	100		
166	116.6	97.3	145.9
129	97.3	78.6	117.8
131	93.0	79.2	118.8



Instrument :
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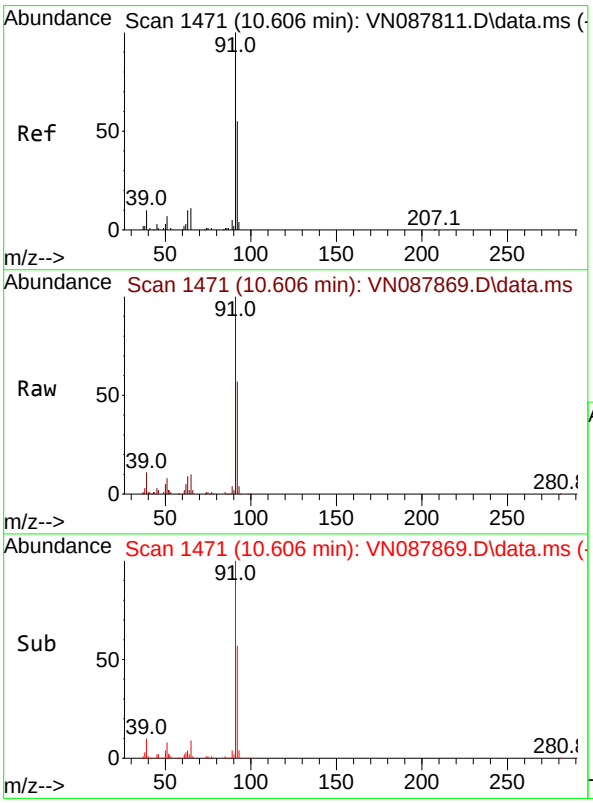
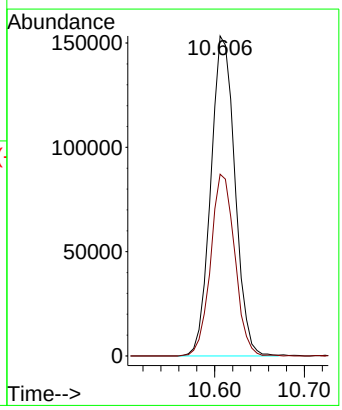
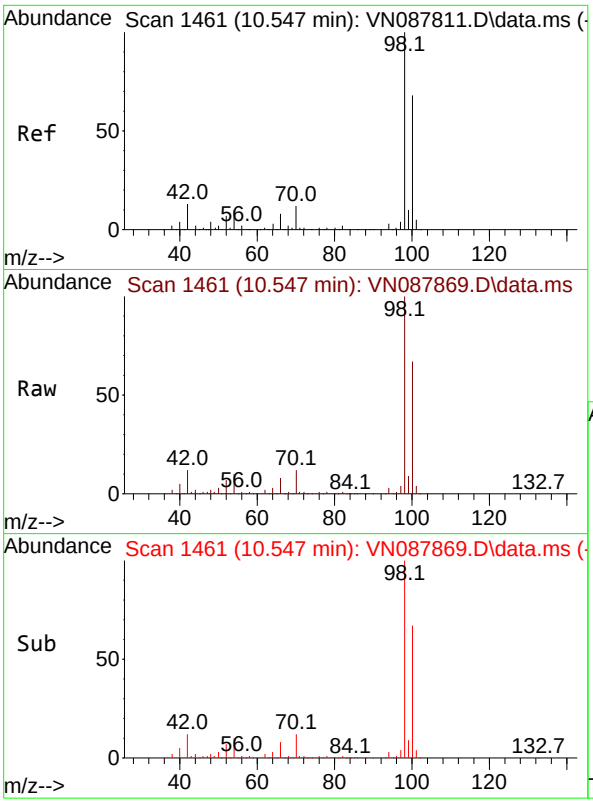


#62
Toluene
Concen: 18.296 ug/l
RT: 10.606 min Scan# 1471
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 91 Resp: 286562

Ion	Ratio	Lower	Upper
91	100		
92	56.6	45.4	68.0





#63
Toluene-d8
Concen: 28.879 ug/l
RT: 10.547 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 98 Resp: 34775

Ion	Ratio	Lower	Upper
98	100		
100	65.6	50.6	76.0

Instrument :
MSVOA_N
ClientSampleId :
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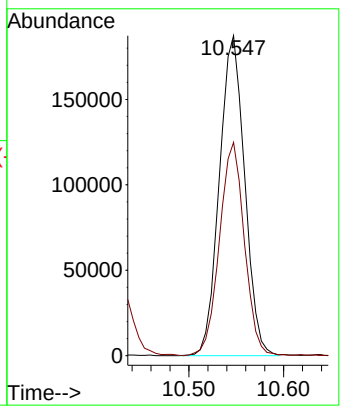
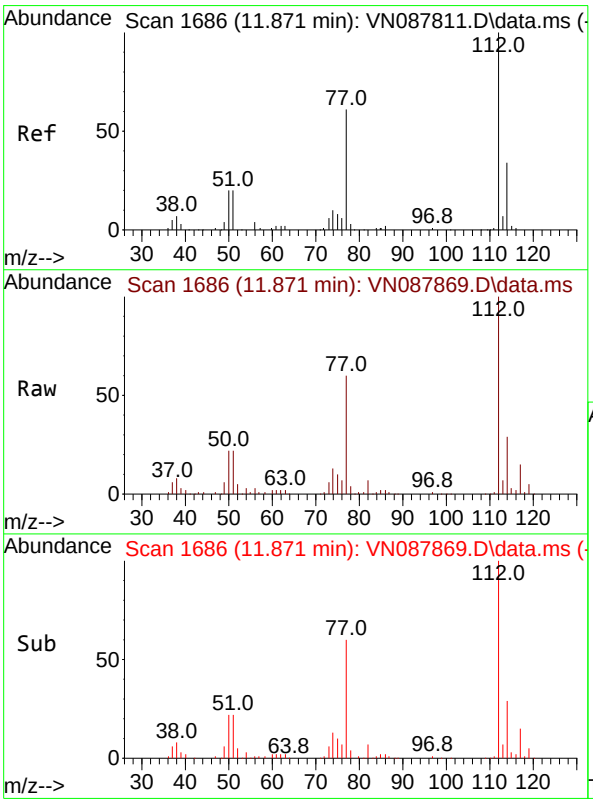
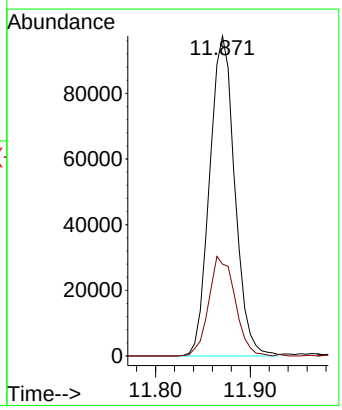


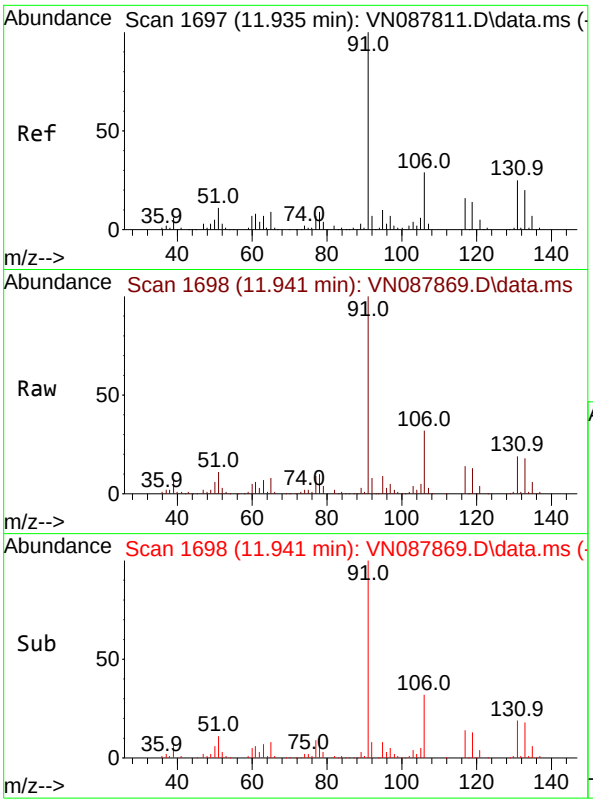


#64
Chlorobenzene
Concen: 18.713 ug/l
RT: 11.871 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:112 Resp: 179893

Ion	Ratio	Lower	Upper
112	100		
114	28.7	23.5	35.3

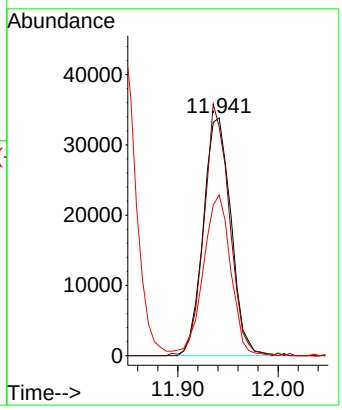




#65
1,1,1,2-Tetrachloroethane
Concen: 19.239 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:131 Resp: 6511

Ion	Ratio	Lower	Upper
131	100		
133	96.8	0.0	195.8
119	66.9	0.0	139.0



Instrument :
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ClientSampleId :
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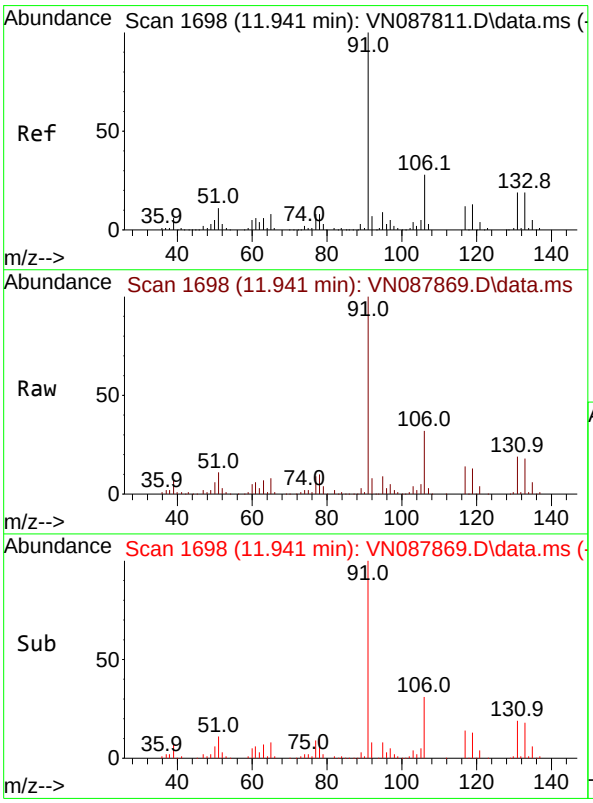
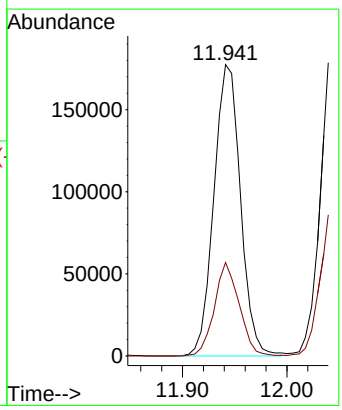
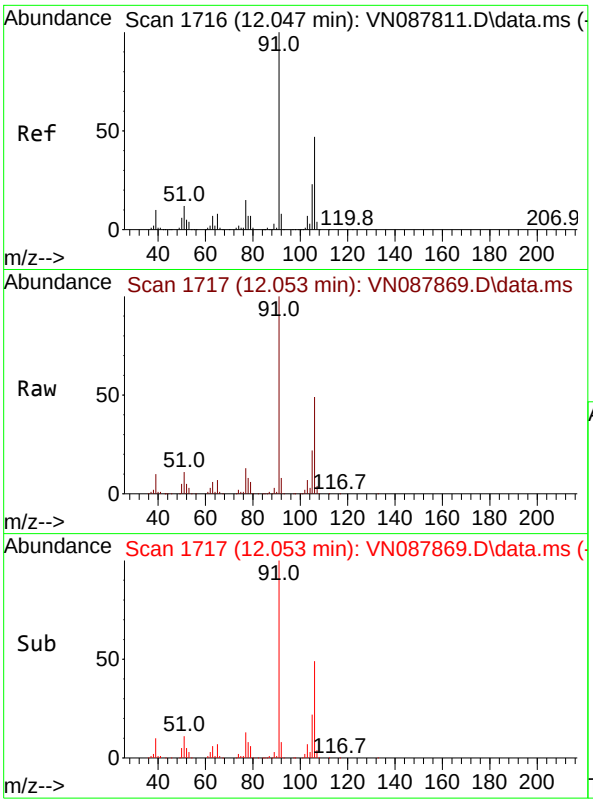


#66
Ethyl Benzene
Concen: 18.600 ug/l m
RT: 11.941 min Scan# 1698
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 91 Resp: 314293

Ion	Ratio	Lower	Upper
91	100		
106	32.1	21.3	31.9#

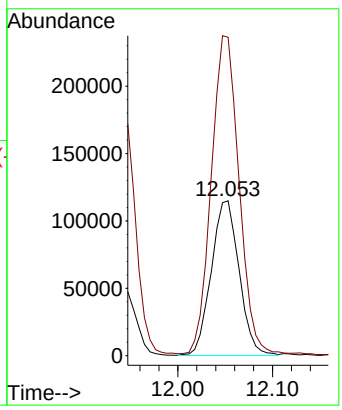




#67
m/p-Xylenes
Concen: 37.305 ug/l
RT: 12.053 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:106 Resp: 23399

Ion	Ratio	Lower	Upper
106	100		
91	207.1	174.3	261.5



Instrument :
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ClientSampleId :
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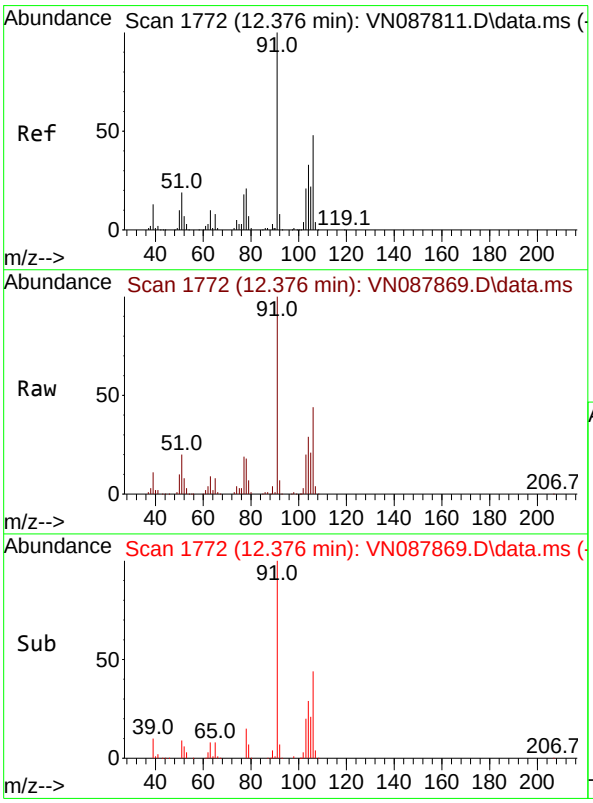
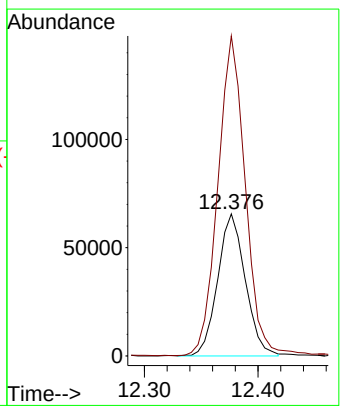
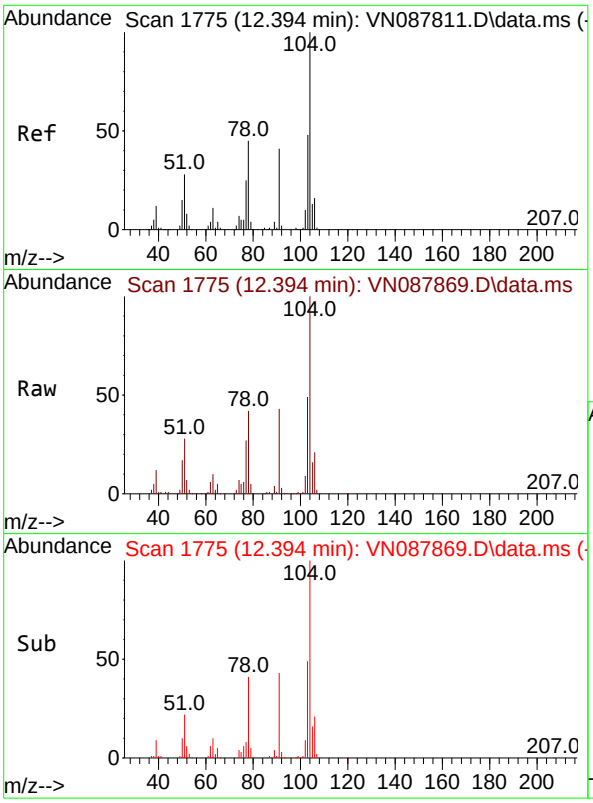


#68
o-Xylene
Concen: 18.241 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:106 Resp: 110935

Ion	Ratio	Lower	Upper
106	100		
91	223.1	107.7	323.3

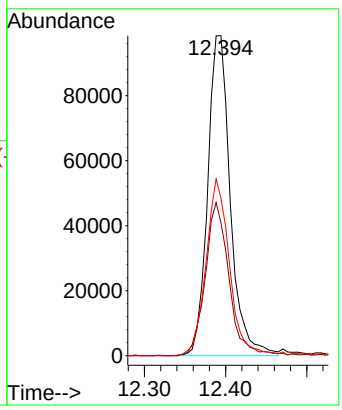




#69
Styrene
Concen: 18.095 ug/l
RT: 12.394 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:104 Resp: 19126

Ion	Ratio	Lower	Upper
104	100		
78	49.0	41.0	61.6
103	57.0	44.6	66.8



Instrument :
MSVOA_N
ClientSampleId :
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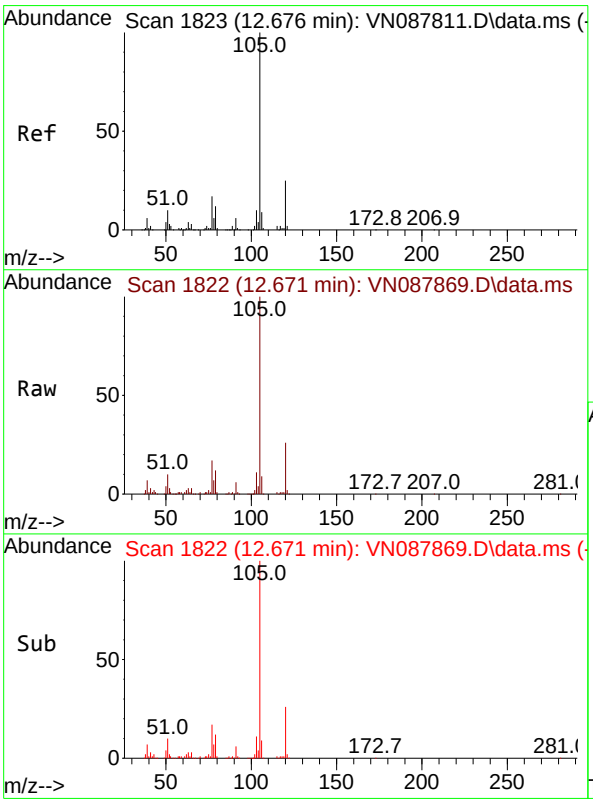
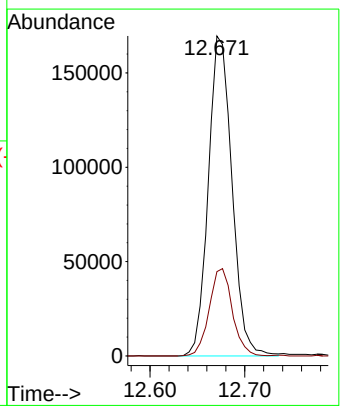
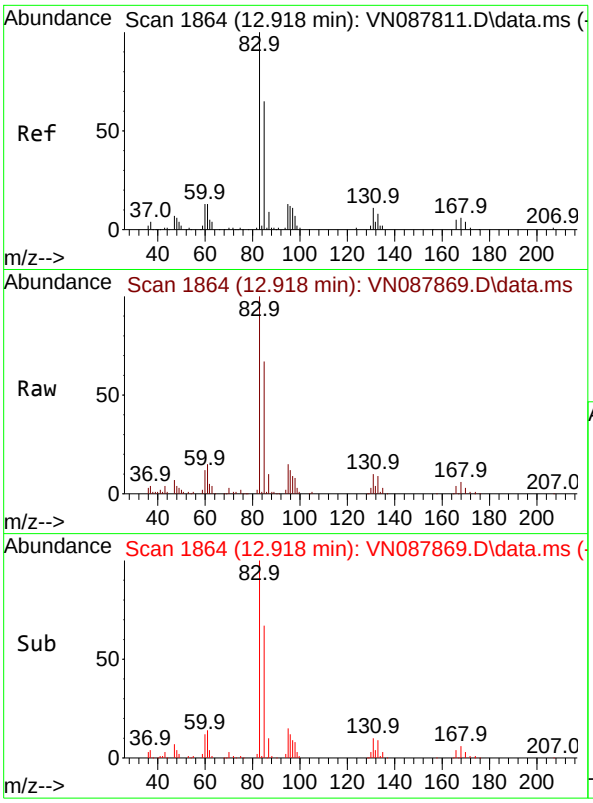


#70
Isopropylbenzene
Concen: 19.093 ug/l
RT: 12.671 min Scan# 1822
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:105 Resp: 294417

Ion	Ratio	Lower	Upper
105	100		
120	26.6	17.4	32.4

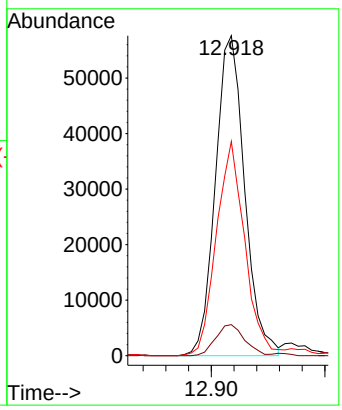




#71
1,1,2,2-Tetrachloroethane
Concen: 18.614 ug/l
RT: 12.918 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 83 Resp: 10319

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.3
85	64.9	31.9	95.7



Instrument :
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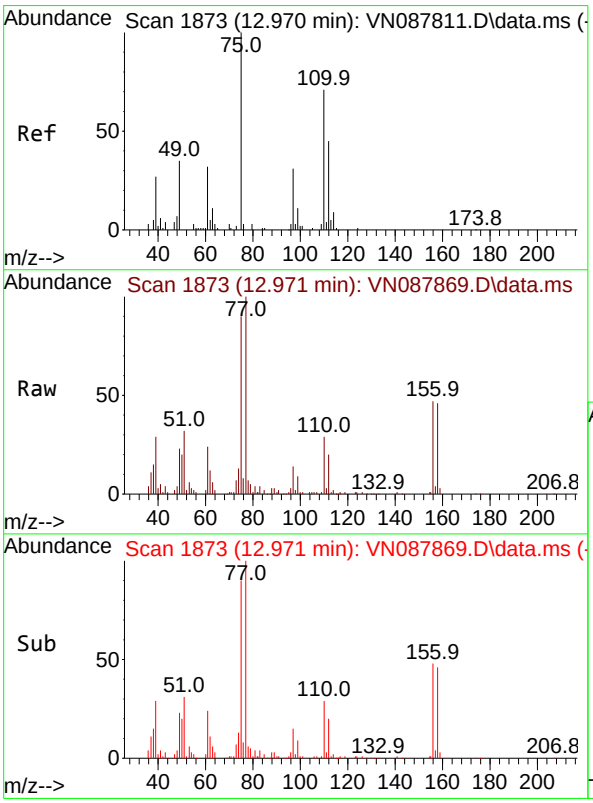
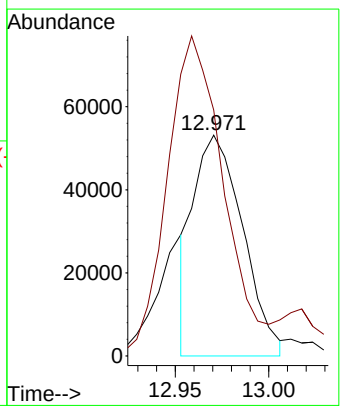
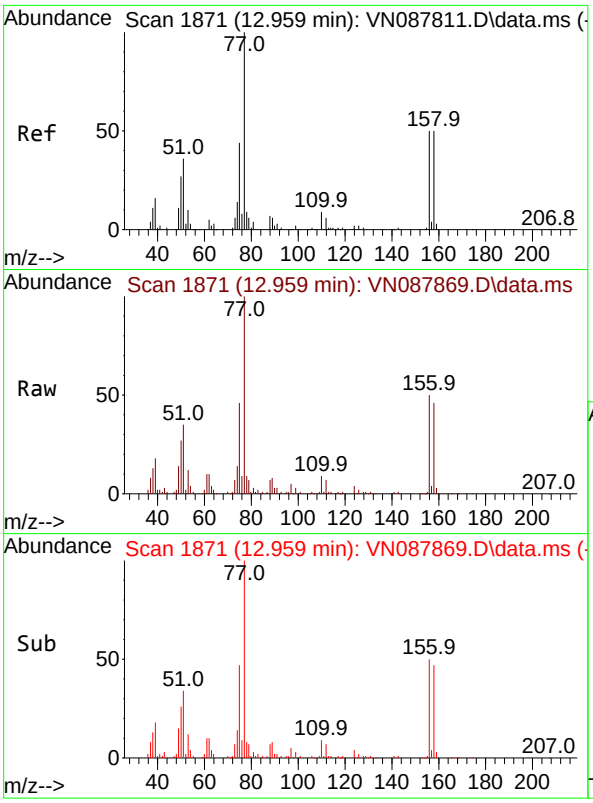


#72
1,2,3-Trichloropropane
Concen: 17.804 ug/l m
RT: 12.971 min Scan# 1873
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 75 Resp: 96909

Ion	Ratio	Lower	Upper
75	100		
77	167.0	0.0	378.8

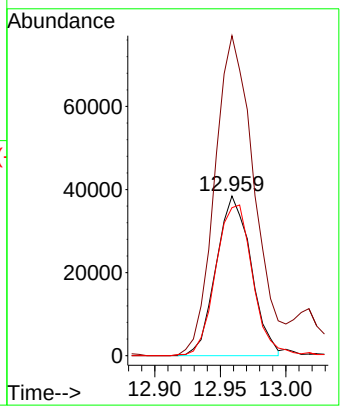




#73
Bromobenzene
Concen: 18.889 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:156 Resp: 7126

Ion	Ratio	Lower	Upper
156	100		
77	227.1	0.0	484.2
158	99.4	0.0	186.2



Instrument :
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ClientSampleId :
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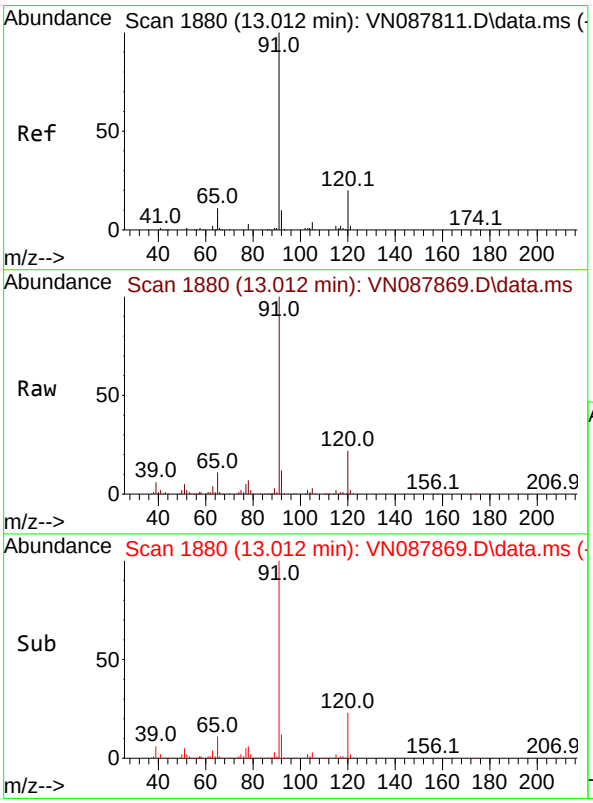
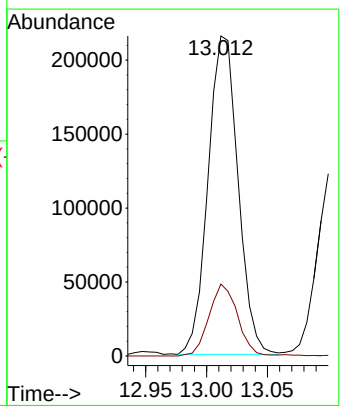
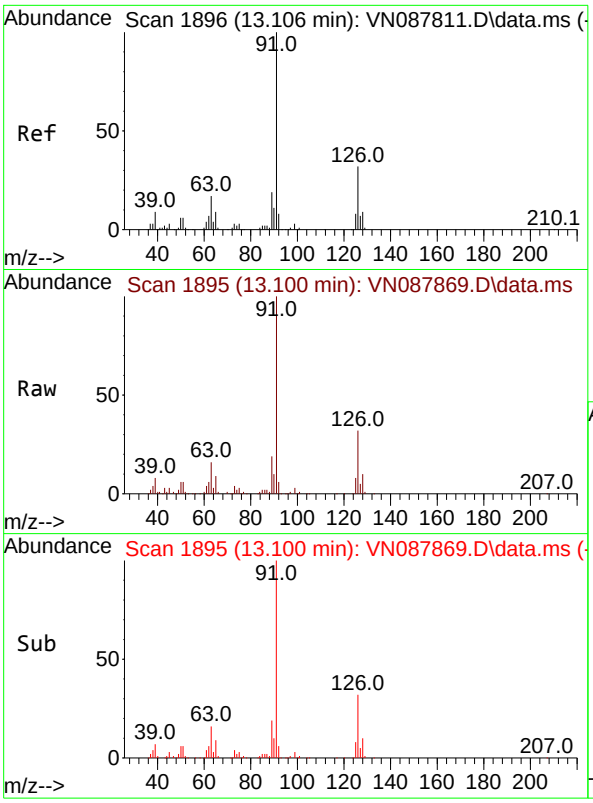


#74
n-propylbenzene
Concen: 18.990 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 91 Resp: 369477

Ion	Ratio	Lower	Upper
91	100		
120	21.3	0.0	42.2

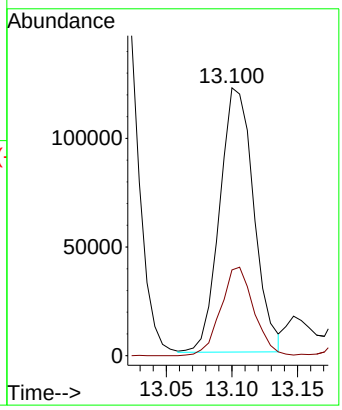




#75
2-Chlorotoluene
Concen: 18.796 ug/l
RT: 13.100 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 91 Resp: 22011

Ion	Ratio	Lower	Upper
91	100		
126	32.4	0.0	60.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

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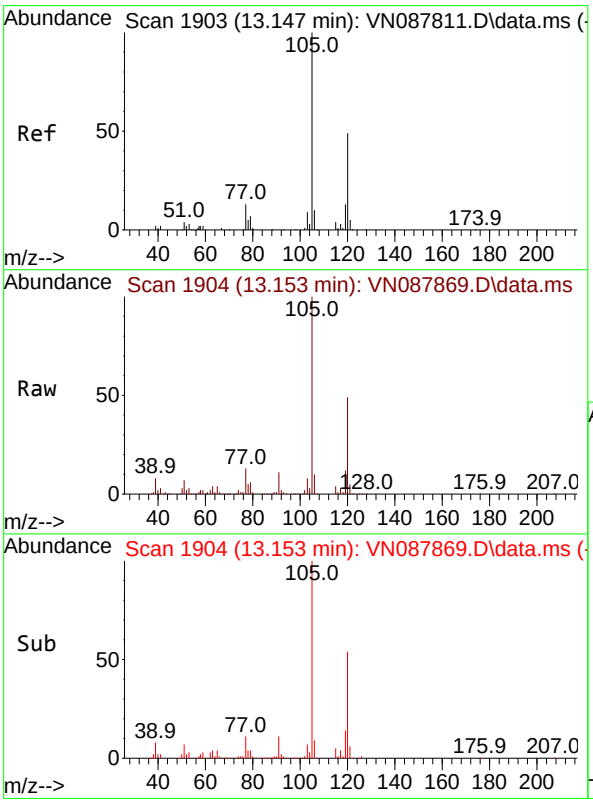
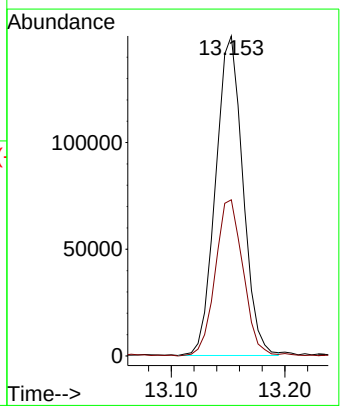
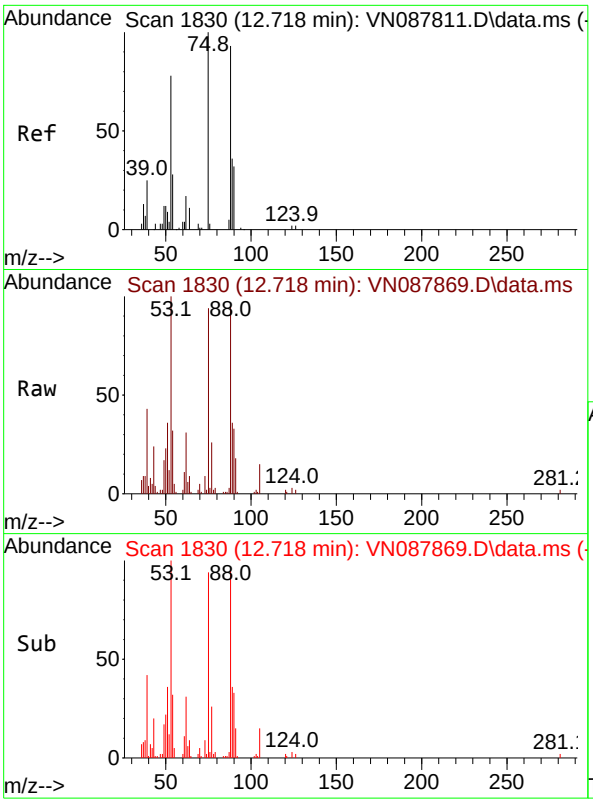


#76
1,3,5-Trimethylbenzene
Concen: 19.162 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:105 Resp: 249532

Ion	Ratio	Lower	Upper
105	100		
120	49.8	0.0	92.6

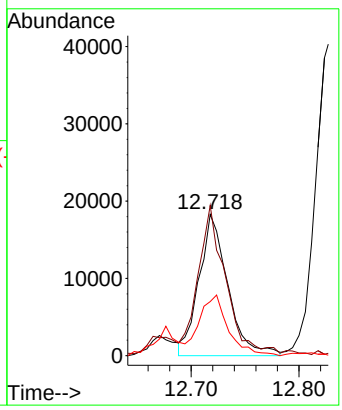




#77
t-1,4-Dichloro-2-butene
Concen: 18.585 ug/l m
RT: 12.718 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 75 Resp: 3414

Ion	Ratio	Lower	Upper
75	100		
53	106.3	45.3	135.9
89	38.3	18.8	56.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations
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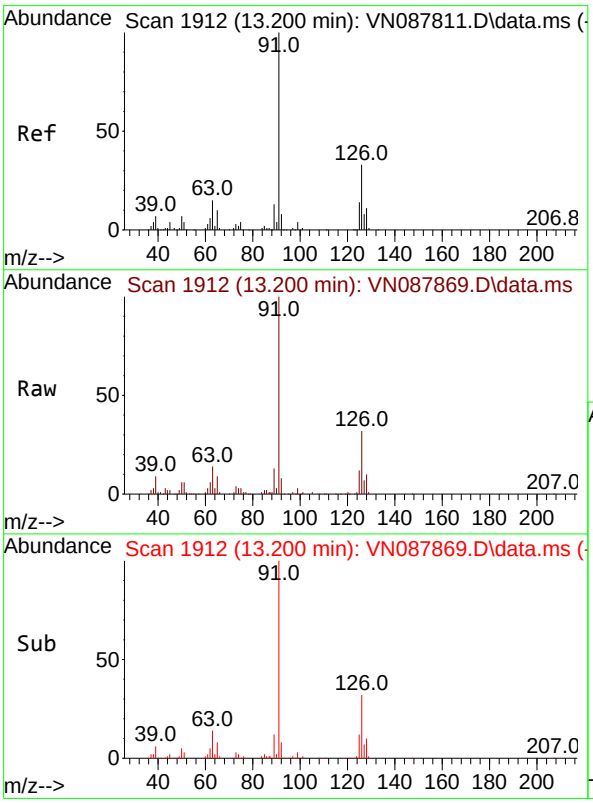
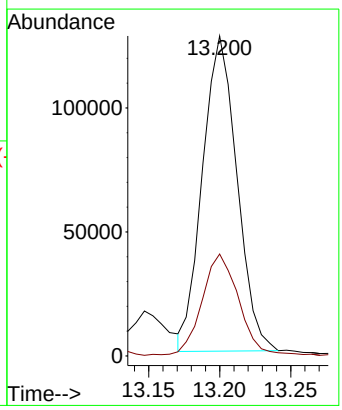
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

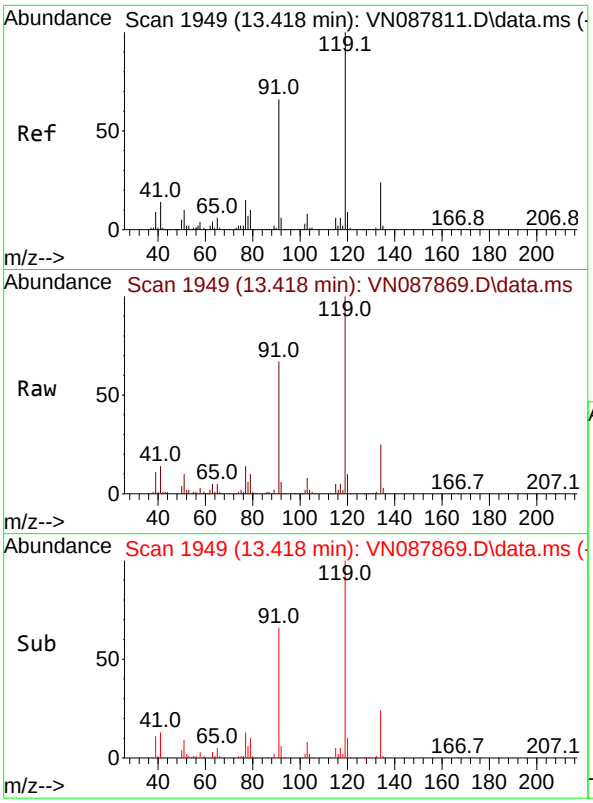


#78
4-Chlorotoluene
Concen: 18.179 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 91 Resp: 214620

Ion	Ratio	Lower	Upper
91	100		
126	35.1	0.0	67.0

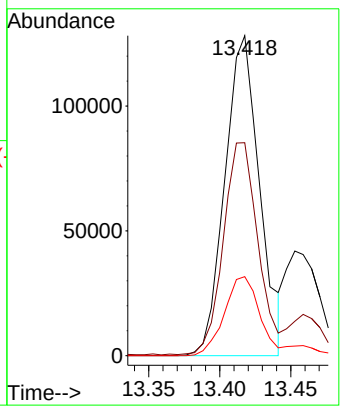




#79
tert-butylbenzene
Concen: 19.953 ug/l
RT: 13.418 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:119 Resp: 21759

Ion	Ratio	Lower	Upper
119	100		
91	66.0	0.0	142.6
134	24.9	0.0	47.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations
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Reviewed By :John Carlone 09/18/2025
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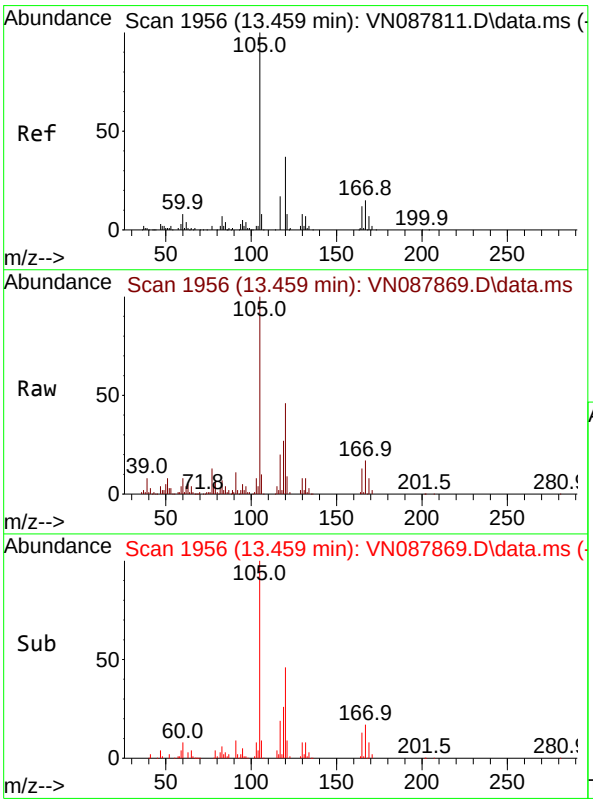
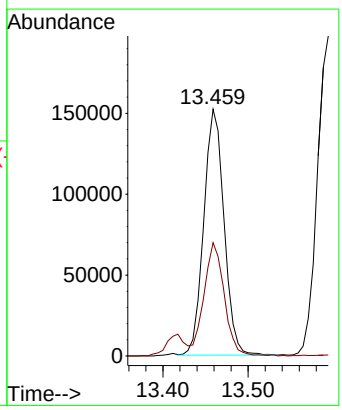
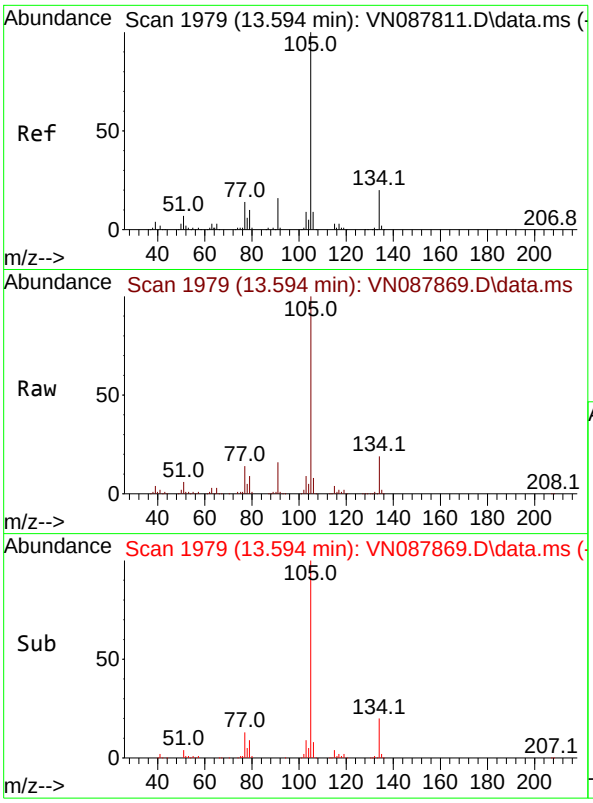


#80
1,2,4-Trimethylbenzene
Concen: 18.815 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:105 Resp: 251183

Ion	Ratio	Lower	Upper
105	100		
120	46.1	0.0	86.6





#81
sec-Butylbenzene
Concen: 20.100 ug/l
RT: 13.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:105 Resp: 32242

Ion	Ratio	Lower	Upper
105	100		
134	19.8	0.0	37.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

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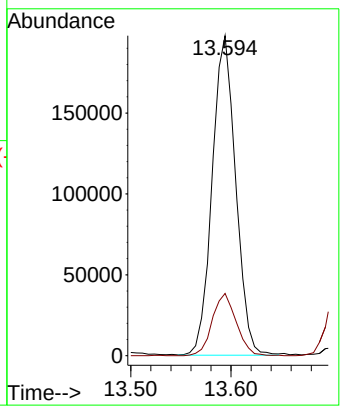
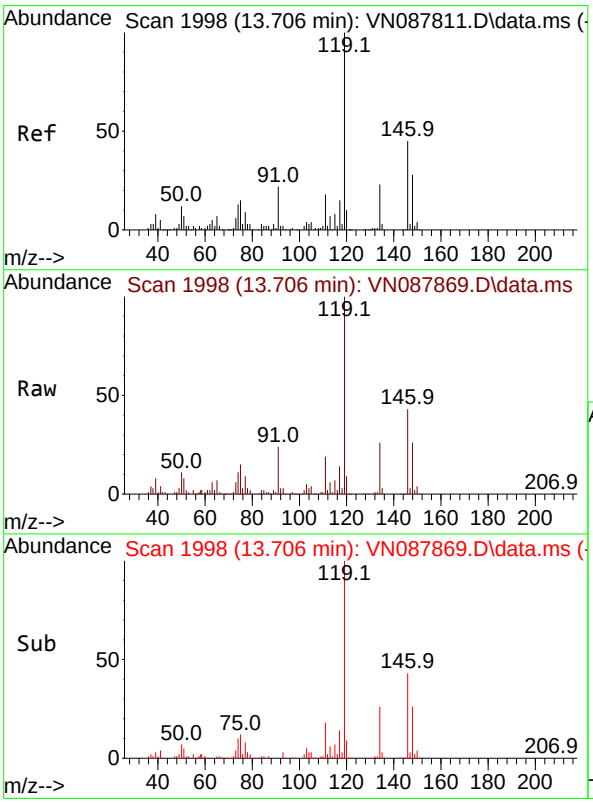
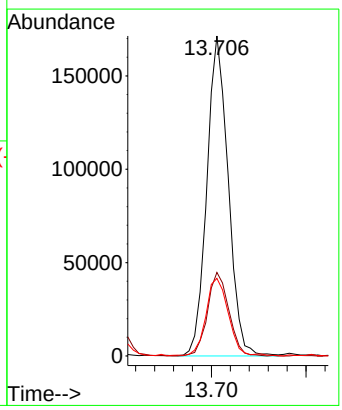


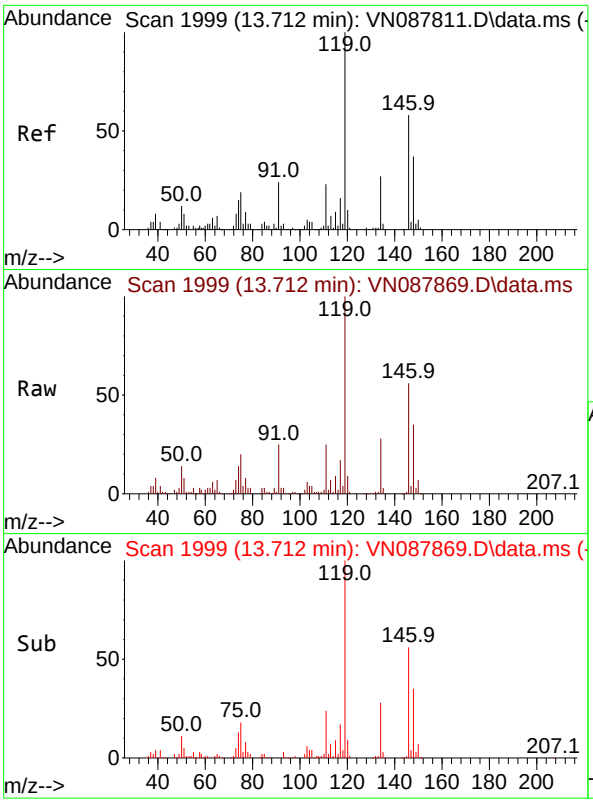


#82
p-Isopropyltoluene
Concen: 20.299 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:119 Resp: 268282

Ion	Ratio	Lower	Upper
119	100		
134	26.1	0.0	49.4
91	24.9	0.0	52.2

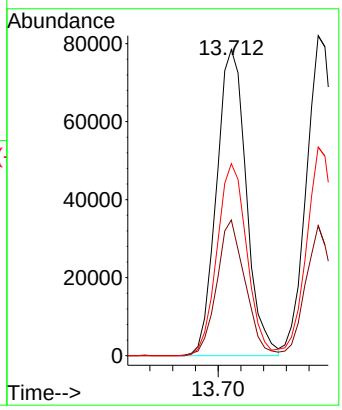




#83
1,3-Dichlorobenzene
Concen: 19.657 ug/l
RT: 13.712 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:146 Resp: 14297

Ion	Ratio	Lower	Upper
146	100		
111	42.3	21.1	63.4
148	62.4	31.0	93.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations
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Reviewed By :John Carlone 09/18/2025
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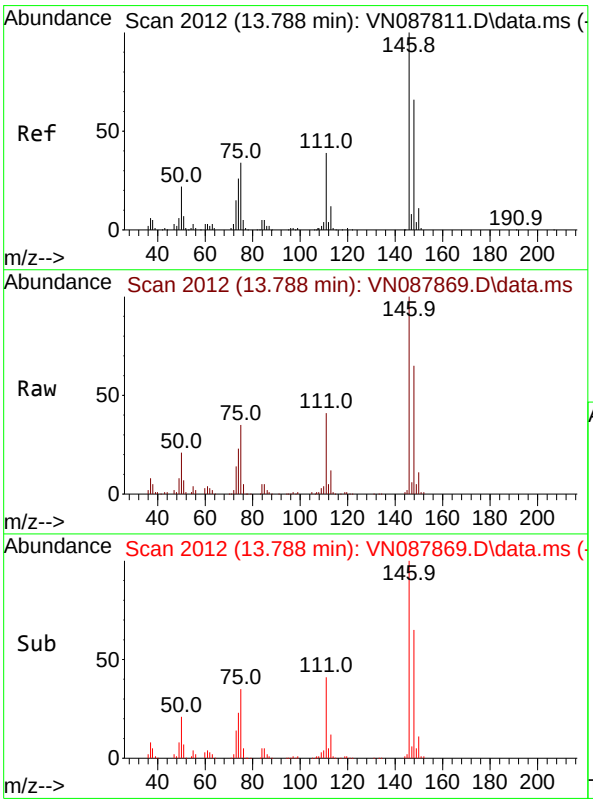
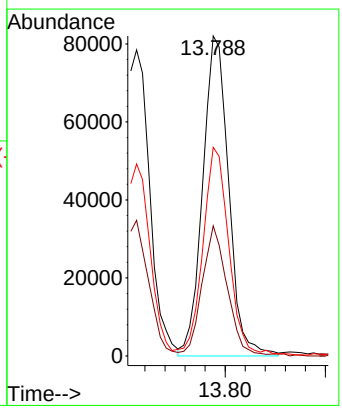
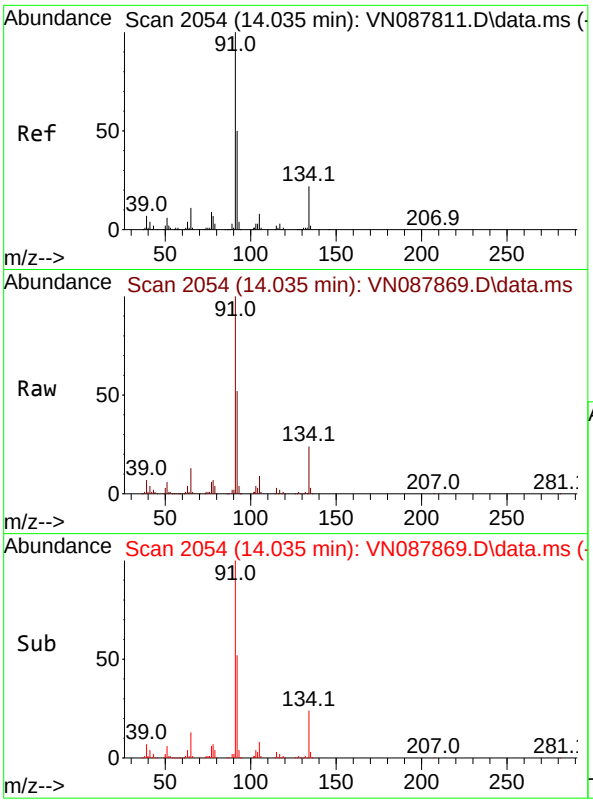


#84
1,4-Dichlorobenzene
Concen: 20.261 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:146 Resp: 147719

Ion	Ratio	Lower	Upper
146	100		
111	39.3	20.2	60.5
148	63.8	31.5	94.5





#85
n-Butylbenzene
Concen: 19.849 ug/l
RT: 14.035 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 91 Resp: 25216

Ion	Ratio	Lower	Upper
91	100		
92	52.4	0.0	104.0
134	24.7	0.0	46.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations
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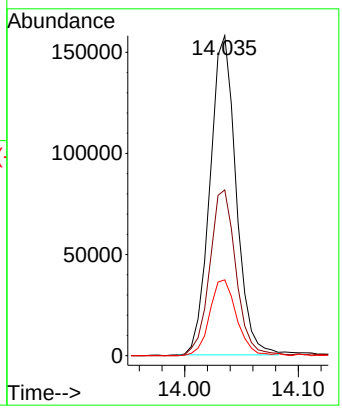
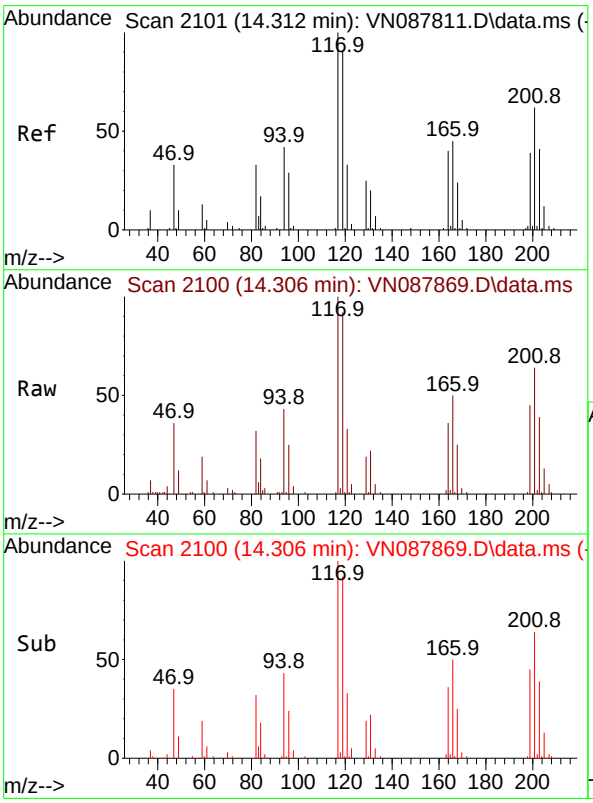
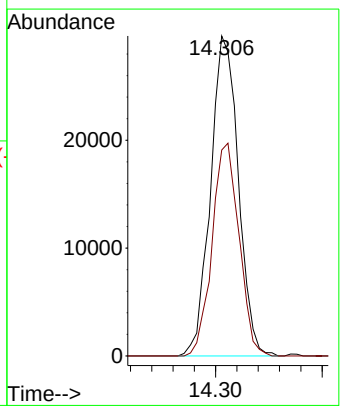


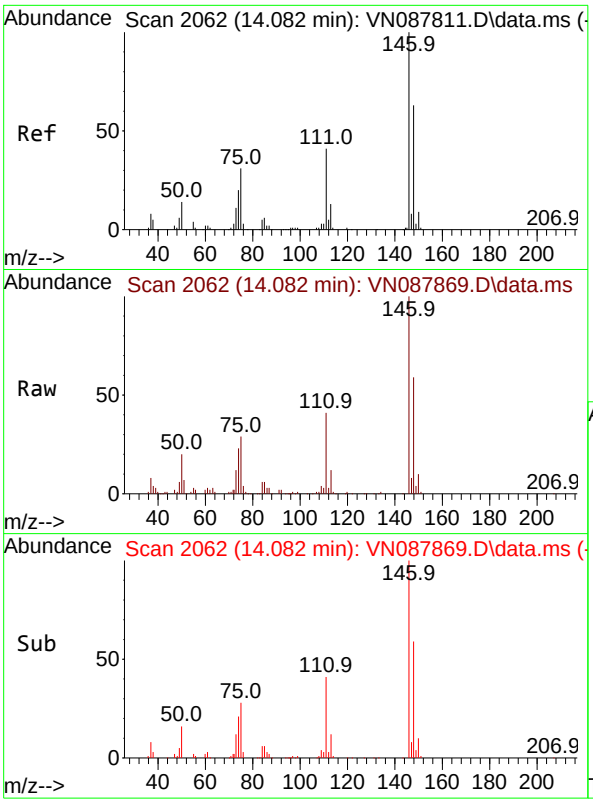


#86
Hexachloroethane
Concen: 20.013 ug/l
RT: 14.306 min Scan# 2100
Delta R.T. -0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:117 Resp: 53724

Ion	Ratio	Lower	Upper
117	100		
201	64.4	29.9	89.7

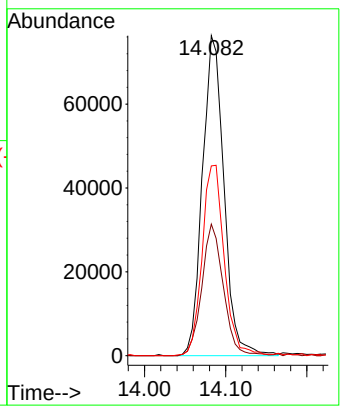




#87
1,2-Dichlorobenzene
Concen: 20.507 ug/l
RT: 14.082 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:146 Resp: 14067

Ion	Ratio	Lower	Upper
146	100		
111	40.8	21.5	64.5
148	60.3	33.4	100.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations
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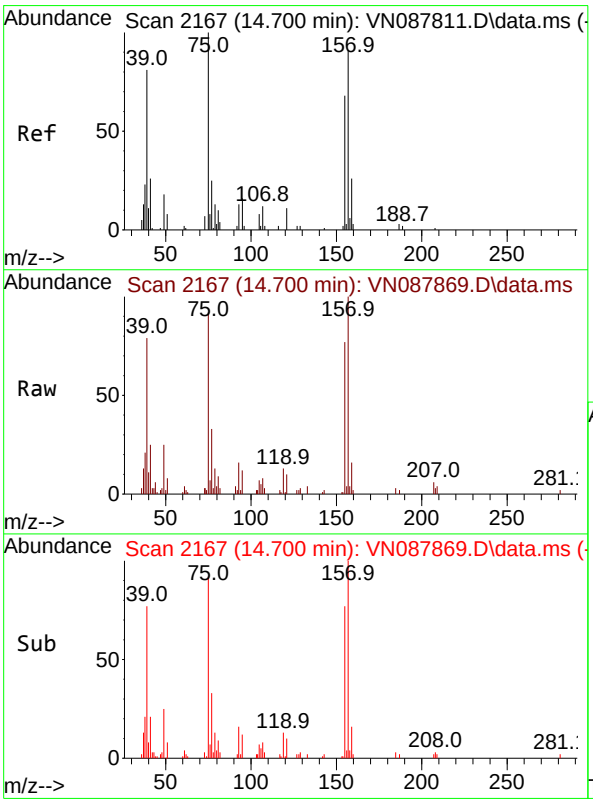
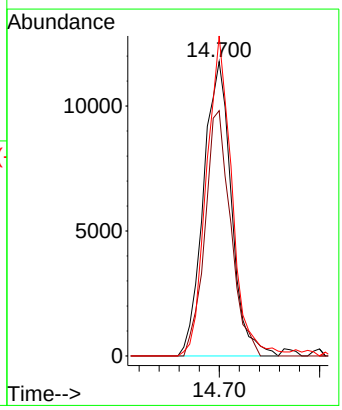
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

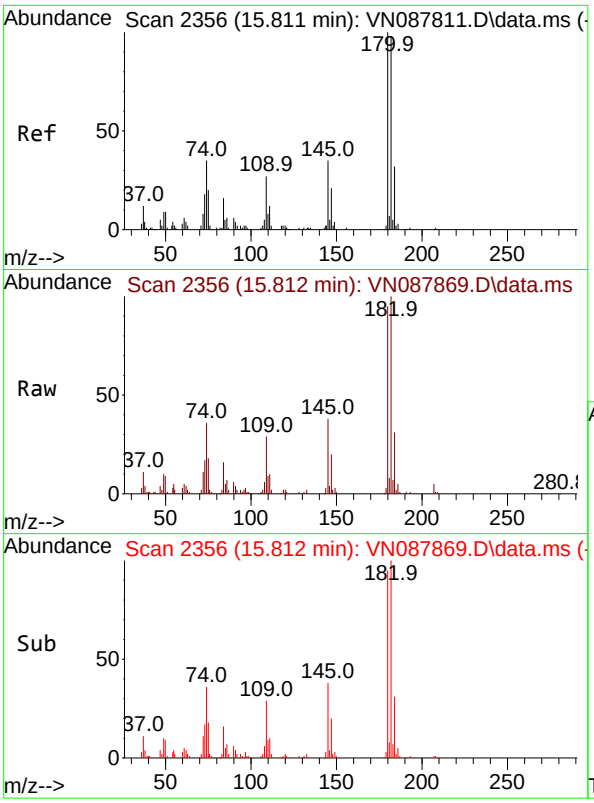


#88
1,2-Dibromo-3-Chloropropane
Concen: 18.468 ug/l
RT: 14.700 min Scan# 2167
Delta R.T. 0.006 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion: 75 Resp: 22720

Ion	Ratio	Lower	Upper
75	100		
155	76.8	53.0	79.4
157	99.1	72.2	108.4

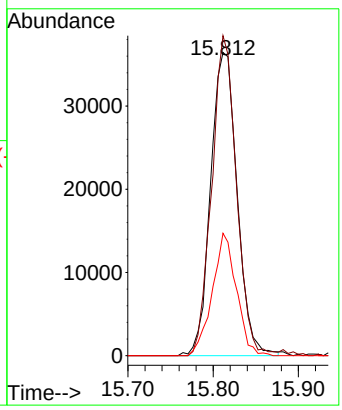




#89
1,2,4-Trichlorobenzene
Concen: 20.244 ug/l
RT: 15.812 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:180 Resp: 7898

Ion	Ratio	Lower	Upper
180	100		
182	98.1	74.6	111.8
145	36.5	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations
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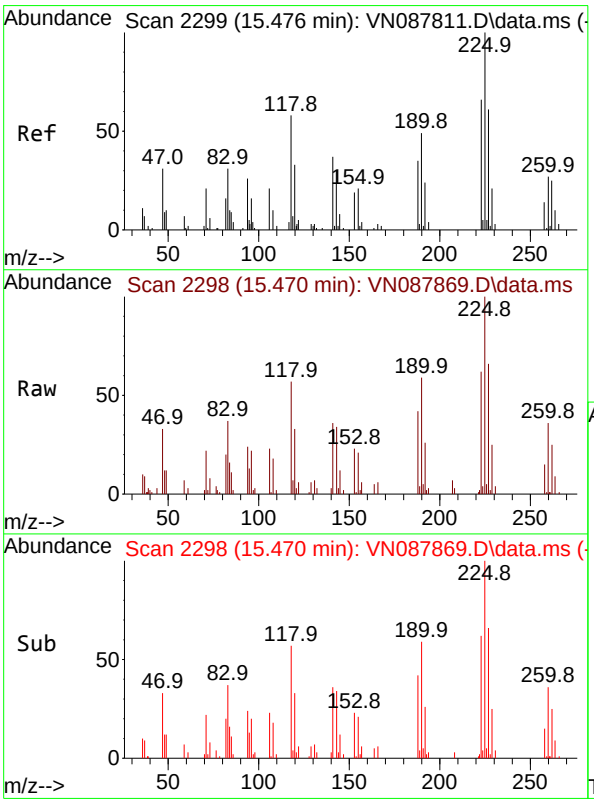
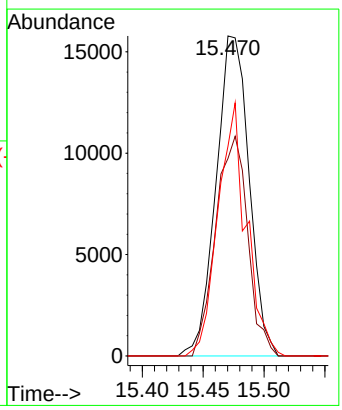
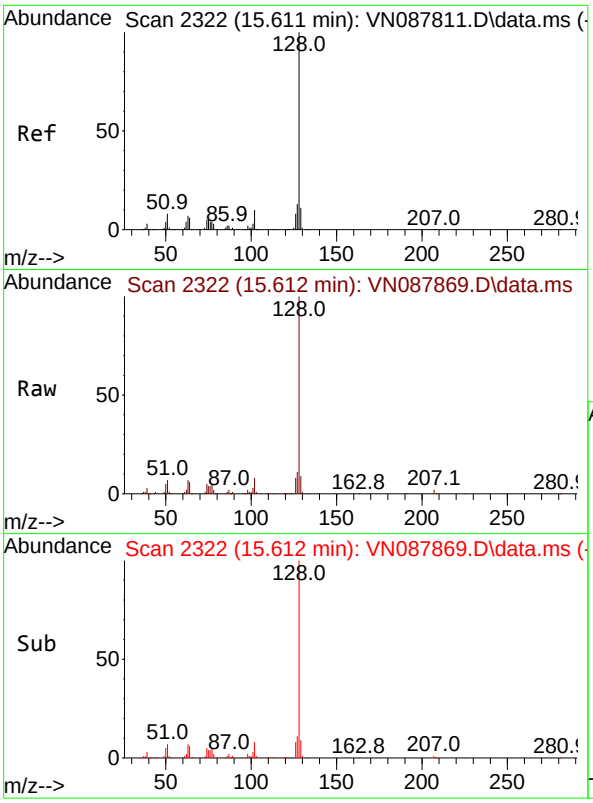


#90
Hexachlorobutadiene
Concen: 22.803 ug/l
RT: 15.470 min Scan# 2298
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:225 Resp: 29826

Ion	Ratio	Lower	Upper
225	100		
223	66.6	0.0	118.2
227	67.9	0.0	139.0

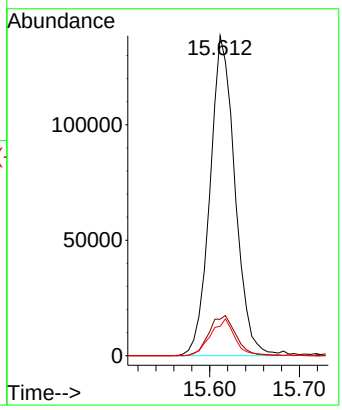




#91
Naphthalene
Concen: 18.665 ug/l
RT: 15.612 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:128 Resp: 26810

Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.2	15.4
129	11.1	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations
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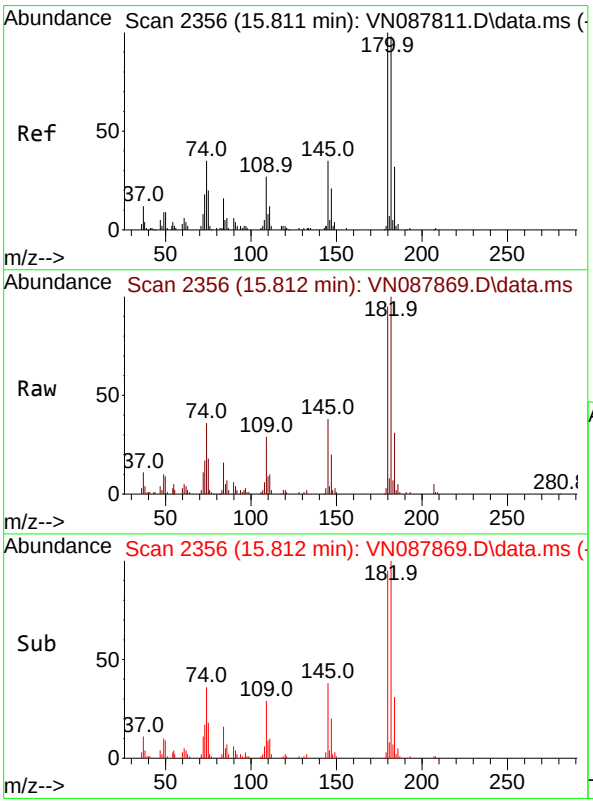
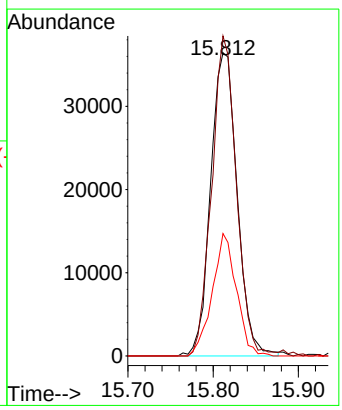


#92
1,2,3-Trichlorobenzene
Concen: 20.244 ug/l
RT: 15.812 min Scan# 2356
Delta R.T. -0.000 min
Lab File: VN087869.D
Acq: 17 Sep 2025 09:42

Tgt Ion:180 Resp: 78987

Ion	Ratio	Lower	Upper
180	100		
182	98.1	0.0	186.4
145	36.5	0.0	68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087869.D
Acq On : 17 Sep 2025 09:42
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Sep 18 03:06:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 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	Bromochloromethane	1.000	1.000	0.0	122	0.00
2	M	Dichlorodifluoromethane	1.865	1.833	1.7	128	0.00
3	M	Chloromethane	1.957	1.487	24.0	101	0.00
4	M	Vinyl Chloride	2.213	1.692	23.5	103	0.00
5	M	Bromomethane	1.298	0.922	29.0#	101	0.00
6	M	Chloroethane	1.512	1.076	28.8#	97	0.00
7	M	Trichlorofluoromethane	3.243	2.707	16.5	114	0.00
8	T	Diethyl Ether	1.370	1.004	26.7#	105	0.00
9		1,1,2-Trichlorotrifluoroeth	1.757	1.557	11.4	119	0.00
10	M	1,1-Dichloroethene	1.811	1.471	18.8	114	0.00
11		Methyl Iodide	1.282	0.790	38.4#	103	0.00
12		Methyl Acetate	2.792	2.699	3.3	129	0.00
13	M	Acrolein	0.497	0.578	-16.3	163#	0.00
14	M	Acrylonitrile	1.202	1.090	9.3	126	0.00
15	M	Acetone	0.375	0.315	16.0	120	0.00
16	M	Carbon Disulfide	4.972	4.145	16.6	116	0.00
17		Allyl chloride	2.958	2.555	13.6	123	0.00
18	M	Methylene Chloride	2.052	1.906	7.1	132	0.00
19	M	trans-1,2-Dichloroethene	1.847	1.654	10.4	122	-0.01
20	T	Diisopropyl ether	6.802	6.097	10.4	125	0.00
21	M	1,1-Dichloroethane	3.725	3.405	8.6	127	0.00
22	M	cis-1,2-Dichloroethene	2.242	2.095	6.6	128	0.00
23	M	tert-Butyl Alcohol	0.425	0.392	7.8	125	-0.01
24	M	Methyl tert-Butyl Ether	6.466	6.174	4.5	136	0.00
25	M	Chloroform	3.899	3.643	6.6	127	0.00
26		Cyclohexane	2.837	2.631	7.3	131	0.00
27	s	1,2-Dichloroethane-d4	2.563	2.512	2.0	122	0.00
28	I	1,4-Difluorobenzene	1.000	1.000	0.0	133	0.00
29		1,1-Dichloropropene	0.488	0.435	10.9	129	0.00
30	M	2-Butanone	0.336	0.296	11.9	130	0.00
31		2,2-Dichloropropane	0.588	0.608	-3.4	163#	0.00
32	M	1,1,1-Trichloroethane	0.618	0.585	5.3	134	0.00
33	M	Carbon Tetrachloride	0.515	0.484	6.0	139	0.00
34	M	Benzene	1.576	1.389	11.9	128	0.00
35		Methacrylonitrile	0.351	0.303	13.7	117	0.00
36	M	1,2-Dichloroethane	0.595	0.532	10.6	128	0.00
37	M	Trichloroethene	0.352	0.336	4.5	139	0.00
38		Methylcyclohexane	0.537	0.498	7.3	139	0.00
39	M	1,2-Dichloropropane	0.404	0.353	12.6	126	0.00
40		Dibromomethane	0.300	0.267	11.0	129	0.00
41	M	Bromodichloromethane	0.614	0.543	11.6	127	0.00
42	M	Vinyl Acetate	1.122	0.929	17.2	124	0.00
43		Ethyl Acetate	0.686	0.591	13.8	122	0.00
44		Isopropyl Acetate	1.076	0.922	14.3	124	0.00
45	T	1,4-Dioxane	0.007	0.006	14.3	121	0.00
46		Methyl methacrylate	0.496	0.417	15.9	125	0.00
47		n-amyl Acetate	0.727	0.552	24.1	142	-0.05
48	M	t-1,3-Dichloropropene	0.638	0.544	14.7	130	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087869.D
Acq On : 17 Sep 2025 09:42
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Sep 18 03:06:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 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	cis-1,3-Dichloropropene	0.653	0.584	10.6	137	0.00
50	M	1,1,2-Trichloroethane	0.388	0.361	7.0	136	0.00
51		Ethyl methacrylate	0.604	0.513	15.1	133	0.00
52		1,3-Dichloropropane	0.674	0.588	12.8	126	0.00
53	M	Dibromochloromethane	0.435	0.404	7.1	146	0.00
54	M	1,2-Dibromoethane	0.404	0.365	9.7	134	0.00
55	M	2-Chloroethyl vinyl ether	0.346	0.310	10.4	129	0.00
56	M	Bromoform	0.284	0.265	6.7	146	0.00
57	I	Chlorobenzene-d5	1.000	1.000	0.0	131	0.00
58	M	4-Methyl-2-Pentanone	0.709	0.635	10.4	127	0.00
59	M	2-Hexanone	0.464	0.410	11.6	128	0.00
60	S	4-Bromofluorobenzene	0.482	0.479	0.6	128	0.00
61	M	Tetrachloroethene	0.299	0.295	1.3	138	0.00
62	M	Toluene	1.815	1.660	8.5	130	0.00
63	S	Toluene-d8	1.395	1.343	3.7	124	0.00
64	M	Chlorobenzene	1.114	1.042	6.5	135	0.00
65		1,1,1,2-Tetrachloroethane	0.392	0.377	3.8	139	0.00
66	M	Ethyl Benzene	1.958	1.821	7.0	136	0.00
67	M	m/p-Xylenes	0.727	0.678	6.7	138	0.00
68	M	o-Xylene	0.705	0.643	8.8	131	0.00
69	M	Styrene	1.225	1.108	9.6	134	0.00
70		Isopropylbenzene	1.787	1.706	4.5	143	0.00
71	M	1,1,2,2-Tetrachloroethane	0.642	0.598	6.9	129	0.00
72		1,2,3-Trichloropropane	0.631	0.561	11.1	115	0.00
73		Bromobenzene	0.437	0.413	5.5	137	0.00
74		n-propylbenzene	2.254	2.140	5.1	139	0.00
75		2-Chlorotoluene	1.357	1.275	6.0	134	0.00
76		1,3,5-Trimethylbenzene	1.509	1.446	4.2	140	0.00
77		t-1,4-Dichloro-2-butene	0.213	0.198	7.0	142	0.00
78		4-Chlorotoluene	1.368	1.243	9.1	129	0.00
79		tert-butylbenzene	1.263	1.261	0.2	145	0.00
80		1,2,4-Trimethylbenzene	1.547	1.455	5.9	135	0.00
81		sec-Butylbenzene	1.858	1.868	-0.5	145	0.00
82		p-Isopropyltoluene	1.531	1.554	-1.5	149	0.00
83	M	1,3-Dichlorobenzene	0.843	0.828	1.8	137	0.00
84	M	1,4-Dichlorobenzene	0.845	0.856	-1.3	144	0.00
85		n-Butylbenzene	1.472	1.461	0.7	149	0.00
86	T	Hexachloroethane	0.311	0.311	0.0	142	0.00
87	M	1,2-Dichlorobenzene	0.795	0.815	-2.5	145	0.00
88		1,2-Dibromo-3-Chloropropane	0.143	0.132	7.7	124	0.00
89		1,2,4-Trichlorobenzene	0.452	0.458	-1.3	149	0.00
90		Hexachlorobutadiene	0.152	0.173	-13.8	155#	0.00
91	M	Naphthalene	1.664	1.553	6.7	141	0.00
92		1,2,3-Trichlorobenzene	0.452	0.458	-1.3	149	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087869.D
Acq On : 17 Sep 2025 09:42
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Sep 18 03:06:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 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	Bromochloromethane	30.000	30.000	0.0	122	0.00
2	M	Dichlorodifluoromethane	20.000	19.663	1.7	128	0.00
3	M	Chloromethane	20.000	15.195	24.0	101	0.00
4	M	Vinyl Chloride	20.000	15.293	23.5	103	0.00
5	M	Bromomethane	20.000	14.205	29.0#	101	0.00
6	M	Chloroethane	20.000	14.235	28.8#	97	0.00
7	M	Trichlorofluoromethane	20.000	16.695	16.5	114	0.00
8	T	Diethyl Ether	20.000	14.668	26.7#	105	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	17.723	11.4	119	0.00
10	M	1,1-Dichloroethene	20.000	16.247	18.8	114	0.00
11		Methyl Iodide	20.000	12.324	38.4#	103	0.00
12		Methyl Acetate	20.000	19.337	3.3	129	0.00
13	M	Acrolein	100.000	116.214	-16.2	163	0.00
14	M	Acrylonitrile	100.000	90.687	9.3	126	0.00
15	M	Acetone	100.000	84.010	16.0	120	0.00
16	M	Carbon Disulfide	20.000	16.674	16.6	116	0.00
17		Allyl chloride	20.000	17.278	13.6	123	0.00
18	M	Methylene Chloride	20.000	18.580	7.1	132	0.00
19	M	trans-1,2-Dichloroethene	20.000	17.909	10.5	122	-0.01
20	T	Diisopropyl ether	20.000	17.926	10.4	125	0.00
21	M	1,1-Dichloroethane	20.000	18.283	8.6	127	0.00
22	M	cis-1,2-Dichloroethene	20.000	18.692	6.5	128	0.00
23	M	tert-Butyl Alcohol	100.000	92.244	7.8	125	-0.01
24	M	Methyl tert-Butyl Ether	20.000	19.098	4.5	136	0.00
25	M	Chloroform	20.000	18.683	6.6	127	0.00
26		Cyclohexane	20.000	18.551	7.2	131	0.00
27	s	1,2-Dichloroethane-d4	30.000	29.406	2.0	122	0.00
28	I	1,4-Difluorobenzene	30.000	30.000	0.0	133	0.00
29		1,1-Dichloropropene	20.000	17.828	10.9	129	0.00
30	M	2-Butanone	100.000	88.150	11.8	130	0.00
31		2,2-Dichloropropane	20.000	20.675	-3.4	163	0.00
32	M	1,1,1-Trichloroethane	20.000	18.918	5.4	134	0.00
33	M	Carbon Tetrachloride	20.000	18.801	6.0	139	0.00
34	M	Benzene	20.000	17.628	11.9	128	0.00
35		Methacrylonitrile	20.000	17.244	13.8	117	0.00
36	M	1,2-Dichloroethane	20.000	17.869	10.7	128	0.00
37	M	Trichloroethene	20.000	19.090	4.6	139	0.00
38		Methylcyclohexane	20.000	18.550	7.2	139	0.00
39	M	1,2-Dichloropropane	20.000	17.494	12.5	126	0.00
40		Dibromomethane	20.000	17.772	11.1	129	0.00
41	M	Bromodichloromethane	20.000	17.689	11.6	127	0.00
42	M	Vinyl Acetate	100.000	82.808	17.2	124	0.00
43		Ethyl Acetate	20.000	17.221	13.9	122	0.00
44		Isopropyl Acetate	20.000	17.138	14.3	124	0.00
45	T	1,4-Dioxane	400.000	354.558	11.4	121	0.00
46		Methyl methacrylate	20.000	16.814	15.9	125	0.00
47		n-amyl Acetate	20.000	15.176	24.1	142	-0.05
48	M	t-1,3-Dichloropropene	20.000	17.051	14.7	130	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087869.D
Acq On : 17 Sep 2025 09:42
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Sep 18 03:06:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 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	cis-1,3-Dichloropropene	20.000	17.874	10.6	137	0.00
50	M	1,1,2-Trichloroethane	20.000	18.631	6.8	136	0.00
51		Ethyl methacrylate	20.000	16.987	15.1	133	0.00
52		1,3-Dichloropropane	20.000	17.456	12.7	126	0.00
53	M	Dibromochloromethane	20.000	18.558	7.2	146	0.00
54	M	1,2-Dibromoethane	20.000	18.087	9.6	134	0.00
55	M	2-Chloroethyl vinyl ether	100.000	89.490	10.5	129	0.00
56	M	Bromoform	20.000	18.693	6.5	146	0.00
57	I	Chlorobenzene-d5	30.000	30.000	0.0	131	0.00
58	M	4-Methyl-2-Pentanone	100.000	89.532	10.5	127	0.00
59	M	2-Hexanone	100.000	88.377	11.6	128	0.00
60	S	4-Bromofluorobenzene	30.000	29.761	0.8	128	0.00
61	M	Tetrachloroethene	20.000	19.754	1.2	138	0.00
62	M	Toluene	20.000	18.296	8.5	130	0.00
63	S	Toluene-d8	30.000	28.879	3.7	124	0.00
64	M	Chlorobenzene	20.000	18.713	6.4	135	0.00
65		1,1,1,2-Tetrachloroethane	20.000	19.239	3.8	139	0.00
66	M	Ethyl Benzene	20.000	18.600	7.0	136	0.00
67	M	m/p-Xylenes	40.000	37.305	6.7	138	0.00
68	M	o-Xylene	20.000	18.241	8.8	131	0.00
69	M	Styrene	20.000	18.095	9.5	134	0.00
70		Isopropylbenzene	20.000	19.093	4.5	143	0.00
71	M	1,1,2,2-Tetrachloroethane	20.000	18.614	6.9	129	0.00
72		1,2,3-Trichloropropane	20.000	17.804	11.0	115	0.00
73		Bromobenzene	20.000	18.889	5.6	137	0.00
74		n-propylbenzene	20.000	18.990	5.1	139	0.00
75		2-Chlorotoluene	20.000	18.796	6.0	134	0.00
76		1,3,5-Trimethylbenzene	20.000	19.162	4.2	140	0.00
77		t-1,4-Dichloro-2-butene	20.000	18.585	7.1	142	0.00
78		4-Chlorotoluene	20.000	18.179	9.1	129	0.00
79		tert-butylbenzene	20.000	19.953	0.2	145	0.00
80		1,2,4-Trimethylbenzene	20.000	18.815	5.9	135	0.00
81		sec-Butylbenzene	20.000	20.100	-0.5	145	0.00
82		p-Isopropyltoluene	20.000	20.299	-1.5	149	0.00
83	M	1,3-Dichlorobenzene	20.000	19.657	1.7	137	0.00
84	M	1,4-Dichlorobenzene	20.000	20.261	-1.3	144	0.00
85		n-Butylbenzene	20.000	19.849	0.8	149	0.00
86	T	Hexachloroethane	20.000	20.013	-0.1	142	0.00
87	M	1,2-Dichlorobenzene	20.000	20.507	-2.5	145	0.00
88		1,2-Dibromo-3-Chloropropane	20.000	18.468	7.7	124	0.00
89		1,2,4-Trichlorobenzene	20.000	20.244	-1.2	149	0.00
90		Hexachlorobutadiene	20.000	22.803	-14.0	155	0.00
91	M	Naphthalene	20.000	18.665	6.7	141	0.00
92		1,2,3-Trichlorobenzene	20.000	20.244	-1.2	149	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

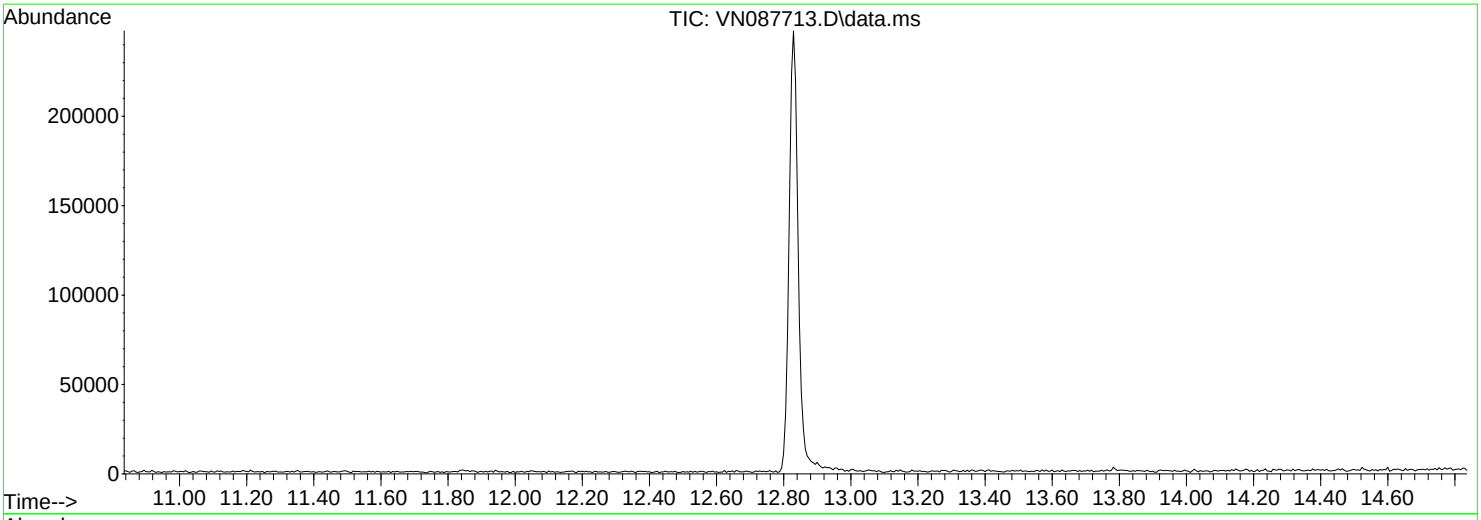
QC SAMPLE DATA

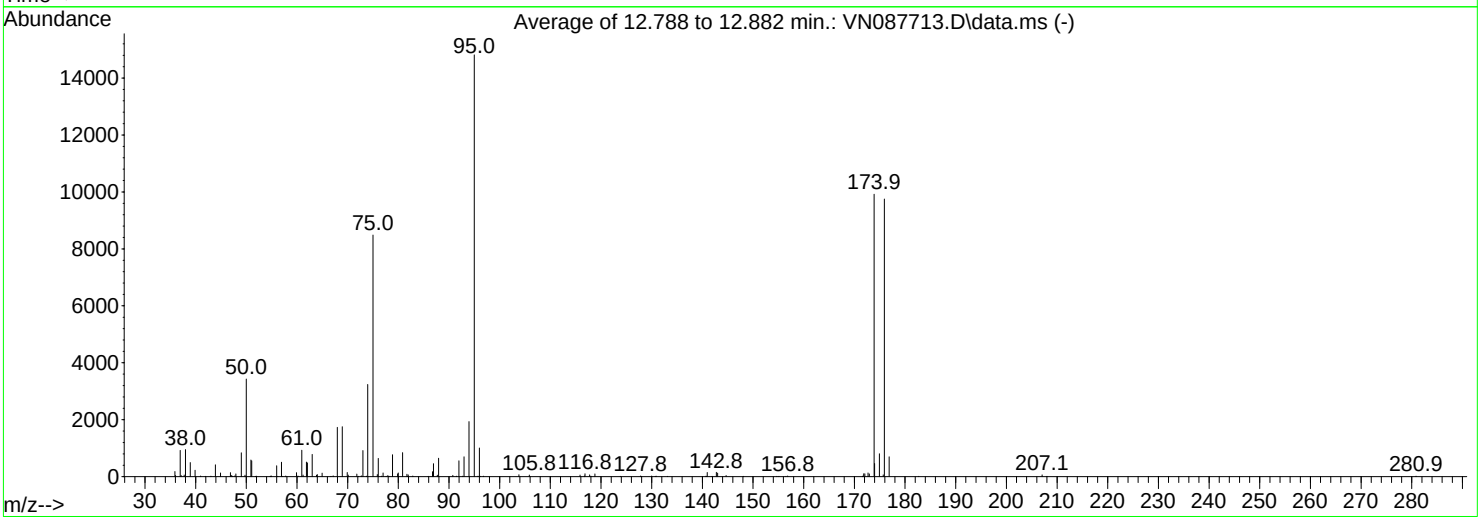
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090425\
Data File : VN087713.D
Acq On : 04 Sep 2025 10:10
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT3.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Fri Sep 05 03:29:53 2025





AutoFind: Averaged scan 1842 to 1858; Bkg corrected with scan 1841

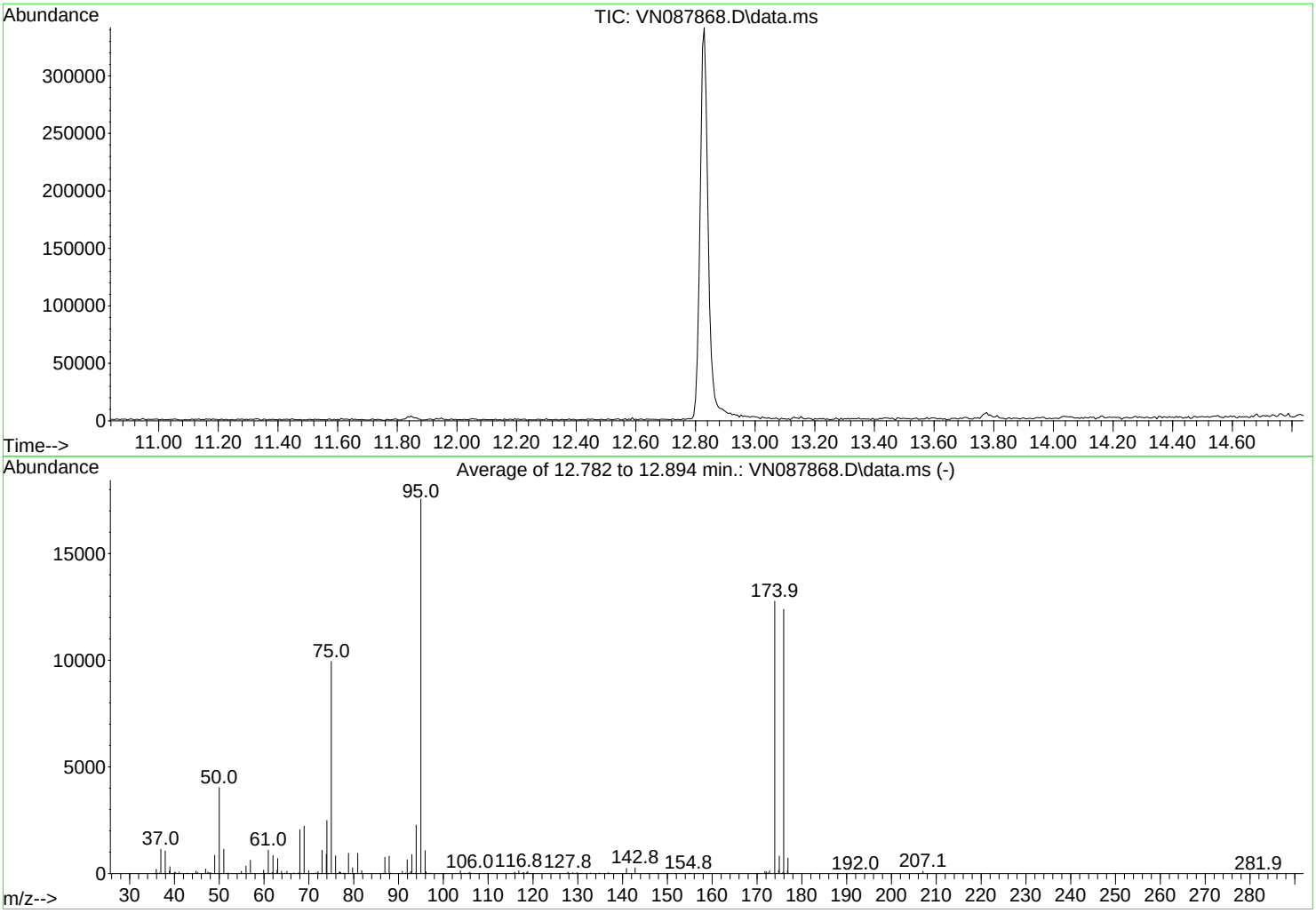
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	3426	PASS
75	95	30	60	57.3	8489	PASS
95	95	100	100	100.0	14815	PASS
96	95	5	9	6.8	1008	PASS
173	174	0.00	2	1.3	131	PASS
174	95	50	100	67.0	9919	PASS
175	174	5	9	8.1	802	PASS
176	174	95	101	98.3	9751	PASS
177	176	5	9	7.1	696	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087868.D
Acq On : 17 Sep 2025 08:24
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT3.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Fri Sep 05 03:29:53 2025



AutoFind: Averaged scan 1841 to 1860; Bkg corrected with scan 1840

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.0	4036	PASS
75	95	30	60	56.6	9947	PASS
95	95	100	100	100.0	17560	PASS
96	95	5	9	6.1	1076	PASS
173	174	0.00	2	1.1	135	PASS
174	95	50	100	72.7	12770	PASS
175	174	5	9	6.4	820	PASS
176	174	95	101	97.0	12386	PASS
177	176	5	9	5.9	730	PASS

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBL01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBL01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087872.D	1	09/17/25 12:03	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.77	U	0.77	5.00	ug/L
74-87-3	Chloromethane	0.64	U	0.64	5.00	ug/L
75-01-4	Vinyl Chloride	0.83	U	0.83	5.00	ug/L
74-83-9	Bromomethane	0.80	U	0.80	5.00	ug/L
75-00-3	Chloroethane	2.30	U	2.30	5.00	ug/L
75-69-4	Trichlorofluoromethane	0.80	U	0.80	5.00	ug/L
75-35-4	1,1-Dichloroethene	0.76	U	0.76	5.00	ug/L
107-02-8	Acrolein	6.60	U	6.60	25.0	ug/L
107-13-1	Acrylonitrile	2.80	U	2.80	25.0	ug/L
67-64-1	Acetone	4.60	U	4.60	25.0	ug/L
75-15-0	Carbon Disulfide	0.82	U	0.82	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	0.77	U	0.77	5.00	ug/L
75-09-2	Methylene Chloride	0.86	U	0.86	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.82	U	0.82	5.00	ug/L
108-05-4	Vinyl Acetate	3.20	U	3.20	25.0	ug/L
75-34-3	1,1-Dichloroethane	0.68	U	0.68	5.00	ug/L
78-93-3	2-Butanone	2.00	U	2.00	25.0	ug/L
56-23-5	Carbon Tetrachloride	0.74	U	0.74	5.00	ug/L
594-20-7	2,2-Dichloropropane	0.66	U	0.66	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.80	U	0.80	5.00	ug/L
67-66-3	Chloroform	0.55	U	0.55	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.63	U	0.63	5.00	ug/L
563-58-6	1,1-Dichloropropene	0.63	U	0.63	5.00	ug/L
71-43-2	Benzene	0.45	U	0.45	5.00	ug/L
107-06-2	1,2-Dichloroethane	0.50	U	0.50	5.00	ug/L
79-01-6	Trichloroethene	0.49	U	0.49	5.00	ug/L
78-87-5	1,2-Dichloropropane	0.46	U	0.46	5.00	ug/L
74-95-3	Dibromomethane	0.59	U	0.59	5.00	ug/L
75-27-4	Bromodichloromethane	0.64	U	0.64	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	3.00	U	3.00	25.0	ug/L

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBL01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBL01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087872.D	1	09/17/25 12:03	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-88-3	Toluene	0.46	U	0.46	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.72	U	0.72	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.67	U	0.67	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.45	U	0.45	5.00	ug/L
142-28-9	1,3-Dichloropropane	0.44	U	0.44	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	4.60	U	4.60	25.0	ug/L
591-78-6	2-Hexanone	3.20	U	3.20	25.0	ug/L
124-48-1	Dibromochloromethane	0.66	U	0.66	5.00	ug/L
106-93-4	1,2-Dibromoethane	0.56	U	0.56	5.00	ug/L
127-18-4	Tetrachloroethene	0.84	U	0.84	5.00	ug/L
108-90-7	Chlorobenzene	0.47	U	0.47	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	0.62	U	0.62	5.00	ug/L
67-72-1	Hexachloroethane	0.98	U	0.98	5.00	ug/L
100-41-4	Ethyl Benzene	0.56	U	0.56	5.00	ug/L
179601-23-1	m/p-Xylenes	1.30	U	1.30	10.0	ug/L
1330-20-7	Total Xylenes	1.97	U	1.97	15.0	ug/L
95-47-6	o-Xylene	0.67	U	0.67	5.00	ug/L
100-42-5	Styrene	0.72	U	0.72	5.00	ug/L
75-25-2	Bromoform	0.94	U	0.94	5.00	ug/L
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.44	U	0.44	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.62	U	0.62	5.00	ug/L
108-86-1	Bromobenzene	0.59	U	0.59	5.00	ug/L
103-65-1	n-propylbenzene	0.67	U	0.67	5.00	ug/L
95-49-8	2-Chlorotoluene	0.64	U	0.64	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.59	U	0.59	5.00	ug/L
106-43-4	4-Chlorotoluene	0.62	U	0.62	5.00	ug/L
98-06-6	tert-butylbenzene	0.71	U	0.71	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.77	U	0.77	5.00	ug/L
135-98-8	sec-Butylbenzene	0.64	U	0.64	5.00	ug/L
99-87-6	p-Isopropyltoluene	0.70	U	0.70	5.00	ug/L

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBL01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBL01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087872.D	1	09/17/25 12:03	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
541-73-1	1,3-Dichlorobenzene	0.67	U	0.67	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.81	U	0.81	5.00	ug/L
104-51-8	n-Butylbenzene	0.82	U	0.82	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.67	U	0.67	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.86	U	0.86	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	1.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	0.68	U	0.68	5.00	ug/L
91-20-3	Naphthalene	1.00	U	1.00	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	28.8		91 - 110	96%	SPK: 30
2037-26-5	Toluene-d8	28.9		91 - 112	96%	SPK: 30
460-00-4	4-Bromofluorobenzene	26.4		63 - 112	88%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	50700	7.8			
540-36-3	1,4-Difluorobenzene	260000	9.083			
3114-55-4	Chlorobenzene-d5	235000	11.847			
74-97-5	Bromochloromethane	50700	7.8			

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\VN091725\
Data File : VN087872.D
Acq On : 17 Sep 2025 12:03
Operator : JC\MD
Sample : VN0917WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBL01

Quant Time: Sep 18 03:09:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

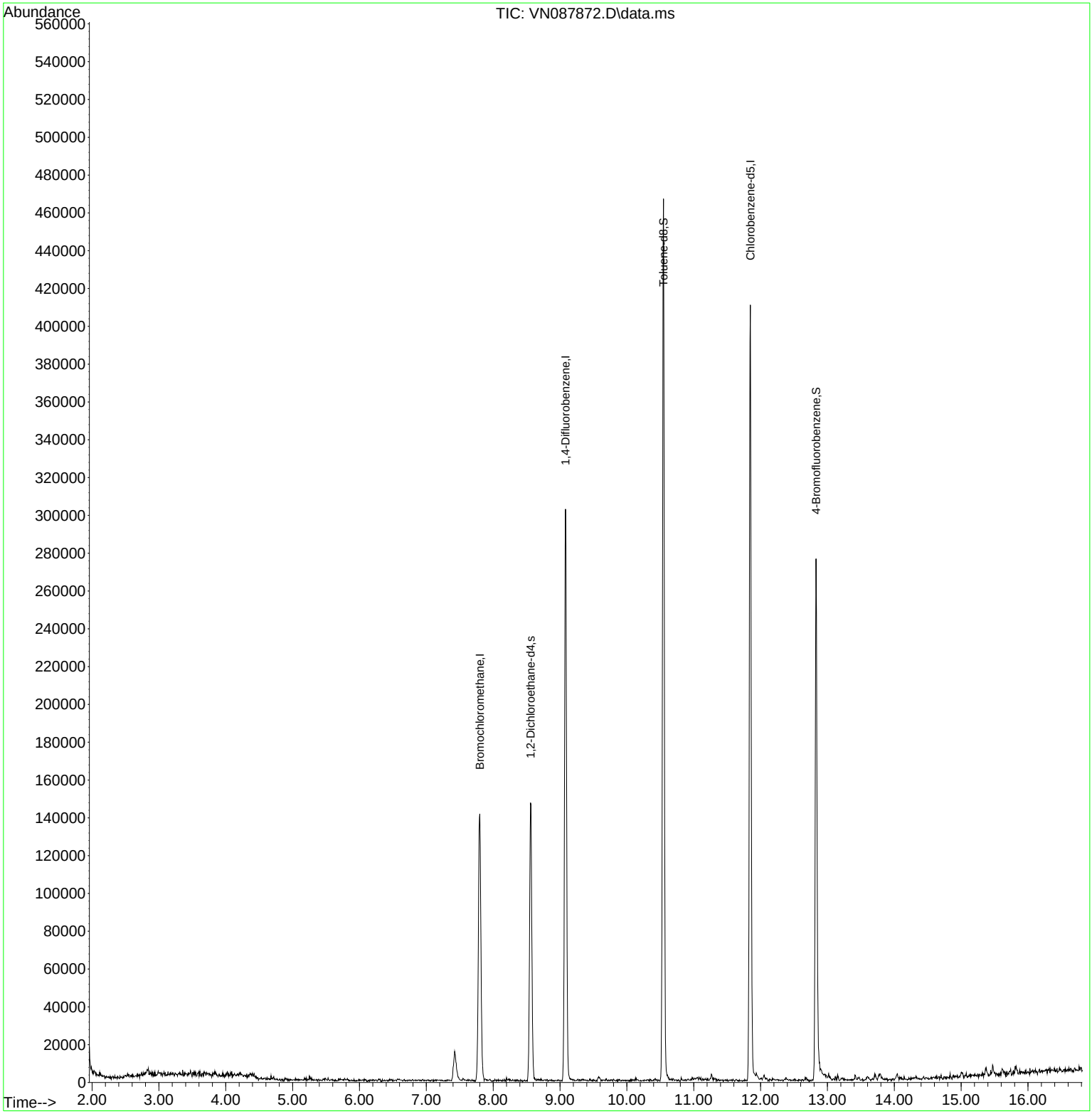
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.800	128	50672	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.083	114	260263	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.847	117	234698	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.559	65	124770	28.825	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	96.067%		
60) 4-Bromofluorobenzene	12.829	95	99589	26.390	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	87.967%		
63) Toluene-d8	10.547	98	315410	28.898	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	96.333%		
Target Compounds						Qvalue

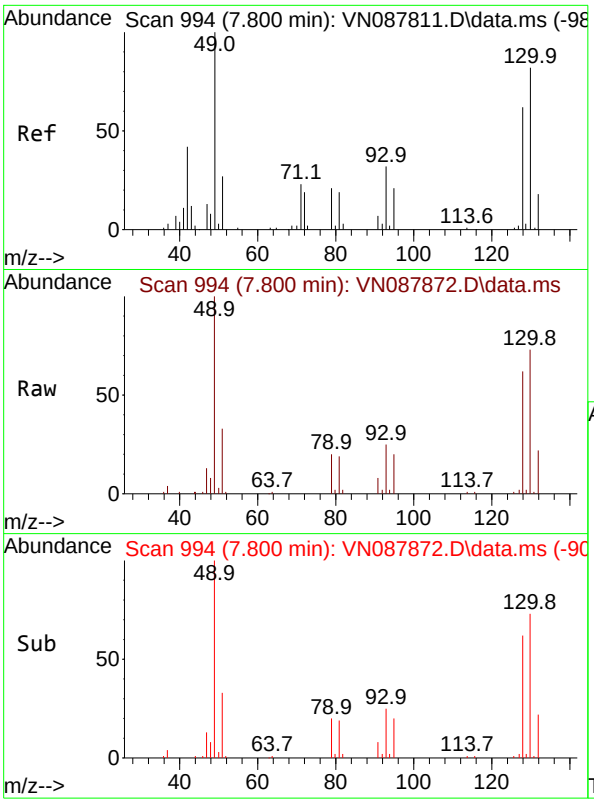
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087872.D
Acq On : 17 Sep 2025 12:03
Operator : JC\MD
Sample : VN0917WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBL01

Quant Time: Sep 18 03:09:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration



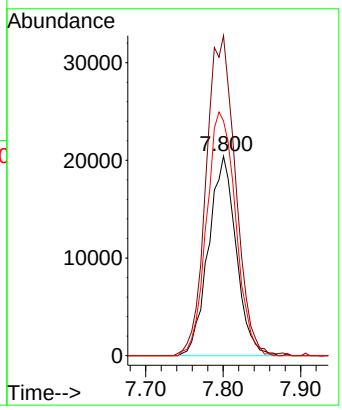


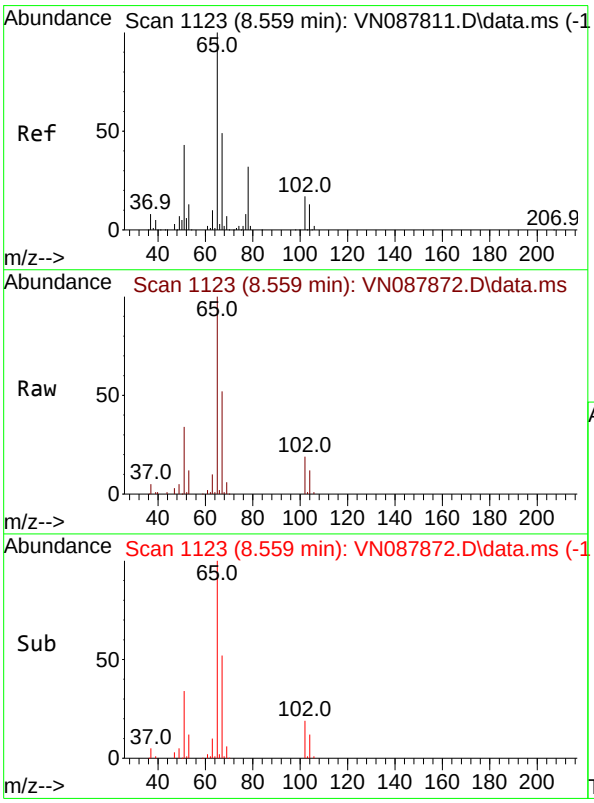
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.800 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087872.D
Acq: 17 Sep 2025 12:03

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBL01

Tgt Ion:128 Resp: 50672

Ion	Ratio	Lower	Upper
128	100		
49	170.0	0.0	464.3
130	128.5	0.0	300.5

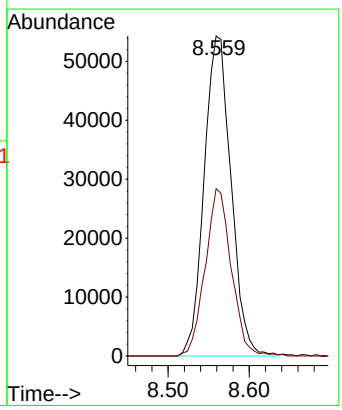


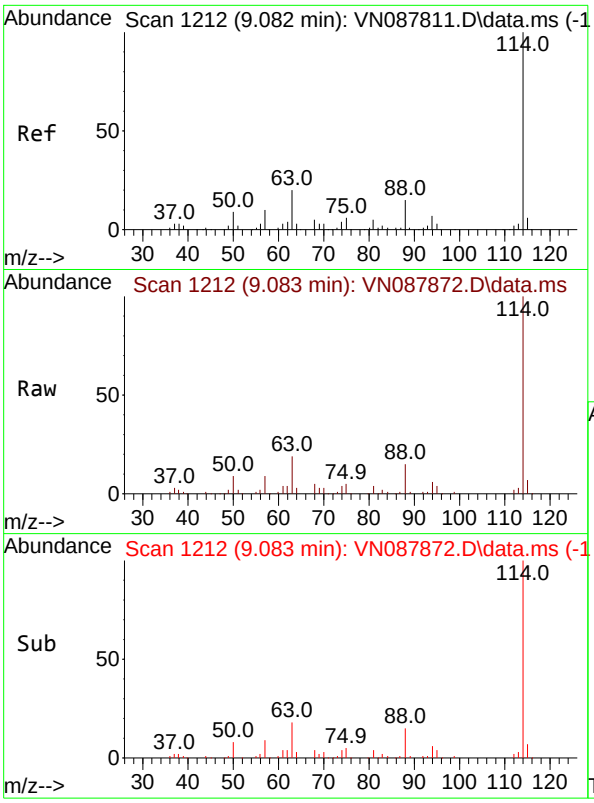


#27
1,2-Dichloroethane-d4
Concen: 28.825 ug/l
RT: 8.559 min Scan# 1123
Delta R.T. 0.000 min
Lab File: VN087872.D
Acq: 17 Sep 2025 12:03

Tgt Ion: 65 Resp: 124770

Ion	Ratio	Lower	Upper
65	100		
67	50.9	39.6	59.4



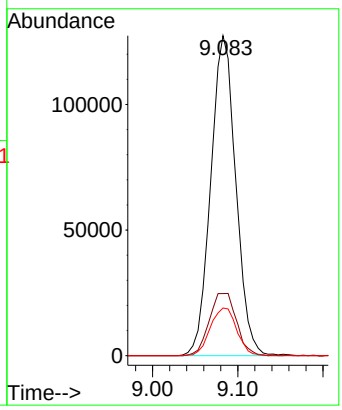


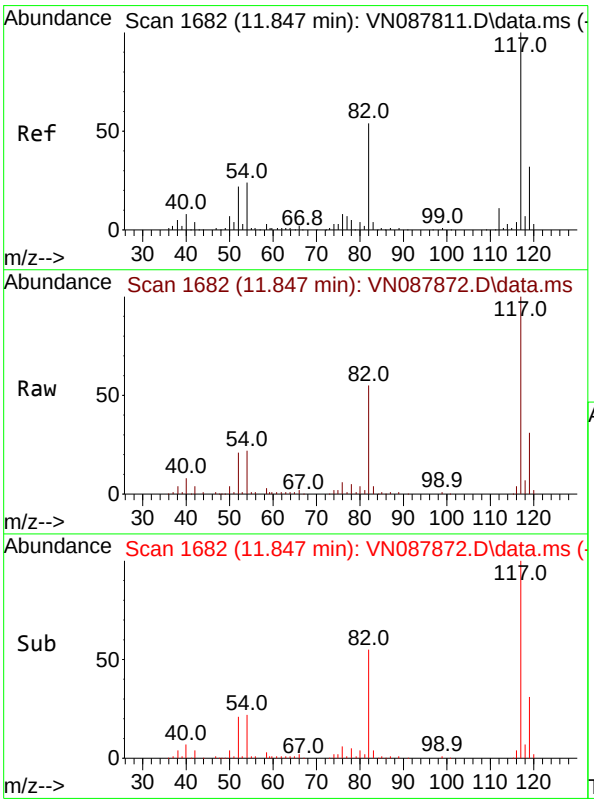
#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.083 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087872.D
Acq: 17 Sep 2025 12:03

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBL01

Tgt Ion:114 Resp: 260263

Ion	Ratio	Lower	Upper
114	100		
63	21.1	18.3	27.5
88	15.7	12.4	18.6

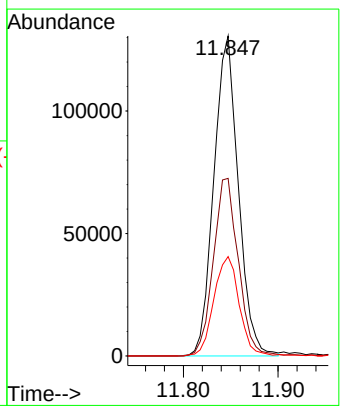


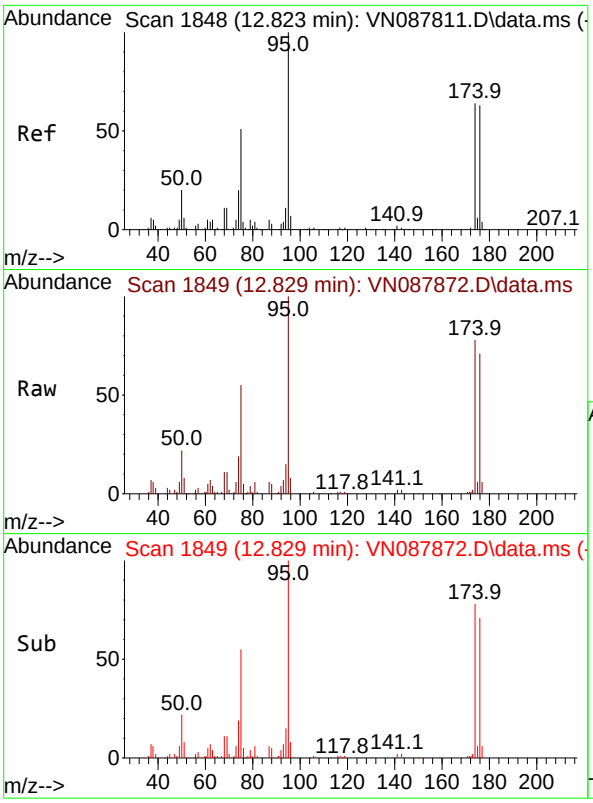


#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.847 min Scan# 1682
Delta R.T. 0.006 min
Lab File: VN087872.D
Acq: 17 Sep 2025 12:03

Tgt Ion:117 Resp: 234698

Ion	Ratio	Lower	Upper
117	100		
82	56.6	45.9	68.9
119	32.0	25.3	37.9



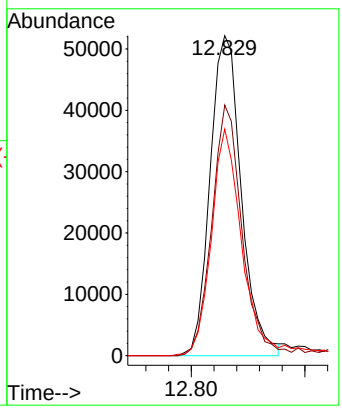


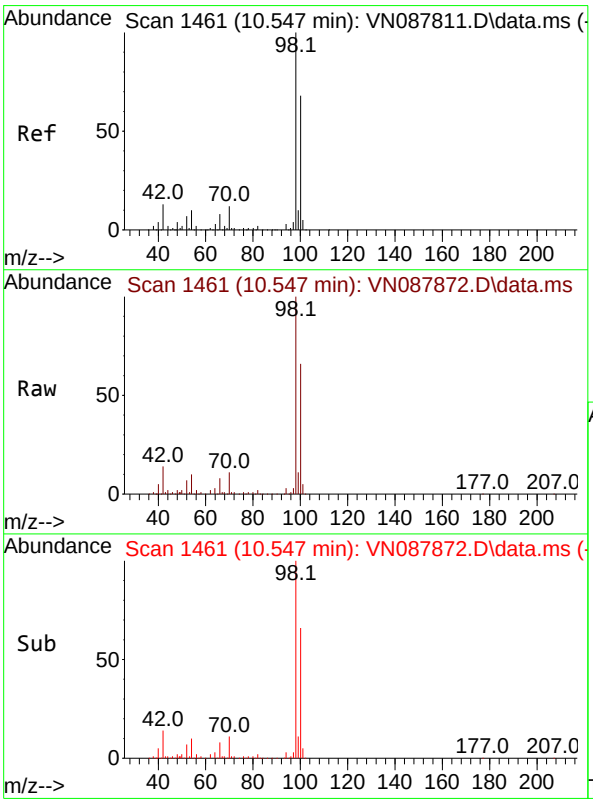
#60
4-Bromofluorobenzene
Concen: 26.390 ug/l
RT: 12.829 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087872.D
Acq: 17 Sep 2025 12:03

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBL01

Tgt Ion: 95 Resp: 99589

Ion	Ratio	Lower	Upper
95	100		
174	75.3	55.4	83.0
176	70.4	51.5	77.3

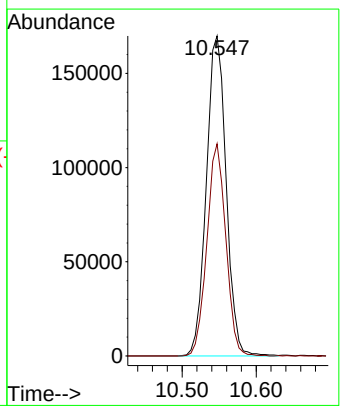




#63
Toluene-d8
Concen: 28.898 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087872.D
Acq: 17 Sep 2025 12:03

Tgt Ion: 98 Resp: 315410

Ion	Ratio	Lower	Upper
98	100		
100	63.3	50.6	76.0



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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBS01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBS01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087870.D	1	09/17/25 10:55	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	20.2		0.77	5.00	ug/L
74-87-3	Chloromethane	16.7		0.64	5.00	ug/L
75-01-4	Vinyl Chloride	16.9		0.83	5.00	ug/L
74-83-9	Bromomethane	15.0		0.80	5.00	ug/L
75-00-3	Chloroethane	15.8		2.30	5.00	ug/L
75-69-4	Trichlorofluoromethane	18.3		0.80	5.00	ug/L
75-35-4	1,1-Dichloroethene	18.2		0.76	5.00	ug/L
107-02-8	Acrolein	120		6.60	25.0	ug/L
107-13-1	Acrylonitrile	98.6		2.80	25.0	ug/L
67-64-1	Acetone	92.4		4.60	25.0	ug/L
75-15-0	Carbon Disulfide	17.7		0.82	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	20.5		0.77	5.00	ug/L
75-09-2	Methylene Chloride	19.7		0.86	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	20.3		0.82	5.00	ug/L
108-05-4	Vinyl Acetate	85.6		3.20	25.0	ug/L
75-34-3	1,1-Dichloroethane	19.8		0.68	5.00	ug/L
78-93-3	2-Butanone	94.9		2.00	25.0	ug/L
56-23-5	Carbon Tetrachloride	19.6		0.74	5.00	ug/L
594-20-7	2,2-Dichloropropane	20.8		0.66	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.1		0.80	5.00	ug/L
67-66-3	Chloroform	20.1		0.55	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.8		0.63	5.00	ug/L
563-58-6	1,1-Dichloropropene	19.0		0.63	5.00	ug/L
71-43-2	Benzene	18.8		0.45	5.00	ug/L
107-06-2	1,2-Dichloroethane	18.6		0.50	5.00	ug/L
79-01-6	Trichloroethene	20.2		0.49	5.00	ug/L
78-87-5	1,2-Dichloropropane	18.9		0.46	5.00	ug/L
74-95-3	Dibromomethane	18.4		0.59	5.00	ug/L
75-27-4	Bromodichloromethane	18.8		0.64	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	94.5		3.00	25.0	ug/L

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBS01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBS01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087870.D	1	09/17/25 10:55	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-88-3	Toluene	19.6		0.46	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.4		0.72	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.5		0.67	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.9		0.45	5.00	ug/L
142-28-9	1,3-Dichloropropane	19.2		0.44	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	83.8		4.60	25.0	ug/L
591-78-6	2-Hexanone	92.4		3.20	25.0	ug/L
124-48-1	Dibromochloromethane	20.0		0.66	5.00	ug/L
106-93-4	1,2-Dibromoethane	18.9		0.56	5.00	ug/L
127-18-4	Tetrachloroethene	22.6		0.84	5.00	ug/L
108-90-7	Chlorobenzene	20.7		0.47	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	20.5		0.62	5.00	ug/L
67-72-1	Hexachloroethane	20.9		0.98	5.00	ug/L
100-41-4	Ethyl Benzene	20.2		0.56	5.00	ug/L
179601-23-1	m/p-Xylenes	40.8		1.30	10.0	ug/L
1330-20-7	Total Xylenes	61.0		1.97	15.0	ug/L
95-47-6	o-Xylene	20.2		0.67	5.00	ug/L
100-42-5	Styrene	19.5		0.72	5.00	ug/L
75-25-2	Bromoform	20.2		0.94	5.00	ug/L
98-82-8	Isopropylbenzene	21.1		0.78	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.9		0.44	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	19.6		0.62	5.00	ug/L
108-86-1	Bromobenzene	20.5		0.59	5.00	ug/L
103-65-1	n-propylbenzene	20.7		0.67	5.00	ug/L
95-49-8	2-Chlorotoluene	20.2		0.64	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	20.6		0.59	5.00	ug/L
106-43-4	4-Chlorotoluene	20.3		0.62	5.00	ug/L
98-06-6	tert-butylbenzene	21.8		0.71	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	20.2		0.77	5.00	ug/L
135-98-8	sec-Butylbenzene	21.4		0.64	5.00	ug/L
99-87-6	p-Isopropyltoluene	22.1		0.70	5.00	ug/L

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBS01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBS01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087870.D	1	09/17/25 10:55	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
541-73-1	1,3-Dichlorobenzene	21.6		0.67	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	21.7		0.81	5.00	ug/L
104-51-8	n-Butylbenzene	22.0		0.82	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	21.6		0.67	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	20.0		0.86	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	22.0		1.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	27.0		0.68	5.00	ug/L
91-20-3	Naphthalene	20.3		1.00	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	22.0		1.10	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.0		91 - 110	100%	SPK: 30
2037-26-5	Toluene-d8	29.8		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.4		63 - 112	101%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	53500	7.794			
540-36-3	1,4-Difluorobenzene	296000	9.082			
3114-55-4	Chlorobenzene-d5	269000	11.847			
74-97-5	Bromochloromethane	53500	7.794			

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\VN091725\
Data File : VN087870.D
Acq On : 17 Sep 2025 10:55
Operator : JC\MD
Sample : VN0917WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 03:07:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.794	128	53476	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.082	114	296032	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.847	117	268776	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.559	65	137020	29.995	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.000%				
60) 4-Bromofluorobenzene	12.829	95	131390	30.402	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 101.333%				
63) Toluene-d8	10.541	98	372539	29.804	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 99.333%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.142	85	67104	20.190	ug/l		98
3) Chloromethane	2.383	50	58286	16.706	ug/l		98
4) Vinyl Chloride	2.536	62	66773	16.930	ug/l		99
5) Bromomethane	2.977	94	34766	15.026	ug/l		97
6) Chloroethane	3.136	64	42585	15.798	ug/l	#	78
7) Trichlorofluoromethane	3.512	101	105691	18.282	ug/l		90
8) Diethyl Ether	3.965	74	41183	16.870	ug/l		93
9) 1,1,2-Trichlorotrifluo...	4.377	101	60935m	19.460	ug/l		
10) 1,1-Dichloroethene	4.336	96	58764	18.203	ug/l		88
11) Methyl Iodide	4.583	142	37791	16.537	ug/l		82
12) Methyl Acetate	5.012	43	103303	20.758	ug/l		96
13) Acrolein	4.177	56	106235m	119.897	ug/l		
14) Acrylonitrile	5.706	53	211139	98.570	ug/l		99
15) Acetone	4.424	58	61711	92.351	ug/l		97
16) Carbon Disulfide	4.700	76	156918	17.704	ug/l	#	91
17) Allyl chloride	5.006	41	103203	19.572	ug/l		95
18) Methylene Chloride	5.259	84	72176m	19.737	ug/l		
19) trans-1,2-Dichloroethene	5.771	96	66956	20.336	ug/l		97
20) Diisopropyl ether	6.653	45	227741	18.782	ug/l		98
21) 1,1-Dichloroethane	6.553	63	131509	19.805	ug/l		98
22) cis-1,2-Dichloroethene	7.471	96	80456	20.132	ug/l		96
23) tert-Butyl Alcohol	5.512	59	76053	100.440	ug/l	#	100
24) Methyl tert-Butyl Ether	5.788	73	236800	20.546	ug/l		100
25) Chloroform	7.947	83	139613	20.087	ug/l		94
26) Cyclohexane	8.241	56	103429	20.453	ug/l	#	98
29) 1,1-Dichloropropene	8.359	75	91361	18.990	ug/l		97
30) 2-Butanone	7.465	43	314577	94.918	ug/l		99
31) 2,2-Dichloropropane	7.471	77	120804	20.830	ug/l		100
32) 1,1,1-Trichloroethane	8.147	97	120694	19.788	ug/l		99
33) Carbon Tetrachloride	8.347	117	99548	19.574	ug/l		97
34) Benzene	8.588	78	291758	18.764	ug/l		97
35) Methacrylonitrile	7.759	41	64671	18.655	ug/l		95
36) 1,2-Dichloroethane	8.653	62	109196	18.592	ug/l		100
37) Trichloroethene	9.335	130	70049	20.153	ug/l		91
38) Methylcyclohexane	9.576	83	102865	19.418	ug/l		98
39) 1,2-Dichloropropane	9.606	63	75122	18.863	ug/l		99
40) Dibromomethane	9.688	93	54595	18.421	ug/l		95
41) Bromodichloromethane	9.871	83	114152	18.845	ug/l		97
42) Vinyl Acetate	6.588	43	948262	85.635	ug/l		98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087870.D
Acq On : 17 Sep 2025 10:55
Operator : JC\MD
Sample : VN0917WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 03:07:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.541	43	119327	17.623	ug/l		95
44) Isopropyl Acetate	8.671	43	190975	17.991	ug/l		97
45) 1,4-Dioxane	9.682	88	25037	374.007	ug/l	#	69
46) Methyl methacrylate	9.665	41	82471	16.855	ug/l		92
47) n-amyl Acetate	12.559	43	102030m	14.223	ug/l		
48) t-1,3-Dichloropropene	10.818	75	116022	18.442	ug/l		99
49) cis-1,3-Dichloropropene	10.294	75	118981	18.464	ug/l		91
50) 1,1,2-Trichloroethane	11.000	97	72265	18.879	ug/l		94
51) Ethyl methacrylate	10.853	69	106318	17.847	ug/l		97
52) 1,3-Dichloropropane	11.141	76	127768	19.222	ug/l		99
53) Dibromochloromethane	11.335	129	85737	19.976	ug/l		92
54) 1,2-Dibromoethane	11.447	107	75101	18.855	ug/l		98
55) 2-Chloroethyl vinyl ether	10.141	63	286029	83.801	ug/l		97
56) Bromoform	12.559	173	56526	20.167	ug/l		97
58) 4-Methyl-2-Pentanone	10.423	43	600838	94.543	ug/l		98
59) 2-Hexanone	11.176	43	383551	92.361	ug/l		96
61) Tetrachloroethene	11.082	164	60444	22.587	ug/l		91
62) Toluene	10.606	91	318841	19.612	ug/l		99
64) Chlorobenzene	11.870	112	206408	20.686	ug/l		97
65) 1,1,1,2-Tetrachloroethane	11.941	131	72178	20.546	ug/l		96
66) Ethyl Benzene	11.941	91	353748	20.169	ug/l		91
67) m/p-Xylenes	12.047	106	265828	40.829	ug/l		92
68) o-Xylene	12.376	106	127272	20.161	ug/l		99
69) Styrene	12.394	104	213549	19.464	ug/l		98
70) Isopropylbenzene	12.676	105	337517	21.086	ug/l		99
71) 1,1,2,2-Tetrachloroethane	12.917	83	114652	19.925	ug/l		98
72) 1,2,3-Trichloropropane	12.970	75	111015m	19.649	ug/l		
73) Bromobenzene	12.959	156	80238	20.489	ug/l		92
74) n-propylbenzene	13.012	91	418506	20.722	ug/l		98
75) 2-Chlorotoluene	13.106	91	246028	20.240	ug/l		96
76) 1,3,5-Trimethylbenzene	13.153	105	279014	20.642	ug/l		96
77) t-1,4-Dichloro-2-butene	12.723	75	36499	19.139	ug/l		99
78) 4-Chlorotoluene	13.200	91	248882	20.310	ug/l		98
79) tert-butylbenzene	13.417	119	246851	21.807	ug/l		95
80) 1,2,4-Trimethylbenzene	13.459	105	280072	20.211	ug/l		96
81) sec-Butylbenzene	13.594	105	357039	21.444	ug/l		96
82) p-Isopropyltoluene	13.706	119	303705	22.138	ug/l		98
83) 1,3-Dichlorobenzene	13.711	146	162789	21.562	ug/l		98
84) 1,4-Dichlorobenzene	13.794	146	164451	21.731	ug/l		99
85) n-Butylbenzene	14.035	91	290663	22.042	ug/l		99
86) Hexachloroethane	14.306	117	58197	20.885	ug/l		93
87) 1,2-Dichlorobenzene	14.082	146	154091	21.640	ug/l		98
88) 1,2-Dibromo-3-Chloropr...	14.694	75	25535	19.996	ug/l		88
89) 1,2,4-Trichlorobenzene	15.811	180	88968	21.968	ug/l		98
90) Hexachlorobutadiene	15.476	225	36715	27.042	ug/l		93
91) Naphthalene	15.617	128	303214	20.336	ug/l		99
92) 1,2,3-Trichlorobenzene	15.811	180	88968	21.968	ug/l		98

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087870.D
Acq On : 17 Sep 2025 10:55
Operator : JC\MD
Sample : VN0917WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 03:07:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations APPROVED

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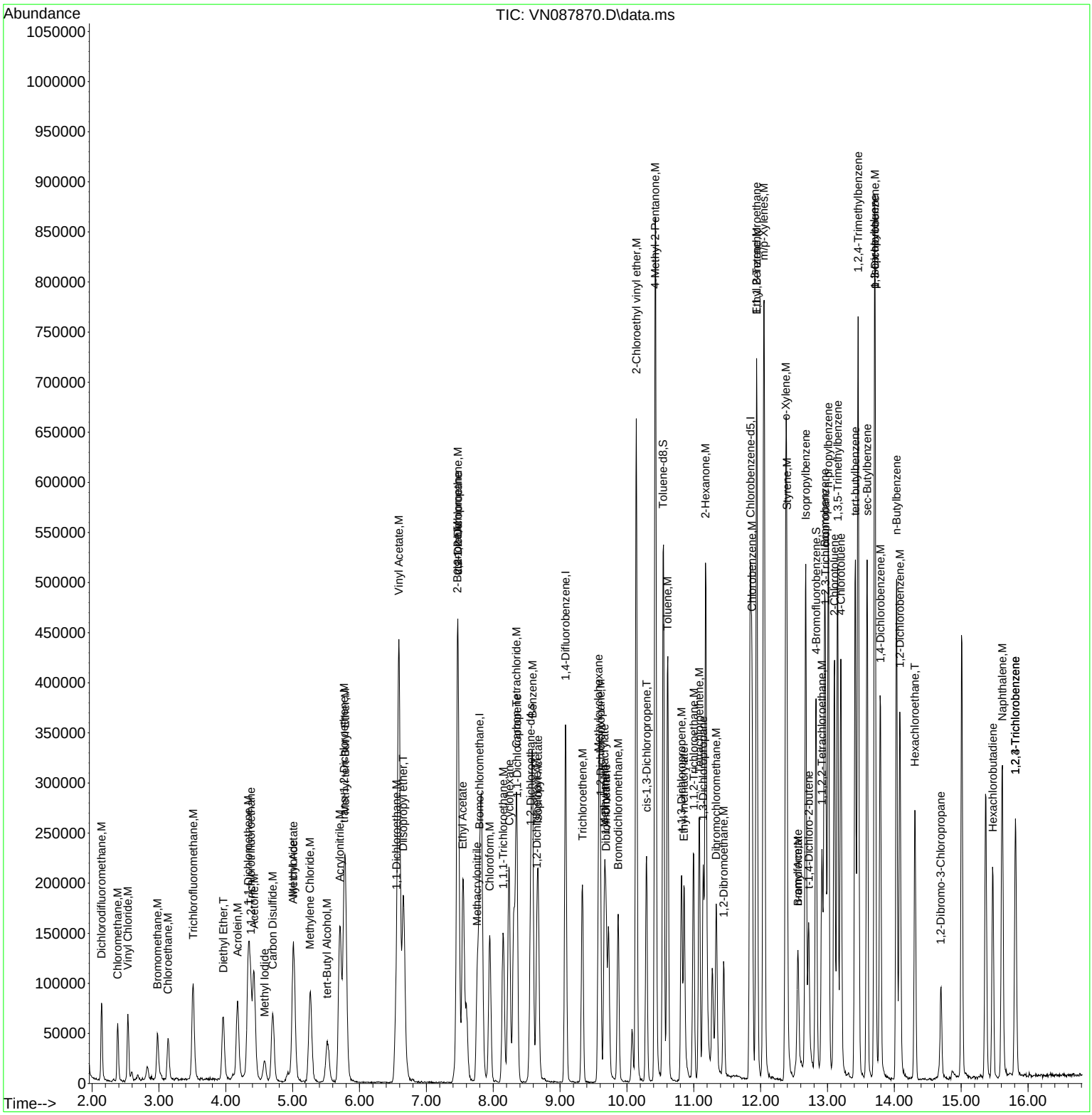
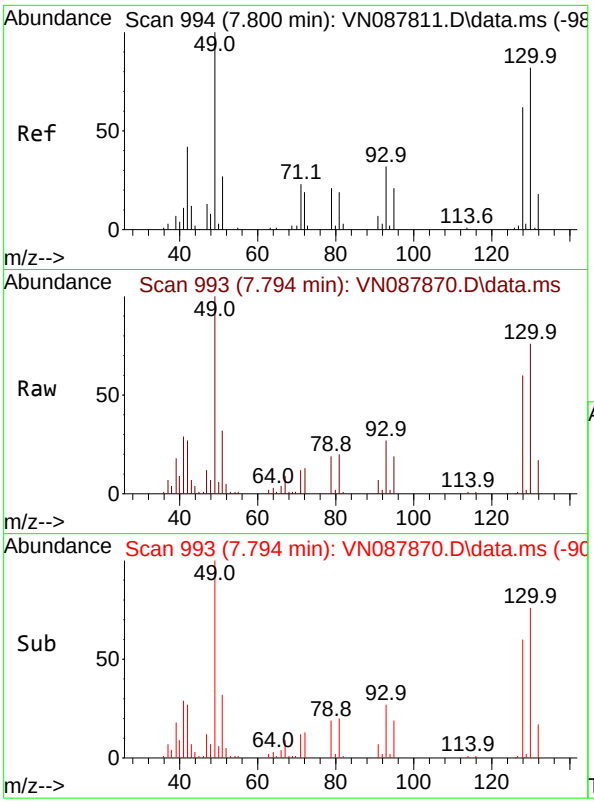
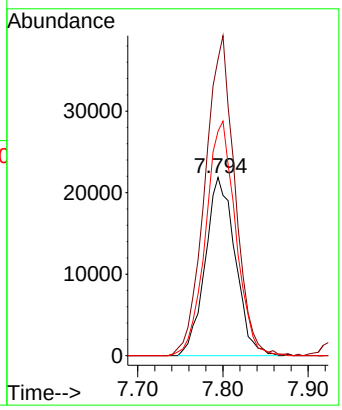




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.794 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:128 Resp: 5347

Ion	Ratio	Lower	Upper
128	100		
49	178.2	0.0	464.3
130	131.6	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations
APPROVED

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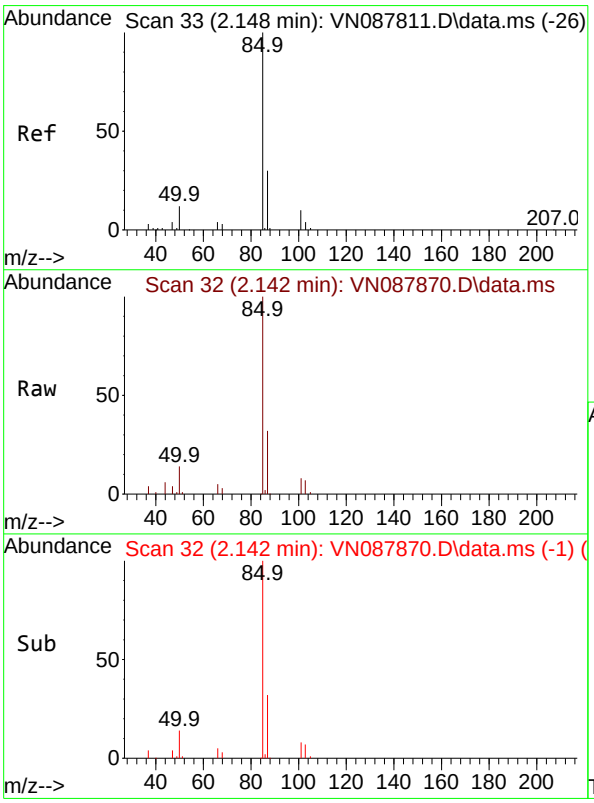
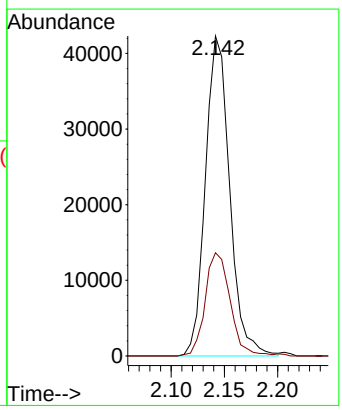
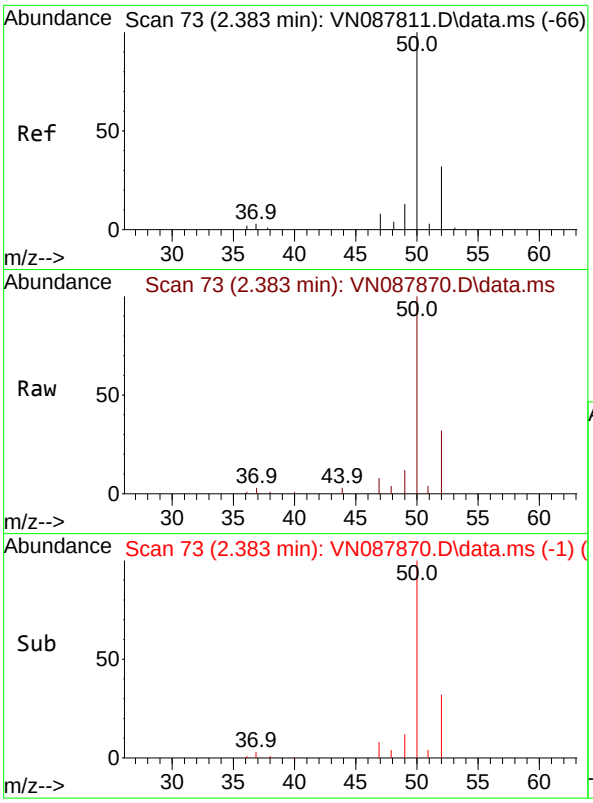


#2
Dichlorodifluoromethane
Concen: 20.190 ug/l
RT: 2.142 min Scan# 32
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 85 Resp: 67104

Ion	Ratio	Lower	Upper
85	100		
87	32.3	16.8	50.4

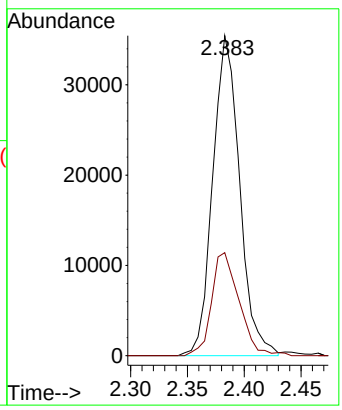




#3
Chloromethane
Concen: 16.706 ug/l
RT: 2.383 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 50 Resp: 5828

Ion	Ratio	Lower	Upper
50	100		
52	32.2	26.6	40.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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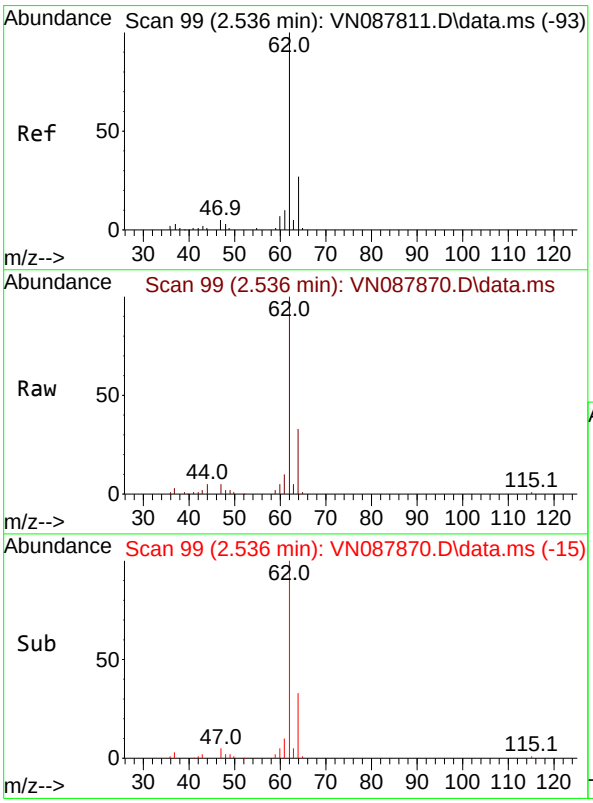
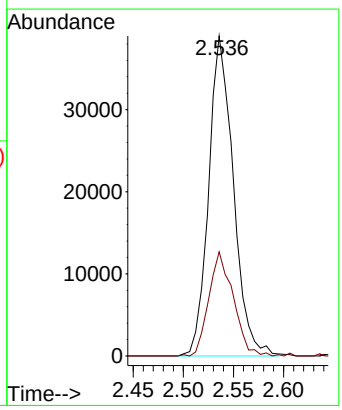
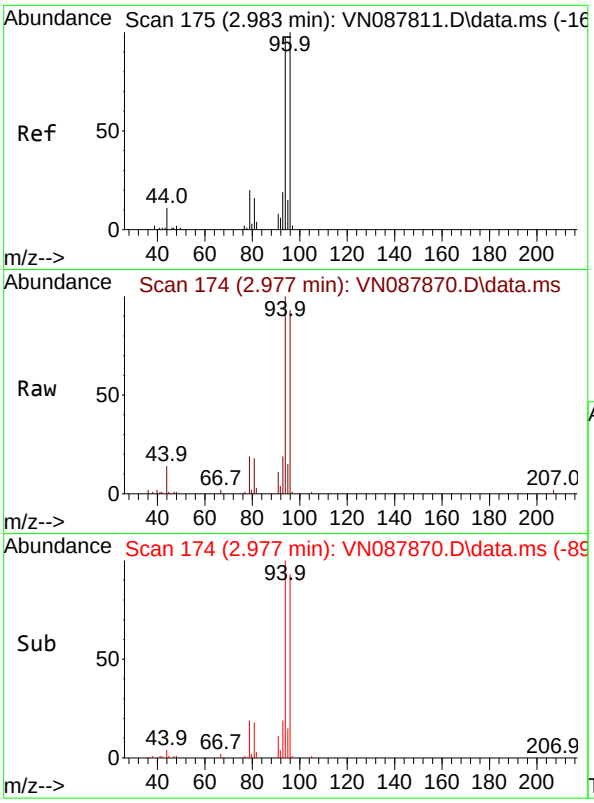


#4
Vinyl Chloride
Concen: 16.930 ug/l
RT: 2.536 min Scan# 99
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 62 Resp: 66773

Ion	Ratio	Lower	Upper
62	100		
64	32.6	25.5	38.3

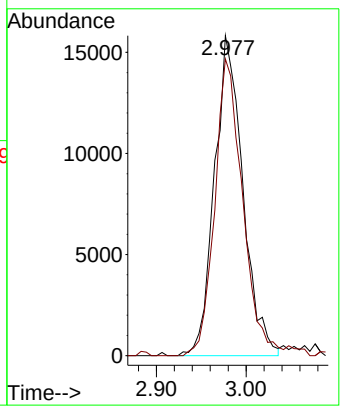




#5
Bromomethane
Concen: 15.026 ug/l
RT: 2.977 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 94 Resp: 3476

Ion	Ratio	Lower	Upper
94	100		
96	92.7	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations
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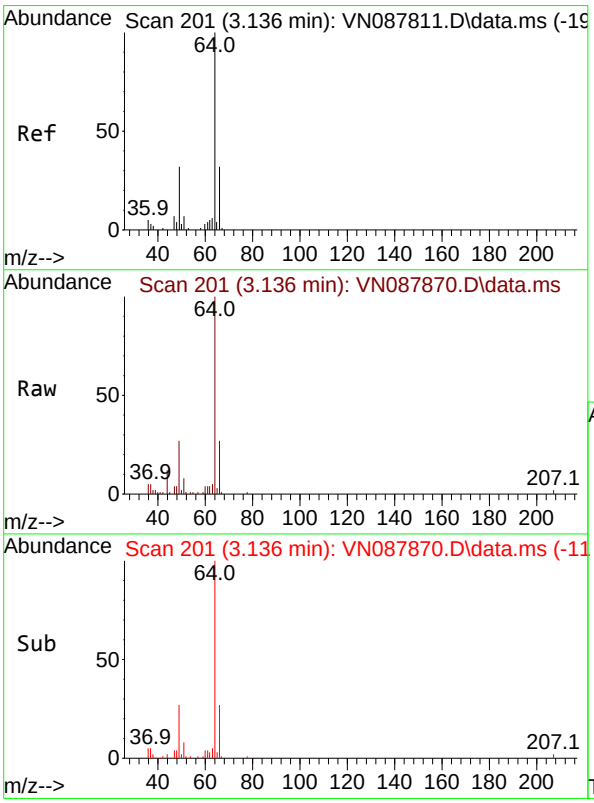
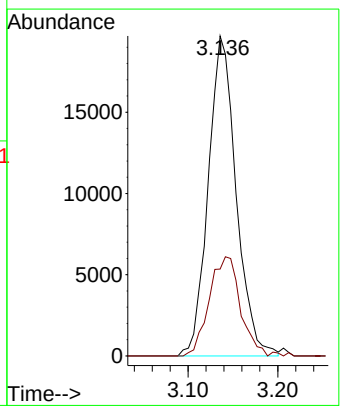
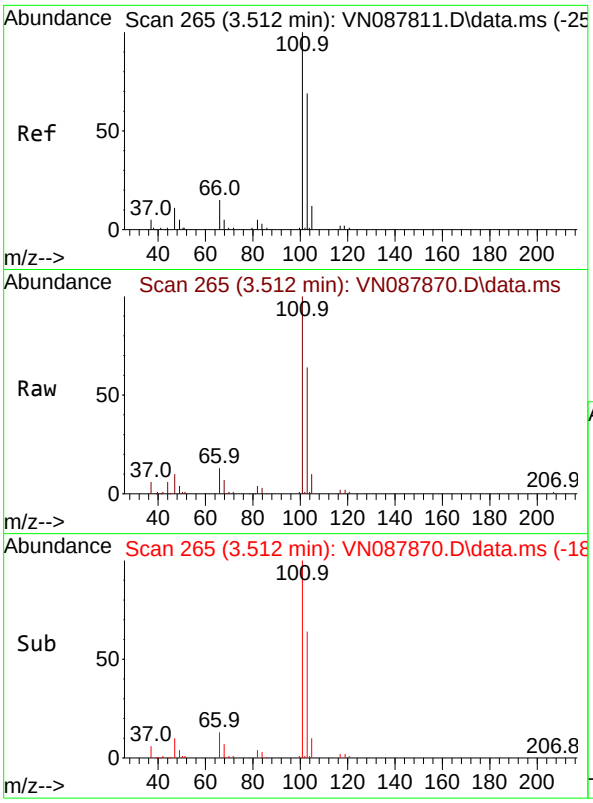


#6
Chloroethane
Concen: 15.798 ug/l
RT: 3.136 min Scan# 201
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 64 Resp: 42585

Ion	Ratio	Lower	Upper
64	100		
66	27.2	32.8	49.2#





#7
Trichlorofluoromethane
Concen: 18.282 ug/l
RT: 3.512 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:101 Resp: 10569

Ion	Ratio	Lower	Upper
101	100		
103	64.4	45.7	68.5

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations APPROVED

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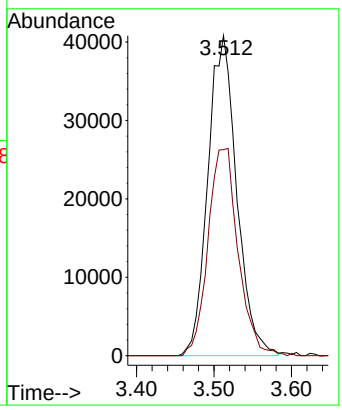
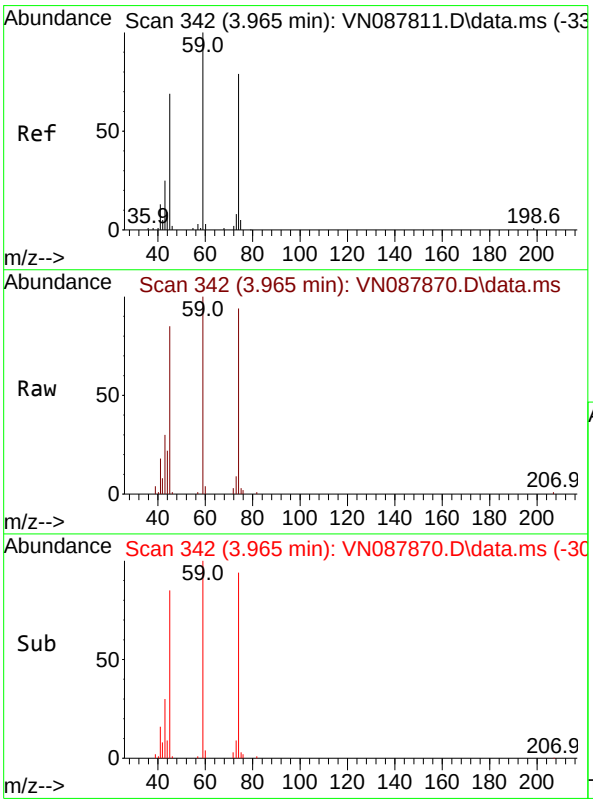
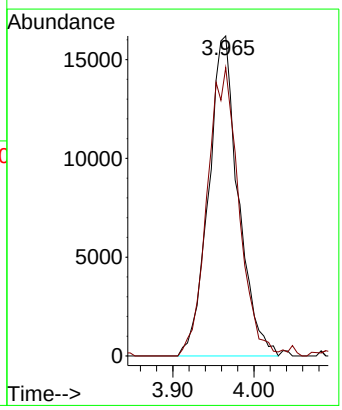


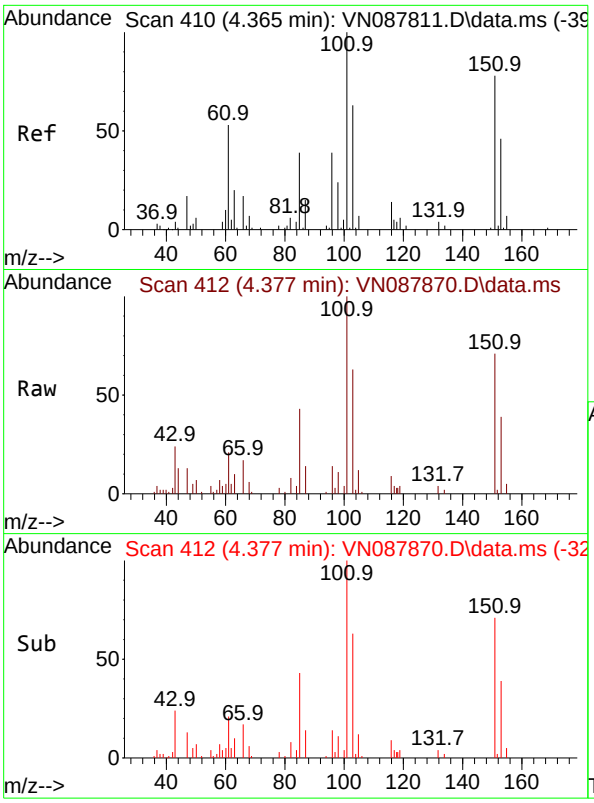


#8
Diethyl Ether
Concen: 16.870 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.012 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 74 Resp: 41183

Ion	Ratio	Lower	Upper
74	100		
45	95.1	20.4	183.8





#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.460 ug/l m
RT: 4.377 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:101 Resp: 6093

Ion	Ratio	Lower	Upper
101	100		
85	48.8	0.0	95.6
151	77.0	0.0	85.8

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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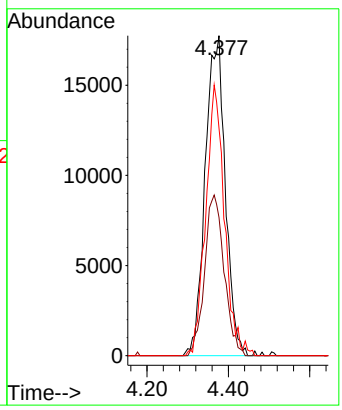
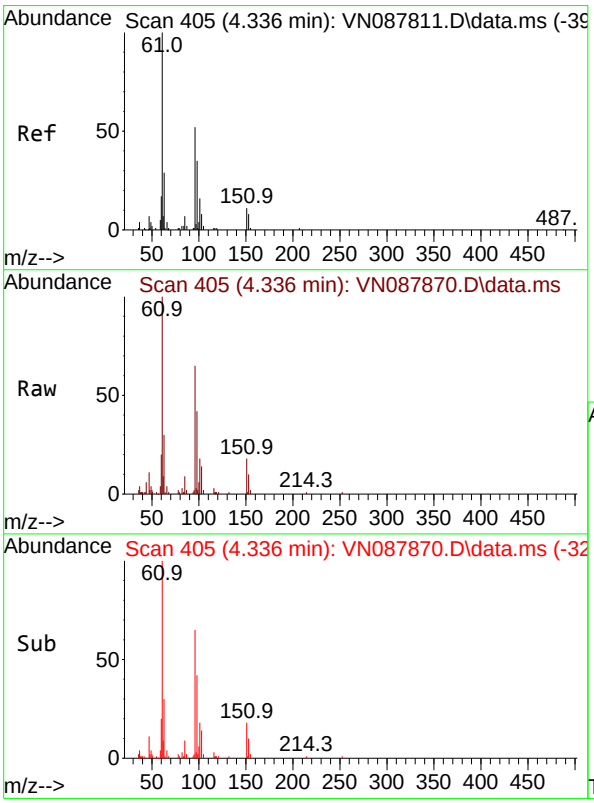
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

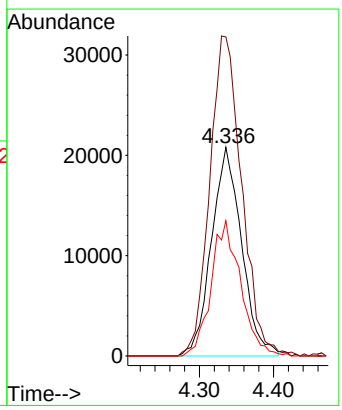


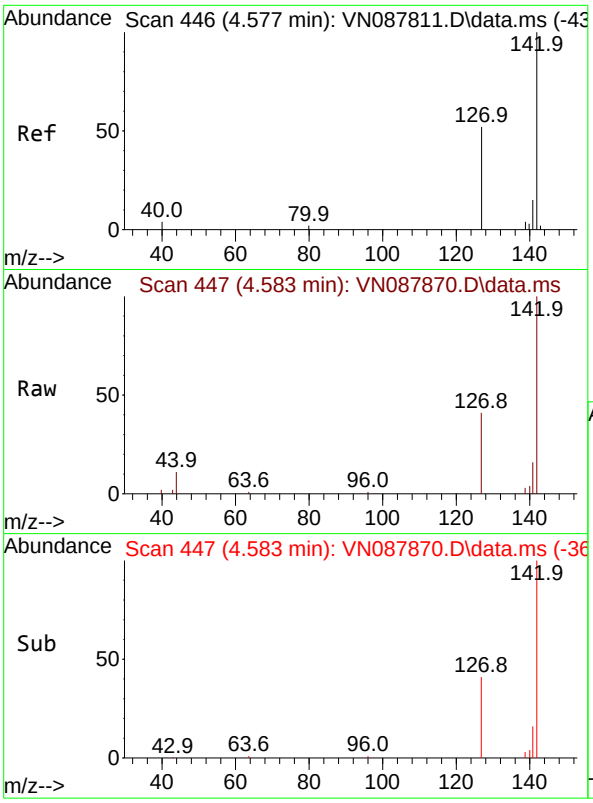


#10
1,1-Dichloroethene
Concen: 18.203 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 96 Resp: 58764

Ion	Ratio	Lower	Upper
96	100		
61	153.0	135.9	203.9
98	64.8	59.2	88.8

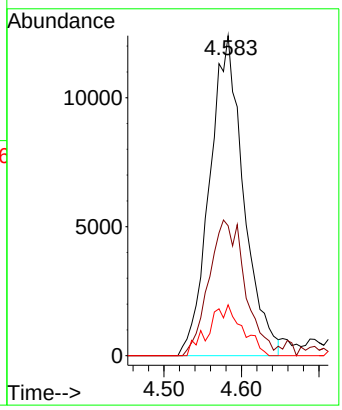




#11
Methyl Iodide
Concen: 16.537 ug/l
RT: 4.583 min Scan# 44
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:142 Resp: 3779

Ion	Ratio	Lower	Upper
142	100		
127	40.1	27.9	83.7
141	16.3	9.6	28.8



Instrument :
MSVOA_N
ClientSampleId :
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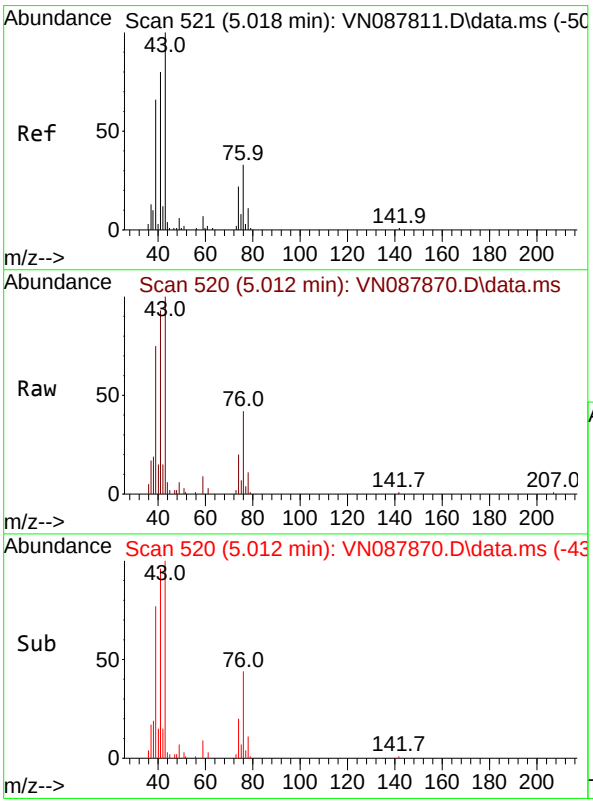
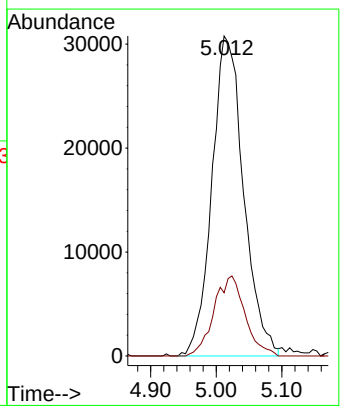
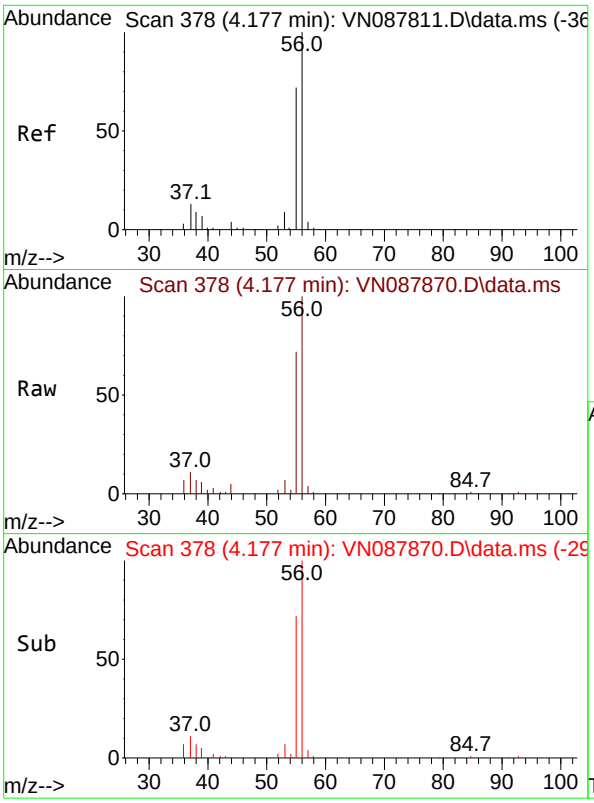


#12
Methyl Acetate
Concen: 20.758 ug/l
RT: 5.012 min Scan# 520
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 43 Resp: 103303

Ion	Ratio	Lower	Upper
43	100		
74	20.0	17.5	26.3

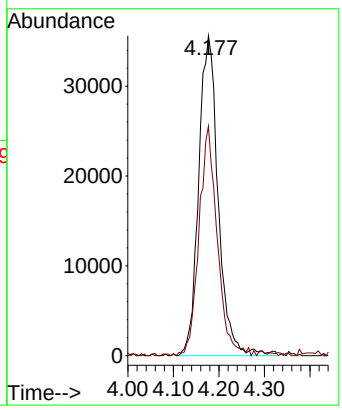




#13
Acrolein
Concen: 119.897 ug/l m
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 56 Resp: 10623

Ion	Ratio	Lower	Upper
56	100		
55	0.3	28.6	42.8



Instrument :
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ClientSampleId :
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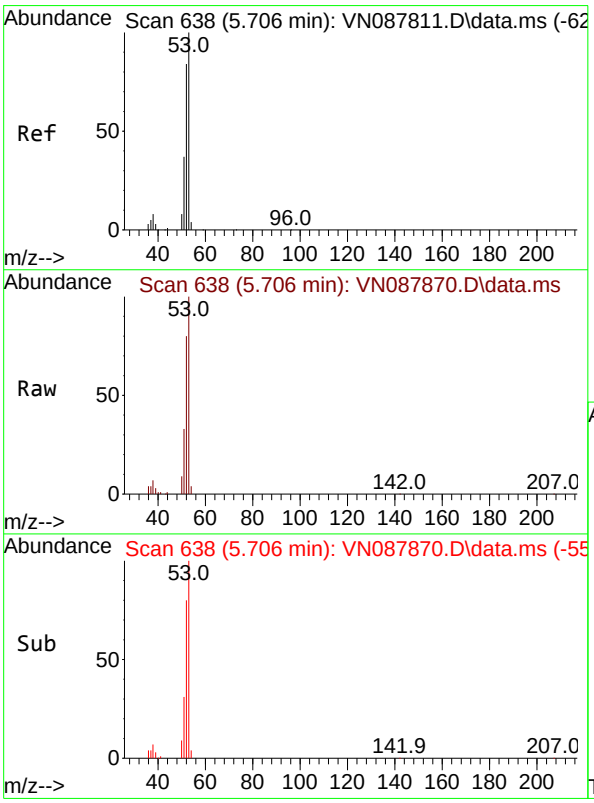
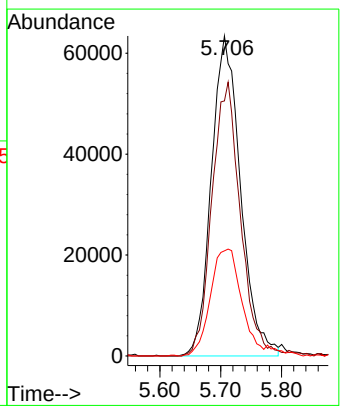
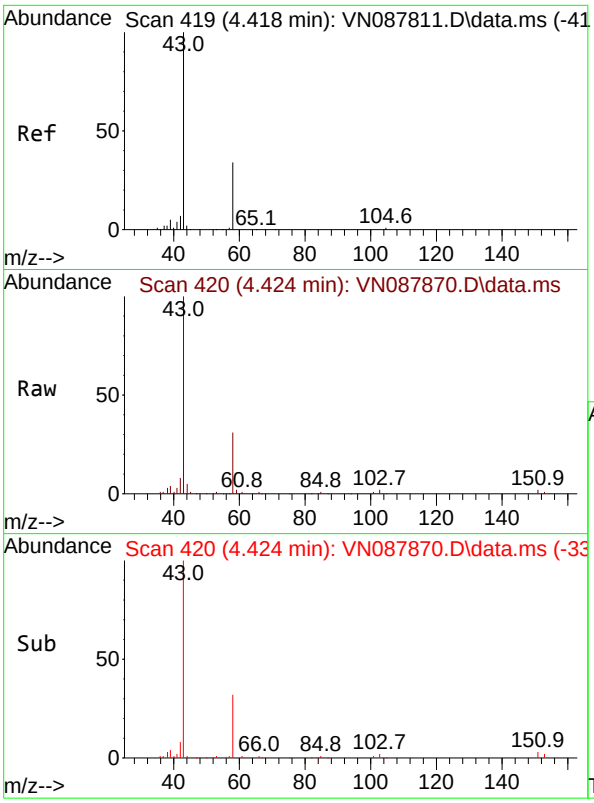


#14
Acrylonitrile
Concen: 98.570 ug/l
RT: 5.706 min Scan# 638
Delta R.T. -0.012 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 53 Resp: 211139

Ion	Ratio	Lower	Upper
53	100		
52	83.1	40.9	122.7
51	35.5	18.1	54.1

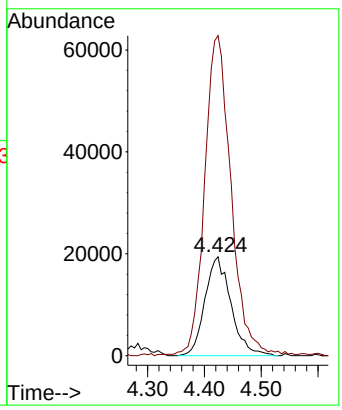




#15
Acetone
Concen: 92.351 ug/l
RT: 4.424 min Scan# 4
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 58 Resp: 6171

Ion	Ratio	Lower	Upper
58	100		
43	319.7	250.6	376.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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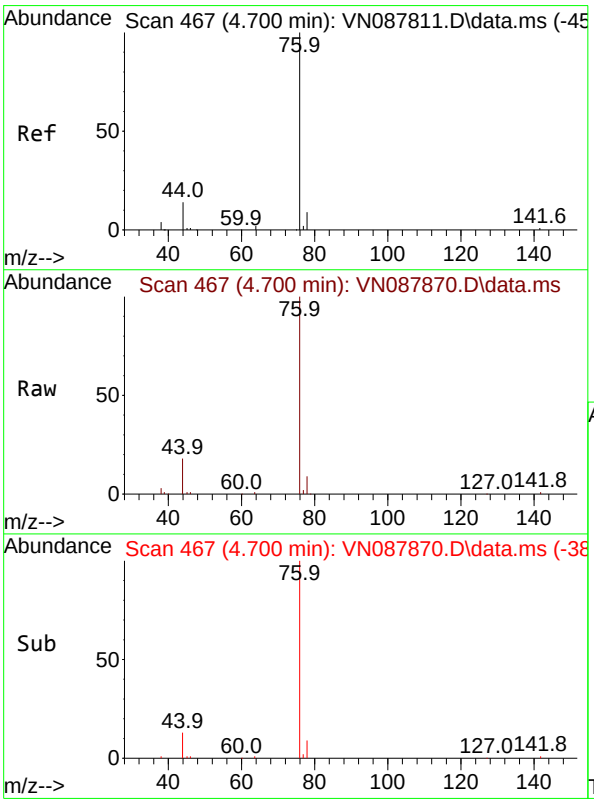
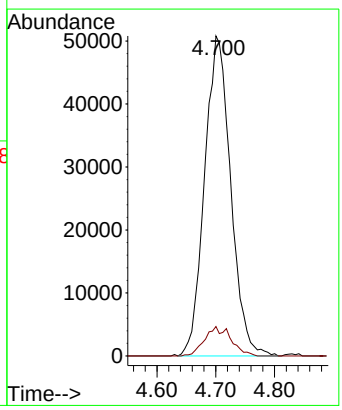
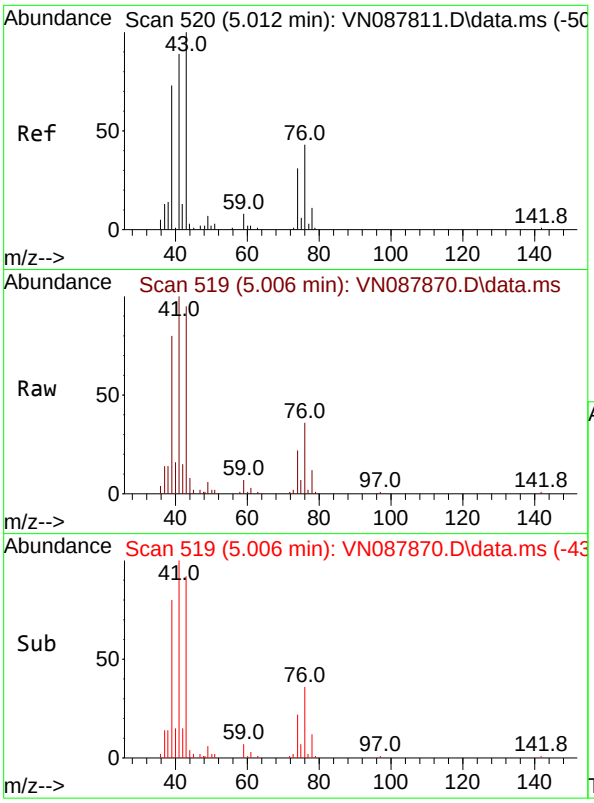


#16
Carbon Disulfide
Concen: 17.704 ug/l
RT: 4.700 min Scan# 467
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 76 Resp: 156918

Ion	Ratio	Lower	Upper
76	100		
78	9.2	5.0	7.6#

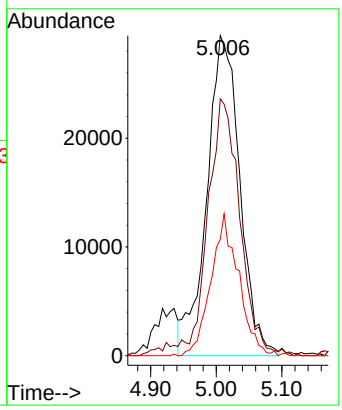




#17
Allyl chloride
Concen: 19.572 ug/l
RT: 5.006 min Scan# 5
Delta R.T. -0.012 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 41 Resp: 10320

Ion	Ratio	Lower	Upper
41	100		
39	80.0	36.7	110.1
76	36.8	18.3	54.8



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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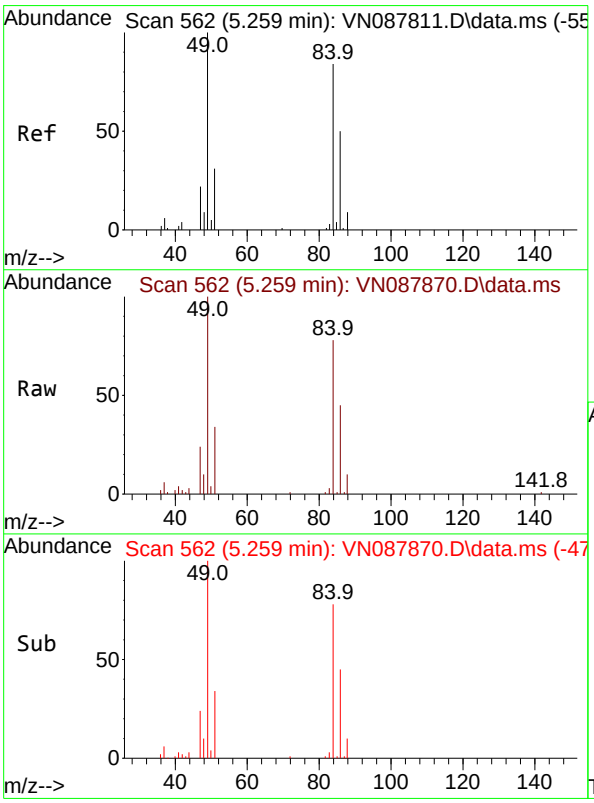
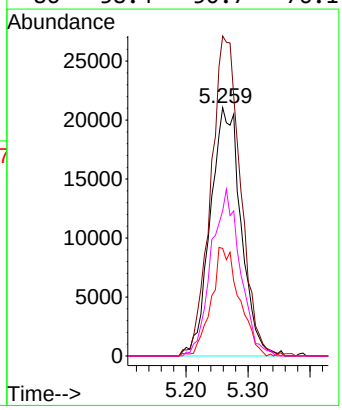
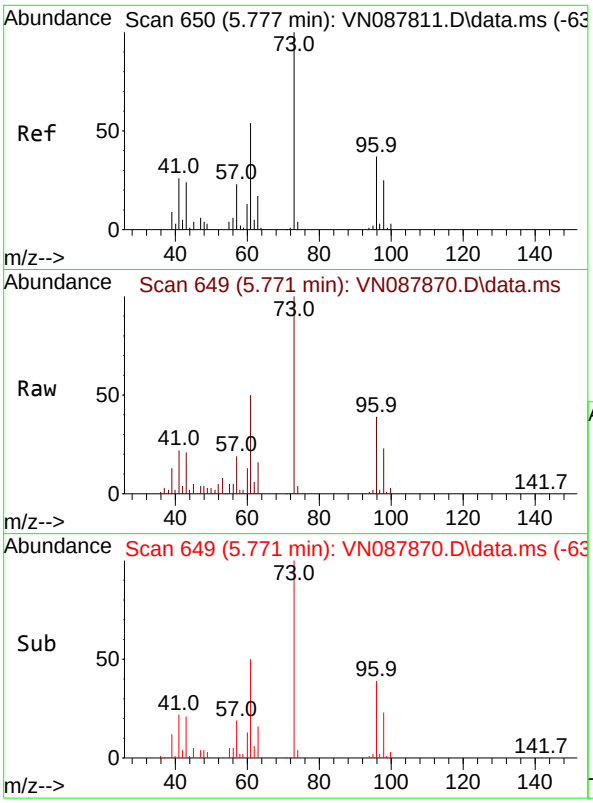


#18
Methylene Chloride
Concen: 19.737 ug/l m
RT: 5.259 min Scan# 562
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 84 Resp: 72176

Ion	Ratio	Lower	Upper
84	100		
49	128.9	114.1	171.1
51	43.3	30.2	45.4
86	58.4	50.7	76.1

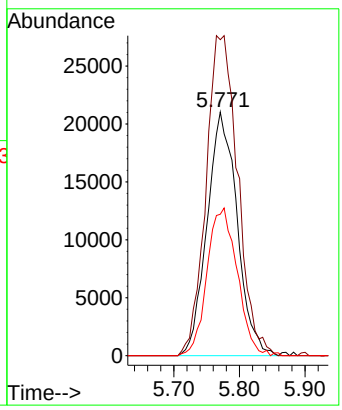




#19
trans-1,2-Dichloroethene
Concen: 20.336 ug/l
RT: 5.771 min Scan# 64
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 96 Resp: 6695

Ion	Ratio	Lower	Upper
96	100		
61	129.7	106.4	159.6
98	58.1	48.9	73.3



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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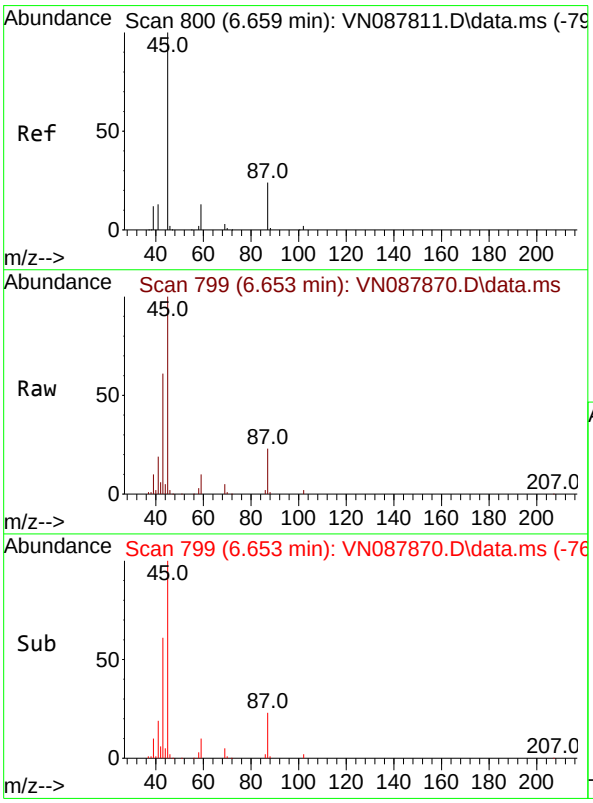
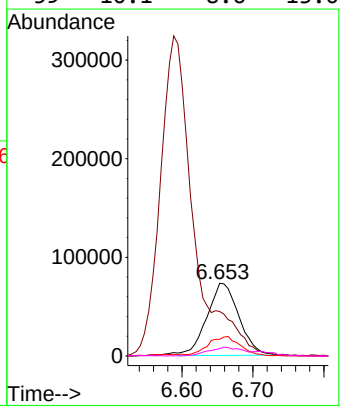
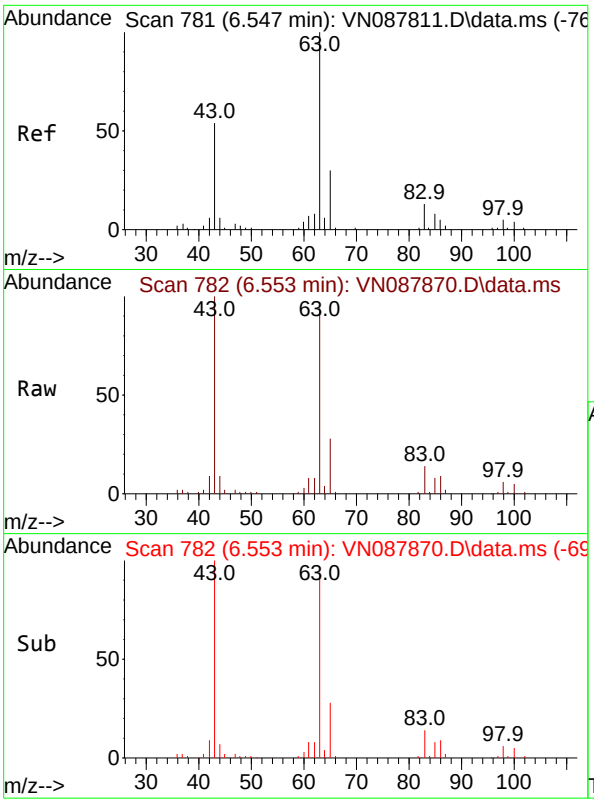


#20
Diisopropyl ether
Concen: 18.782 ug/l
RT: 6.653 min Scan# 799
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 45 Resp: 227741

Ion	Ratio	Lower	Upper
45	100		
43	60.3	49.5	74.3
87	22.7	18.8	28.2
59	10.1	8.6	13.0

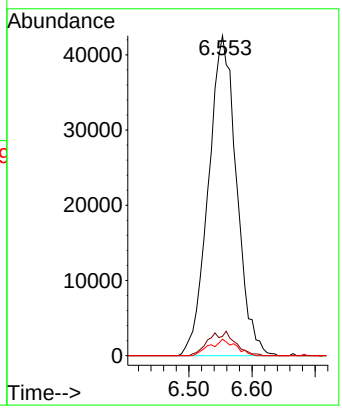




#21
1,1-Dichloroethane
Concen: 19.805 ug/l
RT: 6.553 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 63 Resp: 13150

Ion	Ratio	Lower	Upper
63	100		
98	6.1	2.9	8.8
100	5.2	1.8	5.3



Instrument :
MSVOA_N
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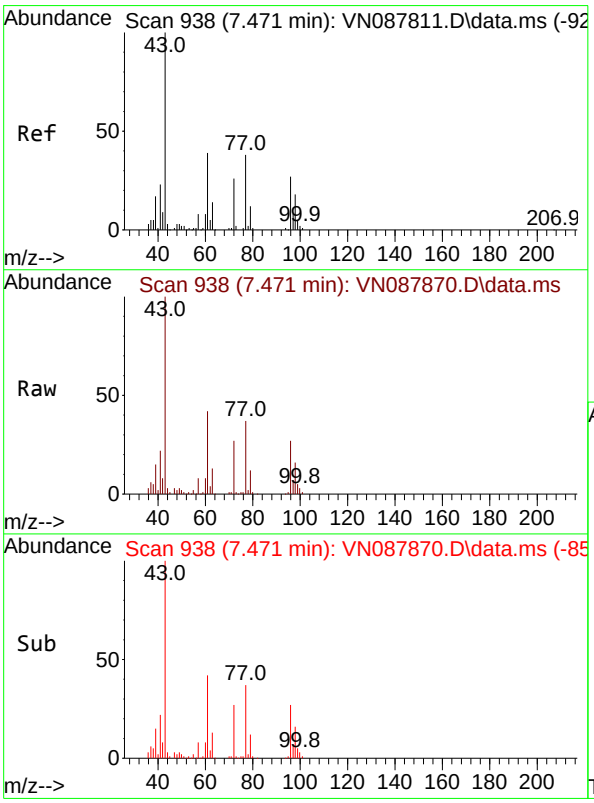
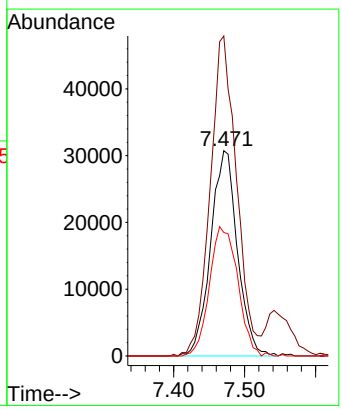
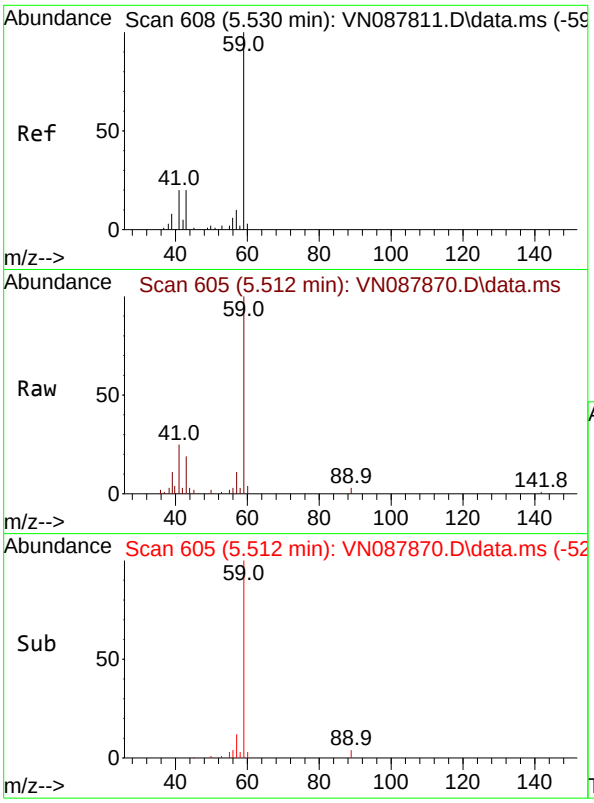


#22
cis-1,2-Dichloroethene
Concen: 20.132 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 96 Resp: 80456

Ion	Ratio	Lower	Upper
96	100		
61	154.4	118.2	177.2
98	66.2	51.6	77.4

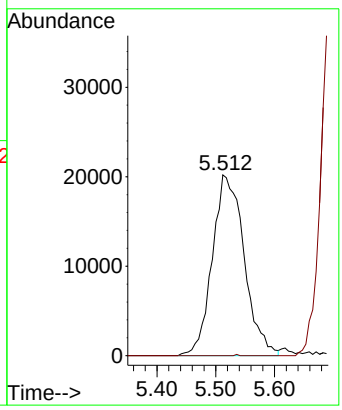




#23
tert-Butyl Alcohol
Concen: 100.440 ug/l
RT: 5.512 min Scan# 6
Delta R.T. -0.018 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 59 Resp: 7605

Ion	Ratio	Lower	Upper
59	100		
52	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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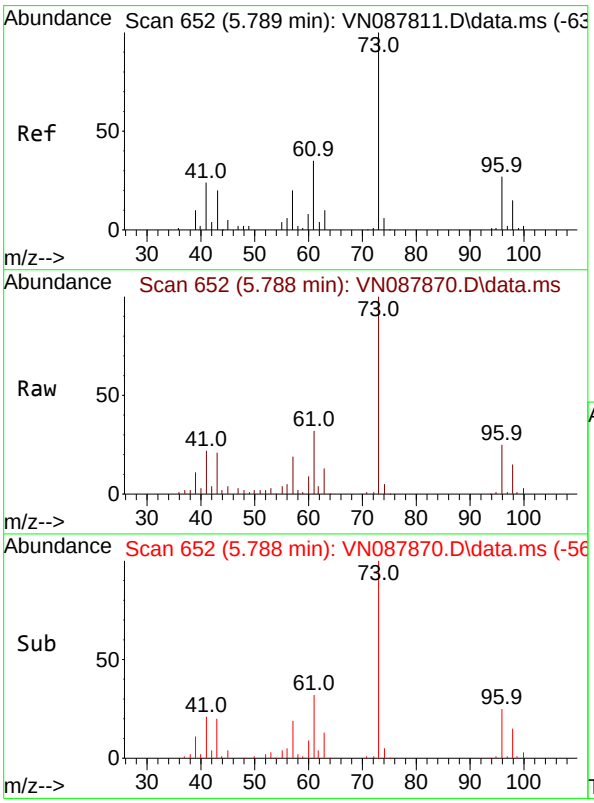
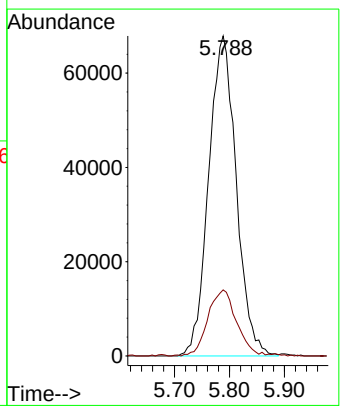
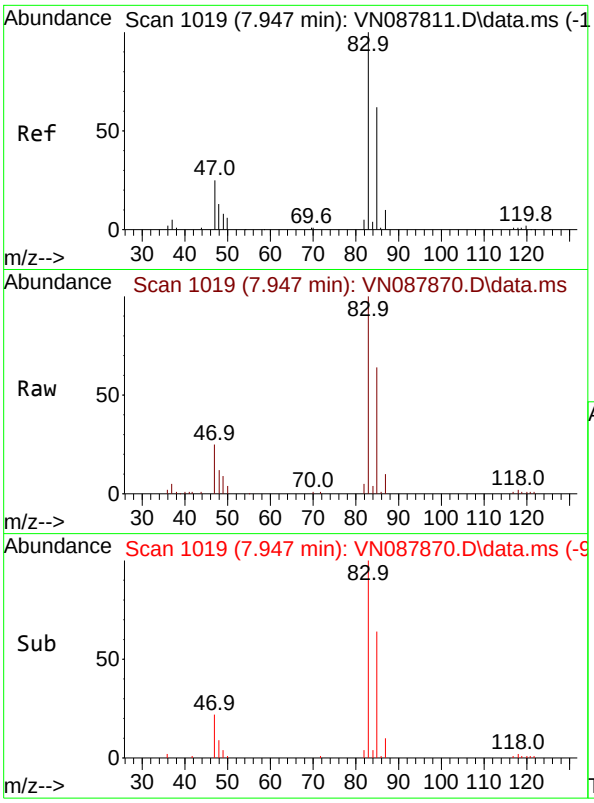


#24
Methyl tert-Butyl Ether
Concen: 20.546 ug/l
RT: 5.788 min Scan# 652
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 73 Resp: 236800

Ion	Ratio	Lower	Upper
73	100		
43	21.2	16.8	25.2





#25
Chloroform
Concen: 20.087 ug/l
RT: 7.947 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 83 Resp: 13961

Ion	Ratio	Lower	Upper
83	100		
85	63.8	47.7	71.5

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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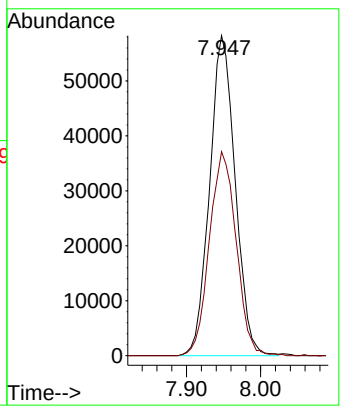
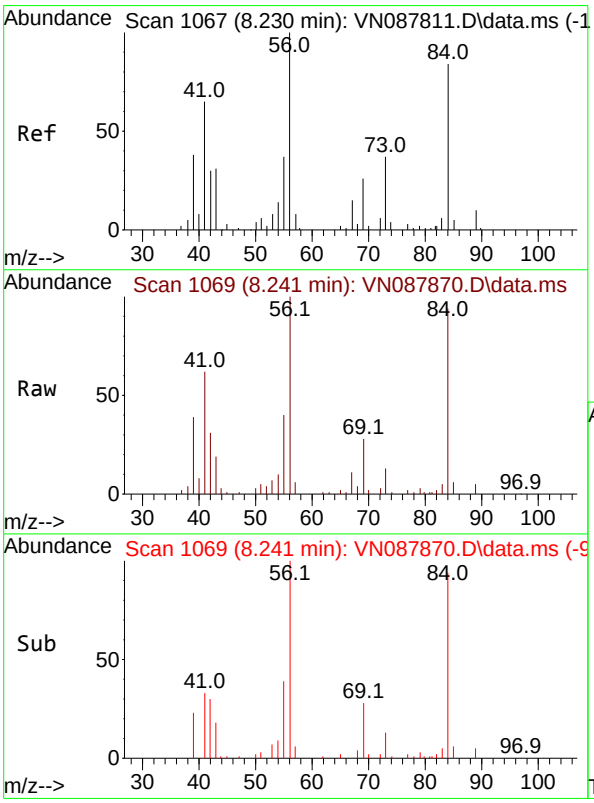
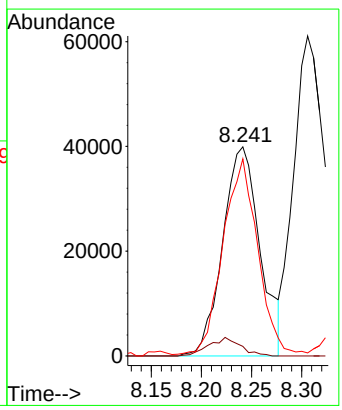


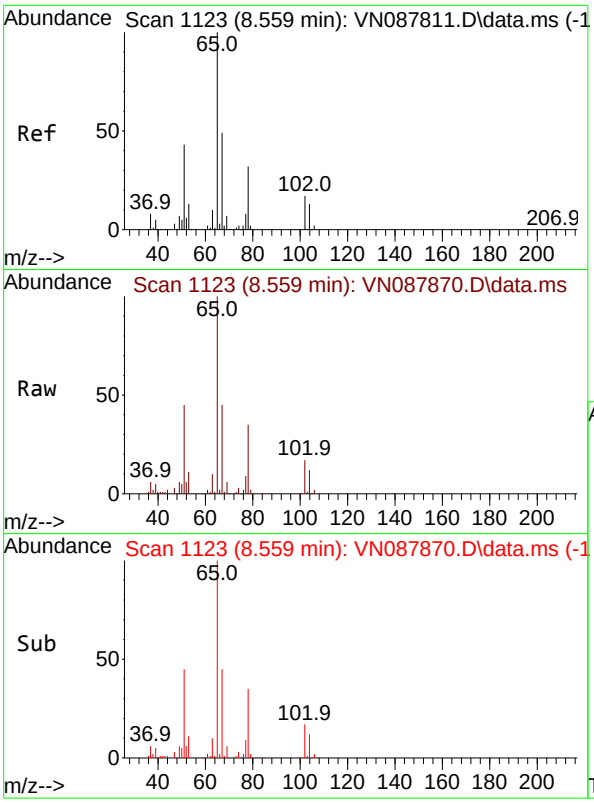


#26
Cyclohexane
Concen: 20.453 ug/l
RT: 8.241 min Scan# 1069
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 56 Resp: 103429

Ion	Ratio	Lower	Upper
56	100		
89	7.6	0.0	0.0#
84	88.7	69.4	104.2

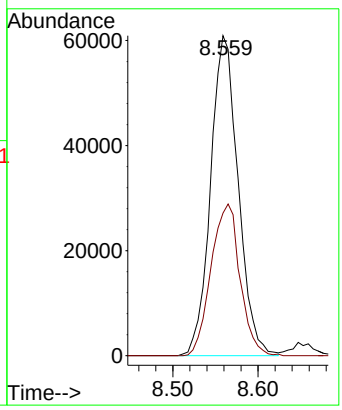




#27
1,2-Dichloroethane-d4
Concen: 29.995 ug/l
RT: 8.559 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 65 Resp: 13702

Ion	Ratio	Lower	Upper
65	100		
67	49.6	39.6	59.4



Instrument :
MSVOA_N
ClientSampleId :
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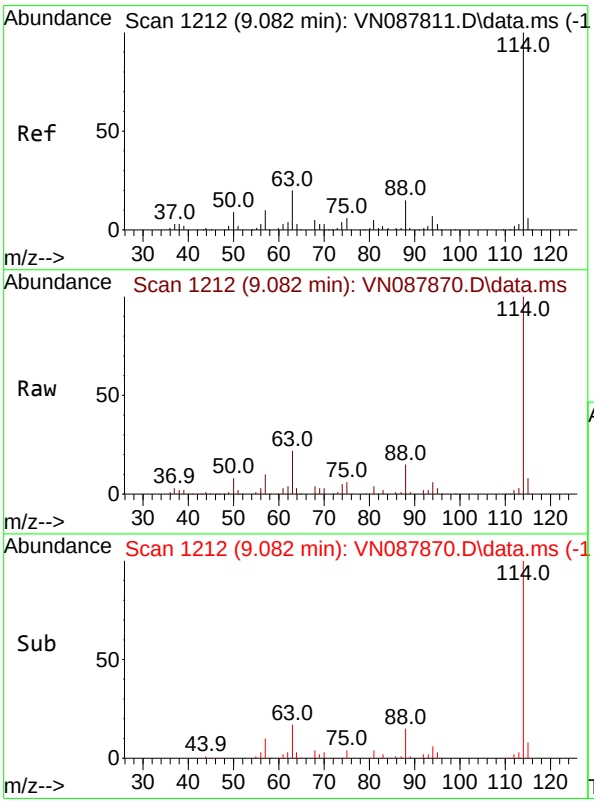
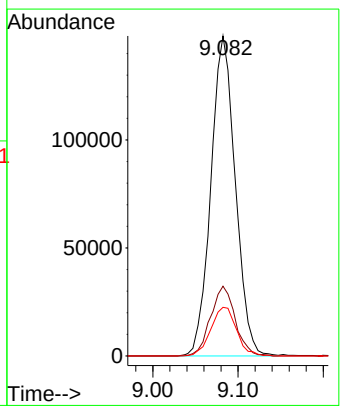
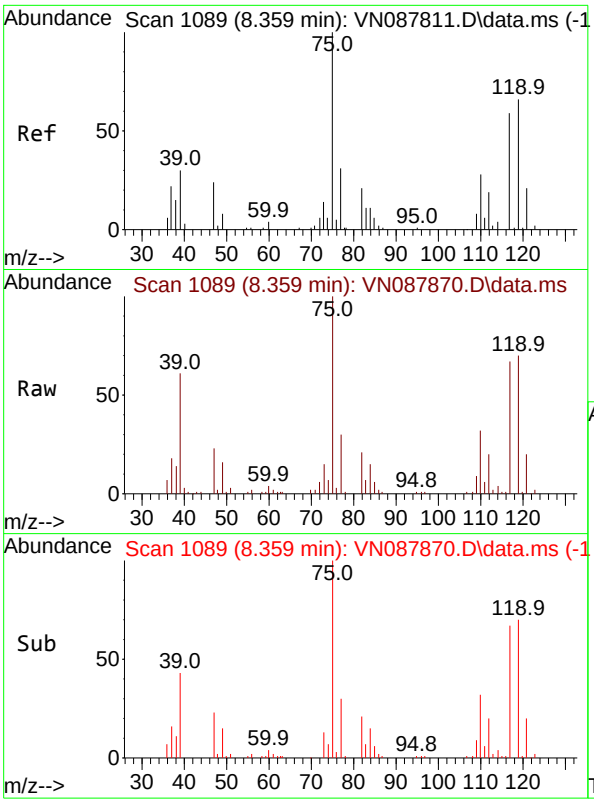


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:114 Resp: 296032

Ion	Ratio	Lower	Upper
114	100		
63	21.9	18.3	27.5
88	15.9	12.4	18.6

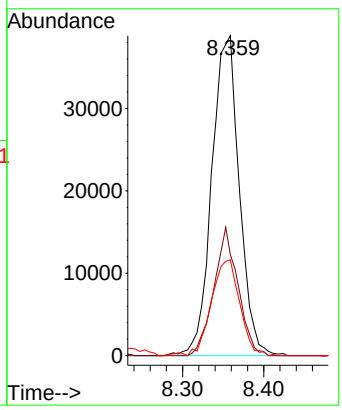




#29
1,1-Dichloropropene
Concen: 18.990 ug/l
RT: 8.359 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 75 Resp: 9136

Ion	Ratio	Lower	Upper
75	100		
110	35.2	0.0	64.4
77	30.5	0.0	62.2



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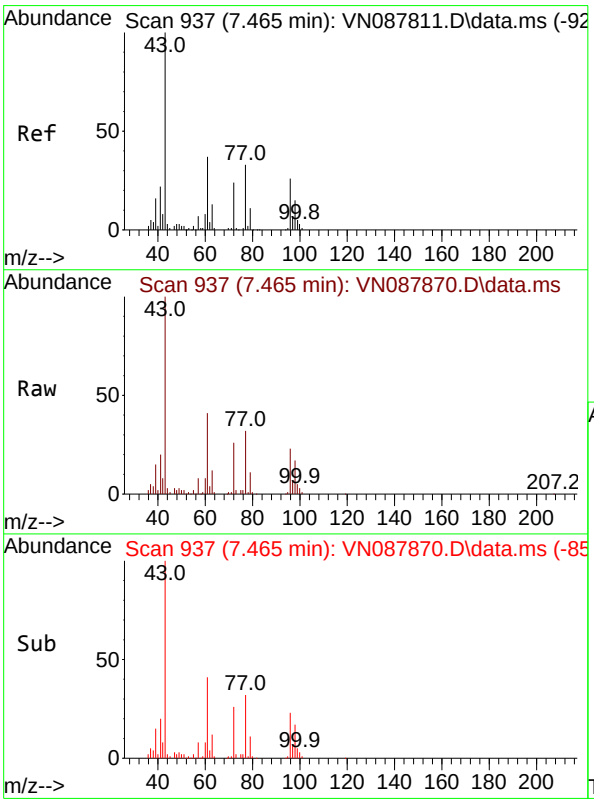
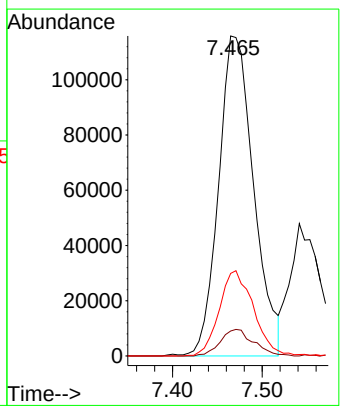
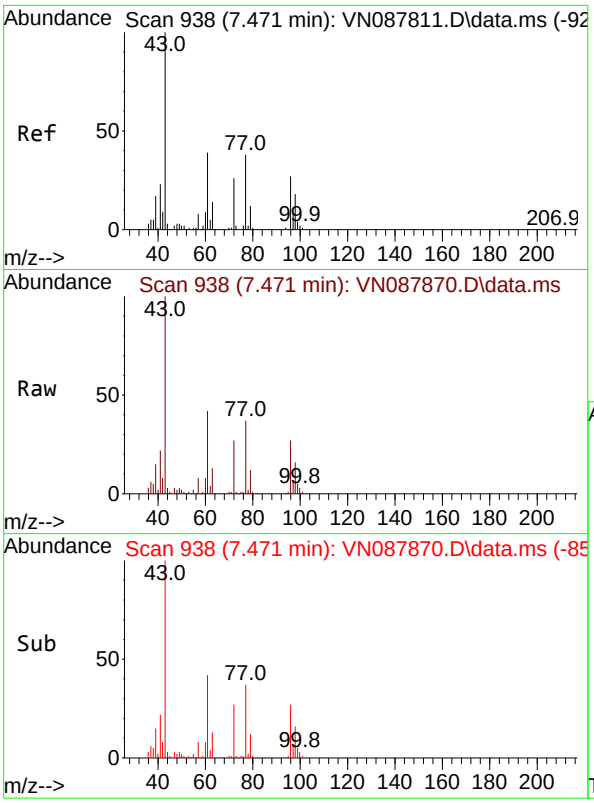


#30
2-Butanone
Concen: 94.918 ug/l
RT: 7.465 min Scan# 937
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 43 Resp: 314577

Ion	Ratio	Lower	Upper
43	100		
57	7.9	6.3	9.5
72	26.0	21.4	32.2





#31
2,2-Dichloropropane
Concen: 20.830 ug/l
RT: 7.471 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 77 Resp: 12080

Ion	Ratio	Lower	Upper
77	100		
97	21.2	17.1	25.7

Instrument :
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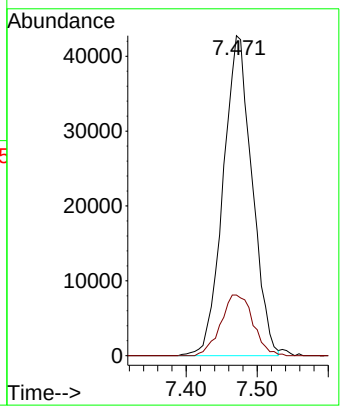
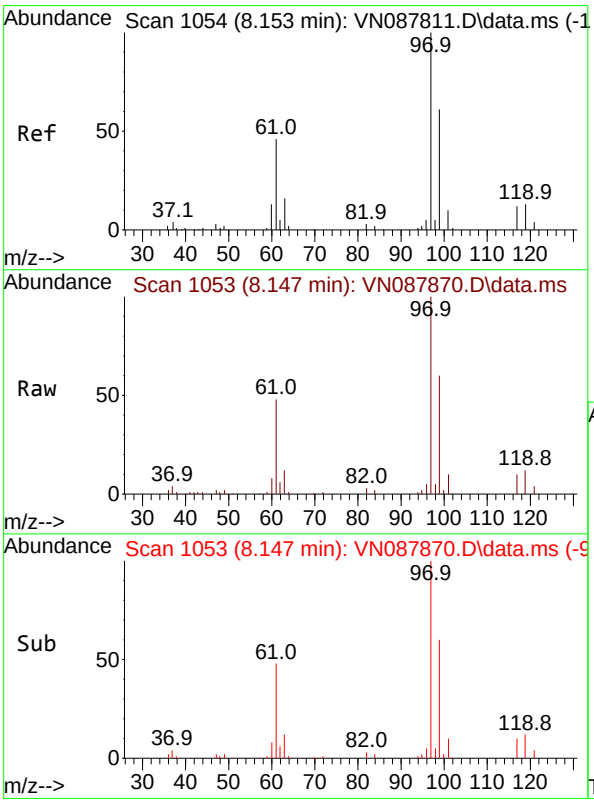
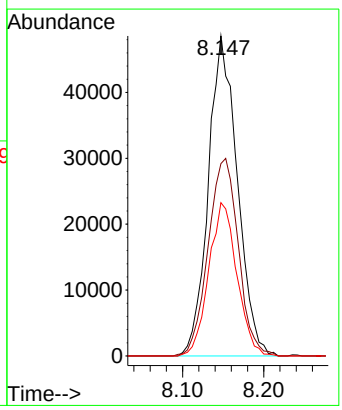


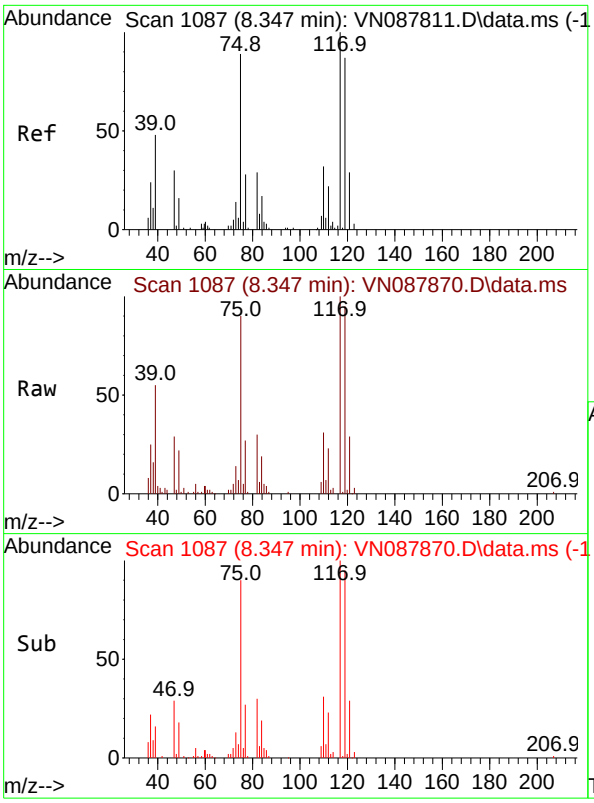


#32
1,1,1-Trichloroethane
Concen: 19.788 ug/l
RT: 8.147 min Scan# 1053
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 97 Resp: 120694

Ion	Ratio	Lower	Upper
97	100		
99	64.3	52.2	78.4
61	46.4	37.9	56.9

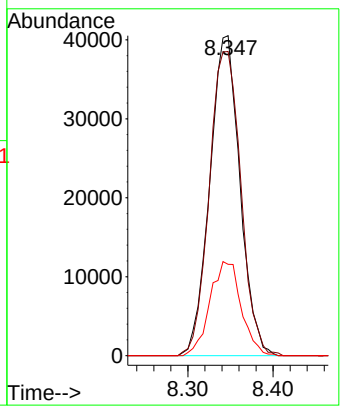




#33
Carbon Tetrachloride
Concen: 19.574 ug/l
RT: 8.347 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:117 Resp: 9954

Ion	Ratio	Lower	Upper
117	100		
119	95.1	77.3	115.9
121	28.5	26.6	39.8



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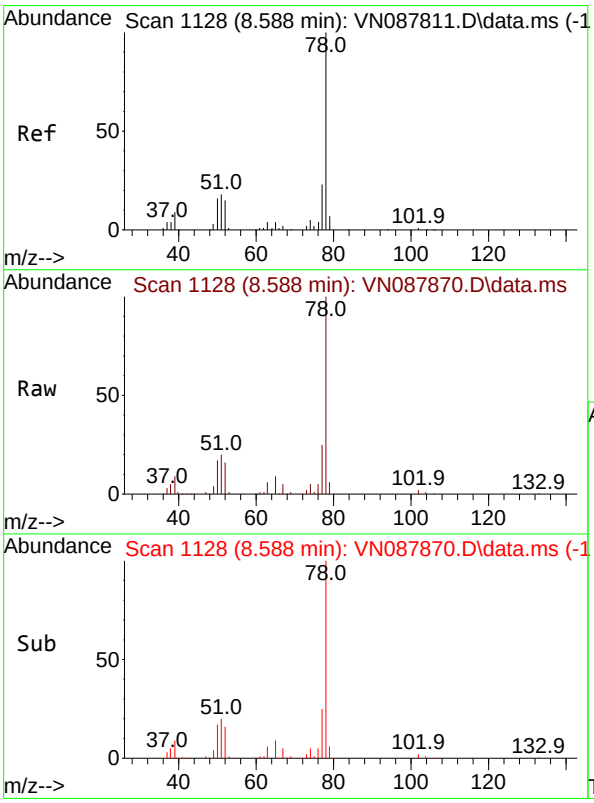
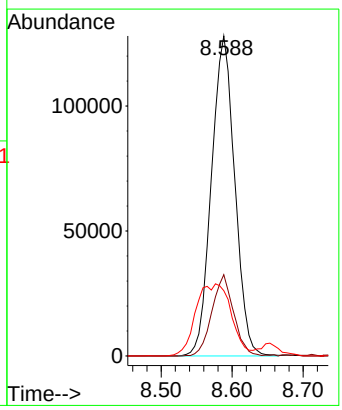
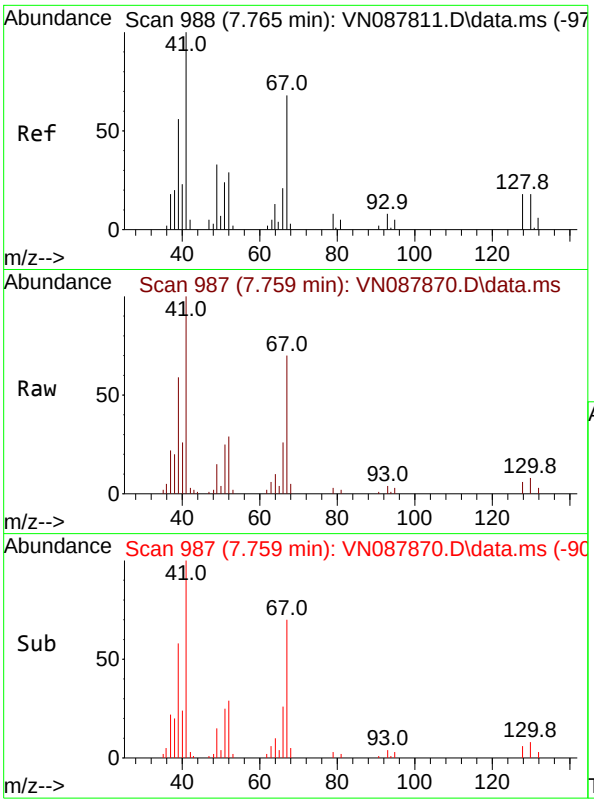


#34
Benzene
Concen: 18.764 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 78 Resp: 291758

Ion	Ratio	Lower	Upper
78	100		
77	25.4	20.3	30.5
51	19.4	18.0	27.0

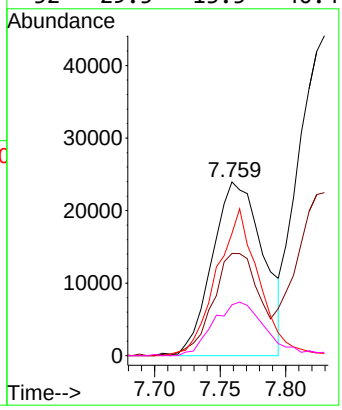




#35
Methacrylonitrile
Concen: 18.655 ug/l
RT: 7.759 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 41 Resp: 6467

Ion	Ratio	Lower	Upper
41	100		
39	57.4	27.1	81.2
67	68.8	32.1	96.5
52	29.5	13.5	40.4



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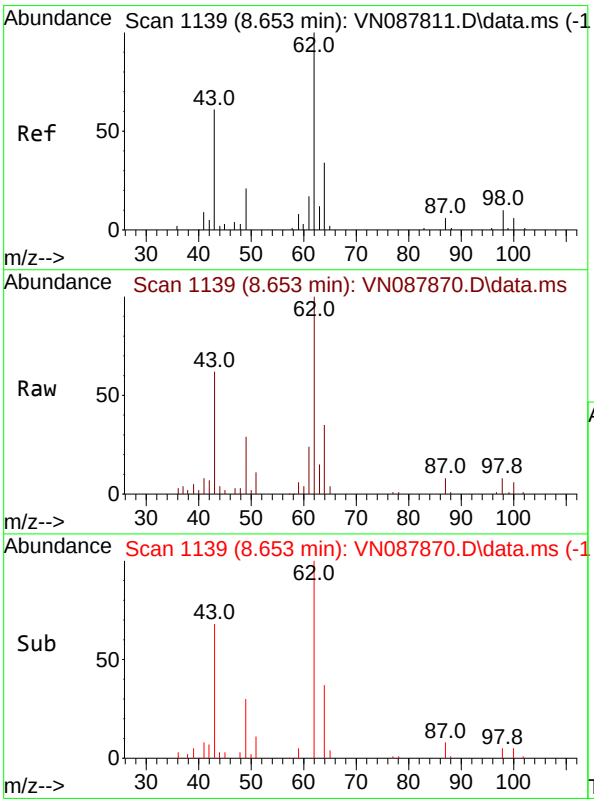
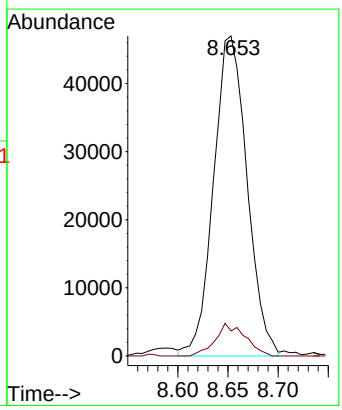
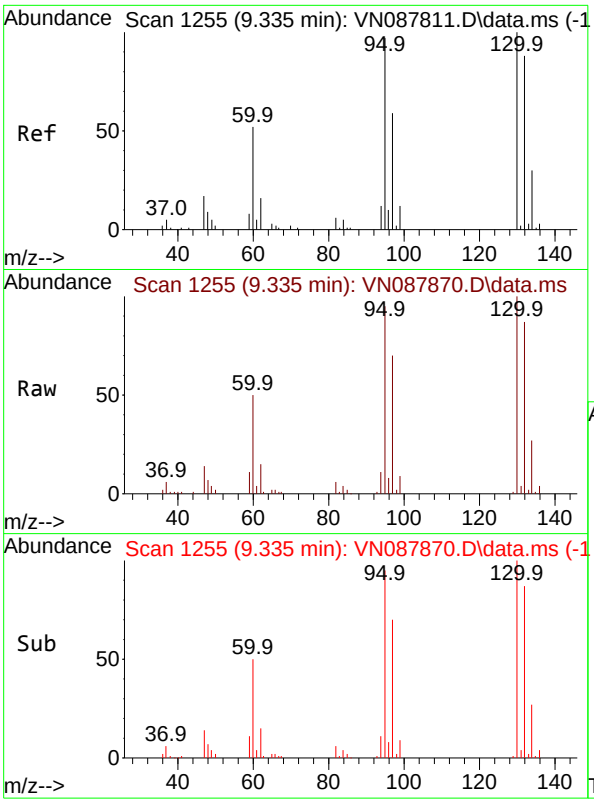


#36
1,2-Dichloroethane
Concen: 18.592 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 62 Resp: 109196

Ion	Ratio	Lower	Upper
62	100		
98	9.1	7.2	10.8

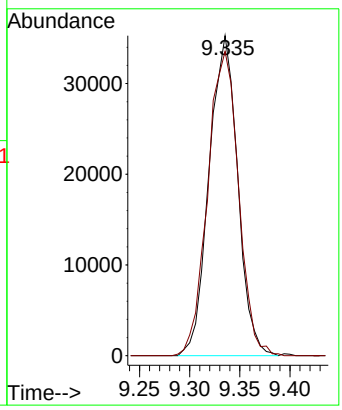




#37
Trichloroethene
Concen: 20.153 ug/l
RT: 9.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:130 Resp: 7004

Ion	Ratio	Lower	Upper
130	100		
95	94.6	82.7	124.1



Instrument :
MSVOA_N
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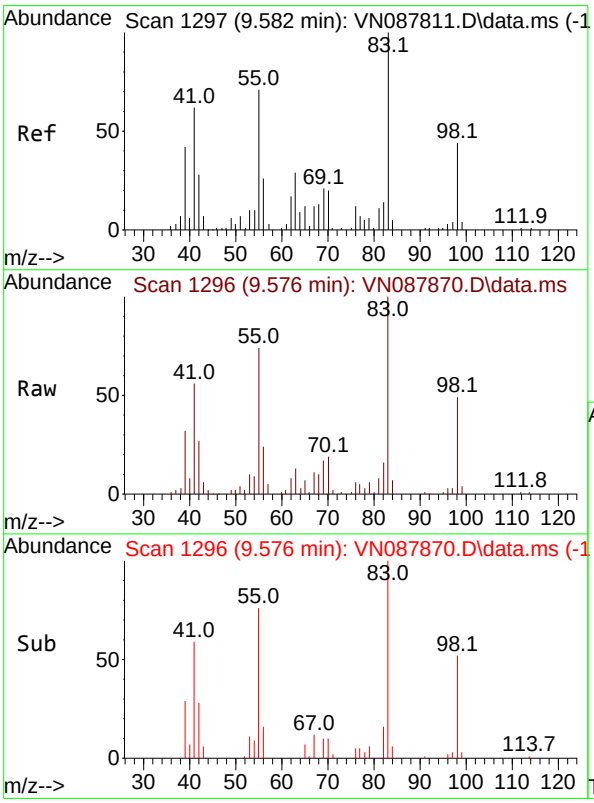
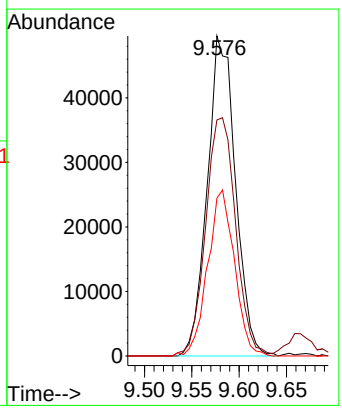
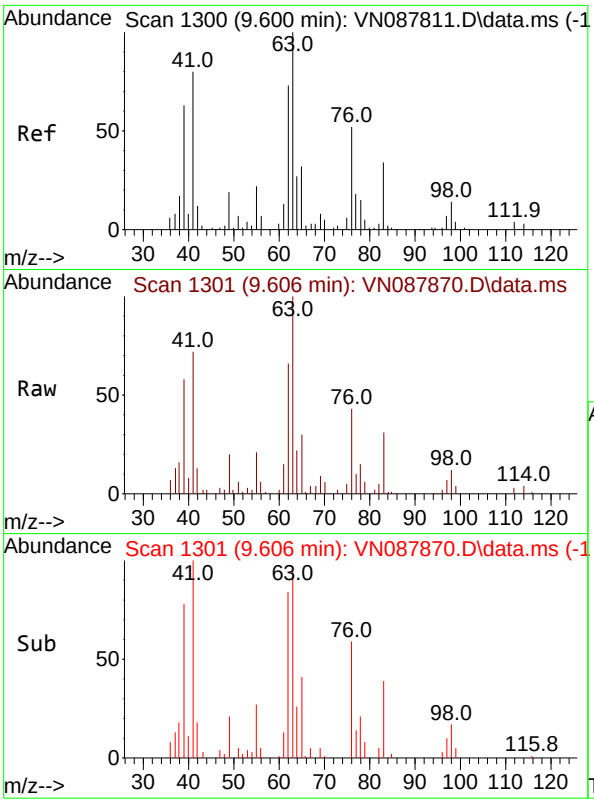


#38
Methylcyclohexane
Concen: 19.418 ug/l
RT: 9.576 min Scan# 1296
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 83 Resp: 102865

Ion	Ratio	Lower	Upper
83	100		
55	79.2	40.4	121.1
98	49.4	24.0	72.0





#39
1,2-Dichloropropane
Concen: 18.863 ug/l
RT: 9.606 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 63 Resp: 7512

Ion	Ratio	Lower	Upper
63	100		
65	29.8	24.1	36.1

Instrument :
MSVOA_N
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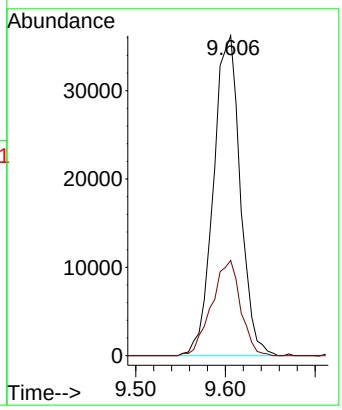
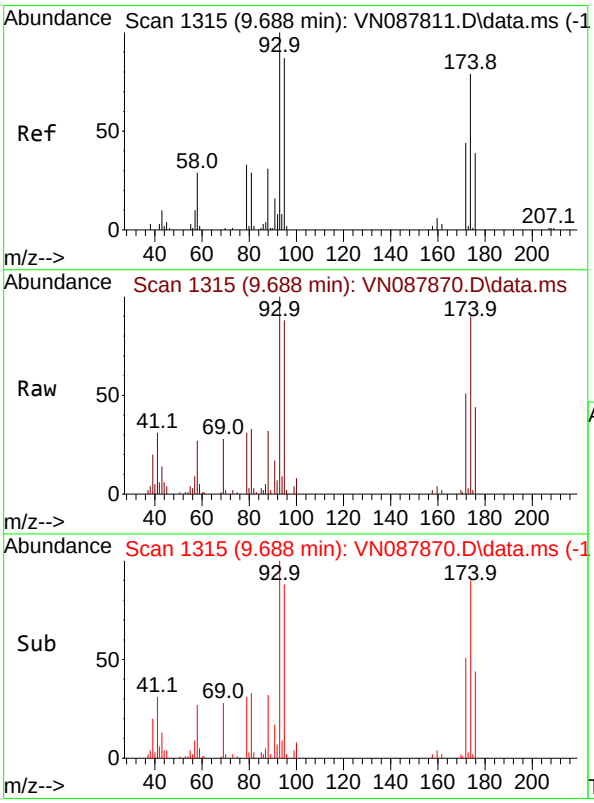
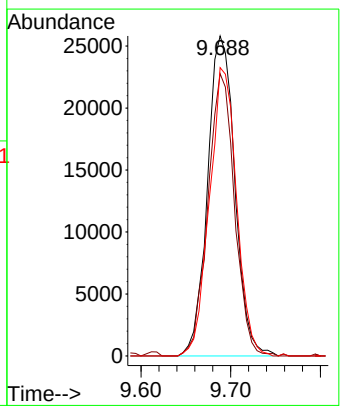


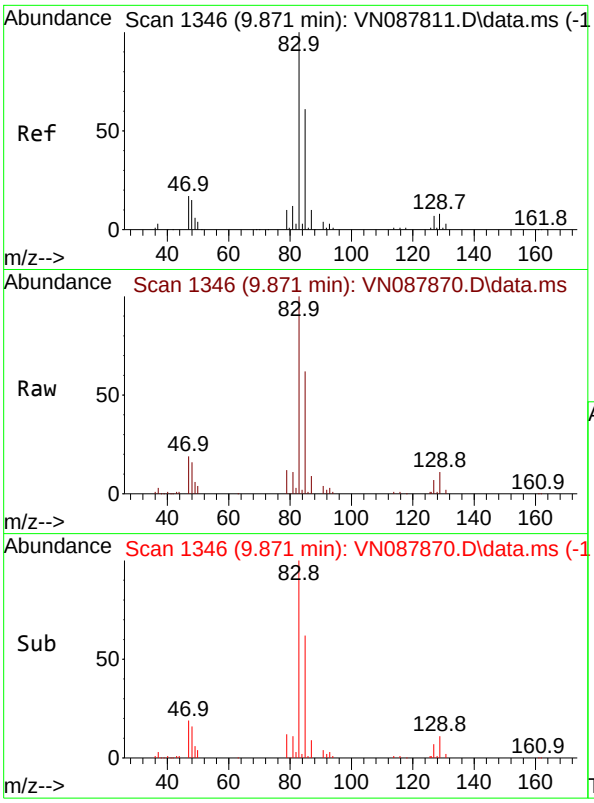


#40
Dibromomethane
Concen: 18.421 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 93 Resp: 54595

Ion	Ratio	Lower	Upper
93	100		
95	85.6	0.0	168.4
174	89.3	0.0	162.8

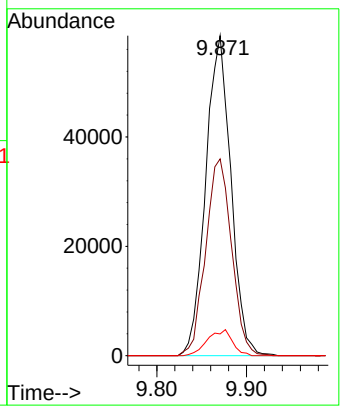




#41
Bromodichloromethane
Concen: 18.845 ug/l
RT: 9.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 83 Resp: 11415

Ion	Ratio	Lower	Upper
83	100		
85	61.5	47.3	70.9
127	6.8	5.2	7.8



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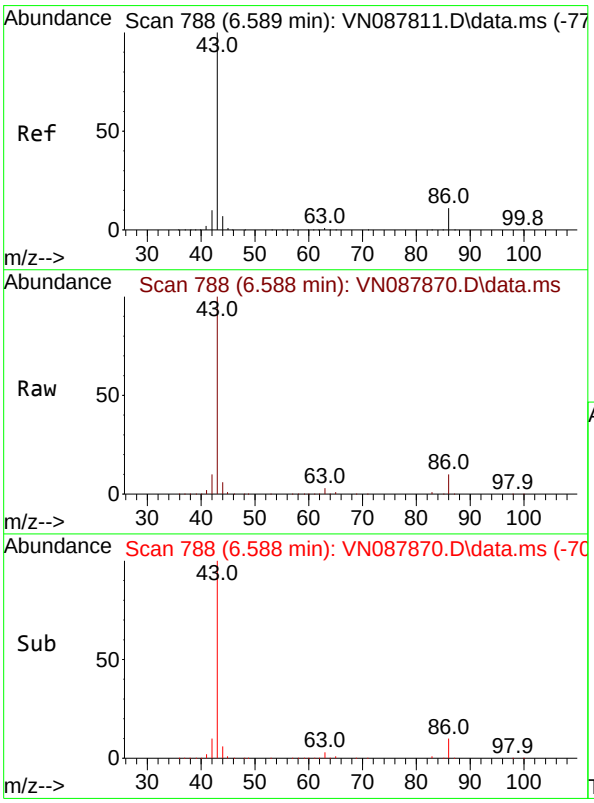
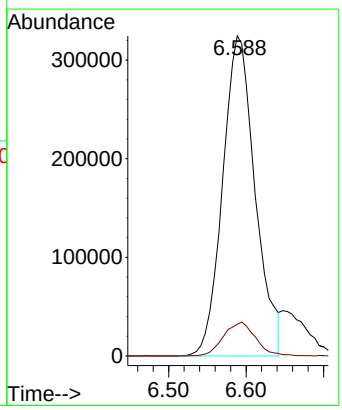
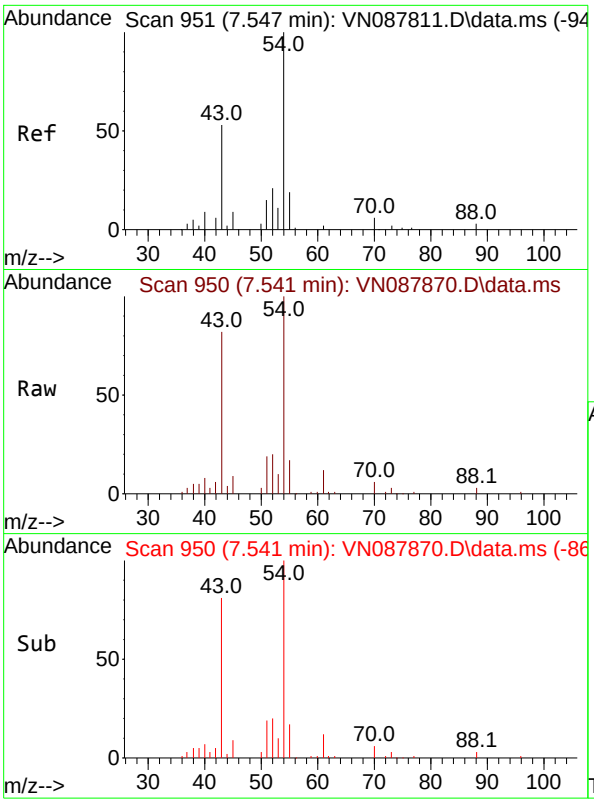


#42
Vinyl Acetate
Concen: 85.635 ug/l
RT: 6.588 min Scan# 788
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 43 Resp: 948262

Ion	Ratio	Lower	Upper
43	100		
86	10.4	7.7	11.5





#43
Ethyl Acetate
Concen: 17.623 ug/l
RT: 7.541 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 43 Resp: 11932

Ion	Ratio	Lower	Upper
43	100		
45	15.1	10.5	15.7

Instrument :
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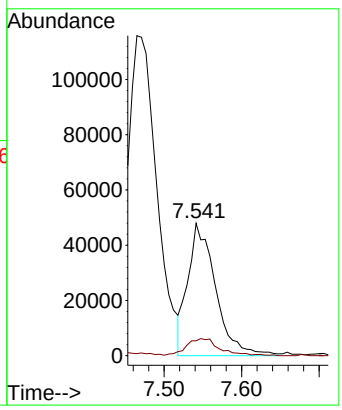
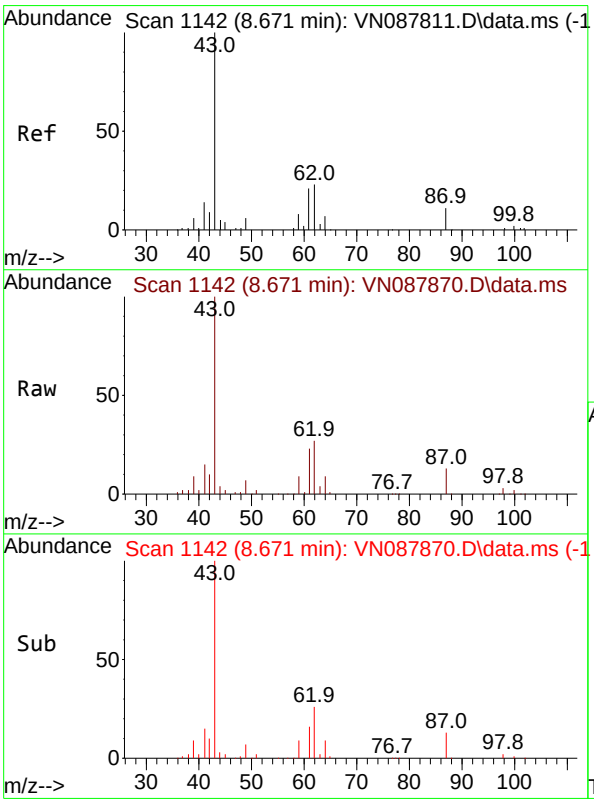
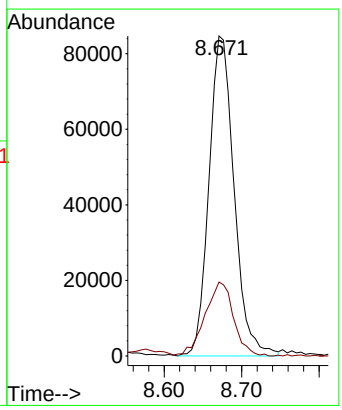


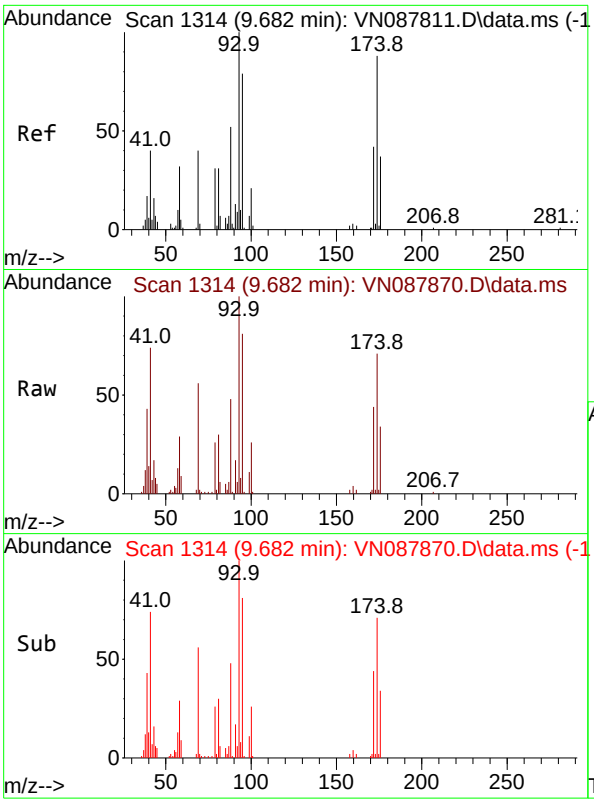


#44
Isopropyl Acetate
Concen: 17.991 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 43 Resp: 190975

Ion	Ratio	Lower	Upper
43	100		
61	26.1	19.5	29.3

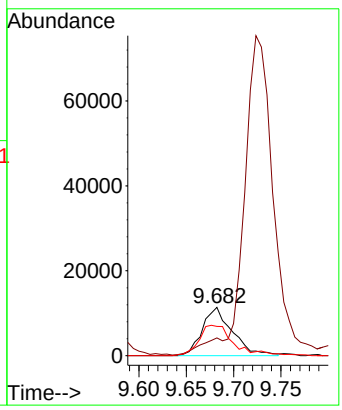




#45
1,4-Dioxane
Concen: 374.007 ug/l
RT: 9.682 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 88 Resp: 2503

Ion	Ratio	Lower	Upper
88	100		
43	26.9	23.6	35.4
58	40.6	60.5	90.7



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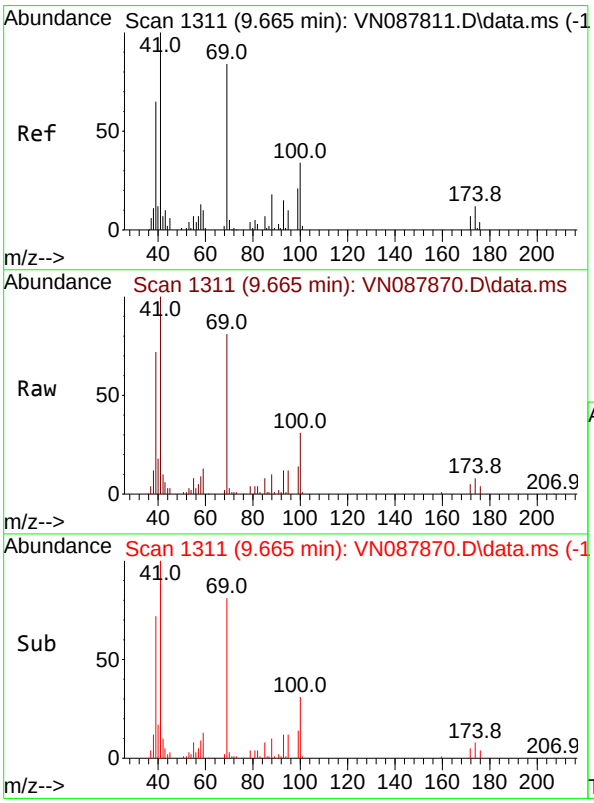
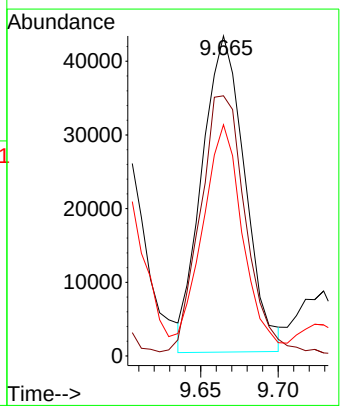
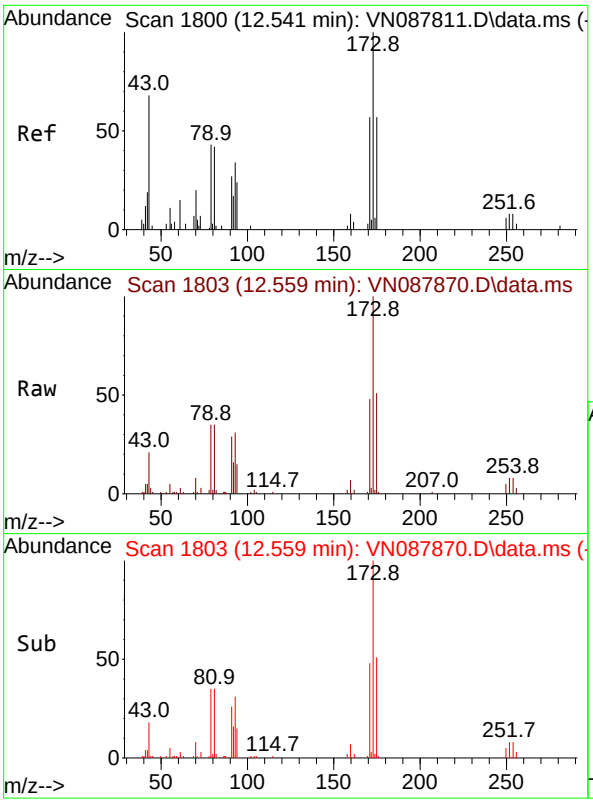


#46
Methyl methacrylate
Concen: 16.855 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 41 Resp: 82471

Ion	Ratio	Lower	Upper
41	100		
69	83.8	40.3	120.9
39	74.8	31.9	95.9

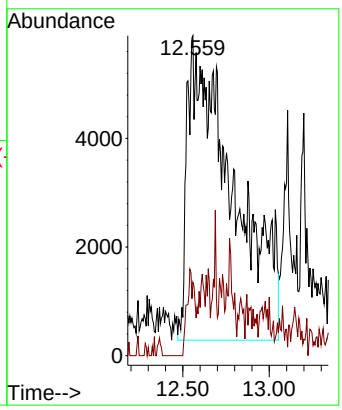




#47
n-amyl Acetate
Concen: 14.223 ug/l m
RT: 12.559 min Scan# 1
Delta R.T. -0.112 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 43 Resp: 10203

Ion	Ratio	Lower	Upper
43	100		
55	0.0	0.7	1.1



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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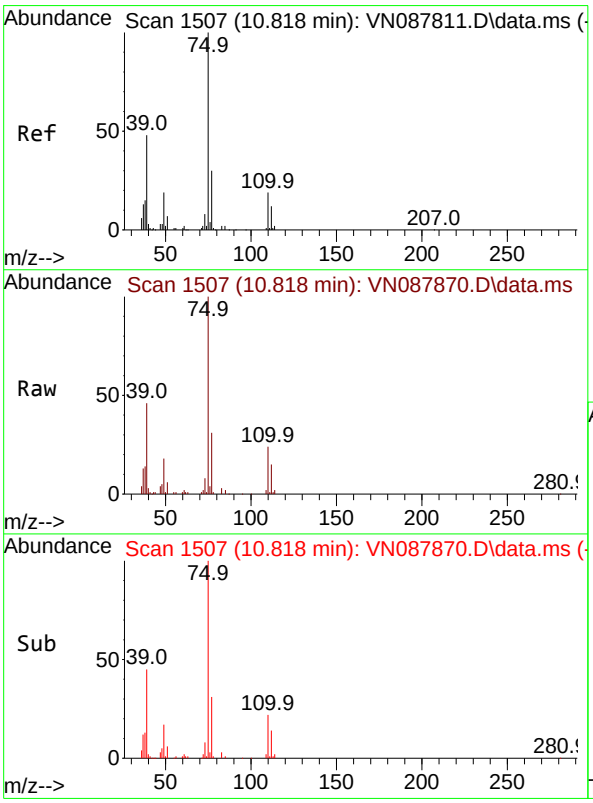
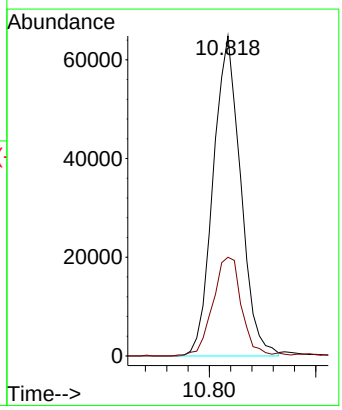
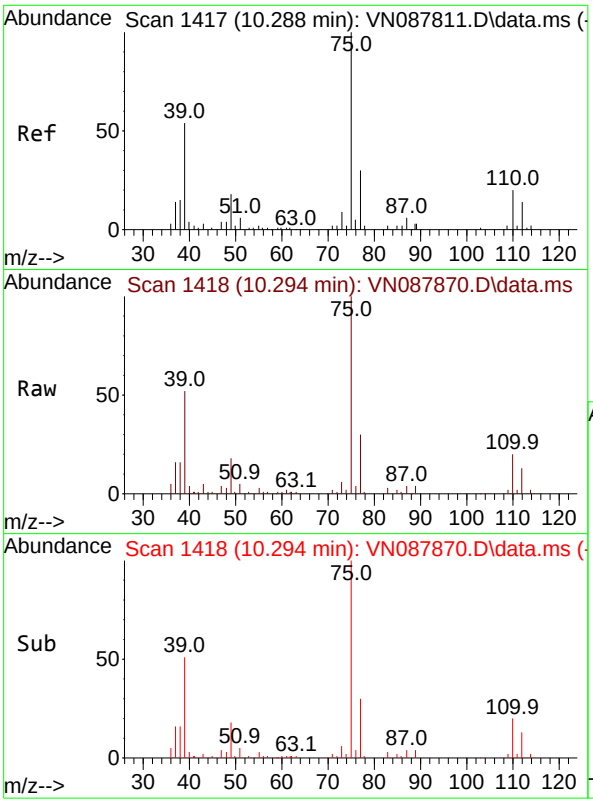


#48
t-1,3-Dichloropropene
Concen: 18.442 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 75 Resp: 116022

Ion	Ratio	Lower	Upper
75	100		
77	30.5	24.7	37.1

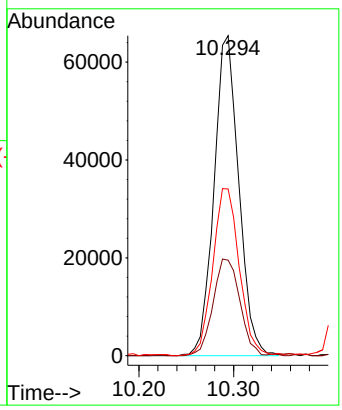




#49
cis-1,3-Dichloropropene
Concen: 18.464 ug/l
RT: 10.294 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 75 Resp: 11898

Ion	Ratio	Lower	Upper
75	100		
77	29.9	27.8	41.6
39	52.1	47.6	71.4



Instrument :
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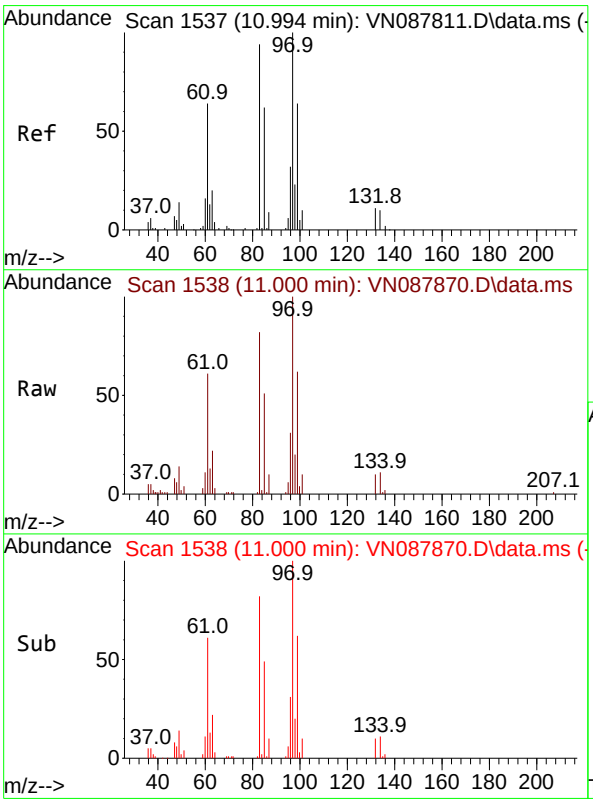
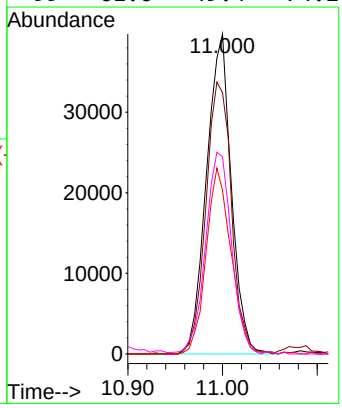
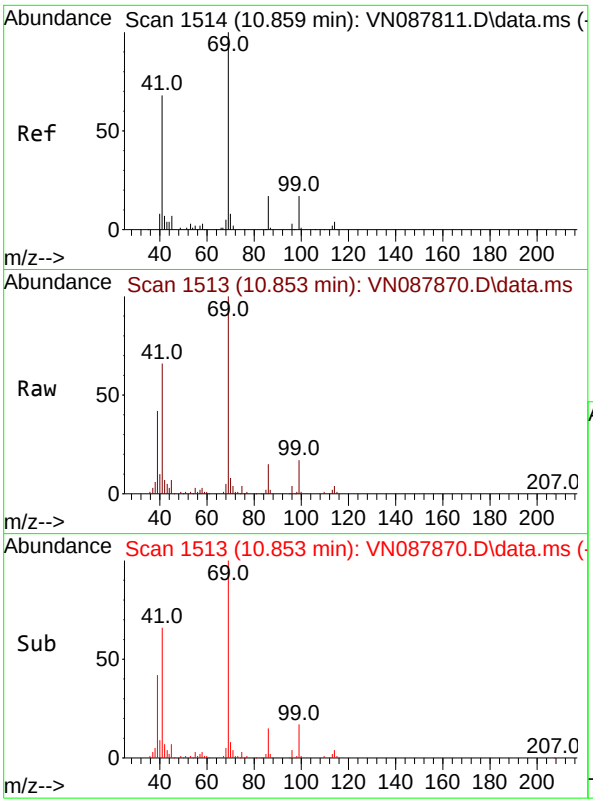


#50
1,1,2-Trichloroethane
Concen: 18.879 ug/l
RT: 11.000 min Scan# 1538
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 97 Resp: 72265

Ion	Ratio	Lower	Upper
97	100		
83	81.7	70.5	105.7
85	51.0	46.3	69.5
99	61.6	49.4	74.2

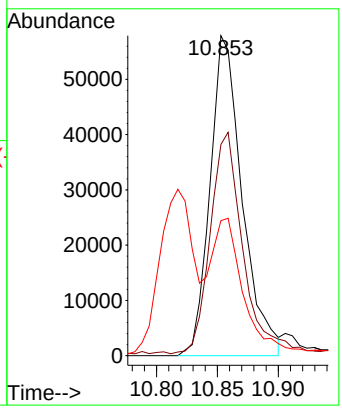




#51
Ethyl methacrylate
Concen: 17.847 ug/l
RT: 10.853 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 69 Resp: 10631

Ion	Ratio	Lower	Upper
69	100		
41	64.8	33.7	101.0
39	38.4	20.3	60.9



Instrument :
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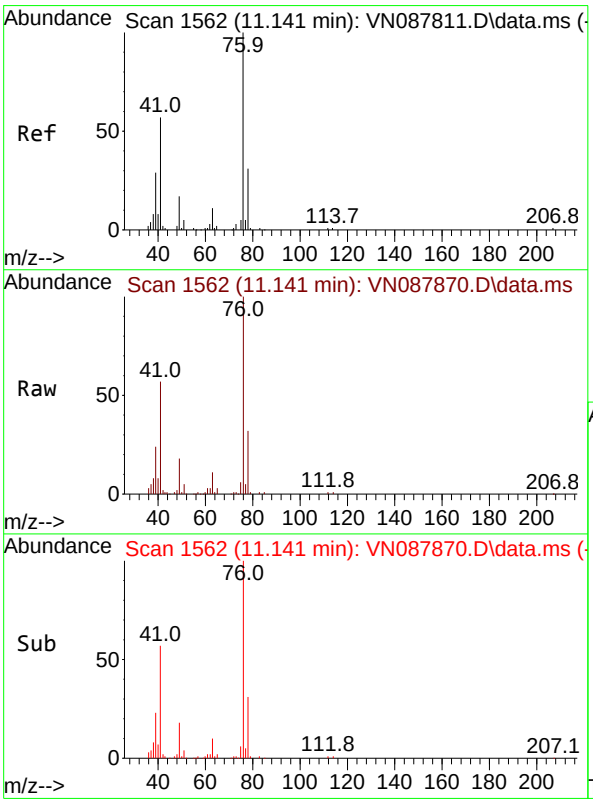
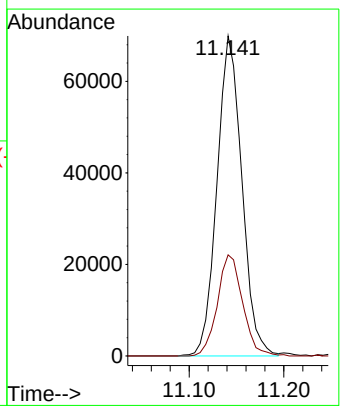
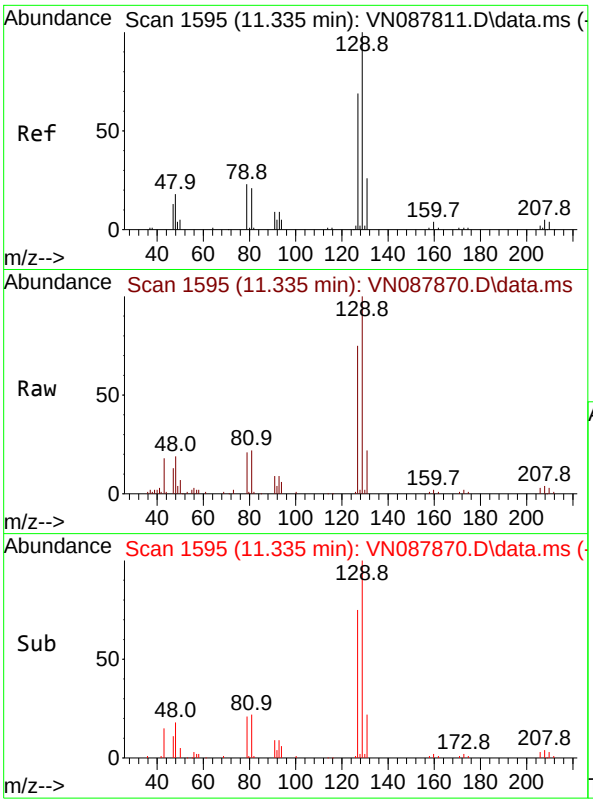


#52
1,3-Dichloropropane
Concen: 19.222 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 76 Resp: 127768

Ion	Ratio	Lower	Upper
76	100		
78	32.0	0.0	65.2

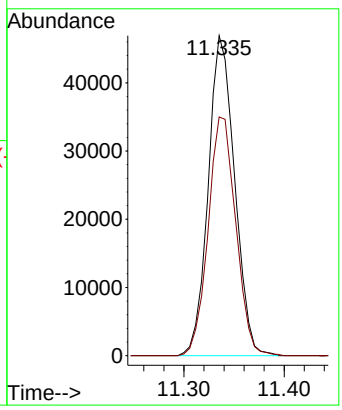




#53
Dibromochloromethane
Concen: 19.976 ug/l
RT: 11.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:129 Resp: 8573

Ion	Ratio	Lower	Upper
129	100		
127	78.2	42.6	128.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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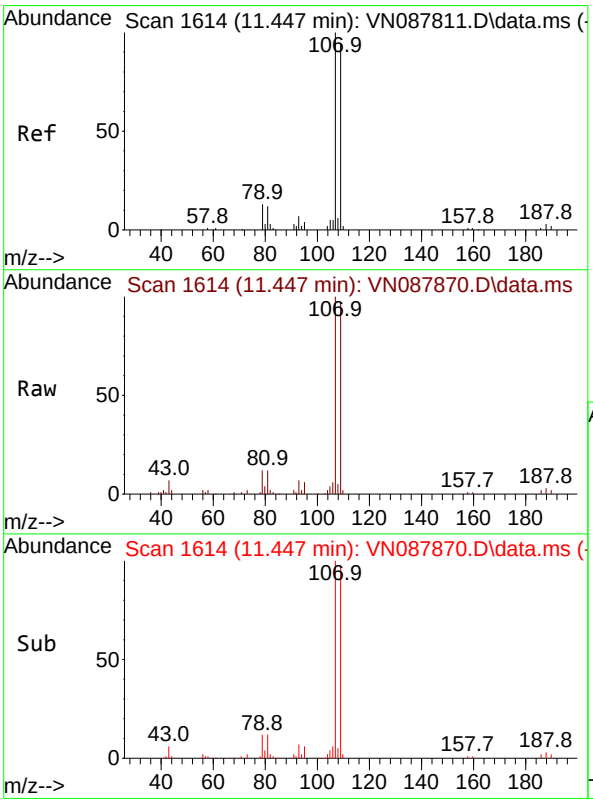
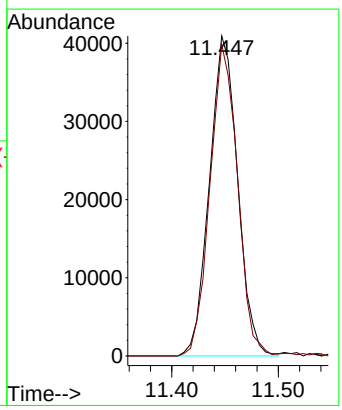
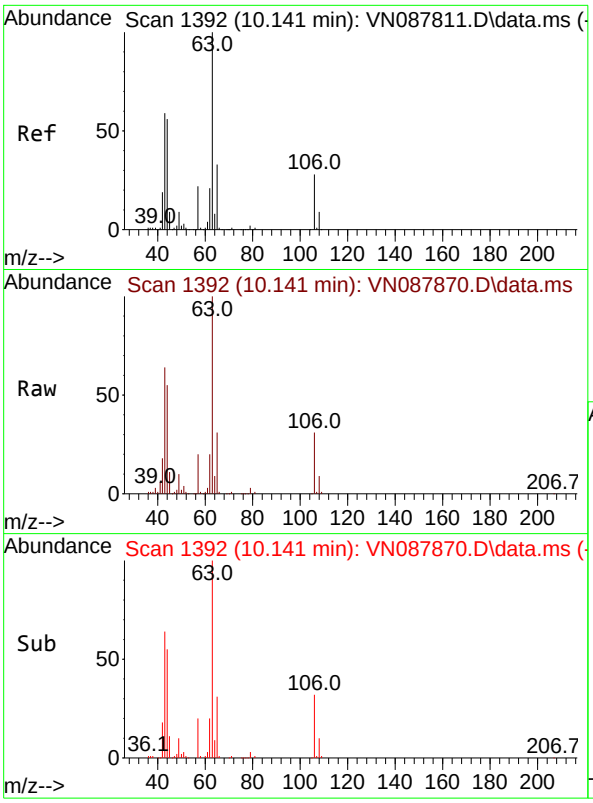


#54
1,2-Dibromoethane
Concen: 18.855 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:107 Resp: 75101

Ion	Ratio	Lower	Upper
107	100		
109	95.0	74.6	112.0

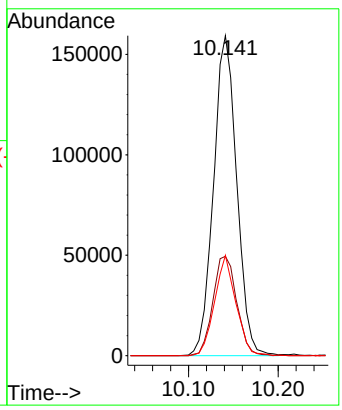




#55
2-Chloroethyl vinyl ether
Concen: 83.801 ug/l
RT: 10.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 63 Resp: 28602

Ion	Ratio	Lower	Upper
63	100		
65	31.9	26.6	40.0
106	28.7	21.1	31.7



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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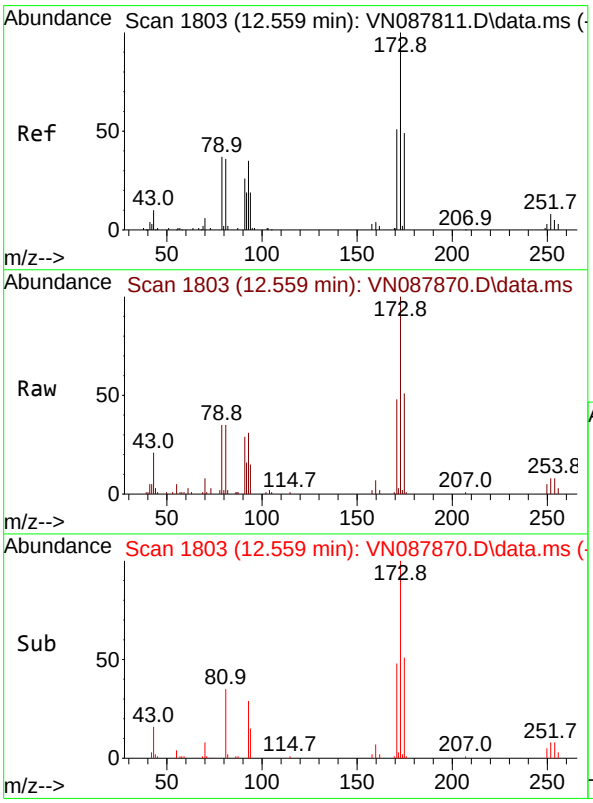
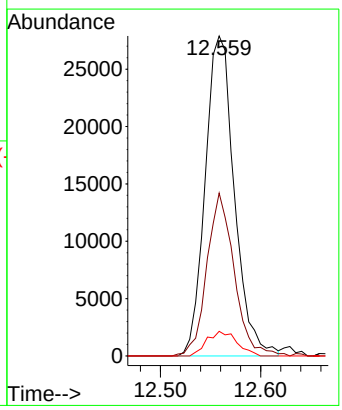
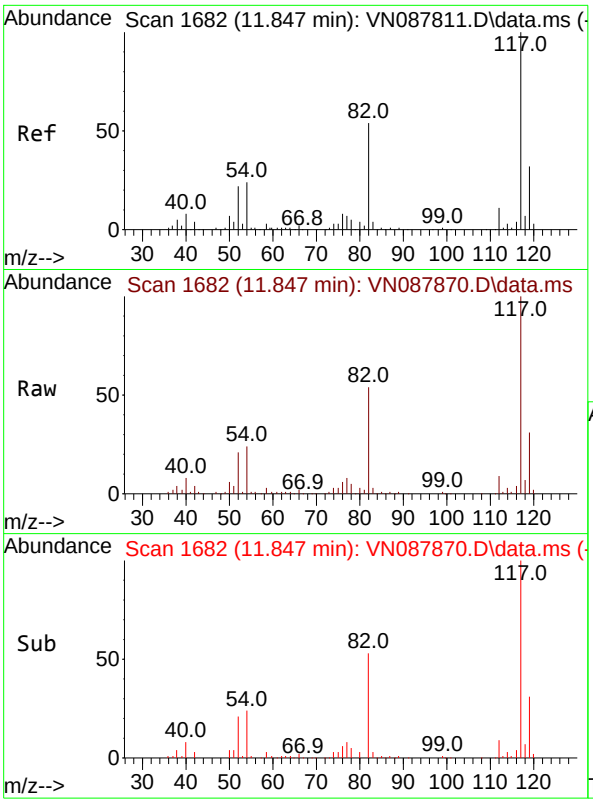


#56
Bromoform
Concen: 20.167 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:173 Resp: 56526

Ion	Ratio	Lower	Upper
173	100		
175	47.5	39.8	59.6
254	7.9	6.2	9.4

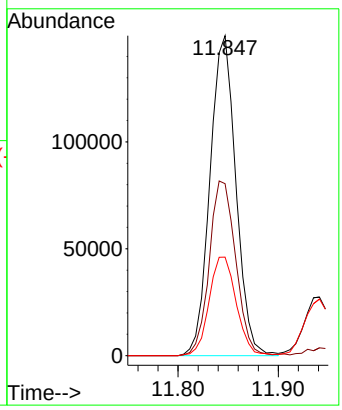




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:117 Resp: 26877

Ion	Ratio	Lower	Upper
117	100		
82	55.6	45.9	68.9
119	32.3	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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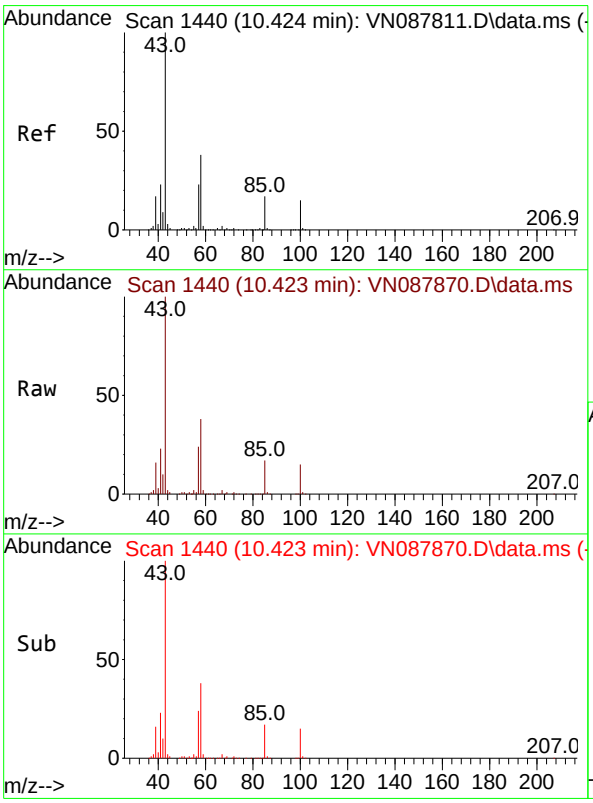
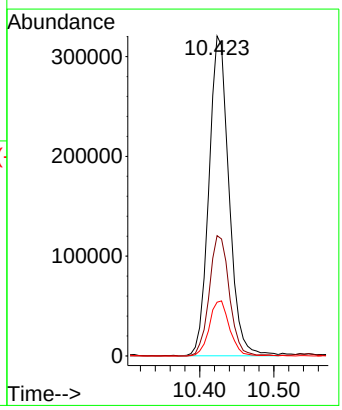
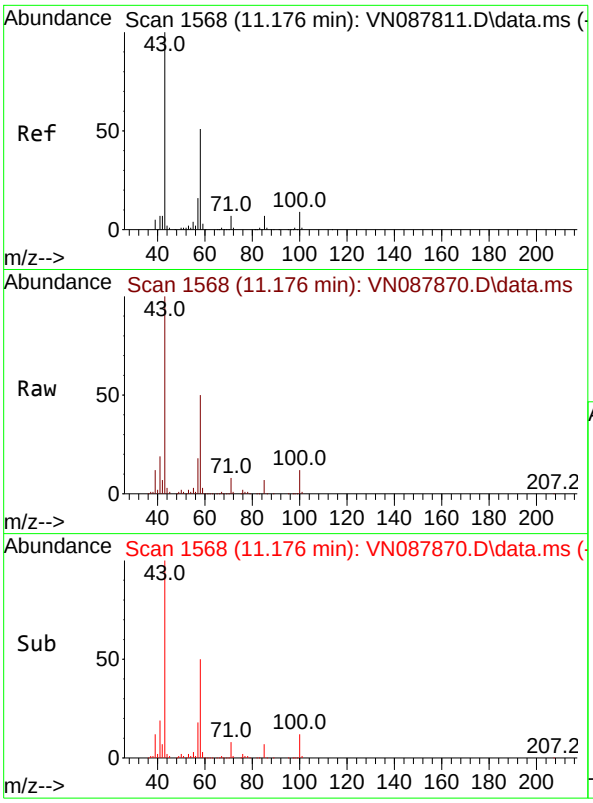


#58
4-Methyl-2-Pentanone
Concen: 94.543 ug/l
RT: 10.423 min Scan# 1440
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 43 Resp: 600838

Ion	Ratio	Lower	Upper
43	100		
58	37.6	29.6	44.4
85	17.4	13.0	19.4





#59
2-Hexanone
Concen: 92.361 ug/l
RT: 11.176 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 43 Resp: 38355

Ion	Ratio	Lower	Upper
43	100		
58	53.0	40.2	60.4
57	18.8	13.7	20.5

Instrument :
MSVOA_N
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VN0917WBS01

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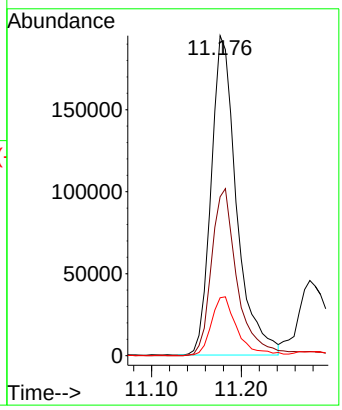
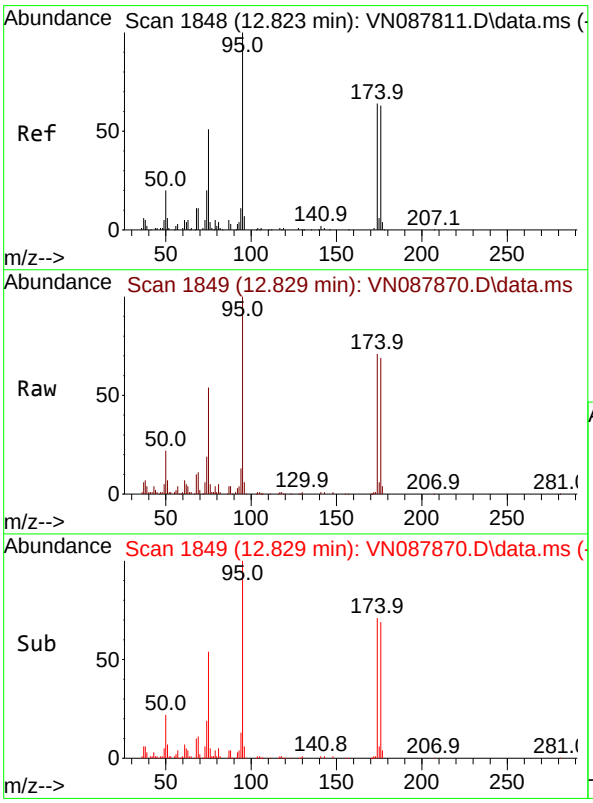
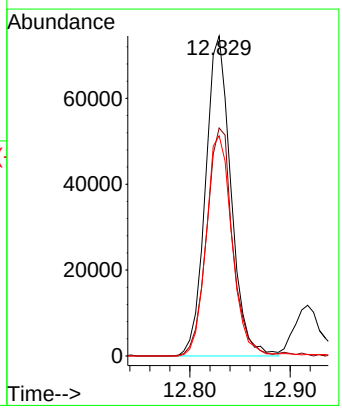


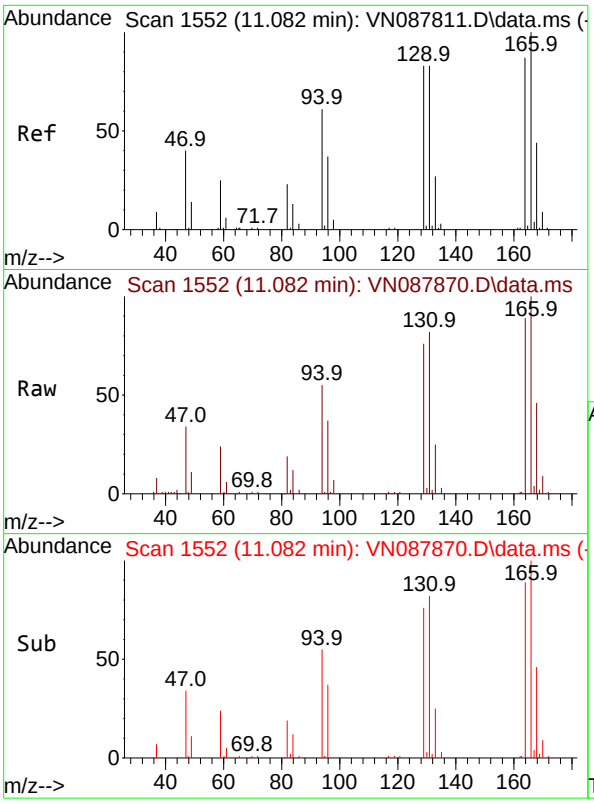


#60
4-Bromofluorobenzene
Concen: 30.402 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 95 Resp: 131390

Ion	Ratio	Lower	Upper
95	100		
174	72.9	55.4	83.0
176	69.7	51.5	77.3

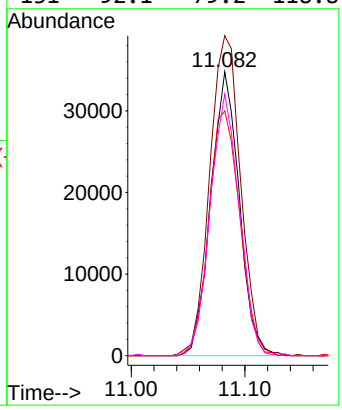




#61
Tetrachloroethene
Concen: 22.587 ug/l
RT: 11.082 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:164 Resp: 6044

Ion	Ratio	Lower	Upper
164	100		
166	112.1	97.3	145.9
129	86.2	78.6	117.8
131	92.1	79.2	118.8



Instrument :
MSVOA_N
ClientSampleId :
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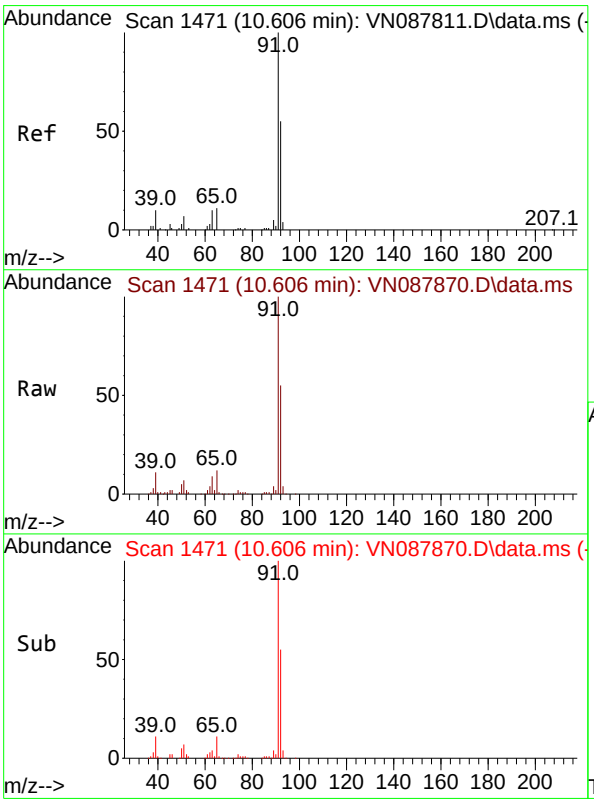
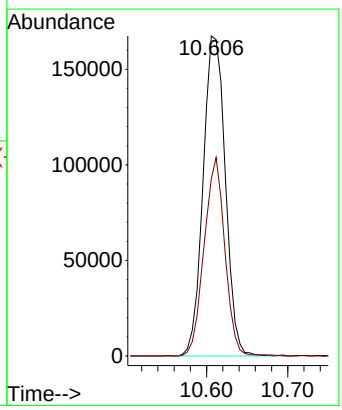
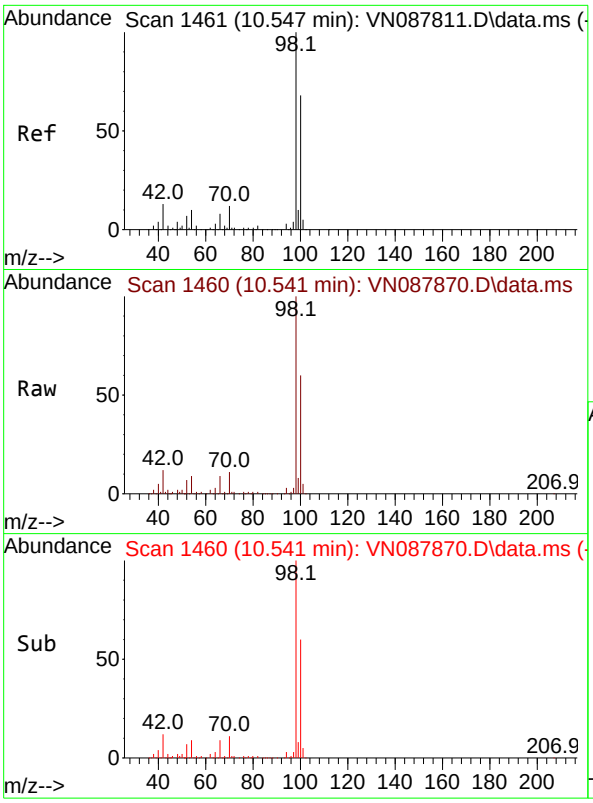


#62
Toluene
Concen: 19.612 ug/l
RT: 10.606 min Scan# 1471
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 91 Resp: 318841

Ion	Ratio	Lower	Upper
91	100		
92	57.5	45.4	68.0

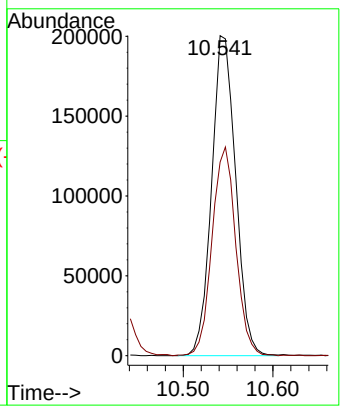




#63
Toluene-d8
Concen: 29.804 ug/l
RT: 10.541 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 98 Resp: 37253

Ion	Ratio	Lower	Upper
98	100		
100	64.4	50.6	76.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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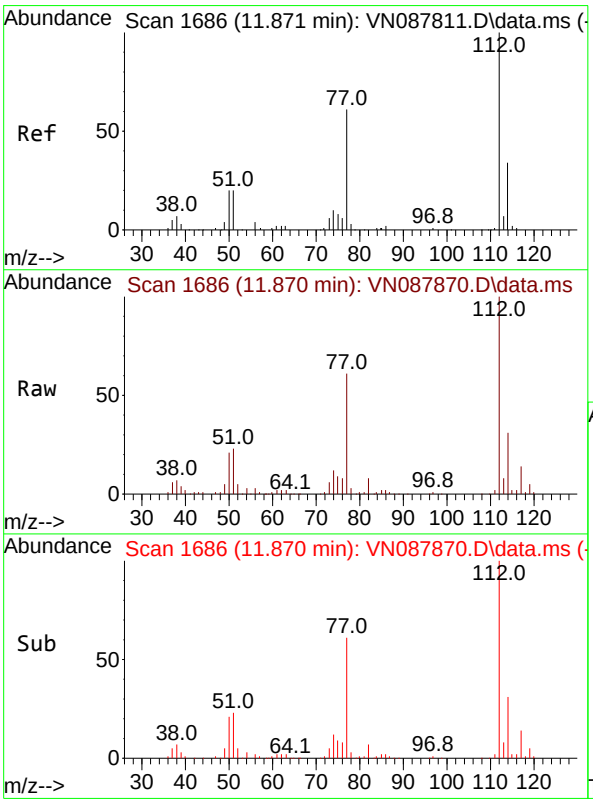
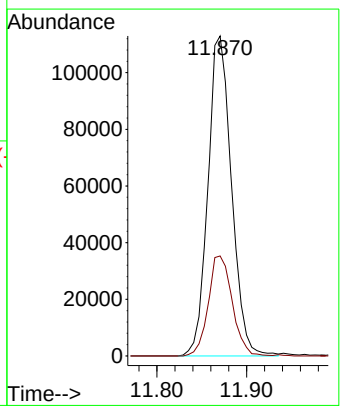
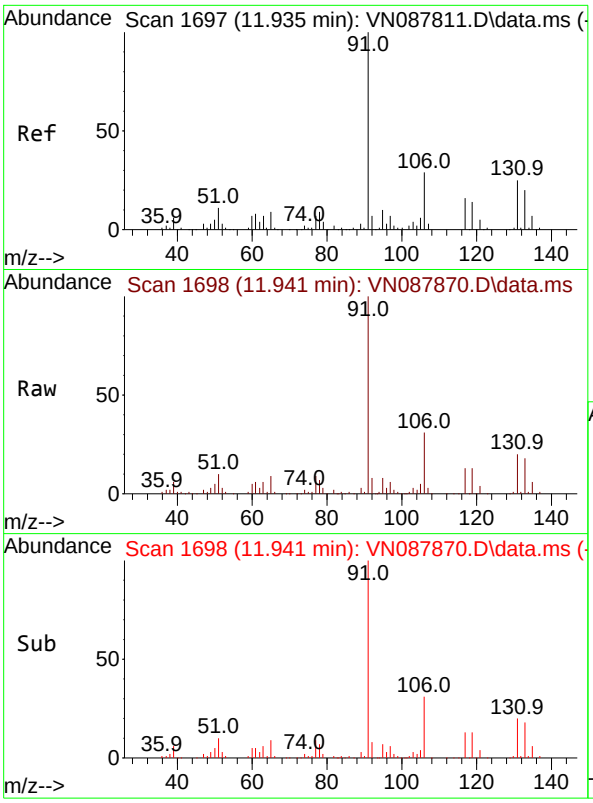


#64
Chlorobenzene
Concen: 20.686 ug/l
RT: 11.870 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:112 Resp: 206408

Ion	Ratio	Lower	Upper
112	100		
114	31.2	23.5	35.3

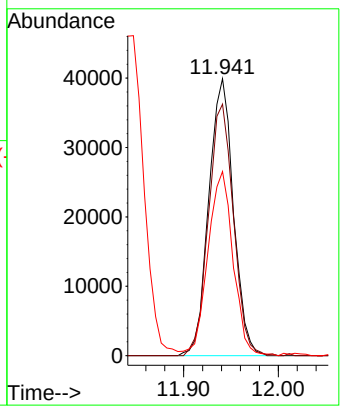




#65
1,1,1,2-Tetrachloroethane
Concen: 20.546 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:131 Resp: 7217

Ion	Ratio	Lower	Upper
131	100		
133	91.9	0.0	195.8
119	67.9	0.0	139.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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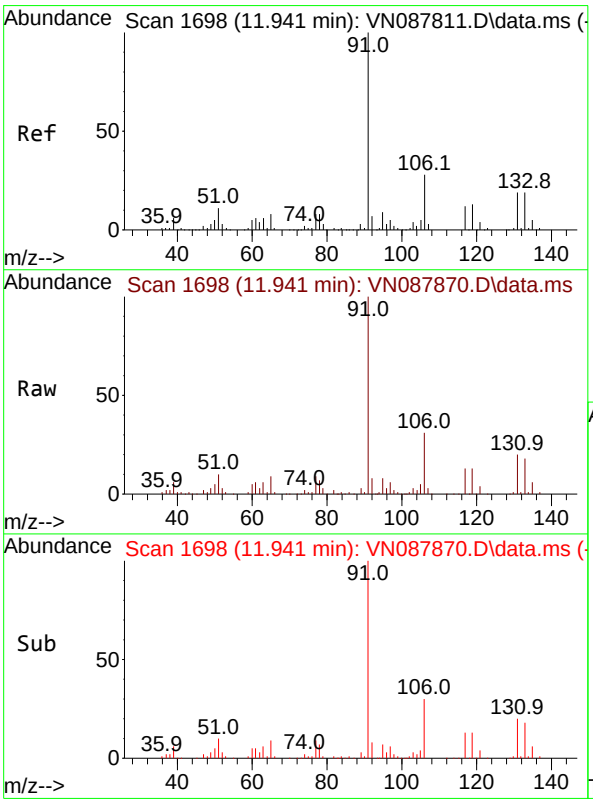
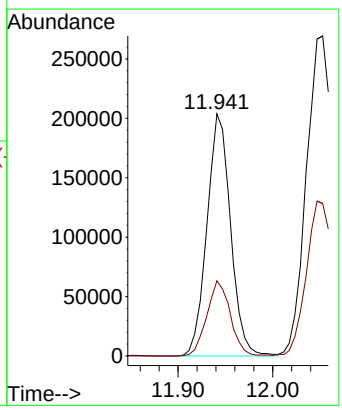
Supervised By :Mahesh Dadoda 09/18/2025

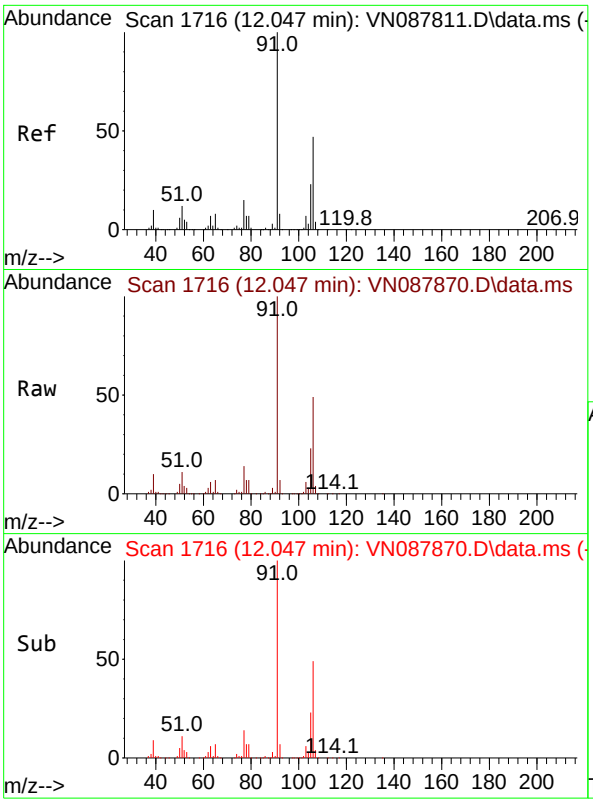


#66
Ethyl Benzene
Concen: 20.169 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 91 Resp: 353748

Ion	Ratio	Lower	Upper
91	100		
106	31.1	21.3	31.9

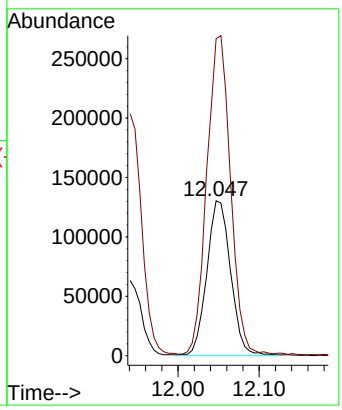




#67
m/p-Xylenes
Concen: 40.829 ug/l
RT: 12.047 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:106 Resp: 26582

Ion	Ratio	Lower	Upper
106	100		
91	204.9	174.3	261.5



Instrument :
MSVOA_N
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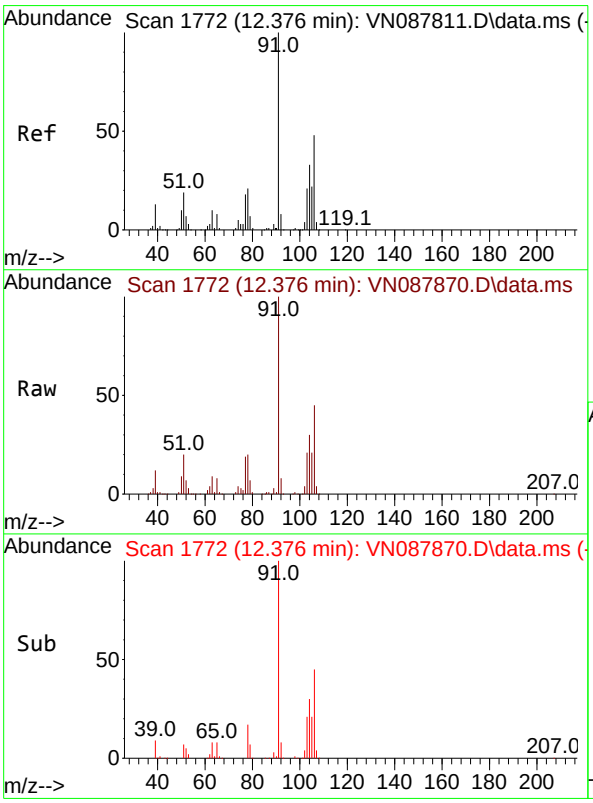
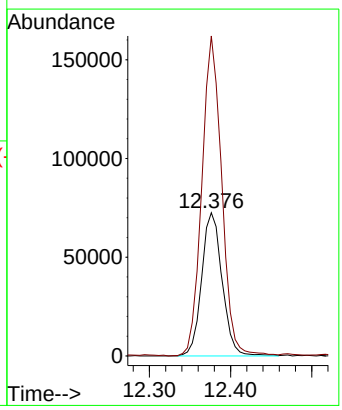
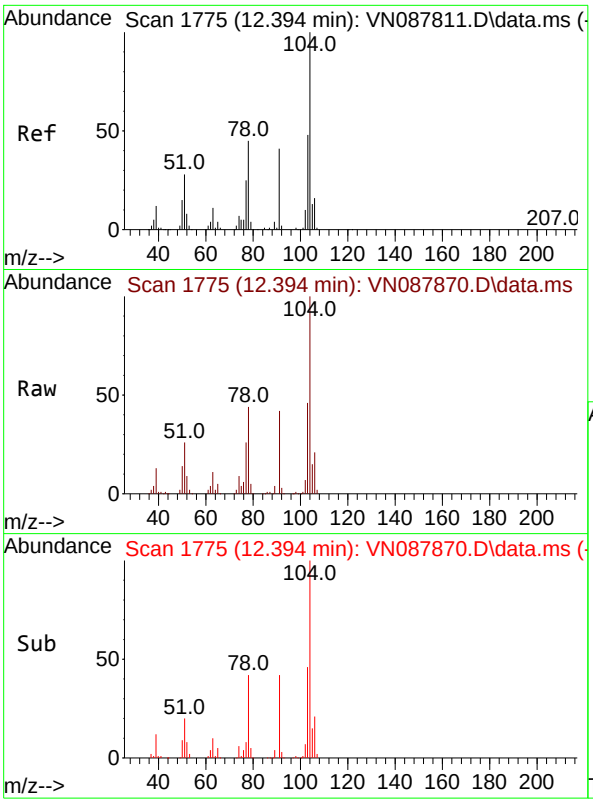


#68
o-Xylene
Concen: 20.161 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:106 Resp: 127272

Ion	Ratio	Lower	Upper
106	100		
91	217.1	107.7	323.3





#69
Styrene
Concen: 19.464 ug/l
RT: 12.394 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:104 Resp: 21354

Ion	Ratio	Lower	Upper
104	100		
78	49.9	41.0	61.6
103	54.5	44.6	66.8

Instrument :
MSVOA_N
ClientSampleId :
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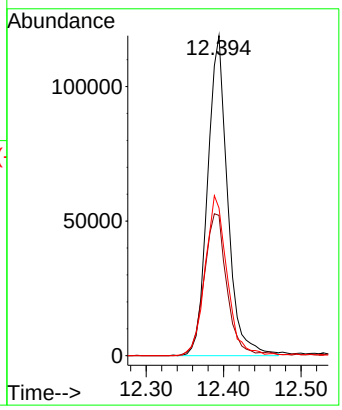
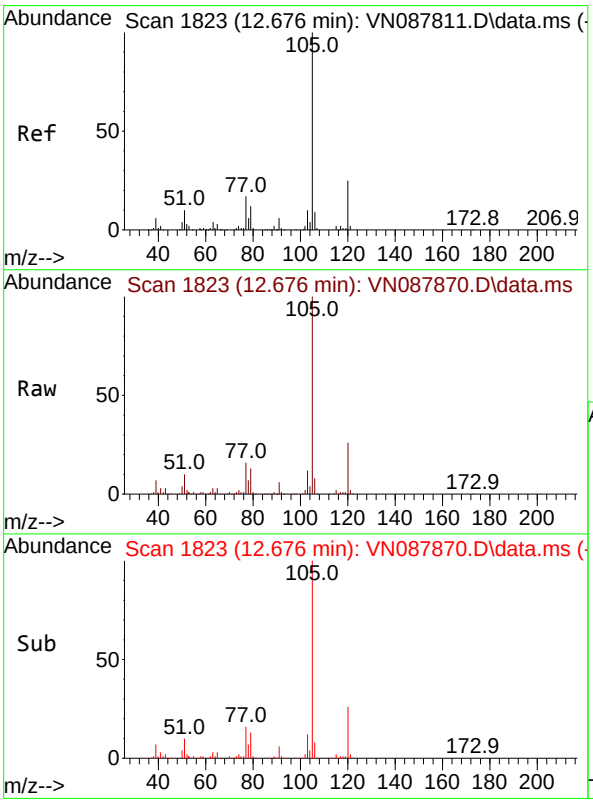
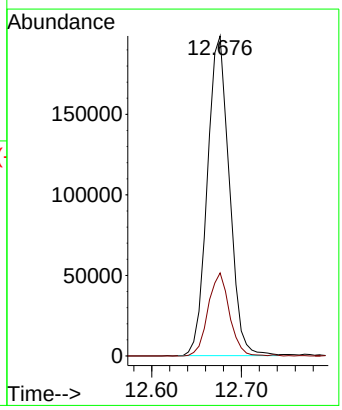


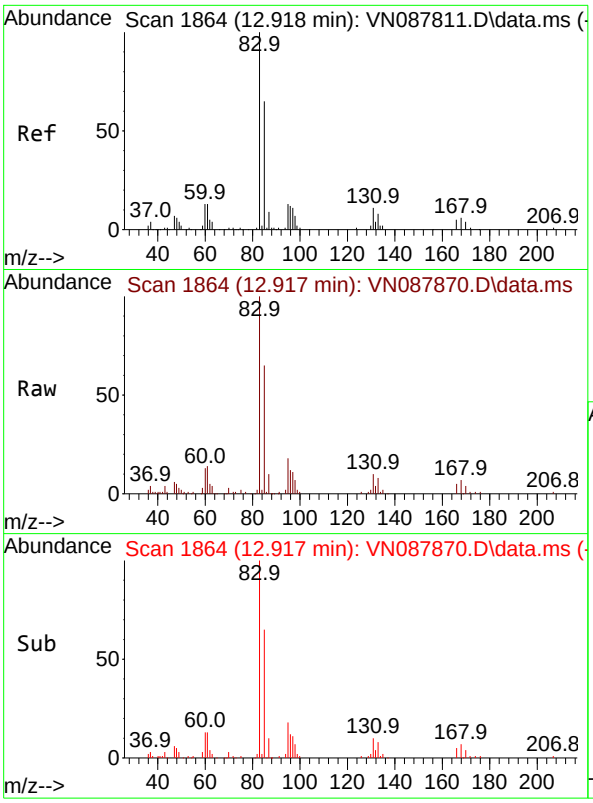


#70
Isopropylbenzene
Concen: 21.086 ug/l
RT: 12.676 min Scan# 1823
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:105 Resp: 337517

Ion	Ratio	Lower	Upper
105	100		
120	25.2	17.4	32.4

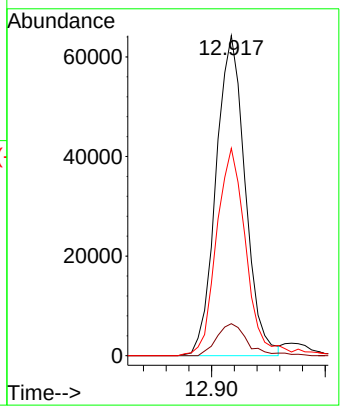




#71
1,1,2,2-Tetrachloroethane
Concen: 19.925 ug/l
RT: 12.917 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 83 Resp: 11465

Ion	Ratio	Lower	Upper
83	100		
131	10.0	4.8	14.3
85	65.1	31.9	95.7



Instrument :
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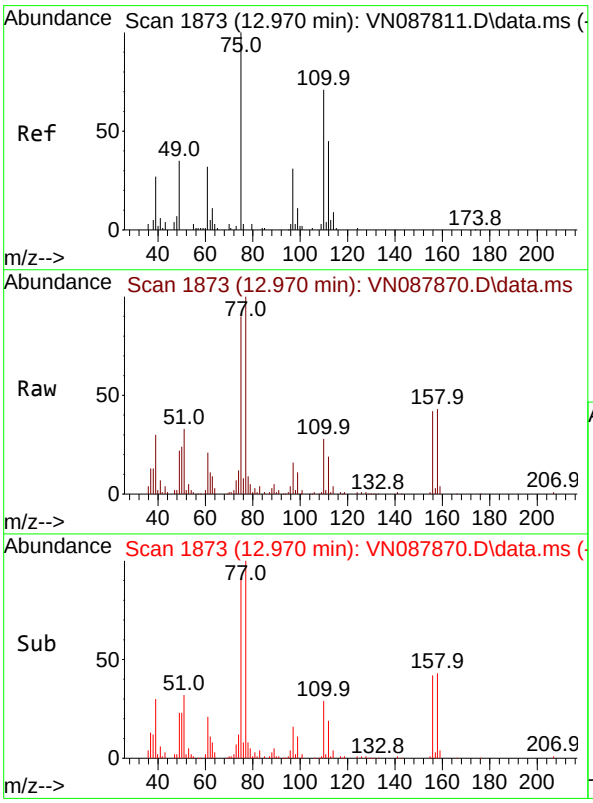
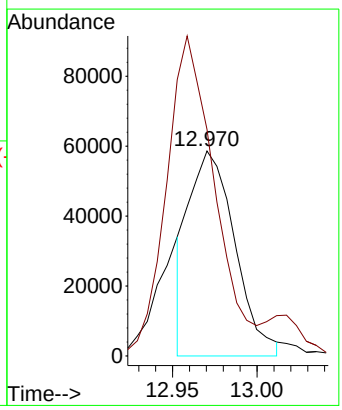
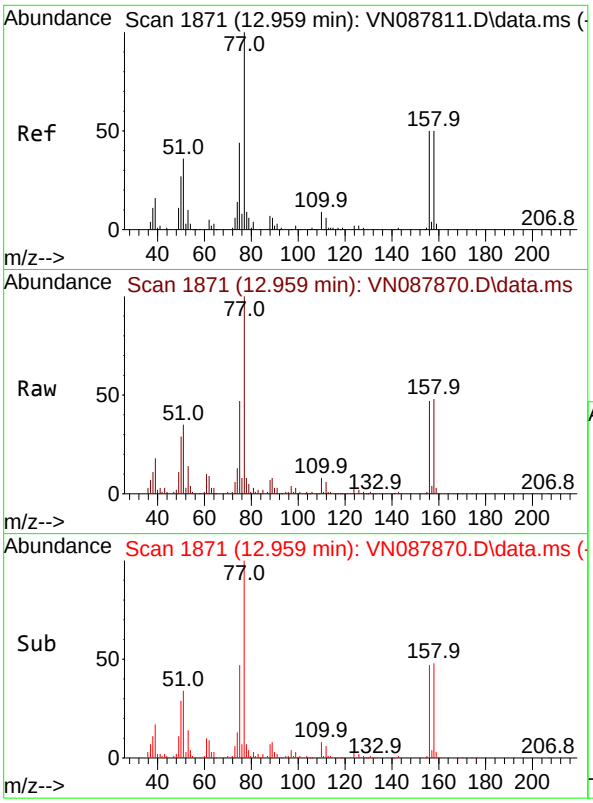


#72
1,2,3-Trichloropropane
Concen: 19.649 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 75 Resp: 111015

Ion	Ratio	Lower	Upper
75	100		
77	164.1	0.0	378.8

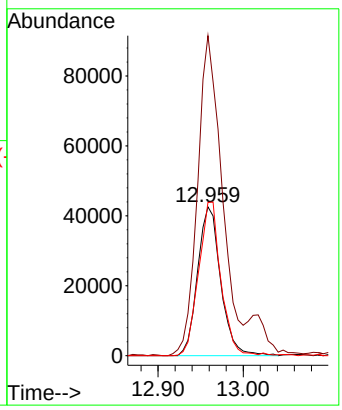




#73
Bromobenzene
Concen: 20.489 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:156 Resp: 8023

Ion	Ratio	Lower	Upper
156	100		
77	227.0	0.0	484.2
158	99.1	0.0	186.2



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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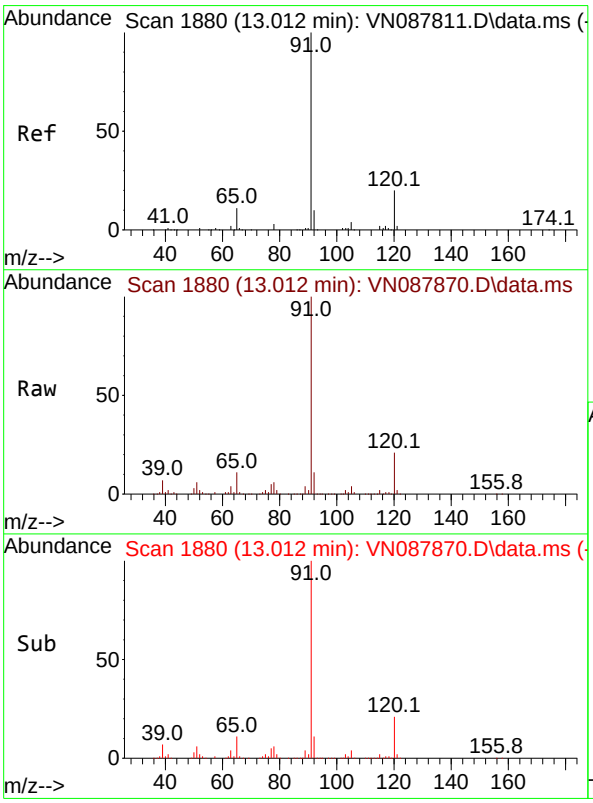
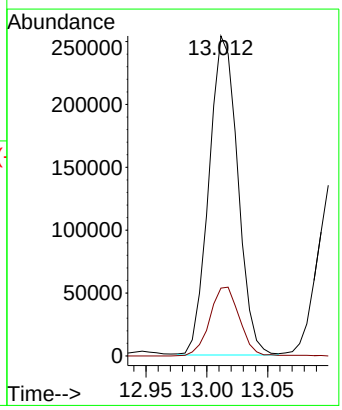
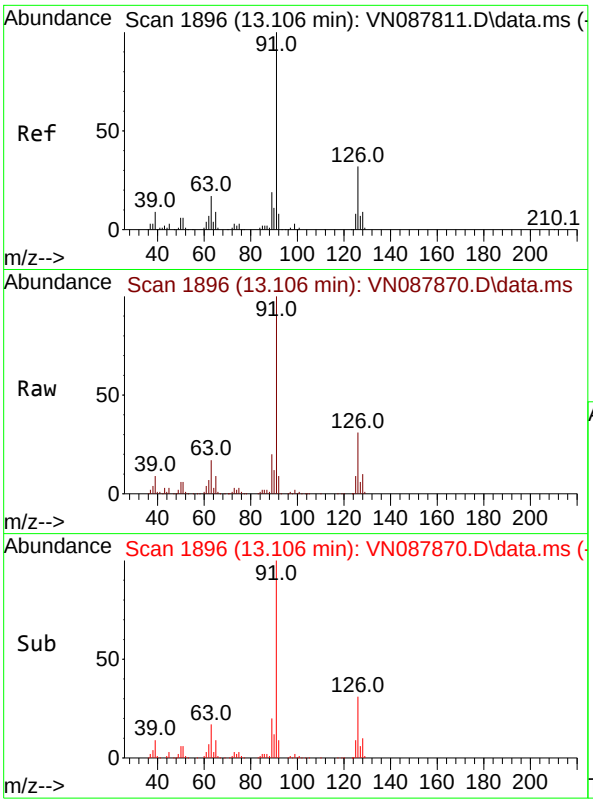


#74
n-propylbenzene
Concen: 20.722 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 91 Resp: 418506

Ion	Ratio	Lower	Upper
91	100		
120	22.2	0.0	42.2





#75
2-Chlorotoluene
Concen: 20.240 ug/l
RT: 13.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 91 Resp: 24602

Ion	Ratio	Lower	Upper
91	100		
126	32.4	0.0	60.4

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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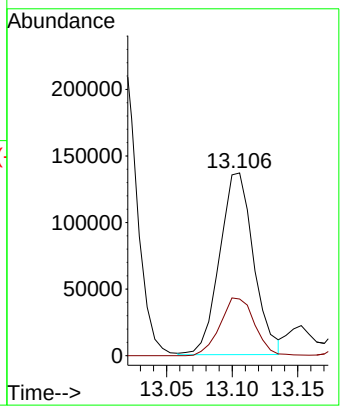
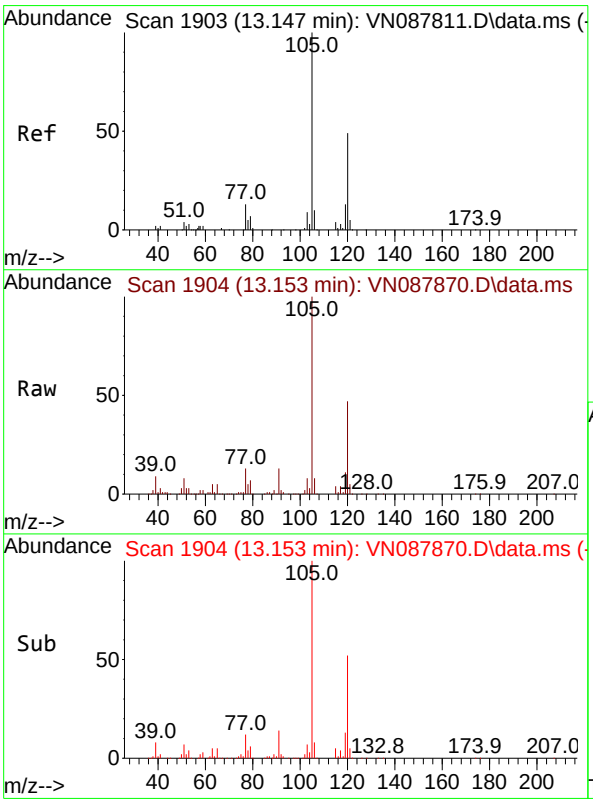
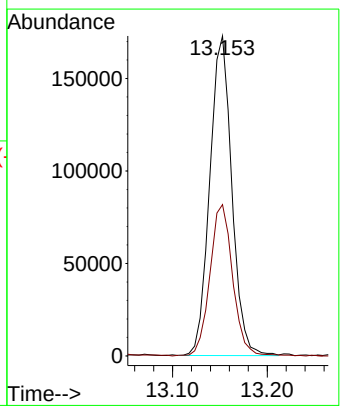


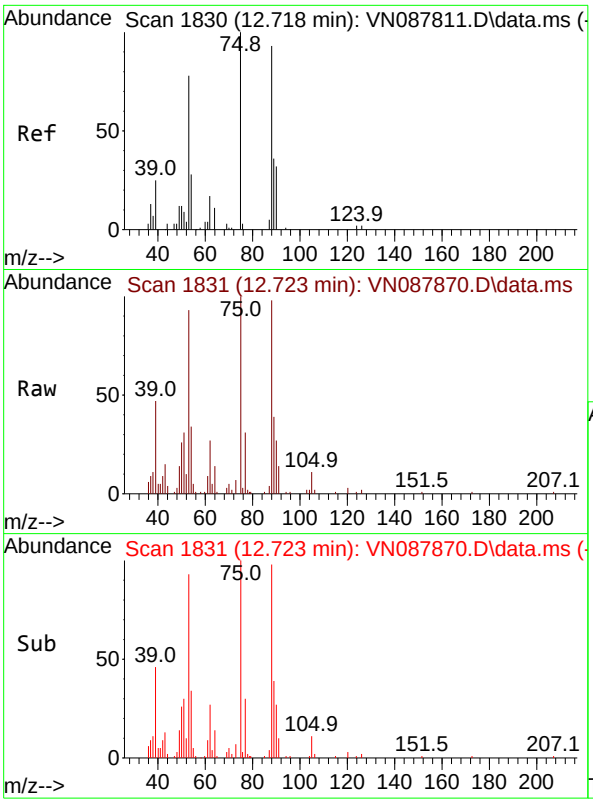


#76
1,3,5-Trimethylbenzene
Concen: 20.642 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:105 Resp: 279014

Ion	Ratio	Lower	Upper
105	100		
120	49.0	0.0	92.6

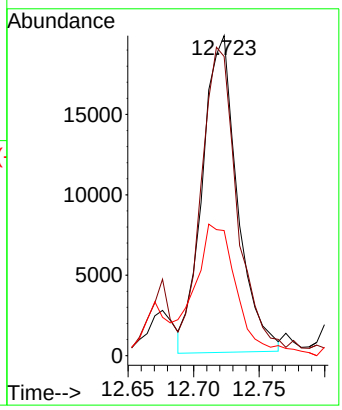




#77
t-1,4-Dichloro-2-butene
Concen: 19.139 ug/l
RT: 12.723 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 75 Resp: 3649

Ion	Ratio	Lower	Upper
75	100		
53	92.4	45.3	135.9
89	37.6	18.8	56.3



Instrument :
MSVOA_N
ClientSampleId :
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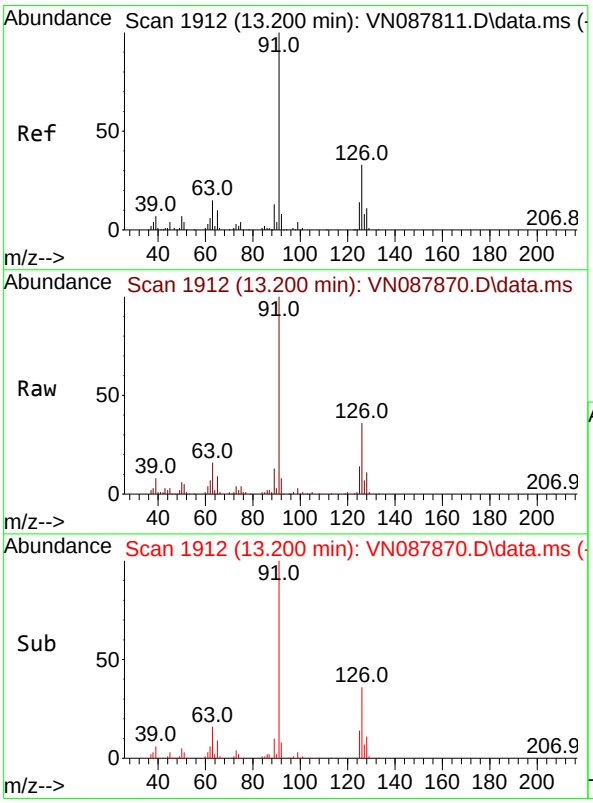
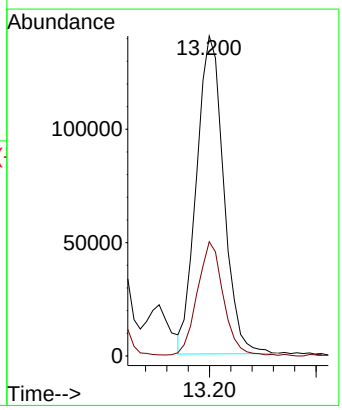
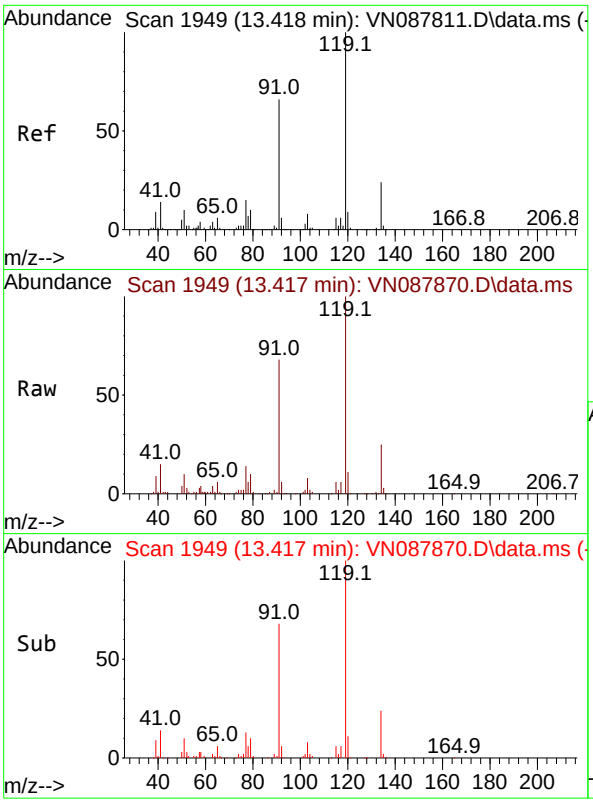


#78
4-Chlorotoluene
Concen: 20.310 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 91 Resp: 248882

Ion	Ratio	Lower	Upper
91	100		
126	34.8	0.0	67.0





#79
tert-butylbenzene
Concen: 21.807 ug/l
RT: 13.417 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:119 Resp: 24685

Ion	Ratio	Lower	Upper
119	100		
91	66.6	0.0	142.6
134	24.8	0.0	47.2

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

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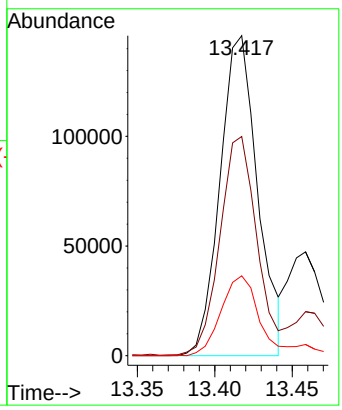
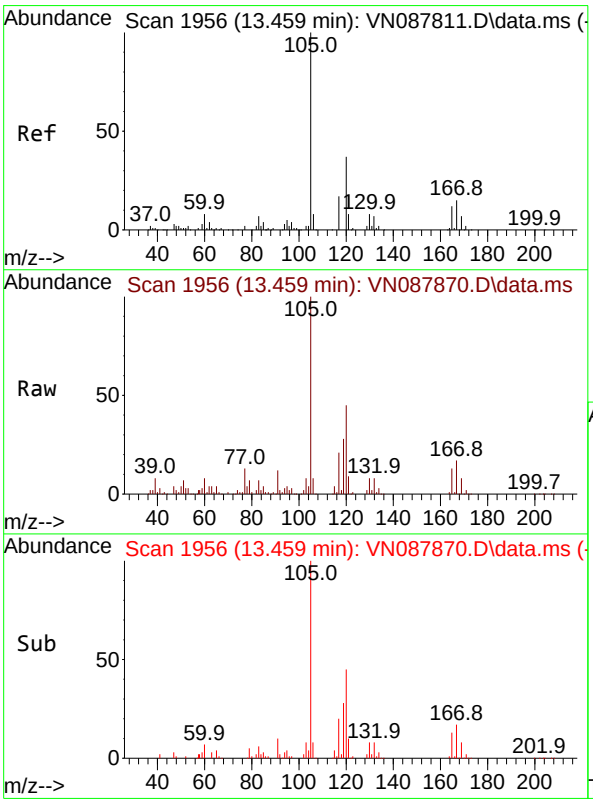
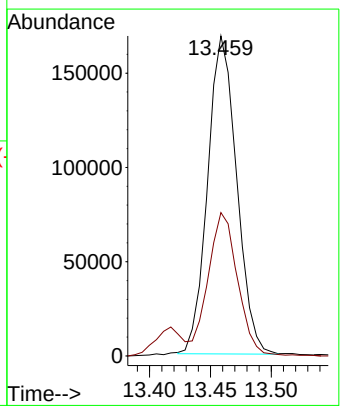


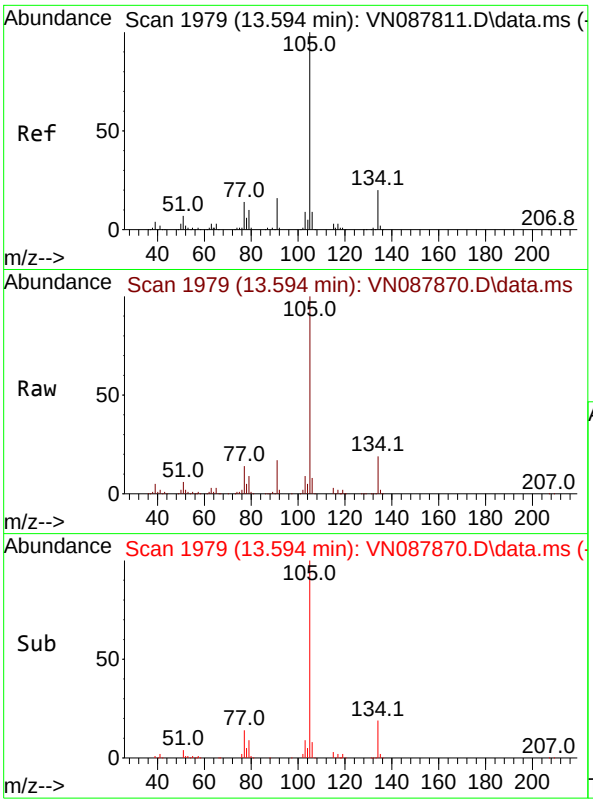


#80
1,2,4-Trimethylbenzene
Concen: 20.211 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:105 Resp: 280072

Ion	Ratio	Lower	Upper
105	100		
120	45.8	0.0	86.6

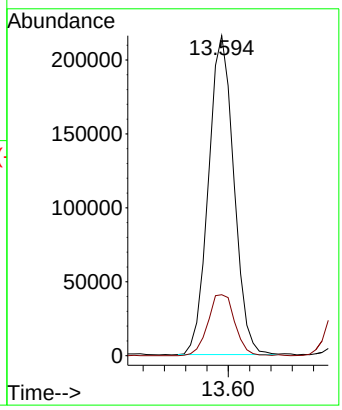




#81
sec-Butylbenzene
Concen: 21.444 ug/l
RT: 13.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:105 Resp: 35703

Ion	Ratio	Lower	Upper
105	100		
134	20.3	0.0	37.0



Instrument :
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ClientSampleId :
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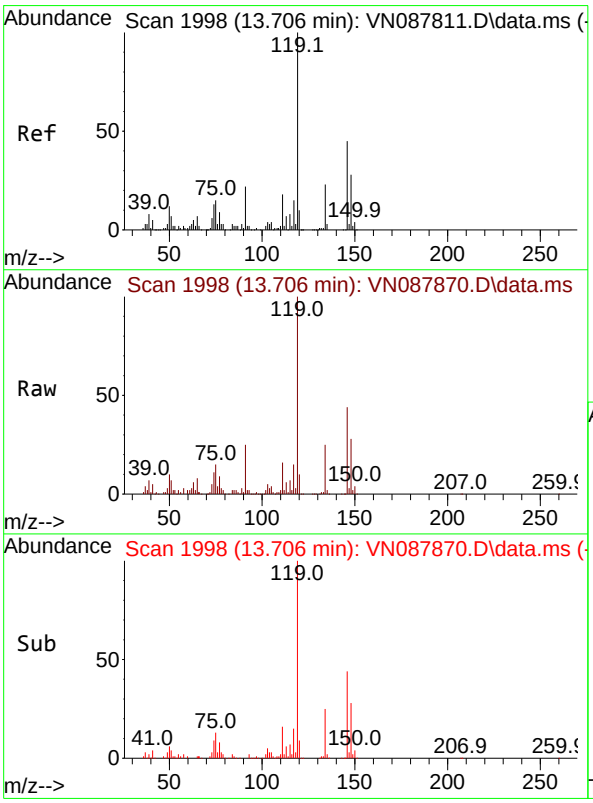
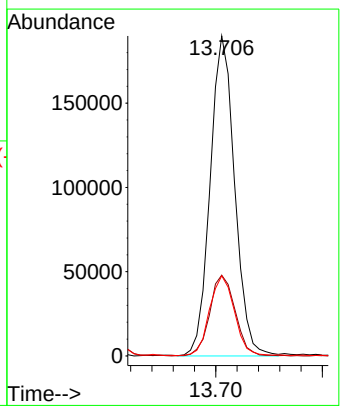
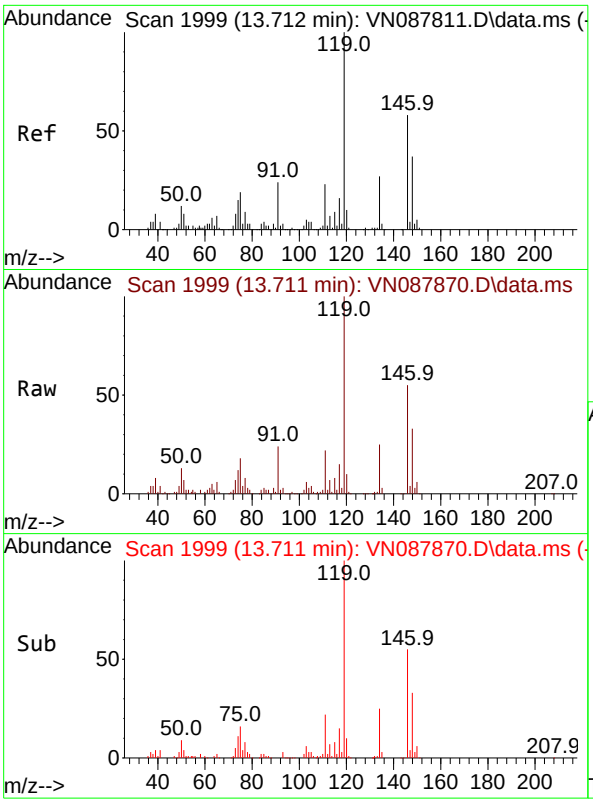


#82
p-Isopropyltoluene
Concen: 22.138 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:119 Resp: 303705

Ion	Ratio	Lower	Upper
119	100		
134	26.2	0.0	49.4
91	25.1	0.0	52.2

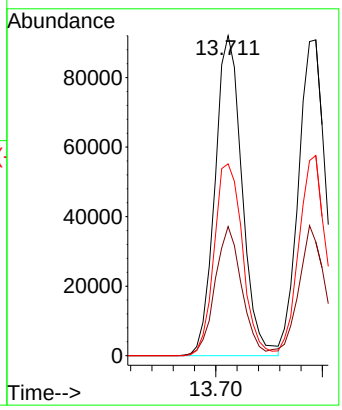




#83
1,3-Dichlorobenzene
Concen: 21.562 ug/l
RT: 13.711 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:146 Resp: 16278

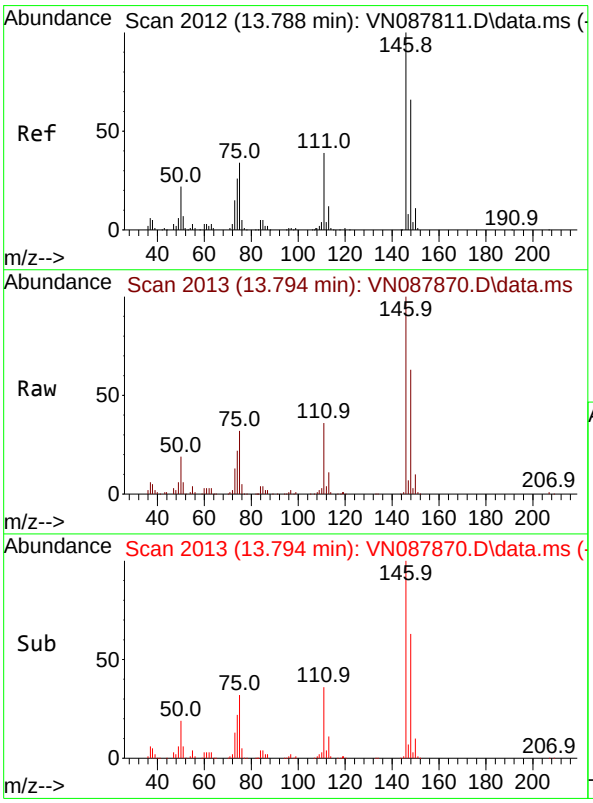
Ion	Ratio	Lower	Upper
146	100		
111	39.7	21.1	63.4
148	62.6	31.0	93.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations APPROVED

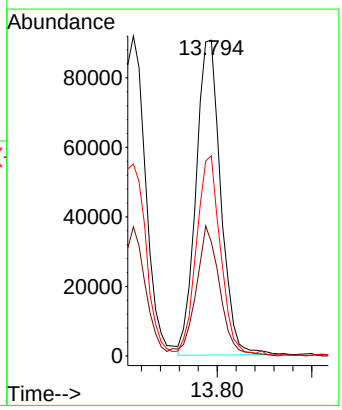
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

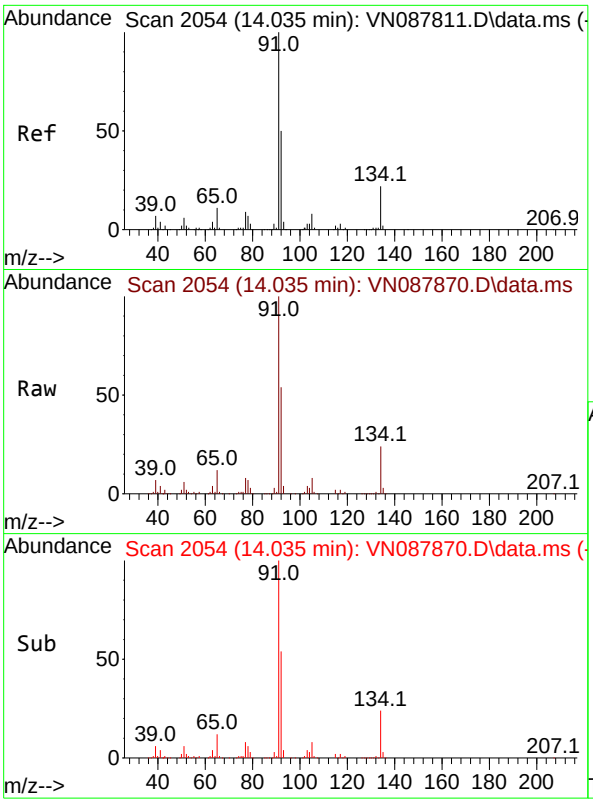


#84
1,4-Dichlorobenzene
Concen: 21.731 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:146 Resp: 164451

Ion	Ratio	Lower	Upper
146	100		
111	40.0	20.2	60.5
148	62.4	31.5	94.5





#85
n-Butylbenzene
Concen: 22.042 ug/l
RT: 14.035 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 91 Resp: 29066

Ion	Ratio	Lower	Upper
91	100		
92	51.7	0.0	104.0
134	23.6	0.0	46.0

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/18/2025
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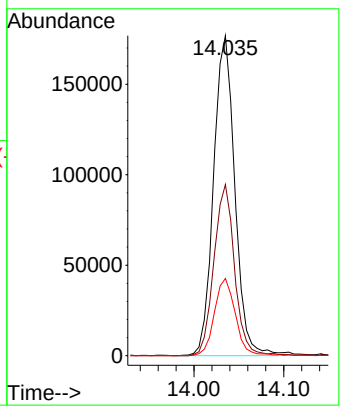
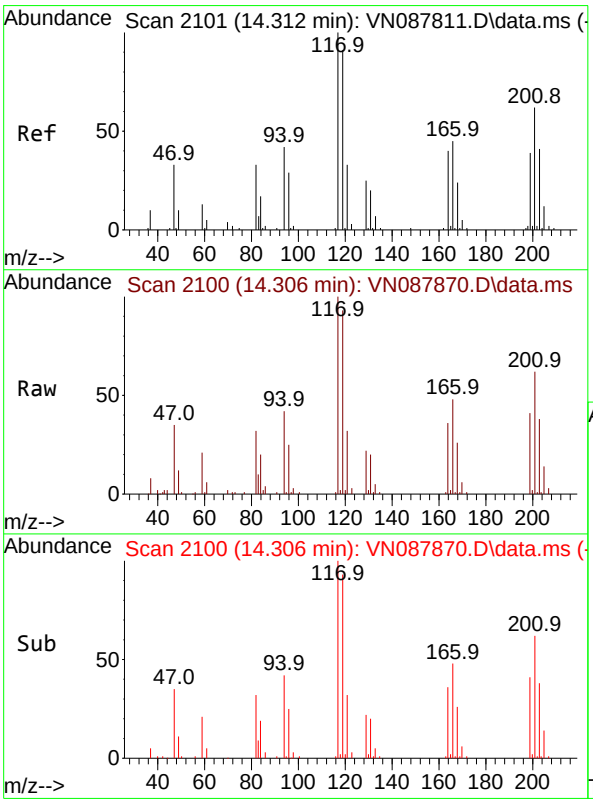
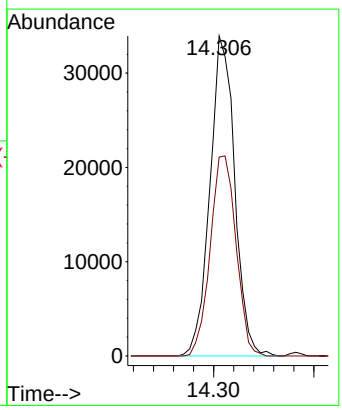


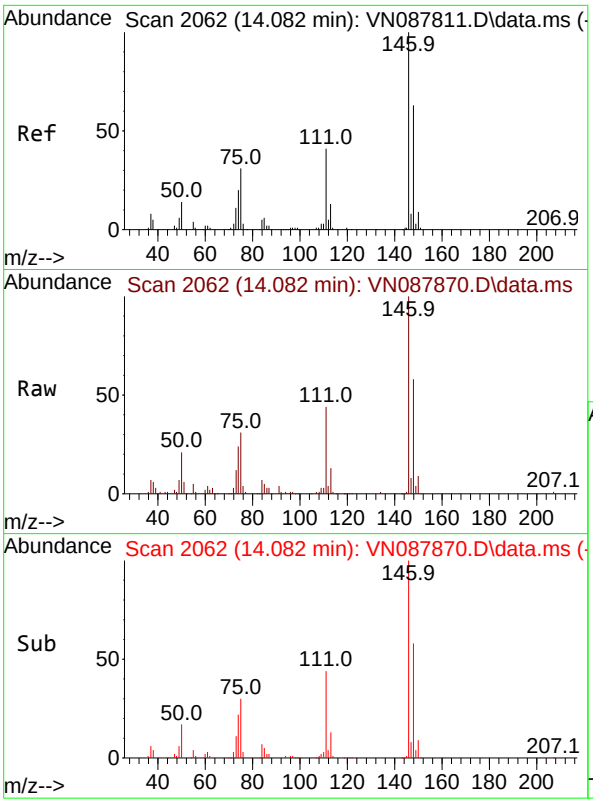


#86
Hexachloroethane
Concen: 20.885 ug/l
RT: 14.306 min Scan# 2100
Delta R.T. -0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:117 Resp: 58197

Ion	Ratio	Lower	Upper
117	100		
201	65.1	29.9	89.7

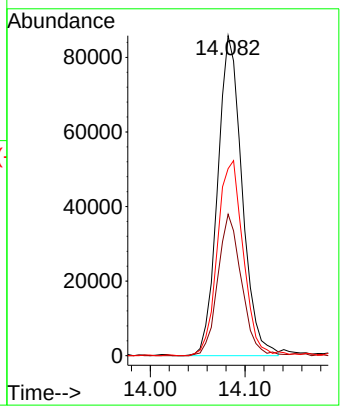




#87
1,2-Dichlorobenzene
Concen: 21.640 ug/l
RT: 14.082 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:146 Resp: 15409

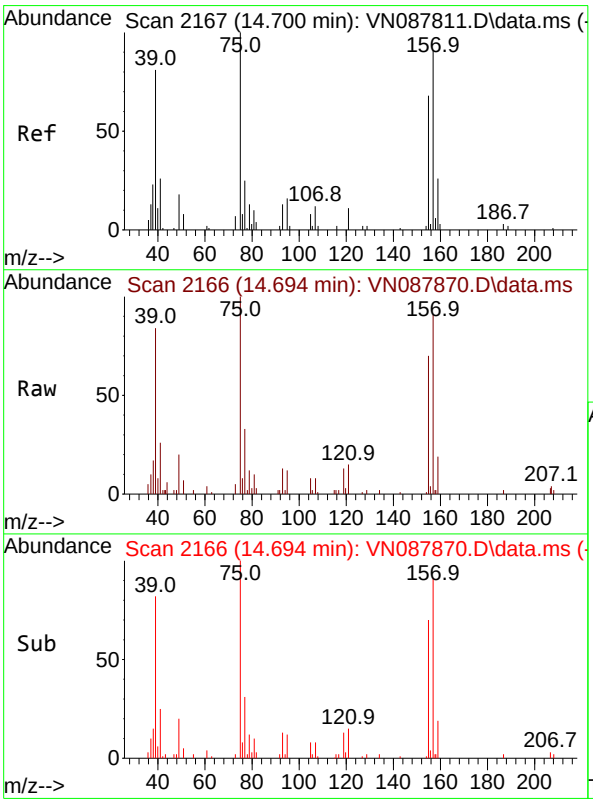
Ion	Ratio	Lower	Upper
146	100		
111	42.8	21.5	64.5
148	63.9	33.4	100.1



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations APPROVED

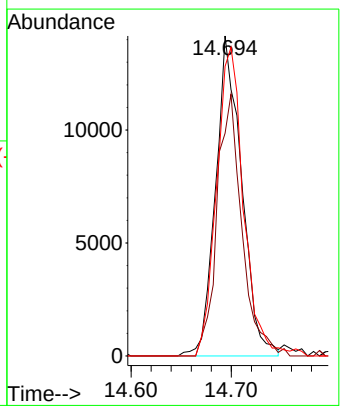
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

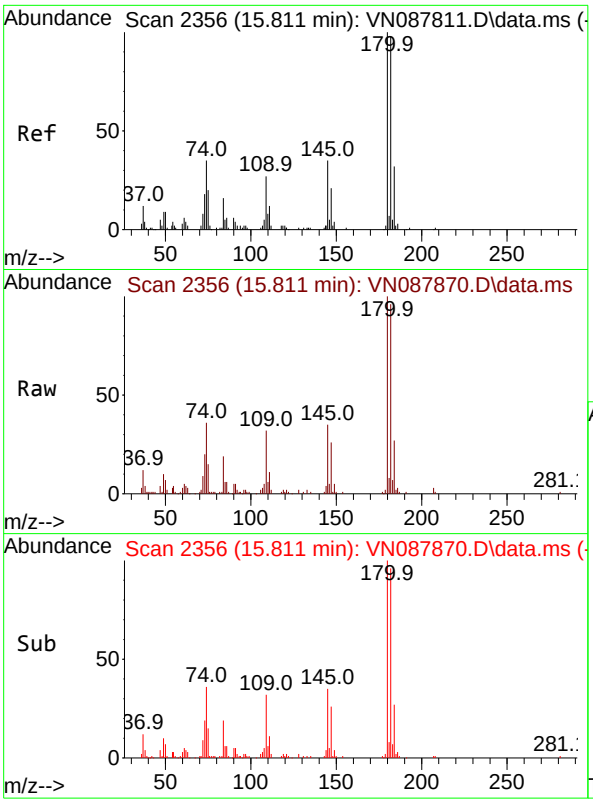


#88
1,2-Dibromo-3-Chloropropane
Concen: 19.996 ug/l
RT: 14.694 min Scan# 2166
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion: 75 Resp: 25535

Ion	Ratio	Lower	Upper
75	100		
155	78.3	53.0	79.4
157	99.9	72.2	108.4

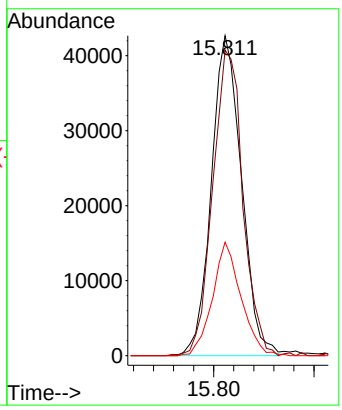




#89
1,2,4-Trichlorobenzene
Concen: 21.968 ug/l
RT: 15.811 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:180 Resp: 8896

Ion	Ratio	Lower	Upper
180	100		
182	95.4	74.6	111.8
145	33.6	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 09/18/2025
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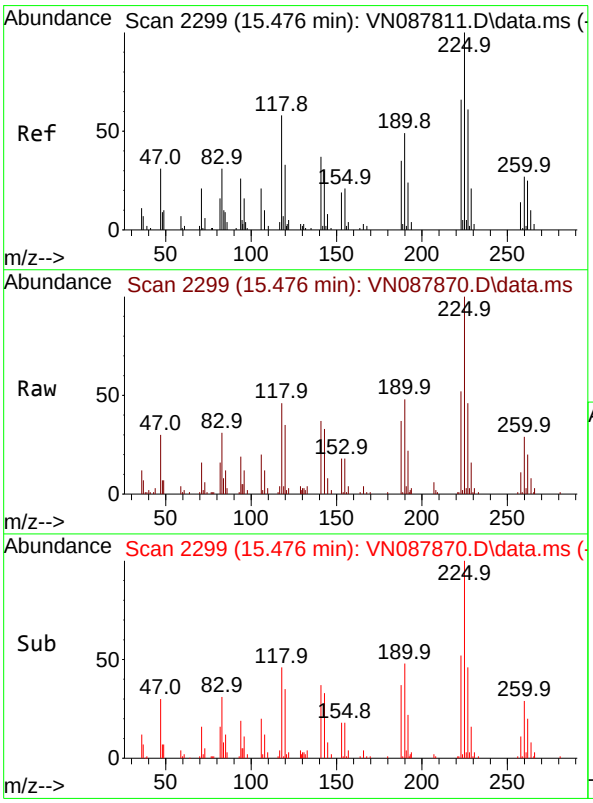
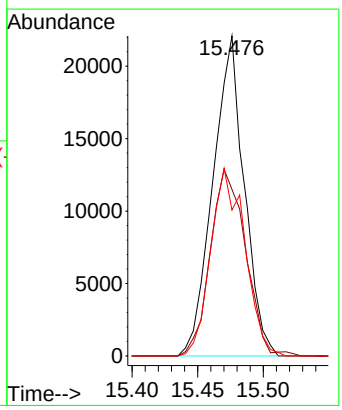
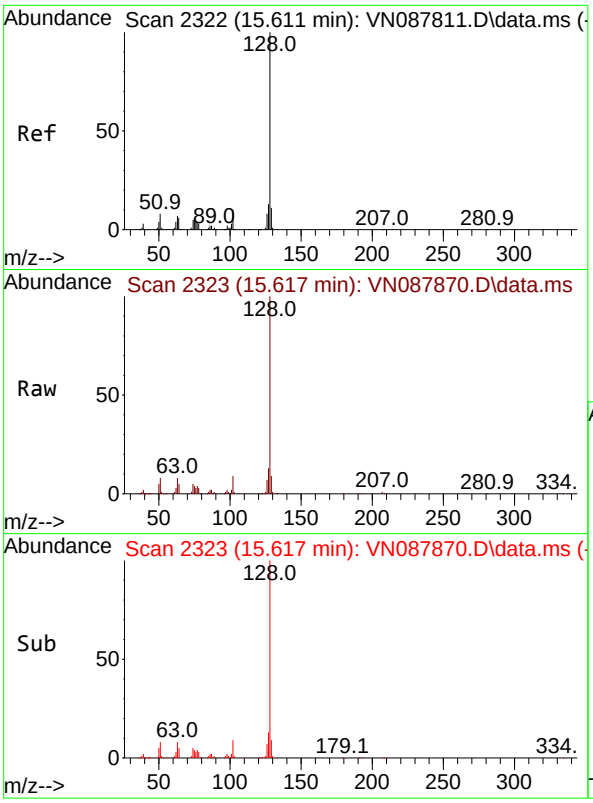


#90
Hexachlorobutadiene
Concen: 27.042 ug/l
RT: 15.476 min Scan# 2299
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:225 Resp: 36715

Ion	Ratio	Lower	Upper
225	100		
223	64.8	0.0	118.2
227	63.8	0.0	139.0

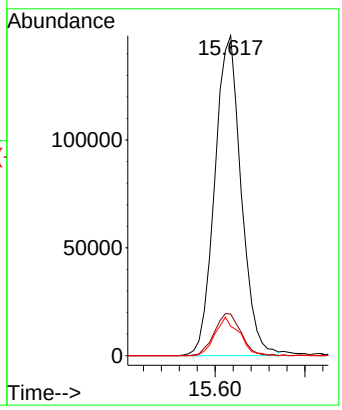




#91
Naphthalene
Concen: 20.336 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:128 Resp: 30321

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.2	15.4
129	11.1	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBS01

Manual Integrations
APPROVED

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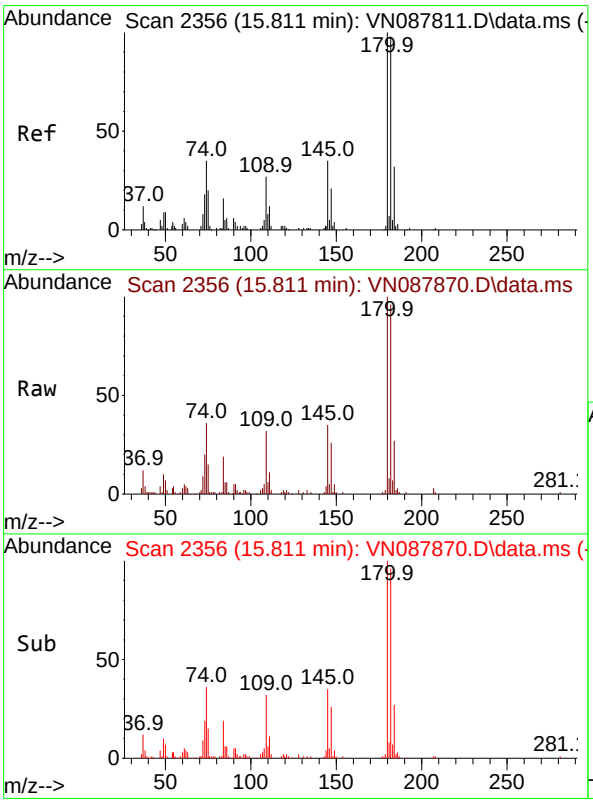
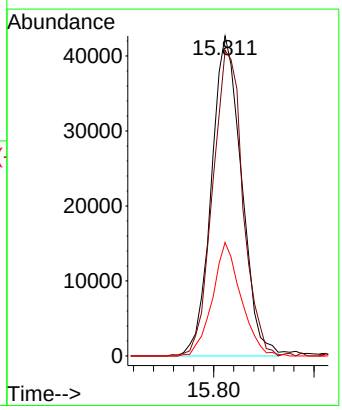


#92
1,2,3-Trichlorobenzene
Concen: 21.968 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. -0.000 min
Lab File: VN087870.D
Acq: 17 Sep 2025 10:55

Tgt Ion:180 Resp: 88968

Ion	Ratio	Lower	Upper
180	100		
182	95.4	0.0	186.4
145	33.6	0.0	68.4



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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBSD01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBSD01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087871.D	1	09/17/25 11:30	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	20.1		0.77	5.00	ug/L
74-87-3	Chloromethane	16.4		0.64	5.00	ug/L
75-01-4	Vinyl Chloride	15.8		0.83	5.00	ug/L
74-83-9	Bromomethane	14.3		0.80	5.00	ug/L
75-00-3	Chloroethane	14.7		2.30	5.00	ug/L
75-69-4	Trichlorofluoromethane	18.0		0.80	5.00	ug/L
75-35-4	1,1-Dichloroethene	16.7		0.76	5.00	ug/L
107-02-8	Acrolein	120		6.60	25.0	ug/L
107-13-1	Acrylonitrile	99.8		2.80	25.0	ug/L
67-64-1	Acetone	89.7		4.60	25.0	ug/L
75-15-0	Carbon Disulfide	17.0		0.82	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	20.4		0.77	5.00	ug/L
75-09-2	Methylene Chloride	20.5		0.86	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.8		0.82	5.00	ug/L
108-05-4	Vinyl Acetate	100		3.20	25.0	ug/L
75-34-3	1,1-Dichloroethane	19.9		0.68	5.00	ug/L
78-93-3	2-Butanone	96.7		2.00	25.0	ug/L
56-23-5	Carbon Tetrachloride	20.2		0.74	5.00	ug/L
594-20-7	2,2-Dichloropropane	20.2		0.66	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.9		0.80	5.00	ug/L
67-66-3	Chloroform	19.7		0.55	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.4		0.63	5.00	ug/L
563-58-6	1,1-Dichloropropene	18.5		0.63	5.00	ug/L
71-43-2	Benzene	18.9		0.45	5.00	ug/L
107-06-2	1,2-Dichloroethane	18.6		0.50	5.00	ug/L
79-01-6	Trichloroethene	20.4		0.49	5.00	ug/L
78-87-5	1,2-Dichloropropane	19.0		0.46	5.00	ug/L
74-95-3	Dibromomethane	19.0		0.59	5.00	ug/L
75-27-4	Bromodichloromethane	19.1		0.64	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	99.6		3.00	25.0	ug/L

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Fax : 908 789 8922

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBSD01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBSD01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087871.D	1	09/17/25 11:30	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-88-3	Toluene	19.8		0.46	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	19.1		0.72	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.0		0.67	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.3		0.45	5.00	ug/L
142-28-9	1,3-Dichloropropane	19.1		0.44	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	92.5		4.60	25.0	ug/L
591-78-6	2-Hexanone	99.3		3.20	25.0	ug/L
124-48-1	Dibromochloromethane	20.6		0.66	5.00	ug/L
106-93-4	1,2-Dibromoethane	20.1		0.56	5.00	ug/L
127-18-4	Tetrachloroethene	22.3		0.84	5.00	ug/L
108-90-7	Chlorobenzene	20.8		0.47	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	21.5		0.62	5.00	ug/L
67-72-1	Hexachloroethane	21.3		0.98	5.00	ug/L
100-41-4	Ethyl Benzene	20.1		0.56	5.00	ug/L
179601-23-1	m/p-Xylenes	41.8		1.30	10.0	ug/L
1330-20-7	Total Xylenes	62.1		1.97	15.0	ug/L
95-47-6	o-Xylene	20.3		0.67	5.00	ug/L
100-42-5	Styrene	19.7		0.72	5.00	ug/L
75-25-2	Bromoform	20.9		0.94	5.00	ug/L
98-82-8	Isopropylbenzene	21.2		0.78	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	21.4		0.44	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	17.7		0.62	5.00	ug/L
108-86-1	Bromobenzene	21.6		0.59	5.00	ug/L
103-65-1	n-propylbenzene	20.9		0.67	5.00	ug/L
95-49-8	2-Chlorotoluene	20.8		0.64	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	21.7		0.59	5.00	ug/L
106-43-4	4-Chlorotoluene	20.9		0.62	5.00	ug/L
98-06-6	tert-butylbenzene	22.3		0.71	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	20.2		0.77	5.00	ug/L
135-98-8	sec-Butylbenzene	22.0		0.64	5.00	ug/L
99-87-6	p-Isopropyltoluene	22.5		0.70	5.00	ug/L

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Fax : 908 789 8922

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VN0917WBSD01	SDG No.:	Q3015
Lab Sample ID:	VN0917WBSD01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087871.D	1	09/17/25 11:30	VN091725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
541-73-1	1,3-Dichlorobenzene	21.4		0.67	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	21.8		0.81	5.00	ug/L
104-51-8	n-Butylbenzene	22.5		0.82	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	22.0		0.67	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	21.7		0.86	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	23.2		1.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	27.7		0.68	5.00	ug/L
91-20-3	Naphthalene	21.6		1.00	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	23.2		1.10	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	28.8		91 - 110	96%	SPK: 30
2037-26-5	Toluene-d8	29.4		91 - 112	98%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.4		63 - 112	101%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	52200	7.794			
540-36-3	1,4-Difluorobenzene	279000	9.082			
3114-55-4	Chlorobenzene-d5	250000	11.847			
74-97-5	Bromochloromethane	52200	7.794			

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\VN091725\
Data File : VN087871.D
Acq On : 17 Sep 2025 11:30
Operator : JC\MD
Sample : VN0917WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 03:08:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations APPROVED
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.794	128	52165	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.082	114	278561	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.847	117	250388	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.565	65	128412	28.817	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 96.067%				
60) 4-Bromofluorobenzene	12.829	95	122450	30.415	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 101.367%				
63) Toluene-d8	10.547	98	342293	29.396	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 98.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.142	85	65259	20.129	ug/l		99
3) Chloromethane	2.383	50	55927	16.432	ug/l		99
4) Vinyl Chloride	2.542	62	60861	15.819	ug/l		98
5) Bromomethane	2.977	94	32335	14.327	ug/l		89
6) Chloroethane	3.136	64	38628	14.691	ug/l		87
7) Trichlorofluoromethane	3.512	101	101568	18.011	ug/l		95
8) Diethyl Ether	3.953	74	38295	16.081	ug/l		94
9) 1,1,2-Trichlorotrifluo...	4.365	101	58735	19.229	ug/l		75
10) 1,1-Dichloroethene	4.336	96	52514	16.675	ug/l		94
11) Methyl Iodide	4.577	142	35959	16.131	ug/l		82
12) Methyl Acetate	5.012	43	103011	21.220	ug/l		97
13) Acrolein	4.177	56	104244m	120.607	ug/l		
14) Acrylonitrile	5.706	53	208602	99.833	ug/l		97
15) Acetone	4.430	58	58501m	89.748	ug/l		
16) Carbon Disulfide	4.706	76	147396	17.047	ug/l	#	89
17) Allyl chloride	5.012	41	93289	18.137	ug/l		94
18) Methylene Chloride	5.265	84	72990	20.461	ug/l		92
19) trans-1,2-Dichloroethene	5.777	96	60253	18.760	ug/l		91
20) Diisopropyl ether	6.665	45	220158	18.613	ug/l	#	93
21) 1,1-Dichloroethane	6.553	63	129006	19.916	ug/l	#	97
22) cis-1,2-Dichloroethene	7.471	96	77562	19.896	ug/l		99
23) tert-Butyl Alcohol	5.512	59	77835m	105.377	ug/l		
24) Methyl tert-Butyl Ether	5.783	73	229615	20.423	ug/l	#	83
25) Chloroform	7.947	83	133855	19.742	ug/l		89
26) Cyclohexane	8.235	56	95526	19.365	ug/l	#	99
29) 1,1-Dichloropropene	8.353	75	83670	18.482	ug/l		96
30) 2-Butanone	7.471	43	301515	96.683	ug/l		99
31) 2,2-Dichloropropane	7.477	77	110028	20.162	ug/l		98
32) 1,1,1-Trichloroethane	8.147	97	116982	20.382	ug/l		98
33) Carbon Tetrachloride	8.347	117	96571	20.180	ug/l		97
34) Benzene	8.588	78	275879	18.855	ug/l		94
35) Methacrylonitrile	7.765	41	58704	17.996	ug/l		95
36) 1,2-Dichloroethane	8.653	62	102965	18.631	ug/l		99
37) Trichloroethene	9.335	130	66677	20.386	ug/l		98
38) Methylcyclohexane	9.582	83	98311	19.722	ug/l		96
39) 1,2-Dichloropropane	9.600	63	71195	18.998	ug/l		97
40) Dibromomethane	9.688	93	53021	19.012	ug/l		93
41) Bromodichloromethane	9.871	83	108842	19.095	ug/l	#	93
42) Vinyl Acetate	6.588	43	1043406	100.137	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087871.D
Acq On : 17 Sep 2025 11:30
Operator : JC\MD
Sample : VN0917WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 03:08:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations APPROVED
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.553	43	123992	19.460	ug/l	99
44) Isopropyl Acetate	8.671	43	191251	19.147	ug/l	99
45) 1,4-Dioxane	9.676	88	27423	435.342	ug/l	94
46) Methyl methacrylate	9.665	41	83421	18.119	ug/l	91
47) n-amyl Acetate	12.594	43	94473m	13.996	ug/l	
48) t-1,3-Dichloropropene	10.818	75	113205	19.122	ug/l	89
49) cis-1,3-Dichloropropene	10.294	75	115068	18.977	ug/l	95
50) 1,1,2-Trichloroethane	10.994	97	73088	20.291	ug/l	97
51) Ethyl methacrylate	10.859	69	102178	18.228	ug/l	96
52) 1,3-Dichloropropane	11.141	76	119718	19.140	ug/l	97
53) Dibromochloromethane	11.341	129	83149	20.588	ug/l	92
54) 1,2-Dibromoethane	11.447	107	75402	20.118	ug/l	97
55) 2-Chloroethyl vinyl ether	10.141	63	297054	92.489	ug/l	97
56) Bromoform	12.559	173	54997	20.852	ug/l	99
58) 4-Methyl-2-Pentanone	10.423	43	589811	99.624	ug/l	98
59) 2-Hexanone	11.176	43	384238	99.322	ug/l	96
61) Tetrachloroethene	11.082	164	55692	22.340	ug/l	94
62) Toluene	10.612	91	300459	19.838	ug/l	98
64) Chlorobenzene	11.870	112	193335	20.798	ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.941	131	70373	21.503	ug/l	95
66) Ethyl Benzene	11.941	91	328182	20.085	ug/l	94
67) m/p-Xylenes	12.053	106	253304	41.763	ug/l	92
68) o-Xylene	12.376	106	119443	20.311	ug/l	100
69) Styrene	12.388	104	201474	19.712	ug/l	99
70) Isopropylbenzene	12.676	105	315847	21.182	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.917	83	114474	21.355	ug/l	98
72) 1,2,3-Trichloropropane	12.970	75	93013m	17.671	ug/l	
73) Bromobenzene	12.959	156	78747	21.585	ug/l	90
74) n-propylbenzene	13.012	91	393403	20.910	ug/l	97
75) 2-Chlorotoluene	13.106	91	235172	20.768	ug/l	95
76) 1,3,5-Trimethylbenzene	13.153	105	272968	21.678	ug/l	97
77) t-1,4-Dichloro-2-butene	12.717	75	36462	20.524	ug/l	93
78) 4-Chlorotoluene	13.200	91	239153	20.949	ug/l	98
79) tert-butylbenzene	13.417	119	234797	22.265	ug/l	95
80) 1,2,4-Trimethylbenzene	13.459	105	261053	20.222	ug/l	95
81) sec-Butylbenzene	13.594	105	341990	22.048	ug/l	96
82) p-Isopropyltoluene	13.706	119	287495	22.495	ug/l	97
83) 1,3-Dichlorobenzene	13.711	146	150290	21.368	ug/l	98
84) 1,4-Dichlorobenzene	13.794	146	153609	21.789	ug/l	97
85) n-Butylbenzene	14.035	91	276503	22.508	ug/l	97
86) Hexachloroethane	14.306	117	55330	21.315	ug/l	90
87) 1,2-Dichlorobenzene	14.082	146	146033	22.015	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	14.694	75	25828	21.711	ug/l	93
89) 1,2,4-Trichlorobenzene	15.811	180	87612	23.221	ug/l	98
90) Hexachlorobutadiene	15.470	225	35041	27.704	ug/l	93
91) Naphthalene	15.617	128	300116	21.607	ug/l	99
92) 1,2,3-Trichlorobenzene	15.811	180	87612	23.221	ug/l	98

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

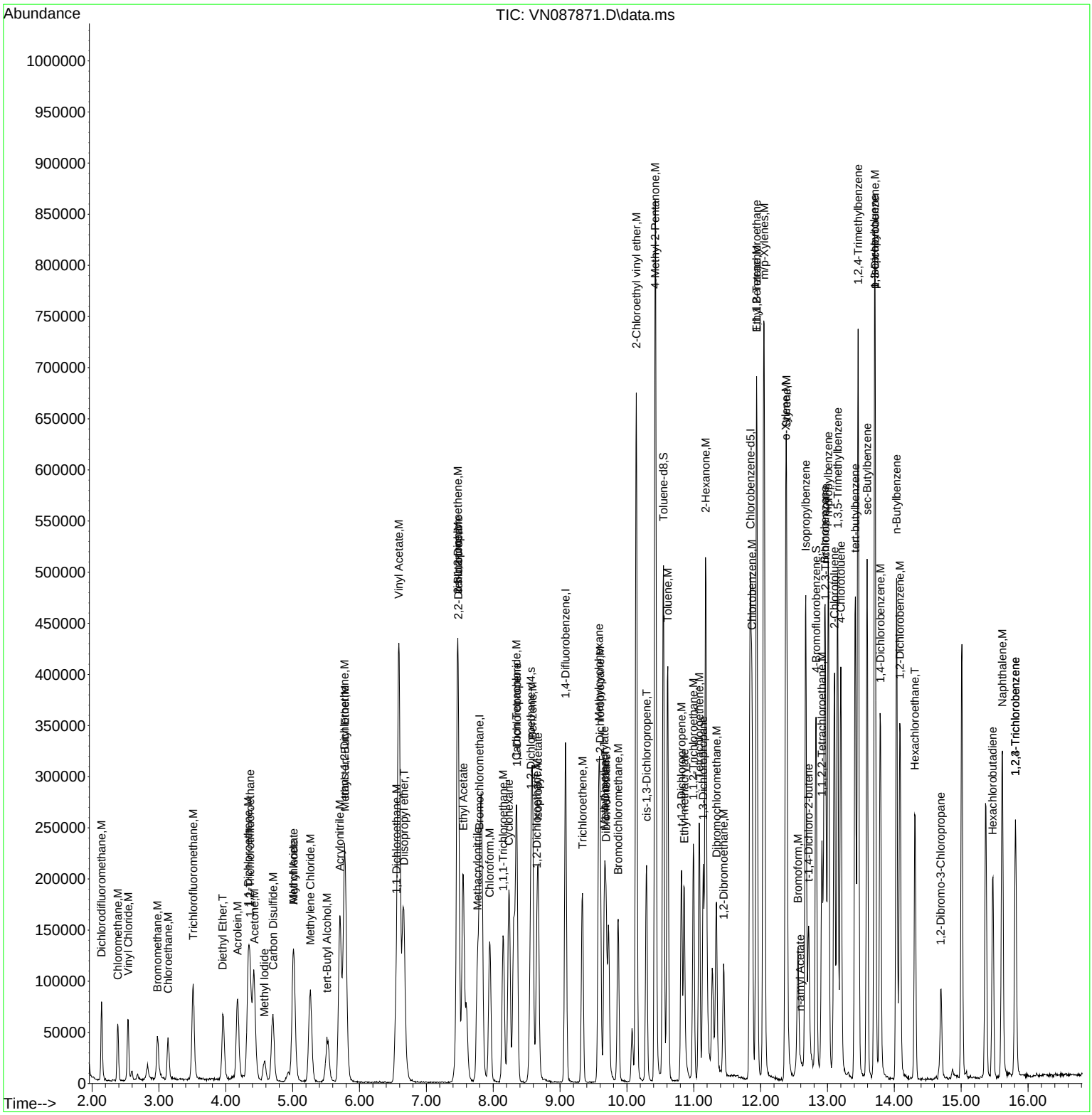
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091725\
Data File : VN087871.D
Acq On : 17 Sep 2025 11:30
Operator : JC\MD
Sample : VN0917WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

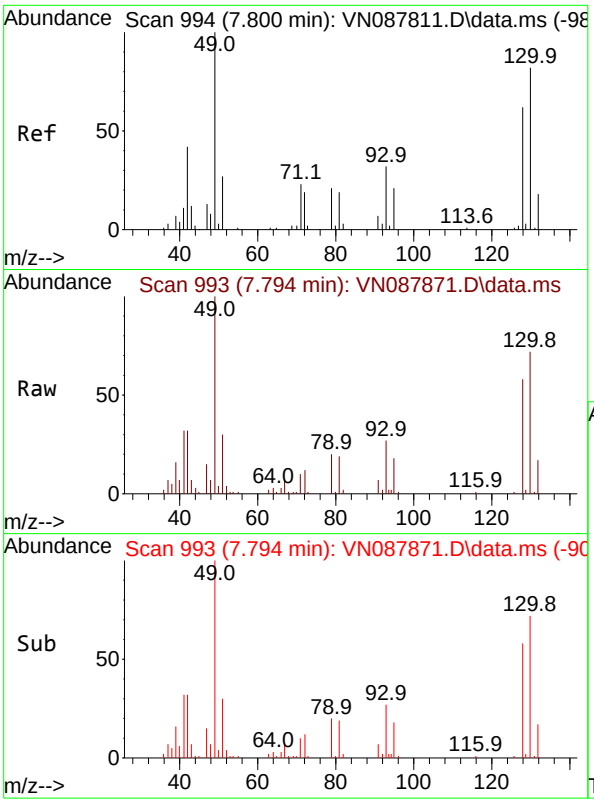
Quant Time: Sep 18 03:08:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090425W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 05 03:29:53 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

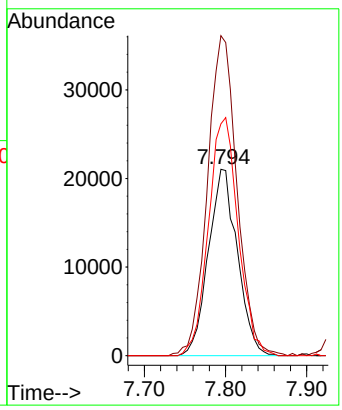




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.794 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:128 Resp: 5216

Ion	Ratio	Lower	Upper
128	100		
49	175.4	0.0	464.3
130	131.2	0.0	300.5



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations
APPROVED
Reviewed By :John Carlone 09/18/2025
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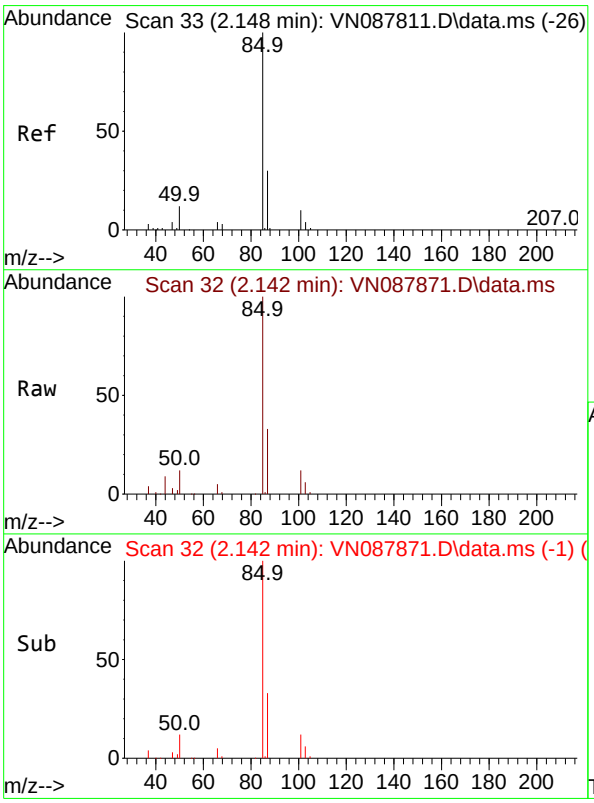
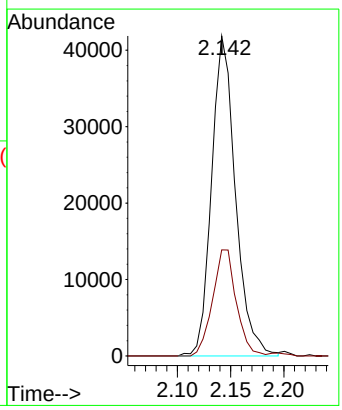
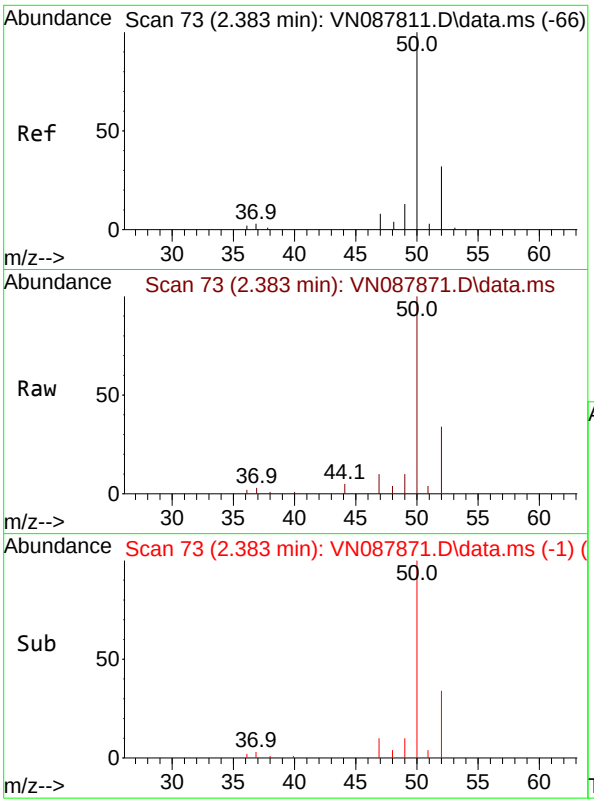


#2
Dichlorodifluoromethane
Concen: 20.129 ug/l
RT: 2.142 min Scan# 32
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 85 Resp: 65259

Ion	Ratio	Lower	Upper
85	100		
87	33.1	16.8	50.4

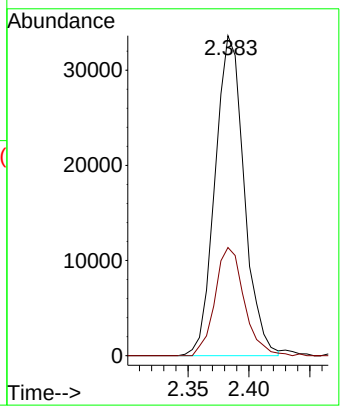




#3
Chloromethane
Concen: 16.432 ug/l
RT: 2.383 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 50 Resp: 5592

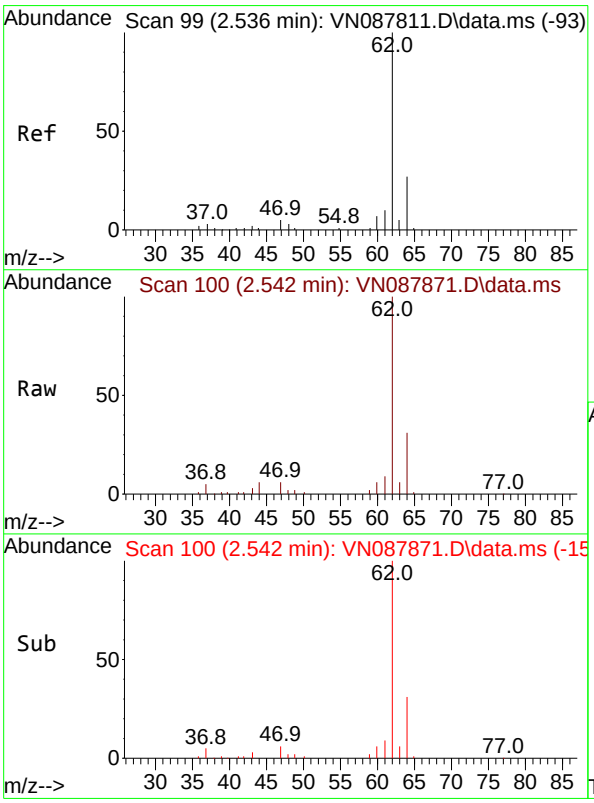
Ion	Ratio	Lower	Upper
50	100		
52	33.8	26.6	40.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations
APPROVED

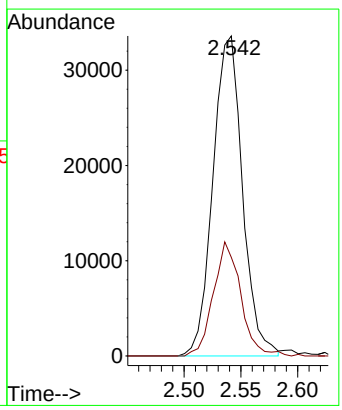
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

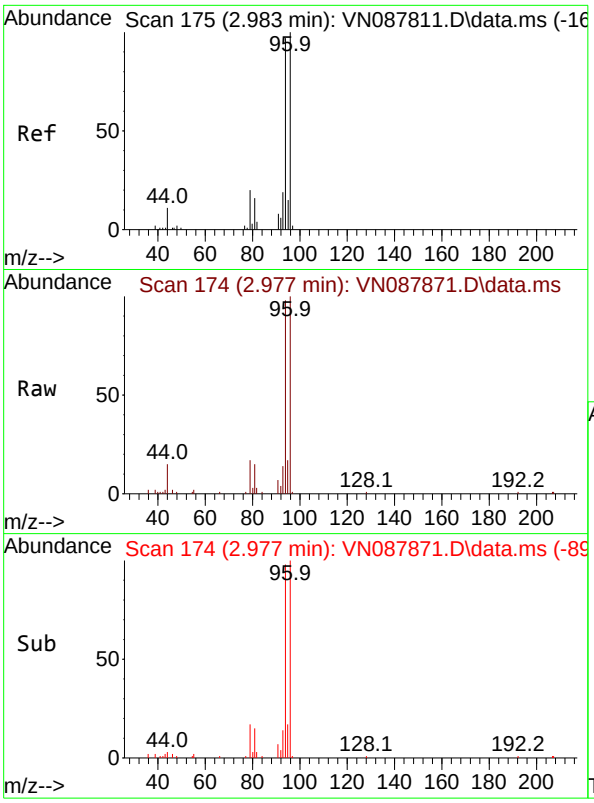


#4
Vinyl Chloride
Concen: 15.819 ug/l
RT: 2.542 min Scan# 100
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 62 Resp: 60861

Ion	Ratio	Lower	Upper
62	100		
64	30.8	25.5	38.3

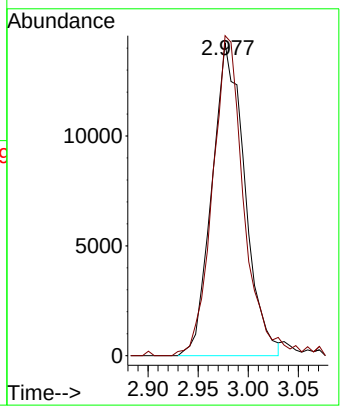




#5
Bromomethane
Concen: 14.327 ug/l
RT: 2.977 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 94 Resp: 3233

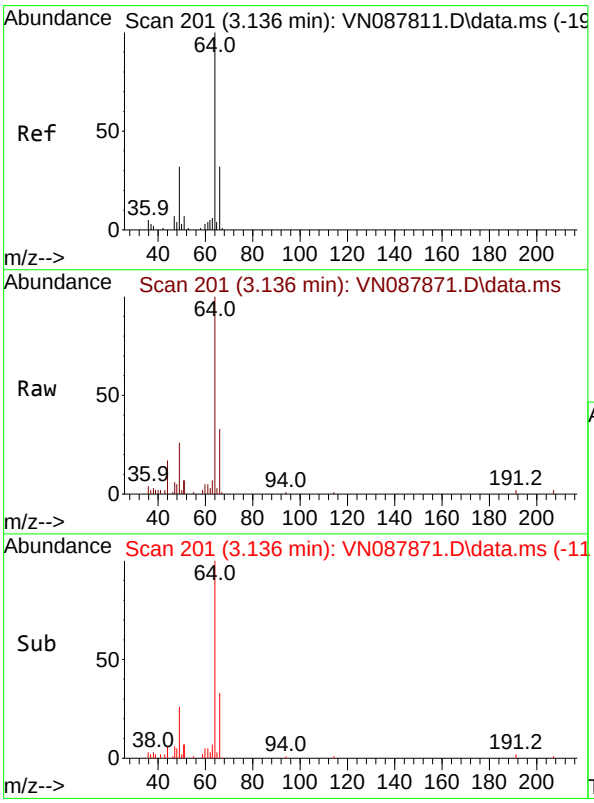
Ion	Ratio	Lower	Upper
94	100		
96	101.1	72.2	108.4



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations
APPROVED

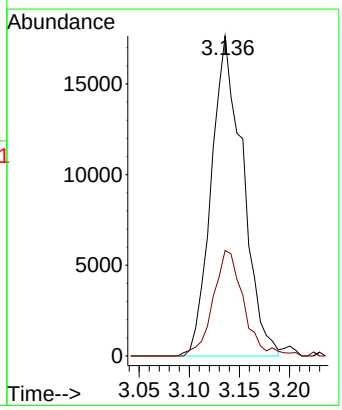
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

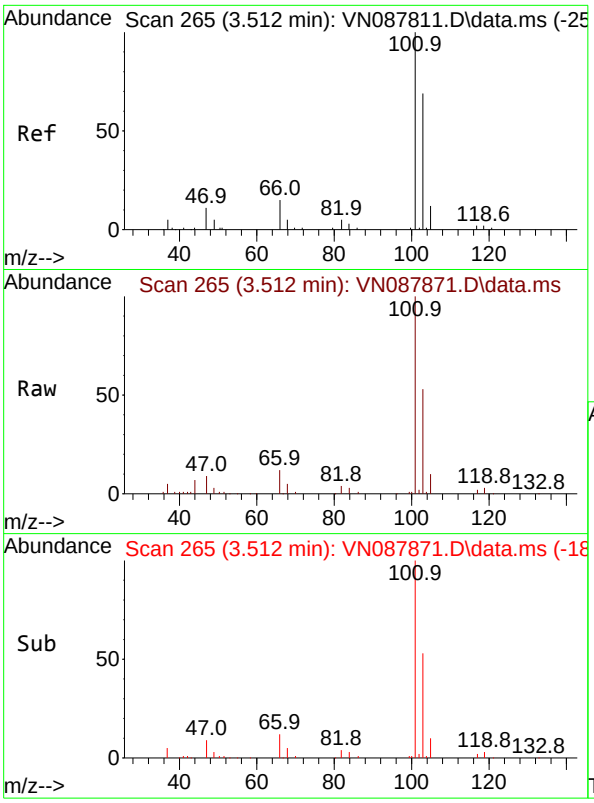


#6
Chloroethane
Concen: 14.691 ug/l
RT: 3.136 min Scan# 201
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 64 Resp: 38628

Ion	Ratio	Lower	Upper
64	100		
66	33.0	32.8	49.2





#7
Trichlorofluoromethane
Concen: 18.011 ug/l
RT: 3.512 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:101 Resp: 10156

Ion	Ratio	Lower	Upper
101	100		
103	53.2	45.7	68.5

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations
APPROVED

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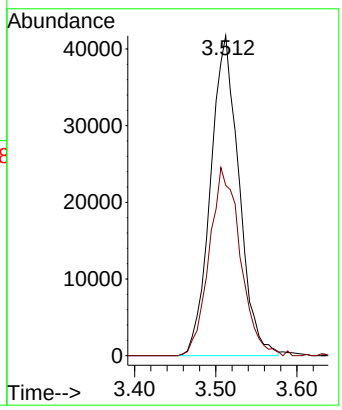
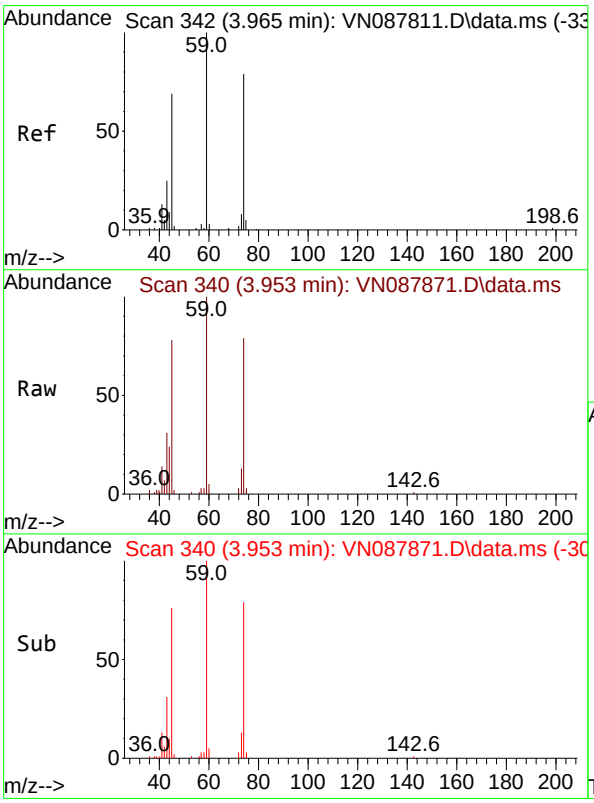
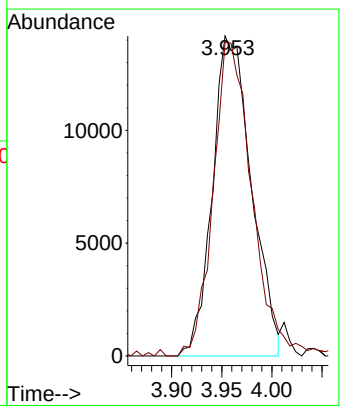


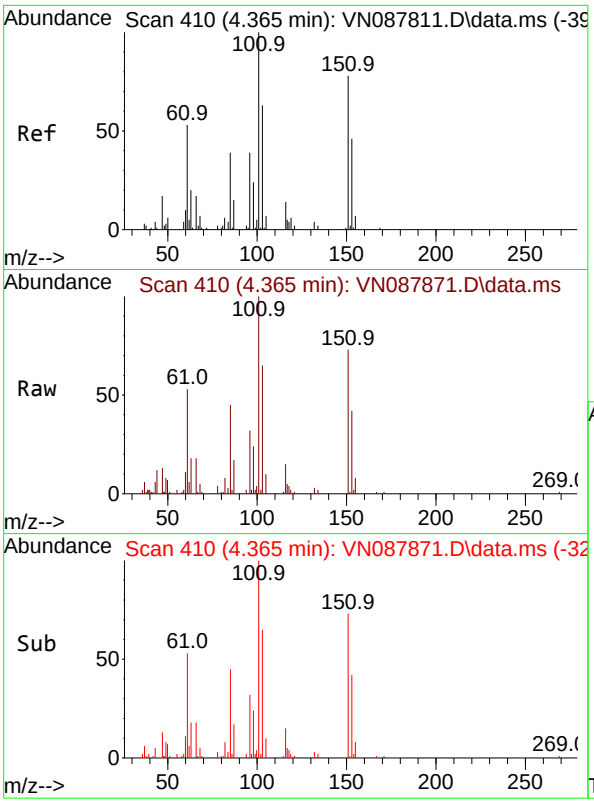


#8
Diethyl Ether
Concen: 16.081 ug/l
RT: 3.953 min Scan# 340
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 74 Resp: 38295

Ion	Ratio	Lower	Upper
74	100		
45	96.3	20.4	183.8





#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.229 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:101 Resp: 5873

Ion	Ratio	Lower	Upper
101	100		
85	44.1	0.0	95.6
151	72.3	0.0	85.8

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations
APPROVED

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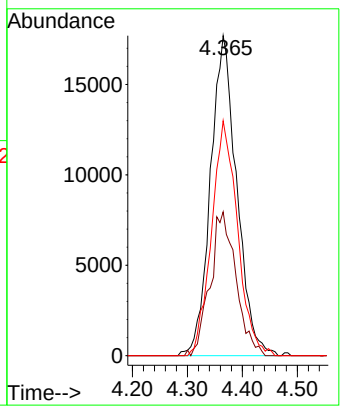
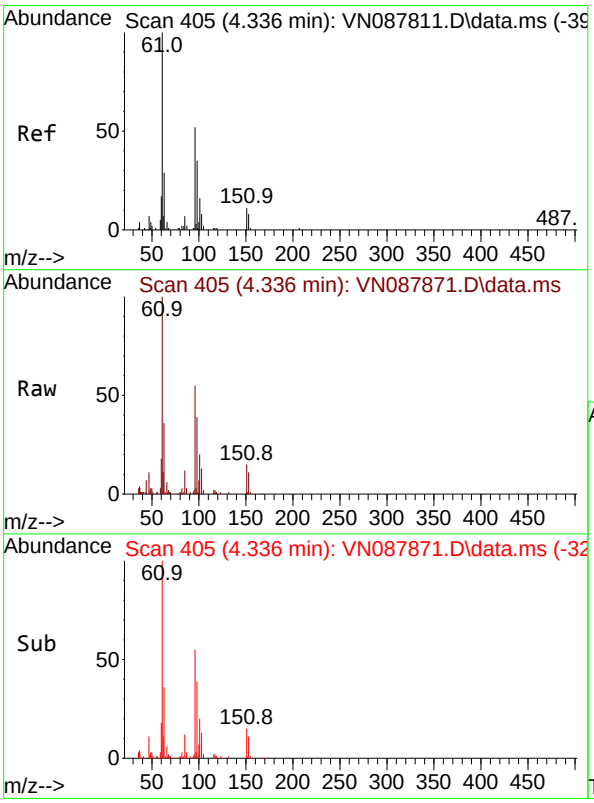
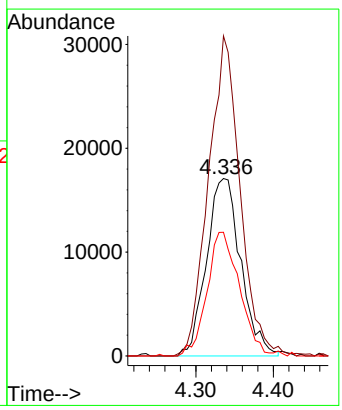


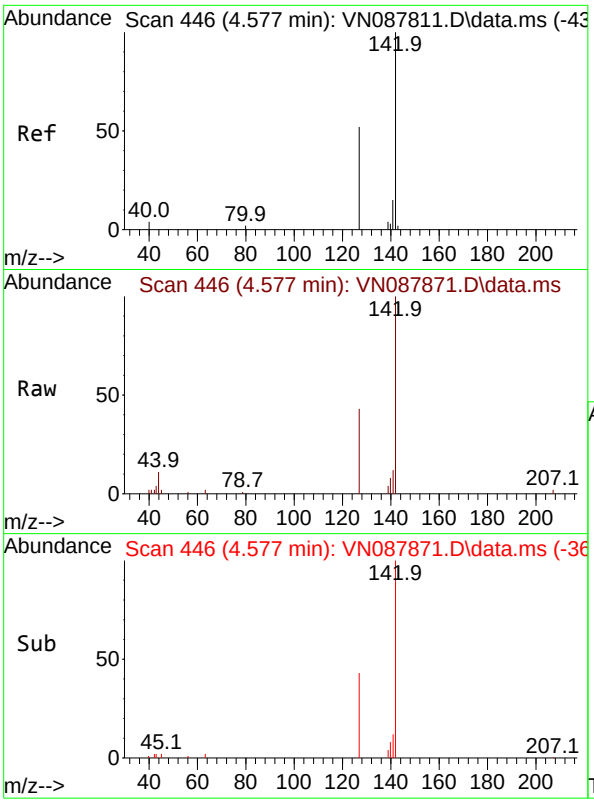


#10
1,1-Dichloroethene
Concen: 16.675 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 96 Resp: 52514

Ion	Ratio	Lower	Upper
96	100		
61	179.2	135.9	203.9
98	69.7	59.2	88.8





#11
Methyl Iodide
Concen: 16.131 ug/l
RT: 4.577 min Scan# 44
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:142 Resp: 3595

Ion	Ratio	Lower	Upper
142	100		
127	42.7	27.9	83.7
141	10.8	9.6	28.8

Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations
APPROVED

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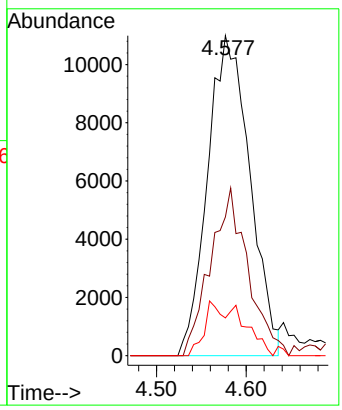
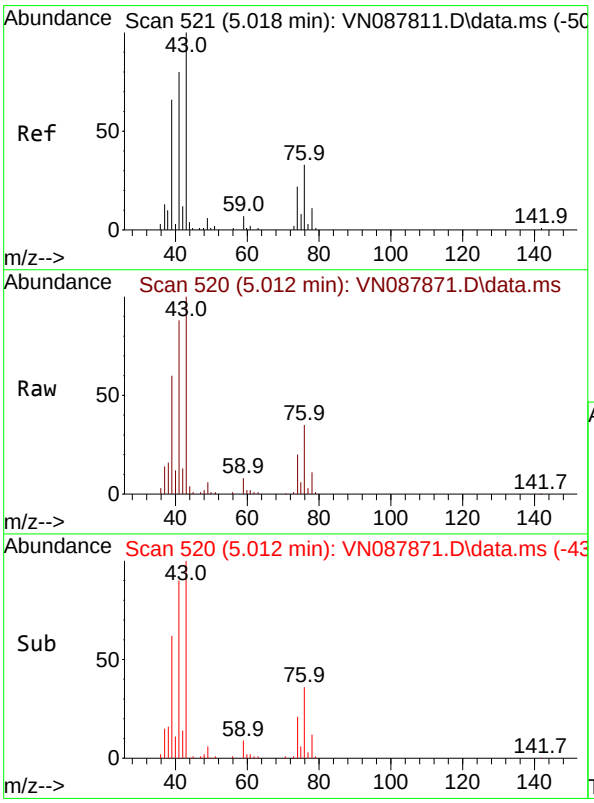
Supervised By :Mahesh Dadoda 09/18/2025

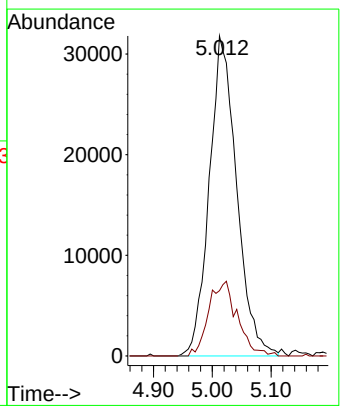


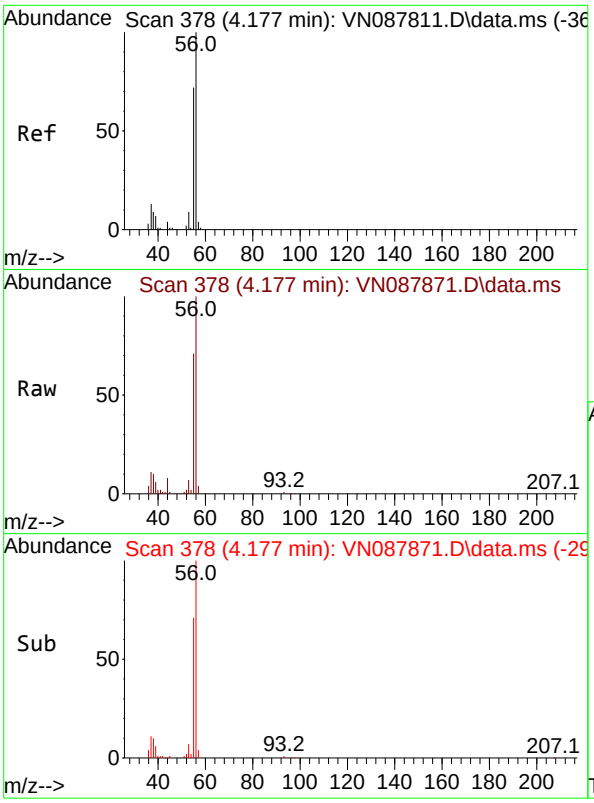


#12
Methyl Acetate
Concen: 21.220 ug/l
RT: 5.012 min Scan# 520
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 43 Resp: 103011

Ion	Ratio	Lower	Upper
43	100		
74	20.5	17.5	26.3

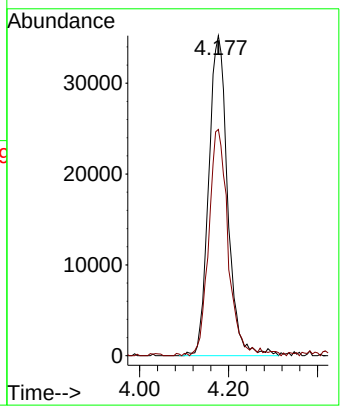




#13
Acrolein
Concen: 120.607 ug/l m
RT: 4.177 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 56 Resp: 10424

Ion	Ratio	Lower	Upper
56	100		
55	0.1	28.6	42.8



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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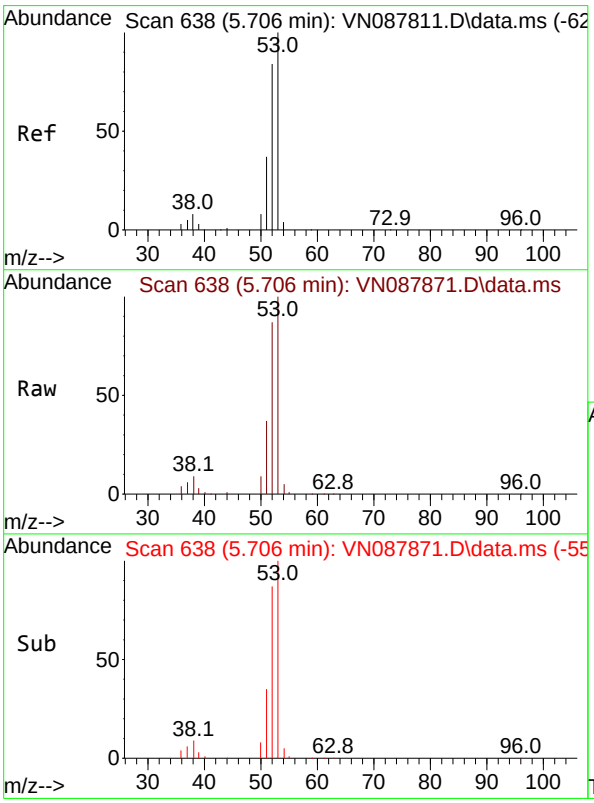
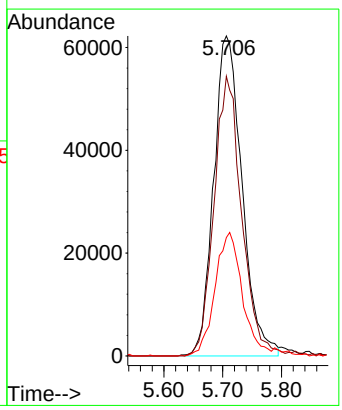
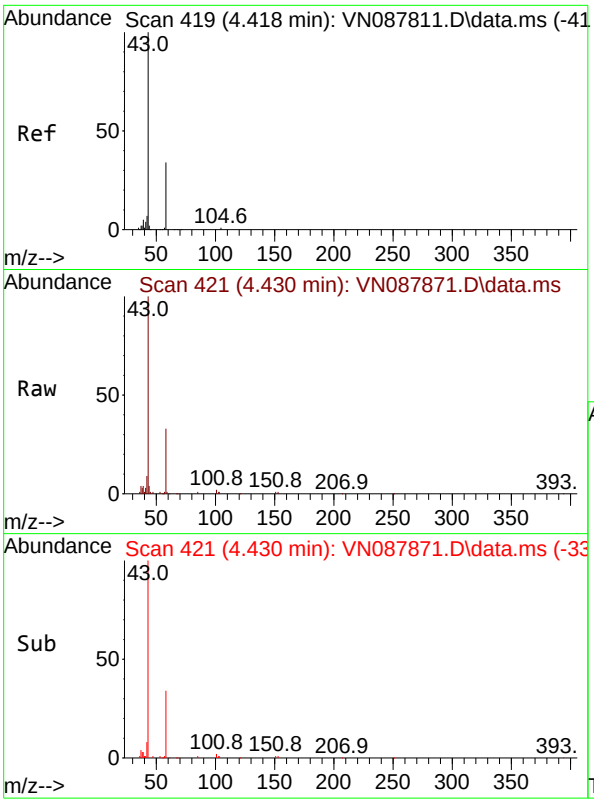


#14
Acrylonitrile
Concen: 99.833 ug/l
RT: 5.706 min Scan# 638
Delta R.T. -0.012 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 53 Resp: 208602

Ion	Ratio	Lower	Upper
53	100		
52	84.9	40.9	122.7
51	37.1	18.1	54.1

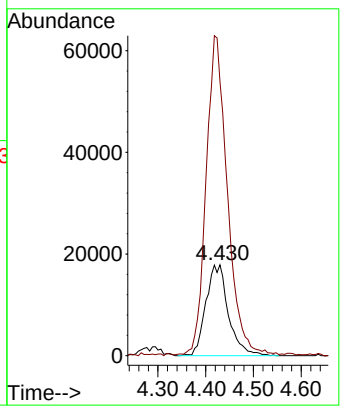




#15
Acetone
Concen: 89.748 ug/l m
RT: 4.430 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 58 Resp: 5850

Ion	Ratio	Lower	Upper
58	100		
43	301.7	250.6	376.0



Instrument :
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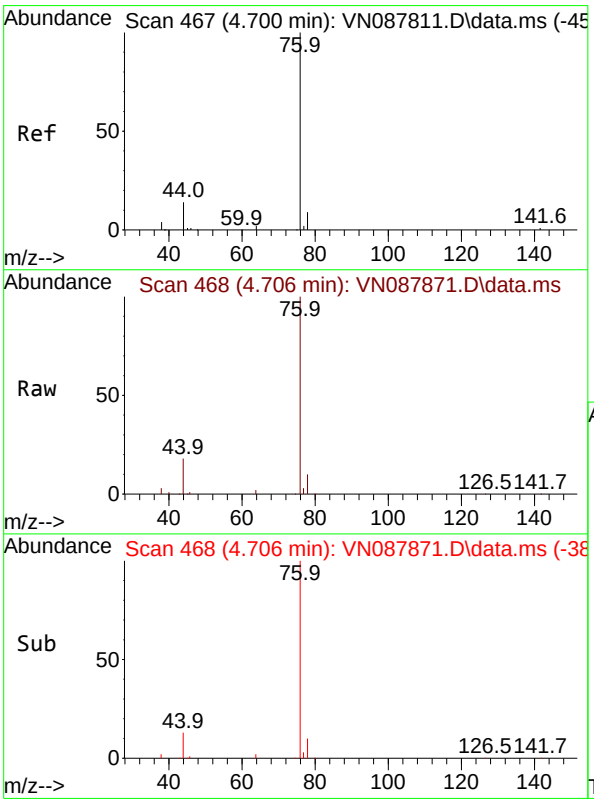
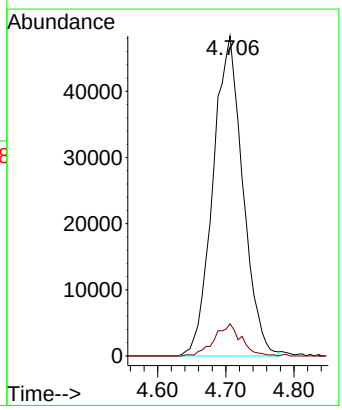
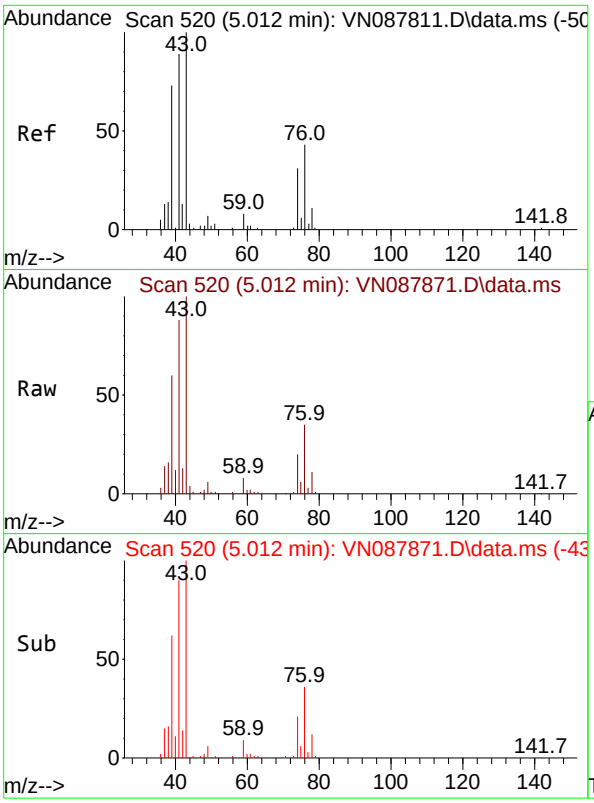


#16
Carbon Disulfide
Concen: 17.047 ug/l
RT: 4.706 min Scan# 468
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 76 Resp: 147396

Ion	Ratio	Lower	Upper
76	100		
78	10.1	5.0	7.6#

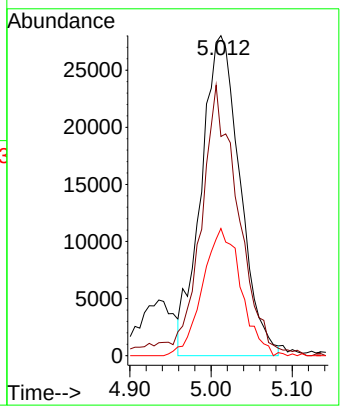




#17
Allyl chloride
Concen: 18.137 ug/l
RT: 5.012 min Scan# 5
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 41 Resp: 9328

Ion	Ratio	Lower	Upper
41	100		
39	68.2	36.7	110.1
76	40.0	18.3	54.8



Instrument :
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ClientSampleId :
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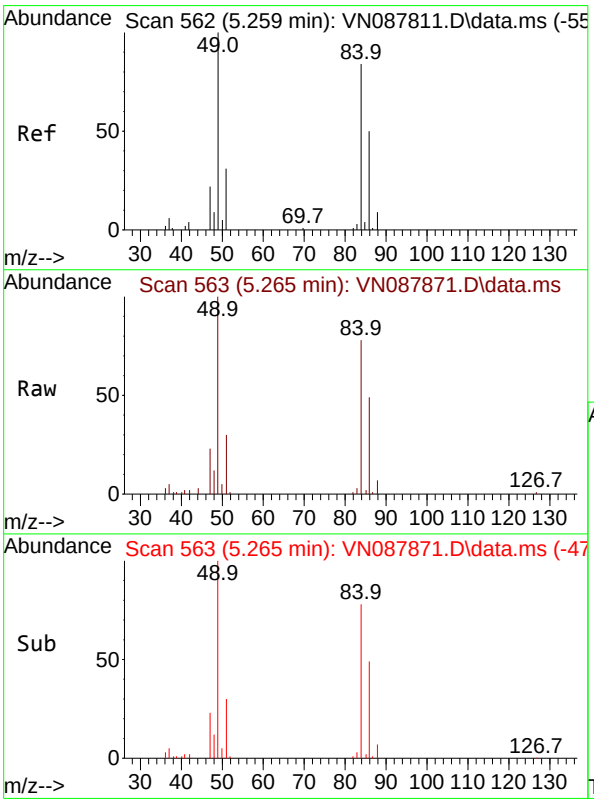
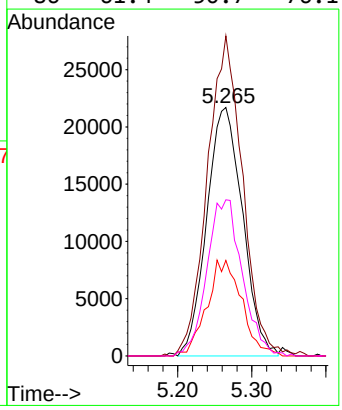
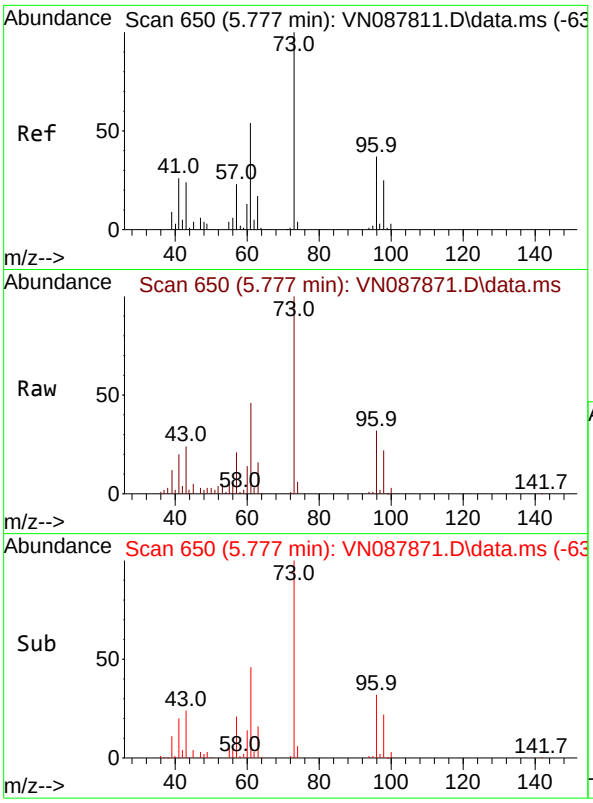


#18
Methylene Chloride
Concen: 20.461 ug/l
RT: 5.265 min Scan# 563
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 84 Resp: 72990

Ion	Ratio	Lower	Upper
84	100		
49	126.6	114.1	171.1
51	37.2	30.2	45.4
86	61.4	50.7	76.1

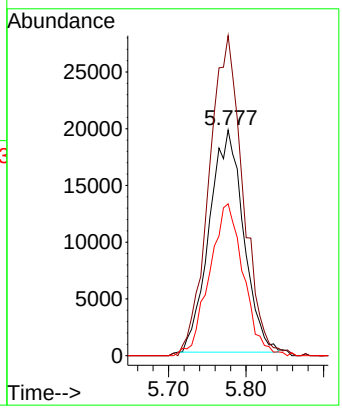




#19
trans-1,2-Dichloroethene
Concen: 18.760 ug/l
RT: 5.777 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 96 Resp: 6025

Ion	Ratio	Lower	Upper
96	100		
61	144.0	106.4	159.6
98	67.0	48.9	73.3



Instrument :
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ClientSampleId :
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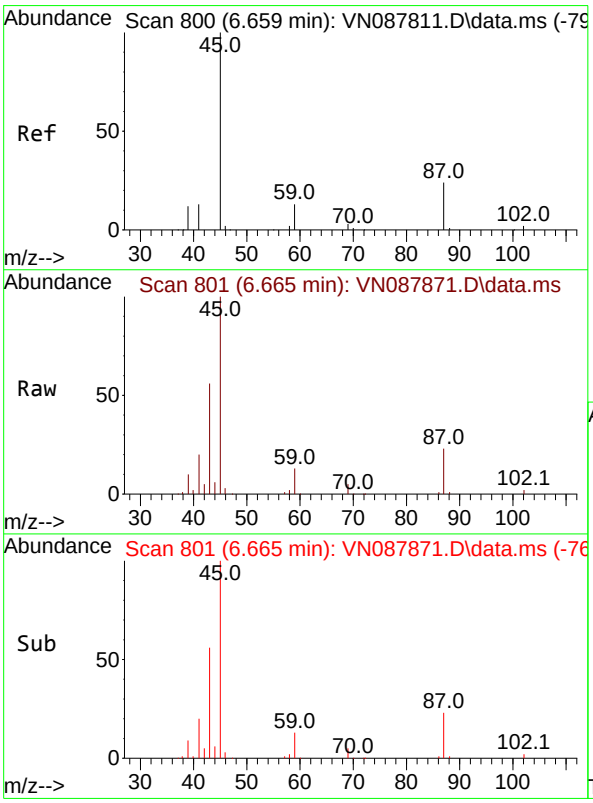
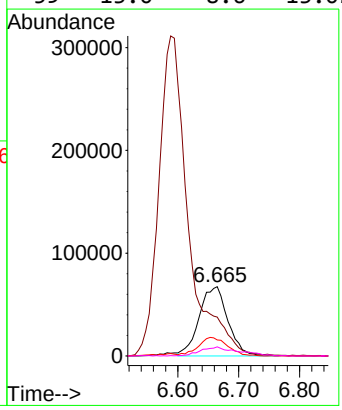
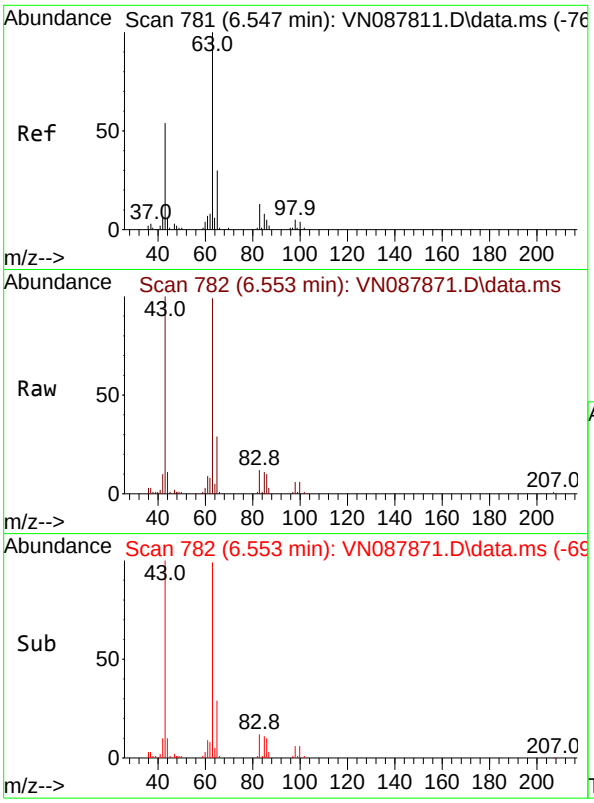


#20
Diisopropyl ether
Concen: 18.613 ug/l
RT: 6.665 min Scan# 801
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 45 Resp: 220158

Ion	Ratio	Lower	Upper
45	100		
43	55.0	49.5	74.3
87	23.2	18.8	28.2
59	13.0	8.6	13.0#

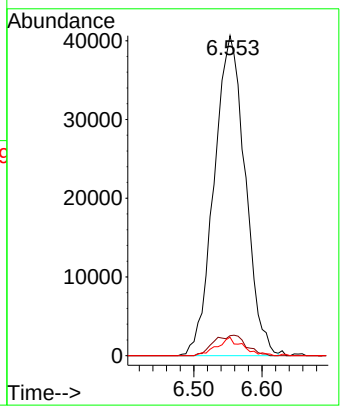




#21
1,1-Dichloroethane
Concen: 19.916 ug/l
RT: 6.553 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 63 Resp: 12900

Ion	Ratio	Lower	Upper
63	100		
98	6.3	2.9	8.8
100	5.7	1.8	5.3#



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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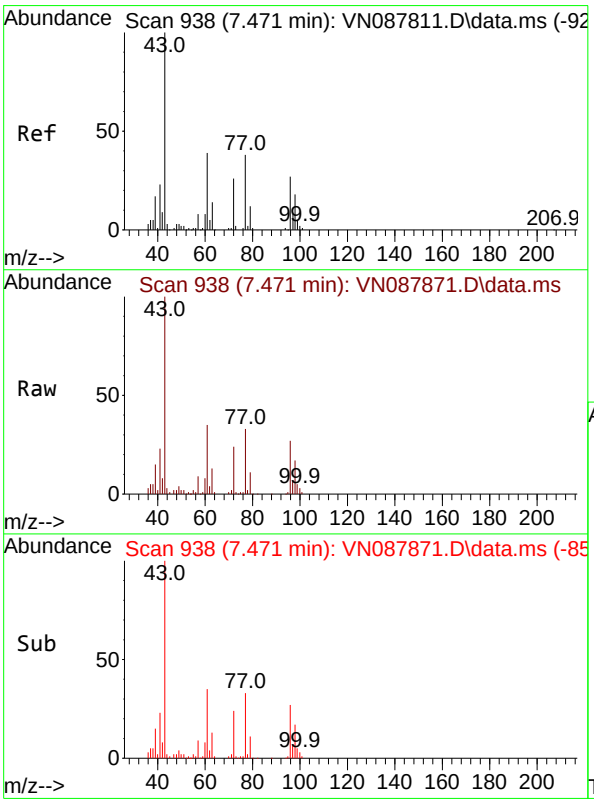
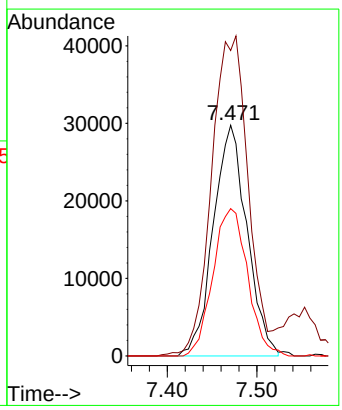
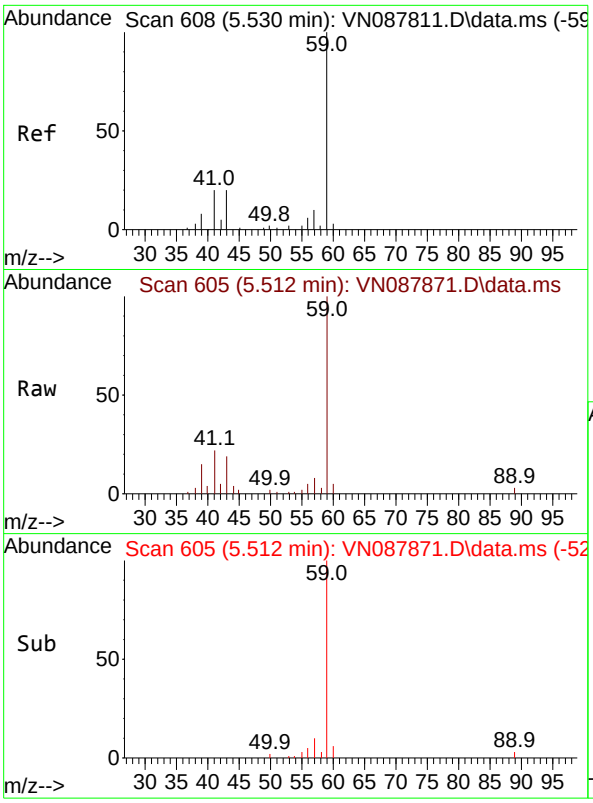


#22
cis-1,2-Dichloroethene
Concen: 19.896 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 96 Resp: 77562

Ion	Ratio	Lower	Upper
96	100		
61	149.4	118.2	177.2
98	65.9	51.6	77.4

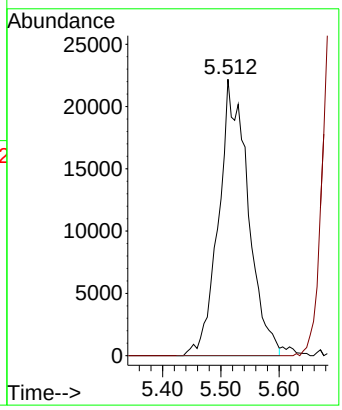




#23
tert-Butyl Alcohol
Concen: 105.377 ug/l m
RT: 5.512 min Scan# 6
Delta R.T. -0.018 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 59 Resp: 7783

Ion	Ratio	Lower	Upper
59	100		
52	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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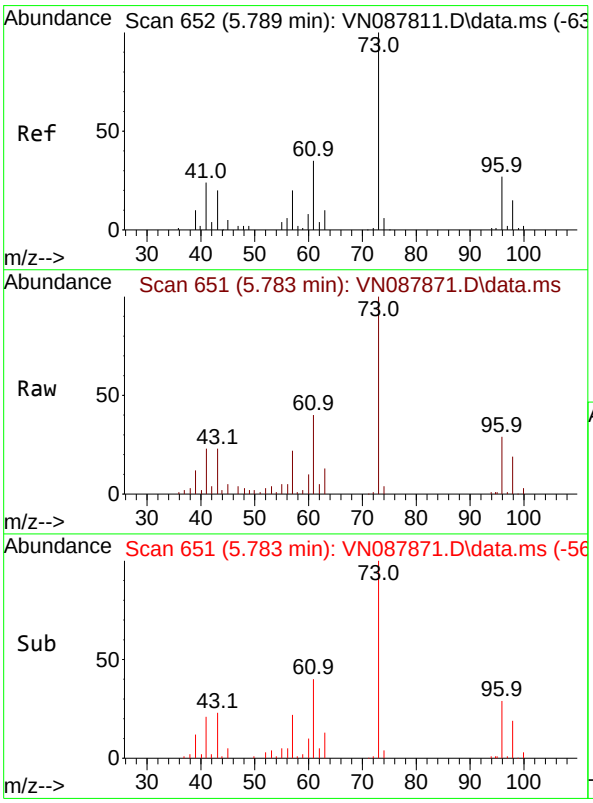
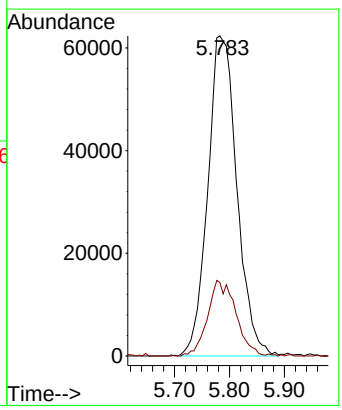
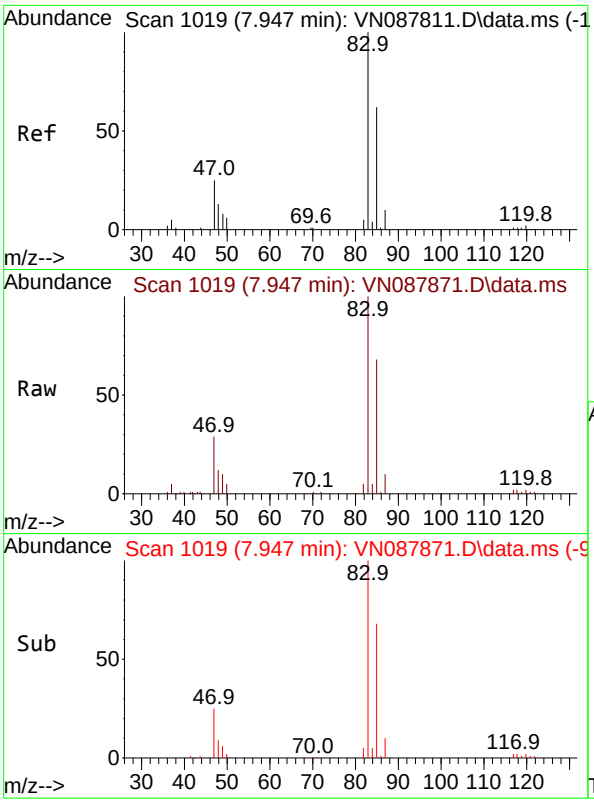


#24
Methyl tert-Butyl Ether
Concen: 20.423 ug/l
RT: 5.783 min Scan# 651
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 73 Resp: 229615

Ion	Ratio	Lower	Upper
73	100		
43	12.9	16.8	25.2#





#25
Chloroform
Concen: 19.742 ug/l
RT: 7.947 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 83 Resp: 13385

Ion	Ratio	Lower	Upper
83	100		
85	67.5	47.7	71.5

Instrument :
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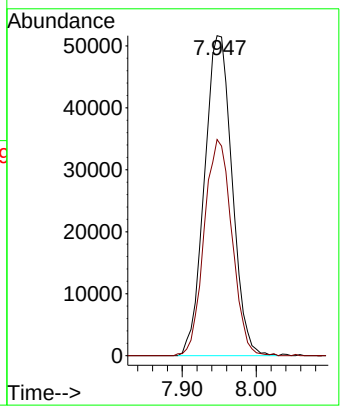
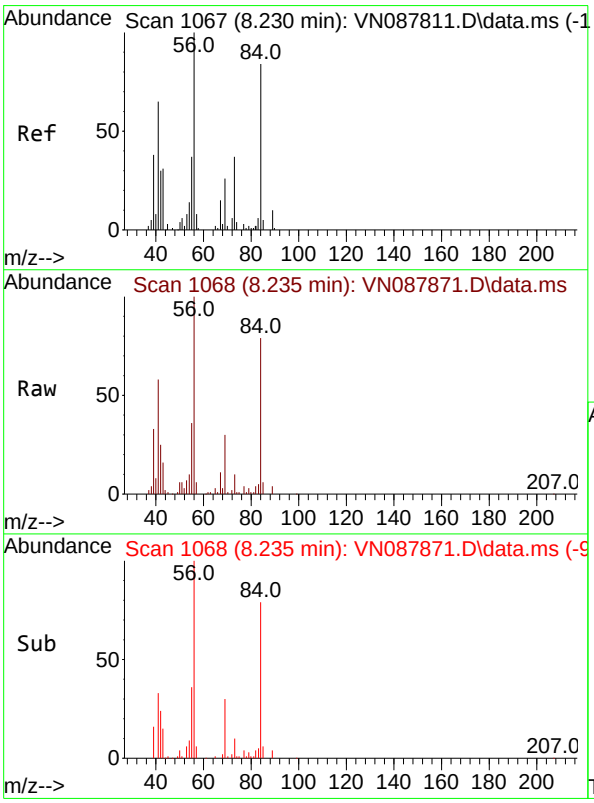
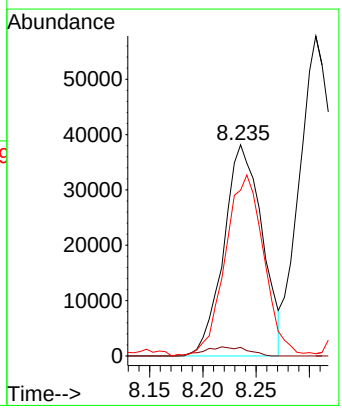


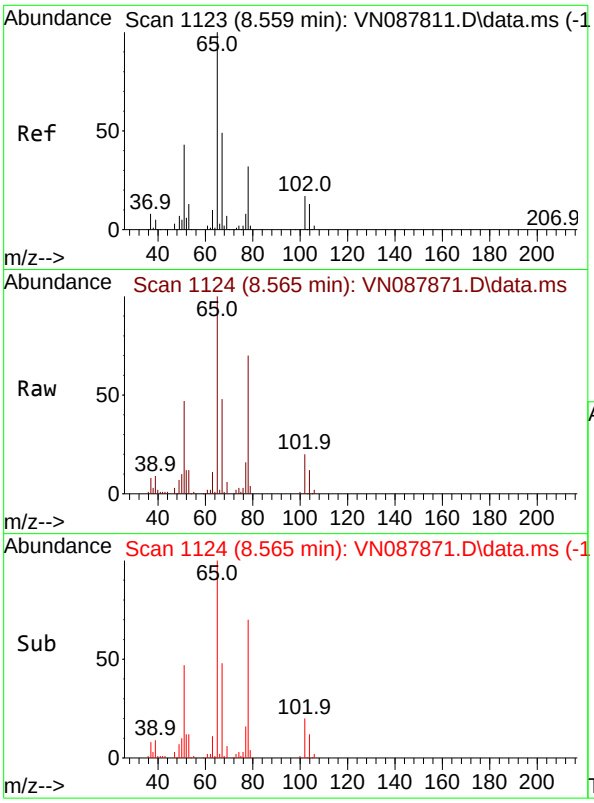


#26
Cyclohexane
Concen: 19.365 ug/l
RT: 8.235 min Scan# 1068
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 56 Resp: 95526

Ion	Ratio	Lower	Upper
56	100		
89	3.3	0.0	0.0#
84	86.3	69.4	104.2





#27
1,2-Dichloroethane-d4
Concen: 28.817 ug/l
RT: 8.565 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 65 Resp: 12841

Ion	Ratio	Lower	Upper
65	100		
67	50.9	39.6	59.4

Instrument :
MSVOA_N
ClientSampleId :
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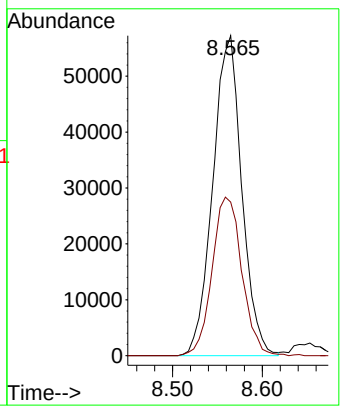
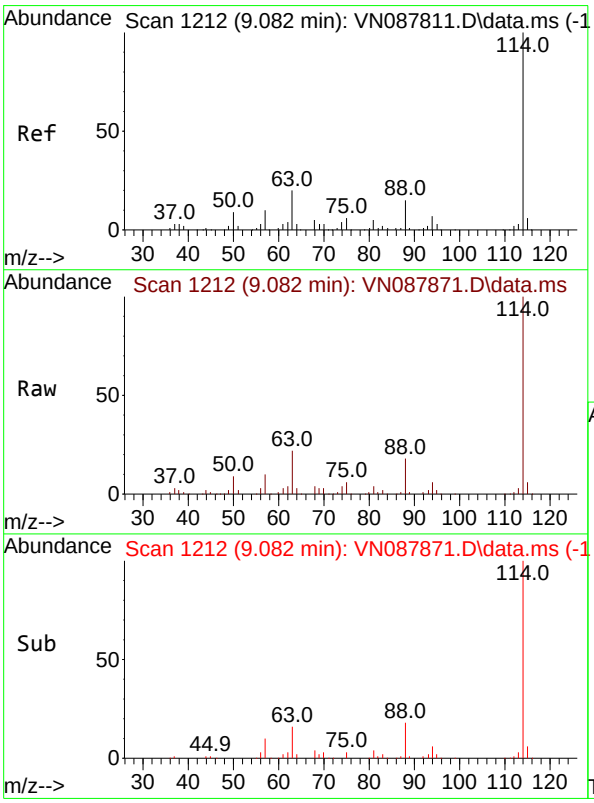
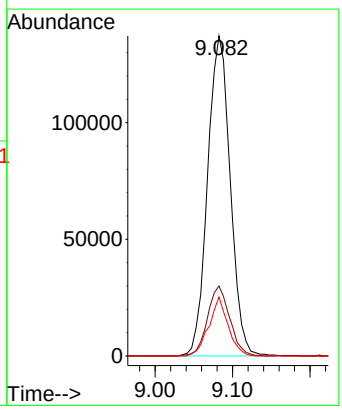


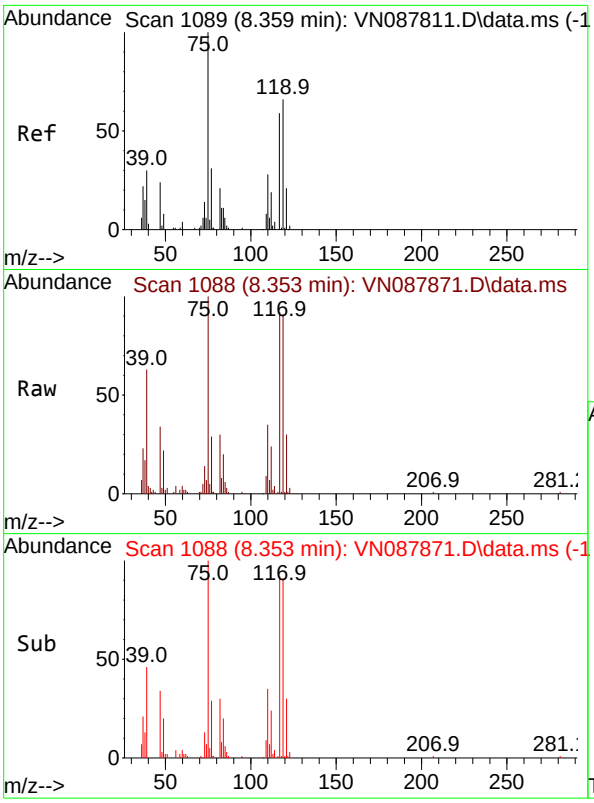


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.082 min Scan# 1212
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:114 Resp: 278561

Ion	Ratio	Lower	Upper
114	100		
63	21.4	18.3	27.5
88	15.6	12.4	18.6

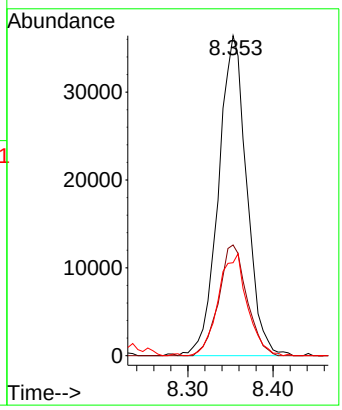




#29
1,1-Dichloropropene
Concen: 18.482 ug/l
RT: 8.353 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 75 Resp: 8367

Ion	Ratio	Lower	Upper
75	100		
110	34.7	0.0	64.4
77	32.8	0.0	62.2



Instrument :
MSVOA_N
ClientSampleId :
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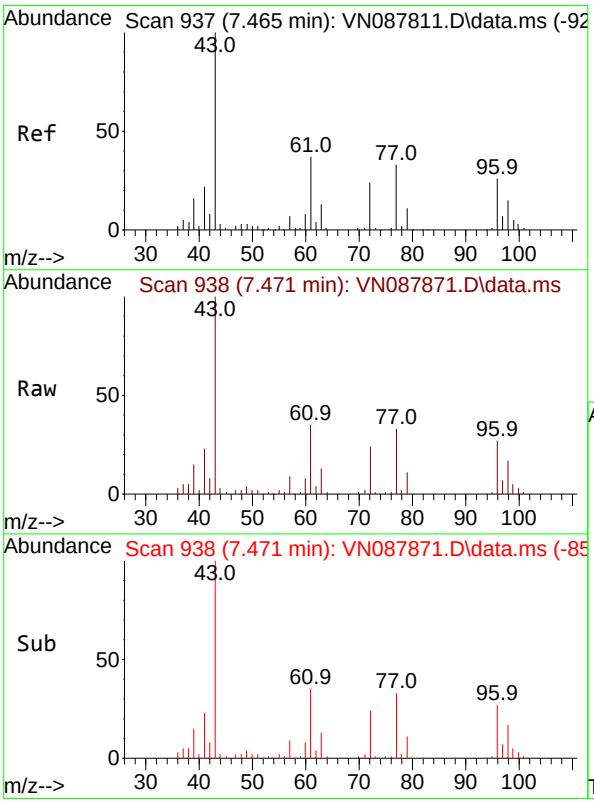
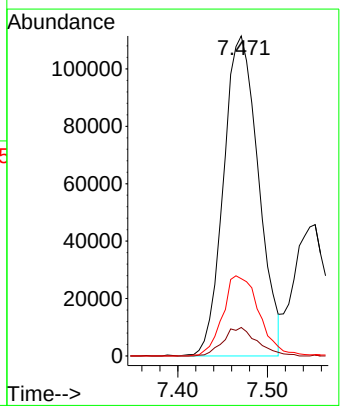
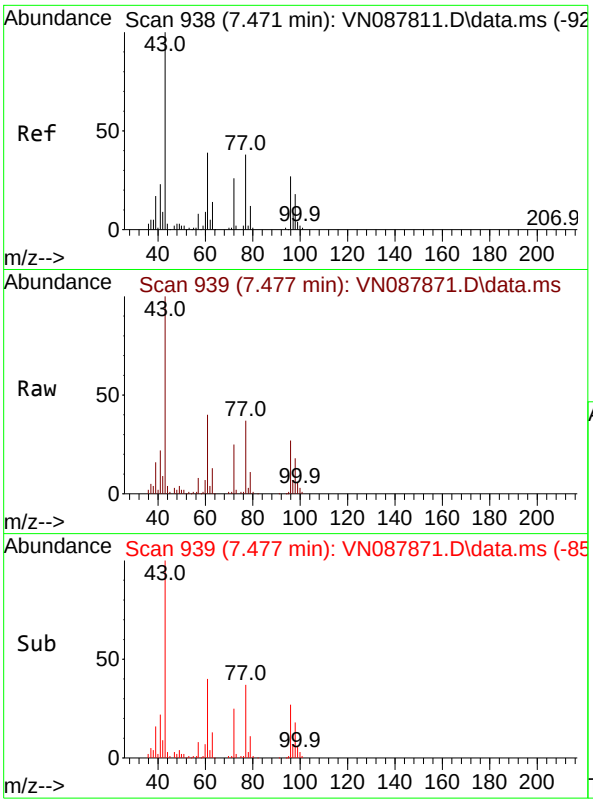


#30
2-Butanone
Concen: 96.683 ug/l
RT: 7.471 min Scan# 938
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 43 Resp: 301515

Ion	Ratio	Lower	Upper
43	100		
57	8.7	6.3	9.5
72	26.2	21.4	32.2

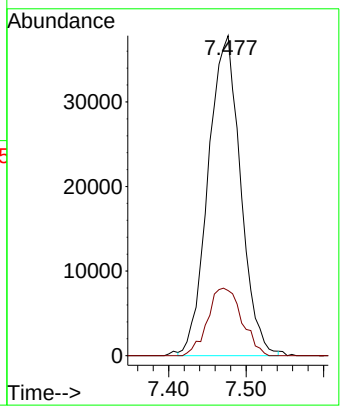




#31
2,2-Dichloropropane
Concen: 20.162 ug/l
RT: 7.477 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 77 Resp: 11002

Ion	Ratio	Lower	Upper
77	100		
97	22.2	17.1	25.7



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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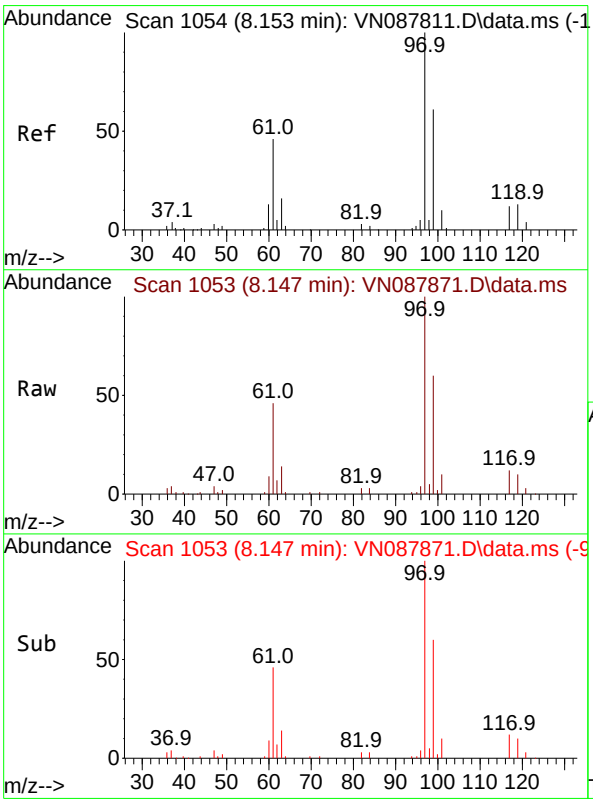
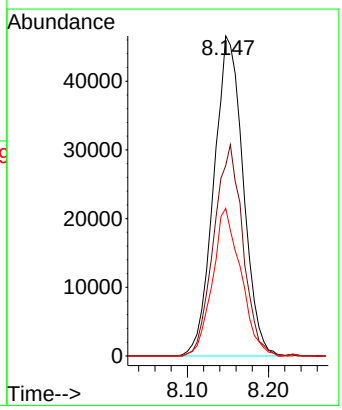
Supervised By :Mahesh Dadoda 09/18/2025

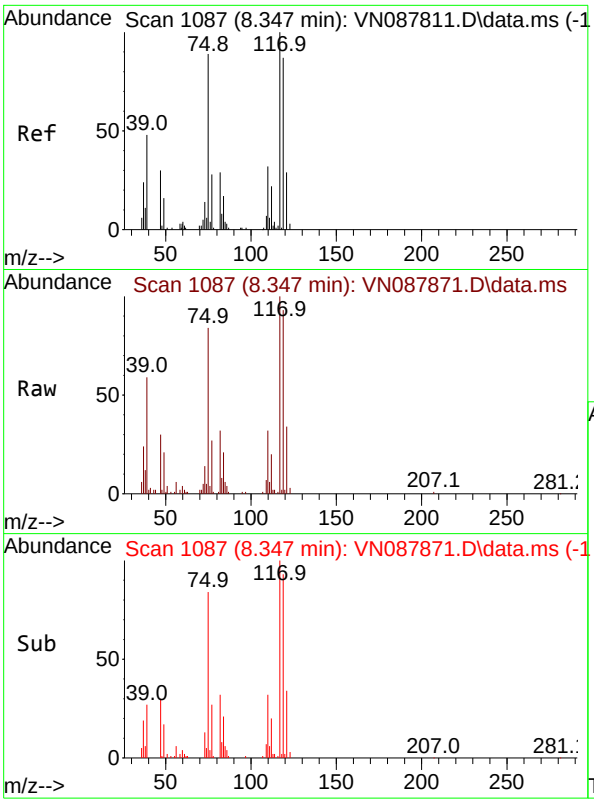


#32
1,1,1-Trichloroethane
Concen: 20.382 ug/l
RT: 8.147 min Scan# 1053
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 97 Resp: 116982

Ion	Ratio	Lower	Upper
97	100		
99	65.2	52.2	78.4
61	44.6	37.9	56.9

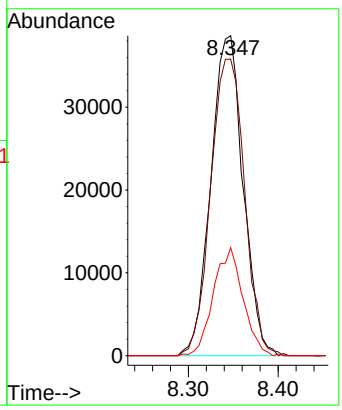




#33
Carbon Tetrachloride
Concen: 20.180 ug/l
RT: 8.347 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:117 Resp: 9657

Ion	Ratio	Lower	Upper
117	100		
119	92.7	77.3	115.9
121	33.8	26.6	39.8



Instrument :
MSVOA_N
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VN0917WBSD01

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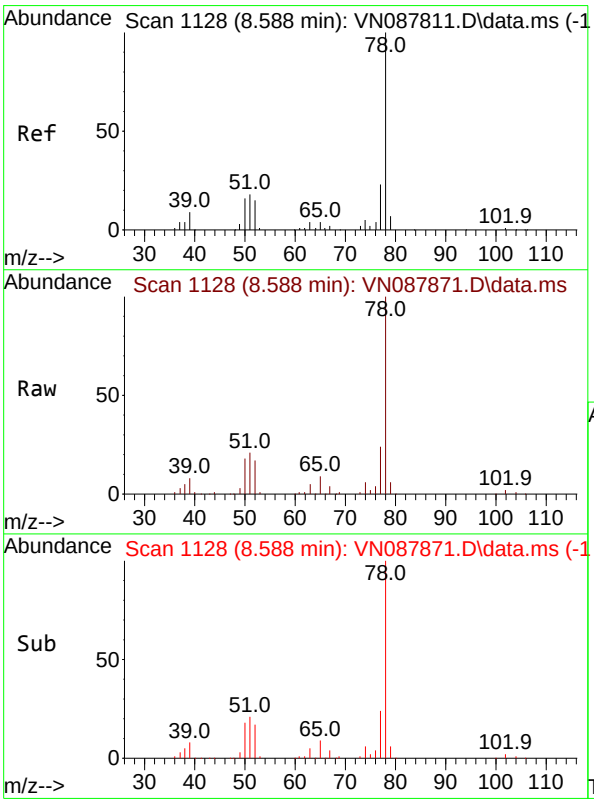
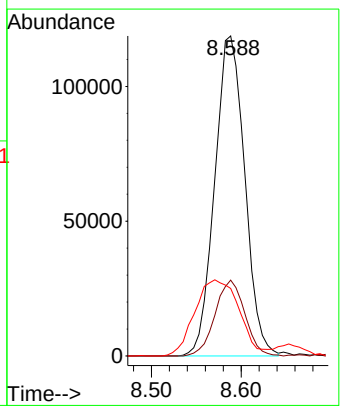
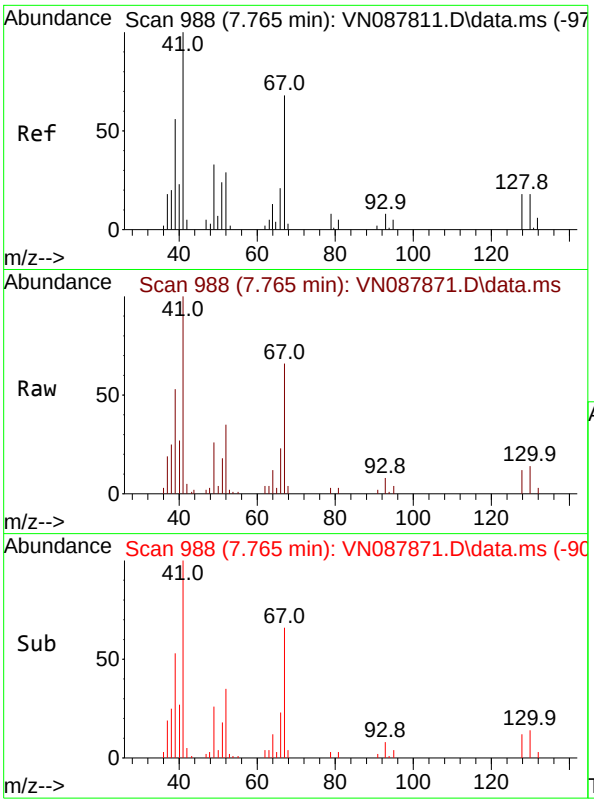


#34
Benzene
Concen: 18.855 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 78 Resp: 275879

Ion	Ratio	Lower	Upper
78	100		
77	23.7	20.3	30.5
51	18.7	18.0	27.0

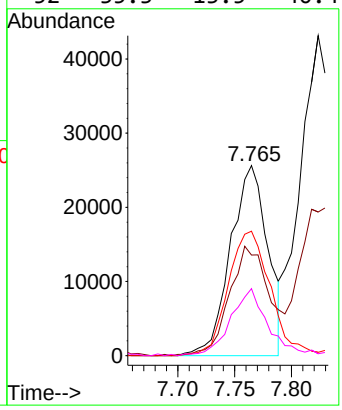




#35
Methacrylonitrile
Concen: 17.996 ug/l
RT: 7.765 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 41 Resp: 5870

Ion	Ratio	Lower	Upper
41	100		
39	52.2	27.1	81.2
67	65.5	32.1	96.5
52	35.3	13.5	40.4



Instrument :
MSVOA_N
ClientSampleId :
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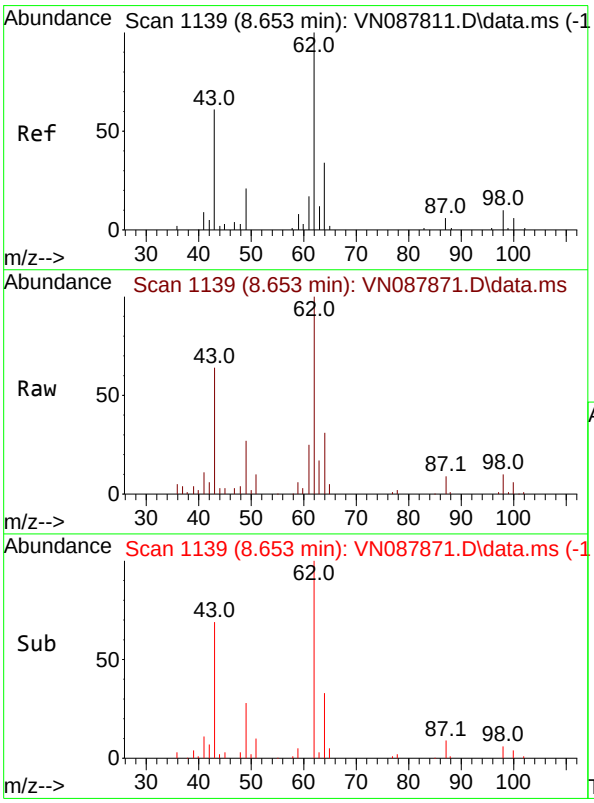
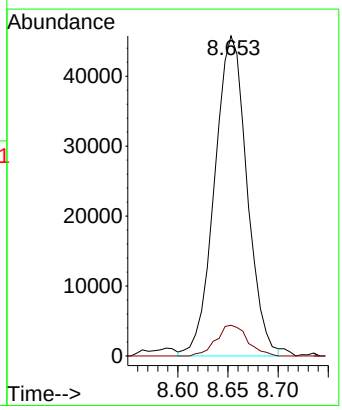
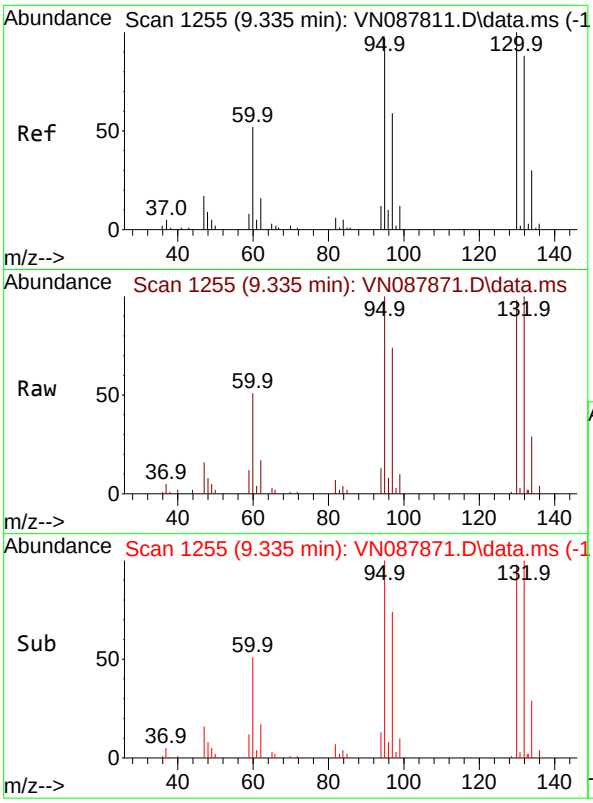


#36
1,2-Dichloroethane
Concen: 18.631 ug/l
RT: 8.653 min Scan# 1139
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 62 Resp: 102965

Ion	Ratio	Lower	Upper
62	100		
98	9.3	7.2	10.8

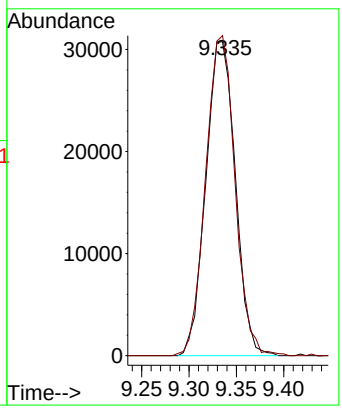




#37
Trichloroethene
Concen: 20.386 ug/l
RT: 9.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:130 Resp: 6667

Ion	Ratio	Lower	Upper
130	100		
95	101.3	82.7	124.1



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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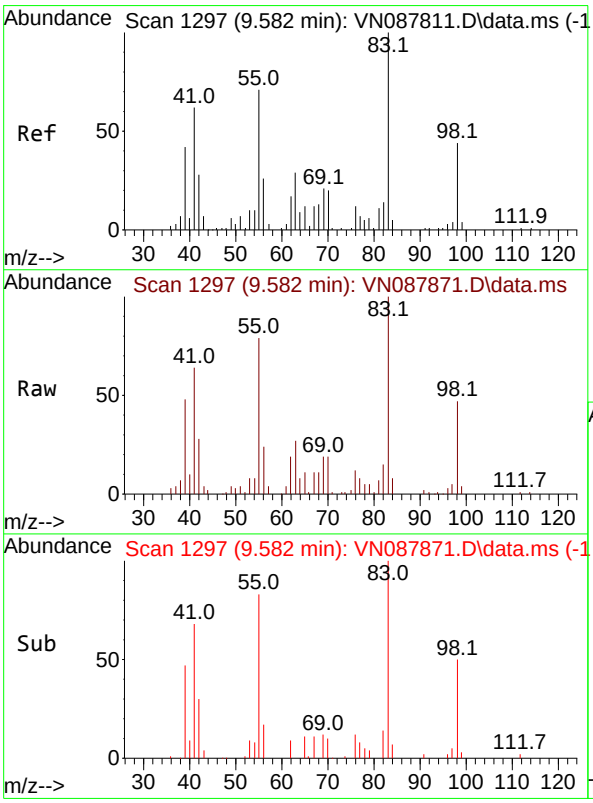
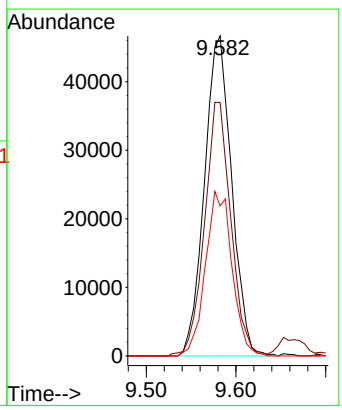
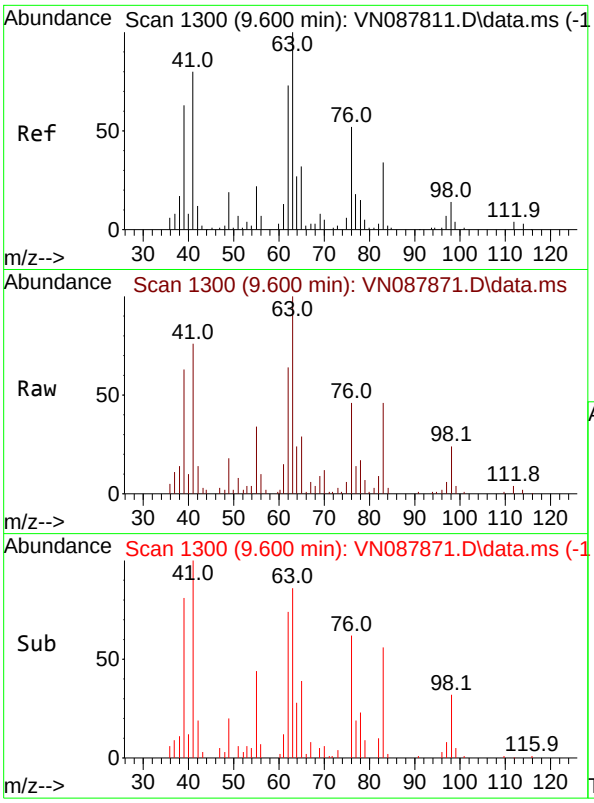


#38
Methylcyclohexane
Concen: 19.722 ug/l
RT: 9.582 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 83 Resp: 98311

Ion	Ratio	Lower	Upper
83	100		
55	76.5	40.4	121.1
98	50.1	24.0	72.0

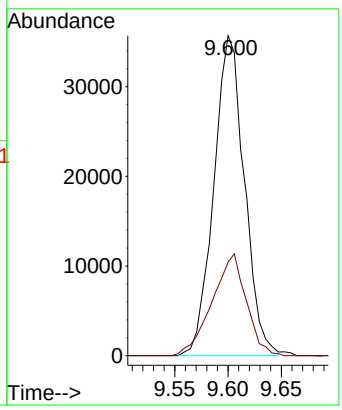




#39
1,2-Dichloropropane
Concen: 18.998 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 63 Resp: 7119

Ion	Ratio	Lower	Upper
63	100		
65	28.6	24.1	36.1



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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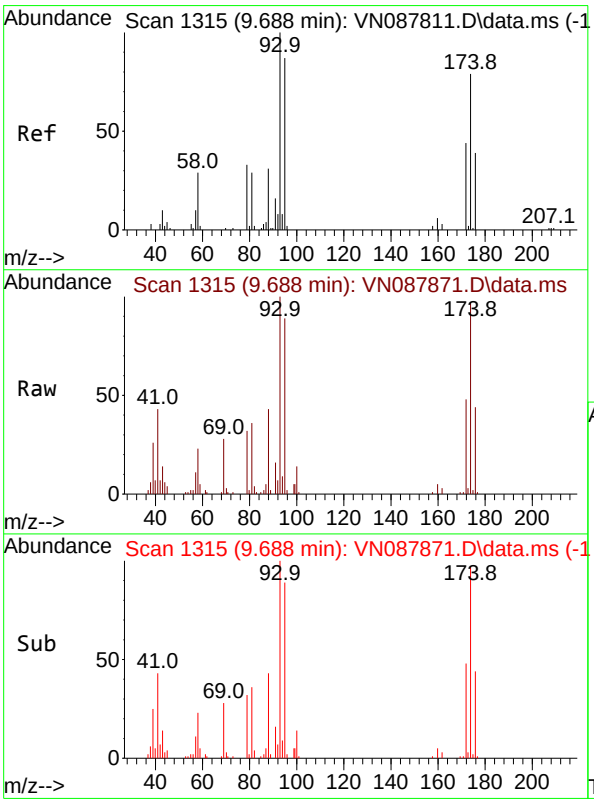
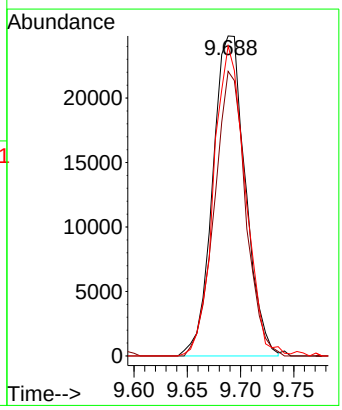
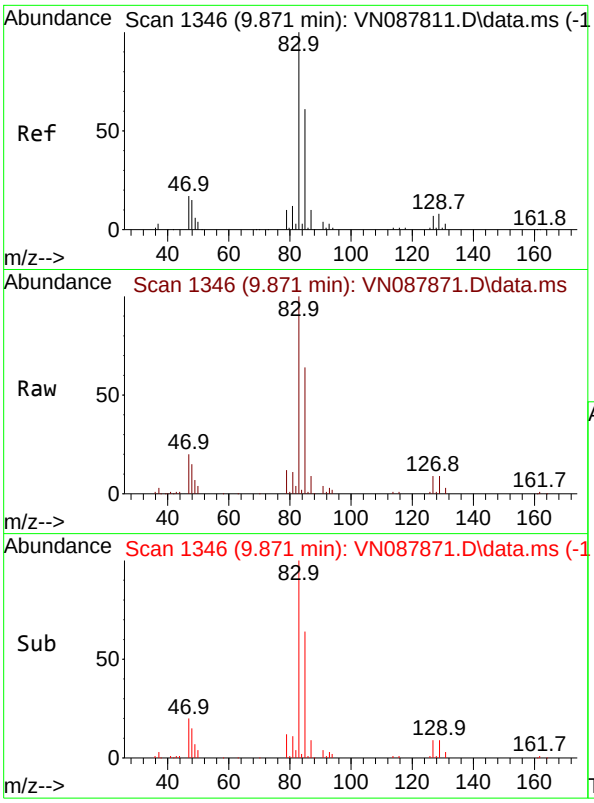


#40
Dibromomethane
Concen: 19.012 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 93 Resp: 53021

Ion	Ratio	Lower	Upper
93	100		
95	84.7	0.0	168.4
174	92.7	0.0	162.8

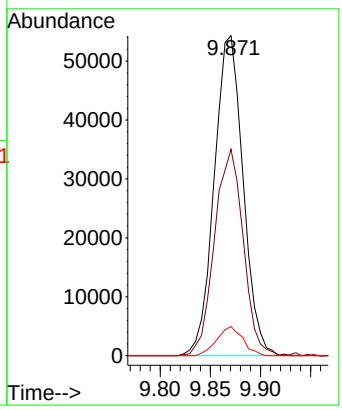




#41
Bromodichloromethane
Concen: 19.095 ug/l
RT: 9.871 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 83 Resp: 10884

Ion	Ratio	Lower	Upper
83	100		
85	64.5	47.3	70.9
127	9.1	5.2	7.8



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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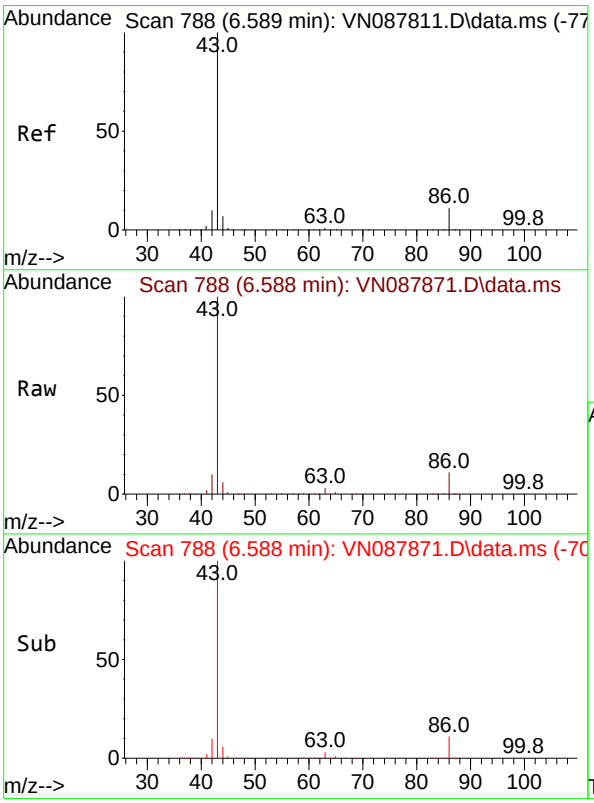
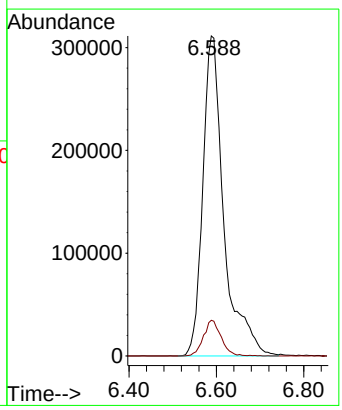
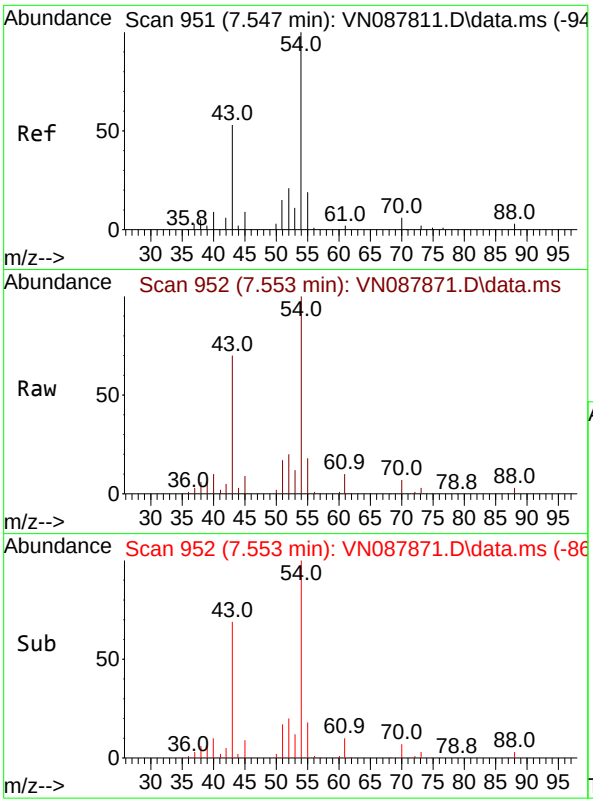


#42
Vinyl Acetate
Concen: 100.137 ug/l
RT: 6.588 min Scan# 788
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 43 Resp: 1043406

Ion	Ratio	Lower	Upper
43	100		
86	9.3	7.7	11.5

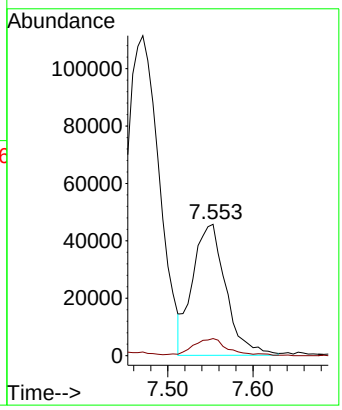




#43
Ethyl Acetate
Concen: 19.460 ug/l
RT: 7.553 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 43 Resp: 12399

Ion	Ratio	Lower	Upper
43	100		
45	12.7	10.5	15.7



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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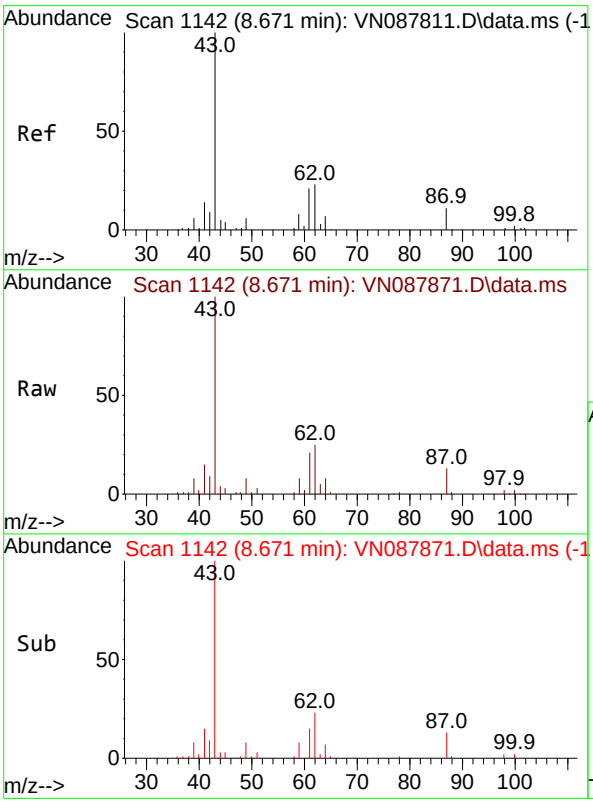
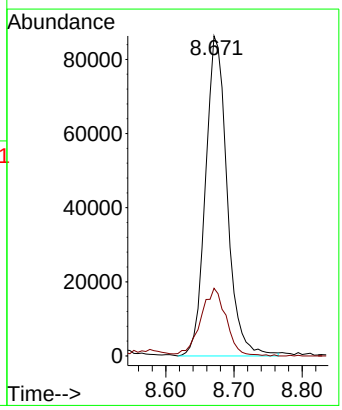
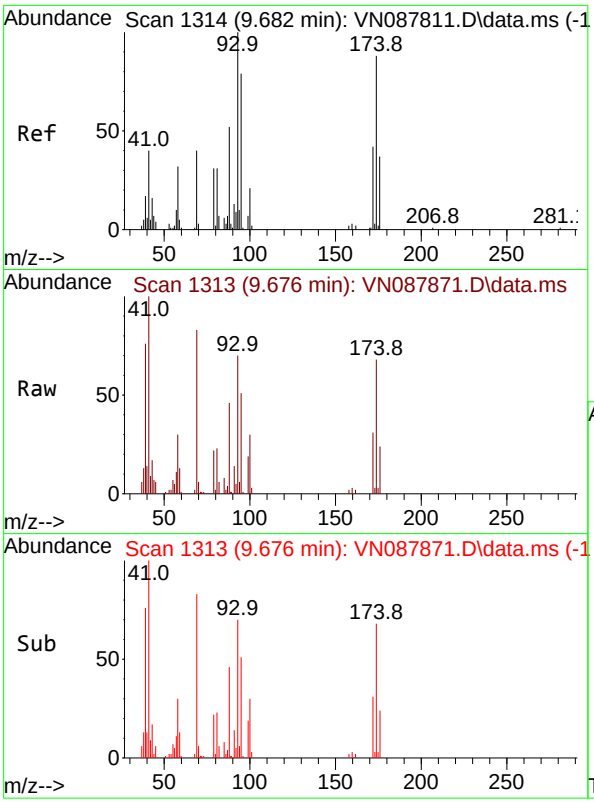


#44
Isopropyl Acetate
Concen: 19.147 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 43 Resp: 191251

Ion	Ratio	Lower	Upper
43	100		
61	24.8	19.5	29.3

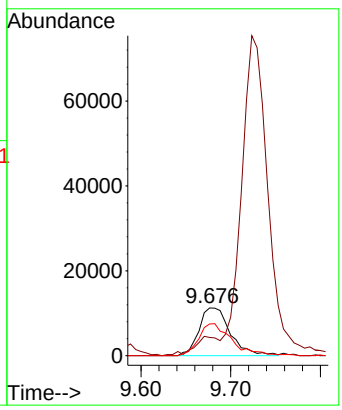




#45
1,4-Dioxane
Concen: 435.342 ug/l
RT: 9.676 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 88 Resp: 2742

Ion	Ratio	Lower	Upper
88	100		
43	26.8	23.6	35.4
58	69.9	60.5	90.7



Instrument :
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ClientSampleId :
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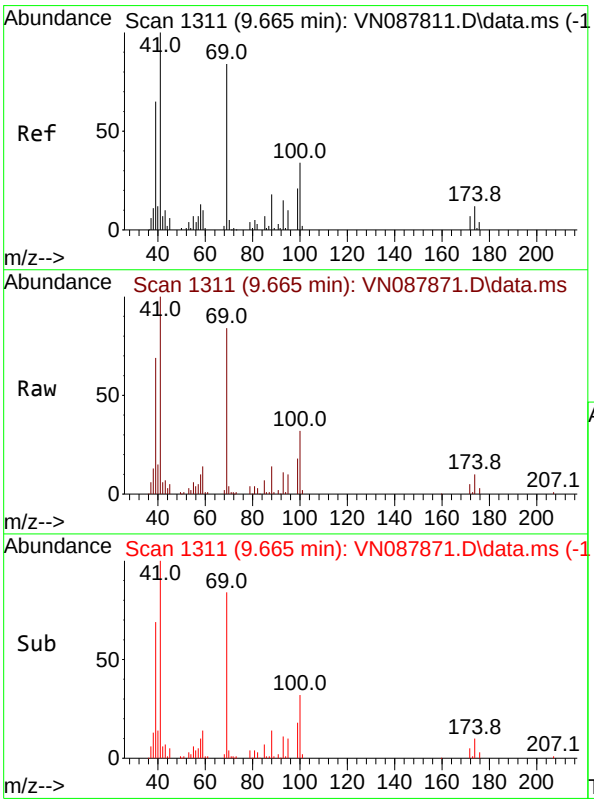
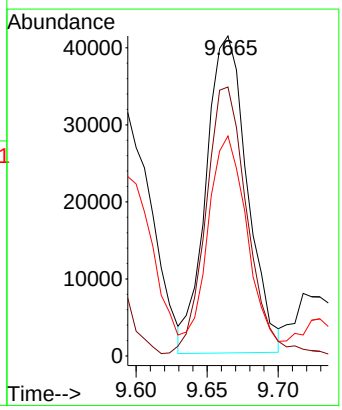
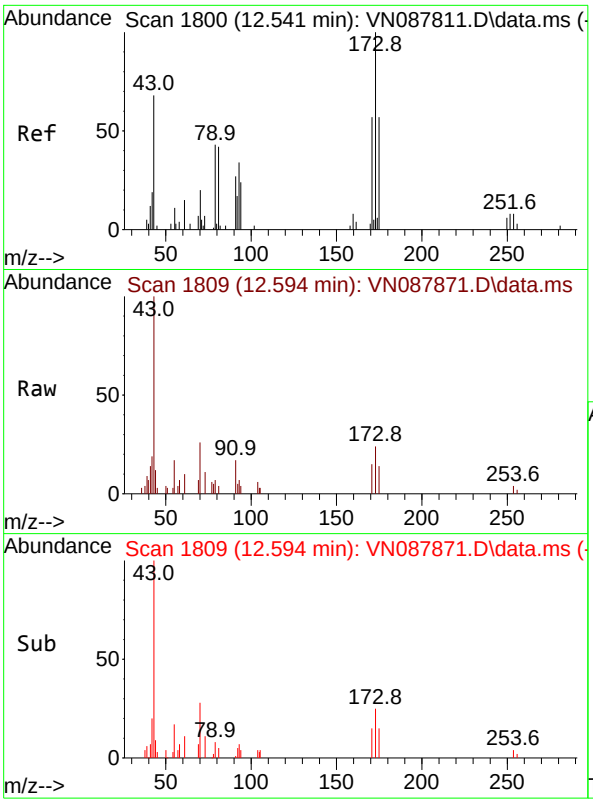


#46
Methyl methacrylate
Concen: 18.119 ug/l
RT: 9.665 min Scan# 1311
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 41 Resp: 83421

Ion	Ratio	Lower	Upper
41	100		
69	88.5	40.3	120.9
39	70.2	31.9	95.9

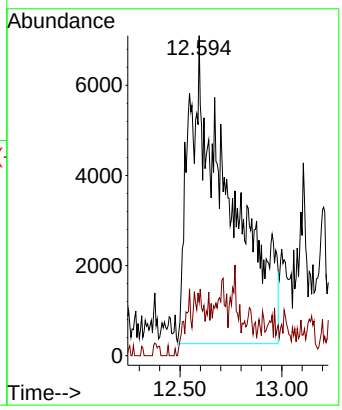




#47
n-amyl Acetate
Concen: 13.996 ug/l m
RT: 12.594 min Scan# 1
Delta R.T. -0.077 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 43 Resp: 9447

Ion	Ratio	Lower	Upper
43	100		
55	1.3	0.7	1.1



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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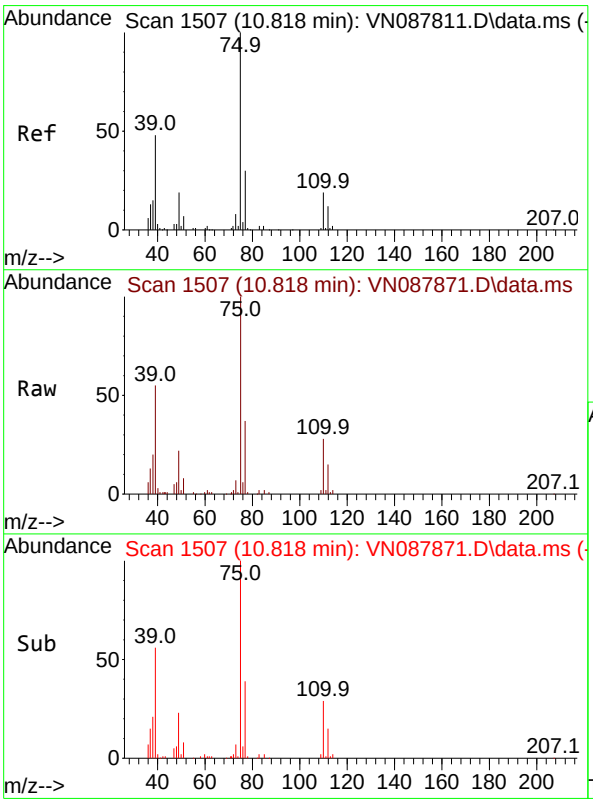
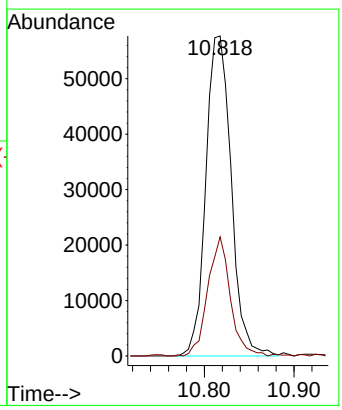
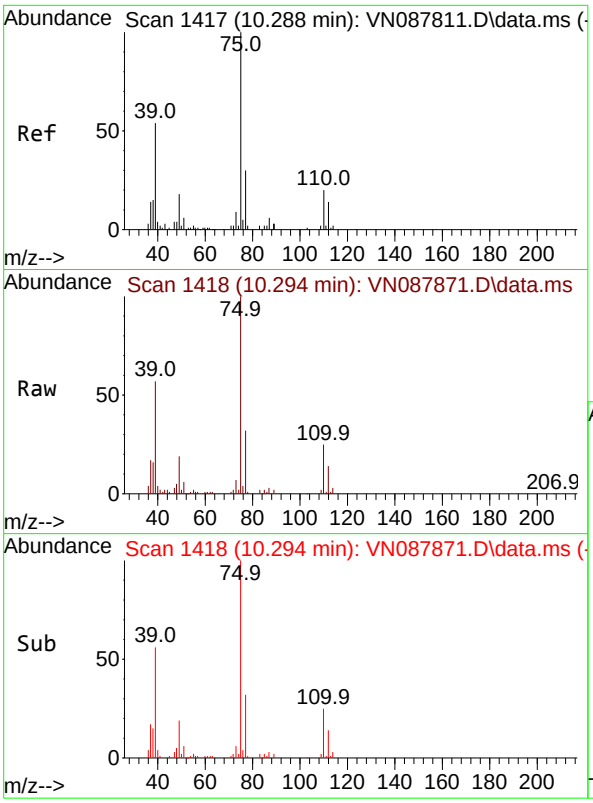


#48
t-1,3-Dichloropropene
Concen: 19.122 ug/l
RT: 10.818 min Scan# 1507
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 75 Resp: 113205

Ion	Ratio	Lower	Upper
75	100		
77	36.8	24.7	37.1

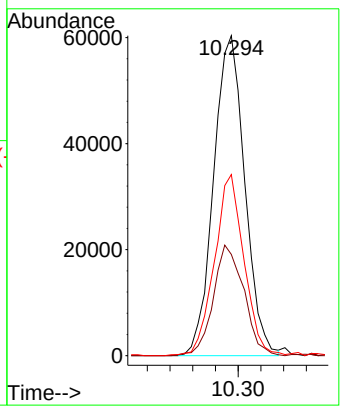




#49
cis-1,3-Dichloropropene
Concen: 18.977 ug/l
RT: 10.294 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 75 Resp: 11506

Ion	Ratio	Lower	Upper
75	100		
77	31.4	27.8	41.6
39	55.6	47.6	71.4



Instrument :
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ClientSampleId :
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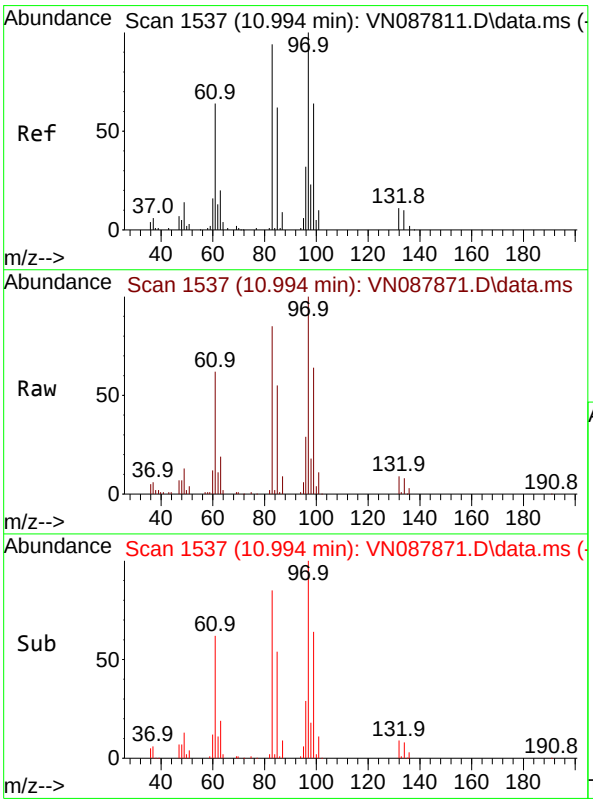
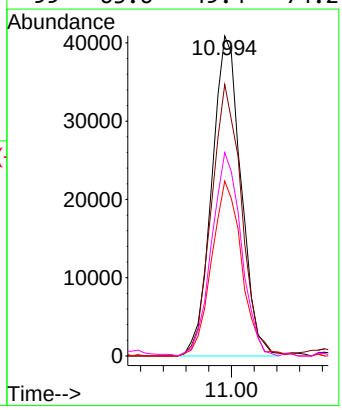
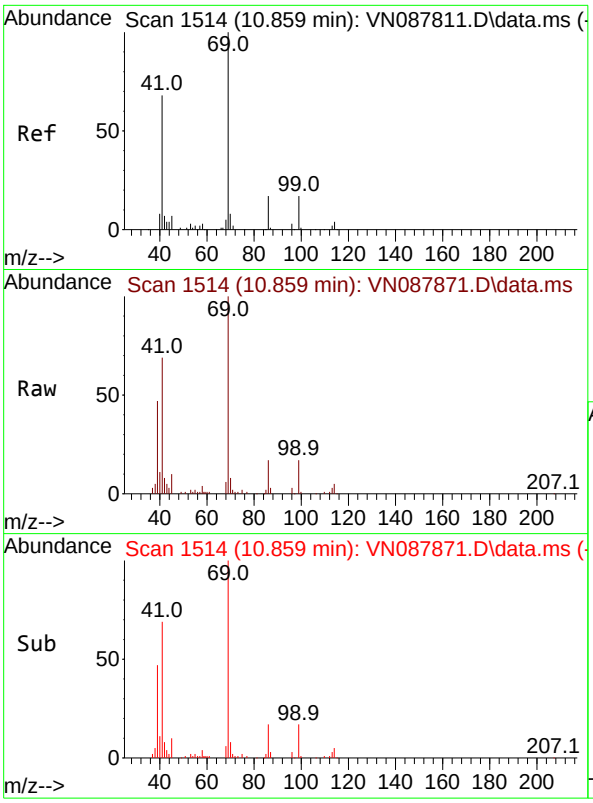


#50
1,1,2-Trichloroethane
Concen: 20.291 ug/l
RT: 10.994 min Scan# 1537
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 97 Resp: 73088

Ion	Ratio	Lower	Upper
97	100		
83	84.8	70.5	105.7
85	54.6	46.3	69.5
99	63.6	49.4	74.2

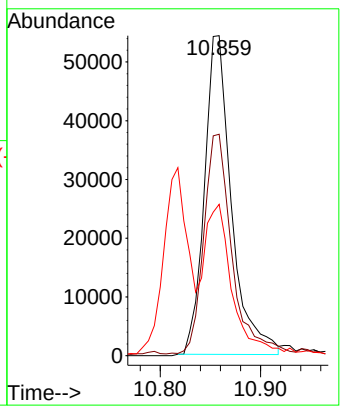




#51
Ethyl methacrylate
Concen: 18.228 ug/l
RT: 10.859 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 69 Resp: 10217

Ion	Ratio	Lower	Upper
69	100		
41	68.8	33.7	101.0
39	45.1	20.3	60.9



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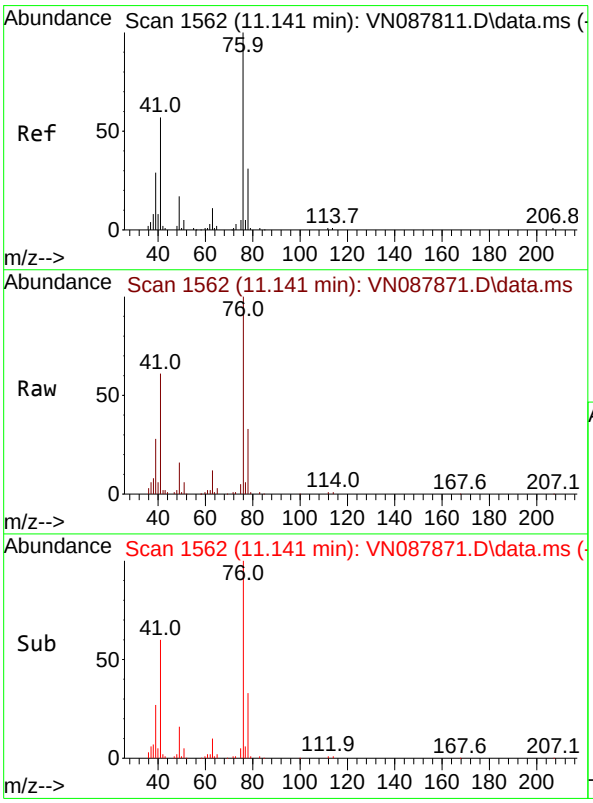
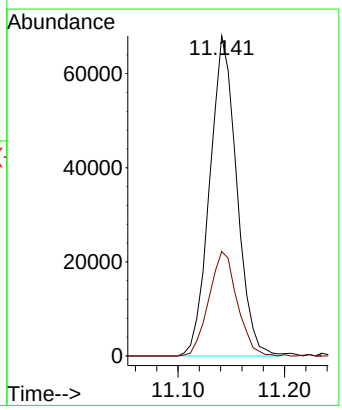
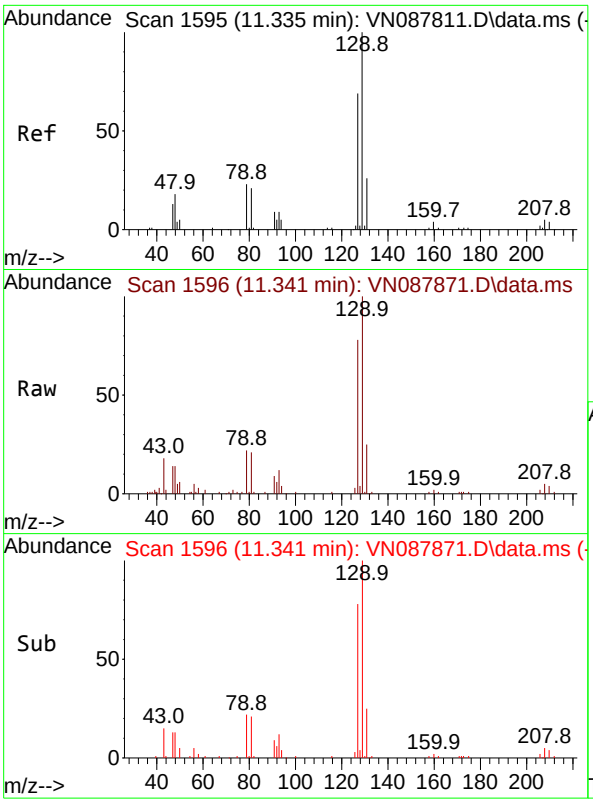


#52
1,3-Dichloropropane
Concen: 19.140 ug/l
RT: 11.141 min Scan# 1562
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 76 Resp: 119718

Ion	Ratio	Lower	Upper
76	100		
78	34.1	0.0	65.2

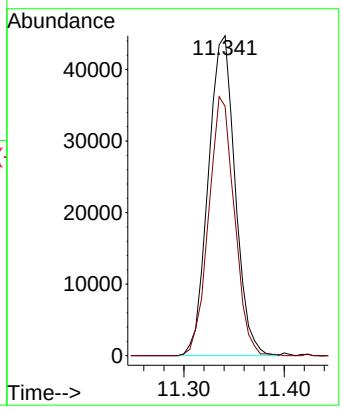




#53
Dibromochloromethane
Concen: 20.588 ug/l
RT: 11.341 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:129 Resp: 8314

Ion	Ratio	Lower	Upper
129	100		
127	77.5	42.6	128.0



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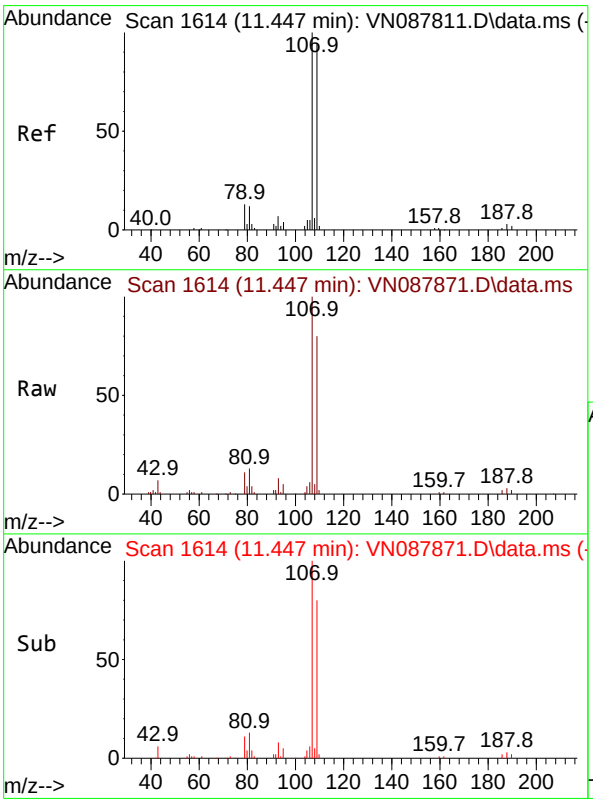
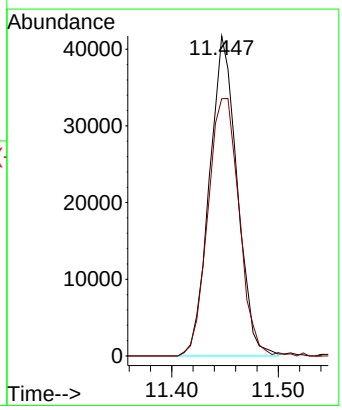
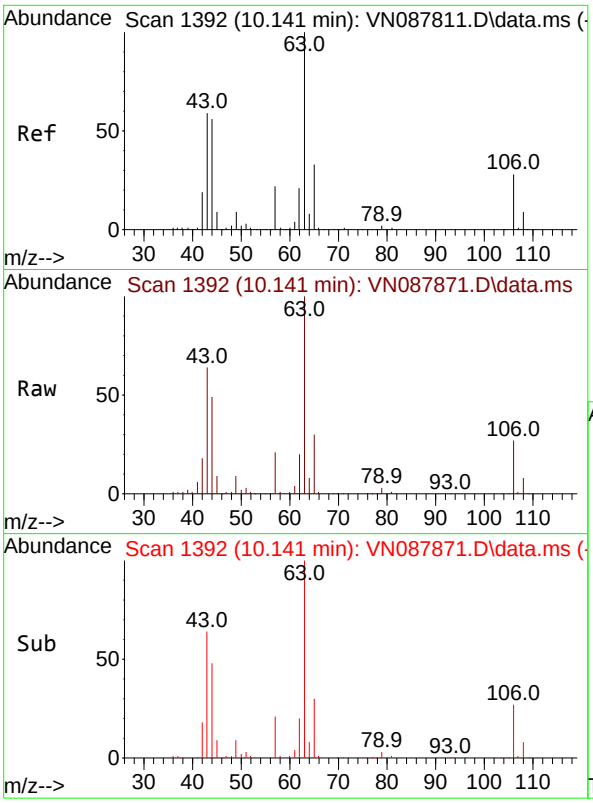


#54
1,2-Dibromoethane
Concen: 20.118 ug/l
RT: 11.447 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:107 Resp: 75402

Ion	Ratio	Lower	Upper
107	100		
109	90.5	74.6	112.0

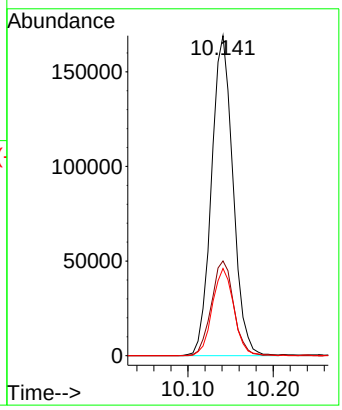




#55
2-Chloroethyl vinyl ether
Concen: 92.489 ug/l
RT: 10.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 63 Resp: 29705

Ion	Ratio	Lower	Upper
63	100		
65	30.6	26.6	40.0
106	27.2	21.1	31.7



Instrument :
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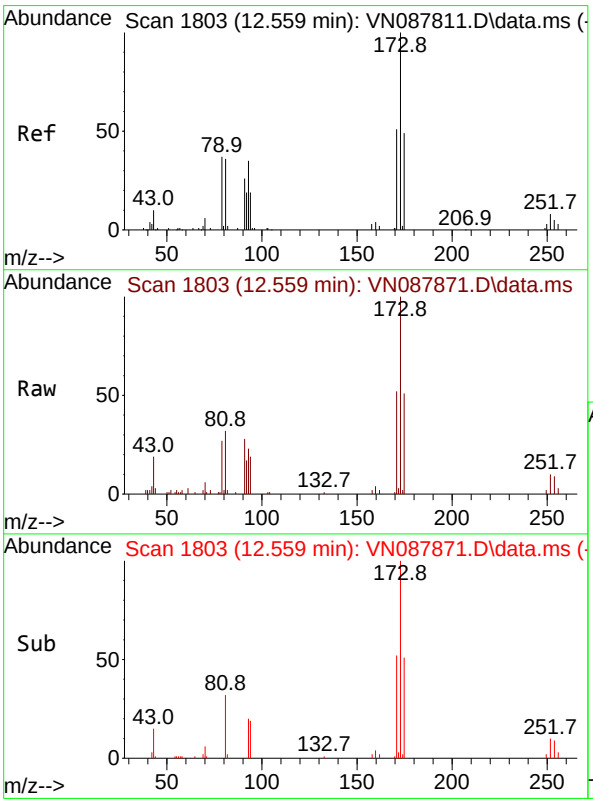
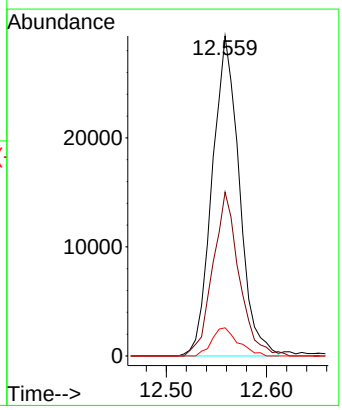
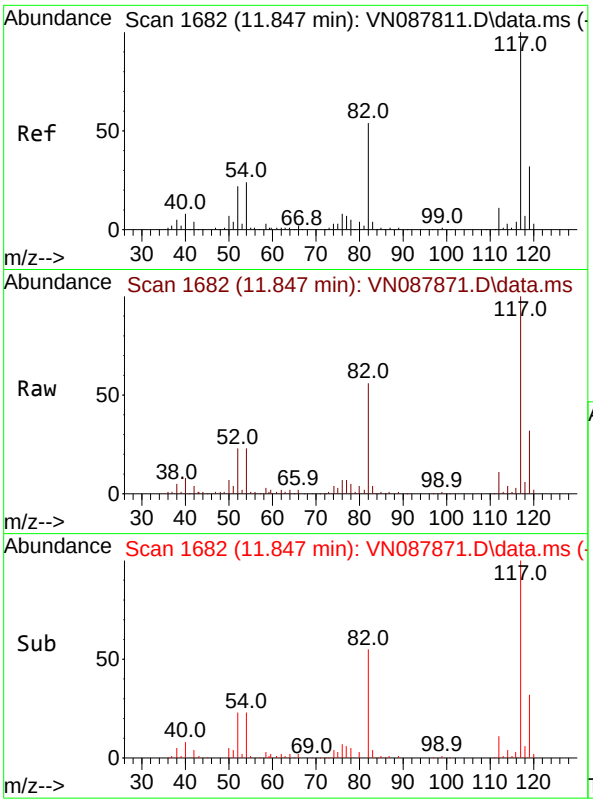


#56
Bromoform
Concen: 20.852 ug/l
RT: 12.559 min Scan# 1803
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:173 Resp: 54997

Ion	Ratio	Lower	Upper
173	100		
175	49.5	39.8	59.6
254	8.6	6.2	9.4

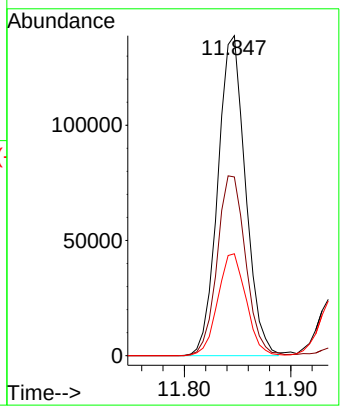




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.847 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:117 Resp: 25038

Ion	Ratio	Lower	Upper
117	100		
82	57.9	45.9	68.9
119	32.6	25.3	37.9



Instrument :
MSVOA_N
ClientSampleId :
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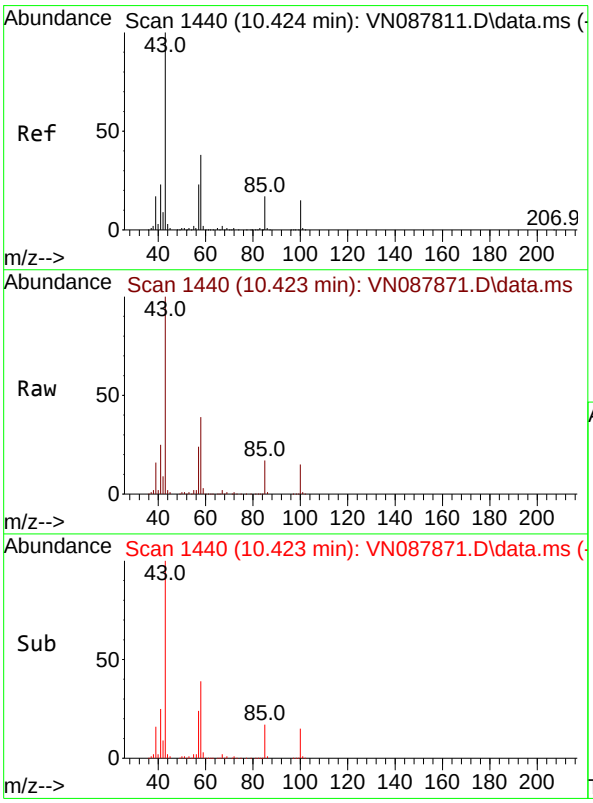
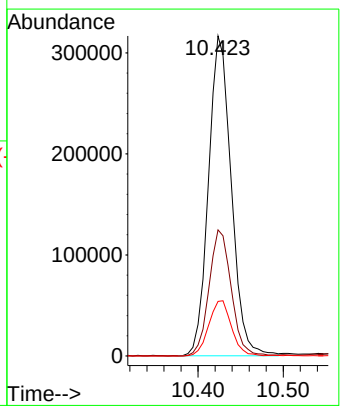
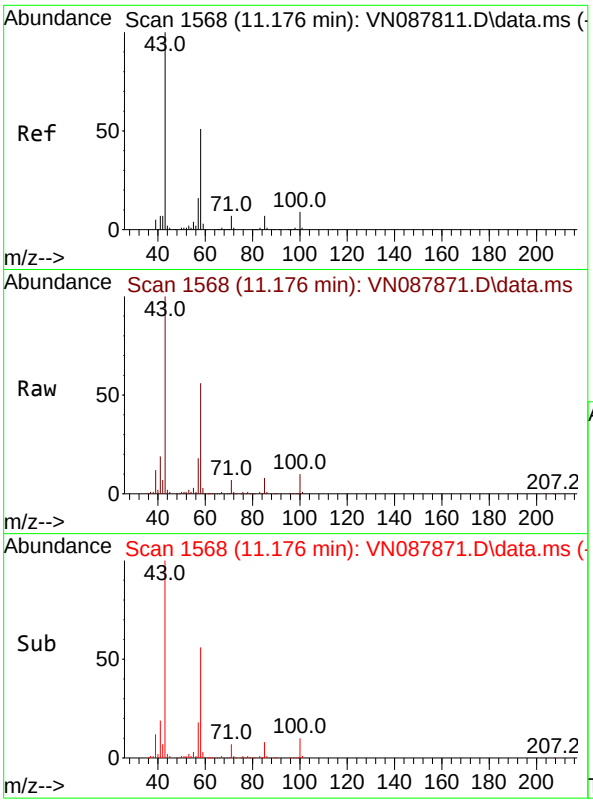


#58
4-Methyl-2-Pentanone
Concen: 99.624 ug/l
RT: 10.423 min Scan# 1440
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 43 Resp: 589811

Ion	Ratio	Lower	Upper
43	100		
58	38.3	29.6	44.4
85	17.2	13.0	19.4





#59
2-Hexanone
Concen: 99.322 ug/l
RT: 11.176 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 43 Resp: 38423

Ion	Ratio	Lower	Upper
43	100		
58	53.2	40.2	60.4
57	18.2	13.7	20.5

Instrument :
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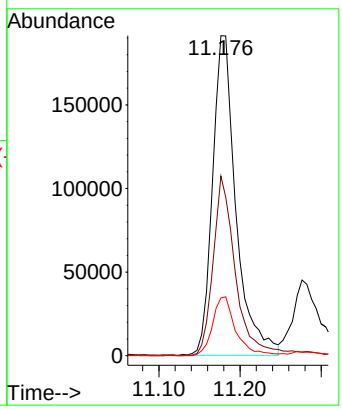
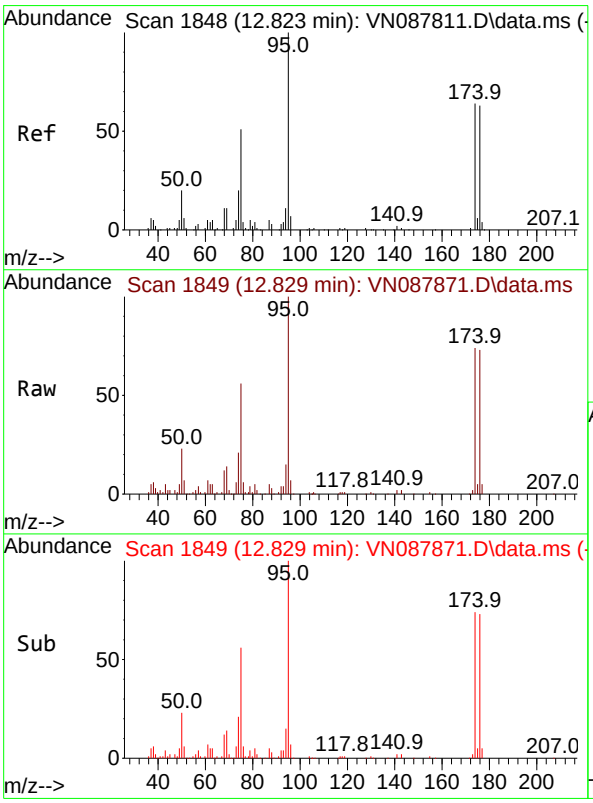
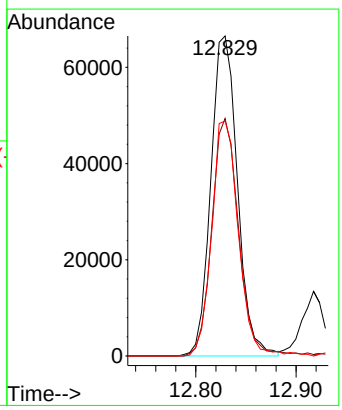


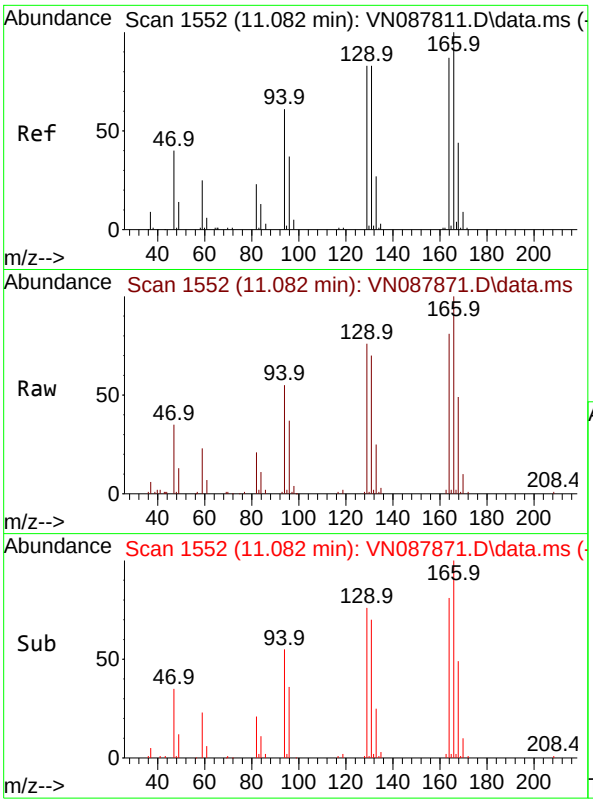


#60
4-Bromofluorobenzene
Concen: 30.415 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 95 Resp: 122450

Ion	Ratio	Lower	Upper
95	100		
174	74.6	55.4	83.0
176	73.2	51.5	77.3

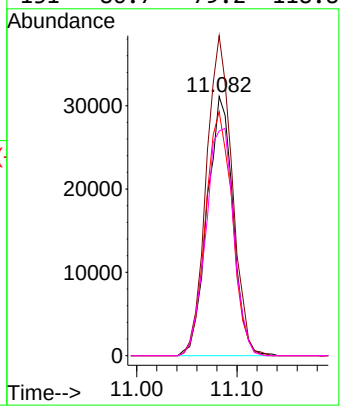




#61
Tetrachloroethene
Concen: 22.340 ug/l
RT: 11.082 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:164 Resp: 5569

Ion	Ratio	Lower	Upper
164	100		
166	123.4	97.3	145.9
129	94.1	78.6	117.8
131	86.7	79.2	118.8



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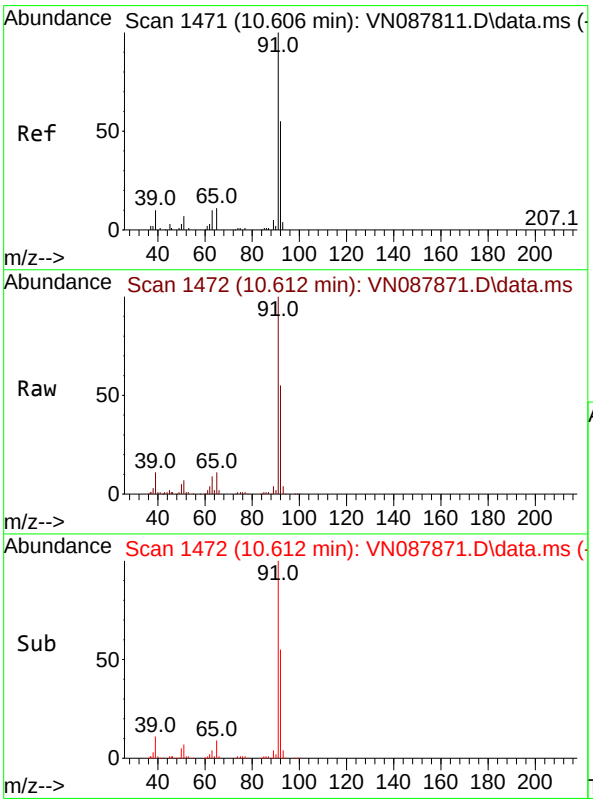
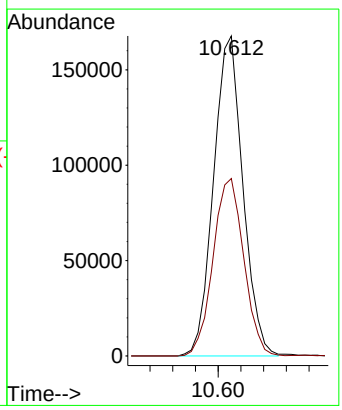
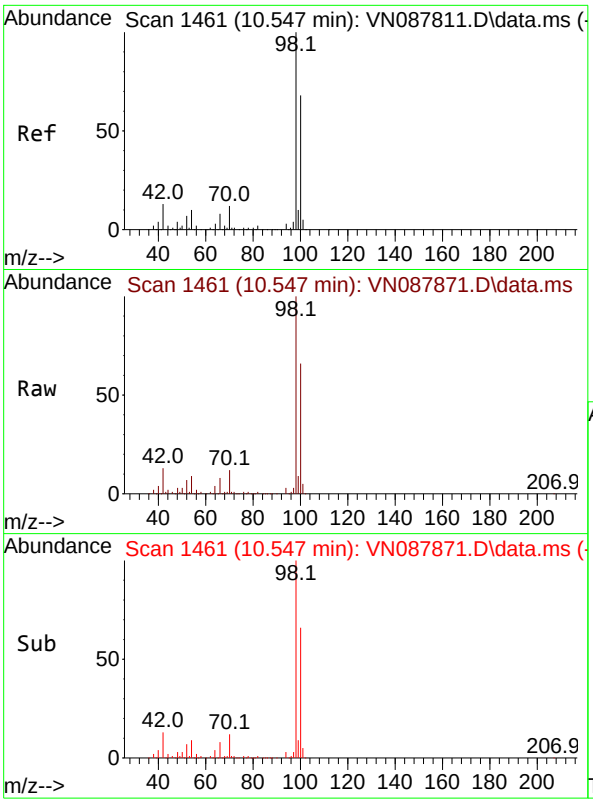


#62
Toluene
Concen: 19.838 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 91 Resp: 300459

Ion	Ratio	Lower	Upper
91	100		
92	58.1	45.4	68.0





#63
Toluene-d8
Concen: 29.396 ug/l
RT: 10.547 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 98 Resp: 34229

Ion	Ratio	Lower	Upper
98	100		
100	66.2	50.6	76.0

Instrument :
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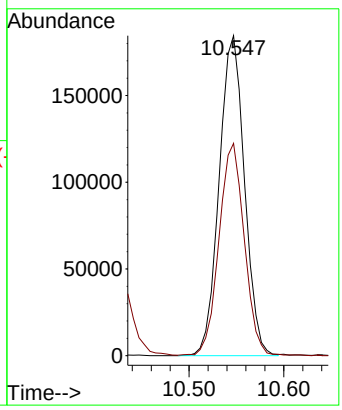
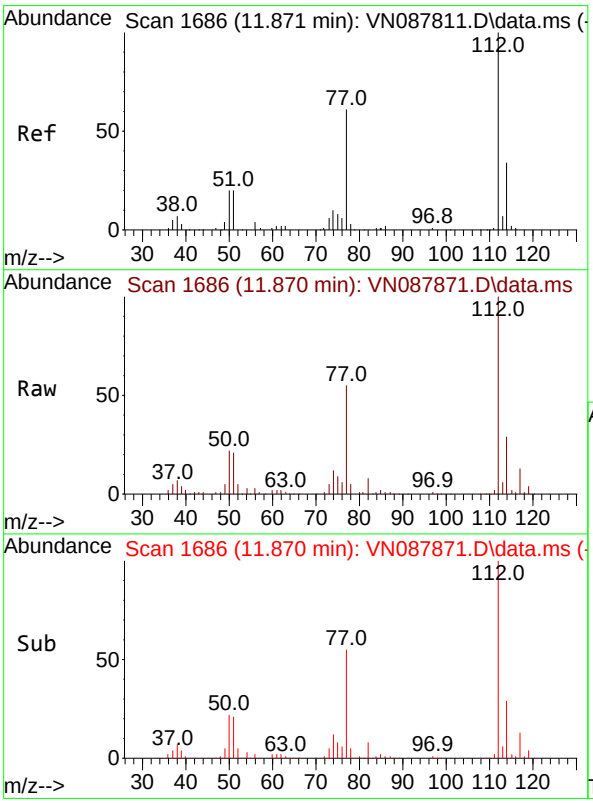
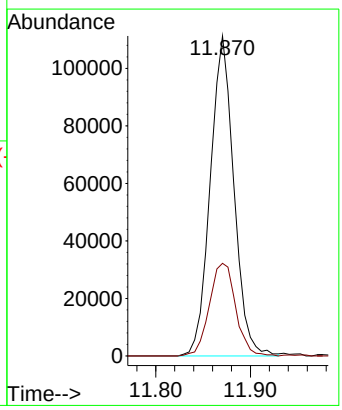


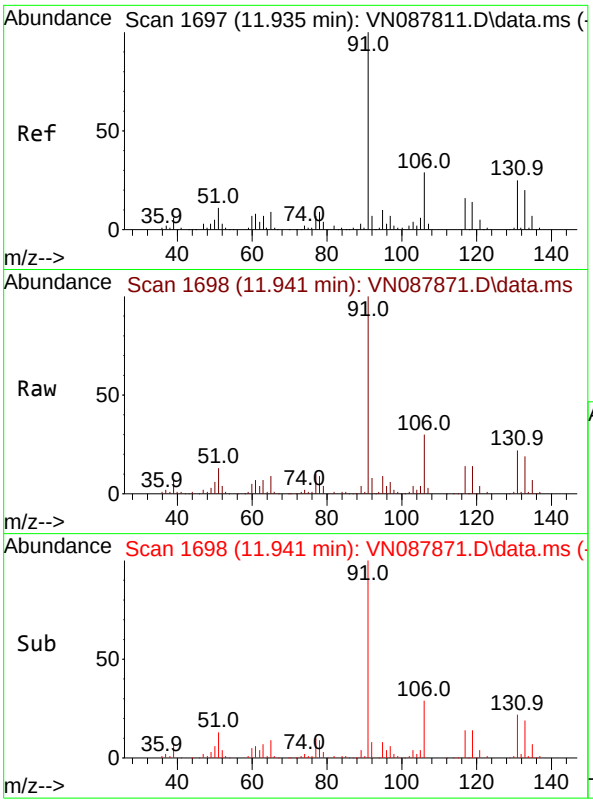


#64
Chlorobenzene
Concen: 20.798 ug/l
RT: 11.870 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:112 Resp: 193335

Ion	Ratio	Lower	Upper
112	100		
114	28.9	23.5	35.3

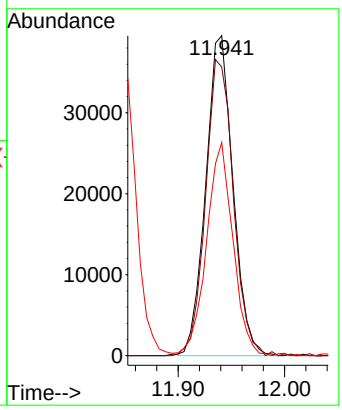




#65
1,1,1,2-Tetrachloroethane
Concen: 21.503 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:131 Resp: 7037

Ion	Ratio	Lower	Upper
131	100		
133	94.1	0.0	195.8
119	64.7	0.0	139.0



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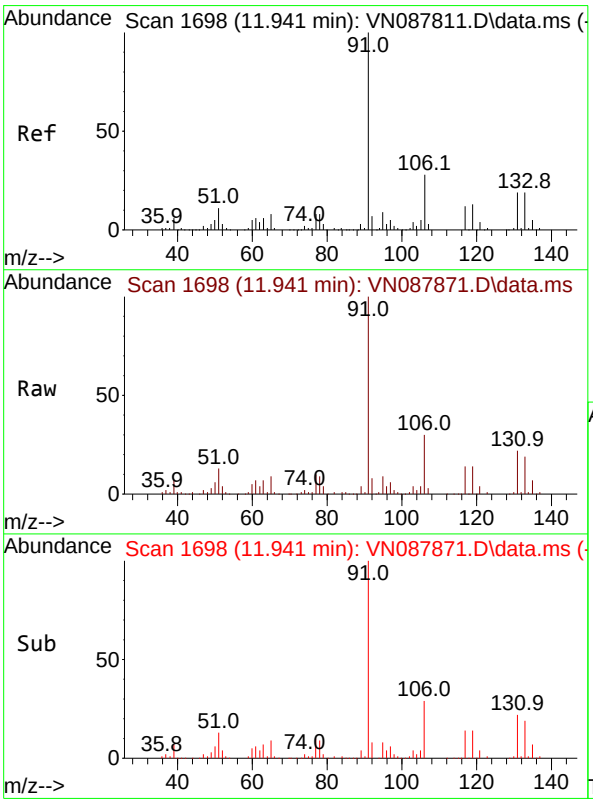
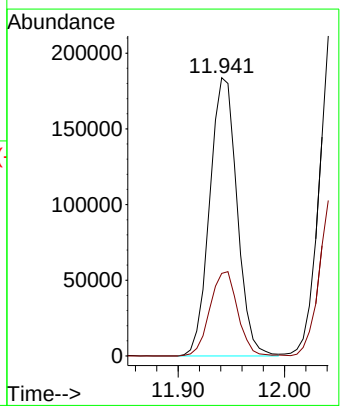
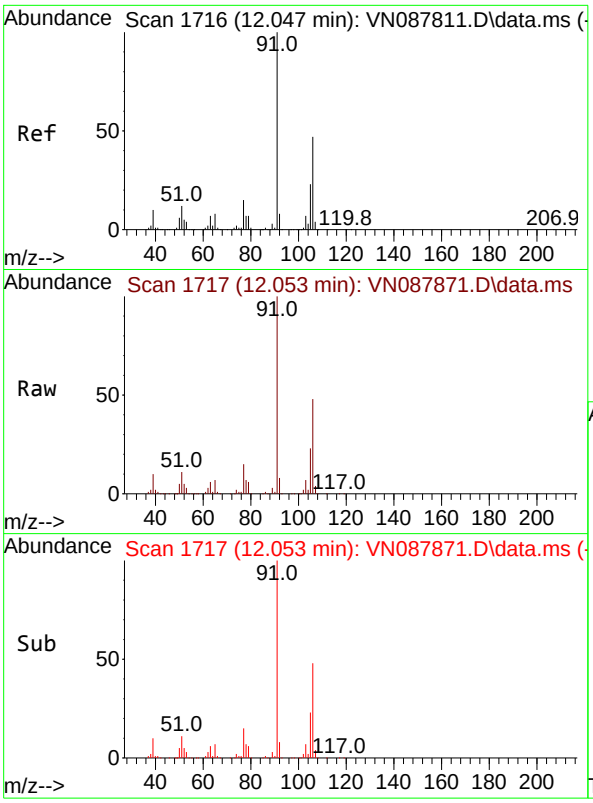


#66
Ethyl Benzene
Concen: 20.085 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 91 Resp: 328182

Ion	Ratio	Lower	Upper
91	100		
106	29.7	21.3	31.9





#67
m/p-Xylenes
Concen: 41.763 ug/l
RT: 12.053 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:106 Resp: 25330

Ion	Ratio	Lower	Upper
106	100		
91	205.3	174.3	261.5

Instrument :
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ClientSampleId :
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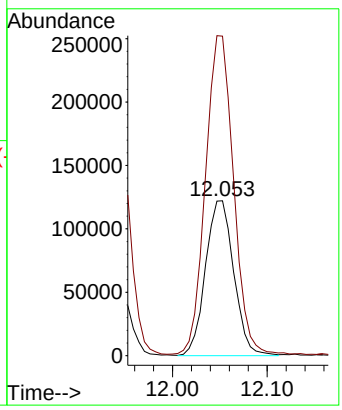
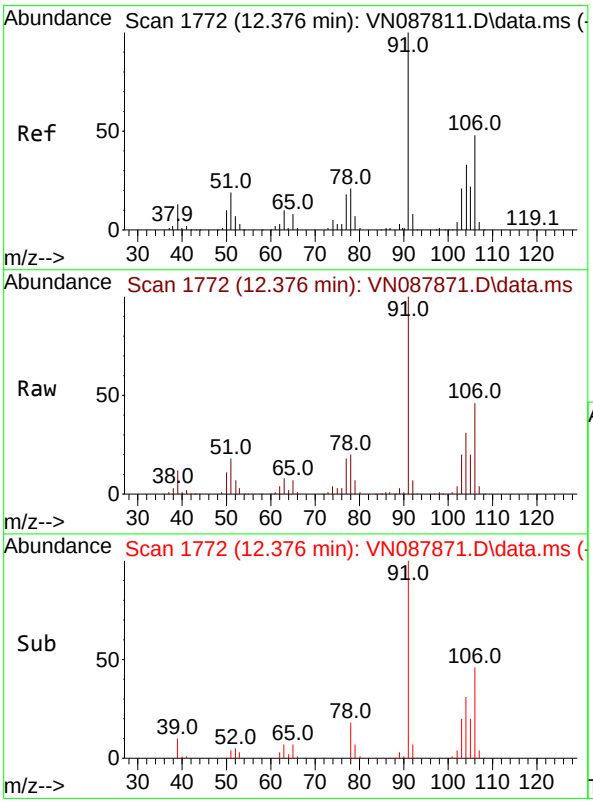
Supervised By :Mahesh Dadoda 09/18/2025

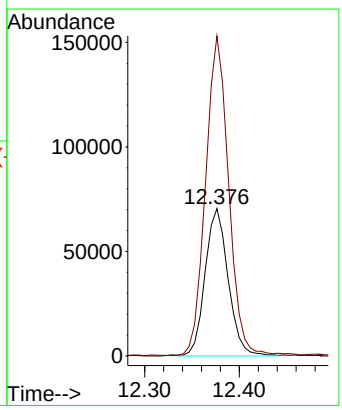


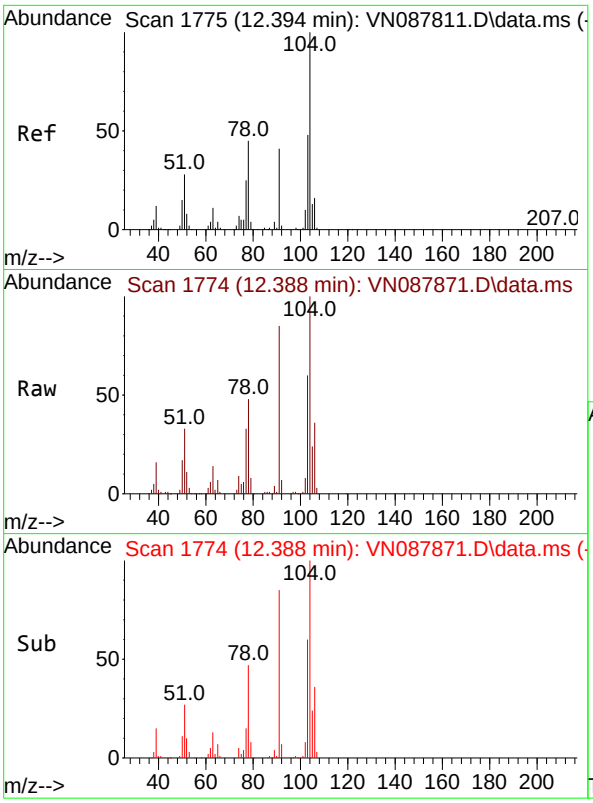


#68
o-Xylene
Concen: 20.311 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:106 Resp: 119443

Ion	Ratio	Lower	Upper
106	100		
91	216.0	107.7	323.3

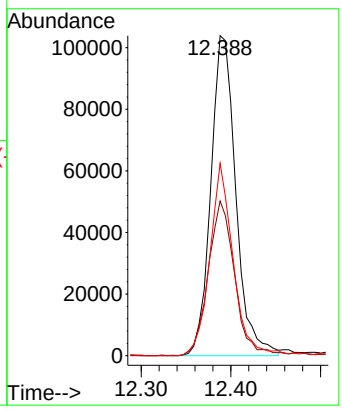




#69
Styrene
Concen: 19.712 ug/l
RT: 12.388 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:104 Resp: 20147

Ion	Ratio	Lower	Upper
104	100		
78	49.5	41.0	61.6
103	55.6	44.6	66.8



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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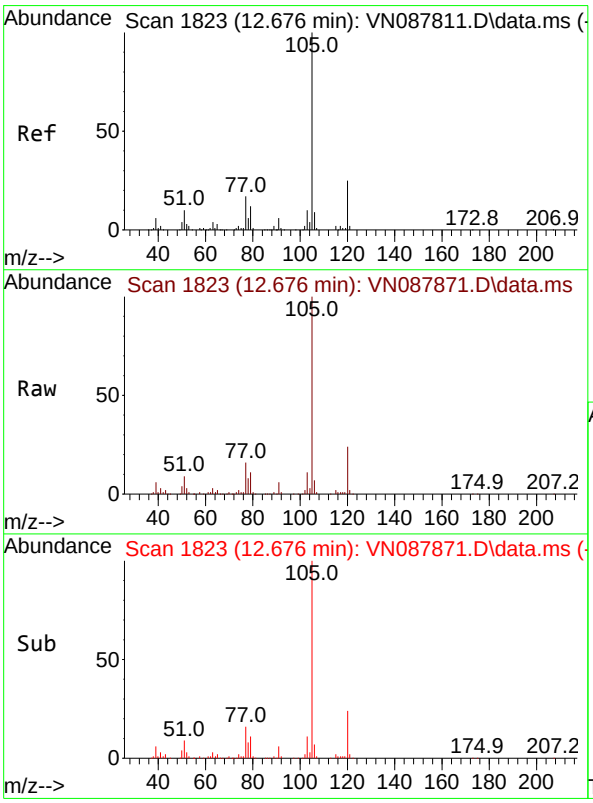
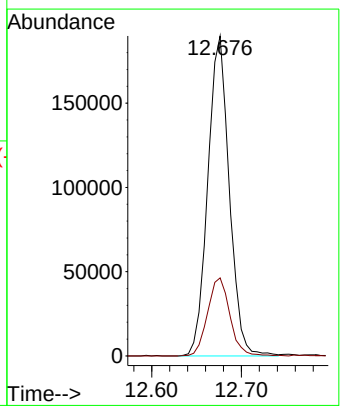
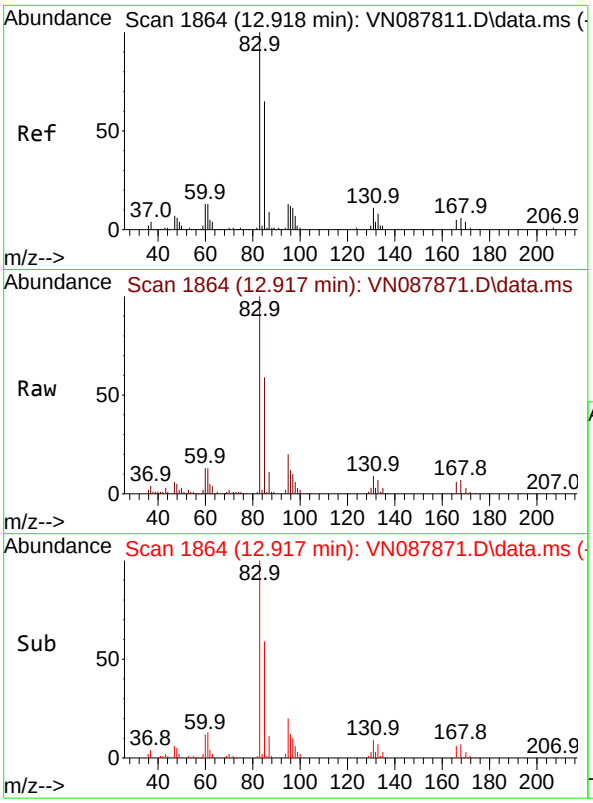


#70
Isopropylbenzene
Concen: 21.182 ug/l
RT: 12.676 min Scan# 1823
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:105 Resp: 315847

Ion	Ratio	Lower	Upper
105	100		
120	25.3	17.4	32.4

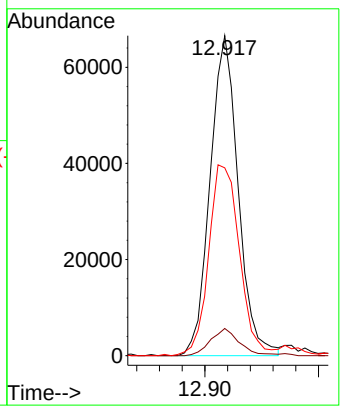




#71
1,1,2,2-Tetrachloroethane
Concen: 21.355 ug/l
RT: 12.917 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 83 Resp: 11447

Ion	Ratio	Lower	Upper
83	100		
131	8.7	4.8	14.3
85	65.0	31.9	95.7



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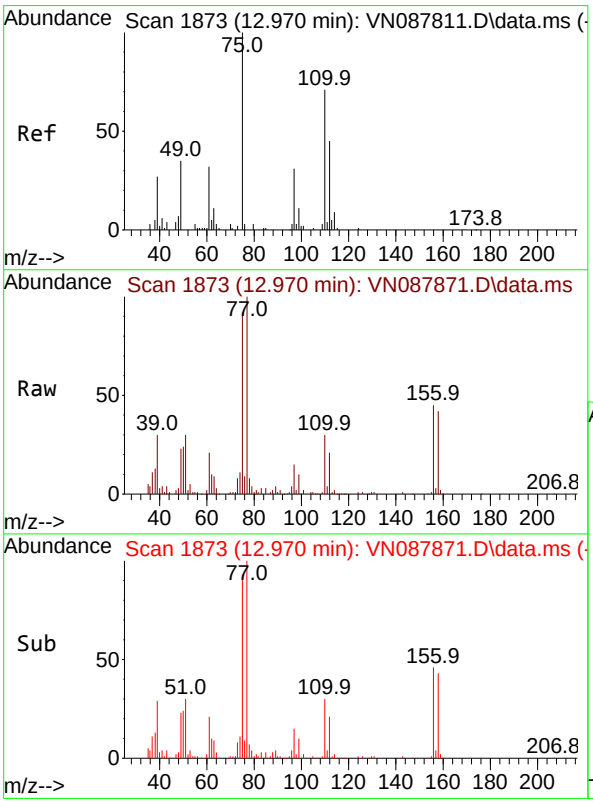
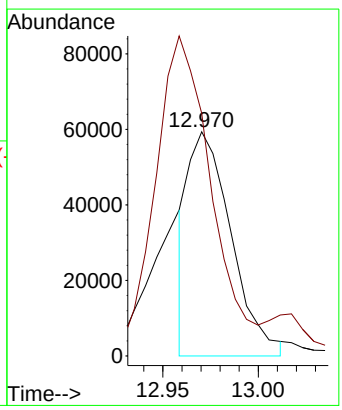
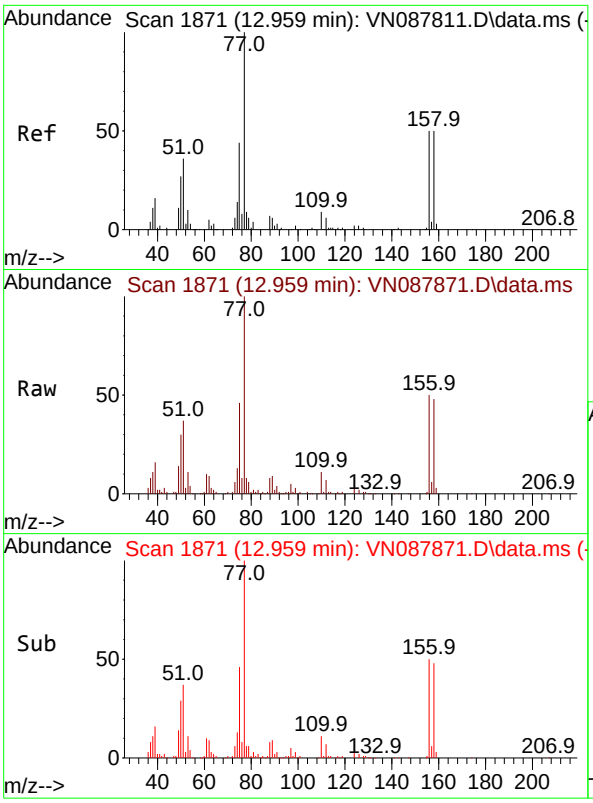


#72
1,2,3-Trichloropropane
Concen: 17.671 ug/l m
RT: 12.970 min Scan# 1873
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 75 Resp: 93013

Ion	Ratio	Lower	Upper
75	100		
77	185.6	0.0	378.8





#73
Bromobenzene
Concen: 21.585 ug/l
RT: 12.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:156 Resp: 7874

Ion	Ratio	Lower	Upper
156	100		
77	219.2	0.0	484.2
158	94.8	0.0	186.2

Instrument :
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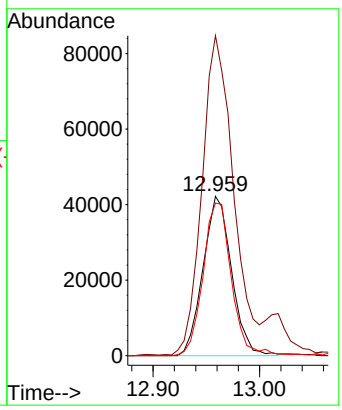
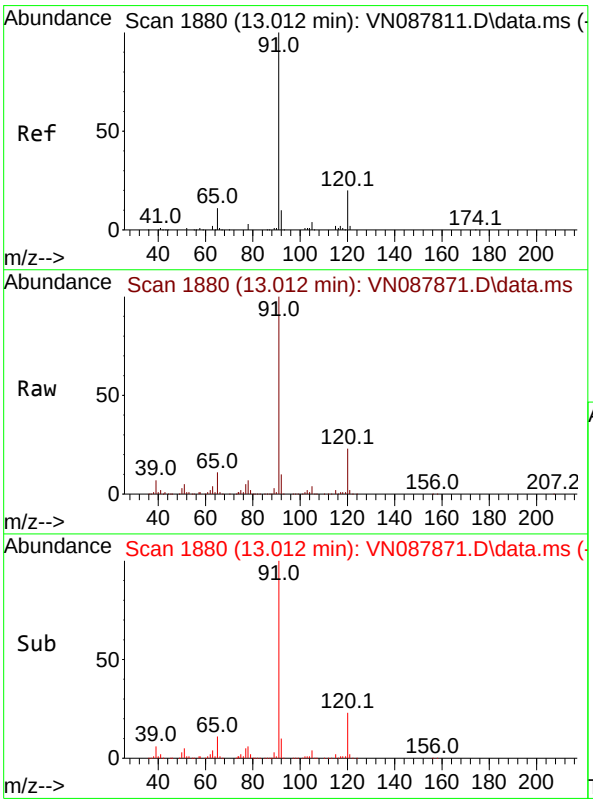
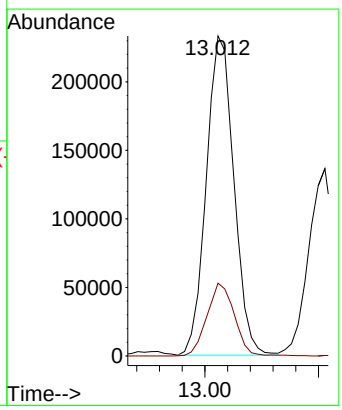


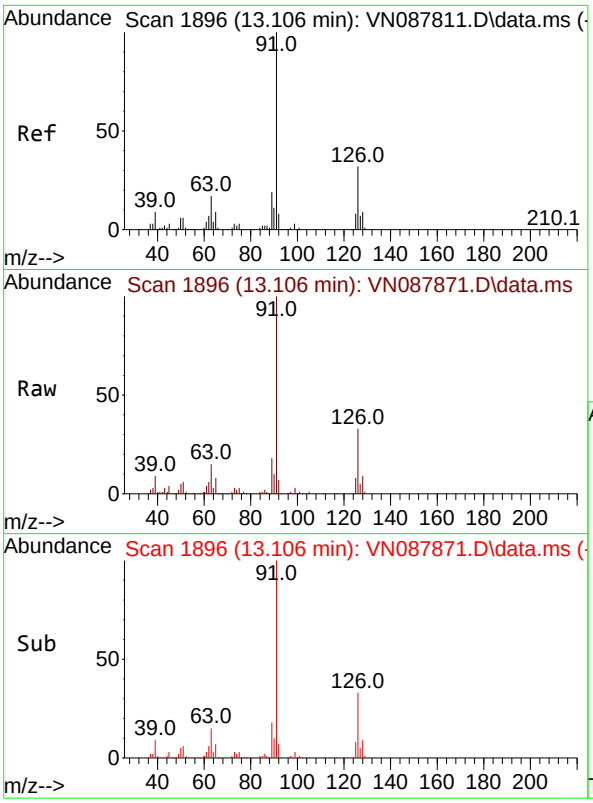


#74
n-propylbenzene
Concen: 20.910 ug/l
RT: 13.012 min Scan# 1880
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 91 Resp: 393403

Ion	Ratio	Lower	Upper
91	100		
120	22.4	0.0	42.2

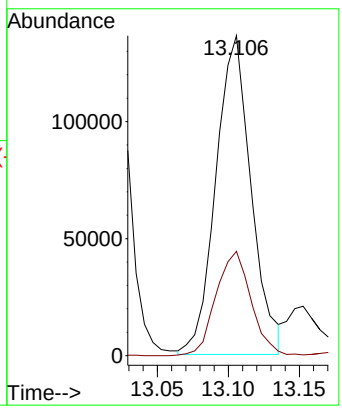




#75
2-Chlorotoluene
Concen: 20.768 ug/l
RT: 13.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 91 Resp: 23517

Ion	Ratio	Lower	Upper
91	100		
126	32.7	0.0	60.4



Instrument :
MSVOA_N
ClientSampleId :
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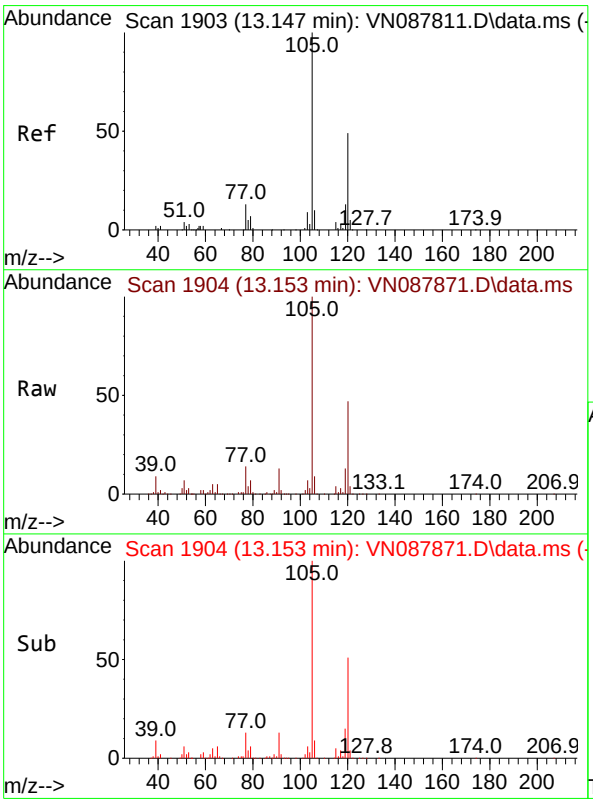
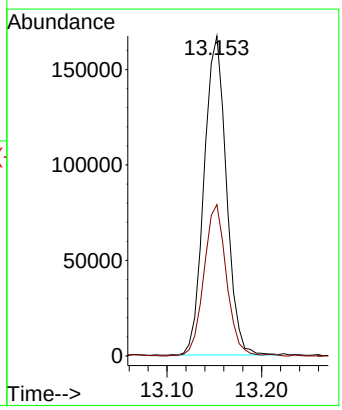
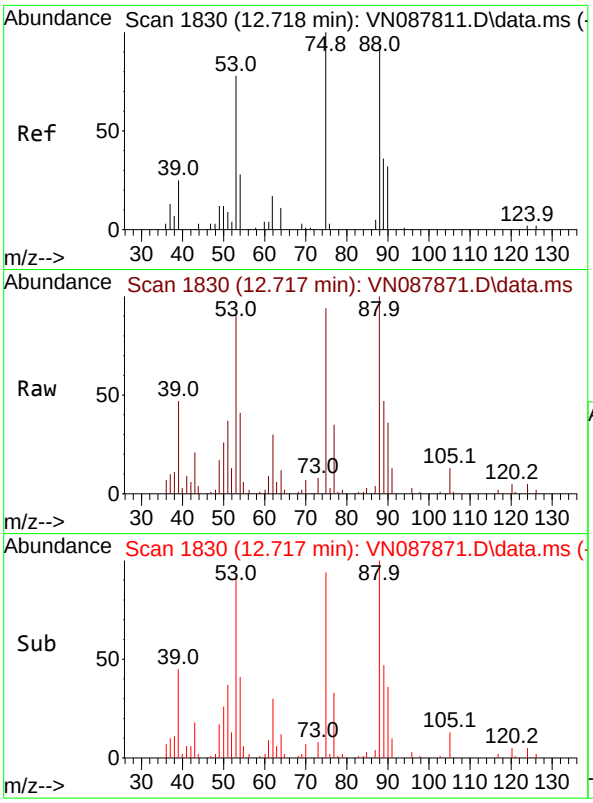


#76
1,3,5-Trimethylbenzene
Concen: 21.678 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:105 Resp: 272968

Ion	Ratio	Lower	Upper
105	100		
120	48.0	0.0	92.6

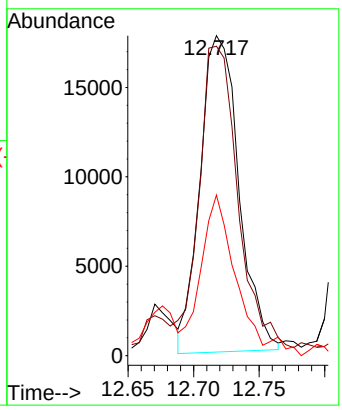




#77
t-1,4-Dichloro-2-butene
Concen: 20.524 ug/l
RT: 12.717 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 75 Resp: 3646

Ion	Ratio	Lower	Upper
75	100		
53	94.8	45.3	135.9
89	46.2	18.8	56.3



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

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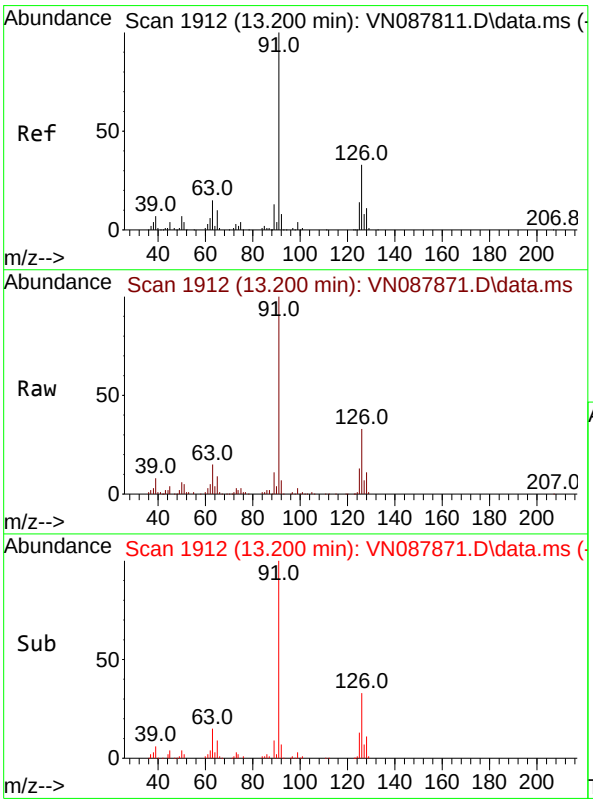
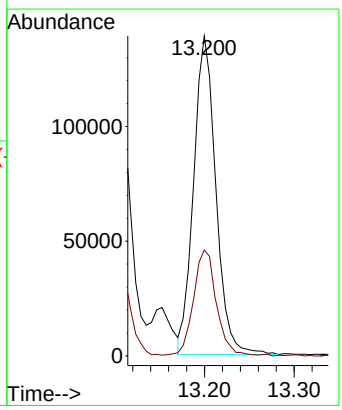
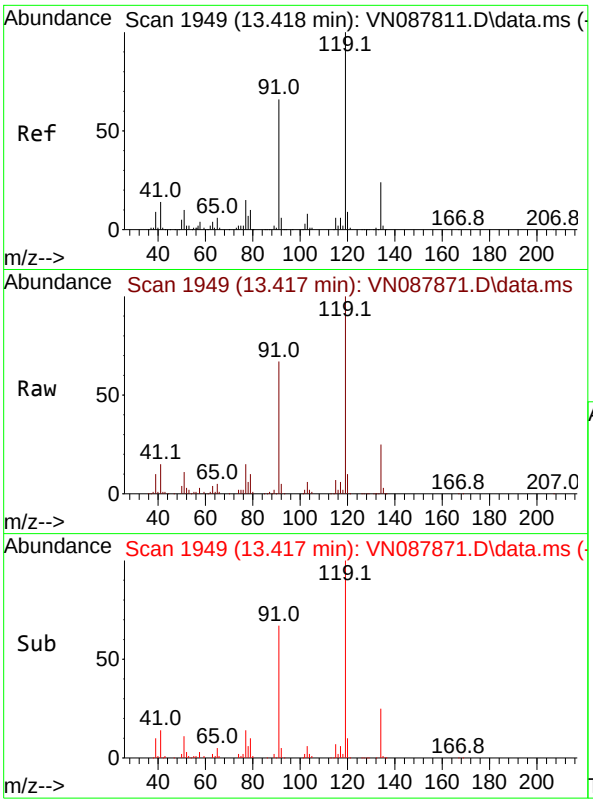


#78
4-Chlorotoluene
Concen: 20.949 ug/l
RT: 13.200 min Scan# 1912
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 91 Resp: 239153

Ion	Ratio	Lower	Upper
91	100		
126	34.4	0.0	67.0

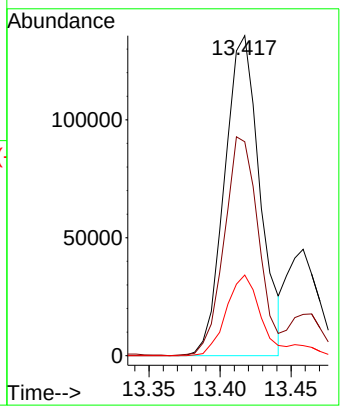




#79
tert-butylbenzene
Concen: 22.265 ug/l
RT: 13.417 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:119 Resp: 23479

Ion	Ratio	Lower	Upper
119	100		
91	66.4	0.0	142.6
134	24.4	0.0	47.2



Instrument :
MSVOA_N
ClientSampleId :
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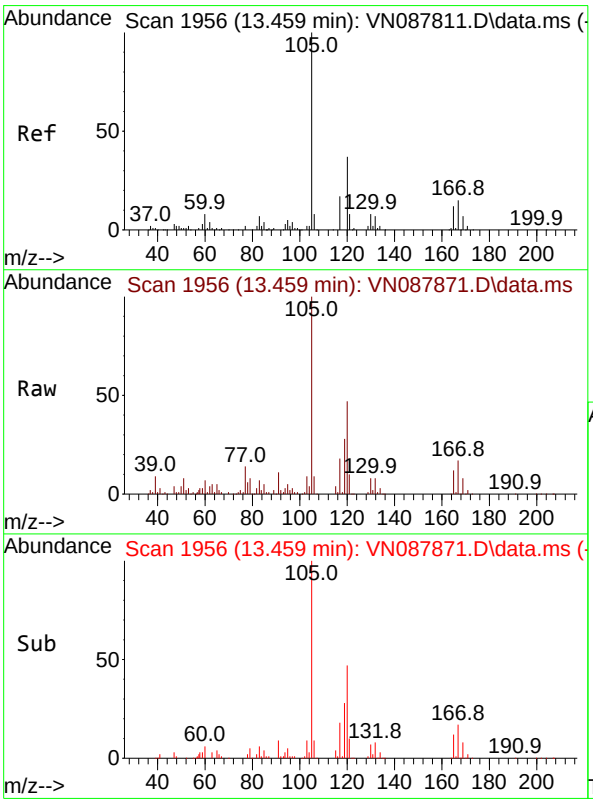
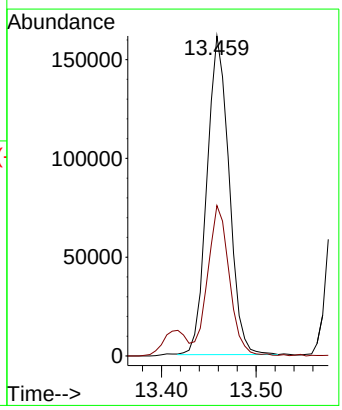
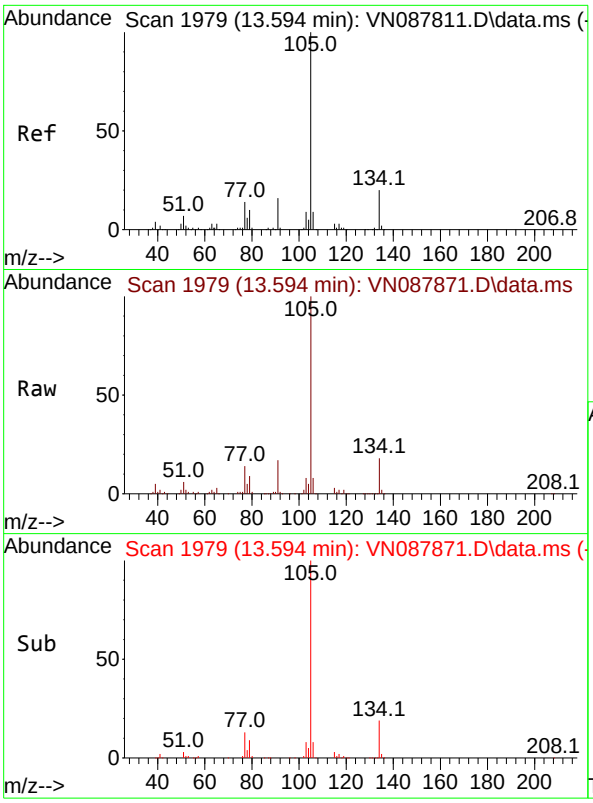


#80
1,2,4-Trimethylbenzene
Concen: 20.222 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:105 Resp: 261053

Ion	Ratio	Lower	Upper
105	100		
120	46.4	0.0	86.6





#81
sec-Butylbenzene
Concen: 22.048 ug/l
RT: 13.594 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:105 Resp: 34199

Ion	Ratio	Lower	Upper
105	100		
134	20.2	0.0	37.0

Instrument :
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ClientSampleId :
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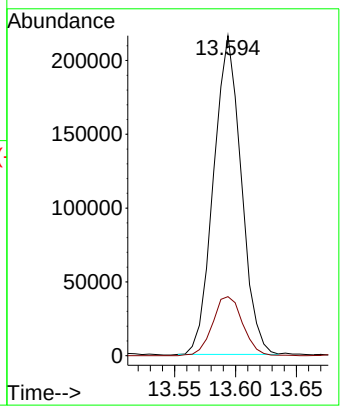
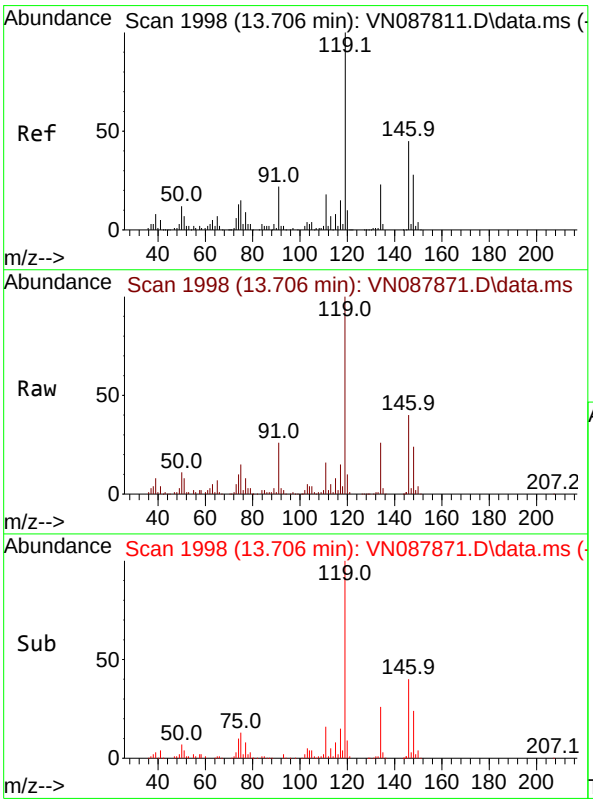
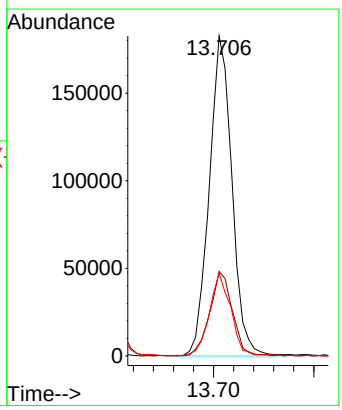


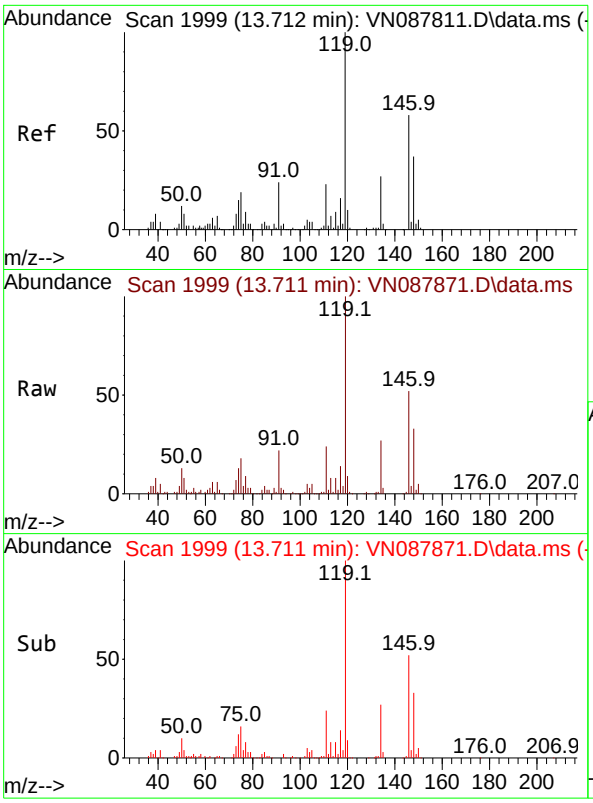


#82
p-Isopropyltoluene
Concen: 22.495 ug/l
RT: 13.706 min Scan# 1998
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:119 Resp: 287495

Ion	Ratio	Lower	Upper
119	100		
134	25.8	0.0	49.4
91	24.0	0.0	52.2

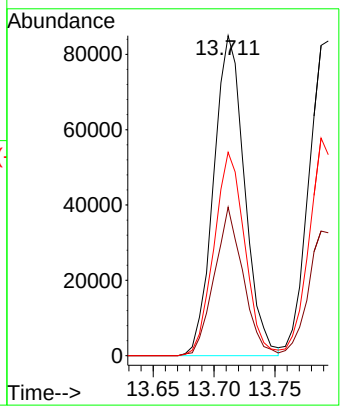




#83
1,3-Dichlorobenzene
Concen: 21.368 ug/l
RT: 13.711 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:146 Resp: 15029

Ion	Ratio	Lower	Upper
146	100		
111	43.3	21.1	63.4
148	63.2	31.0	93.0



Instrument :
MSVOA_N
ClientSampleId :
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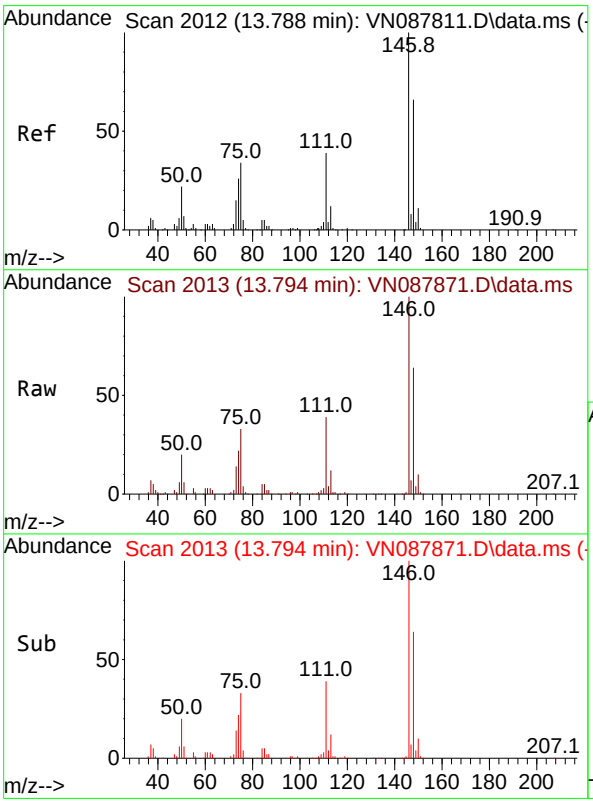
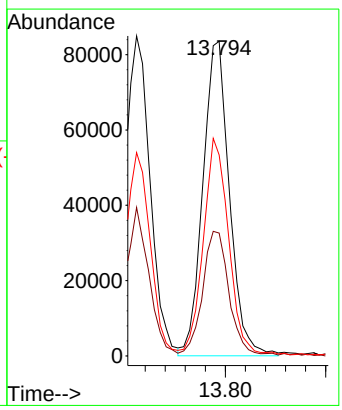
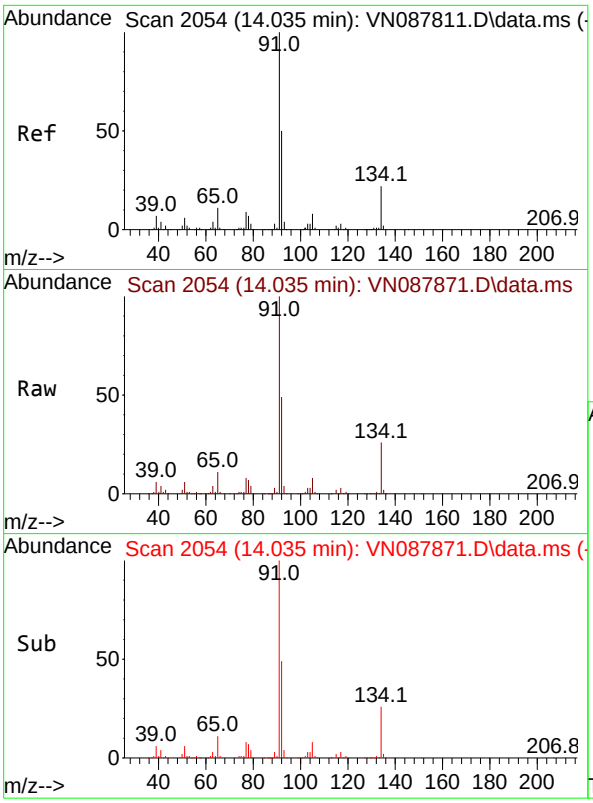


#84
1,4-Dichlorobenzene
Concen: 21.789 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:146 Resp: 153609

Ion	Ratio	Lower	Upper
146	100		
111	39.5	20.2	60.5
148	66.2	31.5	94.5





#85
n-Butylbenzene
Concen: 22.508 ug/l
RT: 14.035 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 91 Resp: 27650

Ion	Ratio	Lower	Upper
91	100		
92	50.4	0.0	104.0
134	25.3	0.0	46.0

Instrument :
MSVOA_N
ClientSampleId :
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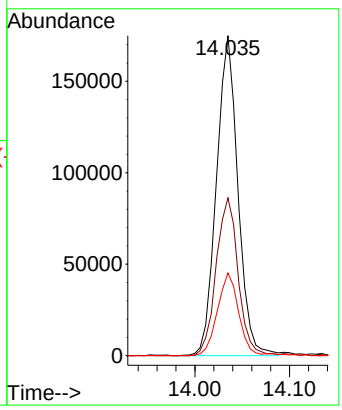
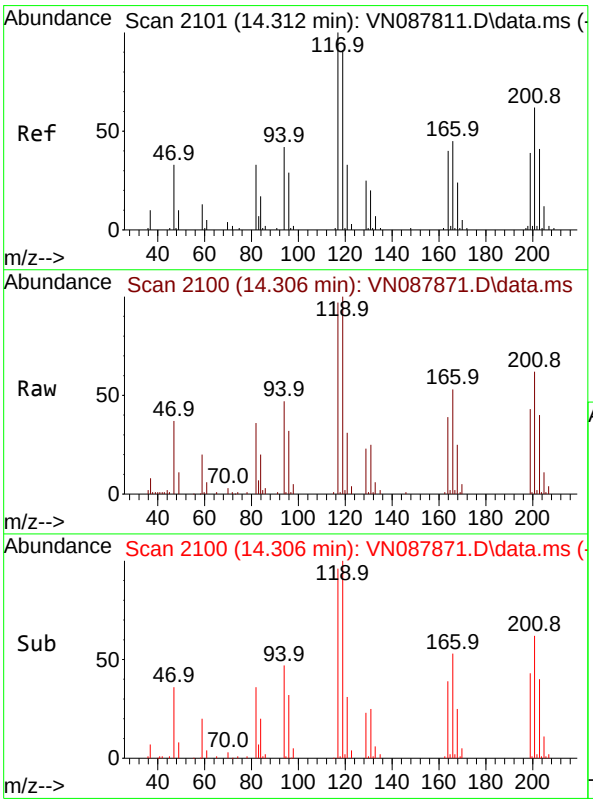
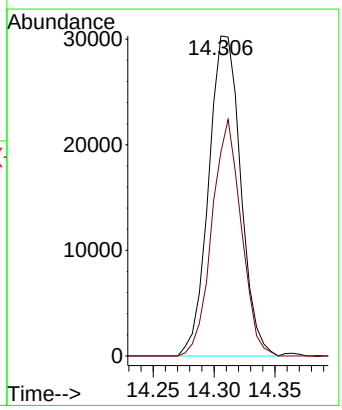


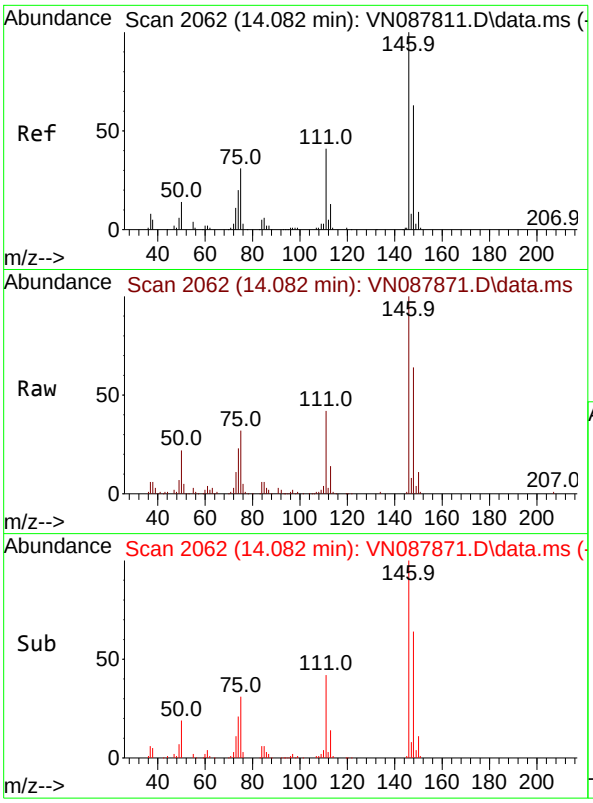


#86
Hexachloroethane
Concen: 21.315 ug/l
RT: 14.306 min Scan# 2100
Delta R.T. -0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:117 Resp: 55330

Ion	Ratio	Lower	Upper
117	100		
201	67.6	29.9	89.7

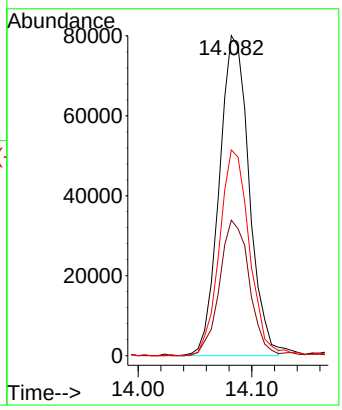




#87
1,2-Dichlorobenzene
Concen: 22.015 ug/l
RT: 14.082 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:146 Resp: 14603

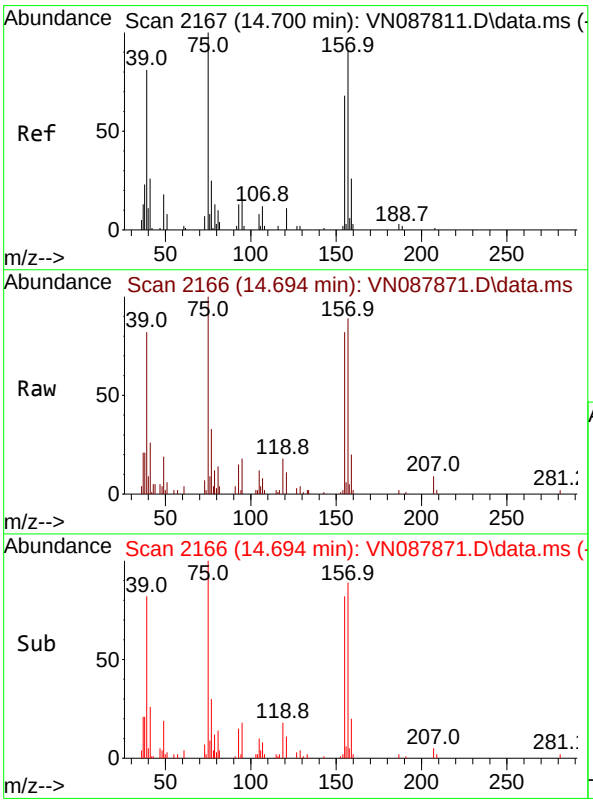
Ion	Ratio	Lower	Upper
146	100		
111	42.2	21.5	64.5
148	64.8	33.4	100.1



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

Manual Integrations
APPROVED

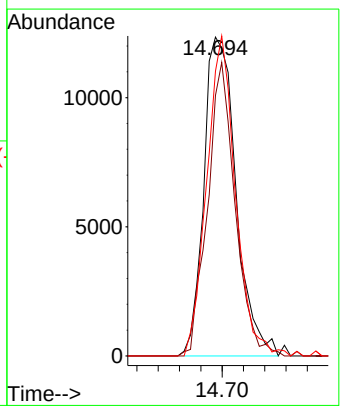
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

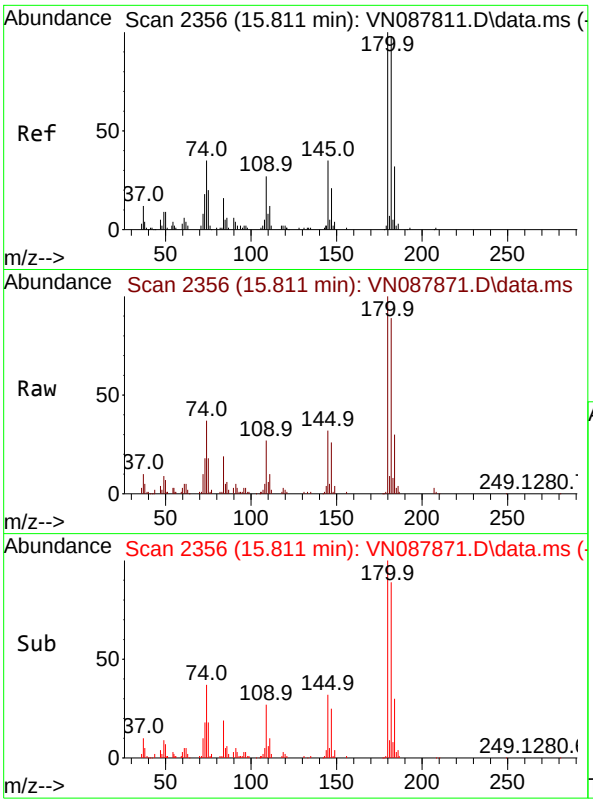


#88
1,2-Dibromo-3-Chloropropane
Concen: 21.711 ug/l
RT: 14.694 min Scan# 2166
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion: 75 Resp: 25828

Ion	Ratio	Lower	Upper
75	100		
155	79.2	53.0	79.4
157	89.4	72.2	108.4

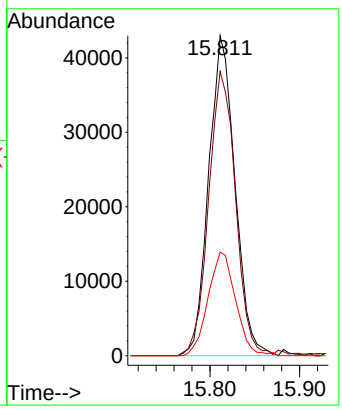




#89
1,2,4-Trichlorobenzene
Concen: 23.221 ug/l
RT: 15.811 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

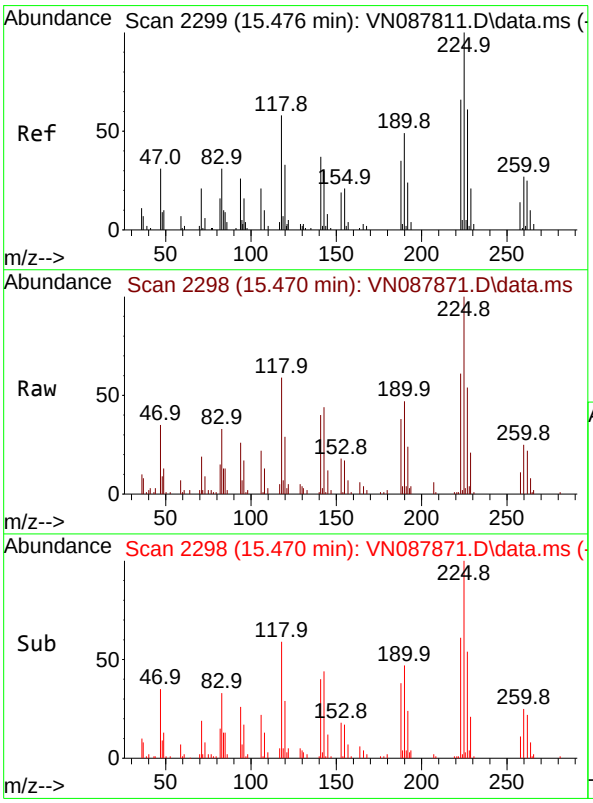
Tgt Ion:180 Resp: 8761

Ion	Ratio	Lower	Upper
180	100		
182	90.4	74.6	111.8
145	33.7	27.4	41.0



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

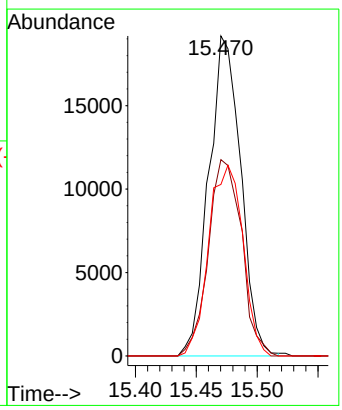
Manual Integrations
APPROVED
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025

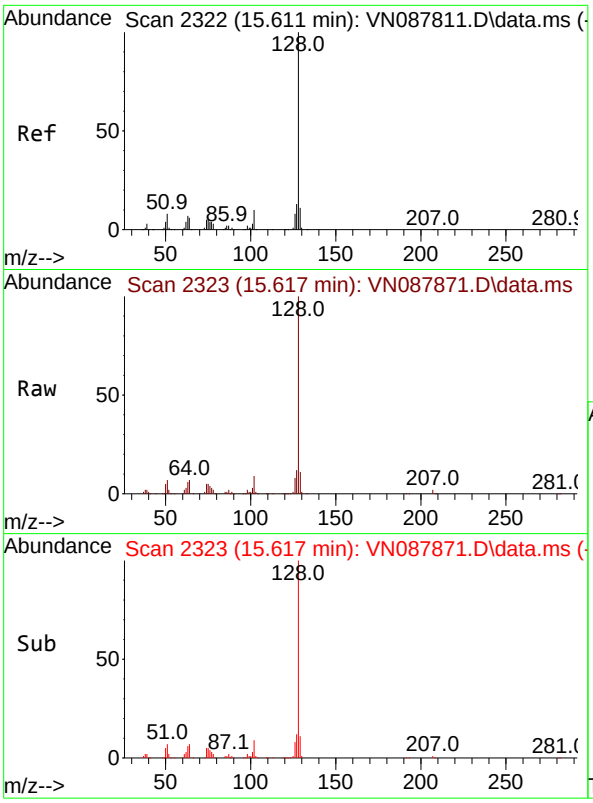


#90
Hexachlorobutadiene
Concen: 27.704 ug/l
RT: 15.470 min Scan# 2298
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:225 Resp: 35041

Ion	Ratio	Lower	Upper
225	100		
223	63.7	0.0	118.2
227	63.9	0.0	139.0

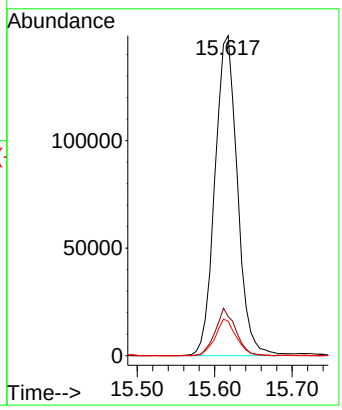




#91
Naphthalene
Concen: 21.607 ug/l
RT: 15.617 min Scan# 2
Delta R.T. 0.006 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

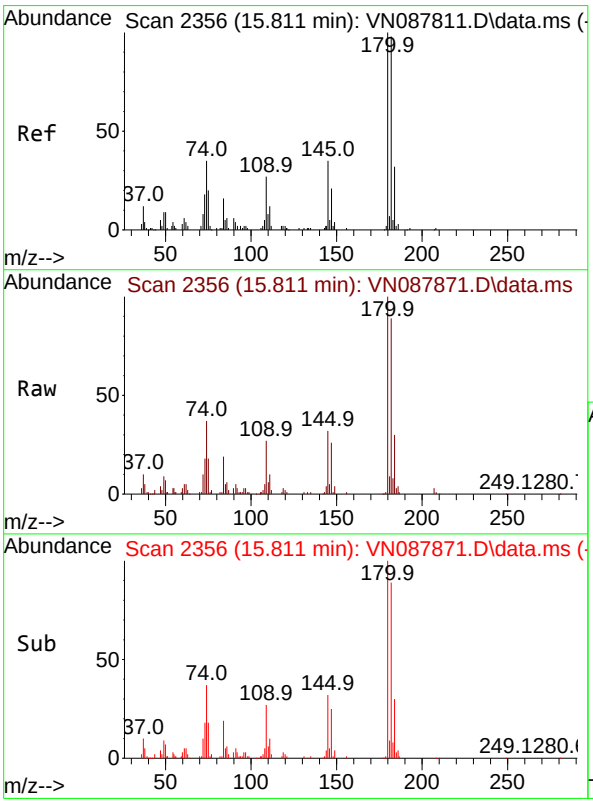
Tgt Ion:128 Resp: 30011

Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.2	15.4
129	10.7	8.3	12.5



Instrument :
MSVOA_N
ClientSampleId :
VN0917WBSD01

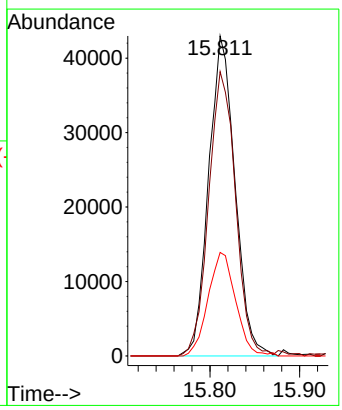
Manual Integrations
APPROVED
Reviewed By :John Carlone 09/18/2025
Supervised By :Mahesh Dadoda 09/18/2025



#92
1,2,3-Trichlorobenzene
Concen: 23.221 ug/l
RT: 15.811 min Scan# 2356
Delta R.T. -0.000 min
Lab File: VN087871.D
Acq: 17 Sep 2025 11:30

Tgt Ion:180 Resp: 87612

Ion	Ratio	Lower	Upper
180	100		
182	90.4	0.0	186.4
145	33.7	0.0	68.4



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Manual Integration Report

Sequence:	vn090425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC020	VN087714.D	1,2,3-Trichloropropane	sam	9/5/2025 1:44:22 PM	MMDadoda	9/5/2025 2:56:13 PM	Peak Integrated by Software
VSTDCCC020	VN087714.D	Acetone	sam	9/5/2025 1:44:22 PM	MMDadoda	9/5/2025 2:56:13 PM	Peak Integrated by Software
VSTDCCC020	VN087714.D	Allyl chloride	sam	9/5/2025 1:44:22 PM	MMDadoda	9/5/2025 2:56:13 PM	Peak Integrated by Software
VSTDCCC020	VN087714.D	n-amyl Acetate	sam	9/5/2025 1:44:22 PM	MMDadoda	9/5/2025 2:56:13 PM	Peak Integrated by Software
VSTDCCC020	VN087723.D	1,2,3-Trichloropropane	sam	9/5/2025 1:45:37 PM	MMDadoda	9/5/2025 2:56:18 PM	Peak Integrated by Software
VSTDCCC020	VN087723.D	n-amyl Acetate	sam	9/5/2025 1:45:37 PM	MMDadoda	9/5/2025 2:56:18 PM	Peak Integrated by Software
VSTDCCC020	VN087723.D	tert-Butyl Alcohol	sam	9/5/2025 1:45:37 PM	MMDadoda	9/5/2025 2:56:18 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	1,1,2-Trichlorotrifluoroethane	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	1,2,3-Trichloropropane	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	1,2-Dibromo-3-Chloropropane	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	2,2-Dichloropropane	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	Acetone	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	Allyl chloride	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vn090425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VN087725.D	Diethyl Ether	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	Methyl Iodide	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	Methyl methacrylate	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	Methyl tert-Butyl Ether	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	n-amyl Acetate	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	tert-Butyl Alcohol	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICC005	VN087725.D	trans-1,2-Dichloroethene	sam	9/5/2025 1:45:43 PM	MMDadoda	9/5/2025 2:56:20 PM	Peak Integrated by Software
VSTDICCC020	VN087726.D	1,2,3-Trichloropropane	sam	9/5/2025 1:45:53 PM	MMDadoda	9/5/2025 2:56:23 PM	Peak Integrated by Software
VSTDICCC020	VN087726.D	Acrylonitrile	sam	9/5/2025 1:45:53 PM	MMDadoda	9/5/2025 2:56:23 PM	Peak Integrated by Software
VSTDICCC020	VN087726.D	n-amyl Acetate	sam	9/5/2025 1:45:53 PM	MMDadoda	9/5/2025 2:56:23 PM	Peak Integrated by Software
VSTDICCC020	VN087726.D	trans-1,2-Dichloroethene	sam	9/5/2025 1:45:53 PM	MMDadoda	9/5/2025 2:56:23 PM	Peak Integrated by Software
VSTDICC050	VN087727.D	1,2,3-Trichloropropane	sam	9/5/2025 1:46:26 PM	MMDadoda	9/5/2025 2:56:24 PM	Peak Integrated by Software
VSTDICC050	VN087727.D	n-amyl Acetate	sam	9/5/2025 1:46:26 PM	MMDadoda	9/5/2025 2:56:24 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vn090425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN087728.D	1,2,3-Trichloropropane	sam	9/5/2025 1:46:31 PM	MMDadoda	9/5/2025 2:56:26 PM	Peak Integrated by Software
VSTDICC100	VN087728.D	Acrolein	sam	9/5/2025 1:46:31 PM	MMDadoda	9/5/2025 2:56:26 PM	Peak Integrated by Software
VSTDICC100	VN087728.D	n-amyl Acetate	sam	9/5/2025 1:46:31 PM	MMDadoda	9/5/2025 2:56:26 PM	Peak Integrated by Software
VSTDICC150	VN087729.D	1,2,3-Trichloropropane	sam	9/5/2025 1:45:48 PM	MMDadoda	9/5/2025 2:56:28 PM	Peak Integrated by Software
VSTDICC150	VN087729.D	Acrolein	sam	9/5/2025 1:45:48 PM	MMDadoda	9/5/2025 2:56:28 PM	Peak Integrated by Software
VSTDICC150	VN087729.D	Carbon Disulfide	sam	9/5/2025 1:45:48 PM	MMDadoda	9/5/2025 2:56:28 PM	Peak Integrated by Software
VSTDICC150	VN087729.D	n-amyl Acetate	sam	9/5/2025 1:45:48 PM	MMDadoda	9/5/2025 2:56:28 PM	Peak Integrated by Software
VSTDICV020	VN087731.D	1,2,3-Trichloropropane	sam	9/5/2025 1:46:09 PM	MMDadoda	9/5/2025 2:56:30 PM	Peak Integrated by Software
VSTDICV020	VN087731.D	Acrolein	sam	9/5/2025 1:46:09 PM	MMDadoda	9/5/2025 2:56:30 PM	Peak Integrated by Software
VSTDICV020	VN087731.D	Methyl Iodide	sam	9/5/2025 1:46:09 PM	MMDadoda	9/5/2025 2:56:30 PM	Peak Integrated by Software
VSTDICV020	VN087731.D	n-amyl Acetate	sam	9/5/2025 1:46:09 PM	MMDadoda	9/5/2025 2:56:30 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN091725	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC020	VN087869.D	1,2,3-Trichloropropane	JOHN	9/18/2025 8:16:06 AM	MMDadoda	9/18/2025 3:25:08 PM	Peak Integrated by Software
VSTDCCC020	VN087869.D	Allyl chloride	JOHN	9/18/2025 8:16:06 AM	MMDadoda	9/18/2025 3:25:08 PM	Peak Integrated by Software
VSTDCCC020	VN087869.D	Ethyl Benzene	JOHN	9/18/2025 8:16:06 AM	MMDadoda	9/18/2025 3:25:08 PM	Peak Integrated by Software
VSTDCCC020	VN087869.D	n-amyl Acetate	JOHN	9/18/2025 8:16:06 AM	MMDadoda	9/18/2025 3:25:08 PM	Peak Integrated by Software
VSTDCCC020	VN087869.D	t-1,4-Dichloro-2-butene	JOHN	9/18/2025 8:16:06 AM	MMDadoda	9/18/2025 3:25:08 PM	Peak Integrated by Software
VN0917WBS01	VN087870.D	1,1,2-Trichlorotrifluoroethane	JOHN	9/18/2025 8:16:10 AM	MMDadoda	9/18/2025 3:25:10 PM	Peak Integrated by Software
VN0917WBS01	VN087870.D	1,2,3-Trichloropropane	JOHN	9/18/2025 8:16:10 AM	MMDadoda	9/18/2025 3:25:10 PM	Peak Integrated by Software
VN0917WBS01	VN087870.D	Acrolein	JOHN	9/18/2025 8:16:10 AM	MMDadoda	9/18/2025 3:25:10 PM	Peak Integrated by Software
VN0917WBS01	VN087870.D	Methylene Chloride	JOHN	9/18/2025 8:16:10 AM	MMDadoda	9/18/2025 3:25:10 PM	Peak Integrated by Software
VN0917WBS01	VN087870.D	n-amyl Acetate	JOHN	9/18/2025 8:16:10 AM	MMDadoda	9/18/2025 3:25:10 PM	Peak Integrated by Software
VN0917WBSD01	VN087871.D	1,2,3-Trichloropropane	JOHN	9/18/2025 8:16:15 AM	MMDadoda	9/18/2025 3:25:09 PM	Peak Integrated by Software
VN0917WBSD01	VN087871.D	Acetone	JOHN	9/18/2025 8:16:15 AM	MMDadoda	9/18/2025 3:25:09 PM	Peak Integrated by Software
VN0917WBSD01	VN087871.D	Acrolein	JOHN	9/18/2025 8:16:15 AM	MMDadoda	9/18/2025 3:25:09 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN091725	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VN0917WBSD01	VN087871.D	n-amyl Acetate	JOHN	9/18/2025 8:16:15 AM	MMDadoda	9/18/2025 3:25:09 PM	Peak Integrated by Software
VN0917WBSD01	VN087871.D	tert-Butyl Alcohol	JOHN	9/18/2025 8:16:15 AM	MMDadoda	9/18/2025 3:25:09 PM	Peak Integrated by Software
VSTDCCC020	VN087883.D	1,2,3-Trichloropropane	JOHN	9/18/2025 8:16:41 AM	MMDadoda	9/18/2025 3:25:18 PM	Peak Integrated by Software
VSTDCCC020	VN087883.D	Acrolein	JOHN	9/18/2025 8:16:41 AM	MMDadoda	9/18/2025 3:25:18 PM	Peak Integrated by Software
VSTDCCC020	VN087883.D	n-amyl Acetate	JOHN	9/18/2025 8:16:41 AM	MMDadoda	9/18/2025 3:25:18 PM	Peak Integrated by Software

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN090425

Review By	Mahesh Dadoda	Review On	9/5/2025 2:55:23 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/5/2025 2:57:06 PM		
SubDirectory	VN090425	HP Acquire Method		HP Processing Method	624N080525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135371,VP135374
Initial Calibration Stds	VP135375,VP135376,VP135377,VP135378,VP135379
CCC	VP135372,VP135373
Internal Standard/PEM	
ICV/I.BLK	VP135380
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087713.D	04 Sep 2025 10:10	JC\MD	Ok
2	VSTDCCC020	VN087714.D	04 Sep 2025 10:54	JC\MD	Ok,M
3	VN0904WBS01	VN087715.D	04 Sep 2025 12:04	JC\MD	Ok,M
4	VN0904WBSD01	VN087716.D	04 Sep 2025 12:38	JC\MD	Ok,M
5	VN0904WBL01	VN087717.D	04 Sep 2025 12:59	JC\MD	Ok
6	Q3017-01	VN087718.D	04 Sep 2025 13:35	JC\MD	Ok
7	Q3017-02	VN087719.D	04 Sep 2025 13:56	JC\MD	Ok
8	Q3017-04	VN087720.D	04 Sep 2025 14:16	JC\MD	Ok
9	Q3017-05	VN087721.D	04 Sep 2025 14:37	JC\MD	Ok
10	Q3017-03	VN087722.D	04 Sep 2025 14:58	JC\MD	Ok
11	VSTDCCC020	VN087723.D	04 Sep 2025 15:21	JC\MD	Ok,M
12	BLK	VN087724.D	04 Sep 2025 15:41	JC\MD	Ok
13	VSTDICC005	VN087725.D	04 Sep 2025 16:23	JC\MD	Ok,M
14	VSTDICCC020	VN087726.D	04 Sep 2025 16:44	JC\MD	Ok,M
15	VSTDICC050	VN087727.D	04 Sep 2025 17:05	JC\MD	Ok,M
16	VSTDICC100	VN087728.D	04 Sep 2025 17:25	JC\MD	Ok,M
17	VSTDICC150	VN087729.D	04 Sep 2025 17:46	JC\MD	Ok,M
18	IBLK	VN087730.D	04 Sep 2025 18:07	JC\MD	Ok
19	VSTDICV020	VN087731.D	04 Sep 2025 18:28	JC\MD	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN091725

Review By	John Carlone	Review On	9/18/2025 8:19:51 AM		
Supervise By	Mahesh Dadoda	Supervise On	9/18/2025 3:25:32 PM		
SubDirectory	VN091725	HP Acquire Method		HP Processing Method	624N090425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135514
Initial Calibration Stds	
CCC	VP135515,VP135516
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087868.D	17 Sep 2025 08:24	JC\MD	Ok
2	VSTDCCC020	VN087869.D	17 Sep 2025 09:42	JC\MD	Ok,M
3	VN0917WBS01	VN087870.D	17 Sep 2025 10:55	JC\MD	Ok,M
4	VN0917WBSD01	VN087871.D	17 Sep 2025 11:30	JC\MD	Ok,M
5	VN0917WBL01	VN087872.D	17 Sep 2025 12:03	JC\MD	Ok
6	Q3015-02	VN087873.D	17 Sep 2025 12:38	JC\MD	Ok
7	IBLK	VN087874.D	17 Sep 2025 13:11	JC\MD	Ok
8	Q3120-01	VN087875.D	17 Sep 2025 13:32	JC\MD	Ok
9	Q3120-02	VN087876.D	17 Sep 2025 13:53	JC\MD	Ok,M
10	IBLK	VN087877.D	17 Sep 2025 14:14	JC\MD	Ok
11	Q3098-01	VN087878.D	17 Sep 2025 14:35	JC\MD	ReRun
12	Q3098-02MS	VN087879.D	17 Sep 2025 14:57	JC\MD	Ok,M
13	Q3098-03MSD	VN087880.D	17 Sep 2025 15:18	JC\MD	Ok,M
14	IBLK	VN087881.D	17 Sep 2025 15:39	JC\MD	Ok
15	Q3098-01	VN087882.D	17 Sep 2025 16:00	JC\MD	Ok,M
16	VSTDCCC020	VN087883.D	17 Sep 2025 16:21	JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN090425

Review By	Mahesh Dadoda	Review On	9/5/2025 2:55:23 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/5/2025 2:57:06 PM		
SubDirectory	VN090425	HP Acquire Method		HP Processing Method	624N080525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135371,VP135374
Initial Calibration Stds	VP135375,VP135376,VP135377,VP135378,VP135379
CCC	VP135372,VP135373
Internal Standard/PEM	
ICV/I.BLK	VP135380
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087713.D	04 Sep 2025 10:10		JC\MD	Ok
2	VSTDCCC020	VSTDCCC020	VN087714.D	04 Sep 2025 10:54		JC\MD	Ok,M
3	VN0904WBS01	VN0904WBS01	VN087715.D	04 Sep 2025 12:04		JC\MD	Ok,M
4	VN0904WBSD01	VN0904WBSD01	VN087716.D	04 Sep 2025 12:38		JC\MD	Ok,M
5	VN0904WBL01	VN0904WBL01	VN087717.D	04 Sep 2025 12:59		JC\MD	Ok
6	Q3017-01	BP-TB-20250903	VN087718.D	04 Sep 2025 13:35	vial A pH<2 TB	JC\MD	Ok
7	Q3017-02	TT-076-IDWGW-20250	VN087719.D	04 Sep 2025 13:56	vial A+B pH<2	JC\MD	Ok
8	Q3017-04	TT-078-IDWGW-20250	VN087720.D	04 Sep 2025 14:16	vial A+B pH<2	JC\MD	Ok
9	Q3017-05	TT-079-IDWGW-20250	VN087721.D	04 Sep 2025 14:37	vial A+B pH<2	JC\MD	Ok
10	Q3017-03	TT-077-IDWGW-20250	VN087722.D	04 Sep 2025 14:58	vial A+B pH<2	JC\MD	Ok
11	VSTDCCC020	VSTDCCC020EC	VN087723.D	04 Sep 2025 15:21		JC\MD	Ok,M
12	BLK	BLK	VN087724.D	04 Sep 2025 15:41		JC\MD	Ok
13	VSTDICC005	VSTDICC005	VN087725.D	04 Sep 2025 16:23		JC\MD	Ok,M
14	VSTDICCC020	VSTDICCC020	VN087726.D	04 Sep 2025 16:44		JC\MD	Ok,M
15	VSTDICC050	VSTDICC050	VN087727.D	04 Sep 2025 17:05		JC\MD	Ok,M
16	VSTDICC100	VSTDICC100	VN087728.D	04 Sep 2025 17:25		JC\MD	Ok,M
17	VSTDICC150	VSTDICC150	VN087729.D	04 Sep 2025 17:46		JC\MD	Ok,M
18	IBLK	IBLK	VN087730.D	04 Sep 2025 18:07		JC\MD	Ok

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN090425

Review By	Mahesh Dadoda	Review On	9/5/2025 2:55:23 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/5/2025 2:57:06 PM		
SubDirectory	VN090425	HP Acquire Method		HP Processing Method	624N080525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135371,VP135374
Initial Calibration Stds	VP135375,VP135376,VP135377,VP135378,VP135379
CCC	VP135372,VP135373
Internal Standard/PEM	
ICV/I.BLK	VP135380
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	VSTDICV020	ICVVN090425	VN087731.D	04 Sep 2025 18:28		JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN091725

Review By	John Carlone	Review On	9/18/2025 8:19:51 AM		
Supervise By	Mahesh Dadoda	Supervise On	9/18/2025 3:25:32 PM		
SubDirectory	VN091725	HP Acquire Method		HP Processing Method	624N090425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135514
Initial Calibration Stds	
CCC	VP135515,VP135516
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	VN087868.D	17 Sep 2025 08:24		JC\MD	Ok
2	VSTDCCC020	VSTDCCC020	VN087869.D	17 Sep 2025 09:42	pH#Lot#V12668	JC\MD	Ok,M
3	VN0917WBS01	VN0917WBS01	VN087870.D	17 Sep 2025 10:55		JC\MD	Ok,M
4	VN0917WBSD01	VN0917WBSD01	VN087871.D	17 Sep 2025 11:30		JC\MD	Ok,M
5	VN0917WBL01	VN0917WBL01	VN087872.D	17 Sep 2025 12:03		JC\MD	Ok
6	Q3015-02	WP0925-PT-VOA-WP	VN087873.D	17 Sep 2025 12:38		JC\MD	Ok
7	IBLK	IBLK	VN087874.D	17 Sep 2025 13:11		JC\MD	Ok
8	Q3120-01	OUTFALL-DSN-001	VN087875.D	17 Sep 2025 13:32	vial A pH<2	JC\MD	Ok
9	Q3120-02	OUTFALL-DSN-002	VN087876.D	17 Sep 2025 13:53	vial A pH<2	JC\MD	Ok,M
10	IBLK	IBLK	VN087877.D	17 Sep 2025 14:14		JC\MD	Ok
11	Q3098-01	EFF-WW	VN087878.D	17 Sep 2025 14:35	vial A pH<2 Surrogate fail	JC\MD	ReRun
12	Q3098-02MS	EFF-WWMS	VN087879.D	17 Sep 2025 14:57	vial A pH<2	JC\MD	Ok,M
13	Q3098-03MSD	EFF-WWMSD	VN087880.D	17 Sep 2025 15:18	vial A pH<2	JC\MD	Ok,M
14	IBLK	IBLK	VN087881.D	17 Sep 2025 15:39		JC\MD	Ok
15	Q3098-01	EFF-WW	VN087882.D	17 Sep 2025 16:00	vial B pH<2	JC\MD	Ok,M
16	VSTDCCC020	VSTDCCC020EC	VN087883.D	17 Sep 2025 16:21		JC\MD	Ok,M

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q3015

Test : VOCMS Group1

Prepbatch ID :

Sequence ID/Qc Batch ID: VN091725,

Standard ID :
VP134149,VP134691,VP134957,VP135059,VP135480,VP135514,VP135515,VP135516,

Chemical ID :
V13391,V14444,V14446,V14507,V14508,V14529,V14530,V14580,V14625,V14629,V14636,V14637,V14638,V14639,V14702,V14705,V14716,V14745,V14751,V14806,V14807,V14843,V14885,V14929,V15066,V15067,V15068,W3112,

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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	VP134149	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 1.00000ml of V14636 + 1.00000ml of V14637 + 1.00000ml of V14638 + 1.00000ml of V14639 + 46.00000ml of V14929 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
466	624 Internal Standard and Surrogate Mix, 150PPM	VP134691	07/09/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/15/2025

FROM 0.15000ml of V14580 + 0.15000ml of V14885 + 24.70000ml of V14629 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP134957	08/01/2025	11/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/06/2025

FROM 0.50000ml of V13391 + 49.50000ml of V14625 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP135059	08/11/2025	09/19/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/19/2025

FROM 0.40000ml of V14843 + 1.00000ml of V14444 + 1.00000ml of V14446 + 1.00000ml of V14507 + 1.00000ml of V14508 + 1.00000ml of V14529 + 1.00000ml of V14530 + 1.00000ml of V14705 + 1.00000ml of V14745 + 1.00000ml of V14751 + 1.00000ml of V14806 + 1.00000ml of V14807 + 1.50000ml of V14702 + 1.50000ml of V14716 + 10.60000ml of V14625 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP135480	09/16/2025	10/15/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/19/2025

FROM 1.00000ml of V15066 + 1.50000ml of V15067 + 1.50000ml of V15068 + 21.00000ml of V14625 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP135514	09/17/2025	09/18/2025	John Carlone	None	None	Mahesh Dadoda 09/19/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP134957 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
645	20 PPB CCC, 624	VP135515	09/17/2025	09/18/2025	John Carlone	None	None	Mahesh Dadoda 09/19/2025

FROM 39.97000ml of W3112 + 0.00500ml of VP134149 + 0.00500ml of VP135059 + 0.00500ml of VP135480 + 0.00800ml of VP134691 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
645	20 PPB CCC, 624	VP135516	09/17/2025	09/18/2025	John Carlone	None	None	Mahesh Dadoda 09/19/2025

FROM 39.97000ml of W3112 + 0.00500ml of VP134149 + 0.00500ml of VP135059 + 0.00500ml of VP135480 + 0.00800ml of VP134691 = 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	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	09/30/2025	08/08/2025 / SAM	08/15/2024 / SAM	V14444

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	09/30/2025	08/08/2025 / SAM	08/15/2024 / SAM	V14446

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	02/08/2026	08/08/2025 / SAM	09/17/2024 / SAM	V14507

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	02/08/2026	08/08/2025 / SAM	09/17/2024 / SAM	V14508

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	02/08/2026	08/08/2025 / SAM	09/18/2024 / SAM	V14529

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	02/08/2026	08/08/2025 / SAM	09/18/2024 / SAM	V14530

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555584 / Custom Standard, CLP VOA SurrogateStd [CS 5179-4]	A0219012	01/02/2026	01/02/2025 / SAM	11/18/2024 / SAM	V14580

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	01/29/2026	07/29/2025 / SAM	11/26/2024 / SAM	V14625

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	01/09/2026	07/07/2025 / SAM	11/26/2024 / SAM	V14629

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14636

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14637

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14638

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14639

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14702

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14705

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14716

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14745

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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	02/08/2026	08/08/2025 / SAM	12/17/2024 / SAM	V14751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	02/08/2026	08/08/2025 / SAM	01/08/2025 / SAM	V14806

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	02/08/2026	08/08/2025 / SAM	01/08/2025 / SAM	V14807

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0217535	11/12/2025	05/12/2025 / SAM	01/21/2025 / SAM	V14843

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555583 / Custom Standard, CLP VOA Internal Std [CS 5179-3]	A0223136	03/12/2026	03/12/2025 / SAM	03/12/2025 / SAM	V14885

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	12/06/2025	06/06/2025 / SAM	05/09/2025 / SAM	V14929

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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)	091525	10/15/2025	09/16/2025 / sam	09/16/2025 / sam	V15066

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	091525	10/15/2025	09/16/2025 / sam	09/16/2025 / sam	V15067

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	091525	10/15/2025	09/16/2025 / sam	09/16/2025 / sam	V15068

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

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

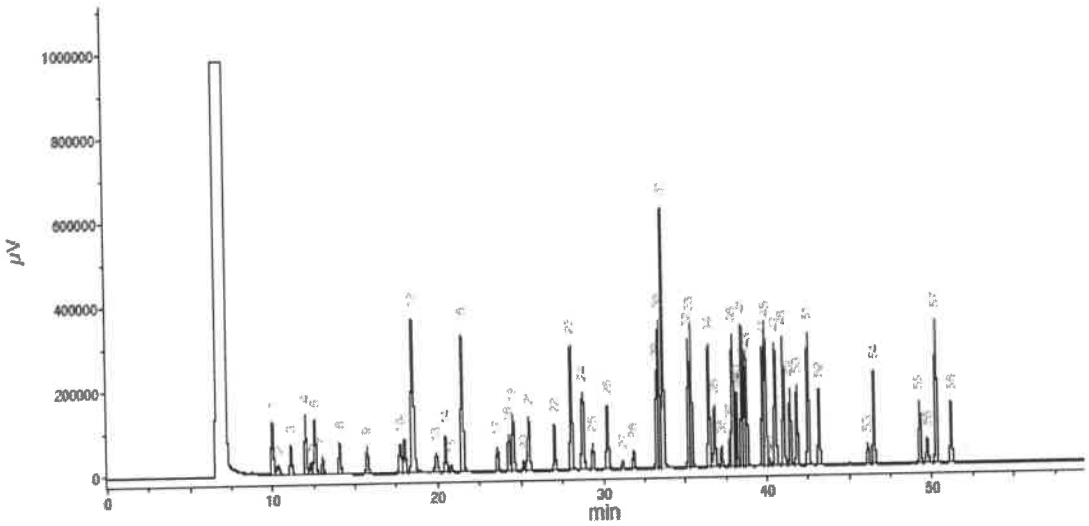
	Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached 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 848mg/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	20.8	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	40000.8	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	27.02
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	35.39
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	41.42
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.02
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.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	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))			
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	% (optional) > 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.
Storage Conditions	Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. 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

Formulated By:	Prashant Chauhan	021624	DATE
Reviewed By:	Pedro L. Rentas	021624	DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

5E-05 Balance Uncertainty

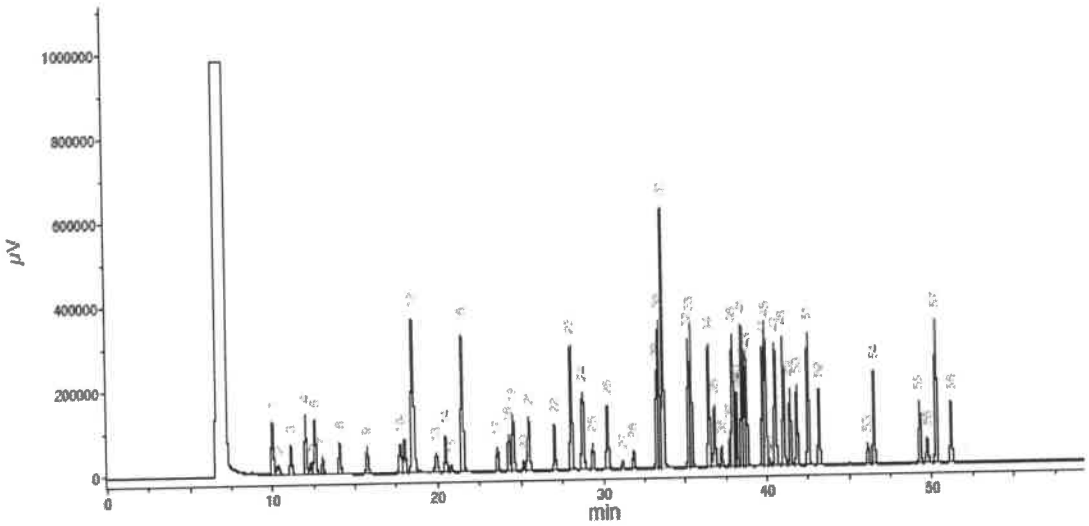
	Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached 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 848mg/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	20.8	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	40000.8	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	6.97
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	27.02
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethane/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	35.30
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	41.42
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.82
52	1,2-Dichlorobenzene	43.18
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	50.26
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.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	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))			
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	% (optional) > 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.
Storage Conditions	Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: Vapours may form explosive mixture with air.
Conditions to avoid: Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid: Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Solvent(s): Water **Lot#** 072324Q

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

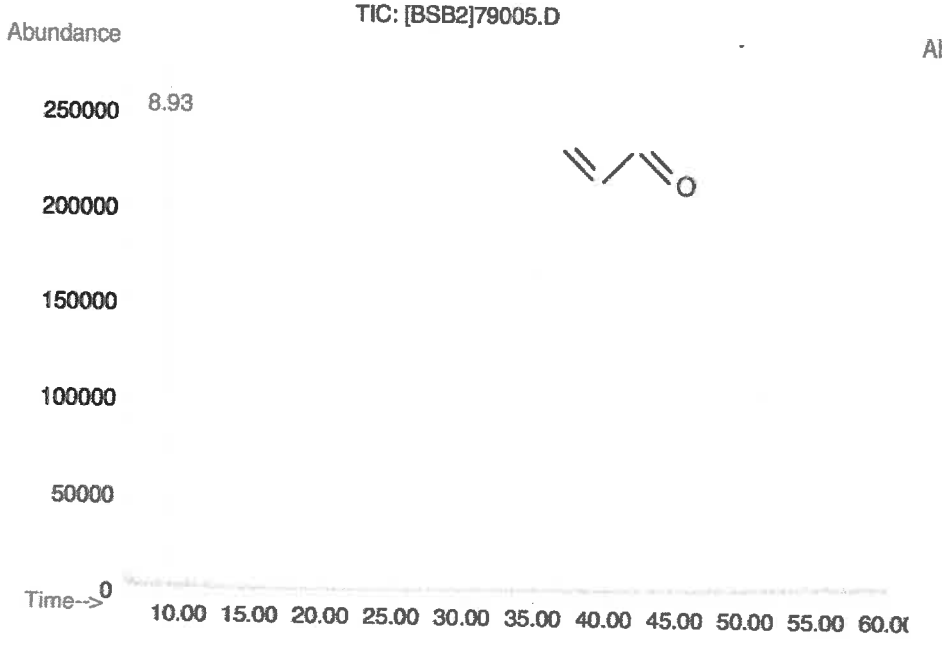
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.001 Flask Uncertainty

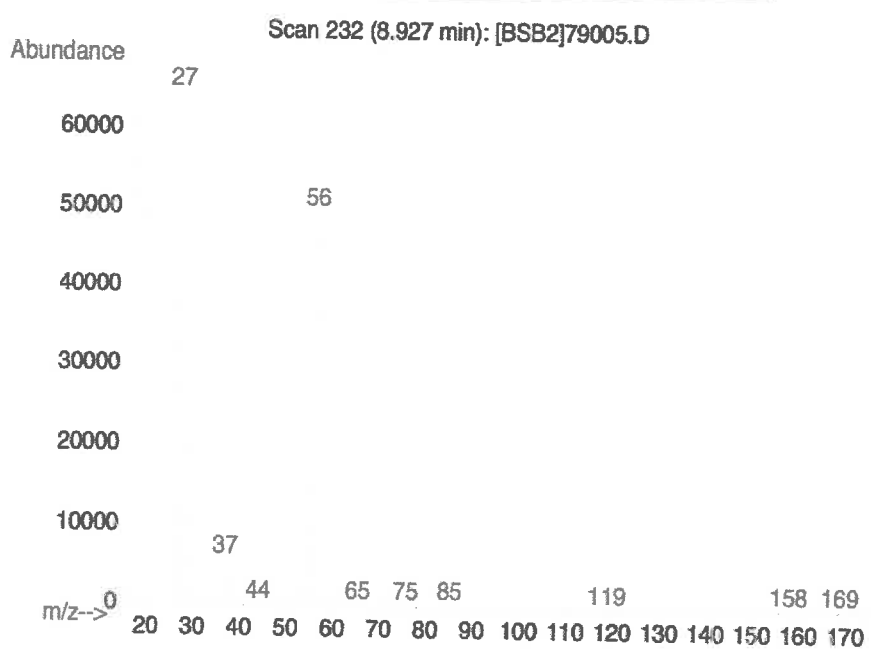
Justin Dippold 091424
Formulated By: Justin Dippold DATE

Pedro Rentas 091424
Reviewed By: Pedro L. Rentas 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.





- 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).

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Certified Reference Material CRM

Rec 09/16/24 2 Vials

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CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Solvent(s): Water **Lot#** 072324Q

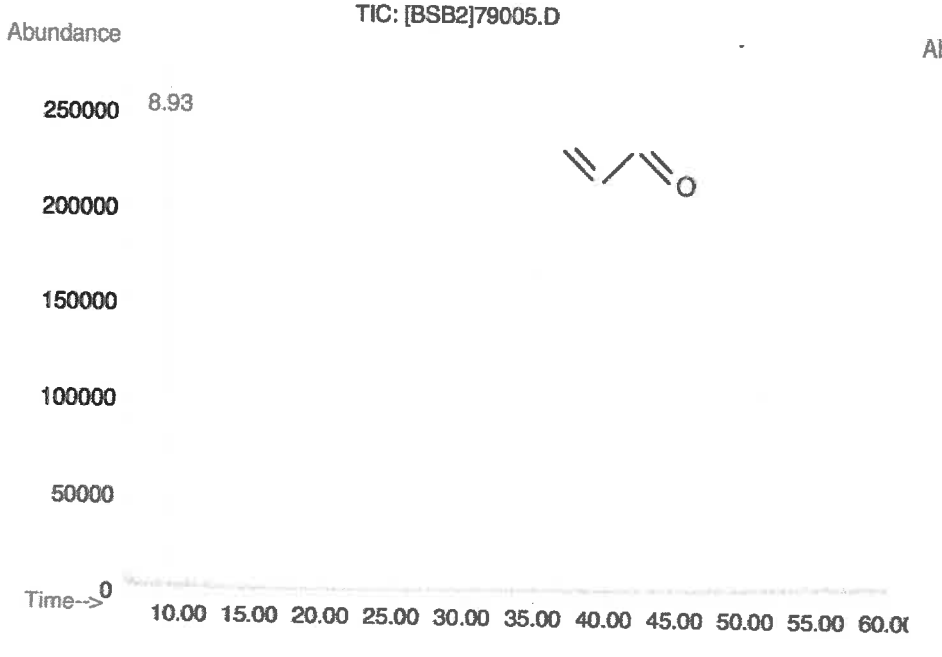
Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

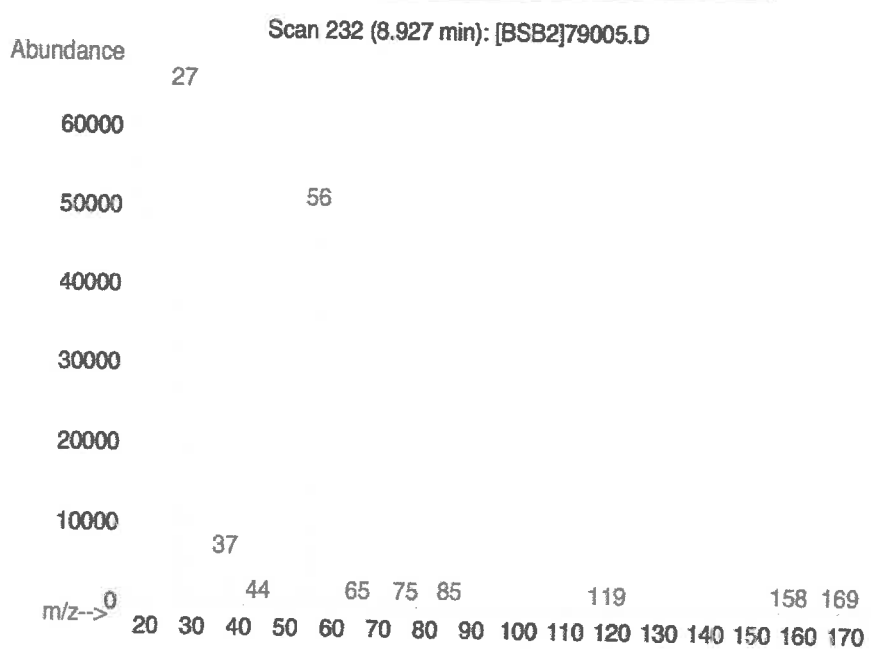
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.001 Flask Uncertainty

Justin Dippold	091424
Formulated By: Justin Dippold	DATE
Pedro Rentas	091424
Reviewed By: Pedro L. Rentas	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.





- 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).
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Certified Reference Material CRM

Rec 12/6/24
20 vial
V14630 to
V14649

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

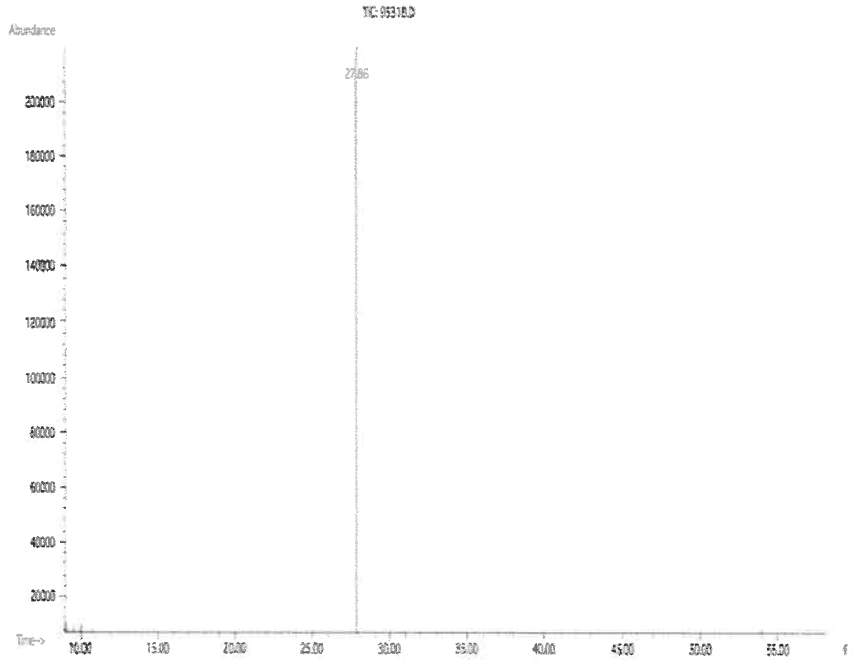
Solvent(s): Methanol **Lot#** EJ143-US

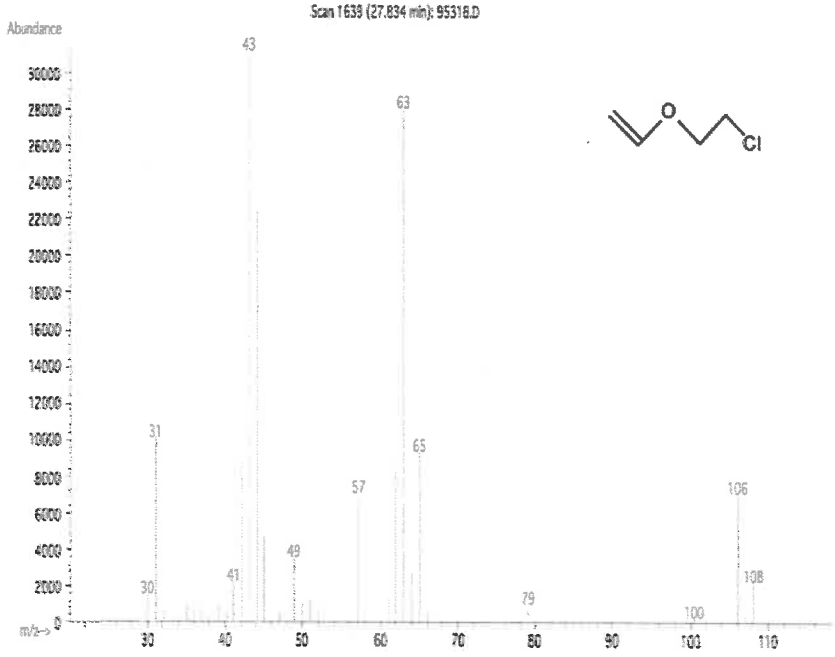
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro Rentas	120524
Reviewed By: Pedro L. Rentas	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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Rec 12/6/24
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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):	Lot#
Methanol	EJ143-US

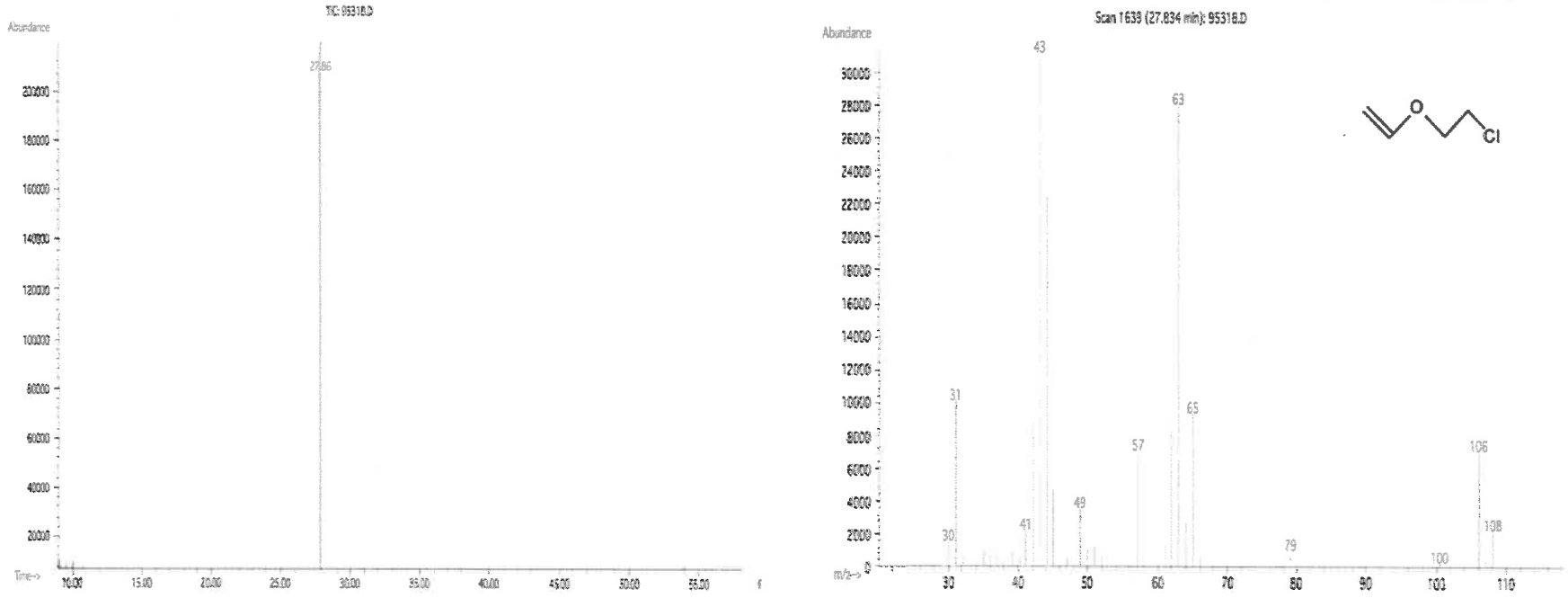
V14630 to V14649

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan		120524
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		120524
Reviewed By:	Pedro L. Rentas	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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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

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If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
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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.
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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
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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

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):	Lot#
Methanol	EJ143-US

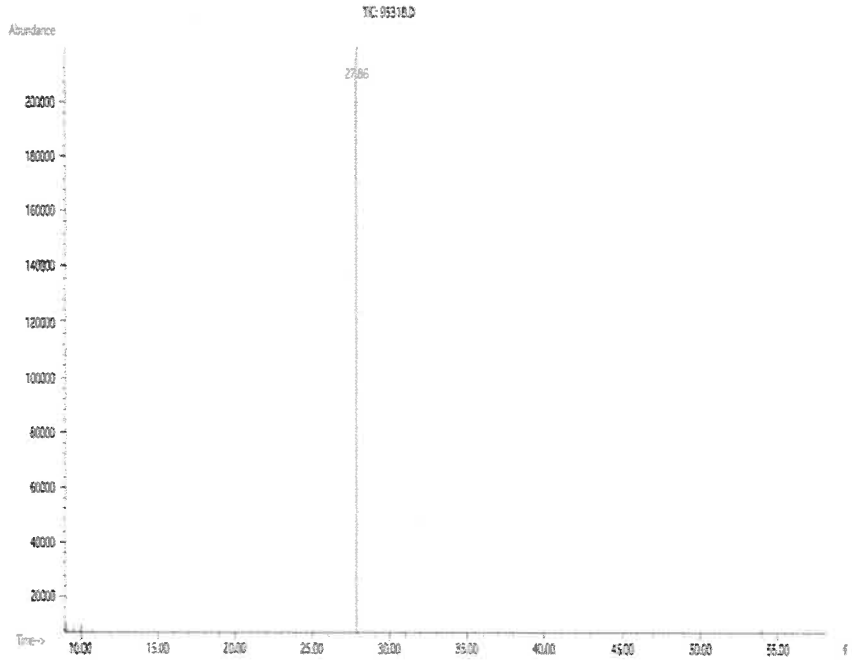
V14630 to V14649

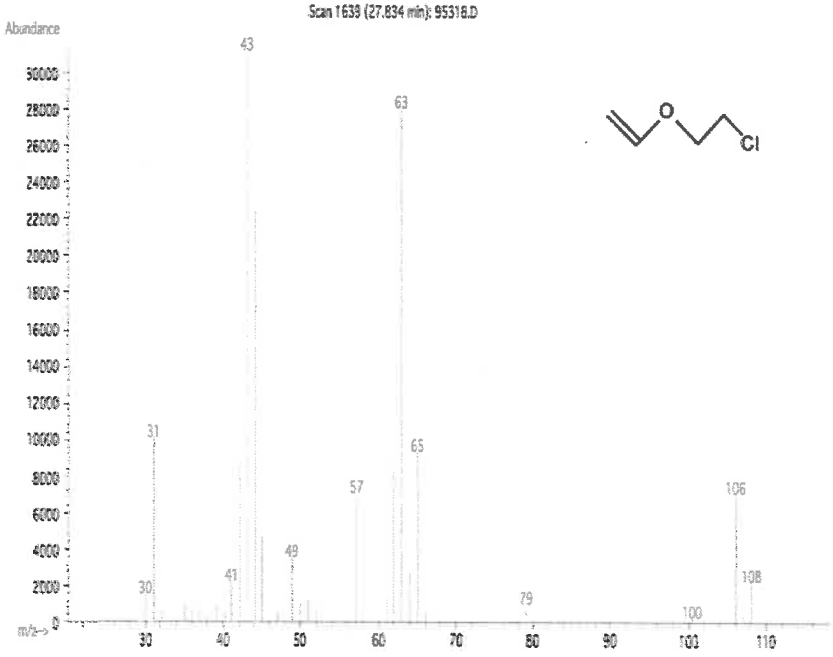
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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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).

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Solubility in Water COMPLETE

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Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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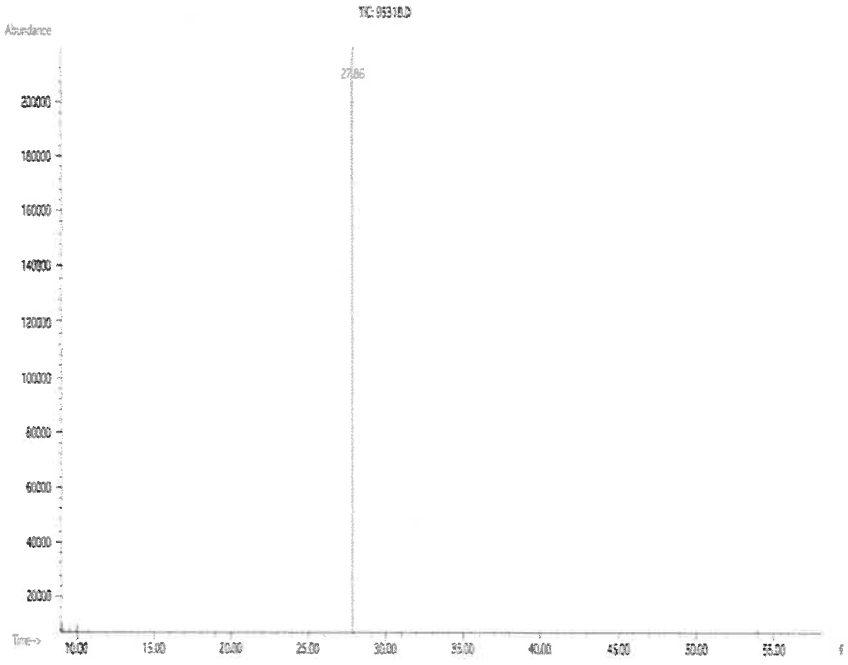

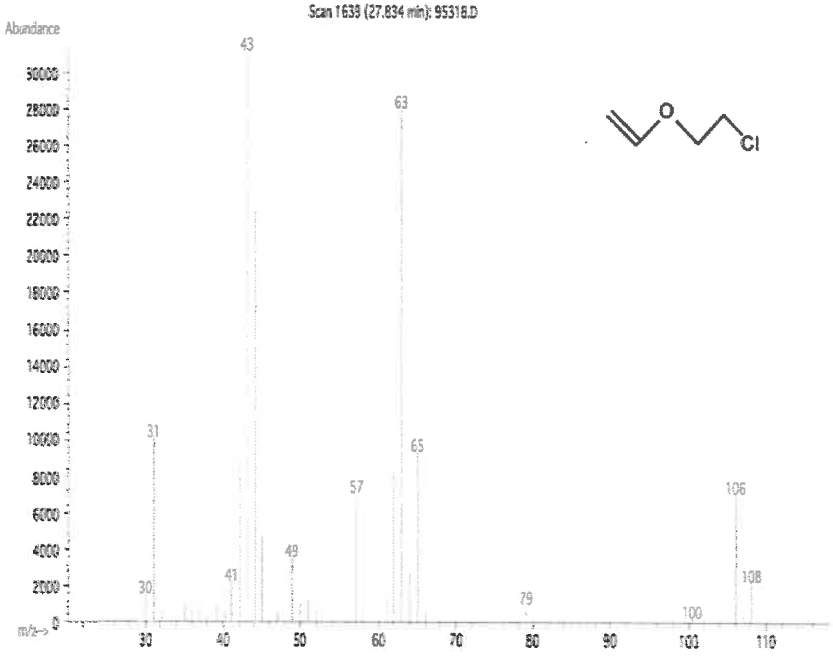

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RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0191805

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,483.9 µg/mL	+/- 139.5488

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

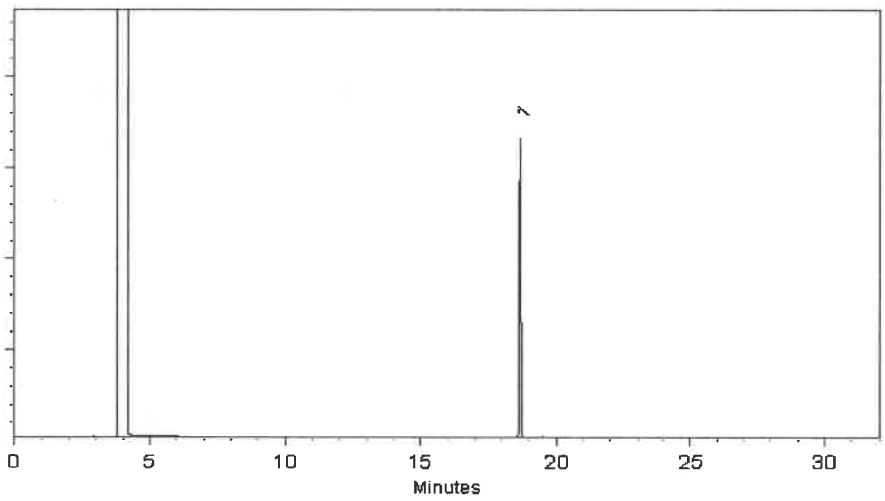
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alicia Leathers - Operation Technician I

Date Mixed: 17-Nov-2022 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 21-Nov-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.)

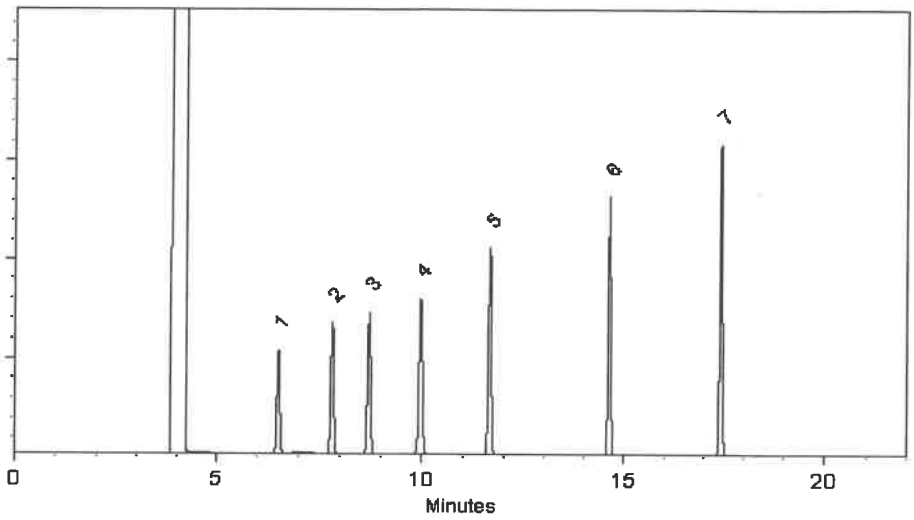
Inj. Temp:
200°C

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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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
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Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

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Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
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Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
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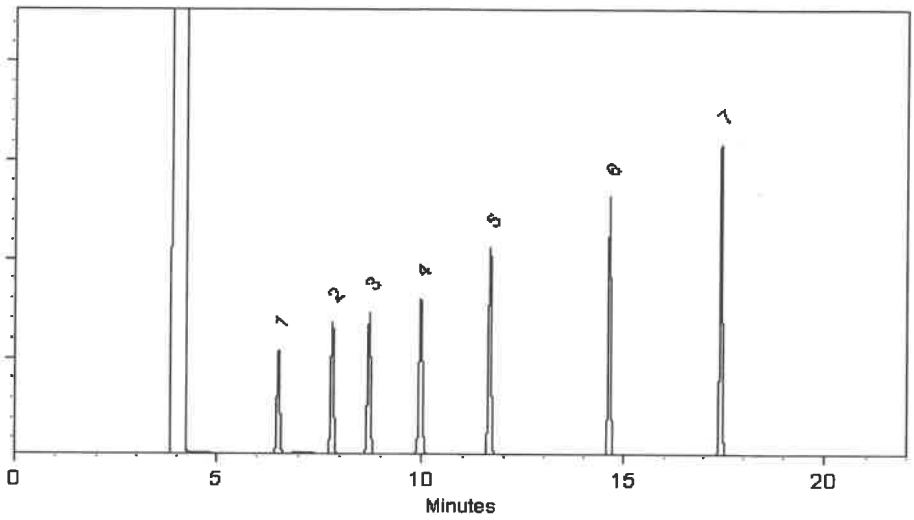
Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

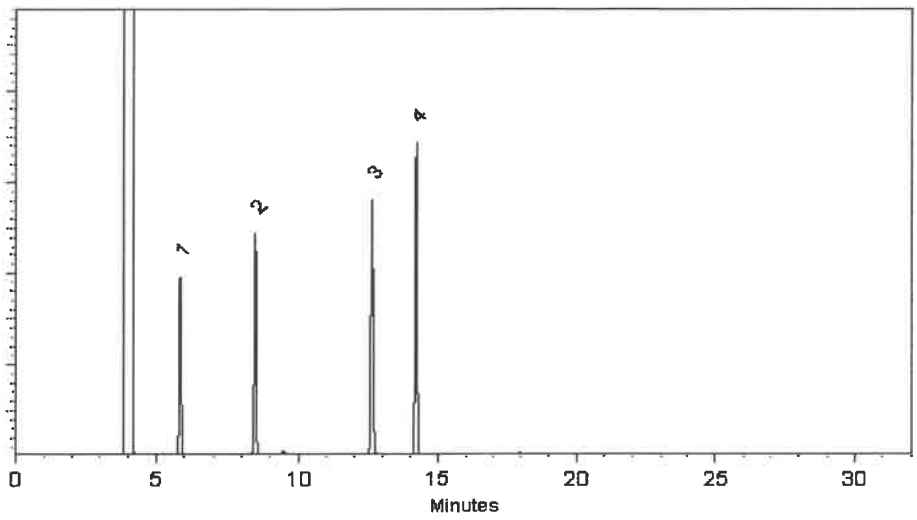
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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Certified Uncertainty Value Notes:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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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
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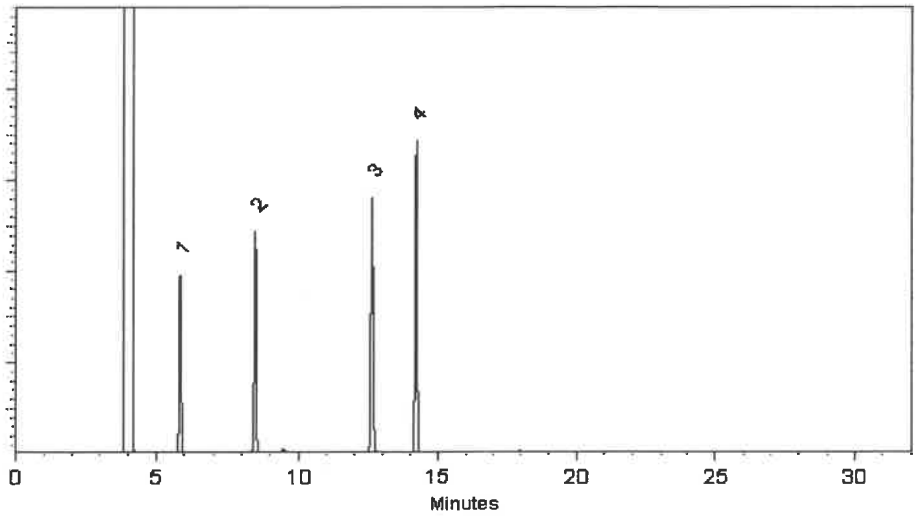

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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Manufacturing Notes:

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Handling Notes:

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* 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:
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Temp. Program:
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Inj. Temp:
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Det. Temp:
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Det. Type:
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Split Vent:
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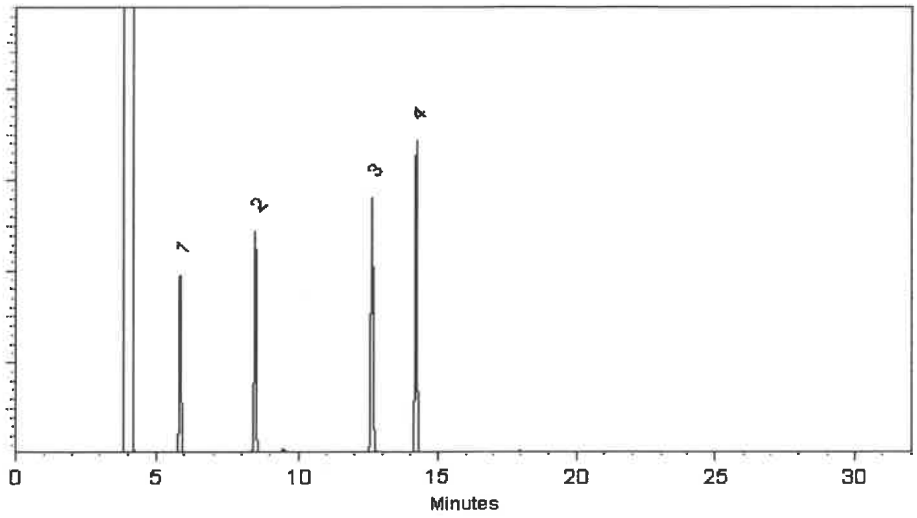
Inj. Vol
1µl



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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

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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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Rec 12/17/24

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V14727 to
V14756

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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. : 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.

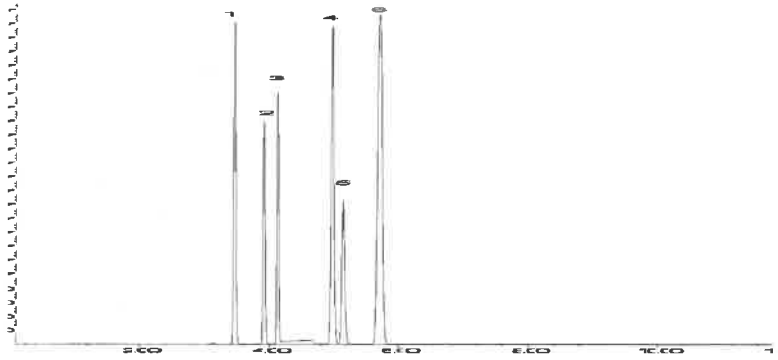
Inj. Temp:
200°C

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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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. : 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.

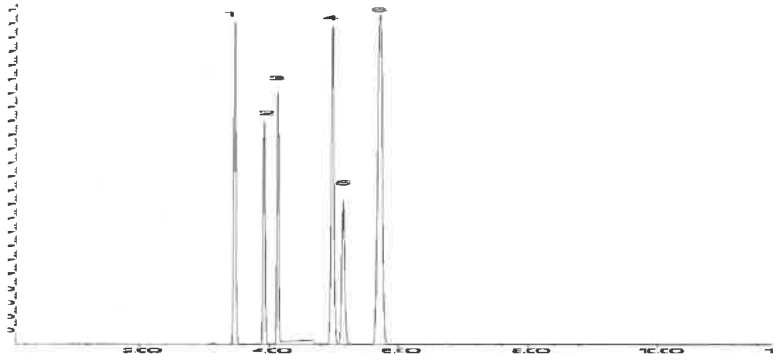
Inj. Temp:
200°C

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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ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

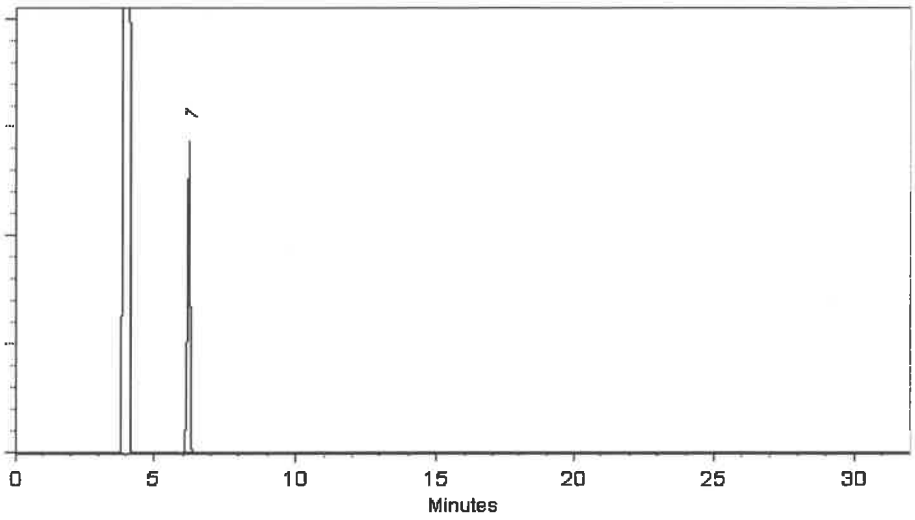
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

gravimetric

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. : 555584 **Lot No.:** A0219012

Description : Custom CLP VOA Surrogate Standard Mix

Custom CLP VOA Surrogate Standard Mix 25,000µg/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

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	25,228.0 µg/mL	+/- 1,428.7919
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	25,196.0 µg/mL	+/- 1,426.9795
3	Toluene-d8	2037-26-5	PR-34141	99%	25,228.0 µg/mL	+/- 1,428.7919

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Jess Hoy - Operations Tech I

Date Mixed: 12-Nov-2024 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- 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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Zo Vinyl Rec 01/08/25

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ilac-MRA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic

V14803 - V14822

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

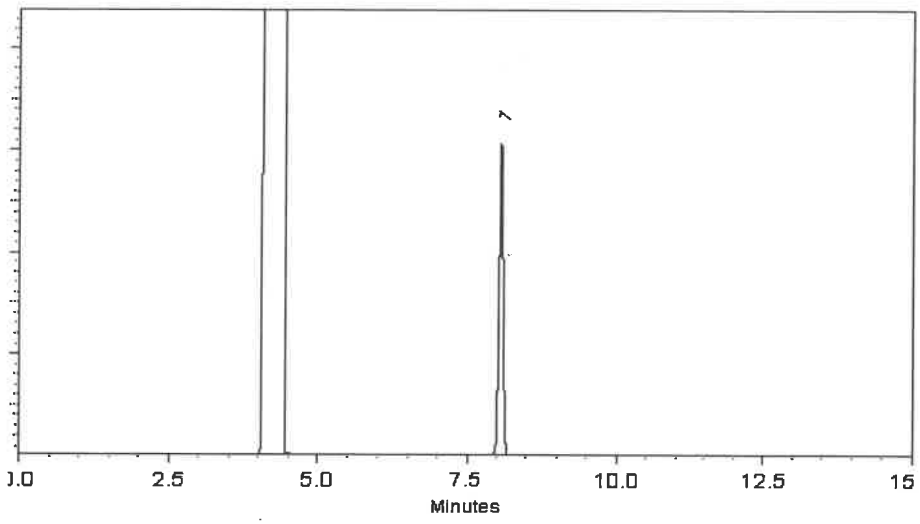
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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Manufacturing Notes:

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Handling Notes:

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Zo Vinyl Rec 01/08/25

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Certificate of Analysis

chromatographic

V14803 - V14822

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

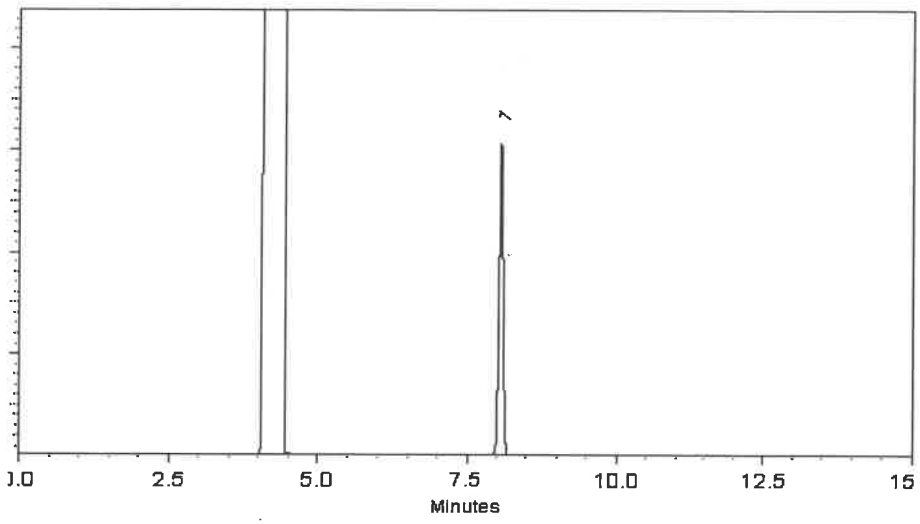
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

Rec 03/12/25

CERTIFIED REFERENCE MATERIAL

10 vials

Certificate of Analysis

gravimetric

V14885-to-V14894

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. : 555583 **Lot No.:** A0223136

Description : Custom CLP VOA Internal Standard Mix

Custom CLP VOA Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 0°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-Difluorobenzene	540-36-3	MKCS8657	99%	25,024.0 µg/mL	+/- 1,417.2383
2	Bromochloromethane	74-97-5	S241017RSR	99%	25,060.0 µg/mL	+/- 1,419.2772
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,048.4 µg/mL	+/- 1,418.6202

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Penelope Riglin - Operations Tech I

Date Mixed: 10-Mar-2025 **Balance:** 1128342314

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.
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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:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  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

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/25 5 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091525
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

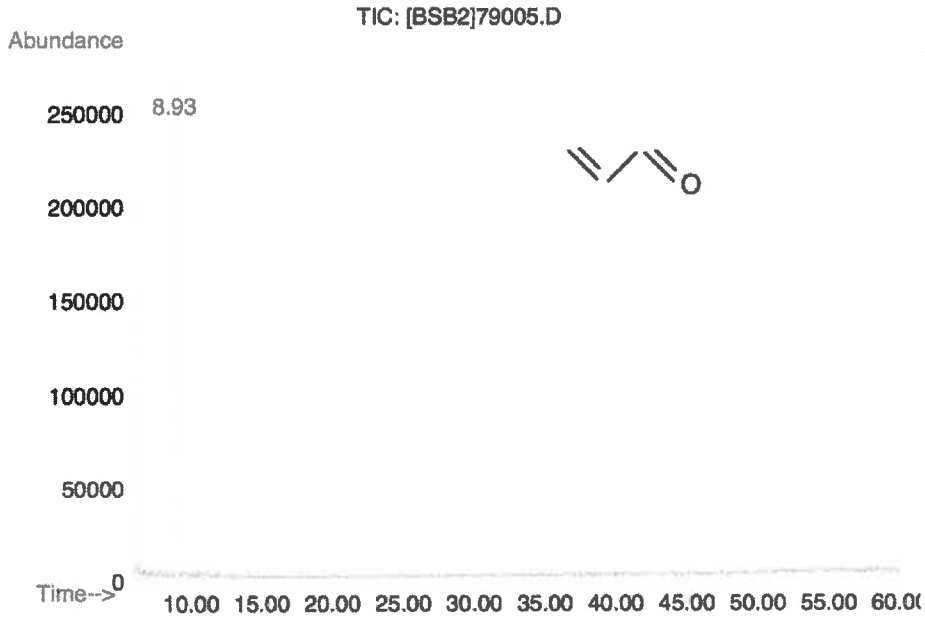
V15064 to V15068

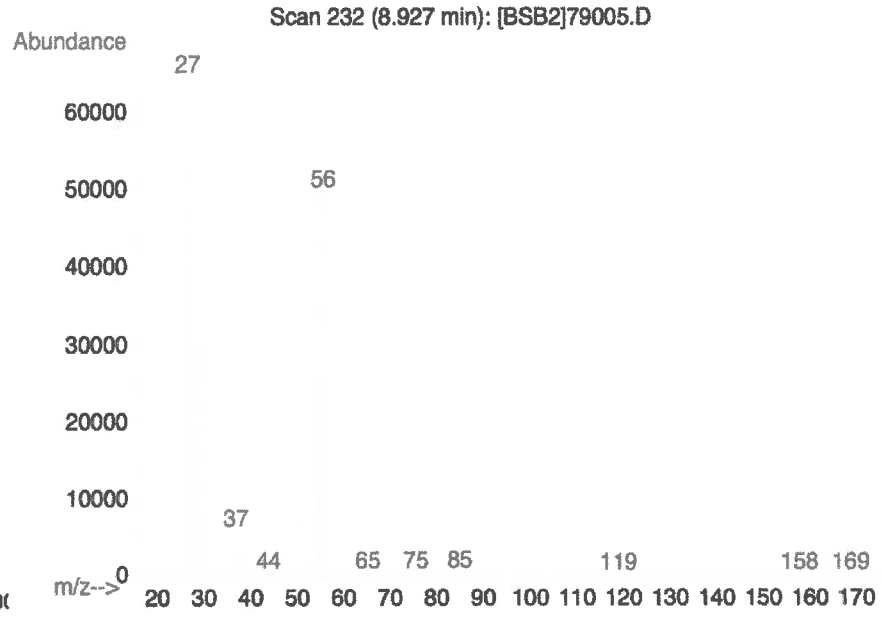
Expiration Date: 101525
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By:	Anthony Mahoney	091525 DATE
Reviewed By:	Pedro L. Rentas	091525 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	0.05176	5009.9	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).**
- **Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**

Rev 1.0, 2/25/2025

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/25 5 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091525
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

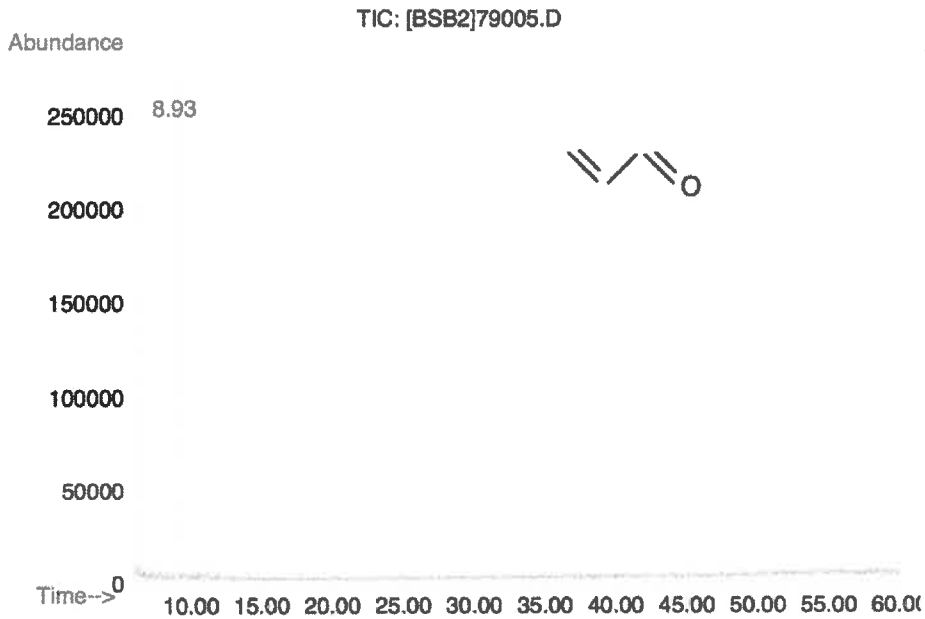
V15064 to V15068

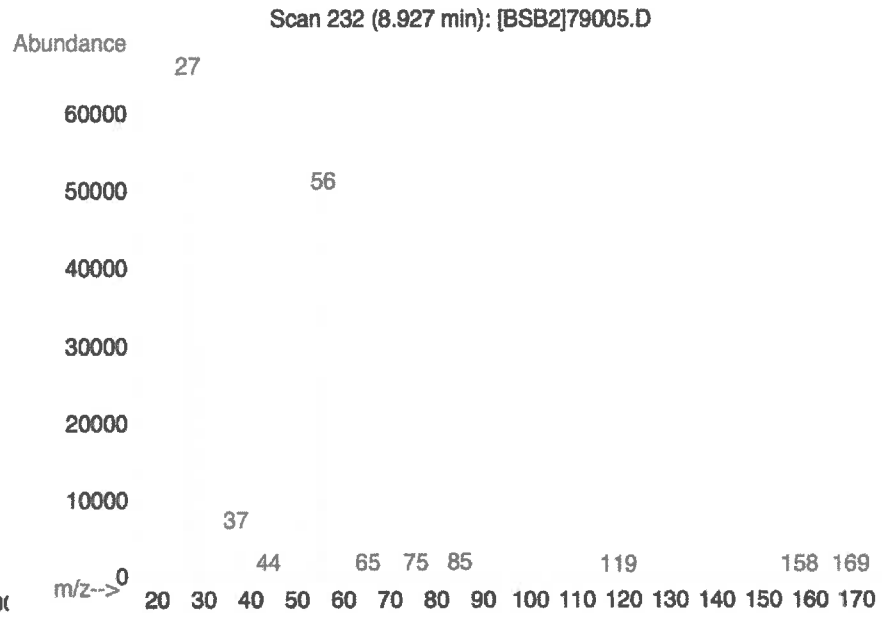
Expiration Date: 101525
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By:	Anthony Mahoney	091525 DATE
Reviewed By:	Pedro L. Rentas	091525 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	0.05176	5009.9	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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Rev 1.0, 2/25/2025

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/25 5 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091525
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

V15064 to V15068

Expiration Date: 101525
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

091525
Formulated By: Anthony Mahoney DATE

091525
Reviewed By: Pedro L. Rentas 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	0.05176	5009.9	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

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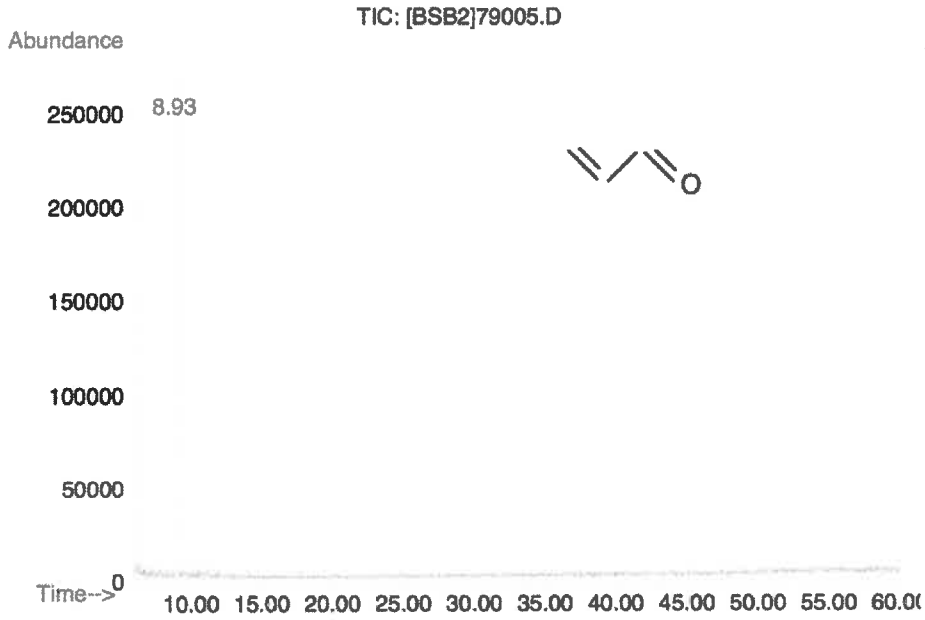

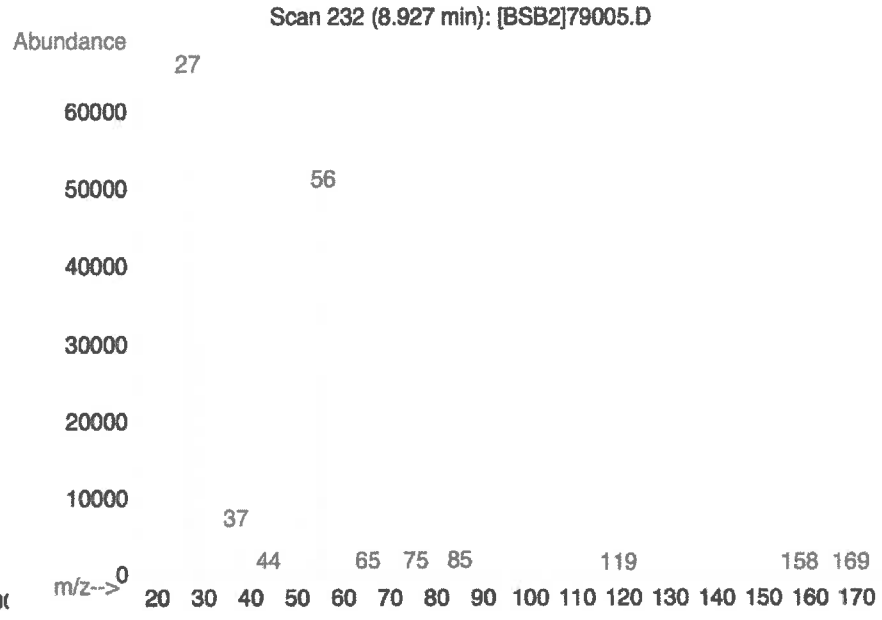

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Rev 1.0, 2/25/2025

SHIPPING DOCUMENTS

phenova® Certified Reference Materials | A Phenomenex® Company

Packing List

Date	Order #
09/02/2025	333290

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ 9/4/2025 9:25

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-3159	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0925	8270-04
1	1	0	PT-HG-WP	WP Mercury	WP0925	8270-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0925	8270-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0925	8270-06
1	1	0	PT-DEM-WP	WP Demand	WP0925	8270-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0925	8270-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0925	8270-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0925	8270-72
1	1	0	PT-COND-WP	WP Conductivity Only	WP0925	8270-72
1	1	0	PT-SOL-WP	WP Solids	WP0925	8270-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0925	8270-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0925	8270-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0925	8270-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0925	8270-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0925	8270-13
1	1	0	PT-PH-WP	WP pH	WP0925	8270-15
1	1	0	PT-CN-WP	WP Cyanide	WP0925	8270-14

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Packing List

Date	Order #
09/02/2025	333290

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

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Alliance Tech Group - Newark
ATTN: Sohil Jodhani
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Mountainside, NJ 07092
USA

Received by: SJ
9/4/2025
9:25

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-3159	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-PHEN-WP	WP Phenolics	WP0925	8270-16
1	1	0	PT-S2-WP	WP Sulfide	WP0925	8270-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0925	8270-17
1	1	0	PT-VSOL-WP	WP Volatile Solids	WP0925	8270-18
1	1	0	PT-TURB-WP	WP Turbidity	WP0925	8270-20
1	1	0	PT-SIO2-WP	WP Silica	WP0925	8270-21
1	1	0	PT-COL-WP	WP Color	WP0925	8270-51
1	1	0	PT-VOA-WP	WP Volatiles	WP0925	8270-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0925	8270-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0925	8270-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0925	8270-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0925	8270-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0925	8270-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0925	8270-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0925	8270-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R41815	R41815-104
1	1	0	RR-PAH-WP	WP PAH-Low Level	R41815	R41815-37
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R41815	R41815-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R41815	R41815-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R41815	R41815-98

phenova® Certified Reference Materials | A Phenomenex® Company

Packing List

Date	Order #
09/05/2025	340092

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
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USA

Received by: SJ
9/9/2025 12:20

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-3159	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R41854	R41854-108

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

Laboratory Certification

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