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Cover Page

Order ID : Q3395

Project ID : AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

Client : AECOM

Lab Sample Number	Client Sample Number
Q3395-01	PR132-S09-000051-20251017
Q3395-02	PR132-S07-000102-20251017
Q3395-03	PR132-S07-000102-20251017MS
Q3395-04	PR132-S07-000102-20251017MSD
Q3395-05	PR132-S07-102116-20251017
Q3395-06	PR132-COMP03-2025-20251017
Q3395-07	PR132-S08-038048-20251017

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

Signature : _____

Date: 10/30/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

AECOM
Project Name: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
Project # N/A
Order ID # Q3395
Test Name: VOC-TCLVOA-10

A. Number of Samples and Date of Receipt:
6 Solid samples were received on 10/17/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_W were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOC-TCLVOA-10 was based on method 8260D.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries were met for all analysis.
The Internal Standards Areas were met for all analysis except for PR132-S07-000102-20251017MS, PR132-S07-000102-20251017MSD due to matrix interference.

The Retention Times were met for all analysis.
The MS {Q3395-03MS} with File ID: VW032400.D recoveries met the requirements for all compounds except for 1,1,2,2-Tetrachloroethane[275%], 1,2-Dibromo-3-Chloropropane[180%], 1,3-Dichlorobenzene[49%], 1,4-Dichlorobenzene[52%], 2-Butanone[202%], Acetone[260%], Carbon Tetrachloride[34%], cis-1,3-Dichloropropene[37%] and Methyl Acetate[729%] due to matrix interference.

The MSD {Q3395-04MSD} with File ID: VW032401.D recoveries met the requirements for all compounds except for 1,1,2,2-Tetrachloroethane[192%], 1,2-Dibromo-3-Chloropropane[181%], 1,2-Dichlorobenzene[50%], 1,3-Dichlorobenzene[43%], 1,4-Dichlorobenzene[46%], 2-Butanone[250%], 4-Methyl-2-Pentanone[170%], Acetone[344%], Bromoform[151%], Carbon Tetrachloride[44%], cis-1,3-Dichloropropene[48%], Methyl Acetate[605%] and Methylcyclohexane[-20%] due to matrix interference.

The RPD for {Q3395-04MSD} with File ID: VW032401.D met criteria except for 1,1,2,2-Tetrachloroethane[36%], 1,1,2-Trichloroethane[32%], 1,2,3-Trichlorobenzene[30%], 2-Butanone[21%], 2-Hexanone[22%], Acetone[28%], Carbon

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disulfide[24%], Carbon Tetrachloride[25%], cis-1,3-Dichloropropene[25%], Methylcyclohexane[8200%] and t-1,3-Dichloropropene[21%] due to difference in results of MS and MSD.

The Blank Spike met requirements for all compounds.
The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 20% in the Initial Calibration method (82W100125S.M) for Methylene chloride passing on Linear regression.

The Continuous Calibration File ID VW032378.D met the requirements except for Bromoform and Dibromochloromethane are failing high but no positive hit in associate sample therefore no corrective action taken.

The Tuning criteria met requirements.

E. Additional Comments:
Trip Blank was not provided with this set of samples.
The soil samples results are based on a dry weight basis.

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

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

Signature_____

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DATA REPORTING QUALIFIERS- ORGANIC

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

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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q3395 MATRIX: Solid

METHOD: 8260D

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements. The %RSD is greater than 20% in the Initial Calibration method (82W100125S.M) for Methylene chloride passing on Linear regression. The Continuous Calibration File ID VW032378.D met the requirements except for Bromoform and Dibromochloromethane are failing high but no positive hit in associate sample therefore no corrective action taken.		✓	
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.			✓

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

		NA	NO	YES
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓

If not met, list those compounds and their recoveries which fall outside the acceptable range.

The MS {Q3395-03MS} with File ID: VW032400.D recoveries met the requirements for all compounds except for 1,1,2,2-Tetrachloroethane[275%], 1,2-Dibromo-3-Chloropropane[180%], 1,3-Dichlorobenzene[49%], 1,4-Dichlorobenzene[52%], 2-Butanone[202%], Acetone[260%], Carbon Tetrachloride[34%], cis-1,3-Dichloropropene[37%] and Methyl Acetate[729%] due to matrix interference.

The MSD {Q3395-04MSD} with File ID: VW032401.D recoveries met the requirements for all compounds except for 1,1,2,2-Tetrachloroethane[192%], 1,2-Dibromo-3-Chloropropane[181%], 1,2-Dichlorobenzene[50%], 1,3-Dichlorobenzene[43%], 1,4-Dichlorobenzene[46%], 2-Butanone[250%], 4-Methyl-2-Pentanone[170%], Acetone[344%], Bromoform[151%], Carbon Tetrachloride[44%], cis-1,3-Dichloropropene[48%], Methyl Acetate[605%] and Methylcyclohexane[-20%] due to matrix interference.

The RPD for {Q3395-04MSD} with File ID: VW032401.D met criteria except for 1,1,2,2-Tetrachloroethane[36%], 1,1,2-Trichloroethane[32%], 1,2,3-Trichlorobenzene[30%], 2-Butanone[21%], 2-Hexanone[22%], Acetone[28%], Carbon disulfide[24%], Carbon Tetrachloride[25%], cis-1,3-Dichloropropene[25%], Methylcyclohexane[8200%] and t-1,3-Dichloropropene[21%] due to difference in results of MS and MSD.

9.	Internal Standard Area/Retention Time Shift Meet Criteria			✓

Comments: The Internal Standards Areas were met for all analysis except for PR132-S07-000102-20251017MS, PR132-S07-000102-20251017MSD due to matrix interference.

10.	Analysis Holding Time Met			✓

If not met, list number of days exceeded for each sample:

ADDITIONAL COMMENTS:

Trip Blank was not provided with this set of samples.

The soil samples results are based on a dry weight basis.

_____ _____

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q3395**

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

QA Review Signature: **SOHIL JODHANI** **Date:** **10/30/2025**

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LAB CHRONICLE

OrderID:	Q3395	**OrderDate:**	10/17/2025 4:25:00 PM
Client:	AECOM	**Project:**	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
Contact:	Rob Forstner	**Location:**	D31,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3395-01	**PR132-S09-000051-2 0251017**	**SOIL**			**10/17/25**			**10/17/25**
			VOC-TCLVOA-10	8260D			10/20/25	
Q3395-02	**PR132-S07-000102-2 0251017**	**SOIL**			**10/17/25**			**10/17/25**
			VOC-TCLVOA-10	8260D			10/20/25	
Q3395-05	**PR132-S07-102116-2 0251017**	**SOIL**			**10/17/25**			**10/17/25**
			VOC-TCLVOA-10	8260D			10/20/25	
Q3395-07	**PR132-S08-038048-2 0251017**	**SOIL**			**10/17/25**			**10/17/25**
			VOC-TCLVOA-10	8260D			10/20/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3395

Client: AECOM

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID:	**PR132-S09-000051-20251017**								
Q3395-01	PR132-S09-000051	SOIL	Acetone		140		8.40	44.3	ug/Kg
Q3395-01	PR132-S09-000051	SOIL	Carbon Disulfide		43.9		1.90	8.90	ug/Kg
Q3395-01	PR132-S09-000051	SOIL	2-Butanone		38.6	J	11.6	44.3	ug/Kg
Q3395-01	PR132-S09-000051	SOIL	Benzene		2.70	J	1.40	8.90	ug/Kg
			Total Voc :		225				
Q3395-01	PR132-S09-000051	SOIL	3-Heptene, 2,2,4,6,6-pentameth	*	140	J	0	0	ug/Kg
Q3395-01	PR132-S09-000051	SOIL	Heptane, 2,2,6,6-tetramethyl-4-	*	120	J	0	0	ug/Kg
			Total Tics :		260				
			Total Concentration:		485				
Client ID:	**PR132-S07-000102-20251017**								
Q3395-02	PR132-S07-000102	SOIL	Acetone		480		11.4	60.3	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	Carbon Disulfide		18.6		2.60	12.1	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	2-Butanone		150		15.8	60.3	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	Methylcyclohexane		120		2.20	12.1	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	Benzene		7.50	J	1.90	12.1	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	o-Xylene		13.2		2.00	12.1	ug/Kg
			Total Voc :		789				
Q3395-02	PR132-S07-000102	SOIL	Heptane, 2,6-dimethyl-	*	240	J	0	0	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	Octane, 2,6-dimethyl-	*	460	J	0	0	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	Heptane, 3-ethyl-2-methyl-	*	790	J	0	0	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	Undecane, 2,6-dimethyl-	*	290	J	0	0	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	Dodecane, 2,7,10-trimethyl-	*	250	J	0	0	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	1,3,5-Trimethylbenzene	*	10.0	J	2.00	12.1	ug/Kg
Q3395-02	PR132-S07-000102	SOIL	1,2,4-Trimethylbenzene	*	11.5	J	1.50	12.1	ug/Kg
			Total Tics :		2050				
			Total Concentration:		2840				
Client ID:	**PR132-S07-102116-20251017**								
Q3395-05	PR132-S07-102116	SOIL	Acetone		430		9.40	49.4	ug/Kg
Q3395-05	PR132-S07-102116	SOIL	Carbon Disulfide		19.8		2.10	9.90	ug/Kg
Q3395-05	PR132-S07-102116	SOIL	2-Butanone		130		12.9	49.4	ug/Kg
Q3395-05	PR132-S07-102116	SOIL	Methylcyclohexane		83.0		1.80	9.90	ug/Kg
Q3395-05	PR132-S07-102116	SOIL	Isopropylbenzene		5.60	J	1.50	9.90	ug/Kg
			Total Voc :		668				
Q3395-05	PR132-S07-102116	SOIL	Heptane, 2,6-dimethyl-	*	150	J	0	0	ug/Kg
Q3395-05	PR132-S07-102116	SOIL	Heptane, 2,5-dimethyl-	*	120	J	0	0	ug/Kg
Q3395-05	PR132-S07-102116	SOIL	Cyclohexane, 1,1,3-trimethyl-	*	200	J	0	0	ug/Kg

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Hit Summary Sheet
SW-846

SDG No.: Q3395

Client: AECOM

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q3395-05	PR132-S07-102116-	SOIL	Cyclohexane, 1,2,4-trimethyl-,	*	120	J	0	0	ug/Kg
Q3395-05	PR132-S07-102116-	SOIL	Octane, 3,6-dimethyl-	*	180	J	0	0	ug/Kg
Q3395-05	PR132-S07-102116-	SOIL	1,2,4-Trimethylbenzene	*	9.60	J	1.30	9.90	ug/Kg
			Total Tics :		780				
			Total Concentration:		1450				
Client ID:	**PR132-S08-038048-20251017**								
Q3395-07	PR132-S08-038048-	SOIL	Acetone		370		8.90	46.8	ug/Kg
Q3395-07	PR132-S08-038048-	SOIL	Carbon Disulfide		7.20	J	2.00	9.40	ug/Kg
Q3395-07	PR132-S08-038048-	SOIL	Methyl Acetate		5.80	J	2.90	9.40	ug/Kg
Q3395-07	PR132-S08-038048-	SOIL	2-Butanone		110		12.2	46.8	ug/Kg
			Total Voc :		493				
Q3395-07	PR132-S08-038048-	SOIL	Octane, 2,6-dimethyl-	*	120	J	0	0	ug/Kg
Q3395-07	PR132-S08-038048-	SOIL	Undecane, 2,6-dimethyl-	*	150	J	0	0	ug/Kg
Q3395-07	PR132-S08-038048-	SOIL	Dodecane, 2,6,11-trimethyl-	*	100	J	0	0	ug/Kg
			Total Tics :		370				
			Total Concentration:		863				

QC SUMMARY

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Surrogate Summary

SDG No.: Q3395

Client: AECOM

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q3395-01	PR132-S09-000051-20251017	1,2-Dichloroethane-d4	50	60.8	122		63	155
		Dibromofluoromethane	50	53.9	108		70	134
		Toluene-d8	50	53.3	107		74	123
		4-Bromofluorobenzene	50	64.8	130		17	146
Q3395-02	PR132-S07-000102-20251017	1,2-Dichloroethane-d4	50	61.3	123		63	155
		Dibromofluoromethane	50	55.0	110		70	134
		Toluene-d8	50	58.2	116		74	123
		4-Bromofluorobenzene	50	68.0	136		17	146
Q3395-03MS	PR132-S07-000102-20251017MS	1,2-Dichloroethane-d4	50	70.3	141		63	155
		Dibromofluoromethane	50	54.6	109		70	134
		Toluene-d8	50	41.2	82		74	123
		4-Bromofluorobenzene	50	36.0	72		17	146
Q3395-04MSD	PR132-S07-000102-20251017MSD	1,2-Dichloroethane-d4	50	71.7	143		63	155
		Dibromofluoromethane	50	55.3	111		70	134
		Toluene-d8	50	38.0	76		74	123
		4-Bromofluorobenzene	50	62.4	125		17	146
Q3395-05	PR132-S07-102116-20251017	1,2-Dichloroethane-d4	50	60.3	121		63	155
		Dibromofluoromethane	50	52.0	104		70	134
		Toluene-d8	50	55.0	110		74	123
		4-Bromofluorobenzene	50	71.4	143		17	146
Q3395-07	PR132-S08-038048-20251017	1,2-Dichloroethane-d4	50	58.0	116		63	155
		Dibromofluoromethane	50	51.2	102		70	134
		Toluene-d8	50	50.6	101		74	123
		4-Bromofluorobenzene	50	64.8	130		17	146
VW1020SBL01	VW1020SBL01	1,2-Dichloroethane-d4	50	65.7	131		63	155
		Dibromofluoromethane	50	58.2	116		70	134
		Toluene-d8	50	54.5	109		74	123
		4-Bromofluorobenzene	50	51.8	104		17	146
VW1020SBS01	VW1020SBS01	1,2-Dichloroethane-d4	50	52.1	104		63	155
		Dibromofluoromethane	50	53.3	107		70	134
		Toluene-d8	50	53.0	106		74	123
		4-Bromofluorobenzene	50	51.7	103		17	146

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q3395 **Analytical Method:** SW8260D

Client: AECOM **Datafile :** VW032400.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Lab Sample ID : Q3395-03MS		**Client Sample ID : PR132-S07-000102-20251017MS**									
Dichlorodifluoromethane	94.6	0	110	ug/Kg	116				40	150	
Chloromethane	94.6	0	100	ug/Kg	106				24	175	
Vinyl chloride	94.6	0	120	ug/Kg	127				21	175	
Bromomethane	94.6	0	64.8	ug/Kg	68				46	150	
Chloroethane	94.6	0	120	ug/Kg	127				30	175	
Trichlorofluoromethane	94.6	0	110	ug/Kg	116				53	150	
1,1,2-Trichlorotrifluoroethane	94.6	0	62.1	ug/Kg	66				60	135	
1,1-Dichloroethene	94.6	0	110	ug/Kg	116				63	136	
Acetone	470	480	1700	ug/Kg	260	*			41	175	
Carbon disulfide	94.6	18.6	86.5	ug/Kg	72				45	126	
Methyl tert-butyl Ether	94.6	0	160	ug/Kg	169				56	175	
Methyl Acetate	94.6	0	690	ug/Kg	729	*			32	175	
Methylene Chloride	94.6	0	140	ug/Kg	148				59	175	
trans-1,2-Dichloroethene	94.6	0	97.6	ug/Kg	103				63	137	
1,1-Dichloroethane	94.6	0	120	ug/Kg	127				62	154	
Cyclohexane	94.6	0	47.1	ug/Kg	50				41	131	
2-Butanone	470	150	1100	ug/Kg	202	*			48	174	
Carbon Tetrachloride	94.6	0	32.5	ug/Kg	34	*			48	149	
cis-1,2-Dichloroethene	94.6	0	120	ug/Kg	127				59	153	
Bromochloromethane	94.6	0	120	ug/Kg	127				54	172	
Chloroform	94.6	0	120	ug/Kg	127				60	159	
1,1,1-Trichloroethane	94.6	0	98.0	ug/Kg	104				60	149	
Methylcyclohexane	94.6	120	140	ug/Kg	21				19	135	
Benzene	94.6	7.50	99.5	ug/Kg	97				59	140	
1,2-Dichloroethane	94.6	0	110	ug/Kg	116				63	153	
Trichloroethene	94.6	0	80.7	ug/Kg	85				45	154	
1,2-Dichloropropane	94.6	0	98.6	ug/Kg	104				67	141	
Bromodichloromethane	94.6	0	97.0	ug/Kg	103				54	160	
4-Methyl-2-Pentanone	470	0	760	ug/Kg	162				54	164	
Toluene	94.6	0	64.0	ug/Kg	68				61	134	
t-1,3-Dichloropropene	94.6	0	45.7	ug/Kg	48				47	155	
cis-1,3-Dichloropropene	94.6	0	35.3	ug/Kg	37	*			56	141	
1,1,2-Trichloroethane	94.6	0	76.3	ug/Kg	81				69	148	
2-Hexanone	470	0	620	ug/Kg	132				43	164	
Dibromochloromethane	94.6	0	79.8	ug/Kg	84				65	143	
1,2-Dibromoethane	94.6	0	94.7	ug/Kg	100				63	144	
Tetrachloroethene	94.6	0	83.2	ug/Kg	88				27	175	
Chlorobenzene	94.6	0	90.4	ug/Kg	96				66	127	
Ethyl Benzene	94.6	0	70.7	ug/Kg	75				54	134	
m/p-Xylenes	190	0	140	ug/Kg	74				51	137	
o-Xylene	94.6	13.2	97.5	ug/Kg	89				57	139	
Styrene	94.6	0	68.4	ug/Kg	72				47	136	
Bromoform	94.6	0	130	ug/Kg	137				64	144	
Isopropylbenzene	94.6	0	62.9	ug/Kg	66				44	160	
1,1,2,2-Tetrachloroethane	94.6	0	260	ug/Kg	275	*			18	175	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q3395 **Analytical Method:** SW8260D

Client: AECOM **Datafile :** VW032400.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
1,3-Dichlorobenzene	94.6	0	46.2	ug/Kg	49	*			55	131	
1,4-Dichlorobenzene	94.6	0	48.9	ug/Kg	52	*			57	129	
1,2-Dichlorobenzene	94.6	0	53.7	ug/Kg	57				54	140	
1,2-Dibromo-3-Chloropropane	94.6	0	170	ug/Kg	180	*			46	175	
1,2,4-Trichlorobenzene	94.6	0	38.1	ug/Kg	40				12	127	
1,2,3-Trichlorobenzene	94.6	0	33.7	ug/Kg	36				10	160	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q3395 **Analytical Method:** SW8260D

Client: AECOM **Datafile :** VW032401.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Lab Sample ID : Q3395-04MSD		**Client Sample ID : PR132-S07-000102-20251017MSD**									
Dichlorodifluoromethane	99.2	0	130	ug/Kg	131		12		40	150	20
Chloromethane	99.2	0	120	ug/Kg	121		13		24	175	20
Vinyl chloride	99.2	0	130	ug/Kg	131		3		21	175	20
Bromomethane	99.2	0	78.9	ug/Kg	80		15		46	150	20
Chloroethane	99.2	0	140	ug/Kg	141		11		30	175	20
Trichlorofluoromethane	99.2	0	120	ug/Kg	121		4		53	150	20
1,1,2-Trichlorotrifluoroethane	99.2	0	64.4	ug/Kg	65		1		60	135	20
1,1-Dichloroethene	99.2	0	130	ug/Kg	131		12		63	136	20
Acetone	500	480	2200	ug/Kg	344	*	28	*	41	175	20
Carbon disulfide	99.2	18.6	110	ug/Kg	92		24	*	45	126	20
Methyl tert-butyl Ether	99.2	0	170	ug/Kg	171		1		56	175	20
Methyl Acetate	99.2	0	600	ug/Kg	605	*	19		32	175	20
Methylene Chloride	99.2	0	150	ug/Kg	151		2		59	175	20
trans-1,2-Dichloroethene	99.2	0	120	ug/Kg	121		16		63	137	20
1,1-Dichloroethane	99.2	0	130	ug/Kg	131		3		62	154	20
Cyclohexane	99.2	0	42.8	ug/Kg	43		14		41	131	20
2-Butanone	500	150	1400	ug/Kg	250	*	21	*	48	174	20
Carbon Tetrachloride	99.2	0	43.9	ug/Kg	44	*	25	*	48	149	20
cis-1,2-Dichloroethene	99.2	0	130	ug/Kg	131		3		59	153	20
Bromochloromethane	99.2	0	130	ug/Kg	131		3		54	172	20
Chloroform	99.2	0	130	ug/Kg	131		3		60	159	20
1,1,1-Trichloroethane	99.2	0	110	ug/Kg	111		7		60	149	20
Methylcyclohexane	99.2	120	100	ug/Kg	-20	*	8200	*	19	135	20
Benzene	99.2	7.50	110	ug/Kg	103		6		59	140	20
1,2-Dichloroethane	99.2	0	120	ug/Kg	121		4		63	153	20
Trichloroethene	99.2	0	85.7	ug/Kg	86		1		45	154	20
1,2-Dichloropropane	99.2	0	100	ug/Kg	101		3		67	141	20
Bromodichloromethane	99.2	0	110	ug/Kg	111		8		54	160	20
4-Methyl-2-Pentanone	500	0	850	ug/Kg	170	*	5		54	164	20
Toluene	99.2	0	69.4	ug/Kg	70		3		61	134	20
t-1,3-Dichloropropene	99.2	0	59.3	ug/Kg	60		21	*	47	155	20
cis-1,3-Dichloropropene	99.2	0	47.5	ug/Kg	48	*	25	*	56	141	20
1,1,2-Trichloroethane	99.2	0	110	ug/Kg	111		32	*	69	148	20
2-Hexanone	500	0	820	ug/Kg	164		22	*	43	164	20
Dibromochloromethane	99.2	0	90.2	ug/Kg	91		7		65	143	20
1,2-Dibromoethane	99.2	0	110	ug/Kg	111		10		63	144	20
Tetrachloroethene	99.2	0	79.7	ug/Kg	80		9		27	175	20
Chlorobenzene	99.2	0	95.2	ug/Kg	96		0		66	127	20
Ethyl Benzene	99.2	0	73.0	ug/Kg	74		2		54	134	20
m/p-Xylenes	200	0	140	ug/Kg	70		5		51	137	20
o-Xylene	99.2	13.2	97.8	ug/Kg	85		5		57	139	20
Styrene	99.2	0	72.8	ug/Kg	73		1		47	136	20
Bromoform	99.2	0	150	ug/Kg	151	*	10		64	144	20
Isopropylbenzene	99.2	0	55.5	ug/Kg	56		17		44	160	20
1,1,2,2-Tetrachloroethane	99.2	0	190	ug/Kg	192	*	36	*	18	175	20

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q3395 **Analytical Method:** SW8260D

Client: AECOM **Datafile :** VW032401.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
1,3-Dichlorobenzene	99.2	0	42.3	ug/Kg	43	*	14		55	131	20
1,4-Dichlorobenzene	99.2	0	46.1	ug/Kg	46	*	11		57	129	20
1,2-Dichlorobenzene	99.2	0	49.2	ug/Kg	50	*	13		54	140	20
1,2-Dibromo-3-Chloropropane	99.2	0	180	ug/Kg	181	*	1		46	175	20
1,2,4-Trichlorobenzene	99.2	0	33.2	ug/Kg	33		18		12	127	20
1,2,3-Trichlorobenzene	99.2	0	26.0	ug/Kg	26		30	*	10	160	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3395 **Analytical Method:** SW8260D

Client: AECOM **Datafile :** VW032380.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VW1020SBS01	Dichlorodifluoromethane	20	19.9	ug/Kg	100			64	136	
	Chloromethane	20	20.1	ug/Kg	101			52	151	
	Vinyl chloride	20	22.1	ug/Kg	111			56	148	
	Bromomethane	20	21.1	ug/Kg	106			58	141	
	Chloroethane	20	21.4	ug/Kg	107			69	130	
	Trichlorofluoromethane	20	19.4	ug/Kg	97			69	134	
	1,1,2-Trichlorotrifluoroethane	20	20.9	ug/Kg	104			81	123	
	1,1-Dichloroethene	20	21.7	ug/Kg	109			79	121	
	Acetone	100	97.1	ug/Kg	97			40	171	
	Carbon disulfide	20	21.1	ug/Kg	106			59	130	
	Methyl tert-butyl Ether	20	19.0	ug/Kg	95			77	129	
	Methyl Acetate	20	17.5	ug/Kg	88			69	149	
	Methylene Chloride	20	19.0	ug/Kg	95			72	131	
	trans-1,2-Dichloroethene	20	21.0	ug/Kg	105			80	123	
	1,1-Dichloroethane	20	20.8	ug/Kg	104			82	123	
	Cyclohexane	20	19.2	ug/Kg	96			76	122	
	2-Butanone	100	87.6	ug/Kg	88			69	131	
	Carbon Tetrachloride	20	22.0	ug/Kg	110			76	129	
	cis-1,2-Dichloroethene	20	20.3	ug/Kg	102			82	123	
	Bromochloromethane	20	20.8	ug/Kg	104			80	127	
	Chloroform	20	21.5	ug/Kg	108			82	125	
	1,1,1-Trichloroethane	20	21.5	ug/Kg	108			80	126	
	Methylcyclohexane	20	19.3	ug/Kg	97			77	123	
	Benzene	20	20.9	ug/Kg	104			84	121	
	1,2-Dichloroethane	20	20.6	ug/Kg	103			81	126	
	Trichloroethene	20	20.3	ug/Kg	102			83	122	
	1,2-Dichloropropane	20	21.0	ug/Kg	105			83	122	
	Bromodichloromethane	20	22.0	ug/Kg	110			82	123	
	4-Methyl-2-Pentanone	100	92.3	ug/Kg	92			70	135	
	Toluene	20	20.8	ug/Kg	104			83	122	
	t-1,3-Dichloropropene	20	20.2	ug/Kg	101			78	124	
	cis-1,3-Dichloropropene	20	20.7	ug/Kg	104			81	122	
	1,1,2-Trichloroethane	20	20.7	ug/Kg	104			82	125	
	2-Hexanone	100	92.8	ug/Kg	93			66	138	
	Dibromochloromethane	20	21.7	ug/Kg	109			79	125	
	1,2-Dibromoethane	20	20.3	ug/Kg	102			80	125	
	Tetrachloroethene	20	20.1	ug/Kg	101			83	125	
	Chlorobenzene	20	20.2	ug/Kg	101			84	122	
	Ethyl Benzene	20	20.5	ug/Kg	103			82	124	
	m/p-Xylenes	40	41.2	ug/Kg	103			83	124	
	o-Xylene	20	19.8	ug/Kg	99			83	123	
	Styrene	20	21.1	ug/Kg	106			82	124	
	Bromoform	20	21.5	ug/Kg	108			75	127	
	Isopropylbenzene	20	19.8	ug/Kg	99			82	124	
	1,1,2,2-Tetrachloroethane	20	18.9	ug/Kg	95			77	127	
	1,3-Dichlorobenzene	20	20.4	ug/Kg	102			83	122	
	1,4-Dichlorobenzene	20	20.3	ug/Kg	102			84	121	
	1,2-Dichlorobenzene	20	20.0	ug/Kg	100			83	124	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3395 **Analytical Method:** SW8260D

Client: AECOM **Datafile :** VW032380.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VW1020SBS01	1,2-Dibromo-3-Chloropropane	20	18.4	ug/Kg	92			66	134	
	1,2,4-Trichlorobenzene	20	19.2	ug/Kg	96			78	127	
	1,2,3-Trichlorobenzene	20	19.0	ug/Kg	95			70	137	

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VOLATILE METHOD BLANK SUMMARY

Client ID: VW1020SBL01

Lab Name: Alliance | Contract: AECO02

Lab Code: ACE | SDG NO.: Q3395

Lab File ID: VW032379.D | Lab Sample ID: VW1020SBL01

Date Analyzed: 10/20/2025 | Time Analyzed: 11:11

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

Instrument ID: MSVOA_W

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VW1020SBS01	VW1020SBS01	VW032380.D	10/20/2025
PR132-S09-000051-20251017	Q3395-01	VW032396.D	10/20/2025
PR132-S07-000102-20251017	Q3395-02	VW032397.D	10/20/2025
PR132-S07-102116-20251017	Q3395-05	VW032398.D	10/20/2025
PR132-S08-038048-20251017	Q3395-07	VW032399.D	10/20/2025
PR132-S07-000102-20251017MS	Q3395-03MS	VW032400.D	10/20/2025
PR132-S07-000102-20251017MSD	Q3395-04MSD	VW032401.D	10/20/2025

COMMENTS:

Raw Data: **VW032312.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: AECO02
Lab Code: ACE
SDG NO.: Q3395
Lab File ID: VW032312.D
BFB Injection Date: 10/01/2025
Instrument ID: MSVOA_W
BFB Injection Time: 08:12
GC Column: RXI-624 ID: 0.25 (mm)
Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.3
75	30.0 - 60.0% of mass 95	51.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 100.0% of mass 95	66.2
175	5.0 - 9.0% of mass 174	5.3 (8) 1
176	95.0 - 101.0% of mass 174	63.3 (95.6) 1
177	5.0 - 9.0% of mass 176	4.2 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC005	VSTDICC005	VW032313.D	10/01/2025	13:12
VSTDICC010	VSTDICC010	VW032314.D	10/01/2025	13:34
VSTDICC020	VSTDICC020	VW032315.D	10/01/2025	14:15
VSTDICCC050	VSTDICCC050	VW032316.D	10/01/2025	14:37
VSTDICC100	VSTDICC100	VW032317.D	10/01/2025	14:59
VSTDICC150	VSTDICC150	VW032318.D	10/01/2025	15:20

Raw Data: **VW032377.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: AECO02
Lab Code: ACE
SDG NO.: Q3395
Lab File ID: VW032377.D
BFB Injection Date: 10/20/2025
Instrument ID: MSVOA_W
BFB Injection Time: 09:36
GC Column: RXI-624 ID: 0.25 (mm)
Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.6
75	30.0 - 60.0% of mass 95	51.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.3 (0.5) 1
174	50.0 - 100.0% of mass 95	66.2
175	5.0 - 9.0% of mass 174	5.2 (7.8) 1
176	95.0 - 101.0% of mass 174	63.7 (96.2) 1
177	5.0 - 9.0% of mass 176	4.5 (7) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VW032378.D	10/20/2025	10:20
VW1020SBL01	VW1020SBL01	VW032379.D	10/20/2025	11:11
VW1020SBS01	VW1020SBS01	VW032380.D	10/20/2025	11:41
PR132-S09-000051-20251017	Q3395-01	VW032396.D	10/20/2025	17:51
PR132-S07-000102-20251017	Q3395-02	VW032397.D	10/20/2025	18:14
PR132-S07-102116-20251017	Q3395-05	VW032398.D	10/20/2025	18:36
PR132-S08-038048-20251017	Q3395-07	VW032399.D	10/20/2025	18:58
PR132-S07-000102-20251017MS	Q3395-03MS	VW032400.D	10/20/2025	19:20
PR132-S07-000102-20251017MSD	Q3395-04MSD	VW032401.D	10/20/2025	19:42

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: AECO02

Lab Code: ACE SDG NO.: Q3395

Lab File ID: VW032378.D Date Analyzed: 10/20/2025

Instrument ID: MSVOA_W Time Analyzed: 10:20

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

	IS1 AREA #		RT #	IS2 AREA #	RT #	IS3 AREA #		RT #
12 HOUR STD	276051		7.97	500417	8.86	466876		11.63
UPPER LIMIT	552102		8.465	1000830	9.355	933752		12.129
LOWER LIMIT	138026		7.465	250209	8.355	233438		11.129
EPA SAMPLE NO.								
PR132-S09-000051-20251017	242117		7.96	528270	8.86	532171		11.63
PR132-S07-000102-20251017	223455		7.96	495591	8.85	505431		11.63
PR132-S07-000102-20251017MS	125839	*	7.97	270130	8.85	141965	*	11.63
PR132-S07-000102-20251017MSD	130782	*	7.96	279199	8.85	138787	*	11.64
PR132-S07-102116-20251017	238348		7.96	525564	8.85	518256		11.64
PR132-S08-038048-20251017	239838		7.96	525260	8.85	508147		11.64
VW1020SBL01	172114		7.96	392797	8.85	400571		11.63
VW1020SBS01	280998		7.96	517149	8.85	480746		11.63

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: AECO02

Lab Code: ACE SDG NO.: Q3395

Lab File ID: VW032378.D Date Analyzed: 10/20/2025

Instrument ID: MSVOA_W Time Analyzed: 10:20

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

	IS4 AREA #		RT #				
12 HOUR STD	234766		13.556				
UPPER LIMIT	469532		14.056				
LOWER LIMIT	117383		13.056				
EPA SAMPLE NO.							
PR132-S09-000051-20251017	278056		13.56				
PR132-S07-000102-20251017	270145		13.56				
PR132-S07-000102-20251017MS	54387	*	13.56				
PR132-S07-000102-20251017MSD	56507	*	13.56				
PR132-S07-102116-20251017	242674		13.55				
PR132-S08-038048-20251017	246462		13.56				
VW1020SBL01	188560		13.56				
VW1020SBS01	240746		13.56				

IS4 = 1,4-Dichlorobenzene-d4

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

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

SAMPLE DATA

Raw Data: **VW032396.D**

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Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S09-000051-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-01	Matrix:	SOIL
Analytical Method:	8260D Level : LOW	% Solid:	52.9
Sample Wt/Vol:	5.33 g Final Vol: 5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	8.90	U	1	2.00	8.90	ug/Kg	10/20/25 17:51	VW102025
74-87-3	Chloromethane	8.90	U	1	2.00	8.90	ug/Kg	10/20/25 17:51	VW102025
75-01-4	Vinyl Chloride	8.90	U	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
74-83-9	Bromomethane	8.90	U	1	1.90	8.90	ug/Kg	10/20/25 17:51	VW102025
75-00-3	Chloroethane	8.90	U	1	2.20	8.90	ug/Kg	10/20/25 17:51	VW102025
75-69-4	Trichlorofluoromethane	8.90	U	1	2.10	8.90	ug/Kg	10/20/25 17:51	VW102025
76-13-1	1,1,2-Trichlorotrifluoroethane	8.90	U	1	1.90	8.90	ug/Kg	10/20/25 17:51	VW102025
75-35-4	1,1-Dichloroethene	8.90	U	1	1.80	8.90	ug/Kg	10/20/25 17:51	VW102025
67-64-1	Acetone	140		1	8.40	44.3	ug/Kg	10/20/25 17:51	VW102025
75-15-0	Carbon Disulfide	43.9		1	1.90	8.90	ug/Kg	10/20/25 17:51	VW102025
1634-04-4	Methyl tert-butyl Ether	8.90	U	1	1.30	8.90	ug/Kg	10/20/25 17:51	VW102025
79-20-9	Methyl Acetate	8.90	U	1	2.70	8.90	ug/Kg	10/20/25 17:51	VW102025
75-09-2	Methylene Chloride	17.7	U	1	6.30	17.7	ug/Kg	10/20/25 17:51	VW102025
156-60-5	trans-1,2-Dichloroethene	8.90	U	1	1.50	8.90	ug/Kg	10/20/25 17:51	VW102025
75-34-3	1,1-Dichloroethane	8.90	U	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
110-82-7	Cyclohexane	8.90	U	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
78-93-3	2-Butanone	38.6	J	1	11.6	44.3	ug/Kg	10/20/25 17:51	VW102025
56-23-5	Carbon Tetrachloride	8.90	U	1	1.70	8.90	ug/Kg	10/20/25 17:51	VW102025
156-59-2	cis-1,2-Dichloroethene	8.90	U	1	1.30	8.90	ug/Kg	10/20/25 17:51	VW102025
74-97-5	Bromochloromethane	8.90	U	1	2.00	8.90	ug/Kg	10/20/25 17:51	VW102025
67-66-3	Chloroform	8.90	U	1	1.50	8.90	ug/Kg	10/20/25 17:51	VW102025
71-55-6	1,1,1-Trichloroethane	8.90	U	1	1.60	8.90	ug/Kg	10/20/25 17:51	VW102025
108-87-2	Methylcyclohexane	8.90	U	1	1.60	8.90	ug/Kg	10/20/25 17:51	VW102025
71-43-2	Benzene	2.70	J	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
107-06-2	1,2-Dichloroethane	8.90	U	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
79-01-6	Trichloroethene	8.90	U	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
78-87-5	1,2-Dichloropropane	8.90	U	1	1.60	8.90	ug/Kg	10/20/25 17:51	VW102025
75-27-4	Bromodichloromethane	8.90	U	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
108-10-1	4-Methyl-2-Pentanone	44.3	U	1	6.30	44.3	ug/Kg	10/20/25 17:51	VW102025
108-88-3	Toluene	8.90	U	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
10061-02-6	t-1,3-Dichloropropene	8.90	U	1	1.20	8.90	ug/Kg	10/20/25 17:51	VW102025
10061-01-5	cis-1,3-Dichloropropene	8.90	U	1	1.10	8.90	ug/Kg	10/20/25 17:51	VW102025
79-00-5	1,1,2-Trichloroethane	8.90	U	1	1.60	8.90	ug/Kg	10/20/25 17:51	VW102025
591-78-6	2-Hexanone	44.3	U	1	6.50	44.3	ug/Kg	10/20/25 17:51	VW102025
124-48-1	Dibromochloromethane	8.90	U	1	1.50	8.90	ug/Kg	10/20/25 17:51	VW102025
106-93-4	1,2-Dibromoethane	8.90	U	1	1.60	8.90	ug/Kg	10/20/25 17:51	VW102025
127-18-4	Tetrachloroethene	8.90	U	1	1.90	8.90	ug/Kg	10/20/25 17:51	VW102025
108-90-7	Chlorobenzene	8.90	U	1	1.60	8.90	ug/Kg	10/20/25 17:51	VW102025
100-41-4	Ethyl Benzene	8.90	U	1	1.20	8.90	ug/Kg	10/20/25 17:51	VW102025
179601-23-1	m/p-Xylenes	17.7	U	1	2.20	17.7	ug/Kg	10/20/25 17:51	VW102025
95-47-6	o-Xylene	8.90	U	1	1.50	8.90	ug/Kg	10/20/25 17:51	VW102025
100-42-5	Styrene	8.90	U	1	1.30	8.90	ug/Kg	10/20/25 17:51	VW102025
75-25-2	Bromoform	8.90	U	1	1.50	8.90	ug/Kg	10/20/25 17:51	VW102025

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S09-000051-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-01	Matrix:	SOIL
Analytical Method:	8260D Level : LOW	% Solid:	52.9
Sample Wt/Vol:	5.33 g Final Vol: 5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	8.90	U	1	1.40	8.90	ug/Kg	10/20/25 17:51	VW102025
79-34-5	1,1,2,2-Tetrachloroethane	8.90	U	1	2.10	8.90	ug/Kg	10/20/25 17:51	VW102025
541-73-1	1,3-Dichlorobenzene	8.90	U	1	3.00	8.90	ug/Kg	10/20/25 17:51	VW102025
106-46-7	1,4-Dichlorobenzene	8.90	U	1	2.80	8.90	ug/Kg	10/20/25 17:51	VW102025
95-50-1	1,2-Dichlorobenzene	8.90	U	1	2.60	8.90	ug/Kg	10/20/25 17:51	VW102025
96-12-8	1,2-Dibromo-3-Chloropropane	8.90	U	1	3.30	8.90	ug/Kg	10/20/25 17:51	VW102025
120-82-1	1,2,4-Trichlorobenzene	8.90	U	1	5.30	8.90	ug/Kg	10/20/25 17:51	VW102025
87-61-6	1,2,3-Trichlorobenzene	8.90	U	1	5.60	8.90	ug/Kg	10/20/25 17:51	VW102025
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	60.8			63 - 155	122%	SPK: 50		
1868-53-7	Dibromofluoromethane	53.9			70 - 134	108%	SPK: 50		
2037-26-5	Toluene-d8	53.3			74 - 123	107%	SPK: 50		
460-00-4	4-Bromofluorobenzene	64.8			17 - 146	130%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	242000							
540-36-3	1,4-Difluorobenzene	528000							
3114-55-4	Chlorobenzene-d5	532000							
3855-82-1	1,4-Dichlorobenzene-d4	278000							
TENTATIVE IDENTIFIED COMPOUNDS									
000141-70-8	Heptane, 2,2,6,6-tetramethyl-4-met	120	J			13.1	ug/Kg		
000123-48-8	3-Heptene, 2,2,4,6,6-pentamethyl-	140	J			13.1	ug/Kg		

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_W\Data\VW102025\
Data File : VW032396.D
Acq On : 20 Oct 2025 17:51
Operator : SY/MD
Sample : Q3395-01
Misc : 5.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Quant Time: Oct 21 01:32:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

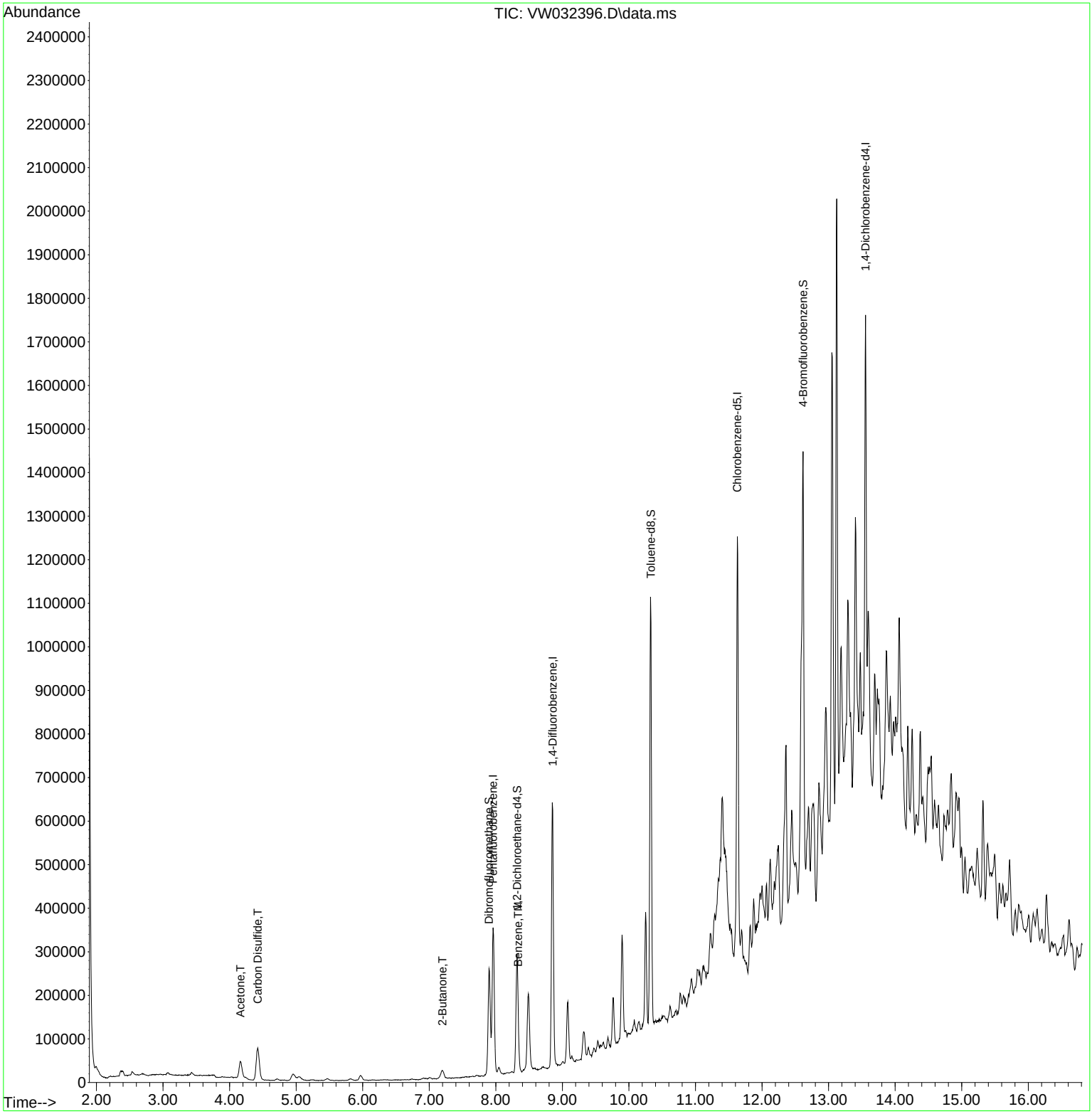
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	242117	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	528270	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	532171	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	278056	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	214866	60.844	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 121.680%			
35) Dibromofluoromethane	7.898	113	184326	53.879	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 107.760%			
50) Toluene-d8	10.331	98	672570	53.266	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 106.540%			
62) 4-Bromofluorobenzene	12.617	95	309089	64.765	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 129.540%			
Target Compounds						Qvalue
16) Acetone	4.161	43	77052	78.799	ug/l	99
17) Carbon Disulfide	4.423	76	184469	24.777	ug/l	96
25) 2-Butanone	7.197	43	29021	21.792	ug/l	98
40) Benzene	8.337	78	23201	1.533	ug/l	99

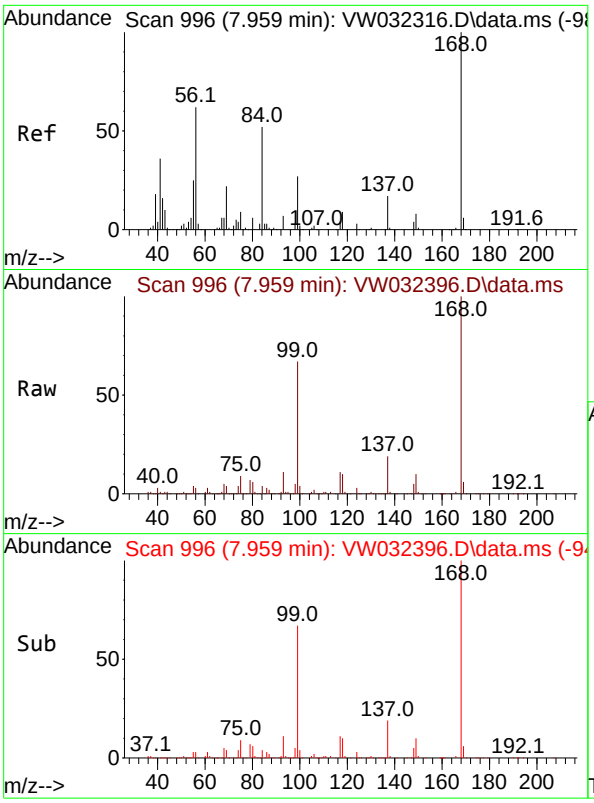
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032396.D
Acq On : 20 Oct 2025 17:51
Operator : SY/MD
Sample : Q3395-01
Misc : 5.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Quant Time: Oct 21 01:32:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration



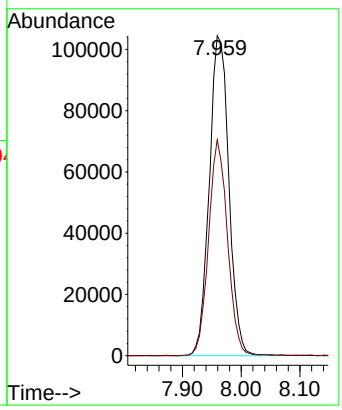


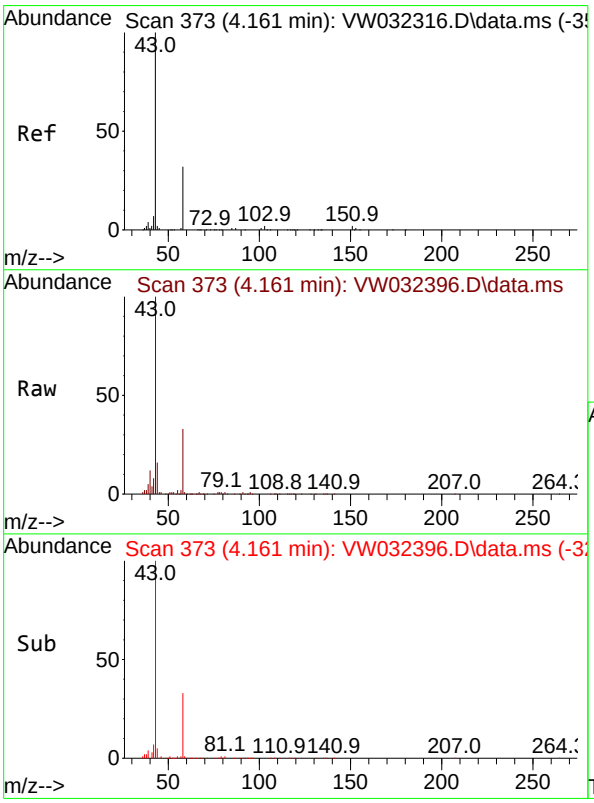
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Tgt Ion:168 Resp: 242117

Ion	Ratio	Lower	Upper
168	100		
99	67.5	49.3	73.9

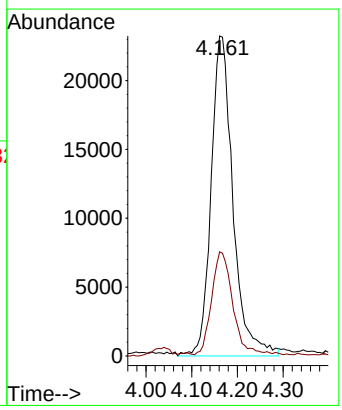


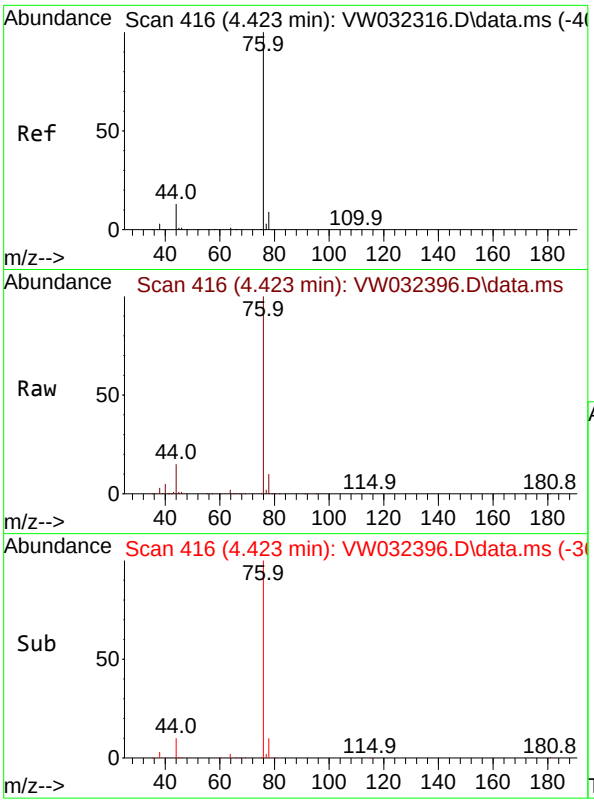


#16
Acetone
Concen: 78.799 ug/l
RT: 4.161 min Scan# 373
Delta R.T. -0.000 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Tgt Ion: 43 Resp: 77052

Ion	Ratio	Lower	Upper
43	100		
58	32.0	25.3	37.9



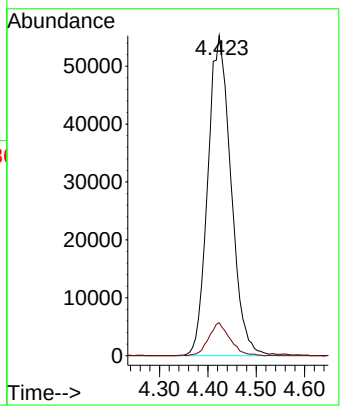


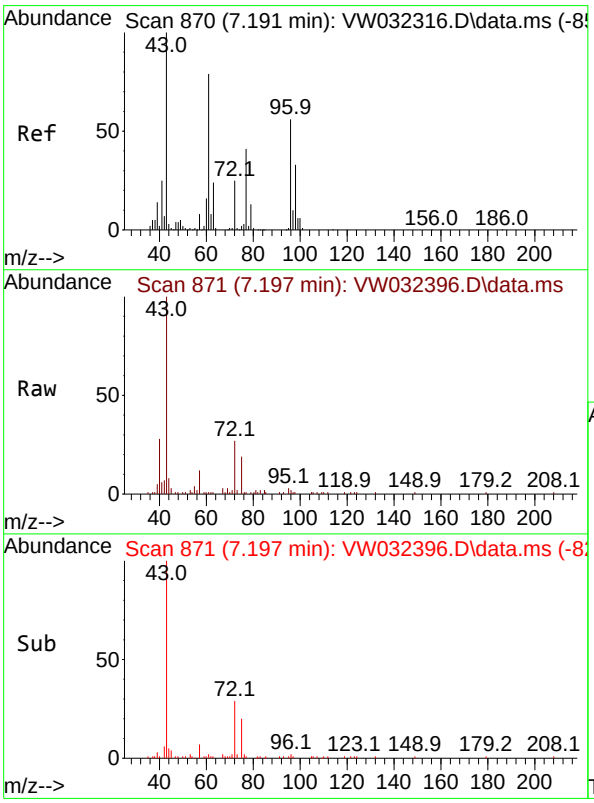
#17
Carbon Disulfide
Concen: 24.777 ug/l
RT: 4.423 min Scan# 4
Delta R.T. -0.000 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Tgt Ion: 76 Resp: 184469

Ion	Ratio	Lower	Upper
76	100		
78	10.3	7.0	10.6

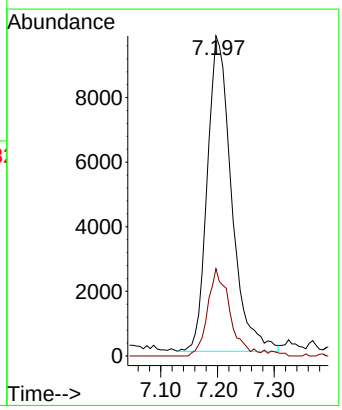


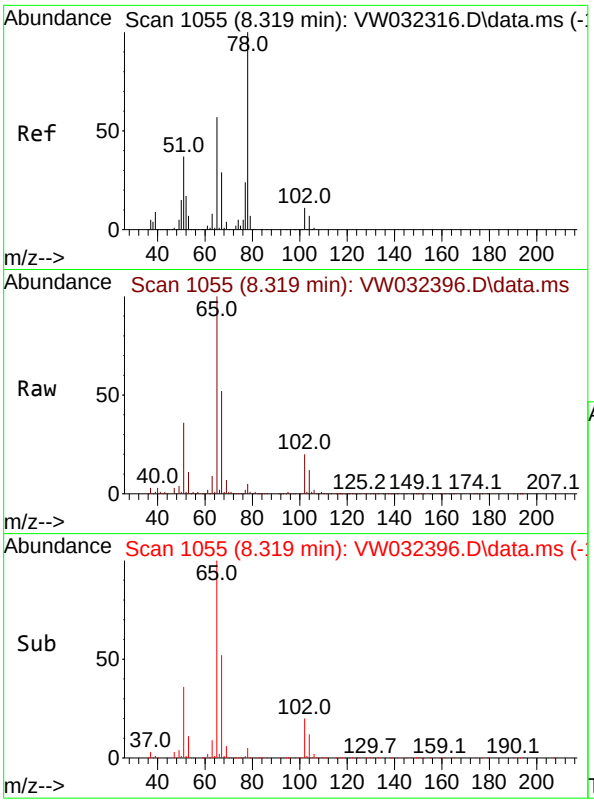


#25
2-Butanone
Concen: 21.792 ug/l
RT: 7.197 min Scan# 871
Delta R.T. 0.006 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Tgt Ion: 43 Resp: 29021

Ion	Ratio	Lower	Upper
43	100		
72	27.7	21.4	32.2



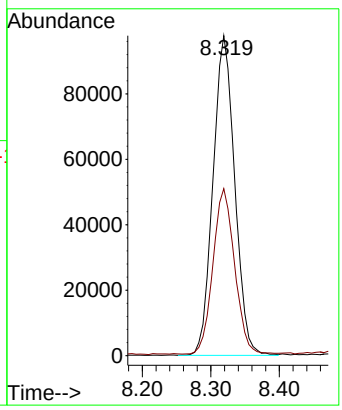


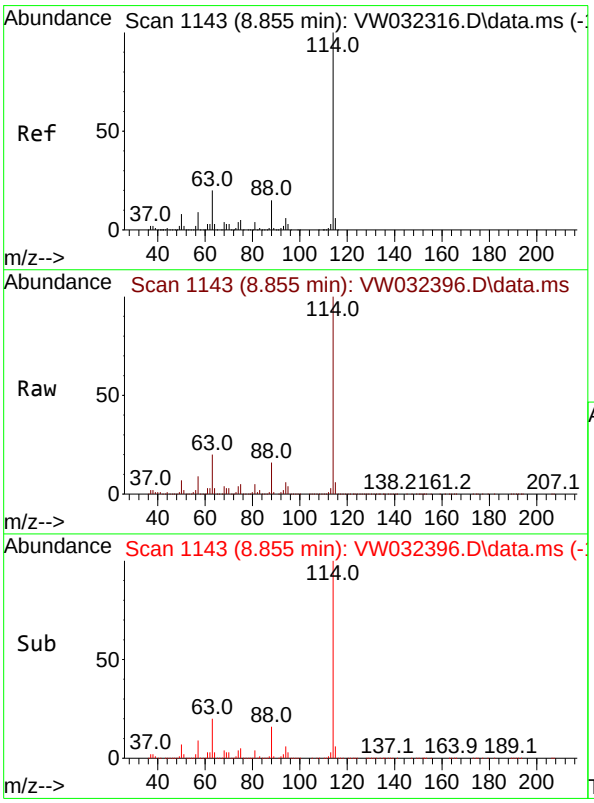
#33
1,2-Dichloroethane-d4
Concen: 60.844 ug/l
RT: 8.319 min Scan# 10
Delta R.T. -0.000 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Tgt Ion: 65 Resp: 214866

Ion	Ratio	Lower	Upper
65	100		
67	51.5	0.0	99.6

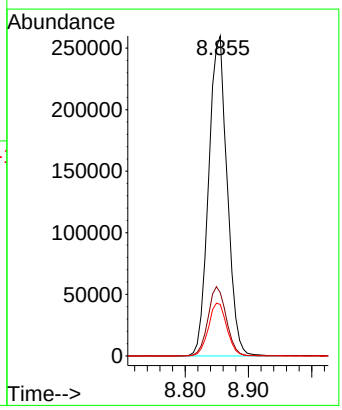


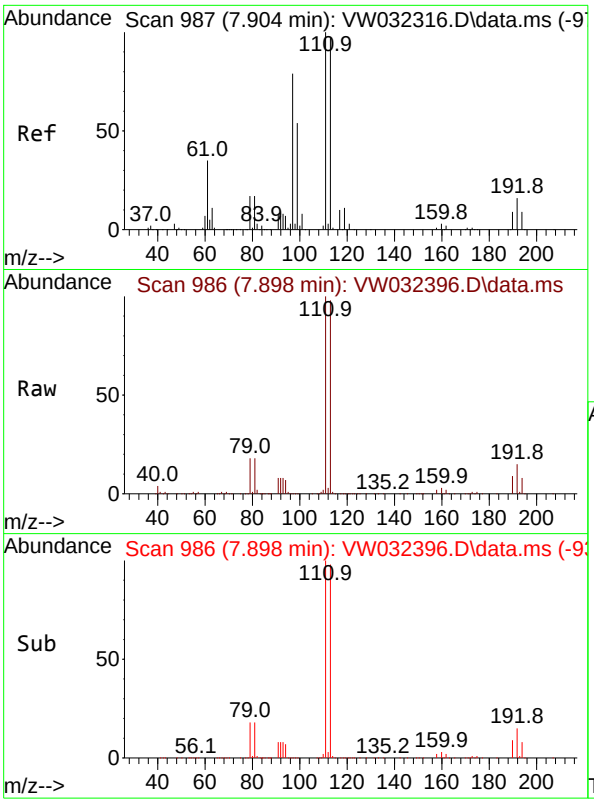


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.855 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Tgt Ion:114 Resp: 528270

Ion	Ratio	Lower	Upper
114	100		
63	19.7	0.0	40.4
88	16.1	0.0	32.0



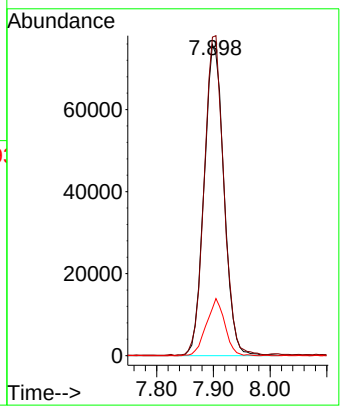


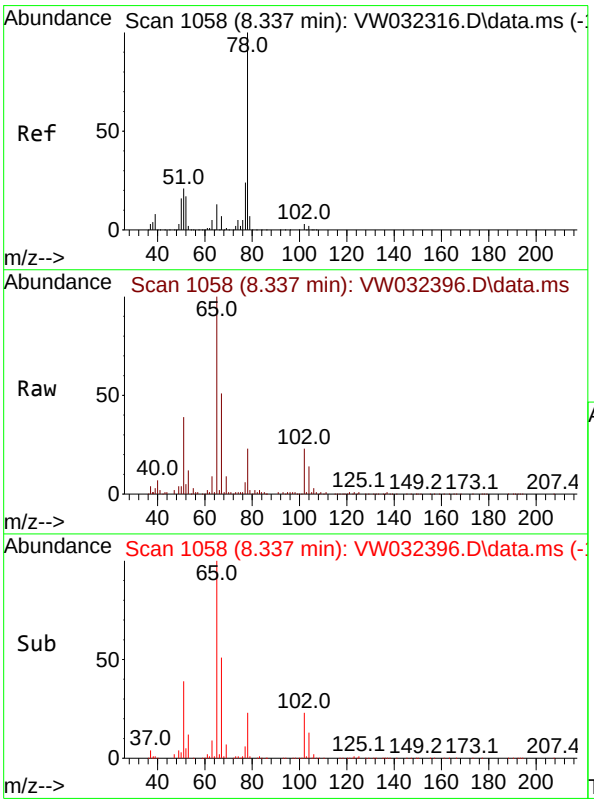
#35
Dibromofluoromethane
Concen: 53.879 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Tgt Ion:113 Resp: 184326

Ion	Ratio	Lower	Upper
113	100		
111	101.3	83.9	125.9
192	17.1	14.6	21.8

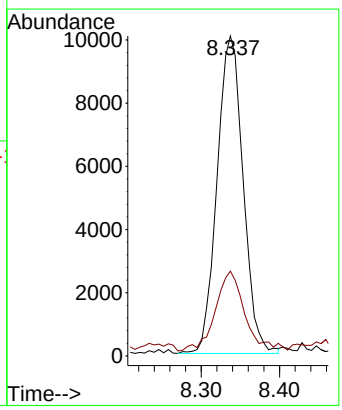


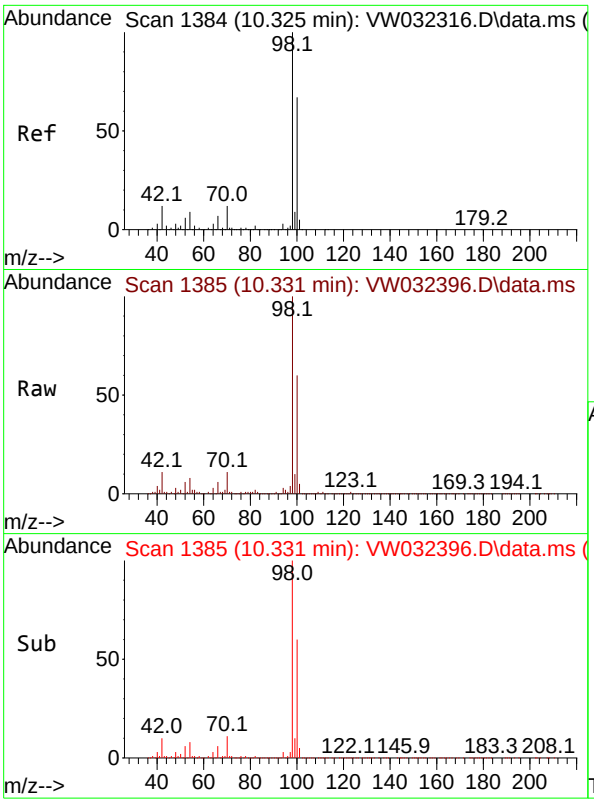


#40
Benzene
Concen: 1.533 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Tgt Ion: 78 Resp: 23201

Ion	Ratio	Lower	Upper
78	100		
77	25.2	20.7	31.1



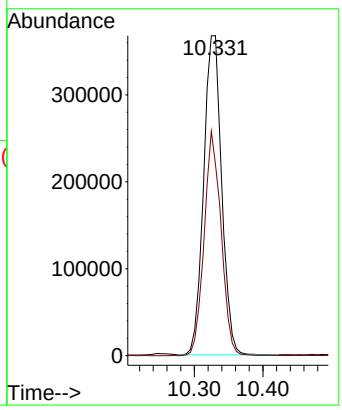


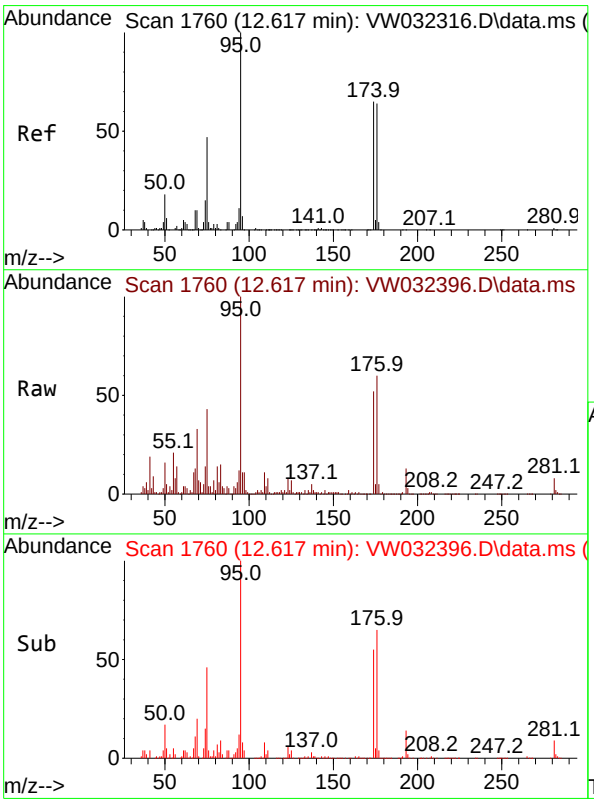
#50
Toluene-d8
Concen: 53.266 ug/l
RT: 10.331 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Tgt Ion: 98 Resp: 672570

Ion	Ratio	Lower	Upper
98	100		
100	65.9	51.4	77.2

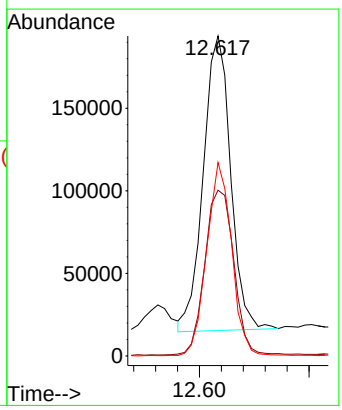


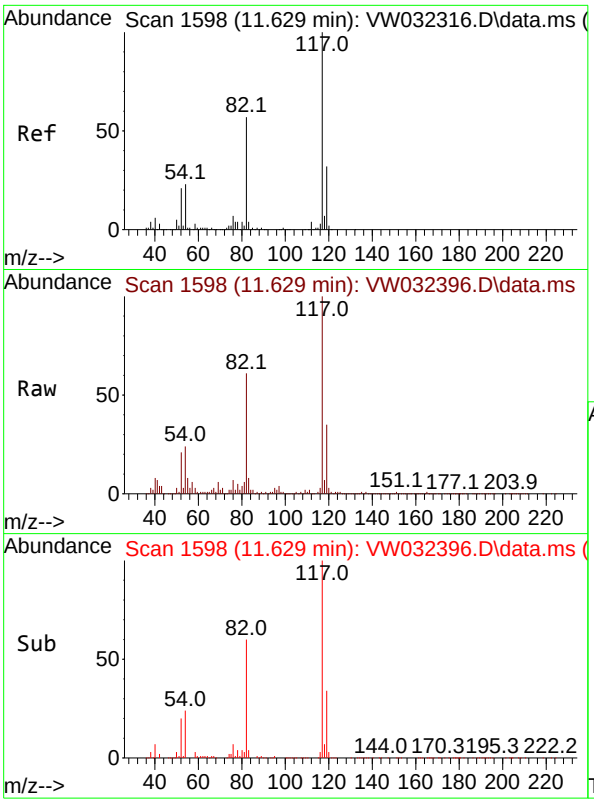


#62
4-Bromofluorobenzene
Concen: 64.765 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Tgt Ion: 95 Resp: 309089

Ion	Ratio	Lower	Upper
95	100		
174	60.3	0.0	145.6
176	60.5	0.0	140.8



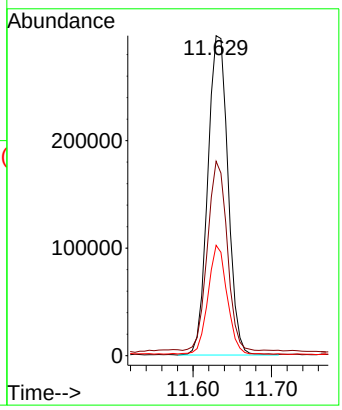


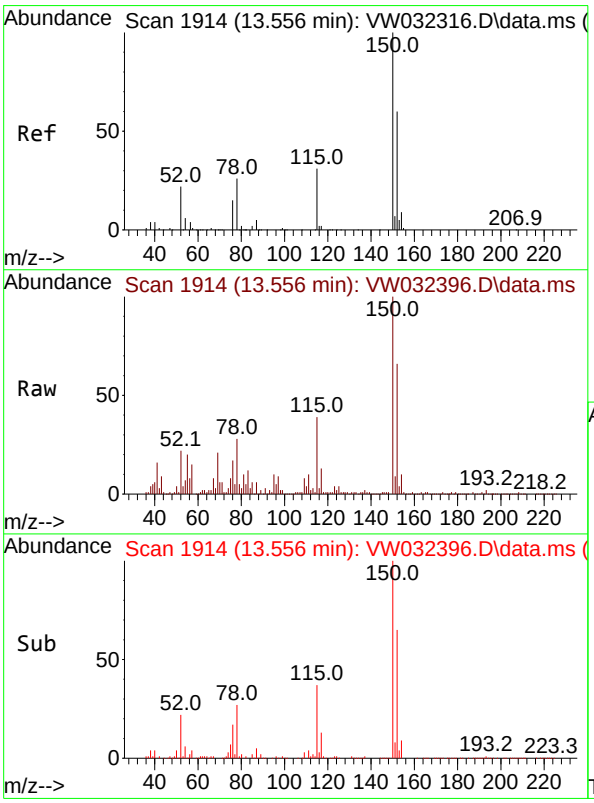
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Tgt Ion:117 Resp: 532171

Ion	Ratio	Lower	Upper
117	100		
82	59.2	42.7	64.1
119	34.0	25.2	37.8

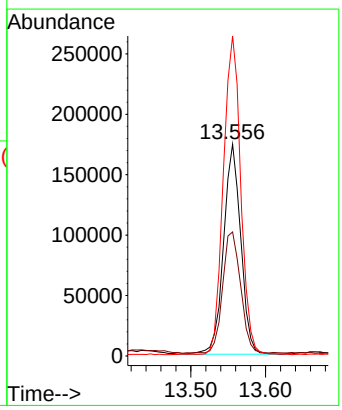




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032396.D
Acq: 20 Oct 2025 17:51

Tgt Ion:152 Resp: 278056

Ion	Ratio	Lower	Upper
152	100		
115	59.7	31.8	95.4
150	153.3	0.0	343.0



Sample Results: **VW032396.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032396.D
Acq On : 20 Oct 2025 17:51
Operator : SY/MD
Sample : Q3395-01
Misc : 5.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

Signal : TIC: VW032396.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.161	363	373	385	rBV	37769	117464	5.05%	0.524%
2	4.423	405	416	433	rVB	74052	249960	10.74%	1.115%
3	4.954	492	503	512	rBV3	14556	59931	2.57%	0.267%
4	5.966	662	669	679	rBV4	10611	31128	1.34%	0.139%
5	7.197	861	871	879	rBV3	17958	58871	2.53%	0.263%
6	7.898	973	986	991	rBV2	246756	599925	25.77%	2.676%
7	7.959	991	996	1006	rVV	337129	772639	33.20%	3.446%
8	8.045	1006	1010	1017	rVB5	14215	32766	1.41%	0.146%
9	8.319	1047	1055	1067	rBV	272288	635143	27.29%	2.833%
10	8.490	1075	1083	1094	rVB	172168	433498	18.62%	1.934%
11	8.849	1135	1142	1152	rBV	606675	1247197	53.58%	5.563%
12	9.081	1173	1180	1187	rBV2	139994	309272	13.29%	1.380%
13	9.319	1213	1219	1226	rBV5	64260	171713	7.38%	0.766%
14	9.392	1227	1231	1237	rVB4	18988	35313	1.52%	0.158%
15	9.764	1287	1292	1299	rVB	105203	192496	8.27%	0.859%
16	9.898	1308	1314	1320	rBV2	238896	480212	20.63%	2.142%
17	10.252	1367	1372	1378	rVB	254411	432528	18.58%	1.929%
18	10.325	1378	1384	1393	rVB	979082	1747224	75.07%	7.794%
19	11.404	1557	1561	1566	rBV3	144394	275845	11.85%	1.230%
20	11.629	1593	1598	1605	rVB	938395	1637818	70.37%	7.306%
21	11.824	1626	1630	1633	rBV2	88855	152973	6.57%	0.682%
22	11.873	1635	1638	1642	rVV3	101384	166296	7.14%	0.742%
23	12.123	1675	1679	1684	rBV3	118069	208681	8.97%	0.931%
24	12.361	1709	1718	1723	rBV2	367168	860908	36.99%	3.840%
25	12.617	1751	1760	1766	rVB3	958789	2327569	100.00%	10.383%
26	13.050	1827	1831	1838	rBV	1038519	1853033	79.61%	8.266%
27	13.123	1838	1843	1848	rBV	1389032	2177355	93.55%	9.712%
28	13.190	1850	1854	1860	rVB3	269042	533381	22.92%	2.379%
29	13.288	1867	1870	1876	rBV	286301	488165	20.97%	2.178%
30	13.403	1885	1889	1897	rVB3	492885	879411	37.78%	3.923%
31	13.556	1909	1914	1918	rBV	921053	1405657	60.39%	6.270%
32	14.062	1994	1997	2003	rVB2	307951	502231	21.58%	2.240%
33	14.190	2014	2018	2024	rBV2	234799	421999	18.13%	1.882%
34	14.379	2046	2049	2053	rVB2	166721	212948	9.15%	0.950%
35	15.318	2199	2203	2209	rVB2	226281	406822	17.48%	1.815%
36	16.275	2356	2360	2368	rVB2	130326	299737	12.88%	1.337%

Sample Results: **VW032396.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032396.D
Acq On : 20 Oct 2025 17:51
Operator : SY/MD
Sample : Q3395-01
Misc : 5.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

Sum of corrected areas: 22418109

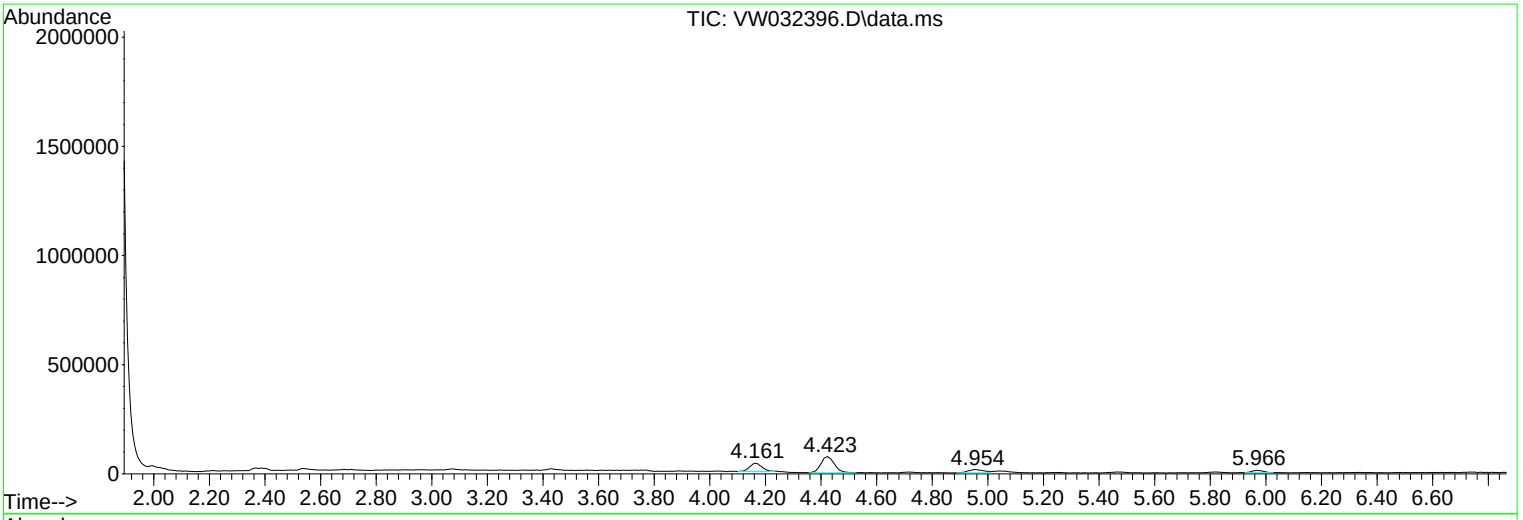
Sample Results: **VW032396.D**

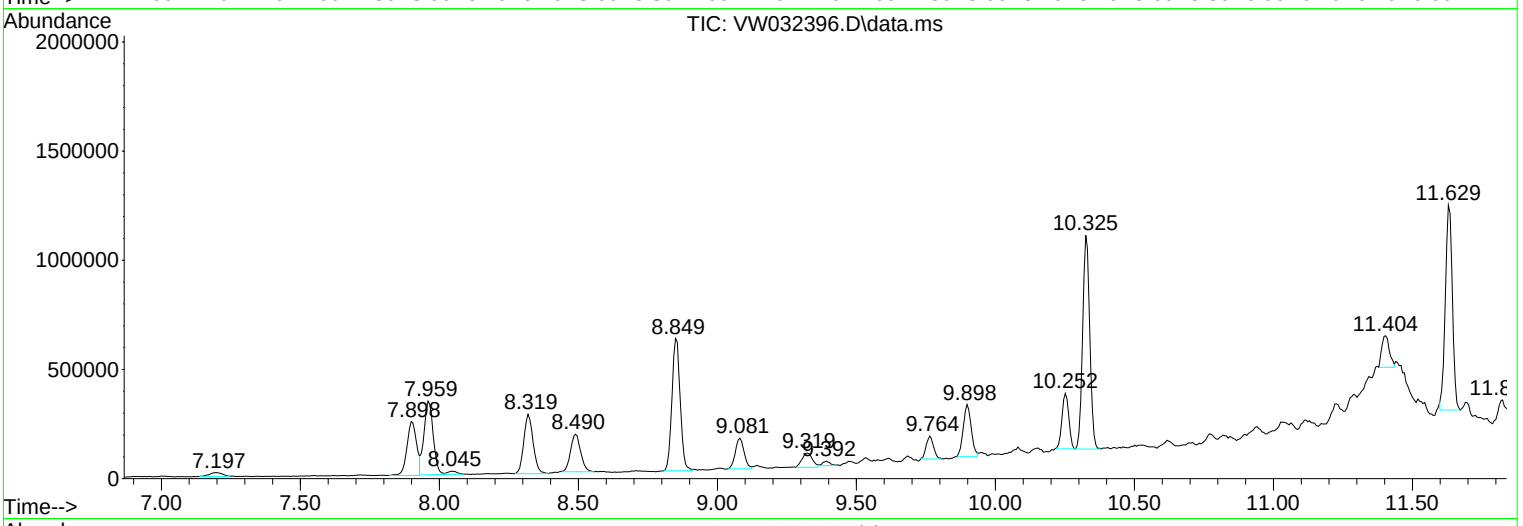
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032396.D
Acq On : 20 Oct 2025 17:51
Operator : SY/MD
Sample : Q3395-01
Misc : 5.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

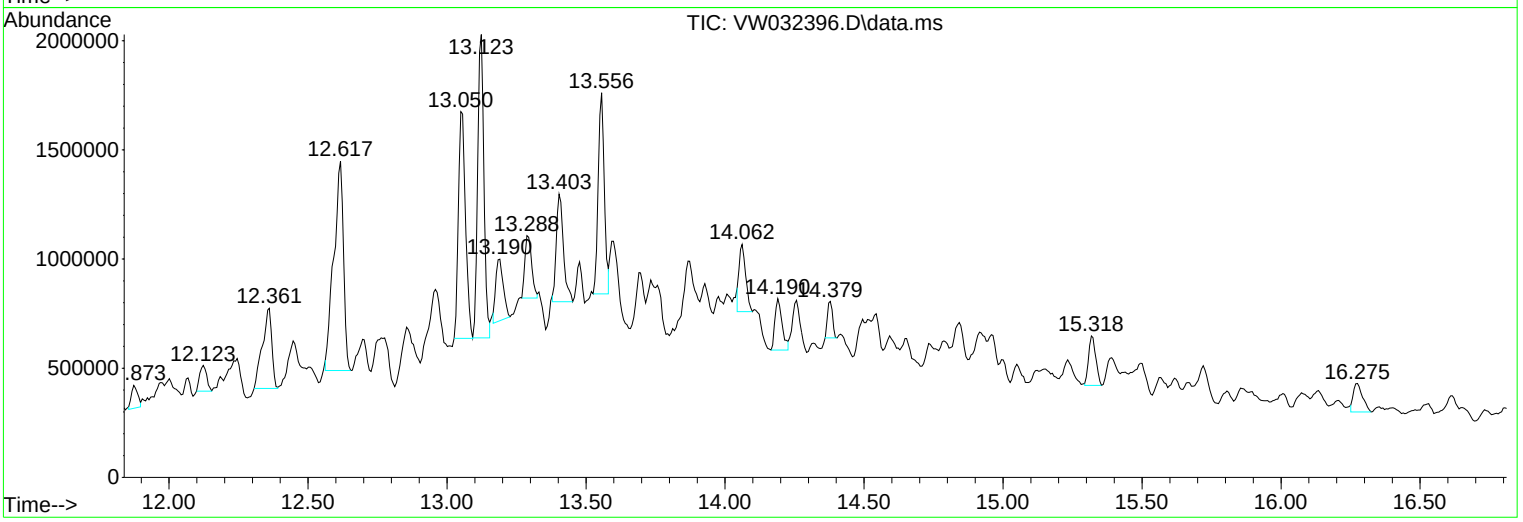
Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032396.D
Acq On : 20 Oct 2025 17:51
Operator : SY/MD
Sample : Q3395-01
Misc : 5.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

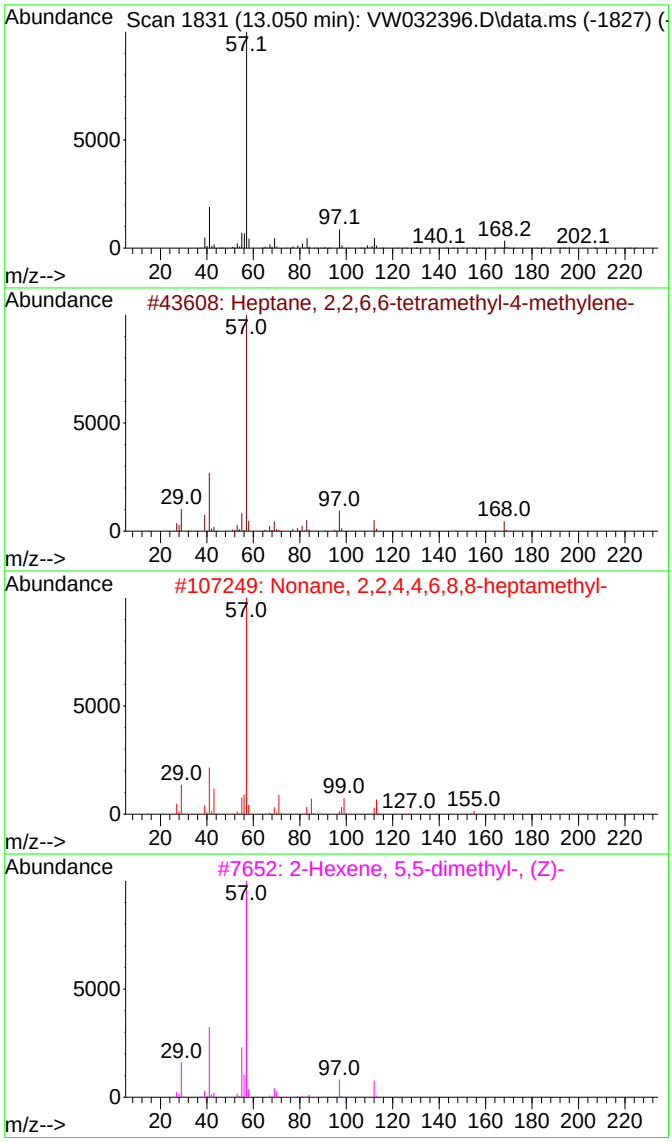
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

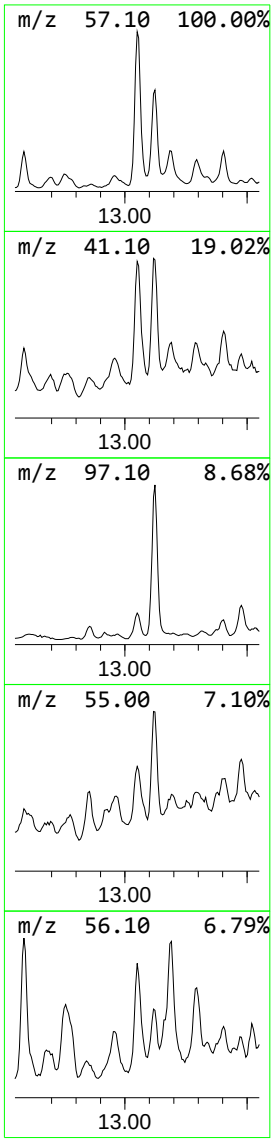
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Heptane, 2,2,6,6-tetramethy... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.050	65.91 ug/l	1853030	1,4-Dichlorobenzene-d4	13.556

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,2,6,6-tetramethyl-4-m...	168	C12H24	000141-70-8	91
2	Nonane, 2,2,4,4,6,8,8-heptamethyl-	226	C16H34	004390-04-9	53
3	2-Hexene, 5,5-dimethyl-, (Z)-	112	C8H16	039761-61-0	42
4	Sulfone, 2-hydroxyoctyl t-butyl	250	C12H26O3S	1000161-82-7	42
5	4-Decene, 2,2-dimethyl-, (Z)-	168	C12H24	055499-03-1	42





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032396.D
Acq On : 20 Oct 2025 17:51
Operator : SY/MD
Sample : Q3395-01
Misc : 5.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

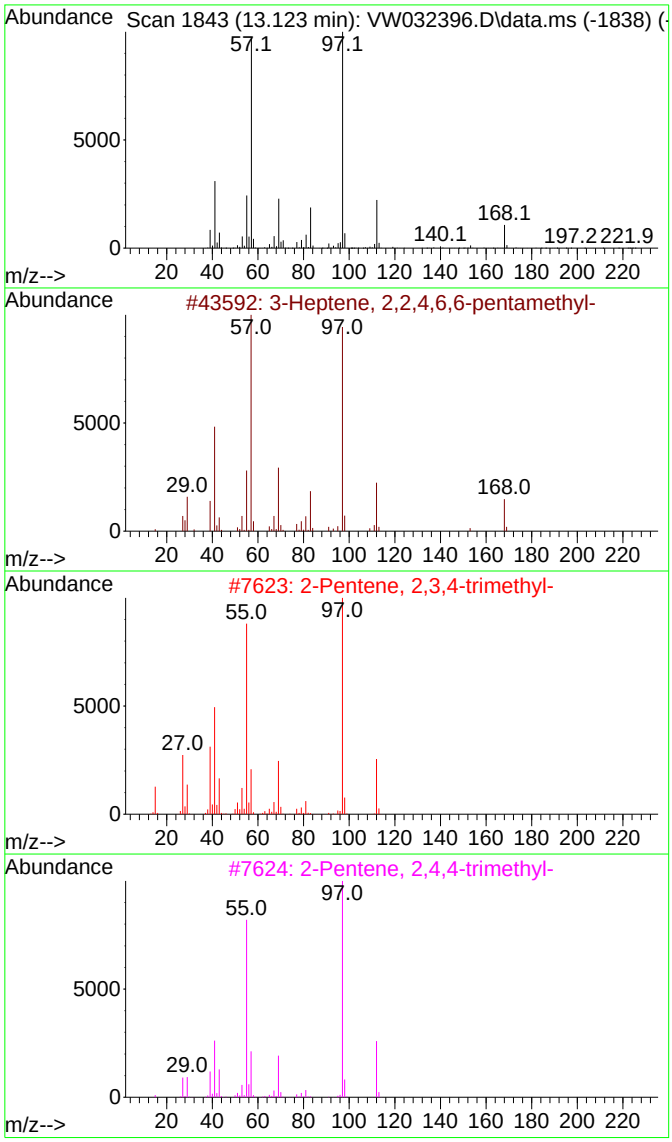
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

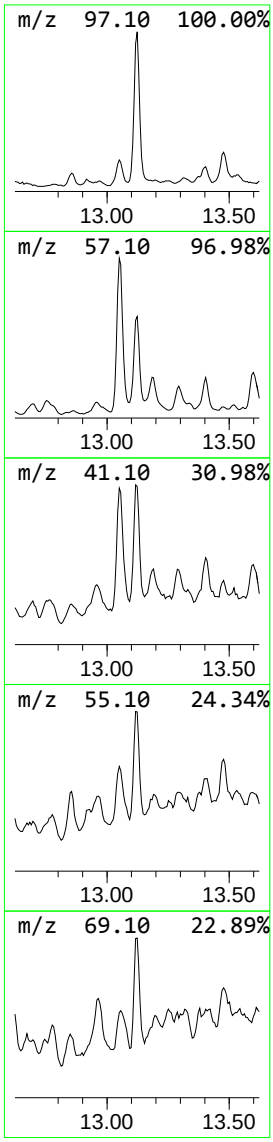
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 3-Heptene, 2,2,4,6,6-pentam... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.123	77.45 ug/l	2177360	1,4-Dichlorobenzene-d4	13.556

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Heptene, 2,2,4,6,6-pentamethyl-	168	C12H24	000123-48-8	91
2	2-Pentene, 2,3,4-trimethyl-	112	C8H16	000565-77-5	64
3	2-Pentene, 2,4,4-trimethyl-	112	C8H16	000107-40-4	64
4	Cyclohexane, 1,3-dimethyl-	112	C8H16	000591-21-9	58
5	2-Pentene, 3,4,4-trimethyl-	112	C8H16	000598-96-9	58





Sample Results: **VW032396.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032396.D
Acq On : 20 Oct 2025 17:51
Operator : SY/MD
Sample : Q3395-01
Misc : 5.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S09-000051-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Heptane, 2,2,6,...	13.050	65.9	ug/l	1853030	4	13.556	1405660	50.0
3-Heptene, 2,2,...	13.123	77.5	ug/l	2177360	4	13.556	1405660	50.0

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S07-000102-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-02	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 47.9
Sample Wt/Vol:	4.33 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	12.1	U	1	2.70	12.1	ug/Kg	10/20/25 18:14	VW102025
74-87-3	Chloromethane	12.1	U	1	2.70	12.1	ug/Kg	10/20/25 18:14	VW102025
75-01-4	Vinyl Chloride	12.1	U	1	1.90	12.1	ug/Kg	10/20/25 18:14	VW102025
74-83-9	Bromomethane	12.1	U	1	2.60	12.1	ug/Kg	10/20/25 18:14	VW102025
75-00-3	Chloroethane	12.1	U	1	3.00	12.1	ug/Kg	10/20/25 18:14	VW102025
75-69-4	Trichlorofluoromethane	12.1	U	1	2.90	12.1	ug/Kg	10/20/25 18:14	VW102025
76-13-1	1,1,2-Trichlorotrifluoroethane	12.1	U	1	2.60	12.1	ug/Kg	10/20/25 18:14	VW102025
75-35-4	1,1-Dichloroethene	12.1	U	1	2.40	12.1	ug/Kg	10/20/25 18:14	VW102025
67-64-1	Acetone	480		1	11.4	60.3	ug/Kg	10/20/25 18:14	VW102025
75-15-0	Carbon Disulfide	18.6		1	2.60	12.1	ug/Kg	10/20/25 18:14	VW102025
1634-04-4	Methyl tert-butyl Ether	12.1	U	1	1.80	12.1	ug/Kg	10/20/25 18:14	VW102025
79-20-9	Methyl Acetate	12.1	U	1	3.70	12.1	ug/Kg	10/20/25 18:14	VW102025
75-09-2	Methylene Chloride	24.1	U	1	8.50	24.1	ug/Kg	10/20/25 18:14	VW102025
156-60-5	trans-1,2-Dichloroethene	12.1	U	1	2.10	12.1	ug/Kg	10/20/25 18:14	VW102025
75-34-3	1,1-Dichloroethane	12.1	U	1	1.90	12.1	ug/Kg	10/20/25 18:14	VW102025
110-82-7	Cyclohexane	12.1	U	1	1.90	12.1	ug/Kg	10/20/25 18:14	VW102025
78-93-3	2-Butanone	150		1	15.8	60.3	ug/Kg	10/20/25 18:14	VW102025
56-23-5	Carbon Tetrachloride	12.1	U	1	2.30	12.1	ug/Kg	10/20/25 18:14	VW102025
156-59-2	cis-1,2-Dichloroethene	12.1	U	1	1.80	12.1	ug/Kg	10/20/25 18:14	VW102025
74-97-5	Bromochloromethane	12.1	U	1	2.80	12.1	ug/Kg	10/20/25 18:14	VW102025
67-66-3	Chloroform	12.1	U	1	2.00	12.1	ug/Kg	10/20/25 18:14	VW102025
71-55-6	1,1,1-Trichloroethane	12.1	U	1	2.20	12.1	ug/Kg	10/20/25 18:14	VW102025
108-87-2	Methylcyclohexane	120		1	2.20	12.1	ug/Kg	10/20/25 18:14	VW102025
71-43-2	Benzene	7.50	J	1	1.90	12.1	ug/Kg	10/20/25 18:14	VW102025
107-06-2	1,2-Dichloroethane	12.1	U	1	1.90	12.1	ug/Kg	10/20/25 18:14	VW102025
79-01-6	Trichloroethene	12.1	U	1	2.00	12.1	ug/Kg	10/20/25 18:14	VW102025
78-87-5	1,2-Dichloropropane	12.1	U	1	2.20	12.1	ug/Kg	10/20/25 18:14	VW102025
75-27-4	Bromodichloromethane	12.1	U	1	1.90	12.1	ug/Kg	10/20/25 18:14	VW102025
108-10-1	4-Methyl-2-Pentanone	60.3	U	1	8.60	60.3	ug/Kg	10/20/25 18:14	VW102025
108-88-3	Toluene	12.1	U	1	1.90	12.1	ug/Kg	10/20/25 18:14	VW102025
10061-02-6	t-1,3-Dichloropropene	12.1	U	1	1.60	12.1	ug/Kg	10/20/25 18:14	VW102025
10061-01-5	cis-1,3-Dichloropropene	12.1	U	1	1.50	12.1	ug/Kg	10/20/25 18:14	VW102025
79-00-5	1,1,2-Trichloroethane	12.1	U	1	2.20	12.1	ug/Kg	10/20/25 18:14	VW102025
591-78-6	2-Hexanone	60.3	U	1	8.90	60.3	ug/Kg	10/20/25 18:14	VW102025
124-48-1	Dibromochloromethane	12.1	U	1	2.10	12.1	ug/Kg	10/20/25 18:14	VW102025
106-93-4	1,2-Dibromoethane	12.1	U	1	2.10	12.1	ug/Kg	10/20/25 18:14	VW102025
127-18-4	Tetrachloroethene	12.1	U	1	2.50	12.1	ug/Kg	10/20/25 18:14	VW102025
108-90-7	Chlorobenzene	12.1	U	1	2.20	12.1	ug/Kg	10/20/25 18:14	VW102025
100-41-4	Ethyl Benzene	12.1	U	1	1.60	12.1	ug/Kg	10/20/25 18:14	VW102025
179601-23-1	m/p-Xylenes	24.1	U	1	3.00	24.1	ug/Kg	10/20/25 18:14	VW102025
95-47-6	o-Xylene	13.2		1	2.00	12.1	ug/Kg	10/20/25 18:14	VW102025
100-42-5	Styrene	12.1	U	1	1.70	12.1	ug/Kg	10/20/25 18:14	VW102025
75-25-2	Bromoform	12.1	U	1	2.10	12.1	ug/Kg	10/20/25 18:14	VW102025

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S07-000102-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-02	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 47.9
Sample Wt/Vol:	4.33 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	12.1	U	1	1.90	12.1	ug/Kg	10/20/25 18:14	VW102025
79-34-5	1,1,2,2-Tetrachloroethane	12.1	U	1	2.90	12.1	ug/Kg	10/20/25 18:14	VW102025
541-73-1	1,3-Dichlorobenzene	12.1	U	1	4.10	12.1	ug/Kg	10/20/25 18:14	VW102025
106-46-7	1,4-Dichlorobenzene	12.1	U	1	3.80	12.1	ug/Kg	10/20/25 18:14	VW102025
95-50-1	1,2-Dichlorobenzene	12.1	U	1	3.50	12.1	ug/Kg	10/20/25 18:14	VW102025
96-12-8	1,2-Dibromo-3-Chloropropane	12.1	U	1	4.40	12.1	ug/Kg	10/20/25 18:14	VW102025
120-82-1	1,2,4-Trichlorobenzene	12.1	U	1	7.20	12.1	ug/Kg	10/20/25 18:14	VW102025
87-61-6	1,2,3-Trichlorobenzene	12.1	U	1	7.70	12.1	ug/Kg	10/20/25 18:14	VW102025
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	61.3			63 - 155	123%	SPK: 50		
1868-53-7	Dibromofluoromethane	55.0			70 - 134	110%	SPK: 50		
2037-26-5	Toluene-d8	58.2			74 - 123	116%	SPK: 50		
460-00-4	4-Bromofluorobenzene	68.0			17 - 146	136%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	223000							
540-36-3	1,4-Difluorobenzene	496000							
3114-55-4	Chlorobenzene-d5	505000							
3855-82-1	1,4-Dichlorobenzene-d4	270000							
TENTATIVE IDENTIFIED COMPOUNDS									
001072-05-5	Heptane, 2,6-dimethyl-	240	J			10.9	ug/Kg		
002051-30-1	Octane, 2,6-dimethyl-	460	J			12.3	ug/Kg		
014676-29-0	Heptane, 3-ethyl-2-methyl-	790	J			12.4	ug/Kg		
108-67-8	1,3,5-Trimethylbenzene	10.0	J			12.9	ug/Kg		
95-63-6	1,2,4-Trimethylbenzene	11.5	J			13.3	ug/Kg		
017301-23-4	Undecane, 2,6-dimethyl-	290	J			14.8	ug/Kg		
074645-98-0	Dodecane, 2,7,10-trimethyl-	250	J			16.3	ug/Kg		

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_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Quant Time: Oct 21 01:33:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

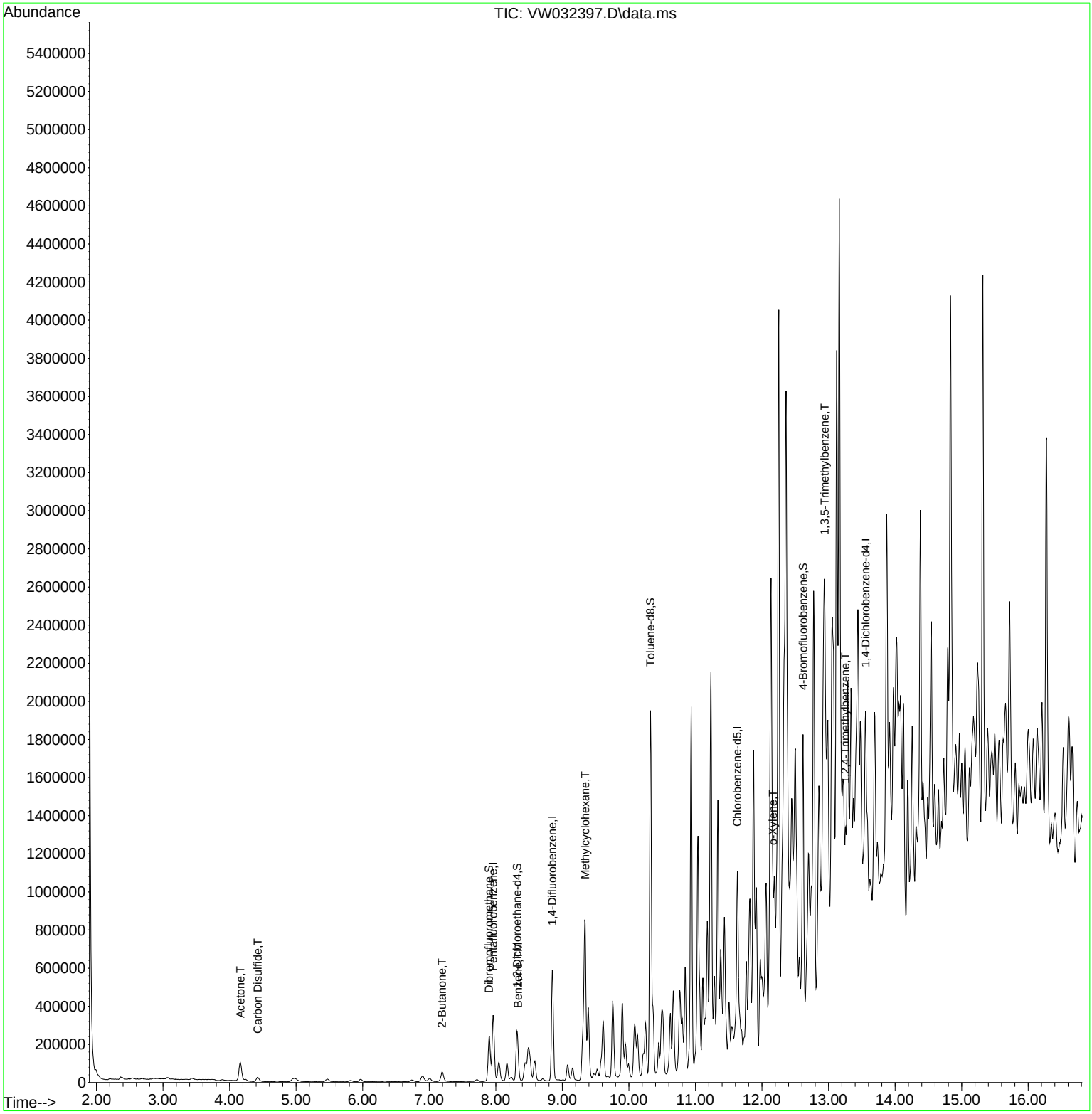
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	223455	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	495591	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	505431	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	270145	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	199880	61.327	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 122.660%			
35) Dibromofluoromethane	7.898	113	176402	54.962	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 109.920%			
50) Toluene-d8	10.325	98	689108	58.174	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 116.340%			
62) 4-Bromofluorobenzene	12.617	95	304455	68.001	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 136.000%			
Target Compounds						Qvalue
16) Acetone	4.161	43	180799	200.341	ug/l	99
17) Carbon Disulfide	4.423	76	53078	7.724	ug/l	96
25) 2-Butanone	7.191	43	78309	63.712	ug/l	95
39) Methylcyclohexane	9.343	83	273121	49.989	ug/l	92
40) Benzene	8.337	78	44000	3.099	ug/l	91
69) o-Xylene	12.166	106	36513	5.462	ug/l	84
80) 1,3,5-Trimethylbenzene	12.940	105	65963	4.128	ug/l	99
84) 1,2,4-Trimethylbenzene	13.251	105	77416	4.764	ug/l	98

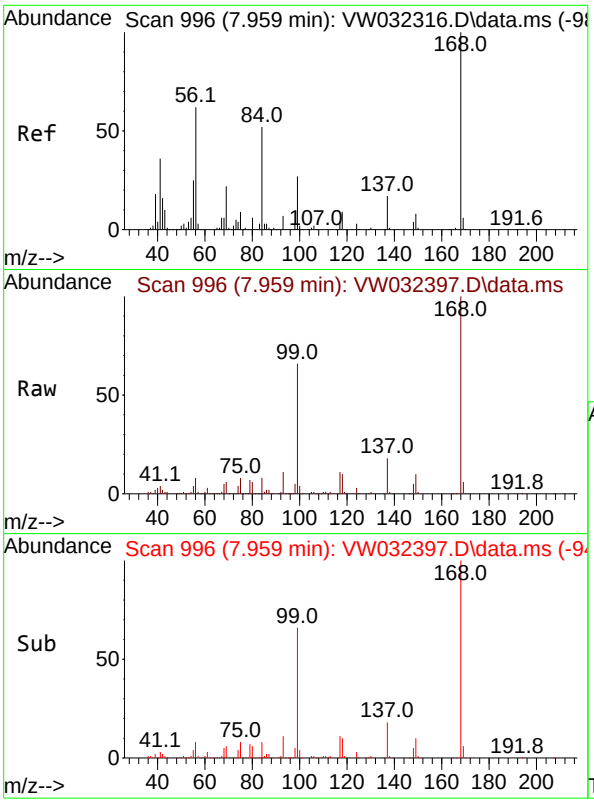
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Quant Time: Oct 21 01:33:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration



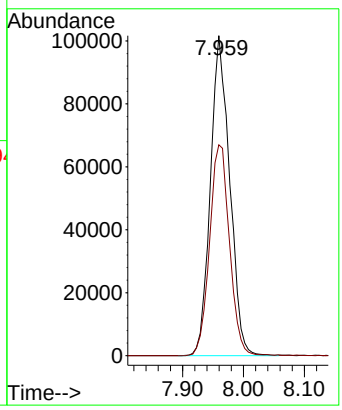


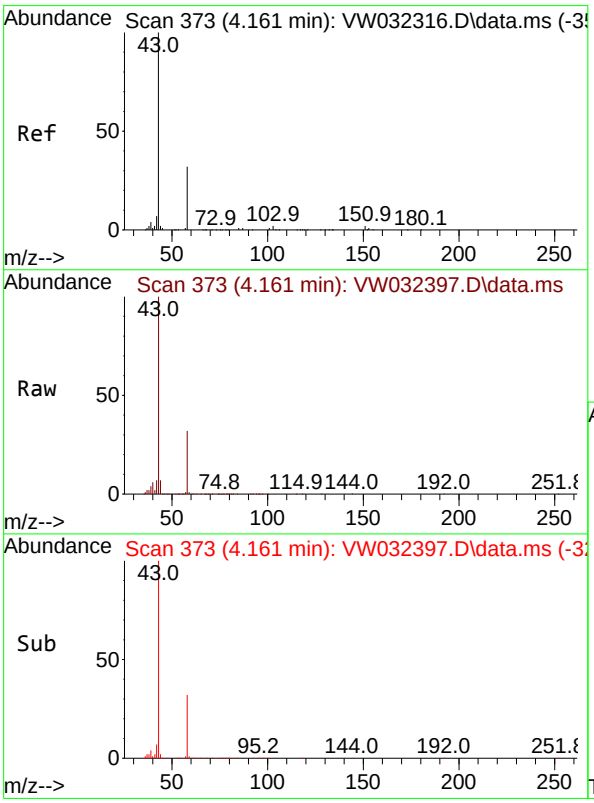
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Tgt Ion:168 Resp: 223455

Ion	Ratio	Lower	Upper
168	100		
99	65.9	49.3	73.9

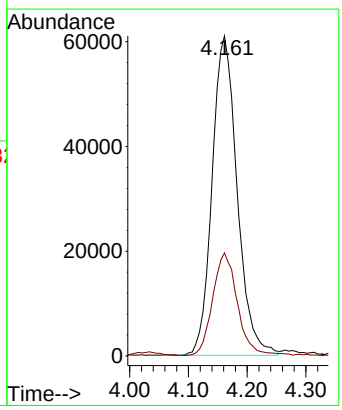


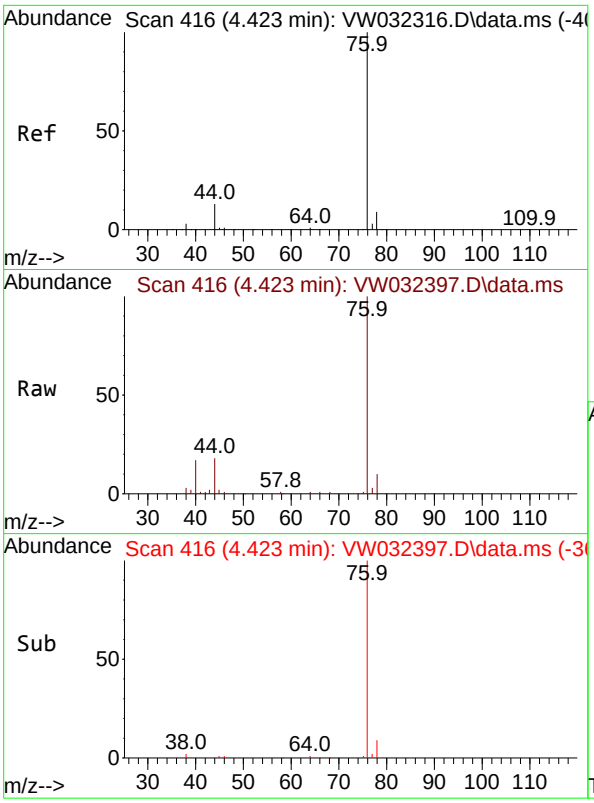


#16
Acetone
Concen: 200.341 ug/l
RT: 4.161 min Scan# 373
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Tgt Ion: 43 Resp: 180799

Ion	Ratio	Lower	Upper
43	100		
58	32.1	25.3	37.9



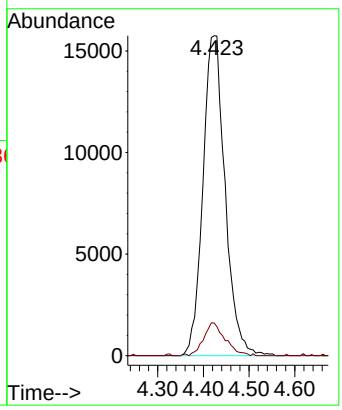


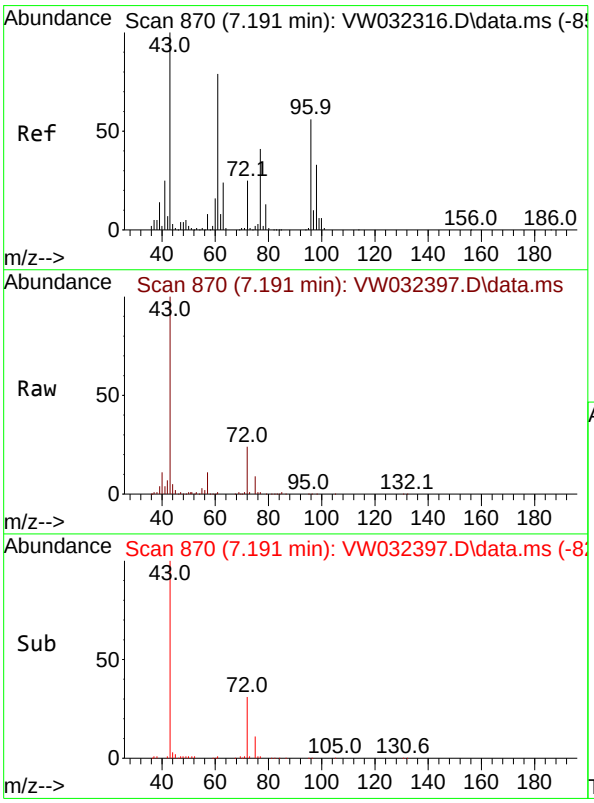
#17
Carbon Disulfide
Concen: 7.724 ug/l
RT: 4.423 min Scan# 4
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Tgt Ion: 76 Resp: 53078

Ion	Ratio	Lower	Upper
76	100		
78	10.2	7.0	10.6

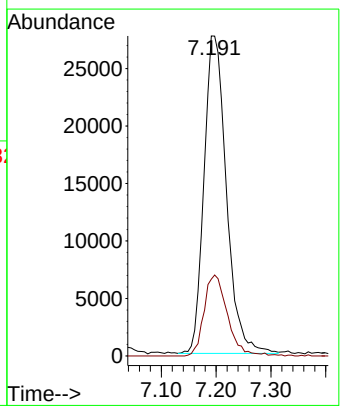


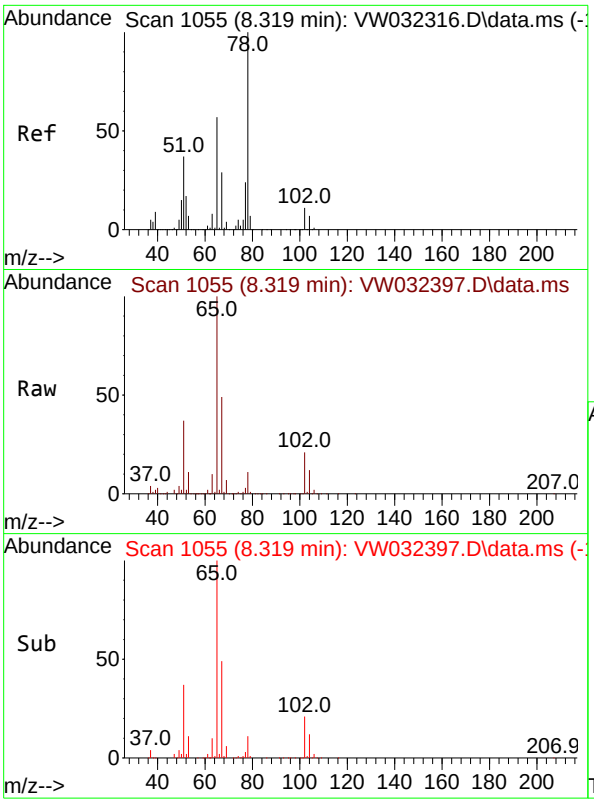


#25
2-Butanone
Concen: 63.712 ug/l
RT: 7.191 min Scan# 870
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Tgt Ion: 43 Resp: 78309

Ion	Ratio	Lower	Upper
43	100		
72	24.2	21.4	32.2



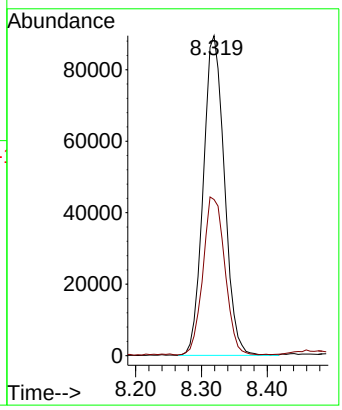


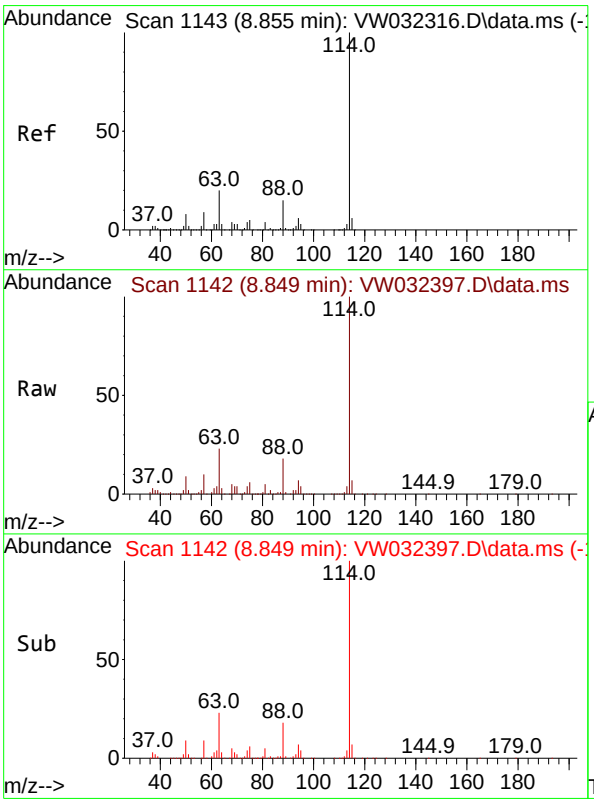
#33
1,2-Dichloroethane-d4
Concen: 61.327 ug/l
RT: 8.319 min Scan# 10
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Tgt Ion: 65 Resp: 199880

Ion	Ratio	Lower	Upper
65	100		
67	51.2	0.0	99.6

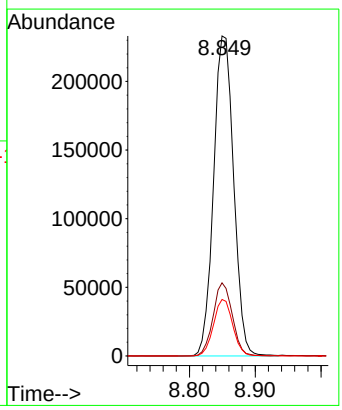


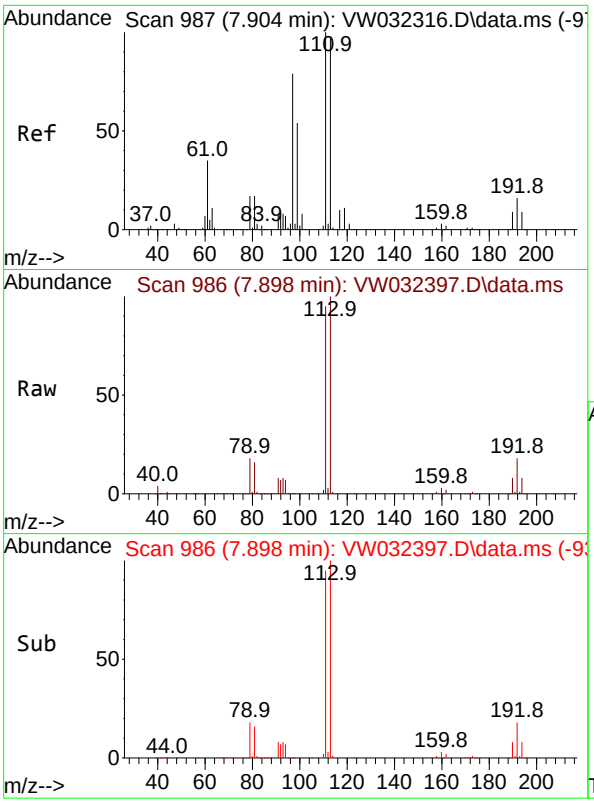


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Tgt Ion:114 Resp: 495591

Ion	Ratio	Lower	Upper
114	100		
63	22.8	0.0	40.4
88	17.7	0.0	32.0



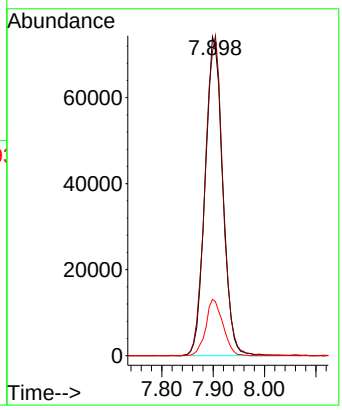


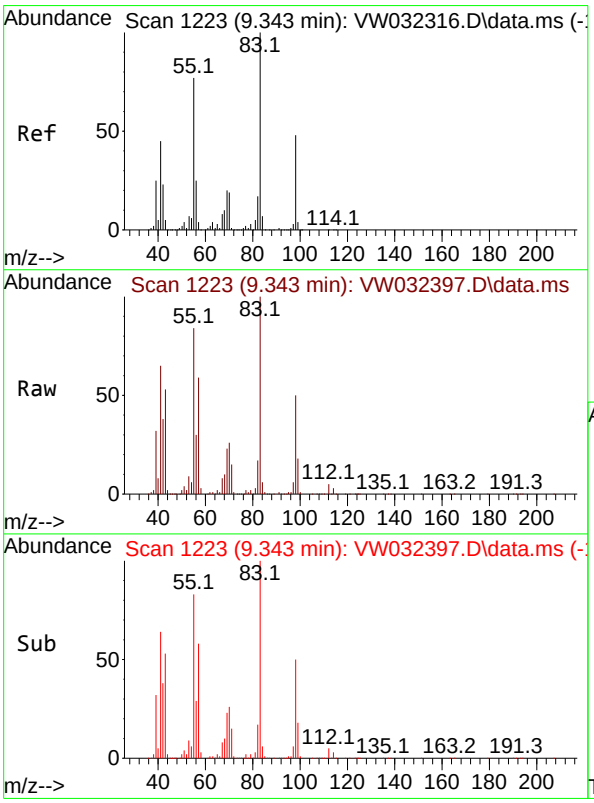
#35
Dibromofluoromethane
Concen: 54.962 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Tgt Ion:113 Resp: 176402

Ion	Ratio	Lower	Upper
113	100		
111	101.5	83.9	125.9
192	17.3	14.6	21.8

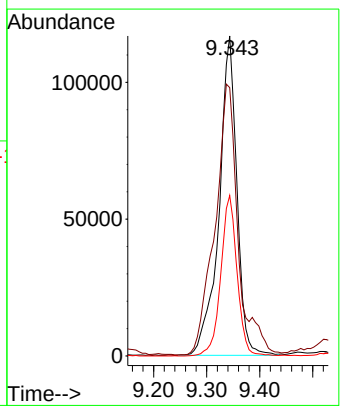


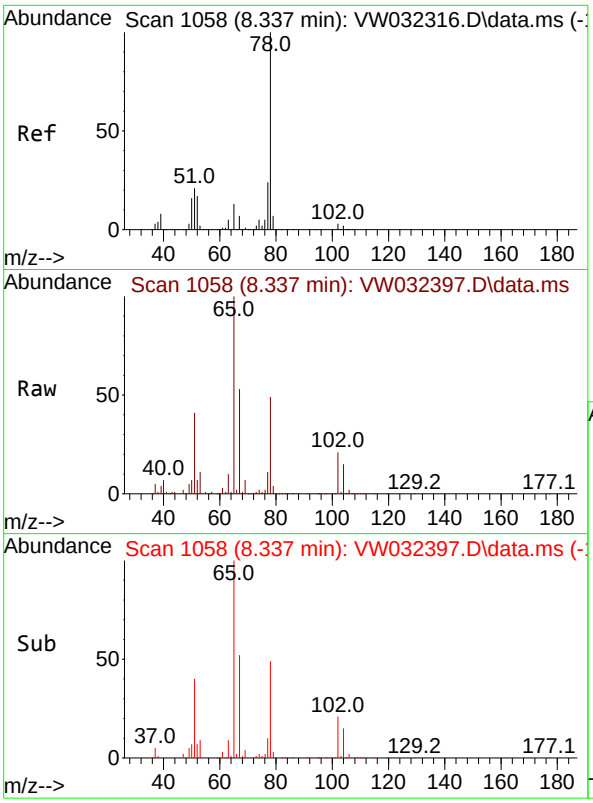


#39
Methylcyclohexane
Concen: 49.989 ug/l
RT: 9.343 min Scan# 1223
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Tgt Ion: 83 Resp: 273121

Ion	Ratio	Lower	Upper
83	100		
55	83.7	58.4	87.6
98	50.2	39.4	59.2



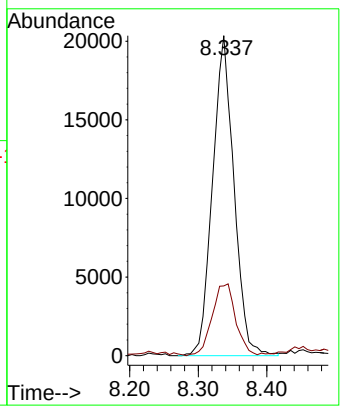


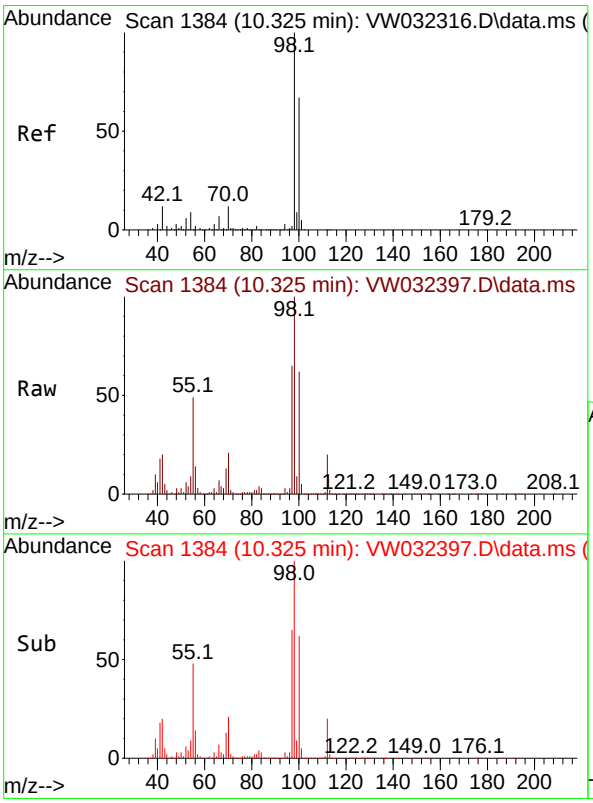
#40
Benzene
Concen: 3.099 ug/l
RT: 8.337 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Tgt Ion: 78 Resp: 44000

Ion	Ratio	Lower	Upper
78	100		
77	21.3	20.7	31.1

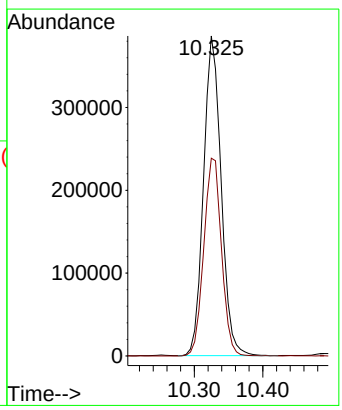


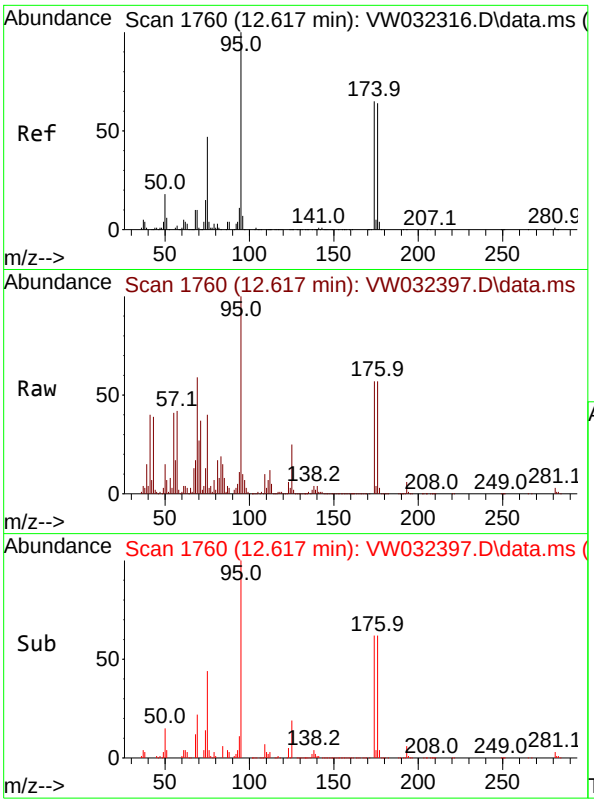


#50
Toluene-d8
Concen: 58.174 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Tgt Ion: 98 Resp: 689108

Ion	Ratio	Lower	Upper
98	100		
100	62.3	51.4	77.2



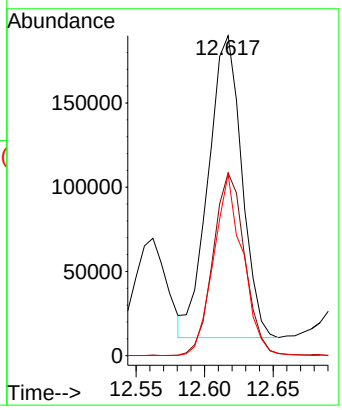


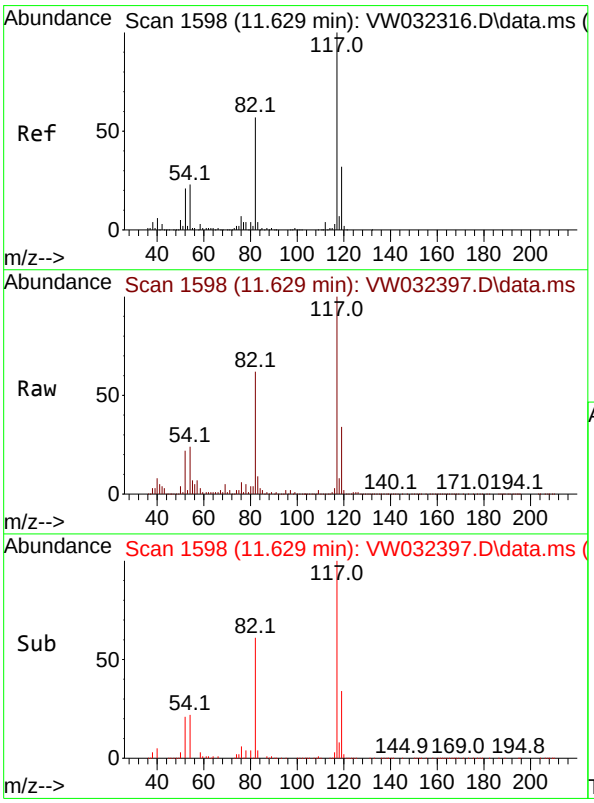
#62
4-Bromofluorobenzene
Concen: 68.001 ug/l
RT: 12.617 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Tgt Ion: 95 Resp: 304455

Ion	Ratio	Lower	Upper
95	100		
174	57.6	0.0	145.6
176	52.4	0.0	140.8

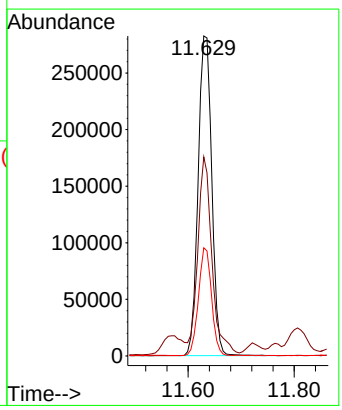


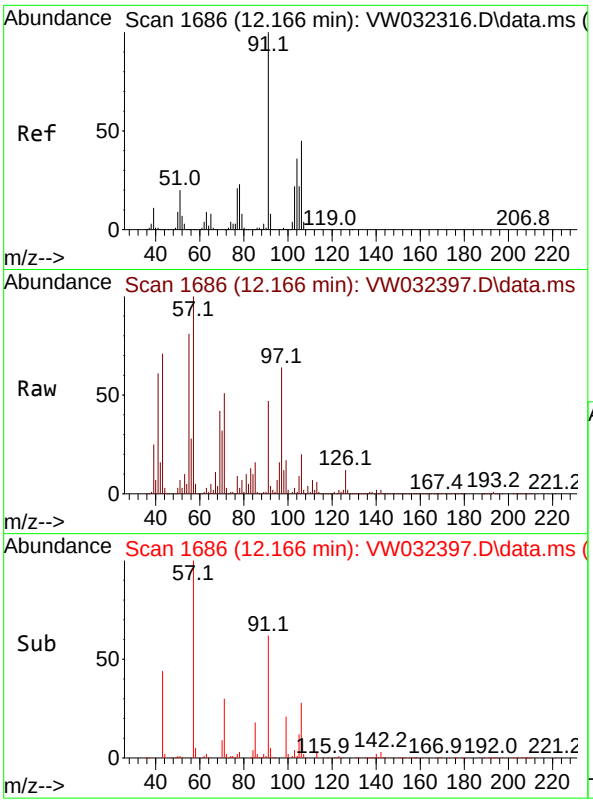


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Tgt Ion:117 Resp: 505431

Ion	Ratio	Lower	Upper
117	100		
82	58.5	42.7	64.1
119	33.7	25.2	37.8



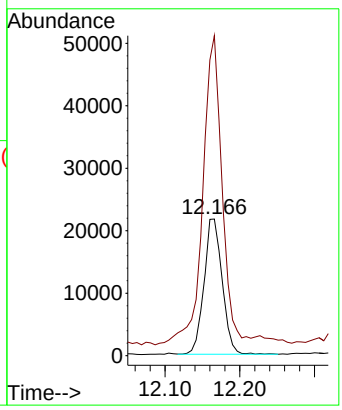


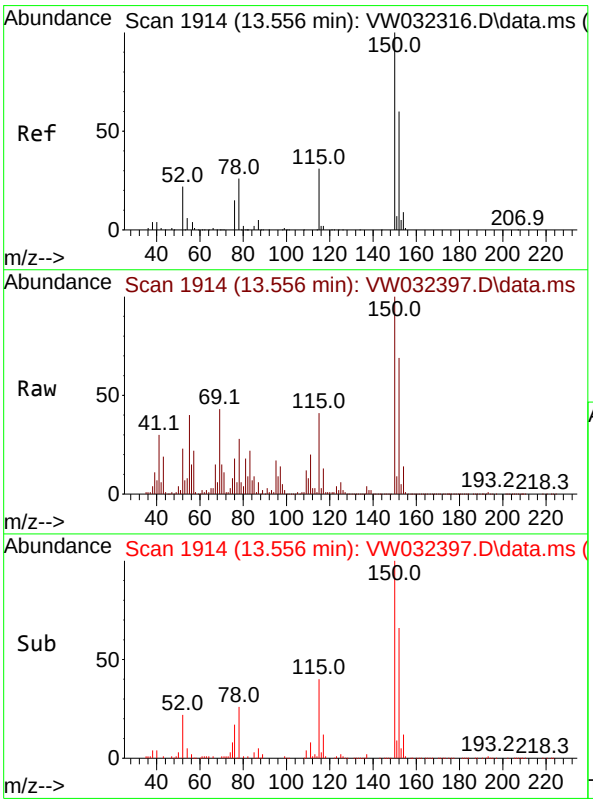
#69
o-Xylene
Concen: 5.462 ug/l
RT: 12.166 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Tgt Ion:106 Resp: 36513

Ion	Ratio	Lower	Upper
106	100		
91	243.2	108.7	326.3

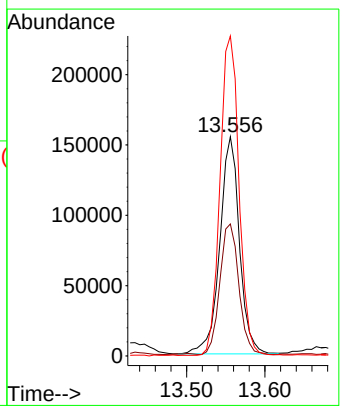


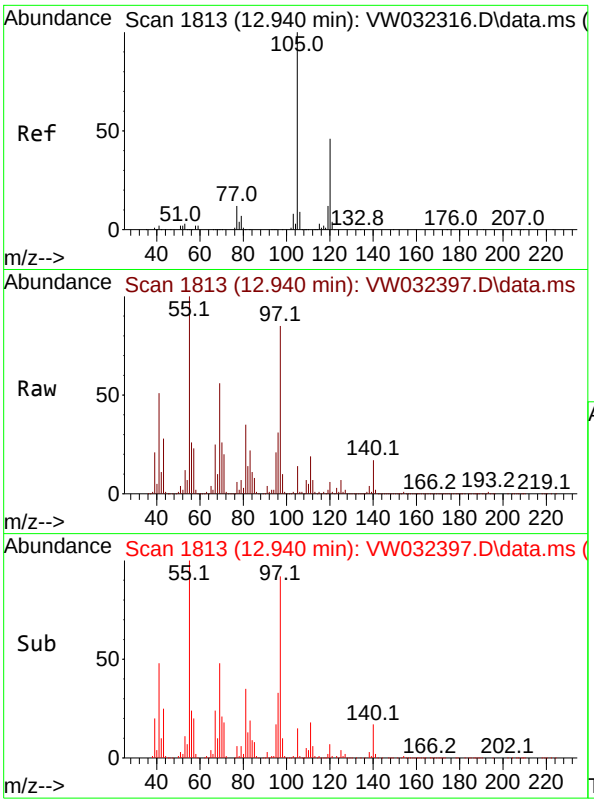


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Tgt Ion:152 Resp: 270145

Ion	Ratio	Lower	Upper
152	100		
115	57.9	31.8	95.4
150	141.5	0.0	343.0



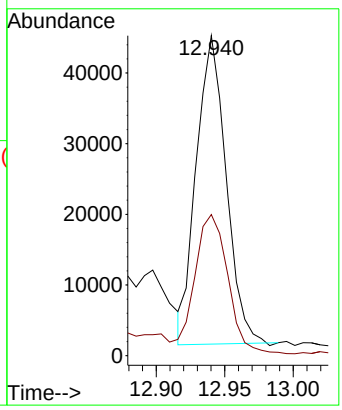


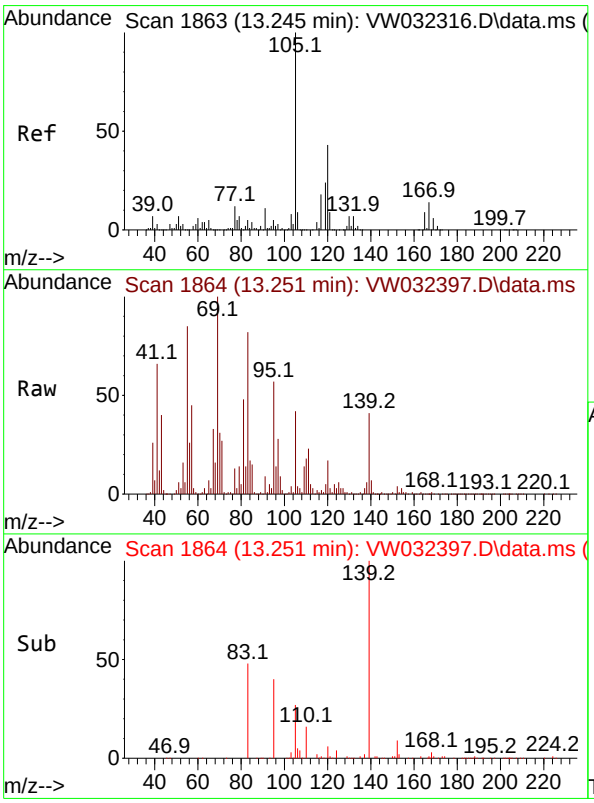
#80
1,3,5-Trimethylbenzene
Concen: 4.128 ug/l
RT: 12.940 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Tgt Ion:105 Resp: 65963

Ion	Ratio	Lower	Upper
105	100		
120	50.6	24.8	74.4

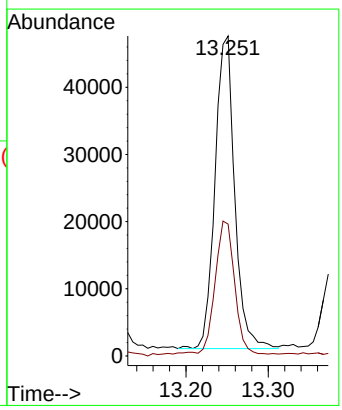




#84
1,2,4-Trimethylbenzene
Concen: 4.764 ug/l
RT: 13.251 min Scan# 1864
Delta R.T. 0.006 min
Lab File: VW032397.D
Acq: 20 Oct 2025 18:14

Tgt Ion:105 Resp: 77416

Ion	Ratio	Lower	Upper
105	100		
120	45.3	22.1	66.3



Sample Results: **VW032397.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

Signal : TIC: VW032397.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.161	363	373	384	rBV	94772	274653	2.50%	0.190%
2	7.191	856	870	884	rBV2	50803	152970	1.39%	0.106%
3	7.905	973	987	991	rBV	235226	577405	5.26%	0.399%
4	7.959	991	996	1004	rVV	342445	795641	7.25%	0.549%
5	8.045	1004	1010	1021	rVB	96978	252933	2.30%	0.175%
6	8.167	1023	1030	1037	rBV2	92057	210915	1.92%	0.146%
7	8.319	1047	1055	1066	rVB2	258073	620308	5.65%	0.428%
8	8.441	1066	1075	1078	rBV2	93278	228371	2.08%	0.158%
9	8.490	1078	1083	1093	rVV	172446	581865	5.30%	0.402%
10	8.587	1093	1099	1109	rVB	101637	238296	2.17%	0.165%
11	8.849	1133	1142	1156	rBV	582680	1218522	11.10%	0.841%
12	9.081	1172	1180	1186	rBV2	81426	183910	1.68%	0.127%
13	9.154	1186	1192	1200	rVB	62274	138801	1.26%	0.096%
14	9.337	1208	1222	1227	rBV3	843689	2229234	20.30%	1.539%
15	9.392	1227	1231	1239	rVB	366692	727499	6.63%	0.502%
16	9.612	1257	1267	1275	rVB2	294253	737508	6.72%	0.509%
17	9.758	1284	1291	1304	rBV2	402557	856069	7.80%	0.591%
18	9.904	1304	1315	1319	rBV	383576	809692	7.37%	0.559%
19	9.947	1319	1322	1327	rVB2	123248	193378	1.76%	0.134%
20	9.996	1327	1330	1336	rVB3	69584	116542	1.06%	0.080%
21	10.087	1337	1345	1349	rBV2	274251	681589	6.21%	0.471%
22	10.130	1349	1352	1360	rVB	212292	391020	3.56%	0.270%
23	10.215	1360	1366	1367	rBV2	116679	173680	1.58%	0.120%
24	10.252	1368	1372	1377	rVB2	259742	466096	4.25%	0.322%
25	10.325	1377	1384	1397	rVB	1903531	4024687	36.66%	2.779%
26	10.447	1398	1404	1407	rBV2	156151	280169	2.55%	0.193%
27	10.496	1407	1412	1422	rVB3	339370	949831	8.65%	0.656%
28	10.624	1424	1433	1436	rBV	317704	626622	5.71%	0.433%
29	10.666	1436	1440	1448	rVB	419641	755778	6.88%	0.522%
30	10.764	1449	1456	1460	rBV3	417066	944311	8.60%	0.652%
31	10.849	1466	1470	1475	rVB	525884	852922	7.77%	0.589%
32	10.934	1475	1484	1491	rBV	1894231	3300307	30.06%	2.279%
33	11.038	1491	1501	1509	rBV	1198090	2695446	24.55%	1.861%
34	11.111	1509	1513	1516	rVV2	409732	662615	6.04%	0.457%
35	11.178	1520	1524	1527	rVV	692087	1171747	10.67%	0.809%
36	11.233	1527	1533	1538	rVV	1986411	3873776	35.28%	2.675%

Sample Results: **VW032397.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

37	11.282	1538	1541	1545	rVV	377992	648810	5.91%	0.448%
38	11.337	1545	1550	1554	rVV2	1290203	2260017	20.58%	1.560%
39	11.379	1554	1557	1562	rVV3	495164	954861	8.70%	0.659%
40	11.434	1562	1566	1573	rVB	692575	1286548	11.72%	0.888%
41	11.501	1573	1577	1581	rBV	245720	377713	3.44%	0.261%
42	11.544	1581	1584	1589	rBV4	67819	115203	1.05%	0.080%
43	11.629	1591	1598	1607	rVV	849126	1672788	15.24%	1.155%
44	11.764	1616	1620	1623	rBV	396863	600729	5.47%	0.415%
45	11.818	1623	1629	1633	rVV4	648598	1272859	11.59%	0.879%
46	11.873	1633	1638	1642	rVV	1350988	2321658	21.15%	1.603%
47	11.916	1642	1645	1650	rVB3	826735	1302603	11.86%	0.899%
48	11.971	1650	1654	1657	rBV2	455169	827186	7.53%	0.571%
49	12.062	1664	1669	1673	rVB2	653919	1147542	10.45%	0.792%
50	12.135	1673	1681	1687	rBV2	2251294	5350406	48.73%	3.694%
51	12.251	1692	1700	1704	rVV	3594451	6433481	58.60%	4.442%
52	12.361	1704	1718	1726	rVV3	3127697	10979465	100.00%	7.581%
53	12.446	1729	1732	1735	rVV4	958538	1752977	15.97%	1.210%
54	12.501	1737	1741	1748	rVB4	1193532	2738361	24.94%	1.891%
55	12.617	1754	1760	1765	rVB2	1401954	2321864	21.15%	1.603%
56	12.696	1765	1773	1777	rBV5	777026	1914181	17.43%	1.322%
57	12.776	1782	1786	1792	rVB2	2081975	3722217	33.90%	2.570%
58	12.855	1792	1799	1804	rBV5	1059778	2580248	23.50%	1.781%
59	12.940	1805	1813	1818	rBV5	1625980	4656633	42.41%	3.215%
60	13.056	1826	1832	1838	rBV2	1518881	4169738	37.98%	2.879%
61	13.123	1838	1843	1846	rVV	2617750	4234419	38.57%	2.924%
62	13.160	1846	1849	1856	rVB	3179097	5087478	46.34%	3.513%
63	13.288	1867	1870	1874	rBV2	787294	1007355	9.17%	0.696%
64	13.336	1875	1878	1882	rVB3	736079	974303	8.87%	0.673%
65	13.440	1892	1895	1899	rVB3	814448	1140484	10.39%	0.787%
66	13.556	1910	1914	1922	rVB5	940735	2069184	18.85%	1.429%
67	13.690	1931	1936	1941	rBV3	954075	1810793	16.49%	1.250%
68	13.873	1961	1966	1970	rBV4	1756488	3201732	29.16%	2.211%
69	13.977	1979	1983	1986	rBV5	654506	1108944	10.10%	0.766%
70	14.019	1986	1990	1994	rVV3	602387	1241493	11.31%	0.857%
71	14.123	2005	2007	2013	rVB	1110799	1655772	15.08%	1.143%
72	14.190	2014	2018	2022	rBV3	704046	1220847	11.12%	0.843%
73	14.257	2025	2029	2035	rVB5	816175	1367773	12.46%	0.944%
74	14.318	2035	2039	2042	rBV4	285720	550557	5.01%	0.380%
75	14.379	2045	2049	2053	rVV2	1554424	2353682	21.44%	1.625%
76	14.489	2064	2067	2069	rBV3	308361	413251	3.76%	0.285%

Sample Results: **VW032397.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

77	14.544	2072	2076	2081	rVB4	1101570	1884220	17.16%	1.301%
78	14.794	2112	2117	2119	rBV2	880779	1519242	13.84%	1.049%
79	14.830	2119	2123	2130	rVB	2631797	4915120	44.77%	3.394%
80	15.318	2198	2203	2210	rBV	2865665	4707956	42.88%	3.251%
81	15.623	2250	2253	2254	rBV2	350717	424819	3.87%	0.293%
82	15.720	2265	2269	2277	rVB6	1162978	2334800	21.27%	1.612%
83	16.208	2345	2349	2354	rVV3	580881	988004	9.00%	0.682%
84	16.275	2355	2360	2368	rVB	2122998	4221899	38.45%	2.915%

Sum of corrected areas: 144837323

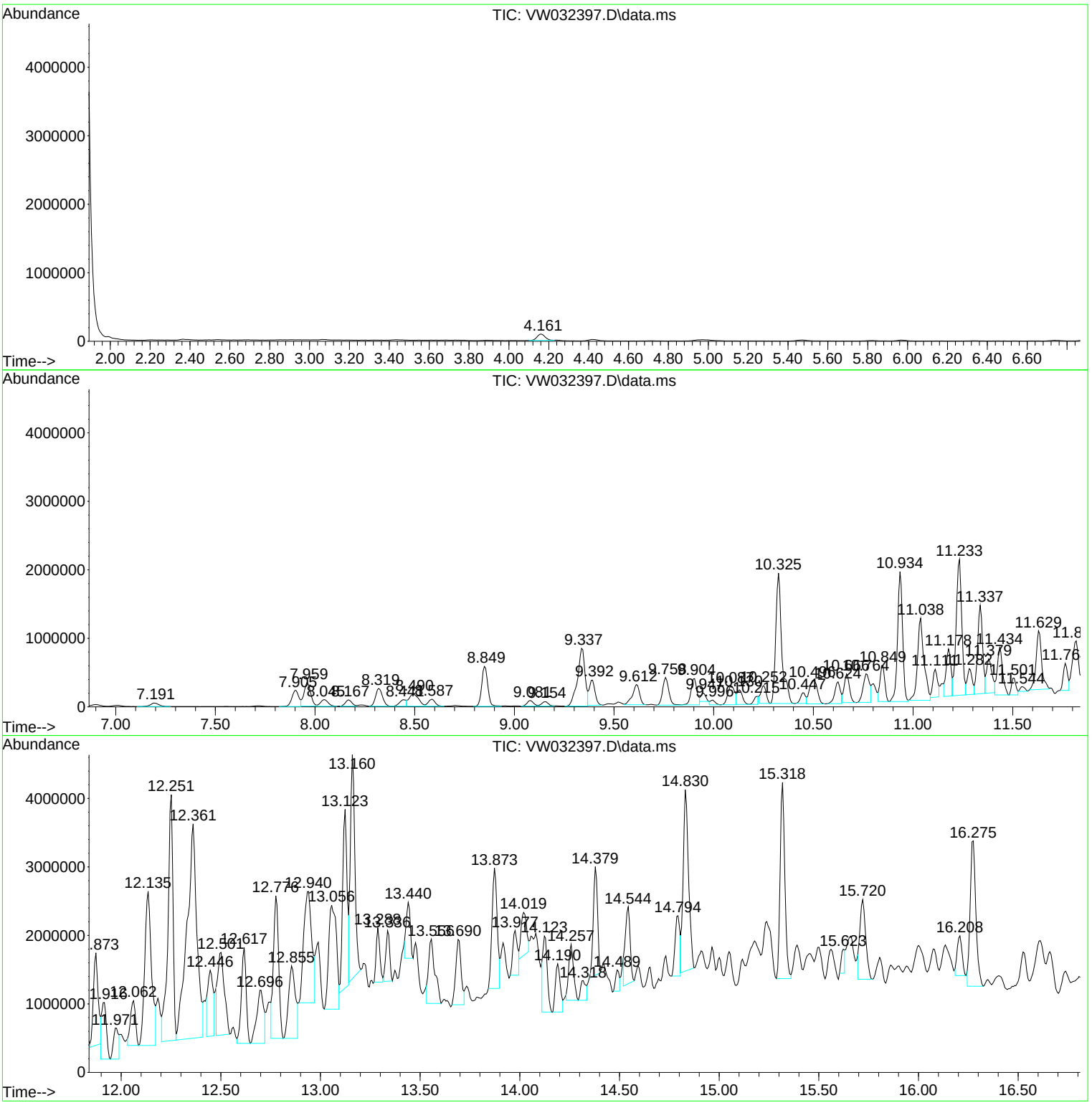
Sample Results: **VW032397.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

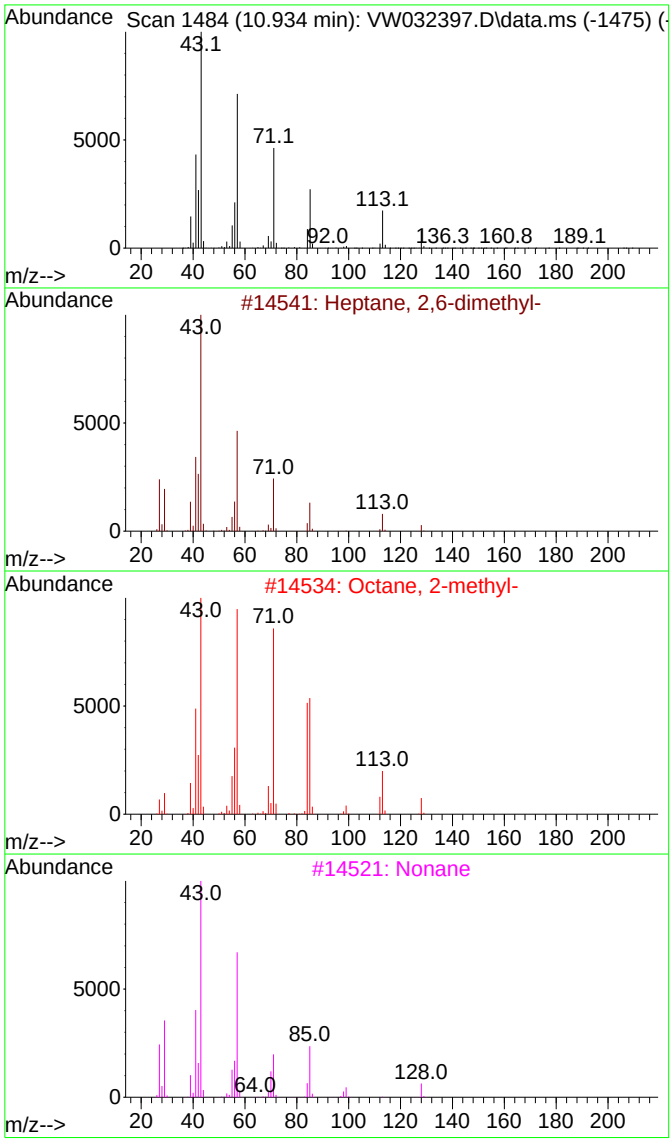
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

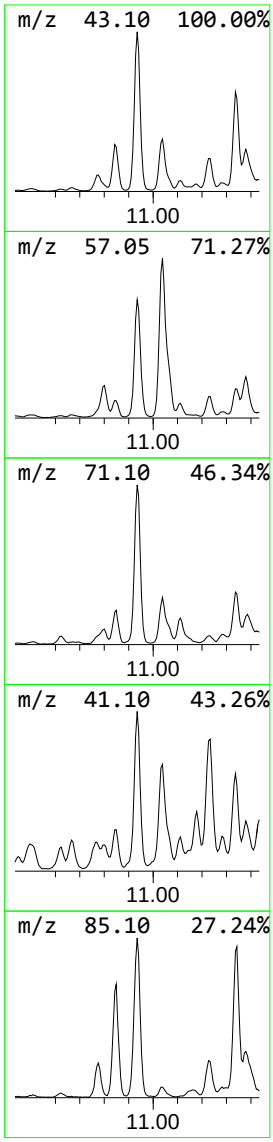
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 Heptane, 2,6-dimethyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.935	98.65 ug/l	3300310	Chlorobenzene-d5	11.629

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,6-dimethyl-	128	C9H20	001072-05-5	94
2	Octane, 2-methyl-	128	C9H20	003221-61-2	91
3	Nonane	128	C9H20	000111-84-2	58
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	53
5	Hexane, 3,3-dimethyl-	114	C8H18	000563-16-6	50





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

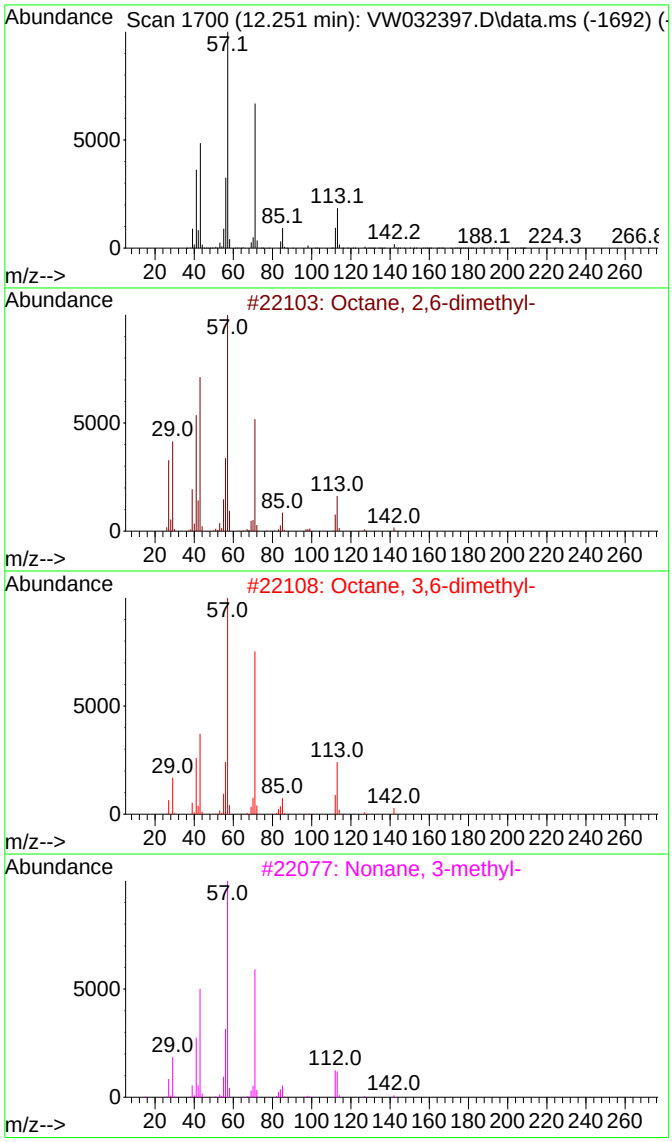
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

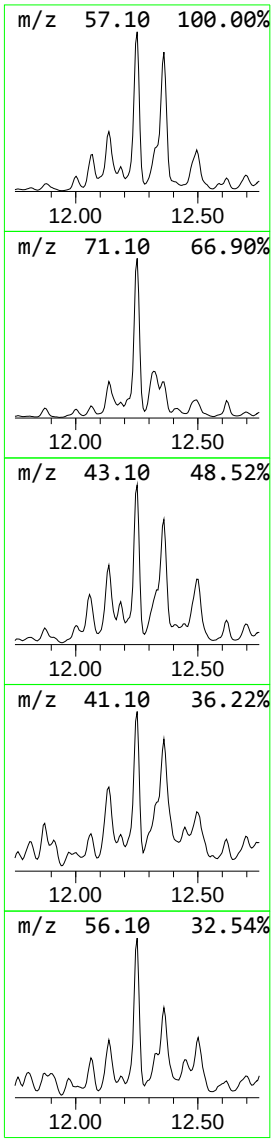
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 Octane, 2,6-dimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.251	192.30 ug/l	6433480	Chlorobenzene-d5	11.629

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	91
2	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	91
3	Nonane, 3-methyl-	142	C10H22	005911-04-6	87
4	Decane, 2,6,7-trimethyl-	184	C13H28	062108-25-2	64
5	Nonane, 4-methyl-5-propyl-	184	C13H28	062185-55-1	59





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

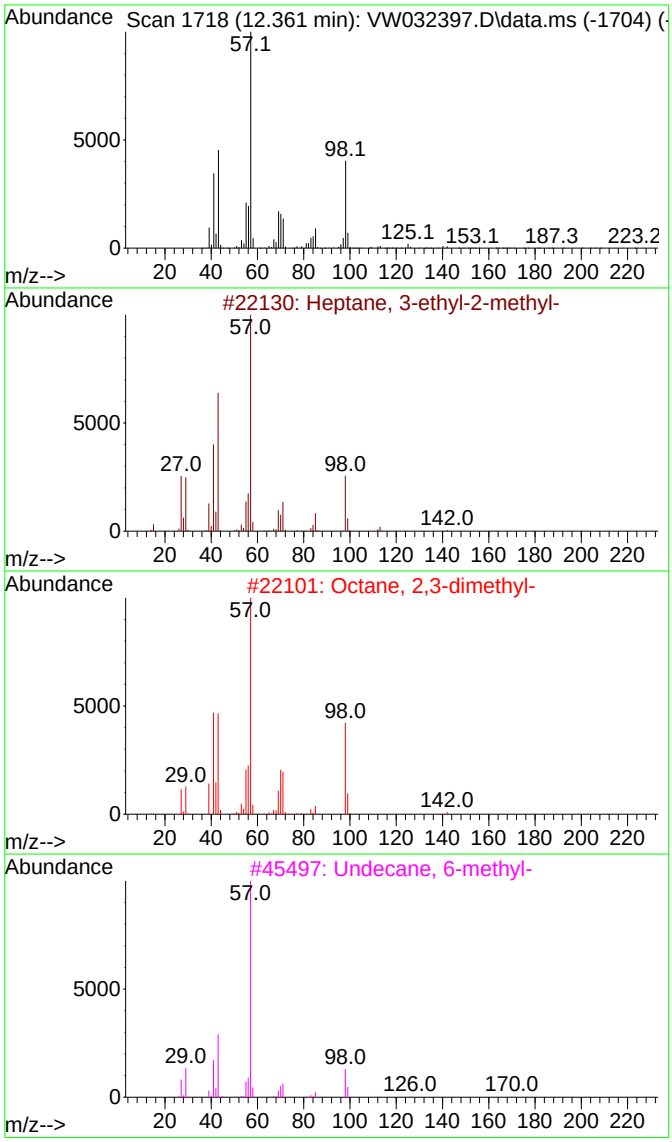
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

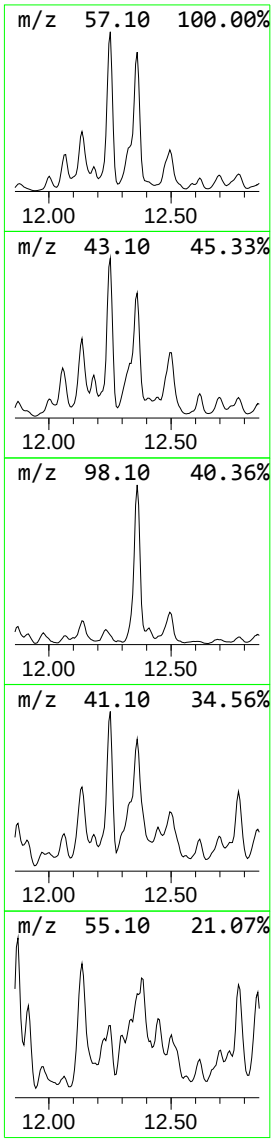
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Heptane, 3-ethyl-2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.361	328.18 ug/l	10979500	Chlorobenzene-d5	11.629

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	91
2	Octane, 2,3-dimethyl-	142	C10H22	007146-60-3	81
3	Undecane, 6-methyl-	170	C12H26	017302-33-9	64
4	Carbonic acid, heptyl vinyl ester	186	C10H18O3	1010383-25-4	59
5	Heptyl isobutyl carbonate	216	C12H24O3	959068-08-7	38





Sample Results: **VW032397.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

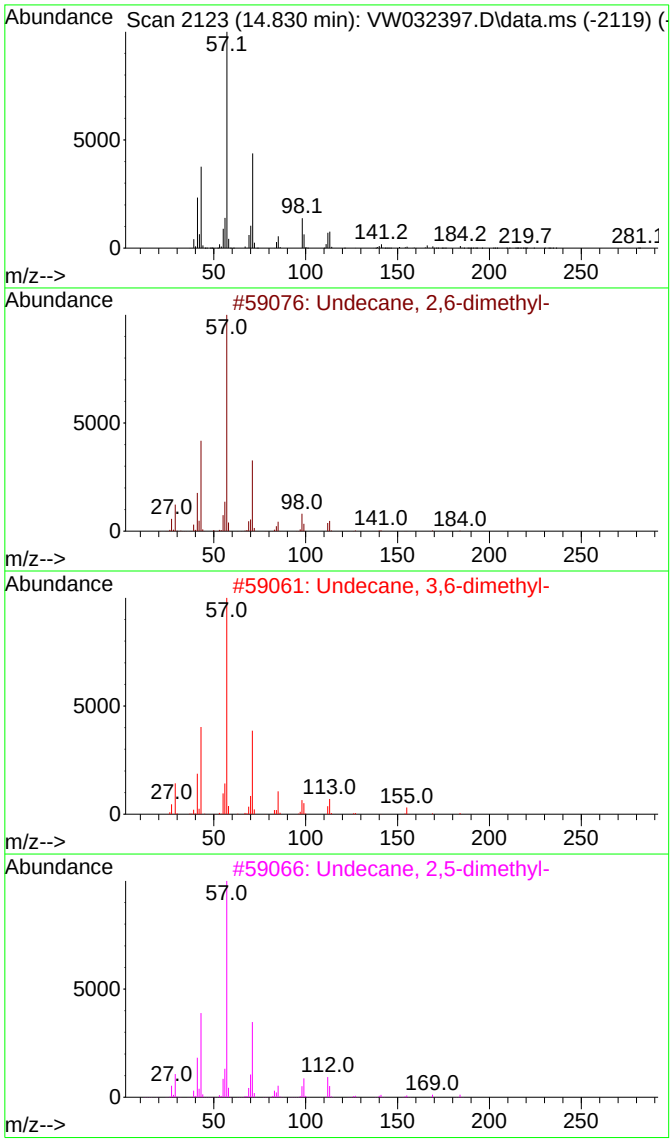
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

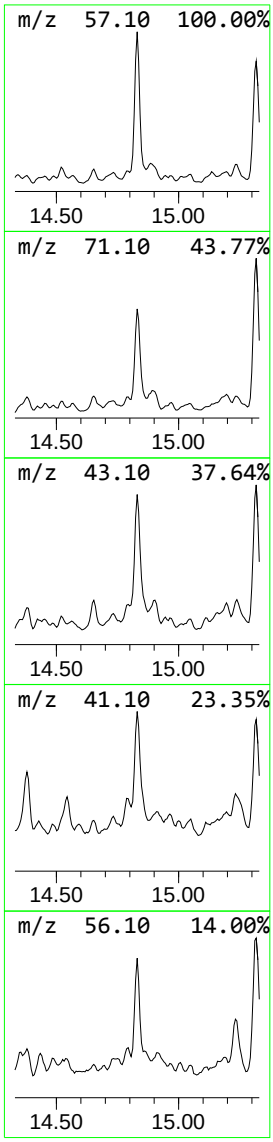
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 Undecane, 2,6-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.830	118.77 ug/l	4915120	1,4-Dichlorobenzene-d4	13.556

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	95
2	Undecane, 3,6-dimethyl-	184	C13H28	017301-28-9	94
3	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	93
4	Dodecane, 6-methyl-	184	C13H28	006044-71-9	91
5	Decane, 2,5,9-trimethyl-	184	C13H28	062108-22-9	72





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

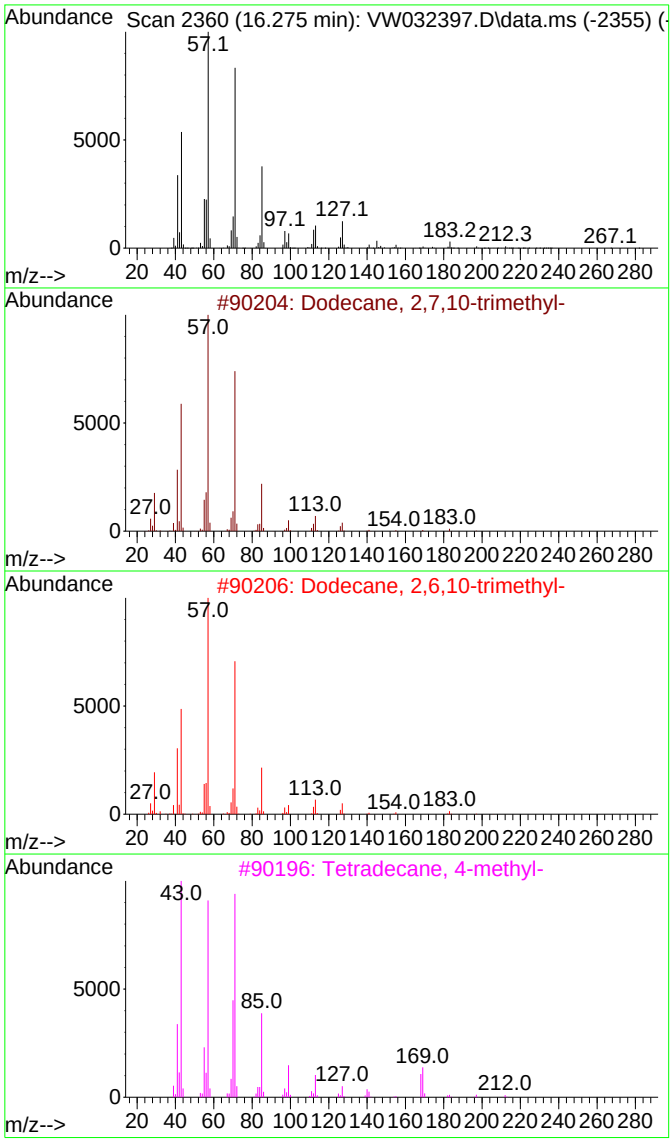
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

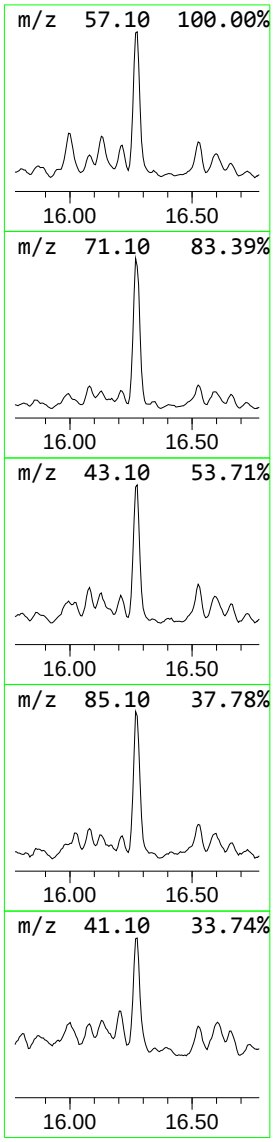
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 10 Dodecane, 2,7,10-trimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.275	102.02 ug/l	4221900	1,4-Dichlorobenzene-d4	13.556

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,7,10-trimethyl-	212	C15H32	074645-98-0	86
2	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	80
3	Tetradecane, 4-methyl-	212	C15H32	025117-24-2	72
4	Sulfurous acid, butyl nonyl ester	264	C13H28O3S	1000309-17-6	72
5	Nonane, 3-methyl-5-propyl-	184	C13H28	031081-18-2	72





Sample Results: **VW032397.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032397.D
Acq On : 20 Oct 2025 18:14
Operator : SY/MD
Sample : Q3395-02
Misc : 4.33g/5mL/MSVOA_W/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Heptane, 2,6-di...	10.935	98.7	ug/l	3300310	3	11.629	1672790	50.0
Octane, 2,6-dim...	12.251	192.3	ug/l	6433480	3	11.629	1672790	50.0
Heptane, 3-ethy...	12.361	328.2	ug/l	10979500	3	11.629	1672790	50.0
Undecane, 2,6-d...	14.830	118.8	ug/l	4915120	4	13.556	2069180	50.0
Dodecane, 2,7,1...	16.275	102.0	ug/l	4221900	4	13.556	2069180	50.0

Raw Data: **VW032398.D**

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S07-102116-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-05	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 51.4
Sample Wt/Vol:	4.92 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	9.90	U	1	2.30	9.90	ug/Kg	10/20/25 18:36	VW102025
74-87-3	Chloromethane	9.90	U	1	2.30	9.90	ug/Kg	10/20/25 18:36	VW102025
75-01-4	Vinyl Chloride	9.90	U	1	1.60	9.90	ug/Kg	10/20/25 18:36	VW102025
74-83-9	Bromomethane	9.90	U	1	2.10	9.90	ug/Kg	10/20/25 18:36	VW102025
75-00-3	Chloroethane	9.90	U	1	2.50	9.90	ug/Kg	10/20/25 18:36	VW102025
75-69-4	Trichlorofluoromethane	9.90	U	1	2.40	9.90	ug/Kg	10/20/25 18:36	VW102025
76-13-1	1,1,2-Trichlorotrifluoroethane	9.90	U	1	2.10	9.90	ug/Kg	10/20/25 18:36	VW102025
75-35-4	1,1-Dichloroethene	9.90	U	1	2.00	9.90	ug/Kg	10/20/25 18:36	VW102025
67-64-1	Acetone	430		1	9.40	49.4	ug/Kg	10/20/25 18:36	VW102025
75-15-0	Carbon Disulfide	19.8		1	2.10	9.90	ug/Kg	10/20/25 18:36	VW102025
1634-04-4	Methyl tert-butyl Ether	9.90	U	1	1.40	9.90	ug/Kg	10/20/25 18:36	VW102025
79-20-9	Methyl Acetate	9.90	U	1	3.00	9.90	ug/Kg	10/20/25 18:36	VW102025
75-09-2	Methylene Chloride	19.8	U	1	7.00	19.8	ug/Kg	10/20/25 18:36	VW102025
156-60-5	trans-1,2-Dichloroethene	9.90	U	1	1.70	9.90	ug/Kg	10/20/25 18:36	VW102025
75-34-3	1,1-Dichloroethane	9.90	U	1	1.60	9.90	ug/Kg	10/20/25 18:36	VW102025
110-82-7	Cyclohexane	9.90	U	1	1.60	9.90	ug/Kg	10/20/25 18:36	VW102025
78-93-3	2-Butanone	130		1	12.9	49.4	ug/Kg	10/20/25 18:36	VW102025
56-23-5	Carbon Tetrachloride	9.90	U	1	1.90	9.90	ug/Kg	10/20/25 18:36	VW102025
156-59-2	cis-1,2-Dichloroethene	9.90	U	1	1.50	9.90	ug/Kg	10/20/25 18:36	VW102025
74-97-5	Bromochloromethane	9.90	U	1	2.30	9.90	ug/Kg	10/20/25 18:36	VW102025
67-66-3	Chloroform	9.90	U	1	1.70	9.90	ug/Kg	10/20/25 18:36	VW102025
71-55-6	1,1,1-Trichloroethane	9.90	U	1	1.80	9.90	ug/Kg	10/20/25 18:36	VW102025
108-87-2	Methylcyclohexane	83.0		1	1.80	9.90	ug/Kg	10/20/25 18:36	VW102025
71-43-2	Benzene	9.90	U	1	1.60	9.90	ug/Kg	10/20/25 18:36	VW102025
107-06-2	1,2-Dichloroethane	9.90	U	1	1.60	9.90	ug/Kg	10/20/25 18:36	VW102025
79-01-6	Trichloroethene	9.90	U	1	1.60	9.90	ug/Kg	10/20/25 18:36	VW102025
78-87-5	1,2-Dichloropropane	9.90	U	1	1.80	9.90	ug/Kg	10/20/25 18:36	VW102025
75-27-4	Bromodichloromethane	9.90	U	1	1.50	9.90	ug/Kg	10/20/25 18:36	VW102025
108-10-1	4-Methyl-2-Pentanone	49.4	U	1	7.10	49.4	ug/Kg	10/20/25 18:36	VW102025
108-88-3	Toluene	9.90	U	1	1.50	9.90	ug/Kg	10/20/25 18:36	VW102025
10061-02-6	t-1,3-Dichloropropene	9.90	U	1	1.30	9.90	ug/Kg	10/20/25 18:36	VW102025
10061-01-5	cis-1,3-Dichloropropene	9.90	U	1	1.20	9.90	ug/Kg	10/20/25 18:36	VW102025
79-00-5	1,1,2-Trichloroethane	9.90	U	1	1.80	9.90	ug/Kg	10/20/25 18:36	VW102025
591-78-6	2-Hexanone	49.4	U	1	7.30	49.4	ug/Kg	10/20/25 18:36	VW102025
124-48-1	Dibromochloromethane	9.90	U	1	1.70	9.90	ug/Kg	10/20/25 18:36	VW102025
106-93-4	1,2-Dibromoethane	9.90	U	1	1.70	9.90	ug/Kg	10/20/25 18:36	VW102025
127-18-4	Tetrachloroethene	9.90	U	1	2.10	9.90	ug/Kg	10/20/25 18:36	VW102025
108-90-7	Chlorobenzene	9.90	U	1	1.80	9.90	ug/Kg	10/20/25 18:36	VW102025
100-41-4	Ethyl Benzene	9.90	U	1	1.30	9.90	ug/Kg	10/20/25 18:36	VW102025
179601-23-1	m/p-Xylenes	19.8	U	1	2.50	19.8	ug/Kg	10/20/25 18:36	VW102025
95-47-6	o-Xylene	9.90	U	1	1.60	9.90	ug/Kg	10/20/25 18:36	VW102025
100-42-5	Styrene	9.90	U	1	1.40	9.90	ug/Kg	10/20/25 18:36	VW102025
75-25-2	Bromoform	9.90	U	1	1.70	9.90	ug/Kg	10/20/25 18:36	VW102025

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S07-102116-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-05	Matrix:	SOIL
Analytical Method:	8260D Level : LOW	% Solid:	51.4
Sample Wt/Vol:	4.92 g Final Vol: 5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	5.60	J	1	1.50	9.90	ug/Kg	10/20/25 18:36	VW102025
79-34-5	1,1,2,2-Tetrachloroethane	9.90	U	1	2.40	9.90	ug/Kg	10/20/25 18:36	VW102025
541-73-1	1,3-Dichlorobenzene	9.90	U	1	3.40	9.90	ug/Kg	10/20/25 18:36	VW102025
106-46-7	1,4-Dichlorobenzene	9.90	U	1	3.10	9.90	ug/Kg	10/20/25 18:36	VW102025
95-50-1	1,2-Dichlorobenzene	9.90	U	1	2.90	9.90	ug/Kg	10/20/25 18:36	VW102025
96-12-8	1,2-Dibromo-3-Chloropropane	9.90	U	1	3.60	9.90	ug/Kg	10/20/25 18:36	VW102025
120-82-1	1,2,4-Trichlorobenzene	9.90	U	1	5.90	9.90	ug/Kg	10/20/25 18:36	VW102025
87-61-6	1,2,3-Trichlorobenzene	9.90	U	1	6.30	9.90	ug/Kg	10/20/25 18:36	VW102025
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	60.3			63 - 155	121%	SPK: 50		
1868-53-7	Dibromofluoromethane	52.0			70 - 134	104%	SPK: 50		
2037-26-5	Toluene-d8	55.0			74 - 123	110%	SPK: 50		
460-00-4	4-Bromofluorobenzene	71.4			17 - 146	143%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	238000							
540-36-3	1,4-Difluorobenzene	526000							
3114-55-4	Chlorobenzene-d5	518000							
3855-82-1	1,4-Dichlorobenzene-d4	243000							
TENTATIVE IDENTIFIED COMPOUNDS									
001072-05-5	Heptane, 2,6-dimethyl-	150	J			10.9	ug/Kg		
002216-30-0	Heptane, 2,5-dimethyl-	120	J			11.0	ug/Kg		
003073-66-3	Cyclohexane, 1,1,3-trimethyl-	200	J			11.2	ug/Kg		
007667-60-9	Cyclohexane, 1,2,4-trimethyl-, (1.	120	J			11.4	ug/Kg		
015869-94-0	Octane, 3,6-dimethyl-	180	J			12.3	ug/Kg		
95-63-6	1,2,4-Trimethylbenzene	9.60	J			13.2	ug/Kg		

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

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

Sample Results: **VW032398.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 21 01:33:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	238348	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	525564	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	518256	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.550	152	242674	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	209559	60.280	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 120.560%			
35) Dibromofluoromethane	7.898	113	176996	52.002	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 104.000%			
50) Toluene-d8	10.325	98	691135	55.018	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 110.040%			
62) 4-Bromofluorobenzene	12.617	95	339211	71.443	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 142.880%			
Target Compounds						Qvalue
16) Acetone	4.161	43	210624	218.806	ug/l	100
17) Carbon Disulfide	4.423	76	73268	9.996	ug/l	99
25) 2-Butanone	7.197	43	83888	63.987	ug/l	98
39) Methylcyclohexane	9.337	83	243178m	41.970	ug/l	
73) Isopropylbenzene	12.464	105	46646	2.810	ug/l	97
84) 1,2,4-Trimethylbenzene	13.245	105	70905	4.857	ug/l	94

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

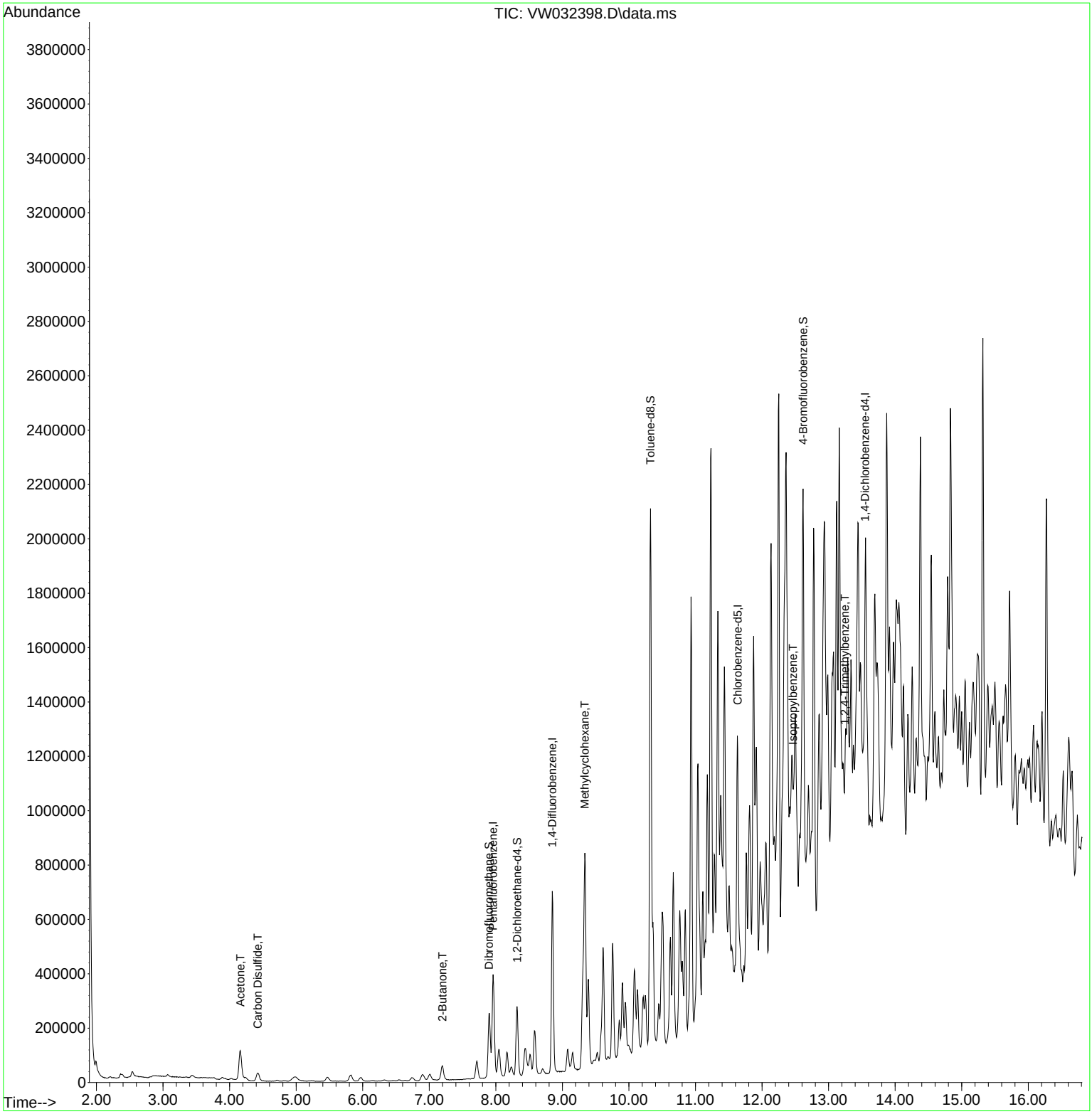
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

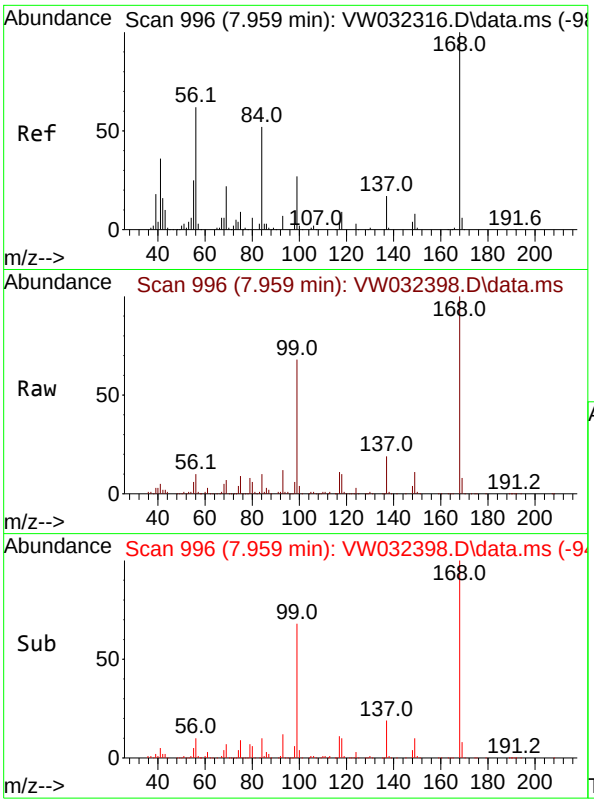
Quant Time: Oct 21 01:33:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

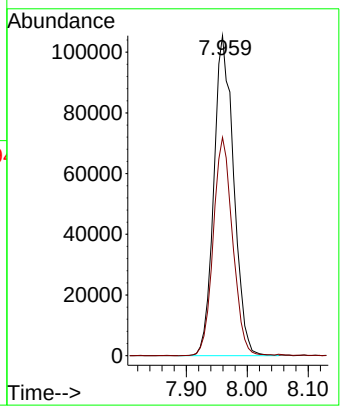
Tgt Ion:168 Resp: 23834

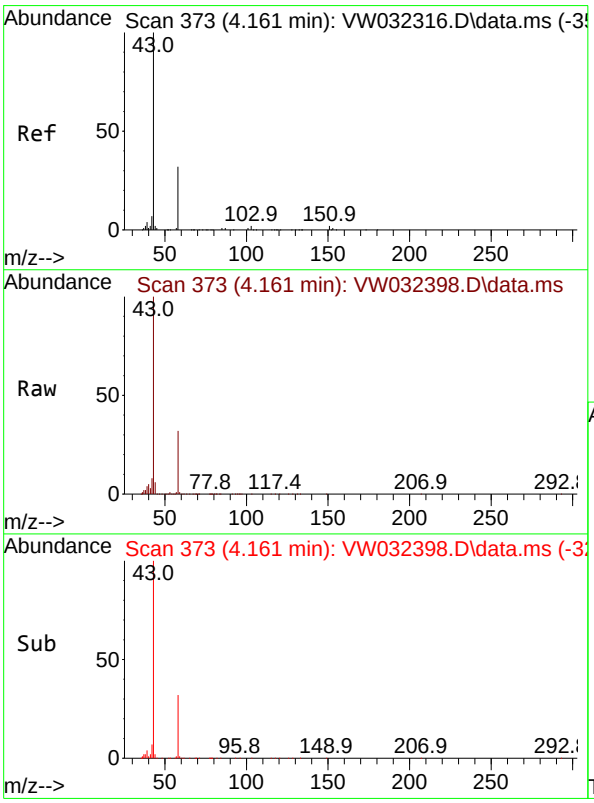
Ion	Ratio	Lower	Upper
168	100		
99	68.2	49.3	73.9

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

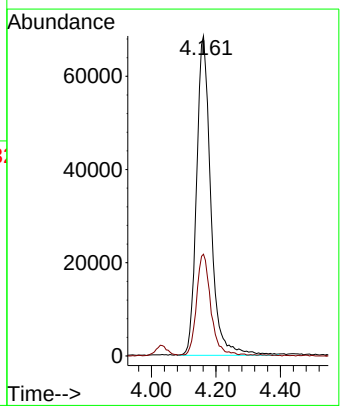


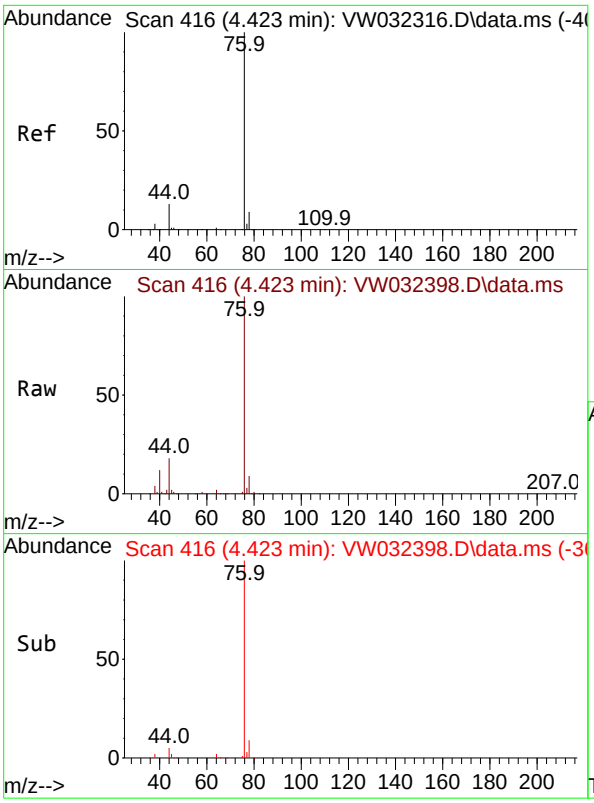


#16
Acetone
Concen: 218.806 ug/l
RT: 4.161 min Scan# 373
Delta R.T. -0.000 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion: 43 Resp: 210624

Ion	Ratio	Lower	Upper
43	100		
58	31.7	25.3	37.9





#17
Carbon Disulfide
Concen: 9.996 ug/l
RT: 4.423 min Scan# 4
Delta R.T. -0.000 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

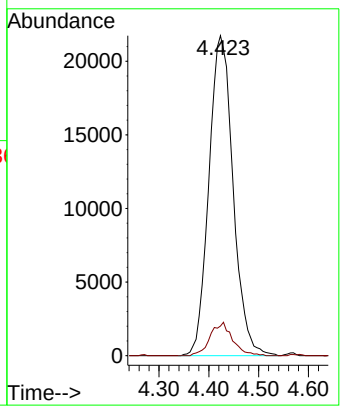
Tgt Ion: 76 Resp: 7326

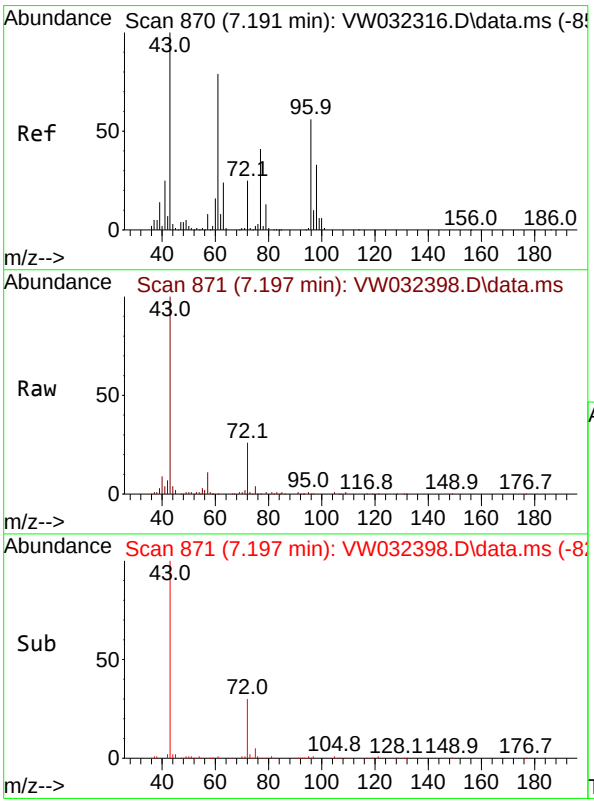
Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.0	10.6

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

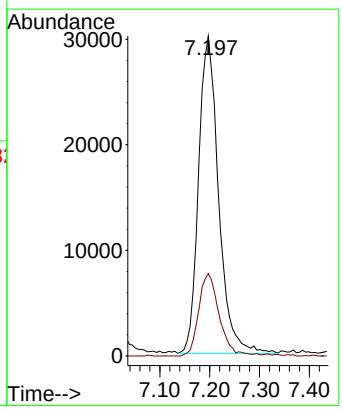


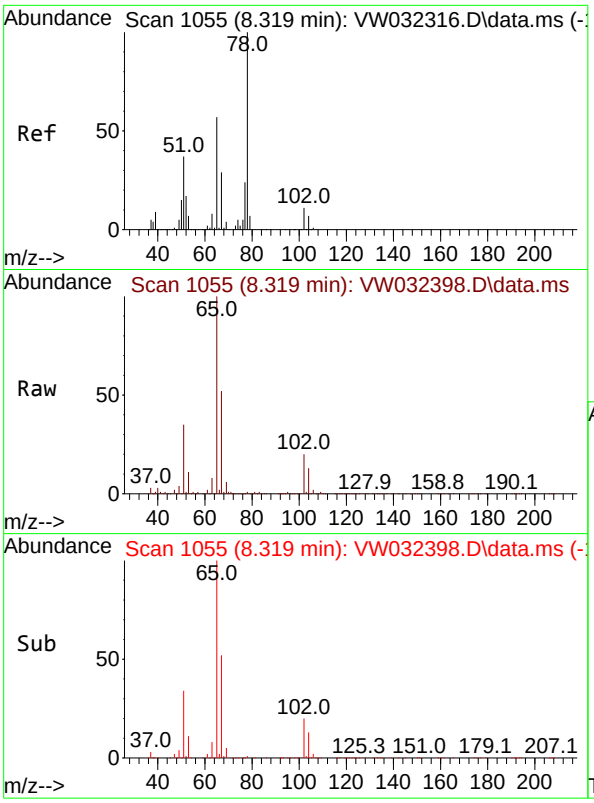


#25
2-Butanone
Concen: 63.987 ug/l
RT: 7.197 min Scan# 871
Delta R.T. 0.006 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion: 43 Resp: 83888

Ion	Ratio	Lower	Upper
43	100		
72	25.9	21.4	32.2





#33
1,2-Dichloroethane-d4
Concen: 60.280 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

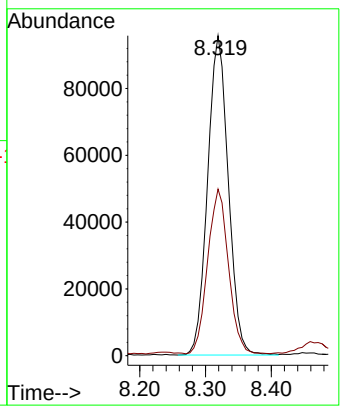
Tgt Ion: 65 Resp: 20955

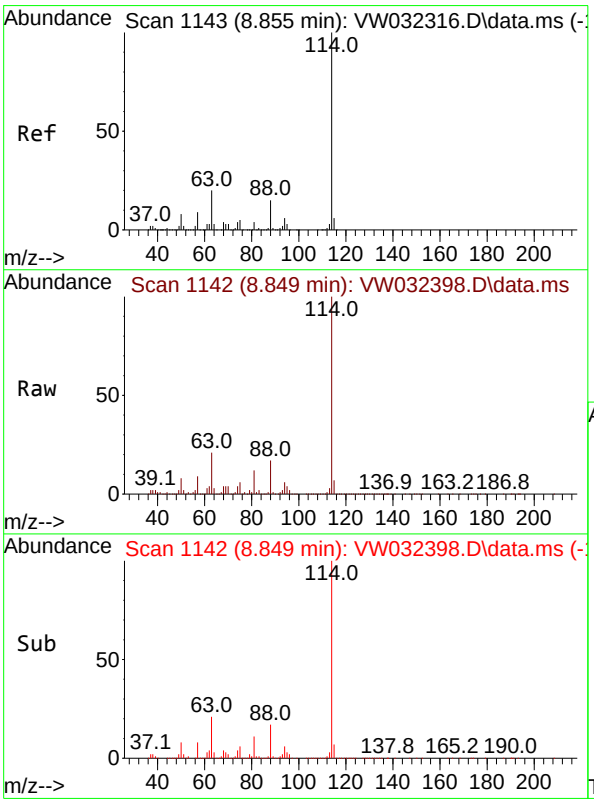
Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	99.6

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

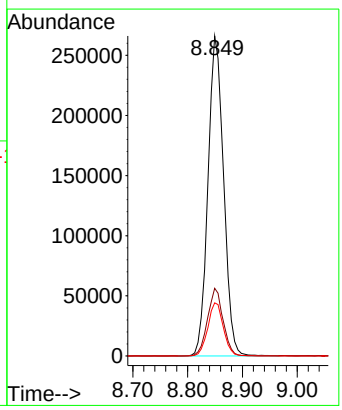


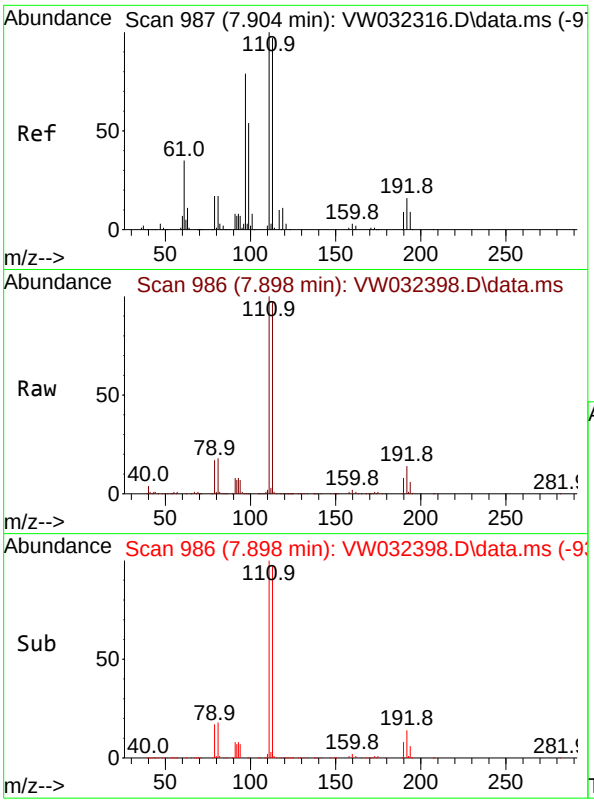


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion:114 Resp: 525564

Ion	Ratio	Lower	Upper
114	100		
63	21.1	0.0	40.4
88	16.6	0.0	32.0

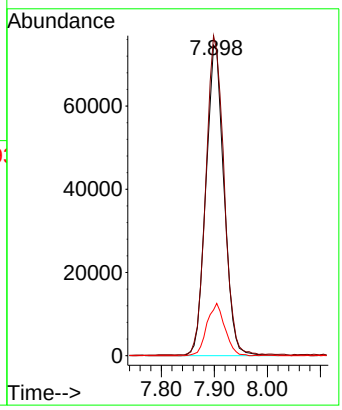




#35
Dibromofluoromethane
Concen: 52.002 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion:113 Resp: 17699

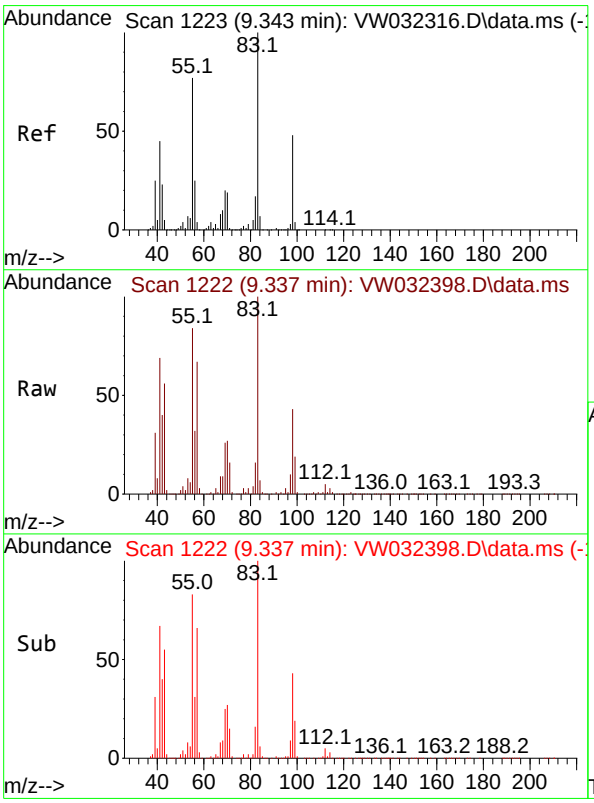
Ion	Ratio	Lower	Upper
113	100		
111	102.9	83.9	125.9
192	16.8	14.6	21.8



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations
APPROVED

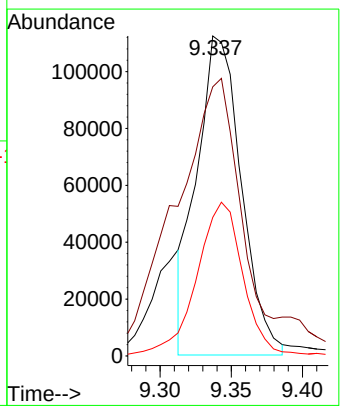
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

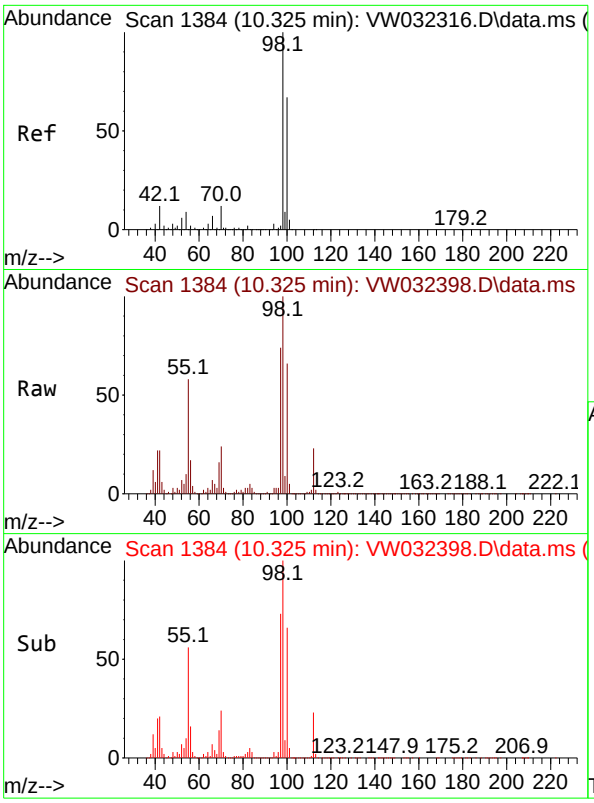


#39
Methylcyclohexane
Concen: 41.970 ug/l m
RT: 9.337 min Scan# 1222
Delta R.T. -0.006 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion: 83 Resp: 243178

Ion	Ratio	Lower	Upper
83	100		
55	84.1	58.4	87.6
98	43.3	39.4	59.2





#50
Toluene-d8
Concen: 55.018 ug/l
RT: 10.325 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

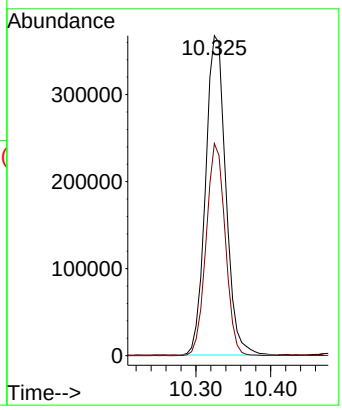
Tgt Ion: 98 Resp: 69113

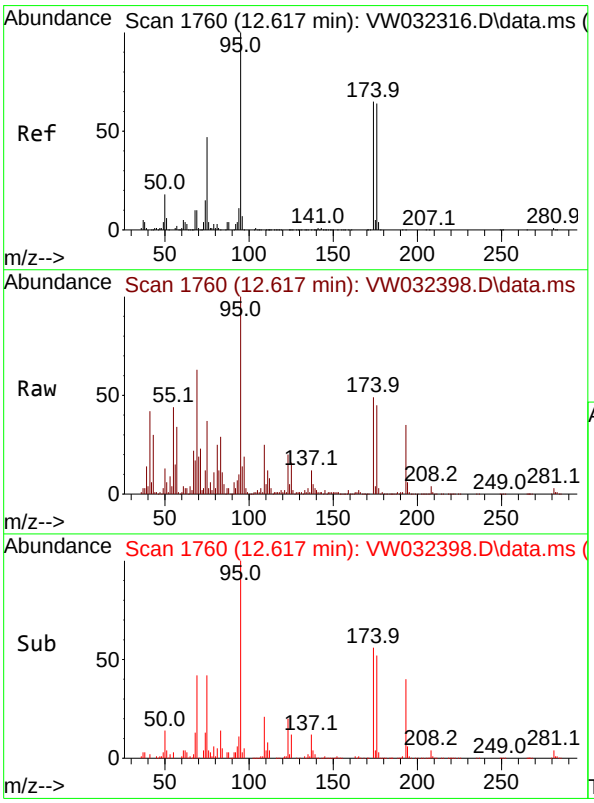
Ion	Ratio	Lower	Upper
98	100		
100	62.5	51.4	77.2

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

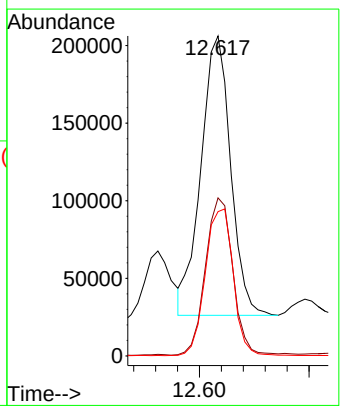


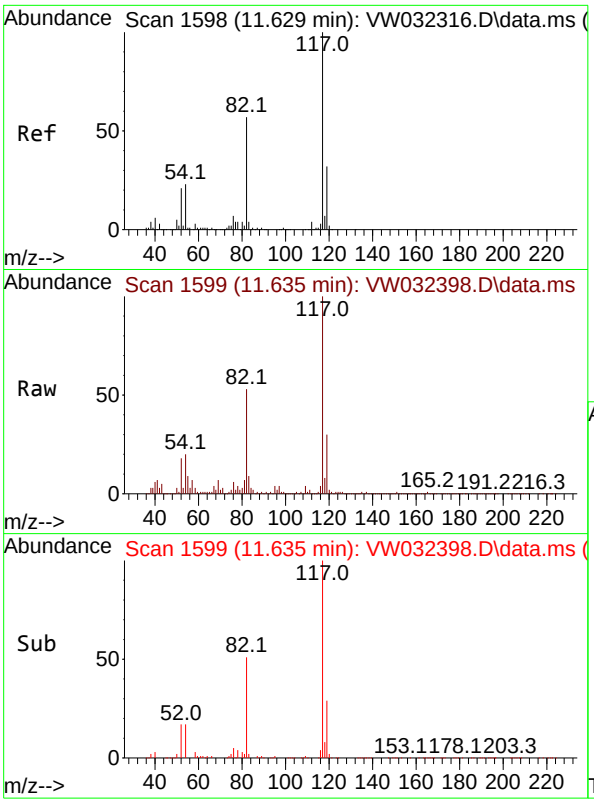


#62
4-Bromofluorobenzene
Concen: 71.443 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion: 95 Resp: 339211

Ion	Ratio	Lower	Upper
95	100		
174	51.8	0.0	145.6
176	49.2	0.0	140.8

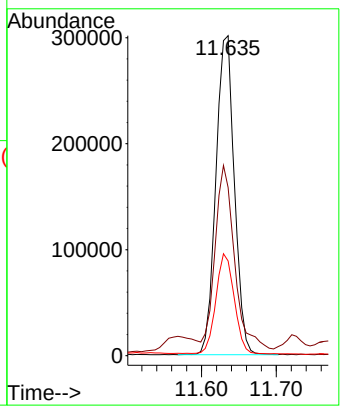




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.635 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion:117 Resp: 51825

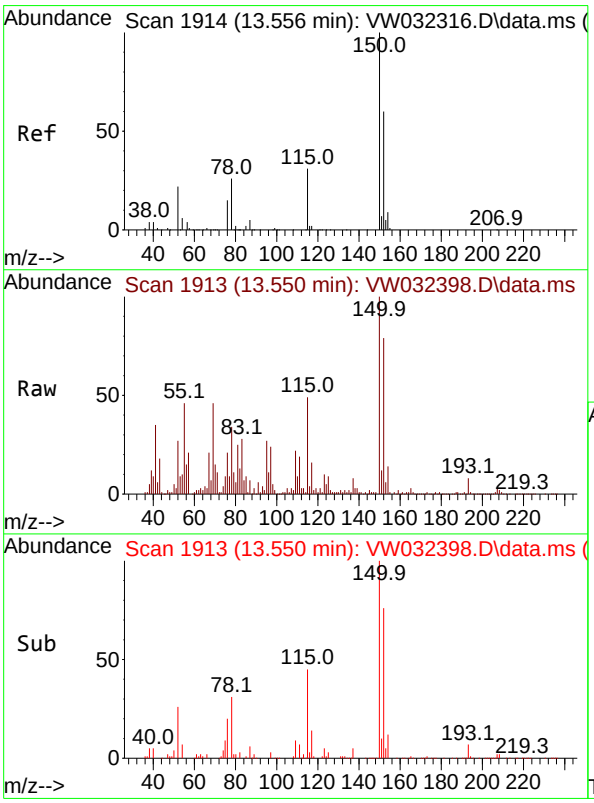
Ion	Ratio	Lower	Upper
117	100		
82	49.9	42.7	64.1
119	29.1	25.2	37.8



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations
APPROVED

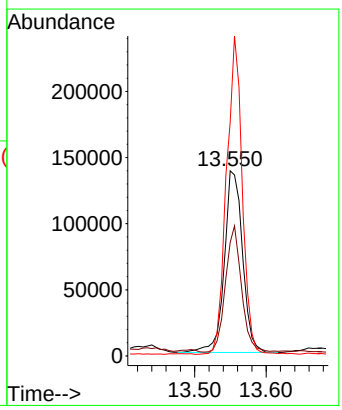
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

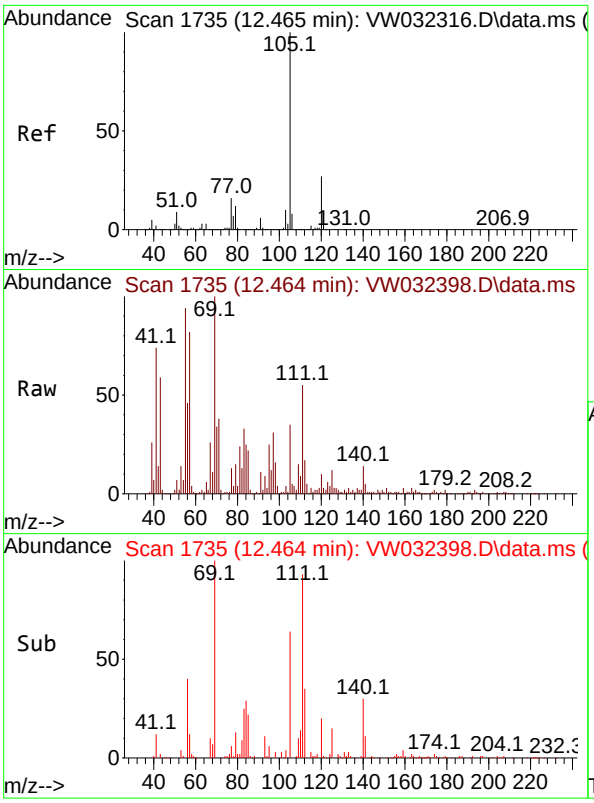


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.550 min Scan# 1913
Delta R.T. -0.006 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion:152 Resp: 242674

Ion	Ratio	Lower	Upper
152	100		
115	61.1	31.8	95.4
150	152.1	0.0	343.0





#73
Isopropylbenzene
Concen: 2.810 ug/l
RT: 12.464 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

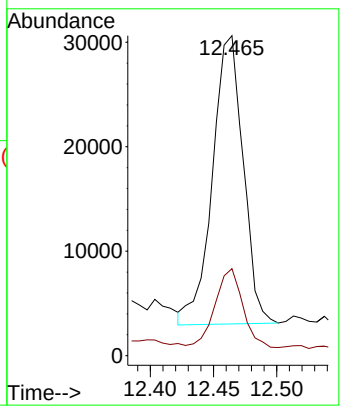
Tgt Ion:105 Resp: 4664

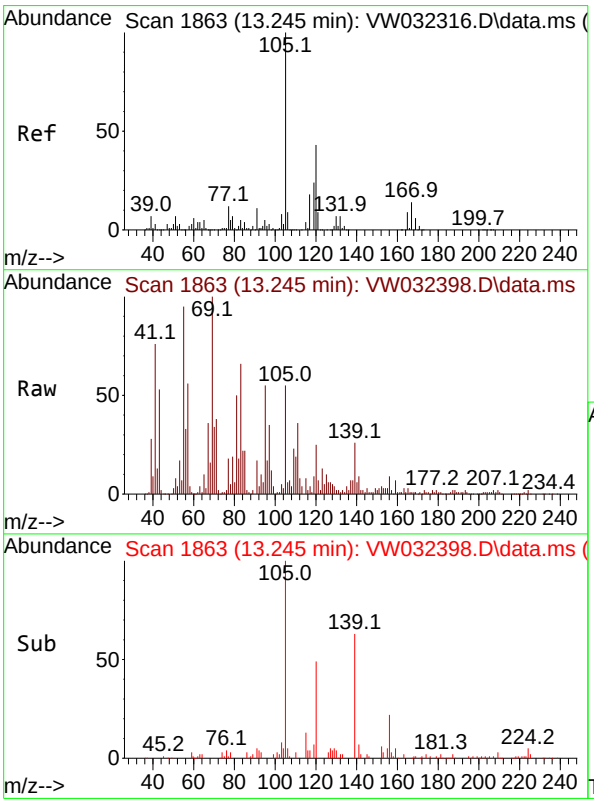
Ion	Ratio	Lower	Upper
105	100		
120	24.6	13.0	38.9

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

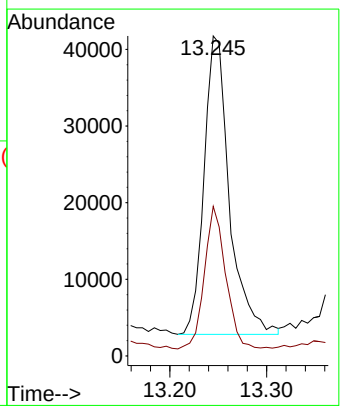




#84
1,2,4-Trimethylbenzene
Concen: 4.857 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VW032398.D
Acq: 20 Oct 2025 18:36

Tgt Ion:105 Resp: 70905

Ion	Ratio	Lower	Upper
105	100		
120	40.1	22.1	66.3



Sample Results: **VW032398.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

Signal : TIC: VW032398.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.991	15	17	39	rVB3	62238	171081	2.60%	0.174%
2	4.161	362	373	383	rBV	106272	312633	4.75%	0.319%
3	4.423	405	416	429	rVB2	28751	95943	1.46%	0.098%
4	5.825	632	646	656	rBV3	23070	81276	1.23%	0.083%
5	6.898	812	822	832	rBV4	22670	84109	1.28%	0.086%
6	7.197	858	871	883	rBV	53541	165460	2.51%	0.169%
7	7.715	948	956	965	rBV	63637	156813	2.38%	0.160%
8	7.904	976	987	991	rBV	237516	577168	8.76%	0.588%
9	7.959	991	996	1004	rVV	378692	878561	13.34%	0.895%
10	8.045	1004	1010	1021	rVV2	101113	273346	4.15%	0.279%
11	8.166	1023	1030	1036	rVV	88667	205066	3.11%	0.209%
12	8.234	1037	1041	1048	rVV2	32547	76665	1.16%	0.078%
13	8.319	1048	1055	1066	rVB	254250	572665	8.69%	0.584%
14	8.441	1066	1075	1082	rBV4	99832	311364	4.73%	0.317%
15	8.514	1083	1087	1092	rVV	72006	162656	2.47%	0.166%
16	8.581	1092	1098	1108	rVB	157590	376151	5.71%	0.383%
17	8.849	1134	1142	1154	rBV	669327	1344849	20.42%	1.370%
18	9.081	1173	1180	1185	rBV2	80304	183526	2.79%	0.187%
19	9.154	1187	1192	1199	rVB	61541	132635	2.01%	0.135%
20	9.337	1209	1222	1227	rBV3	794747	2325758	35.31%	2.370%
21	9.392	1227	1231	1240	rVB	314189	627045	9.52%	0.639%
22	9.611	1257	1267	1276	rBV2	416106	980385	14.88%	0.999%
23	9.758	1284	1291	1299	rBV2	423196	857842	13.02%	0.874%
24	9.855	1302	1307	1310	rBV	131080	231680	3.52%	0.236%
25	9.904	1310	1315	1319	rVV	243567	472181	7.17%	0.481%
26	9.947	1319	1322	1328	rVB2	160682	275925	4.19%	0.281%
27	10.081	1338	1344	1349	rBV	302975	687349	10.43%	0.700%
28	10.130	1349	1352	1360	rVB	211936	358144	5.44%	0.365%
29	10.215	1360	1366	1368	rBV2	184346	344726	5.23%	0.351%
30	10.325	1377	1384	1389	rBV2	1968371	3880095	58.90%	3.954%
31	10.447	1400	1404	1407	rBV	124791	216703	3.29%	0.221%
32	10.501	1407	1413	1422	rVB3	482856	1267294	19.24%	1.291%
33	10.623	1427	1433	1436	rBV	353558	643334	9.77%	0.656%
34	10.666	1436	1440	1448	rVB	607012	1091696	16.57%	1.112%
35	10.764	1449	1456	1460	rBV3	459600	1034247	15.70%	1.054%
36	10.849	1466	1470	1475	rVB	439989	714793	10.85%	0.728%

Sample Results: **VW032398.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

37	10.934	1475	1484	1491	rBV	1590815	2817287	42.77%	2.871%
38	11.038	1492	1501	1509	rBV	932066	2268835	34.44%	2.312%
39	11.111	1509	1513	1516	rVV2	393702	639790	9.71%	0.652%
40	11.178	1520	1524	1528	rVV	793761	1409748	21.40%	1.437%
41	11.233	1528	1533	1538	rVV	1969502	3801686	57.71%	3.874%
42	11.282	1538	1541	1545	rVV2	453419	859585	13.05%	0.876%
43	11.337	1545	1550	1554	rVV3	1327681	2669298	40.52%	2.720%
44	11.379	1554	1557	1562	rVV3	628465	1440334	21.87%	1.468%
45	11.434	1562	1566	1574	rVV	1072042	2302683	34.96%	2.346%
46	11.507	1574	1578	1583	rVB2	239615	408518	6.20%	0.416%
47	11.629	1593	1598	1611	rVB	904949	1864370	28.30%	1.900%
48	11.763	1616	1620	1623	rBV	427085	649203	9.86%	0.662%
49	11.812	1623	1628	1633	rVB4	474551	878651	13.34%	0.895%
50	11.873	1633	1638	1641	rBV	1096518	1861548	28.26%	1.897%
51	11.971	1650	1654	1661	rBV3	326993	762619	11.58%	0.777%
52	12.135	1674	1681	1687	rBV2	1498611	3605357	54.73%	3.674%
53	12.251	1693	1700	1704	rVB	1925006	3439911	52.22%	3.505%
54	12.361	1704	1718	1725	rBV4	1709291	6587327	100.00%	6.713%
55	12.568	1748	1752	1753	rBV2	193312	277015	4.21%	0.282%
56	12.617	1754	1760	1767	rVB4	1395192	2831466	42.98%	2.885%
57	12.775	1782	1786	1792	rVB2	1407550	2465100	37.42%	2.512%
58	12.861	1793	1800	1804	rBV6	721945	1807600	27.44%	1.842%
59	12.934	1805	1812	1818	rBV6	1019274	2841385	43.13%	2.895%
60	13.074	1827	1835	1839	rBV2	659507	1893950	28.75%	1.930%
61	13.123	1839	1843	1846	rVV	1094348	1793643	27.23%	1.828%
62	13.160	1846	1849	1857	rVB2	1277628	2091179	31.75%	2.131%
63	13.288	1867	1870	1874	rVB2	327518	434421	6.59%	0.443%
64	13.556	1910	1914	1922	rVB2	1056897	2243663	34.06%	2.286%
65	13.696	1931	1937	1940	rBV3	818302	1717687	26.08%	1.750%
66	13.873	1961	1966	1970	rBV3	1334609	2488533	37.78%	2.536%
67	14.190	2014	2018	2023	rBV6	423913	851596	12.93%	0.868%
68	14.257	2026	2029	2035	rVB5	482284	847531	12.87%	0.864%
69	14.379	2044	2049	2054	rBV2	1182992	1900014	28.84%	1.936%
70	14.543	2072	2076	2081	rVB4	763071	1211349	18.39%	1.234%
71	14.787	2113	2116	2120	rBV4	539317	937046	14.22%	0.955%
72	14.830	2120	2123	2131	rVB2	1193284	2247875	34.12%	2.291%
73	15.318	2198	2203	2210	rBV2	1679315	2815899	42.75%	2.869%
74	15.720	2266	2269	2277	rVB5	799027	1492331	22.65%	1.521%
75	16.275	2355	2360	2368	rVB	1278634	2507558	38.07%	2.555%

Sample Results: **VW032398.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

Sum of corrected areas: 98134755

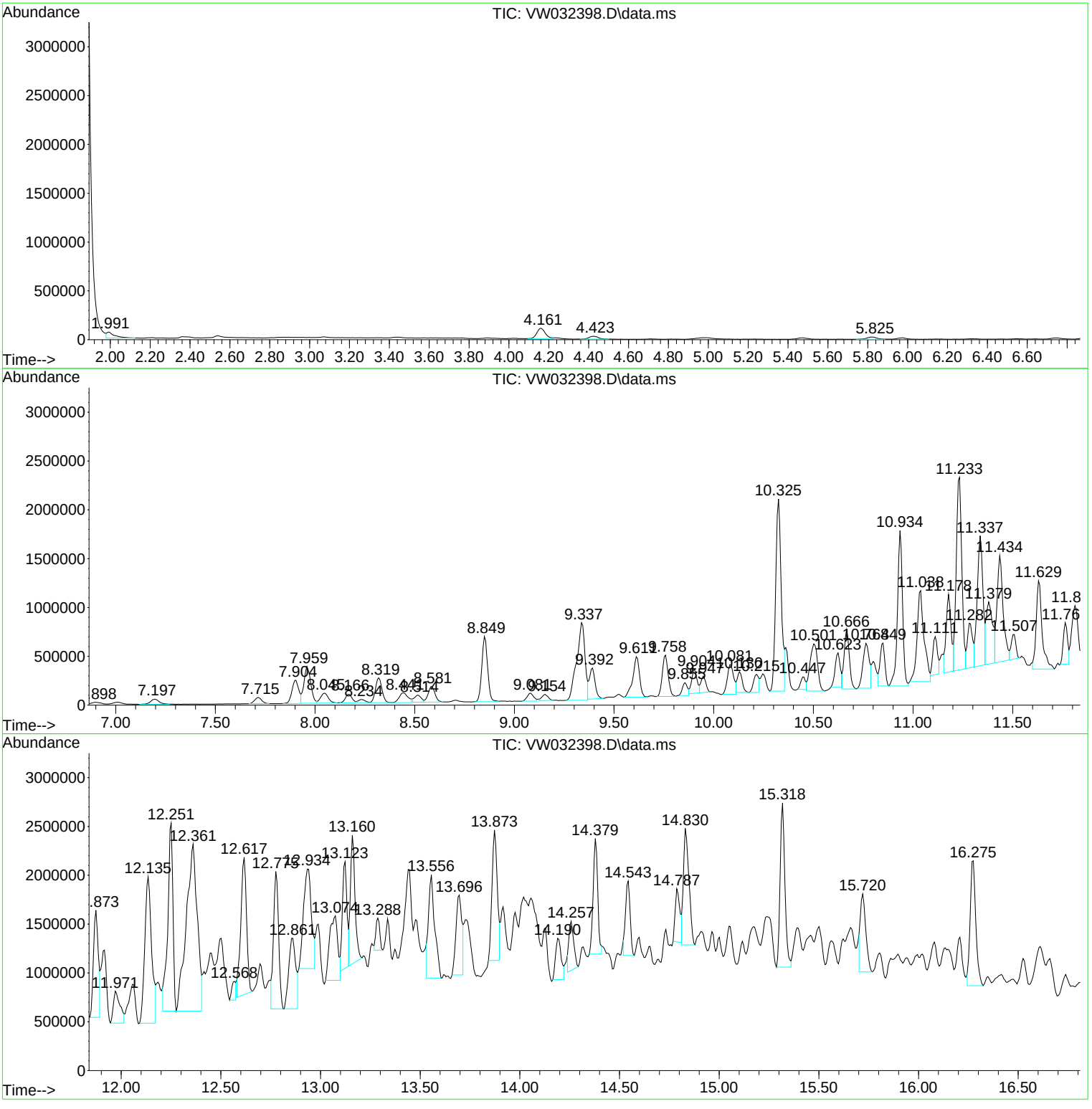
Sample Results: **VW032398.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

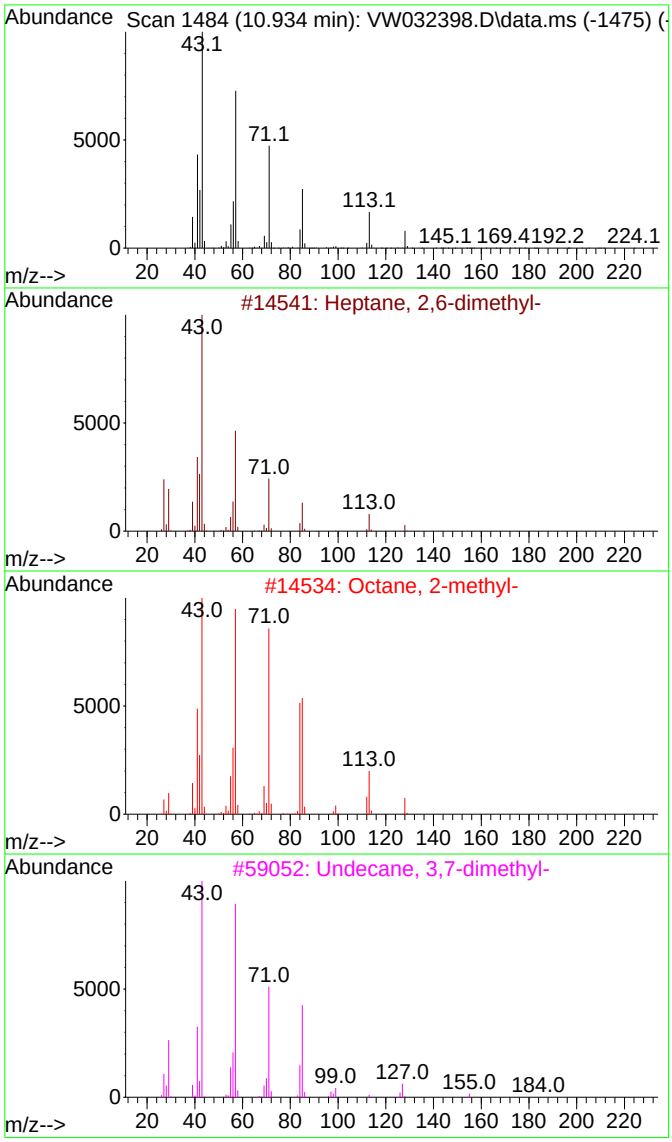
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

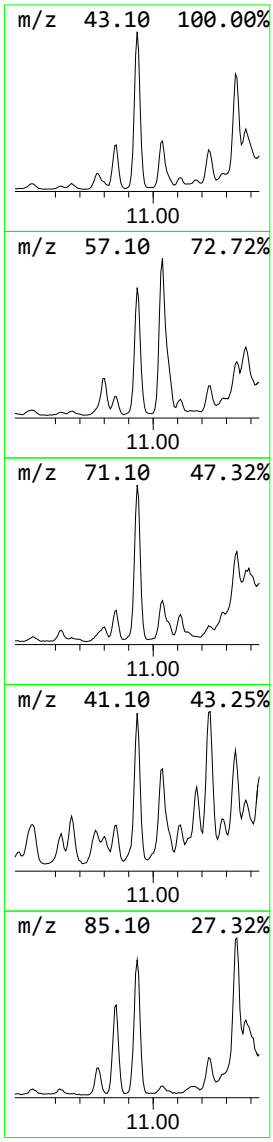
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 Heptane, 2,6-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.934	75.56 ug/l	2817290	Chlorobenzene-d5	11.635

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,6-dimethyl-	128	C9H20	001072-05-5	94
2	Octane, 2-methyl-	128	C9H20	003221-61-2	72
3	Undecane, 3,7-dimethyl-	184	C13H28	017301-29-0	59
4	Nonane	128	C9H20	000111-84-2	58
5	Octane, 3,4,5,6-tetramethyl-	170	C12H26	062185-21-1	53





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

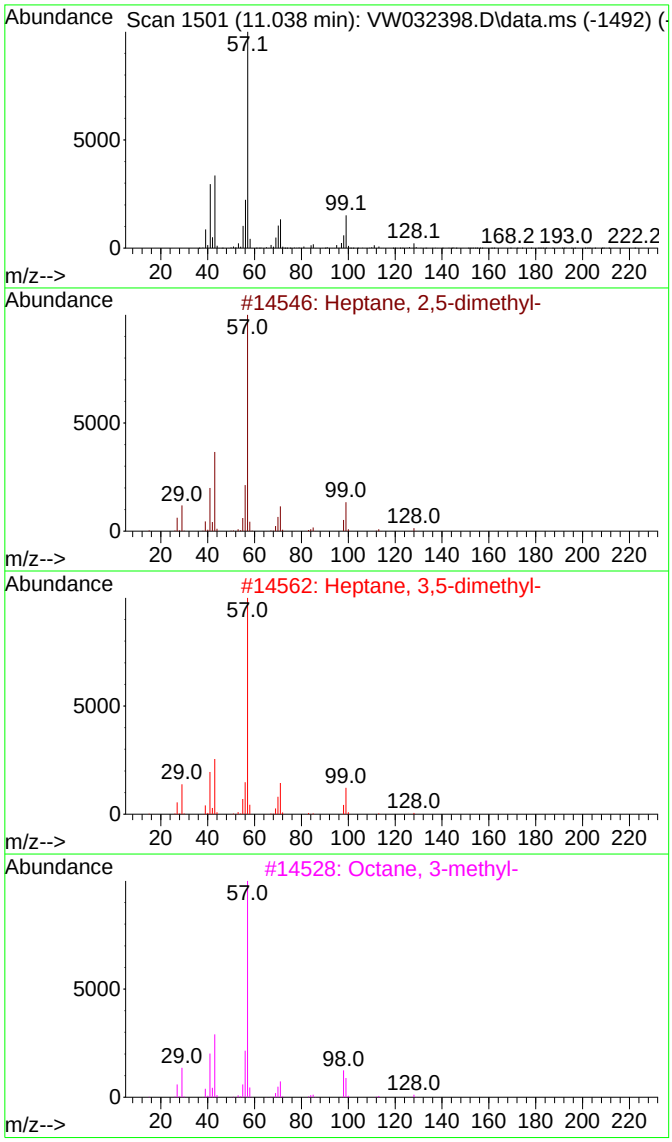
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

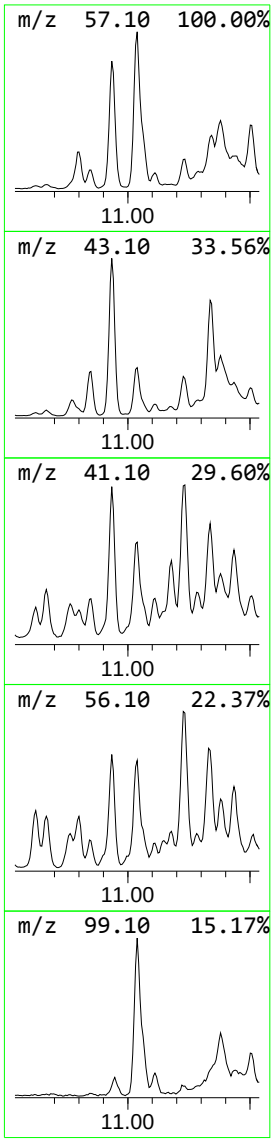
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Heptane, 2,5-dimethyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.038	60.85 ug/l	2268840	Chlorobenzene-d5	11.635

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	90
2	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	81
3	Octane, 3-methyl-	128	C9H20	002216-33-3	72
4	Decane, 2,6,6-trimethyl-	184	C13H28	062108-24-1	59
5	Decane, 2,5-dimethyl-	170	C12H26	017312-50-4	53





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

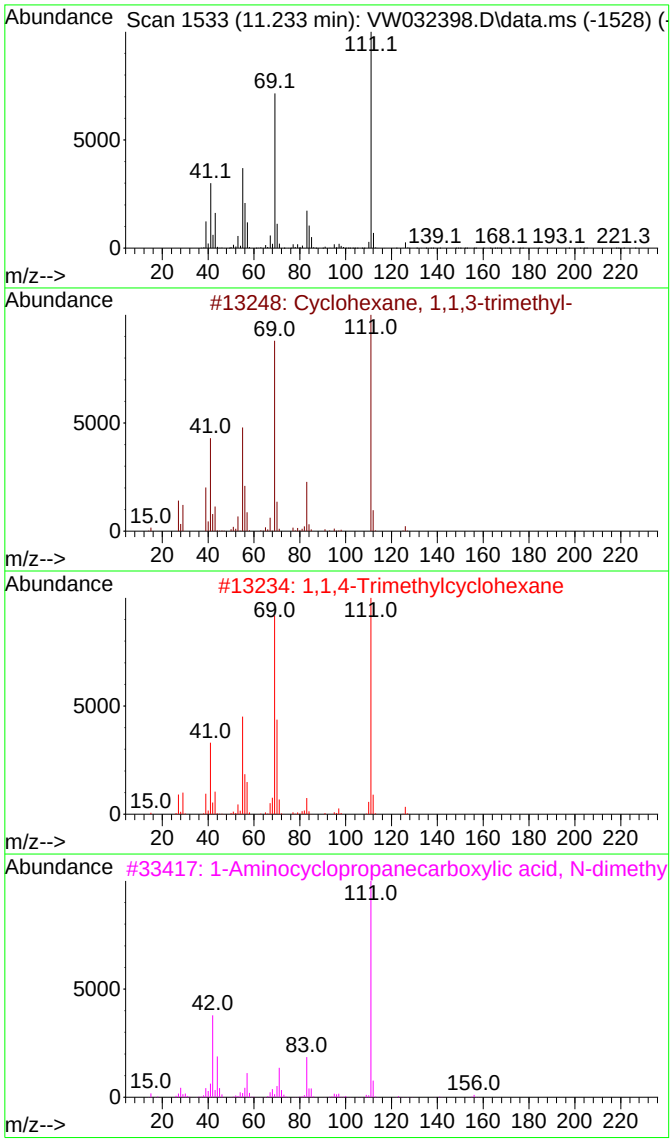
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

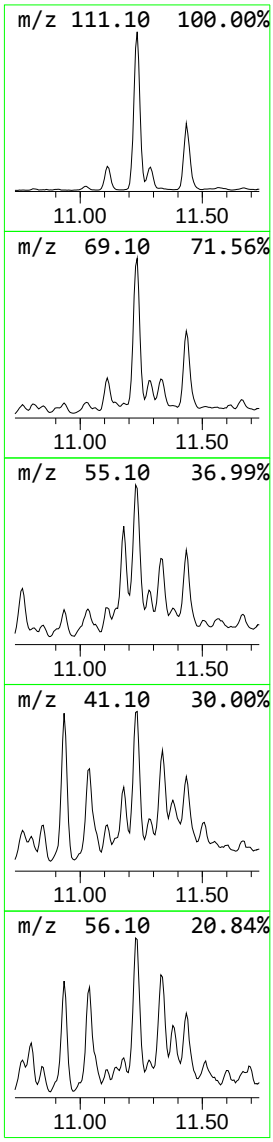
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 Cyclohexane, 1,1,3-trimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.233	101.96 ug/l	3801690	Chlorobenzene-d5	11.635

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	94
2	1,1,4-Trimethylcyclohexane	126	C9H18	007094-27-1	72
3	1-Aminocyclopropanecarboxylic ac...	156	C7H12N2O2	1000375-50-8	53
4	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-27-3	53
5	Benzenamine, 2-fluoro-	111	C6H6FN	000348-54-9	50





Sample Results: **VW032398.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

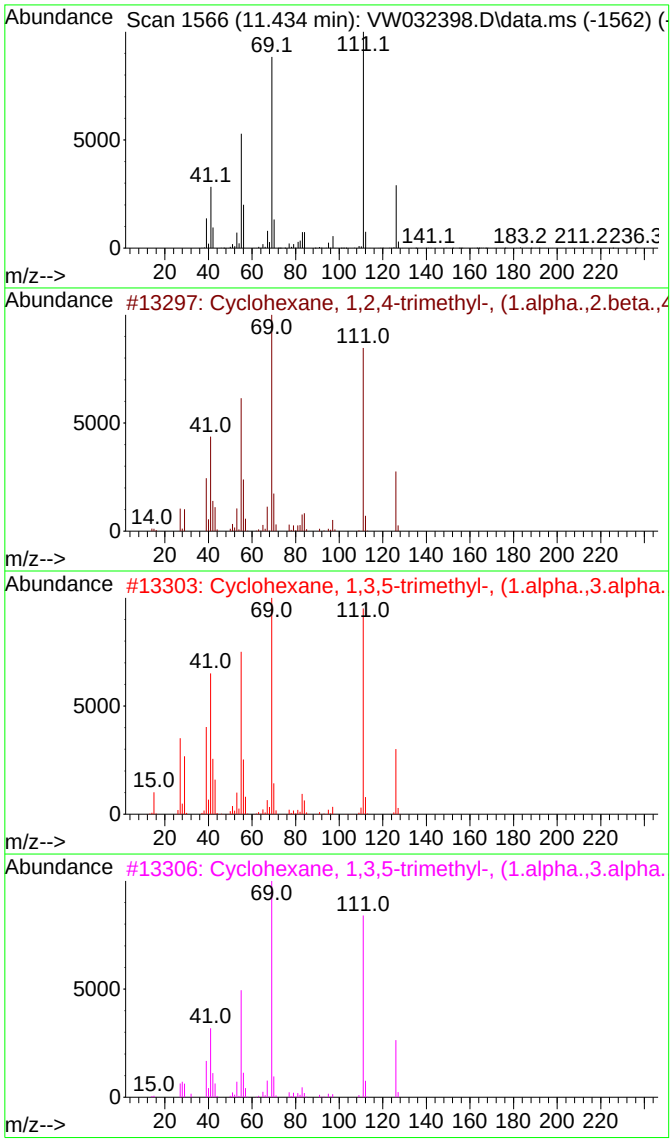
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

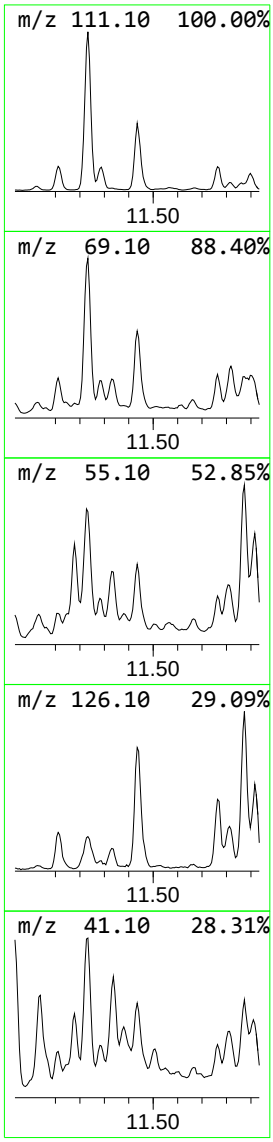
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Cyclohexane, 1,2,4-trimethy... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.434	61.76 ug/l	2302680	Chlorobenzene-d5	11.635

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,2,4-trimethyl-, (...	126	C9H18	007667-60-9	94
2	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-26-2	93
3	Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-27-3	90
4	Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	90
5	2-Pyrazoline, 1-isopropyl-5-methyl-	126	C7H14N2	026964-54-5	72





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

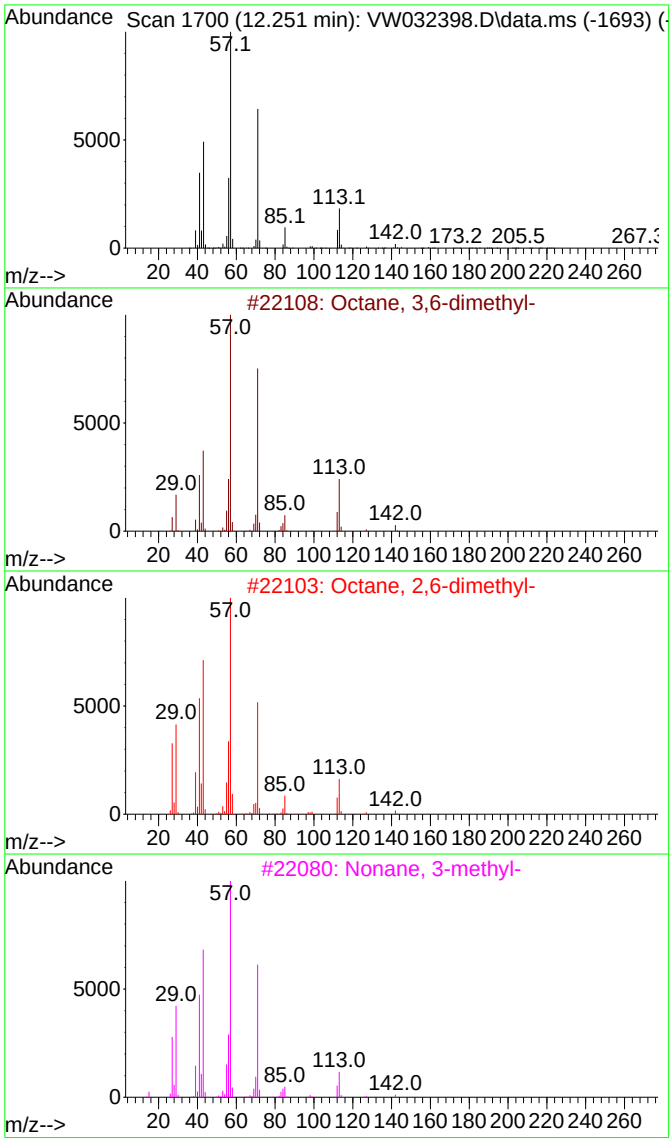
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

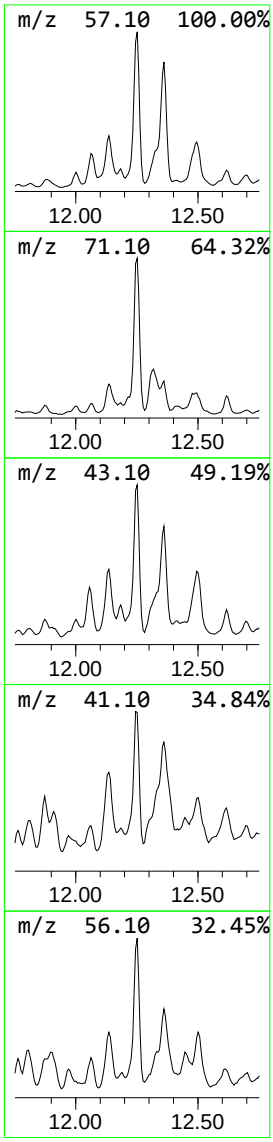
****

Peak Number 7 Octane, 3,6-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.251	92.25 ug/l	3439910	Chlorobenzene-d5	11.635

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	91
2	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	91
3	Nonane, 3-methyl-	142	C10H22	005911-04-6	90
4	Sulfurous acid, decyl 2-ethylhex...	334	C18H38O3S	1000309-19-3	53
5	Nonane, 4-methyl-5-propyl-	184	C13H28	062185-55-1	53





Sample Results: **VW032398.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032398.D
Acq On : 20 Oct 2025 18:36
Operator : SY/MD
Sample : Q3395-05
Misc : 4.92g/5mL/MSVOA_W/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-102116-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Heptane, 2,6-di...	10.934	75.6	ug/l	2817290	3	11.635	1864370	50.0
Heptane, 2,5-di...	11.038	60.9	ug/l	2268840	3	11.635	1864370	50.0
Cyclohexane, 1,...	11.233	102.0	ug/l	3801690	3	11.635	1864370	50.0
Cyclohexane, 1,...	11.434	61.8	ug/l	2302680	3	11.635	1864370	50.0
Octane, 3,6-dim...	12.251	92.3	ug/l	3439910	3	11.635	1864370	50.0

Raw Data: **VW032399.D**

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S08-038048-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-07	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 58.6
Sample Wt/Vol:	4.56 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	9.40	U	1	2.10	9.40	ug/Kg	10/20/25 18:58	VW102025
74-87-3	Chloromethane	9.40	U	1	2.10	9.40	ug/Kg	10/20/25 18:58	VW102025
75-01-4	Vinyl Chloride	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
74-83-9	Bromomethane	9.40	U	1	2.00	9.40	ug/Kg	10/20/25 18:58	VW102025
75-00-3	Chloroethane	9.40	U	1	2.40	9.40	ug/Kg	10/20/25 18:58	VW102025
75-69-4	Trichlorofluoromethane	9.40	U	1	2.30	9.40	ug/Kg	10/20/25 18:58	VW102025
76-13-1	1,1,2-Trichlorotrifluoroethane	9.40	U	1	2.00	9.40	ug/Kg	10/20/25 18:58	VW102025
75-35-4	1,1-Dichloroethene	9.40	U	1	1.90	9.40	ug/Kg	10/20/25 18:58	VW102025
67-64-1	Acetone	370		1	8.90	46.8	ug/Kg	10/20/25 18:58	VW102025
75-15-0	Carbon Disulfide	7.20	J	1	2.00	9.40	ug/Kg	10/20/25 18:58	VW102025
1634-04-4	Methyl tert-butyl Ether	9.40	U	1	1.40	9.40	ug/Kg	10/20/25 18:58	VW102025
79-20-9	Methyl Acetate	5.80	J	1	2.90	9.40	ug/Kg	10/20/25 18:58	VW102025
75-09-2	Methylene Chloride	18.7	U	1	6.60	18.7	ug/Kg	10/20/25 18:58	VW102025
156-60-5	trans-1,2-Dichloroethene	9.40	U	1	1.60	9.40	ug/Kg	10/20/25 18:58	VW102025
75-34-3	1,1-Dichloroethane	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
110-82-7	Cyclohexane	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
78-93-3	2-Butanone	110		1	12.2	46.8	ug/Kg	10/20/25 18:58	VW102025
56-23-5	Carbon Tetrachloride	9.40	U	1	1.80	9.40	ug/Kg	10/20/25 18:58	VW102025
156-59-2	cis-1,2-Dichloroethene	9.40	U	1	1.40	9.40	ug/Kg	10/20/25 18:58	VW102025
74-97-5	Bromochloromethane	9.40	U	1	2.20	9.40	ug/Kg	10/20/25 18:58	VW102025
67-66-3	Chloroform	9.40	U	1	1.60	9.40	ug/Kg	10/20/25 18:58	VW102025
71-55-6	1,1,1-Trichloroethane	9.40	U	1	1.70	9.40	ug/Kg	10/20/25 18:58	VW102025
108-87-2	Methylcyclohexane	9.40	U	1	1.70	9.40	ug/Kg	10/20/25 18:58	VW102025
71-43-2	Benzene	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
107-06-2	1,2-Dichloroethane	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
79-01-6	Trichloroethene	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
78-87-5	1,2-Dichloropropane	9.40	U	1	1.70	9.40	ug/Kg	10/20/25 18:58	VW102025
75-27-4	Bromodichloromethane	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
108-10-1	4-Methyl-2-Pentanone	46.8	U	1	6.70	46.8	ug/Kg	10/20/25 18:58	VW102025
108-88-3	Toluene	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
10061-02-6	t-1,3-Dichloropropene	9.40	U	1	1.20	9.40	ug/Kg	10/20/25 18:58	VW102025
10061-01-5	cis-1,3-Dichloropropene	9.40	U	1	1.20	9.40	ug/Kg	10/20/25 18:58	VW102025
79-00-5	1,1,2-Trichloroethane	9.40	U	1	1.70	9.40	ug/Kg	10/20/25 18:58	VW102025
591-78-6	2-Hexanone	46.8	U	1	6.90	46.8	ug/Kg	10/20/25 18:58	VW102025
124-48-1	Dibromochloromethane	9.40	U	1	1.60	9.40	ug/Kg	10/20/25 18:58	VW102025
106-93-4	1,2-Dibromoethane	9.40	U	1	1.60	9.40	ug/Kg	10/20/25 18:58	VW102025
127-18-4	Tetrachloroethene	9.40	U	1	2.00	9.40	ug/Kg	10/20/25 18:58	VW102025
108-90-7	Chlorobenzene	9.40	U	1	1.70	9.40	ug/Kg	10/20/25 18:58	VW102025
100-41-4	Ethyl Benzene	9.40	U	1	1.30	9.40	ug/Kg	10/20/25 18:58	VW102025
179601-23-1	m/p-Xylenes	18.7	U	1	2.30	18.7	ug/Kg	10/20/25 18:58	VW102025
95-47-6	o-Xylene	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
100-42-5	Styrene	9.40	U	1	1.30	9.40	ug/Kg	10/20/25 18:58	VW102025
75-25-2	Bromoform	9.40	U	1	1.60	9.40	ug/Kg	10/20/25 18:58	VW102025

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S08-038048-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-07	Matrix:	SOIL
Analytical Method:	8260D Level : LOW	% Solid:	58.6
Sample Wt/Vol:	4.56 g Final Vol: 5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	9.40	U	1	1.50	9.40	ug/Kg	10/20/25 18:58	VW102025
79-34-5	1,1,2,2-Tetrachloroethane	9.40	U	1	2.30	9.40	ug/Kg	10/20/25 18:58	VW102025
541-73-1	1,3-Dichlorobenzene	9.40	U	1	3.20	9.40	ug/Kg	10/20/25 18:58	VW102025
106-46-7	1,4-Dichlorobenzene	9.40	U	1	2.90	9.40	ug/Kg	10/20/25 18:58	VW102025
95-50-1	1,2-Dichlorobenzene	9.40	U	1	2.70	9.40	ug/Kg	10/20/25 18:58	VW102025
96-12-8	1,2-Dibromo-3-Chloropropane	9.40	U	1	3.40	9.40	ug/Kg	10/20/25 18:58	VW102025
120-82-1	1,2,4-Trichlorobenzene	9.40	U	1	5.60	9.40	ug/Kg	10/20/25 18:58	VW102025
87-61-6	1,2,3-Trichlorobenzene	9.40	U	1	6.00	9.40	ug/Kg	10/20/25 18:58	VW102025
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	58.1			63 - 155	116%	SPK: 50		
1868-53-7	Dibromofluoromethane	51.2			70 - 134	102%	SPK: 50		
2037-26-5	Toluene-d8	50.6			74 - 123	101%	SPK: 50		
460-00-4	4-Bromofluorobenzene	64.8			17 - 146	130%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	240000							
540-36-3	1,4-Difluorobenzene	525000							
3114-55-4	Chlorobenzene-d5	508000							
3855-82-1	1,4-Dichlorobenzene-d4	246000							
TENTATIVE IDENTIFIED COMPOUNDS									
002051-30-1	Octane, 2,6-dimethyl-	120	J			12.3	ug/Kg		
017301-23-4	Undecane, 2,6-dimethyl-	150	J			14.8	ug/Kg		
031295-56-4	Dodecane, 2,6,11-trimethyl-	100	J			16.3	ug/Kg		

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_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Quant Time: Oct 21 01:34:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

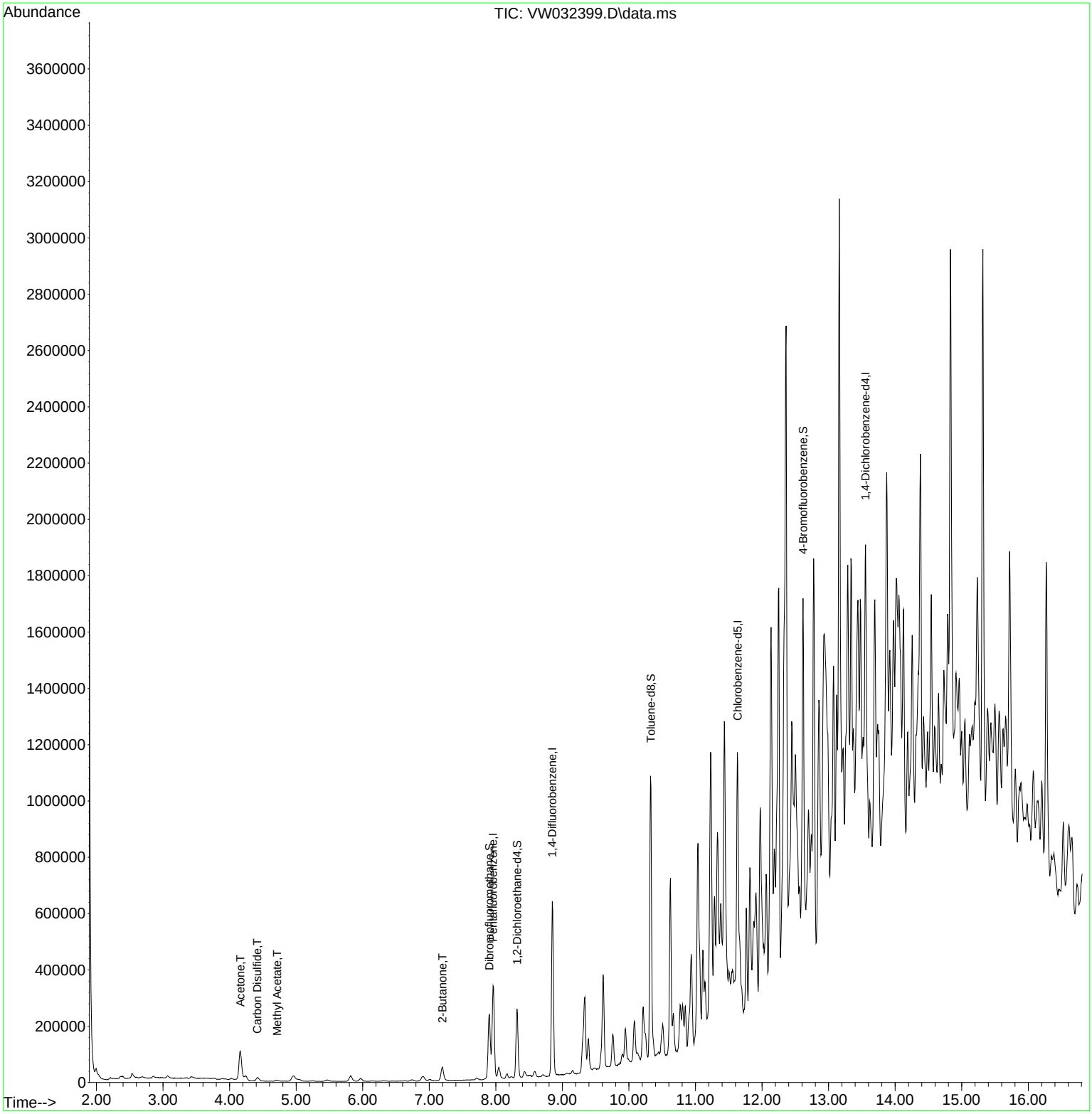
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	239838	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	525260	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	508147	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	246462	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	203068	58.050	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 116.100%			
35) Dibromofluoromethane	7.904	113	174150	51.196	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 102.400%			
50) Toluene-d8	10.331	98	634729	50.557	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 101.120%			
62) 4-Bromofluorobenzene	12.617	95	307677	64.839	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 129.680%			
Target Compounds						Qvalue
16) Acetone	4.161	43	188988	195.110	ug/l	100
17) Carbon Disulfide	4.417	76	28260	3.832	ug/l #	94
18) Methyl Acetate	4.716	43	8634	3.112	ug/l	98
25) 2-Butanone	7.197	43	77218	58.533	ug/l	99

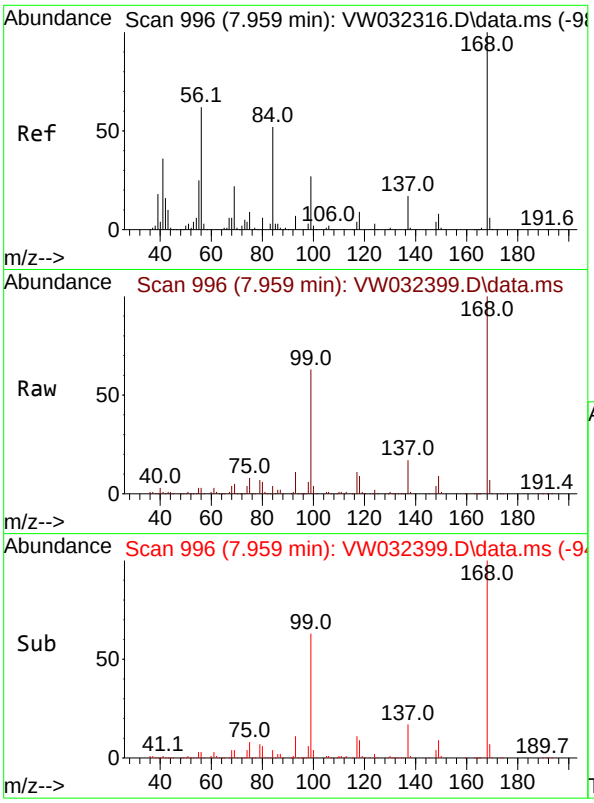
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Quant Time: Oct 21 01:34:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration



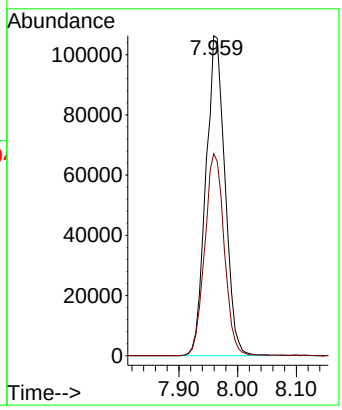


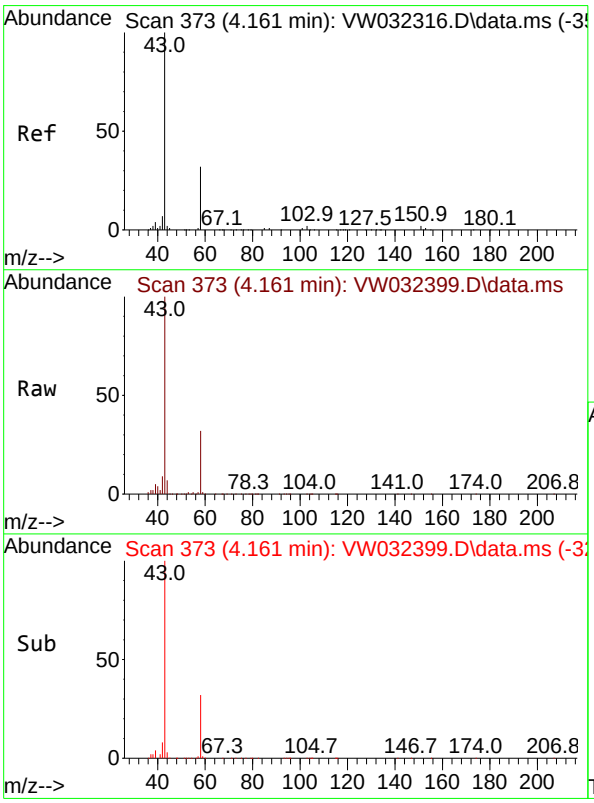
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Tgt Ion:168 Resp: 239838

Ion	Ratio	Lower	Upper
168	100		
99	63.1	49.3	73.9

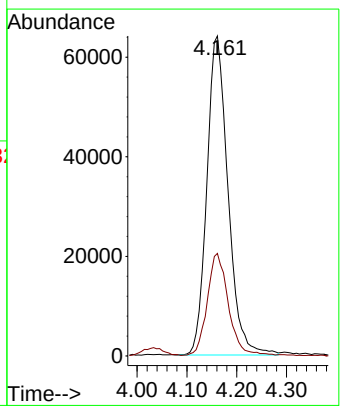


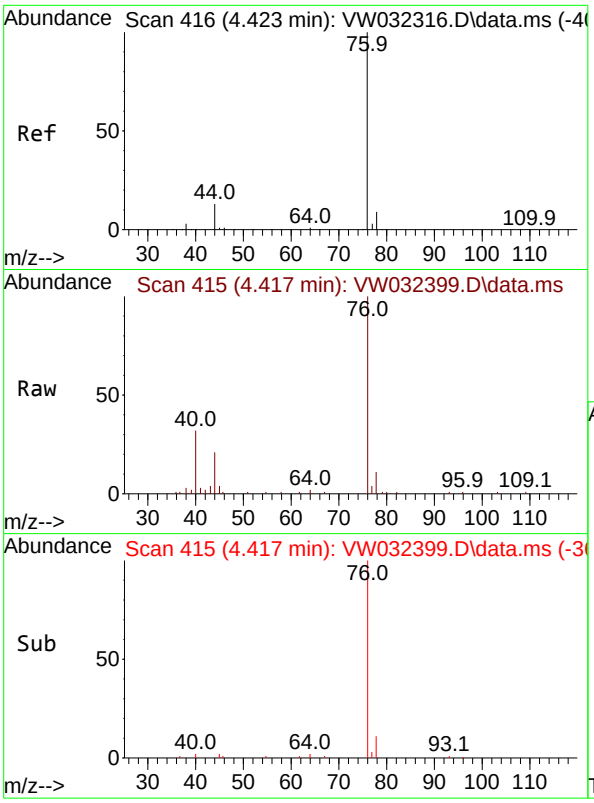


#16
Acetone
Concen: 195.110 ug/l
RT: 4.161 min Scan# 373
Delta R.T. -0.000 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Tgt Ion: 43 Resp: 188988

Ion	Ratio	Lower	Upper
43	100		
58	31.8	25.3	37.9



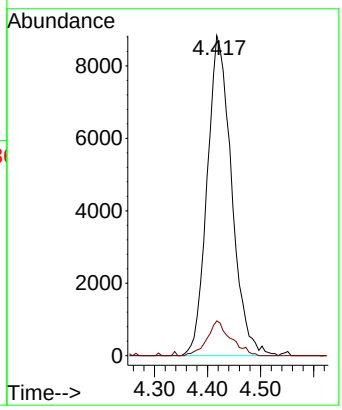


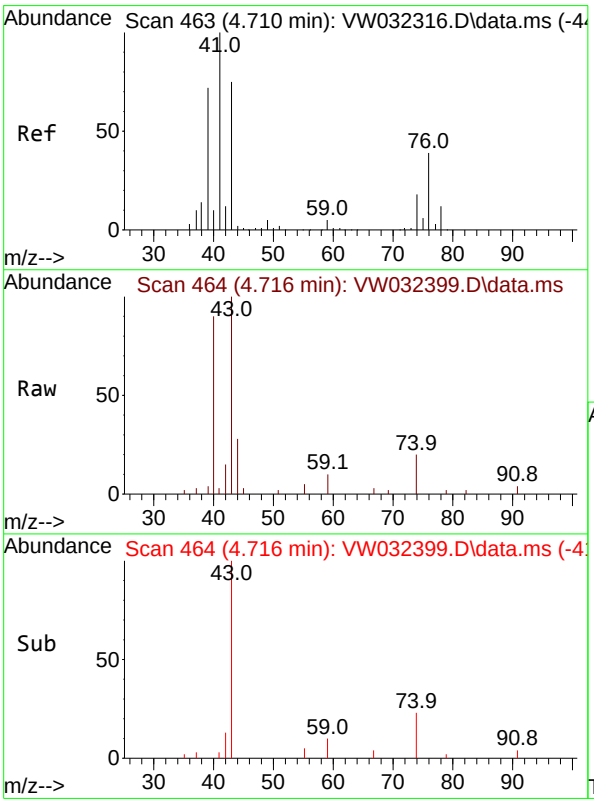
#17
Carbon Disulfide
Concen: 3.832 ug/l
RT: 4.417 min Scan# 4
Delta R.T. -0.006 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Tgt Ion: 76 Resp: 28260

Ion	Ratio	Lower	Upper
76	100		
78	10.9	7.0	10.6#

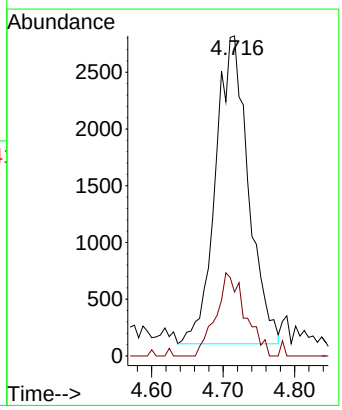


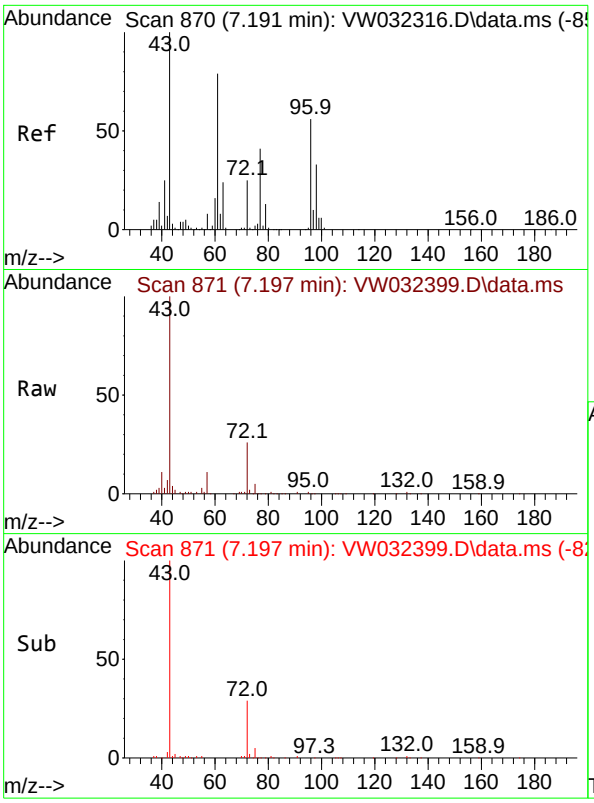


#18
Methyl Acetate
Concen: 3.112 ug/l
RT: 4.716 min Scan# 464
Delta R.T. 0.006 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Tgt Ion: 43 Resp: 8634

Ion	Ratio	Lower	Upper
43	100		
74	24.1	20.2	30.4



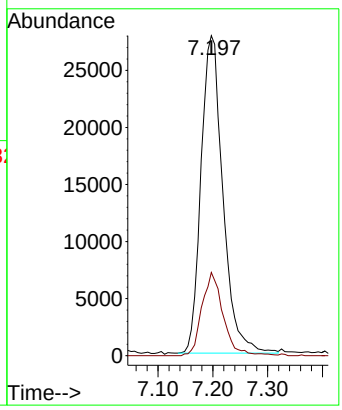


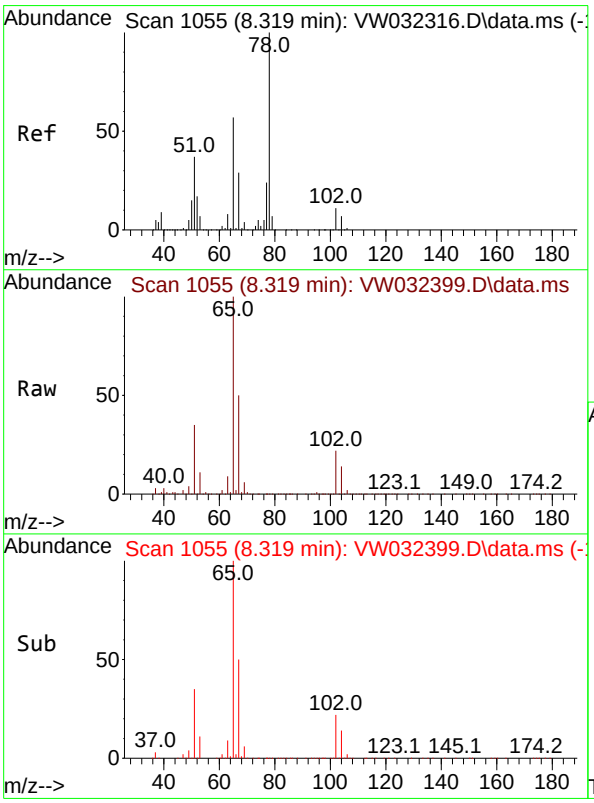
#25
2-Butanone
Concen: 58.533 ug/l
RT: 7.197 min Scan# 8
Delta R.T. 0.006 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Tgt Ion: 43 Resp: 77218

Ion	Ratio	Lower	Upper
43	100		
72	26.2	21.4	32.2

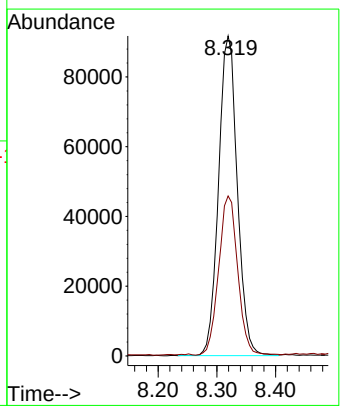


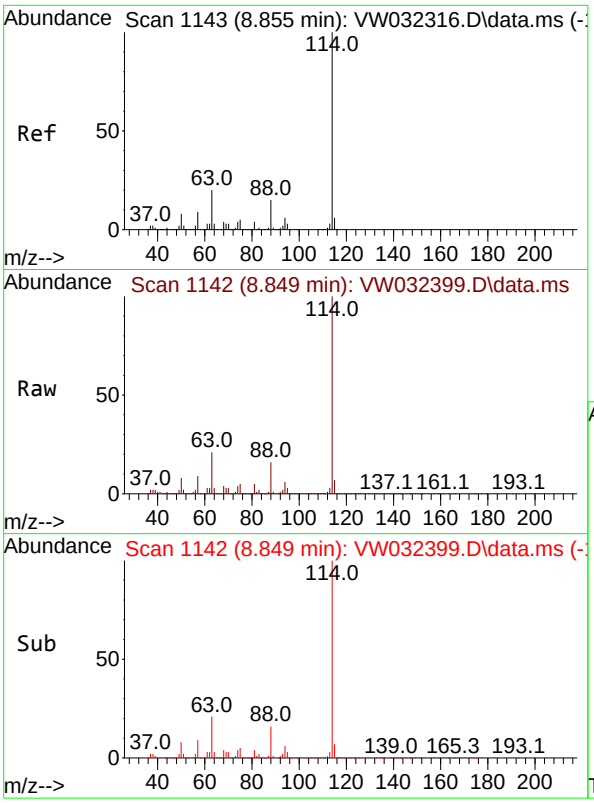


#33
1,2-Dichloroethane-d4
Concen: 58.050 ug/l
RT: 8.319 min Scan# 1055
Delta R.T. -0.000 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Tgt Ion: 65 Resp: 203068

Ion	Ratio	Lower	Upper
65	100		
67	50.6	0.0	99.6



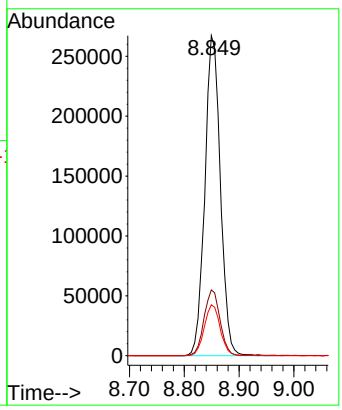


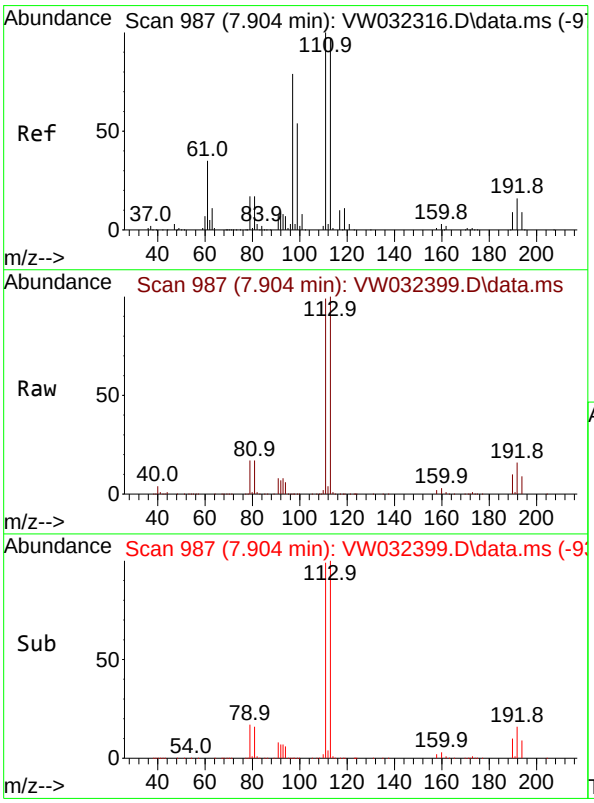
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 11
Delta R.T. -0.006 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Tgt Ion:114 Resp: 525260

Ion	Ratio	Lower	Upper
114	100		
63	20.6	0.0	40.4
88	15.9	0.0	32.0

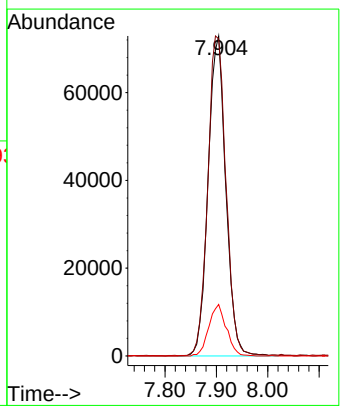


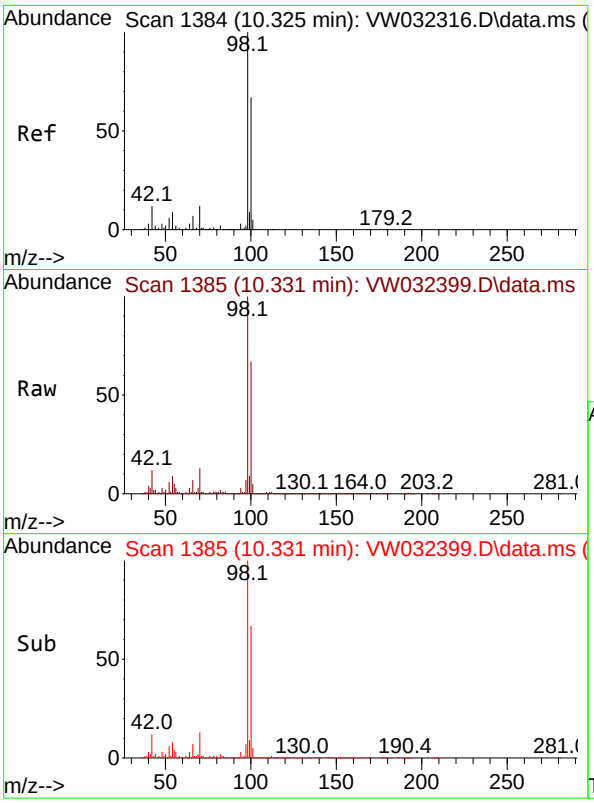


#35
Dibromofluoromethane
Concen: 51.196 ug/l
RT: 7.904 min Scan# 987
Delta R.T. -0.000 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Tgt Ion:113 Resp: 174150

Ion	Ratio	Lower	Upper
113	100		
111	102.6	83.9	125.9
192	16.0	14.6	21.8



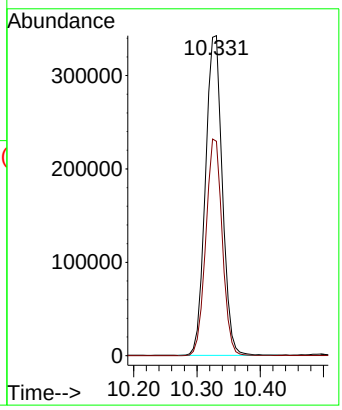


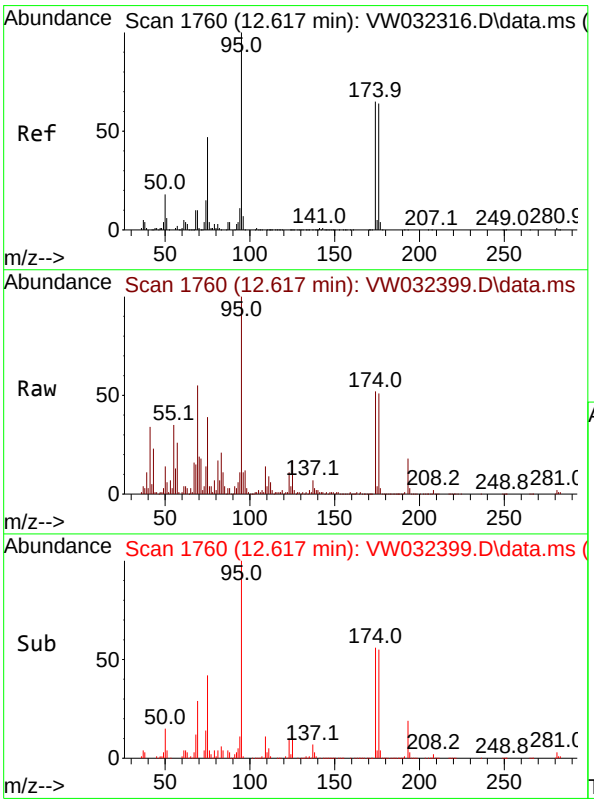
#50
Toluene-d8
Concen: 50.557 ug/l
RT: 10.331 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Tgt Ion: 98 Resp: 634729

Ion	Ratio	Lower	Upper
98	100		
100	66.2	51.4	77.2

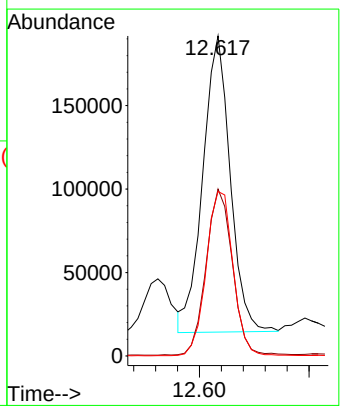


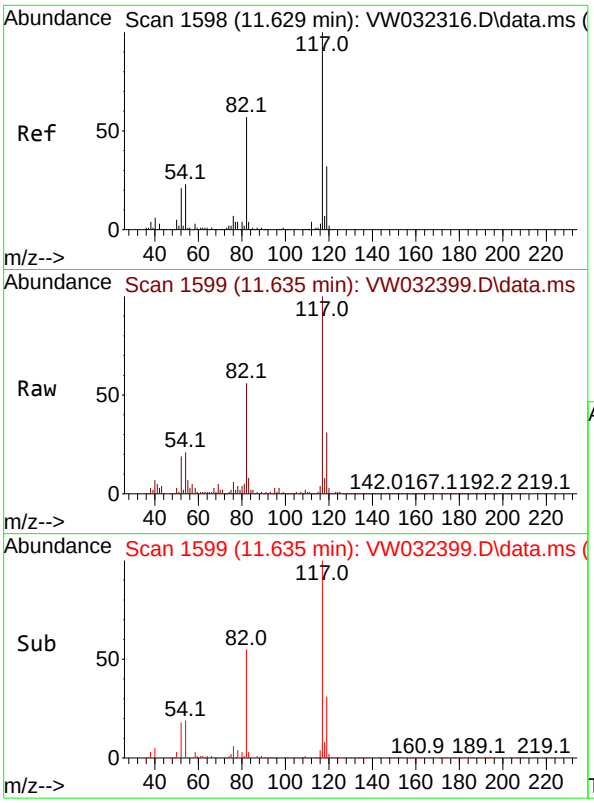


#62
4-Bromofluorobenzene
Concen: 64.839 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Tgt Ion: 95 Resp: 307677

Ion	Ratio	Lower	Upper
95	100		
174	53.9	0.0	145.6
176	54.5	0.0	140.8



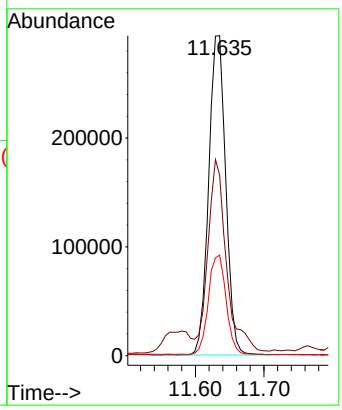


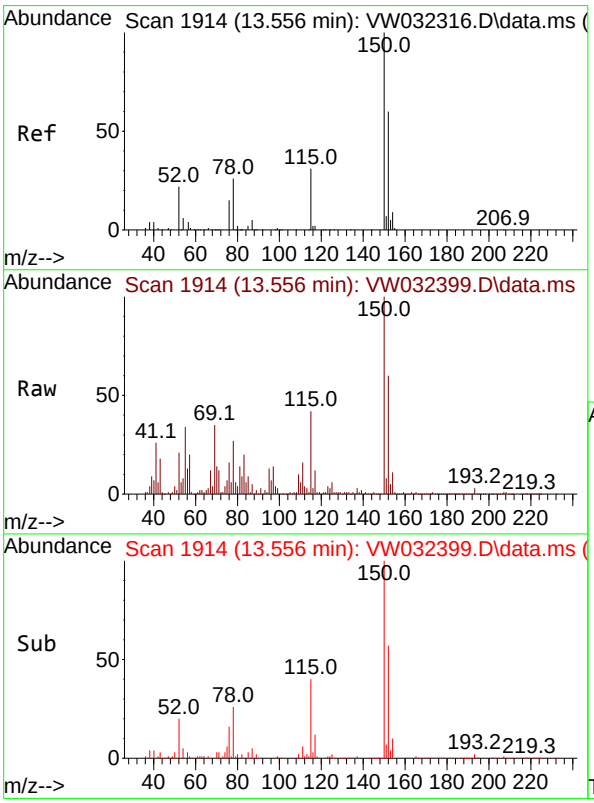
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.635 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Tgt Ion:117 Resp: 508147

Ion	Ratio	Lower	Upper
117	100		
82	54.9	42.7	64.1
119	31.2	25.2	37.8

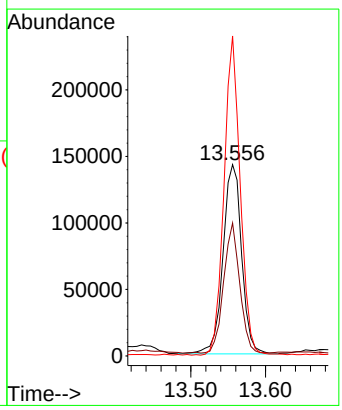




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032399.D
Acq: 20 Oct 2025 18:58

Tgt Ion:152 Resp: 246462

Ion	Ratio	Lower	Upper
152	100		
115	59.4	31.8	95.4
150	147.4	0.0	343.0



Sample Results: **VW032399.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

Signal : TIC: VW032399.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.997	15	18	34	rVB3	38641	105500	1.74%	0.122%
2	4.161	363	373	382	rBV	100470	289893	4.78%	0.335%
3	4.960	490	504	513	rBV6	19094	82507	1.36%	0.095%
4	5.819	634	645	658	rBV	20258	65632	1.08%	0.076%
5	7.197	857	871	885	rBV	48885	147245	2.43%	0.170%
6	7.904	972	987	991	rBV	230355	569816	9.40%	0.658%
7	7.959	991	996	1004	rVV	329203	758636	12.51%	0.875%
8	8.045	1004	1010	1019	rVB2	38151	96802	1.60%	0.112%
9	8.319	1047	1055	1066	rBV	244725	544343	8.98%	0.628%
10	8.849	1134	1142	1154	rBV	620986	1244330	20.52%	1.436%
11	9.337	1210	1222	1227	rBV3	269337	753017	12.42%	0.869%
12	9.392	1227	1231	1240	rVB	110987	220879	3.64%	0.255%
13	9.611	1257	1267	1276	rBV	334044	756291	12.47%	0.873%
14	9.758	1285	1291	1299	rBV2	111958	234404	3.87%	0.270%
15	9.947	1317	1322	1328	rVB	110208	210342	3.47%	0.243%
16	10.081	1339	1344	1350	rBV2	132064	266957	4.40%	0.308%
17	10.215	1360	1366	1377	rBV3	183522	498491	8.22%	0.575%
18	10.325	1378	1384	1395	rVV	997717	1916828	31.61%	2.212%
19	10.508	1407	1414	1421	rVB4	110912	260459	4.29%	0.301%
20	10.623	1426	1433	1438	rBV	622224	1147785	18.93%	1.325%
21	10.666	1438	1440	1450	rVB2	138271	209362	3.45%	0.242%
22	10.770	1452	1457	1460	rBV3	153336	290913	4.80%	0.336%
23	10.806	1461	1463	1467	rVB2	76612	87180	1.44%	0.101%
24	10.849	1467	1470	1474	rVB	142798	211099	3.48%	0.244%
25	10.934	1474	1484	1491	rBV3	327665	819865	13.52%	0.946%
26	11.038	1494	1501	1509	rBV	682394	1683210	27.75%	1.942%
27	11.111	1509	1513	1516	rBV	246114	381312	6.29%	0.440%
28	11.227	1525	1532	1538	rBV3	937884	2101973	34.66%	2.426%
29	11.288	1538	1542	1545	rVV2	386979	709882	11.71%	0.819%
30	11.331	1545	1549	1554	rVV2	591854	1285676	21.20%	1.484%
31	11.379	1554	1557	1561	rVV2	315533	621783	10.25%	0.718%
32	11.434	1561	1566	1575	rVB	927309	1934517	31.90%	2.232%
33	11.629	1593	1598	1613	rVB	923335	2215013	36.52%	2.556%
34	11.763	1616	1620	1624	rBV	352772	519188	8.56%	0.599%
35	11.818	1624	1629	1634	rBV3	472863	886621	14.62%	1.023%
36	11.873	1634	1638	1640	rBV2	172585	276749	4.56%	0.319%

Sample Results: **VW032399.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

37	11.971	1649	1654	1664	rBV3	652593	1724620	28.44%	1.990%
38	12.062	1665	1669	1673	rVB2	351408	557011	9.18%	0.643%
39	12.135	1673	1681	1686	rBV3	1228317	2778989	45.82%	3.207%
40	12.184	1687	1689	1692	rVV2	340935	504158	8.31%	0.582%
41	12.251	1692	1700	1704	rVB2	1313065	2818099	46.47%	3.252%
42	12.361	1704	1718	1723	rBV2	2244516	6064665	100.00%	6.998%
43	12.446	1728	1732	1738	rBV3	492386	1017248	16.77%	1.174%
44	12.617	1754	1760	1767	rBV	1136644	2024168	33.38%	2.336%
45	12.696	1770	1773	1777	rVV5	245355	373197	6.15%	0.431%
46	12.775	1782	1786	1792	rVB2	1365950	2394795	39.49%	2.764%
47	12.855	1793	1799	1804	rBV4	857060	2076924	34.25%	2.397%
48	12.934	1806	1812	1826	rVB9	868970	4015306	66.21%	4.634%
49	13.074	1831	1835	1839	rVB2	621056	899947	14.84%	1.039%
50	13.123	1839	1843	1845	rBV3	518725	769770	12.69%	0.888%
51	13.160	1845	1849	1855	rVB	2039447	3099693	51.11%	3.577%
52	13.288	1862	1870	1875	rBV2	921302	2128320	35.09%	2.456%
53	13.336	1875	1878	1882	rVB	699777	1017655	16.78%	1.174%
54	13.440	1889	1895	1898	rBV4	587829	1235363	20.37%	1.426%
55	13.477	1899	1901	1905	rVB2	568977	687414	11.33%	0.793%
56	13.556	1910	1914	1922	rVB	1042863	2014150	33.21%	2.324%
57	13.696	1931	1937	1941	rBV2	853157	1717593	28.32%	1.982%
58	13.873	1961	1966	1971	rBV4	1001715	1874921	30.92%	2.164%
59	13.976	1979	1983	1986	rBV4	448568	763007	12.58%	0.880%
60	14.129	2004	2008	2013	rVB	791628	1342658	22.14%	1.549%
61	14.190	2014	2018	2021	rBV4	348747	571218	9.42%	0.659%
62	14.257	2026	2029	2035	rVB3	600831	980382	16.17%	1.131%
63	14.379	2045	2049	2054	rVB2	1119006	1815546	29.94%	2.095%
64	14.543	2073	2076	2081	rVB	630076	878702	14.49%	1.014%
65	14.653	2091	2094	2098	rVB	320252	434307	7.16%	0.501%
66	14.732	2104	2107	2113	rBV4	322339	676536	11.16%	0.781%
67	14.787	2113	2116	2119	rVV2	487688	806153	13.29%	0.930%
68	14.830	2119	2123	2131	rVB	1748676	3140358	51.78%	3.624%
69	15.232	2186	2189	2198	rVB6	722102	1539132	25.38%	1.776%
70	15.318	2198	2203	2209	rVB	1958930	3319078	54.73%	3.830%
71	15.720	2265	2269	2278	rVB5	961206	1991618	32.84%	2.298%
72	16.269	2355	2359	2368	rVB	1115494	2199479	36.27%	2.538%

Sum of corrected areas: 86656680

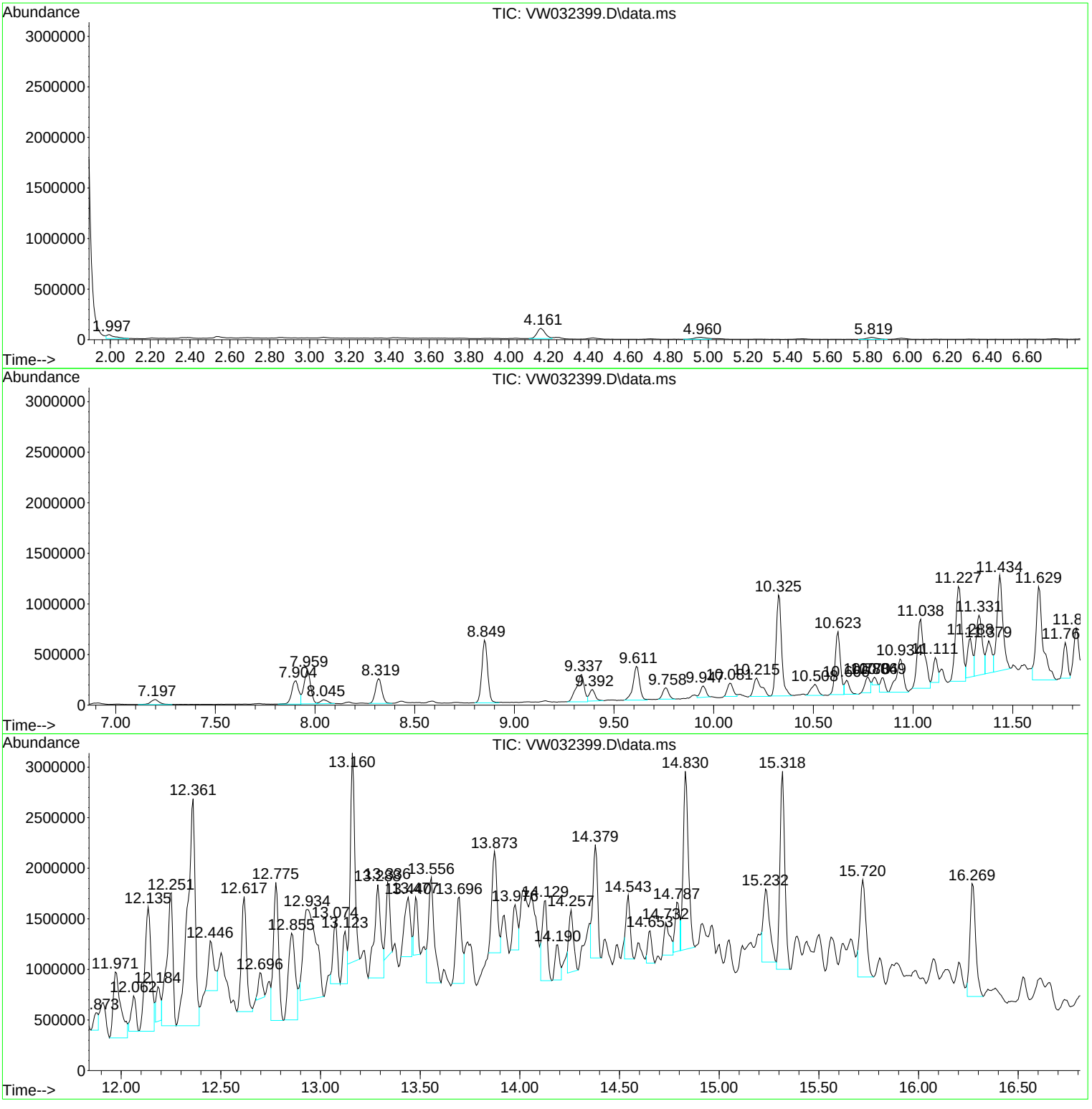
Sample Results: **VW032399.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

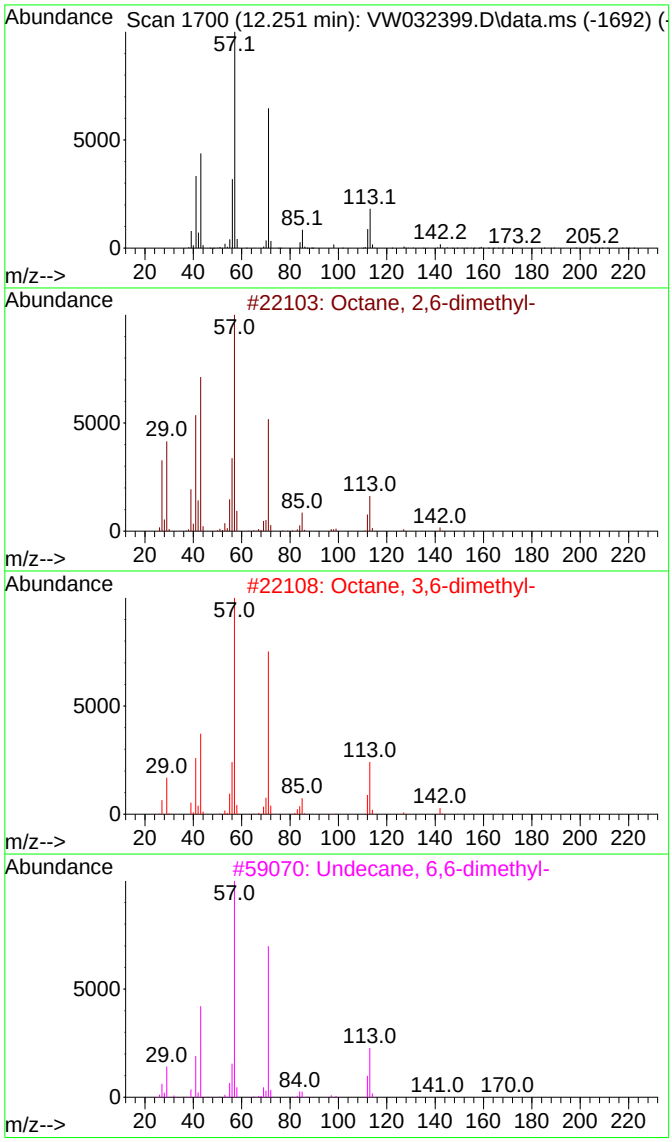
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

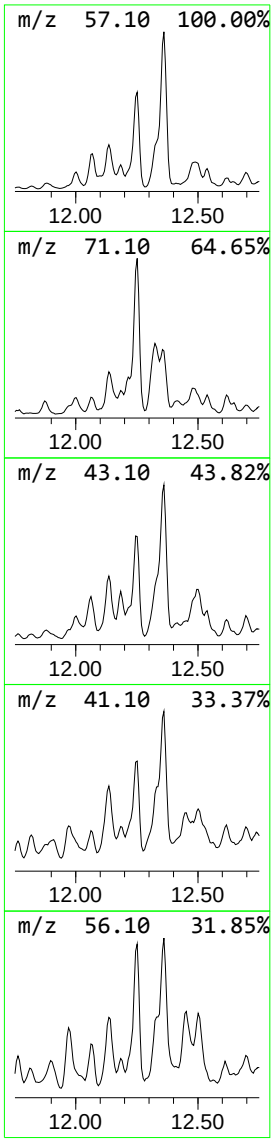
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Octane, 2,6-dimethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.251	63.61 ug/l	2818100	Chlorobenzene-d5	11.635

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	91
2	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	90
3	Undecane, 6,6-dimethyl-	184	C13H28	017312-76-4	72
4	Nonane, 3-methyl-	142	C10H22	005911-04-6	72
5	Sulfurous acid, di(2-ethylhexyl)...	306	C16H34O3S	1000309-19-1	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

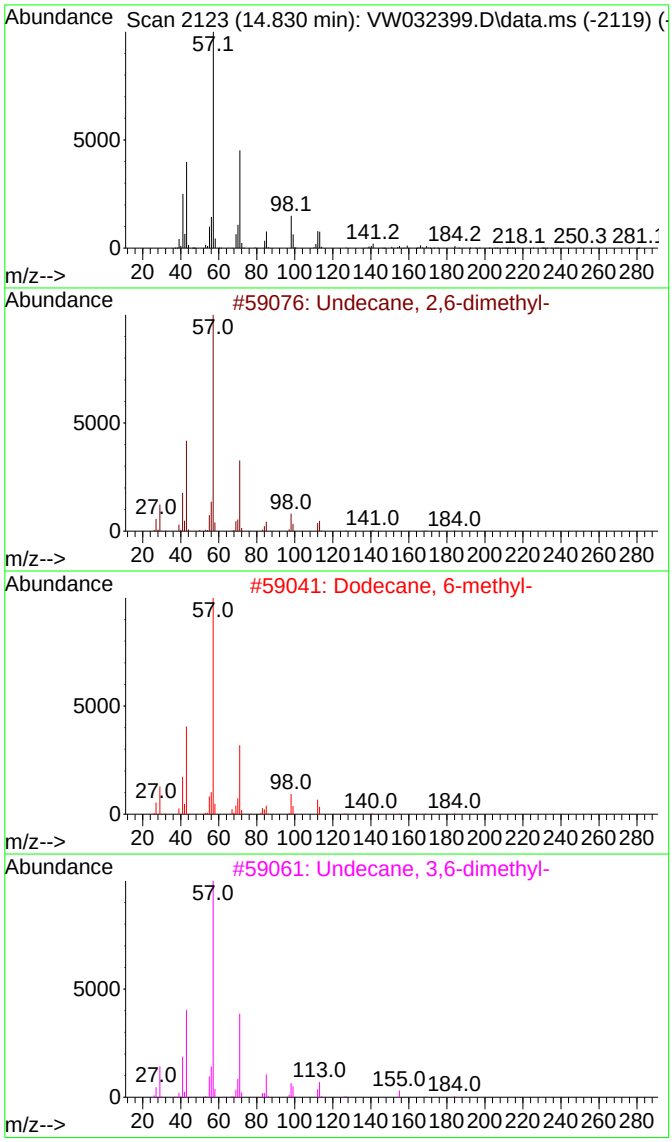
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

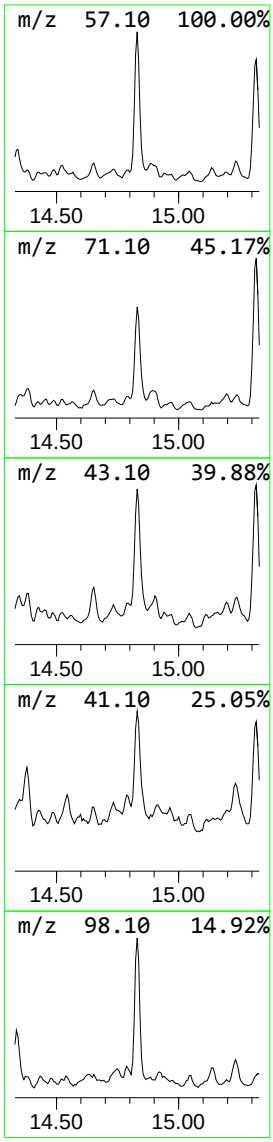
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 Undecane, 2,6-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.830	77.96 ug/l	3140360	1,4-Dichlorobenzene-d4	13.556

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	94
2	Dodecane, 6-methyl-	184	C13H28	006044-71-9	90
3	Undecane, 3,6-dimethyl-	184	C13H28	017301-28-9	90
4	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	76
5	Heptane, 3-(bromomethyl)-	192	C8H17Br	018908-66-2	64





Sample Results: **VW032399.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

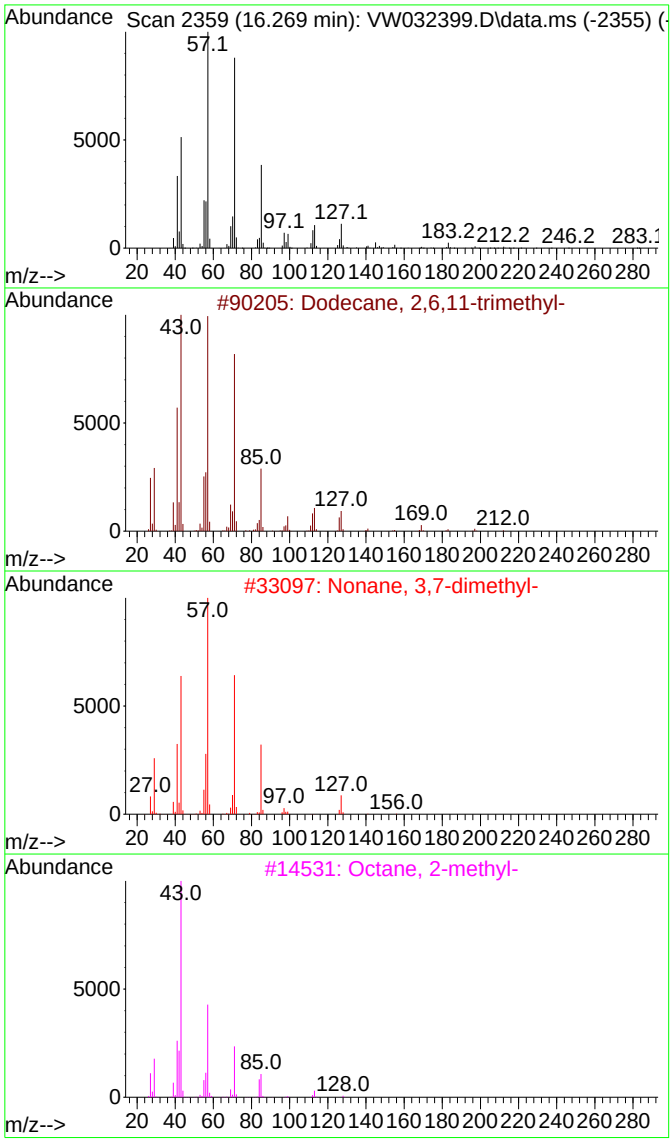
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

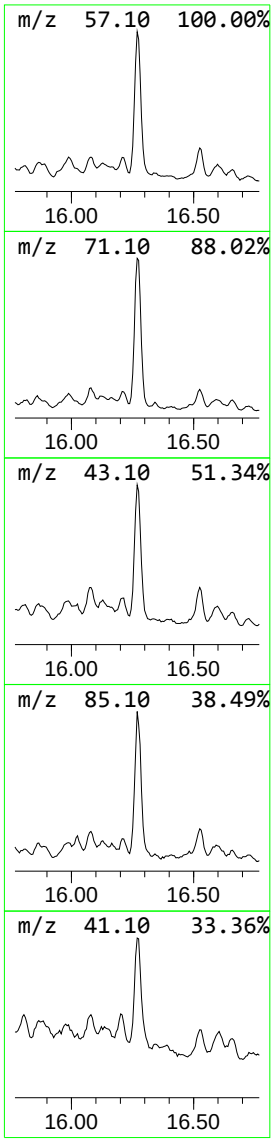
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 10 Dodecane, 2,6,11-trimethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.269	54.60 ug/l	2199480	1,4-Dichlorobenzene-d4	13.556

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	91
2	Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	90
3	Octane, 2-methyl-	128	C9H20	003221-61-2	87
4	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	83
5	Dodecane, 2,7,10-trimethyl-	212	C15H32	074645-98-0	80





Sample Results: **VW032399.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032399.D
Acq On : 20 Oct 2025 18:58
Operator : SY/MD
Sample : Q3395-07
Misc : 4.56g/5mL/MSVOA_W/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S08-038048-20251017

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Octane, 2,6-dim...	12.251	63.6	ug/l	2818100	3	11.635	2215010	50.0
Undecane, 2,6-d...	14.830	78.0	ug/l	3140360	4	13.556	2014150	50.0
Dodecane, 2,6,1...	16.269	54.6	ug/l	2199480	4	13.556	2014150	50.0

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: AECO02

Lab Code: ACE SDG No.: Q3395

Instrument ID: MSVOA_W Calibration Date(s): 10/01/2025 10/01/2025

Heated Purge: (Y/N) Y Calibration Time(s): 13:12 15:20

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

LAB FILE ID: RRF005 = VW032313.D RRF010 = VW032314.D RRF020 = VW032315.D
RRF050 = VW032316.D RRF100 = VW032317.D RRF150 = VW032318.D

COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.347	0.343	0.345	0.264	0.284	0.299	0.314	11.5
Chloromethane	0.532	0.527	0.516	0.418	0.450	0.463	0.484	9.7
Vinyl Chloride	0.625	0.636	0.606	0.529	0.533	0.538	0.578	8.6
Bromomethane	0.483	0.472	0.435	0.382	0.391	0.386	0.425	10.6
Chloroethane	0.405	0.409	0.394	0.356	0.365	0.361	0.382	6.3
Trichlorofluoromethane	0.426	0.453	0.430	0.418	0.422	0.447	0.433	3.3
1,1,2-Trichlorotrifluoroethane	0.609	0.569	0.524	0.465	0.469	0.478	0.519	11.5
1,1-Dichloroethene	0.588	0.608	0.595	0.521	0.534	0.535	0.564	6.7
Acetone	0.235	0.230	0.209	0.183	0.174	0.181	0.202	13.1
Carbon Disulfide	1.581	1.583	1.581	1.442	1.517	1.521	1.538	3.7
Methyl tert-butyl Ether	1.087	1.161	1.150	1.069	1.094	1.099	1.110	3.3
Methyl Acetate	0.478	0.597	0.612	0.624	0.567	0.592	0.578	9.1
Methylene Chloride	1.280	1.052	0.811	0.631	0.630	0.625	0.838	32.6
trans-1,2-Dichloroethene	0.649	0.640	0.636	0.589	0.613	0.617	0.624	3.6
1,1-Dichloroethane	1.238	1.261	1.244	1.132	1.169	1.172	1.203	4.3
Cyclohexane	1.228	1.108	1.042	0.911	0.931	0.939	1.027	12.1
2-Butanone	0.271	0.293	0.286	0.262	0.262	0.277	0.275	4.6
Carbon Tetrachloride	0.446	0.441	0.427	0.403	0.434	0.429	0.430	3.5
cis-1,2-Dichloroethene	0.768	0.763	0.766	0.716	0.740	0.744	0.749	2.7
Bromochloromethane	0.566	0.588	0.583	0.547	0.553	0.557	0.566	2.9
Chloroform	1.257	1.275	1.271	1.146	1.191	1.178	1.220	4.5
1,1,1-Trichloroethane	0.906	0.910	0.896	0.816	0.835	0.822	0.864	5.1
Methylcyclohexane	0.585	0.542	0.529	0.521	0.568	0.561	0.551	4.5
Benzene	1.518	1.494	1.440	1.345	1.424	1.373	1.432	4.7
1,2-Dichloroethane	0.487	0.497	0.472	0.442	0.461	0.453	0.469	4.4
Trichloroethene	0.354	0.348	0.330	0.312	0.339	0.329	0.335	4.5
1,2-Dichloropropane	0.370	0.371	0.363	0.341	0.355	0.346	0.358	3.4
Bromodichloromethane	0.507	0.517	0.500	0.480	0.513	0.500	0.503	2.6
4-Methyl-2-Pentanone	0.289	0.325	0.318	0.312	0.314	0.317	0.313	3.9
Toluene	0.909	0.905	0.897	0.857	0.908	0.876	0.892	2.4

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

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: AECO02

Lab Code: ACE SDG No.: Q3395

Instrument ID: MSVOA_W Calibration Date(s): 10/01/2025 10/01/2025

Heated Purge: (Y/N) Y Calibration Time(s): 13:12 15:20

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

LAB FILE ID: RRF005 = VW032313.D RRF010 = VW032314.D RRF020 = VW032315.D
RRF050 = VW032316.D RRF100 = VW032317.D RRF150 = VW032318.D

COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
t-1,3-Dichloropropene	0.451	0.482	0.469	0.478	0.525	0.523	0.488	6.1
cis-1,3-Dichloropropene	0.531	0.571	0.550	0.544	0.591	0.584	0.562	4.2
1,1,2-Trichloroethane	0.304	0.307	0.295	0.280	0.293	0.285	0.294	3.6
2-Hexanone	0.202	0.225	0.226	0.219	0.223	0.228	0.220	4.4
Dibromochloromethane	0.317	0.327	0.334	0.326	0.355	0.343	0.334	4
1,2-Dibromoethane	0.286	0.295	0.288	0.278	0.285	0.287	0.287	2
Tetrachloroethene	0.327	0.325	0.299	0.278	0.287	0.279	0.299	7.3
Chlorobenzene	1.159	1.140	1.109	1.028	1.094	1.070	1.100	4.3
Ethyl Benzene	1.822	1.861	1.843	1.734	1.897	1.845	1.834	3
m/p-Xylenes	0.704	0.720	0.715	0.668	0.730	0.705	0.707	3
o-Xylene	0.632	0.665	0.653	0.637	0.701	0.678	0.661	3.9
Styrene	1.090	1.143	1.199	1.124	1.186	1.186	1.155	3.7
Bromoform	0.179	0.207	0.192	0.189	0.202	0.209	0.196	6
Isopropylbenzene	3.316	3.159	3.364	3.327	3.645	3.714	3.421	6.2
1,1,2,2-Tetrachloroethane	0.867	0.867	0.851	0.808	0.833	0.869	0.849	2.9
1,3-Dichlorobenzene	1.765	1.650	1.625	1.600	1.658	1.722	1.670	3.7
1,4-Dichlorobenzene	1.839	1.673	1.700	1.548	1.661	1.597	1.670	6
1,2-Dichlorobenzene	1.541	1.549	1.557	1.402	1.467	1.540	1.509	4.1
1,2-Dibromo-3-Chloropropane	0.146	0.144	0.150	0.146	0.147	0.160	0.149	3.8
1,2,4-Trichlorobenzene	0.956	0.842	0.865	0.833	0.938	0.997	0.905	7.5
1,2,3-Trichlorobenzene	0.893	0.818	0.839	0.810	0.864	0.895	0.853	4.3
1,2-Dichloroethane-d4	0.738	0.758	0.765	0.695	0.714	0.706	0.729	4
Dibromofluoromethane	0.331	0.335	0.327	0.306	0.331	0.311	0.324	3.8
Toluene-d8	1.182	1.204	1.166	1.193	1.231	1.194	1.195	1.8
4-Bromofluorobenzene	0.472	0.449	0.436	0.448	0.459	0.446	0.452	2.8

* 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_W

Method Path : Z:\voasrv\HPCHEM1\MSVOA_W\Method\
Method File : 82W100125S.M
Title : SW846 8260
Last Update : Thu Oct 02 21:24:16 2025
Response Via : Initial Calibration

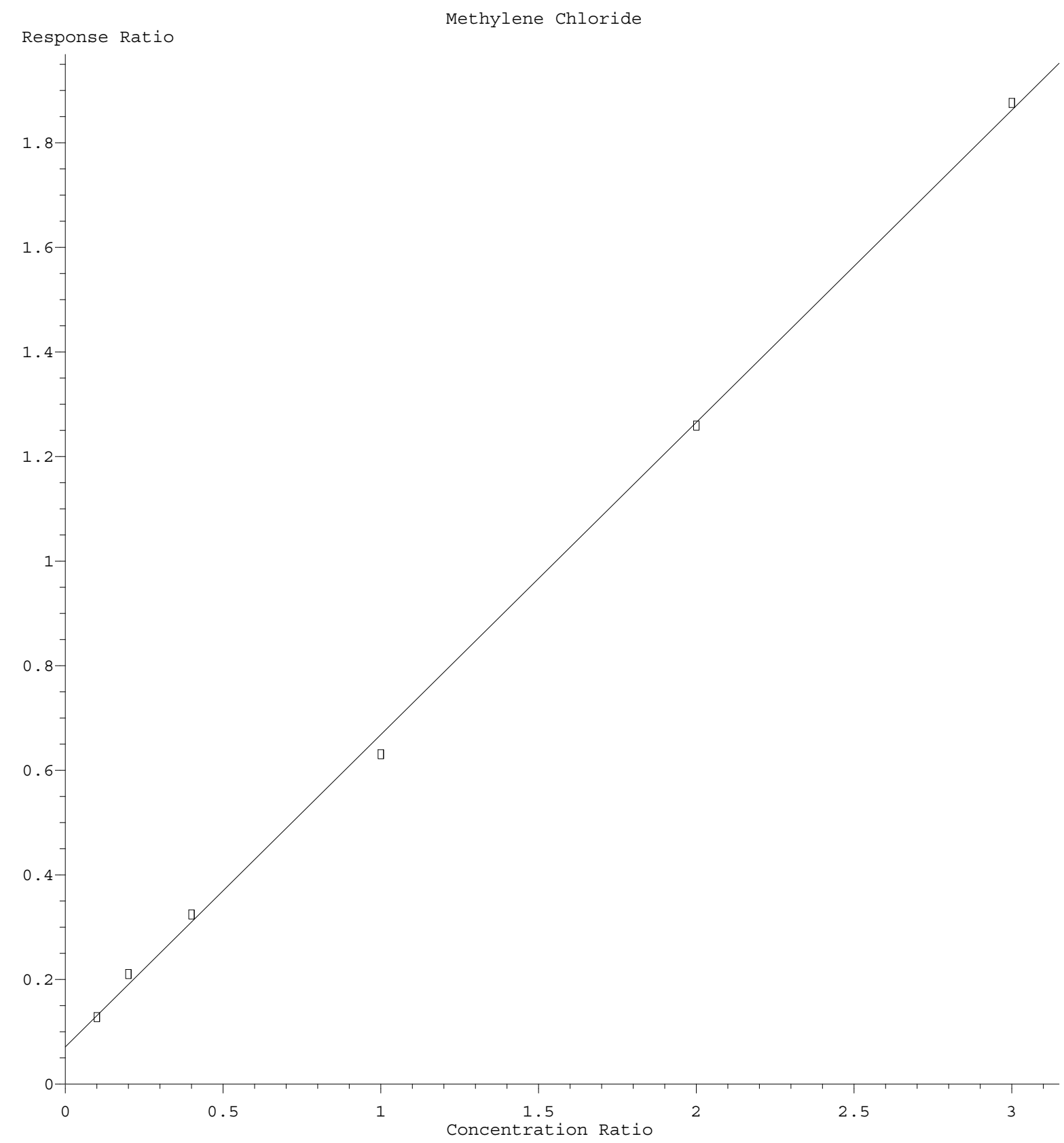
Calibration Files
5 =VW032313.D 10 =VW032314.D 20 =VW032315.D 50 =VW032316.D 100 =VW032317.D 150 =VW032318.D

		Compound	5	10	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.347	0.343	0.345	0.264	0.284	0.299	0.314	11.52
3)	P	Chloromethane	0.532	0.527	0.516	0.418	0.450	0.463	0.484	9.72
4)	C	Vinyl Chloride	0.625	0.636	0.606	0.529	0.533	0.538	0.578	8.63#
5)	T	Bromomethane	0.483	0.472	0.435	0.382	0.391	0.386	0.425	10.61
6)	T	Chloroethane	0.405	0.409	0.394	0.356	0.365	0.361	0.382	6.27
7)	T	Trichlorofluor...	0.426	0.453	0.430	0.418	0.422	0.447	0.433	3.30
8)	T	Diethyl Ether	0.389	0.406	0.387	0.344	0.360	0.365	0.375	6.01
9)	T	1,1,2-Trichlor...	0.609	0.569	0.524	0.465	0.469	0.478	0.519	11.46
10)	T	Methyl Iodide	0.753	0.777	0.790	0.693	0.704	0.726	0.741	5.32
11)	T	Tert butyl alc...	0.057	0.062	0.061	0.049	0.049	0.054	0.055	10.36
12)	CM	1,1-Dichloroet...	0.588	0.608	0.595	0.521	0.534	0.535	0.564	6.68#
13)	T	Acrolein	0.091	0.098	0.102	0.080	0.083	0.084	0.090	9.91
14)	T	Allyl chloride	0.983	0.992	0.958	0.911	0.921	0.947	0.952	3.42
15)	T	Acrylonitrile	0.189	0.202	0.200	0.187	0.192	0.200	0.195	3.32
16)	T	Acetone	0.235	0.230	0.209	0.183	0.174	0.181	0.202	13.10
17)	T	Carbon Disulfide	1.581	1.583	1.581	1.442	1.517	1.521	1.538	3.65
18)	T	Methyl Acetate	0.478	0.597	0.612	0.624	0.567	0.592	0.578	9.12
19)	T	Methyl tert-bu...	1.087	1.161	1.150	1.069	1.094	1.099	1.110	3.33
20)	T	Methylene Chlo...	1.280	1.052	0.811	0.631	0.630	0.625	0.838	32.60
21)	T	trans-1,2-Dich...	0.649	0.640	0.636	0.589	0.613	0.617	0.624	3.56
22)	T	Diisopropyl ether	1.900	2.086	2.085	1.897	1.951	1.958	1.979	4.34
23)	T	Vinyl Acetate	1.247	1.325	1.375	1.256	1.349	1.380	1.322	4.40
24)	P	1,1-Dichloroet...	1.238	1.261	1.244	1.132	1.169	1.172	1.203	4.34
25)	T	2-Butanone	0.271	0.293	0.286	0.262	0.262	0.277	0.275	4.60
26)	T	2,2-Dichloropr...	0.659	0.654	0.635	0.576	0.590	0.577	0.615	6.23
27)	T	cis-1,2-Dichlo...	0.768	0.763	0.766	0.716	0.740	0.744	0.749	2.65
28)	T	Bromochloromet...	0.566	0.588	0.583	0.547	0.553	0.557	0.566	2.93
29)	T	Tetrahydrofuran	0.161	0.176	0.180	0.171	0.171	0.179	0.173	4.21
30)	C	Chloroform	1.257	1.275	1.271	1.146	1.191	1.178	1.220	4.50#
31)	T	Cyclohexane	1.228	1.108	1.042	0.911	0.931	0.939	1.027	12.15
32)	T	1,1,1-Trichlor...	0.906	0.910	0.896	0.816	0.835	0.822	0.864	5.15
33)	S	1,2-Dichloroet...	0.738	0.758	0.765	0.695	0.714	0.706	0.729	3.95
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...	0.331	0.335	0.327	0.306	0.331	0.311	0.324	3.76
36)	T	1,1-Dichloropr...	0.471	0.470	0.455	0.439	0.460	0.446	0.457	2.80
37)	T	Ethyl Acetate	0.302	0.315	0.302	0.290	0.305	0.310	0.304	2.83
38)	T	Carbon Tetrach...	0.446	0.441	0.427	0.403	0.434	0.429	0.430	3.49
39)	T	Methylcyclohexane	0.585	0.542	0.529	0.521	0.568	0.561	0.551	4.46
40)	TM	Benzene	1.518	1.494	1.440	1.345	1.424	1.373	1.432	4.66
41)	T	Methacrylonitrile	0.143	0.158	0.172	0.164	0.171	0.175	0.164	7.29
42)	TM	1,2-Dichloroet...	0.487	0.497	0.472	0.442	0.461	0.453	0.469	4.41
43)	T	Isopropyl Acetate	0.498	0.540	0.539	0.520	0.565	0.575	0.540	5.23
44)	TM	Trichloroethene	0.354	0.348	0.330	0.312	0.339	0.329	0.335	4.52
45)	C	1,2-Dichloropr...	0.370	0.371	0.363	0.341	0.355	0.346	0.358	3.44#
46)	T	Dibromomethane	0.224	0.229	0.222	0.211	0.219	0.215	0.220	2.93
47)	T	Bromodichlorom...	0.507	0.517	0.500	0.480	0.513	0.500	0.503	2.60
48)	T	Methyl methacr...	0.237	0.260	0.257	0.259	0.278	0.284	0.262	6.39
49)	T	1,4-Dioxane	0.003	0.003	0.003	0.003	0.003	0.003	0.003	7.47
50)	S	Toluene-d8	1.182	1.204	1.166	1.193	1.231	1.194	1.195	1.82
51)	T	4-Methyl-2-Pen...	0.289	0.325	0.318	0.312	0.314	0.317	0.313	3.87
52)	CM	Toluene	0.909	0.905	0.897	0.857	0.908	0.876	0.892	2.36#
53)	T	t-1,3-Dichloro...	0.451	0.482	0.469	0.478	0.525	0.523	0.488	6.14
54)	T	cis-1,3-Dichlo...	0.531	0.571	0.550	0.544	0.591	0.584	0.562	4.22
55)	T	1,1,2-Trichlor...	0.304	0.307	0.295	0.280	0.293	0.285	0.294	3.58
56)	T	Ethyl methacry...	0.354	0.401	0.399	0.408	0.451	0.454	0.411	9.03

Method Path : Z:\voasrv\HPCHEM1\MSVOA_W\Method\
Method File : 82W100125S.M

57)	T	1,3-Dichloropr...	0.518	0.545	0.526	0.498	0.519	0.507	0.519	3.10
58)	T	2-Chloroethyl ...	0.177	0.199	0.204	0.241	0.243	0.249	0.219	13.48
59)	T	2-Hexanone	0.202	0.225	0.226	0.219	0.223	0.228	0.220	4.37
60)	T	Dibromochlorom...	0.317	0.327	0.334	0.326	0.355	0.343	0.334	4.05
61)	T	1,2-Dibromoethane	0.286	0.295	0.288	0.278	0.285	0.287	0.287	2.00
62)	S	4-Bromofluorob...	0.472	0.449	0.436	0.448	0.459	0.446	0.452	2.77
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.327	0.325	0.299	0.278	0.287	0.279	0.299	7.28
65)	PM	Chlorobenzene	1.159	1.140	1.109	1.028	1.094	1.070	1.100	4.33
66)	T	1,1,1,2-Tetrac...	0.339	0.351	0.347	0.317	0.351	0.351	0.343	3.98
67)	C	Ethyl Benzene	1.822	1.861	1.843	1.734	1.897	1.845	1.834	2.98#
68)	T	m/p-Xylenes	0.704	0.720	0.715	0.668	0.730	0.705	0.707	3.05
69)	T	o-Xylene	0.632	0.665	0.653	0.637	0.701	0.678	0.661	3.92
70)	T	Styrene	1.090	1.143	1.199	1.124	1.186	1.186	1.155	3.73
71)	P	Bromoform	0.179	0.207	0.192	0.189	0.202	0.209	0.196	5.98
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.316	3.159	3.364	3.327	3.645	3.714	3.421	6.24
74)	T	N-amyl acetate	0.964	1.027	1.080	1.063	1.169	1.245	1.091	9.24
75)	P	1,1,2,2-Tetrac...	0.867	0.867	0.851	0.808	0.833	0.869	0.849	2.88
76)	T	1,2,3-Trichlor...	0.747	0.656	0.640	0.605	0.638	0.662	0.658	7.32
77)	T	Bromobenzene	0.824	0.787	0.807	0.817	0.858	0.853	0.825	3.30
78)	T	n-propylbenzene	4.287	4.025	4.285	4.100	4.439	4.502	4.273	4.34
79)	T	2-Chlorotoluene	2.604	2.575	2.604	2.520	2.625	2.748	2.613	2.90
80)	T	1,3,5-Trimethy...	2.940	2.807	2.855	2.912	3.114	3.120	2.958	4.44
81)	T	trans-1,4-Dich...	0.211	0.235	0.244	0.268	0.293	0.307	0.260	14.03
82)	T	4-Chlorotoluene	2.847	2.743	2.778	2.650	2.810	2.839	2.778	2.65
83)	T	tert-Butylbenzene	2.385	2.347	2.389	2.357	2.551	2.534	2.427	3.74
84)	T	1,2,4-Trimethy...	2.973	2.881	3.046	2.965	3.126	3.055	3.008	2.85
85)	T	sec-Butylbenzene	3.808	3.536	3.562	3.568	3.798	3.981	3.709	4.87
86)	T	p-Isopropyltol...	3.133	2.873	3.086	3.000	3.160	3.213	3.077	4.01
87)	T	1,3-Dichlorobe...	1.765	1.650	1.625	1.600	1.658	1.722	1.670	3.71
88)	T	1,4-Dichlorobe...	1.839	1.673	1.700	1.548	1.661	1.597	1.670	5.97
89)	T	n-Butylbenzene	3.008	2.818	2.942	2.891	3.116	3.253	3.005	5.29
90)	T	Hexachloroethane	0.571	0.535	0.518	0.521	0.575	0.589	0.552	5.52
91)	T	1,2-Dichlorobe...	1.541	1.549	1.557	1.402	1.467	1.540	1.509	4.11
92)	T	1,2-Dibromo-3-...	0.146	0.144	0.150	0.146	0.147	0.160	0.149	3.78
93)	T	1,2,4-Trichlor...	0.956	0.842	0.865	0.833	0.938	0.997	0.905	7.47
94)	T	Hexachlorobuta...	0.478	0.426	0.379	0.362	0.413	0.425	0.414	9.83
95)	T	Naphthalene	1.948	1.919	2.162	2.195	2.280	2.538	2.174	10.51
96)	T	1,2,3-Trichlor...	0.893	0.818	0.839	0.810	0.864	0.895	0.853	4.34

(#) = Out of Range



Response = 5.970e-001 * Amt + 7.148e-002
Coef of Det (r^2) = 0.999066 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA W\Method\82W100125S.M
Calibration Table Last Updated: Thu Oct 02 21:24:16 2025

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032313.D
Acq On : 01 Oct 2025 13:12
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.965	168	284753	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	526707	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	478552	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	234250	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	21010	5.059	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	10.120%#		
35) Dibromofluoromethane	7.898	113	17458	5.118	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	10.240%#		
50) Toluene-d8	10.325	98	62281	4.947	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	9.900%#		
62) 4-Bromofluorobenzene	12.617	95	24882	5.229	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	10.460%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	9893	5.537	ug/l	96
3) Chloromethane	2.253	50	15140	5.491	ug/l	96
4) Vinyl Chloride	2.399	62	17809	5.410	ug/l	98
5) Bromomethane	2.832	94	13745	5.682	ug/l	87
6) Chloroethane	2.966	64	11537	5.309	ug/l	97
7) Trichlorofluoromethane	3.302	101	12133	4.923	ug/l	100
8) Diethyl Ether	3.722	74	11070	5.183	ug/l	87
9) 1,1,2-Trichlorotrifluo...	4.112	101	17336	5.865	ug/l #	87
10) Methyl Iodide	4.320	142	21442	5.084	ug/l	98
11) Tert butyl alcohol	5.210	59	8165	25.972	ug/l	97
12) 1,1-Dichloroethene	4.082	96	16745	5.218	ug/l	90
13) Acrolein	3.936	56	12931	25.344	ug/l	97
14) Allyl chloride	4.704	41	27986	5.163	ug/l	90
15) Acrylonitrile	5.411	53	26916	24.226	ug/l	98
16) Acetone	4.167	43	33407	29.049	ug/l	100
17) Carbon Disulfide	4.423	76	45031	5.143	ug/l	100
18) Methyl Acetate	4.710	43	13618	4.134	ug/l	100
19) Methyl tert-butyl Ether	5.466	73	30951	4.897	ug/l	95
20) Methylene Chloride	4.954	84	36441	4.732	ug/l	94
21) trans-1,2-Dichloroethene	5.460	96	18485	5.203	ug/l	98
22) Diisopropyl ether	6.338	45	54095	4.799	ug/l #	87
23) Vinyl Acetate	6.289	43	177543	23.579	ug/l	100
24) 1,1-Dichloroethane	6.252	63	35264	5.149	ug/l	96
25) 2-Butanone	7.203	43	38549	24.612	ug/l	95
26) 2,2-Dichloropropane	7.191	77	18751	5.352	ug/l	97
27) cis-1,2-Dichloroethene	7.197	96	21855	5.120	ug/l	93
28) Bromochloromethane	7.533	49	16126	5.005	ug/l	87
29) Tetrahydrofuran	7.557	42	22855	23.204	ug/l	92
30) Chloroform	7.691	83	35798	5.154	ug/l	93
31) Cyclohexane	7.971	56	34981	5.983	ug/l #	87
32) 1,1,1-Trichloroethane	7.886	97	25812	5.244	ug/l	98
36) 1,1-Dichloropropene	8.093	75	24817	5.155	ug/l	98
37) Ethyl Acetate	7.276	43	15932	4.972	ug/l	96
38) Carbon Tetrachloride	8.087	117	23500	5.188	ug/l	99
39) Methylcyclohexane	9.343	83	30816	5.307	ug/l	95
40) Benzene	8.337	78	79933	5.297	ug/l	94

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032313.D
Acq On : 01 Oct 2025 13:12
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	7536	4.364	ug/l		99
42) 1,2-Dichloroethane	8.417	62	25632	5.192	ug/l		97
43) Isopropyl Acetate	8.441	43	26247	4.618	ug/l		97
44) Trichloroethene	9.099	130	18643	5.277	ug/l		98
45) 1,2-Dichloropropane	9.380	63	19476	5.171	ug/l		97
46) Dibromomethane	9.471	93	11793	5.092	ug/l		96
47) Bromodichloromethane	9.654	83	26693	5.039	ug/l		92
48) Methyl methacrylate	9.441	41	12470	4.512	ug/l	#	90
49) 1,4-Dioxane	9.465	88	2732	86.306	ug/l	#	86
51) 4-Methyl-2-Pentanone	10.215	43	76240	23.157	ug/l		97
52) Toluene	10.392	92	47870	5.094	ug/l		100
53) t-1,3-Dichloropropene	10.611	75	23740	4.619	ug/l		95
54) cis-1,3-Dichloropropene	10.075	75	27985	4.727	ug/l		96
55) 1,1,2-Trichloroethane	10.788	97	16014	5.174	ug/l		93
56) Ethyl methacrylate	10.648	69	18666	4.308	ug/l		97
57) 1,3-Dichloropropane	10.934	76	27288	4.991	ug/l		98
58) 2-Chloroethyl Vinyl ether	9.928	63	46589	20.206	ug/l		95
59) 2-Hexanone	10.971	43	53126	22.879	ug/l		96
60) Dibromochloromethane	11.129	129	16674	4.744	ug/l		95
61) 1,2-Dibromoethane	11.239	107	15062	4.990	ug/l		99
64) Tetrachloroethene	10.867	164	15638	5.461	ug/l		93
65) Chlorobenzene	11.660	112	55479	5.269	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.733	131	16206	4.942	ug/l		98
67) Ethyl Benzene	11.733	91	87214	4.969	ug/l		99
68) m/p-Xylenes	11.837	106	67346	9.951	ug/l		100
69) o-Xylene	12.166	106	30267	4.782	ug/l		98
70) Styrene	12.178	104	52147	4.719	ug/l		98
71) Bromoform	12.349	173	8566	4.557	ug/l	#	99
73) Isopropylbenzene	12.465	105	77676	4.847	ug/l		100
74) N-amyl acetate	12.270	43	22577	4.416	ug/l		97
75) 1,1,2,2-Tetrachloroethane	12.715	83	20303	5.102	ug/l		98
76) 1,2,3-Trichloropropane	12.763	75	17510m	5.665	ug/l		
77) Bromobenzene	12.745	156	19313	4.999	ug/l		85
78) n-propylbenzene	12.800	91	100413	5.016	ug/l		96
79) 2-Chlorotoluene	12.891	91	61002	4.984	ug/l		97
80) 1,3,5-Trimethylbenzene	12.940	105	68864	4.969	ug/l		95
81) trans-1,4-Dichloro-2-b...	12.507	75	4939	4.059	ug/l		87
82) 4-Chlorotoluene	12.989	91	66681	5.124	ug/l		99
83) tert-Butylbenzene	13.202	119	55879	4.914	ug/l		96
84) 1,2,4-Trimethylbenzene	13.245	105	69654	4.943	ug/l		100
85) sec-Butylbenzene	13.379	105	89212	5.134	ug/l		96
86) p-Isopropyltoluene	13.495	119	73385	5.090	ug/l		99
87) 1,3-Dichlorobenzene	13.495	146	41335	5.284	ug/l		94
88) 1,4-Dichlorobenzene	13.574	146	43076	5.507	ug/l		95
89) n-Butylbenzene	13.818	91	70466	5.006	ug/l		98
90) Hexachloroethane	14.086	117	13382	5.178	ug/l		96
91) 1,2-Dichlorobenzene	13.861	146	36095	5.104	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.483	75	3424	4.914	ug/l		84
93) 1,2,4-Trichlorobenzene	15.129	180	22385	5.279	ug/l		99
94) Hexachlorobutadiene	15.232	225	11196	5.775	ug/l		96
95) Naphthalene	15.360	128	45626	4.481	ug/l		98
96) 1,2,3-Trichlorobenzene	15.543	180	20926	5.236	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032313.D
Acq On : 01 Oct 2025 13:12
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032313.D
Acq On : 01 Oct 2025 13:12
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 02 21:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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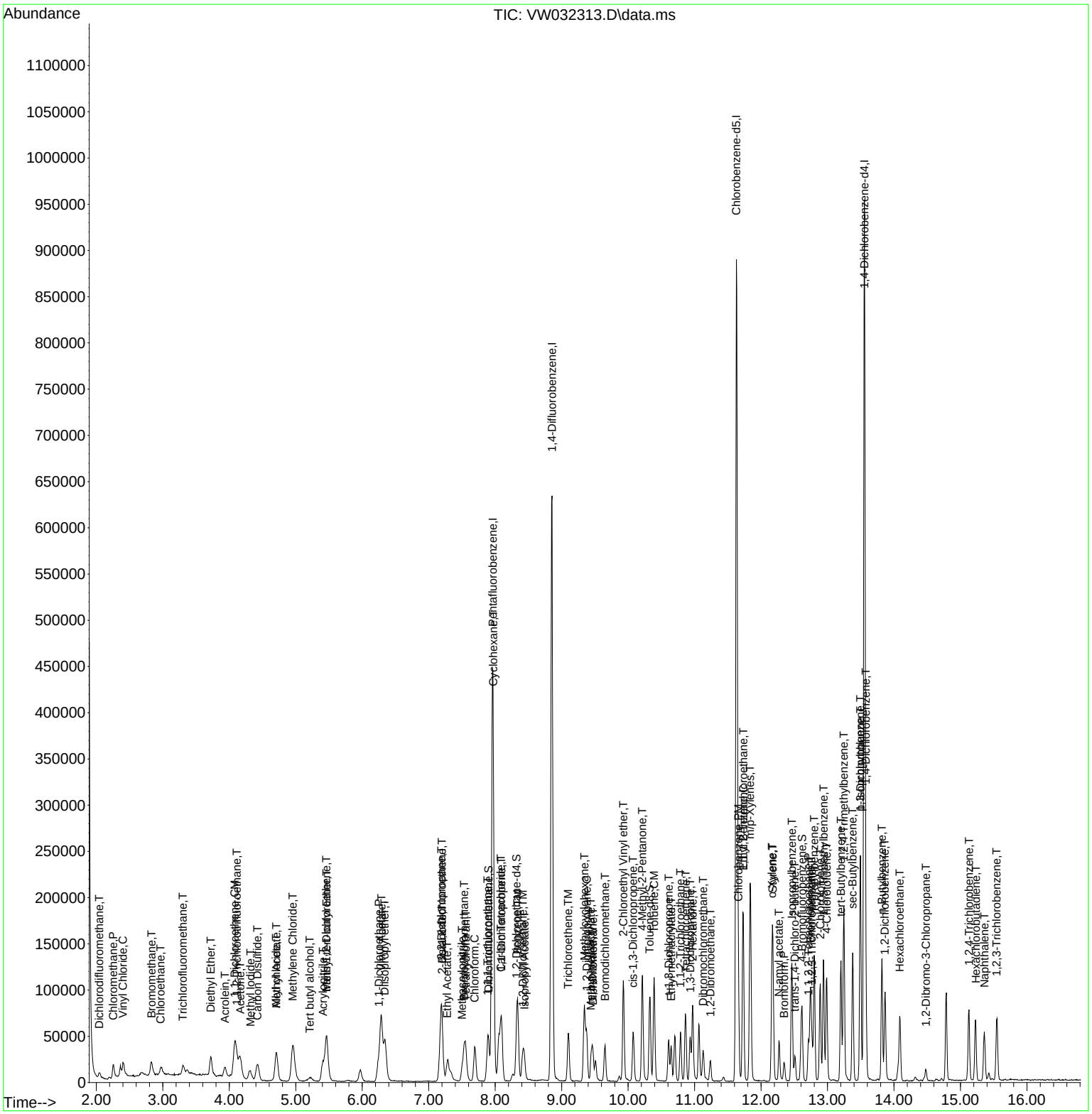
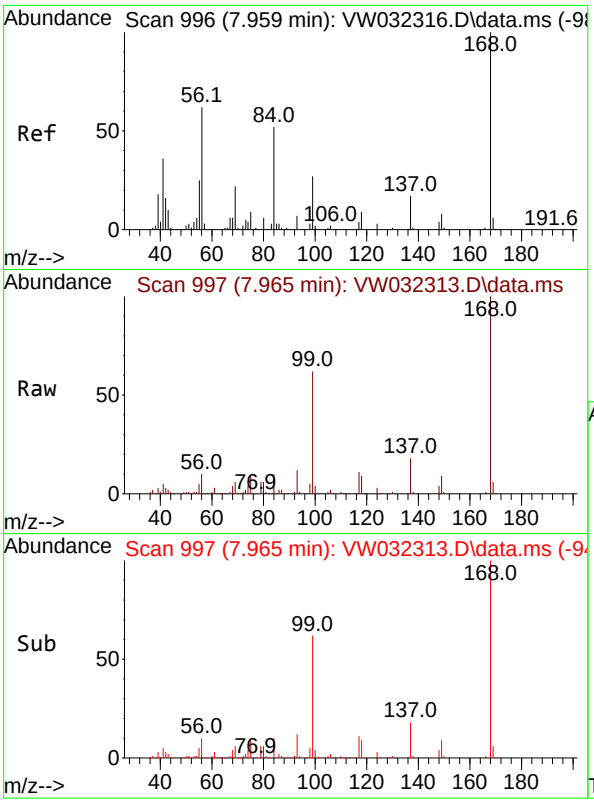
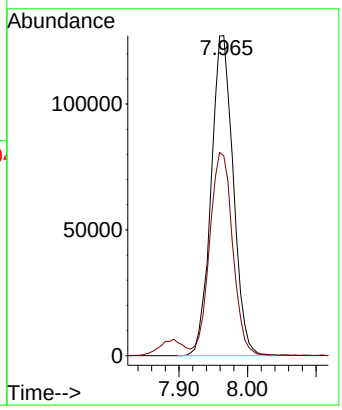




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.965 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:168 Resp: 28475

Ion	Ratio	Lower	Upper
168	100		
99	62.3	49.3	73.9



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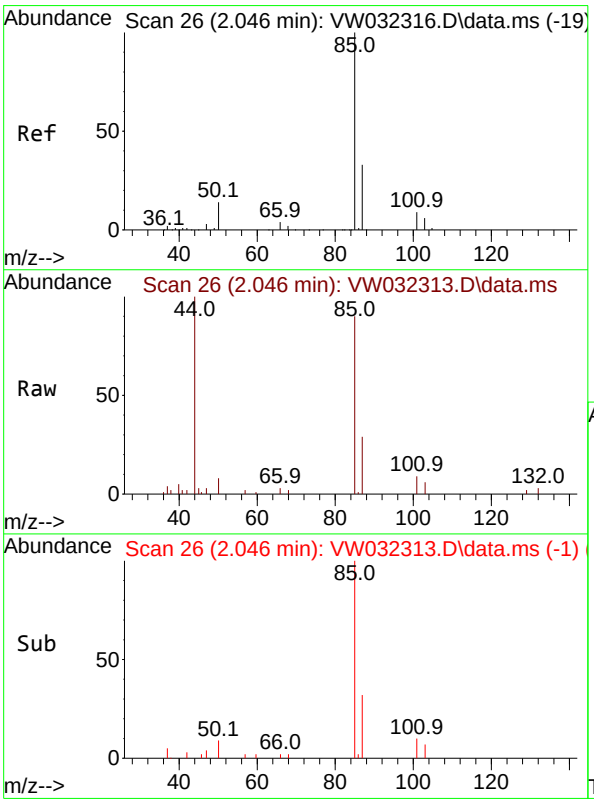
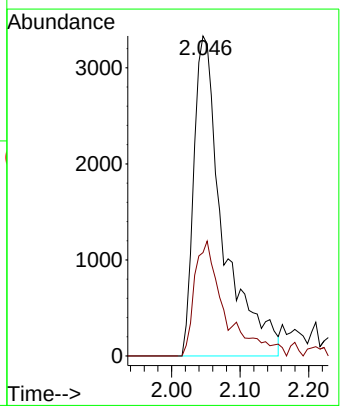
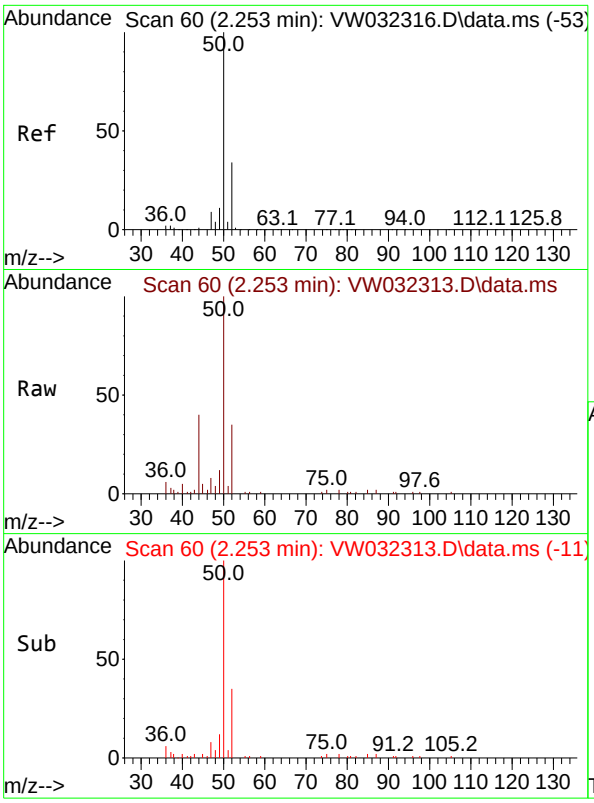


#2
Dichlorodifluoromethane
Concen: 5.537 ug/l
RT: 2.046 min Scan# 26
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 85 Resp: 9893

Ion	Ratio	Lower	Upper
85	100		
87	32.3	17.2	51.6

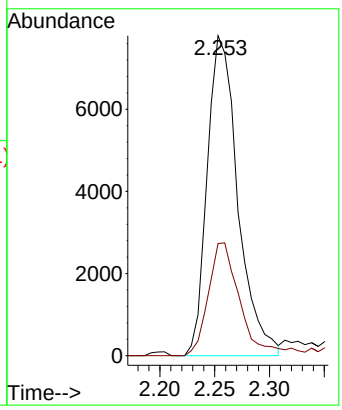




#3
Chloromethane
Concen: 5.491 ug/l
RT: 2.253 min Scan# 6
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 50 Resp: 1514

Ion	Ratio	Lower	Upper
50	100		
52	35.1	26.1	39.1



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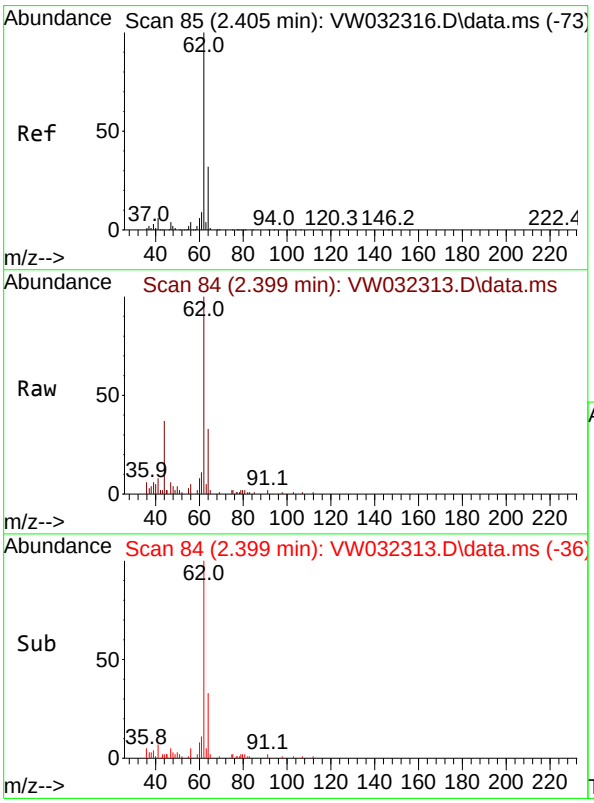
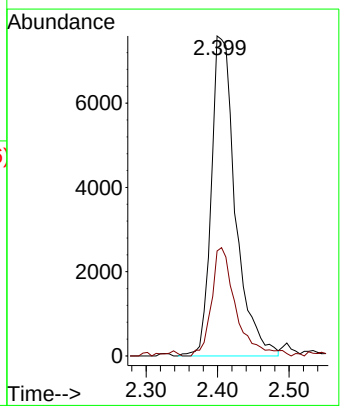
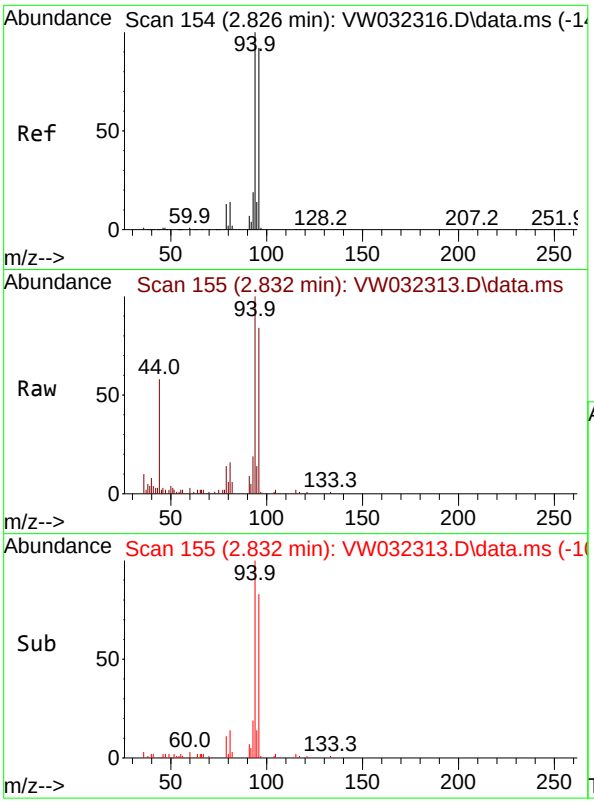


#4
Vinyl Chloride
Concen: 5.410 ug/l
RT: 2.399 min Scan# 84
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 62 Resp: 17809

Ion	Ratio	Lower	Upper
62	100		
64	32.0	24.8	37.2





#5
Bromomethane
Concen: 5.682 ug/l
RT: 2.832 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 94 Resp: 1374

Ion	Ratio	Lower	Upper
94	100		
96	82.8	76.6	115.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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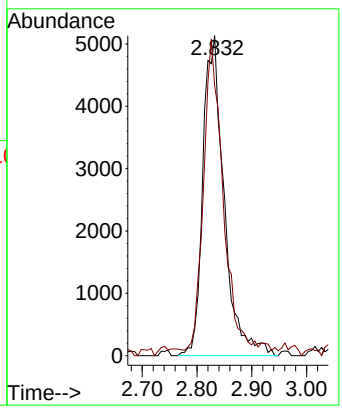
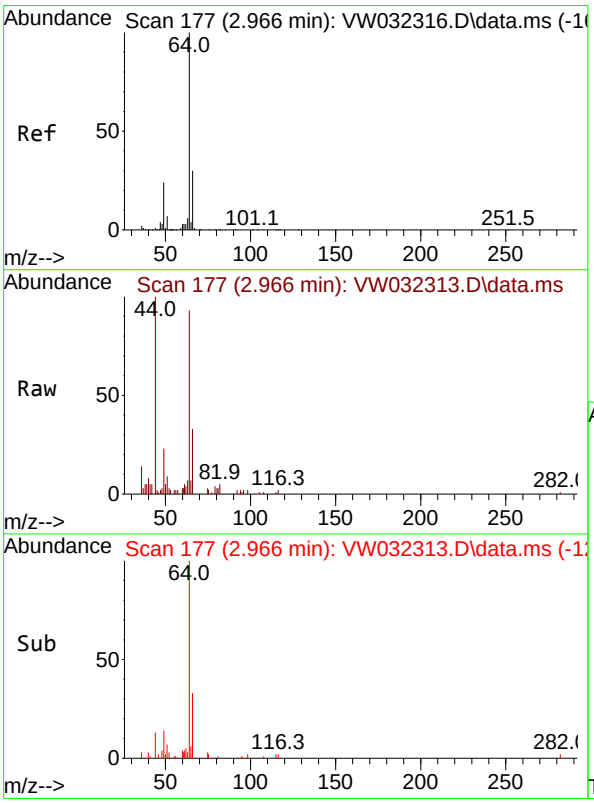
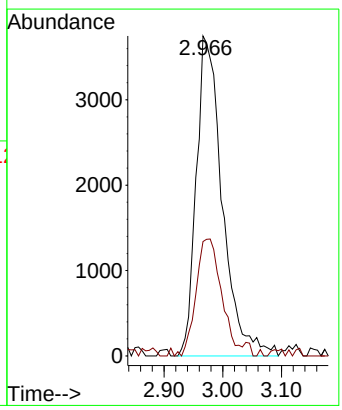


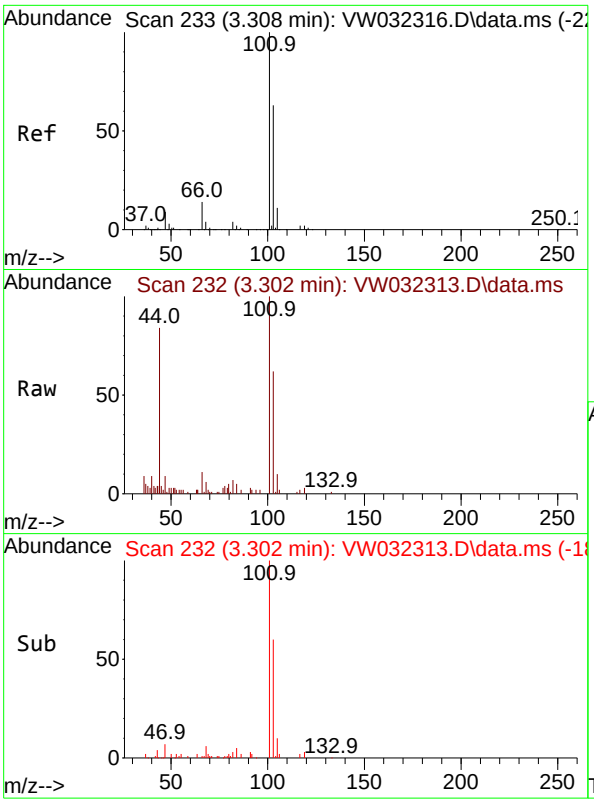


#6
Chloroethane
Concen: 5.309 ug/l
RT: 2.966 min Scan# 177
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 64 Resp: 11537

Ion	Ratio	Lower	Upper
64	100		
66	34.4	26.2	39.4

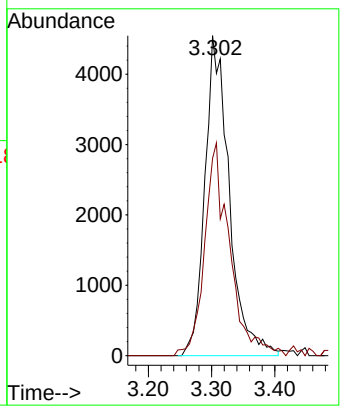




#7
Trichlorofluoromethane
Concen: 4.923 ug/l
RT: 3.302 min Scan# 2
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:101 Resp: 1213

Ion	Ratio	Lower	Upper
101	100		
103	59.9	47.8	71.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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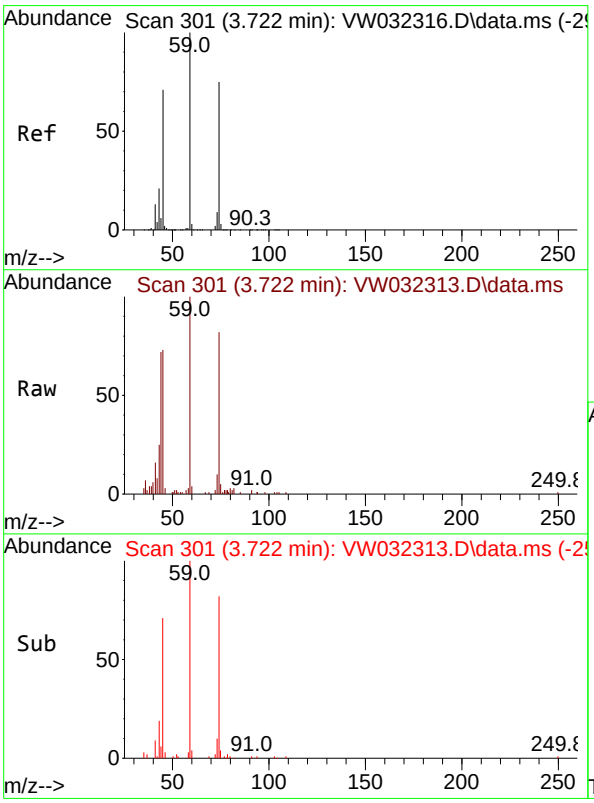
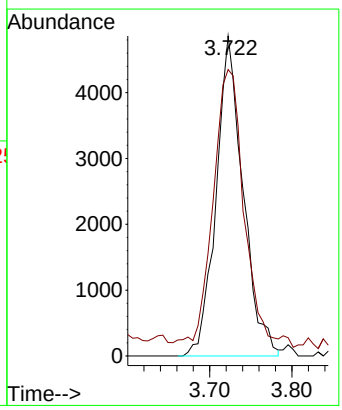
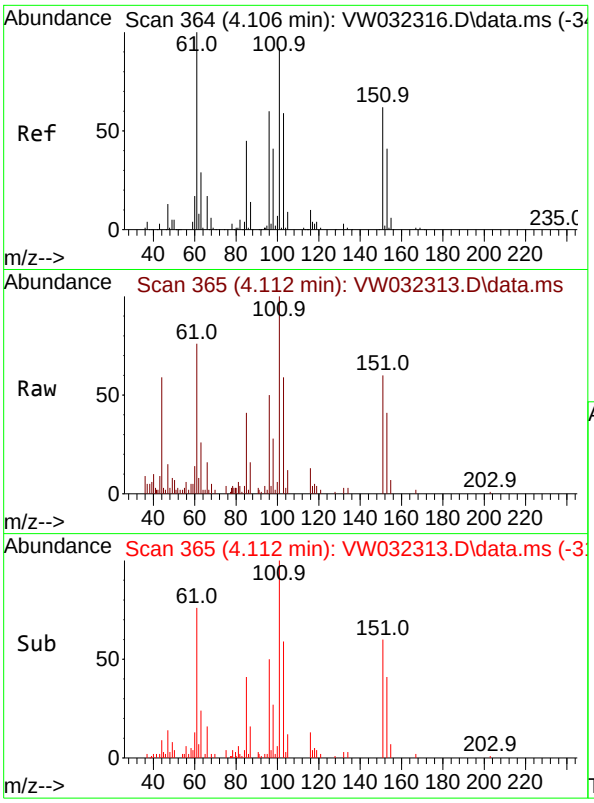


#8
Diethyl Ether
Concen: 5.183 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 74 Resp: 11070

Ion	Ratio	Lower	Upper
74	100		
45	98.2	43.1	129.4

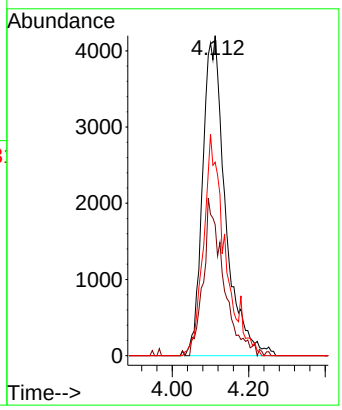




#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.865 ug/l
RT: 4.112 min Scan# 3
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:101 Resp: 1733

Ion	Ratio	Lower	Upper
101	100		
85	44.1	37.1	55.7
151	60.6	61.5	92.3



Instrument :
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ClientSampleId :
VSTDICC005

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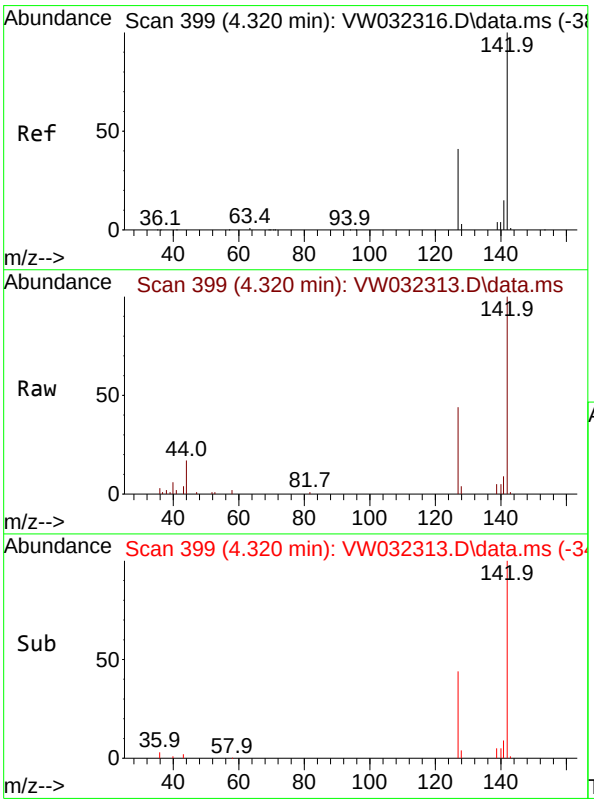
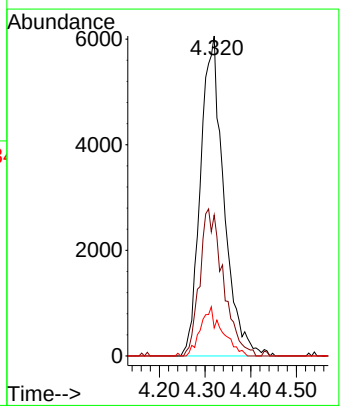
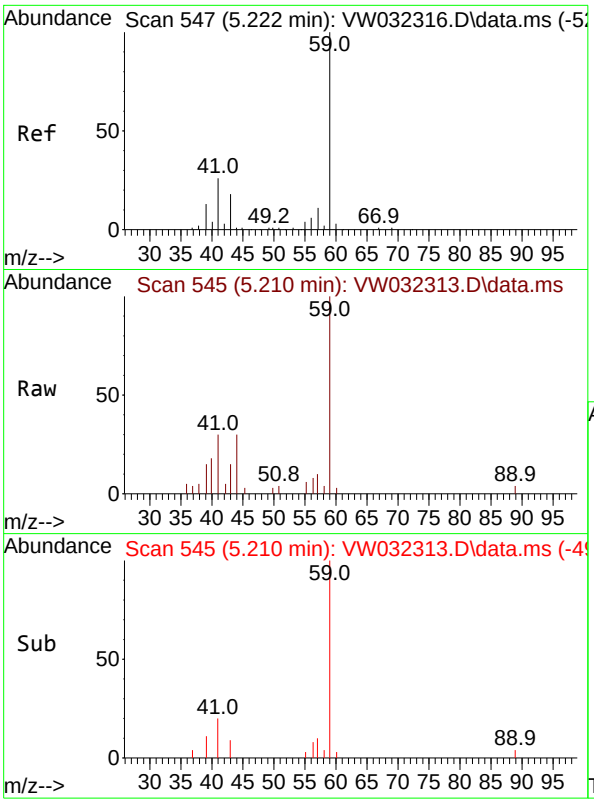


#10
Methyl Iodide
Concen: 5.084 ug/l
RT: 4.320 min Scan# 399
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:142 Resp: 21442

Ion	Ratio	Lower	Upper
142	100		
127	46.5	38.2	57.2
141	14.2	12.2	18.2

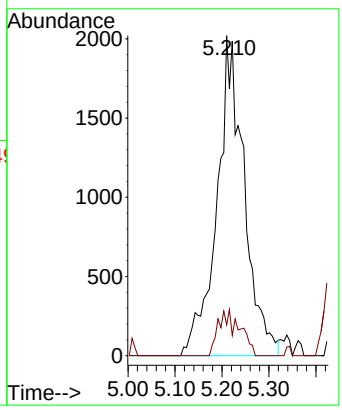




#11
Tert butyl alcohol
Concen: 25.972 ug/l
RT: 5.210 min Scan# 54
Delta R.T. -0.012 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 59 Resp: 816

Ion	Ratio	Lower	Upper
59	100		
57	11.2	9.8	14.6



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ClientSampleId :
VSTDICC005

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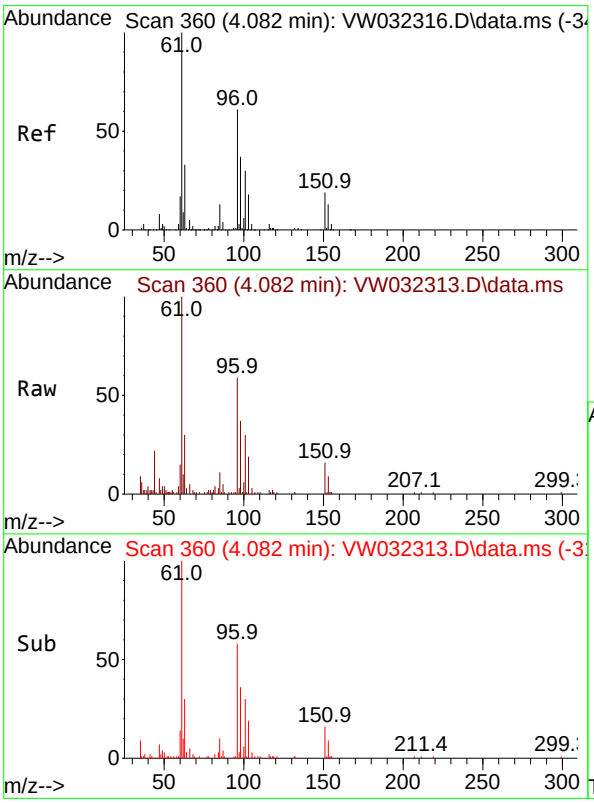
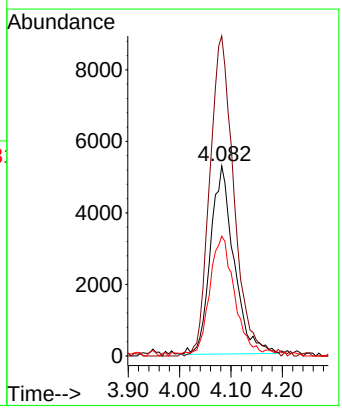
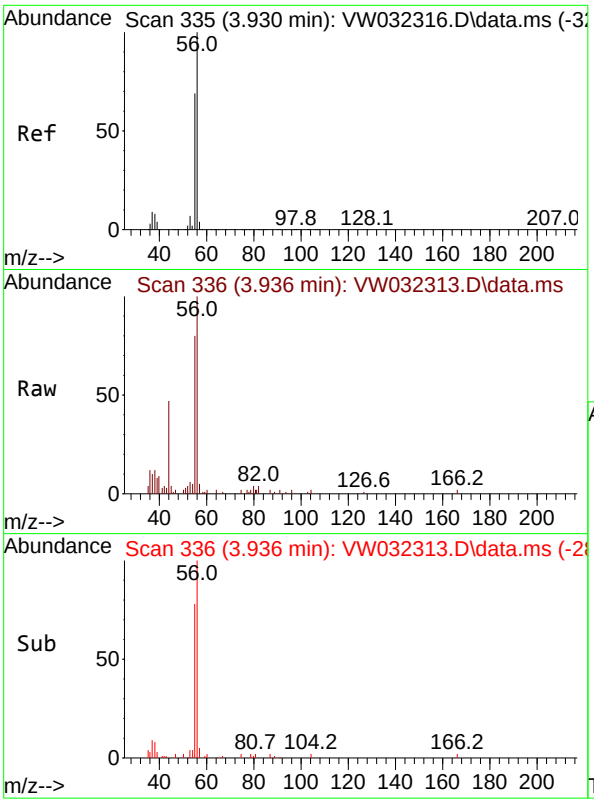


#12
1,1-Dichloroethene
Concen: 5.218 ug/l
RT: 4.082 min Scan# 360
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 96 Resp: 16745

Ion	Ratio	Lower	Upper
96	100		
61	170.5	123.0	184.4
98	62.3	48.5	72.7

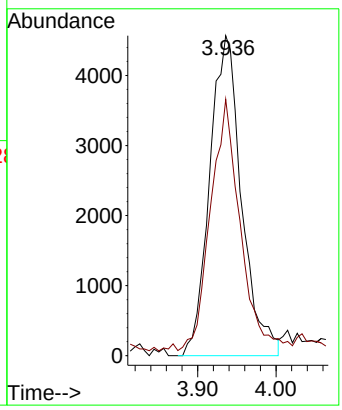




#13
Acrolein
Concen: 25.344 ug/l
RT: 3.936 min Scan# 3
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 56 Resp: 1293

Ion	Ratio	Lower	Upper
56	100		
55	73.0	56.4	84.6



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VSTDICC005

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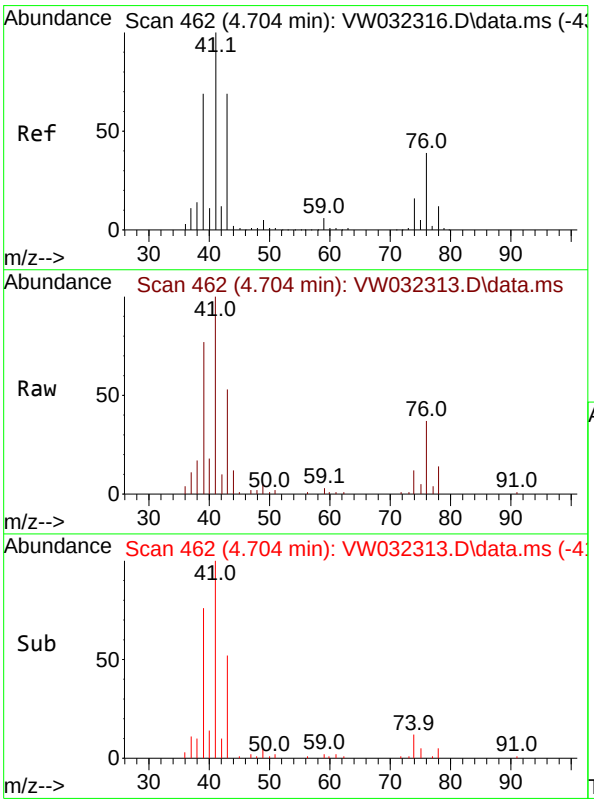
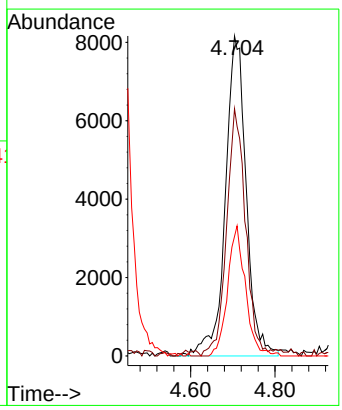
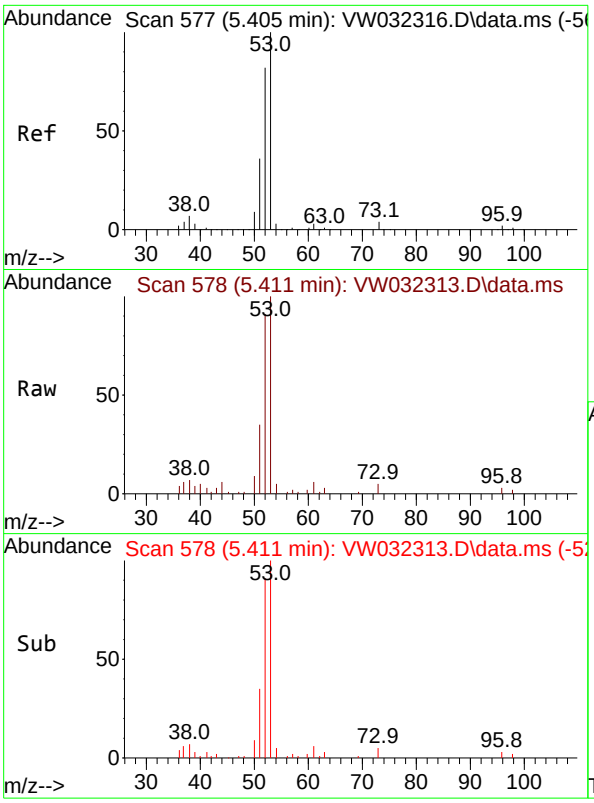


#14
Allyl chloride
Concen: 5.163 ug/l
RT: 4.704 min Scan# 462
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 41 Resp: 27986

Ion	Ratio	Lower	Upper
41	100		
39	70.3	64.1	96.1
76	34.7	31.4	47.2

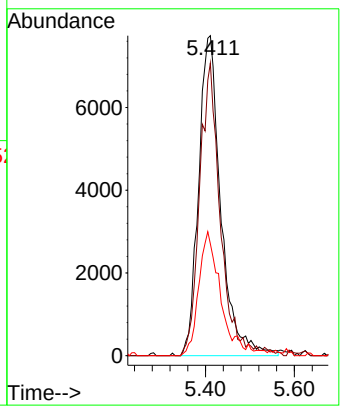




#15
Acrylonitrile
Concen: 24.226 ug/l
RT: 5.411 min Scan# 5
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 53 Resp: 2691

Ion	Ratio	Lower	Upper
53	100		
52	84.6	67.4	101.2
51	35.2	30.3	45.5



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VSTDICC005

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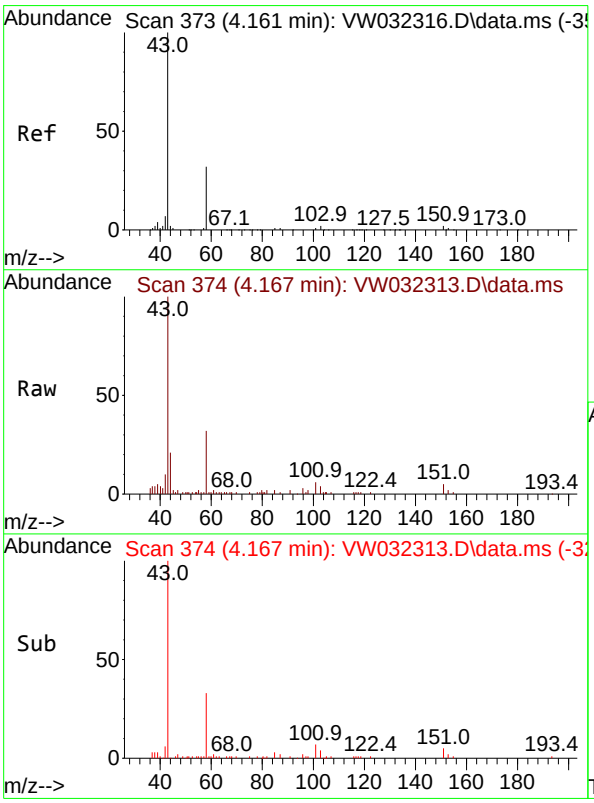
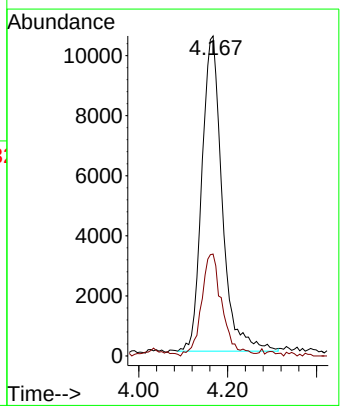
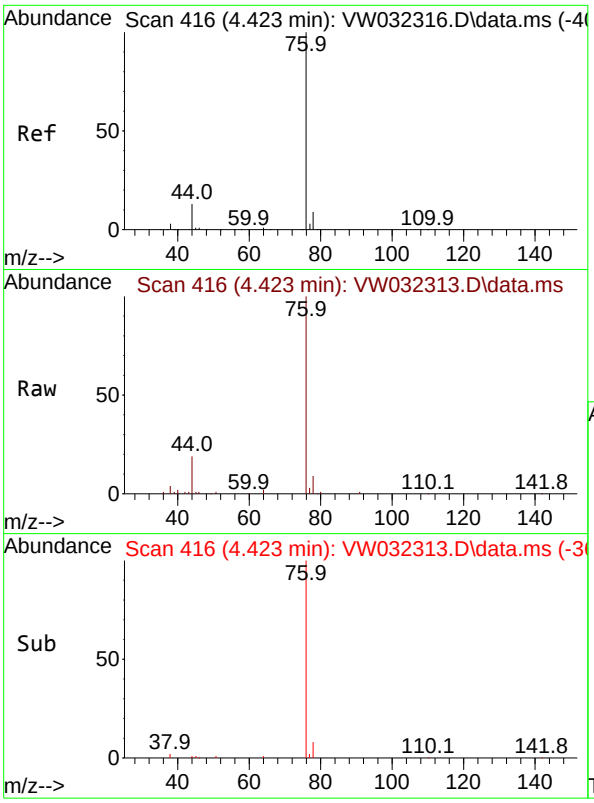


#16
Acetone
Concen: 29.049 ug/l
RT: 4.167 min Scan# 374
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 33407

Ion	Ratio	Lower	Upper
43	100		
58	31.8	25.3	37.9





#17
Carbon Disulfide
Concen: 5.143 ug/l
RT: 4.423 min Scan# 4
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 76 Resp: 4503

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.0	10.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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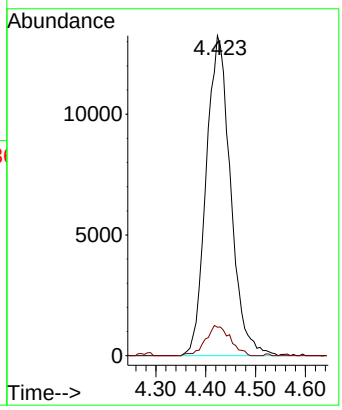
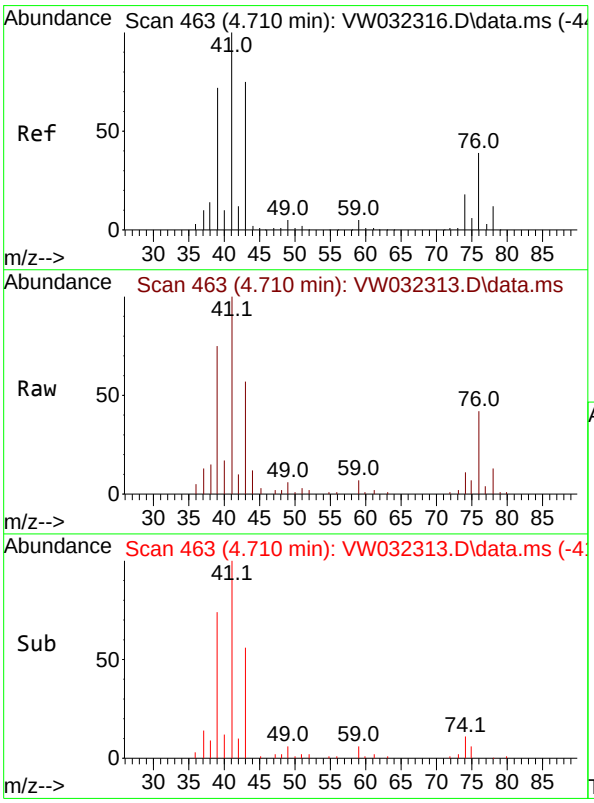
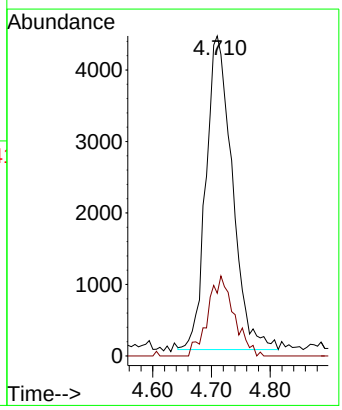


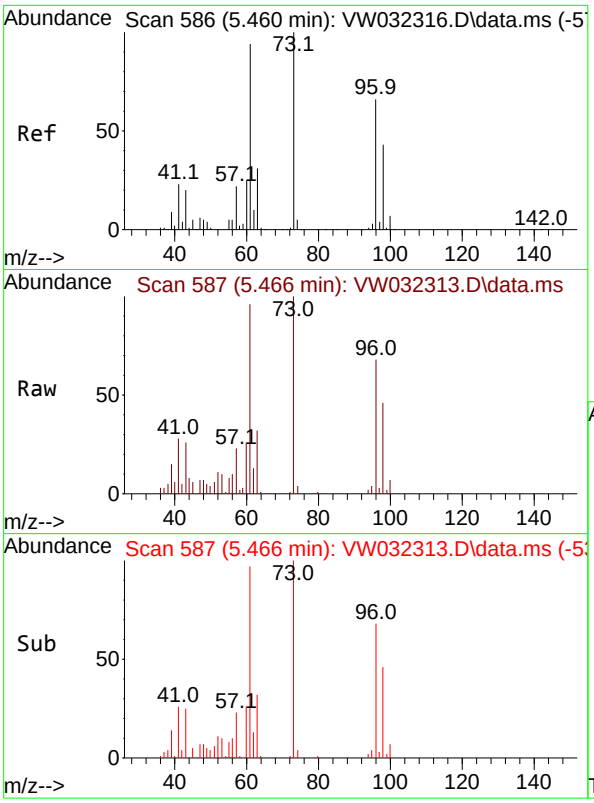


#18
Methyl Acetate
Concen: 4.134 ug/l
RT: 4.710 min Scan# 463
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 13618

Ion	Ratio	Lower	Upper
43	100		
74	25.4	20.2	30.4

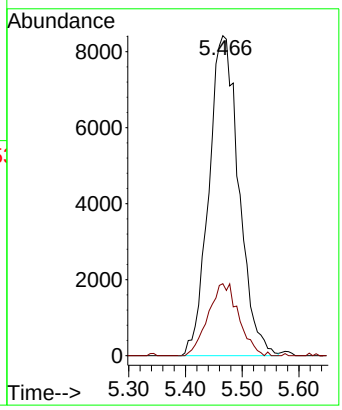




#19
Methyl tert-butyl Ether
Concen: 4.897 ug/l
RT: 5.466 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 73 Resp: 3095

Ion	Ratio	Lower	Upper
73	100		
57	22.5	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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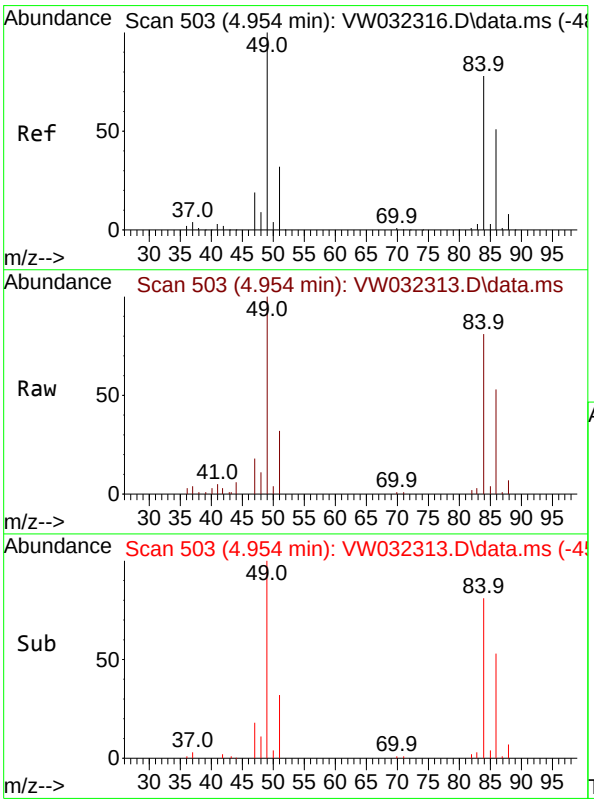
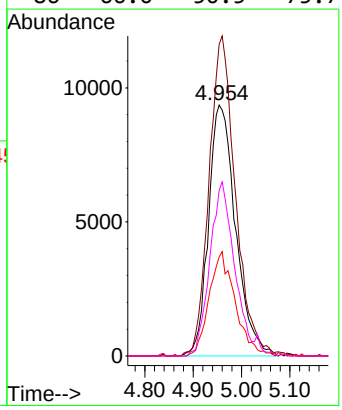
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

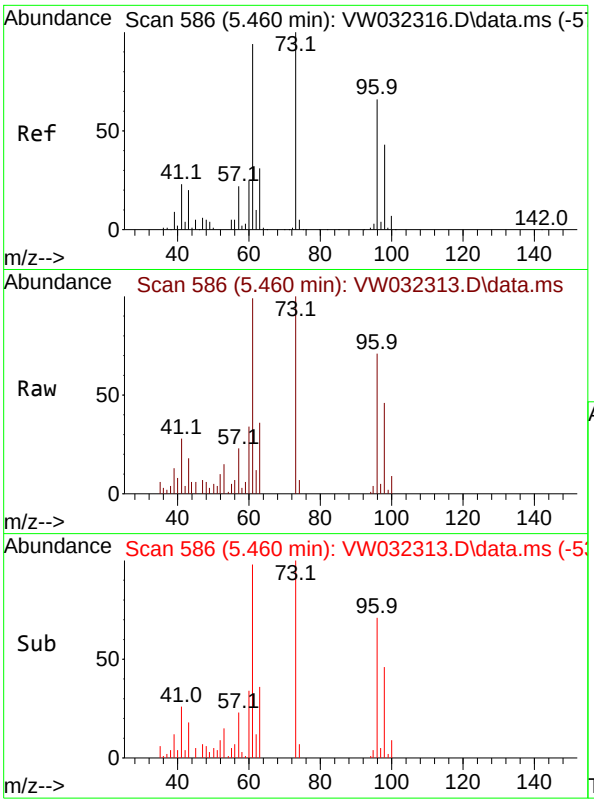


#20
Methylene Chloride
Concen: 4.732 ug/l
RT: 4.954 min Scan# 503
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 84 Resp: 36441

Ion	Ratio	Lower	Upper
84	100		
49	124.2	92.2	138.4
51	39.5	31.0	46.6
86	66.0	50.5	75.7

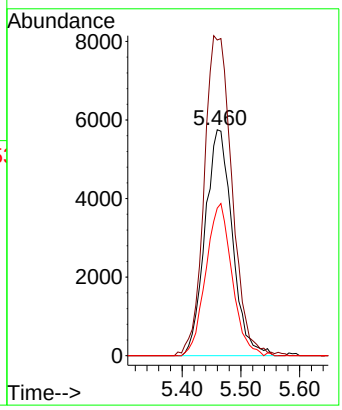




#21
trans-1,2-Dichloroethene
Concen: 5.203 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 96 Resp: 1848

Ion	Ratio	Lower	Upper
96	100		
61	138.3	112.5	168.7
98	65.3	54.2	81.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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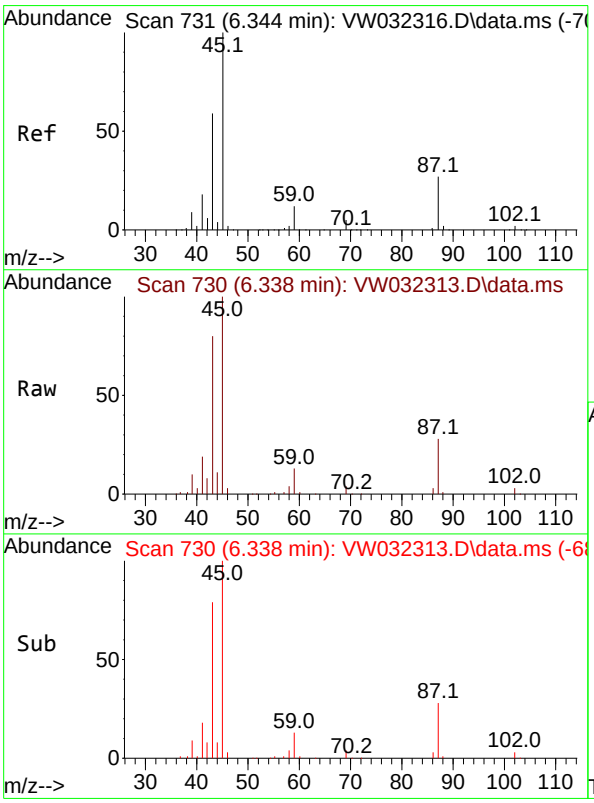
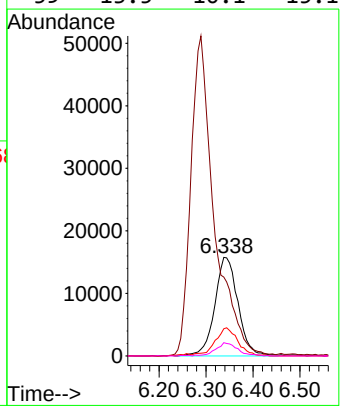
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

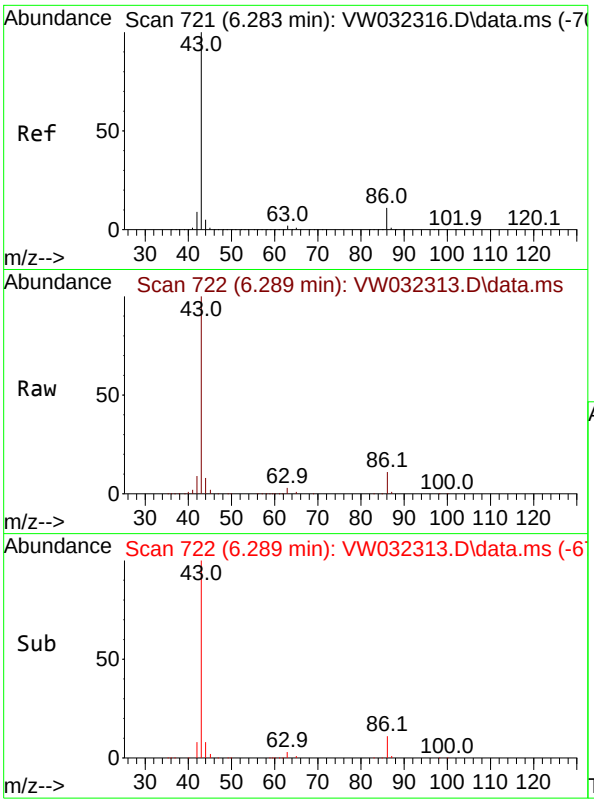


#22
Diisopropyl ether
Concen: 4.799 ug/l
RT: 6.338 min Scan# 730
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 45 Resp: 54095

Ion	Ratio	Lower	Upper
45	100		
43	78.3	51.4	77.2#
87	27.7	25.9	38.9
59	13.5	10.1	15.1





#23
Vinyl Acetate
Concen: 23.579 ug/l
RT: 6.289 min Scan# 7
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 17754

Ion	Ratio	Lower	Upper
43	100		
86	10.9	8.8	13.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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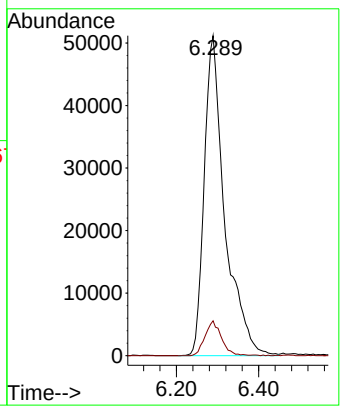
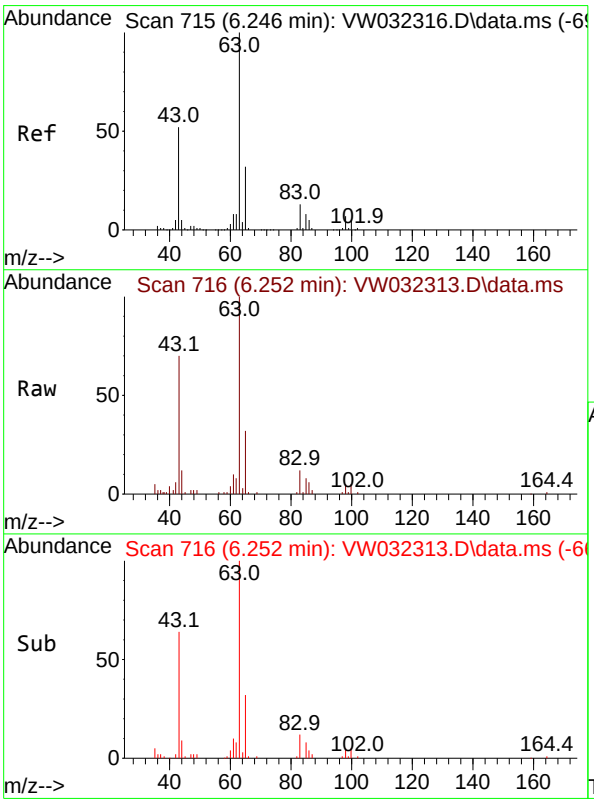
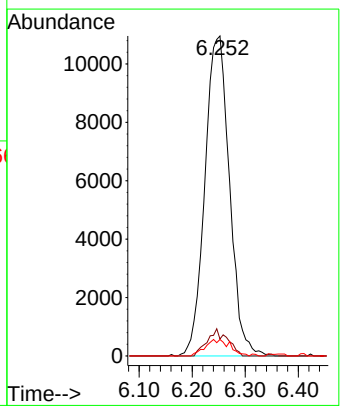


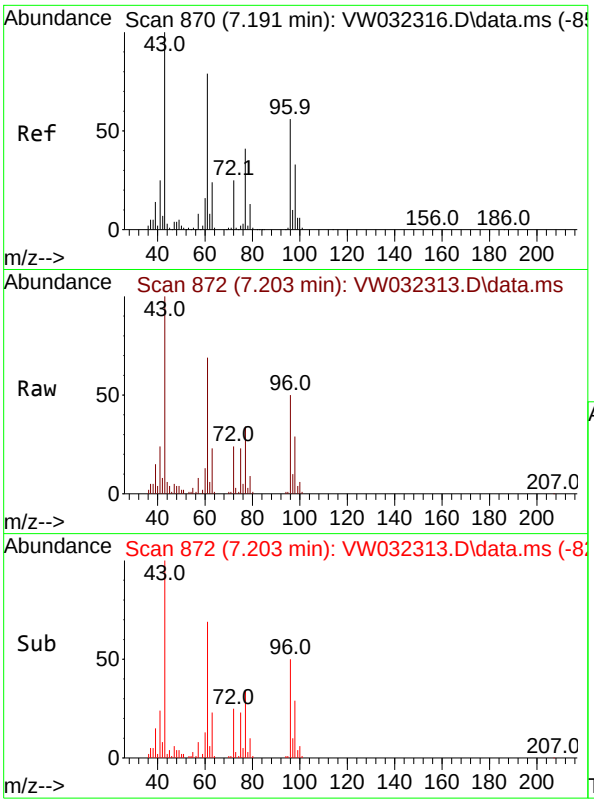


#24
1,1-Dichloroethane
Concen: 5.149 ug/l
RT: 6.252 min Scan# 716
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 63 Resp: 35264

Ion	Ratio	Lower	Upper
63	100		
98	5.3	3.8	11.2
100	5.1	2.5	7.5





#25
2-Butanone
Concen: 24.612 ug/l
RT: 7.203 min Scan# 8
Delta R.T. 0.012 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 3854

Ion	Ratio	Lower	Upper
43	100		
72	24.5	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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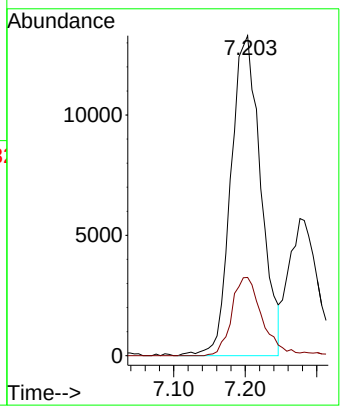
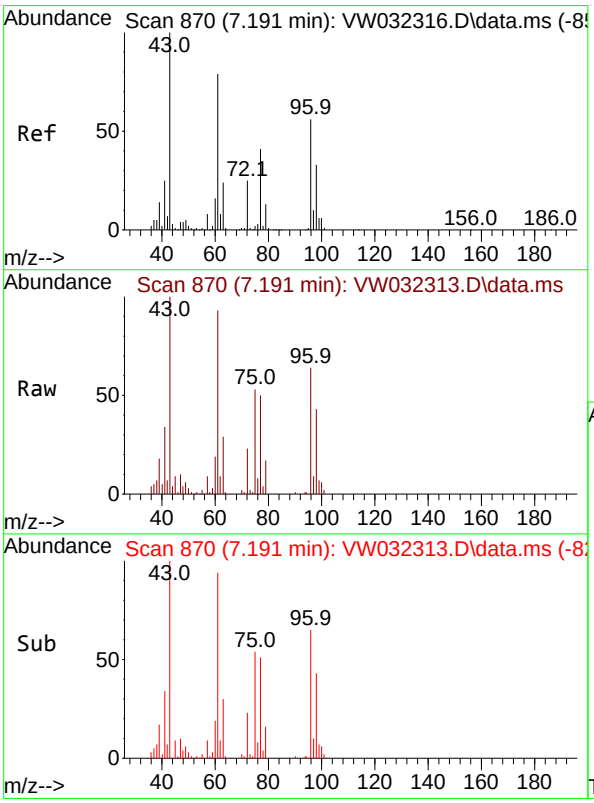
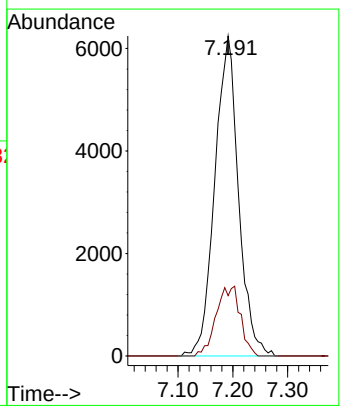


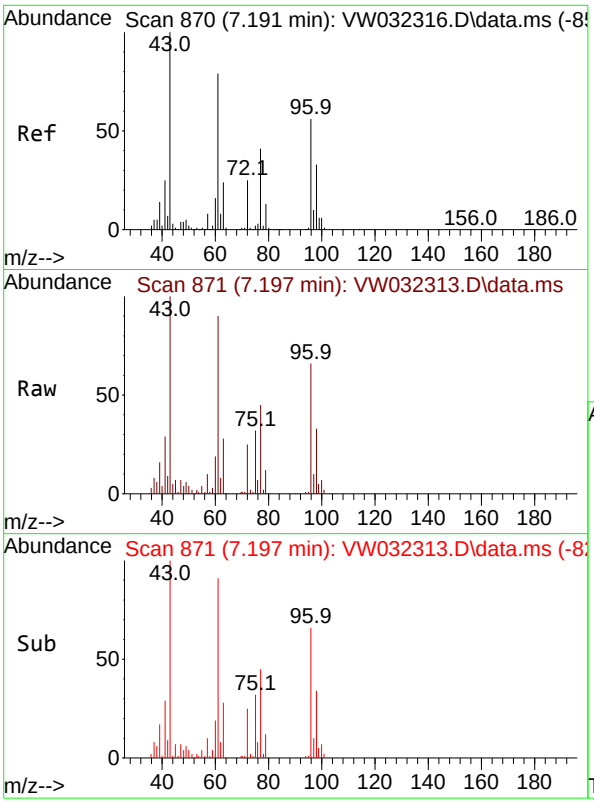


#26
2,2-Dichloropropane
Concen: 5.352 ug/l
RT: 7.191 min Scan# 870
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 77 Resp: 18751

Ion	Ratio	Lower	Upper
77	100		
97	22.3	11.9	35.5

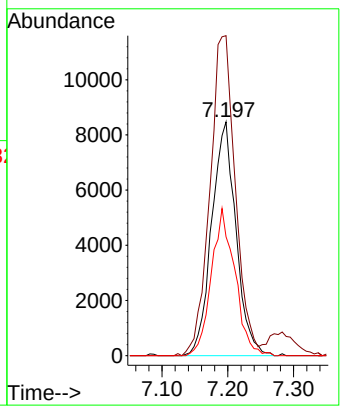




#27
cis-1,2-Dichloroethene
Concen: 5.120 ug/l
RT: 7.197 min Scan# 8
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 96 Resp: 2185

Ion	Ratio	Lower	Upper
96	100		
61	142.8	0.0	268.0
98	60.8	0.0	130.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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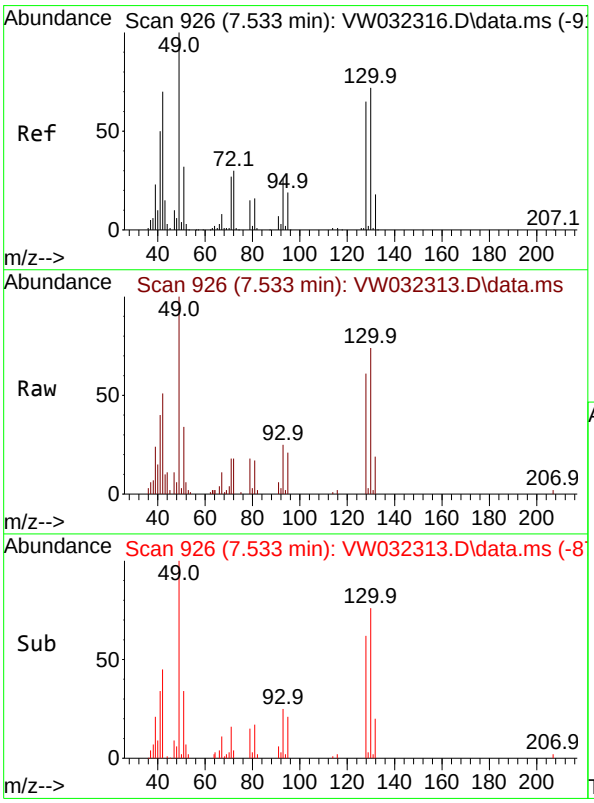
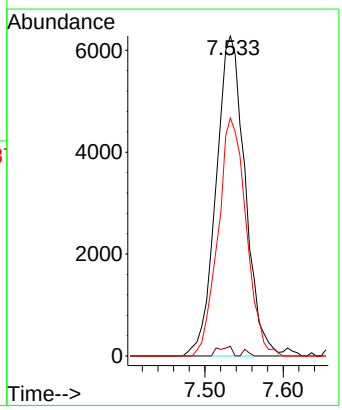
Supervised By :Semsettin Yesilyurt 10/03/2025

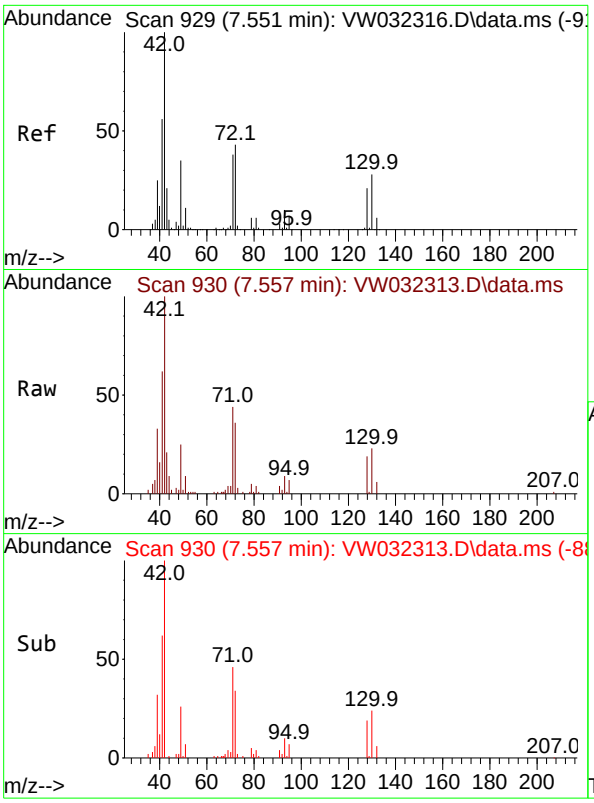


#28
Bromochloromethane
Concen: 5.005 ug/l
RT: 7.533 min Scan# 926
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 49 Resp: 16126

Ion	Ratio	Lower	Upper
49	100		
129	1.4	0.0	4.2
130	72.4	67.5	101.3

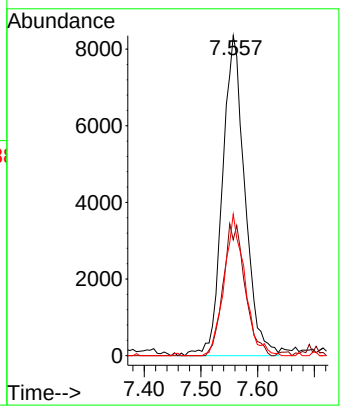




#29
Tetrahydrofuran
Concen: 23.204 ug/l
RT: 7.557 min Scan# 9
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 42 Resp: 2285

Ion	Ratio	Lower	Upper
42	100		
72	40.3	37.4	56.2
71	41.0	36.0	54.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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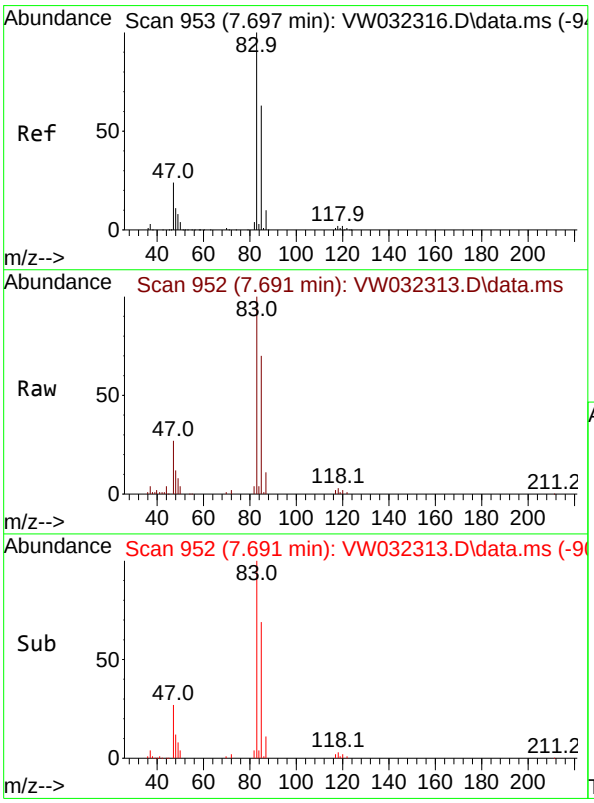
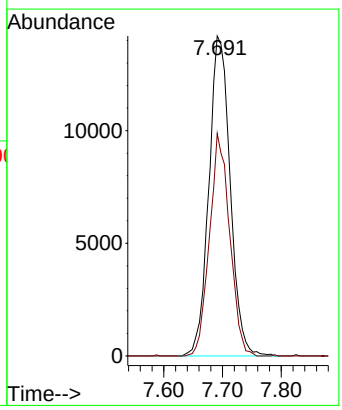
Supervised By :Semsettin Yesilyurt 10/03/2025

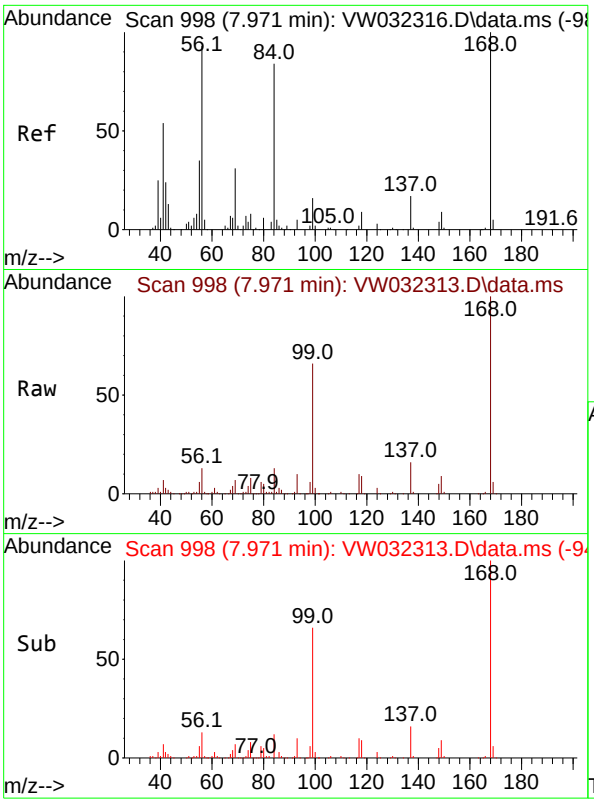


#30
Chloroform
Concen: 5.154 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 83 Resp: 35798

Ion	Ratio	Lower	Upper
83	100		
85	69.5	51.2	76.8

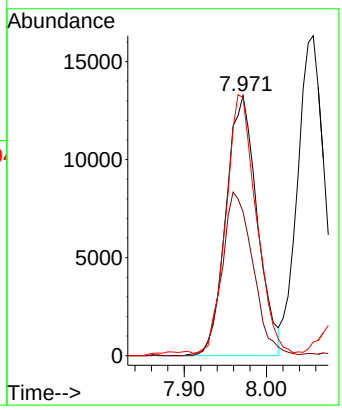




#31
Cyclohexane
Concen: 5.983 ug/l
RT: 7.971 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 56 Resp: 3498

Ion	Ratio	Lower	Upper
56	100		
69	55.3	27.7	41.5
84	98.1	74.6	112.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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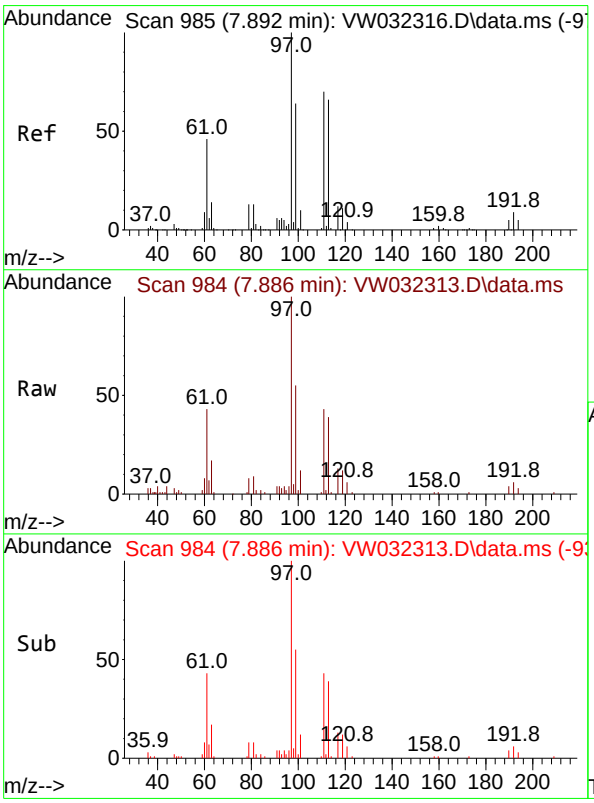
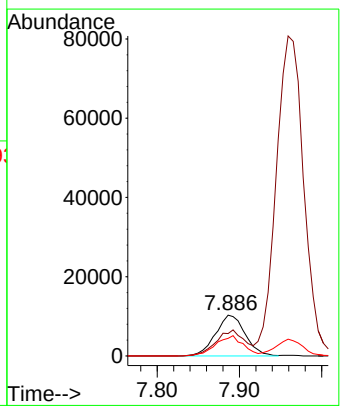
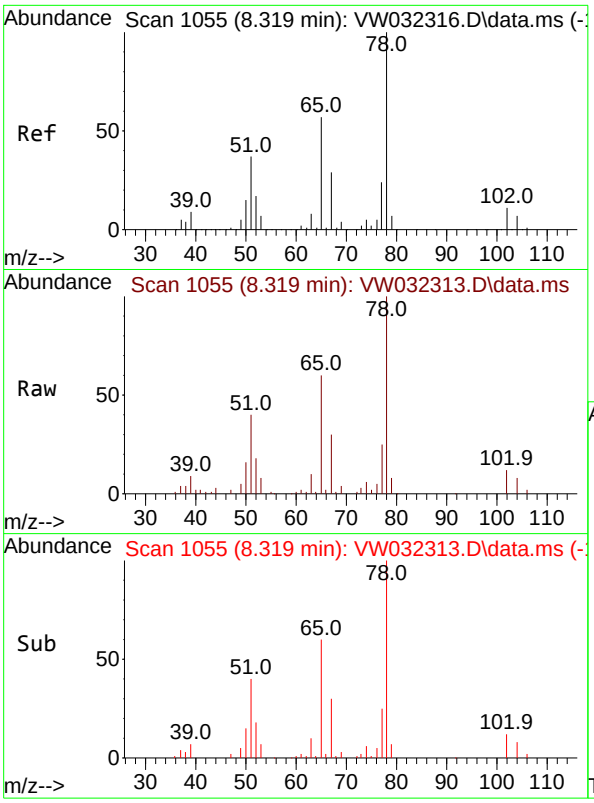


#32
1,1,1-Trichloroethane
Concen: 5.244 ug/l
RT: 7.886 min Scan# 984
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 97 Resp: 25812

Ion	Ratio	Lower	Upper
97	100		
99	61.9	50.9	76.3
61	46.5	36.2	54.4

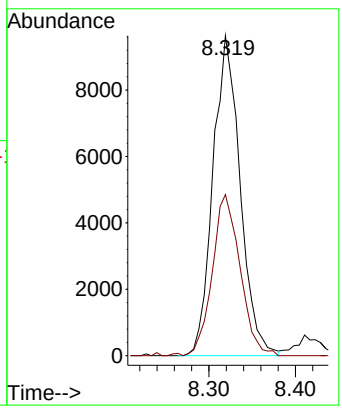




#33
1,2-Dichloroethane-d4
Concen: 5.059 ug/l
RT: 8.319 min Scan# 1(
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 65 Resp: 2101(

Ion	Ratio	Lower	Upper
65	100		
67	51.5	0.0	99.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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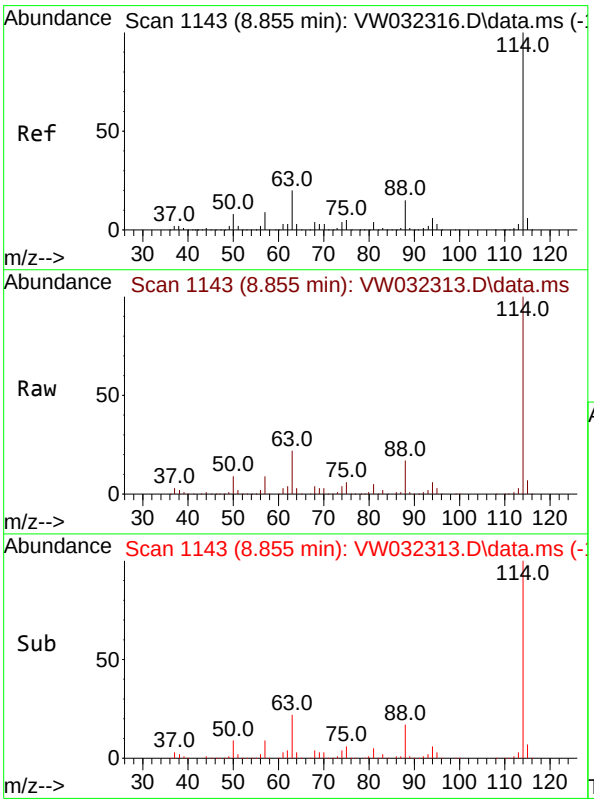
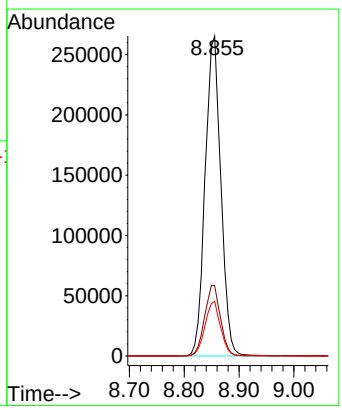
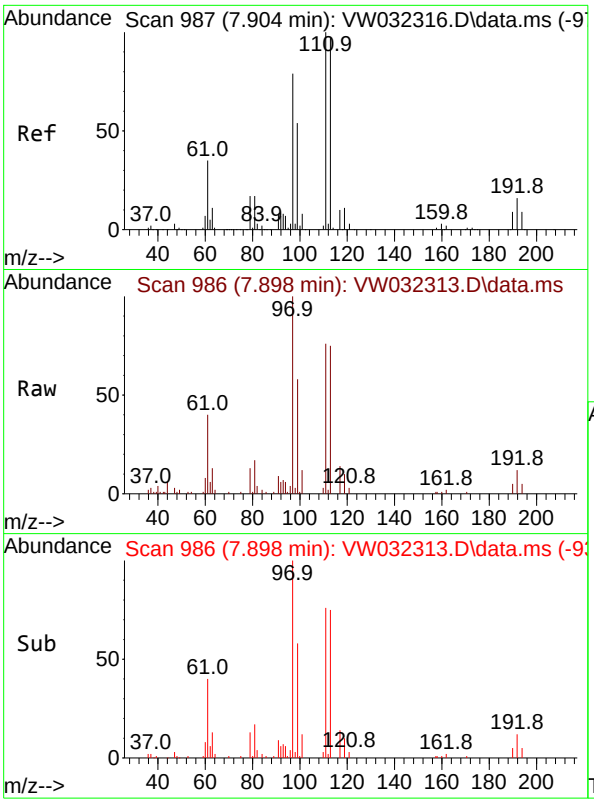


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.855 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:114 Resp: 526707

Ion	Ratio	Lower	Upper
114	100		
63	22.0	0.0	40.4
88	17.1	0.0	32.0





#35
Dibromofluoromethane
Concen: 5.118 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:113 Resp: 1745

Ion	Ratio	Lower	Upper
113	100		
111	97.8	83.9	125.9
192	15.7	14.6	21.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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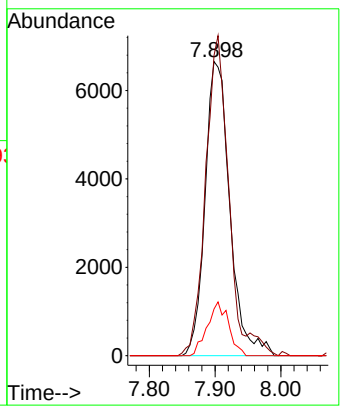
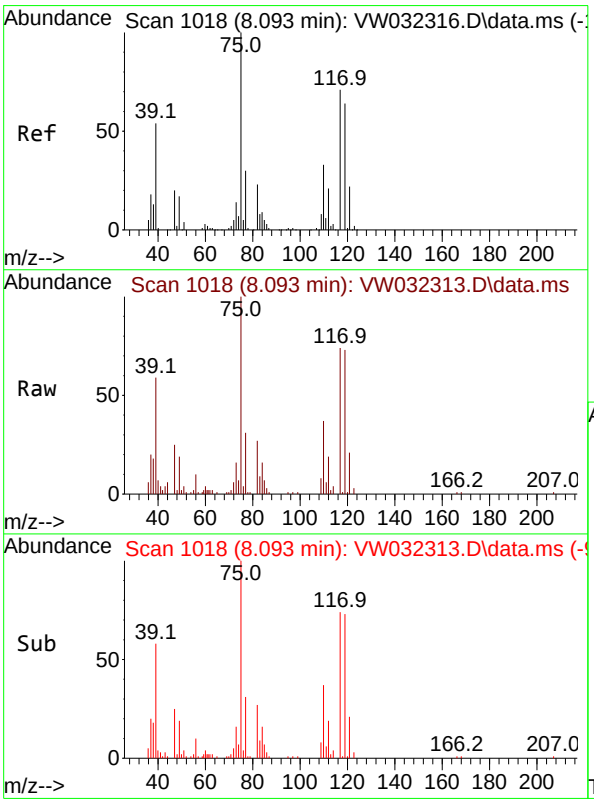
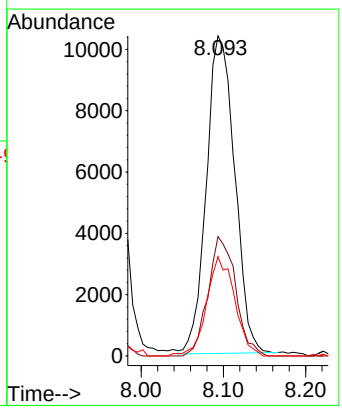


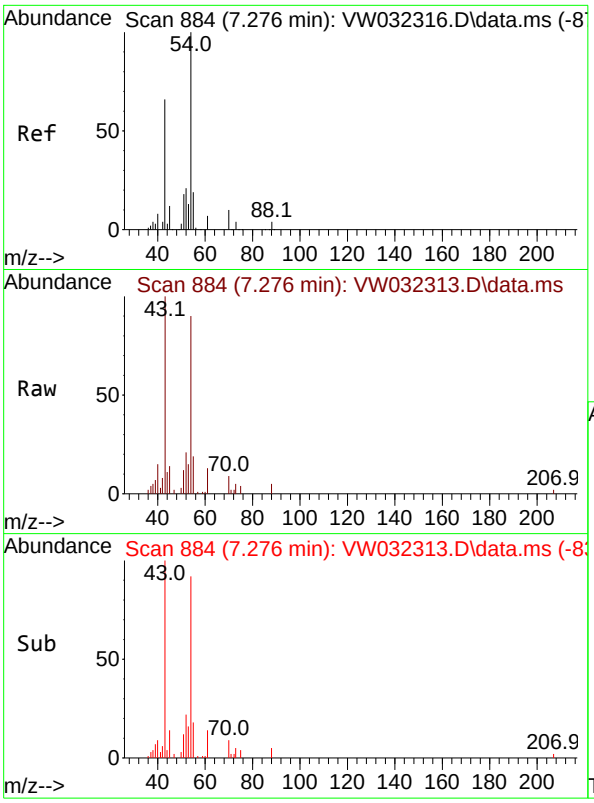


#36
1,1-Dichloropropene
Concen: 5.155 ug/l
RT: 8.093 min Scan# 1018
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 75 Resp: 24817

Ion	Ratio	Lower	Upper
75	100		
110	36.6	17.5	52.5
77	31.0	24.1	36.1





#37
Ethyl Acetate
Concen: 4.972 ug/l
RT: 7.276 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 1593

Ion	Ratio	Lower	Upper
43	100		
61	15.1	11.3	16.9
70	13.3	8.9	13.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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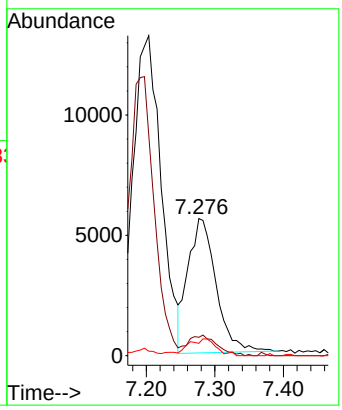
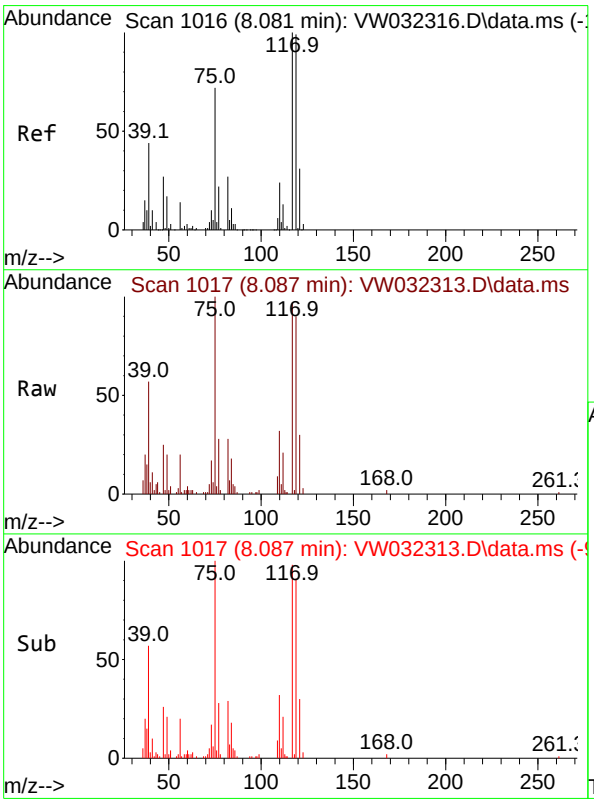
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

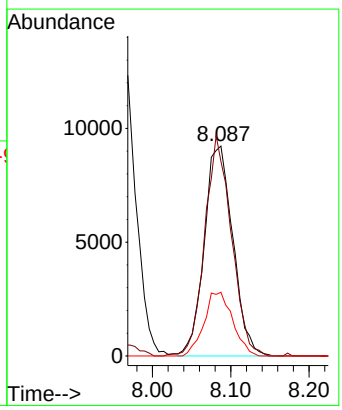


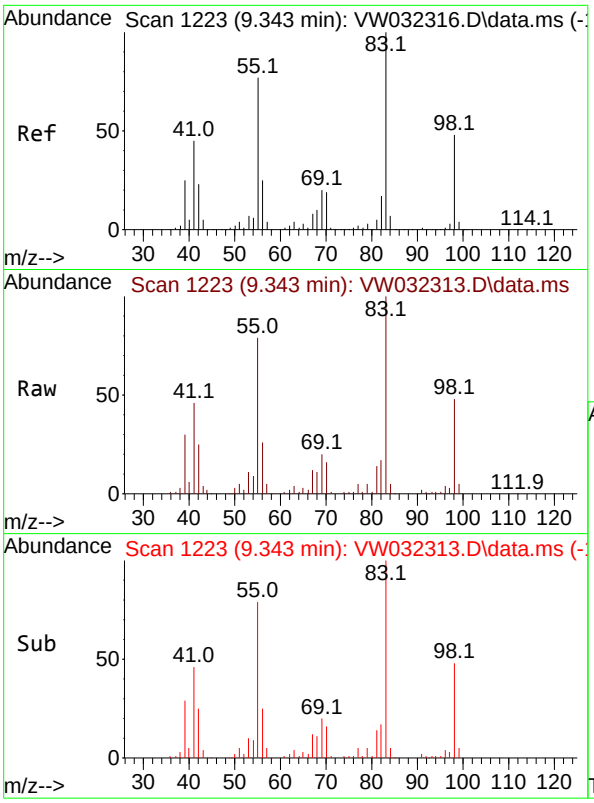


#38
Carbon Tetrachloride
Concen: 5.188 ug/l
RT: 8.087 min Scan# 1017
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:117 Resp: 23500

Ion	Ratio	Lower	Upper
117	100		
119	92.7	74.2	111.2
121	30.4	25.6	38.4





#39
Methylcyclohexane
Concen: 5.307 ug/l
RT: 9.343 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 83 Resp: 3081

Ion	Ratio	Lower	Upper
83	100		
55	78.7	58.4	87.6
98	48.4	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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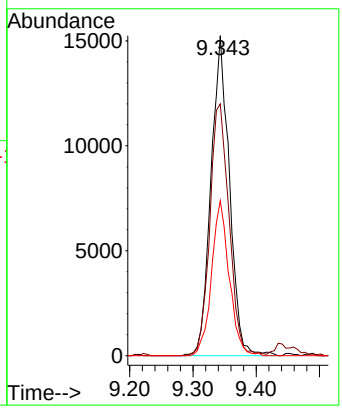
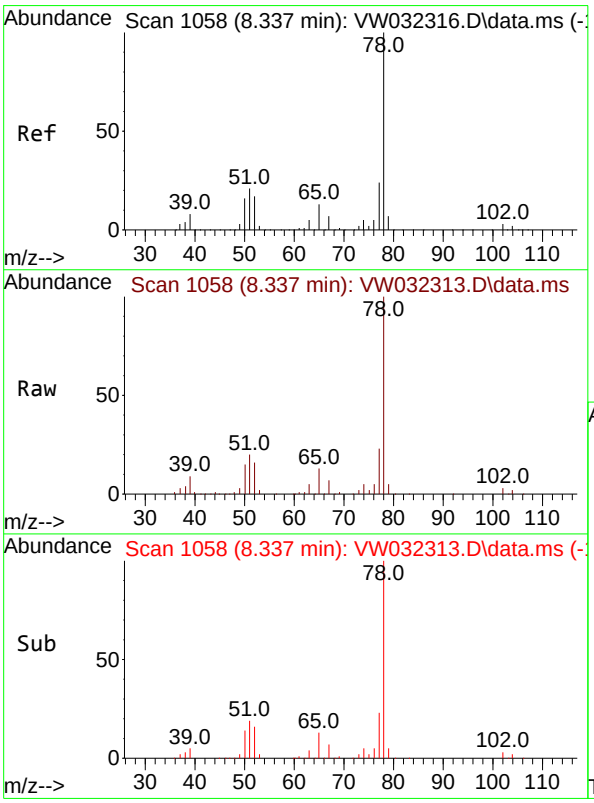
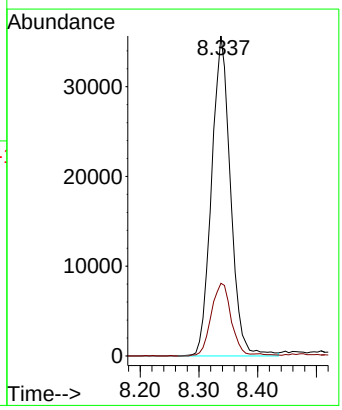


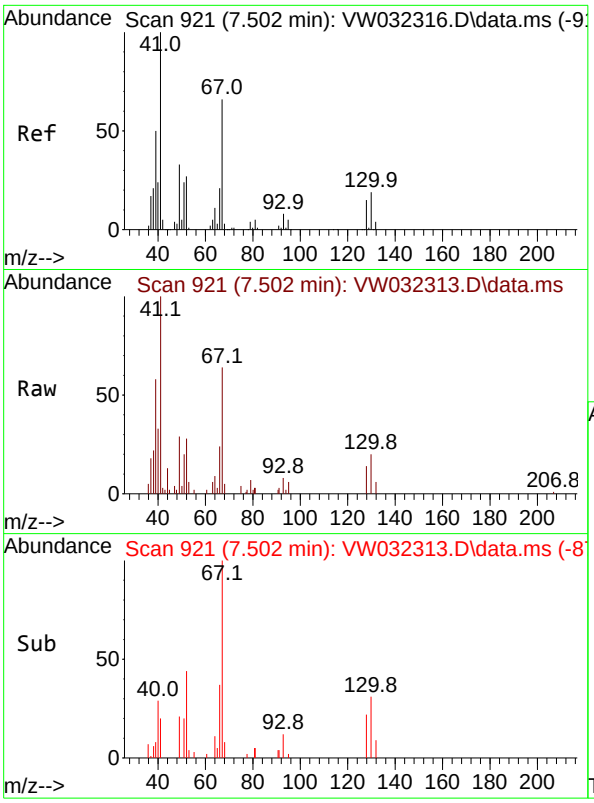


#40
Benzene
Concen: 5.297 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 78 Resp: 79933

Ion	Ratio	Lower	Upper
78	100		
77	22.7	20.7	31.1

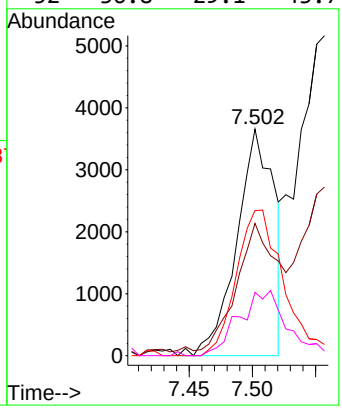




#41
Methacrylonitrile
Concen: 4.364 ug/l
RT: 7.502 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 41 Resp: 753

Ion	Ratio	Lower	Upper
41	100		
39	61.4	50.9	76.3
67	82.6	65.6	98.4
52	36.8	29.1	43.7



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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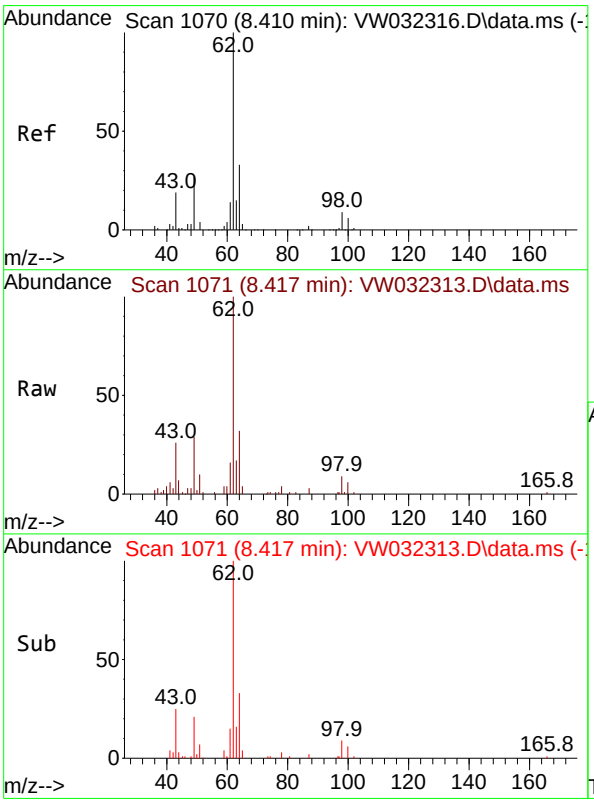
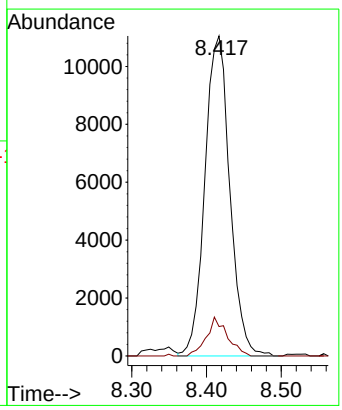
Supervised By :Semsettin Yesilyurt 10/03/2025

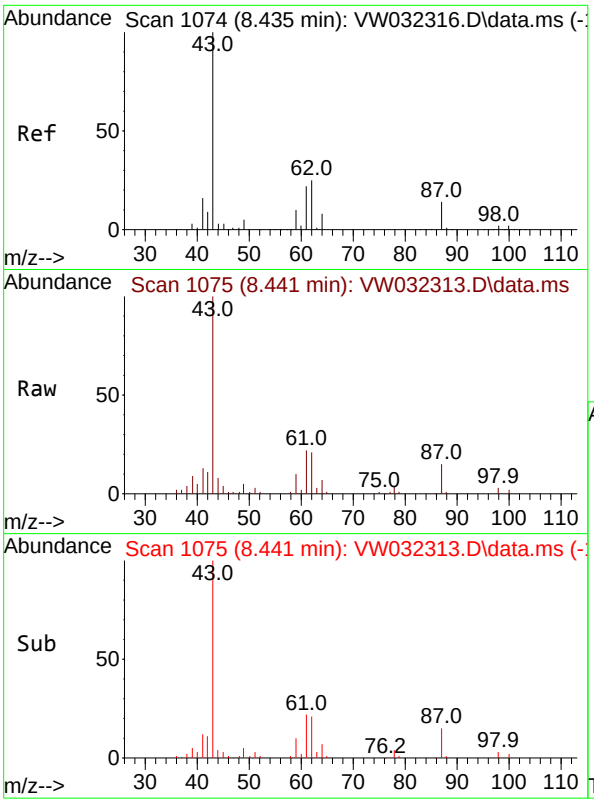


#42
1,2-Dichloroethane
Concen: 5.192 ug/l
RT: 8.417 min Scan# 1071
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 62 Resp: 25632

Ion	Ratio	Lower	Upper
62	100		
98	10.2	0.0	18.0

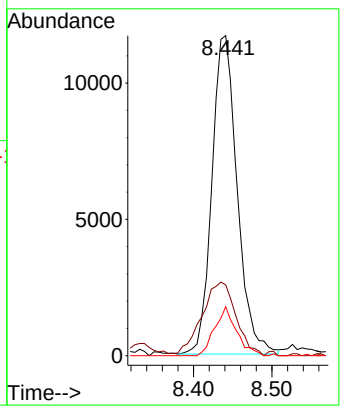




#43
Isopropyl Acetate
Concen: 4.618 ug/l
RT: 8.441 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 2624

Ion	Ratio	Lower	Upper
43	100		
61	31.2	23.3	34.9
87	13.2	11.1	16.7



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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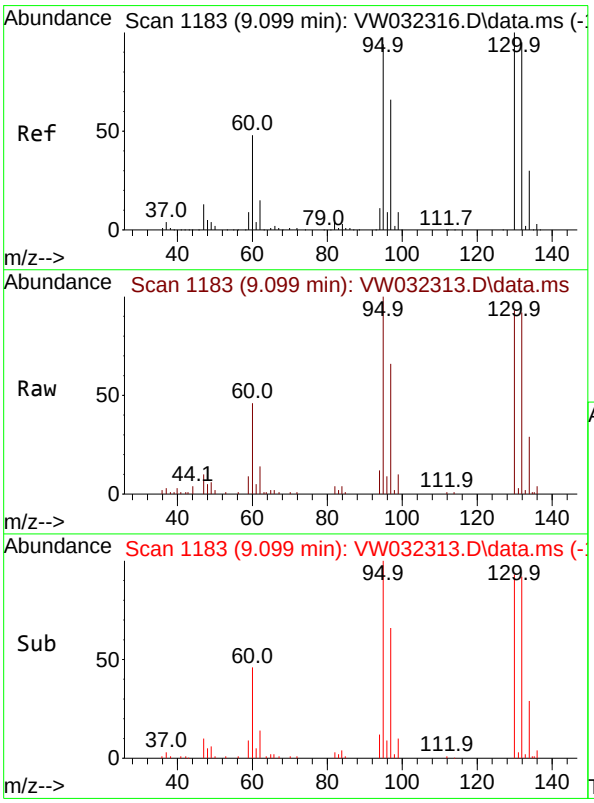
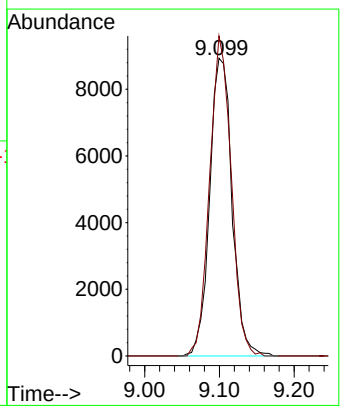
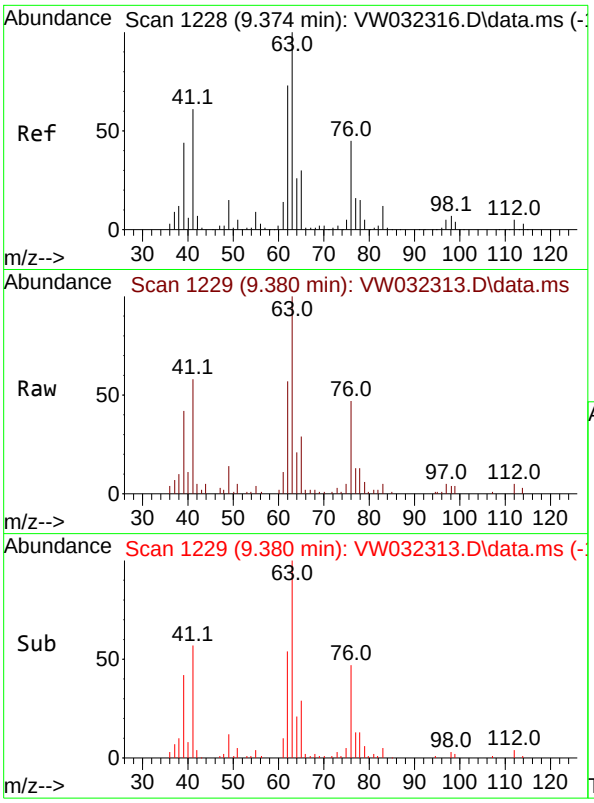


#44
Trichloroethene
Concen: 5.277 ug/l
RT: 9.099 min Scan# 1183
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:130 Resp: 18643

Ion	Ratio	Lower	Upper
130	100		
95	107.4	0.0	220.0

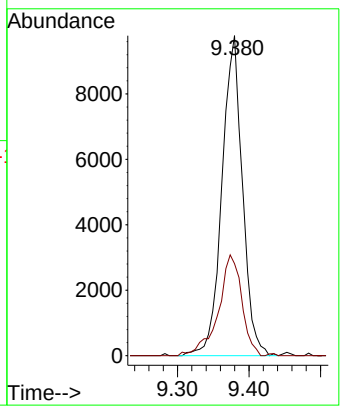




#45
1,2-Dichloropropane
Concen: 5.171 ug/l
RT: 9.380 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 63 Resp: 1947

Ion	Ratio	Lower	Upper
63	100		
65	28.7	24.3	36.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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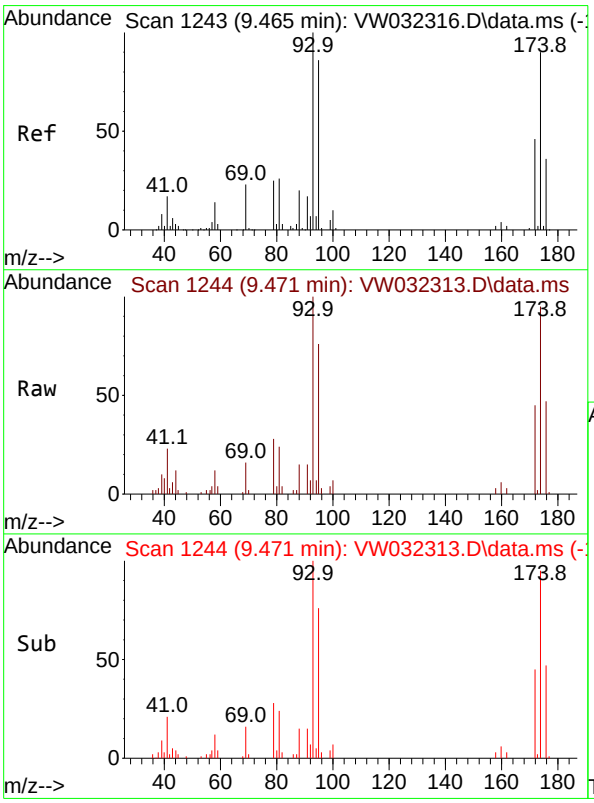
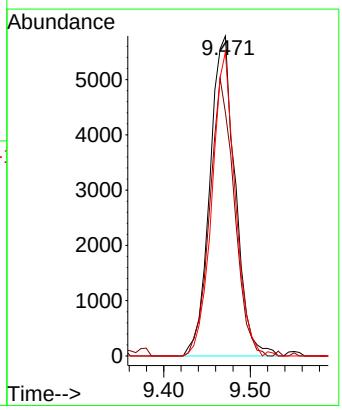
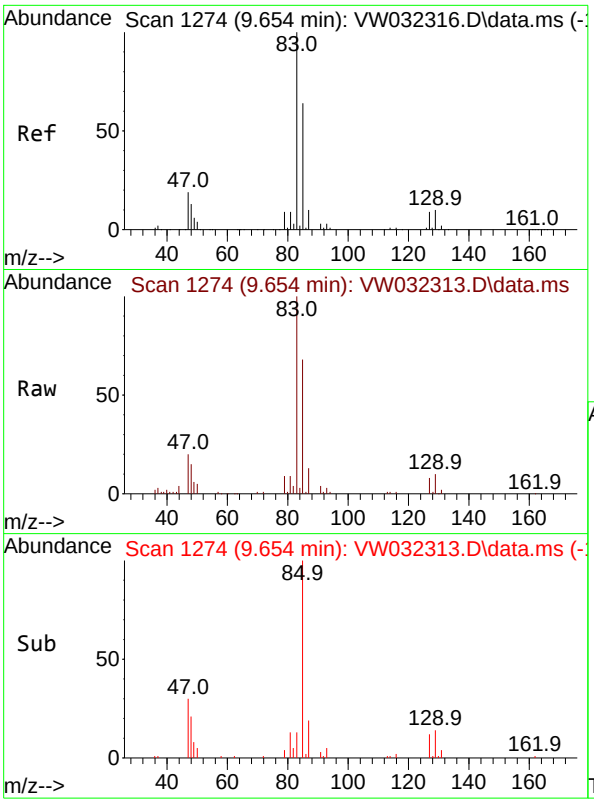


#46
Dibromomethane
Concen: 5.092 ug/l
RT: 9.471 min Scan# 1244
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 93 Resp: 11793

Ion	Ratio	Lower	Upper
93	100		
95	83.8	67.4	101.2
174	87.1	75.7	113.5

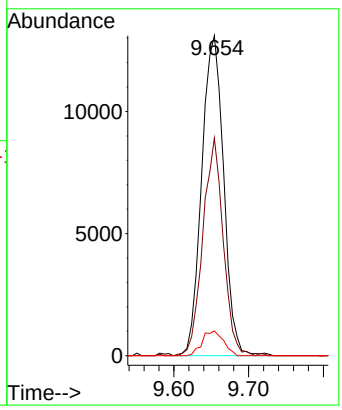




#47
Bromodichloromethane
Concen: 5.039 ug/l
RT: 9.654 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 83 Resp: 2669

Ion	Ratio	Lower	Upper
83	100		
85	68.0	48.7	73.1
127	7.8	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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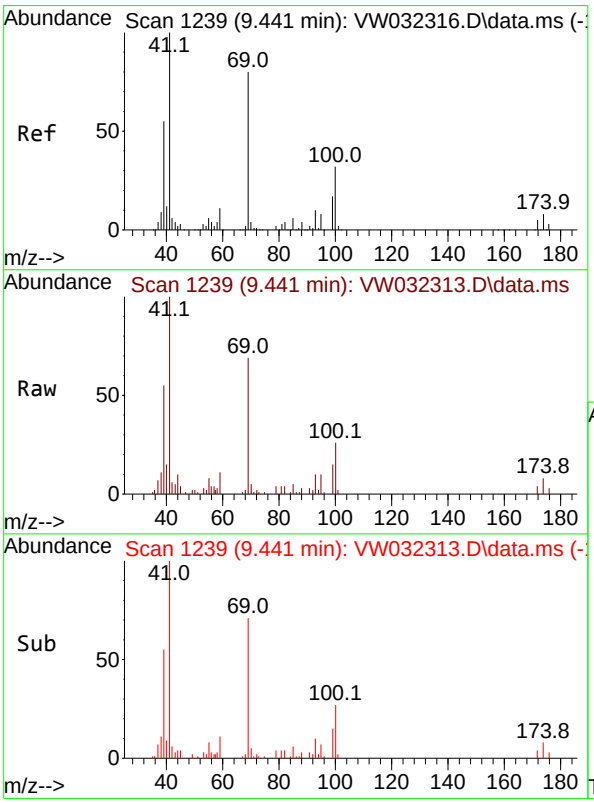
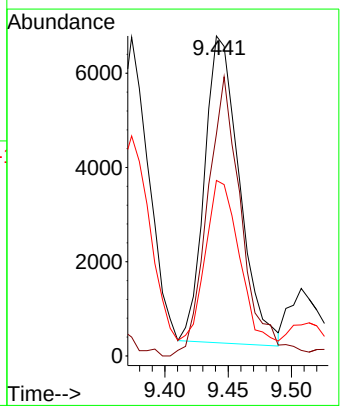
Supervised By :Semsettin Yesilyurt 10/03/2025

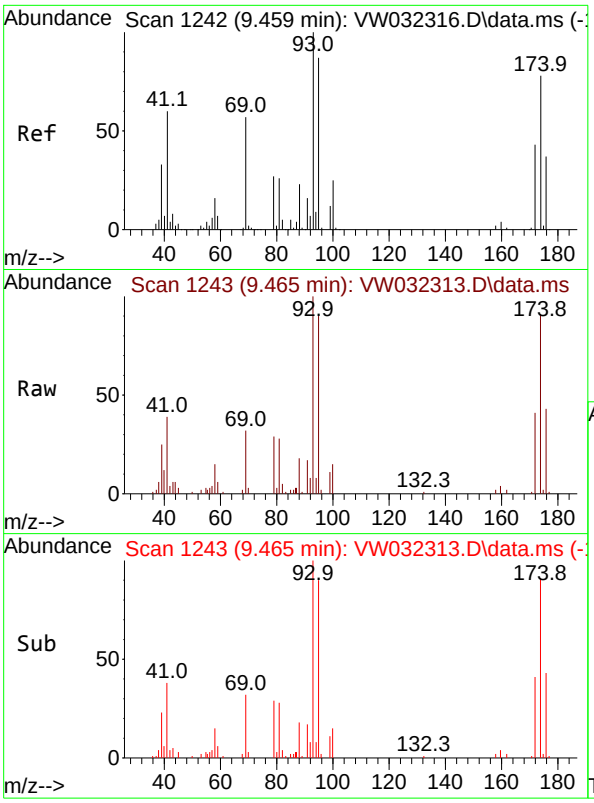


#48
Methyl methacrylate
Concen: 4.512 ug/l
RT: 9.441 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 41 Resp: 12470

Ion	Ratio	Lower	Upper
41	100		
69	89.2	71.5	107.3
39	51.0	55.9	83.9#





#49
1,4-Dioxane
Concen: 86.306 ug/l
RT: 9.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 88 Resp: 273

Ion	Ratio	Lower	Upper
88	100		
43	30.9	18.0	27.0#
58	79.9	55.4	83.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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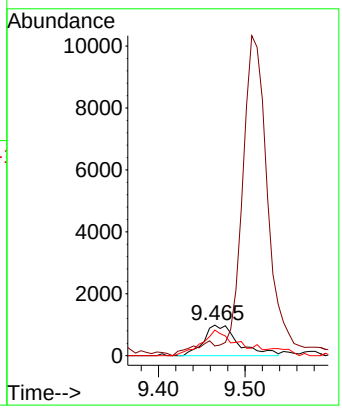
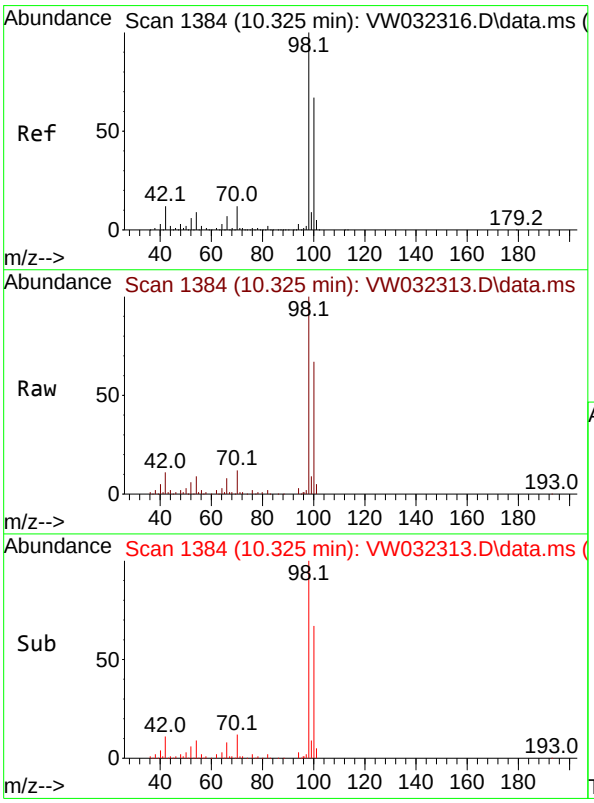
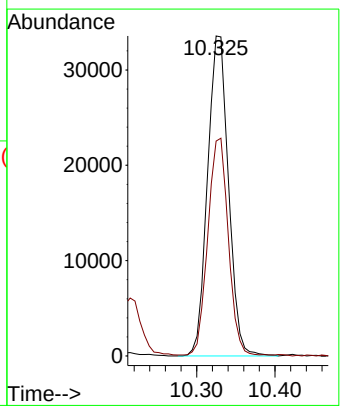


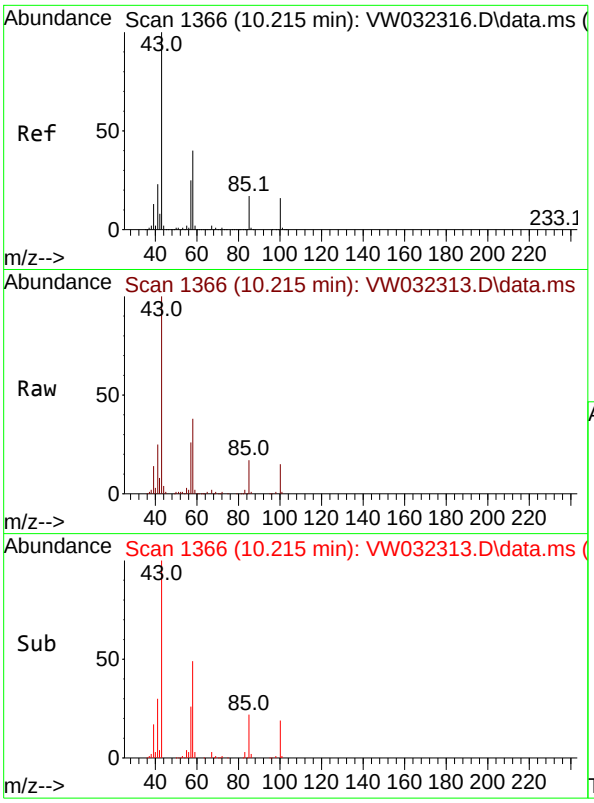


#50
Toluene-d8
Concen: 4.947 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 98 Resp: 62281

Ion	Ratio	Lower	Upper
98	100		
100	66.2	51.4	77.2

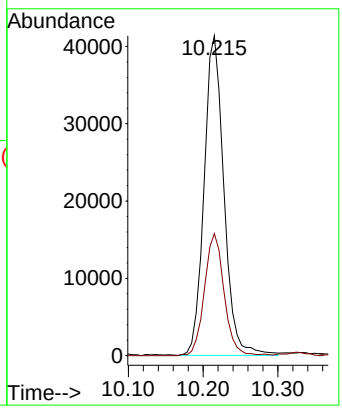




#51
4-Methyl-2-Pentanone
Concen: 23.157 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 7624

Ion	Ratio	Lower	Upper
43	100		
58	38.0	32.0	48.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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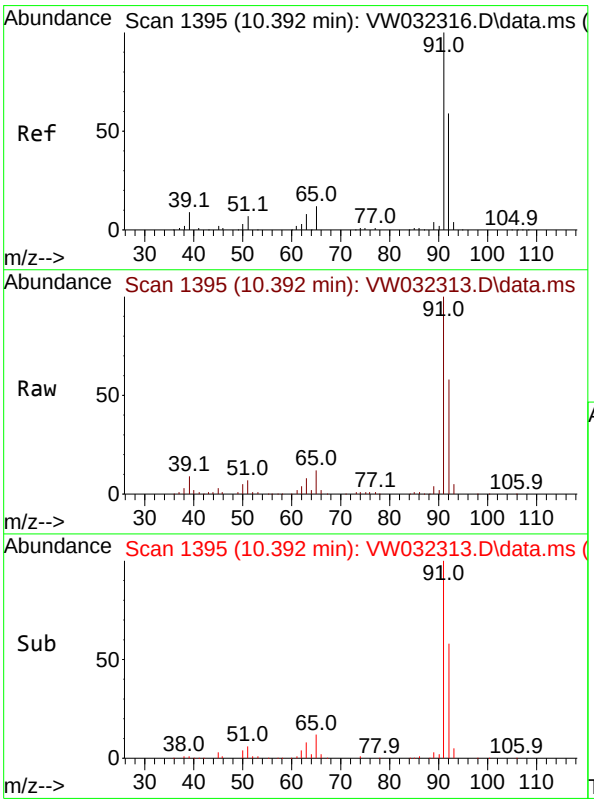
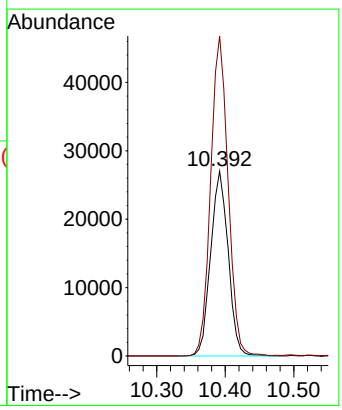
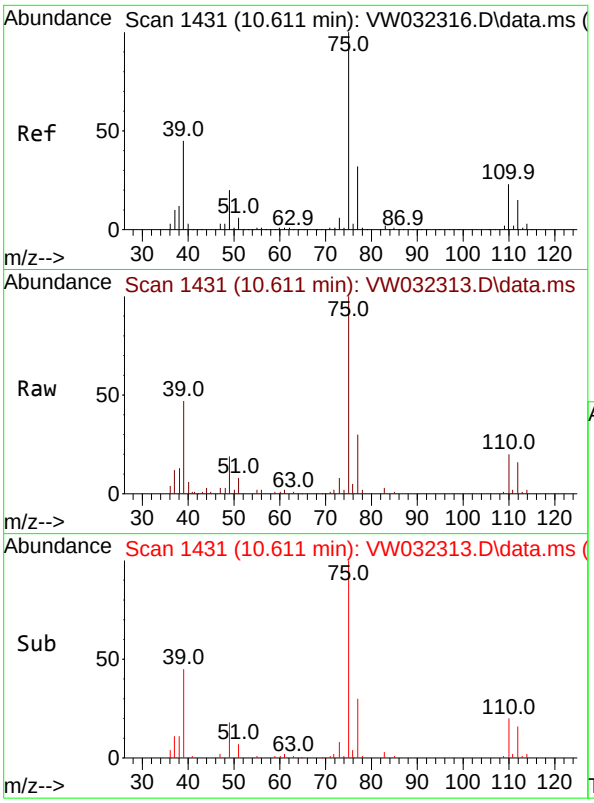


#52
Toluene
Concen: 5.094 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 92 Resp: 47870

Ion	Ratio	Lower	Upper
92	100		
91	172.3	137.5	206.3

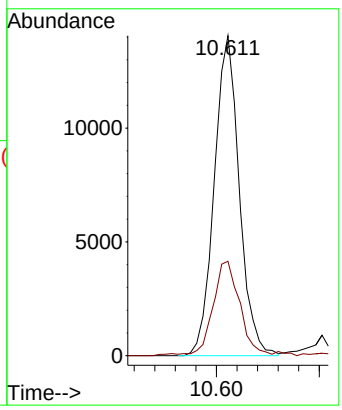




#53
t-1,3-Dichloropropene
Concen: 4.619 ug/l
RT: 10.611 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 75 Resp: 2374

Ion	Ratio	Lower	Upper
75	100		
77	29.1	25.6	38.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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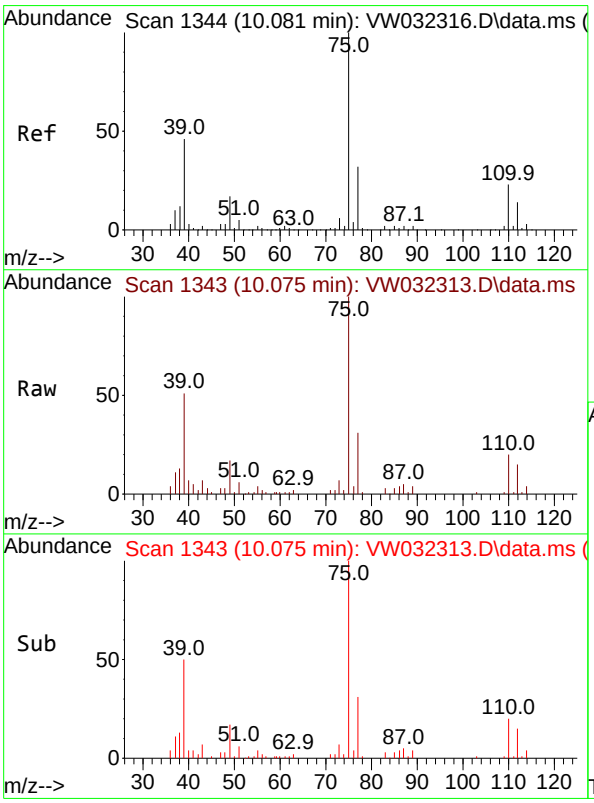
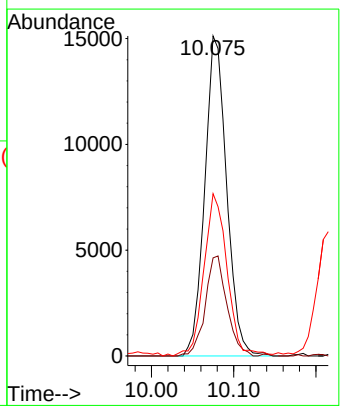
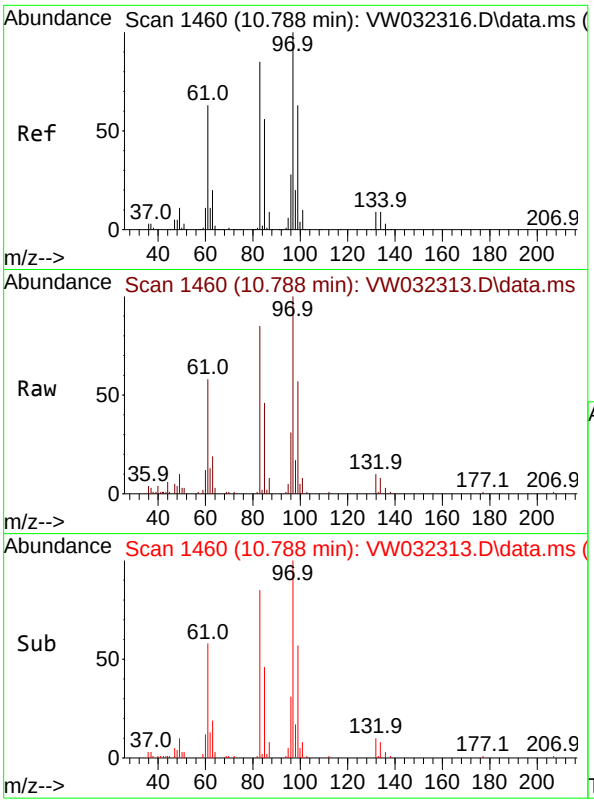


#54
cis-1,3-Dichloropropene
Concen: 4.727 ug/l
RT: 10.075 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 75 Resp: 27985

Ion	Ratio	Lower	Upper
75	100		
77	30.7	25.1	37.7
39	50.0	43.2	64.8

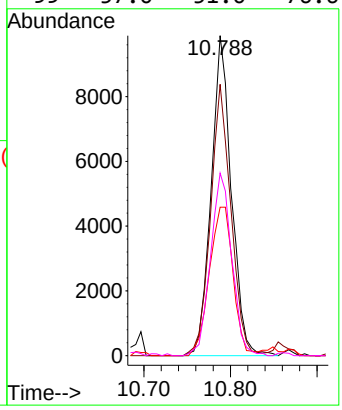




#55
1,1,2-Trichloroethane
Concen: 5.174 ug/l
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 97 Resp: 1601

Ion	Ratio	Lower	Upper
97	100		
83	84.8	71.0	106.6
85	46.4	42.8	64.2
99	57.0	51.0	76.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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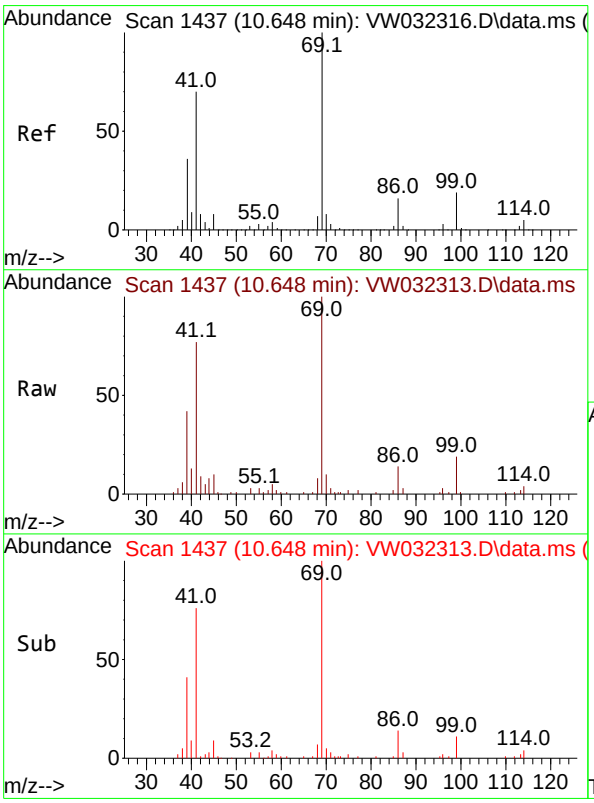
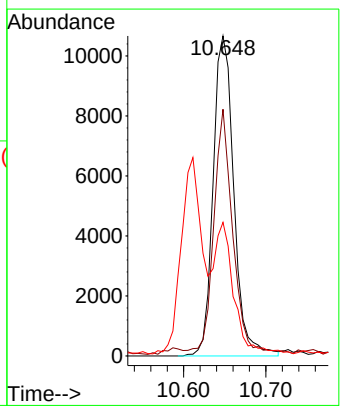
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

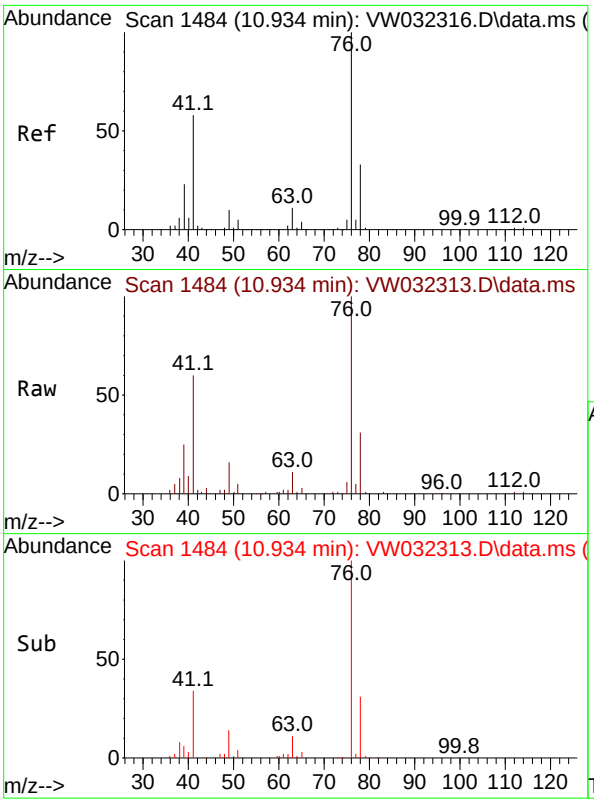


#56
Ethyl methacrylate
Concen: 4.308 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 69 Resp: 18666

Ion	Ratio	Lower	Upper
69	100		
41	69.9	53.2	79.8
39	39.9	32.9	49.3





#57
1,3-Dichloropropane
Concen: 4.991 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 76 Resp: 2728

Ion	Ratio	Lower	Upper
76	100		
78	33.8	26.2	39.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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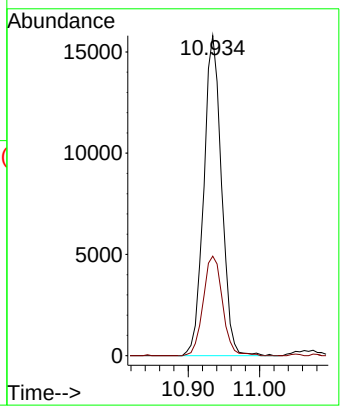
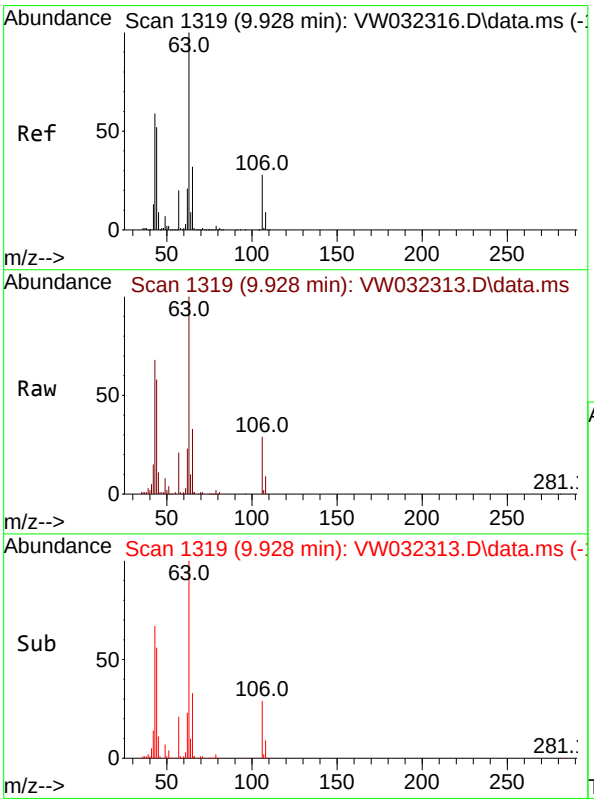
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

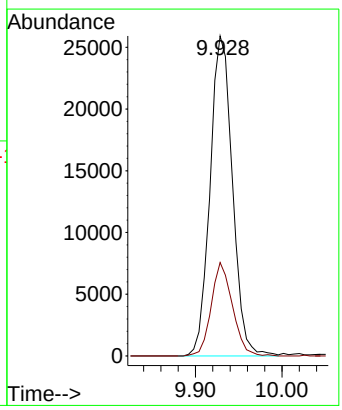


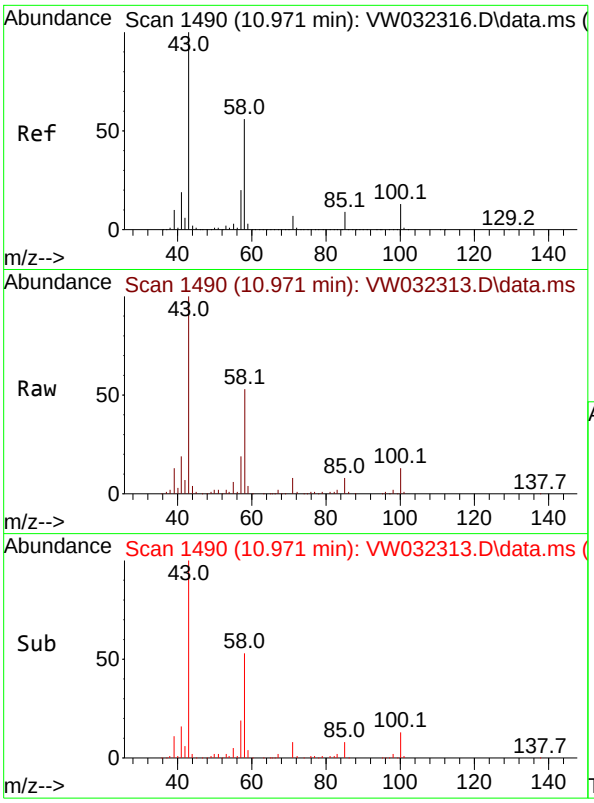


#58
2-Chloroethyl Vinyl ether
Concen: 20.206 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 63 Resp: 46589

Ion	Ratio	Lower	Upper
63	100		
106	27.7	24.3	36.5





#59
2-Hexanone
Concen: 22.879 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 5312(

Ion	Ratio	Lower	Upper
43	100		
58	52.2	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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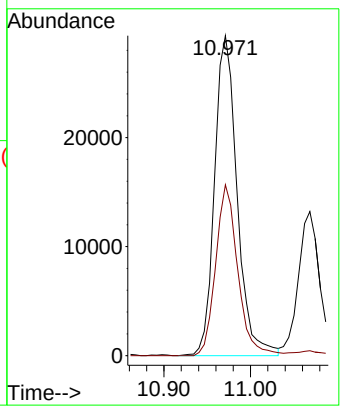
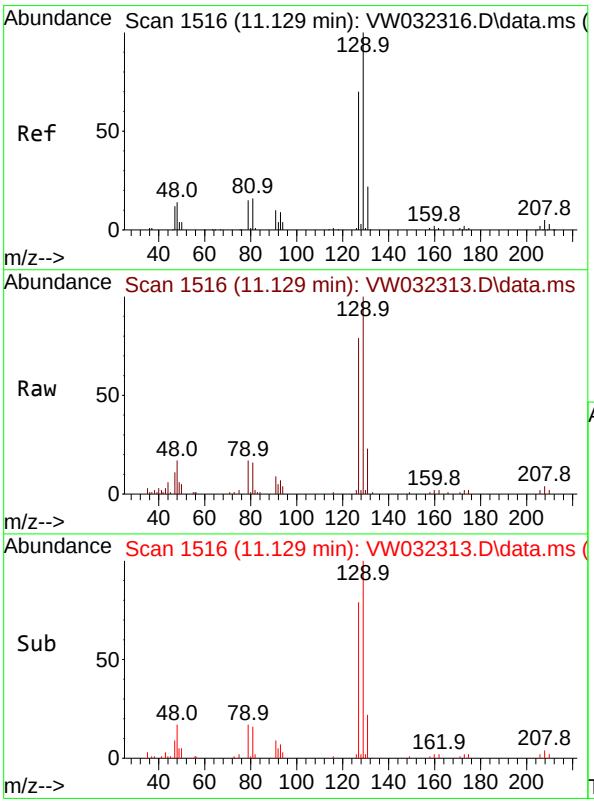
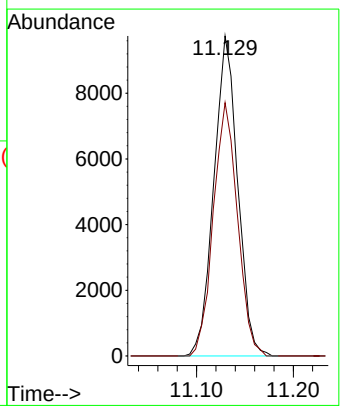


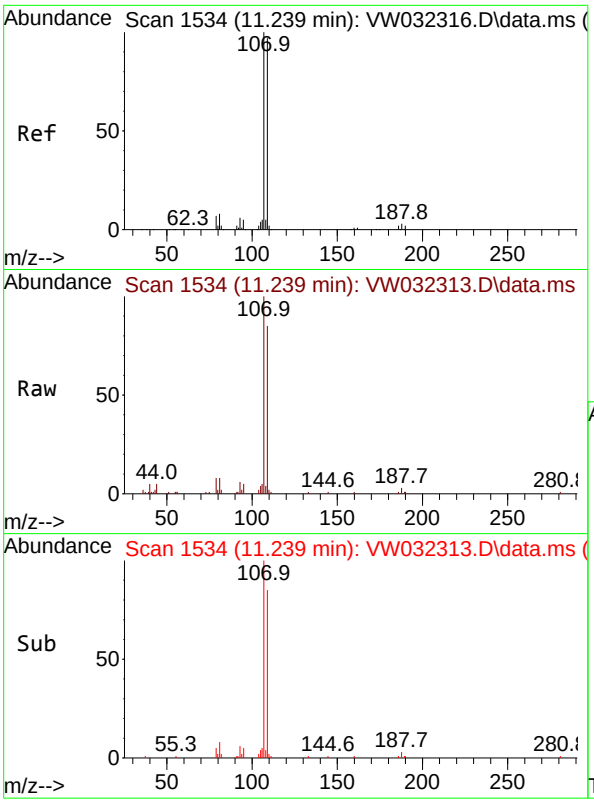


#60
Dibromochloromethane
Concen: 4.744 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:129 Resp: 16674

Ion	Ratio	Lower	Upper
129	100		
127	80.3	38.1	114.5





#61
1,2-Dibromoethane
Concen: 4.990 ug/l
RT: 11.239 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:107 Resp: 1506

Ion	Ratio	Lower	Upper
107	100		
109	92.3	74.5	111.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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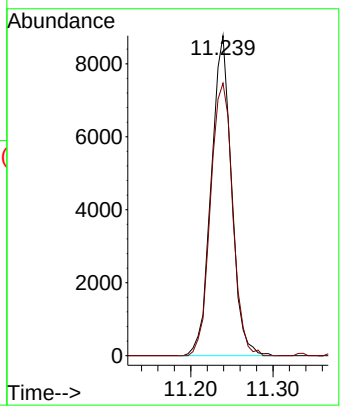
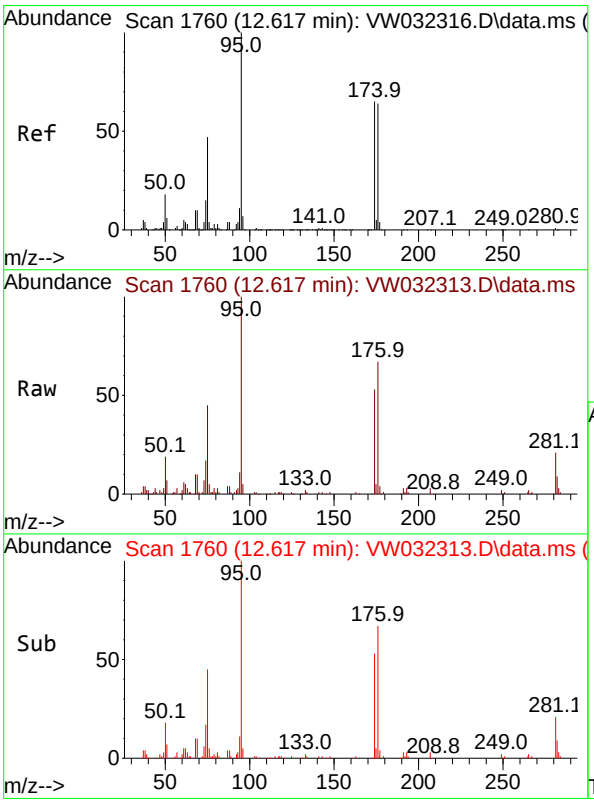
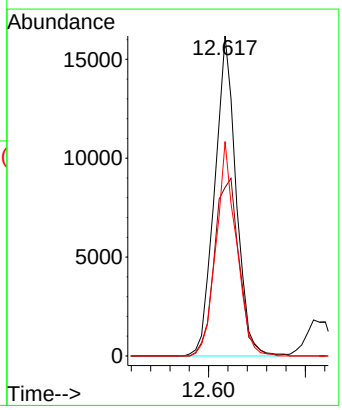


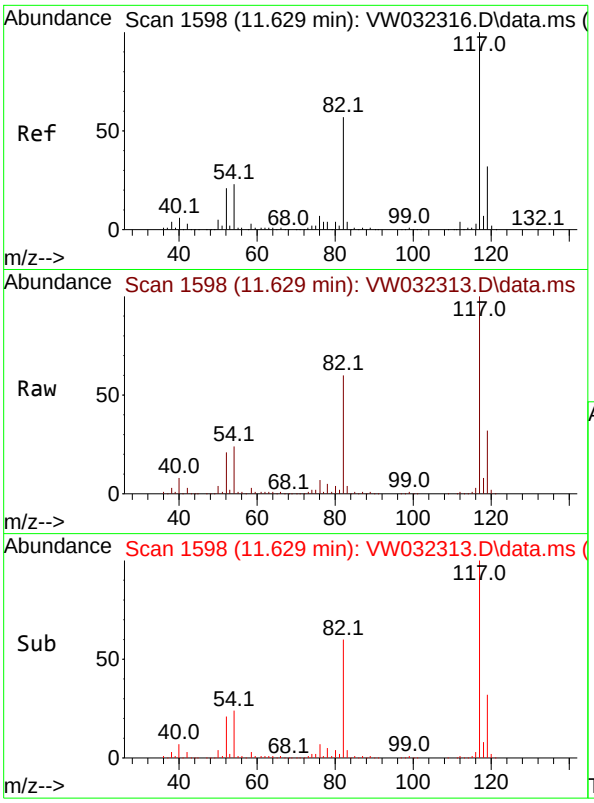


#62
4-Bromofluorobenzene
Concen: 5.229 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 95 Resp: 24882

Ion	Ratio	Lower	Upper
95	100		
174	64.4	0.0	145.6
176	63.2	0.0	140.8

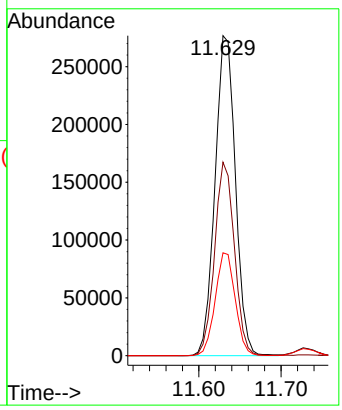




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:117 Resp: 47855

Ion	Ratio	Lower	Upper
117	100		
82	60.5	42.7	64.1
119	32.2	25.2	37.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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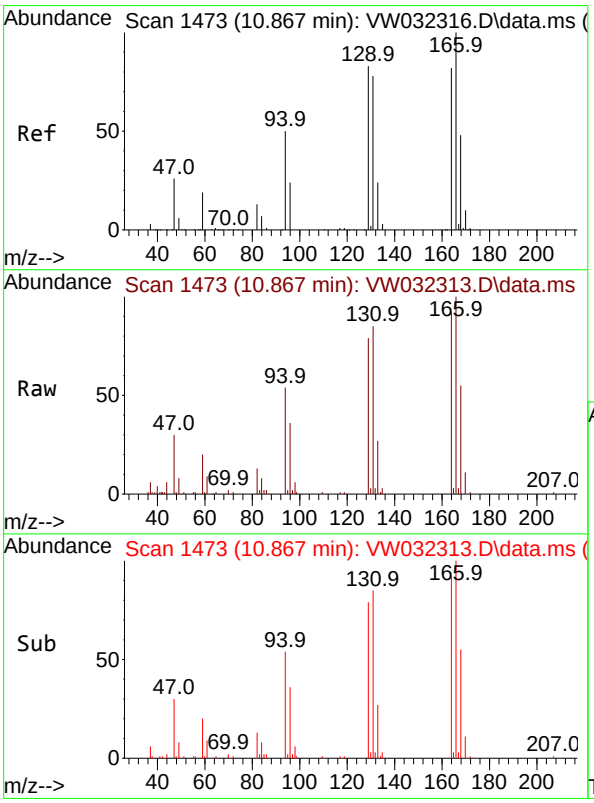
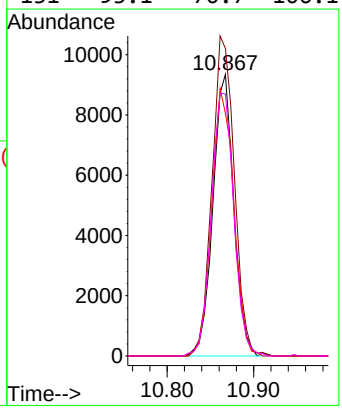
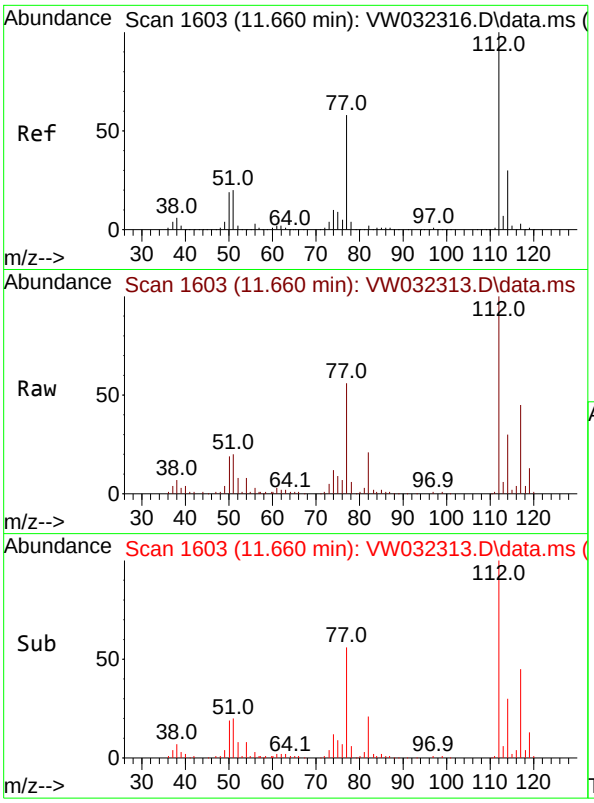


#64
Tetrachloroethene
Concen: 5.461 ug/l
RT: 10.867 min Scan# 1473
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:164 Resp: 15638

Ion	Ratio	Lower	Upper
164	100		
166	109.2	97.5	146.3
129	86.2	71.2	106.8
131	93.1	70.7	106.1

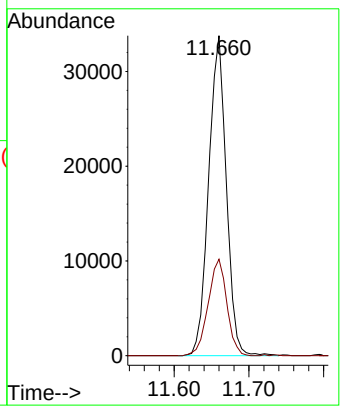




#65
Chlorobenzene
Concen: 5.269 ug/l
RT: 11.660 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:112 Resp: 5547

Ion	Ratio	Lower	Upper
112	100		
114	30.1	26.0	39.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

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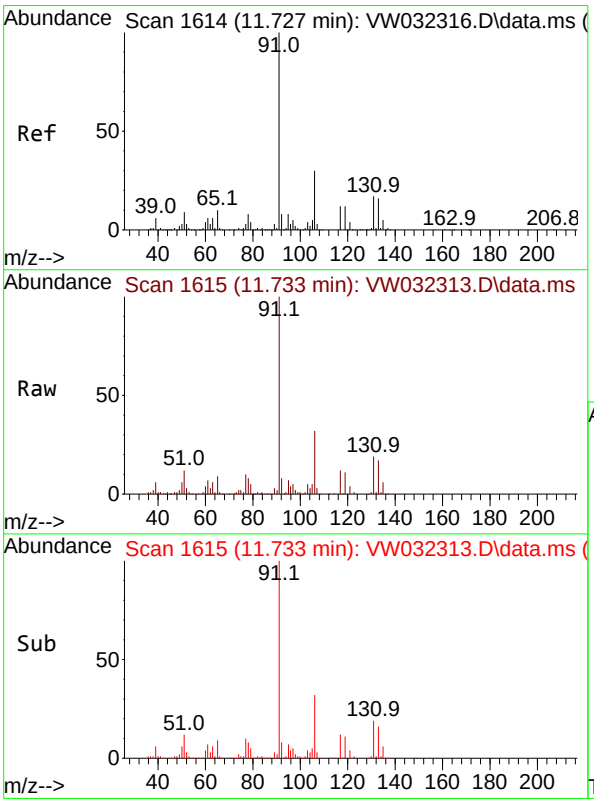
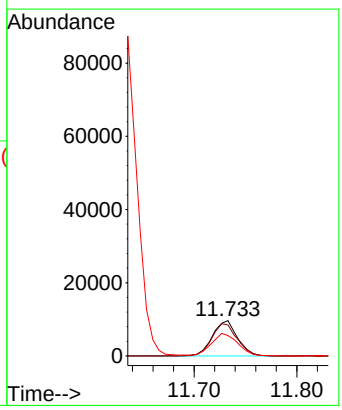
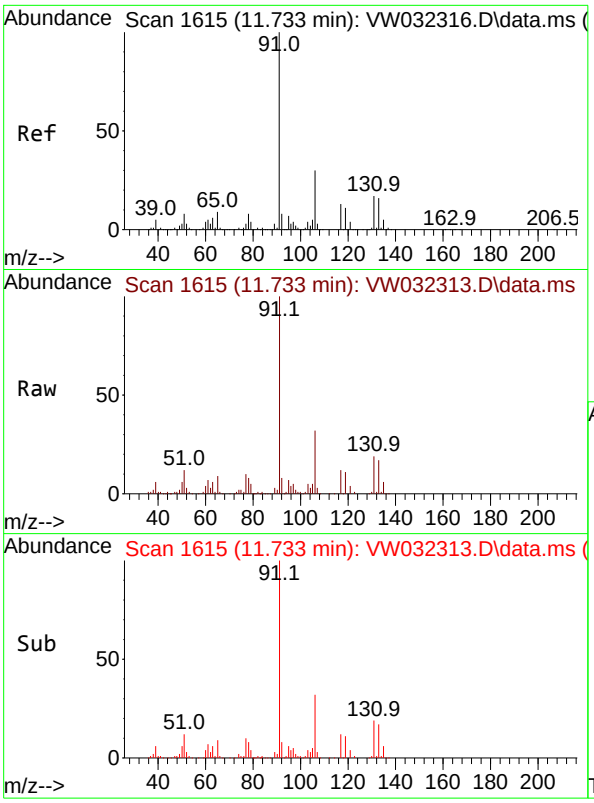


#66
1,1,1,2-Tetrachloroethane
Concen: 4.942 ug/l
RT: 11.733 min Scan# 1615
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:131 Resp: 16206

Ion	Ratio	Lower	Upper
131	100		
133	94.1	47.7	143.1
119	67.8	32.8	98.3





#67
Ethyl Benzene
Concen: 4.969 ug/l
RT: 11.733 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 91 Resp: 8721

Ion	Ratio	Lower	Upper
91	100		
106	32.1	25.3	37.9

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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Reviewed By :Mahesh Dadoda 10/03/2025
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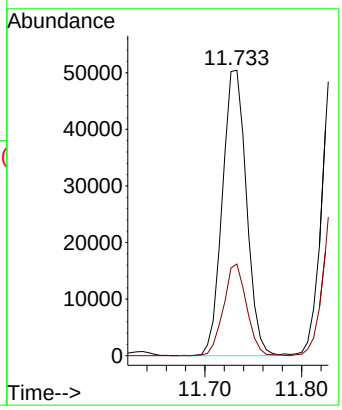
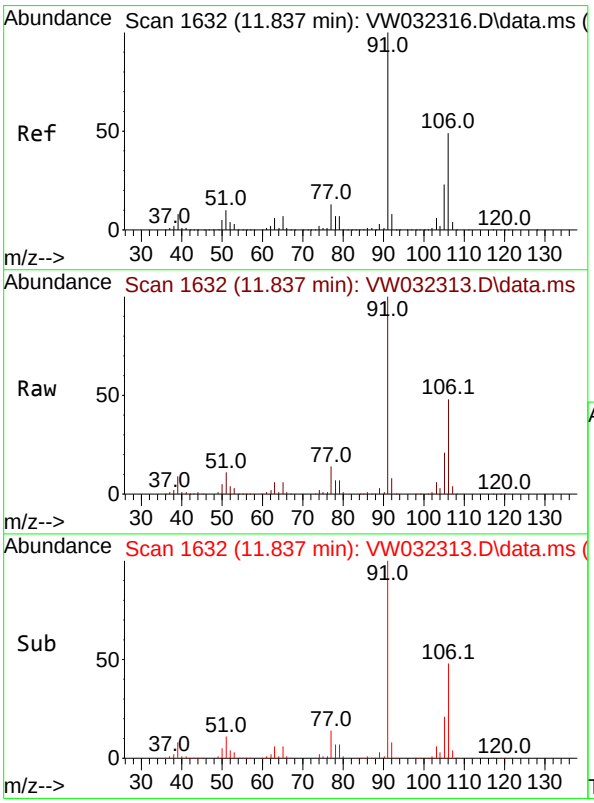
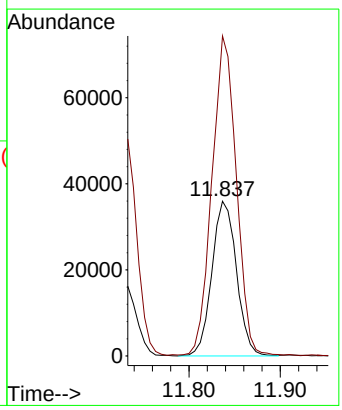


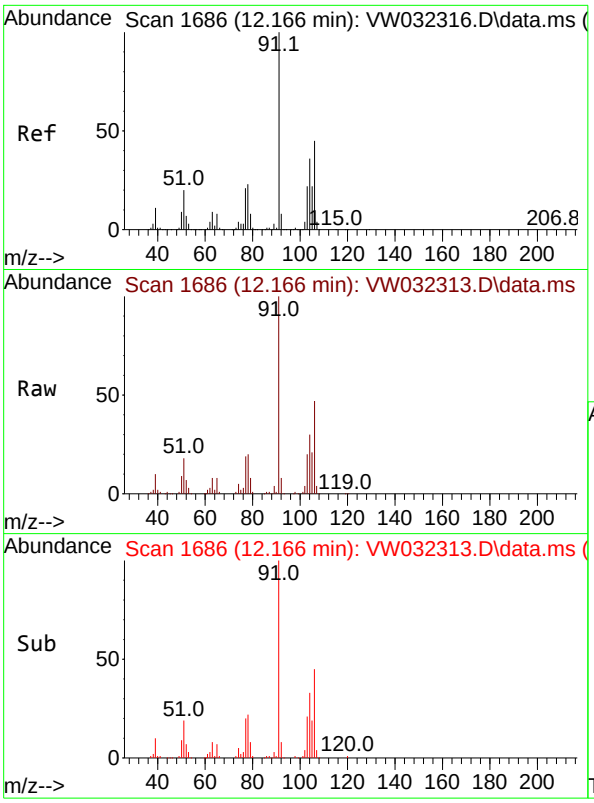


#68
m/p-Xylenes
Concen: 9.951 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:106 Resp: 67346

Ion	Ratio	Lower	Upper
106	100		
91	204.4	164.2	246.2





#69
o-Xylene
Concen: 4.782 ug/l
RT: 12.166 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:106 Resp: 3026

Ion	Ratio	Lower	Upper
106	100		
91	220.9	108.7	326.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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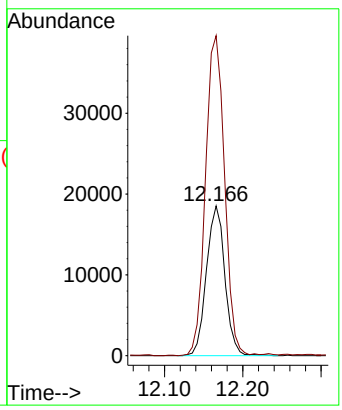
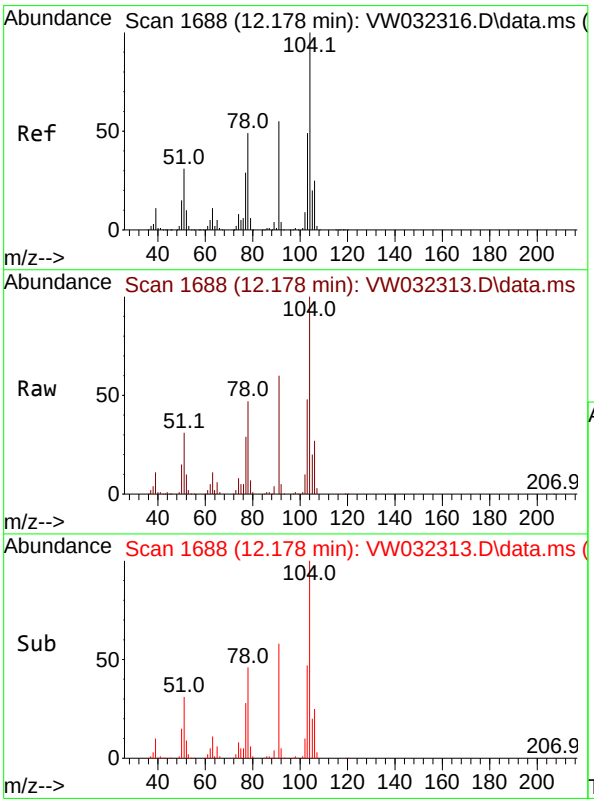
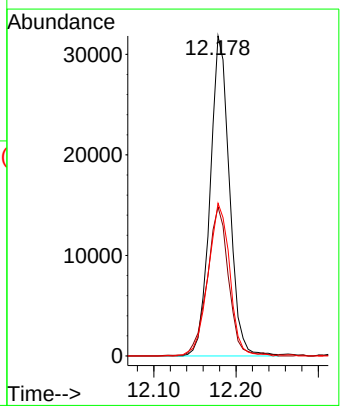


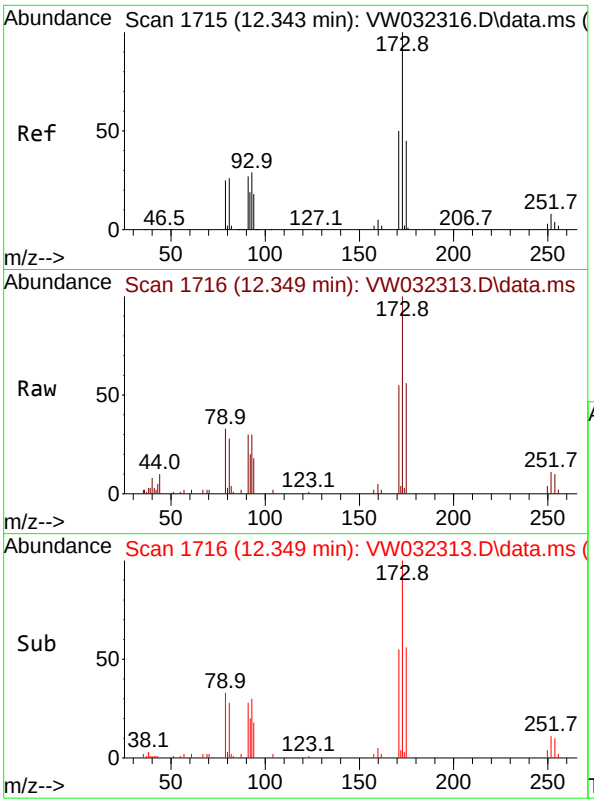


#70
Styrene
Concen: 4.719 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:104 Resp: 52147

Ion	Ratio	Lower	Upper
104	100		
78	51.5	41.6	62.4
103	53.5	44.8	67.2

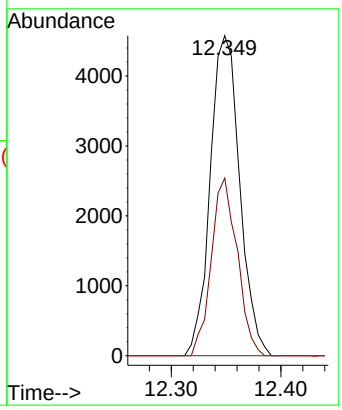




#71
Bromoform
Concen: 4.557 ug/l
RT: 12.349 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:173 Resp: 856

Ion	Ratio	Lower	Upper
173	100		
175	48.9	24.9	74.7
254	0.0	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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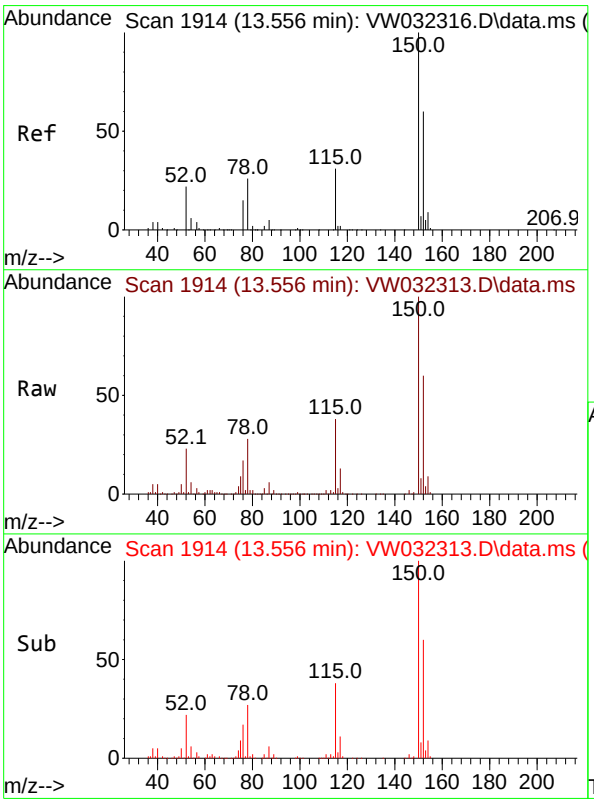
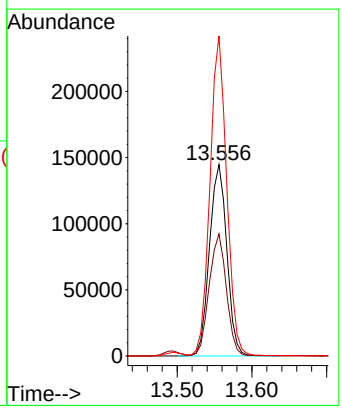
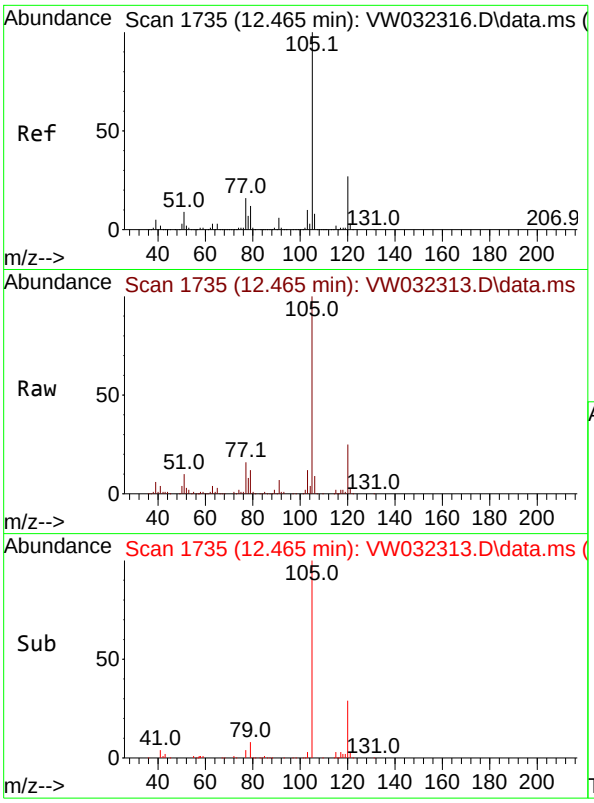


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:152 Resp: 234250

Ion	Ratio	Lower	Upper
152	100		
115	63.3	31.8	95.4
150	160.2	0.0	343.0

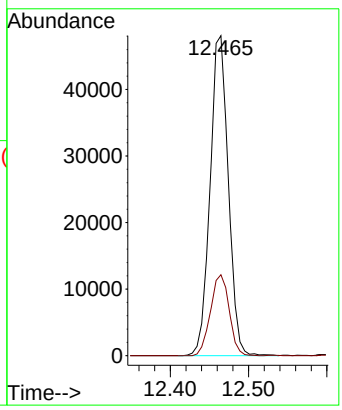




#73
Isopropylbenzene
Concen: 4.847 ug/l
RT: 12.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:105 Resp: 7767

Ion	Ratio	Lower	Upper
105	100		
120	26.0	13.0	38.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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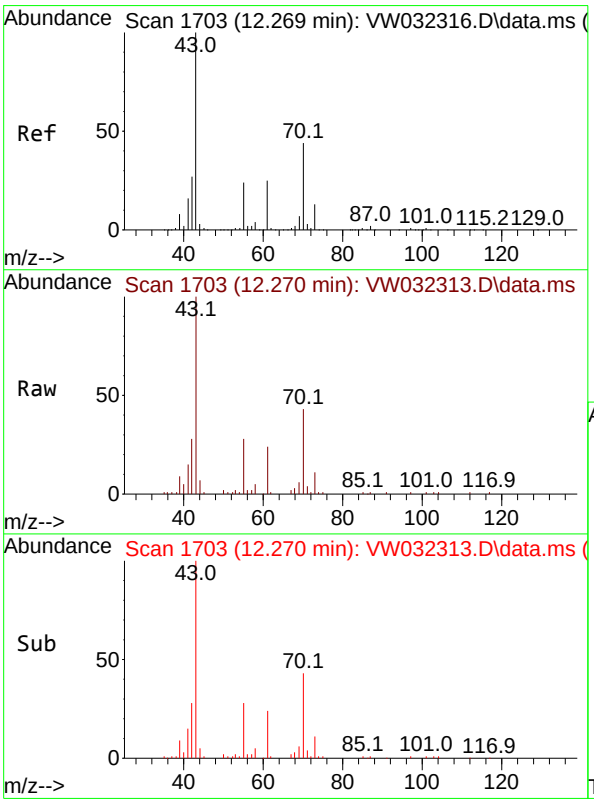
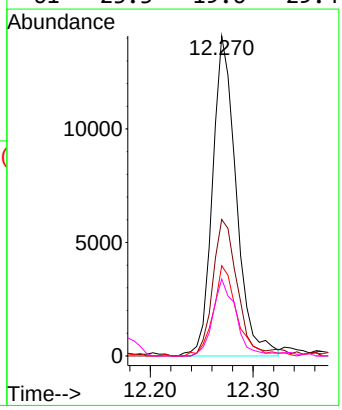
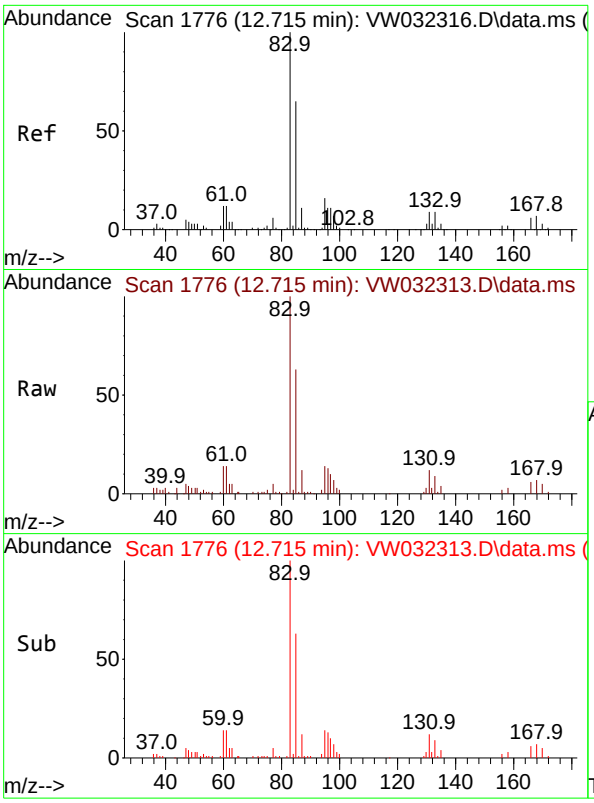


#74
N-amyl acetate
Concen: 4.416 ug/l
RT: 12.270 min Scan# 1703
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 43 Resp: 22577

Ion	Ratio	Lower	Upper
43	100		
70	43.3	35.3	52.9
55	28.4	19.9	29.9
61	23.3	19.6	29.4





#75
1,1,2,2-Tetrachloroethane
Concen: 5.102 ug/l
RT: 12.715 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

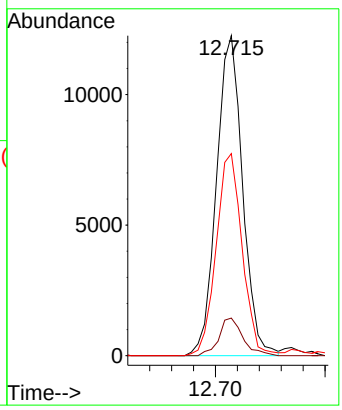
Tgt Ion: 83 Resp: 2030

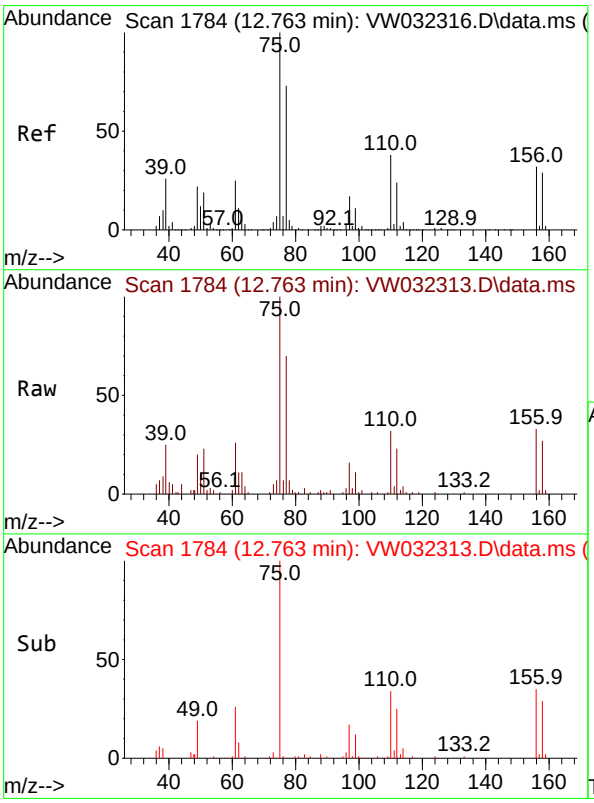
Ion	Ratio	Lower	Upper
83	100		
131	10.8	5.1	15.4
85	62.9	32.2	96.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

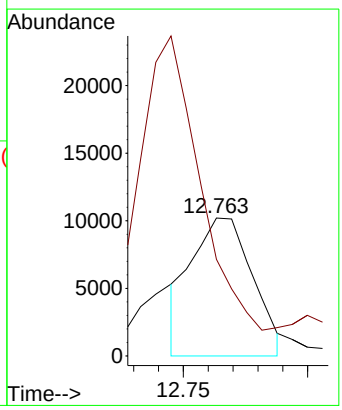


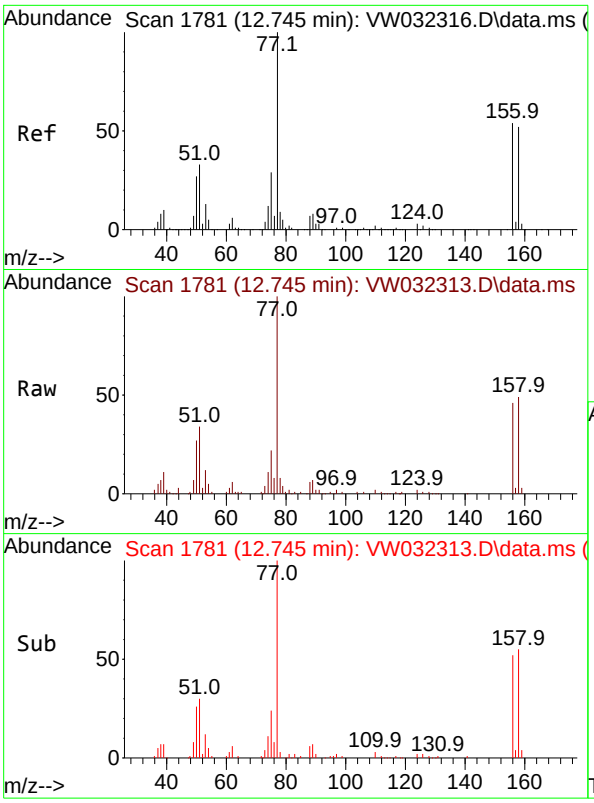


#76
1,2,3-Trichloropropane
Concen: 5.665 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 75 Resp: 17510

Ion	Ratio	Lower	Upper
75	100		
77	251.5	141.7	425.1

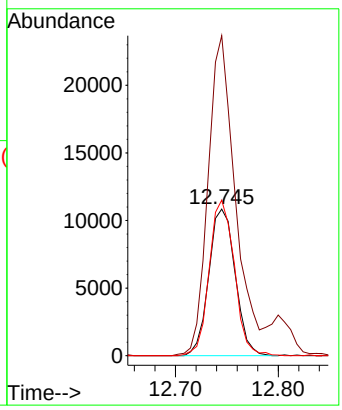




#77
Bromobenzene
Concen: 4.999 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:156 Resp: 1931

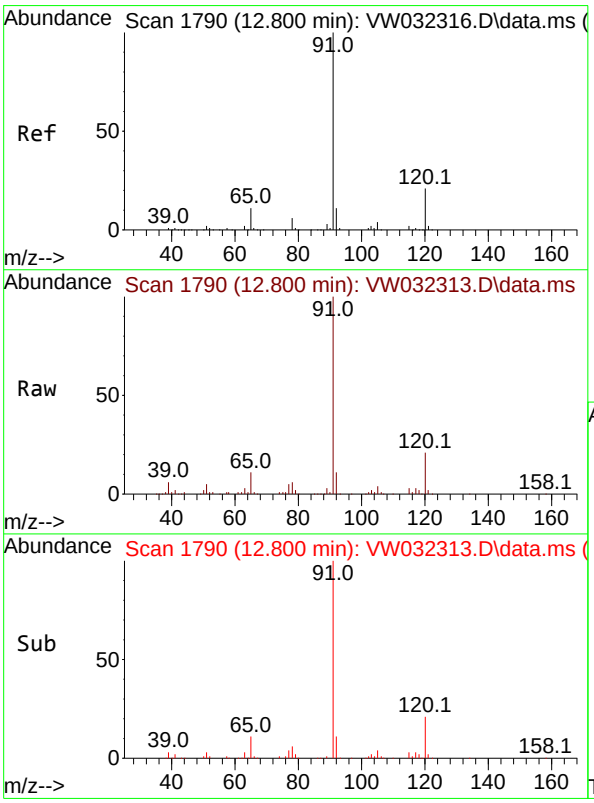
Ion	Ratio	Lower	Upper
156	100		
77	228.1	98.6	295.7
158	101.1	48.4	145.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

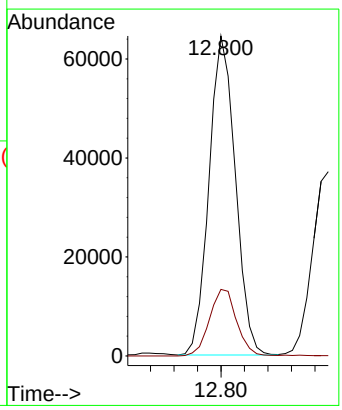
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

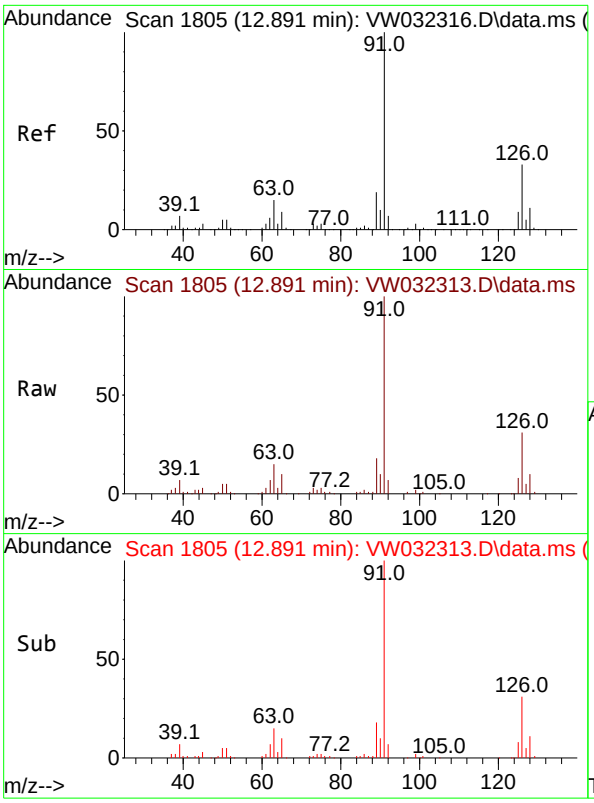


#78
n-propylbenzene
Concen: 5.016 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 91 Resp: 100413

Ion	Ratio	Lower	Upper
91	100		
120	21.5	11.8	35.4





#79
2-Chlorotoluene
Concen: 4.984 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 91 Resp: 6100

Ion	Ratio	Lower	Upper
91	100		
126	31.7	16.6	49.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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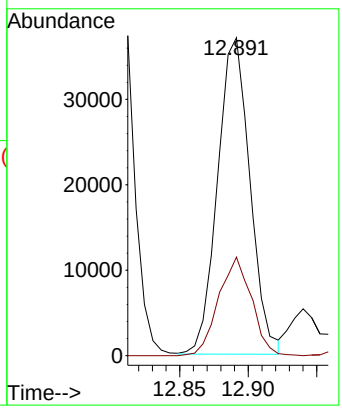
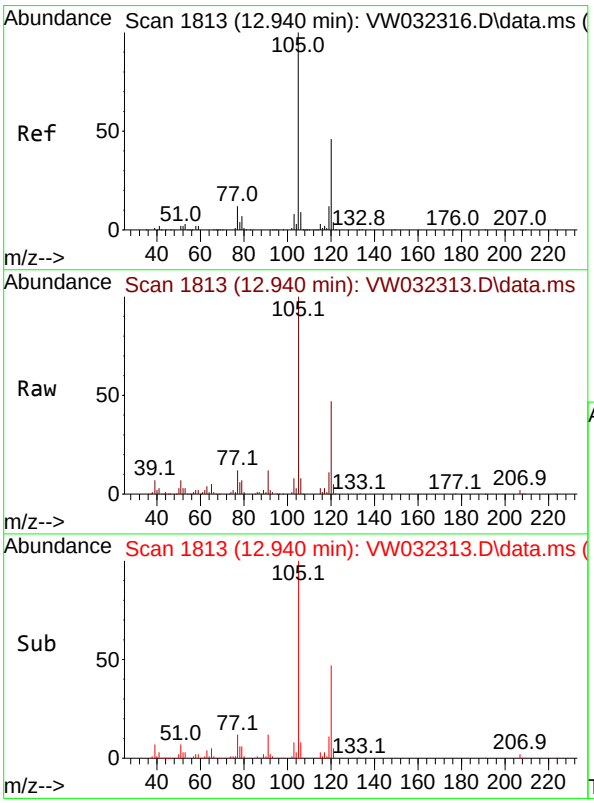
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

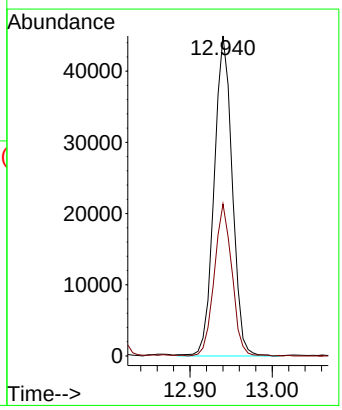


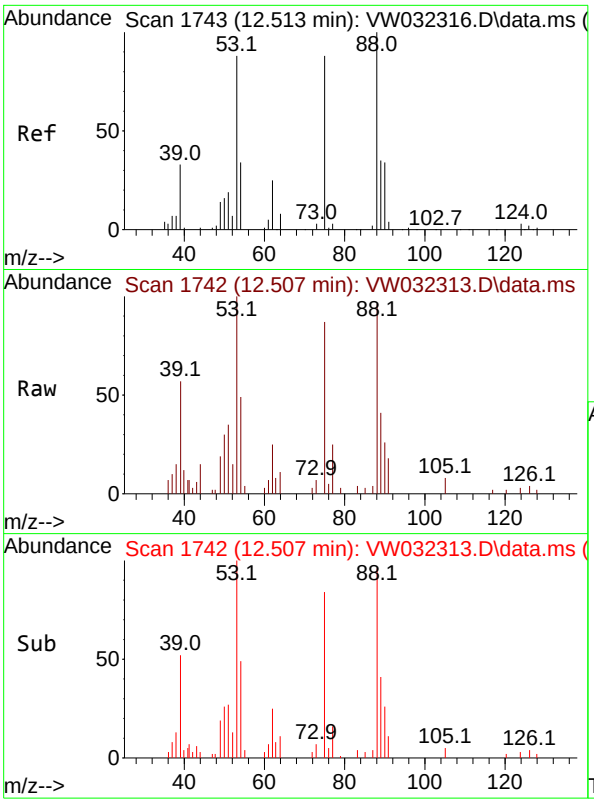


#80
1,3,5-Trimethylbenzene
Concen: 4.969 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:105 Resp: 68864

Ion	Ratio	Lower	Upper
105	100		
120	46.2	24.8	74.4





#81
trans-1,4-Dichloro-2-butene
Concen: 4.059 ug/l
RT: 12.507 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 75 Resp: 493

Ion	Ratio	Lower	Upper
75	100		
53	131.1	91.0	136.6
89	53.2	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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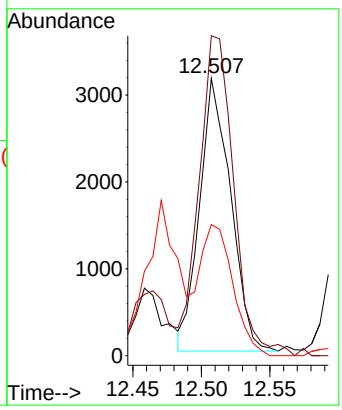
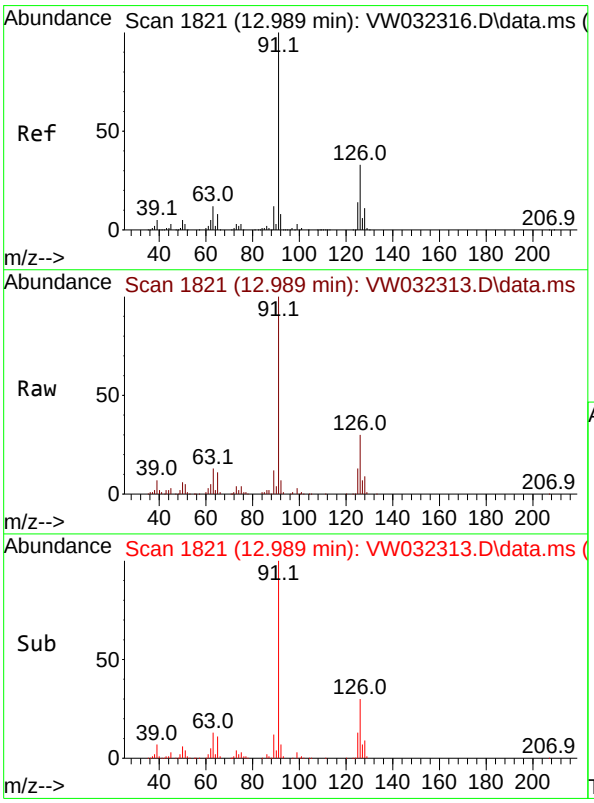
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

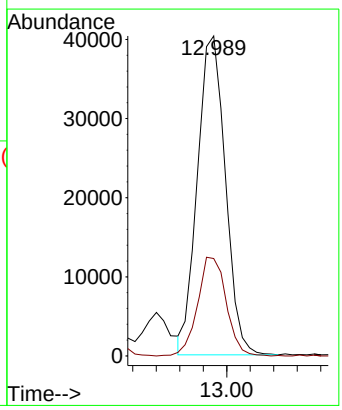


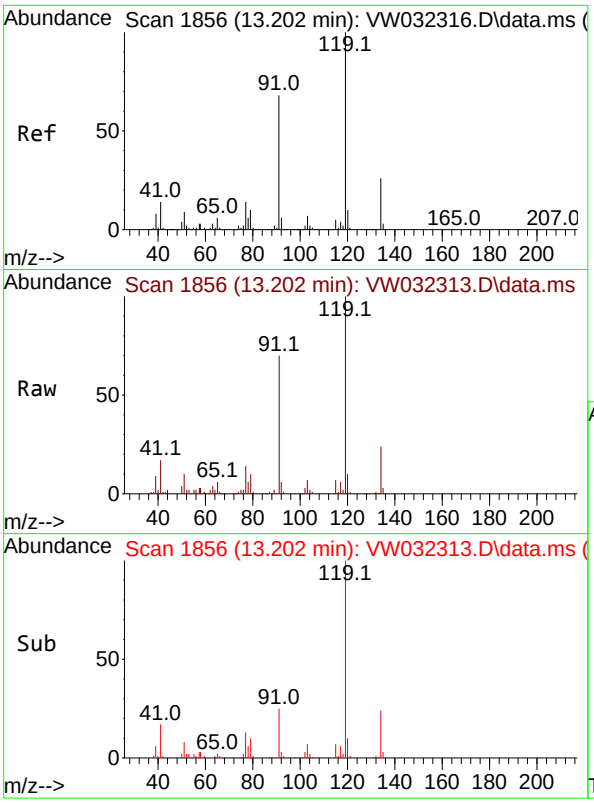


#82
4-Chlorotoluene
Concen: 5.124 ug/l
RT: 12.989 min Scan# 1821
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 91 Resp: 66681

Ion	Ratio	Lower	Upper
91	100		
126	31.7	16.1	48.2





#83
tert-Butylbenzene
Concen: 4.914 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:119 Resp: 5587

Ion	Ratio	Lower	Upper
119	100		
91	71.8	33.8	101.3
134	25.9	12.5	37.5

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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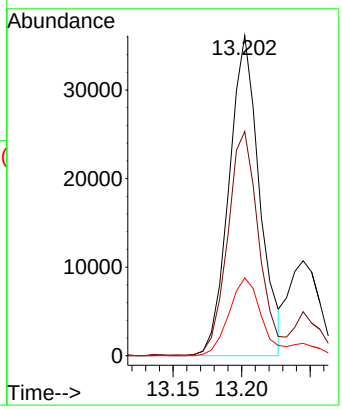
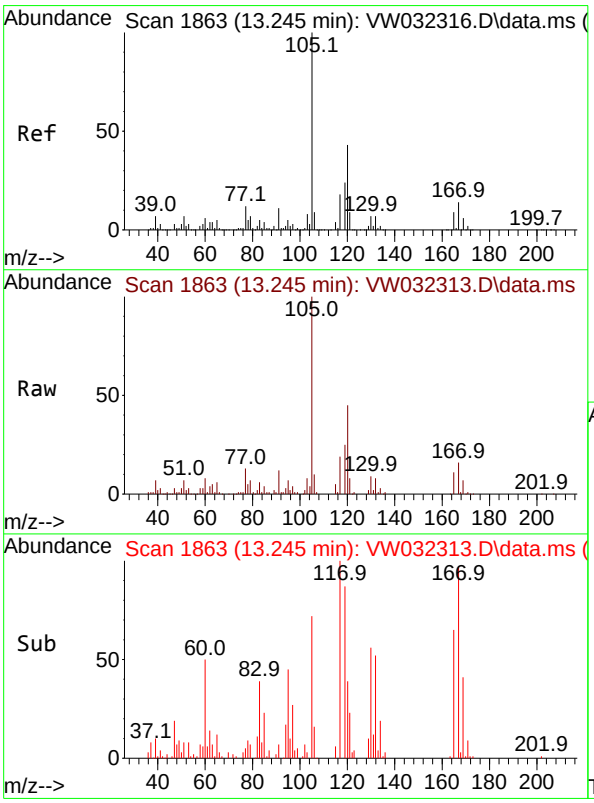
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

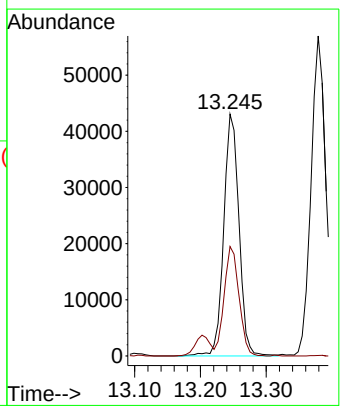


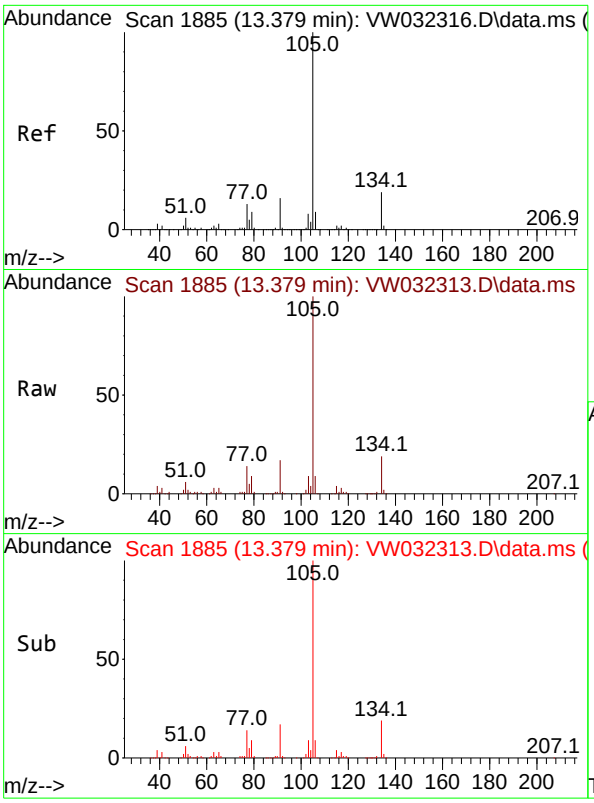


#84
1,2,4-Trimethylbenzene
Concen: 4.943 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:105 Resp: 69654

Ion	Ratio	Lower	Upper
105	100		
120	43.9	22.1	66.3

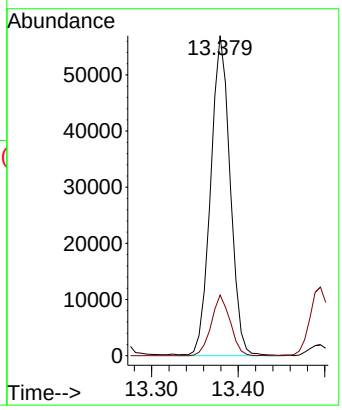




#85
sec-Butylbenzene
Concen: 5.134 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:105 Resp: 8921

Ion	Ratio	Lower	Upper
105	100		
134	18.3	10.1	30.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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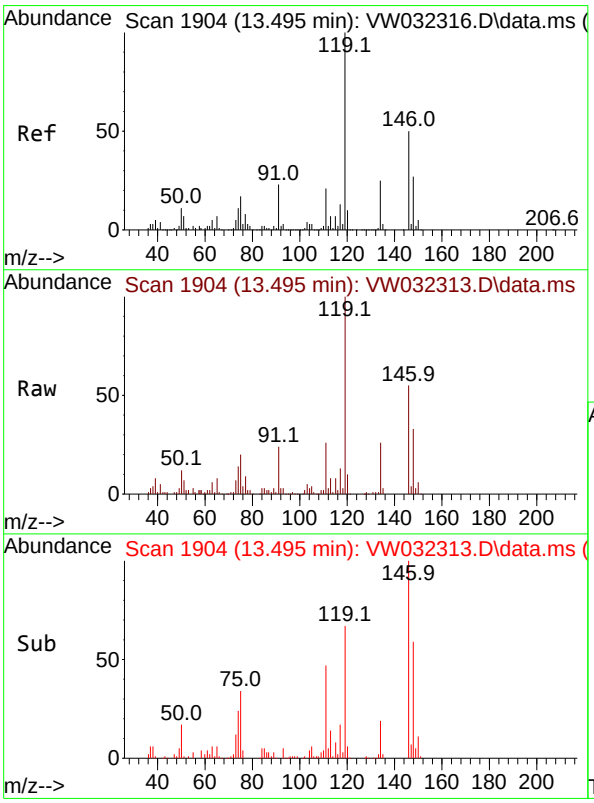
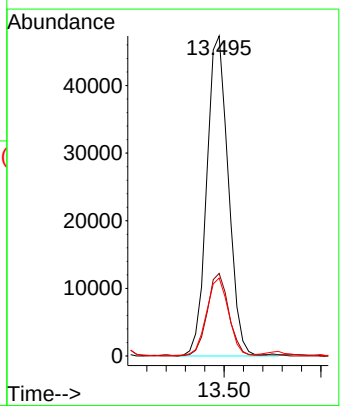
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

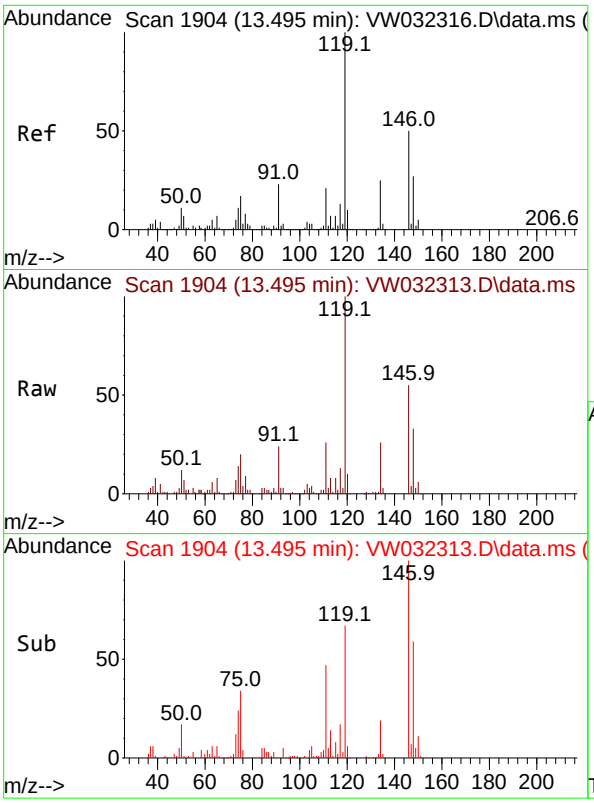


#86
p-Isopropyltoluene
Concen: 5.090 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:119 Resp: 73385

Ion	Ratio	Lower	Upper
119	100		
134	25.8	12.6	37.6
91	24.7	12.4	37.0

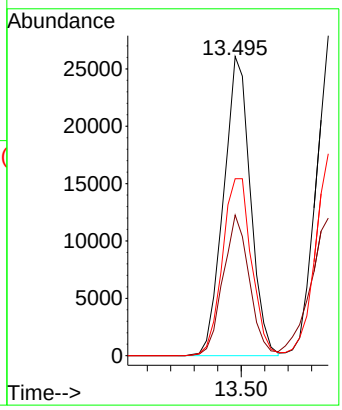




#87
1,3-Dichlorobenzene
Concen: 5.284 ug/l
RT: 13.495 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:146 Resp: 4133

Ion	Ratio	Lower	Upper
146	100		
111	46.2	20.6	61.9
148	64.4	30.6	92.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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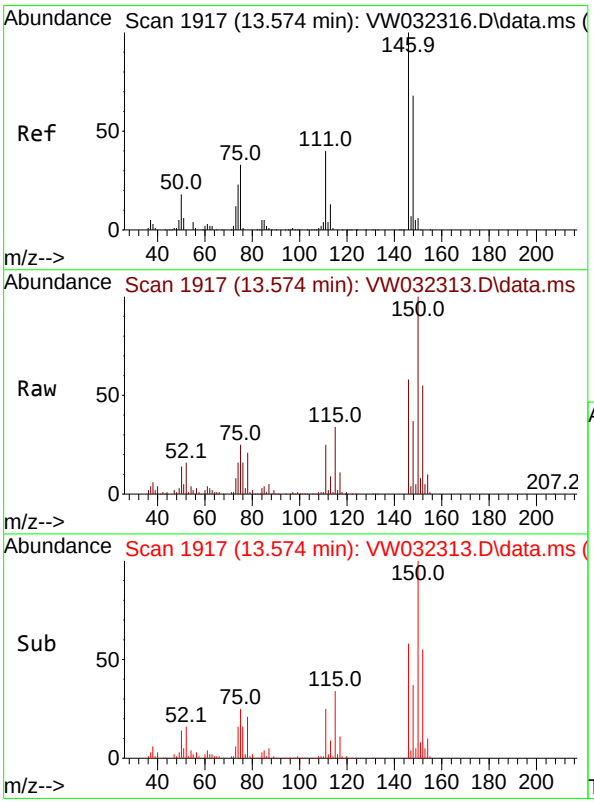
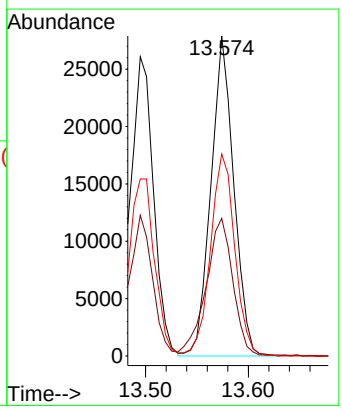
Supervised By :Semsettin Yesilyurt 10/03/2025

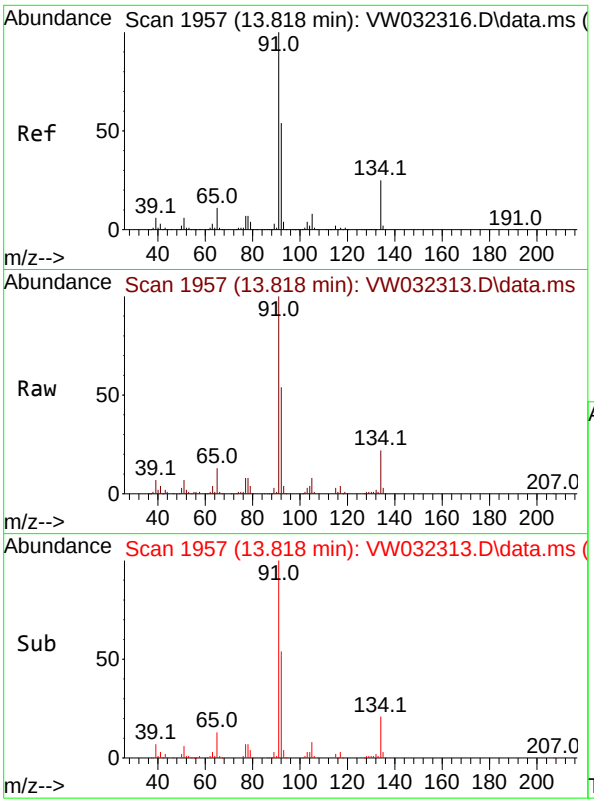


#88
1,4-Dichlorobenzene
Concen: 5.507 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:146 Resp: 43076

Ion	Ratio	Lower	Upper
146	100		
111	50.7	21.3	63.7
148	67.2	33.4	100.1

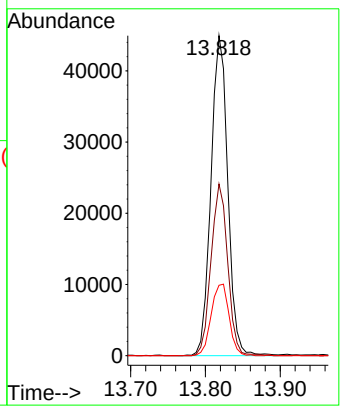




#89
n-Butylbenzene
Concen: 5.006 ug/l
RT: 13.818 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 91 Resp: 7046

Ion	Ratio	Lower	Upper
91	100		
92	53.1	27.0	81.0
134	23.8	13.1	39.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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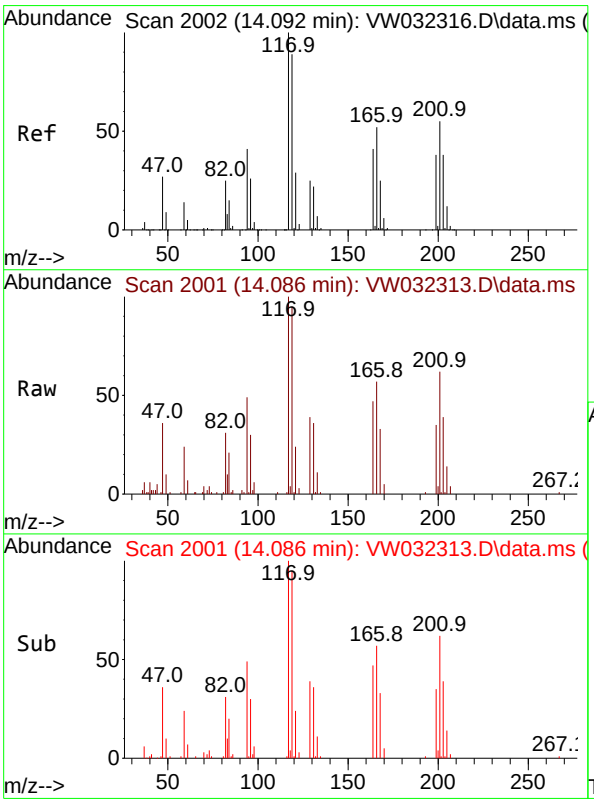
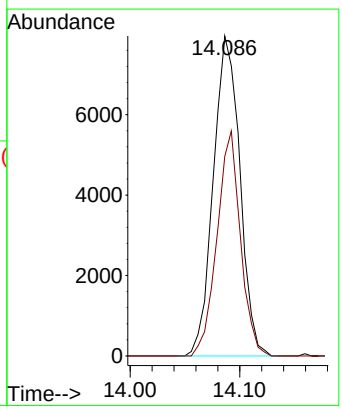
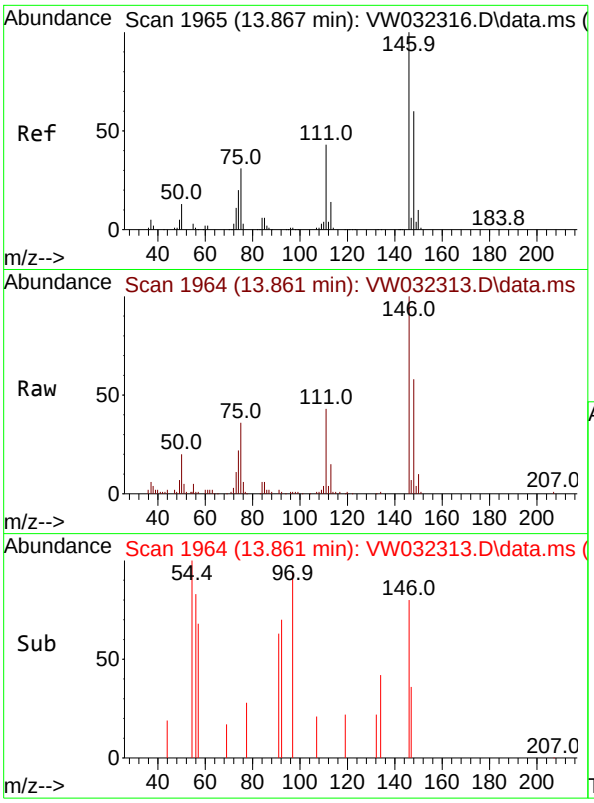


#90
Hexachloroethane
Concen: 5.178 ug/l
RT: 14.086 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:117 Resp: 13382

Ion	Ratio	Lower	Upper
117	100		
201	62.2	32.8	98.4

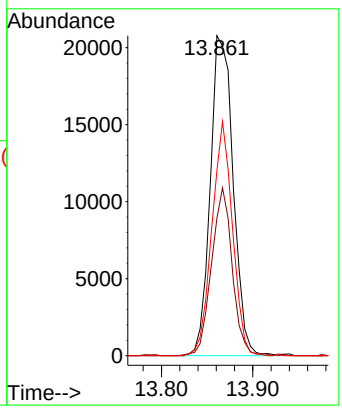




#91
1,2-Dichlorobenzene
Concen: 5.104 ug/l
RT: 13.861 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:146 Resp: 3609

Ion	Ratio	Lower	Upper
146	100		
111	47.4	23.4	70.0
148	65.9	34.1	102.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
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Reviewed By :Mahesh Dadoda 10/03/2025
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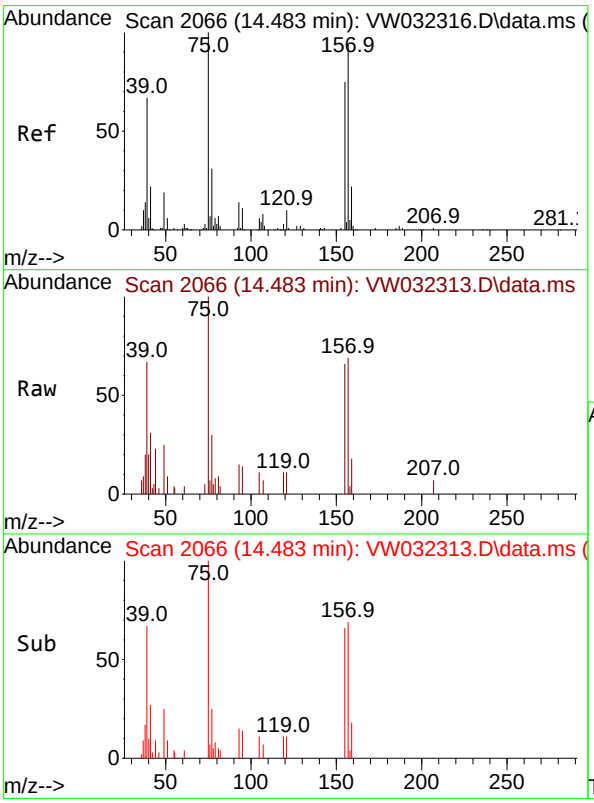
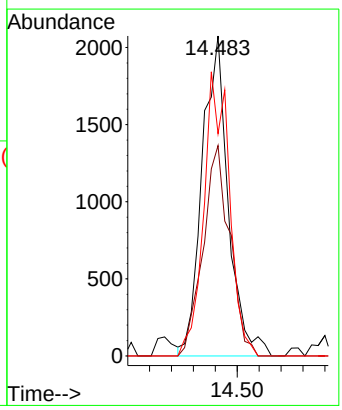
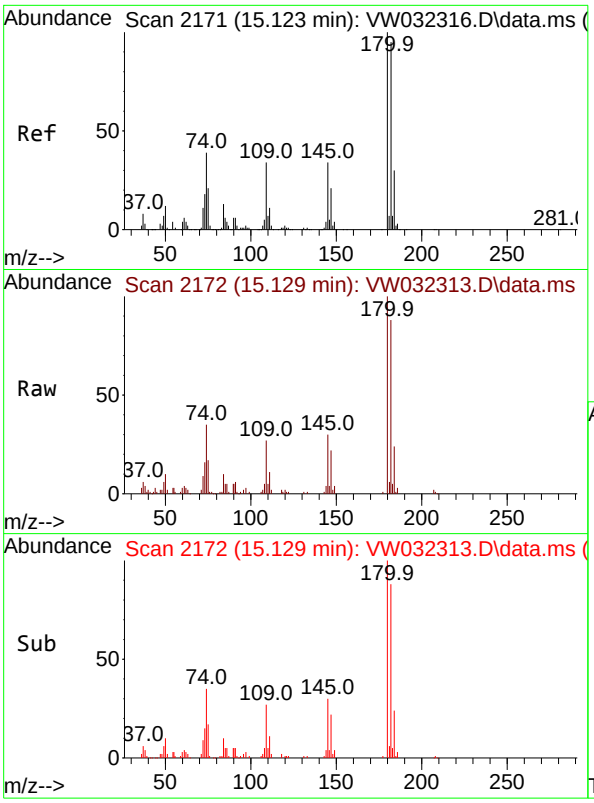


#92
1,2-Dibromo-3-Chloropropane
Concen: 4.914 ug/l
RT: 14.483 min Scan# 2066
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion: 75 Resp: 3424

Ion	Ratio	Lower	Upper
75	100		
155	67.6	40.8	122.5
157	87.1	51.8	155.4

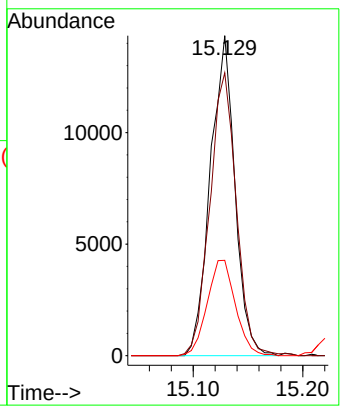




#93
1,2,4-Trichlorobenzene
Concen: 5.279 ug/l
RT: 15.129 min Scan# 2
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:180 Resp: 2238

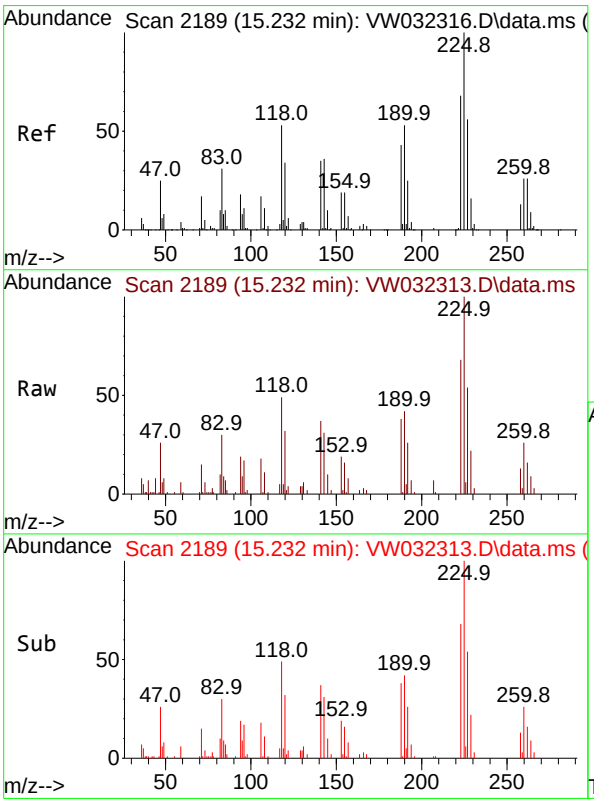
Ion	Ratio	Lower	Upper
180	100		
182	94.9	47.4	142.2
145	34.2	16.4	49.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

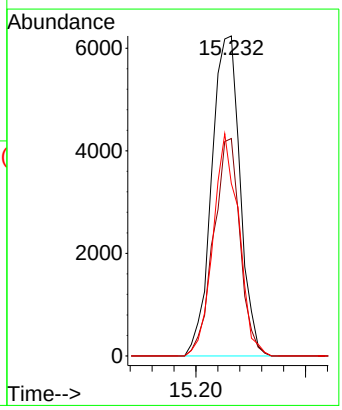
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

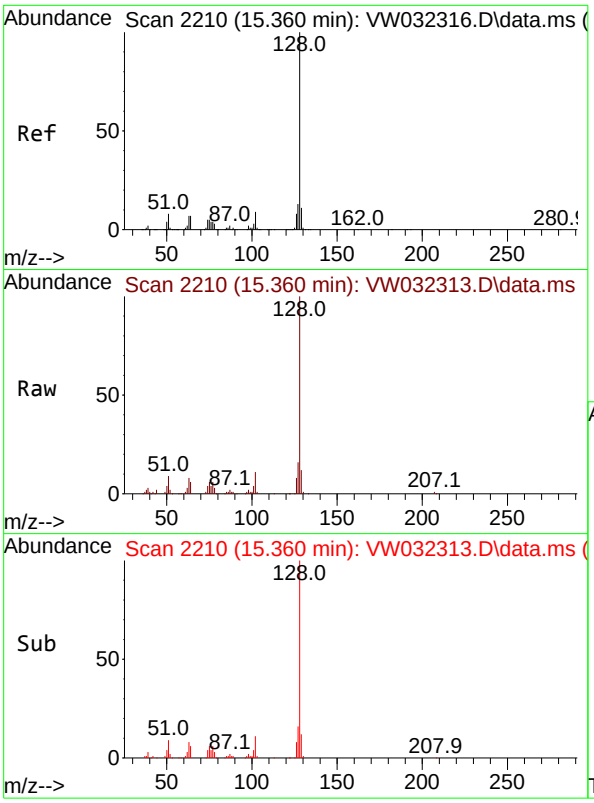


#94
Hexachlorobutadiene
Concen: 5.775 ug/l
RT: 15.232 min Scan# 2189
Delta R.T. 0.006 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:225 Resp: 11196

Ion	Ratio	Lower	Upper
225	100		
223	63.5	29.8	89.3
227	62.7	30.5	91.5





#95
Naphthalene
Concen: 4.481 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

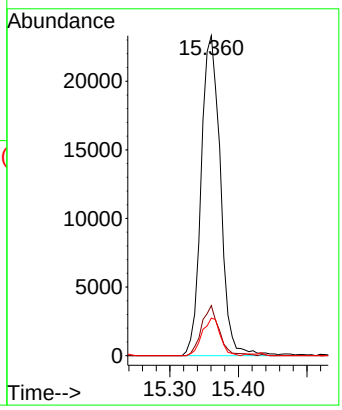
Tgt Ion:128 Resp: 4562

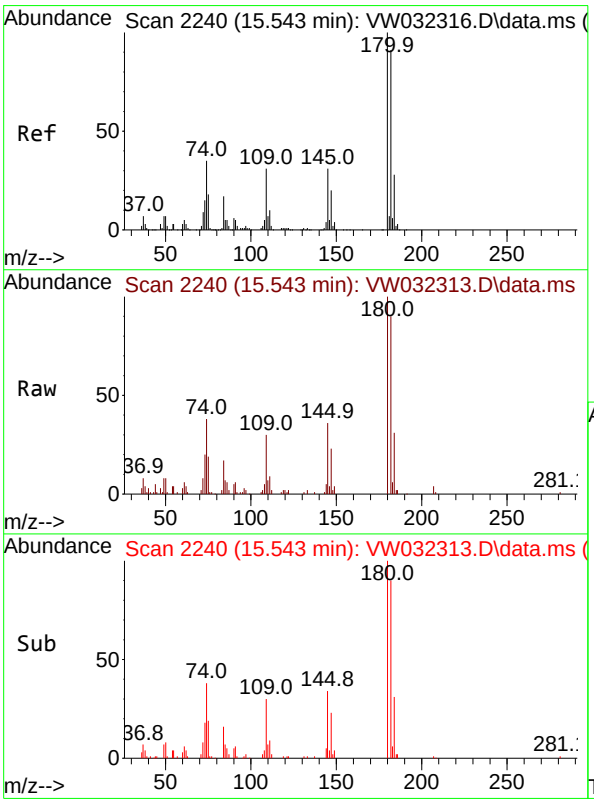
Ion	Ratio	Lower	Upper
128	100		
127	14.4	10.6	16.0
129	11.1	8.4	12.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

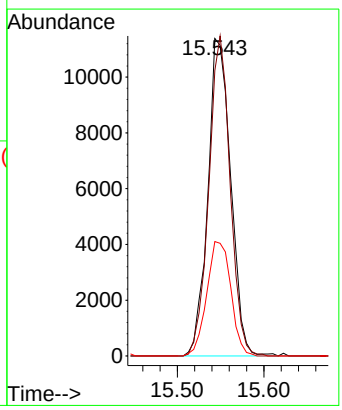




#96
1,2,3-Trichlorobenzene
Concen: 5.236 ug/l
RT: 15.543 min Scan# 2240
Delta R.T. 0.000 min
Lab File: VW032313.D
Acq: 01 Oct 2025 13:12

Tgt Ion:180 Resp: 20926

Ion	Ratio	Lower	Upper
180	100		
182	93.9	47.7	143.1
145	38.0	17.2	51.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032314.D
Acq On : 01 Oct 2025 13:34
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:13:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	280850	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	525265	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	471729	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	242027	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	42595	10.398	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	20.800%#		
35) Dibromofluoromethane	7.898	113	35230	10.357	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	20.720%#		
50) Toluene-d8	10.325	98	126526	10.078	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	20.160%#		
62) 4-Bromofluorobenzene	12.617	95	47150	9.936	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	19.880%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.039	85	19283	10.941	ug/l	98
3) Chloromethane	2.259	50	29583	10.879	ug/l	97
4) Vinyl Chloride	2.405	62	35737	11.008	ug/l	98
5) Bromomethane	2.826	94	26494	11.105	ug/l	90
6) Chloroethane	2.972	64	22994	10.728	ug/l	98
7) Trichlorofluoromethane	3.308	101	25472	10.479	ug/l	99
8) Diethyl Ether	3.722	74	22779	10.814	ug/l	86
9) 1,1,2-Trichlorotrifluo...	4.100	101	31968	10.965	ug/l	94
10) Methyl Iodide	4.307	142	43646	10.492	ug/l	98
11) Tert butyl alcohol	5.216	59	17352	55.962	ug/l #	80
12) 1,1-Dichloroethene	4.082	96	34142	10.786	ug/l	97
13) Acrolein	3.929	56	27390	54.429	ug/l	97
14) Allyl chloride	4.710	41	55724	10.423	ug/l	89
15) Acrylonitrile	5.405	53	56775	51.811	ug/l	99
16) Acetone	4.161	43	64630	56.980	ug/l	98
17) Carbon Disulfide	4.423	76	88918	10.296	ug/l	98
18) Methyl Acetate	4.716	43	33520	10.316	ug/l	98
19) Methyl tert-butyl Ether	5.466	73	65224	10.462	ug/l	97
20) Methylene Chloride	4.960	84	59087	11.634	ug/l	94
21) trans-1,2-Dichloroethene	5.460	96	35963	10.262	ug/l	95
22) Diisopropyl ether	6.344	45	117148	10.536	ug/l #	94
23) Vinyl Acetate	6.283	43	372258	50.126	ug/l	98
24) 1,1-Dichloroethane	6.246	63	70852	10.489	ug/l	98
25) 2-Butanone	7.197	43	82281	53.263	ug/l	97
26) 2,2-Dichloropropane	7.191	77	36712	10.625	ug/l	99
27) cis-1,2-Dichloroethene	7.191	96	42849	10.178	ug/l	93
28) Bromochloromethane	7.532	49	33043	10.397	ug/l	87
29) Tetrahydrofuran	7.557	42	49488	50.941	ug/l	96
30) Chloroform	7.691	83	71607	10.453	ug/l	98
31) Cyclohexane	7.971	56	62233	10.792	ug/l #	93
32) 1,1,1-Trichloroethane	7.886	97	51138	10.534	ug/l	97
36) 1,1-Dichloropropene	8.099	75	49414	10.293	ug/l	98
37) Ethyl Acetate	7.276	43	33130	10.368	ug/l	99
38) Carbon Tetrachloride	8.087	117	46310	10.251	ug/l	94
39) Methylcyclohexane	9.343	83	56991	9.842	ug/l	92
40) Benzene	8.337	78	156957	10.431	ug/l	94

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032314.D
Acq On : 01 Oct 2025 13:34
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:13:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	Methacrylonitrile	7.502	41	16618	9.650	ug/l		98
42)	1,2-Dichloroethane	8.416	62	52201	10.602	ug/l		99
43)	Isopropyl Acetate	8.441	43	56692	10.001	ug/l		98
44)	Trichloroethene	9.105	130	36599	10.387	ug/l		87
45)	1,2-Dichloropropane	9.374	63	38953	10.371	ug/l		100
46)	Dibromomethane	9.465	93	24036	10.407	ug/l		94
47)	Bromodichloromethane	9.654	83	54338	10.286	ug/l		99
48)	Methyl methacrylate	9.447	41	27343	9.921	ug/l		94
49)	1,4-Dioxane	9.465	88	6100	193.232	ug/l	#	64
51)	4-Methyl-2-Pentanone	10.215	43	170455	51.916	ug/l		98
52)	Toluene	10.392	92	95076	10.146	ug/l		99
53)	t-1,3-Dichloropropene	10.611	75	50624	9.878	ug/l		99
54)	cis-1,3-Dichloropropene	10.081	75	59970	10.158	ug/l		97
55)	1,1,2-Trichloroethane	10.794	97	32248	10.447	ug/l		95
56)	Ethyl methacrylate	10.648	69	42126	9.750	ug/l		93
57)	1,3-Dichloropropane	10.934	76	57249	10.501	ug/l		99
58)	2-Chloroethyl Vinyl ether	9.928	63	104587	45.484	ug/l		95
59)	2-Hexanone	10.971	43	118088	50.996	ug/l		98
60)	Dibromochloromethane	11.129	129	34371	9.806	ug/l		97
61)	1,2-Dibromoethane	11.233	107	31025	10.308	ug/l		97
64)	Tetrachloroethene	10.867	164	30629	10.851	ug/l		95
65)	Chlorobenzene	11.660	112	107554	10.362	ug/l		95
66)	1,1,1,2-Tetrachloroethane	11.733	131	33104	10.240	ug/l		97
67)	Ethyl Benzene	11.733	91	175582	10.149	ug/l		95
68)	m/p-Xylenes	11.837	106	135895	20.370	ug/l		98
69)	o-Xylene	12.166	106	62715	10.052	ug/l		98
70)	Styrene	12.178	104	107824	9.899	ug/l		99
71)	Bromoform	12.349	173	19572	10.562	ug/l	#	92
73)	Isopropylbenzene	12.464	105	152894	9.234	ug/l		99
74)	N-amyl acetate	12.269	43	49718	9.412	ug/l		99
75)	1,1,2,2-Tetrachloroethane	12.714	83	41991	10.213	ug/l		100
76)	1,2,3-Trichloropropane	12.763	75	31741m	9.939	ug/l		
77)	Bromobenzene	12.745	156	38105	9.547	ug/l		84
78)	n-propylbenzene	12.800	91	194851	9.421	ug/l		97
79)	2-Chlorotoluene	12.891	91	124638	9.855	ug/l		98
80)	1,3,5-Trimethylbenzene	12.940	105	135870	9.490	ug/l		97
81)	trans-1,4-Dichloro-2-b...	12.513	75	11399	9.067	ug/l		91
82)	4-Chlorotoluene	12.989	91	132770	9.874	ug/l		99
83)	tert-Butylbenzene	13.202	119	113595	9.669	ug/l		99
84)	1,2,4-Trimethylbenzene	13.245	105	139474	9.580	ug/l		98
85)	sec-Butylbenzene	13.379	105	171153	9.533	ug/l		99
86)	p-Isopropyltoluene	13.495	119	139064	9.335	ug/l		99
87)	1,3-Dichlorobenzene	13.495	146	79860	9.881	ug/l		94
88)	1,4-Dichlorobenzene	13.574	146	80973	10.019	ug/l		98
89)	n-Butylbenzene	13.818	91	136393	9.378	ug/l		99
90)	Hexachloroethane	14.086	117	25898	9.699	ug/l		98
91)	1,2-Dichlorobenzene	13.867	146	74980	10.262	ug/l		94
92)	1,2-Dibromo-3-Chloropr...	14.482	75	6955	9.662	ug/l		87
93)	1,2,4-Trichlorobenzene	15.129	180	40772	9.306	ug/l		95
94)	Hexachlorobutadiene	15.226	225	20605	10.287	ug/l		96
95)	Naphthalene	15.360	128	92896	8.829	ug/l		99
96)	1,2,3-Trichlorobenzene	15.555	180	39577	9.584	ug/l		96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032314.D
Acq On : 01 Oct 2025 13:34
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:13:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

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

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

ICAL Form

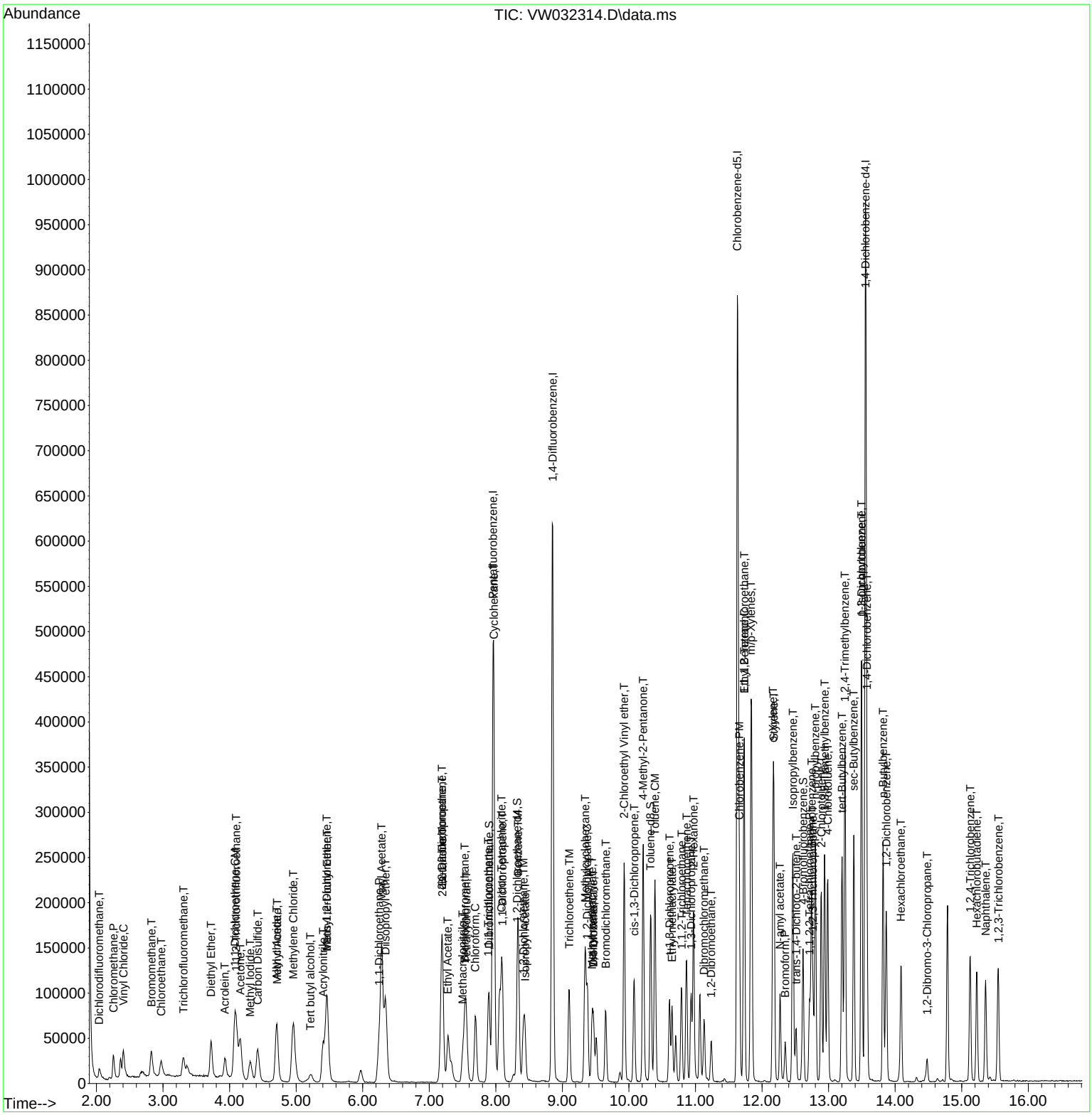
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032314.D
Acq On : 01 Oct 2025 13:34
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

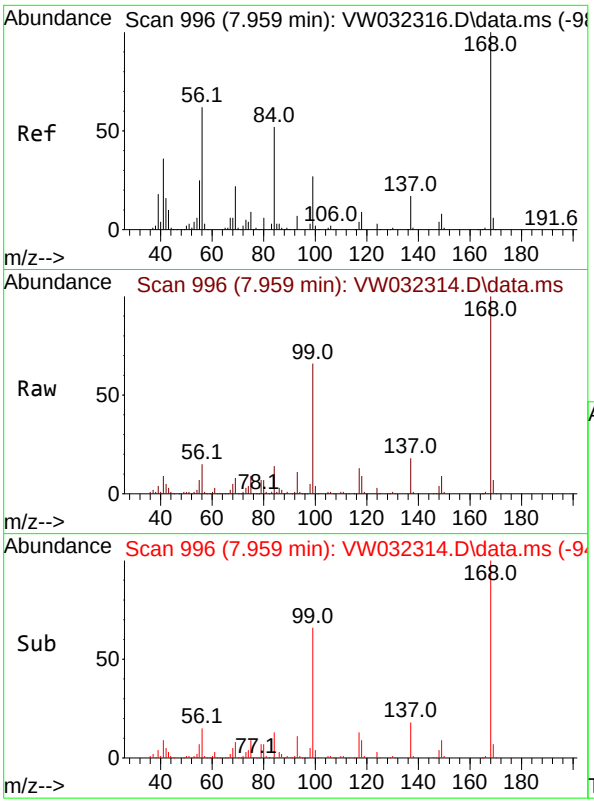
Quant Time: Oct 02 21:13:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

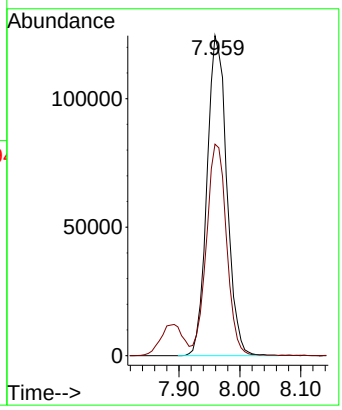




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:168 Resp: 28085

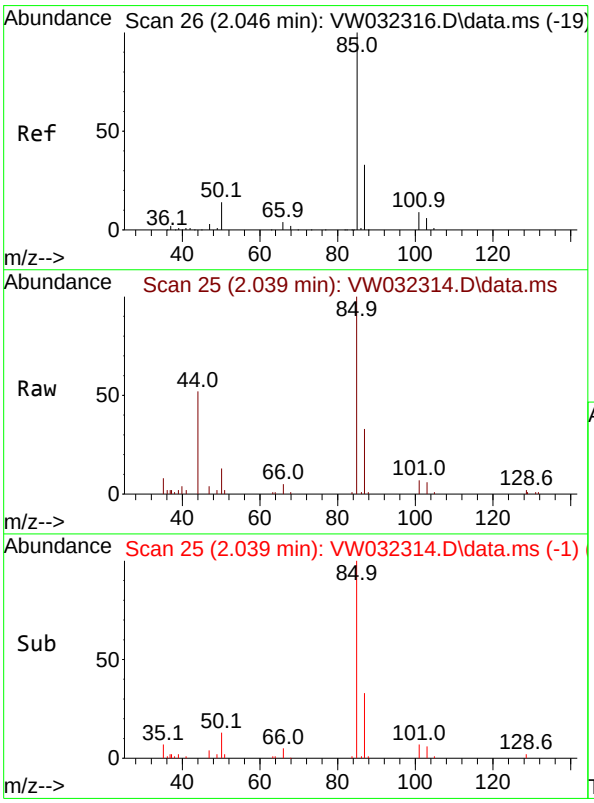
Ion	Ratio	Lower	Upper
168	100		
99	66.0	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

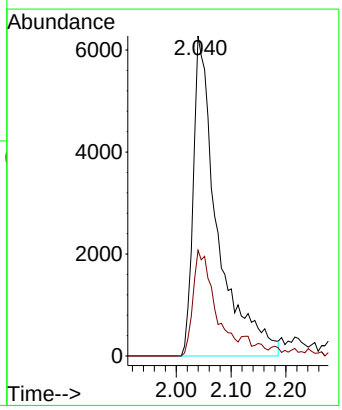
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

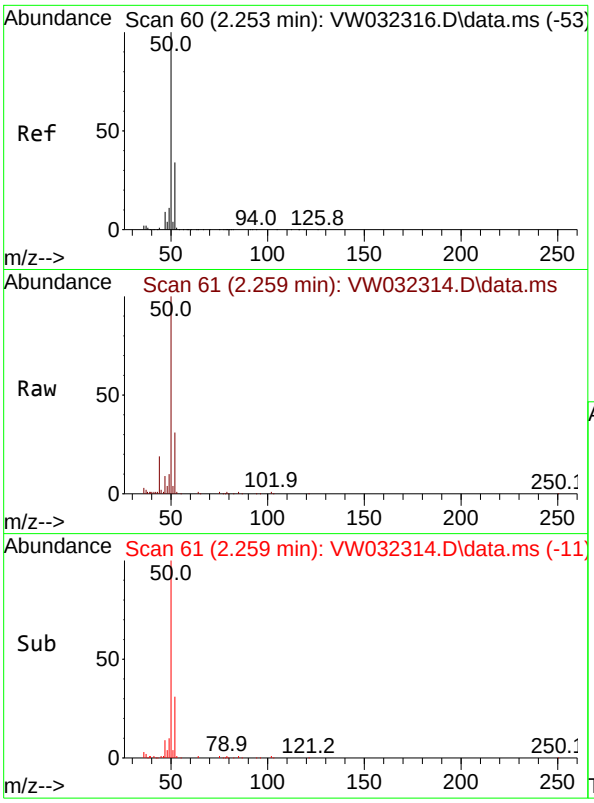


#2
Dichlorodifluoromethane
Concen: 10.941 ug/l
RT: 2.039 min Scan# 25
Delta R.T. -0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 85 Resp: 19283

Ion	Ratio	Lower	Upper
85	100		
87	33.0	17.2	51.6





#3
Chloromethane
Concen: 10.879 ug/l
RT: 2.259 min Scan# 6
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

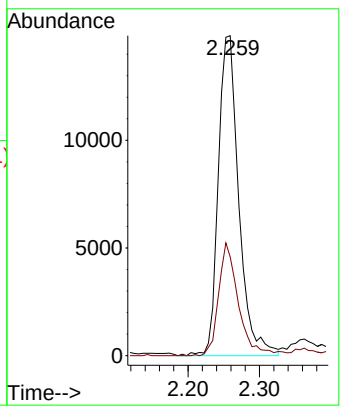
Tgt Ion: 50 Resp: 2958

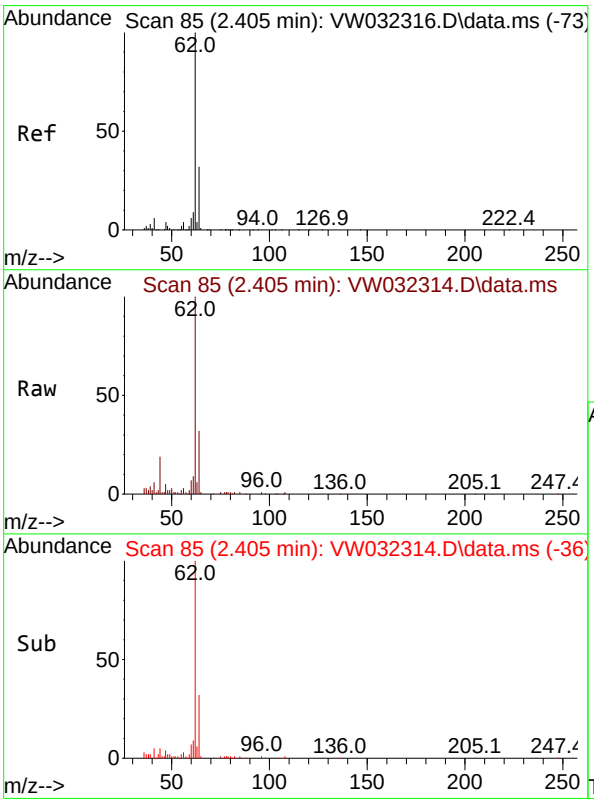
Ion	Ratio	Lower	Upper
50	100		
52	30.8	26.1	39.1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

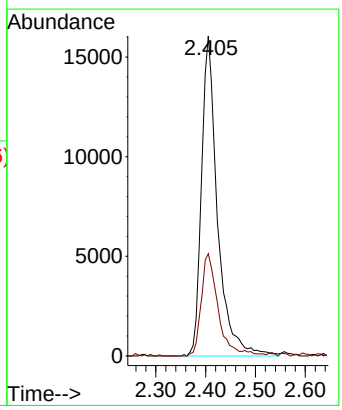


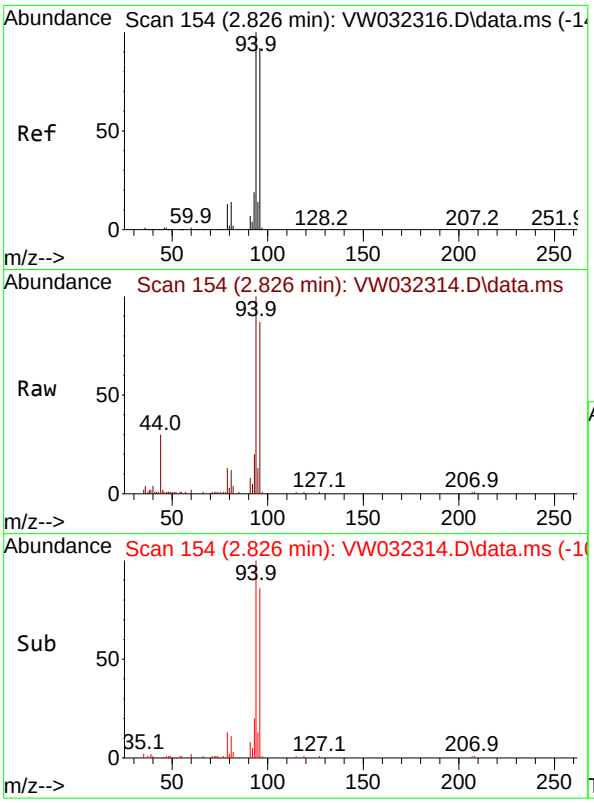


#4
Vinyl Chloride
Concen: 11.008 ug/l
RT: 2.405 min Scan# 85
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 62 Resp: 35737

Ion	Ratio	Lower	Upper
62	100		
64	31.9	24.8	37.2





#5
Bromomethane
Concen: 11.105 ug/l
RT: 2.826 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

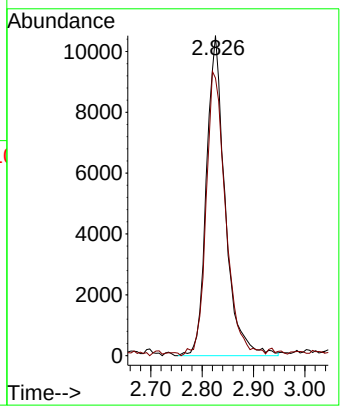
Tgt Ion: 94 Resp: 2649

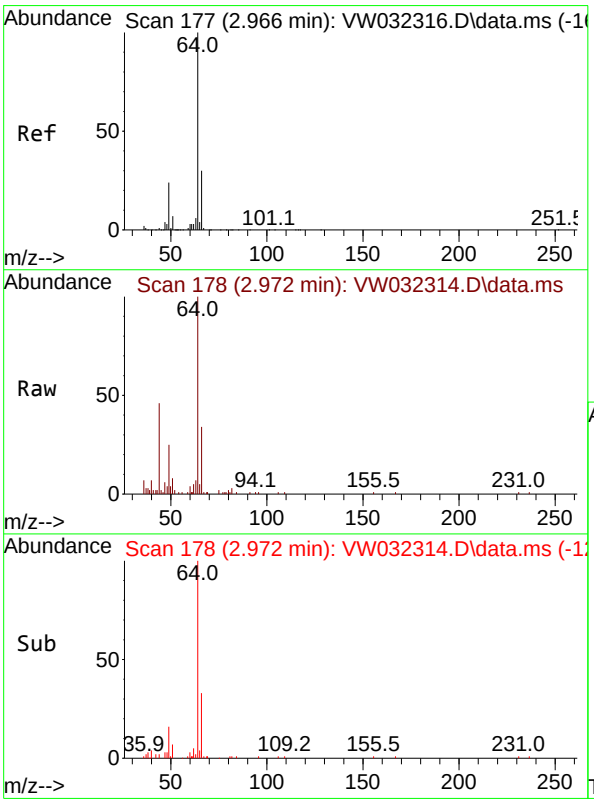
Ion	Ratio	Lower	Upper
94	100		
96	85.9	76.6	115.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

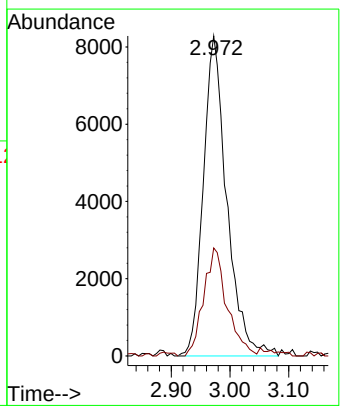


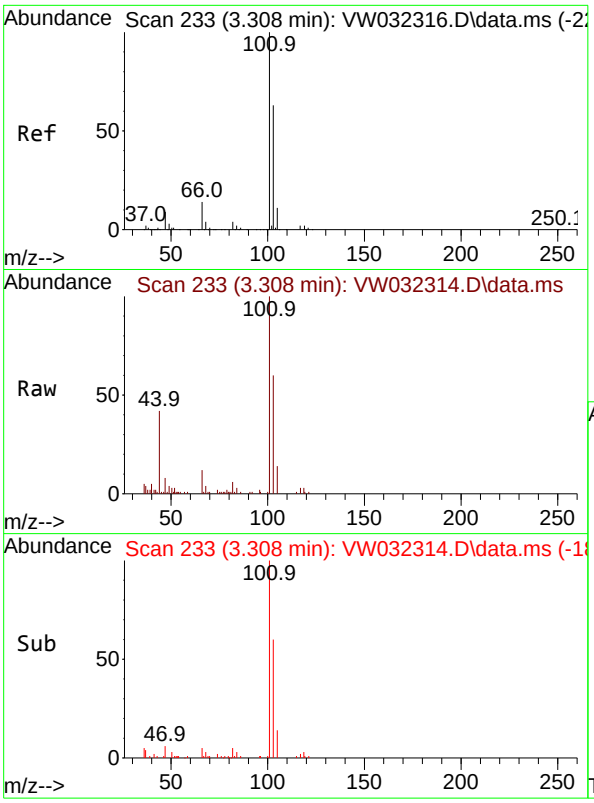


#6
Chloroethane
Concen: 10.728 ug/l
RT: 2.972 min Scan# 178
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 64 Resp: 22994

Ion	Ratio	Lower	Upper
64	100		
66	33.7	26.2	39.4





#7
Trichlorofluoromethane
Concen: 10.479 ug/l
RT: 3.308 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:101 Resp: 2547

Ion	Ratio	Lower	Upper
101	100		
103	60.5	47.8	71.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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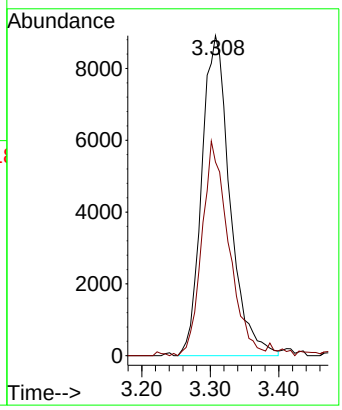
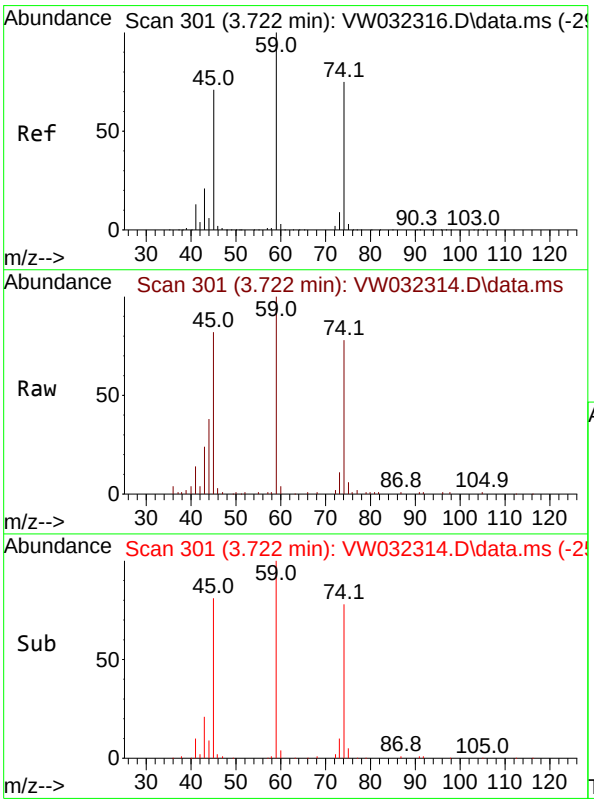
Supervised By :Semsettin Yesilyurt 10/03/2025

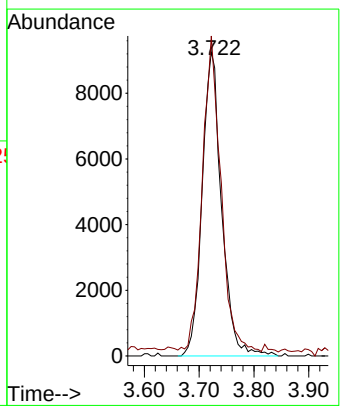


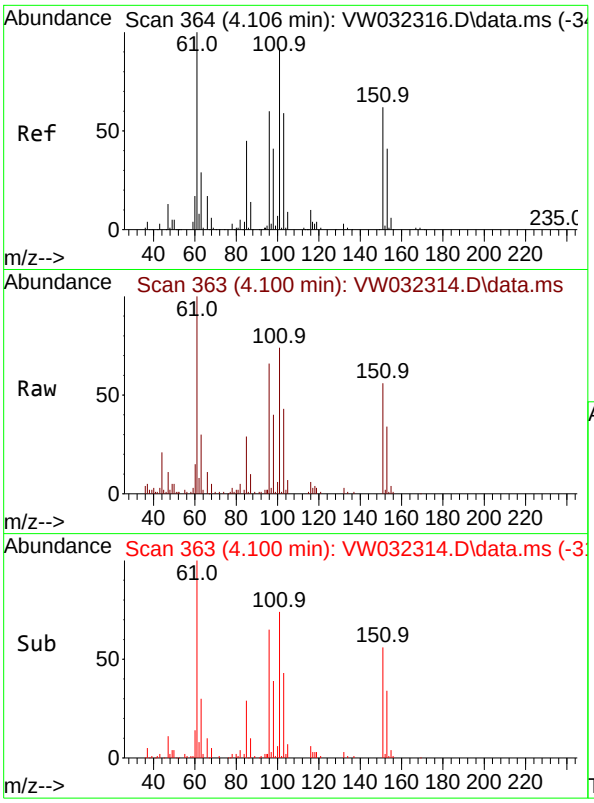


#8
Diethyl Ether
Concen: 10.814 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 74 Resp: 22779

Ion	Ratio	Lower	Upper
74	100		
45	98.9	43.1	129.4





#9
1,1,2-Trichlorotrifluoroethane
Concen: 10.965 ug/l
RT: 4.100 min Scan# 3
Delta R.T. -0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:101 Resp: 3196

Ion	Ratio	Lower	Upper
101	100		
85	43.1	37.1	55.7
151	70.9	61.5	92.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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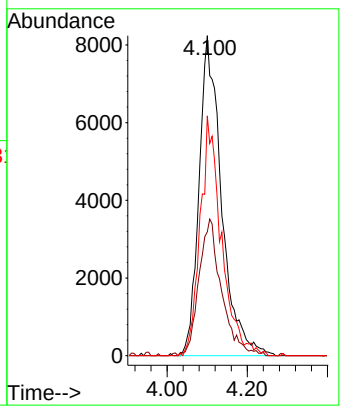
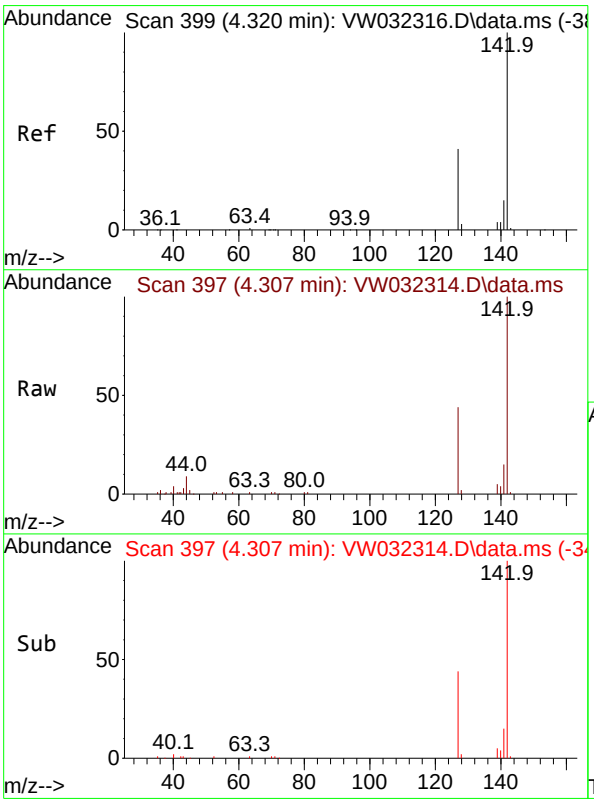
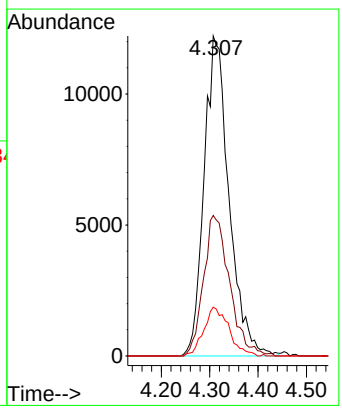


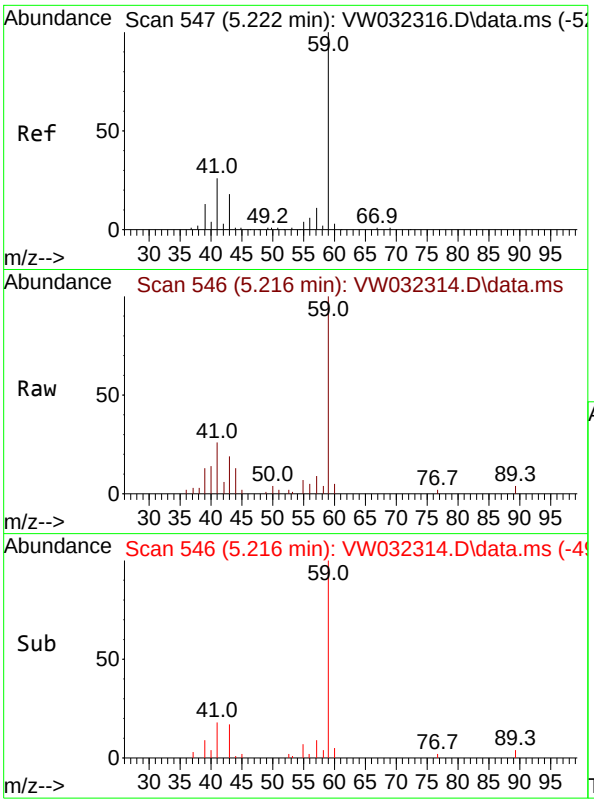


#10
Methyl Iodide
Concen: 10.492 ug/l
RT: 4.307 min Scan# 397
Delta R.T. -0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:142 Resp: 43646

Ion	Ratio	Lower	Upper
142	100		
127	45.9	38.2	57.2
141	15.4	12.2	18.2

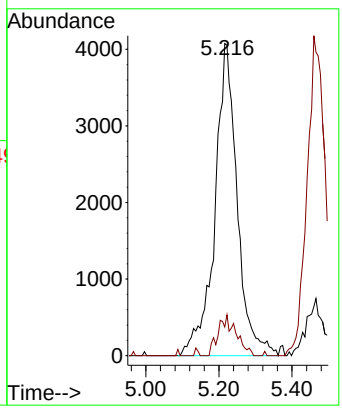




#11
Tert butyl alcohol
Concen: 55.962 ug/l
RT: 5.216 min Scan# 54
Delta R.T. -0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 59 Resp: 1735

Ion	Ratio	Lower	Upper
59	100		
57	4.4	9.8	14.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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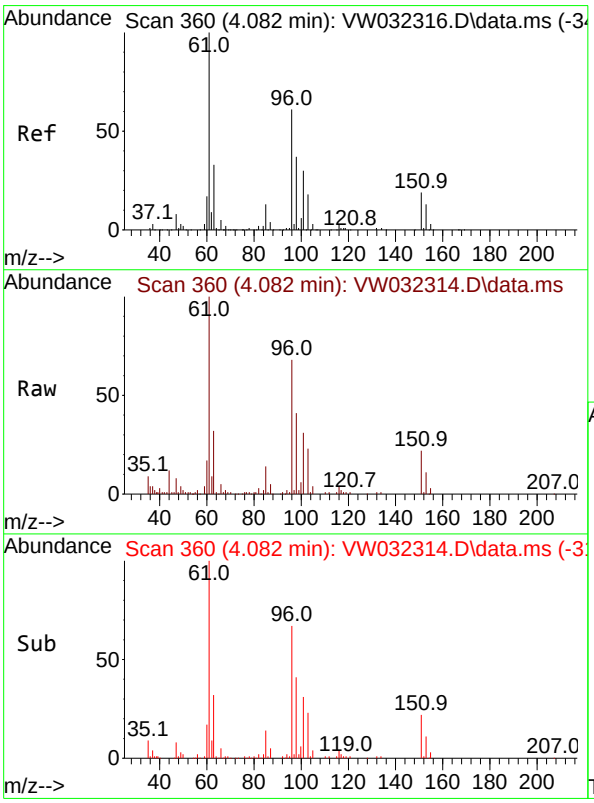
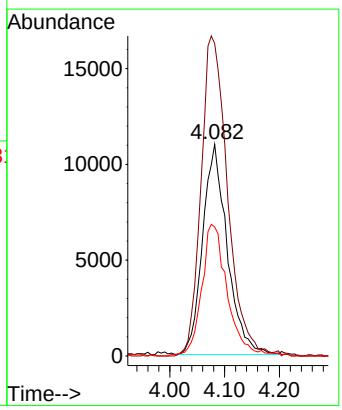
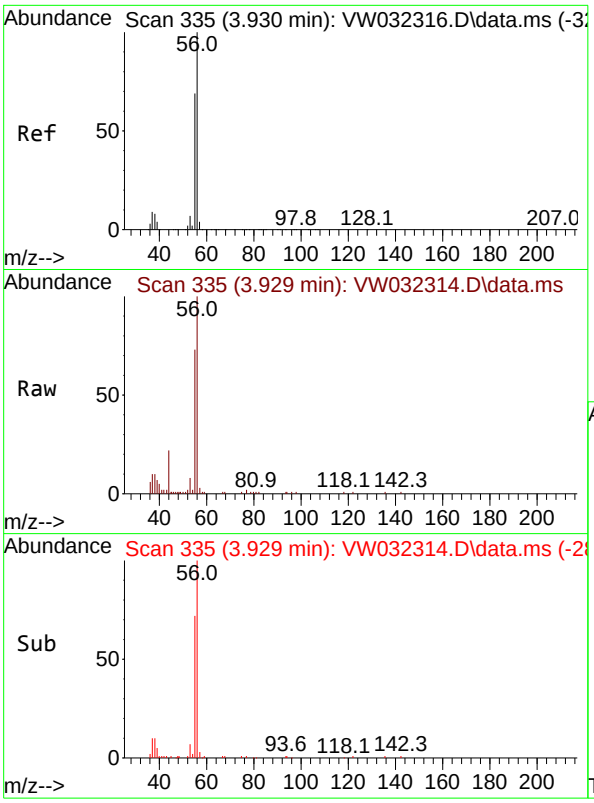


#12
1,1-Dichloroethene
Concen: 10.786 ug/l
RT: 4.082 min Scan# 360
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 96 Resp: 34142

Ion	Ratio	Lower	Upper
96	100		
61	148.1	123.0	184.4
98	60.3	48.5	72.7

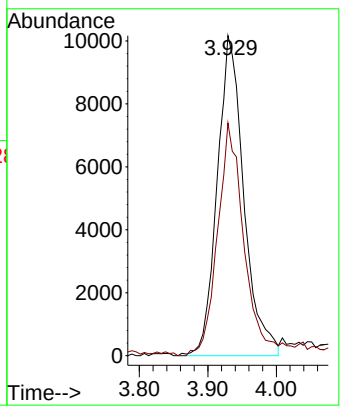




#13
Acrolein
Concen: 54.429 ug/l
RT: 3.929 min Scan# 3
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 56 Resp: 2739

Ion	Ratio	Lower	Upper
56	100		
55	72.9	56.4	84.6



Instrument :
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ClientSampleId :
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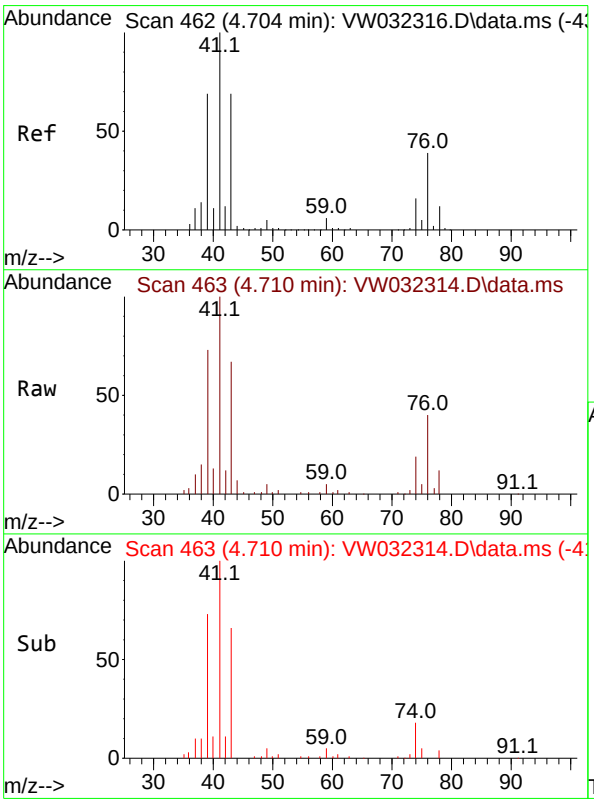
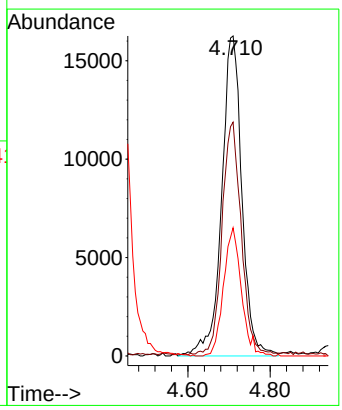
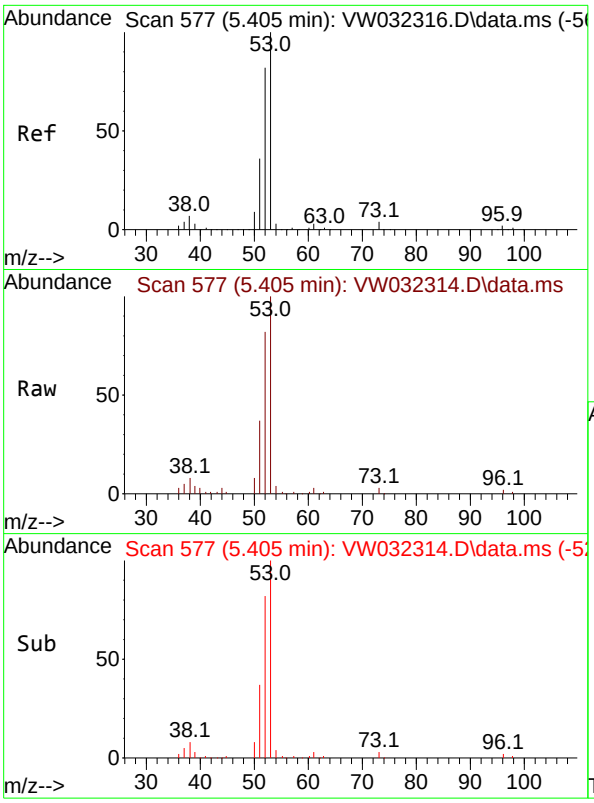


#14
Allyl chloride
Concen: 10.423 ug/l
RT: 4.710 min Scan# 463
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 41 Resp: 55724

Ion	Ratio	Lower	Upper
41	100		
39	68.4	64.1	96.1
76	35.2	31.4	47.2

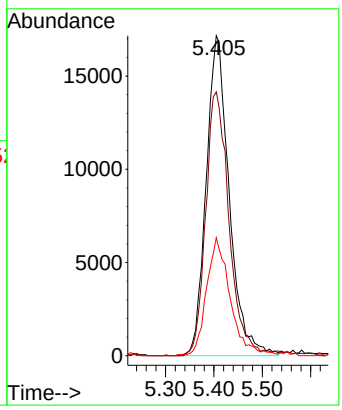




#15
Acrylonitrile
Concen: 51.811 ug/l
RT: 5.405 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 53 Resp: 5677

Ion	Ratio	Lower	Upper
53	100		
52	83.4	67.4	101.2
51	37.9	30.3	45.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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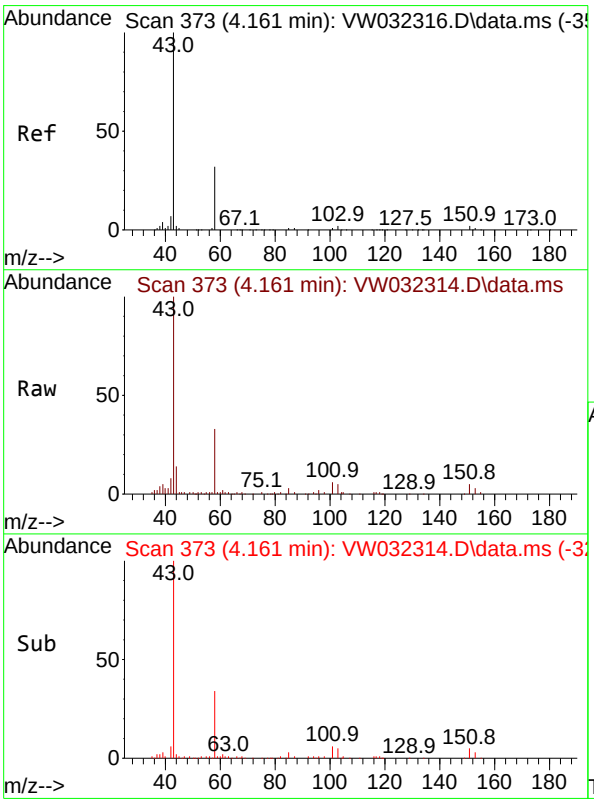
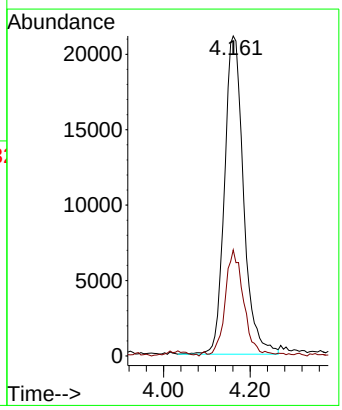
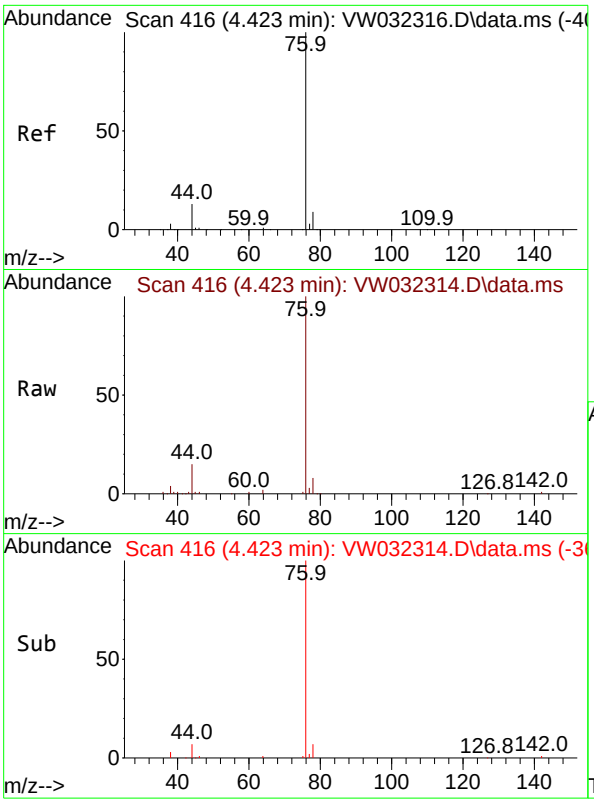


#16
Acetone
Concen: 56.980 ug/l
RT: 4.161 min Scan# 373
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 64630

Ion	Ratio	Lower	Upper
43	100		
58	32.5	25.3	37.9

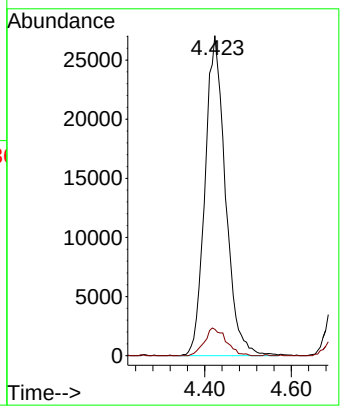




#17
Carbon Disulfide
Concen: 10.296 ug/l
RT: 4.423 min Scan# 4
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 76 Resp: 8891

Ion	Ratio	Lower	Upper
76	100		
78	8.2	7.0	10.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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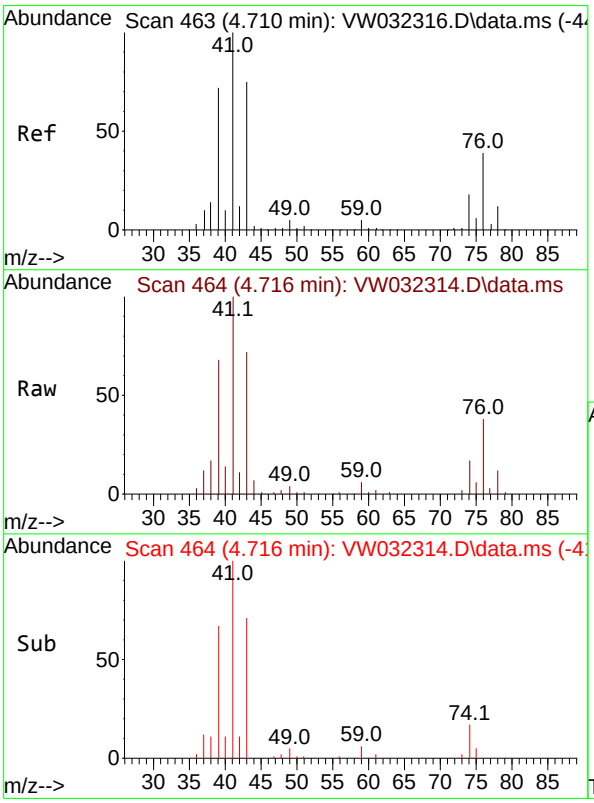
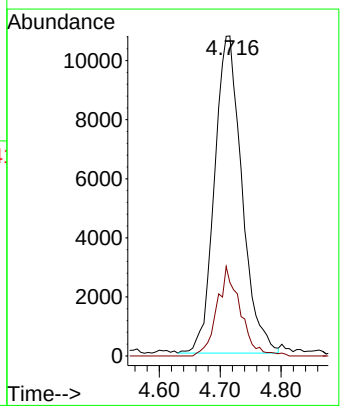
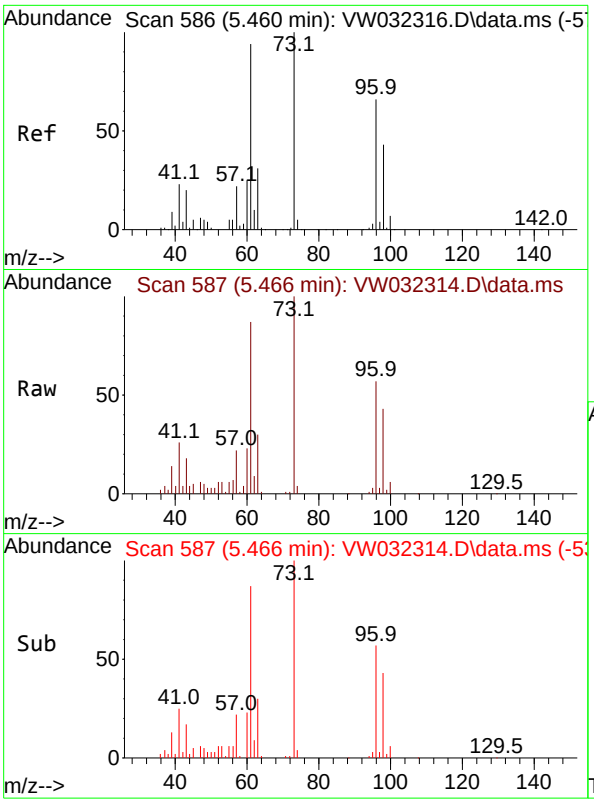


#18
Methyl Acetate
Concen: 10.316 ug/l
RT: 4.716 min Scan# 464
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 33520

Ion	Ratio	Lower	Upper
43	100		
74	24.1	20.2	30.4

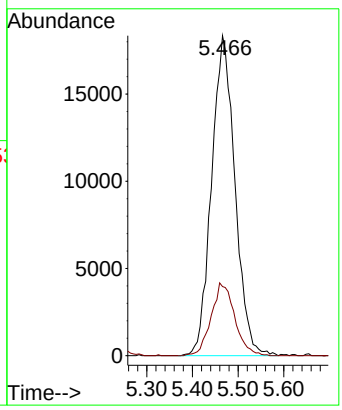




#19
Methyl tert-butyl Ether
Concen: 10.462 ug/l
RT: 5.466 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 73 Resp: 6522

Ion	Ratio	Lower	Upper
73	100		
57	21.6	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
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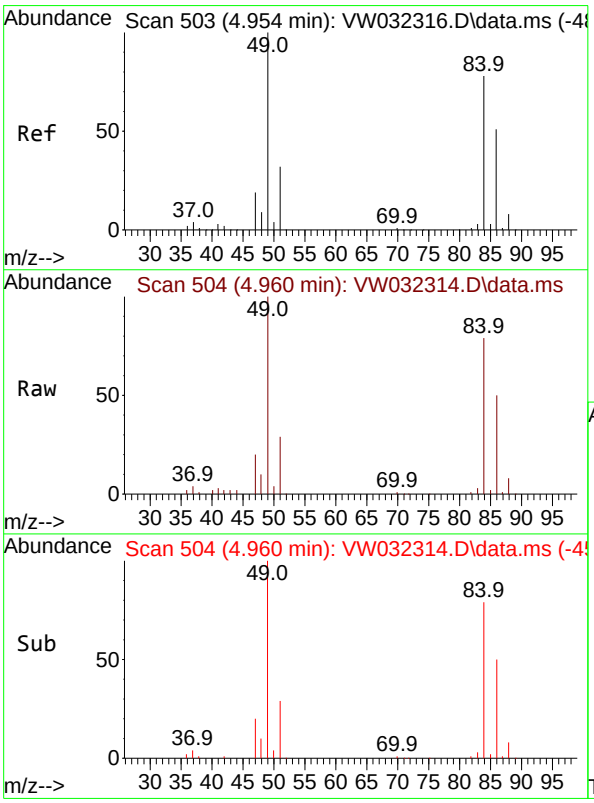
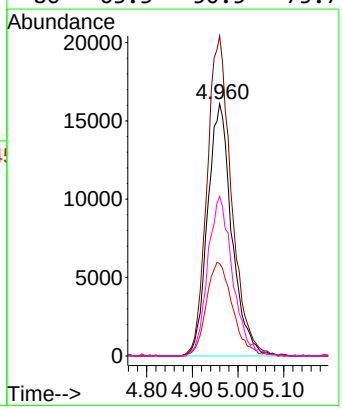
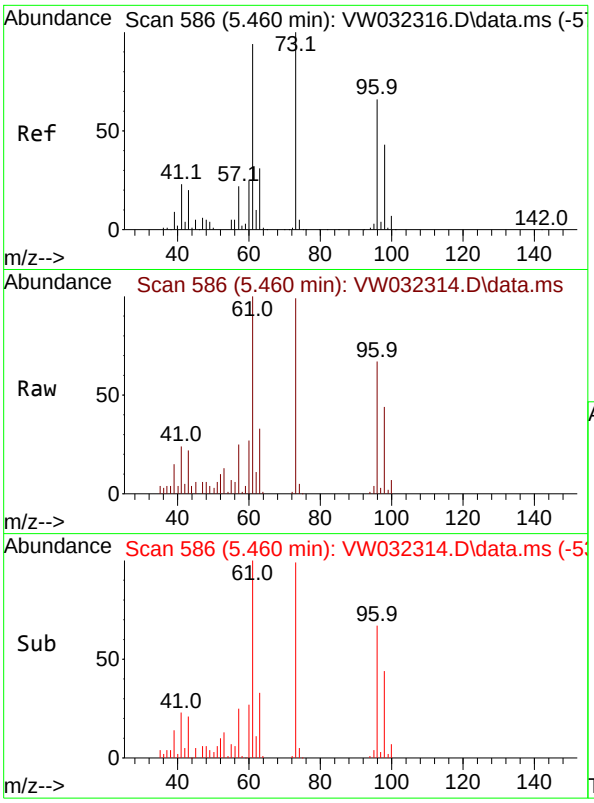


#20
Methylene Chloride
Concen: 11.634 ug/l
RT: 4.960 min Scan# 504
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 84 Resp: 59087

Ion	Ratio	Lower	Upper
84	100		
49	126.9	92.2	138.4
51	36.7	31.0	46.6
86	63.3	50.5	75.7

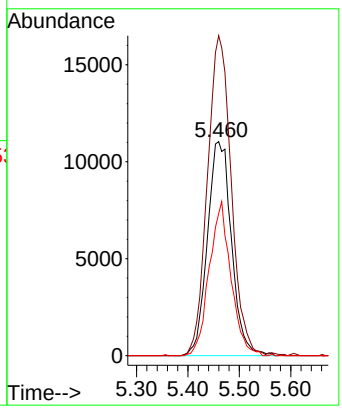




#21
trans-1,2-Dichloroethene
Concen: 10.262 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 96 Resp: 3596

Ion	Ratio	Lower	Upper
96	100		
61	149.5	112.5	168.7
98	66.4	54.2	81.4



Instrument :
MSVOA_W
ClientSampleId :
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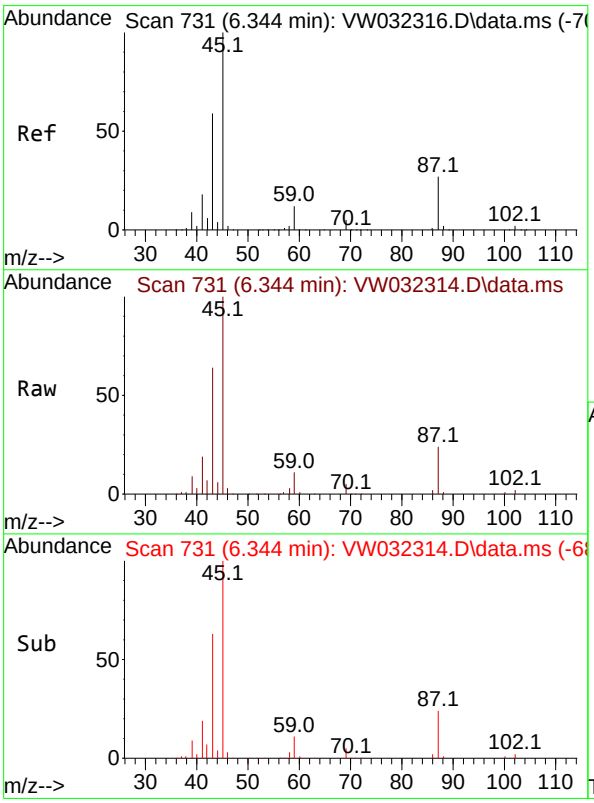
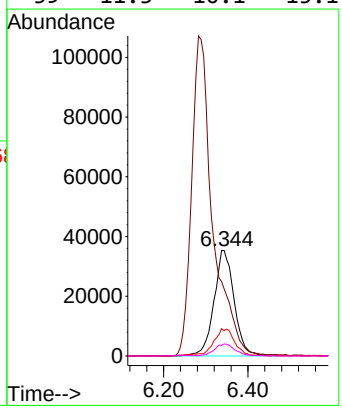
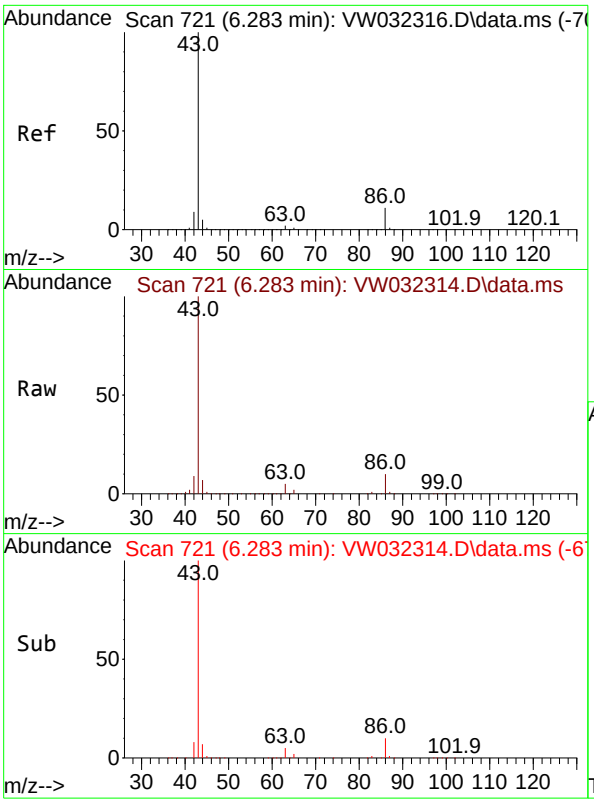


#22
Diisopropyl ether
Concen: 10.536 ug/l
RT: 6.344 min Scan# 731
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 45 Resp: 117148

Ion	Ratio	Lower	Upper
45	100		
43	62.3	51.4	77.2
87	24.2	25.9	38.9#
59	11.3	10.1	15.1

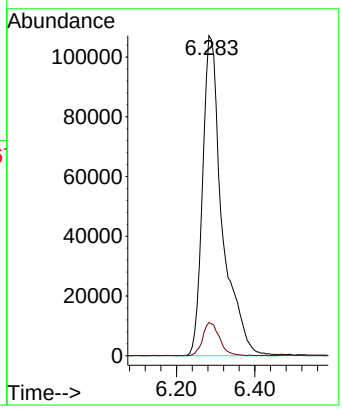




#23
Vinyl Acetate
Concen: 50.126 ug/l
RT: 6.283 min Scan# 7
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 37225

Ion	Ratio	Lower	Upper
43	100		
86	10.3	8.8	13.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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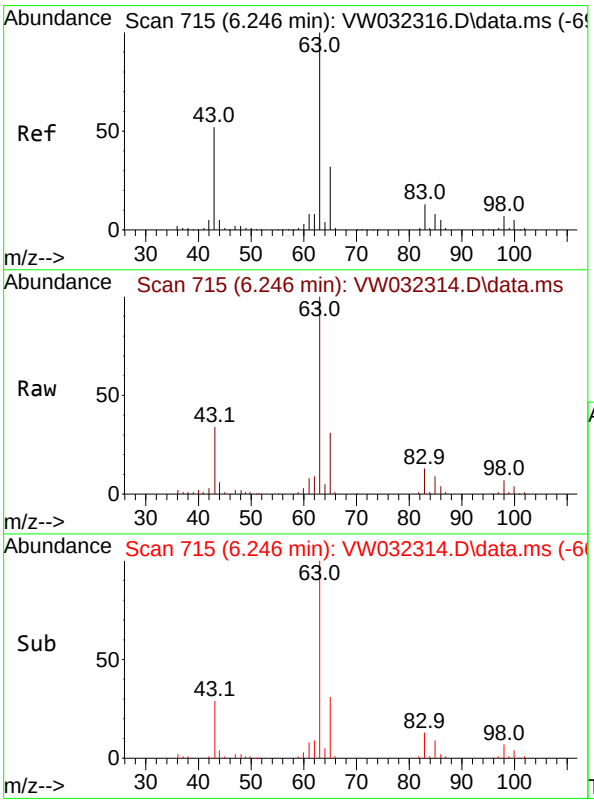
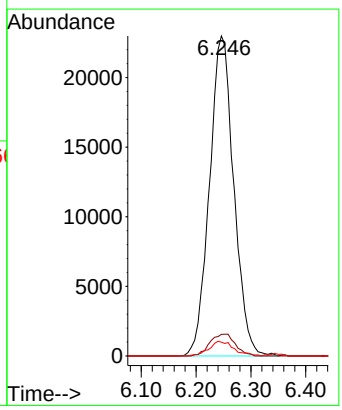
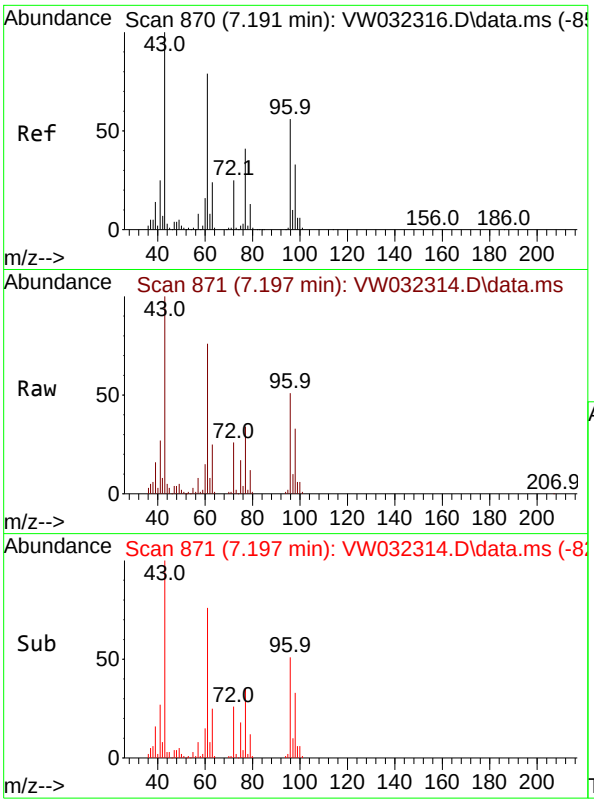


#24
1,1-Dichloroethane
Concen: 10.489 ug/l
RT: 6.246 min Scan# 715
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 63 Resp: 70852

Ion	Ratio	Lower	Upper
63	100		
98	6.7	3.8	11.2
100	4.3	2.5	7.5





#25
2-Butanone
Concen: 53.263 ug/l
RT: 7.197 min Scan# 8
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 8228

Ion	Ratio	Lower	Upper
43	100		
72	25.4	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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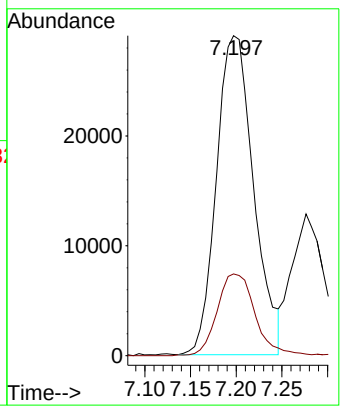
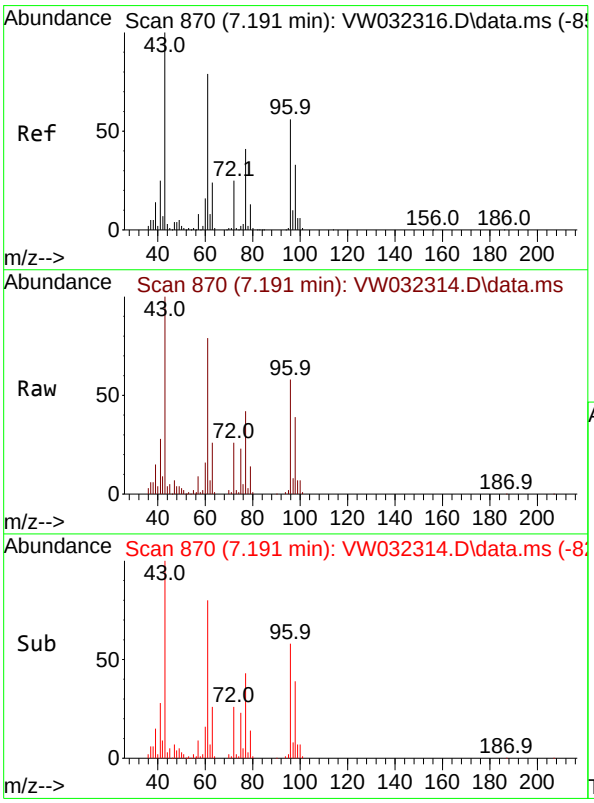
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

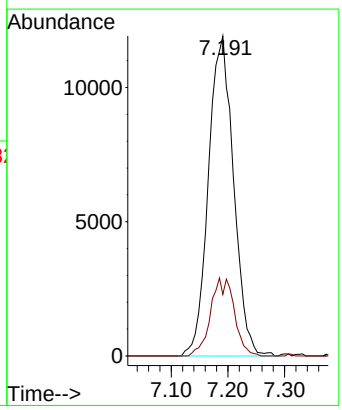


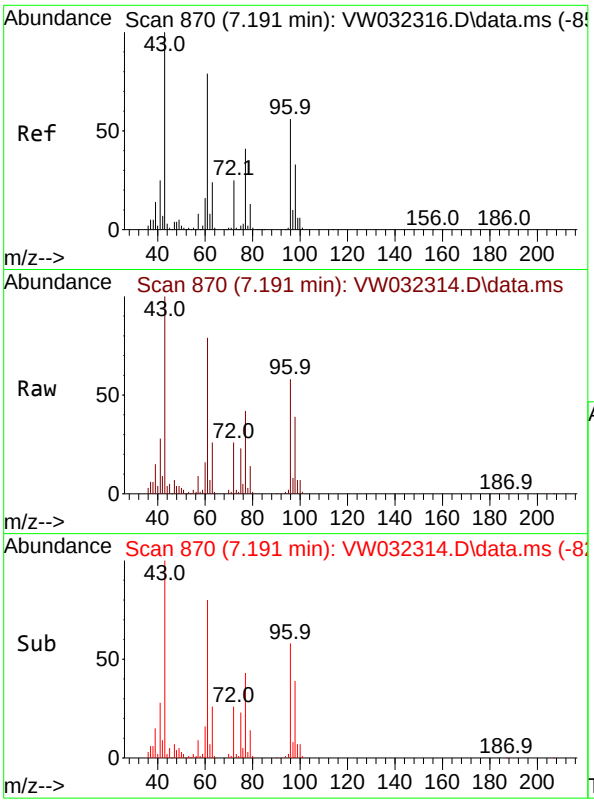


#26
2,2-Dichloropropane
Concen: 10.625 ug/l
RT: 7.191 min Scan# 870
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 77 Resp: 36712

Ion	Ratio	Lower	Upper
77	100		
97	23.0	11.9	35.5

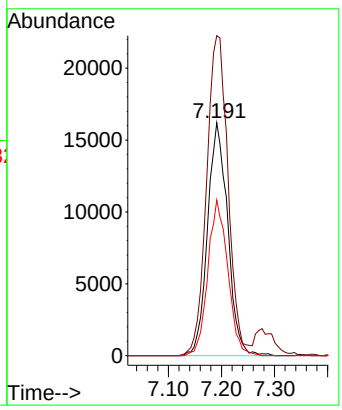




#27
cis-1,2-Dichloroethene
Concen: 10.178 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 96 Resp: 4284

Ion	Ratio	Lower	Upper
96	100		
61	145.8	0.0	268.0
98	65.9	0.0	130.8



Instrument :
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ClientSampleId :
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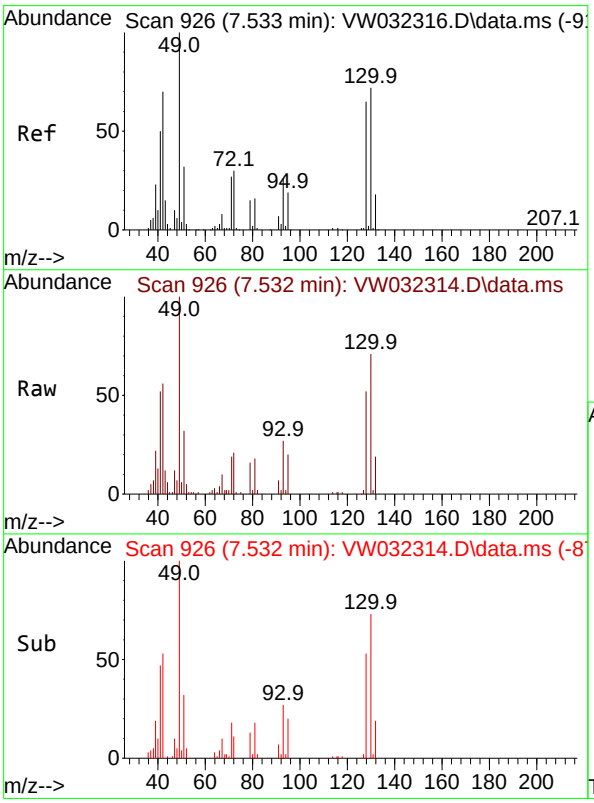
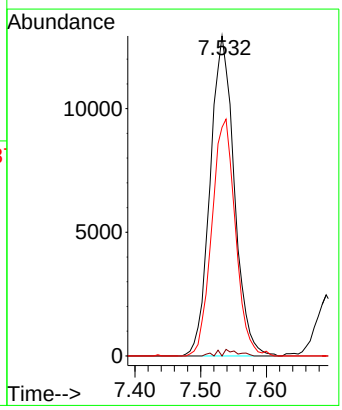
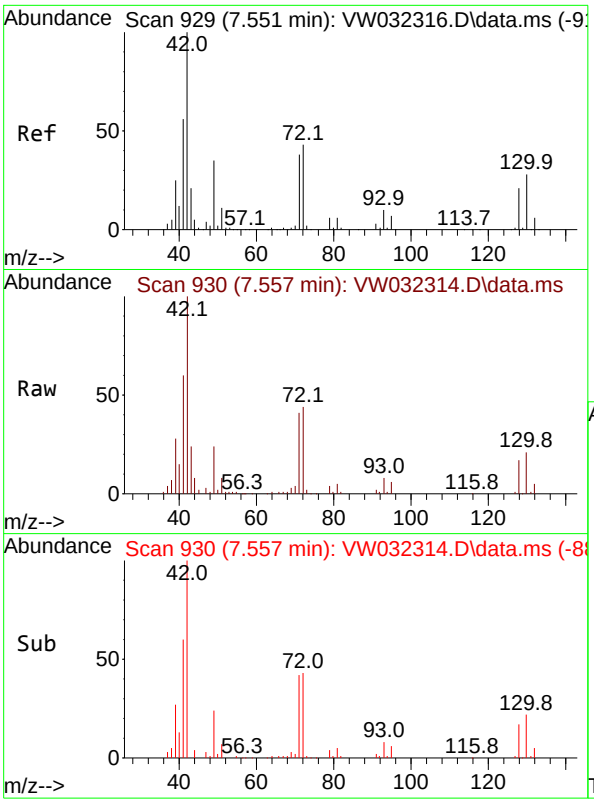


#28
Bromochloromethane
Concen: 10.397 ug/l
RT: 7.532 min Scan# 926
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 49 Resp: 33043

Ion	Ratio	Lower	Upper
49	100		
129	1.3	0.0	4.2
130	72.4	67.5	101.3





#29
Tetrahydrofuran
Concen: 50.941 ug/l
RT: 7.557 min Scan# 9
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 42 Resp: 4948

Ion	Ratio	Lower	Upper
42	100		
72	44.8	37.4	56.2
71	41.5	36.0	54.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
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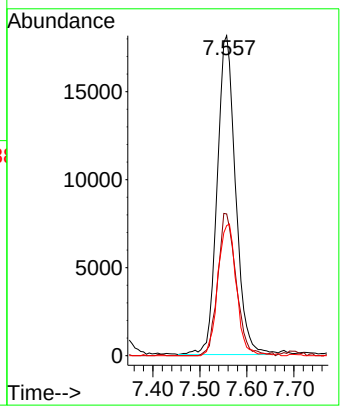
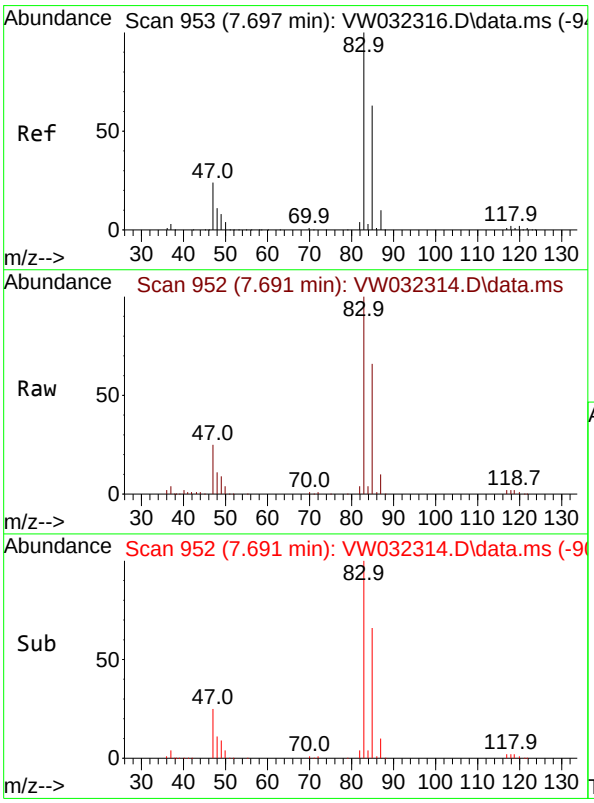
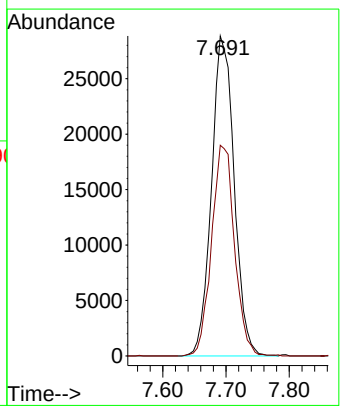


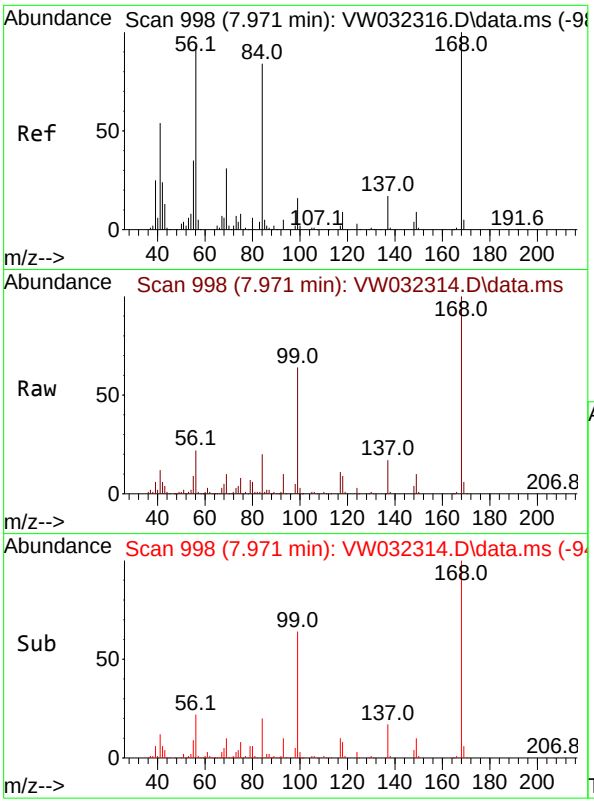


#30
Chloroform
Concen: 10.453 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 83 Resp: 71607

Ion	Ratio	Lower	Upper
83	100		
85	65.8	51.2	76.8





#31
Cyclohexane
Concen: 10.792 ug/l
RT: 7.971 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 56 Resp: 6223

Ion	Ratio	Lower	Upper
56	100		
69	44.2	27.7	41.5
84	90.2	74.6	112.0

Instrument :
MSVOA_W
ClientSampleId :
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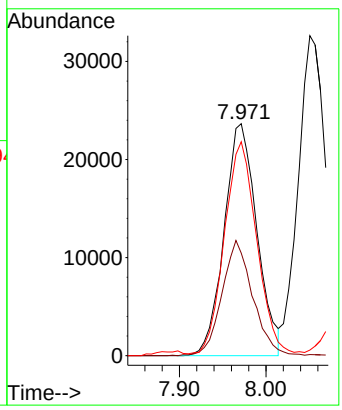
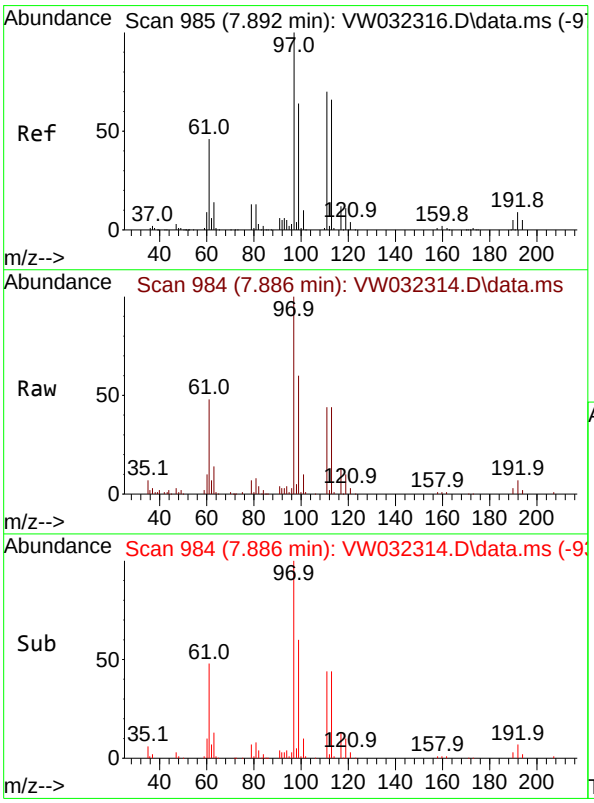
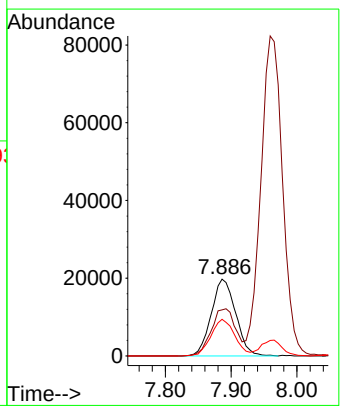


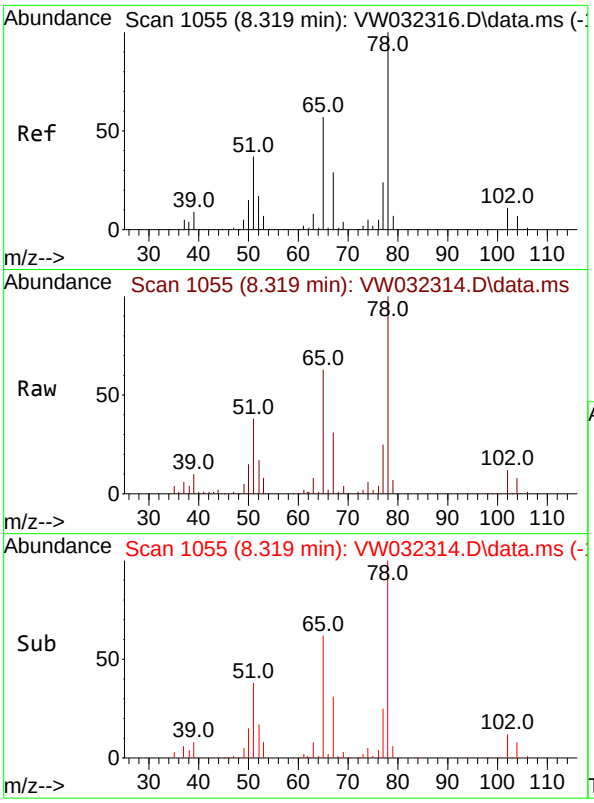


#32
1,1,1-Trichloroethane
Concen: 10.534 ug/l
RT: 7.886 min Scan# 984
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 97 Resp: 51138

Ion	Ratio	Lower	Upper
97	100		
99	60.9	50.9	76.3
61	46.6	36.2	54.4

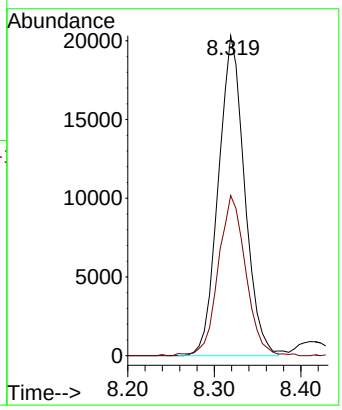




#33
1,2-Dichloroethane-d4
Concen: 10.398 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 65 Resp: 4259

Ion	Ratio	Lower	Upper
65	100		
67	52.6	0.0	99.6



Instrument :
MSVOA_W
ClientSampleId :
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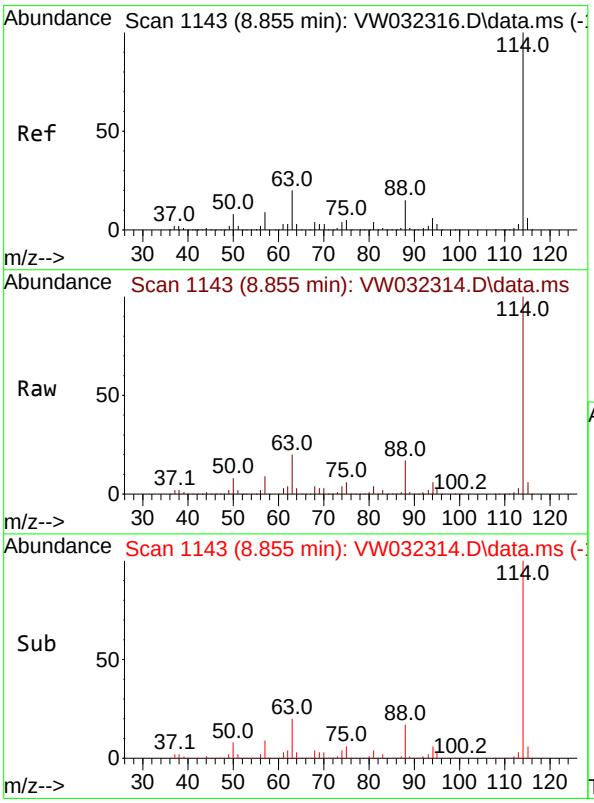
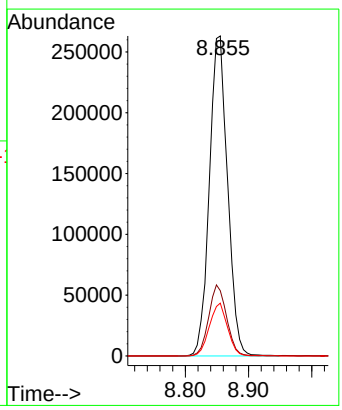
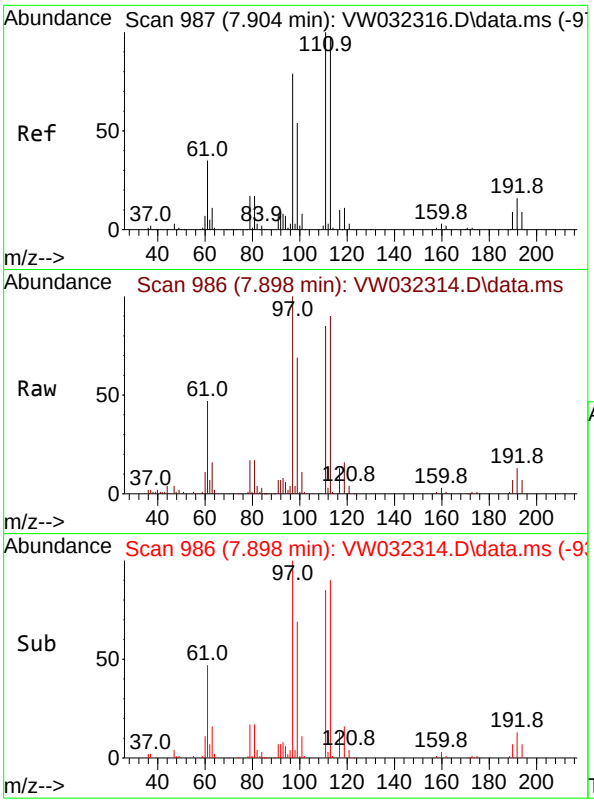


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.855 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:114 Resp: 525265

Ion	Ratio	Lower	Upper
114	100		
63	20.4	0.0	40.4
88	16.5	0.0	32.0

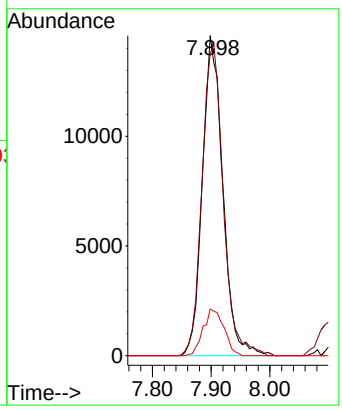




#35
Dibromofluoromethane
Concen: 10.357 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:113 Resp: 3523

Ion	Ratio	Lower	Upper
113	100		
111	101.4	83.9	125.9
192	14.9	14.6	21.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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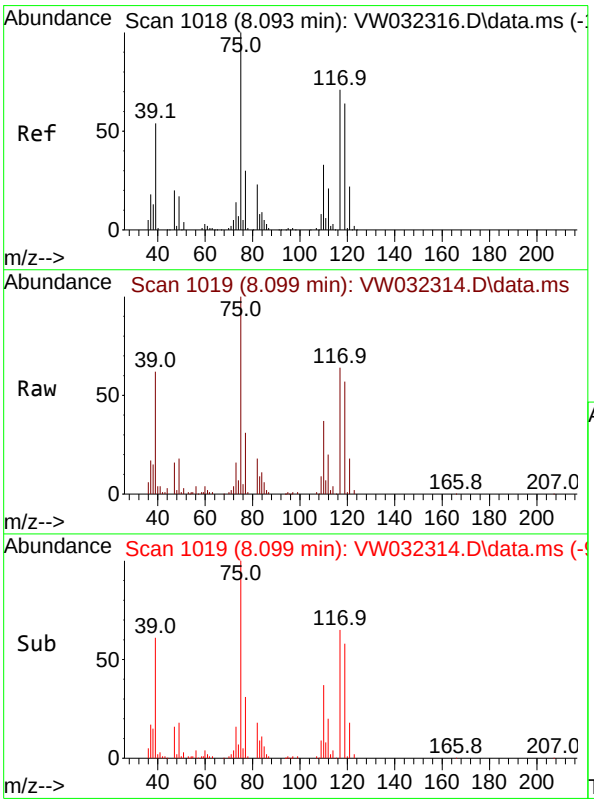
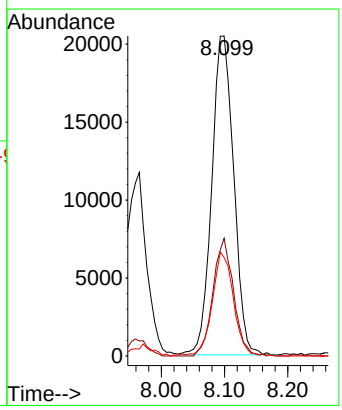
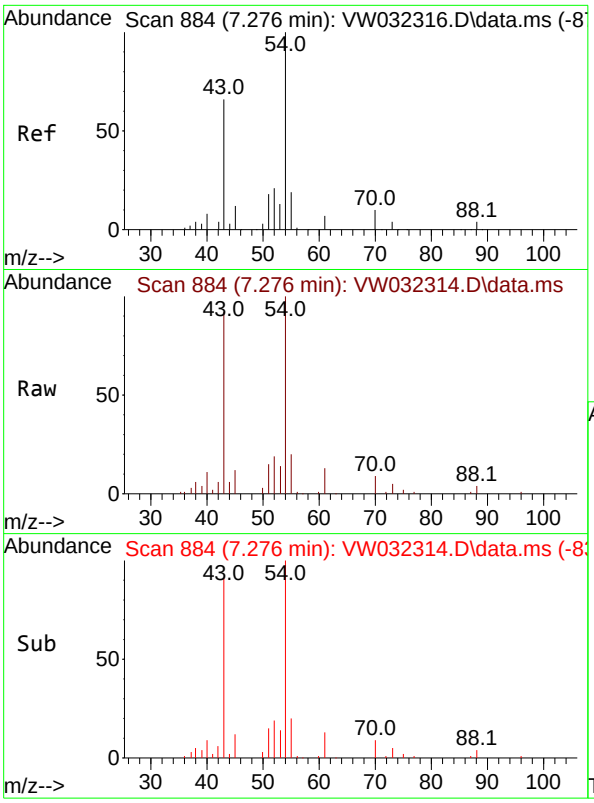


#36
1,1-Dichloropropene
Concen: 10.293 ug/l
RT: 8.099 min Scan# 1019
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 75 Resp: 49414

Ion	Ratio	Lower	Upper
75	100		
110	34.4	17.5	52.5
77	31.4	24.1	36.1





#37
Ethyl Acetate
Concen: 10.368 ug/l
RT: 7.276 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 3313

Ion	Ratio	Lower	Upper
43	100		
61	13.7	11.3	16.9
70	10.5	8.9	13.3

Instrument :
MSVOA_W
ClientSampleId :
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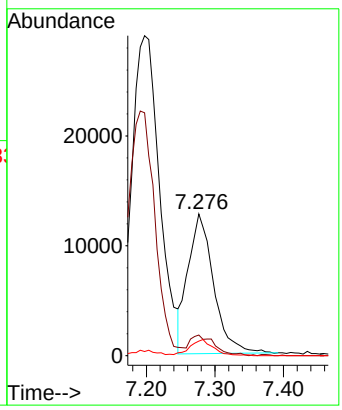
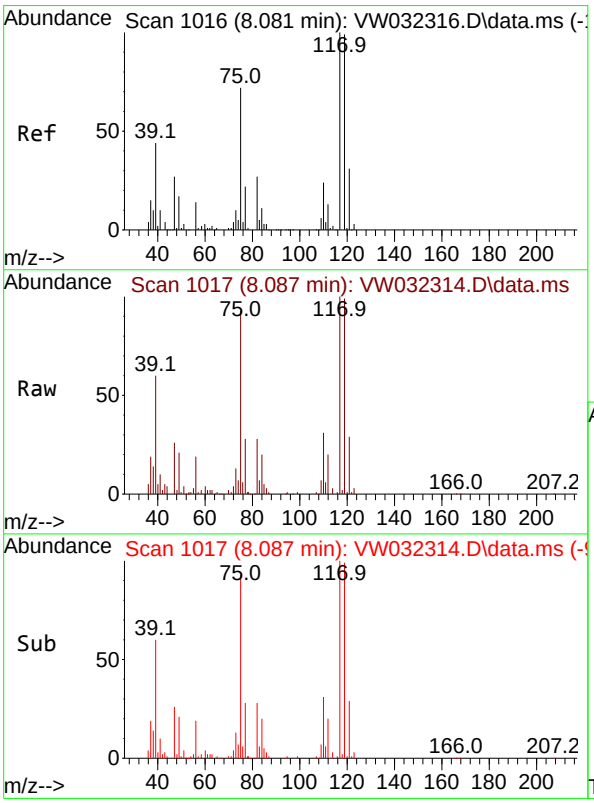
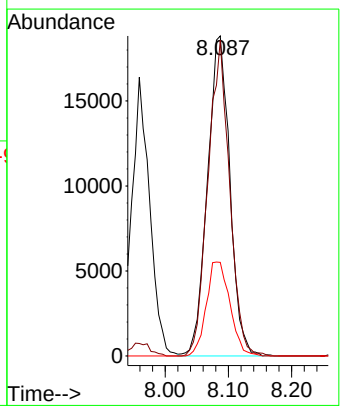


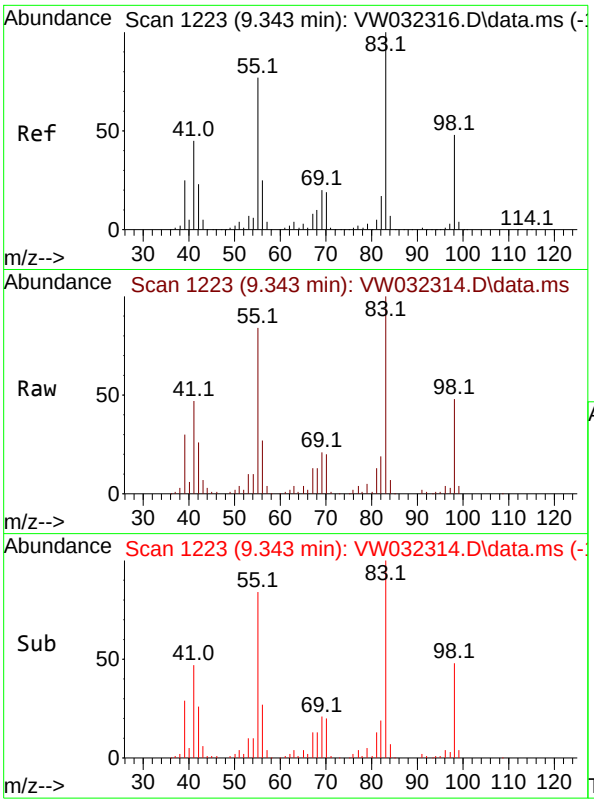


#38
Carbon Tetrachloride
Concen: 10.251 ug/l
RT: 8.087 min Scan# 1017
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:117 Resp: 46310

Ion	Ratio	Lower	Upper
117	100		
119	98.7	74.2	111.2
121	29.2	25.6	38.4

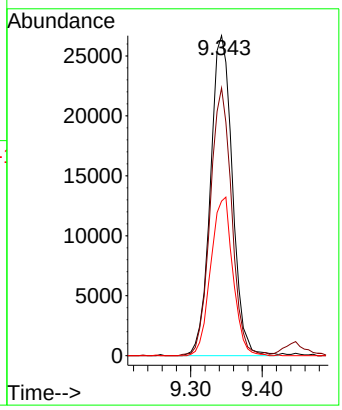




#39
Methylcyclohexane
Concen: 9.842 ug/l
RT: 9.343 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 83 Resp: 5699

Ion	Ratio	Lower	Upper
83	100		
55	83.6	58.4	87.6
98	48.3	39.4	59.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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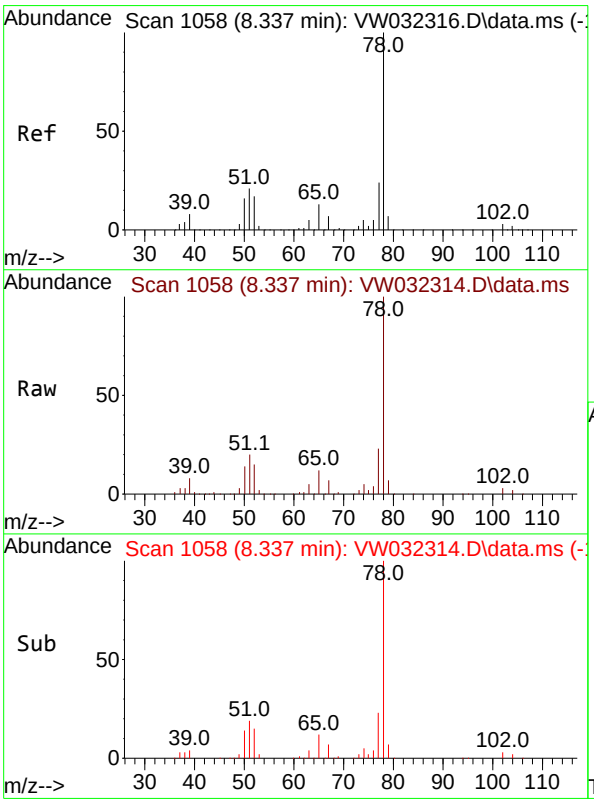
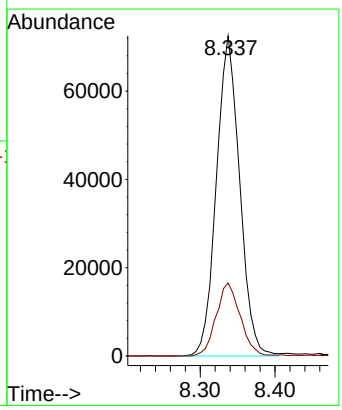
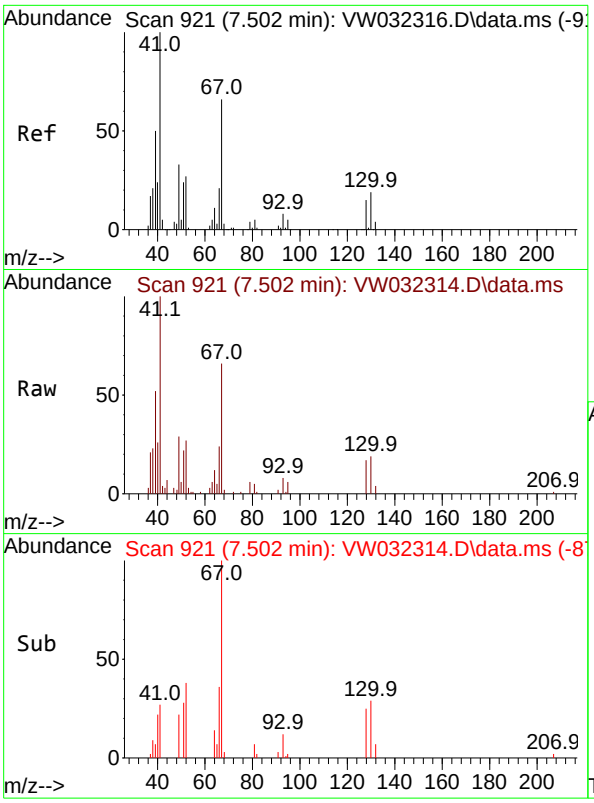


#40
Benzene
Concen: 10.431 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 78 Resp: 156957

Ion	Ratio	Lower	Upper
78	100		
77	22.8	20.7	31.1

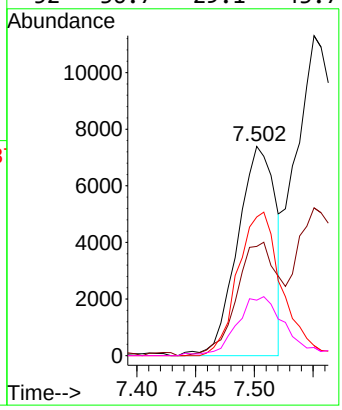




#41
Methacrylonitrile
Concen: 9.650 ug/l
RT: 7.502 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 41 Resp: 1661

Ion	Ratio	Lower	Upper
41	100		
39	60.4	50.9	76.3
67	80.4	65.6	98.4
52	36.7	29.1	43.7



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
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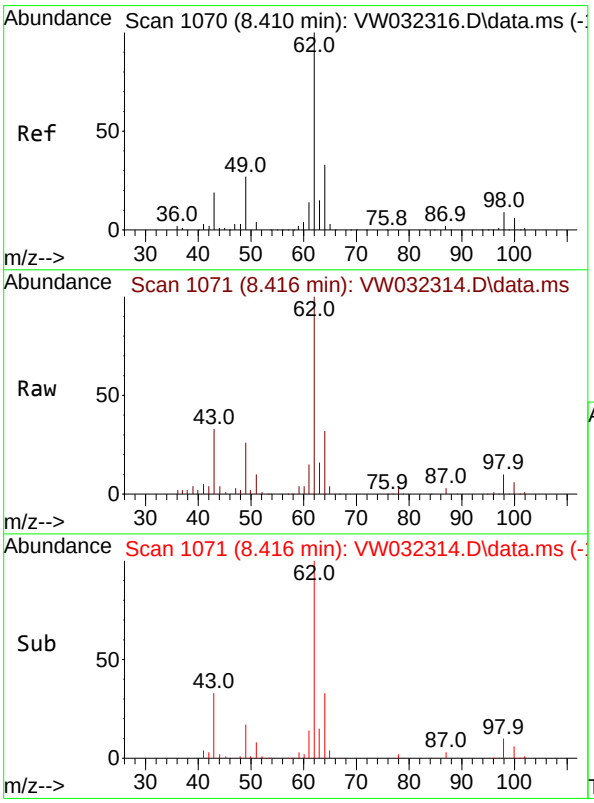
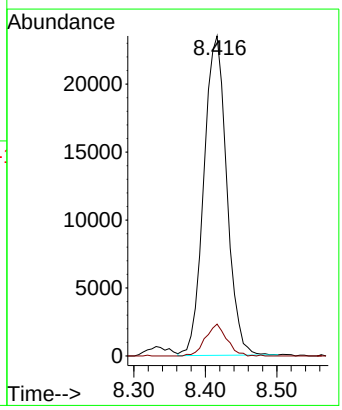
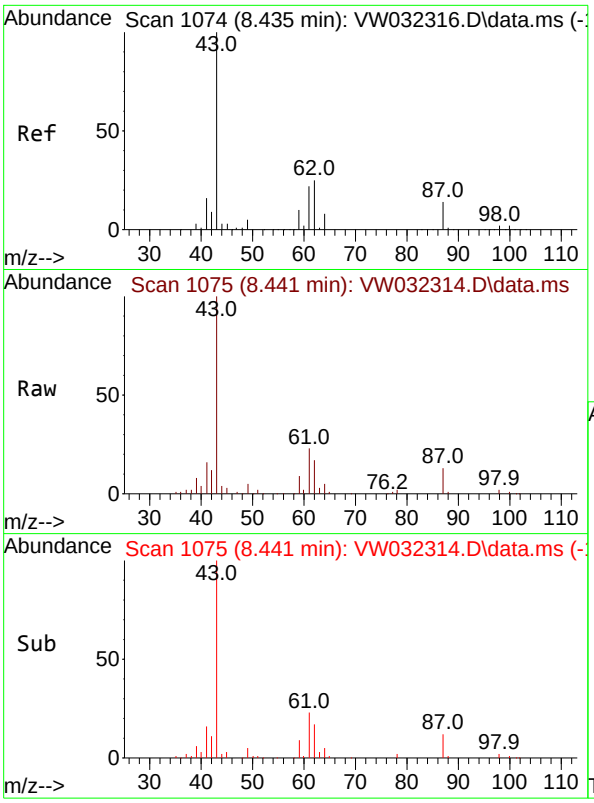


#42
1,2-Dichloroethane
Concen: 10.602 ug/l
RT: 8.416 min Scan# 1071
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 62 Resp: 52201

Ion	Ratio	Lower	Upper
62	100		
98	9.3	0.0	18.0





#43
Isopropyl Acetate
Concen: 10.001 ug/l
RT: 8.441 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 5669

Ion	Ratio	Lower	Upper
43	100		
61	30.5	23.3	34.9
87	13.5	11.1	16.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
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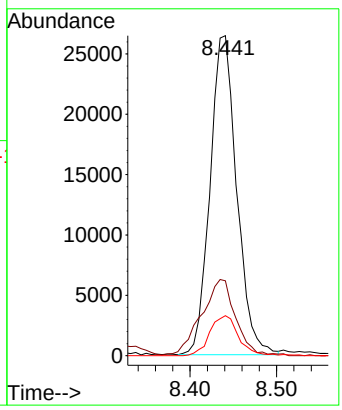
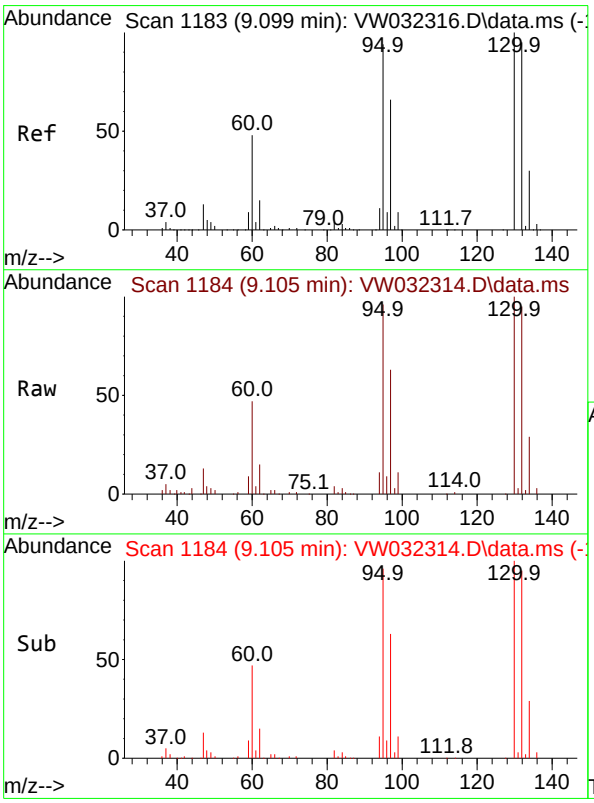
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

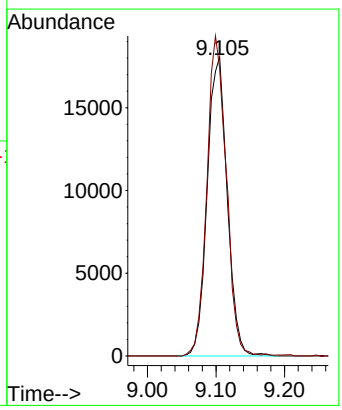


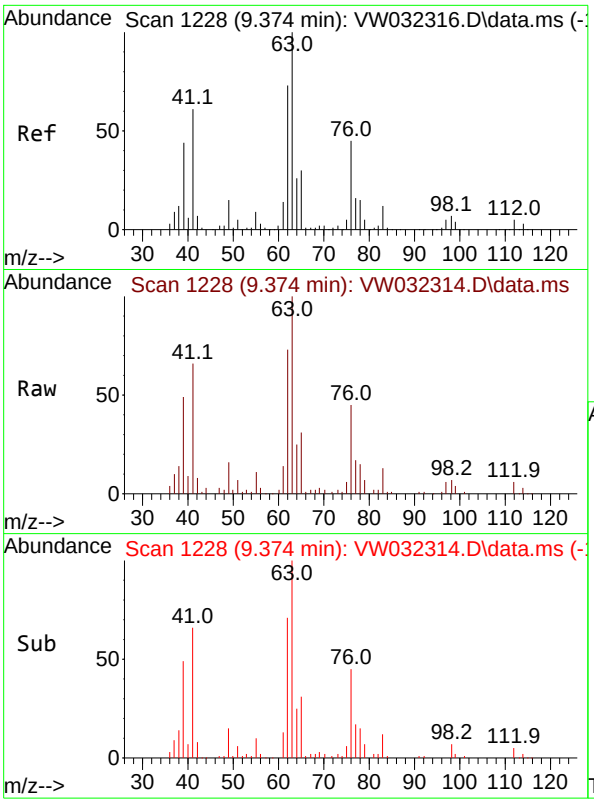


#44
Trichloroethene
Concen: 10.387 ug/l
RT: 9.105 min Scan# 1184
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:130 Resp: 36599

Ion	Ratio	Lower	Upper
130	100		
95	96.3	0.0	220.0





#45
1,2-Dichloropropane
Concen: 10.371 ug/l
RT: 9.374 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 63 Resp: 3895

Ion	Ratio	Lower	Upper
63	100		
65	30.5	24.3	36.5

Instrument :
MSVOA_W
ClientSampleId :
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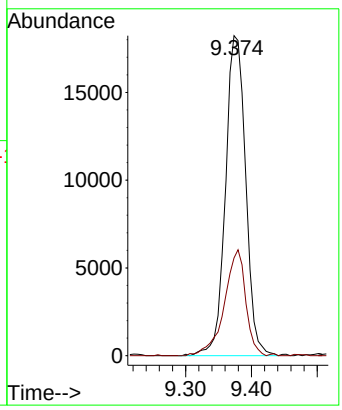
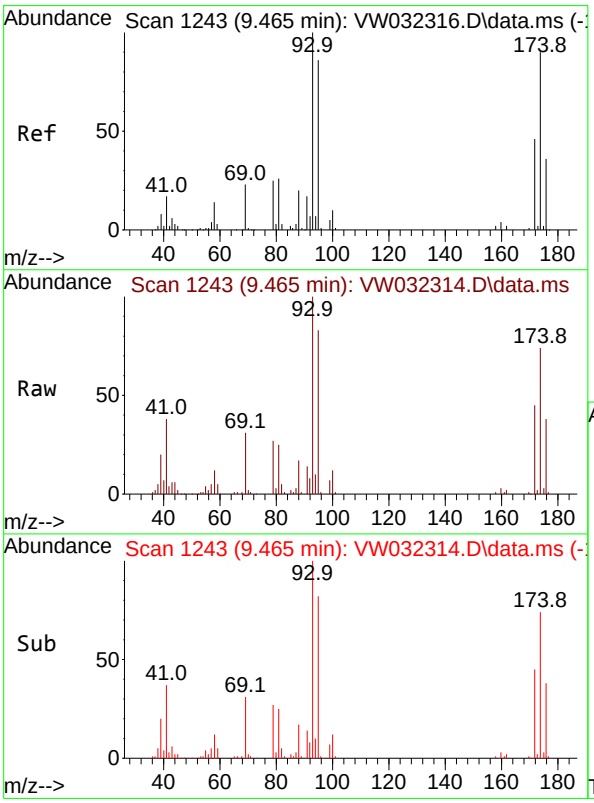
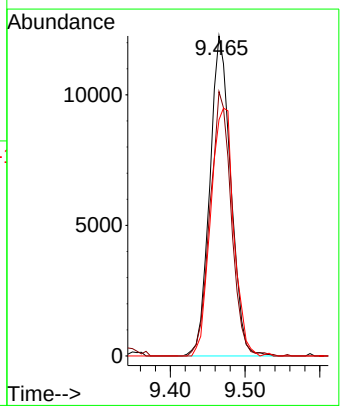


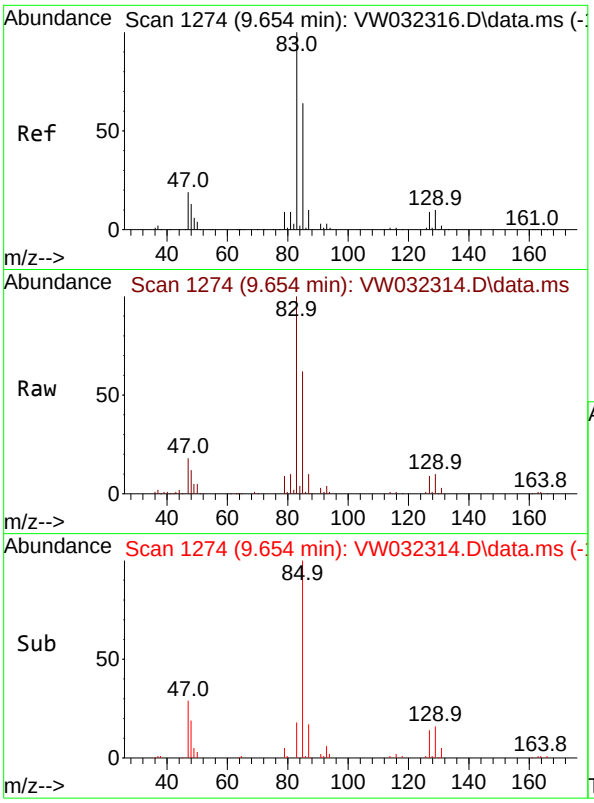


#46
Dibromomethane
Concen: 10.407 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 93 Resp: 24036

Ion	Ratio	Lower	Upper
93	100		
95	83.1	67.4	101.2
174	84.5	75.7	113.5

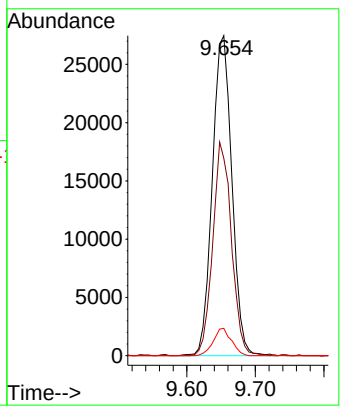




#47
Bromodichloromethane
Concen: 10.286 ug/l
RT: 9.654 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 83 Resp: 5433

Ion	Ratio	Lower	Upper
83	100		
85	61.7	48.7	73.1
127	8.5	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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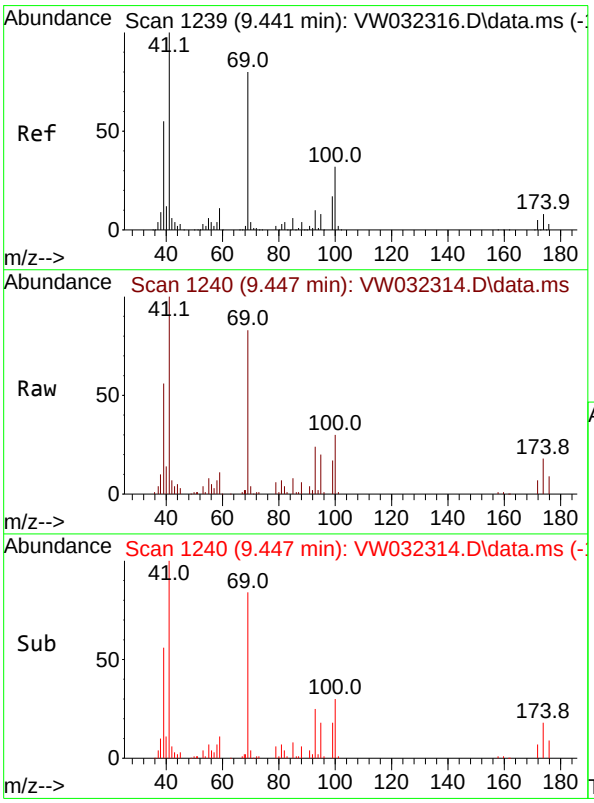
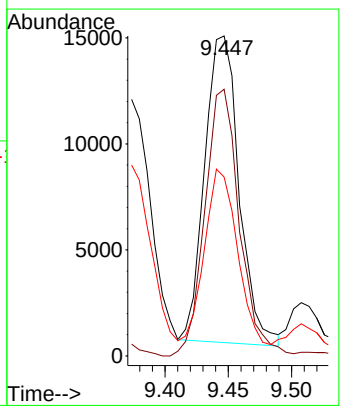
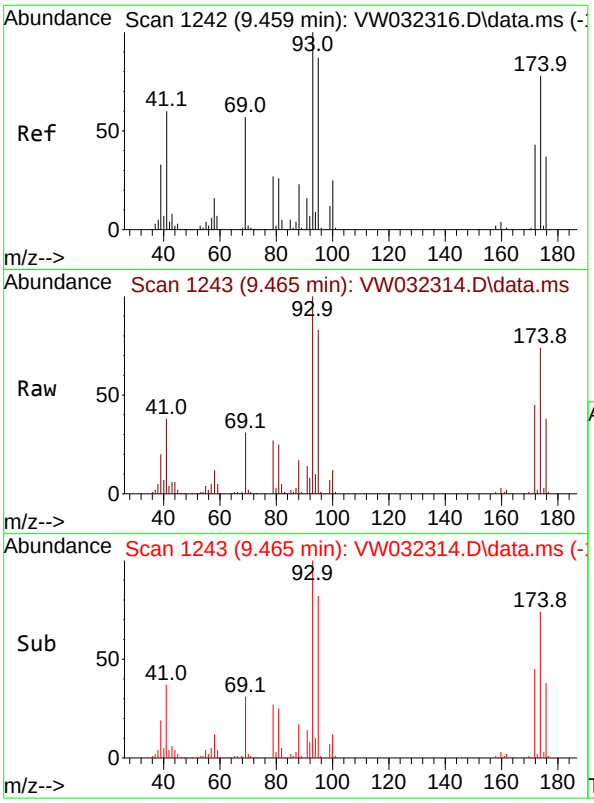


#48
Methyl methacrylate
Concen: 9.921 ug/l
RT: 9.447 min Scan# 1240
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 41 Resp: 27343

Ion	Ratio	Lower	Upper
41	100		
69	87.7	71.5	107.3
39	60.9	55.9	83.9

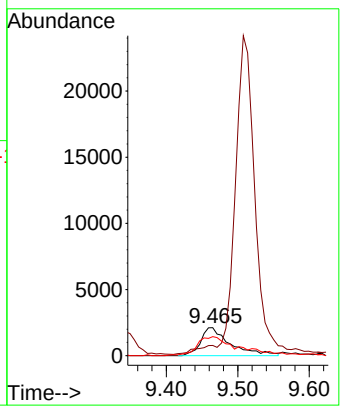




#49
1,4-Dioxane
Concen: 193.232 ug/l
RT: 9.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 88 Resp: 610

Ion	Ratio	Lower	Upper
88	100		
43	0.0	18.0	27.0#
58	95.6	55.4	83.0#



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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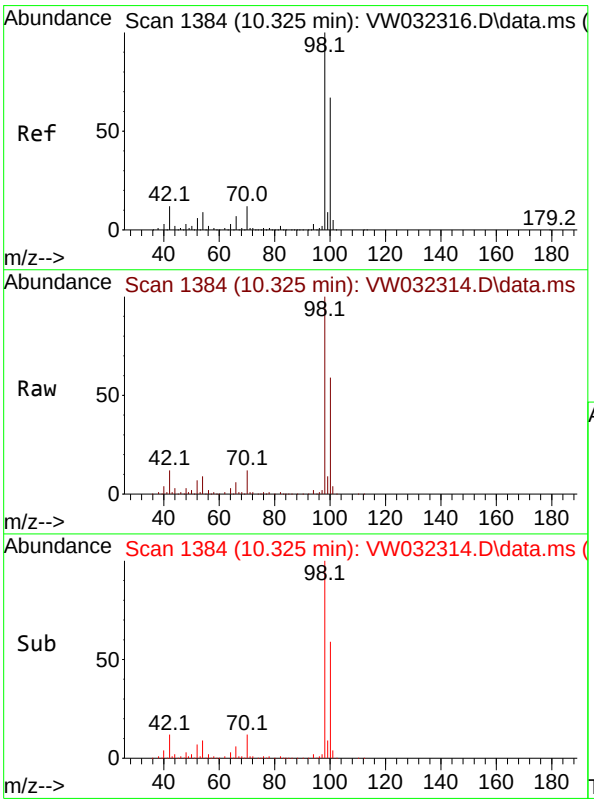
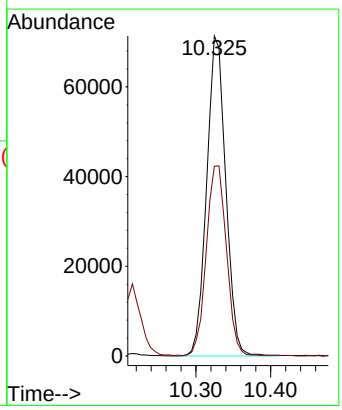
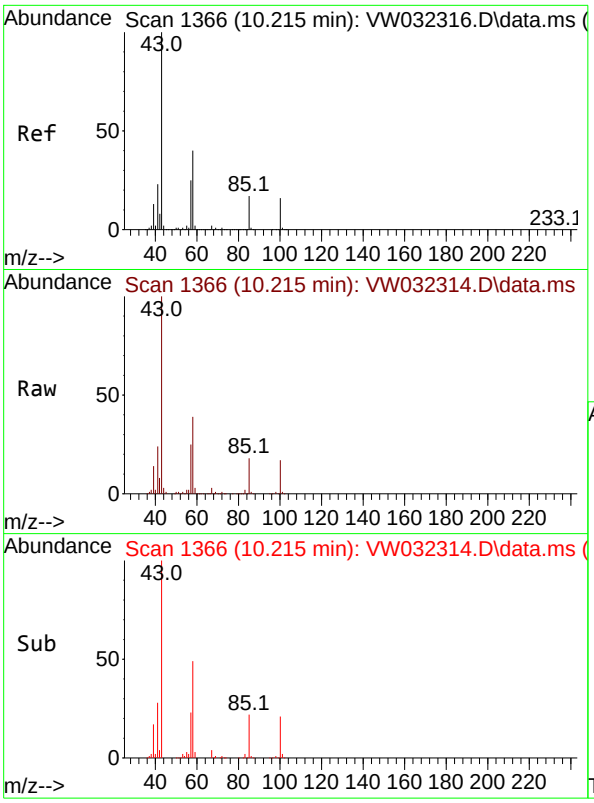


#50
Toluene-d8
Concen: 10.078 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 98 Resp: 126526

Ion	Ratio	Lower	Upper
98	100		
100	62.5	51.4	77.2





#51
4-Methyl-2-Pentanone
Concen: 51.916 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 17045

Ion	Ratio	Lower	Upper
43	100		
58	38.7	32.0	48.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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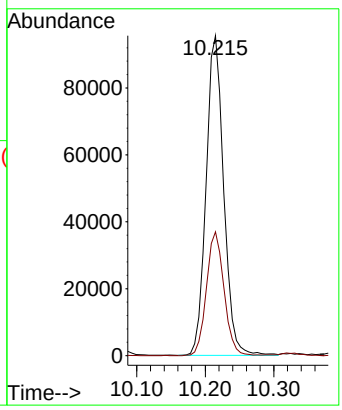
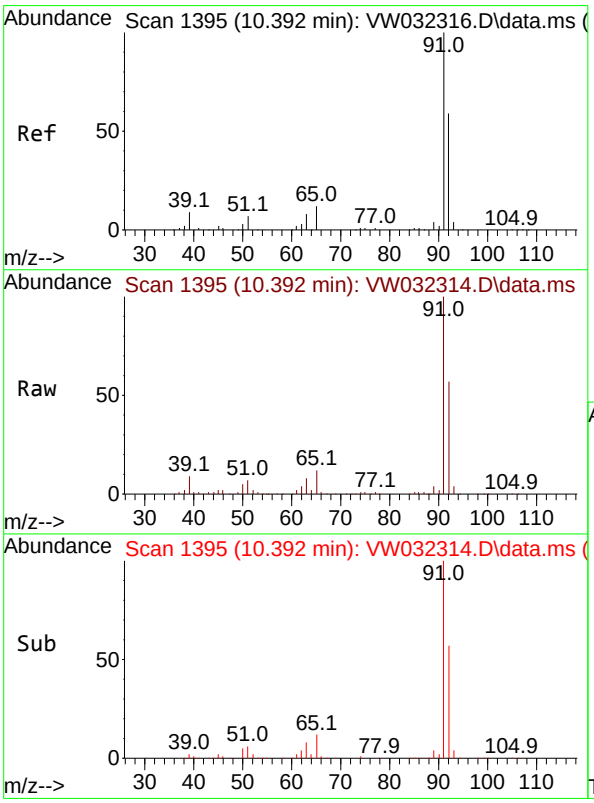
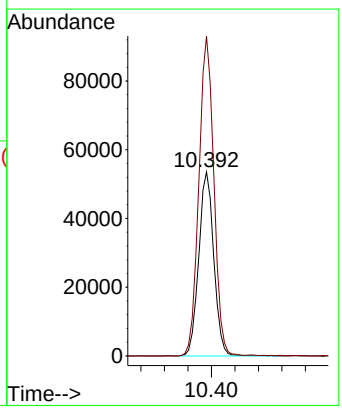


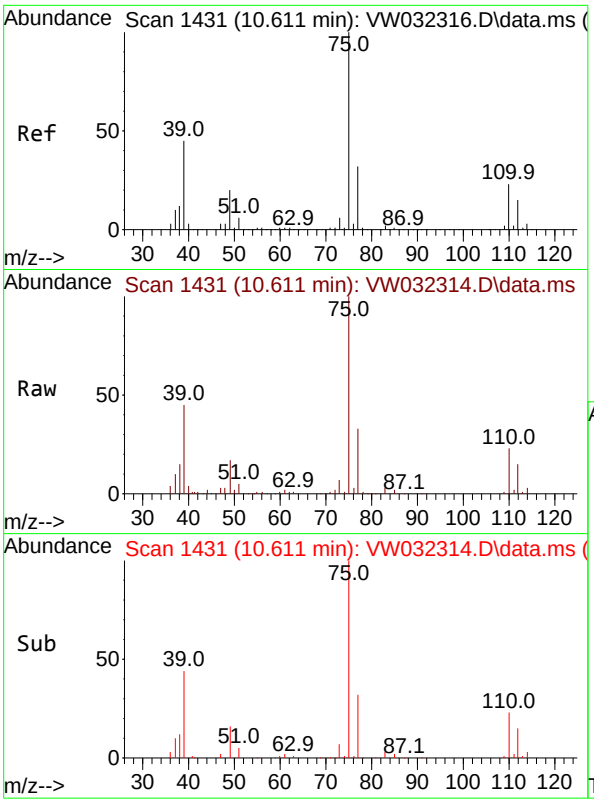


#52
Toluene
Concen: 10.146 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 92 Resp: 95076

Ion	Ratio	Lower	Upper
92	100		
91	173.4	137.5	206.3





#53
t-1,3-Dichloropropene
Concen: 9.878 ug/l
RT: 10.611 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 75 Resp: 5062

Ion	Ratio	Lower	Upper
75	100		
77	32.7	25.6	38.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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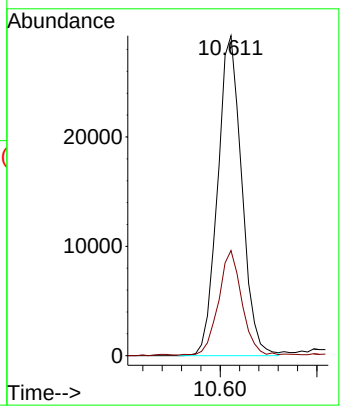
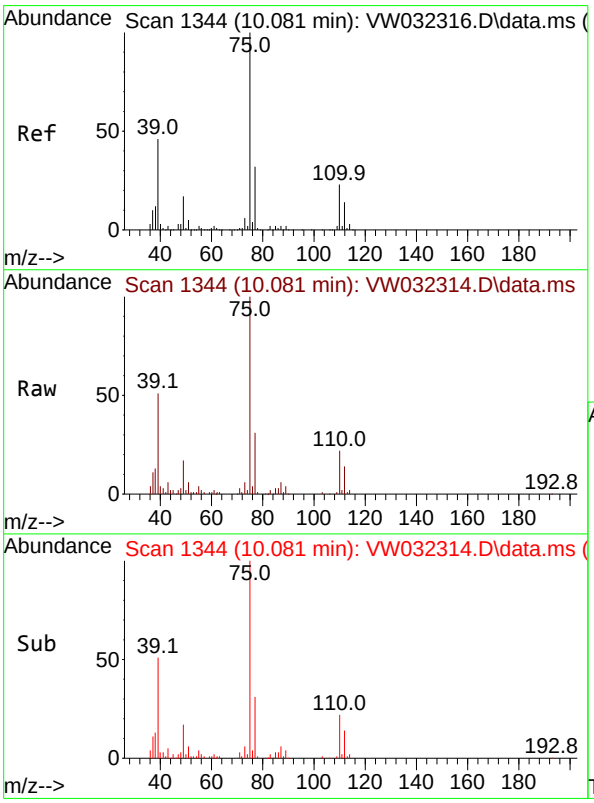
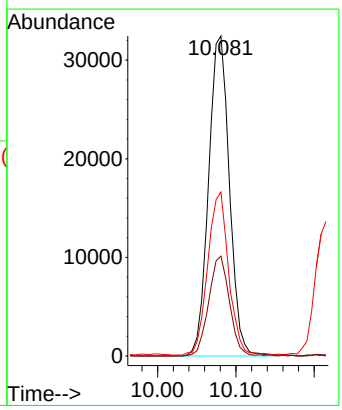


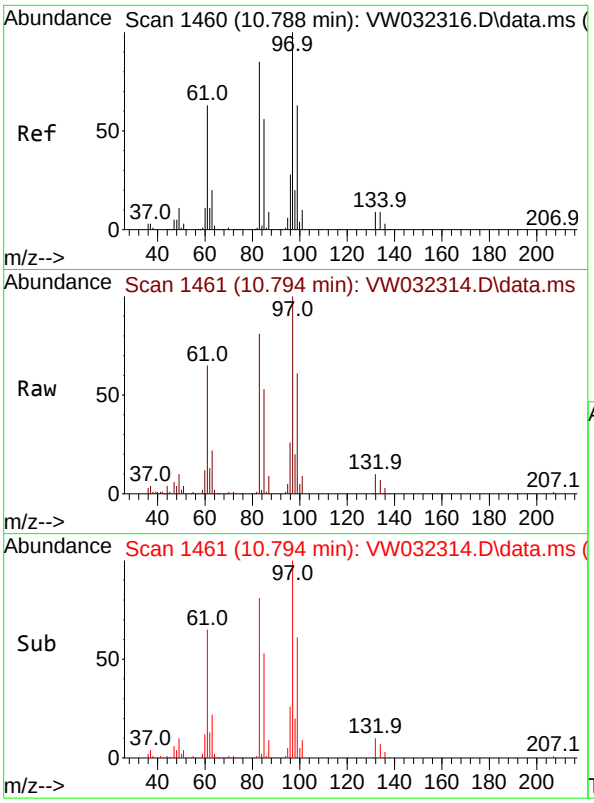


#54
cis-1,3-Dichloropropene
Concen: 10.158 ug/l
RT: 10.081 min Scan# 1344
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 75 Resp: 59970

Ion	Ratio	Lower	Upper
75	100		
77	31.2	25.1	37.7
39	51.0	43.2	64.8

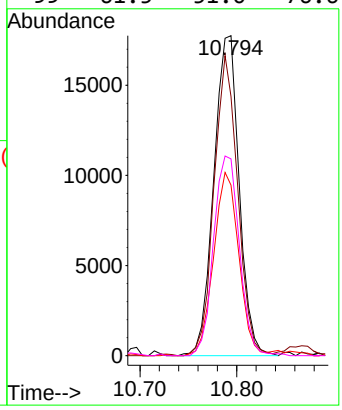




#55
1,1,2-Trichloroethane
Concen: 10.447 ug/l
RT: 10.794 min Scan# 14
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 97 Resp: 3224

Ion	Ratio	Lower	Upper
97	100		
83	81.0	71.0	106.6
85	53.3	42.8	64.2
99	61.5	51.0	76.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
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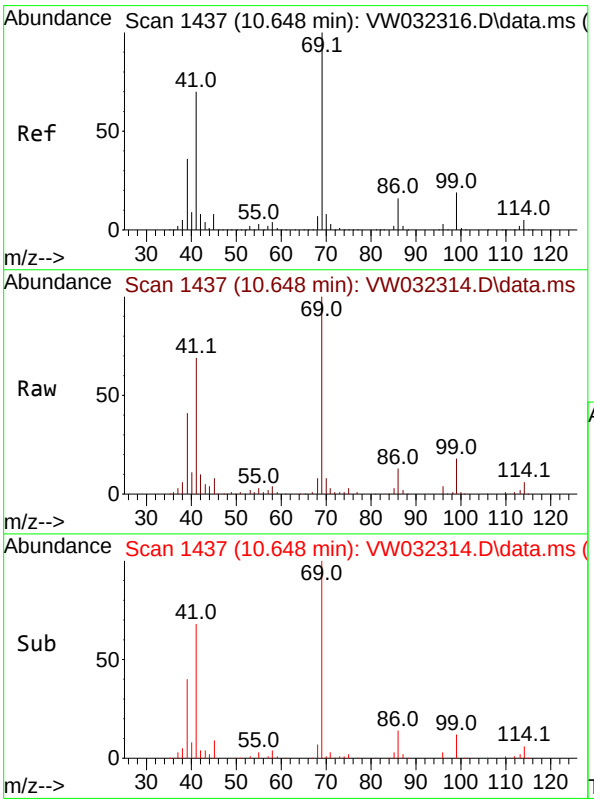
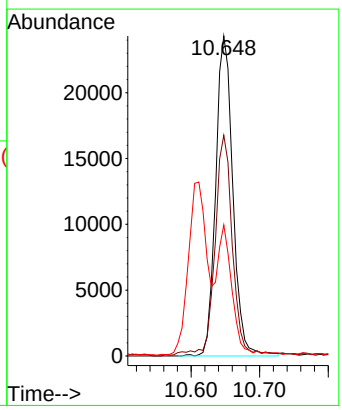
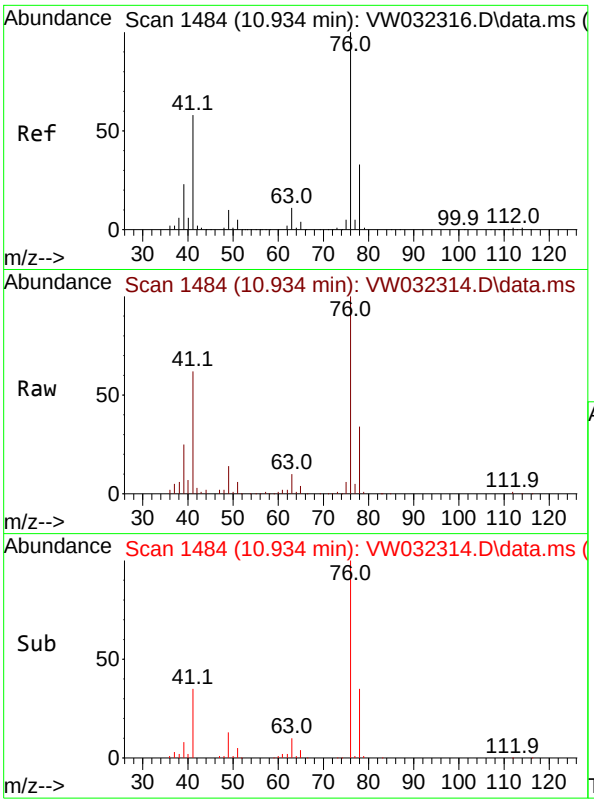


#56
Ethyl methacrylate
Concen: 9.750 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 69 Resp: 42126

Ion	Ratio	Lower	Upper
69	100		
41	71.6	53.2	79.8
39	36.1	32.9	49.3

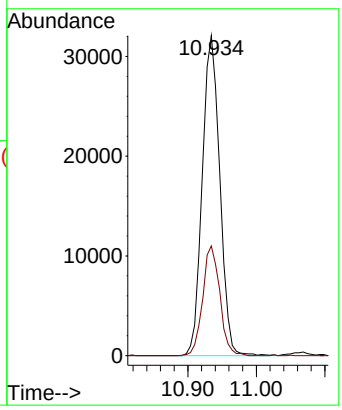




#57
1,3-Dichloropropane
Concen: 10.501 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 76 Resp: 5724

Ion	Ratio	Lower	Upper
76	100		
78	33.5	26.2	39.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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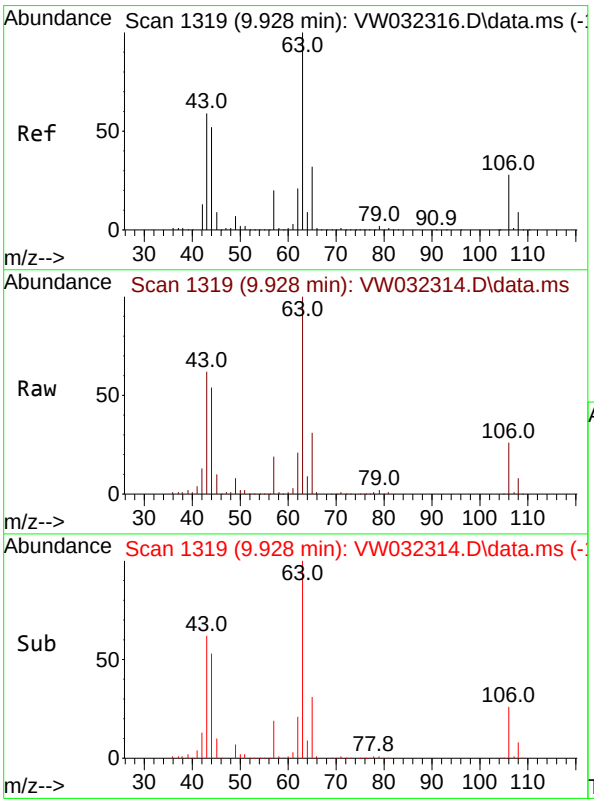
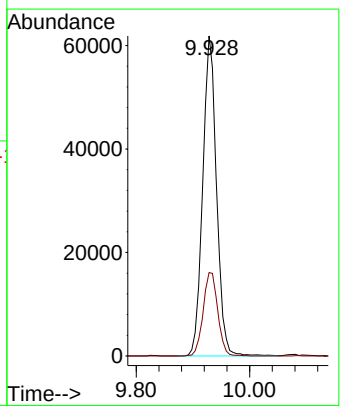
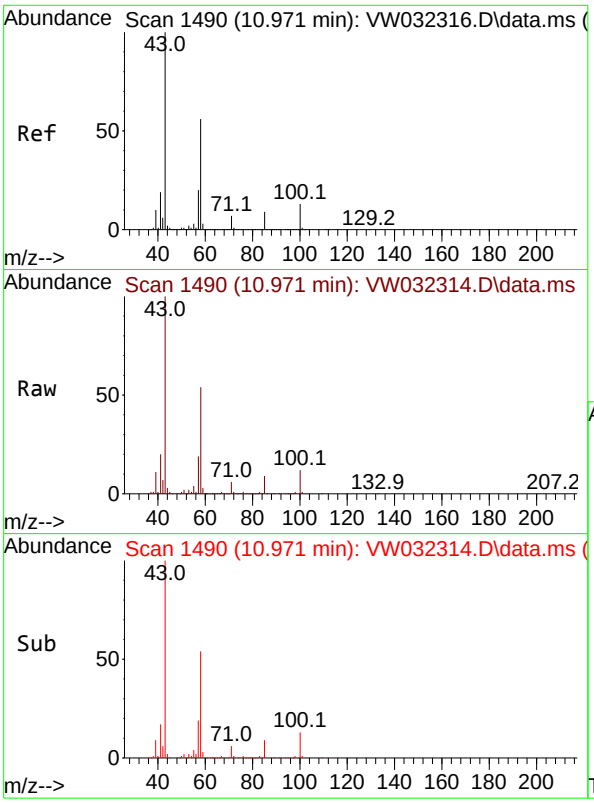


#58
2-Chloroethyl Vinyl ether
Concen: 45.484 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 63 Resp: 104587

Ion	Ratio	Lower	Upper
63	100		
106	27.5	24.3	36.5





#59
2-Hexanone
Concen: 50.996 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 11808

Ion	Ratio	Lower	Upper
43	100		
58	53.3	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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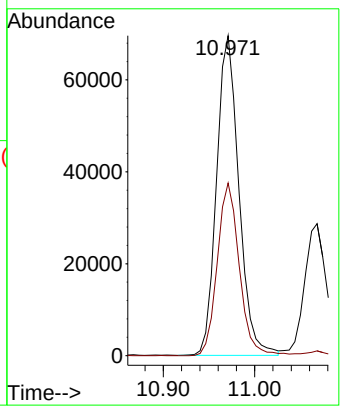
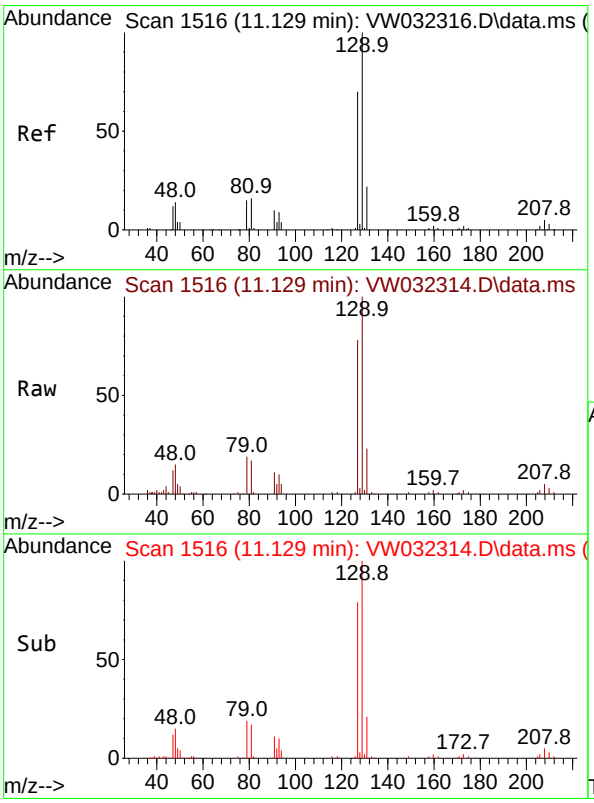
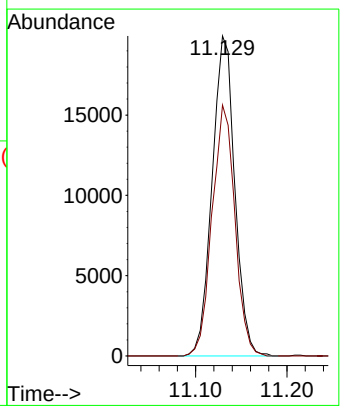


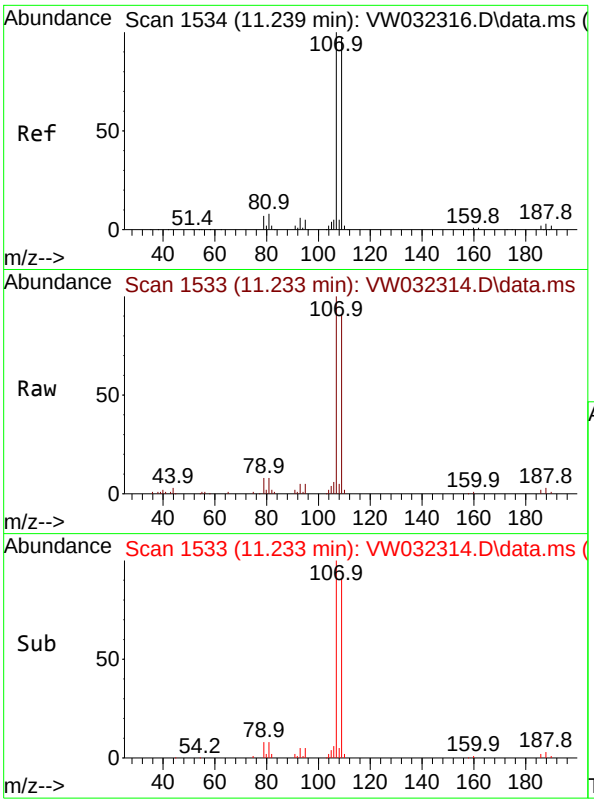


#60
Dibromochloromethane
Concen: 9.806 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:129 Resp: 34371

Ion	Ratio	Lower	Upper
129	100		
127	78.7	38.1	114.5





#61
1,2-Dibromoethane
Concen: 10.308 ug/l
RT: 11.233 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:107 Resp: 3102

Ion	Ratio	Lower	Upper
107	100		
109	95.8	74.5	111.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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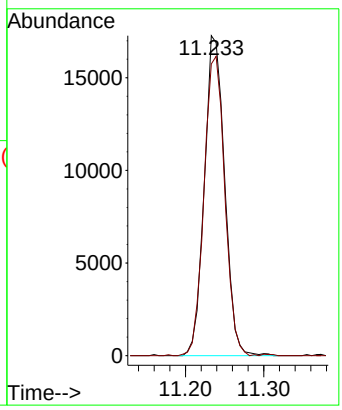
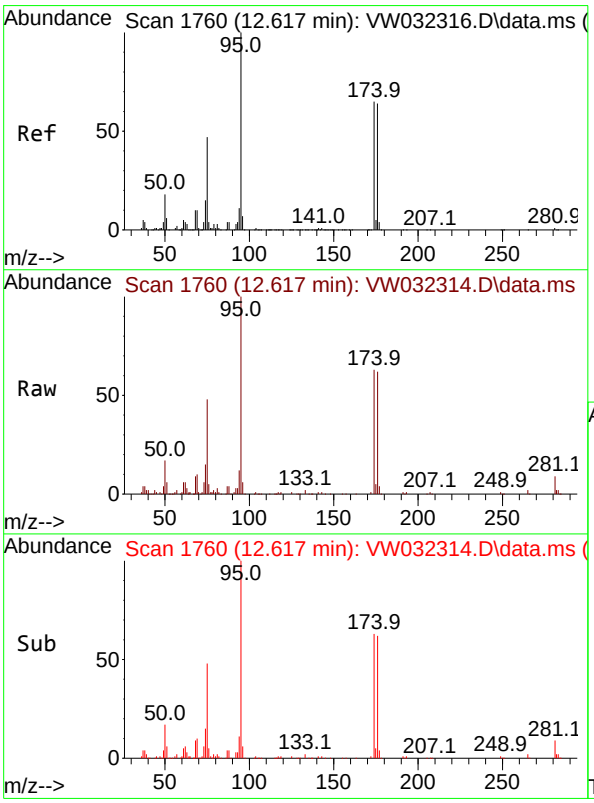
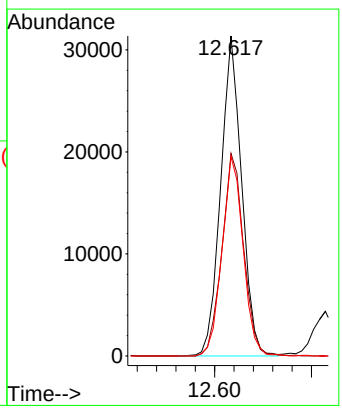


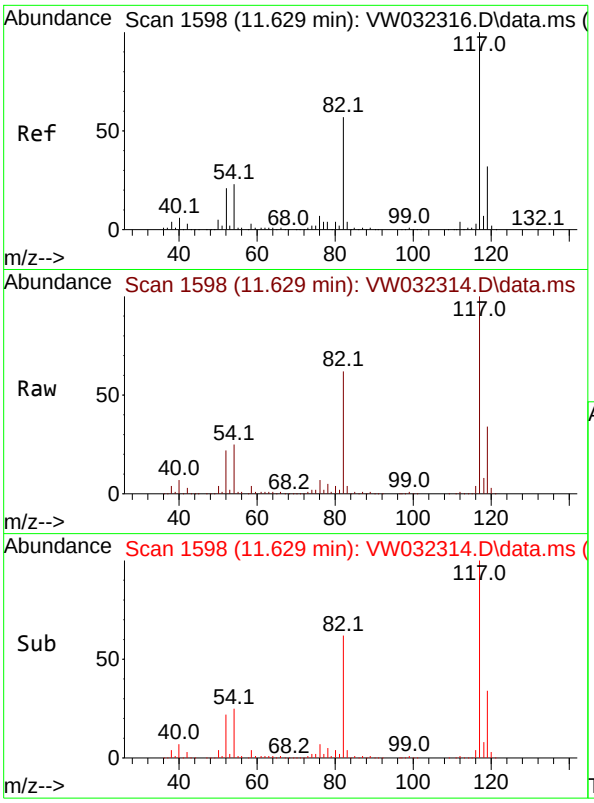


#62
4-Bromofluorobenzene
Concen: 9.936 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 95 Resp: 47150

Ion	Ratio	Lower	Upper
95	100		
174	65.8	0.0	145.6
176	62.6	0.0	140.8

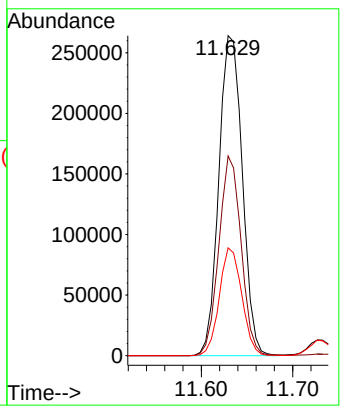




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:117 Resp: 47172

Ion	Ratio	Lower	Upper
117	100		
82	62.4	42.7	64.1
119	33.7	25.2	37.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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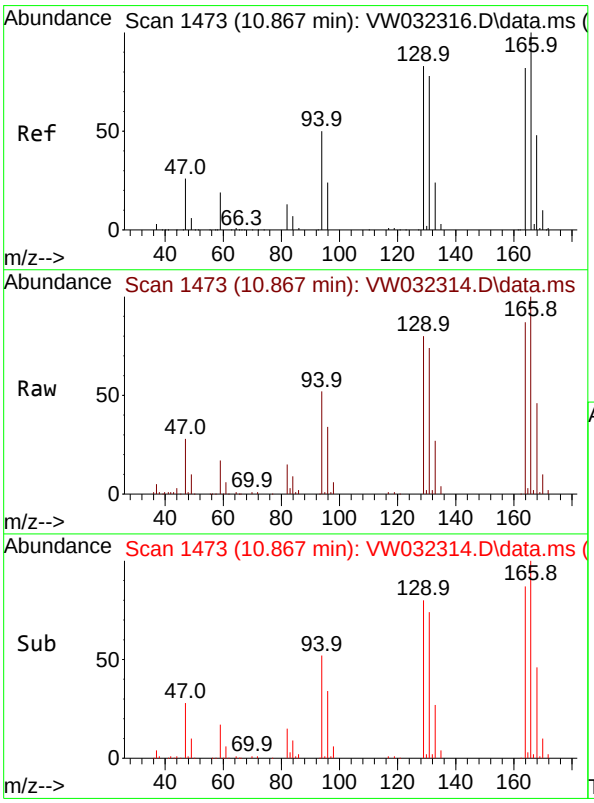
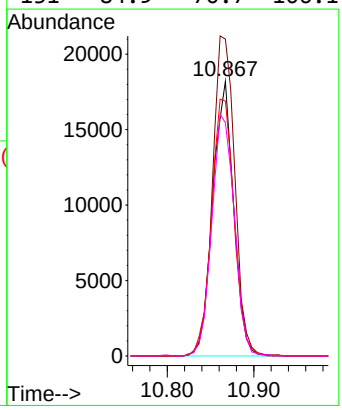
Supervised By :Semsettin Yesilyurt 10/03/2025

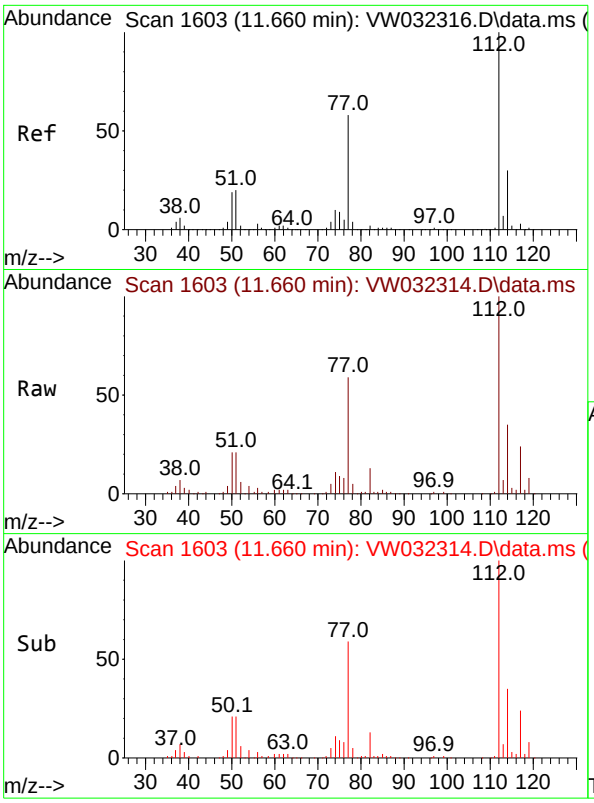


#64
Tetrachloroethene
Concen: 10.851 ug/l
RT: 10.867 min Scan# 1473
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:164 Resp: 30629

Ion	Ratio	Lower	Upper
164	100		
166	115.3	97.5	146.3
129	92.8	71.2	106.8
131	84.9	70.7	106.1





#65
Chlorobenzene
Concen: 10.362 ug/l
RT: 11.660 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:112 Resp: 10755

Ion	Ratio	Lower	Upper
112	100		
114	35.2	26.0	39.0

Instrument :
MSVOA_W
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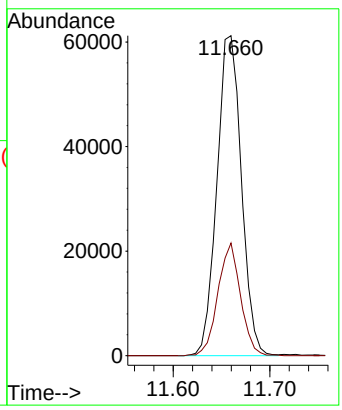
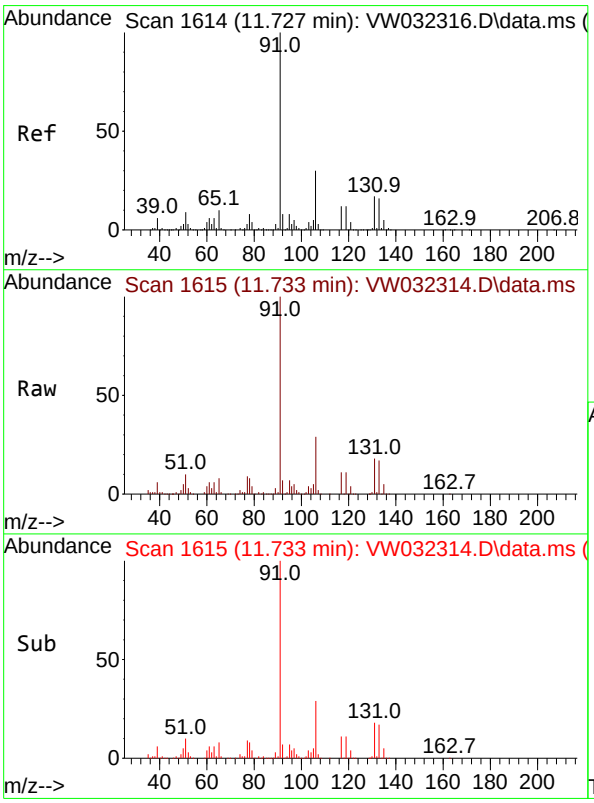
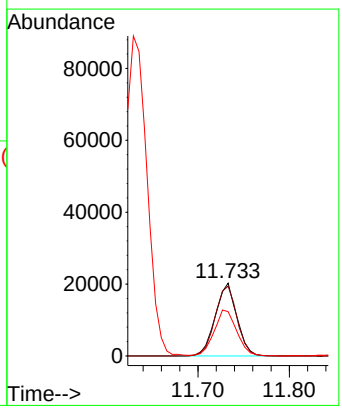


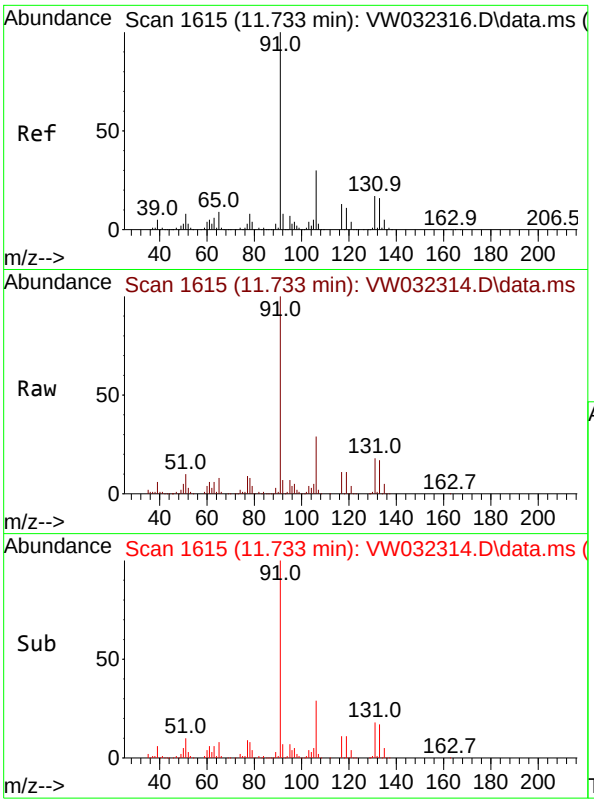


#66
1,1,1,2-Tetrachloroethane
Concen: 10.240 ug/l
RT: 11.733 min Scan# 1615
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:131 Resp: 33104

Ion	Ratio	Lower	Upper
131	100		
133	98.6	47.7	143.1
119	66.6	32.8	98.3

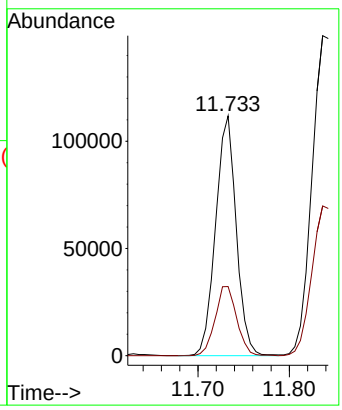




#67
Ethyl Benzene
Concen: 10.149 ug/l
RT: 11.733 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 91 Resp: 17558

Ion	Ratio	Lower	Upper
91	100		
106	28.8	25.3	37.9



Instrument :
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ClientSampleId :
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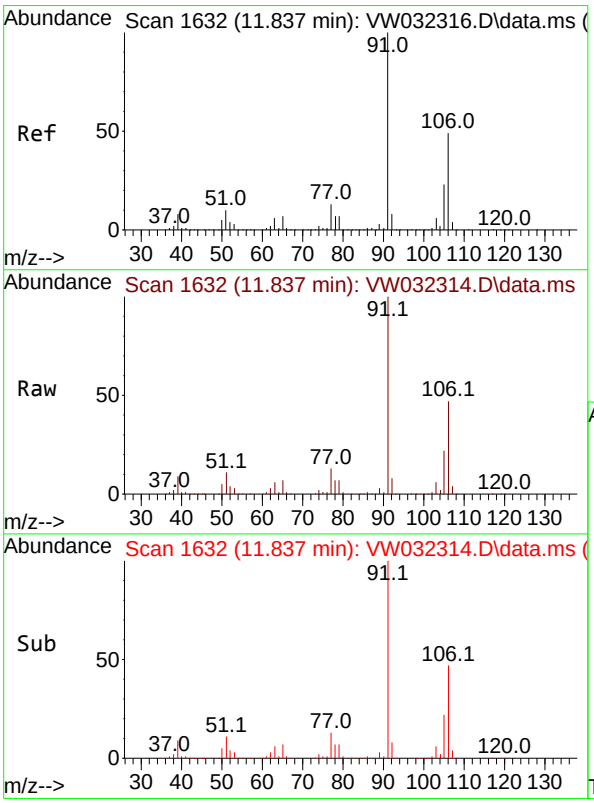
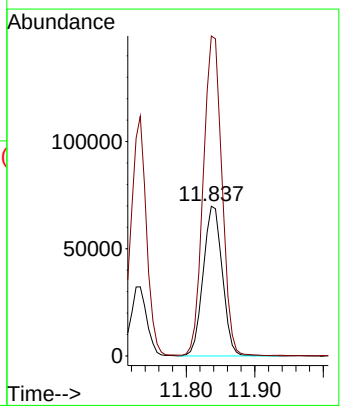
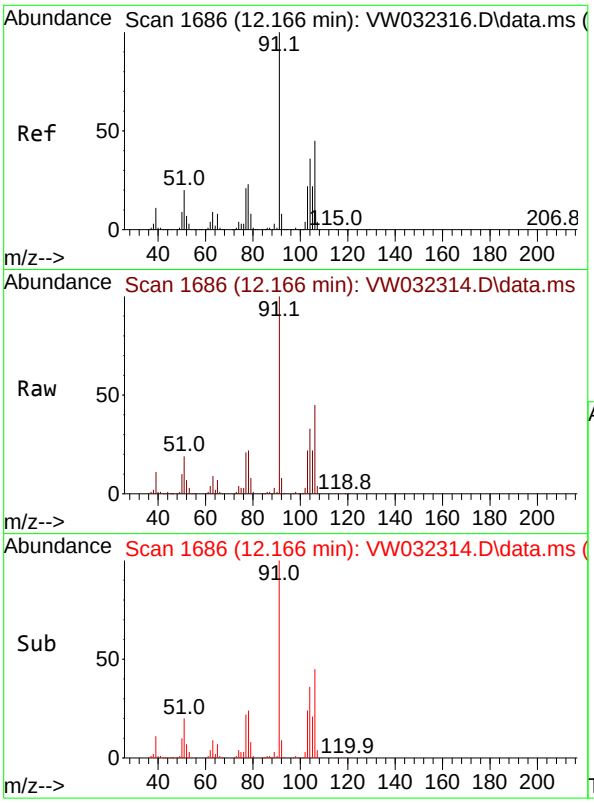


#68
m/p-Xylenes
Concen: 20.370 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:106 Resp: 135895

Ion	Ratio	Lower	Upper
106	100		
91	208.1	164.2	246.2





#69
o-Xylene
Concen: 10.052 ug/l
RT: 12.166 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:106 Resp: 6271

Ion	Ratio	Lower	Upper
106	100		
91	220.8	108.7	326.3

Instrument :
MSVOA_W
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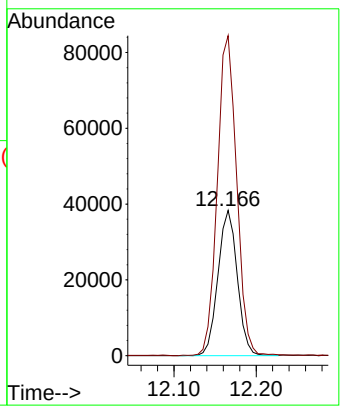
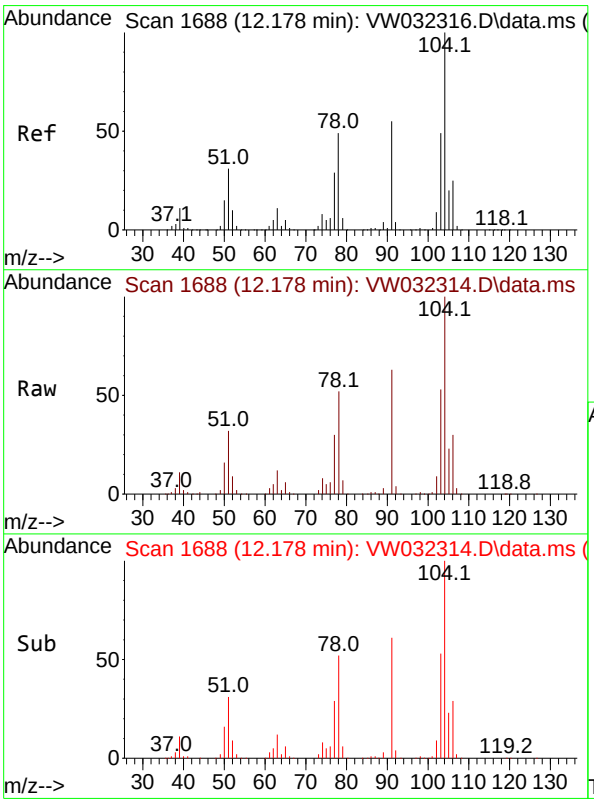
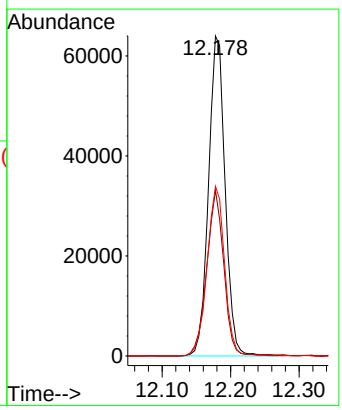


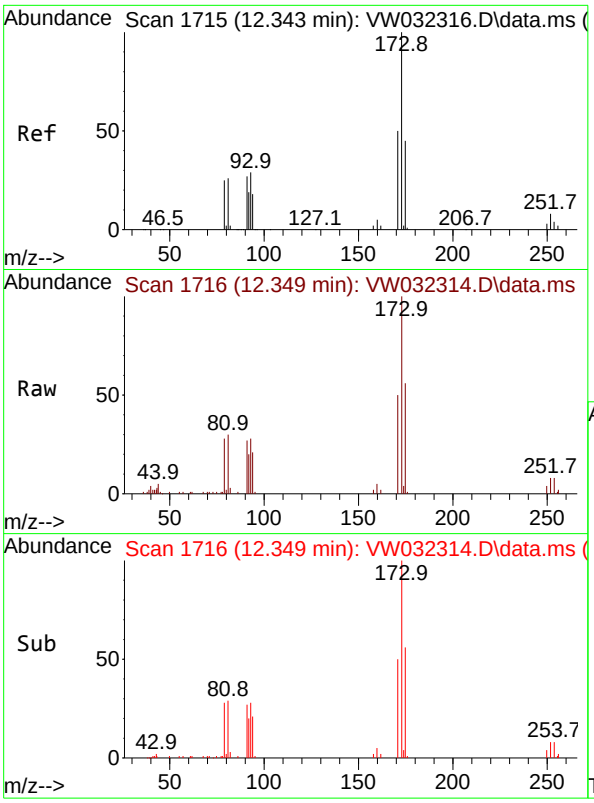


#70
Styrene
Concen: 9.899 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:104 Resp: 107824

Ion	Ratio	Lower	Upper
104	100		
78	53.3	41.6	62.4
103	56.0	44.8	67.2

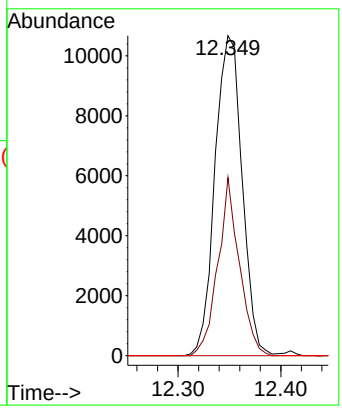




#71
Bromoform
Concen: 10.562 ug/l
RT: 12.349 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:173 Resp: 1957

Ion	Ratio	Lower	Upper
173	100		
175	44.1	24.9	74.7
254	0.0	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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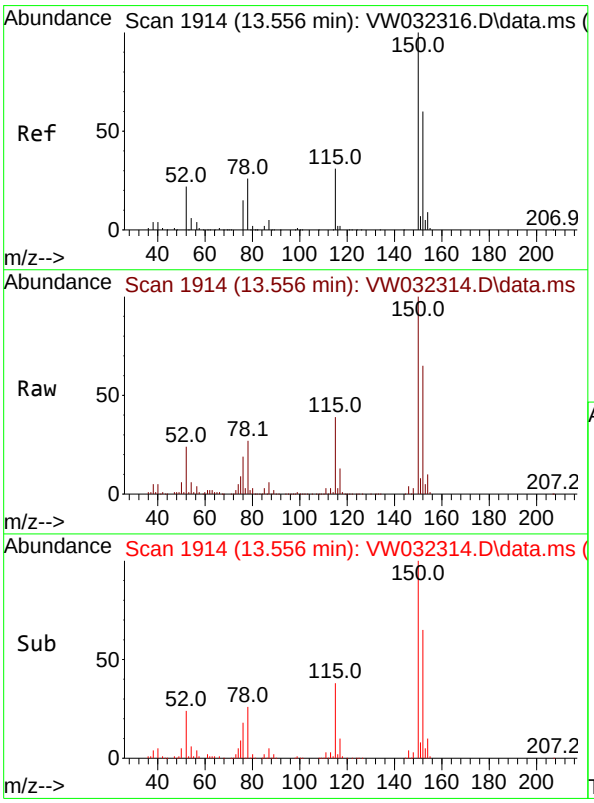
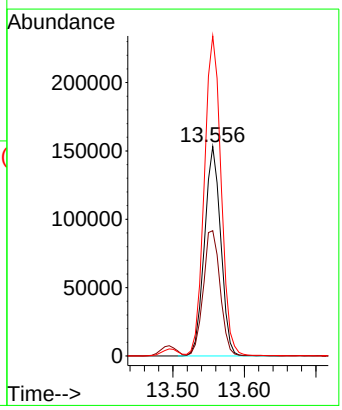
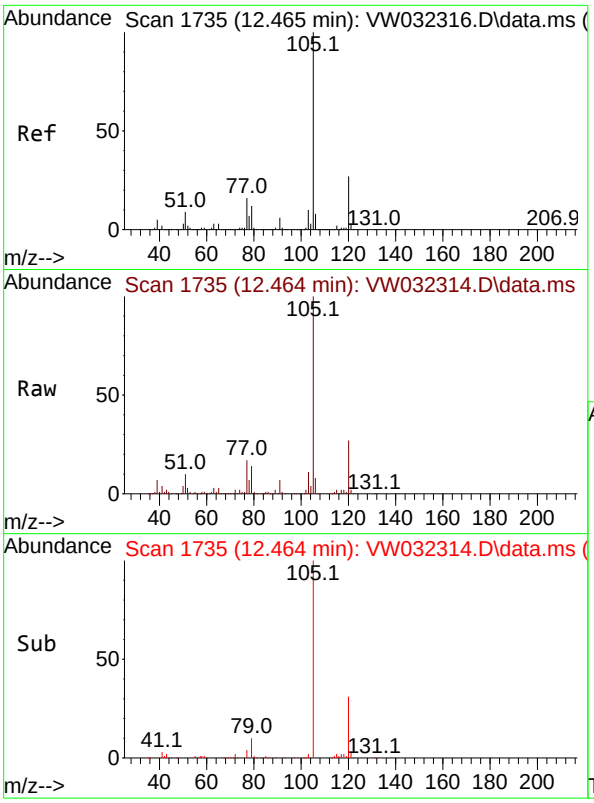


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:152 Resp: 242027

Ion	Ratio	Lower	Upper
152	100		
115	61.7	31.8	95.4
150	157.1	0.0	343.0





#73
Isopropylbenzene
Concen: 9.234 ug/l
RT: 12.464 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:105 Resp: 15289

Ion	Ratio	Lower	Upper
105	100		
120	26.3	13.0	38.9

Instrument :
MSVOA_W
ClientSampleId :
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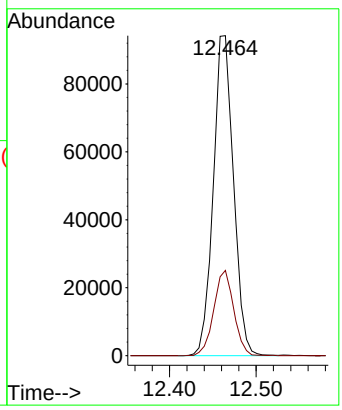
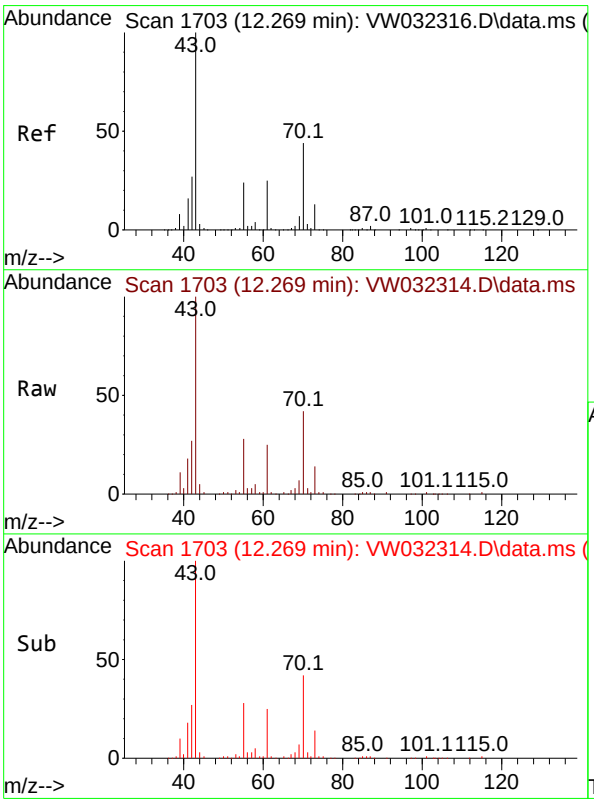
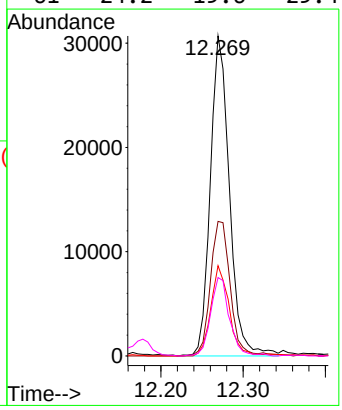


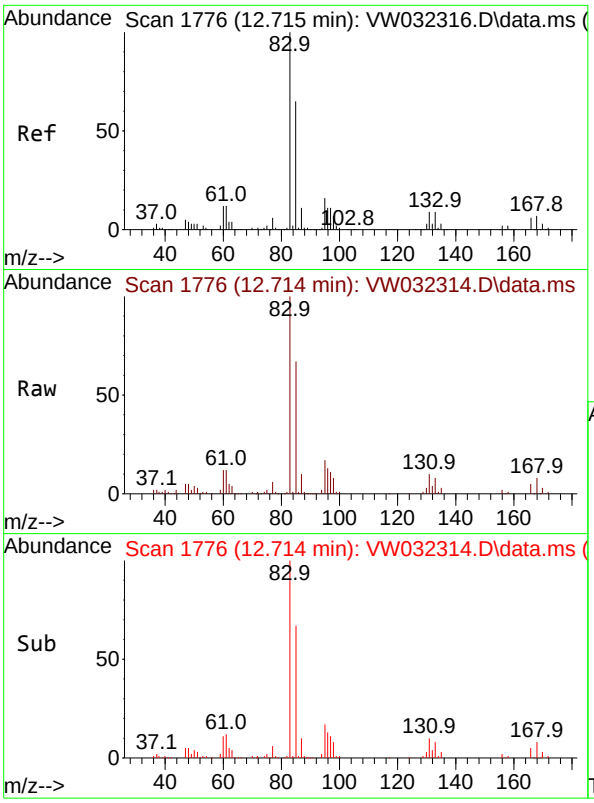


#74
N-amyl acetate
Concen: 9.412 ug/l
RT: 12.269 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 43 Resp: 49718

Ion	Ratio	Lower	Upper
43	100		
70	43.7	35.3	52.9
55	26.8	19.9	29.9
61	24.2	19.6	29.4





#75
1,1,2,2-Tetrachloroethane
Concen: 10.213 ug/l
RT: 12.714 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 83 Resp: 4199

Ion	Ratio	Lower	Upper
83	100		
131	10.0	5.1	15.4
85	64.1	32.2	96.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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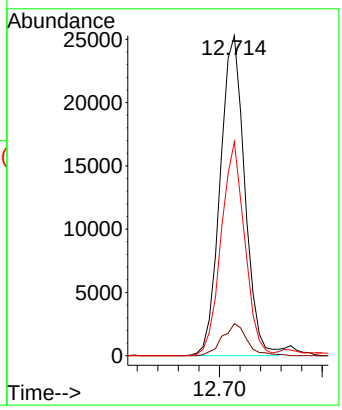
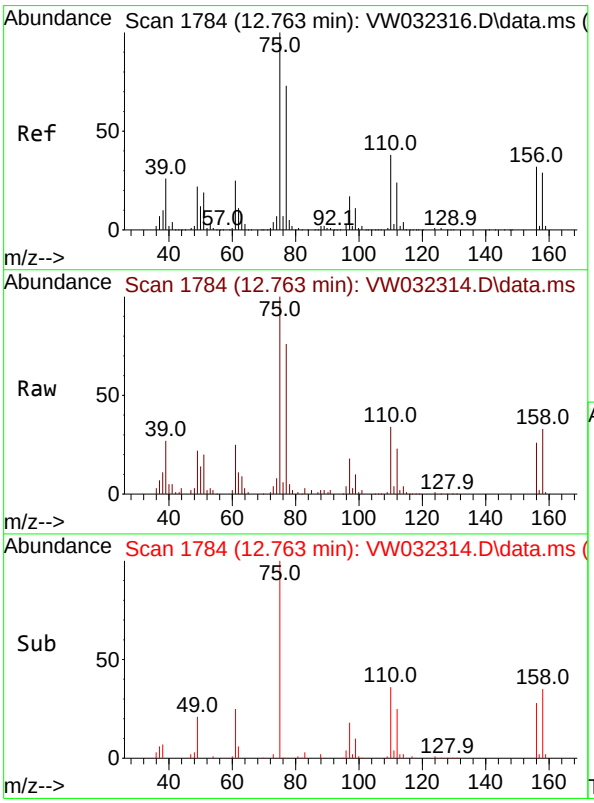
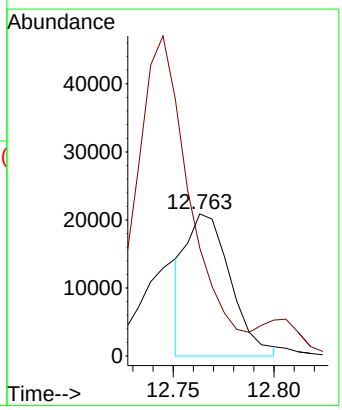


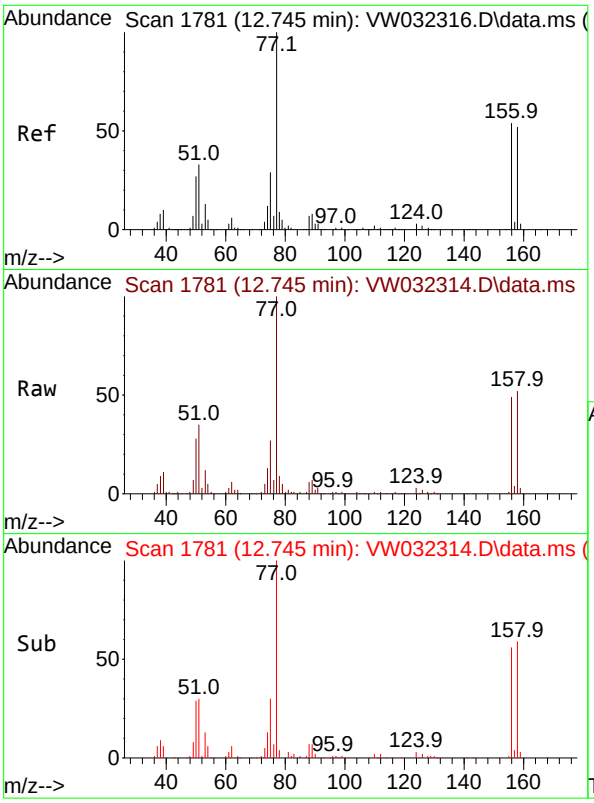


#76
1,2,3-Trichloropropane
Concen: 9.939 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 75 Resp: 31741

Ion	Ratio	Lower	Upper
75	100		
77	276.5	141.7	425.1

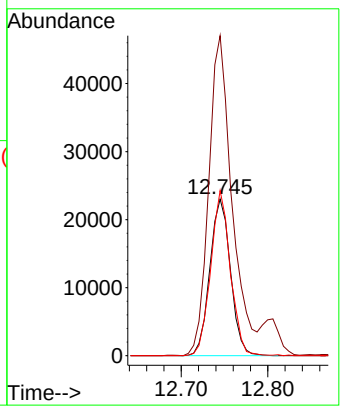




#77
Bromobenzene
Concen: 9.547 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:156 Resp: 3810

Ion	Ratio	Lower	Upper
156	100		
77	230.4	98.6	295.7
158	100.7	48.4	145.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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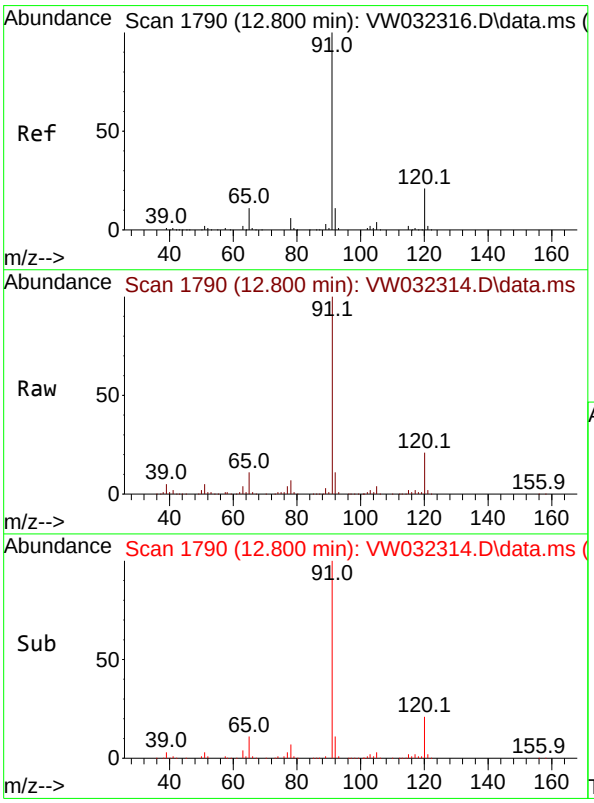
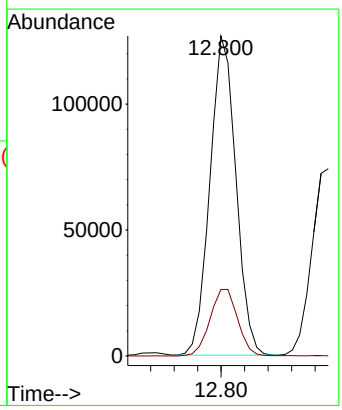
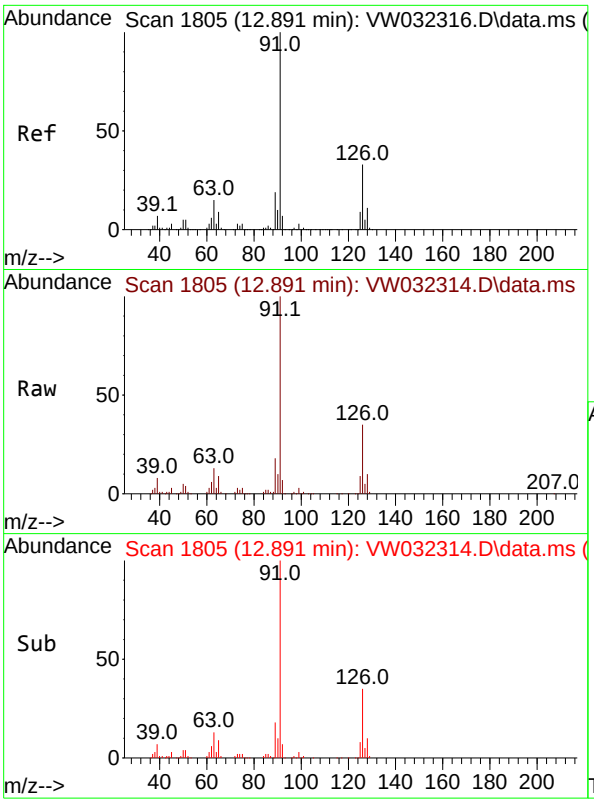


#78
n-propylbenzene
Concen: 9.421 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 91 Resp: 194851

Ion	Ratio	Lower	Upper
91	100		
120	22.2	11.8	35.4





#79
2-Chlorotoluene
Concen: 9.855 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 91 Resp: 12463

Ion	Ratio	Lower	Upper
91	100		
126	31.8	16.6	49.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

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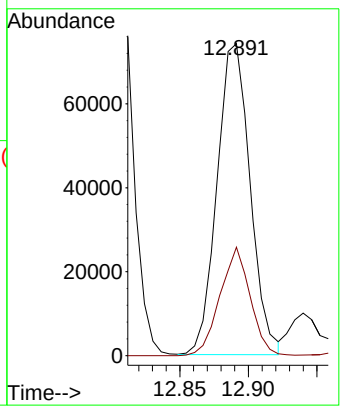
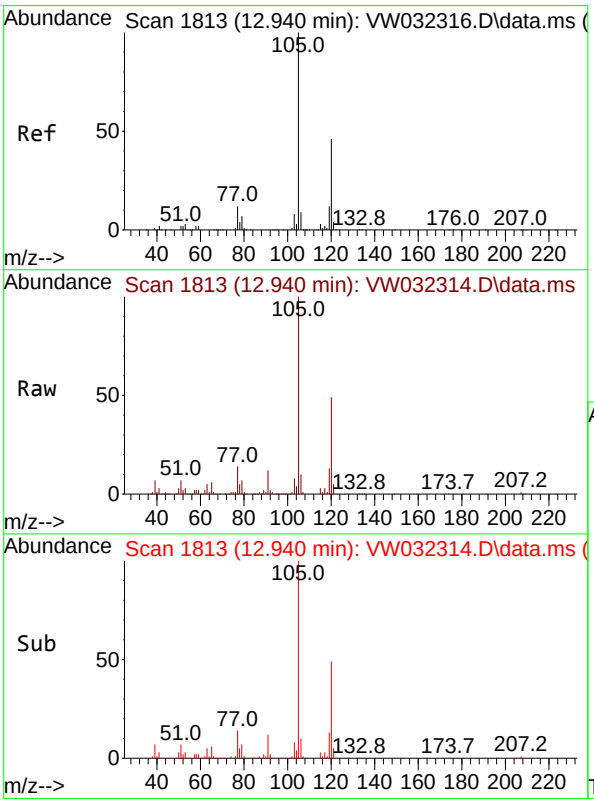
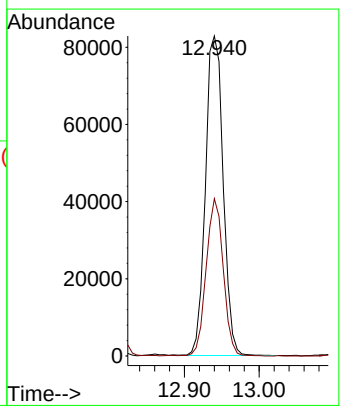


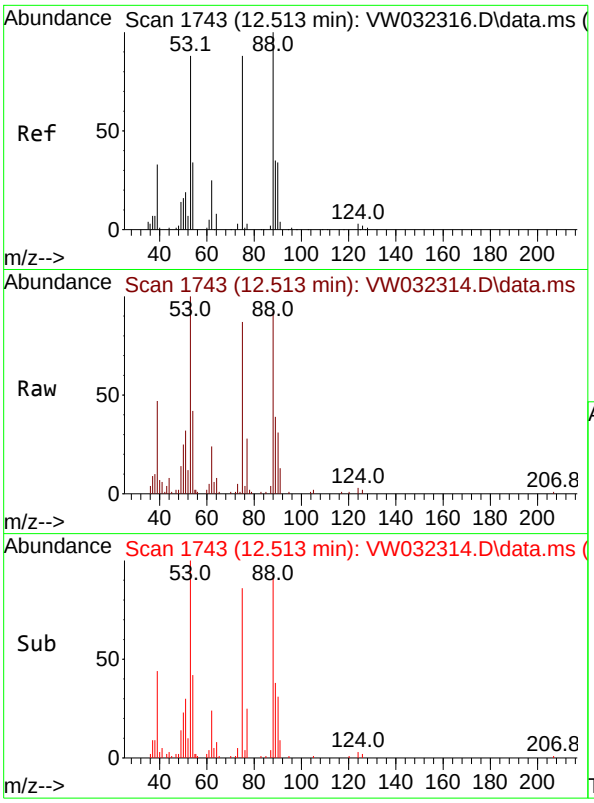


#80
1,3,5-Trimethylbenzene
Concen: 9.490 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:105 Resp: 135870

Ion	Ratio	Lower	Upper
105	100		
120	47.6	24.8	74.4

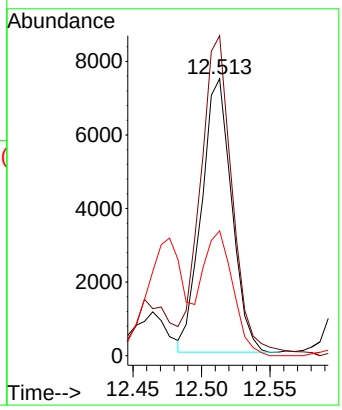




#81
trans-1,4-Dichloro-2-butene
Concen: 9.067 ug/l
RT: 12.513 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 75 Resp: 1139

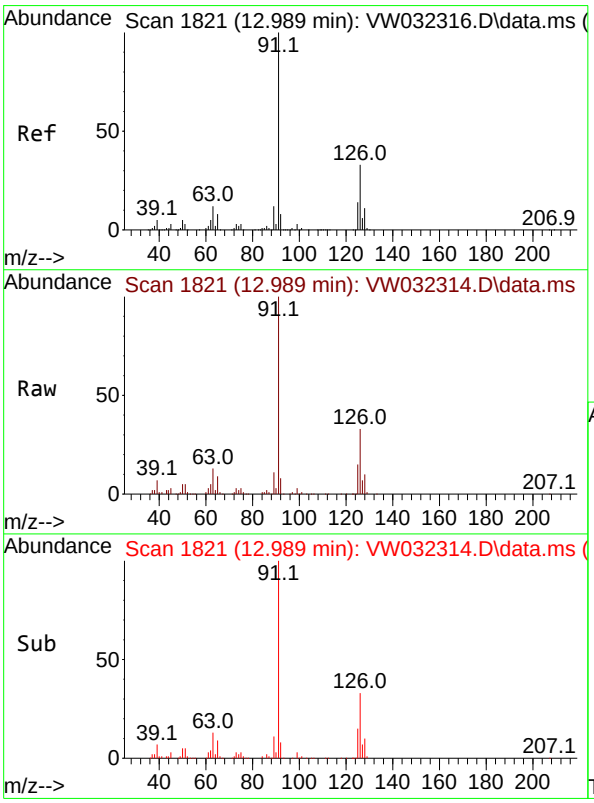
Ion	Ratio	Lower	Upper
75	100		
53	124.5	91.0	136.6
89	44.1	39.4	59.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

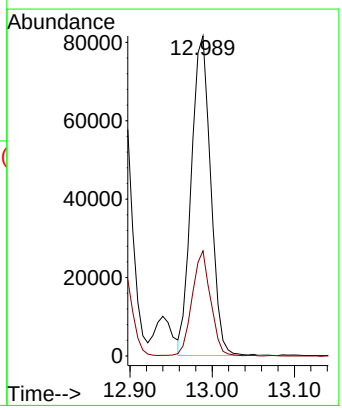
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

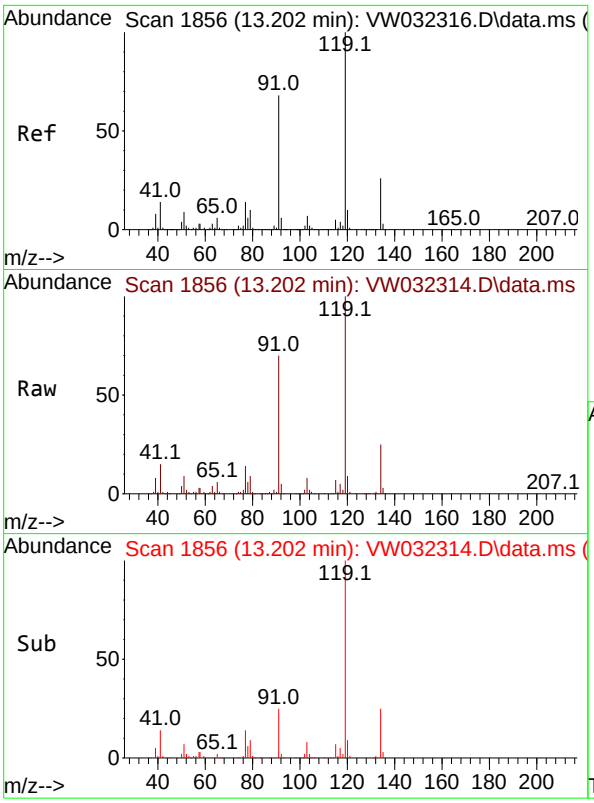


#82
4-Chlorotoluene
Concen: 9.874 ug/l
RT: 12.989 min Scan# 1821
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 91 Resp: 132770

Ion	Ratio	Lower	Upper
91	100		
126	31.3	16.1	48.2

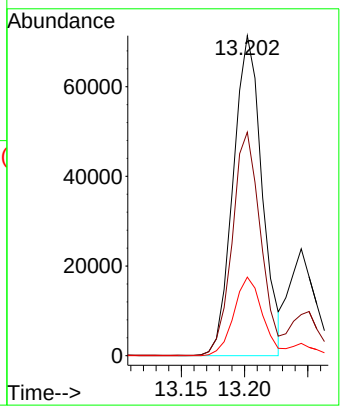




#83
tert-Butylbenzene
Concen: 9.669 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:119 Resp: 11359

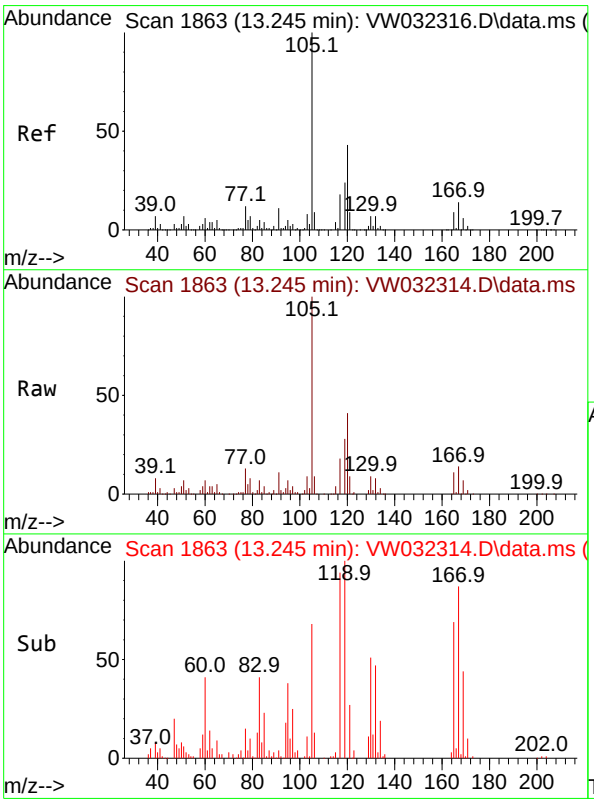
Ion	Ratio	Lower	Upper
119	100		
91	67.9	33.8	101.3
134	24.5	12.5	37.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

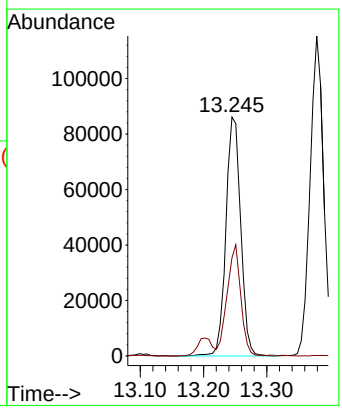
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

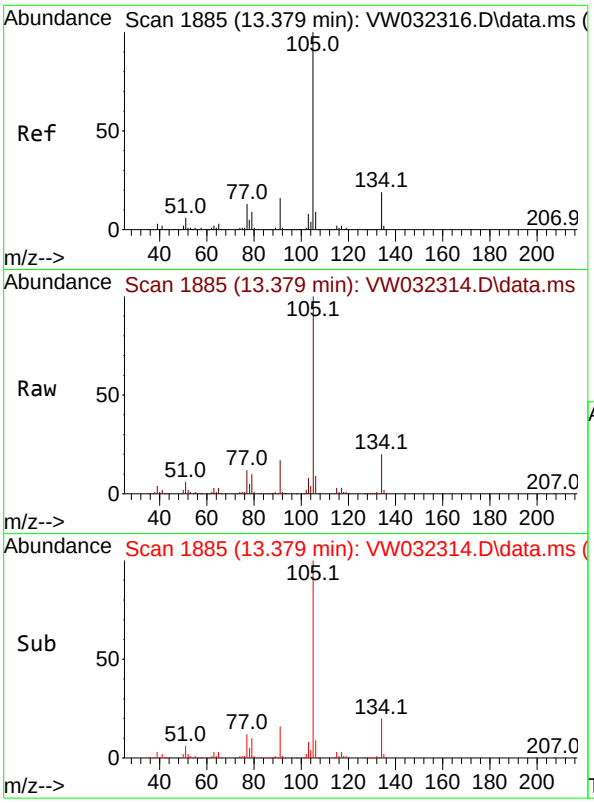


#84
1,2,4-Trimethylbenzene
Concen: 9.580 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:105 Resp: 139474

Ion	Ratio	Lower	Upper
105	100		
120	43.1	22.1	66.3

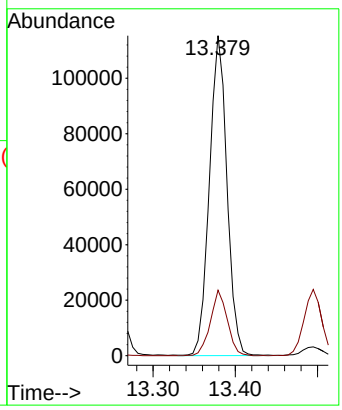




#85
sec-Butylbenzene
Concen: 9.533 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:105 Resp: 17115

Ion	Ratio	Lower	Upper
105	100		
134	19.7	10.1	30.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
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Reviewed By :Mahesh Dadoda 10/03/2025
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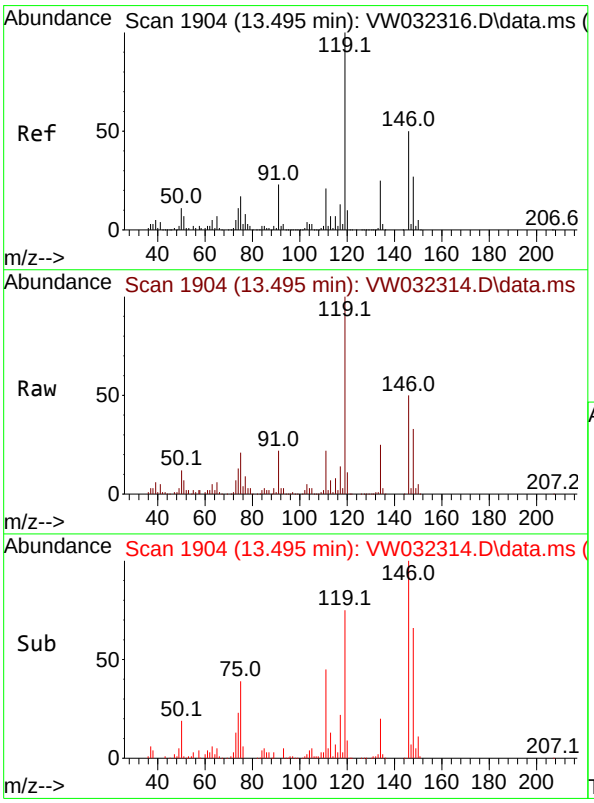
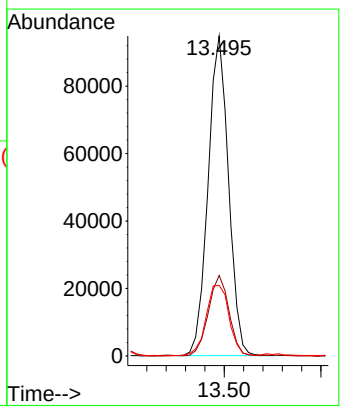
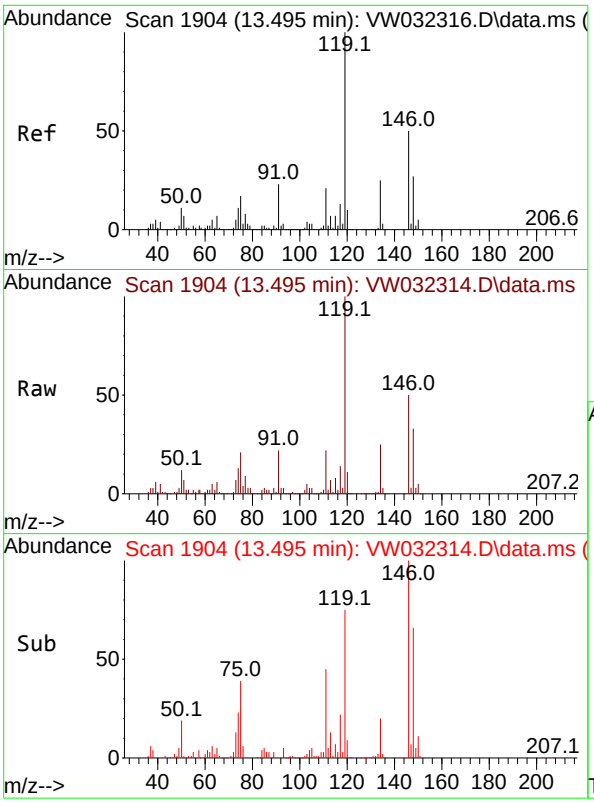


#86
p-Isopropyltoluene
Concen: 9.335 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:119 Resp: 139064

Ion	Ratio	Lower	Upper
119	100		
134	25.6	12.6	37.6
91	25.2	12.4	37.0





#87
1,3-Dichlorobenzene
Concen: 9.881 ug/l
RT: 13.495 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

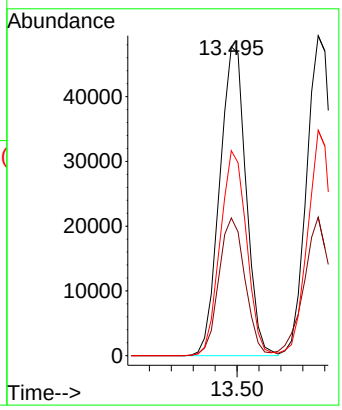
Tgt Ion:146 Resp: 7986

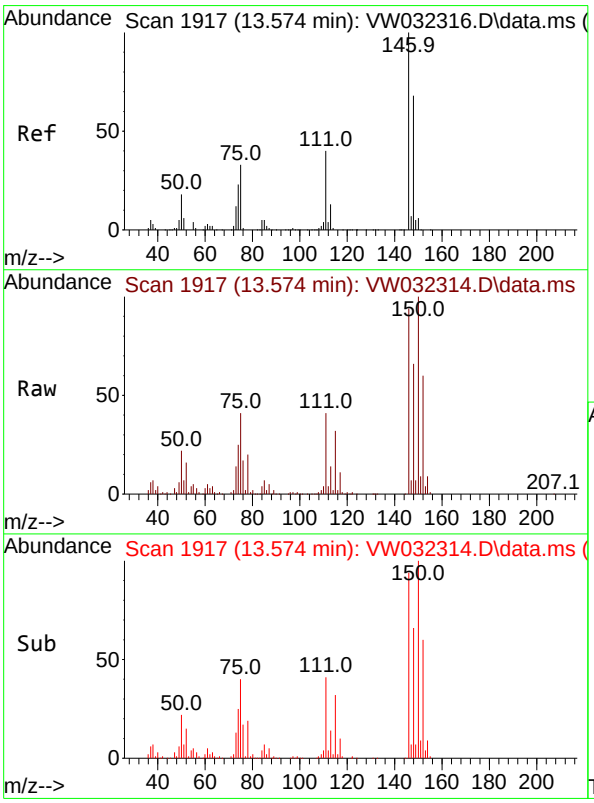
Ion	Ratio	Lower	Upper
146	100		
111	44.4	20.6	61.9
148	66.4	30.6	92.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

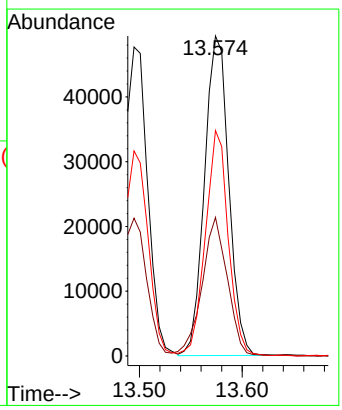


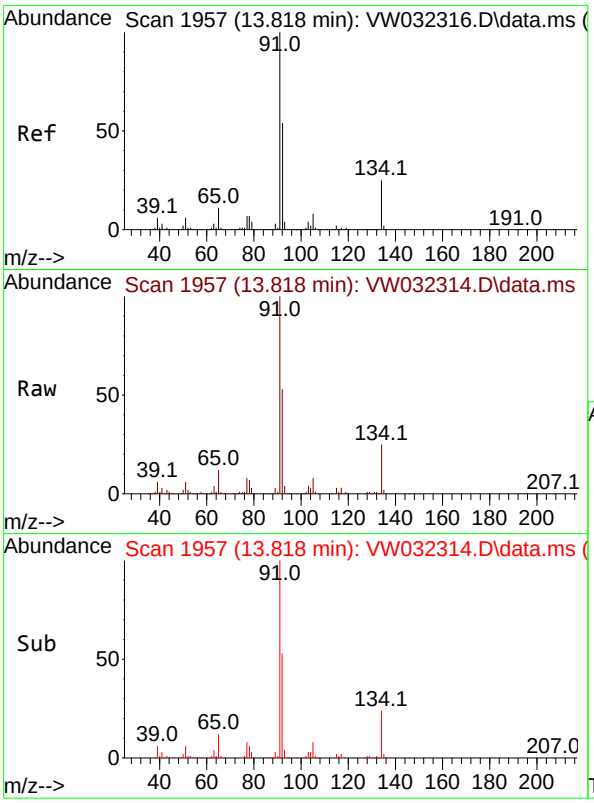


#88
1,4-Dichlorobenzene
Concen: 10.019 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:146 Resp: 80973

Ion	Ratio	Lower	Upper
146	100		
111	44.9	21.3	63.7
148	67.0	33.4	100.1

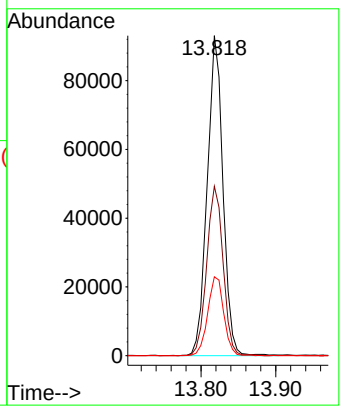




#89
n-Butylbenzene
Concen: 9.378 ug/l
RT: 13.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 91 Resp: 13639

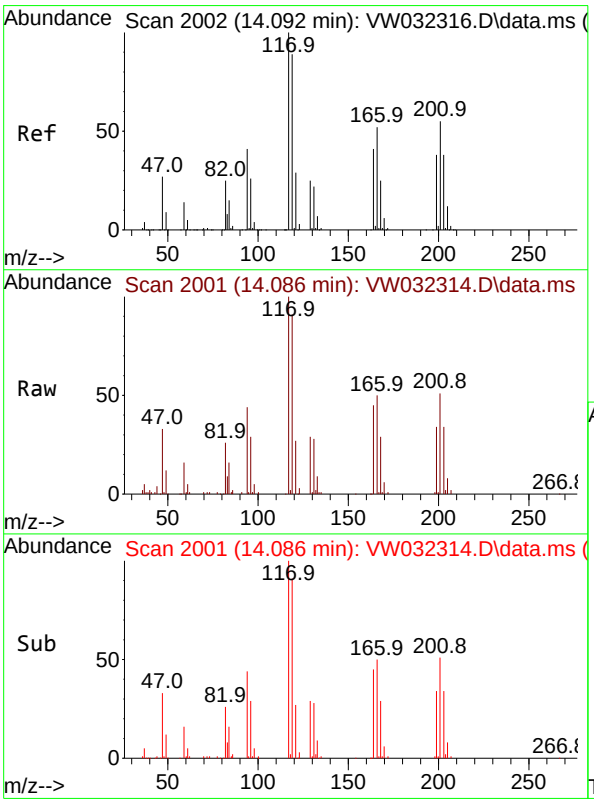
Ion	Ratio	Lower	Upper
91	100		
92	54.9	27.0	81.0
134	25.2	13.1	39.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

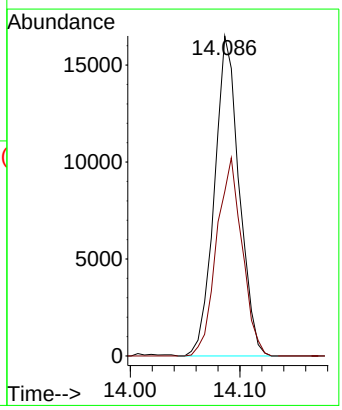
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

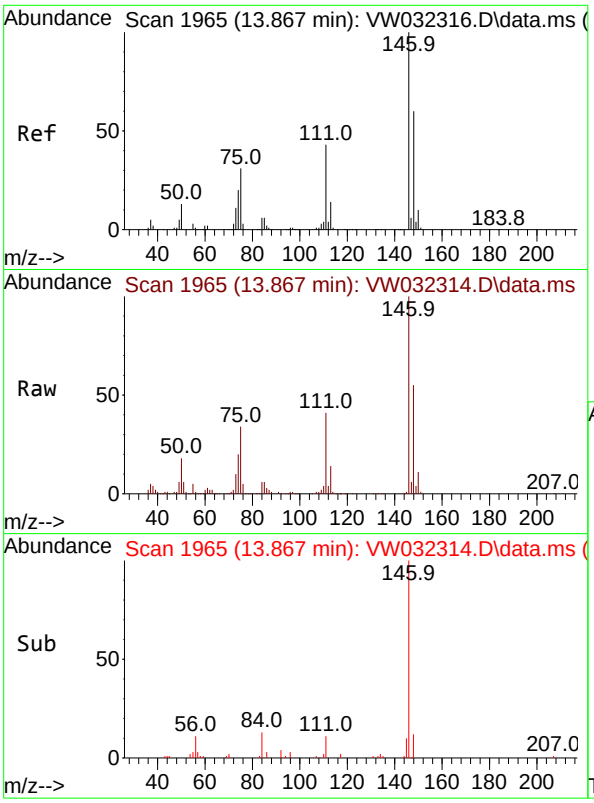


#90
Hexachloroethane
Concen: 9.699 ug/l
RT: 14.086 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:117 Resp: 25898

Ion	Ratio	Lower	Upper
117	100		
201	64.0	32.8	98.4

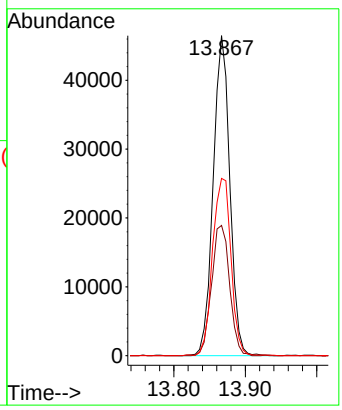




#91
1,2-Dichlorobenzene
Concen: 10.262 ug/l
RT: 13.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:146 Resp: 7498

Ion	Ratio	Lower	Upper
146	100		
111	44.1	23.4	70.0
148	61.5	34.1	102.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
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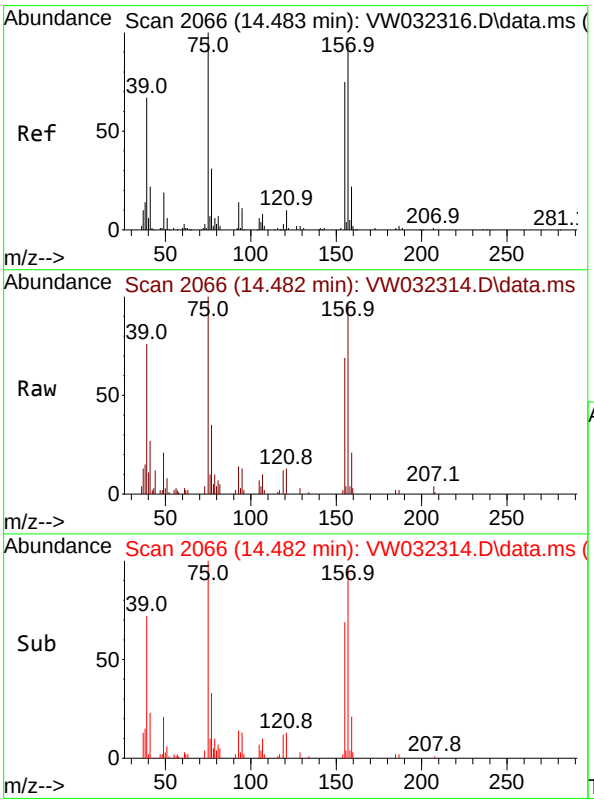
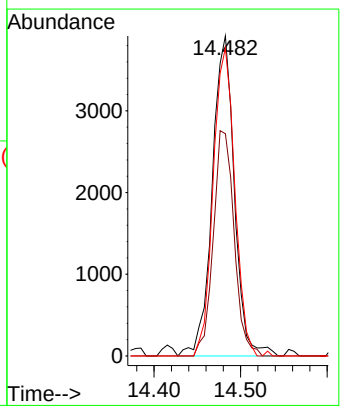
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

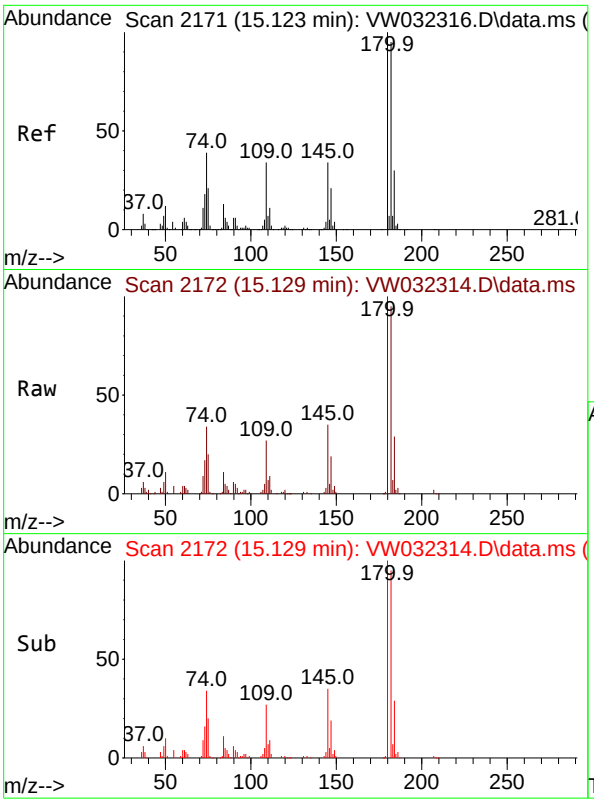


#92
1,2-Dibromo-3-Chloropropane
Concen: 9.662 ug/l
RT: 14.482 min Scan# 2066
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion: 75 Resp: 6955

Ion	Ratio	Lower	Upper
75	100		
155	66.2	40.8	122.5
157	93.6	51.8	155.4





#93
1,2,4-Trichlorobenzene
Concen: 9.306 ug/l
RT: 15.129 min Scan# 2
Delta R.T. 0.006 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:180 Resp: 4077

Ion	Ratio	Lower	Upper
180	100		
182	98.6	47.4	142.2
145	37.0	16.4	49.1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
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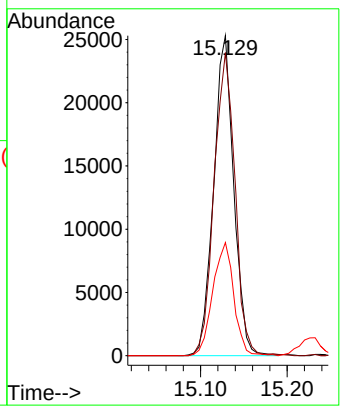
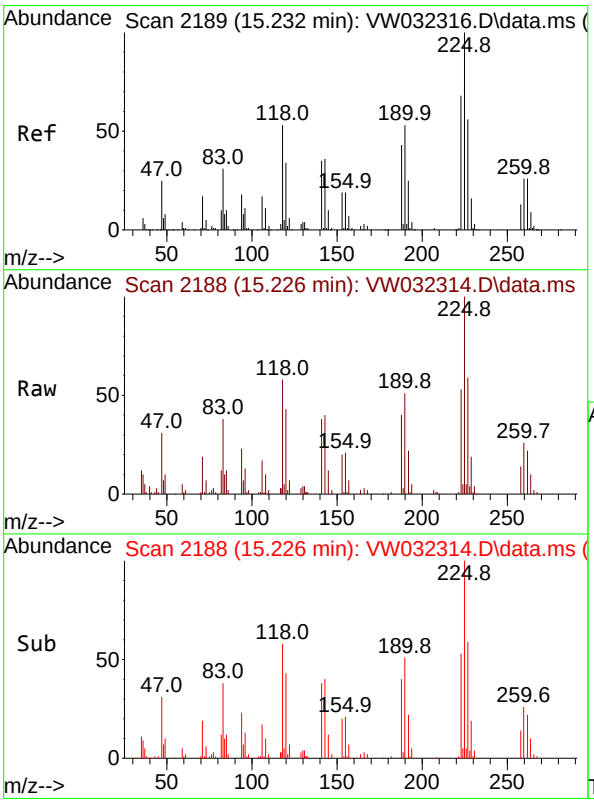
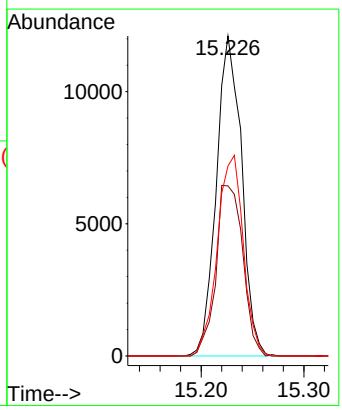


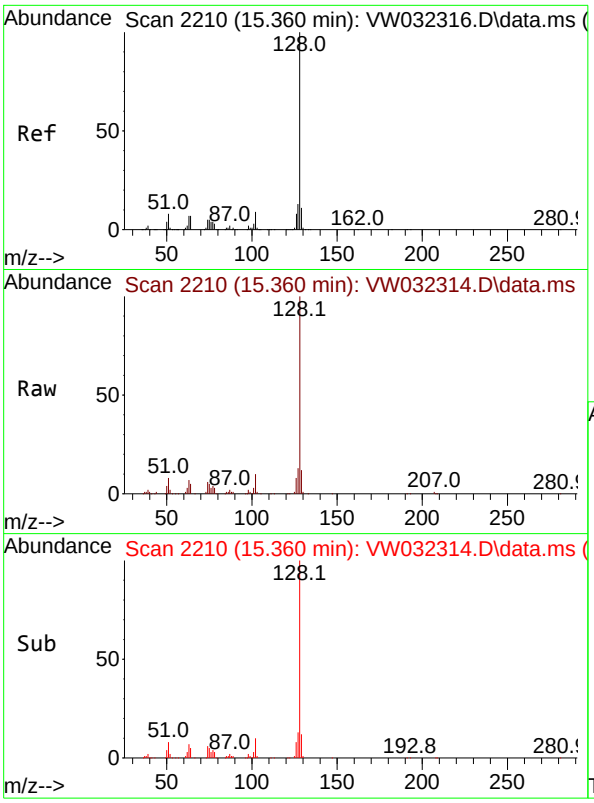


#94
Hexachlorobutadiene
Concen: 10.287 ug/l
RT: 15.226 min Scan# 2188
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:225 Resp: 20605

Ion	Ratio	Lower	Upper
225	100		
223	57.0	29.8	89.3
227	64.7	30.5	91.5

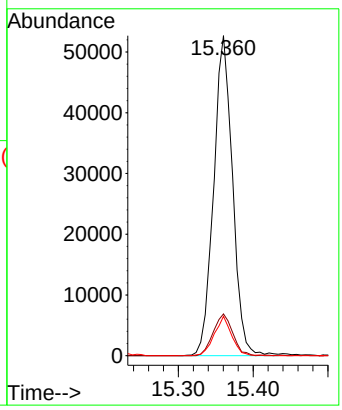




#95
Naphthalene
Concen: 8.829 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:128 Resp: 9289

Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.6	16.0
129	11.3	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
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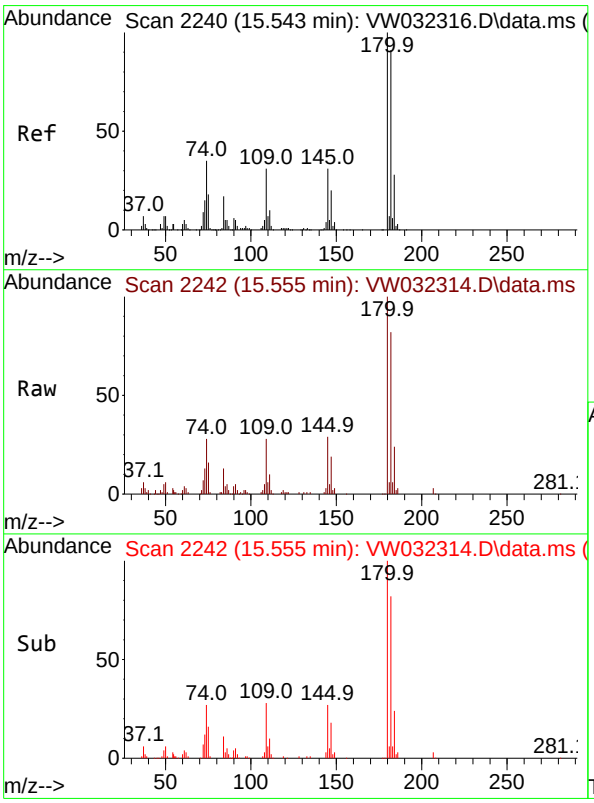
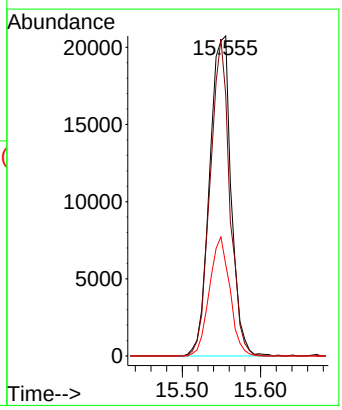


#96
1,2,3-Trichlorobenzene
Concen: 9.584 ug/l
RT: 15.555 min Scan# 2242
Delta R.T. 0.012 min
Lab File: VW032314.D
Acq: 01 Oct 2025 13:34

Tgt Ion:180 Resp: 39577

Ion	Ratio	Lower	Upper
180	100		
182	90.2	47.7	143.1
145	35.2	17.2	51.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032315.D
Acq On : 01 Oct 2025 14:15
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:14:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	281404	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	536489	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	481502	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.555	152	241841	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.312	65	86104	20.978	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	41.960%#		
35) Dibromofluoromethane	7.898	113	70270	20.225	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	40.460%#		
50) Toluene-d8	10.324	98	250144	19.507	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	39.020%#		
62) 4-Bromofluorobenzene	12.617	95	93567	19.305	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	38.620%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.045	85	38800	21.972	ug/l	95
3) Chloromethane	2.253	50	58031	21.298	ug/l	99
4) Vinyl Chloride	2.405	62	68214	20.970	ug/l	97
5) Bromomethane	2.813	94	48996	20.496	ug/l	99
6) Chloroethane	2.960	64	44339	20.645	ug/l	99
7) Trichlorofluoromethane	3.295	101	48412	19.877	ug/l	93
8) Diethyl Ether	3.716	74	43506	20.614	ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.094	101	59004	20.198	ug/l	95
10) Methyl Iodide	4.301	142	88957	21.342	ug/l	97
11) Tert butyl alcohol	5.215	59	34233	110.188	ug/l	96
12) 1,1-Dichloroethene	4.075	96	67001	21.126	ug/l	97
13) Acrolein	3.923	56	57603	114.243	ug/l	96
14) Allyl chloride	4.697	41	107824	20.129	ug/l	91
15) Acrylonitrile	5.392	53	112746	102.687	ug/l	99
16) Acetone	4.155	43	117625	103.498	ug/l	94
17) Carbon Disulfide	4.417	76	177979	20.568	ug/l	99
18) Methyl Acetate	4.703	43	68880	21.157	ug/l	95
19) Methyl tert-butyl Ether	5.459	73	129438	20.722	ug/l	92
20) Methylene Chloride	4.947	84	91257	21.174	ug/l	90
21) trans-1,2-Dichloroethene	5.453	96	71565	20.381	ug/l	98
22) Diisopropyl ether	6.337	45	234704	21.068	ug/l	94
23) Vinyl Acetate	6.276	43	773956	104.011	ug/l	98
24) 1,1-Dichloroethane	6.234	63	140018	20.687	ug/l	98
25) 2-Butanone	7.191	43	160713	103.830	ug/l	98
26) 2,2-Dichloropropane	7.179	77	71502	20.653	ug/l	98
27) cis-1,2-Dichloroethene	7.185	96	86196	20.434	ug/l	93
28) Bromochloromethane	7.526	49	65600	20.601	ug/l	85
29) Tetrahydrofuran	7.550	42	101422	104.194	ug/l	94
30) Chloroform	7.691	83	143028	20.837	ug/l	99
31) Cyclohexane	7.965	56	117320	20.304	ug/l	95
32) 1,1,1-Trichloroethane	7.886	97	100837	20.731	ug/l	99
36) 1,1-Dichloropropene	8.093	75	97586	19.902	ug/l	97
37) Ethyl Acetate	7.276	43	64814	19.859	ug/l	99
38) Carbon Tetrachloride	8.081	117	91643	19.861	ug/l	100
39) Methylcyclohexane	9.343	83	113500	19.190	ug/l	96
40) Benzene	8.331	78	309105	20.112	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032315.D
Acq On : 01 Oct 2025 14:15
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:14:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.496	41	37010	21.042	ug/l		90
42) 1,2-Dichloroethane	8.410	62	101383	20.160	ug/l		100
43) Isopropyl Acetate	8.434	43	115725	19.988	ug/l		99
44) Trichloroethene	9.099	130	70719	19.651	ug/l		98
45) 1,2-Dichloropropane	9.373	63	77815	20.284	ug/l		98
46) Dibromomethane	9.459	93	47632	20.192	ug/l		95
47) Bromodichloromethane	9.654	83	107295	19.886	ug/l		97
48) Methyl methacrylate	9.440	41	55063	19.561	ug/l		95
49) 1,4-Dioxane	9.465	88	13352	414.108	ug/l	#	85
51) 4-Methyl-2-Pentanone	10.208	43	341386	101.802	ug/l		98
52) Toluene	10.391	92	192396	20.102	ug/l		98
53) t-1,3-Dichloropropene	10.605	75	100559	19.211	ug/l		97
54) cis-1,3-Dichloropropene	10.074	75	117968	19.565	ug/l		96
55) 1,1,2-Trichloroethane	10.788	97	63272	20.068	ug/l		98
56) Ethyl methacrylate	10.647	69	85643	19.407	ug/l		94
57) 1,3-Dichloropropane	10.934	76	112943	20.283	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	219091	93.287	ug/l		96
59) 2-Hexanone	10.971	43	242814	102.664	ug/l		97
60) Dibromochloromethane	11.129	129	71782	20.051	ug/l		100
61) 1,2-Dibromoethane	11.233	107	61899	20.135	ug/l		98
64) Tetrachloroethene	10.867	164	57503	19.958	ug/l		97
65) Chlorobenzene	11.653	112	213655	20.167	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.733	131	66918	20.280	ug/l		98
67) Ethyl Benzene	11.727	91	355003	20.103	ug/l		97
68) m/p-Xylenes	11.836	106	275521	40.461	ug/l		96
69) o-Xylene	12.165	106	125849	19.762	ug/l		95
70) Styrene	12.178	104	230999	20.776	ug/l		97
71) Bromoform	12.348	173	37059	19.593	ug/l	#	97
73) Isopropylbenzene	12.464	105	325413	19.668	ug/l		99
74) N-amyl acetate	12.269	43	104472	19.793	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.708	83	82334	20.041	ug/l		100
76) 1,2,3-Trichloropropane	12.763	75	61898m	19.396	ug/l		
77) Bromobenzene	12.745	156	78072	19.575	ug/l		88
78) n-propylbenzene	12.799	91	414530	20.057	ug/l		97
79) 2-Chlorotoluene	12.891	91	251889	19.933	ug/l		97
80) 1,3,5-Trimethylbenzene	12.940	105	276218	19.307	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.513	75	23628	18.808	ug/l		98
82) 4-Chlorotoluene	12.982	91	268736	20.002	ug/l		99
83) tert-Butylbenzene	13.202	119	231081	19.685	ug/l		98
84) 1,2,4-Trimethylbenzene	13.245	105	294630	20.253	ug/l		97
85) sec-Butylbenzene	13.379	105	344593	19.209	ug/l		99
86) p-Isopropyltoluene	13.494	119	298543	20.057	ug/l		99
87) 1,3-Dichlorobenzene	13.501	146	157169	19.461	ug/l		94
88) 1,4-Dichlorobenzene	13.574	146	164453	20.364	ug/l		96
89) n-Butylbenzene	13.818	91	284638	19.585	ug/l		98
90) Hexachloroethane	14.086	117	50102	18.779	ug/l		94
91) 1,2-Dichlorobenzene	13.866	146	150657	20.636	ug/l		91
92) 1,2-Dibromo-3-Chloropr...	14.482	75	14474	20.123	ug/l		84
93) 1,2,4-Trichlorobenzene	15.122	180	83681	19.115	ug/l		99
94) Hexachlorobutadiene	15.226	225	36708	18.340	ug/l		90
95) Naphthalene	15.360	128	209101	19.889	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	81141	19.664	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032315.D
Acq On : 01 Oct 2025 14:15
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:14:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

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

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

ICAL Form

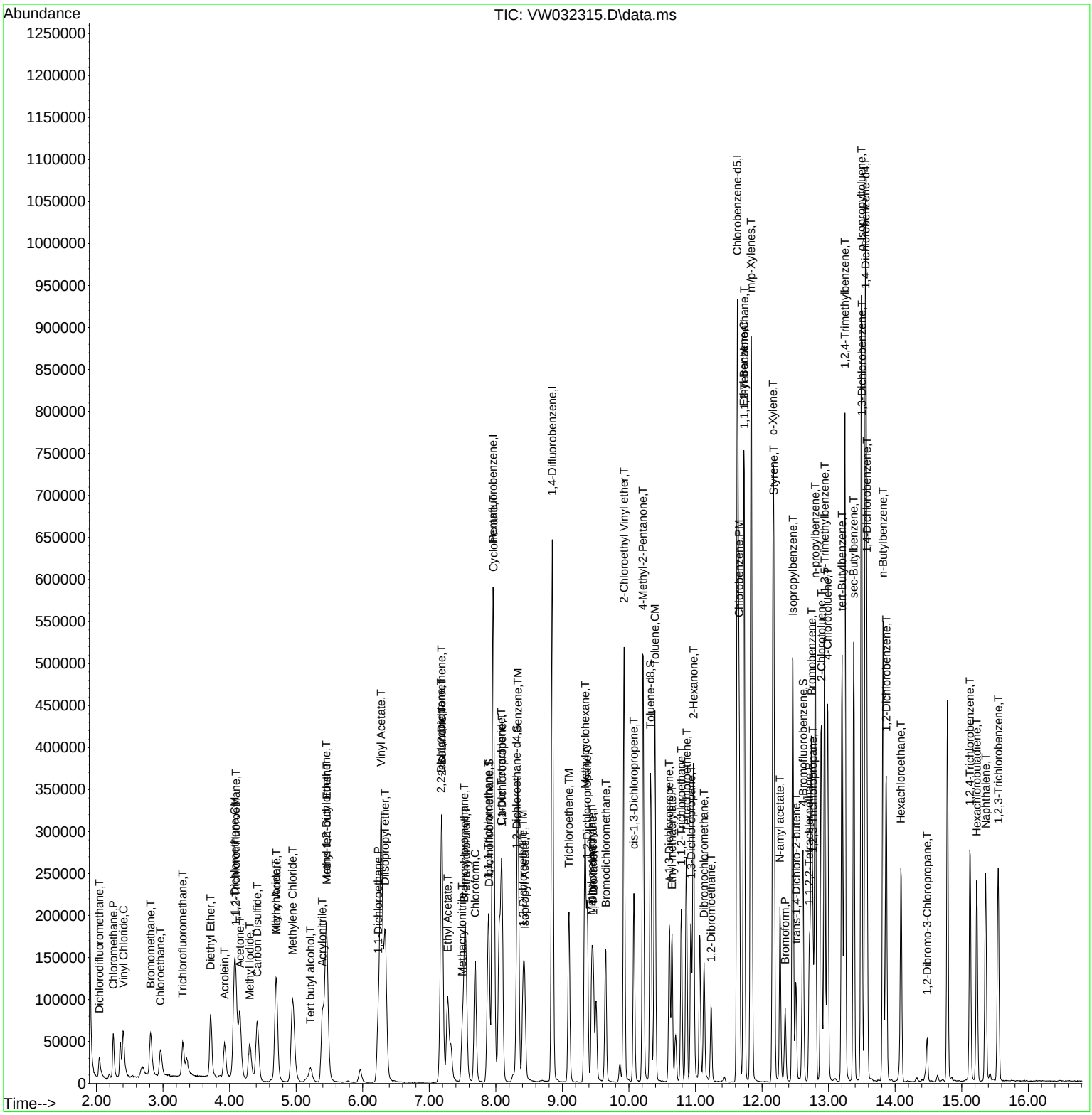
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032315.D
Acq On : 01 Oct 2025 14:15
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

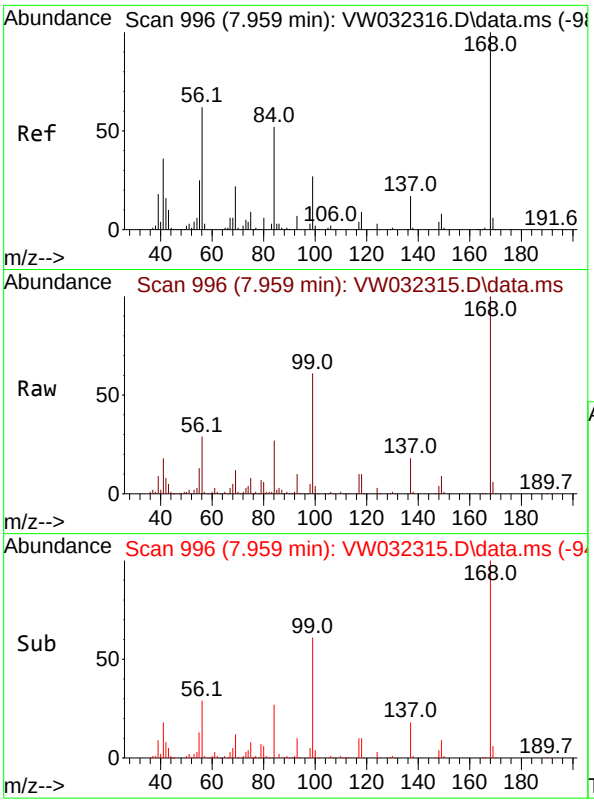
Quant Time: Oct 02 21:14:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

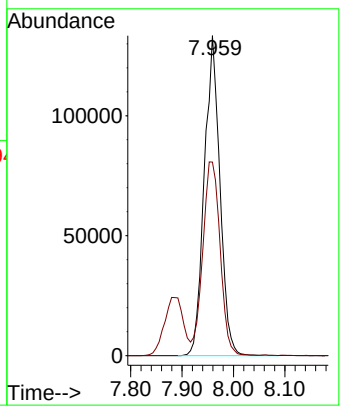




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:168 Resp: 28140

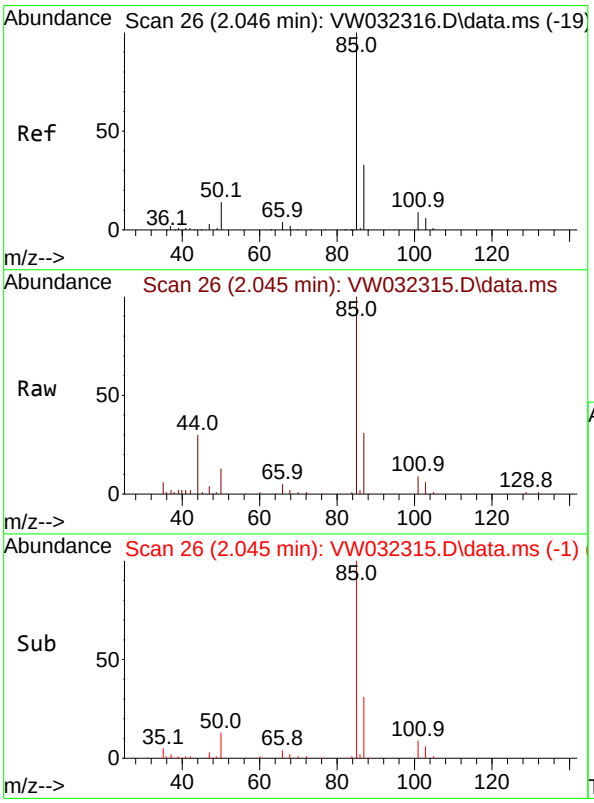
Ion	Ratio	Lower	Upper
168	100		
99	60.5	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

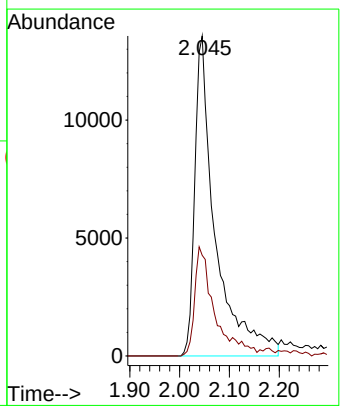
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

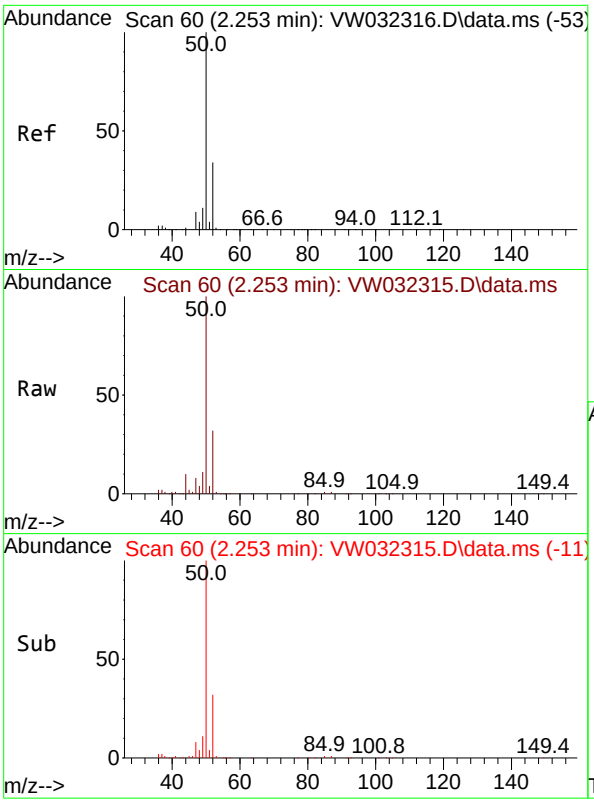


#2
Dichlorodifluoromethane
Concen: 21.972 ug/l
RT: 2.045 min Scan# 26
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 85 Resp: 38800

Ion	Ratio	Lower	Upper
85	100		
87	31.4	17.2	51.6

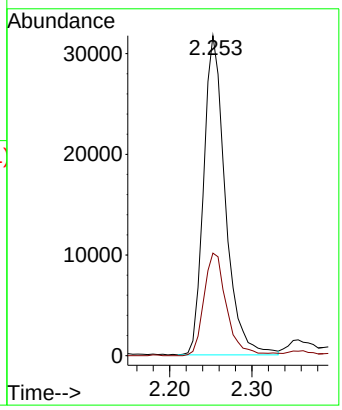




#3
Chloromethane
Concen: 21.298 ug/l
RT: 2.253 min Scan# 6
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 50 Resp: 5803

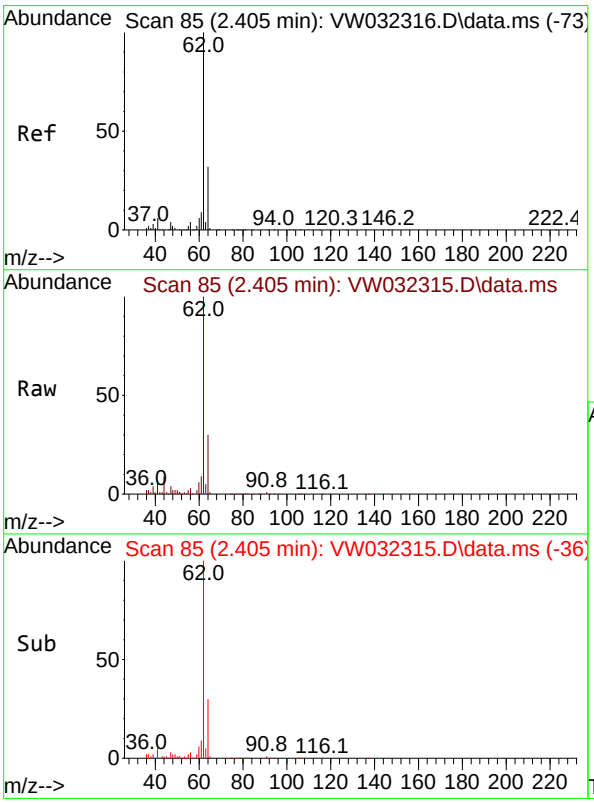
Ion	Ratio	Lower	Upper
50	100		
52	32.1	26.1	39.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

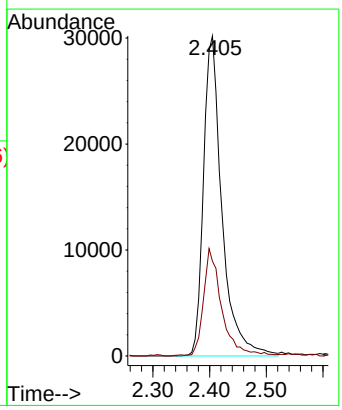
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

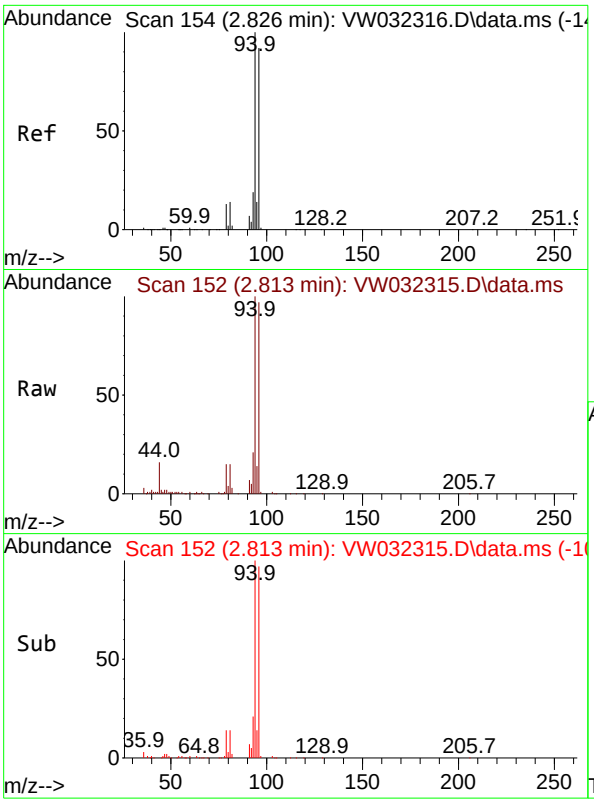


#4
Vinyl Chloride
Concen: 20.970 ug/l
RT: 2.405 min Scan# 85
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 62 Resp: 68214

Ion	Ratio	Lower	Upper
62	100		
64	29.4	24.8	37.2





#5
Bromomethane
Concen: 20.496 ug/l
RT: 2.813 min Scan# 1
Delta R.T. -0.013 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

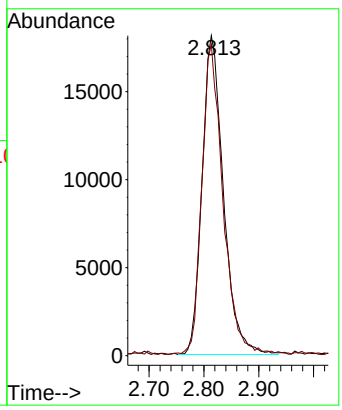
Tgt Ion: 94 Resp: 4899

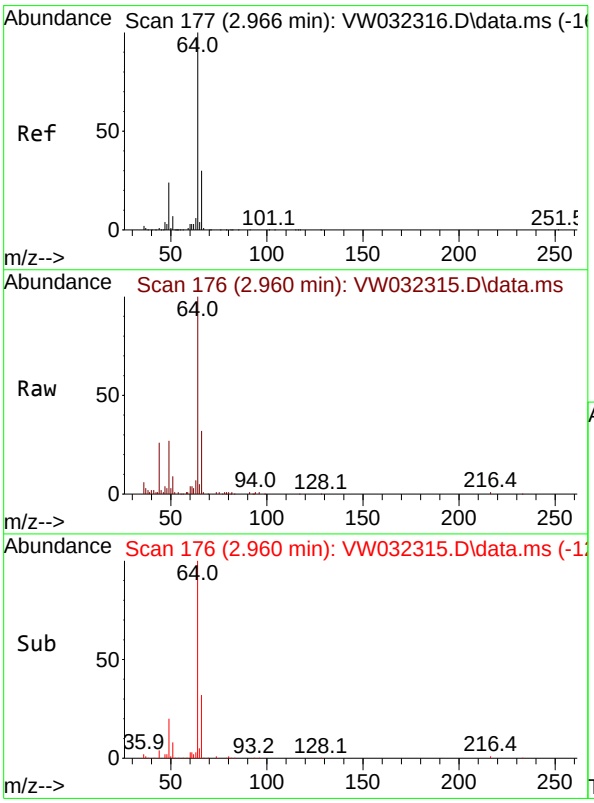
Ion	Ratio	Lower	Upper
94	100		
96	96.8	76.6	115.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

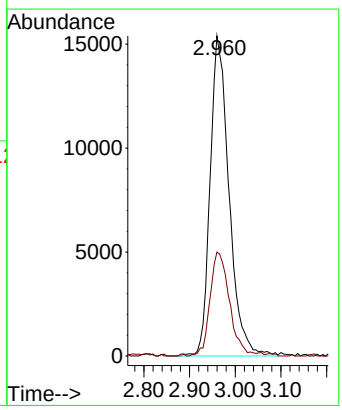


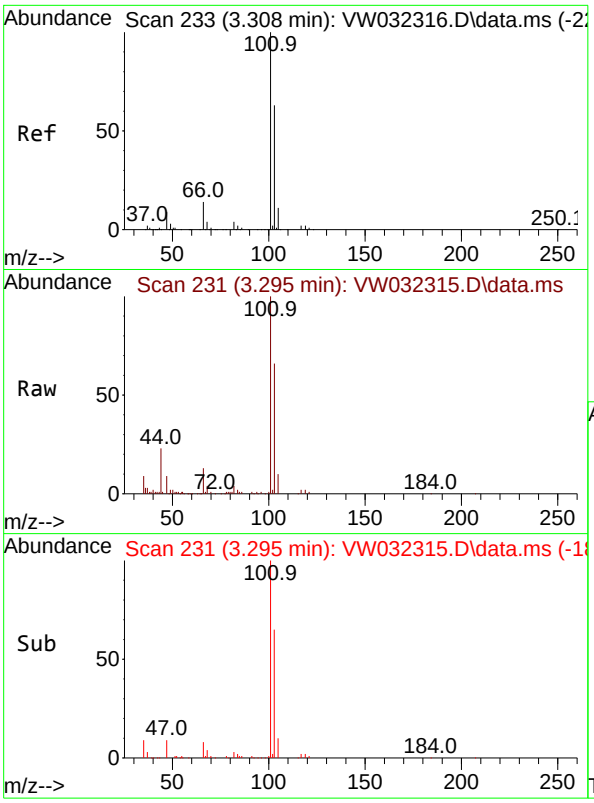


#6
Chloroethane
Concen: 20.645 ug/l
RT: 2.960 min Scan# 176
Delta R.T. -0.013 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 64 Resp: 44339

Ion	Ratio	Lower	Upper
64	100		
66	32.4	26.2	39.4





#7
Trichlorofluoromethane
Concen: 19.877 ug/l
RT: 3.295 min Scan# 2
Delta R.T. -0.013 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

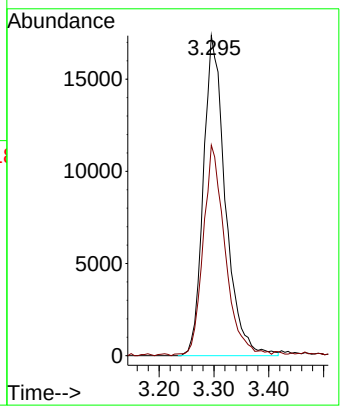
Tgt Ion:101 Resp: 4841

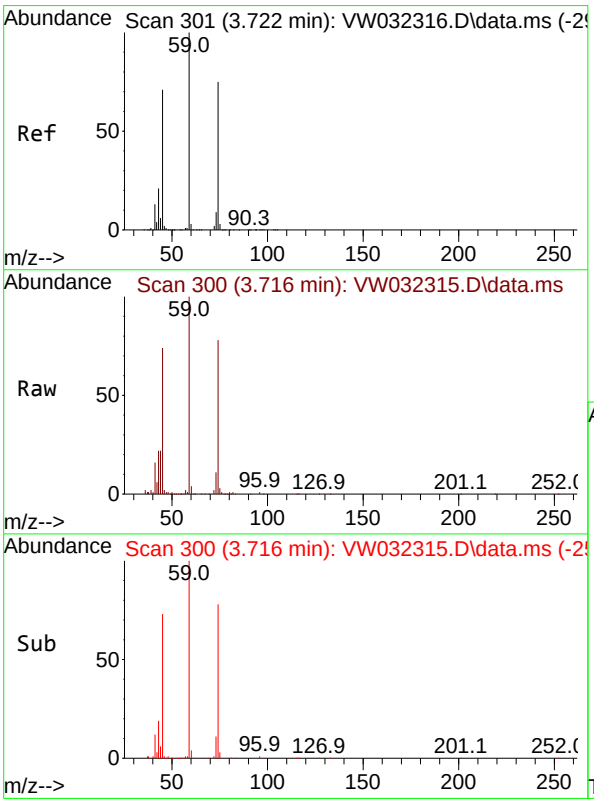
Ion	Ratio	Lower	Upper
101	100		
103	65.3	47.8	71.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

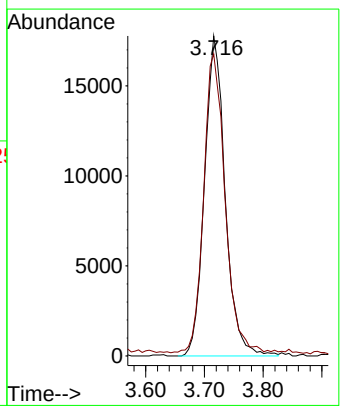


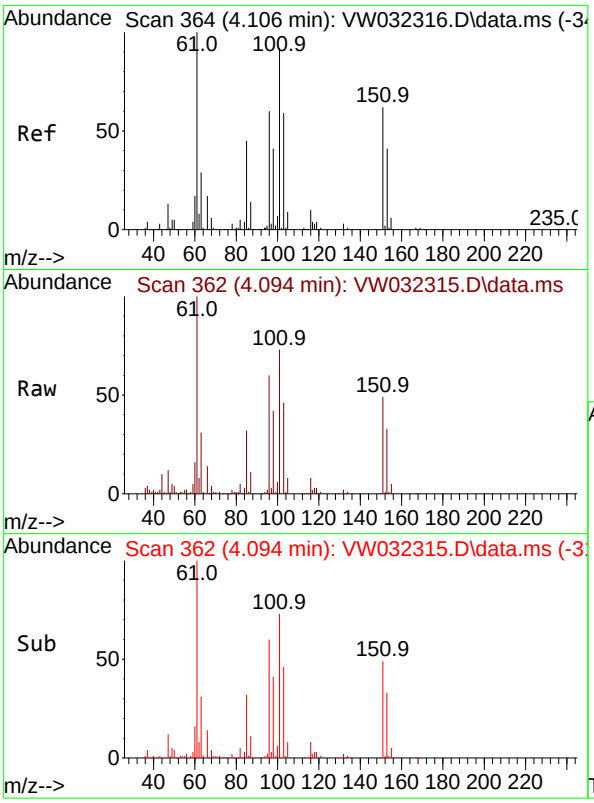


#8
Diethyl Ether
Concen: 20.614 ug/l
RT: 3.716 min Scan# 300
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 74 Resp: 43506

Ion	Ratio	Lower	Upper
74	100		
45	96.4	43.1	129.4

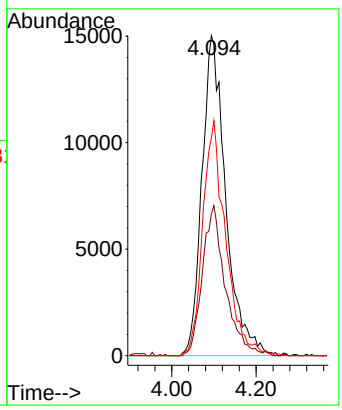




#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.198 ug/l
RT: 4.094 min Scan# 3
Delta R.T. -0.013 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:101 Resp: 5900

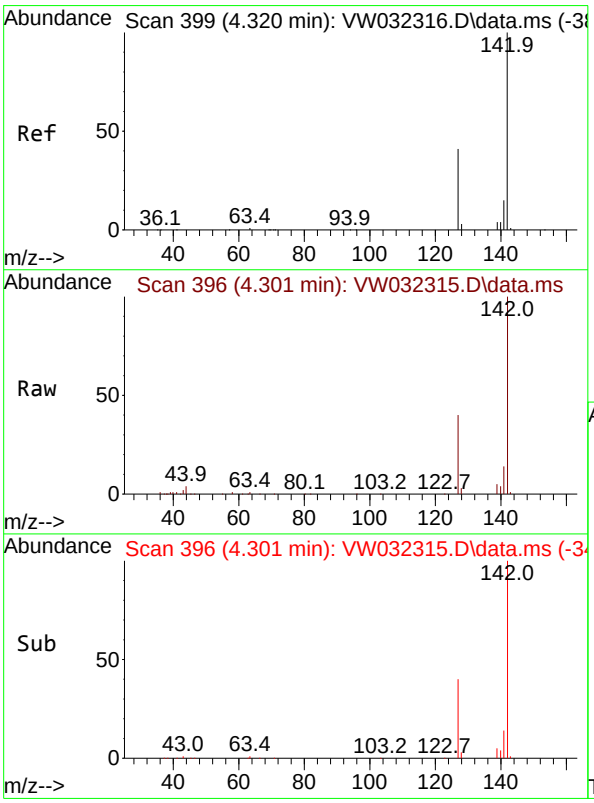
Ion	Ratio	Lower	Upper
101	100		
85	45.3	37.1	55.7
151	70.3	61.5	92.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

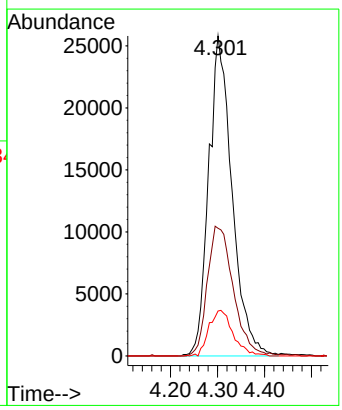
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

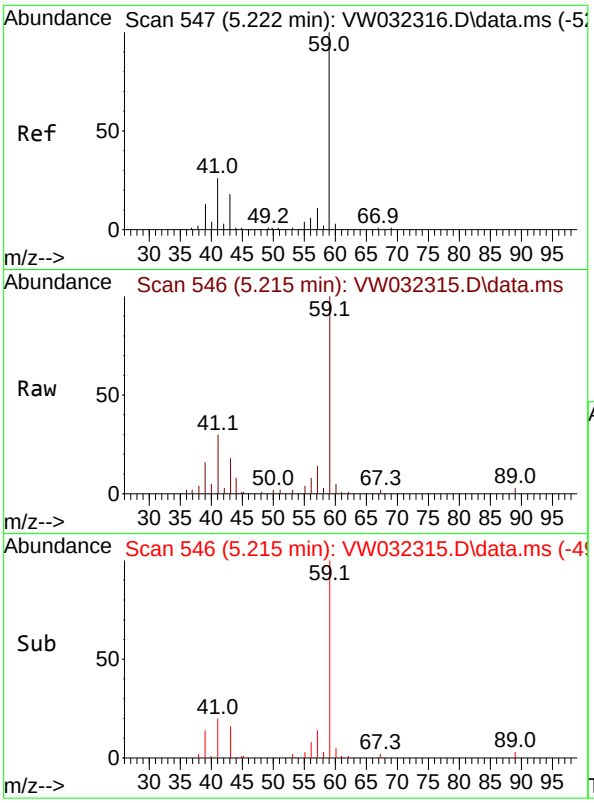


#10
Methyl Iodide
Concen: 21.342 ug/l
RT: 4.301 min Scan# 396
Delta R.T. -0.013 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:142 Resp: 88957

Ion	Ratio	Lower	Upper
142	100		
127	45.2	38.2	57.2
141	14.8	12.2	18.2





#11
Tert butyl alcohol
Concen: 110.188 ug/l
RT: 5.215 min Scan# 54
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

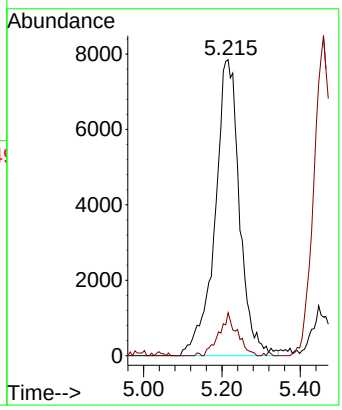
Tgt Ion: 59 Resp: 3423

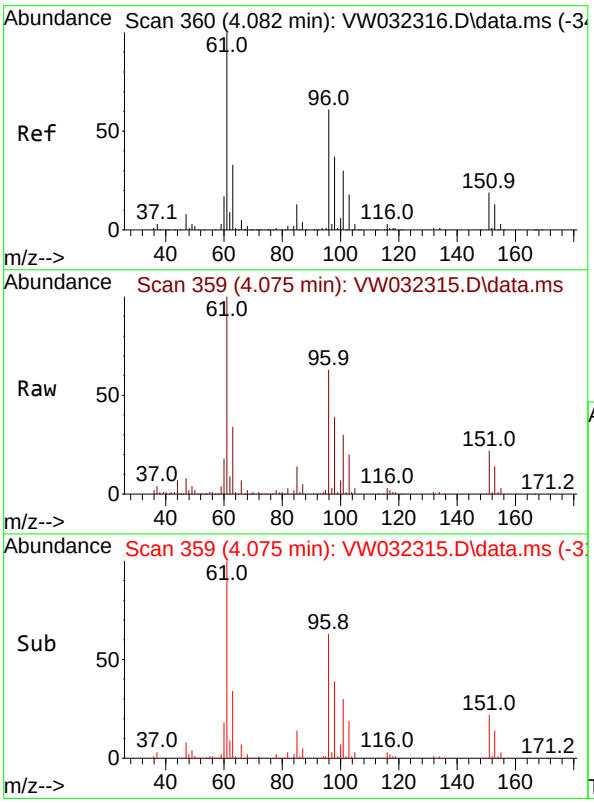
Ion	Ratio	Lower	Upper
59	100		
57	10.6	9.8	14.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

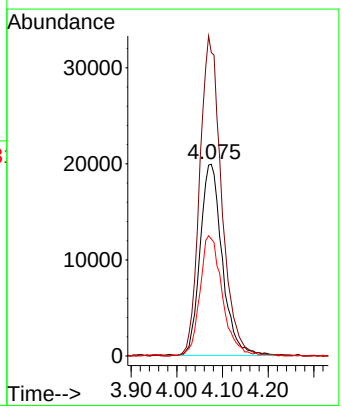


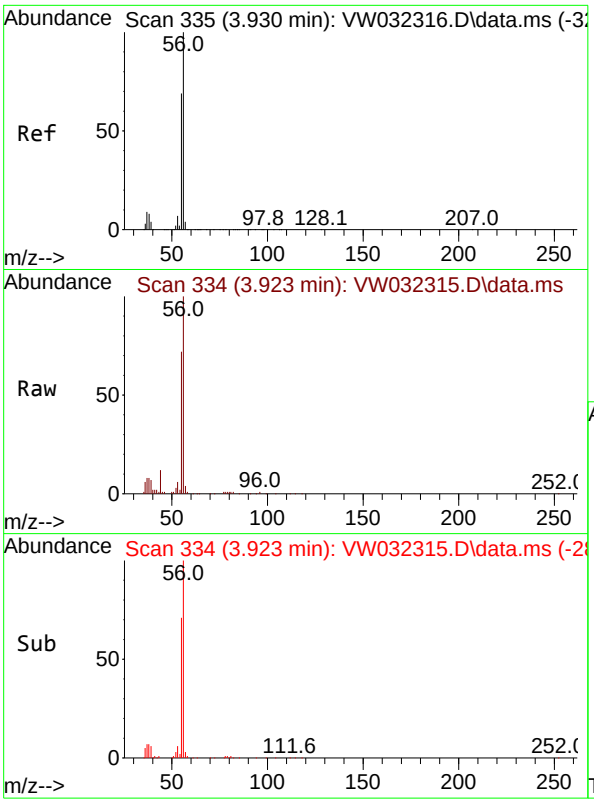


#12
1,1-Dichloroethene
Concen: 21.126 ug/l
RT: 4.075 min Scan# 359
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 96 Resp: 67001

Ion	Ratio	Lower	Upper
96	100		
61	158.2	123.0	184.4
98	61.2	48.5	72.7

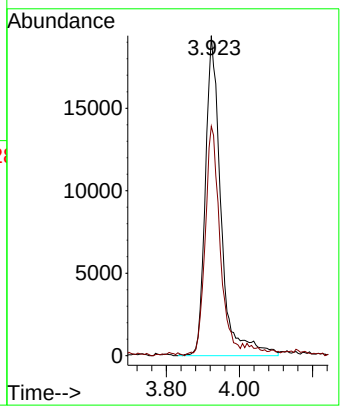




#13
Acrolein
Concen: 114.243 ug/l
RT: 3.923 min Scan# 3
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 56 Resp: 5760

Ion	Ratio	Lower	Upper
56	100		
55	67.4	56.4	84.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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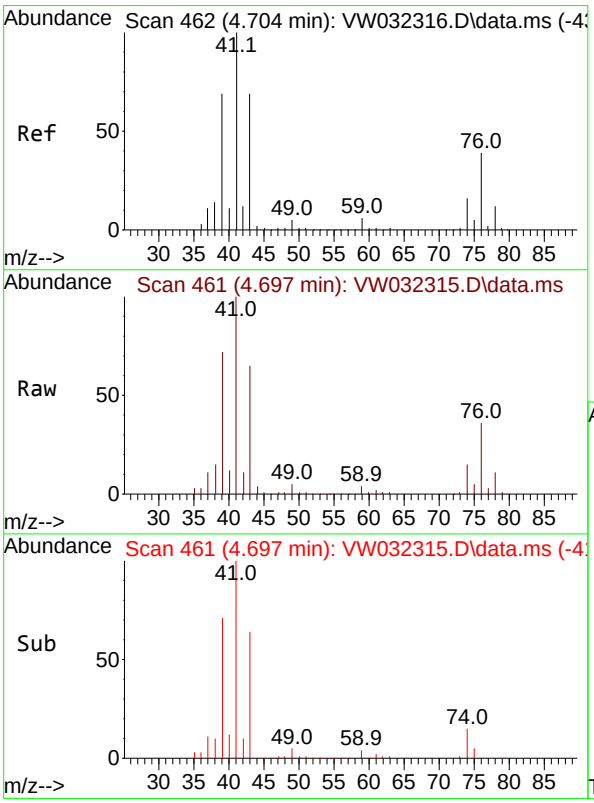
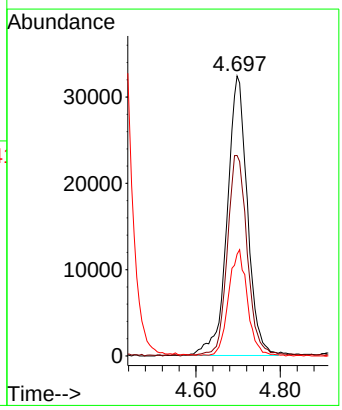
Supervised By :Semsettin Yesilyurt 10/03/2025

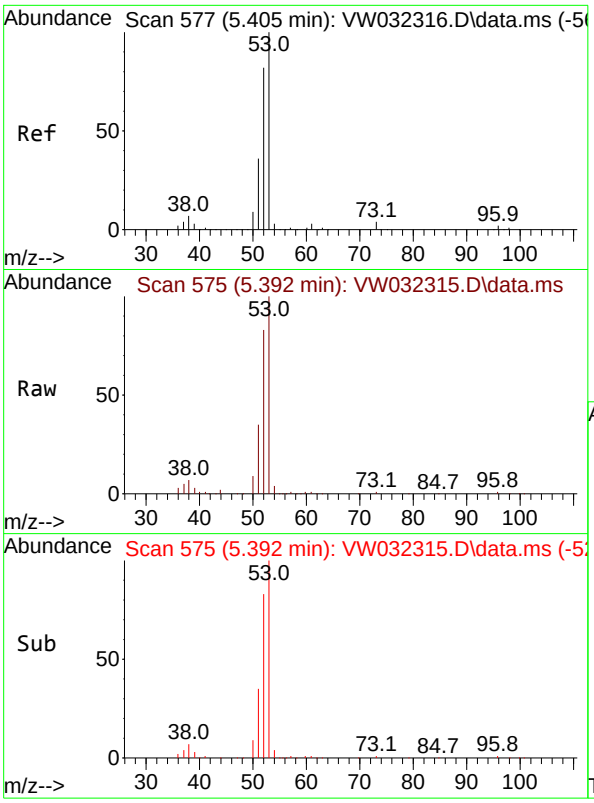


#14
Allyl chloride
Concen: 20.129 ug/l
RT: 4.697 min Scan# 461
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 41 Resp: 107824

Ion	Ratio	Lower	Upper
41	100		
39	71.4	64.1	96.1
76	35.7	31.4	47.2

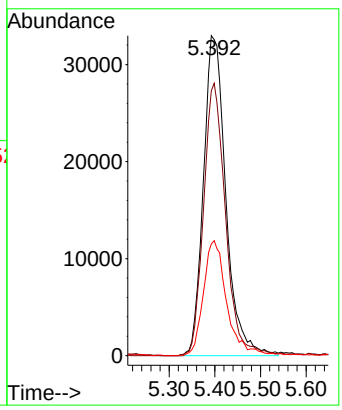




#15
Acrylonitrile
Concen: 102.687 ug/l
RT: 5.392 min Scan# 5
Delta R.T. -0.013 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 53 Resp: 11274

Ion	Ratio	Lower	Upper
53	100		
52	83.5	67.4	101.2
51	37.5	30.3	45.5



Instrument :
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ClientSampleId :
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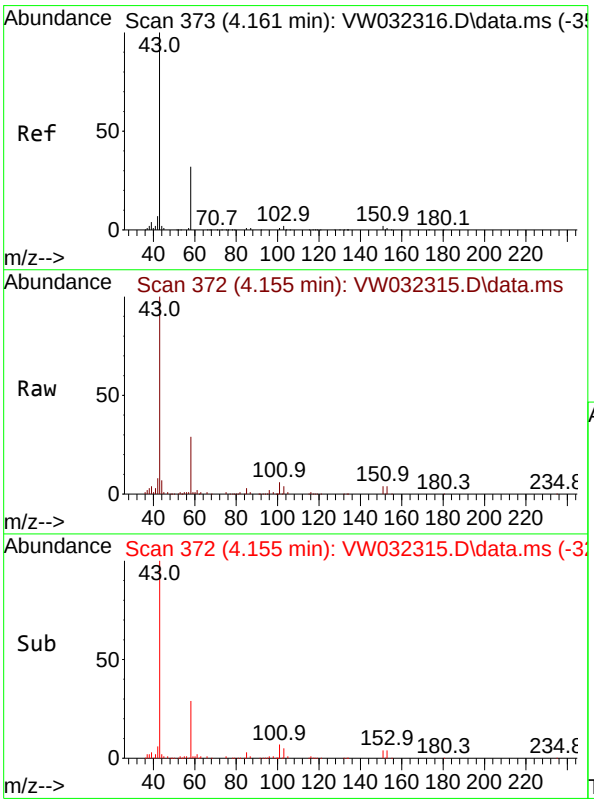
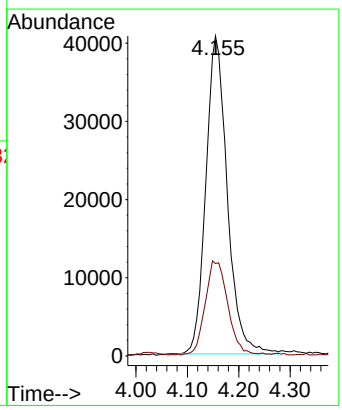
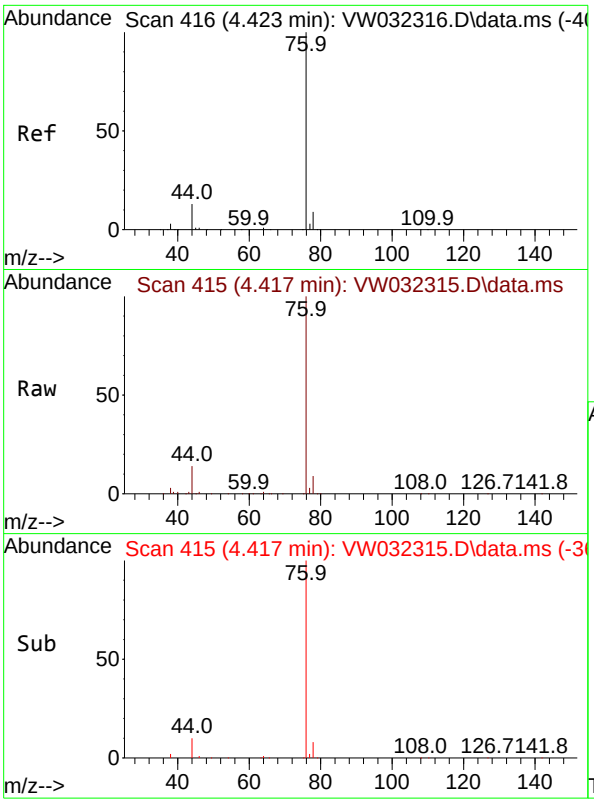


#16
Acetone
Concen: 103.498 ug/l
RT: 4.155 min Scan# 372
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 117625

Ion	Ratio	Lower	Upper
43	100		
58	28.5	25.3	37.9





#17
Carbon Disulfide
Concen: 20.568 ug/l
RT: 4.417 min Scan# 4
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 76 Resp: 17797

Ion	Ratio	Lower	Upper
76	100		
78	9.0	7.0	10.6

Instrument :
MSVOA_W
ClientSampleId :
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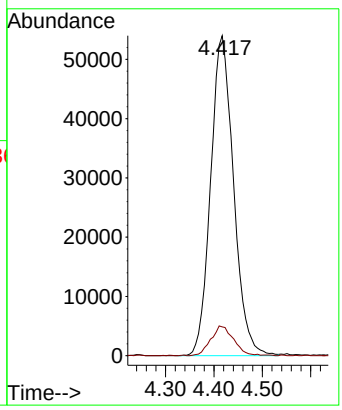
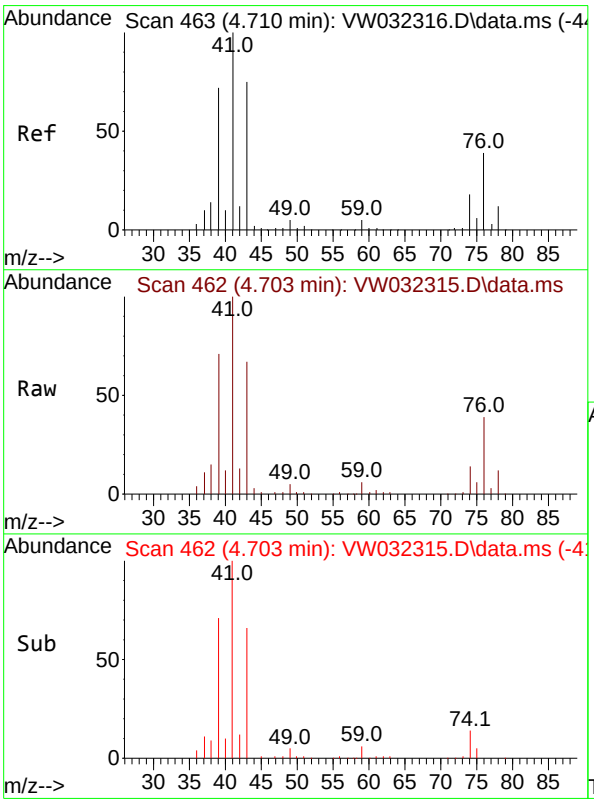
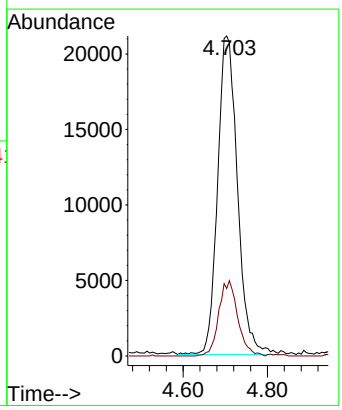


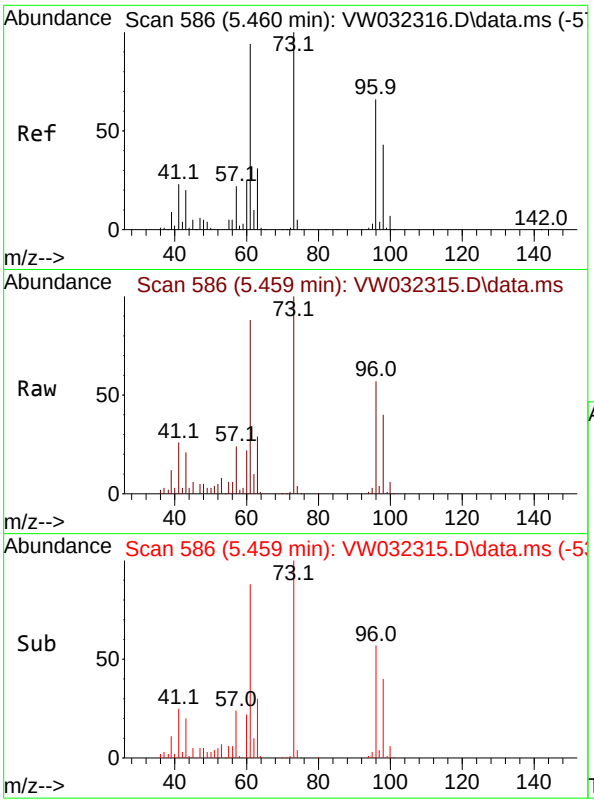


#18
Methyl Acetate
Concen: 21.157 ug/l
RT: 4.703 min Scan# 462
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 68880

Ion	Ratio	Lower	Upper
43	100		
74	22.6	20.2	30.4





#19
Methyl tert-butyl Ether
Concen: 20.722 ug/l
RT: 5.459 min Scan# 5
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 73 Resp: 12943

Ion	Ratio	Lower	Upper
73	100		
57	24.2	16.2	24.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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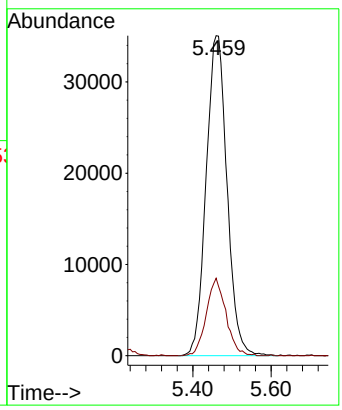
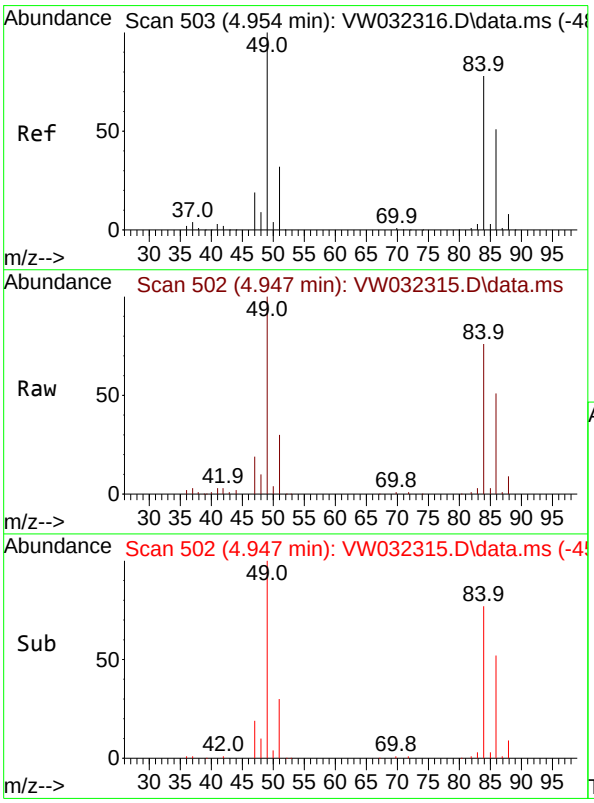
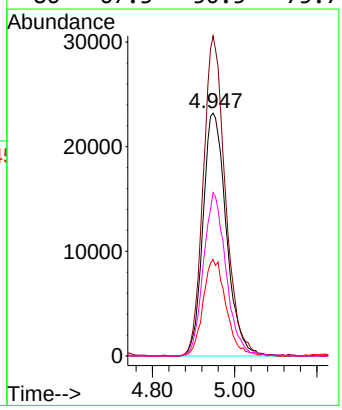


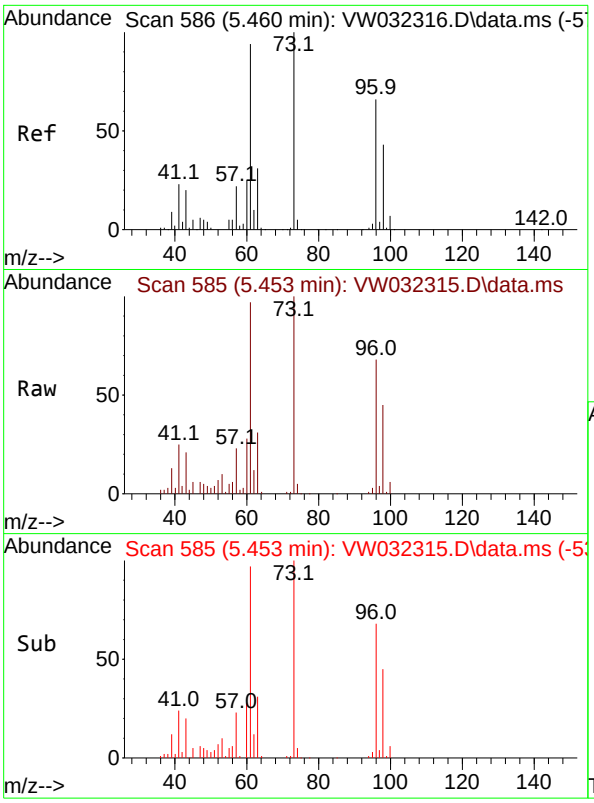


#20
Methylene Chloride
Concen: 21.174 ug/l
RT: 4.947 min Scan# 502
Delta R.T. -0.013 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 84 Resp: 91257

Ion	Ratio	Lower	Upper
84	100		
49	131.8	92.2	138.4
51	39.7	31.0	46.6
86	67.3	50.5	75.7

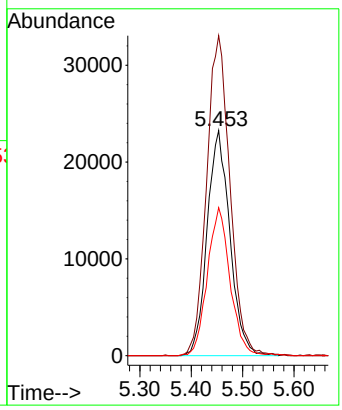




#21
trans-1,2-Dichloroethene
Concen: 20.381 ug/l
RT: 5.453 min Scan# 5
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 96 Resp: 7156

Ion	Ratio	Lower	Upper
96	100		
61	142.1	112.5	168.7
98	65.7	54.2	81.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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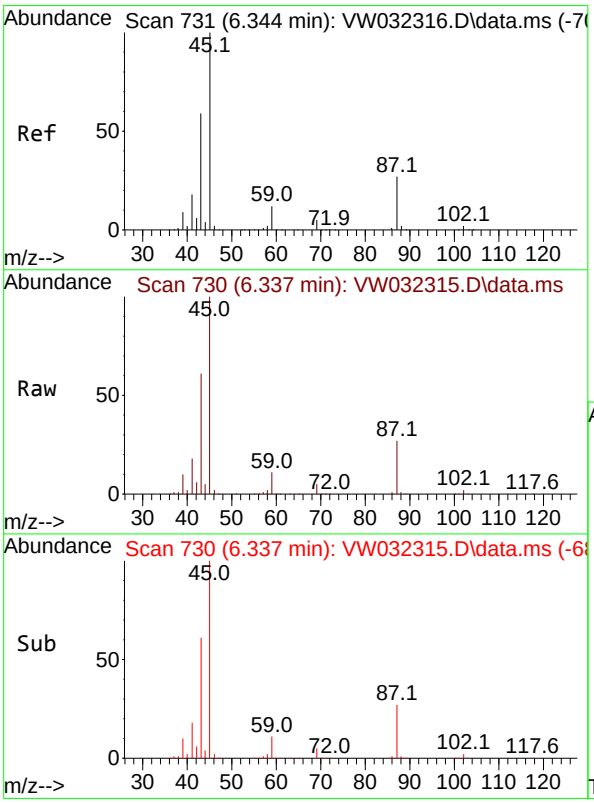
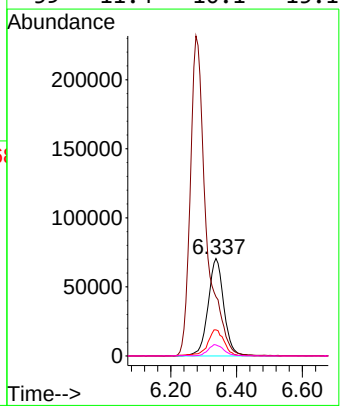
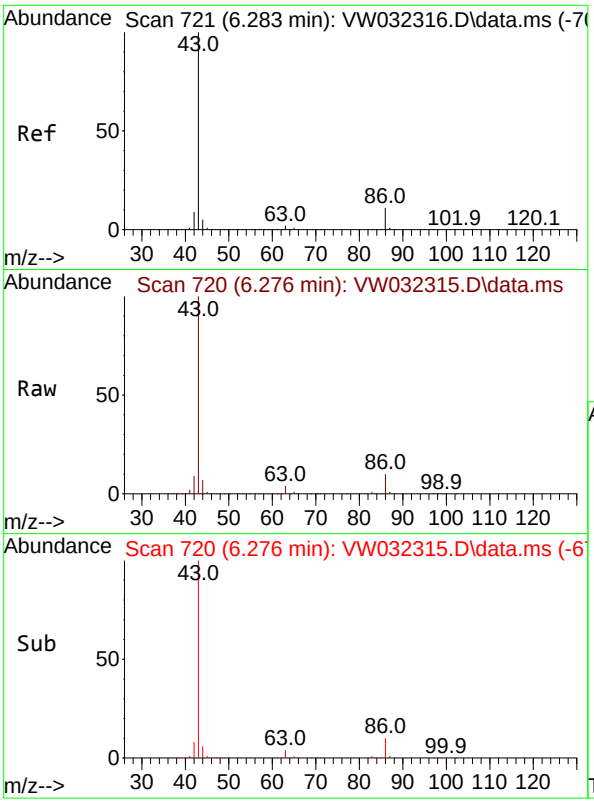


#22
Diisopropyl ether
Concen: 21.068 ug/l
RT: 6.337 min Scan# 730
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 45 Resp: 234704

Ion	Ratio	Lower	Upper
45	100		
43	60.2	51.4	77.2
87	26.7	25.9	38.9
59	11.4	10.1	15.1





#23
Vinyl Acetate
Concen: 104.011 ug/l
RT: 6.276 min Scan# 7
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 77395

Ion	Ratio	Lower	Upper
43	100		
86	10.3	8.8	13.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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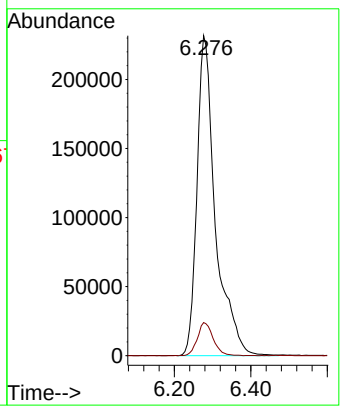
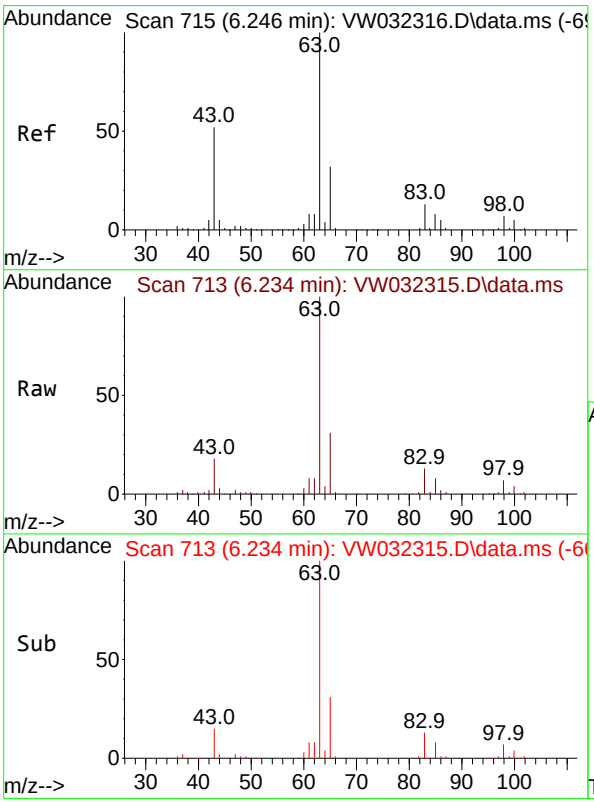
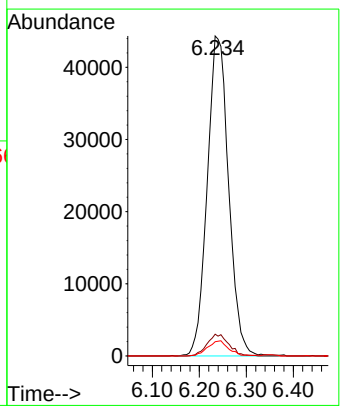


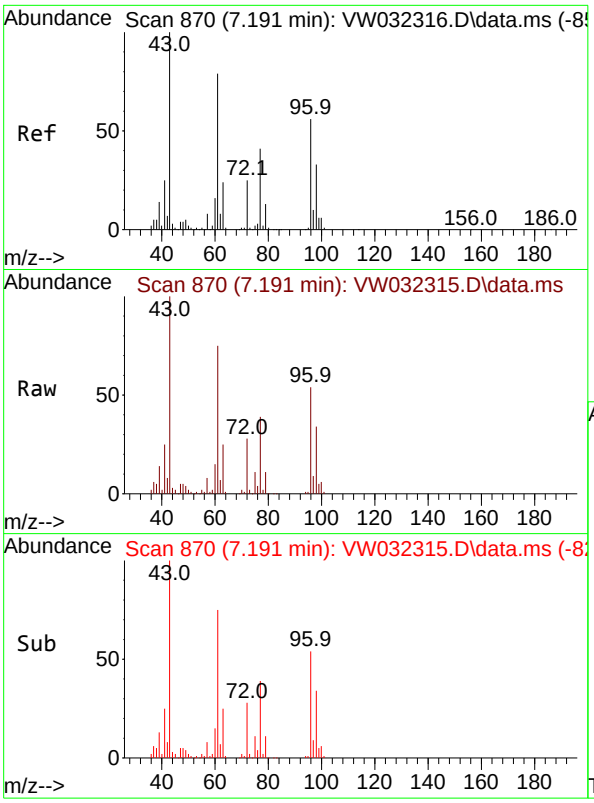


#24
1,1-Dichloroethane
Concen: 20.687 ug/l
RT: 6.234 min Scan# 713
Delta R.T. -0.013 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 63 Resp: 140018

Ion	Ratio	Lower	Upper
63	100		
98	6.8	3.8	11.2
100	4.4	2.5	7.5





#25
2-Butanone
Concen: 103.830 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 16071

Ion	Ratio	Lower	Upper
43	100		
72	27.6	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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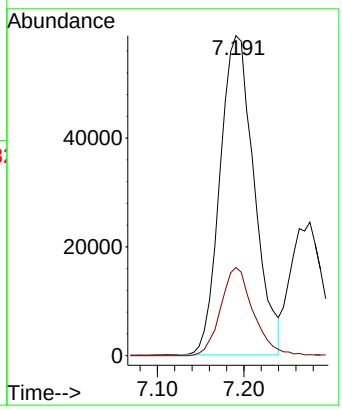
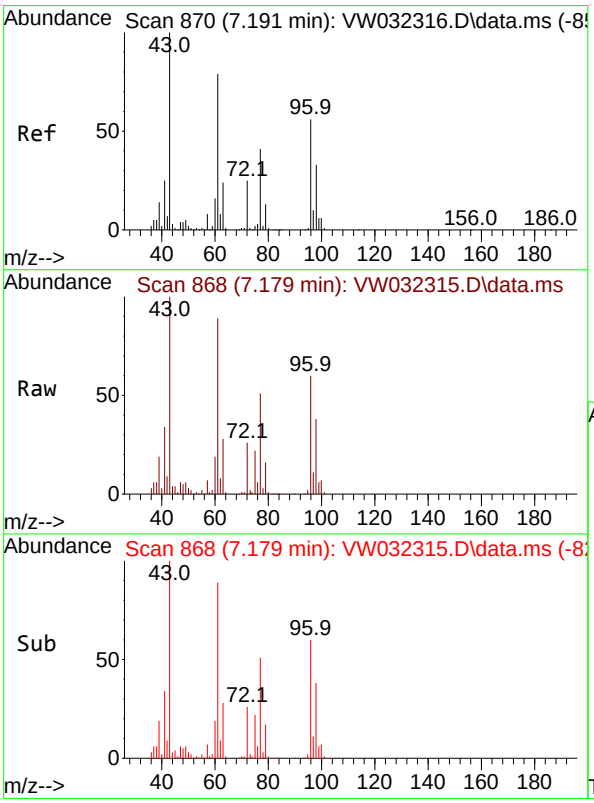
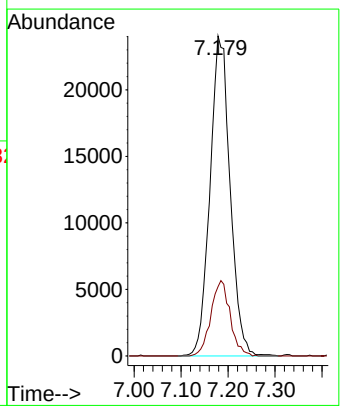


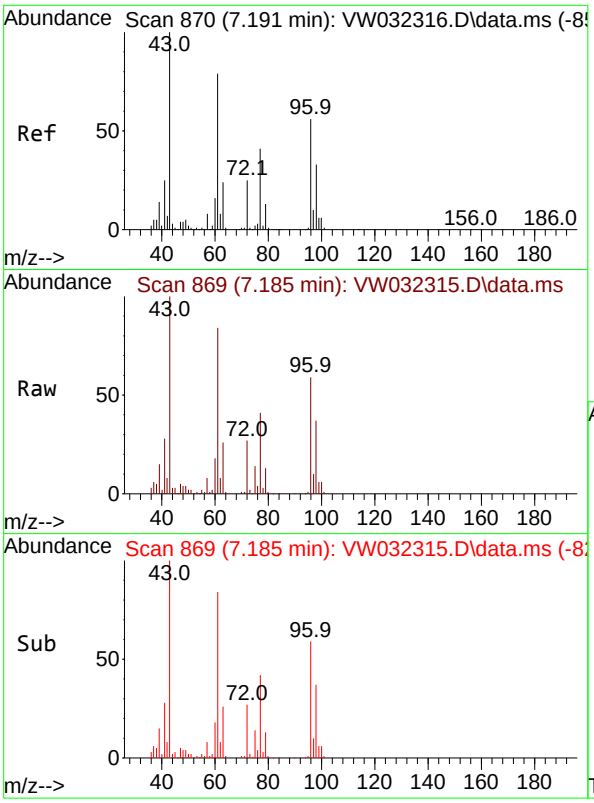


#26
2,2-Dichloropropane
Concen: 20.653 ug/l
RT: 7.179 min Scan# 868
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 77 Resp: 71502

Ion	Ratio	Lower	Upper
77	100		
97	22.5	11.9	35.5

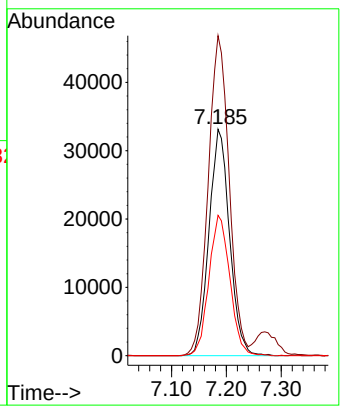




#27
cis-1,2-Dichloroethene
Concen: 20.434 ug/l
RT: 7.185 min Scan# 8
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 96 Resp: 8619

Ion	Ratio	Lower	Upper
96	100		
61	144.5	0.0	268.0
98	63.4	0.0	130.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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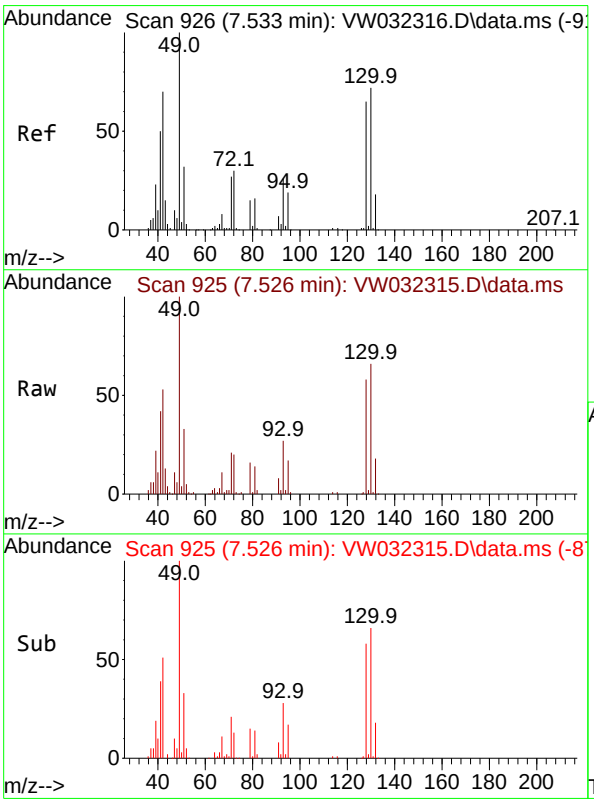
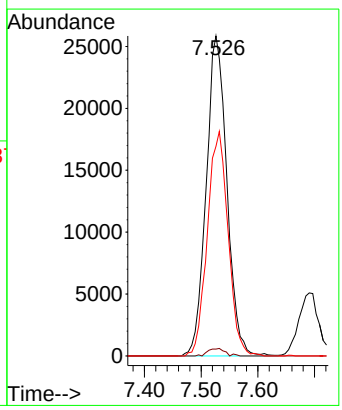
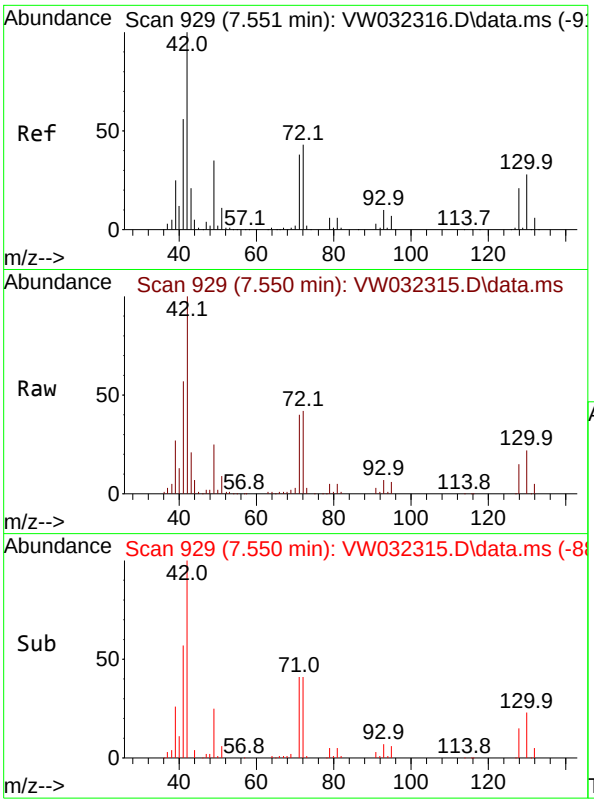


#28
Bromochloromethane
Concen: 20.601 ug/l
RT: 7.526 min Scan# 925
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 49 Resp: 65600

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.2
130	70.3	67.5	101.3

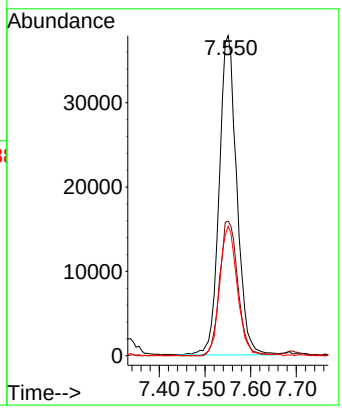




#29
Tetrahydrofuran
Concen: 104.194 ug/l
RT: 7.550 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 42 Resp: 10142

Ion	Ratio	Lower	Upper
42	100		
72	43.9	37.4	56.2
71	40.6	36.0	54.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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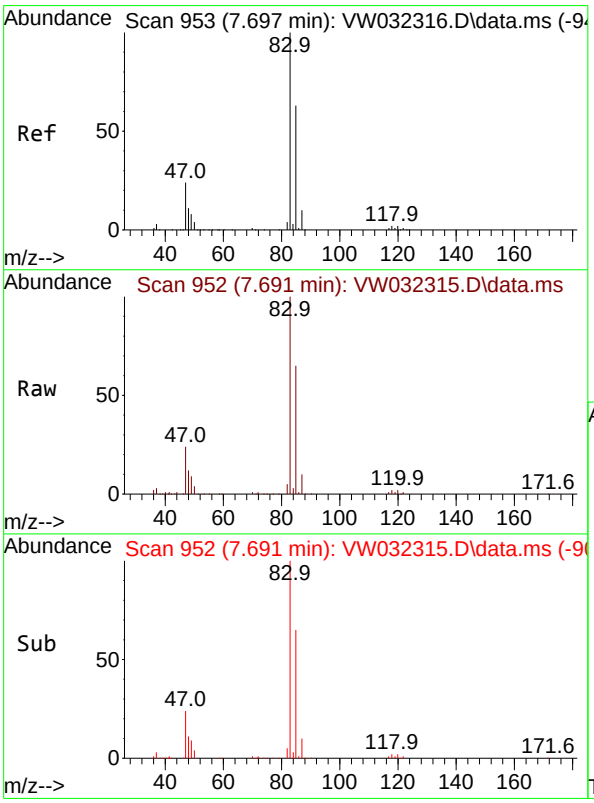
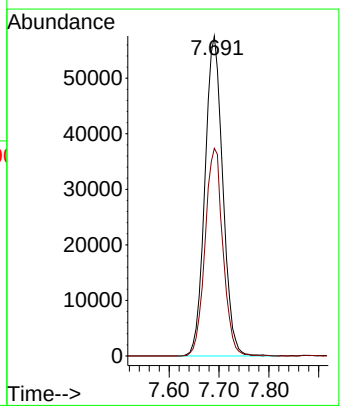
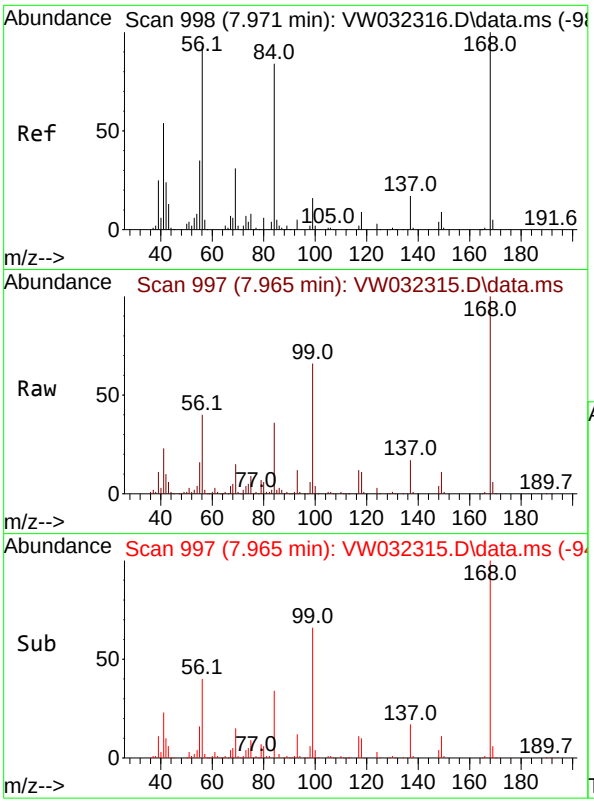


#30
Chloroform
Concen: 20.837 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 83 Resp: 143028

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.2	76.8

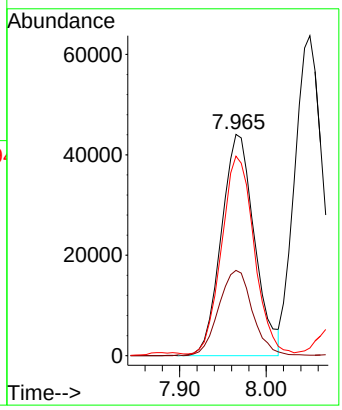




#31
Cyclohexane
Concen: 20.304 ug/l
RT: 7.965 min Scan# 9
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 56 Resp: 11732

Ion	Ratio	Lower	Upper
56	100		
69	38.2	27.7	41.5
84	89.0	74.6	112.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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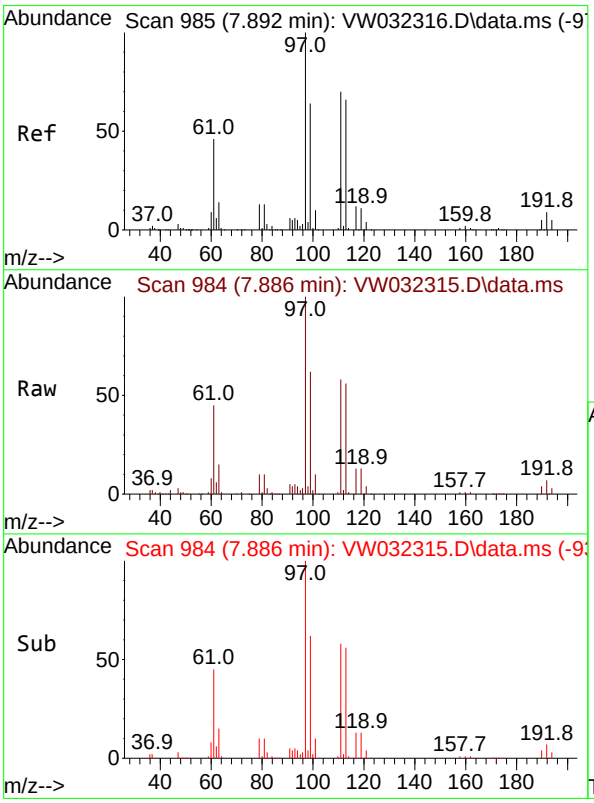
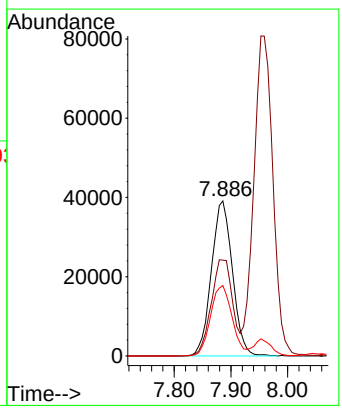
Supervised By :Semsettin Yesilyurt 10/03/2025

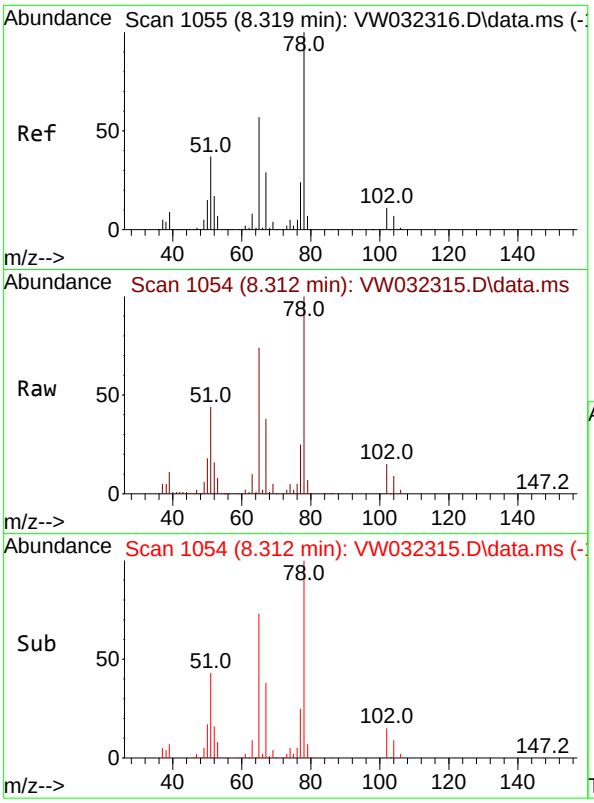


#32
1,1,1-Trichloroethane
Concen: 20.731 ug/l
RT: 7.886 min Scan# 984
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 97 Resp: 100837

Ion	Ratio	Lower	Upper
97	100		
99	62.9	50.9	76.3
61	46.6	36.2	54.4

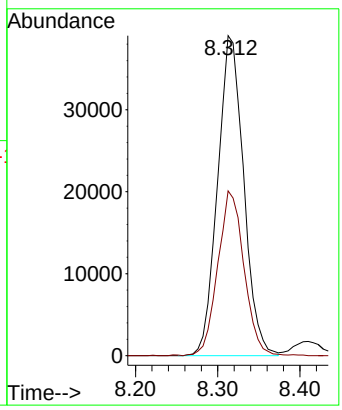




#33
1,2-Dichloroethane-d4
Concen: 20.978 ug/l
RT: 8.312 min Scan# 1
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 65 Resp: 8610

Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	99.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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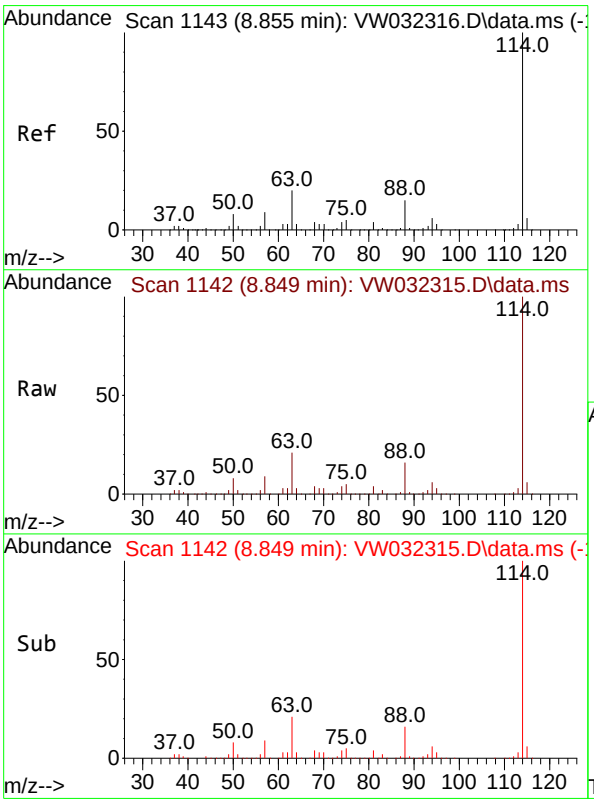
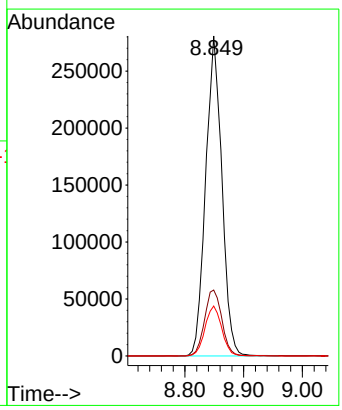
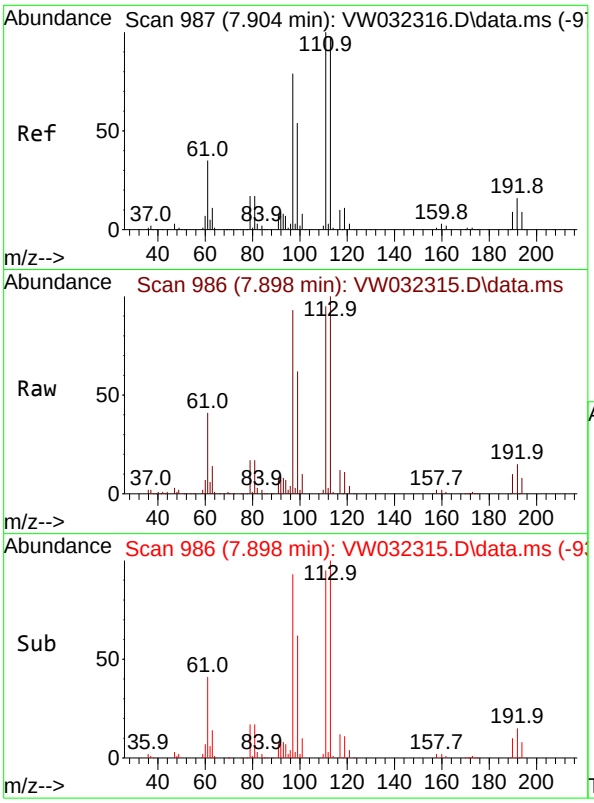


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 1142
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:114 Resp: 536489

Ion	Ratio	Lower	Upper
114	100		
63	20.6	0.0	40.4
88	15.6	0.0	32.0





#35
Dibromofluoromethane
Concen: 20.225 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:113 Resp: 7027

Ion	Ratio	Lower	Upper
113	100		
111	100.5	83.9	125.9
192	15.3	14.6	21.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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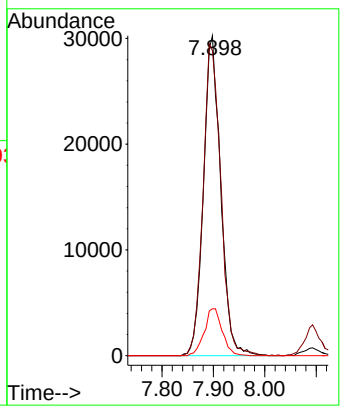
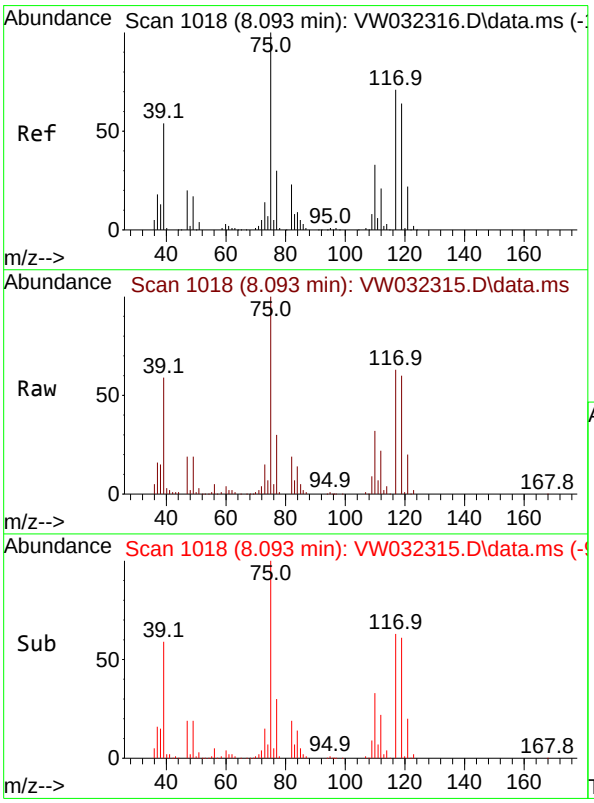
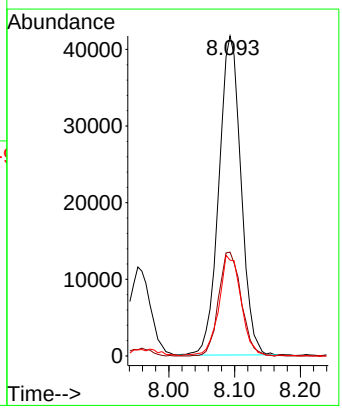


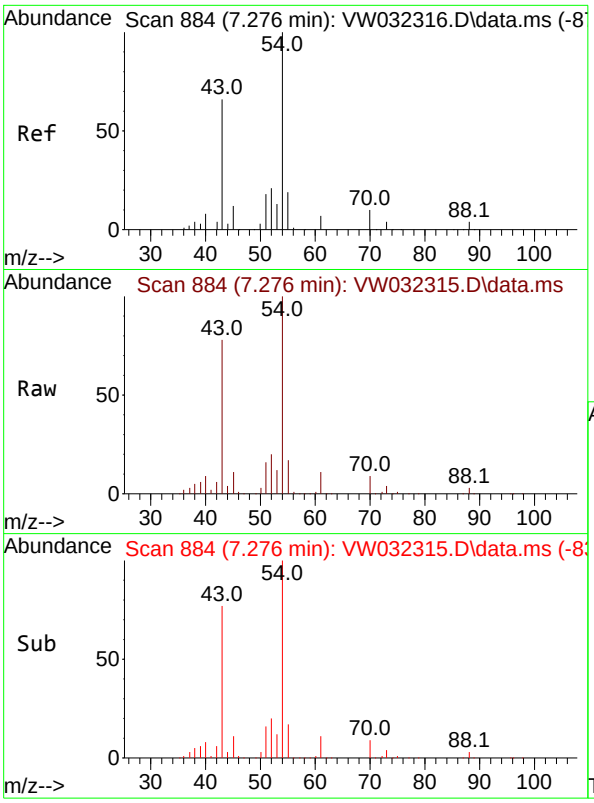


#36
1,1-Dichloropropene
Concen: 19.902 ug/l
RT: 8.093 min Scan# 1018
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 75 Resp: 97586

Ion	Ratio	Lower	Upper
75	100		
110	33.2	17.5	52.5
77	31.8	24.1	36.1

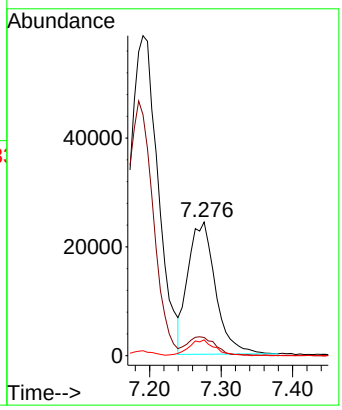




#37
Ethyl Acetate
Concen: 19.859 ug/l
RT: 7.276 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 6481

Ion	Ratio	Lower	Upper
43	100		
61	14.6	11.3	16.9
70	11.4	8.9	13.3



Instrument :
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ClientSampleId :
VSTDICC020

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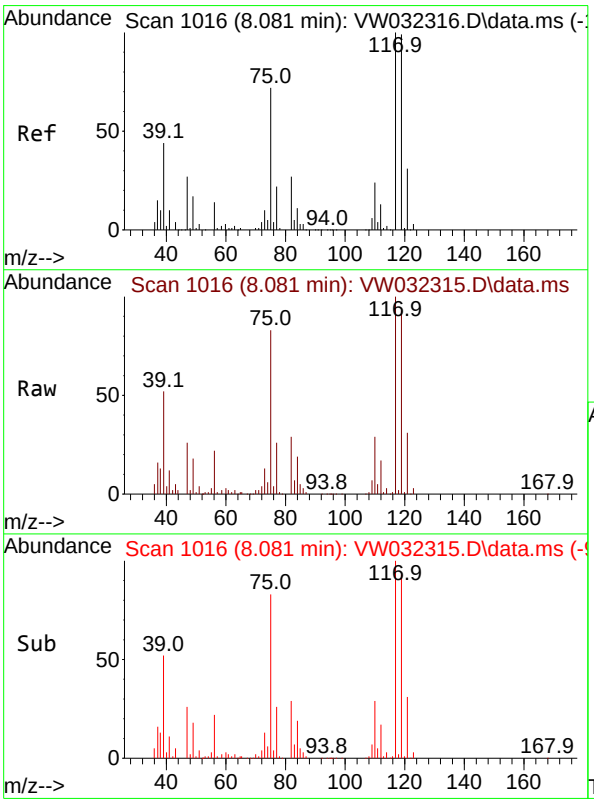
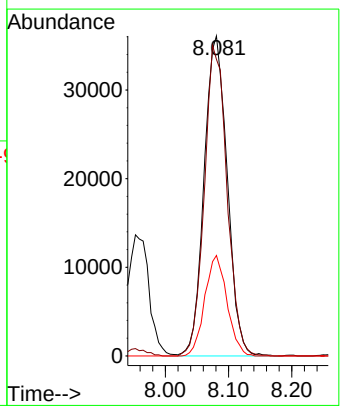
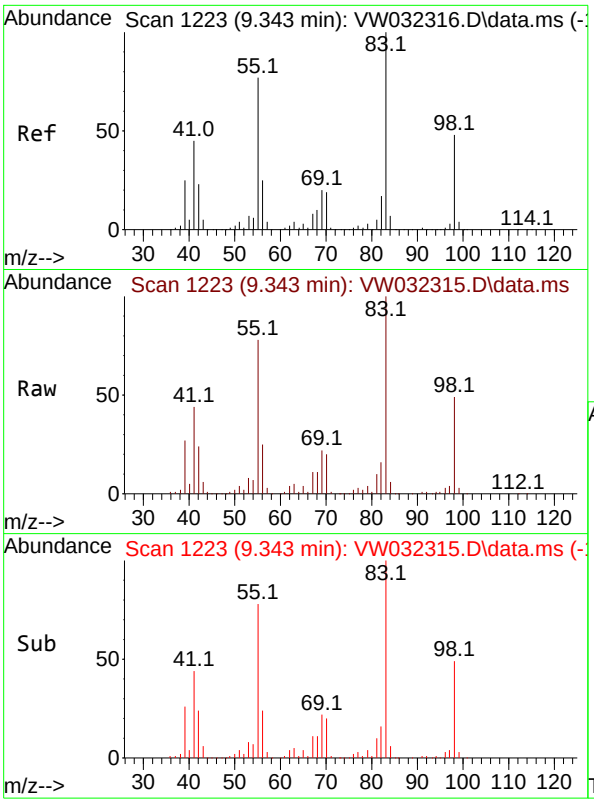


#38
Carbon Tetrachloride
Concen: 19.861 ug/l
RT: 8.081 min Scan# 1016
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:117 Resp: 91643

Ion	Ratio	Lower	Upper
117	100		
119	92.7	74.2	111.2
121	31.4	25.6	38.4

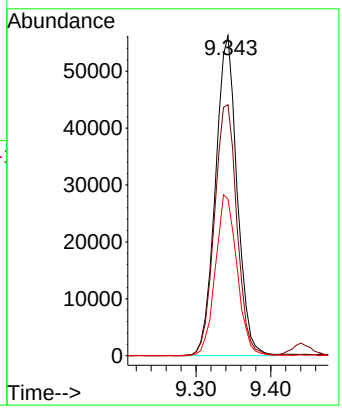




#39
Methylcyclohexane
Concen: 19.190 ug/l
RT: 9.343 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 83 Resp: 11350

Ion	Ratio	Lower	Upper
83	100		
55	78.4	58.4	87.6
98	49.0	39.4	59.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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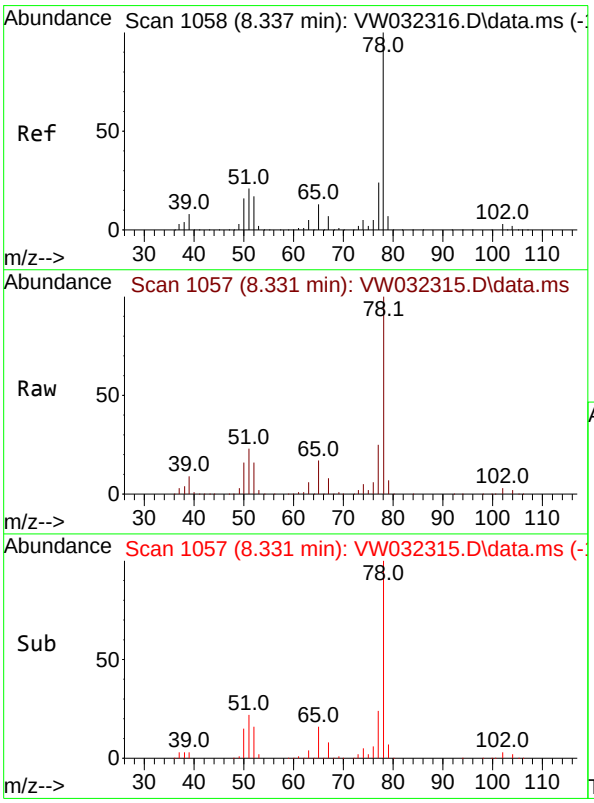
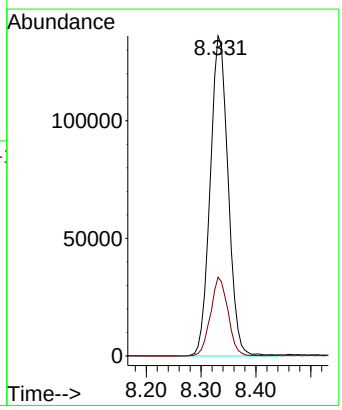
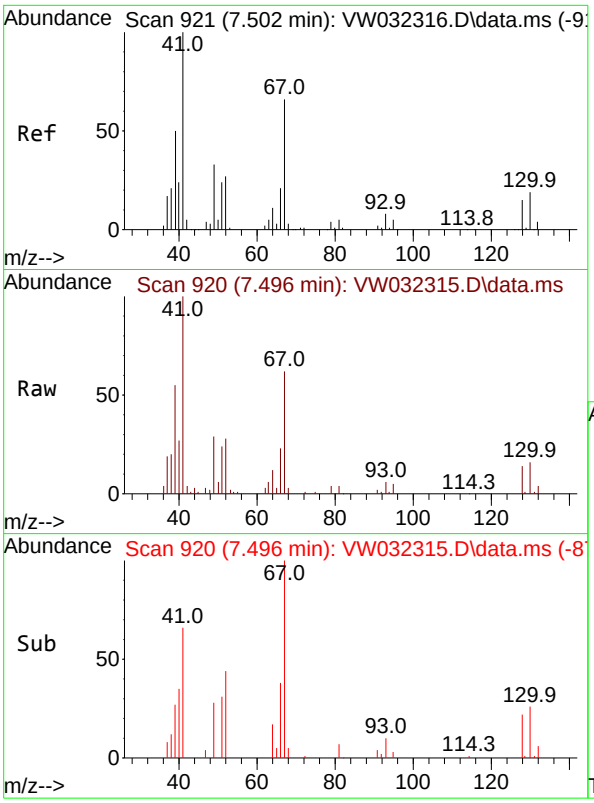


#40
Benzene
Concen: 20.112 ug/l
RT: 8.331 min Scan# 1057
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 78 Resp: 309105

Ion	Ratio	Lower	Upper
78	100		
77	24.6	20.7	31.1

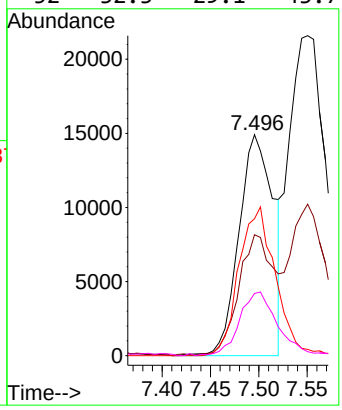




#41
Methacrylonitrile
Concen: 21.042 ug/l
RT: 7.496 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 41 Resp: 3701

Ion	Ratio	Lower	Upper
41	100		
39	54.5	50.9	76.3
67	72.1	65.6	98.4
52	32.3	29.1	43.7



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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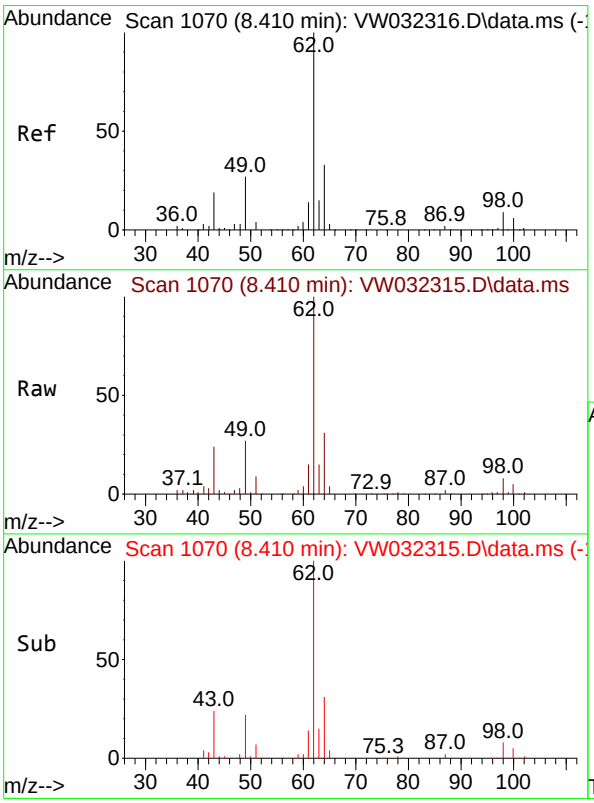
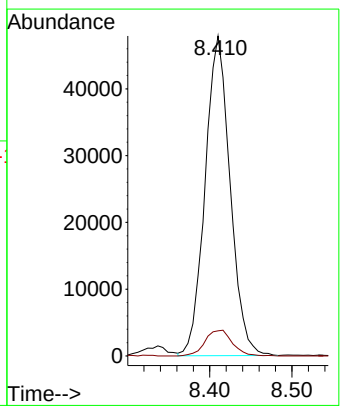
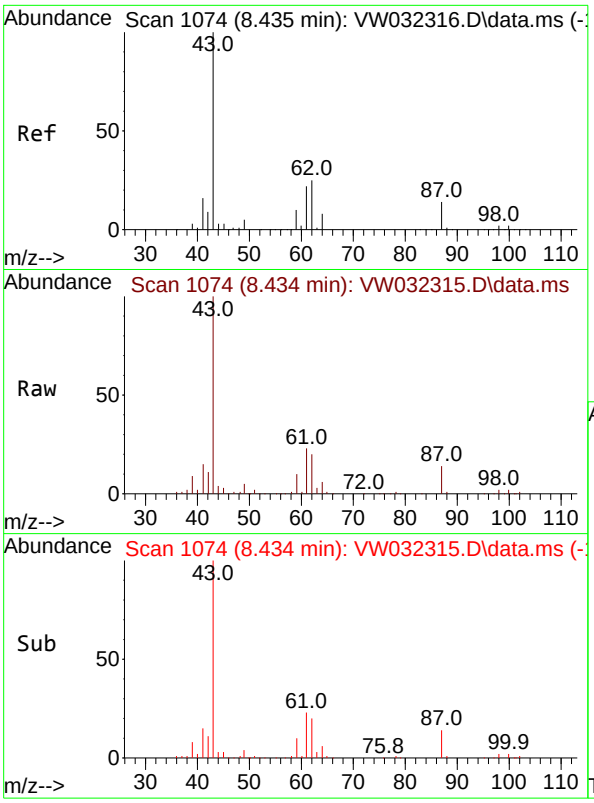


#42
1,2-Dichloroethane
Concen: 20.160 ug/l
RT: 8.410 min Scan# 1070
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 62 Resp: 101383

Ion	Ratio	Lower	Upper
62	100		
98	8.8	0.0	18.0





#43
Isopropyl Acetate
Concen: 19.988 ug/l
RT: 8.434 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 11572

Ion	Ratio	Lower	Upper
43	100		
61	29.5	23.3	34.9
87	12.9	11.1	16.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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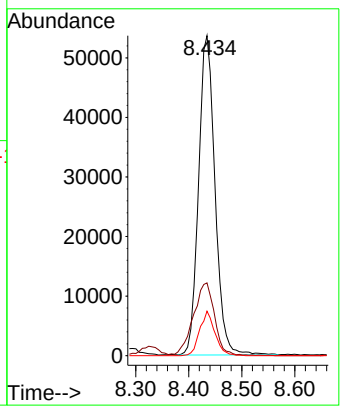
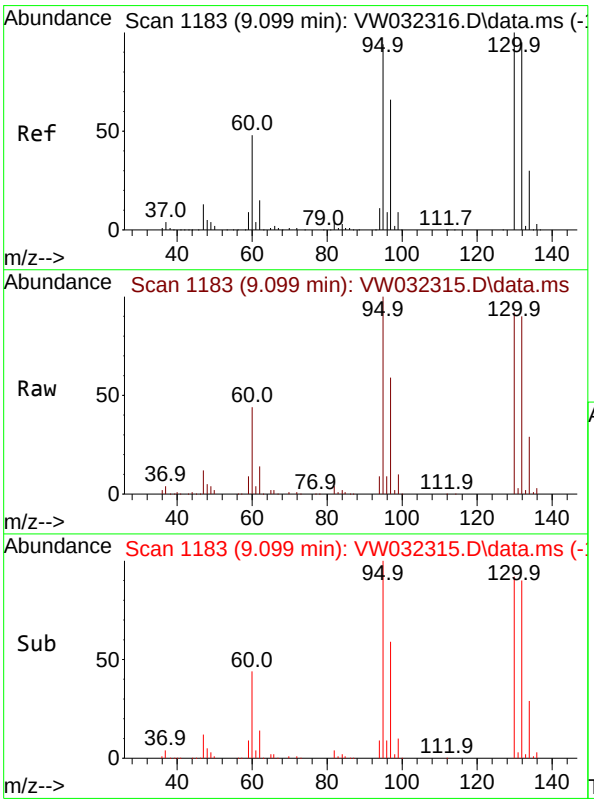
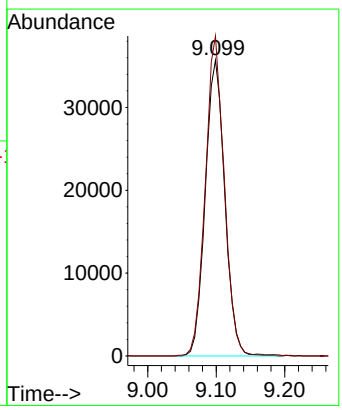


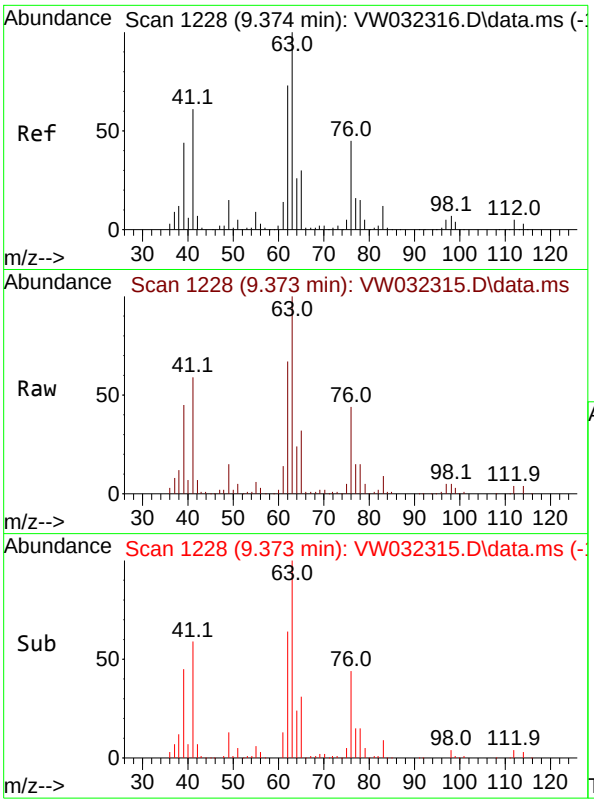


#44
Trichloroethene
Concen: 19.651 ug/l
RT: 9.099 min Scan# 1183
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:130 Resp: 70719

Ion	Ratio	Lower	Upper
130	100		
95	107.9	0.0	220.0





#45
1,2-Dichloropropane
Concen: 20.284 ug/l
RT: 9.373 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 63 Resp: 7781

Ion	Ratio	Lower	Upper
63	100		
65	31.7	24.3	36.5

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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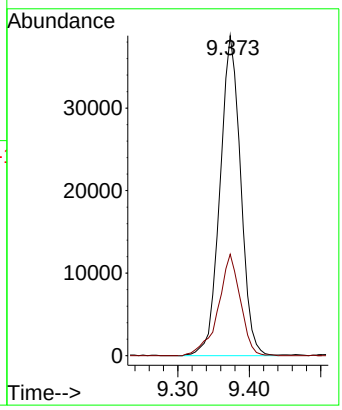
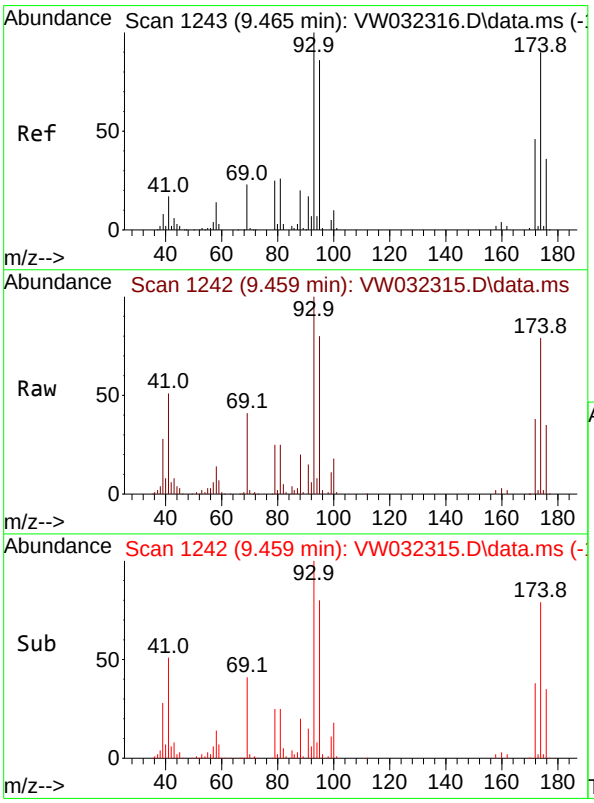
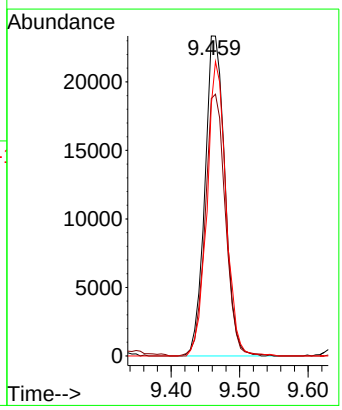


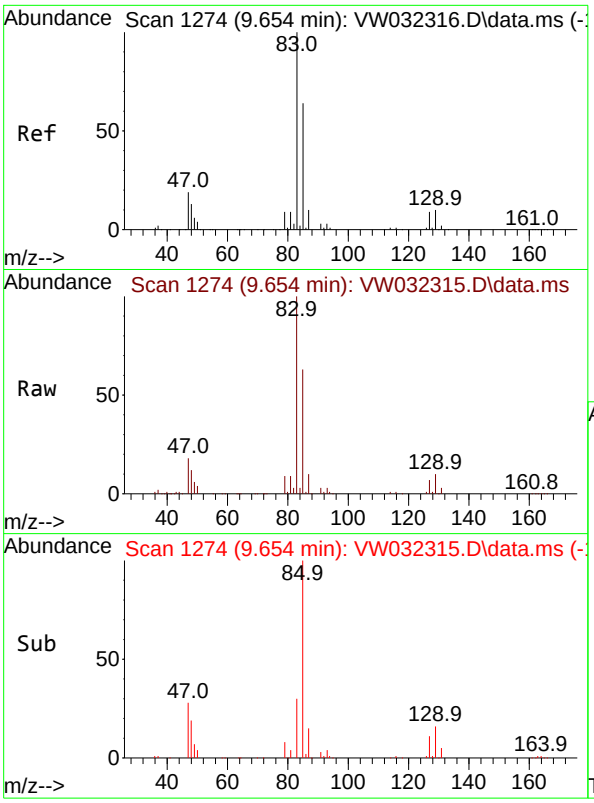


#46
Dibromomethane
Concen: 20.192 ug/l
RT: 9.459 min Scan# 1242
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 93 Resp: 47632

Ion	Ratio	Lower	Upper
93	100		
95	82.3	67.4	101.2
174	87.4	75.7	113.5

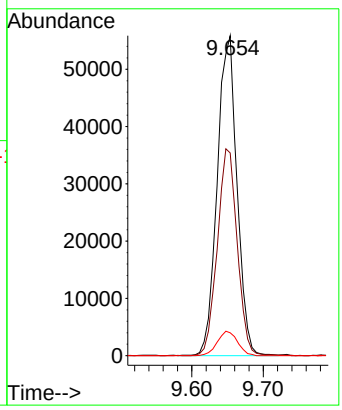




#47
Bromodichloromethane
Concen: 19.886 ug/l
RT: 9.654 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 83 Resp: 10729

Ion	Ratio	Lower	Upper
83	100		
85	63.2	48.7	73.1
127	7.1	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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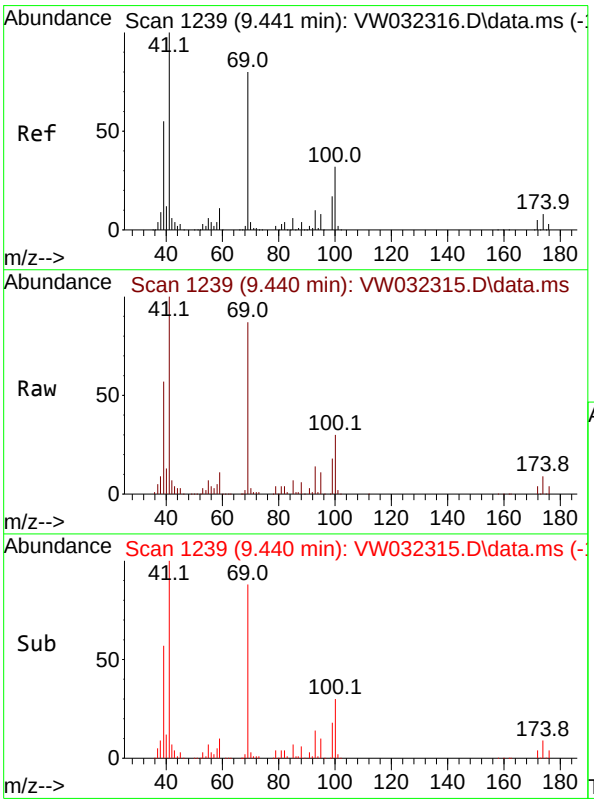
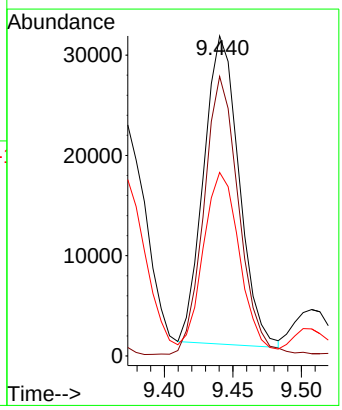
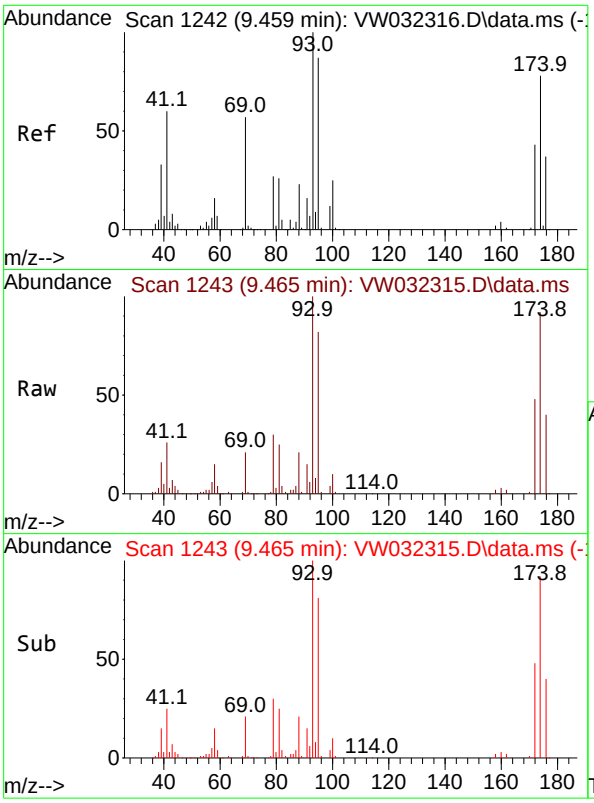


#48
Methyl methacrylate
Concen: 19.561 ug/l
RT: 9.440 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 41 Resp: 55063

Ion	Ratio	Lower	Upper
41	100		
69	90.8	71.5	107.3
39	61.9	55.9	83.9

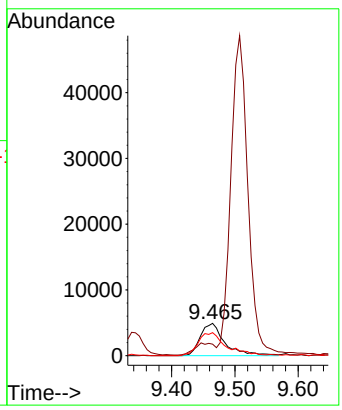




#49
1,4-Dioxane
Concen: 414.108 ug/l
RT: 9.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 88 Resp: 1335

Ion	Ratio	Lower	Upper
88	100		
43	29.8	18.0	27.0#
58	80.9	55.4	83.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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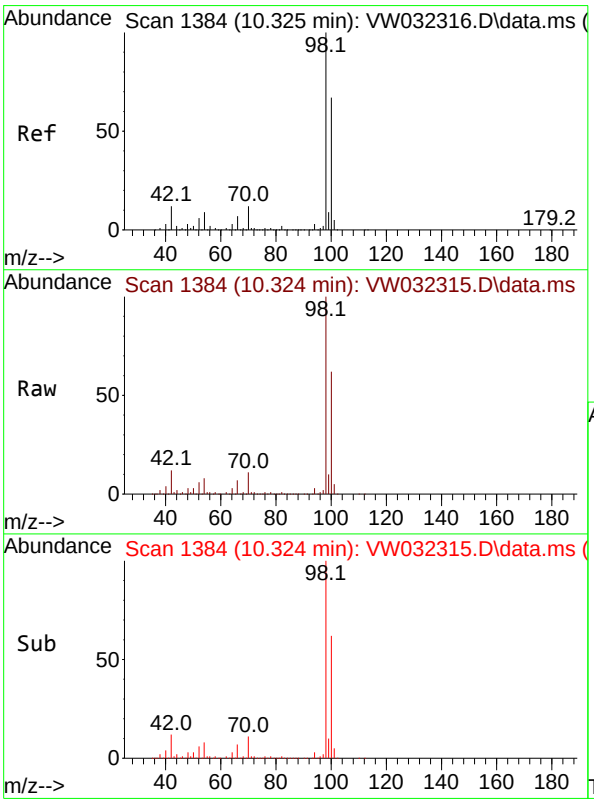
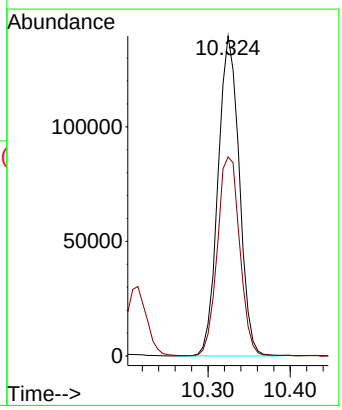
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

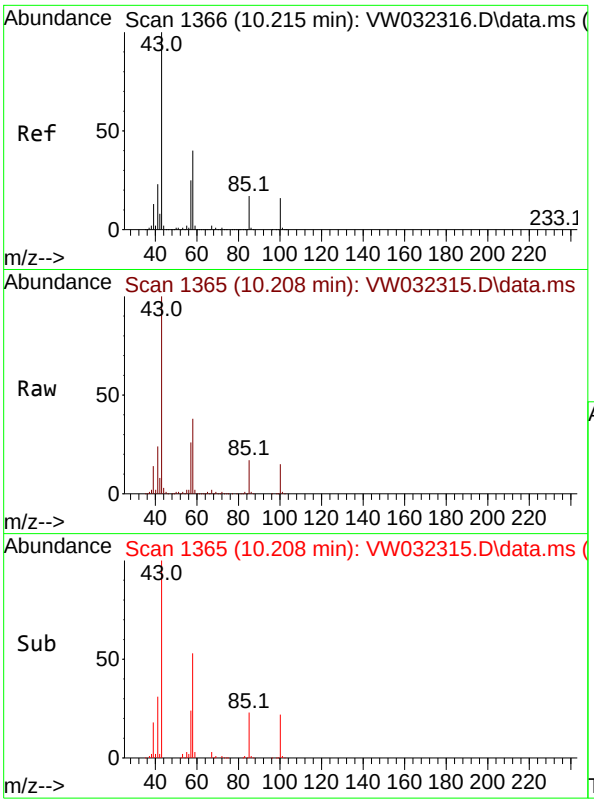


#50
Toluene-d8
Concen: 19.507 ug/l
RT: 10.324 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 98 Resp: 250144

Ion	Ratio	Lower	Upper
98	100		
100	65.6	51.4	77.2





#51
4-Methyl-2-Pentanone
Concen: 101.802 ug/l
RT: 10.208 min Scan# 1
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 34138

Ion	Ratio	Lower	Upper
43	100		
58	39.1	32.0	48.0

Instrument :
MSVOA_W
ClientSampleId :
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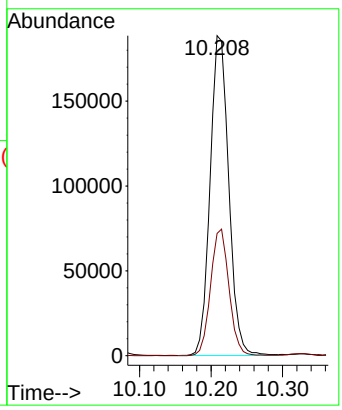
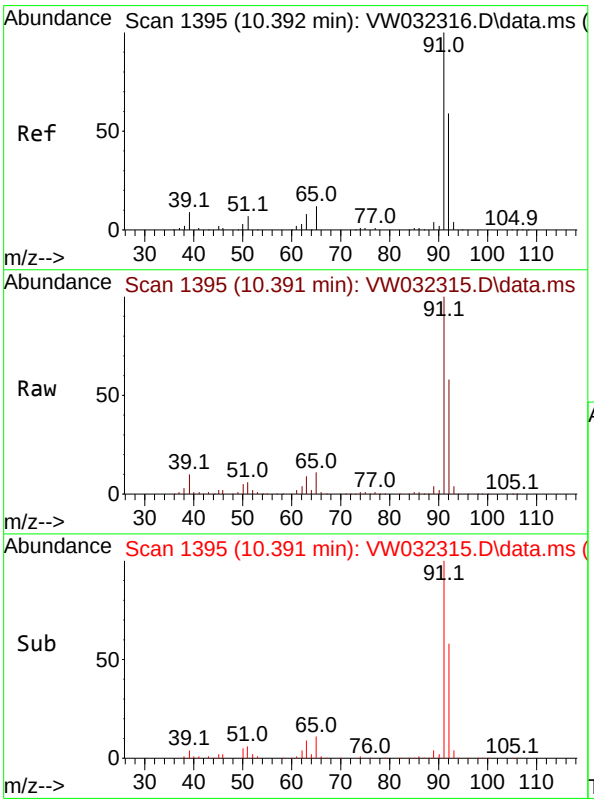
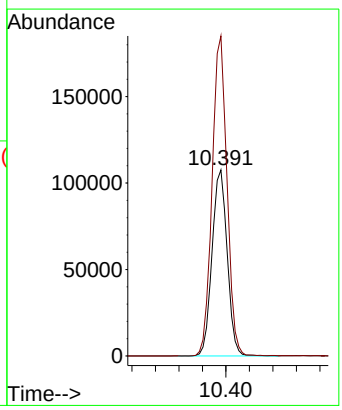


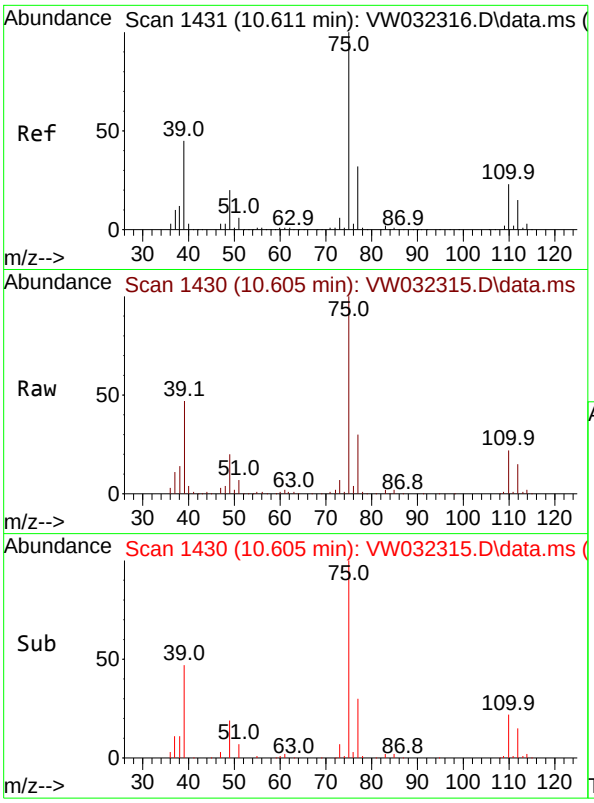


#52
Toluene
Concen: 20.102 ug/l
RT: 10.391 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 92 Resp: 192396

Ion	Ratio	Lower	Upper
92	100		
91	168.8	137.5	206.3

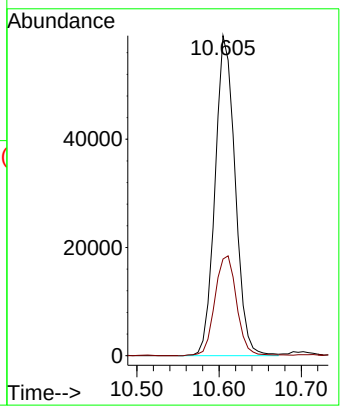




#53
t-1,3-Dichloropropene
Concen: 19.211 ug/l
RT: 10.605 min Scan# 14
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 75 Resp: 10055

Ion	Ratio	Lower	Upper
75	100		
77	30.2	25.6	38.4



Instrument :
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ClientSampleId :
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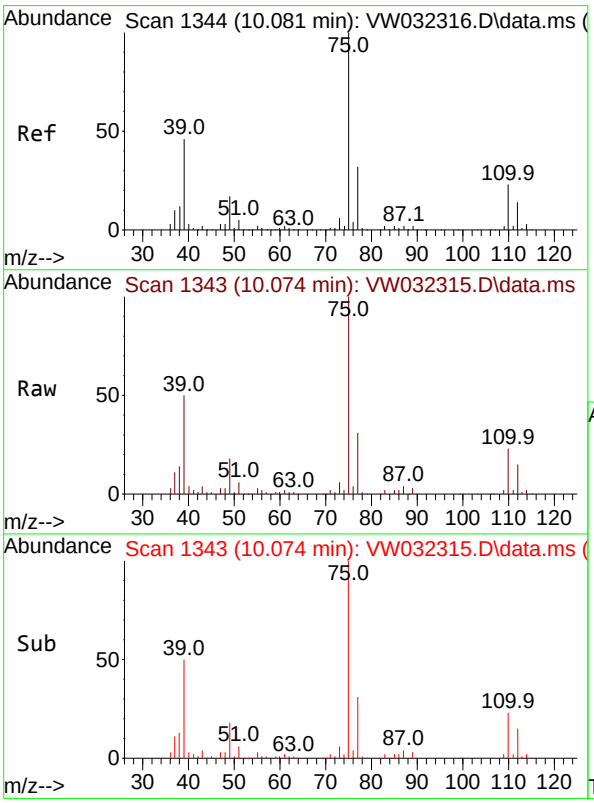
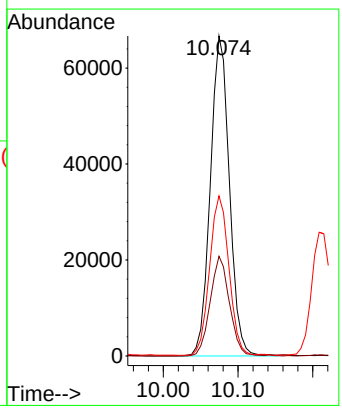
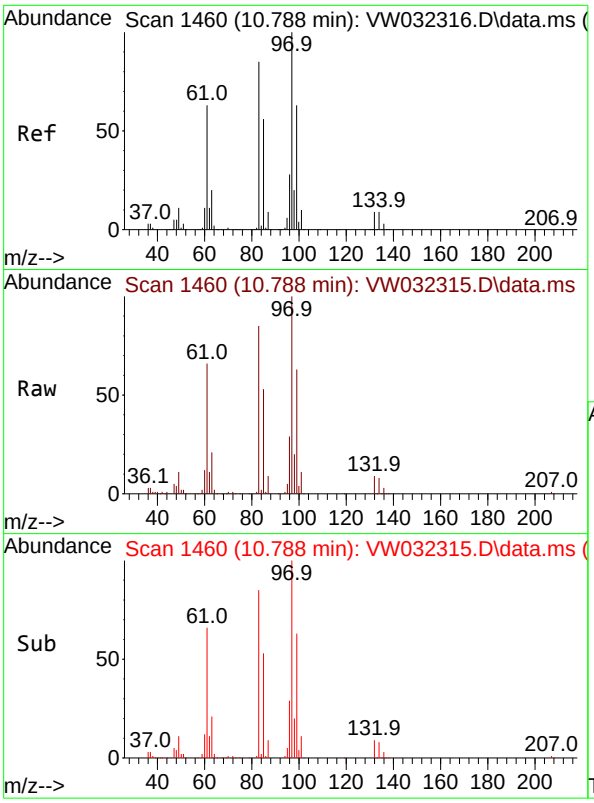


#54
cis-1,3-Dichloropropene
Concen: 19.565 ug/l
RT: 10.074 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 75 Resp: 117968

Ion	Ratio	Lower	Upper
75	100		
77	31.1	25.1	37.7
39	49.8	43.2	64.8

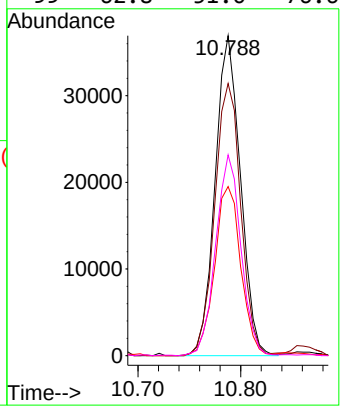




#55
1,1,2-Trichloroethane
Concen: 20.068 ug/l
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 97 Resp: 6327

Ion	Ratio	Lower	Upper
97	100		
83	85.0	71.0	106.6
85	52.8	42.8	64.2
99	62.8	51.0	76.6



Instrument :
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ClientSampleId :
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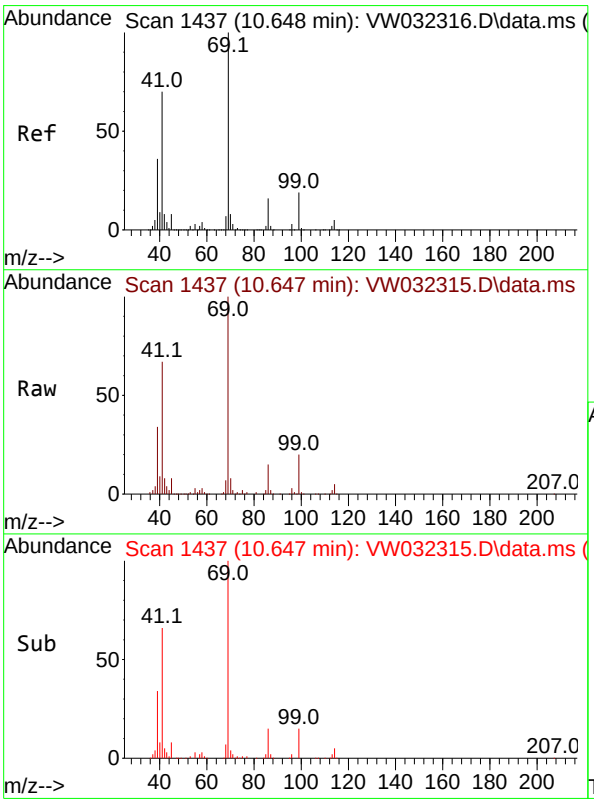
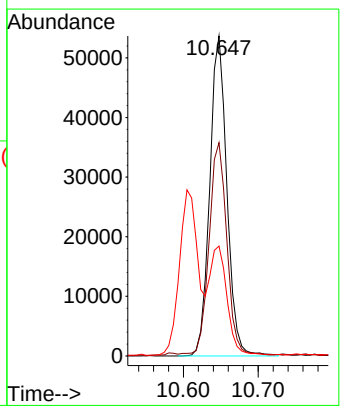
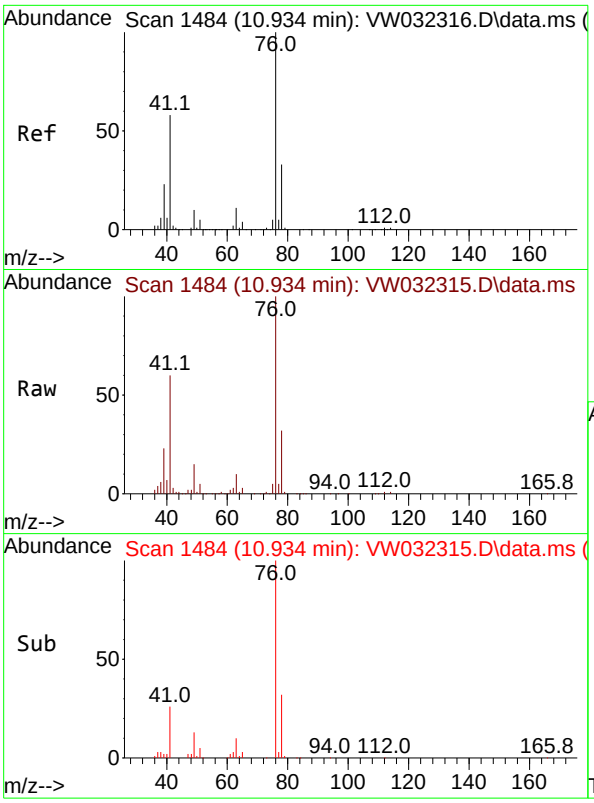


#56
Ethyl methacrylate
Concen: 19.407 ug/l
RT: 10.647 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 69 Resp: 85643

Ion	Ratio	Lower	Upper
69	100		
41	68.9	53.2	79.8
39	33.7	32.9	49.3





#57
1,3-Dichloropropane
Concen: 20.283 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 76 Resp: 11294

Ion	Ratio	Lower	Upper
76	100		
78	32.3	26.2	39.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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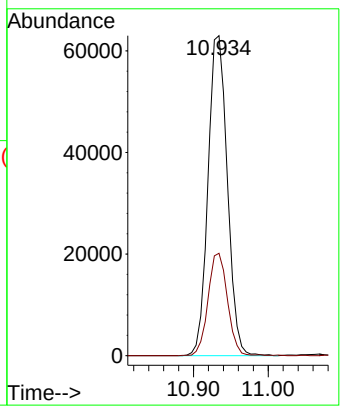
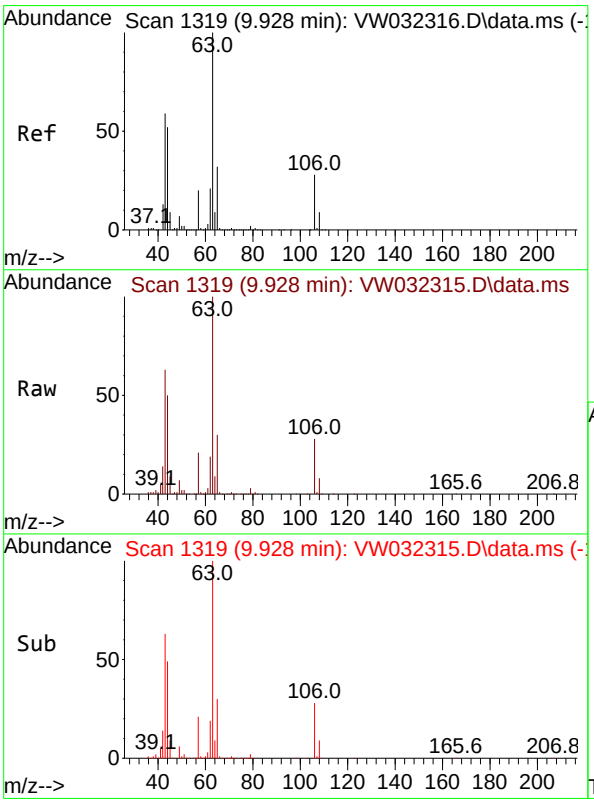
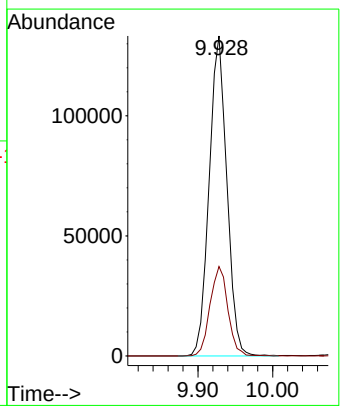


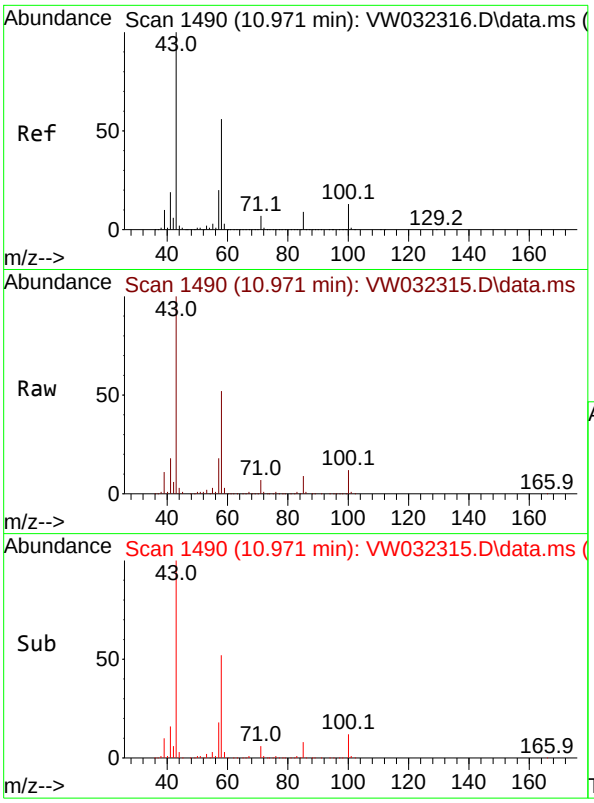


#58
2-Chloroethyl Vinyl ether
Concen: 93.287 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 63 Resp: 219091

Ion	Ratio	Lower	Upper
63	100		
106	28.2	24.3	36.5





#59
2-Hexanone
Concen: 102.664 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 24281

Ion	Ratio	Lower	Upper
43	100		
58	53.0	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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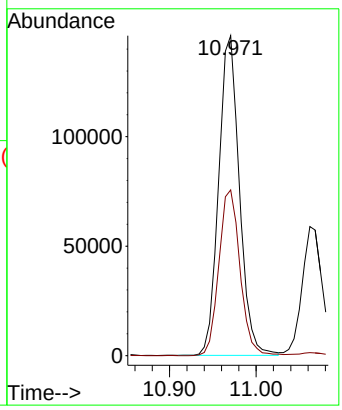
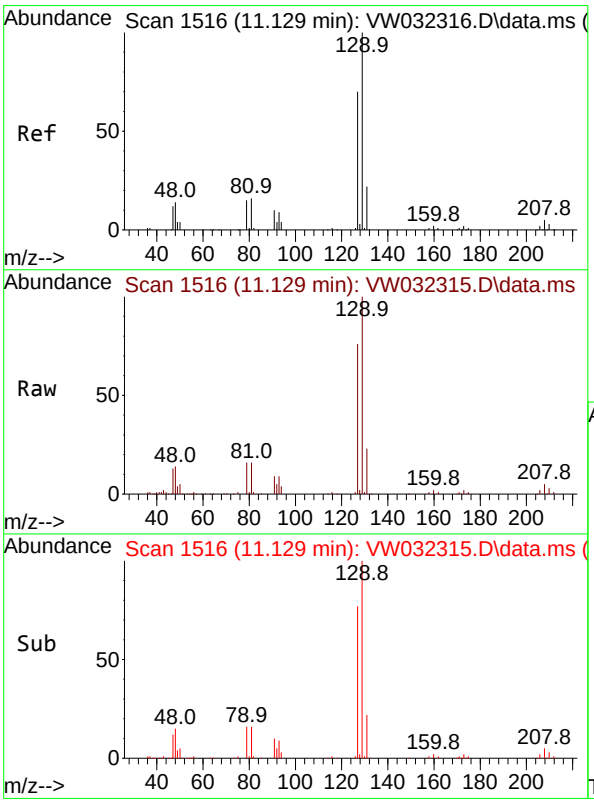
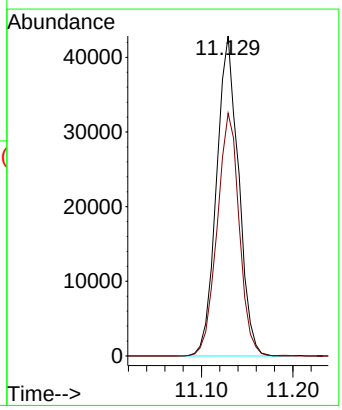


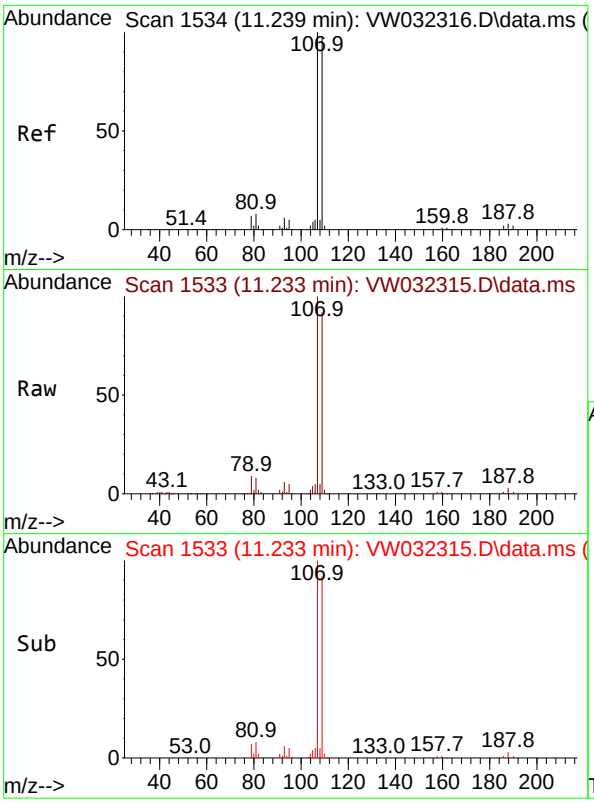


#60
Dibromochloromethane
Concen: 20.051 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:129 Resp: 71782

Ion	Ratio	Lower	Upper
129	100		
127	76.0	38.1	114.5





#61
1,2-Dibromoethane
Concen: 20.135 ug/l
RT: 11.233 min Scan# 1
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:107 Resp: 6189

Ion	Ratio	Lower	Upper
107	100		
109	91.2	74.5	111.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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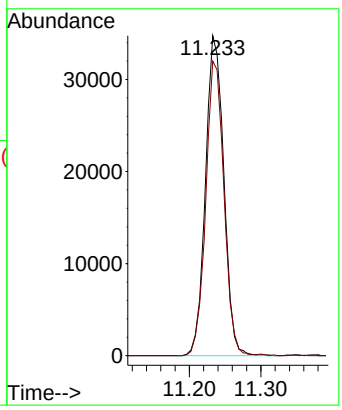
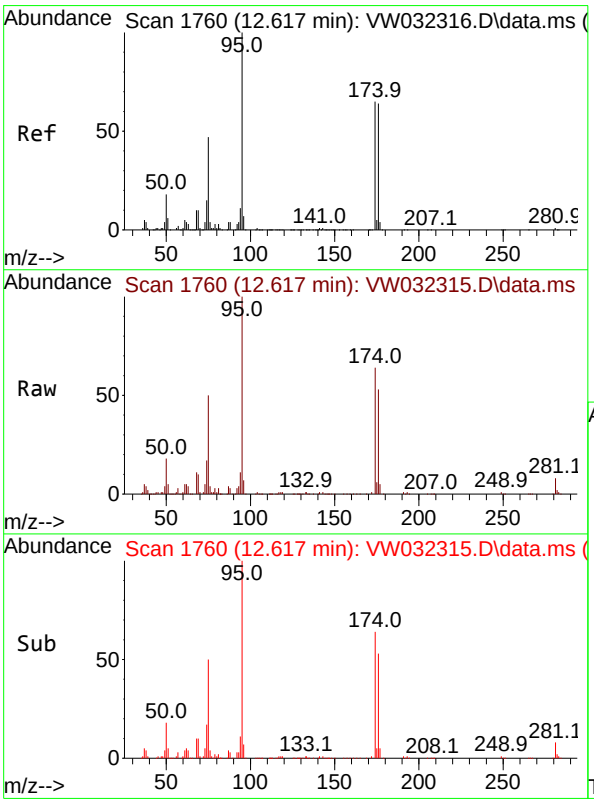
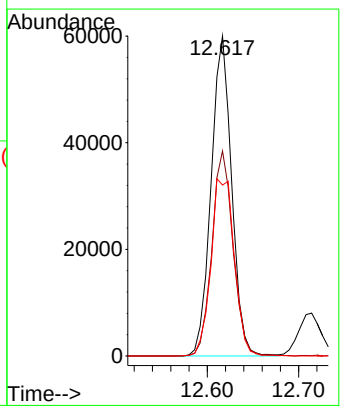


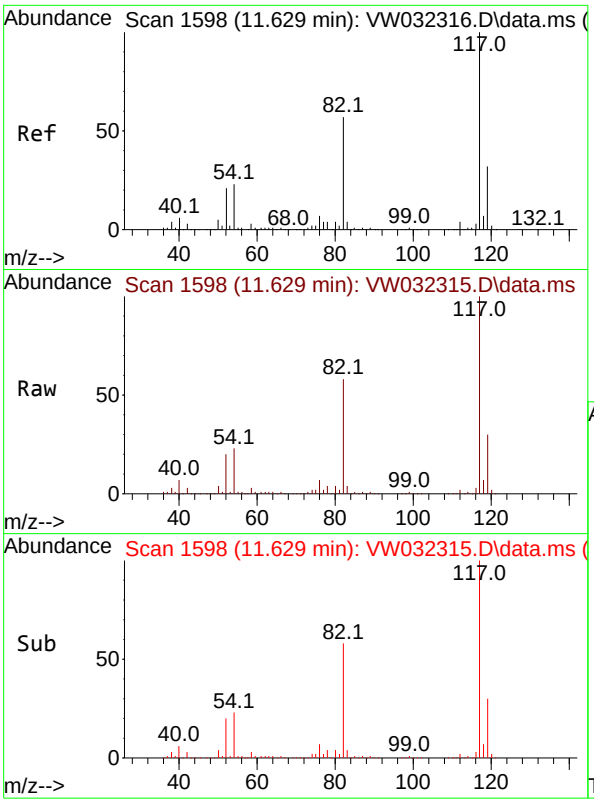


#62
4-Bromofluorobenzene
Concen: 19.305 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 95 Resp: 93567

Ion	Ratio	Lower	Upper
95	100		
174	65.8	0.0	145.6
176	63.4	0.0	140.8

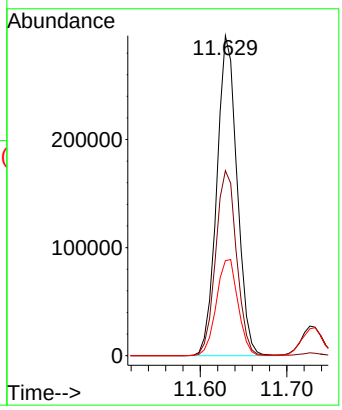




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:117 Resp: 48150

Ion	Ratio	Lower	Upper
117	100		
82	57.8	42.7	64.1
119	29.7	25.2	37.8



Instrument :
MSVOA_W
ClientSampleId :
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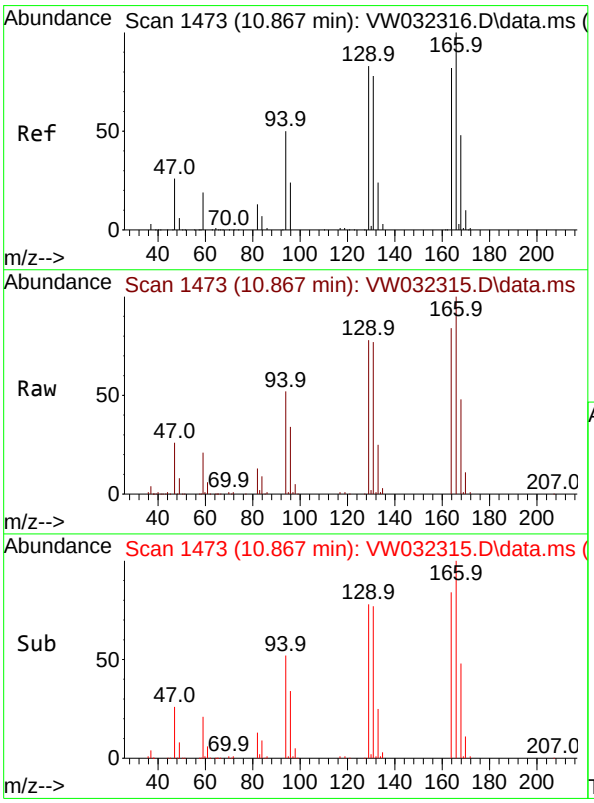
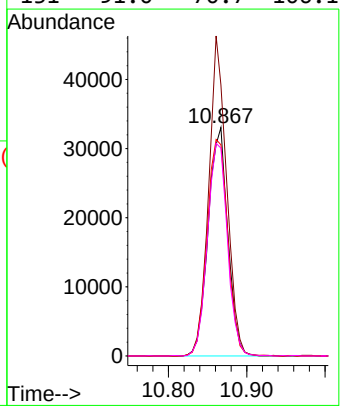
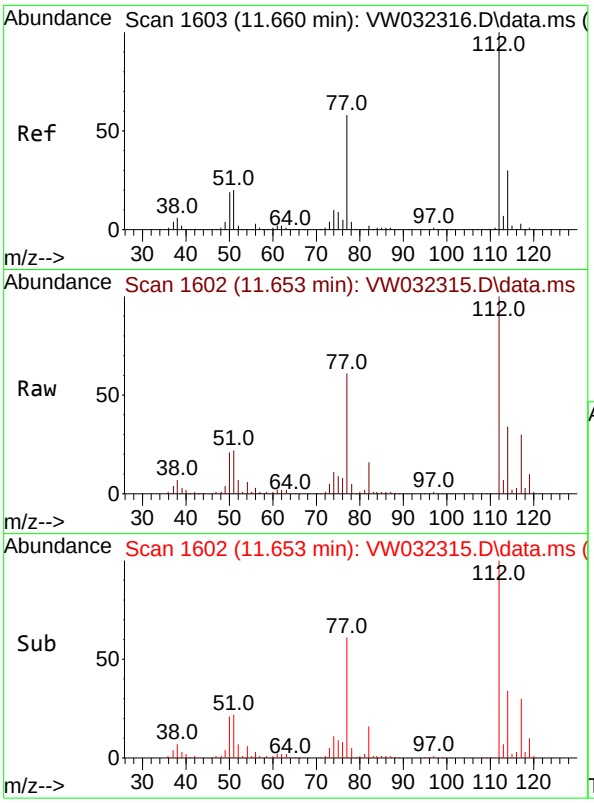


#64
Tetrachloroethene
Concen: 19.958 ug/l
RT: 10.867 min Scan# 1473
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:164 Resp: 57503

Ion	Ratio	Lower	Upper
164	100		
166	118.6	97.5	146.3
129	92.4	71.2	106.8
131	91.0	70.7	106.1

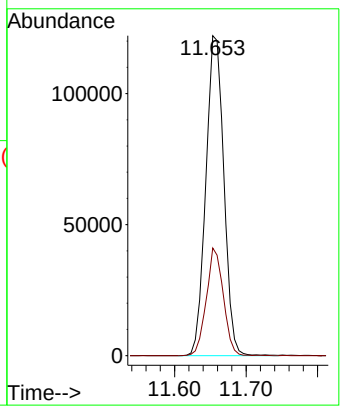




#65
Chlorobenzene
Concen: 20.167 ug/l
RT: 11.653 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:112 Resp: 21365

Ion	Ratio	Lower	Upper
112	100		
114	33.7	26.0	39.0



Instrument :
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ClientSampleId :
VSTDICC020

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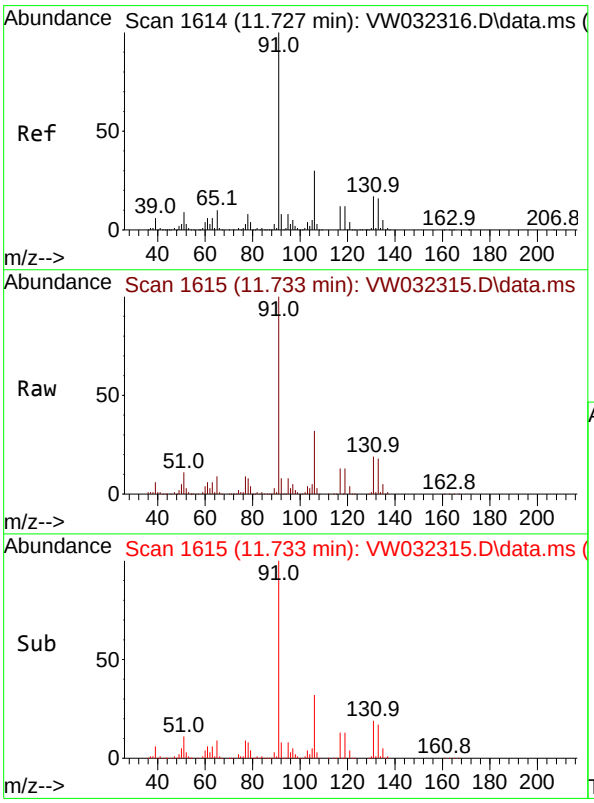
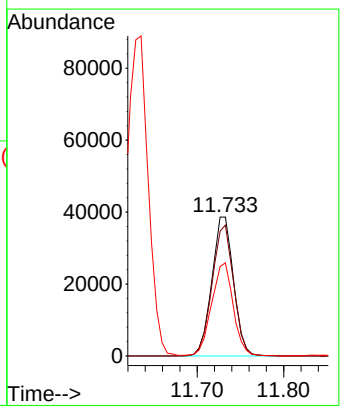
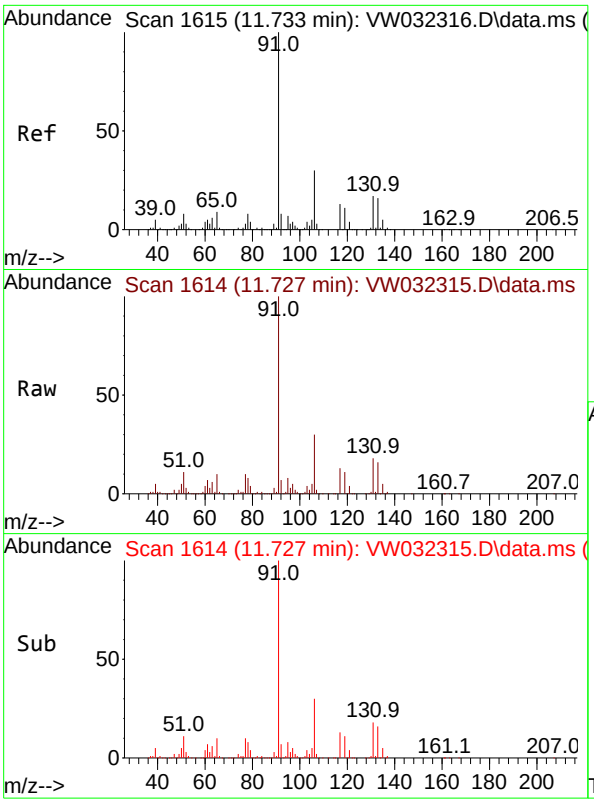


#66
1,1,1,2-Tetrachloroethane
Concen: 20.280 ug/l
RT: 11.733 min Scan# 1615
Delta R.T. 0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:131 Resp: 66918

Ion	Ratio	Lower	Upper
131	100		
133	94.1	47.7	143.1
119	67.3	32.8	98.3





#67
Ethyl Benzene
Concen: 20.103 ug/l
RT: 11.727 min Scan# 1
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 91 Resp: 35500

Ion	Ratio	Lower	Upper
91	100		
106	30.2	25.3	37.9

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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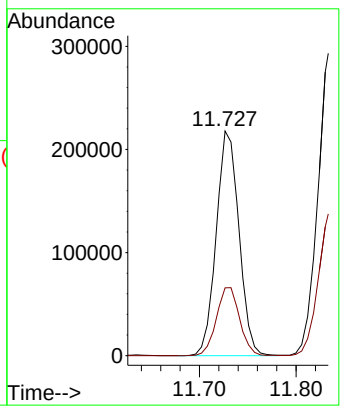
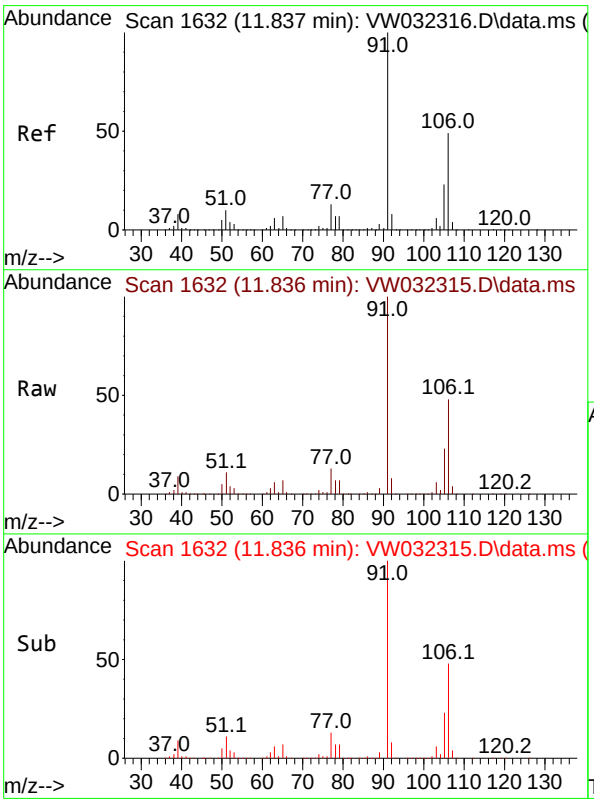
Supervised By :Semsettin Yesilyurt 10/03/2025

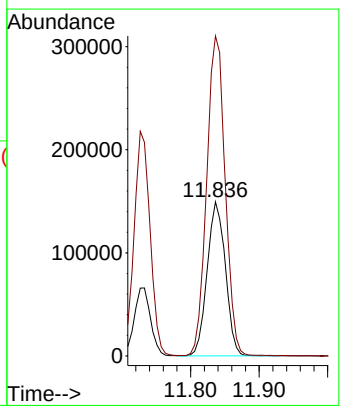


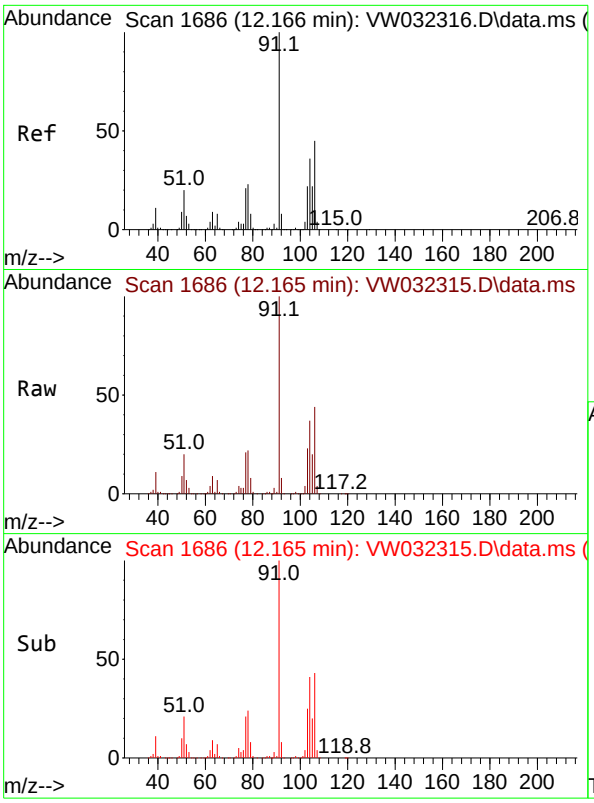


#68
m/p-Xylenes
Concen: 40.461 ug/l
RT: 11.836 min Scan# 1632
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:106 Resp: 275521

Ion	Ratio	Lower	Upper
106	100		
91	210.9	164.2	246.2





#69
o-Xylene
Concen: 19.762 ug/l
RT: 12.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:106 Resp: 12584

Ion	Ratio	Lower	Upper
106	100		
91	226.2	108.7	326.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
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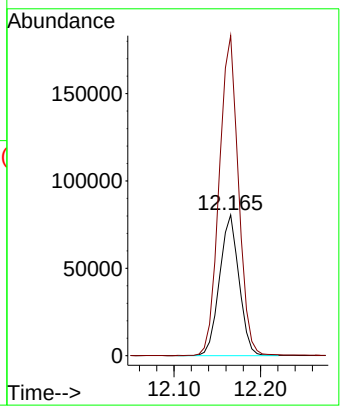
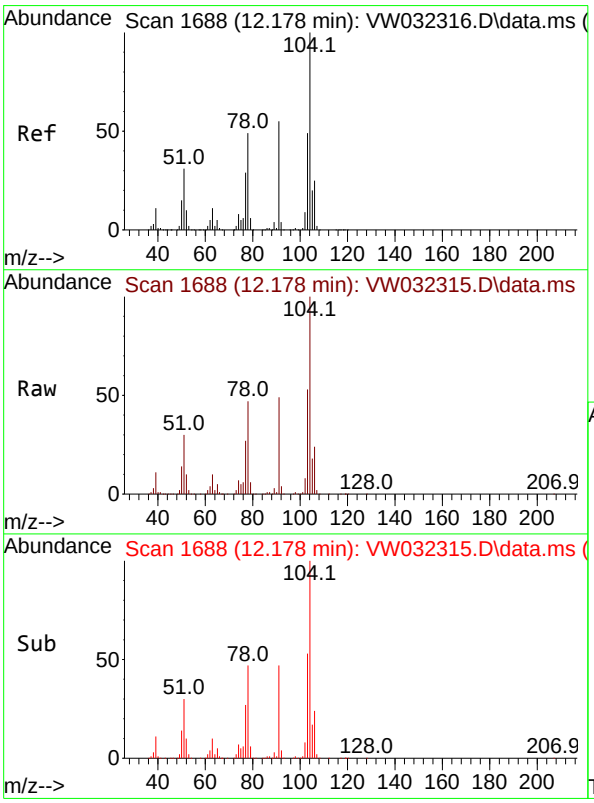
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

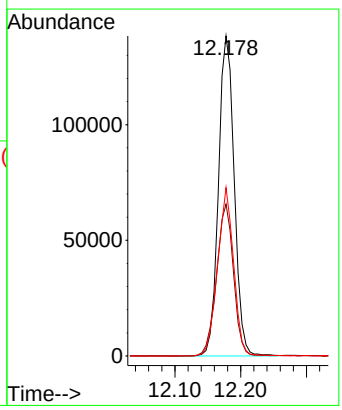


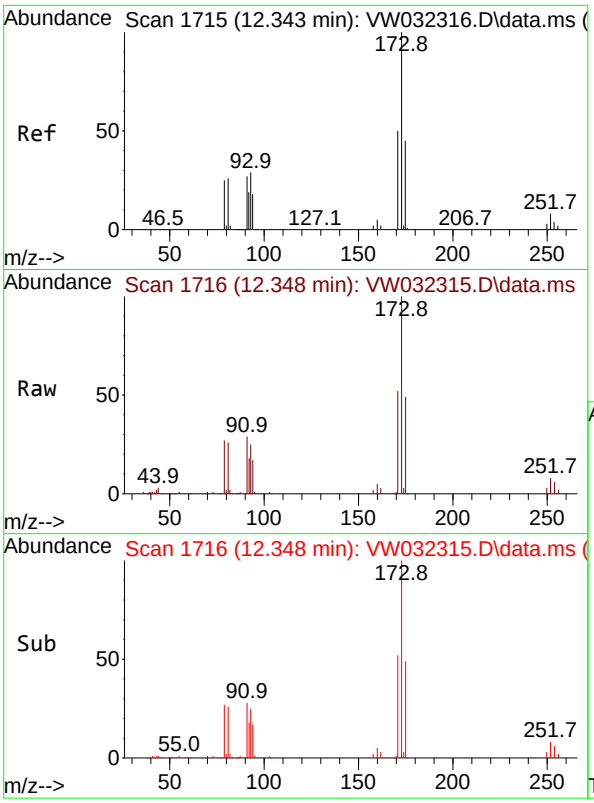


#70
Styrene
Concen: 20.776 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:104 Resp: 230999

Ion	Ratio	Lower	Upper
104	100		
78	50.9	41.6	62.4
103	53.5	44.8	67.2

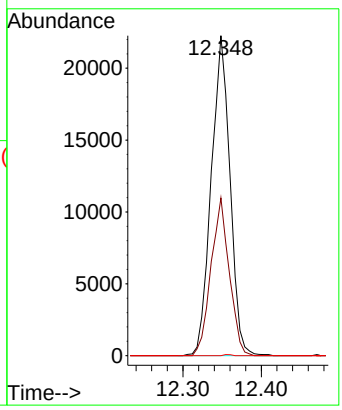




#71
Bromoform
Concen: 19.593 ug/l
RT: 12.348 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:173 Resp: 3705

Ion	Ratio	Lower	Upper
173	100		
175	48.0	24.9	74.7
254	0.1	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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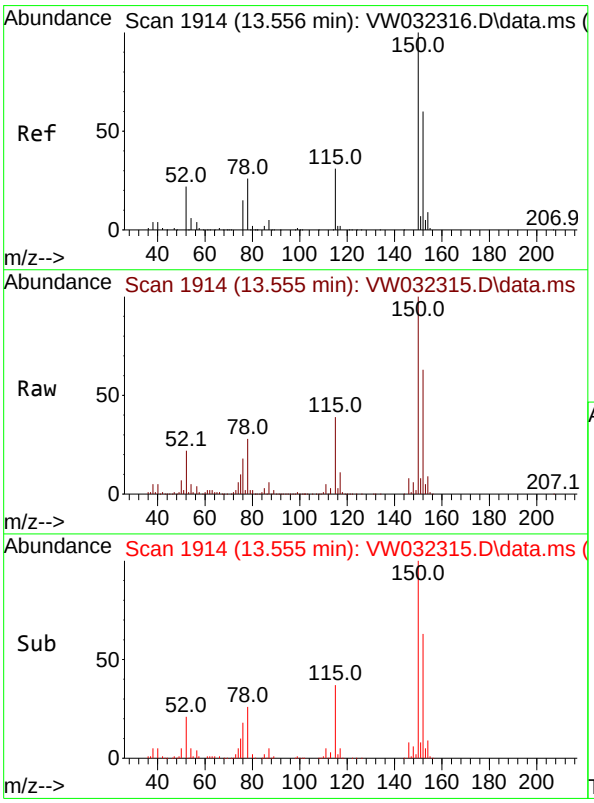
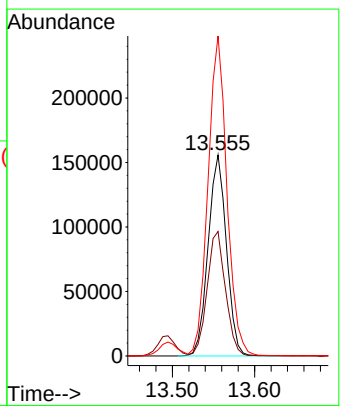
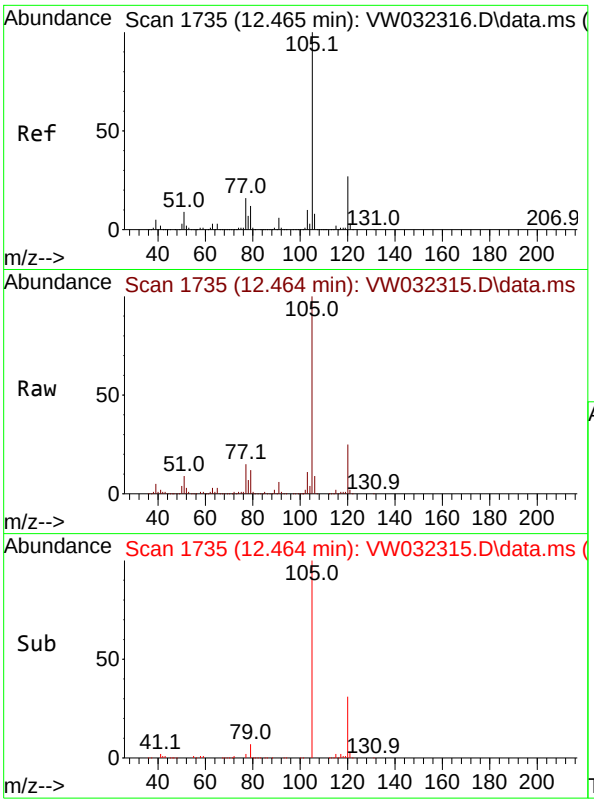


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.555 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:152 Resp: 241841

Ion	Ratio	Lower	Upper
152	100		
115	61.8	31.8	95.4
150	163.6	0.0	343.0





#73
Isopropylbenzene
Concen: 19.668 ug/l
RT: 12.464 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:105 Resp: 32541

Ion	Ratio	Lower	Upper
105	100		
120	25.3	13.0	38.9

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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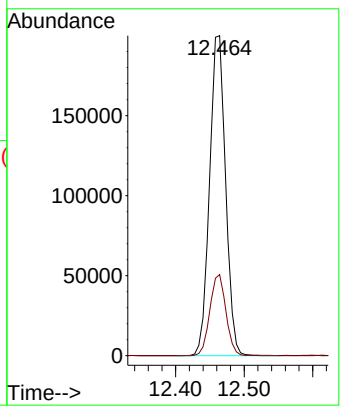
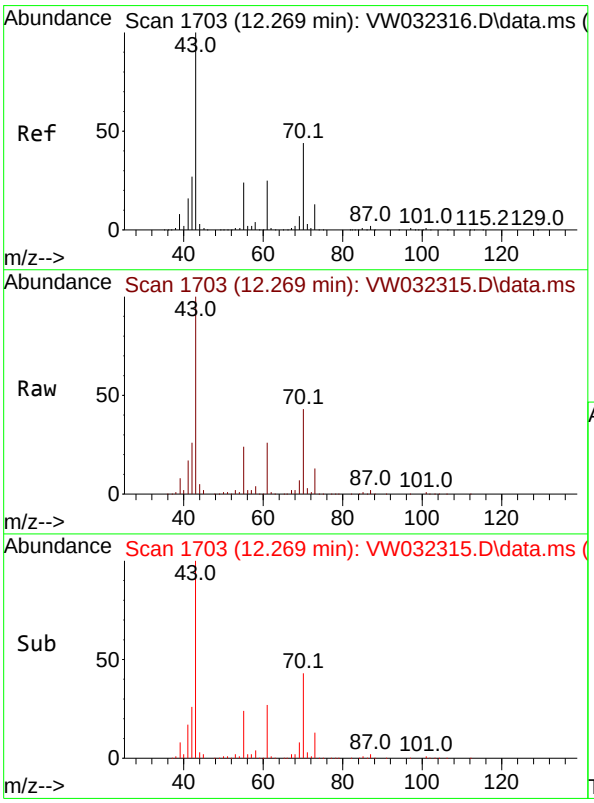
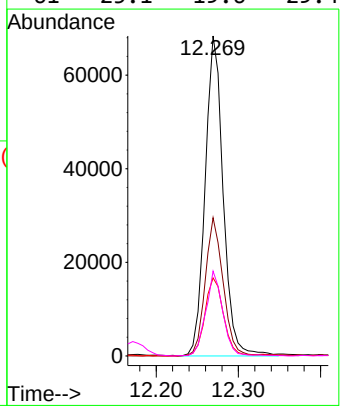


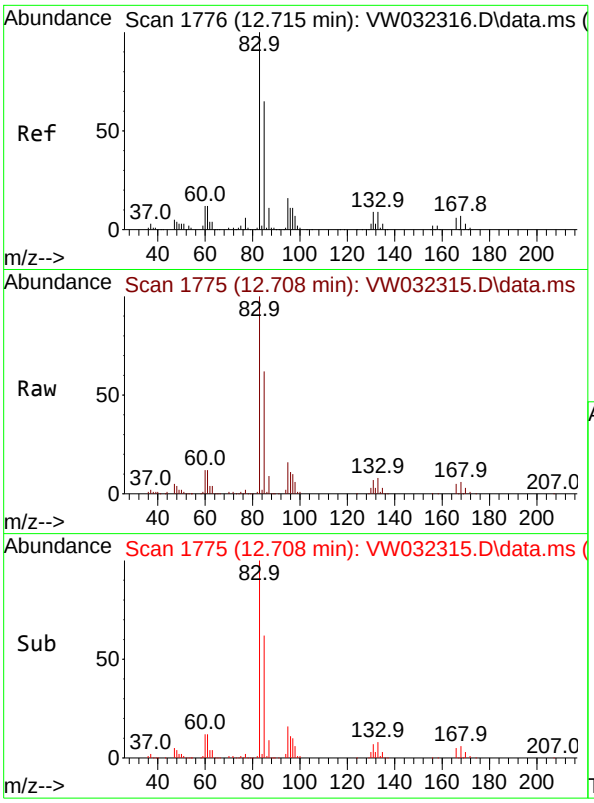


#74
N-amyl acetate
Concen: 19.793 ug/l
RT: 12.269 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 43 Resp: 104472

Ion	Ratio	Lower	Upper
43	100		
70	42.8	35.3	52.9
55	25.1	19.9	29.9
61	25.1	19.6	29.4





#75
1,1,2,2-Tetrachloroethane
Concen: 20.041 ug/l
RT: 12.708 min Scan# 1
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 83 Resp: 8233

Ion	Ratio	Lower	Upper
83	100		
131	9.5	5.1	15.4
85	64.5	32.2	96.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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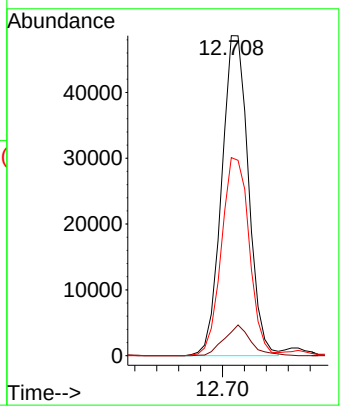
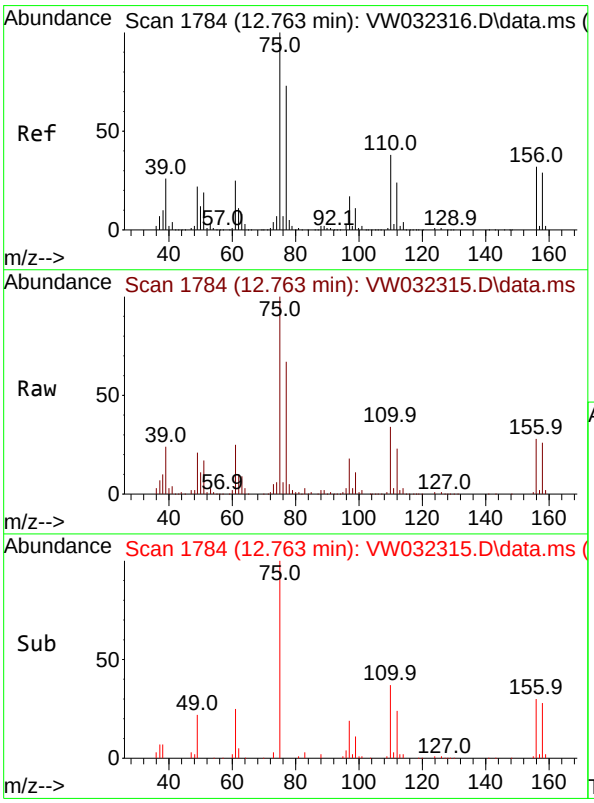
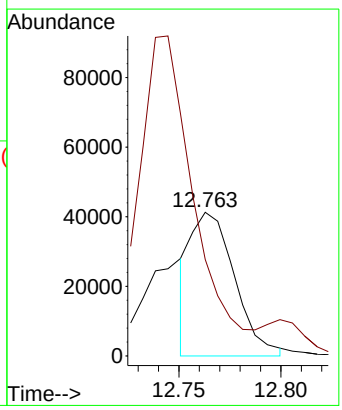


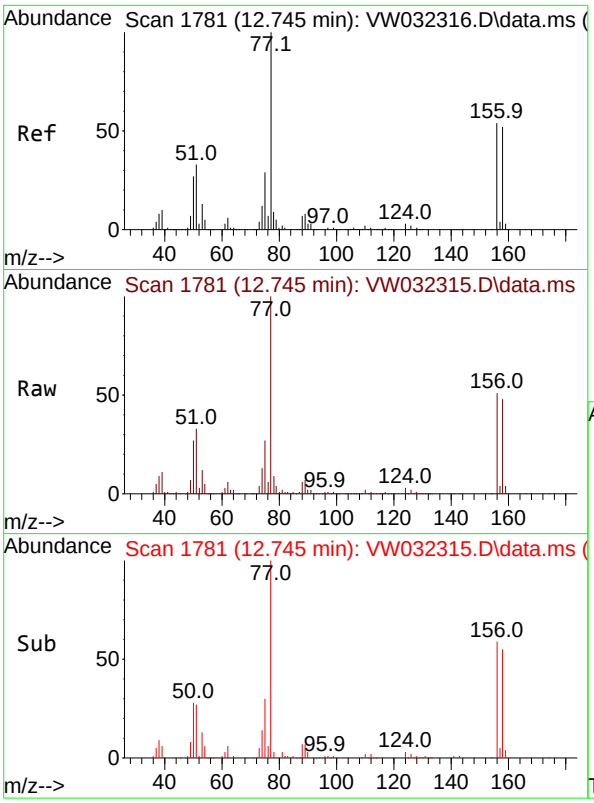


#76
1,2,3-Trichloropropane
Concen: 19.396 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 75 Resp: 61898

Ion	Ratio	Lower	Upper
75	100		
77	282.2	141.7	425.1

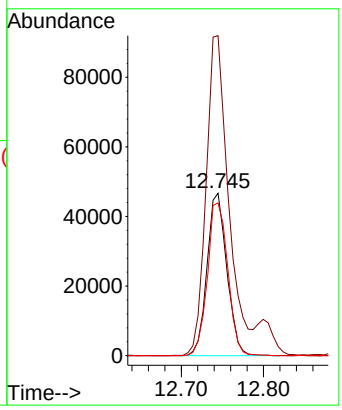




#77
Bromobenzene
Concen: 19.575 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:156 Resp: 7807

Ion	Ratio	Lower	Upper
156	100		
77	223.8	98.6	295.7
158	97.1	48.4	145.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
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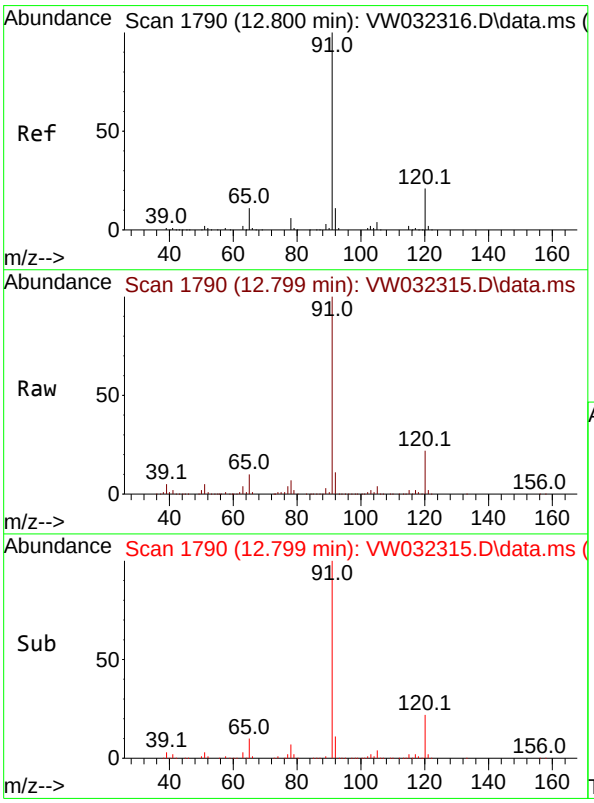
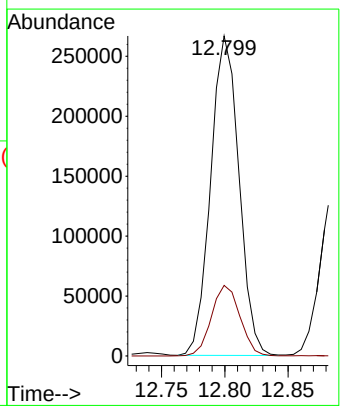
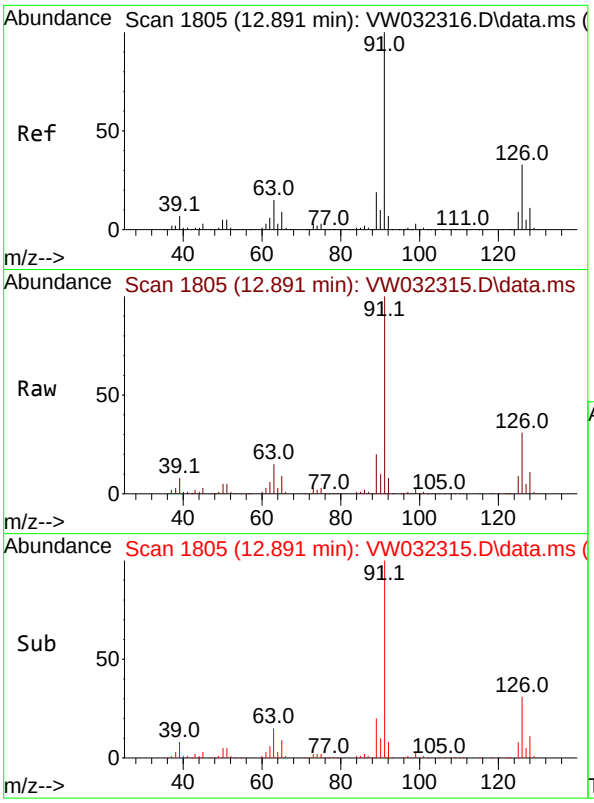


#78
n-propylbenzene
Concen: 20.057 ug/l
RT: 12.799 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 91 Resp: 414530

Ion	Ratio	Lower	Upper
91	100		
120	22.3	11.8	35.4





#79
2-Chlorotoluene
Concen: 19.933 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 91 Resp: 25188

Ion	Ratio	Lower	Upper
91	100		
126	31.3	16.6	49.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
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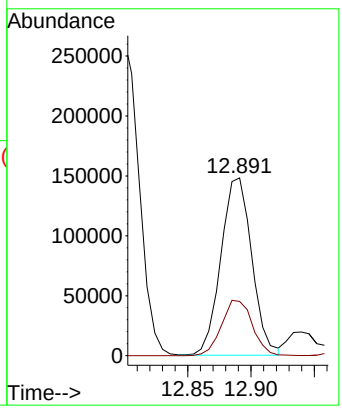
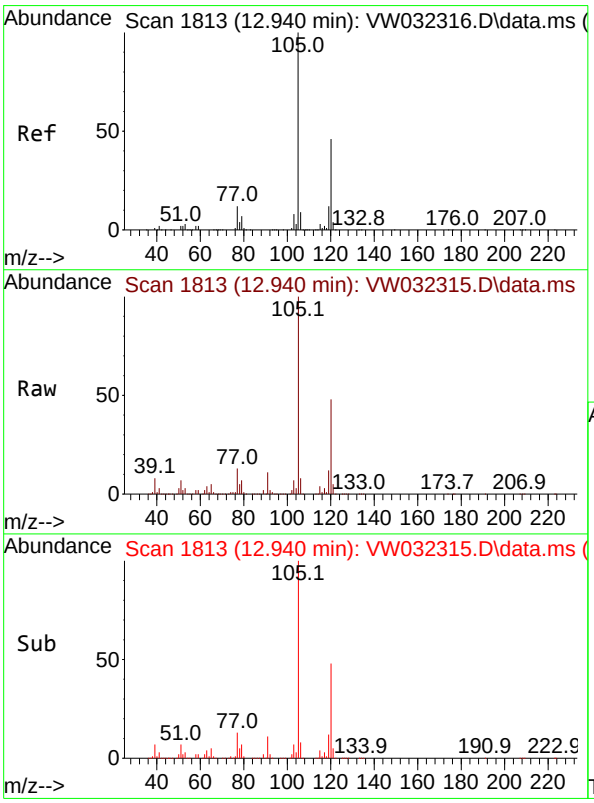
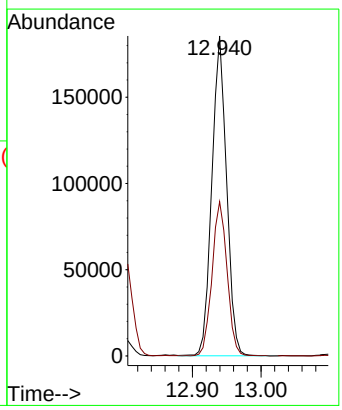


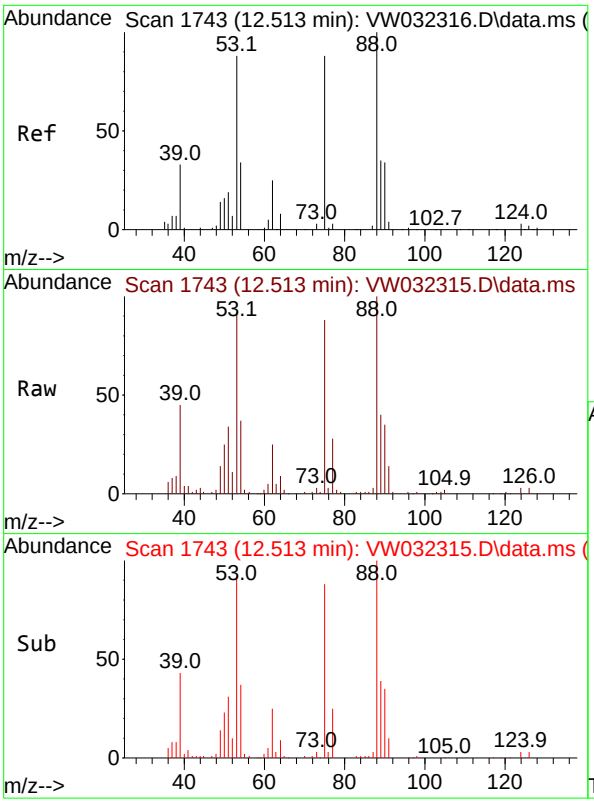


#80
1,3,5-Trimethylbenzene
Concen: 19.307 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:105 Resp: 276218

Ion	Ratio	Lower	Upper
105	100		
120	49.3	24.8	74.4





#81
trans-1,4-Dichloro-2-butene
Concen: 18.808 ug/l
RT: 12.513 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 75 Resp: 2362

Ion	Ratio	Lower	Upper
75	100		
53	115.4	91.0	136.6
89	46.7	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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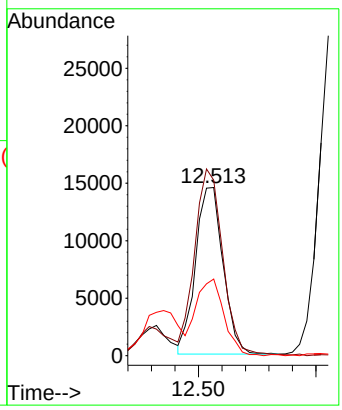
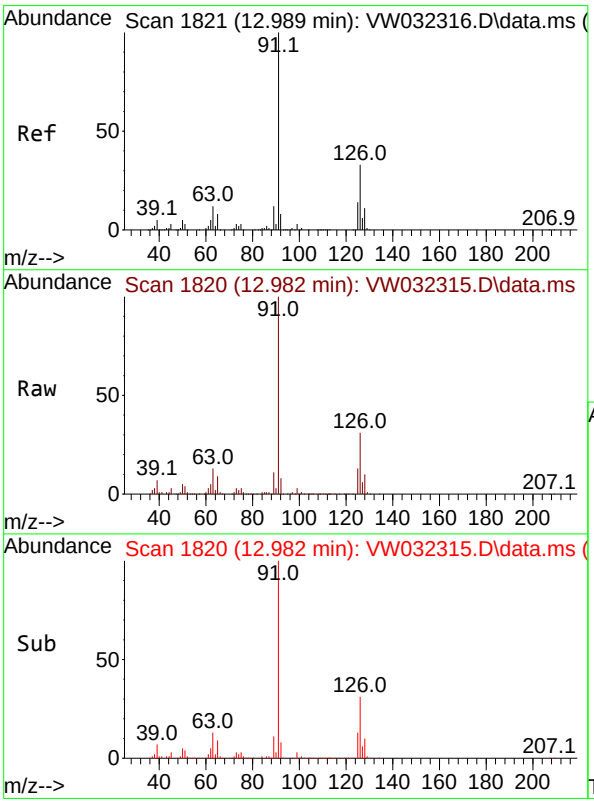
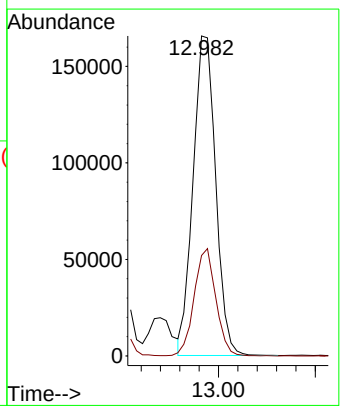


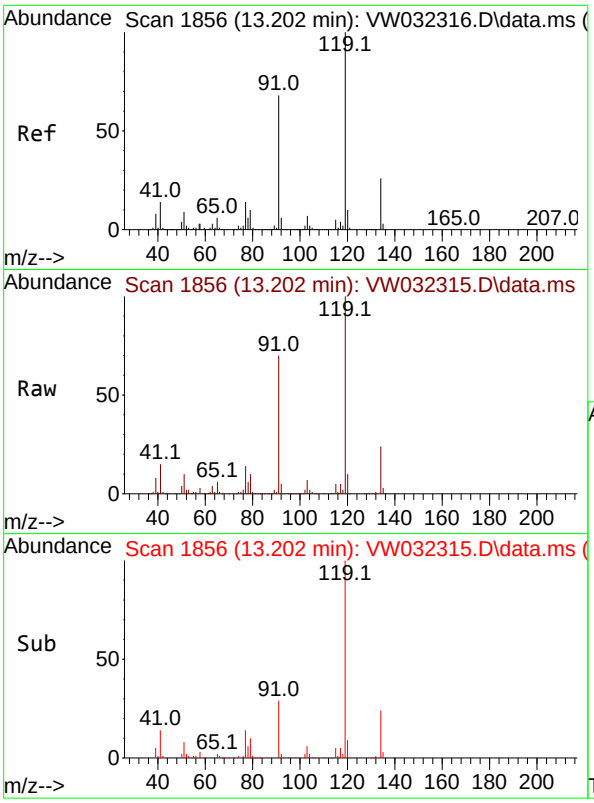


#82
4-Chlorotoluene
Concen: 20.002 ug/l
RT: 12.982 min Scan# 1820
Delta R.T. -0.007 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 91 Resp: 268736

Ion	Ratio	Lower	Upper
91	100		
126	32.4	16.1	48.2





#83
tert-Butylbenzene
Concen: 19.685 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:119 Resp: 23108

Ion	Ratio	Lower	Upper
119	100		
91	69.3	33.8	101.3
134	24.9	12.5	37.5

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

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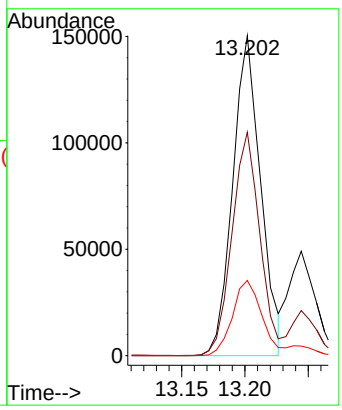
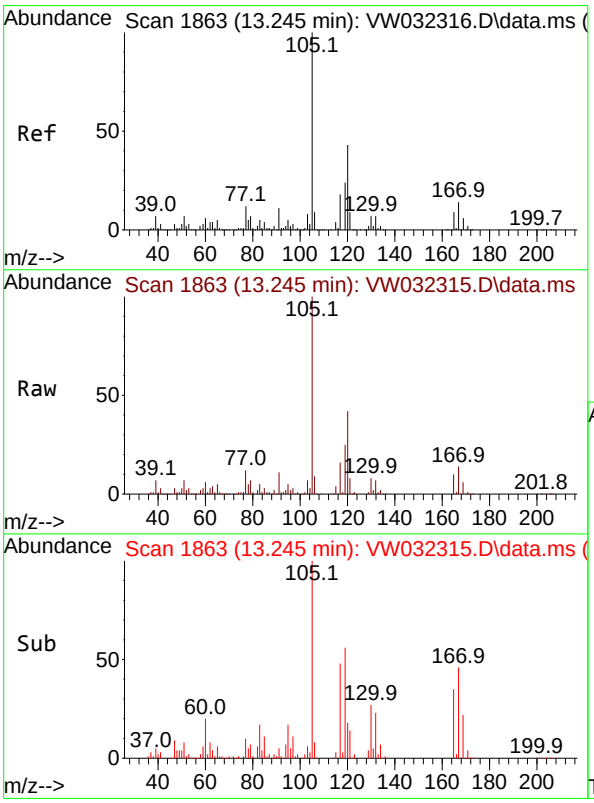
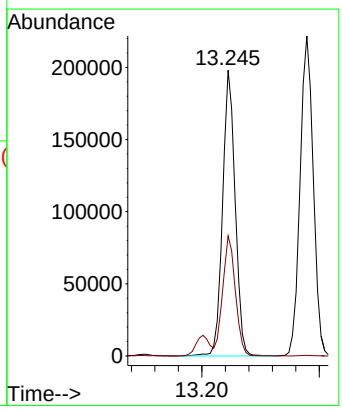


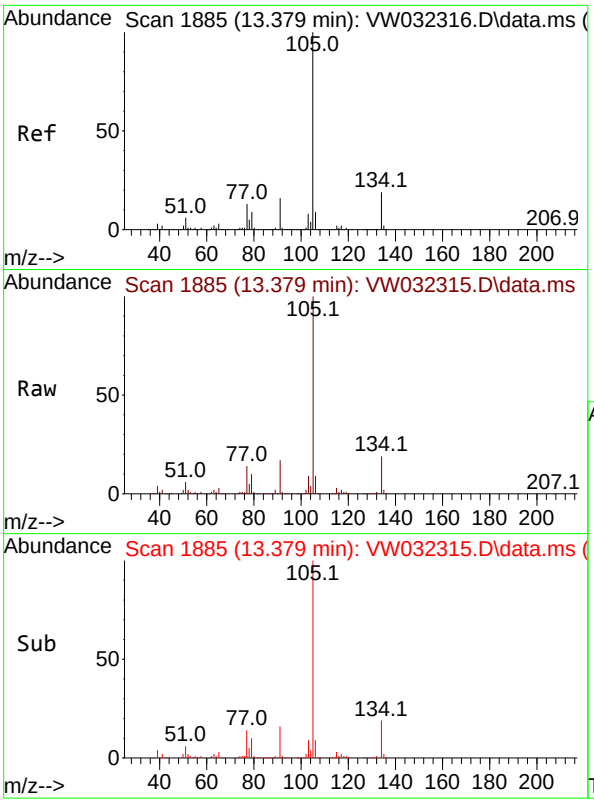


#84
1,2,4-Trimethylbenzene
Concen: 20.253 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:105 Resp: 294630

Ion	Ratio	Lower	Upper
105	100		
120	42.3	22.1	66.3

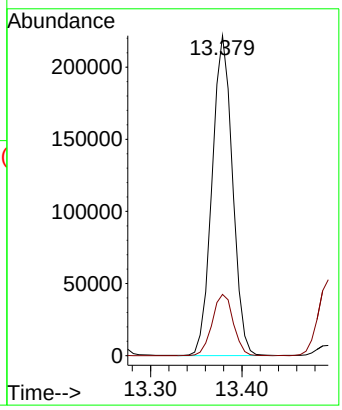




#85
sec-Butylbenzene
Concen: 19.209 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:105 Resp: 34459

Ion	Ratio	Lower	Upper
105	100		
134	19.8	10.1	30.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
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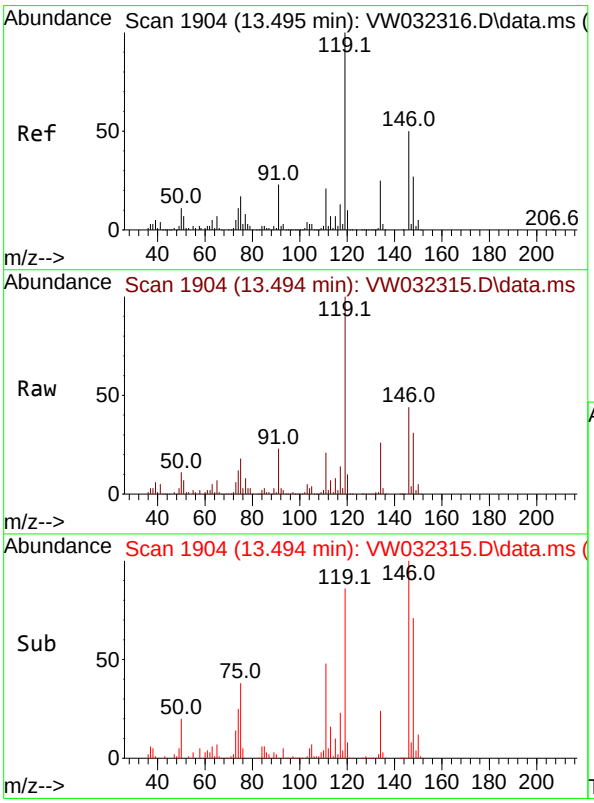
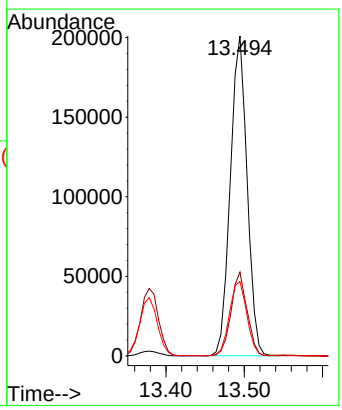
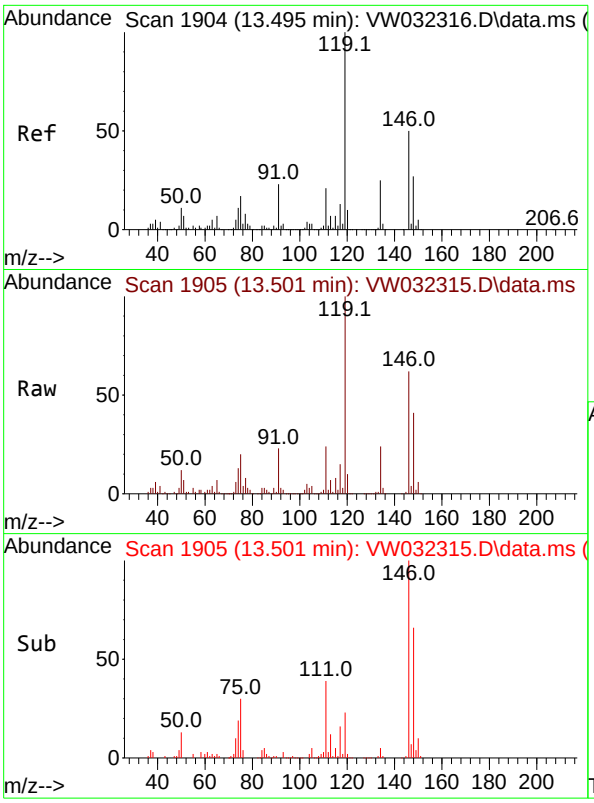


#86
p-Isopropyltoluene
Concen: 20.057 ug/l
RT: 13.494 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:119 Resp: 298543

Ion	Ratio	Lower	Upper
119	100		
134	25.0	12.6	37.6
91	24.1	12.4	37.0

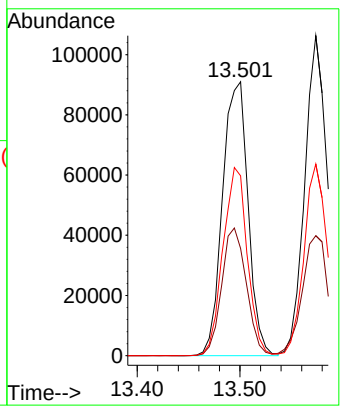




#87
1,3-Dichlorobenzene
Concen: 19.461 ug/l
RT: 13.501 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:146 Resp: 15716

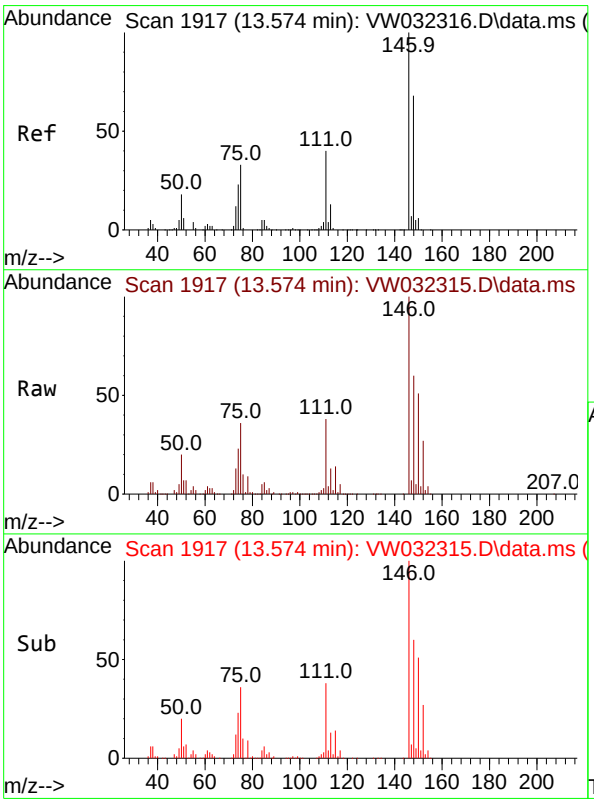
Ion	Ratio	Lower	Upper
146	100		
111	45.0	20.6	61.9
148	65.4	30.6	92.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

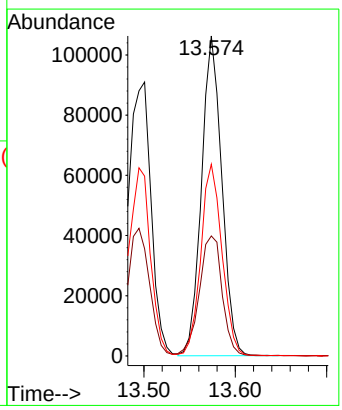
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

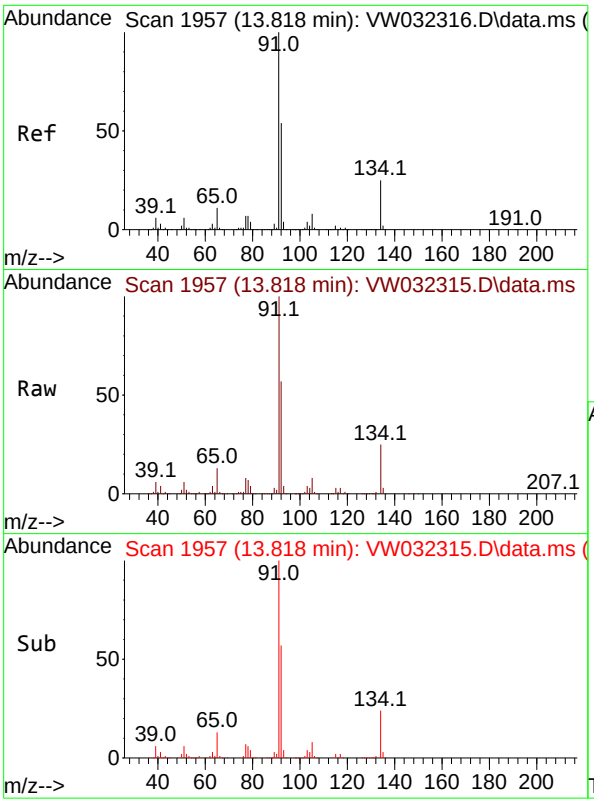


#88
1,4-Dichlorobenzene
Concen: 20.364 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:146 Resp: 164453

Ion	Ratio	Lower	Upper
146	100		
111	42.1	21.3	63.7
148	62.2	33.4	100.1

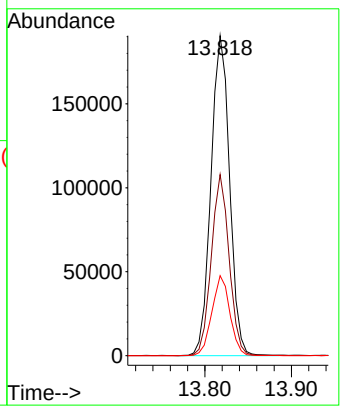




#89
n-Butylbenzene
Concen: 19.585 ug/l
RT: 13.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 91 Resp: 28463

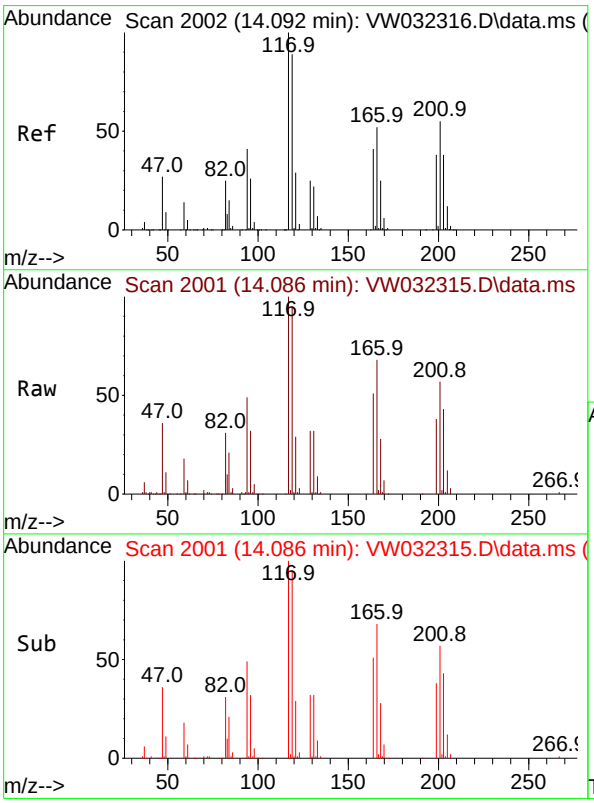
Ion	Ratio	Lower	Upper
91	100		
92	54.3	27.0	81.0
134	24.2	13.1	39.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

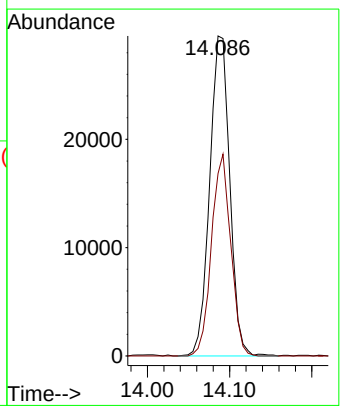
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

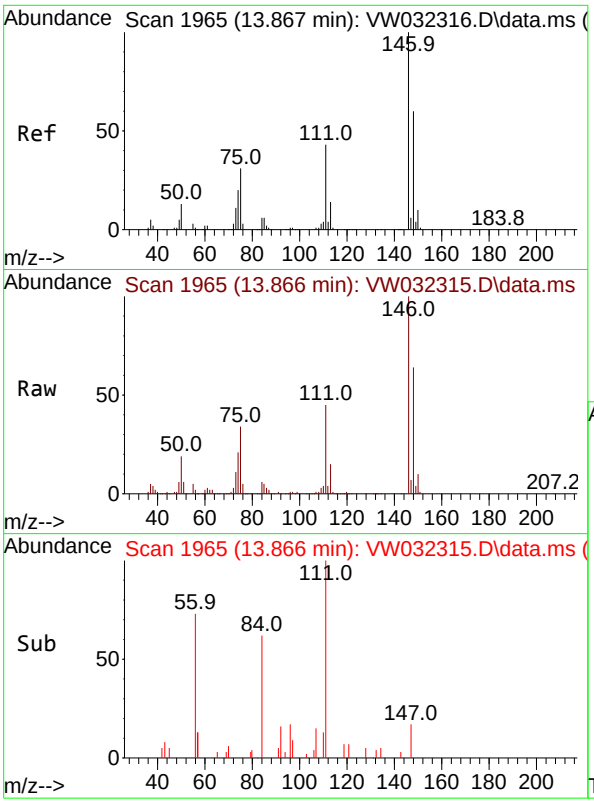


#90
Hexachloroethane
Concen: 18.779 ug/l
RT: 14.086 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:117 Resp: 50102

Ion	Ratio	Lower	Upper
117	100		
201	60.5	32.8	98.4

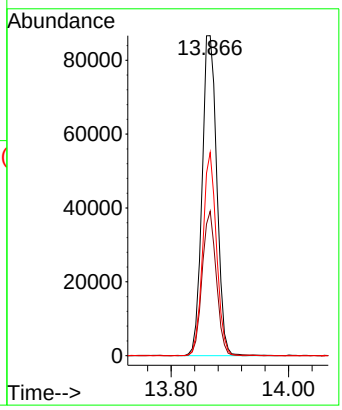




#91
1,2-Dichlorobenzene
Concen: 20.636 ug/l
RT: 13.866 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:146 Resp: 15065

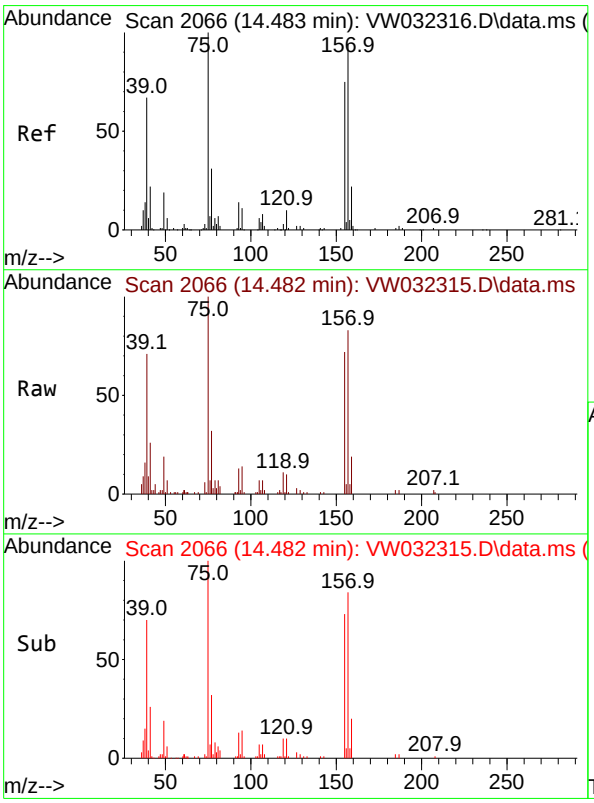
Ion	Ratio	Lower	Upper
146	100		
111	43.4	23.4	70.0
148	59.1	34.1	102.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

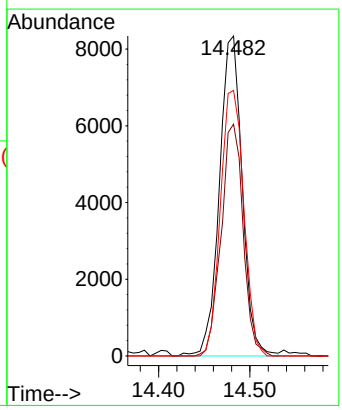
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

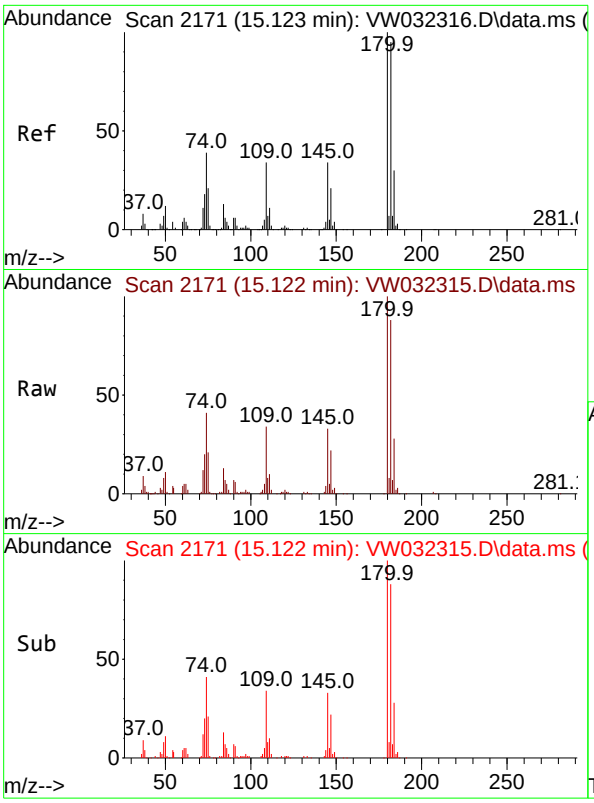


#92
1,2-Dibromo-3-Chloropropane
Concen: 20.123 ug/l
RT: 14.482 min Scan# 2066
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion: 75 Resp: 14474

Ion	Ratio	Lower	Upper
75	100		
155	70.0	40.8	122.5
157	84.8	51.8	155.4

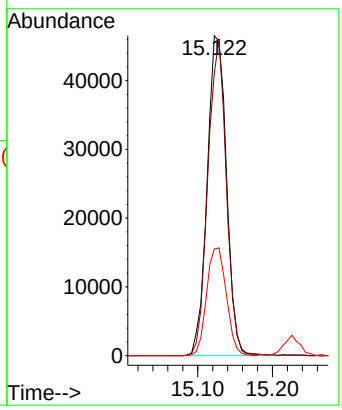




#93
1,2,4-Trichlorobenzene
Concen: 19.115 ug/l
RT: 15.122 min Scan# 21
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:180 Resp: 8368

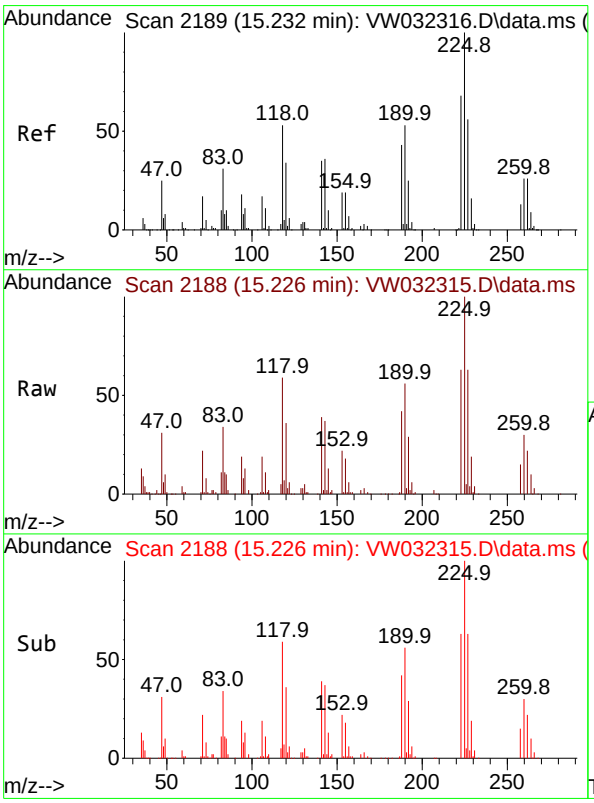
Ion	Ratio	Lower	Upper
180	100		
182	94.3	47.4	142.2
145	34.4	16.4	49.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

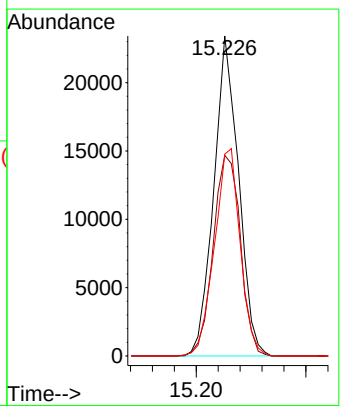
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

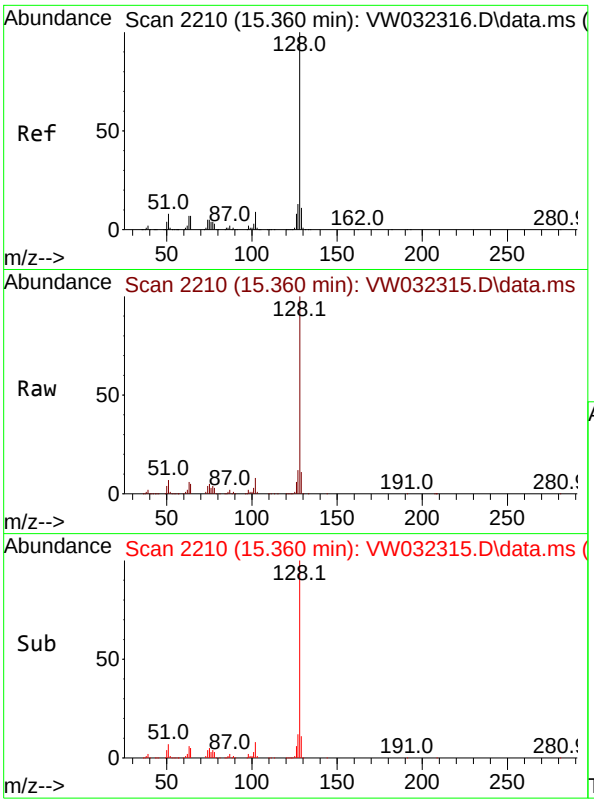


#94
Hexachlorobutadiene
Concen: 18.340 ug/l
RT: 15.226 min Scan# 2188
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:225 Resp: 36708

Ion	Ratio	Lower	Upper
225	100		
223	68.8	29.8	89.3
227	67.5	30.5	91.5

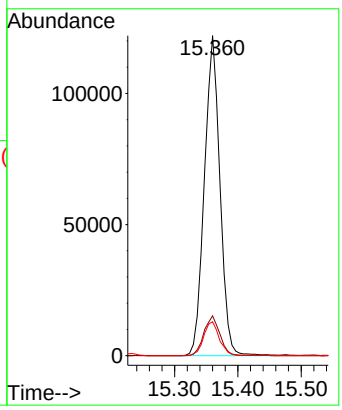




#95
Naphthalene
Concen: 19.889 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:128 Resp: 20910

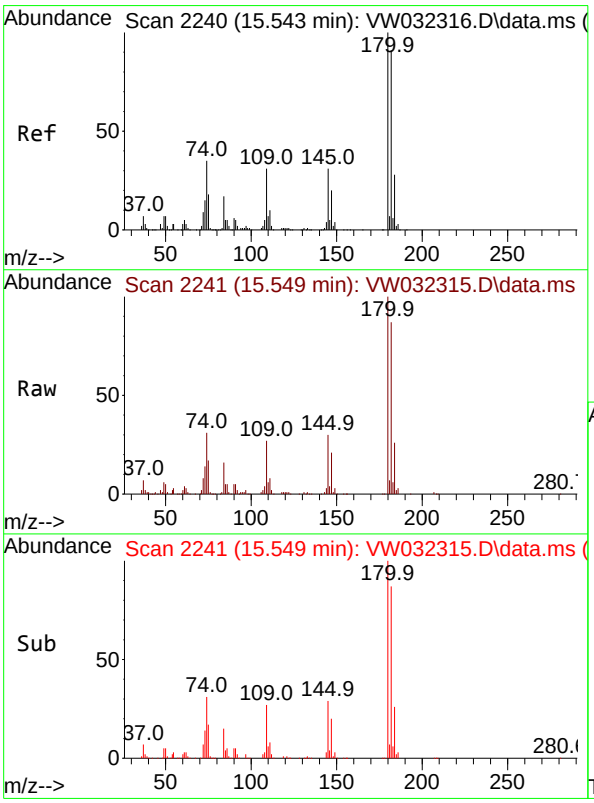
Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.6	16.0
129	10.8	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

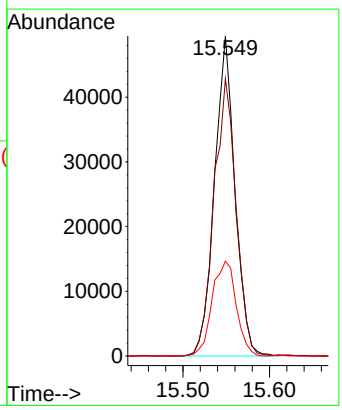
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025



#96
1,2,3-Trichlorobenzene
Concen: 19.664 ug/l
RT: 15.549 min Scan# 2241
Delta R.T. 0.006 min
Lab File: VW032315.D
Acq: 01 Oct 2025 14:15

Tgt Ion:180 Resp: 81141

Ion	Ratio	Lower	Upper
180	100		
182	93.9	47.7	143.1
145	34.8	17.2	51.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032316.D
Acq On : 01 Oct 2025 14:37
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:15:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	289091	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	530255	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	489049	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	234466	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	200915	47.649	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 95.300%			
35) Dibromofluoromethane	7.904	113	162134	47.215	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 94.420%			
50) Toluene-d8	10.325	98	632778	49.927	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 99.860%			
62) 4-Bromofluorobenzene	12.617	95	237645	49.609	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 99.220%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	76397	42.113	ug/l	97
3) Chloromethane	2.253	50	120776	43.147	ug/l	97
4) Vinyl Chloride	2.405	62	153004	45.785	ug/l	98
5) Bromomethane	2.826	94	110413	44.960	ug/l	96
6) Chloroethane	2.966	64	102915	46.646	ug/l	95
7) Trichlorofluoromethane	3.308	101	120856	48.301	ug/l	96
8) Diethyl Ether	3.722	74	99427	45.858	ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.106	101	134421	44.790	ug/l	92
10) Methyl Iodide	4.320	142	200360	46.790	ug/l	98
11) Tert butyl alcohol	5.222	59	70796	221.816	ug/l	97
12) 1,1-Dichloroethene	4.082	96	150540	46.204	ug/l	94
13) Acrolein	3.930	56	116224	224.375	ug/l	99
14) Allyl chloride	4.704	41	263294	47.845	ug/l	88
15) Acrylonitrile	5.405	53	270572	239.878	ug/l	98
16) Acetone	4.161	43	264513	226.556	ug/l	99
17) Carbon Disulfide	4.423	76	416819	46.888	ug/l	99
18) Methyl Acetate	4.710	43	180500	53.969	ug/l	97
19) Methyl tert-butyl Ether	5.460	73	308939	48.143	ug/l	97
20) Methylene Chloride	4.954	84	182336	46.839	ug/l	92
21) trans-1,2-Dichloroethene	5.460	96	170174	47.176	ug/l	98
22) Diisopropyl ether	6.344	45	548474	47.923	ug/l	93
23) Vinyl Acetate	6.283	43	1815632	237.512	ug/l	100
24) 1,1-Dichloroethane	6.246	63	327109	47.045	ug/l	99
25) 2-Butanone	7.191	43	378087	237.771	ug/l	97
26) 2,2-Dichloropropane	7.191	77	166572	46.834	ug/l	100
27) cis-1,2-Dichloroethene	7.191	96	207106	47.792	ug/l	94
28) Bromochloromethane	7.533	49	158249	48.374	ug/l	87
29) Tetrahydrofuran	7.551	42	247313	247.317	ug/l	94
30) Chloroform	7.697	83	331309	46.983	ug/l	99
31) Cyclohexane	7.971	56	263340	44.363	ug/l	98
32) 1,1,1-Trichloroethane	7.892	97	235925	47.214	ug/l	99
36) 1,1-Dichloropropene	8.093	75	232959	48.069	ug/l	97
37) Ethyl Acetate	7.276	43	153726	47.655	ug/l	99
38) Carbon Tetrachloride	8.081	117	213729	46.865	ug/l	95
39) Methylcyclohexane	9.343	83	276342	47.272	ug/l	97
40) Benzene	8.337	78	713410	46.964	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032316.D
Acq On : 01 Oct 2025 14:37
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:15:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	Methacrylonitrile	7.502	41	86799	49.929	ug/l		92
42)	1,2-Dichloroethane	8.410	62	234579	47.194	ug/l		100
43)	Isopropyl Acetate	8.435	43	275836	48.202	ug/l		100
44)	Trichloroethene	9.099	130	165466	46.519	ug/l		84
45)	1,2-Dichloropropane	9.374	63	180898	47.709	ug/l		100
46)	Dibromomethane	9.465	93	111827	47.962	ug/l		94
47)	Bromodichloromethane	9.654	83	254689	47.759	ug/l		97
48)	Methyl methacrylate	9.441	41	137281	49.341	ug/l	#	92
49)	1,4-Dioxane	9.459	88	32650	1024.535	ug/l	#	94
51)	4-Methyl-2-Pentanone	10.215	43	825948	249.195	ug/l		99
52)	Toluene	10.392	92	454566	48.052	ug/l		99
53)	t-1,3-Dichloropropene	10.611	75	253517	49.001	ug/l		99
54)	cis-1,3-Dichloropropene	10.081	75	288719	48.447	ug/l		93
55)	1,1,2-Trichloroethane	10.788	97	148551	47.671	ug/l		97
56)	Ethyl methacrylate	10.648	69	216484	49.633	ug/l		94
57)	1,3-Dichloropropane	10.934	76	264139	47.992	ug/l		100
58)	2-Chloroethyl Vinyl ether	9.928	63	639919	275.675	ug/l		96
59)	2-Hexanone	10.971	43	581510	248.758	ug/l		99
60)	Dibromochloromethane	11.129	129	172945	48.878	ug/l		96
61)	1,2-Dibromoethane	11.239	107	147146	48.427	ug/l		100
64)	Tetrachloroethene	10.867	164	136139	46.522	ug/l		94
65)	Chlorobenzene	11.660	112	502586	46.707	ug/l		96
66)	1,1,1,2-Tetrachloroethane	11.727	131	154835	46.199	ug/l		98
67)	Ethyl Benzene	11.733	91	848140	47.287	ug/l		97
68)	m/p-Xylenes	11.837	106	653426	94.476	ug/l		98
69)	o-Xylene	12.166	106	311759	48.200	ug/l		100
70)	Styrene	12.178	104	549550	48.664	ug/l		99
71)	Bromoform	12.343	173	92293	48.043	ug/l	#	100
73)	Isopropylbenzene	12.465	105	780146	48.634	ug/l		100
74)	N-amyl acetate	12.269	43	249273	48.711	ug/l		99
75)	1,1,2,2-Tetrachloroethane	12.715	83	189461	47.568	ug/l		99
76)	1,2,3-Trichloropropane	12.763	75	141741m	45.812	ug/l		
77)	Bromobenzene	12.745	156	191637	49.560	ug/l		90
78)	n-propylbenzene	12.800	91	961286	47.974	ug/l		97
79)	2-Chlorotoluene	12.891	91	590868	48.227	ug/l		100
80)	1,3,5-Trimethylbenzene	12.940	105	682722	49.221	ug/l		96
81)	trans-1,4-Dichloro-2-b...	12.513	75	62771	51.537	ug/l		91
82)	4-Chlorotoluene	12.989	91	621247	47.694	ug/l		99
83)	tert-Butylbenzene	13.202	119	552559	48.551	ug/l		99
84)	1,2,4-Trimethylbenzene	13.245	105	695101	49.283	ug/l		100
85)	sec-Butylbenzene	13.379	105	836597	48.102	ug/l		96
86)	p-Isopropyltoluene	13.495	119	703465	48.747	ug/l		99
87)	1,3-Dichlorobenzene	13.495	146	375062	47.901	ug/l		98
88)	1,4-Dichlorobenzene	13.574	146	362915	46.354	ug/l		99
89)	n-Butylbenzene	13.818	91	677726	48.100	ug/l		99
90)	Hexachloroethane	14.092	117	122267	47.269	ug/l		90
91)	1,2-Dichlorobenzene	13.867	146	328681	46.437	ug/l		97
92)	1,2-Dibromo-3-Chloropr...	14.483	75	34323	49.219	ug/l		87
93)	1,2,4-Trichlorobenzene	15.123	180	195251	46.003	ug/l		96
94)	Hexachlorobutadiene	15.232	225	84805	43.703	ug/l		96
95)	Naphthalene	15.360	128	514556	50.483	ug/l		99
96)	1,2,3-Trichlorobenzene	15.543	180	189852	47.458	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032316.D
Acq On : 01 Oct 2025 14:37
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:15:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032316.D
Acq On : 01 Oct 2025 14:37
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 02 21:15:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

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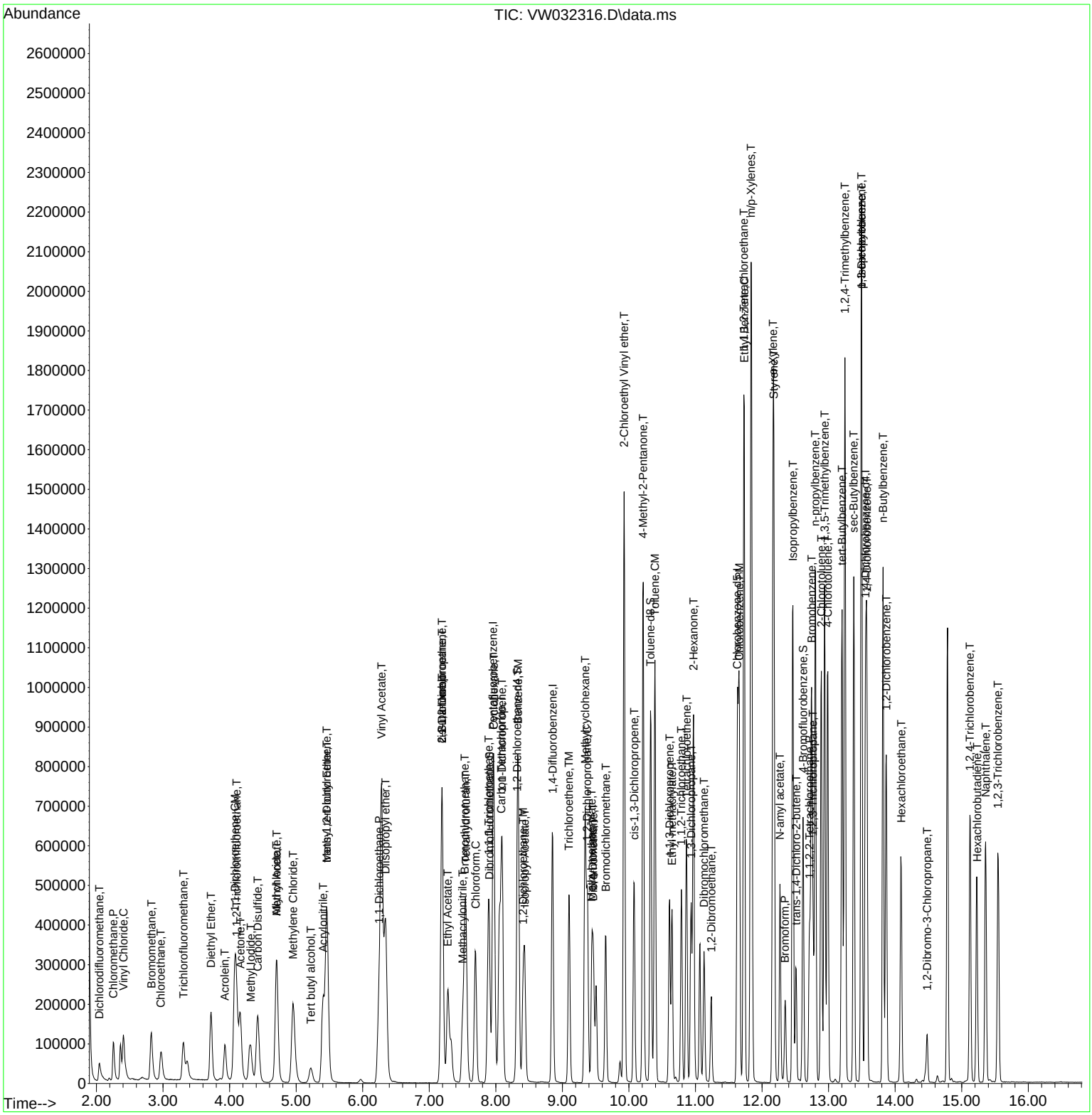
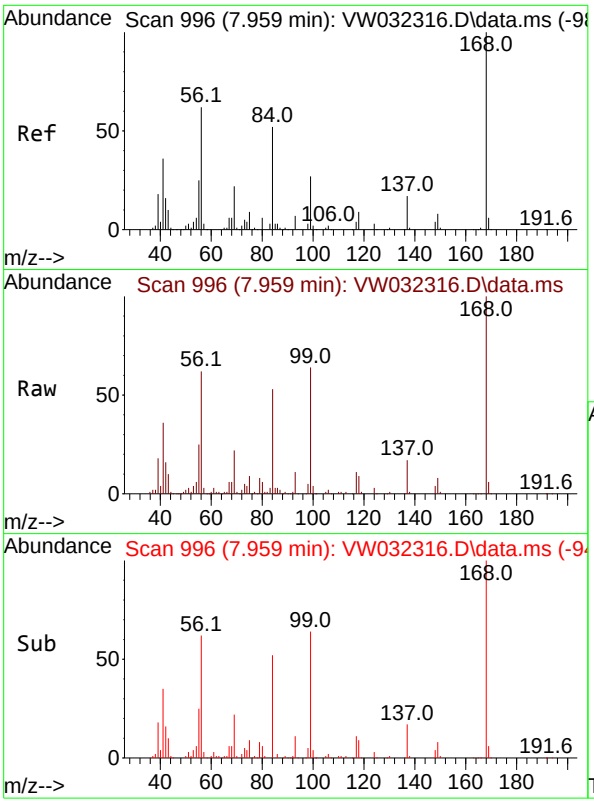
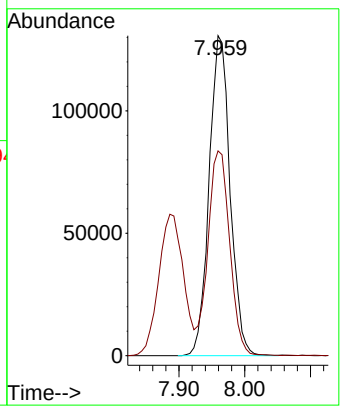




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:168 Resp: 28909

Ion	Ratio	Lower	Upper
168	100		
99	63.9	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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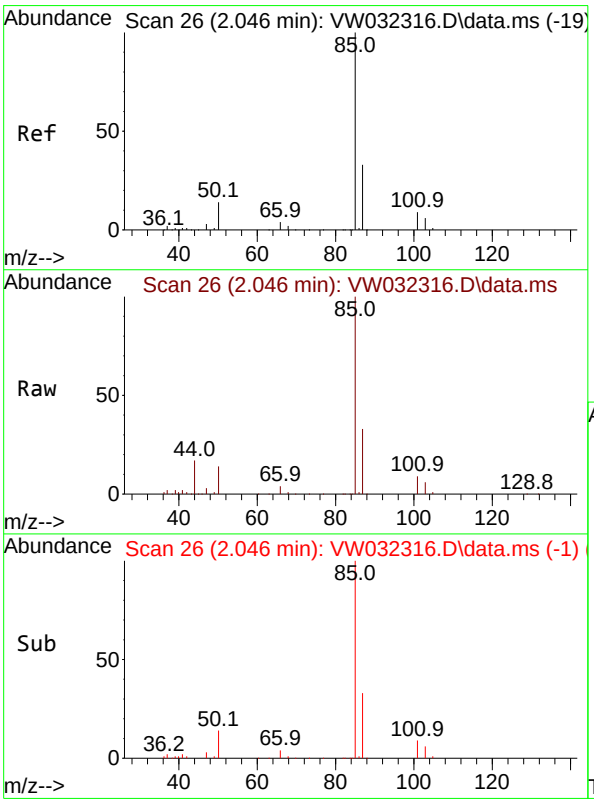
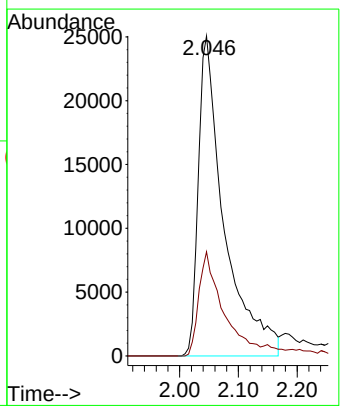
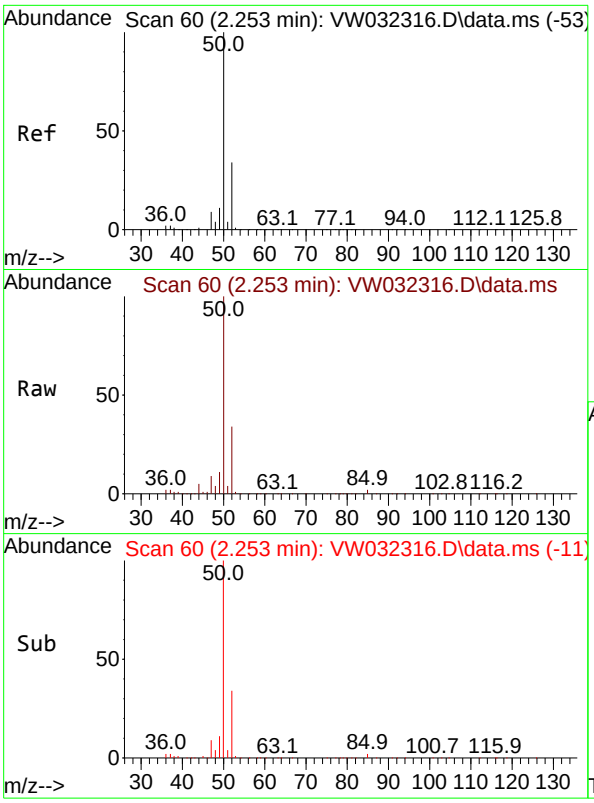


#2
Dichlorodifluoromethane
Concen: 42.113 ug/l
RT: 2.046 min Scan# 26
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 85 Resp: 76397

Ion	Ratio	Lower	Upper
85	100		
87	32.5	17.2	51.6

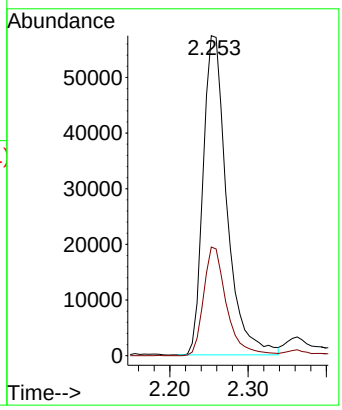




#3
Chloromethane
Concen: 43.147 ug/l
RT: 2.253 min Scan# 6
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 50 Resp: 12077

Ion	Ratio	Lower	Upper
50	100		
52	34.0	26.1	39.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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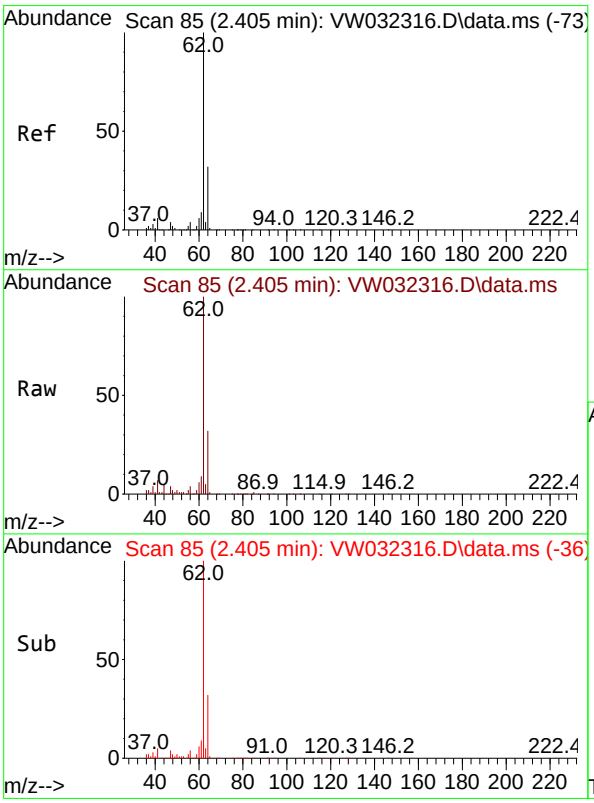
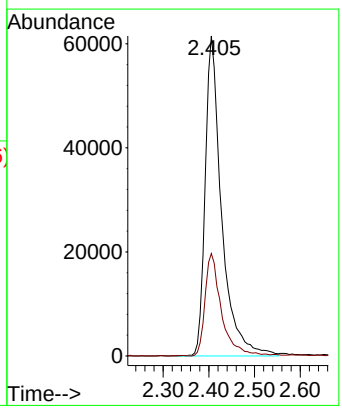
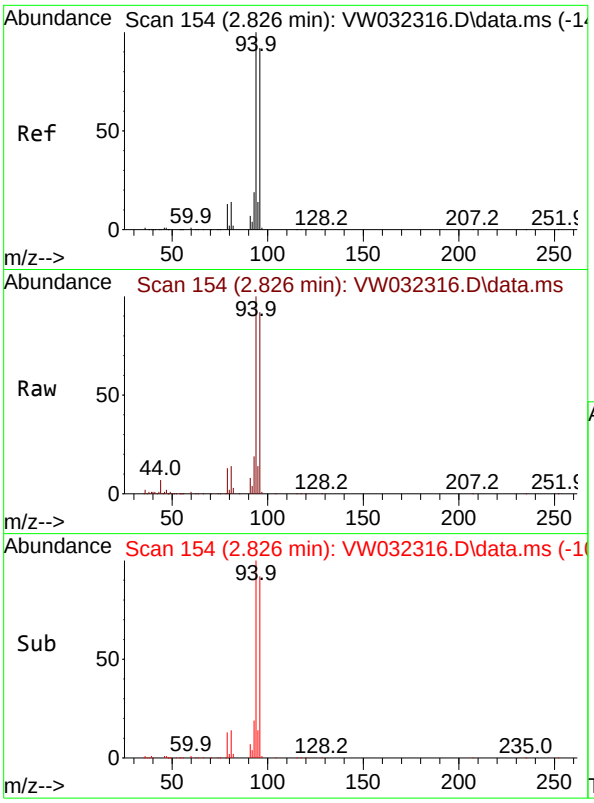


#4
Vinyl Chloride
Concen: 45.785 ug/l
RT: 2.405 min Scan# 85
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 62 Resp: 153004

Ion	Ratio	Lower	Upper
62	100		
64	31.9	24.8	37.2

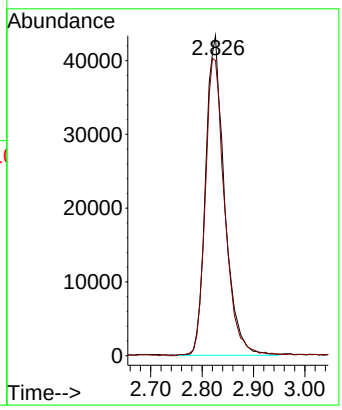




#5
Bromomethane
Concen: 44.960 ug/l
RT: 2.826 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 94 Resp: 11041

Ion	Ratio	Lower	Upper
94	100		
96	92.0	76.6	115.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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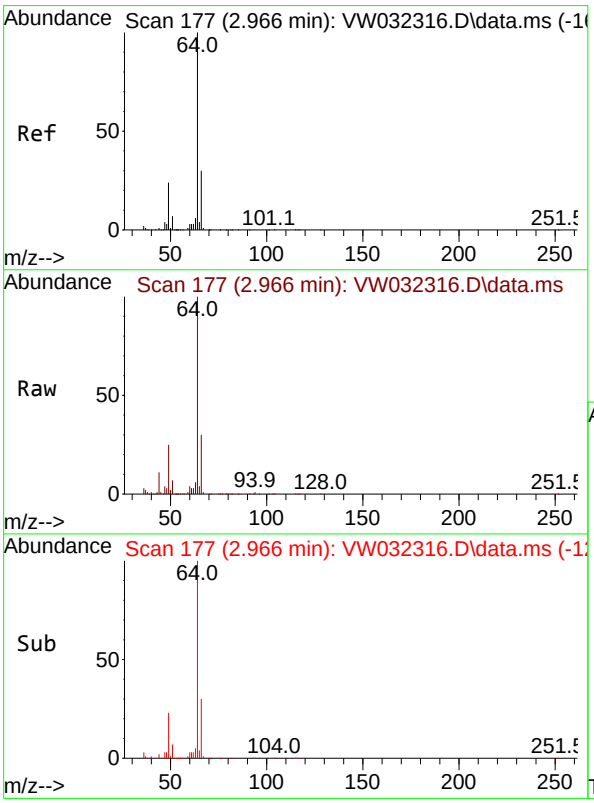
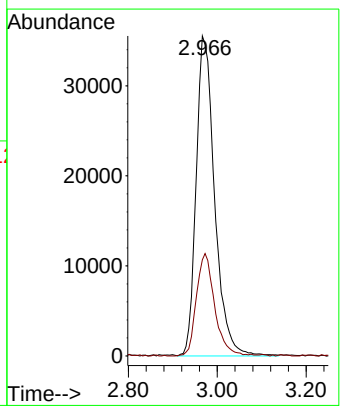
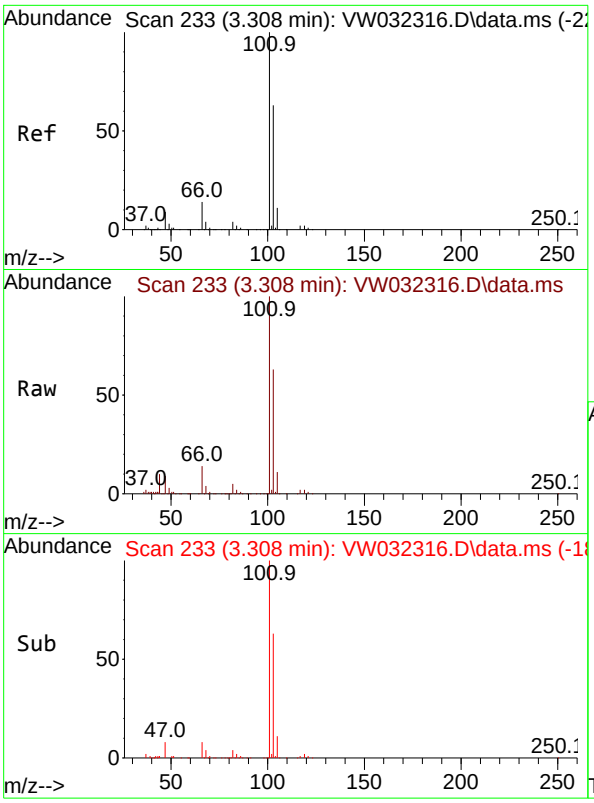


#6
Chloroethane
Concen: 46.646 ug/l
RT: 2.966 min Scan# 177
Delta R.T. -0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 64 Resp: 102915

Ion	Ratio	Lower	Upper
64	100		
66	29.9	26.2	39.4





#7
Trichlorofluoromethane
Concen: 48.301 ug/l
RT: 3.308 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:101 Resp: 12085

Ion	Ratio	Lower	Upper
101	100		
103	63.0	47.8	71.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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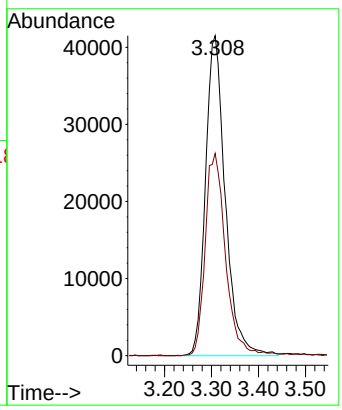
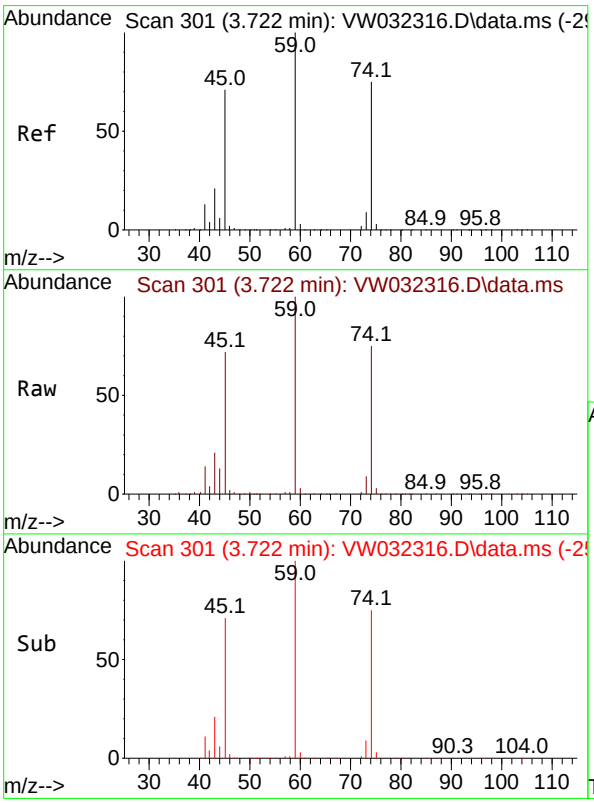
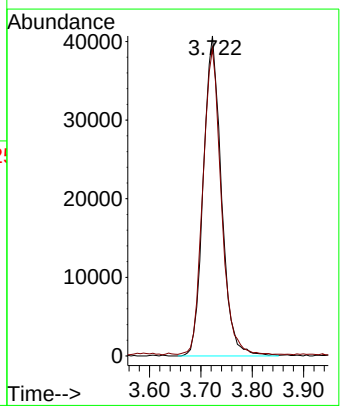


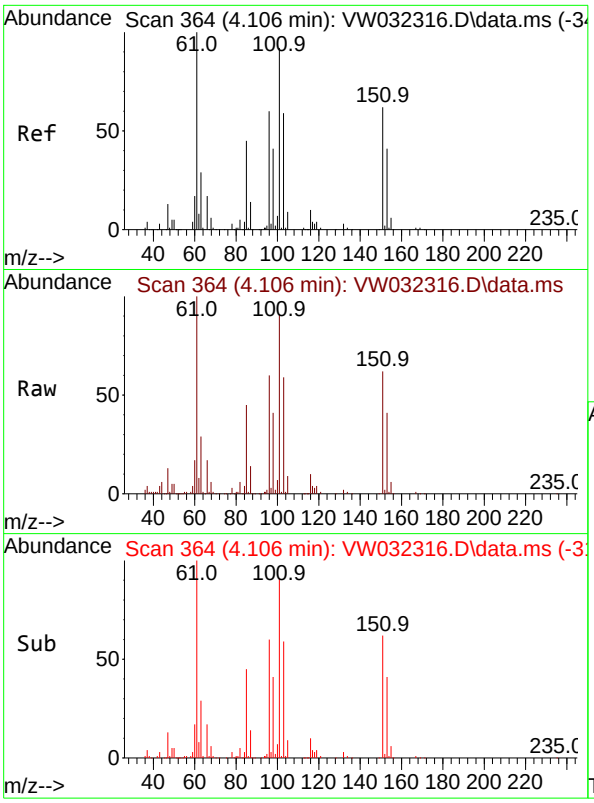


#8
Diethyl Ether
Concen: 45.858 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 74 Resp: 99427

Ion	Ratio	Lower	Upper
74	100		
45	96.7	43.1	129.4

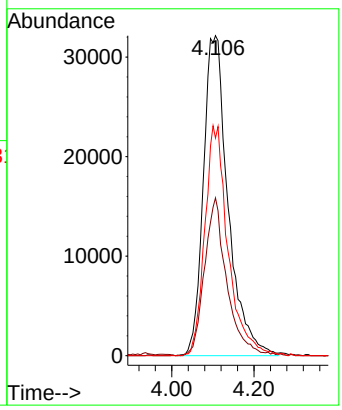




#9
1,1,2-Trichlorotrifluoroethane
Concen: 44.790 ug/l
RT: 4.106 min Scan# 3
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:101 Resp: 13442

Ion	Ratio	Lower	Upper
101	100		
85	44.5	37.1	55.7
151	67.7	61.5	92.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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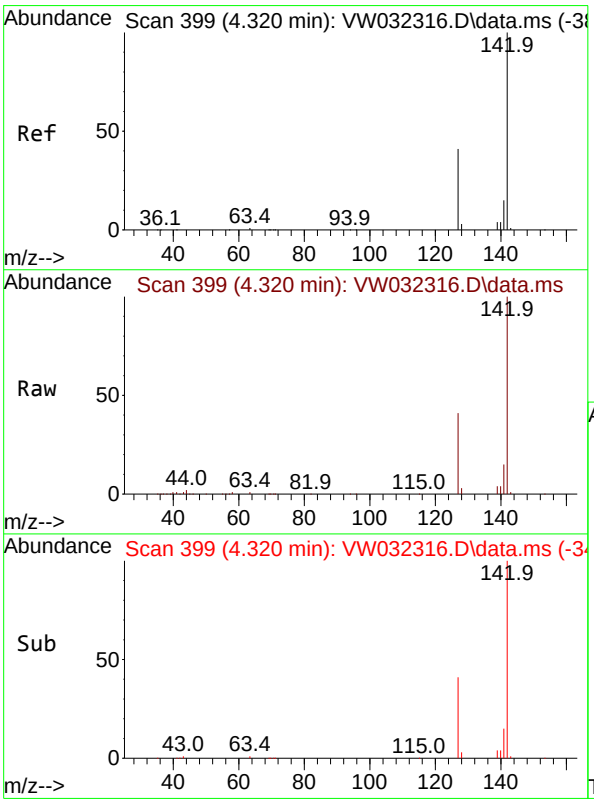
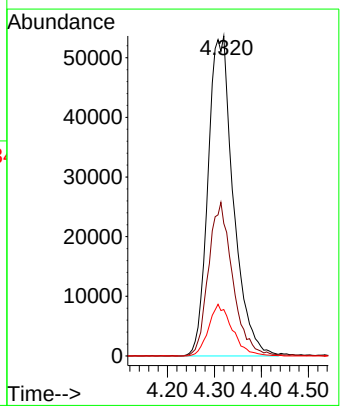
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

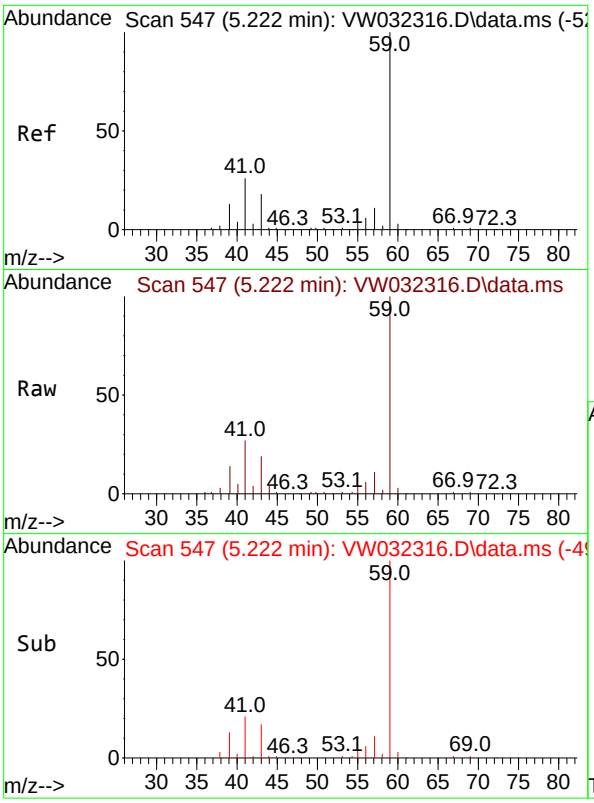


#10
Methyl Iodide
Concen: 46.790 ug/l
RT: 4.320 min Scan# 399
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:142 Resp: 200360

Ion	Ratio	Lower	Upper
142	100		
127	46.1	38.2	57.2
141	15.3	12.2	18.2





#11
Tert butyl alcohol
Concen: 221.816 ug/l
RT: 5.222 min Scan# 54
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 59 Resp: 7079

Ion	Ratio	Lower	Upper
59	100		
57	10.9	9.8	14.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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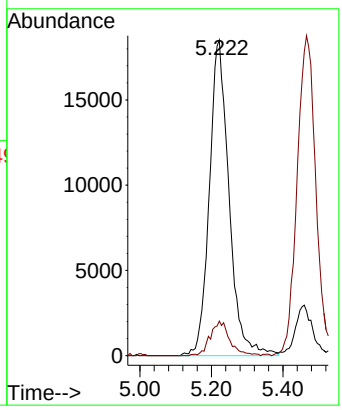
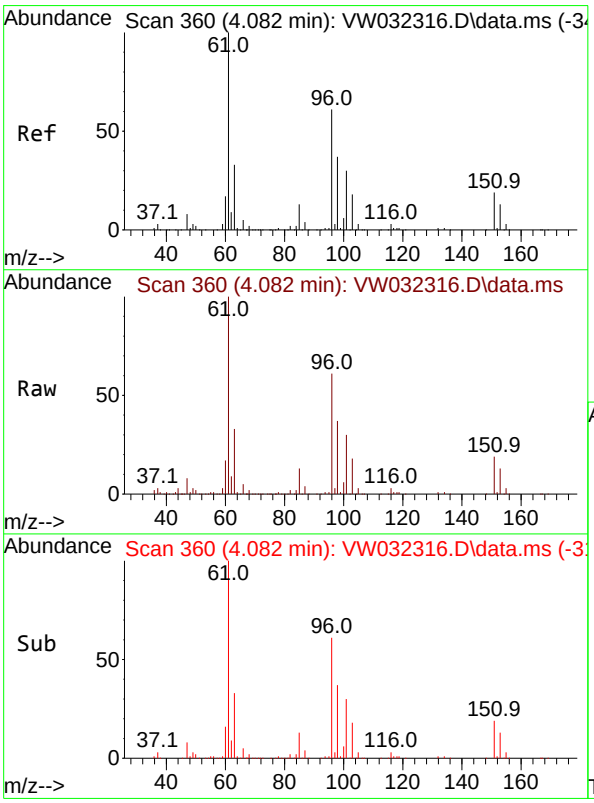
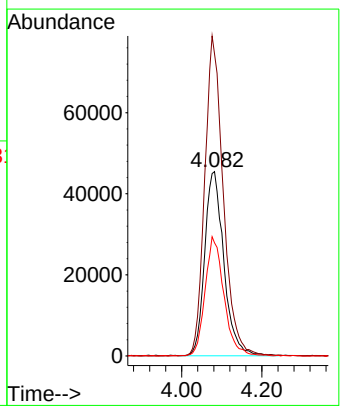


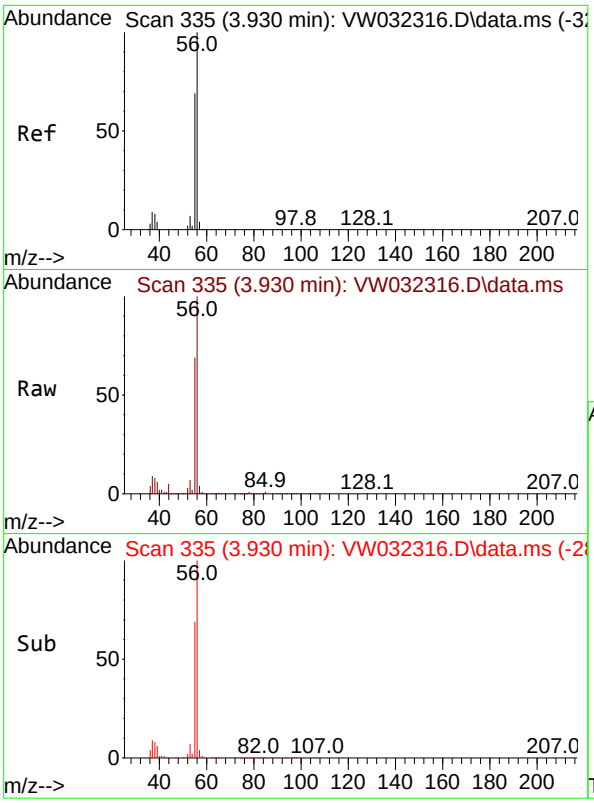


#12
1,1-Dichloroethene
Concen: 46.204 ug/l
RT: 4.082 min Scan# 360
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 96 Resp: 150540

Ion	Ratio	Lower	Upper
96	100		
61	163.9	123.0	184.4
98	61.4	48.5	72.7

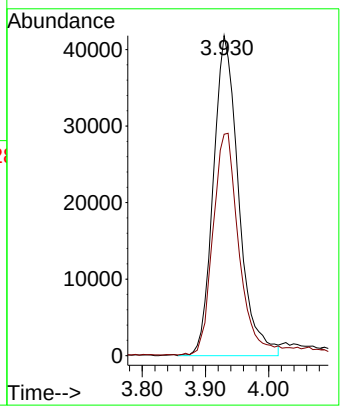




#13
Acrolein
Concen: 224.375 ug/l
RT: 3.930 min Scan# 3
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 56 Resp: 11622

Ion	Ratio	Lower	Upper
56	100		
55	71.0	56.4	84.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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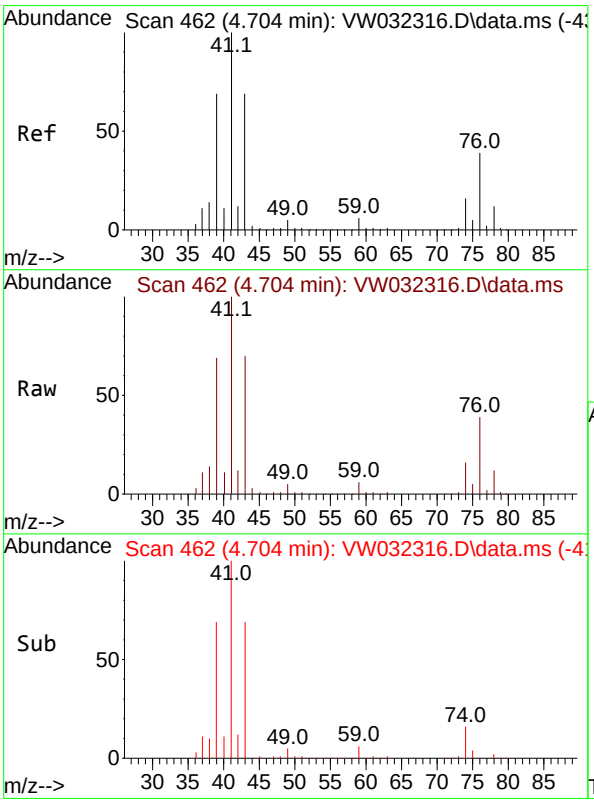
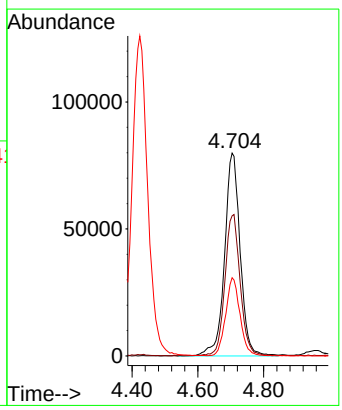
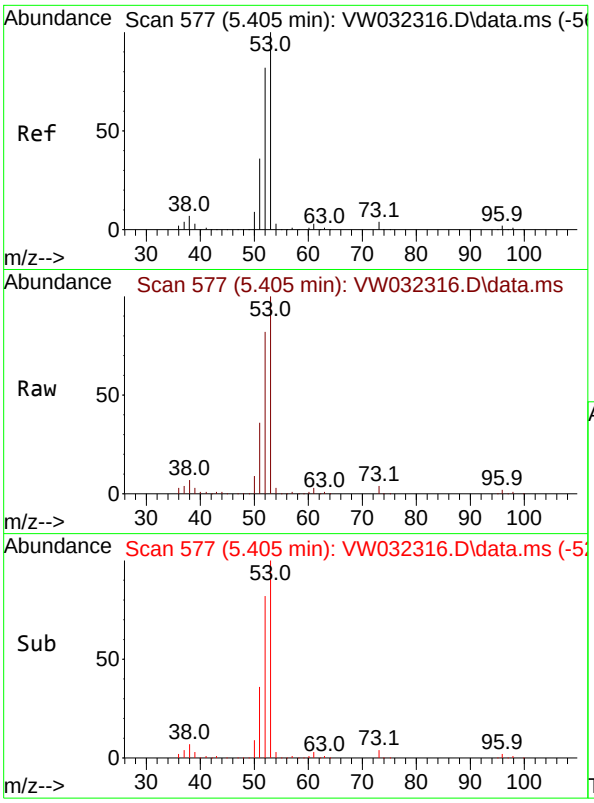


#14
Allyl chloride
Concen: 47.845 ug/l
RT: 4.704 min Scan# 462
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 41 Resp: 263294

Ion	Ratio	Lower	Upper
41	100		
39	67.8	64.1	96.1
76	35.3	31.4	47.2

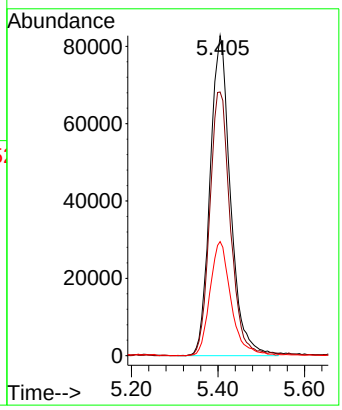




#15
Acrylonitrile
Concen: 239.878 ug/l
RT: 5.405 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 53 Resp: 27057

Ion	Ratio	Lower	Upper
53	100		
52	83.0	67.4	101.2
51	36.9	30.3	45.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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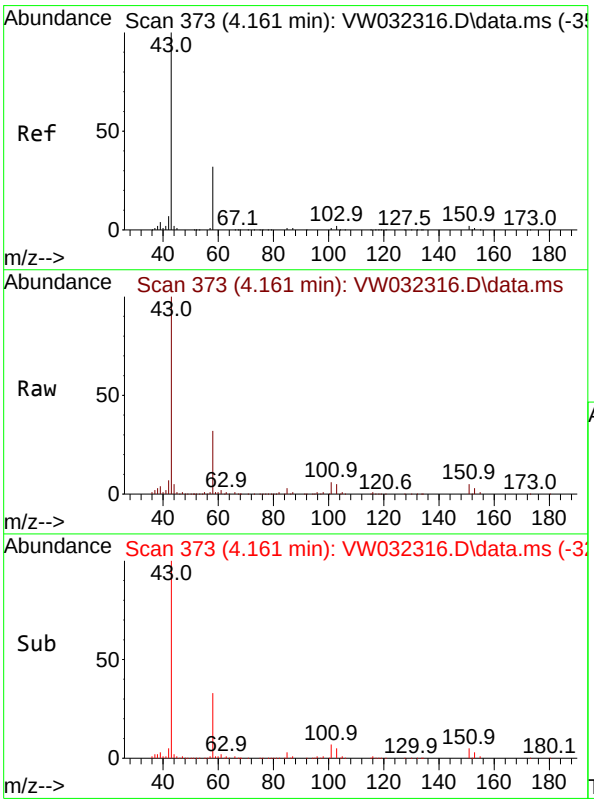
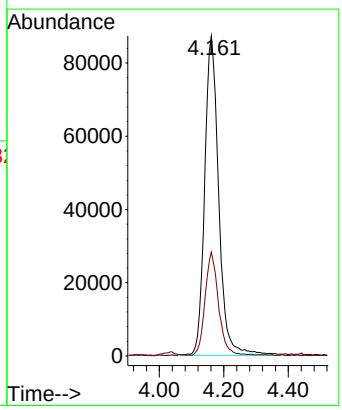
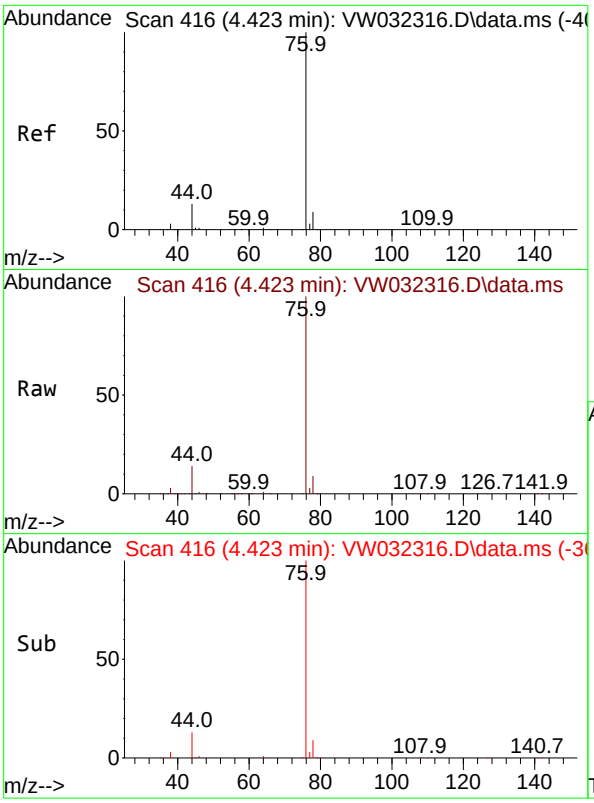


#16
Acetone
Concen: 226.556 ug/l
RT: 4.161 min Scan# 373
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 264513

Ion	Ratio	Lower	Upper
43	100		
58	32.4	25.3	37.9





#17
Carbon Disulfide
Concen: 46.888 ug/l
RT: 4.423 min Scan# 4
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

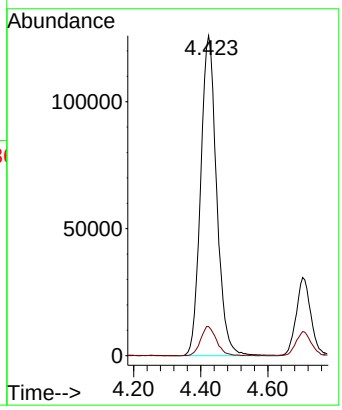
Tgt Ion: 76 Resp: 41681

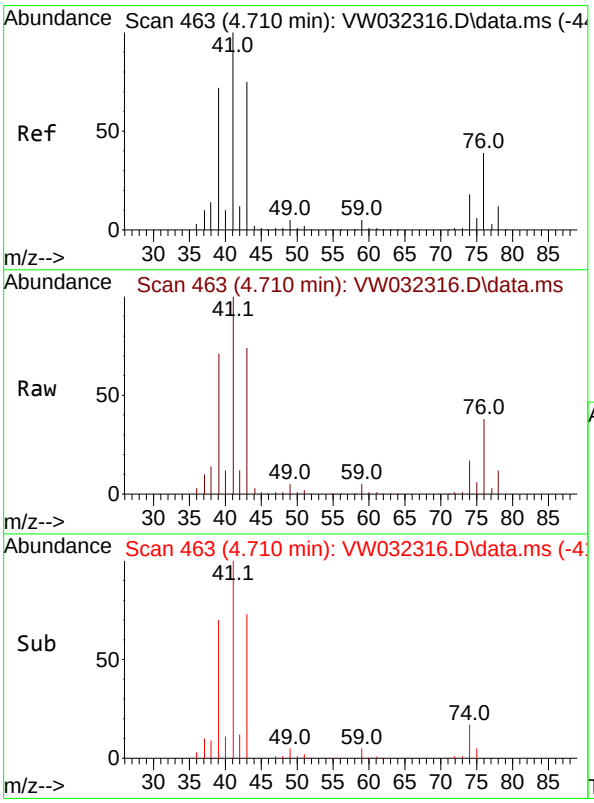
Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.0	10.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

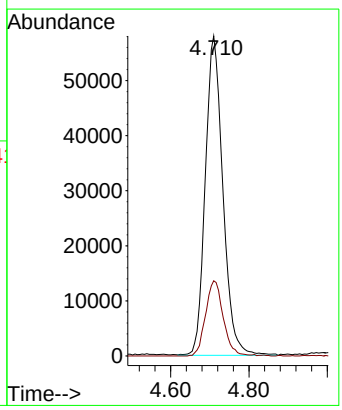


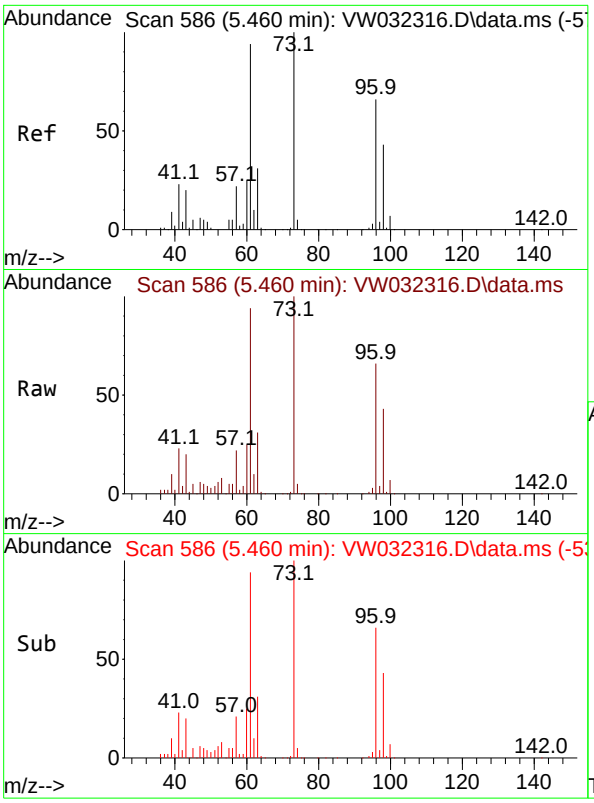


#18
Methyl Acetate
Concen: 53.969 ug/l
RT: 4.710 min Scan# 463
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 180500

Ion	Ratio	Lower	Upper
43	100		
74	23.6	20.2	30.4

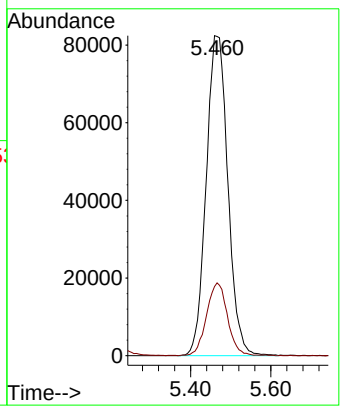




#19
Methyl tert-butyl Ether
Concen: 48.143 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 73 Resp: 30893

Ion	Ratio	Lower	Upper
73	100		
57	21.6	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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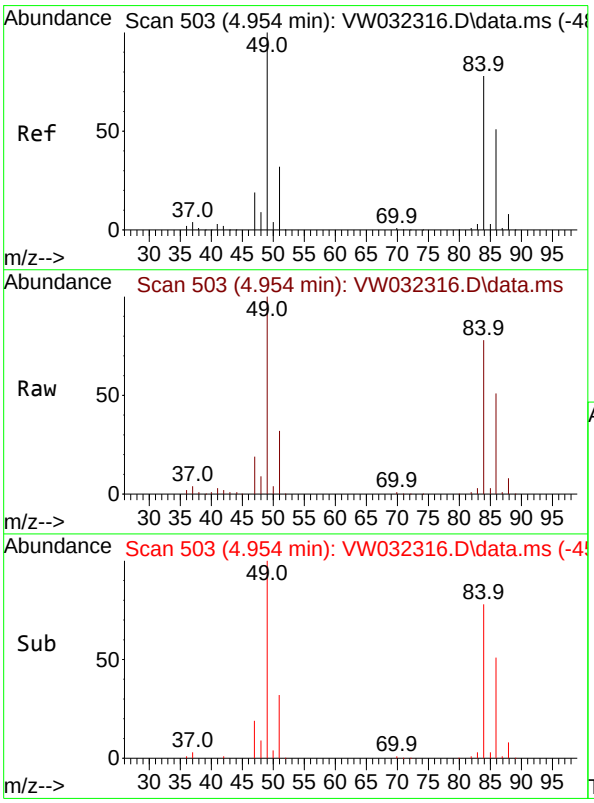
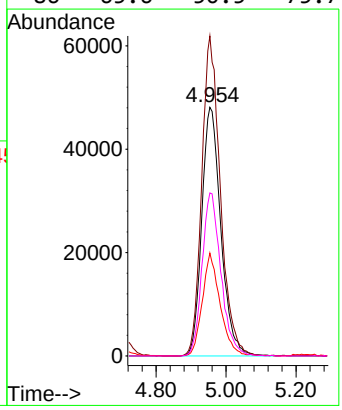
Supervised By :Semsettin Yesilyurt 10/03/2025

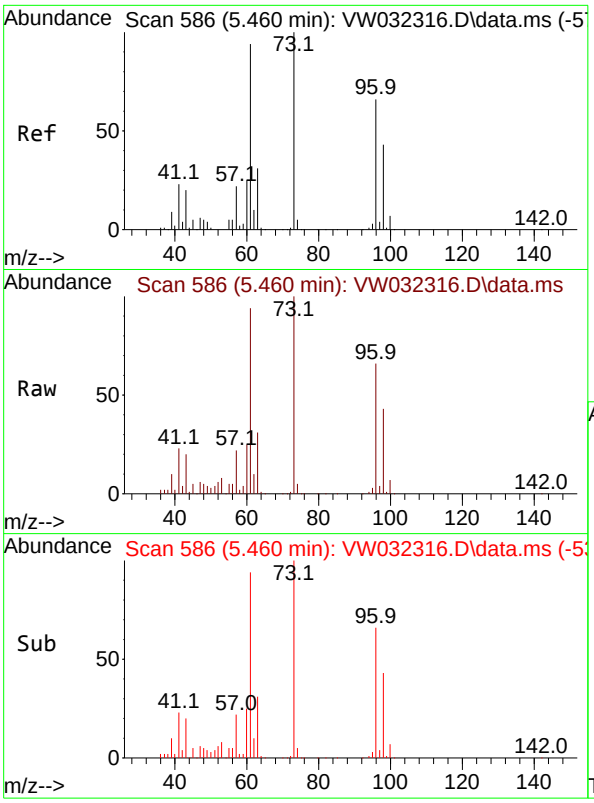


#20
Methylene Chloride
Concen: 46.839 ug/l
RT: 4.954 min Scan# 503
Delta R.T. -0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 84 Resp: 182336

Ion	Ratio	Lower	Upper
84	100		
49	128.7	92.2	138.4
51	41.4	31.0	46.6
86	65.6	50.5	75.7

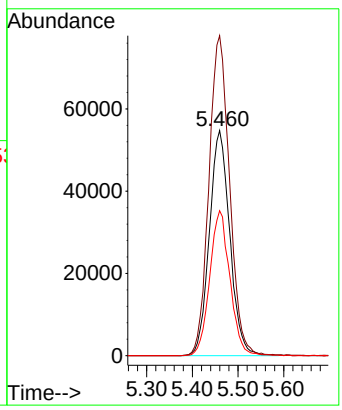




#21
trans-1,2-Dichloroethene
Concen: 47.176 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 96 Resp: 17017

Ion	Ratio	Lower	Upper
96	100		
61	142.1	112.5	168.7
98	64.4	54.2	81.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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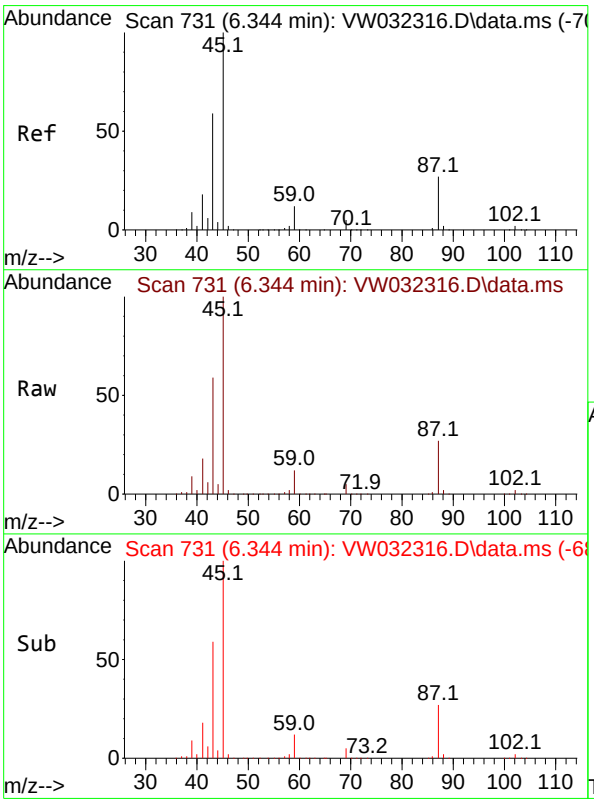
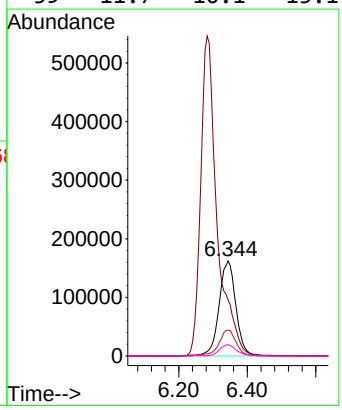
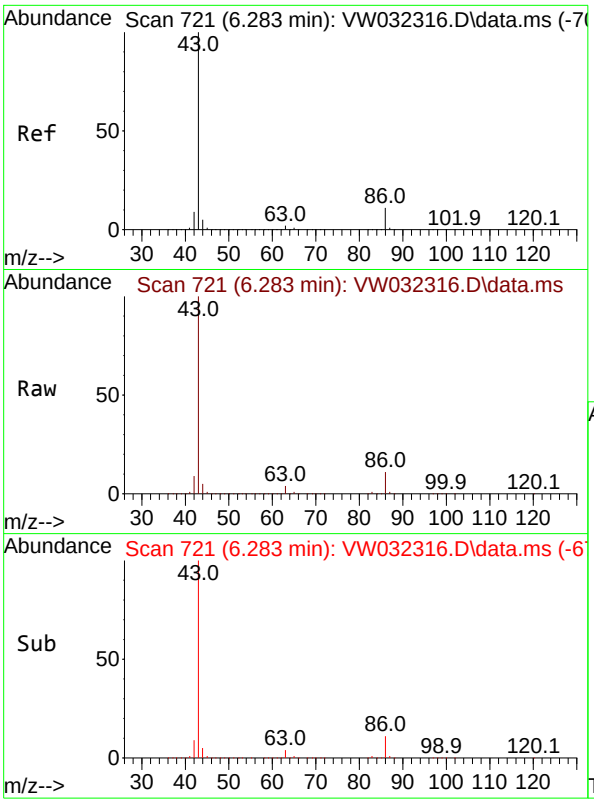


#22
Diisopropyl ether
Concen: 47.923 ug/l
RT: 6.344 min Scan# 731
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 45 Resp: 548474

Ion	Ratio	Lower	Upper
45	100		
43	58.8	51.4	77.2
87	27.1	25.9	38.9
59	11.7	10.1	15.1





#23
Vinyl Acetate
Concen: 237.512 ug/l
RT: 6.283 min Scan# 7
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 181563

Ion	Ratio	Lower	Upper
43	100		
86	11.0	8.8	13.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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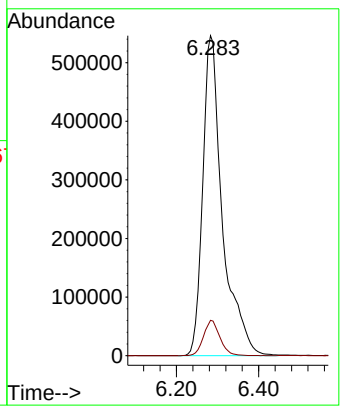
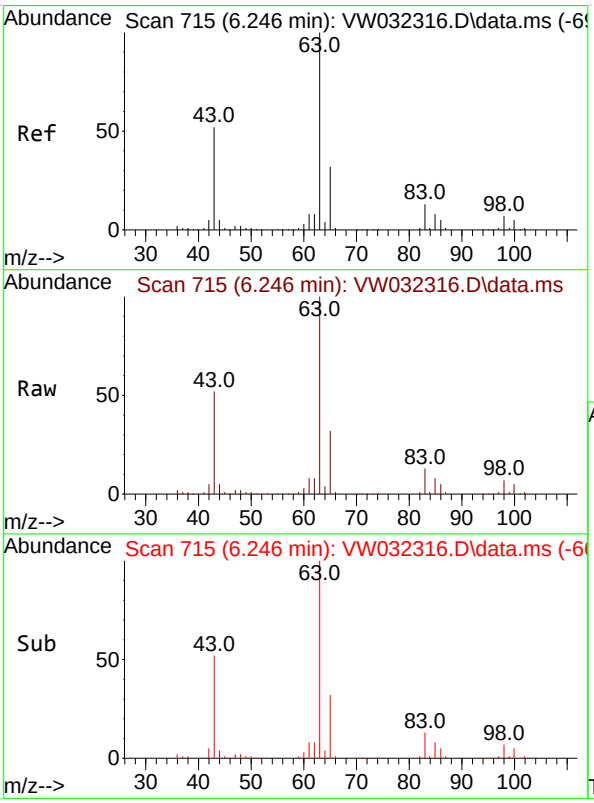
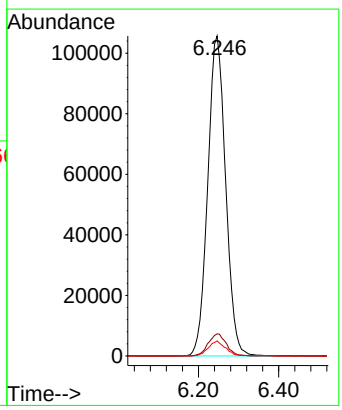


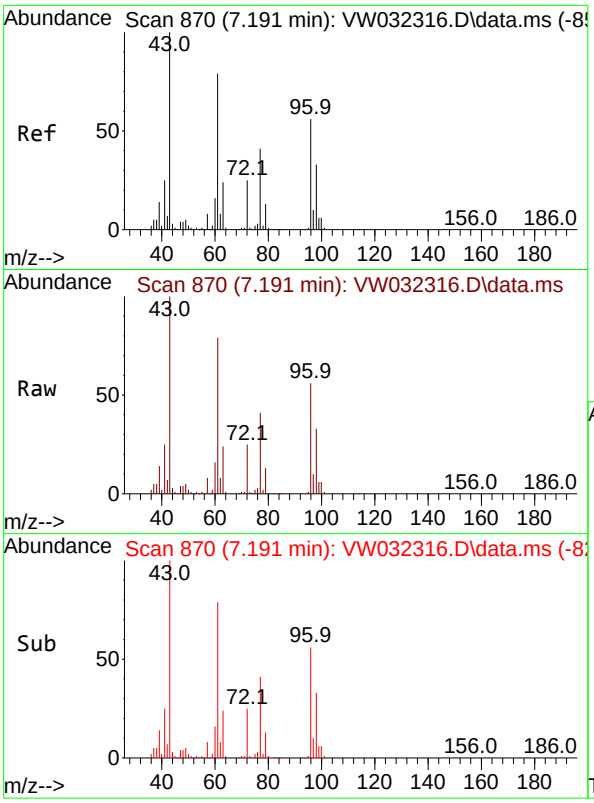


#24
1,1-Dichloroethane
Concen: 47.045 ug/l
RT: 6.246 min Scan# 715
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 63 Resp: 327109

Ion	Ratio	Lower	Upper
63	100		
98	6.9	3.8	11.2
100	4.7	2.5	7.5





#25
2-Butanone
Concen: 237.771 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 37808

Ion	Ratio	Lower	Upper
43	100		
72	25.1	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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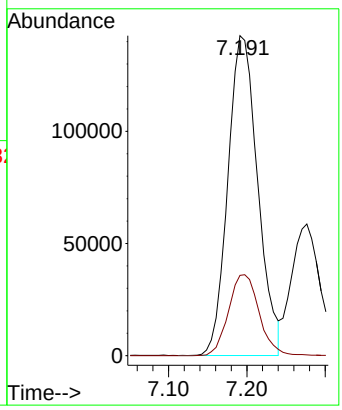
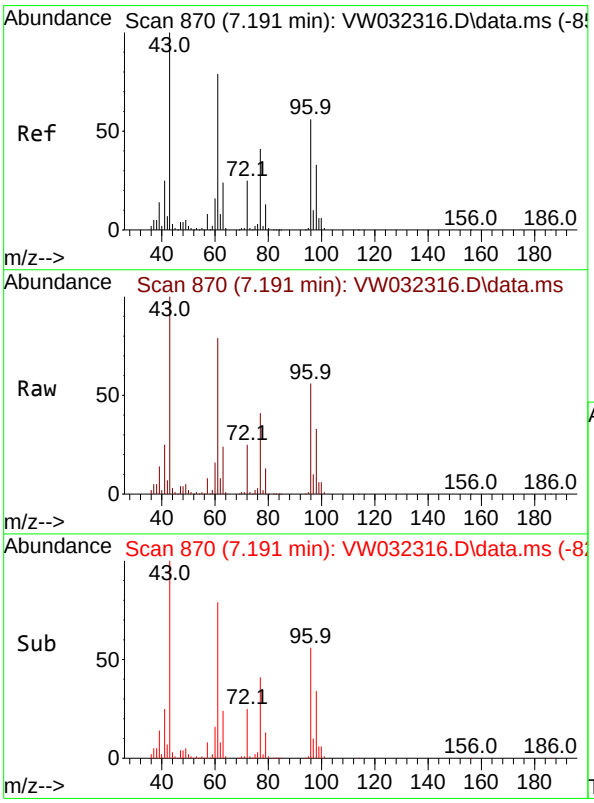
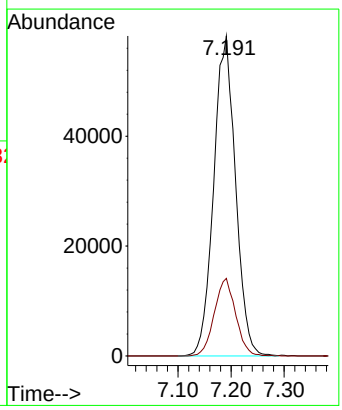


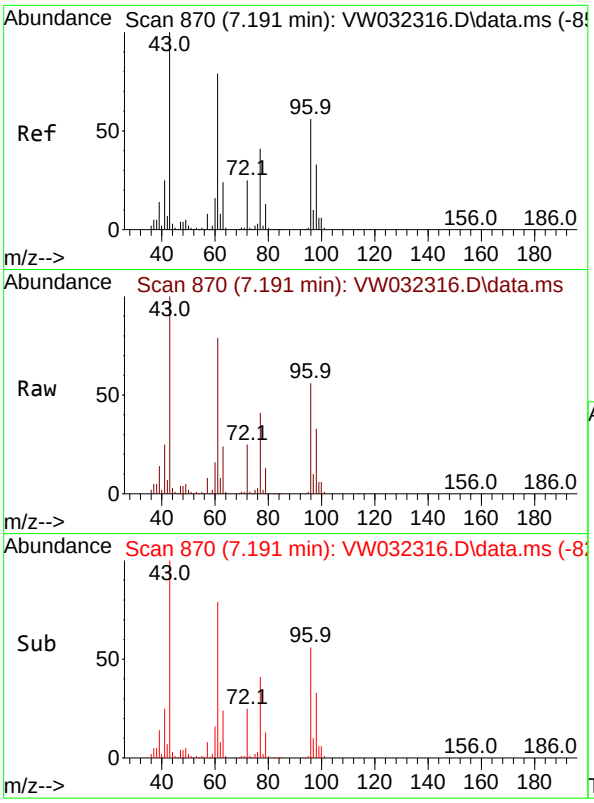


#26
2,2-Dichloropropane
Concen: 46.834 ug/l
RT: 7.191 min Scan# 870
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 77 Resp: 166572

Ion	Ratio	Lower	Upper
77	100		
97	23.7	11.9	35.5

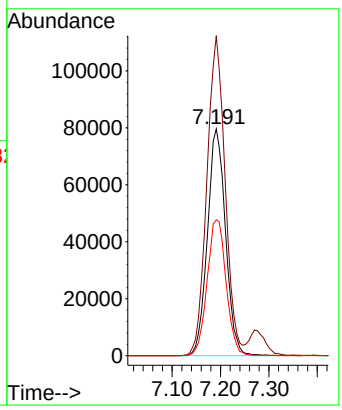




#27
cis-1,2-Dichloroethene
Concen: 47.792 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 96 Resp: 20710

Ion	Ratio	Lower	Upper
96	100		
61	142.1	0.0	268.0
98	63.0	0.0	130.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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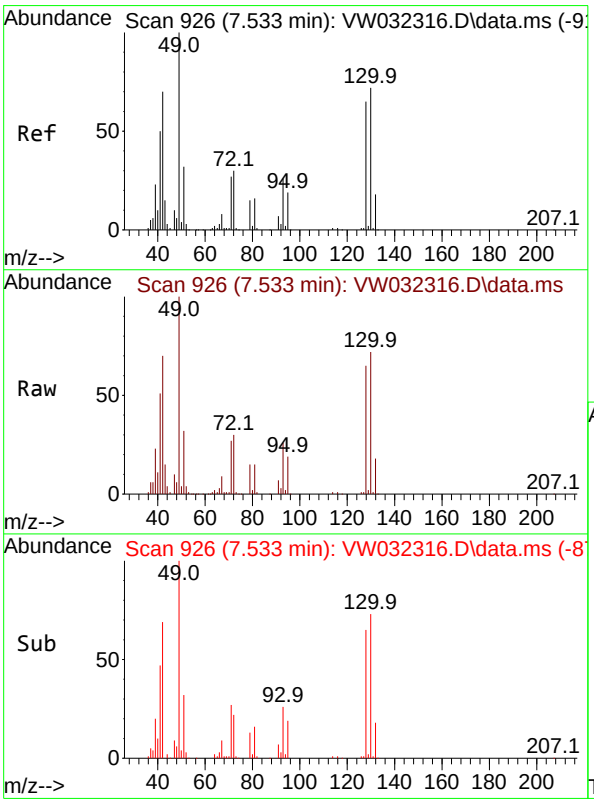
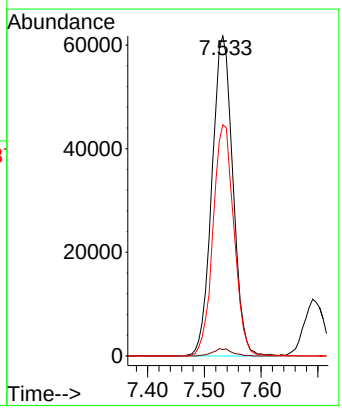
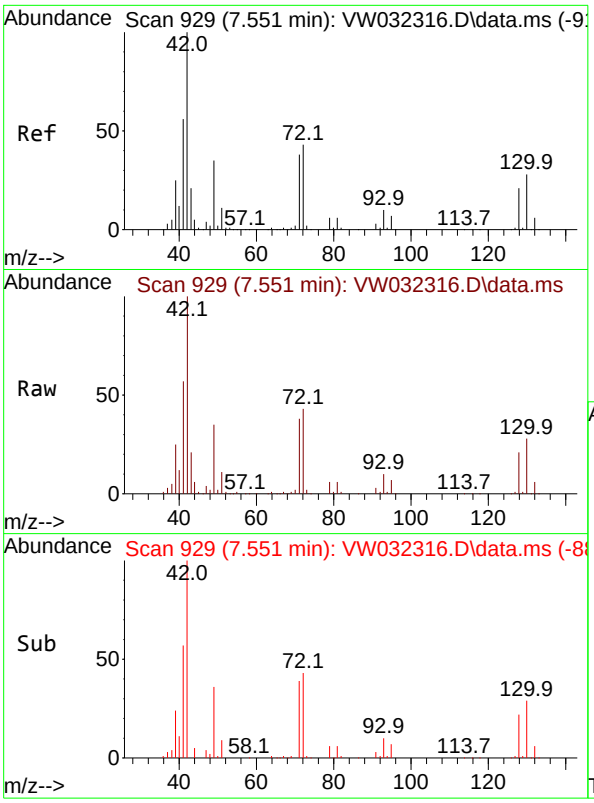


#28
Bromochloromethane
Concen: 48.374 ug/l
RT: 7.533 min Scan# 926
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 49 Resp: 158249

Ion	Ratio	Lower	Upper
49	100		
129	2.1	0.0	4.2
130	72.2	67.5	101.3

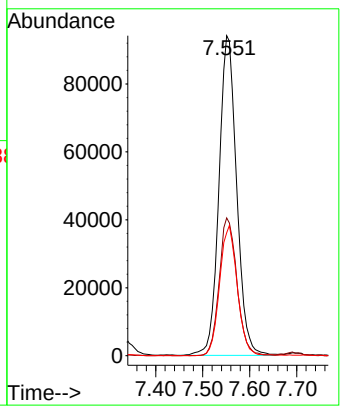




#29
Tetrahydrofuran
Concen: 247.317 ug/l
RT: 7.551 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 42 Resp: 24731

Ion	Ratio	Lower	Upper
42	100		
72	43.3	37.4	56.2
71	40.4	36.0	54.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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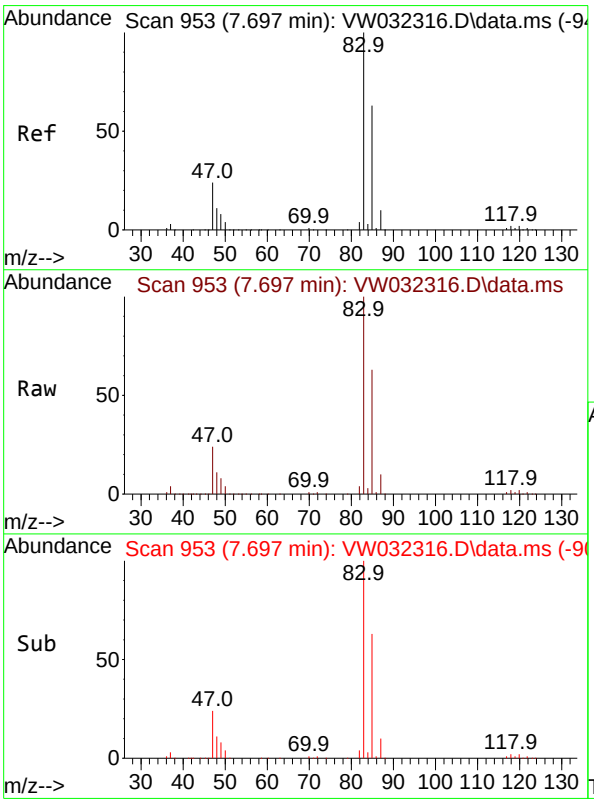
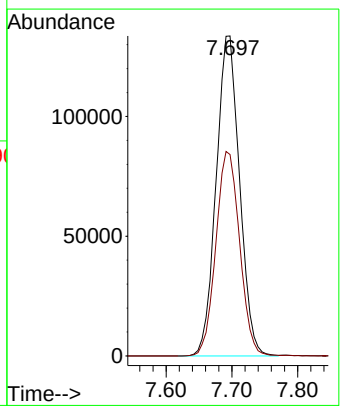
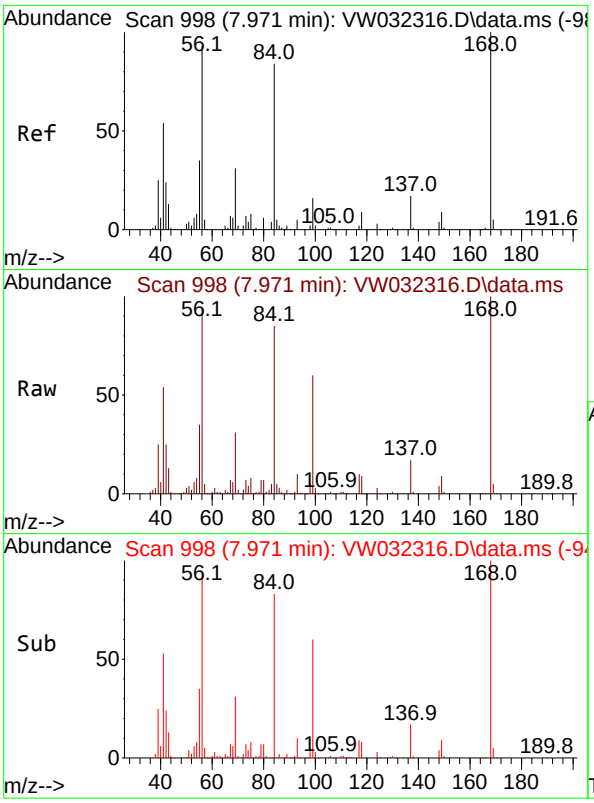


#30
Chloroform
Concen: 46.983 ug/l
RT: 7.697 min Scan# 953
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 83 Resp: 331309

Ion	Ratio	Lower	Upper
83	100		
85	62.9	51.2	76.8

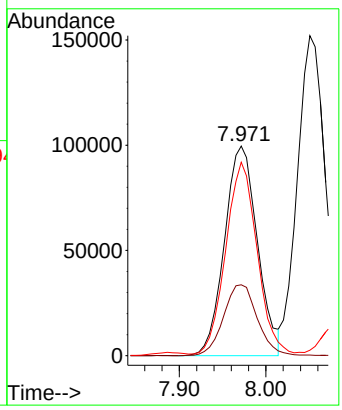




#31
Cyclohexane
Concen: 44.363 ug/l
RT: 7.971 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 56 Resp: 26334

Ion	Ratio	Lower	Upper
56	100		
69	33.8	27.7	41.5
84	91.0	74.6	112.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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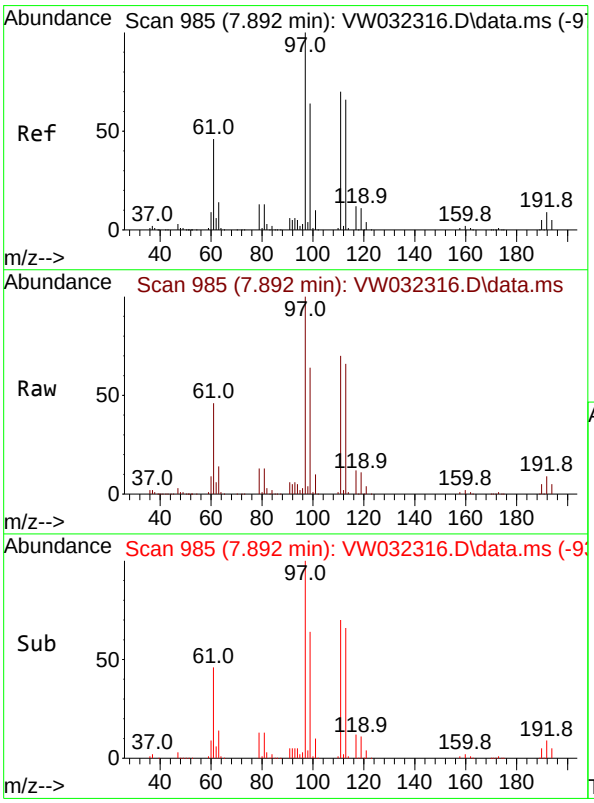
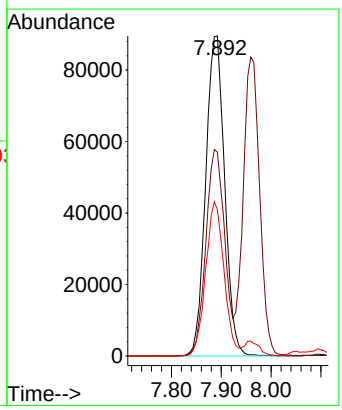
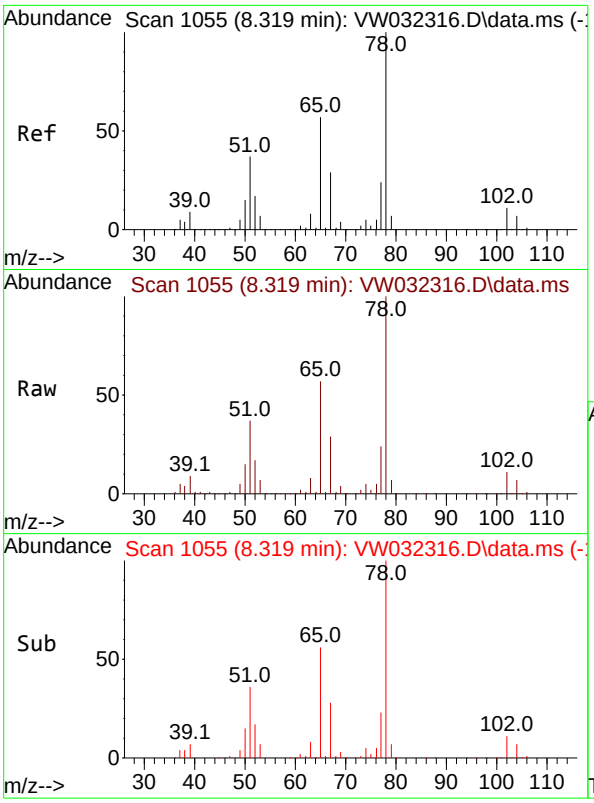


#32
1,1,1-Trichloroethane
Concen: 47.214 ug/l
RT: 7.892 min Scan# 985
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 97 Resp: 235925

Ion	Ratio	Lower	Upper
97	100		
99	64.1	50.9	76.3
61	46.7	36.2	54.4





#33
1,2-Dichloroethane-d4
Concen: 47.649 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 65 Resp: 20091

Ion	Ratio	Lower	Upper
65	100		
67	53.4	0.0	99.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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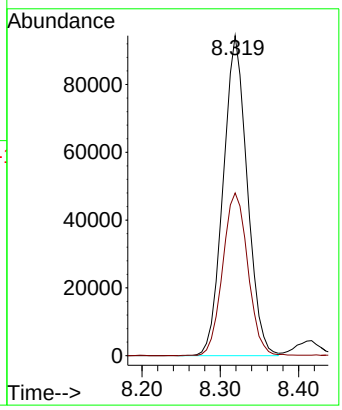
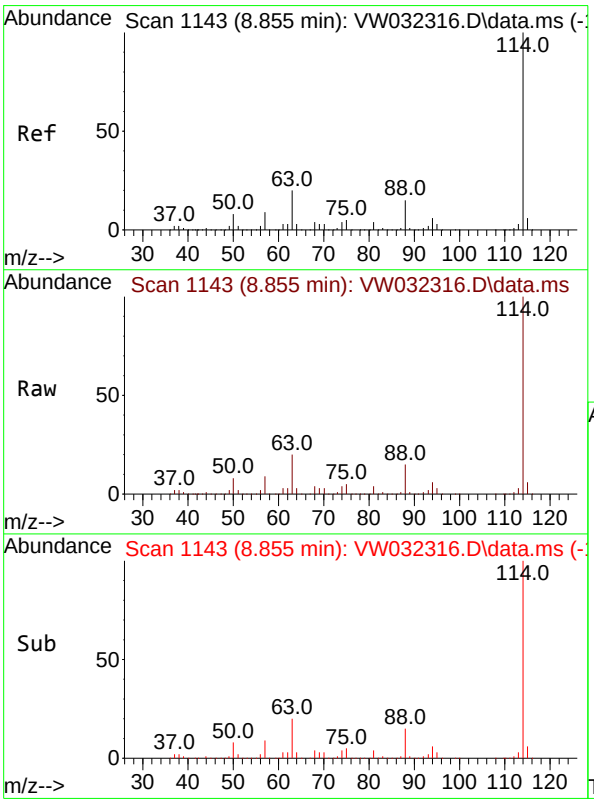
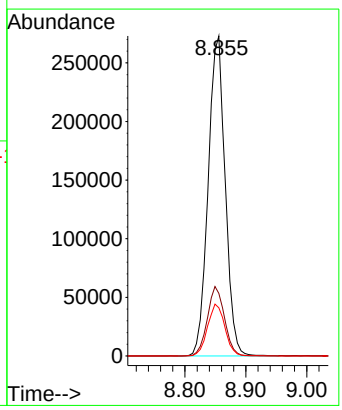


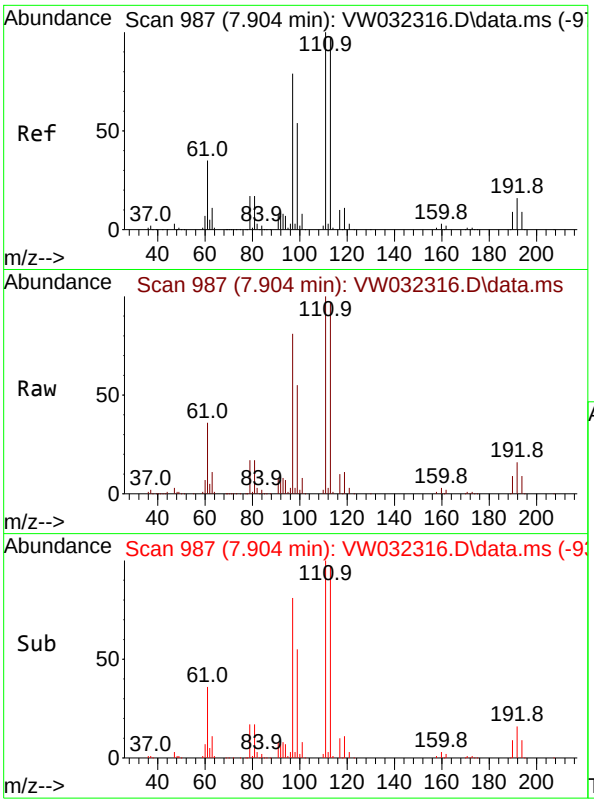


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.855 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:114 Resp: 530255

Ion	Ratio	Lower	Upper
114	100		
63	19.5	0.0	40.4
88	15.0	0.0	32.0

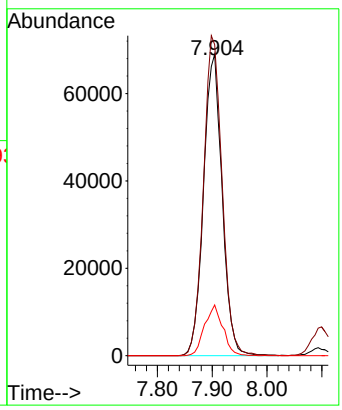




#35
Dibromofluoromethane
Concen: 47.215 ug/l
RT: 7.904 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:113 Resp: 16213

Ion	Ratio	Lower	Upper
113	100		
111	106.2	83.9	125.9
192	16.6	14.6	21.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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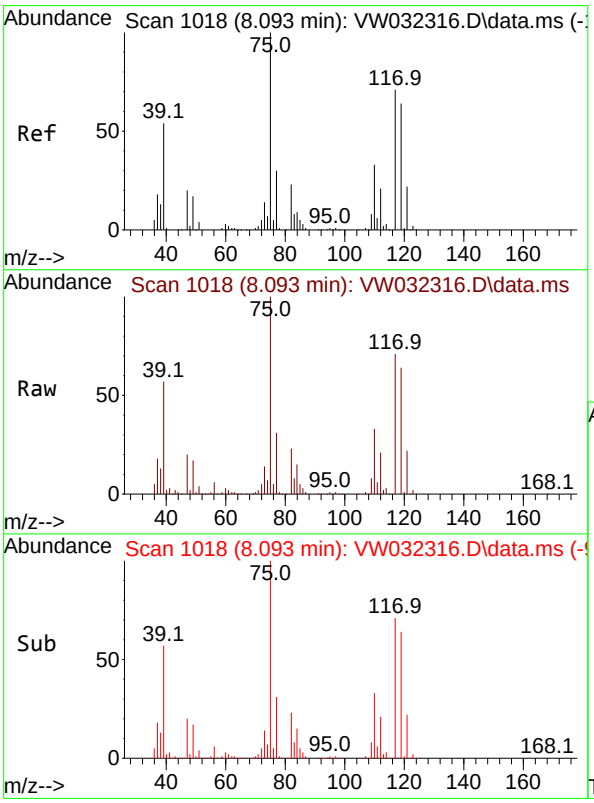
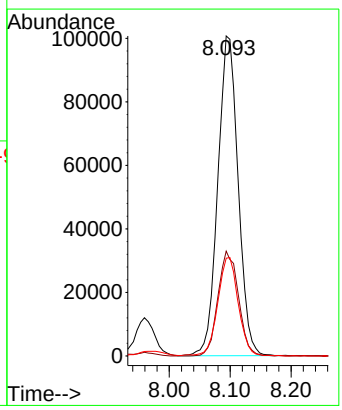
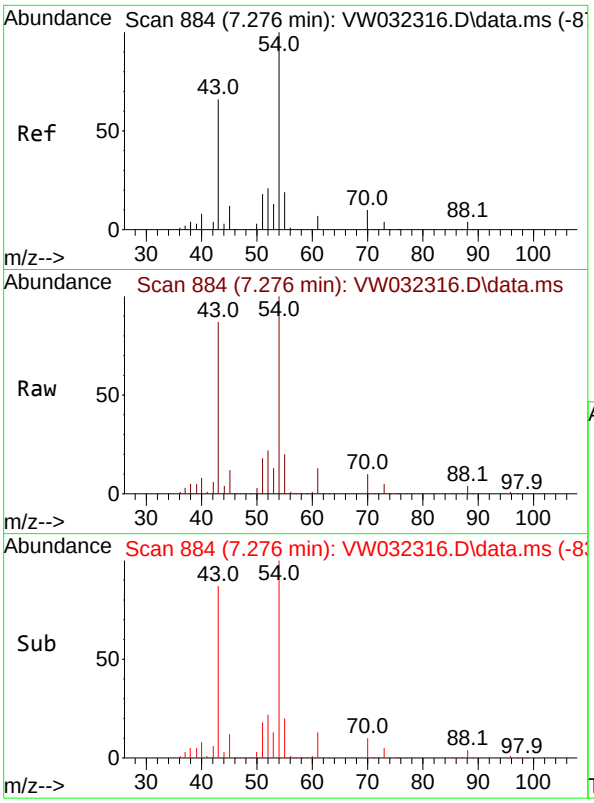


#36
1,1-Dichloropropene
Concen: 48.069 ug/l
RT: 8.093 min Scan# 1018
Delta R.T. -0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 75 Resp: 232959

Ion	Ratio	Lower	Upper
75	100		
110	33.1	17.5	52.5
77	31.2	24.1	36.1





#37
Ethyl Acetate
Concen: 47.655 ug/l
RT: 7.276 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 15372

Ion	Ratio	Lower	Upper
43	100		
61	13.7	11.3	16.9
70	11.0	8.9	13.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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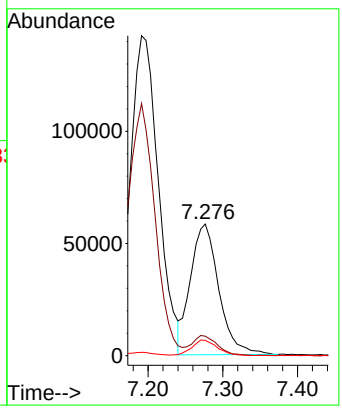
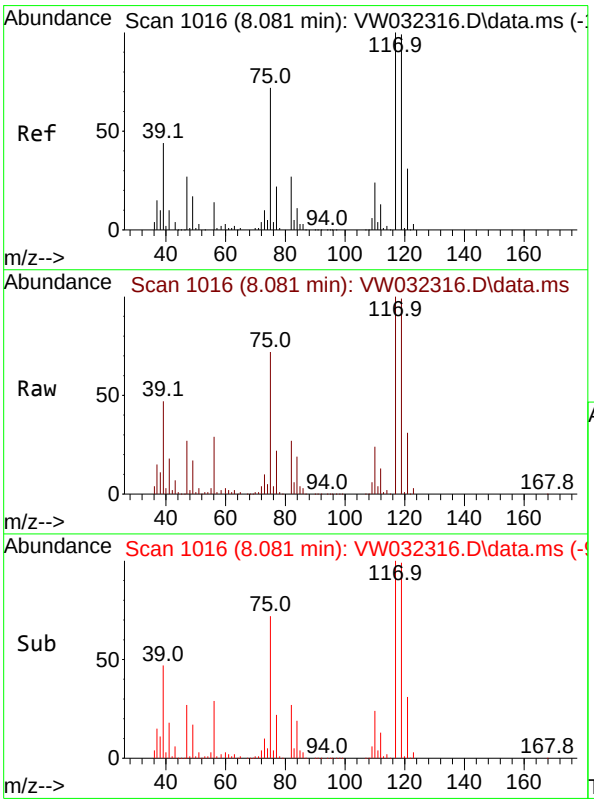
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

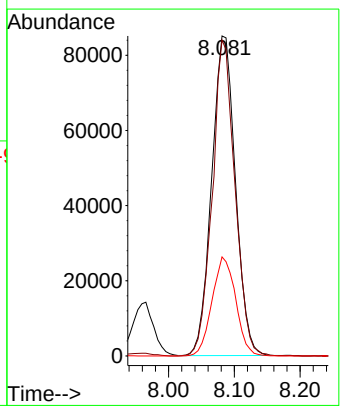


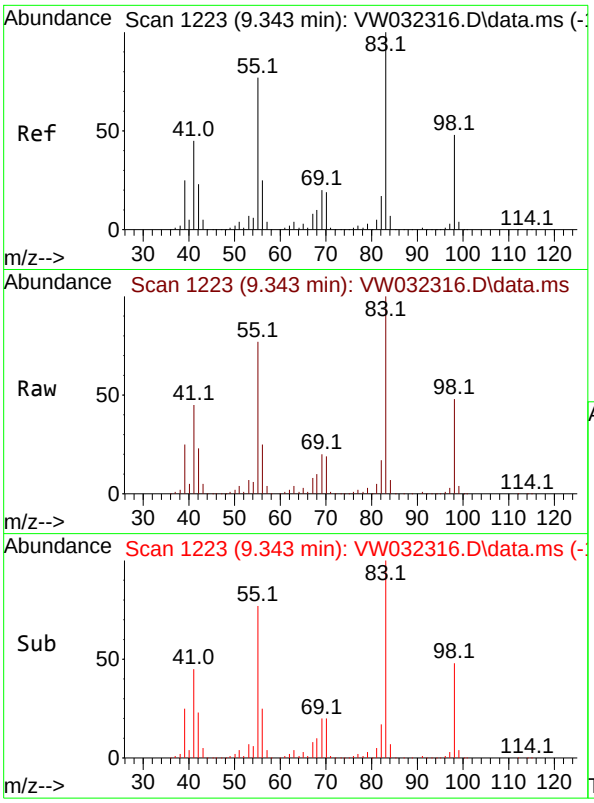


#38
Carbon Tetrachloride
Concen: 46.865 ug/l
RT: 8.081 min Scan# 1016
Delta R.T. -0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:117 Resp: 213729

Ion	Ratio	Lower	Upper
117	100		
119	98.8	74.2	111.2
121	31.0	25.6	38.4





#39
Methylcyclohexane
Concen: 47.272 ug/l
RT: 9.343 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 83 Resp: 27634

Ion	Ratio	Lower	Upper
83	100		
55	77.1	58.4	87.6
98	48.4	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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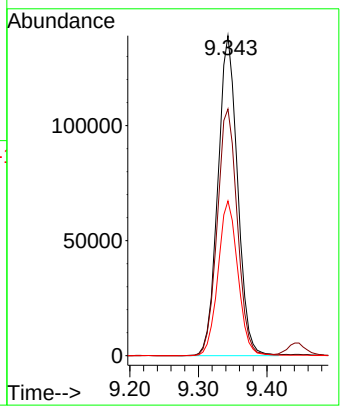
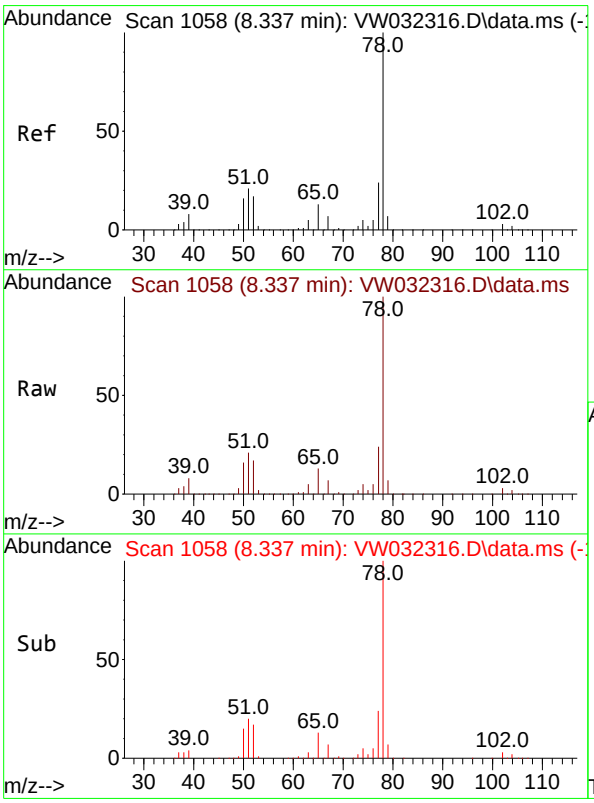
Supervised By :Semsettin Yesilyurt 10/03/2025

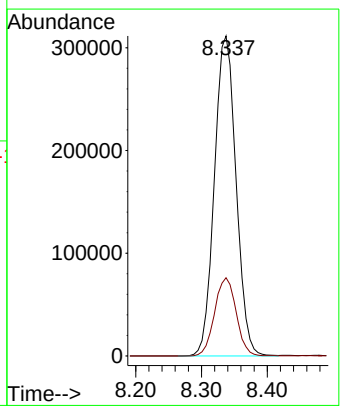


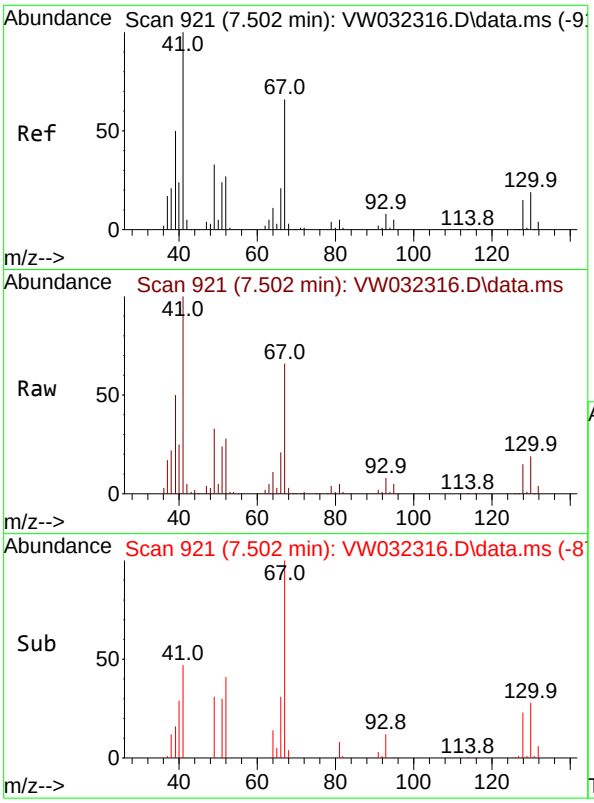


#40
Benzene
Concen: 46.964 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 78 Resp: 713410

Ion	Ratio	Lower	Upper
78	100		
77	24.4	20.7	31.1

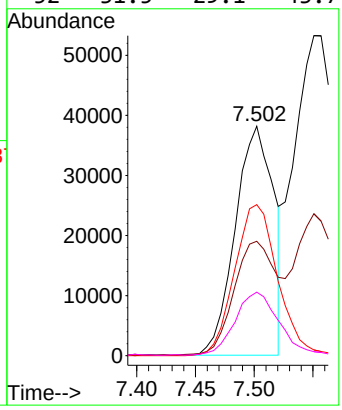




#41
Methacrylonitrile
Concen: 49.929 ug/l
RT: 7.502 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 41 Resp: 8679

Ion	Ratio	Lower	Upper
41	100		
39	57.9	50.9	76.3
67	74.3	65.6	98.4
52	31.5	29.1	43.7



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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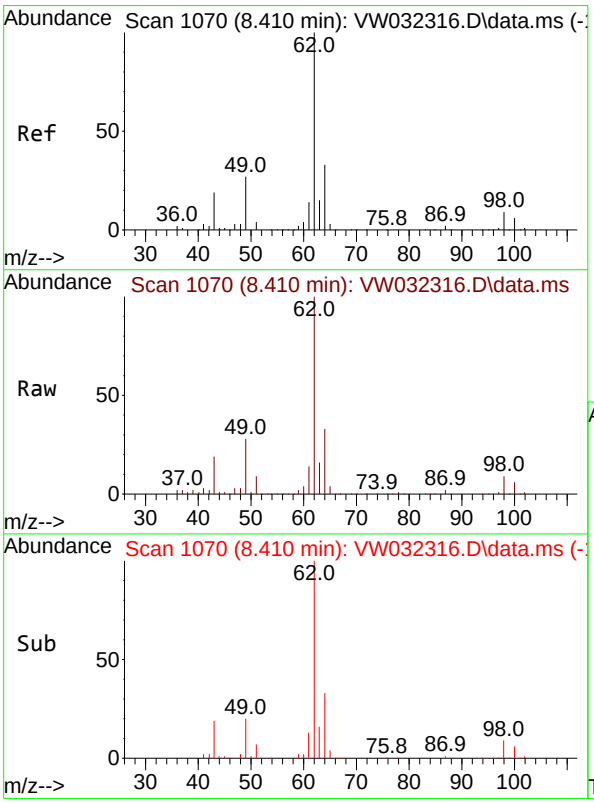
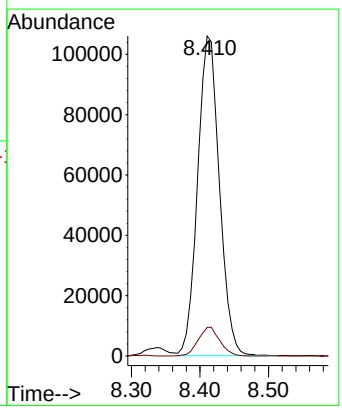
Supervised By :Semsettin Yesilyurt 10/03/2025

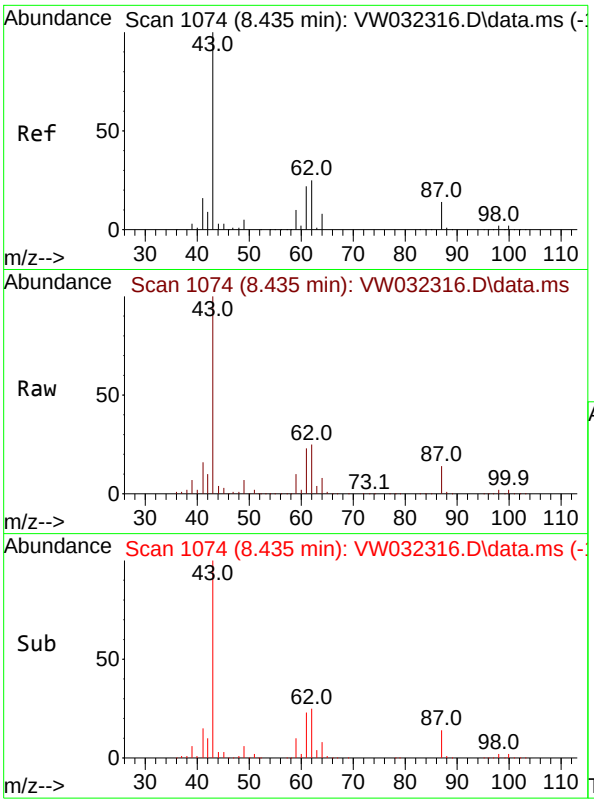


#42
1,2-Dichloroethane
Concen: 47.194 ug/l
RT: 8.410 min Scan# 1070
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 62 Resp: 234579

Ion	Ratio	Lower	Upper
62	100		
98	8.9	0.0	18.0





#43
Isopropyl Acetate
Concen: 48.202 ug/l
RT: 8.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 27583

Ion	Ratio	Lower	Upper
43	100		
61	29.0	23.3	34.9
87	13.6	11.1	16.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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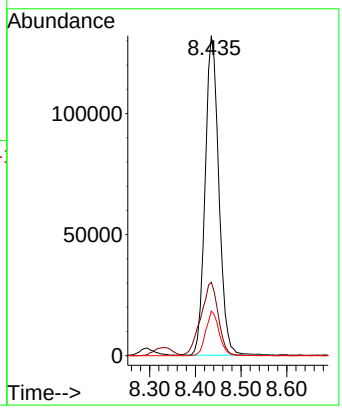
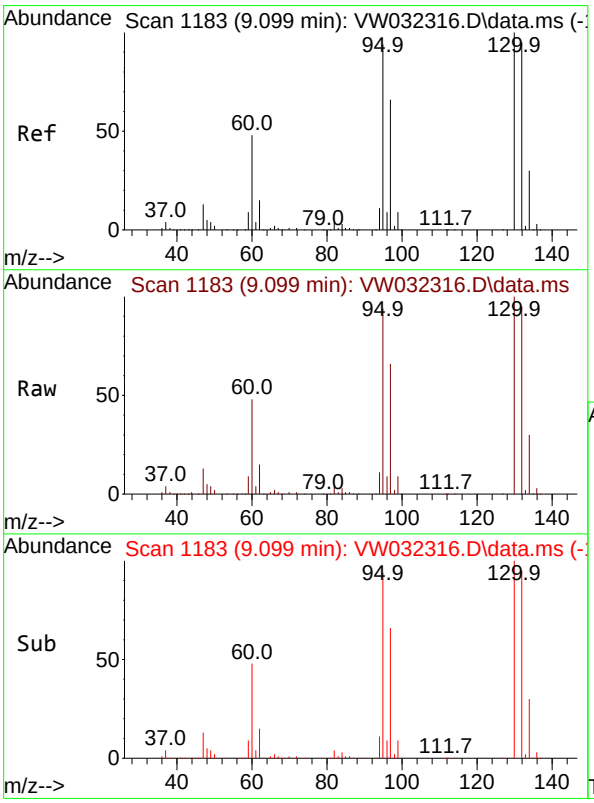
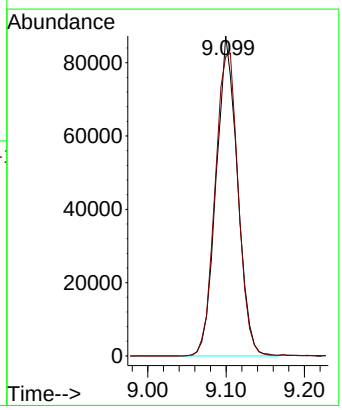


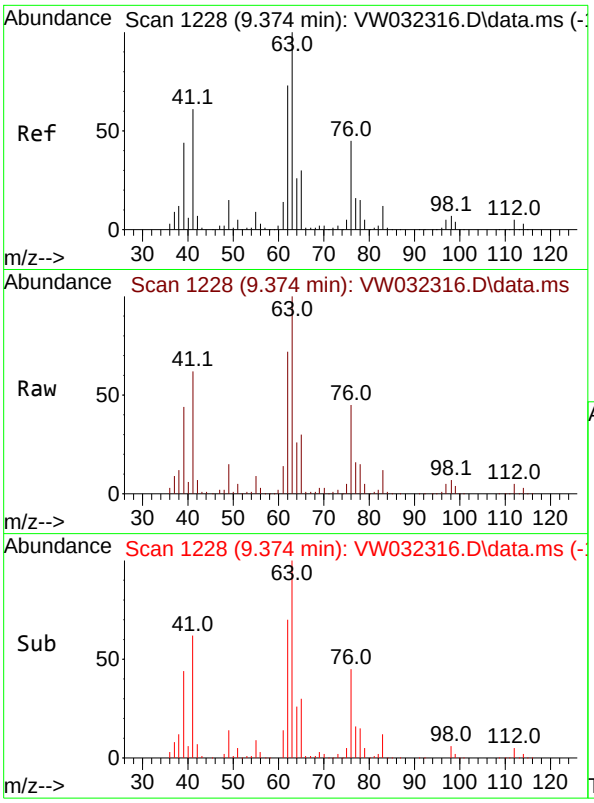


#44
Trichloroethene
Concen: 46.519 ug/l
RT: 9.099 min Scan# 1183
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:130 Resp: 165466

Ion	Ratio	Lower	Upper
130	100		
95	93.5	0.0	220.0

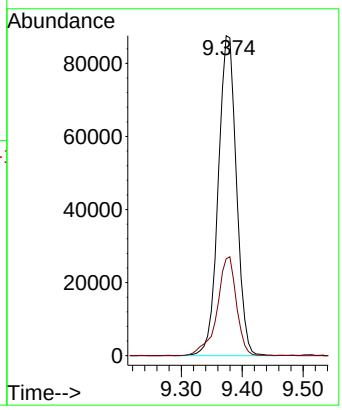




#45
1,2-Dichloropropane
Concen: 47.709 ug/l
RT: 9.374 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 63 Resp: 18089

Ion	Ratio	Lower	Upper
63	100		
65	30.2	24.3	36.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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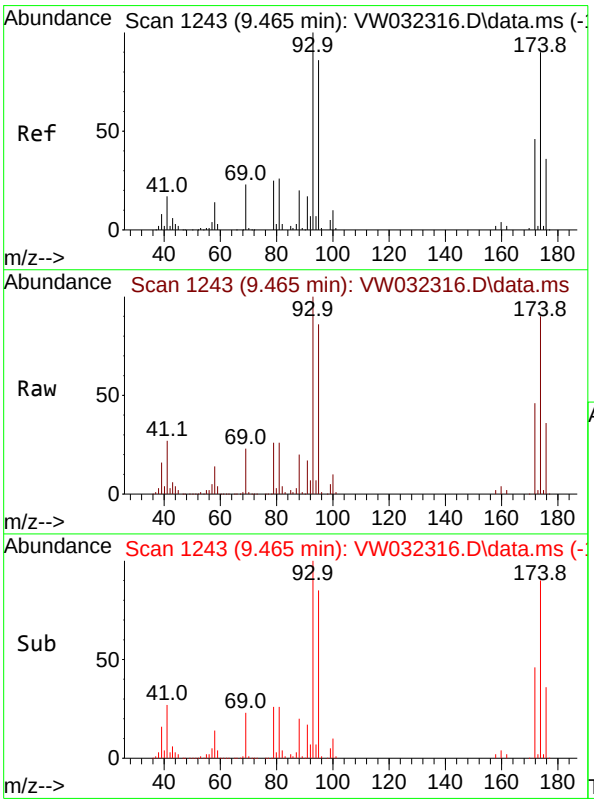
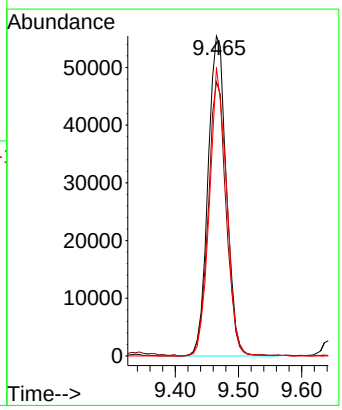
Supervised By :Semsettin Yesilyurt 10/03/2025

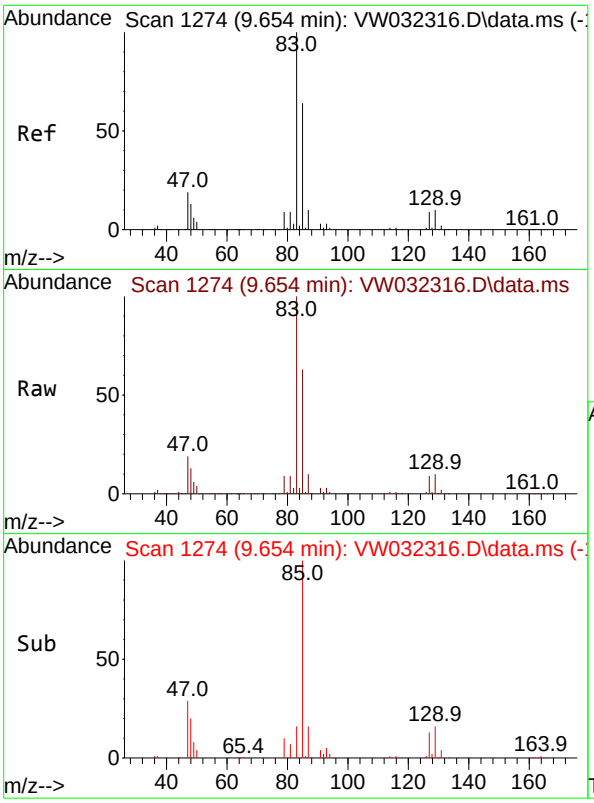


#46
Dibromomethane
Concen: 47.962 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 93 Resp: 111827

Ion	Ratio	Lower	Upper
93	100		
95	83.8	67.4	101.2
174	84.5	75.7	113.5

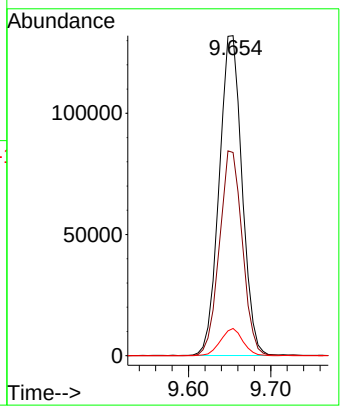




#47
Bromodichloromethane
Concen: 47.759 ug/l
RT: 9.654 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 83 Resp: 25468

Ion	Ratio	Lower	Upper
83	100		
85	63.5	48.7	73.1
127	8.5	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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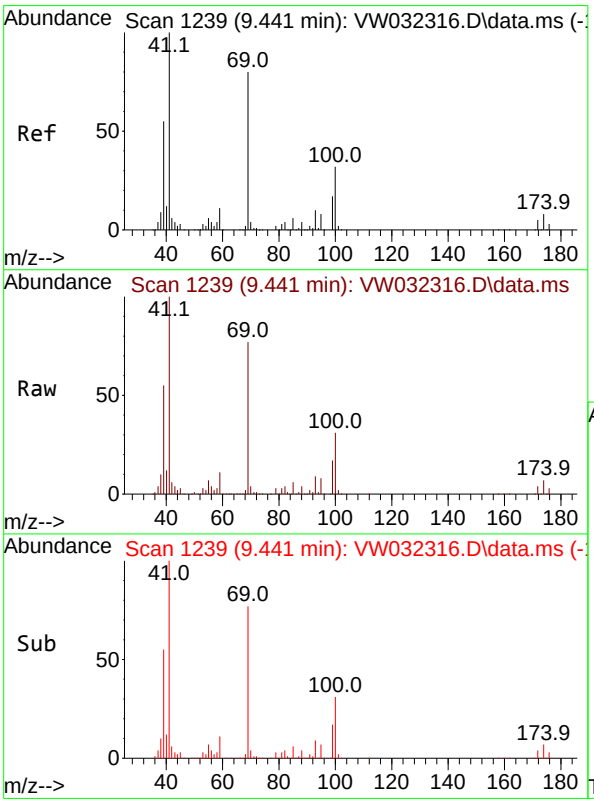
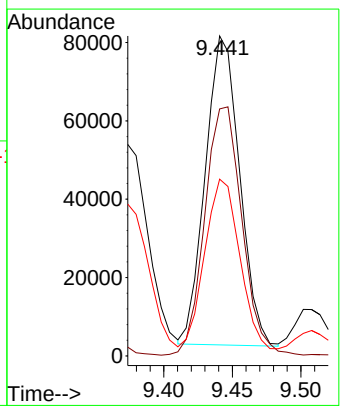
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

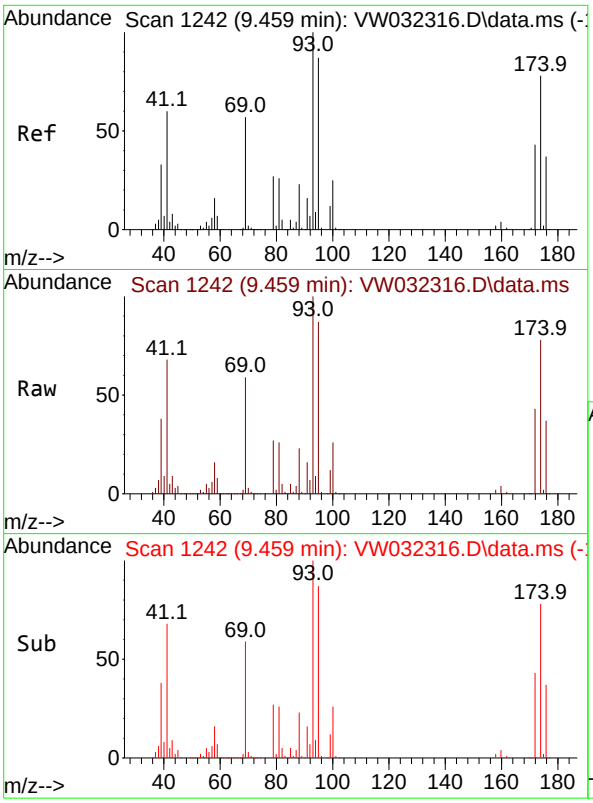


#48
Methyl methacrylate
Concen: 49.341 ug/l
RT: 9.441 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 41 Resp: 137281

Ion	Ratio	Lower	Upper
41	100		
69	88.1	71.5	107.3
39	55.9	55.9	83.9#

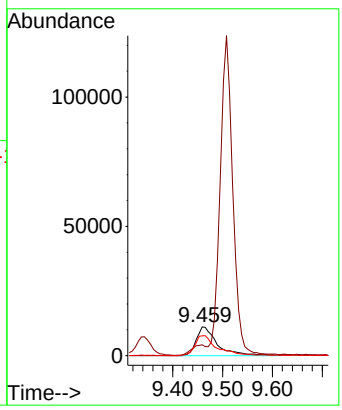




#49
1,4-Dioxane
Concen: 1024.535 ug/l
RT: 9.459 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 88 Resp: 3265

Ion	Ratio	Lower	Upper
88	100		
43	27.4	18.0	27.0#
58	72.9	55.4	83.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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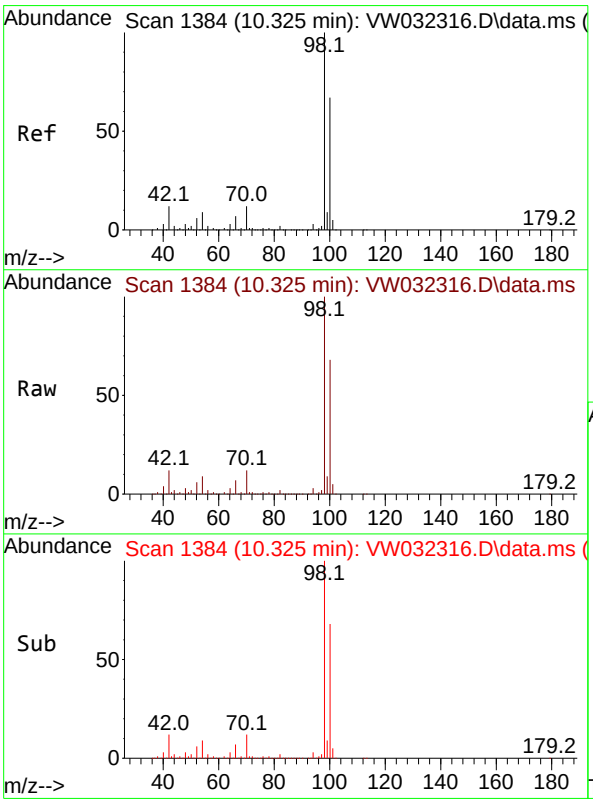
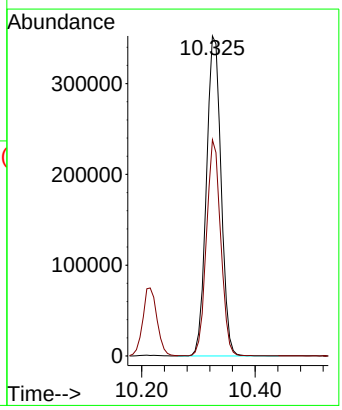
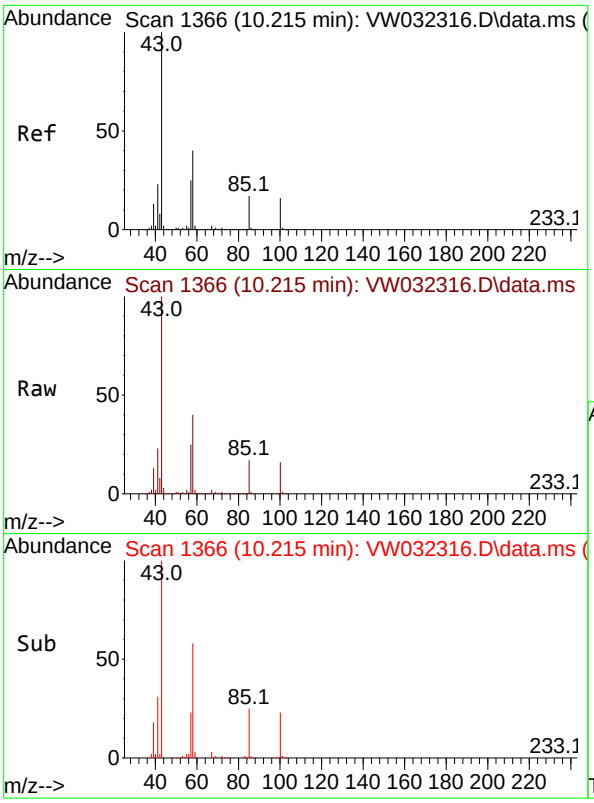


#50
Toluene-d8
Concen: 49.927 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 98 Resp: 632778

Ion	Ratio	Lower	Upper
98	100		
100	65.7	51.4	77.2

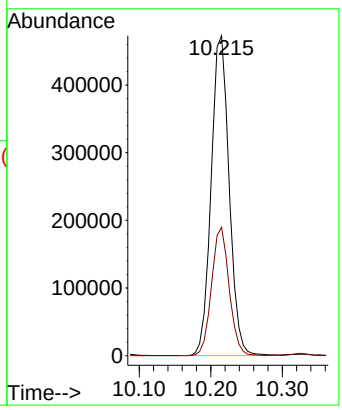




#51
4-Methyl-2-Pentanone
Concen: 249.195 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 82594

Ion	Ratio	Lower	Upper
43	100		
58	39.3	32.0	48.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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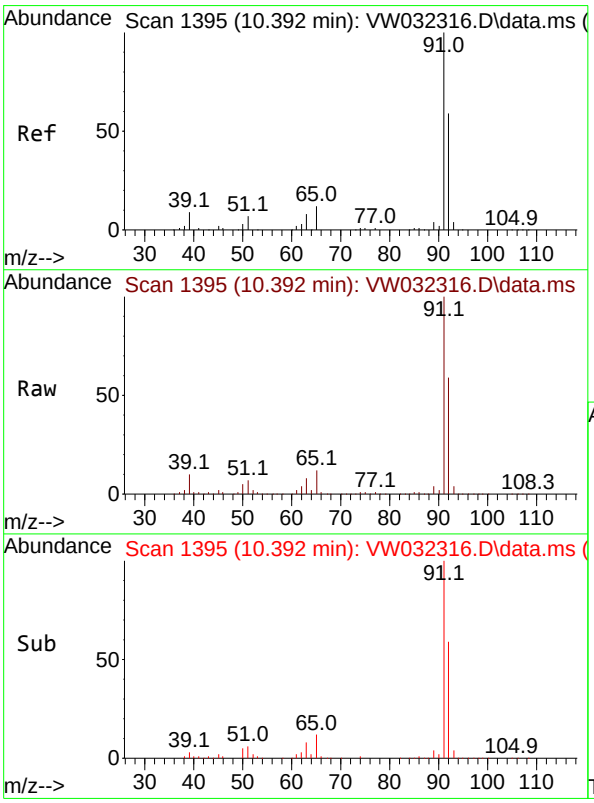
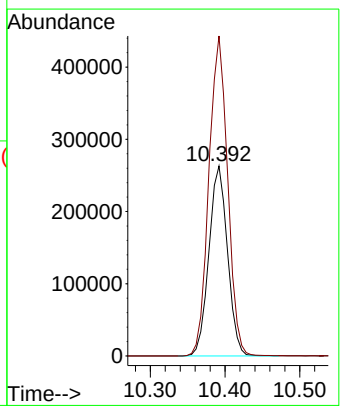
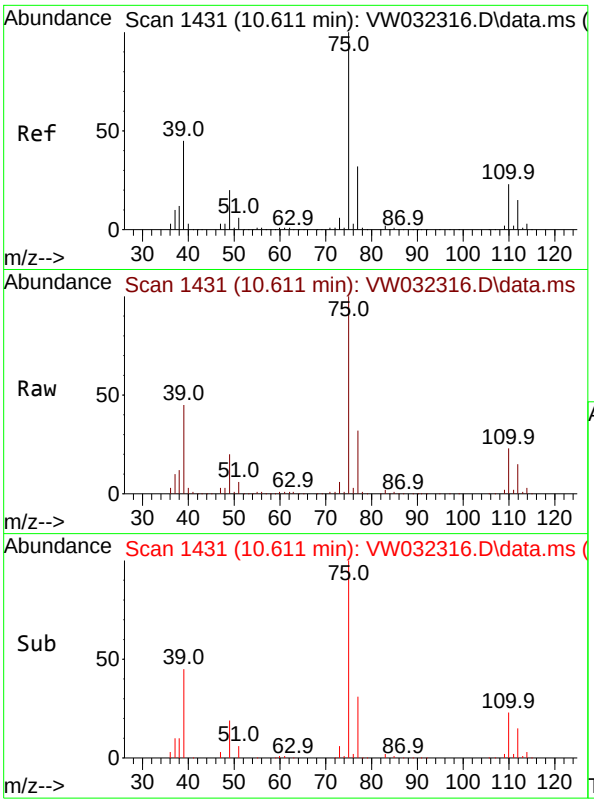


#52
Toluene
Concen: 48.052 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 92 Resp: 454566

Ion	Ratio	Lower	Upper
92	100		
91	170.0	137.5	206.3





#53
t-1,3-Dichloropropene
Concen: 49.001 ug/l
RT: 10.611 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 75 Resp: 25351

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.6	38.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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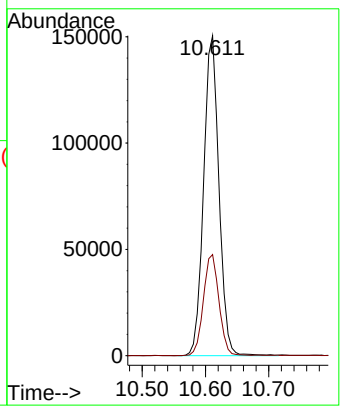
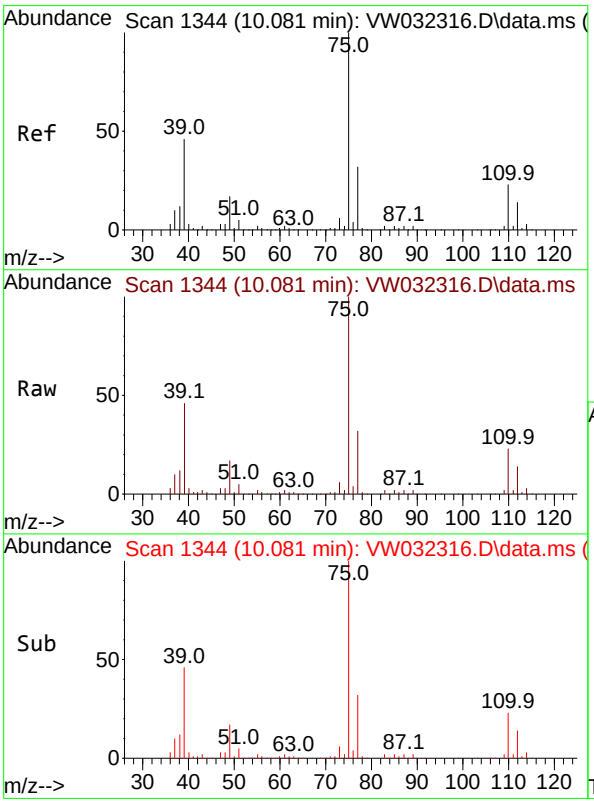
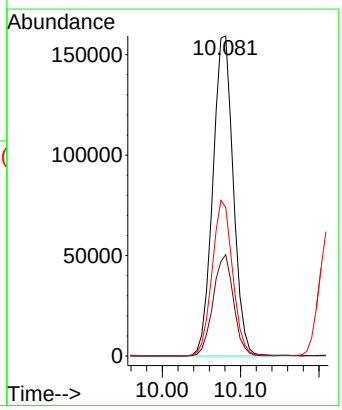


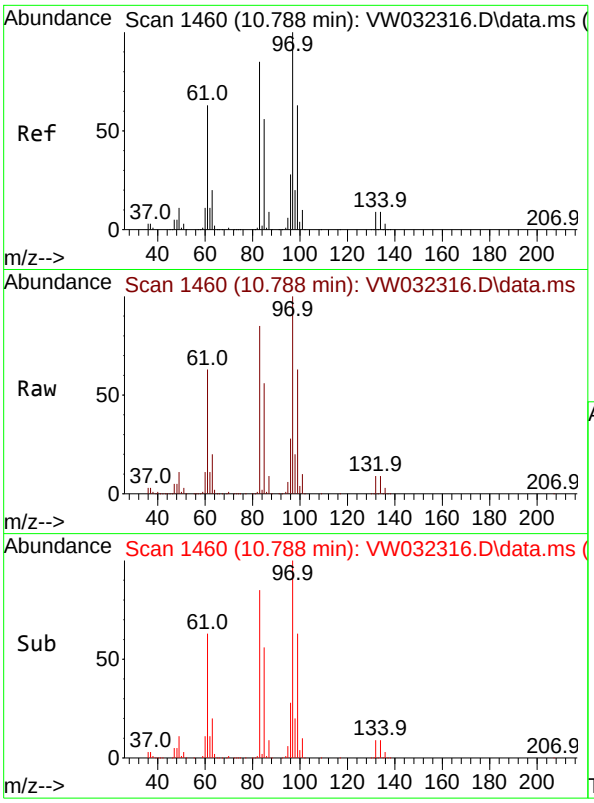


#54
cis-1,3-Dichloropropene
Concen: 48.447 ug/l
RT: 10.081 min Scan# 1344
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 75 Resp: 288719

Ion	Ratio	Lower	Upper
75	100		
77	31.7	25.1	37.7
39	46.4	43.2	64.8

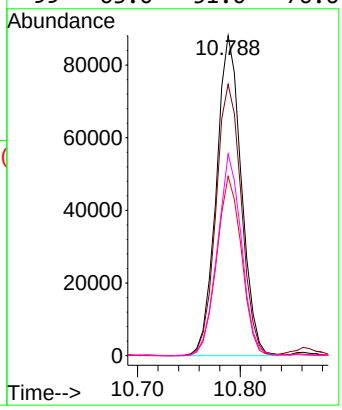




#55
1,1,2-Trichloroethane
Concen: 47.671 ug/l
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 97 Resp: 14855

Ion	Ratio	Lower	Upper
97	100		
83	84.7	71.0	106.6
85	56.0	42.8	64.2
99	63.0	51.0	76.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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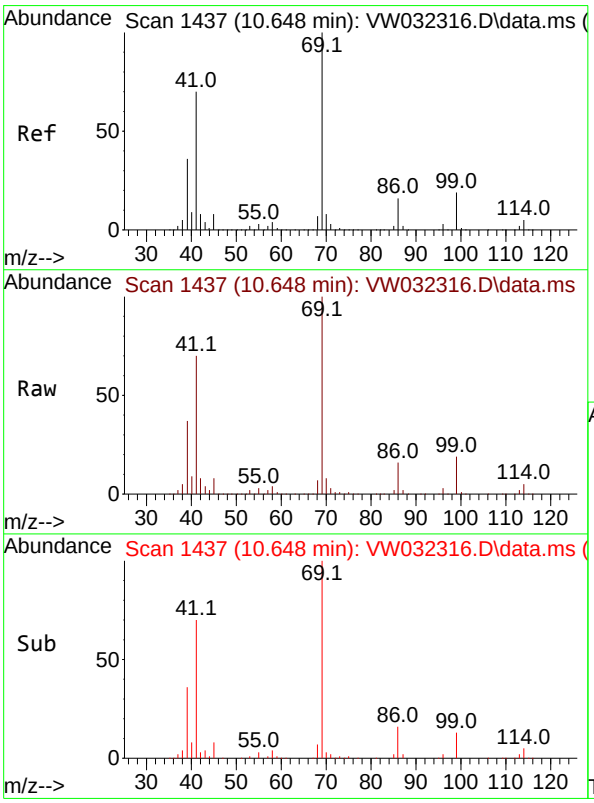
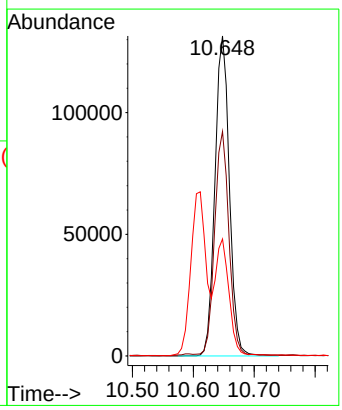
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

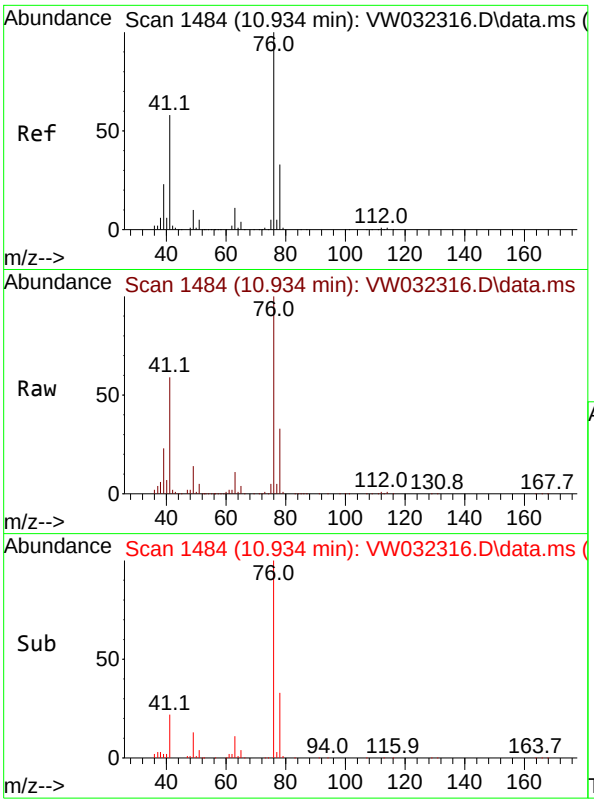


#56
Ethyl methacrylate
Concen: 49.633 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 69 Resp: 216484

Ion	Ratio	Lower	Upper
69	100		
41	69.2	53.2	79.8
39	34.1	32.9	49.3





#57
1,3-Dichloropropane
Concen: 47.992 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 76 Resp: 26413

Ion	Ratio	Lower	Upper
76	100		
78	32.5	26.2	39.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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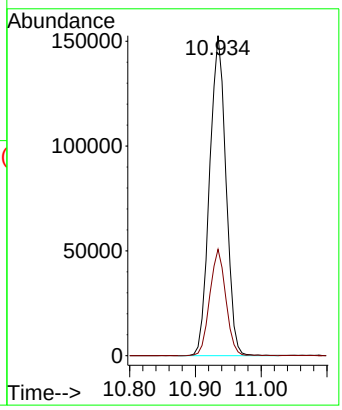
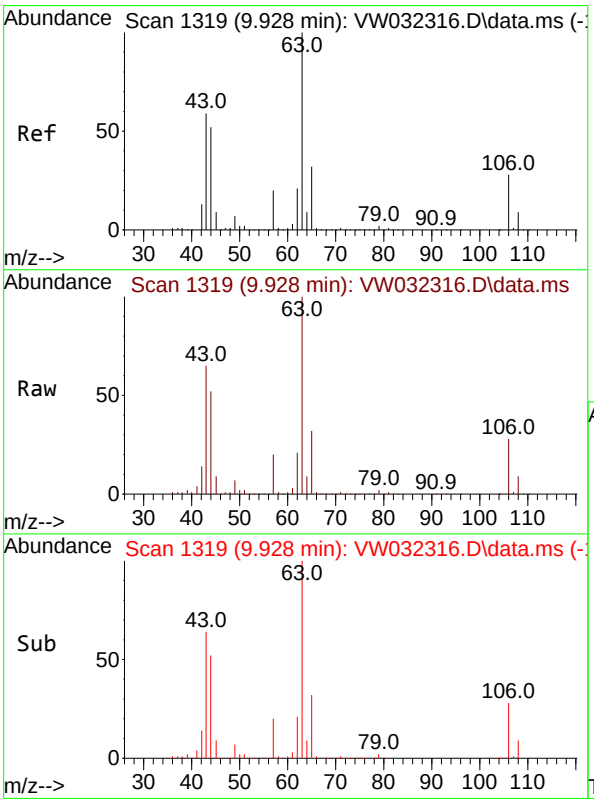
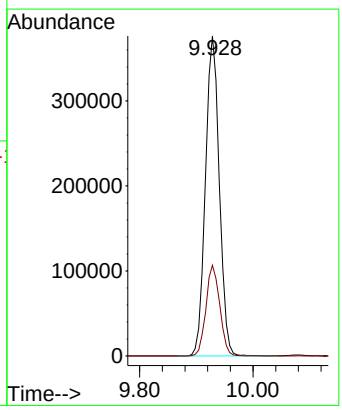


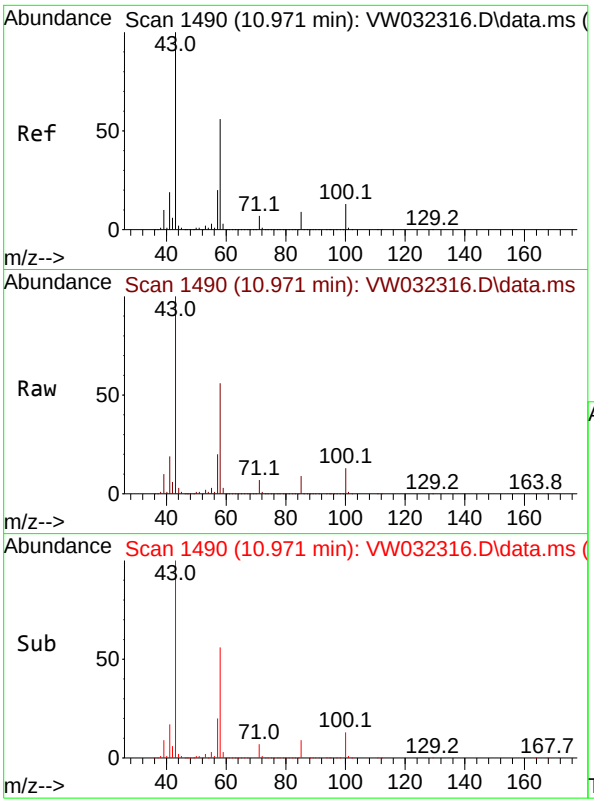


#58
2-Chloroethyl Vinyl ether
Concen: 275.675 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 63 Resp: 639919

Ion	Ratio	Lower	Upper
63	100		
106	28.1	24.3	36.5





#59
2-Hexanone
Concen: 248.758 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 58151

Ion	Ratio	Lower	Upper
43	100		
58	54.4	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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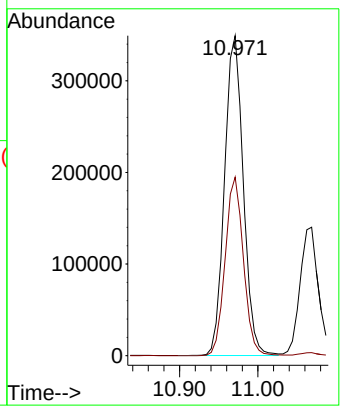
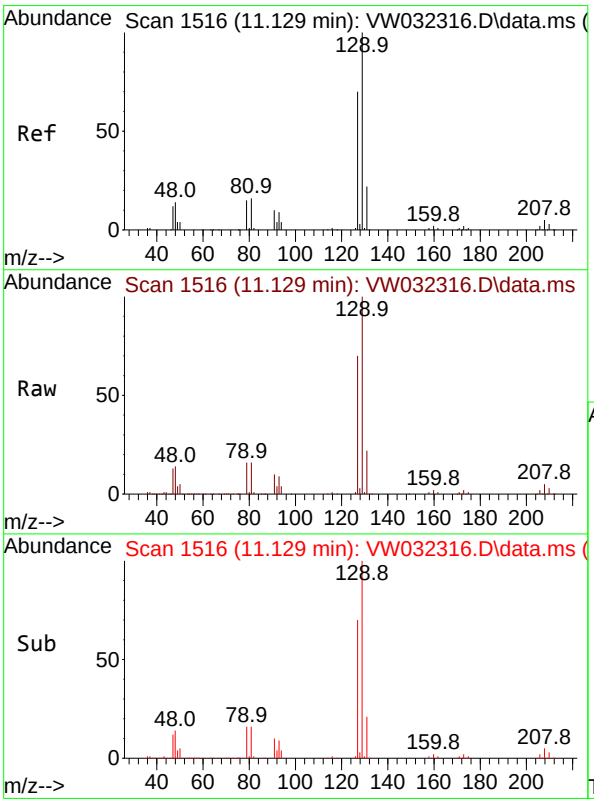
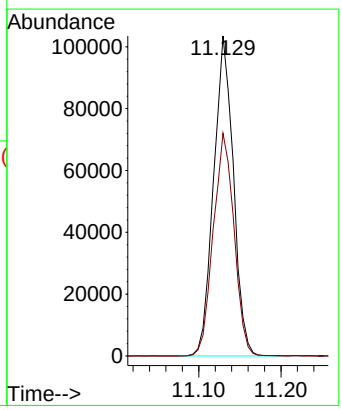


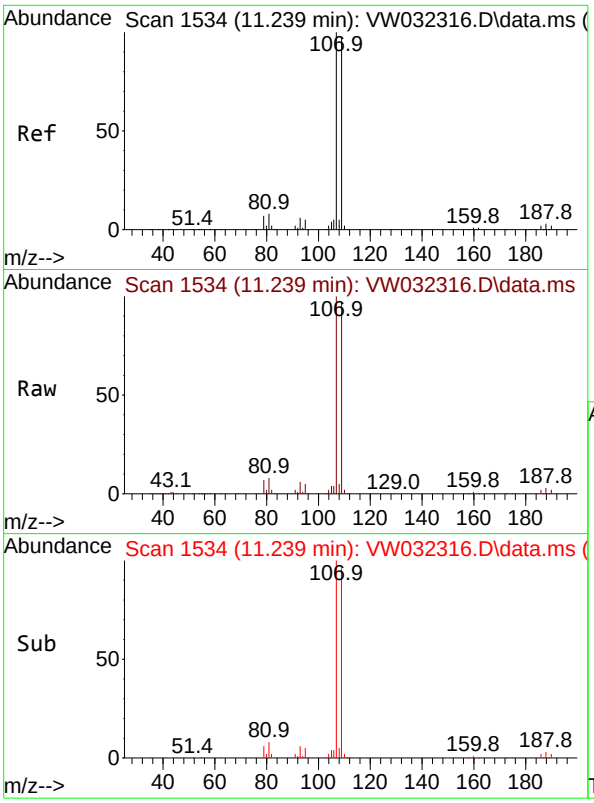


#60
Dibromochloromethane
Concen: 48.878 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:129 Resp: 172945

Ion	Ratio	Lower	Upper
129	100		
127	73.1	38.1	114.5





#61
1,2-Dibromoethane
Concen: 48.427 ug/l
RT: 11.239 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:107 Resp: 14714

Ion	Ratio	Lower	Upper
107	100		
109	93.5	74.5	111.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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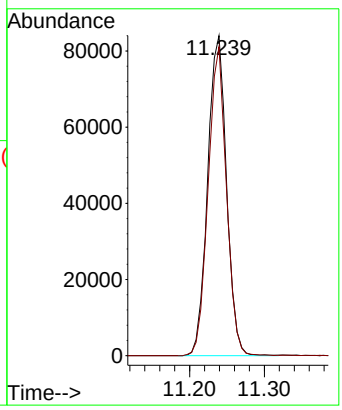
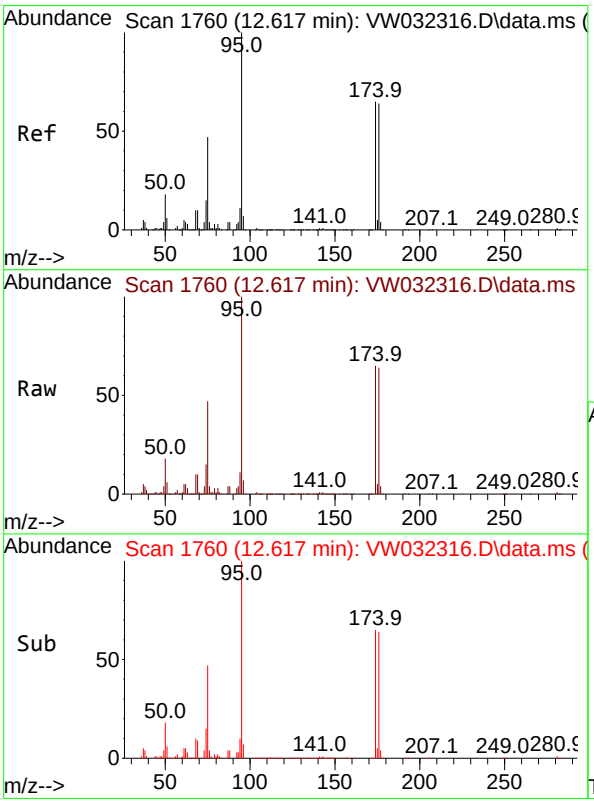
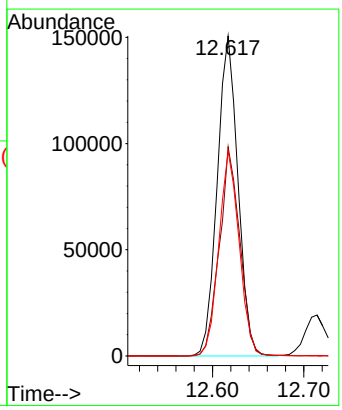


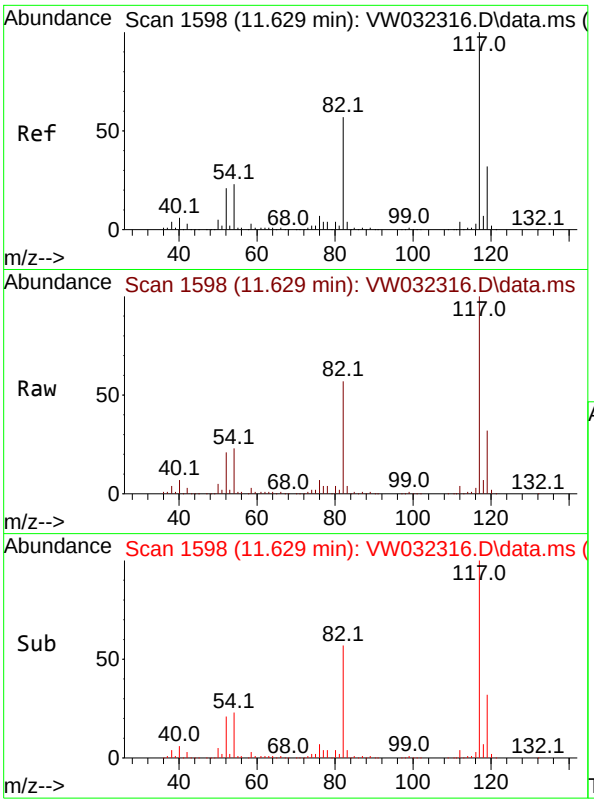


#62
4-Bromofluorobenzene
Concen: 49.609 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 95 Resp: 237645

Ion	Ratio	Lower	Upper
95	100		
174	64.4	0.0	145.6
176	62.8	0.0	140.8

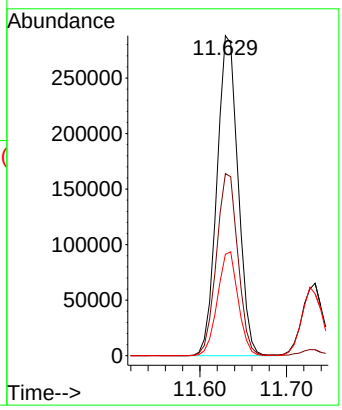




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:117 Resp: 48904

Ion	Ratio	Lower	Upper
117	100		
82	56.9	42.7	64.1
119	31.7	25.2	37.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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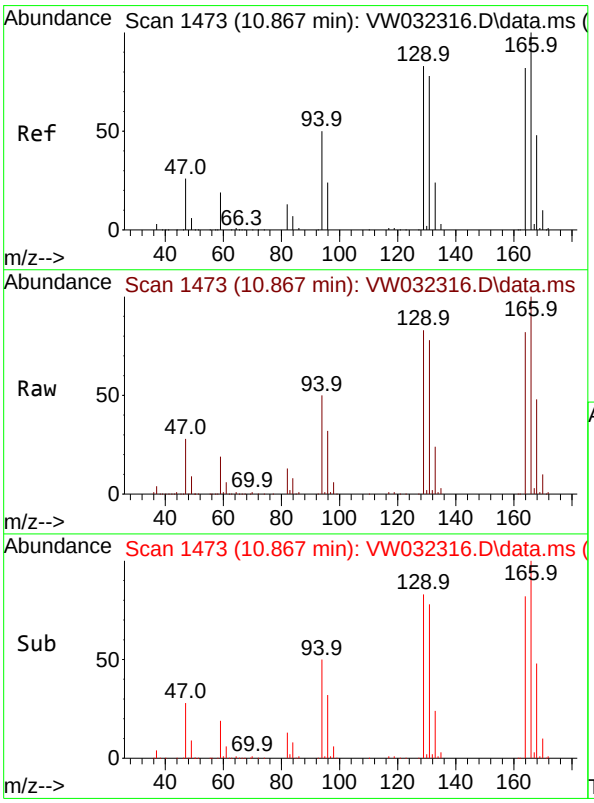
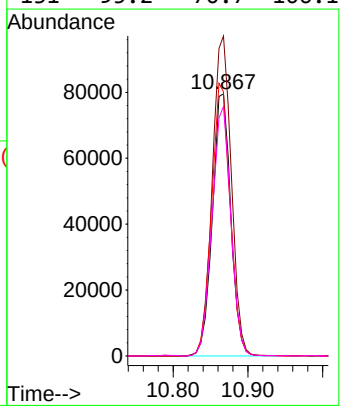
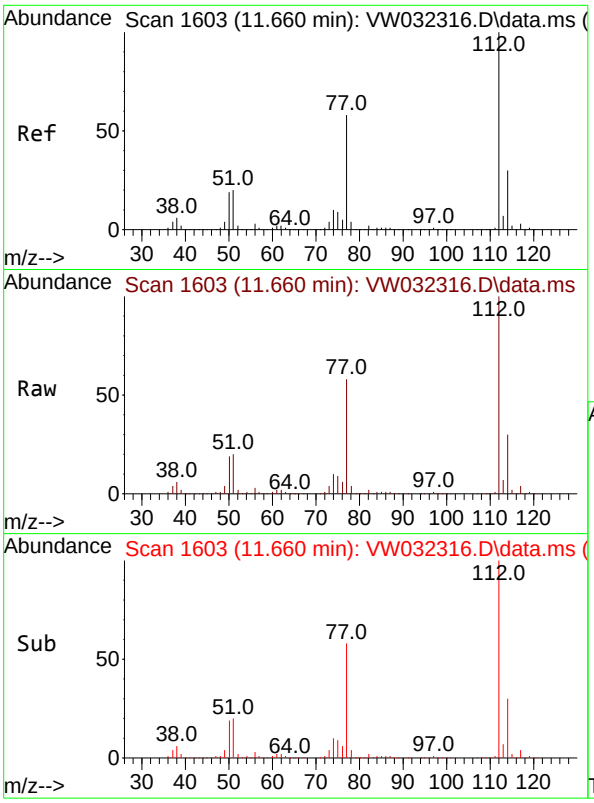


#64
Tetrachloroethene
Concen: 46.522 ug/l
RT: 10.867 min Scan# 1473
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:164 Resp: 136139

Ion	Ratio	Lower	Upper
164	100		
166	122.1	97.5	146.3
129	100.8	71.2	106.8
131	95.2	70.7	106.1





#65
Chlorobenzene
Concen: 46.707 ug/l
RT: 11.660 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:112 Resp: 50258

Ion	Ratio	Lower	Upper
112	100		
114	30.3	26.0	39.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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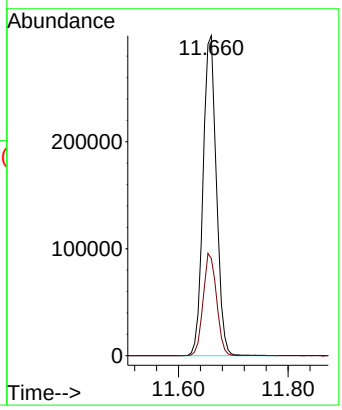
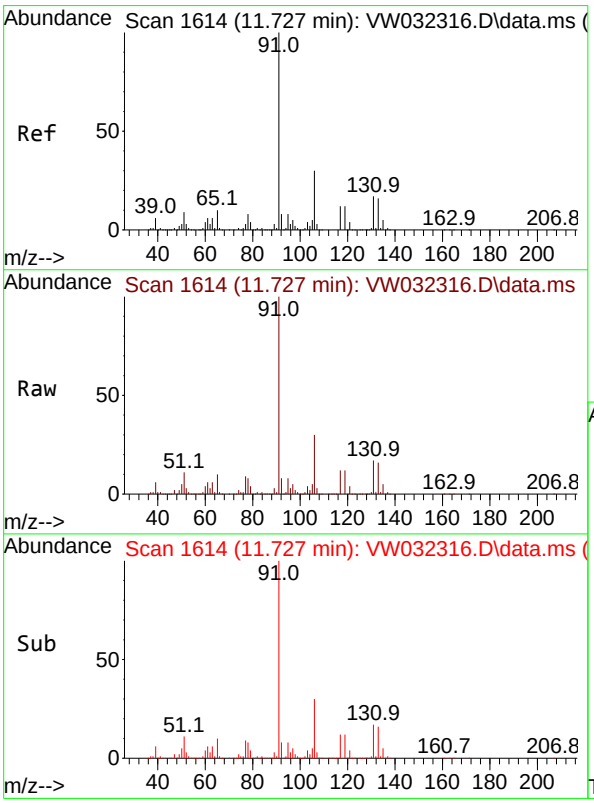
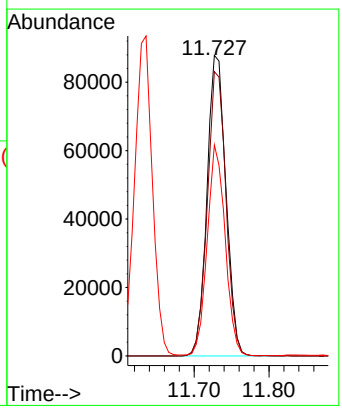


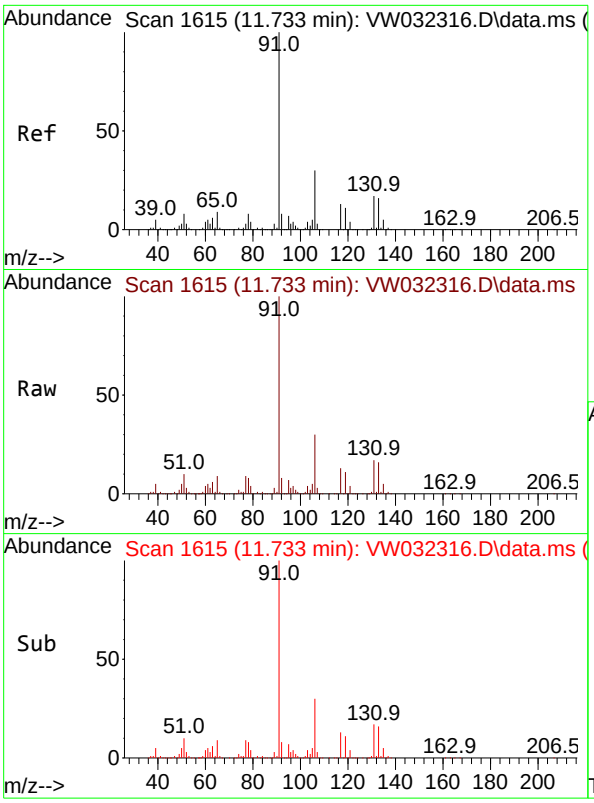


#66
1,1,1,2-Tetrachloroethane
Concen: 46.199 ug/l
RT: 11.727 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:131 Resp: 154835

Ion	Ratio	Lower	Upper
131	100		
133	93.4	47.7	143.1
119	66.6	32.8	98.3





#67
Ethyl Benzene
Concen: 47.287 ug/l
RT: 11.733 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 91 Resp: 84814

Ion	Ratio	Lower	Upper
91	100		
106	29.8	25.3	37.9

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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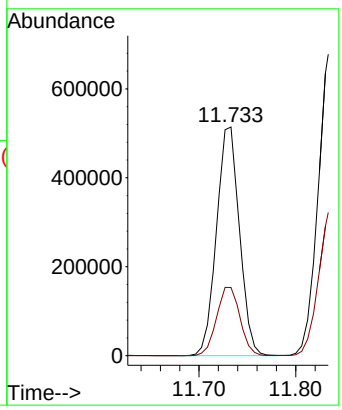
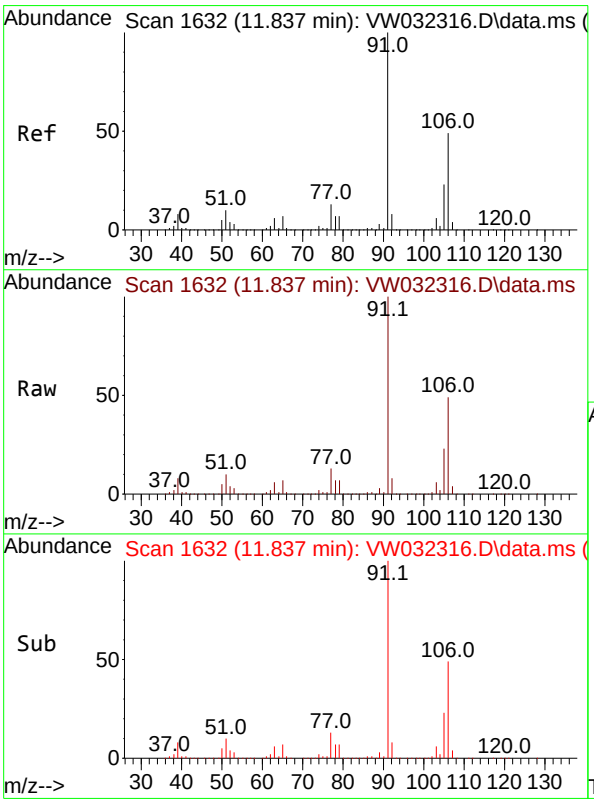
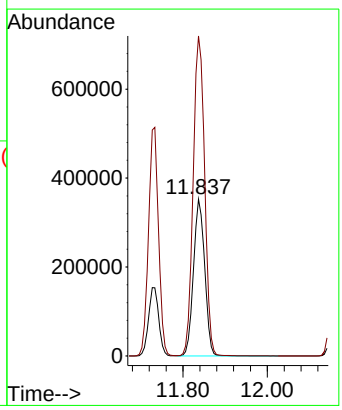


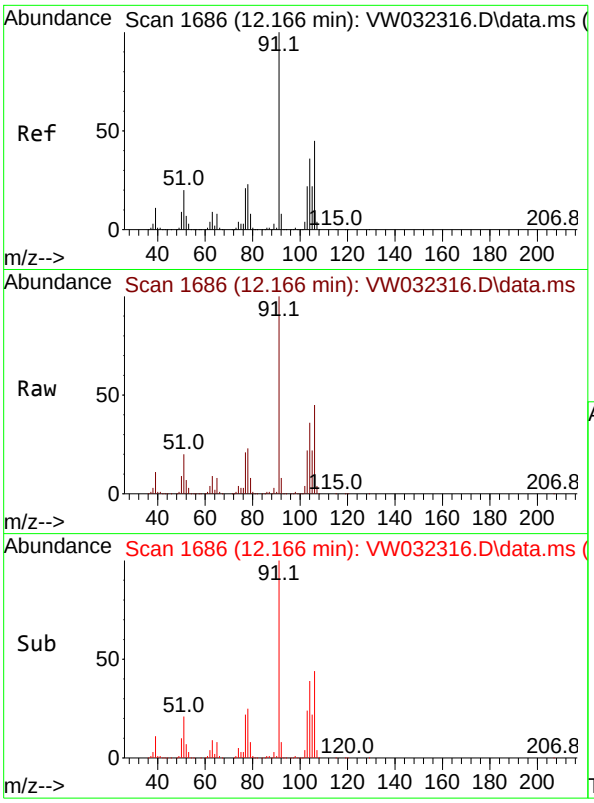


#68
m/p-Xylenes
Concen: 94.476 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:106 Resp: 653426

Ion	Ratio	Lower	Upper
106	100		
91	208.4	164.2	246.2





#69
o-Xylene
Concen: 48.200 ug/l
RT: 12.166 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:106 Resp: 31175

Ion	Ratio	Lower	Upper
106	100		
91	218.0	108.7	326.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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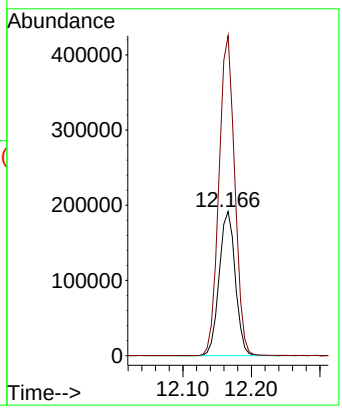
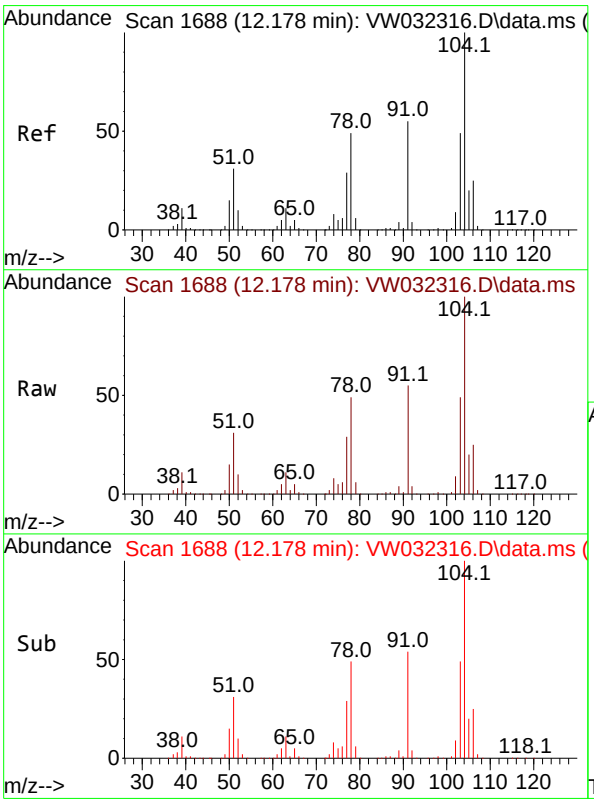
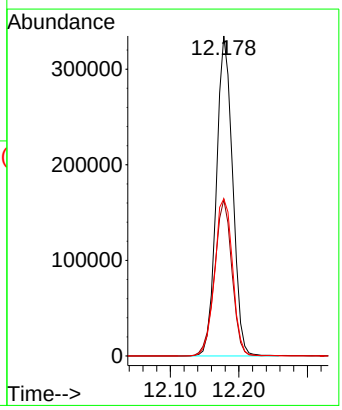


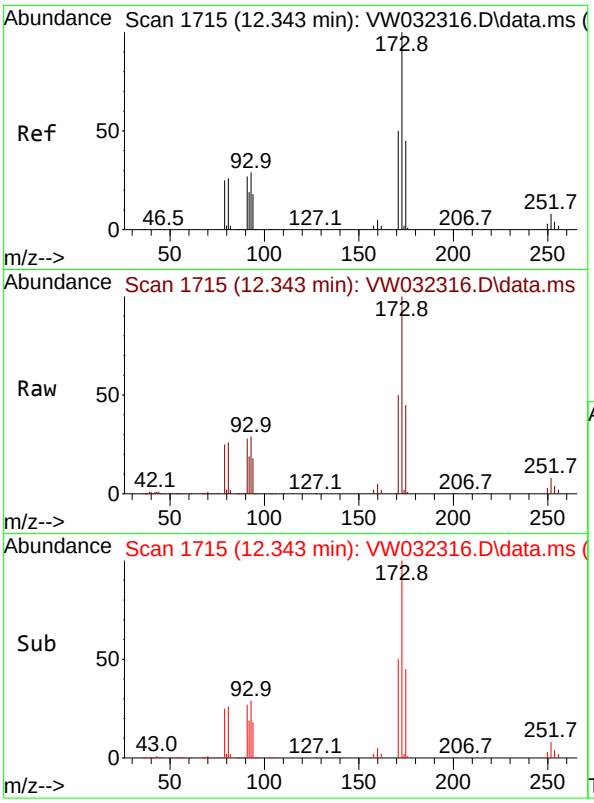


#70
Styrene
Concen: 48.664 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:104 Resp: 549550

Ion	Ratio	Lower	Upper
104	100		
78	52.4	41.6	62.4
103	54.5	44.8	67.2

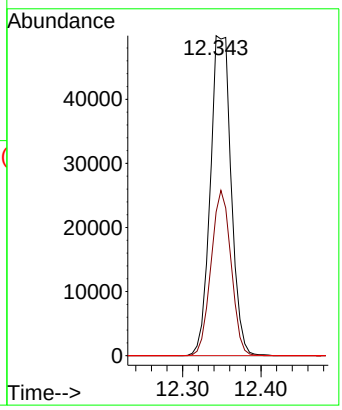




#71
Bromoform
Concen: 48.043 ug/l
RT: 12.343 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:173 Resp: 9229

Ion	Ratio	Lower	Upper
173	100		
175	49.6	24.9	74.7
254	0.0	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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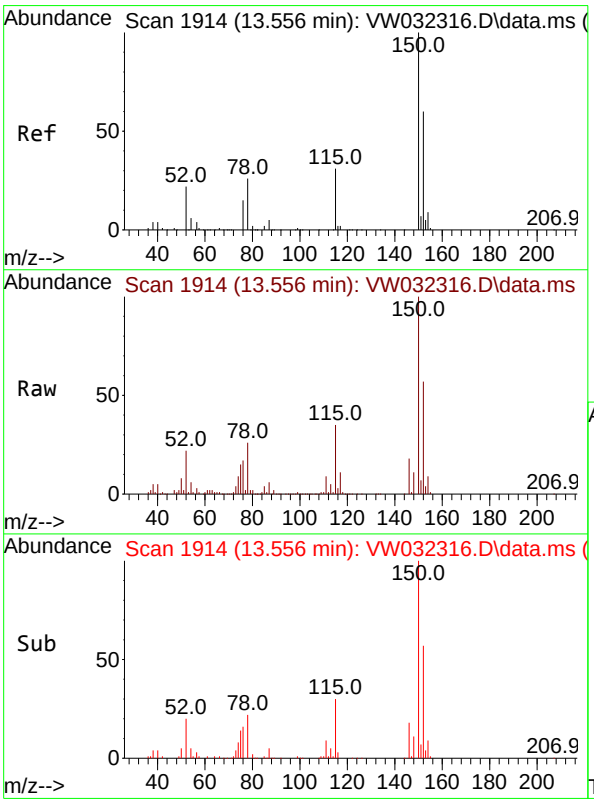
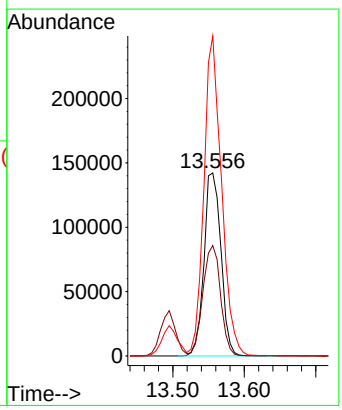
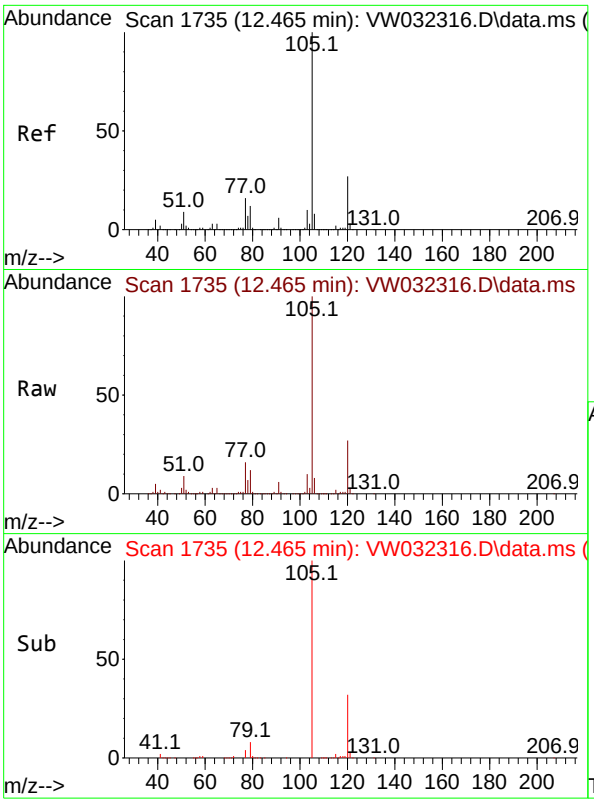


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:152 Resp: 234466

Ion	Ratio	Lower	Upper
152	100		
115	62.5	31.8	95.4
150	180.7	0.0	343.0





#73
Isopropylbenzene
Concen: 48.634 ug/l
RT: 12.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:105 Resp: 78014

Ion	Ratio	Lower	Upper
105	100		
120	25.8	13.0	38.9

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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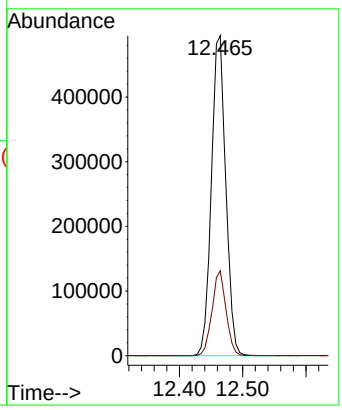
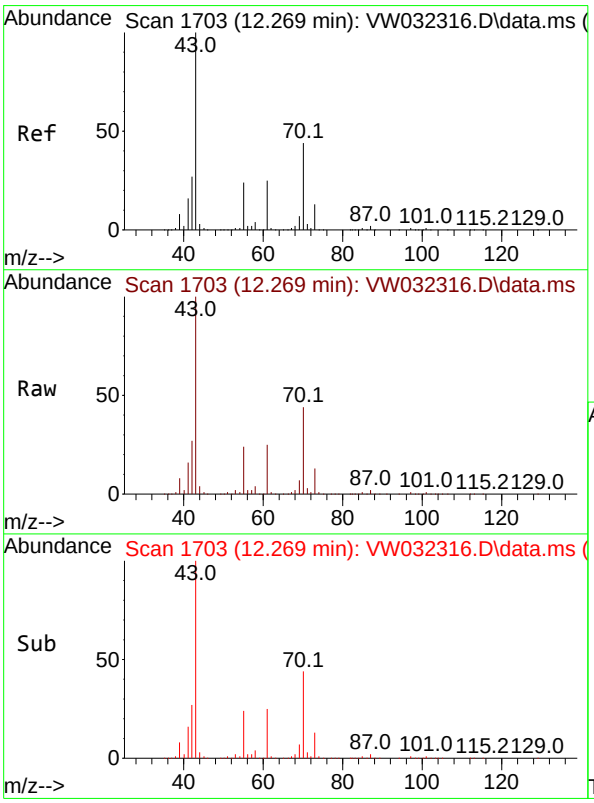
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

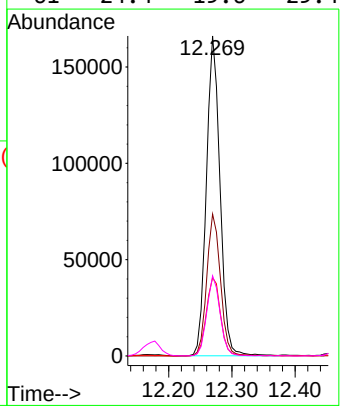


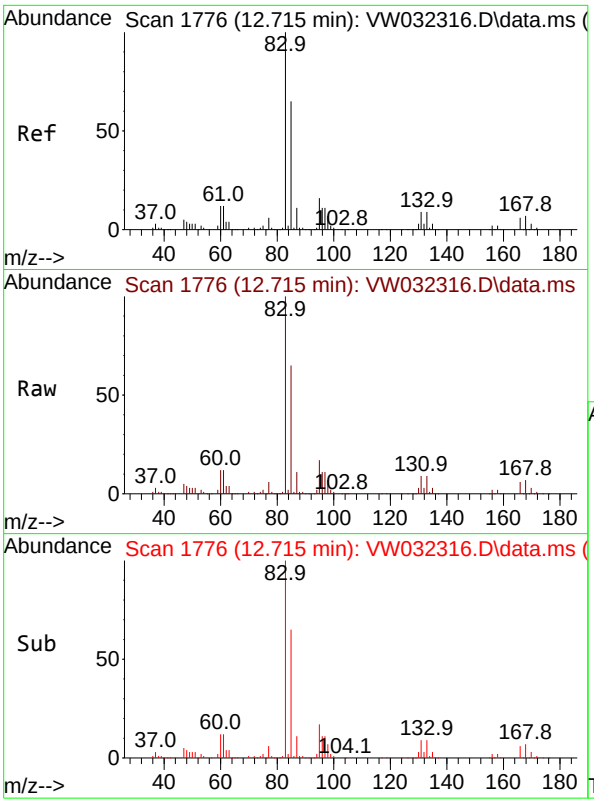


#74
N-amyl acetate
Concen: 48.711 ug/l
RT: 12.269 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 43 Resp: 249273

Ion	Ratio	Lower	Upper
43	100		
70	44.8	35.3	52.9
55	25.7	19.9	29.9
61	24.4	19.6	29.4





#75
1,1,2,2-Tetrachloroethane
Concen: 47.568 ug/l
RT: 12.715 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 83 Resp: 18946

Ion	Ratio	Lower	Upper
83	100		
131	9.9	5.1	15.4
85	64.0	32.2	96.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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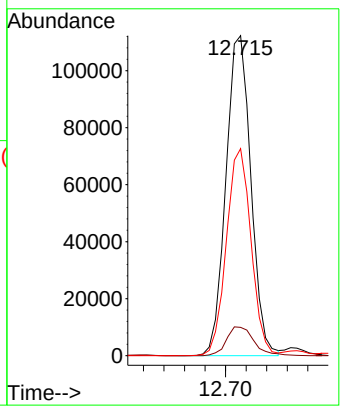
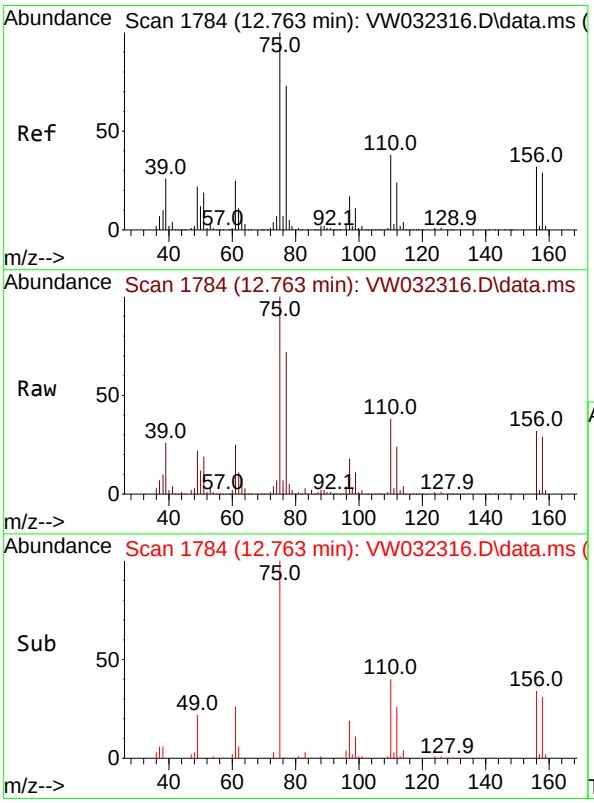
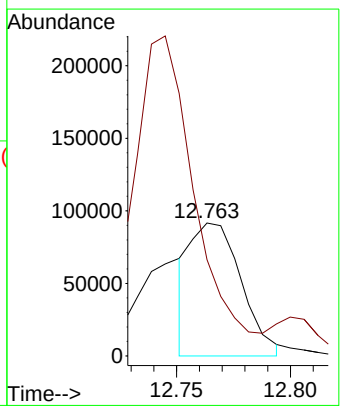


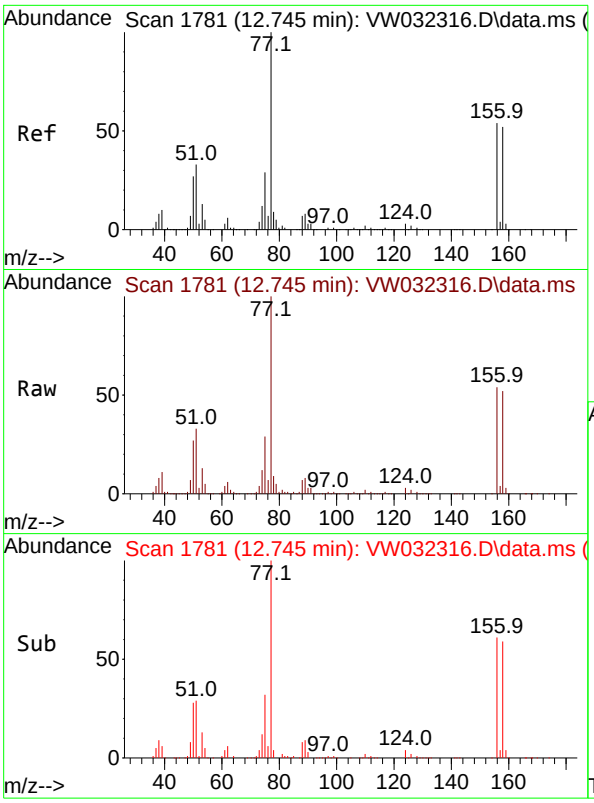


#76
1,2,3-Trichloropropane
Concen: 45.812 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 75 Resp: 141741

Ion	Ratio	Lower	Upper
75	100		
77	294.8	141.7	425.1

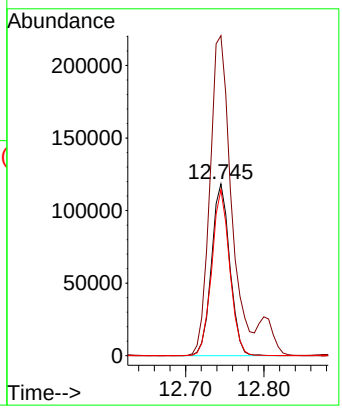




#77
Bromobenzene
Concen: 49.560 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:156 Resp: 19163

Ion	Ratio	Lower	Upper
156	100		
77	218.1	98.6	295.7
158	94.8	48.4	145.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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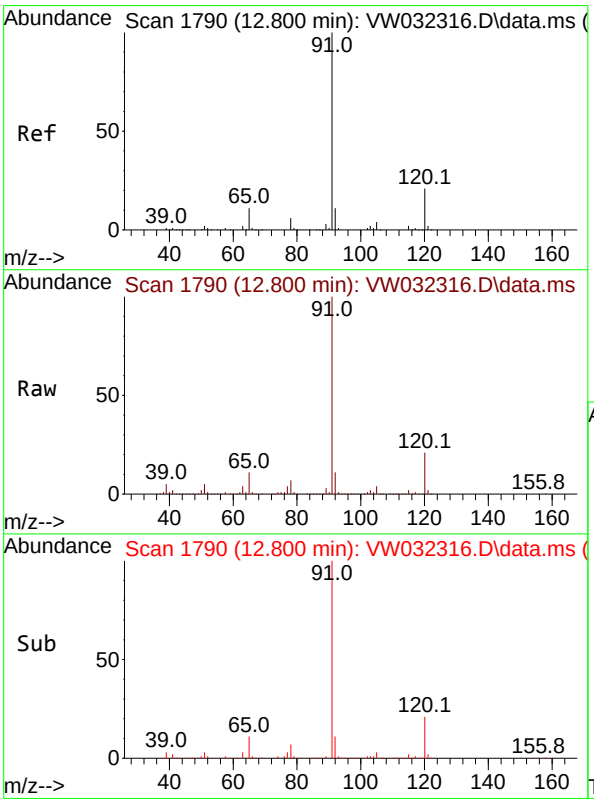
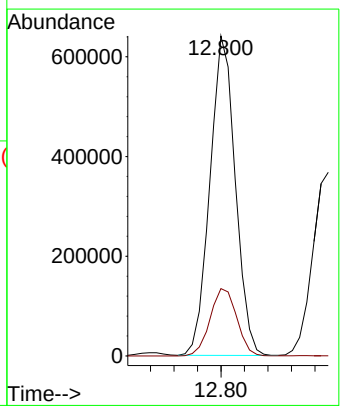
Supervised By :Semsettin Yesilyurt 10/03/2025

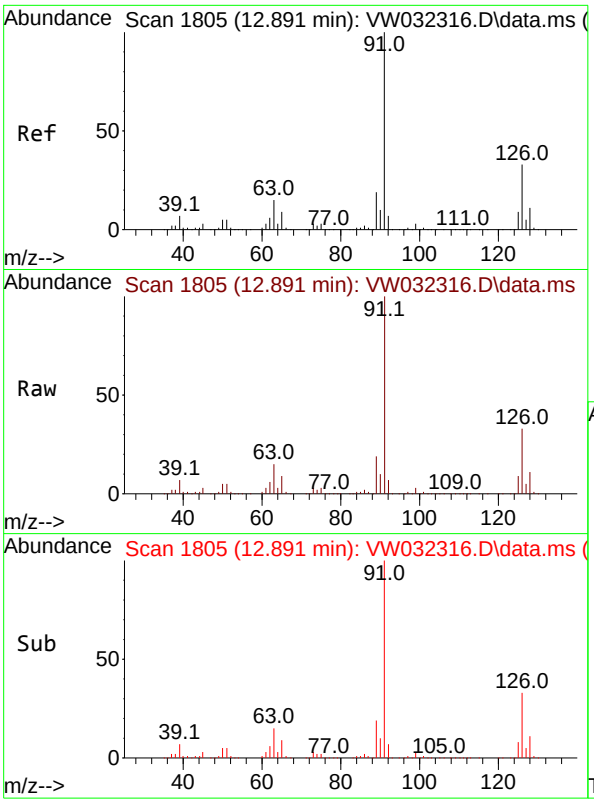


#78
n-propylbenzene
Concen: 47.974 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 91 Resp: 961286

Ion	Ratio	Lower	Upper
91	100		
120	22.2	11.8	35.4





#79
2-Chlorotoluene
Concen: 48.227 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 91 Resp: 59086

Ion	Ratio	Lower	Upper
91	100		
126	33.1	16.6	49.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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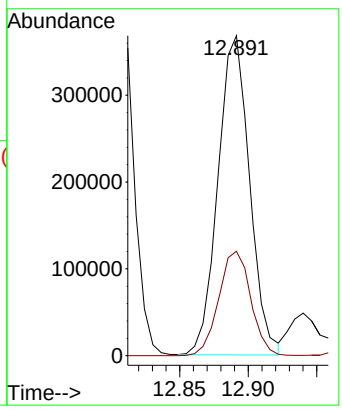
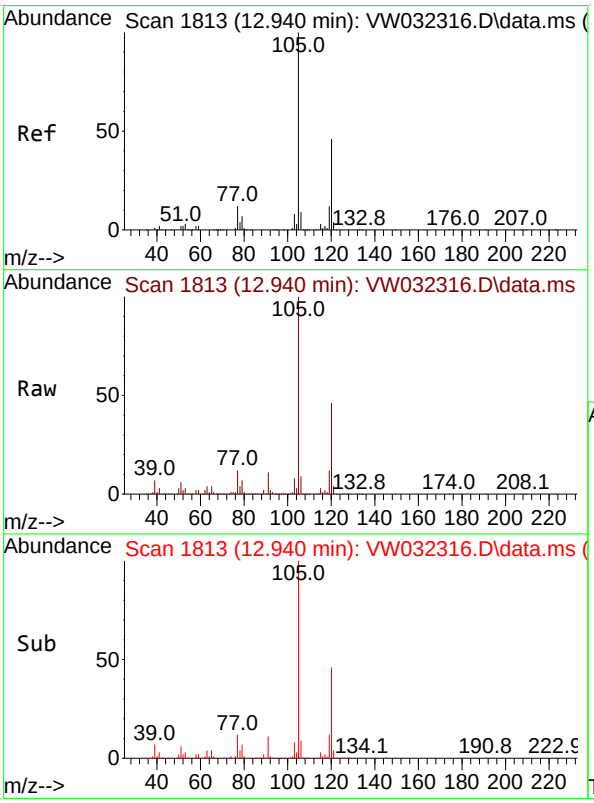
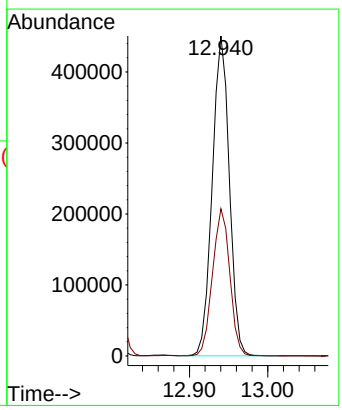


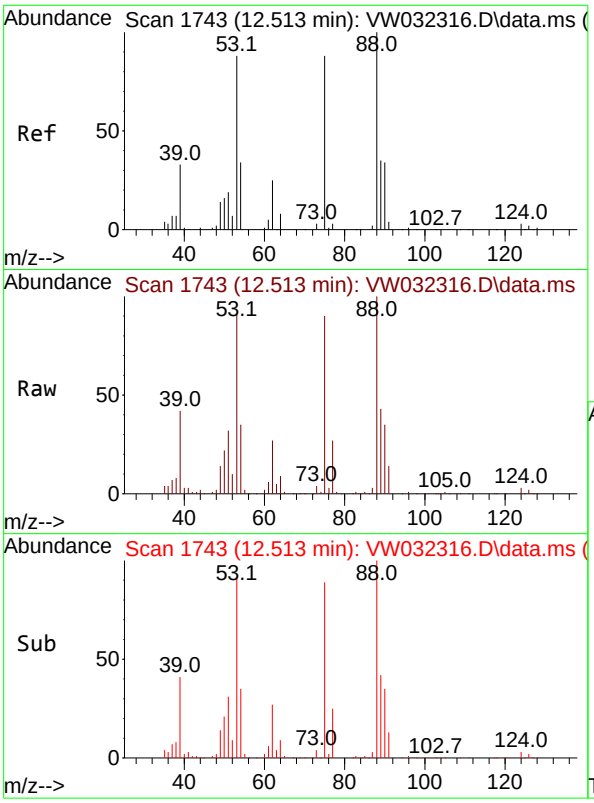


#80
1,3,5-Trimethylbenzene
Concen: 49.221 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:105 Resp: 682722

Ion	Ratio	Lower	Upper
105	100		
120	46.6	24.8	74.4





#81
trans-1,4-Dichloro-2-butene
Concen: 51.537 ug/l
RT: 12.513 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 75 Resp: 6277

Ion	Ratio	Lower	Upper
75	100		
53	103.9	91.0	136.6
89	43.6	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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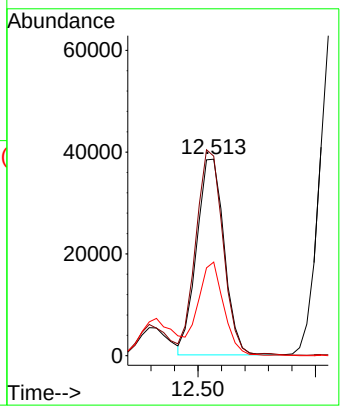
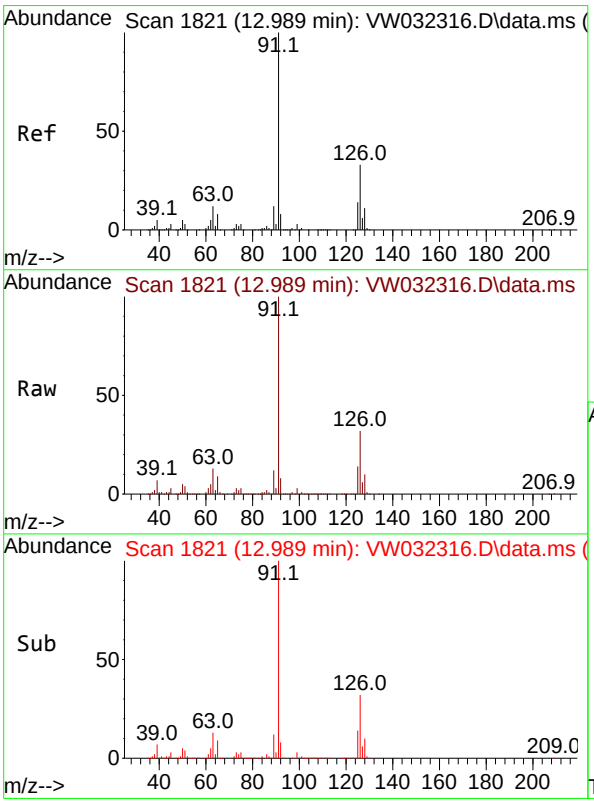
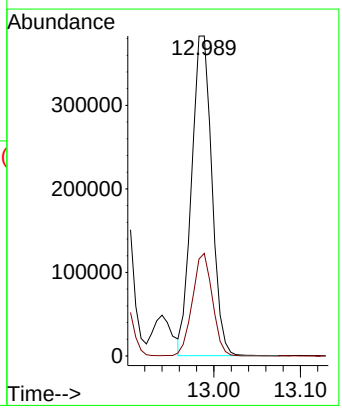


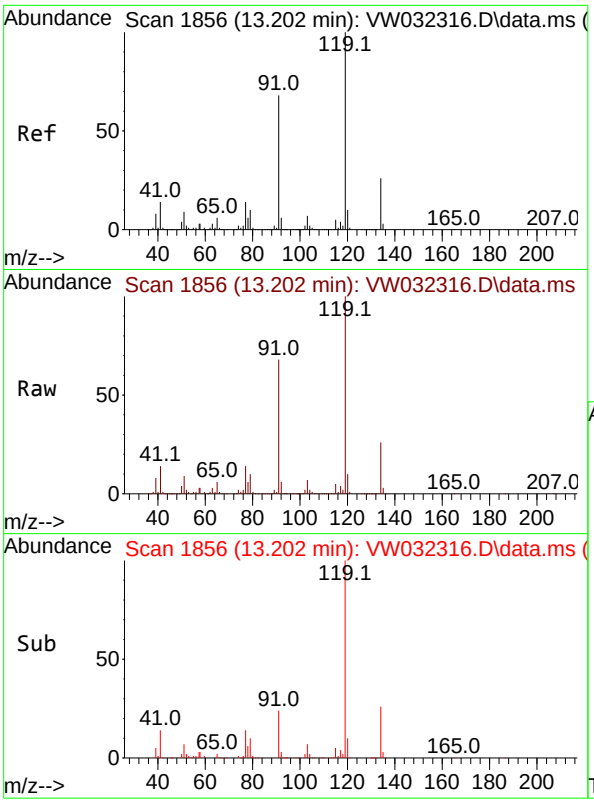


#82
4-Chlorotoluene
Concen: 47.694 ug/l
RT: 12.989 min Scan# 1821
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 91 Resp: 621247

Ion	Ratio	Lower	Upper
91	100		
126	31.8	16.1	48.2

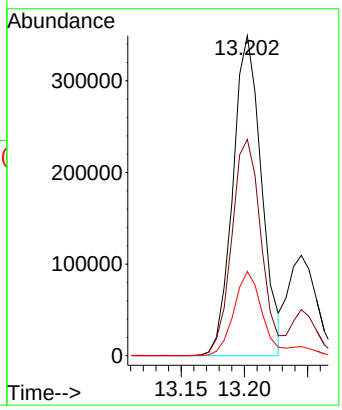




#83
tert-Butylbenzene
Concen: 48.551 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:119 Resp: 55255

Ion	Ratio	Lower	Upper
119	100		
91	68.6	33.8	101.3
134	25.8	12.5	37.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
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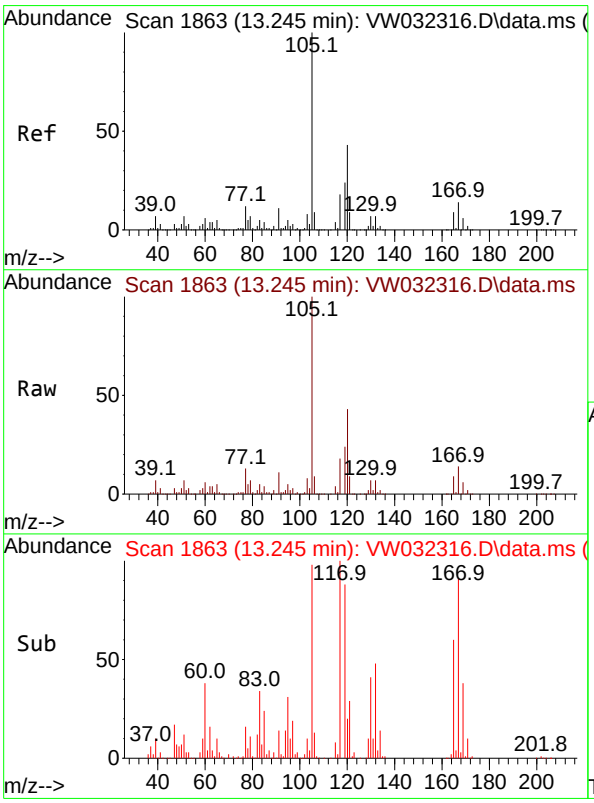
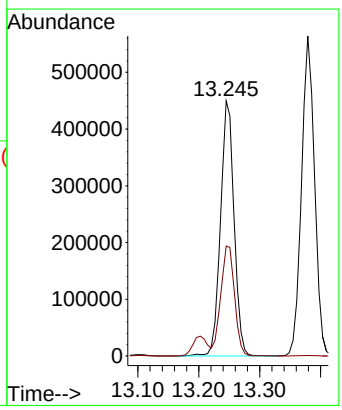
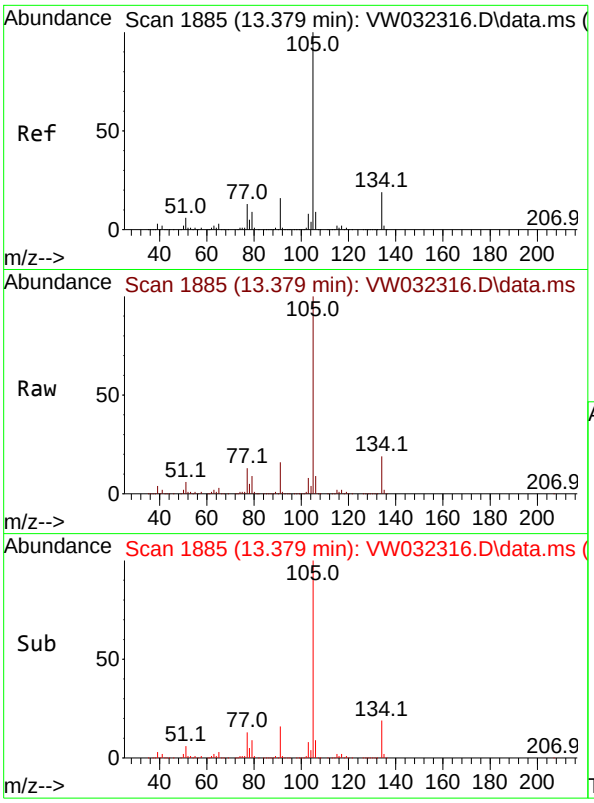


#84
1,2,4-Trimethylbenzene
Concen: 49.283 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:105 Resp: 695101

Ion	Ratio	Lower	Upper
105	100		
120	43.9	22.1	66.3

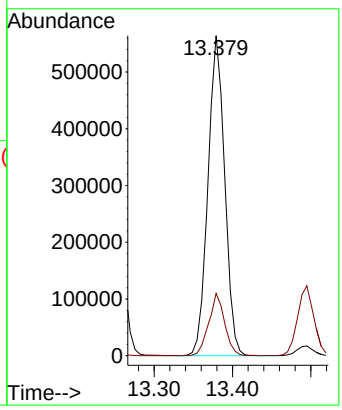




#85
sec-Butylbenzene
Concen: 48.102 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:105 Resp: 83659

Ion	Ratio	Lower	Upper
105	100		
134	18.5	10.1	30.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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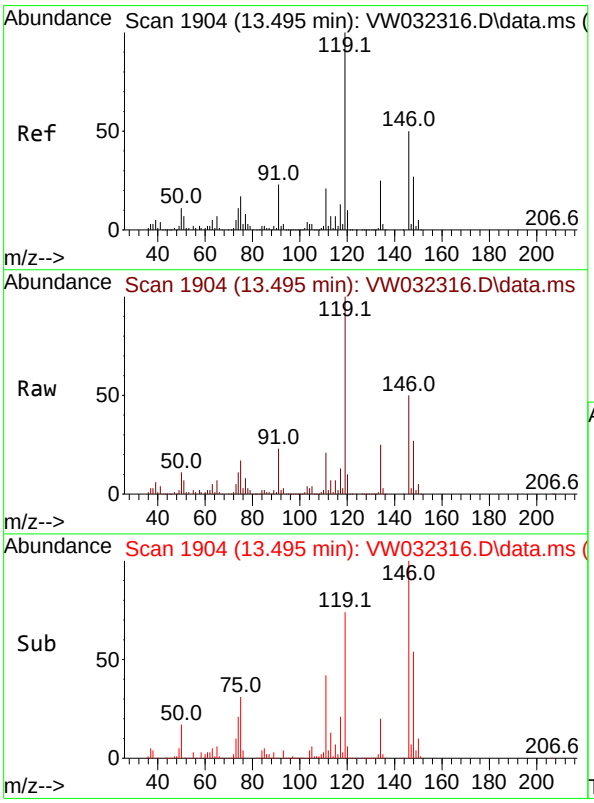
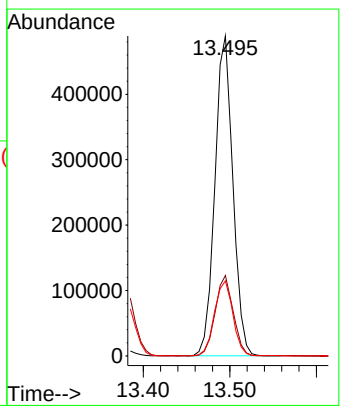
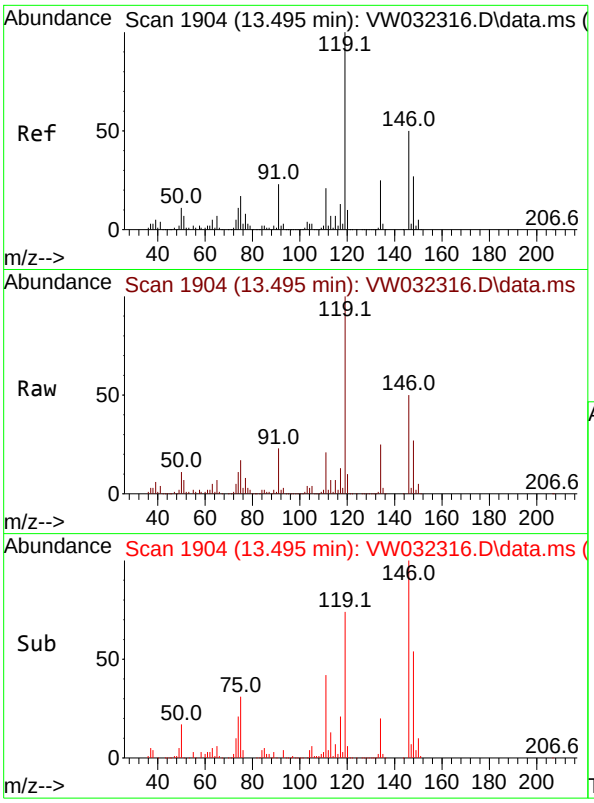


#86
p-Isopropyltoluene
Concen: 48.747 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:119 Resp: 703465

Ion	Ratio	Lower	Upper
119	100		
134	25.3	12.6	37.6
91	24.1	12.4	37.0

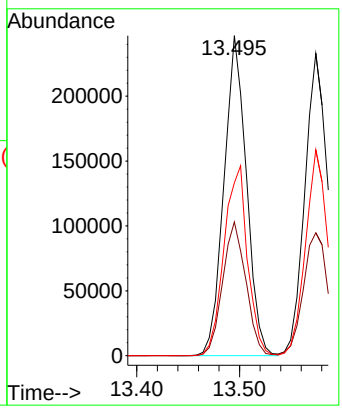




#87
1,3-Dichlorobenzene
Concen: 47.901 ug/l
RT: 13.495 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:146 Resp: 37506

Ion	Ratio	Lower	Upper
146	100		
111	43.1	20.6	61.9
148	61.9	30.6	92.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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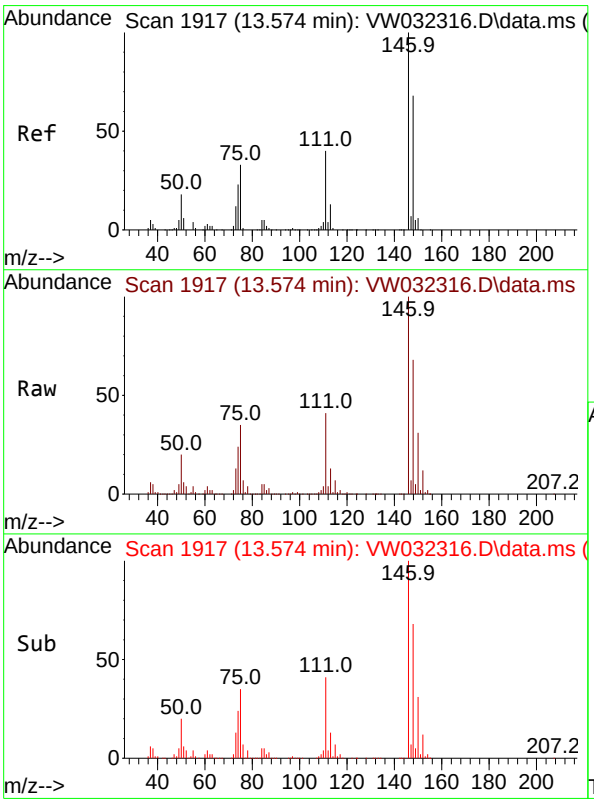
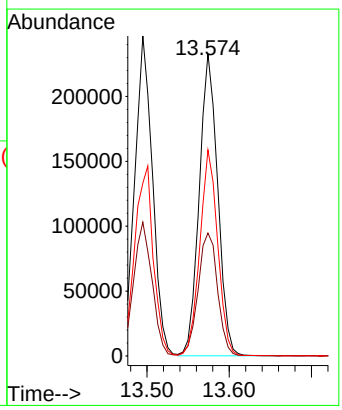
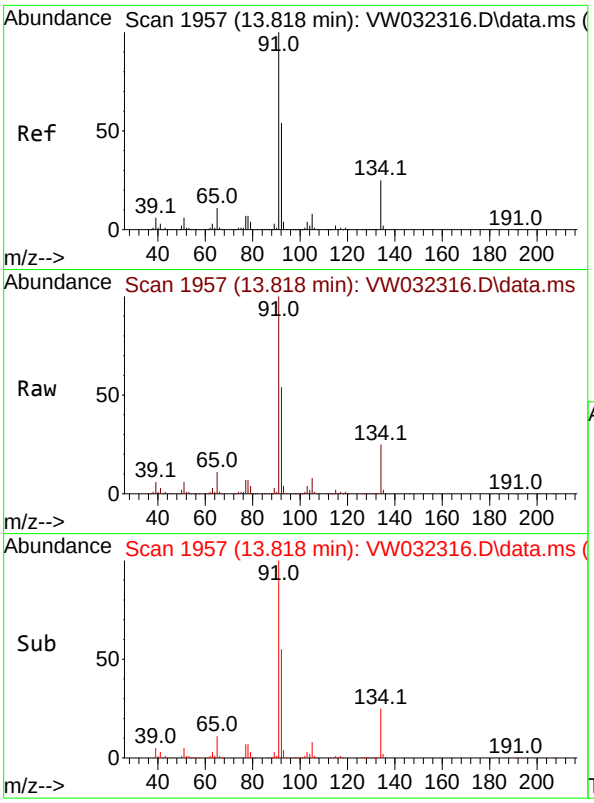


#88
1,4-Dichlorobenzene
Concen: 46.354 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:146 Resp: 362915

Ion	Ratio	Lower	Upper
146	100		
111	43.3	21.3	63.7
148	66.1	33.4	100.1

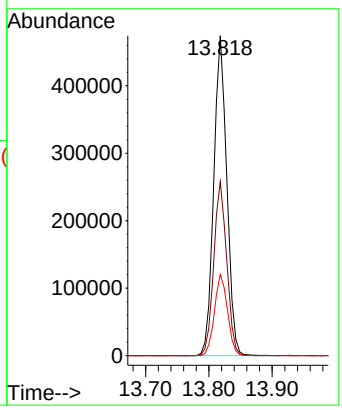




#89
n-Butylbenzene
Concen: 48.100 ug/l
RT: 13.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 91 Resp: 67772

Ion	Ratio	Lower	Upper
91	100		
92	54.1	27.0	81.0
134	25.4	13.1	39.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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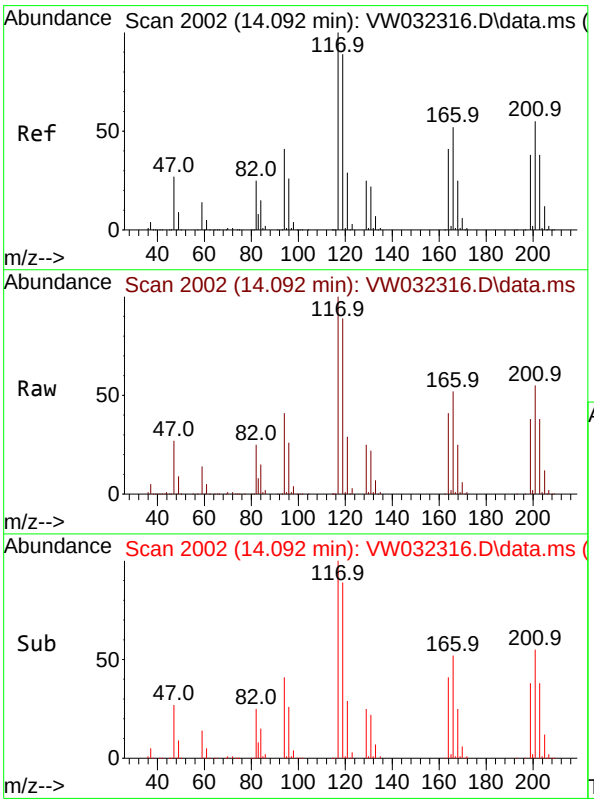
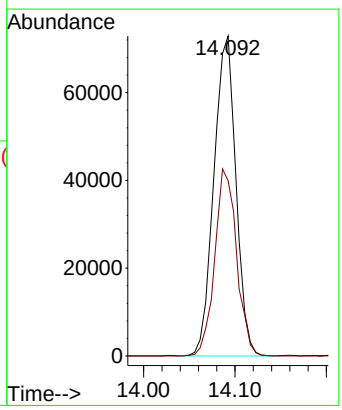
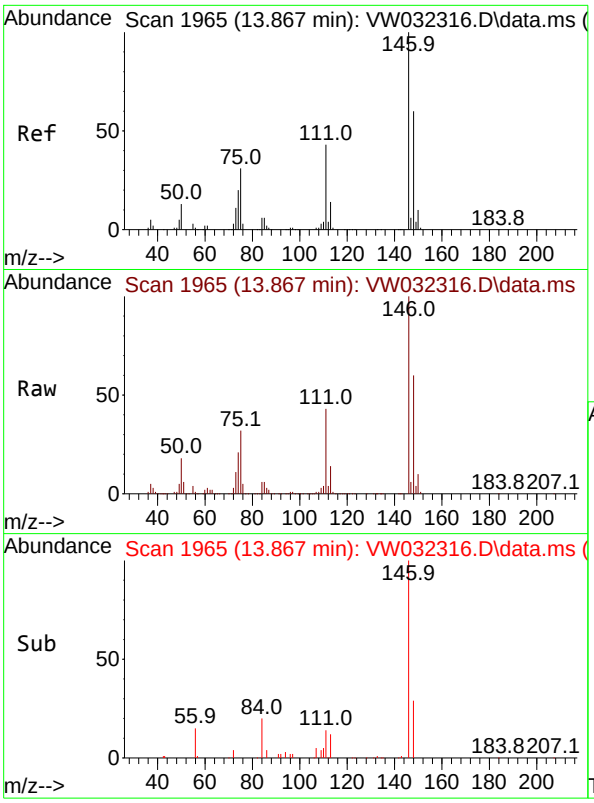


#90
Hexachloroethane
Concen: 47.269 ug/l
RT: 14.092 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:117 Resp: 122267

Ion	Ratio	Lower	Upper
117	100		
201	57.9	32.8	98.4

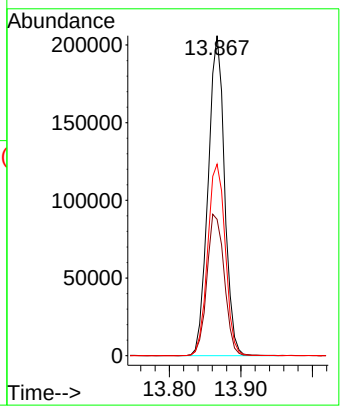




#91
1,2-Dichlorobenzene
Concen: 46.437 ug/l
RT: 13.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:146 Resp: 32868

Ion	Ratio	Lower	Upper
146	100		
111	46.8	23.4	70.0
148	64.0	34.1	102.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

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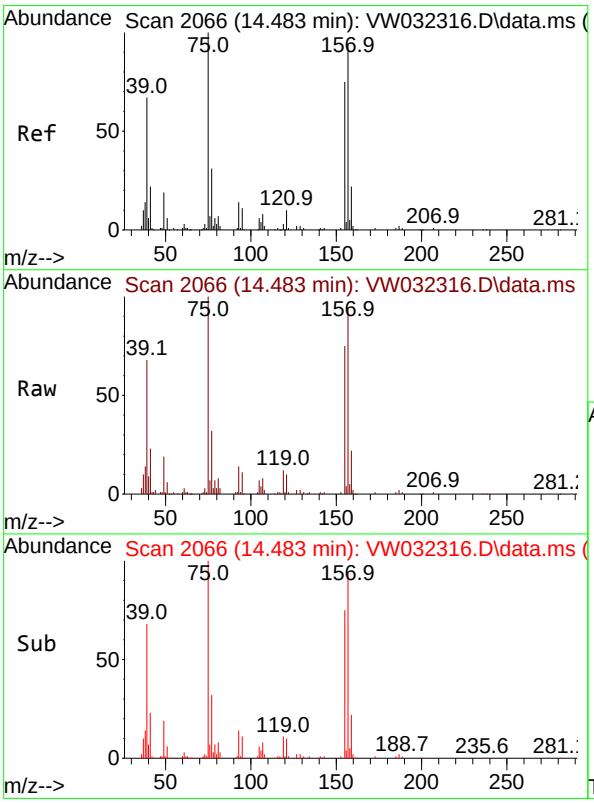
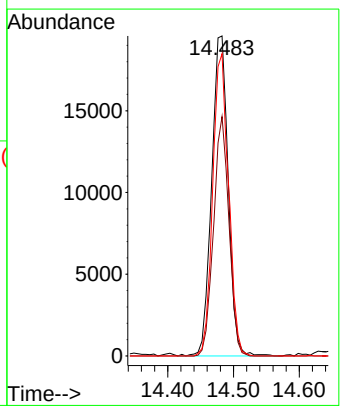
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

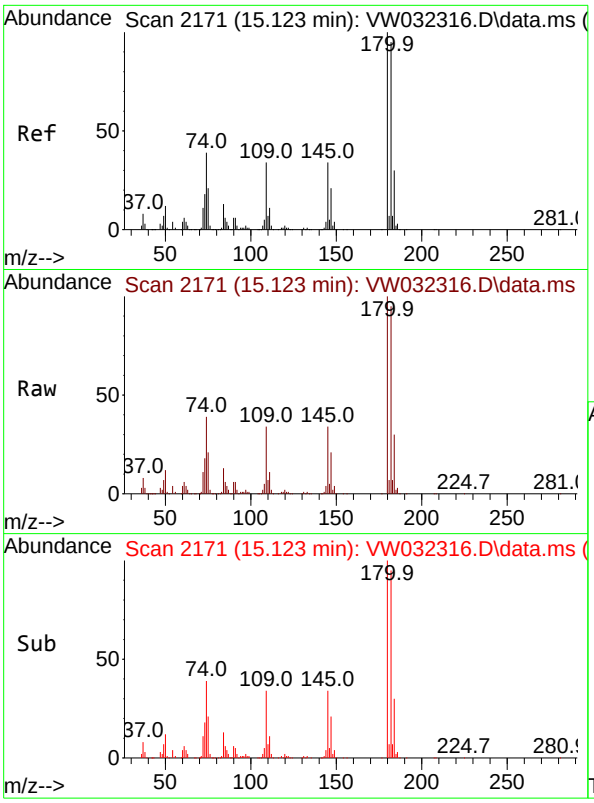


#92
1,2-Dibromo-3-Chloropropane
Concen: 49.219 ug/l
RT: 14.483 min Scan# 2066
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion: 75 Resp: 34323

Ion	Ratio	Lower	Upper
75	100		
155	69.4	40.8	122.5
157	90.3	51.8	155.4

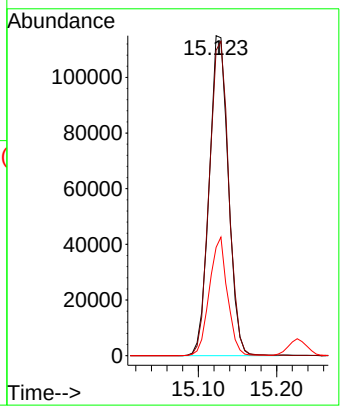




#93
1,2,4-Trichlorobenzene
Concen: 46.003 ug/l
RT: 15.123 min Scan# 21
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:180 Resp: 19525

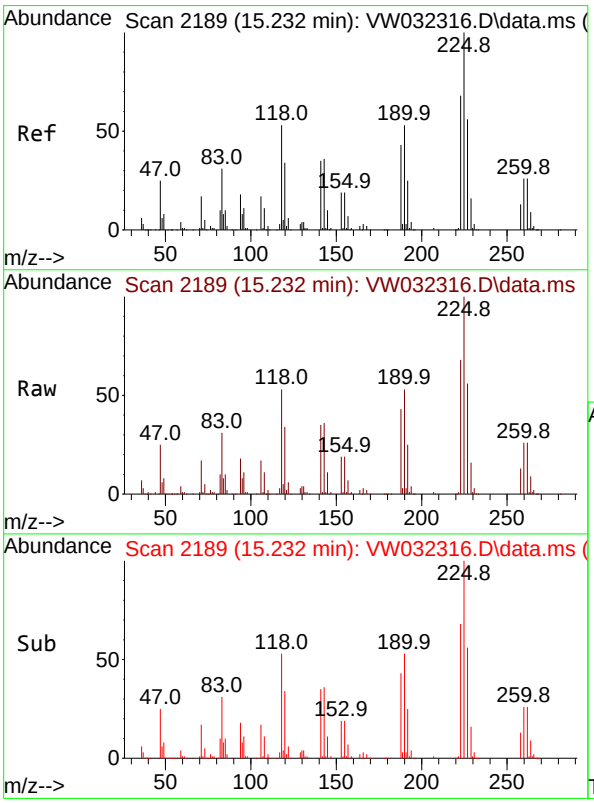
Ion	Ratio	Lower	Upper
180	100		
182	99.3	47.4	142.2
145	34.9	16.4	49.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

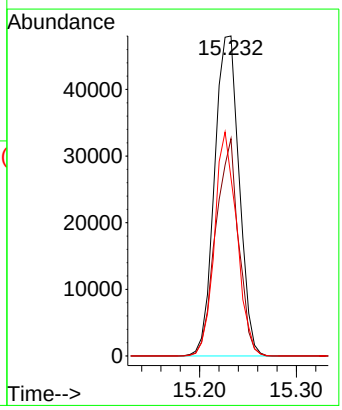
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

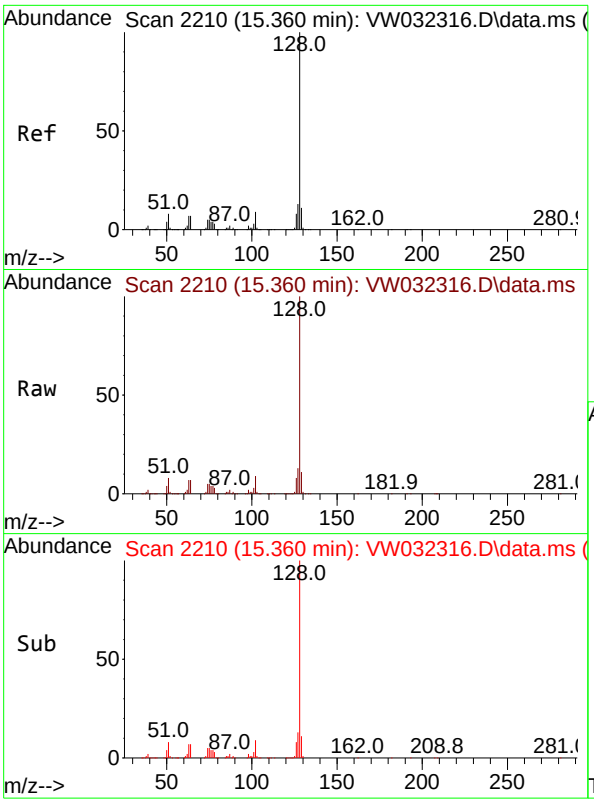


#94
Hexachlorobutadiene
Concen: 43.703 ug/l
RT: 15.232 min Scan# 2189
Delta R.T. 0.006 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:225 Resp: 84805

Ion	Ratio	Lower	Upper
225	100		
223	63.2	29.8	89.3
227	63.4	30.5	91.5

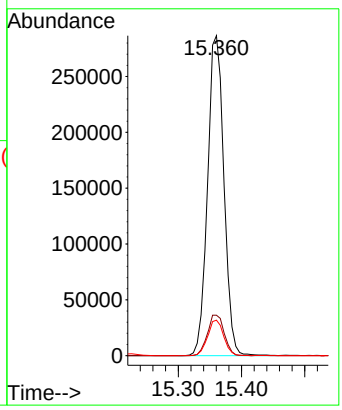




#95
Naphthalene
Concen: 50.483 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:128 Resp: 51455

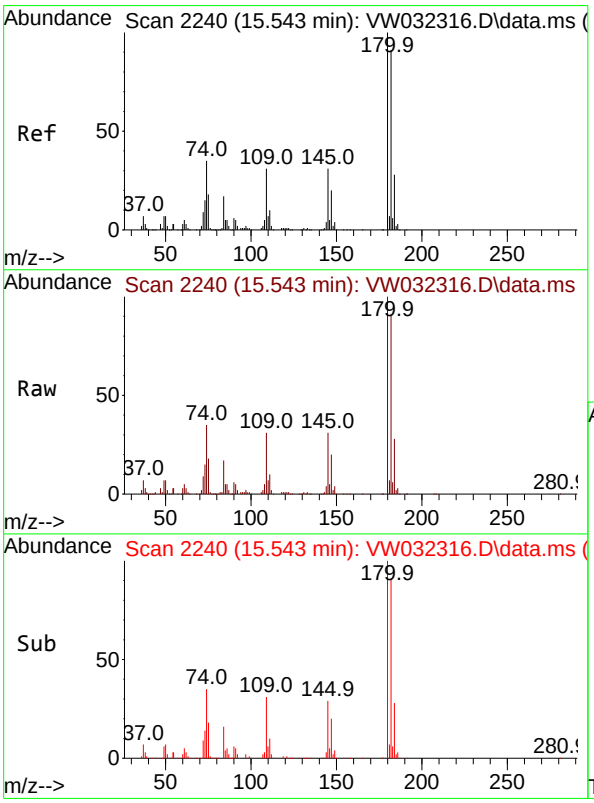
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.6	16.0
129	11.0	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

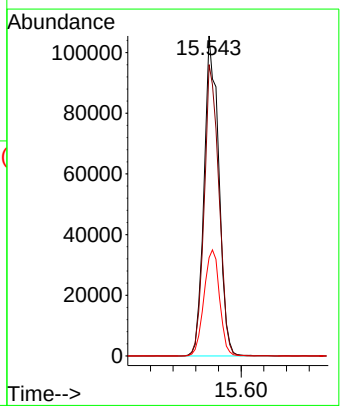
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025



#96
1,2,3-Trichlorobenzene
Concen: 47.458 ug/l
RT: 15.543 min Scan# 2240
Delta R.T. -0.000 min
Lab File: VW032316.D
Acq: 01 Oct 2025 14:37

Tgt Ion:180 Resp: 189852

Ion	Ratio	Lower	Upper
180	100		
182	91.3	47.7	143.1
145	35.1	17.2	51.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032317.D
Acq On : 01 Oct 2025 14:59
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:16:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	292547	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	528901	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	475984	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	231176	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	417484	97.841	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 195.680%#			
35) Dibromofluoromethane	7.898	113	350567	102.349	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 204.700%#			
50) Toluene-d8	10.331	98	1301655	102.965	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 205.920%#			
62) 4-Bromofluorobenzene	12.617	95	485396	101.586	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 203.180%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	165937	90.391	ug/l	98
3) Chloromethane	2.259	50	263109	92.885	ug/l	100
4) Vinyl Chloride	2.405	62	311778	92.194	ug/l	100
5) Bromomethane	2.820	94	228770	92.054	ug/l	94
6) Chloroethane	2.966	64	213270	95.521	ug/l	100
7) Trichlorofluoromethane	3.308	101	246809	97.475	ug/l	97
8) Diethyl Ether	3.722	74	210643	96.005	ug/l	88
9) 1,1,2-Trichlorotrifluo...	4.106	101	274433	90.363	ug/l	96
10) Methyl Iodide	4.308	142	411793	95.030	ug/l	99
11) Tert butyl alcohol	5.222	59	142390	440.862	ug/l	97
12) 1,1-Dichloroethene	4.076	96	312434	94.761	ug/l	90
13) Acrolein	3.930	56	241522	460.759	ug/l	100
14) Allyl chloride	4.704	41	538624	96.720	ug/l	89
15) Acrylonitrile	5.405	53	561280	491.730	ug/l	98
16) Acetone	4.161	43	508582	430.455	ug/l	99
17) Carbon Disulfide	4.423	76	887546	98.660	ug/l	100
18) Methyl Acetate	4.710	43	331793	98.033	ug/l	97
19) Methyl tert-butyl Ether	5.466	73	639931	98.544	ug/l	97
20) Methylene Chloride	4.960	84	368359	99.471	ug/l	96
21) trans-1,2-Dichloroethene	5.460	96	358450	98.197	ug/l	97
22) Diisopropyl ether	6.344	45	1141459	98.558	ug/l	91
23) Vinyl Acetate	6.283	43	3946823	510.205	ug/l	99
24) 1,1-Dichloroethane	6.246	63	683736	97.173	ug/l	98
25) 2-Butanone	7.197	43	767105	476.718	ug/l	99
26) 2,2-Dichloropropane	7.191	77	345332	95.948	ug/l	100
27) cis-1,2-Dichloroethene	7.191	96	433121	98.767	ug/l	95
28) Bromochloromethane	7.533	49	323538	97.732	ug/l	87
29) Tetrahydrofuran	7.551	42	499036	493.149	ug/l	94
30) Chloroform	7.691	83	697012	97.676	ug/l	96
31) Cyclohexane	7.971	56	544824	90.699	ug/l	94
32) 1,1,1-Trichloroethane	7.886	97	488662	96.637	ug/l	100
36) 1,1-Dichloropropene	8.093	75	486510	100.644	ug/l	98
37) Ethyl Acetate	7.277	43	322862	100.344	ug/l	99
38) Carbon Tetrachloride	8.081	117	458732	100.845	ug/l	90
39) Methylcyclohexane	9.343	83	601153	103.099	ug/l	98
40) Benzene	8.337	78	1506339	99.416	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032317.D
Acq On : 01 Oct 2025 14:59
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:16:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	181036	104.404	ug/l		92
42) 1,2-Dichloroethane	8.410	62	487667	98.363	ug/l		99
43) Isopropyl Acetate	8.435	43	597878	104.746	ug/l		100
44) Trichloroethene	9.099	130	359102	101.217	ug/l		90
45) 1,2-Dichloropropane	9.380	63	375302	99.234	ug/l		99
46) Dibromomethane	9.465	93	231385	99.495	ug/l		95
47) Bromodichloromethane	9.654	83	542848	102.055	ug/l		96
48) Methyl methacrylate	9.441	41	293582	105.789	ug/l	#	91
49) 1,4-Dioxane	9.465	88	66922	2105.342	ug/l		98
51) 4-Methyl-2-Pentanone	10.215	43	1663070	503.045	ug/l		100
52) Toluene	10.392	92	960973	101.843	ug/l		99
53) t-1,3-Dichloropropene	10.611	75	555072	107.561	ug/l		99
54) cis-1,3-Dichloropropene	10.081	75	625271	105.188	ug/l		92
55) 1,1,2-Trichloroethane	10.788	97	309412	99.546	ug/l		98
56) Ethyl methacrylate	10.648	69	477191	109.686	ug/l		95
57) 1,3-Dichloropropane	10.934	76	548954	99.997	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	1282918	554.092	ug/l		96
59) 2-Hexanone	10.971	43	1177144	504.847	ug/l		99
60) Dibromochloromethane	11.129	129	375002	106.254	ug/l		99
61) 1,2-Dibromoethane	11.239	107	301749	99.562	ug/l		97
64) Tetrachloroethene	10.867	164	273519	96.034	ug/l		88
65) Chlorobenzene	11.660	112	1041724	99.469	ug/l		97
66) 1,1,1,2-Tetrachloroethane	11.733	131	334400	102.516	ug/l		98
67) Ethyl Benzene	11.733	91	1805810	103.444	ug/l		97
68) m/p-Xylenes	11.837	106	1390632	206.584	ug/l		98
69) o-Xylene	12.166	106	667671	106.061	ug/l		99
70) Styrene	12.178	104	1128688	102.692	ug/l		99
71) Bromoform	12.349	173	192066	102.725	ug/l	#	100
73) Isopropylbenzene	12.465	105	1685355	106.560	ug/l		100
74) N-amyl acetate	12.270	43	540543	107.133	ug/l		100
75) 1,1,2,2-Tetrachloroethane	12.715	83	385347	98.125	ug/l		100
76) 1,2,3-Trichloropropane	12.763	75	295124m	96.745	ug/l		
77) Bromobenzene	12.745	156	396745	104.063	ug/l		92
78) n-propylbenzene	12.800	91	2052249	103.878	ug/l		97
79) 2-Chlorotoluene	12.885	91	1213767	100.479	ug/l		97
80) 1,3,5-Trimethylbenzene	12.940	105	1439767	105.277	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.507	75	135383	112.737	ug/l		88
82) 4-Chlorotoluene	12.989	91	1299440	101.179	ug/l		99
83) tert-Butylbenzene	13.202	119	1179238	105.090	ug/l		98
84) 1,2,4-Trimethylbenzene	13.245	105	1445279	103.930	ug/l		99
85) sec-Butylbenzene	13.379	105	1756008	102.403	ug/l		99
86) p-Isopropyltoluene	13.495	119	1460991	102.680	ug/l		100
87) 1,3-Dichlorobenzene	13.495	146	766586	99.297	ug/l		98
88) 1,4-Dichlorobenzene	13.574	146	767903	99.477	ug/l		95
89) n-Butylbenzene	13.818	91	1440709	103.706	ug/l		98
90) Hexachloroethane	14.092	117	265991	104.296	ug/l		93
91) 1,2-Dichlorobenzene	13.867	146	678218	97.184	ug/l		95
92) 1,2-Dibromo-3-Chloropr...	14.483	75	67919	98.781	ug/l		89
93) 1,2,4-Trichlorobenzene	15.129	180	433724	103.645	ug/l		97
94) Hexachlorobutadiene	15.232	225	191123	99.894	ug/l		97
95) Naphthalene	15.360	128	1054202	104.900	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	399527	101.292	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032317.D
Acq On : 01 Oct 2025 14:59
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:16:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

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

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

ICAL Form

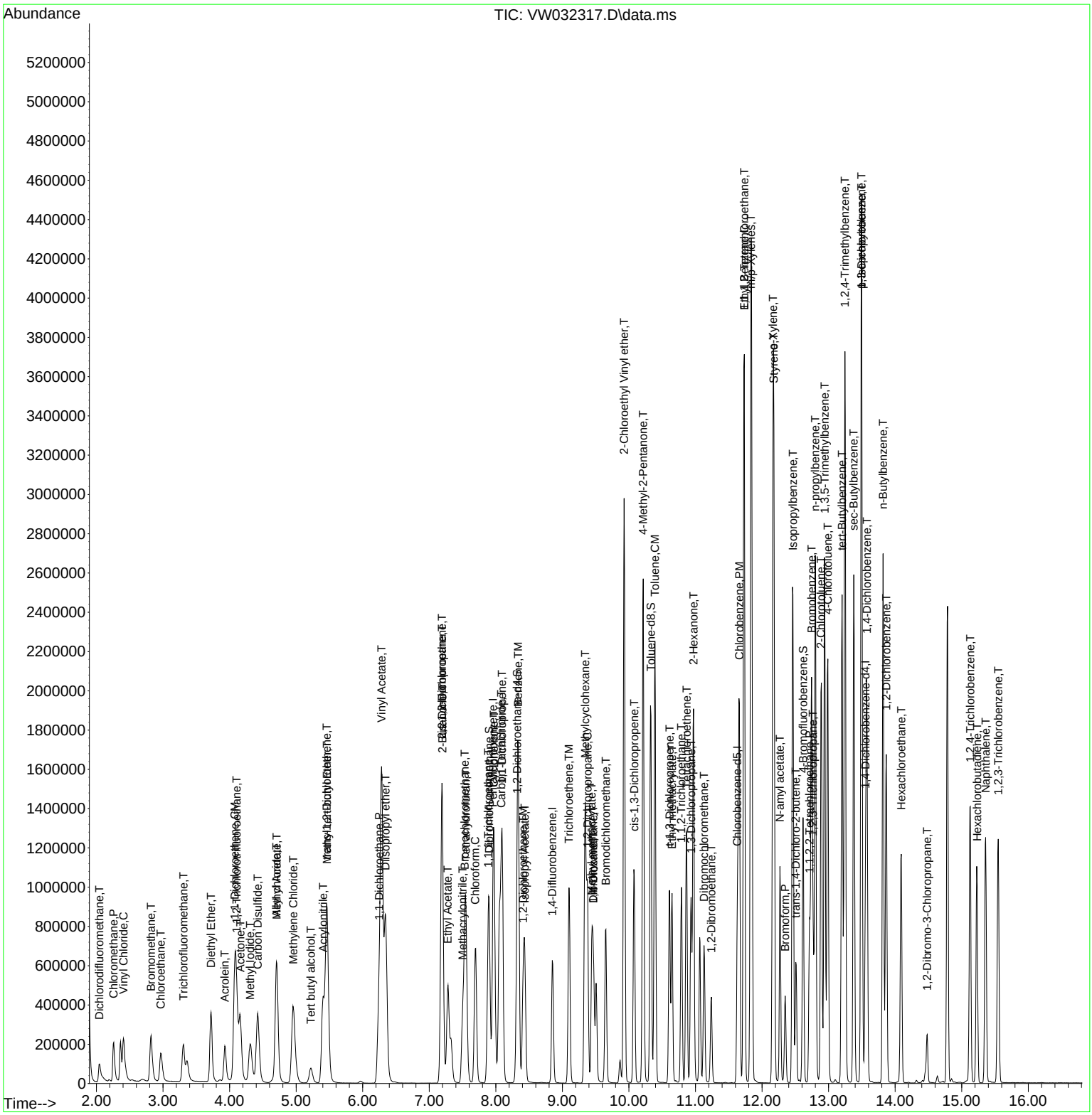
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032317.D
Acq On : 01 Oct 2025 14:59
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 7 Sample Multiplier: 1

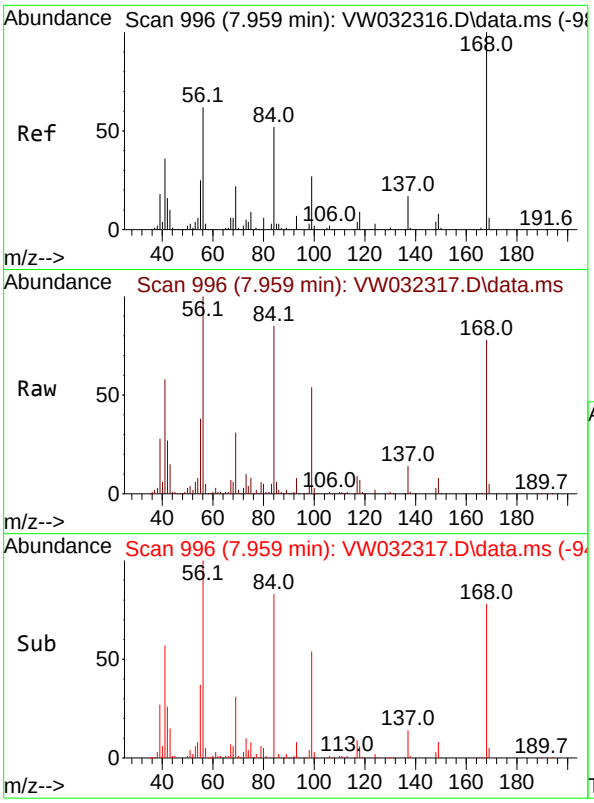
Quant Time: Oct 02 21:16:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

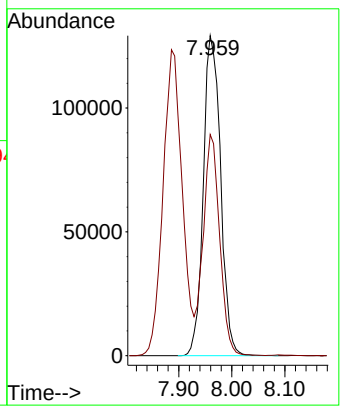




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:168 Resp: 29254

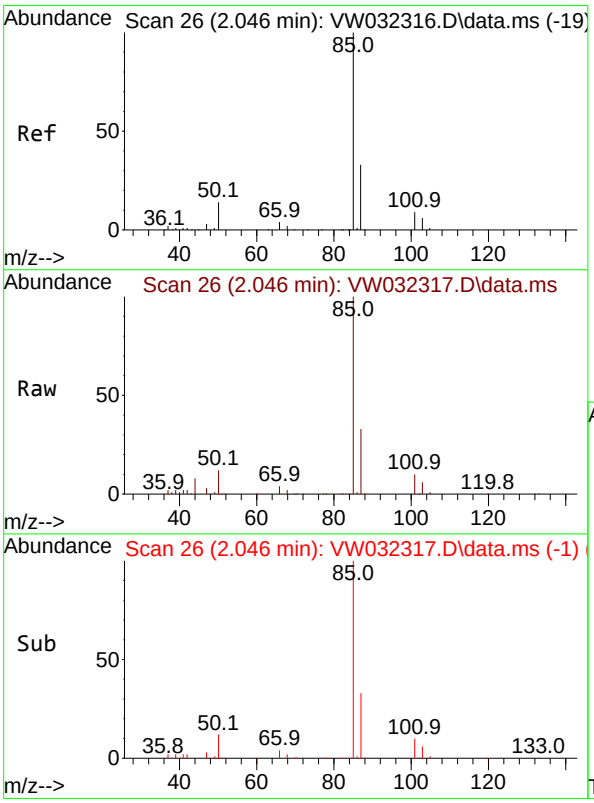
Ion	Ratio	Lower	Upper
168	100		
99	68.8	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

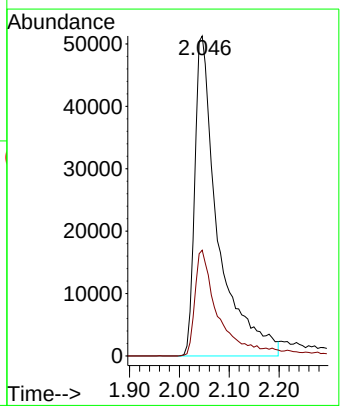
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

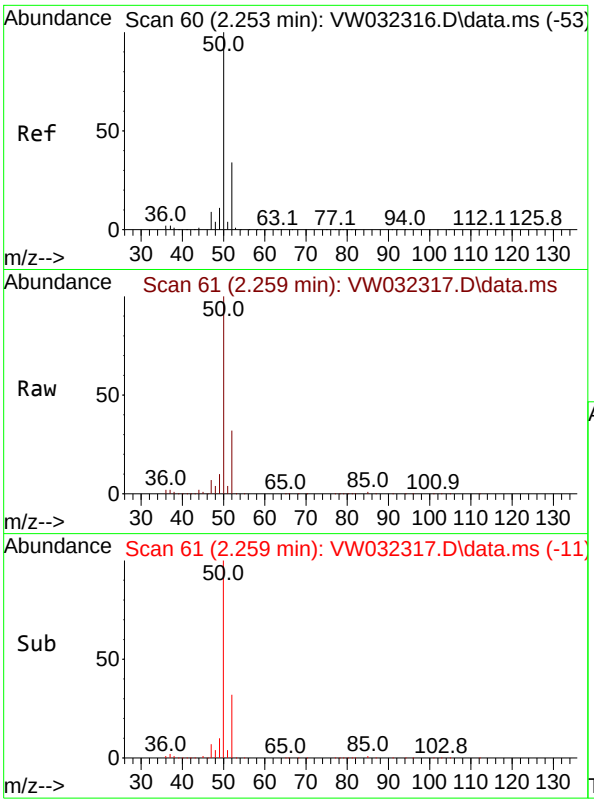


#2
Dichlorodifluoromethane
Concen: 90.391 ug/l
RT: 2.046 min Scan# 26
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 85 Resp: 165937

Ion	Ratio	Lower	Upper
85	100		
87	33.0	17.2	51.6

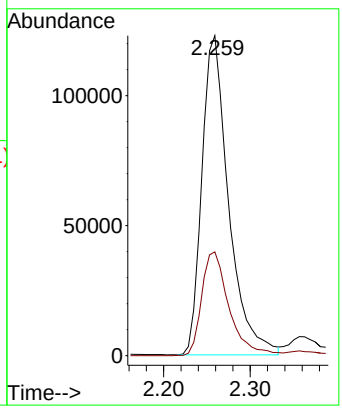




#3
Chloromethane
Concen: 92.885 ug/l
RT: 2.259 min Scan# 6
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 50 Resp: 26310

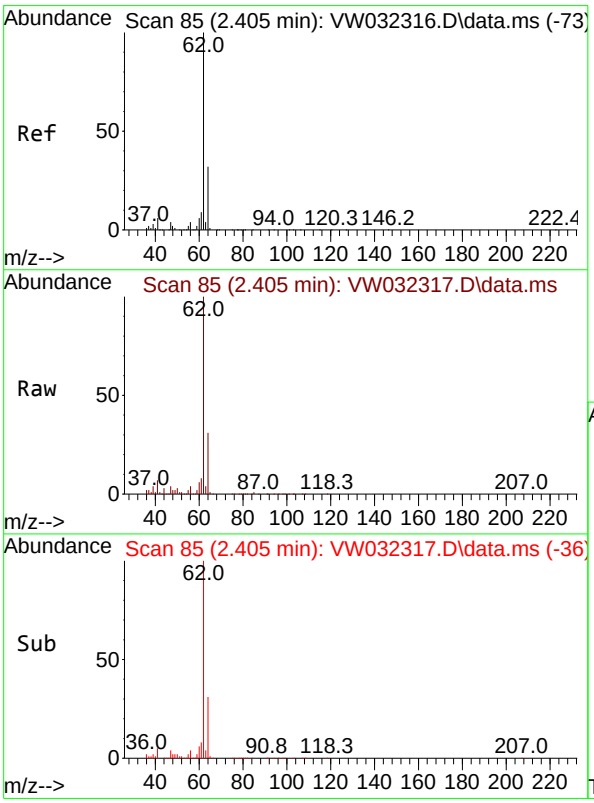
Ion	Ratio	Lower	Upper
50	100		
52	32.4	26.1	39.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

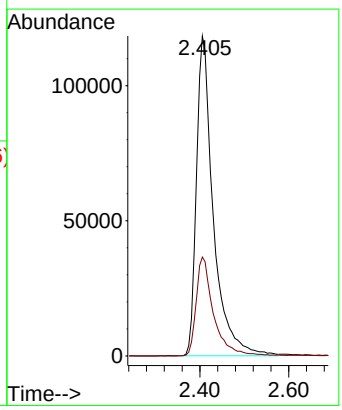
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

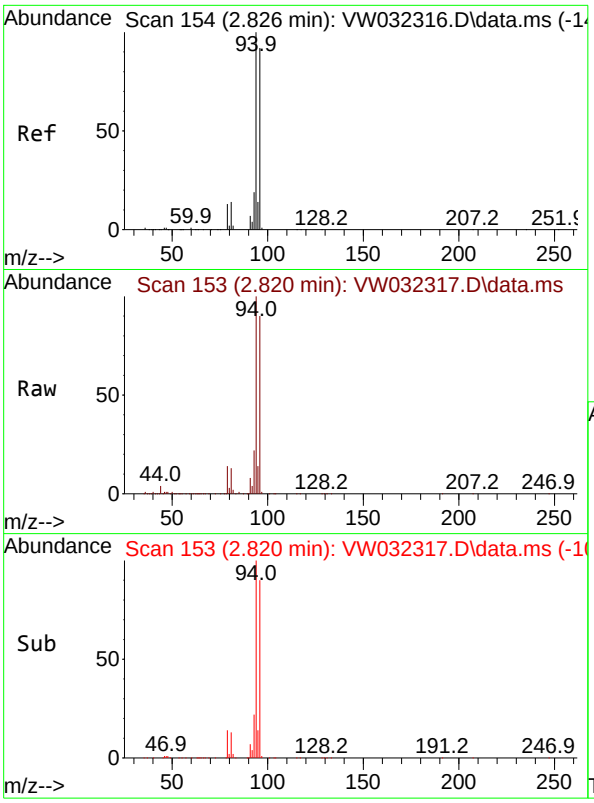


#4
Vinyl Chloride
Concen: 92.194 ug/l
RT: 2.405 min Scan# 85
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 62 Resp: 311778

Ion	Ratio	Lower	Upper
62	100		
64	30.9	24.8	37.2





#5
Bromomethane
Concen: 92.054 ug/l
RT: 2.820 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 94 Resp: 22877

Ion	Ratio	Lower	Upper
94	100		
96	89.6	76.6	115.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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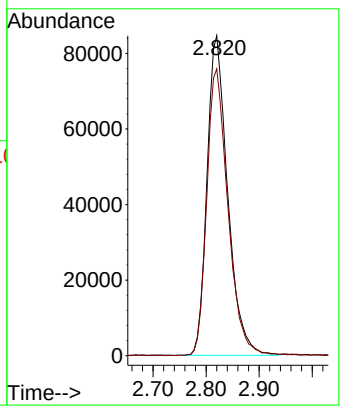
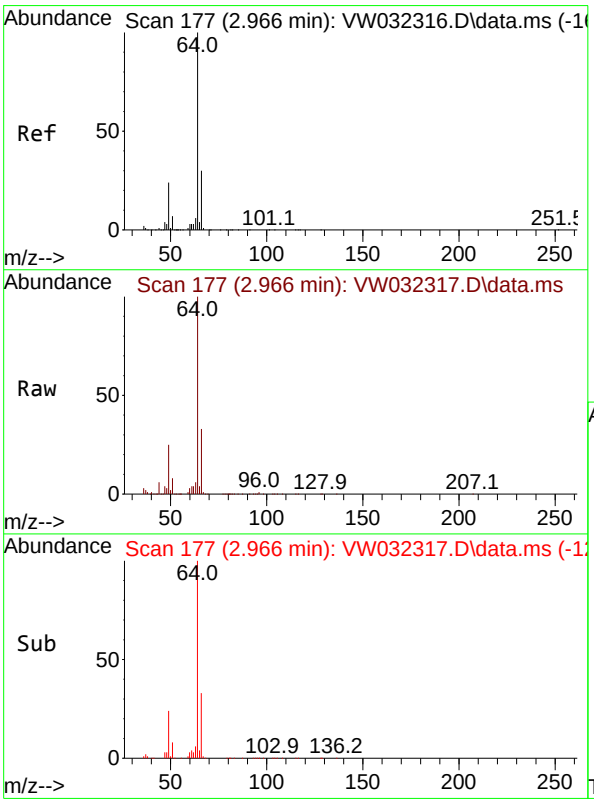
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

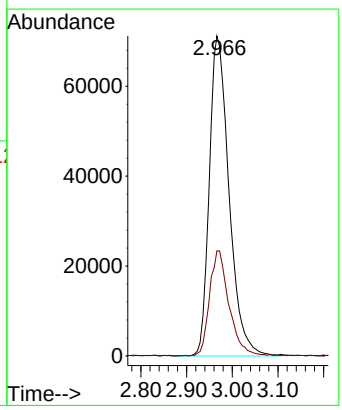


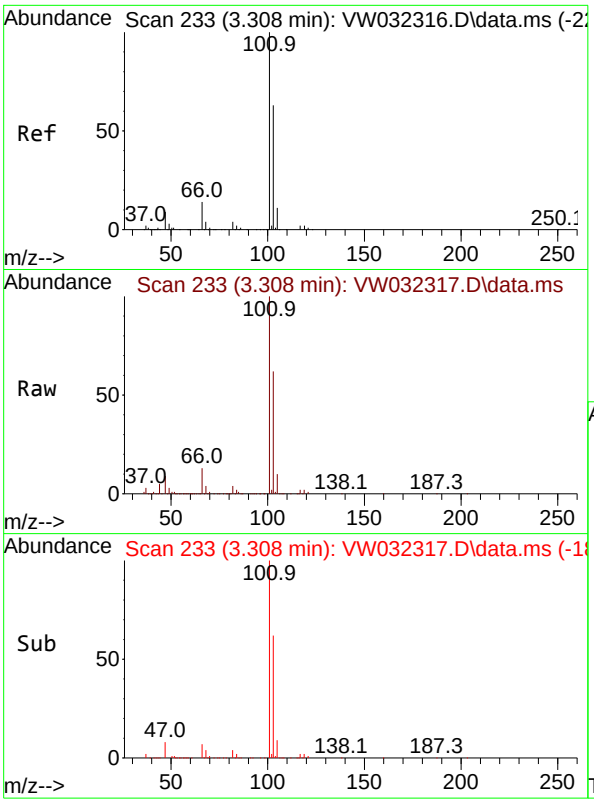


#6
Chloroethane
Concen: 95.521 ug/l
RT: 2.966 min Scan# 177
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 64 Resp: 213270

Ion	Ratio	Lower	Upper
64	100		
66	32.8	26.2	39.4

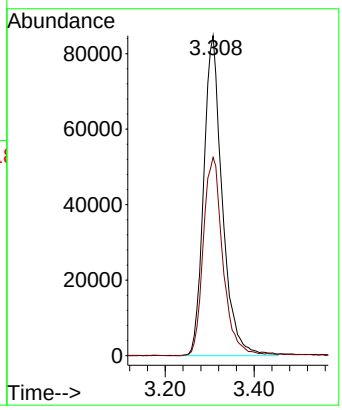




#7
Trichlorofluoromethane
Concen: 97.475 ug/l
RT: 3.308 min Scan# 2
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:101 Resp: 24680

Ion	Ratio	Lower	Upper
101	100		
103	61.9	47.8	71.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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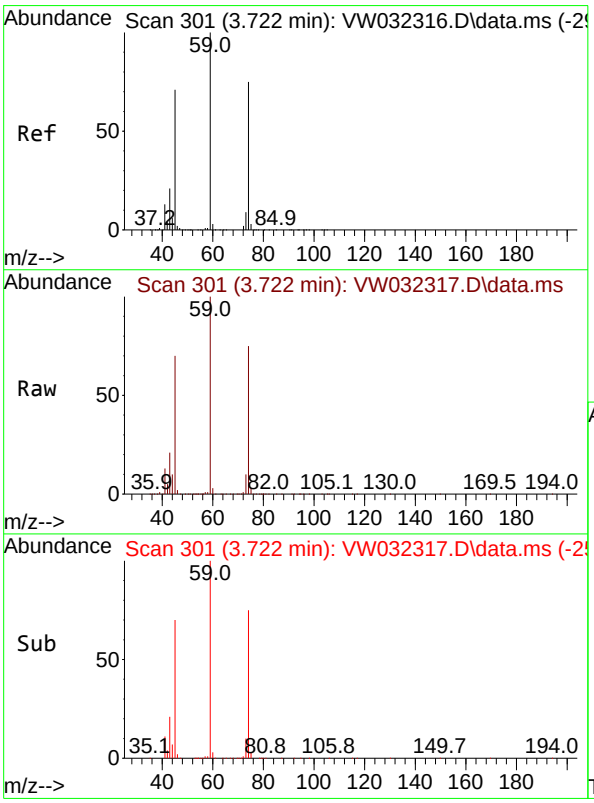
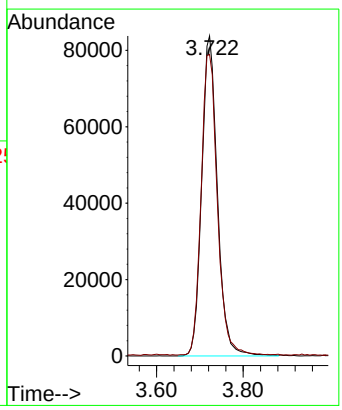
Supervised By :Semsettin Yesilyurt 10/03/2025

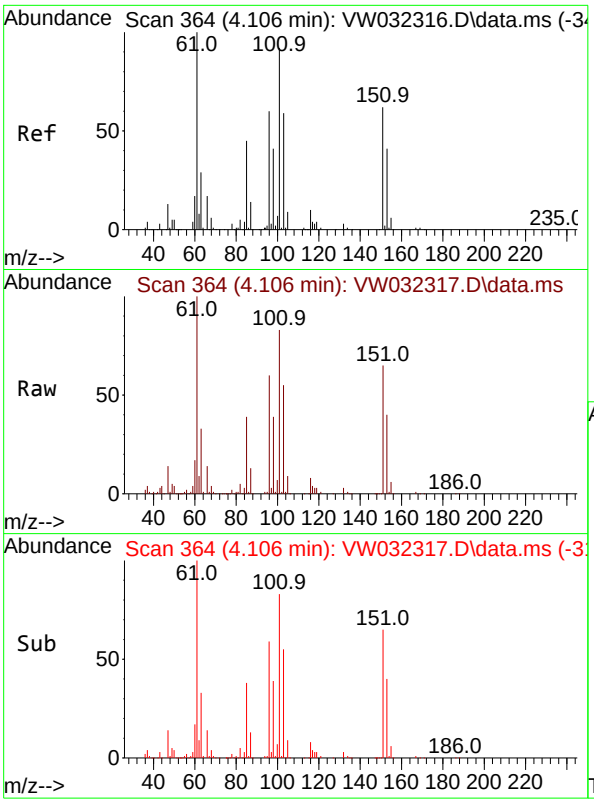


#8
Diethyl Ether
Concen: 96.005 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 74 Resp: 210643

Ion	Ratio	Lower	Upper
74	100		
45	97.2	43.1	129.4

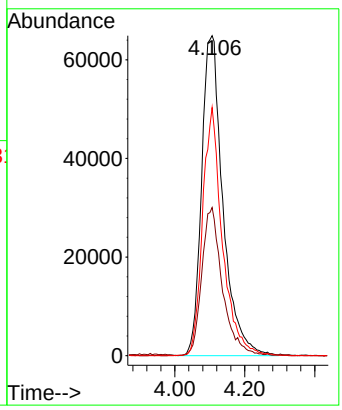




#9
1,1,2-Trichlorotrifluoroethane
Concen: 90.363 ug/l
RT: 4.106 min Scan# 3
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:101 Resp: 27443

Ion	Ratio	Lower	Upper
101	100		
85	44.8	37.1	55.7
151	72.0	61.5	92.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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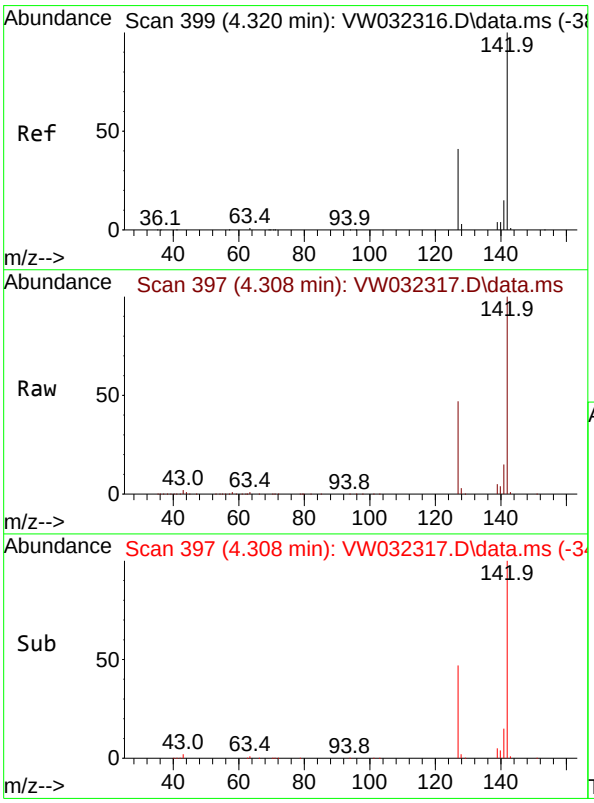
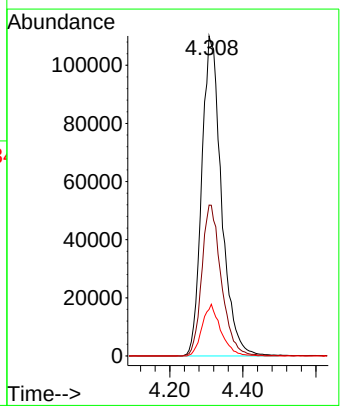
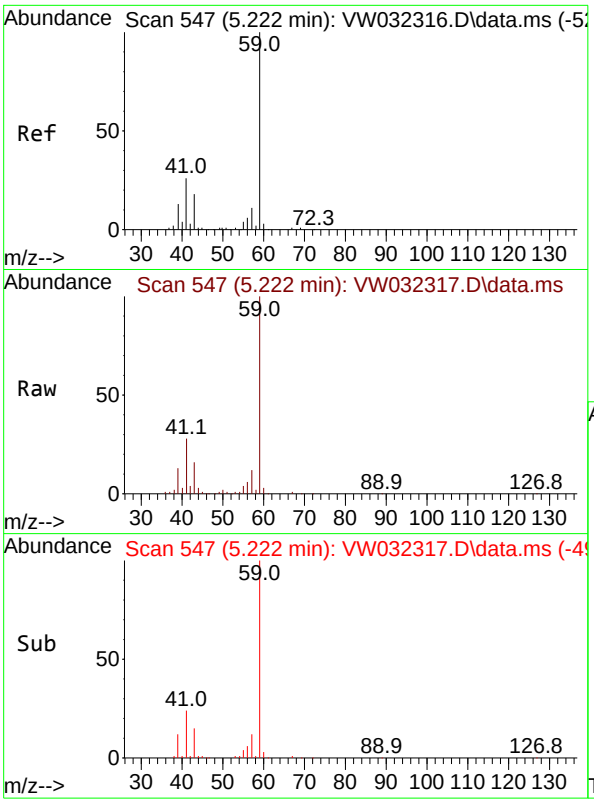


#10
Methyl Iodide
Concen: 95.030 ug/l
RT: 4.308 min Scan# 397
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:142 Resp: 411793

Ion	Ratio	Lower	Upper
142	100		
127	46.9	38.2	57.2
141	15.3	12.2	18.2





#11
Tert butyl alcohol
Concen: 440.862 ug/l
RT: 5.222 min Scan# 54
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 59 Resp: 14239

Ion	Ratio	Lower	Upper
59	100		
57	11.0	9.8	14.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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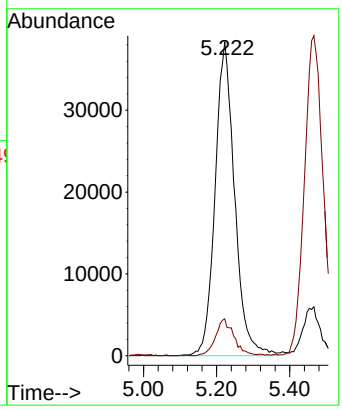
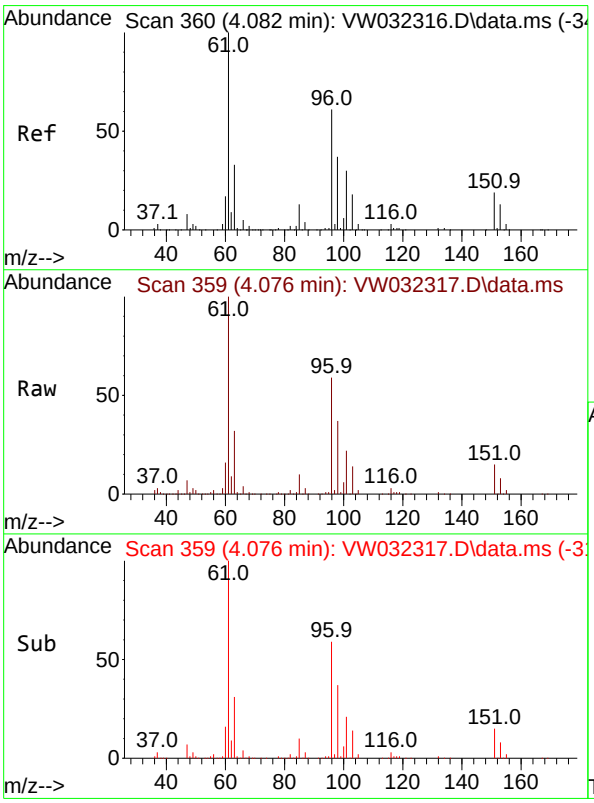
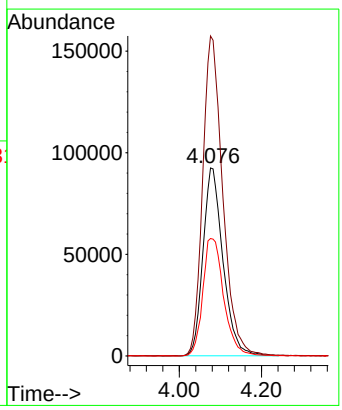


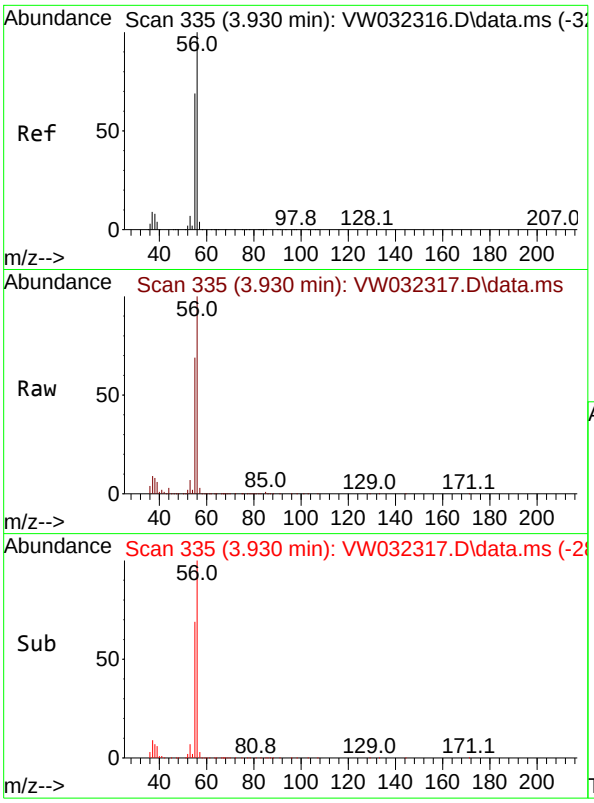


#12
1,1-Dichloroethene
Concen: 94.761 ug/l
RT: 4.076 min Scan# 359
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 96 Resp: 312434

Ion	Ratio	Lower	Upper
96	100		
61	170.2	123.0	184.4
98	62.5	48.5	72.7

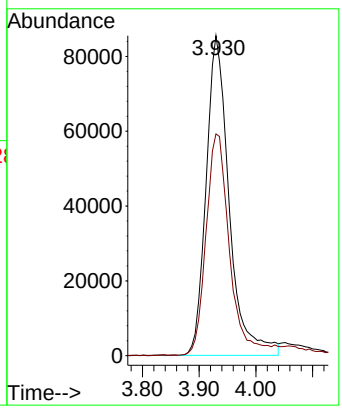




#13
Acrolein
Concen: 460.759 ug/l
RT: 3.930 min Scan# 3
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 56 Resp: 24152

Ion	Ratio	Lower	Upper
56	100		
55	70.4	56.4	84.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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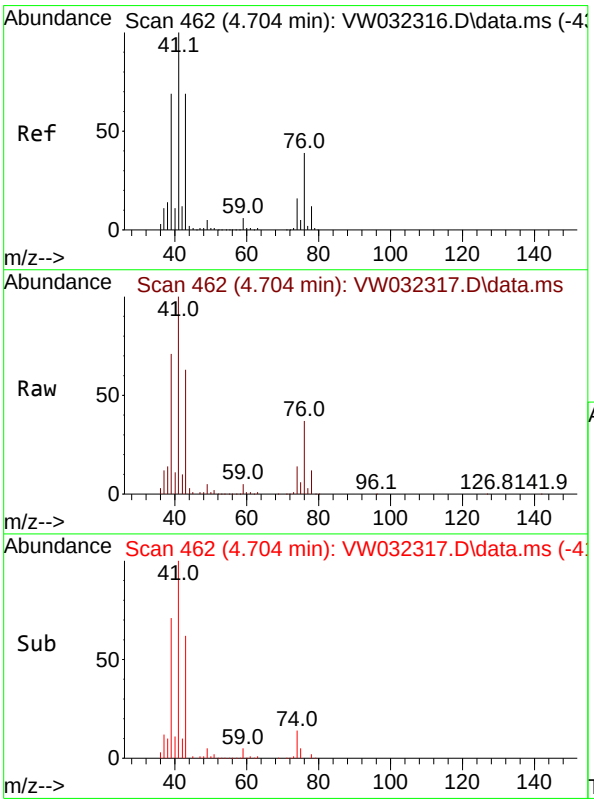
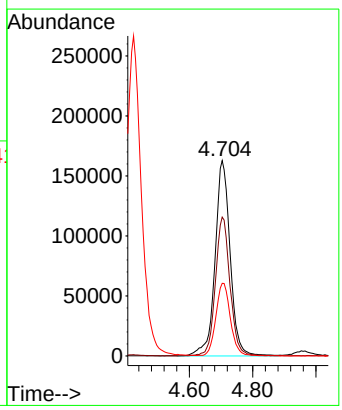
Supervised By :Semsettin Yesilyurt 10/03/2025

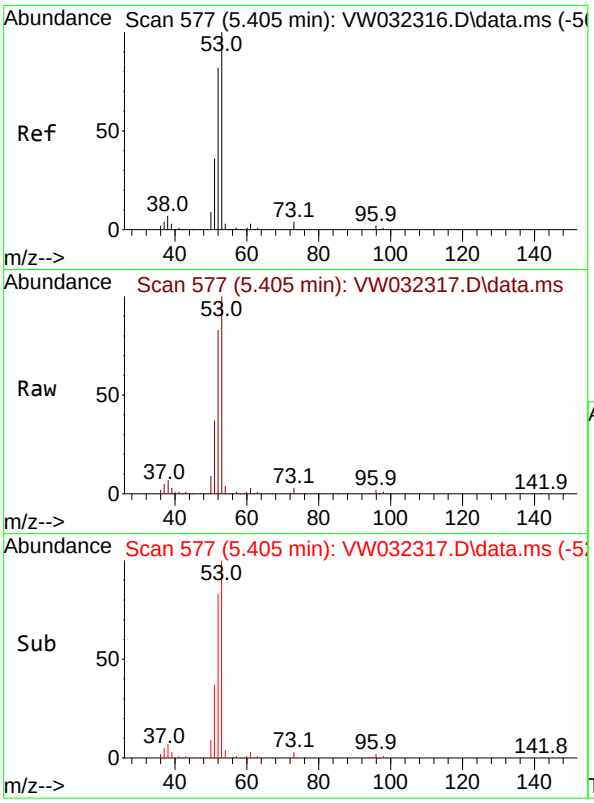


#14
Allyl chloride
Concen: 96.720 ug/l
RT: 4.704 min Scan# 462
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 41 Resp: 538624

Ion	Ratio	Lower	Upper
41	100		
39	68.5	64.1	96.1
76	35.5	31.4	47.2

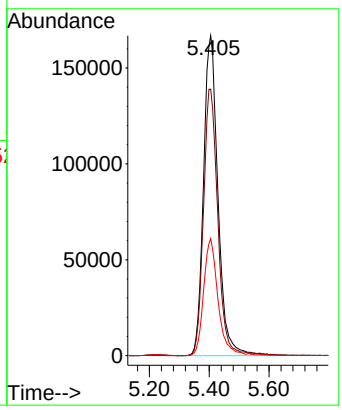




#15
Acrylonitrile
Concen: 491.730 ug/l
RT: 5.405 min Scan# 5
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 53 Resp: 56128

Ion	Ratio	Lower	Upper
53	100		
52	82.7	67.4	101.2
51	36.3	30.3	45.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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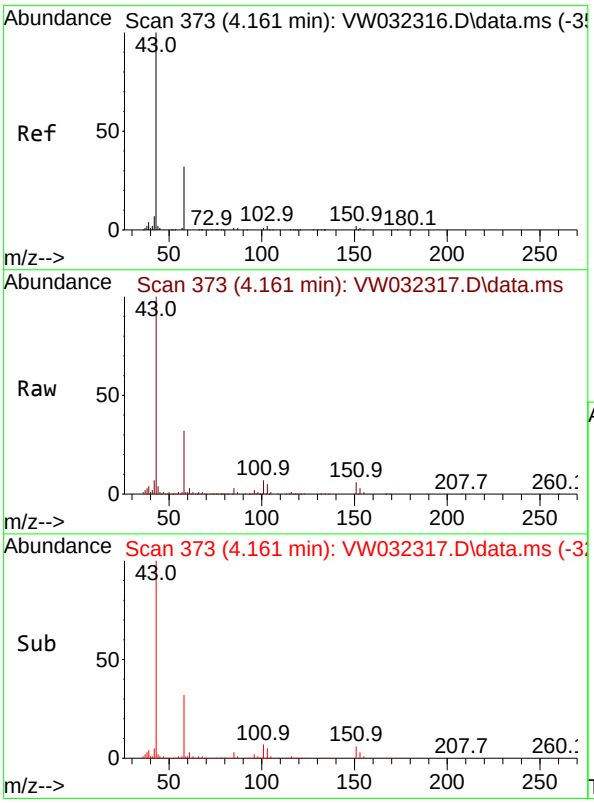
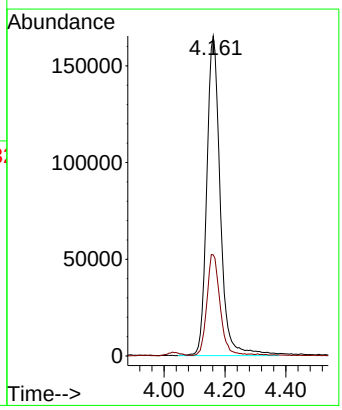
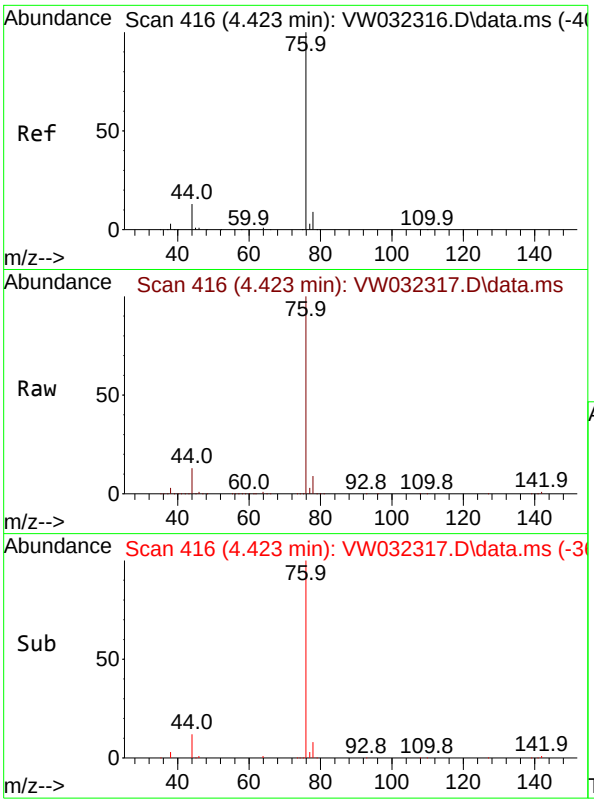


#16
Acetone
Concen: 430.455 ug/l
RT: 4.161 min Scan# 373
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 508582

Ion	Ratio	Lower	Upper
43	100		
58	31.3	25.3	37.9





#17
Carbon Disulfide
Concen: 98.660 ug/l
RT: 4.423 min Scan# 4
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 76 Resp: 88754

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.0	10.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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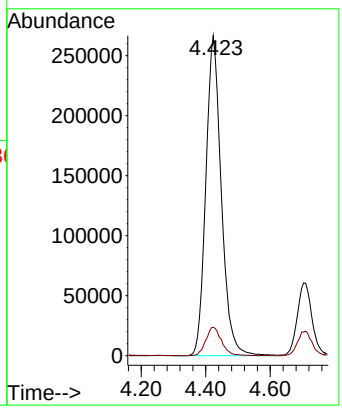
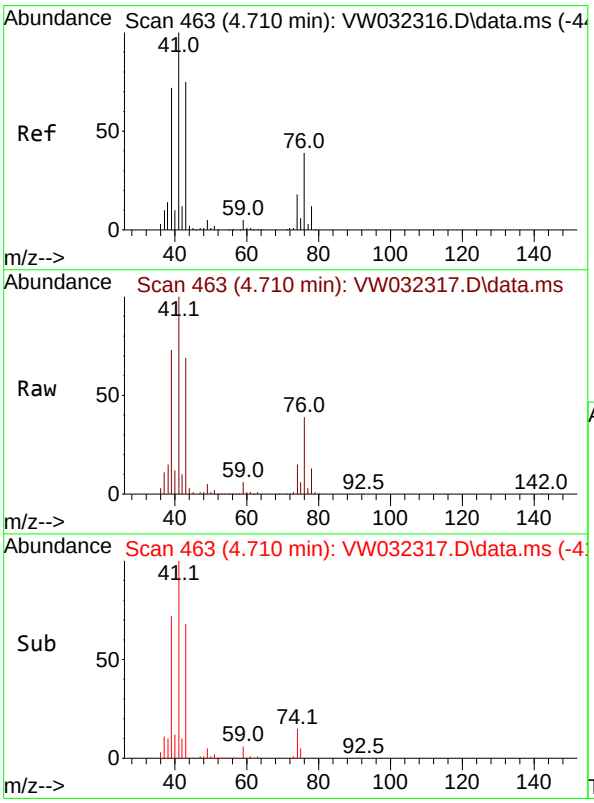
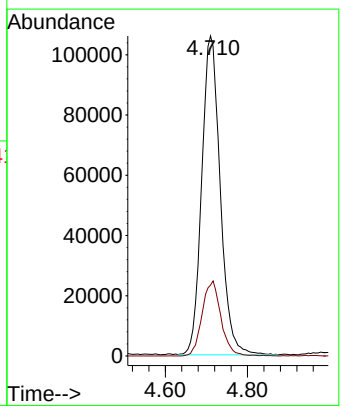


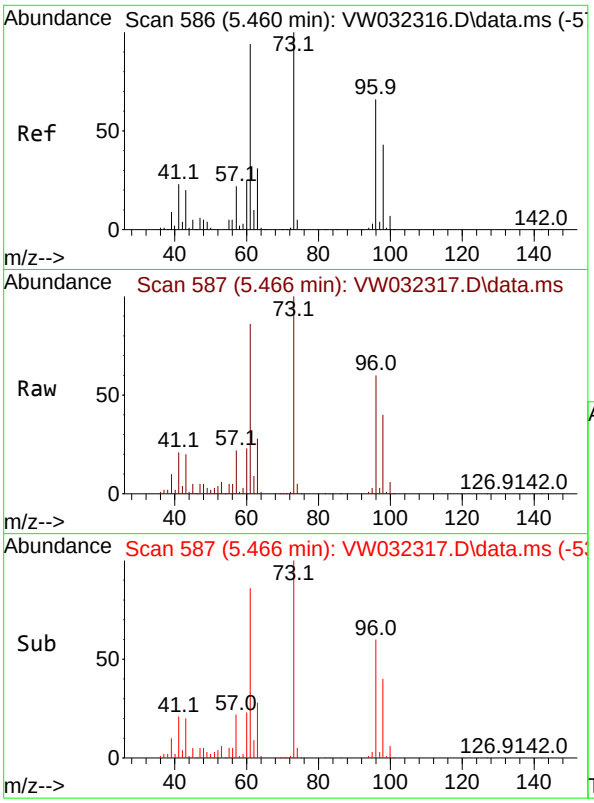


#18
Methyl Acetate
Concen: 98.033 ug/l
RT: 4.710 min Scan# 463
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 331793

Ion	Ratio	Lower	Upper
43	100		
74	23.7	20.2	30.4

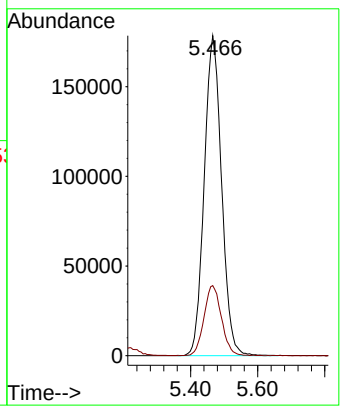




#19
Methyl tert-butyl Ether
Concen: 98.544 ug/l
RT: 5.466 min Scan# 5
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 73 Resp: 63993

Ion	Ratio	Lower	Upper
73	100		
57	21.9	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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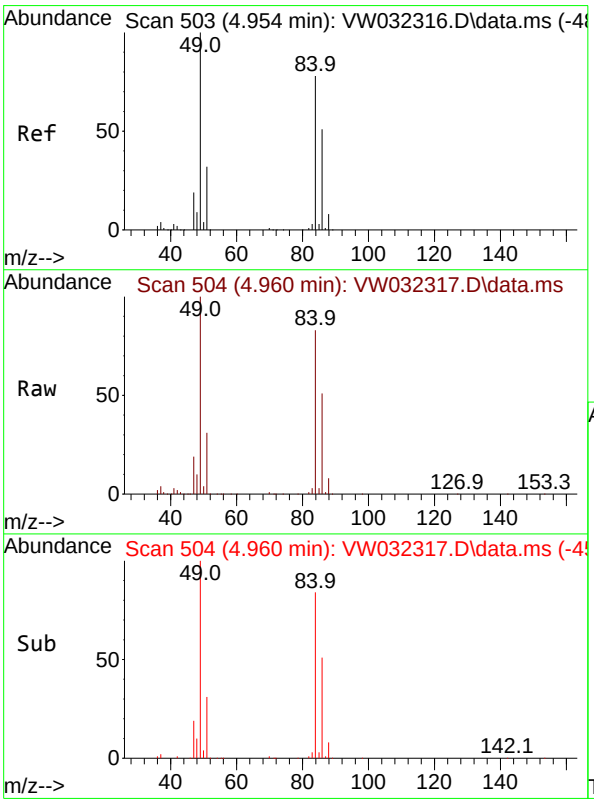
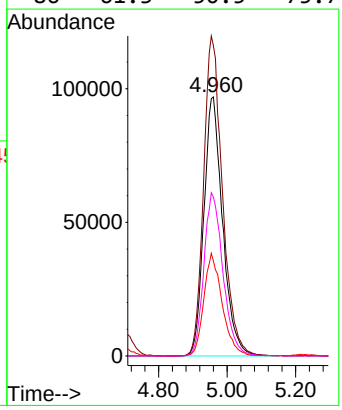
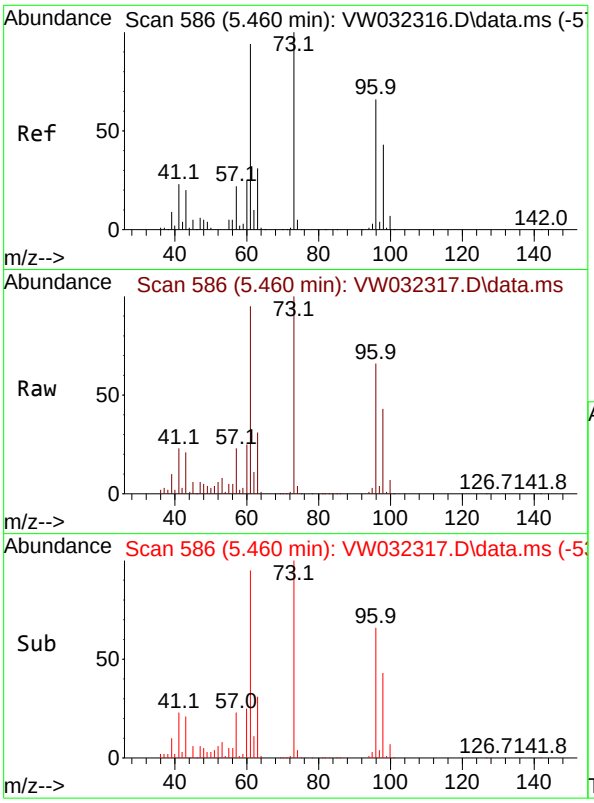


#20
Methylene Chloride
Concen: 99.471 ug/l
RT: 4.960 min Scan# 504
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 84 Resp: 368359

Ion	Ratio	Lower	Upper
84	100		
49	119.8	92.2	138.4
51	36.6	31.0	46.6
86	61.3	50.5	75.7

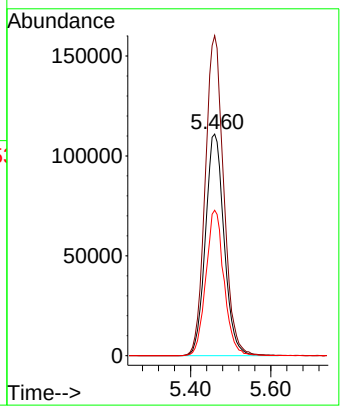




#21
trans-1,2-Dichloroethene
Concen: 98.197 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 96 Resp: 35845

Ion	Ratio	Lower	Upper
96	100		
61	144.4	112.5	168.7
98	65.6	54.2	81.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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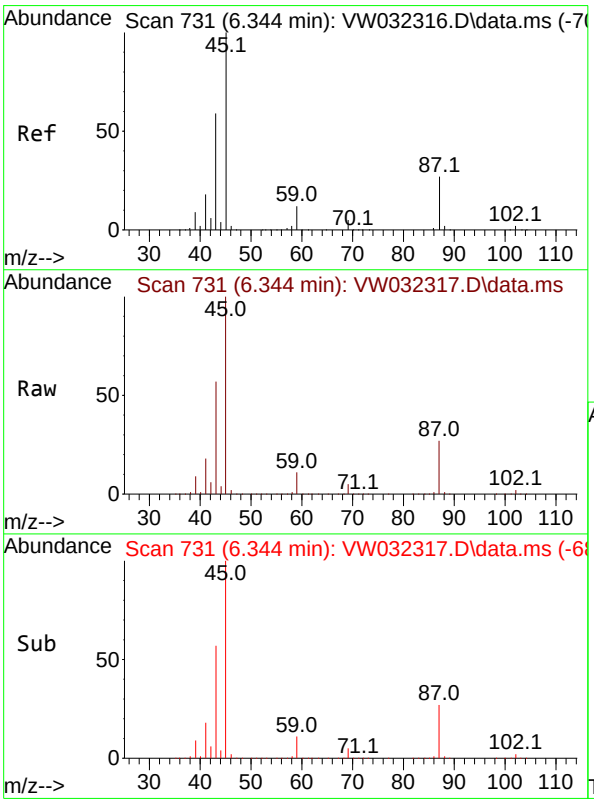
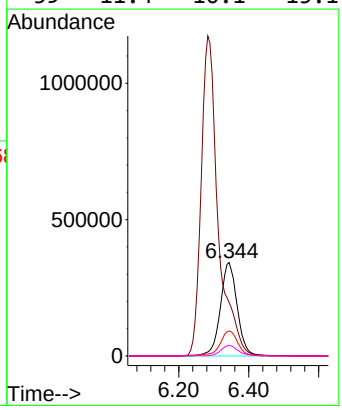
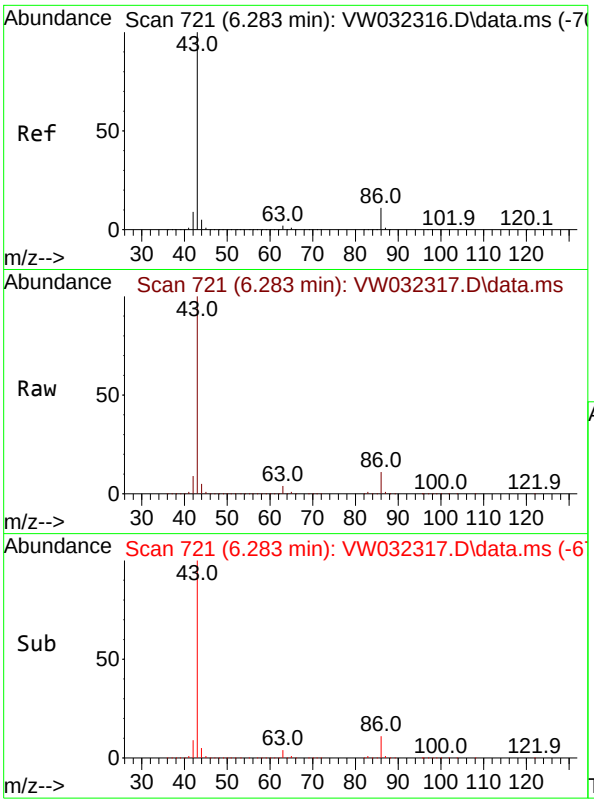


#22
Diisopropyl ether
Concen: 98.558 ug/l
RT: 6.344 min Scan# 731
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 45 Resp: 1141459

Ion	Ratio	Lower	Upper
45	100		
43	57.4	51.4	77.2
87	26.7	25.9	38.9
59	11.4	10.1	15.1





#23
Vinyl Acetate
Concen: 510.205 ug/l
RT: 6.283 min Scan# 7
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 394682

Ion	Ratio	Lower	Upper
43	100		
86	10.8	8.8	13.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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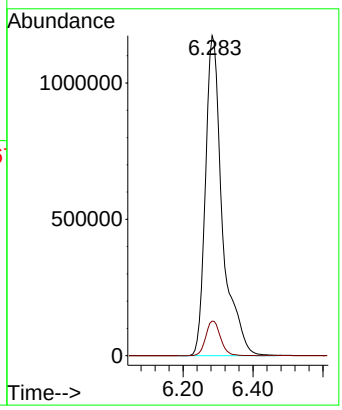
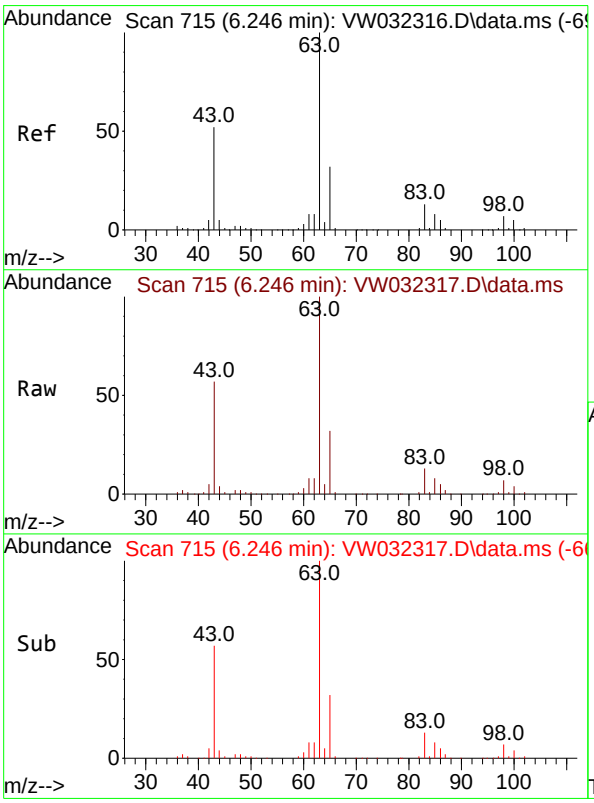
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

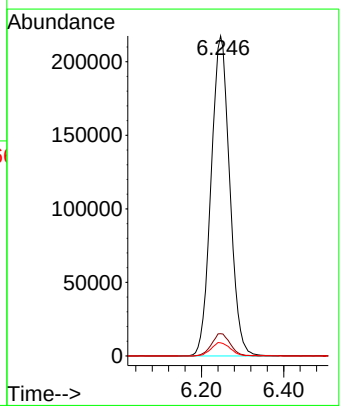


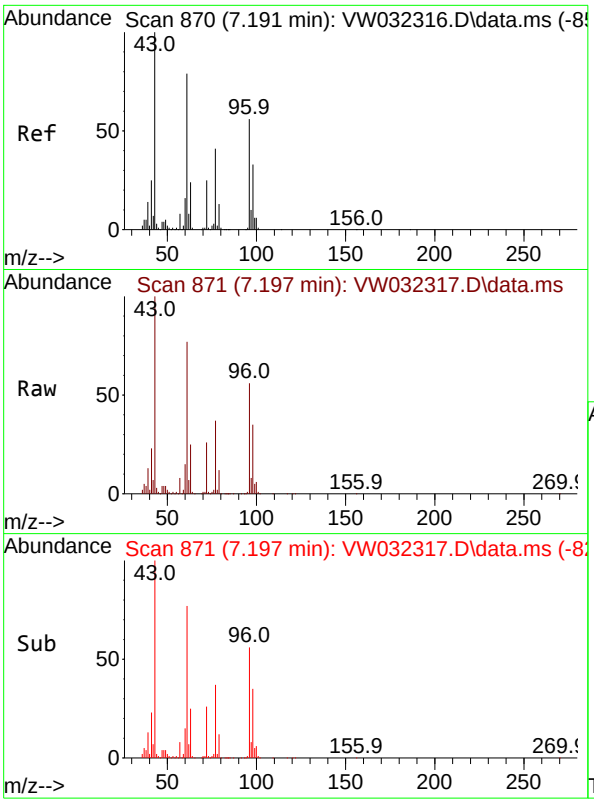


#24
1,1-Dichloroethane
Concen: 97.173 ug/l
RT: 6.246 min Scan# 715
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 63 Resp: 683736

Ion	Ratio	Lower	Upper
63	100		
98	7.0	3.8	11.2
100	4.1	2.5	7.5





#25
2-Butanone
Concen: 476.718 ug/l
RT: 7.197 min Scan# 8
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 76710

Ion	Ratio	Lower	Upper
43	100		
72	26.1	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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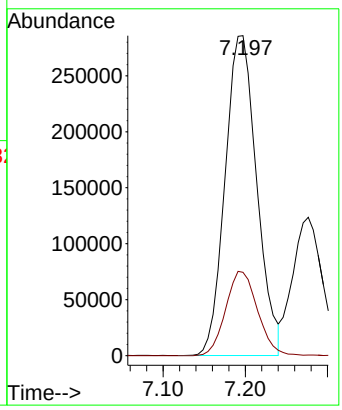
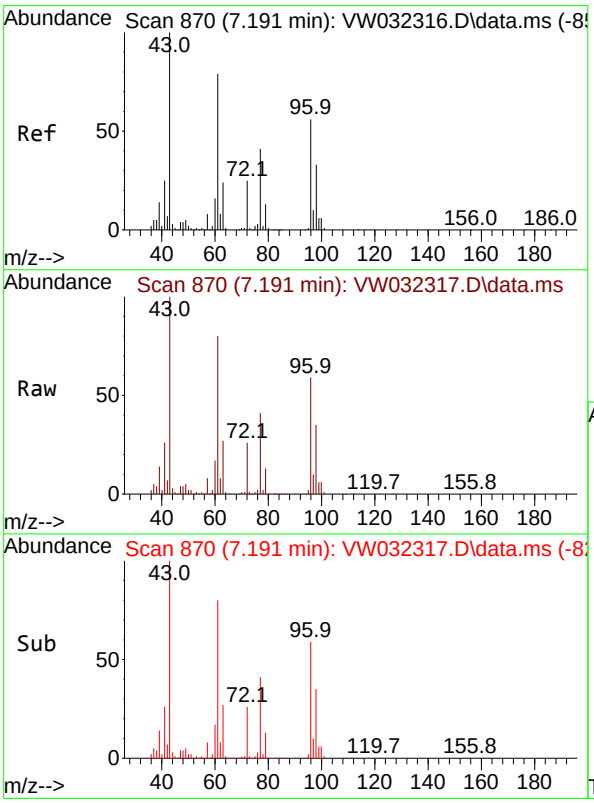
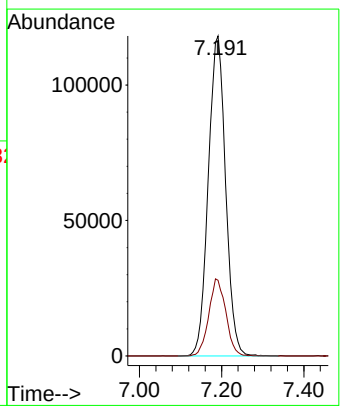


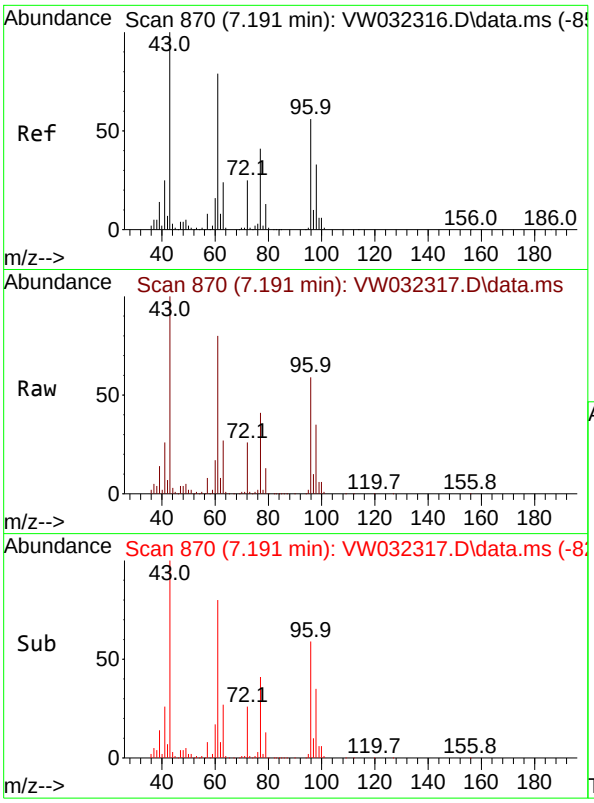


#26
2,2-Dichloropropane
Concen: 95.948 ug/l
RT: 7.191 min Scan# 870
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 77 Resp: 345332

Ion	Ratio	Lower	Upper
77	100		
97	23.7	11.9	35.5





#27
cis-1,2-Dichloroethene
Concen: 98.767 ug/l
RT: 7.191 min Scan# 8
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 96 Resp: 43312

Ion	Ratio	Lower	Upper
96	100		
61	142.5	0.0	268.0
98	64.4	0.0	130.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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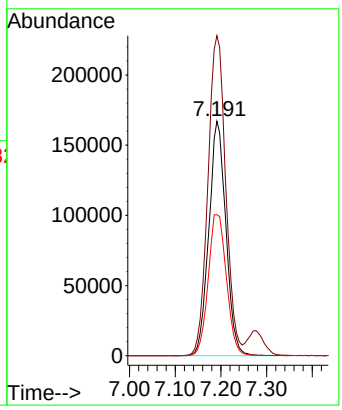
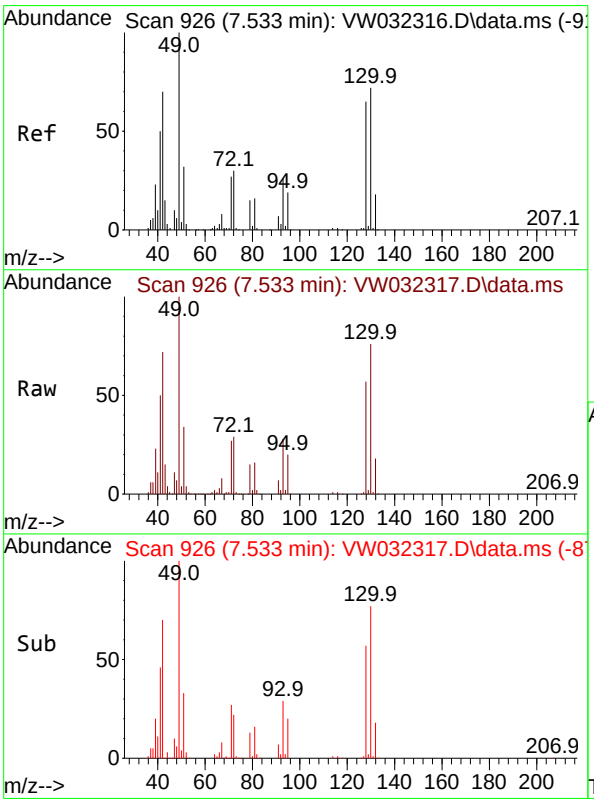
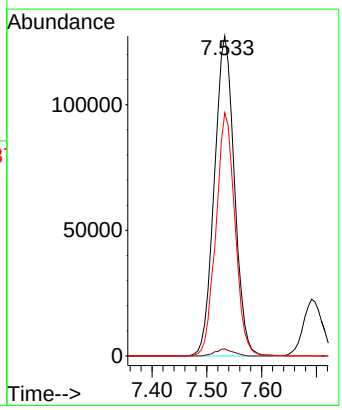


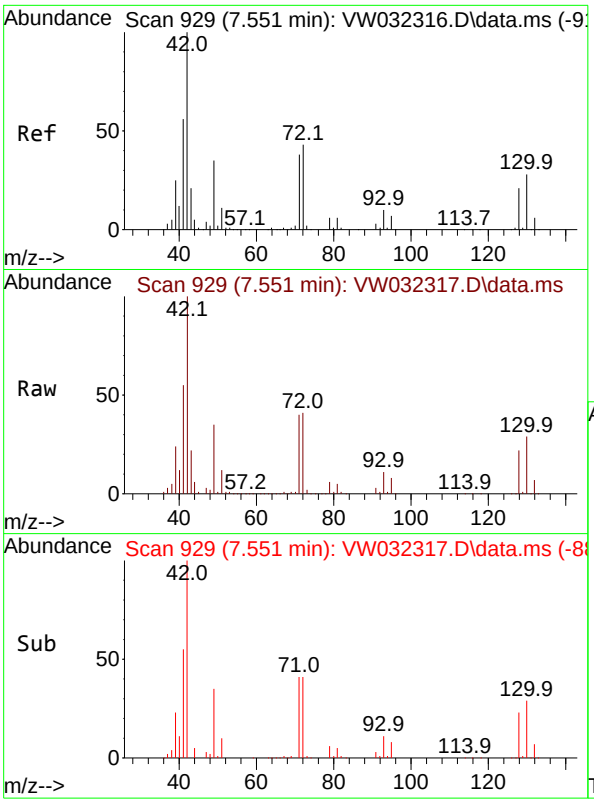


#28
Bromochloromethane
Concen: 97.732 ug/l
RT: 7.533 min Scan# 926
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 49 Resp: 323538

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.2
130	72.2	67.5	101.3





#29
Tetrahydrofuran
Concen: 493.149 ug/l
RT: 7.551 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 42 Resp: 49903

Ion	Ratio	Lower	Upper
42	100		
72	43.4	37.4	56.2
71	41.1	36.0	54.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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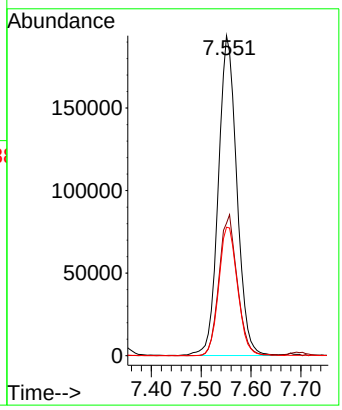
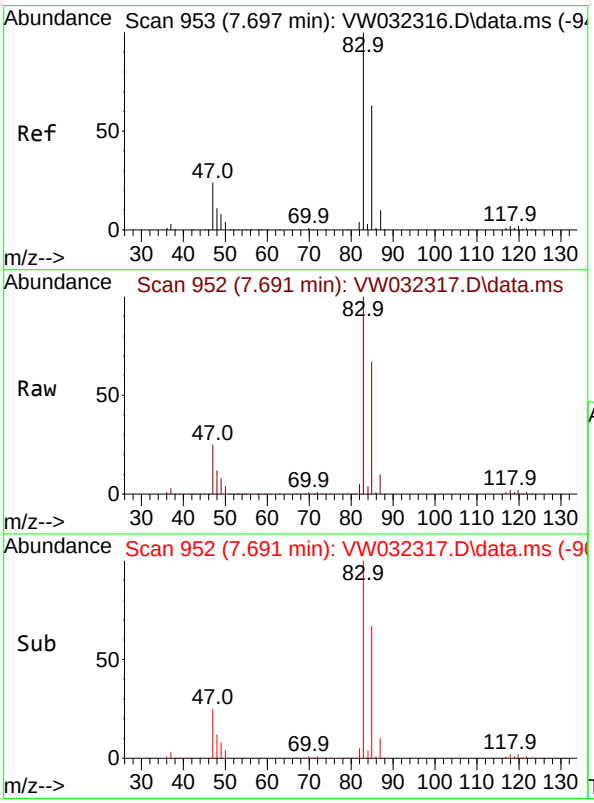
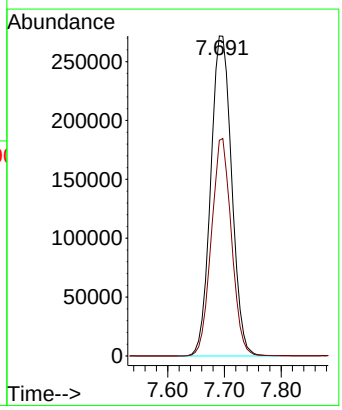


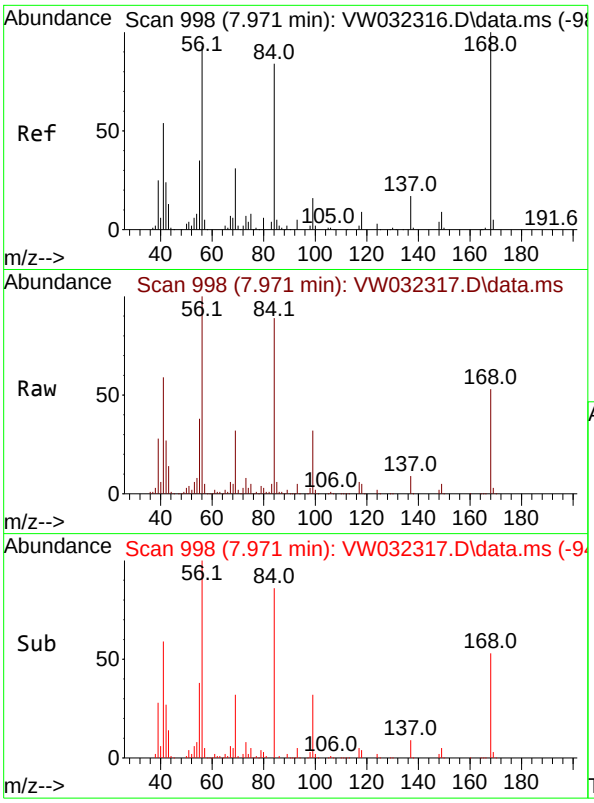


#30
Chloroform
Concen: 97.676 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 83 Resp: 697012

Ion	Ratio	Lower	Upper
83	100		
85	67.4	51.2	76.8

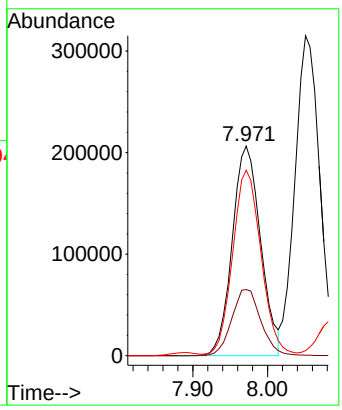




#31
Cyclohexane
Concen: 90.699 ug/l
RT: 7.971 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 56 Resp: 54482

Ion	Ratio	Lower	Upper
56	100		
69	31.6	27.7	41.5
84	87.2	74.6	112.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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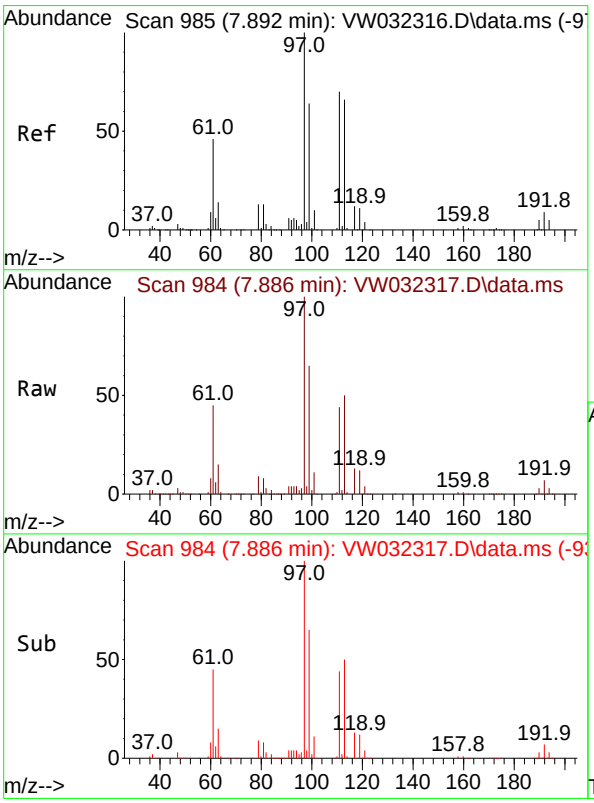
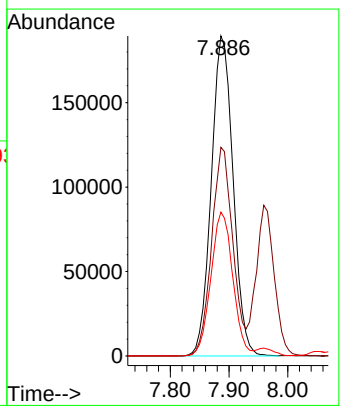
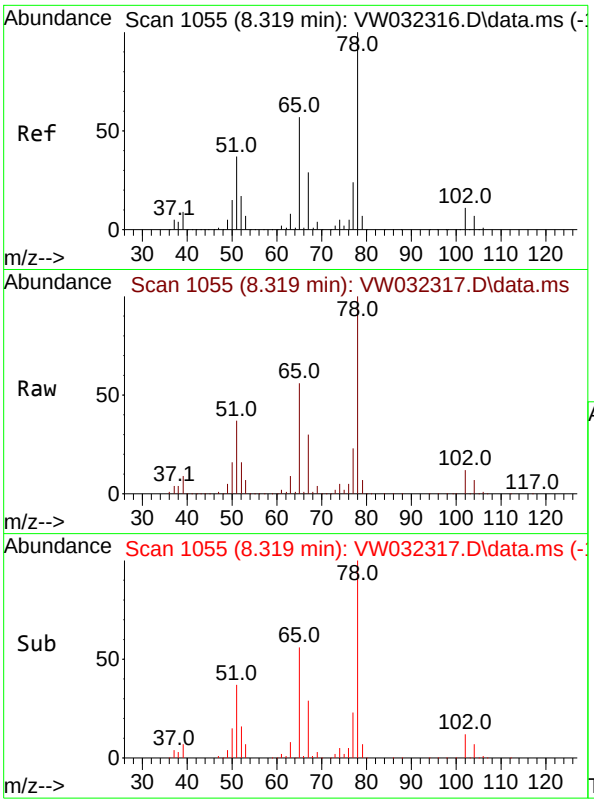


#32
1,1,1-Trichloroethane
Concen: 96.637 ug/l
RT: 7.886 min Scan# 984
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 97 Resp: 488662

Ion	Ratio	Lower	Upper
97	100		
99	63.7	50.9	76.3
61	45.2	36.2	54.4

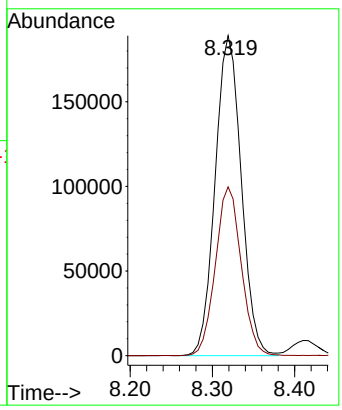




#33
1,2-Dichloroethane-d4
Concen: 97.841 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 65 Resp: 41748

Ion	Ratio	Lower	Upper
65	100		
67	52.0	0.0	99.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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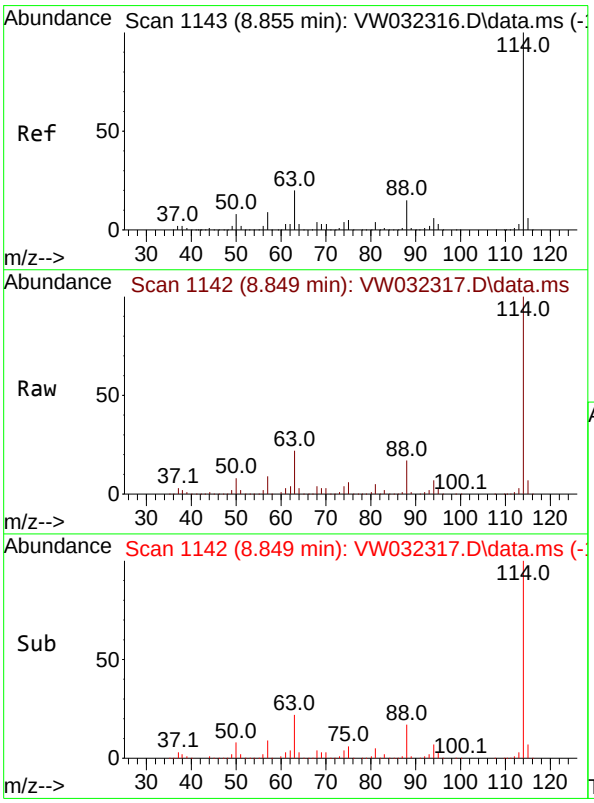
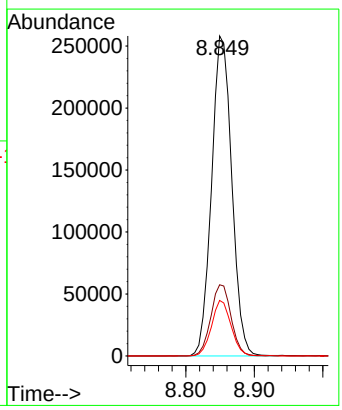
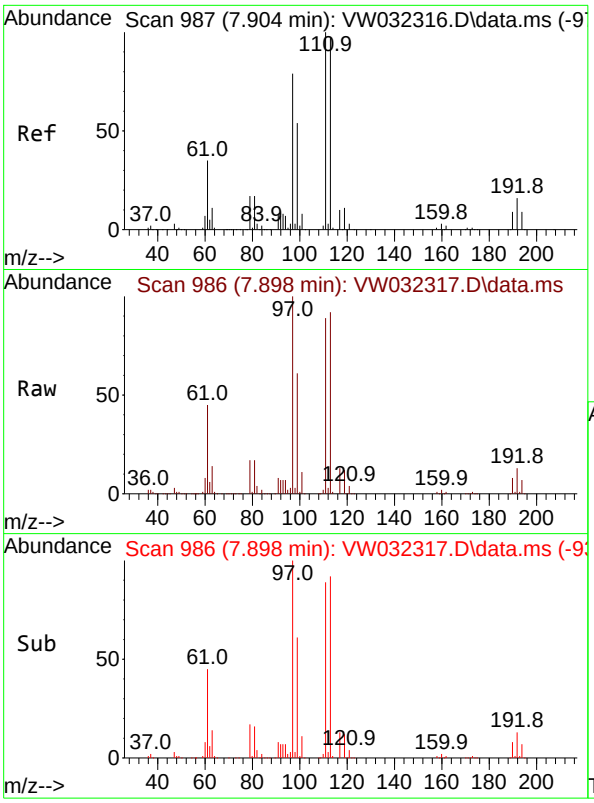


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:114 Resp: 528901

Ion	Ratio	Lower	Upper
114	100		
63	22.2	0.0	40.4
88	17.4	0.0	32.0





#35
Dibromofluoromethane
Concen: 102.349 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:113 Resp: 35056

Ion	Ratio	Lower	Upper
113	100		
111	100.1	83.9	125.9
192	15.6	14.6	21.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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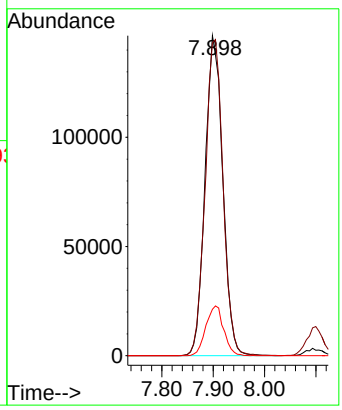
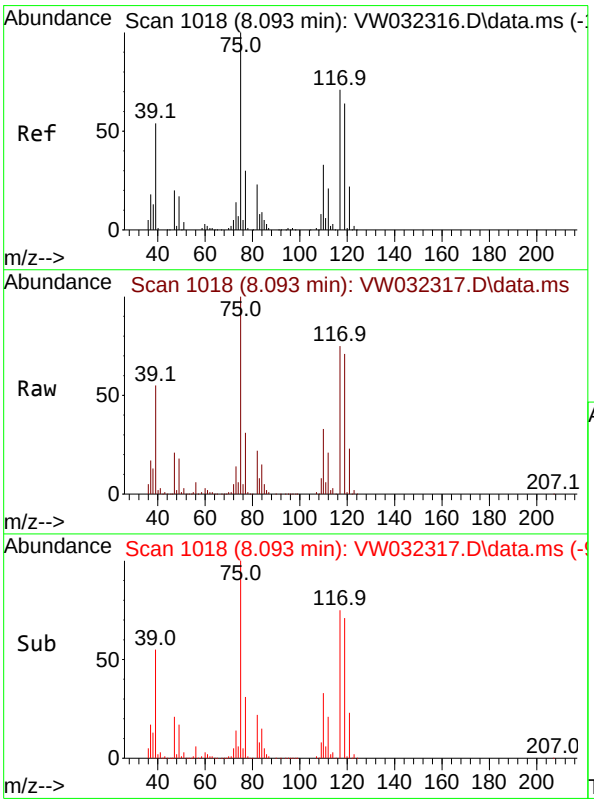
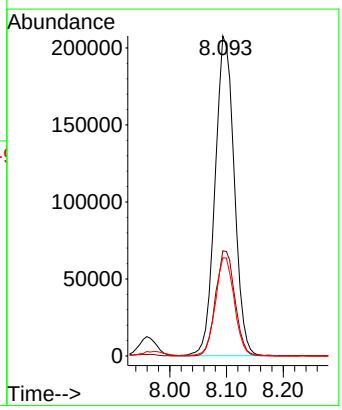


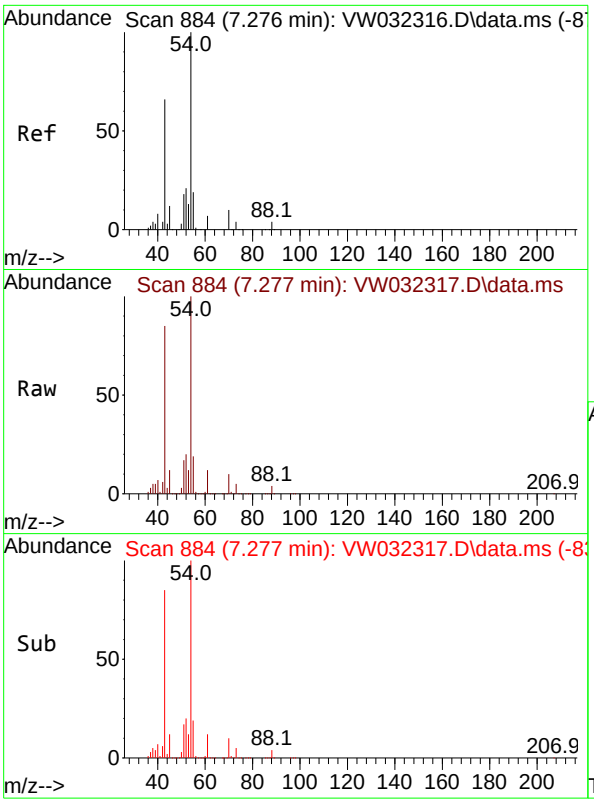


#36
1,1-Dichloropropene
Concen: 100.644 ug/l
RT: 8.093 min Scan# 1018
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 75 Resp: 486510

Ion	Ratio	Lower	Upper
75	100		
110	33.1	17.5	52.5
77	30.7	24.1	36.1





#37
Ethyl Acetate
Concen: 100.344 ug/l
RT: 7.277 min Scan# 8
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 32286

Ion	Ratio	Lower	Upper
43	100		
61	13.7	11.3	16.9
70	10.4	8.9	13.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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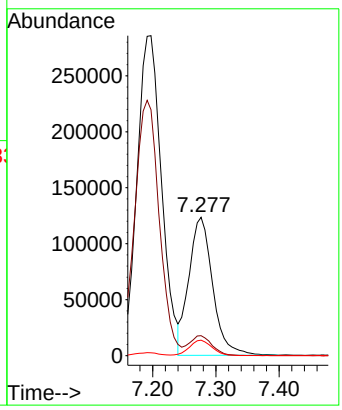
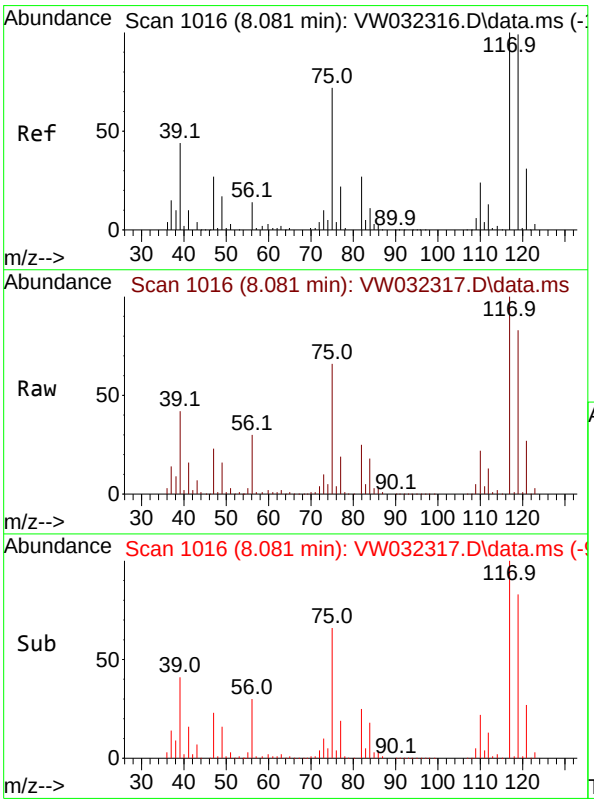
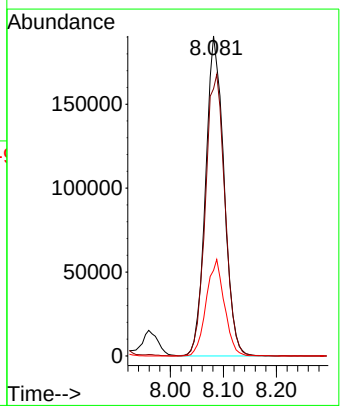


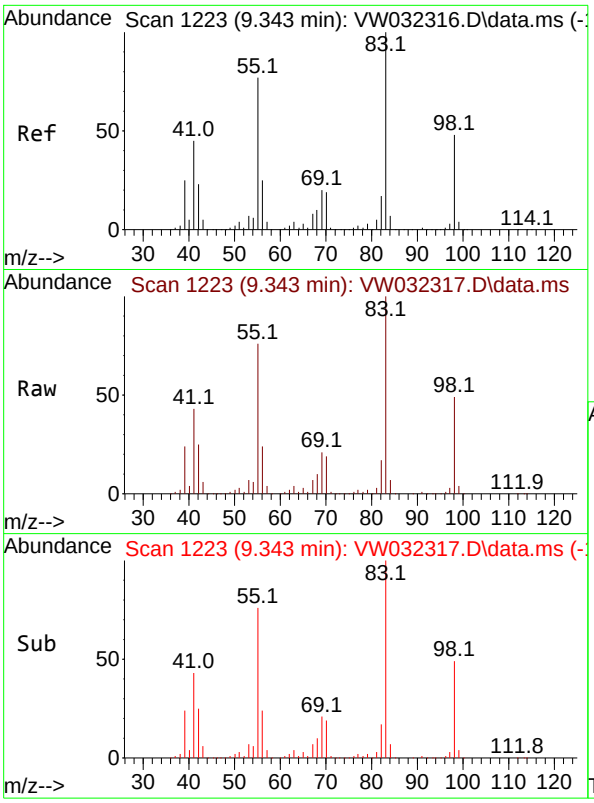


#38
Carbon Tetrachloride
Concen: 100.845 ug/l
RT: 8.081 min Scan# 1016
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:117 Resp: 458732

Ion	Ratio	Lower	Upper
117	100		
119	83.5	74.2	111.2
121	26.8	25.6	38.4





#39
Methylcyclohexane
Concen: 103.099 ug/l
RT: 9.343 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 83 Resp: 60115

Ion	Ratio	Lower	Upper
83	100		
55	75.7	58.4	87.6
98	49.3	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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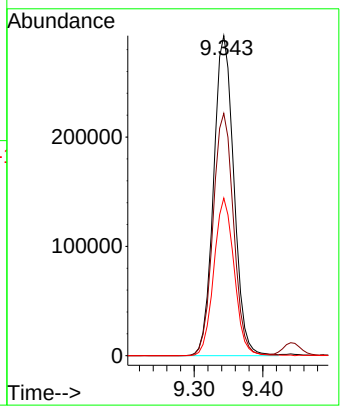
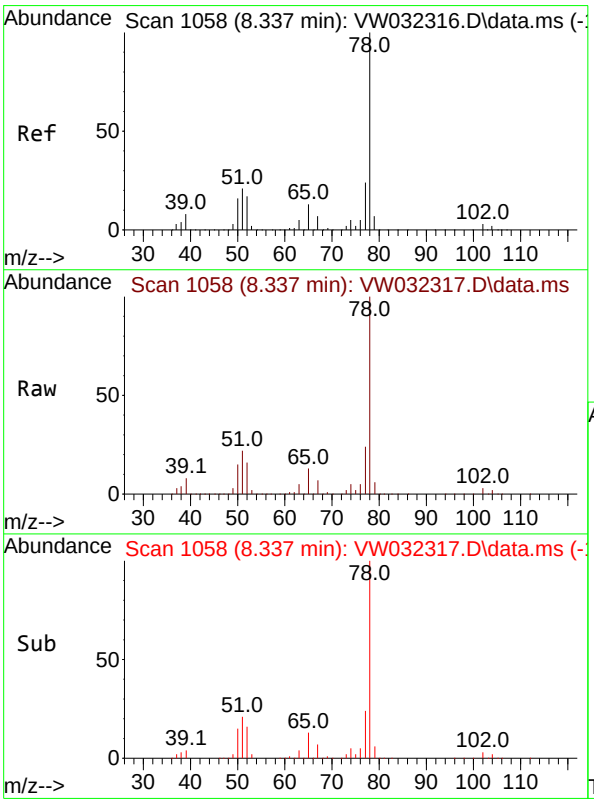
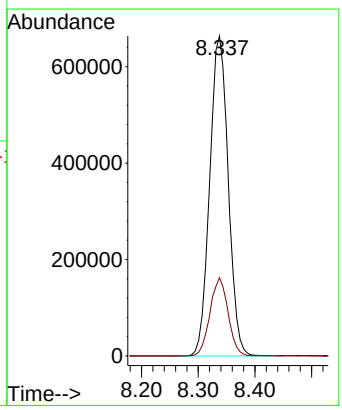


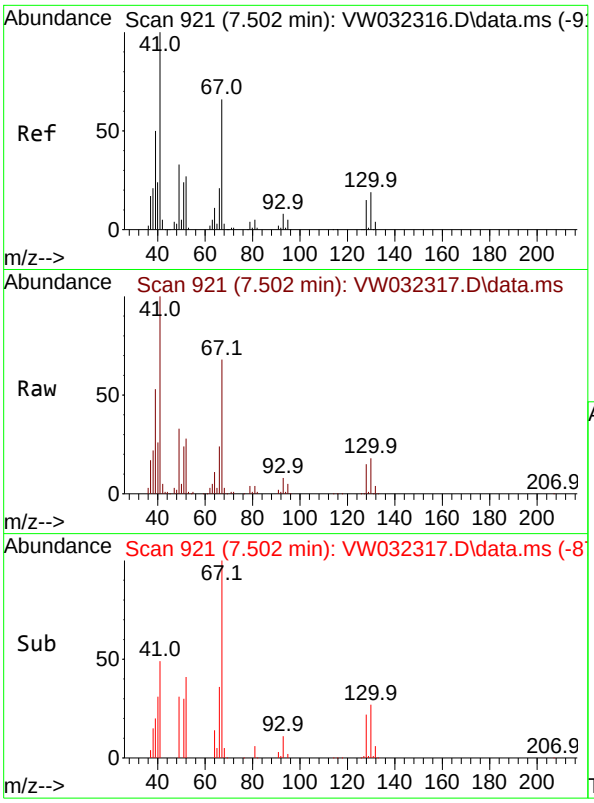


#40
Benzene
Concen: 99.416 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 78 Resp: 1506339

Ion	Ratio	Lower	Upper
78	100		
77	24.4	20.7	31.1

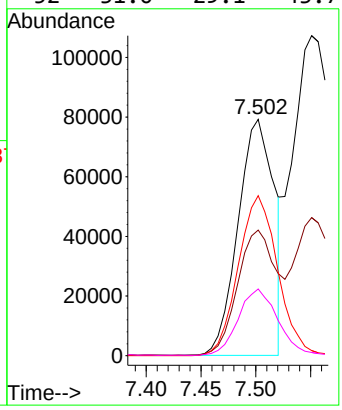




#41
Methacrylonitrile
Concen: 104.404 ug/l
RT: 7.502 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 41 Resp: 18103

Ion	Ratio	Lower	Upper
41	100		
39	59.2	50.9	76.3
67	74.5	65.6	98.4
52	31.0	29.1	43.7



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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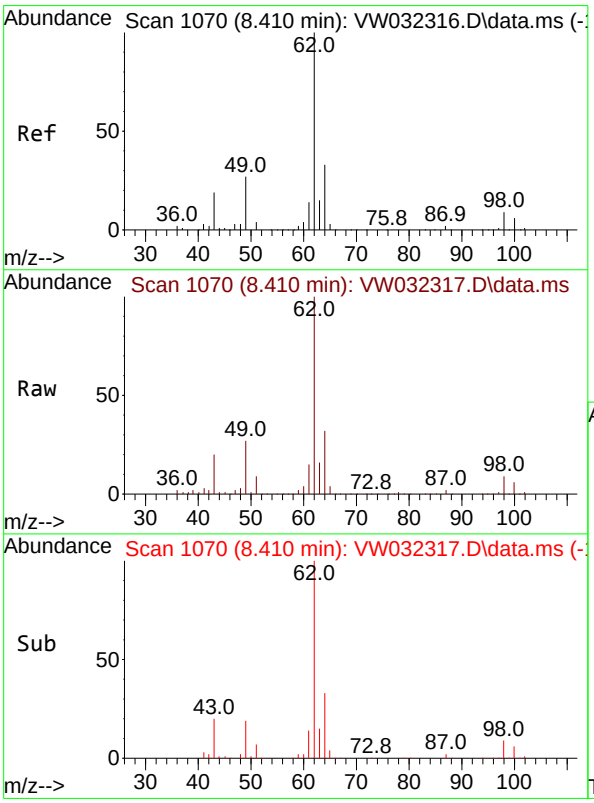
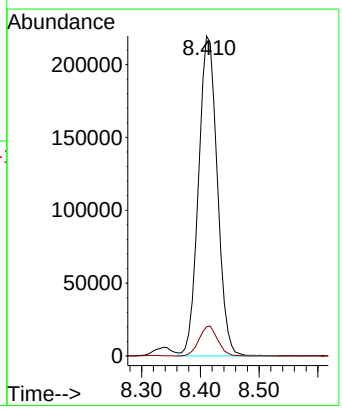
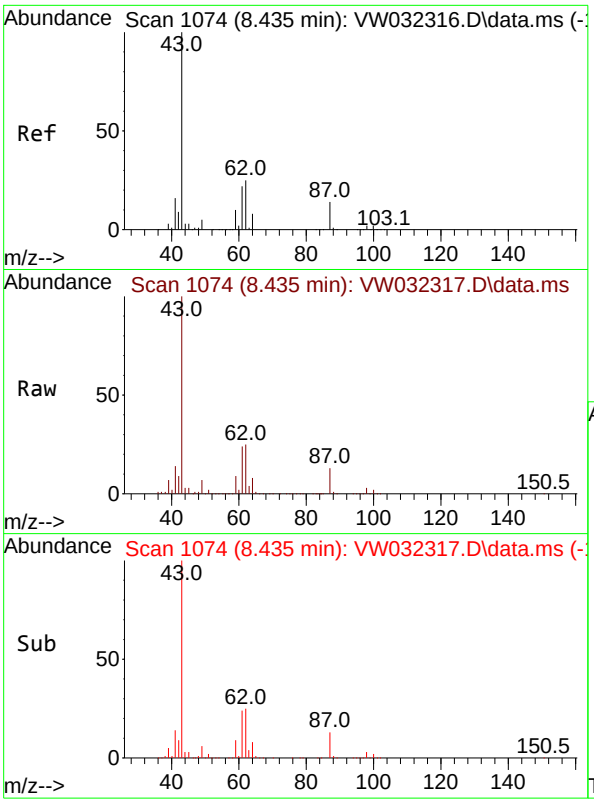


#42
1,2-Dichloroethane
Concen: 98.363 ug/l
RT: 8.410 min Scan# 1070
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 62 Resp: 487667

Ion	Ratio	Lower	Upper
62	100		
98	9.3	0.0	18.0





#43
Isopropyl Acetate
Concen: 104.746 ug/l
RT: 8.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 59787

Ion	Ratio	Lower	Upper
43	100		
61	29.0	23.3	34.9
87	13.5	11.1	16.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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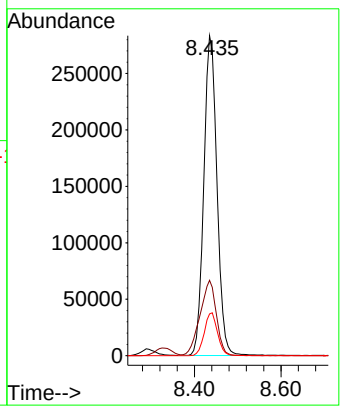
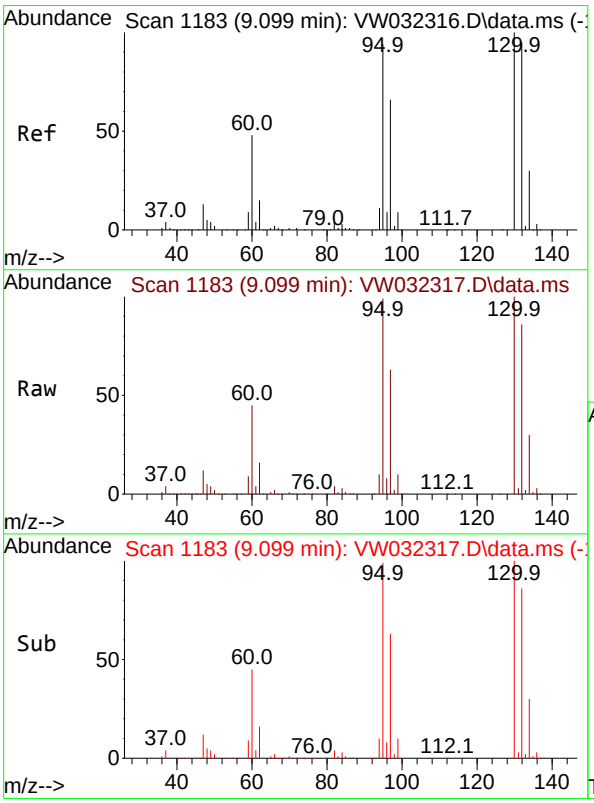
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

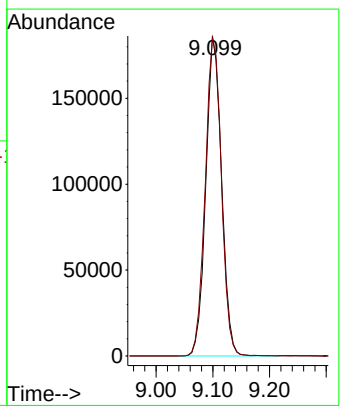


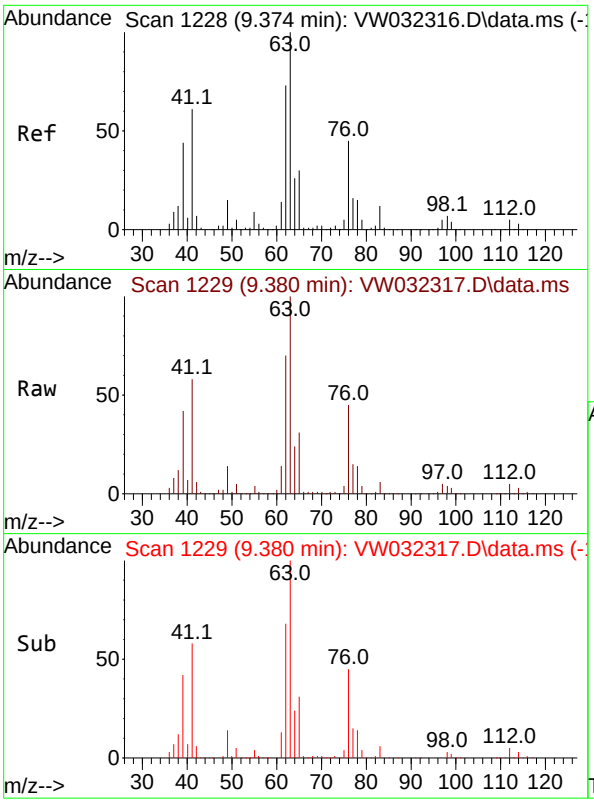


#44
Trichloroethene
Concen: 101.217 ug/l
RT: 9.099 min Scan# 1183
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:130 Resp: 359102

Ion	Ratio	Lower	Upper
130	100		
95	99.5	0.0	220.0





#45
1,2-Dichloropropane
Concen: 99.234 ug/l
RT: 9.380 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 63 Resp: 37530

Ion	Ratio	Lower	Upper
63	100		
65	31.1	24.3	36.5

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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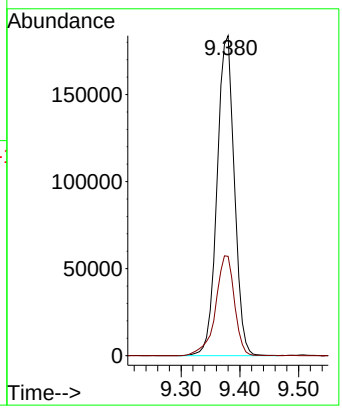
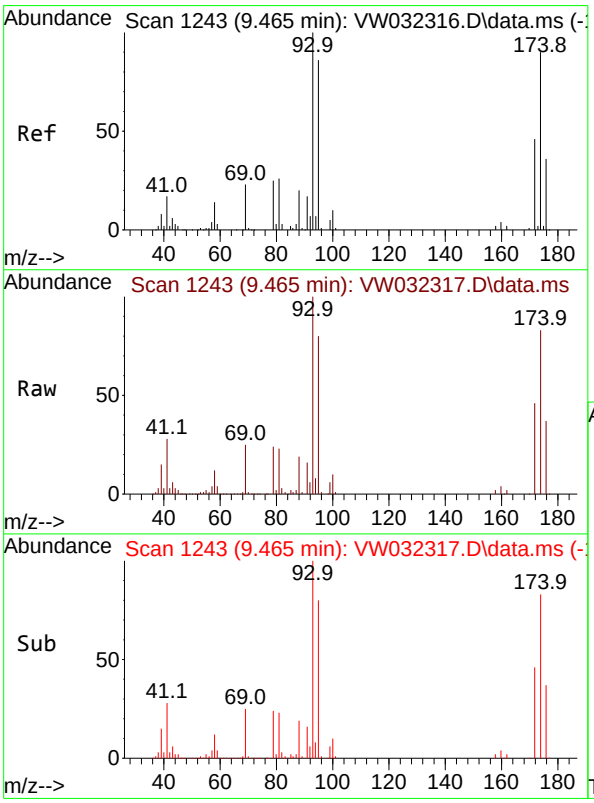
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

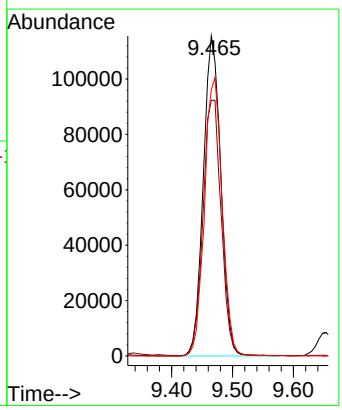


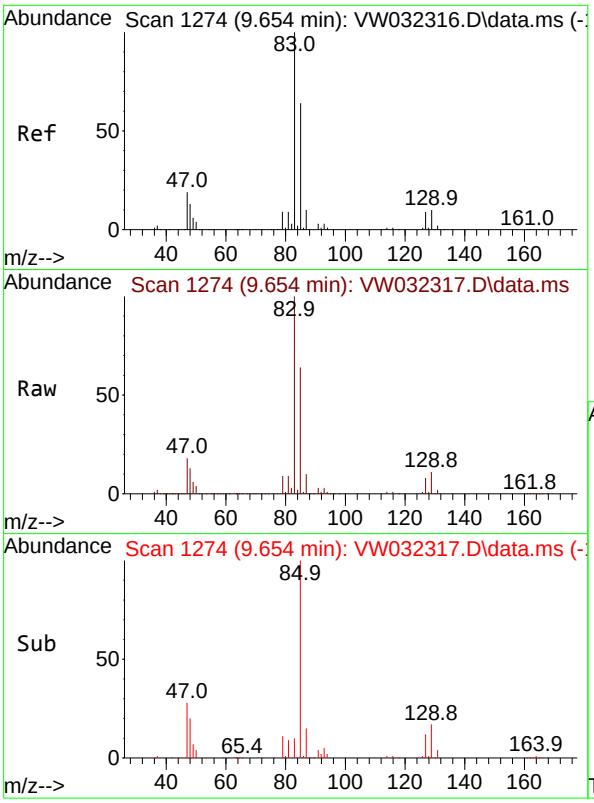


#46
Dibromomethane
Concen: 99.495 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 93 Resp: 231385

Ion	Ratio	Lower	Upper
93	100		
95	82.6	67.4	101.2
174	87.8	75.7	113.5

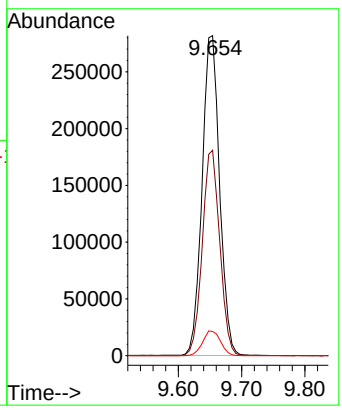




#47
Bromodichloromethane
Concen: 102.055 ug/l
RT: 9.654 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 83 Resp: 54284

Ion	Ratio	Lower	Upper
83	100		
85	64.2	48.7	73.1
127	7.6	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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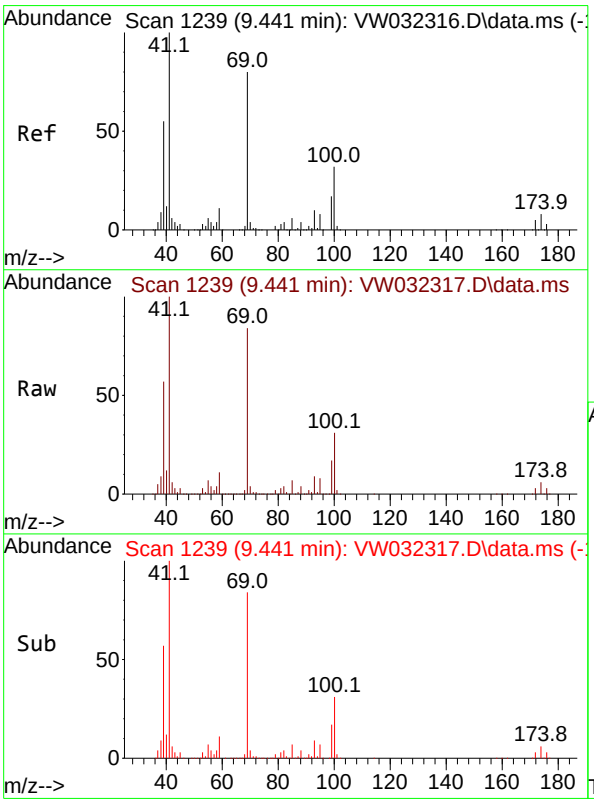
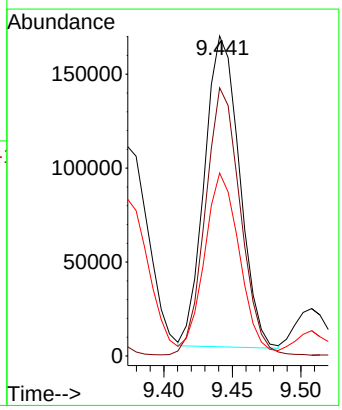
Supervised By :Semsettin Yesilyurt 10/03/2025

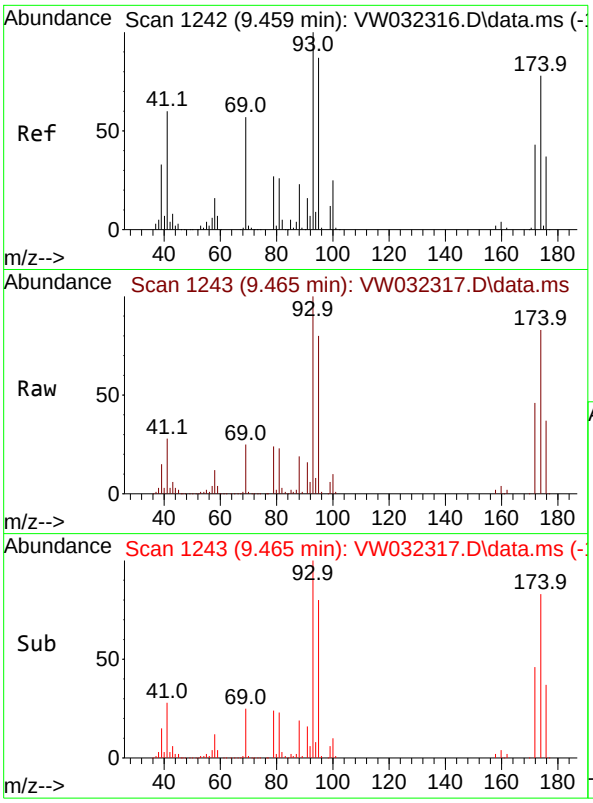


#48
Methyl methacrylate
Concen: 105.789 ug/l
RT: 9.441 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 41 Resp: 293582

Ion	Ratio	Lower	Upper
41	100		
69	87.0	71.5	107.3
39	55.3	55.9	83.9#





#49
1,4-Dioxane
Concen: 2105.342 ug/l
RT: 9.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 88 Resp: 6692

Ion	Ratio	Lower	Upper
88	100		
43	22.4	18.0	27.0
58	71.0	55.4	83.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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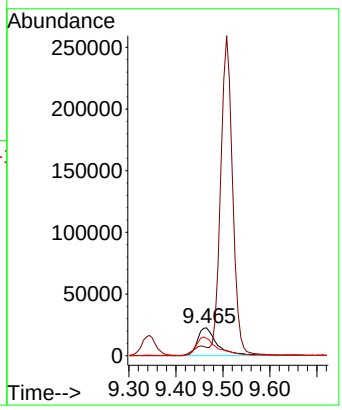
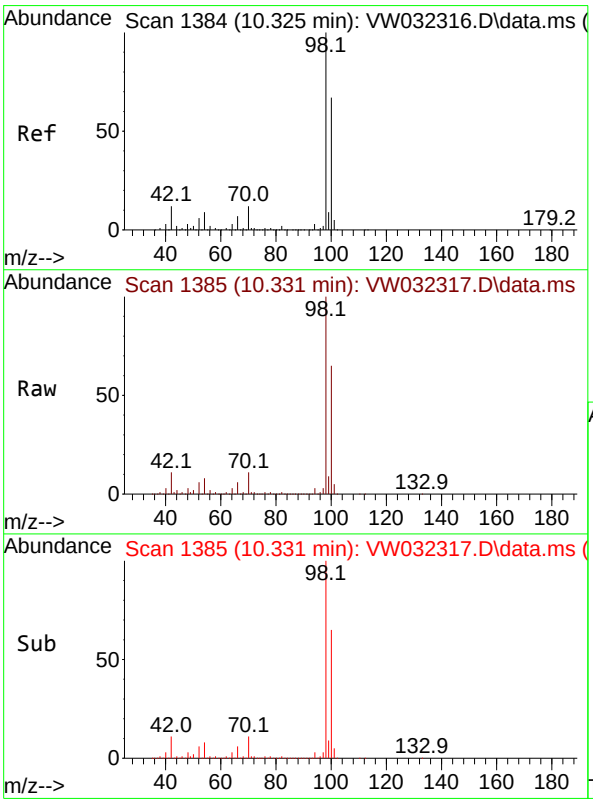
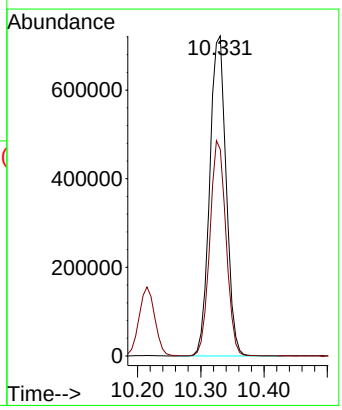


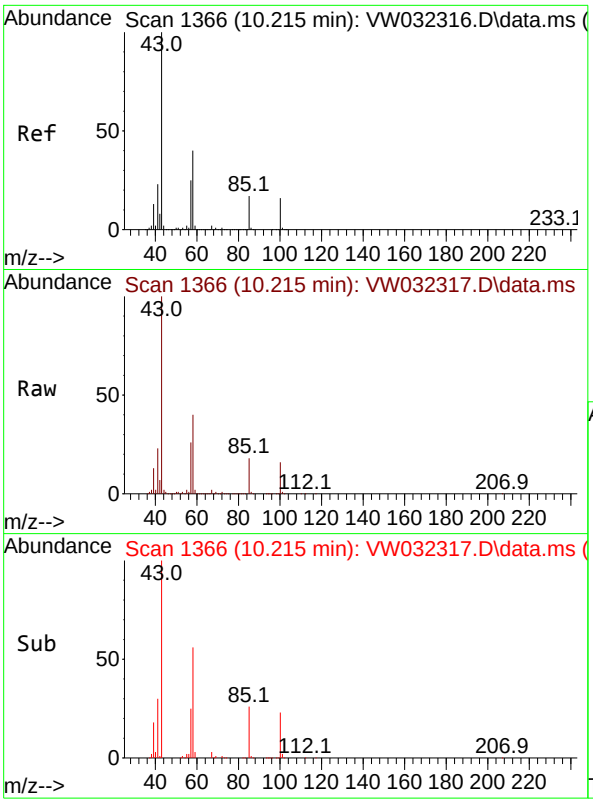


#50
Toluene-d8
Concen: 102.965 ug/l
RT: 10.331 min Scan# 1385
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 98 Resp: 1301655

Ion	Ratio	Lower	Upper
98	100		
100	66.3	51.4	77.2





#51
4-Methyl-2-Pentanone
Concen: 503.045 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 166307

Ion	Ratio	Lower	Upper
43	100		
58	40.0	32.0	48.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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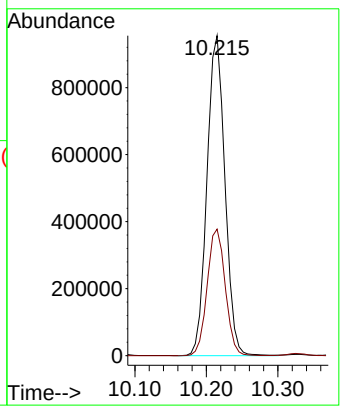
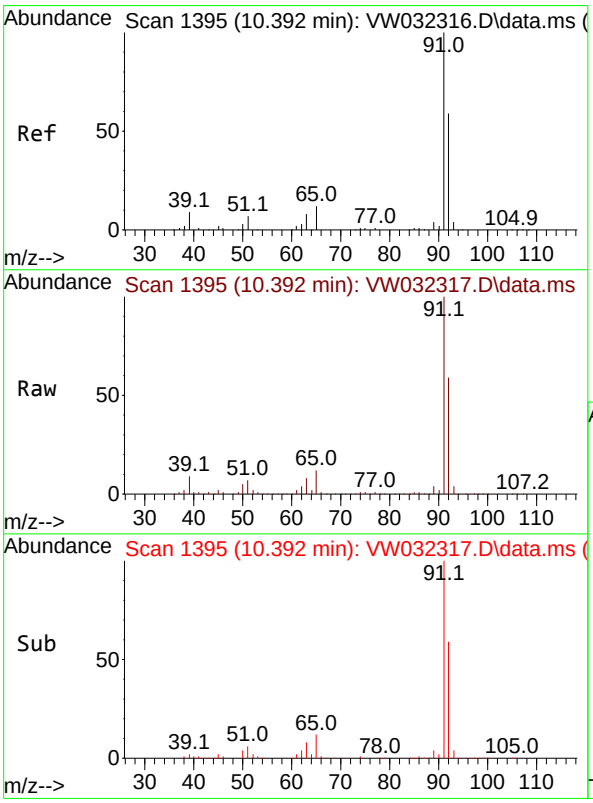
Supervised By :Semsettin Yesilyurt 10/03/2025

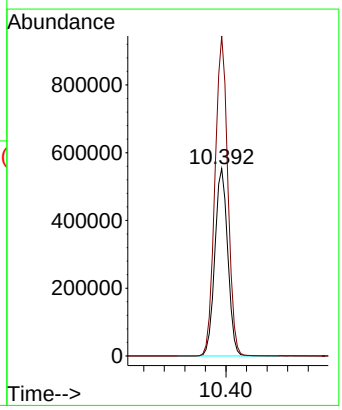


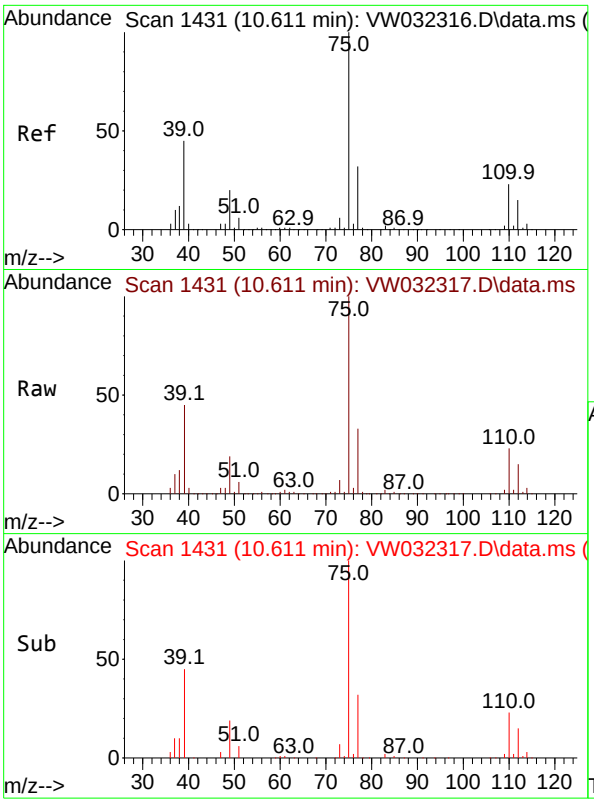


#52
Toluene
Concen: 101.843 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 92 Resp: 960973

Ion	Ratio	Lower	Upper
92	100		
91	170.0	137.5	206.3

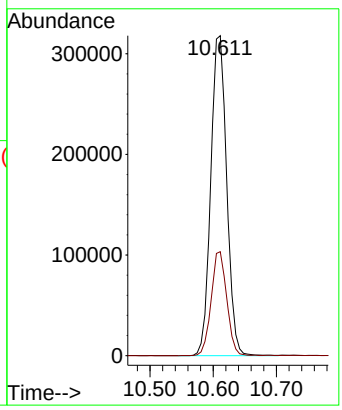




#53
t-1,3-Dichloropropene
Concen: 107.561 ug/l
RT: 10.611 min Scan# 14
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 75 Resp: 55507

Ion	Ratio	Lower	Upper
75	100		
77	32.5	25.6	38.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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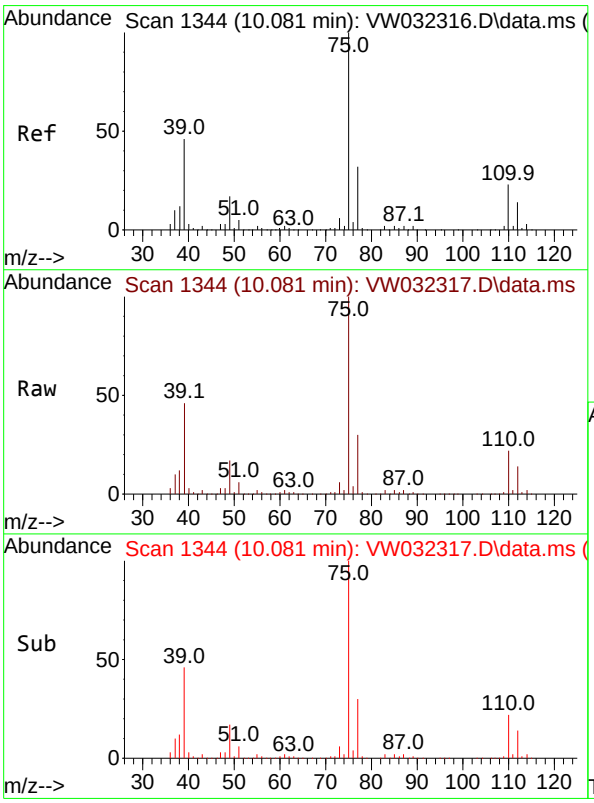
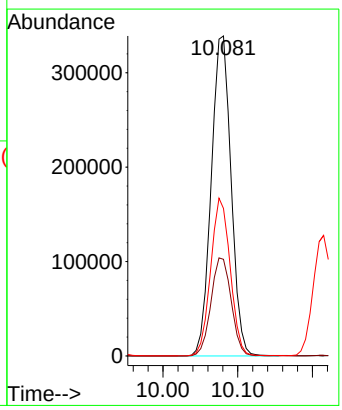
Supervised By :Semsettin Yesilyurt 10/03/2025

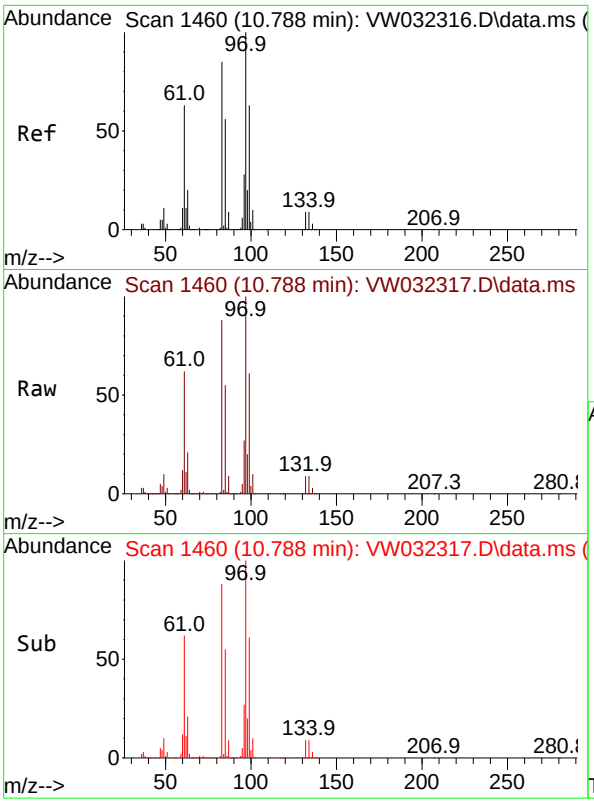


#54
cis-1,3-Dichloropropene
Concen: 105.188 ug/l
RT: 10.081 min Scan# 1344
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 75 Resp: 625271

Ion	Ratio	Lower	Upper
75	100		
77	30.2	25.1	37.7
39	46.1	43.2	64.8

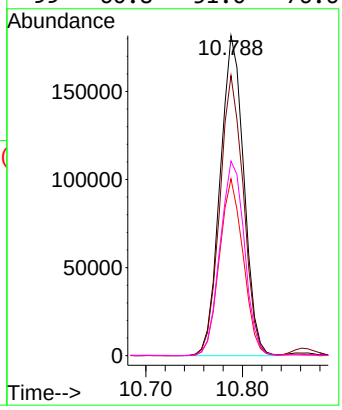




#55
1,1,2-Trichloroethane
Concen: 99.546 ug/l
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 97 Resp: 30941

Ion	Ratio	Lower	Upper
97	100		
83	87.5	71.0	106.6
85	55.3	42.8	64.2
99	60.8	51.0	76.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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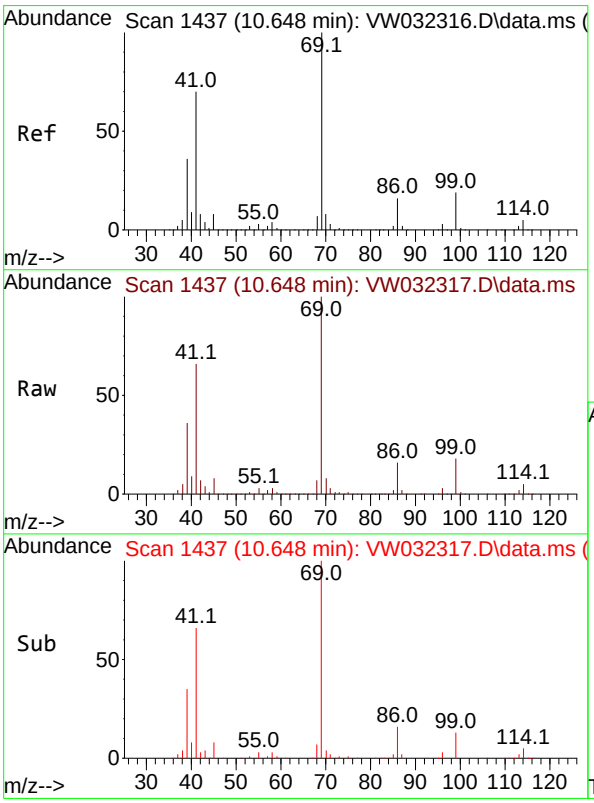
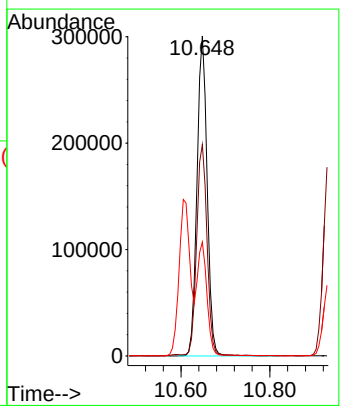
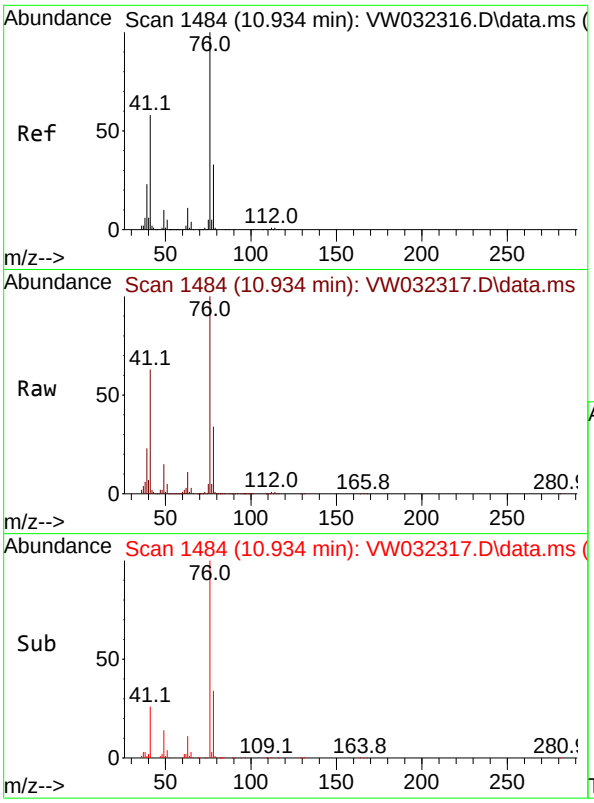


#56
Ethyl methacrylate
Concen: 109.686 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 69 Resp: 477191

Ion	Ratio	Lower	Upper
69	100		
41	67.0	53.2	79.8
39	33.6	32.9	49.3





#57
1,3-Dichloropropane
Concen: 99.997 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 76 Resp: 54895

Ion	Ratio	Lower	Upper
76	100		
78	32.3	26.2	39.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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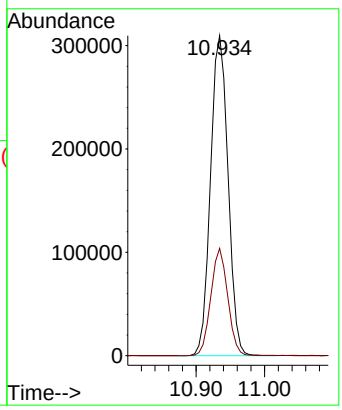
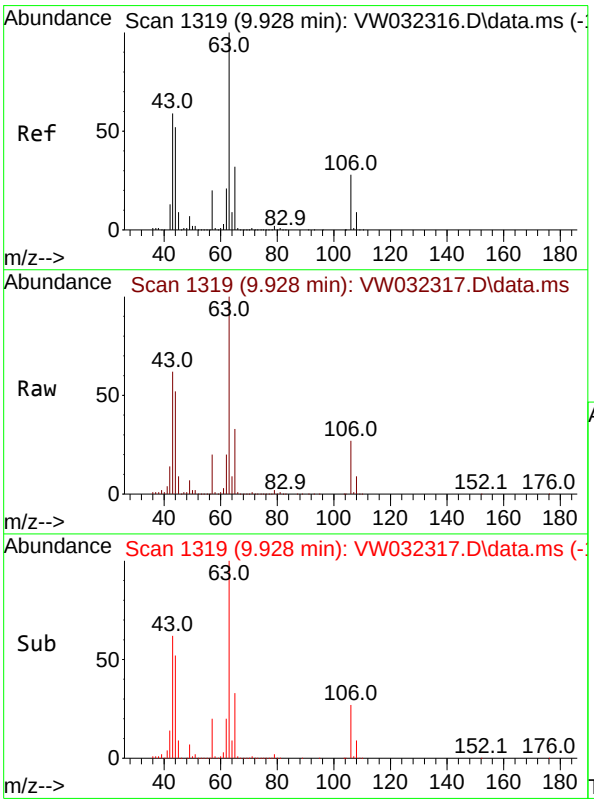
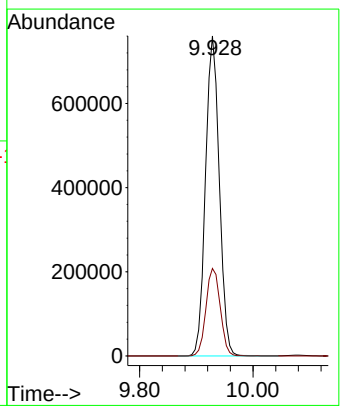


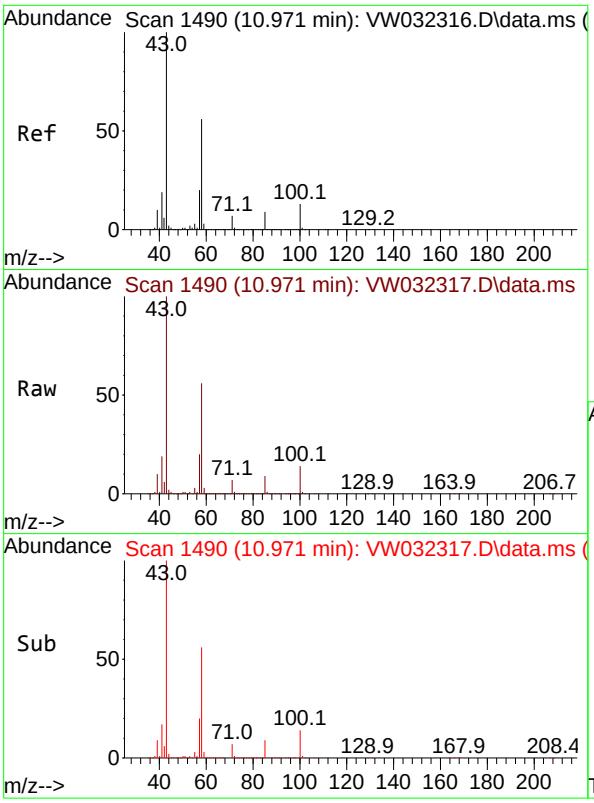


#58
2-Chloroethyl Vinyl ether
Concen: 554.092 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 63 Resp: 1282918

Ion	Ratio	Lower	Upper
63	100		
106	28.3	24.3	36.5





#59
2-Hexanone
Concen: 504.847 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 117714

Ion	Ratio	Lower	Upper
43	100		
58	55.5	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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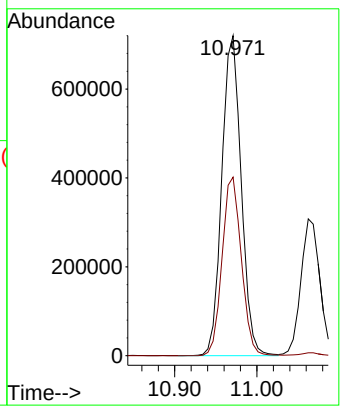
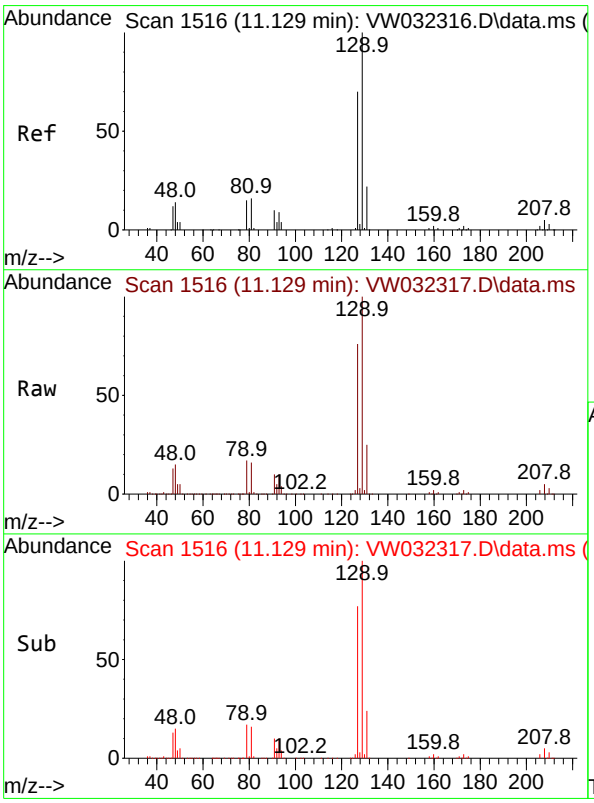
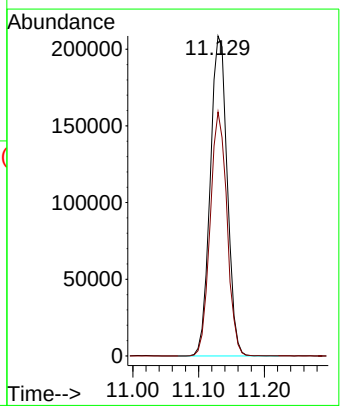


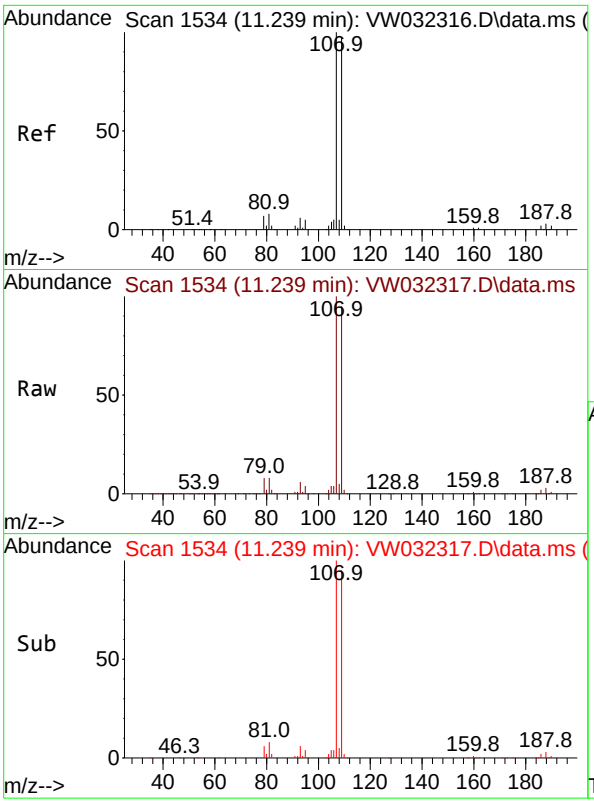


#60
Dibromochloromethane
Concen: 106.254 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:129 Resp: 375002

Ion	Ratio	Lower	Upper
129	100		
127	75.5	38.1	114.5

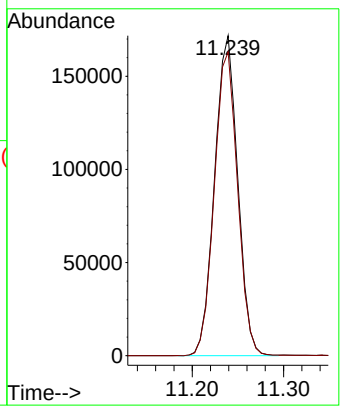




#61
1,2-Dibromoethane
Concen: 99.562 ug/l
RT: 11.239 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:107 Resp: 30174

Ion	Ratio	Lower	Upper
107	100		
109	95.8	74.5	111.7



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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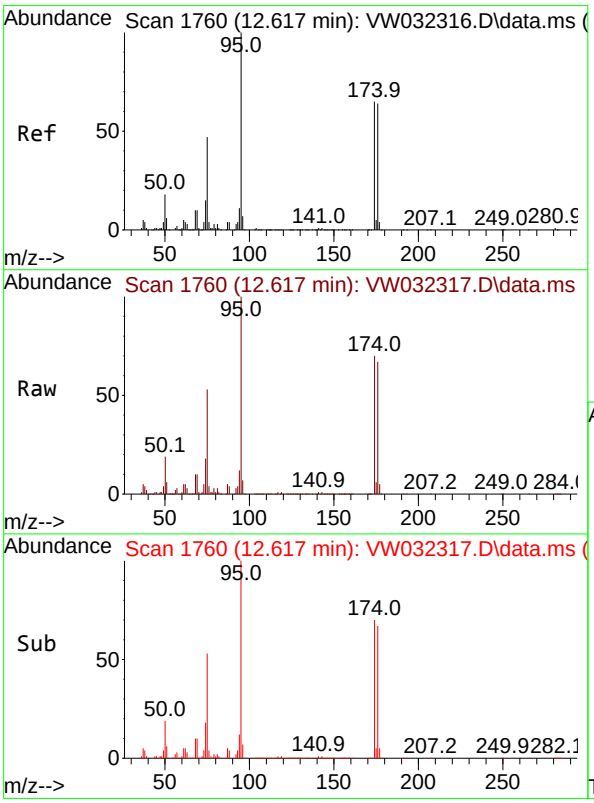
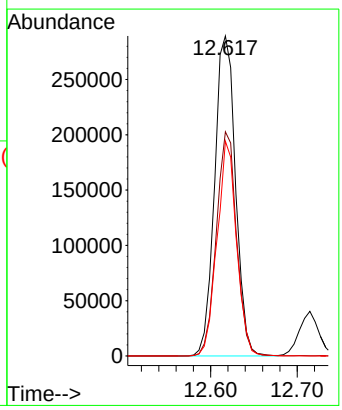
Supervised By :Semsettin Yesilyurt 10/03/2025

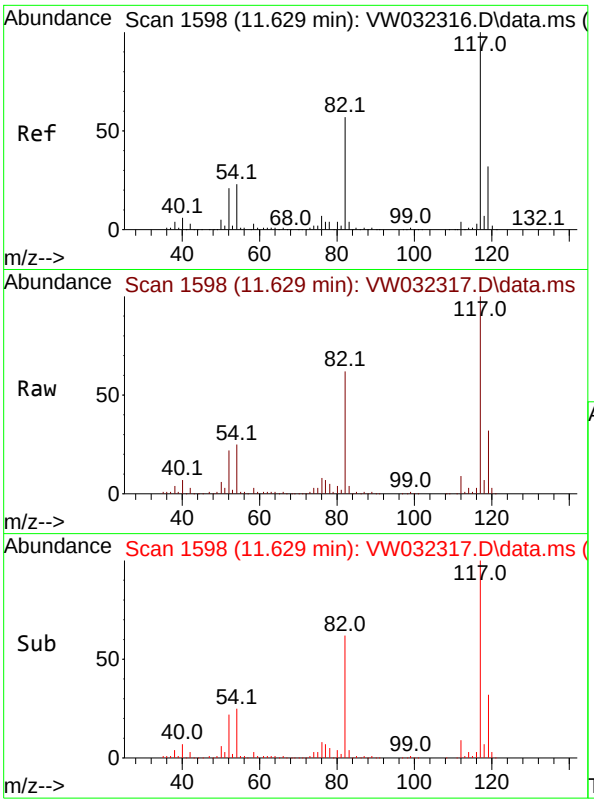


#62
4-Bromofluorobenzene
Concen: 101.586 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 95 Resp: 485396

Ion	Ratio	Lower	Upper
95	100		
174	67.6	0.0	145.6
176	62.7	0.0	140.8

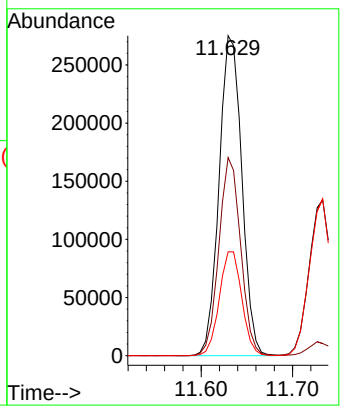




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:117 Resp: 47598

Ion	Ratio	Lower	Upper
117	100		
82	61.9	42.7	64.1
119	32.4	25.2	37.8



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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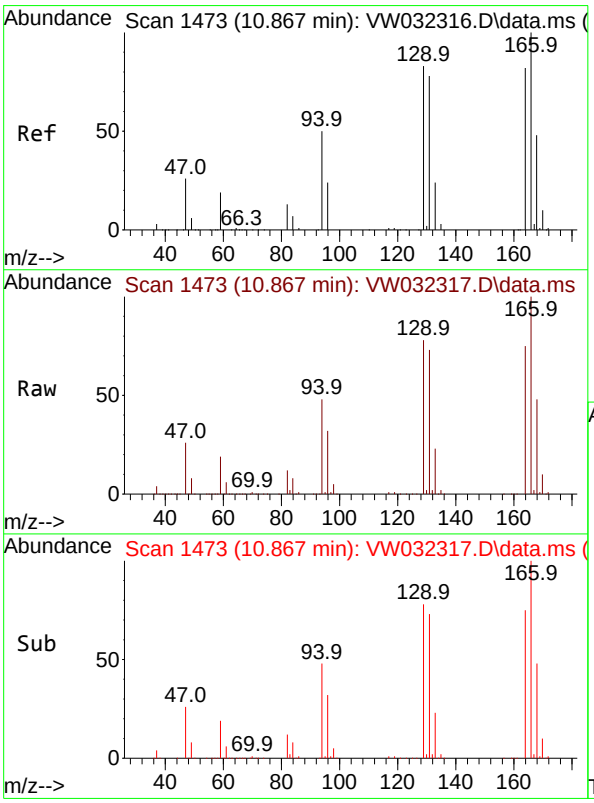
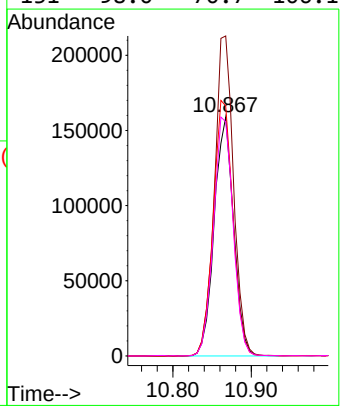
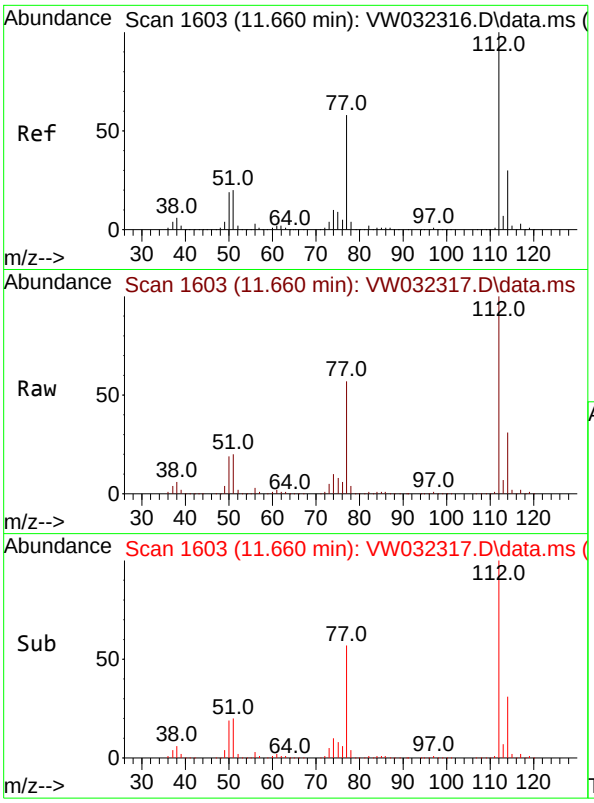


#64
Tetrachloroethene
Concen: 96.034 ug/l
RT: 10.867 min Scan# 1473
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:164 Resp: 273519

Ion	Ratio	Lower	Upper
164	100		
166	134.0	97.5	146.3
129	104.7	71.2	106.8
131	98.0	70.7	106.1





#65
Chlorobenzene
Concen: 99.469 ug/l
RT: 11.660 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:112 Resp: 104172

Ion	Ratio	Lower	Upper
112	100		
114	30.7	26.0	39.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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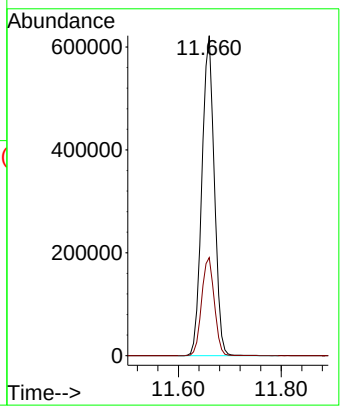
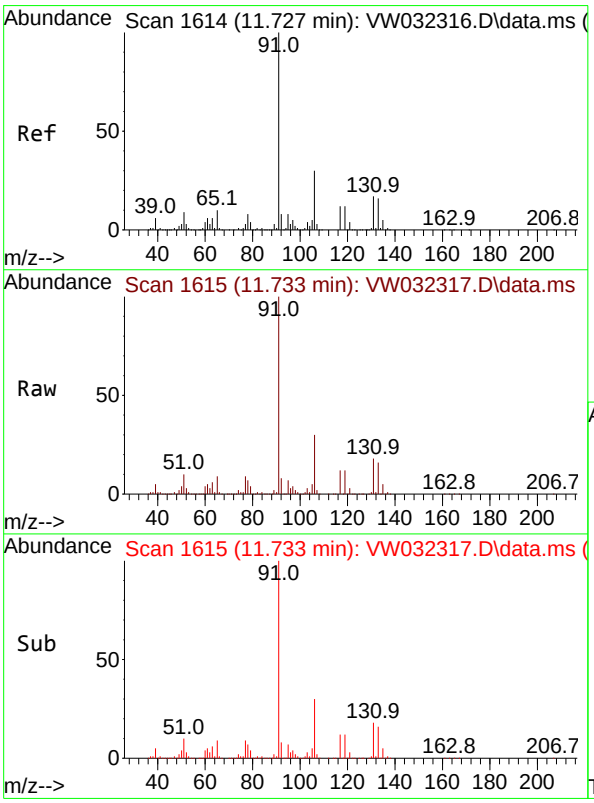
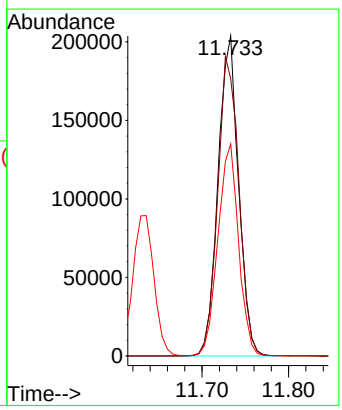


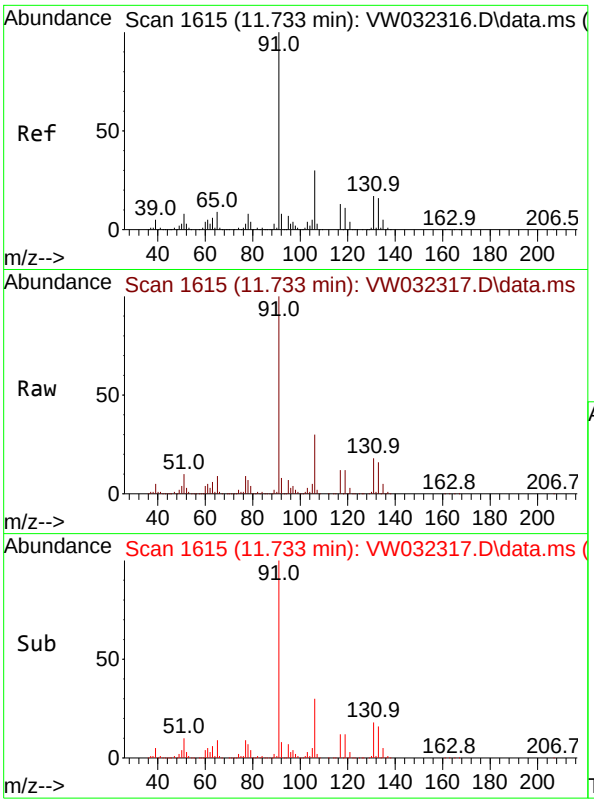


#66
1,1,1,2-Tetrachloroethane
Concen: 102.516 ug/l
RT: 11.733 min Scan# 1615
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:131 Resp: 334400

Ion	Ratio	Lower	Upper
131	100		
133	97.0	47.7	143.1
119	66.9	32.8	98.3

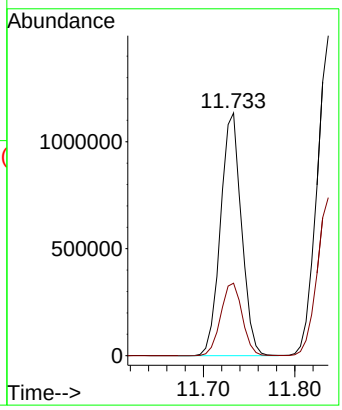




#67
Ethyl Benzene
Concen: 103.444 ug/l
RT: 11.733 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 91 Resp: 180581

Ion	Ratio	Lower	Upper
91	100		
106	29.9	25.3	37.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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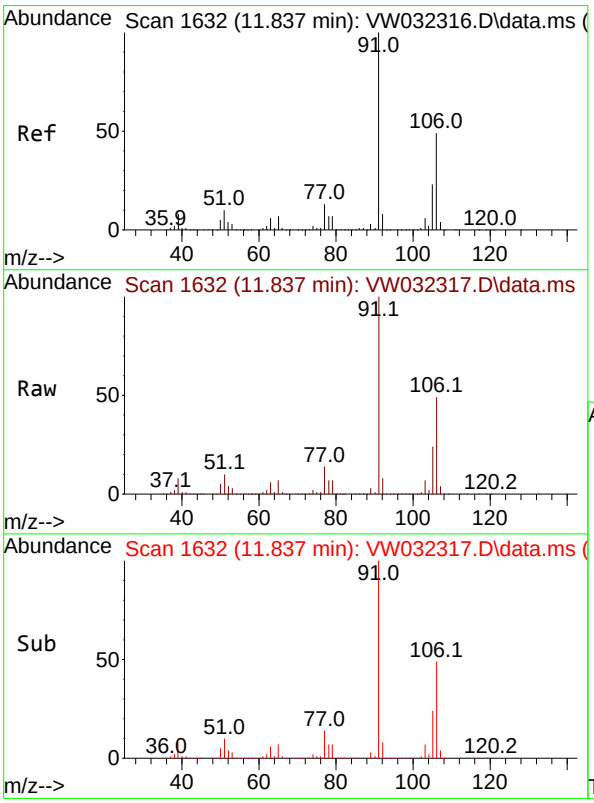
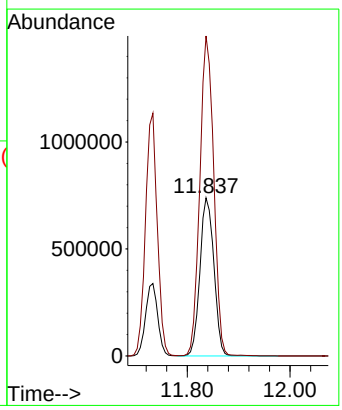
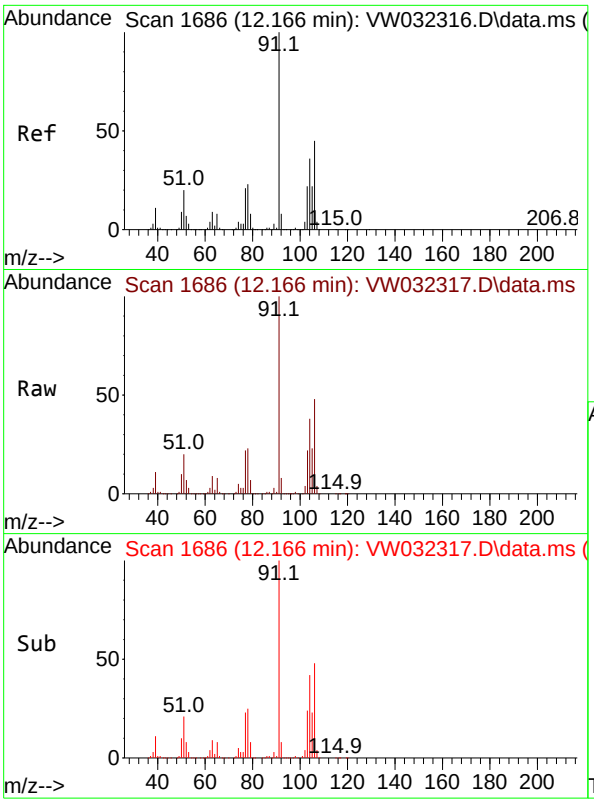


#68
m/p-Xylenes
Concen: 206.584 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:106 Resp: 1390632

Ion	Ratio	Lower	Upper
106	100		
91	201.8	164.2	246.2





#69
o-Xylene
Concen: 106.061 ug/l
RT: 12.166 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:106 Resp: 66767

Ion	Ratio	Lower	Upper
106	100		
91	216.2	108.7	326.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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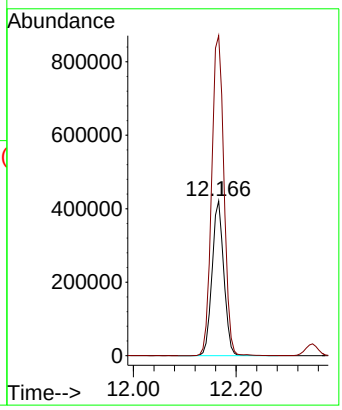
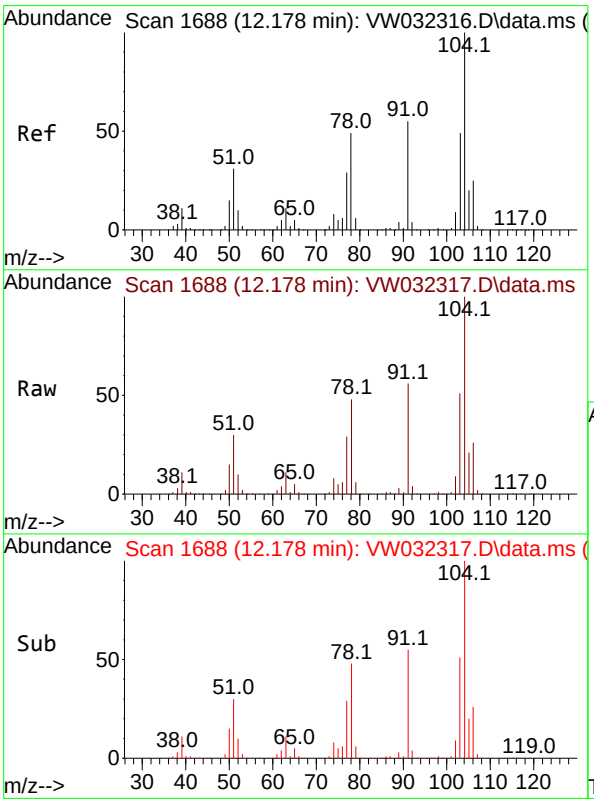
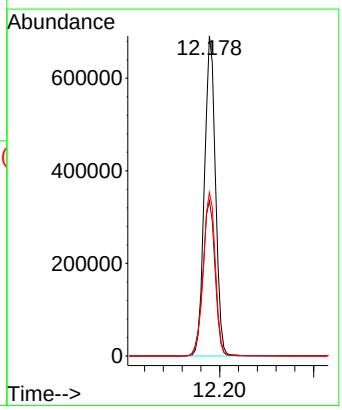


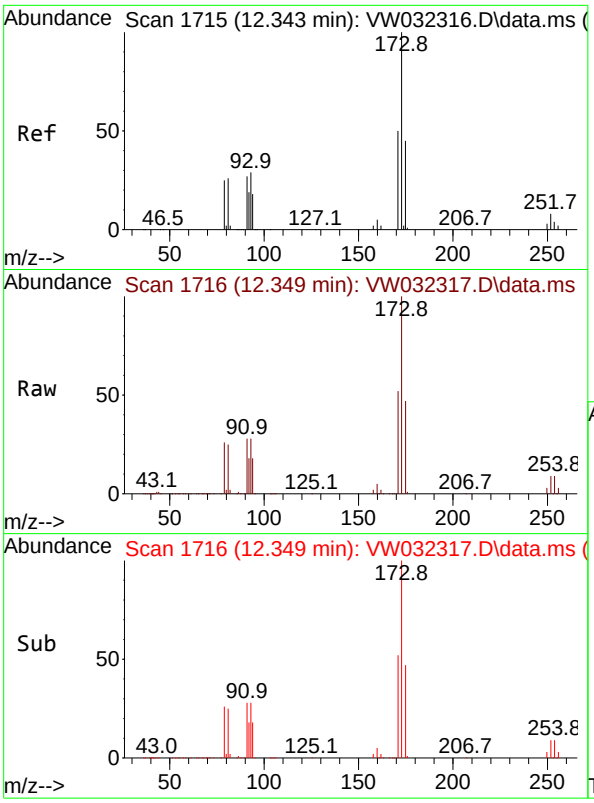


#70
Styrene
Concen: 102.692 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:104 Resp: 1128688

Ion	Ratio	Lower	Upper
104	100		
78	53.2	41.6	62.4
103	55.8	44.8	67.2

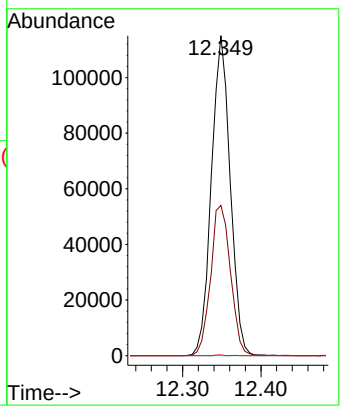




#71
Bromoform
Concen: 102.725 ug/l
RT: 12.349 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:173 Resp: 19206

Ion	Ratio	Lower	Upper
173	100		
175	49.5	24.9	74.7
254	0.1	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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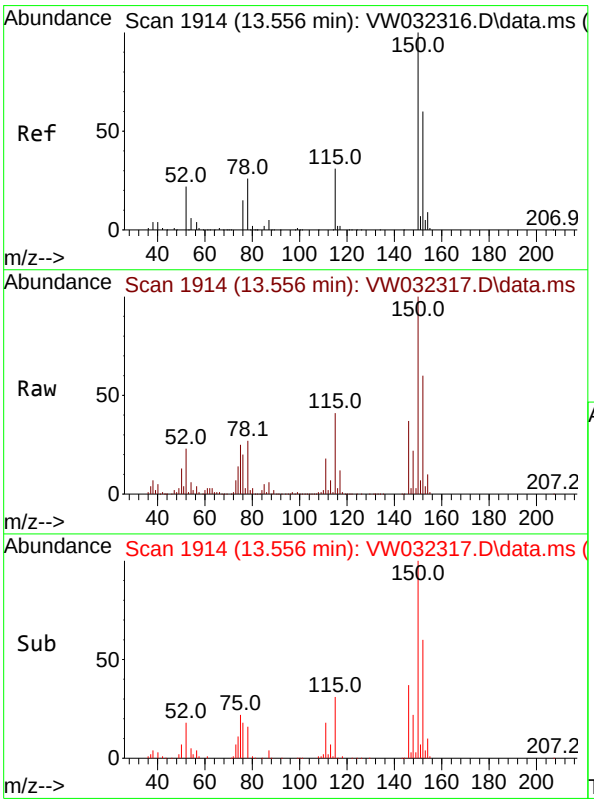
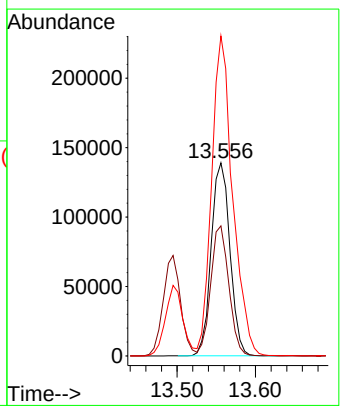
Supervised By :Semsettin Yesilyurt 10/03/2025

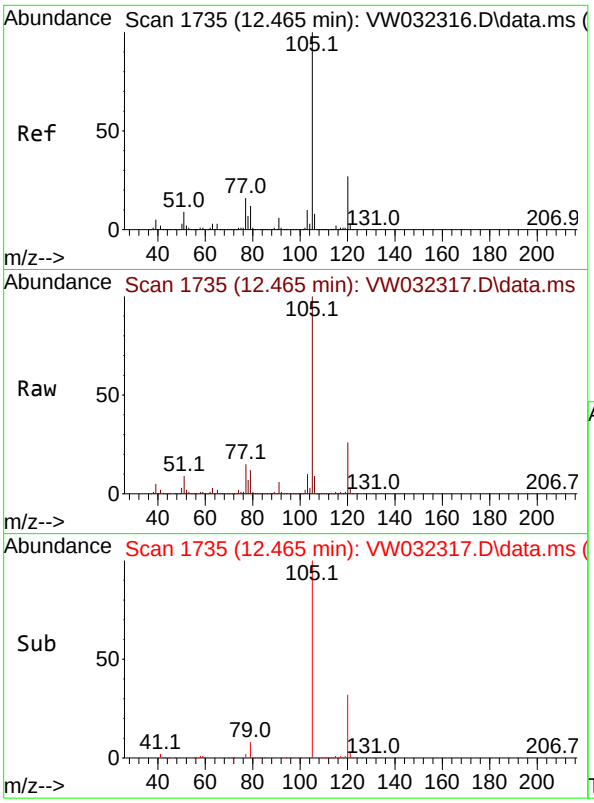


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:152 Resp: 231176

Ion	Ratio	Lower	Upper
152	100		
115	64.9	31.8	95.4
150	185.2	0.0	343.0

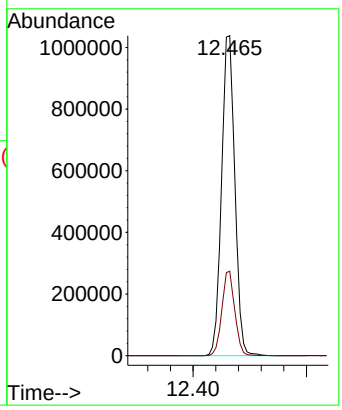




#73
Isopropylbenzene
Concen: 106.560 ug/l
RT: 12.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:105 Resp: 168535

Ion	Ratio	Lower	Upper
105	100		
120	25.7	13.0	38.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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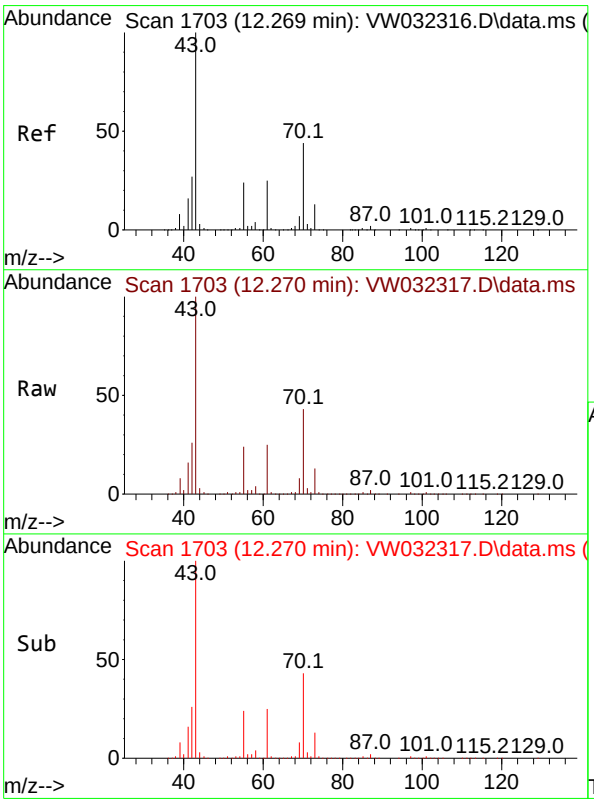
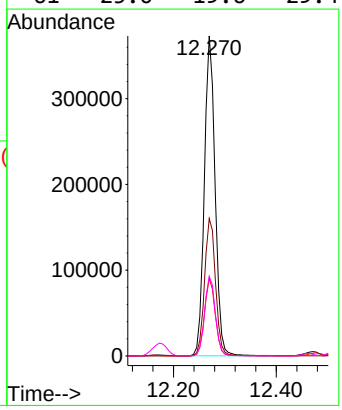
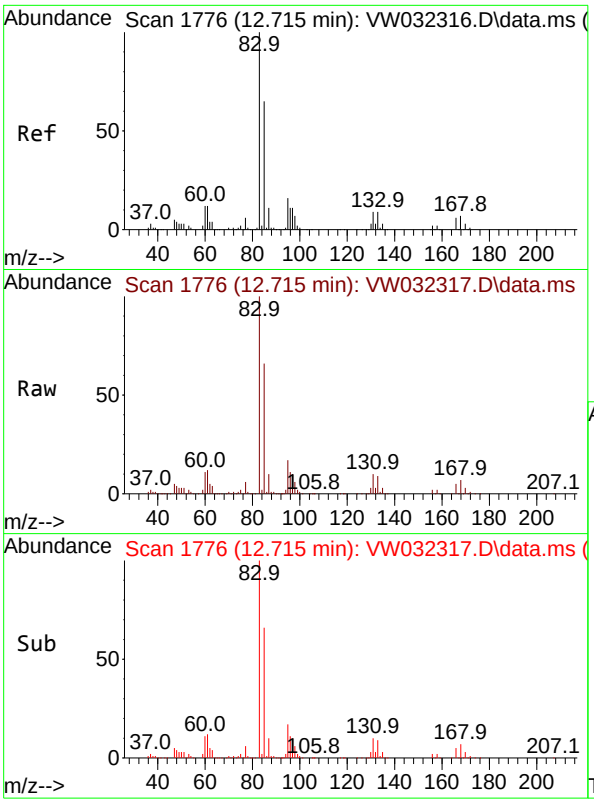


#74
N-amyl acetate
Concen: 107.133 ug/l
RT: 12.270 min Scan# 1703
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 43 Resp: 540543

Ion	Ratio	Lower	Upper
43	100		
70	44.1	35.3	52.9
55	24.5	19.9	29.9
61	25.0	19.6	29.4

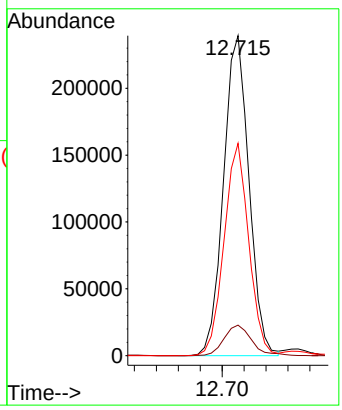




#75
1,1,2,2-Tetrachloroethane
Concen: 98.125 ug/l
RT: 12.715 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 83 Resp: 38534

Ion	Ratio	Lower	Upper
83	100		
131	10.3	5.1	15.4
85	64.4	32.2	96.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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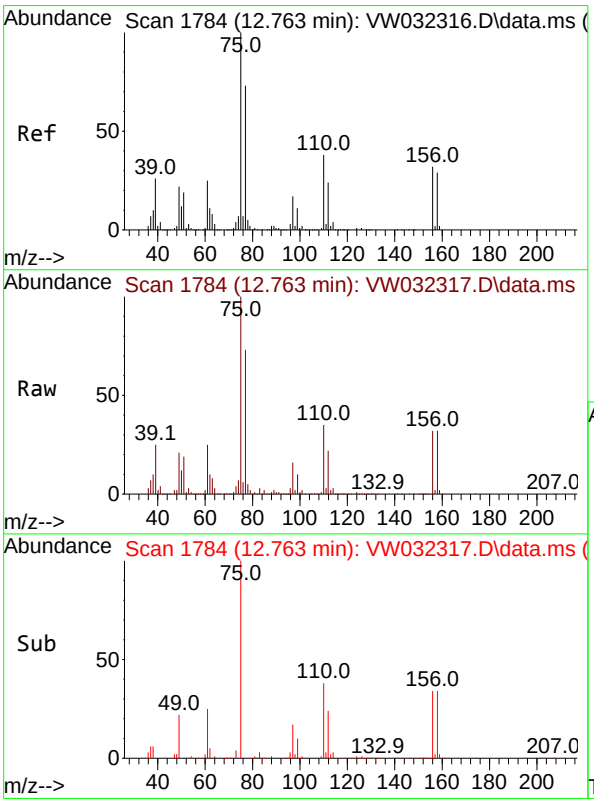
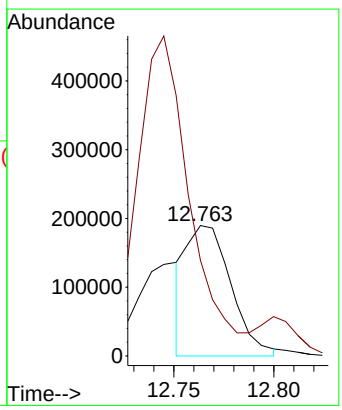
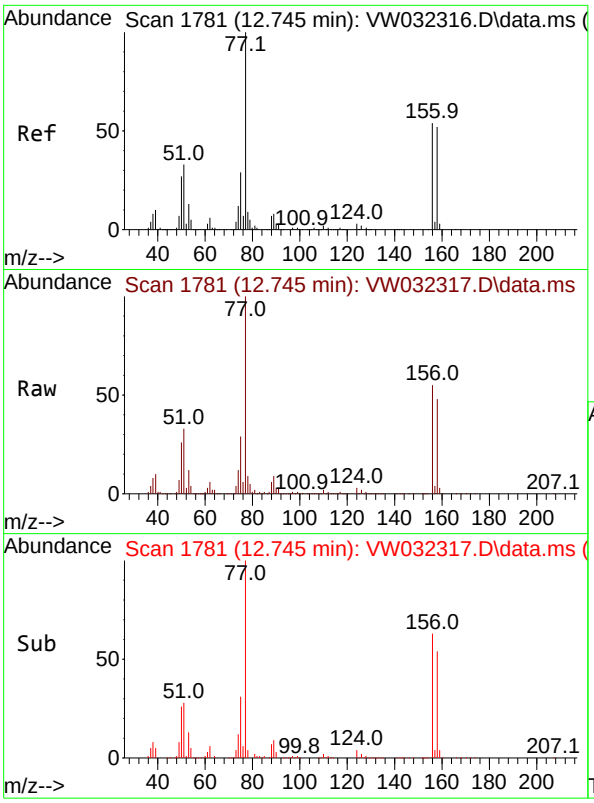


#76
1,2,3-Trichloropropane
Concen: 96.745 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 75 Resp: 295124

Ion	Ratio	Lower	Upper
75	100		
77	286.5	141.7	425.1

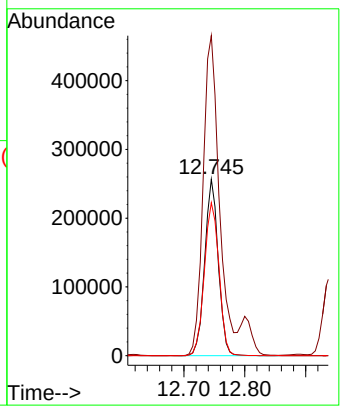




#77
Bromobenzene
Concen: 104.063 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:156 Resp: 39674

Ion	Ratio	Lower	Upper
156	100		
77	213.1	98.6	295.7
158	93.9	48.4	145.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

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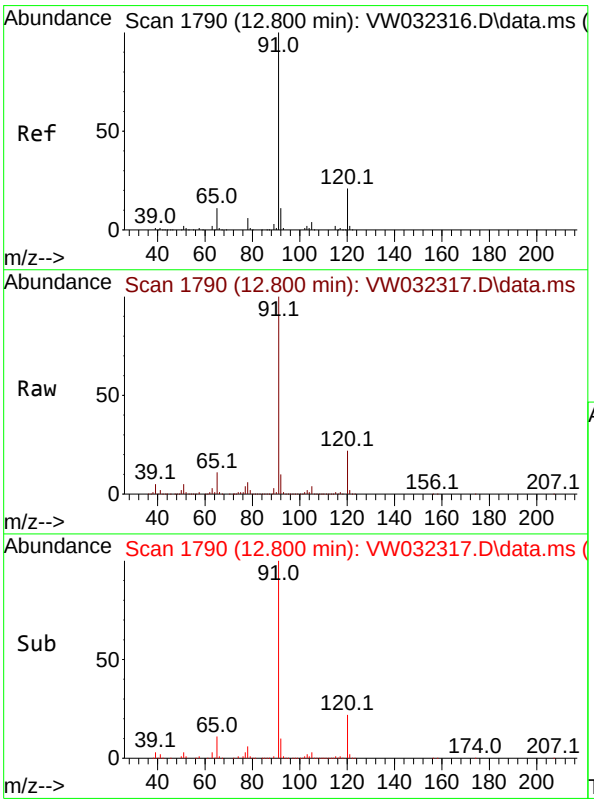
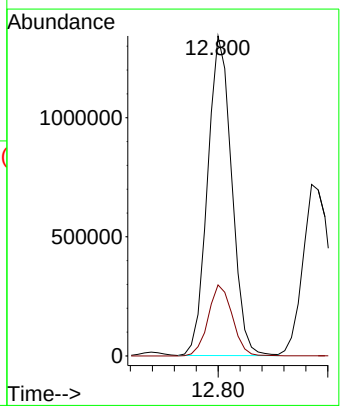
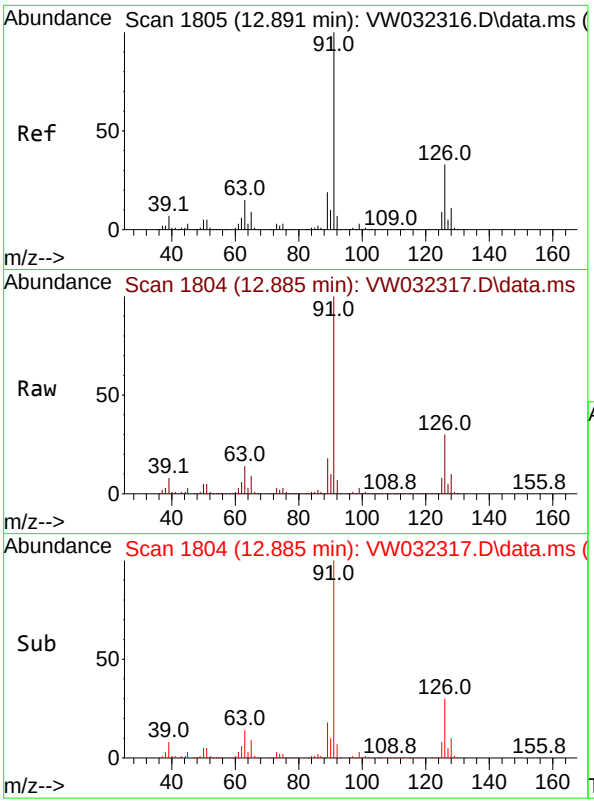


#78
n-propylbenzene
Concen: 103.878 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 91 Resp: 2052249

Ion	Ratio	Lower	Upper
91	100		
120	22.3	11.8	35.4





#79
2-Chlorotoluene
Concen: 100.479 ug/l
RT: 12.885 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 91 Resp: 121376

Ion	Ratio	Lower	Upper
91	100		
126	31.4	16.6	49.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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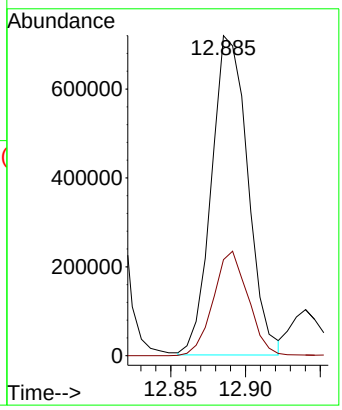
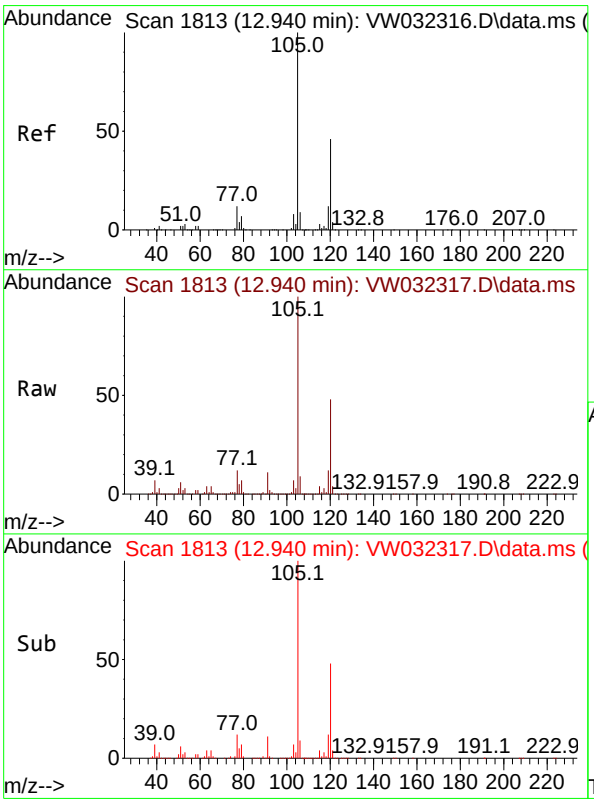
Supervised By :Semsettin Yesilyurt 10/03/2025

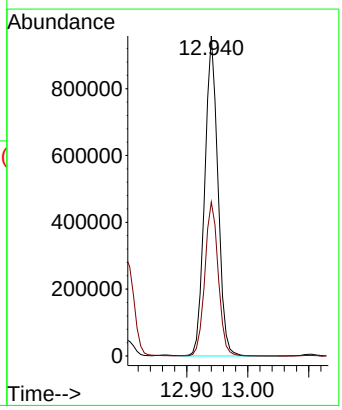


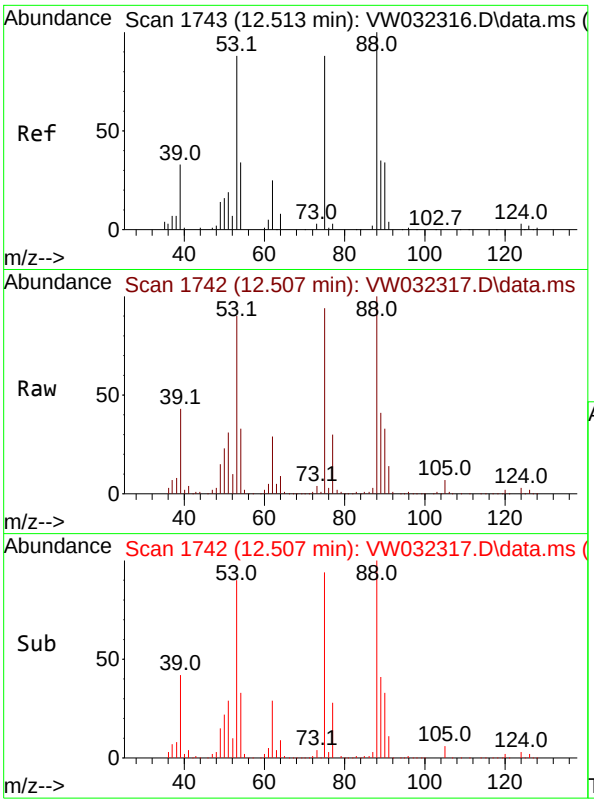


#80
1,3,5-Trimethylbenzene
Concen: 105.277 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:105 Resp: 1439767

Ion	Ratio	Lower	Upper
105	100		
120	48.8	24.8	74.4





#81
trans-1,4-Dichloro-2-butene
Concen: 112.737 ug/l
RT: 12.507 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

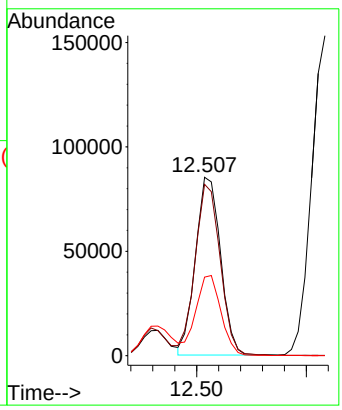
Tgt Ion: 75 Resp: 13538

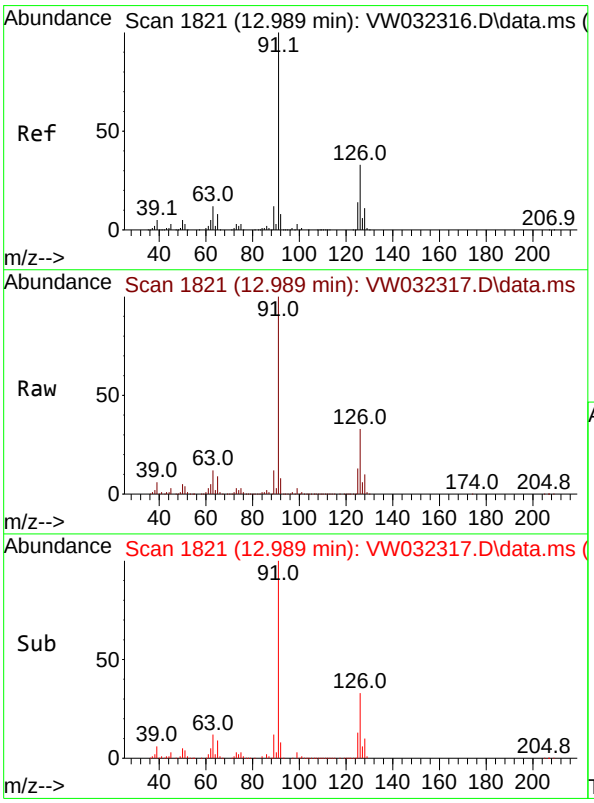
Ion	Ratio	Lower	Upper
75	100		
53	98.1	91.0	136.6
89	45.9	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

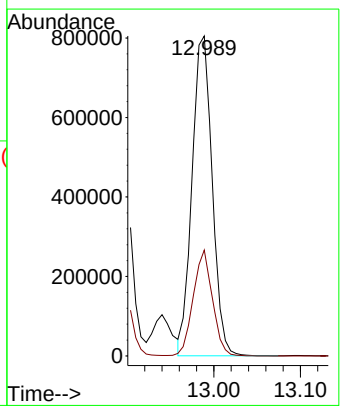


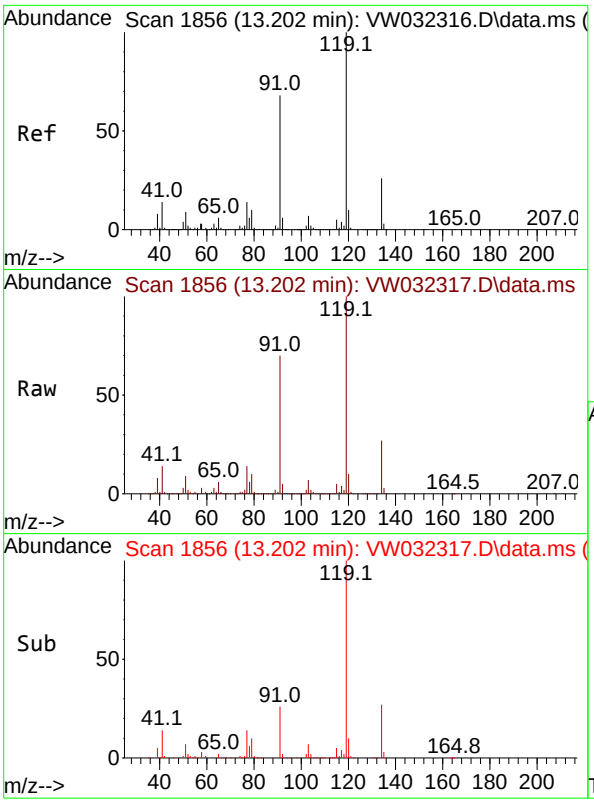


#82
4-Chlorotoluene
Concen: 101.179 ug/l
RT: 12.989 min Scan# 1821
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 91 Resp: 1299440

Ion	Ratio	Lower	Upper
91	100		
126	31.7	16.1	48.2





#83
tert-Butylbenzene
Concen: 105.090 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

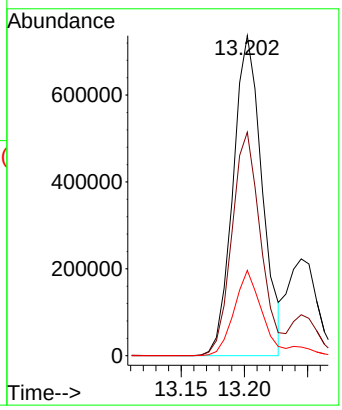
Tgt Ion:119 Resp: 117923

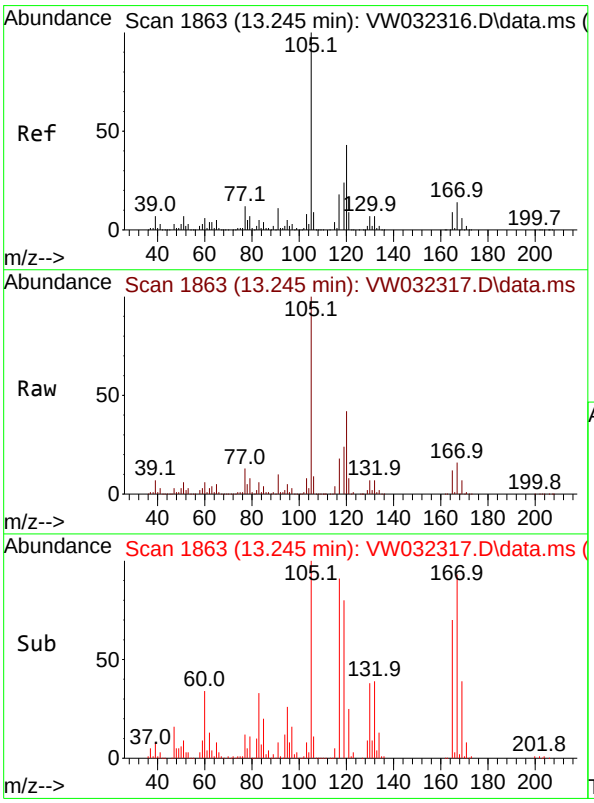
Ion	Ratio	Lower	Upper
119	100		
91	69.8	33.8	101.3
134	25.3	12.5	37.5

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

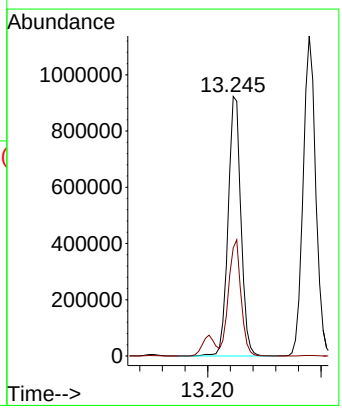


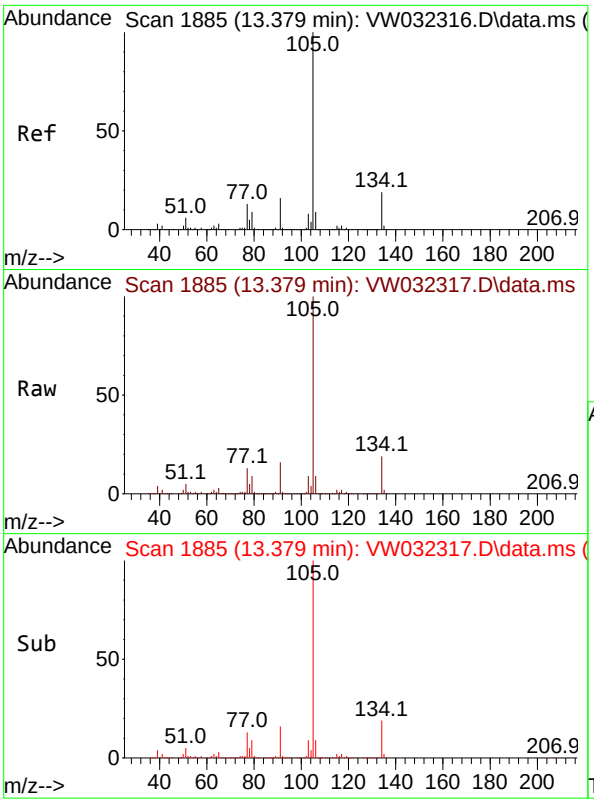


#84
1,2,4-Trimethylbenzene
Concen: 103.930 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:105 Resp: 1445279

Ion	Ratio	Lower	Upper
105	100		
120	43.3	22.1	66.3

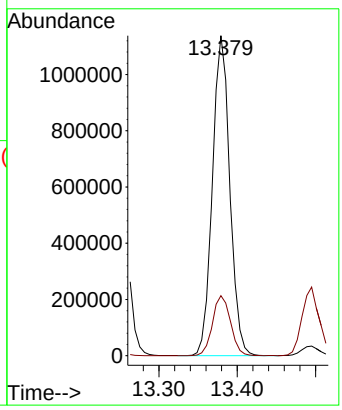




#85
sec-Butylbenzene
Concen: 102.403 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:105 Resp: 175600

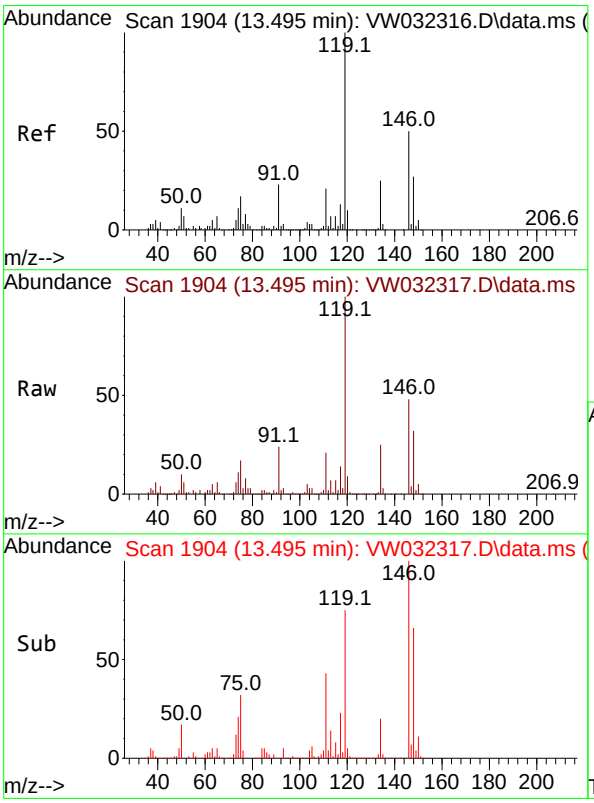
Ion	Ratio	Lower	Upper
105	100		
134	19.4	10.1	30.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

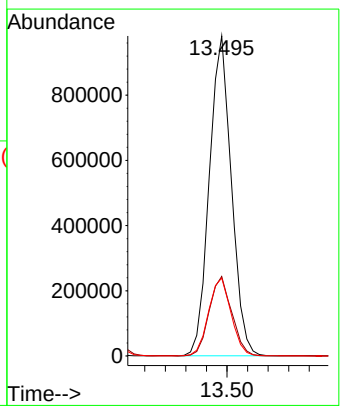
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

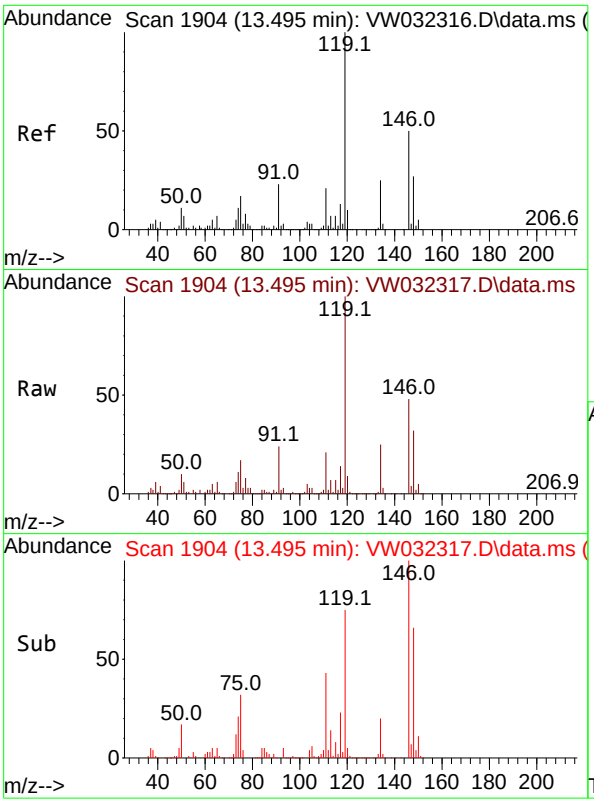


#86
p-Isopropyltoluene
Concen: 102.680 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:119 Resp: 1460991

Ion	Ratio	Lower	Upper
119	100		
134	25.5	12.6	37.6
91	24.7	12.4	37.0

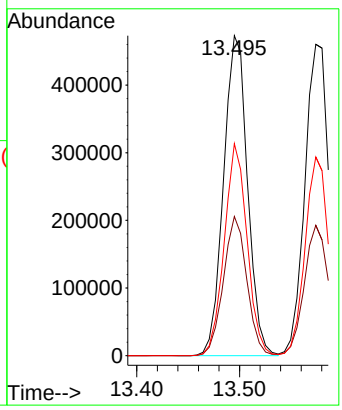




#87
1,3-Dichlorobenzene
Concen: 99.297 ug/l
RT: 13.495 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:146 Resp: 76658

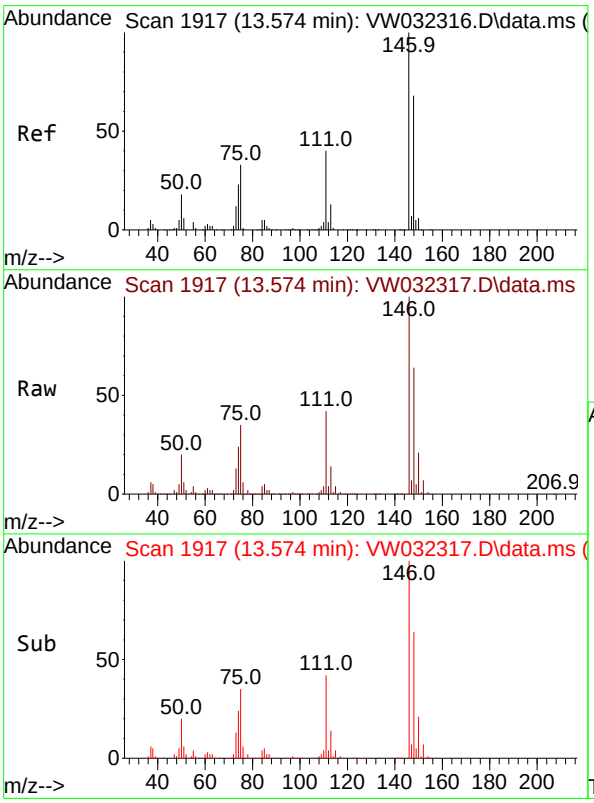
Ion	Ratio	Lower	Upper
146	100		
111	42.6	20.6	61.9
148	63.1	30.6	92.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

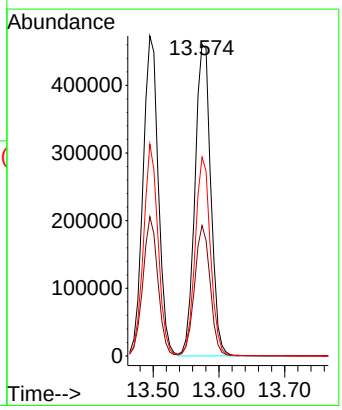
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

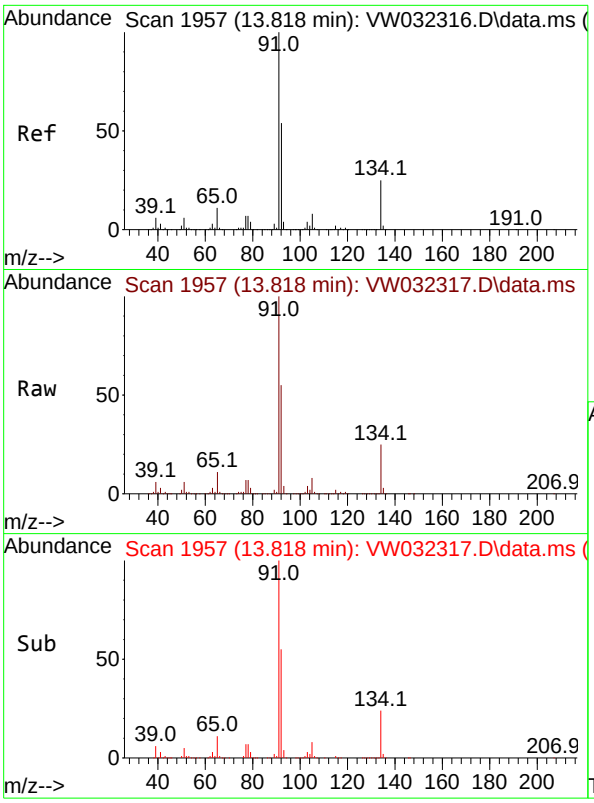


#88
1,4-Dichlorobenzene
Concen: 99.477 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:146 Resp: 767903

Ion	Ratio	Lower	Upper
146	100		
111	40.9	21.3	63.7
148	61.6	33.4	100.1





#89
n-Butylbenzene
Concen: 103.706 ug/l
RT: 13.818 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 91 Resp: 144070

Ion	Ratio	Lower	Upper
91	100		
92	55.0	27.0	81.0
134	24.3	13.1	39.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
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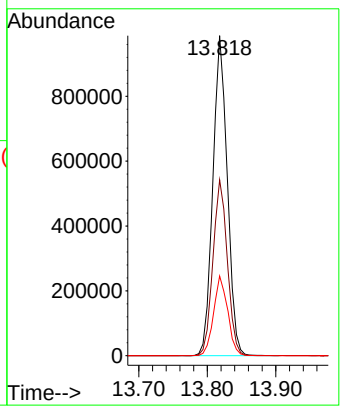
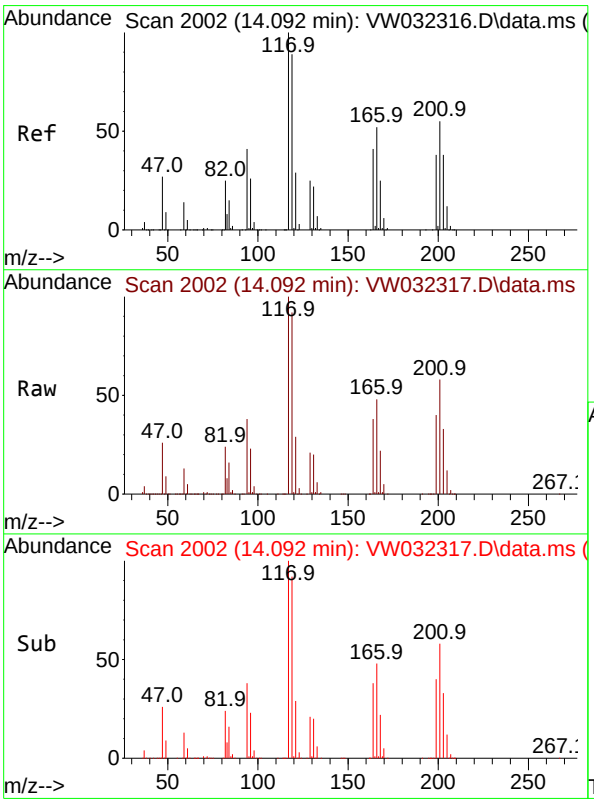
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

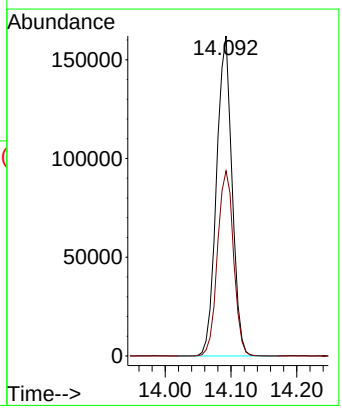


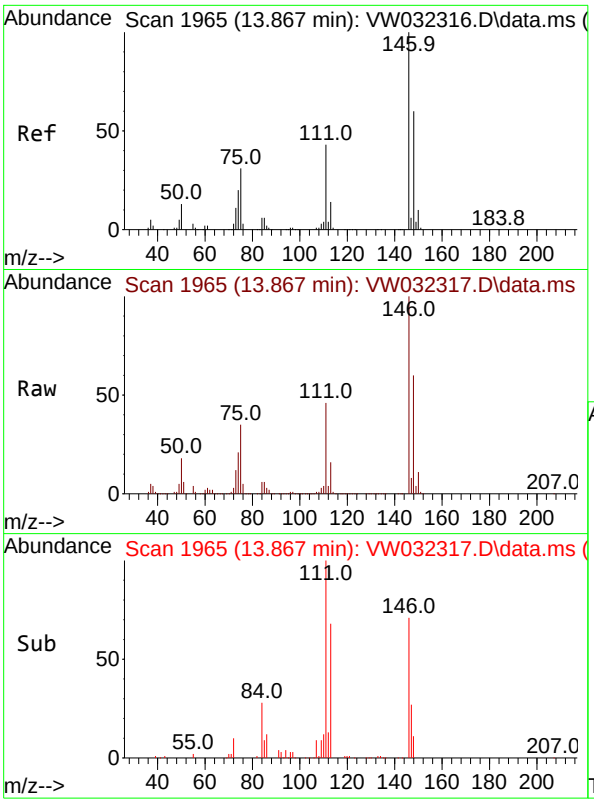


#90
Hexachloroethane
Concen: 104.296 ug/l
RT: 14.092 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:117 Resp: 265991

Ion	Ratio	Lower	Upper
117	100		
201	59.9	32.8	98.4





#91
1,2-Dichlorobenzene
Concen: 97.184 ug/l
RT: 13.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

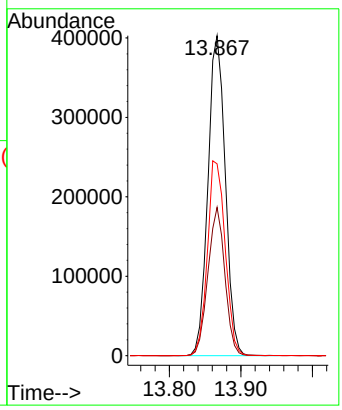
Tgt Ion:146 Resp: 67821

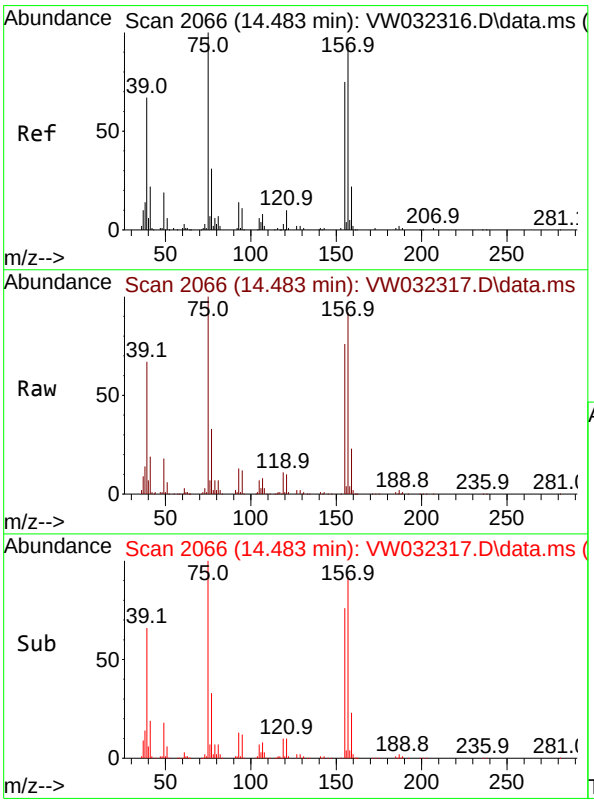
Ion	Ratio	Lower	Upper
146	100		
111	45.2	23.4	70.0
148	62.5	34.1	102.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

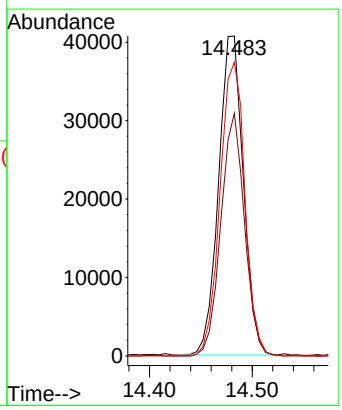


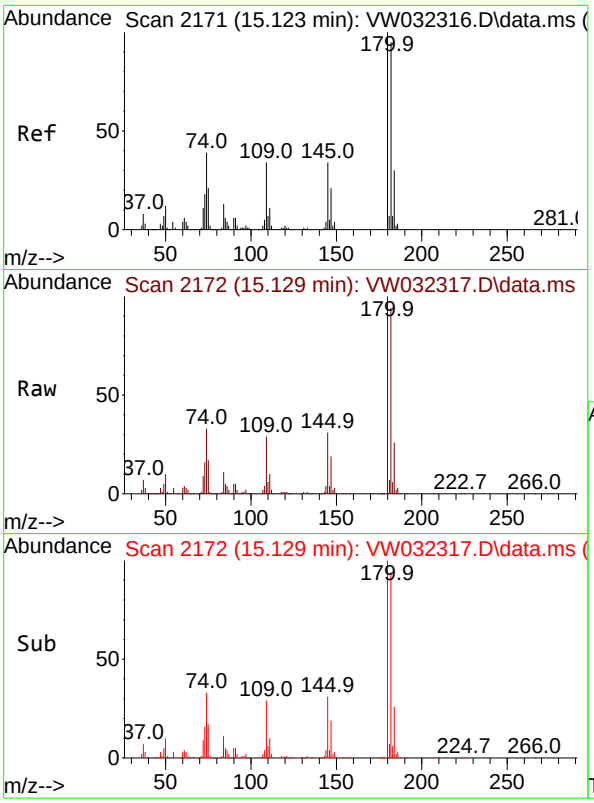


#92
1,2-Dibromo-3-Chloropropane
Concen: 98.781 ug/l
RT: 14.483 min Scan# 2066
Delta R.T. 0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion: 75 Resp: 67919

Ion	Ratio	Lower	Upper
75	100		
155	72.8	40.8	122.5
157	92.4	51.8	155.4

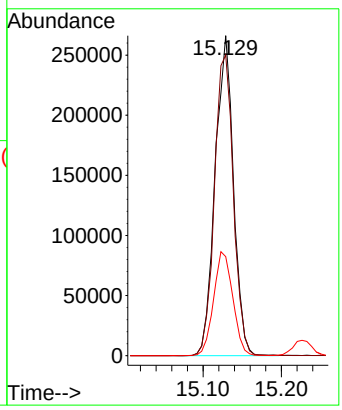




#93
1,2,4-Trichlorobenzene
Concen: 103.645 ug/l
RT: 15.129 min Scan# 2
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:180 Resp: 43372

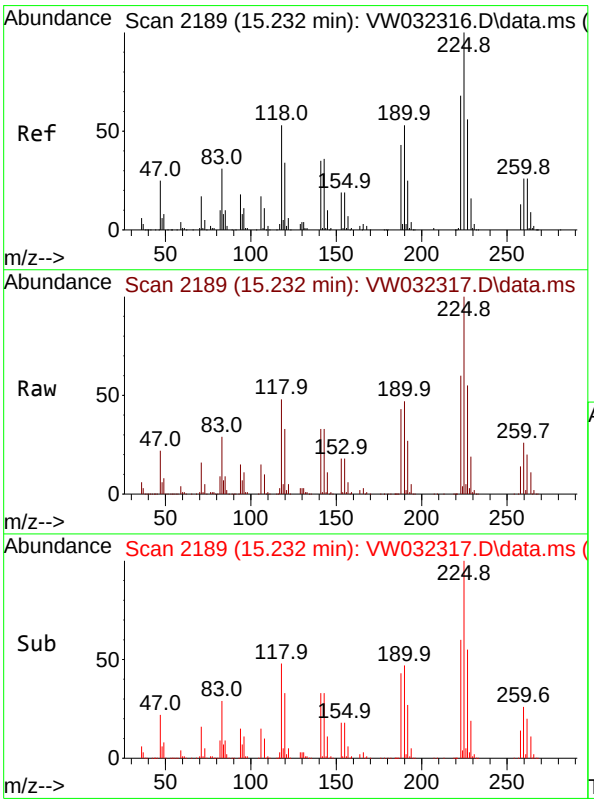
Ion	Ratio	Lower	Upper
180	100		
182	97.3	47.4	142.2
145	34.0	16.4	49.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

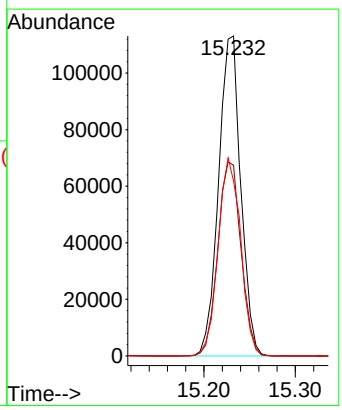
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

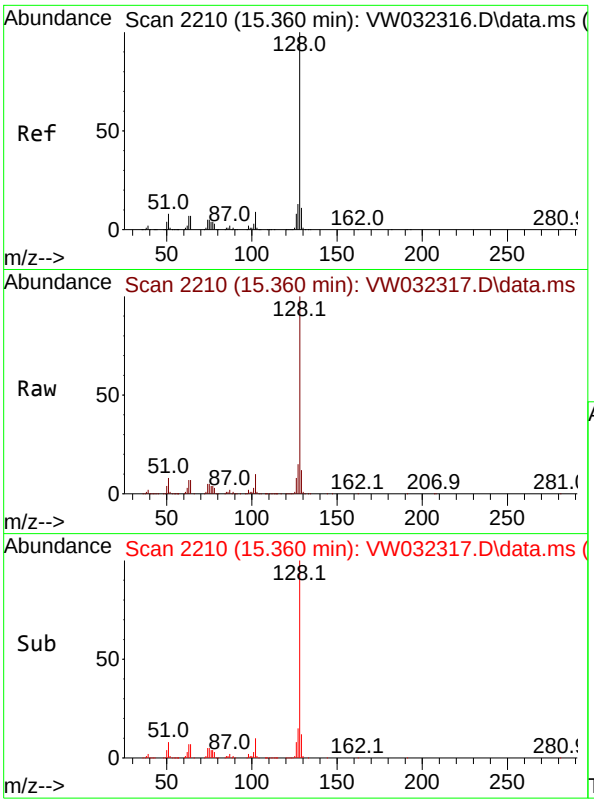


#94
Hexachlorobutadiene
Concen: 99.894 ug/l
RT: 15.232 min Scan# 2189
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:225 Resp: 191123

Ion	Ratio	Lower	Upper
225	100		
223	63.2	29.8	89.3
227	62.6	30.5	91.5

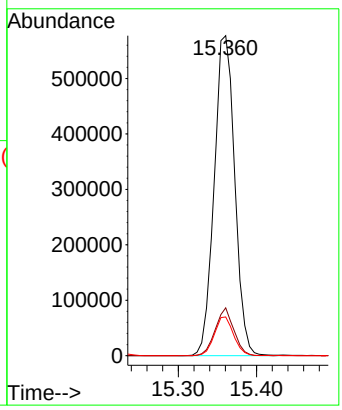




#95
Naphthalene
Concen: 104.900 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:128 Resp: 105420

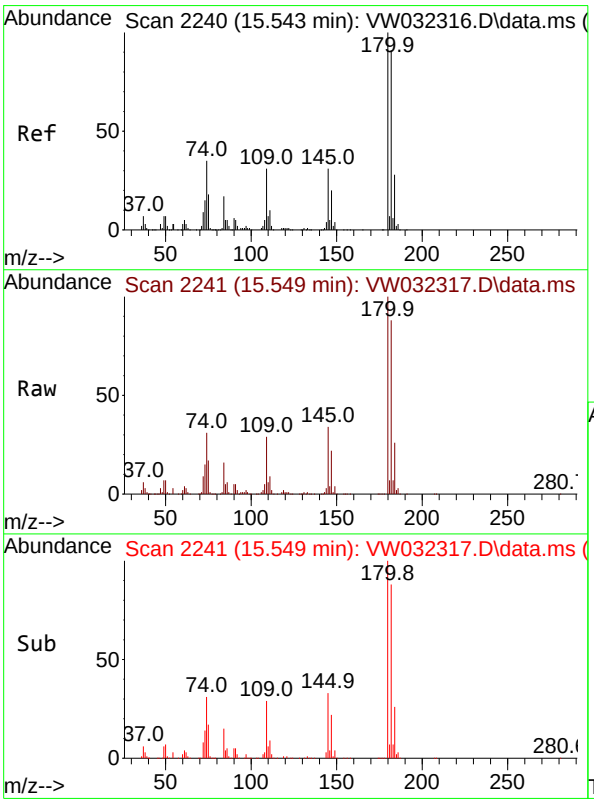
Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.6	16.0
129	11.4	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

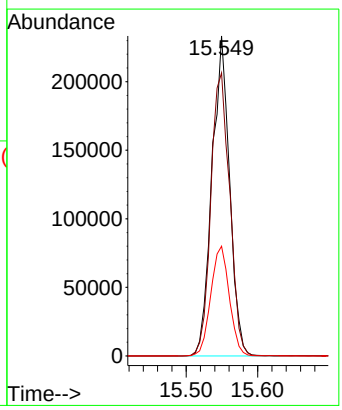
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025



#96
1,2,3-Trichlorobenzene
Concen: 101.292 ug/l
RT: 15.549 min Scan# 2241
Delta R.T. 0.006 min
Lab File: VW032317.D
Acq: 01 Oct 2025 14:59

Tgt Ion:180 Resp: 399527

Ion	Ratio	Lower	Upper
180	100		
182	94.6	47.7	143.1
145	36.1	17.2	51.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032318.D
Acq On : 01 Oct 2025 15:20
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:17:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.965	168	291156	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	539030	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	484985	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	222254	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	616717	145.223	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 290.440%#			
35) Dibromofluoromethane	7.898	113	503547	144.249	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 288.500%#			
50) Toluene-d8	10.325	98	1931096	149.885	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 299.780%#			
62) 4-Bromofluorobenzene	12.617	95	721146	148.089	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 296.180%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.040	85	261383	143.063	ug/l	97
3) Chloromethane	2.259	50	404786	143.584	ug/l	97
4) Vinyl Chloride	2.405	62	470035	139.655	ug/l	98
5) Bromomethane	2.814	94	337072	136.281	ug/l	100
6) Chloroethane	2.966	64	315013	141.765	ug/l	100
7) Trichlorofluoromethane	3.302	101	390434	154.935	ug/l	90
8) Diethyl Ether	3.722	74	319023	146.096	ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.100	101	417711	138.198	ug/l	92
10) Methyl Iodide	4.308	142	634551	147.136	ug/l	98
11) Tert butyl alcohol	5.222	59	234095	728.258	ug/l	96
12) 1,1-Dichloroethene	4.076	96	467506	142.471	ug/l	91
13) Acrolein	3.930	56	366309	702.158	ug/l	94
14) Allyl chloride	4.704	41	826844	149.185	ug/l	88
15) Acrylonitrile	5.405	53	873212	768.664	ug/l	98
16) Acetone	4.161	43	790475	672.241	ug/l	100
17) Carbon Disulfide	4.417	76	1328431	148.374	ug/l	99
18) Methyl Acetate	4.710	43	517404	153.605	ug/l	98
19) Methyl tert-butyl Ether	5.466	73	959825	148.511	ug/l	98
20) Methylene Chloride	4.960	84	546261	151.150	ug/l	98
21) trans-1,2-Dichloroethene	5.454	96	538776	148.302	ug/l	96
22) Diisopropyl ether	6.344	45	1710365	148.385	ug/l	93
23) Vinyl Acetate	6.283	43	6026856	782.812	ug/l	100
24) 1,1-Dichloroethane	6.246	63	1023465	146.150	ug/l	98
25) 2-Butanone	7.191	43	1210042	755.574	ug/l	99
26) 2,2-Dichloropropane	7.185	77	504110	140.732	ug/l	98
27) cis-1,2-Dichloroethene	7.191	96	650040	148.941	ug/l	95
28) Bromochloromethane	7.533	49	486570	147.682	ug/l	88
29) Tetrahydrofuran	7.551	42	782184	776.649	ug/l	94
30) Chloroform	7.691	83	1028785	144.857	ug/l	98
31) Cyclohexane	7.971	56	820370	137.222	ug/l	94
32) 1,1,1-Trichloroethane	7.886	97	717558	142.581	ug/l	99
36) 1,1-Dichloropropene	8.093	75	721795	146.511	ug/l	97
37) Ethyl Acetate	7.276	43	501366	152.893	ug/l	99
38) Carbon Tetrachloride	8.081	117	694408	149.786	ug/l	99
39) Methylcyclohexane	9.343	83	907851	152.772	ug/l	93
40) Benzene	8.337	78	2220041	143.766	ug/l	94

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032318.D
Acq On : 01 Oct 2025 15:20
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:17:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	282967	160.121	ug/l		92
42) 1,2-Dichloroethane	8.410	62	732140	144.899	ug/l		99
43) Isopropyl Acetate	8.435	43	929737	159.826	ug/l		99
44) Trichloroethene	9.099	130	531979	147.127	ug/l		87
45) 1,2-Dichloropropane	9.374	63	559634	145.193	ug/l		99
46) Dibromomethane	9.465	93	347379	146.565	ug/l		95
47) Bromodichloromethane	9.654	83	807902	149.030	ug/l		96
48) Methyl methacrylate	9.441	41	459352	162.411	ug/l	#	91
49) 1,4-Dioxane	9.459	88	102853	3174.916	ug/l		93
51) 4-Methyl-2-Pentanone	10.215	43	2563648	760.880	ug/l		99
52) Toluene	10.392	92	1416495	147.299	ug/l		96
53) t-1,3-Dichloropropene	10.611	75	845826	160.824	ug/l		99
54) cis-1,3-Dichloropropene	10.081	75	944717	155.941	ug/l		93
55) 1,1,2-Trichloroethane	10.788	97	460089	145.242	ug/l		98
56) Ethyl methacrylate	10.648	69	733869	165.515	ug/l		95
57) 1,3-Dichloropropane	10.934	76	820516	146.656	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	2014602	853.757	ug/l		96
59) 2-Hexanone	10.971	43	1842050	775.163	ug/l		99
60) Dibromochloromethane	11.129	129	554578	154.183	ug/l		98
61) 1,2-Dibromoethane	11.239	107	463449	150.041	ug/l		99
64) Tetrachloroethene	10.867	164	406564	140.097	ug/l	#	82
65) Chlorobenzene	11.660	112	1557035	145.914	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.733	131	510773	153.680	ug/l		97
67) Ethyl Benzene	11.733	91	2684011	150.897	ug/l		100
68) m/p-Xylenes	11.837	106	2051963	299.170	ug/l		100
69) o-Xylene	12.166	106	986773	153.842	ug/l		99
70) Styrene	12.178	104	1725722	154.098	ug/l		98
71) Bromoform	12.349	173	304225	159.692	ug/l	#	99
73) Isopropylbenzene	12.465	105	2476143	162.844	ug/l		99
74) N-amyl acetate	12.269	43	829796	171.063	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.715	83	579686	153.538	ug/l		99
76) 1,2,3-Trichloropropane	12.763	75	441352m	150.487	ug/l		
77) Bromobenzene	12.745	156	569028	155.243	ug/l		89
78) n-propylbenzene	12.800	91	3001989	158.050	ug/l		98
79) 2-Chlorotoluene	12.891	91	1832239	157.767	ug/l		97
80) 1,3,5-Trimethylbenzene	12.940	105	2080060	158.201	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.513	75	204880	177.457	ug/l		89
82) 4-Chlorotoluene	12.983	91	1892838	153.300	ug/l		99
83) tert-Butylbenzene	13.202	119	1689407	156.599	ug/l		93
84) 1,2,4-Trimethylbenzene	13.245	105	2037112	152.369	ug/l		99
85) sec-Butylbenzene	13.379	105	2654122	160.991	ug/l		97
86) p-Isopropyltoluene	13.495	119	2141983	156.585	ug/l		99
87) 1,3-Dichlorobenzene	13.495	146	1147994	154.671	ug/l		97
88) 1,4-Dichlorobenzene	13.574	146	1064904	143.490	ug/l		99
89) n-Butylbenzene	13.818	91	2169211	162.413	ug/l		99
90) Hexachloroethane	14.092	117	392482	160.071	ug/l		94
91) 1,2-Dichlorobenzene	13.867	146	1027041	153.076	ug/l		94
92) 1,2-Dibromo-3-Chloropr...	14.476	75	106355	160.891	ug/l		93
93) 1,2,4-Trichlorobenzene	15.129	180	664620	165.196	ug/l		97
94) Hexachlorobutadiene	15.226	225	283170	153.946	ug/l		99
95) Naphthalene	15.360	128	1692473	175.173	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	596762	157.371	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032318.D
Acq On : 01 Oct 2025 15:20
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:17:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

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

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

ICAL Form

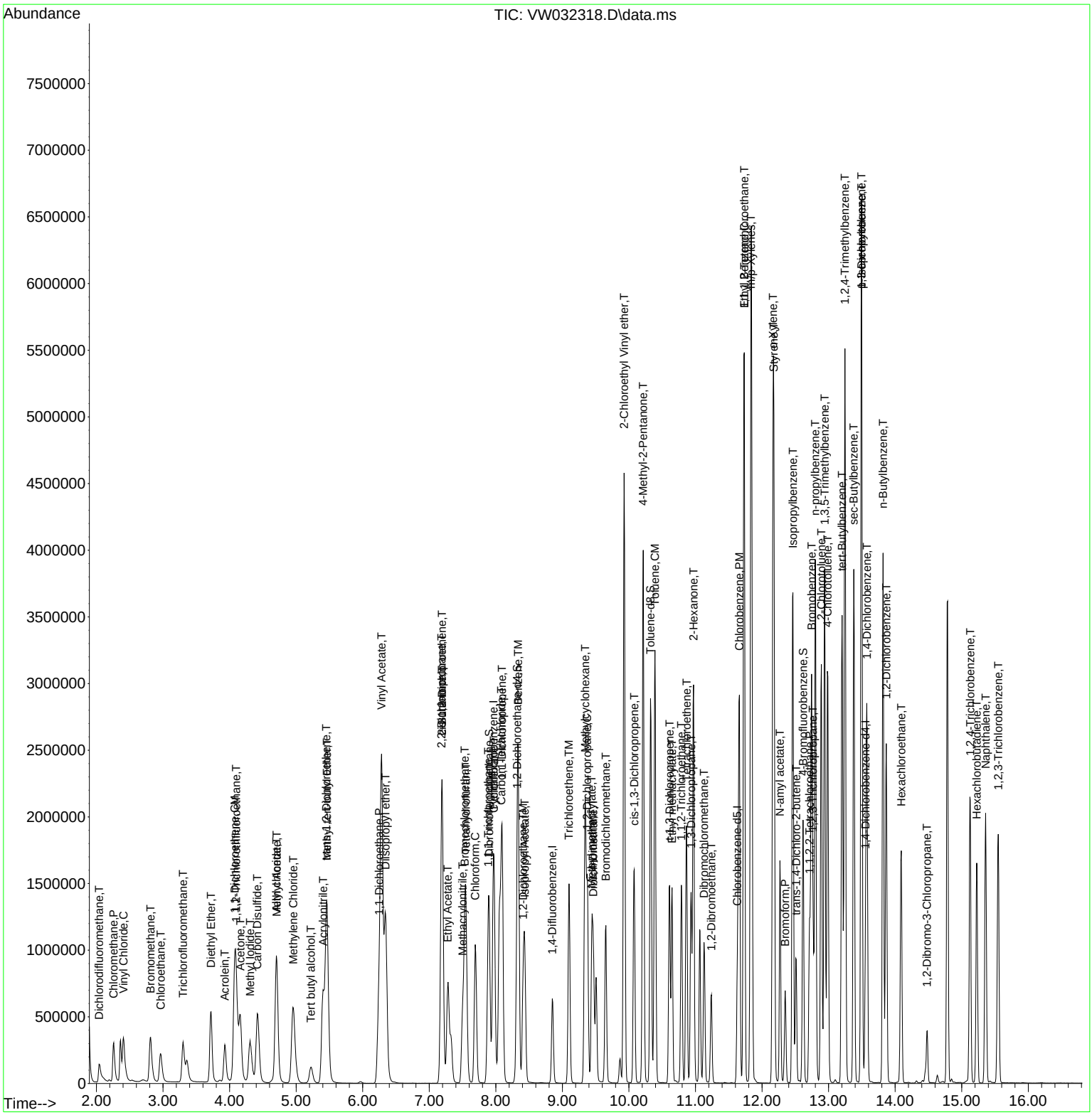
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032318.D
Acq On : 01 Oct 2025 15:20
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 8 Sample Multiplier: 1

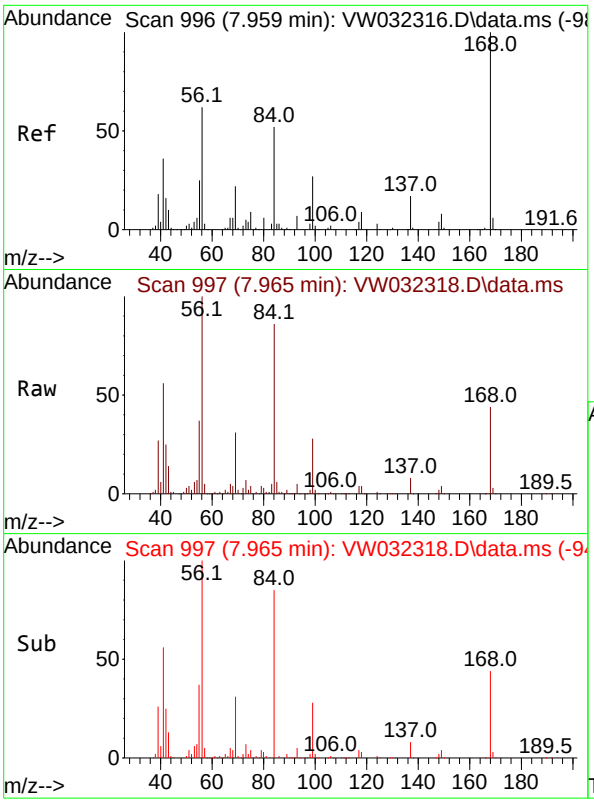
Quant Time: Oct 02 21:17:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:10:58 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

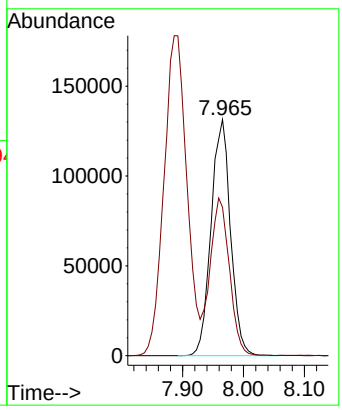




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.965 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:168 Resp: 29115

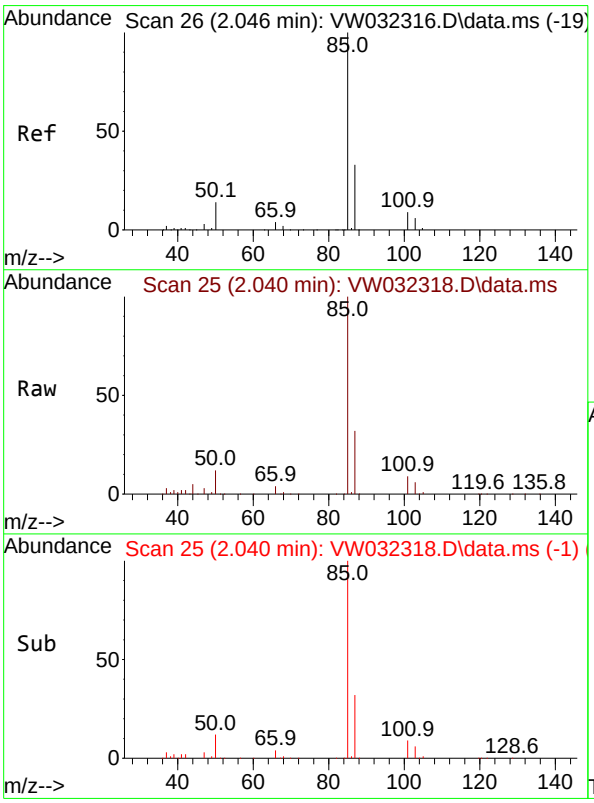
Ion	Ratio	Lower	Upper
168	100		
99	62.7	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

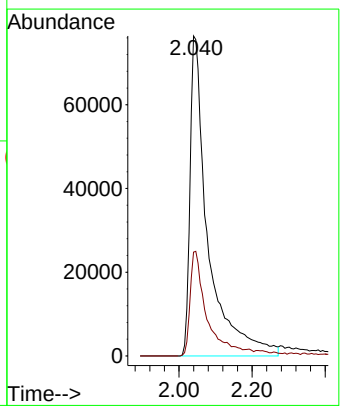
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

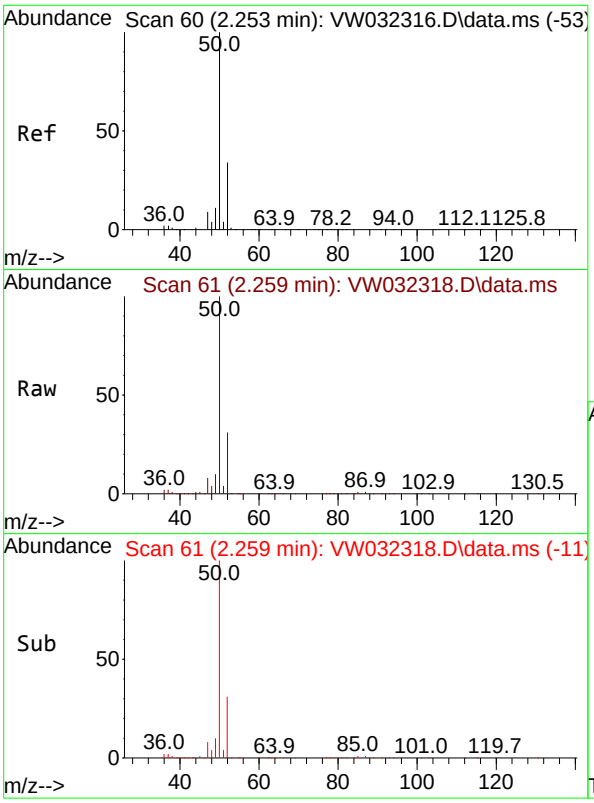


#2
Dichlorodifluoromethane
Concen: 143.063 ug/l
RT: 2.040 min Scan# 25
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 85 Resp: 261383

Ion	Ratio	Lower	Upper
85	100		
87	32.5	17.2	51.6

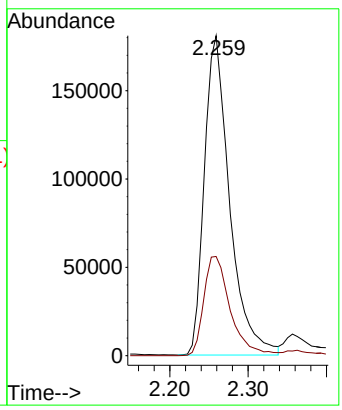




#3
Chloromethane
Concen: 143.584 ug/l
RT: 2.259 min Scan# 6
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 50 Resp: 40478

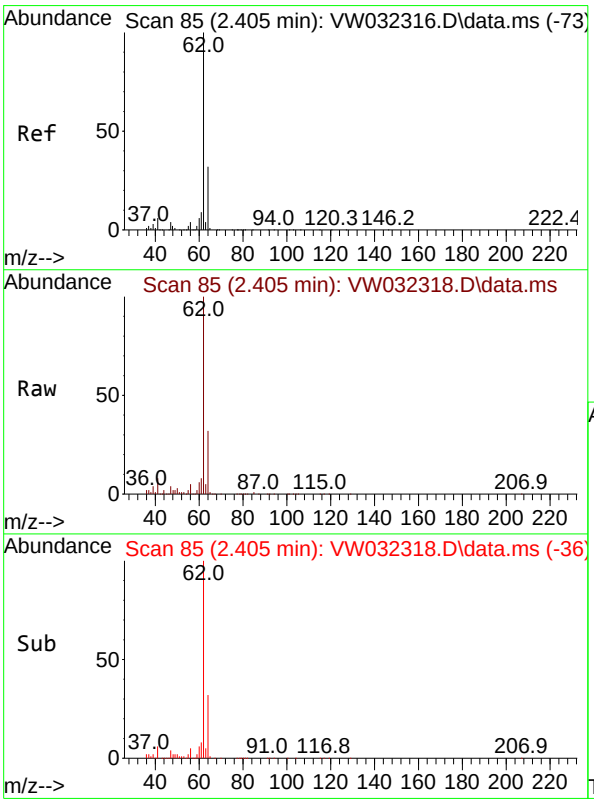
Ion	Ratio	Lower	Upper
50	100		
52	31.1	26.1	39.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

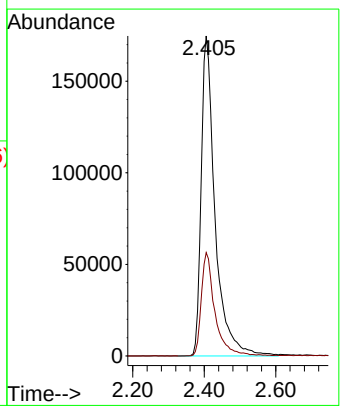
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

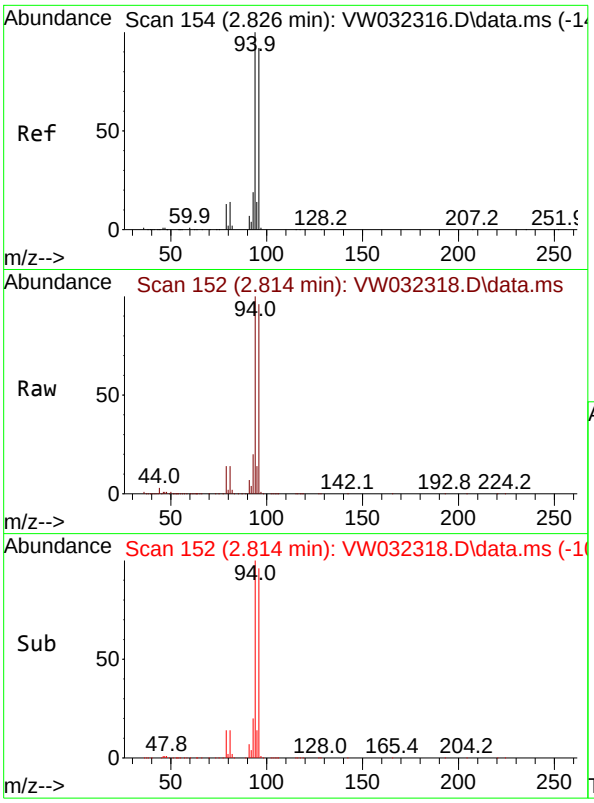


#4
Vinyl Chloride
Concen: 139.655 ug/l
RT: 2.405 min Scan# 85
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 62 Resp: 470035

Ion	Ratio	Lower	Upper
62	100		
64	32.3	24.8	37.2





#5
Bromomethane
Concen: 136.281 ug/l
RT: 2.814 min Scan# 1
Delta R.T. -0.012 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

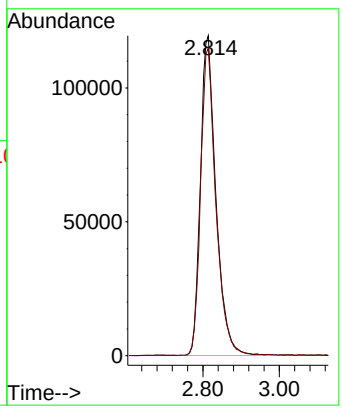
Tgt Ion: 94 Resp: 33707

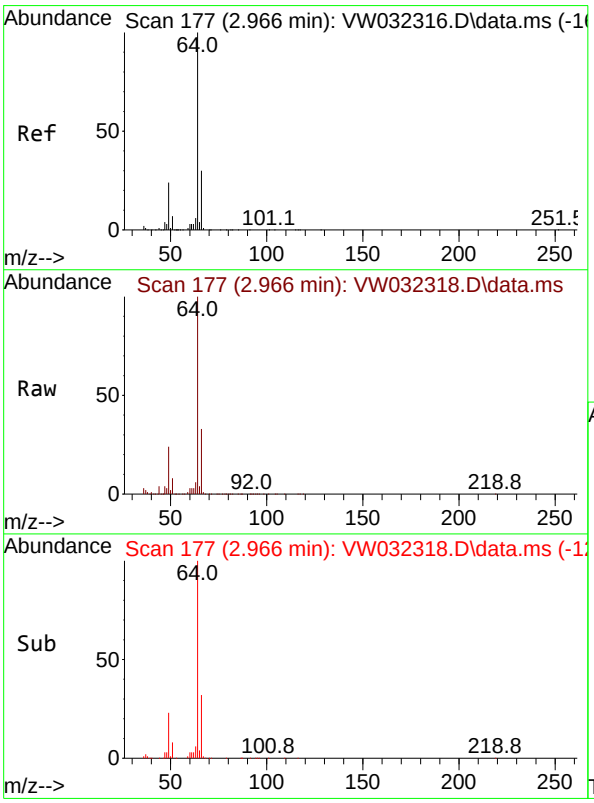
Ion	Ratio	Lower	Upper
94	100		
96	96.1	76.6	115.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

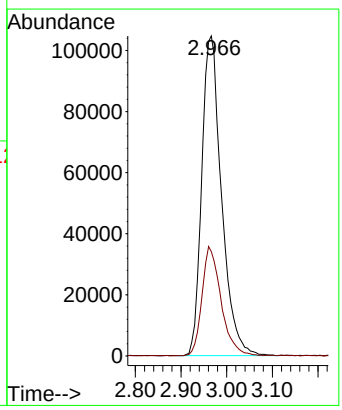


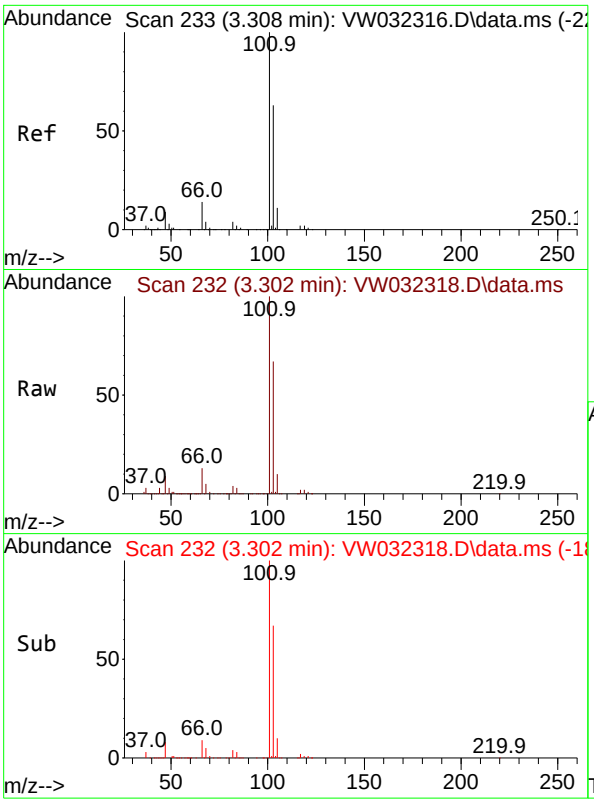


#6
Chloroethane
Concen: 141.765 ug/l
RT: 2.966 min Scan# 177
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 64 Resp: 315013

Ion	Ratio	Lower	Upper
64	100		
66	32.5	26.2	39.4





#7
Trichlorofluoromethane
Concen: 154.935 ug/l
RT: 3.302 min Scan# 2
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

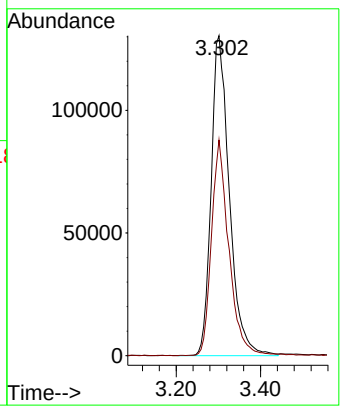
Tgt Ion:101 Resp: 39043

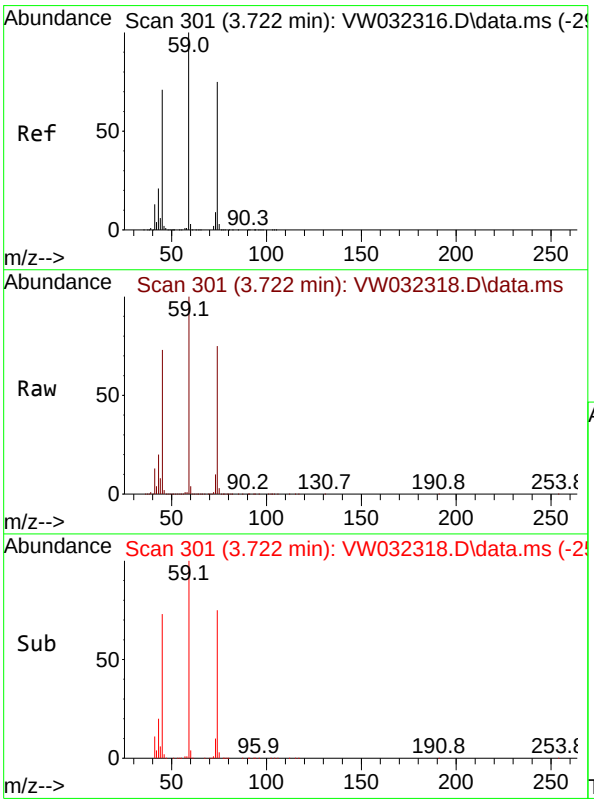
Ion	Ratio	Lower	Upper
101	100		
103	67.3	47.8	71.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

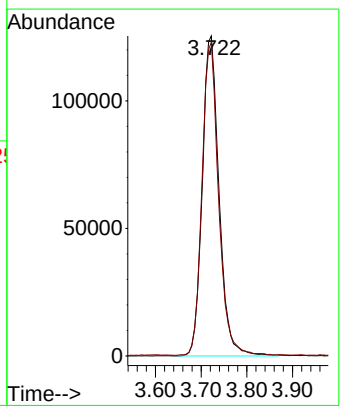


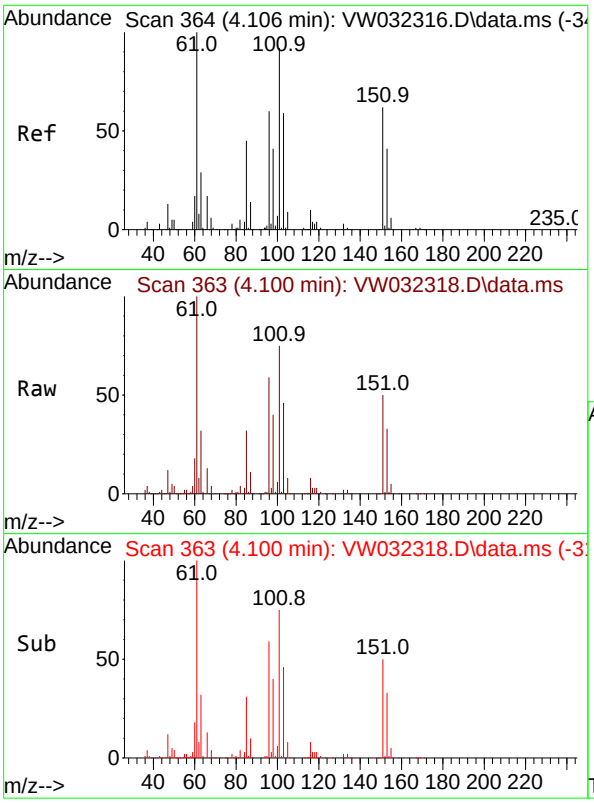


#8
Diethyl Ether
Concen: 146.096 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 74 Resp: 319023

Ion	Ratio	Lower	Upper
74	100		
45	96.9	43.1	129.4





#9
1,1,2-Trichlorotrifluoroethane
Concen: 138.198 ug/l
RT: 4.100 min Scan# 3
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

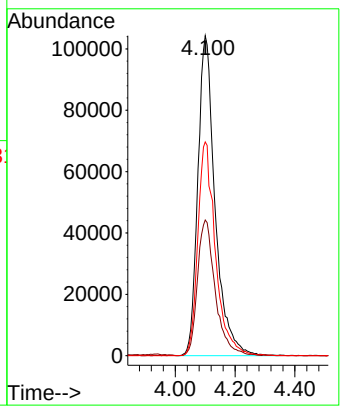
Tgt Ion:101 Resp: 41771

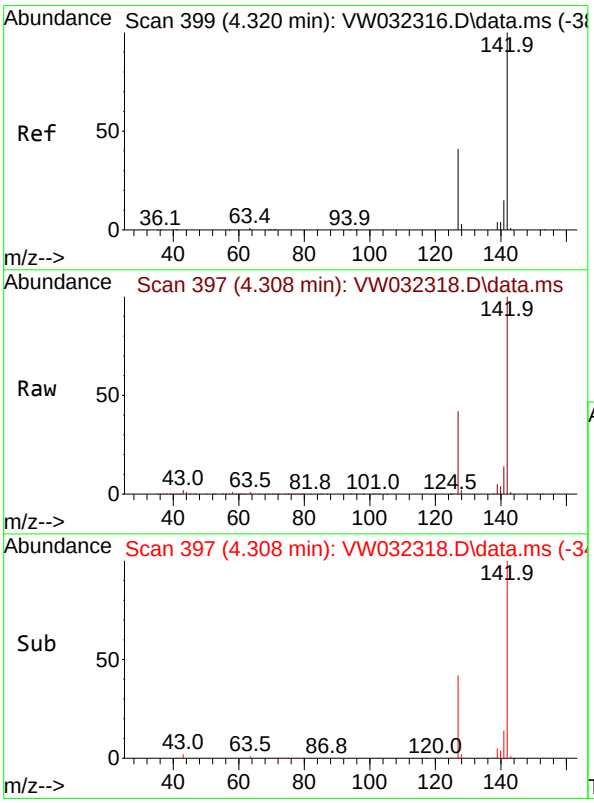
Ion	Ratio	Lower	Upper
101	100		
85	43.8	37.1	55.7
151	68.1	61.5	92.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

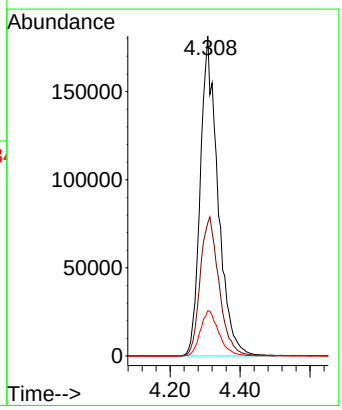


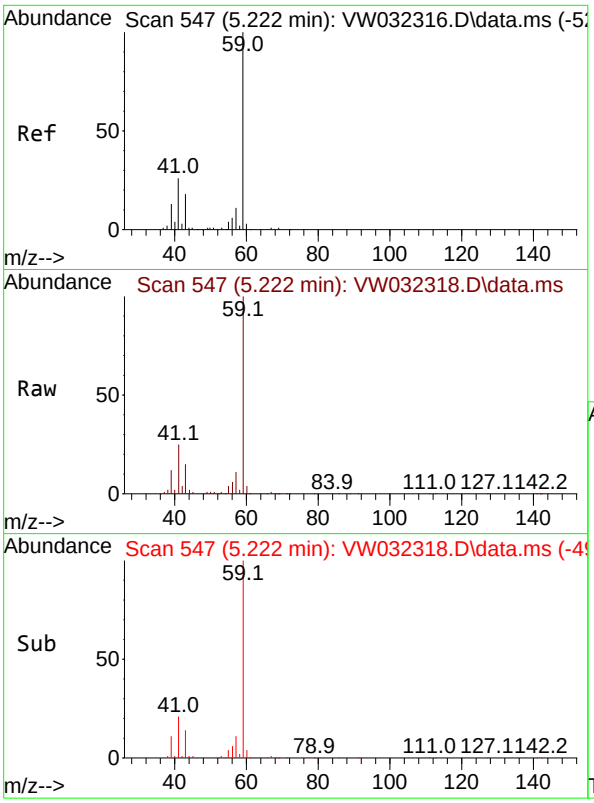


#10
Methyl Iodide
Concen: 147.136 ug/l
RT: 4.308 min Scan# 397
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:142 Resp: 634551

Ion	Ratio	Lower	Upper
142	100		
127	46.3	38.2	57.2
141	14.9	12.2	18.2





#11
Tert butyl alcohol
Concen: 728.258 ug/l
RT: 5.222 min Scan# 54
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 59 Resp: 23409

Ion	Ratio	Lower	Upper
59	100		
57	10.6	9.8	14.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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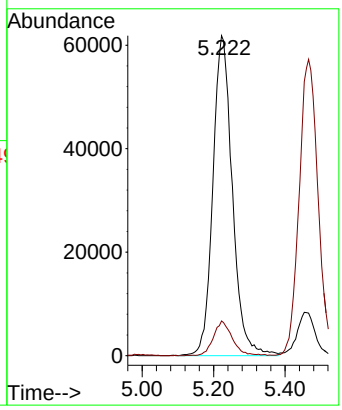
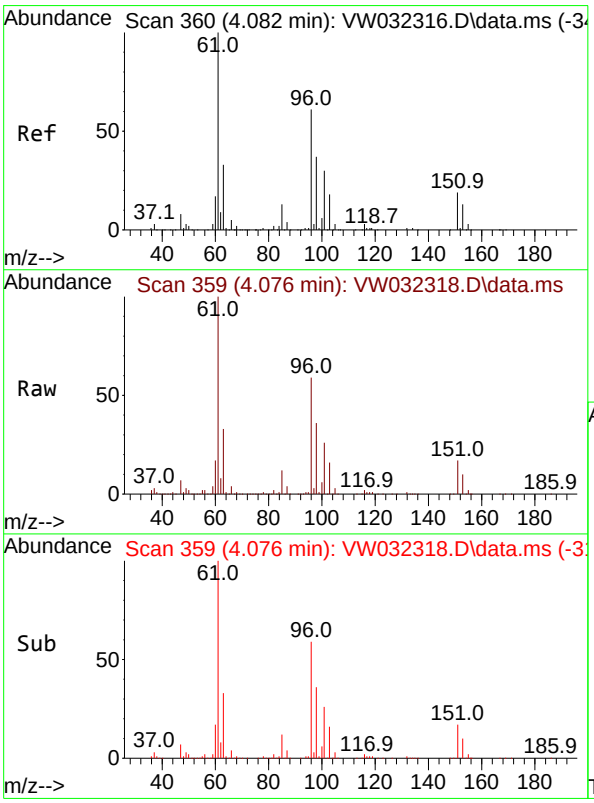
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

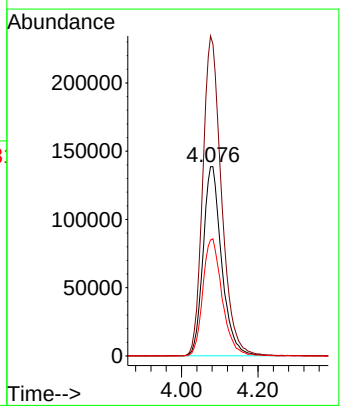


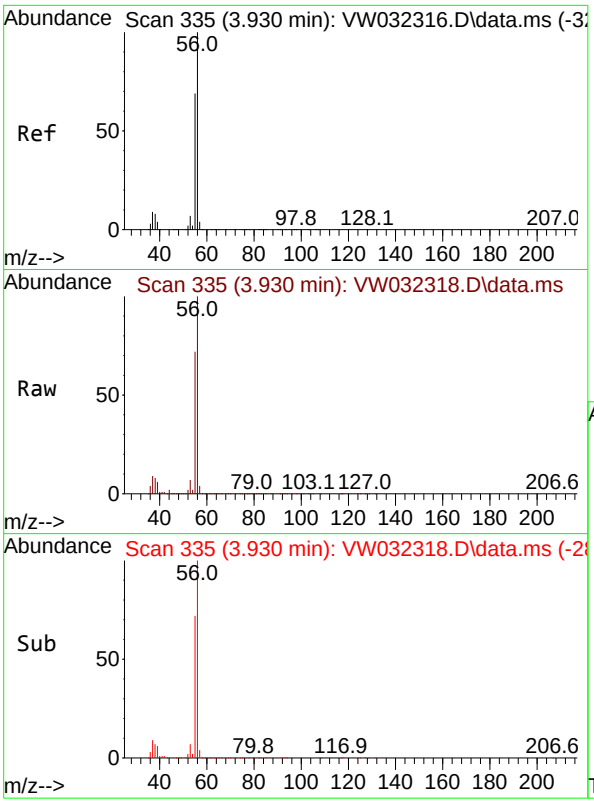


#12
1,1-Dichloroethene
Concen: 142.471 ug/l
RT: 4.076 min Scan# 359
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 96 Resp: 467506

Ion	Ratio	Lower	Upper
96	100		
61	169.1	123.0	184.4
98	61.3	48.5	72.7

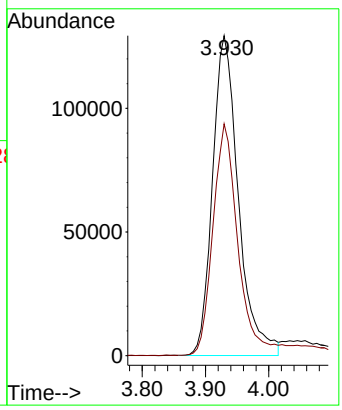




#13
Acrolein
Concen: 702.158 ug/l
RT: 3.930 min Scan# 3
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 56 Resp: 366309

Ion	Ratio	Lower	Upper
56	100		
55	75.5	56.4	84.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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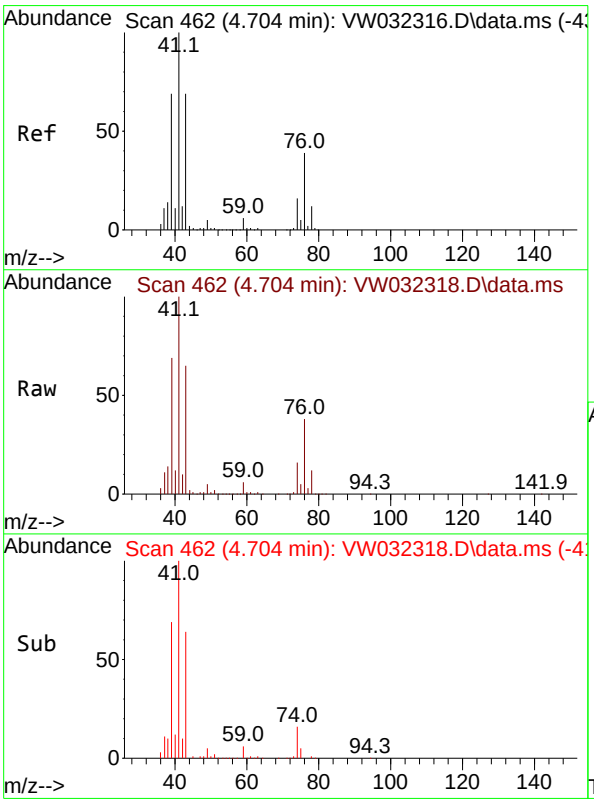
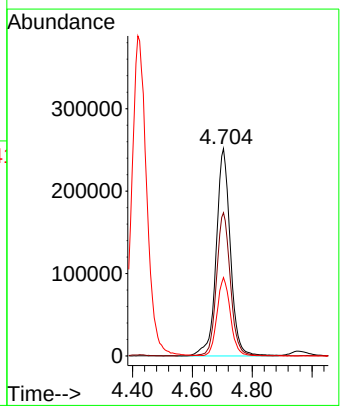
Supervised By :Semsettin Yesilyurt 10/03/2025

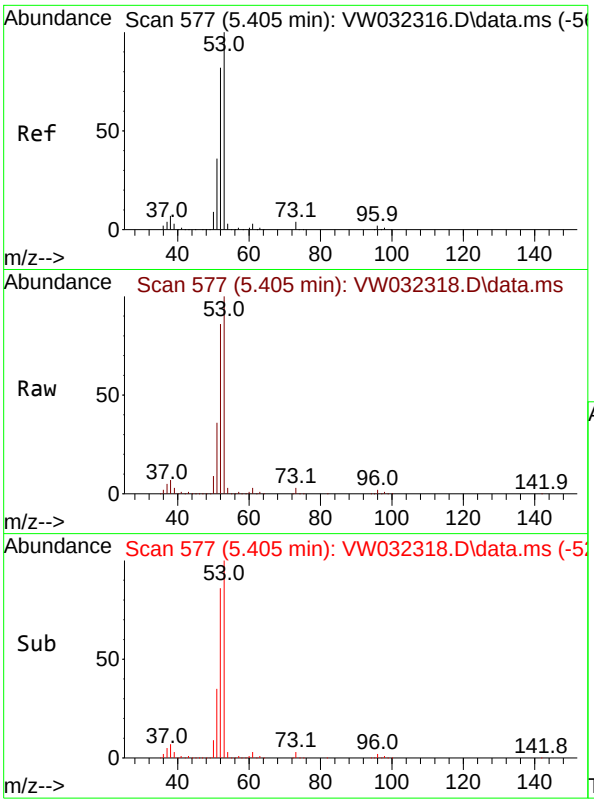


#14
Allyl chloride
Concen: 149.185 ug/l
RT: 4.704 min Scan# 462
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 41 Resp: 826844

Ion	Ratio	Lower	Upper
41	100		
39	67.5	64.1	96.1
76	35.5	31.4	47.2

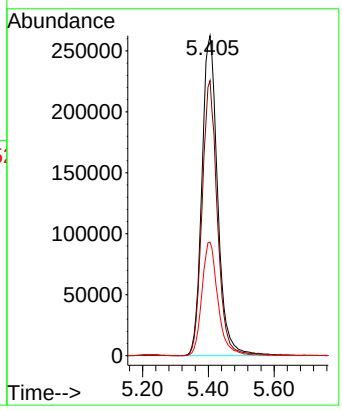




#15
Acrylonitrile
Concen: 768.664 ug/l
RT: 5.405 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 53 Resp: 87321

Ion	Ratio	Lower	Upper
53	100		
52	83.3	67.4	101.2
51	36.2	30.3	45.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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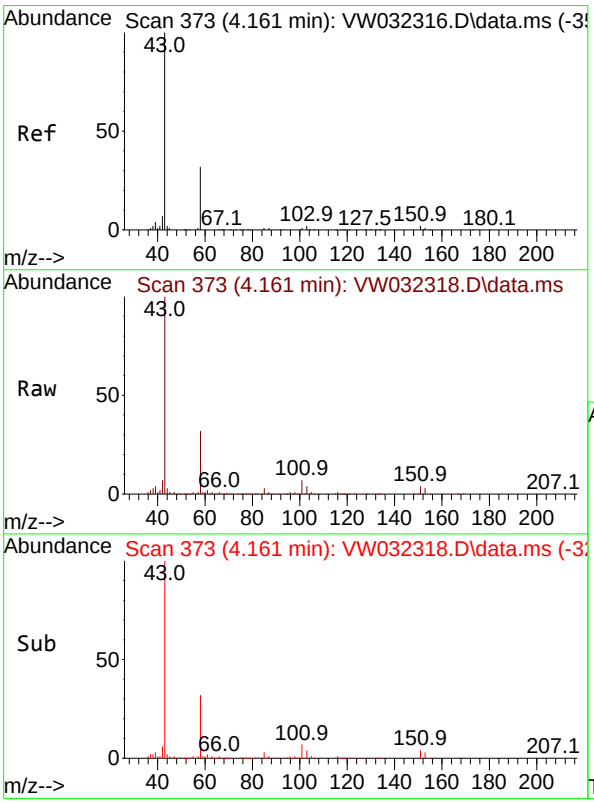
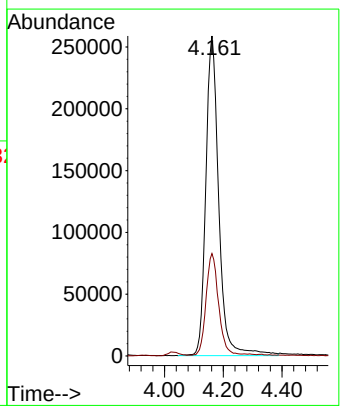
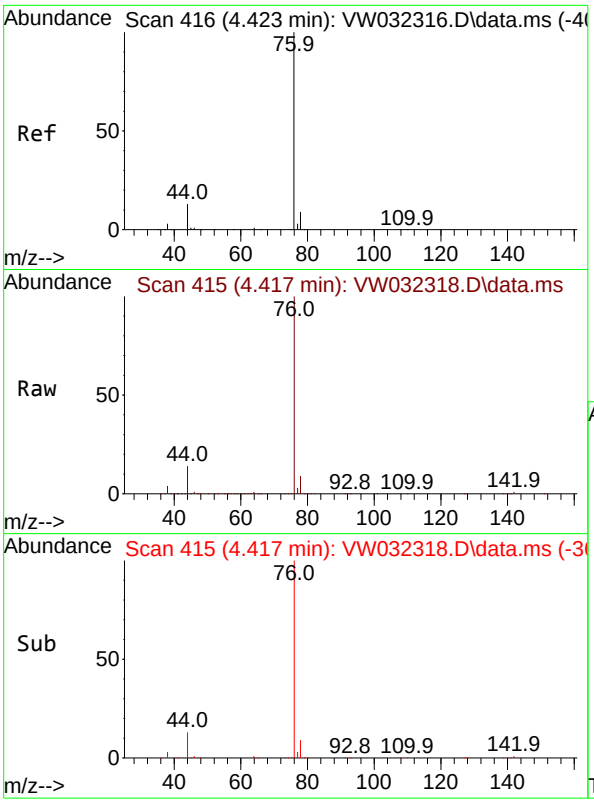


#16
Acetone
Concen: 672.241 ug/l
RT: 4.161 min Scan# 373
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 790475

Ion	Ratio	Lower	Upper
43	100		
58	31.8	25.3	37.9





#17
Carbon Disulfide
Concen: 148.374 ug/l
RT: 4.417 min Scan# 4
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 76 Resp: 132843

Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.0	10.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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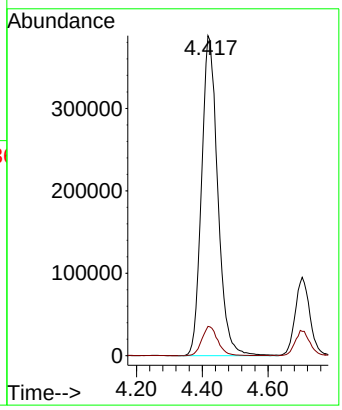
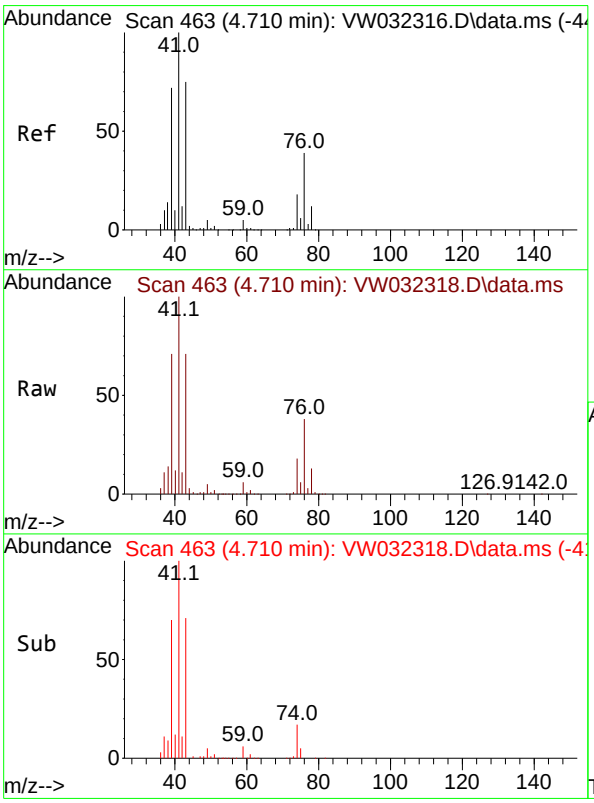
Supervised By :Semsettin Yesilyurt 10/03/2025

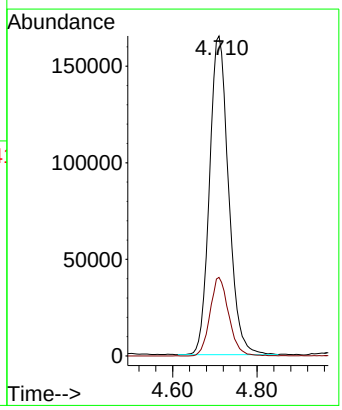


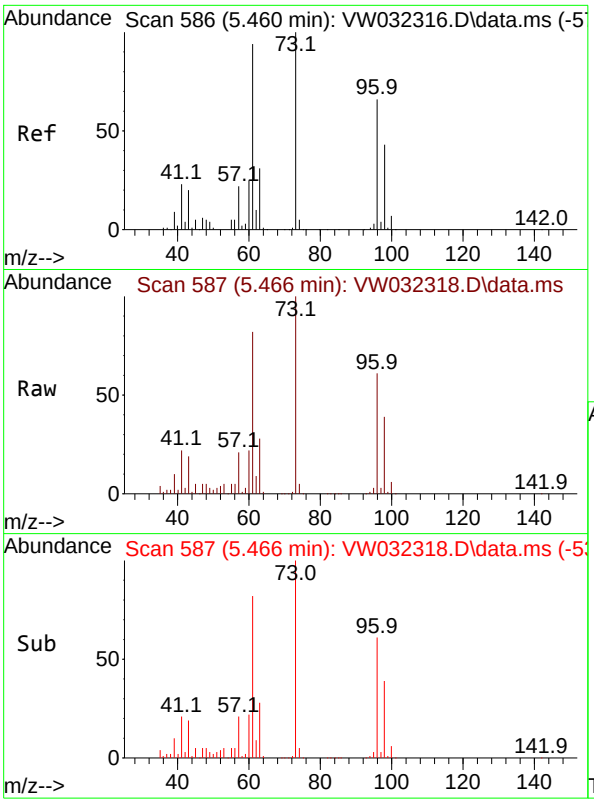


#18
Methyl Acetate
Concen: 153.605 ug/l
RT: 4.710 min Scan# 463
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 517404

Ion	Ratio	Lower	Upper
43	100		
74	24.3	20.2	30.4

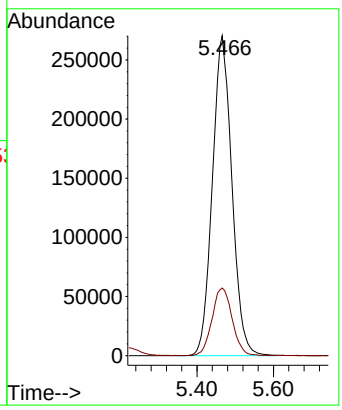




#19
Methyl tert-butyl Ether
Concen: 148.511 ug/l
RT: 5.466 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 73 Resp: 95982

Ion	Ratio	Lower	Upper
73	100		
57	21.1	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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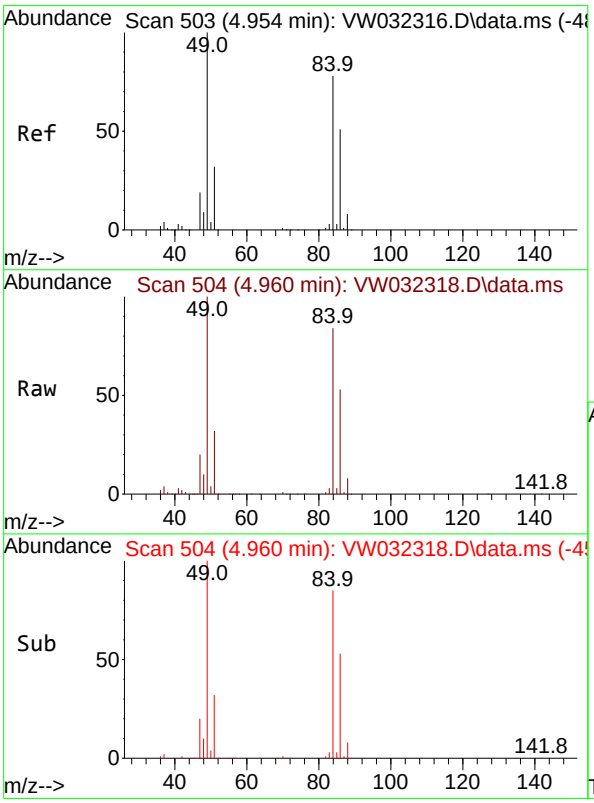
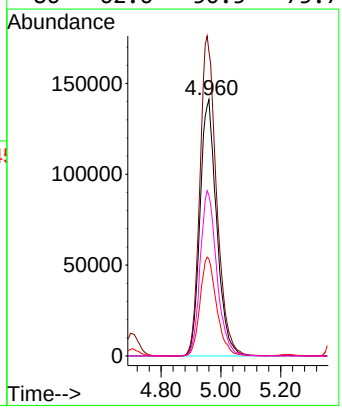
Supervised By :Semsettin Yesilyurt 10/03/2025

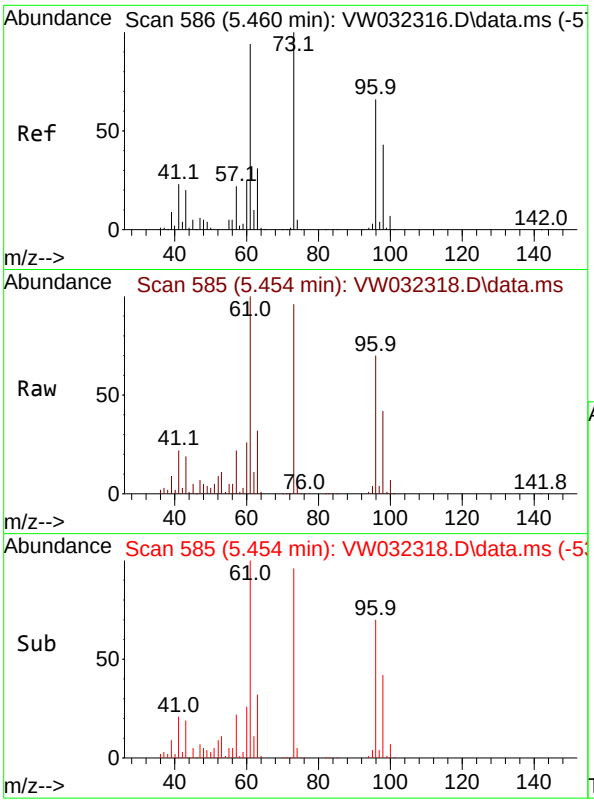


#20
Methylene Chloride
Concen: 151.150 ug/l
RT: 4.960 min Scan# 504
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 84 Resp: 546261

Ion	Ratio	Lower	Upper
84	100		
49	118.7	92.2	138.4
51	37.8	31.0	46.6
86	62.6	50.5	75.7

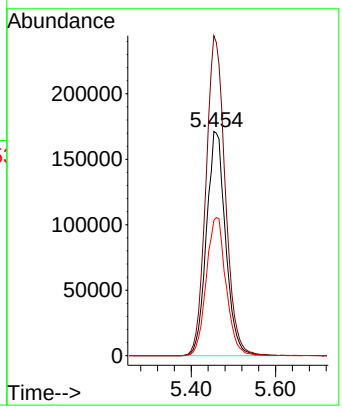




#21
trans-1,2-Dichloroethene
Concen: 148.302 ug/l
RT: 5.454 min Scan# 5
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 96 Resp: 53877

Ion	Ratio	Lower	Upper
96	100		
61	142.8	112.5	168.7
98	60.5	54.2	81.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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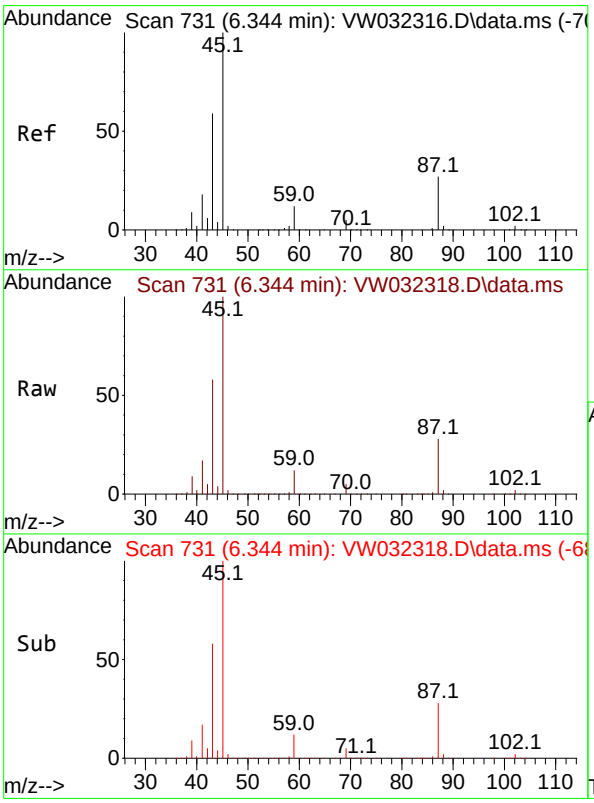
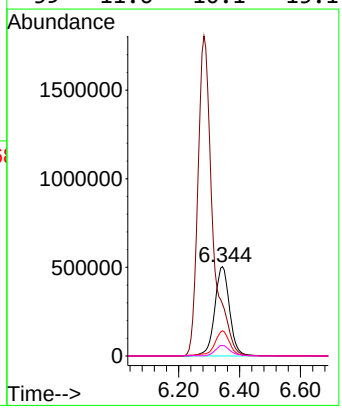
Supervised By :Semsettin Yesilyurt 10/03/2025

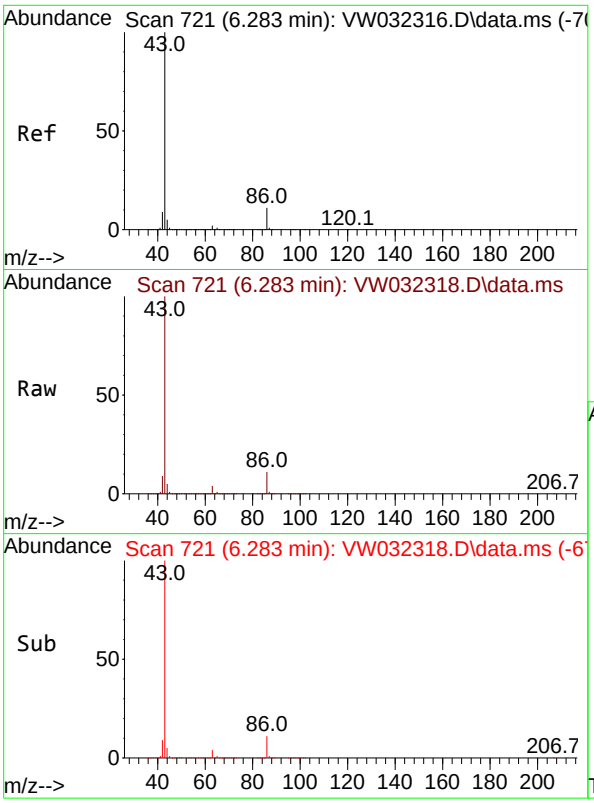


#22
Diisopropyl ether
Concen: 148.385 ug/l
RT: 6.344 min Scan# 731
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 45 Resp: 1710365

Ion	Ratio	Lower	Upper
45	100		
43	58.1	51.4	77.2
87	28.1	25.9	38.9
59	11.6	10.1	15.1





#23
Vinyl Acetate
Concen: 782.812 ug/l
RT: 6.283 min Scan# 7
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 602685

Ion	Ratio	Lower	Upper
43	100		
86	11.1	8.8	13.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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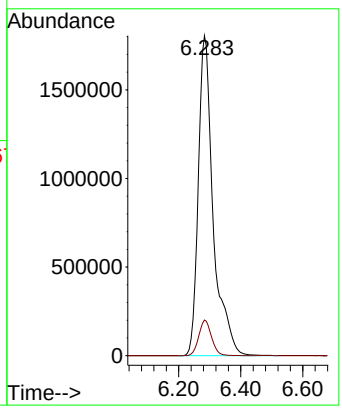
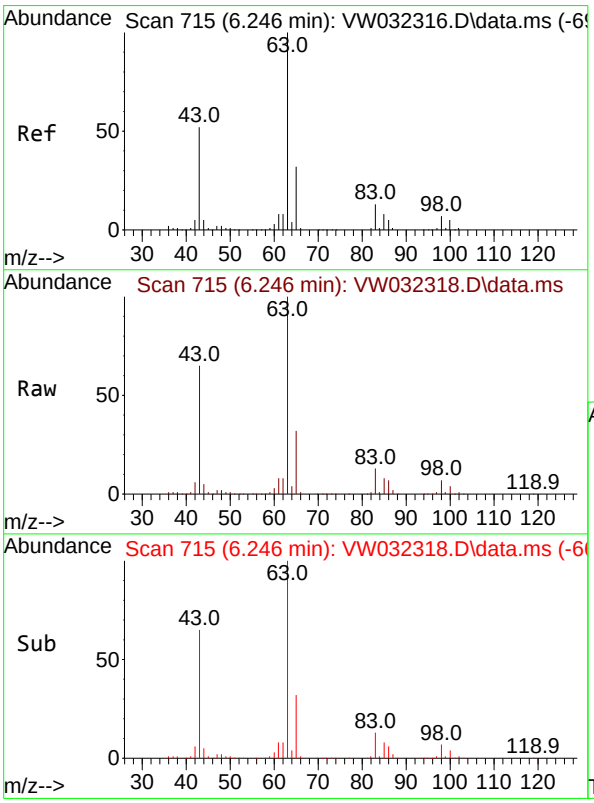
Supervised By :Semsettin Yesilyurt 10/03/2025

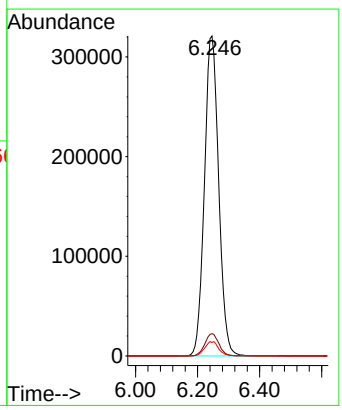


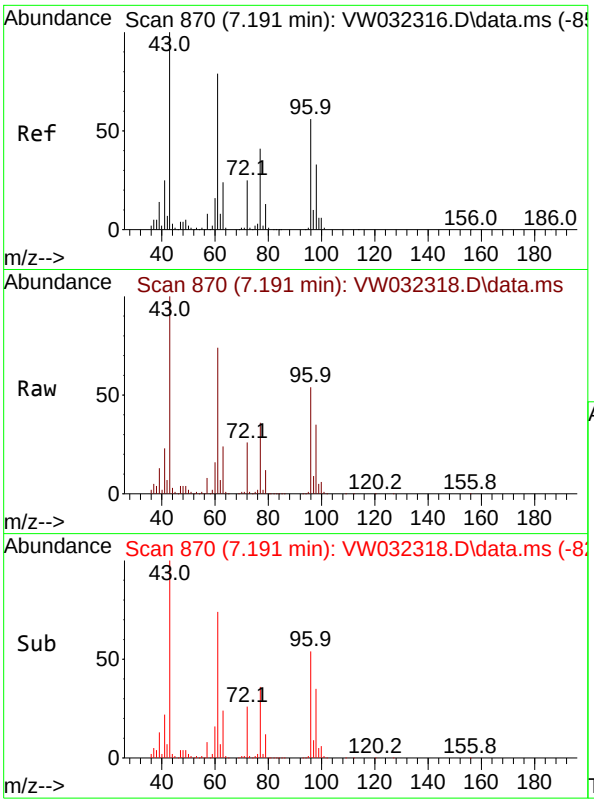


#24
1,1-Dichloroethane
Concen: 146.150 ug/l
RT: 6.246 min Scan# 715
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 63 Resp: 1023465

Ion	Ratio	Lower	Upper
63	100		
98	7.0	3.8	11.2
100	4.2	2.5	7.5





#25
2-Butanone
Concen: 755.574 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 121004

Ion	Ratio	Lower	Upper
43	100		
72	26.3	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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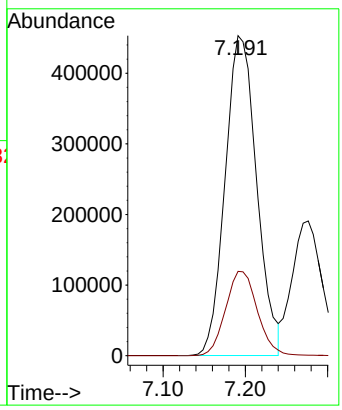
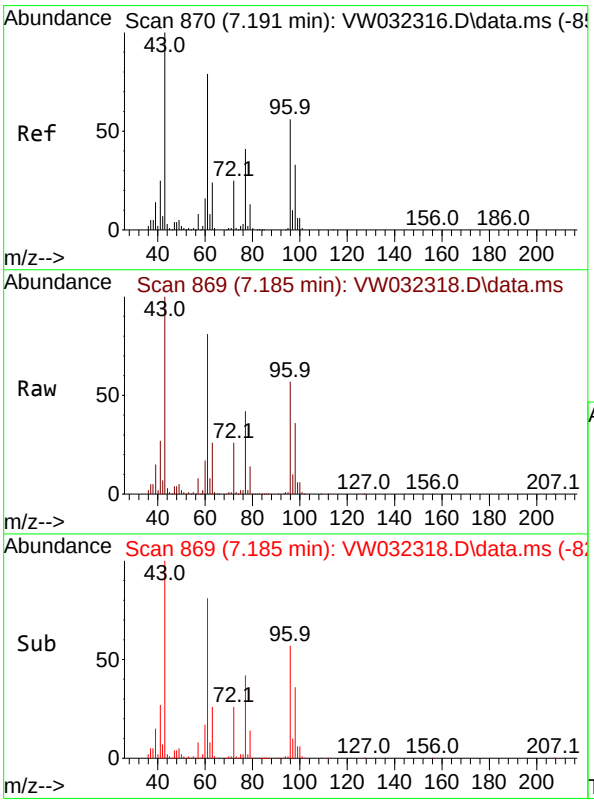
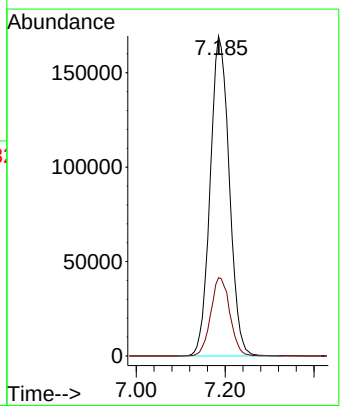


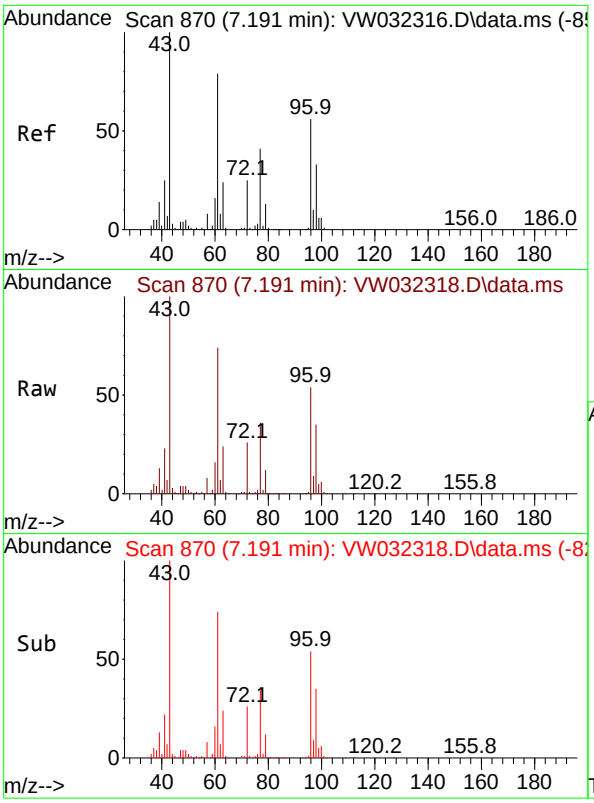


#26
2,2-Dichloropropane
Concen: 140.732 ug/l
RT: 7.185 min Scan# 869
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 77 Resp: 504110

Ion	Ratio	Lower	Upper
77	100		
97	24.5	11.9	35.5





#27
cis-1,2-Dichloroethene
Concen: 148.941 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 96 Resp: 65004

Ion	Ratio	Lower	Upper
96	100		
61	142.1	0.0	268.0
98	65.1	0.0	130.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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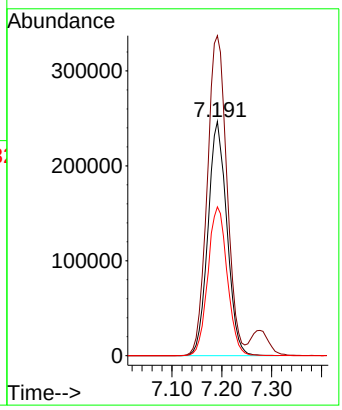
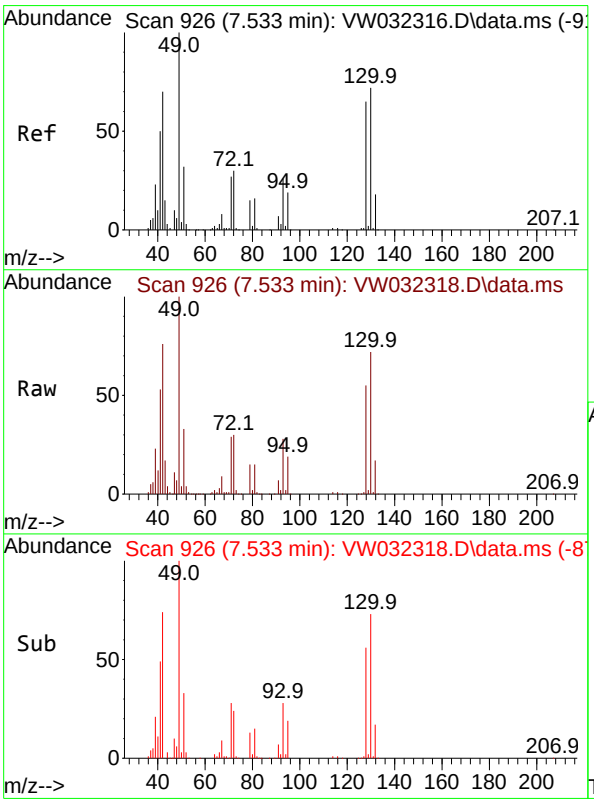
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

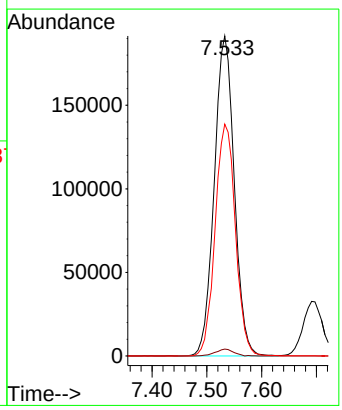


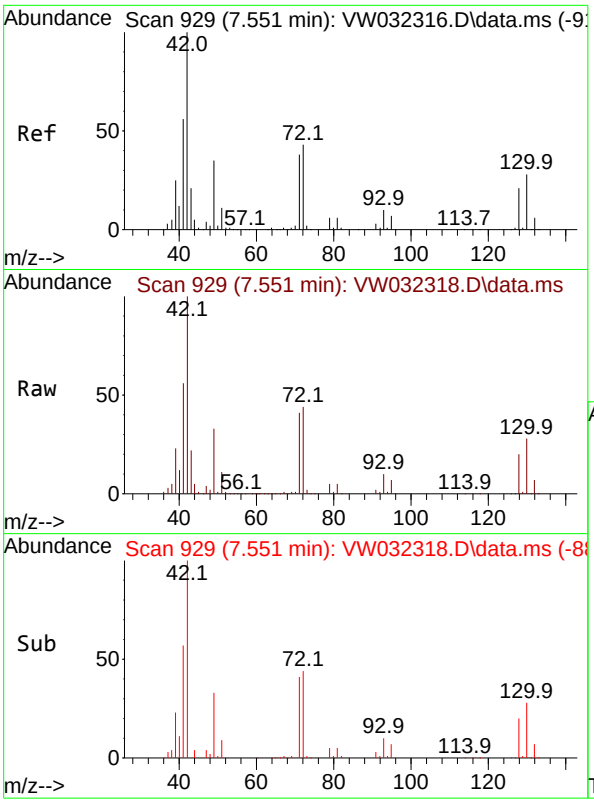


#28
Bromochloromethane
Concen: 147.682 ug/l
RT: 7.533 min Scan# 926
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 49 Resp: 486570

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.2
130	73.5	67.5	101.3

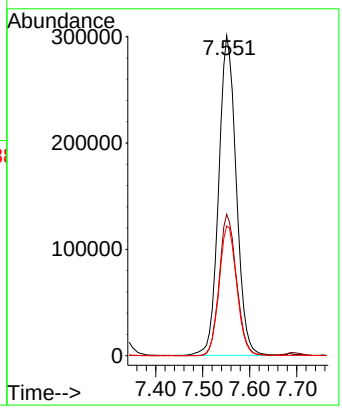




#29
Tetrahydrofuran
Concen: 776.649 ug/l
RT: 7.551 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 42 Resp: 78218

Ion	Ratio	Lower	Upper
42	100		
72	43.6	37.4	56.2
71	40.8	36.0	54.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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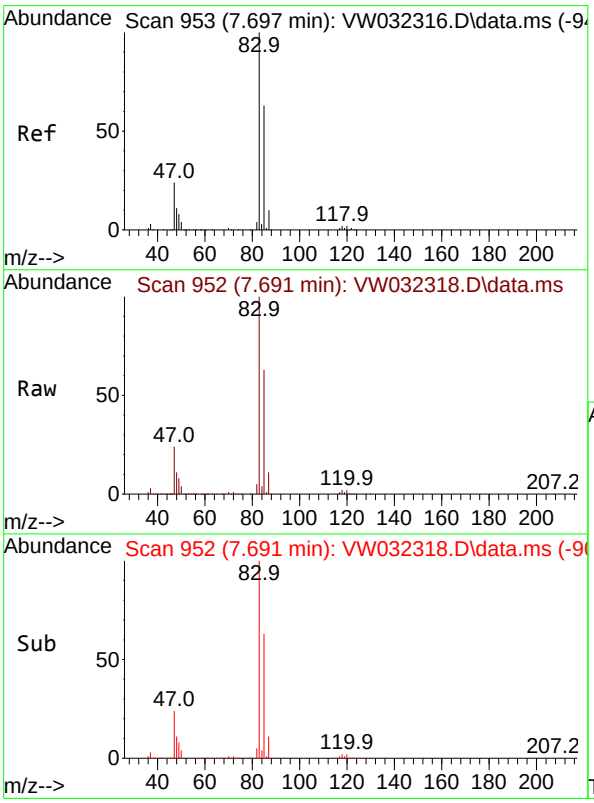
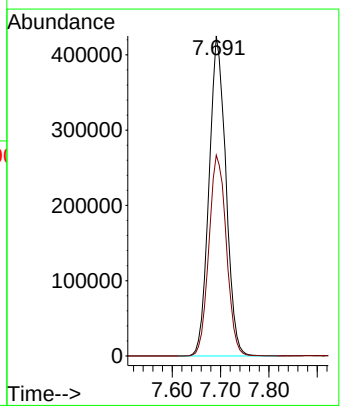
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

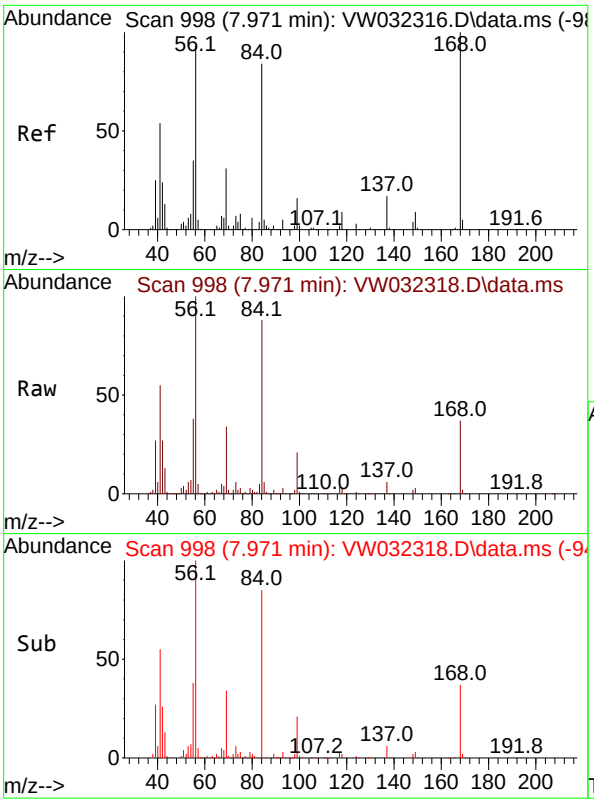


#30
Chloroform
Concen: 144.857 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 83 Resp: 1028785

Ion	Ratio	Lower	Upper
83	100		
85	62.7	51.2	76.8

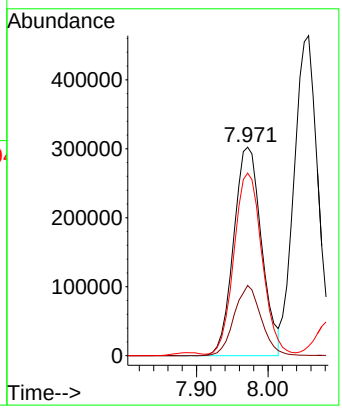




#31
Cyclohexane
Concen: 137.222 ug/l
RT: 7.971 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 56 Resp: 82037

Ion	Ratio	Lower	Upper
56	100		
69	33.7	27.7	41.5
84	86.5	74.6	112.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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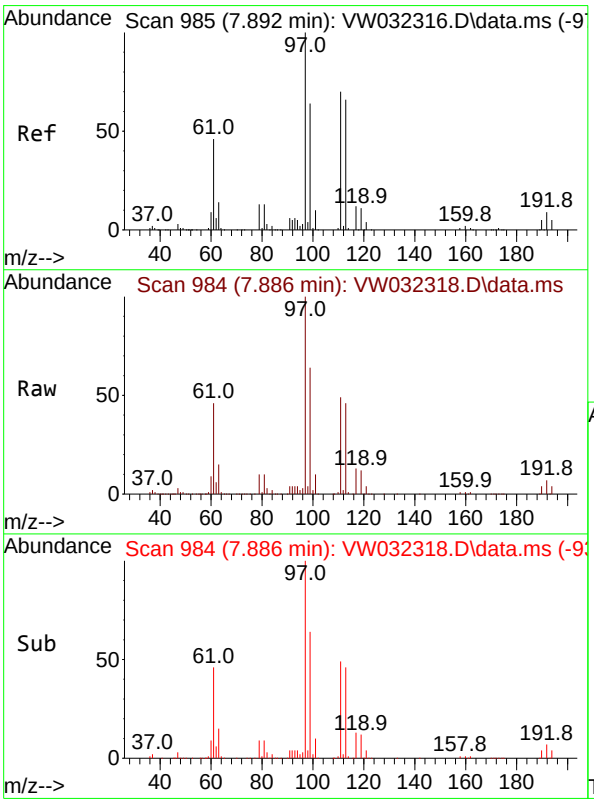
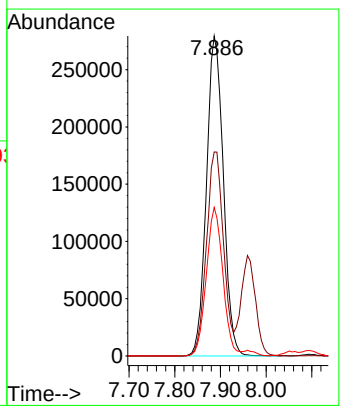
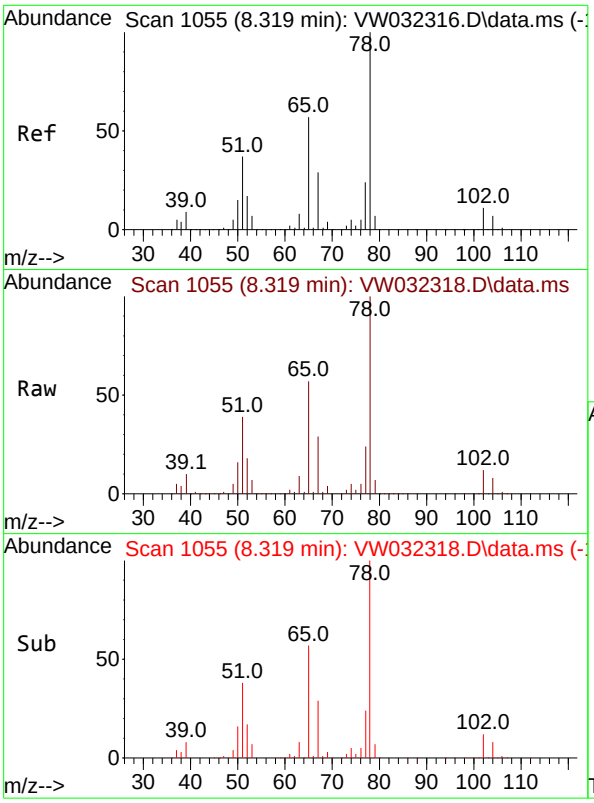


#32
1,1,1-Trichloroethane
Concen: 142.581 ug/l
RT: 7.886 min Scan# 984
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 97 Resp: 717558

Ion	Ratio	Lower	Upper
97	100		
99	64.8	50.9	76.3
61	45.7	36.2	54.4

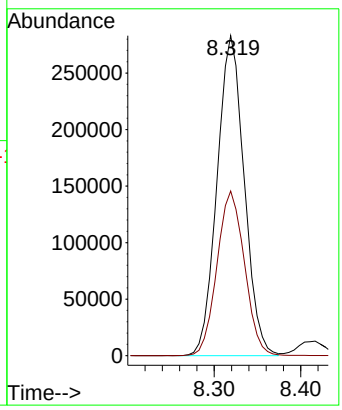




#33
1,2-Dichloroethane-d4
Concen: 145.223 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 65 Resp: 61671

Ion	Ratio	Lower	Upper
65	100		
67	52.1	0.0	99.6



Instrument :
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ClientSampleId :
VSTDICC150

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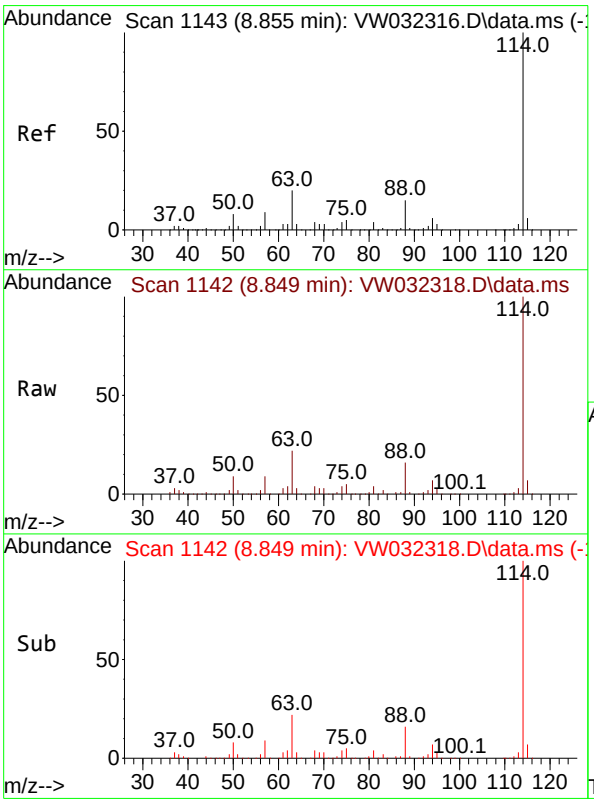
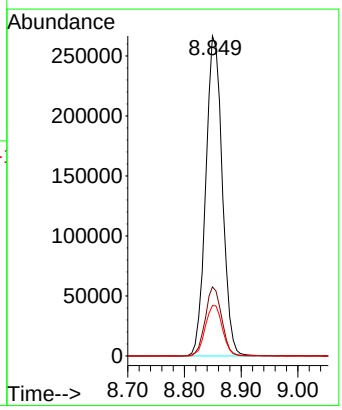
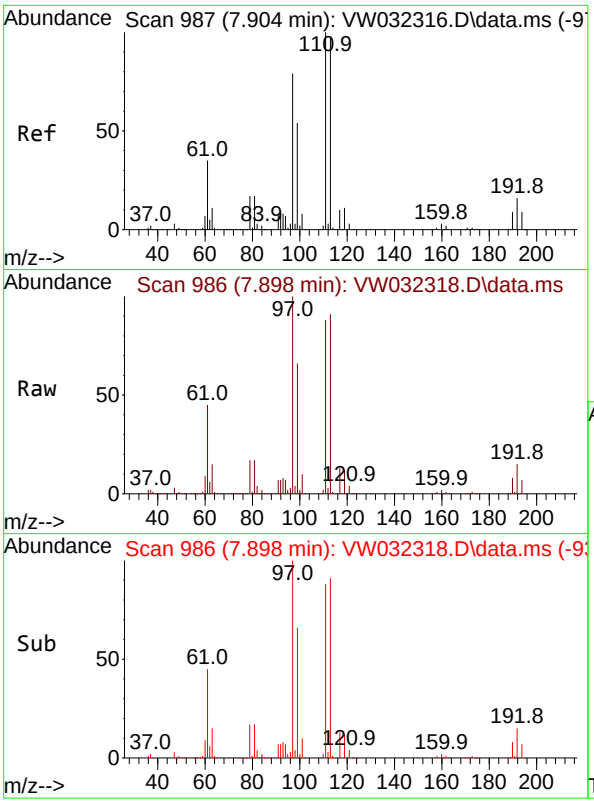


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:114 Resp: 539030

Ion	Ratio	Lower	Upper
114	100		
63	21.6	0.0	40.4
88	15.7	0.0	32.0





#35
Dibromofluoromethane
Concen: 144.249 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:113 Resp: 50354

Ion	Ratio	Lower	Upper
113	100		
111	102.9	83.9	125.9
192	16.3	14.6	21.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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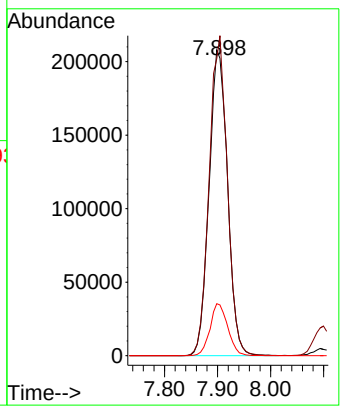
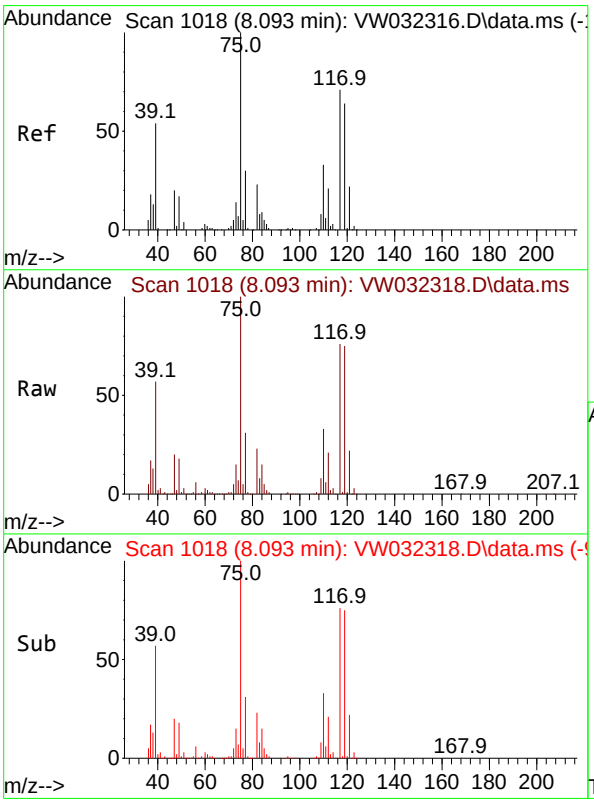
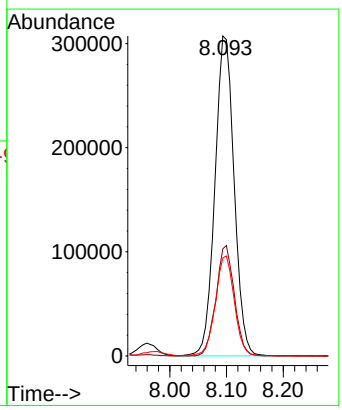


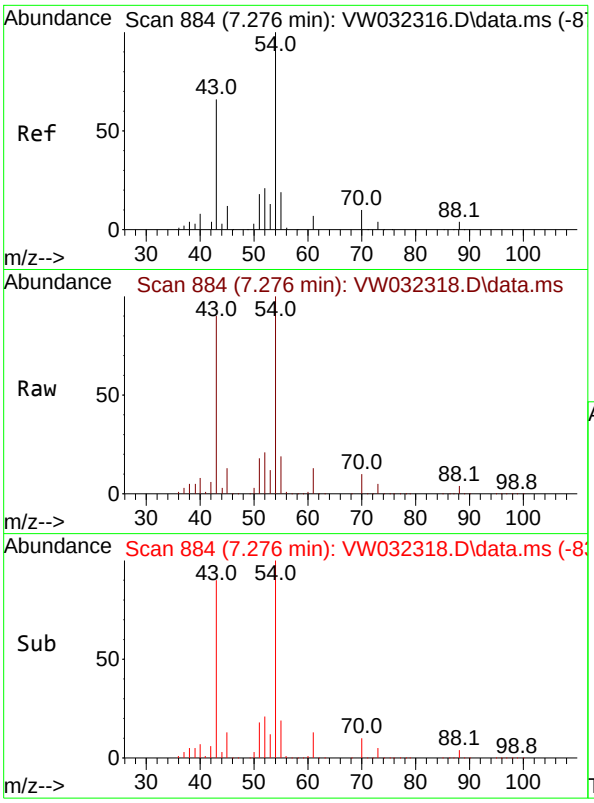


#36
1,1-Dichloropropene
Concen: 146.511 ug/l
RT: 8.093 min Scan# 1018
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 75 Resp: 721795

Ion	Ratio	Lower	Upper
75	100		
110	33.1	17.5	52.5
77	31.0	24.1	36.1





#37
Ethyl Acetate
Concen: 152.893 ug/l
RT: 7.276 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 50136

Ion	Ratio	Lower	Upper
43	100		
61	13.6	11.3	16.9
70	10.6	8.9	13.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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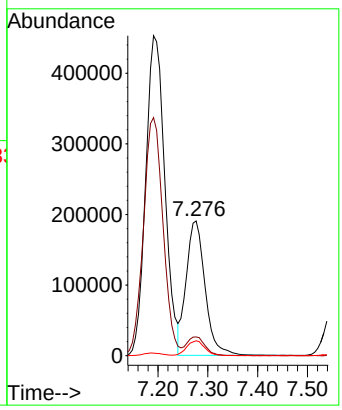
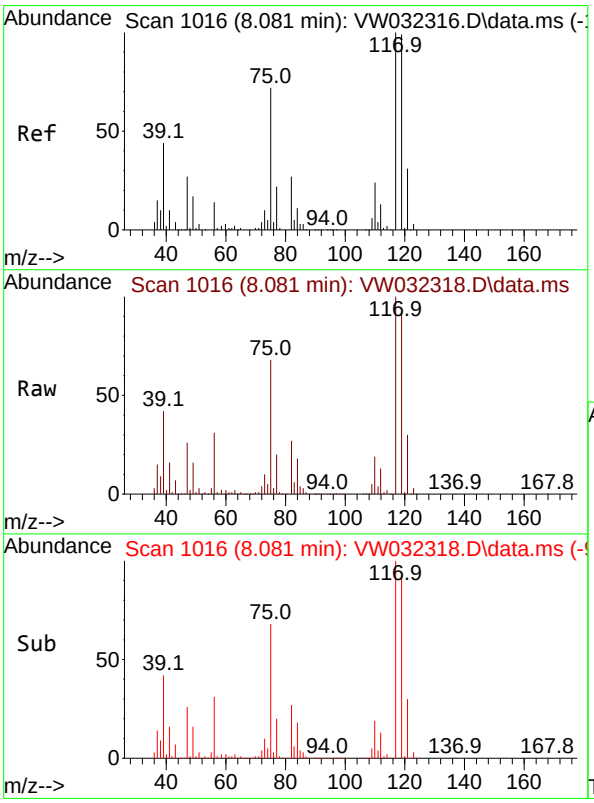
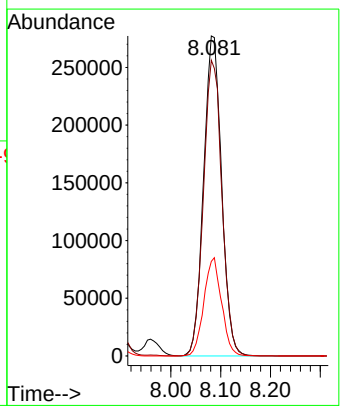


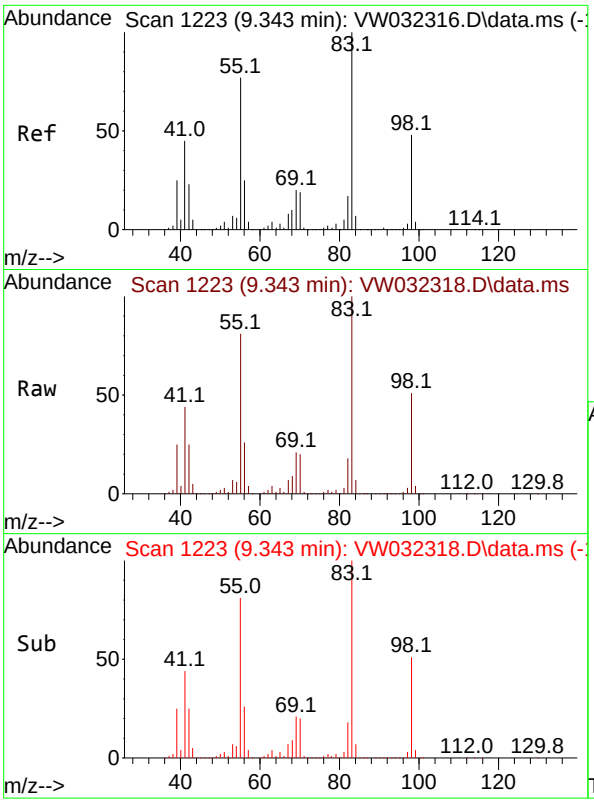


#38
Carbon Tetrachloride
Concen: 149.786 ug/l
RT: 8.081 min Scan# 1016
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:117 Resp: 694408

Ion	Ratio	Lower	Upper
117	100		
119	92.4	74.2	111.2
121	29.6	25.6	38.4

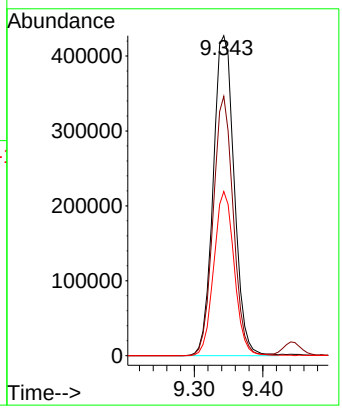




#39
Methylcyclohexane
Concen: 152.772 ug/l
RT: 9.343 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 83 Resp: 90785

Ion	Ratio	Lower	Upper
83	100		
55	81.0	58.4	87.6
98	51.3	39.4	59.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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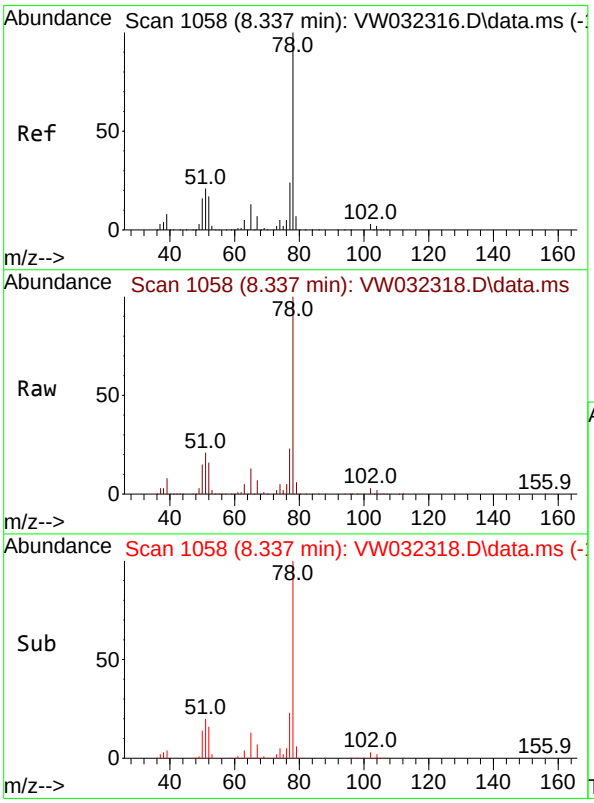
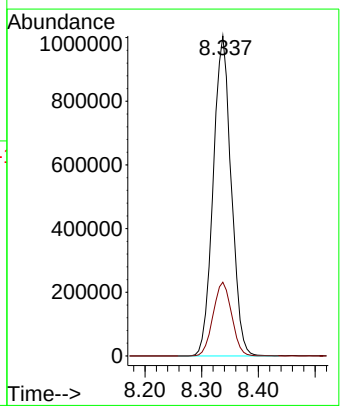
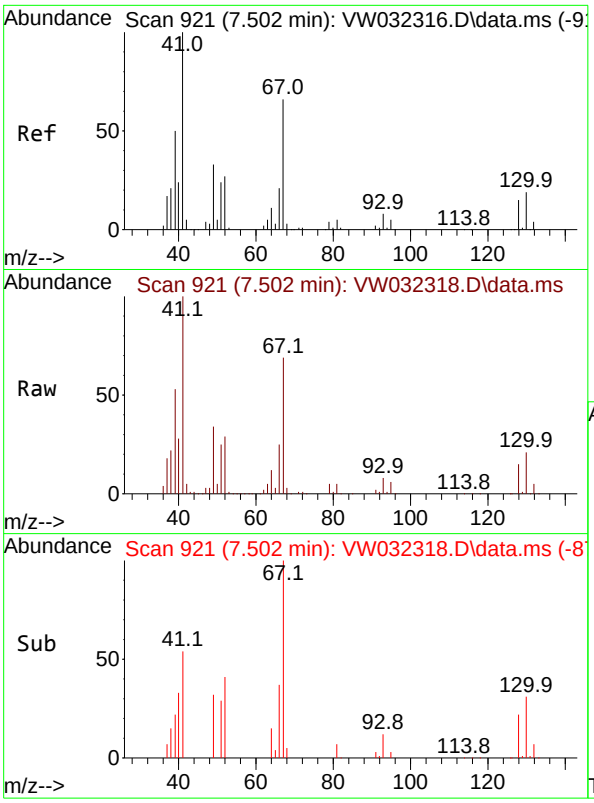


#40
Benzene
Concen: 143.766 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 78 Resp: 2220041

Ion	Ratio	Lower	Upper
78	100		
77	23.1	20.7	31.1

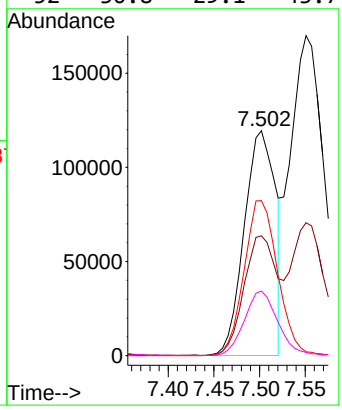




#41
Methacrylonitrile
Concen: 160.121 ug/l
RT: 7.502 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 41 Resp: 28296

Ion	Ratio	Lower	Upper
41	100		
39	58.5	50.9	76.3
67	74.8	65.6	98.4
52	30.8	29.1	43.7



Instrument :
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ClientSampleId :
VSTDICC150

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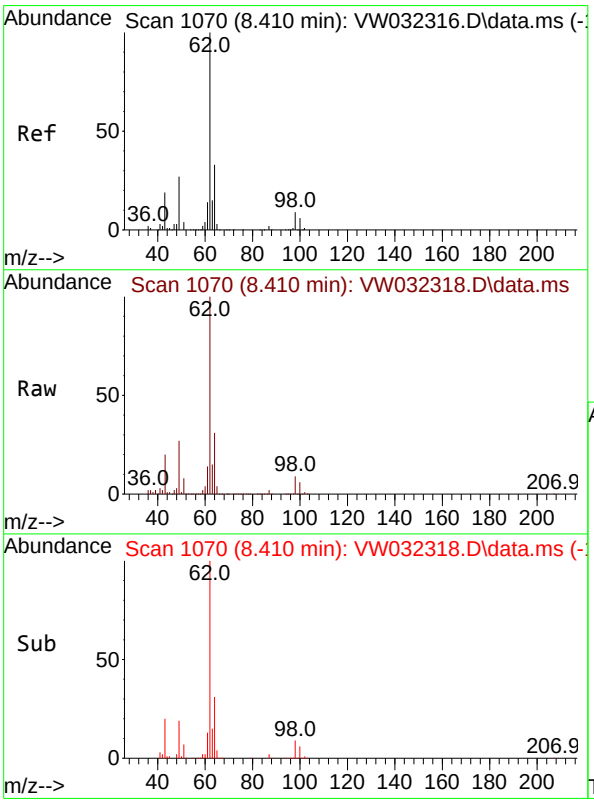
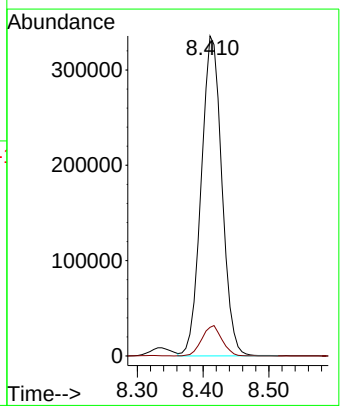
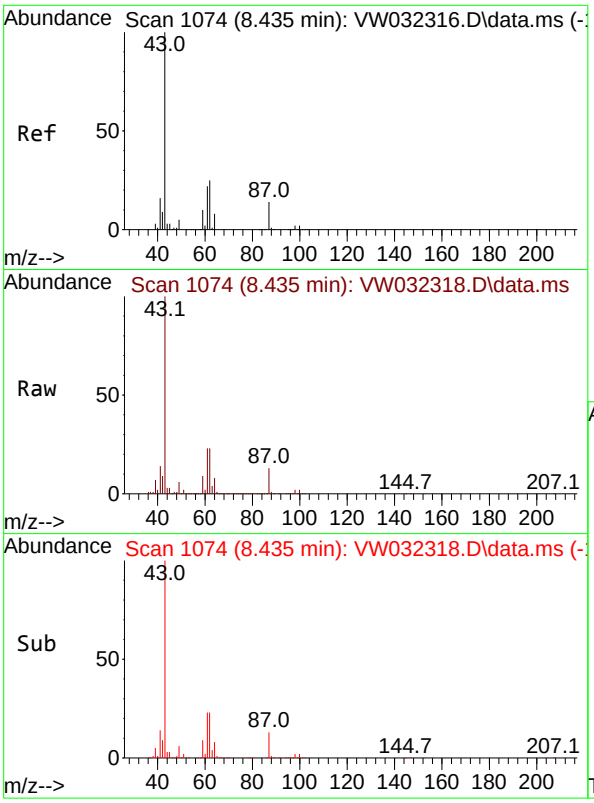


#42
1,2-Dichloroethane
Concen: 144.899 ug/l
RT: 8.410 min Scan# 1070
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 62 Resp: 732140

Ion	Ratio	Lower	Upper
62	100		
98	9.3	0.0	18.0





#43
Isopropyl Acetate
Concen: 159.826 ug/l
RT: 8.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 92973

Ion	Ratio	Lower	Upper
43	100		
61	29.0	23.3	34.9
87	13.3	11.1	16.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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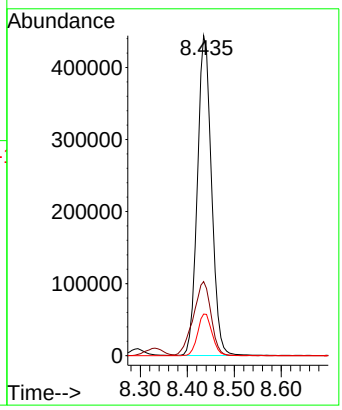
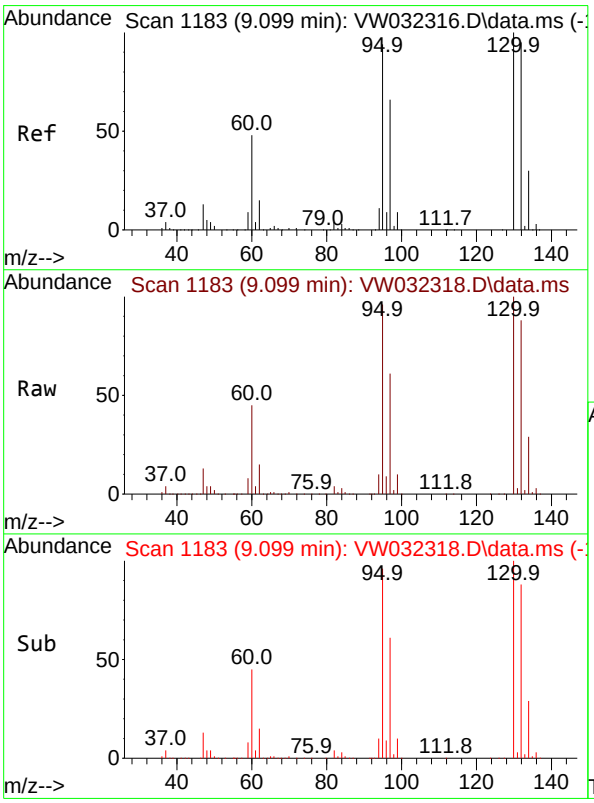
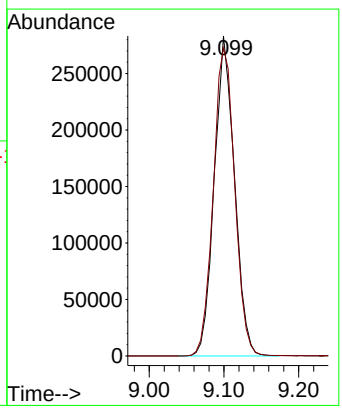


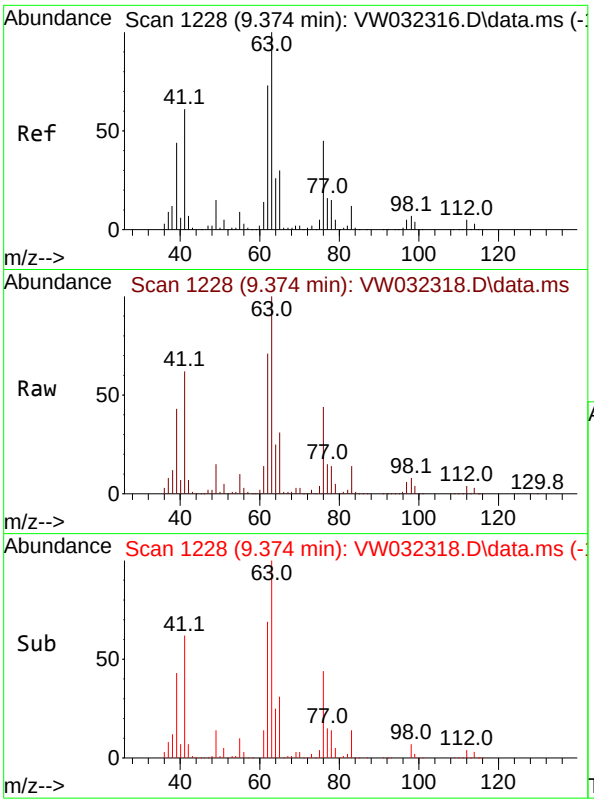


#44
Trichloroethene
Concen: 147.127 ug/l
RT: 9.099 min Scan# 1183
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:130 Resp: 531979

Ion	Ratio	Lower	Upper
130	100		
95	96.2	0.0	220.0

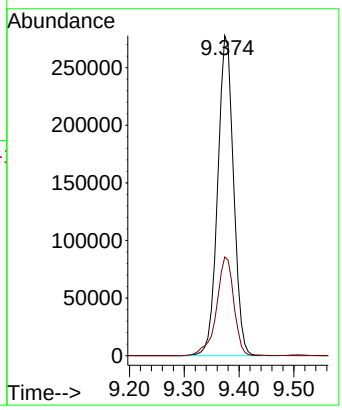




#45
1,2-Dichloropropane
Concen: 145.193 ug/l
RT: 9.374 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 63 Resp: 55963

Ion	Ratio	Lower	Upper
63	100		
65	30.8	24.3	36.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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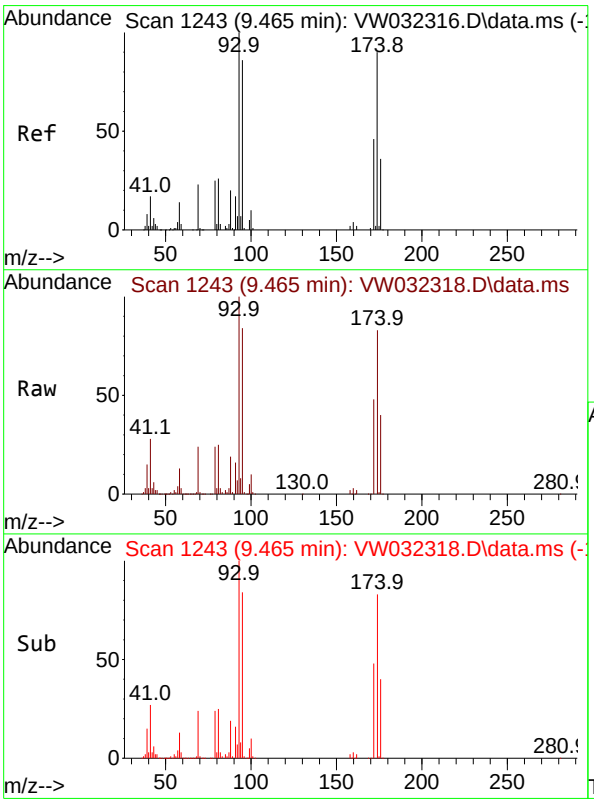
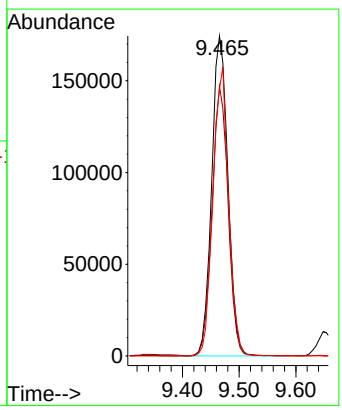
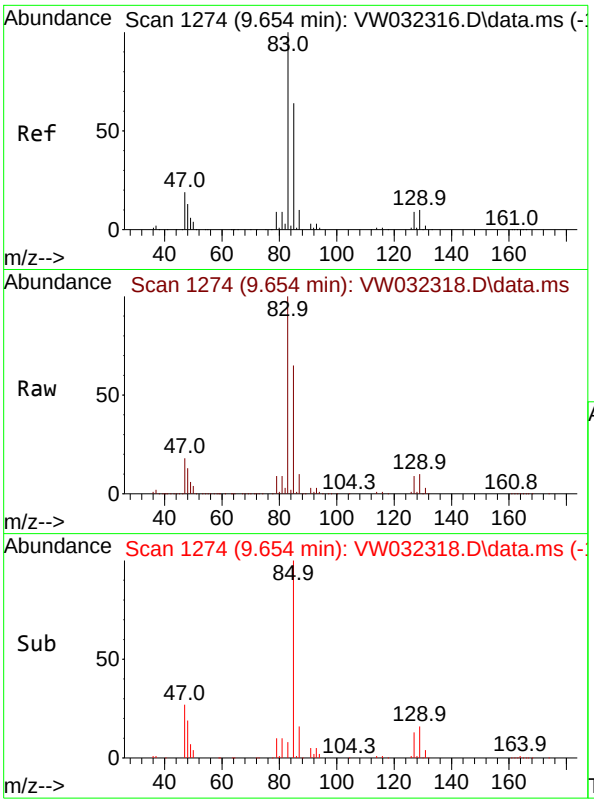


#46
Dibromomethane
Concen: 146.565 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 93 Resp: 347379

Ion	Ratio	Lower	Upper
93	100		
95	83.2	67.4	101.2
174	86.8	75.7	113.5

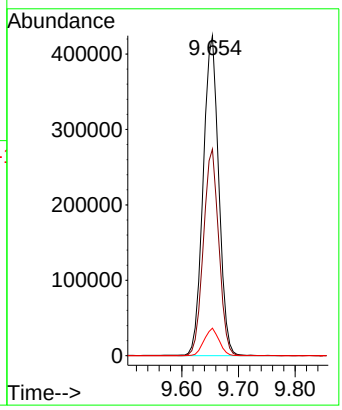




#47
Bromodichloromethane
Concen: 149.030 ug/l
RT: 9.654 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 83 Resp: 80790

Ion	Ratio	Lower	Upper
83	100		
85	64.6	48.7	73.1
127	8.6	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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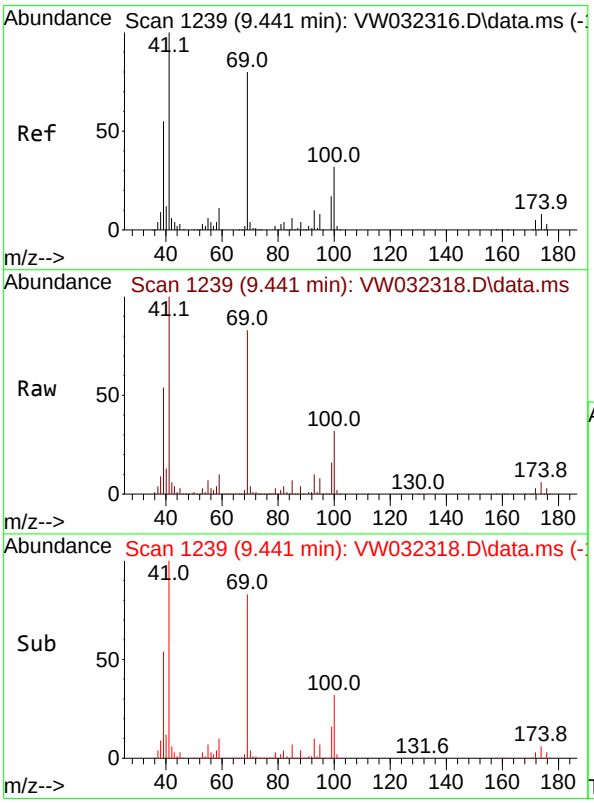
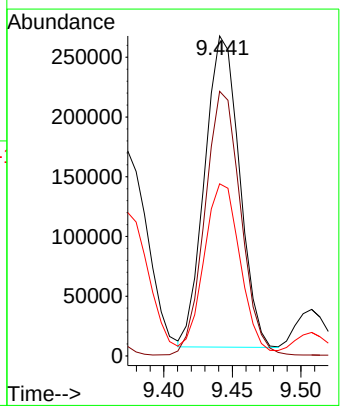
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

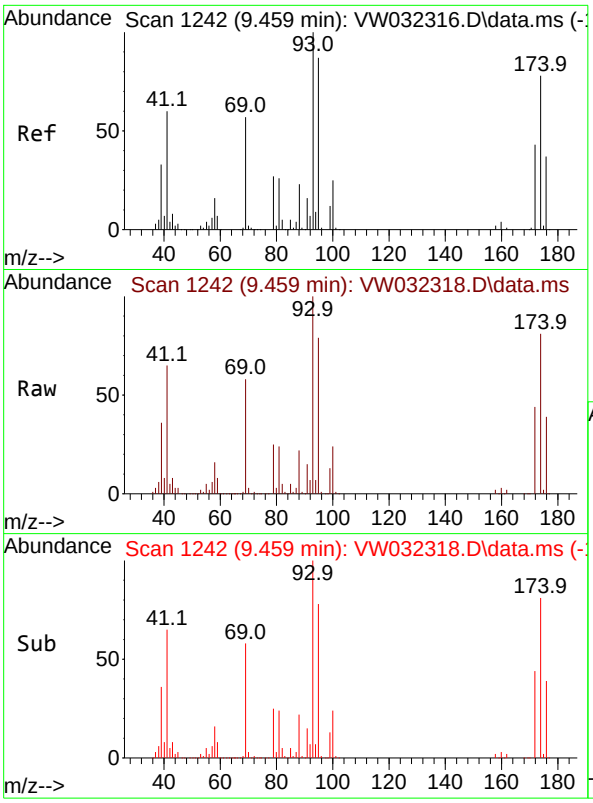


#48
Methyl methacrylate
Concen: 162.411 ug/l
RT: 9.441 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 41 Resp: 459352

Ion	Ratio	Lower	Upper
41	100		
69	88.2	71.5	107.3
39	54.3	55.9	83.9#

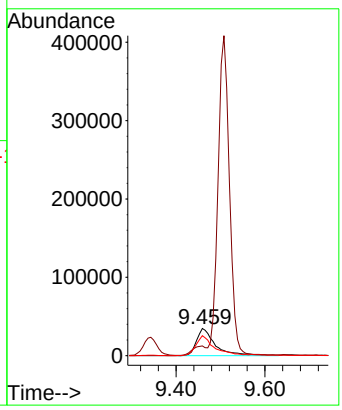




#49
1,4-Dioxane
Concen: 3174.916 ug/l
RT: 9.459 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 88 Resp: 10285

Ion	Ratio	Lower	Upper
88	100		
43	26.7	18.0	27.0
58	74.8	55.4	83.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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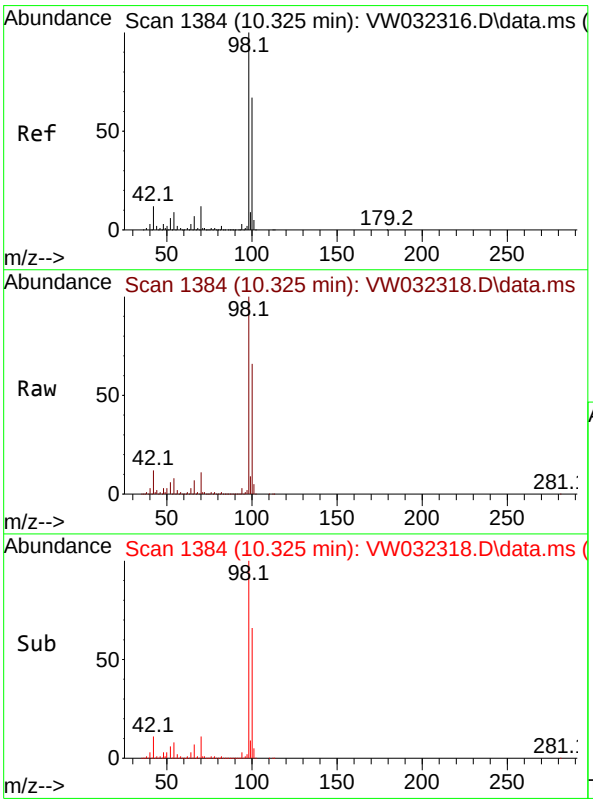
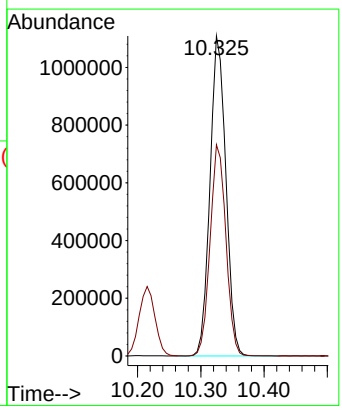
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

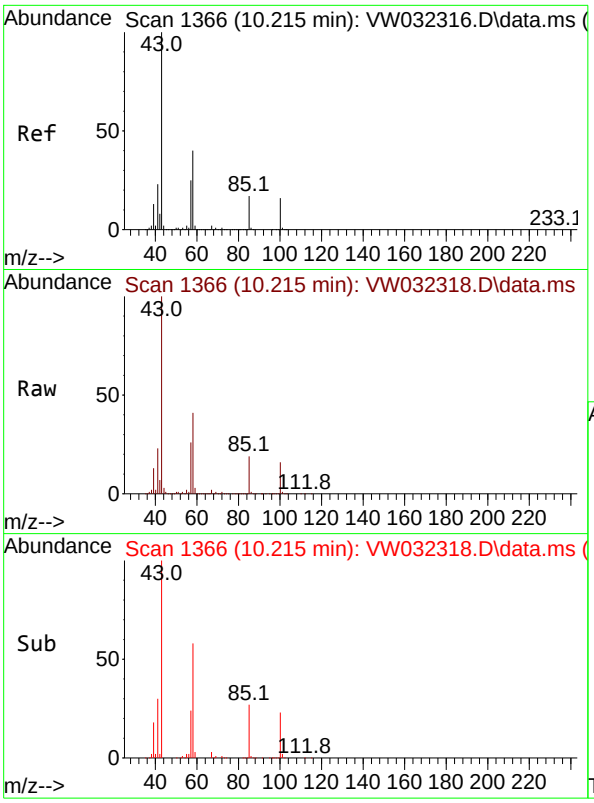


#50
Toluene-d8
Concen: 149.885 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 98 Resp: 1931096

Ion	Ratio	Lower	Upper
98	100		
100	65.8	51.4	77.2





#51
4-Methyl-2-Pentanone
Concen: 760.880 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 256364

Ion	Ratio	Lower	Upper
43	100		
58	40.4	32.0	48.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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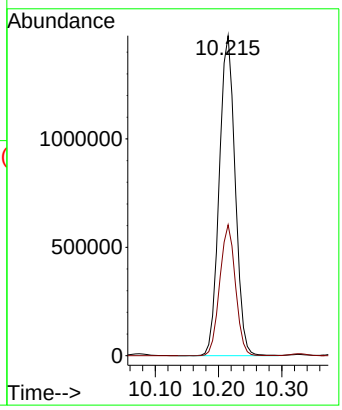
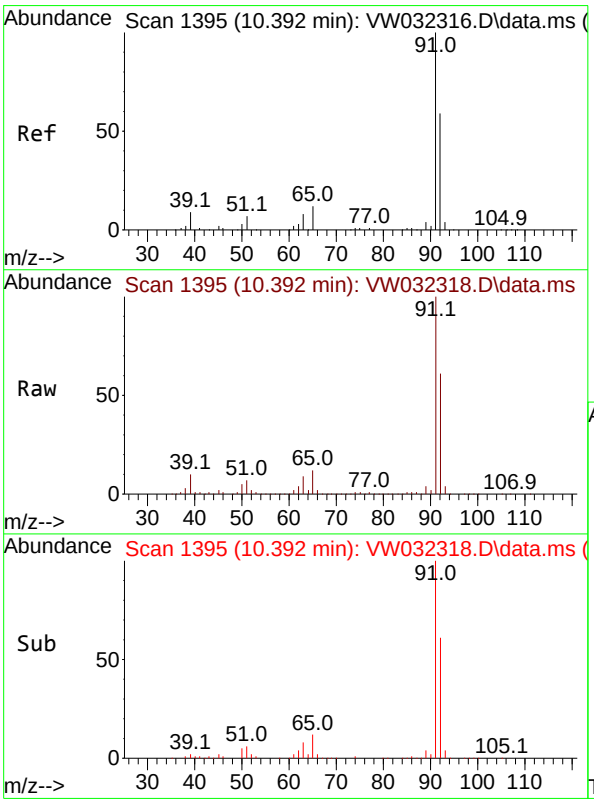
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

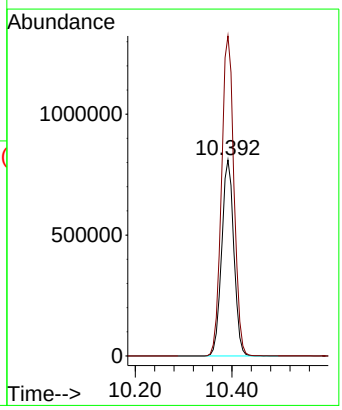


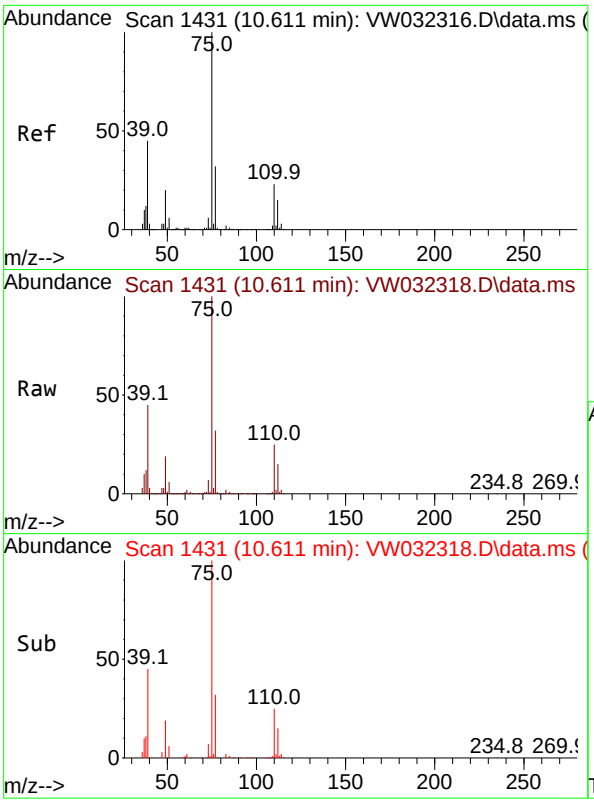


#52
Toluene
Concen: 147.299 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 92 Resp: 1416495

Ion	Ratio	Lower	Upper
92	100		
91	166.7	137.5	206.3





#53
t-1,3-Dichloropropene
Concen: 160.824 ug/l
RT: 10.611 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 75 Resp: 84582

Ion	Ratio	Lower	Upper
75	100		
77	31.7	25.6	38.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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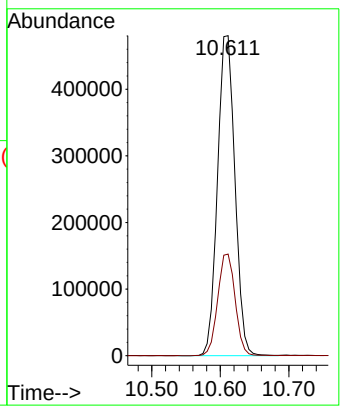
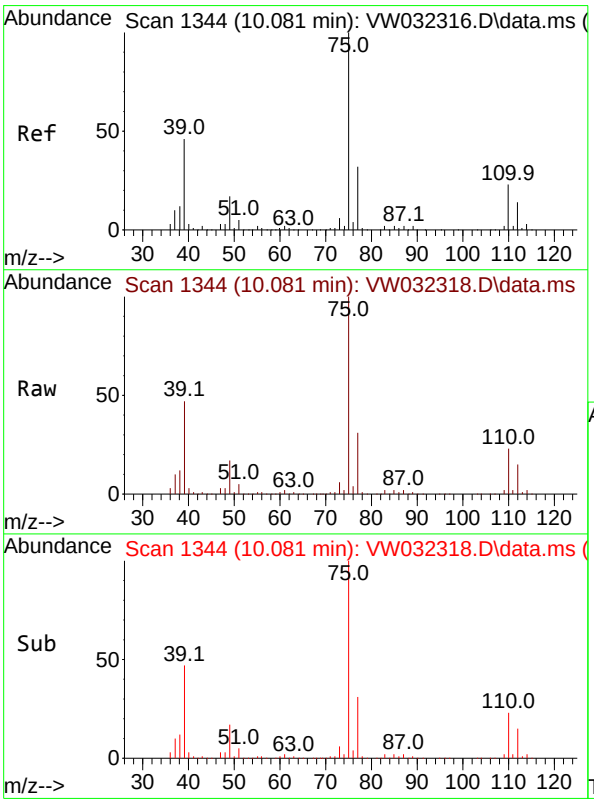
Supervised By :Semsettin Yesilyurt 10/03/2025

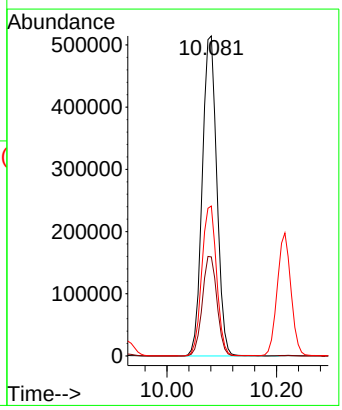


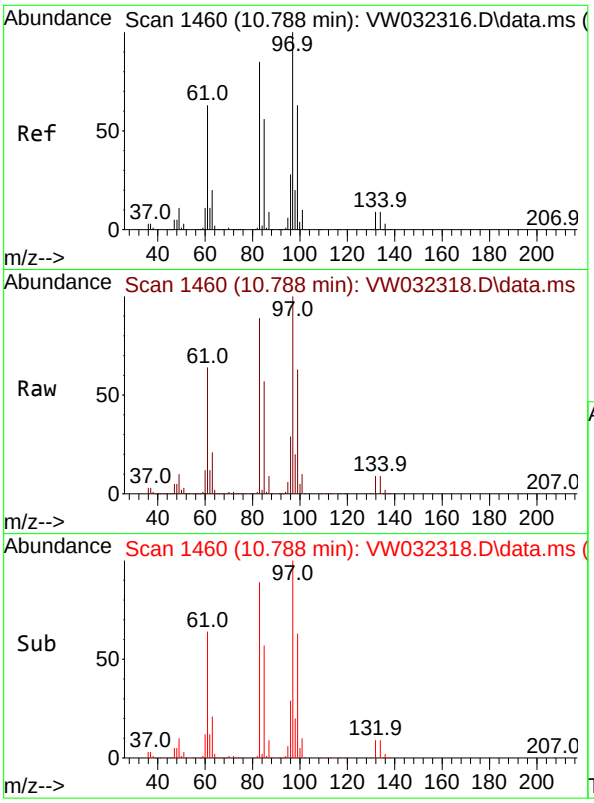


#54
cis-1,3-Dichloropropene
Concen: 155.941 ug/l
RT: 10.081 min Scan# 1344
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 75 Resp: 944717

Ion	Ratio	Lower	Upper
75	100		
77	30.9	25.1	37.7
39	46.8	43.2	64.8

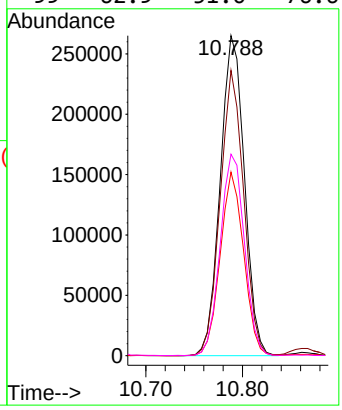




#55
1,1,2-Trichloroethane
Concen: 145.242 ug/l
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 97 Resp: 46008

Ion	Ratio	Lower	Upper
97	100		
83	89.1	71.0	106.6
85	57.3	42.8	64.2
99	62.9	51.0	76.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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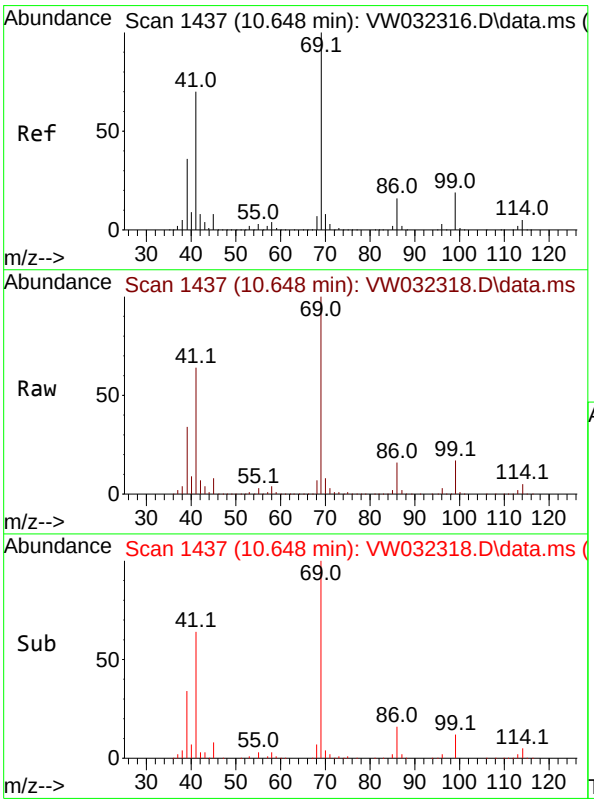
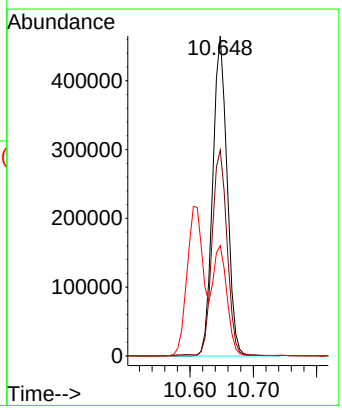
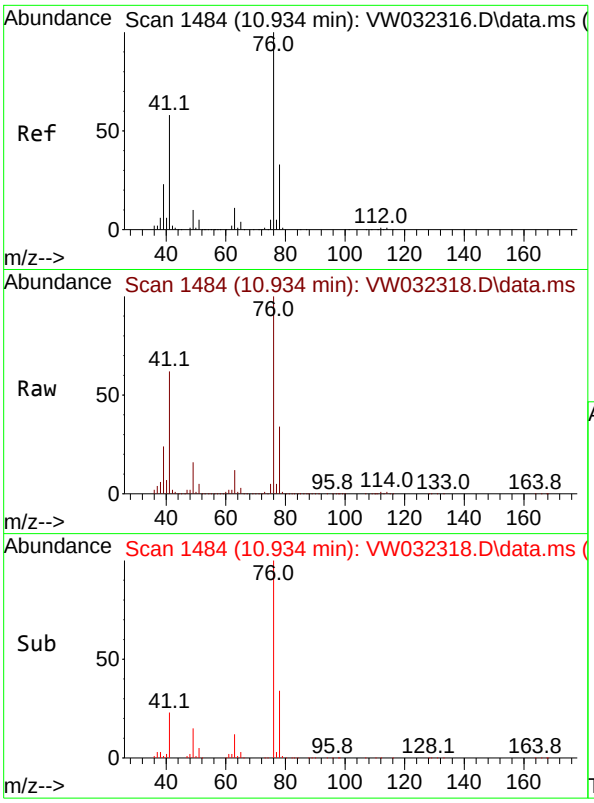


#56
Ethyl methacrylate
Concen: 165.515 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 69 Resp: 733869

Ion	Ratio	Lower	Upper
69	100		
41	66.4	53.2	79.8
39	33.0	32.9	49.3





#57
1,3-Dichloropropane
Concen: 146.656 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 76 Resp: 82051(

Ion	Ratio	Lower	Upper
76	100		
78	33.2	26.2	39.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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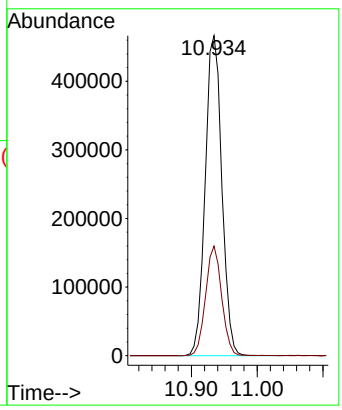
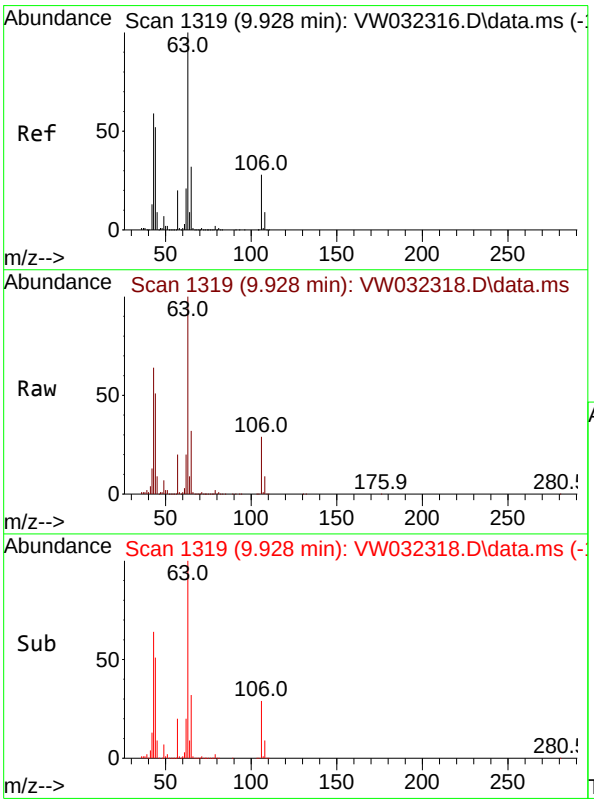
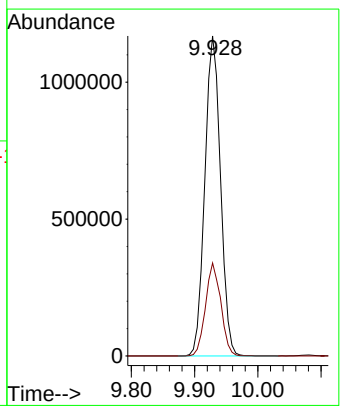


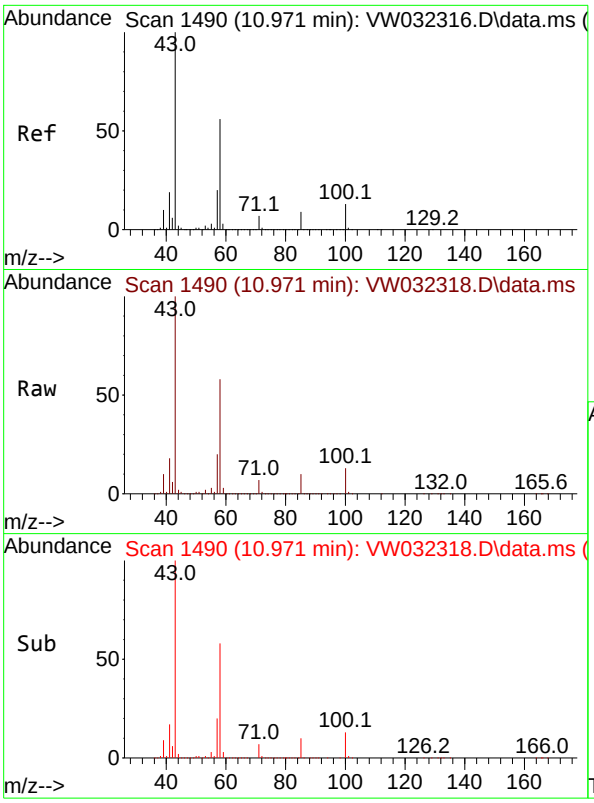


#58
2-Chloroethyl Vinyl ether
Concen: 853.757 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 63 Resp: 2014602

Ion	Ratio	Lower	Upper
63	100		
106	28.3	24.3	36.5





#59
2-Hexanone
Concen: 775.163 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 184205

Ion	Ratio	Lower	Upper
43	100		
58	55.6	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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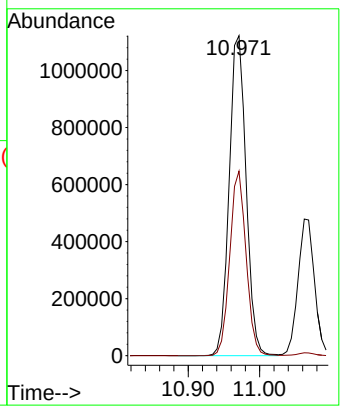
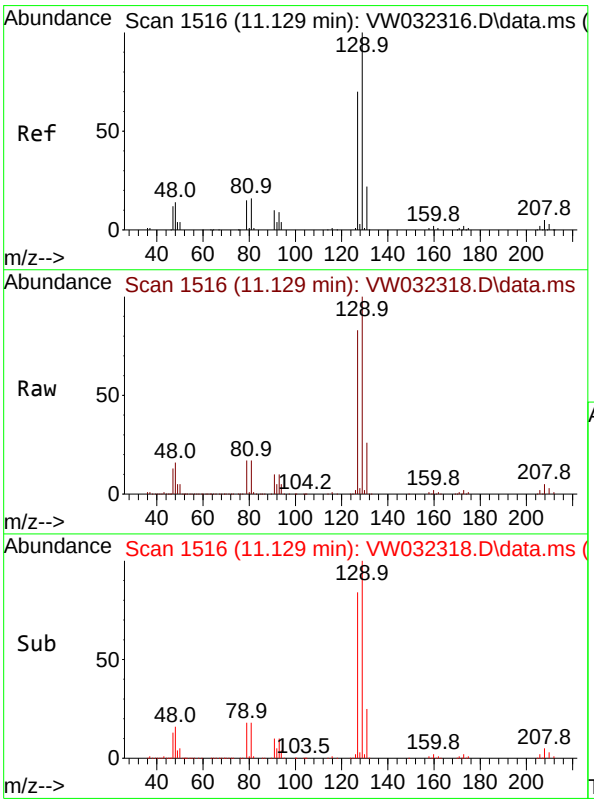
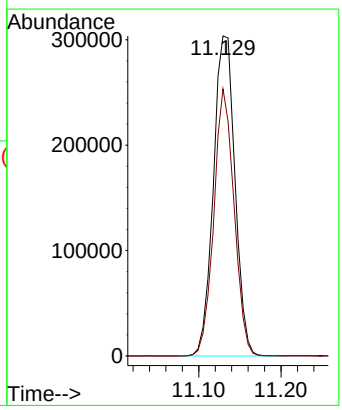


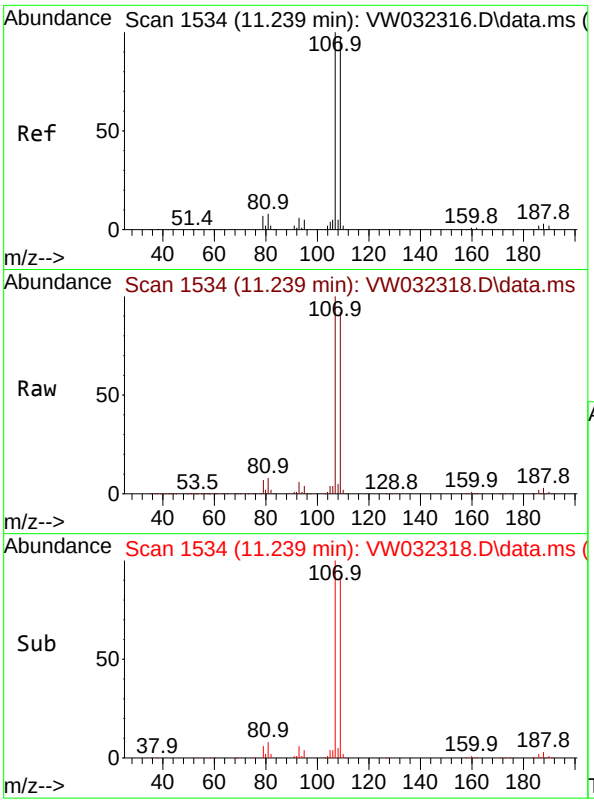


#60
Dibromochloromethane
Concen: 154.183 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:129 Resp: 554578

Ion	Ratio	Lower	Upper
129	100		
127	78.1	38.1	114.5





#61
1,2-Dibromoethane
Concen: 150.041 ug/l
RT: 11.239 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:107 Resp: 46344

Ion	Ratio	Lower	Upper
107	100		
109	93.6	74.5	111.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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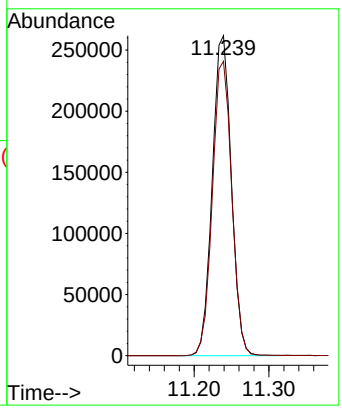
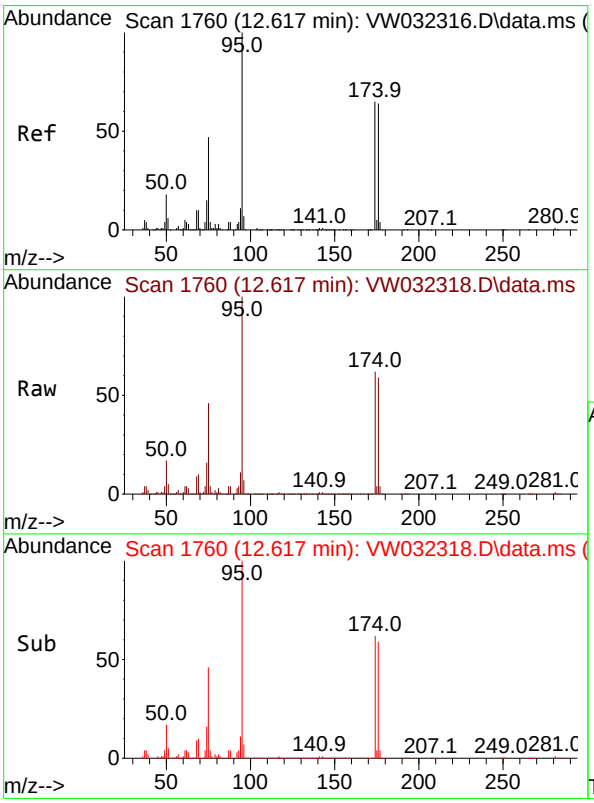
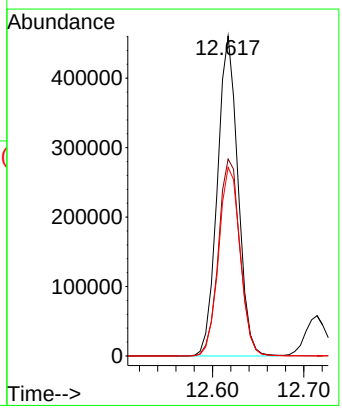


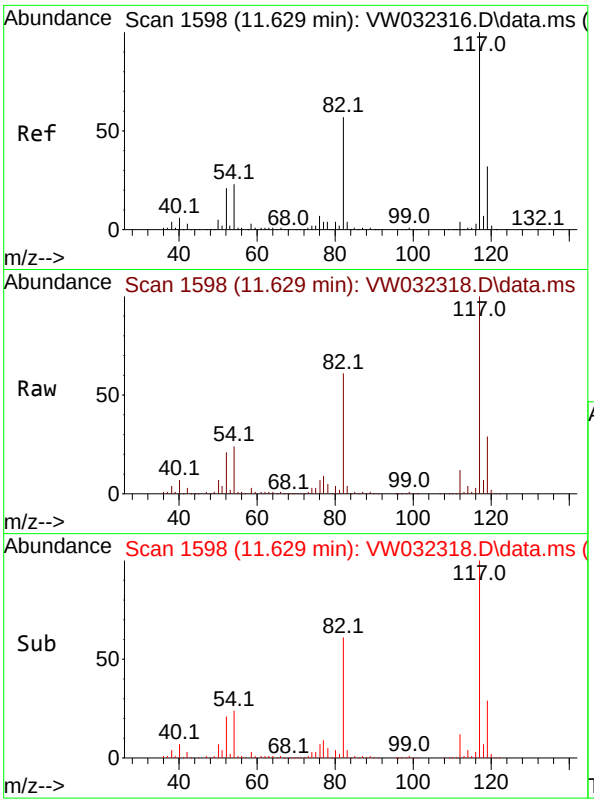


#62
4-Bromofluorobenzene
Concen: 148.089 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 95 Resp: 721146

Ion	Ratio	Lower	Upper
95	100		
174	64.6	0.0	145.6
176	61.8	0.0	140.8





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:117 Resp: 48498

Ion	Ratio	Lower	Upper
117	100		
82	60.8	42.7	64.1
119	29.4	25.2	37.8

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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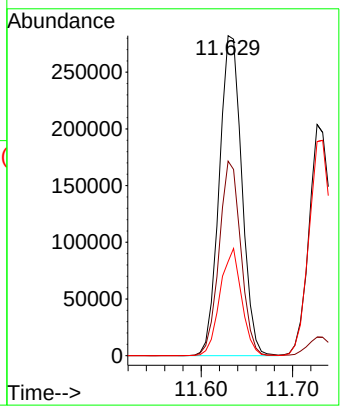
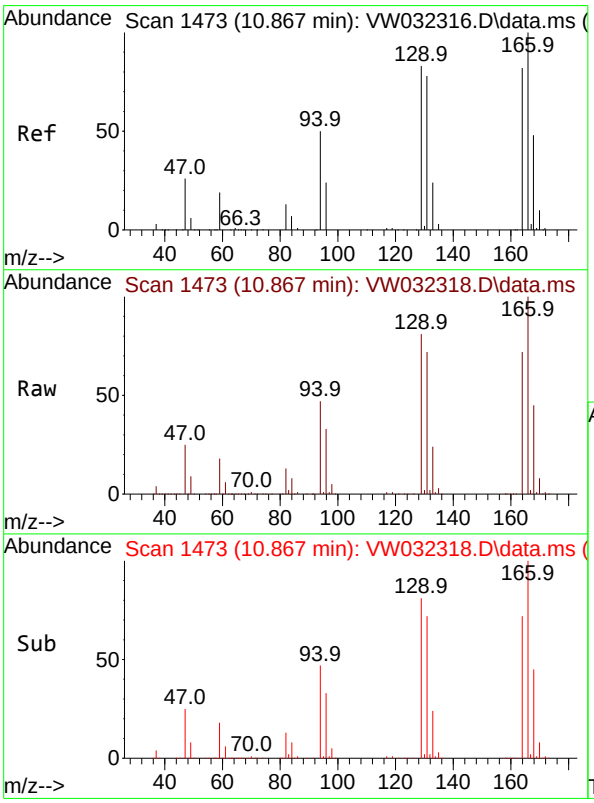
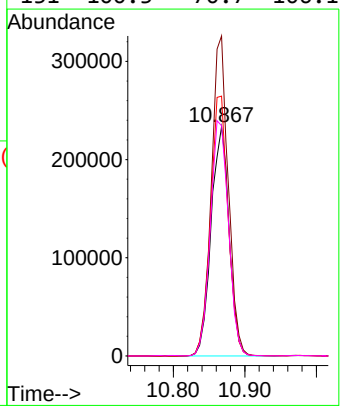


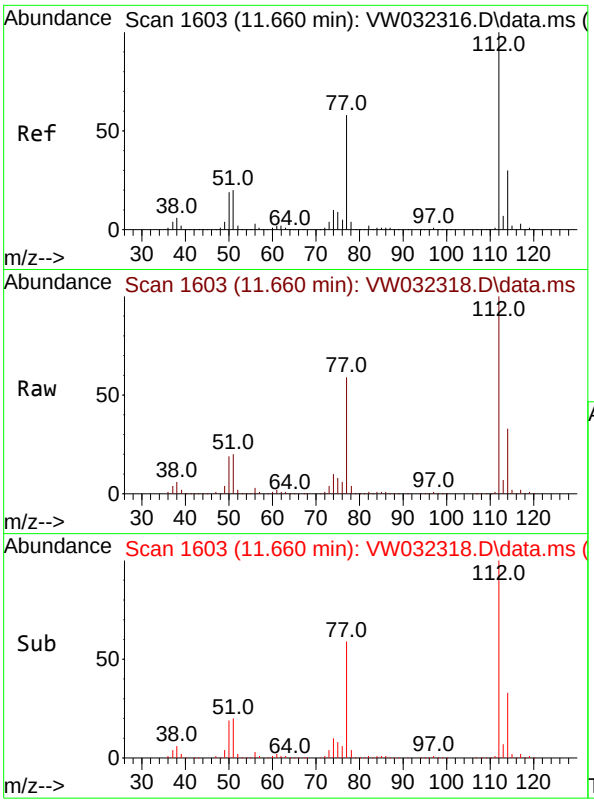


#64
Tetrachloroethene
Concen: 140.097 ug/l
RT: 10.867 min Scan# 1473
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:164 Resp: 406564

Ion	Ratio	Lower	Upper
164	100		
166	139.5	97.5	146.3
129	113.3	71.2	106.8#
131	100.3	70.7	106.1





#65
Chlorobenzene
Concen: 145.914 ug/l
RT: 11.660 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:112 Resp: 155703

Ion	Ratio	Lower	Upper
112	100		
114	32.9	26.0	39.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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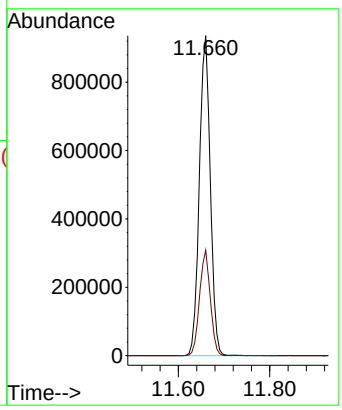
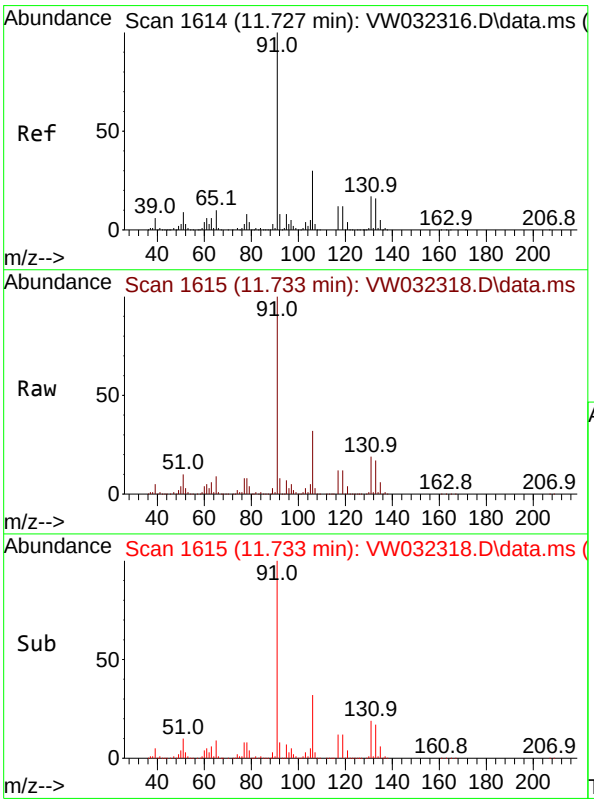
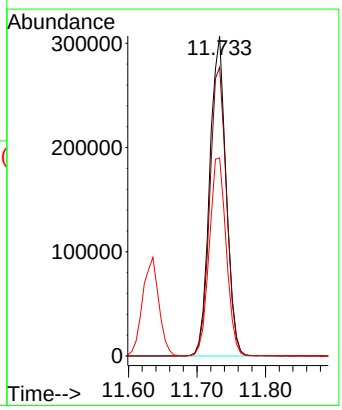


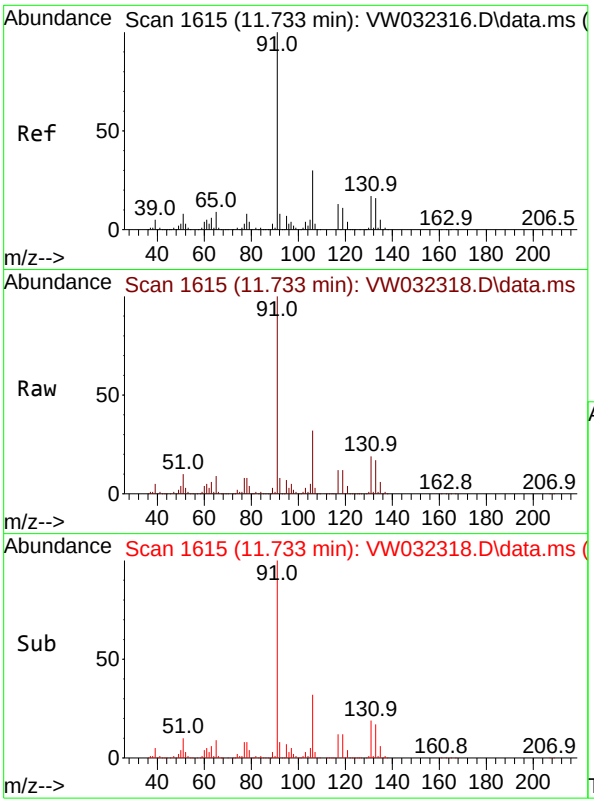


#66
1,1,1,2-Tetrachloroethane
Concen: 153.680 ug/l
RT: 11.733 min Scan# 1615
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:131 Resp: 510773

Ion	Ratio	Lower	Upper
131	100		
133	92.3	47.7	143.1
119	64.3	32.8	98.3





#67
Ethyl Benzene
Concen: 150.897 ug/l
RT: 11.733 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 91 Resp: 268401

Ion	Ratio	Lower	Upper
91	100		
106	31.5	25.3	37.9

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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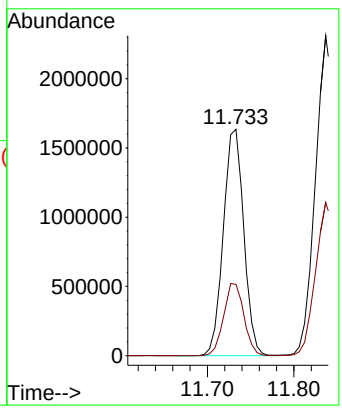
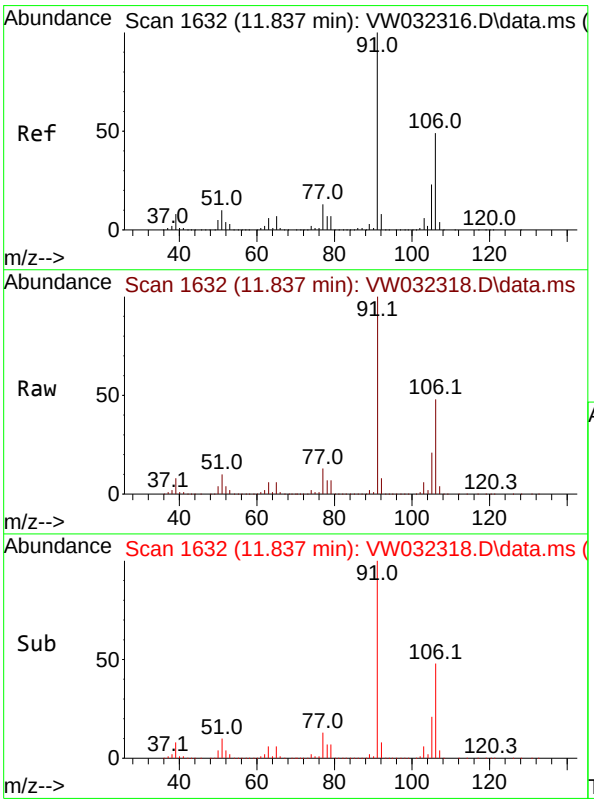
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

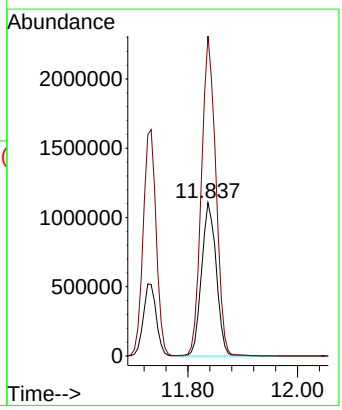


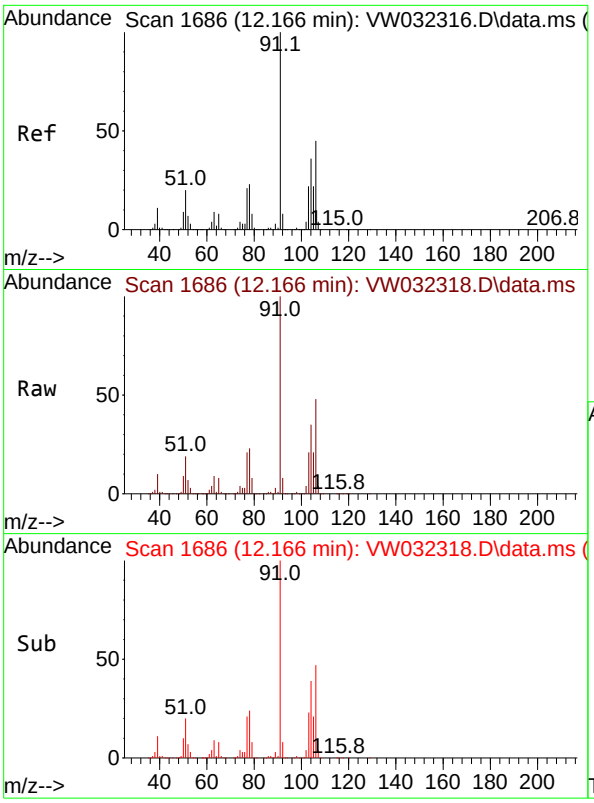


#68
m/p-Xylenes
Concen: 299.170 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:106 Resp: 2051963

Ion	Ratio	Lower	Upper
106	100		
91	205.1	164.2	246.2





#69
o-Xylene
Concen: 153.842 ug/l
RT: 12.166 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:106 Resp: 98677

Ion	Ratio	Lower	Upper
106	100		
91	215.7	108.7	326.3

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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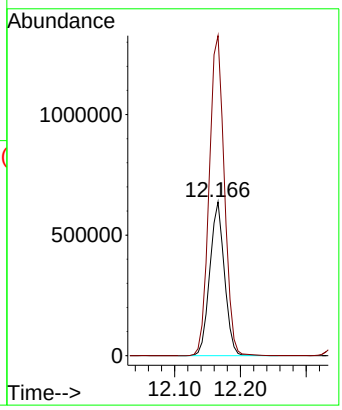
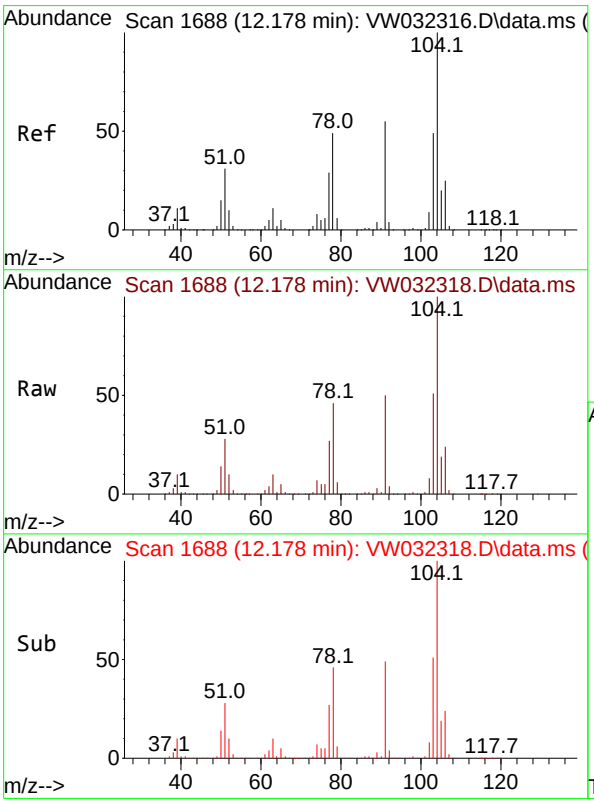
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

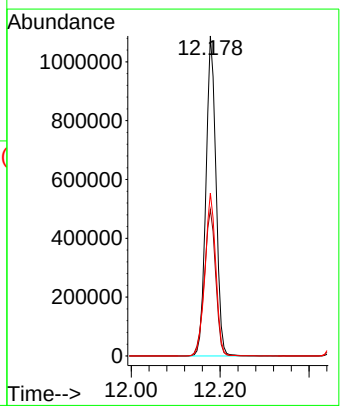


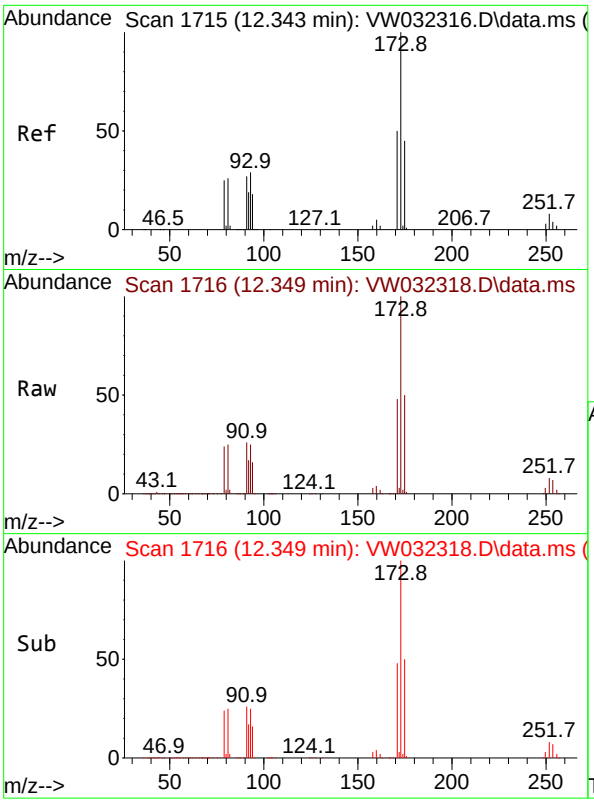


#70
Styrene
Concen: 154.098 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:104 Resp: 1725722

Ion	Ratio	Lower	Upper
104	100		
78	51.1	41.6	62.4
103	54.6	44.8	67.2

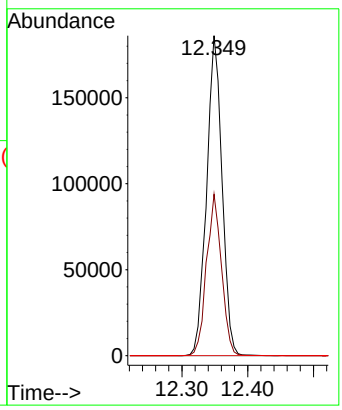




#71
Bromoform
Concen: 159.692 ug/l
RT: 12.349 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:173 Resp: 30422

Ion	Ratio	Lower	Upper
173	100		
175	49.1	24.9	74.7
254	0.0	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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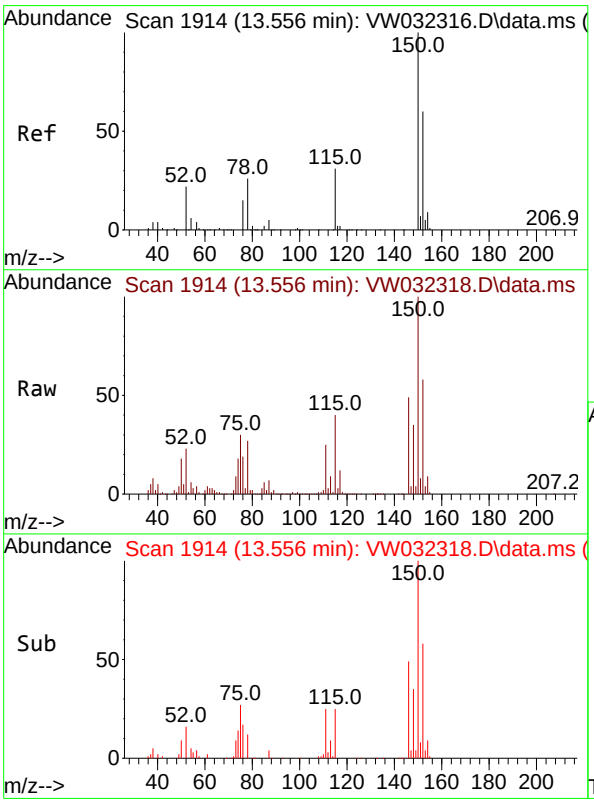
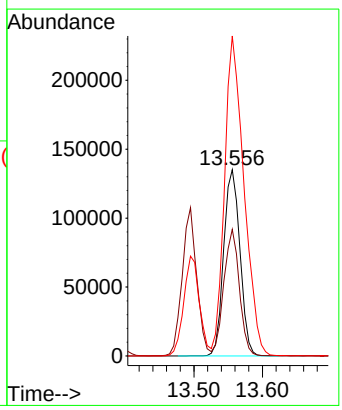
Supervised By :Semsettin Yesilyurt 10/03/2025

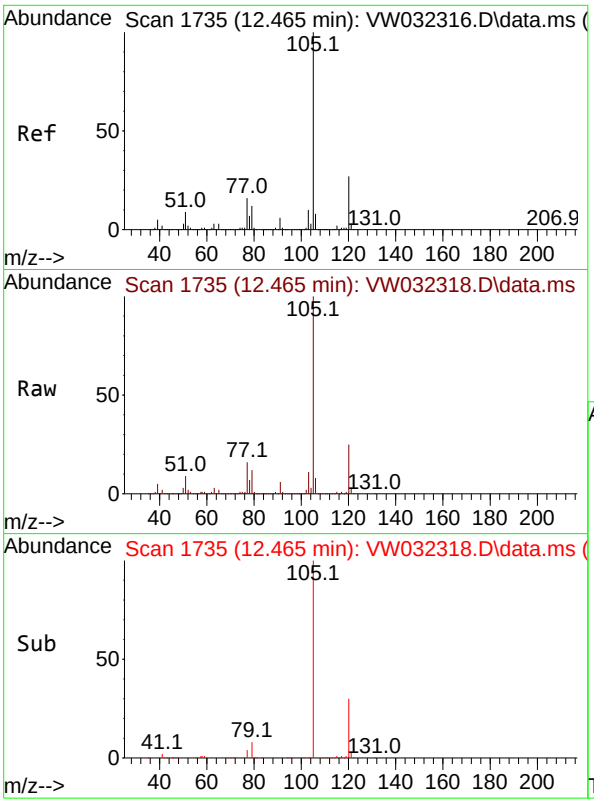


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:152 Resp: 222254

Ion	Ratio	Lower	Upper
152	100		
115	64.7	31.8	95.4
150	205.1	0.0	343.0

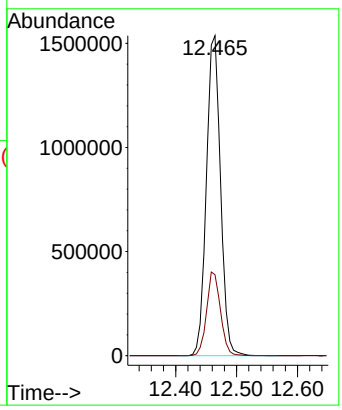




#73
Isopropylbenzene
Concen: 162.844 ug/l
RT: 12.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:105 Resp: 247614

Ion	Ratio	Lower	Upper
105	100		
120	25.6	13.0	38.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

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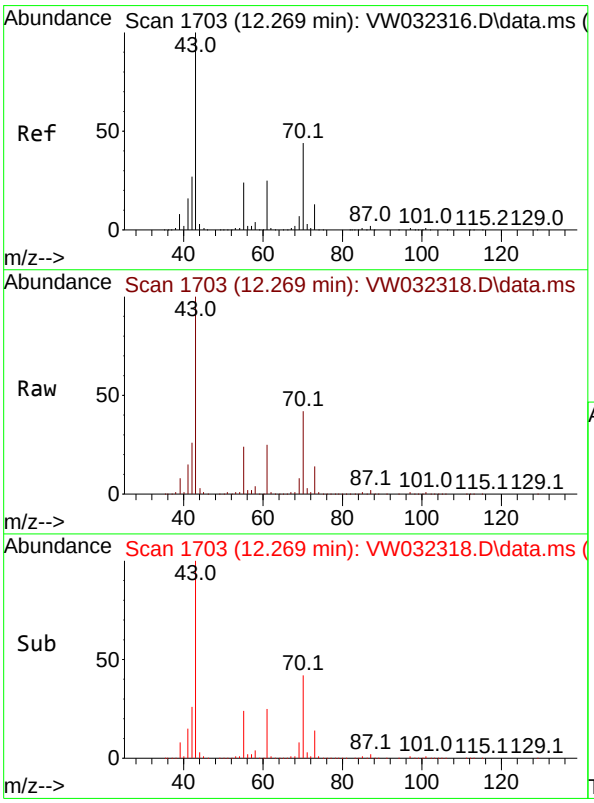
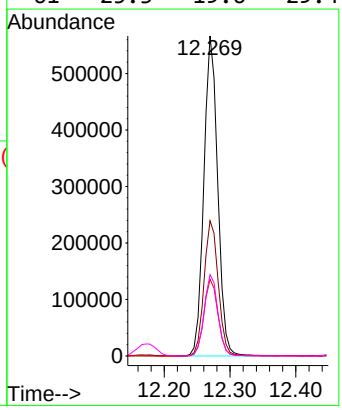
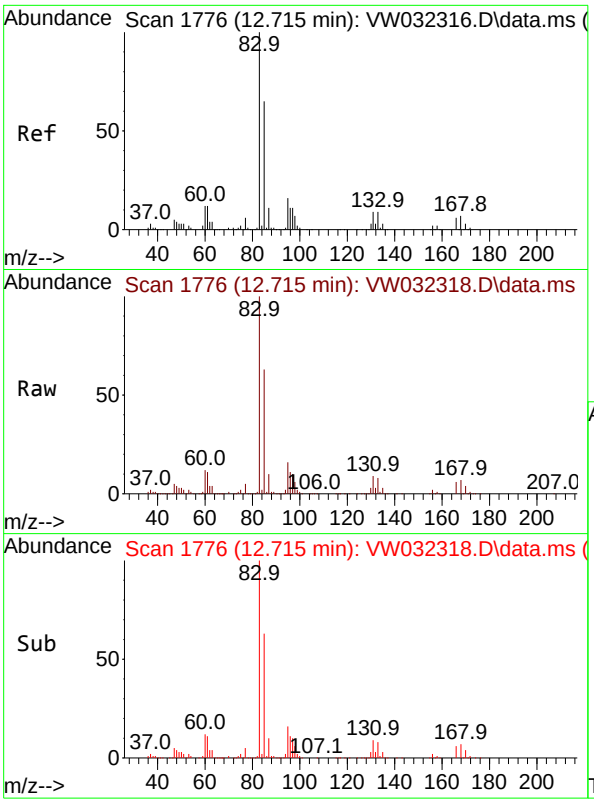


#74
N-amyl acetate
Concen: 171.063 ug/l
RT: 12.269 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 43 Resp: 829796

Ion	Ratio	Lower	Upper
43	100		
70	43.4	35.3	52.9
55	24.4	19.9	29.9
61	25.3	19.6	29.4





#75
1,1,2,2-Tetrachloroethane
Concen: 153.538 ug/l
RT: 12.715 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 83 Resp: 57968

Ion	Ratio	Lower	Upper
83	100		
131	9.9	5.1	15.4
85	63.9	32.2	96.6

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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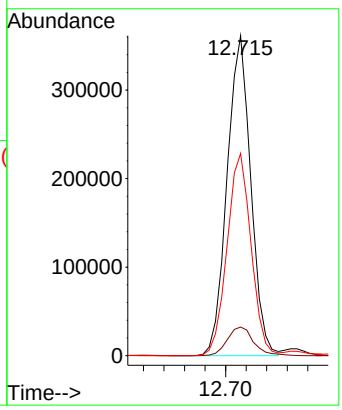
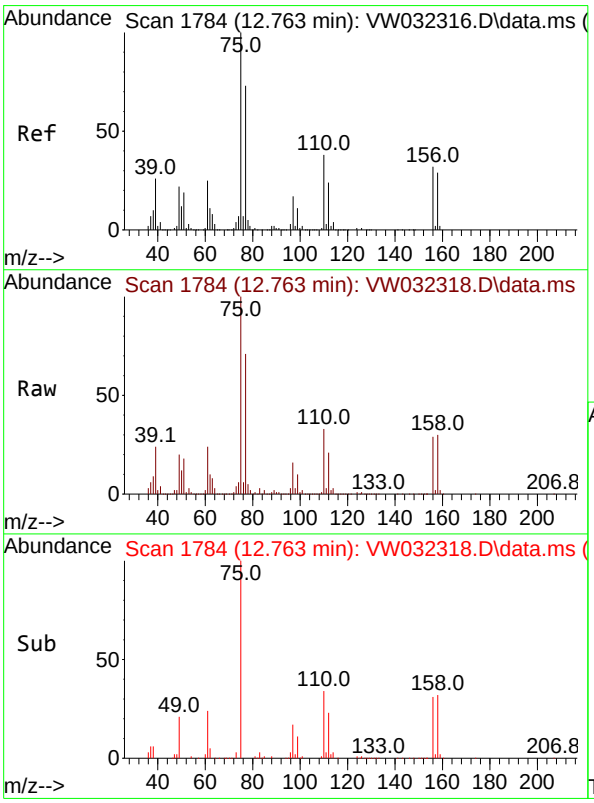
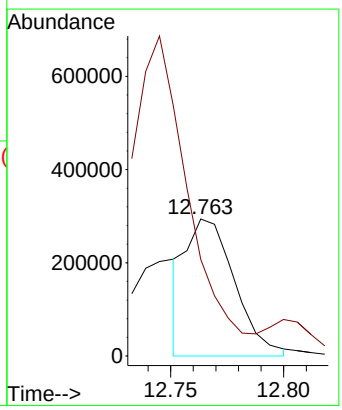


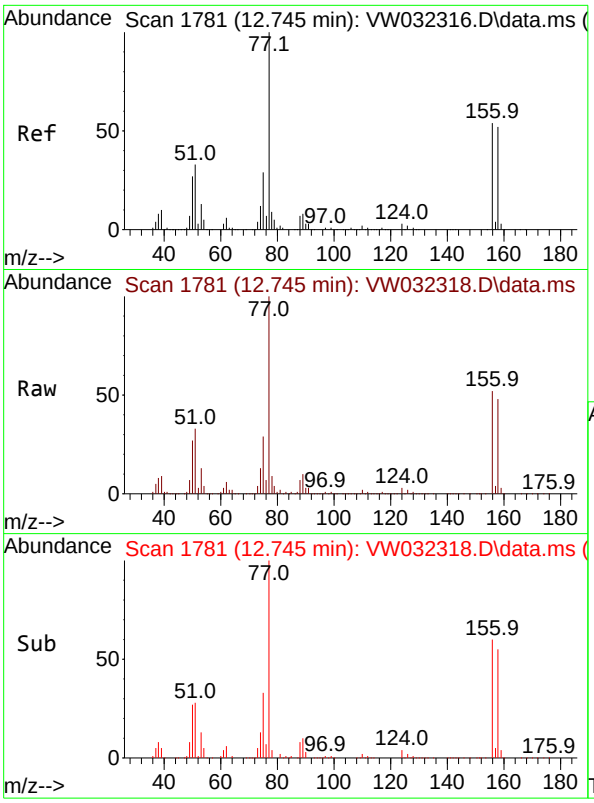


#76
1,2,3-Trichloropropane
Concen: 150.487 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 75 Resp: 441352

Ion	Ratio	Lower	Upper
75	100		
77	284.9	141.7	425.1

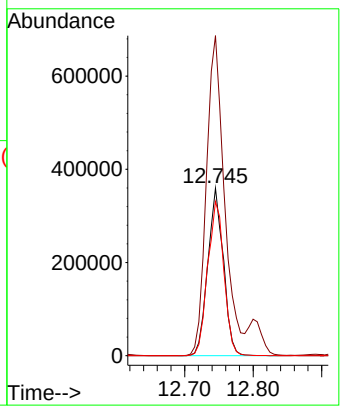




#77
Bromobenzene
Concen: 155.243 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:156 Resp: 56902

Ion	Ratio	Lower	Upper
156	100		
77	221.0	98.6	295.7
158	96.0	48.4	145.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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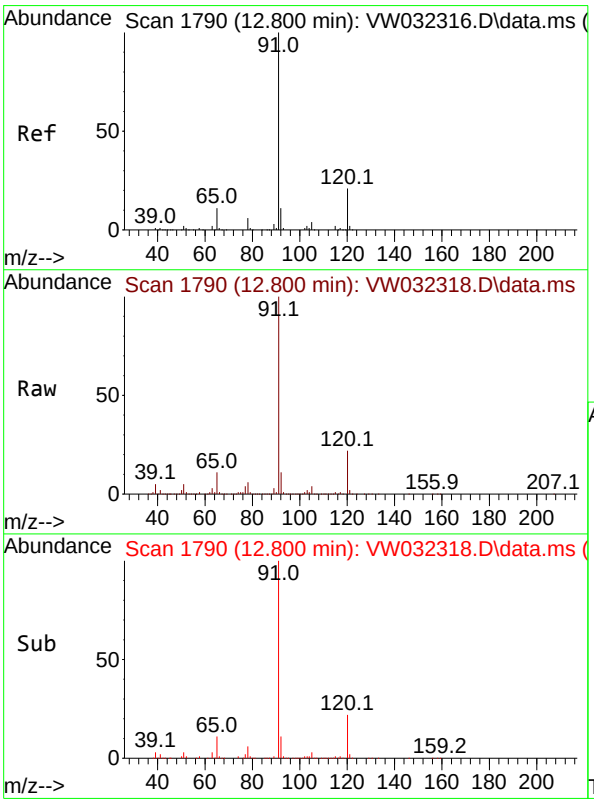
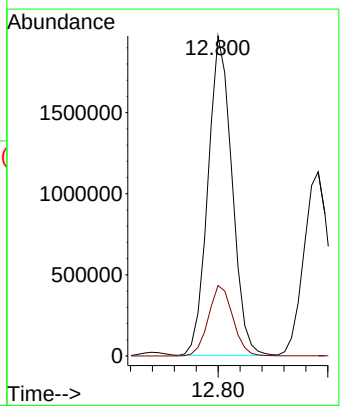
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

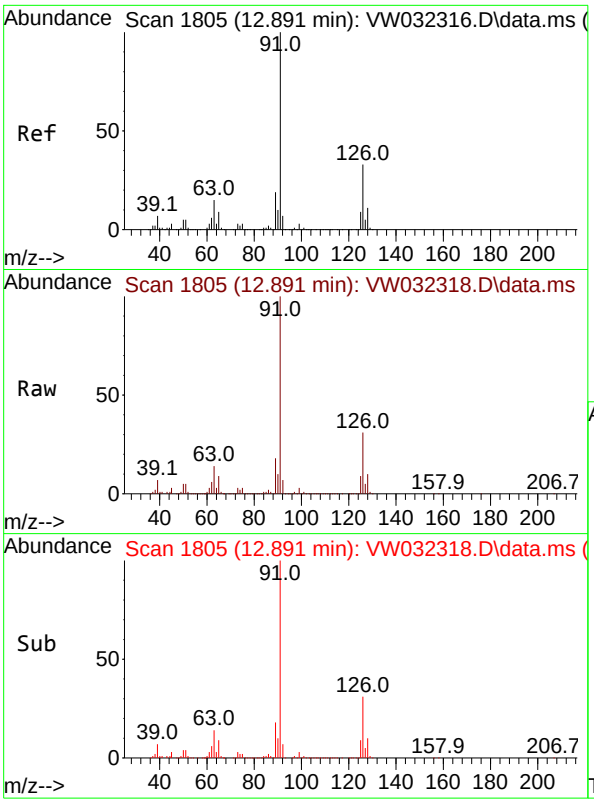


#78
n-propylbenzene
Concen: 158.050 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 91 Resp: 3001989

Ion	Ratio	Lower	Upper
91	100		
120	22.5	11.8	35.4





#79
2-Chlorotoluene
Concen: 157.767 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 91 Resp: 183223

Ion	Ratio	Lower	Upper
91	100		
126	31.4	16.6	49.7

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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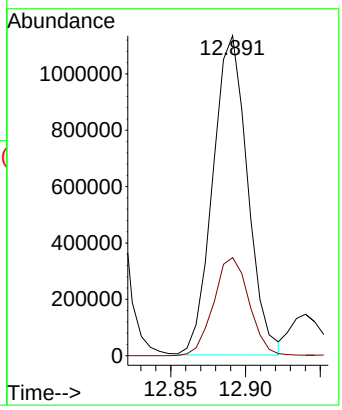
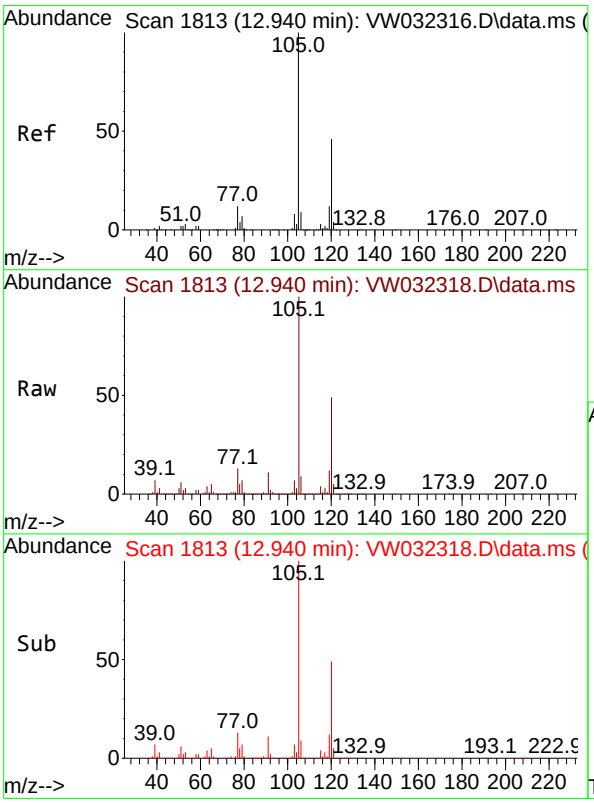
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

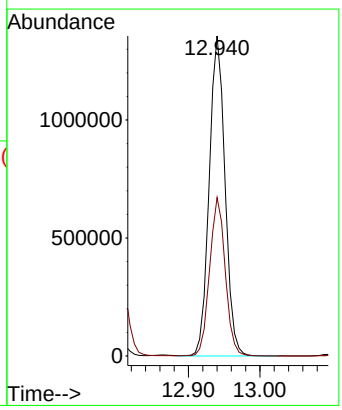


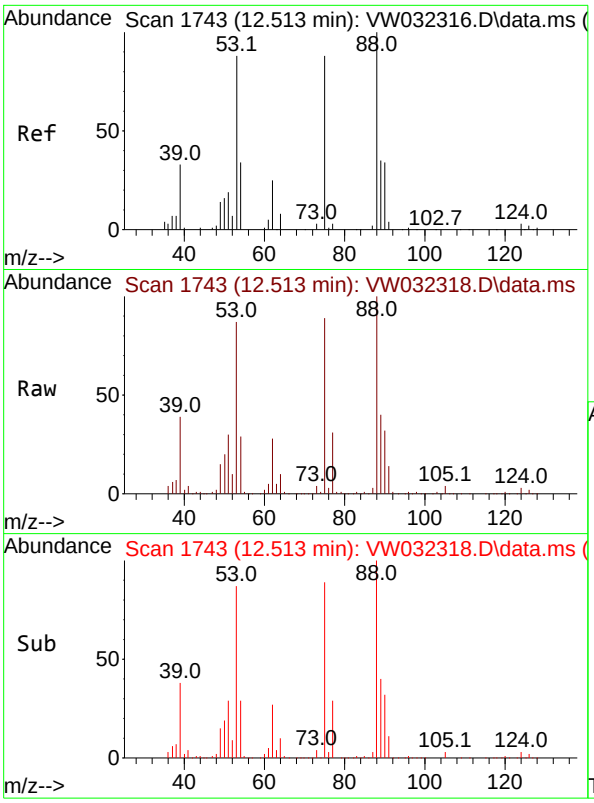


#80
1,3,5-Trimethylbenzene
Concen: 158.201 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:105 Resp: 2080060

Ion	Ratio	Lower	Upper
105	100		
120	48.8	24.8	74.4





#81
trans-1,4-Dichloro-2-butene
Concen: 177.457 ug/l
RT: 12.513 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 75 Resp: 20488

Ion	Ratio	Lower	Upper
75	100		
53	98.3	91.0	136.6
89	46.6	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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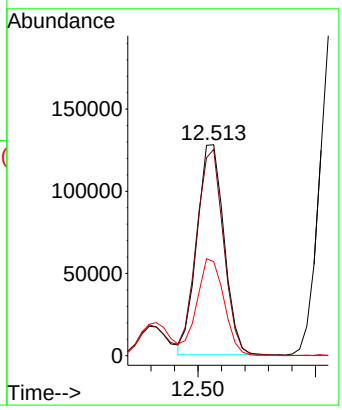
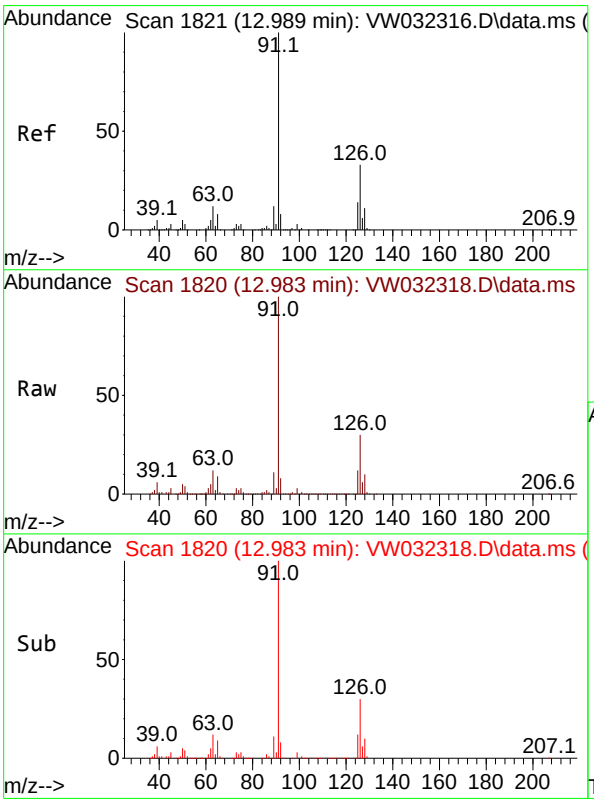
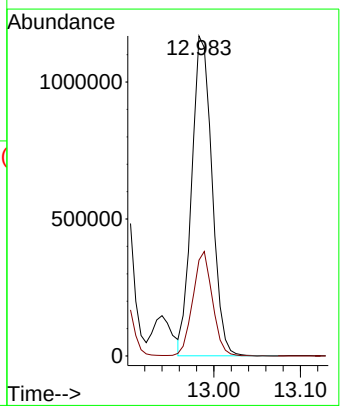


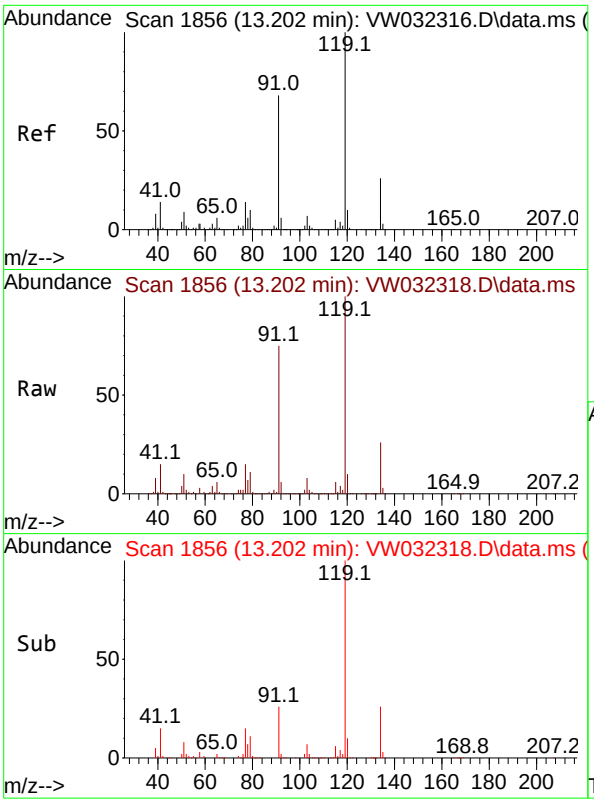


#82
4-Chlorotoluene
Concen: 153.300 ug/l
RT: 12.983 min Scan# 1820
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 91 Resp: 1892838

Ion	Ratio	Lower	Upper
91	100		
126	31.7	16.1	48.2

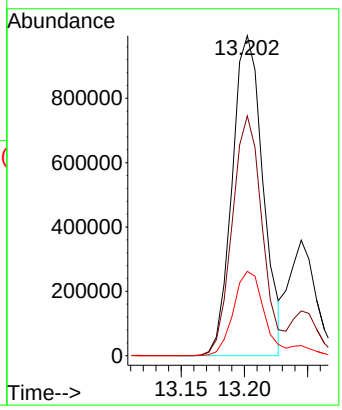




#83
tert-Butylbenzene
Concen: 156.599 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:119 Resp: 168940

Ion	Ratio	Lower	Upper
119	100		
91	73.7	33.8	101.3
134	28.3	12.5	37.5



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
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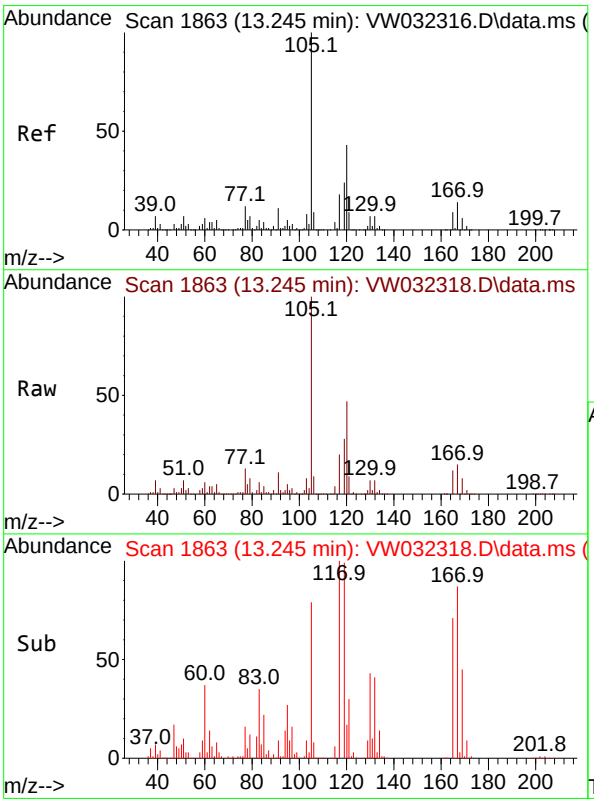
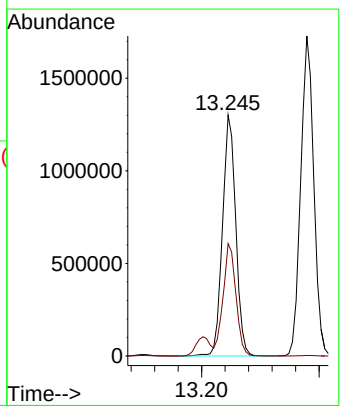
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

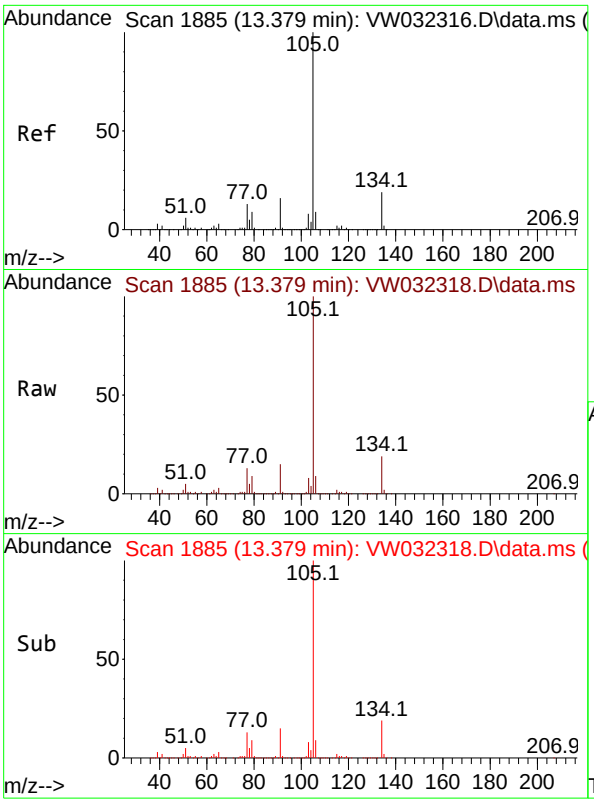


#84
1,2,4-Trimethylbenzene
Concen: 152.369 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:105 Resp: 2037112

Ion	Ratio	Lower	Upper
105	100		
120	45.1	22.1	66.3

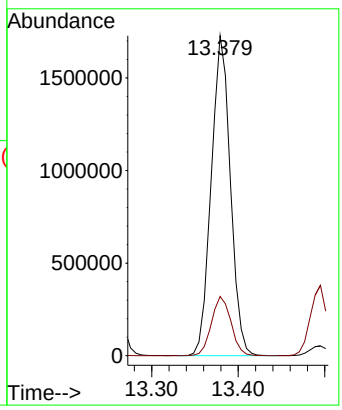




#85
sec-Butylbenzene
Concen: 160.991 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:105 Resp: 265412

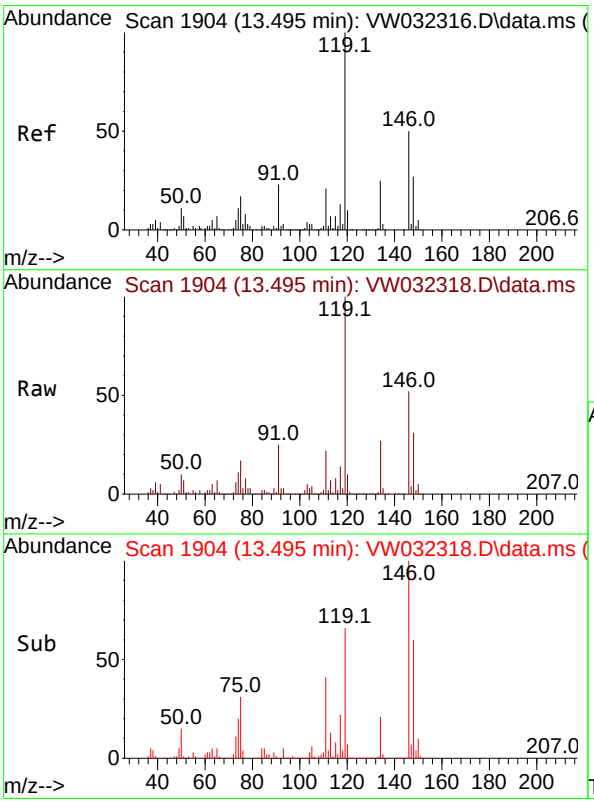
Ion	Ratio	Lower	Upper
105	100		
134	18.9	10.1	30.1



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

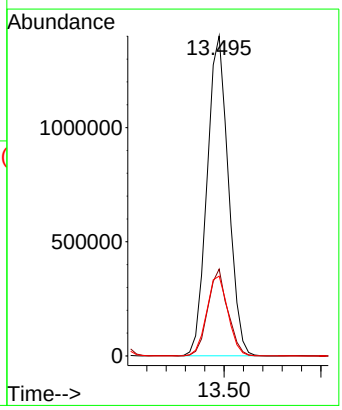
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

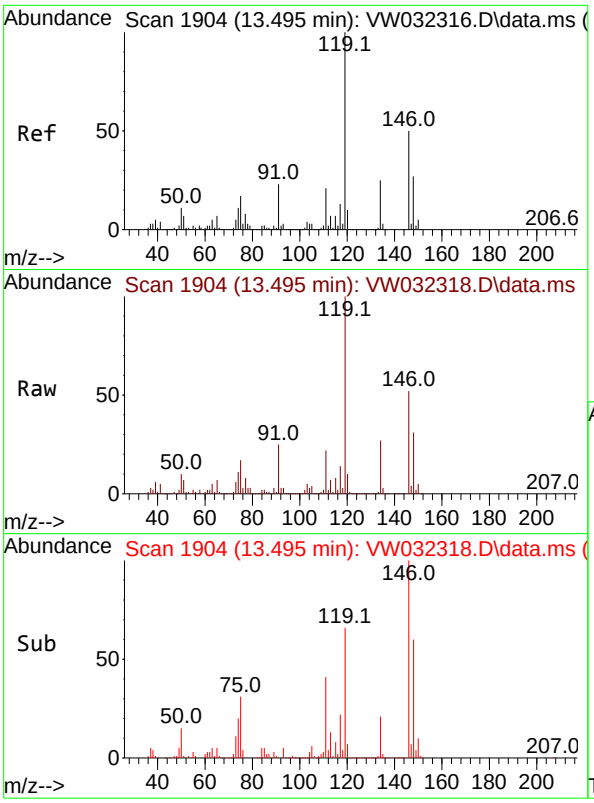


#86
p-Isopropyltoluene
Concen: 156.585 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:119 Resp: 2141983

Ion	Ratio	Lower	Upper
119	100		
134	25.4	12.6	37.6
91	24.9	12.4	37.0





#87
1,3-Dichlorobenzene
Concen: 154.671 ug/l
RT: 13.495 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

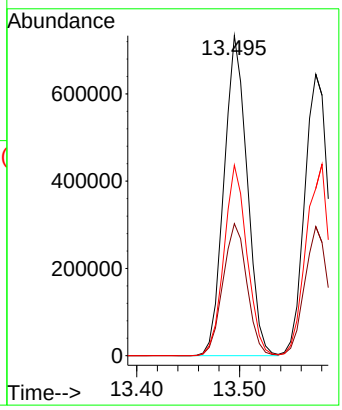
Tgt Ion:146 Resp: 114799

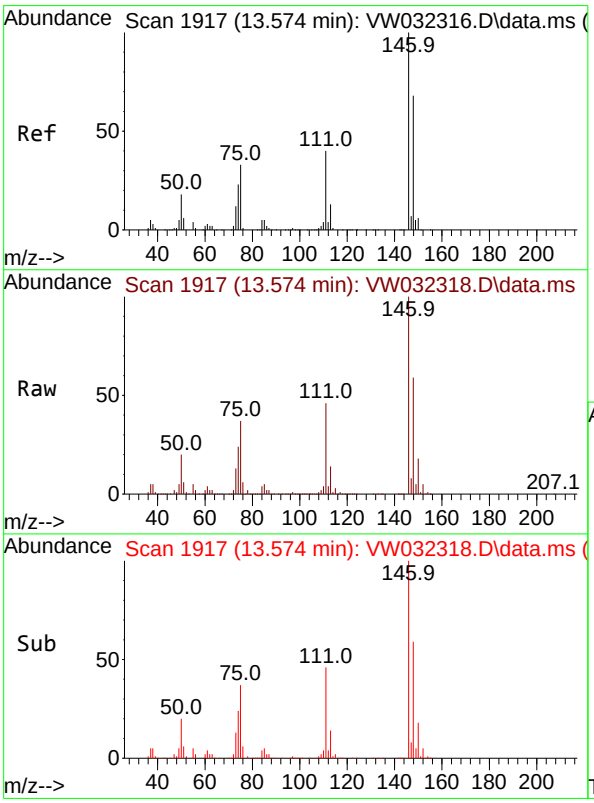
Ion	Ratio	Lower	Upper
146	100		
111	42.7	20.6	61.9
148	59.1	30.6	92.0

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

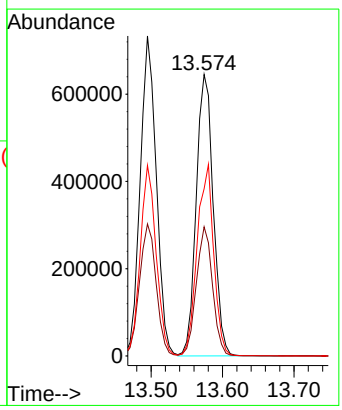


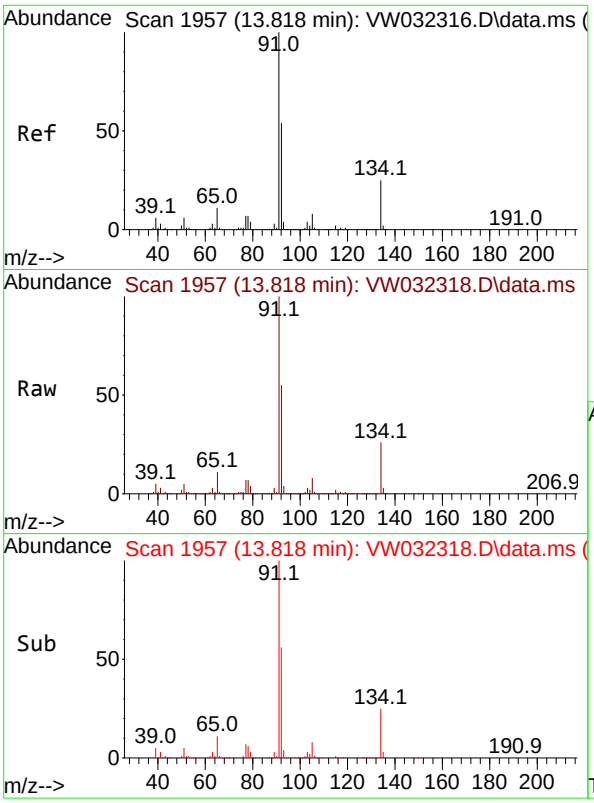


#88
1,4-Dichlorobenzene
Concen: 143.490 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:146 Resp: 1064904

Ion	Ratio	Lower	Upper
146	100		
111	44.0	21.3	63.7
148	66.2	33.4	100.1

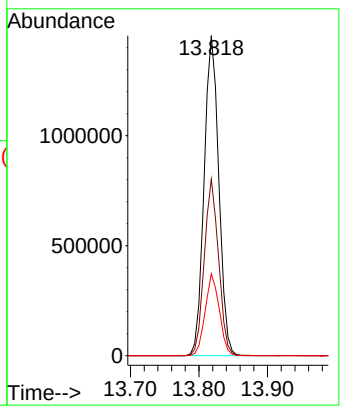




#89
n-Butylbenzene
Concen: 162.413 ug/l
RT: 13.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 91 Resp: 216921

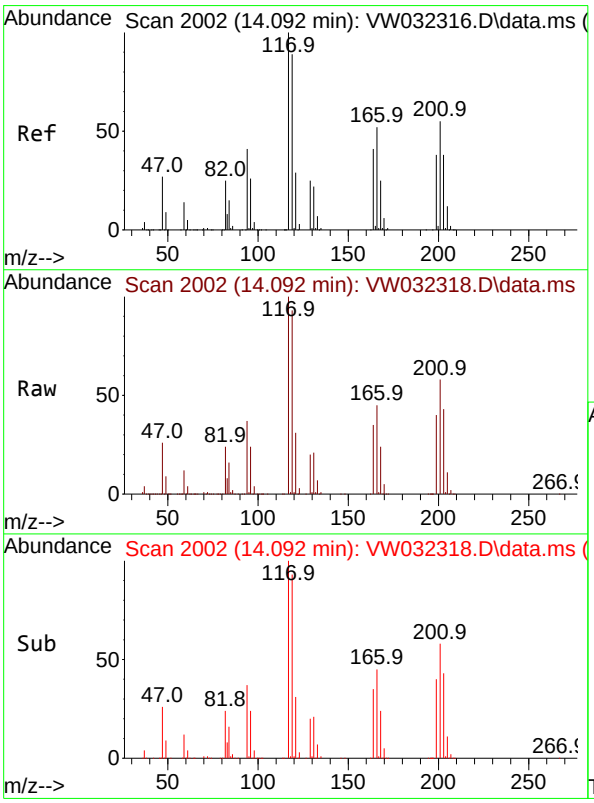
Ion	Ratio	Lower	Upper
91	100		
92	53.8	27.0	81.0
134	24.7	13.1	39.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

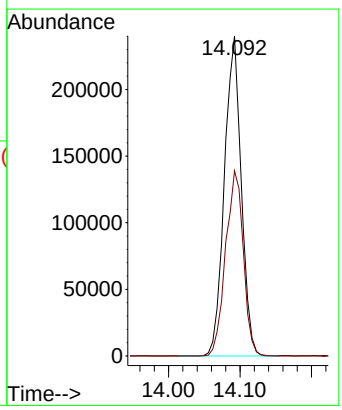
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

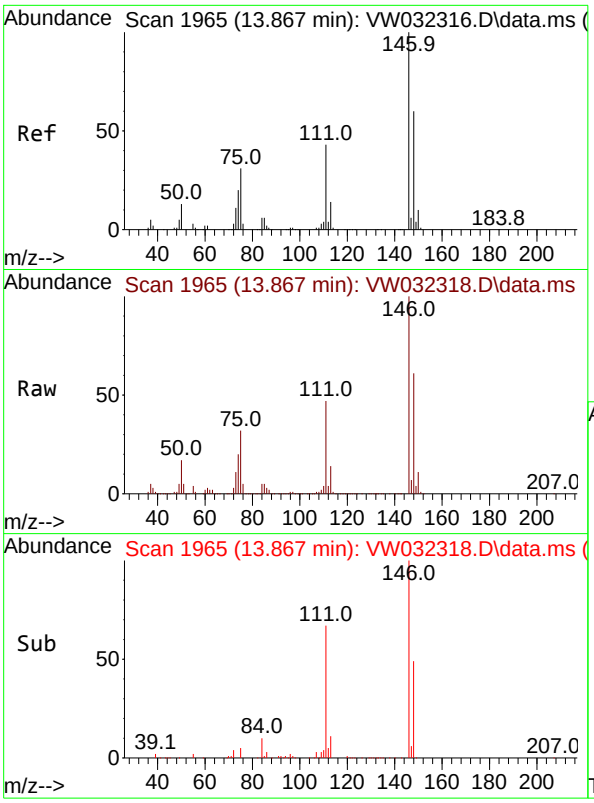


#90
Hexachloroethane
Concen: 160.071 ug/l
RT: 14.092 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:117 Resp: 392482

Ion	Ratio	Lower	Upper
117	100		
201	60.7	32.8	98.4

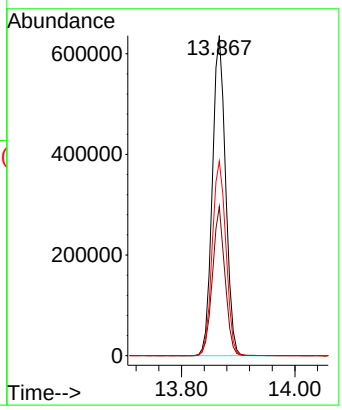




#91
1,2-Dichlorobenzene
Concen: 153.076 ug/l
RT: 13.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:146 Resp: 102704

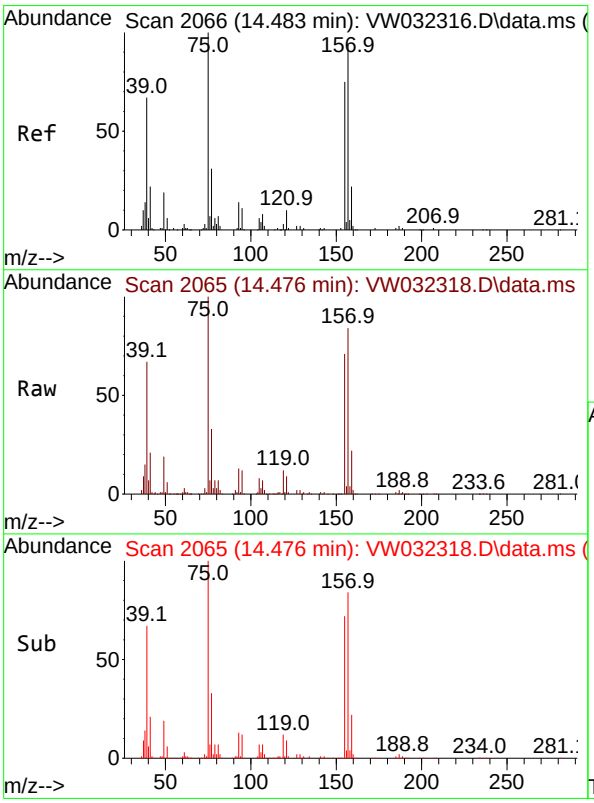
Ion	Ratio	Lower	Upper
146	100		
111	44.1	23.4	70.0
148	62.8	34.1	102.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

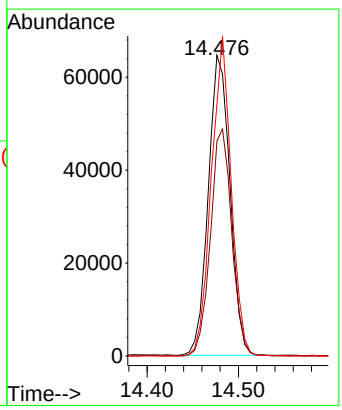
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

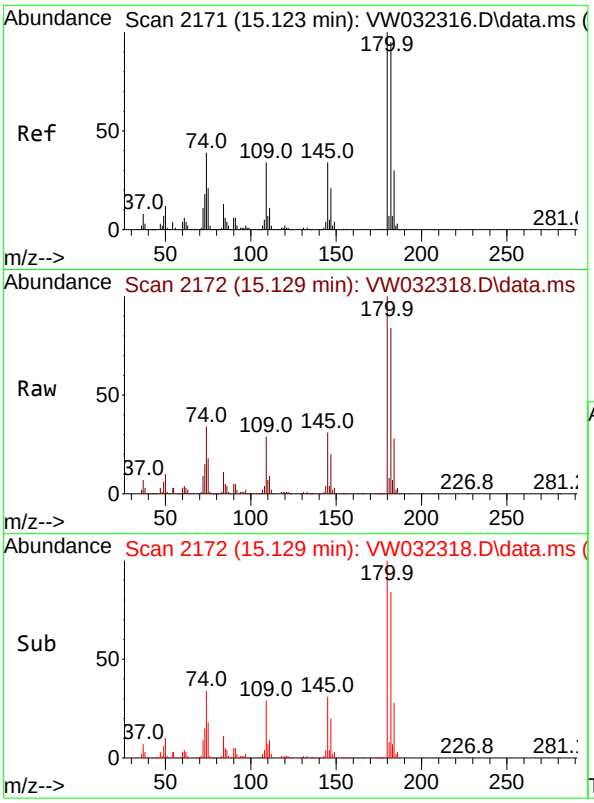


#92
1,2-Dibromo-3-Chloropropane
Concen: 160.891 ug/l
RT: 14.476 min Scan# 2065
Delta R.T. -0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion: 75 Resp: 106355

Ion	Ratio	Lower	Upper
75	100		
155	74.4	40.8	122.5
157	97.8	51.8	155.4





#93
1,2,4-Trichlorobenzene
Concen: 165.196 ug/l
RT: 15.129 min Scan# 2
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

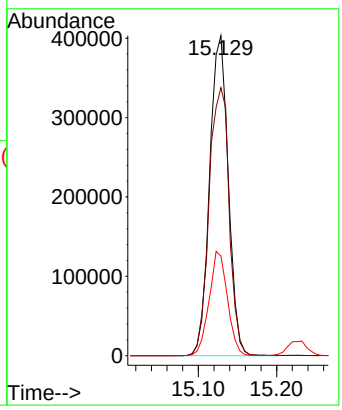
Tgt Ion:180 Resp: 66462

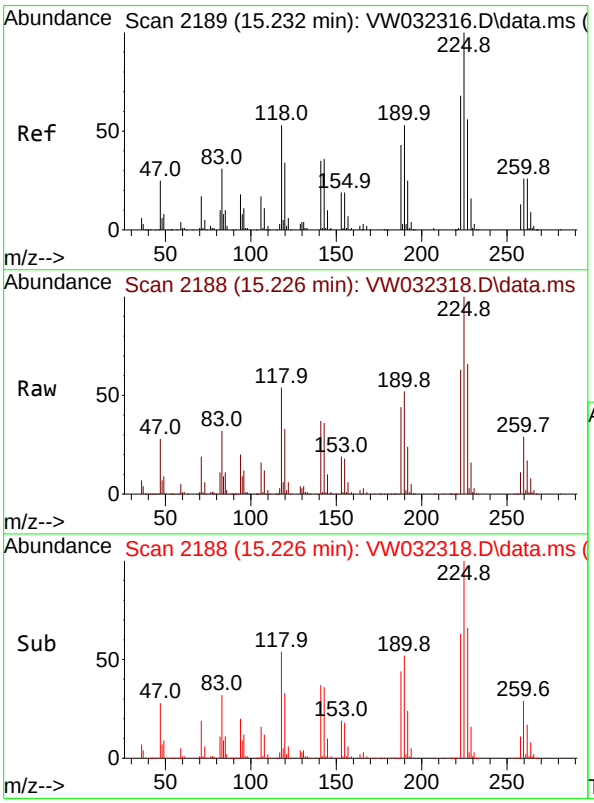
Ion	Ratio	Lower	Upper
180	100		
182	90.8	47.4	142.2
145	32.2	16.4	49.1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

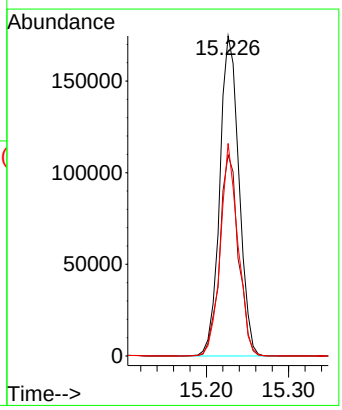


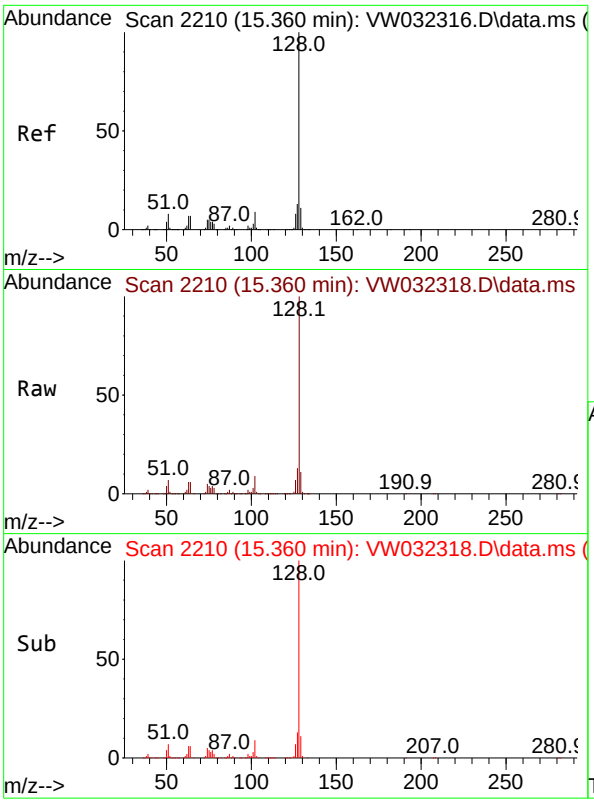


#94
Hexachlorobutadiene
Concen: 153.946 ug/l
RT: 15.226 min Scan# 2188
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:225 Resp: 283170

Ion	Ratio	Lower	Upper
225	100		
223	61.3	29.8	89.3
227	60.7	30.5	91.5

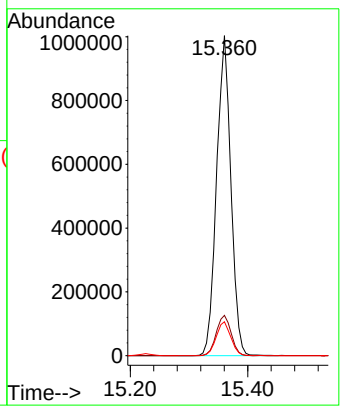




#95
Naphthalene
Concen: 175.173 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:128 Resp: 169247

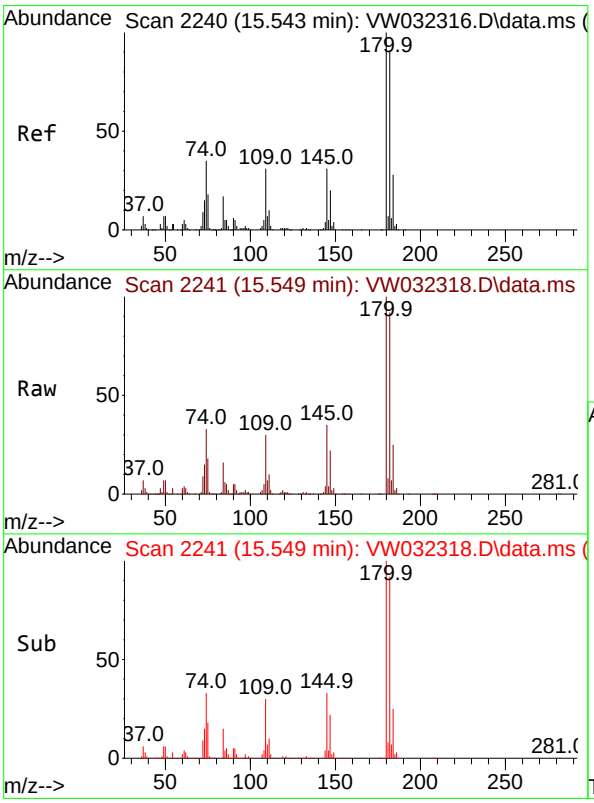
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.6	16.0
129	10.8	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

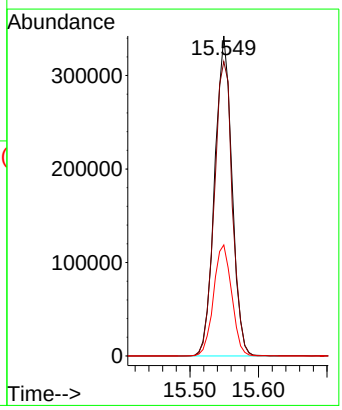
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025



#96
1,2,3-Trichlorobenzene
Concen: 157.371 ug/l
RT: 15.549 min Scan# 2241
Delta R.T. 0.006 min
Lab File: VW032318.D
Acq: 01 Oct 2025 15:20

Tgt Ion:180 Resp: 596762

Ion	Ratio	Lower	Upper
180	100		
182	96.3	47.7	143.1
145	36.5	17.2	51.6



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	286648	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	542900	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	498213	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	235528	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	211714	50.638	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 101.280%			
35) Dibromofluoromethane	7.904	113	172657	49.108	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 98.220%			
50) Toluene-d8	10.325	98	645322	49.731	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 99.460%			
62) 4-Bromofluorobenzene	12.617	95	236491	48.218	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 96.440%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	84688	47.081	ug/l	96
3) Chloromethane	2.259	50	138637	49.950	ug/l	96
4) Vinyl Chloride	2.405	62	159289	48.072	ug/l	97
5) Bromomethane	2.826	94	115275	47.340	ug/l	97
6) Chloroethane	2.972	64	106181	48.536	ug/l	97
7) Trichlorofluoromethane	3.314	101	123819	49.907	ug/l	98
8) Diethyl Ether	3.722	74	106705	49.634	ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.094	101	143716	48.296	ug/l	93
10) Methyl Iodide	4.320	142	201132	47.371	ug/l	100
11) Tert butyl alcohol	5.228	59	77891	246.126	ug/l	97
12) 1,1-Dichloroethene	4.082	96	160883	49.800	ug/l	95
13) Acrolein	3.930	56	119840	233.328	ug/l	99
14) Allyl chloride	4.704	41	271835	49.818	ug/l	88
15) Acrylonitrile	5.405	53	288801	258.222	ug/l	100
16) Acetone	4.161	43	264871	228.796	ug/l	100
17) Carbon Disulfide	4.429	76	436417	49.511	ug/l	100
18) Methyl Acetate	4.710	43	179271	54.058	ug/l	96
19) Methyl tert-butyl Ether	5.466	73	326683	51.342	ug/l	95
20) Methylene Chloride	4.954	84	194169	50.746	ug/l	97
21) trans-1,2-Dichloroethene	5.460	96	180820	50.555	ug/l	98
22) Diisopropyl ether	6.344	45	581042	51.202	ug/l	95
23) Vinyl Acetate	6.283	43	1998017	263.598	ug/l	100
24) 1,1-Dichloroethane	6.246	63	344370	49.949	ug/l	99
25) 2-Butanone	7.197	43	399441	253.341	ug/l	97
26) 2,2-Dichloropropane	7.191	77	171137	48.528	ug/l	99
27) cis-1,2-Dichloroethene	7.191	96	218943	50.954	ug/l	94
28) Bromochloromethane	7.533	49	164051	50.575	ug/l	85
29) Tetrahydrofuran	7.551	42	265382	267.648	ug/l	94
30) Chloroform	7.691	83	356459	50.980	ug/l	98
31) Cyclohexane	7.971	56	283574	48.179	ug/l	99
32) 1,1,1-Trichloroethane	7.892	97	247681	49.989	ug/l	98
36) 1,1-Dichloropropene	8.100	75	246414	49.661	ug/l	98
37) Ethyl Acetate	7.276	43	171315	51.871	ug/l	100
38) Carbon Tetrachloride	8.081	117	231677	49.617	ug/l	96
39) Methylcyclohexane	9.343	83	308455	51.537	ug/l	96
40) Benzene	8.337	78	758892	48.794	ug/l	96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	101959	57.284	ug/l	#	85
42) 1,2-Dichloroethane	8.416	62	247842	48.701	ug/l		99
43) Isopropyl Acetate	8.435	43	303946	51.877	ug/l		100
44) Trichloroethene	9.105	130	178095	48.904	ug/l		87
45) 1,2-Dichloropropane	9.374	63	191384	49.299	ug/l		97
46) Dibromomethane	9.465	93	118979	49.841	ug/l		94
47) Bromodichloromethane	9.654	83	273884	50.162	ug/l		99
48) Methyl methacrylate	9.441	41	150648	52.884	ug/l	#	91
49) 1,4-Dioxane	9.465	88	34528	1058.229	ug/l		98
51) 4-Methyl-2-Pentanone	10.215	43	878208	258.790	ug/l		100
52) Toluene	10.392	92	484871	50.061	ug/l		95
53) t-1,3-Dichloropropene	10.611	75	271391	51.234	ug/l		100
54) cis-1,3-Dichloropropene	10.075	75	306358	50.209	ug/l		97
55) 1,1,2-Trichloroethane	10.788	97	159106	49.869	ug/l		99
56) Ethyl methacrylate	10.648	69	233853	52.367	ug/l		93
57) 1,3-Dichloropropane	10.934	76	278336	49.394	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	658757	277.181	ug/l		96
59) 2-Hexanone	10.971	43	627586	262.215	ug/l		99
60) Dibromochloromethane	11.136	129	181813	50.187	ug/l		98
61) 1,2-Dibromoethane	11.239	107	154714	49.732	ug/l		99
64) Tetrachloroethene	10.867	164	147899	49.611	ug/l		96
65) Chlorobenzene	11.660	112	535619	48.862	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.733	131	166082	48.644	ug/l		99
67) Ethyl Benzene	11.733	91	922981	50.513	ug/l		100
68) m/p-Xylenes	11.837	106	699490	99.276	ug/l		99
69) o-Xylene	12.166	106	332905	50.523	ug/l		100
70) Styrene	12.178	104	594393	51.667	ug/l		97
71) Bromoform	12.349	173	100214	51.207	ug/l	#	97
73) Isopropylbenzene	12.465	105	839135	52.076	ug/l		100
74) N-amyl acetate	12.269	43	276033	53.697	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.715	83	203339	50.822	ug/l		100
76) 1,2,3-Trichloropropane	12.763	75	157491m	50.813	ug/l		
77) Bromobenzene	12.745	156	196776	50.659	ug/l		87
78) n-propylbenzene	12.800	91	1039770	51.657	ug/l		98
79) 2-Chlorotoluene	12.891	91	631196	51.287	ug/l		97
80) 1,3,5-Trimethylbenzene	12.940	105	729628	52.365	ug/l		97
81) trans-1,4-Dichloro-2-b...	12.513	75	66508	54.360	ug/l		91
82) 4-Chlorotoluene	12.989	91	663842	50.734	ug/l		100
83) tert-Butylbenzene	13.202	119	611748	53.510	ug/l		97
84) 1,2,4-Trimethylbenzene	13.245	105	729966	51.522	ug/l		99
85) sec-Butylbenzene	13.379	105	904532	51.774	ug/l		99
86) p-Isopropyltoluene	13.495	119	763912	52.697	ug/l		99
87) 1,3-Dichlorobenzene	13.501	146	397346	50.518	ug/l		97
88) 1,4-Dichlorobenzene	13.574	146	380433	48.372	ug/l		97
89) n-Butylbenzene	13.818	91	748452	52.880	ug/l		99
90) Hexachloroethane	14.086	117	134862	51.903	ug/l		94
91) 1,2-Dichlorobenzene	13.867	146	347039	48.810	ug/l		97
92) 1,2-Dibromo-3-Chloropr...	14.476	75	36524	52.139	ug/l		88
93) 1,2,4-Trichlorobenzene	15.129	180	218198	51.178	ug/l		93
94) Hexachlorobutadiene	15.232	225	90599	46.478	ug/l		87
95) Naphthalene	15.360	128	572147	55.881	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	206623	51.417	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations APPROVED

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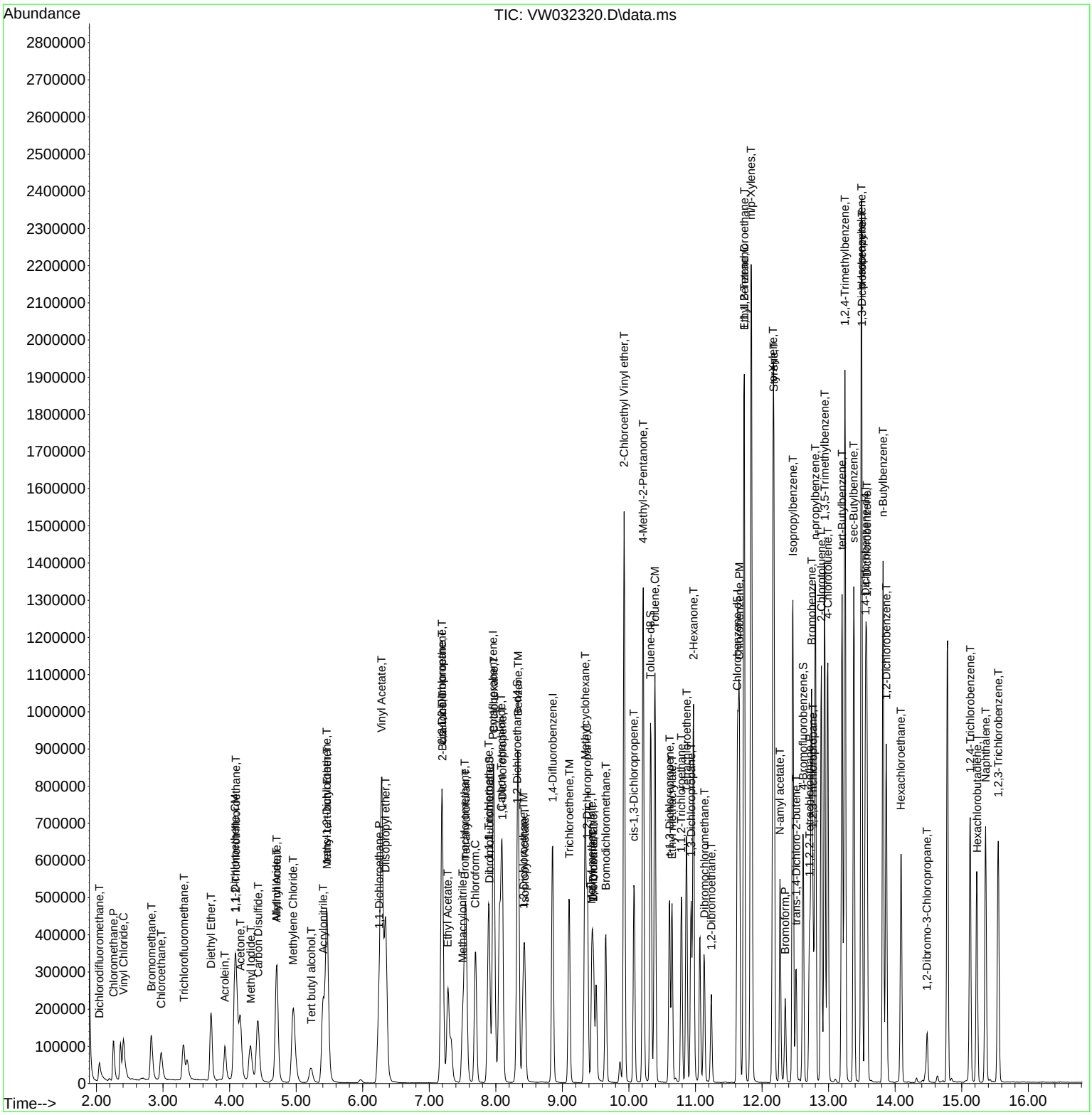
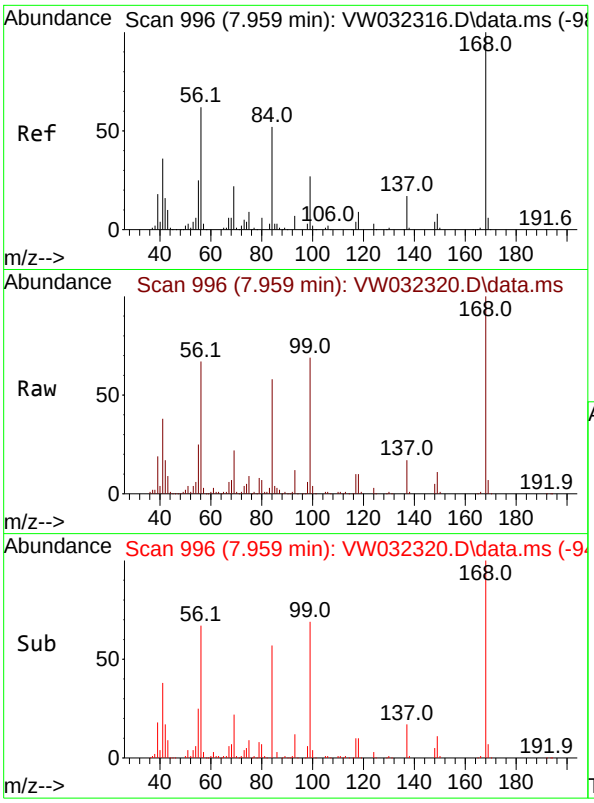
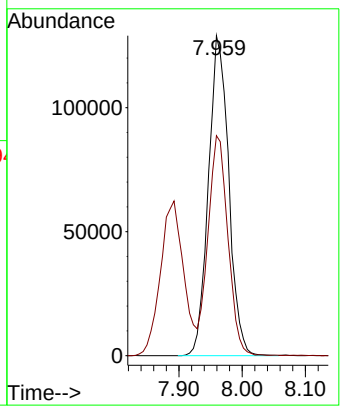




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:168 Resp: 28664

Ion	Ratio	Lower	Upper
168	100		
99	68.6	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
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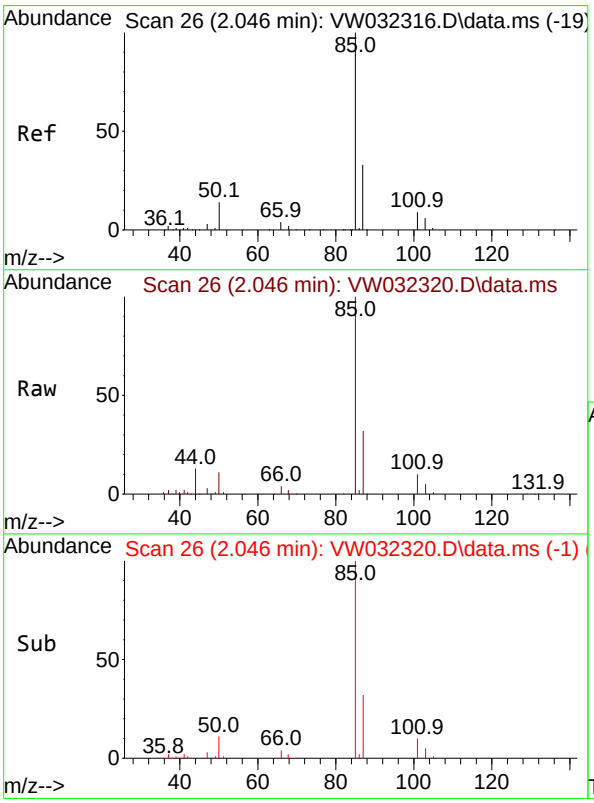
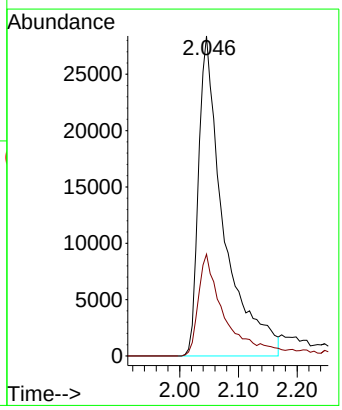
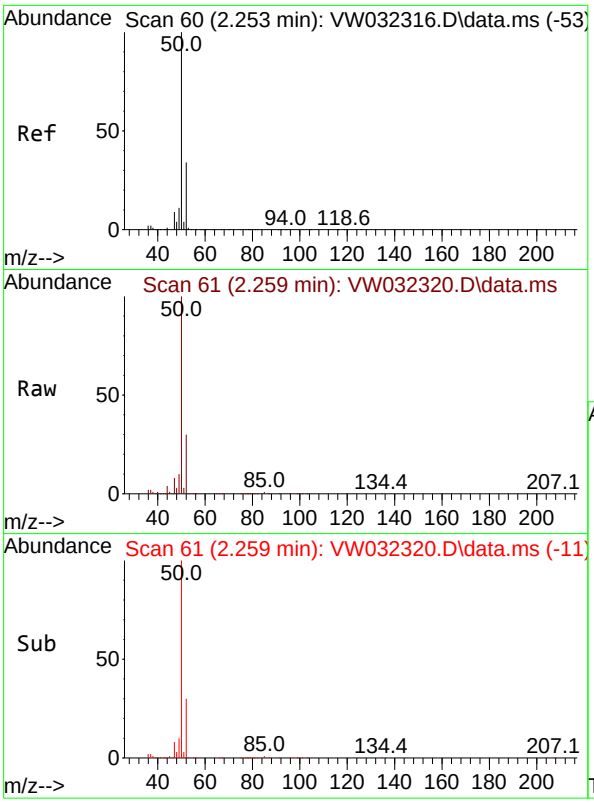


#2
Dichlorodifluoromethane
Concen: 47.081 ug/l
RT: 2.046 min Scan# 26
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 85 Resp: 84688

Ion	Ratio	Lower	Upper
85	100		
87	31.8	17.2	51.6

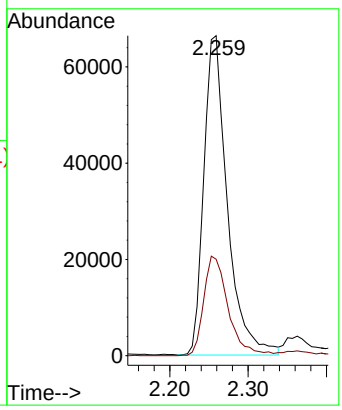




#3
Chloromethane
Concen: 49.950 ug/l
RT: 2.259 min Scan# 6
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 50 Resp: 13863

Ion	Ratio	Lower	Upper
50	100		
52	30.2	26.1	39.1



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
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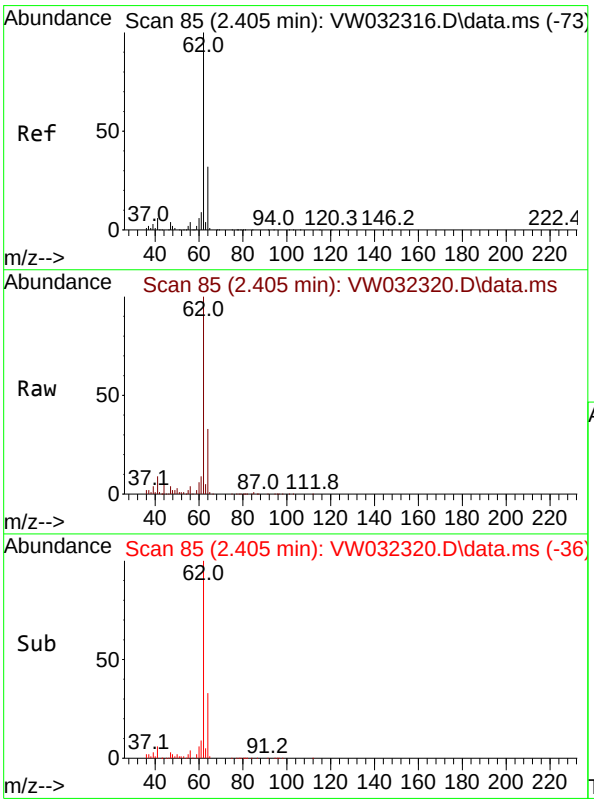
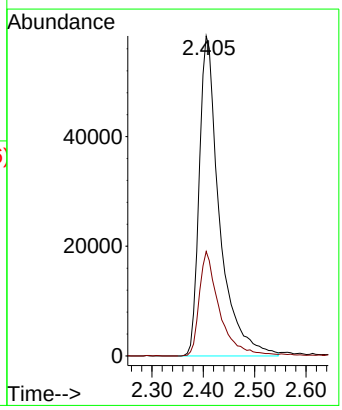
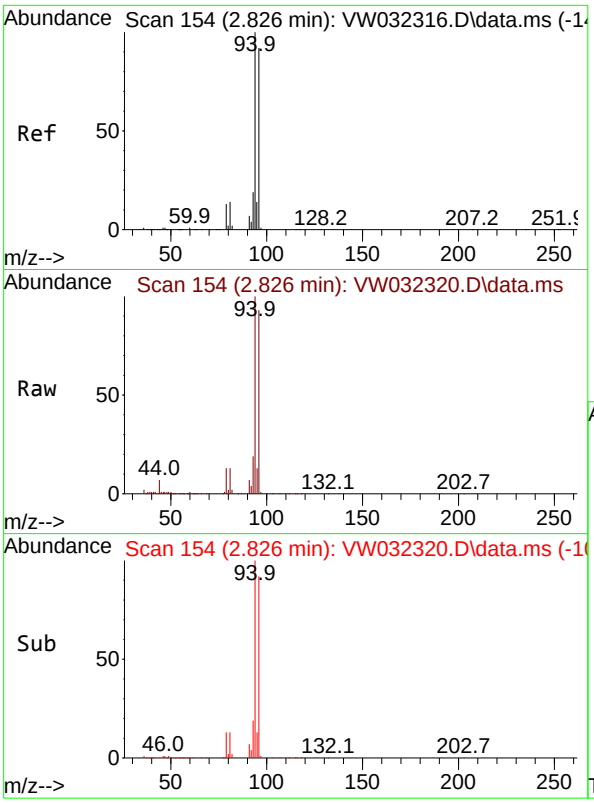


#4
Vinyl Chloride
Concen: 48.072 ug/l
RT: 2.405 min Scan# 85
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 62 Resp: 159289

Ion	Ratio	Lower	Upper
62	100		
64	32.7	24.8	37.2

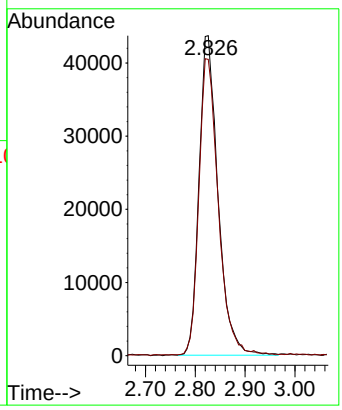




#5
Bromomethane
Concen: 47.340 ug/l
RT: 2.826 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 94 Resp: 11527

Ion	Ratio	Lower	Upper
94	100		
96	92.5	76.6	115.0



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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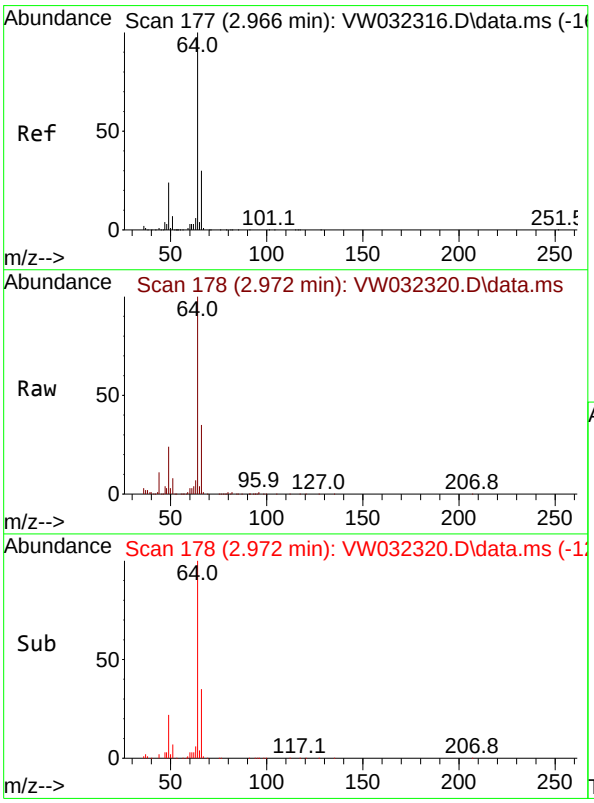
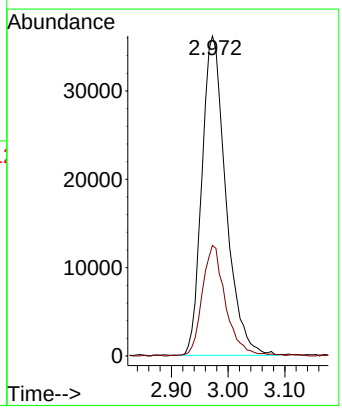
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

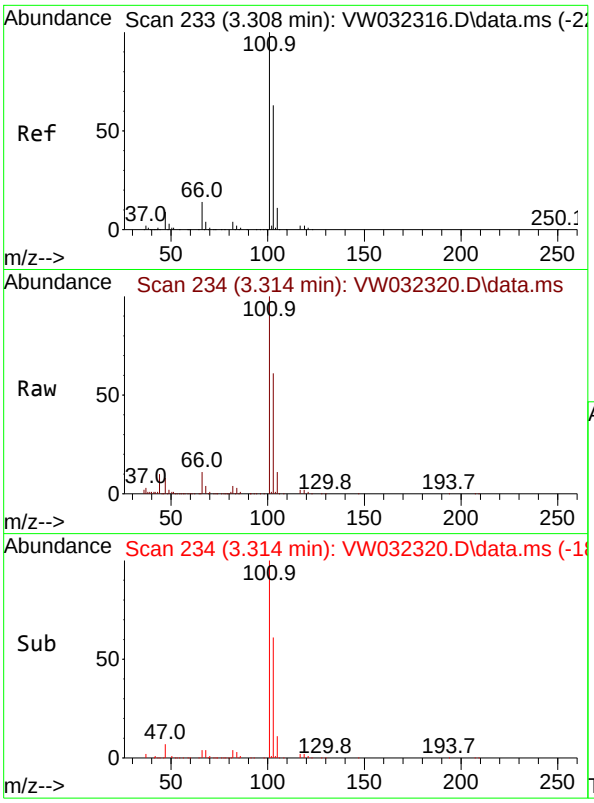


#6
Chloroethane
Concen: 48.536 ug/l
RT: 2.972 min Scan# 178
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 64 Resp: 106181

Ion	Ratio	Lower	Upper
64	100		
66	34.4	26.2	39.4





#7
Trichlorofluoromethane
Concen: 49.907 ug/l
RT: 3.314 min Scan# 2
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:101 Resp: 12381

Ion	Ratio	Lower	Upper
101	100		
103	61.1	47.8	71.8

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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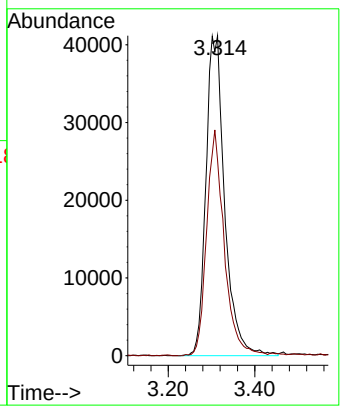
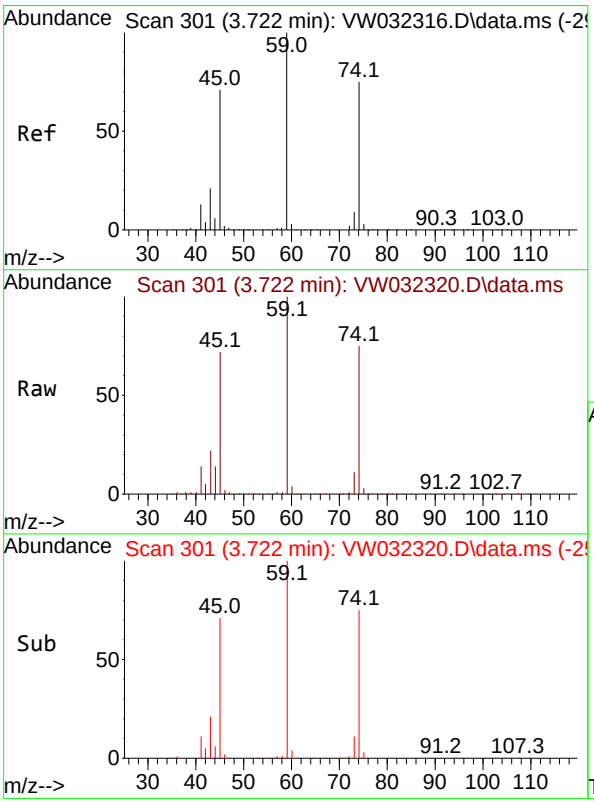
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

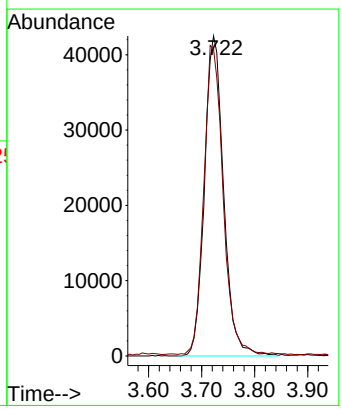


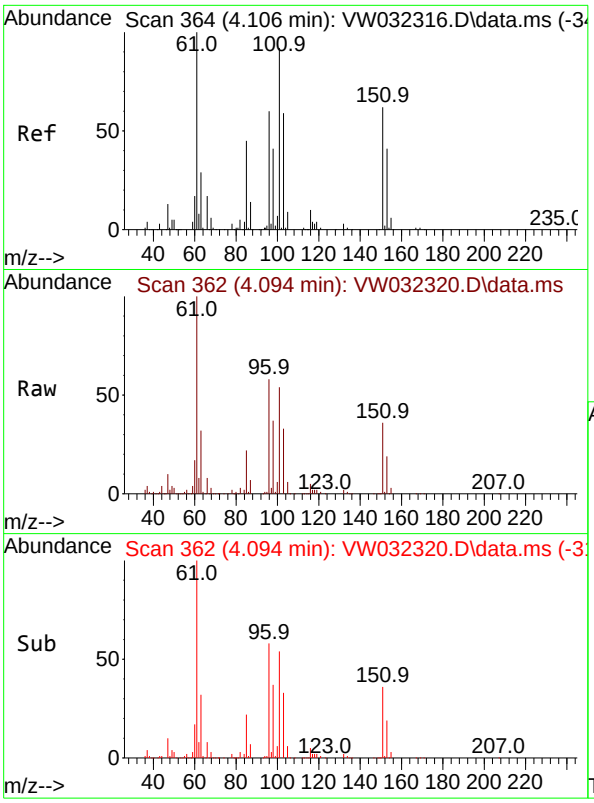


#8
Diethyl Ether
Concen: 49.634 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 74 Resp: 106705

Ion	Ratio	Lower	Upper
74	100		
45	96.8	43.1	129.4





#9
1,1,2-Trichlorotrifluoroethane
Concen: 48.296 ug/l
RT: 4.094 min Scan# 3
Delta R.T. -0.012 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

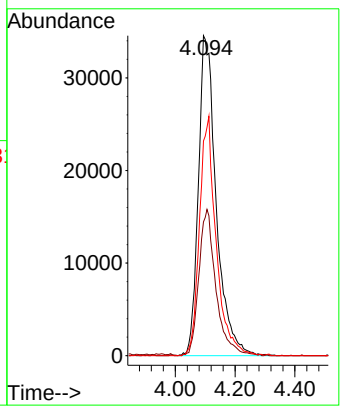
Tgt Ion:101 Resp: 14371

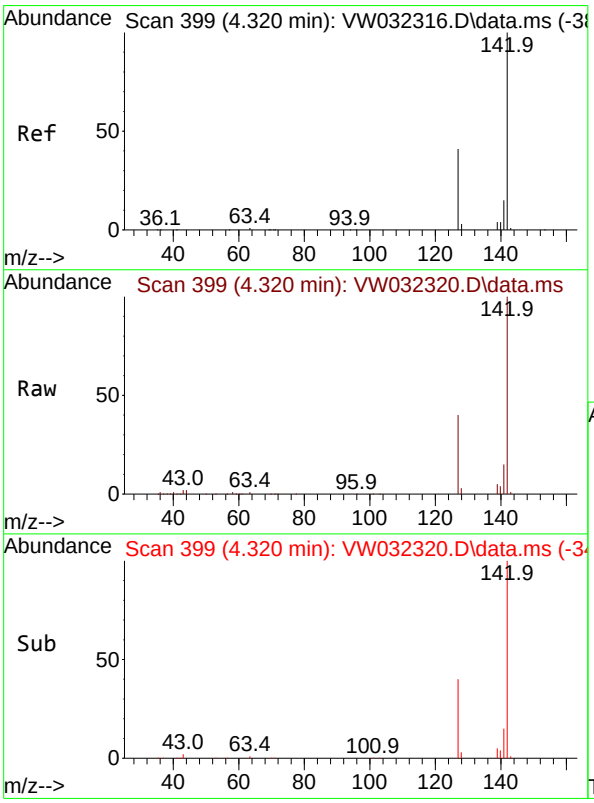
Ion	Ratio	Lower	Upper
101	100		
85	43.7	37.1	55.7
151	69.6	61.5	92.3

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

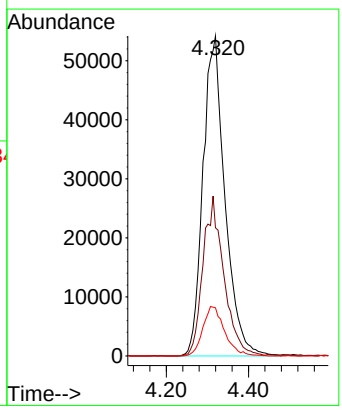


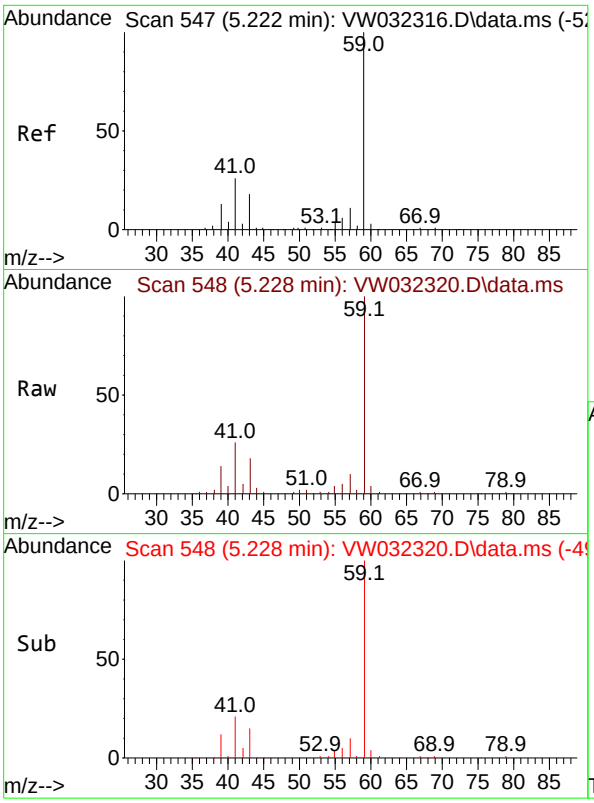


#10
Methyl Iodide
Concen: 47.371 ug/l
RT: 4.320 min Scan# 399
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:142 Resp: 201132

Ion	Ratio	Lower	Upper
142	100		
127	47.4	38.2	57.2
141	15.3	12.2	18.2

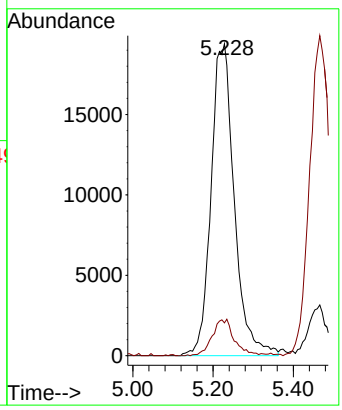




#11
Tert butyl alcohol
Concen: 246.126 ug/l
RT: 5.228 min Scan# 54
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 59 Resp: 7789

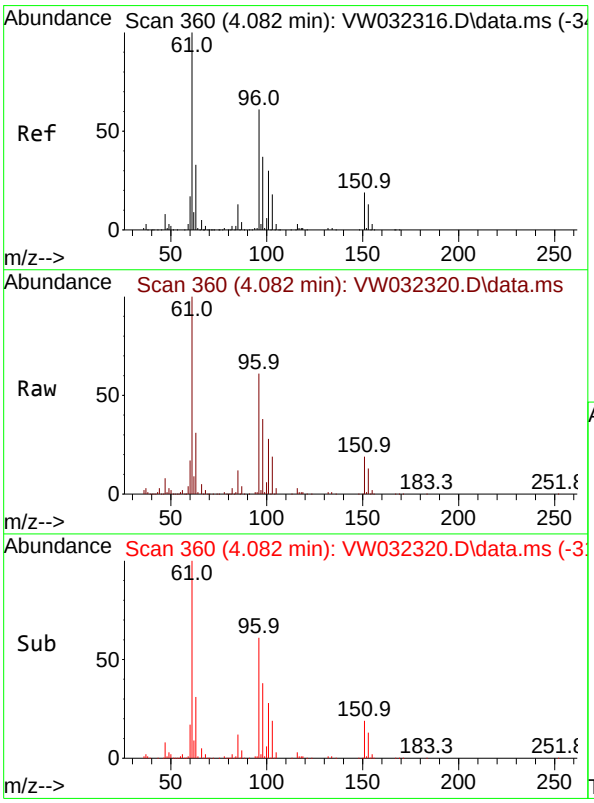
Ion	Ratio	Lower	Upper
59	100		
57	11.0	9.8	14.6



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

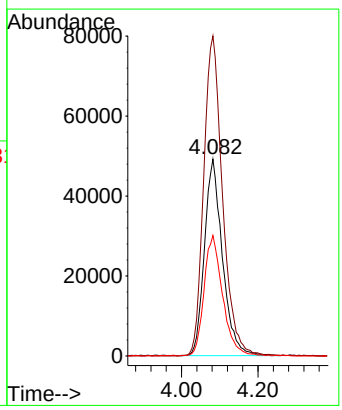
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

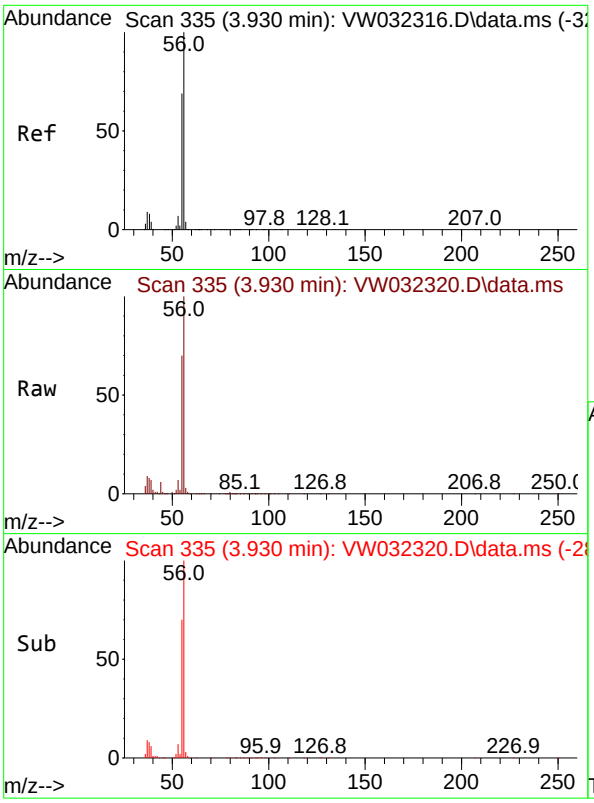


#12
1,1-Dichloroethene
Concen: 49.800 ug/l
RT: 4.082 min Scan# 360
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 96 Resp: 160883

Ion	Ratio	Lower	Upper
96	100		
61	162.9	123.0	184.4
98	61.4	48.5	72.7

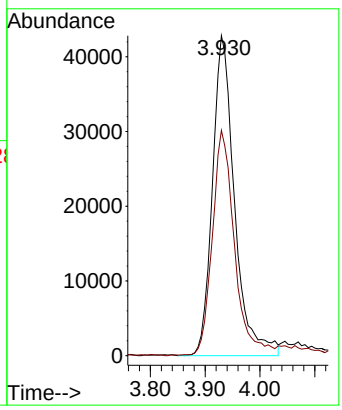




#13
Acrolein
Concen: 233.328 ug/l
RT: 3.930 min Scan# 3
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 56 Resp: 11984

Ion	Ratio	Lower	Upper
56	100		
55	70.0	56.4	84.6



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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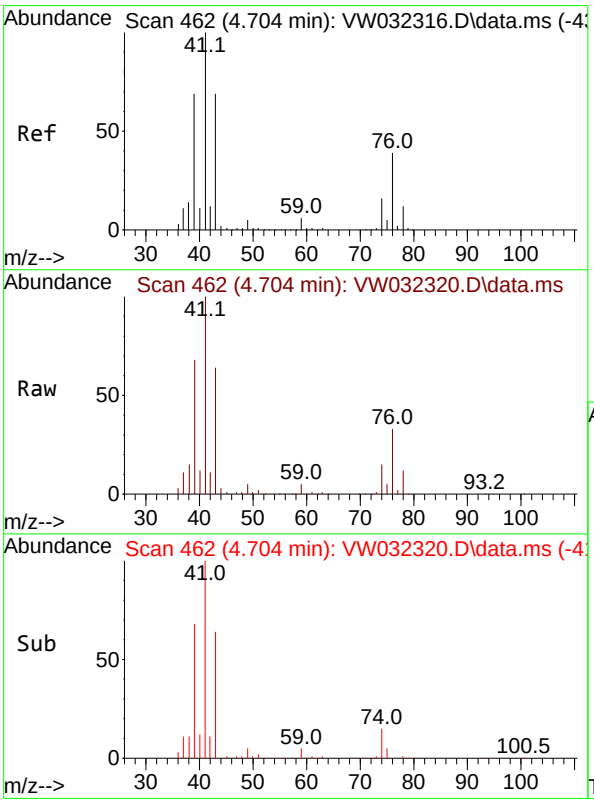
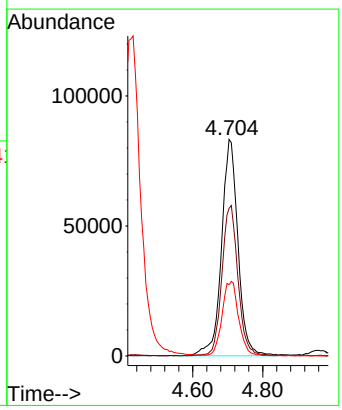
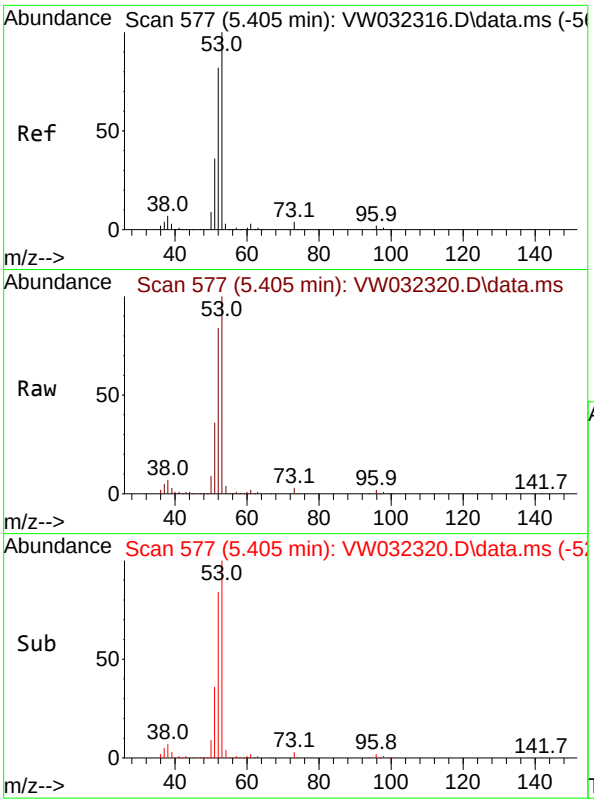


#14
Allyl chloride
Concen: 49.818 ug/l
RT: 4.704 min Scan# 462
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 41 Resp: 271835

Ion	Ratio	Lower	Upper
41	100		
39	67.6	64.1	96.1
76	34.3	31.4	47.2





#15
Acrylonitrile
Concen: 258.222 ug/l
RT: 5.405 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 53 Resp: 28880

Ion	Ratio	Lower	Upper
53	100		
52	84.6	67.4	101.2
51	37.6	30.3	45.5

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

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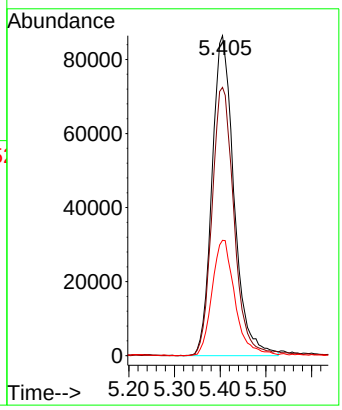
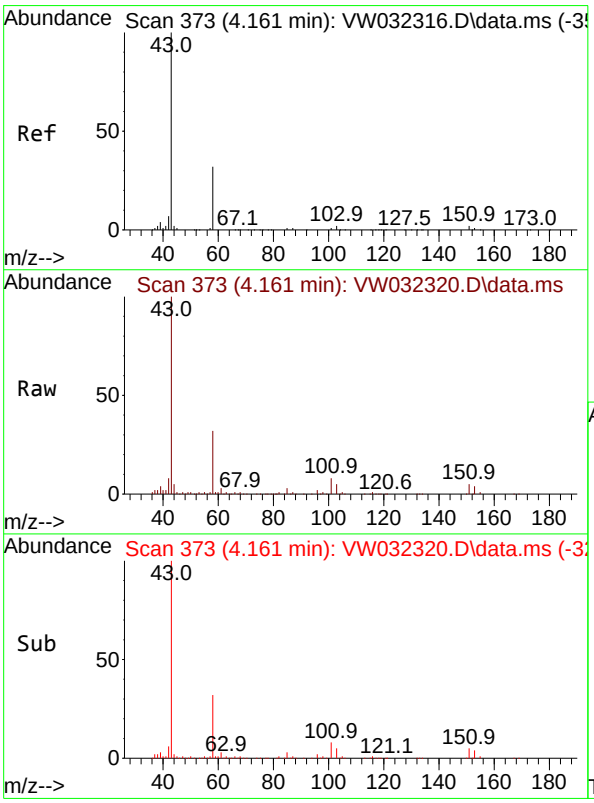
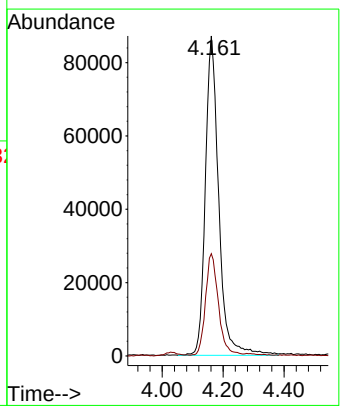


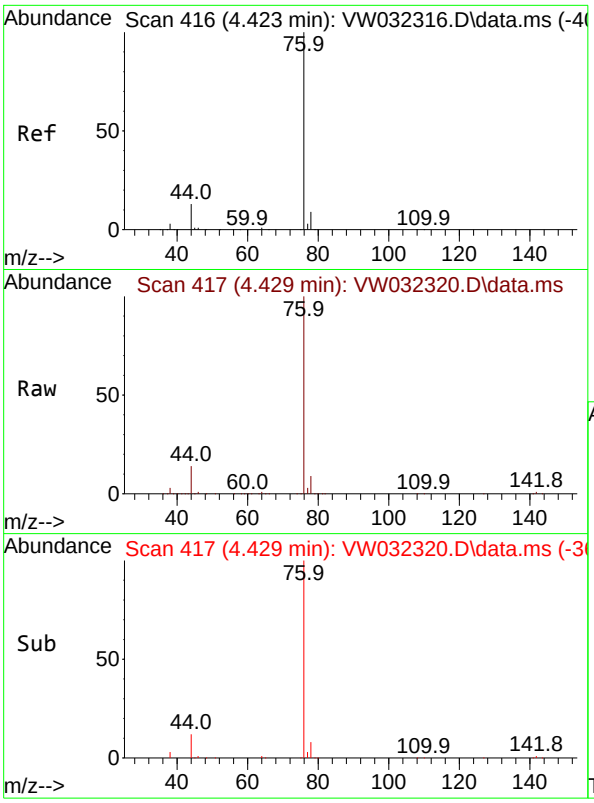


#16
Acetone
Concen: 228.796 ug/l
RT: 4.161 min Scan# 373
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 264871

Ion	Ratio	Lower	Upper
43	100		
58	31.8	25.3	37.9

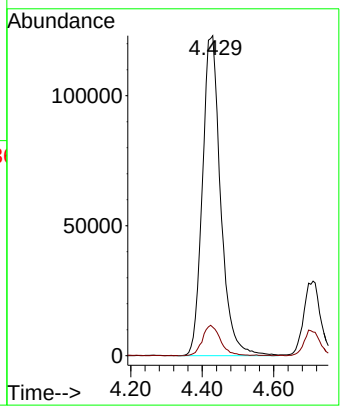




#17
Carbon Disulfide
Concen: 49.511 ug/l
RT: 4.429 min Scan# 4
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 76 Resp: 43641

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.0	10.6



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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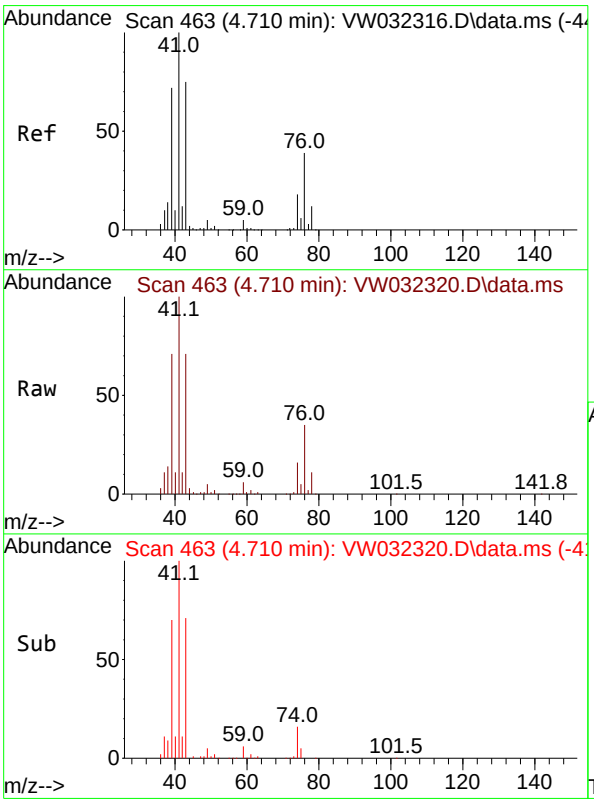
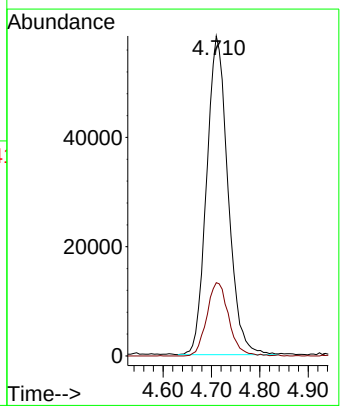
Supervised By :Semsettin Yesilyurt 10/03/2025

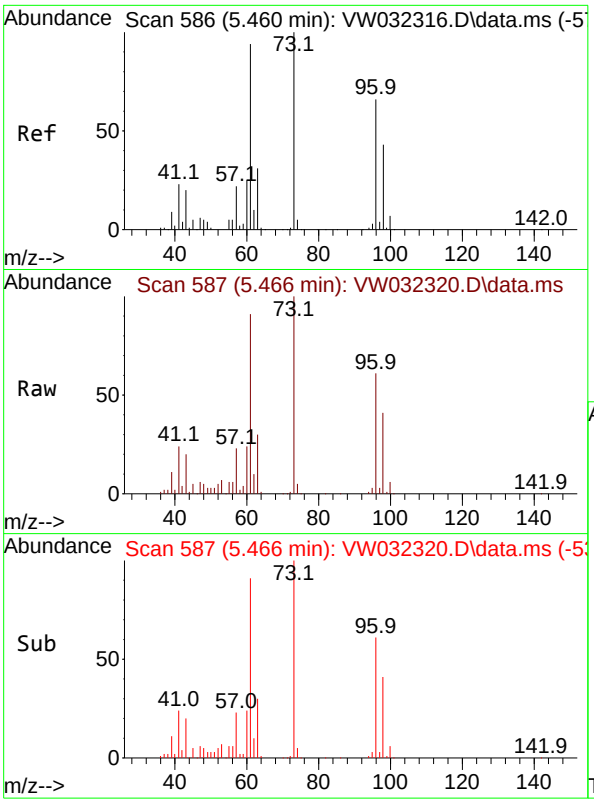


#18
Methyl Acetate
Concen: 54.058 ug/l
RT: 4.710 min Scan# 463
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 179271

Ion	Ratio	Lower	Upper
43	100		
74	23.4	20.2	30.4

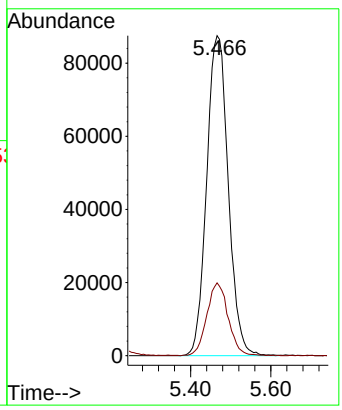




#19
Methyl tert-butyl Ether
Concen: 51.342 ug/l
RT: 5.466 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 73 Resp: 32668

Ion	Ratio	Lower	Upper
73	100		
57	22.7	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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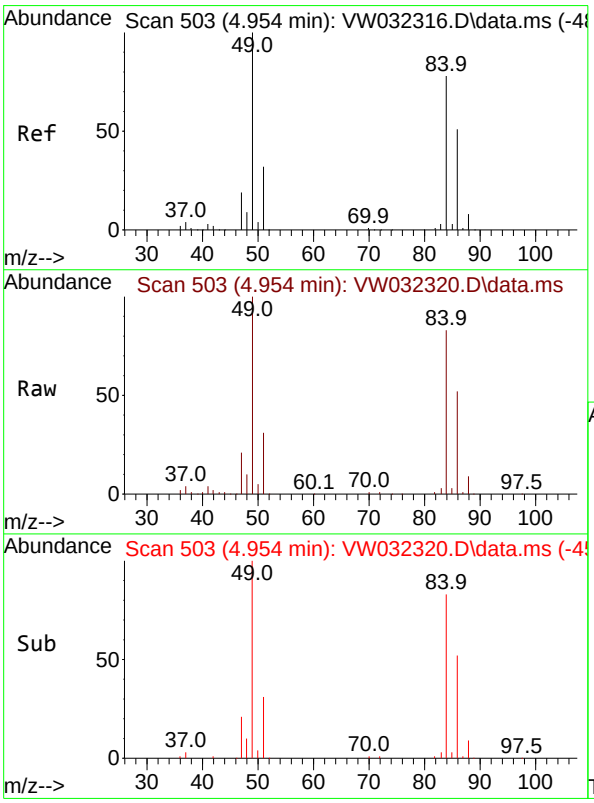
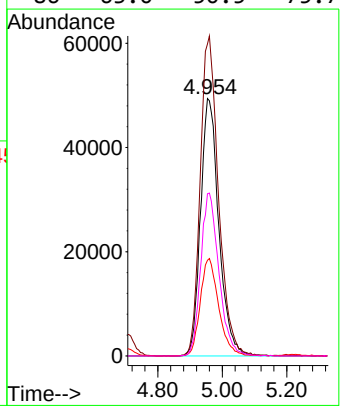
Supervised By :Semsettin Yesilyurt 10/03/2025

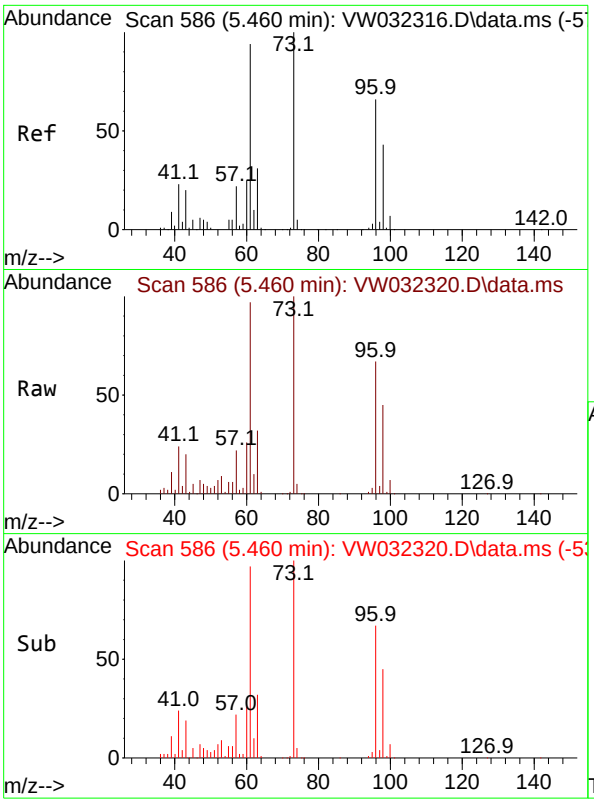


#20
Methylene Chloride
Concen: 50.746 ug/l
RT: 4.954 min Scan# 503
Delta R.T. -0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 84 Resp: 194169

Ion	Ratio	Lower	Upper
84	100		
49	121.2	92.2	138.4
51	37.1	31.0	46.6
86	63.0	50.5	75.7





#21
trans-1,2-Dichloroethene
Concen: 50.555 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 96 Resp: 18082

Ion	Ratio	Lower	Upper
96	100		
61	144.0	112.5	168.7
98	67.4	54.2	81.4

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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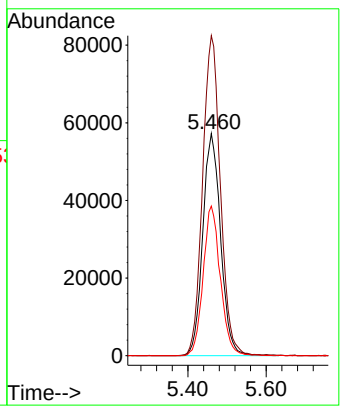
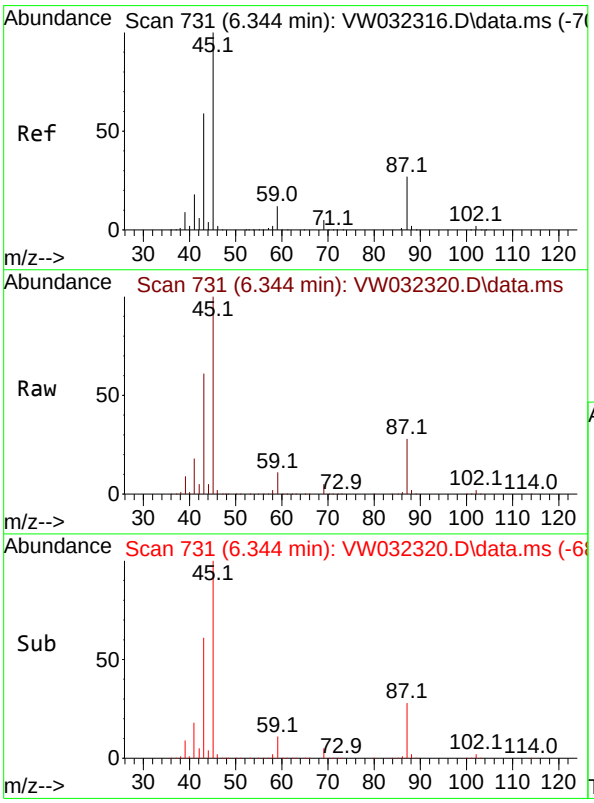
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

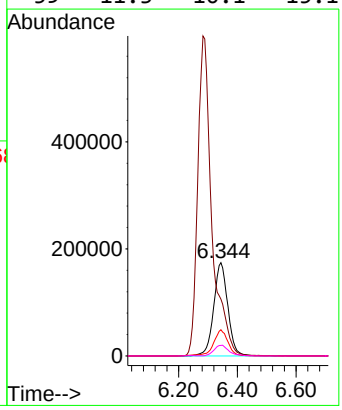


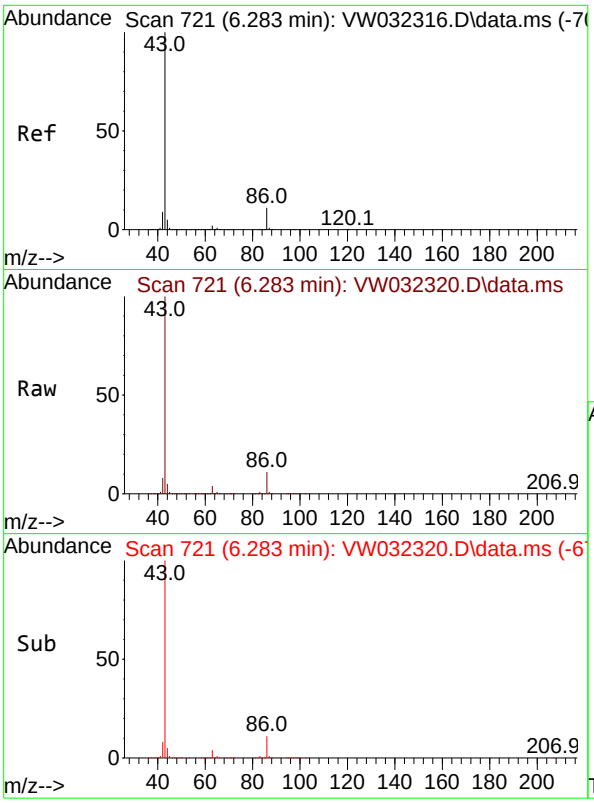


#22
Diisopropyl ether
Concen: 51.202 ug/l
RT: 6.344 min Scan# 731
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 45 Resp: 581042

Ion	Ratio	Lower	Upper
45	100		
43	60.9	51.4	77.2
87	28.2	25.9	38.9
59	11.3	10.1	15.1





#23
Vinyl Acetate
Concen: 263.598 ug/l
RT: 6.283 min Scan# 7
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 199801

Ion	Ratio	Lower	Upper
43	100		
86	10.9	8.8	13.2

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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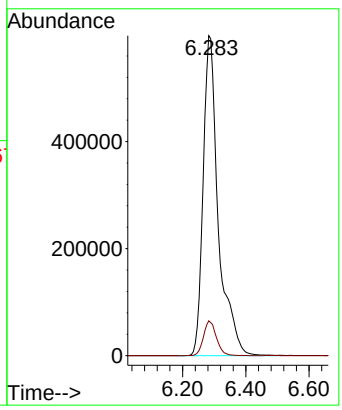
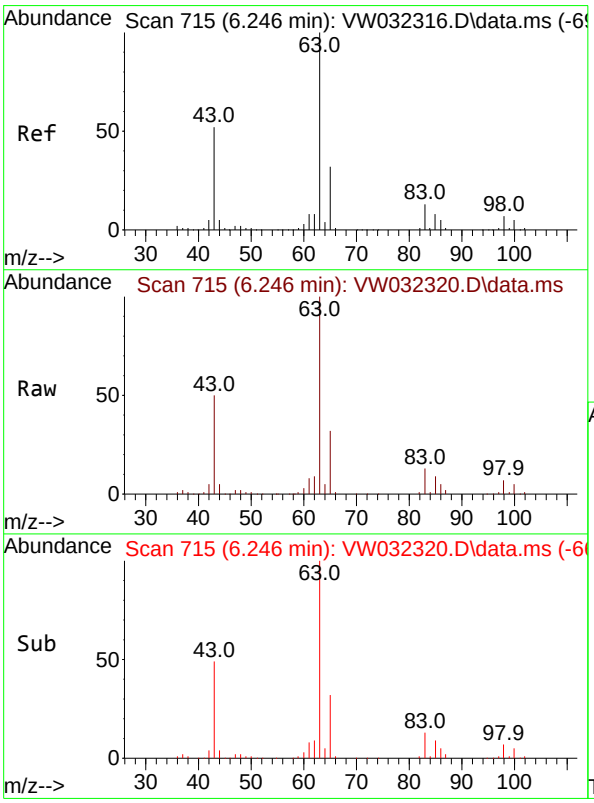
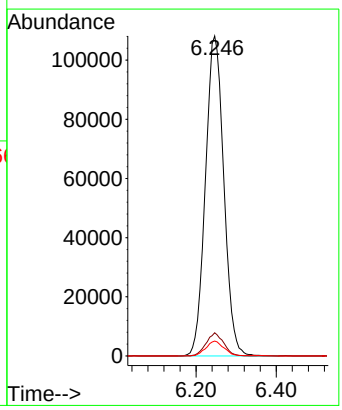


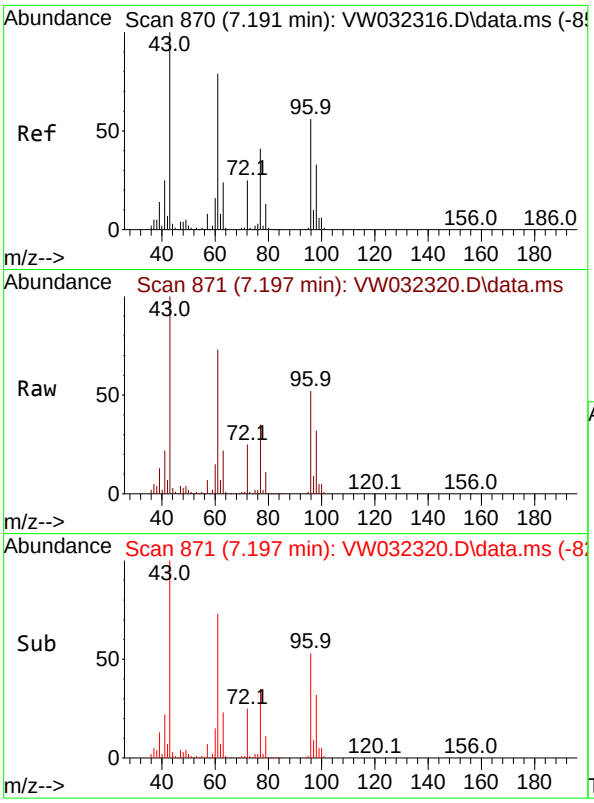


#24
1,1-Dichloroethane
Concen: 49.949 ug/l
RT: 6.246 min Scan# 715
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 63 Resp: 344370

Ion	Ratio	Lower	Upper
63	100		
98	7.2	3.8	11.2
100	4.7	2.5	7.5





#25
2-Butanone
Concen: 253.341 ug/l
RT: 7.197 min Scan# 8
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 39944

Ion	Ratio	Lower	Upper
43	100		
72	25.3	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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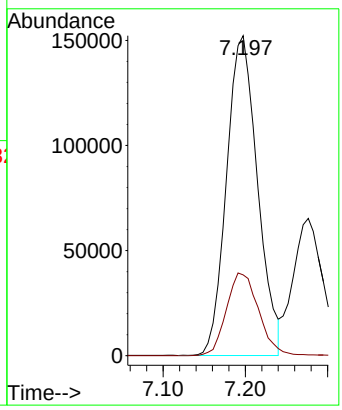
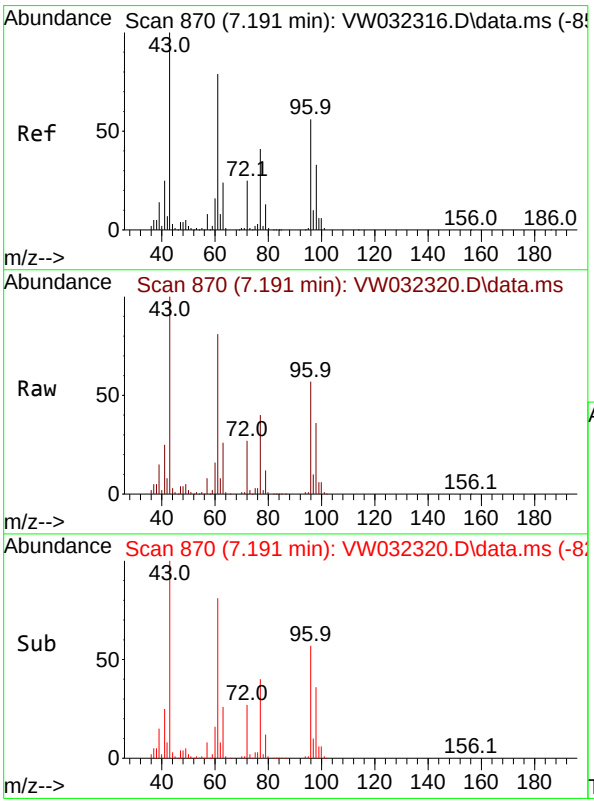
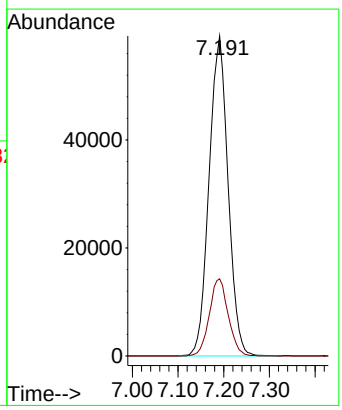


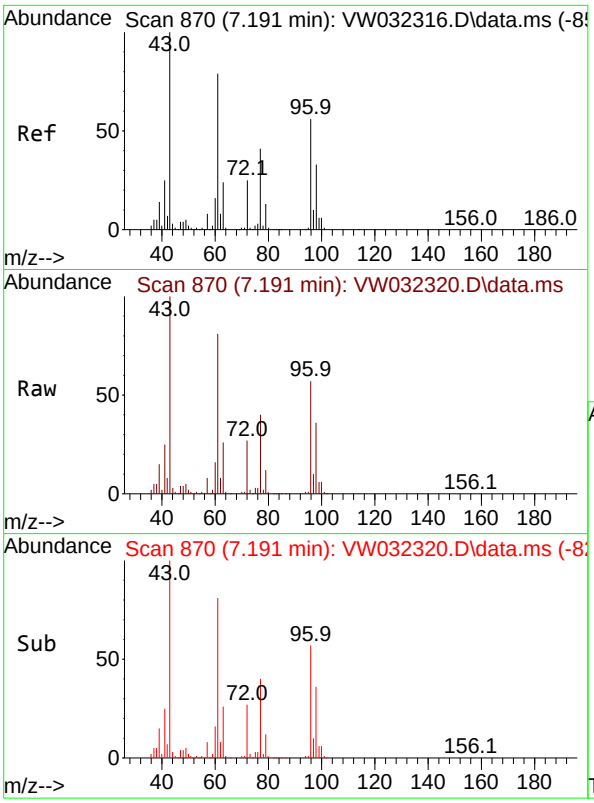


#26
2,2-Dichloropropane
Concen: 48.528 ug/l
RT: 7.191 min Scan# 870
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 77 Resp: 171137

Ion	Ratio	Lower	Upper
77	100		
97	24.0	11.9	35.5

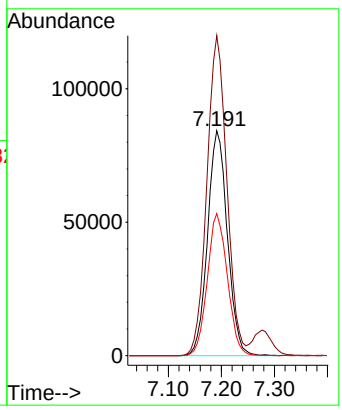




#27
cis-1,2-Dichloroethene
Concen: 50.954 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 96 Resp: 21894

Ion	Ratio	Lower	Upper
96	100		
61	143.0	0.0	268.0
98	63.9	0.0	130.8



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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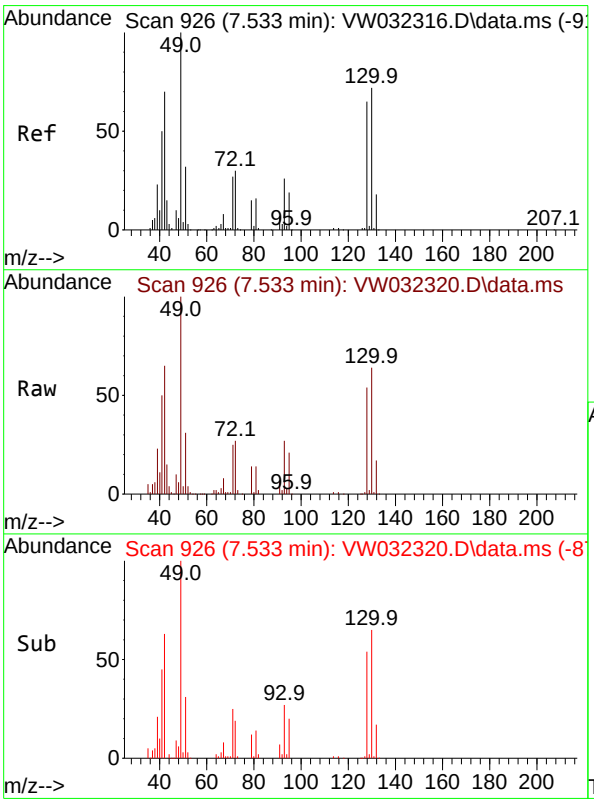
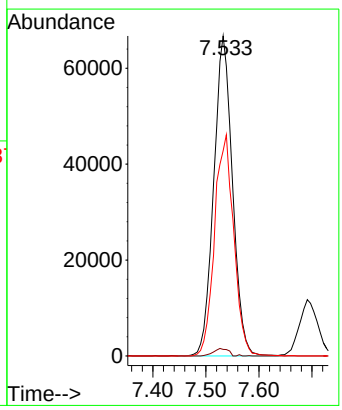
Supervised By :Semsettin Yesilyurt 10/03/2025

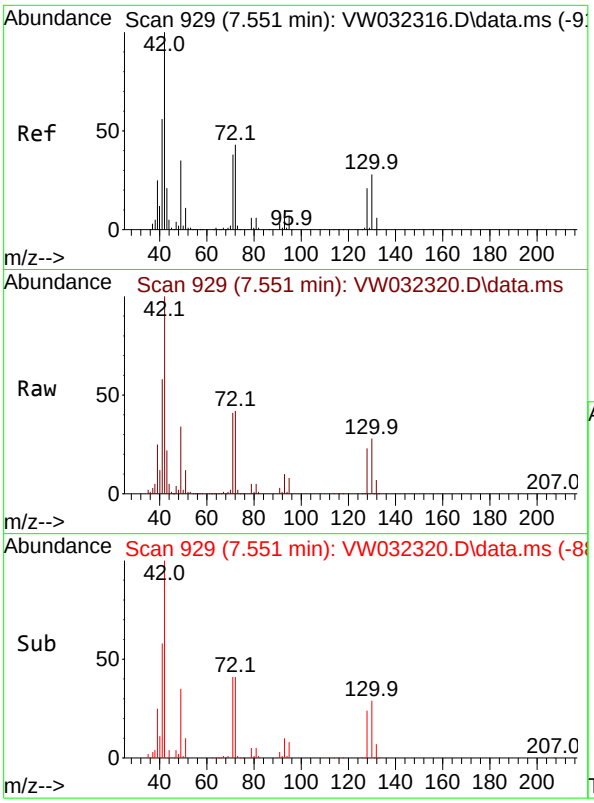


#28
Bromochloromethane
Concen: 50.575 ug/l
RT: 7.533 min Scan# 926
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 49 Resp: 164051

Ion	Ratio	Lower	Upper
49	100		
129	1.8	0.0	4.2
130	70.8	67.5	101.3





#29
Tetrahydrofuran
Concen: 267.648 ug/l
RT: 7.551 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 42 Resp: 26538

Ion	Ratio	Lower	Upper
42	100		
72	42.9	37.4	56.2
71	40.4	36.0	54.0

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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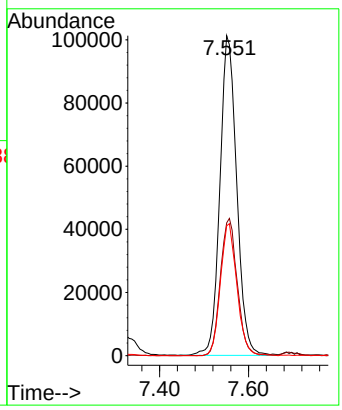
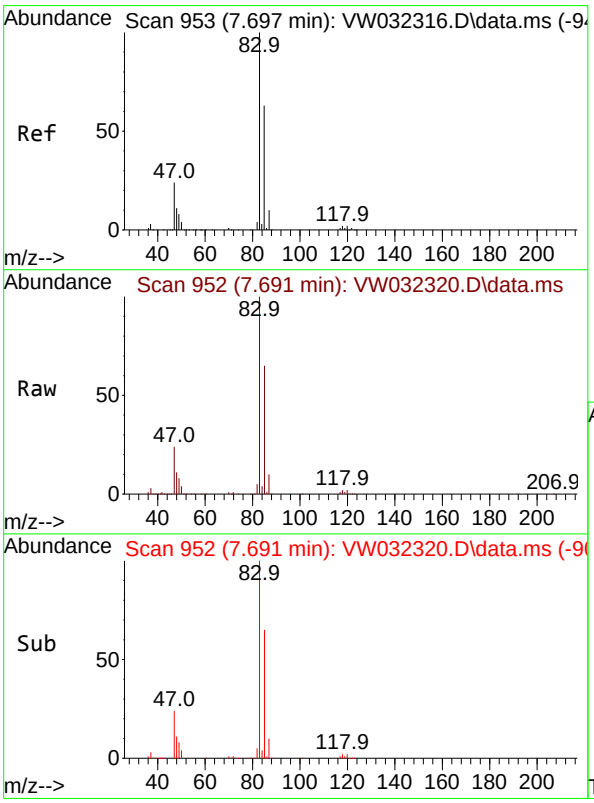
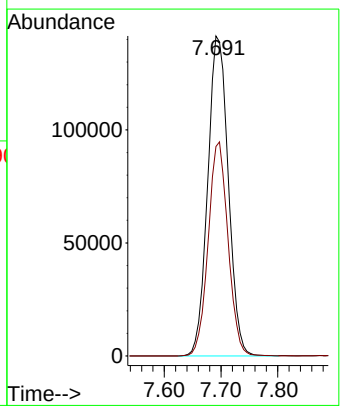


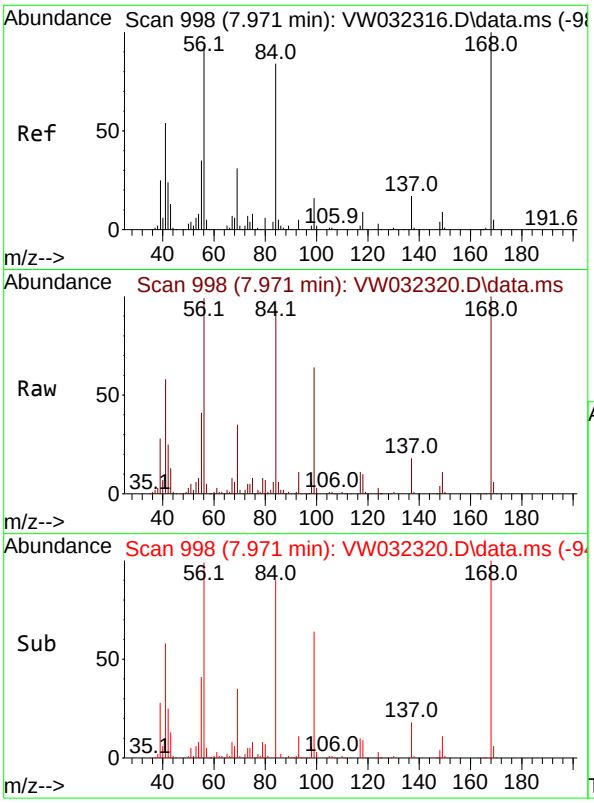


#30
Chloroform
Concen: 50.980 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 83 Resp: 356459

Ion	Ratio	Lower	Upper
83	100		
85	65.4	51.2	76.8

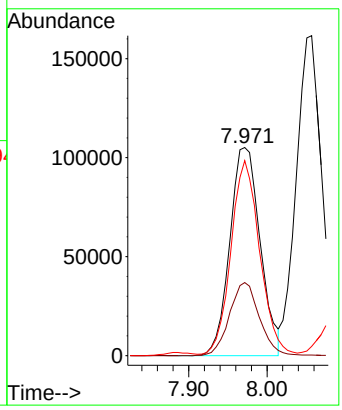




#31
Cyclohexane
Concen: 48.179 ug/l
RT: 7.971 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 56 Resp: 28357

Ion	Ratio	Lower	Upper
56	100		
69	35.2	27.7	41.5
84	92.2	74.6	112.0



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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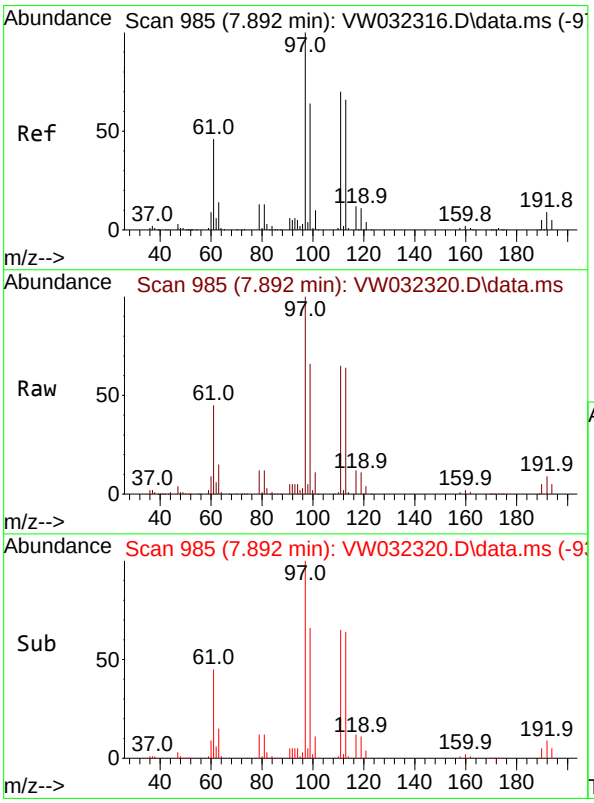
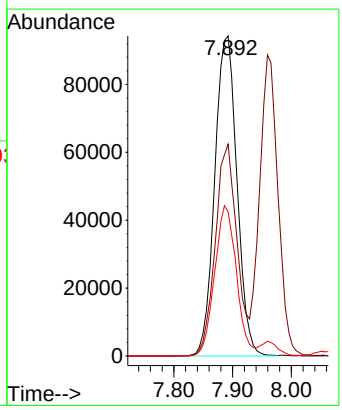
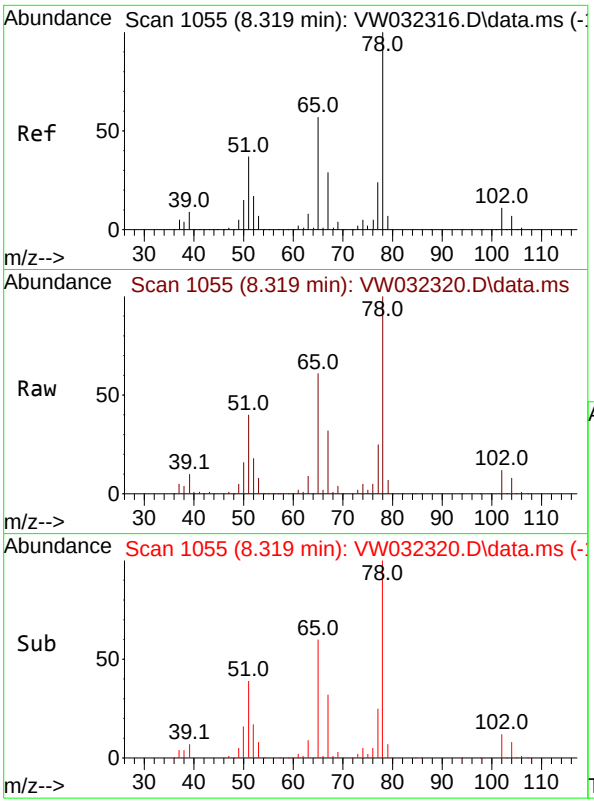


#32
1,1,1-Trichloroethane
Concen: 49.989 ug/l
RT: 7.892 min Scan# 985
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 97 Resp: 247681

Ion	Ratio	Lower	Upper
97	100		
99	65.0	50.9	76.3
61	46.2	36.2	54.4





#33
1,2-Dichloroethane-d4
Concen: 50.638 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 65 Resp: 21171

Ion	Ratio	Lower	Upper
65	100		
67	52.7	0.0	99.6

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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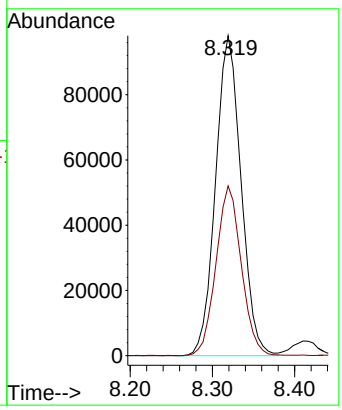
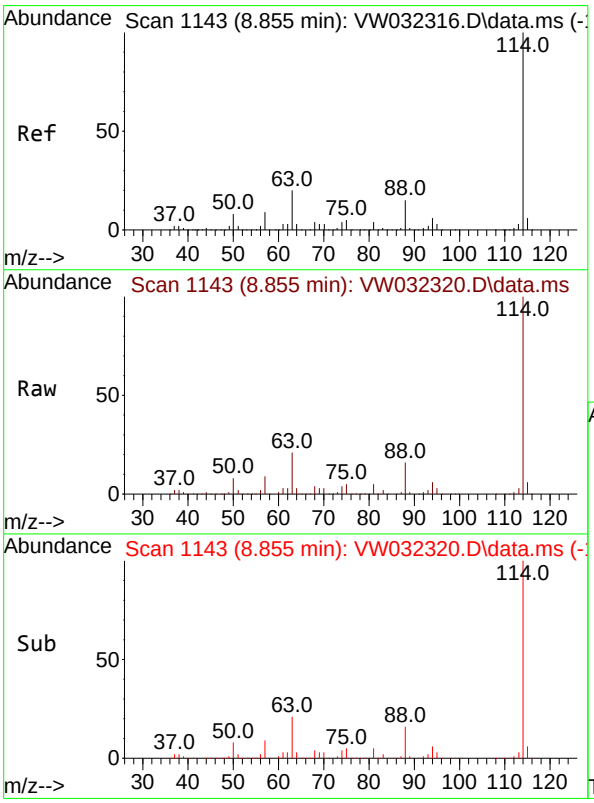
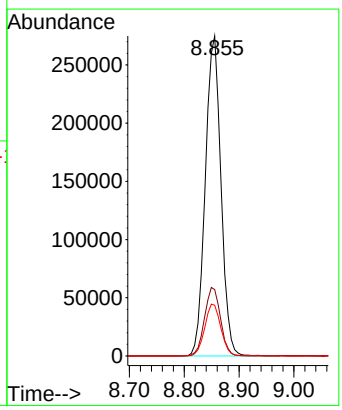


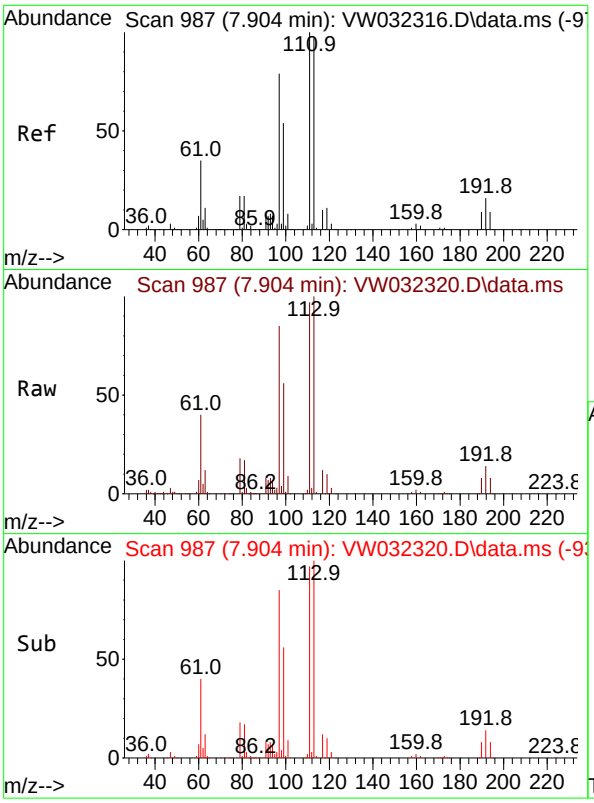


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.855 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:114 Resp: 542900

Ion	Ratio	Lower	Upper
114	100		
63	20.8	0.0	40.4
88	15.9	0.0	32.0





#35
Dibromofluoromethane
Concen: 49.108 ug/l
RT: 7.904 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

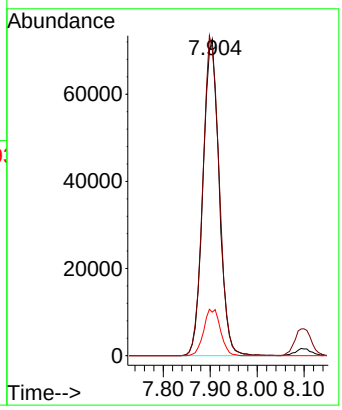
Tgt Ion:113 Resp: 17265

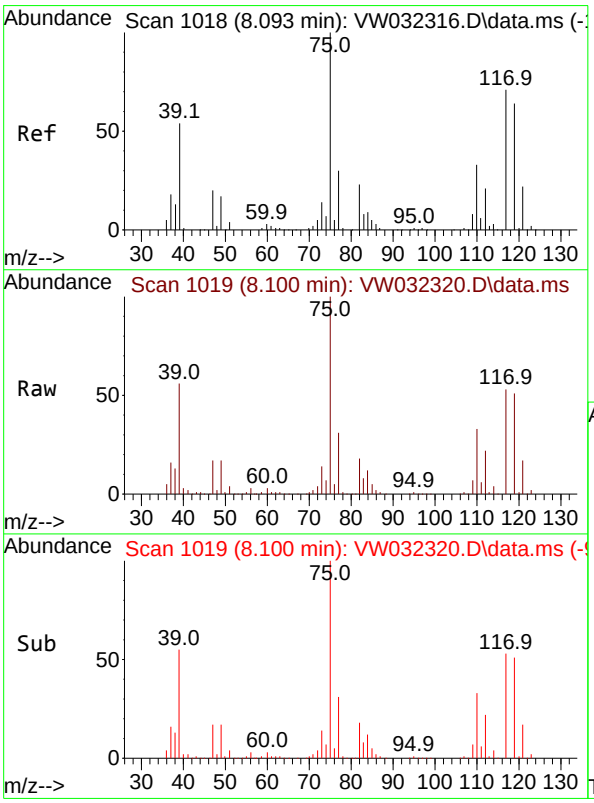
Ion	Ratio	Lower	Upper
113	100		
111	102.1	83.9	125.9
192	15.3	14.6	21.8

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

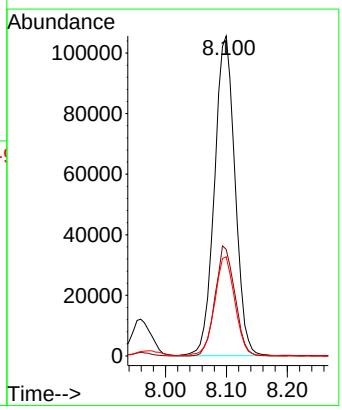


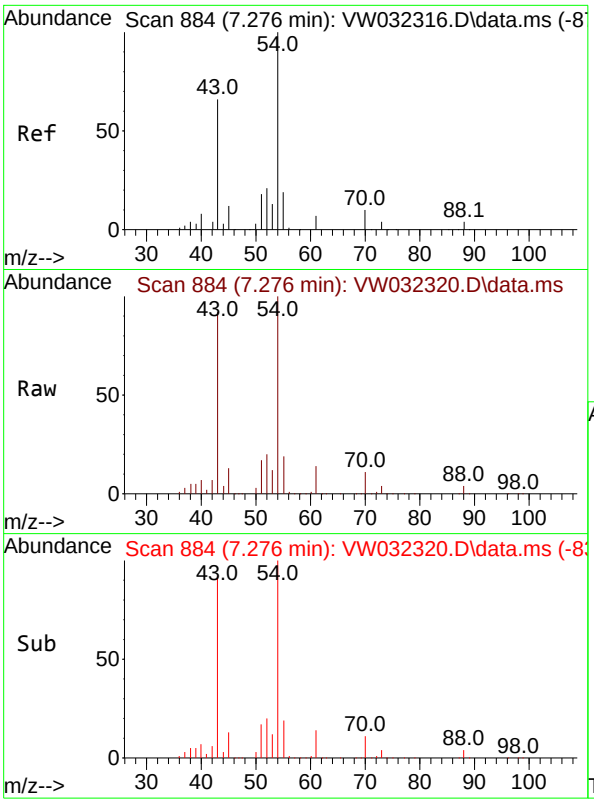


#36
1,1-Dichloropropene
Concen: 49.661 ug/l
RT: 8.100 min Scan# 1019
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 75 Resp: 246414

Ion	Ratio	Lower	Upper
75	100		
110	33.2	17.5	52.5
77	30.9	24.1	36.1





#37
Ethyl Acetate
Concen: 51.871 ug/l
RT: 7.276 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 17131

Ion	Ratio	Lower	Upper
43	100		
61	13.9	11.3	16.9
70	11.0	8.9	13.3

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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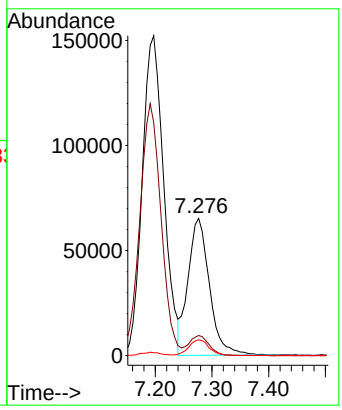
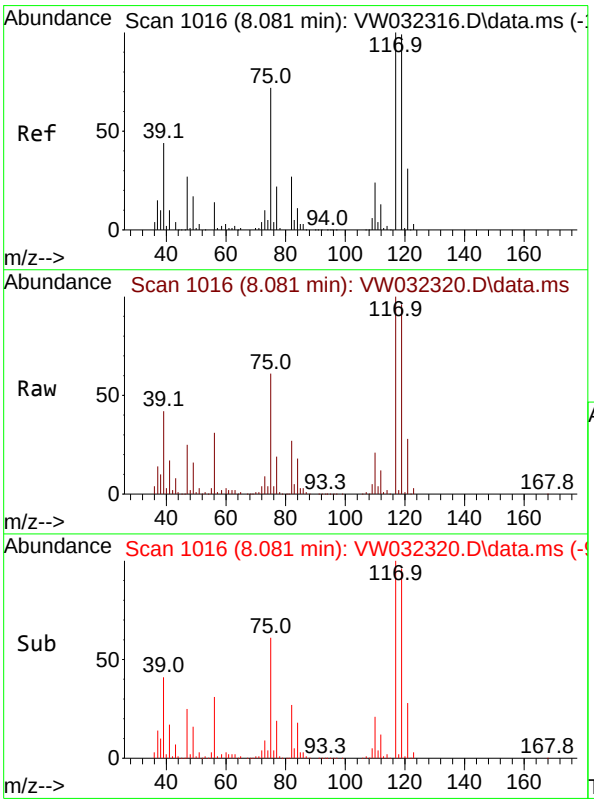
Supervised By :Semsettin Yesilyurt 10/03/2025

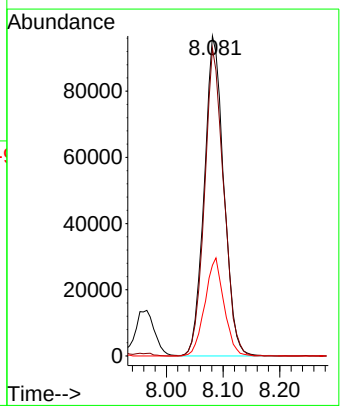


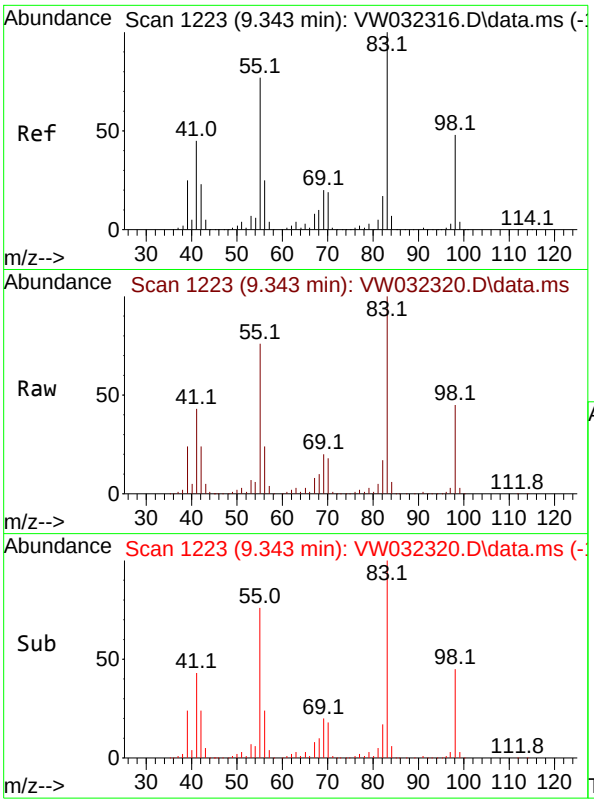


#38
Carbon Tetrachloride
Concen: 49.617 ug/l
RT: 8.081 min Scan# 1016
Delta R.T. -0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:117 Resp: 231677

Ion	Ratio	Lower	Upper
117	100		
119	96.2	74.2	111.2
121	28.3	25.6	38.4





#39
Methylcyclohexane
Concen: 51.537 ug/l
RT: 9.343 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 83 Resp: 30845

Ion	Ratio	Lower	Upper
83	100		
55	75.8	58.4	87.6
98	45.4	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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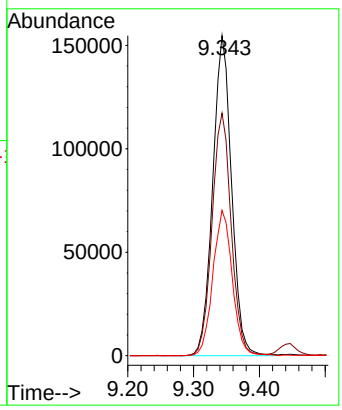
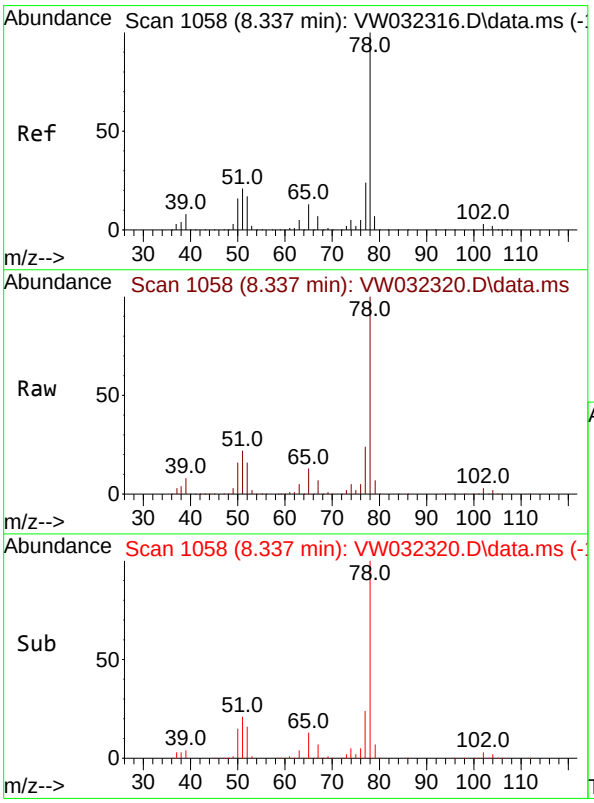
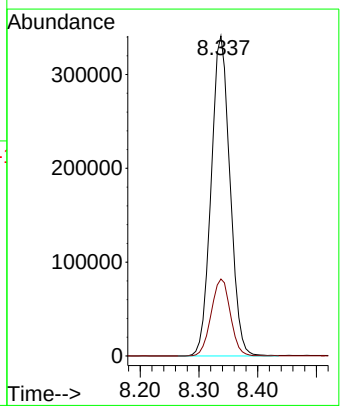


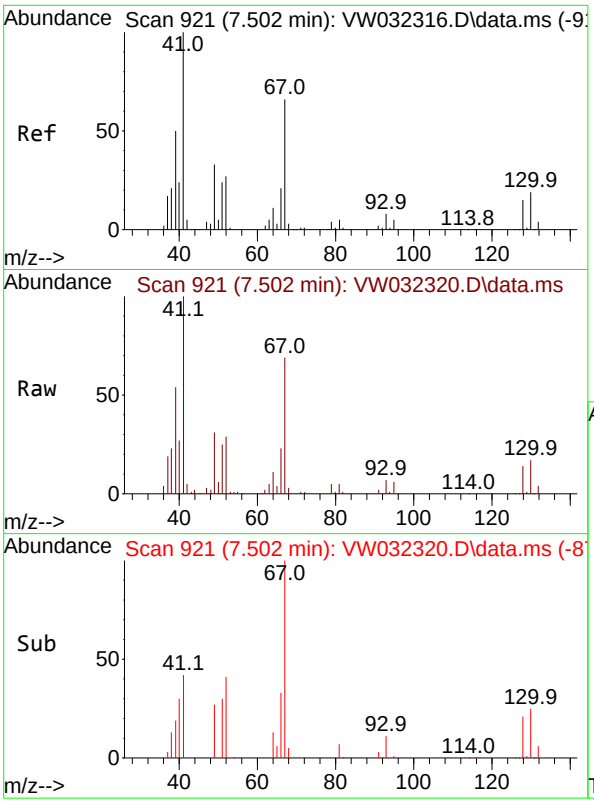


#40
Benzene
Concen: 48.794 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 78 Resp: 758892

Ion	Ratio	Lower	Upper
78	100		
77	24.0	20.7	31.1

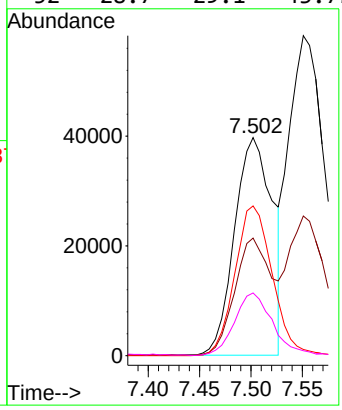




#41
Methacrylonitrile
Concen: 57.284 ug/l
RT: 7.502 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 41 Resp: 10195

Ion	Ratio	Lower	Upper
41	100		
39	52.3	50.9	76.3
67	68.2	65.6	98.4
52	28.7	29.1	43.7#



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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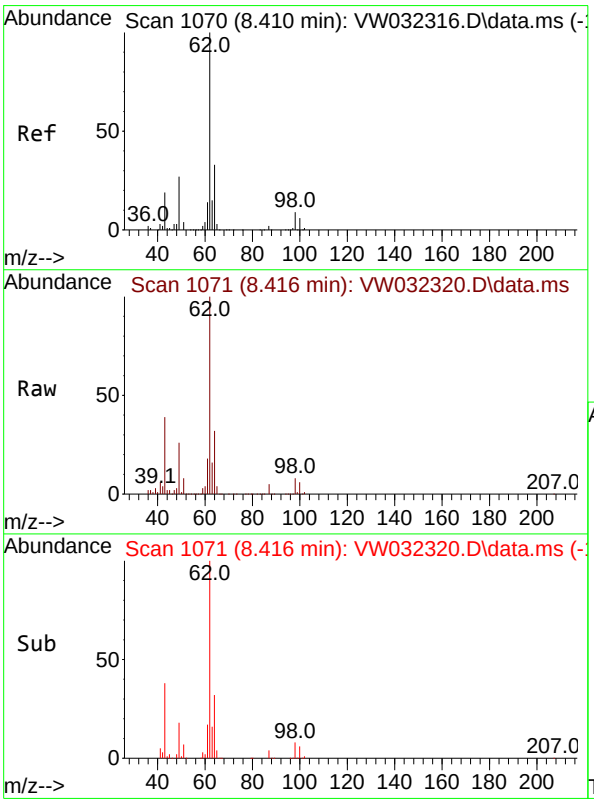
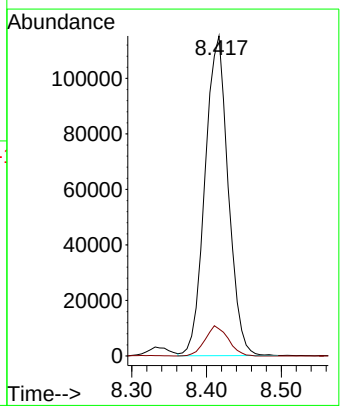
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

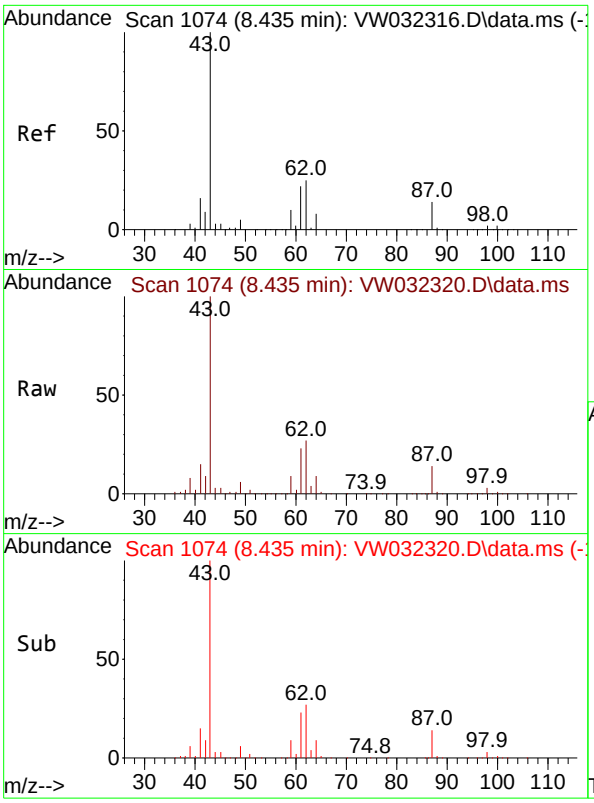


#42
1,2-Dichloroethane
Concen: 48.701 ug/l
RT: 8.416 min Scan# 1071
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 62 Resp: 247842

Ion	Ratio	Lower	Upper
62	100		
98	9.4	0.0	18.0





#43
Isopropyl Acetate
Concen: 51.877 ug/l
RT: 8.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 30394

Ion	Ratio	Lower	Upper
43	100		
61	29.1	23.3	34.9
87	13.4	11.1	16.7

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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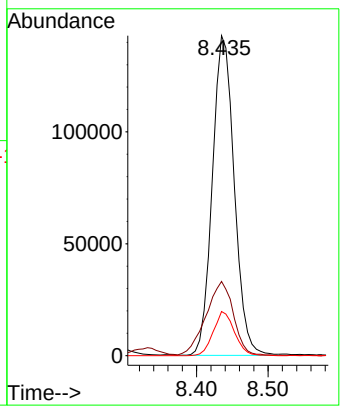
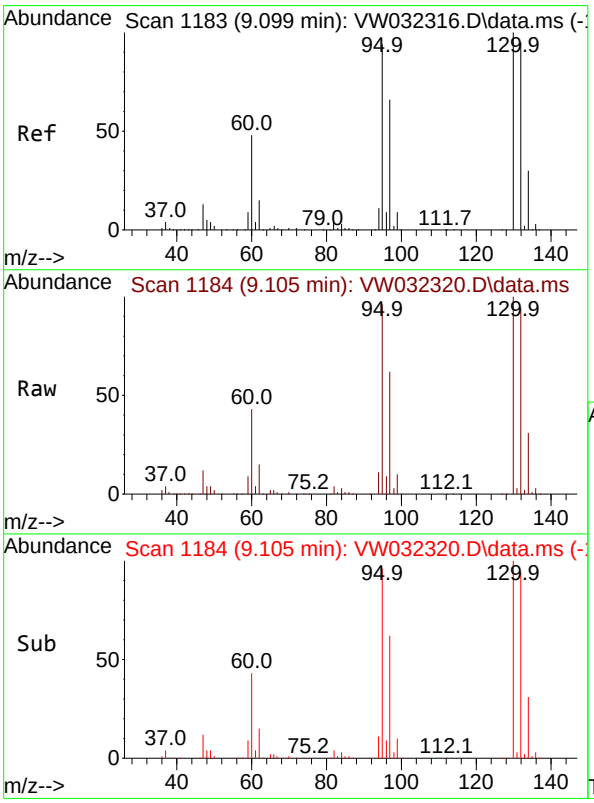
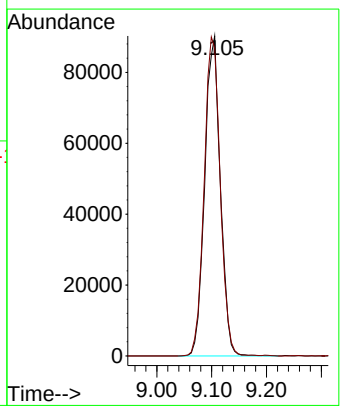


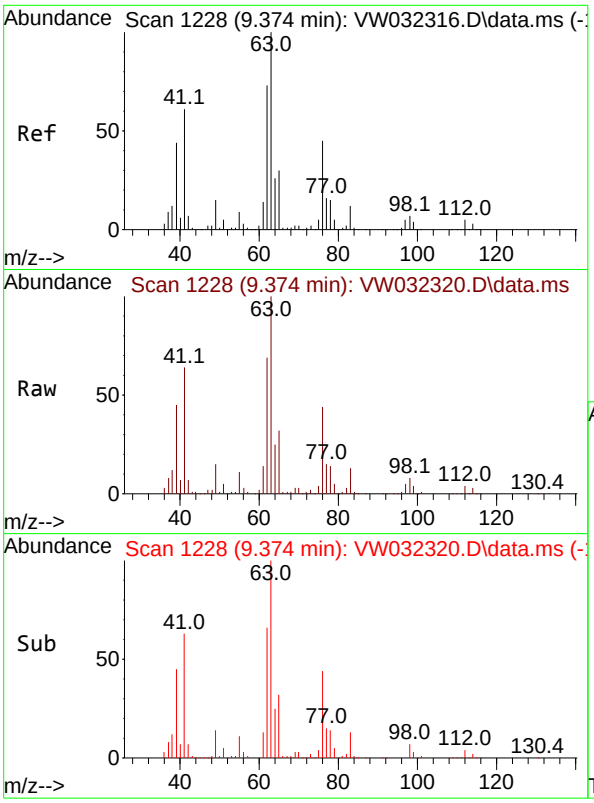


#44
Trichloroethene
Concen: 48.904 ug/l
RT: 9.105 min Scan# 1184
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:130 Resp: 178095

Ion	Ratio	Lower	Upper
130	100		
95	96.2	0.0	220.0





#45
1,2-Dichloropropane
Concen: 49.299 ug/l
RT: 9.374 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 63 Resp: 19138

Ion	Ratio	Lower	Upper
63	100		
65	31.9	24.3	36.5

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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Reviewed By :Mahesh Dadoda 10/03/2025
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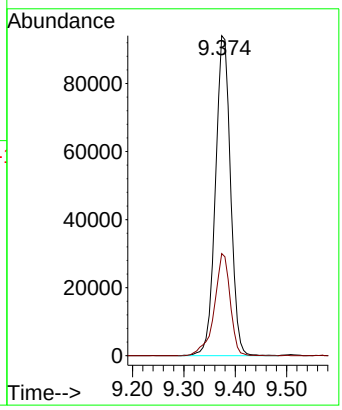
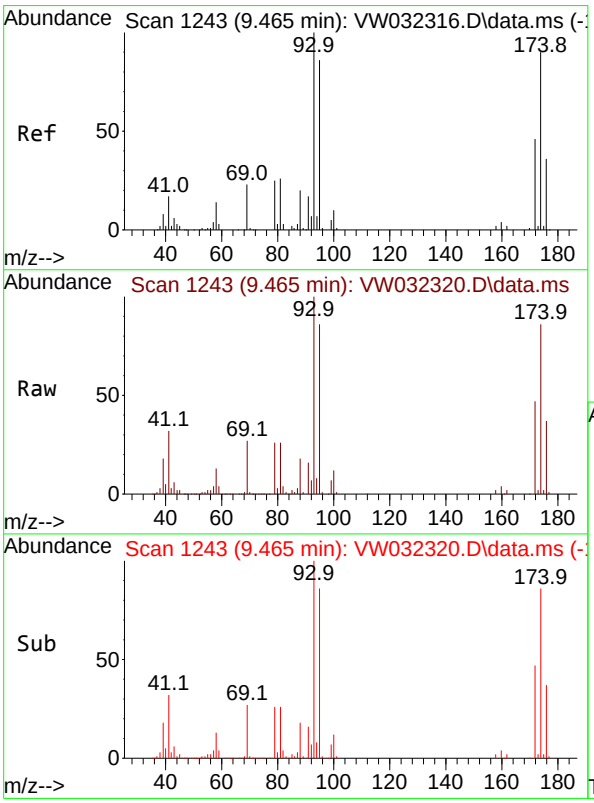
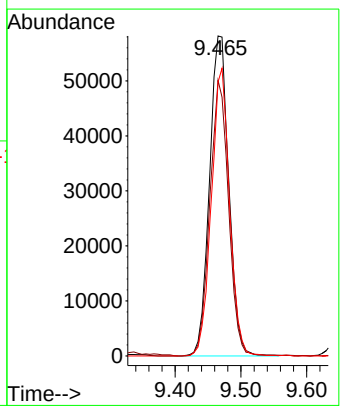


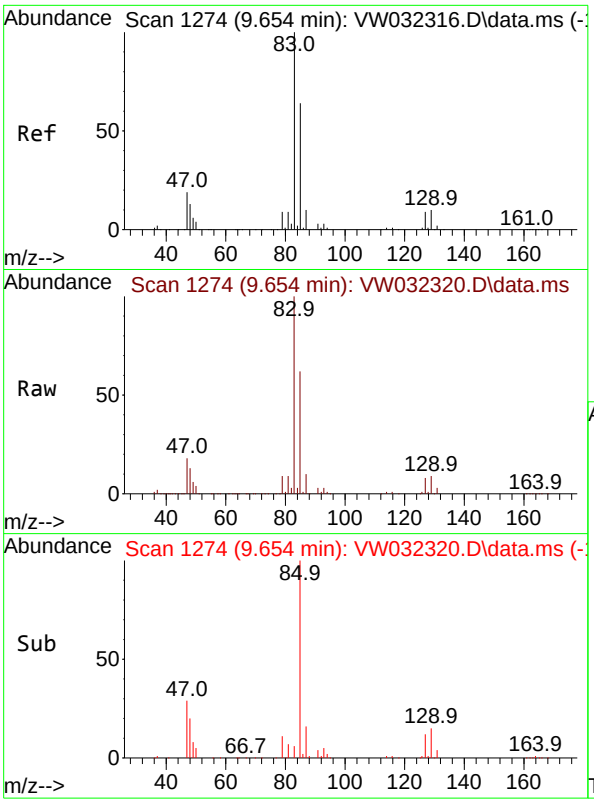


#46
Dibromomethane
Concen: 49.841 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 93 Resp: 118979

Ion	Ratio	Lower	Upper
93	100		
95	83.5	67.4	101.2
174	84.9	75.7	113.5





#47
Bromodichloromethane
Concen: 50.162 ug/l
RT: 9.654 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 83 Resp: 27388

Ion	Ratio	Lower	Upper
83	100		
85	62.0	48.7	73.1
127	7.6	6.4	9.6

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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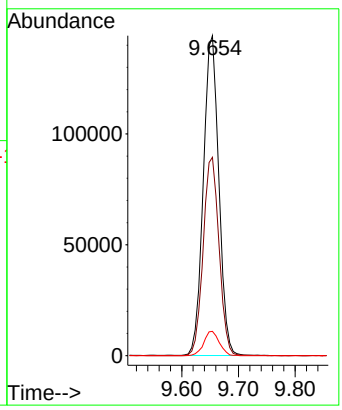
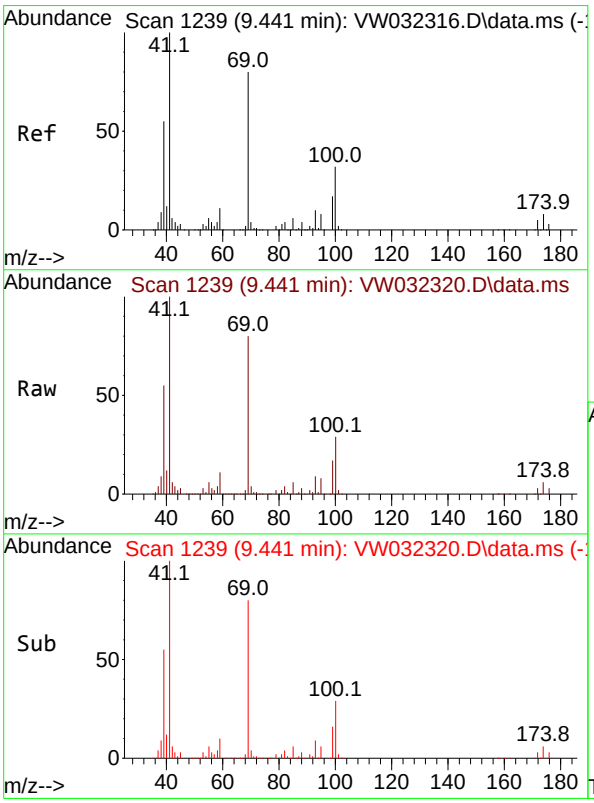
Supervised By :Semsettin Yesilyurt 10/03/2025

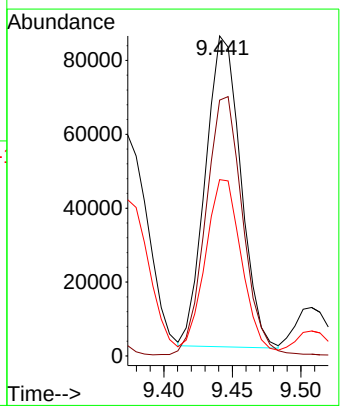


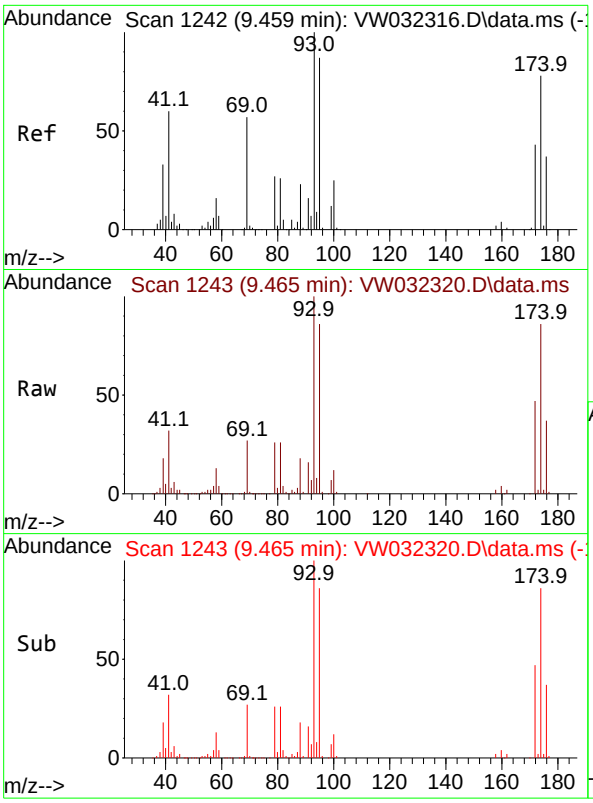


#48
Methyl methacrylate
Concen: 52.884 ug/l
RT: 9.441 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 41 Resp: 150648

Ion	Ratio	Lower	Upper
41	100		
69	87.7	71.5	107.3
39	55.2	55.9	83.9#

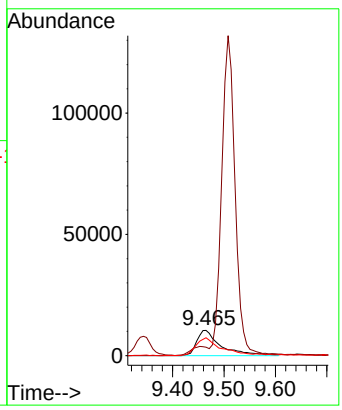




#49
1,4-Dioxane
Concen: 1058.229 ug/l
RT: 9.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 88 Resp: 3452

Ion	Ratio	Lower	Upper
88	100		
43	25.4	18.0	27.0
58	70.1	55.4	83.0



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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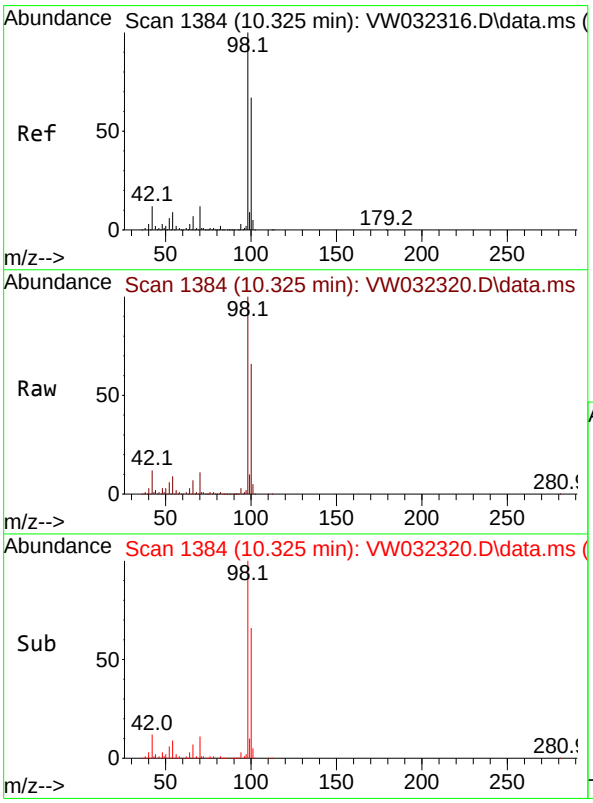
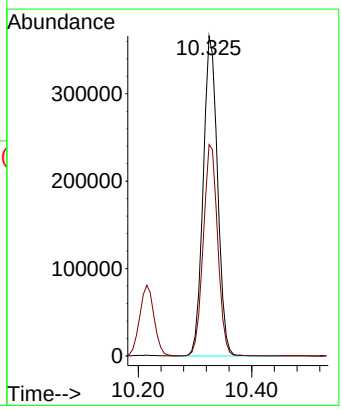
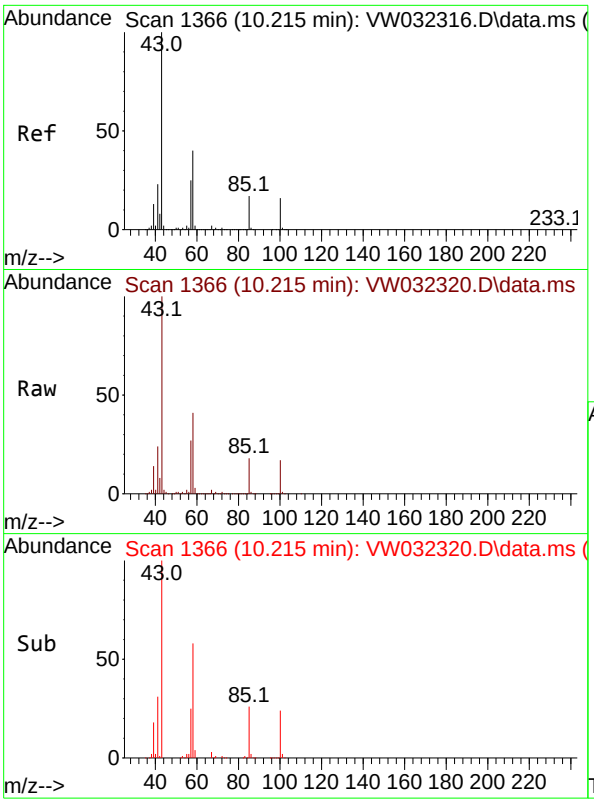


#50
Toluene-d8
Concen: 49.731 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 98 Resp: 645322

Ion	Ratio	Lower	Upper
98	100		
100	66.3	51.4	77.2

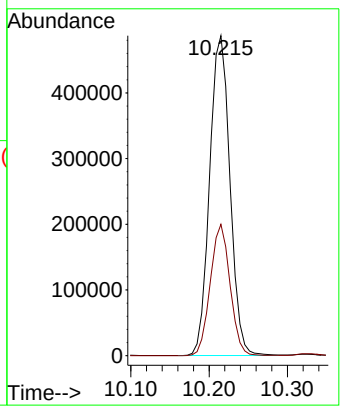




#51
4-Methyl-2-Pentanone
Concen: 258.790 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 87820

Ion	Ratio	Lower	Upper
43	100		
58	39.9	32.0	48.0



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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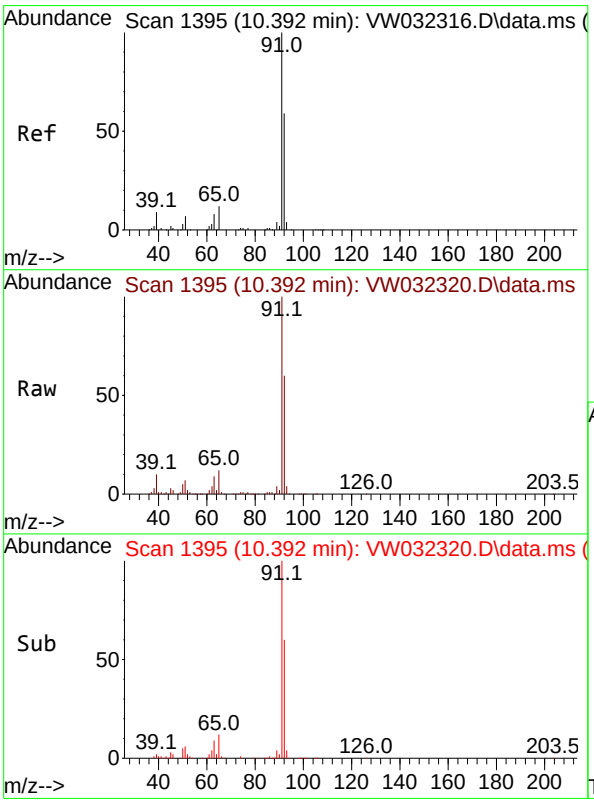
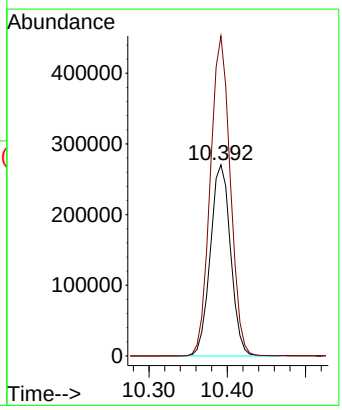
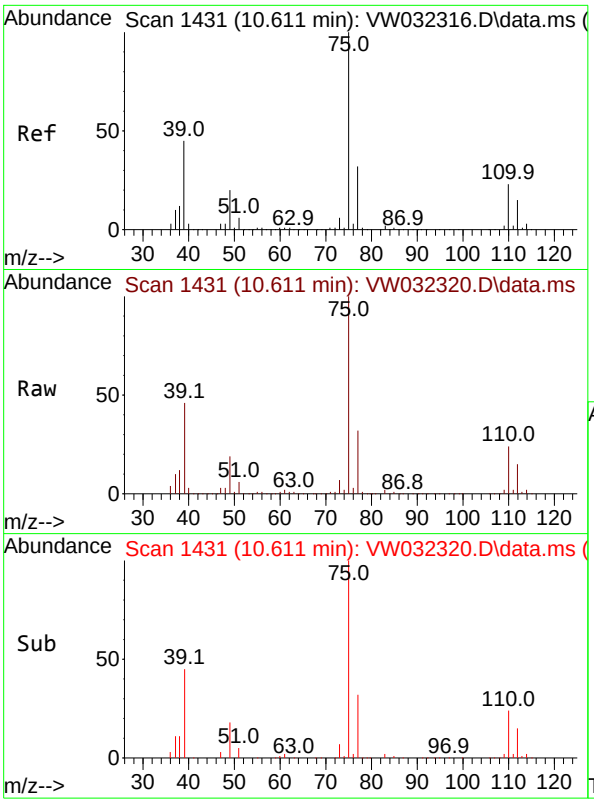


#52
Toluene
Concen: 50.061 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 92 Resp: 484871

Ion	Ratio	Lower	Upper
92	100		
91	165.7	137.5	206.3

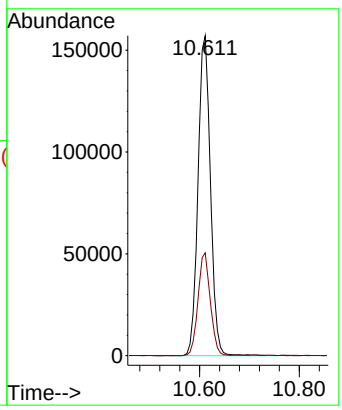




#53
t-1,3-Dichloropropene
Concen: 51.234 ug/l
RT: 10.611 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 75 Resp: 27139

Ion	Ratio	Lower	Upper
75	100		
77	32.1	25.6	38.4



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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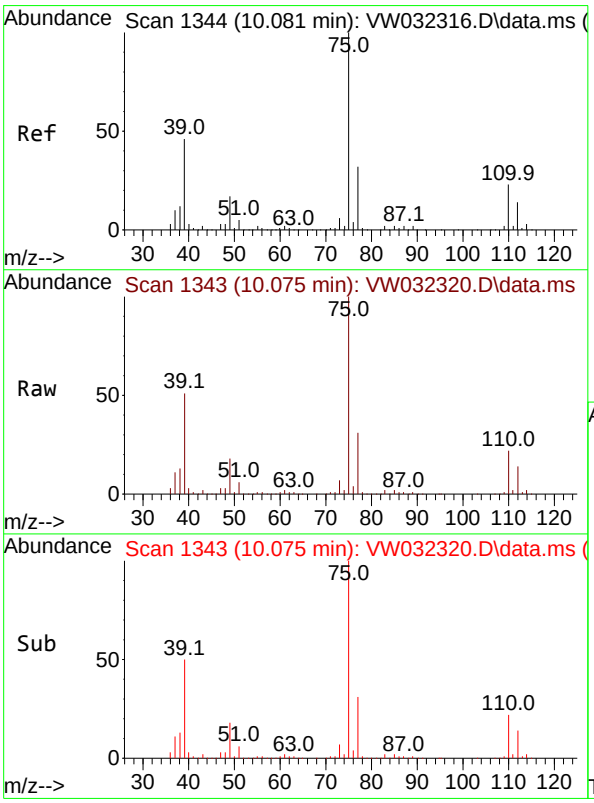
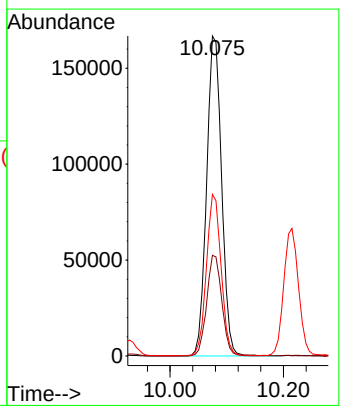
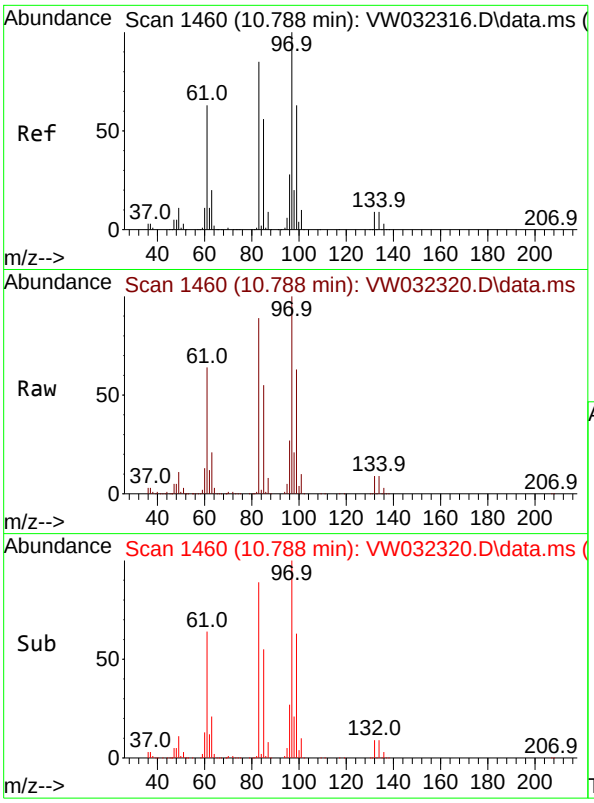


#54
cis-1,3-Dichloropropene
Concen: 50.209 ug/l
RT: 10.075 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 75 Resp: 306358

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.1	37.7
39	50.4	43.2	64.8

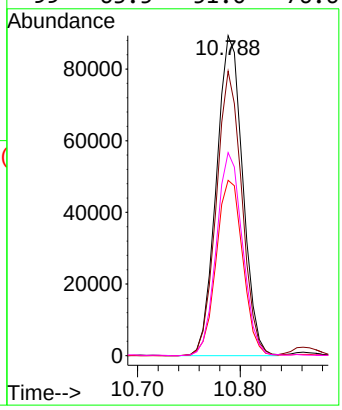




#55
1,1,2-Trichloroethane
Concen: 49.869 ug/l
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 97 Resp: 15910

Ion	Ratio	Lower	Upper
97	100		
83	88.9	71.0	106.6
85	54.8	42.8	64.2
99	63.5	51.0	76.6



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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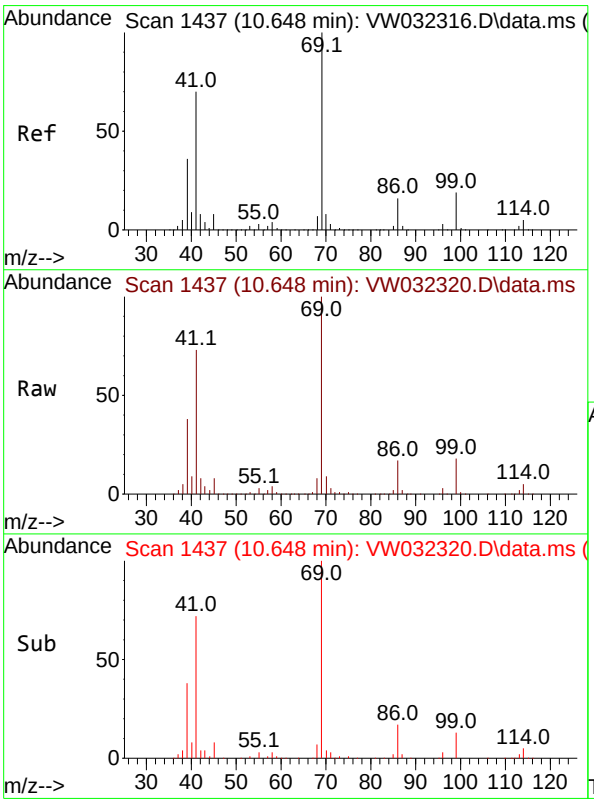
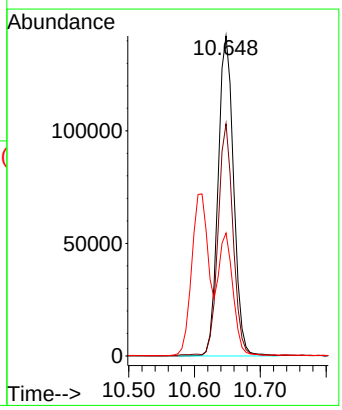
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

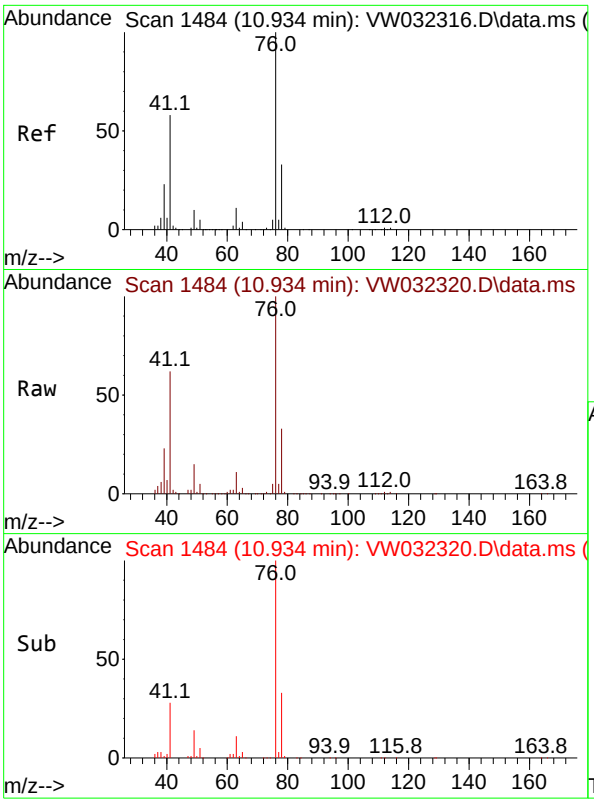


#56
Ethyl methacrylate
Concen: 52.367 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 69 Resp: 233853

Ion	Ratio	Lower	Upper
69	100		
41	70.4	53.2	79.8
39	35.0	32.9	49.3

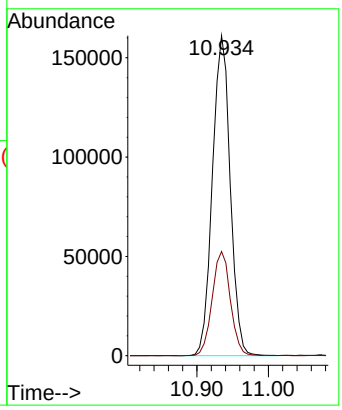




#57
1,3-Dichloropropane
Concen: 49.394 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 76 Resp: 27833

Ion	Ratio	Lower	Upper
76	100		
78	33.3	26.2	39.4



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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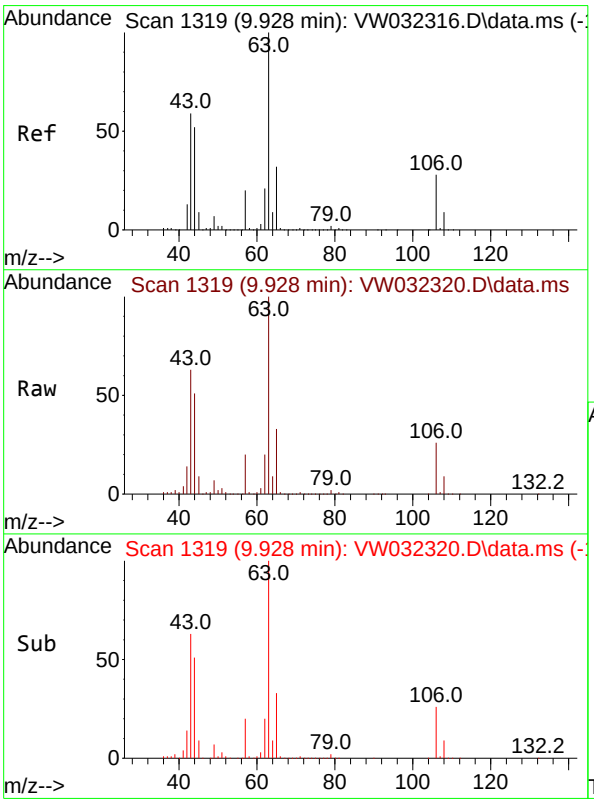
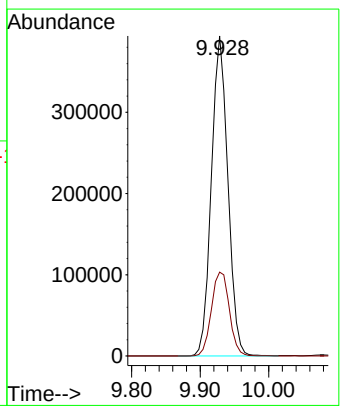
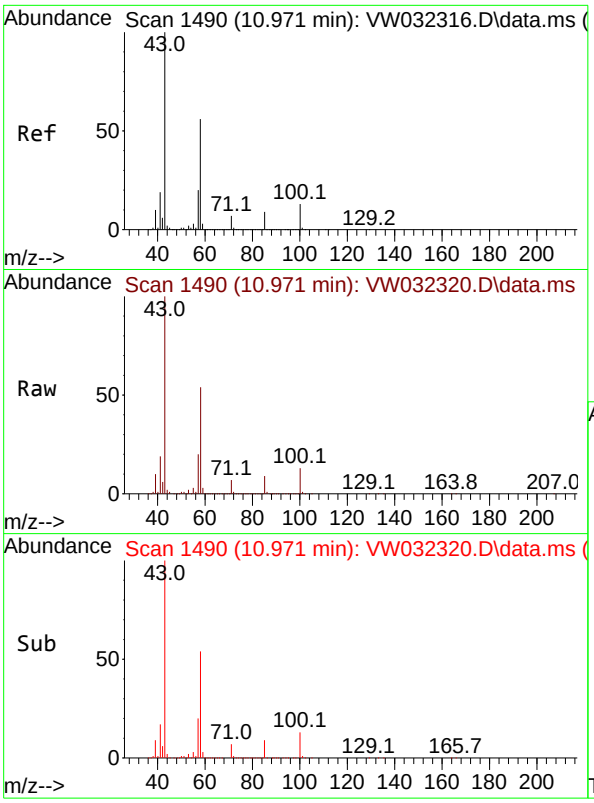


#58
2-Chloroethyl Vinyl ether
Concen: 277.181 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 63 Resp: 658757

Ion	Ratio	Lower	Upper
63	100		
106	28.4	24.3	36.5





#59
2-Hexanone
Concen: 262.215 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 62758

Ion	Ratio	Lower	Upper
43	100		
58	54.0	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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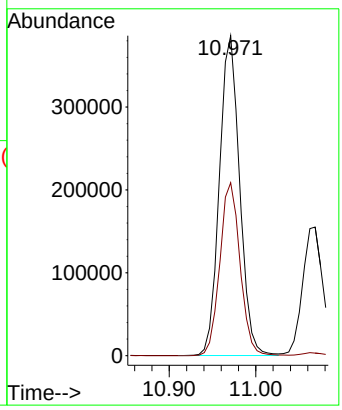
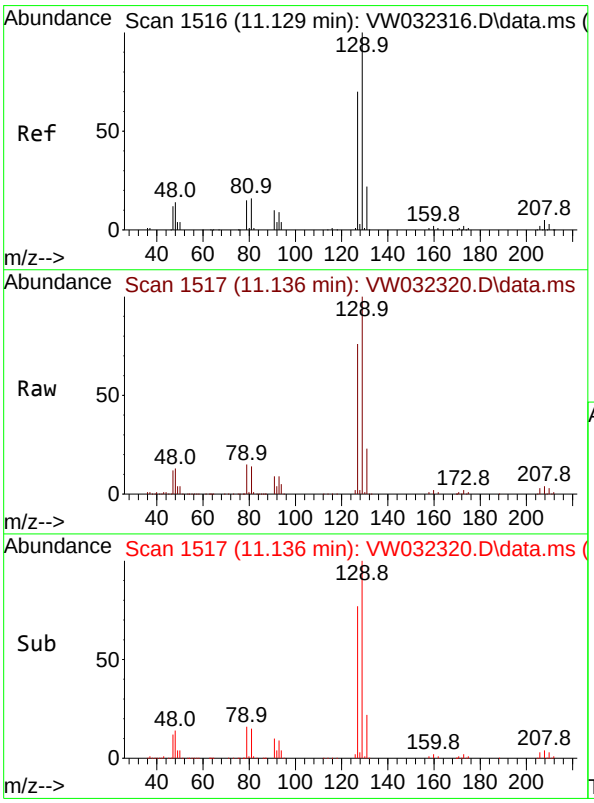
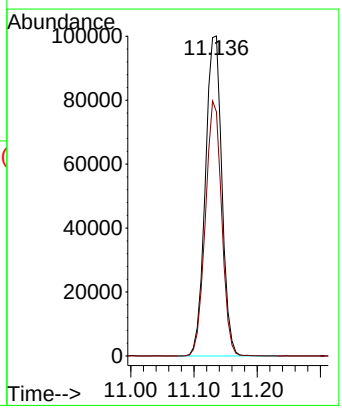


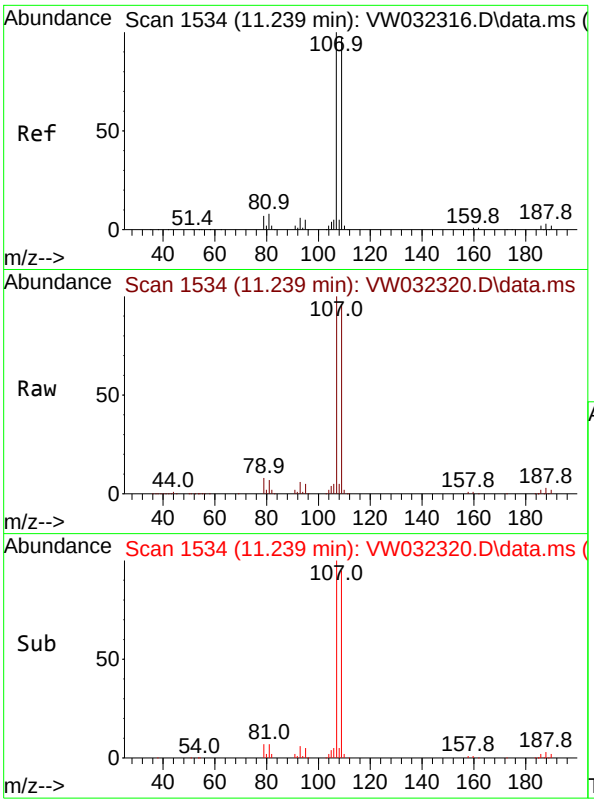


#60
Dibromochloromethane
Concen: 50.187 ug/l
RT: 11.136 min Scan# 1517
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:129 Resp: 181813

Ion	Ratio	Lower	Upper
129	100		
127	78.4	38.1	114.5





#61
1,2-Dibromoethane
Concen: 49.732 ug/l
RT: 11.239 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:107 Resp: 15471

Ion	Ratio	Lower	Upper
107	100		
109	94.4	74.5	111.7

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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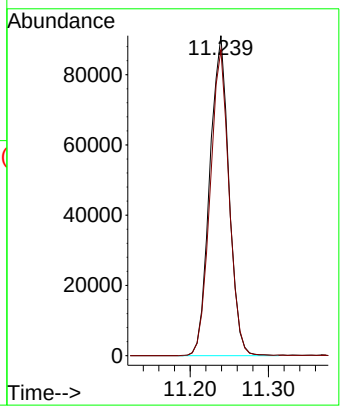
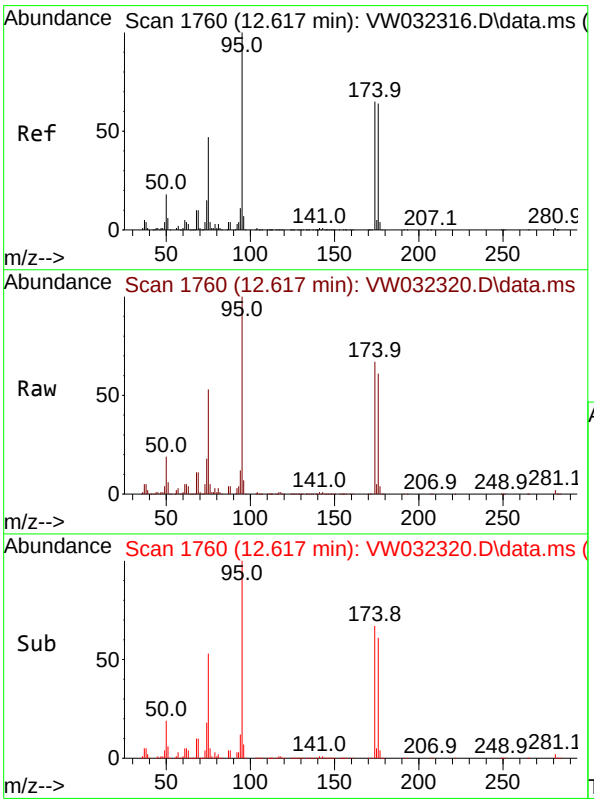
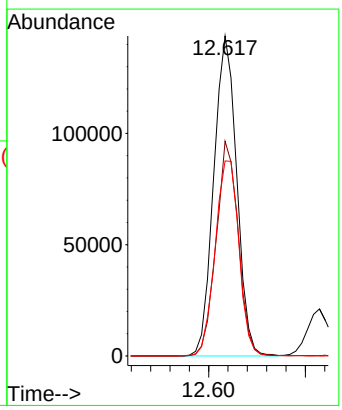


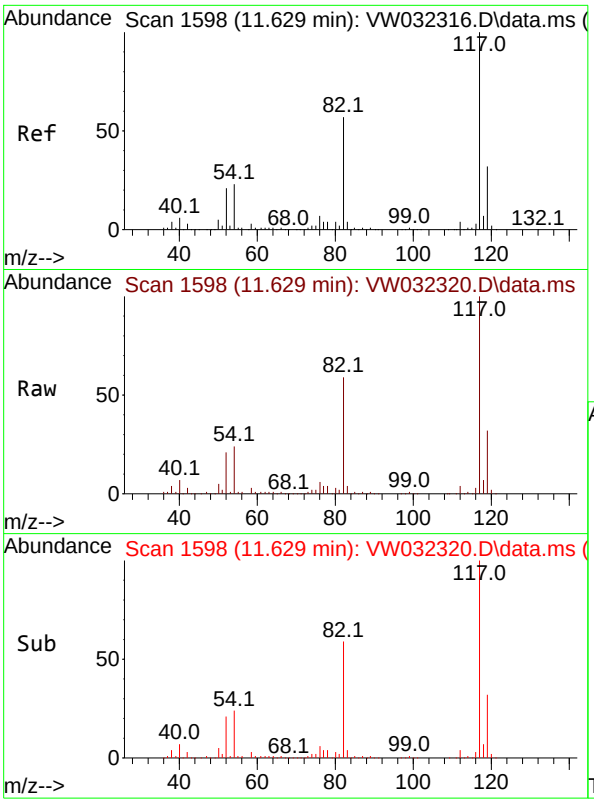


#62
4-Bromofluorobenzene
Concen: 48.218 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 95 Resp: 236491

Ion	Ratio	Lower	Upper
95	100		
174	64.6	0.0	145.6
176	63.3	0.0	140.8





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:117 Resp: 49821

Ion	Ratio	Lower	Upper
117	100		
82	59.1	42.7	64.1
119	32.5	25.2	37.8

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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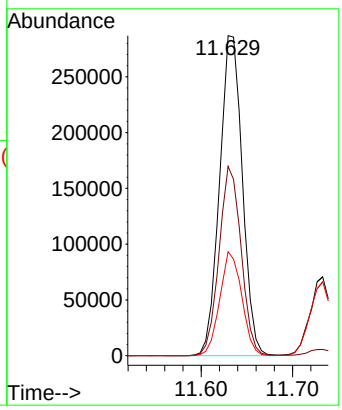
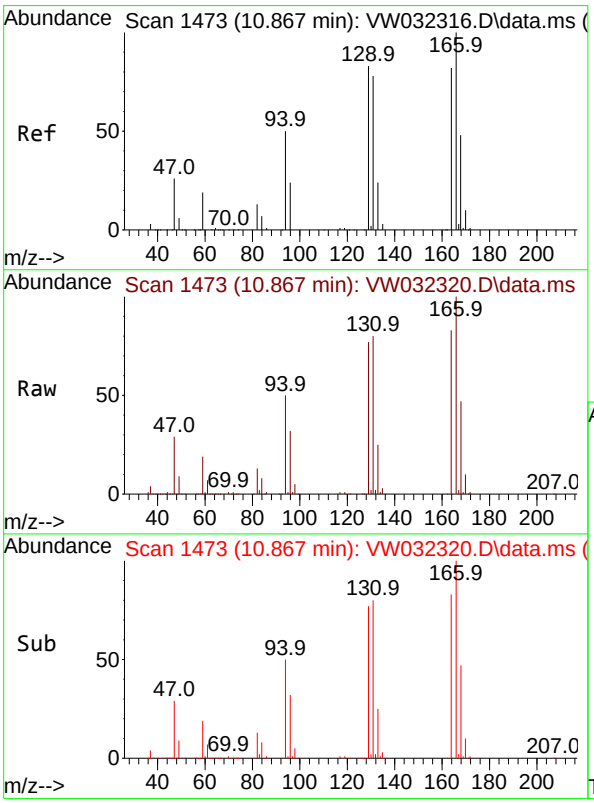
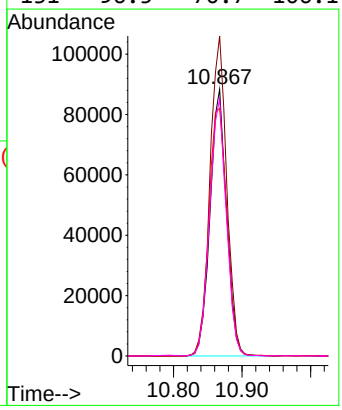


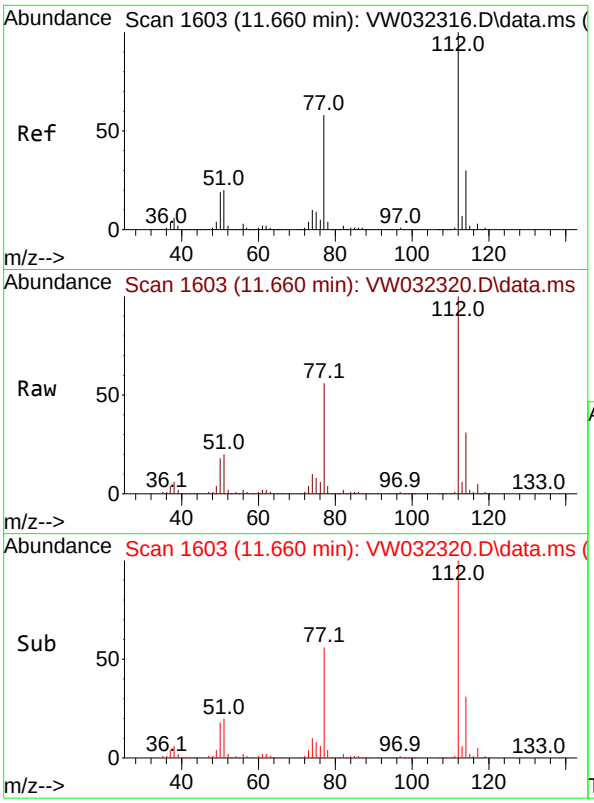


#64
Tetrachloroethene
Concen: 49.611 ug/l
RT: 10.867 min Scan# 1473
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:164 Resp: 147899

Ion	Ratio	Lower	Upper
164	100		
166	120.0	97.5	146.3
129	92.9	71.2	106.8
131	96.5	70.7	106.1

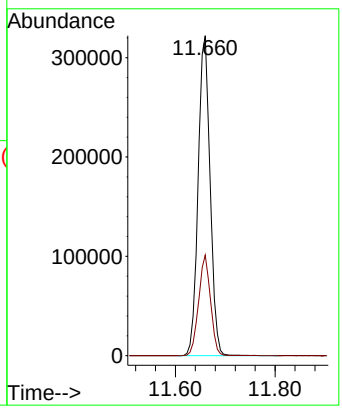




#65
Chlorobenzene
Concen: 48.862 ug/l
RT: 11.660 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:112 Resp: 53561

Ion	Ratio	Lower	Upper
112	100		
114	31.4	26.0	39.0



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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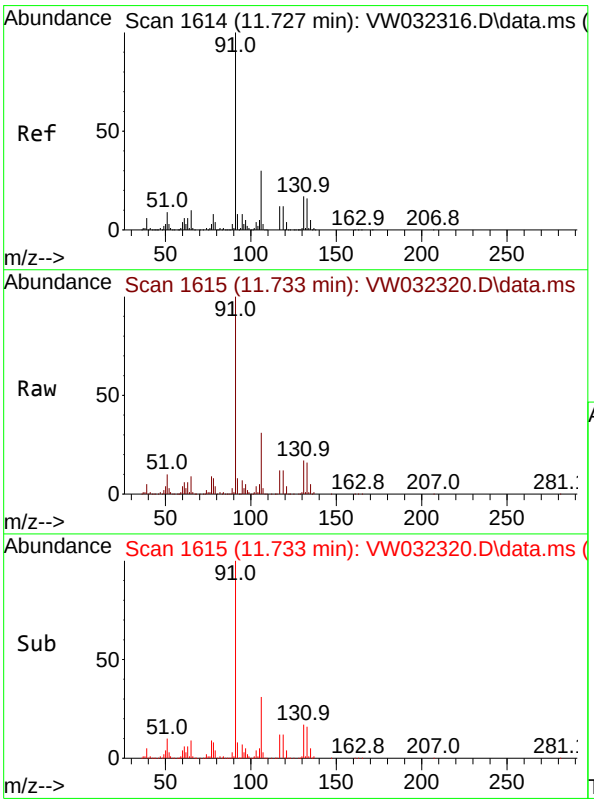
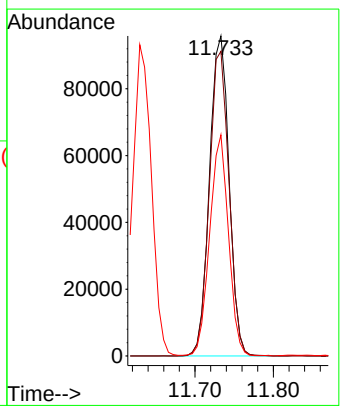
Supervised By :Semsettin Yesilyurt 10/03/2025

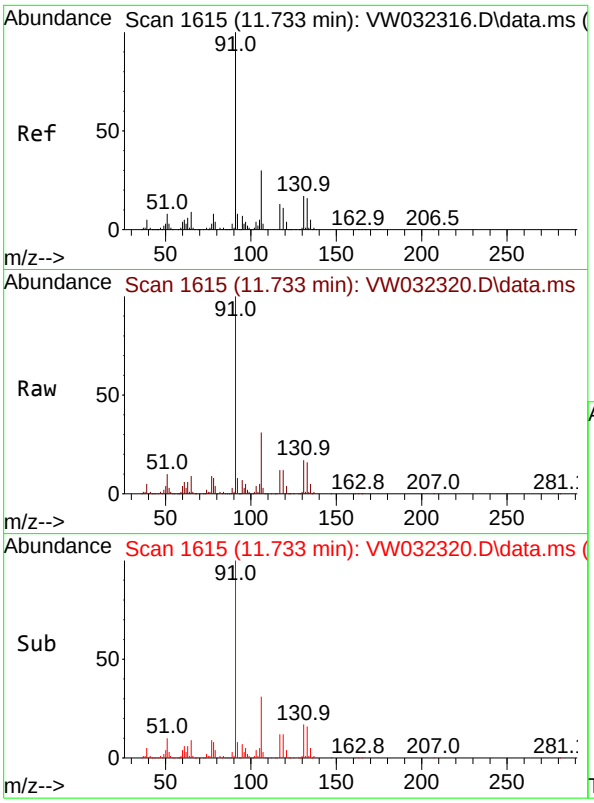


#66
1,1,1,2-Tetrachloroethane
Concen: 48.644 ug/l
RT: 11.733 min Scan# 1615
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:131 Resp: 166082

Ion	Ratio	Lower	Upper
131	100		
133	95.9	47.7	143.1
119	66.2	32.8	98.3





#67
Ethyl Benzene
Concen: 50.513 ug/l
RT: 11.733 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 91 Resp: 92298

Ion	Ratio	Lower	Upper
91	100		
106	31.3	25.3	37.9

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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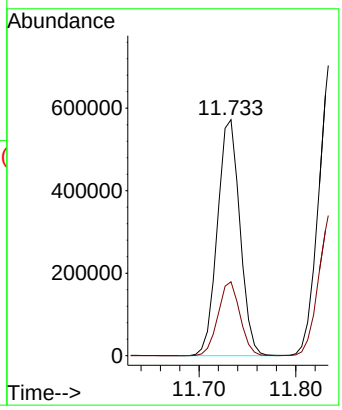
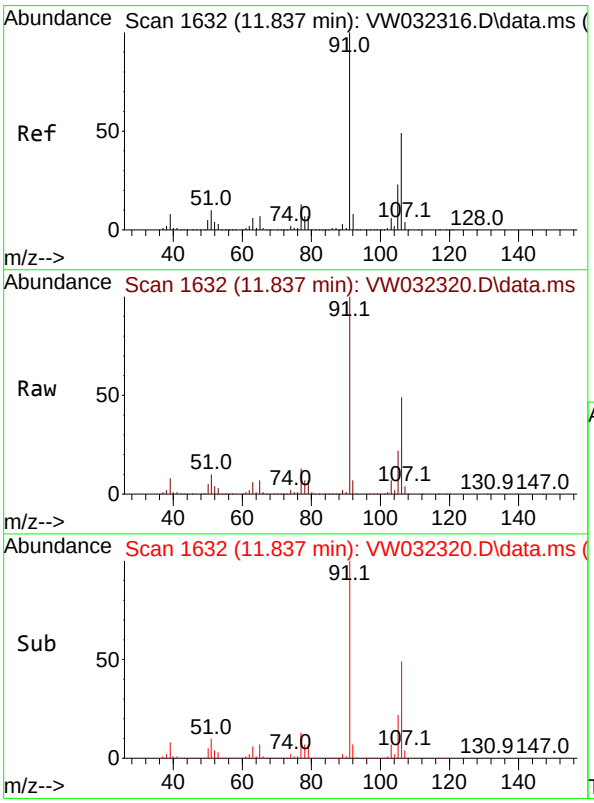
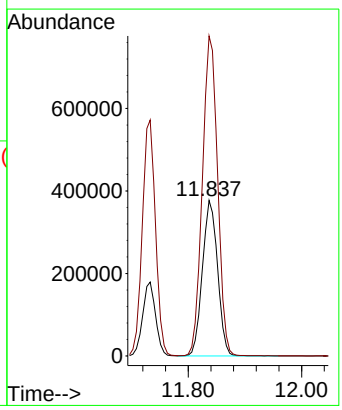


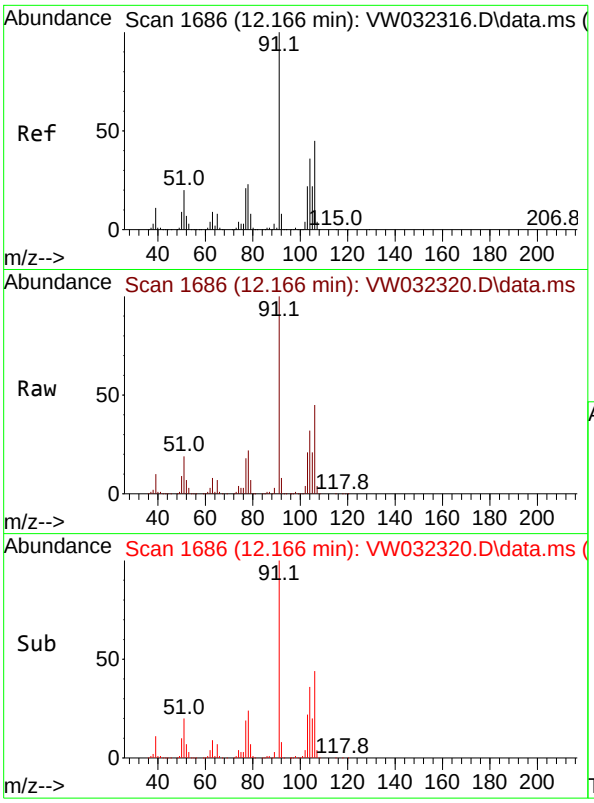


#68
m/p-Xylenes
Concen: 99.276 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:106 Resp: 699490

Ion	Ratio	Lower	Upper
106	100		
91	207.4	164.2	246.2





#69
o-Xylene
Concen: 50.523 ug/l
RT: 12.166 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:106 Resp: 33290

Ion	Ratio	Lower	Upper
106	100		
91	218.0	108.7	326.3

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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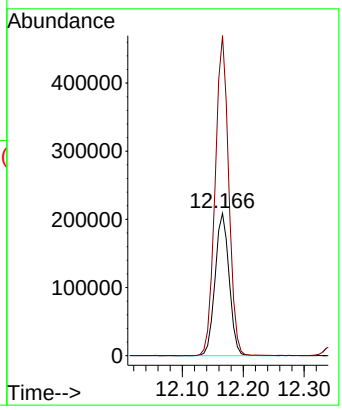
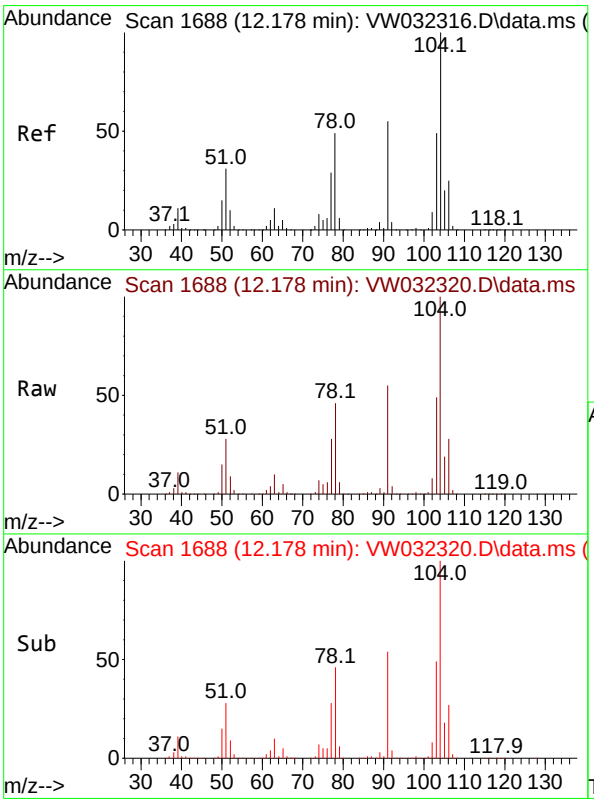
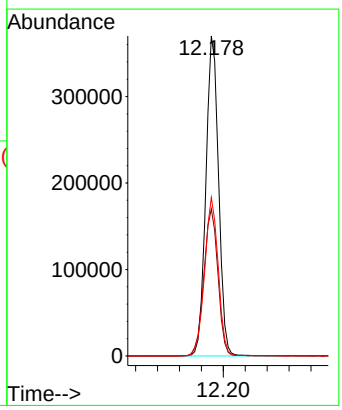


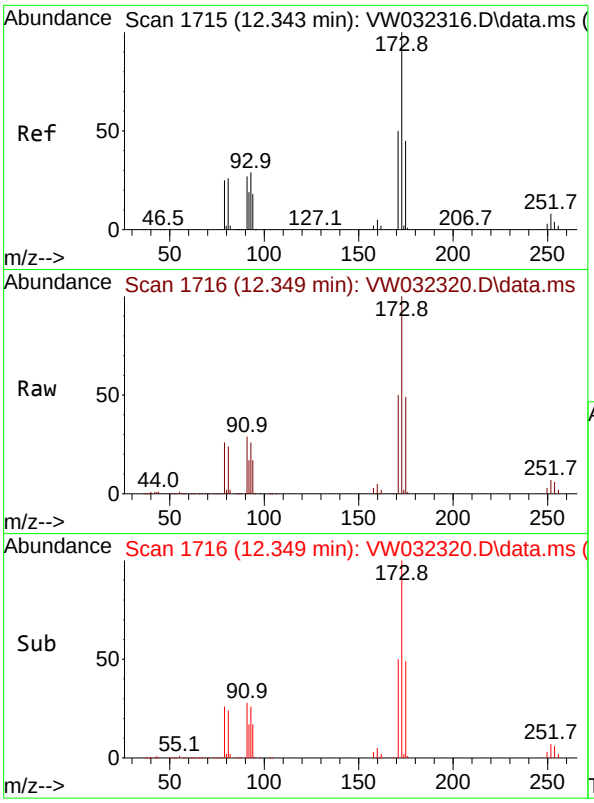


#70
Styrene
Concen: 51.667 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:104 Resp: 594393

Ion	Ratio	Lower	Upper
104	100		
78	50.7	41.6	62.4
103	52.9	44.8	67.2

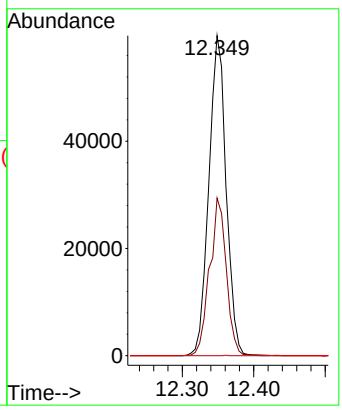




#71
Bromoform
Concen: 51.207 ug/l
RT: 12.349 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:173 Resp: 10021

Ion	Ratio	Lower	Upper
173	100		
175	47.4	24.9	74.7
254	0.0	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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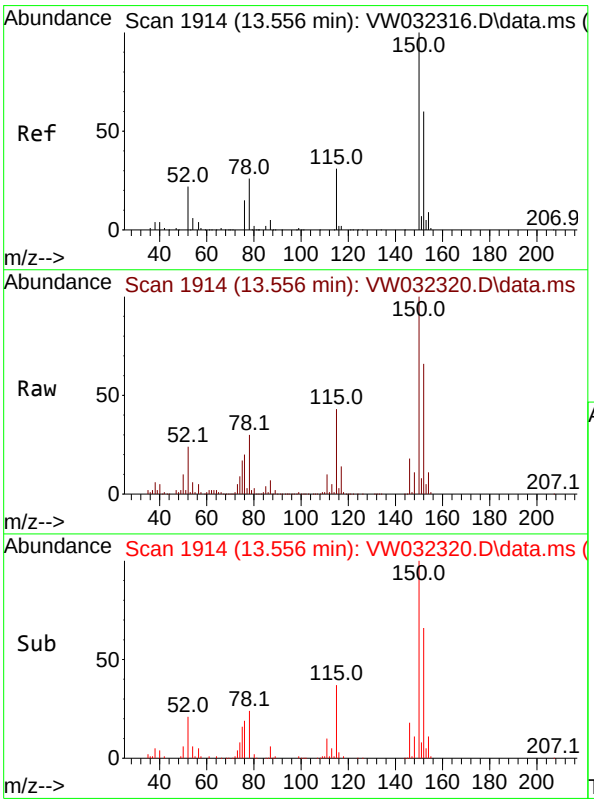
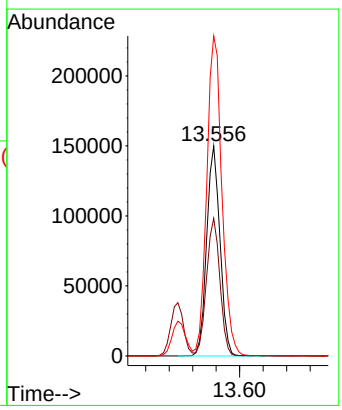
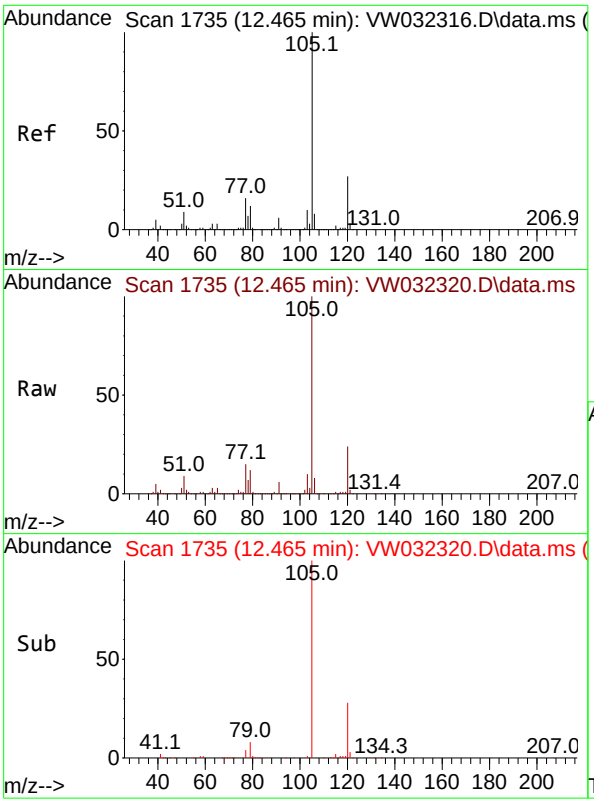


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:152 Resp: 235528

Ion	Ratio	Lower	Upper
152	100		
115	66.0	31.8	95.4
150	173.3	0.0	343.0





#73
Isopropylbenzene
Concen: 52.076 ug/l
RT: 12.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:105 Resp: 83913

Ion	Ratio	Lower	Upper
105	100		
120	25.7	13.0	38.9

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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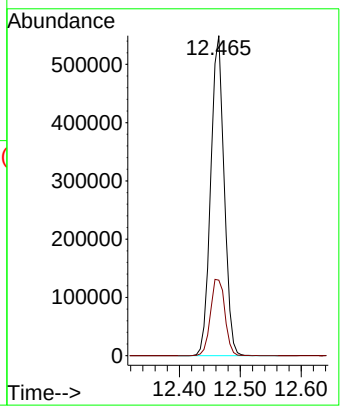
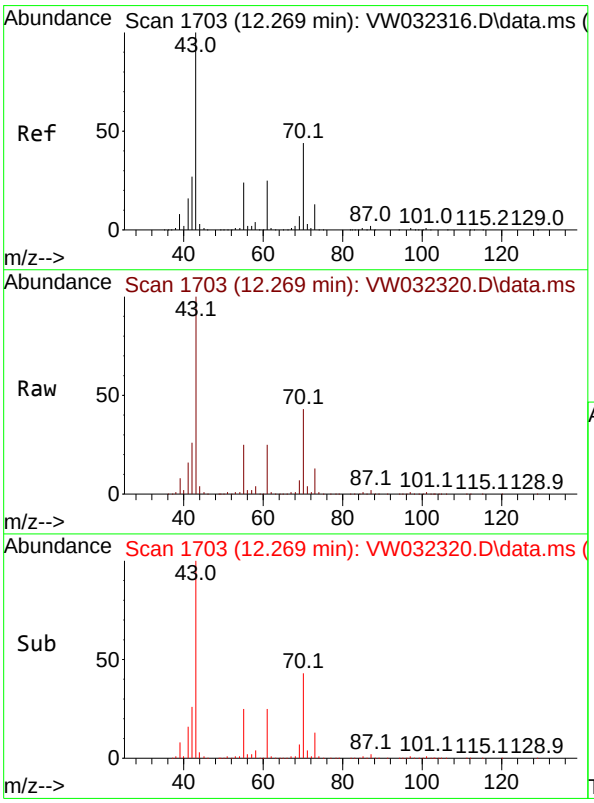
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

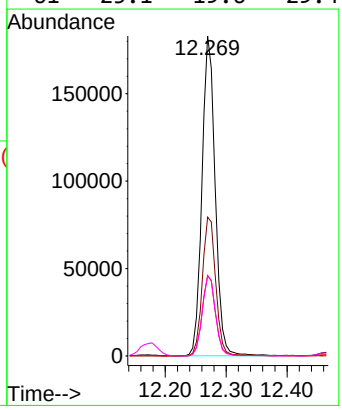


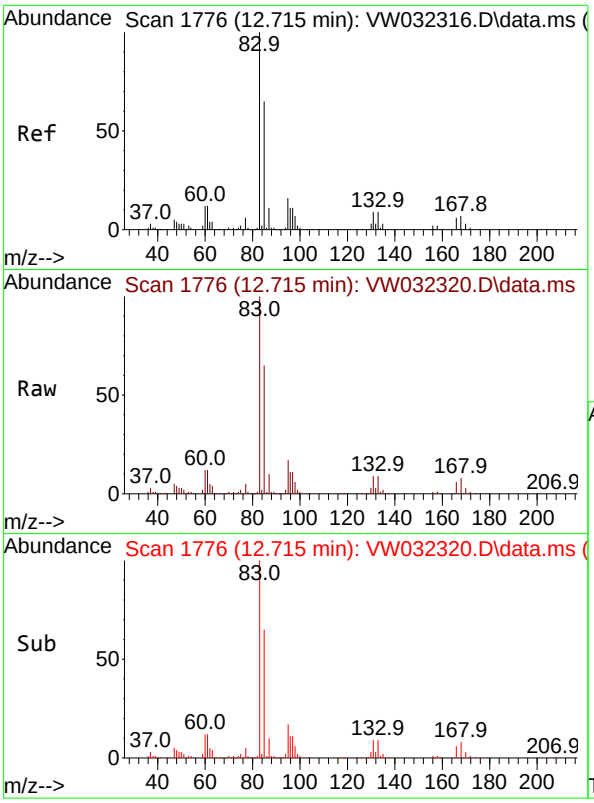


#74
N-amyl acetate
Concen: 53.697 ug/l
RT: 12.269 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 43 Resp: 276033

Ion	Ratio	Lower	Upper
43	100		
70	44.2	35.3	52.9
55	25.8	19.9	29.9
61	25.1	19.6	29.4





#75
1,1,2,2-Tetrachloroethane
Concen: 50.822 ug/l
RT: 12.715 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 83 Resp: 20333

Ion	Ratio	Lower	Upper
83	100		
131	9.9	5.1	15.4
85	64.1	32.2	96.6

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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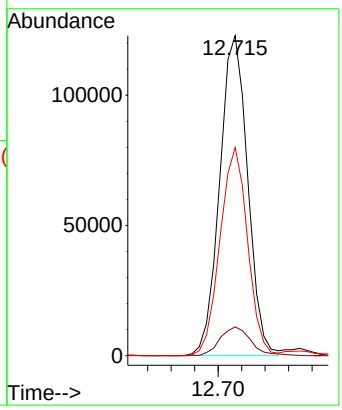
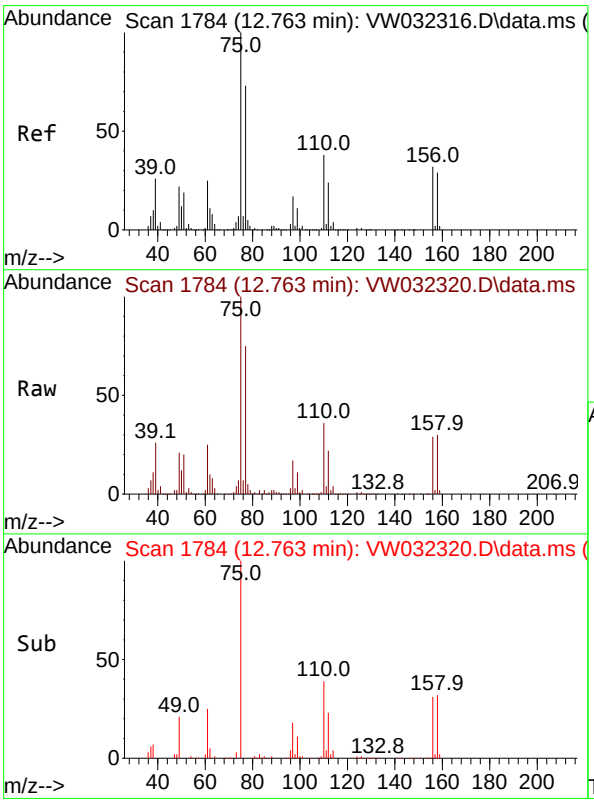
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

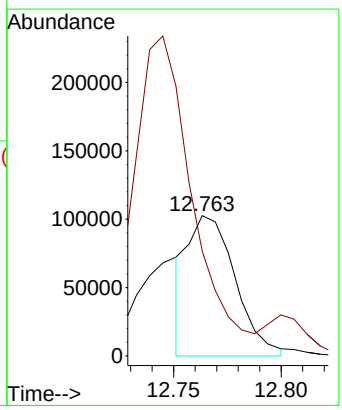


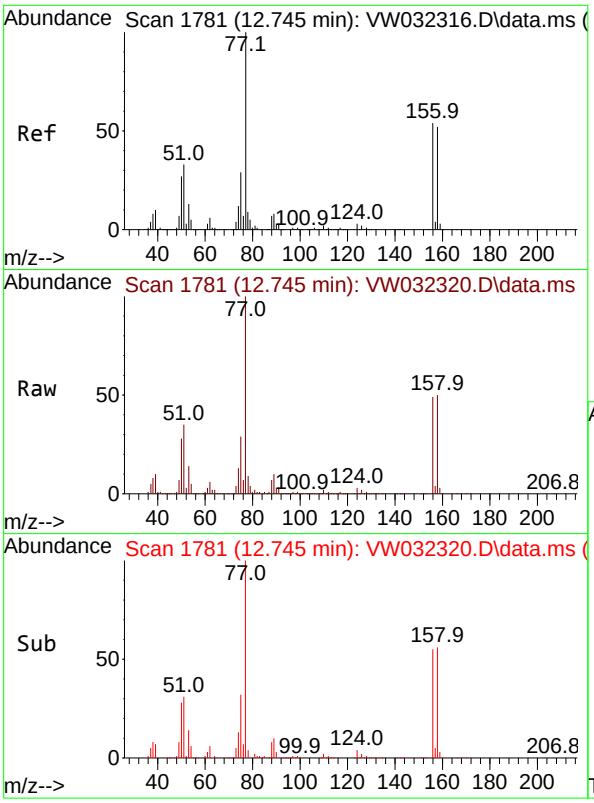


#76
1,2,3-Trichloropropane
Concen: 50.813 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 75 Resp: 157491

Ion	Ratio	Lower	Upper
75	100		
77	282.7	141.7	425.1





#77
Bromobenzene
Concen: 50.659 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:156 Resp: 19677

Ion	Ratio	Lower	Upper
156	100		
77	226.3	98.6	295.7
158	95.6	48.4	145.0

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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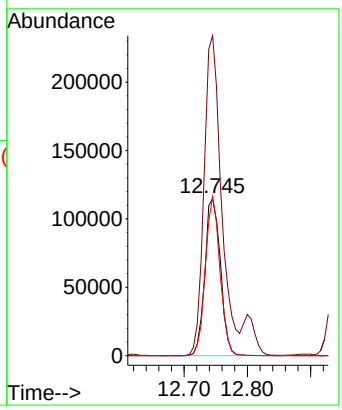
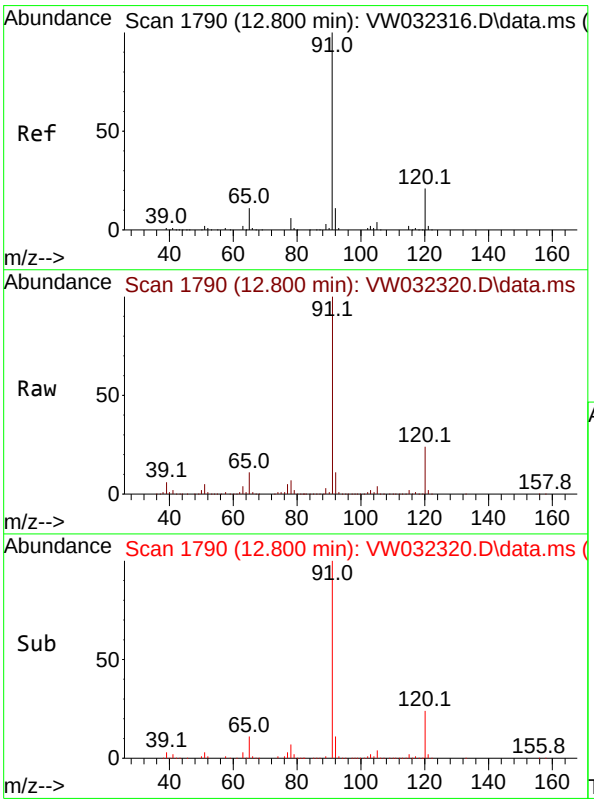
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

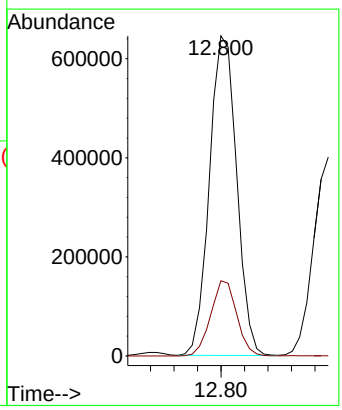


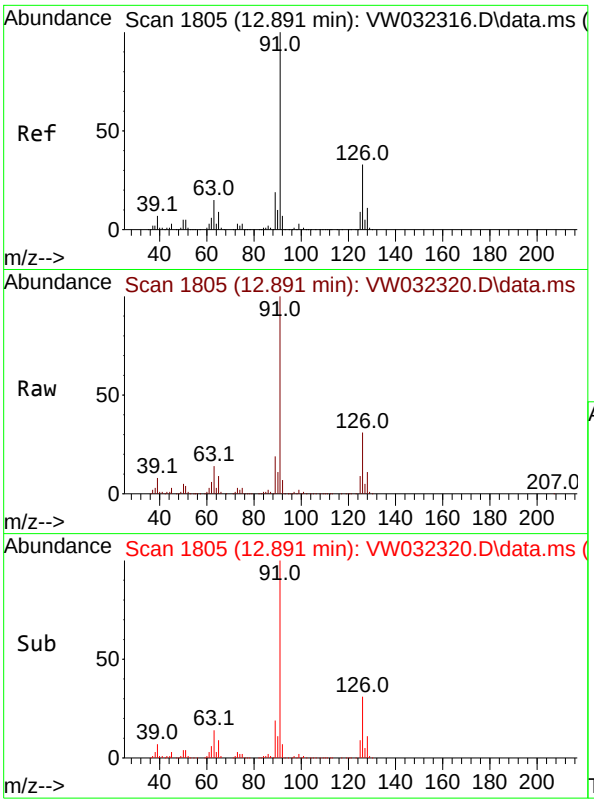


#78
n-propylbenzene
Concen: 51.657 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 91 Resp: 1039770

Ion	Ratio	Lower	Upper
91	100		
120	22.5	11.8	35.4

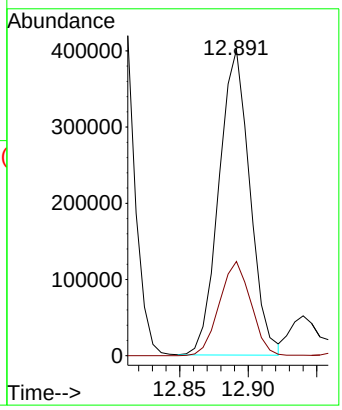




#79
2-Chlorotoluene
Concen: 51.287 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 91 Resp: 63119

Ion	Ratio	Lower	Upper
91	100		
126	31.3	16.6	49.7



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

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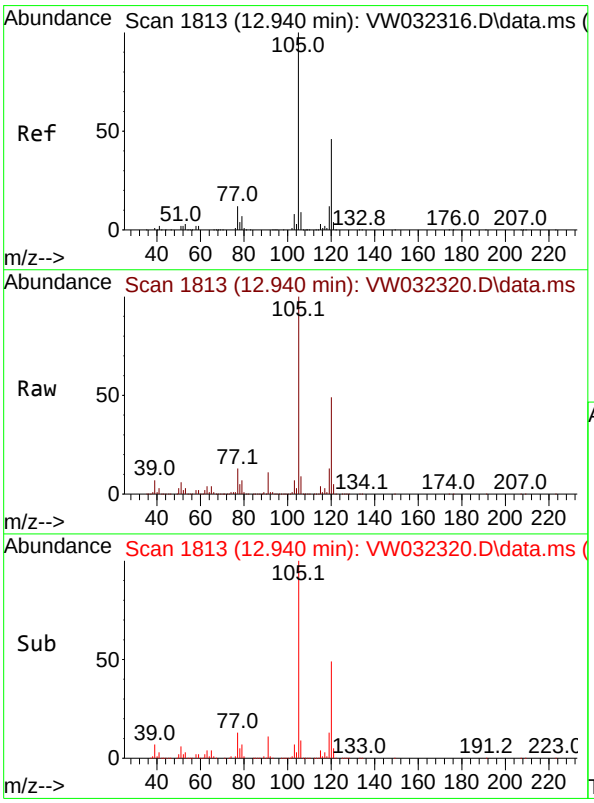
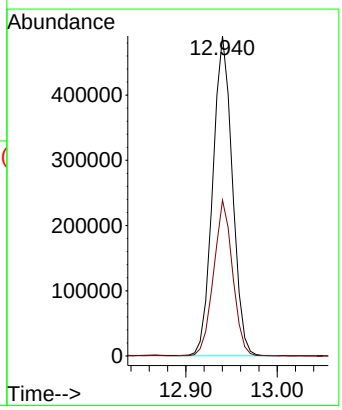
Supervised By :Semsettin Yesilyurt 10/03/2025

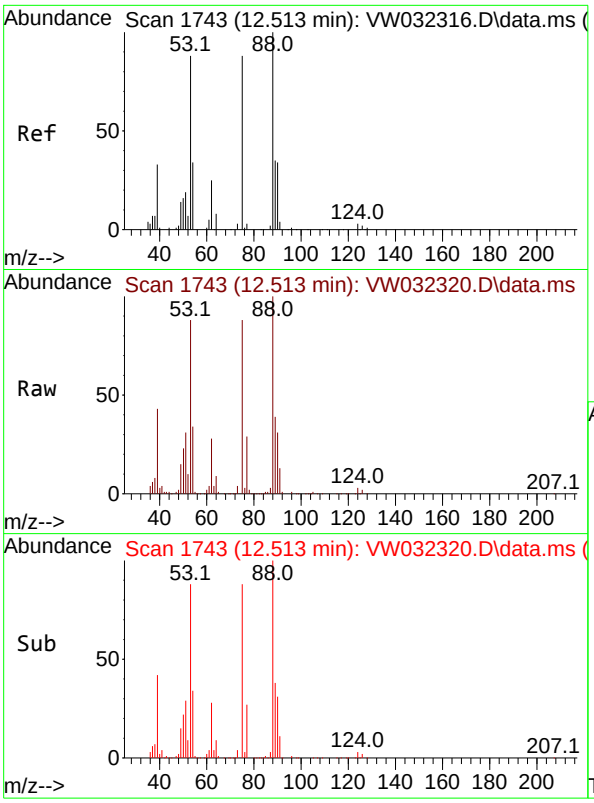


#80
1,3,5-Trimethylbenzene
Concen: 52.365 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:105 Resp: 729628

Ion	Ratio	Lower	Upper
105	100		
120	47.2	24.8	74.4





#81
trans-1,4-Dichloro-2-butene
Concen: 54.360 ug/l
RT: 12.513 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 75 Resp: 6650

Ion	Ratio	Lower	Upper
75	100		
53	102.7	91.0	136.6
89	45.6	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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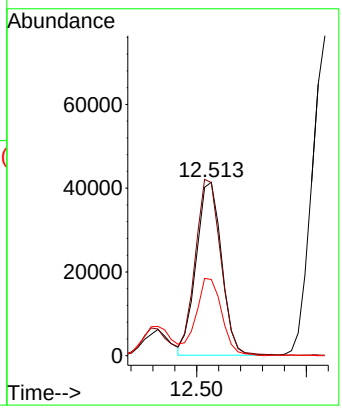
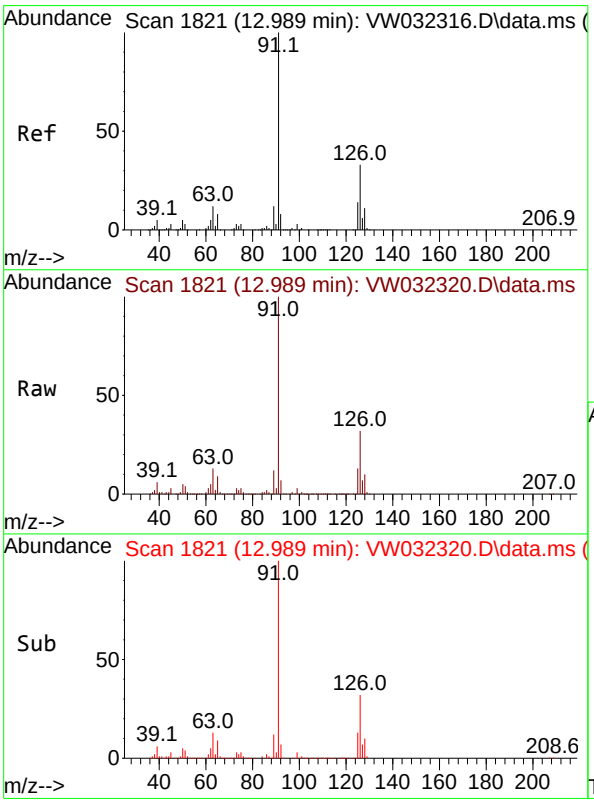
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

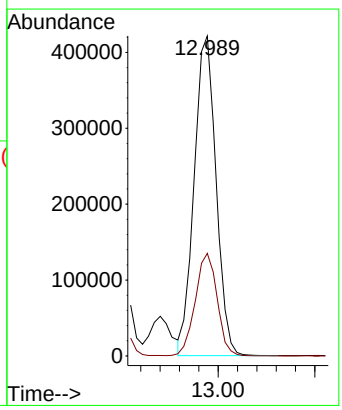


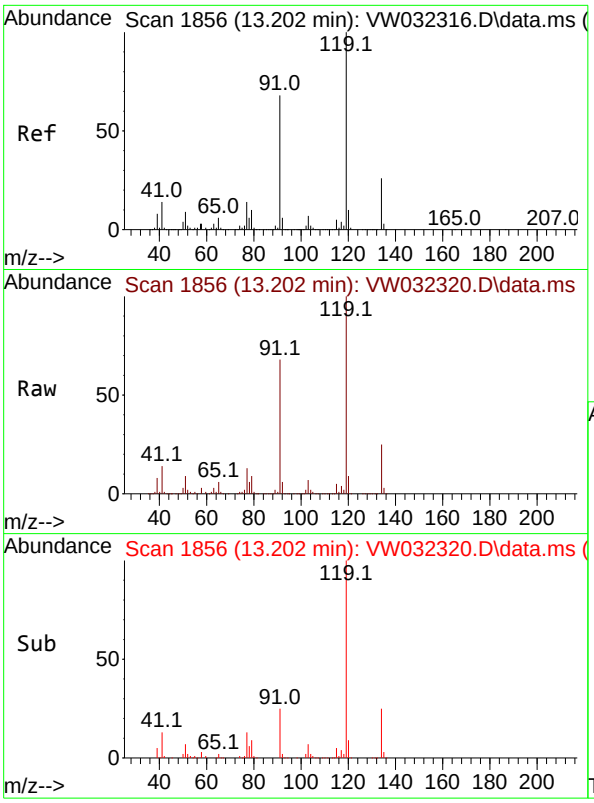


#82
4-Chlorotoluene
Concen: 50.734 ug/l
RT: 12.989 min Scan# 1821
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 91 Resp: 663842

Ion	Ratio	Lower	Upper
91	100		
126	32.1	16.1	48.2





#83
tert-Butylbenzene
Concen: 53.510 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:119 Resp: 61174

Ion	Ratio	Lower	Upper
119	100		
91	70.3	33.8	101.3
134	24.6	12.5	37.5

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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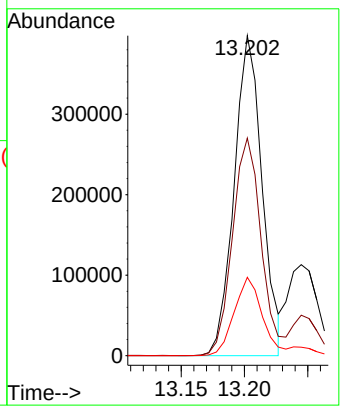
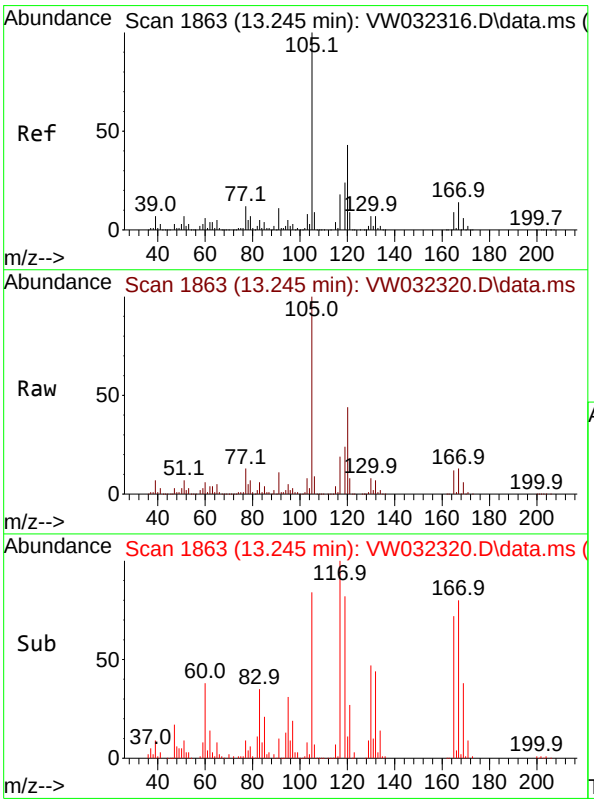
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

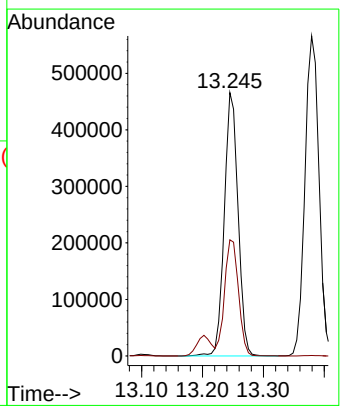


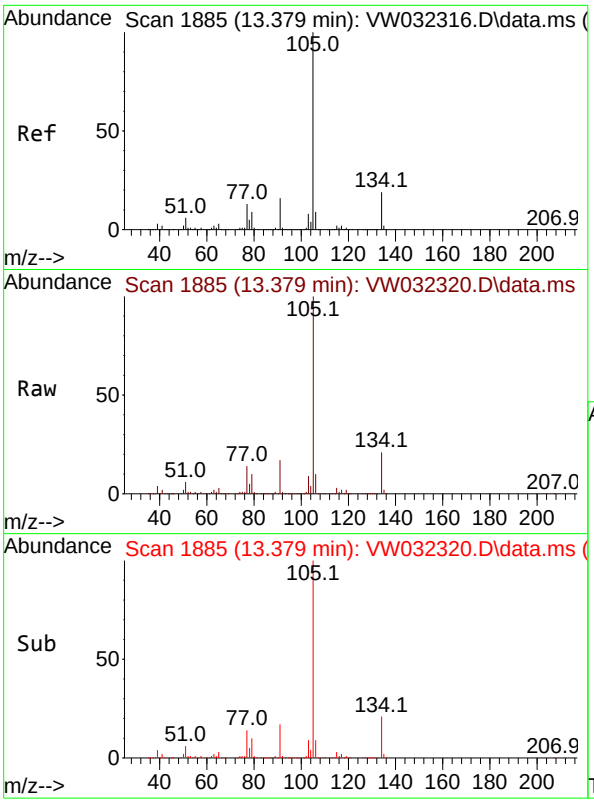


#84
1,2,4-Trimethylbenzene
Concen: 51.522 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:105 Resp: 729966

Ion	Ratio	Lower	Upper
105	100		
120	44.6	22.1	66.3





#85
sec-Butylbenzene
Concen: 51.774 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:105 Resp: 90453

Ion	Ratio	Lower	Upper
105	100		
134	19.6	10.1	30.1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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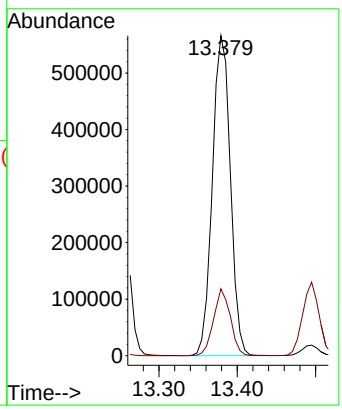
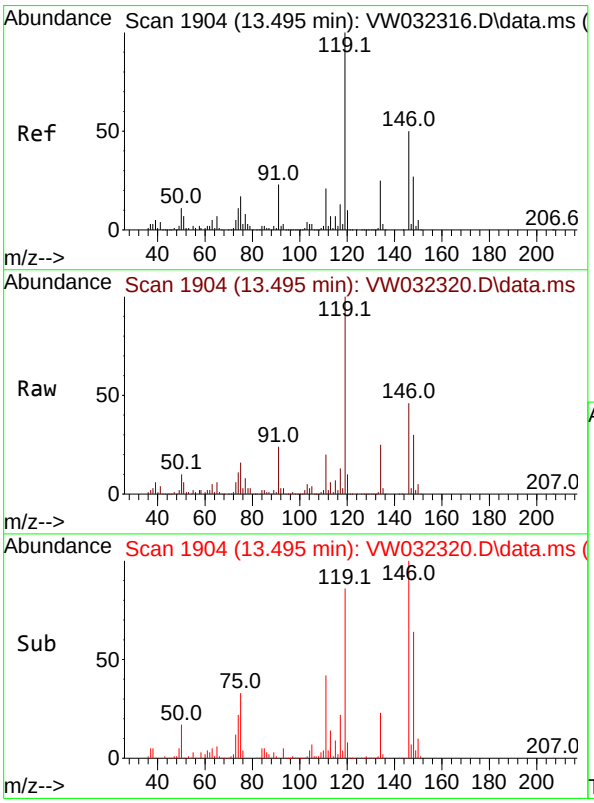
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

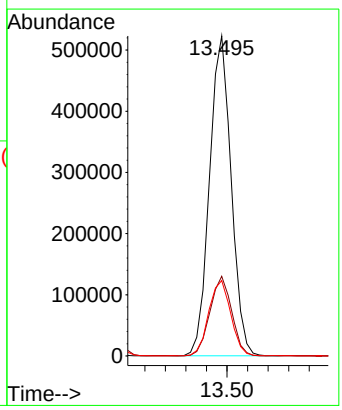


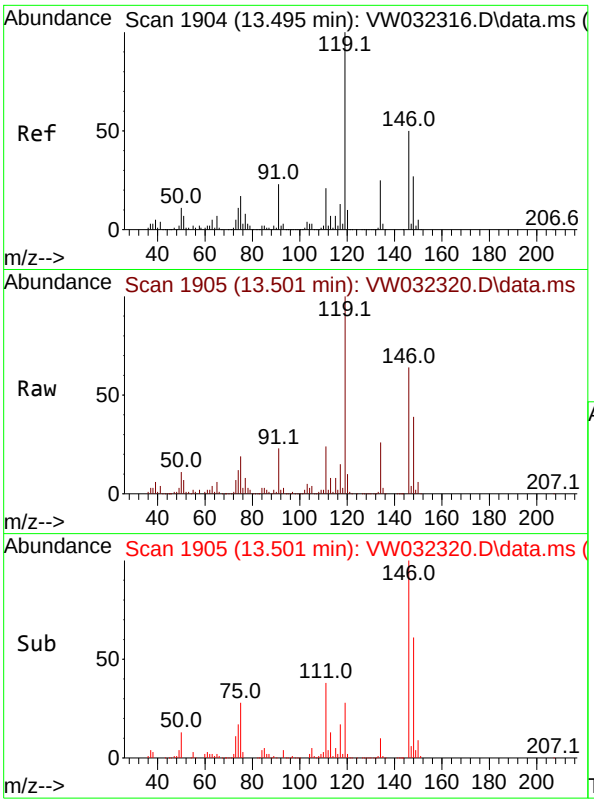


#86
p-Isopropyltoluene
Concen: 52.697 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:119 Resp: 763912

Ion	Ratio	Lower	Upper
119	100		
134	24.9	12.6	37.6
91	24.0	12.4	37.0

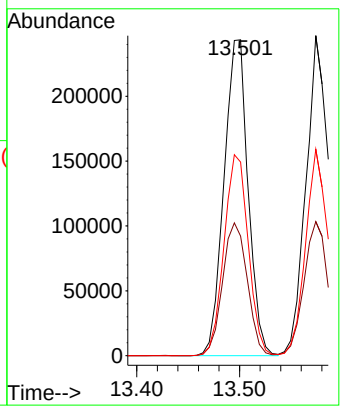




#87
1,3-Dichlorobenzene
Concen: 50.518 ug/l
RT: 13.501 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:146 Resp: 39734

Ion	Ratio	Lower	Upper
146	100		
111	43.0	20.6	61.9
148	64.0	30.6	92.0



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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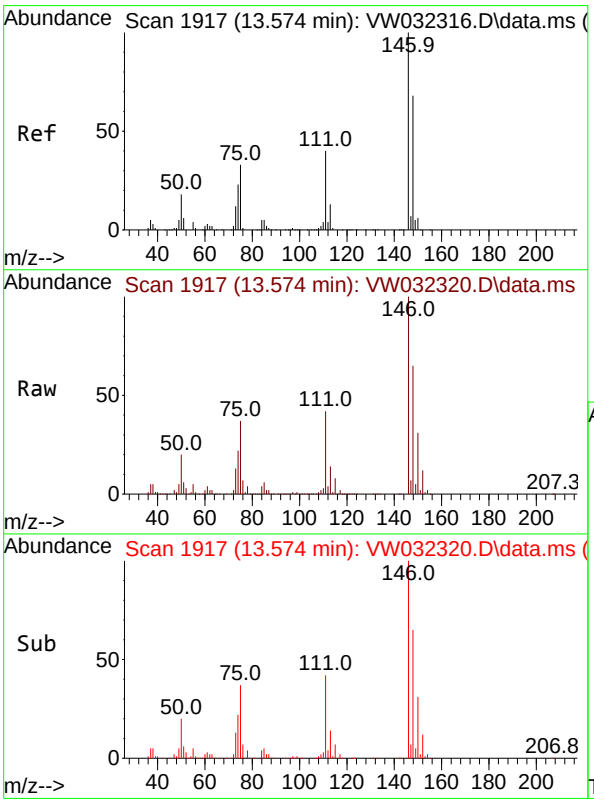
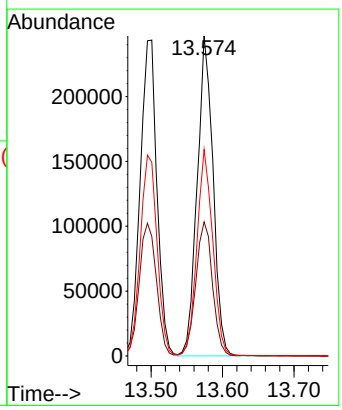
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

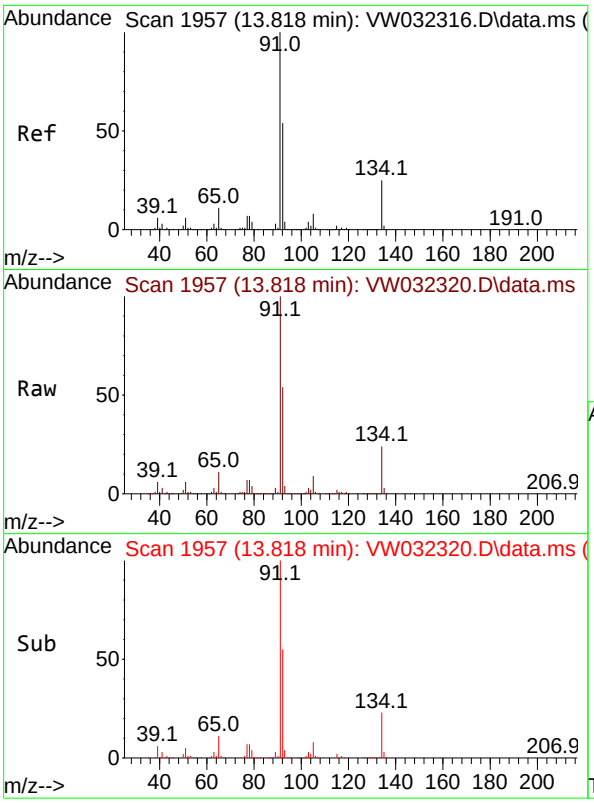


#88
1,4-Dichlorobenzene
Concen: 48.372 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:146 Resp: 380433

Ion	Ratio	Lower	Upper
146	100		
111	43.9	21.3	63.7
148	64.2	33.4	100.1

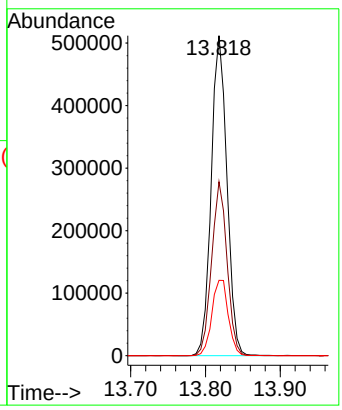




#89
n-Butylbenzene
Concen: 52.880 ug/l
RT: 13.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 91 Resp: 74845

Ion	Ratio	Lower	Upper
91	100		
92	53.6	27.0	81.0
134	24.8	13.1	39.3



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
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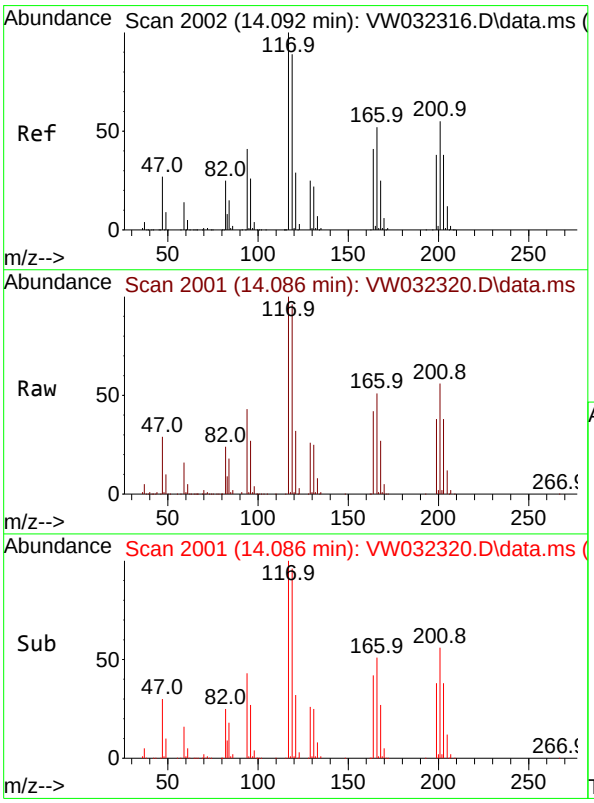
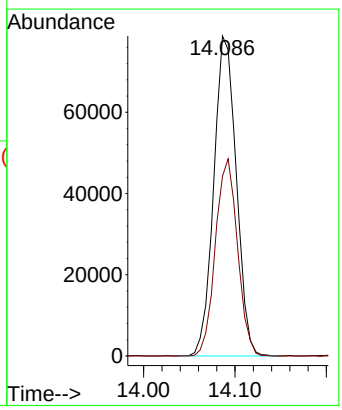
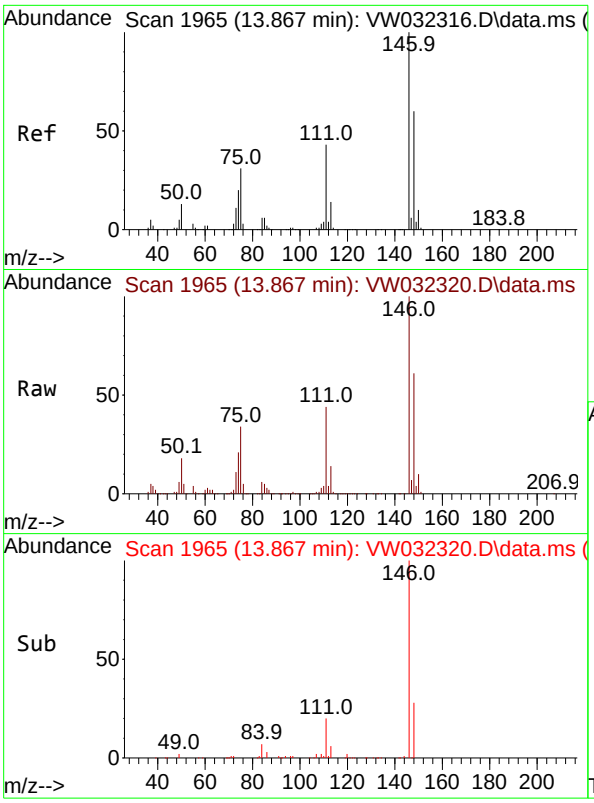


#90
Hexachloroethane
Concen: 51.903 ug/l
RT: 14.086 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:117 Resp: 134862

Ion	Ratio	Lower	Upper
117	100		
201	60.5	32.8	98.4

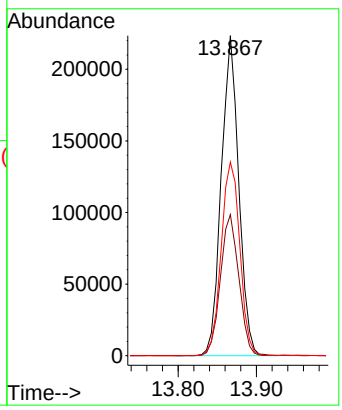




#91
1,2-Dichlorobenzene
Concen: 48.810 ug/l
RT: 13.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:146 Resp: 34703

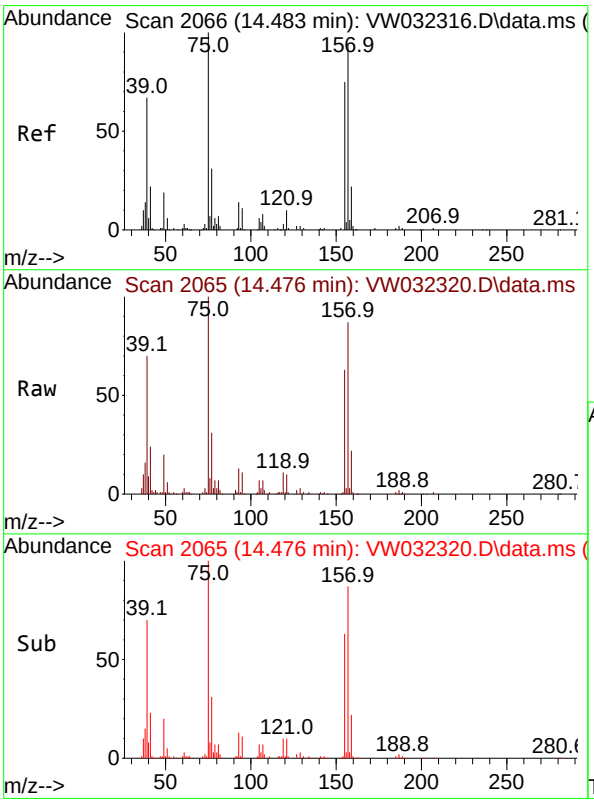
Ion	Ratio	Lower	Upper
146	100		
111	46.4	23.4	70.0
148	64.5	34.1	102.3



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

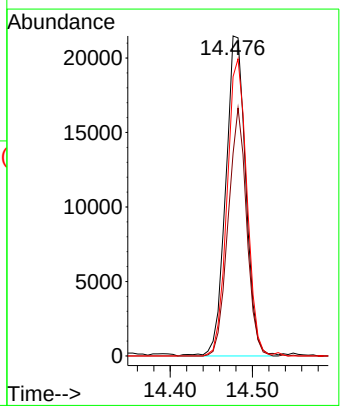
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

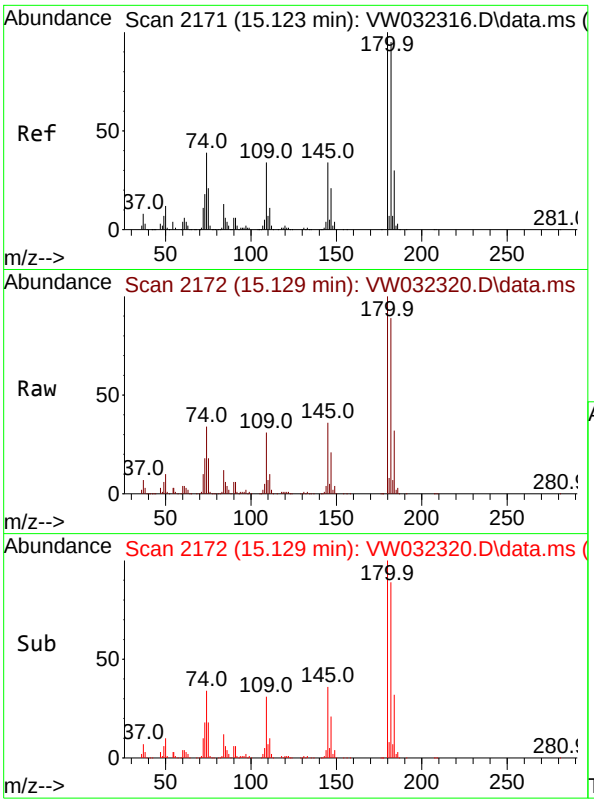


#92
1,2-Dibromo-3-Chloropropane
Concen: 52.139 ug/l
RT: 14.476 min Scan# 2065
Delta R.T. -0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion: 75 Resp: 36524

Ion	Ratio	Lower	Upper
75	100		
155	71.1	40.8	122.5
157	91.4	51.8	155.4





#93
1,2,4-Trichlorobenzene
Concen: 51.178 ug/l
RT: 15.129 min Scan# 2
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

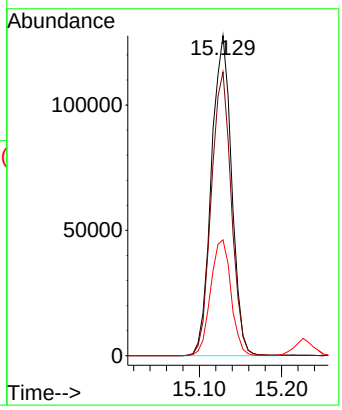
Tgt Ion:180 Resp: 21819

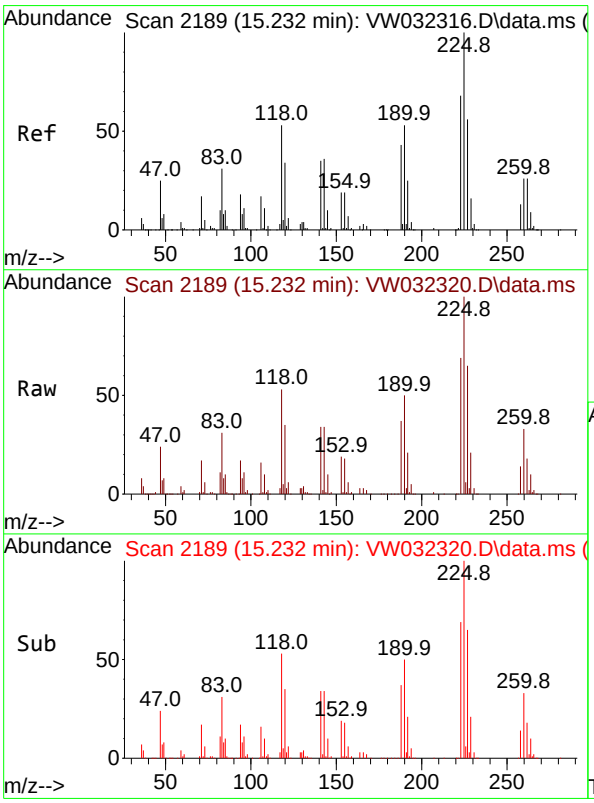
Ion	Ratio	Lower	Upper
180	100		
182	87.8	47.4	142.2
145	36.6	16.4	49.1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025

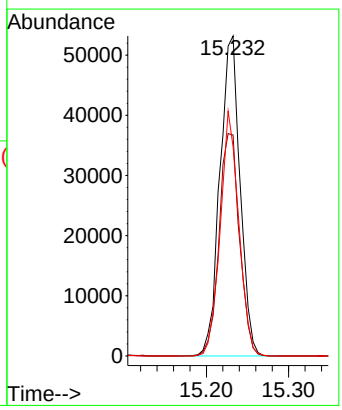


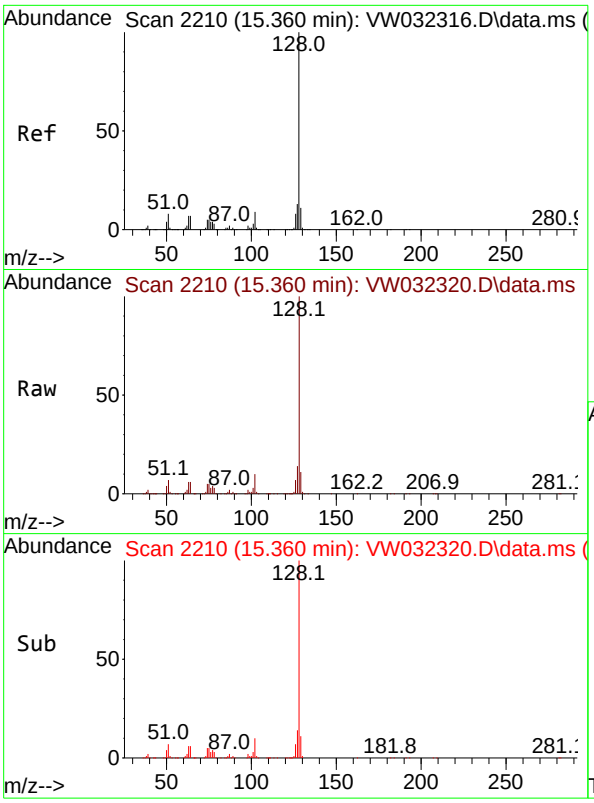


#94
Hexachlorobutadiene
Concen: 46.478 ug/l
RT: 15.232 min Scan# 2189
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:225 Resp: 90599

Ion	Ratio	Lower	Upper
225	100		
223	70.3	29.8	89.3
227	70.0	30.5	91.5

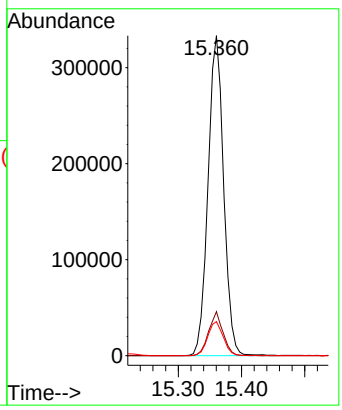




#95
Naphthalene
Concen: 55.881 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:128 Resp: 57214

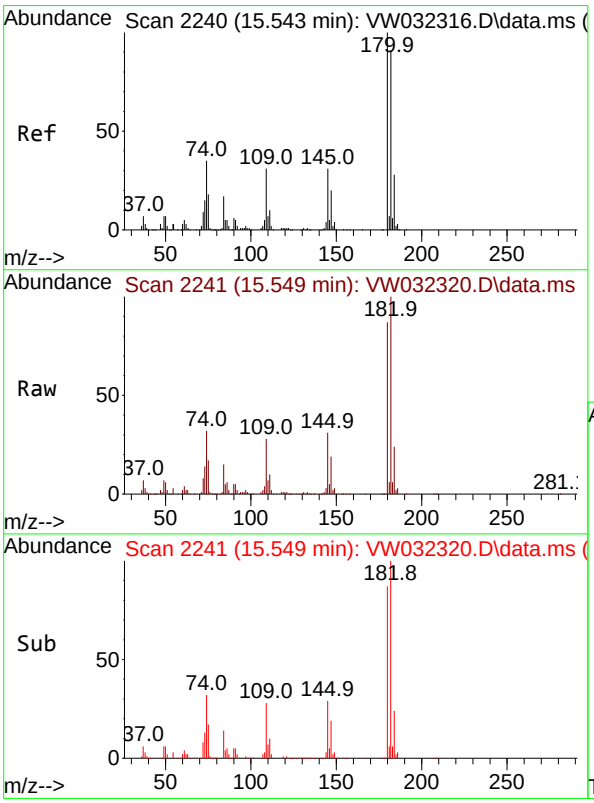
Ion	Ratio	Lower	Upper
128	100		
127	12.7	10.6	16.0
129	10.6	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Manual Integrations
APPROVED

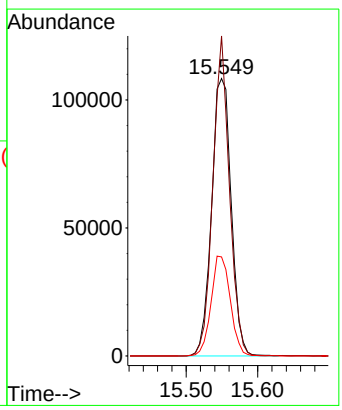
Reviewed By :Mahesh Dadoda 10/03/2025
Supervised By :Semsettin Yesilyurt 10/03/2025



#96
1,2,3-Trichlorobenzene
Concen: 51.417 ug/l
RT: 15.549 min Scan# 2241
Delta R.T. 0.006 min
Lab File: VW032320.D
Acq: 01 Oct 2025 16:04

Tgt Ion:180 Resp: 206623

Ion	Ratio	Lower	Upper
180	100		
182	97.4	47.7	143.1
145	35.4	17.2	51.6



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	99	0.00
2	T	Dichlorodifluoromethane	0.314	0.295	6.1	111	0.00
3	P	Chloromethane	0.484	0.484	0.0	115	0.00
4	C	Vinyl Chloride	0.578	0.556	3.8#	104	0.00
5	T	Bromomethane	0.425	0.402	5.4	104	0.00
6	T	Chloroethane	0.382	0.370	3.1	103	0.00
7	T	Trichlorofluoromethane	0.433	0.432	0.2	102	0.00
8	T	Diethyl Ether	0.375	0.372	0.8	107	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.519	0.501	3.5	107	-0.01
10	T	Methyl Iodide	0.741	0.702	5.3	100	0.00
11	T	Tert butyl alcohol	0.055	0.054	1.8	110	0.00
12	CM	1,1-Dichloroethene	0.564	0.561	0.5#	107	0.00
13	T	Acrolein	0.090	0.084	6.7	103	0.00
14	T	Allyl chloride	0.952	0.948	0.4	103	0.00
15	T	Acrylonitrile	0.195	0.202	-3.6	107	0.00
16	T	Acetone	0.202	0.185	8.4	100	0.00
17	T	Carbon Disulfide	1.538	1.522	1.0	105	0.00
18	T	Methyl Acetate	0.578	0.625	-8.1	99	0.00
19	T	Methyl tert-butyl Ether	1.110	1.140	-2.7	106	0.00
20	T	Methylene Chloride	0.838	0.677	19.2	106	0.00
21	T	trans-1,2-Dichloroethene	0.624	0.631	-1.1	106	0.00
22	T	Diisopropyl ether	1.979	2.027	-2.4	106	0.00
23	T	Vinyl Acetate	1.322	1.394	-5.4	110	0.00
24	P	1,1-Dichloroethane	1.203	1.201	0.2	105	0.00
25	T	2-Butanone	0.275	0.279	-1.5	106	0.00
26	T	2,2-Dichloropropane	0.615	0.597	2.9	103	0.00
27	T	cis-1,2-Dichloroethene	0.749	0.764	-2.0	106	0.00
28	T	Bromochloromethane	0.566	0.572	-1.1	104	0.00
29	T	Tetrahydrofuran	0.173	0.185	-6.9	107	0.00
30	C	Chloroform	1.220	1.244	-2.0#	108	0.00
31	T	Cyclohexane	1.027	0.989	3.7	108	0.00
32	T	1,1,1-Trichloroethane	0.864	0.864	0.0	105	0.00
33	S	1,2-Dichloroethane-d4	0.729	0.739	-1.4	105	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00
35	S	Dibromofluoromethane	0.324	0.318	1.9	106	0.00
36	T	1,1-Dichloropropene	0.457	0.454	0.7	106	0.00
37	T	Ethyl Acetate	0.304	0.316	-3.9	111	0.00
38	T	Carbon Tetrachloride	0.430	0.427	0.7	108	0.00
39	T	Methylcyclohexane	0.551	0.568	-3.1	112	0.00
40	TM	Benzene	1.432	1.398	2.4	106	0.00
41	T	Methacrylonitrile	0.164	0.188	-14.6	117	0.00
42	TM	1,2-Dichloroethane	0.469	0.457	2.6	106	0.00
43	T	Isopropyl Acetate	0.540	0.560	-3.7	110	0.00
44	TM	Trichloroethene	0.335	0.328	2.1	108	0.00
45	C	1,2-Dichloropropane	0.358	0.353	1.4#	106	0.00
46	T	Dibromomethane	0.220	0.219	0.5	106	0.00
47	T	Bromodichloromethane	0.503	0.504	-0.2	108	0.00
48	T	Methyl methacrylate	0.262	0.277	-5.7	110	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.003	0.003	0.0	106	0.00
50	S	Toluene-d8	1.195	1.189	0.5	102	0.00
51	T	4-Methyl-2-Pentanone	0.313	0.324	-3.5	106	0.00
52	CM	Toluene	0.892	0.893	-0.1#	107	0.00
53	T	t-1,3-Dichloropropene	0.488	0.500	-2.5	107	0.00
54	T	cis-1,3-Dichloropropene	0.562	0.564	-0.4	106	0.00
55	T	1,1,2-Trichloroethane	0.294	0.293	0.3	107	0.00
56	T	Ethyl methacrylate	0.411	0.431	-4.9	108	0.00
57	T	1,3-Dichloropropane	0.519	0.513	1.2	105	0.00
58	T	2-Chloroethyl Vinyl ether	0.219	0.243	-11.0	103	0.00
59	T	2-Hexanone	0.220	0.231	-5.0	108	0.00
60	T	Dibromochloromethane	0.334	0.335	-0.3	105	0.00
61	T	1,2-Dibromoethane	0.287	0.285	0.7	105	0.00
62	S	4-Bromofluorobenzene	0.452	0.436	3.5	100	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
64	T	Tetrachloroethene	0.299	0.297	0.7	109	0.00
65	PM	Chlorobenzene	1.100	1.075	2.3	107	0.00
66	T	1,1,1,2-Tetrachloroethane	0.343	0.333	2.9	107	0.00
67	C	Ethyl Benzene	1.834	1.853	-1.0#	109	0.00
68	T	m/p-Xylenes	0.707	0.702	0.7	107	0.00
69	T	o-Xylene	0.661	0.668	-1.1	107	0.00
70	T	Styrene	1.155	1.193	-3.3	108	0.00
71	P	Bromoform	0.196	0.201	-2.6	109	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
73	T	Isopropylbenzene	3.421	3.563	-4.2	108	0.00
74	T	N-amyl acetate	1.091	1.172	-7.4	111	0.00
75	P	1,1,2,2-Tetrachloroethane	0.849	0.863	-1.6	107	0.00
76	T	1,2,3-Trichloropropane	0.658	0.669	-1.7	111	0.00
77	T	Bromobenzene	0.825	0.835	-1.2	103	0.00
78	T	n-propylbenzene	4.273	4.415	-3.3	108	0.00
79	T	2-Chlorotoluene	2.613	2.680	-2.6	107	0.00
80	T	1,3,5-Trimethylbenzene	2.958	3.098	-4.7	107	0.00
81	T	trans-1,4-Dichloro-2-butene	0.260	0.282	-8.5	106	0.00
82	T	4-Chlorotoluene	2.778	2.819	-1.5	107	0.00
83	T	tert-Butylbenzene	2.427	2.597	-7.0	111	0.00
84	T	1,2,4-Trimethylbenzene	3.008	3.099	-3.0	105	0.00
85	T	sec-Butylbenzene	3.709	3.840	-3.5	108	0.00
86	T	p-Isopropyltoluene	3.077	3.243	-5.4	109	0.00
87	T	1,3-Dichlorobenzene	1.670	1.687	-1.0	106	0.00
88	T	1,4-Dichlorobenzene	1.670	1.615	3.3	105	0.00
89	T	n-Butylbenzene	3.005	3.178	-5.8	110	0.00
90	T	Hexachloroethane	0.552	0.573	-3.8	110	0.00
91	T	1,2-Dichlorobenzene	1.509	1.473	2.4	106	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.149	0.155	-4.0	106	0.00
93	T	1,2,4-Trichlorobenzene	0.905	0.926	-2.3	112	0.00
94	T	Hexachlorobutadiene	0.414	0.385	7.0	107	0.00
95	T	Naphthalene	2.174	2.429	-11.7	111	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.853	0.877	-2.8	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	99	0.00
2	T	Dichlorodifluoromethane	50.000	47.081	5.8	111	0.00
3	P	Chloromethane	50.000	49.950	0.1	115	0.00
4	C	Vinyl Chloride	50.000	48.072	3.9#	104	0.00
5	T	Bromomethane	50.000	47.340	5.3	104	0.00
6	T	Chloroethane	50.000	48.536	2.9	103	0.00
7	T	Trichlorofluoromethane	50.000	49.907	0.2	102	0.00
8	T	Diethyl Ether	50.000	49.634	0.7	107	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	48.296	3.4	107	-0.01
10	T	Methyl Iodide	50.000	47.371	5.3	100	0.00
11	T	Tert butyl alcohol	250.000	246.126	1.5	110	0.00
12	CM	1,1-Dichloroethene	50.000	49.800	0.4#	107	0.00
13	T	Acrolein	250.000	233.328	6.7	103	0.00
14	T	Allyl chloride	50.000	49.818	0.4	103	0.00
15	T	Acrylonitrile	250.000	258.222	-3.3	107	0.00
16	T	Acetone	250.000	228.796	8.5	100	0.00
17	T	Carbon Disulfide	50.000	49.511	1.0	105	0.00
18	T	Methyl Acetate	50.000	54.058	-8.1	99	0.00
19	T	Methyl tert-butyl Ether	50.000	51.342	-2.7	106	0.00
20	T	Methylene Chloride	50.000	50.746	-1.5	106	0.00
21	T	trans-1,2-Dichloroethene	50.000	50.555	-1.1	106	0.00
22	T	Diisopropyl ether	50.000	51.202	-2.4	106	0.00
23	T	Vinyl Acetate	250.000	263.598	-5.4	110	0.00
24	P	1,1-Dichloroethane	50.000	49.949	0.1	105	0.00
25	T	2-Butanone	250.000	253.341	-1.3	106	0.00
26	T	2,2-Dichloropropane	50.000	48.528	2.9	103	0.00
27	T	cis-1,2-Dichloroethene	50.000	50.954	-1.9	106	0.00
28	T	Bromochloromethane	50.000	50.575	-1.2	104	0.00
29	T	Tetrahydrofuran	250.000	267.648	-7.1	107	0.00
30	C	Chloroform	50.000	50.980	-2.0#	108	0.00
31	T	Cyclohexane	50.000	48.179	3.6	108	0.00
32	T	1,1,1-Trichloroethane	50.000	49.989	0.0	105	0.00
33	S	1,2-Dichloroethane-d4	50.000	50.638	-1.3	105	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	102	0.00
35	S	Dibromofluoromethane	50.000	49.108	1.8	106	0.00
36	T	1,1-Dichloropropene	50.000	49.661	0.7	106	0.00
37	T	Ethyl Acetate	50.000	51.871	-3.7	111	0.00
38	T	Carbon Tetrachloride	50.000	49.617	0.8	108	0.00
39	T	Methylcyclohexane	50.000	51.537	-3.1	112	0.00
40	TM	Benzene	50.000	48.794	2.4	106	0.00
41	T	Methacrylonitrile	50.000	57.284	-14.6	117	0.00
42	TM	1,2-Dichloroethane	50.000	48.701	2.6	106	0.00
43	T	Isopropyl Acetate	50.000	51.877	-3.8	110	0.00
44	TM	Trichloroethene	50.000	48.904	2.2	108	0.00
45	C	1,2-Dichloropropane	50.000	49.299	1.4#	106	0.00
46	T	Dibromomethane	50.000	49.841	0.3	106	0.00
47	T	Bromodichloromethane	50.000	50.162	-0.3	108	0.00
48	T	Methyl methacrylate	50.000	52.884	-5.8	110	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1058.229	-5.8	106	0.00
50	S	Toluene-d8	50.000	49.731	0.5	102	0.00
51	T	4-Methyl-2-Pentanone	250.000	258.790	-3.5	106	0.00
52	CM	Toluene	50.000	50.061	-0.1#	107	0.00
53	T	t-1,3-Dichloropropene	50.000	51.234	-2.5	107	0.00
54	T	cis-1,3-Dichloropropene	50.000	50.209	-0.4	106	0.00
55	T	1,1,2-Trichloroethane	50.000	49.869	0.3	107	0.00
56	T	Ethyl methacrylate	50.000	52.367	-4.7	108	0.00
57	T	1,3-Dichloropropane	50.000	49.394	1.2	105	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	277.181	-10.9	103	0.00
59	T	2-Hexanone	250.000	262.215	-4.9	108	0.00
60	T	Dibromochloromethane	50.000	50.187	-0.4	105	0.00
61	T	1,2-Dibromoethane	50.000	49.732	0.5	105	0.00
62	S	4-Bromofluorobenzene	50.000	48.218	3.6	100	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	102	0.00
64	T	Tetrachloroethene	50.000	49.611	0.8	109	0.00
65	PM	Chlorobenzene	50.000	48.862	2.3	107	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	48.644	2.7	107	0.00
67	C	Ethyl Benzene	50.000	50.513	-1.0#	109	0.00
68	T	m/p-Xylenes	100.000	99.276	0.7	107	0.00
69	T	o-Xylene	50.000	50.523	-1.0	107	0.00
70	T	Styrene	50.000	51.667	-3.3	108	0.00
71	P	Bromoform	50.000	51.207	-2.4	109	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	100	0.00
73	T	Isopropylbenzene	50.000	52.076	-4.2	108	0.00
74	T	N-amyl acetate	50.000	53.697	-7.4	111	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	50.822	-1.6	107	0.00
76	T	1,2,3-Trichloropropane	50.000	50.813	-1.6	111	0.00
77	T	Bromobenzene	50.000	50.659	-1.3	103	0.00
78	T	n-propylbenzene	50.000	51.657	-3.3	108	0.00
79	T	2-Chlorotoluene	50.000	51.287	-2.6	107	0.00
80	T	1,3,5-Trimethylbenzene	50.000	52.365	-4.7	107	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	54.360	-8.7	106	0.00
82	T	4-Chlorotoluene	50.000	50.734	-1.5	107	0.00
83	T	tert-Butylbenzene	50.000	53.510	-7.0	111	0.00
84	T	1,2,4-Trimethylbenzene	50.000	51.522	-3.0	105	0.00
85	T	sec-Butylbenzene	50.000	51.774	-3.5	108	0.00
86	T	p-Isopropyltoluene	50.000	52.697	-5.4	109	0.00
87	T	1,3-Dichlorobenzene	50.000	50.518	-1.0	106	0.00
88	T	1,4-Dichlorobenzene	50.000	48.372	3.3	105	0.00
89	T	n-Butylbenzene	50.000	52.880	-5.8	110	0.00
90	T	Hexachloroethane	50.000	51.903	-3.8	110	0.00
91	T	1,2-Dichlorobenzene	50.000	48.810	2.4	106	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	52.139	-4.3	106	0.00
93	T	1,2,4-Trichlorobenzene	50.000	51.178	-2.4	112	0.00
94	T	Hexachlorobutadiene	50.000	46.478	7.0	107	0.00
95	T	Naphthalene	50.000	55.881	-11.8	111	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032320.D
Acq On : 01 Oct 2025 16:04
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW100125

Quant Time: Oct 02 21:27:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	51.417	-2.8	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VW032378.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance
Contract: AECO02
Lab Code: ACE
SDG No.: Q3395
Instrument ID: MSVOA_W
Calibration Date/Time: 10/20/2025 10:20
Lab File ID: VW032378.D
Init. Calib. Date(s): 10/01/2025 10/01/2025
Heated Purge: (Y/N) Y
Init. Calib. Time(s): 13:12 15:20
GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.314	0.311		-0.95	20
Chloromethane	0.484	0.459	0.1	-5.16	20
Vinyl Chloride	0.578	0.608		5.19	20
Bromomethane	0.425	0.444		4.47	20
Chloroethane	0.382	0.416		8.9	20
Trichlorofluoromethane	0.433	0.501		15.7	20
1,1,2-Trichlorotrifluoroethane	0.519	0.563		8.48	20
1,1-Dichloroethene	0.564	0.625		10.82	20
Acetone	0.202	0.196		-2.97	20
Carbon Disulfide	1.538	1.711		11.25	20
Methyl tert-butyl Ether	1.110	1.198		7.93	20
Methyl Acetate	0.578	0.649		12.28	20
Methylene Chloride	0.838	0.723		-13.72	20
trans-1,2-Dichloroethene	0.624	0.698		11.86	20
1,1-Dichloroethane	1.203	1.322	0.1	9.89	20
Cyclohexane	1.027	1.031		0.39	20
2-Butanone	0.275	0.276		0.36	20
Carbon Tetrachloride	0.430	0.504		17.21	20
cis-1,2-Dichloroethene	0.749	0.820		9.48	20
Bromochloromethane	0.566	0.610		7.77	20
Chloroform	1.220	1.377		12.87	20
1,1,1-Trichloroethane	0.864	0.981		13.54	20
Methylcyclohexane	0.551	0.593		7.62	20
Benzene	1.432	1.599		11.66	20
1,2-Dichloroethane	0.469	0.515		9.81	20
Trichloroethene	0.335	0.366		9.25	20
1,2-Dichloropropane	0.358	0.402		12.29	20
Bromodichloromethane	0.503	0.597		18.69	20
4-Methyl-2-Pentanone	0.313	0.344		9.9	20
Toluene	0.892	1.027		15.14	20
t-1,3-Dichloropropene	0.488	0.563		15.37	20
cis-1,3-Dichloropropene	0.562	0.643		14.41	20
1,1,2-Trichloroethane	0.294	0.336		14.29	20
2-Hexanone	0.220	0.244		10.91	20
Dibromochloromethane	0.334	0.413		23.65	20
1,2-Dibromoethane	0.287	0.319		11.15	20
Tetrachloroethene	0.299	0.315		5.35	20
Chlorobenzene	1.100	1.171	0.3	6.45	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Raw Data: **VW032378.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance
Contract: AECO02
Lab Code: ACE
SDG No.: Q3395
Instrument ID: MSVOA_W
Calibration Date/Time: 10/20/2025 10:20
Lab File ID: VW032378.D
Init. Calib. Date(s): 10/01/2025 10/01/2025
Heated Purge: (Y/N) Y
Init. Calib. Time(s): 13:12 15:20
GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.834	2.060		12.32	20
m/p-Xylenes	0.707	0.797		12.73	20
o-Xylene	0.661	0.740		11.95	20
Styrene	1.155	1.345		16.45	20
Bromoform	0.196	0.242	0.1	23.47	20
Isopropylbenzene	3.421	3.733		9.12	20
1,1,2,2-Tetrachloroethane	0.849	0.868	0.3	2.24	20
1,3-Dichlorobenzene	1.670	1.766		5.75	20
1,4-Dichlorobenzene	1.670	1.805		8.08	20
1,2-Dichlorobenzene	1.509	1.604		6.3	20
1,2-Dibromo-3-Chloropropane	0.149	0.158		6.04	20
1,2,4-Trichlorobenzene	0.905	0.957		5.75	20
1,2,3-Trichlorobenzene	0.853	0.902		5.74	20
1,2-Dichloroethane-d4	0.729	0.743		1.92	20
Dibromofluoromethane	0.324	0.347		7.1	20
Toluene-d8	1.195	1.278		6.95	20
4-Bromofluorobenzene	0.452	0.470		3.98	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel
10/21/2025
Supervised By :Semsettin Yesilyurt
10/21/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	7.965	168	276051	50.000 ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	500417	50.000 ug/l	0.00
63) Chlorobenzene-d5	11.629	117	466876	50.000 ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	234766	50.000 ug/l	0.00
System Monitoring Compounds					
33) 1,2-Dichloroethane-d4	8.319	65	205038	50.924 ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 101.840%		
35) Dibromofluoromethane	7.904	113	173699	53.598 ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 107.200%		
50) Toluene-d8	10.325	98	639666	53.480 ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 106.960%		
62) 4-Bromofluorobenzene	12.617	95	235180	52.021 ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 104.040%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.046	85	85790	49.525 ug/l	94
3) Chloromethane	2.259	50	126734	47.414 ug/l	100
4) Vinyl Chloride	2.405	62	167782	52.579 ug/l	98
5) Bromomethane	2.826	94	122514	52.244 ug/l	99
6) Chloroethane	2.972	64	114864	54.521 ug/l	94
7) Trichlorofluoromethane	3.308	101	138344	57.903 ug/l	91
8) Diethyl Ether	3.722	74	110844	53.538 ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.106	101	155412	54.231 ug/l	93
10) Methyl Iodide	4.307	142	232975	56.977 ug/l	97
11) Tert butyl alcohol	5.216	59	64740	212.423 ug/l	97
12) 1,1-Dichloroethene	4.076	96	172650	55.494 ug/l	92
13) Acrolein	3.936	56	43147	87.232 ug/l	97
14) Allyl chloride	4.704	41	281514	53.572 ug/l	90
15) Acrylonitrile	5.405	53	276868	257.055 ug/l	99
16) Acetone	4.167	43	269841	242.037 ug/l	98
17) Carbon Disulfide	4.417	76	472236	55.631 ug/l	99
18) Methyl Acetate	4.710	43	179023	56.056 ug/l	97
19) Methyl tert-butyl Ether	5.466	73	330675	53.964 ug/l	96
20) Methylene Chloride	4.960	84	199566	54.562 ug/l	94
21) trans-1,2-Dichloroethene	5.460	96	192705	55.946 ug/l	94
22) Diisopropyl ether	6.344	45	604917	55.352 ug/l	92
23) Vinyl Acetate	6.283	43	1937061	265.367 ug/l	98
24) 1,1-Dichloroethane	6.246	63	364897	54.958 ug/l	99
25) 2-Butanone	7.197	43	380931	250.876 ug/l	98
26) 2,2-Dichloropropane	7.185	77	193268	56.907 ug/l	99
27) cis-1,2-Dichloroethene	7.197	96	226473	54.730 ug/l	93
28) Bromochloromethane	7.532	49	168276	53.869 ug/l	88
29) Tetrahydrofuran	7.551	42	247520	259.216 ug/l	95
30) Chloroform	7.691	83	380098	56.448 ug/l	100
31) Cyclohexane	7.971	56	284615	50.212 ug/l	95
32) 1,1,1-Trichloroethane	7.892	97	270780	56.749 ug/l	99
36) 1,1-Dichloropropene	8.099	75	256579	56.099 ug/l	99
37) Ethyl Acetate	7.270	43	155800	51.178 ug/l	99
38) Carbon Tetrachloride	8.081	117	252146	58.585 ug/l	98
39) Methylcyclohexane	9.343	83	296823	53.803 ug/l	95
40) Benzene	8.337	78	800201	55.818 ug/l	95

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel
10/21/2025
Supervised By :Semsettin Yesilyurt
10/21/2025

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	7.502	41	89114	54.317 ug/l		93
42) 1,2-Dichloroethane	8.410	62	257863	54.972 ug/l		99
43) Isopropyl Acetate	8.435	43	295528	54.722 ug/l		99
44) Trichloroethene	9.099	130	182918	54.492 ug/l		92
45) 1,2-Dichloropropane	9.374	63	200994	56.170 ug/l		100
46) Dibromomethane	9.465	93	123268	56.022 ug/l		95
47) Bromodichloromethane	9.654	83	298867	59.385 ug/l		98
48) Methyl methacrylate	9.441	41	138219	52.640 ug/l		95
49) 1,4-Dioxane	9.465	88	33056	1099.123 ug/l		95
51) 4-Methyl-2-Pentanone	10.215	43	860318	275.041 ug/l		99
52) Toluene	10.392	92	513800	57.552 ug/l		98
53) t-1,3-Dichloropropene	10.611	75	281818	57.719 ug/l		100
54) cis-1,3-Dichloropropene	10.075	75	321876	57.231 ug/l		94
55) 1,1,2-Trichloroethane	10.788	97	168313	57.233 ug/l		93
56) Ethyl methacrylate	10.648	69	231959	56.352 ug/l	#	94
57) 1,3-Dichloropropane	10.934	76	289077	55.655 ug/l		100
58) 2-Chloroethyl Vinyl ether	9.928	63	629980	287.576 ug/l		96
59) 2-Hexanone	10.971	43	610396	276.684 ug/l		99
60) Dibromochloromethane	11.129	129	206640	61.883 ug/l		97
61) 1,2-Dibromoethane	11.239	107	159483	55.617 ug/l		97
64) Tetrachloroethene	10.867	164	147123	52.663 ug/l		96
65) Chlorobenzene	11.660	112	546708	53.221 ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.733	131	188463	58.904 ug/l		99
67) Ethyl Benzene	11.733	91	961868	56.174 ug/l		98
68) m/p-Xylenes	11.837	106	744366	112.736 ug/l		100
69) o-Xylene	12.166	106	345708	55.988 ug/l		98
70) Styrene	12.178	104	628107	58.262 ug/l		98
71) Bromoform	12.349	173	112897	61.560 ug/l	#	95
73) Isopropylbenzene	12.464	105	876325	54.560 ug/l		100
74) N-amyl acetate	12.269	43	262286	51.189 ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.714	83	203868	51.119 ug/l		99
76) 1,2,3-Trichloropropane	12.763	75	153664m	49.739 ug/l		
77) Bromobenzene	12.745	156	208716	53.907 ug/l		91
78) n-propylbenzene	12.800	91	1092673	54.462 ug/l		98
79) 2-Chlorotoluene	12.891	91	652667	53.203 ug/l		99
80) 1,3,5-Trimethylbenzene	12.940	105	752875	54.209 ug/l		97
81) trans-1,4-Dichloro-2-b...	12.513	75	70326	57.667 ug/l		92
82) 4-Chlorotoluene	12.983	91	709987	54.437 ug/l		98
83) tert-Butylbenzene	13.202	119	640849	56.237 ug/l		99
84) 1,2,4-Trimethylbenzene	13.245	105	771106	54.602 ug/l		99
85) sec-Butylbenzene	13.379	105	936126	53.756 ug/l		99
86) p-Isopropyltoluene	13.495	119	800220	55.381 ug/l		99
87) 1,3-Dichlorobenzene	13.495	146	414615	52.884 ug/l		97
88) 1,4-Dichlorobenzene	13.574	146	423851	54.068 ug/l		96
89) n-Butylbenzene	13.818	91	753562	53.414 ug/l		98
90) Hexachloroethane	14.086	117	154192	59.535 ug/l		95
91) 1,2-Dichlorobenzene	13.861	146	376678	53.150 ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.476	75	37022	53.021 ug/l		89
93) 1,2,4-Trichlorobenzene	15.123	180	224715	52.878 ug/l		99
94) Hexachlorobutadiene	15.226	225	105887	54.498 ug/l		92
95) Naphthalene	15.360	128	542330	53.140 ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	211711	52.854 ug/l		100

Sample Results: **VW032378.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel
10/21/2025
Supervised By :Semsettin Yesilyurt
10/21/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

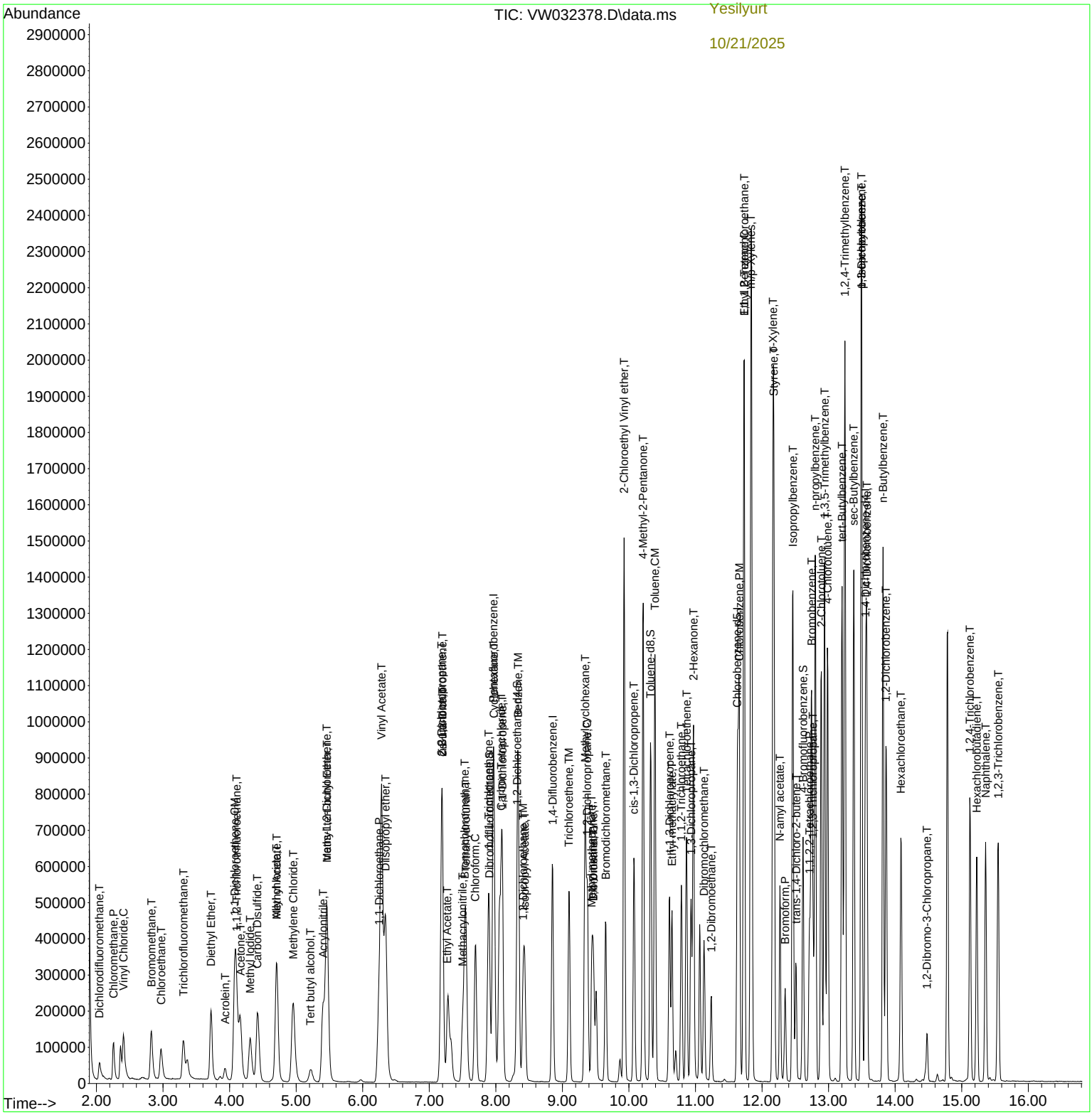
Manual Integrations APPROVED

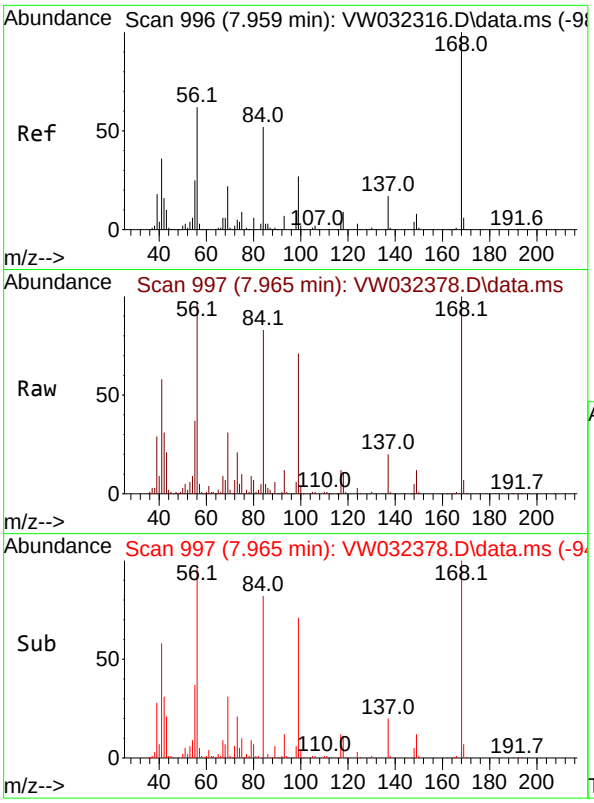
Reviewed By :Amit Patel

10/21/2025

Supervised By :Semsettin Yesilyurt

10/21/2025

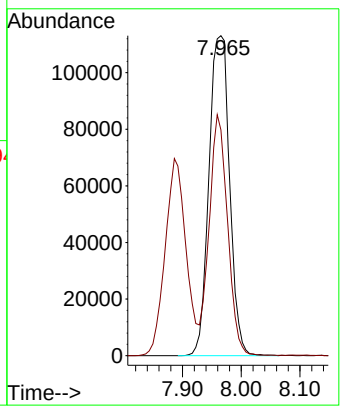




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.965 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:168 Resp: 27605

Ion	Ratio	Lower	Upper
168	100		
99	70.4	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
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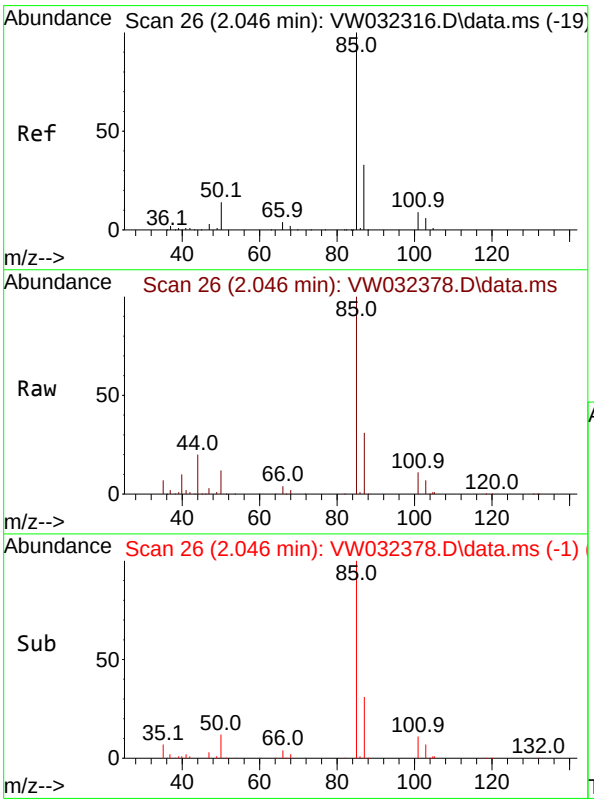
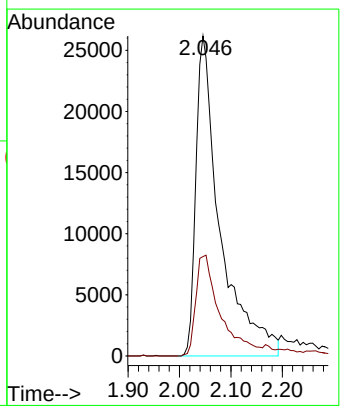
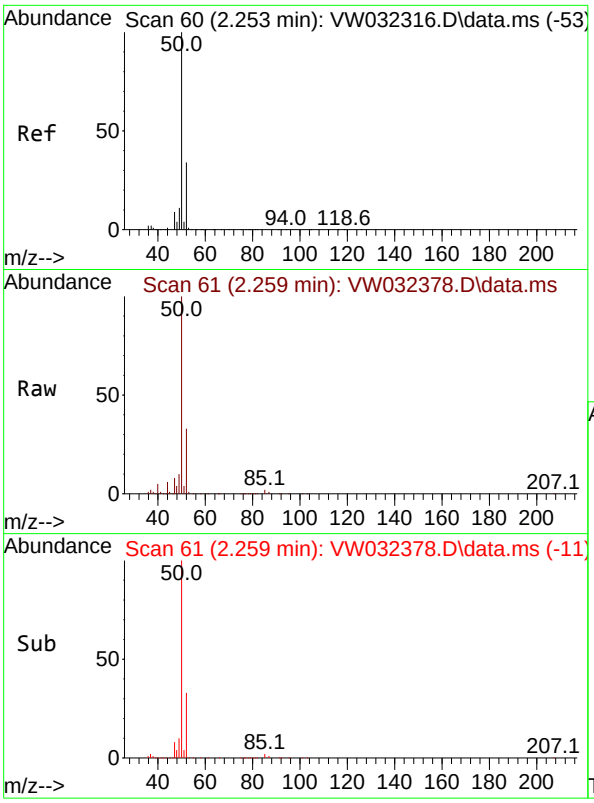


#2
Dichlorodifluoromethane
Concen: 49.525 ug/l
RT: 2.046 min Scan# 26
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 85 Resp: 85790

Ion	Ratio	Lower	Upper
85	100		
87	31.0	17.2	51.6

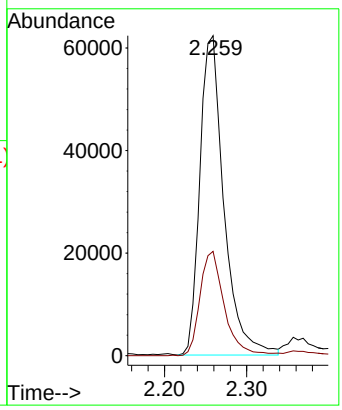




#3
Chloromethane
Concen: 47.414 ug/l
RT: 2.259 min Scan# 6
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 50 Resp: 12673

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.1	39.1



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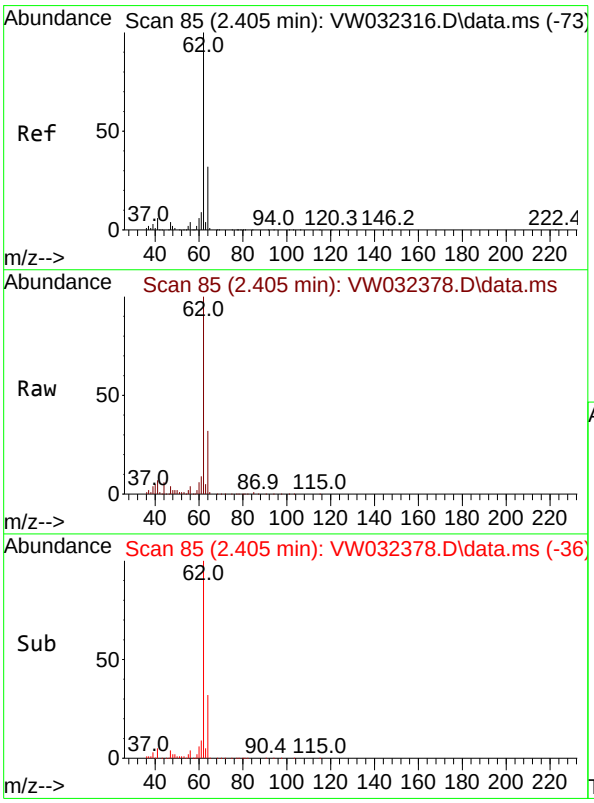
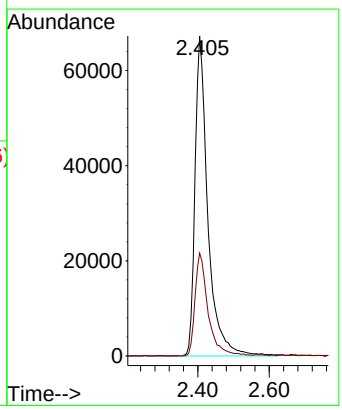
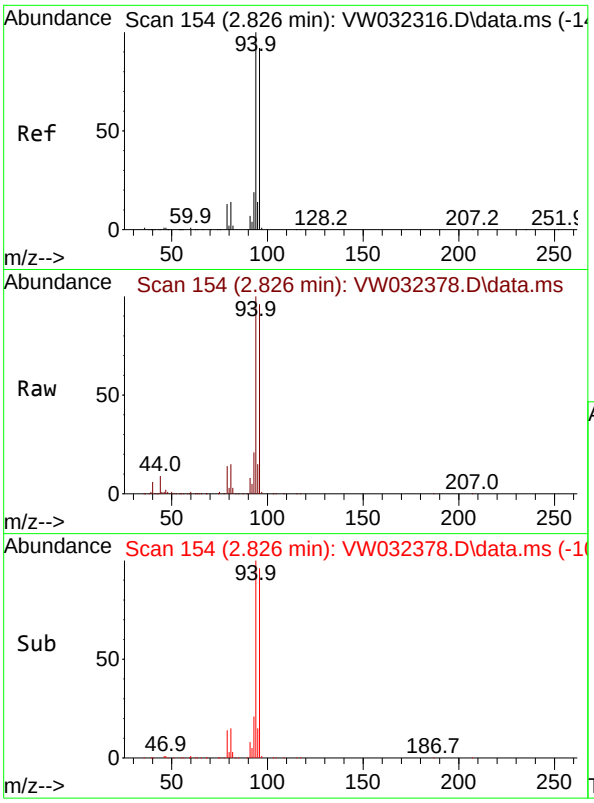


#4
Vinyl Chloride
Concen: 52.579 ug/l
RT: 2.405 min Scan# 85
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 62 Resp: 167782

Ion	Ratio	Lower	Upper
62	100		
64	32.0	24.8	37.2

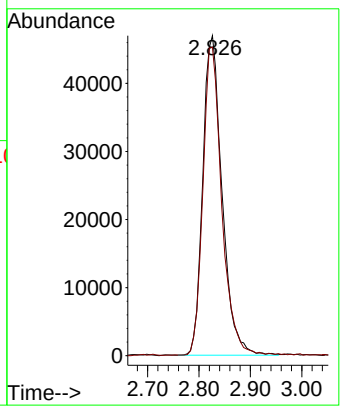




#5
Bromomethane
Concen: 52.244 ug/l
RT: 2.826 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 94 Resp: 12251

Ion	Ratio	Lower	Upper
94	100		
96	96.3	76.6	115.0



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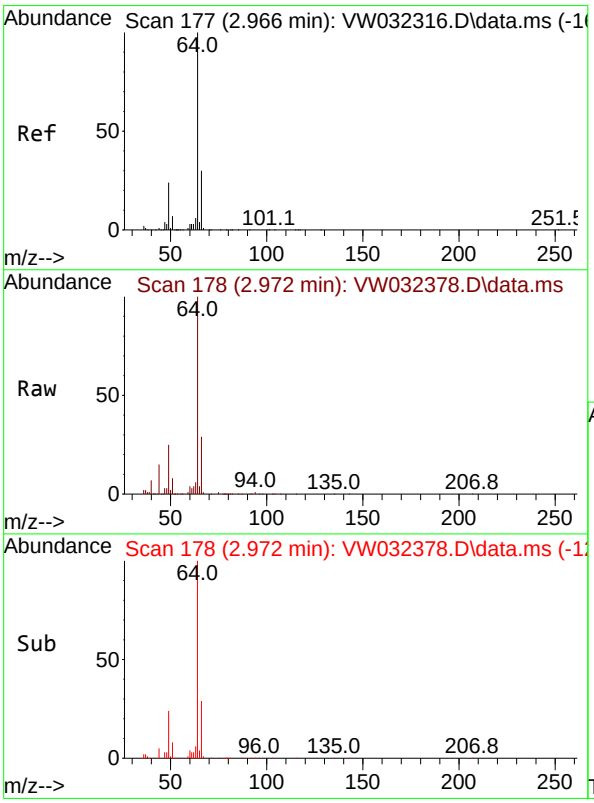
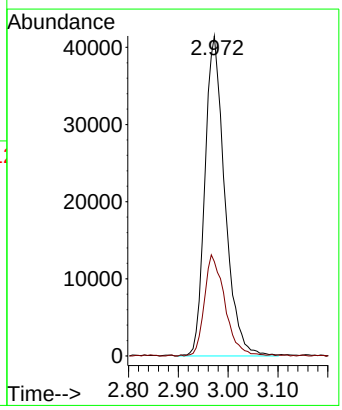
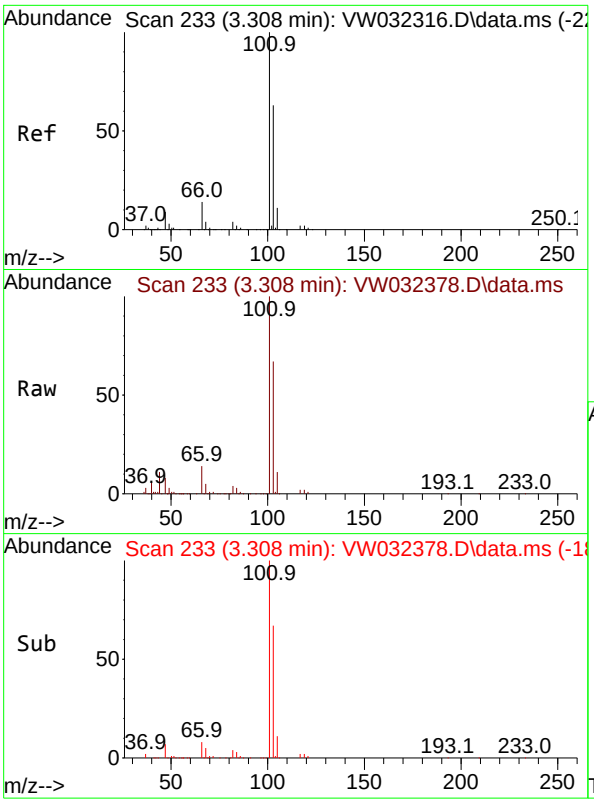


#6
Chloroethane
Concen: 54.521 ug/l
RT: 2.972 min Scan# 178
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 64 Resp: 114864

Ion	Ratio	Lower	Upper
64	100		
66	29.2	26.2	39.4

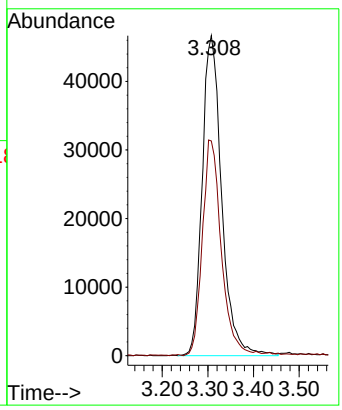




#7
Trichlorofluoromethane
Concen: 57.903 ug/l
RT: 3.308 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:101 Resp: 13834

Ion	Ratio	Lower	Upper
101	100		
103	66.8	47.8	71.8



Instrument :
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ClientSampleId :
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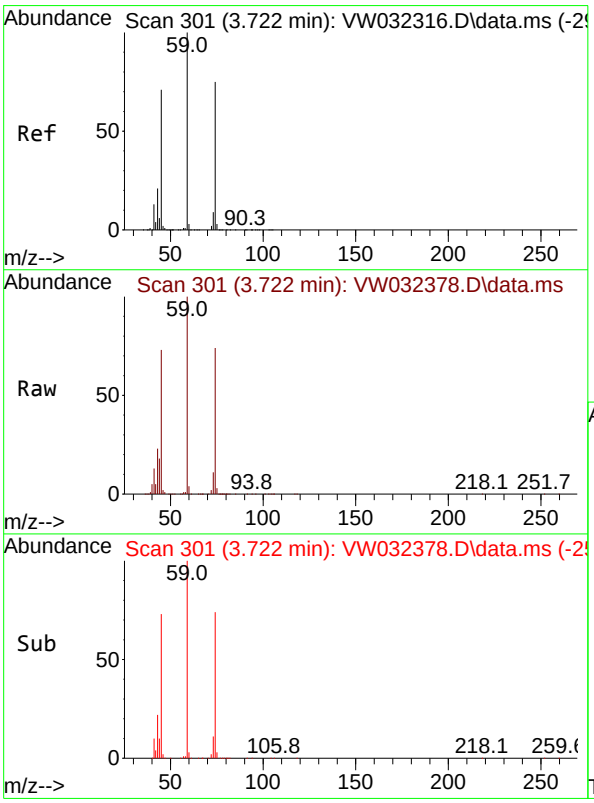
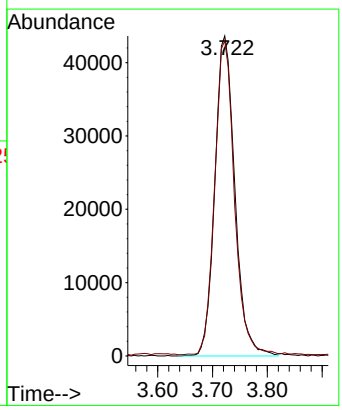
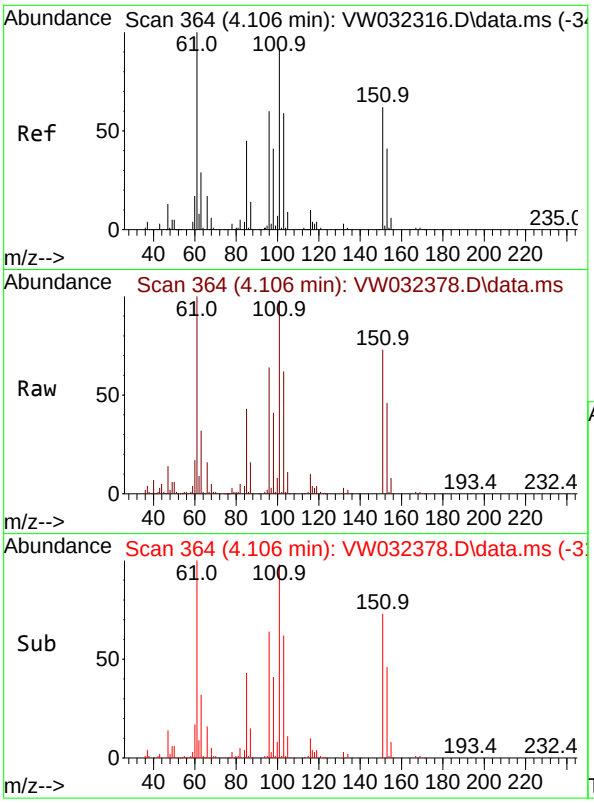


#8
Diethyl Ether
Concen: 53.538 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 74 Resp: 110844

Ion	Ratio	Lower	Upper
74	100		
45	96.3	43.1	129.4

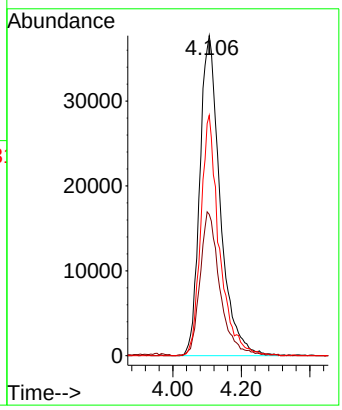




#9
1,1,2-Trichlorotrifluoroethane
Concen: 54.231 ug/l
RT: 4.106 min Scan# 3
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:101 Resp: 15541

Ion	Ratio	Lower	Upper
101	100		
85	44.0	37.1	55.7
151	68.5	61.5	92.3



Instrument :
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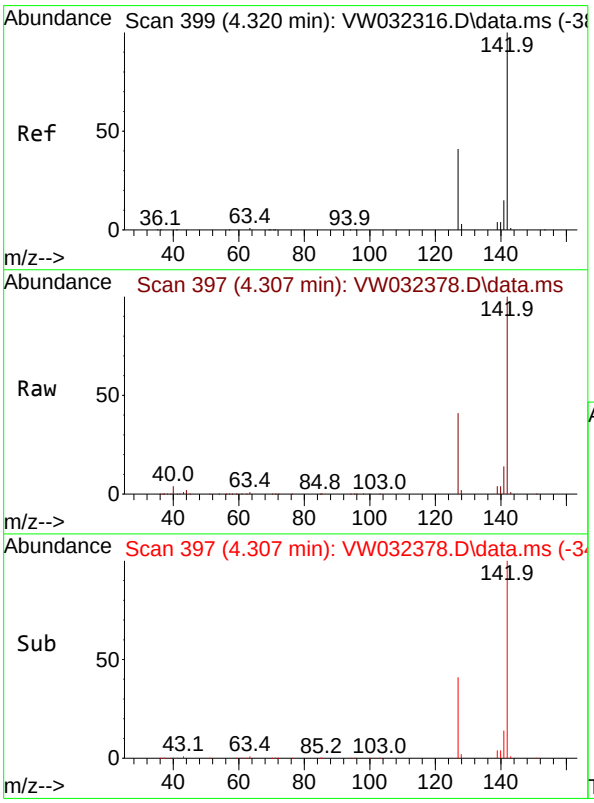
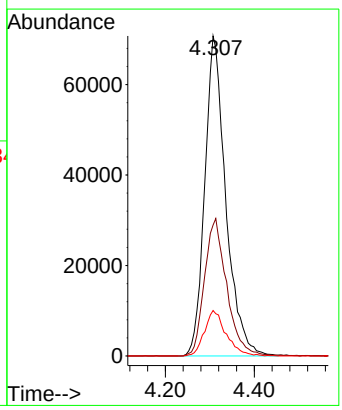
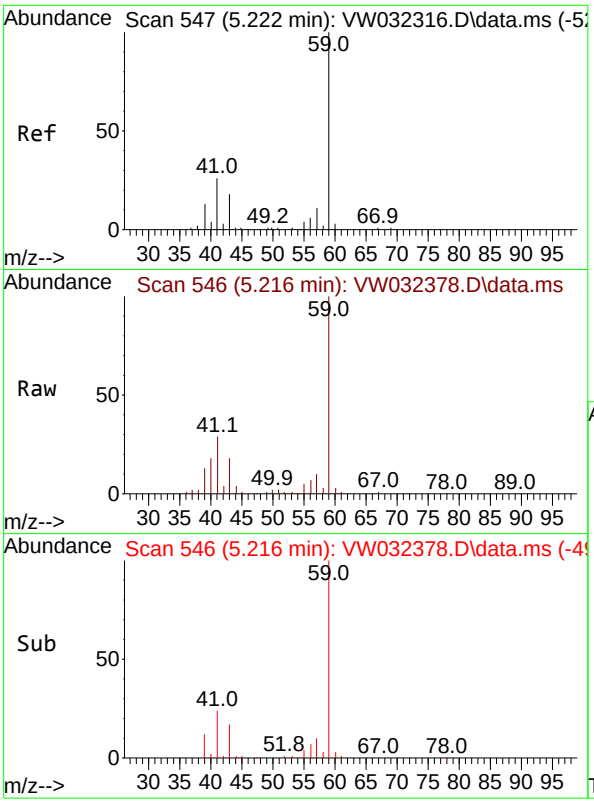


#10
Methyl Iodide
Concen: 56.977 ug/l
RT: 4.307 min Scan# 397
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:142 Resp: 232975

Ion	Ratio	Lower	Upper
142	100		
127	45.4	38.2	57.2
141	14.7	12.2	18.2

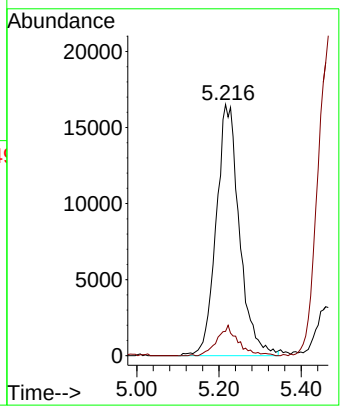




#11
Tert butyl alcohol
Concen: 212.423 ug/l
RT: 5.216 min Scan# 5
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 59 Resp: 6474

Ion	Ratio	Lower	Upper
59	100		
57	10.9	9.8	14.6



Instrument :
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ClientSampleId :
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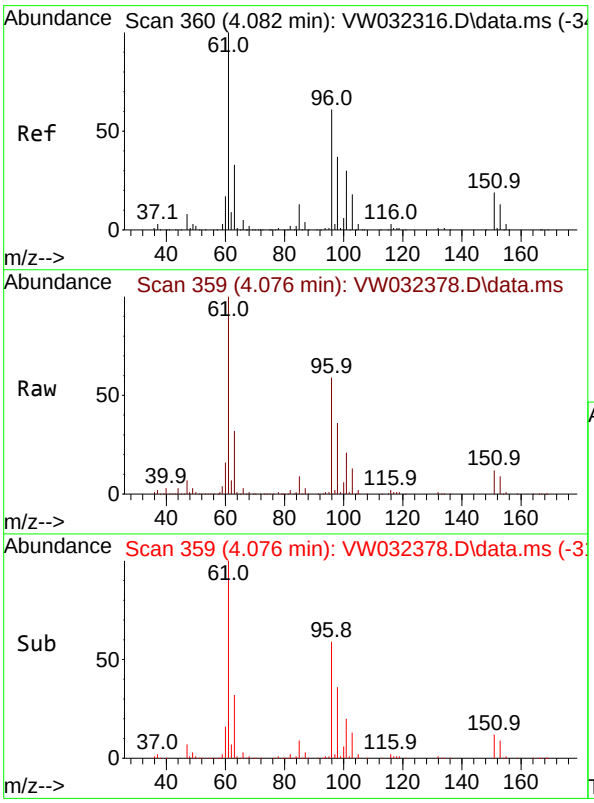
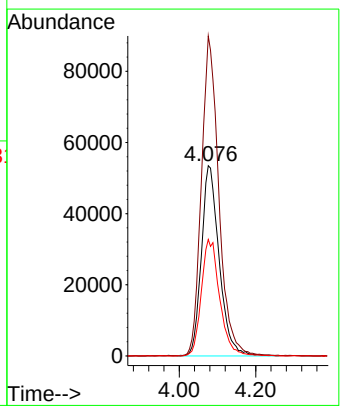
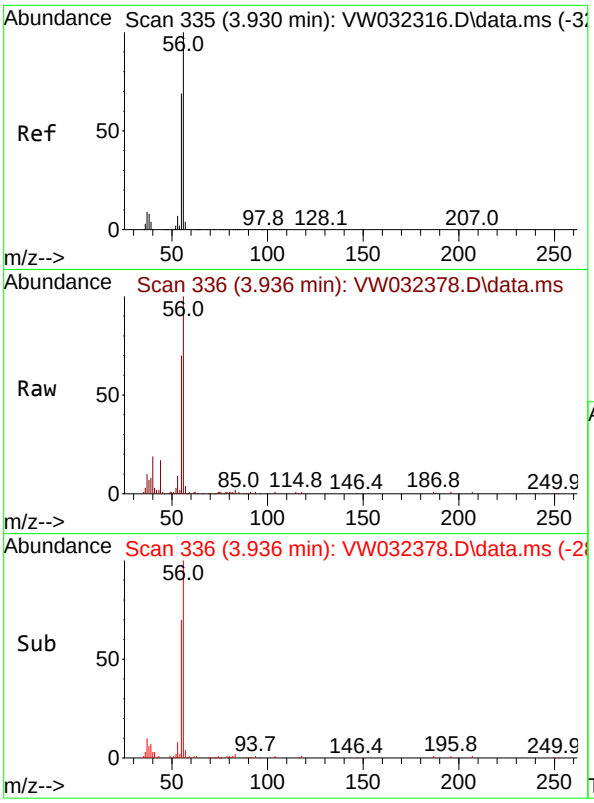


#12
1,1-Dichloroethene
Concen: 55.494 ug/l
RT: 4.076 min Scan# 359
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 96 Resp: 172650

Ion	Ratio	Lower	Upper
96	100		
61	168.0	123.0	184.4
98	61.1	48.5	72.7

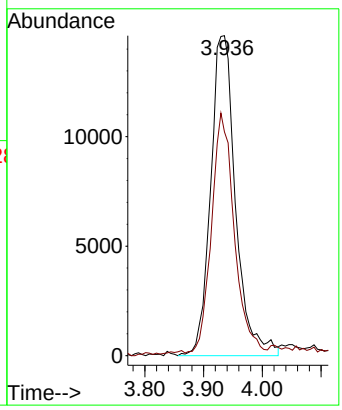




#13
Acrolein
Concen: 87.232 ug/l
RT: 3.936 min Scan# 3
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 56 Resp: 4314

Ion	Ratio	Lower	Upper
56	100		
55	68.0	56.4	84.6



Instrument :
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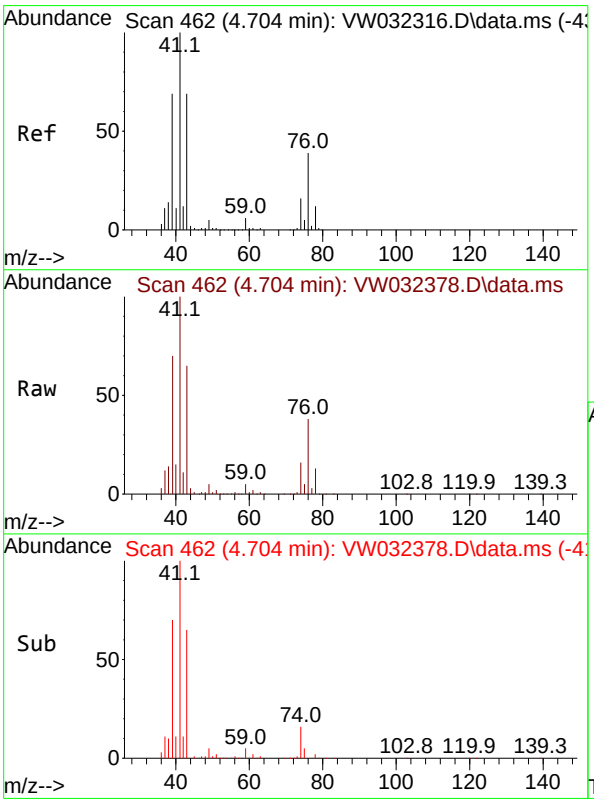
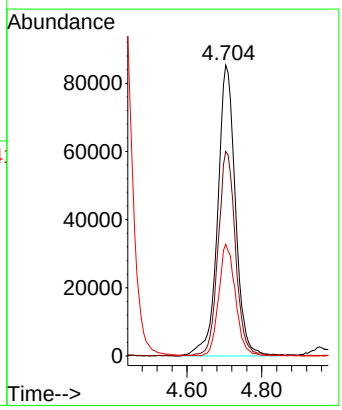
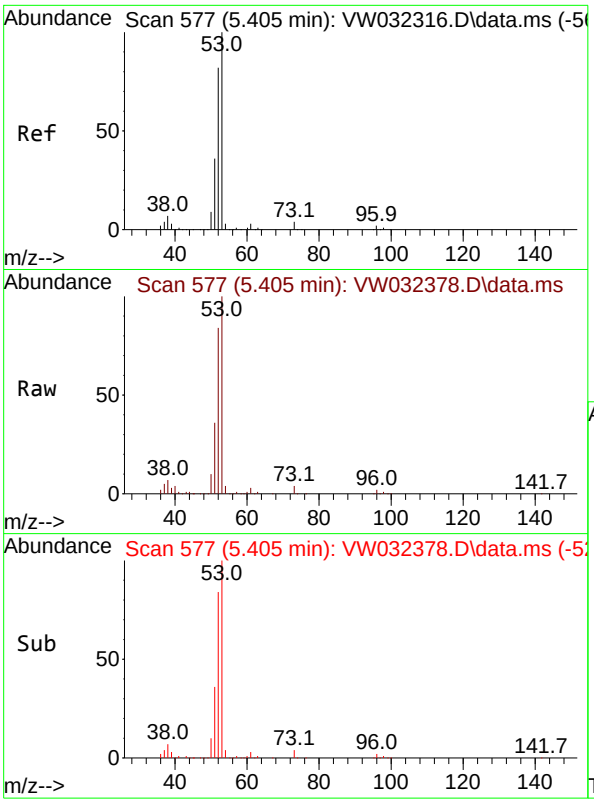


#14
Allyl chloride
Concen: 53.572 ug/l
RT: 4.704 min Scan# 462
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 41 Resp: 281514

Ion	Ratio	Lower	Upper
41	100		
39	69.1	64.1	96.1
76	35.9	31.4	47.2

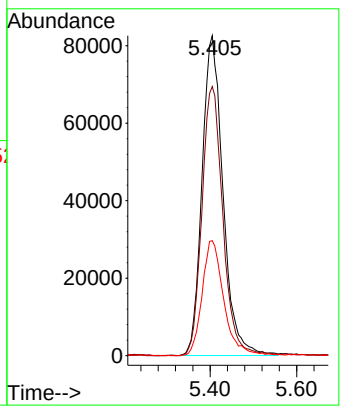




#15
Acrylonitrile
Concen: 257.055 ug/l
RT: 5.405 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 53 Resp: 27686

Ion	Ratio	Lower	Upper
53	100		
52	83.8	67.4	101.2
51	37.4	30.3	45.5



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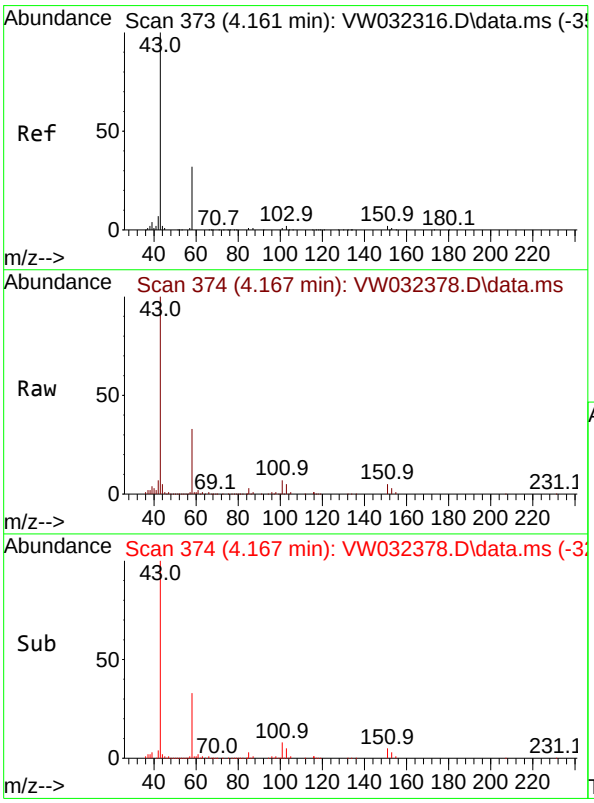
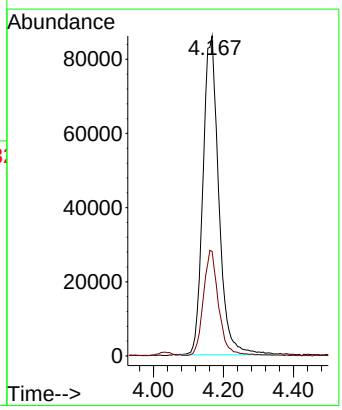
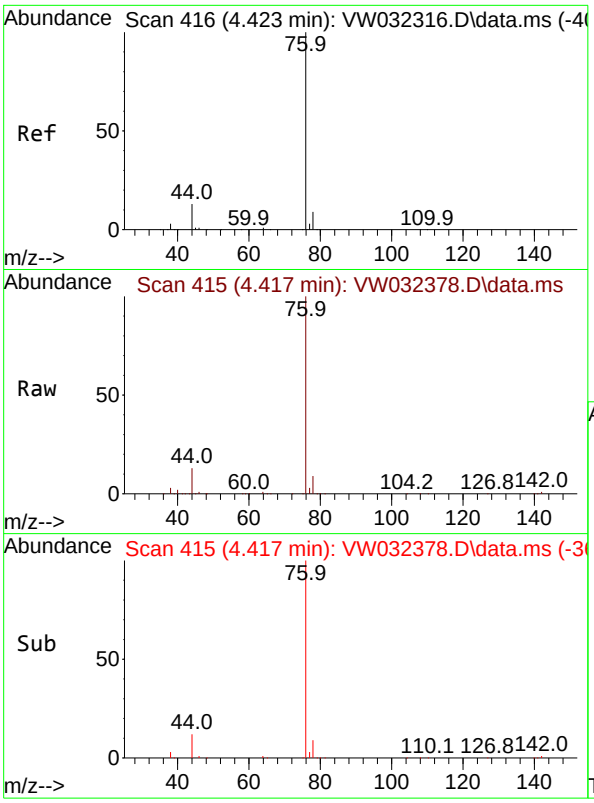


#16
Acetone
Concen: 242.037 ug/l
RT: 4.167 min Scan# 374
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 269841

Ion	Ratio	Lower	Upper
43	100		
58	32.5	25.3	37.9

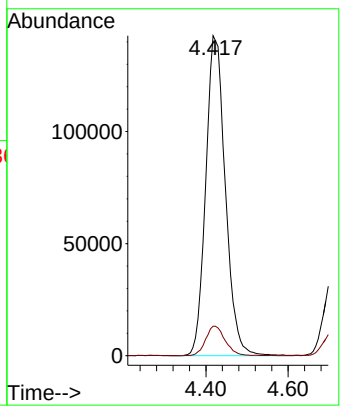




#17
Carbon Disulfide
Concen: 55.631 ug/l
RT: 4.417 min Scan# 4
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 76 Resp: 47223

Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.0	10.6



Instrument :
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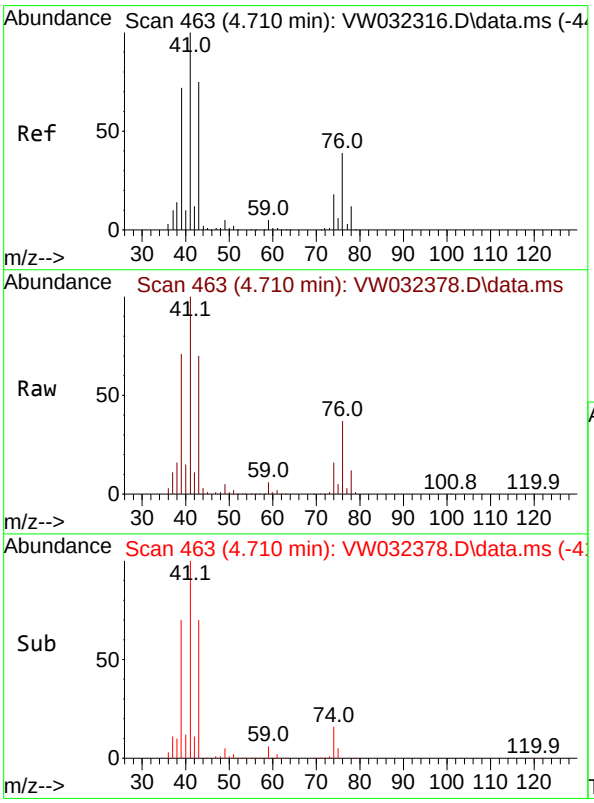
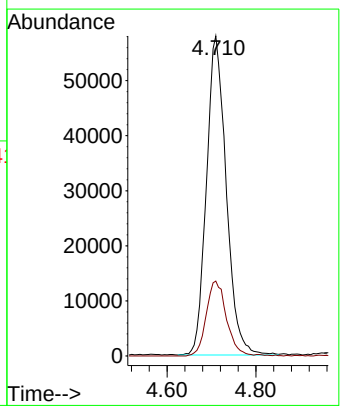
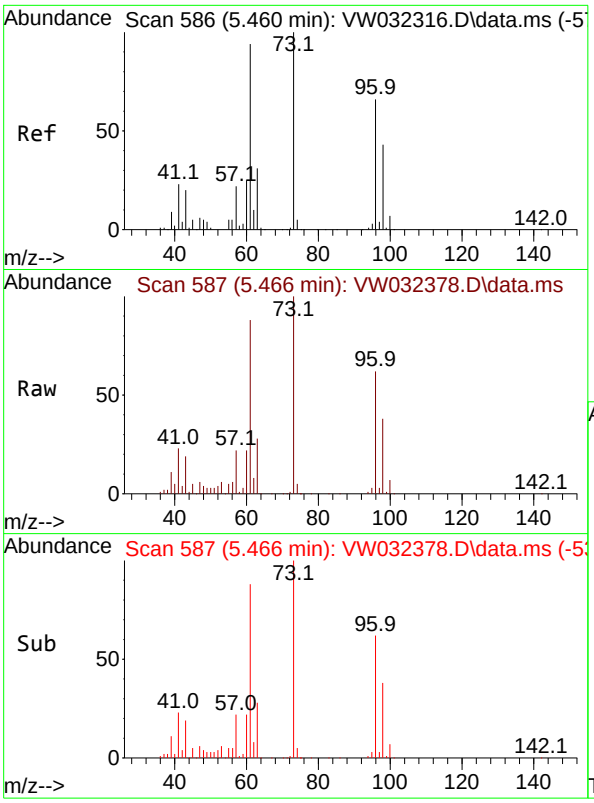


#18
Methyl Acetate
Concen: 56.056 ug/l
RT: 4.710 min Scan# 463
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 179023

Ion	Ratio	Lower	Upper
43	100		
74	23.9	20.2	30.4

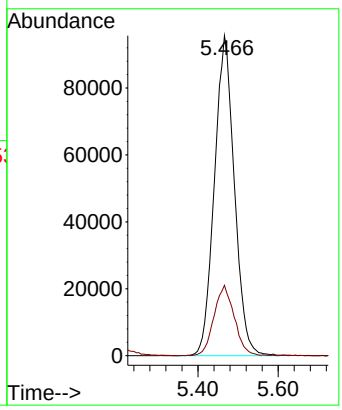




#19
Methyl tert-butyl Ether
Concen: 53.964 ug/l
RT: 5.466 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 73 Resp: 33067

Ion	Ratio	Lower	Upper
73	100		
57	22.0	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
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Supervised By :Semsettin Yesilyurt

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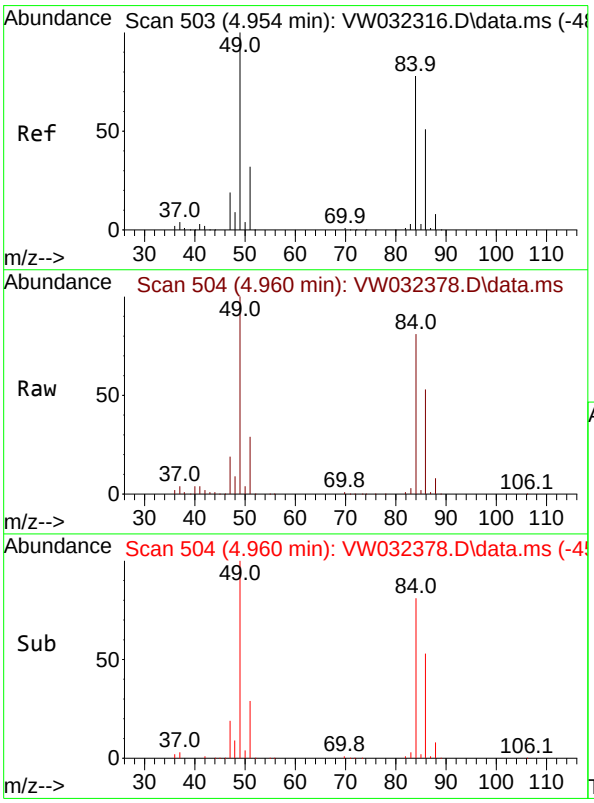
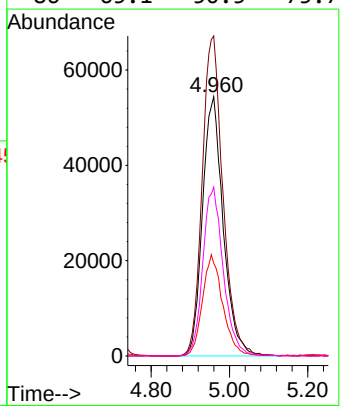
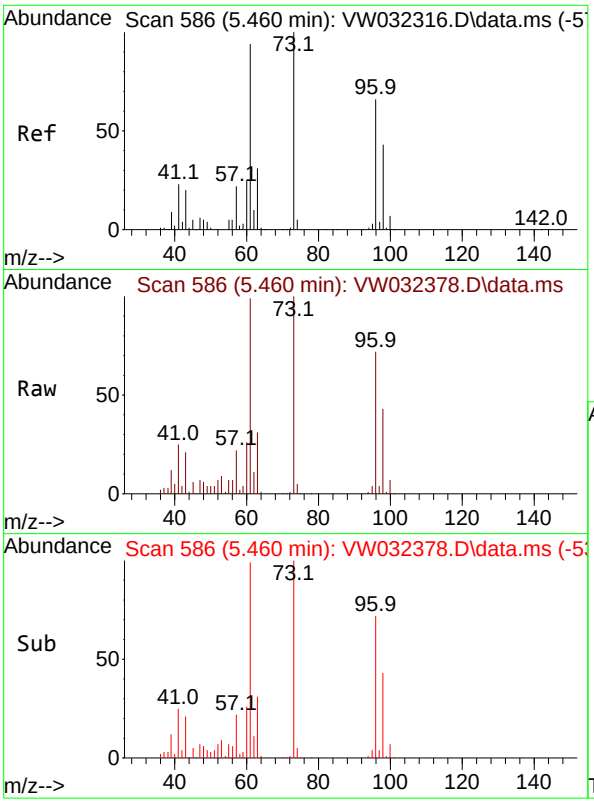


#20
Methylene Chloride
Concen: 54.562 ug/l
RT: 4.960 min Scan# 504
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 84 Resp: 199566

Ion	Ratio	Lower	Upper
84	100		
49	123.4	92.2	138.4
51	35.8	31.0	46.6
86	65.1	50.5	75.7

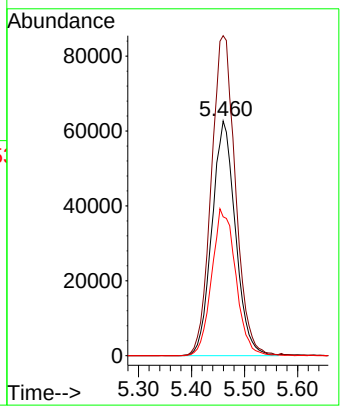




#21
trans-1,2-Dichloroethene
Concen: 55.946 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 96 Resp: 19270

Ion	Ratio	Lower	Upper
96	100		
61	136.3	112.5	168.7
98	59.2	54.2	81.4



Instrument :
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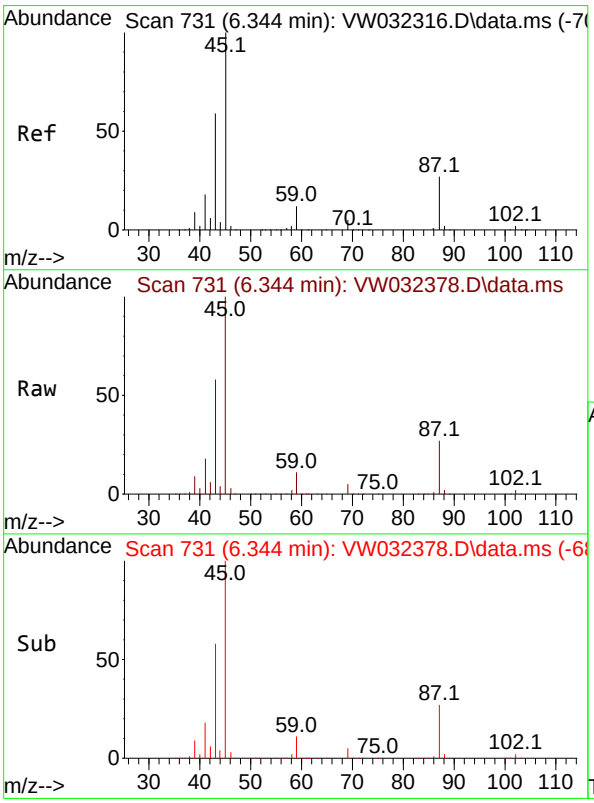
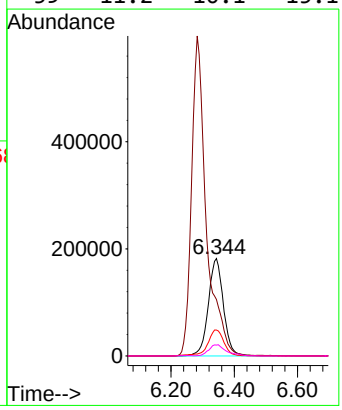
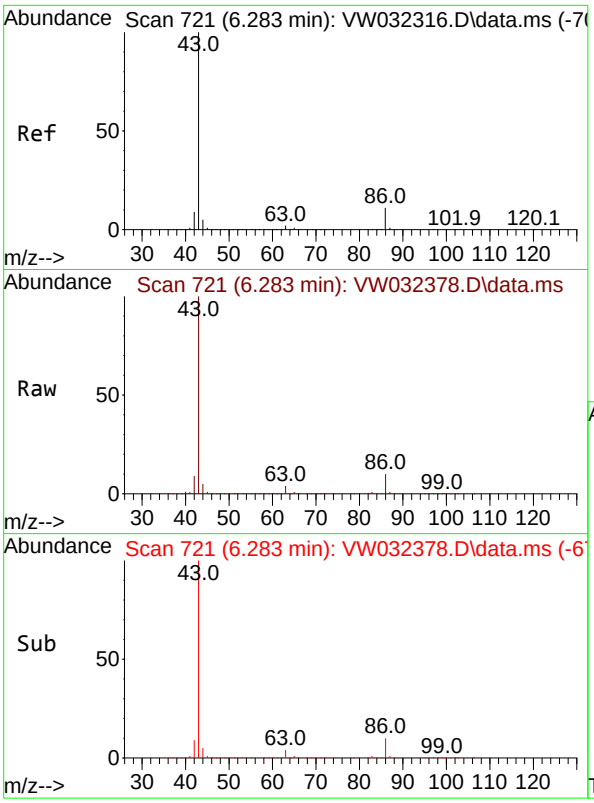


#22
Diisopropyl ether
Concen: 55.352 ug/l
RT: 6.344 min Scan# 731
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 45 Resp: 604917

Ion	Ratio	Lower	Upper
45	100		
43	57.6	51.4	77.2
87	26.6	25.9	38.9
59	11.2	10.1	15.1

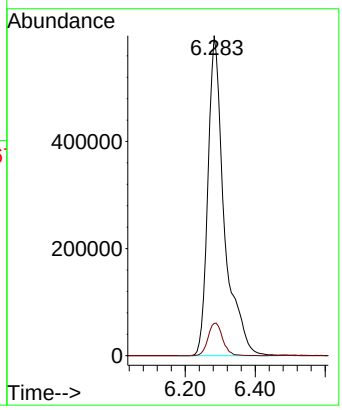




#23
Vinyl Acetate
Concen: 265.367 ug/l
RT: 6.283 min Scan# 7
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 193706

Ion	Ratio	Lower	Upper
43	100		
86	10.1	8.8	13.2



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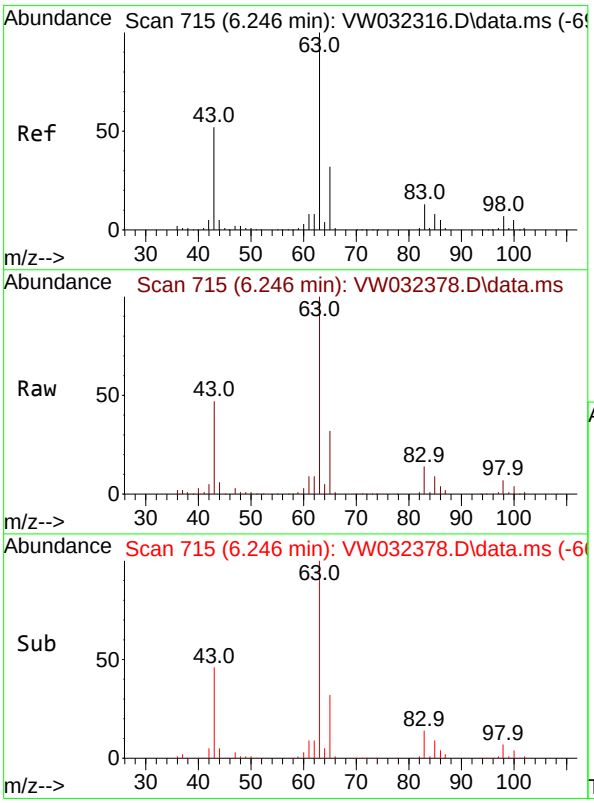
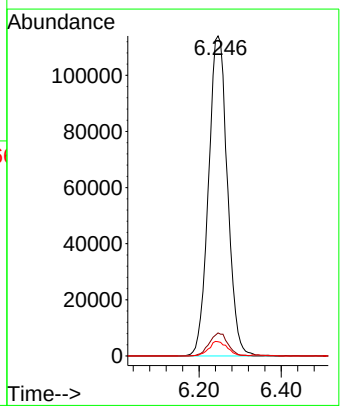
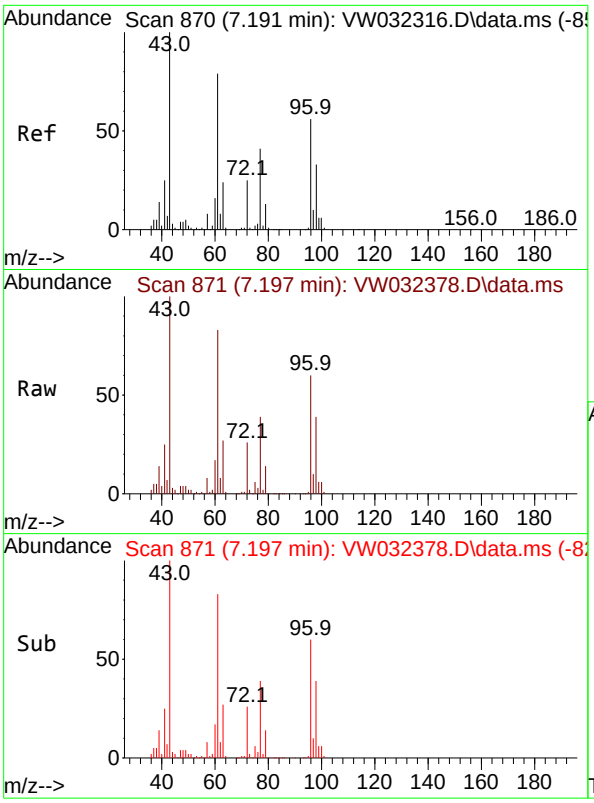


#24
1,1-Dichloroethane
Concen: 54.958 ug/l
RT: 6.246 min Scan# 715
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 63 Resp: 364897

Ion	Ratio	Lower	Upper
63	100		
98	7.2	3.8	11.2
100	4.5	2.5	7.5

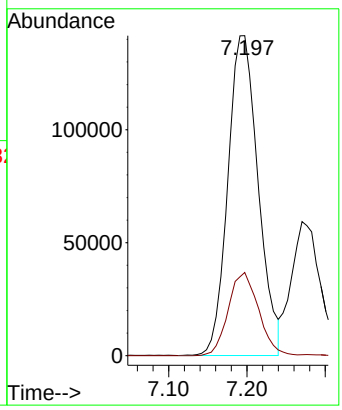




#25
2-Butanone
Concen: 250.876 ug/l
RT: 7.197 min Scan# 8
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 38093

Ion	Ratio	Lower	Upper
43	100		
72	26.0	21.4	32.2



Instrument :
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ClientSampleId :
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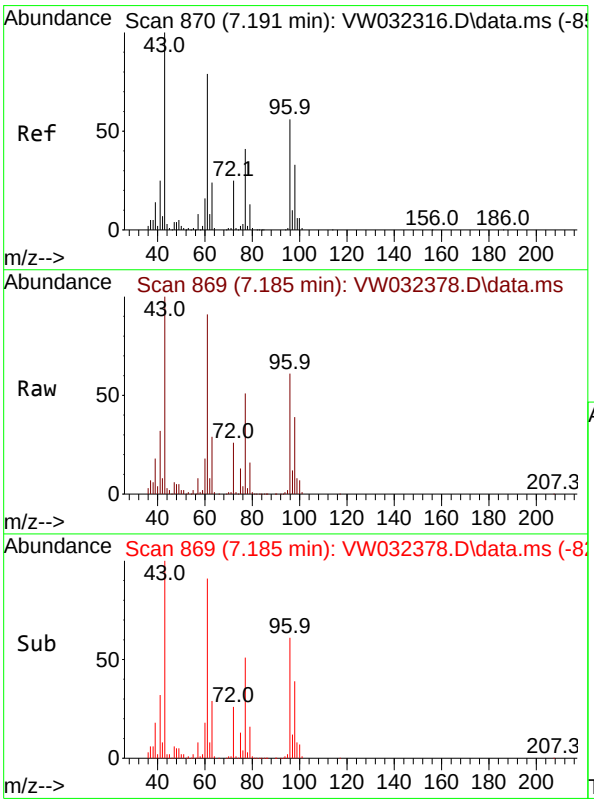
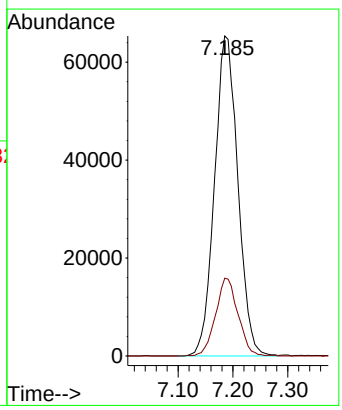
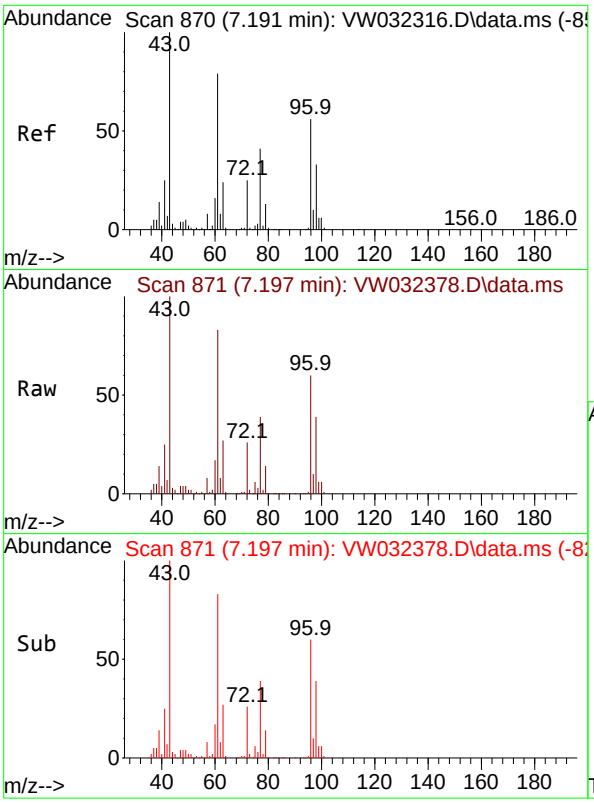


#26
2,2-Dichloropropane
Concen: 56.907 ug/l
RT: 7.185 min Scan# 869
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 77 Resp: 193268

Ion	Ratio	Lower	Upper
77	100		
97	23.4	11.9	35.5

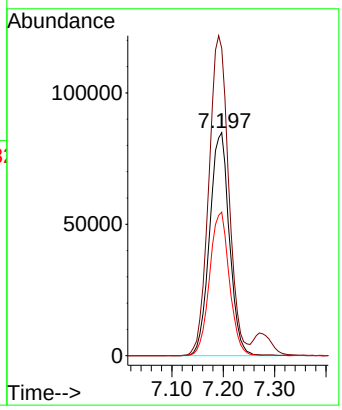




#27
cis-1,2-Dichloroethene
Concen: 54.730 ug/l
RT: 7.197 min Scan# 8
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 96 Resp: 22647

Ion	Ratio	Lower	Upper
96	100		
61	144.9	0.0	268.0
98	64.3	0.0	130.8



Instrument :
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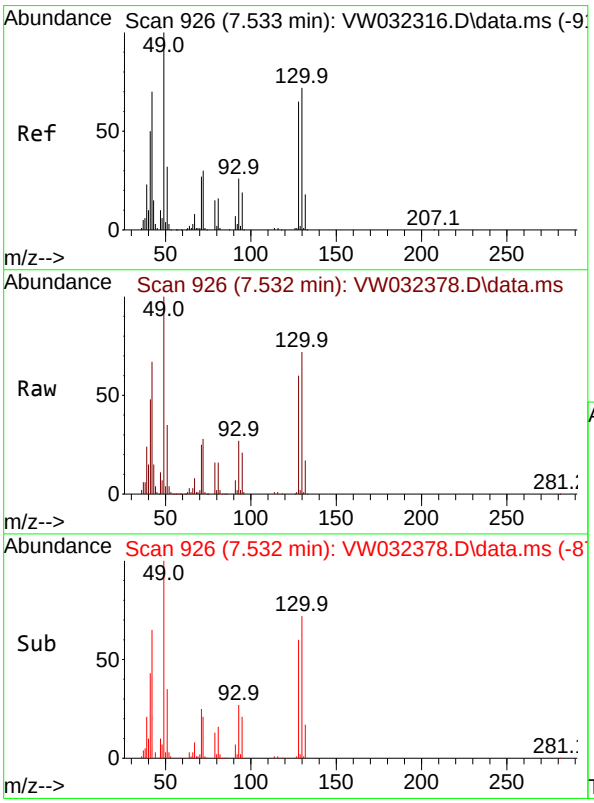
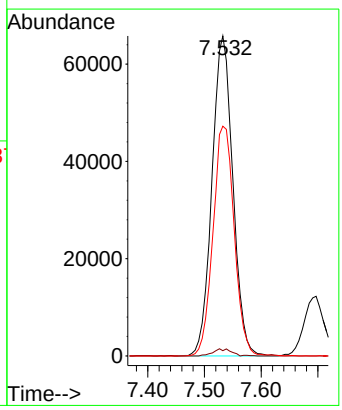
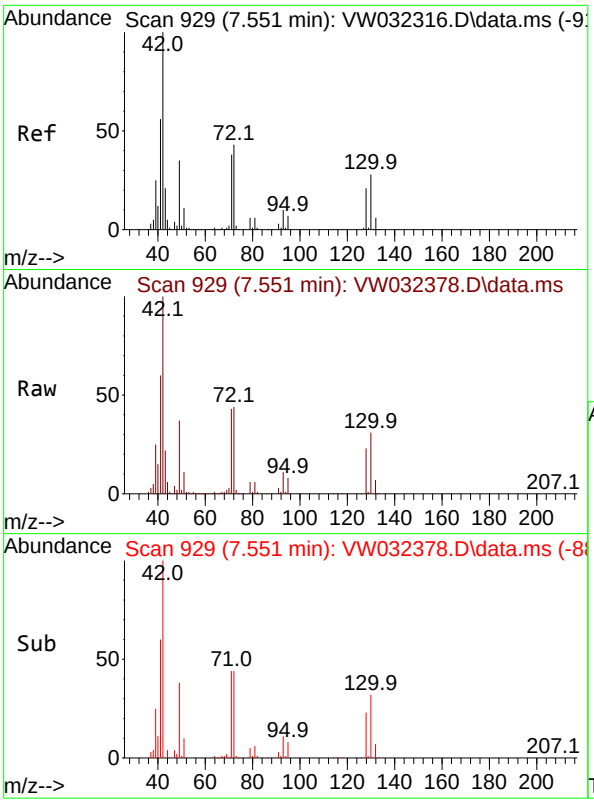


#28
Bromochloromethane
Concen: 53.869 ug/l
RT: 7.532 min Scan# 926
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 49 Resp: 168276

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	4.2
130	73.1	67.5	101.3

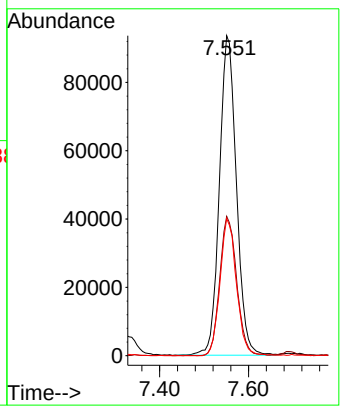




#29
Tetrahydrofuran
Concen: 259.216 ug/l
RT: 7.551 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 42 Resp: 24752

Ion	Ratio	Lower	Upper
42	100		
72	43.6	37.4	56.2
71	41.5	36.0	54.0



Instrument :
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ClientSampleId :
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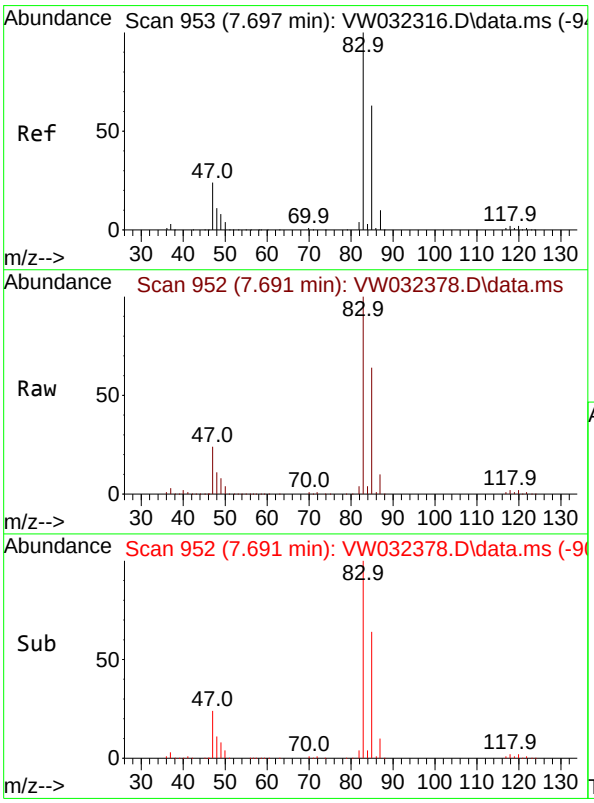
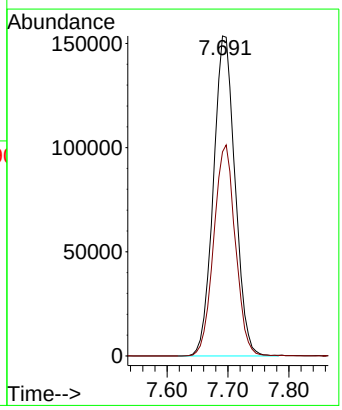
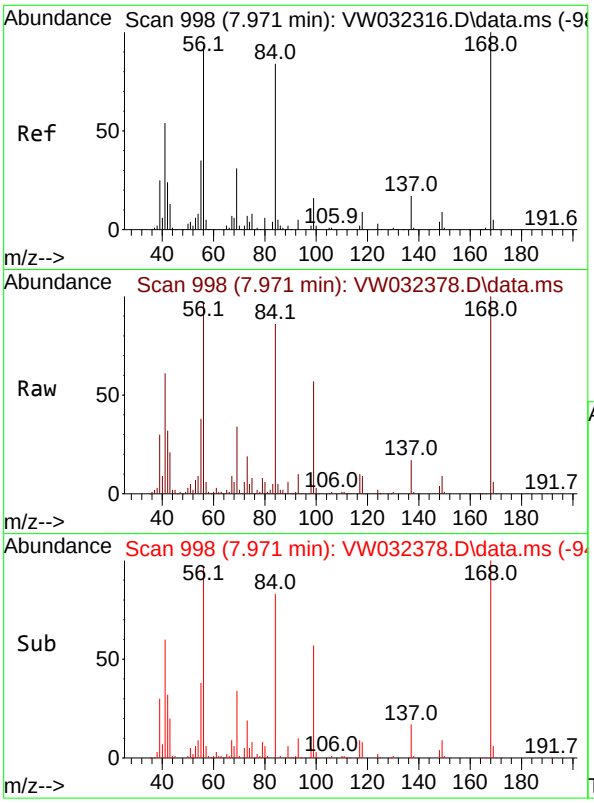


#30
Chloroform
Concen: 56.448 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 83 Resp: 380098

Ion	Ratio	Lower	Upper
83	100		
85	63.8	51.2	76.8

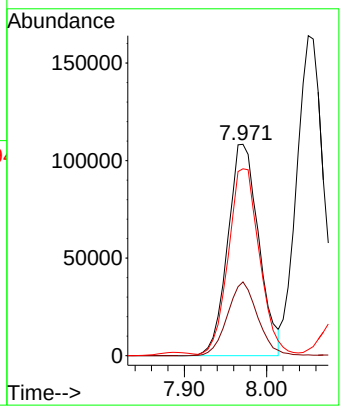




#31
Cyclohexane
Concen: 50.212 ug/l
RT: 7.971 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 56 Resp: 28461

Ion	Ratio	Lower	Upper
56	100		
69	34.9	27.7	41.5
84	86.9	74.6	112.0



Instrument :
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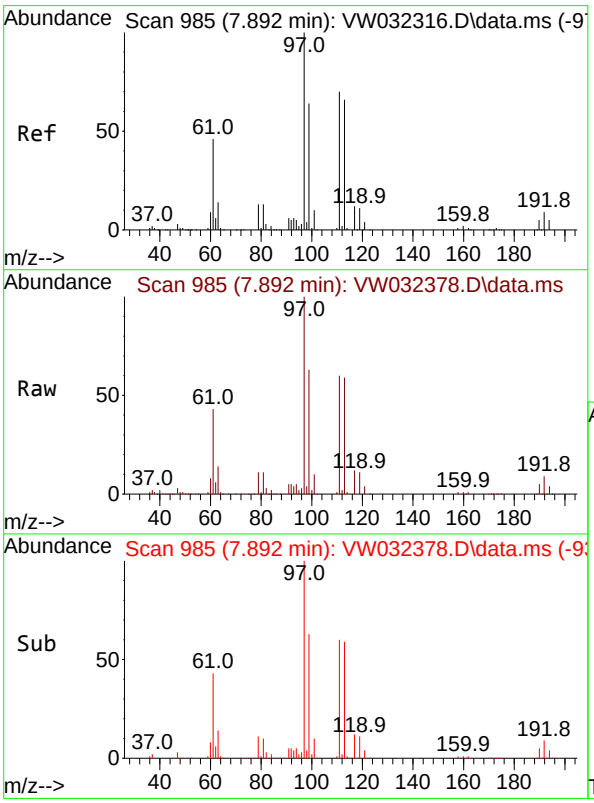
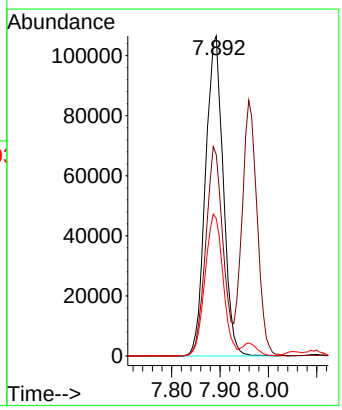
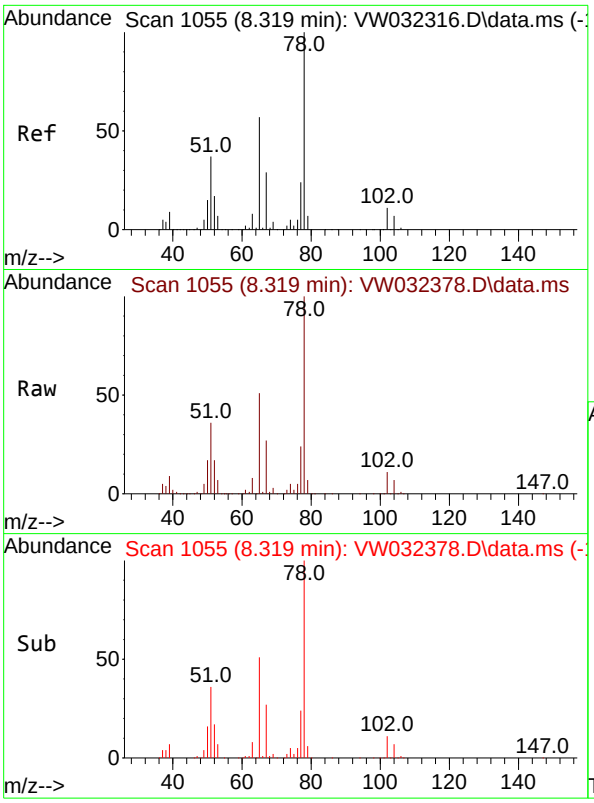


#32
1,1,1-Trichloroethane
Concen: 56.749 ug/l
RT: 7.892 min Scan# 985
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 97 Resp: 270780

Ion	Ratio	Lower	Upper
97	100		
99	64.3	50.9	76.3
61	45.2	36.2	54.4

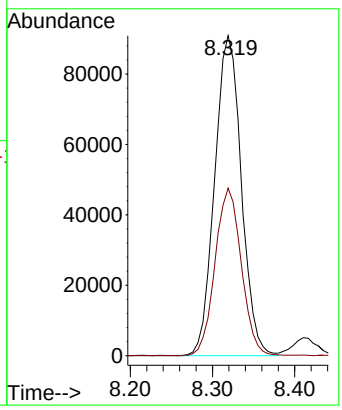




#33
1,2-Dichloroethane-d4
Concen: 50.924 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 65 Resp: 20503

Ion	Ratio	Lower	Upper
65	100		
67	51.6	0.0	99.6



Instrument :
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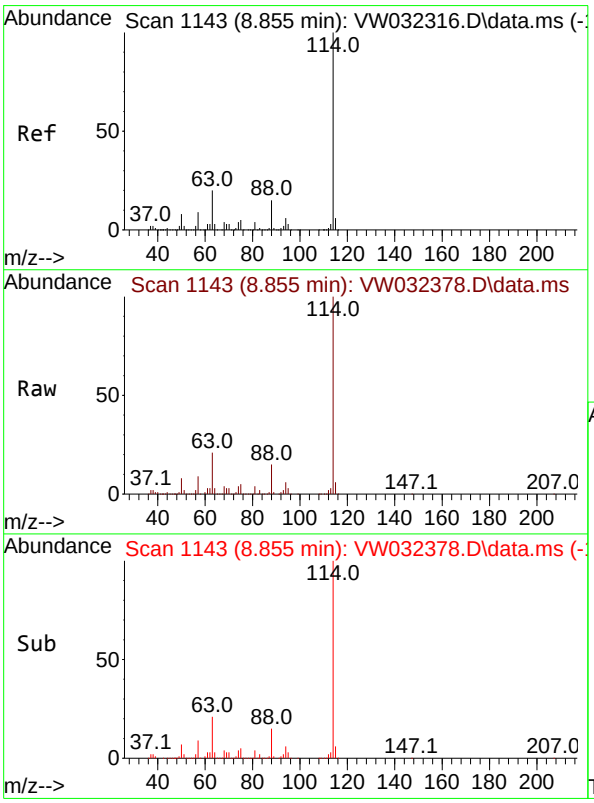
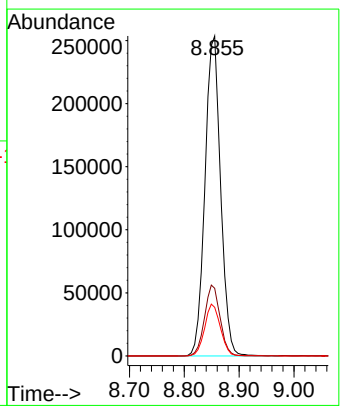
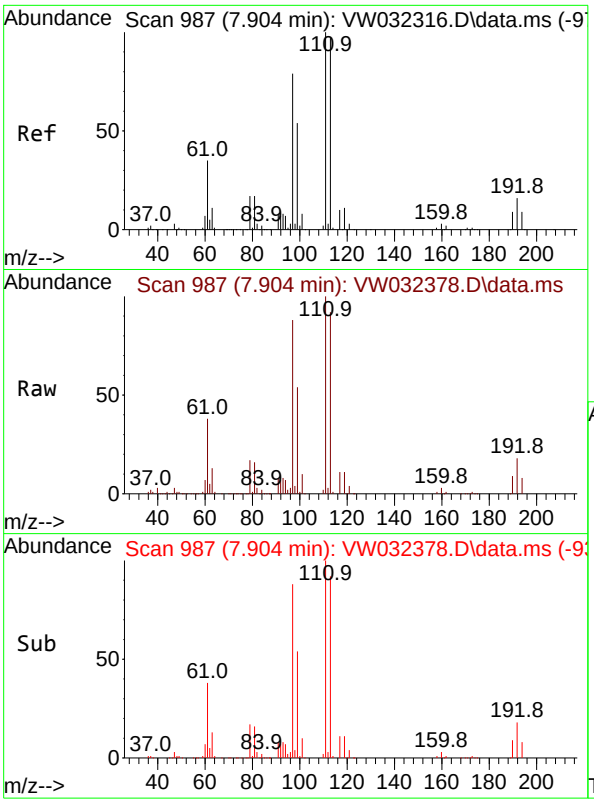


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.855 min Scan# 1143
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:114 Resp: 500417

Ion	Ratio	Lower	Upper
114	100		
63	21.2	0.0	40.4
88	15.2	0.0	32.0

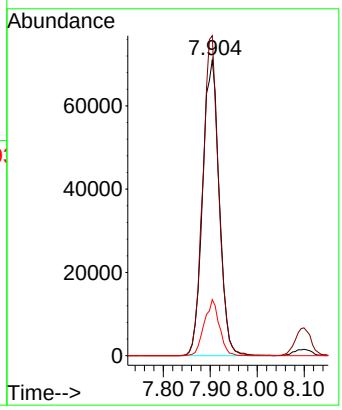




#35
Dibromofluoromethane
Concen: 53.598 ug/l
RT: 7.904 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:113 Resp: 17369

Ion	Ratio	Lower	Upper
113	100		
111	103.4	83.9	125.9
192	17.3	14.6	21.8



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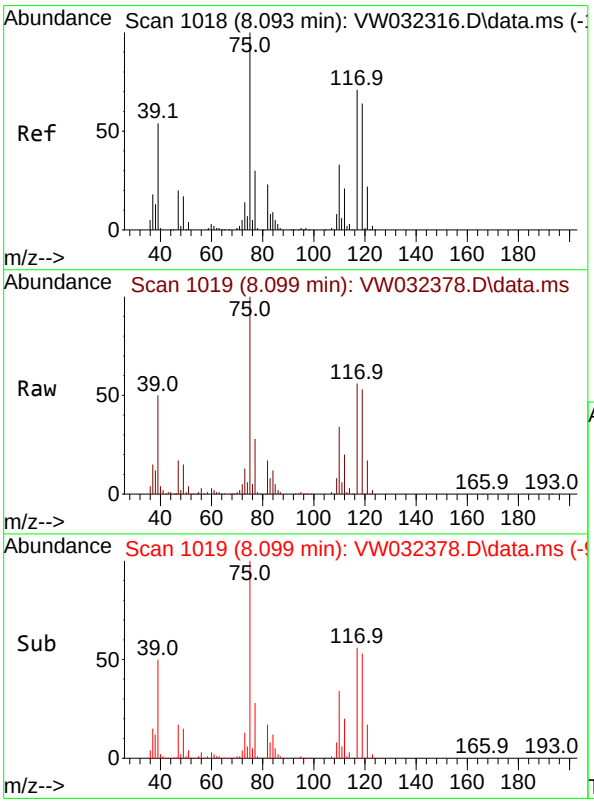
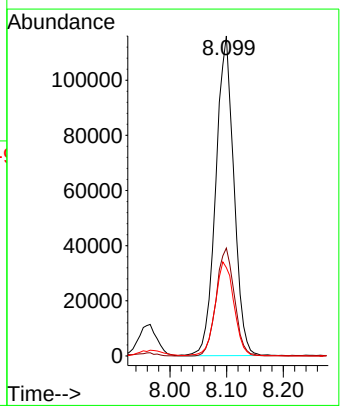
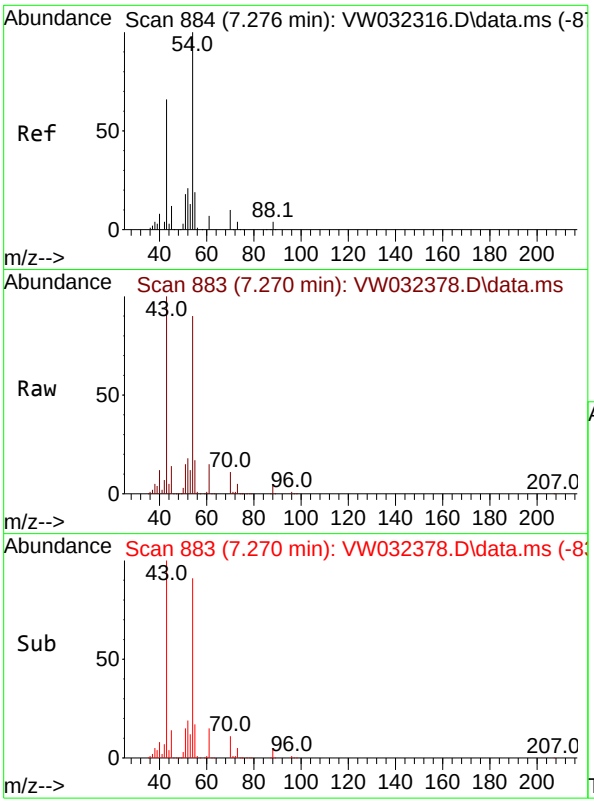


#36
1,1-Dichloropropene
Concen: 56.099 ug/l
RT: 8.099 min Scan# 1019
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 75 Resp: 256579

Ion	Ratio	Lower	Upper
75	100		
110	34.0	17.5	52.5
77	30.6	24.1	36.1

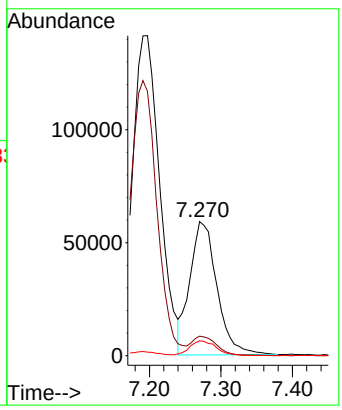




#37
Ethyl Acetate
Concen: 51.178 ug/l
RT: 7.270 min Scan# 8
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 15580

Ion	Ratio	Lower	Upper
43	100		
61	13.5	11.3	16.9
70	10.7	8.9	13.3



Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

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Supervised By :Semsettin Yesilyurt

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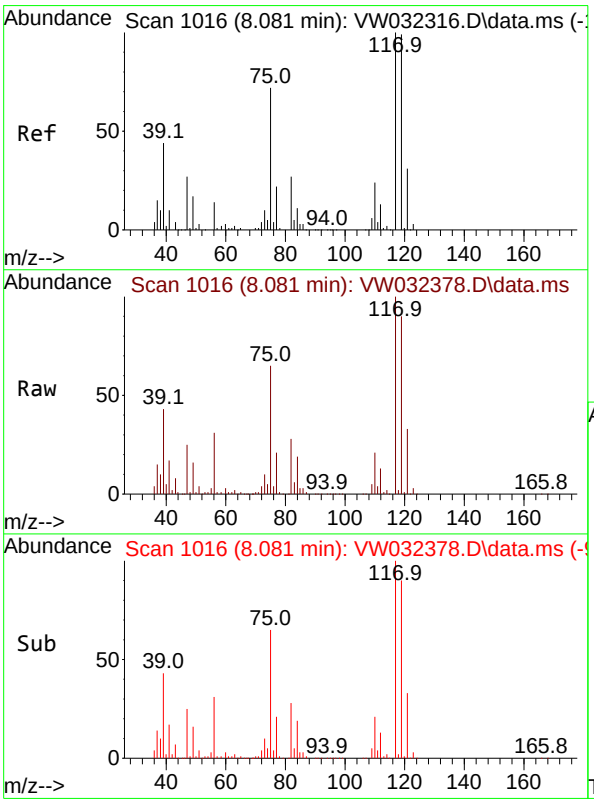
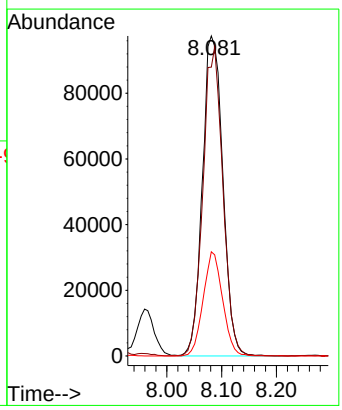
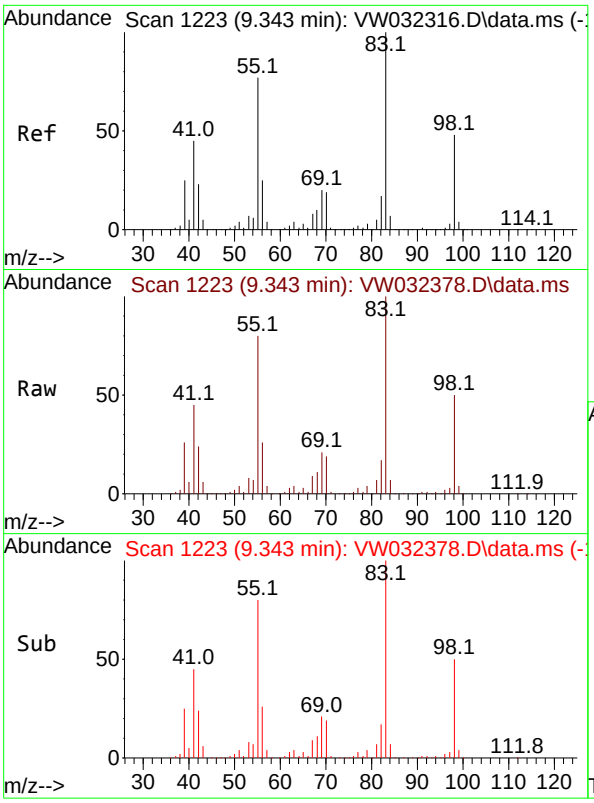


#38
Carbon Tetrachloride
Concen: 58.585 ug/l
RT: 8.081 min Scan# 1016
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:117 Resp: 252146

Ion	Ratio	Lower	Upper
117	100		
119	90.2	74.2	111.2
121	32.5	25.6	38.4

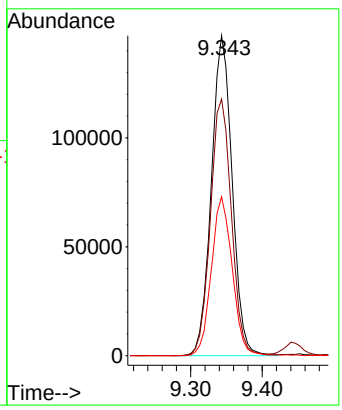




#39
Methylcyclohexane
Concen: 53.803 ug/l
RT: 9.343 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 83 Resp: 29682

Ion	Ratio	Lower	Upper
83	100		
55	80.2	58.4	87.6
98	49.7	39.4	59.2



Instrument :
MSVOA_W
ClientSampleId :
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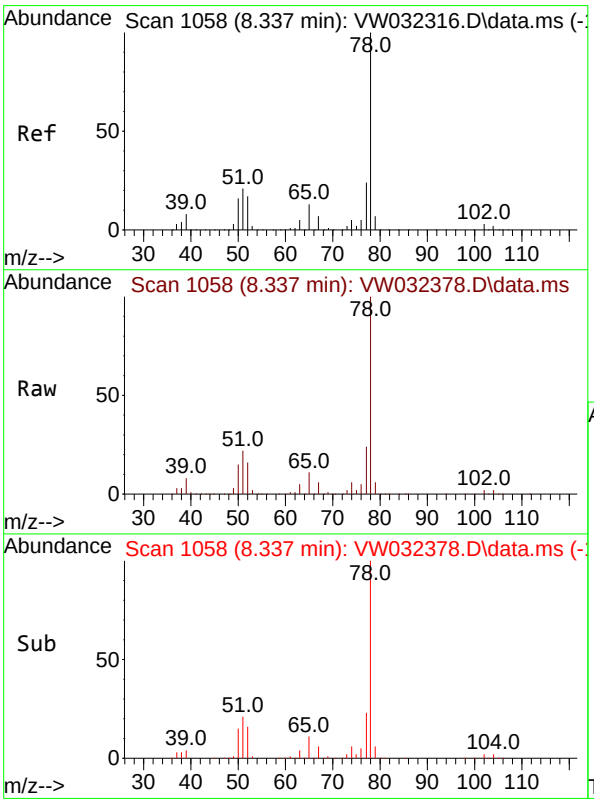
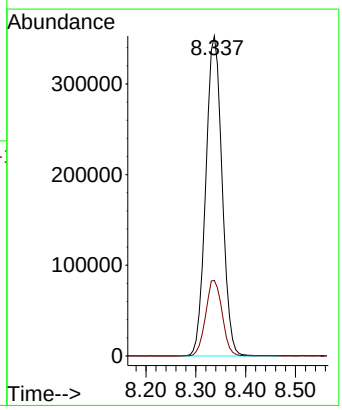
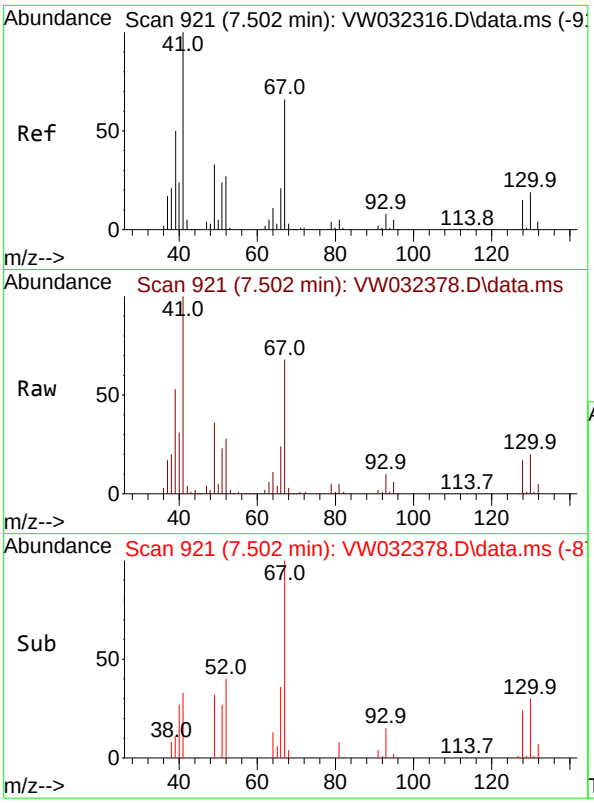


#40
Benzene
Concen: 55.818 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 78 Resp: 800201

Ion	Ratio	Lower	Upper
78	100		
77	23.6	20.7	31.1

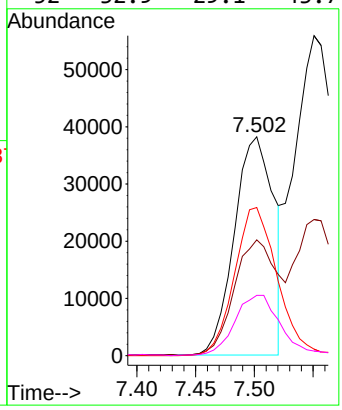




#41
Methacrylonitrile
Concen: 54.317 ug/l
RT: 7.502 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 41 Resp: 8911

Ion	Ratio	Lower	Upper
41	100		
39	59.6	50.9	76.3
67	74.0	65.6	98.4
52	32.9	29.1	43.7



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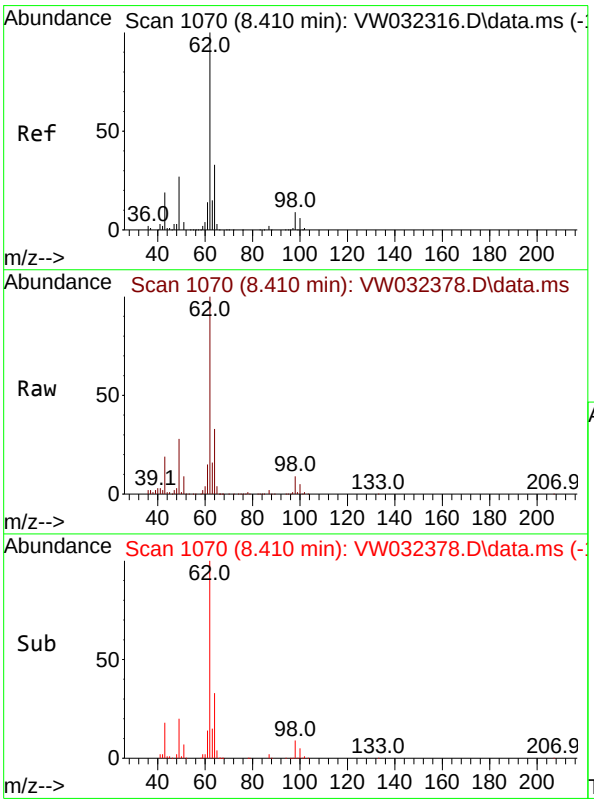
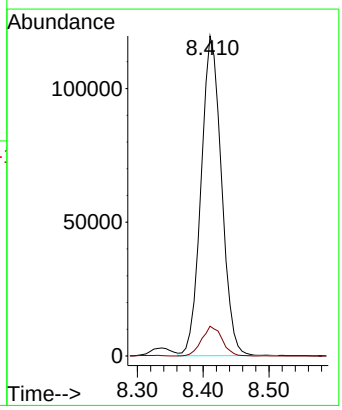
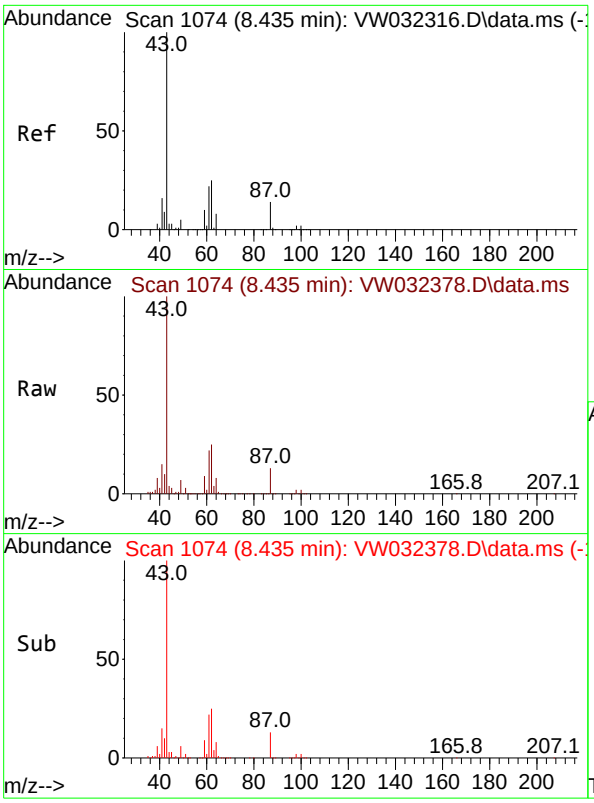


#42
1,2-Dichloroethane
Concen: 54.972 ug/l
RT: 8.410 min Scan# 1070
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 62 Resp: 257863

Ion	Ratio	Lower	Upper
62	100		
98	9.3	0.0	18.0

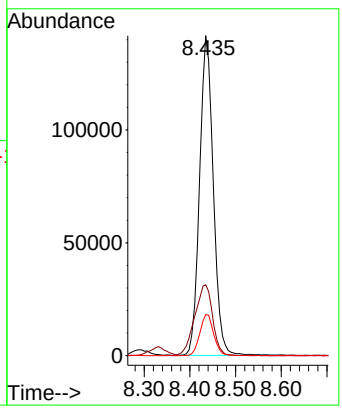




#43
Isopropyl Acetate
Concen: 54.722 ug/l
RT: 8.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 29552

Ion	Ratio	Lower	Upper
43	100		
61	28.7	23.3	34.9
87	13.1	11.1	16.7



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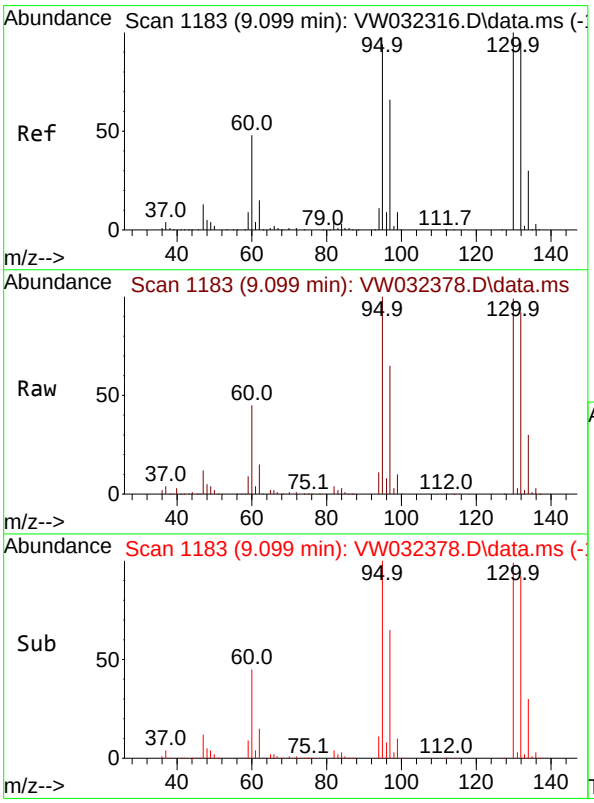
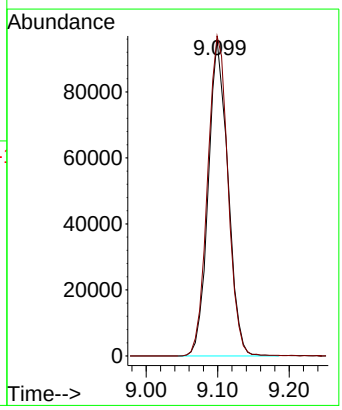
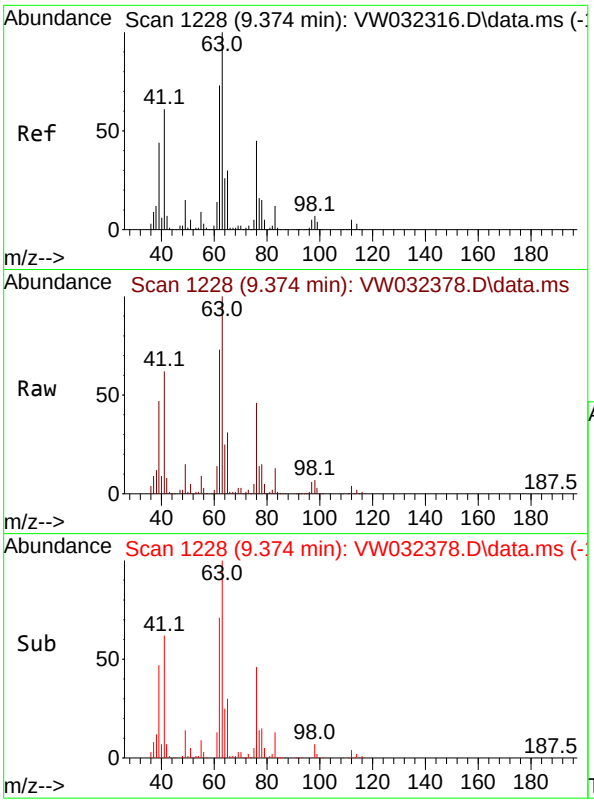


#44
Trichloroethene
Concen: 54.492 ug/l
RT: 9.099 min Scan# 1183
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:130 Resp: 182918

Ion	Ratio	Lower	Upper
130	100		
95	101.2	0.0	220.0

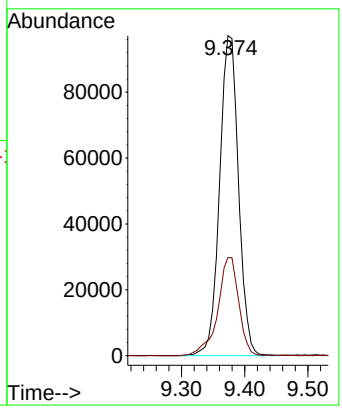




#45
1,2-Dichloropropane
Concen: 56.170 ug/l
RT: 9.374 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 63 Resp: 20099

Ion	Ratio	Lower	Upper
63	100		
65	30.7	24.3	36.5



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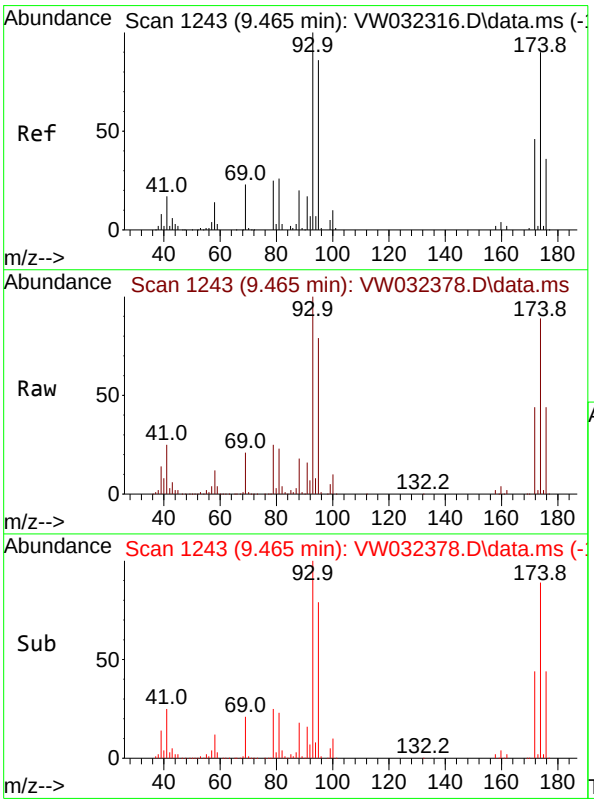
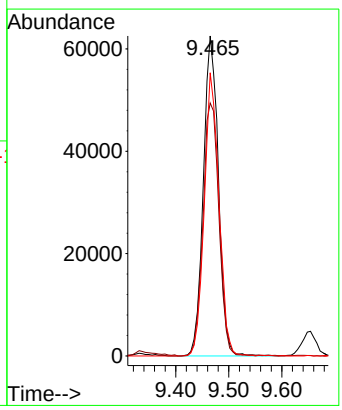
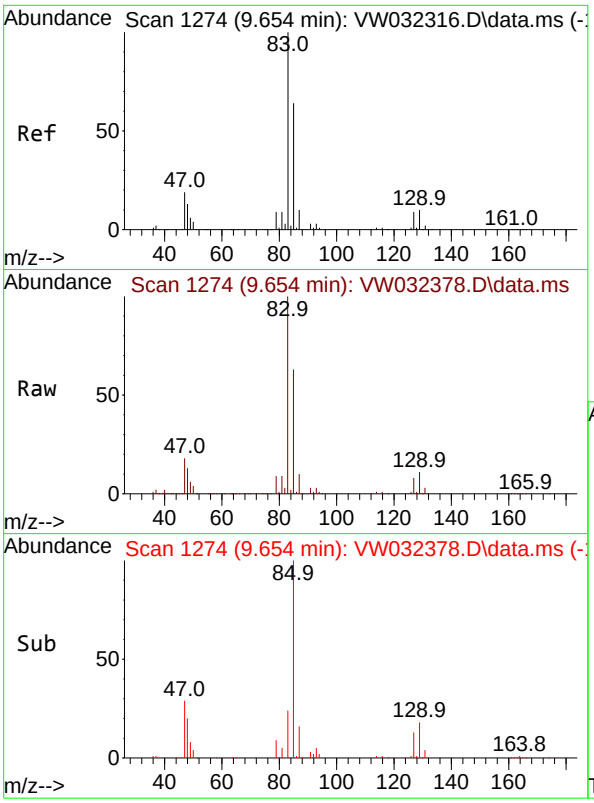


#46
Dibromomethane
Concen: 56.022 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 93 Resp: 123268

Ion	Ratio	Lower	Upper
93	100		
95	83.8	67.4	101.2
174	86.5	75.7	113.5

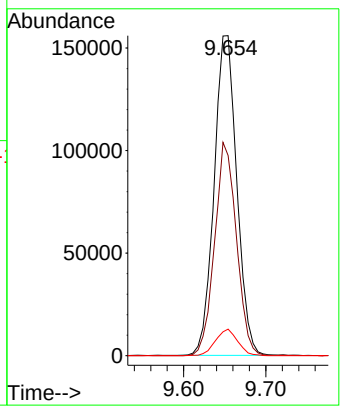




#47
Bromodichloromethane
Concen: 59.385 ug/l
RT: 9.654 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 83 Resp: 29886

Ion	Ratio	Lower	Upper
83	100		
85	62.6	48.7	73.1
127	8.3	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
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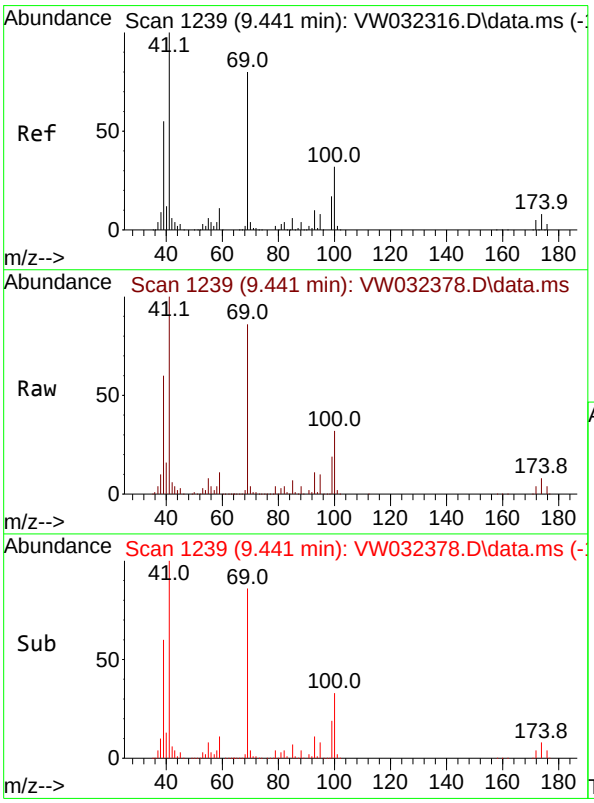
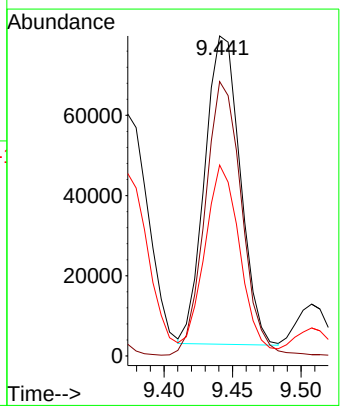
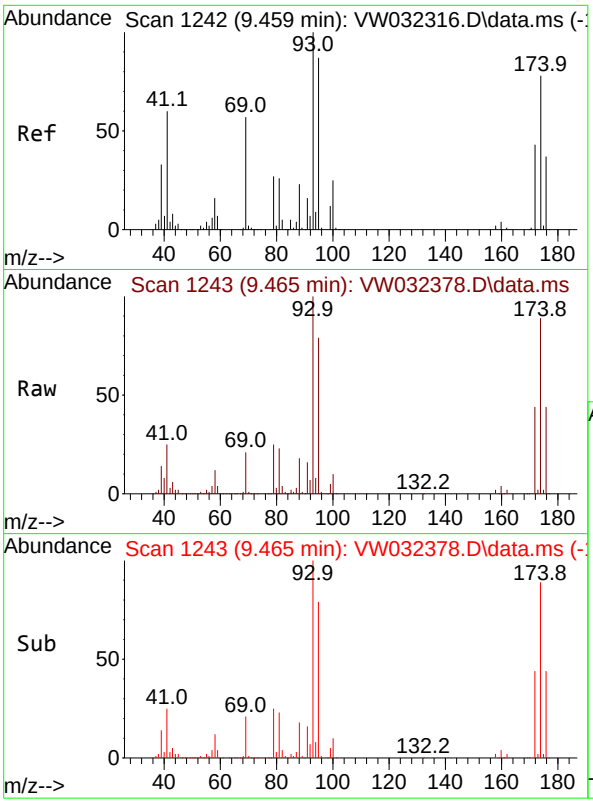


#48
Methyl methacrylate
Concen: 52.640 ug/l
RT: 9.441 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 41 Resp: 138219

Ion	Ratio	Lower	Upper
41	100		
69	91.6	71.5	107.3
39	62.1	55.9	83.9

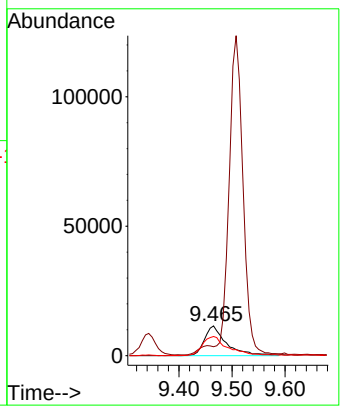




#49
1,4-Dioxane
Concen: 1099.123 ug/l
RT: 9.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 88 Resp: 3305

Ion	Ratio	Lower	Upper
88	100		
43	21.4	18.0	27.0
58	74.0	55.4	83.0



Instrument :
MSVOA_W
ClientSampleId :
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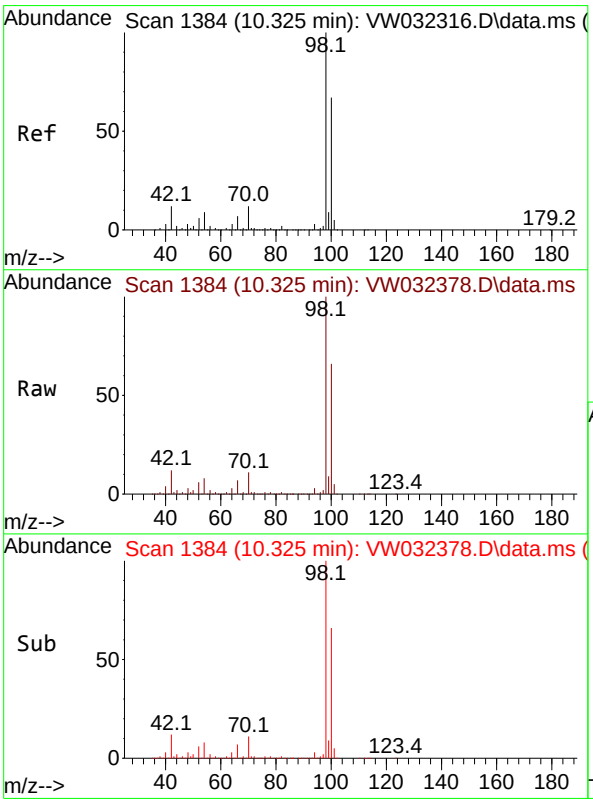
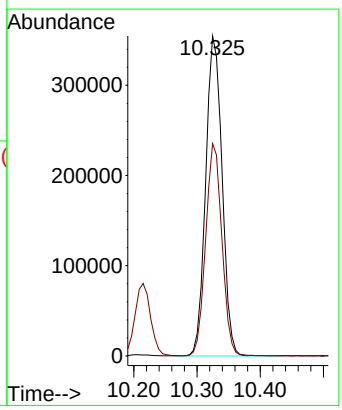
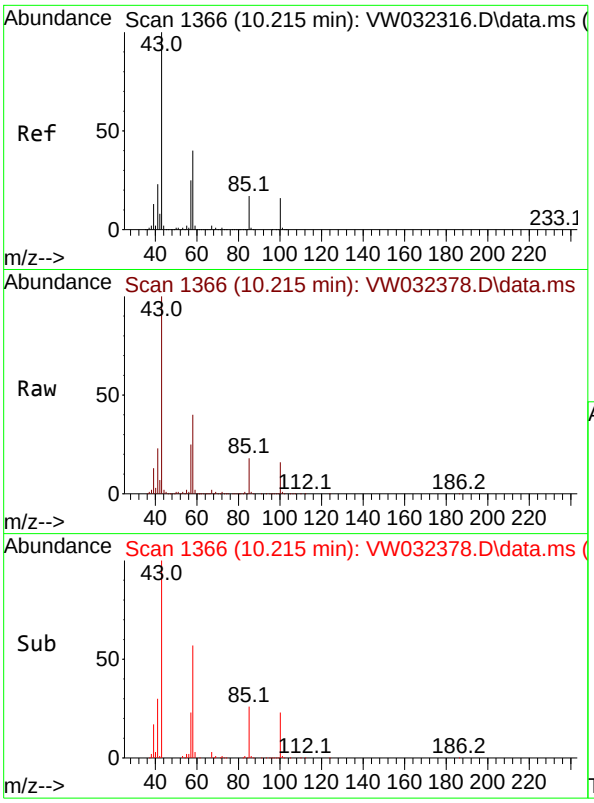


#50
Toluene-d8
Concen: 53.480 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 98 Resp: 639666

Ion	Ratio	Lower	Upper
98	100		
100	65.6	51.4	77.2

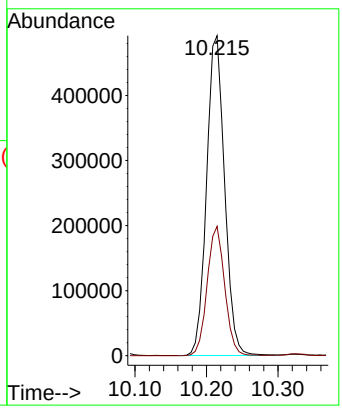




#51
4-Methyl-2-Pentanone
Concen: 275.041 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 860318

Ion	Ratio	Lower	Upper
43	100		
58	39.4	32.0	48.0



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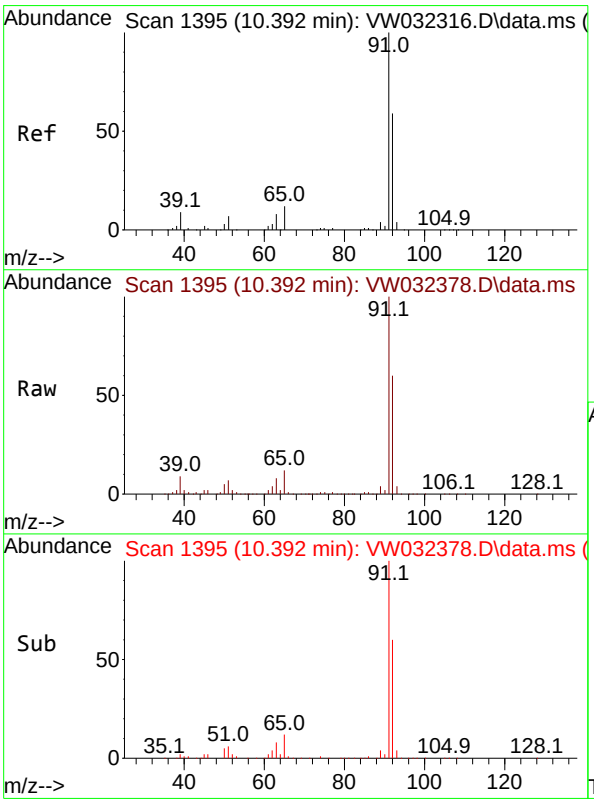
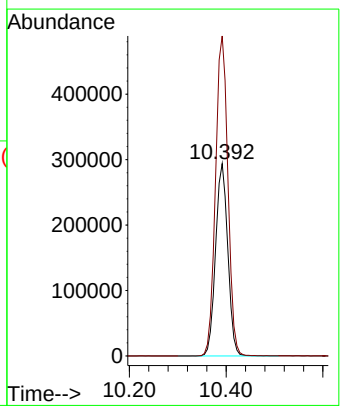
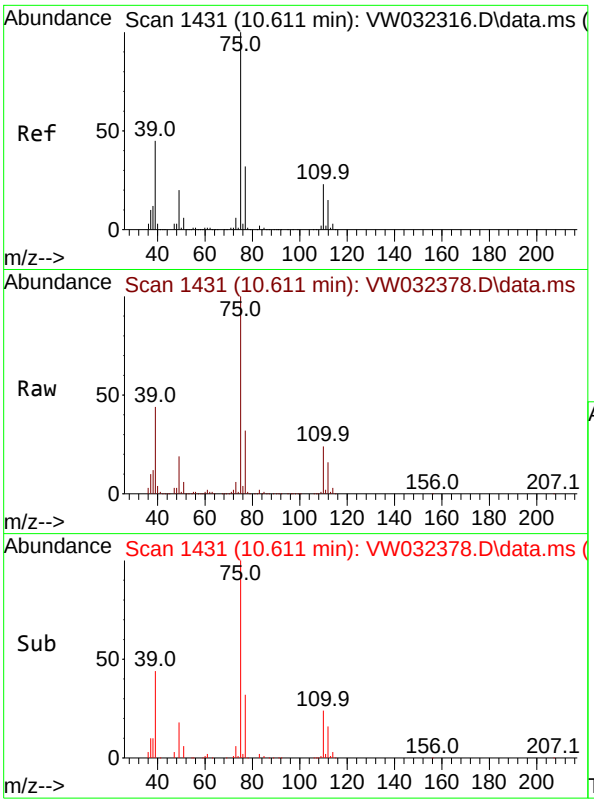


#52
Toluene
Concen: 57.552 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 92 Resp: 513800

Ion	Ratio	Lower	Upper
92	100		
91	168.7	137.5	206.3

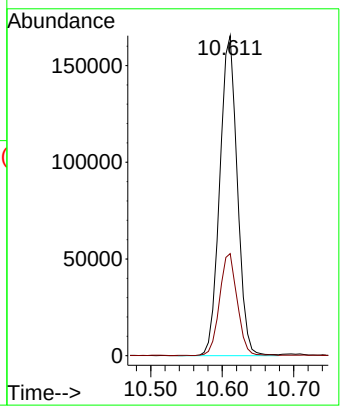




#53
t-1,3-Dichloropropene
Concen: 57.719 ug/l
RT: 10.611 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 75 Resp: 28181

Ion	Ratio	Lower	Upper
75	100		
77	31.8	25.6	38.4



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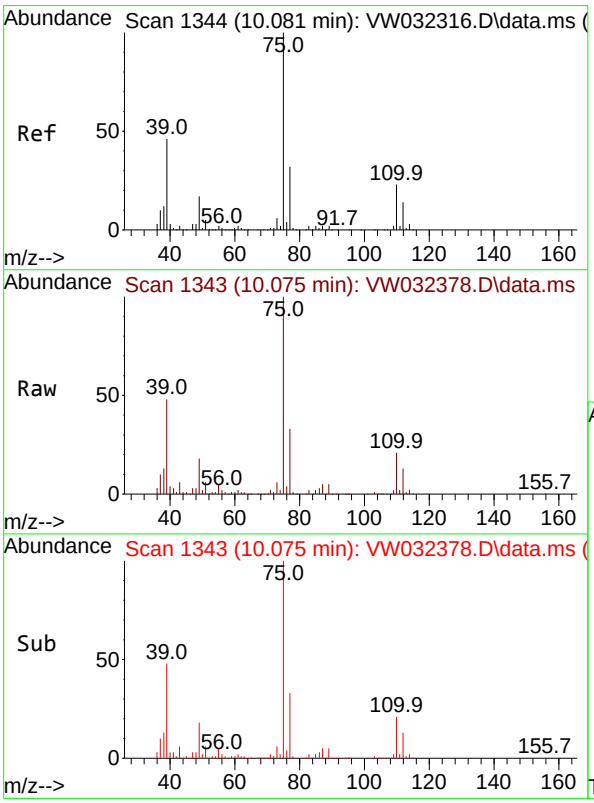
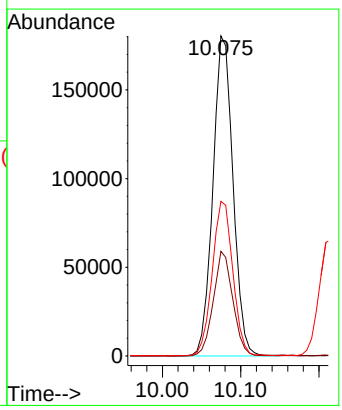
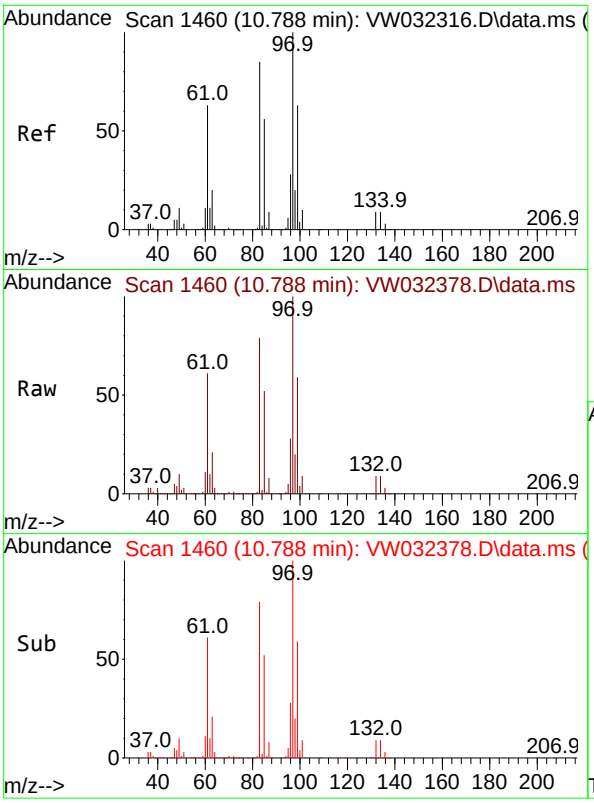


#54
cis-1,3-Dichloropropene
Concen: 57.231 ug/l
RT: 10.075 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 75 Resp: 321876

Ion	Ratio	Lower	Upper
75	100		
77	32.7	25.1	37.7
39	48.2	43.2	64.8

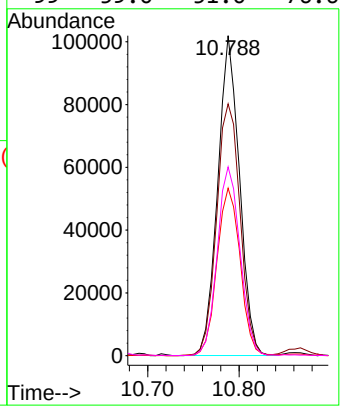




#55
1,1,2-Trichloroethane
Concen: 57.233 ug/l
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 97 Resp: 16831

Ion	Ratio	Lower	Upper
97	100		
83	78.8	71.0	106.6
85	52.4	42.8	64.2
99	59.0	51.0	76.6



Instrument :
MSVOA_W
ClientSampleId :
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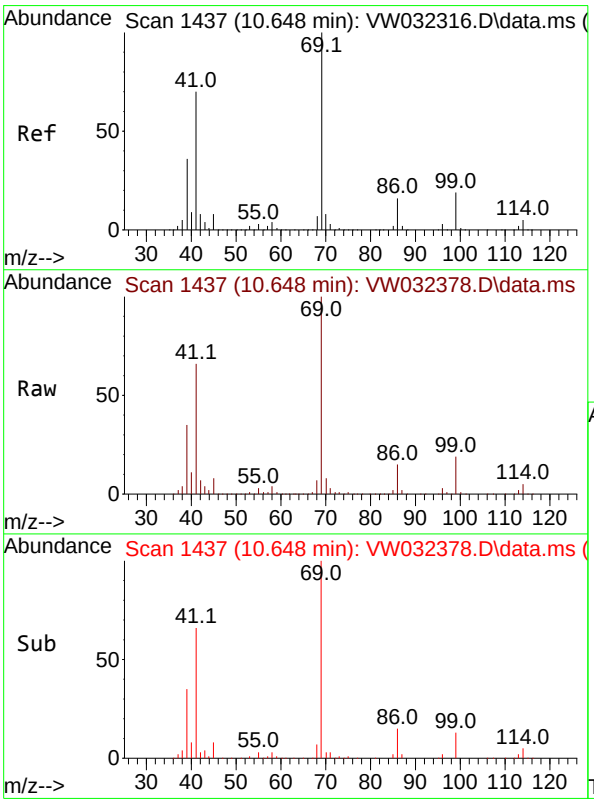
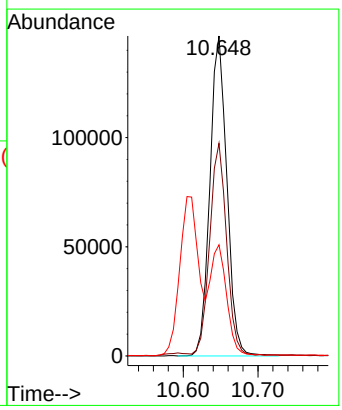
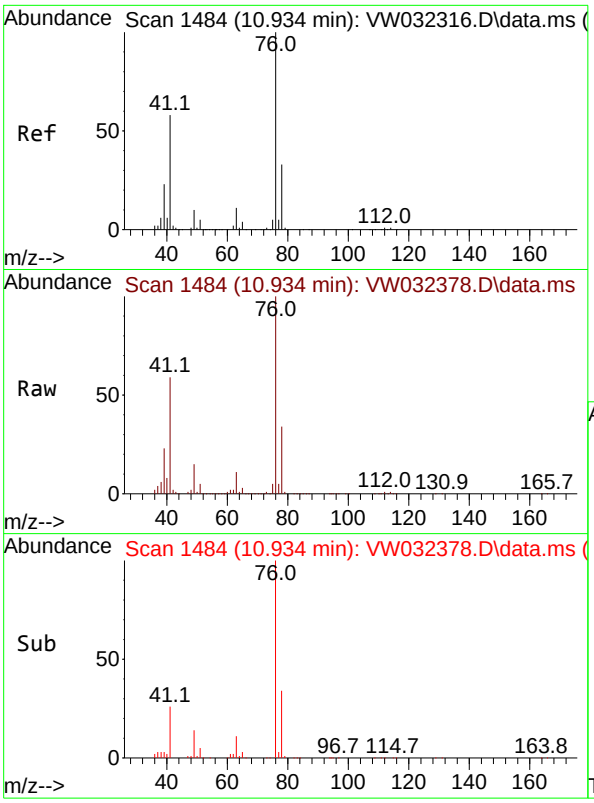


#56
Ethyl methacrylate
Concen: 56.352 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 69 Resp: 231959

Ion	Ratio	Lower	Upper
69	100		
41	65.5	53.2	79.8
39	32.8	32.9	49.3#

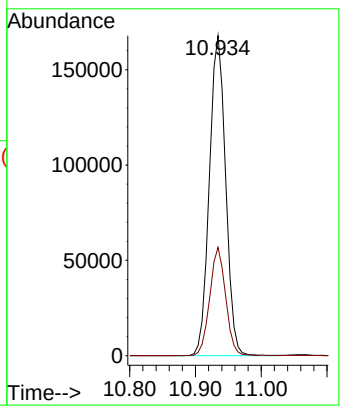




#57
1,3-Dichloropropane
Concen: 55.655 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 76 Resp: 28907

Ion	Ratio	Lower	Upper
76	100		
78	33.0	26.2	39.4



Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

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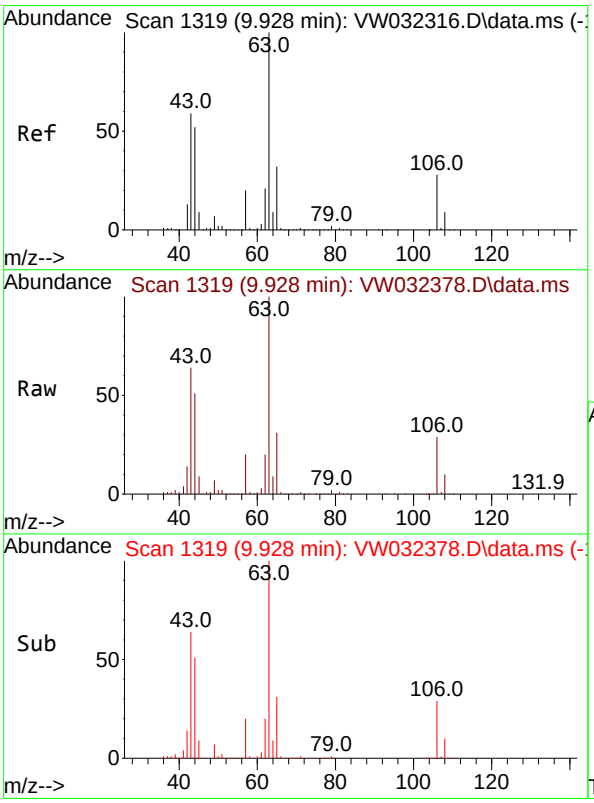
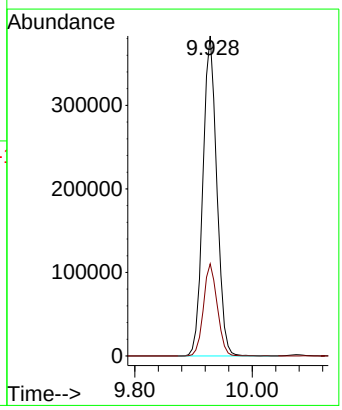
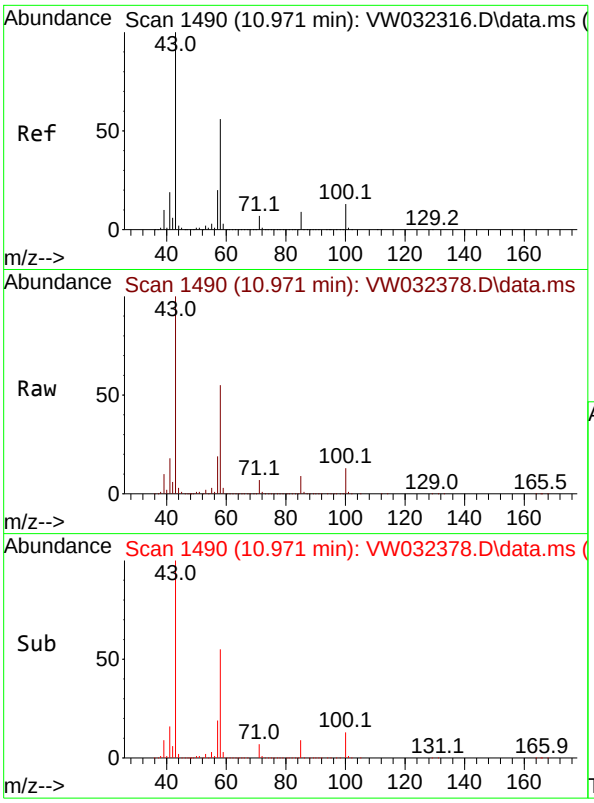


#58
2-Chloroethyl Vinyl ether
Concen: 287.576 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 63 Resp: 629980

Ion	Ratio	Lower	Upper
63	100		
106	28.5	24.3	36.5

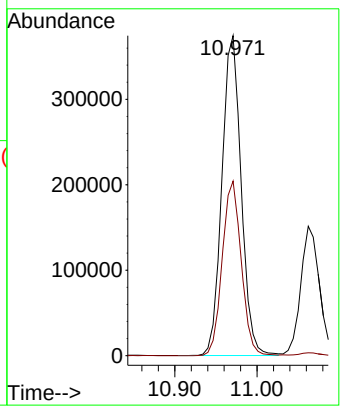




#59
2-Hexanone
Concen: 276.684 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 61039

Ion	Ratio	Lower	Upper
43	100		
58	54.0	27.5	82.4



Instrument :
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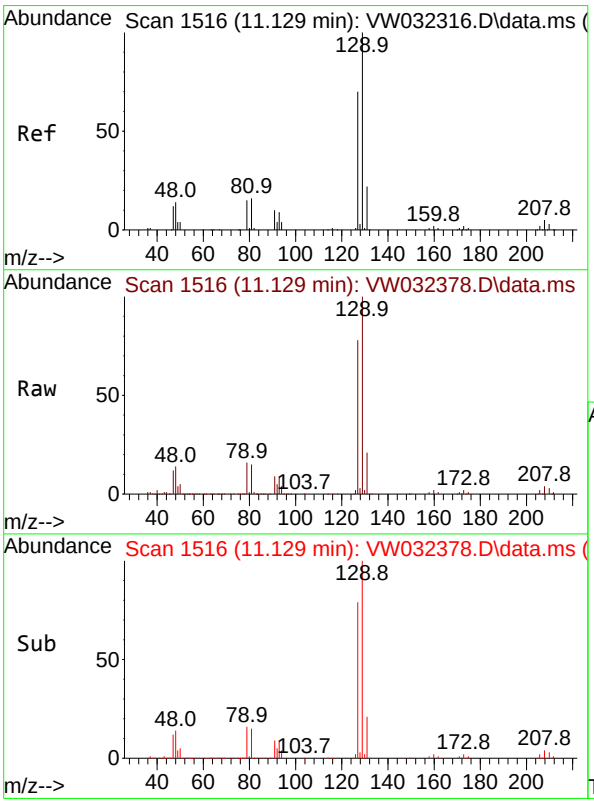
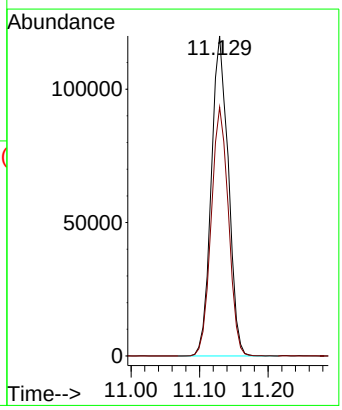
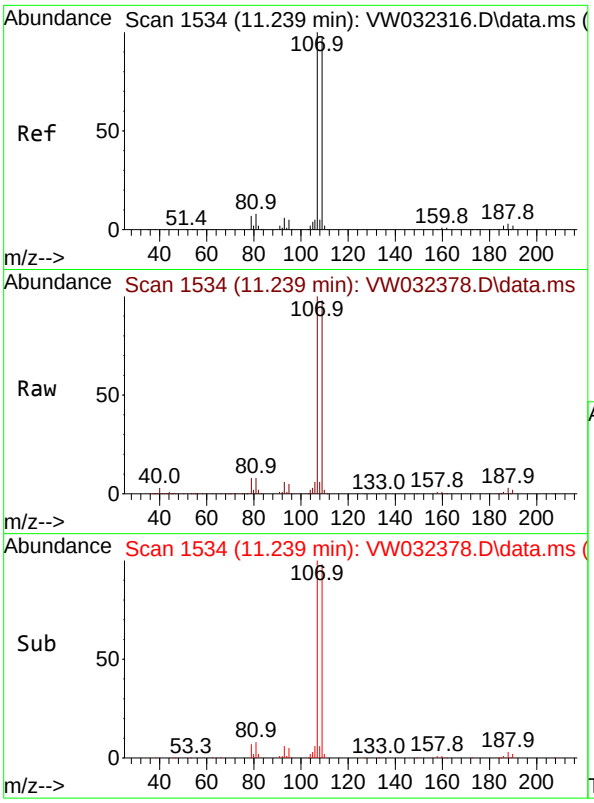


#60
Dibromochloromethane
Concen: 61.883 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:129 Resp: 206640

Ion	Ratio	Lower	Upper
129	100		
127	78.6	38.1	114.5

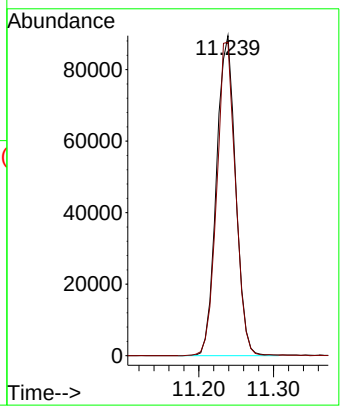




#61
1,2-Dibromoethane
Concen: 55.617 ug/l
RT: 11.239 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:107 Resp: 15948

Ion	Ratio	Lower	Upper
107	100		
109	96.3	74.5	111.7



Instrument :
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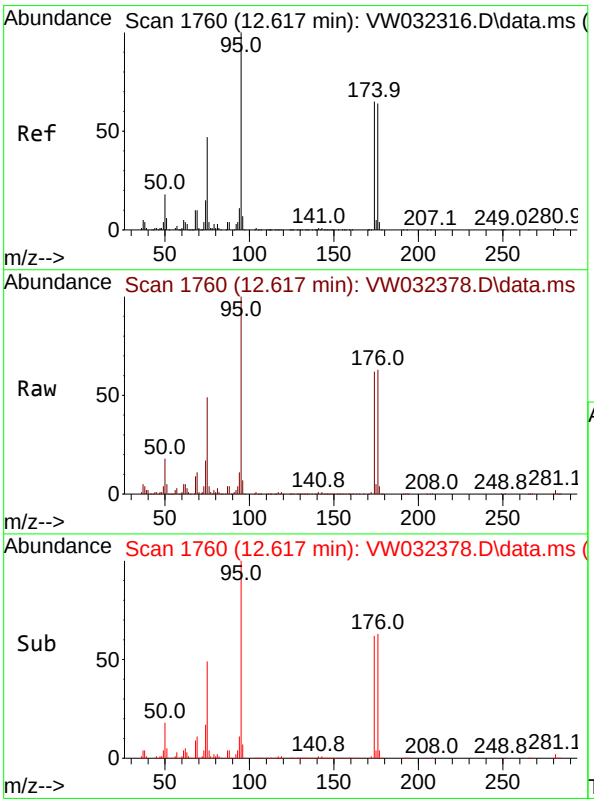
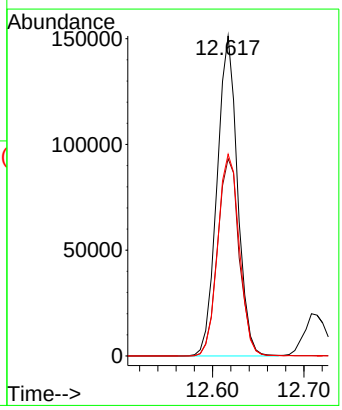
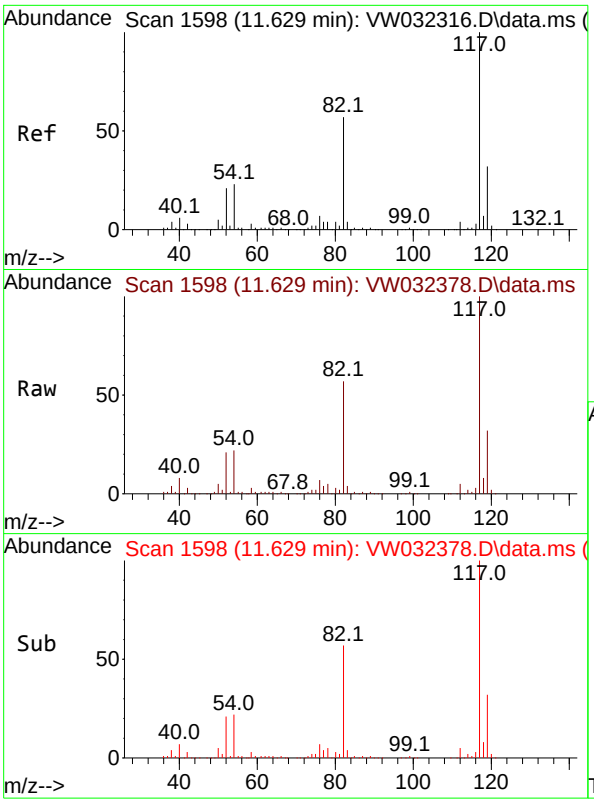


#62
4-Bromofluorobenzene
Concen: 52.021 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 95 Resp: 235180

Ion	Ratio	Lower	Upper
95	100		
174	65.3	0.0	145.6
176	66.5	0.0	140.8

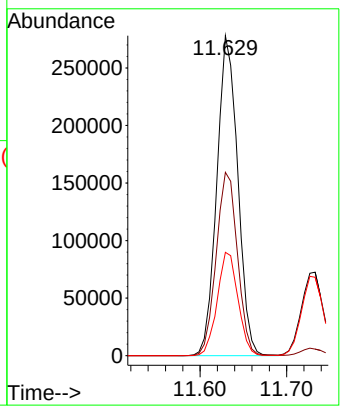




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:117 Resp: 46687

Ion	Ratio	Lower	Upper
117	100		
82	57.3	42.7	64.1
119	32.3	25.2	37.8



Instrument :
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ClientSampleId :
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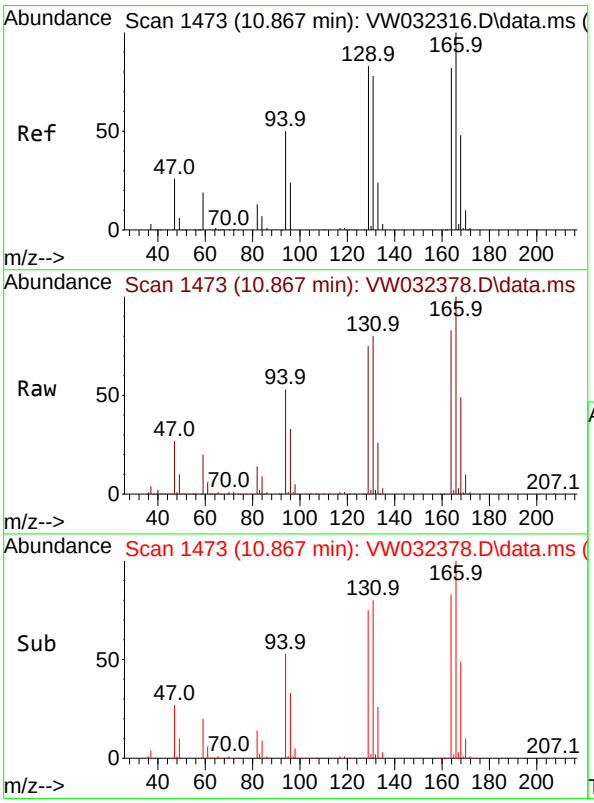
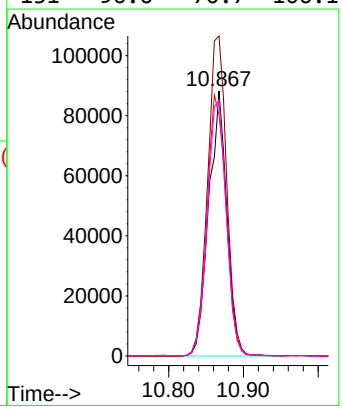
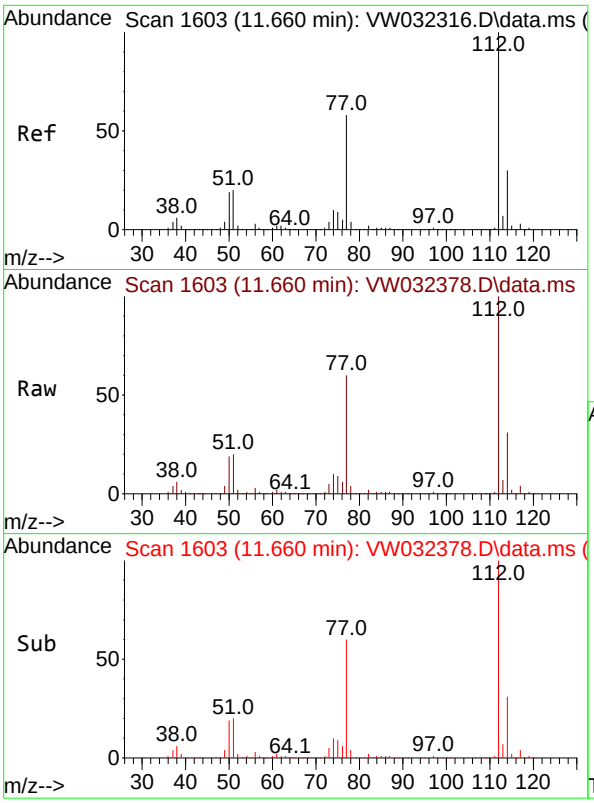


#64
Tetrachloroethene
Concen: 52.663 ug/l
RT: 10.867 min Scan# 1473
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:164 Resp: 147123

Ion	Ratio	Lower	Upper
164	100		
166	120.8	97.5	146.3
129	91.0	71.2	106.8
131	96.6	70.7	106.1

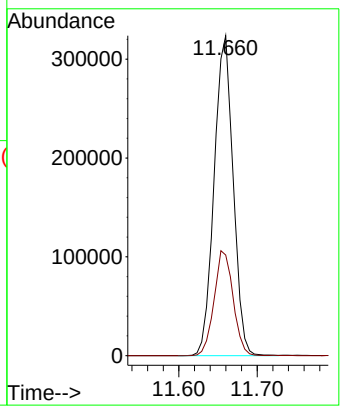




#65
Chlorobenzene
Concen: 53.221 ug/l
RT: 11.660 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:112 Resp: 54670

Ion	Ratio	Lower	Upper
112	100		
114	31.5	26.0	39.0



Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

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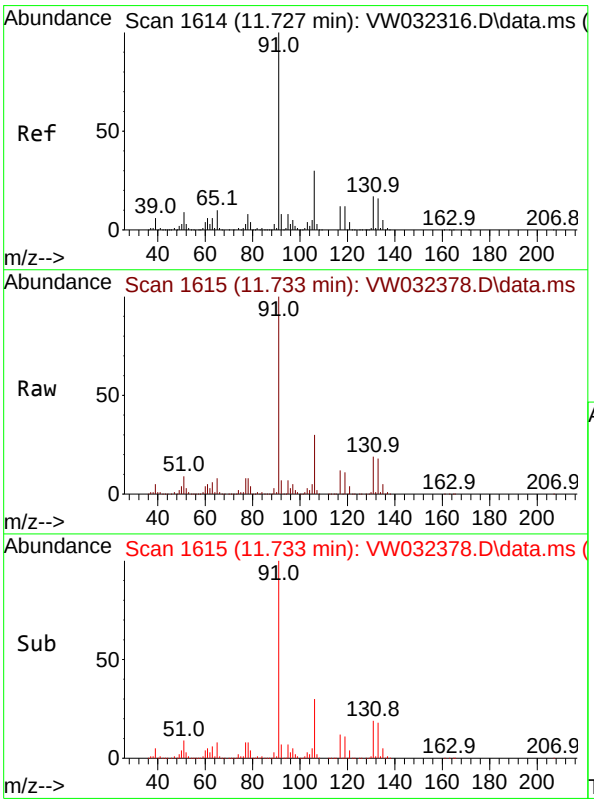
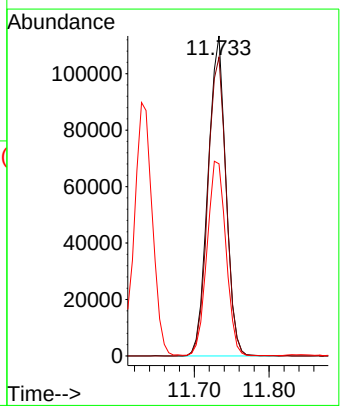
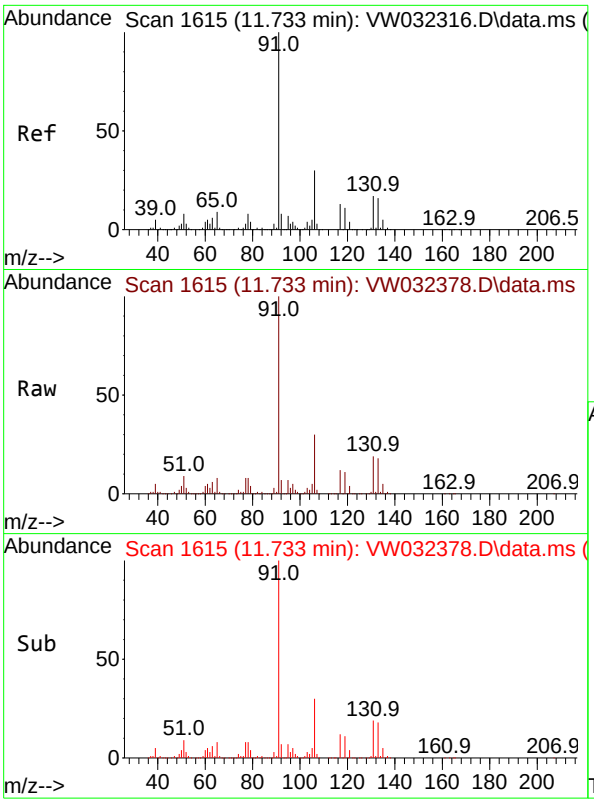


#66
1,1,1,2-Tetrachloroethane
Concen: 58.904 ug/l
RT: 11.733 min Scan# 1615
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:131 Resp: 188463

Ion	Ratio	Lower	Upper
131	100		
133	95.7	47.7	143.1
119	64.2	32.8	98.3

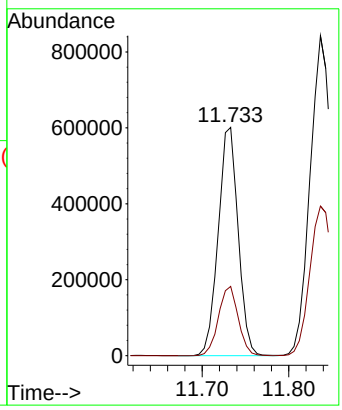




#67
Ethyl Benzene
Concen: 56.174 ug/l
RT: 11.733 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 91 Resp: 96186

Ion	Ratio	Lower	Upper
91	100		
106	30.3	25.3	37.9



Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

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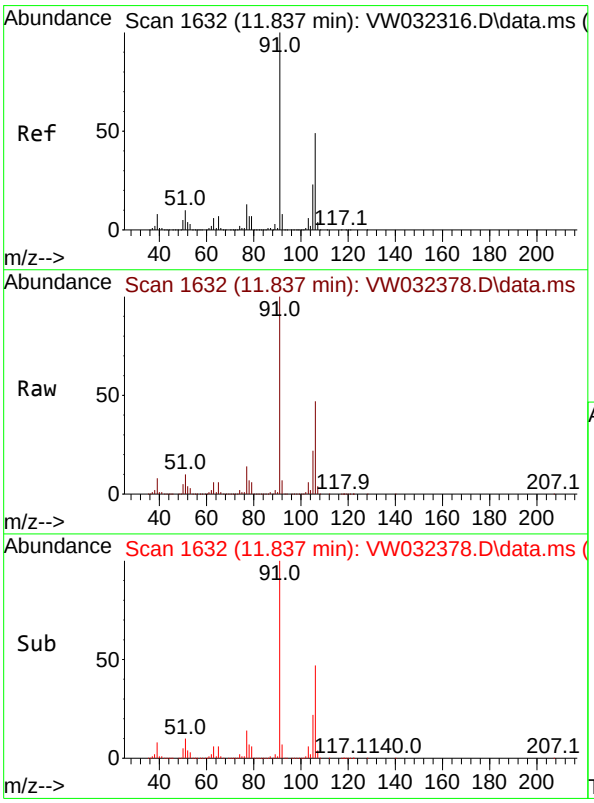
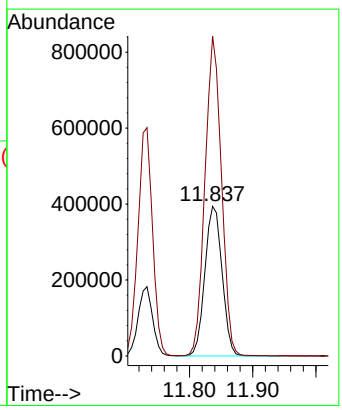
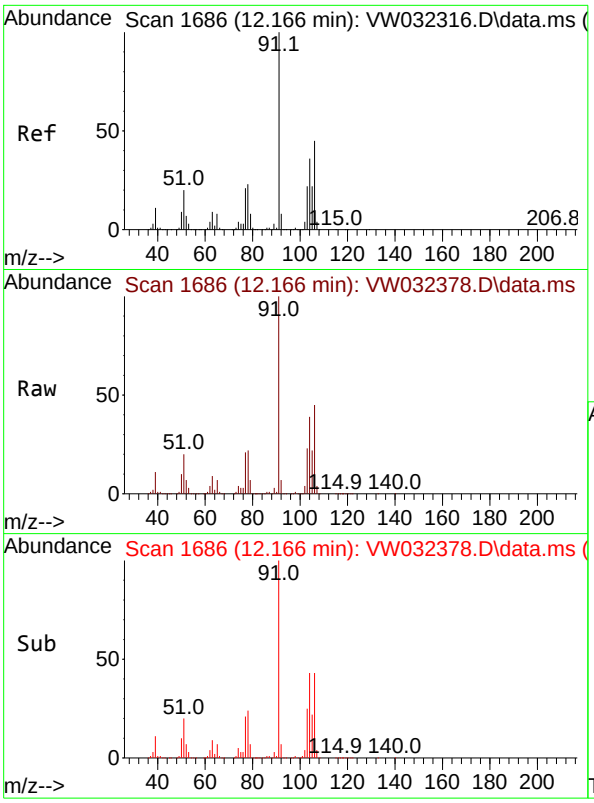


#68
m/p-Xylenes
Concen: 112.736 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:106 Resp: 744366

Ion	Ratio	Lower	Upper
106	100		
91	204.6	164.2	246.2

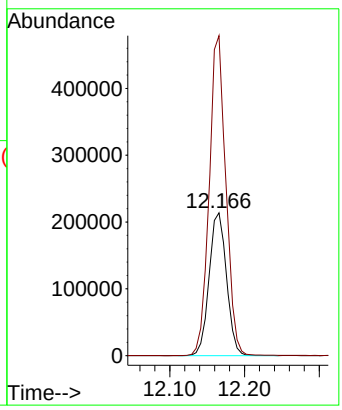




#69
o-Xylene
Concen: 55.988 ug/l
RT: 12.166 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:106 Resp: 34570

Ion	Ratio	Lower	Upper
106	100		
91	214.9	108.7	326.3



Instrument :
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ClientSampleId :
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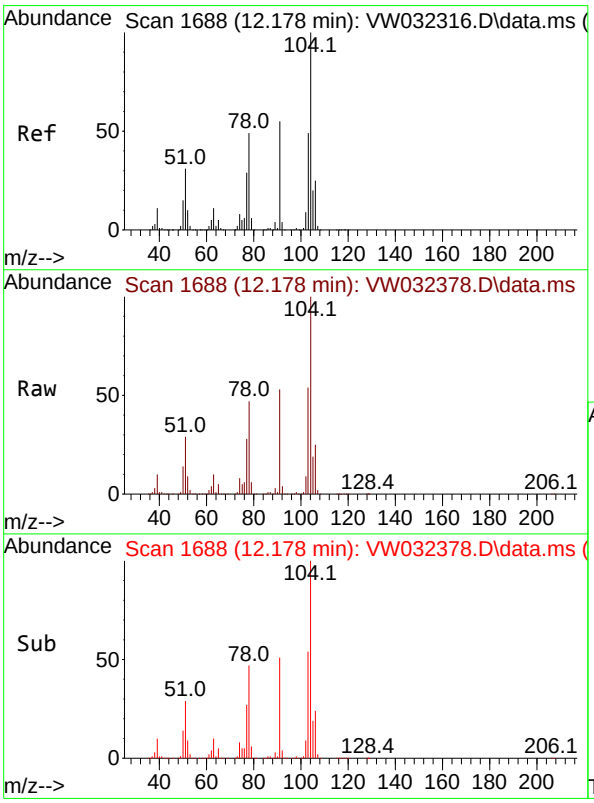
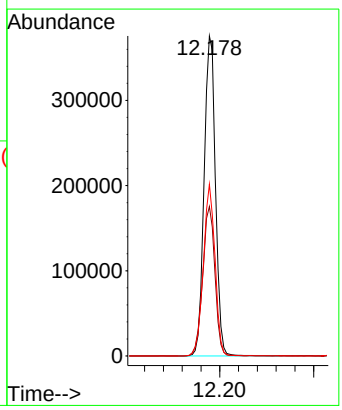
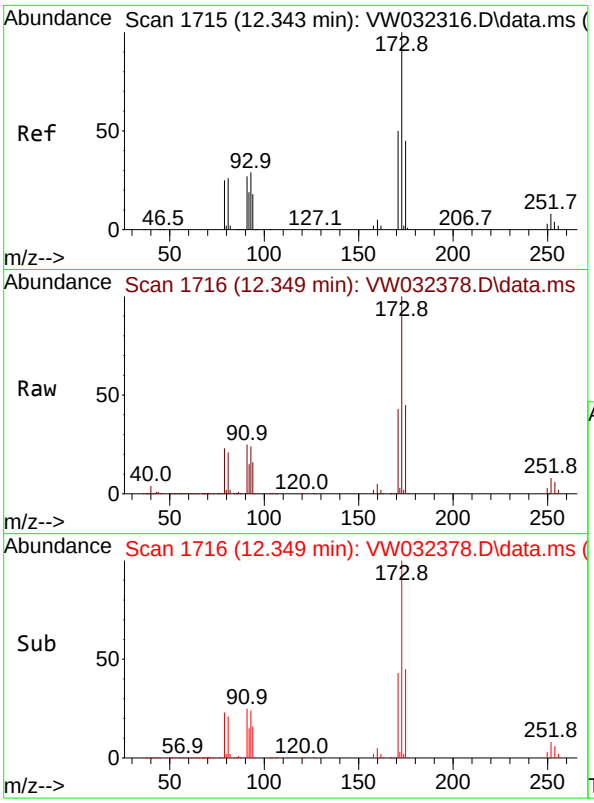


#70
Styrene
Concen: 58.262 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:104 Resp: 628107

Ion	Ratio	Lower	Upper
104	100		
78	50.1	41.6	62.4
103	55.1	44.8	67.2

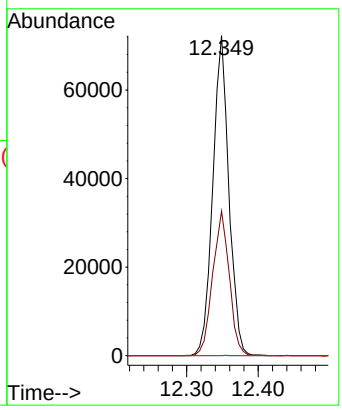




#71
Bromoform
Concen: 61.560 ug/l
RT: 12.349 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:173 Resp: 11289

Ion	Ratio	Lower	Upper
173	100		
175	46.6	24.9	74.7
254	0.0	0.2	0.2



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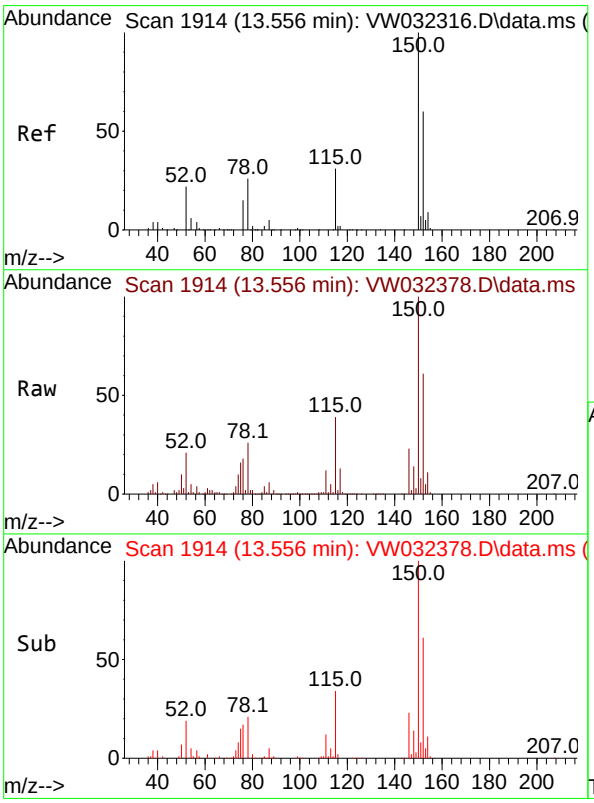
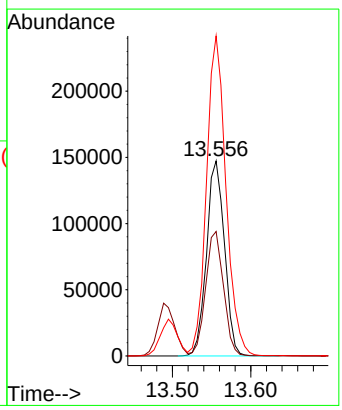
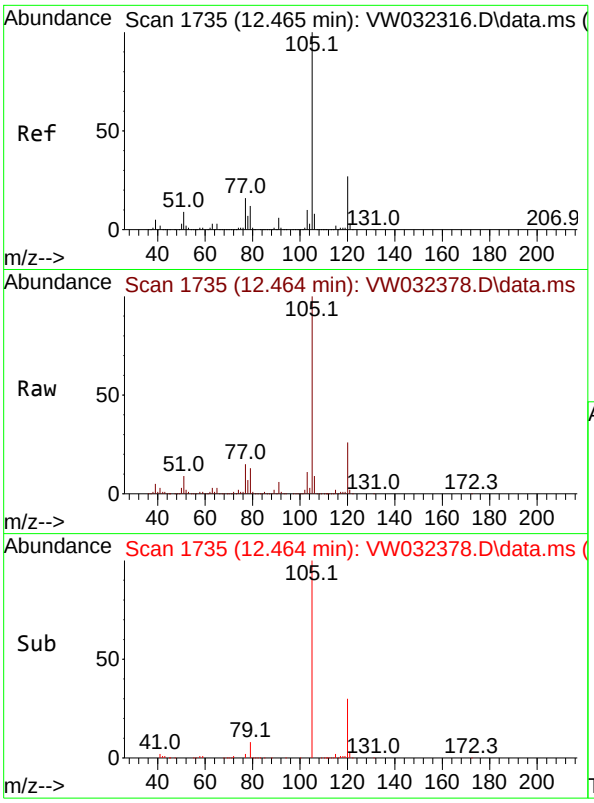


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:152 Resp: 234766

Ion	Ratio	Lower	Upper
152	100		
115	63.2	31.8	95.4
150	177.2	0.0	343.0

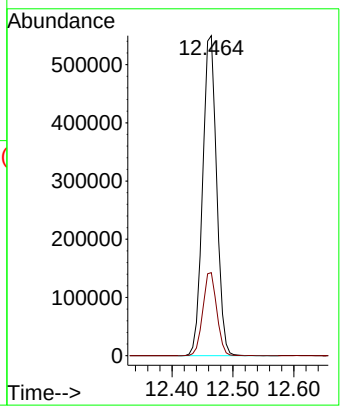




#73
Isopropylbenzene
Concen: 54.560 ug/l
RT: 12.464 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:105 Resp: 87632

Ion	Ratio	Lower	Upper
105	100		
120	26.0	13.0	38.9



Instrument :
MSVOA_W
ClientSampleId :
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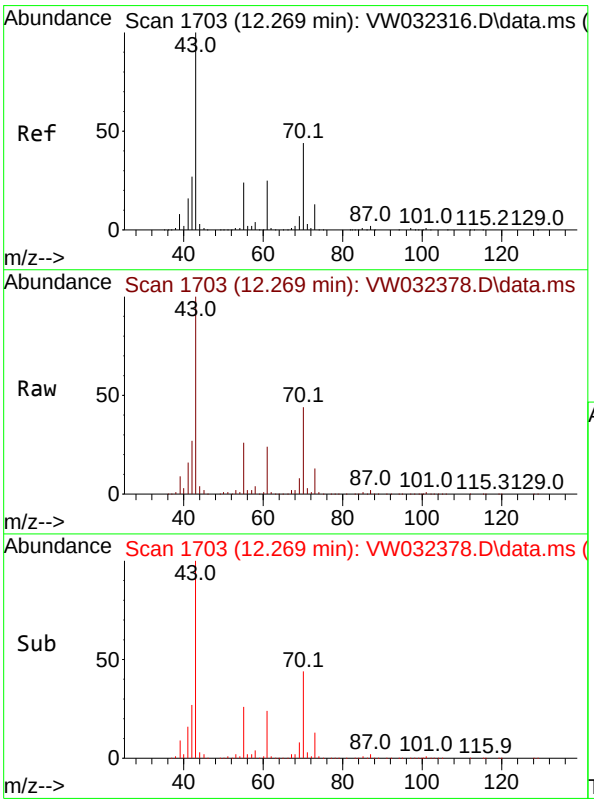
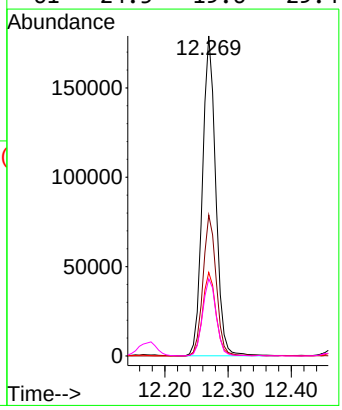
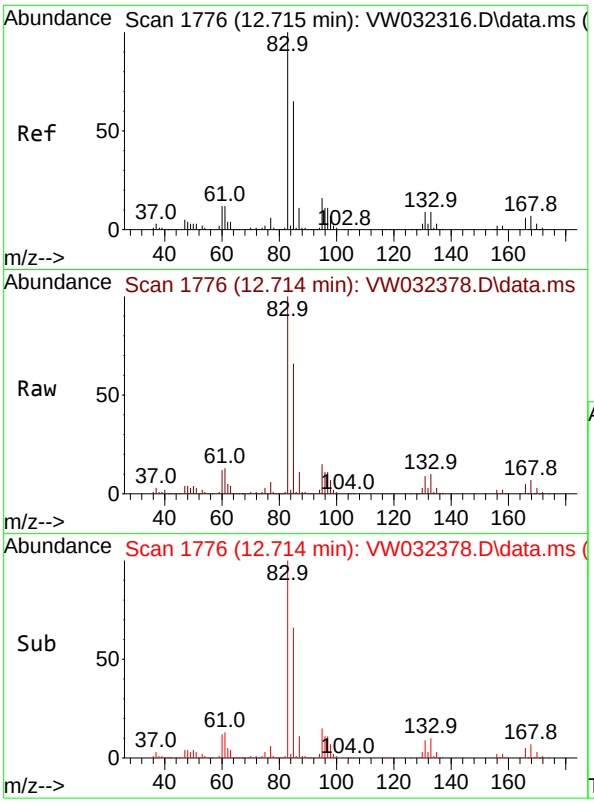


#74
N-amyl acetate
Concen: 51.189 ug/l
RT: 12.269 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 43 Resp: 262286

Ion	Ratio	Lower	Upper
43	100		
70	44.1	35.3	52.9
55	26.7	19.9	29.9
61	24.5	19.6	29.4

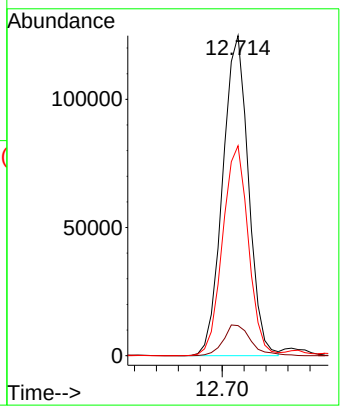




#75
1,1,2,2-Tetrachloroethane
Concen: 51.119 ug/l
RT: 12.714 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 83 Resp: 20386

Ion	Ratio	Lower	Upper
83	100		
131	10.2	5.1	15.4
85	65.6	32.2	96.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

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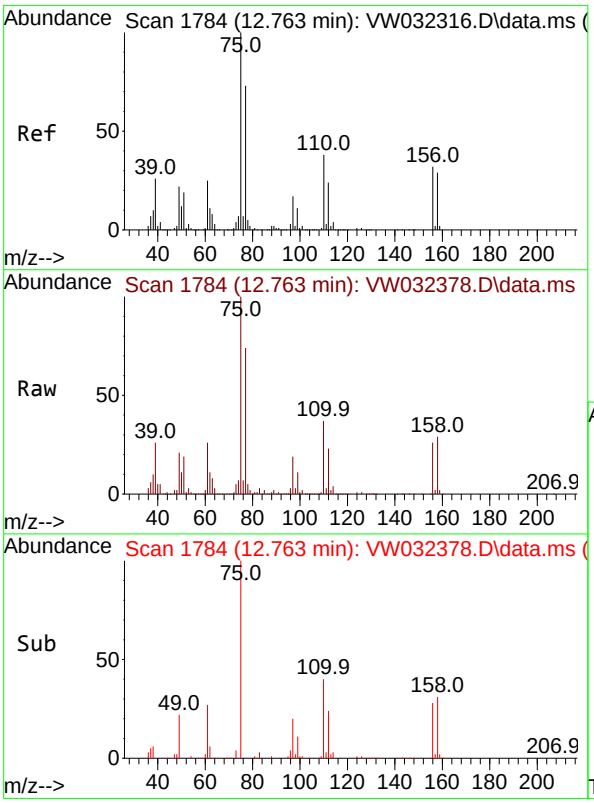
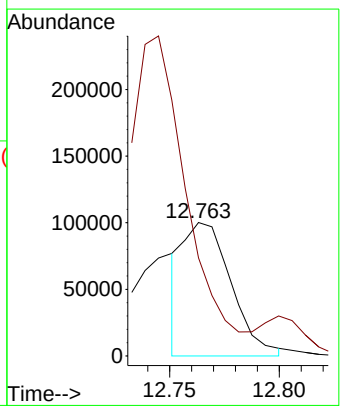
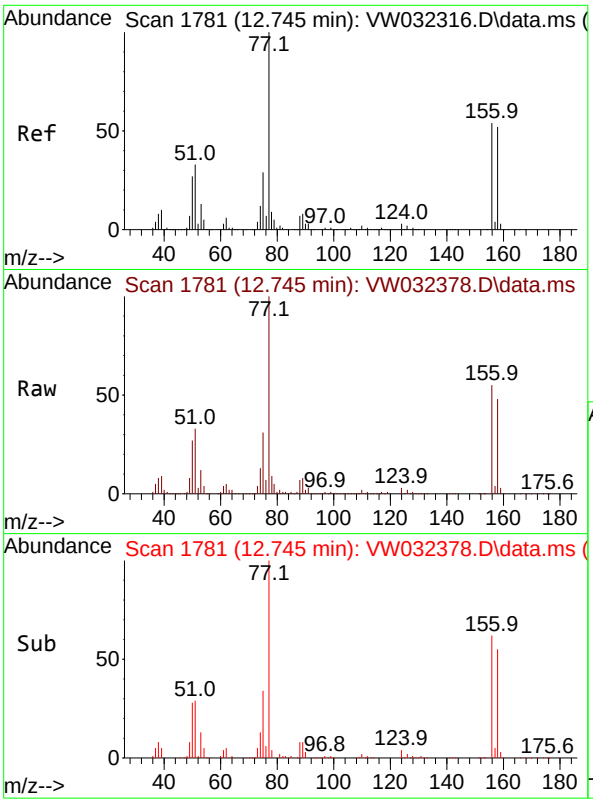


#76
1,2,3-Trichloropropane
Concen: 49.739 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 75 Resp: 153664

Ion	Ratio	Lower	Upper
75	100		
77	293.9	141.7	425.1

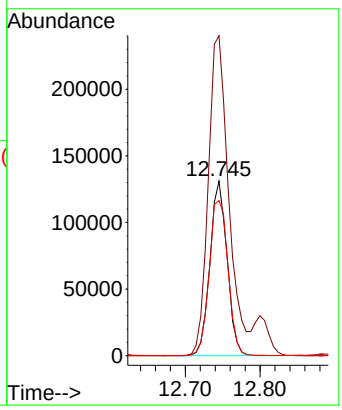




#77
Bromobenzene
Concen: 53.907 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:156 Resp: 20871

Ion	Ratio	Lower	Upper
156	100		
77	216.4	98.6	295.7
158	97.8	48.4	145.0



Instrument :
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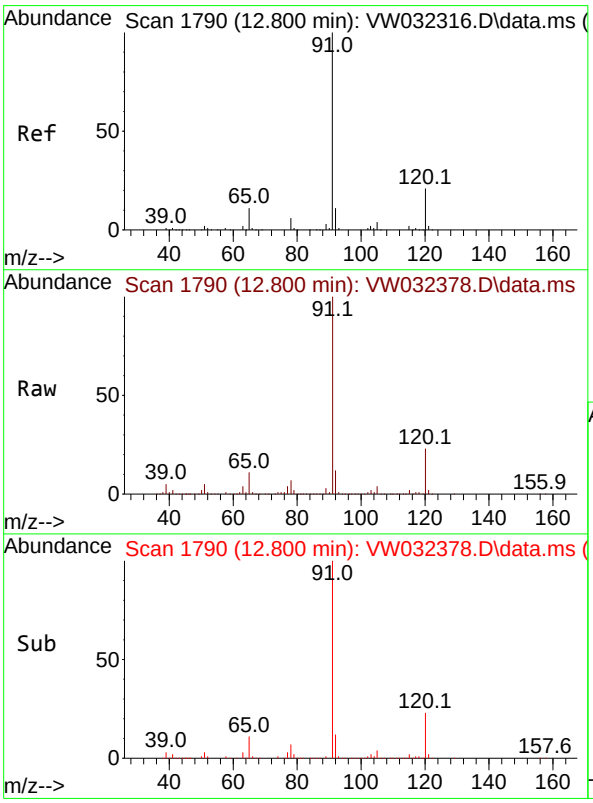
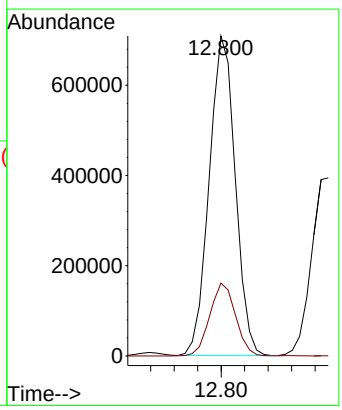
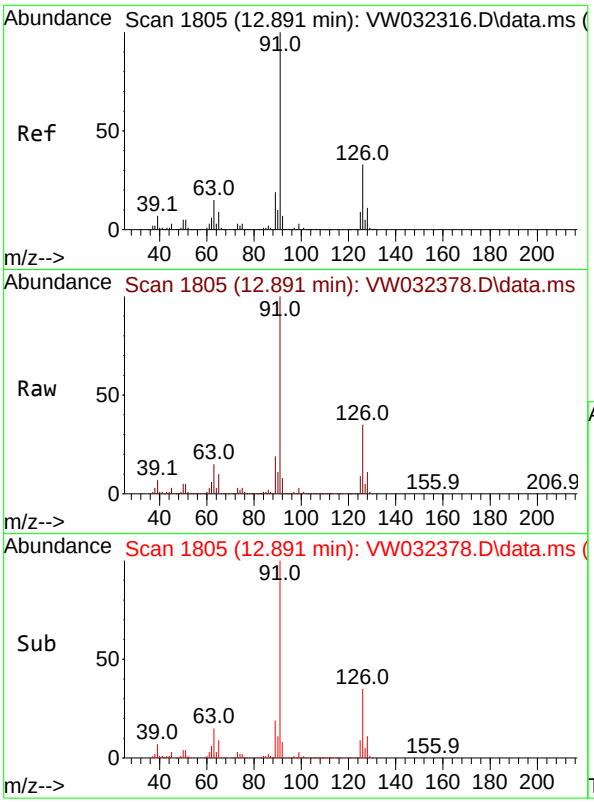


#78
n-propylbenzene
Concen: 54.462 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 91 Resp: 1092673

Ion	Ratio	Lower	Upper
91	100		
120	22.5	11.8	35.4

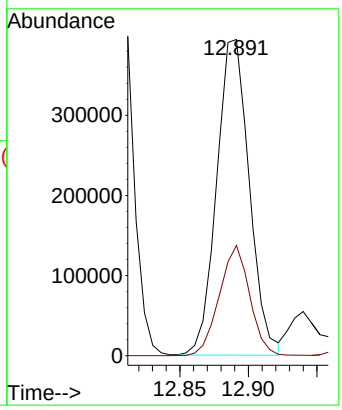




#79
2-Chlorotoluene
Concen: 53.203 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 91 Resp: 65266

Ion	Ratio	Lower	Upper
91	100		
126	32.6	16.6	49.7



Instrument :
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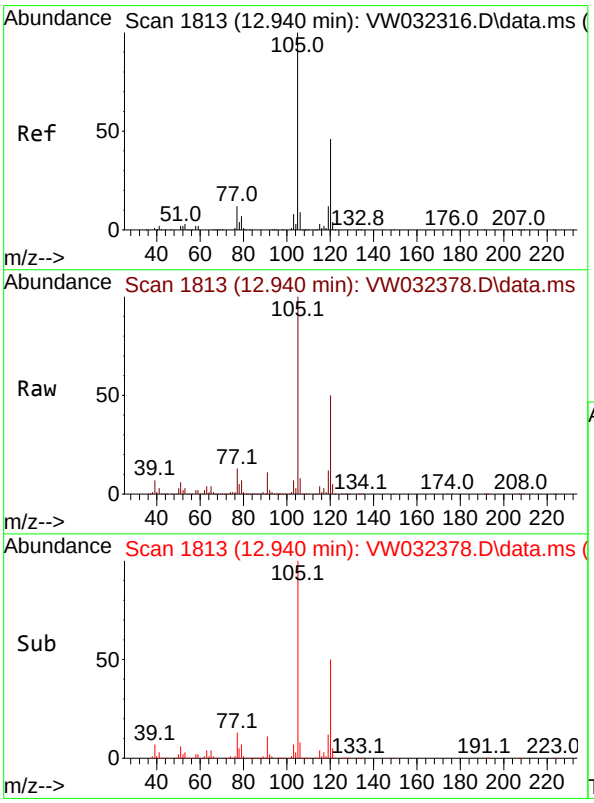
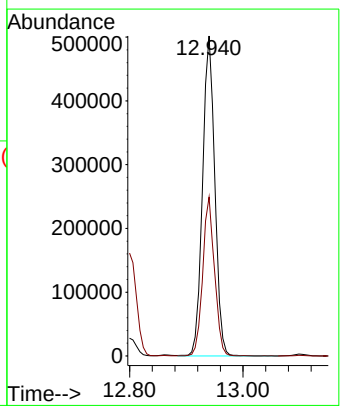
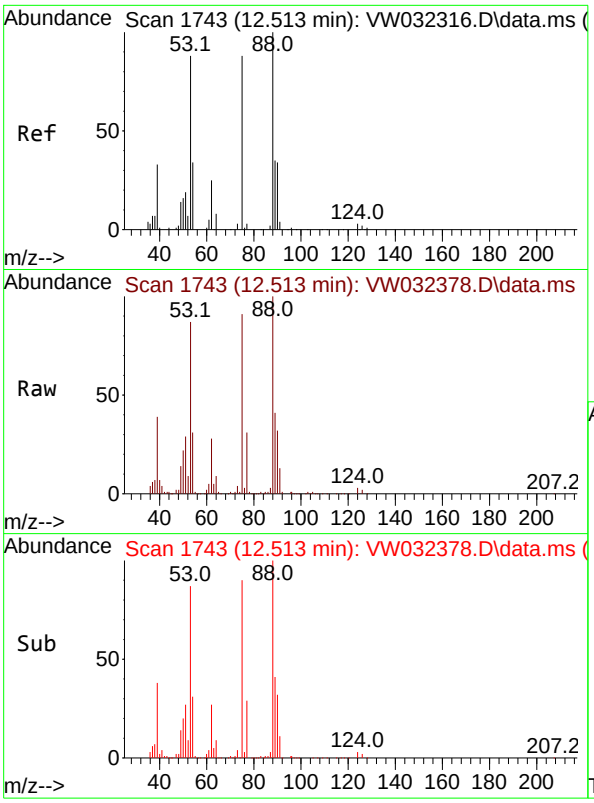


#80
1,3,5-Trimethylbenzene
Concen: 54.209 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:105 Resp: 752875

Ion	Ratio	Lower	Upper
105	100		
120	47.7	24.8	74.4

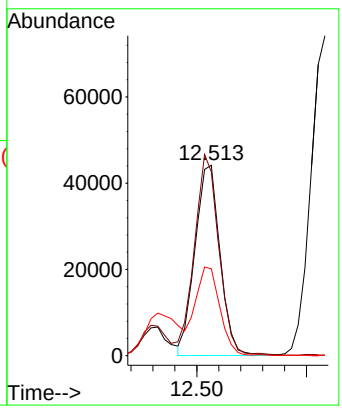




#81
trans-1,4-Dichloro-2-butene
Concen: 57.667 ug/l
RT: 12.513 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 75 Resp: 7032

Ion	Ratio	Lower	Upper
75	100		
53	103.7	91.0	136.6
89	45.6	39.4	59.2



Instrument :
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ClientSampleId :
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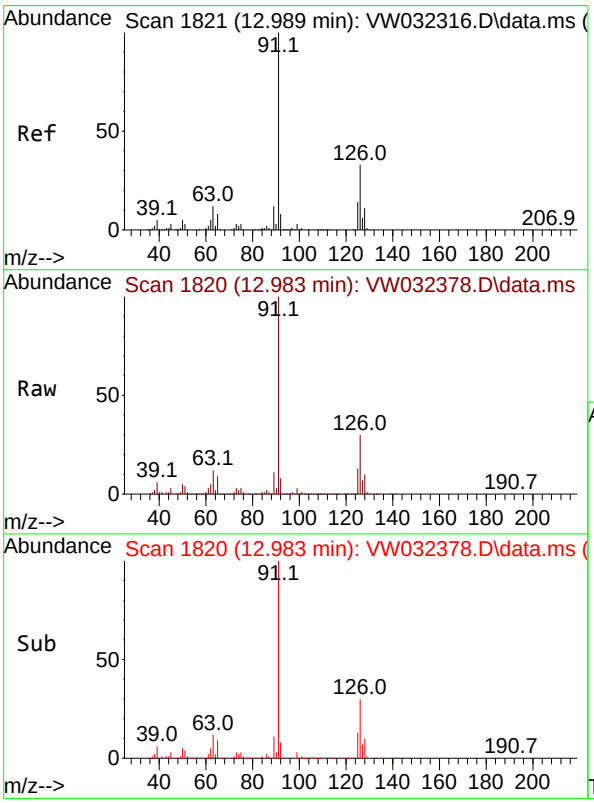
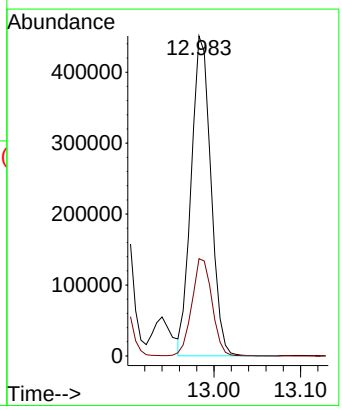
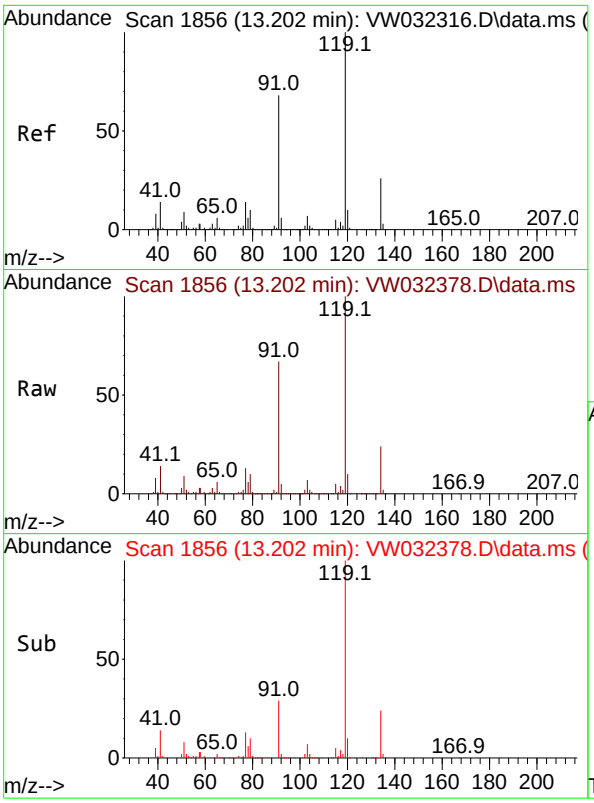


#82
4-Chlorotoluene
Concen: 54.437 ug/l
RT: 12.983 min Scan# 1820
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 91 Resp: 709987

Ion	Ratio	Lower	Upper
91	100		
126	31.2	16.1	48.2

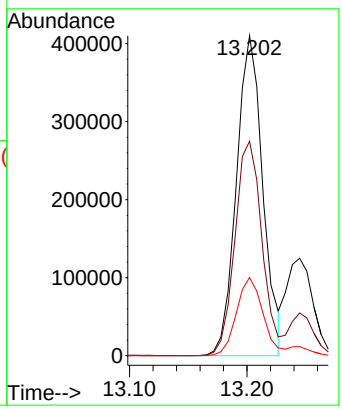




#83
tert-Butylbenzene
Concen: 56.237 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:119 Resp: 64084

Ion	Ratio	Lower	Upper
119	100		
91	68.2	33.8	101.3
134	24.6	12.5	37.5



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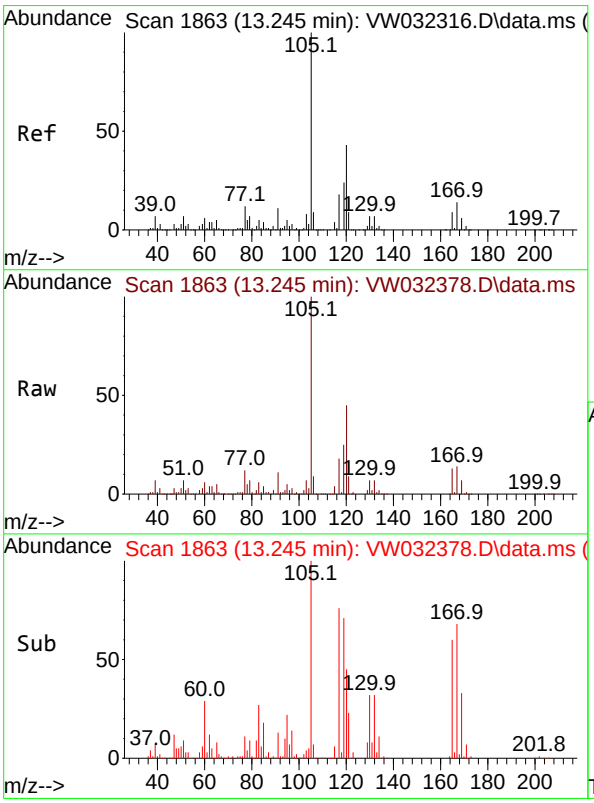
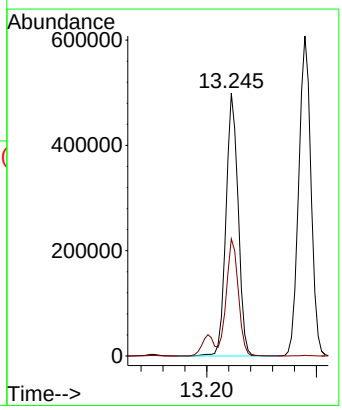
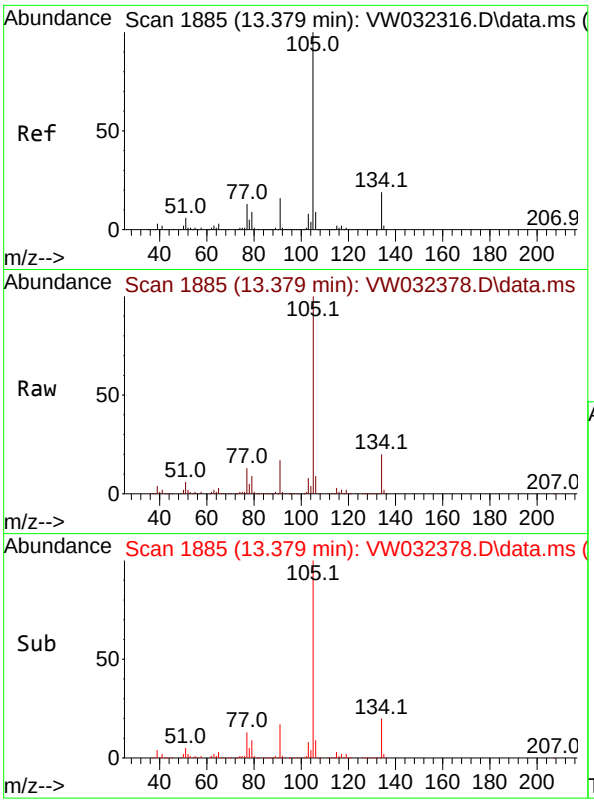


#84
1,2,4-Trimethylbenzene
Concen: 54.602 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:105 Resp: 771106

Ion	Ratio	Lower	Upper
105	100		
120	43.6	22.1	66.3

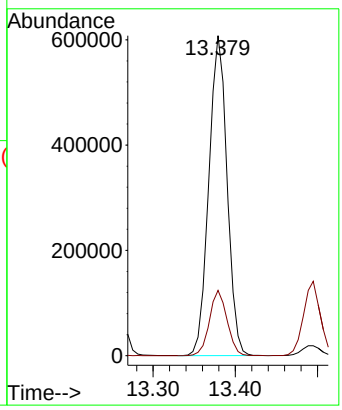




#85
sec-Butylbenzene
Concen: 53.756 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:105 Resp: 93612

Ion	Ratio	Lower	Upper
105	100		
134	19.7	10.1	30.1



Instrument :
MSVOA_W
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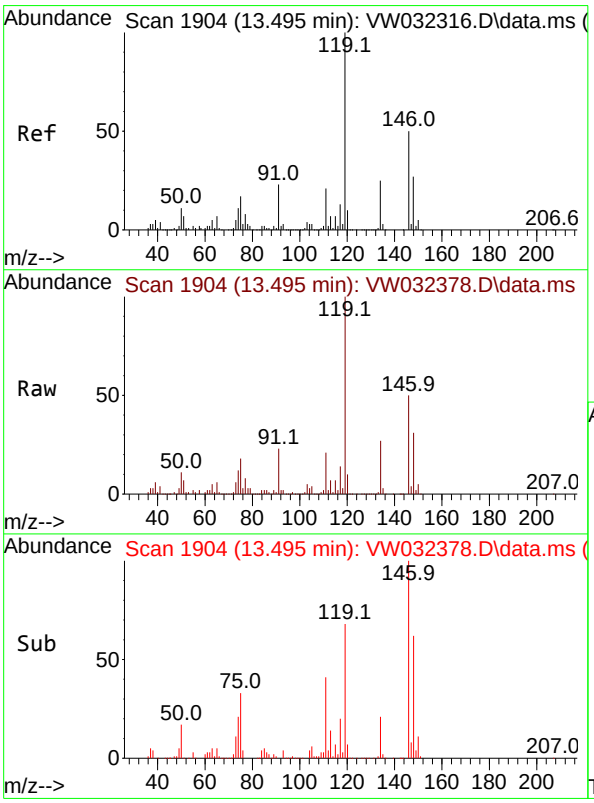
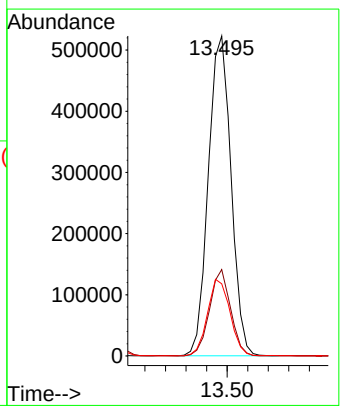
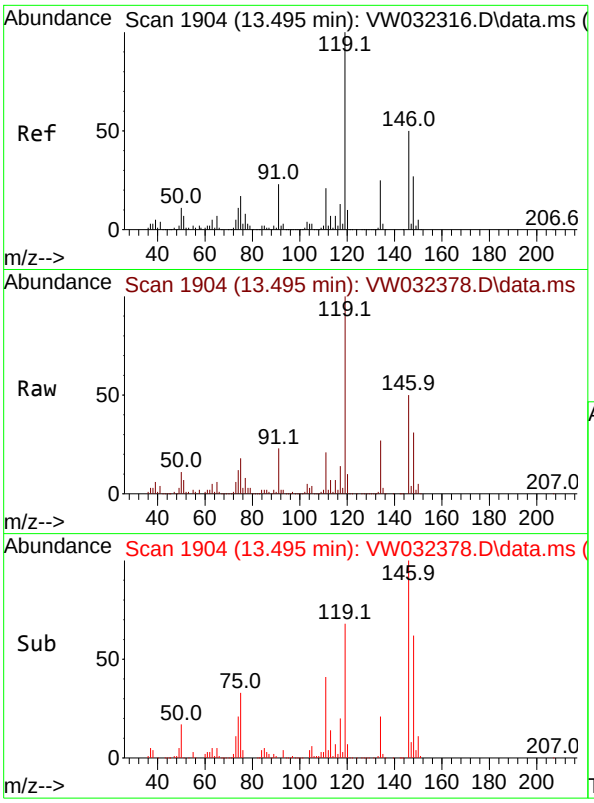


#86
p-Isopropyltoluene
Concen: 55.381 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:119 Resp: 800220

Ion	Ratio	Lower	Upper
119	100		
134	25.1	12.6	37.6
91	23.8	12.4	37.0

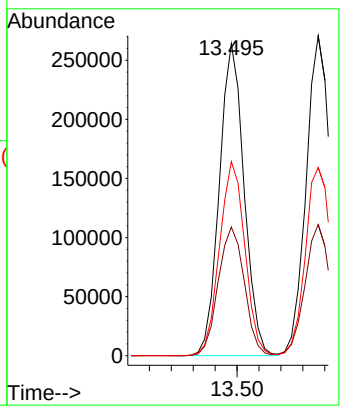




#87
1,3-Dichlorobenzene
Concen: 52.884 ug/l
RT: 13.495 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:146 Resp: 41461

Ion	Ratio	Lower	Upper
146	100		
111	43.4	20.6	61.9
148	63.7	30.6	92.0



Instrument :
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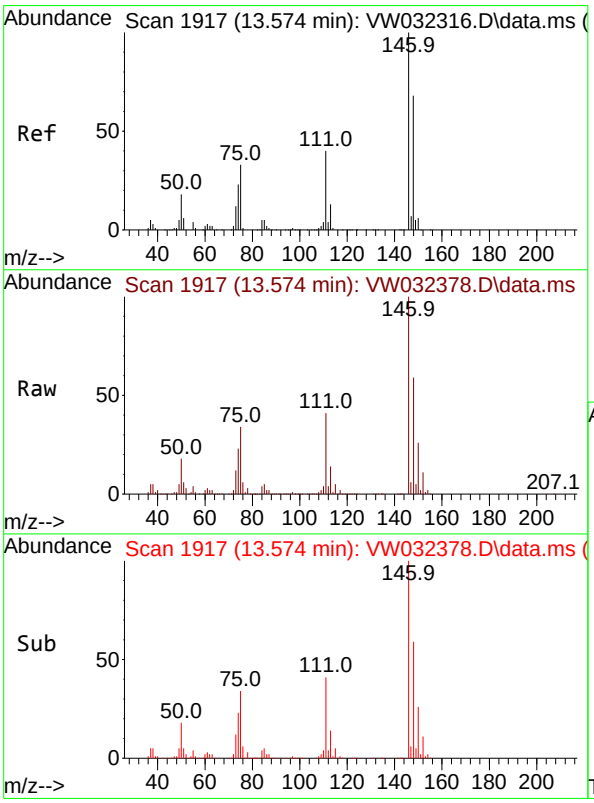
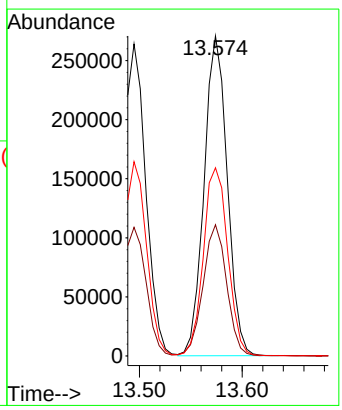
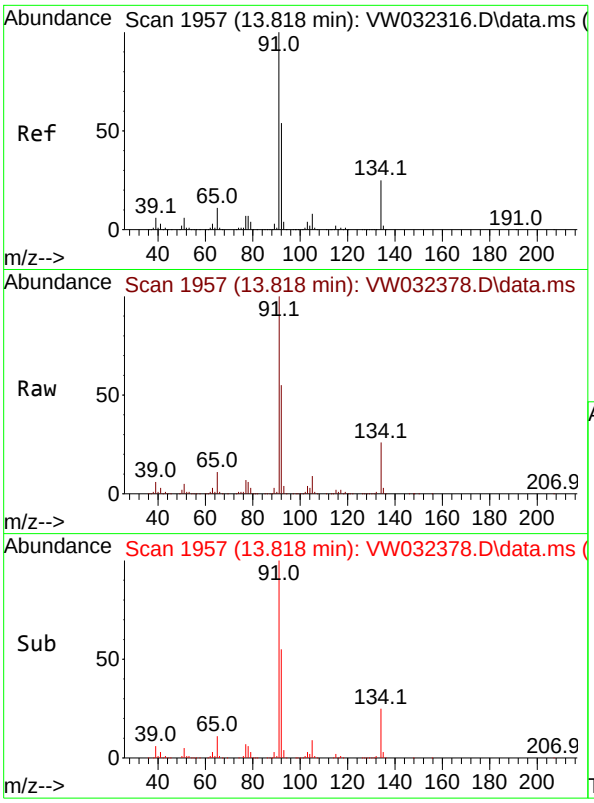


#88
1,4-Dichlorobenzene
Concen: 54.068 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:146 Resp: 423851

Ion	Ratio	Lower	Upper
146	100		
111	41.7	21.3	63.7
148	62.0	33.4	100.1

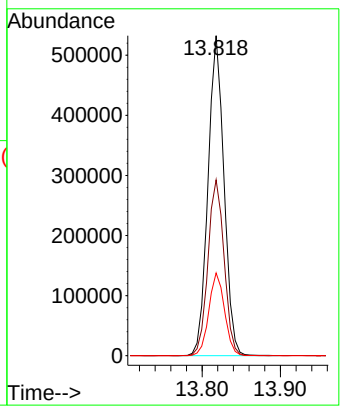




#89
n-Butylbenzene
Concen: 53.414 ug/l
RT: 13.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 91 Resp: 75356

Ion	Ratio	Lower	Upper
91	100		
92	55.4	27.0	81.0
134	25.4	13.1	39.3



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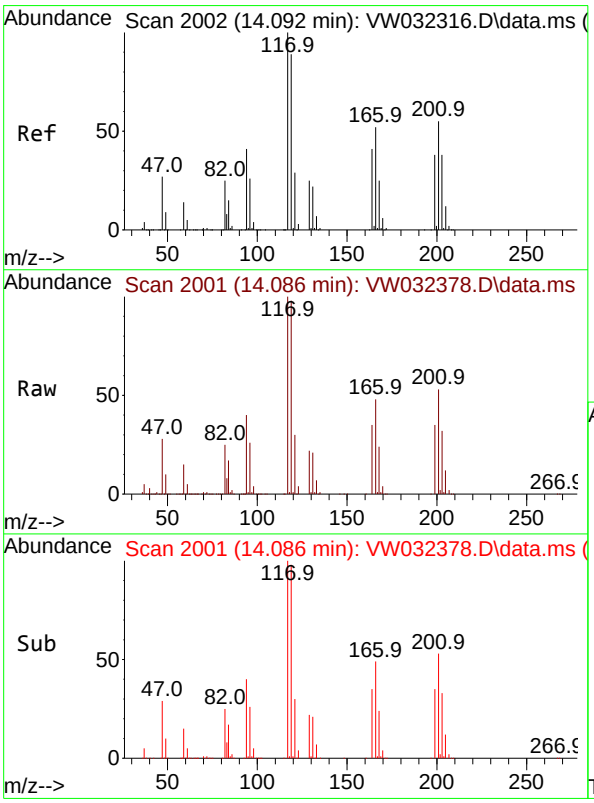
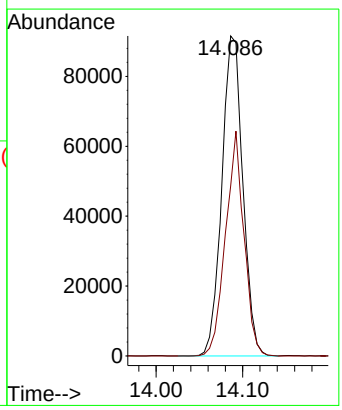
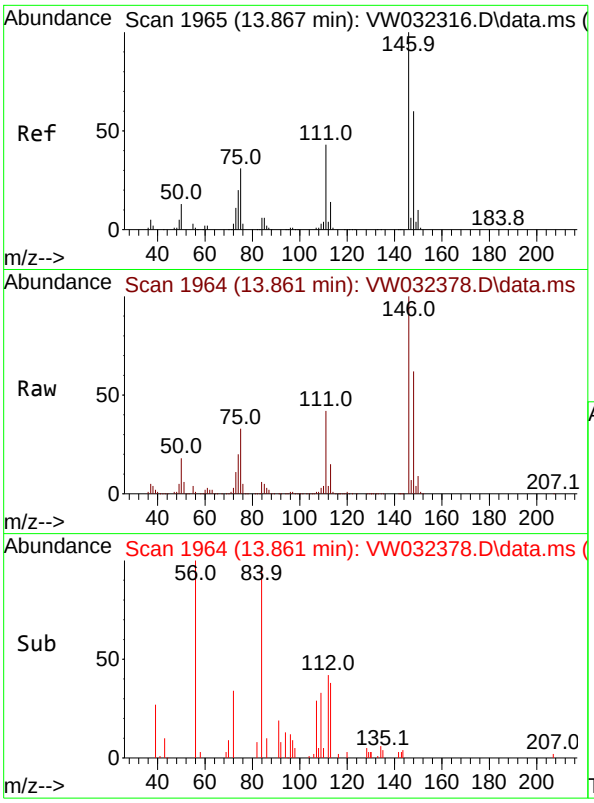


#90
Hexachloroethane
Concen: 59.535 ug/l
RT: 14.086 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:117 Resp: 154192

Ion	Ratio	Lower	Upper
117	100		
201	61.8	32.8	98.4

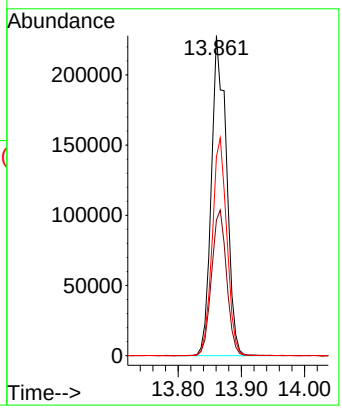




#91
1,2-Dichlorobenzene
Concen: 53.150 ug/l
RT: 13.861 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:146 Resp: 37667

Ion	Ratio	Lower	Upper
146	100		
111	45.4	23.4	70.0
148	65.9	34.1	102.3



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Yesilyurt

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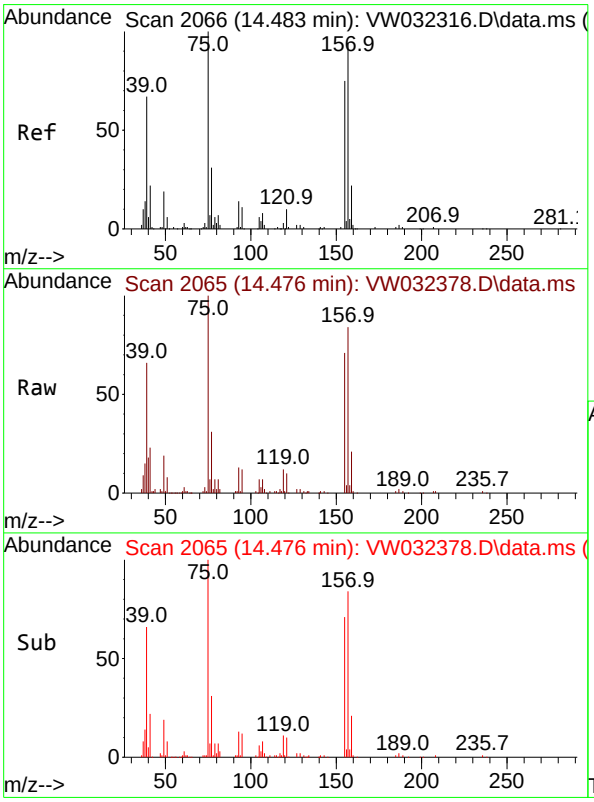
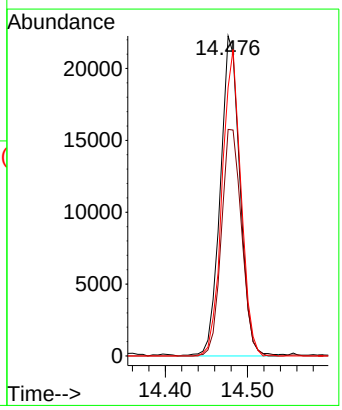
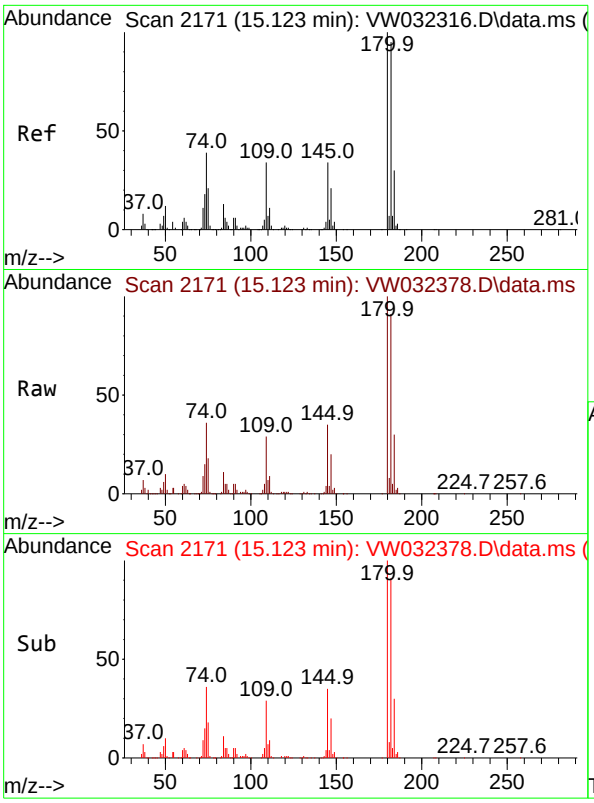


#92
1,2-Dibromo-3-Chloropropane
Concen: 53.021 ug/l
RT: 14.476 min Scan# 2065
Delta R.T. -0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion: 75 Resp: 37022

Ion	Ratio	Lower	Upper
75	100		
155	72.7	40.8	122.5
157	91.7	51.8	155.4

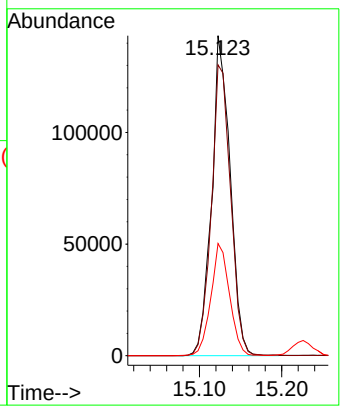




#93
1,2,4-Trichlorobenzene
Concen: 52.878 ug/l
RT: 15.123 min Scan# 21
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:180 Resp: 22471

Ion	Ratio	Lower	Upper
180	100		
182	94.5	47.4	142.2
145	35.5	16.4	49.1



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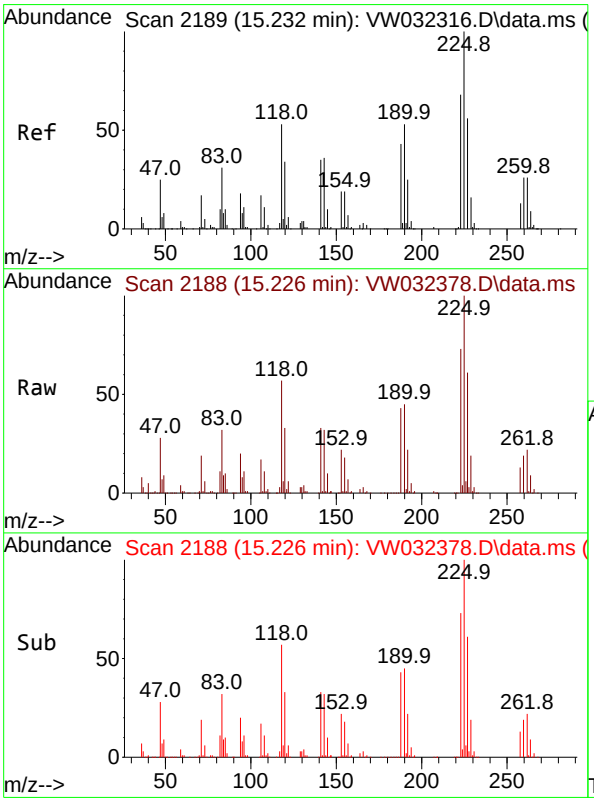
Supervised By :Semsettin Yesilyurt

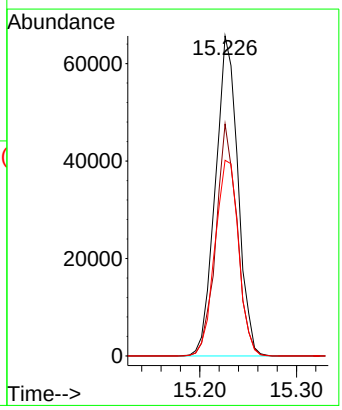
10/21/2025

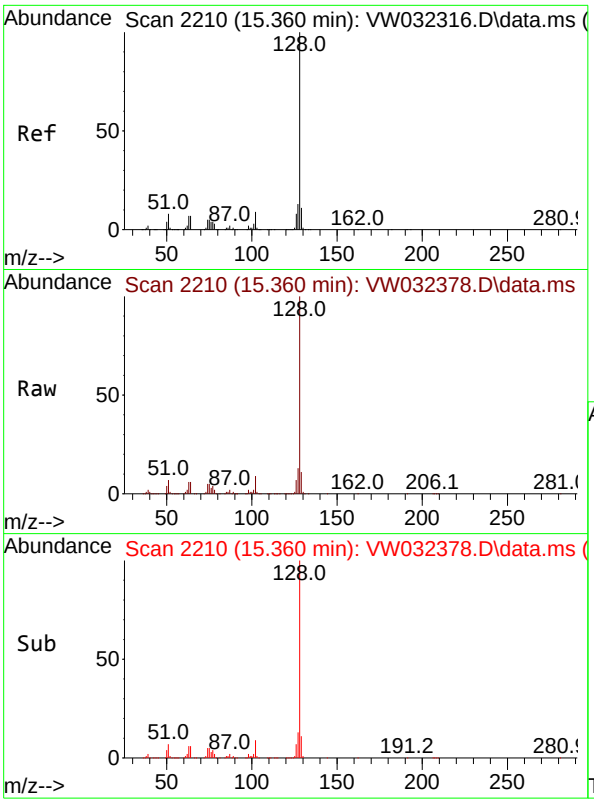


#94
Hexachlorobutadiene
Concen: 54.498 ug/l
RT: 15.226 min Scan# 2188
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:225 Resp: 105887

Ion	Ratio	Lower	Upper
225	100		
223	67.9	29.8	89.3
227	64.3	30.5	91.5

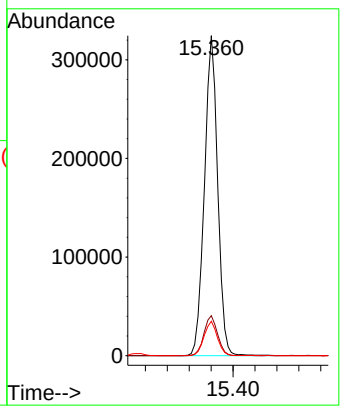




#95
Naphthalene
Concen: 53.140 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:128 Resp: 54233

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.6	16.0
129	10.9	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

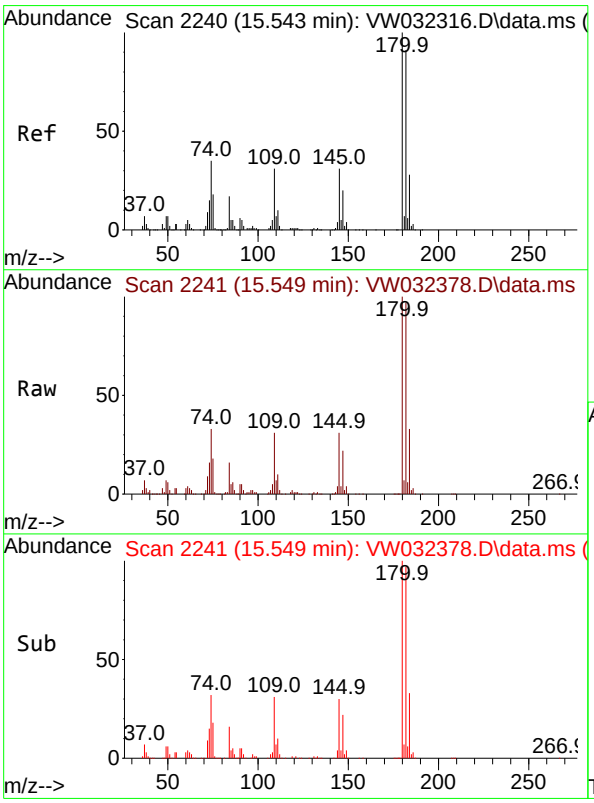
Manual Integrations
APPROVED

Reviewed By :Amit Patel

10/21/2025

Supervised By :Semsettin Yesilyurt

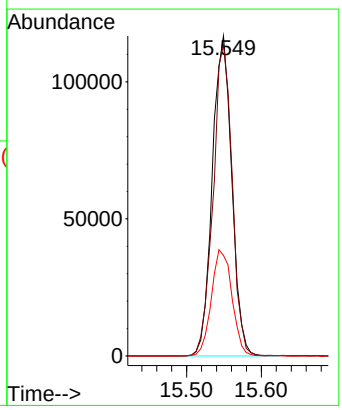
10/21/2025



#96
1,2,3-Trichlorobenzene
Concen: 52.854 ug/l
RT: 15.549 min Scan# 2241
Delta R.T. 0.006 min
Lab File: VW032378.D
Acq: 20 Oct 2025 10:20

Tgt Ion:180 Resp: 211711

Ion	Ratio	Lower	Upper
180	100		
182	95.4	47.7	143.1
145	35.0	17.2	51.6



Sample Results: **VW032378.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	95	0.00
2	T	Dichlorodifluoromethane	0.314	0.311	1.0	112	0.00
3	P	Chloromethane	0.484	0.459	5.2	105	0.00
4	C	Vinyl Chloride	0.578	0.608	-5.2#	110	0.00
5	T	Bromomethane	0.425	0.444	-4.5	111	0.00
6	T	Chloroethane	0.382	0.416	-8.9	112	0.00
7	T	Trichlorofluoromethane	0.433	0.501	-15.7	114	0.00
8	T	Diethyl Ether	0.375	0.402	-7.2	111	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.519	0.563	-8.5	116	0.00
10	T	Methyl Iodide	0.741	0.844	-13.9	116	0.00
11	T	Tert butyl alcohol	0.055	0.047	14.5	91	0.00
12	CM	1,1-Dichloroethene	0.564	0.625	-10.8#	115	0.00
13	T	Acrolein	0.090	0.031	65.6#	37#	0.00
14	T	Allyl chloride	0.952	1.020	-7.1	107	0.00
15	T	Acrylonitrile	0.195	0.201	-3.1	102	0.00
16	T	Acetone	0.202	0.196	3.0	102	0.00
17	T	Carbon Disulfide	1.538	1.711	-11.2	113	0.00
18	T	Methyl Acetate	0.578	0.649	-12.3	99	0.00
19	T	Methyl tert-butyl Ether	1.110	1.198	-7.9	107	0.00
20	T	Methylene Chloride	0.838	0.723	13.7	109	0.00
21	T	trans-1,2-Dichloroethene	0.624	0.698	-11.9	113	0.00
22	T	Diisopropyl ether	1.979	2.191	-10.7	110	0.00
23	T	Vinyl Acetate	1.322	1.403	-6.1	107	0.00
24	P	1,1-Dichloroethane	1.203	1.322	-9.9	112	0.00
25	T	2-Butanone	0.275	0.276	-0.4	101	0.00
26	T	2,2-Dichloropropane	0.615	0.700	-13.8	116	0.00
27	T	cis-1,2-Dichloroethene	0.749	0.820	-9.5	109	0.00
28	T	Bromochloromethane	0.566	0.610	-7.8	106	0.00
29	T	Tetrahydrofuran	0.173	0.179	-3.5	100	0.00
30	C	Chloroform	1.220	1.377	-12.9#	115	0.00
31	T	Cyclohexane	1.027	1.031	-0.4	108	0.00
32	T	1,1,1-Trichloroethane	0.864	0.981	-13.5	115	0.00
33	S	1,2-Dichloroethane-d4	0.729	0.743	-1.9	102	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
35	S	Dibromofluoromethane	0.324	0.347	-7.1	107	0.00
36	T	1,1-Dichloropropene	0.457	0.513	-12.3	110	0.00
37	T	Ethyl Acetate	0.304	0.311	-2.3	101	0.00
38	T	Carbon Tetrachloride	0.430	0.504	-17.2	118	0.00
39	T	Methylcyclohexane	0.551	0.593	-7.6	107	0.00
40	TM	Benzene	1.432	1.599	-11.7	112	0.00
41	T	Methacrylonitrile	0.164	0.178	-8.5	103	0.00
42	TM	1,2-Dichloroethane	0.469	0.515	-9.8	110	0.00
43	T	Isopropyl Acetate	0.540	0.591	-9.4	107	0.00
44	TM	Trichloroethene	0.335	0.366	-9.3	111	0.00
45	C	1,2-Dichloropropane	0.358	0.402	-12.3#	111	0.00
46	T	Dibromomethane	0.220	0.246	-11.8	110	0.00
47	T	Bromodichloromethane	0.503	0.597	-18.7	117	0.00
48	T	Methyl methacrylate	0.262	0.276	-5.3	101	0.00

Sample Results: **VW032378.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.003	0.003	0.0	101	0.00
50	S	Toluene-d8	1.195	1.278	-6.9	101	0.00
51	T	4-Methyl-2-Pentanone	0.313	0.344	-9.9	104	0.00
52	CM	Toluene	0.892	1.027	-15.1#	113	0.00
53	T	t-1,3-Dichloropropene	0.488	0.563	-15.4	111	0.00
54	T	cis-1,3-Dichloropropene	0.562	0.643	-14.4	111	0.00
55	T	1,1,2-Trichloroethane	0.294	0.336	-14.3	113	0.00
56	T	Ethyl methacrylate	0.411	0.464	-12.9	107	0.00
57	T	1,3-Dichloropropane	0.519	0.578	-11.4	109	0.00
58	T	2-Chloroethyl Vinyl ether	0.219	0.252	-15.1	98	0.00
59	T	2-Hexanone	0.220	0.244	-10.9	105	0.00
60	T	Dibromochloromethane	0.334	0.413	-23.7	119	0.00
61	T	1,2-Dibromoethane	0.287	0.319	-11.1	108	0.00
62	S	4-Bromofluorobenzene	0.452	0.470	-4.0	99	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
64	T	Tetrachloroethene	0.299	0.315	-5.4	108	0.00
65	PM	Chlorobenzene	1.100	1.171	-6.5	109	0.00
66	T	1,1,1,2-Tetrachloroethane	0.343	0.404	-17.8	122	0.00
67	C	Ethyl Benzene	1.834	2.060	-12.3#	113	0.00
68	T	m/p-Xylenes	0.707	0.797	-12.7	114	0.00
69	T	o-Xylene	0.661	0.740	-12.0	111	0.00
70	T	Styrene	1.155	1.345	-16.5	114	0.00
71	P	Bromoform	0.196	0.242	-23.5	122	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
73	T	Isopropylbenzene	3.421	3.733	-9.1	112	0.00
74	T	N-amyl acetate	1.091	1.117	-2.4	105	0.00
75	P	1,1,2,2-Tetrachloroethane	0.849	0.868	-2.2	108	0.00
76	T	1,2,3-Trichloropropane	0.658	0.655	0.5	108	0.00
77	T	Bromobenzene	0.825	0.889	-7.8	109	0.00
78	T	n-propylbenzene	4.273	4.654	-8.9	114	0.00
79	T	2-Chlorotoluene	2.613	2.780	-6.4	110	0.00
80	T	1,3,5-Trimethylbenzene	2.958	3.207	-8.4	110	0.00
81	T	trans-1,4-Dichloro-2-butene	0.260	0.300	-15.4	112	0.00
82	T	4-Chlorotoluene	2.778	3.024	-8.9	114	0.00
83	T	tert-Butylbenzene	2.427	2.730	-12.5	116	0.00
84	T	1,2,4-Trimethylbenzene	3.008	3.285	-9.2	111	0.00
85	T	sec-Butylbenzene	3.709	3.987	-7.5	112	0.00
86	T	p-Isopropyltoluene	3.077	3.409	-10.8	114	0.00
87	T	1,3-Dichlorobenzene	1.670	1.766	-5.7	111	0.00
88	T	1,4-Dichlorobenzene	1.670	1.805	-8.1	117	0.00
89	T	n-Butylbenzene	3.005	3.210	-6.8	111	0.00
90	T	Hexachloroethane	0.552	0.657	-19.0	126	0.00
91	T	1,2-Dichlorobenzene	1.509	1.604	-6.3	115	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.149	0.158	-6.0	108	0.00
93	T	1,2,4-Trichlorobenzene	0.905	0.957	-5.7	115	0.00
94	T	Hexachlorobutadiene	0.414	0.451	-8.9	125	0.00
95	T	Naphthalene	2.174	2.310	-6.3	105	0.00

Sample Results: **VW032378.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.853	0.902	-5.7	112	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VW032378.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	95	0.00
2	T	Dichlorodifluoromethane	50.000	49.525	1.0	112	0.00
3	P	Chloromethane	50.000	47.414	5.2	105	0.00
4	C	Vinyl Chloride	50.000	52.579	-5.2#	110	0.00
5	T	Bromomethane	50.000	52.244	-4.5	111	0.00
6	T	Chloroethane	50.000	54.521	-9.0	112	0.00
7	T	Trichlorofluoromethane	50.000	57.903	-15.8	114	0.00
8	T	Diethyl Ether	50.000	53.538	-7.1	111	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	54.231	-8.5	116	0.00
10	T	Methyl Iodide	50.000	56.977	-14.0	116	0.00
11	T	Tert butyl alcohol	250.000	212.423	15.0	91	0.00
12	CM	1,1-Dichloroethene	50.000	55.494	-11.0#	115	0.00
13	T	Acrolein	250.000	87.232	65.1#	37	0.00
14	T	Allyl chloride	50.000	53.572	-7.1	107	0.00
15	T	Acrylonitrile	250.000	257.055	-2.8	102	0.00
16	T	Acetone	250.000	242.037	3.2	102	0.00
17	T	Carbon Disulfide	50.000	55.631	-11.3	113	0.00
18	T	Methyl Acetate	50.000	56.056	-12.1	99	0.00
19	T	Methyl tert-butyl Ether	50.000	53.964	-7.9	107	0.00
20	T	Methylene Chloride	50.000	54.562	-9.1	109	0.00
21	T	trans-1,2-Dichloroethene	50.000	55.946	-11.9	113	0.00
22	T	Diisopropyl ether	50.000	55.352	-10.7	110	0.00
23	T	Vinyl Acetate	250.000	265.367	-6.1	107	0.00
24	P	1,1-Dichloroethane	50.000	54.958	-9.9	112	0.00
25	T	2-Butanone	250.000	250.876	-0.4	101	0.00
26	T	2,2-Dichloropropane	50.000	56.907	-13.8	116	0.00
27	T	cis-1,2-Dichloroethene	50.000	54.730	-9.5	109	0.00
28	T	Bromochloromethane	50.000	53.869	-7.7	106	0.00
29	T	Tetrahydrofuran	250.000	259.216	-3.7	100	0.00
30	C	Chloroform	50.000	56.448	-12.9#	115	0.00
31	T	Cyclohexane	50.000	50.212	-0.4	108	0.00
32	T	1,1,1-Trichloroethane	50.000	56.749	-13.5	115	0.00
33	S	1,2-Dichloroethane-d4	50.000	50.924	-1.8	102	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	94	0.00
35	S	Dibromofluoromethane	50.000	53.598	-7.2	107	0.00
36	T	1,1-Dichloropropene	50.000	56.099	-12.2	110	0.00
37	T	Ethyl Acetate	50.000	51.178	-2.4	101	0.00
38	T	Carbon Tetrachloride	50.000	58.585	-17.2	118	0.00
39	T	Methylcyclohexane	50.000	53.803	-7.6	107	0.00
40	TM	Benzene	50.000	55.818	-11.6	112	0.00
41	T	Methacrylonitrile	50.000	54.317	-8.6	103	0.00
42	TM	1,2-Dichloroethane	50.000	54.972	-9.9	110	0.00
43	T	Isopropyl Acetate	50.000	54.722	-9.4	107	0.00
44	TM	Trichloroethene	50.000	54.492	-9.0	111	0.00
45	C	1,2-Dichloropropane	50.000	56.170	-12.3#	111	0.00
46	T	Dibromomethane	50.000	56.022	-12.0	110	0.00
47	T	Bromodichloromethane	50.000	59.385	-18.8	117	0.00
48	T	Methyl methacrylate	50.000	52.640	-5.3	101	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1099.123	-9.9	101	0.00
50	S	Toluene-d8	50.000	53.480	-7.0	101	0.00
51	T	4-Methyl-2-Pentanone	250.000	275.041	-10.0	104	0.00
52	CM	Toluene	50.000	57.552	-15.1#	113	0.00
53	T	t-1,3-Dichloropropene	50.000	57.719	-15.4	111	0.00
54	T	cis-1,3-Dichloropropene	50.000	57.231	-14.5	111	0.00
55	T	1,1,2-Trichloroethane	50.000	57.233	-14.5	113	0.00
56	T	Ethyl methacrylate	50.000	56.352	-12.7	107	0.00
57	T	1,3-Dichloropropane	50.000	55.655	-11.3	109	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	287.576	-15.0	98	0.00
59	T	2-Hexanone	250.000	276.684	-10.7	105	0.00
60	T	Dibromochloromethane	50.000	61.883	-23.8	119	0.00
61	T	1,2-Dibromoethane	50.000	55.617	-11.2	108	0.00
62	S	4-Bromofluorobenzene	50.000	52.021	-4.0	99	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	95	0.00
64	T	Tetrachloroethene	50.000	52.663	-5.3	108	0.00
65	PM	Chlorobenzene	50.000	53.221	-6.4	109	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	58.904	-17.8	122	0.00
67	C	Ethyl Benzene	50.000	56.174	-12.3#	113	0.00
68	T	m/p-Xylenes	100.000	112.736	-12.7	114	0.00
69	T	o-Xylene	50.000	55.988	-12.0	111	0.00
70	T	Styrene	50.000	58.262	-16.5	114	0.00
71	P	Bromoform	50.000	61.560	-23.1	122	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	100	0.00
73	T	Isopropylbenzene	50.000	54.560	-9.1	112	0.00
74	T	N-amyl acetate	50.000	51.189	-2.4	105	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	51.119	-2.2	108	0.00
76	T	1,2,3-Trichloropropane	50.000	49.739	0.5	108	0.00
77	T	Bromobenzene	50.000	53.907	-7.8	109	0.00
78	T	n-propylbenzene	50.000	54.462	-8.9	114	0.00
79	T	2-Chlorotoluene	50.000	53.203	-6.4	110	0.00
80	T	1,3,5-Trimethylbenzene	50.000	54.209	-8.4	110	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	57.667	-15.3	112	0.00
82	T	4-Chlorotoluene	50.000	54.437	-8.9	114	0.00
83	T	tert-Butylbenzene	50.000	56.237	-12.5	116	0.00
84	T	1,2,4-Trimethylbenzene	50.000	54.602	-9.2	111	0.00
85	T	sec-Butylbenzene	50.000	53.756	-7.5	112	0.00
86	T	p-Isopropyltoluene	50.000	55.381	-10.8	114	0.00
87	T	1,3-Dichlorobenzene	50.000	52.884	-5.8	111	0.00
88	T	1,4-Dichlorobenzene	50.000	54.068	-8.1	117	0.00
89	T	n-Butylbenzene	50.000	53.414	-6.8	111	0.00
90	T	Hexachloroethane	50.000	59.535	-19.1	126	0.00
91	T	1,2-Dichlorobenzene	50.000	53.150	-6.3	115	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	53.021	-6.0	108	0.00
93	T	1,2,4-Trichlorobenzene	50.000	52.878	-5.8	115	0.00
94	T	Hexachlorobutadiene	50.000	54.498	-9.0	125	0.00
95	T	Naphthalene	50.000	53.140	-6.3	105	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032378.D
Acq On : 20 Oct 2025 10:20
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Oct 21 01:22:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	52.854	-5.7	112	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

QC SAMPLE DATA

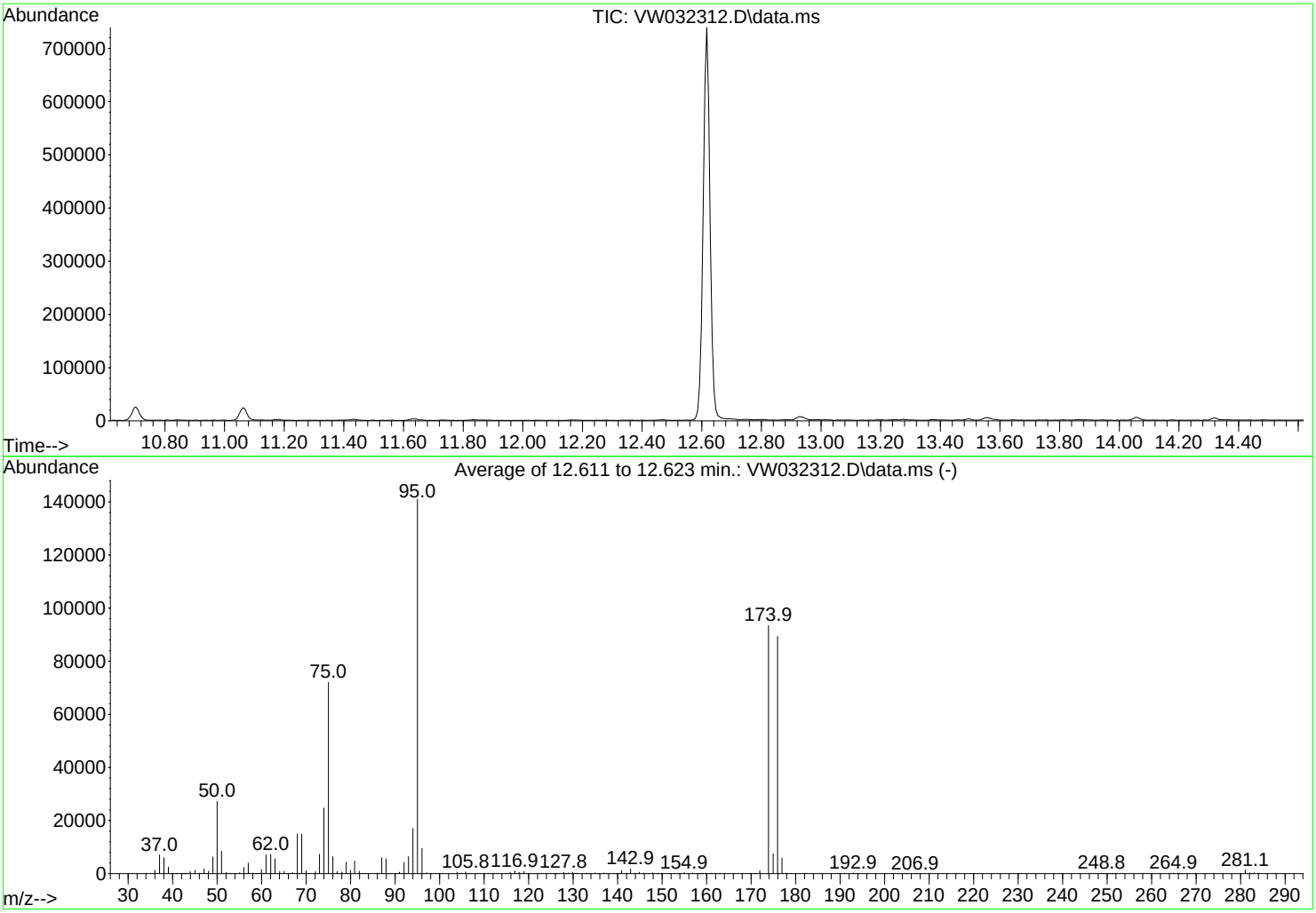
Sample Results: **VW032312.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW100125\
Data File : VW032312.D
Acq On : 01 Oct 2025 08:12
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260
Last Update : Thu Oct 02 21:24:16 2025



AutoFind: Scans 1759, 1760, 1761; Background Corrected with Scan 1750

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	27221	PASS
75	95	30	60	51.1	72061	PASS
95	95	100	100	100.0	141091	PASS
96	95	5	9	6.7	9491	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	66.2	93424	PASS
175	174	5	9	8.0	7516	PASS
176	174	95	101	95.6	89325	PASS
177	176	5	9	6.6	5907	PASS

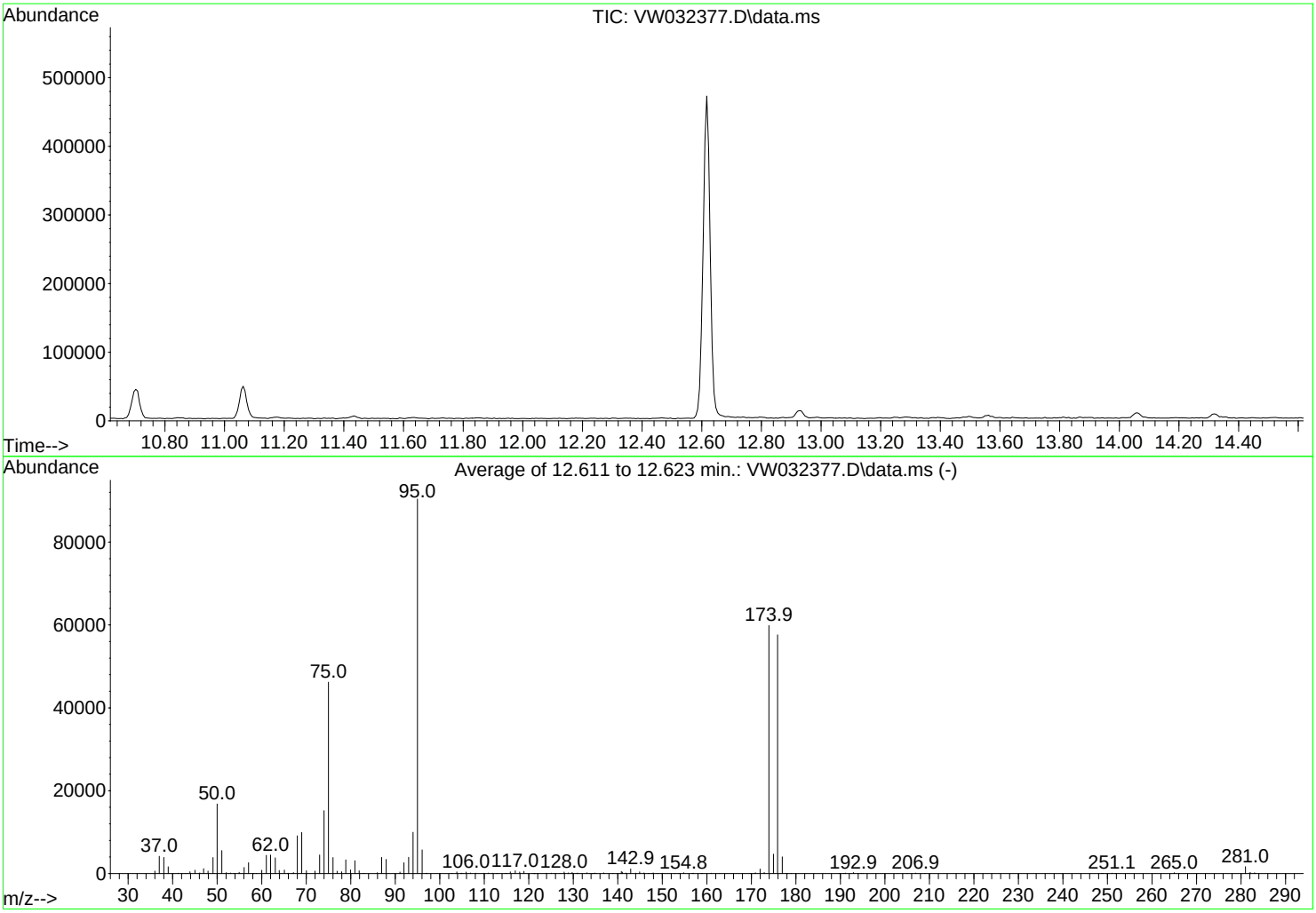
Sample Results: **VW032377.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032377.D
Acq On : 20 Oct 2025 09:36
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260
Last Update : Thu Oct 02 21:24:16 2025



AutoFind: Scans 1759, 1760, 1761; Background Corrected with Scan 1749

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	16809	PASS
75	95	30	60	51.1	46188	PASS
95	95	100	100	100.0	90408	PASS
96	95	5	9	6.3	5736	PASS
173	174	0.00	2	0.5	276	PASS
174	95	50	100	66.2	59875	PASS
175	174	5	9	7.8	4687	PASS
176	174	95	101	96.2	57613	PASS
177	176	5	9	7.0	4059	PASS

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

Report of Analysis

Client:	AECOM	Date Collected:	
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	
Client Sample ID:	VW1020SBL01	SDG No.:	Q3395
Lab Sample ID:	VW1020SBL01	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 100
Sample Wt/Vol:	5 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	5.00	U	1	1.10	5.00	ug/Kg	10/20/25 11:11	VW102025
74-87-3	Chloromethane	5.00	U	1	1.10	5.00	ug/Kg	10/20/25 11:11	VW102025
75-01-4	Vinyl Chloride	5.00	U	1	0.79	5.00	ug/Kg	10/20/25 11:11	VW102025
74-83-9	Bromomethane	5.00	U	1	1.10	5.00	ug/Kg	10/20/25 11:11	VW102025
75-00-3	Chloroethane	5.00	U	1	1.30	5.00	ug/Kg	10/20/25 11:11	VW102025
75-69-4	Trichlorofluoromethane	5.00	U	1	1.20	5.00	ug/Kg	10/20/25 11:11	VW102025
76-13-1	1,1,2-Trichlorotrifluoroethane	5.00	U	1	1.10	5.00	ug/Kg	10/20/25 11:11	VW102025
75-35-4	1,1-Dichloroethene	5.00	U	1	1.00	5.00	ug/Kg	10/20/25 11:11	VW102025
67-64-1	Acetone	25.0	U	1	4.70	25.0	ug/Kg	10/20/25 11:11	VW102025
75-15-0	Carbon Disulfide	5.00	U	1	1.10	5.00	ug/Kg	10/20/25 11:11	VW102025
1634-04-4	Methyl tert-butyl Ether	5.00	U	1	0.73	5.00	ug/Kg	10/20/25 11:11	VW102025
79-20-9	Methyl Acetate	5.00	U	1	1.50	5.00	ug/Kg	10/20/25 11:11	VW102025
75-09-2	Methylene Chloride	10.0	U	1	3.50	10.0	ug/Kg	10/20/25 11:11	VW102025
156-60-5	trans-1,2-Dichloroethene	5.00	U	1	0.86	5.00	ug/Kg	10/20/25 11:11	VW102025
75-34-3	1,1-Dichloroethane	5.00	U	1	0.80	5.00	ug/Kg	10/20/25 11:11	VW102025
110-82-7	Cyclohexane	5.00	U	1	0.79	5.00	ug/Kg	10/20/25 11:11	VW102025
78-93-3	2-Butanone	25.0	U	1	6.50	25.0	ug/Kg	10/20/25 11:11	VW102025
56-23-5	Carbon Tetrachloride	5.00	U	1	0.97	5.00	ug/Kg	10/20/25 11:11	VW102025
156-59-2	cis-1,2-Dichloroethene	5.00	U	1	0.75	5.00	ug/Kg	10/20/25 11:11	VW102025
74-97-5	Bromochloromethane	5.00	U	1	1.20	5.00	ug/Kg	10/20/25 11:11	VW102025
67-66-3	Chloroform	5.00	U	1	0.84	5.00	ug/Kg	10/20/25 11:11	VW102025
71-55-6	1,1,1-Trichloroethane	5.00	U	1	0.93	5.00	ug/Kg	10/20/25 11:11	VW102025
108-87-2	Methylcyclohexane	5.00	U	1	0.91	5.00	ug/Kg	10/20/25 11:11	VW102025
71-43-2	Benzene	5.00	U	1	0.79	5.00	ug/Kg	10/20/25 11:11	VW102025
107-06-2	1,2-Dichloroethane	5.00	U	1	0.79	5.00	ug/Kg	10/20/25 11:11	VW102025
79-01-6	Trichloroethene	5.00	U	1	0.81	5.00	ug/Kg	10/20/25 11:11	VW102025
78-87-5	1,2-Dichloropropane	5.00	U	1	0.91	5.00	ug/Kg	10/20/25 11:11	VW102025
75-27-4	Bromodichloromethane	5.00	U	1	0.78	5.00	ug/Kg	10/20/25 11:11	VW102025
108-10-1	4-Methyl-2-Pentanone	25.0	U	1	3.60	25.0	ug/Kg	10/20/25 11:11	VW102025
108-88-3	Toluene	5.00	U	1	0.78	5.00	ug/Kg	10/20/25 11:11	VW102025
10061-02-6	t-1,3-Dichloropropene	5.00	U	1	0.65	5.00	ug/Kg	10/20/25 11:11	VW102025
10061-01-5	cis-1,3-Dichloropropene	5.00	U	1	0.62	5.00	ug/Kg	10/20/25 11:11	VW102025
79-00-5	1,1,2-Trichloroethane	5.00	U	1	0.92	5.00	ug/Kg	10/20/25 11:11	VW102025
591-78-6	2-Hexanone	25.0	U	1	3.70	25.0	ug/Kg	10/20/25 11:11	VW102025
124-48-1	Dibromochloromethane	5.00	U	1	0.87	5.00	ug/Kg	10/20/25 11:11	VW102025
106-93-4	1,2-Dibromoethane	5.00	U	1	0.88	5.00	ug/Kg	10/20/25 11:11	VW102025
127-18-4	Tetrachloroethene	5.00	U	1	1.10	5.00	ug/Kg	10/20/25 11:11	VW102025
108-90-7	Chlorobenzene	5.00	U	1	0.91	5.00	ug/Kg	10/20/25 11:11	VW102025
100-41-4	Ethyl Benzene	5.00	U	1	0.67	5.00	ug/Kg	10/20/25 11:11	VW102025
179601-23-1	m/p-Xylenes	10.0	U	1	1.20	10.0	ug/Kg	10/20/25 11:11	VW102025
95-47-6	o-Xylene	5.00	U	1	0.82	5.00	ug/Kg	10/20/25 11:11	VW102025
100-42-5	Styrene	5.00	U	1	0.71	5.00	ug/Kg	10/20/25 11:11	VW102025
75-25-2	Bromoform	5.00	U	1	0.86	5.00	ug/Kg	10/20/25 11:11	VW102025

Raw Data: **VW032379.D**

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

Report of Analysis

Client:	AECOM	Date Collected:	
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	
Client Sample ID:	VW1020SBL01	SDG No.:	Q3395
Lab Sample ID:	VW1020SBL01	Matrix:	SOIL
Analytical Method:	8260D Level : LOW	% Solid:	100
Sample Wt/Vol:	5 g Final Vol: 5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	5.00	U	1	0.78	5.00	ug/Kg	10/20/25 11:11	VW102025
79-34-5	1,1,2,2-Tetrachloroethane	5.00	U	1	1.20	5.00	ug/Kg	10/20/25 11:11	VW102025
541-73-1	1,3-Dichlorobenzene	5.00	U	1	1.70	5.00	ug/Kg	10/20/25 11:11	VW102025
106-46-7	1,4-Dichlorobenzene	5.00	U	1	1.60	5.00	ug/Kg	10/20/25 11:11	VW102025
95-50-1	1,2-Dichlorobenzene	5.00	U	1	1.50	5.00	ug/Kg	10/20/25 11:11	VW102025
96-12-8	1,2-Dibromo-3-Chloropropane	5.00	U	1	1.80	5.00	ug/Kg	10/20/25 11:11	VW102025
120-82-1	1,2,4-Trichlorobenzene	5.00	U	1	3.00	5.00	ug/Kg	10/20/25 11:11	VW102025
87-61-6	1,2,3-Trichlorobenzene	5.00	U	1	3.20	5.00	ug/Kg	10/20/25 11:11	VW102025
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	65.7			63 - 155	131%	SPK: 50		
1868-53-7	Dibromofluoromethane	58.2			70 - 134	116%	SPK: 50		
2037-26-5	Toluene-d8	54.5			74 - 123	109%	SPK: 50		
460-00-4	4-Bromofluorobenzene	51.8			17 - 146	104%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	172000							
540-36-3	1,4-Difluorobenzene	393000							
3114-55-4	Chlorobenzene-d5	401000							
3855-82-1	1,4-Dichlorobenzene-d4	189000							

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_W\Data\VW102025\
Data File : VW032379.D
Acq On : 20 Oct 2025 11:11
Operator : SY/MD
Sample : VW1020SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Quant Time: Oct 21 01:23:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

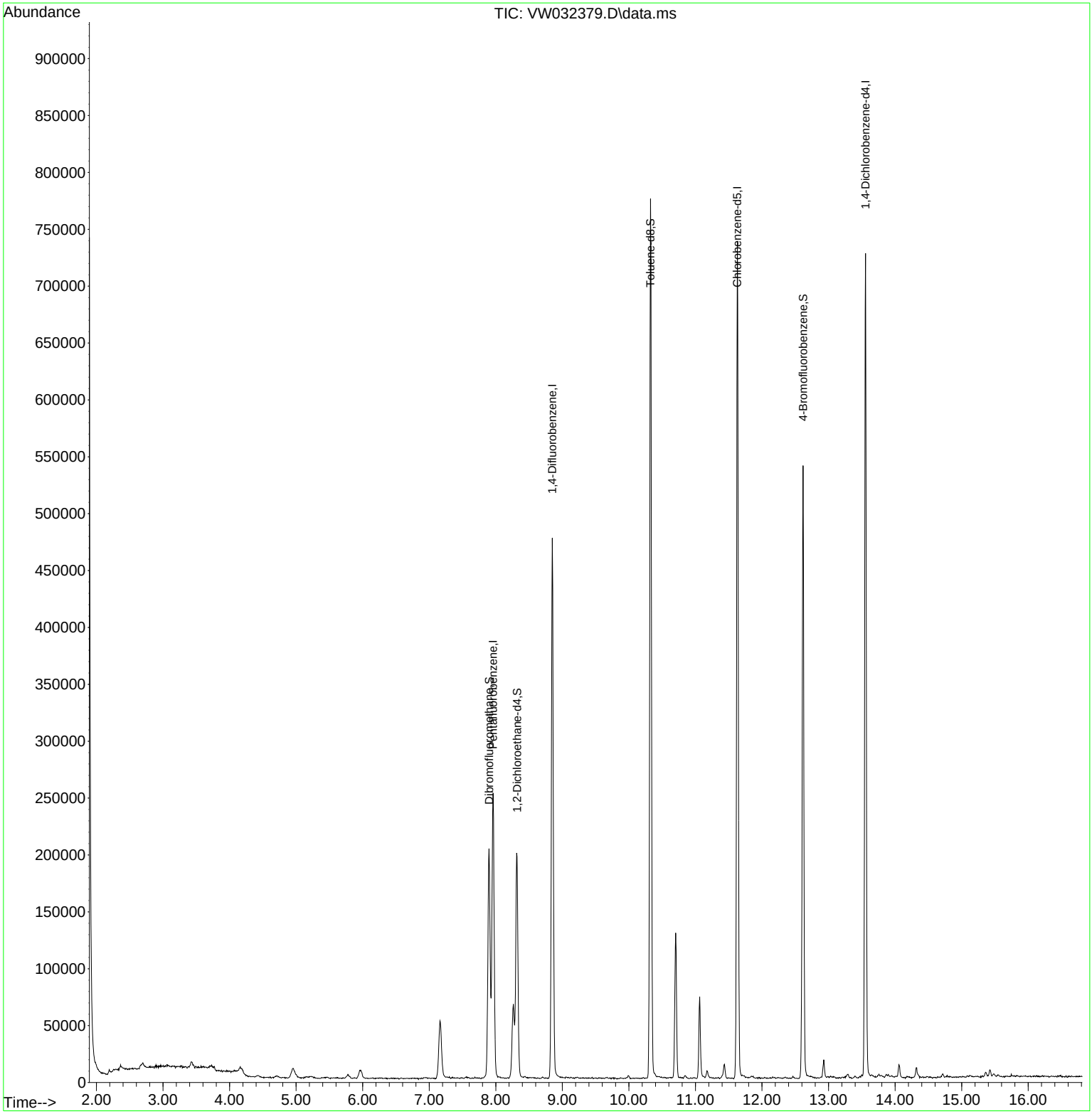
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	172114	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	392797	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	400571	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	188560	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	164963	65.712	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 131.420%			
35) Dibromofluoromethane	7.898	113	148107	58.223	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 116.440%			
50) Toluene-d8	10.325	98	512060	54.541	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 109.080%			
62) 4-Bromofluorobenzene	12.617	95	183742	51.779	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 103.560%			
Target Compounds						Qvalue

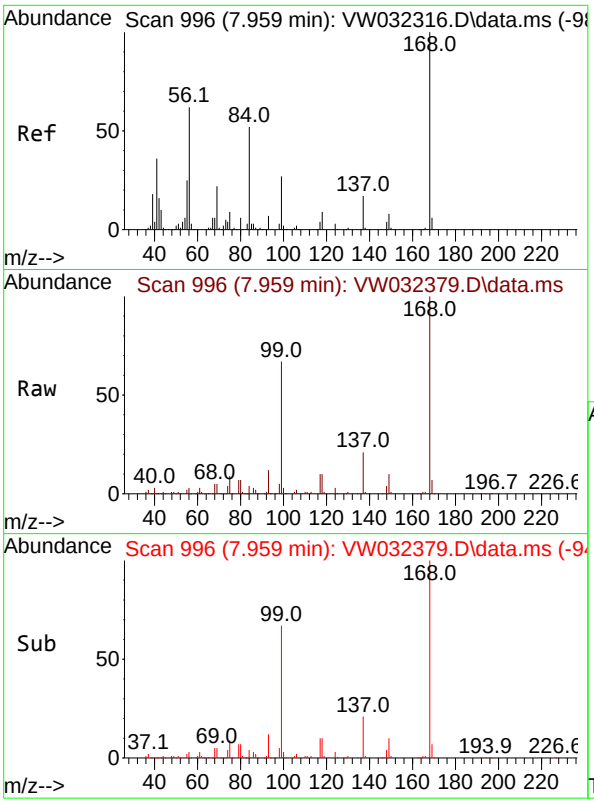
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032379.D
Acq On : 20 Oct 2025 11:11
Operator : SY/MD
Sample : VW1020SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Quant Time: Oct 21 01:23:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration



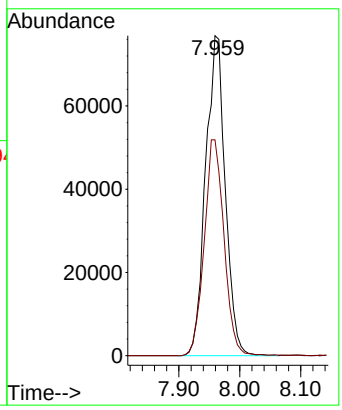


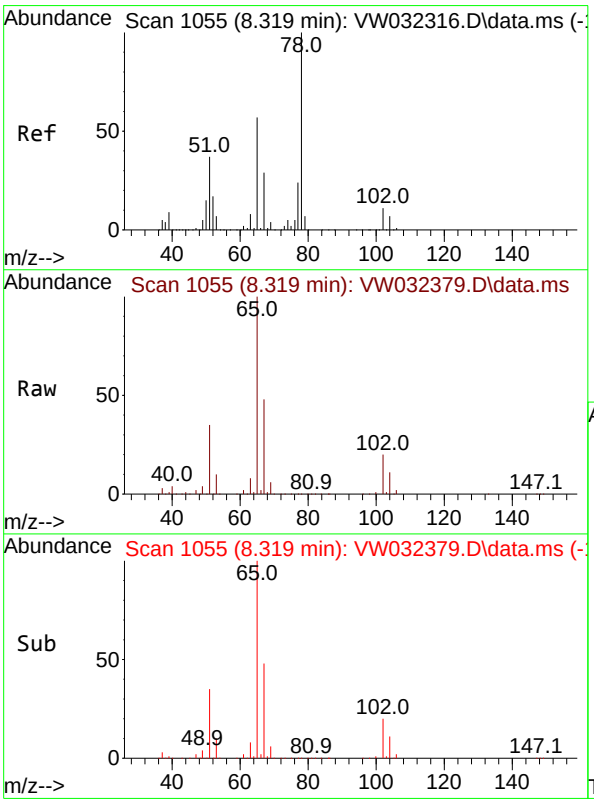
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032379.D
Acq: 20 Oct 2025 11:11

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Tgt Ion:168 Resp: 172114

Ion	Ratio	Lower	Upper
168	100		
99	67.4	49.3	73.9

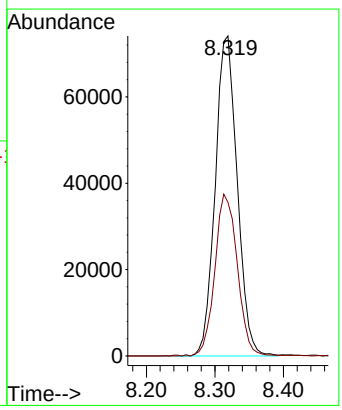


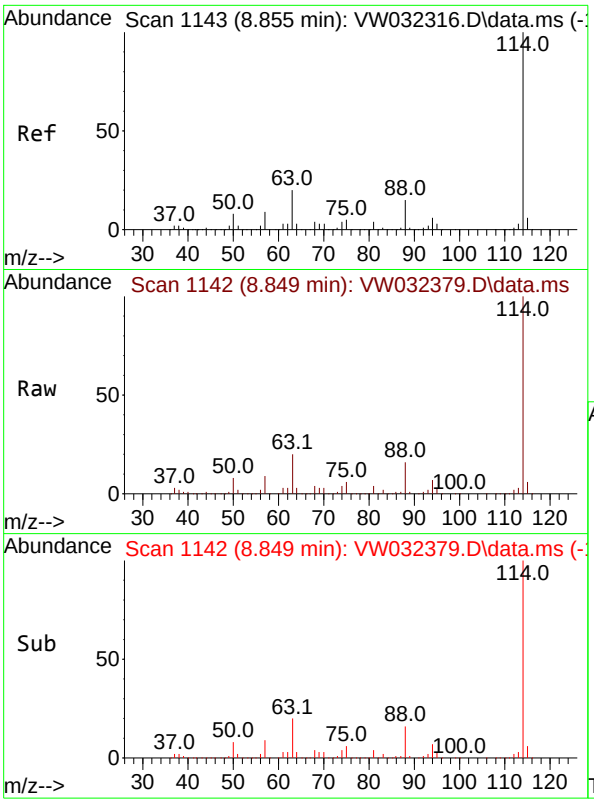


#33
1,2-Dichloroethane-d4
Concen: 65.712 ug/l
RT: 8.319 min Scan# 1055
Delta R.T. 0.000 min
Lab File: VW032379.D
Acq: 20 Oct 2025 11:11

Tgt Ion: 65 Resp: 164963

Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	99.6



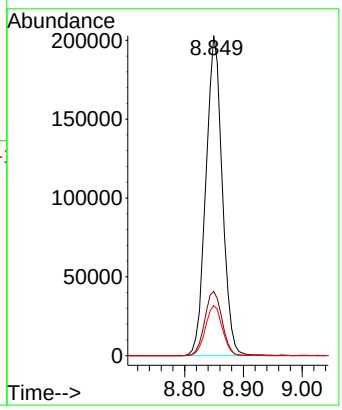


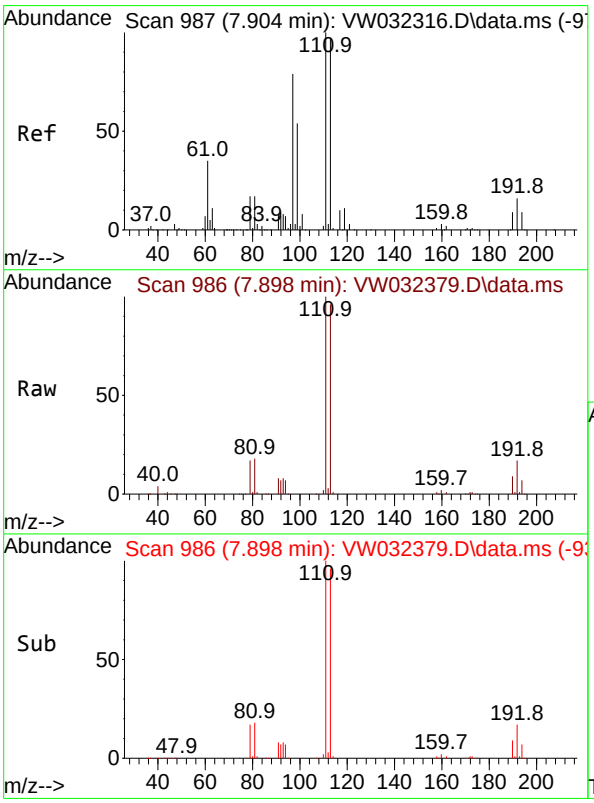
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 11
Delta R.T. -0.006 min
Lab File: VW032379.D
Acq: 20 Oct 2025 11:11

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Tgt Ion:114 Resp: 392797

Ion	Ratio	Lower	Upper
114	100		
63	20.1	0.0	40.4
88	15.6	0.0	32.0

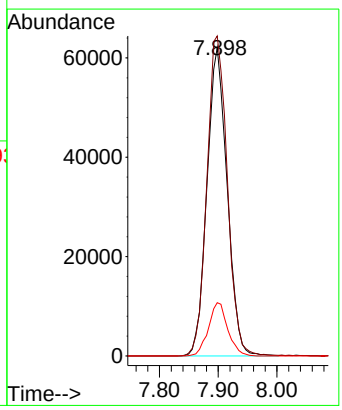


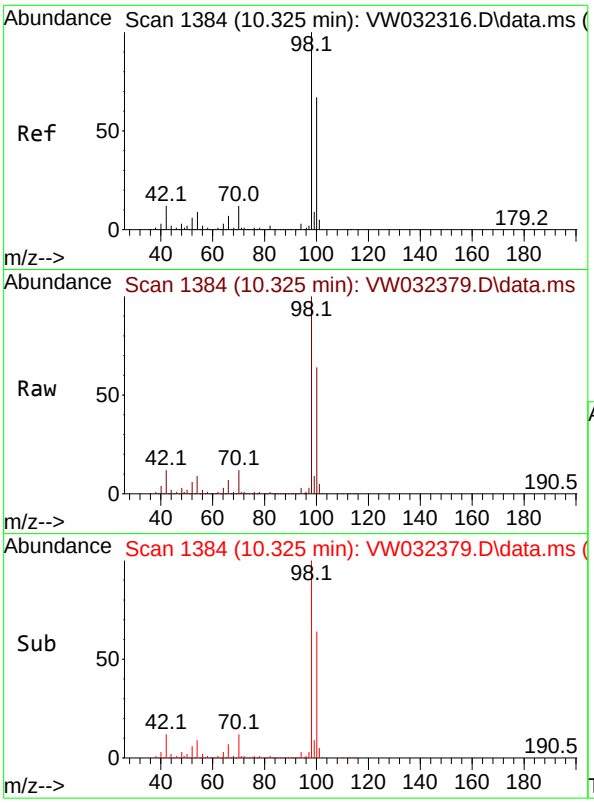


#35
Dibromofluoromethane
Concen: 58.223 ug/l
RT: 7.898 min Scan# 986
Delta R.T. -0.006 min
Lab File: VW032379.D
Acq: 20 Oct 2025 11:11

Tgt Ion:113 Resp: 148107

Ion	Ratio	Lower	Upper
113	100		
111	105.1	83.9	125.9
192	16.6	14.6	21.8



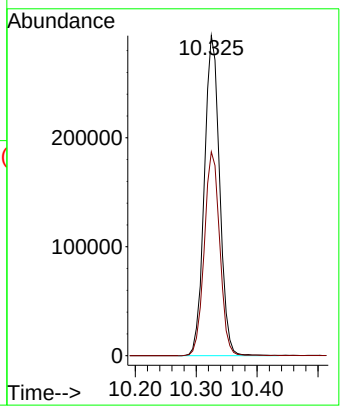


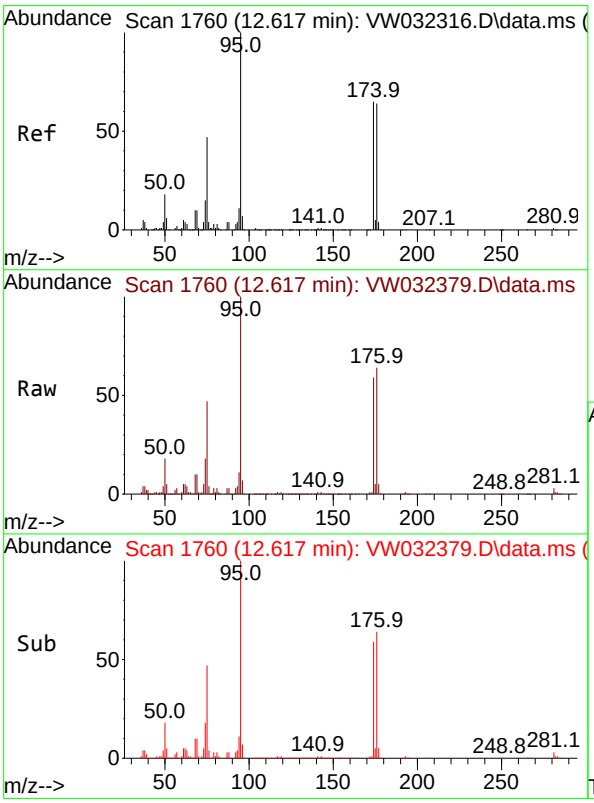
#50
Toluene-d8
Concen: 54.541 ug/l
RT: 10.325 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032379.D
Acq: 20 Oct 2025 11:11

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Tgt Ion: 98 Resp: 512060

Ion	Ratio	Lower	Upper
98	100		
100	64.3	51.4	77.2

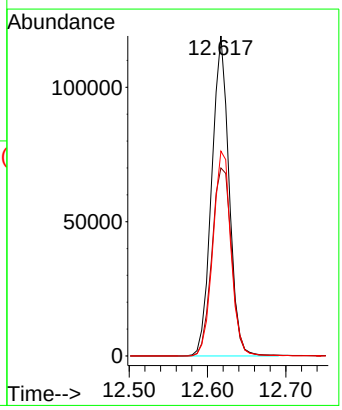


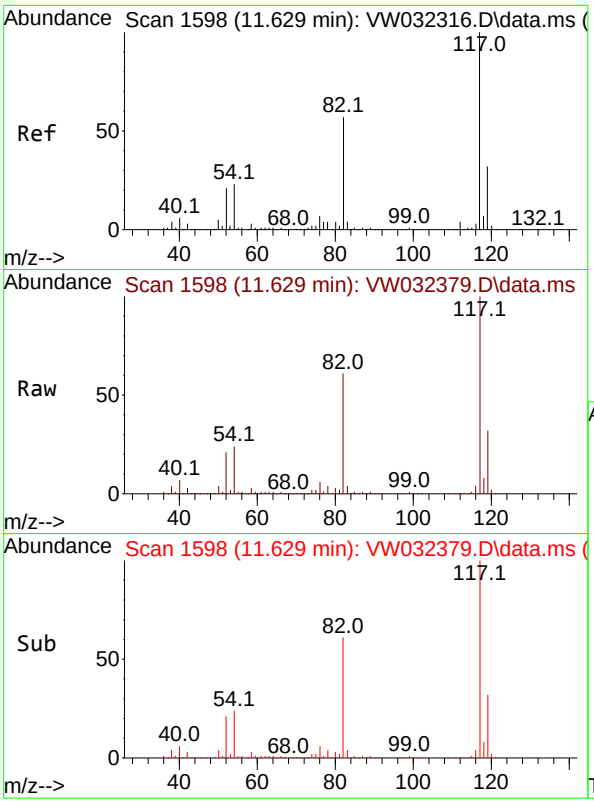


#62
4-Bromofluorobenzene
Concen: 51.779 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. 0.000 min
Lab File: VW032379.D
Acq: 20 Oct 2025 11:11

Tgt Ion: 95 Resp: 183742

Ion	Ratio	Lower	Upper
95	100		
174	66.6	0.0	145.6
176	66.5	0.0	140.8



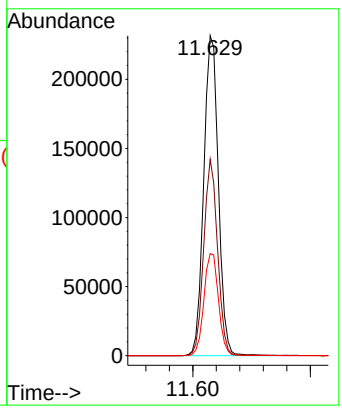


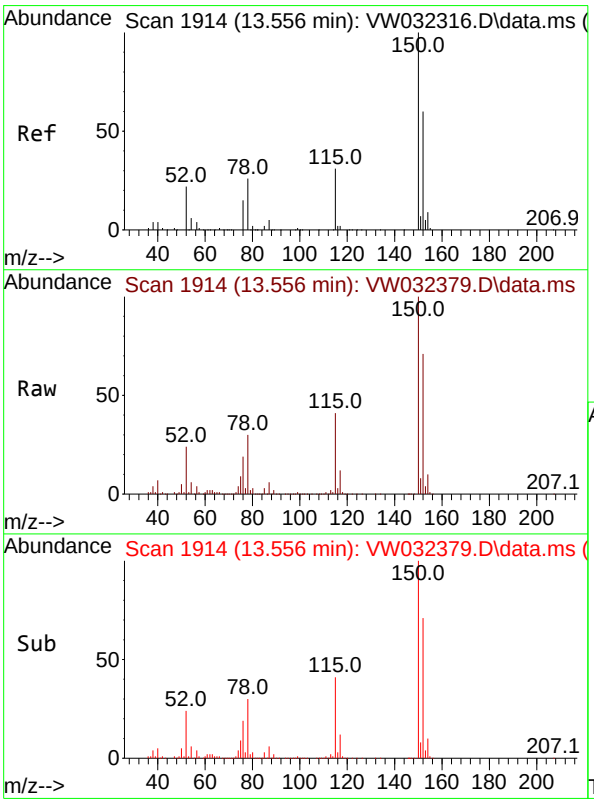
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032379.D
Acq: 20 Oct 2025 11:11

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Tgt Ion:117 Resp: 400571

Ion	Ratio	Lower	Upper
117	100		
82	61.4	42.7	64.1
119	31.9	25.2	37.8

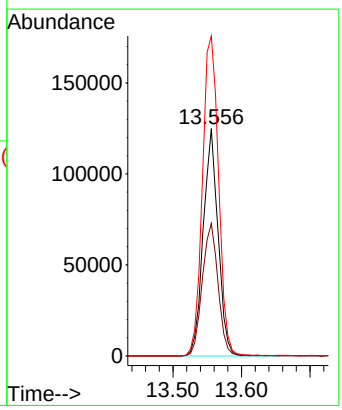




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. 0.000 min
Lab File: VW032379.D
Acq: 20 Oct 2025 11:11

Tgt Ion:152 Resp: 188560

Ion	Ratio	Lower	Upper
152	100		
115	61.8	31.8	95.4
150	153.1	0.0	343.0



Sample Results: **VW032379.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032379.D
Acq On : 20 Oct 2025 11:11
Operator : SY/MD
Sample : VW1020SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Title : SW846 8260

Signal : TIC: VW032379.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.698	124	133	143	rBV	5338	20772	1.52%	0.259%
2	4.954	490	503	514	rBV4	8460	34850	2.55%	0.434%
3	5.960	660	668	679	rBV6	7373	25495	1.87%	0.318%
4	7.161	855	865	879	rBV	50860	152704	11.17%	1.902%
5	7.898	972	986	991	rBV	201590	493964	36.14%	6.152%
6	7.959	991	996	1007	rVB2	249823	559899	40.97%	6.973%
7	8.264	1035	1046	1049	rBV	65149	158907	11.63%	1.979%
8	8.313	1049	1054	1069	rVB	197176	455083	33.30%	5.667%
9	8.849	1133	1142	1161	rBV	475057	956860	70.01%	11.916%
10	10.325	1375	1384	1399	rBV	772994	1366655	100.00%	17.020%
11	10.703	1437	1446	1454	rBV	127501	233716	17.10%	2.911%
12	11.062	1497	1505	1518	rBV	71876	126126	9.23%	1.571%
13	11.434	1554	1566	1574	rBV3	12762	28993	2.12%	0.361%
14	11.629	1589	1598	1608	rBV	735778	1259554	92.16%	15.686%
15	12.617	1750	1760	1771	rBV	538778	919358	67.27%	11.449%
16	12.928	1806	1811	1818	rVB2	15513	24399	1.79%	0.304%
17	13.556	1907	1914	1926	rVB	723062	1170596	85.65%	14.578%
18	14.056	1991	1996	2007	rVB	11711	22497	1.65%	0.280%
19	14.318	2032	2039	2047	rVB3	9025	19376	1.42%	0.241%

Sum of corrected areas: 8029804

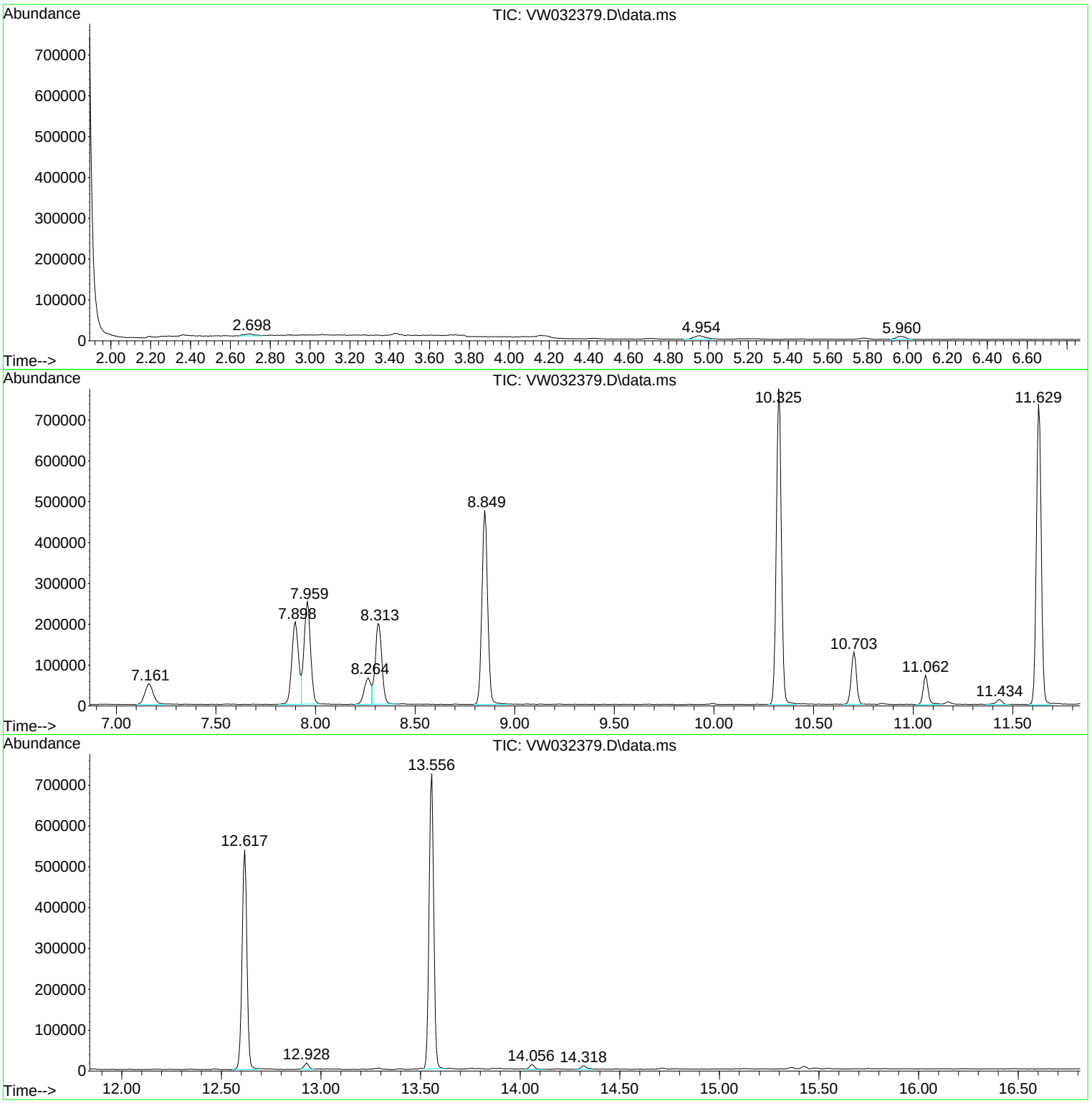
Sample Results: **VW032379.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032379.D
Acq On : 20 Oct 2025 11:11
Operator : SY/MD
Sample : VW1020SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VW032379.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032379.D
Acq On : 20 Oct 2025 11:11
Operator : SY/MD
Sample : VW1020SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032379.D
Acq On : 20 Oct 2025 11:11
Operator : SY/MD
Sample : VW1020SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260

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

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

Raw Data: **VW032380.D**

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

Report of Analysis

Client:	AECOM	Date Collected:	
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	
Client Sample ID:	VW1020SBS01	SDG No.:	Q3395
Lab Sample ID:	VW1020SBS01	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 100
Sample Wt/Vol:	5 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	19.9		1	1.10	5.00	ug/Kg	10/20/25 11:41	VW102025
74-87-3	Chloromethane	20.1		1	1.10	5.00	ug/Kg	10/20/25 11:41	VW102025
75-01-4	Vinyl Chloride	22.1		1	0.79	5.00	ug/Kg	10/20/25 11:41	VW102025
74-83-9	Bromomethane	21.1		1	1.10	5.00	ug/Kg	10/20/25 11:41	VW102025
75-00-3	Chloroethane	21.4		1	1.30	5.00	ug/Kg	10/20/25 11:41	VW102025
75-69-4	Trichlorofluoromethane	19.4		1	1.20	5.00	ug/Kg	10/20/25 11:41	VW102025
76-13-1	1,1,2-Trichlorotrifluoroethane	20.9		1	1.10	5.00	ug/Kg	10/20/25 11:41	VW102025
75-35-4	1,1-Dichloroethene	21.7		1	1.00	5.00	ug/Kg	10/20/25 11:41	VW102025
67-64-1	Acetone	97.1		1	4.70	25.0	ug/Kg	10/20/25 11:41	VW102025
75-15-0	Carbon Disulfide	21.1		1	1.10	5.00	ug/Kg	10/20/25 11:41	VW102025
1634-04-4	Methyl tert-butyl Ether	19.0		1	0.73	5.00	ug/Kg	10/20/25 11:41	VW102025
79-20-9	Methyl Acetate	17.5		1	1.50	5.00	ug/Kg	10/20/25 11:41	VW102025
75-09-2	Methylene Chloride	19.0		1	3.50	10.0	ug/Kg	10/20/25 11:41	VW102025
156-60-5	trans-1,2-Dichloroethene	21.0		1	0.86	5.00	ug/Kg	10/20/25 11:41	VW102025
75-34-3	1,1-Dichloroethane	20.8		1	0.80	5.00	ug/Kg	10/20/25 11:41	VW102025
110-82-7	Cyclohexane	19.2		1	0.79	5.00	ug/Kg	10/20/25 11:41	VW102025
78-93-3	2-Butanone	87.6		1	6.50	25.0	ug/Kg	10/20/25 11:41	VW102025
56-23-5	Carbon Tetrachloride	22.0		1	0.97	5.00	ug/Kg	10/20/25 11:41	VW102025
156-59-2	cis-1,2-Dichloroethene	20.3		1	0.75	5.00	ug/Kg	10/20/25 11:41	VW102025
74-97-5	Bromochloromethane	20.8		1	1.20	5.00	ug/Kg	10/20/25 11:41	VW102025
67-66-3	Chloroform	21.5		1	0.84	5.00	ug/Kg	10/20/25 11:41	VW102025
71-55-6	1,1,1-Trichloroethane	21.5		1	0.93	5.00	ug/Kg	10/20/25 11:41	VW102025
108-87-2	Methylcyclohexane	19.3		1	0.91	5.00	ug/Kg	10/20/25 11:41	VW102025
71-43-2	Benzene	20.9		1	0.79	5.00	ug/Kg	10/20/25 11:41	VW102025
107-06-2	1,2-Dichloroethane	20.6		1	0.79	5.00	ug/Kg	10/20/25 11:41	VW102025
79-01-6	Trichloroethene	20.3		1	0.81	5.00	ug/Kg	10/20/25 11:41	VW102025
78-87-5	1,2-Dichloropropane	21.0		1	0.91	5.00	ug/Kg	10/20/25 11:41	VW102025
75-27-4	Bromodichloromethane	22.0		1	0.78	5.00	ug/Kg	10/20/25 11:41	VW102025
108-10-1	4-Methyl-2-Pentanone	92.3		1	3.60	25.0	ug/Kg	10/20/25 11:41	VW102025
108-88-3	Toluene	20.8		1	0.78	5.00	ug/Kg	10/20/25 11:41	VW102025
10061-02-6	t-1,3-Dichloropropene	20.2		1	0.65	5.00	ug/Kg	10/20/25 11:41	VW102025
10061-01-5	cis-1,3-Dichloropropene	20.7		1	0.62	5.00	ug/Kg	10/20/25 11:41	VW102025
79-00-5	1,1,2-Trichloroethane	20.7		1	0.92	5.00	ug/Kg	10/20/25 11:41	VW102025
591-78-6	2-Hexanone	92.8		1	3.70	25.0	ug/Kg	10/20/25 11:41	VW102025
124-48-1	Dibromochloromethane	21.7		1	0.87	5.00	ug/Kg	10/20/25 11:41	VW102025
106-93-4	1,2-Dibromoethane	20.3		1	0.88	5.00	ug/Kg	10/20/25 11:41	VW102025
127-18-4	Tetrachloroethene	20.1		1	1.10	5.00	ug/Kg	10/20/25 11:41	VW102025
108-90-7	Chlorobenzene	20.2		1	0.91	5.00	ug/Kg	10/20/25 11:41	VW102025
100-41-4	Ethyl Benzene	20.5		1	0.67	5.00	ug/Kg	10/20/25 11:41	VW102025
179601-23-1	m/p-Xylenes	41.2		1	1.20	10.0	ug/Kg	10/20/25 11:41	VW102025
95-47-6	o-Xylene	19.8		1	0.82	5.00	ug/Kg	10/20/25 11:41	VW102025
100-42-5	Styrene	21.1		1	0.71	5.00	ug/Kg	10/20/25 11:41	VW102025
75-25-2	Bromoform	21.5		1	0.86	5.00	ug/Kg	10/20/25 11:41	VW102025

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

Report of Analysis

Client:	AECOM	Date Collected:	
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	
Client Sample ID:	VW1020SBS01	SDG No.:	Q3395
Lab Sample ID:	VW1020SBS01	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 100
Sample Wt/Vol:	5 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	19.8		1	0.78	5.00	ug/Kg	10/20/25 11:41	VW102025
79-34-5	1,1,2,2-Tetrachloroethane	18.9		1	1.20	5.00	ug/Kg	10/20/25 11:41	VW102025
541-73-1	1,3-Dichlorobenzene	20.4		1	1.70	5.00	ug/Kg	10/20/25 11:41	VW102025
106-46-7	1,4-Dichlorobenzene	20.3		1	1.60	5.00	ug/Kg	10/20/25 11:41	VW102025
95-50-1	1,2-Dichlorobenzene	20.0		1	1.50	5.00	ug/Kg	10/20/25 11:41	VW102025
96-12-8	1,2-Dibromo-3-Chloropropane	18.4		1	1.80	5.00	ug/Kg	10/20/25 11:41	VW102025
120-82-1	1,2,4-Trichlorobenzene	19.2		1	3.00	5.00	ug/Kg	10/20/25 11:41	VW102025
87-61-6	1,2,3-Trichlorobenzene	19.0		1	3.20	5.00	ug/Kg	10/20/25 11:41	VW102025
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	52.1			63 - 155	104%	SPK: 50		
1868-53-7	Dibromofluoromethane	53.3			70 - 134	107%	SPK: 50		
2037-26-5	Toluene-d8	53.0			74 - 123	106%	SPK: 50		
460-00-4	4-Bromofluorobenzene	51.7			17 - 146	103%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	281000							
540-36-3	1,4-Difluorobenzene	517000							
3114-55-4	Chlorobenzene-d5	481000							
3855-82-1	1,4-Dichlorobenzene-d4	241000							

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

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

Sample Results: **VW032380.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032380.D
Acq On : 20 Oct 2025 11:41
Operator : SY/MD
Sample : VW1020SBS01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 21 01:23:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	280998	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	517149	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	480746	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	240746	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	213734	52.149	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 104.300%			
35) Dibromofluoromethane	7.898	113	178453	53.284	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 106.560%			
50) Toluene-d8	10.325	98	655431	53.025	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 106.040%			
62) 4-Bromofluorobenzene	12.617	95	241390	51.667	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 103.340%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	35044	19.874	ug/l	99
3) Chloromethane	2.253	50	54581	20.061	ug/l	99
4) Vinyl Chloride	2.405	62	71685	22.069	ug/l	99
5) Bromomethane	2.820	94	50437	21.129	ug/l	99
6) Chloroethane	2.966	64	45866	21.387	ug/l	95
7) Trichlorofluoromethane	3.302	101	47291	19.445	ug/l	96
8) Diethyl Ether	3.716	74	42688	20.256	ug/l	90
9) 1,1,2-Trichlorotrifluo...	4.106	101	60961	20.898	ug/l	95
10) Methyl Iodide	4.301	142	90782	21.811	ug/l	98
11) Tert butyl alcohol	5.216	59	25591	82.490	ug/l	98
12) 1,1-Dichloroethene	4.076	96	68828	21.733	ug/l	90
13) Acrolein	3.929	56	32482	64.514	ug/l	100
14) Allyl chloride	4.698	41	108462	20.277	ug/l	91
15) Acrylonitrile	5.405	53	100696	91.844	ug/l	99
16) Acetone	4.161	43	110171	97.079	ug/l	99
17) Carbon Disulfide	4.417	76	182726	21.147	ug/l	97
18) Methyl Acetate	4.710	43	57010	17.537	ug/l	99
19) Methyl tert-butyl Ether	5.460	73	118617	19.017	ug/l	97
20) Methylene Chloride	4.948	84	83888	19.017	ug/l	98
21) trans-1,2-Dichloroethene	5.454	96	73585	20.987	ug/l	97
22) Diisopropyl ether	6.338	45	227221	20.425	ug/l	94
23) Vinyl Acetate	6.283	43	713649	96.045	ug/l	100
24) 1,1-Dichloroethane	6.240	63	140635	20.809	ug/l	97
25) 2-Butanone	7.191	43	135380	87.590	ug/l	100
26) 2,2-Dichloropropane	7.185	77	76369	22.091	ug/l	99
27) cis-1,2-Dichloroethene	7.191	96	85339	20.260	ug/l	93
28) Bromochloromethane	7.526	49	66032	20.766	ug/l	88
29) Tetrahydrofuran	7.551	42	84977	87.426	ug/l	94
30) Chloroform	7.691	83	147499	21.519	ug/l	98
31) Cyclohexane	7.965	56	110671	19.181	ug/l	98
32) 1,1,1-Trichloroethane	7.886	97	104287	21.471	ug/l	100
36) 1,1-Dichloropropene	8.093	75	97235	20.572	ug/l	98
37) Ethyl Acetate	7.270	43	57160	18.169	ug/l	99
38) Carbon Tetrachloride	8.081	117	97878	22.006	ug/l	98
39) Methylcyclohexane	9.343	83	110291	19.345	ug/l	98
40) Benzene	8.337	78	309652	20.901	ug/l	94

Sample Results: **VW032380.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032380.D
Acq On : 20 Oct 2025 11:41
Operator : SY/MD
Sample : VW1020SBS01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Quant Time: Oct 21 01:23:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.496	41	32519	19.180	ug/l		91
42) 1,2-Dichloroethane	8.410	62	99820	20.591	ug/l		100
43) Isopropyl Acetate	8.435	43	101969	18.271	ug/l		97
44) Trichloroethene	9.099	130	70587	20.348	ug/l		91
45) 1,2-Dichloropropane	9.374	63	77735	21.021	ug/l		97
46) Dibromomethane	9.465	93	47706	20.980	ug/l		93
47) Bromodichloromethane	9.648	83	114292	21.975	ug/l		94
48) Methyl methacrylate	9.441	41	47476	17.496	ug/l		93
49) 1,4-Dioxane	9.459	88	11448	368.334	ug/l	#	85
51) 4-Methyl-2-Pentanone	10.215	43	298346	92.294	ug/l		98
52) Toluene	10.392	92	191814	20.790	ug/l		98
53) t-1,3-Dichloropropene	10.605	75	102094	20.233	ug/l		98
54) cis-1,3-Dichloropropene	10.075	75	120341	20.705	ug/l		98
55) 1,1,2-Trichloroethane	10.788	97	62846	20.679	ug/l		97
56) Ethyl methacrylate	10.648	69	78320	18.412	ug/l		95
57) 1,3-Dichloropropane	10.934	76	109231	20.350	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	202349	89.381	ug/l		95
59) 2-Hexanone	10.971	43	211671	92.843	ug/l		97
60) Dibromochloromethane	11.129	129	74905	21.706	ug/l		99
61) 1,2-Dibromoethane	11.239	107	60047	20.263	ug/l		97
64) Tetrachloroethene	10.861	164	57861	20.114	ug/l		88
65) Chlorobenzene	11.660	112	213685	20.202	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.727	131	72938	22.139	ug/l		97
67) Ethyl Benzene	11.727	91	361301	20.492	ug/l		94
68) m/p-Xylenes	11.837	106	279914	41.170	ug/l		100
69) o-Xylene	12.166	106	125704	19.771	ug/l		97
70) Styrene	12.178	104	233906	21.071	ug/l		97
71) Bromoform	12.349	173	40631	21.516	ug/l	#	98
73) Isopropylbenzene	12.458	105	326100	19.799	ug/l		100
74) N-amyl acetate	12.269	43	92502	17.605	ug/l		98
75) 1,1,2,2-Tetrachloroethane	12.714	83	77328	18.908	ug/l		100
76) 1,2,3-Trichloropropane	12.763	75	67320m	21.249	ug/l		
77) Bromobenzene	12.745	156	80266	20.216	ug/l		93
78) n-propylbenzene	12.800	91	415401	20.190	ug/l		97
79) 2-Chlorotoluene	12.891	91	252737	20.091	ug/l		99
80) 1,3,5-Trimethylbenzene	12.940	105	280554	19.699	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.507	75	24052	19.233	ug/l		92
82) 4-Chlorotoluene	12.989	91	270686	20.239	ug/l		99
83) tert-Butylbenzene	13.202	119	226702	19.400	ug/l		97
84) 1,2,4-Trimethylbenzene	13.245	105	290311	20.046	ug/l		100
85) sec-Butylbenzene	13.379	105	350178	19.609	ug/l		100
86) p-Isopropyltoluene	13.495	119	293214	19.788	ug/l		100
87) 1,3-Dichlorobenzene	13.495	146	163992	20.398	ug/l		96
88) 1,4-Dichlorobenzene	13.574	146	162933	20.268	ug/l		98
89) n-Butylbenzene	13.818	91	285250	19.717	ug/l		97
90) Hexachloroethane	14.086	117	58655	22.085	ug/l		94
91) 1,2-Dichlorobenzene	13.867	146	145087	19.964	ug/l		97
92) 1,2-Dibromo-3-Chloropr...	14.476	75	13154	18.371	ug/l		87
93) 1,2,4-Trichlorobenzene	15.129	180	83664	19.198	ug/l		96
94) Hexachlorobutadiene	15.226	225	40248	20.200	ug/l		89
95) Naphthalene	15.360	128	178782	17.083	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	78242	19.048	ug/l		98

Sample Results: **VW032380.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032380.D
Acq On : 20 Oct 2025 11:41
Operator : SY/MD
Sample : VW1020SBS01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 21 01:23:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

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

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

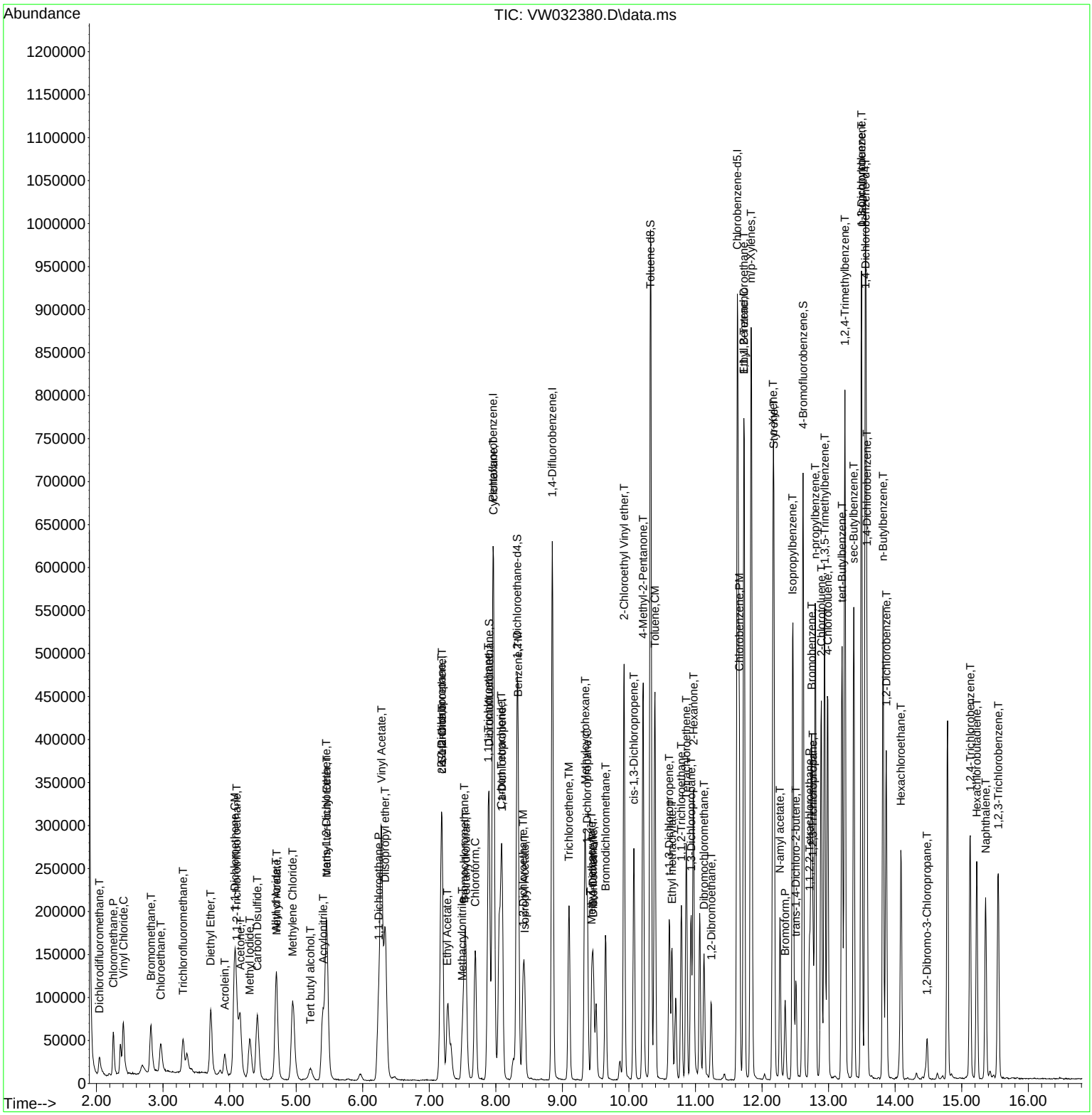
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032380.D
Acq On : 20 Oct 2025 11:41
Operator : SY/MD
Sample : VW1020SBS01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

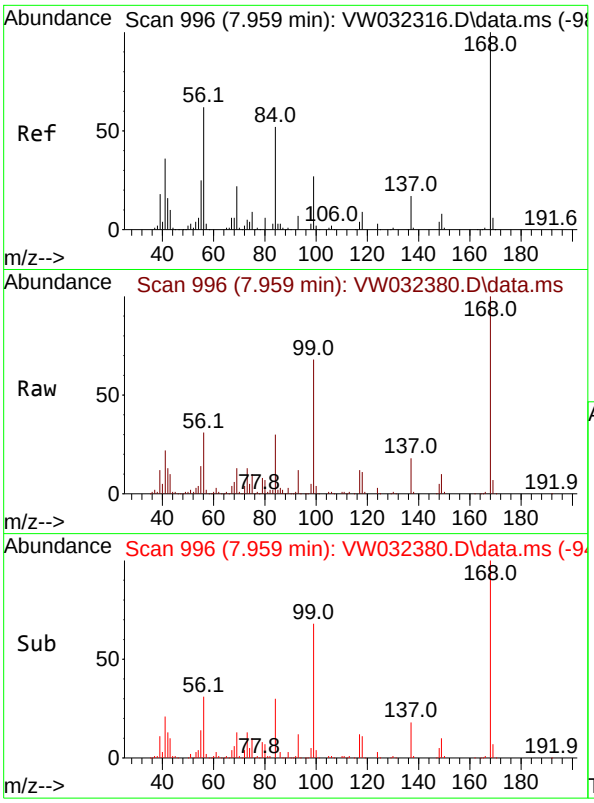
Quant Time: Oct 21 01:23:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

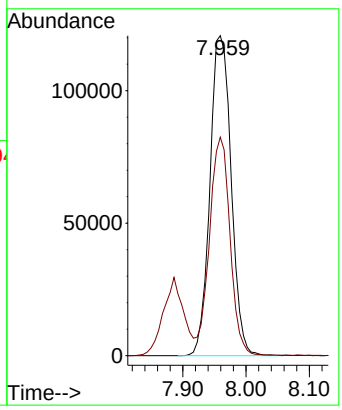




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:168 Resp: 28099

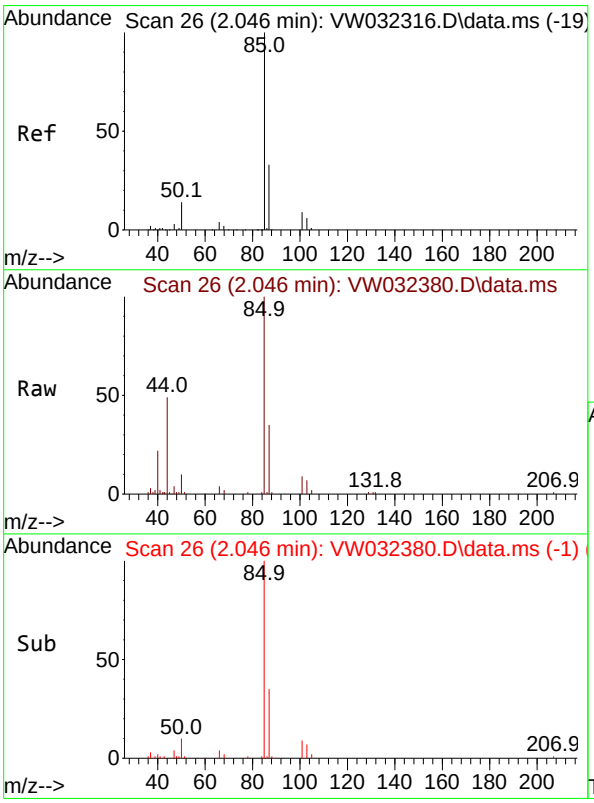
Ion	Ratio	Lower	Upper
168	100		
99	68.2	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

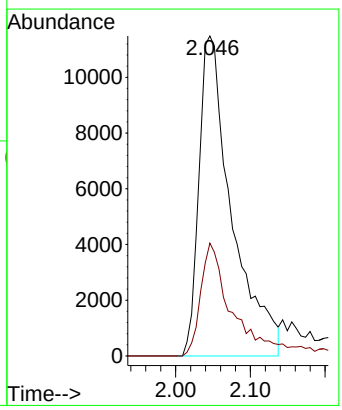
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

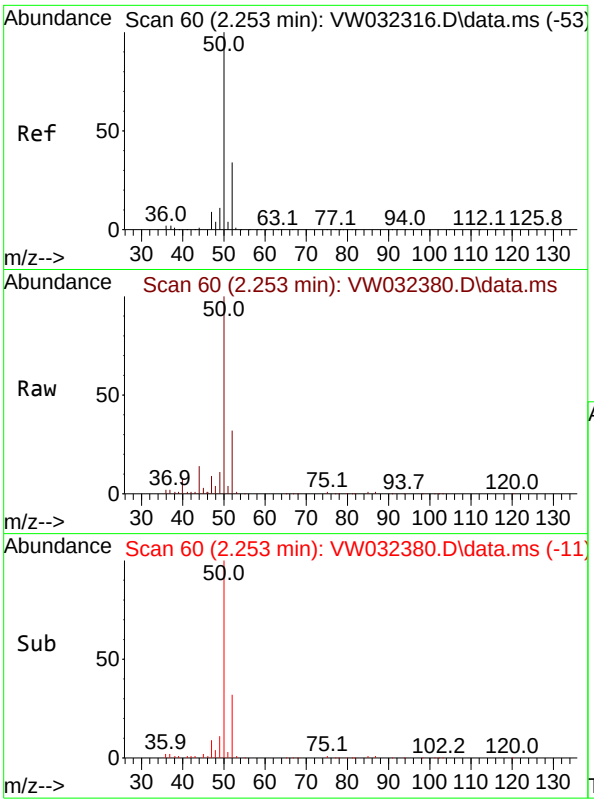


#2
Dichlorodifluoromethane
Concen: 19.874 ug/l
RT: 2.046 min Scan# 26
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 85 Resp: 35044

Ion	Ratio	Lower	Upper
85	100		
87	35.3	17.2	51.6

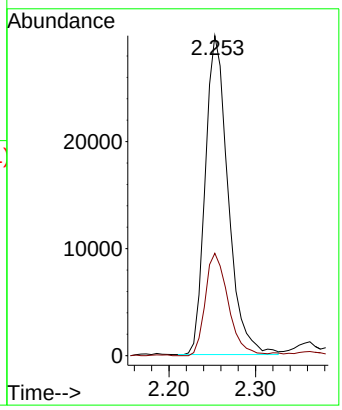




#3
Chloromethane
Concen: 20.061 ug/l
RT: 2.253 min Scan# 6
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 50 Resp: 5458

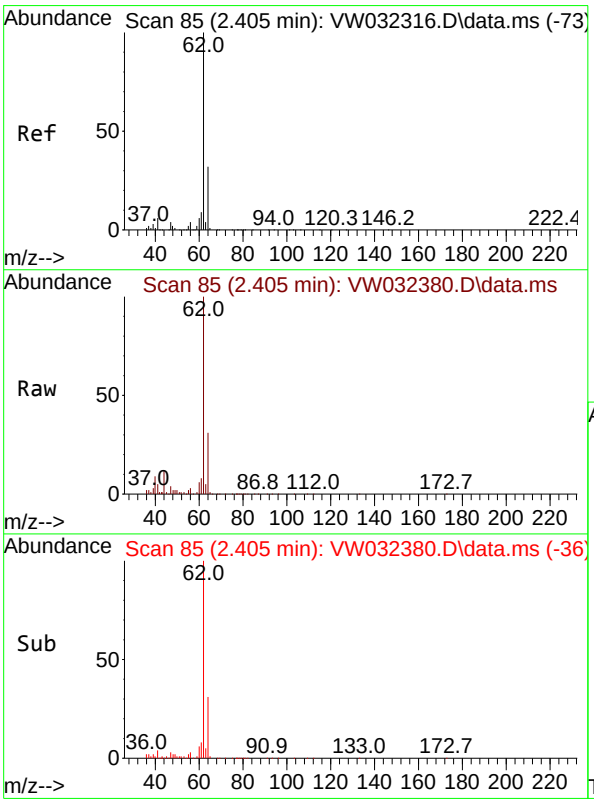
Ion	Ratio	Lower	Upper
50	100		
52	32.1	26.1	39.1



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

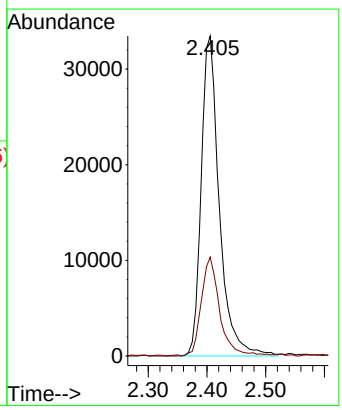
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

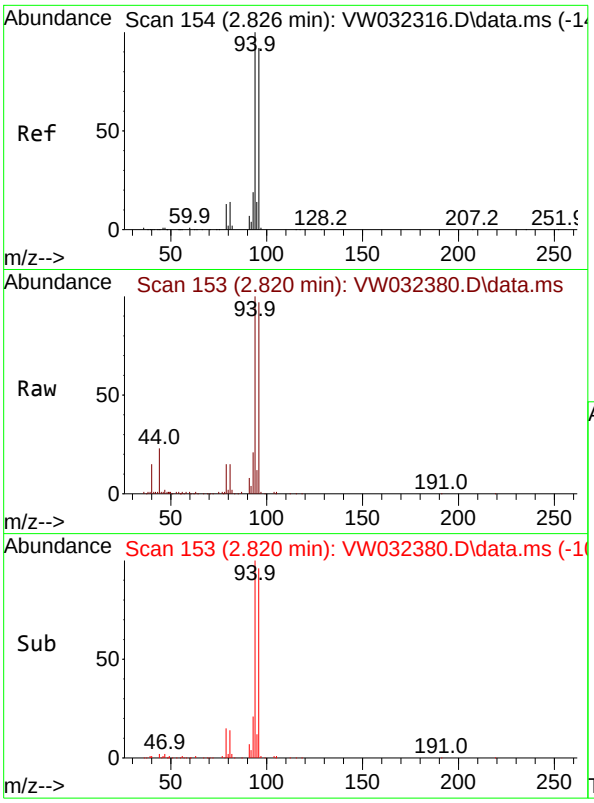


#4
Vinyl Chloride
Concen: 22.069 ug/l
RT: 2.405 min Scan# 85
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 62 Resp: 71685

Ion	Ratio	Lower	Upper
62	100		
64	30.6	24.8	37.2

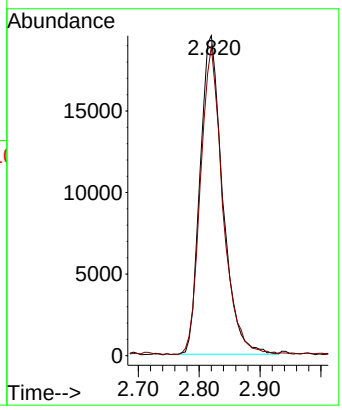




#5
Bromomethane
Concen: 21.129 ug/l
RT: 2.820 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 94 Resp: 5043

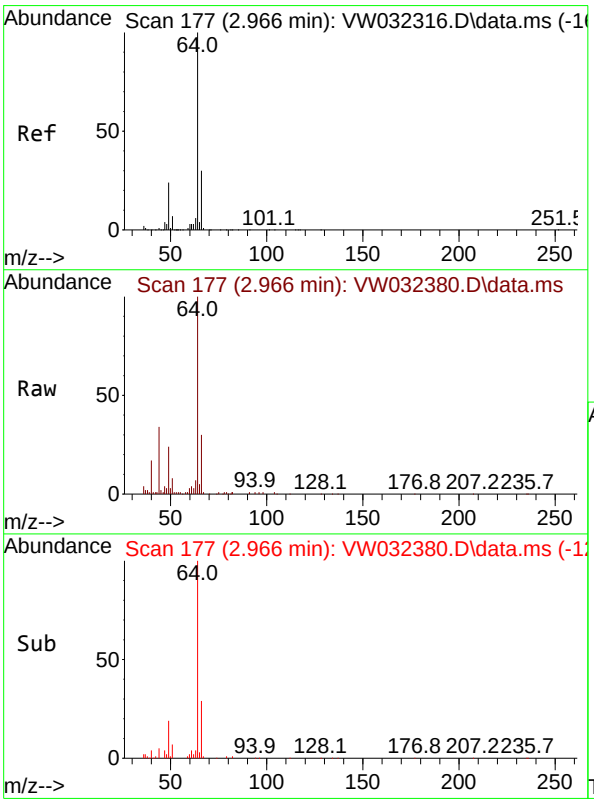
Ion	Ratio	Lower	Upper
94	100		
96	96.7	76.6	115.0



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

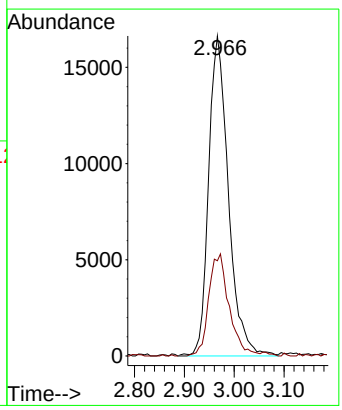
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

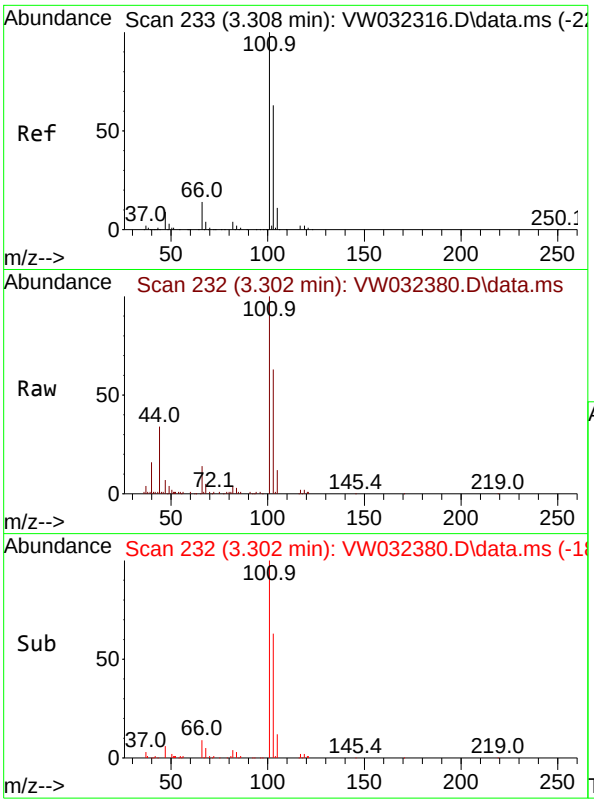


#6
Chloroethane
Concen: 21.387 ug/l
RT: 2.966 min Scan# 177
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 64 Resp: 45866

Ion	Ratio	Lower	Upper
64	100		
66	29.7	26.2	39.4

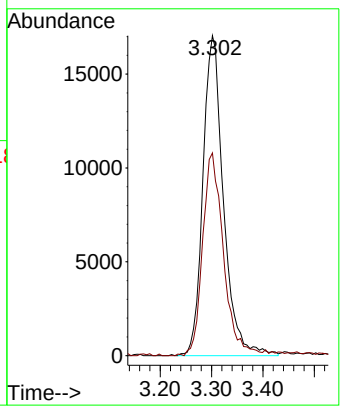




#7
Trichlorofluoromethane
Concen: 19.445 ug/l
RT: 3.302 min Scan# 2
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:101 Resp: 4729

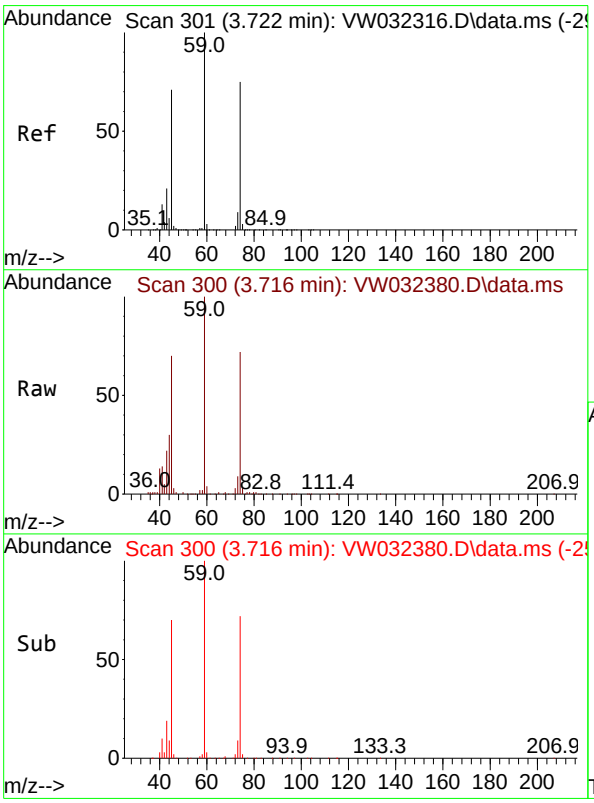
Ion	Ratio	Lower	Upper
101	100		
103	62.9	47.8	71.8



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

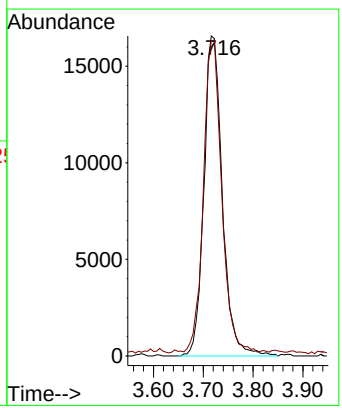
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

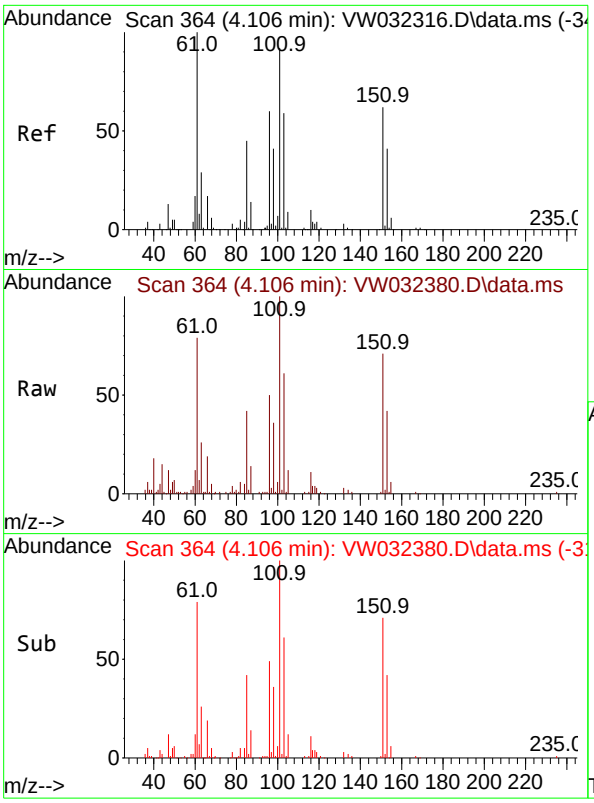


#8
Diethyl Ether
Concen: 20.256 ug/l
RT: 3.716 min Scan# 300
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 74 Resp: 42688

Ion	Ratio	Lower	Upper
74	100		
45	95.7	43.1	129.4





#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.898 ug/l
RT: 4.106 min Scan# 3
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

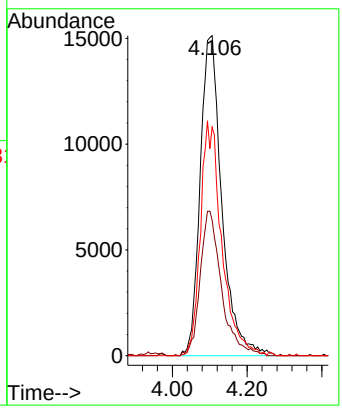
Tgt Ion:101 Resp: 6096

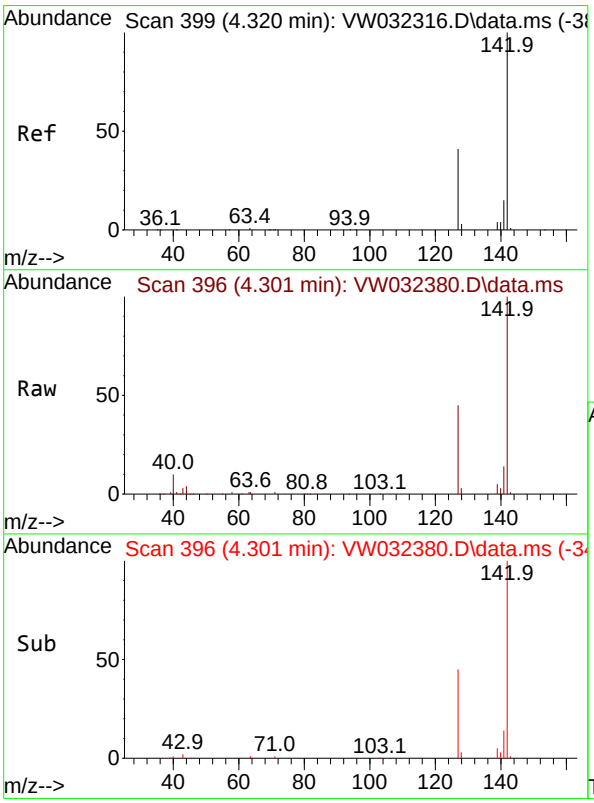
Ion	Ratio	Lower	Upper
101	100		
85	44.4	37.1	55.7
151	71.9	61.5	92.3

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

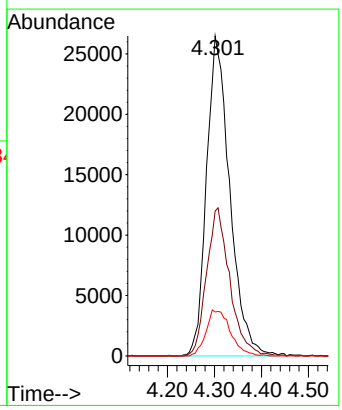


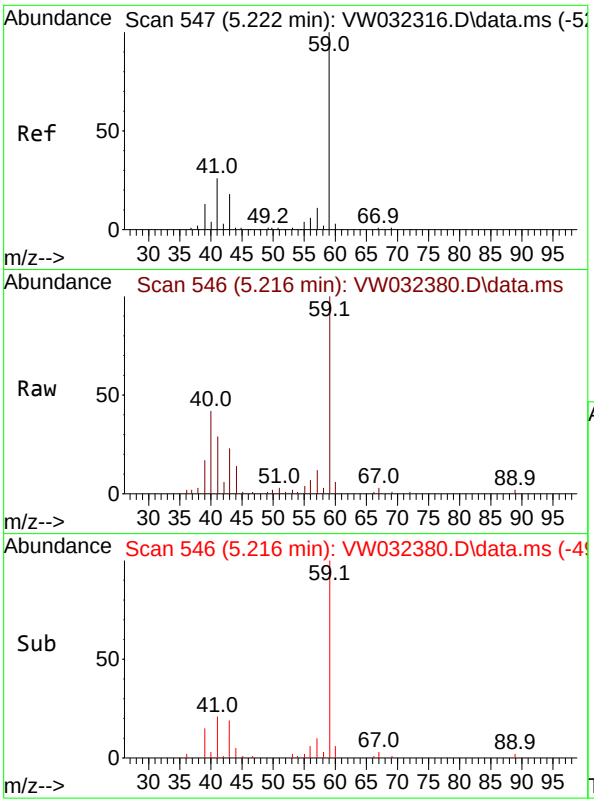


#10
Methyl Iodide
Concen: 21.811 ug/l
RT: 4.301 min Scan# 396
Delta R.T. -0.012 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:142 Resp: 90782

Ion	Ratio	Lower	Upper
142	100		
127	46.3	38.2	57.2
141	15.1	12.2	18.2

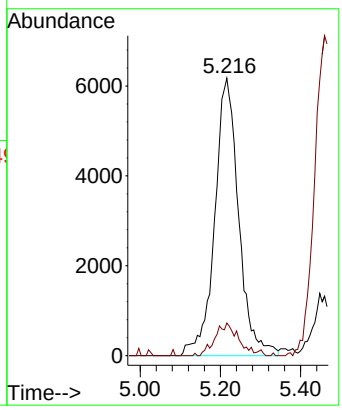




#11
Tert butyl alcohol
Concen: 82.490 ug/l
RT: 5.216 min Scan# 54
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 59 Resp: 2559

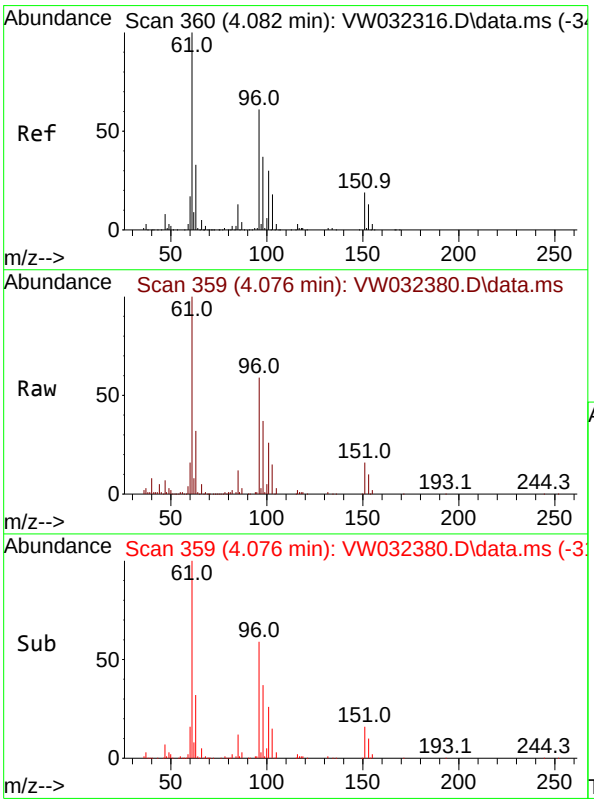
Ion	Ratio	Lower	Upper
59	100		
57	11.3	9.8	14.6



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

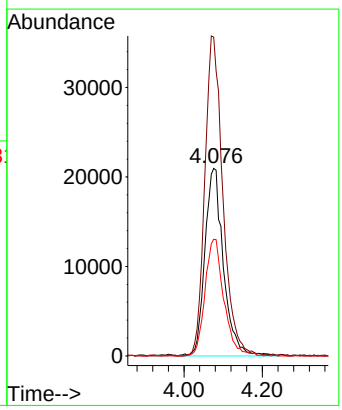
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

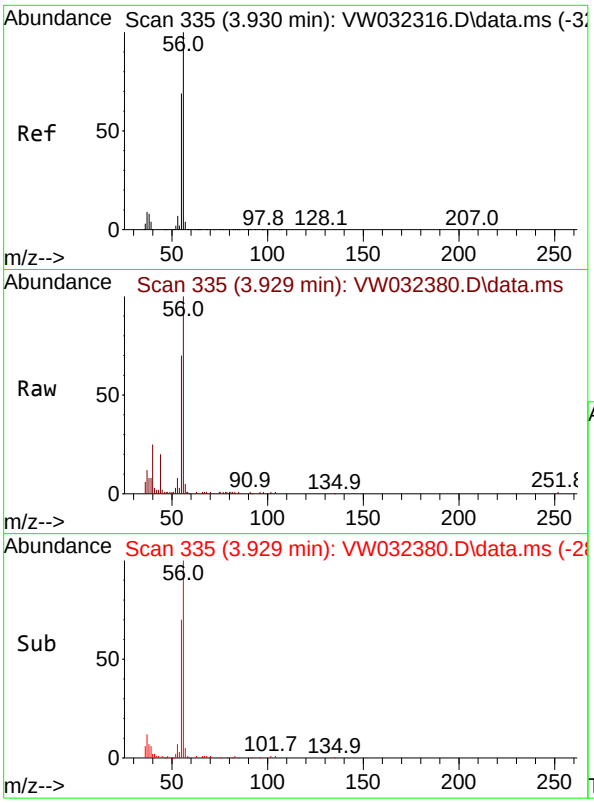


#12
1,1-Dichloroethene
Concen: 21.733 ug/l
RT: 4.076 min Scan# 359
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 96 Resp: 68828

Ion	Ratio	Lower	Upper
96	100		
61	170.0	123.0	184.4
98	62.2	48.5	72.7

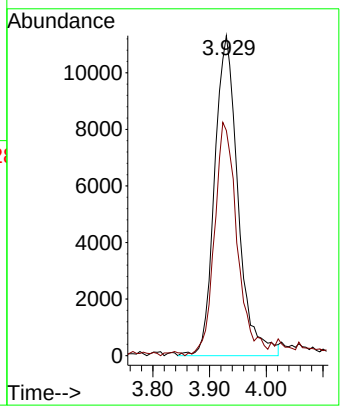




#13
Acrolein
Concen: 64.514 ug/l
RT: 3.929 min Scan# 3
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 56 Resp: 3248

Ion	Ratio	Lower	Upper
56	100		
55	70.5	56.4	84.6



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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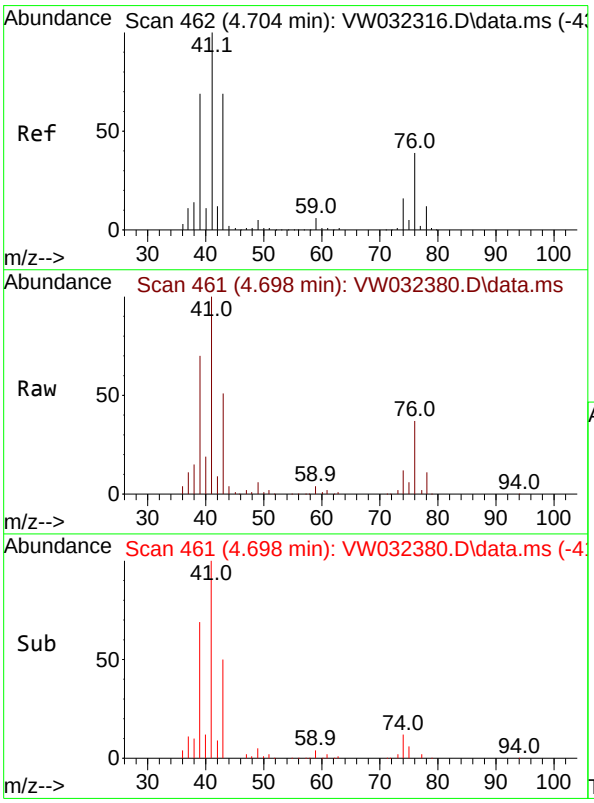
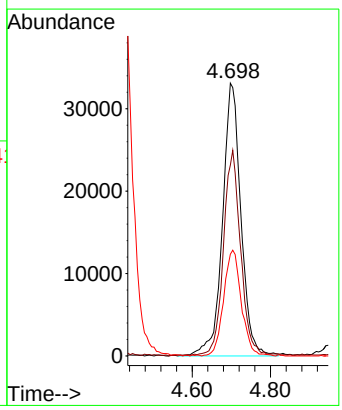
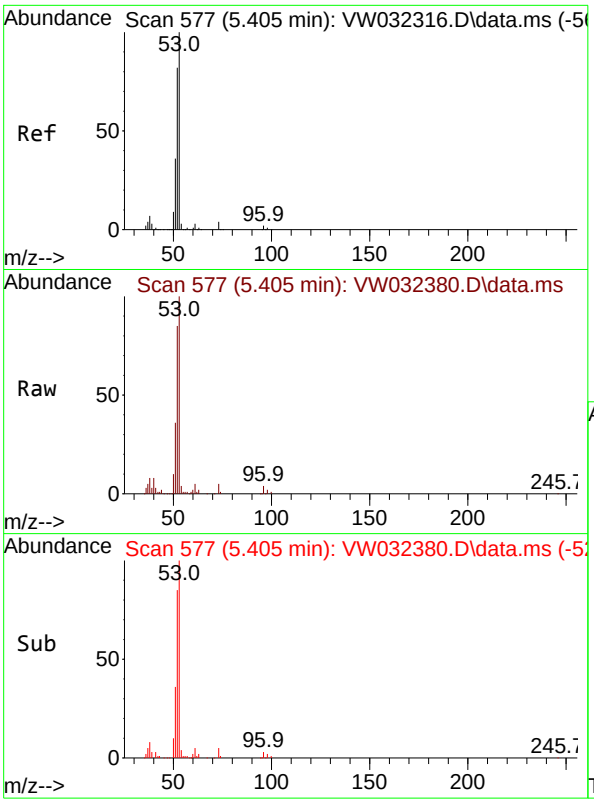


#14
Allyl chloride
Concen: 20.277 ug/l
RT: 4.698 min Scan# 461
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 41 Resp: 108462

Ion	Ratio	Lower	Upper
41	100		
39	69.5	64.1	96.1
76	37.3	31.4	47.2

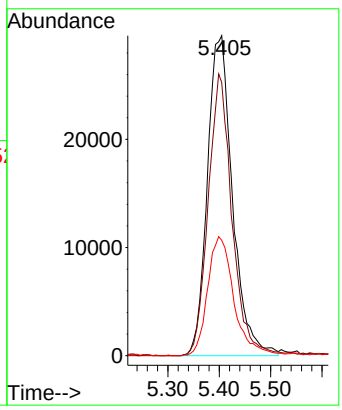




#15
Acrylonitrile
Concen: 91.844 ug/l
RT: 5.405 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 53 Resp: 10069

Ion	Ratio	Lower	Upper
53	100		
52	83.2	67.4	101.2
51	38.9	30.3	45.5



Instrument :
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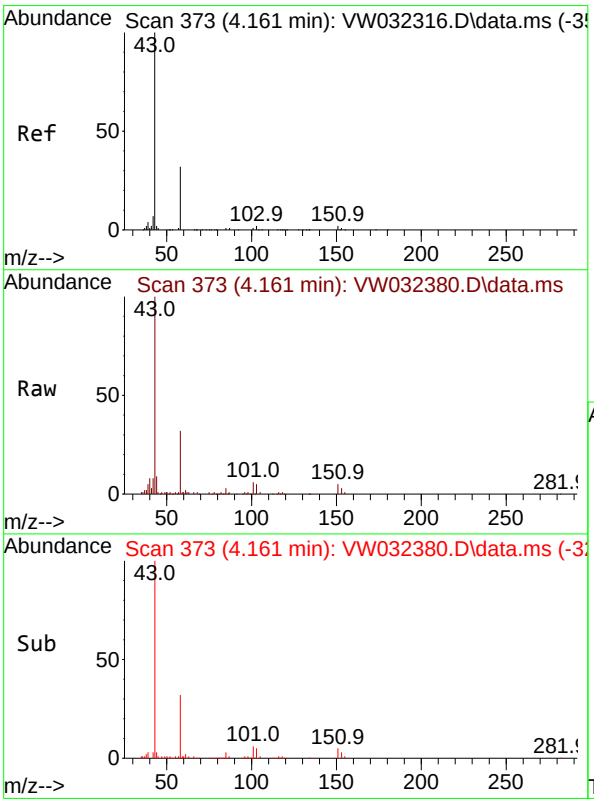
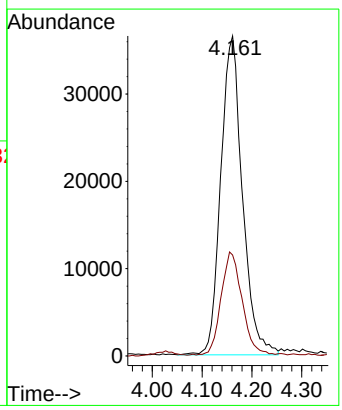
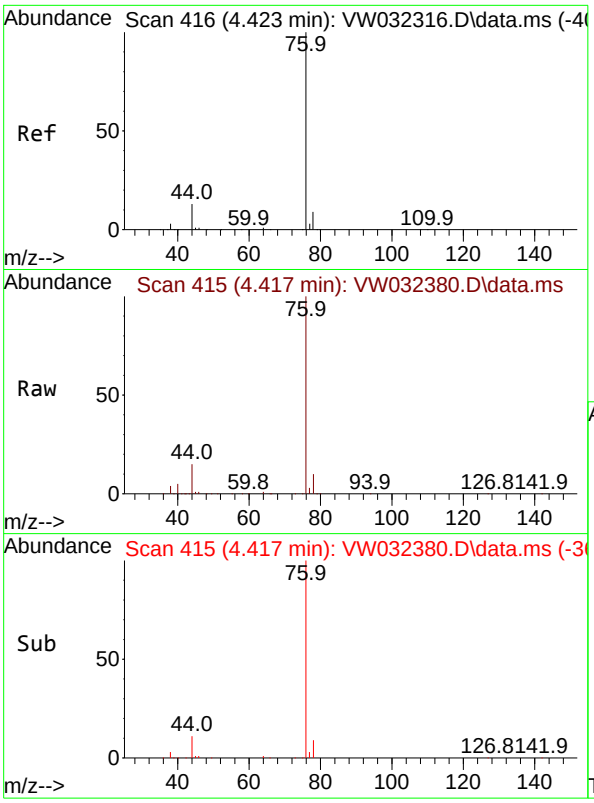


#16
Acetone
Concen: 97.079 ug/l
RT: 4.161 min Scan# 373
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 110171

Ion	Ratio	Lower	Upper
43	100		
58	31.1	25.3	37.9





#17
Carbon Disulfide
Concen: 21.147 ug/l
RT: 4.417 min Scan# 4
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 76 Resp: 18272

Ion	Ratio	Lower	Upper
76	100		
78	10.0	7.0	10.6

Instrument :
MSVOA_W
ClientSampleId :
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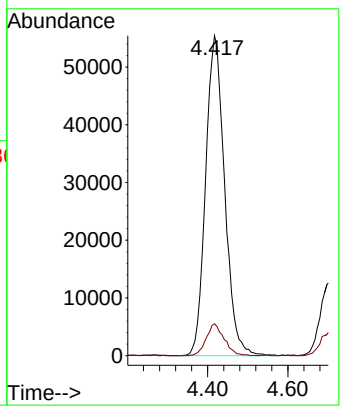
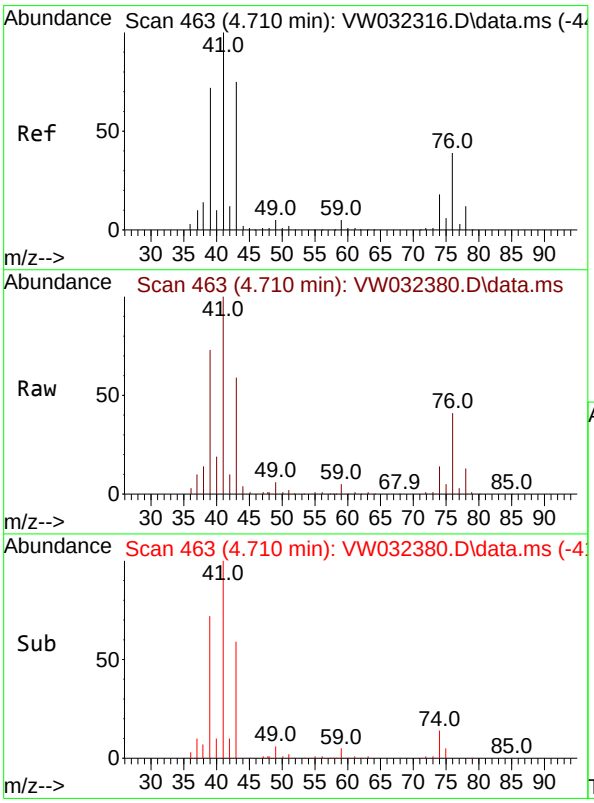
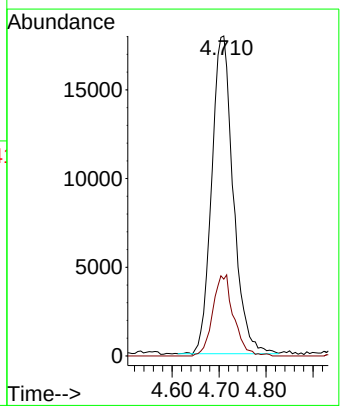


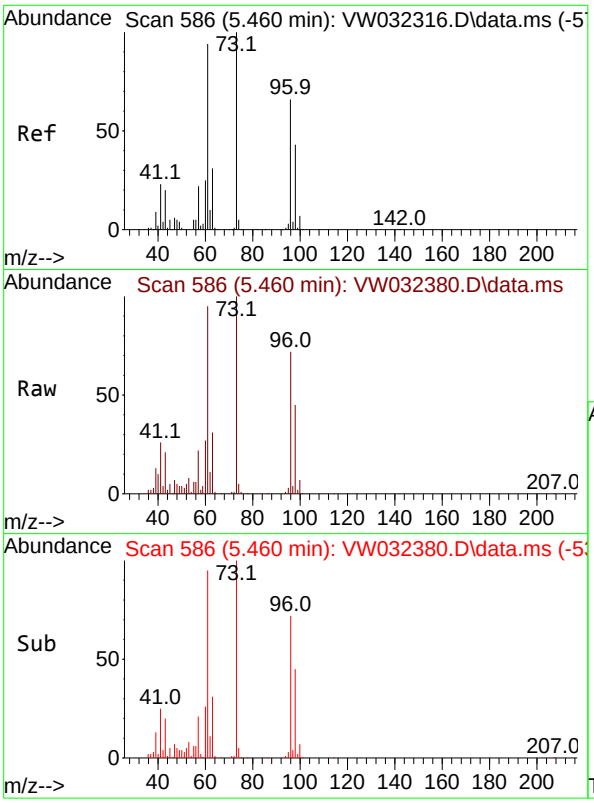


#18
Methyl Acetate
Concen: 17.537 ug/l
RT: 4.710 min Scan# 463
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 57010

Ion	Ratio	Lower	Upper
43	100		
74	24.8	20.2	30.4

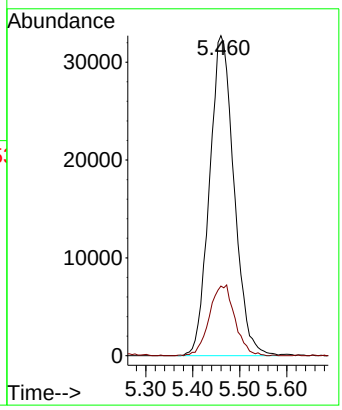




#19
Methyl tert-butyl Ether
Concen: 19.017 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 73 Resp: 11861

Ion	Ratio	Lower	Upper
73	100		
57	21.8	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
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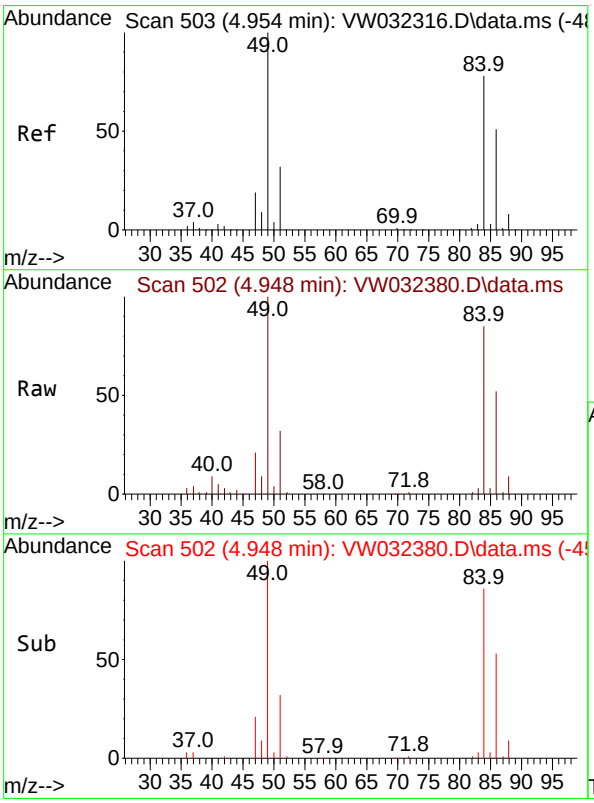
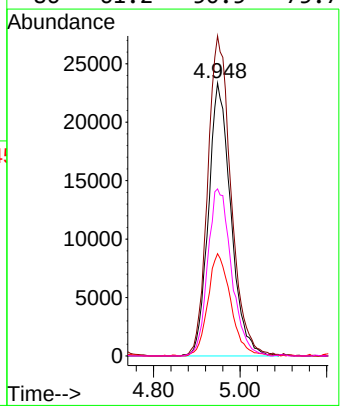
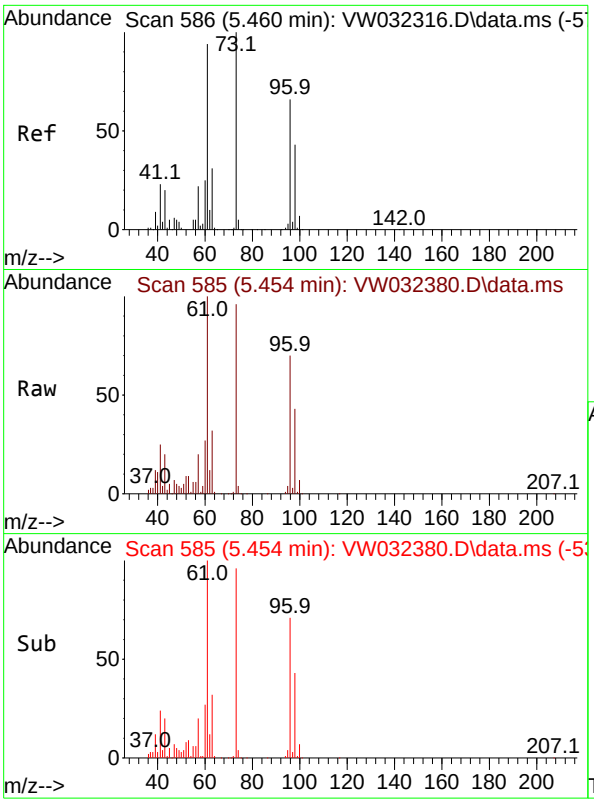


#20
Methylene Chloride
Concen: 19.017 ug/l
RT: 4.948 min Scan# 502
Delta R.T. -0.012 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 84 Resp: 83888

Ion	Ratio	Lower	Upper
84	100		
49	117.3	92.2	138.4
51	37.5	31.0	46.6
86	61.2	50.5	75.7

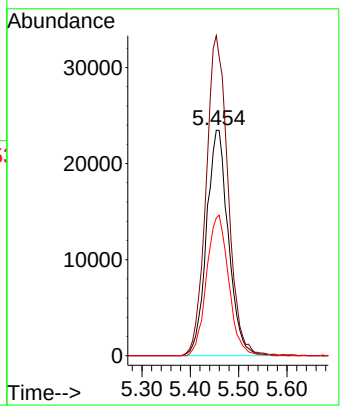




#21
trans-1,2-Dichloroethene
Concen: 20.987 ug/l
RT: 5.454 min Scan# 5
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 96 Resp: 7358

Ion	Ratio	Lower	Upper
96	100		
61	142.0	112.5	168.7
98	61.1	54.2	81.4



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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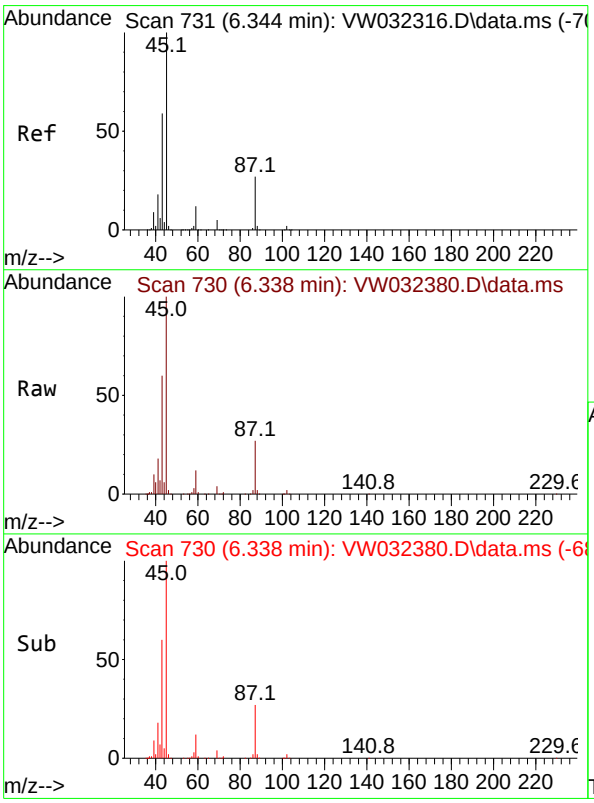
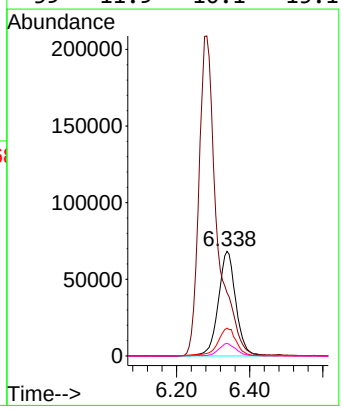
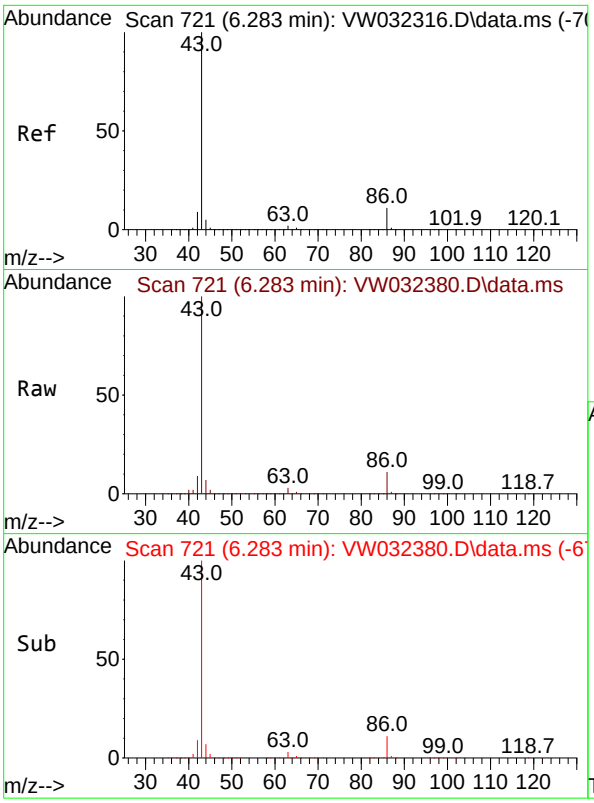


#22
Diisopropyl ether
Concen: 20.425 ug/l
RT: 6.338 min Scan# 730
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 45 Resp: 227221

Ion	Ratio	Lower	Upper
45	100		
43	60.4	51.4	77.2
87	26.6	25.9	38.9
59	11.9	10.1	15.1





#23
Vinyl Acetate
Concen: 96.045 ug/l
RT: 6.283 min Scan# 7
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 71364

Ion	Ratio	Lower	Upper
43	100		
86	10.9	8.8	13.2

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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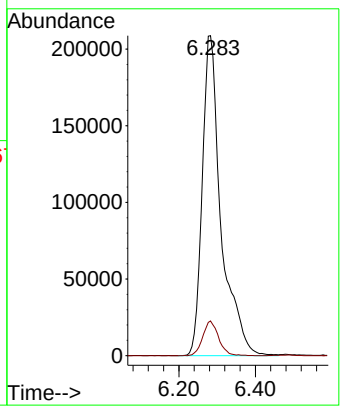
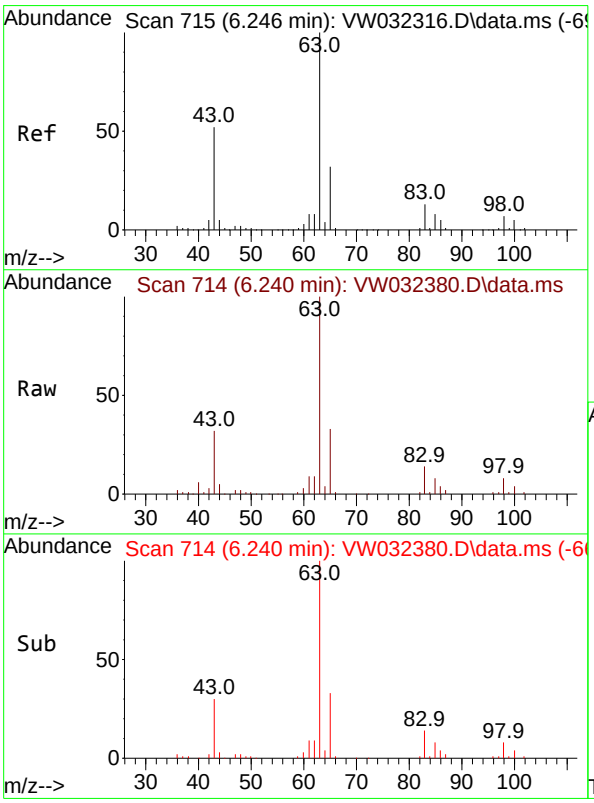
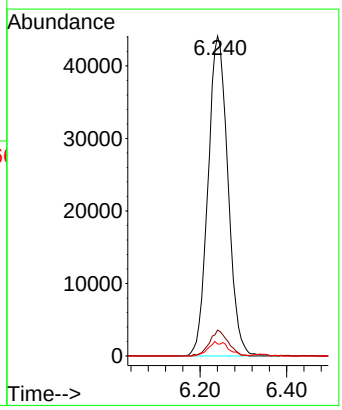


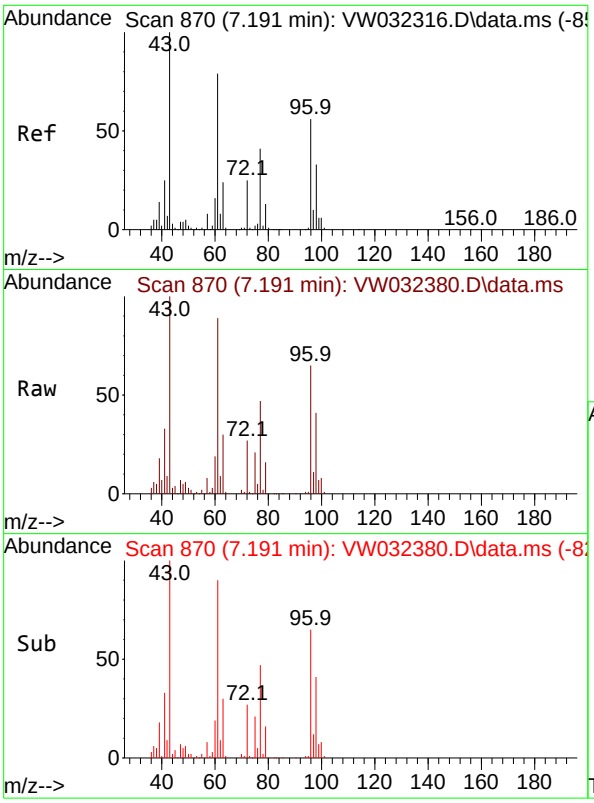


#24
1,1-Dichloroethane
Concen: 20.809 ug/l
RT: 6.240 min Scan# 714
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 63 Resp: 140635

Ion	Ratio	Lower	Upper
63	100		
98	8.1	3.8	11.2
100	3.8	2.5	7.5





#25
2-Butanone
Concen: 87.590 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 13538

Ion	Ratio	Lower	Upper
43	100		
72	26.6	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
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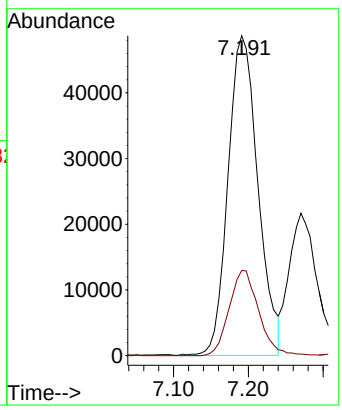
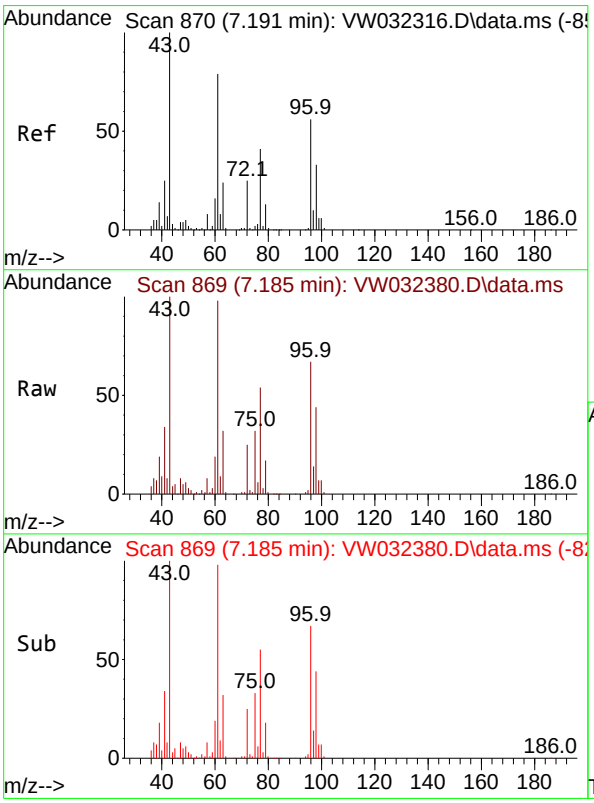
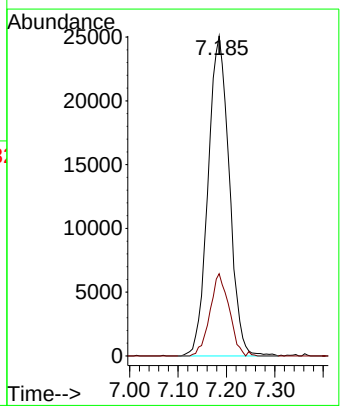


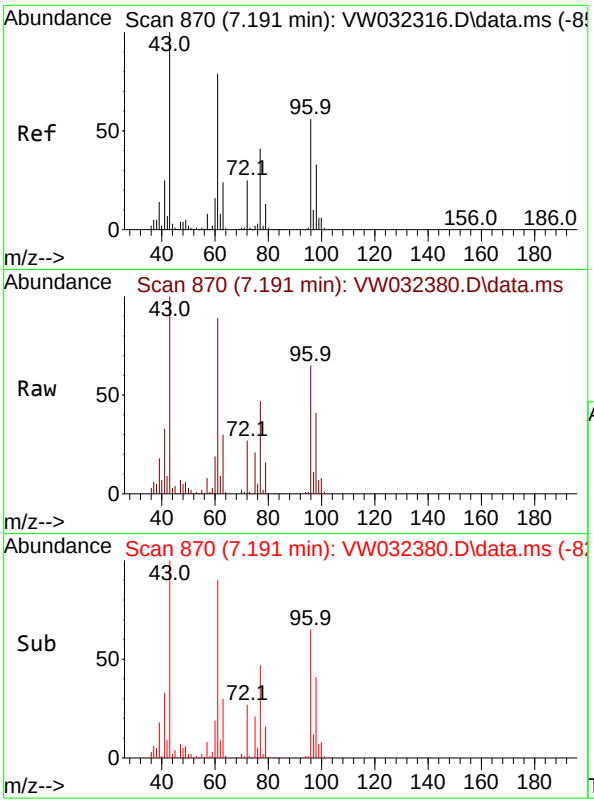


#26
2,2-Dichloropropane
Concen: 22.091 ug/l
RT: 7.185 min Scan# 869
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 77 Resp: 76369

Ion	Ratio	Lower	Upper
77	100		
97	23.2	11.9	35.5

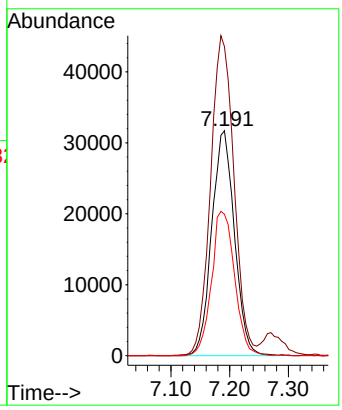




#27
cis-1,2-Dichloroethene
Concen: 20.260 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 96 Resp: 8533

Ion	Ratio	Lower	Upper
96	100		
61	146.3	0.0	268.0
98	65.1	0.0	130.8



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
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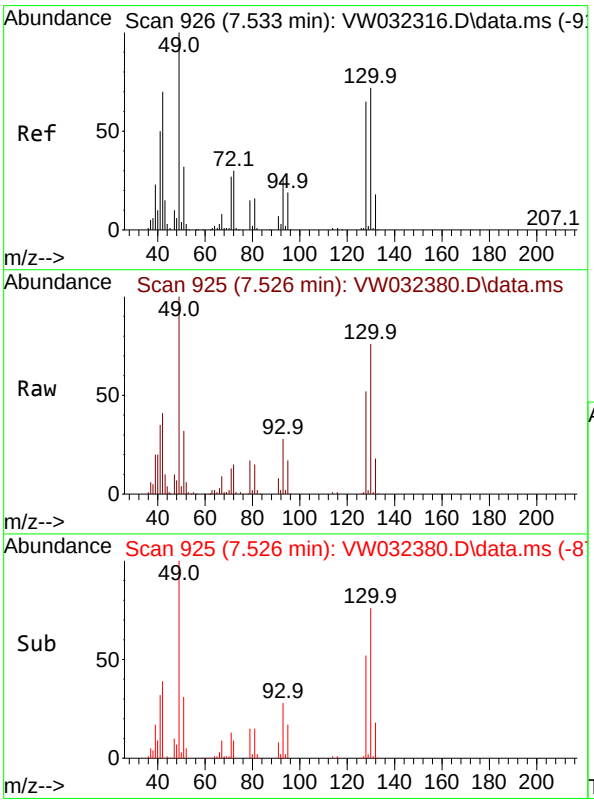
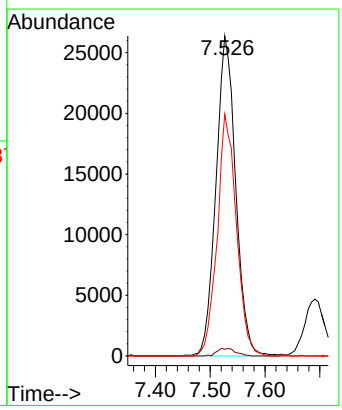
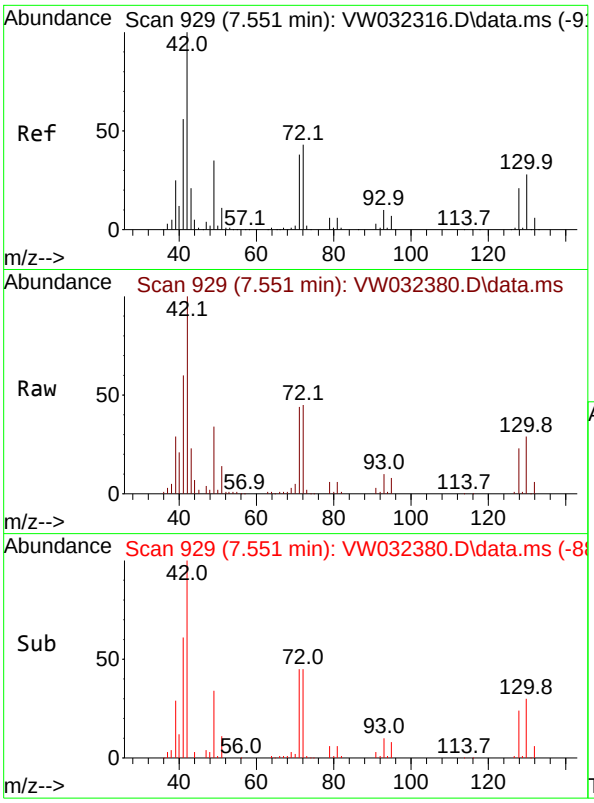


#28
Bromochloromethane
Concen: 20.766 ug/l
RT: 7.526 min Scan# 925
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 49 Resp: 66032

Ion	Ratio	Lower	Upper
49	100		
129	2.2	0.0	4.2
130	73.3	67.5	101.3





#29
Tetrahydrofuran
Concen: 87.426 ug/l
RT: 7.551 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 42 Resp: 8497

Ion	Ratio	Lower	Upper
42	100		
72	43.2	37.4	56.2
71	40.1	36.0	54.0

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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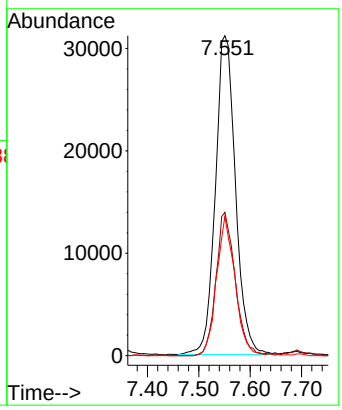
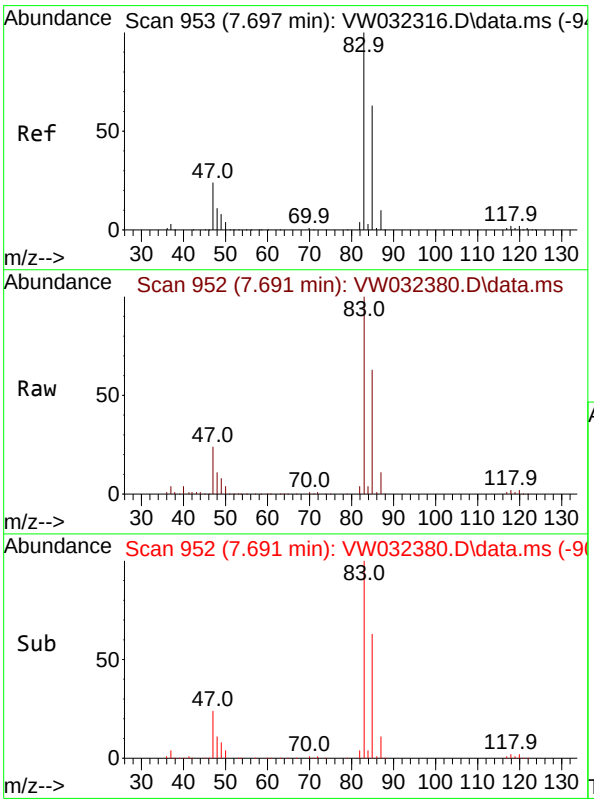
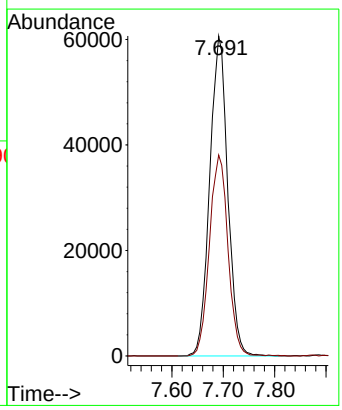


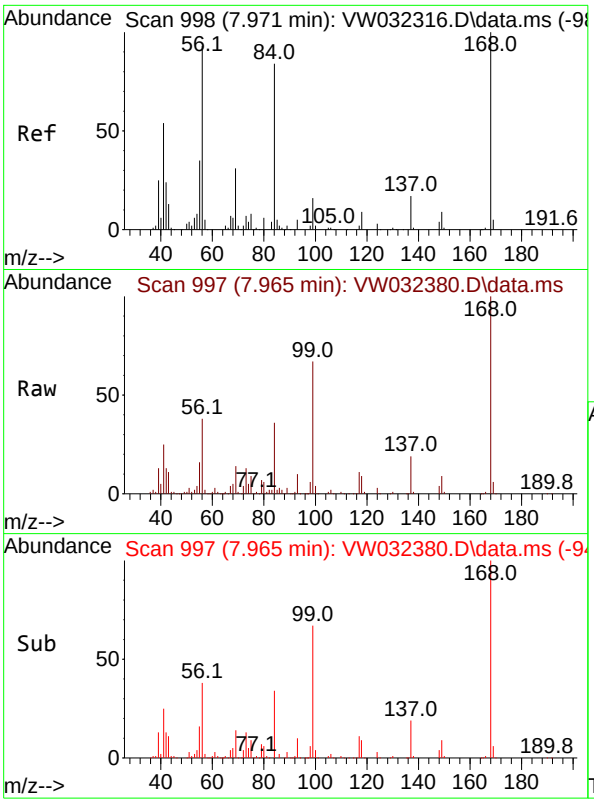


#30
Chloroform
Concen: 21.519 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 83 Resp: 147499

Ion	Ratio	Lower	Upper
83	100		
85	62.8	51.2	76.8

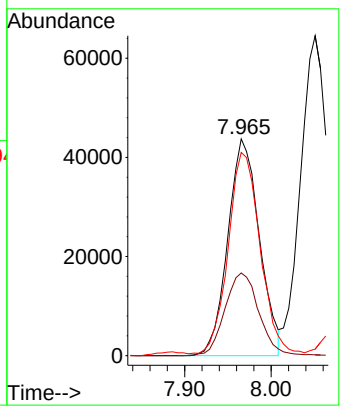




#31
Cyclohexane
Concen: 19.181 ug/l
RT: 7.965 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 56 Resp: 11067

Ion	Ratio	Lower	Upper
56	100		
69	38.1	27.7	41.5
84	92.3	74.6	112.0



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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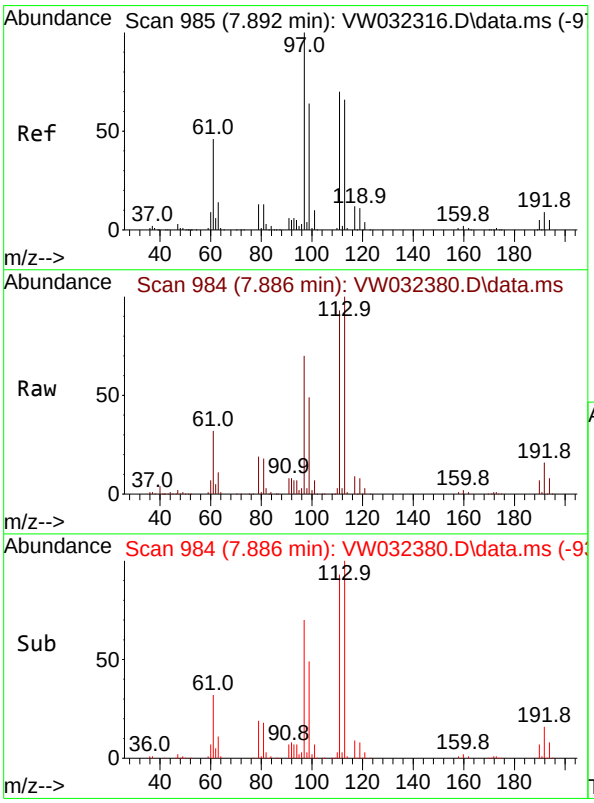
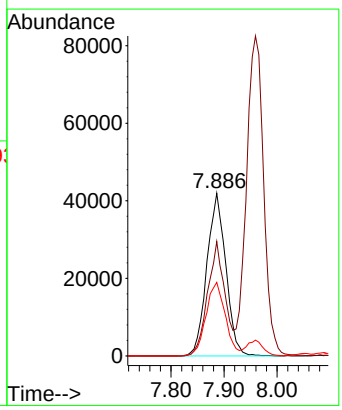
Supervised By :Semsettin Yesilyurt 10/21/2025

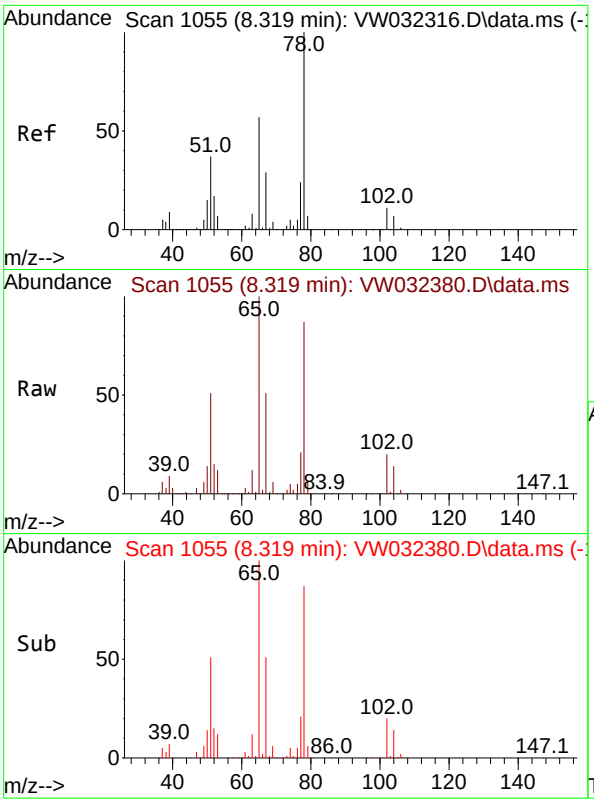


#32
1,1,1-Trichloroethane
Concen: 21.471 ug/l
RT: 7.886 min Scan# 984
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 97 Resp: 104287

Ion	Ratio	Lower	Upper
97	100		
99	63.7	50.9	76.3
61	46.0	36.2	54.4

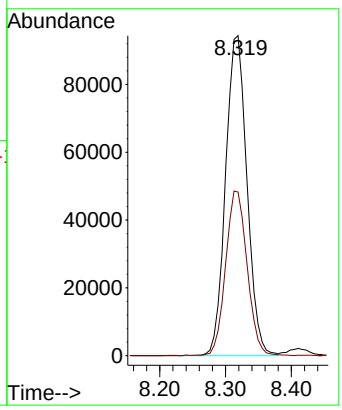




#33
1,2-Dichloroethane-d4
Concen: 52.149 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 65 Resp: 21373

Ion	Ratio	Lower	Upper
65	100		
67	51.8	0.0	99.6



Instrument :
MSVOA_W
ClientSampleId :
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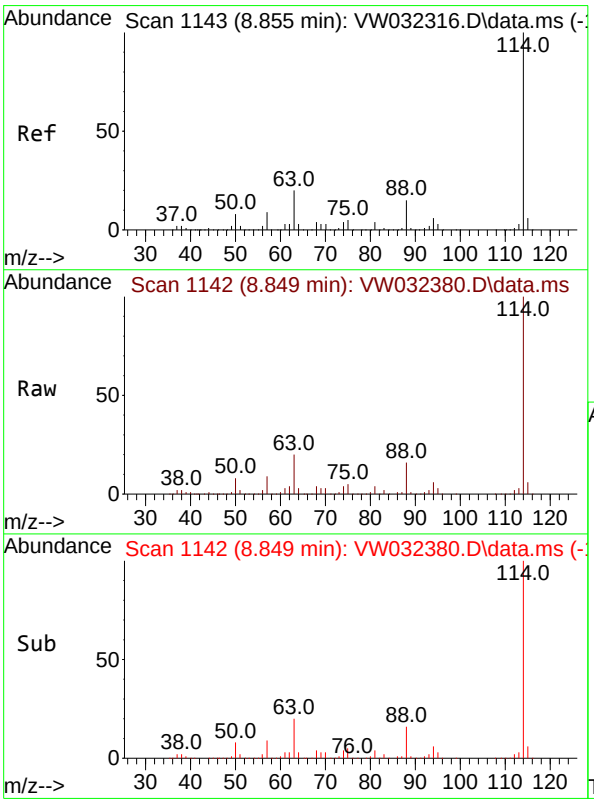
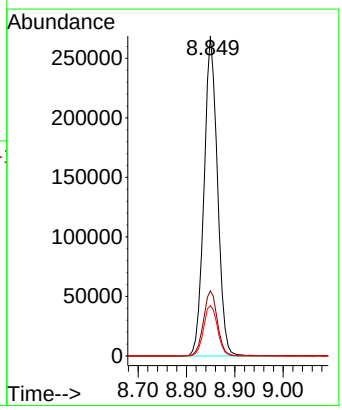
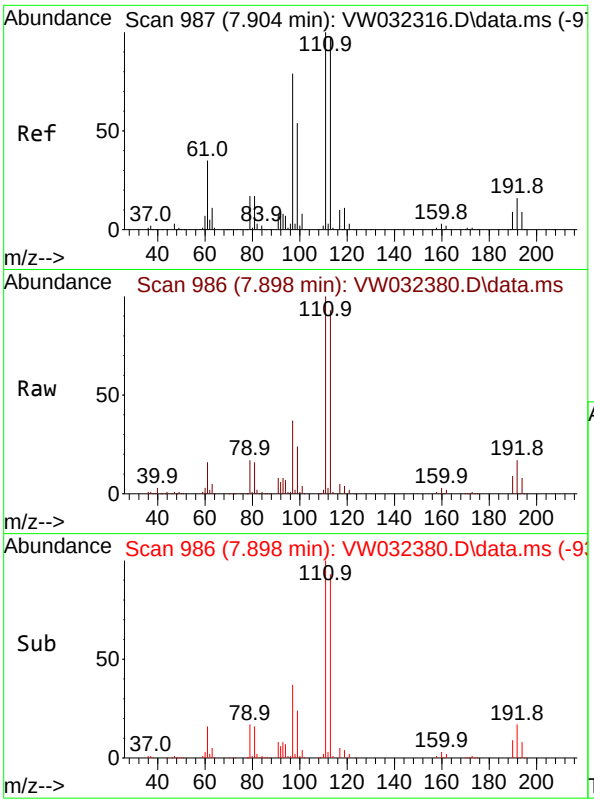


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:114 Resp: 517149

Ion	Ratio	Lower	Upper
114	100		
63	20.4	0.0	40.4
88	15.7	0.0	32.0





#35
Dibromofluoromethane
Concen: 53.284 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:113 Resp: 17845

Ion	Ratio	Lower	Upper
113	100		
111	103.6	83.9	125.9
192	16.8	14.6	21.8

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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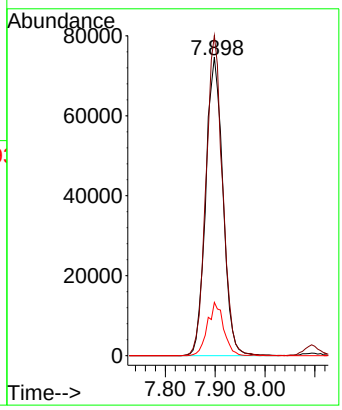
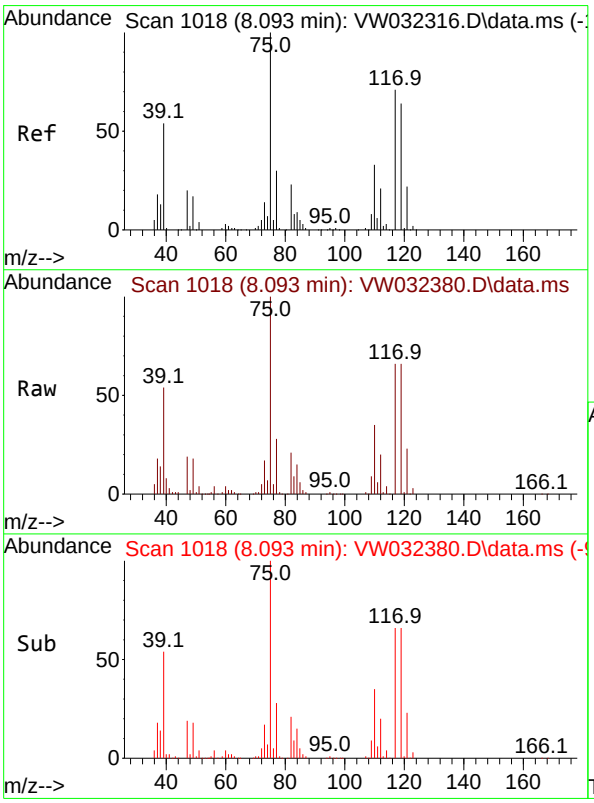
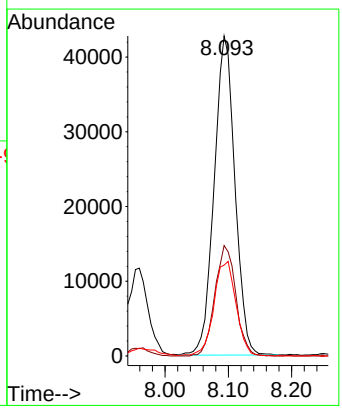


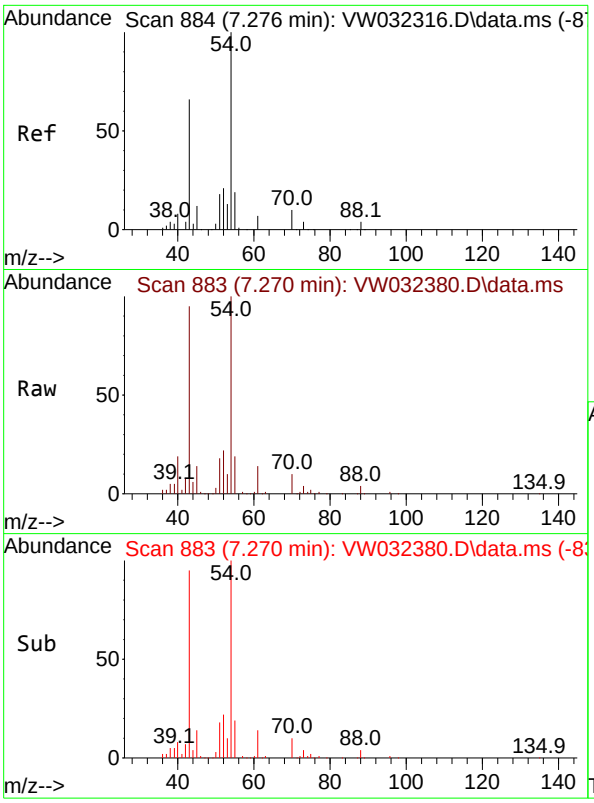


#36
1,1-Dichloropropene
Concen: 20.572 ug/l
RT: 8.093 min Scan# 1018
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 75 Resp: 97235

Ion	Ratio	Lower	Upper
75	100		
110	34.9	17.5	52.5
77	31.8	24.1	36.1

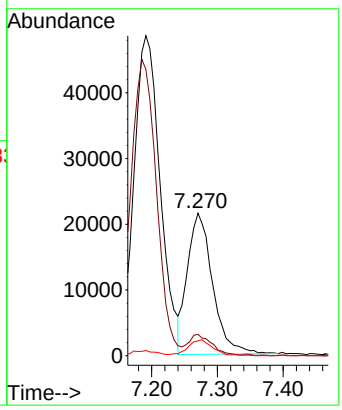




#37
Ethyl Acetate
Concen: 18.169 ug/l
RT: 7.270 min Scan# 8
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 5716

Ion	Ratio	Lower	Upper
43	100		
61	13.2	11.3	16.9
70	11.0	8.9	13.3



Instrument :
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ClientSampleId :
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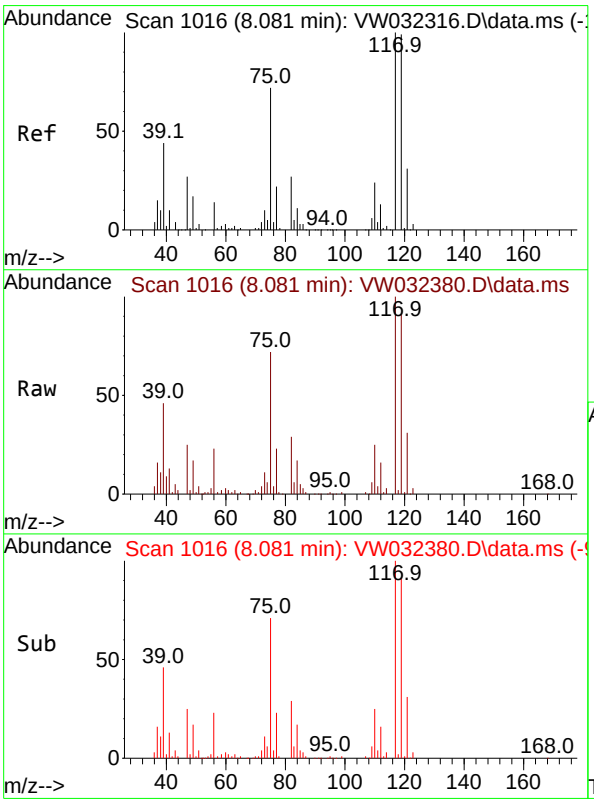
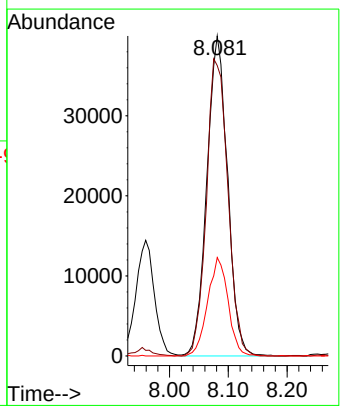
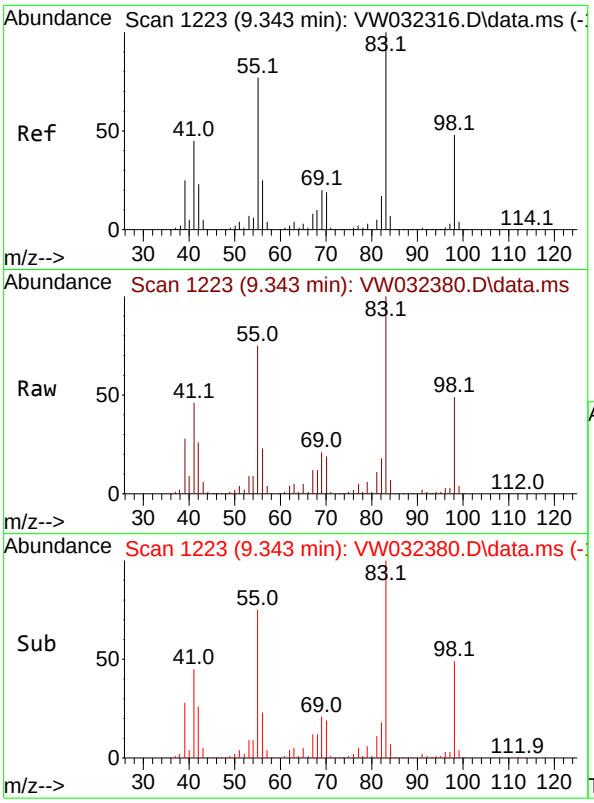


#38
Carbon Tetrachloride
Concen: 22.006 ug/l
RT: 8.081 min Scan# 1016
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:117 Resp: 97878

Ion	Ratio	Lower	Upper
117	100		
119	90.7	74.2	111.2
121	30.8	25.6	38.4





#39
Methylcyclohexane
Concen: 19.345 ug/l
RT: 9.343 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 83 Resp: 11029

Ion	Ratio	Lower	Upper
83	100		
55	75.2	58.4	87.6
98	49.4	39.4	59.2

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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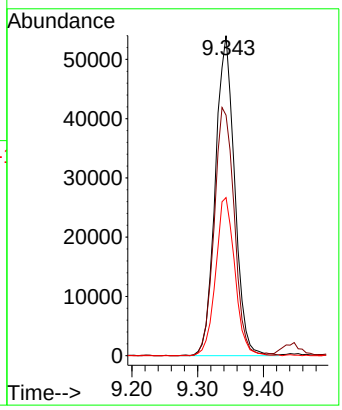
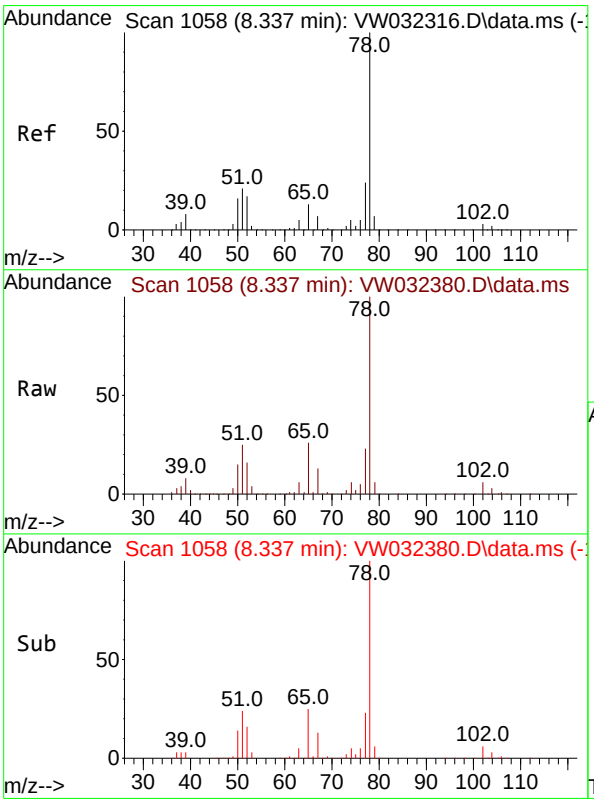
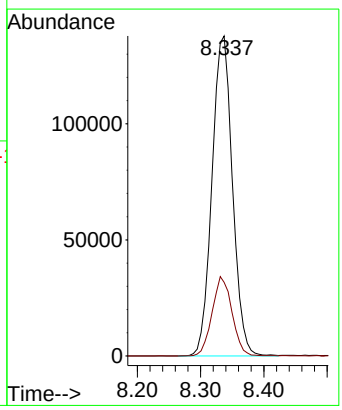


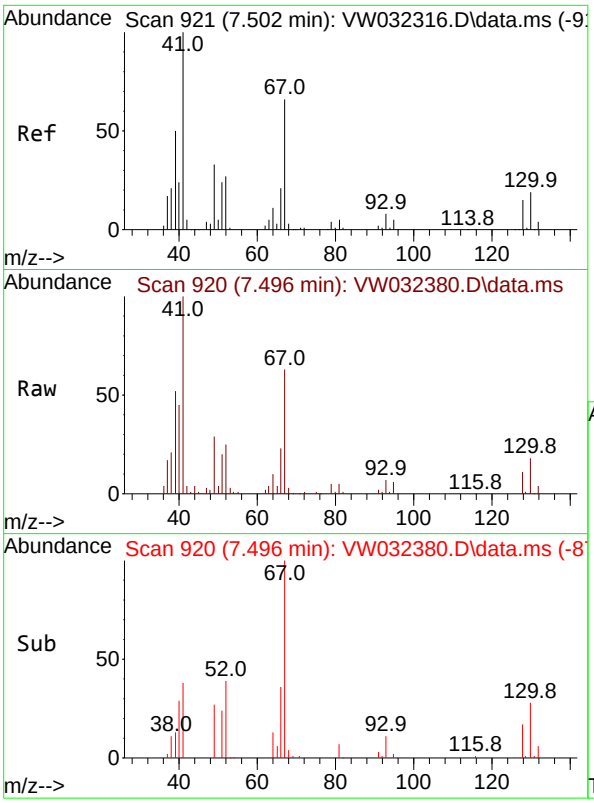


#40
Benzene
Concen: 20.901 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 78 Resp: 309652

Ion	Ratio	Lower	Upper
78	100		
77	23.0	20.7	31.1

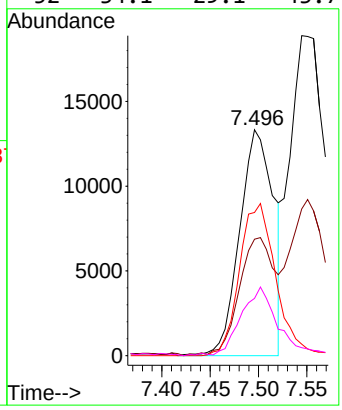




#41
Methacrylonitrile
Concen: 19.180 ug/l
RT: 7.496 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 41 Resp: 3251

Ion	Ratio	Lower	Upper
41	100		
39	54.4	50.9	76.3
67	72.8	65.6	98.4
52	34.1	29.1	43.7



Instrument :
MSVOA_W
ClientSampleId :
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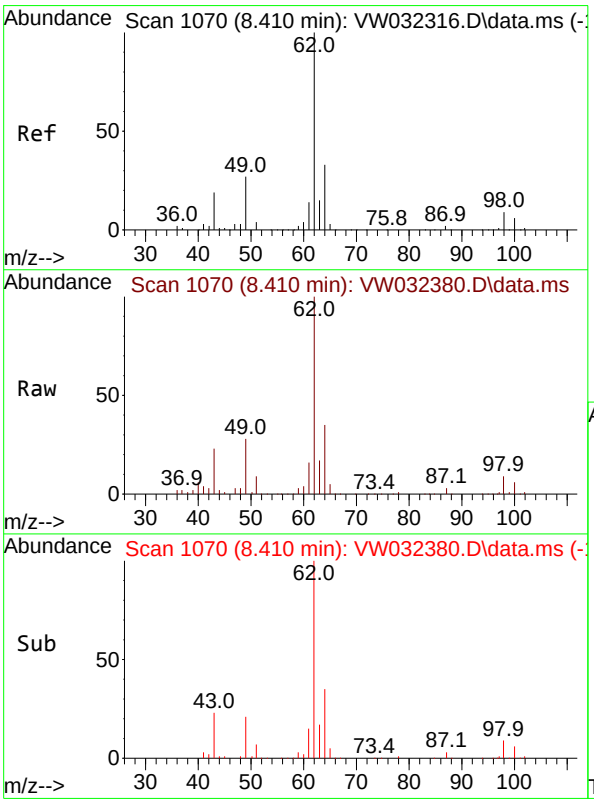
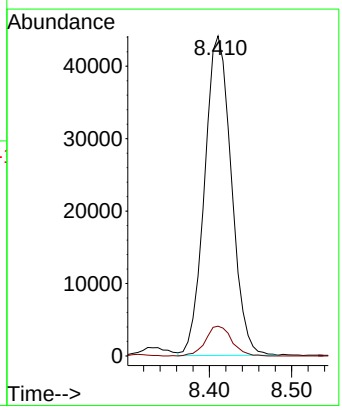
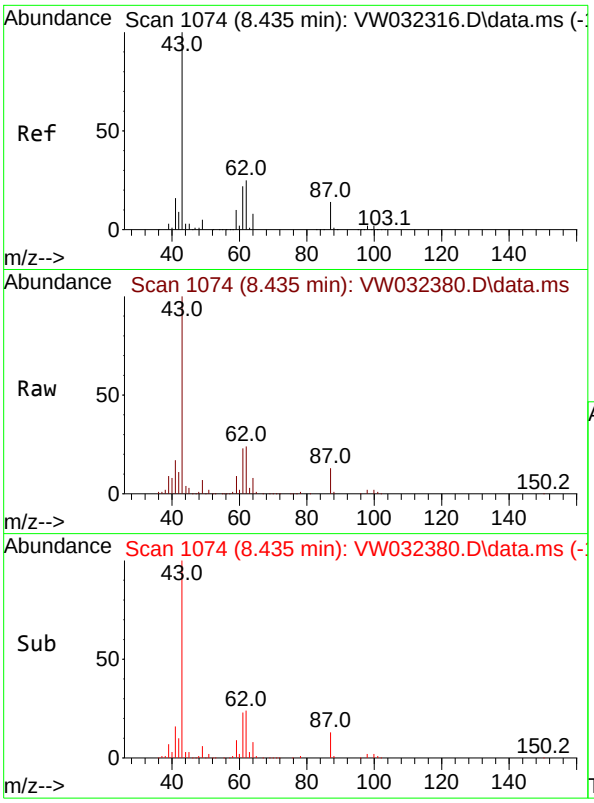


#42
1,2-Dichloroethane
Concen: 20.591 ug/l
RT: 8.410 min Scan# 1070
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 62 Resp: 99820

Ion	Ratio	Lower	Upper
62	100		
98	9.1	0.0	18.0

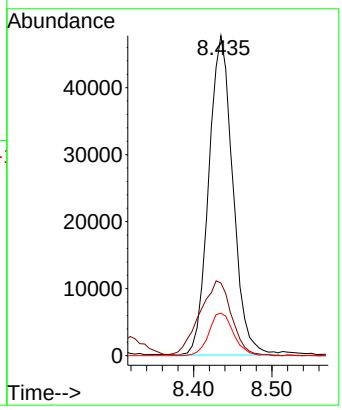




#43
Isopropyl Acetate
Concen: 18.271 ug/l
RT: 8.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 10196

Ion	Ratio	Lower	Upper
43	100		
61	31.0	23.3	34.9
87	13.7	11.1	16.7



Instrument :
MSVOA_W
ClientSampleId :
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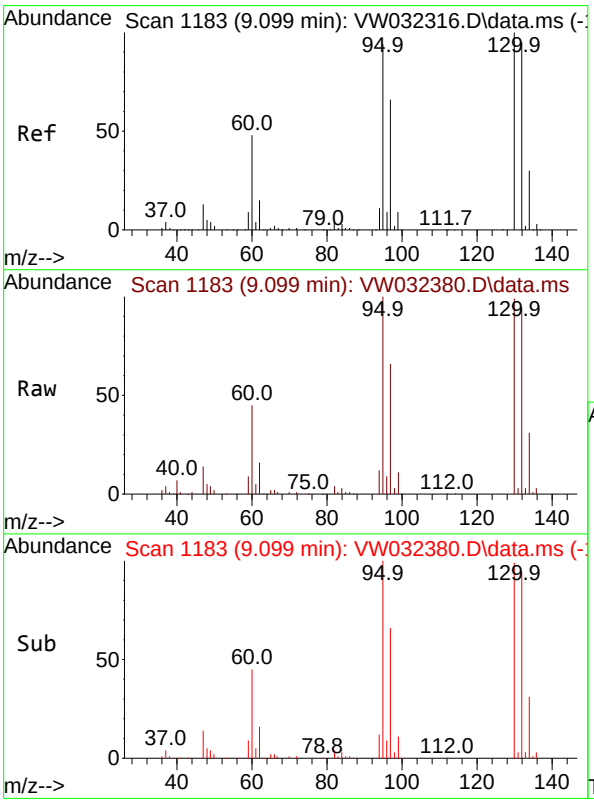
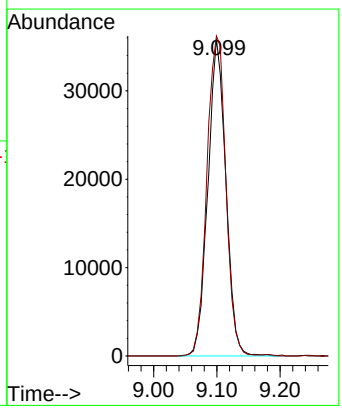
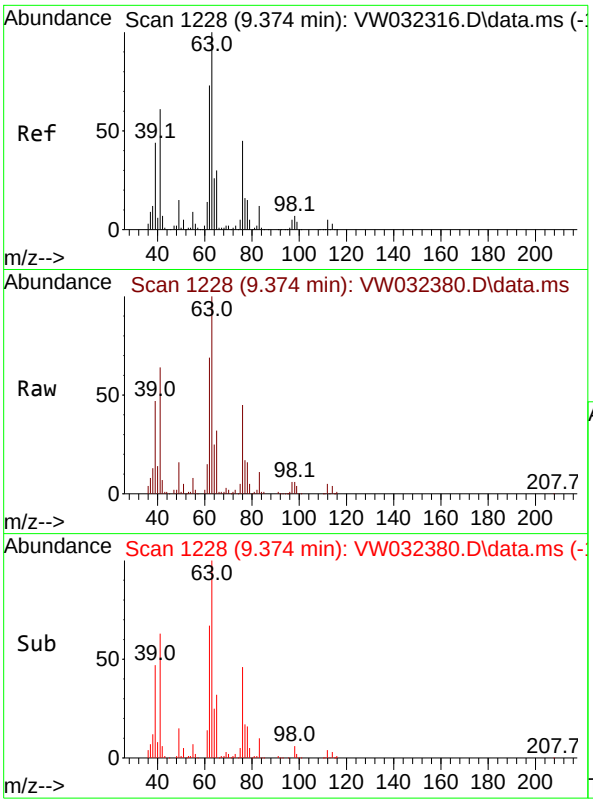


#44
Trichloroethene
Concen: 20.348 ug/l
RT: 9.099 min Scan# 1183
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:130 Resp: 70587

Ion	Ratio	Lower	Upper
130	100		
95	101.0	0.0	220.0





#45
1,2-Dichloropropane
Concen: 21.021 ug/l
RT: 9.374 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 63 Resp: 7773

Ion	Ratio	Lower	Upper
63	100		
65	32.1	24.3	36.5

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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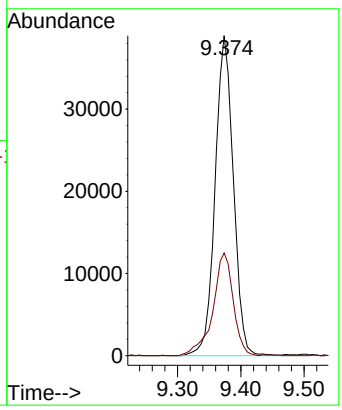
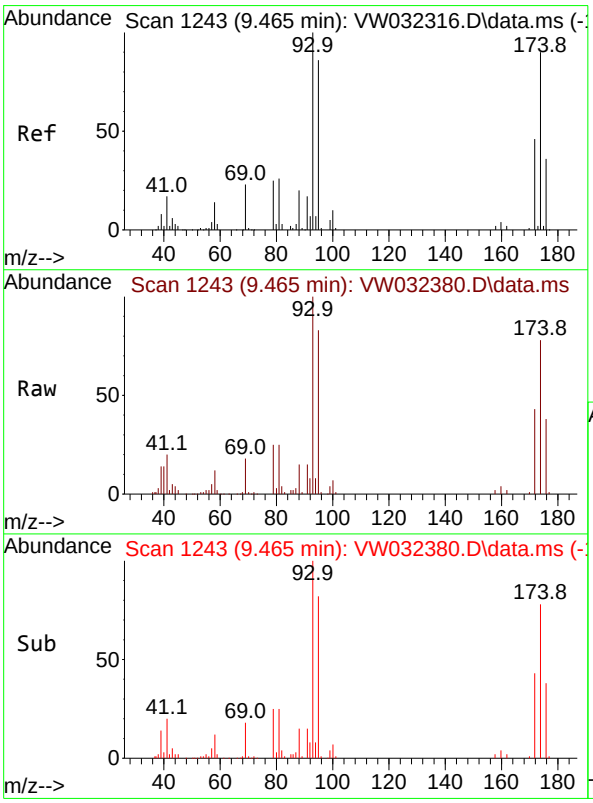
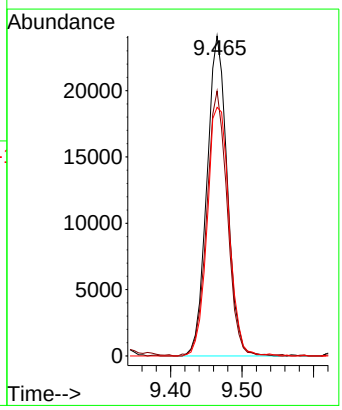


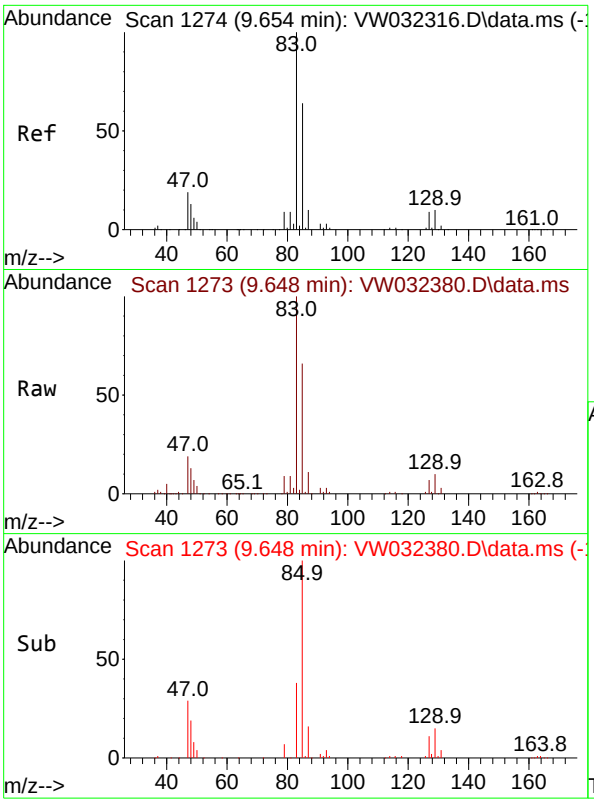


#46
Dibromomethane
Concen: 20.980 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 93 Resp: 47706

Ion	Ratio	Lower	Upper
93	100		
95	83.2	67.4	101.2
174	83.7	75.7	113.5

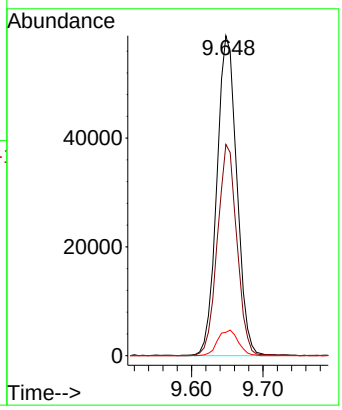




#47
Bromodichloromethane
Concen: 21.975 ug/l
RT: 9.648 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 83 Resp: 11429

Ion	Ratio	Lower	Upper
83	100		
85	66.0	48.7	73.1
127	7.3	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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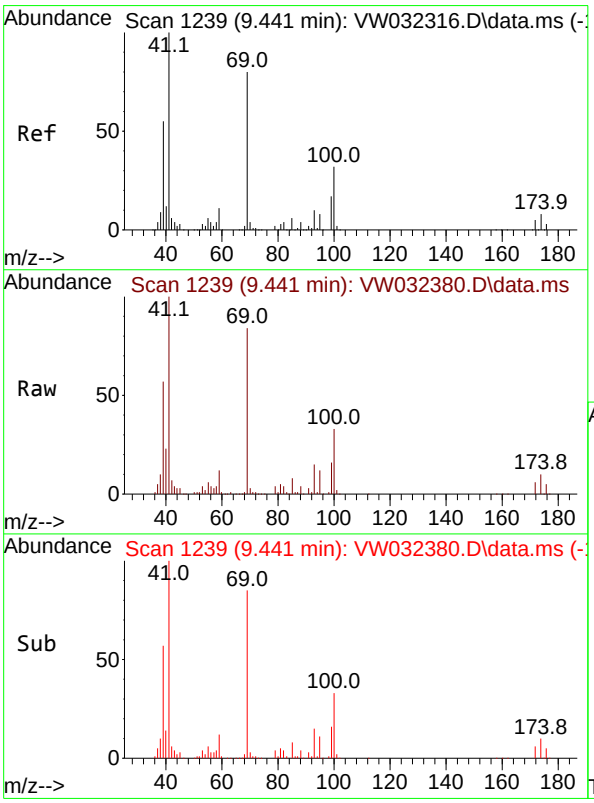
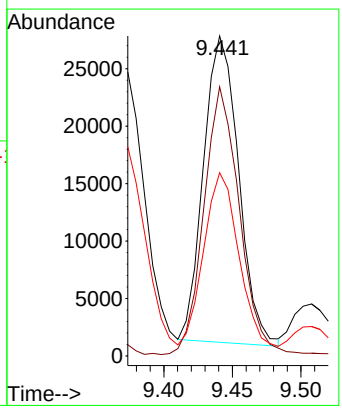
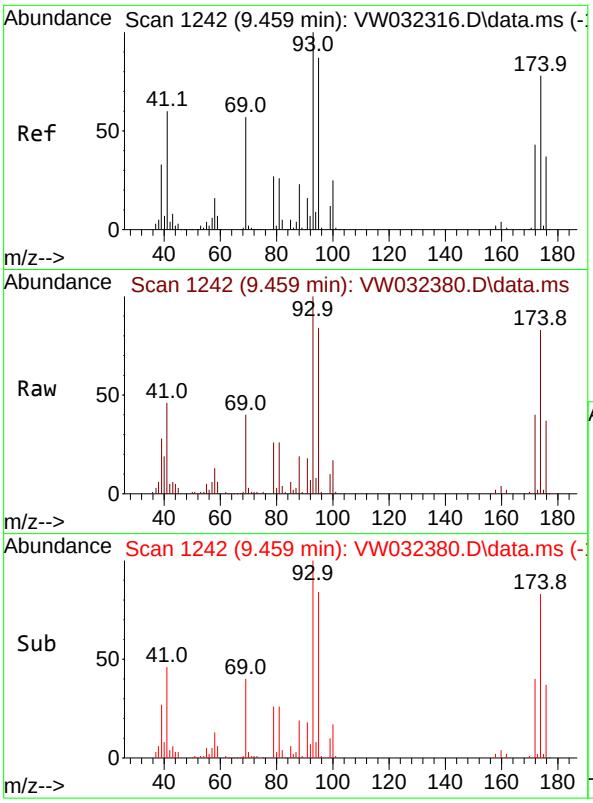


#48
Methyl methacrylate
Concen: 17.496 ug/l
RT: 9.441 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 41 Resp: 47476

Ion	Ratio	Lower	Upper
41	100		
69	89.6	71.5	107.3
39	56.8	55.9	83.9

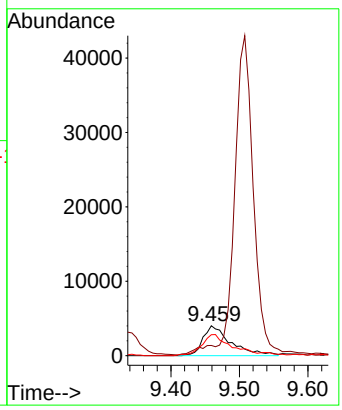




#49
1,4-Dioxane
Concen: 368.334 ug/l
RT: 9.459 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 88 Resp: 1144

Ion	Ratio	Lower	Upper
88	100		
43	0.0	18.0	27.0#
58	73.2	55.4	83.0



Instrument :
MSVOA_W
ClientSampleId :
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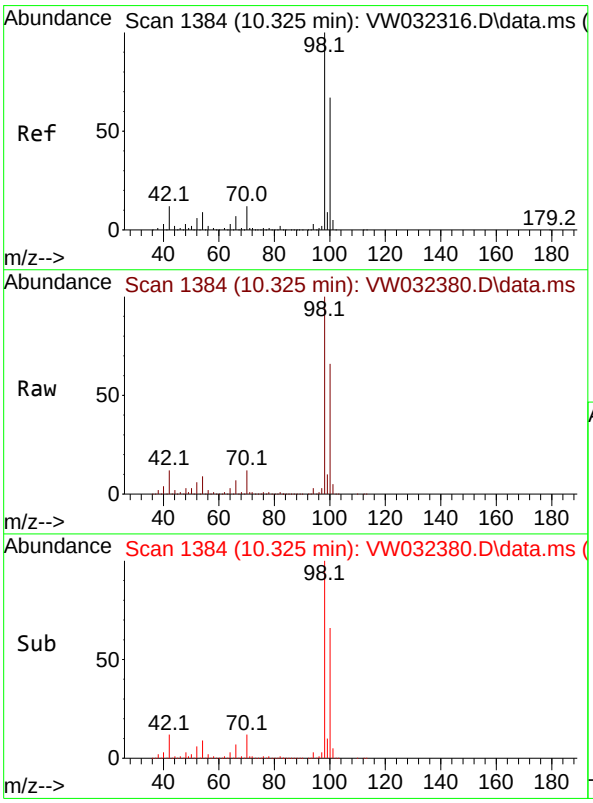
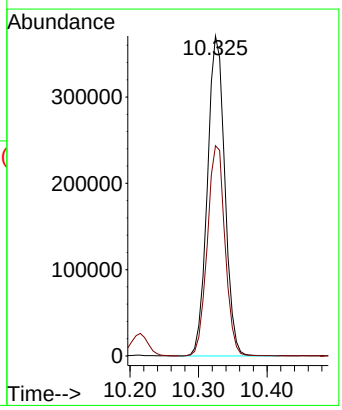
Supervised By :Semsettin Yesilyurt 10/21/2025

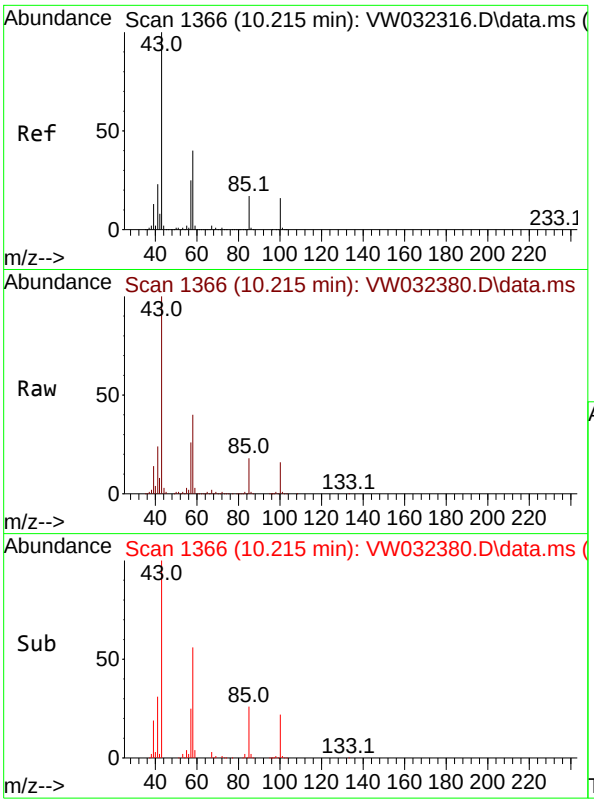


#50
Toluene-d8
Concen: 53.025 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 98 Resp: 655431

Ion	Ratio	Lower	Upper
98	100		
100	66.7	51.4	77.2





#51
4-Methyl-2-Pentanone
Concen: 92.294 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 29834

Ion	Ratio	Lower	Upper
43	100		
58	39.0	32.0	48.0

Instrument :
MSVOA_W
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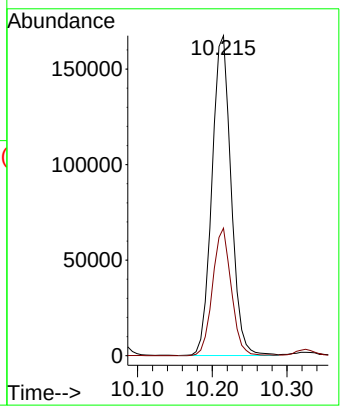
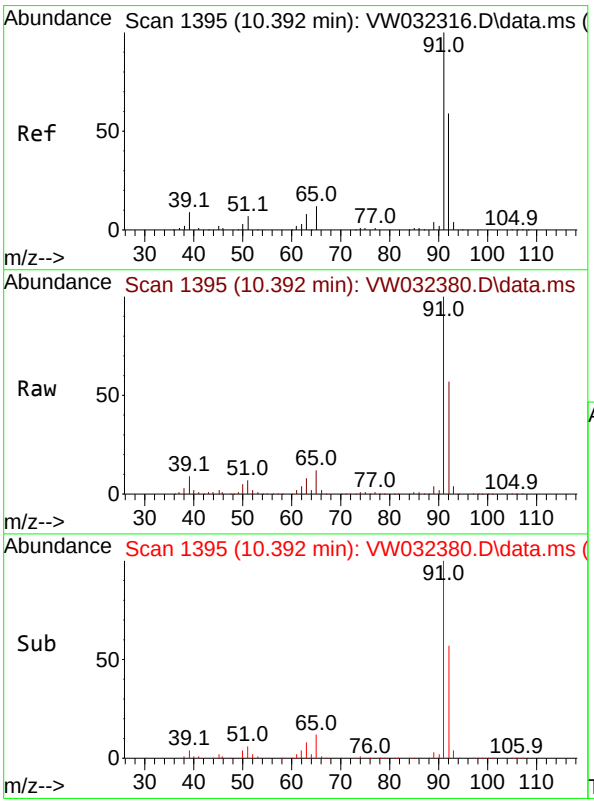
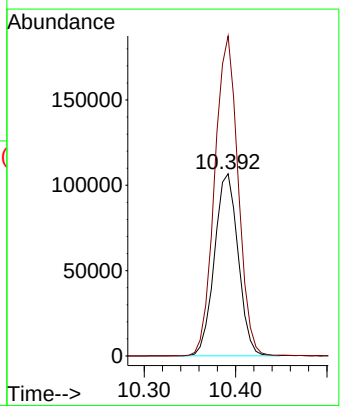


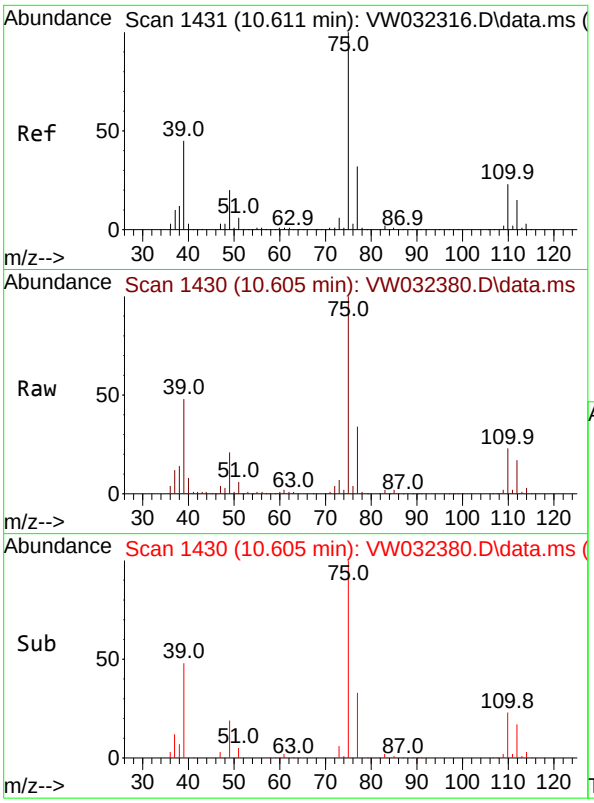


#52
Toluene
Concen: 20.790 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 92 Resp: 191814

Ion	Ratio	Lower	Upper
92	100		
91	174.9	137.5	206.3

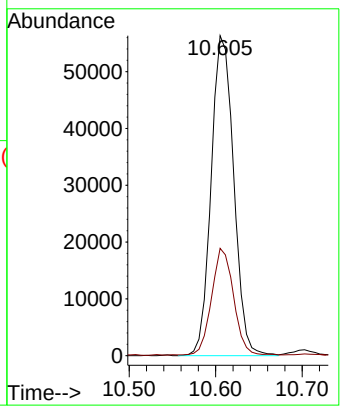




#53
t-1,3-Dichloropropene
Concen: 20.233 ug/l
RT: 10.605 min Scan# 14
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 75 Resp: 10209

Ion	Ratio	Lower	Upper
75	100		
77	33.3	25.6	38.4



Instrument :
MSVOA_W
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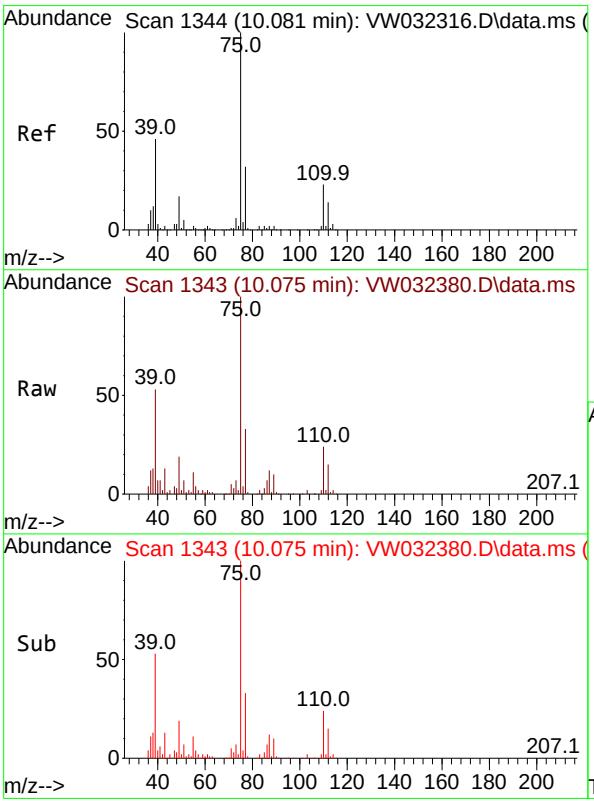
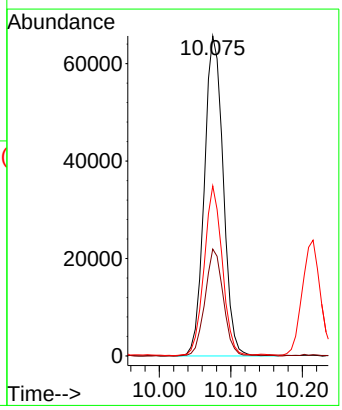
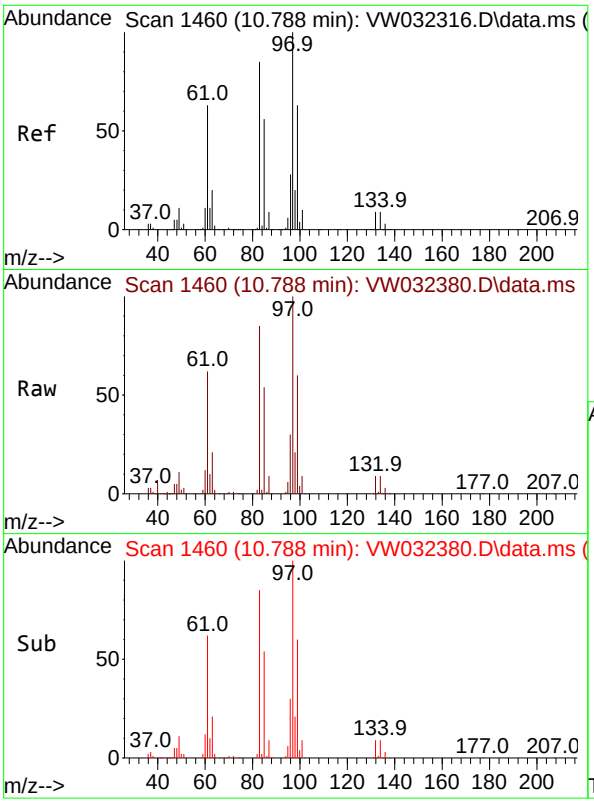


#54
cis-1,3-Dichloropropene
Concen: 20.705 ug/l
RT: 10.075 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 75 Resp: 120341

Ion	Ratio	Lower	Upper
75	100		
77	33.4	25.1	37.7
39	53.0	43.2	64.8

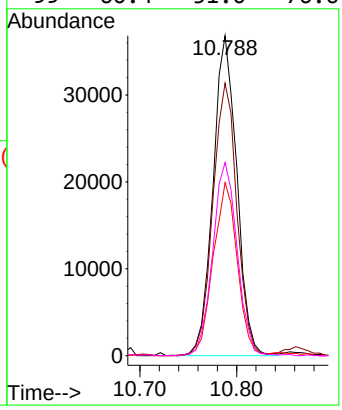




#55
1,1,2-Trichloroethane
Concen: 20.679 ug/l
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 97 Resp: 6284

Ion	Ratio	Lower	Upper
97	100		
83	85.0	71.0	106.6
85	54.1	42.8	64.2
99	60.4	51.0	76.6



Instrument :
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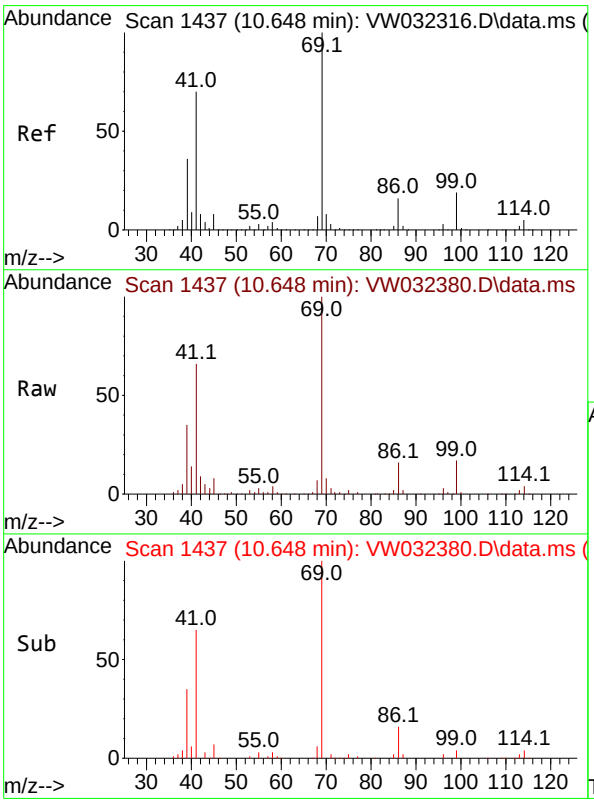
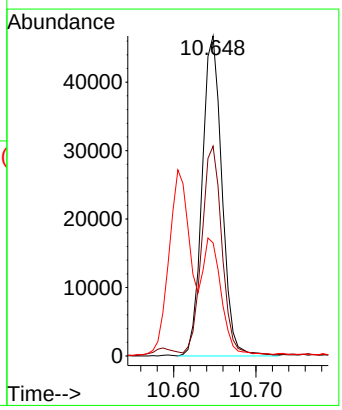
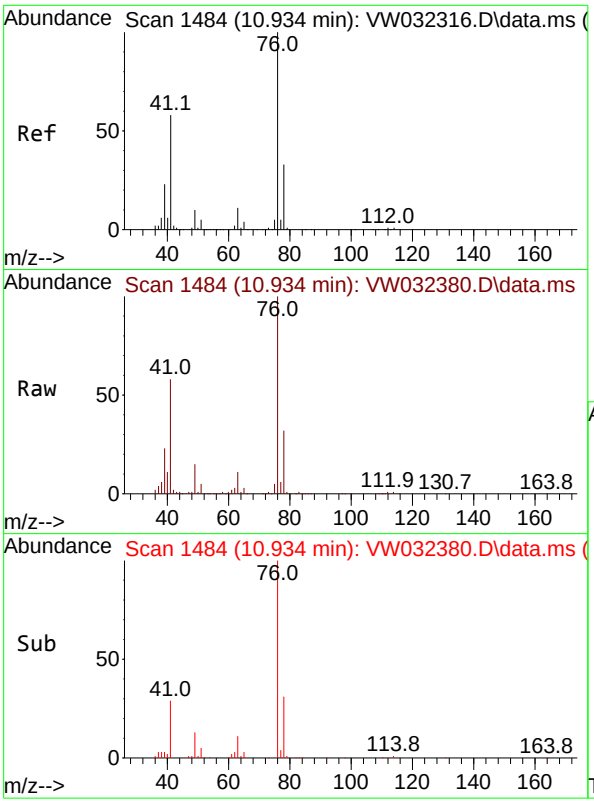


#56
Ethyl methacrylate
Concen: 18.412 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 69 Resp: 78320

Ion	Ratio	Lower	Upper
69	100		
41	66.4	53.2	79.8
39	33.6	32.9	49.3

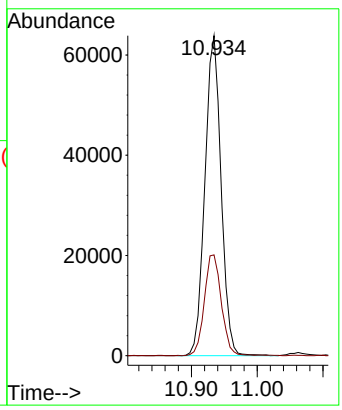




#57
1,3-Dichloropropane
Concen: 20.350 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 76 Resp: 10923

Ion	Ratio	Lower	Upper
76	100		
78	33.2	26.2	39.4



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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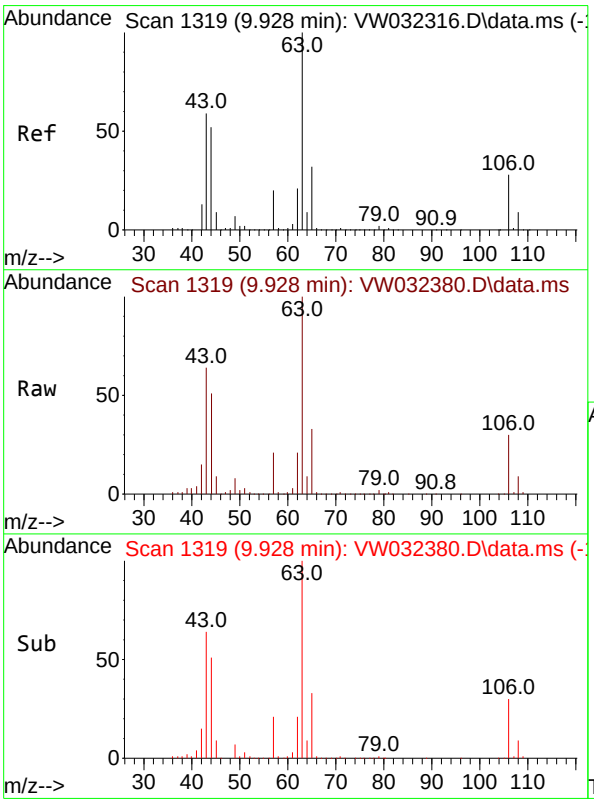
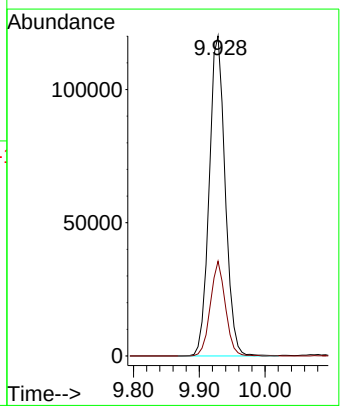
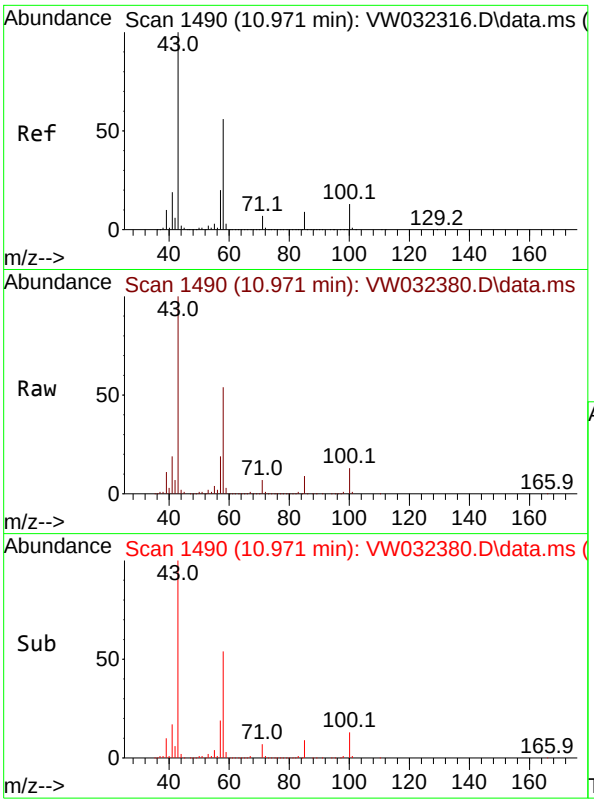


#58
2-Chloroethyl Vinyl ether
Concen: 89.381 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 63 Resp: 202349

Ion	Ratio	Lower	Upper
63	100		
106	27.9	24.3	36.5





#59
2-Hexanone
Concen: 92.843 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 21167

Ion	Ratio	Lower	Upper
43	100		
58	52.7	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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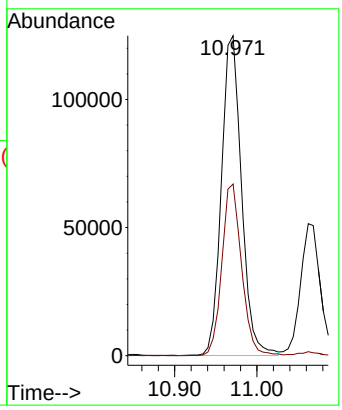
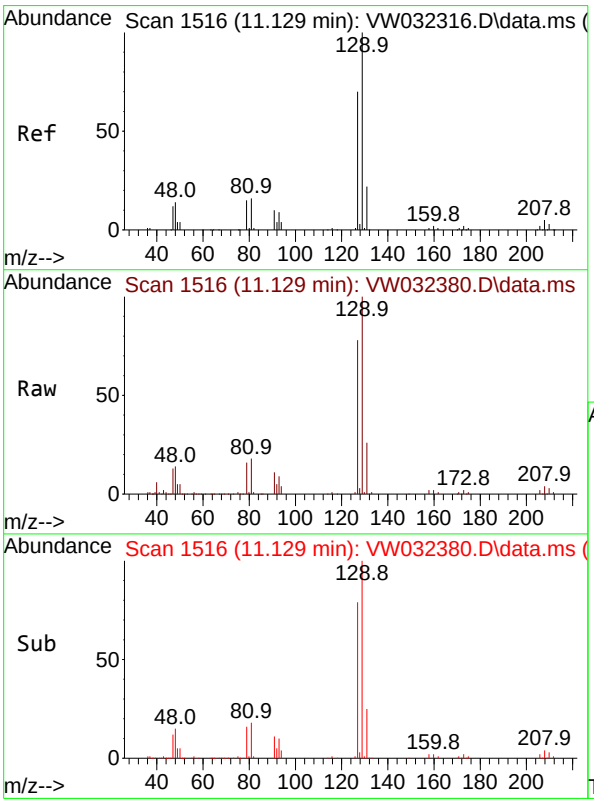
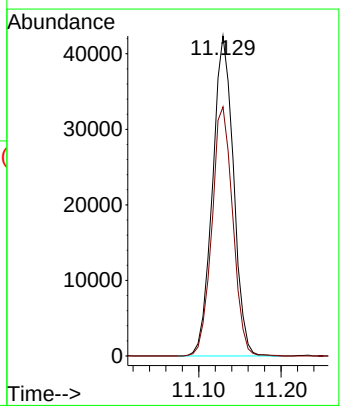


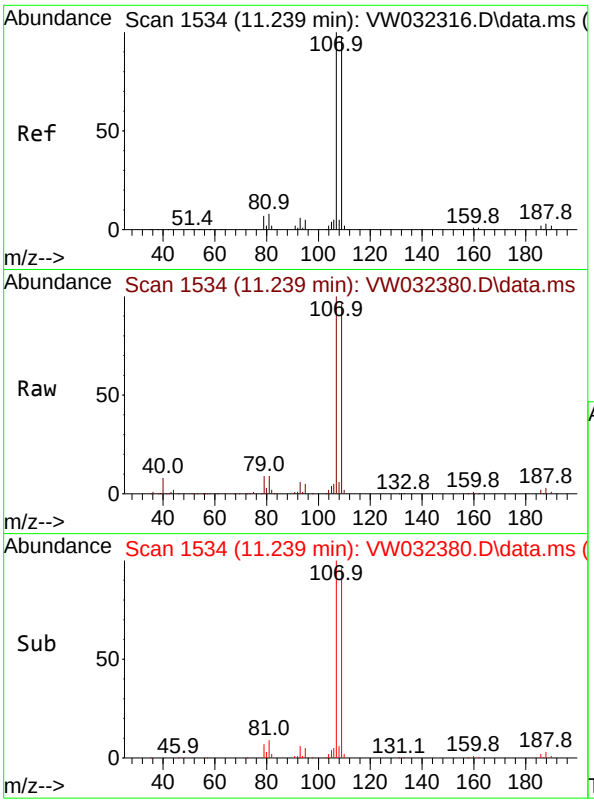


#60
Dibromochloromethane
Concen: 21.706 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:129 Resp: 74905

Ion	Ratio	Lower	Upper
129	100		
127	77.4	38.1	114.5





#61
1,2-Dibromoethane
Concen: 20.263 ug/l
RT: 11.239 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:107 Resp: 6004

Ion	Ratio	Lower	Upper
107	100		
109	96.2	74.5	111.7

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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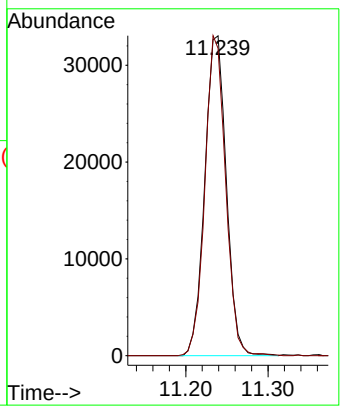
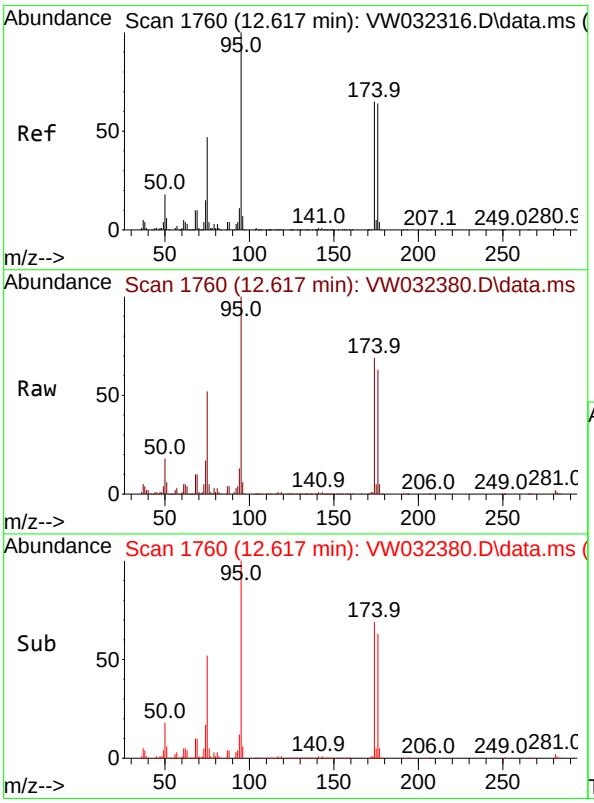
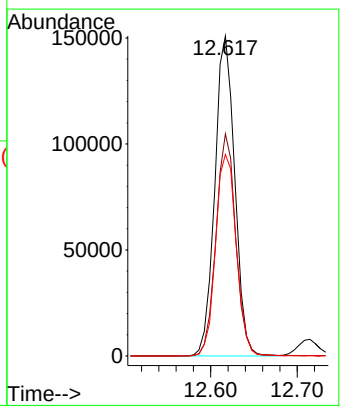


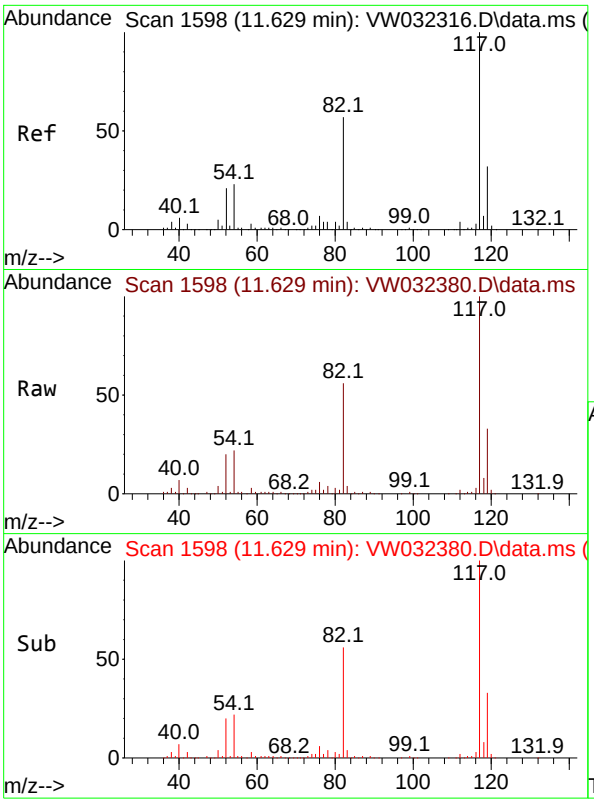


#62
4-Bromofluorobenzene
Concen: 51.667 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 95 Resp: 241390

Ion	Ratio	Lower	Upper
95	100		
174	68.3	0.0	145.6
176	65.4	0.0	140.8

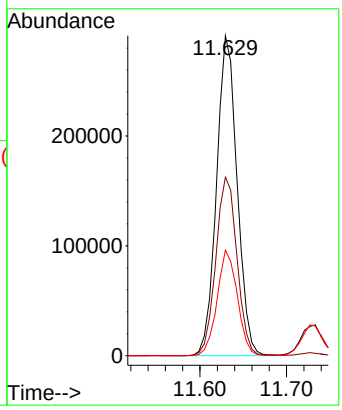




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:117 Resp: 48074

Ion	Ratio	Lower	Upper
117	100		
82	55.8	42.7	64.1
119	33.0	25.2	37.8



Instrument :
MSVOA_W
ClientSampleId :
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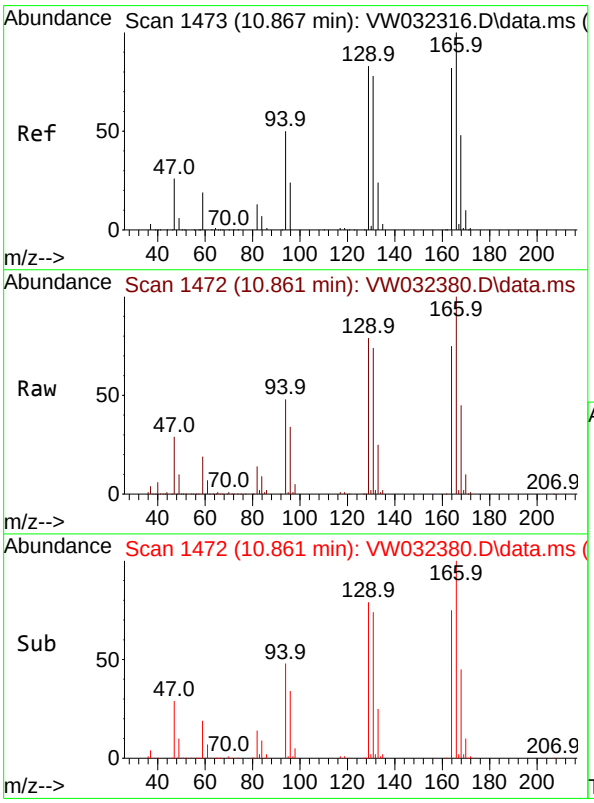
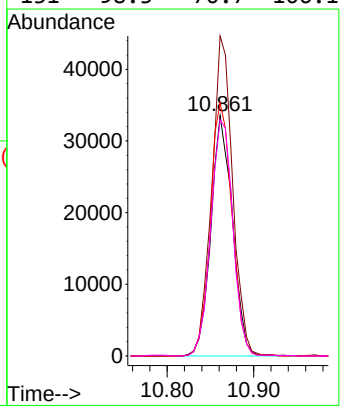
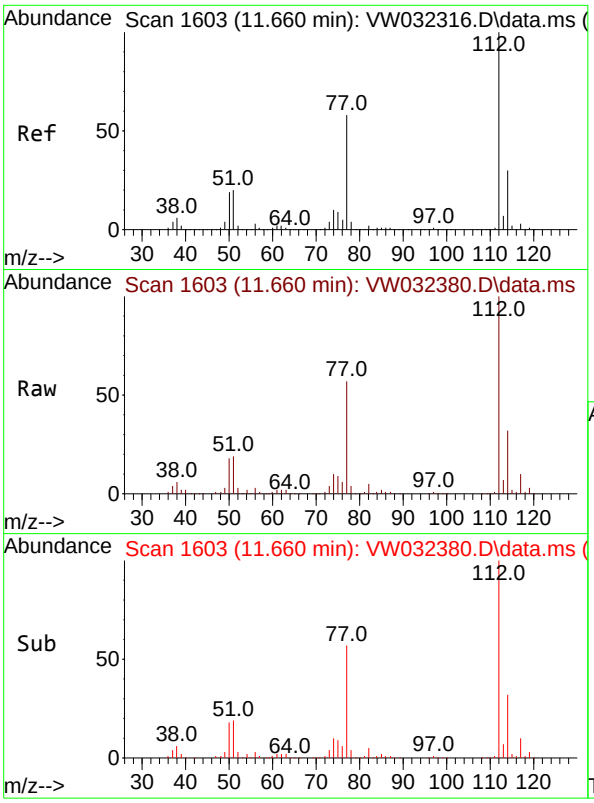


#64
Tetrachloroethene
Concen: 20.114 ug/l
RT: 10.861 min Scan# 1472
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:164 Resp: 57861

Ion	Ratio	Lower	Upper
164	100		
166	133.1	97.5	146.3
129	105.3	71.2	106.8
131	98.3	70.7	106.1





#65
Chlorobenzene
Concen: 20.202 ug/l
RT: 11.660 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:112 Resp: 21368

Ion	Ratio	Lower	Upper
112	100		
114	31.7	26.0	39.0

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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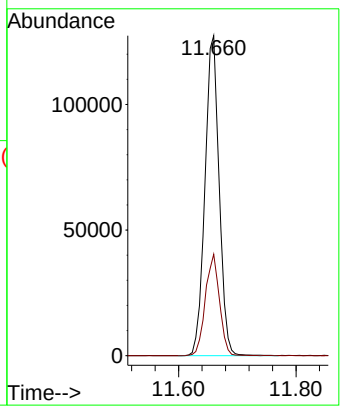
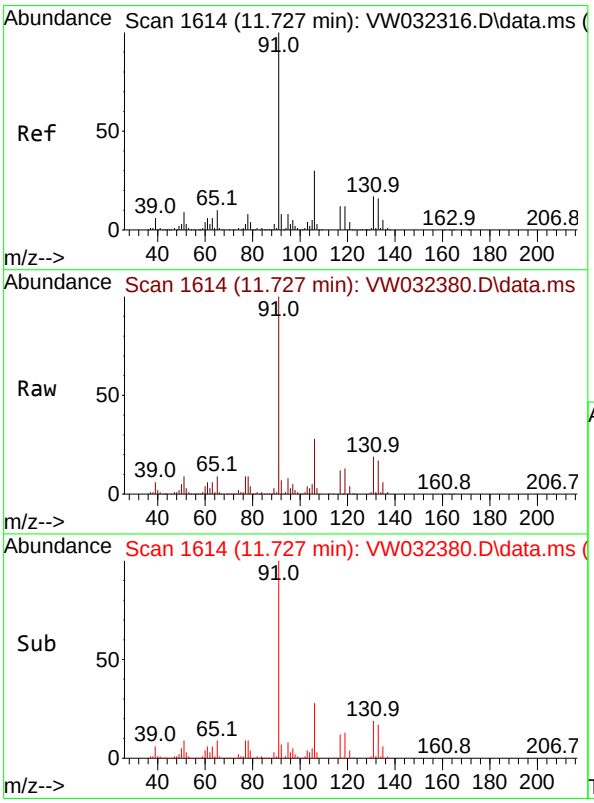
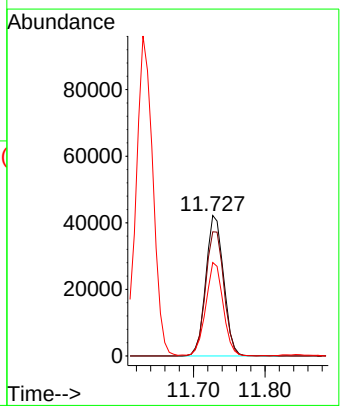


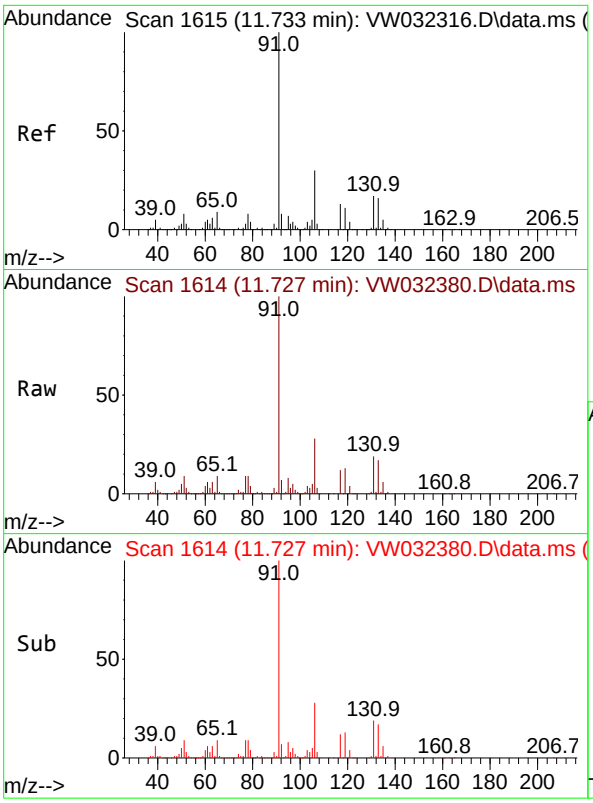


#66
1,1,1,2-Tetrachloroethane
Concen: 22.139 ug/l
RT: 11.727 min Scan# 1614
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:131 Resp: 72938

Ion	Ratio	Lower	Upper
131	100		
133	91.5	47.7	143.1
119	65.1	32.8	98.3





#67
Ethyl Benzene
Concen: 20.492 ug/l
RT: 11.727 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 91 Resp: 36130

Ion	Ratio	Lower	Upper
91	100		
106	28.4	25.3	37.9

Instrument :
MSVOA_W
ClientSampleId :
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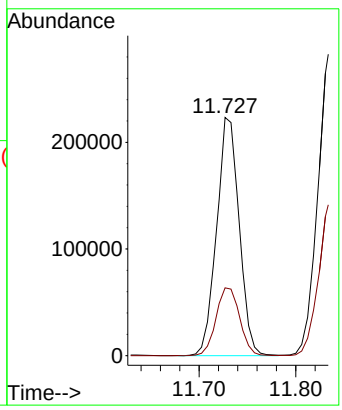
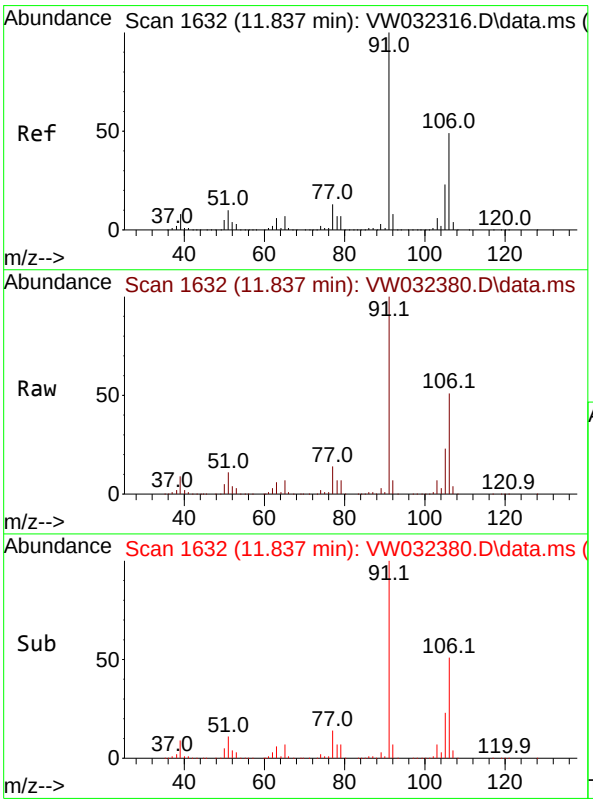
Supervised By :Semsettin Yesilyurt 10/21/2025

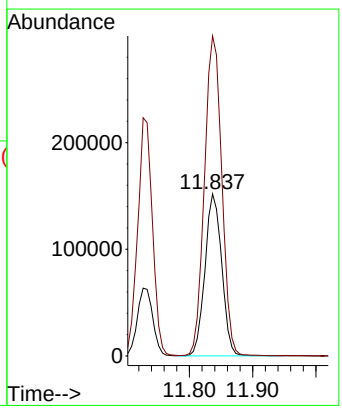


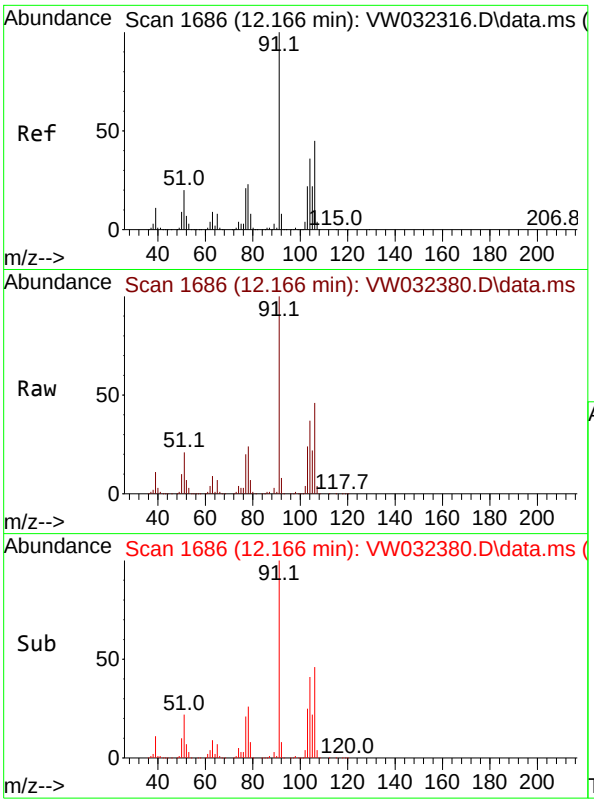


#68
m/p-Xylenes
Concen: 41.170 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:106 Resp: 279914

Ion	Ratio	Lower	Upper
106	100		
91	204.5	164.2	246.2





#69
o-Xylene
Concen: 19.771 ug/l
RT: 12.166 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:106 Resp: 12570

Ion	Ratio	Lower	Upper
106	100		
91	221.9	108.7	326.3

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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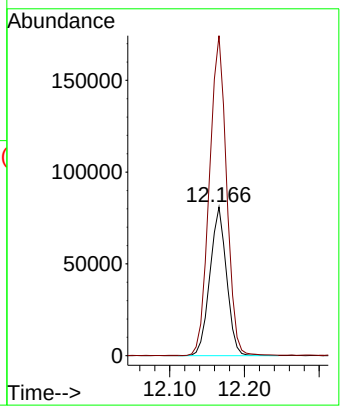
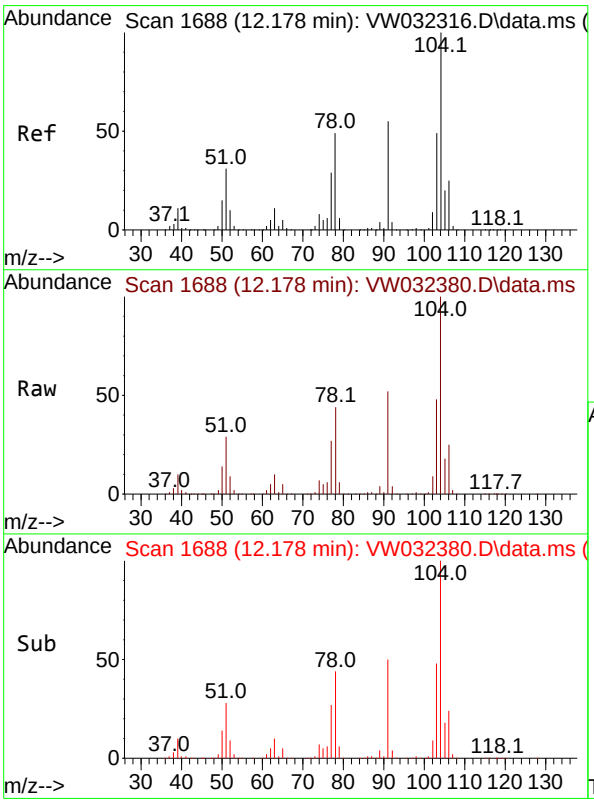
Supervised By :Semsettin Yesilyurt 10/21/2025

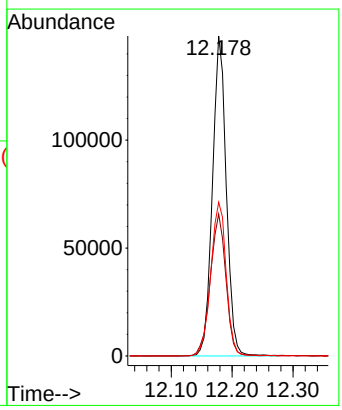


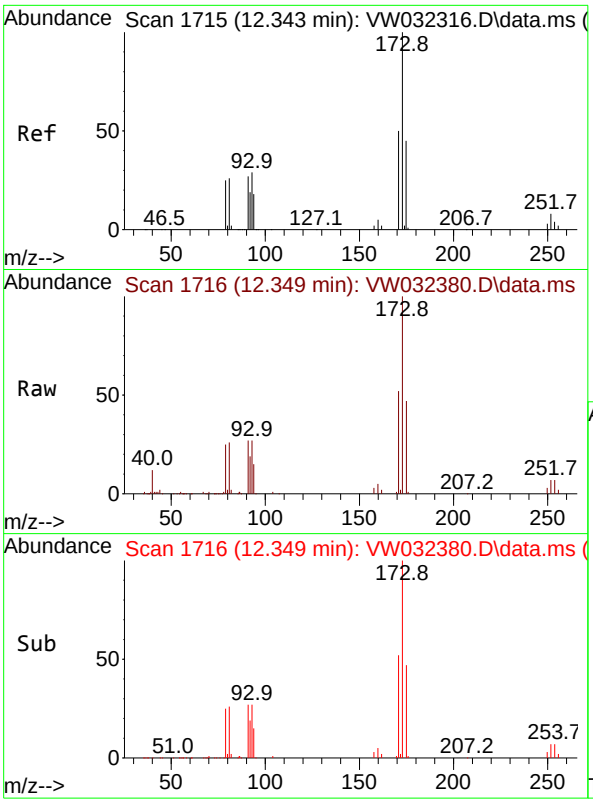


#70
Styrene
Concen: 21.071 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:104 Resp: 233906

Ion	Ratio	Lower	Upper
104	100		
78	49.7	41.6	62.4
103	53.5	44.8	67.2

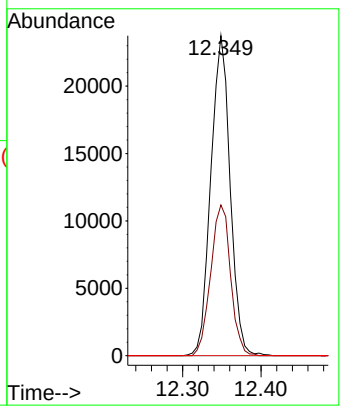




#71
Bromoform
Concen: 21.516 ug/l
RT: 12.349 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:173 Resp: 4063

Ion	Ratio	Lower	Upper
173	100		
175	48.5	24.9	74.7
254	0.0	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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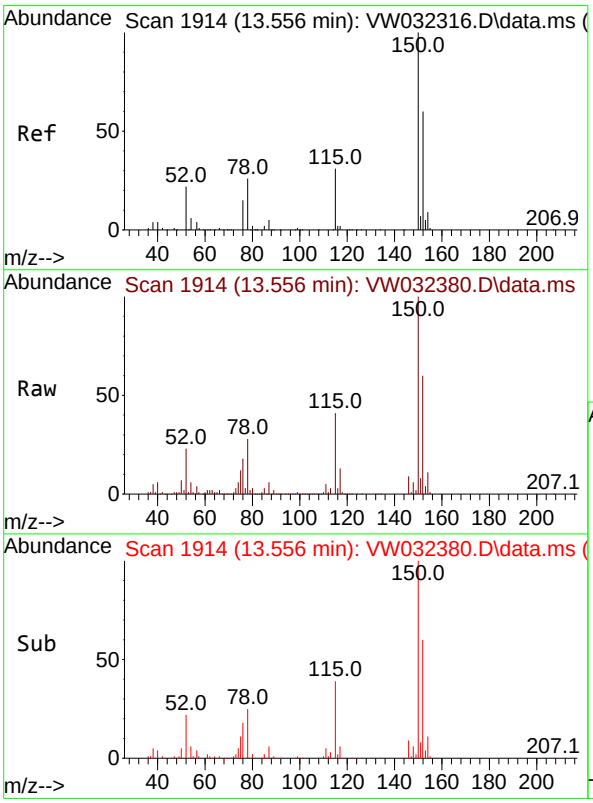
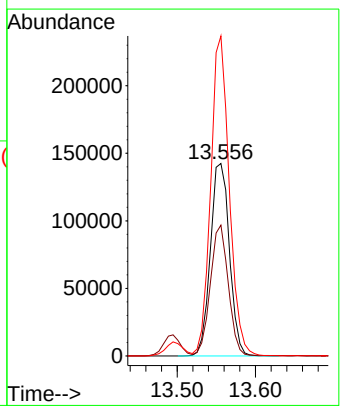
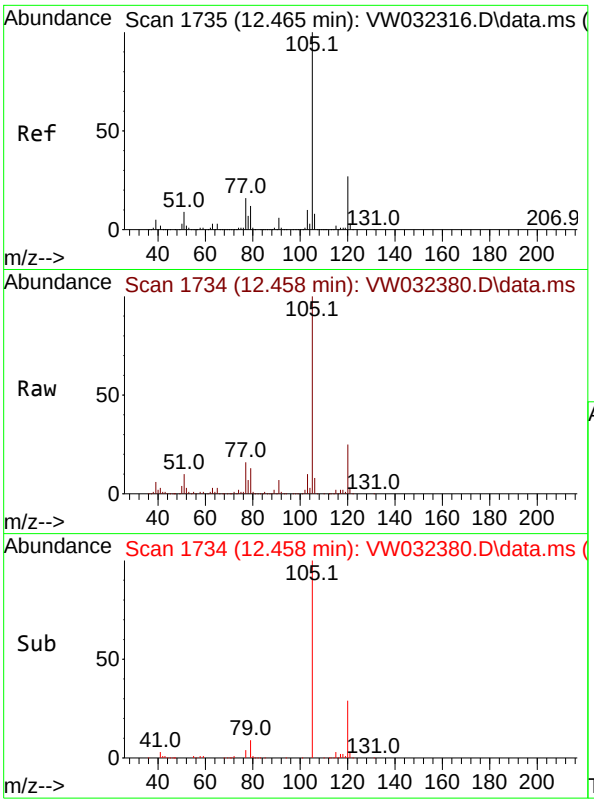


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:152 Resp: 240746

Ion	Ratio	Lower	Upper
152	100		
115	63.8	31.8	95.4
150	161.5	0.0	343.0

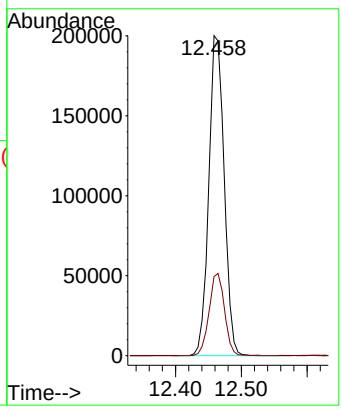




#73
Isopropylbenzene
Concen: 19.799 ug/l
RT: 12.458 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:105 Resp: 32610

Ion	Ratio	Lower	Upper
105	100		
120	25.8	13.0	38.9



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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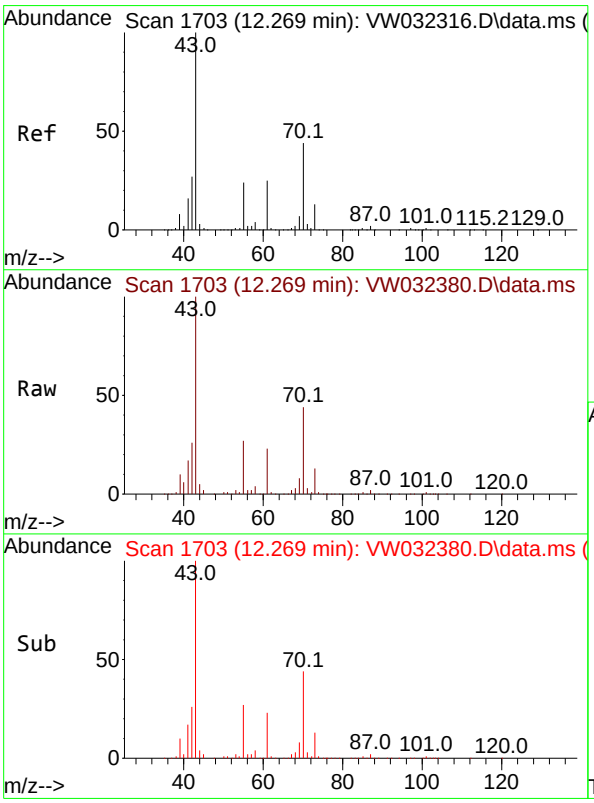
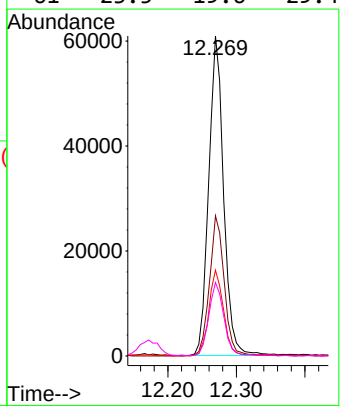
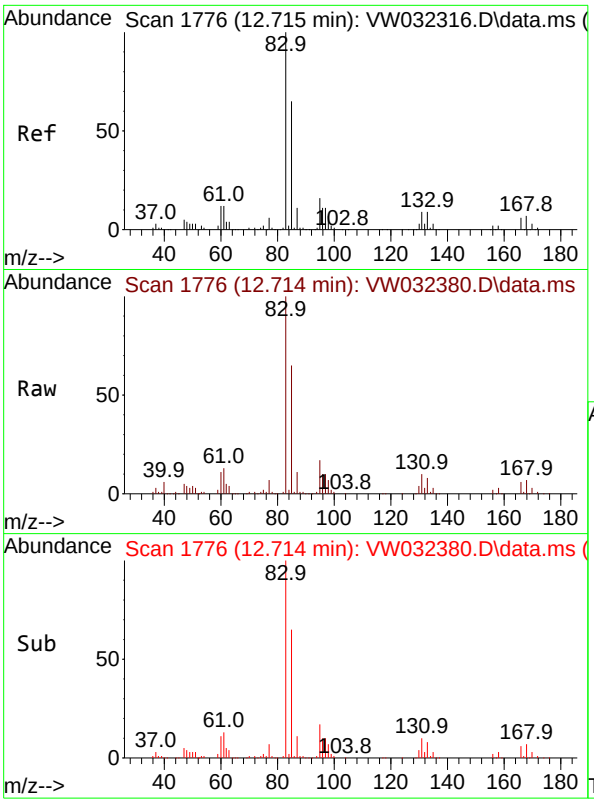


#74
N-amyl acetate
Concen: 17.605 ug/l
RT: 12.269 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 43 Resp: 92502

Ion	Ratio	Lower	Upper
43	100		
70	43.3	35.3	52.9
55	26.7	19.9	29.9
61	23.5	19.6	29.4





#75
1,1,2,2-Tetrachloroethane
Concen: 18.908 ug/l
RT: 12.714 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 83 Resp: 7732

Ion	Ratio	Lower	Upper
83	100		
131	10.5	5.1	15.4
85	64.1	32.2	96.6

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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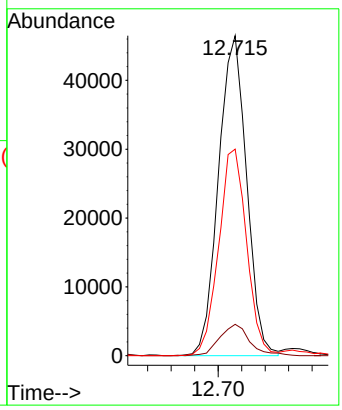
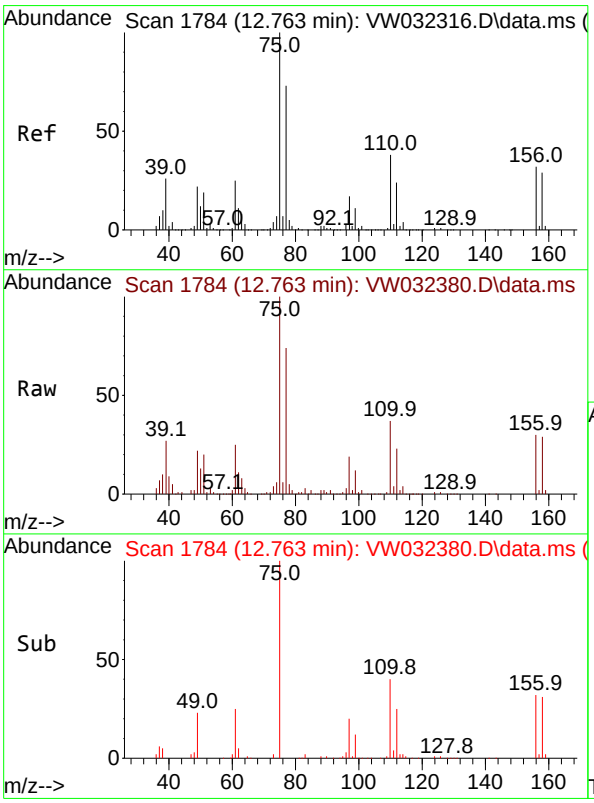
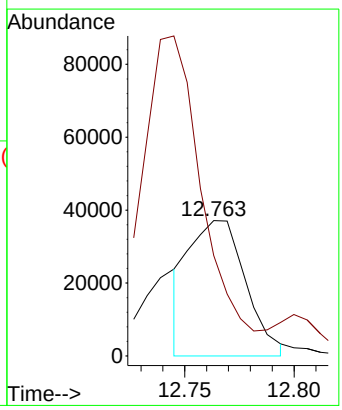


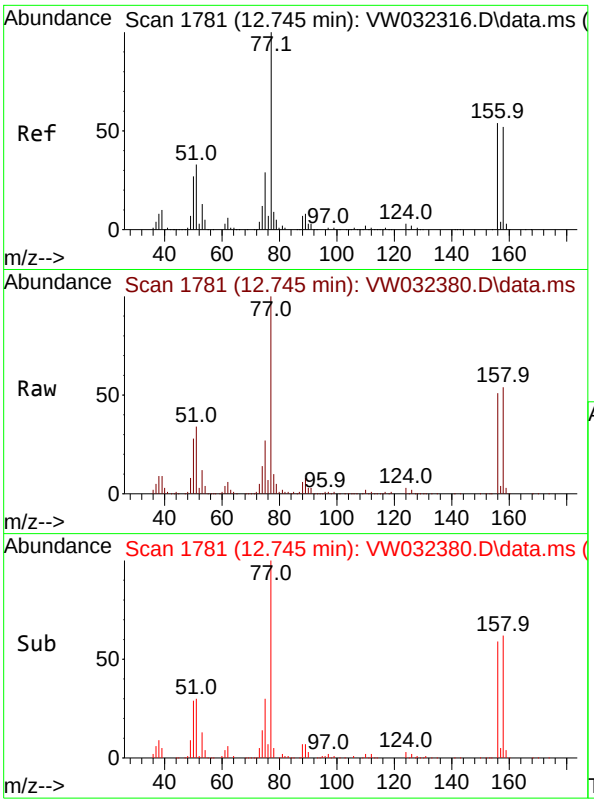


#76
1,2,3-Trichloropropane
Concen: 21.249 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 75 Resp: 67320

Ion	Ratio	Lower	Upper
75	100		
77	252.4	141.7	425.1

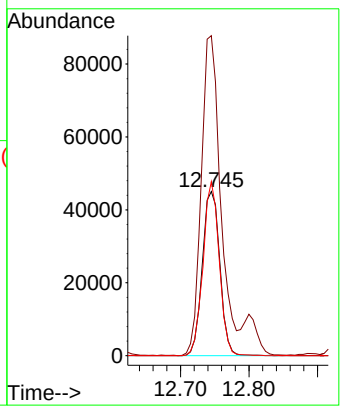




#77
Bromobenzene
Concen: 20.216 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:156 Resp: 8026

Ion	Ratio	Lower	Upper
156	100		
77	211.7	98.6	295.7
158	98.4	48.4	145.0



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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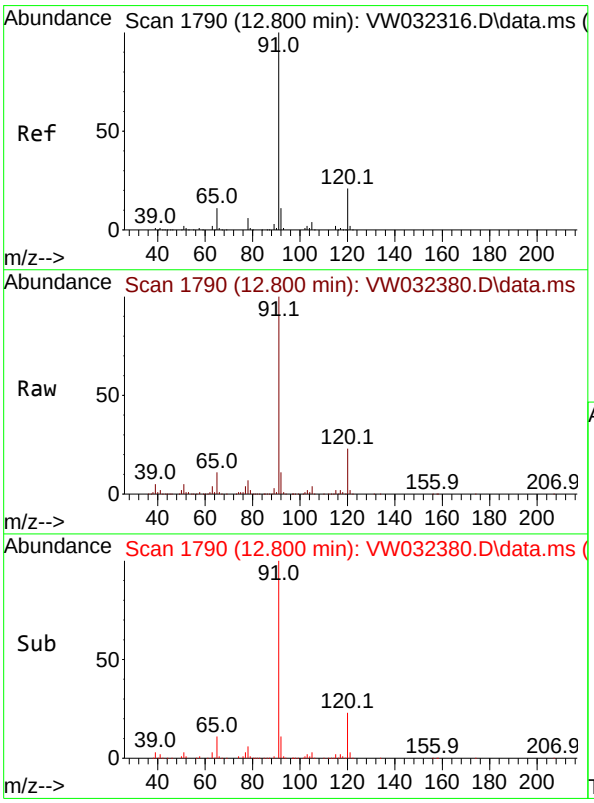
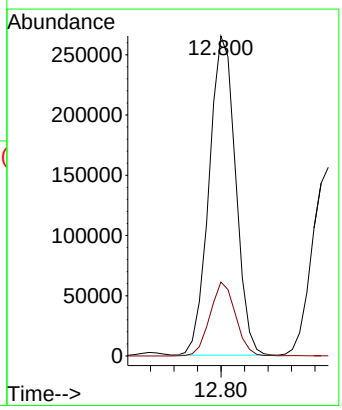
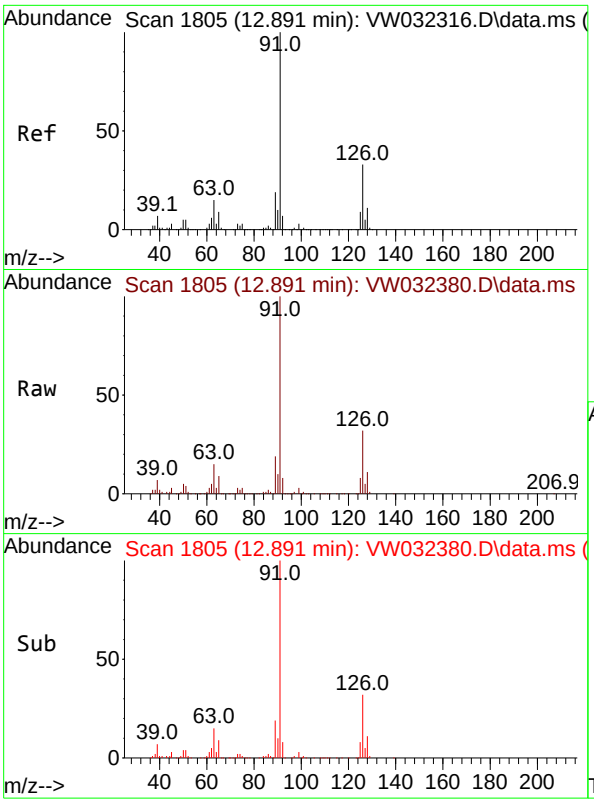


#78
n-propylbenzene
Concen: 20.190 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 91 Resp: 415401

Ion	Ratio	Lower	Upper
91	100		
120	22.3	11.8	35.4





#79
2-Chlorotoluene
Concen: 20.091 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 91 Resp: 25273

Ion	Ratio	Lower	Upper
91	100		
126	32.3	16.6	49.7

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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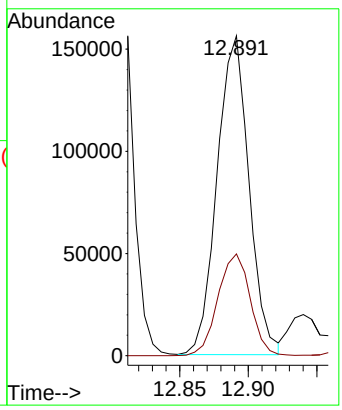
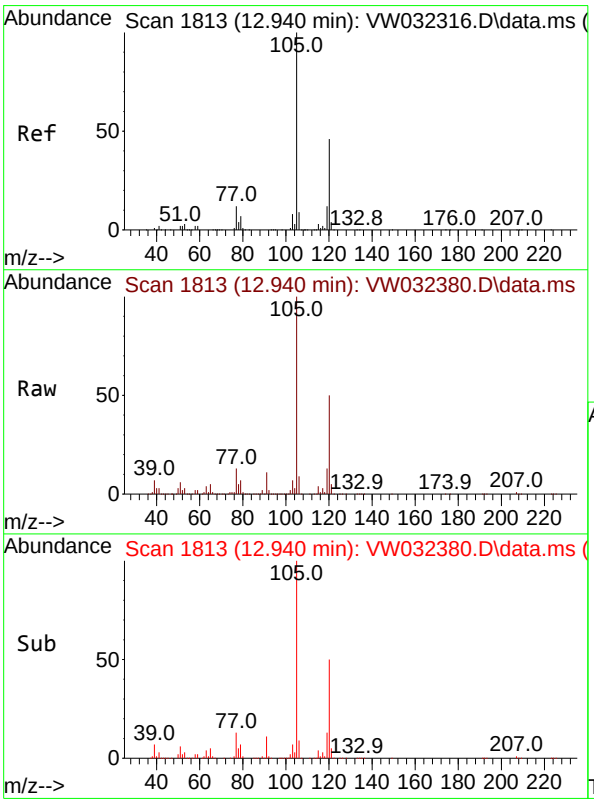
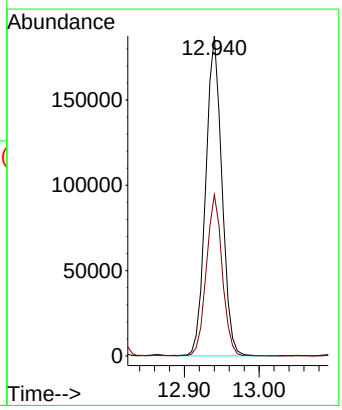


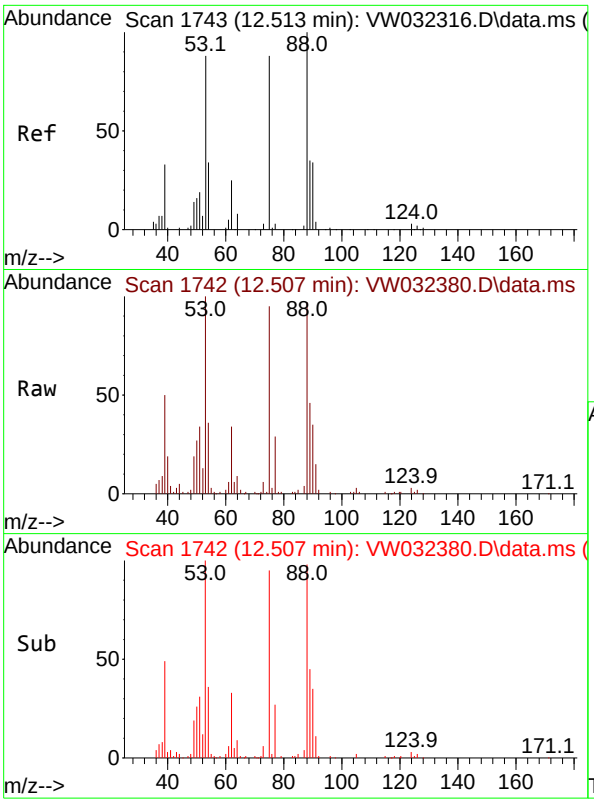


#80
1,3,5-Trimethylbenzene
Concen: 19.699 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:105 Resp: 280554

Ion	Ratio	Lower	Upper
105	100		
120	49.5	24.8	74.4





#81
trans-1,4-Dichloro-2-butene
Concen: 19.233 ug/l
RT: 12.507 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Tgt Ion: 75 Resp: 2405

Ion	Ratio	Lower	Upper
75	100		
53	106.3	91.0	136.6
89	42.6	39.4	59.2

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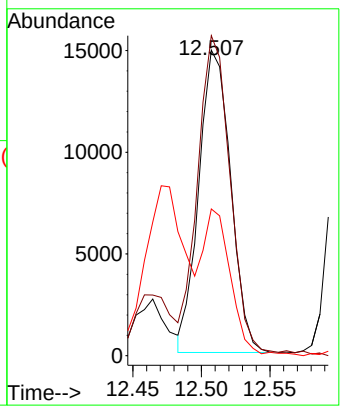
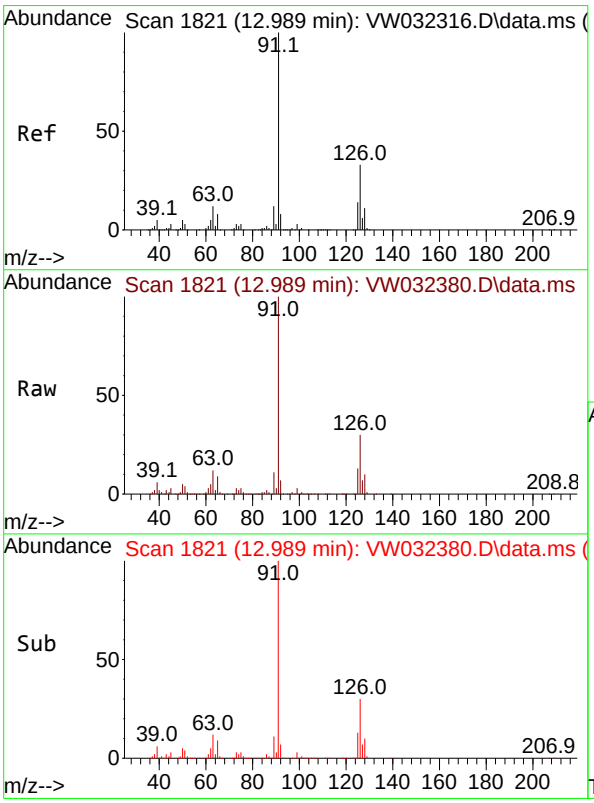
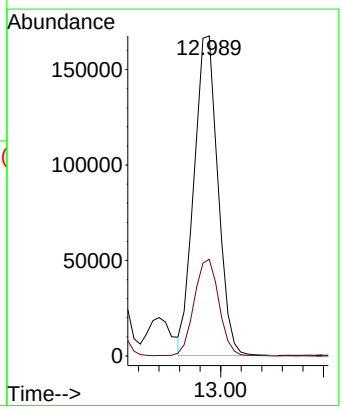


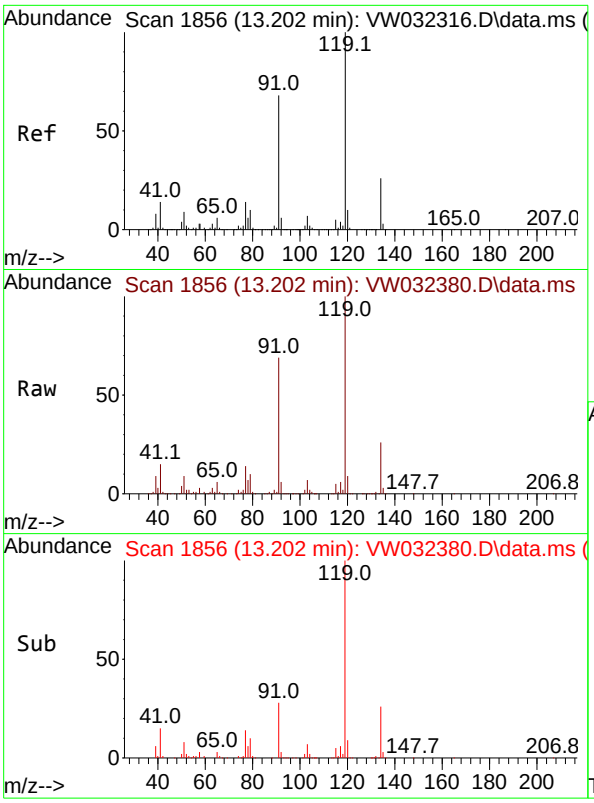


#82
4-Chlorotoluene
Concen: 20.239 ug/l
RT: 12.989 min Scan# 1821
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 91 Resp: 270686

Ion	Ratio	Lower	Upper
91	100		
126	31.4	16.1	48.2

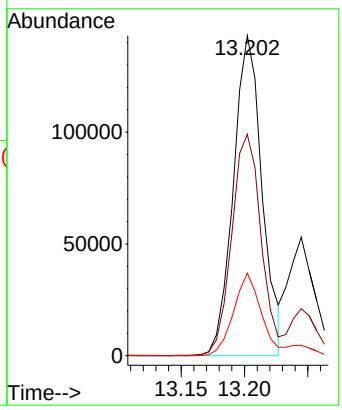




#83
tert-Butylbenzene
Concen: 19.400 ug/l
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:119 Resp: 22670

Ion	Ratio	Lower	Upper
119	100		
91	70.3	33.8	101.3
134	25.0	12.5	37.5



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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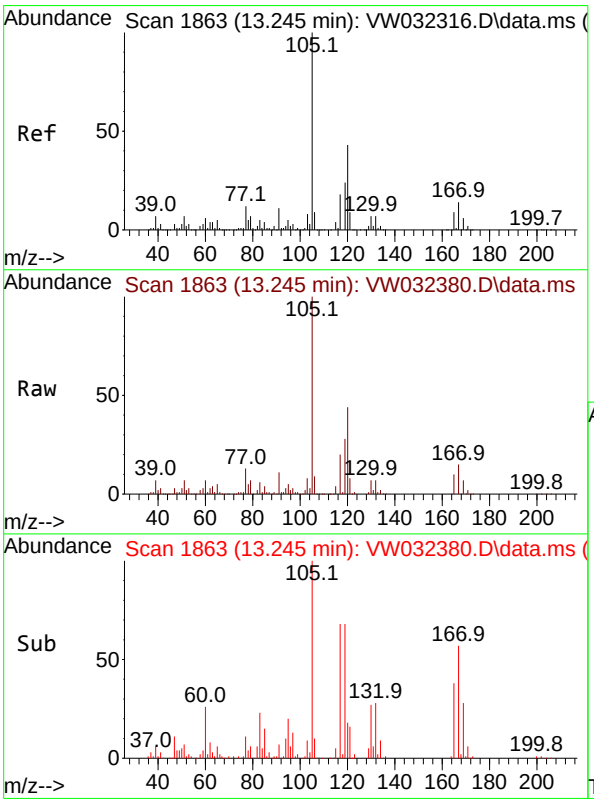
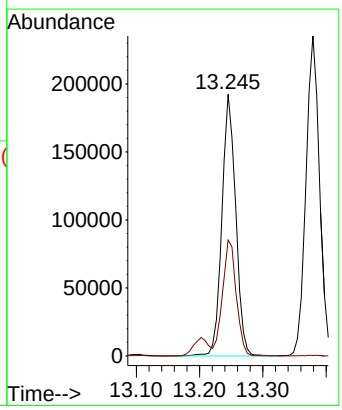
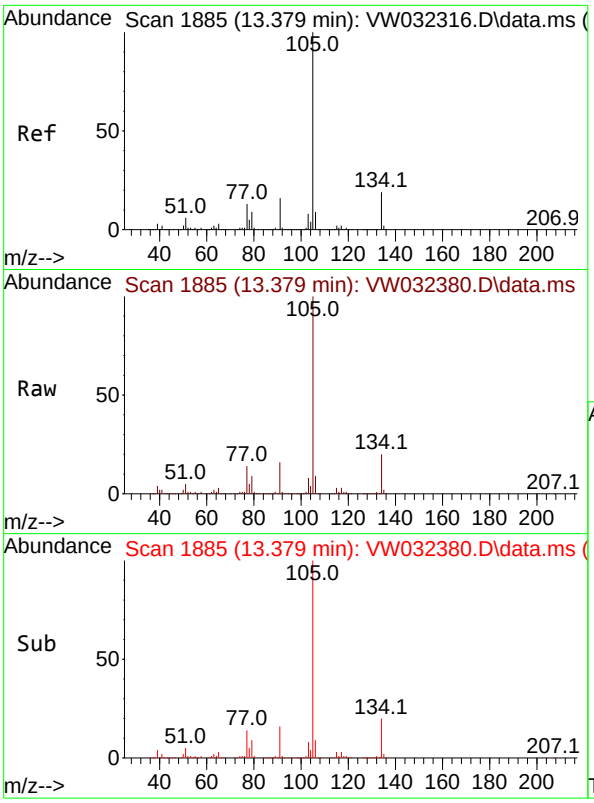


#84
1,2,4-Trimethylbenzene
Concen: 20.046 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:105 Resp: 290311

Ion	Ratio	Lower	Upper
105	100		
120	44.0	22.1	66.3





#85
sec-Butylbenzene
Concen: 19.609 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:105 Resp: 35017

Ion	Ratio	Lower	Upper
105	100		
134	20.1	10.1	30.1

Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

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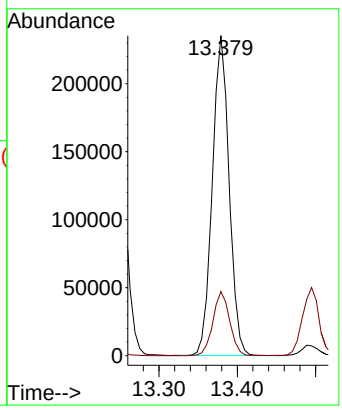
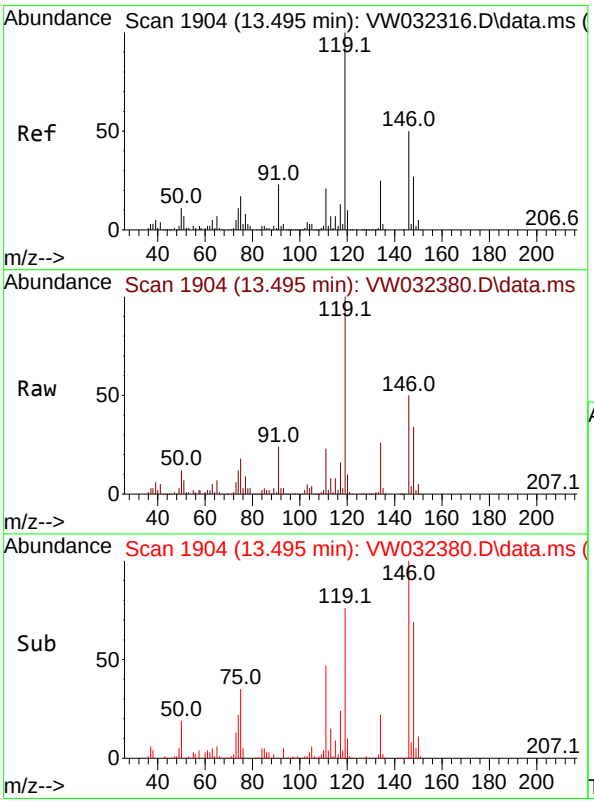
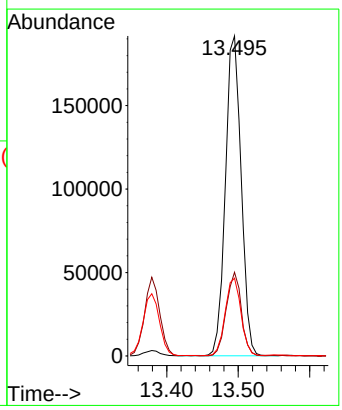


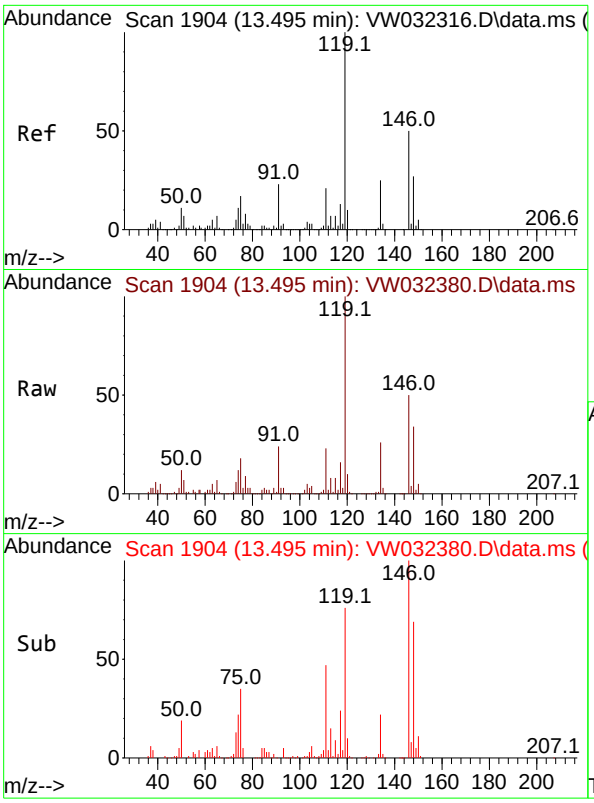


#86
p-Isopropyltoluene
Concen: 19.788 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:119 Resp: 293214

Ion	Ratio	Lower	Upper
119	100		
134	25.0	12.6	37.6
91	24.4	12.4	37.0

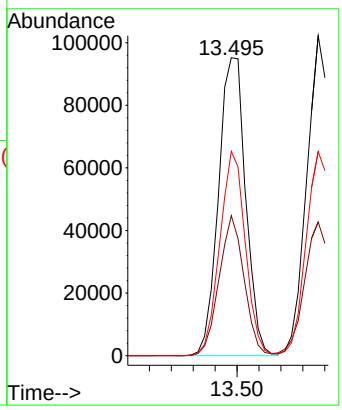




#87
1,3-Dichlorobenzene
Concen: 20.398 ug/l
RT: 13.495 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:146 Resp: 16399

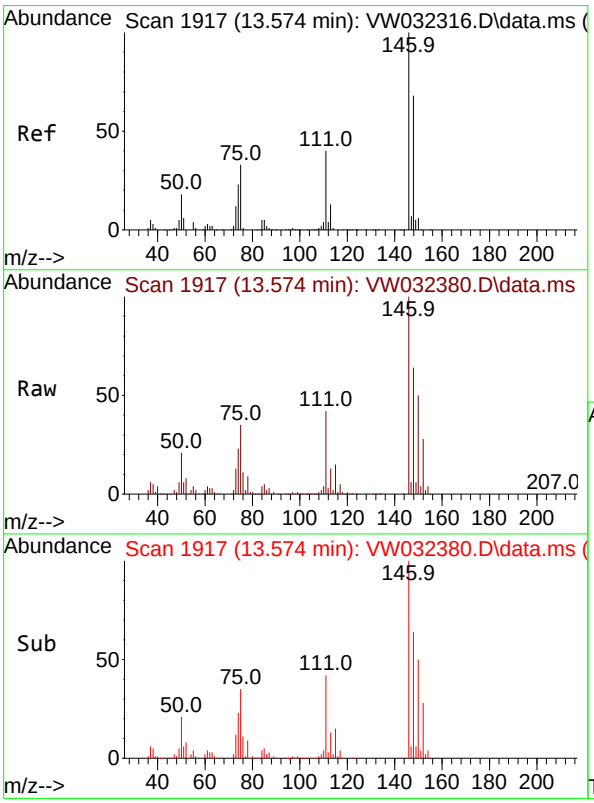
Ion	Ratio	Lower	Upper
146	100		
111	43.1	20.6	61.9
148	64.5	30.6	92.0



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

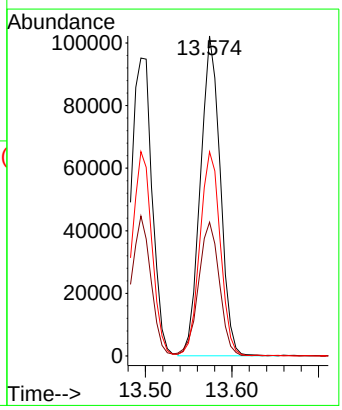
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

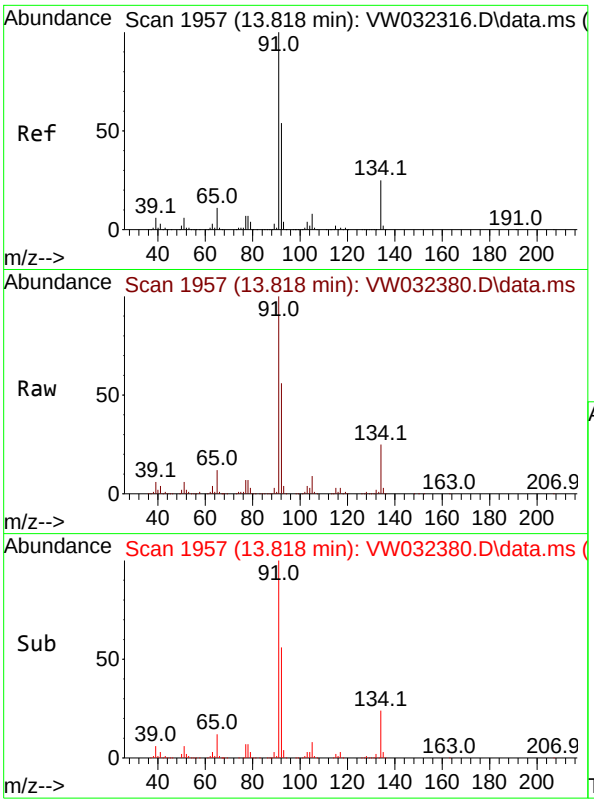


#88
1,4-Dichlorobenzene
Concen: 20.268 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:146 Resp: 162933

Ion	Ratio	Lower	Upper
146	100		
111	43.9	21.3	63.7
148	65.4	33.4	100.1

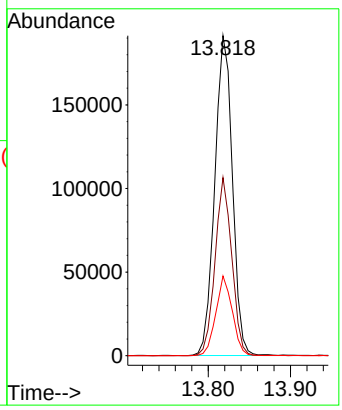




#89
n-Butylbenzene
Concen: 19.717 ug/l
RT: 13.818 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 91 Resp: 28525

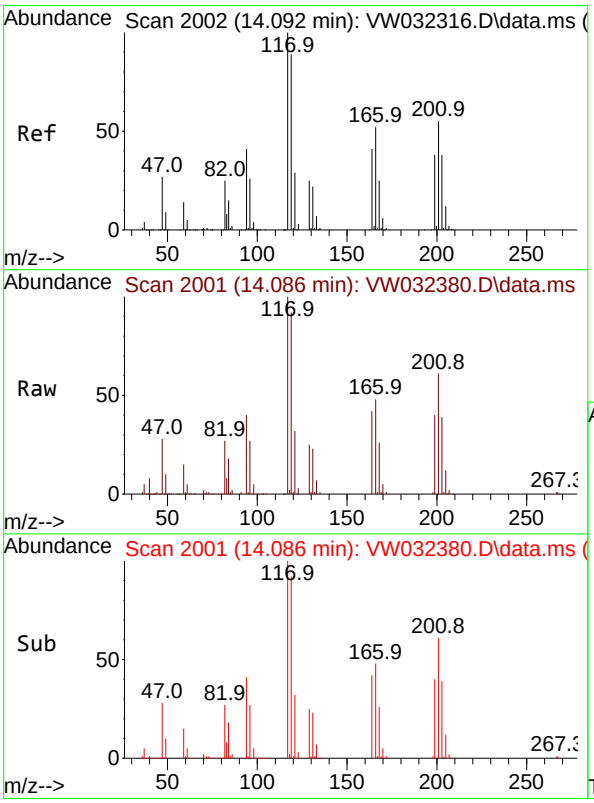
Ion	Ratio	Lower	Upper
91	100		
92	52.8	27.0	81.0
134	23.4	13.1	39.3



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

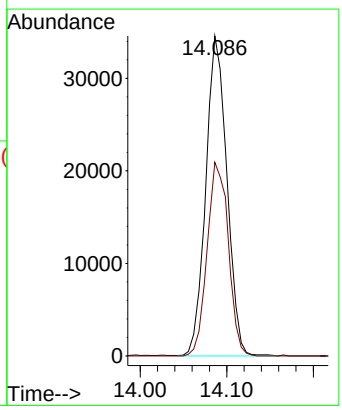
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

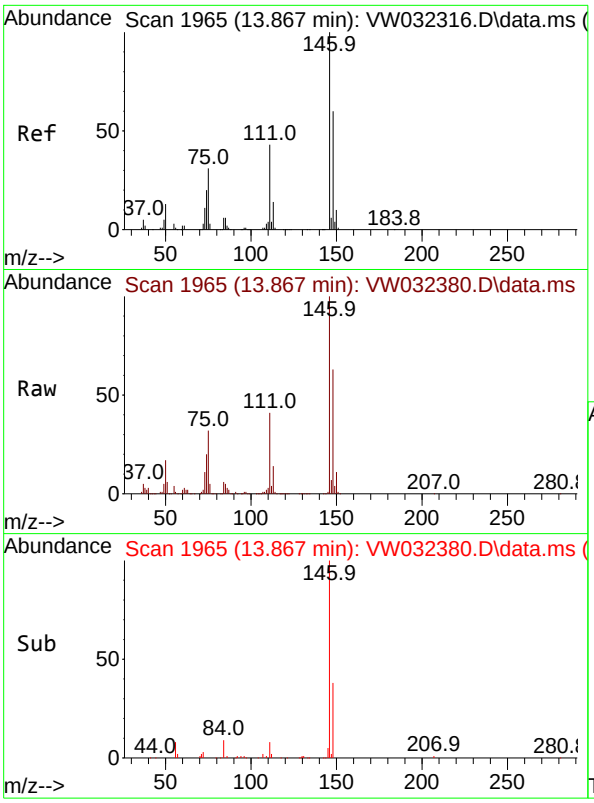


#90
Hexachloroethane
Concen: 22.085 ug/l
RT: 14.086 min Scan# 2001
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:117 Resp: 58655

Ion	Ratio	Lower	Upper
117	100		
201	60.6	32.8	98.4

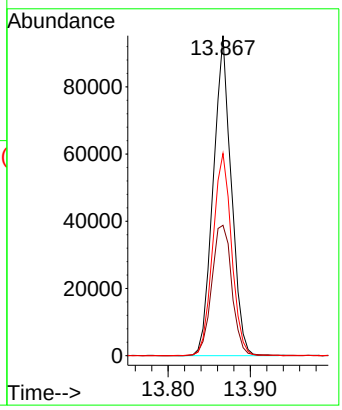




#91
1,2-Dichlorobenzene
Concen: 19.964 ug/l
RT: 13.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:146 Resp: 14508

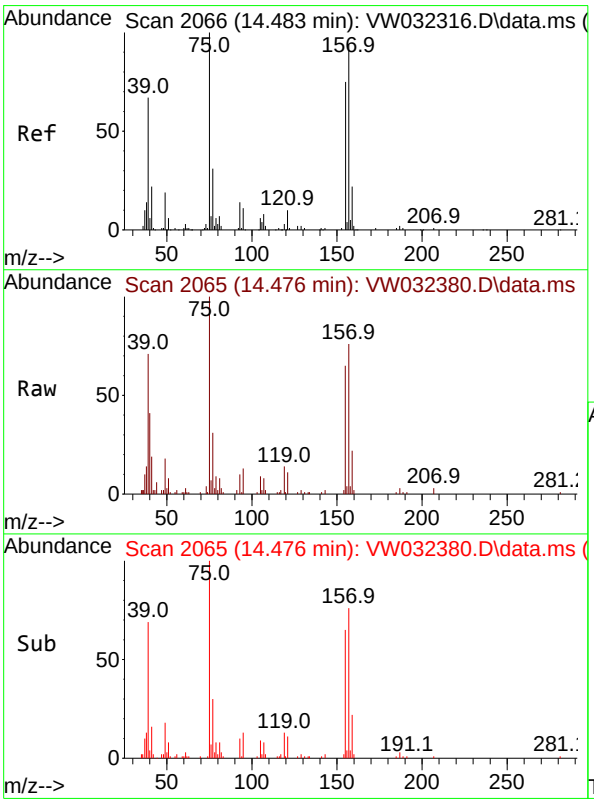
Ion	Ratio	Lower	Upper
146	100		
111	45.5	23.4	70.0
148	65.7	34.1	102.3



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

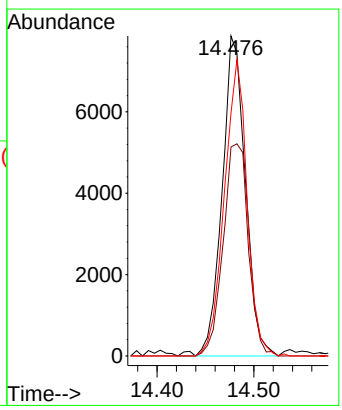
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

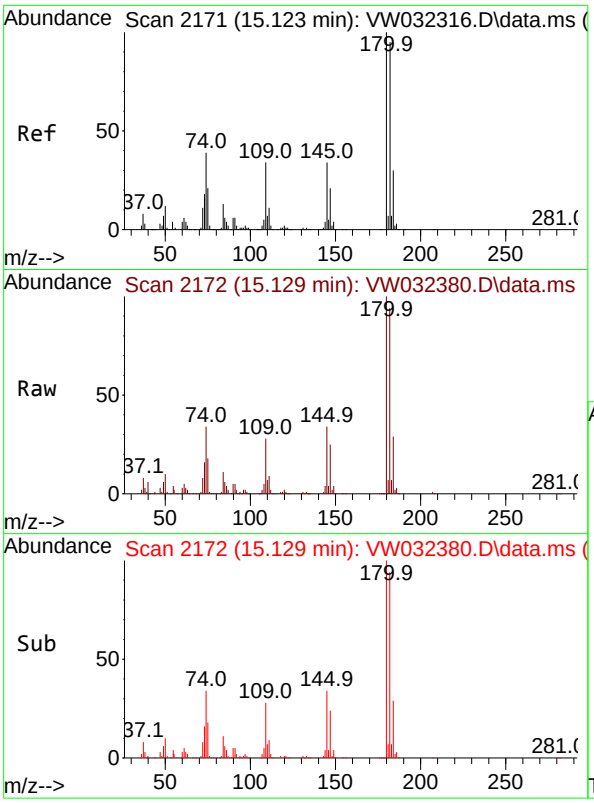


#92
1,2-Dibromo-3-Chloropropane
Concen: 18.371 ug/l
RT: 14.476 min Scan# 2065
Delta R.T. -0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion: 75 Resp: 13154

Ion	Ratio	Lower	Upper
75	100		
155	71.5	40.8	122.5
157	89.9	51.8	155.4

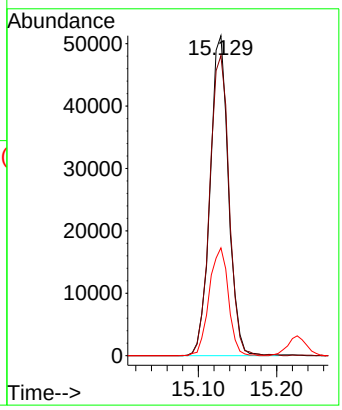




#93
1,2,4-Trichlorobenzene
Concen: 19.198 ug/l
RT: 15.129 min Scan# 21
Delta R.T. 0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:180 Resp: 8366

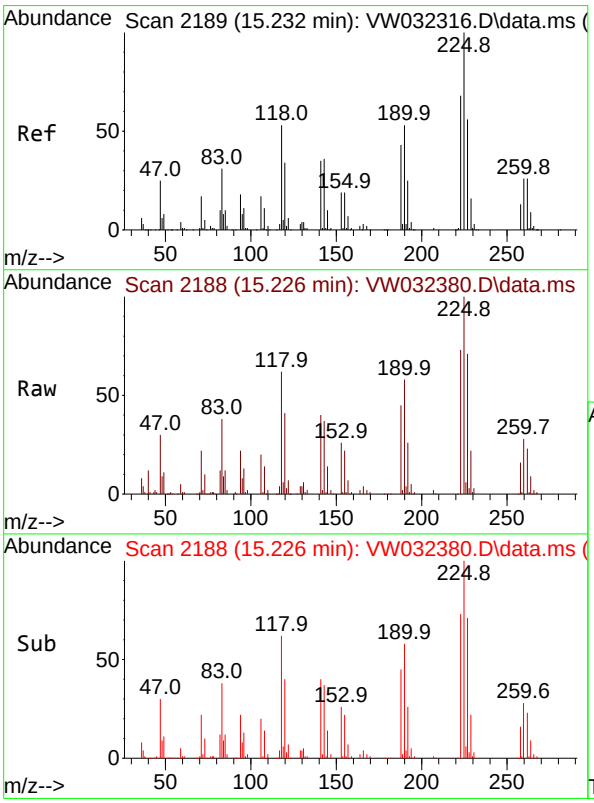
Ion	Ratio	Lower	Upper
180	100		
182	98.4	47.4	142.2
145	35.2	16.4	49.1



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

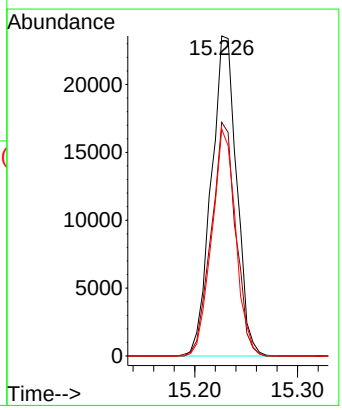
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

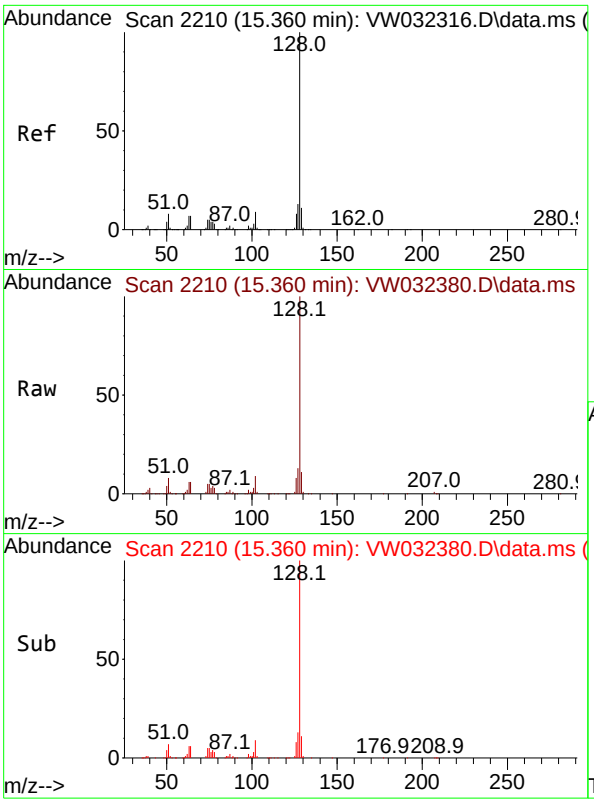


#94
Hexachlorobutadiene
Concen: 20.200 ug/l
RT: 15.226 min Scan# 2188
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:225 Resp: 40248

Ion	Ratio	Lower	Upper
225	100		
223	70.5	29.8	89.3
227	66.8	30.5	91.5

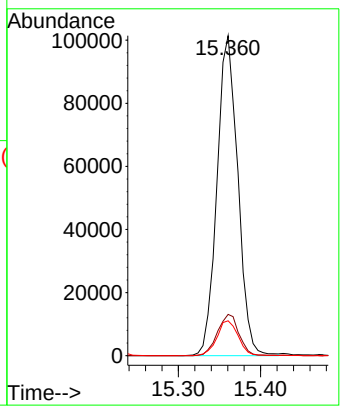




#95
Naphthalene
Concen: 17.083 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:128 Resp: 17878

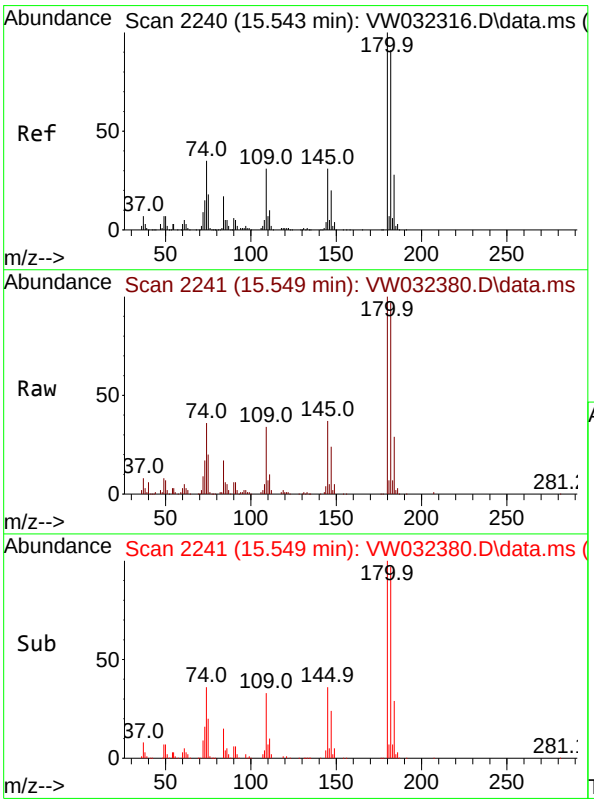
Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.6	16.0
129	11.1	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
VW1020SBS01

Manual Integrations
APPROVED

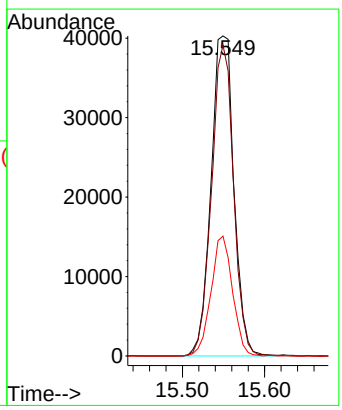
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025



#96
1,2,3-Trichlorobenzene
Concen: 19.048 ug/l
RT: 15.549 min Scan# 2241
Delta R.T. 0.006 min
Lab File: VW032380.D
Acq: 20 Oct 2025 11:41

Tgt Ion:180 Resp: 78242

Ion	Ratio	Lower	Upper
180	100		
182	92.9	47.7	143.1
145	35.1	17.2	51.6



Raw Data: **VW032400.D**

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S07-000102-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-03MS	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 47.9
Sample Wt/Vol:	5.52 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	110		1	2.20	9.50	ug/Kg	10/20/25 19:20	VW102025
74-87-3	Chloromethane	100		1	2.20	9.50	ug/Kg	10/20/25 19:20	VW102025
75-01-4	Vinyl Chloride	120		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
74-83-9	Bromomethane	64.8		1	2.00	9.50	ug/Kg	10/20/25 19:20	VW102025
75-00-3	Chloroethane	120		1	2.40	9.50	ug/Kg	10/20/25 19:20	VW102025
75-69-4	Trichlorofluoromethane	110		1	2.30	9.50	ug/Kg	10/20/25 19:20	VW102025
76-13-1	1,1,2-Trichlorotrifluoroethane	62.1		1	2.00	9.50	ug/Kg	10/20/25 19:20	VW102025
75-35-4	1,1-Dichloroethene	110		1	1.90	9.50	ug/Kg	10/20/25 19:20	VW102025
67-64-1	Acetone	1700	E	1	9.00	47.3	ug/Kg	10/20/25 19:20	VW102025
75-15-0	Carbon Disulfide	86.5		1	2.00	9.50	ug/Kg	10/20/25 19:20	VW102025
1634-04-4	Methyl tert-butyl Ether	160		1	1.40	9.50	ug/Kg	10/20/25 19:20	VW102025
79-20-9	Methyl Acetate	690	E	1	2.90	9.50	ug/Kg	10/20/25 19:20	VW102025
75-09-2	Methylene Chloride	140		1	6.70	18.9	ug/Kg	10/20/25 19:20	VW102025
156-60-5	trans-1,2-Dichloroethene	97.6		1	1.60	9.50	ug/Kg	10/20/25 19:20	VW102025
75-34-3	1,1-Dichloroethane	120		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
110-82-7	Cyclohexane	47.1		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
78-93-3	2-Butanone	1100		1	12.4	47.3	ug/Kg	10/20/25 19:20	VW102025
56-23-5	Carbon Tetrachloride	32.5		1	1.80	9.50	ug/Kg	10/20/25 19:20	VW102025
156-59-2	cis-1,2-Dichloroethene	120		1	1.40	9.50	ug/Kg	10/20/25 19:20	VW102025
74-97-5	Bromochloromethane	120		1	2.20	9.50	ug/Kg	10/20/25 19:20	VW102025
67-66-3	Chloroform	120		1	1.60	9.50	ug/Kg	10/20/25 19:20	VW102025
71-55-6	1,1,1-Trichloroethane	98.0		1	1.80	9.50	ug/Kg	10/20/25 19:20	VW102025
108-87-2	Methylcyclohexane	140		1	1.70	9.50	ug/Kg	10/20/25 19:20	VW102025
71-43-2	Benzene	99.5		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
107-06-2	1,2-Dichloroethane	110		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
79-01-6	Trichloroethene	80.7		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
78-87-5	1,2-Dichloropropane	98.6		1	1.70	9.50	ug/Kg	10/20/25 19:20	VW102025
75-27-4	Bromodichloromethane	97.0		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
108-10-1	4-Methyl-2-Pentanone	760		1	6.80	47.3	ug/Kg	10/20/25 19:20	VW102025
108-88-3	Toluene	64.0		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
10061-02-6	t-1,3-Dichloropropene	45.7		1	1.20	9.50	ug/Kg	10/20/25 19:20	VW102025
10061-01-5	cis-1,3-Dichloropropene	35.3		1	1.20	9.50	ug/Kg	10/20/25 19:20	VW102025
79-00-5	1,1,2-Trichloroethane	76.3		1	1.70	9.50	ug/Kg	10/20/25 19:20	VW102025
591-78-6	2-Hexanone	620		1	7.00	47.3	ug/Kg	10/20/25 19:20	VW102025
124-48-1	Dibromochloromethane	79.8		1	1.60	9.50	ug/Kg	10/20/25 19:20	VW102025
106-93-4	1,2-Dibromoethane	94.7		1	1.70	9.50	ug/Kg	10/20/25 19:20	VW102025
127-18-4	Tetrachloroethene	83.2		1	2.00	9.50	ug/Kg	10/20/25 19:20	VW102025
108-90-7	Chlorobenzene	90.4		1	1.70	9.50	ug/Kg	10/20/25 19:20	VW102025
100-41-4	Ethyl Benzene	70.7		1	1.30	9.50	ug/Kg	10/20/25 19:20	VW102025
179601-23-1	m/p-Xylenes	140		1	2.30	18.9	ug/Kg	10/20/25 19:20	VW102025
95-47-6	o-Xylene	97.5		1	1.60	9.50	ug/Kg	10/20/25 19:20	VW102025
100-42-5	Styrene	68.4		1	1.30	9.50	ug/Kg	10/20/25 19:20	VW102025
75-25-2	Bromoform	130		1	1.60	9.50	ug/Kg	10/20/25 19:20	VW102025

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S07-000102-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-03MS	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 47.9
Sample Wt/Vol:	5.52 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	62.9		1	1.50	9.50	ug/Kg	10/20/25 19:20	VW102025
79-34-5	1,1,2,2-Tetrachloroethane	260		1	2.30	9.50	ug/Kg	10/20/25 19:20	VW102025
541-73-1	1,3-Dichlorobenzene	46.2		1	3.20	9.50	ug/Kg	10/20/25 19:20	VW102025
106-46-7	1,4-Dichlorobenzene	48.9		1	2.90	9.50	ug/Kg	10/20/25 19:20	VW102025
95-50-1	1,2-Dichlorobenzene	53.7		1	2.70	9.50	ug/Kg	10/20/25 19:20	VW102025
96-12-8	1,2-Dibromo-3-Chloropropane	170		1	3.50	9.50	ug/Kg	10/20/25 19:20	VW102025
120-82-1	1,2,4-Trichlorobenzene	38.1		1	5.60	9.50	ug/Kg	10/20/25 19:20	VW102025
87-61-6	1,2,3-Trichlorobenzene	33.7		1	6.00	9.50	ug/Kg	10/20/25 19:20	VW102025
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	70.3			63 - 155	141%	SPK: 50		
1868-53-7	Dibromofluoromethane	54.6			70 - 134	109%	SPK: 50		
2037-26-5	Toluene-d8	41.2			74 - 123	82%	SPK: 50		
460-00-4	4-Bromofluorobenzene	36.0			17 - 146	72%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	126000							
540-36-3	1,4-Difluorobenzene	270000							
3114-55-4	Chlorobenzene-d5	142000							
3855-82-1	1,4-Dichlorobenzene-d4	54400							

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_W\Data\VW102025\
Data File : VW032400.D
Acq On : 20 Oct 2025 19:20
Operator : SY/MD
Sample : Q3395-03MS
Misc : 5.52g/5mL/MSVOA_W/SOIL/A
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 21 01:34:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.965	168	125839	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	270130	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	141965	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	54387	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	128979	70.271	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 140.540%			
35) Dibromofluoromethane	7.898	113	95553	54.621	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 109.240%			
50) Toluene-d8	10.325	98	265737	41.157	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 82.320%			
62) 4-Bromofluorobenzene	12.611	95	87937	36.034	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 72.060%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	45844	58.056	ug/l	95
3) Chloromethane	2.253	50	66428	54.518	ug/l	100
4) Vinyl Chloride	2.405	62	90894	62.485	ug/l	97
5) Bromomethane	2.826	94	36633	34.269	ug/l	94
6) Chloroethane	2.972	64	62395	64.968	ug/l	100
7) Trichlorofluoromethane	3.308	101	60781	55.806	ug/l	94
8) Diethyl Ether	3.722	74	70513	74.713	ug/l	92
9) 1,1,2-Trichlorotrifluo...	4.106	101	42872	32.818	ug/l	93
10) Methyl Iodide	4.308	142	36506	19.585	ug/l	99
11) Tert butyl alcohol	5.222	59	62567	450.349	ug/l	98
12) 1,1-Dichloroethene	4.082	96	86127	60.728	ug/l	93
13) Acrolein	3.942	56	2446	10.848	ug/l	99
14) Allyl chloride	4.704	41	119614	49.934	ug/l #	84
15) Acrylonitrile	5.405	53	209078	425.830	ug/l	98
16) Acetone	4.161	43	455205	895.684	ug/l	98
17) Carbon Disulfide	4.423	76	177025	45.747	ug/l	99
18) Methyl Acetate	4.710	43	530691	364.524	ug/l	98
19) Methyl tert-butyl Ether	5.466	73	235222	84.208	ug/l	92
20) Methylene Chloride	4.960	84	121609	74.952	ug/l	94
21) trans-1,2-Dichloroethene	5.460	96	81060	51.625	ug/l	96
22) Diisopropyl ether	6.344	45	327878	65.815	ug/l #	87
24) 1,1-Dichloroethane	6.246	63	199309	65.851	ug/l	97
25) 2-Butanone	7.197	43	420004	606.793	ug/l	98
26) 2,2-Dichloropropane	7.191	77	88152	56.939	ug/l	99
27) cis-1,2-Dichloroethene	7.191	96	117042	62.048	ug/l	97
28) Bromochloromethane	7.533	49	91846	64.499	ug/l	93
29) Tetrahydrofuran	7.551	42	206513	474.432	ug/l	97
30) Chloroform	7.691	83	201913	65.780	ug/l	99
31) Cyclohexane	7.972	56	64422	24.932	ug/l	97
32) 1,1,1-Trichloroethane	7.886	97	112676	51.802	ug/l	99
36) 1,1-Dichloropropene	8.100	75	89641	36.308	ug/l	98
37) Ethyl Acetate	7.270	43	33154	20.175	ug/l #	81
38) Carbon Tetrachloride	8.087	117	39913	17.179	ug/l	89
39) Methylcyclohexane	9.343	83	218230	73.280	ug/l	94
40) Benzene	8.337	78	407225	52.622	ug/l	95
41) Methacrylonitrile	7.502	41	70692	79.822	ug/l	94

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032400.D
Acq On : 20 Oct 2025 19:20
Operator : SY/MD
Sample : Q3395-03MS
Misc : 5.52g/5mL/MSVOA_W/SOIL/A
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) 1,2-Dichloroethane	8.410	62	153020	60.431	ug/l		96
43) Isopropyl Acetate	8.435	43	102644	35.210	ug/l		94
44) Trichloroethene	9.105	130	77333	42.678	ug/l		88
45) 1,2-Dichloropropane	9.374	63	100743	52.155	ug/l		94
46) Dibromomethane	9.465	93	67232	56.603	ug/l		97
47) Bromodichloromethane	9.654	83	139358	51.296	ug/l		97
48) Methyl methacrylate	9.441	41	135368	95.505	ug/l	#	85
49) 1,4-Dioxane	9.465	88	26309	1620.540	ug/l	#	86
51) 4-Methyl-2-Pentanone	10.215	43	674877	399.689	ug/l		100
52) Toluene	10.392	92	163071	33.838	ug/l		97
53) t-1,3-Dichloropropene	10.611	75	63668	24.156	ug/l		96
54) cis-1,3-Dichloropropene	10.075	75	56671	18.666	ug/l	#	87
55) 1,1,2-Trichloroethane	10.788	97	64063m	40.355	ug/l		
56) Ethyl methacrylate	10.648	69	188573	84.867	ug/l	#	84
57) 1,3-Dichloropropane	10.934	76	155221	55.361	ug/l		98
58) 2-Chloroethyl Vinyl ether	9.928	63	419375	354.640	ug/l		97
59) 2-Hexanone	10.971	43	388390	326.137	ug/l		84
60) Dibromochloromethane	11.130	129	76028	42.178	ug/l		98
61) 1,2-Dibromoethane	11.239	107	77493	50.062	ug/l	#	79
64) Tetrachloroethene	10.867	164	37362	43.982	ug/l		90
65) Chlorobenzene	11.660	112	149251	47.782	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.733	131	44768	46.016	ug/l		98
67) Ethyl Benzene	11.727	91	194676	37.390	ug/l		97
68) m/p-Xylenes	11.837	106	149045	74.236	ug/l		96
69) o-Xylene	12.166	106	96813	51.563	ug/l		88
70) Styrene	12.178	104	118500	36.149	ug/l		94
71) Bromoform	12.349	173	37573	67.377	ug/l	#	94
73) Isopropylbenzene	12.465	105	123721	33.250	ug/l		100
74) N-amyl acetate	12.251	43	424595	357.696	ug/l	#	56
75) 1,1,2,2-Tetrachloroethane	12.715	83	128863	139.478	ug/l		82
76) 1,2,3-Trichloropropane	12.763	75	79488m	111.062	ug/l		
77) Bromobenzene	12.745	156	42521	47.406	ug/l	#	45
78) n-propylbenzene	12.800	91	127627	27.459	ug/l		98
79) 2-Chlorotoluene	12.891	91	104408	36.739	ug/l		89
80) 1,3,5-Trimethylbenzene	12.940	105	176191	54.761	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.513	75	3237	11.458	ug/l	#	1
82) 4-Chlorotoluene	12.983	91	93543	30.960	ug/l		90
83) tert-Butylbenzene	13.202	119	59879	22.682	ug/l		95
84) 1,2,4-Trimethylbenzene	13.245	105	189380	57.886	ug/l		100
85) sec-Butylbenzene	13.379	105	105926	26.257	ug/l	#	75
86) p-Isopropyltoluene	13.495	119	100262	29.952	ug/l		95
87) 1,3-Dichlorobenzene	13.495	146	44352	24.419	ug/l	#	1
88) 1,4-Dichlorobenzene	13.574	146	46923	25.838	ug/l	#	5
89) n-Butylbenzene	13.818	91	53644	16.413	ug/l	#	73
90) Hexachloroethane	14.092	117	19680	32.800	ug/l	#	30
91) 1,2-Dichlorobenzene	13.867	146	46595	28.380	ug/l	#	1
92) 1,2-Dibromo-3-Chloropr...	14.483	75	14281	88.285	ug/l		89
93) 1,2,4-Trichlorobenzene	15.123	180	19822	20.134	ug/l	#	1
94) Hexachlorobutadiene	15.226	225	3383	7.516	ug/l		89
95) Naphthalene	15.360	128	212612	89.927	ug/l		98
96) 1,2,3-Trichlorobenzene	15.549	180	16545	17.830	ug/l	#	1

Sample Results: **VW032400.D**

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

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

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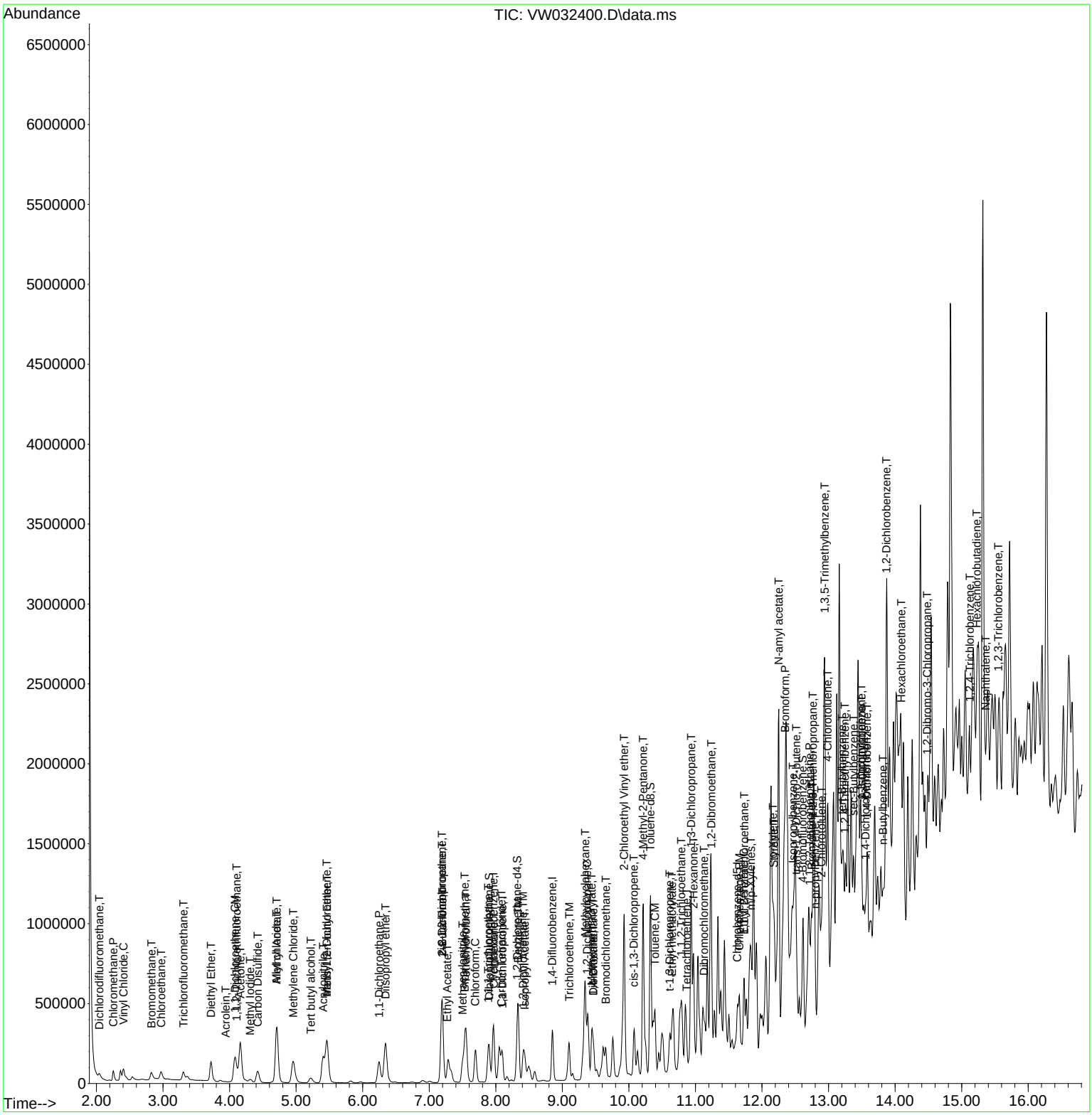
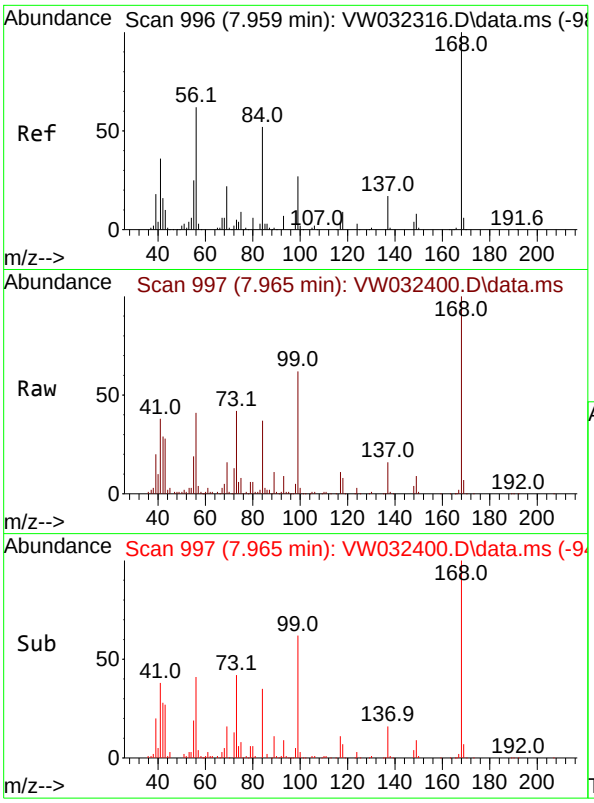
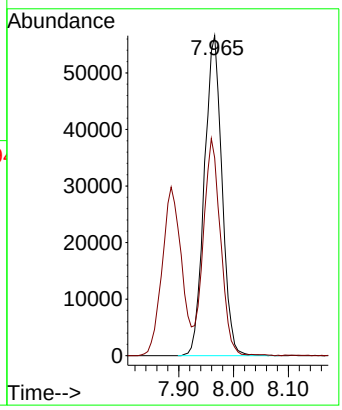




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.965 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:168 Resp: 12583

Ion	Ratio	Lower	Upper
168	100		
99	61.6	49.3	73.9



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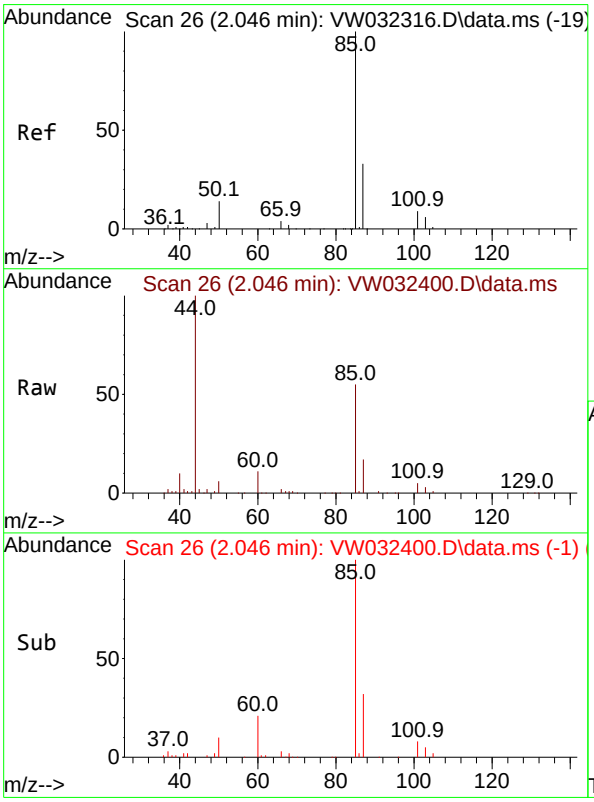
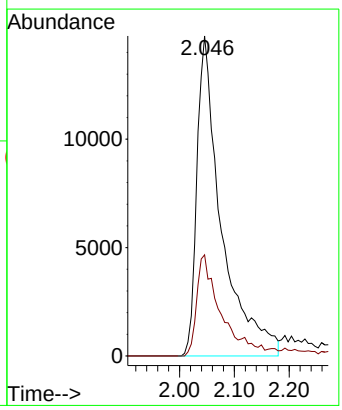
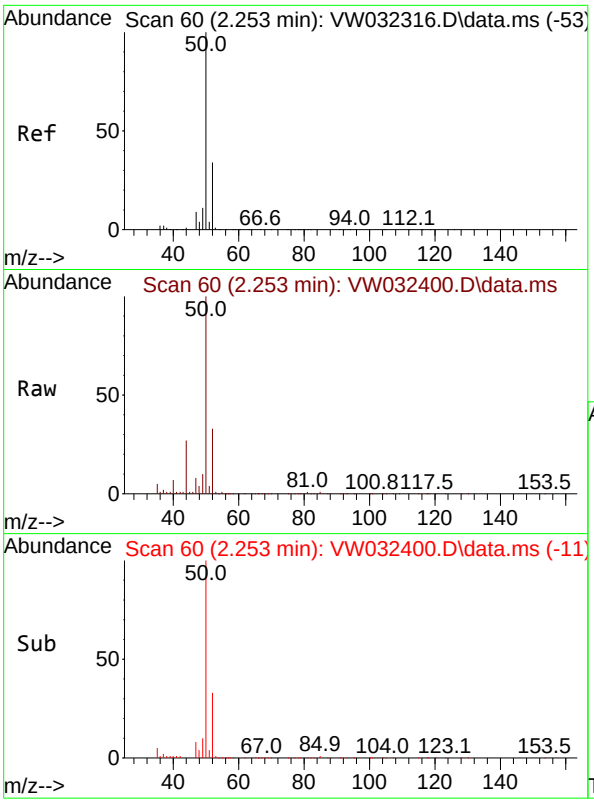


#2
Dichlorodifluoromethane
Concen: 58.056 ug/l
RT: 2.046 min Scan# 26
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 85 Resp: 45844

Ion	Ratio	Lower	Upper
85	100		
87	31.6	17.2	51.6

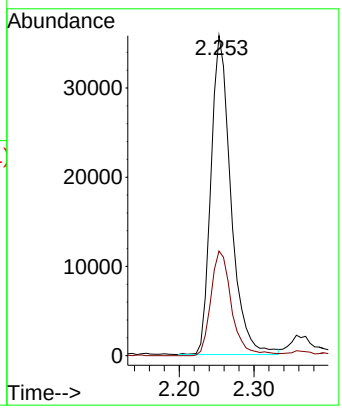




#3
Chloromethane
Concen: 54.518 ug/l
RT: 2.253 min Scan# 6
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 50 Resp: 6642

Ion	Ratio	Lower	Upper
50	100		
52	32.8	26.1	39.1



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ClientSampleId :
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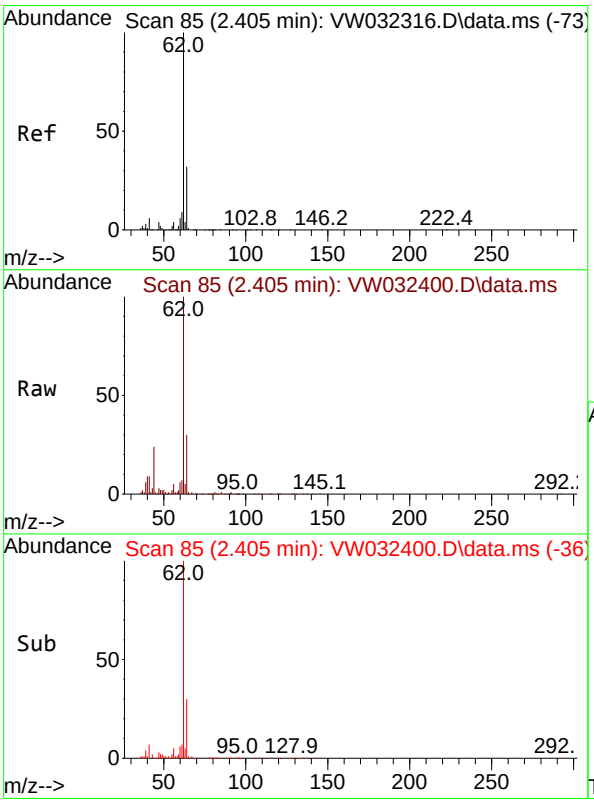
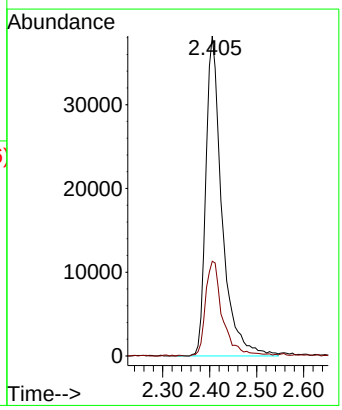
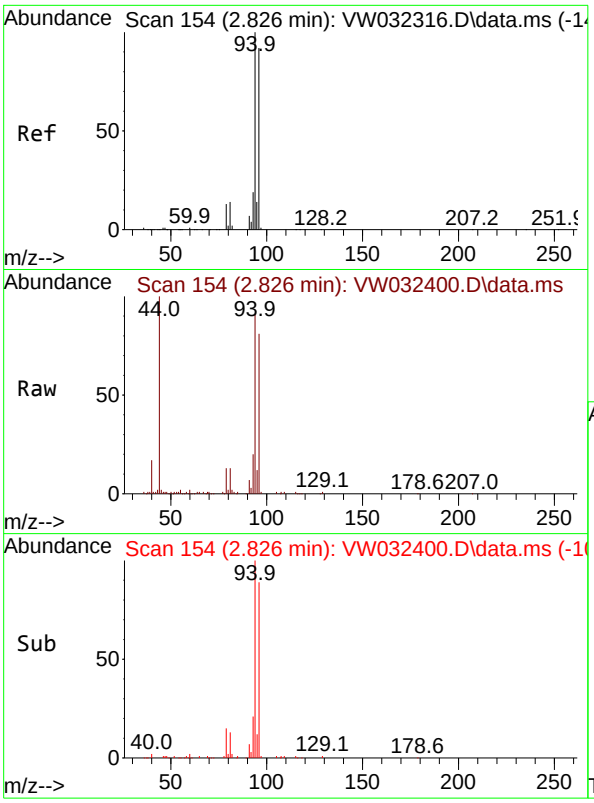


#4
Vinyl Chloride
Concen: 62.485 ug/l
RT: 2.405 min Scan# 85
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 62 Resp: 90894

Ion	Ratio	Lower	Upper
62	100		
64	29.4	24.8	37.2





#5
Bromomethane
Concen: 34.269 ug/l
RT: 2.826 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 94 Resp: 3663

Ion	Ratio	Lower	Upper
94	100		
96	90.0	76.6	115.0

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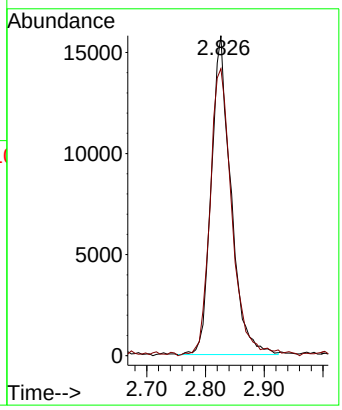
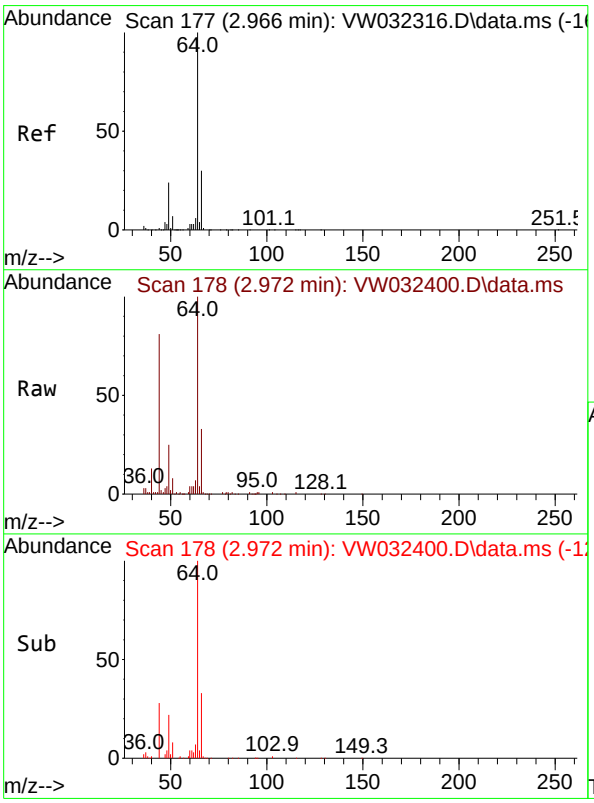
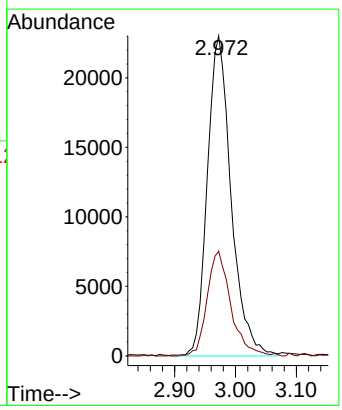


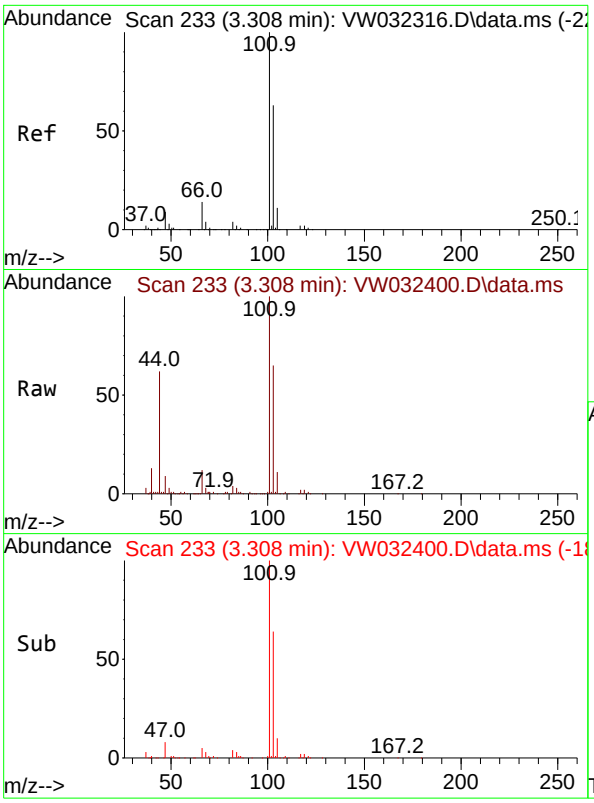


#6
Chloroethane
Concen: 64.968 ug/l
RT: 2.972 min Scan# 178
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 64 Resp: 62395

Ion	Ratio	Lower	Upper
64	100		
66	32.5	26.2	39.4





#7
Trichlorofluoromethane
Concen: 55.806 ug/l
RT: 3.308 min Scan# 2
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:101 Resp: 6078

Ion	Ratio	Lower	Upper
101	100		
103	64.5	47.8	71.8

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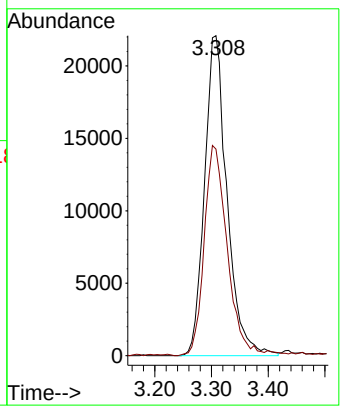
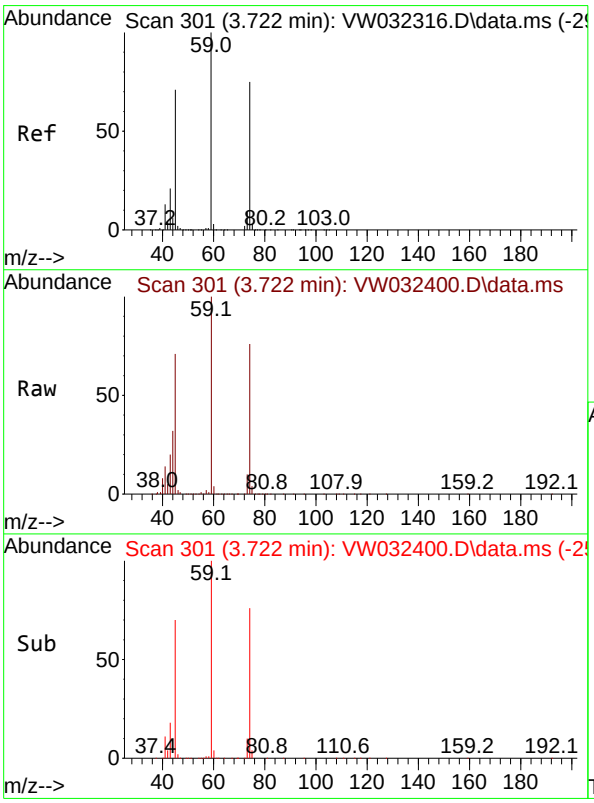
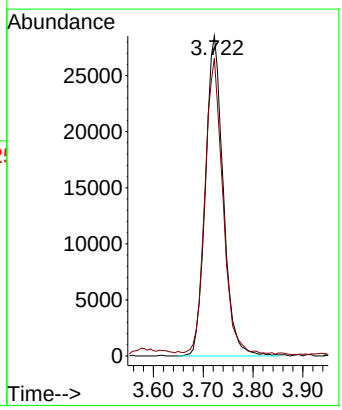


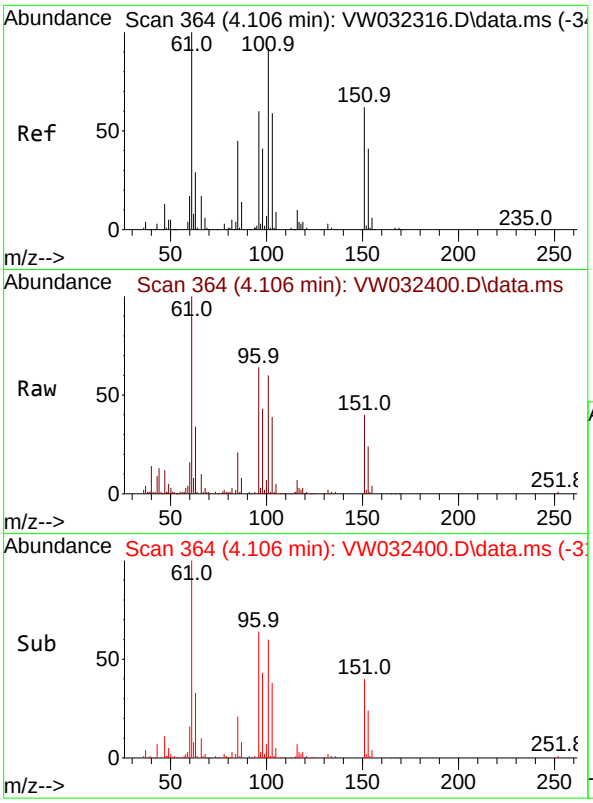


#8
Diethyl Ether
Concen: 74.713 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 74 Resp: 70513

Ion	Ratio	Lower	Upper
74	100		
45	93.7	43.1	129.4





#9
1,1,2-Trichlorotrifluoroethane
Concen: 32.818 ug/l
RT: 4.106 min Scan# 3
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:101 Resp: 4287

Ion	Ratio	Lower	Upper
101	100		
85	43.5	37.1	55.7
151	70.0	61.5	92.3

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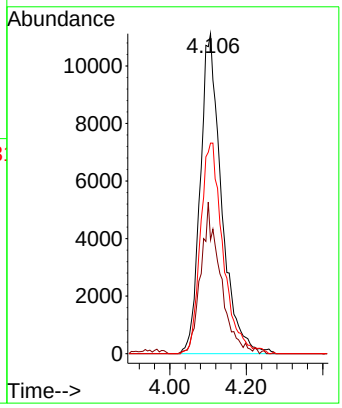
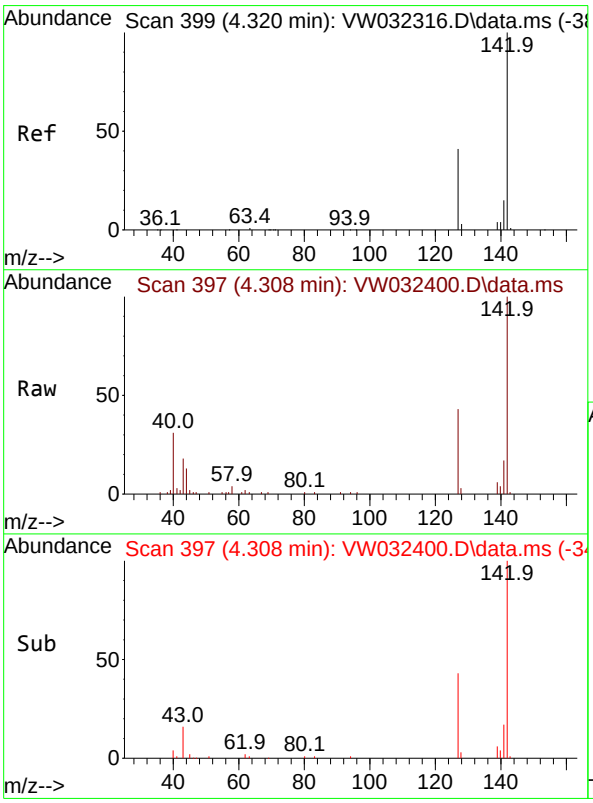
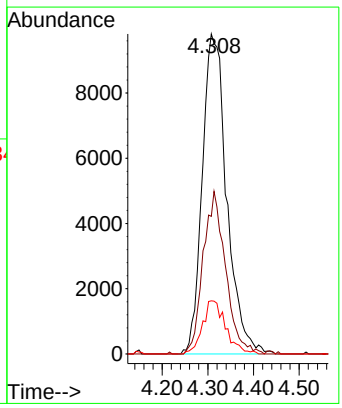


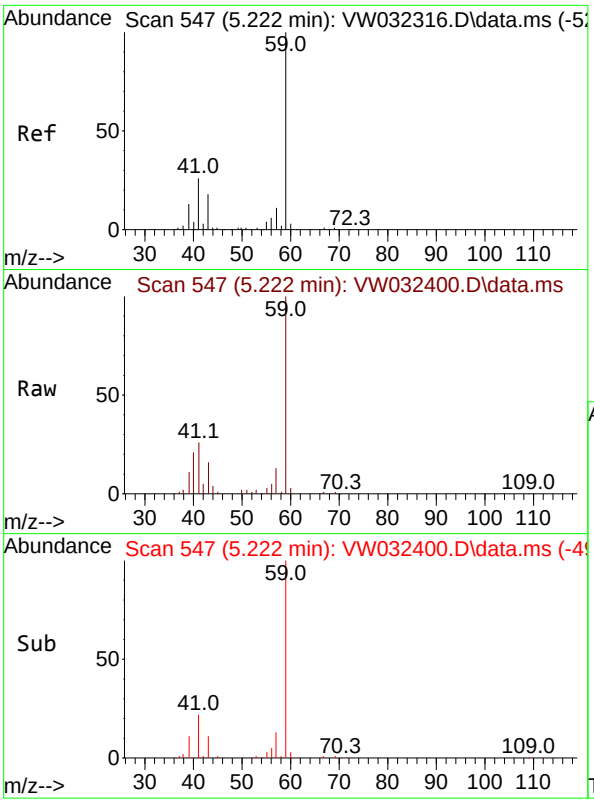


#10
Methyl Iodide
Concen: 19.585 ug/l
RT: 4.308 min Scan# 397
Delta R.T. -0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:142 Resp: 36506

Ion	Ratio	Lower	Upper
142	100		
127	46.7	38.2	57.2
141	15.8	12.2	18.2





#11
Tert butyl alcohol
Concen: 450.349 ug/l
RT: 5.222 min Scan# 54
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 59 Resp: 6256

Ion	Ratio	Lower	Upper
59	100		
57	11.3	9.8	14.6

Instrument :
MSVOA_W
ClientSampleId :
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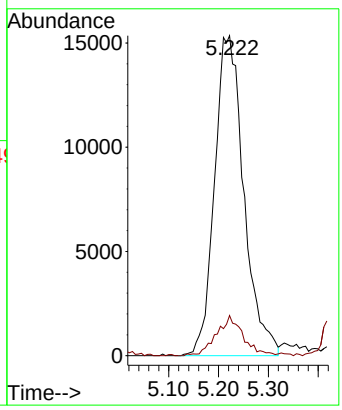
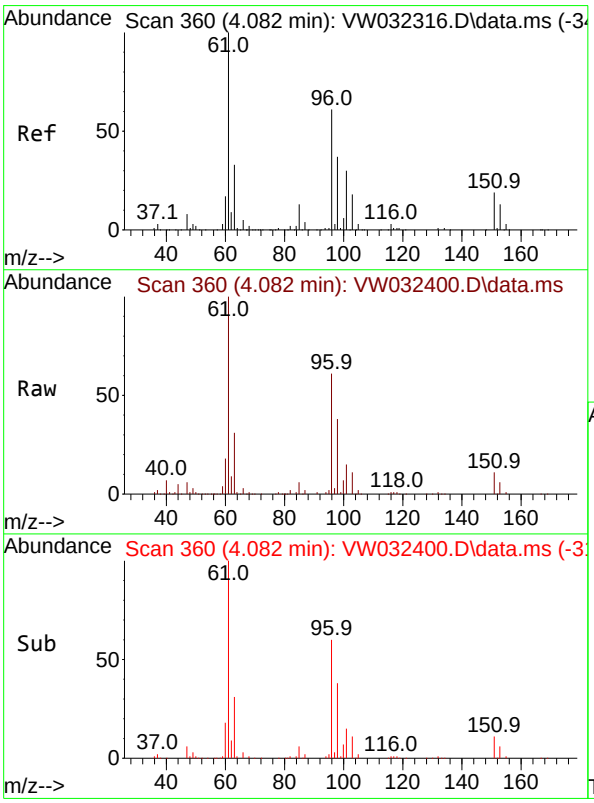
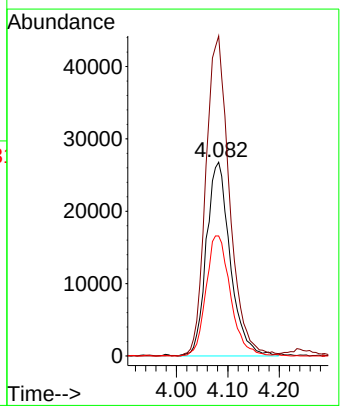


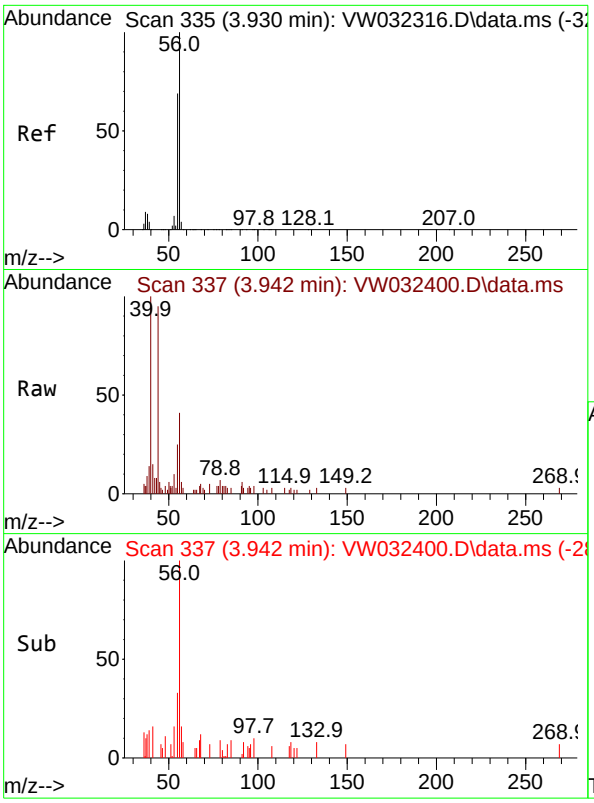


#12
1,1-Dichloroethene
Concen: 60.728 ug/l
RT: 4.082 min Scan# 360
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 96 Resp: 86127

Ion	Ratio	Lower	Upper
96	100		
61	165.1	123.0	184.4
98	61.9	48.5	72.7





#13
Acrolein
Concen: 10.848 ug/l
RT: 3.942 min Scan# 3
Delta R.T. 0.012 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 56 Resp: 244

Ion	Ratio	Lower	Upper
56	100		
55	71.4	56.4	84.6

Instrument :
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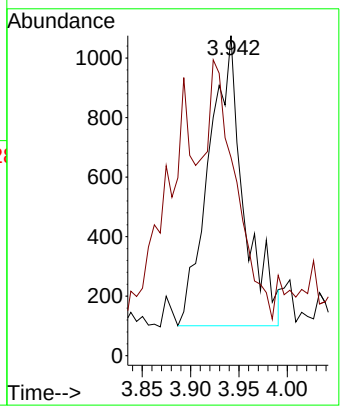
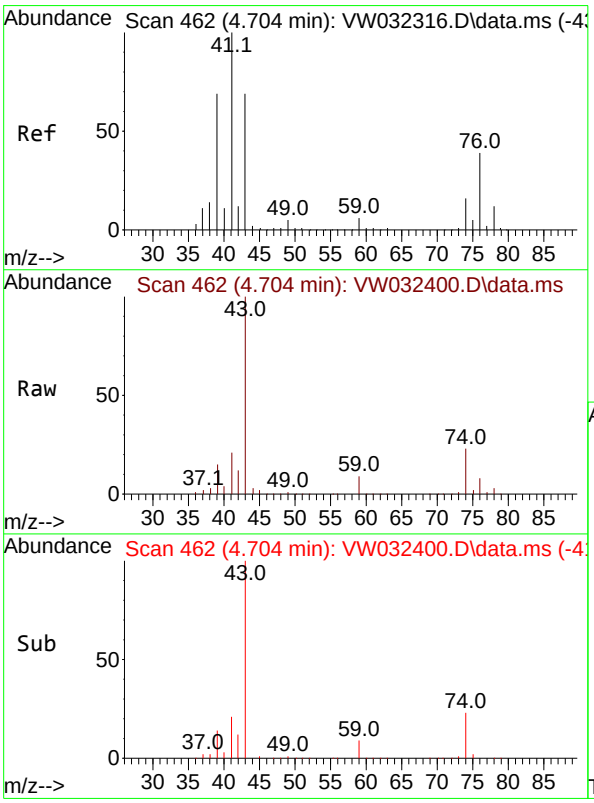
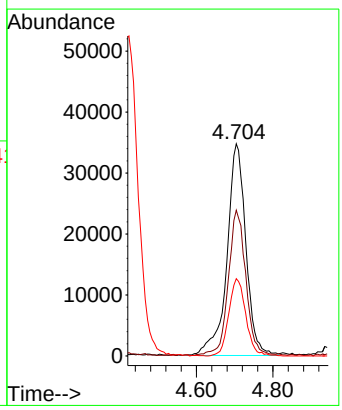


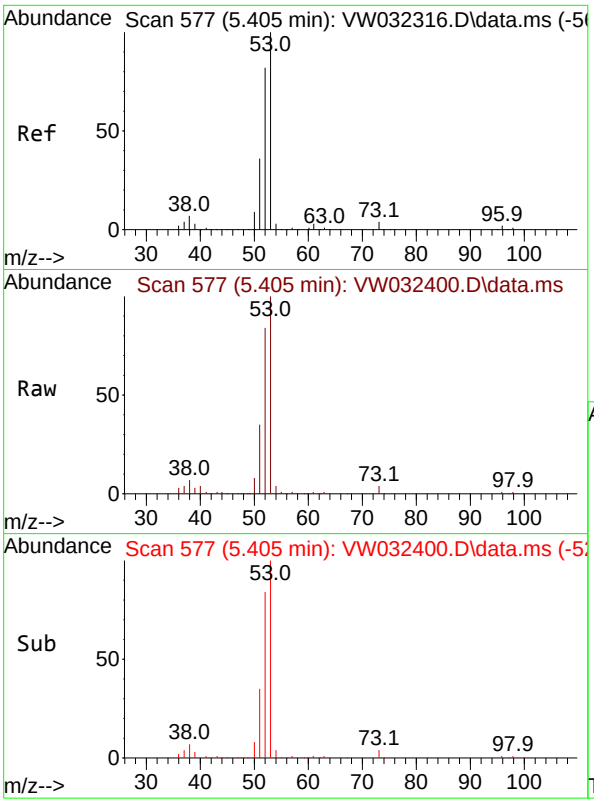


#14
Allyl chloride
Concen: 49.934 ug/l
RT: 4.704 min Scan# 462
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 41 Resp: 119614

Ion	Ratio	Lower	Upper
41	100		
39	63.2	64.1	96.1#
76	32.9	31.4	47.2

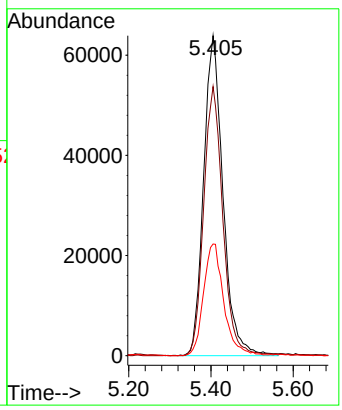




#15
Acrylonitrile
Concen: 425.830 ug/l
RT: 5.405 min Scan# 5
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 53 Resp: 20907

Ion	Ratio	Lower	Upper
53	100		
52	82.9	67.4	101.2
51	36.6	30.3	45.5



Instrument :
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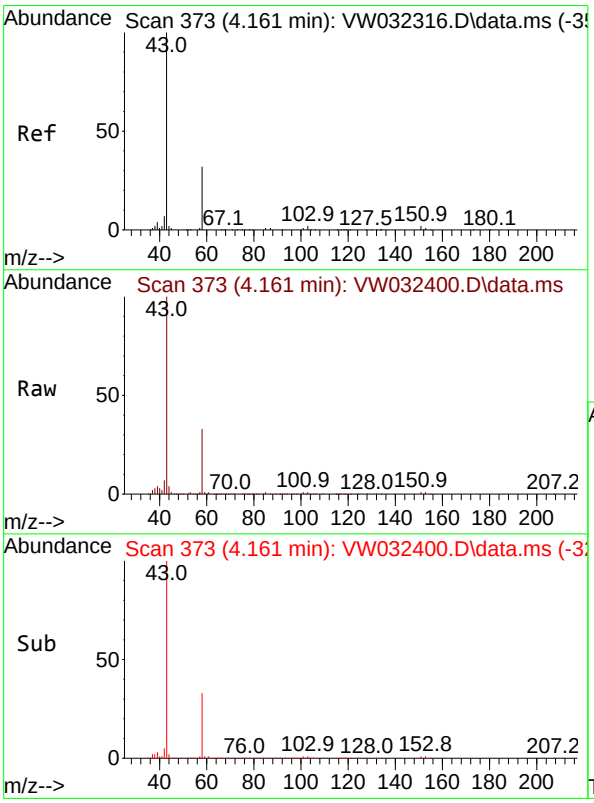
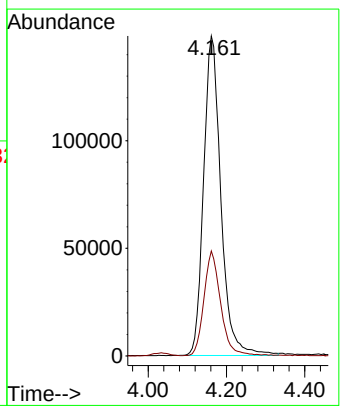
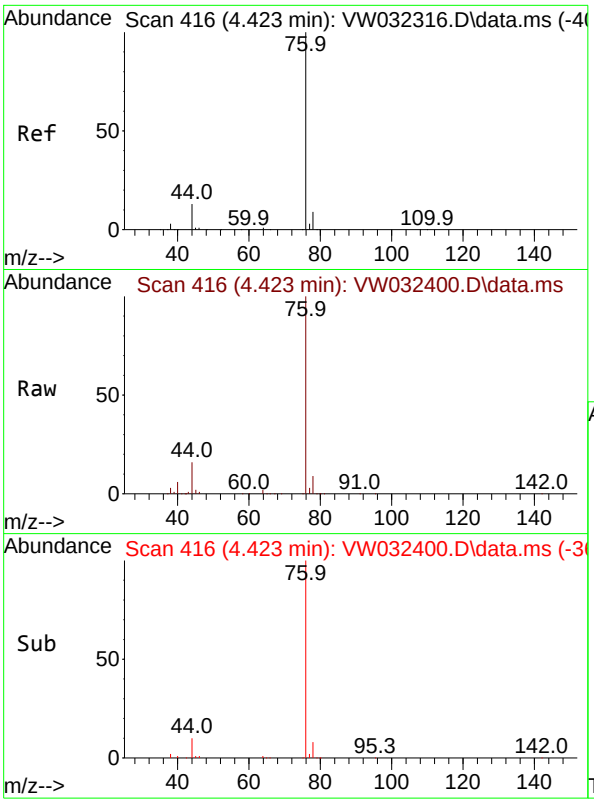


#16
Acetone
Concen: 895.684 ug/l
RT: 4.161 min Scan# 373
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 43 Resp: 455205

Ion	Ratio	Lower	Upper
43	100		
58	32.7	25.3	37.9





#17
Carbon Disulfide
Concen: 45.747 ug/l
RT: 4.423 min Scan# 4
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 76 Resp: 17702

Ion	Ratio	Lower	Upper
76	100		
78	8.5	7.0	10.6

Instrument :
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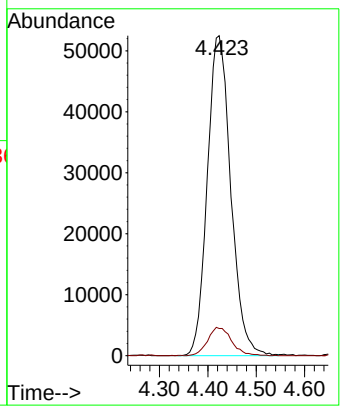
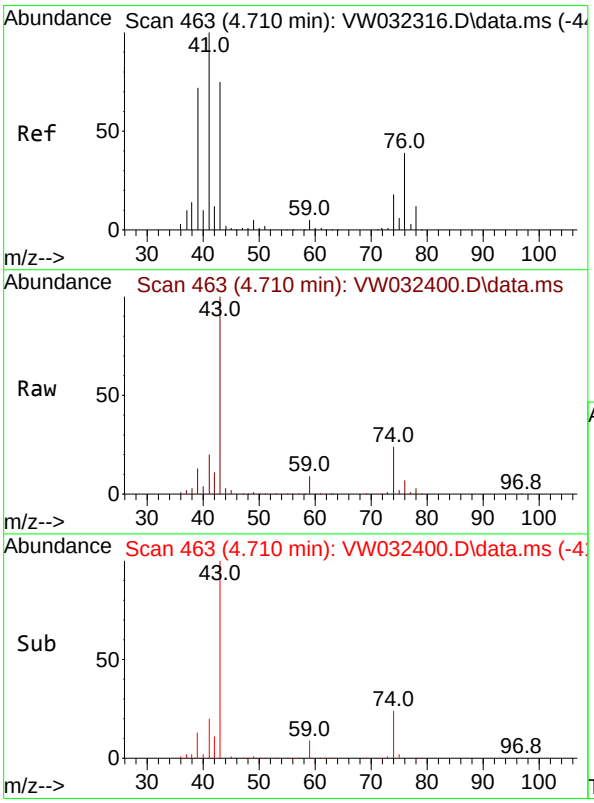
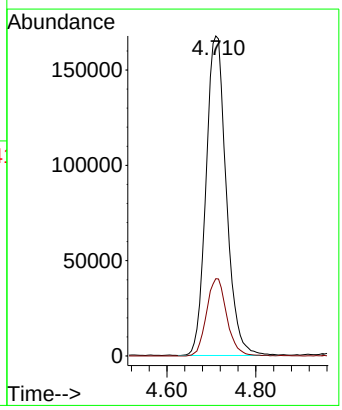


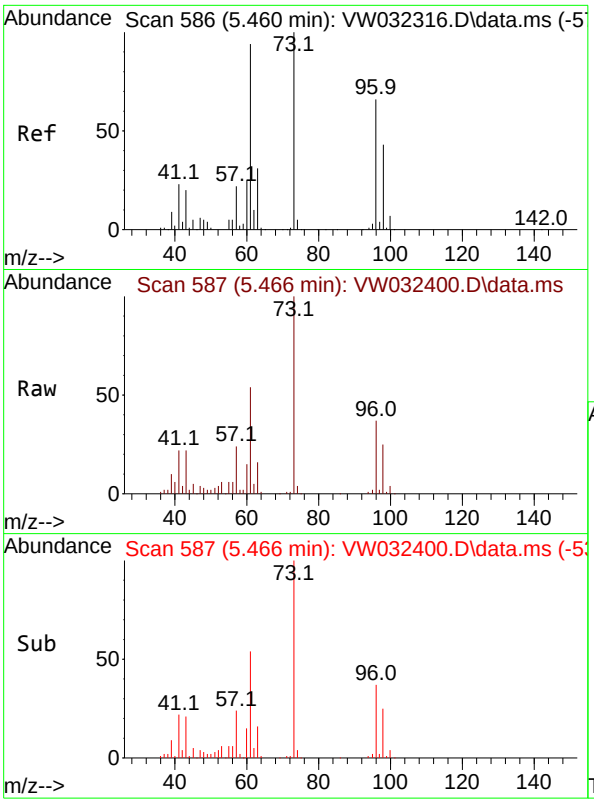


#18
Methyl Acetate
Concen: 364.524 ug/l
RT: 4.710 min Scan# 463
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 43 Resp: 530691

Ion	Ratio	Lower	Upper
43	100		
74	24.3	20.2	30.4

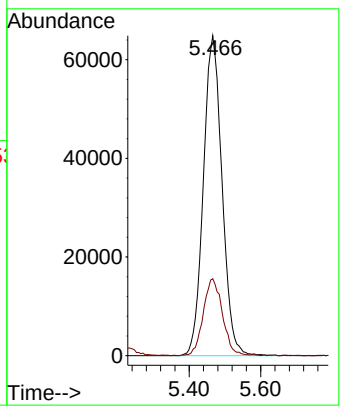




#19
Methyl tert-butyl Ether
Concen: 84.208 ug/l
RT: 5.466 min Scan# 5
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 73 Resp: 23522

Ion	Ratio	Lower	Upper
73	100		
57	24.0	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
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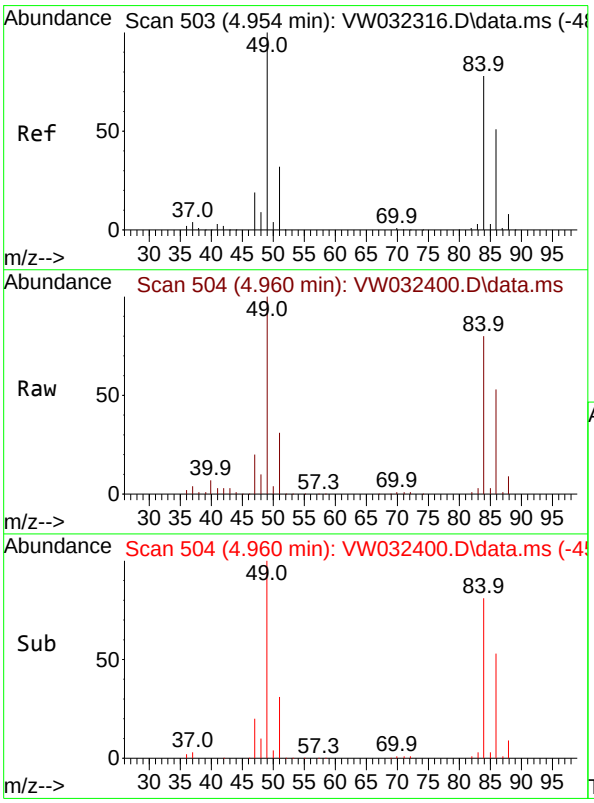
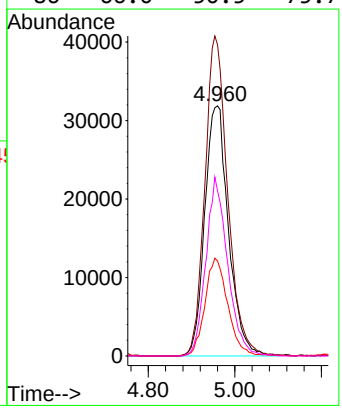
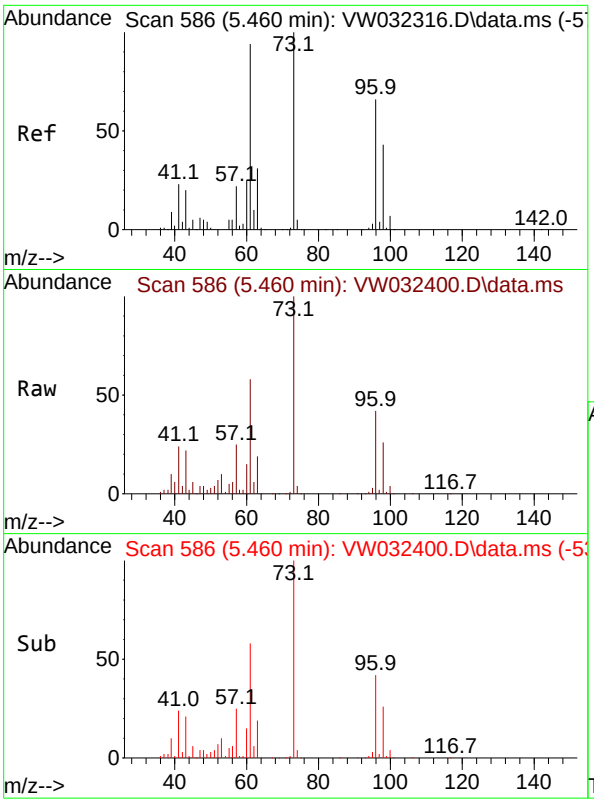


#20
Methylene Chloride
Concen: 74.952 ug/l
RT: 4.960 min Scan# 504
Delta R.T. -0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 84 Resp: 121609

Ion	Ratio	Lower	Upper
84	100		
49	124.4	92.2	138.4
51	38.0	31.0	46.6
86	66.0	50.5	75.7

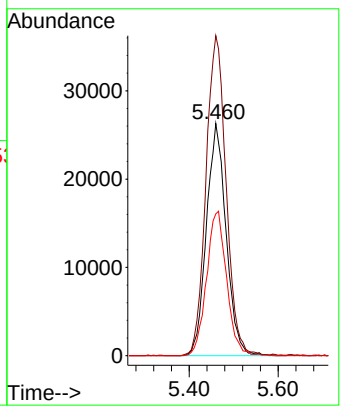




#21
trans-1,2-Dichloroethene
Concen: 51.625 ug/l
RT: 5.460 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 96 Resp: 8106

Ion	Ratio	Lower	Upper
96	100		
61	137.8	112.5	168.7
98	61.0	54.2	81.4



Instrument :
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ClientSampleId :
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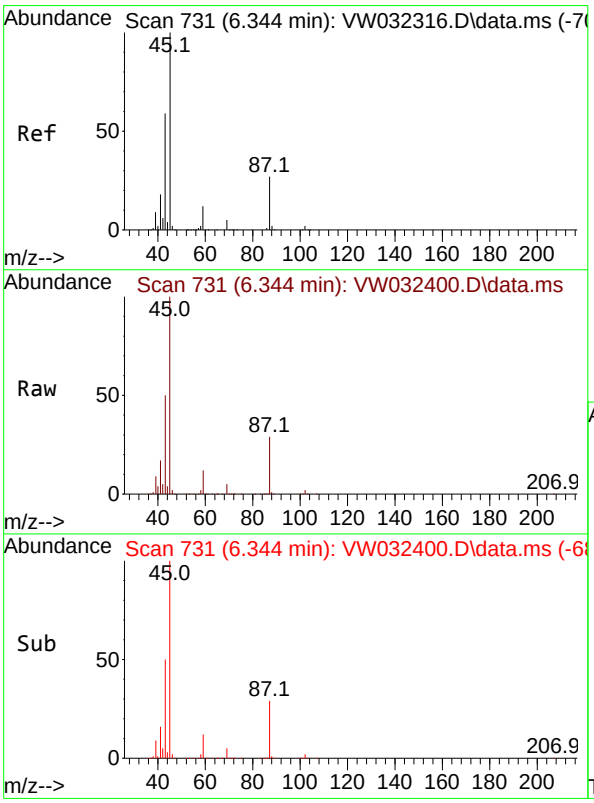
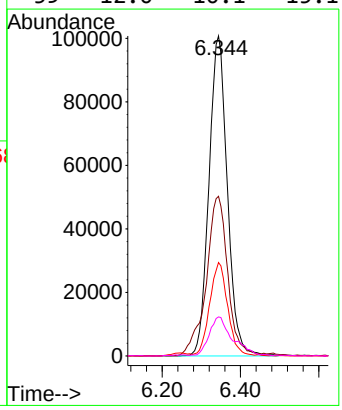
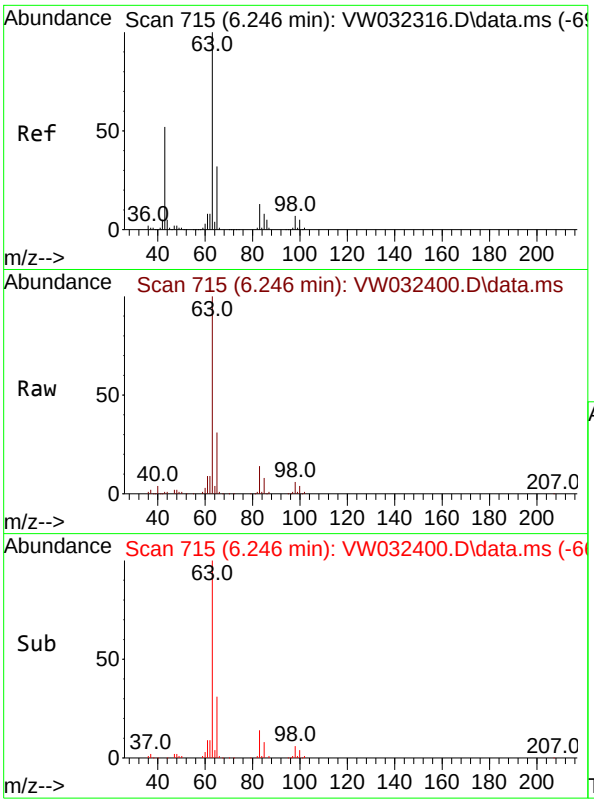


#22
Diisopropyl ether
Concen: 65.815 ug/l
RT: 6.344 min Scan# 731
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 45 Resp: 327878

Ion	Ratio	Lower	Upper
45	100		
43	49.7	51.4	77.2#
87	29.1	25.9	38.9
59	12.0	10.1	15.1

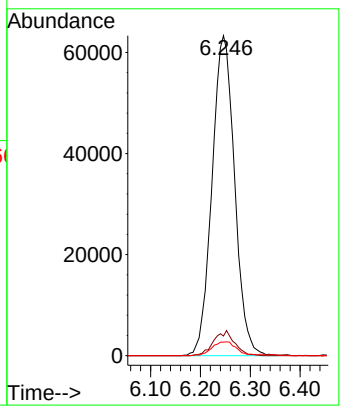




#24
1,1-Dichloroethane
Concen: 65.851 ug/l
RT: 6.246 min Scan# 7
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 63 Resp: 19930

Ion	Ratio	Lower	Upper
63	100		
98	6.1	3.8	11.2
100	4.3	2.5	7.5



Instrument :
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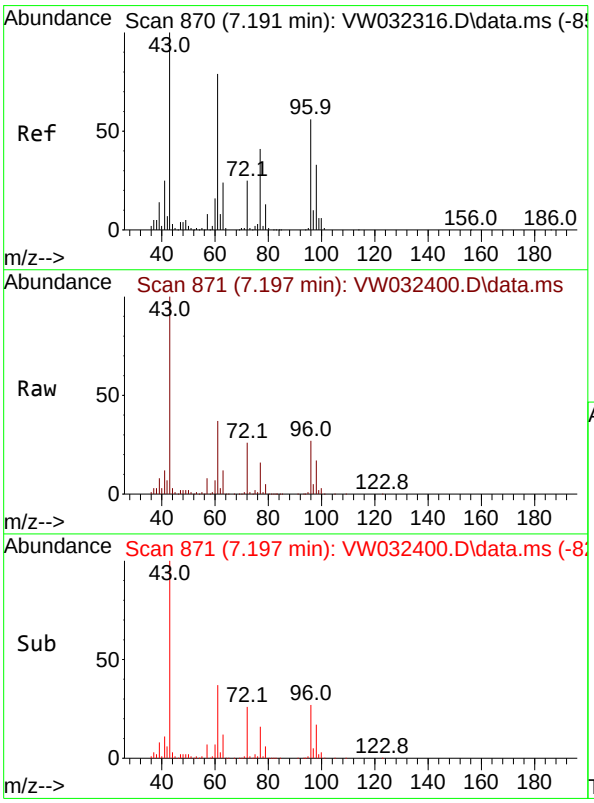
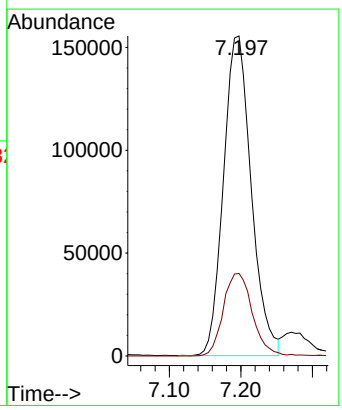
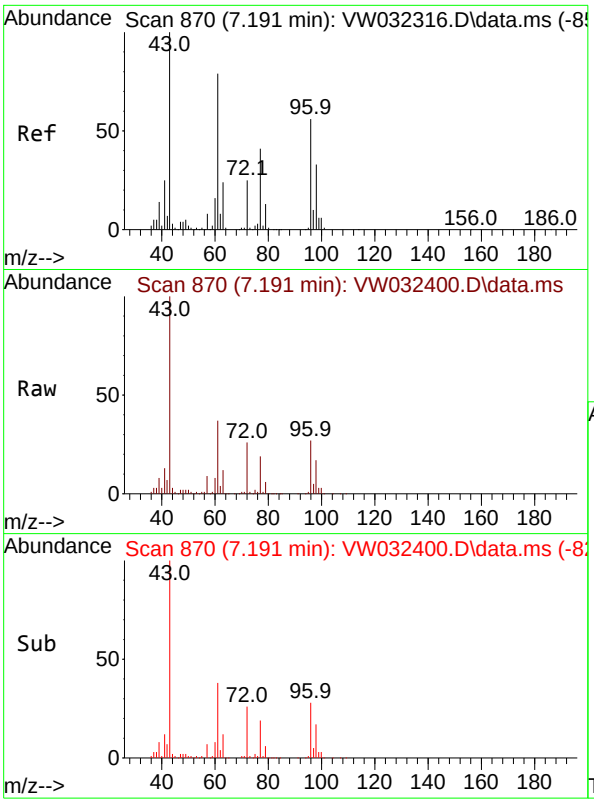


#25
2-Butanone
Concen: 606.793 ug/l
RT: 7.197 min Scan# 871
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 43 Resp: 420004

Ion	Ratio	Lower	Upper
43	100		
72	25.8	21.4	32.2





#26
2,2-Dichloropropane
Concen: 56.939 ug/l
RT: 7.191 min Scan# 8
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 77 Resp: 8815

Ion	Ratio	Lower	Upper
77	100		
97	24.2	11.9	35.5

Instrument :
MSVOA_W
ClientSampleId :
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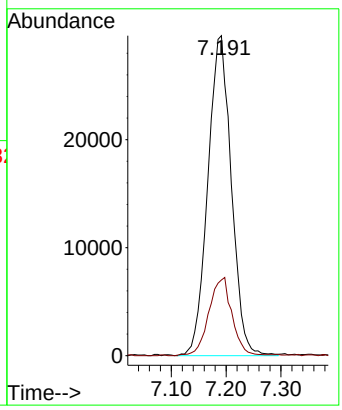
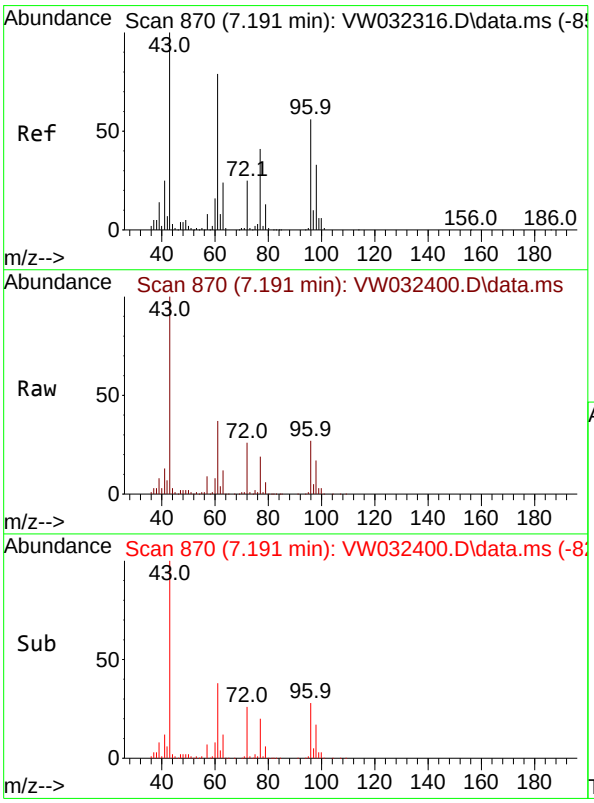
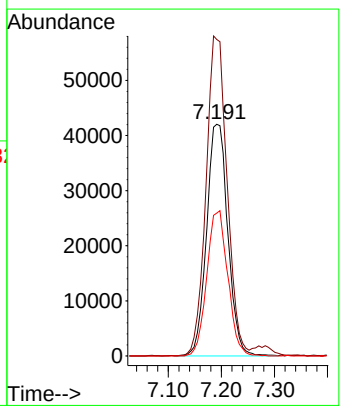


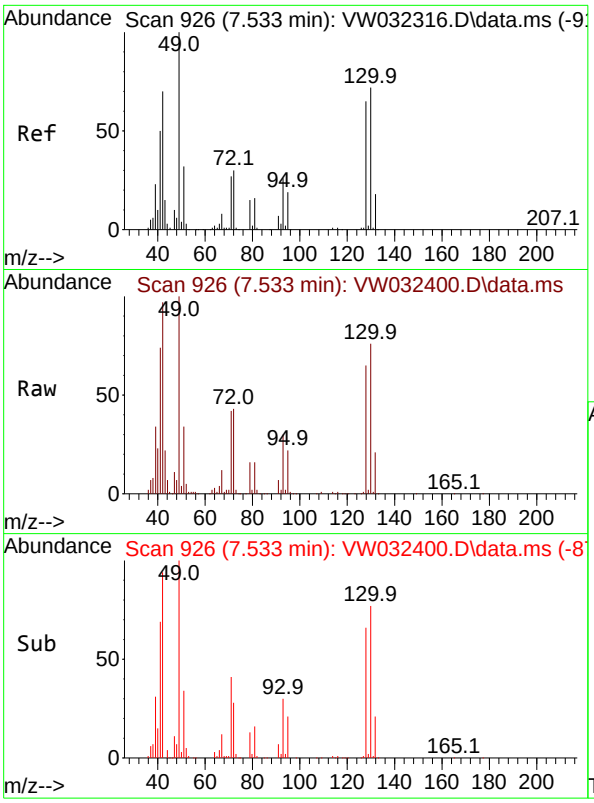


#27
cis-1,2-Dichloroethene
Concen: 62.048 ug/l
RT: 7.191 min Scan# 870
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 96 Resp: 117042

Ion	Ratio	Lower	Upper
96	100		
61	136.9	0.0	268.0
98	62.0	0.0	130.8

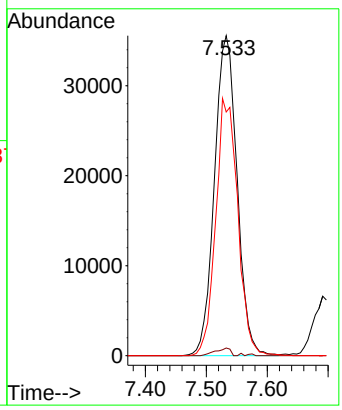




#28
Bromochloromethane
Concen: 64.499 ug/l
RT: 7.533 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 49 Resp: 9184

Ion	Ratio	Lower	Upper
49	100		
129	1.6	0.0	4.2
130	78.3	67.5	101.3



Instrument :
MSVOA_W
ClientSampleId :
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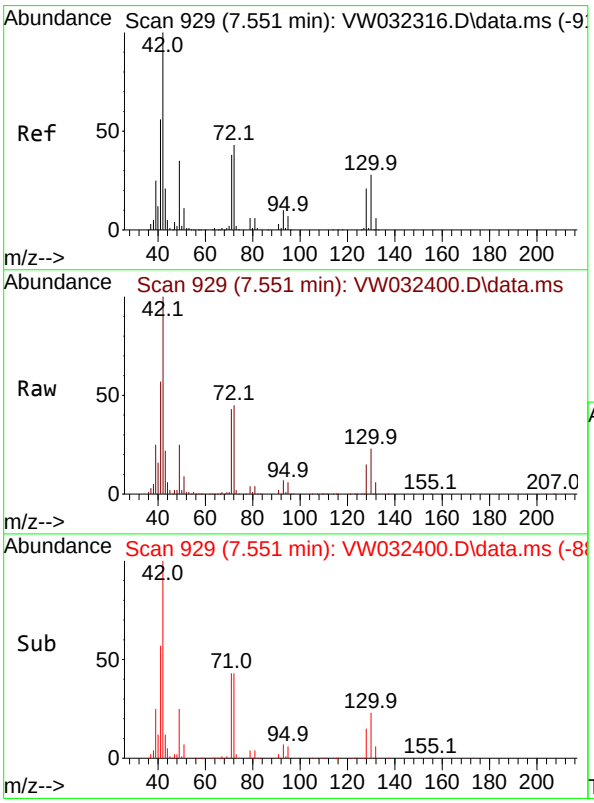
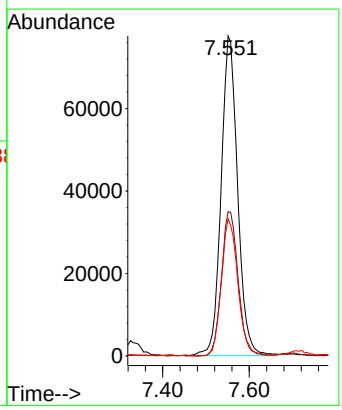
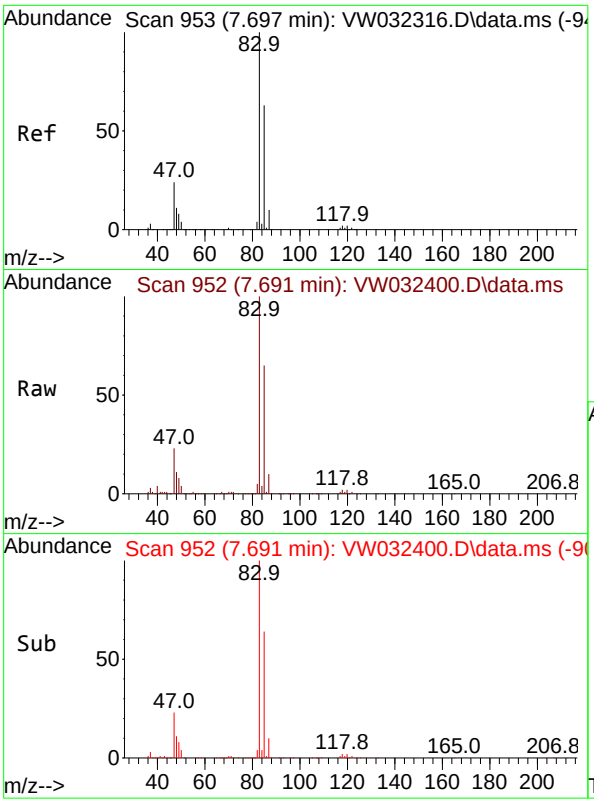


#29
Tetrahydrofuran
Concen: 474.432 ug/l
RT: 7.551 min Scan# 929
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 42 Resp: 206513

Ion	Ratio	Lower	Upper
42	100		
72	45.4	37.4	56.2
71	42.9	36.0	54.0





#30
Chloroform
Concen: 65.780 ug/l
RT: 7.691 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 83 Resp: 20191

Ion	Ratio	Lower	Upper
83	100		
85	64.4	51.2	76.8

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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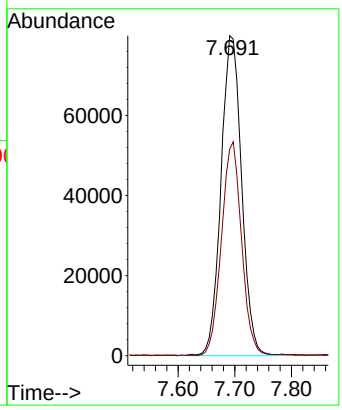
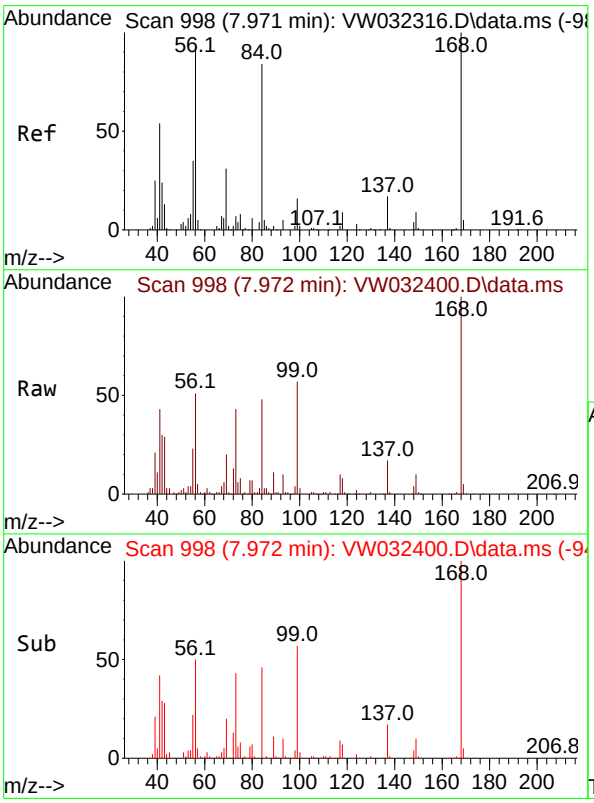
Supervised By :Semsettin Yesilyurt 10/21/2025

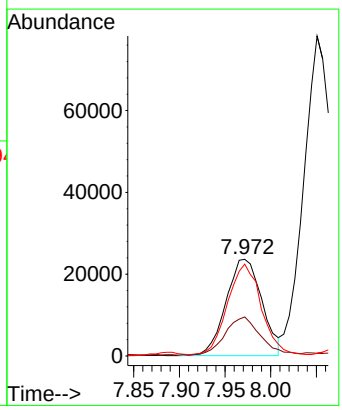


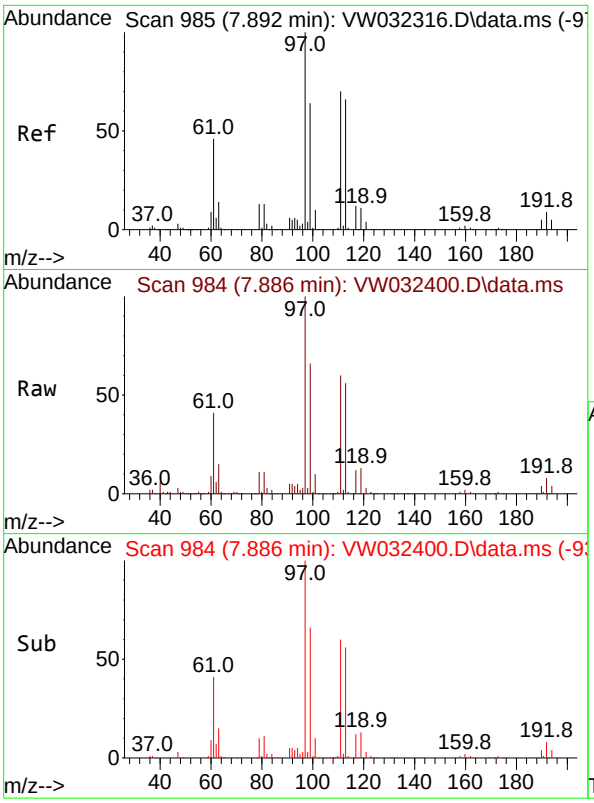


#31
Cyclohexane
Concen: 24.932 ug/l
RT: 7.972 min Scan# 998
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 56 Resp: 64422

Ion	Ratio	Lower	Upper
56	100		
69	39.6	27.7	41.5
84	92.9	74.6	112.0





#32
1,1,1-Trichloroethane
Concen: 51.802 ug/l
RT: 7.886 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 97 Resp: 11267

Ion	Ratio	Lower	Upper
97	100		
99	64.6	50.9	76.3
61	44.2	36.2	54.4

Instrument :
MSVOA_W
ClientSampleId :
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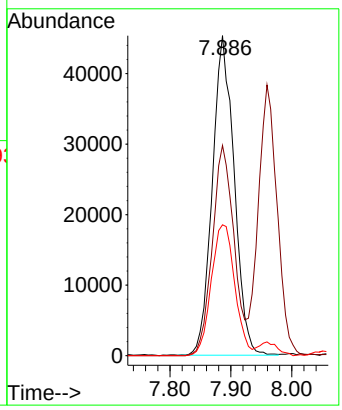
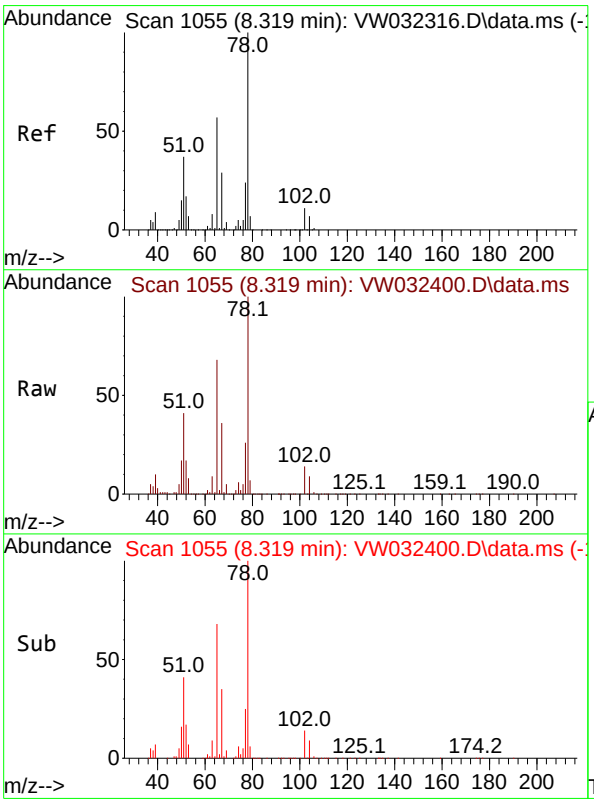
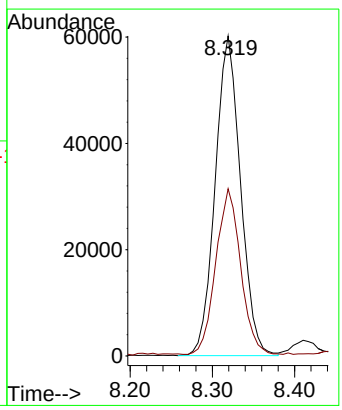


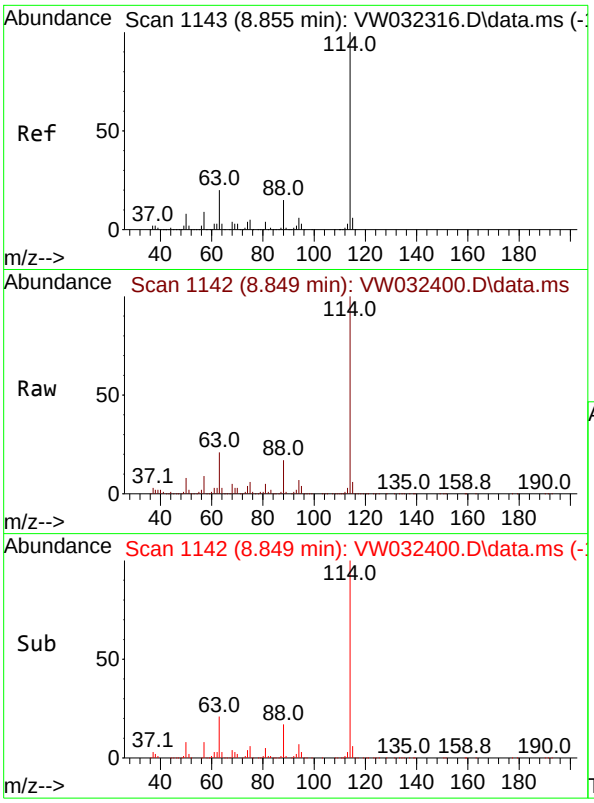


#33
1,2-Dichloroethane-d4
Concen: 70.271 ug/l
RT: 8.319 min Scan# 1055
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 65 Resp: 128979

Ion	Ratio	Lower	Upper
65	100		
67	50.6	0.0	99.6





#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 11
Delta R.T. -0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:114 Resp: 27013

Ion	Ratio	Lower	Upper
114	100		
63	21.4	0.0	40.4
88	17.0	0.0	32.0

Instrument :
MSVOA_W
ClientSampleId :
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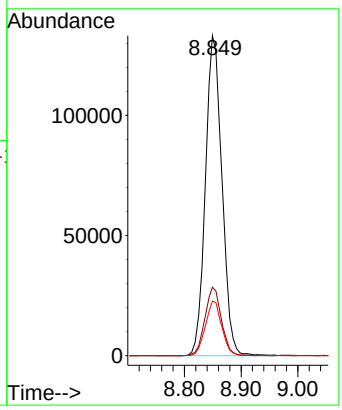
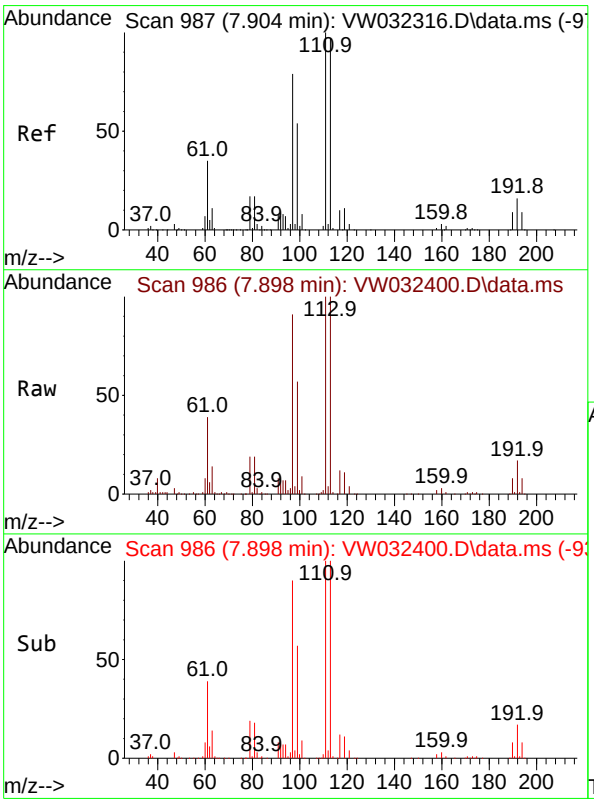
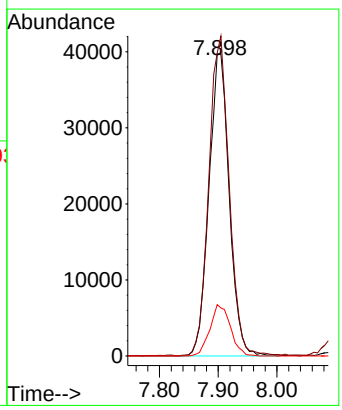


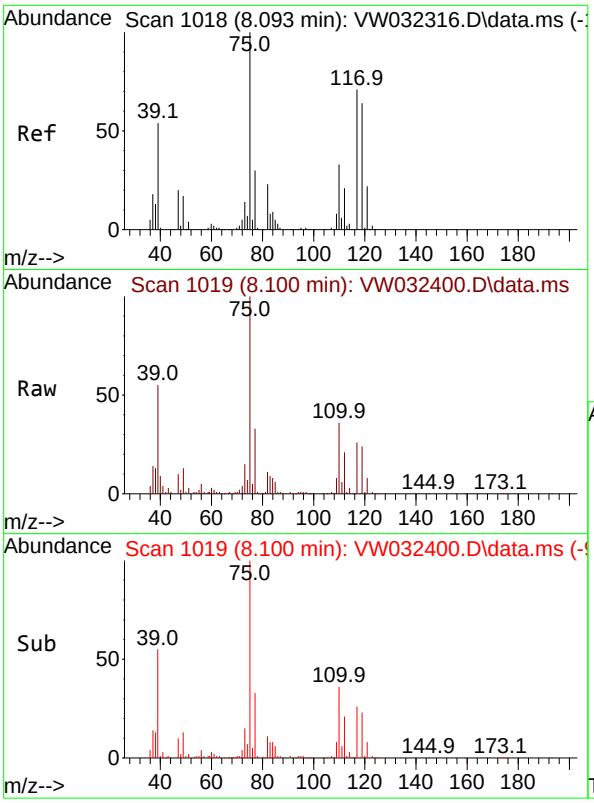


#35
Dibromofluoromethane
Concen: 54.621 ug/l
RT: 7.898 min Scan# 986
Delta R.T. -0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:113 Resp: 95553

Ion	Ratio	Lower	Upper
113	100		
111	106.5	83.9	125.9
192	17.1	14.6	21.8

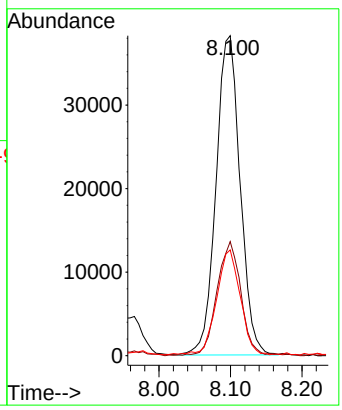




#36
1,1-Dichloropropene
Concen: 36.308 ug/l
RT: 8.100 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 75 Resp: 8964

Ion	Ratio	Lower	Upper
75	100		
110	35.6	17.5	52.5
77	32.1	24.1	36.1



Instrument :
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ClientSampleId :
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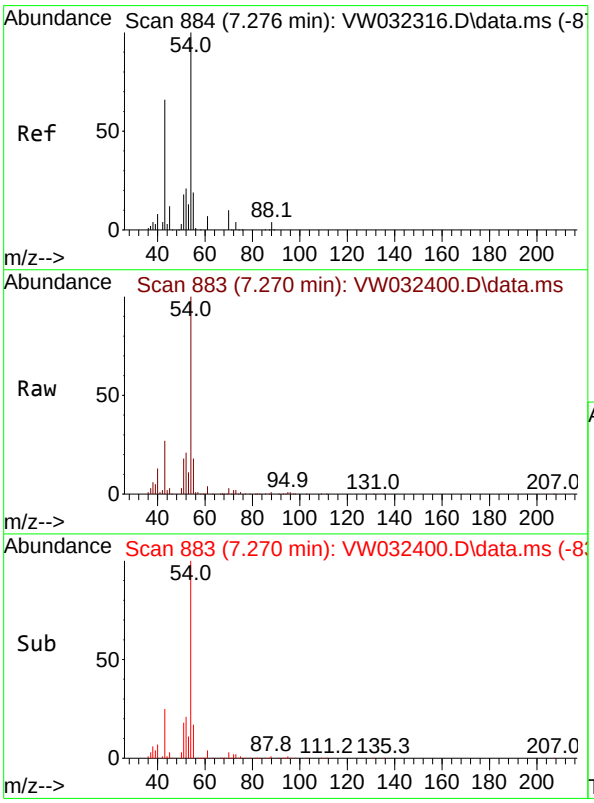
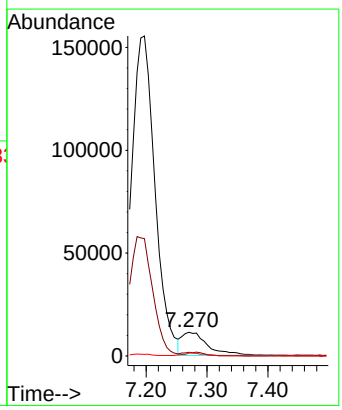
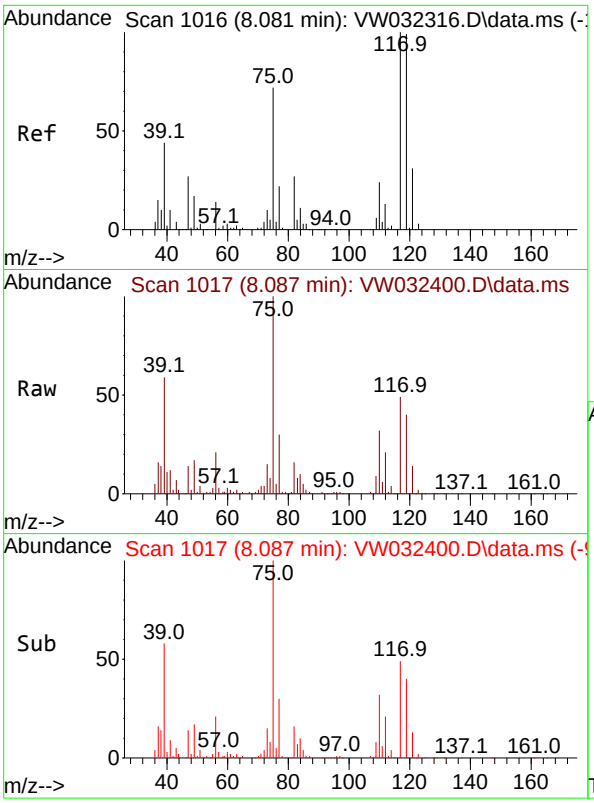


#37
Ethyl Acetate
Concen: 20.175 ug/l
RT: 7.270 min Scan# 883
Delta R.T. -0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 43 Resp: 33154

Ion	Ratio	Lower	Upper
43	100		
61	0.0	11.3	16.9#
70	11.0	8.9	13.3

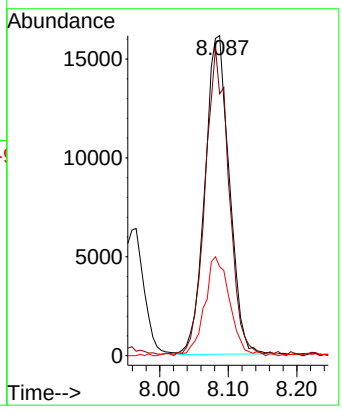




#38
Carbon Tetrachloride
Concen: 17.179 ug/l
RT: 8.087 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:117 Resp: 3991

Ion	Ratio	Lower	Upper
117	100		
119	81.4	74.2	111.2
121	28.0	25.6	38.4



Instrument :
MSVOA_W
ClientSampleId :
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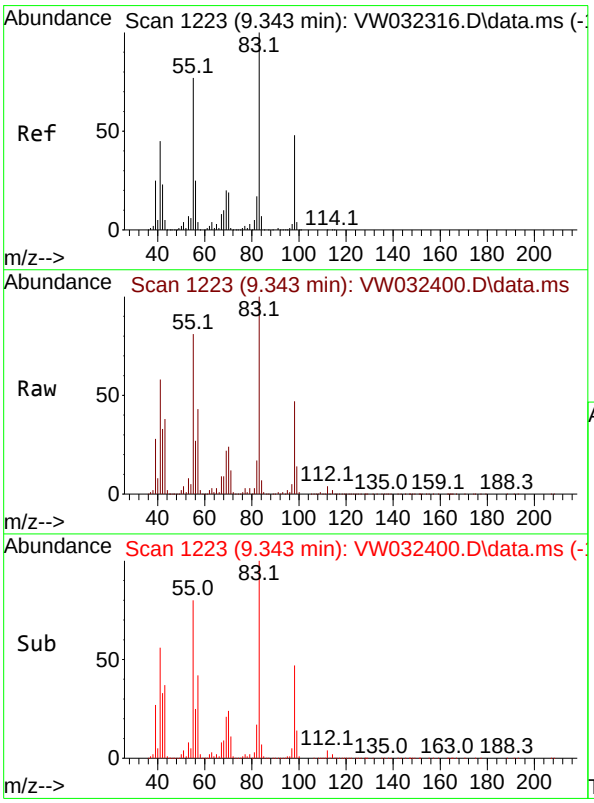
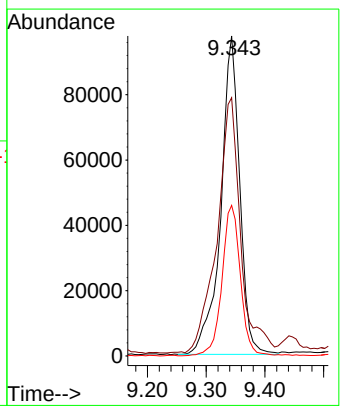
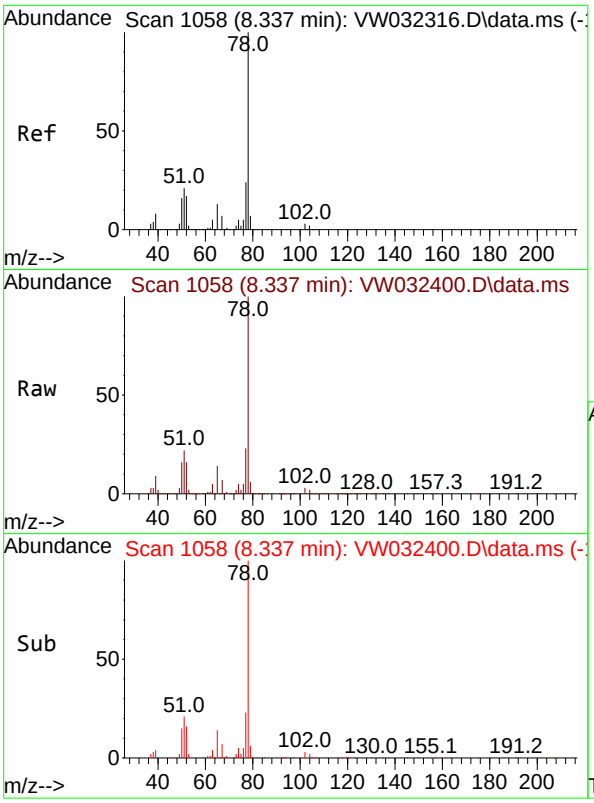


#39
Methylcyclohexane
Concen: 73.280 ug/l
RT: 9.343 min Scan# 1223
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 83 Resp: 218230

Ion	Ratio	Lower	Upper
83	100		
55	80.0	58.4	87.6
98	47.2	39.4	59.2





#40
Benzene
Concen: 52.622 ug/l
RT: 8.337 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 78 Resp: 40722

Ion	Ratio	Lower	Upper
78	100		
77	23.4	20.7	31.1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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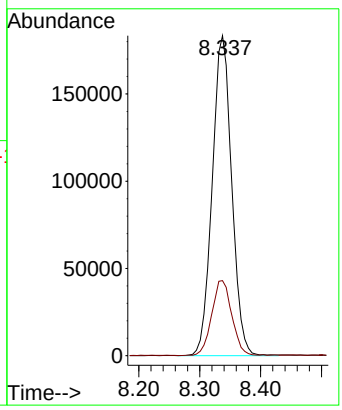
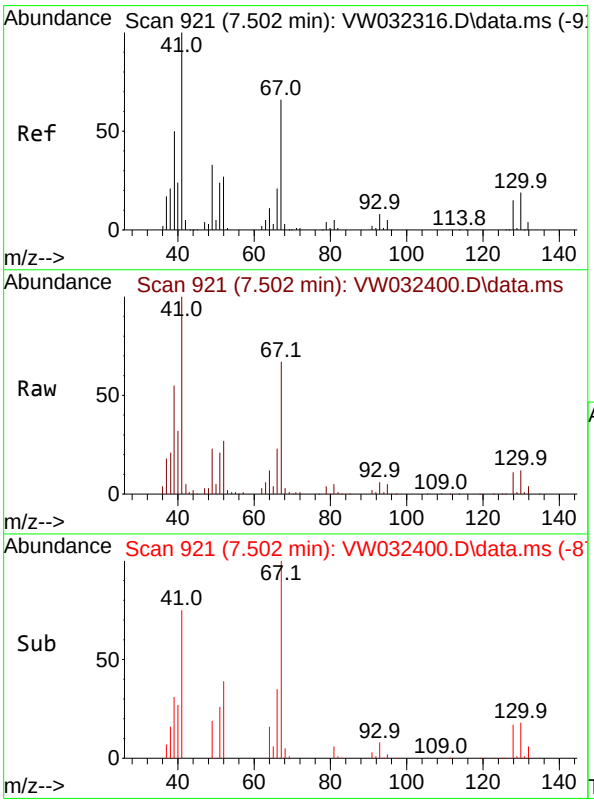
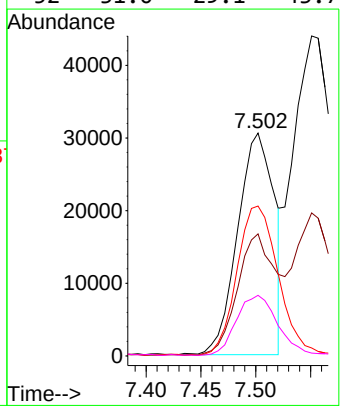


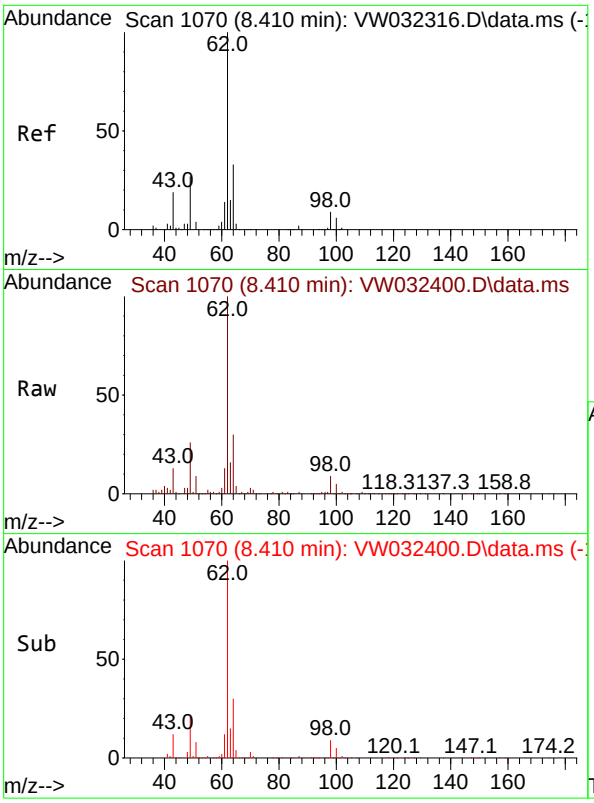


#41
Methacrylonitrile
Concen: 79.822 ug/l
RT: 7.502 min Scan# 921
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 41 Resp: 70692

Ion	Ratio	Lower	Upper
41	100		
39	59.5	50.9	76.3
67	76.5	65.6	98.4
52	31.0	29.1	43.7





#42
1,2-Dichloroethane
Concen: 60.431 ug/l
RT: 8.410 min Scan# 1070
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 62 Resp: 153020

Ion	Ratio	Lower	Upper
62	100		
98	10.3	0.0	18.0

Instrument :
MSVOA_W
ClientSampleId :
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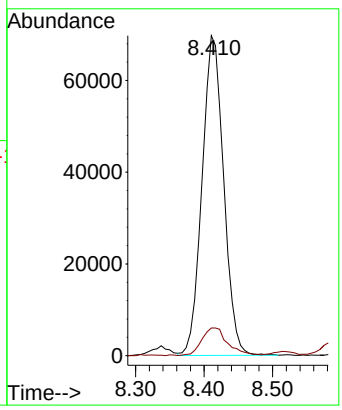
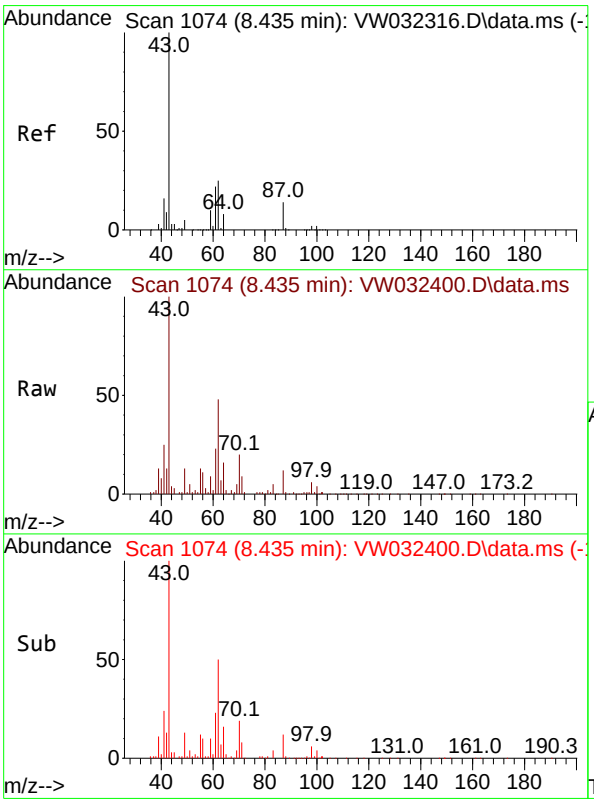
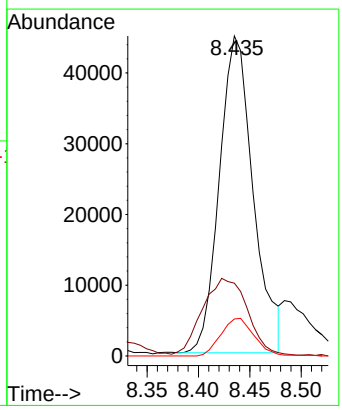


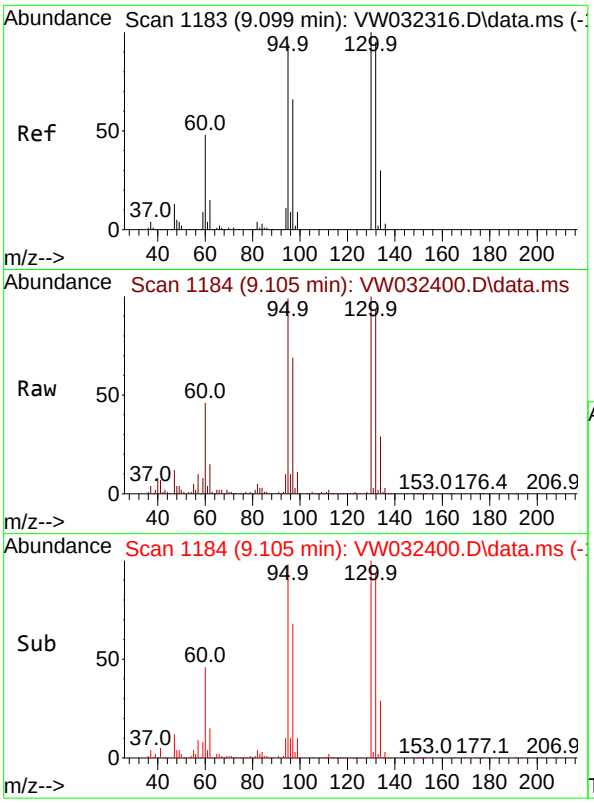


#43
Isopropyl Acetate
Concen: 35.210 ug/l
RT: 8.435 min Scan# 1074
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 43 Resp: 102644

Ion	Ratio	Lower	Upper
43	100		
61	32.2	23.3	34.9
87	11.7	11.1	16.7

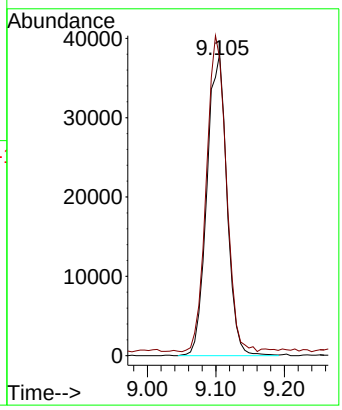




#44
Trichloroethene
Concen: 42.678 ug/l
RT: 9.105 min Scan# 11
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:130 Resp: 7733

Ion	Ratio	Lower	Upper
130	100		
95	97.0	0.0	220.0



Instrument :
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ClientSampleId :
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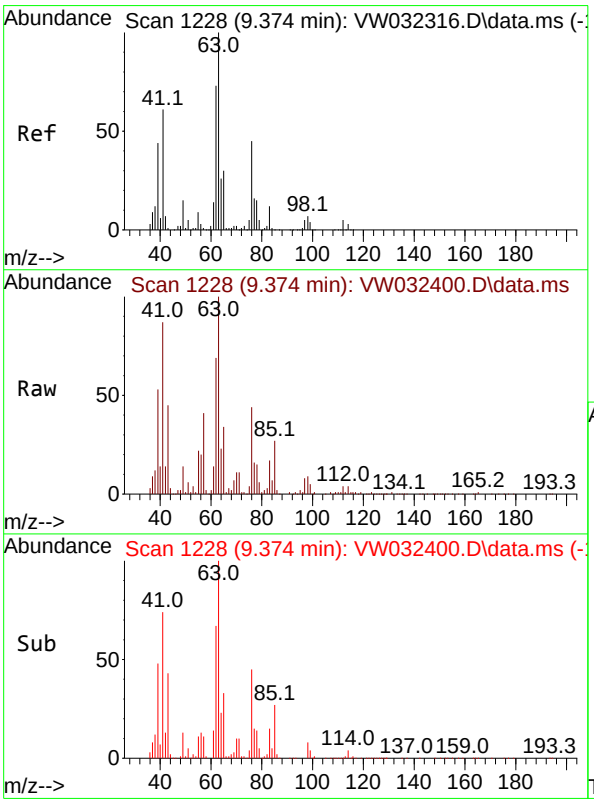
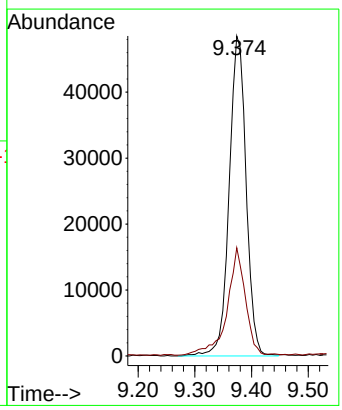
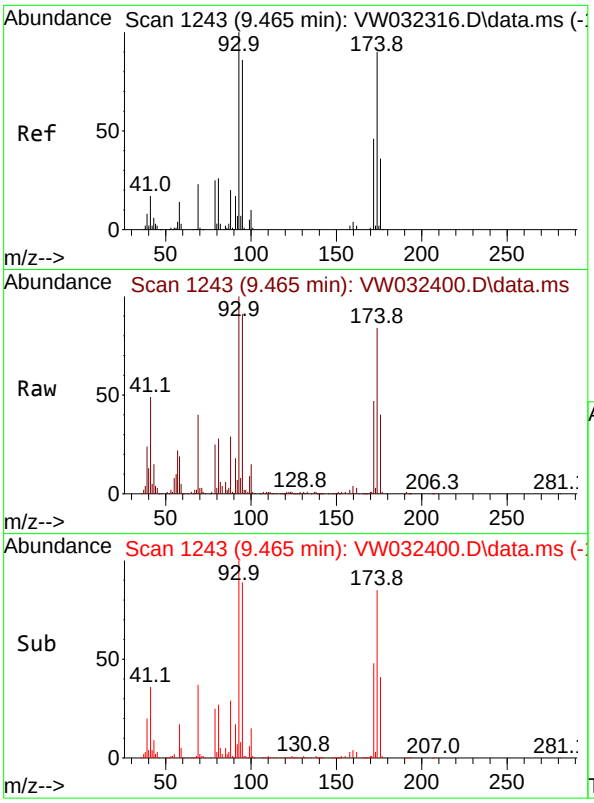


#45
1,2-Dichloropropane
Concen: 52.155 ug/l
RT: 9.374 min Scan# 1228
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 63 Resp: 100743

Ion	Ratio	Lower	Upper
63	100		
65	33.5	24.3	36.5

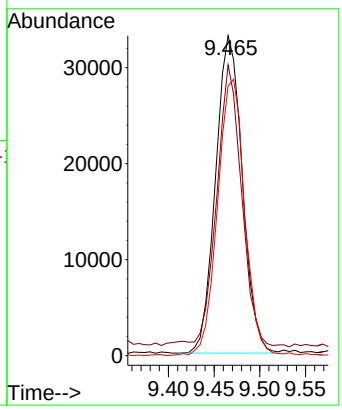




#46
Dibromomethane
Concen: 56.603 ug/l
RT: 9.465 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 93 Resp: 6723

Ion	Ratio	Lower	Upper
93	100		
95	84.0	67.4	101.2
174	88.5	75.7	113.5



Instrument :
MSVOA_W
ClientSampleId :
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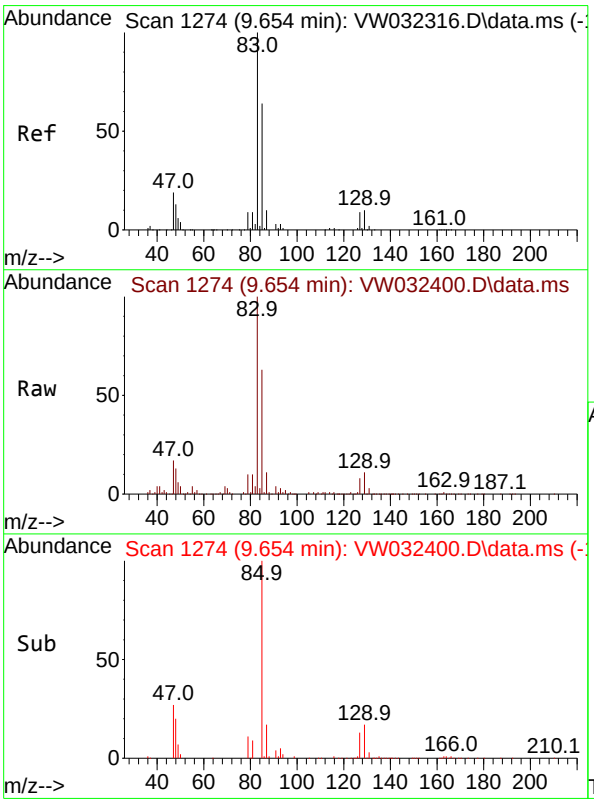
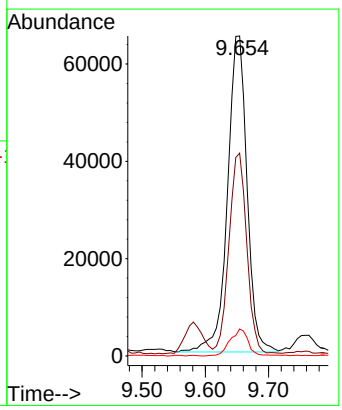
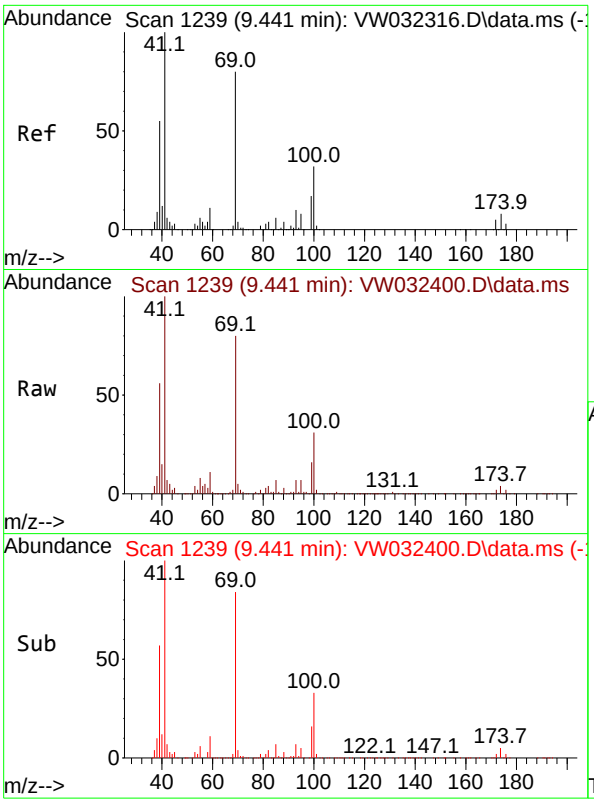


#47
Bromodichloromethane
Concen: 51.296 ug/l
RT: 9.654 min Scan# 1274
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 83 Resp: 139358

Ion	Ratio	Lower	Upper
83	100		
85	63.3	48.7	73.1
127	8.4	6.4	9.6

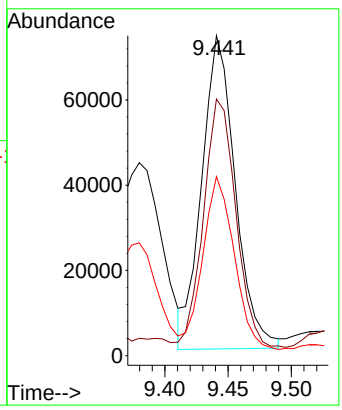




#48
Methyl methacrylate
Concen: 95.505 ug/l
RT: 9.441 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 41 Resp: 13536

Ion	Ratio	Lower	Upper
41	100		
69	80.2	71.5	107.3
39	51.8	55.9	83.9#



Instrument :
MSVOA_W
ClientSampleId :
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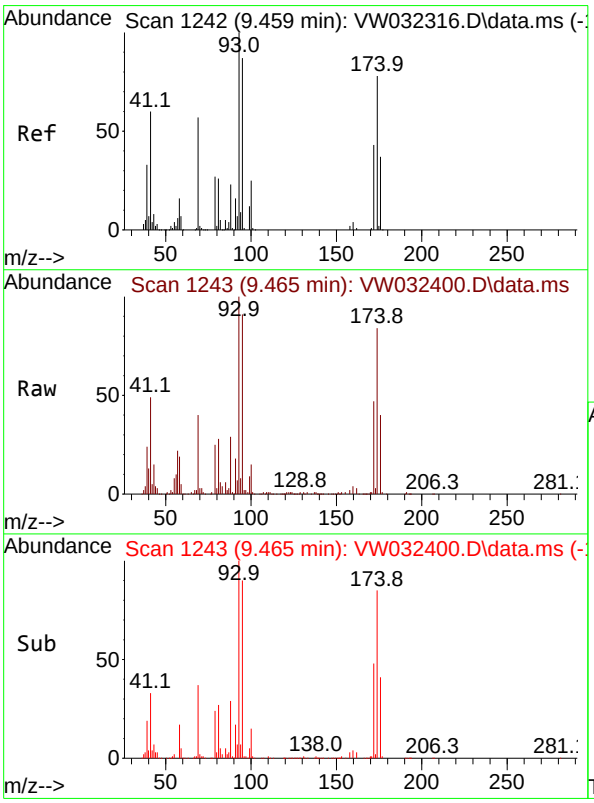
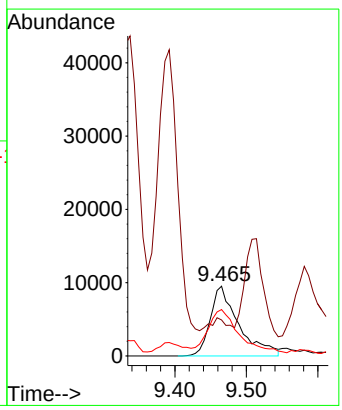
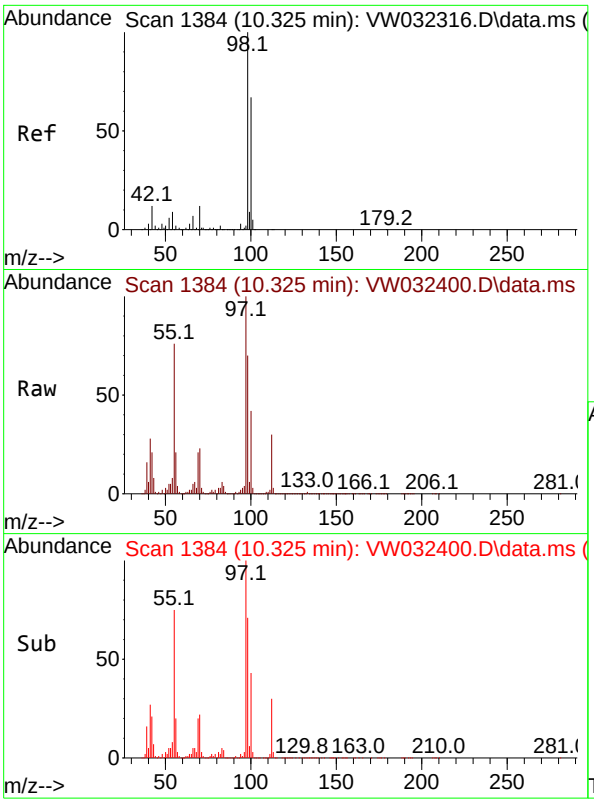


#49
1,4-Dioxane
Concen: 1620.540 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 88 Resp: 26309

Ion	Ratio	Lower	Upper
88	100		
43	36.9	18.0	27.0#
58	76.2	55.4	83.0





#50
Toluene-d8
Concen: 41.157 ug/l
RT: 10.325 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 98 Resp: 26573

Ion	Ratio	Lower	Upper
98	100		
100	57.0	51.4	77.2

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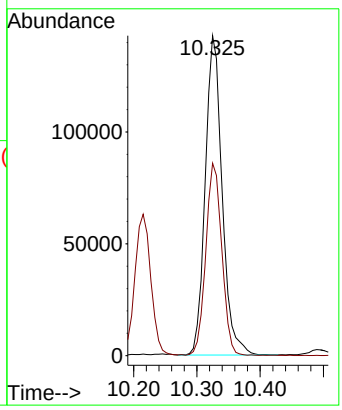
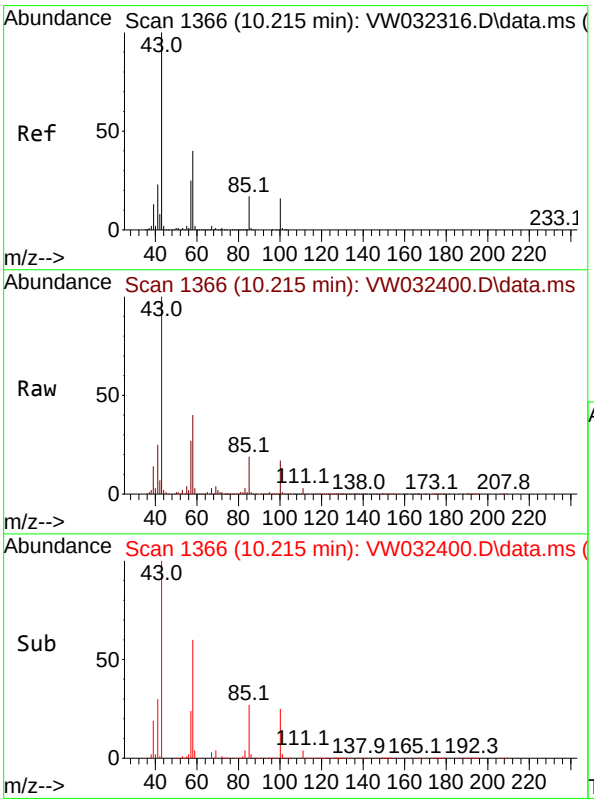
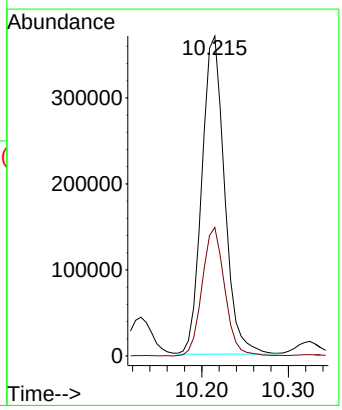


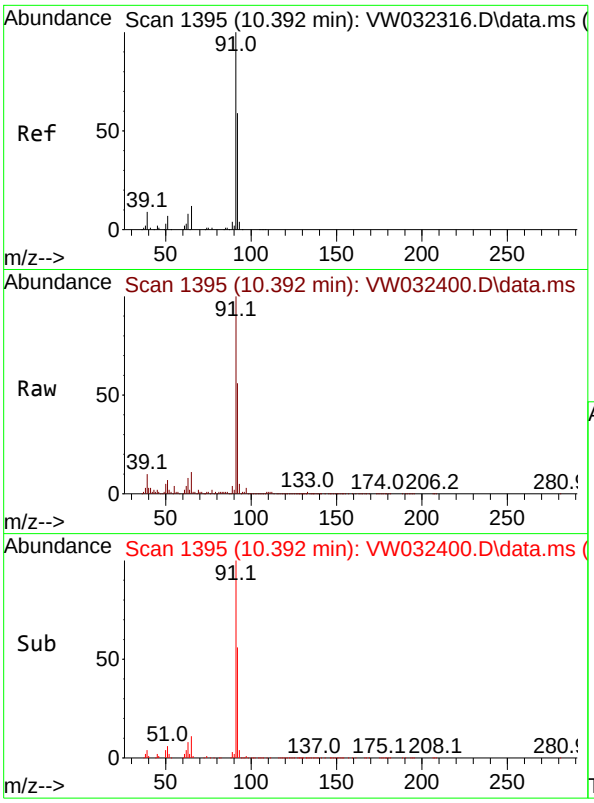


#51
4-Methyl-2-Pentanone
Concen: 399.689 ug/l
RT: 10.215 min Scan# 1366
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 43 Resp: 674877

Ion	Ratio	Lower	Upper
43	100		
58	40.2	32.0	48.0





#52
Toluene
Concen: 33.838 ug/l
RT: 10.392 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 92 Resp: 16307

Ion	Ratio	Lower	Upper
92	100		
91	175.9	137.5	206.3

Instrument :
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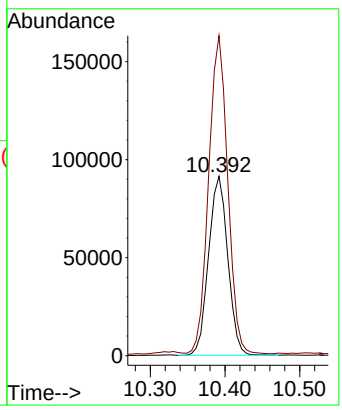
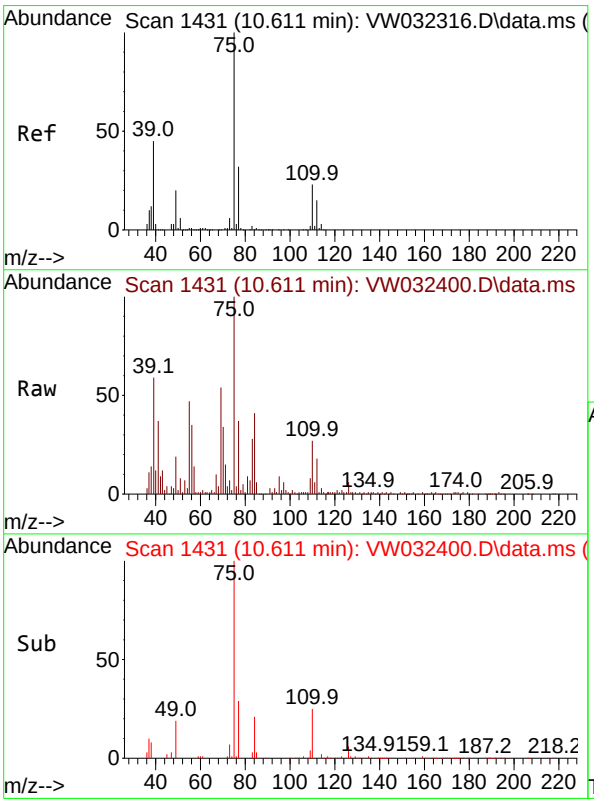
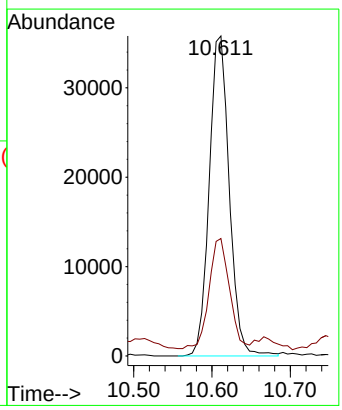


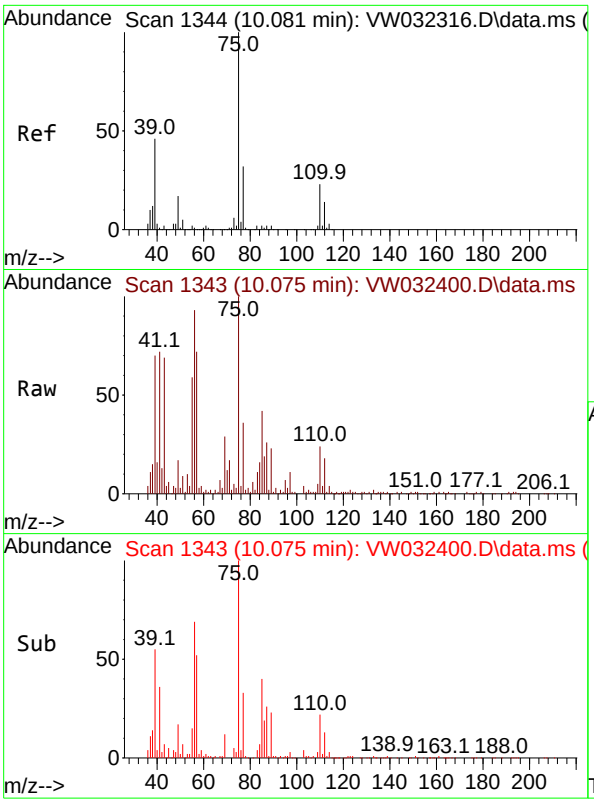


#53
t-1,3-Dichloropropene
Concen: 24.156 ug/l
RT: 10.611 min Scan# 1431
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 75 Resp: 63668

Ion	Ratio	Lower	Upper
75	100		
77	34.4	25.6	38.4

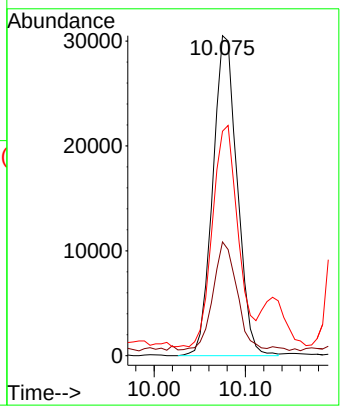




#54
cis-1,3-Dichloropropene
Concen: 18.666 ug/l
RT: 10.075 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 75 Resp: 5667

Ion	Ratio	Lower	Upper
75	100		
77	33.8	25.1	37.7
39	67.3	43.2	64.8#



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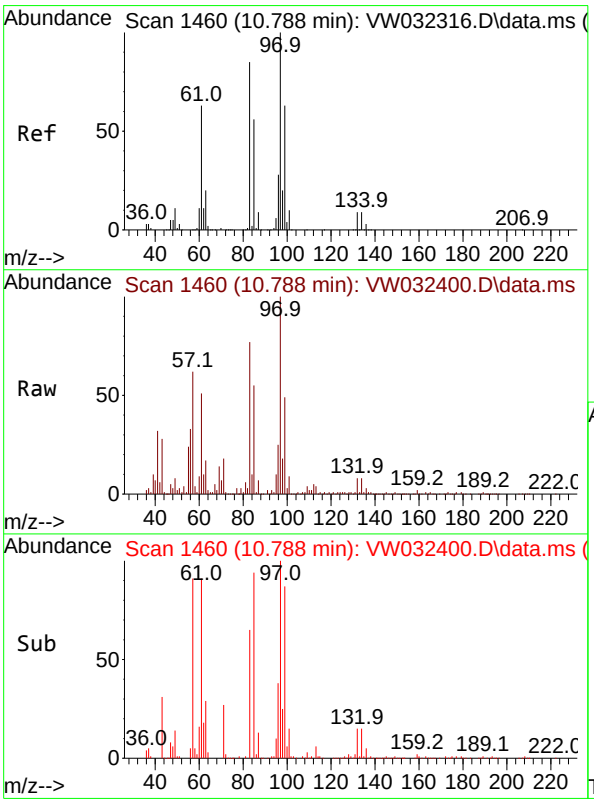
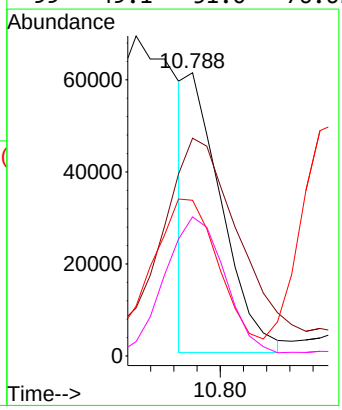
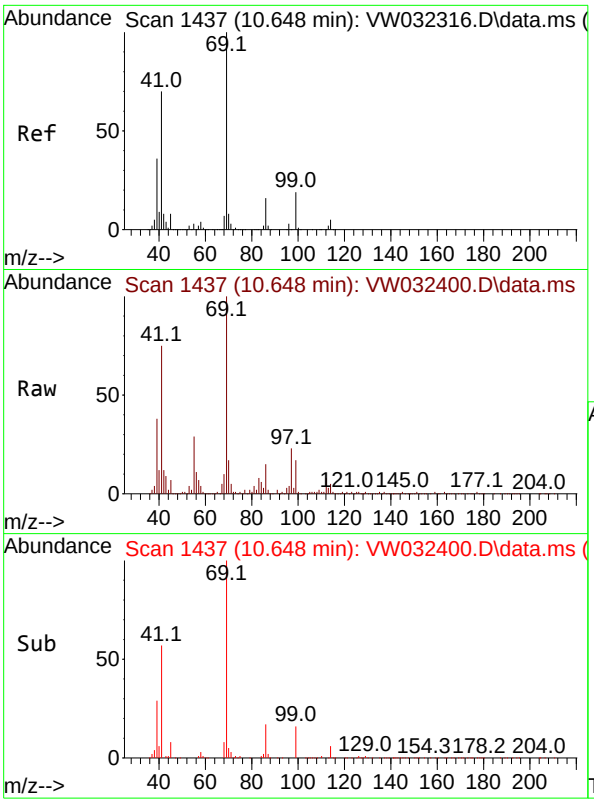


#55
1,1,2-Trichloroethane
Concen: 40.355 ug/l m
RT: 10.788 min Scan# 1460
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 97 Resp: 64063

Ion	Ratio	Lower	Upper
97	100		
83	76.9	71.0	106.6
85	55.0	42.8	64.2
99	49.1	51.0	76.6#

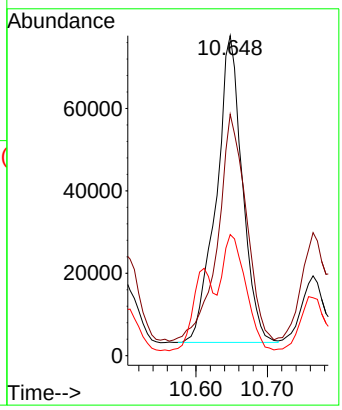




#56
Ethyl methacrylate
Concen: 84.867 ug/l
RT: 10.648 min Scan# 14
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 69 Resp: 18857

Ion	Ratio	Lower	Upper
69	100		
41	80.5	53.2	79.8
39	33.0	32.9	49.3



Instrument :
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ClientSampleId :
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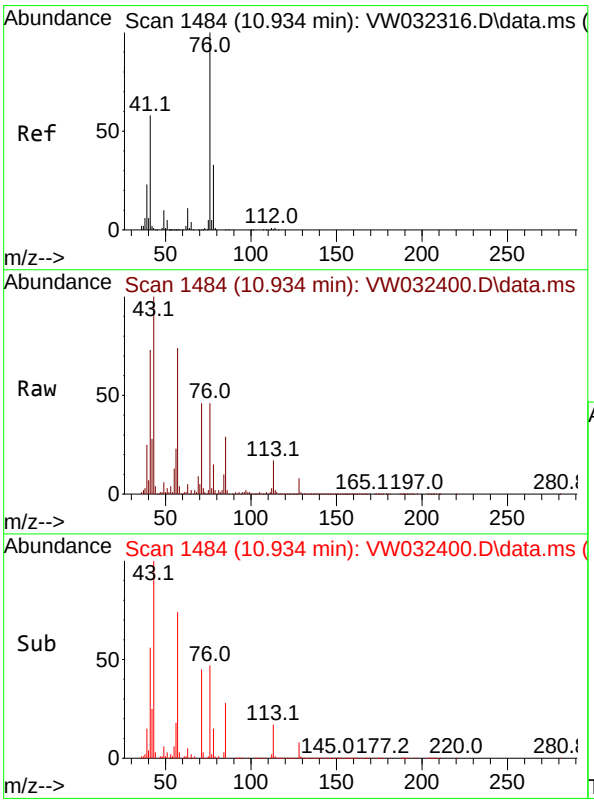
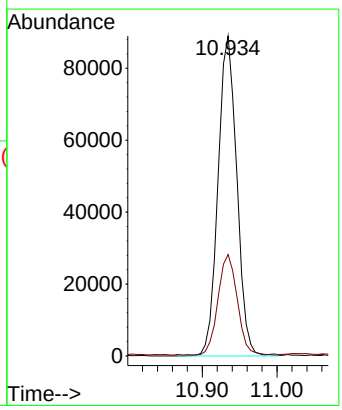
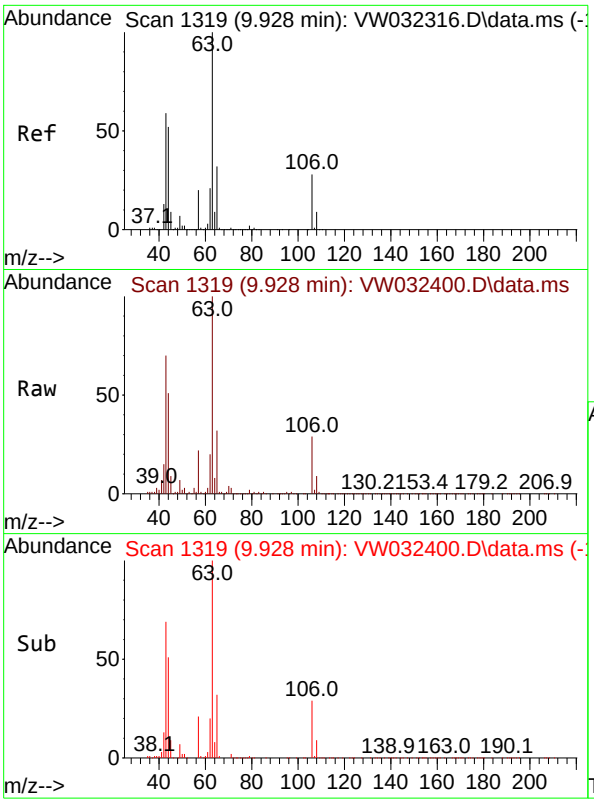


#57
1,3-Dichloropropane
Concen: 55.361 ug/l
RT: 10.934 min Scan# 1484
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 76 Resp: 155221

Ion	Ratio	Lower	Upper
76	100		
78	31.9	26.2	39.4





#58
2-Chloroethyl Vinyl ether
Concen: 354.640 ug/l
RT: 9.928 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 63 Resp: 41937

Ion	Ratio	Lower	Upper
63	100		
106	28.9	24.3	36.5

Instrument :
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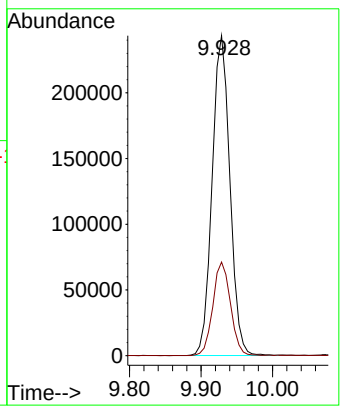
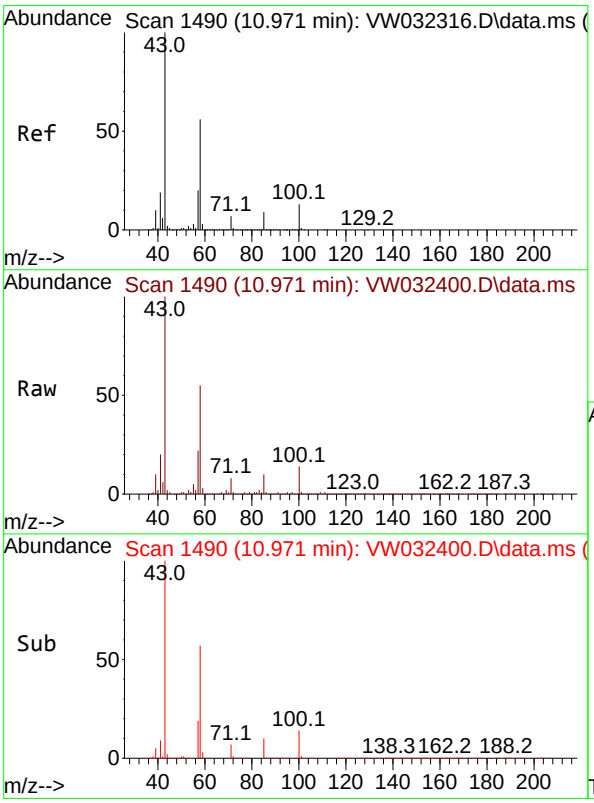
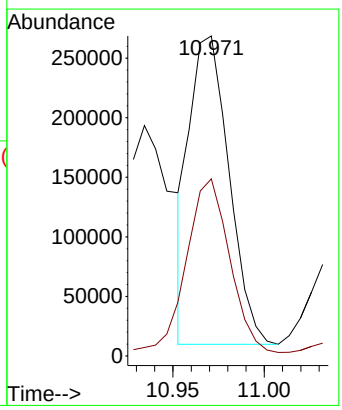


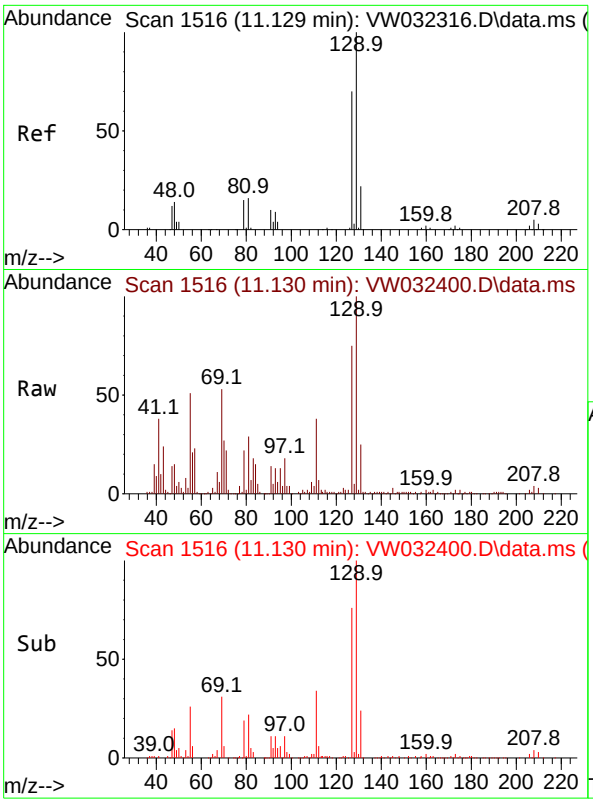


#59
2-Hexanone
Concen: 326.137 ug/l
RT: 10.971 min Scan# 1490
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 43 Resp: 388390

Ion	Ratio	Lower	Upper
43	100		
58	66.1	27.5	82.4

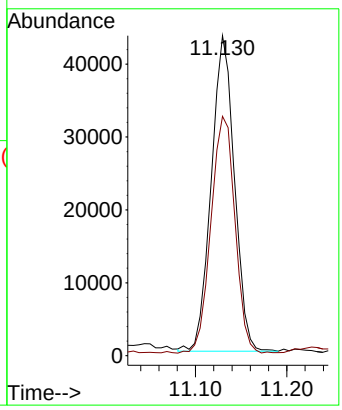




#60
Dibromochloromethane
Concen: 42.178 ug/l
RT: 11.130 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:129 Resp: 7602

Ion	Ratio	Lower	Upper
129	100		
127	77.8	38.1	114.5



Instrument :
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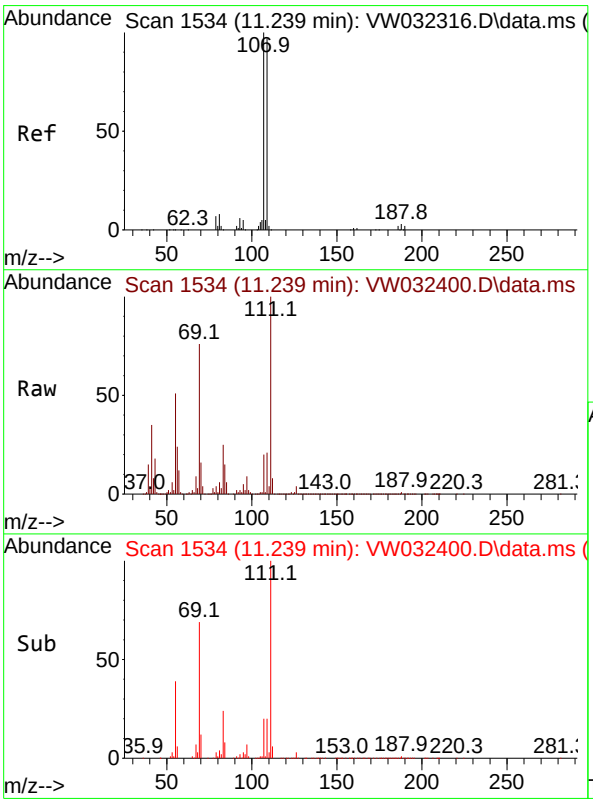
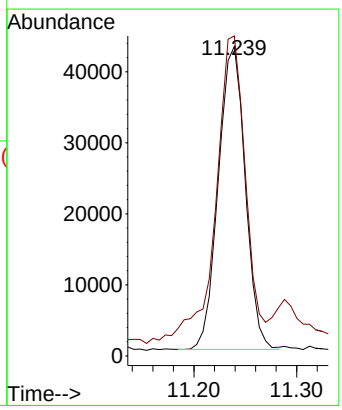
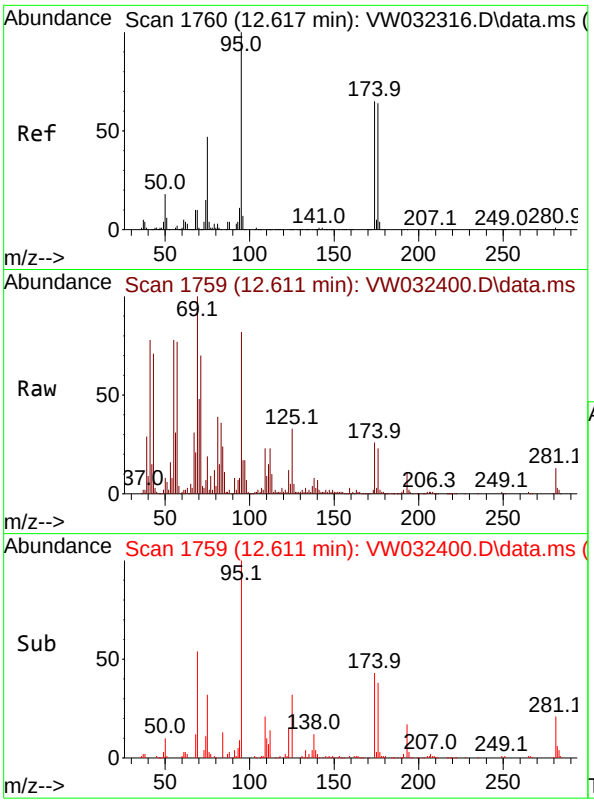


#61
1,2-Dibromoethane
Concen: 50.062 ug/l
RT: 11.239 min Scan# 1534
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:107 Resp: 77493

Ion	Ratio	Lower	Upper
107	100		
109	112.8	74.5	111.7#

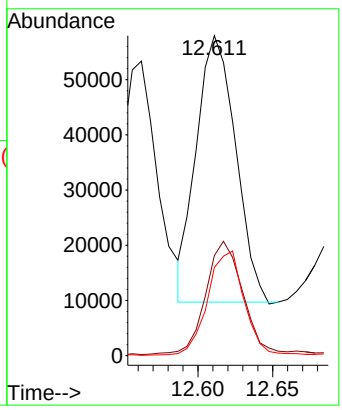




#62
4-Bromofluorobenzene
Concen: 36.034 ug/l
RT: 12.611 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 95 Resp: 8793

Ion	Ratio	Lower	Upper
95	100		
174	41.1	0.0	145.6
176	36.6	0.0	140.8



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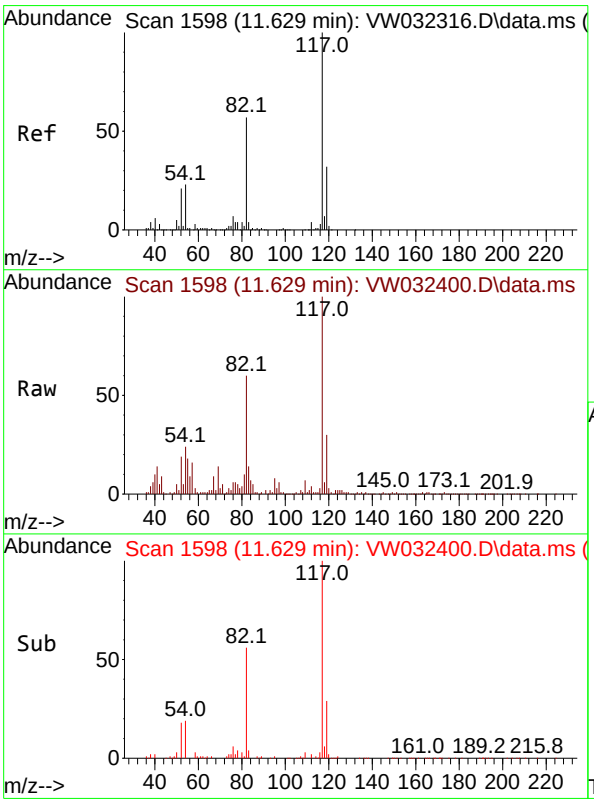
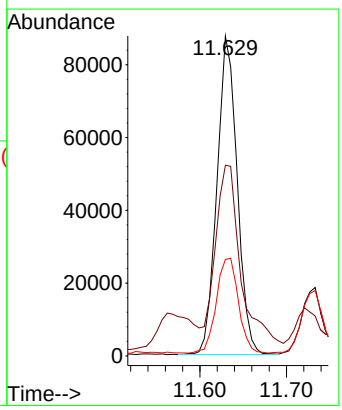
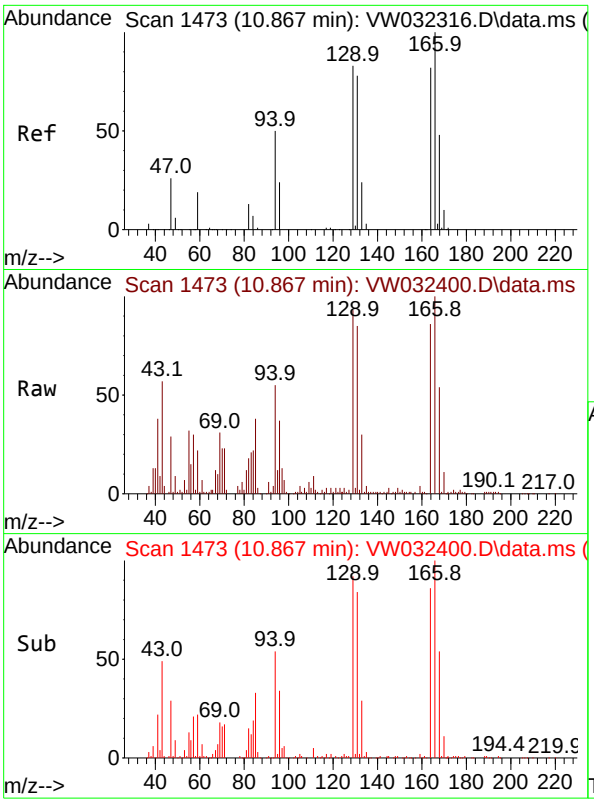


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1598
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:117 Resp: 141965

Ion	Ratio	Lower	Upper
117	100		
82	55.1	42.7	64.1
119	29.3	25.2	37.8

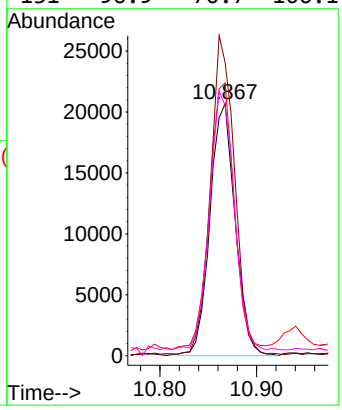




#64
Tetrachloroethene
Concen: 43.982 ug/l
RT: 10.867 min Scan# 14
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:164 Resp: 3736

Ion	Ratio	Lower	Upper
164	100		
166	115.7	97.5	146.3
129	104.8	71.2	106.8
131	96.9	70.7	106.1



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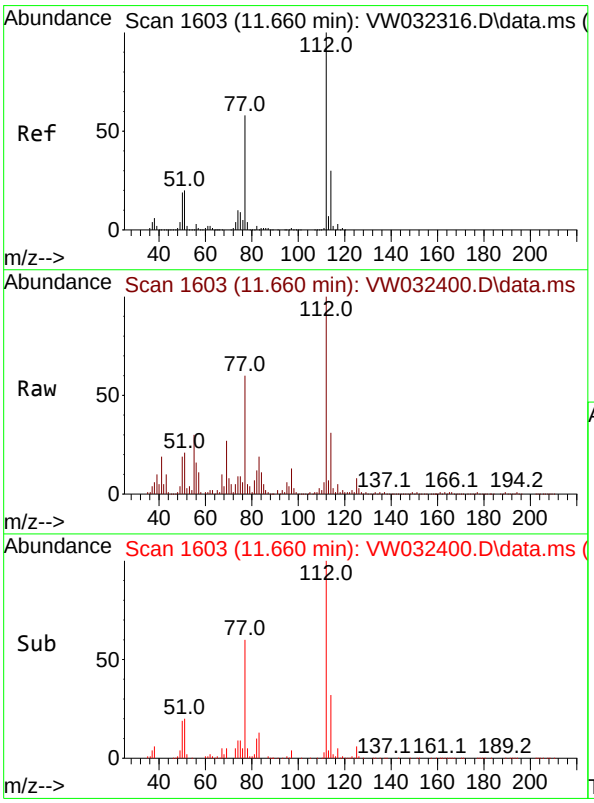
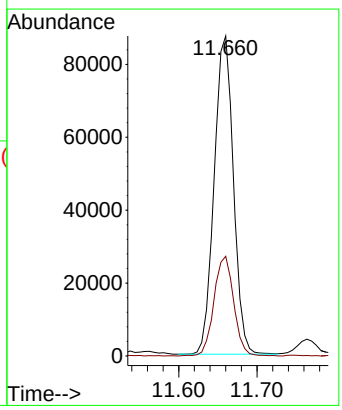
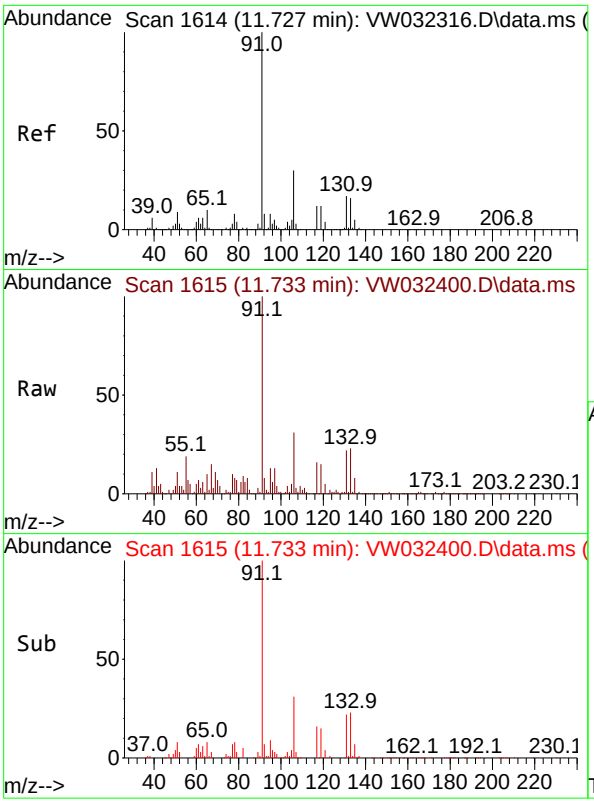


#65
Chlorobenzene
Concen: 47.782 ug/l
RT: 11.660 min Scan# 1603
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:112 Resp: 149251

Ion	Ratio	Lower	Upper
112	100		
114	31.3	26.0	39.0





#66
1,1,1,2-Tetrachloroethane
Concen: 46.016 ug/l
RT: 11.733 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:131 Resp: 4476

Ion	Ratio	Lower	Upper
131	100		
133	98.1	47.7	143.1
119	66.9	32.8	98.3

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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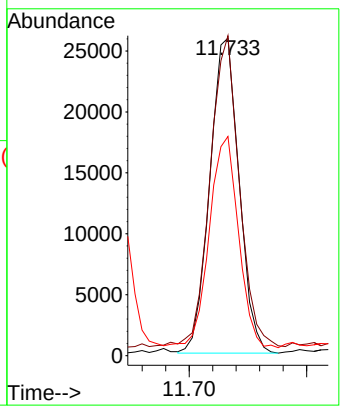
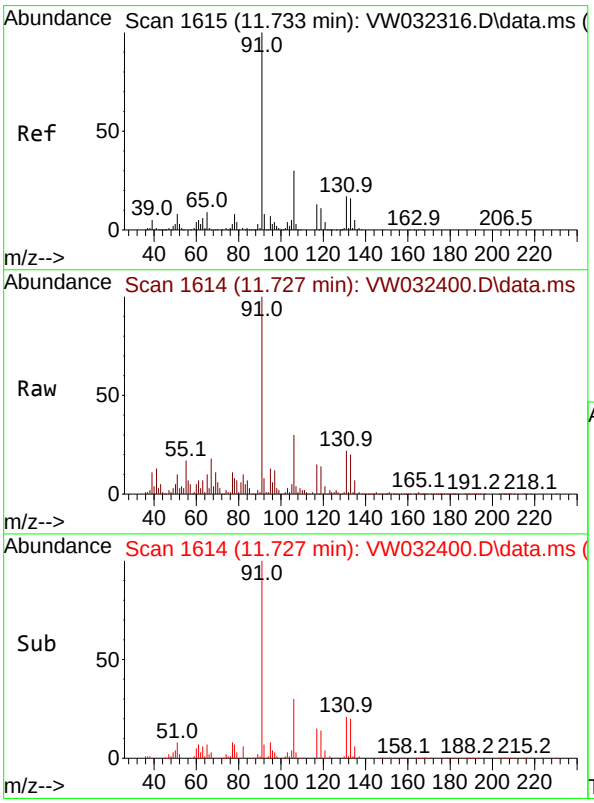
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

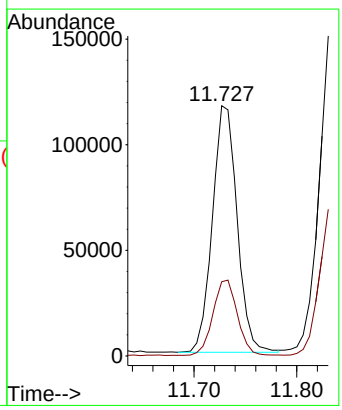


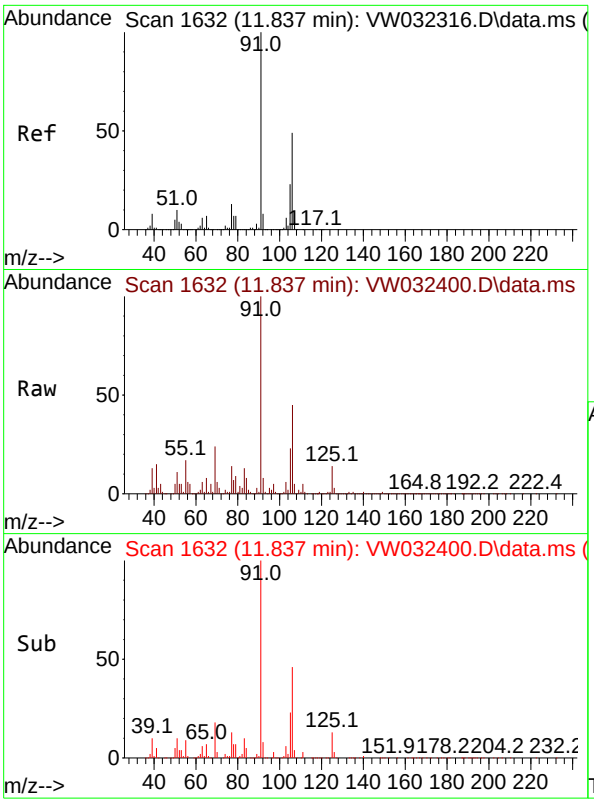


#67
Ethyl Benzene
Concen: 37.390 ug/l
RT: 11.727 min Scan# 1614
Delta R.T. -0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 91 Resp: 194676

Ion	Ratio	Lower	Upper
91	100		
106	29.8	25.3	37.9





#68
m/p-Xylenes
Concen: 74.236 ug/l
RT: 11.837 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:106 Resp: 14904

Ion	Ratio	Lower	Upper
106	100		
91	211.1	164.2	246.2

Instrument :
MSVOA_W
ClientSampleId :
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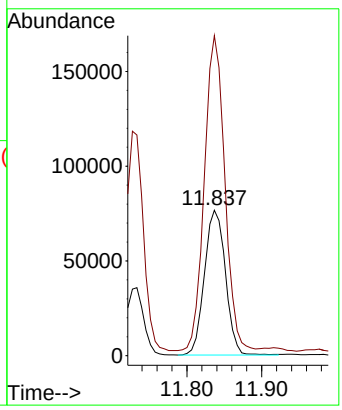
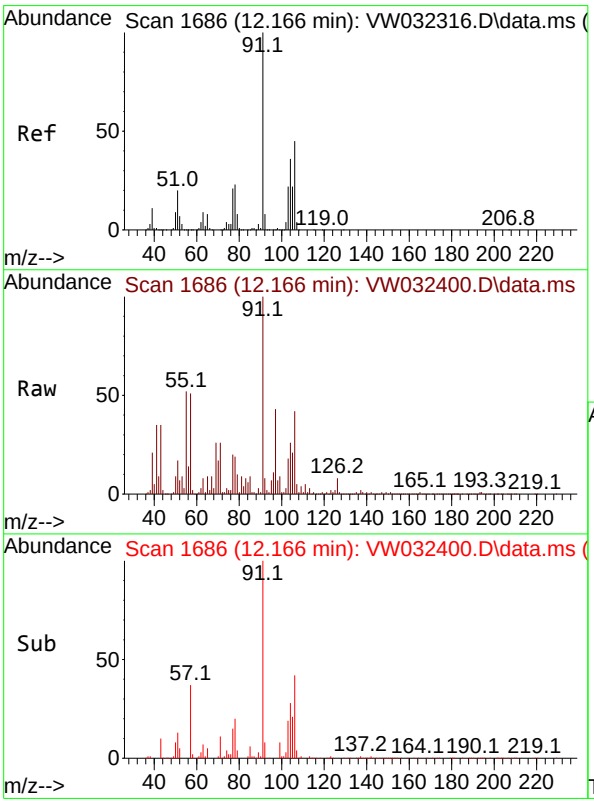
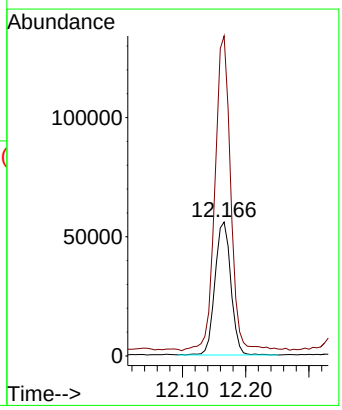


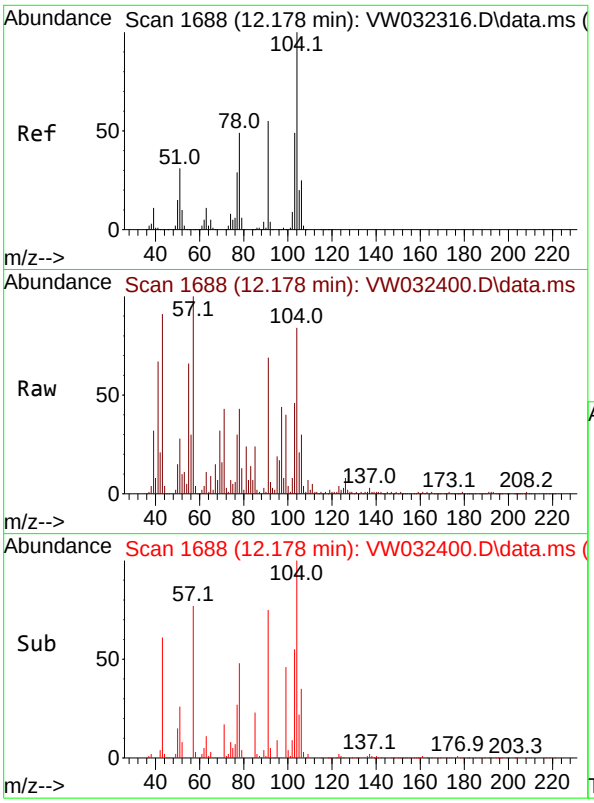


#69
o-Xylene
Concen: 51.563 ug/l
RT: 12.166 min Scan# 1686
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:106 Resp: 96813

Ion	Ratio	Lower	Upper
106	100		
91	236.0	108.7	326.3





#70
Styrene
Concen: 36.149 ug/l
RT: 12.178 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:104 Resp: 11850

Ion	Ratio	Lower	Upper
104	100		
78	57.9	41.6	62.4
103	58.4	44.8	67.2

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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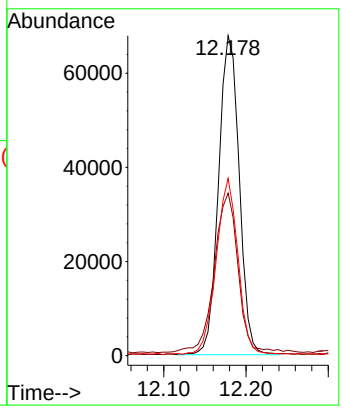
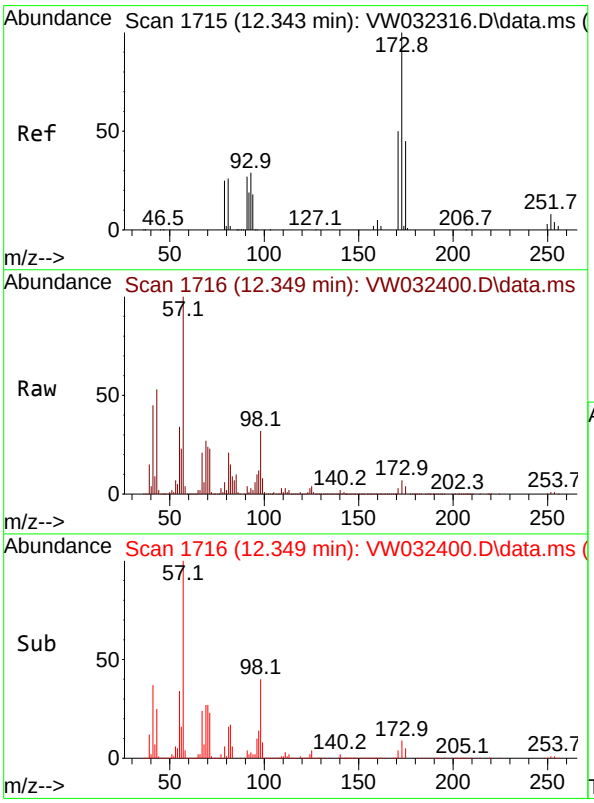
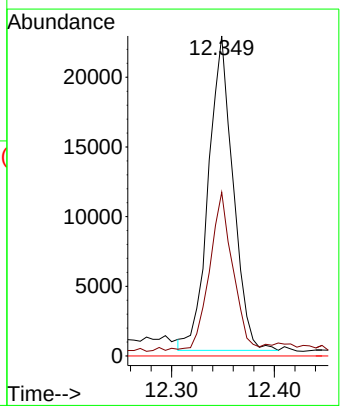


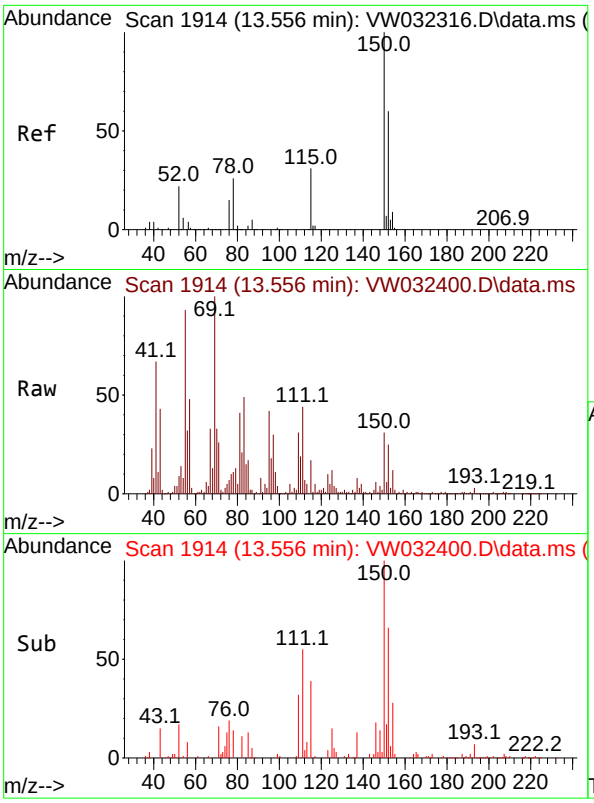


#71
Bromoform
Concen: 67.377 ug/l
RT: 12.349 min Scan# 1716
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:173 Resp: 37573

Ion	Ratio	Lower	Upper
173	100		
175	46.0	24.9	74.7
254	0.0	0.2	0.2#





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:152 Resp: 5438

Ion	Ratio	Lower	Upper
152	100		
115	45.1	31.8	95.4
150	92.5	0.0	343.0

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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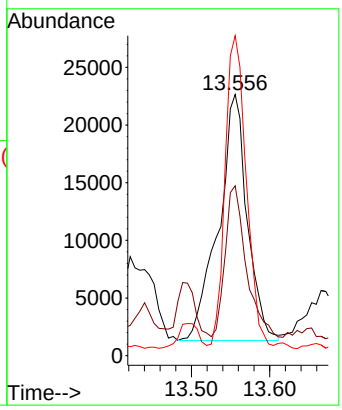
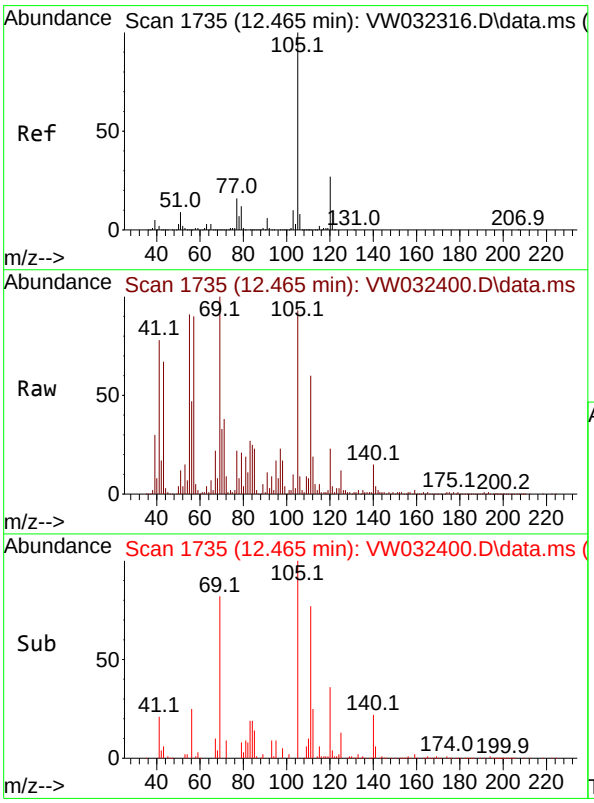
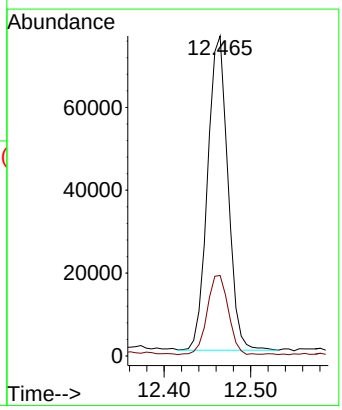


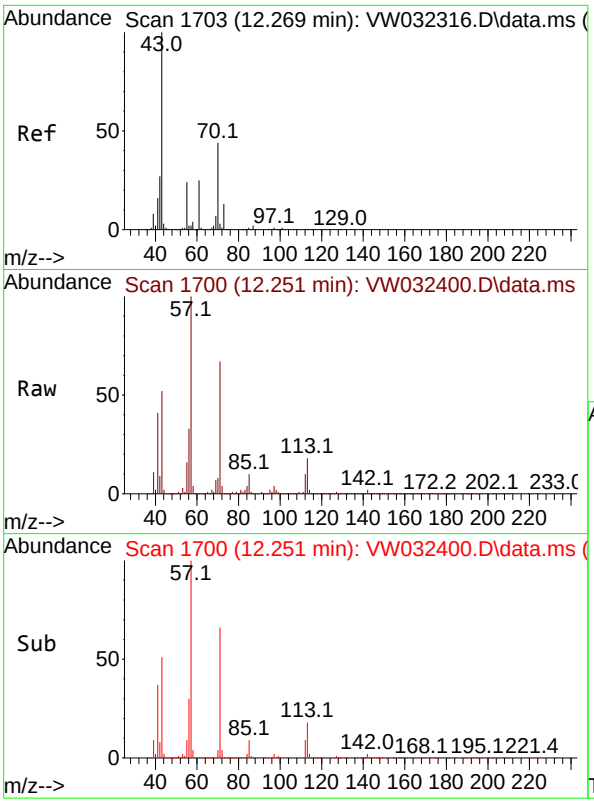


#73
Isopropylbenzene
Concen: 33.250 ug/l
RT: 12.465 min Scan# 1735
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:105 Resp: 123721

Ion	Ratio	Lower	Upper
105	100		
120	26.0	13.0	38.9

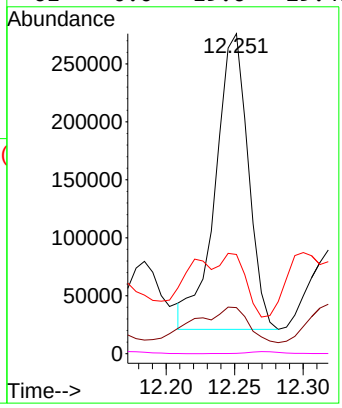




#74
N-amyl acetate
Concen: 357.696 ug/l
RT: 12.251 min Scan# 1
Delta R.T. -0.018 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 43 Resp: 42459

Ion	Ratio	Lower	Upper
43	100		
70	20.2	35.3	52.9#
55	0.0	19.9	29.9#
61	0.0	19.6	29.4#



Instrument :
MSVOA_W
ClientSampleId :
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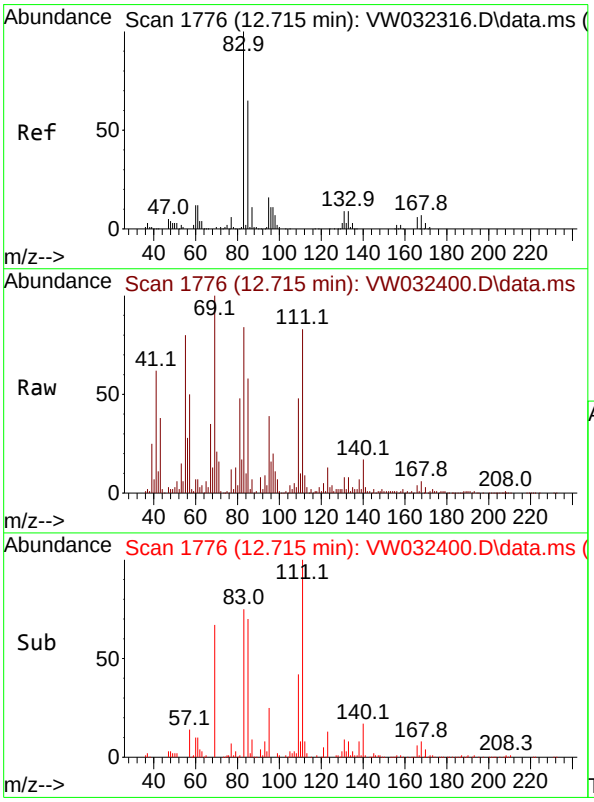
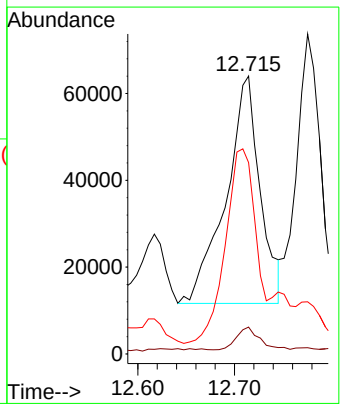
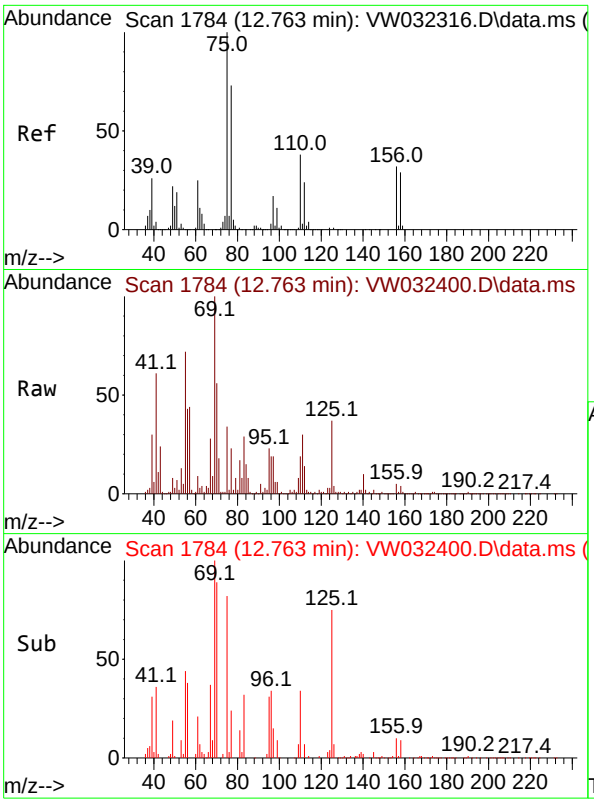


#75
1,1,2,2-Tetrachloroethane
Concen: 139.478 ug/l
RT: 12.715 min Scan# 1776
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 83 Resp: 128863

Ion	Ratio	Lower	Upper
83	100		
131	6.7	5.1	15.4
85	79.2	32.2	96.6





#76
1,2,3-Trichloropropane
Concen: 111.062 ug/l m
RT: 12.763 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 75 Resp: 7948

Ion	Ratio	Lower	Upper
75	100		
77	170.9	141.7	425.1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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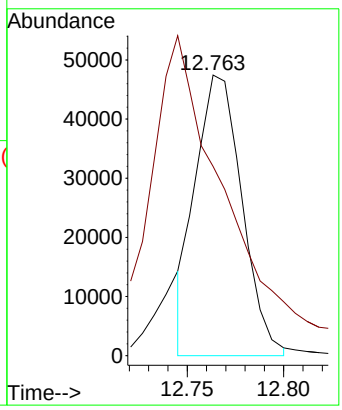
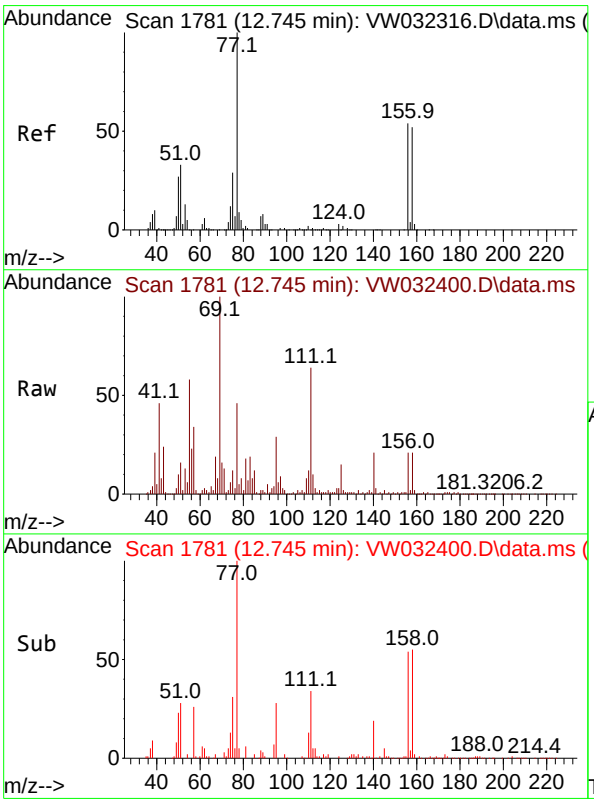
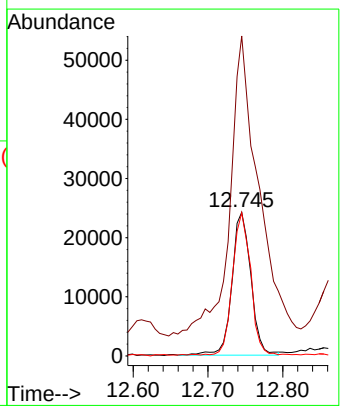


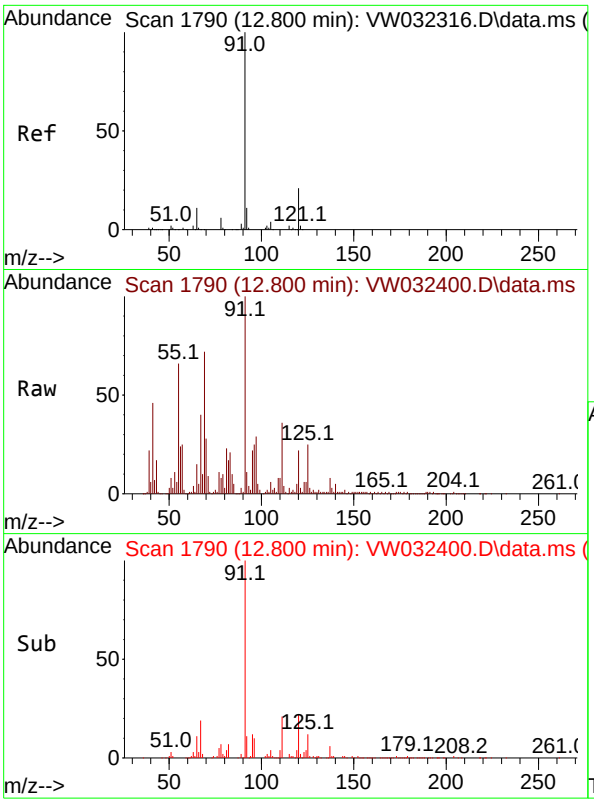


#77
Bromobenzene
Concen: 47.406 ug/l
RT: 12.745 min Scan# 1781
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:156 Resp: 42521

Ion	Ratio	Lower	Upper
156	100		
77	319.6	98.6	295.7#
158	95.1	48.4	145.0





#78
n-propylbenzene
Concen: 27.459 ug/l
RT: 12.800 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 91 Resp: 12762

Ion	Ratio	Lower	Upper
91	100		
120	22.7	11.8	35.4

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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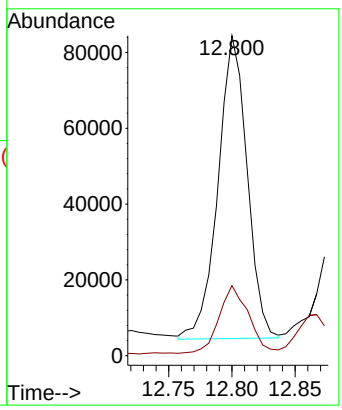
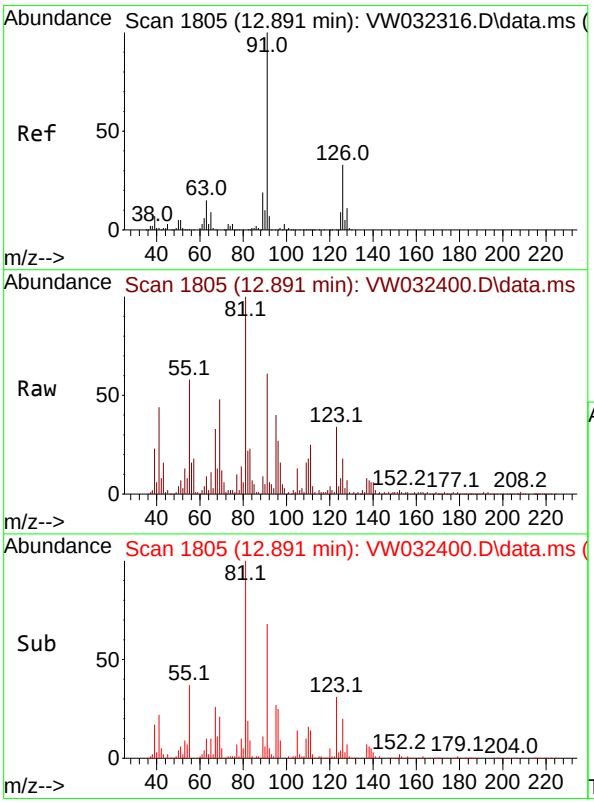
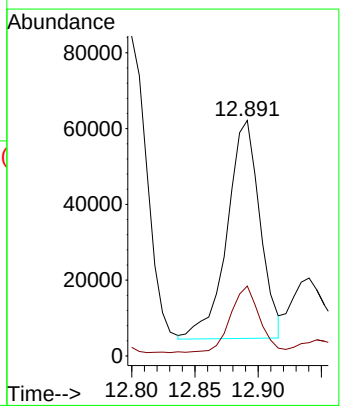


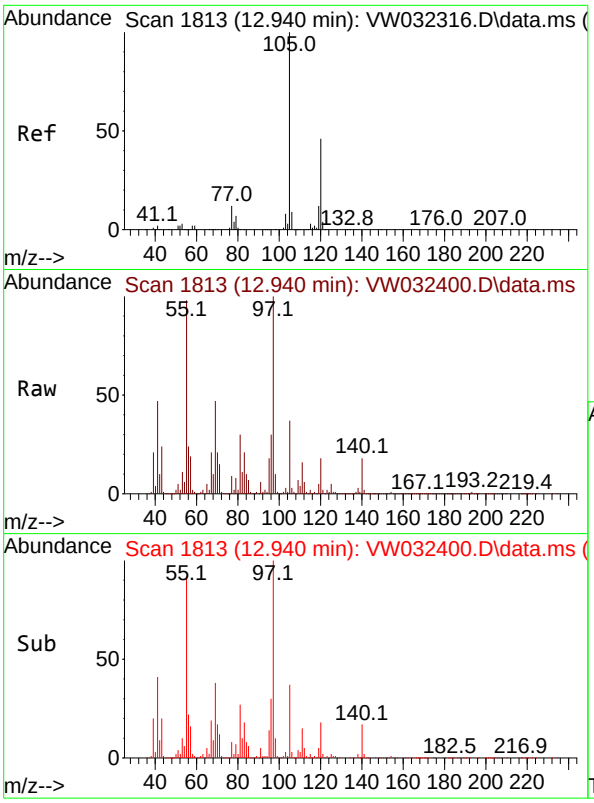


#79
2-Chlorotoluene
Concen: 36.739 ug/l
RT: 12.891 min Scan# 1805
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 91 Resp: 104408

Ion	Ratio	Lower	Upper
91	100		
126	27.1	16.6	49.7





#80
1,3,5-Trimethylbenzene
Concen: 54.761 ug/l
RT: 12.940 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:105 Resp: 17619

Ion	Ratio	Lower	Upper
105	100		
120	48.4	24.8	74.4

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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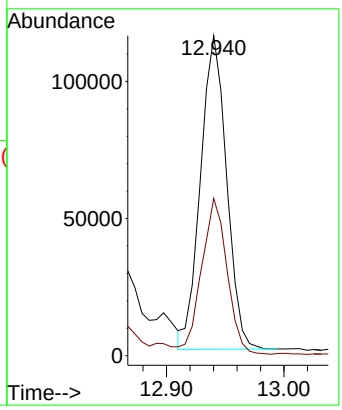
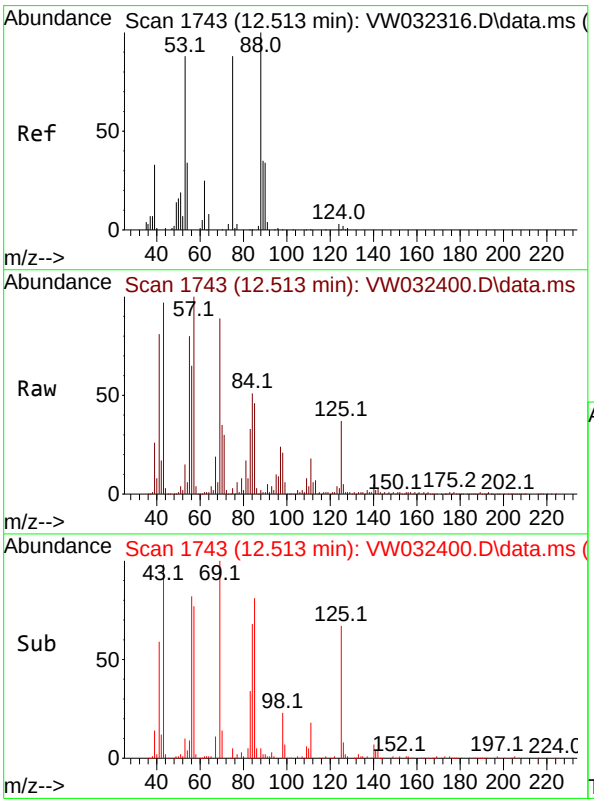
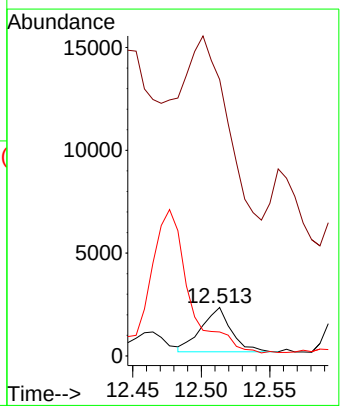


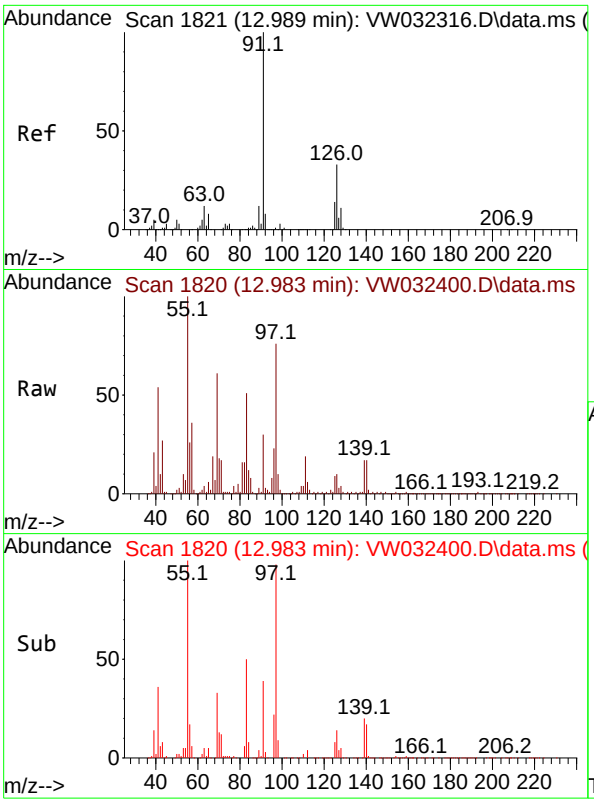


#81
trans-1,4-Dichloro-2-butene
Concen: 11.458 ug/l
RT: 12.513 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 75 Resp: 3237

Ion	Ratio	Lower	Upper
75	100		
53	539.3	91.0	136.6#
89	0.0	39.4	59.2#





#82
4-Chlorotoluene
Concen: 30.960 ug/l
RT: 12.983 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 91 Resp: 9354

Ion	Ratio	Lower	Upper
91	100		
126	37.4	16.1	48.2

Instrument :
MSVOA_W
ClientSampleId :
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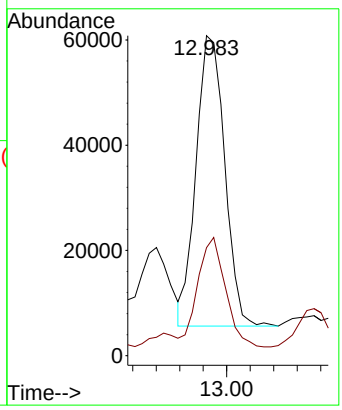
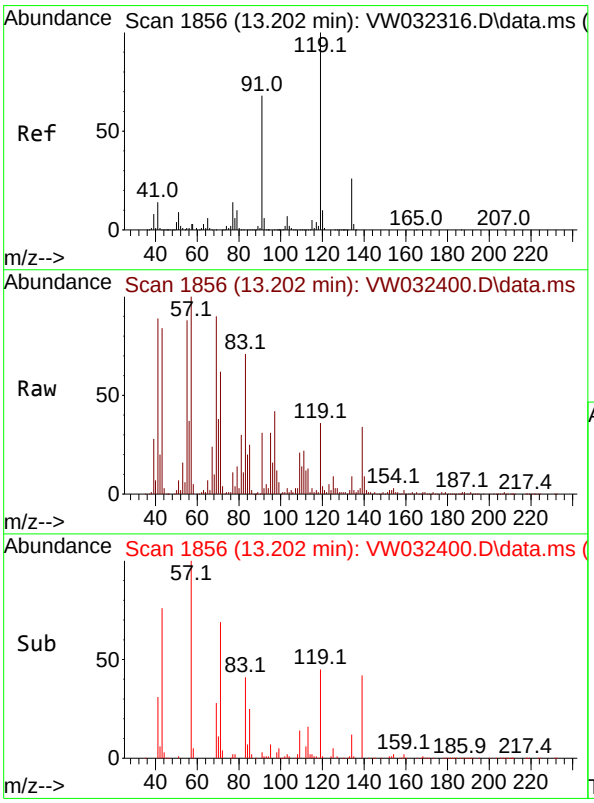
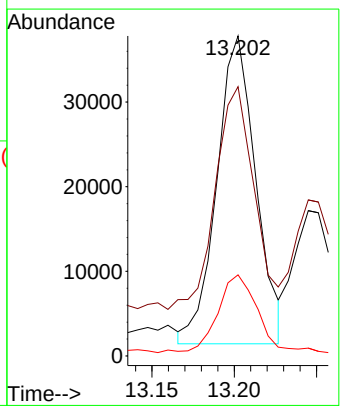


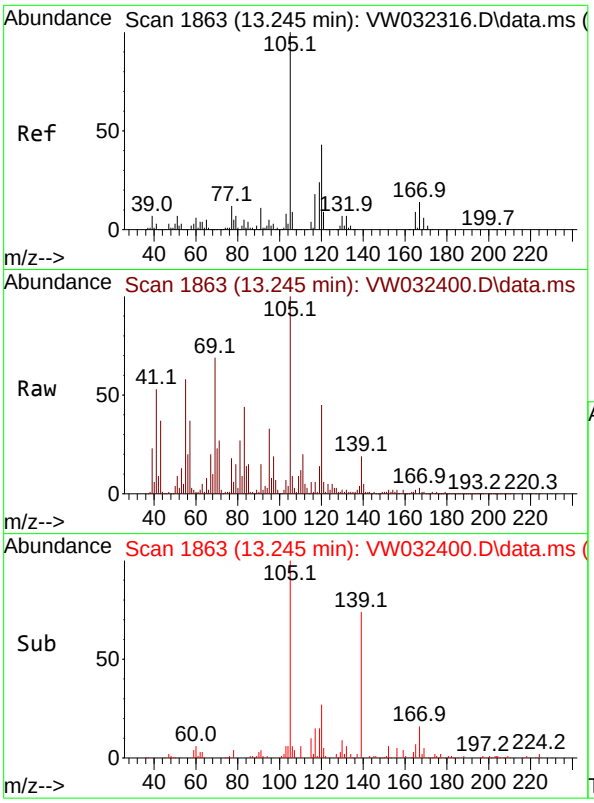


#83
tert-Butylbenzene
Concen: 22.682 ug/l
RT: 13.202 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:119 Resp: 59879

Ion	Ratio	Lower	Upper
119	100		
91	71.4	33.8	101.3
134	27.0	12.5	37.5





#84
1,2,4-Trimethylbenzene
Concen: 57.886 ug/l
RT: 13.245 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:105 Resp: 18938

Ion	Ratio	Lower	Upper
105	100		
120	44.1	22.1	66.3

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

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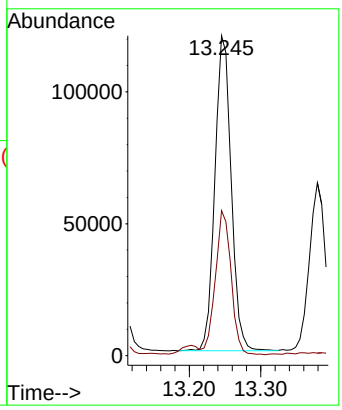
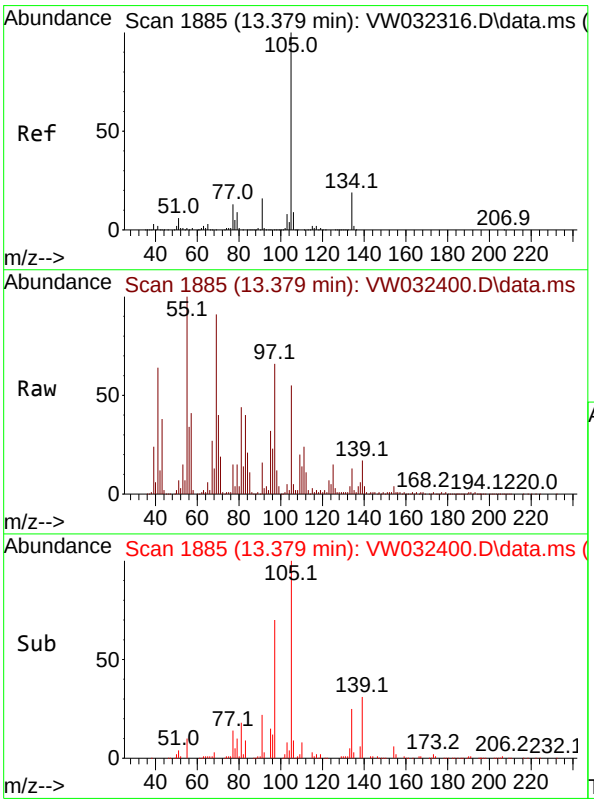
Supervised By :Semsettin Yesilyurt 10/21/2025

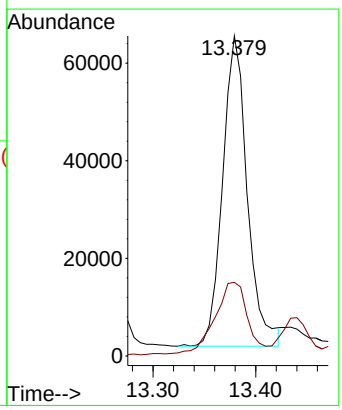


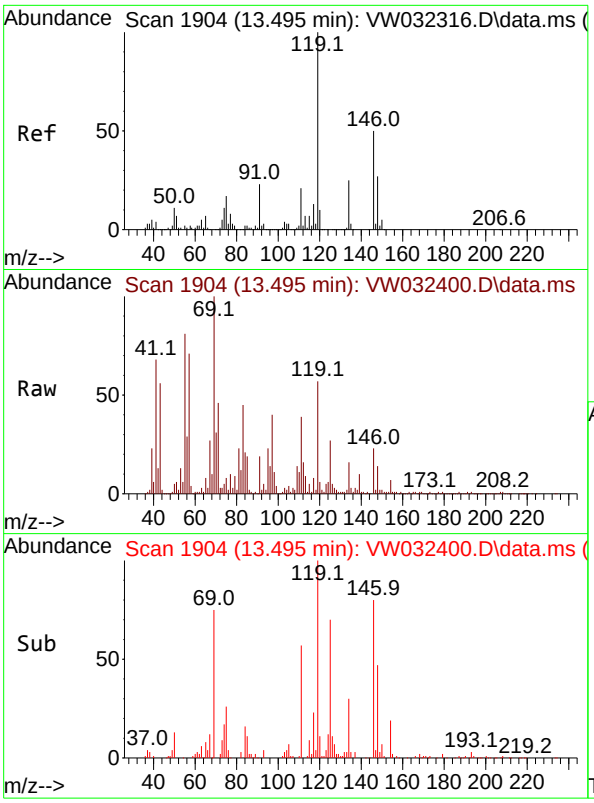


#85
sec-Butylbenzene
Concen: 26.257 ug/l
RT: 13.379 min Scan# 1885
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:105 Resp: 105926

Ion	Ratio	Lower	Upper
105	100		
134	31.6	10.1	30.1#

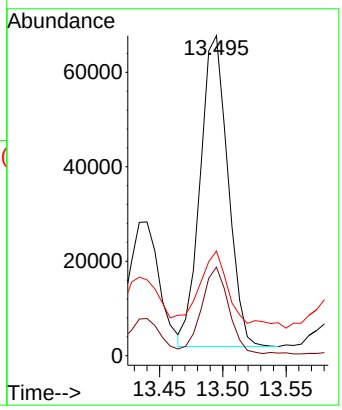




#86
p-Isopropyltoluene
Concen: 29.952 ug/l
RT: 13.495 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:119 Resp: 10026

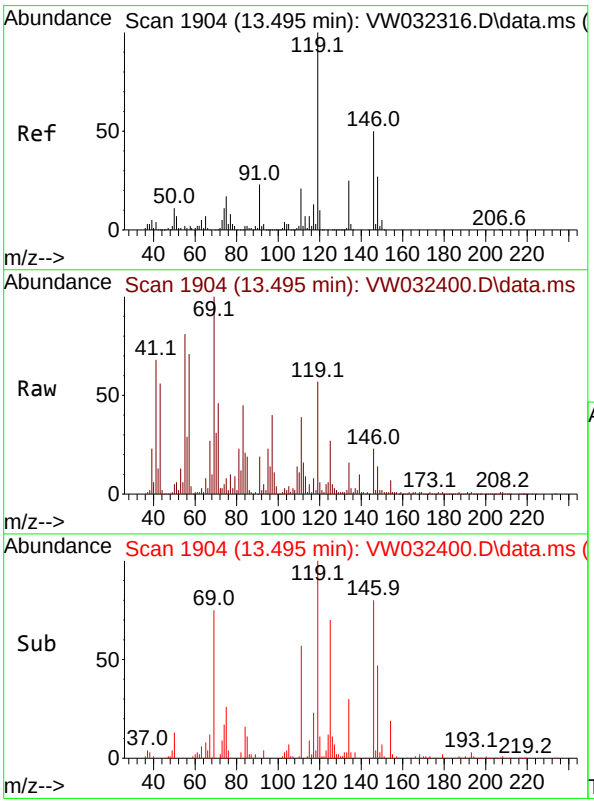
Ion	Ratio	Lower	Upper
119	100		
134	27.2	12.6	37.6
91	27.1	12.4	37.0



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

Manual Integrations
APPROVED

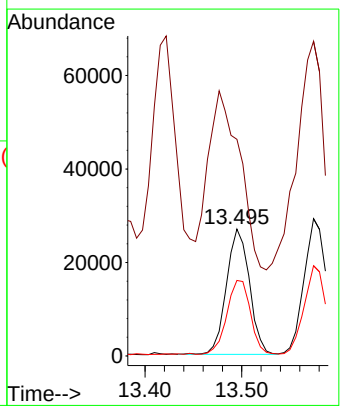
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

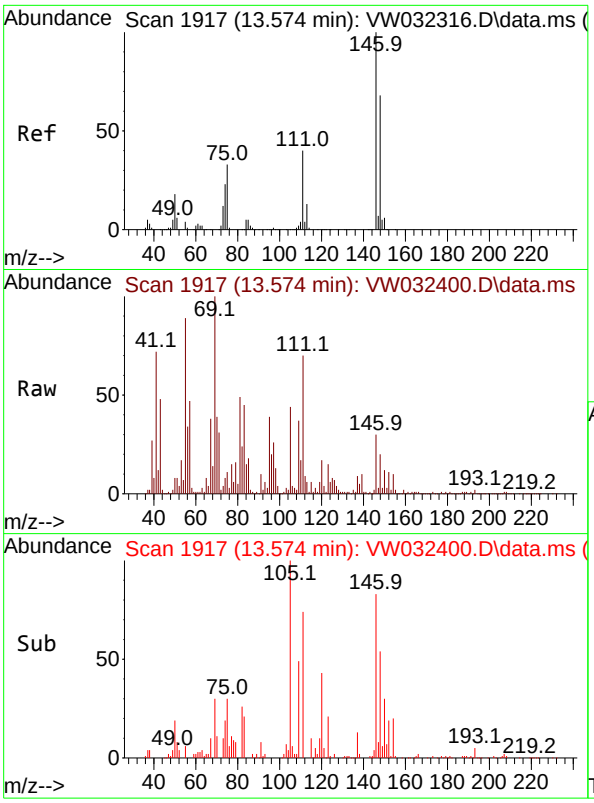


#87
1,3-Dichlorobenzene
Concen: 24.419 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:146 Resp: 44352

Ion	Ratio	Lower	Upper
146	100		
111	194.0	20.6	61.9#
148	60.2	30.6	92.0

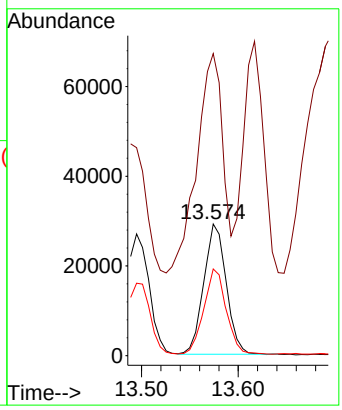




#88
1,4-Dichlorobenzene
Concen: 25.838 ug/l
RT: 13.574 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:146 Resp: 4692

Ion	Ratio	Lower	Upper
146	100		
111	195.3	21.3	63.7#
148	65.1	33.4	100.1



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

Manual Integrations
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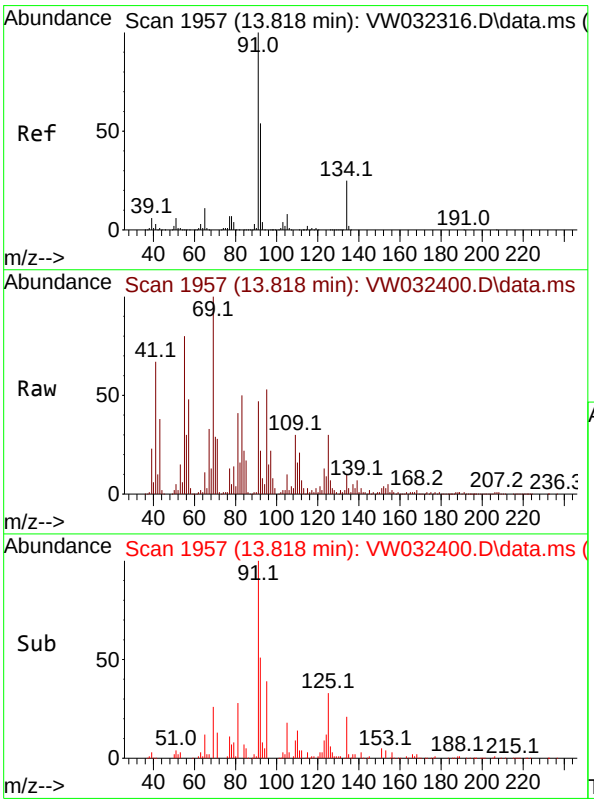
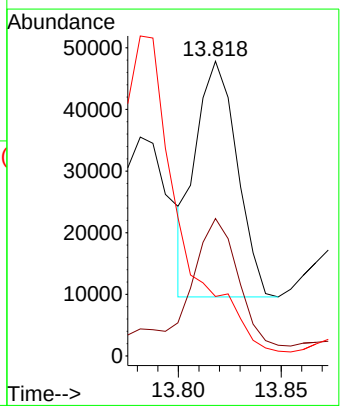
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

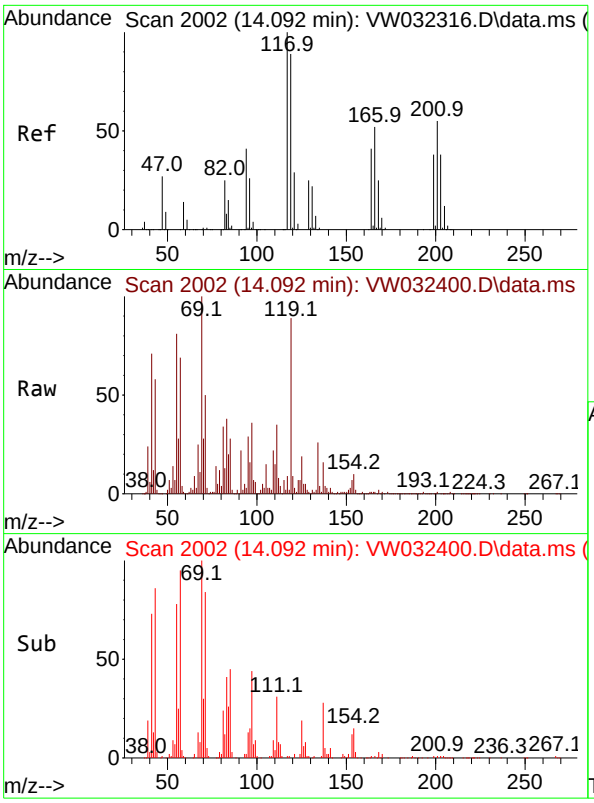


#89
n-Butylbenzene
Concen: 16.413 ug/l
RT: 13.818 min Scan# 1957
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 91 Resp: 53644

Ion	Ratio	Lower	Upper
91	100		
92	64.5	27.0	81.0
134	0.0	13.1	39.3#





#90
Hexachloroethane
Concen: 32.800 ug/l
RT: 14.092 min Scan# 2
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

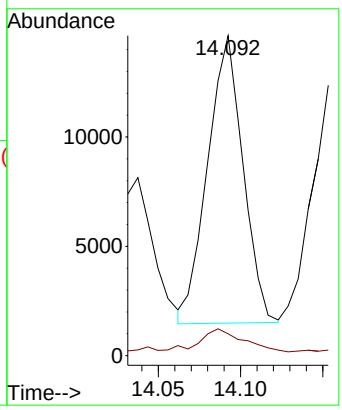
Tgt Ion:117 Resp: 1968

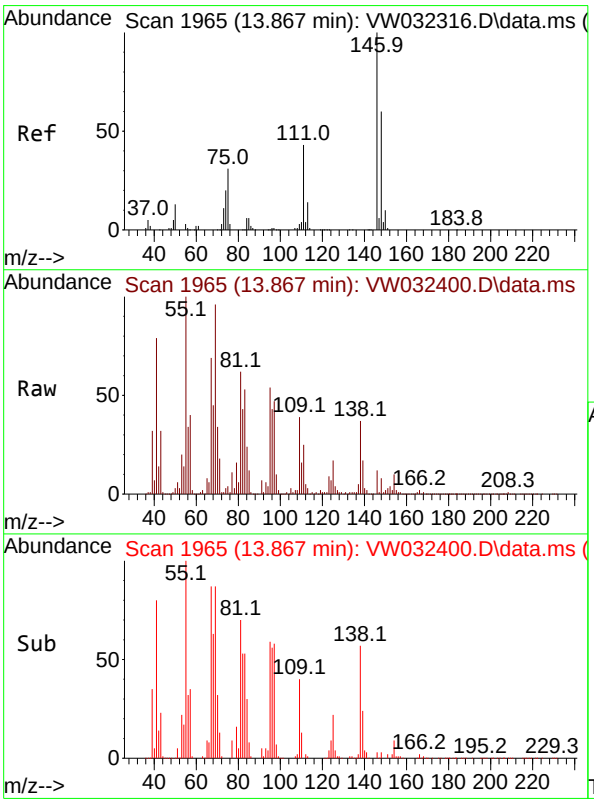
Ion	Ratio	Lower	Upper
117	100		
201	9.8	32.8	98.4#

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

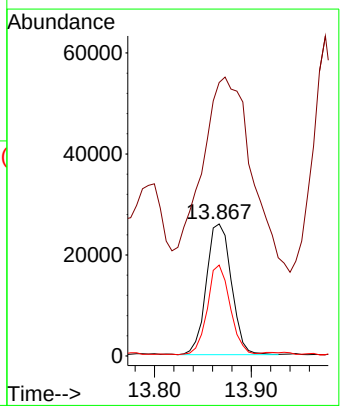


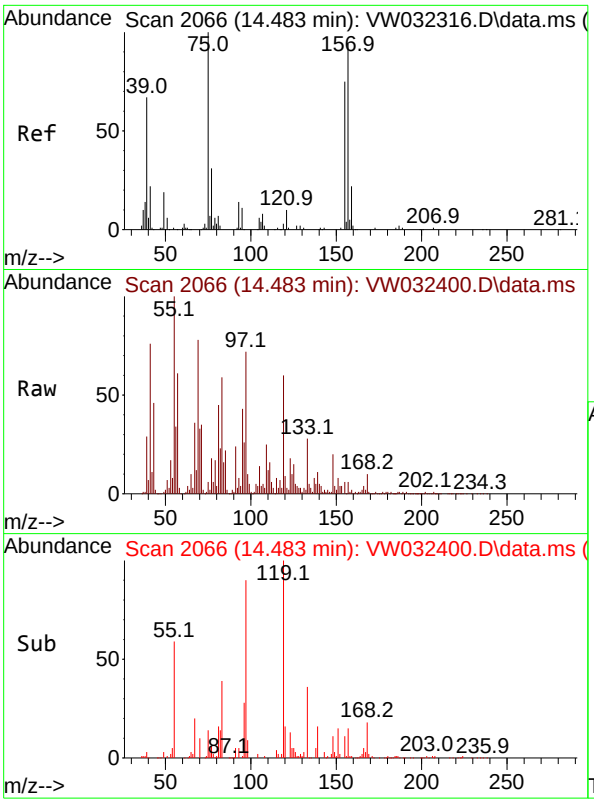


#91
1,2-Dichlorobenzene
Concen: 28.380 ug/l
RT: 13.867 min Scan# 1965
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:146 Resp: 46595

Ion	Ratio	Lower	Upper
146	100		
111	327.6	23.4	70.0#
148	62.4	34.1	102.3





#92
1,2-Dibromo-3-Chloropropane
Concen: 88.285 ug/l
RT: 14.483 min Scan# 2
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion: 75 Resp: 1428

Ion	Ratio	Lower	Upper
75	100		
155	64.5	40.8	122.5
157	107.6	51.8	155.4

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

Manual Integrations
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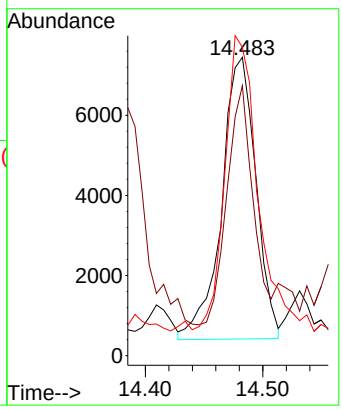
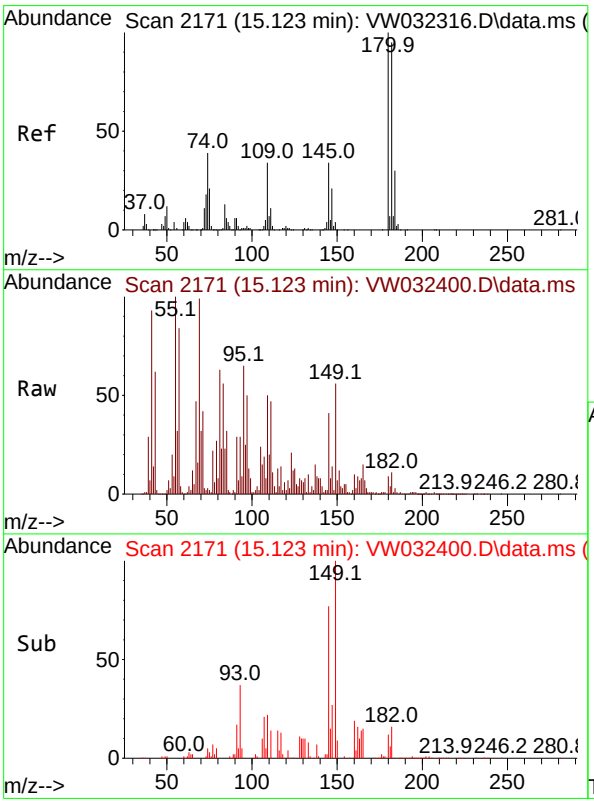
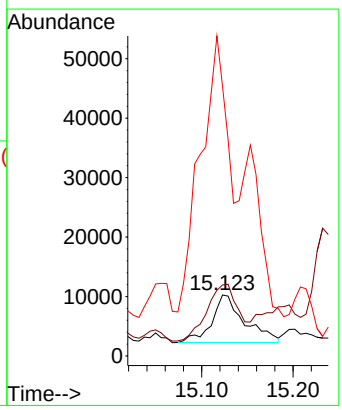


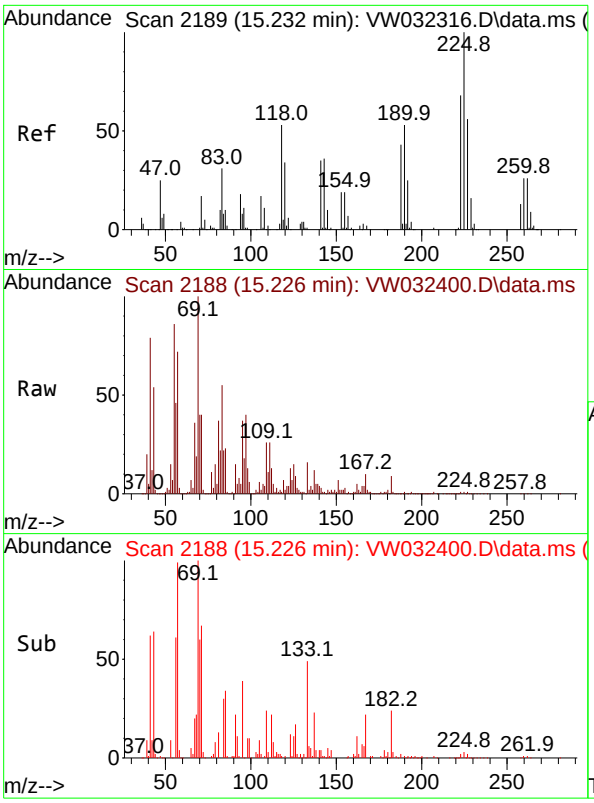


#93
1,2,4-Trichlorobenzene
Concen: 20.134 ug/l
RT: 15.123 min Scan# 2171
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:180 Resp: 19822

Ion	Ratio	Lower	Upper
180	100		
182	117.6	47.4	142.2
145	627.6	16.4	49.1#

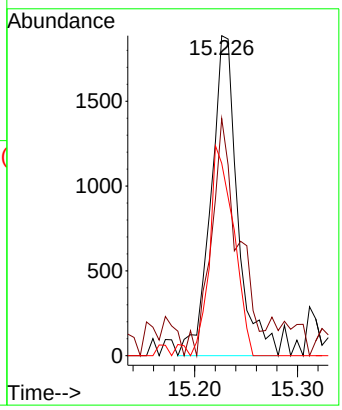




#94
Hexachlorobutadiene
Concen: 7.516 ug/l
RT: 15.226 min Scan# 21
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:225 Resp: 338

Ion	Ratio	Lower	Upper
225	100		
223	76.0	29.8	89.3
227	60.7	30.5	91.5



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

Manual Integrations
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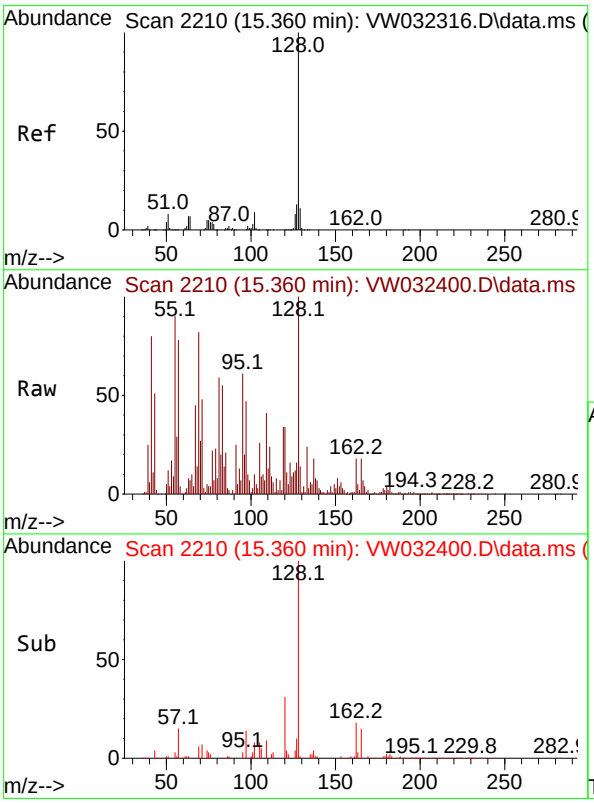
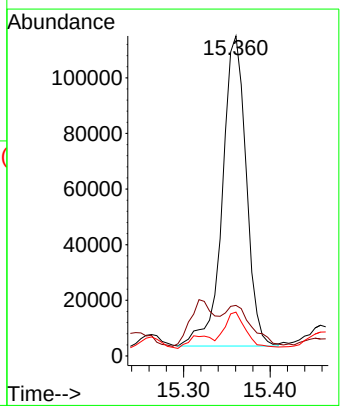
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

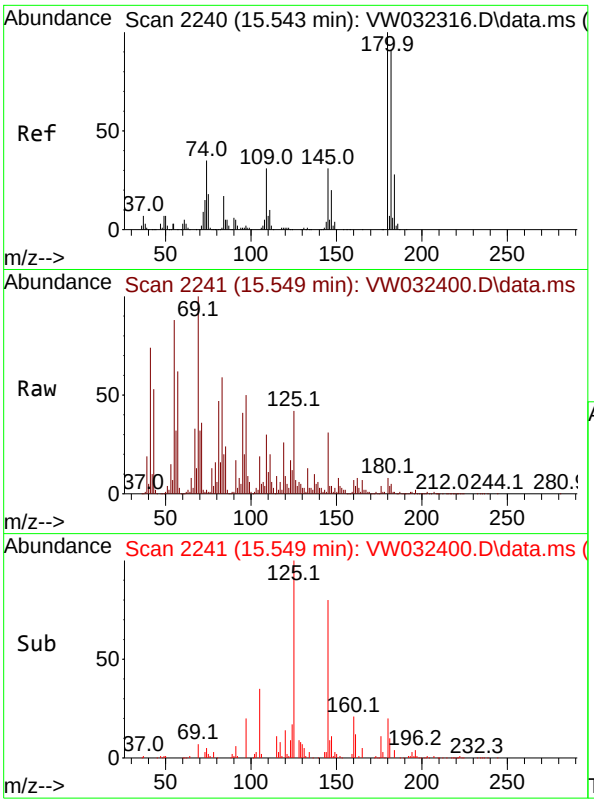


#95
Naphthalene
Concen: 89.927 ug/l
RT: 15.360 min Scan# 2210
Delta R.T. 0.000 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:128 Resp: 212612

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.6	16.0
129	9.7	8.4	12.6

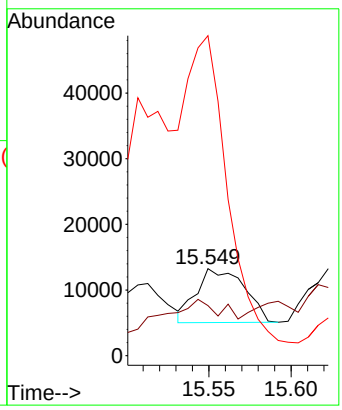




#96
1,2,3-Trichlorobenzene
Concen: 17.830 ug/l
RT: 15.549 min Scan# 2
Delta R.T. 0.006 min
Lab File: VW032400.D
Acq: 20 Oct 2025 19:20

Tgt Ion:180 Resp: 1654

Ion	Ratio	Lower	Upper
180	100		
182	77.7	47.7	143.1
145	478.1	17.2	51.6#



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MS

Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S07-000102-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-04MSD	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 47.9
Sample Wt/Vol:	5.26 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	130		1	2.30	9.90	ug/Kg	10/20/25 19:42	VW102025
74-87-3	Chloromethane	120		1	2.30	9.90	ug/Kg	10/20/25 19:42	VW102025
75-01-4	Vinyl Chloride	130		1	1.60	9.90	ug/Kg	10/20/25 19:42	VW102025
74-83-9	Bromomethane	78.9		1	2.10	9.90	ug/Kg	10/20/25 19:42	VW102025
75-00-3	Chloroethane	140		1	2.50	9.90	ug/Kg	10/20/25 19:42	VW102025
75-69-4	Trichlorofluoromethane	120		1	2.40	9.90	ug/Kg	10/20/25 19:42	VW102025
76-13-1	1,1,2-Trichlorotrifluoroethane	64.4		1	2.10	9.90	ug/Kg	10/20/25 19:42	VW102025
75-35-4	1,1-Dichloroethene	130		1	2.00	9.90	ug/Kg	10/20/25 19:42	VW102025
67-64-1	Acetone	2200	E	1	9.40	49.6	ug/Kg	10/20/25 19:42	VW102025
75-15-0	Carbon Disulfide	110		1	2.10	9.90	ug/Kg	10/20/25 19:42	VW102025
1634-04-4	Methyl tert-butyl Ether	170		1	1.40	9.90	ug/Kg	10/20/25 19:42	VW102025
79-20-9	Methyl Acetate	600	E	1	3.10	9.90	ug/Kg	10/20/25 19:42	VW102025
75-09-2	Methylene Chloride	150		1	7.00	19.8	ug/Kg	10/20/25 19:42	VW102025
156-60-5	trans-1,2-Dichloroethene	120		1	1.70	9.90	ug/Kg	10/20/25 19:42	VW102025
75-34-3	1,1-Dichloroethane	130		1	1.60	9.90	ug/Kg	10/20/25 19:42	VW102025
110-82-7	Cyclohexane	42.8		1	1.60	9.90	ug/Kg	10/20/25 19:42	VW102025
78-93-3	2-Butanone	1400		1	13.0	49.6	ug/Kg	10/20/25 19:42	VW102025
56-23-5	Carbon Tetrachloride	43.9		1	1.90	9.90	ug/Kg	10/20/25 19:42	VW102025
156-59-2	cis-1,2-Dichloroethene	130		1	1.50	9.90	ug/Kg	10/20/25 19:42	VW102025
74-97-5	Bromochloromethane	130		1	2.30	9.90	ug/Kg	10/20/25 19:42	VW102025
67-66-3	Chloroform	130		1	1.70	9.90	ug/Kg	10/20/25 19:42	VW102025
71-55-6	1,1,1-Trichloroethane	110		1	1.80	9.90	ug/Kg	10/20/25 19:42	VW102025
108-87-2	Methylcyclohexane	100		1	1.80	9.90	ug/Kg	10/20/25 19:42	VW102025
71-43-2	Benzene	110		1	1.60	9.90	ug/Kg	10/20/25 19:42	VW102025
107-06-2	1,2-Dichloroethane	120		1	1.60	9.90	ug/Kg	10/20/25 19:42	VW102025
79-01-6	Trichloroethene	85.7		1	1.60	9.90	ug/Kg	10/20/25 19:42	VW102025
78-87-5	1,2-Dichloropropane	100		1	1.80	9.90	ug/Kg	10/20/25 19:42	VW102025
75-27-4	Bromodichloromethane	110		1	1.50	9.90	ug/Kg	10/20/25 19:42	VW102025
108-10-1	4-Methyl-2-Pentanone	850		1	7.10	49.6	ug/Kg	10/20/25 19:42	VW102025
108-88-3	Toluene	69.4		1	1.50	9.90	ug/Kg	10/20/25 19:42	VW102025
10061-02-6	t-1,3-Dichloropropene	59.3		1	1.30	9.90	ug/Kg	10/20/25 19:42	VW102025
10061-01-5	cis-1,3-Dichloropropene	47.5		1	1.20	9.90	ug/Kg	10/20/25 19:42	VW102025
79-00-5	1,1,2-Trichloroethane	110		1	1.80	9.90	ug/Kg	10/20/25 19:42	VW102025
591-78-6	2-Hexanone	820		1	7.30	49.6	ug/Kg	10/20/25 19:42	VW102025
124-48-1	Dibromochloromethane	90.2		1	1.70	9.90	ug/Kg	10/20/25 19:42	VW102025
106-93-4	1,2-Dibromoethane	110		1	1.70	9.90	ug/Kg	10/20/25 19:42	VW102025
127-18-4	Tetrachloroethene	79.7		1	2.10	9.90	ug/Kg	10/20/25 19:42	VW102025
108-90-7	Chlorobenzene	95.2		1	1.80	9.90	ug/Kg	10/20/25 19:42	VW102025
100-41-4	Ethyl Benzene	73.0		1	1.30	9.90	ug/Kg	10/20/25 19:42	VW102025
179601-23-1	m/p-Xylenes	140		1	2.50	19.8	ug/Kg	10/20/25 19:42	VW102025
95-47-6	o-Xylene	97.8		1	1.60	9.90	ug/Kg	10/20/25 19:42	VW102025
100-42-5	Styrene	72.8		1	1.40	9.90	ug/Kg	10/20/25 19:42	VW102025
75-25-2	Bromoform	150		1	1.70	9.90	ug/Kg	10/20/25 19:42	VW102025

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

Report of Analysis

Client:	AECOM	Date Collected:	10/17/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/17/25
Client Sample ID:	PR132-S07-000102-202510	SDG No.:	Q3395
Lab Sample ID:	Q3395-04MSD	Matrix:	SOIL
Analytical Method:	8260D	Level : LOW	% Solid: 47.9
Sample Wt/Vol:	5.26 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	55.5		1	1.50	9.90	ug/Kg	10/20/25 19:42	VW102025
79-34-5	1,1,2,2-Tetrachloroethane	190		1	2.40	9.90	ug/Kg	10/20/25 19:42	VW102025
541-73-1	1,3-Dichlorobenzene	42.3		1	3.40	9.90	ug/Kg	10/20/25 19:42	VW102025
106-46-7	1,4-Dichlorobenzene	46.1		1	3.10	9.90	ug/Kg	10/20/25 19:42	VW102025
95-50-1	1,2-Dichlorobenzene	49.2		1	2.90	9.90	ug/Kg	10/20/25 19:42	VW102025
96-12-8	1,2-Dibromo-3-Chloropropane	180		1	3.70	9.90	ug/Kg	10/20/25 19:42	VW102025
120-82-1	1,2,4-Trichlorobenzene	33.2		1	5.90	9.90	ug/Kg	10/20/25 19:42	VW102025
87-61-6	1,2,3-Trichlorobenzene	26.0		1	6.30	9.90	ug/Kg	10/20/25 19:42	VW102025
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	71.7			63 - 155	143%	SPK: 50		
1868-53-7	Dibromofluoromethane	55.3			70 - 134	111%	SPK: 50		
2037-26-5	Toluene-d8	38.0			74 - 123	76%	SPK: 50		
460-00-4	4-Bromofluorobenzene	62.4			17 - 146	125%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	131000							
540-36-3	1,4-Difluorobenzene	279000							
3114-55-4	Chlorobenzene-d5	139000							
3855-82-1	1,4-Dichlorobenzene-d4	56500							

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

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

Sample Results: **VW032401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032401.D
Acq On : 20 Oct 2025 19:42
Operator : SY/MD
Sample : Q3395-04MSD
Misc : 5.26g/5mL/MSVOA_W/SOIL/A
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Quant Time: Oct 21 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	130782	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	279199	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	138787	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	56507	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	136748	71.688	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 143.380%			
35) Dibromofluoromethane	7.898	113	100041	55.329	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 110.660%			
50) Toluene-d8	10.325	98	253753	38.025	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 76.040%			
62) 4-Bromofluorobenzene	12.617	95	157361	62.387	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 124.780%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	52822	64.364	ug/l	99
3) Chloromethane	2.253	50	75282	59.450	ug/l	100
4) Vinyl Chloride	2.405	62	102567	67.844	ug/l	99
5) Bromomethane	2.826	94	44187	39.773	ug/l	96
6) Chloroethane	2.972	64	68961	69.091	ug/l	99
7) Trichlorofluoromethane	3.308	101	66087	58.384	ug/l	95
8) Diethyl Ether	3.722	74	73907	75.349	ug/l	93
9) 1,1,2-Trichlorotrifluo...	4.100	101	44036	32.435	ug/l	93
10) Methyl Iodide	4.320	142	50850	26.250	ug/l	97
11) Tert butyl alcohol	5.222	59	75049	519.775	ug/l	97
12) 1,1-Dichloroethene	4.082	96	94160	63.883	ug/l	94
13) Acrolein	3.930	56	2999	12.798	ug/l #	19
14) Allyl chloride	4.704	41	135448	54.407	ug/l #	84
15) Acrylonitrile	5.405	53	240618	471.545	ug/l	99
16) Acetone	4.161	43	580324	1098.716	ug/l	98
17) Carbon Disulfide	4.423	76	221685	55.123	ug/l	97
18) Methyl Acetate	4.710	43	457494	302.369	ug/l	98
19) Methyl tert-butyl Ether	5.466	73	255361	87.963	ug/l	96
20) Methylene Chloride	4.954	84	126451	74.993	ug/l	94
21) trans-1,2-Dichloroethene	5.466	96	94598	57.969	ug/l	88
22) Diisopropyl ether	6.344	45	349916	67.584	ug/l #	86
23) Vinyl Acetate	6.289	43	77605m	22.441	ug/l	
24) 1,1-Dichloroethane	6.246	63	210102	66.794	ug/l	99
25) 2-Butanone	7.191	43	513309	713.565	ug/l	99
26) 2,2-Dichloropropane	7.185	77	93628	58.190	ug/l	97
27) cis-1,2-Dichloroethene	7.191	96	125024	63.774	ug/l	95
28) Bromochloromethane	7.533	49	96675	65.324	ug/l	91
29) Tetrahydrofuran	7.551	42	237996	526.094	ug/l	97
30) Chloroform	7.691	83	210422	65.961	ug/l	99
31) Cyclohexane	7.971	56	57852	21.543	ug/l	90
32) 1,1,1-Trichloroethane	7.892	97	121484	53.740	ug/l	98
36) 1,1-Dichloropropene	8.093	75	95367	37.373	ug/l	98
37) Ethyl Acetate	7.270	43	78517	46.227	ug/l	99
38) Carbon Tetrachloride	8.081	117	53145	22.132	ug/l	94
39) Methylcyclohexane	9.343	83	162622	52.833	ug/l	90
40) Benzene	8.337	78	431403	53.936	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032401.D
Acq On : 20 Oct 2025 19:42
Operator : SY/MD
Sample : Q3395-04MSD
Misc : 5.26g/5mL/MSVOA_W/SOIL/A
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 21 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	79555	86.912	ug/l		93
42) 1,2-Dichloroethane	8.417	62	162425	62.062	ug/l		96
43) Isopropyl Acetate	8.435	43	200980	66.702	ug/l		95
44) Trichloroethene	9.099	130	80877	43.184	ug/l		85
45) 1,2-Dichloropropane	9.374	63	103840	52.012	ug/l		98
46) Dibromomethane	9.465	93	73347	59.746	ug/l		94
47) Bromodichloromethane	9.648	83	149758	53.334	ug/l		98
48) Methyl methacrylate	9.441	41	149868	102.301	ug/l	#	85
49) 1,4-Dioxane	9.465	88	32295	1924.641	ug/l		92
51) 4-Methyl-2-Pentanone	10.215	43	750570	430.079	ug/l		99
52) Toluene	10.392	92	174217	34.976	ug/l		97
53) t-1,3-Dichloropropene	10.611	75	81420	29.888	ug/l		96
54) cis-1,3-Dichloropropene	10.075	75	75068	23.923	ug/l		94
55) 1,1,2-Trichloroethane	10.788	97	93942m	57.254	ug/l		
56) Ethyl methacrylate	10.648	69	190171	82.806	ug/l	#	88
57) 1,3-Dichloropropane	10.934	76	166043	57.297	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	451813	369.660	ug/l		98
59) 2-Hexanone	10.971	43	508947	413.489	ug/l		96
60) Dibromochloromethane	11.129	129	84725	45.476	ug/l		98
61) 1,2-Dibromoethane	11.239	107	85044	53.156	ug/l		86
64) Tetrachloroethene	10.861	164	33334	40.139	ug/l		89
65) Chlorobenzene	11.654	112	146469	47.965	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.733	131	49817	52.378	ug/l		93
67) Ethyl Benzene	11.733	91	187188	36.775	ug/l		97
68) m/p-Xylenes	11.837	106	142028	72.361	ug/l		97
69) o-Xylene	12.160	106	90497	49.303	ug/l		85
70) Styrene	12.178	104	117611	36.699	ug/l		98
71) Bromoform	12.349	173	41979	77.002	ug/l	#	97
73) Isopropylbenzene	12.458	105	108042	27.947	ug/l		97
74) N-amyl acetate	12.251	43	403370	327.067	ug/l	#	61
75) 1,1,2,2-Tetrachloroethane	12.708	83	93525	97.431	ug/l	#	19
76) 1,2,3-Trichloropropane	12.763	75	90597m	121.835	ug/l		
77) Bromobenzene	12.745	156	45993	49.353	ug/l		73
78) n-propylbenzene	12.800	91	103177	21.366	ug/l		88
79) 2-Chlorotoluene	12.891	91	91803	31.091	ug/l		87
80) 1,3,5-Trimethylbenzene	12.940	105	135924	40.661	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.507	75	5452	18.574	ug/l	#	1
82) 4-Chlorotoluene	12.989	91	81339	25.910	ug/l		92
83) tert-Butylbenzene	13.202	119	49134m	17.914	ug/l		
84) 1,2,4-Trimethylbenzene	13.245	105	154424	45.430	ug/l		98
85) sec-Butylbenzene	13.379	105	110678	26.405	ug/l		84
86) p-Isopropyltoluene	13.495	119	76135	21.891	ug/l		94
87) 1,3-Dichlorobenzene	13.495	146	40247	21.328	ug/l	#	9
88) 1,4-Dichlorobenzene	13.574	146	43876	23.253	ug/l	#	1
89) n-Butylbenzene	13.818	91	41218	12.138	ug/l	#	73
90) Hexachloroethane	14.086	117	16448	26.385	ug/l	#	35
91) 1,2-Dichlorobenzene	13.867	146	42271	24.780	ug/l	#	1
92) 1,2-Dibromo-3-Chloropr...	14.483	75	15424	91.774	ug/l		72
93) 1,2,4-Trichlorobenzene	15.123	180	17111	16.728	ug/l	#	1
94) Hexachlorobutadiene	15.220	225	2717	5.810	ug/l		96
95) Naphthalene	15.360	128	204142	83.105	ug/l		99
96) 1,2,3-Trichlorobenzene	15.562	180	12612	13.081	ug/l	#	1

Sample Results: **VW032401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032401.D
Acq On : 20 Oct 2025 19:42
Operator : SY/MD
Sample : Q3395-04MSD
Misc : 5.26g/5mL/MSVOA_W/SOIL/A
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 21 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW102025\
Data File : VW032401.D
Acq On : 20 Oct 2025 19:42
Operator : SY/MD
Sample : Q3395-04MSD
Misc : 5.26g/5mL/MSVOA_W/SOIL/A
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 21 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W100125S.M
Quant Title : SW846 8260
QLast Update : Thu Oct 02 21:24:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations APPROVED

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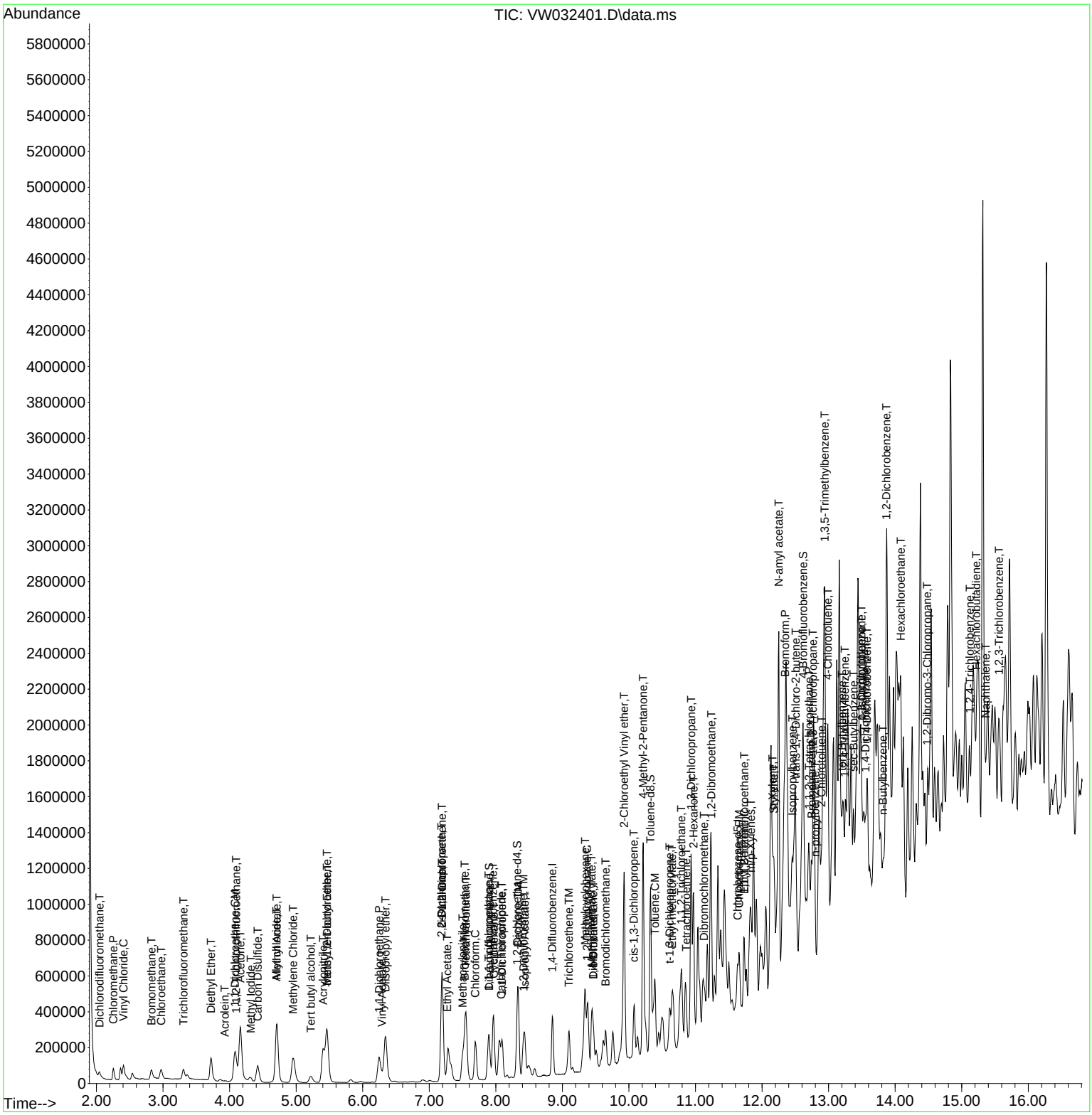
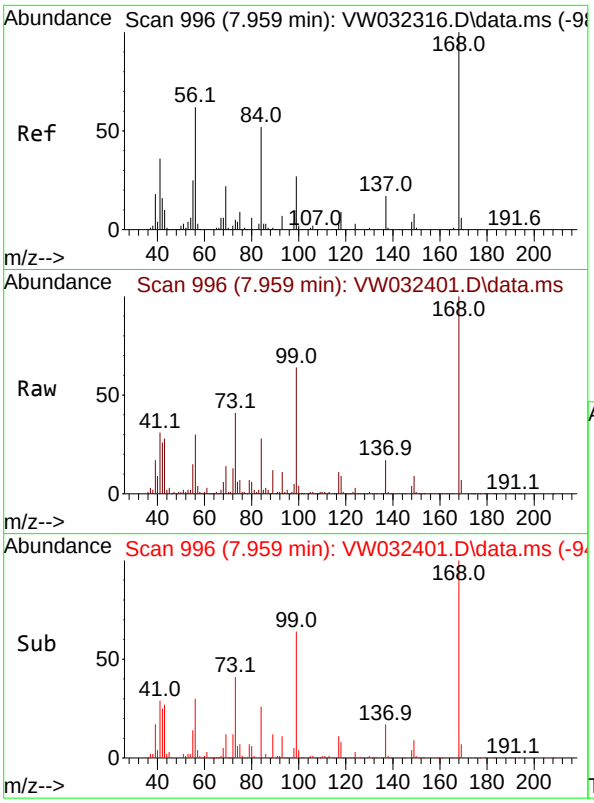
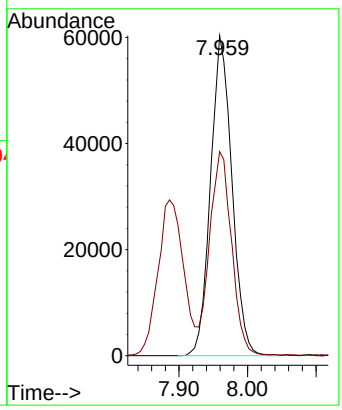




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:168 Resp: 13078

Ion	Ratio	Lower	Upper
168	100		
99	63.5	49.3	73.9



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
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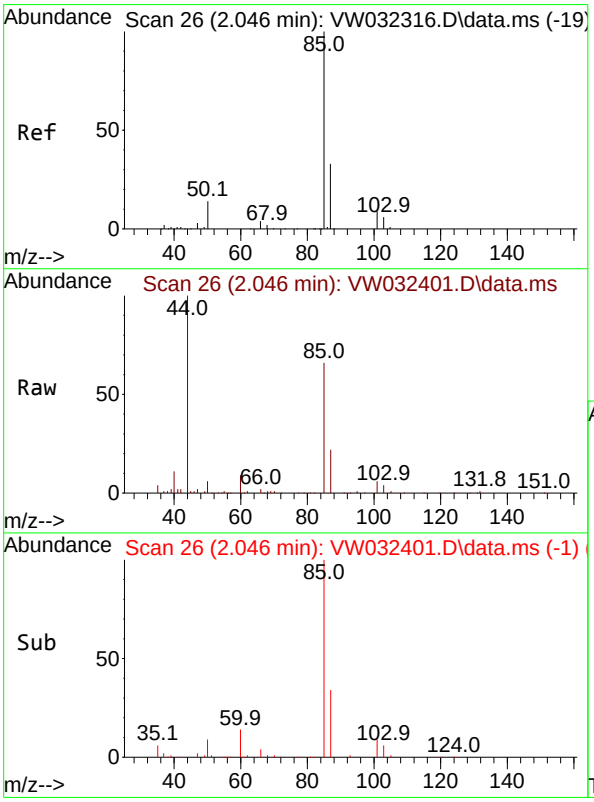
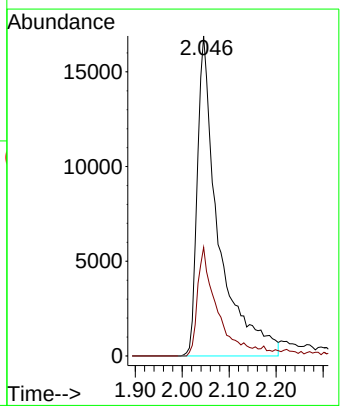
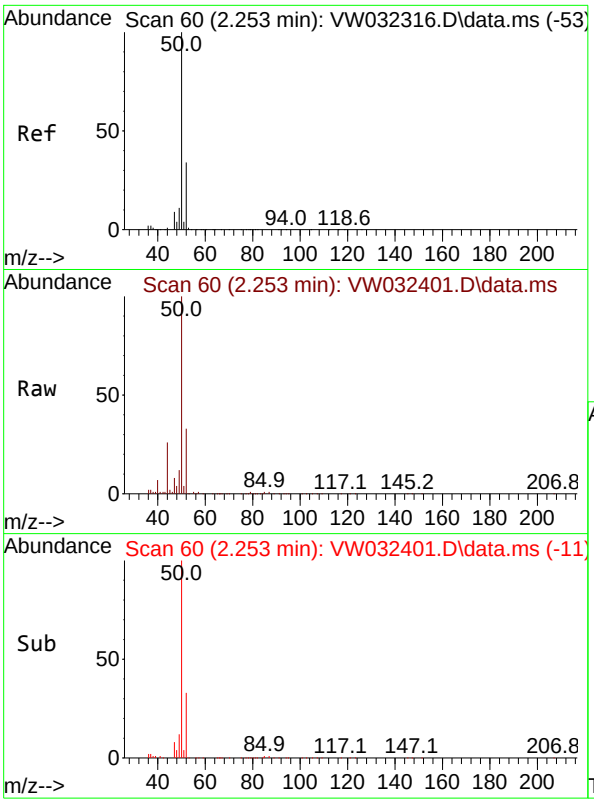


#2
Dichlorodifluoromethane
Concen: 64.364 ug/l
RT: 2.046 min Scan# 26
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 85 Resp: 52822

Ion	Ratio	Lower	Upper
85	100		
87	33.9	17.2	51.6

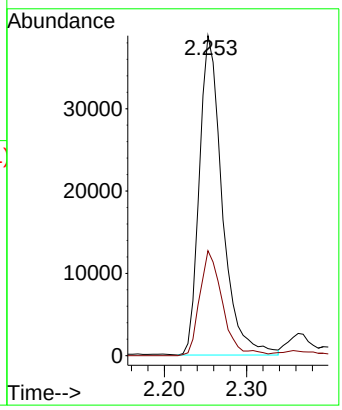




#3
Chloromethane
Concen: 59.450 ug/l
RT: 2.253 min Scan# 6
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 50 Resp: 7528

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
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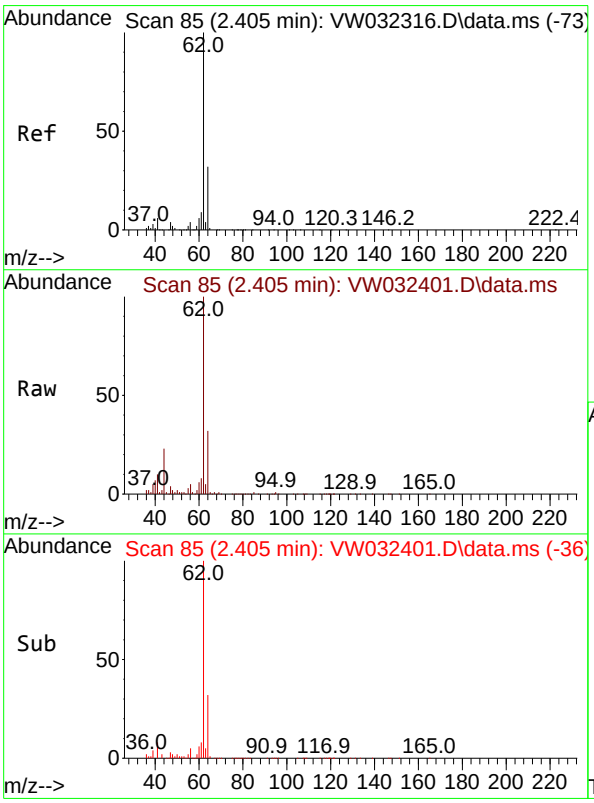
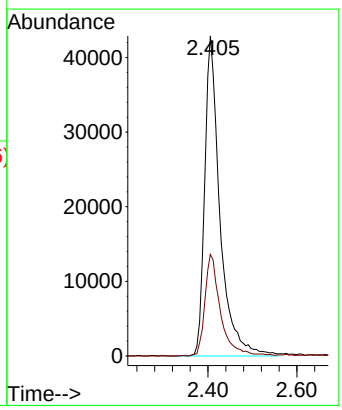
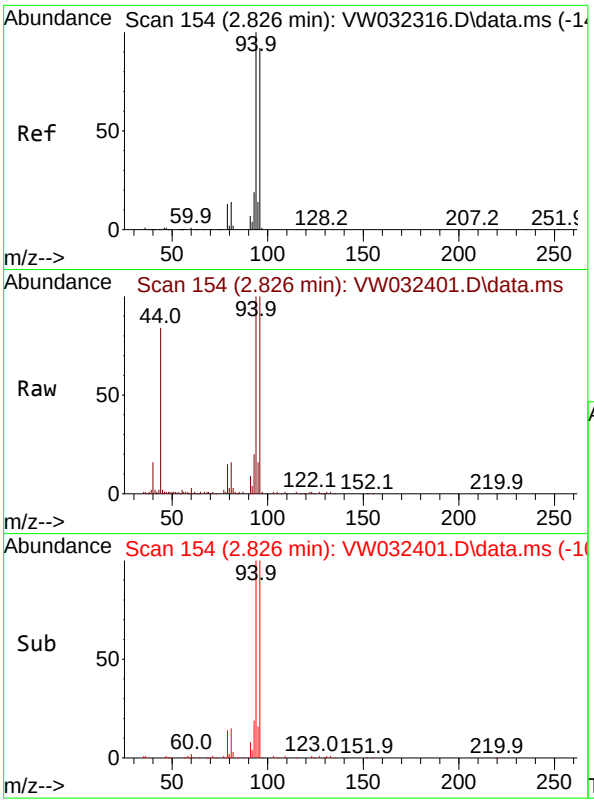


#4
Vinyl Chloride
Concen: 67.844 ug/l
RT: 2.405 min Scan# 85
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 62 Resp: 102567

Ion	Ratio	Lower	Upper
62	100		
64	31.8	24.8	37.2





#5
Bromomethane
Concen: 39.773 ug/l
RT: 2.826 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 94 Resp: 4418

Ion	Ratio	Lower	Upper
94	100		
96	99.5	76.6	115.0

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
APPROVED

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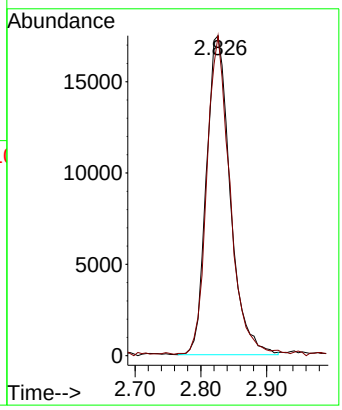
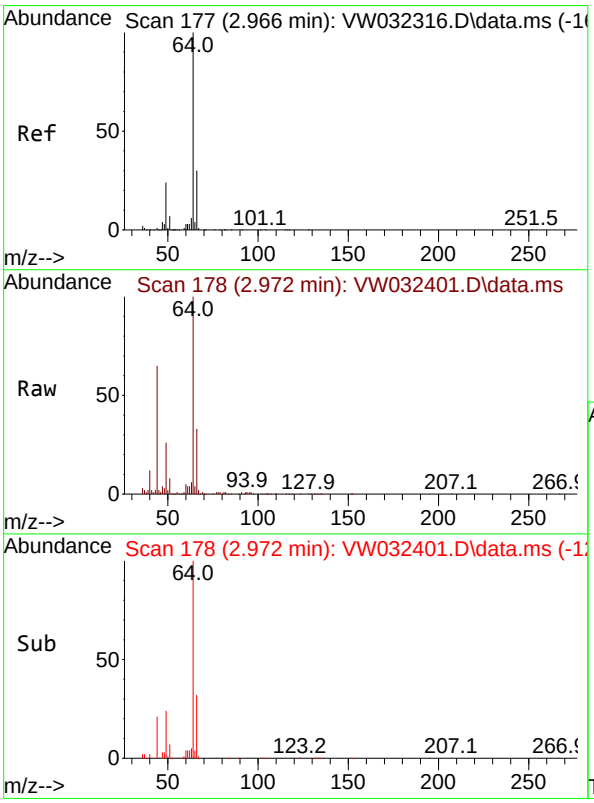
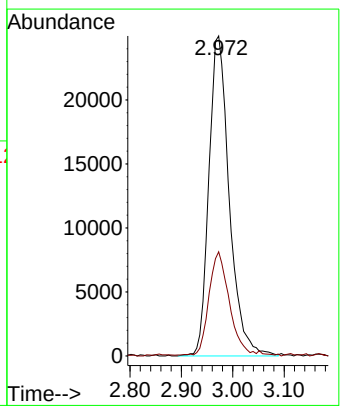


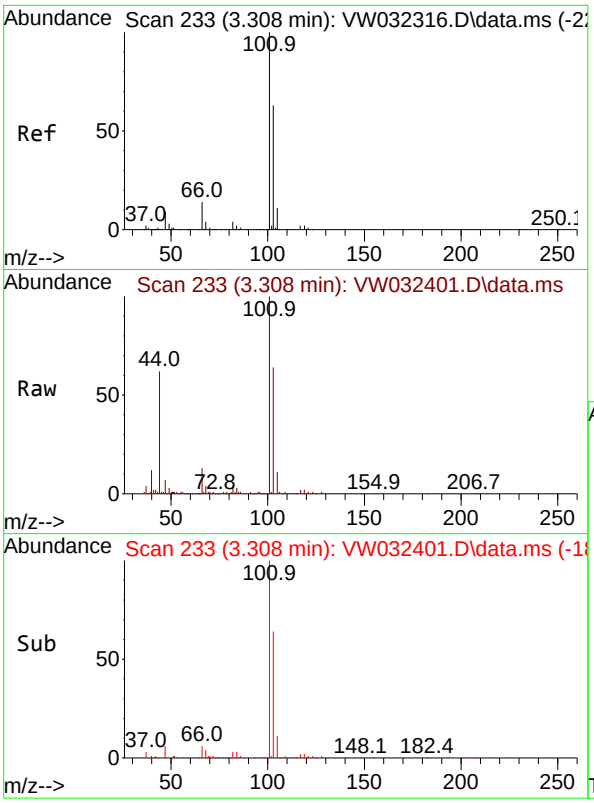


#6
Chloroethane
Concen: 69.091 ug/l
RT: 2.972 min Scan# 178
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 64 Resp: 68961

Ion	Ratio	Lower	Upper
64	100		
66	32.3	26.2	39.4





#7
Trichlorofluoromethane
Concen: 58.384 ug/l
RT: 3.308 min Scan# 2
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:101 Resp: 6608

Ion	Ratio	Lower	Upper
101	100		
103	63.7	47.8	71.8

Instrument :
MSVOA_W
ClientSampleId :
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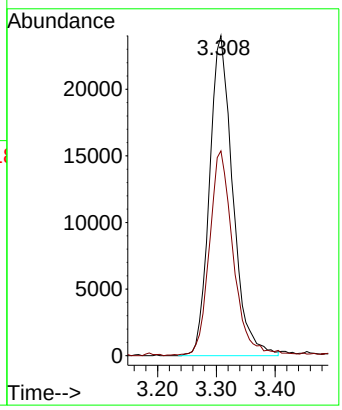
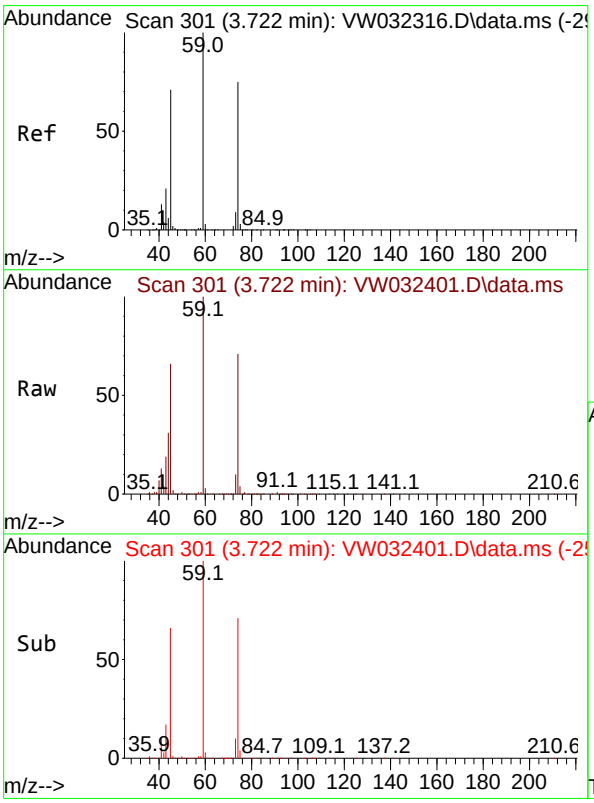
Manual Integrations
APPROVED

Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

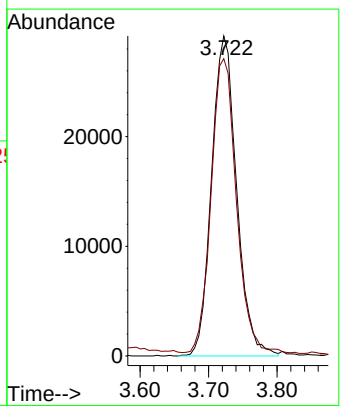


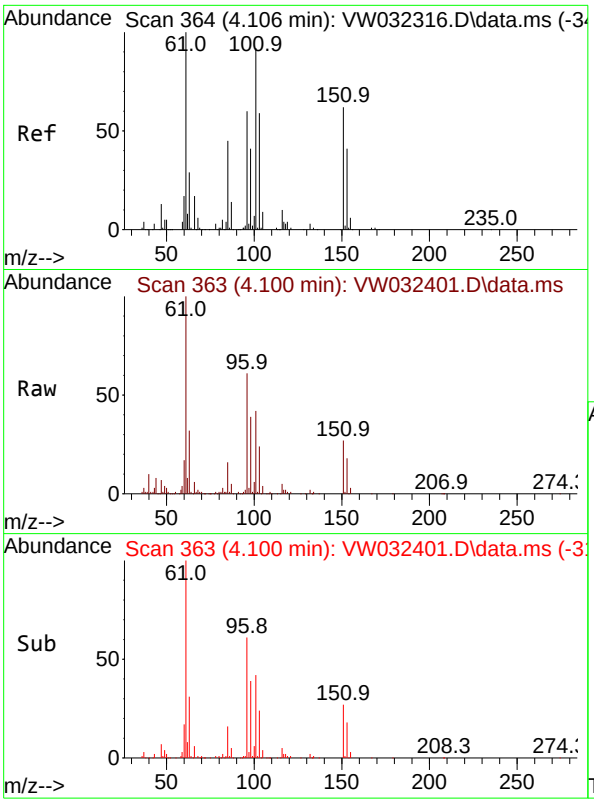


#8
Diethyl Ether
Concen: 75.349 ug/l
RT: 3.722 min Scan# 301
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 74 Resp: 73907

Ion	Ratio	Lower	Upper
74	100		
45	93.0	43.1	129.4





#9
1,1,2-Trichlorotrifluoroethane
Concen: 32.435 ug/l
RT: 4.100 min Scan# 3
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:101 Resp: 4403

Ion	Ratio	Lower	Upper
101	100		
85	44.3	37.1	55.7
151	69.4	61.5	92.3

Instrument :
MSVOA_W
ClientSampleId :
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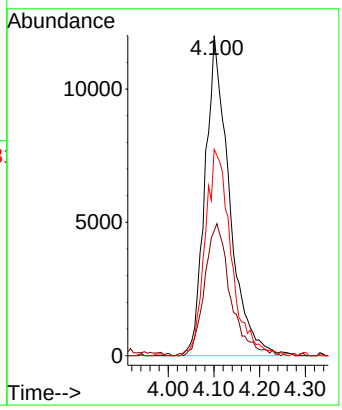
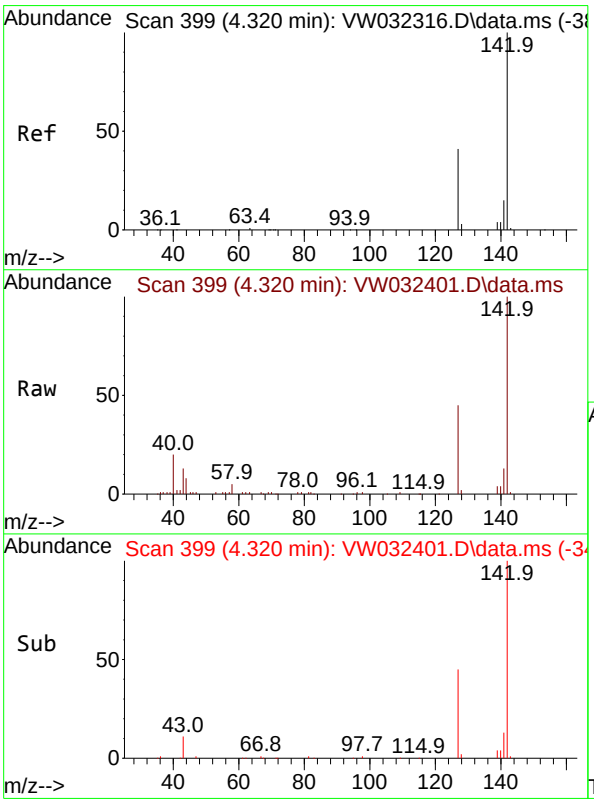
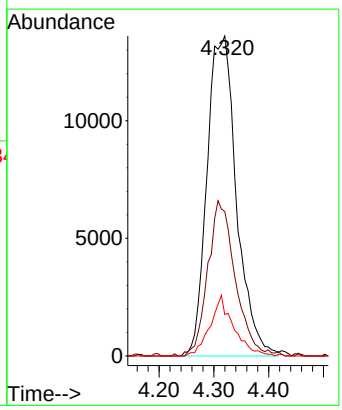


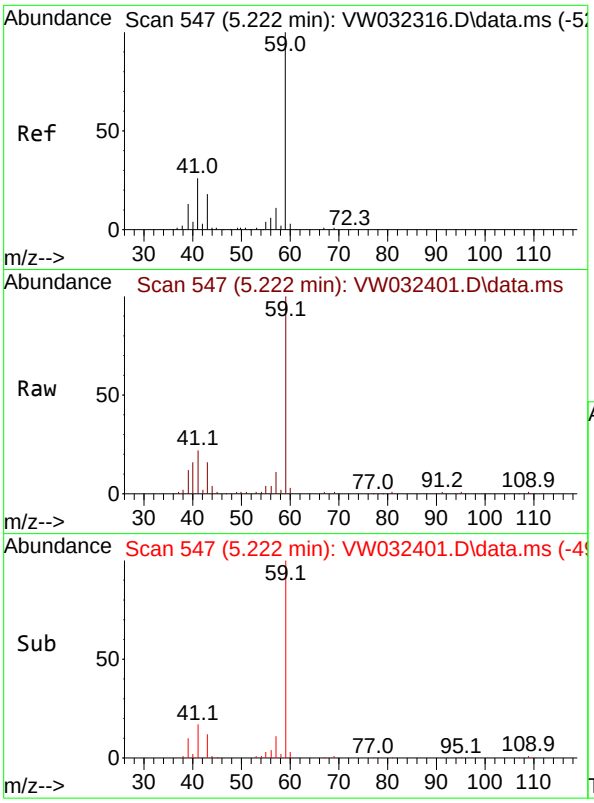


#10
Methyl Iodide
Concen: 26.250 ug/l
RT: 4.320 min Scan# 399
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:142 Resp: 50850

Ion	Ratio	Lower	Upper
142	100		
127	45.2	38.2	57.2
141	15.1	12.2	18.2





#11
Tert butyl alcohol
Concen: 519.775 ug/l
RT: 5.222 min Scan# 54
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 59 Resp: 7504

Ion	Ratio	Lower	Upper
59	100		
57	10.9	9.8	14.6

Instrument :
MSVOA_W
ClientSampleId :
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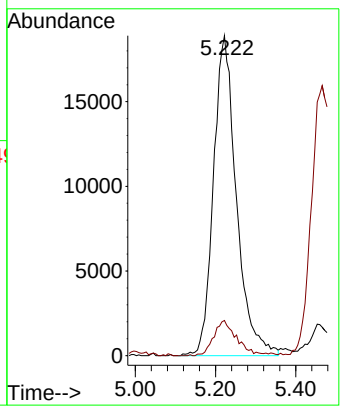
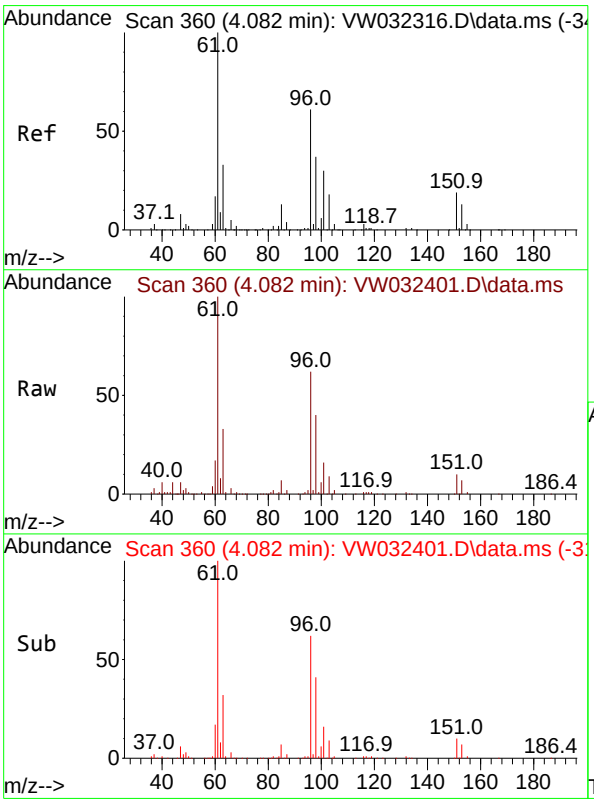
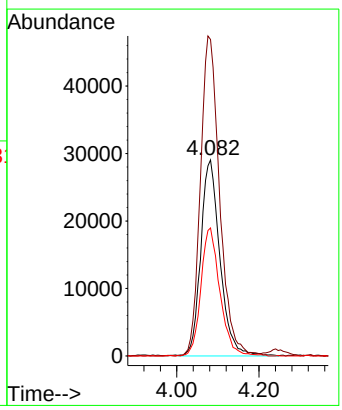


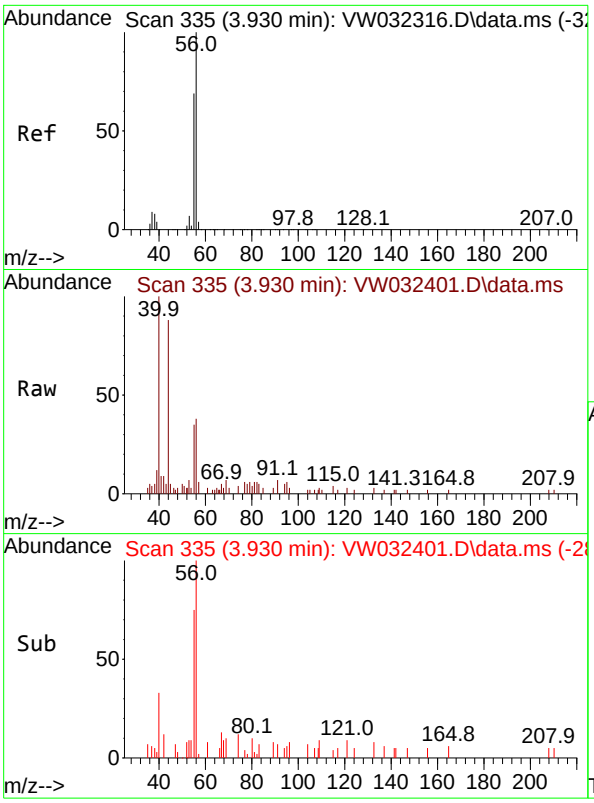


#12
1,1-Dichloroethene
Concen: 63.883 ug/l
RT: 4.082 min Scan# 360
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 96 Resp: 94160

Ion	Ratio	Lower	Upper
96	100		
61	161.1	123.0	184.4
98	65.1	48.5	72.7





#13
Acrolein
Concen: 12.798 ug/l
RT: 3.930 min Scan# 3
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 56 Resp: 299

Ion	Ratio	Lower	Upper
56	100		
55	137.3	56.4	84.6#

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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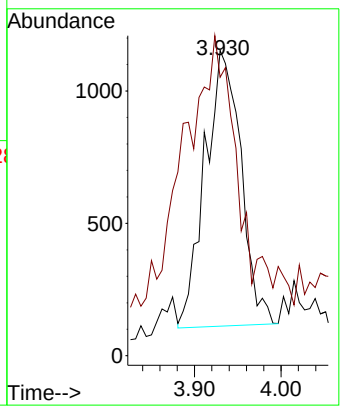
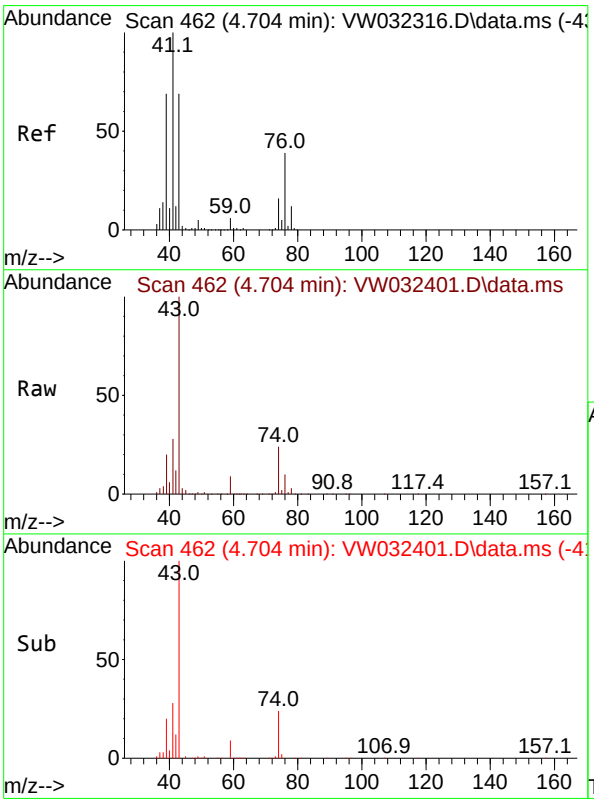
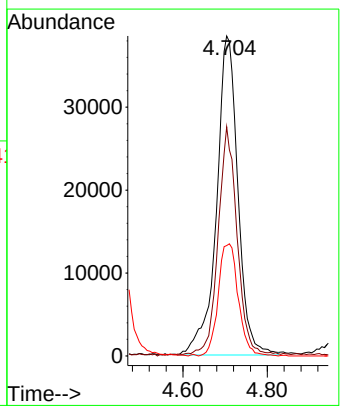


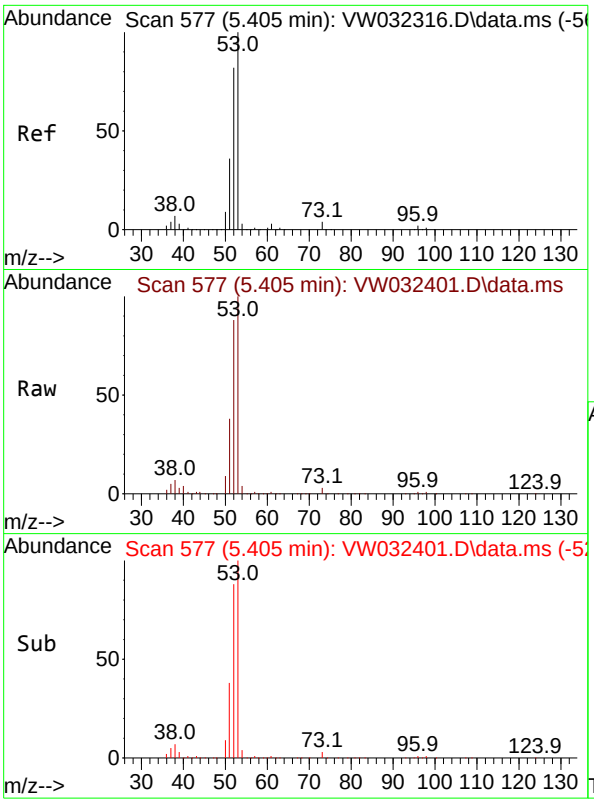


#14
Allyl chloride
Concen: 54.407 ug/l
RT: 4.704 min Scan# 462
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 41 Resp: 135448

Ion	Ratio	Lower	Upper
41	100		
39	63.6	64.1	96.1#
76	33.0	31.4	47.2

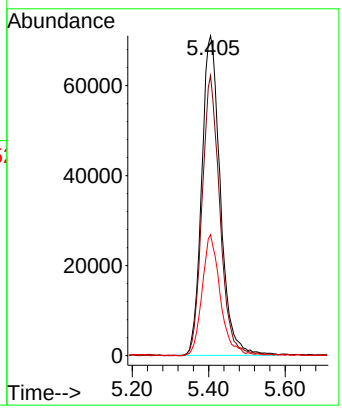




#15
Acrylonitrile
Concen: 471.545 ug/l
RT: 5.405 min Scan# 5
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 53 Resp: 24061

Ion	Ratio	Lower	Upper
53	100		
52	83.9	67.4	101.2
51	37.1	30.3	45.5



Instrument :
MSVOA_W
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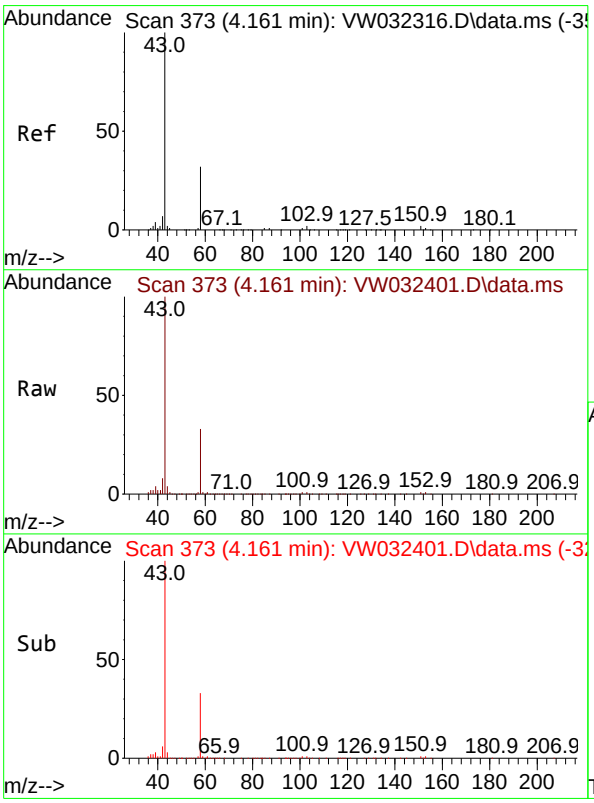
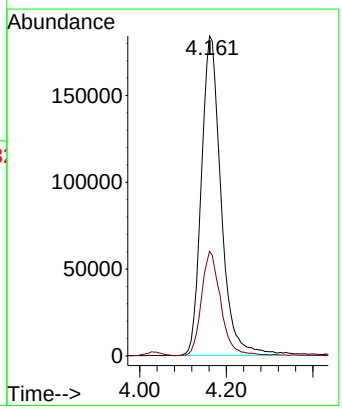
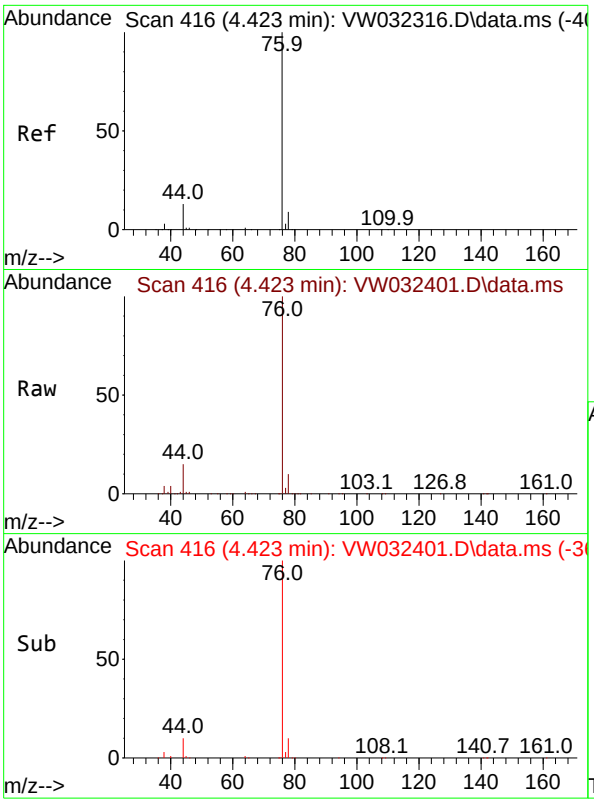


#16
Acetone
Concen: 1098.716 ug/l
RT: 4.161 min Scan# 373
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 580324

Ion	Ratio	Lower	Upper
43	100		
58	32.7	25.3	37.9





#17
Carbon Disulfide
Concen: 55.123 ug/l
RT: 4.423 min Scan# 4
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 76 Resp: 22168

Ion	Ratio	Lower	Upper
76	100		
78	9.8	7.0	10.6

Instrument :
MSVOA_W
ClientSampleId :
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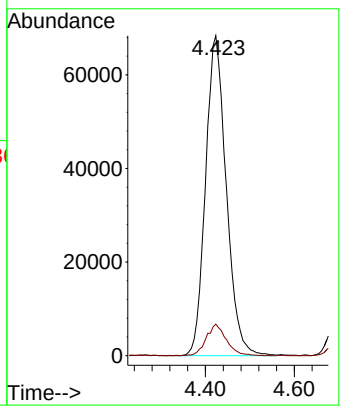
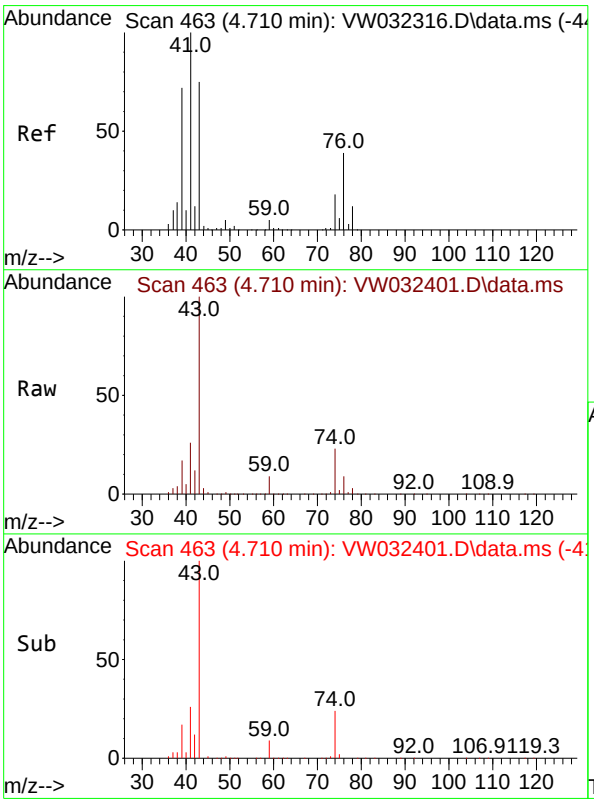
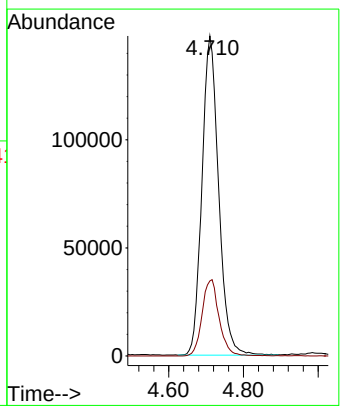


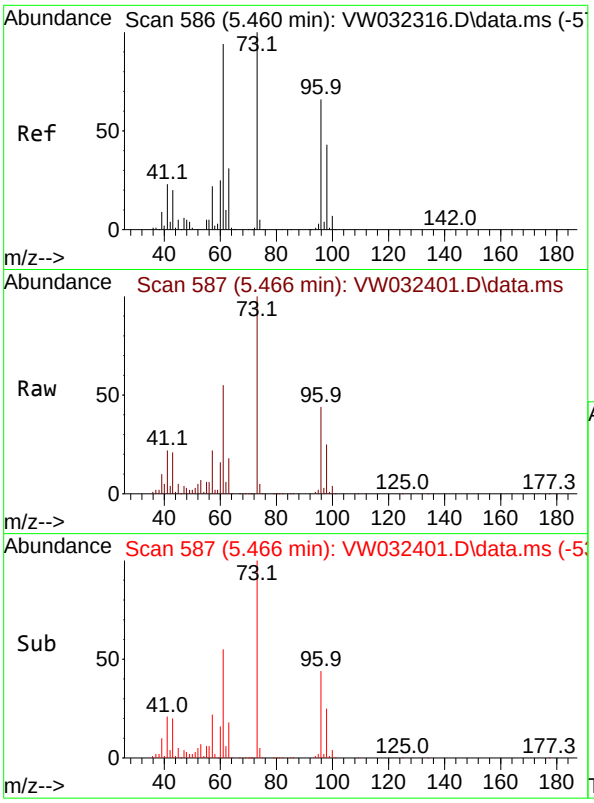


#18
Methyl Acetate
Concen: 302.369 ug/l
RT: 4.710 min Scan# 463
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 457494

Ion	Ratio	Lower	Upper
43	100		
74	24.3	20.2	30.4

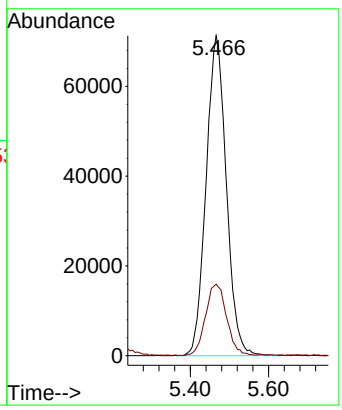




#19
Methyl tert-butyl Ether
Concen: 87.963 ug/l
RT: 5.466 min Scan# 5
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 73 Resp: 25536

Ion	Ratio	Lower	Upper
73	100		
57	22.3	16.2	24.4



Instrument :
MSVOA_W
ClientSampleId :
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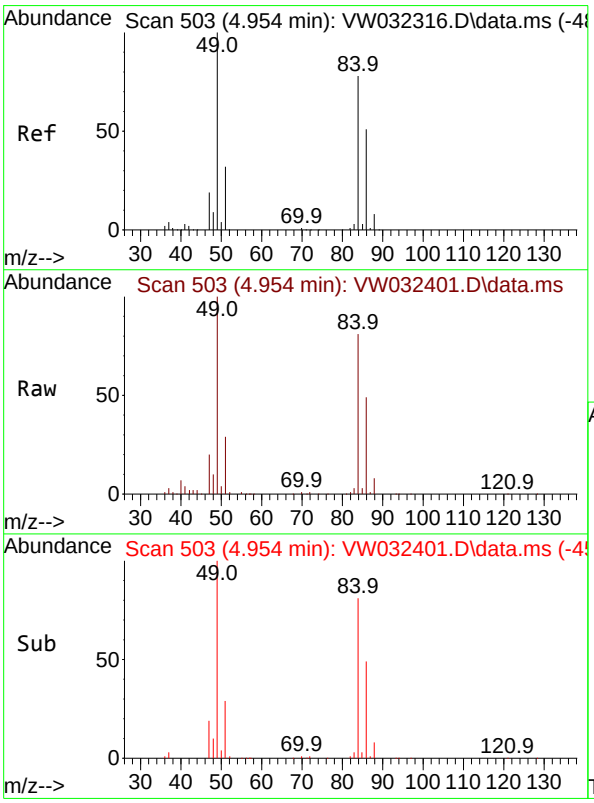
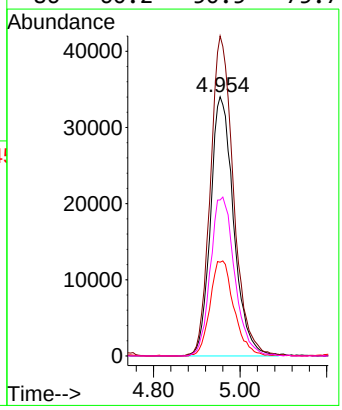
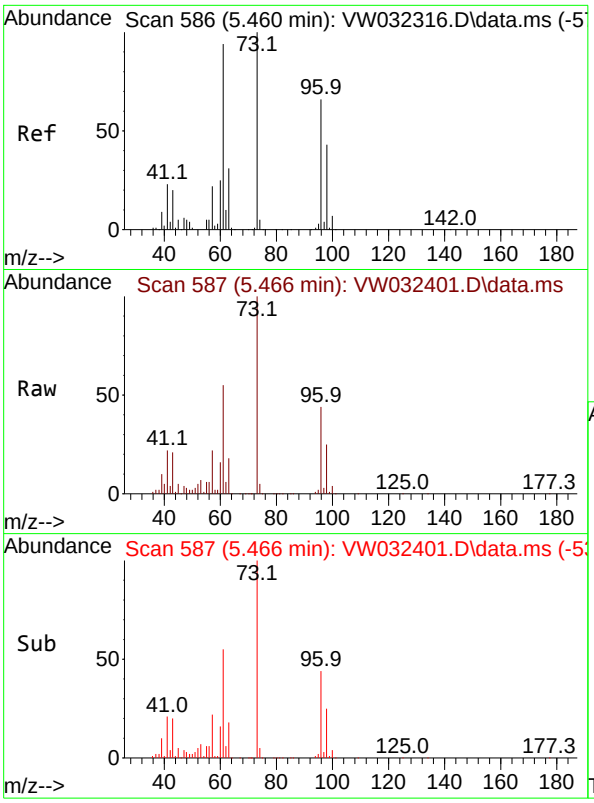


#20
Methylene Chloride
Concen: 74.993 ug/l
RT: 4.954 min Scan# 503
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 84 Resp: 126451

Ion	Ratio	Lower	Upper
84	100		
49	123.5	92.2	138.4
51	36.2	31.0	46.6
86	60.2	50.5	75.7

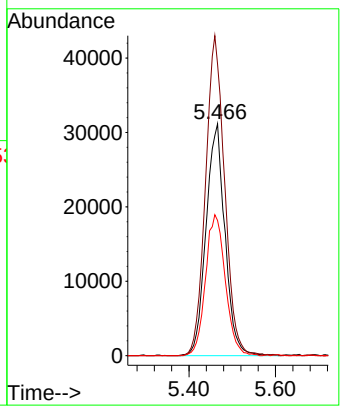




#21
trans-1,2-Dichloroethene
Concen: 57.969 ug/l
RT: 5.466 min Scan# 5
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 96 Resp: 9459

Ion	Ratio	Lower	Upper
96	100		
61	125.7	112.5	168.7
98	58.3	54.2	81.4



Instrument :
MSVOA_W
ClientSampleId :
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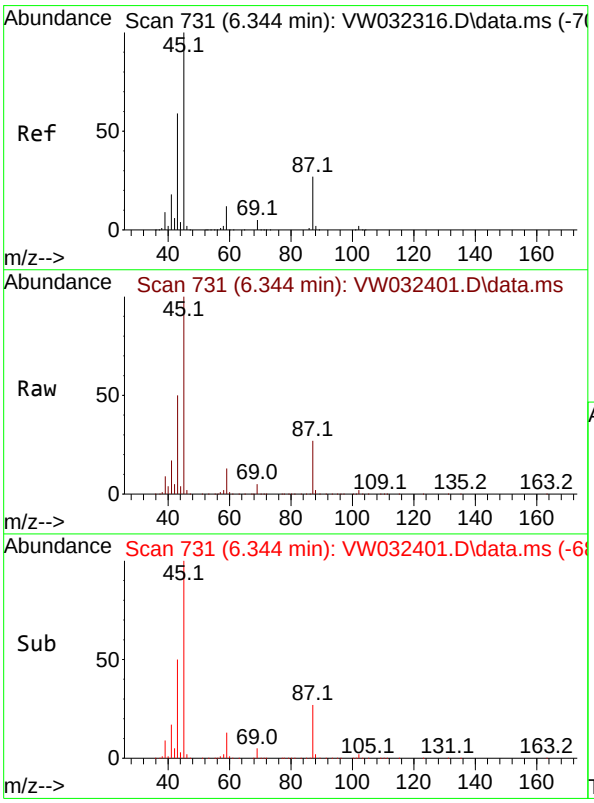
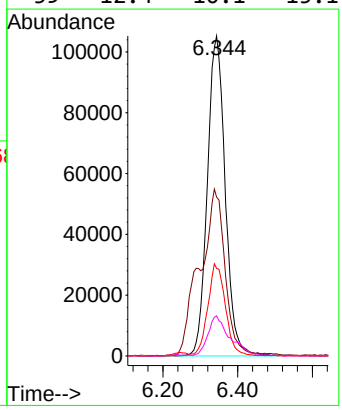
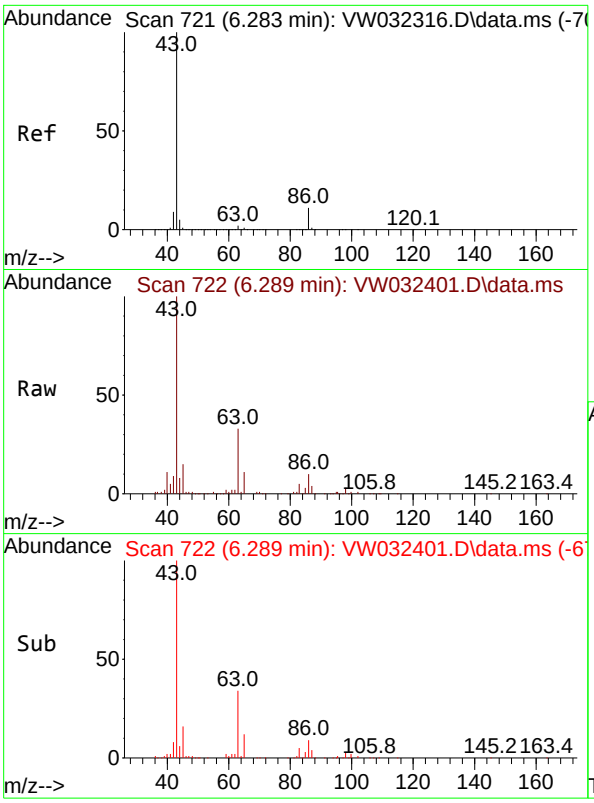


#22
Diisopropyl ether
Concen: 67.584 ug/l
RT: 6.344 min Scan# 731
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 45 Resp: 349916

Ion	Ratio	Lower	Upper
45	100		
43	49.1	51.4	77.2#
87	27.4	25.9	38.9
59	12.4	10.1	15.1

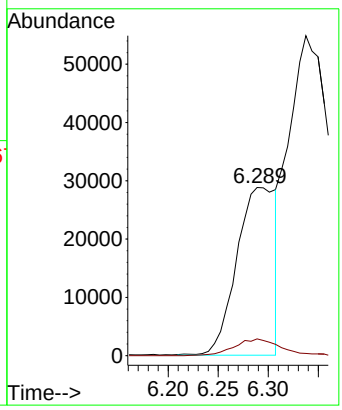




#23
Vinyl Acetate
Concen: 22.441 ug/l m
RT: 6.289 min Scan# 7
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 7760

Ion	Ratio	Lower	Upper
43	100		
86	10.0	8.8	13.2



Instrument :
MSVOA_W
ClientSampleId :
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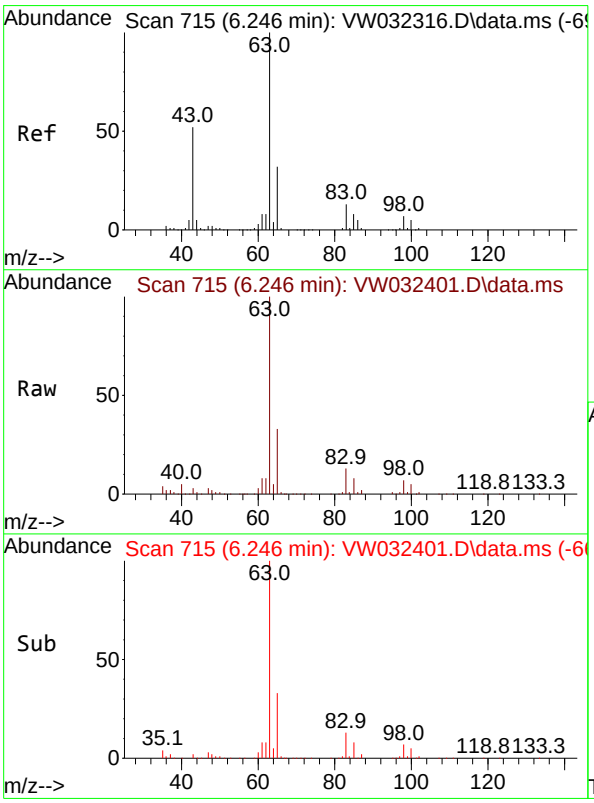
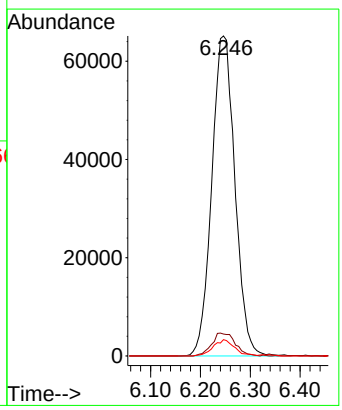
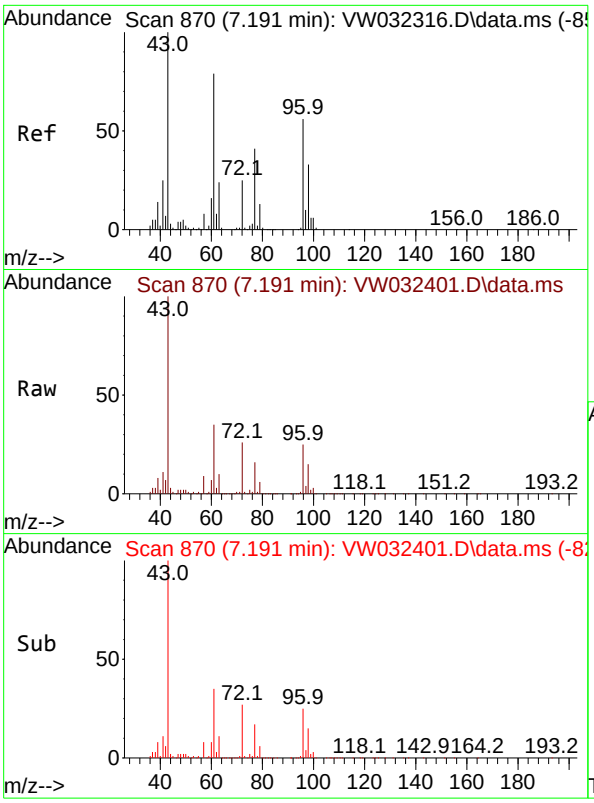


#24
1,1-Dichloroethane
Concen: 66.794 ug/l
RT: 6.246 min Scan# 715
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 63 Resp: 210102

Ion	Ratio	Lower	Upper
63	100		
98	6.8	3.8	11.2
100	5.1	2.5	7.5





#25
2-Butanone
Concen: 713.565 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 51330

Ion	Ratio	Lower	Upper
43	100		
72	26.4	21.4	32.2

Instrument :
MSVOA_W
ClientSampleId :
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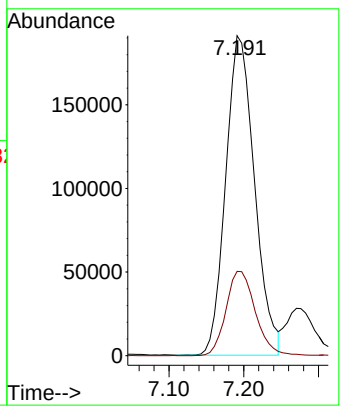
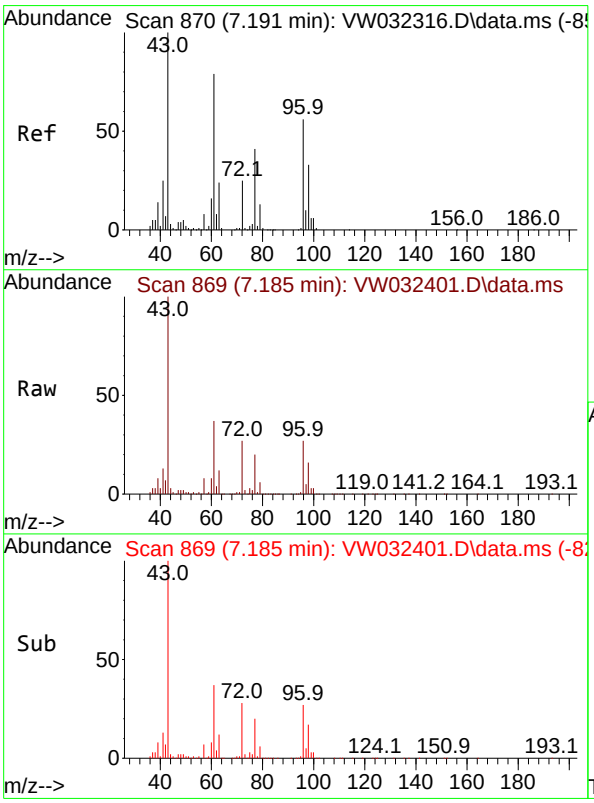
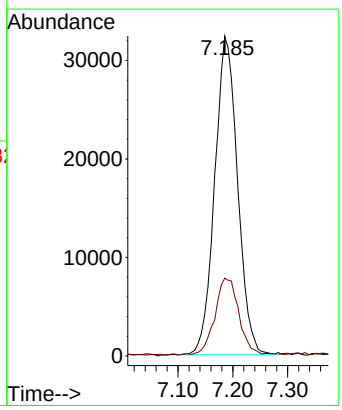


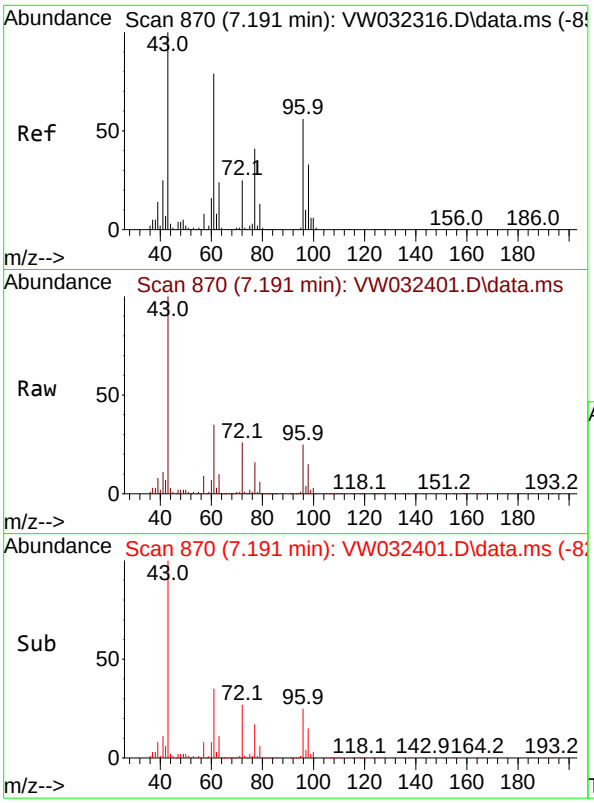


#26
2,2-Dichloropropane
Concen: 58.190 ug/l
RT: 7.185 min Scan# 869
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 77 Resp: 93628

Ion	Ratio	Lower	Upper
77	100		
97	25.3	11.9	35.5





#27
cis-1,2-Dichloroethene
Concen: 63.774 ug/l
RT: 7.191 min Scan# 8
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 96 Resp: 12502

Ion	Ratio	Lower	Upper
96	100		
61	141.3	0.0	268.0
98	63.4	0.0	130.8

Instrument :
MSVOA_W
ClientSampleId :
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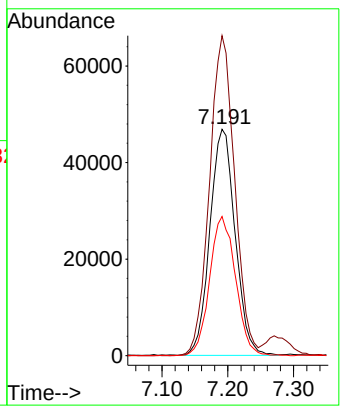
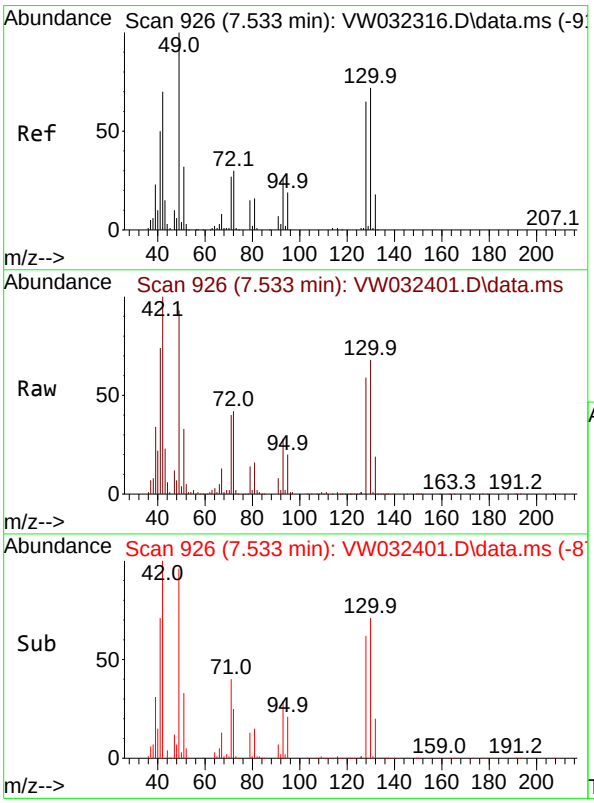
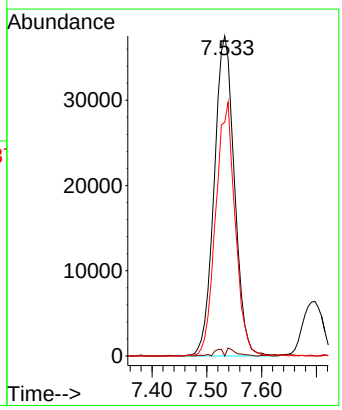


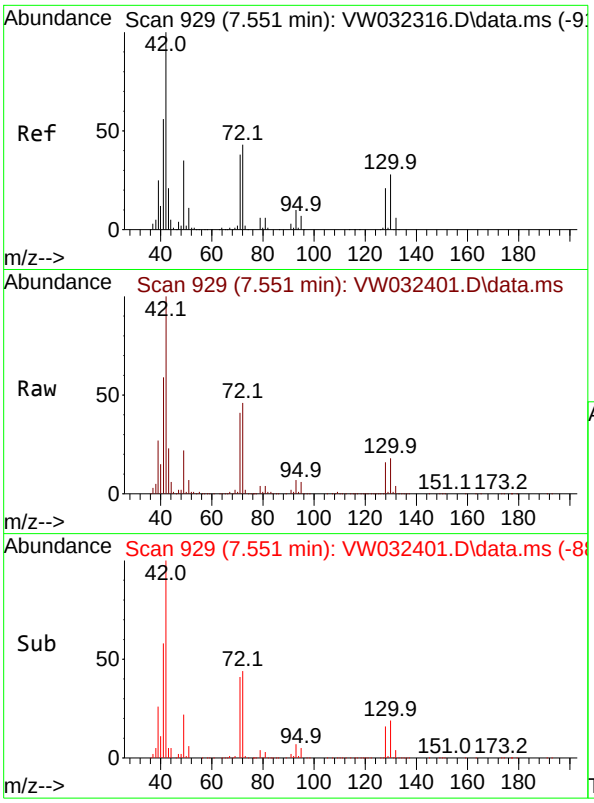


#28
Bromochloromethane
Concen: 65.324 ug/l
RT: 7.533 min Scan# 926
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 49 Resp: 96675

Ion	Ratio	Lower	Upper
49	100		
129	1.1	0.0	4.2
130	76.2	67.5	101.3

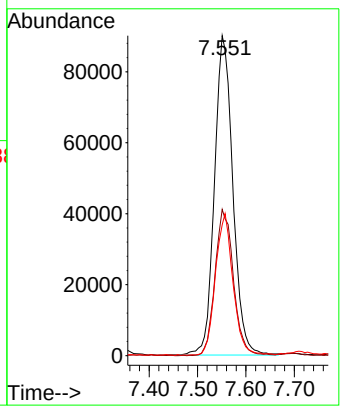




#29
Tetrahydrofuran
Concen: 526.094 ug/l
RT: 7.551 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 42 Resp: 23799

Ion	Ratio	Lower	Upper
42	100		
72	45.9	37.4	56.2
71	42.1	36.0	54.0



Instrument :
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ClientSampleId :
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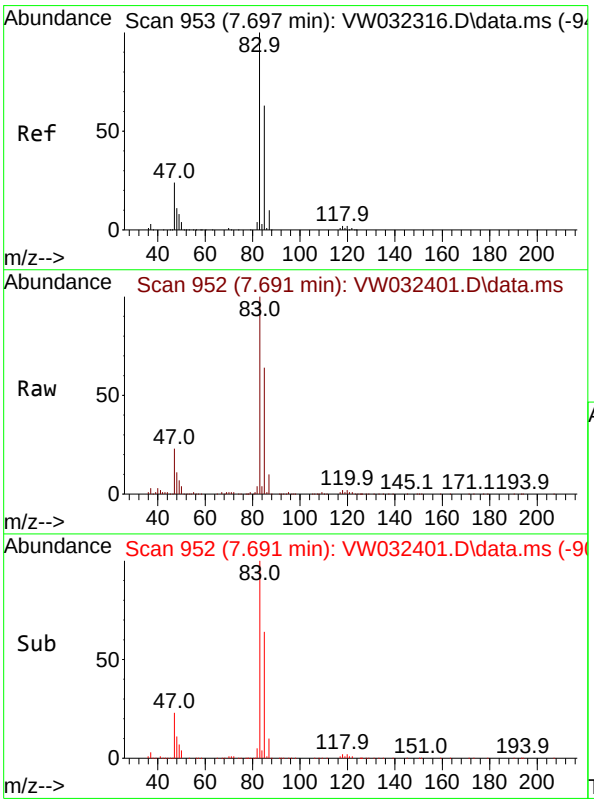
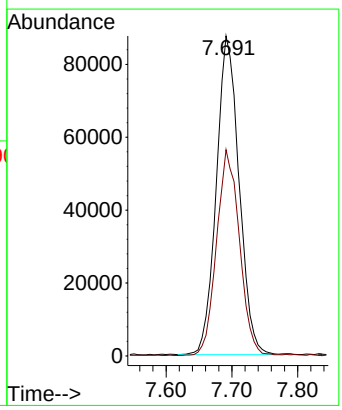
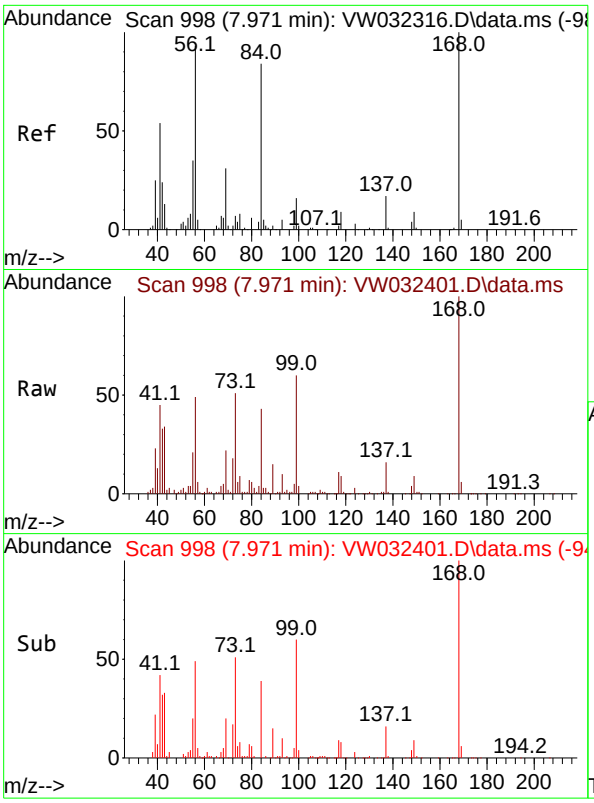


#30
Chloroform
Concen: 65.961 ug/l
RT: 7.691 min Scan# 952
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 83 Resp: 210422

Ion	Ratio	Lower	Upper
83	100		
85	64.6	51.2	76.8

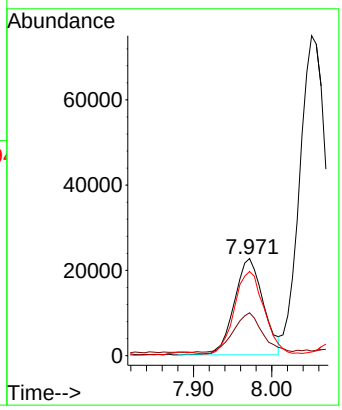




#31
Cyclohexane
Concen: 21.543 ug/l
RT: 7.971 min Scan# 9
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 56 Resp: 5785

Ion	Ratio	Lower	Upper
56	100		
69	40.9	27.7	41.5
84	83.8	74.6	112.0



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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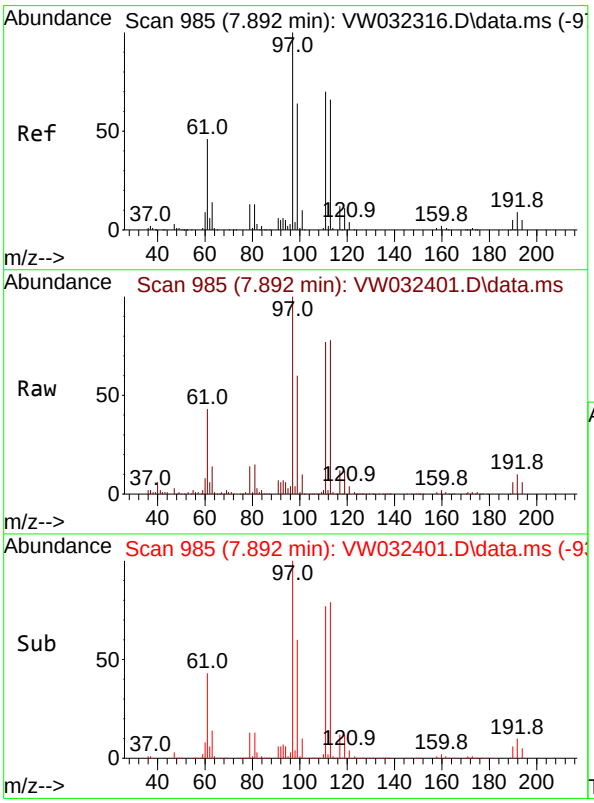
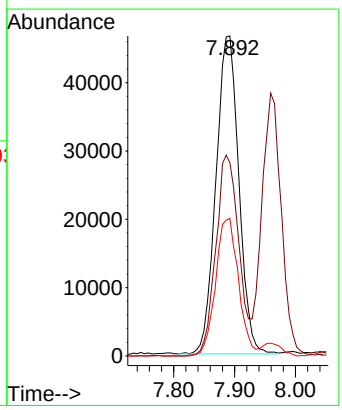
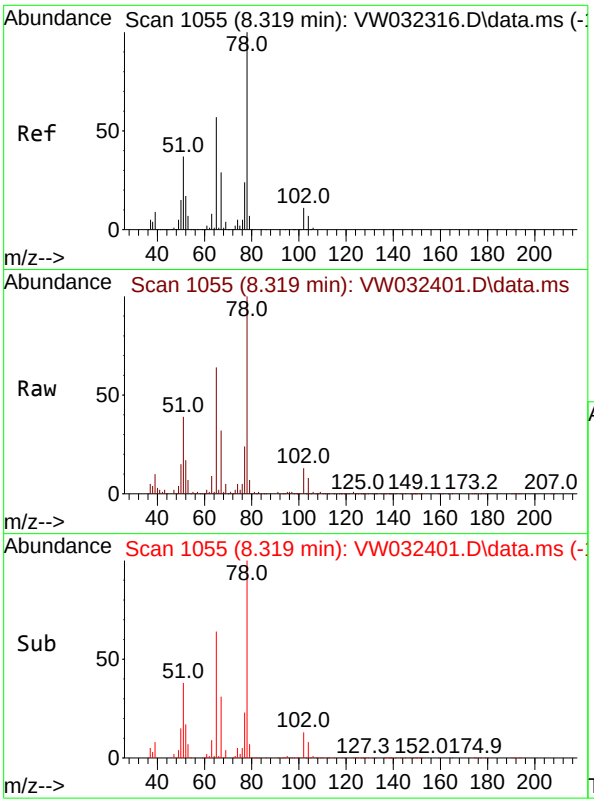


#32
1,1,1-Trichloroethane
Concen: 53.740 ug/l
RT: 7.892 min Scan# 985
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 97 Resp: 121484

Ion	Ratio	Lower	Upper
97	100		
99	64.2	50.9	76.3
61	43.2	36.2	54.4





#33
1,2-Dichloroethane-d4
Concen: 71.688 ug/l
RT: 8.319 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 65 Resp: 13674

Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	99.6

Instrument :
MSVOA_W
ClientSampleId :
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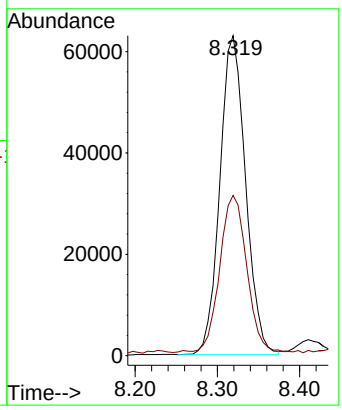
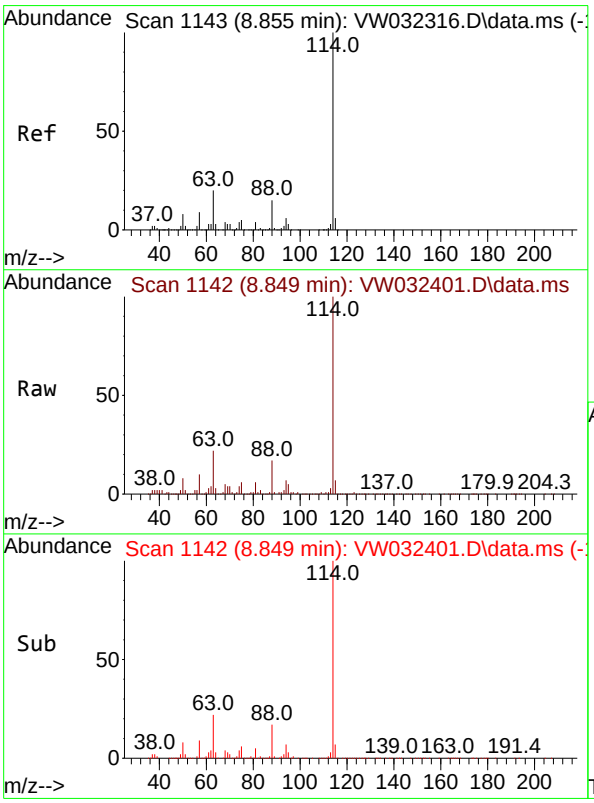
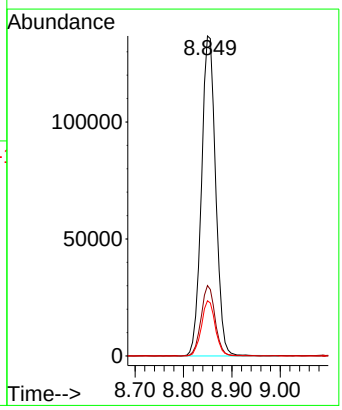


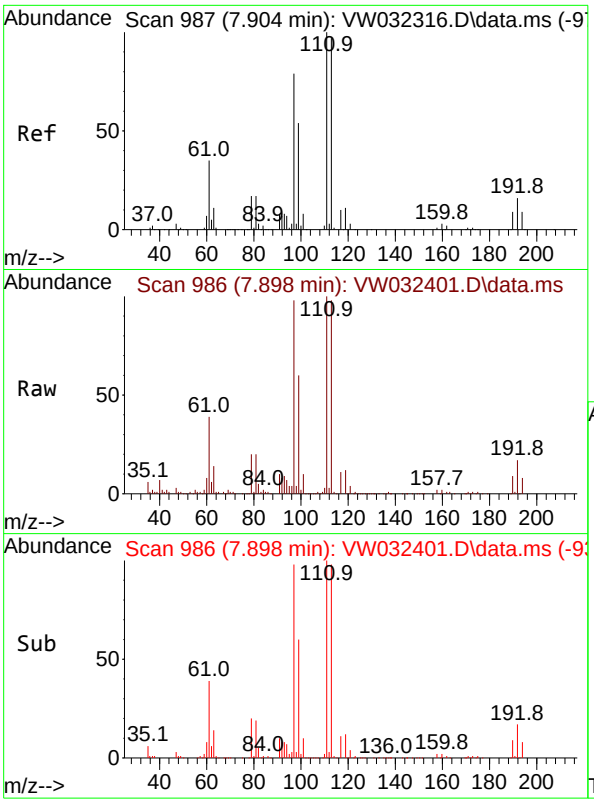


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 1142
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:114 Resp: 279199

Ion	Ratio	Lower	Upper
114	100		
63	22.0	0.0	40.4
88	17.2	0.0	32.0

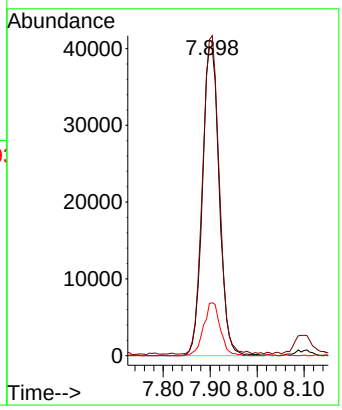




#35
Dibromofluoromethane
Concen: 55.329 ug/l
RT: 7.898 min Scan# 9
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:113 Resp: 10004

Ion	Ratio	Lower	Upper
113	100		
111	102.0	83.9	125.9
192	17.0	14.6	21.8



Instrument :
MSVOA_W
ClientSampleId :
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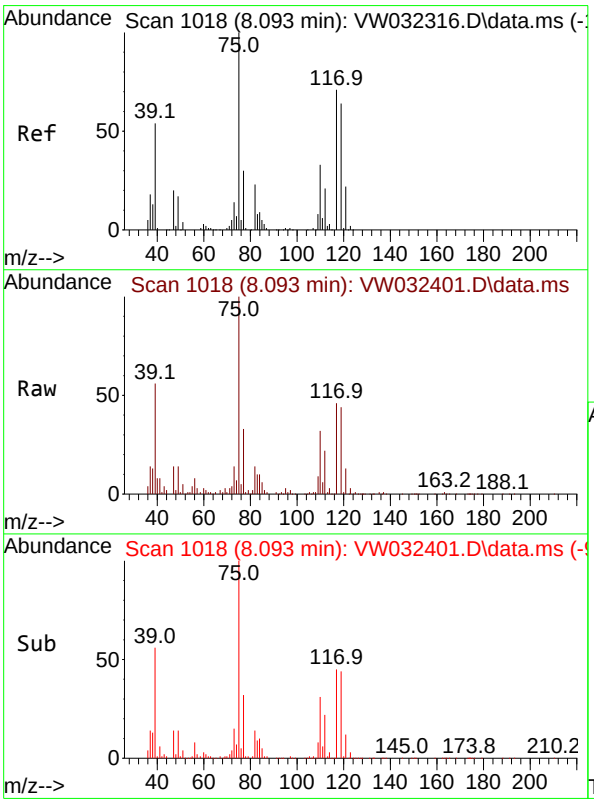
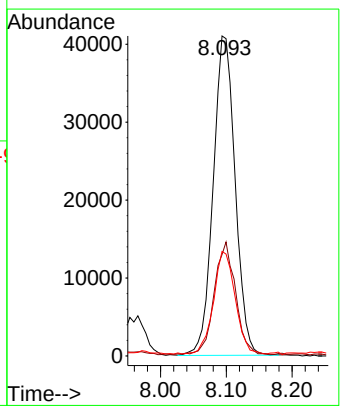
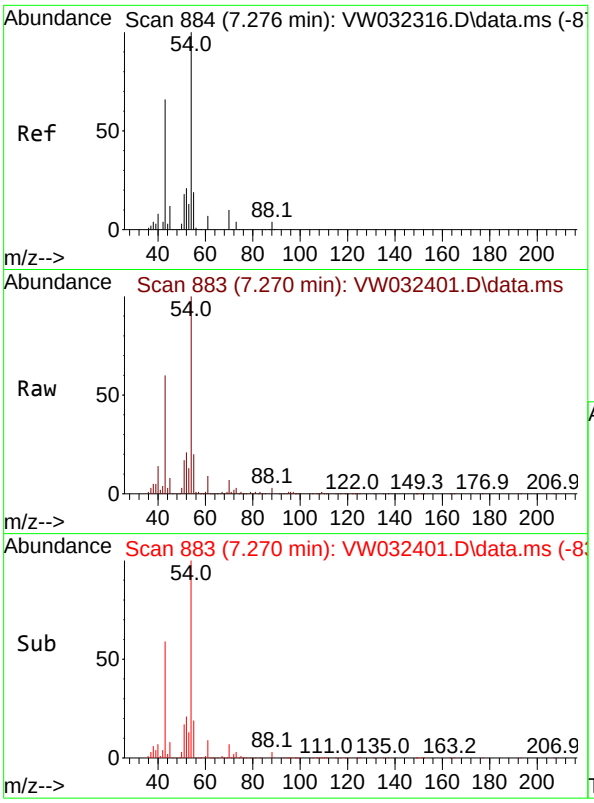


#36
1,1-Dichloropropene
Concen: 37.373 ug/l
RT: 8.093 min Scan# 1018
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 75 Resp: 95367

Ion	Ratio	Lower	Upper
75	100		
110	34.0	17.5	52.5
77	31.7	24.1	36.1

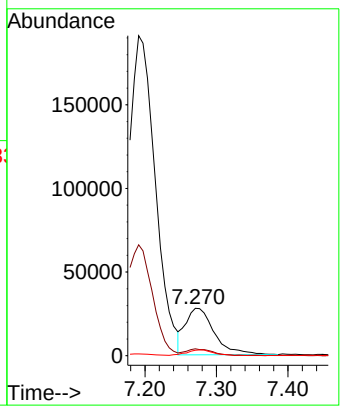




#37
Ethyl Acetate
Concen: 46.227 ug/l
RT: 7.270 min Scan# 8
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 7851

Ion	Ratio	Lower	Upper
43	100		
61	13.9	11.3	16.9
70	11.6	8.9	13.3



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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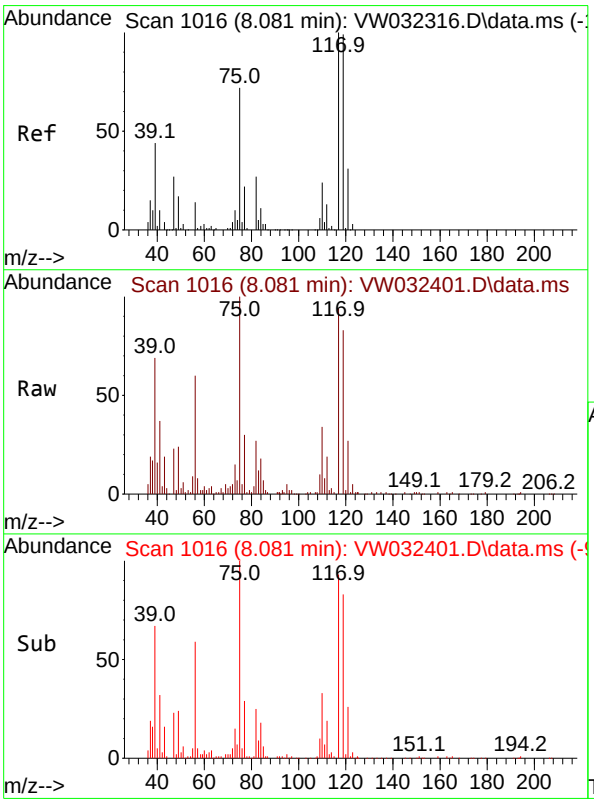
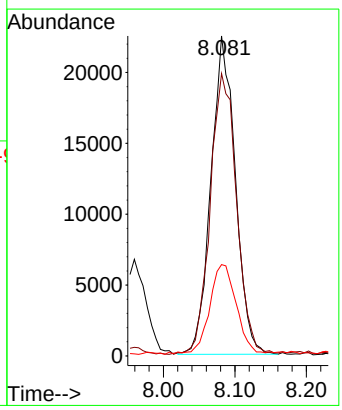
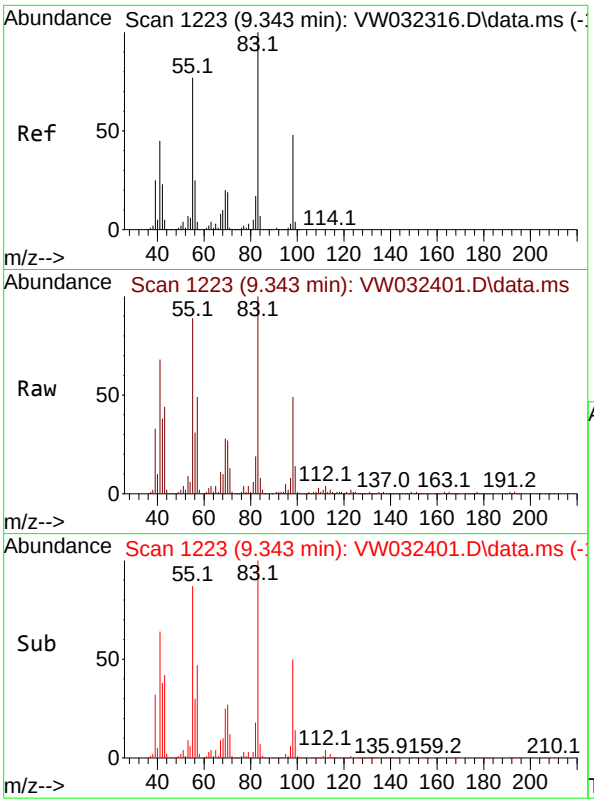


#38
Carbon Tetrachloride
Concen: 22.132 ug/l
RT: 8.081 min Scan# 1016
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:117 Resp: 53145

Ion	Ratio	Lower	Upper
117	100		
119	87.8	74.2	111.2
121	27.5	25.6	38.4

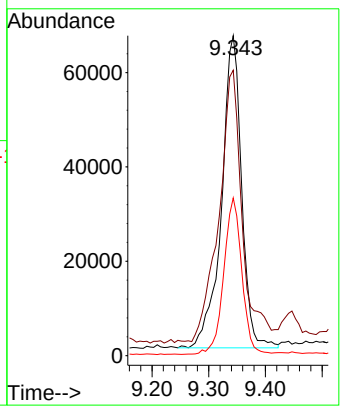




#39
Methylcyclohexane
Concen: 52.833 ug/l
RT: 9.343 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 83 Resp: 16262

Ion	Ratio	Lower	Upper
83	100		
55	86.5	58.4	87.6
98	50.1	39.4	59.2



Instrument :
MSVOA_W
ClientSampleId :
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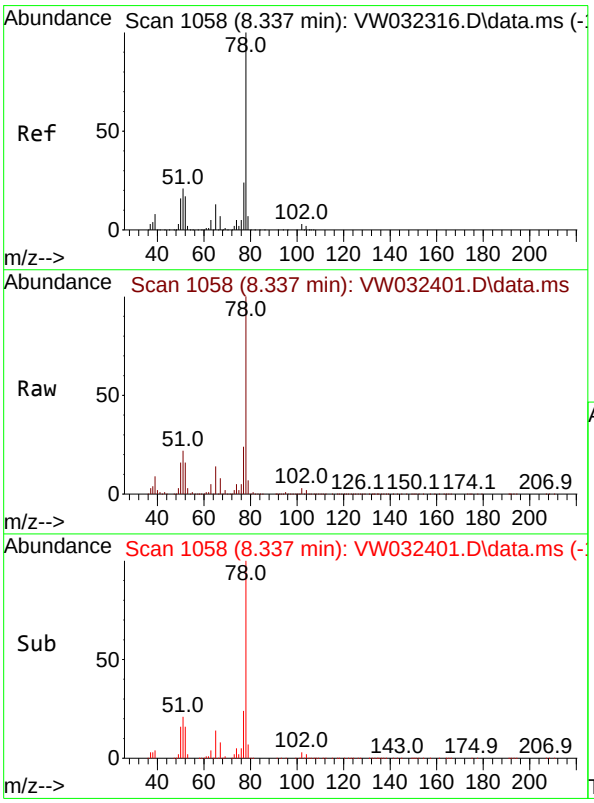
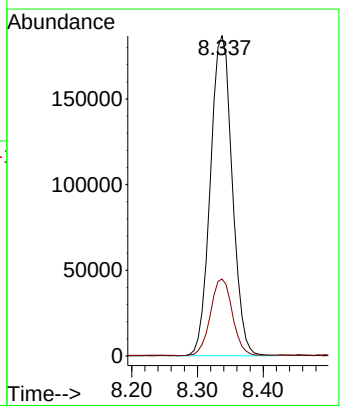
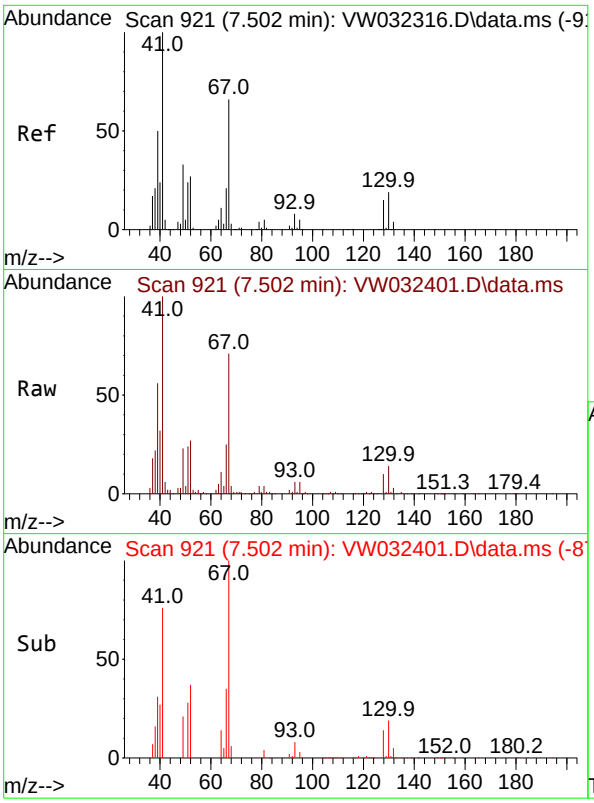


#40
Benzene
Concen: 53.936 ug/l
RT: 8.337 min Scan# 1058
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 78 Resp: 431403

Ion	Ratio	Lower	Upper
78	100		
77	24.0	20.7	31.1

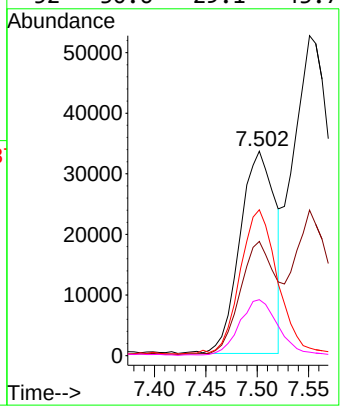




#41
Methacrylonitrile
Concen: 86.912 ug/l
RT: 7.502 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 41 Resp: 7955

Ion	Ratio	Lower	Upper
41	100		
39	59.2	50.9	76.3
67	76.8	65.6	98.4
52	30.6	29.1	43.7



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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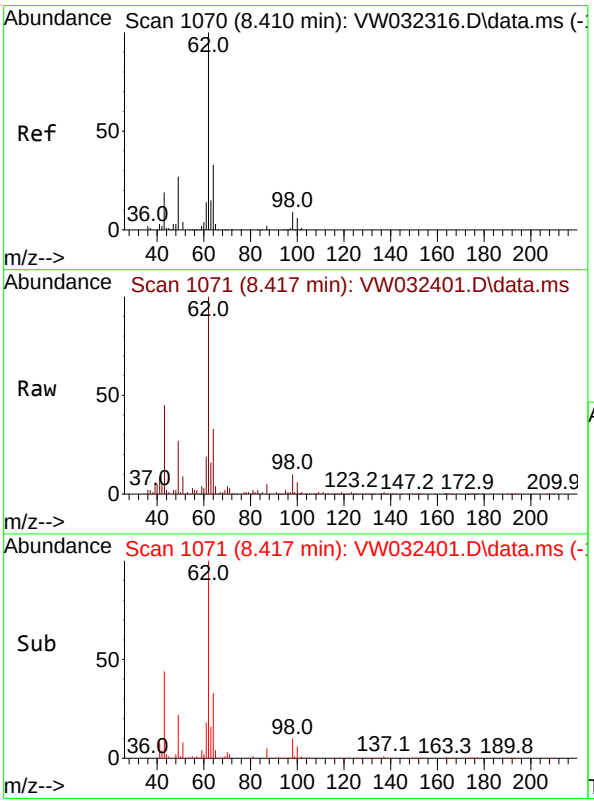
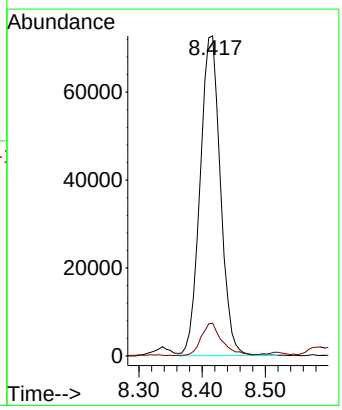
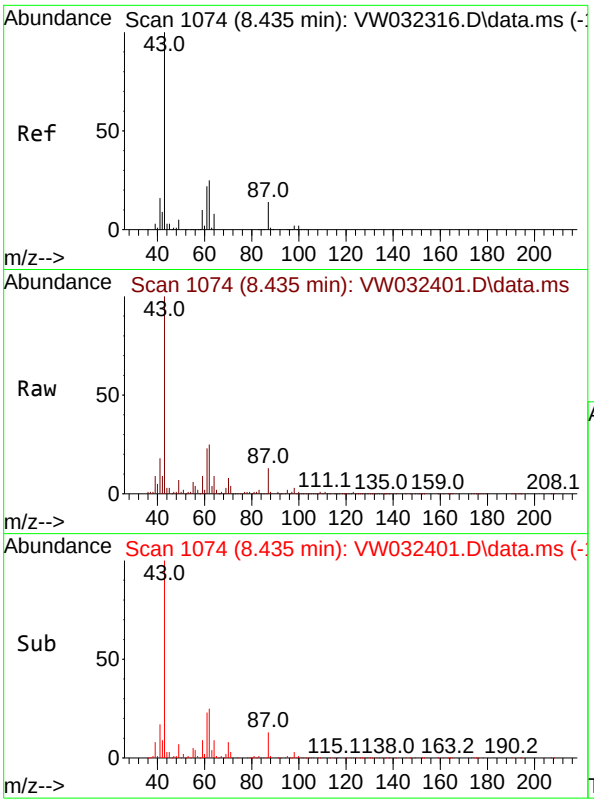


#42
1,2-Dichloroethane
Concen: 62.062 ug/l
RT: 8.417 min Scan# 1071
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 62 Resp: 162425

Ion	Ratio	Lower	Upper
62	100		
98	10.4	0.0	18.0





#43
Isopropyl Acetate
Concen: 66.702 ug/l
RT: 8.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 20098

Ion	Ratio	Lower	Upper
43	100		
61	26.0	23.3	34.9
87	12.5	11.1	16.7

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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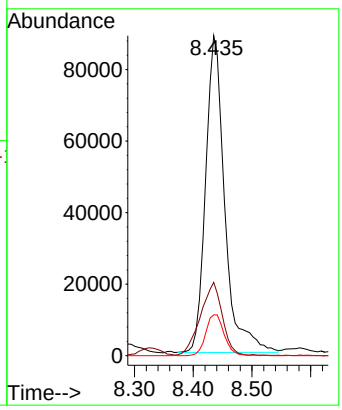
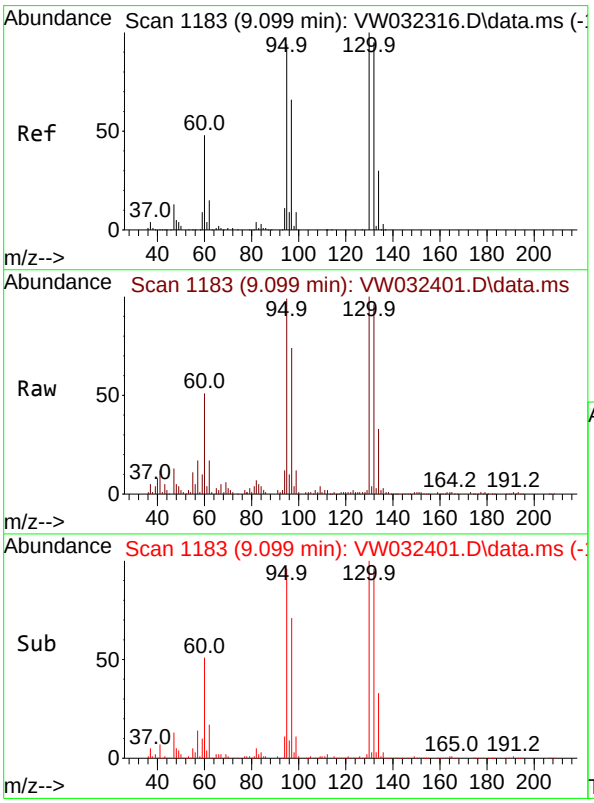
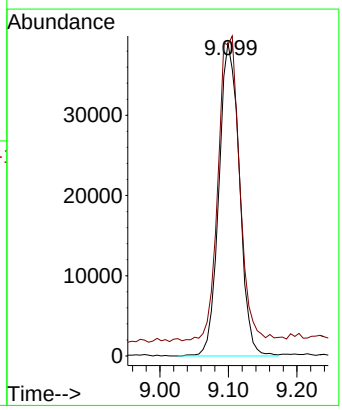


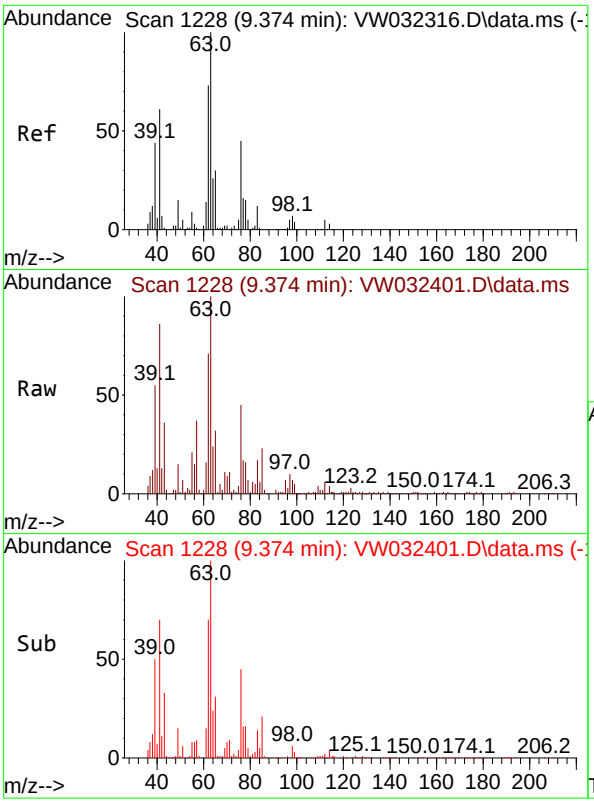


#44
Trichloroethene
Concen: 43.184 ug/l
RT: 9.099 min Scan# 1183
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:130 Resp: 80877

Ion	Ratio	Lower	Upper
130	100		
95	94.0	0.0	220.0

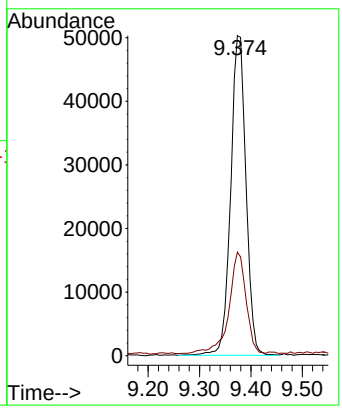




#45
1,2-Dichloropropane
Concen: 52.012 ug/l
RT: 9.374 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 63 Resp: 10384

Ion	Ratio	Lower	Upper
63	100		
65	31.7	24.3	36.5



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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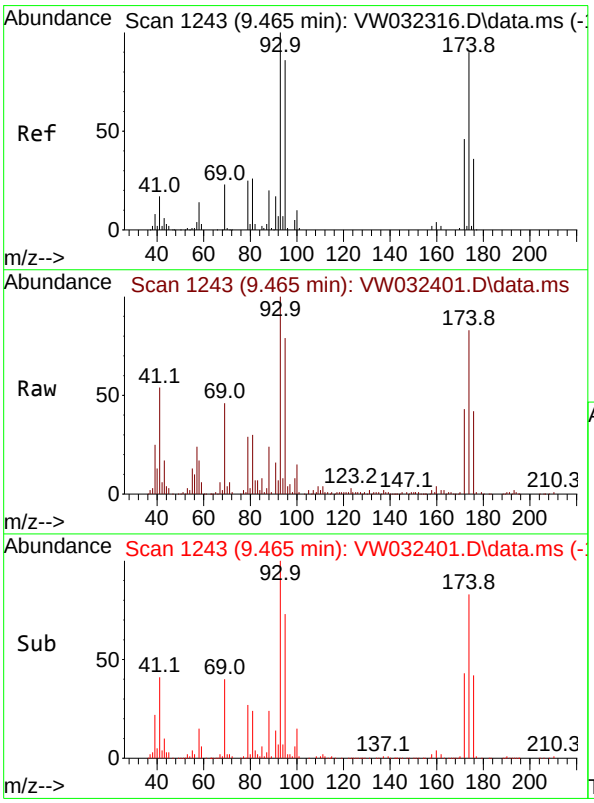
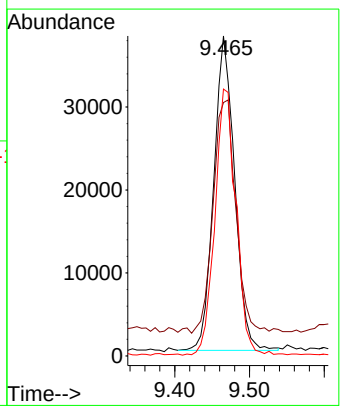
Supervised By :Semsettin Yesilyurt 10/21/2025

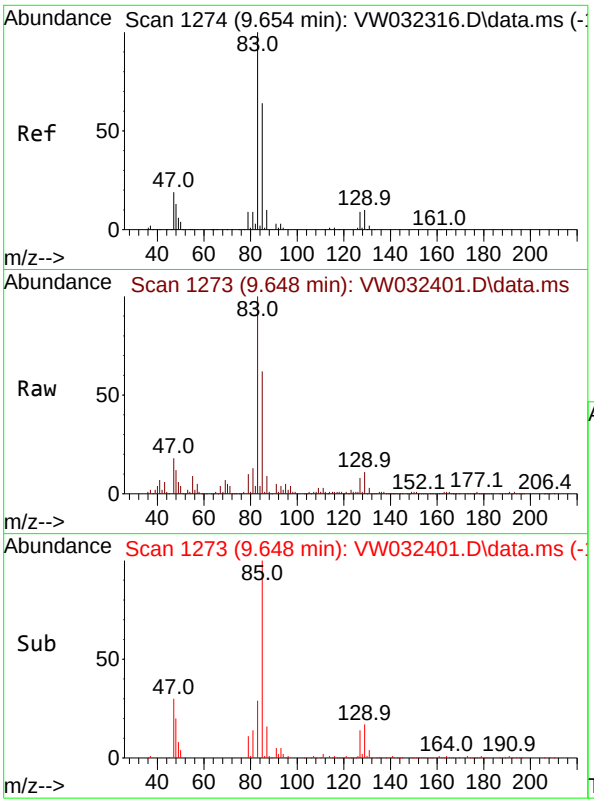


#46
Dibromomethane
Concen: 59.746 ug/l
RT: 9.465 min Scan# 1243
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 93 Resp: 73347

Ion	Ratio	Lower	Upper
93	100		
95	80.9	67.4	101.2
174	86.2	75.7	113.5

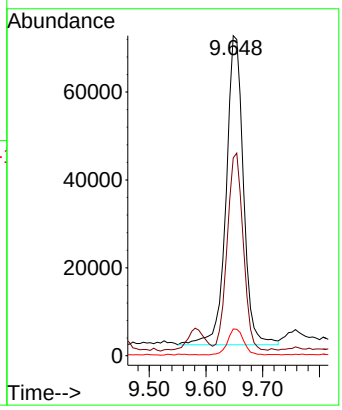




#47
Bromodichloromethane
Concen: 53.334 ug/l
RT: 9.648 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 83 Resp: 14975

Ion	Ratio	Lower	Upper
83	100		
85	62.2	48.7	73.1
127	8.3	6.4	9.6



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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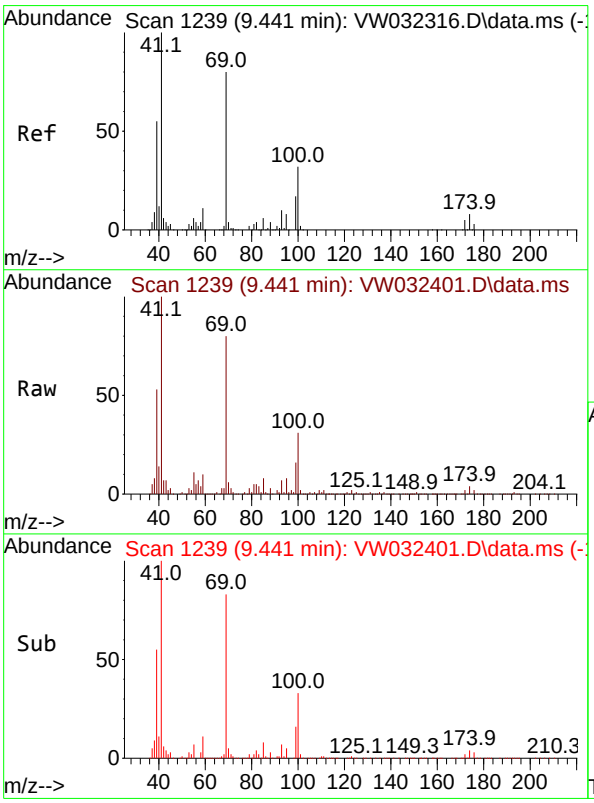
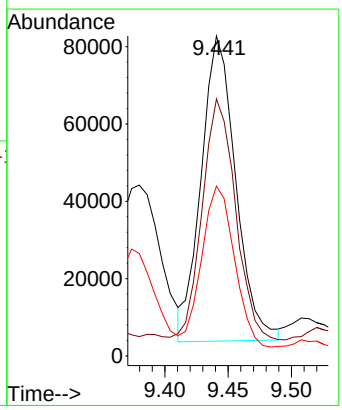
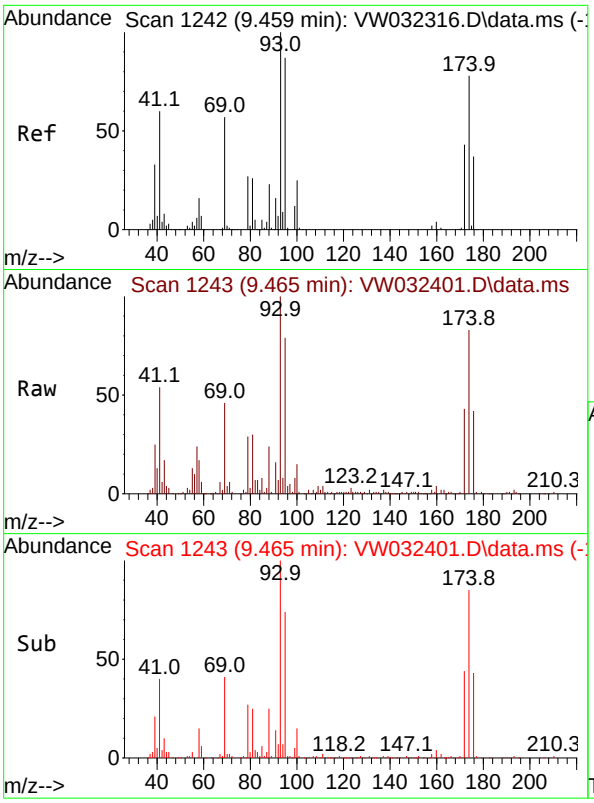


#48
Methyl methacrylate
Concen: 102.301 ug/l
RT: 9.441 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 41 Resp: 149868

Ion	Ratio	Lower	Upper
41	100		
69	79.5	71.5	107.3
39	53.5	55.9	83.9#

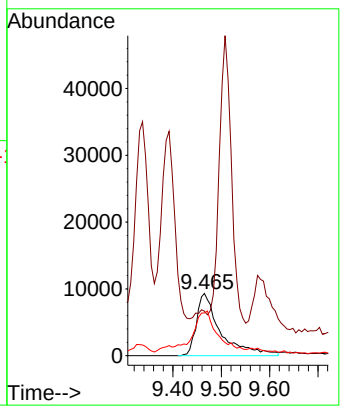




#49
1,4-Dioxane
Concen: 1924.641 ug/l
RT: 9.465 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 88 Resp: 3229

Ion	Ratio	Lower	Upper
88	100		
43	21.7	18.0	27.0
58	60.6	55.4	83.0



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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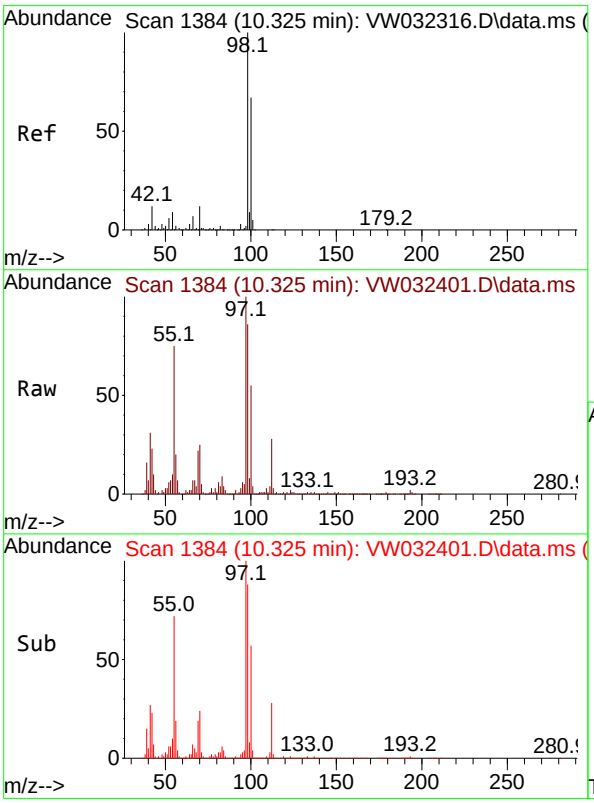
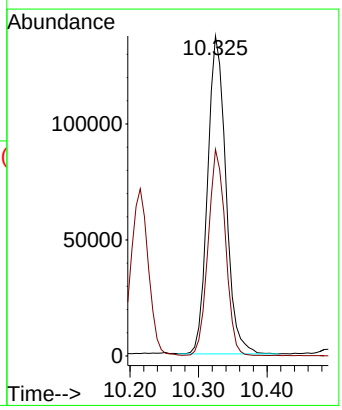
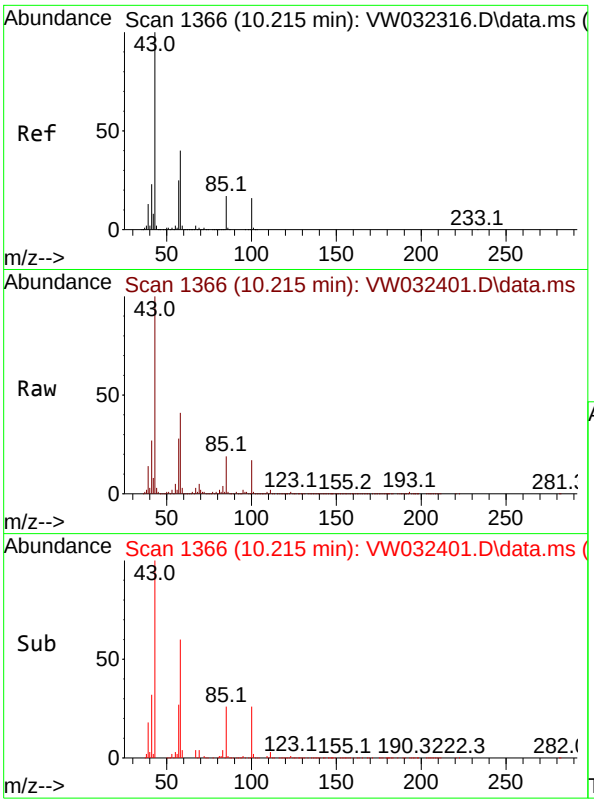


#50
Toluene-d8
Concen: 38.025 ug/l
RT: 10.325 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 98 Resp: 253753

Ion	Ratio	Lower	Upper
98	100		
100	61.4	51.4	77.2





#51
4-Methyl-2-Pentanone
Concen: 430.079 ug/l
RT: 10.215 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 75057

Ion	Ratio	Lower	Upper
43	100		
58	40.6	32.0	48.0

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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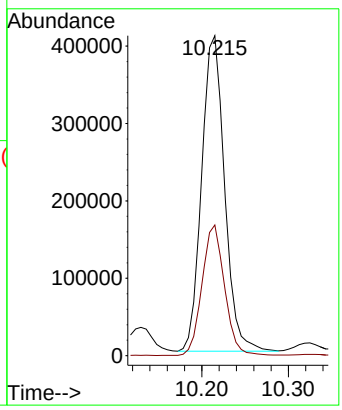
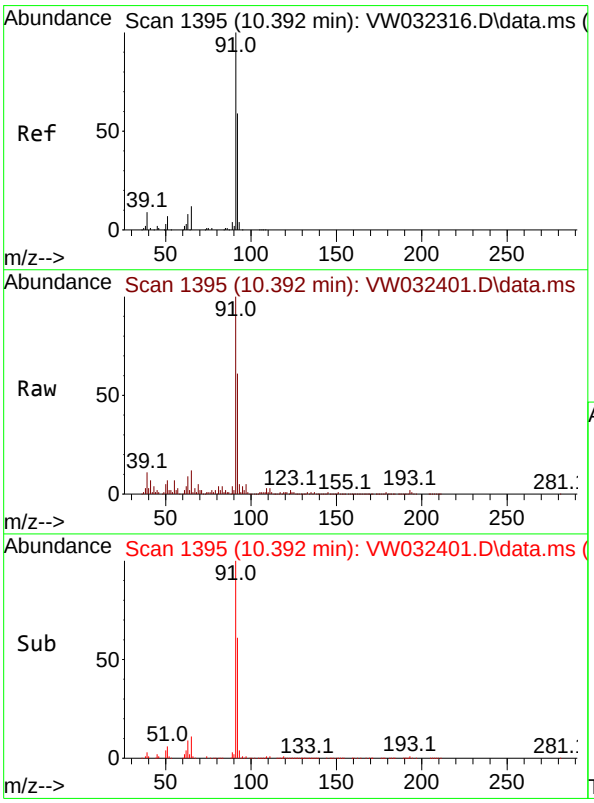
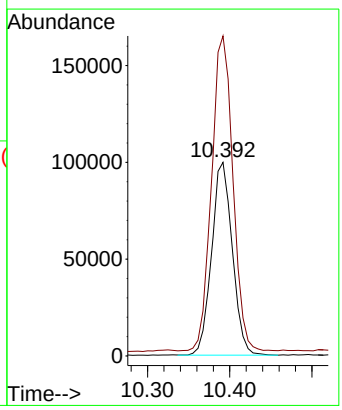


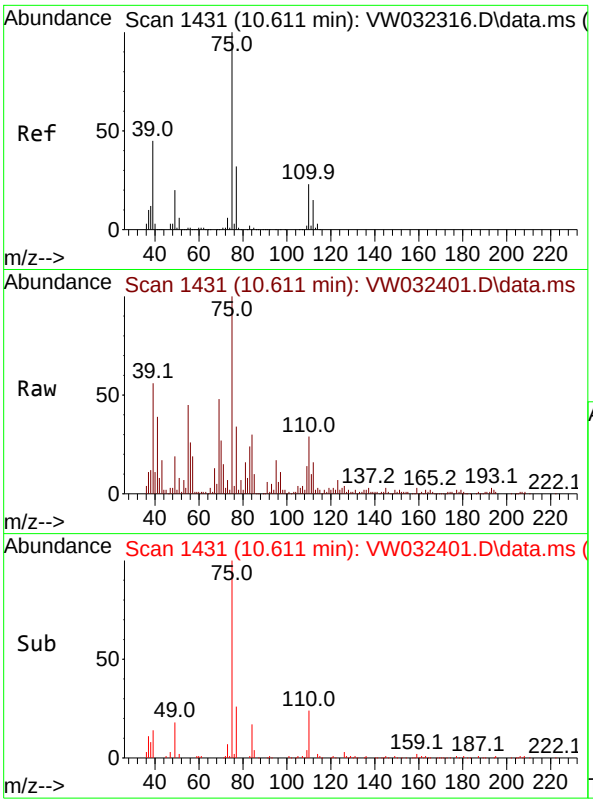


#52
Toluene
Concen: 34.976 ug/l
RT: 10.392 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 92 Resp: 174217

Ion	Ratio	Lower	Upper
92	100		
91	167.8	137.5	206.3





#53
t-1,3-Dichloropropene
Concen: 29.888 ug/l
RT: 10.611 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 75 Resp: 8142

Ion	Ratio	Lower	Upper
75	100		
77	29.6	25.6	38.4

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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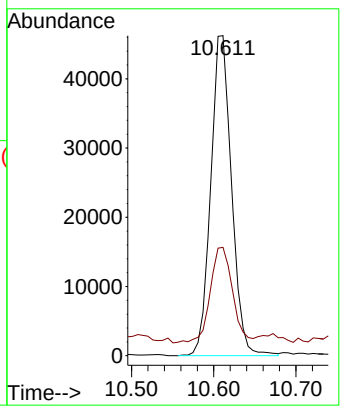
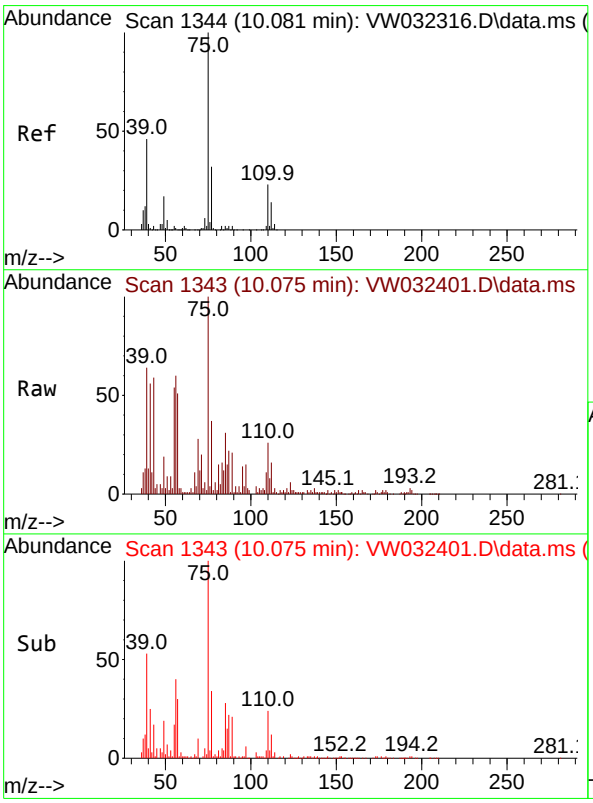
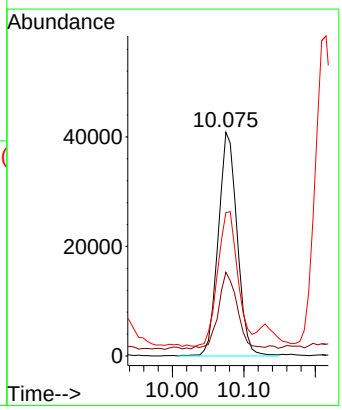


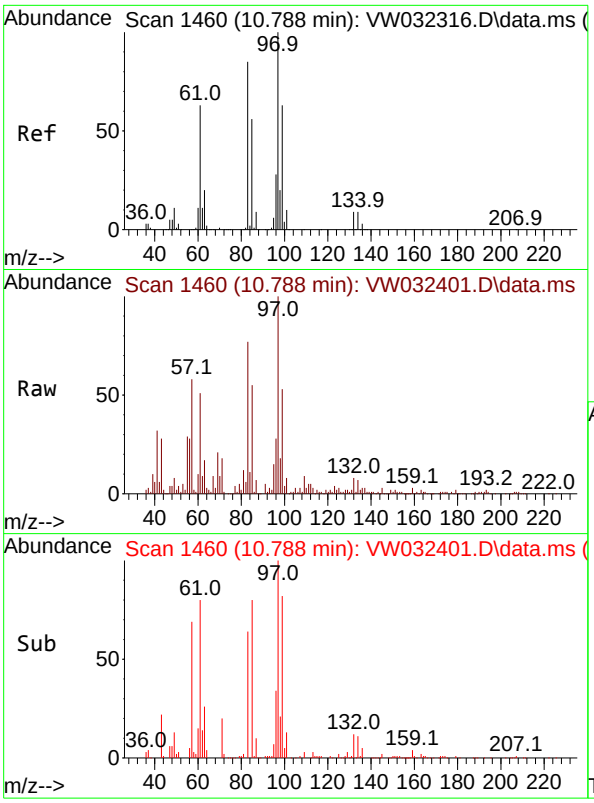


#54
cis-1,3-Dichloropropene
Concen: 23.923 ug/l
RT: 10.075 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 75 Resp: 75068

Ion	Ratio	Lower	Upper
75	100		
77	34.0	25.1	37.7
39	58.9	43.2	64.8

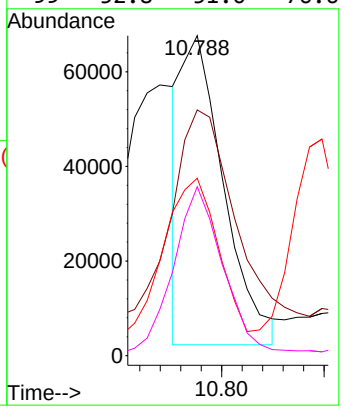




#55
1,1,2-Trichloroethane
Concen: 57.254 ug/l m
RT: 10.788 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 97 Resp: 9394

Ion	Ratio	Lower	Upper
97	100		
83	76.8	71.0	106.6
85	55.4	42.8	64.2
99	52.8	51.0	76.6



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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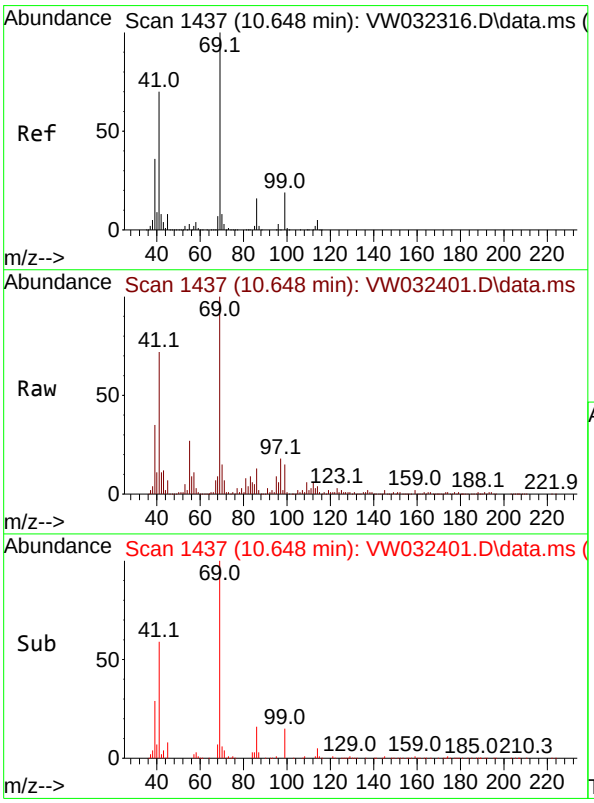
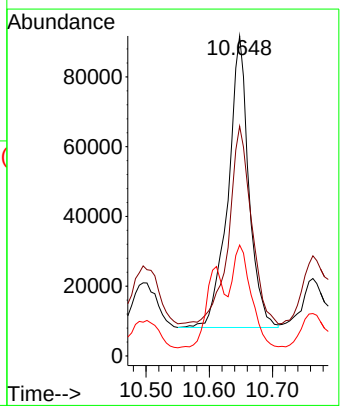
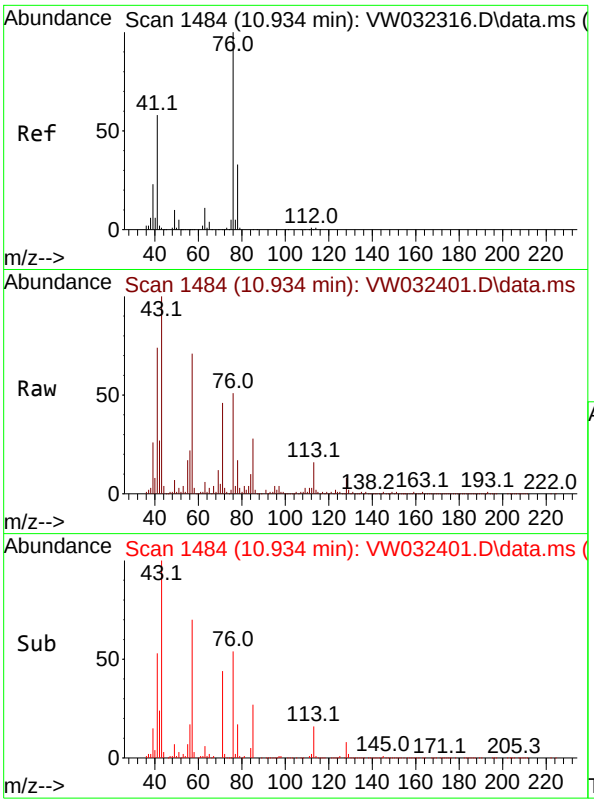


#56
Ethyl methacrylate
Concen: 82.806 ug/l
RT: 10.648 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 69 Resp: 190171

Ion	Ratio	Lower	Upper
69	100		
41	73.9	53.2	79.8
39	30.7	32.9	49.3#





#57
1,3-Dichloropropane
Concen: 57.297 ug/l
RT: 10.934 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 76 Resp: 16604

Ion	Ratio	Lower	Upper
76	100		
78	33.1	26.2	39.4

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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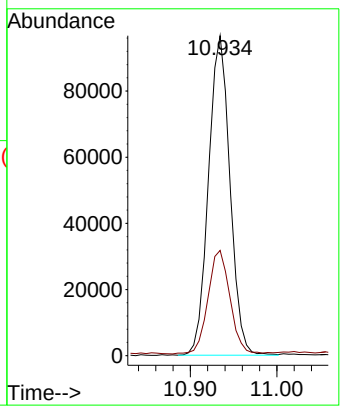
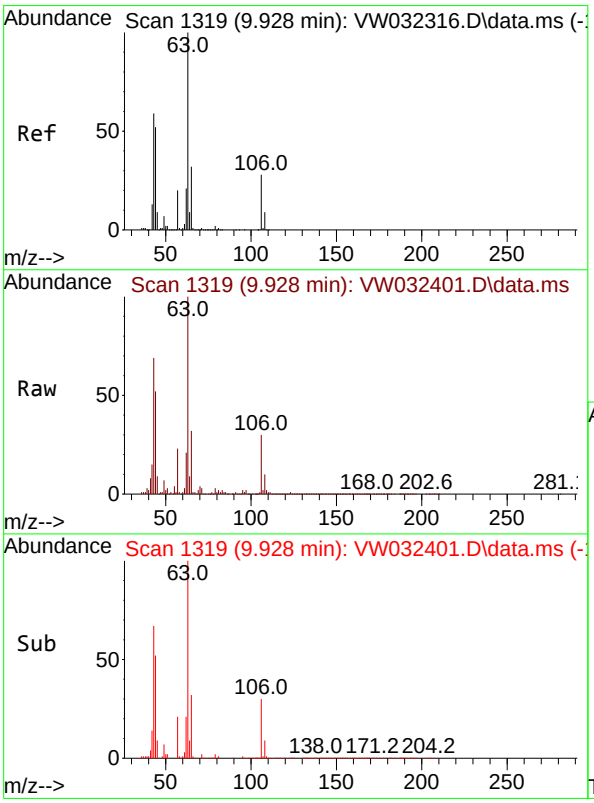
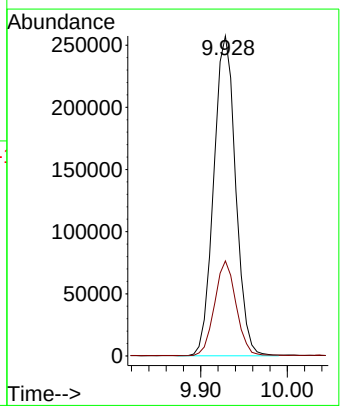


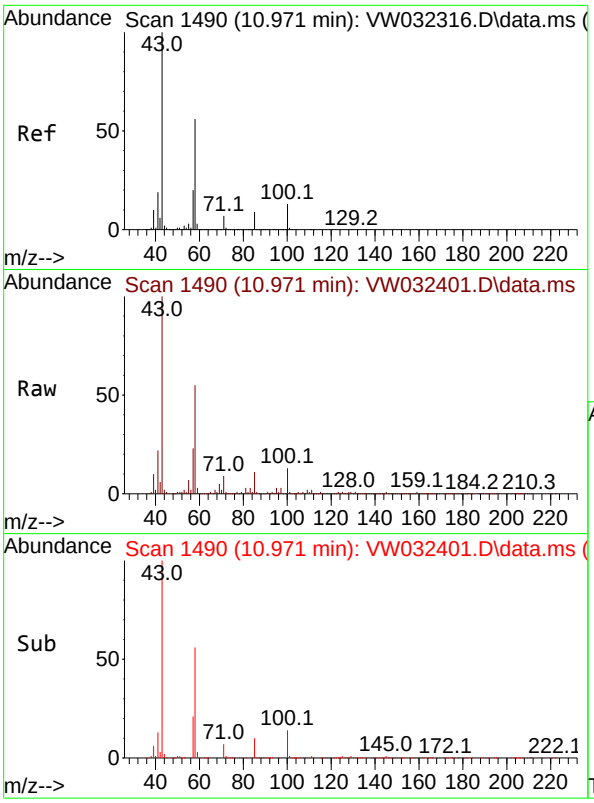


#58
2-Chloroethyl Vinyl ether
Concen: 369.660 ug/l
RT: 9.928 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 63 Resp: 451813

Ion	Ratio	Lower	Upper
63	100		
106	29.1	24.3	36.5





#59
2-Hexanone
Concen: 413.489 ug/l
RT: 10.971 min Scan# 14
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 50894

Ion	Ratio	Lower	Upper
43	100		
58	57.8	27.5	82.4

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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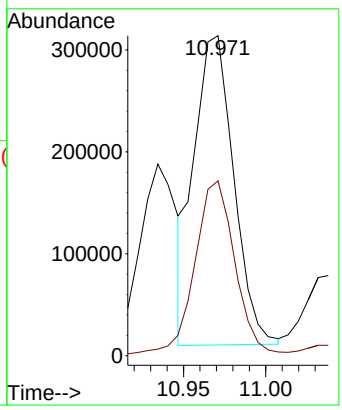
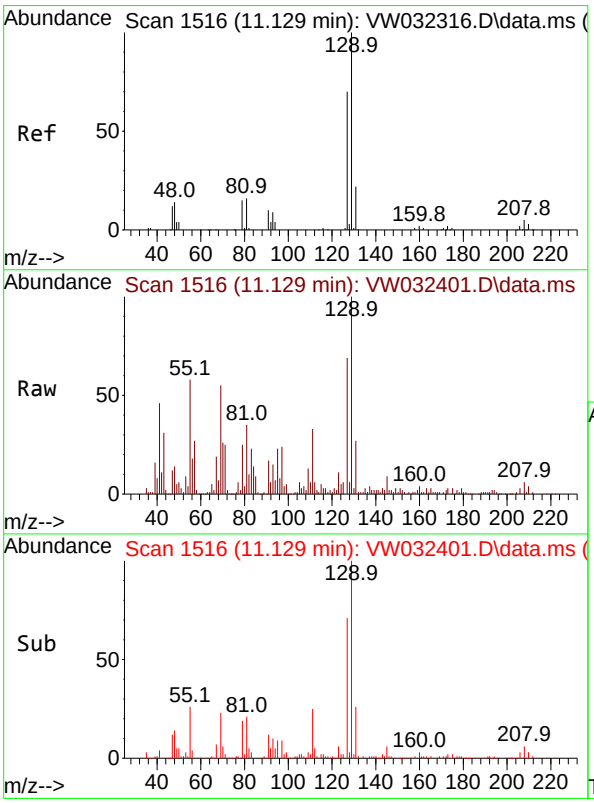
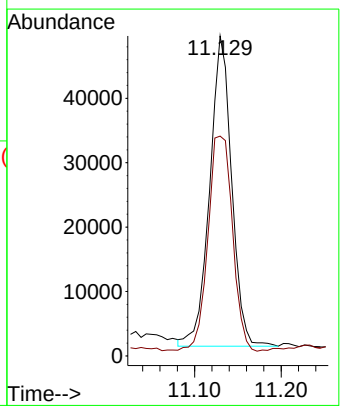


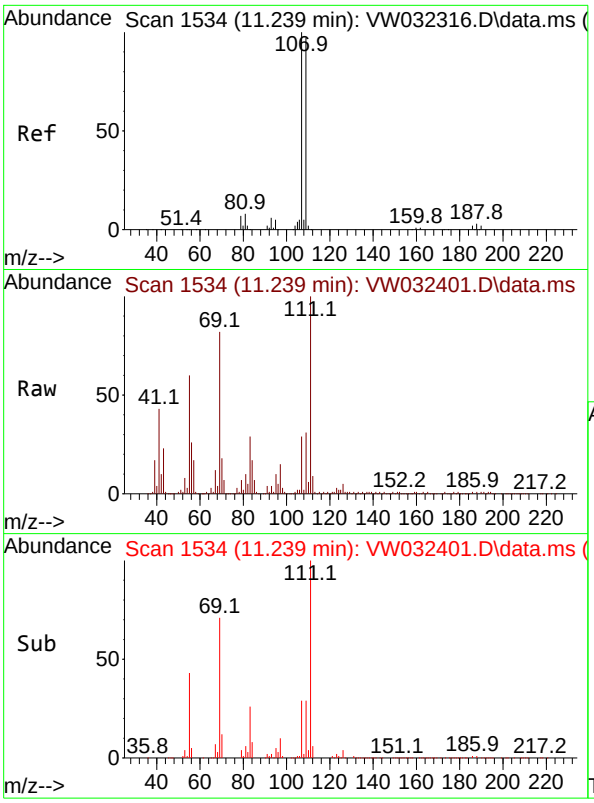


#60
Dibromochloromethane
Concen: 45.476 ug/l
RT: 11.129 min Scan# 1516
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:129 Resp: 84725

Ion	Ratio	Lower	Upper
129	100		
127	77.7	38.1	114.5





#61
1,2-Dibromoethane
Concen: 53.156 ug/l
RT: 11.239 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:107 Resp: 8504

Ion	Ratio	Lower	Upper
107	100		
109	106.3	74.5	111.7

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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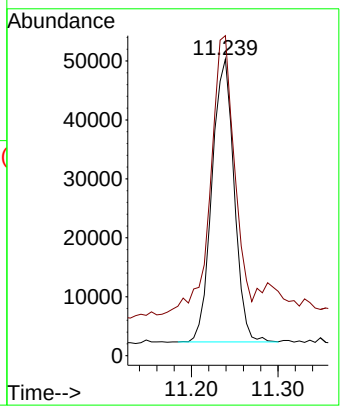
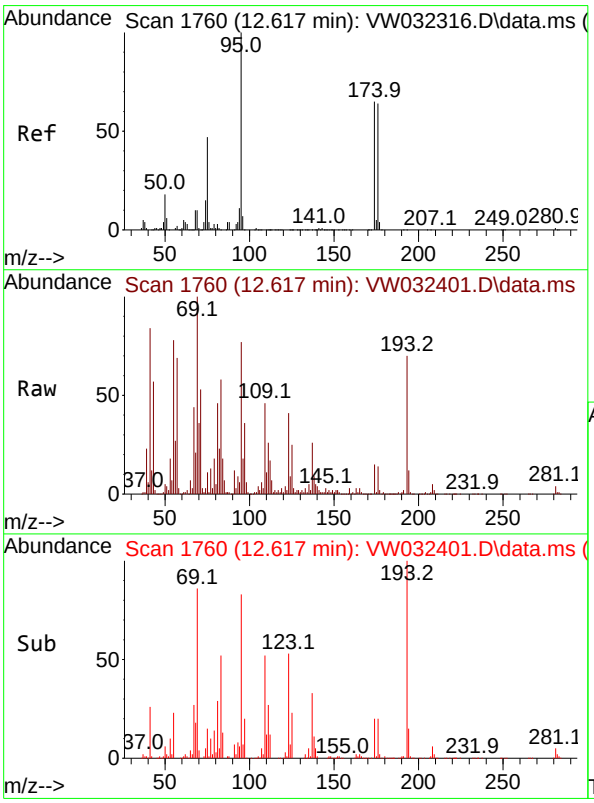
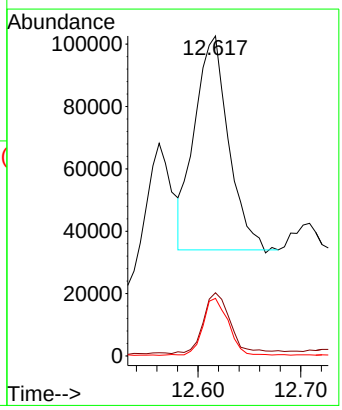


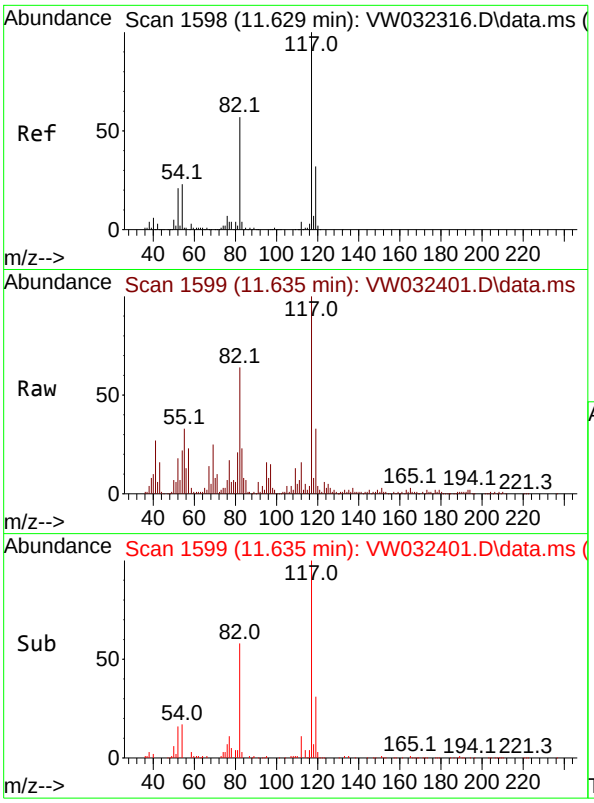


#62
4-Bromofluorobenzene
Concen: 62.387 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 95 Resp: 157361

Ion	Ratio	Lower	Upper
95	100		
174	22.4	0.0	145.6
176	19.9	0.0	140.8

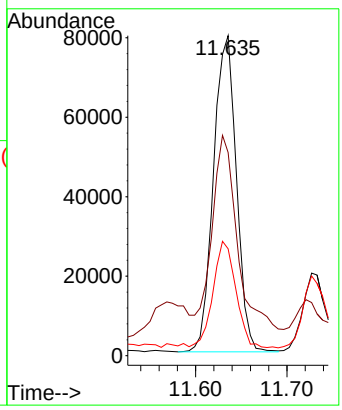




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.635 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:117 Resp: 13878

Ion	Ratio	Lower	Upper
117	100		
82	55.8	42.7	64.1
119	31.3	25.2	37.8



Instrument :
MSVOA_W
ClientSampleId :
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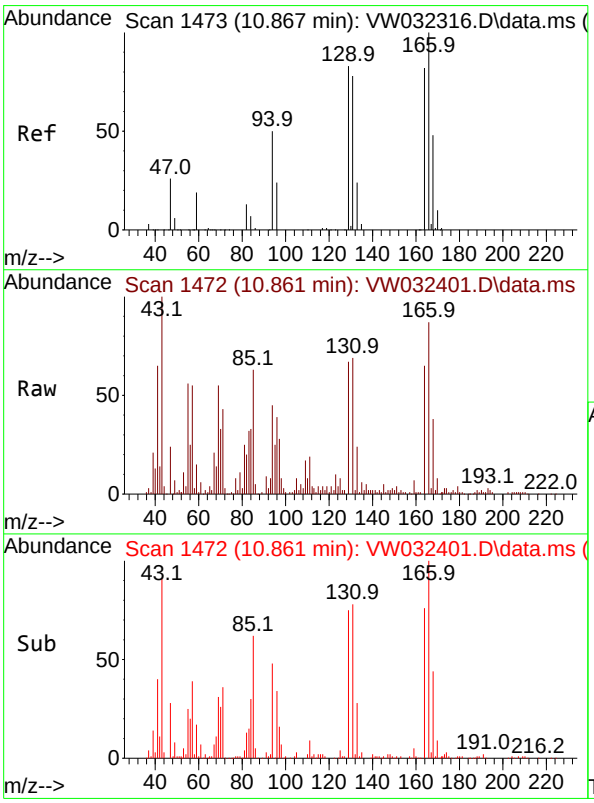
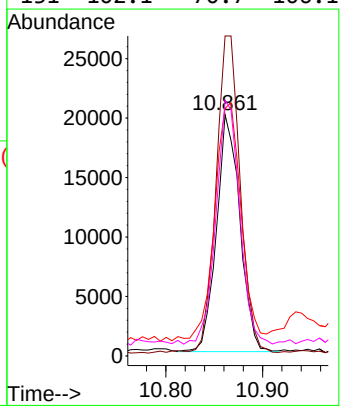
Supervised By :Semsettin Yesilyurt 10/21/2025

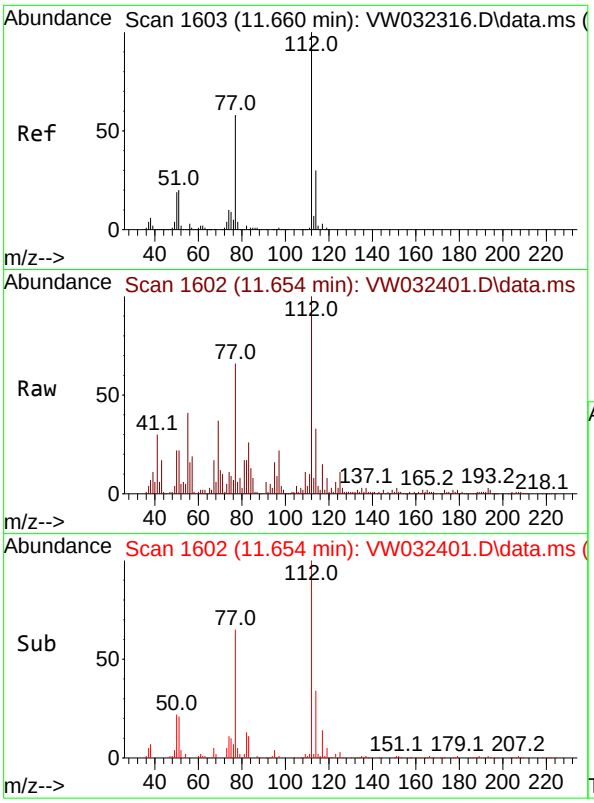


#64
Tetrachloroethene
Concen: 40.139 ug/l
RT: 10.861 min Scan# 1472
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:164 Resp: 33334

Ion	Ratio	Lower	Upper
164	100		
166	133.6	97.5	146.3
129	96.4	71.2	106.8
131	102.1	70.7	106.1

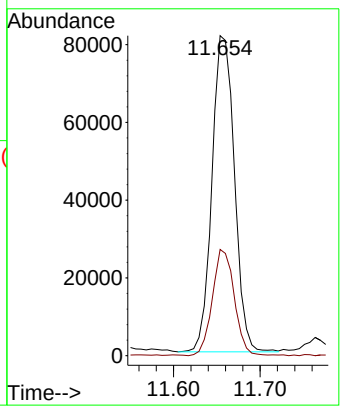




#65
Chlorobenzene
Concen: 47.965 ug/l
RT: 11.654 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:112 Resp: 14646

Ion	Ratio	Lower	Upper
112	100		
114	33.4	26.0	39.0



Instrument :
MSVOA_W
ClientSampleId :
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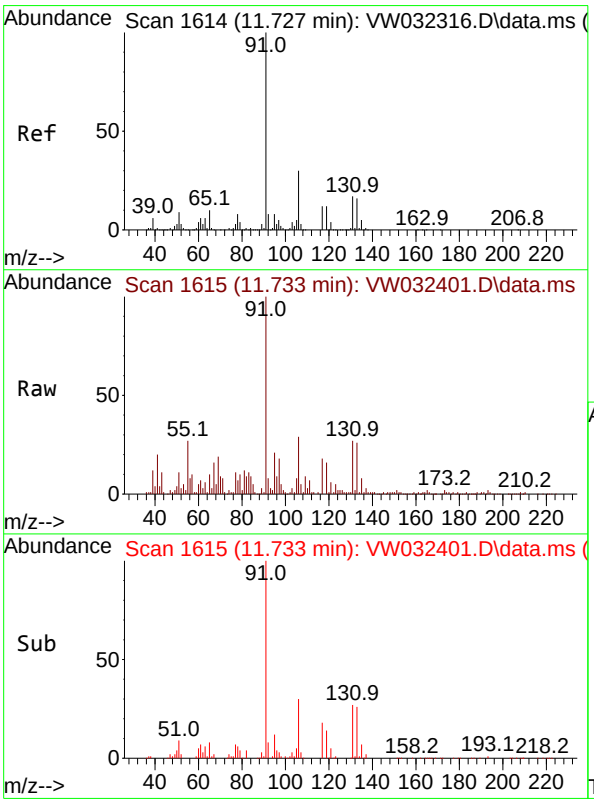
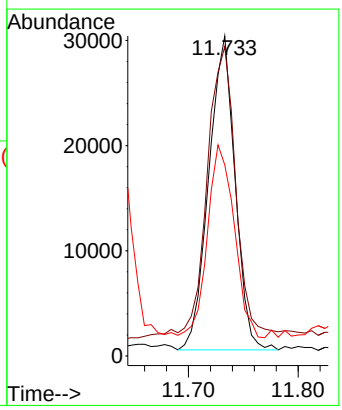
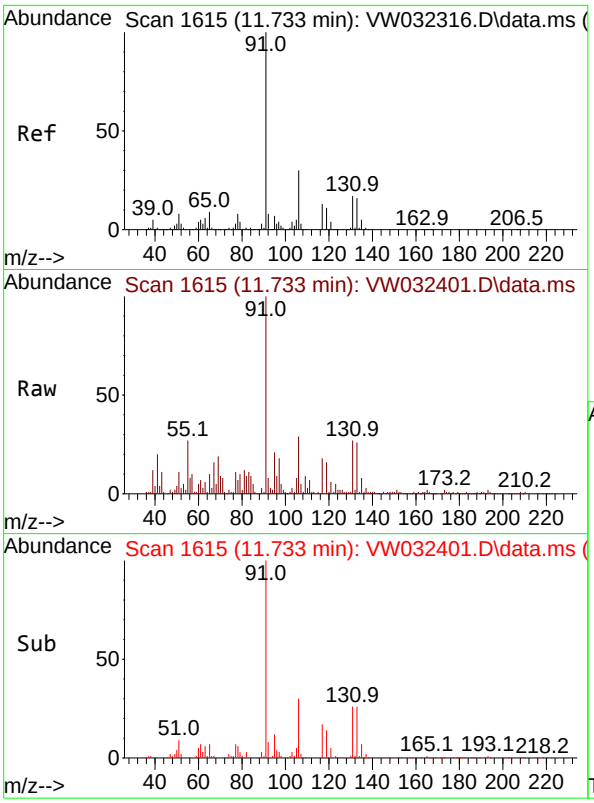


#66
1,1,1,2-Tetrachloroethane
Concen: 52.378 ug/l
RT: 11.733 min Scan# 1615
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:131 Resp: 49817

Ion	Ratio	Lower	Upper
131	100		
133	104.0	47.7	143.1
119	62.5	32.8	98.3





#67
Ethyl Benzene
Concen: 36.775 ug/l
RT: 11.733 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 91 Resp: 18718

Ion	Ratio	Lower	Upper
91	100		
106	29.8	25.3	37.9

Instrument :
MSVOA_W
ClientSampleId :
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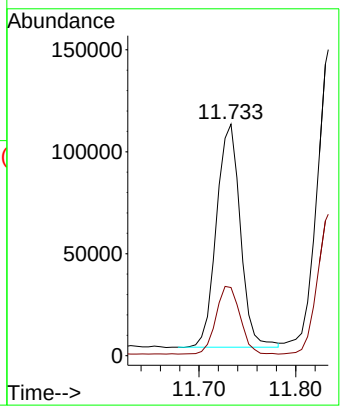
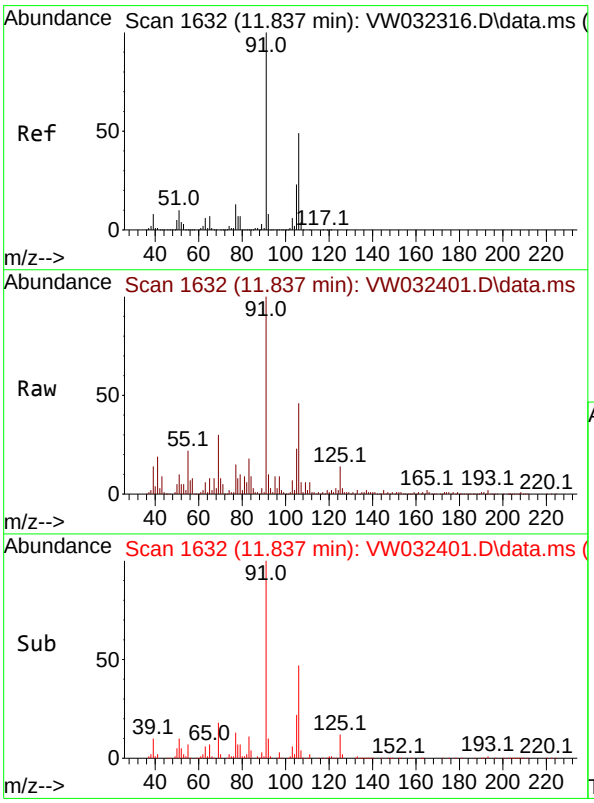
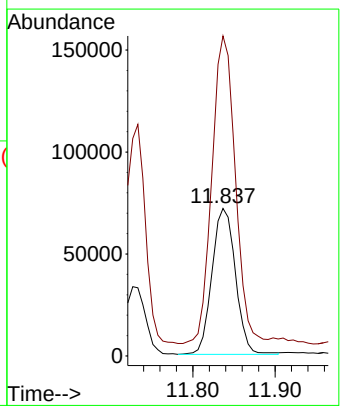


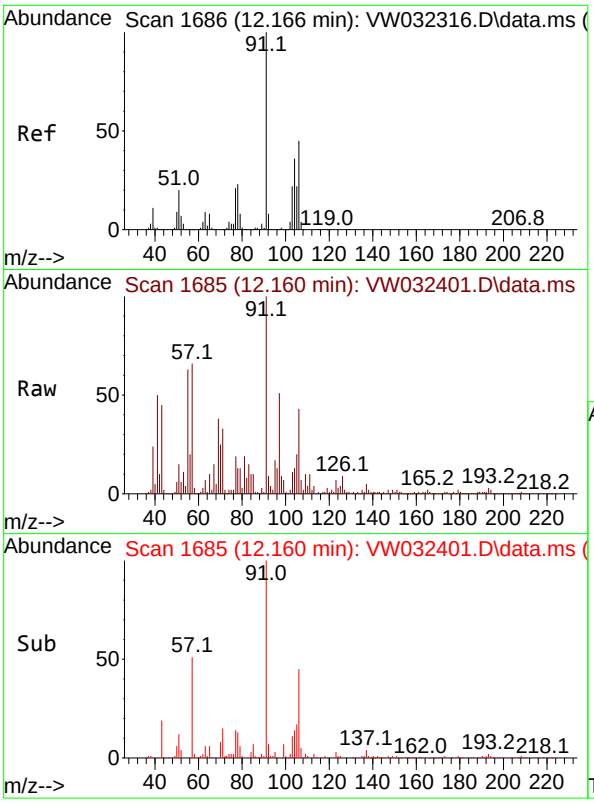


#68
m/p-Xylenes
Concen: 72.361 ug/l
RT: 11.837 min Scan# 1632
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:106 Resp: 142028

Ion	Ratio	Lower	Upper
106	100		
91	210.2	164.2	246.2





#69
o-Xylene
Concen: 49.303 ug/l
RT: 12.160 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:106 Resp: 9049

Ion	Ratio	Lower	Upper
106	100		
91	240.9	108.7	326.3

Instrument :
MSVOA_W
ClientSampleId :
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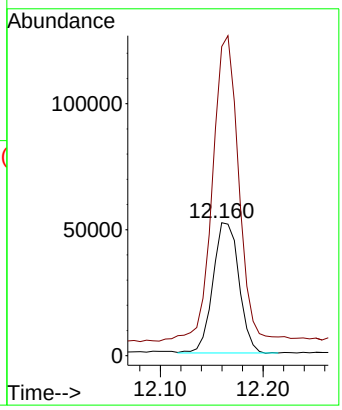
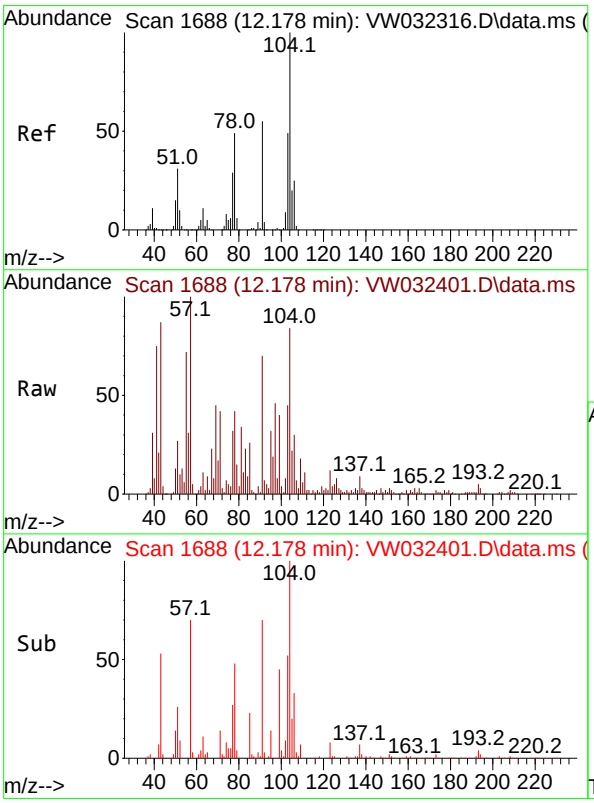
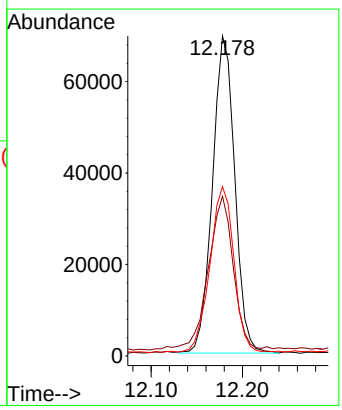


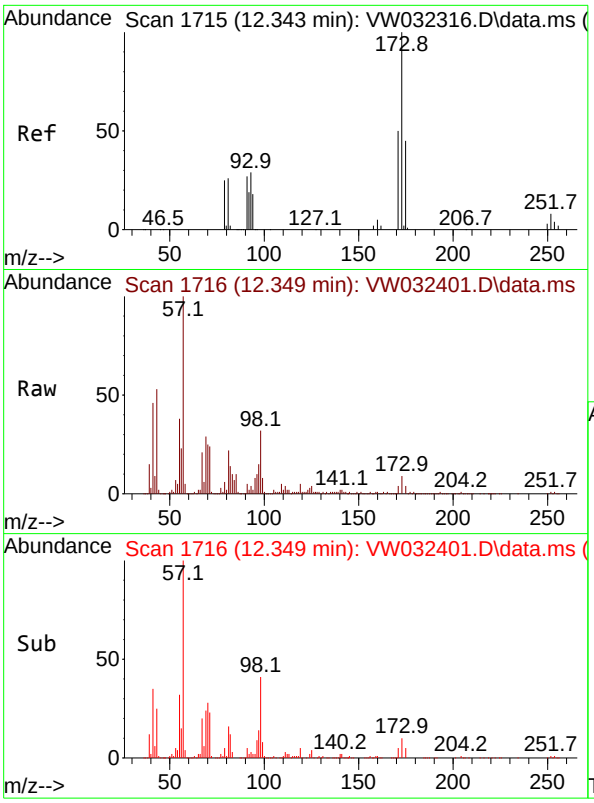


#70
Styrene
Concen: 36.699 ug/l
RT: 12.178 min Scan# 1688
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:104 Resp: 117611

Ion	Ratio	Lower	Upper
104	100		
78	54.4	41.6	62.4
103	57.1	44.8	67.2

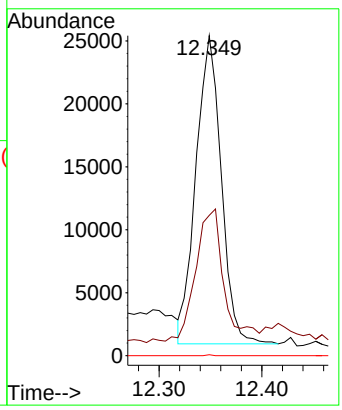




#71
Bromoform
Concen: 77.002 ug/l
RT: 12.349 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:173 Resp: 4197

Ion	Ratio	Lower	Upper
173	100		
175	47.4	24.9	74.7
254	0.1	0.2	0.2



Instrument :
MSVOA_W
ClientSampleId :
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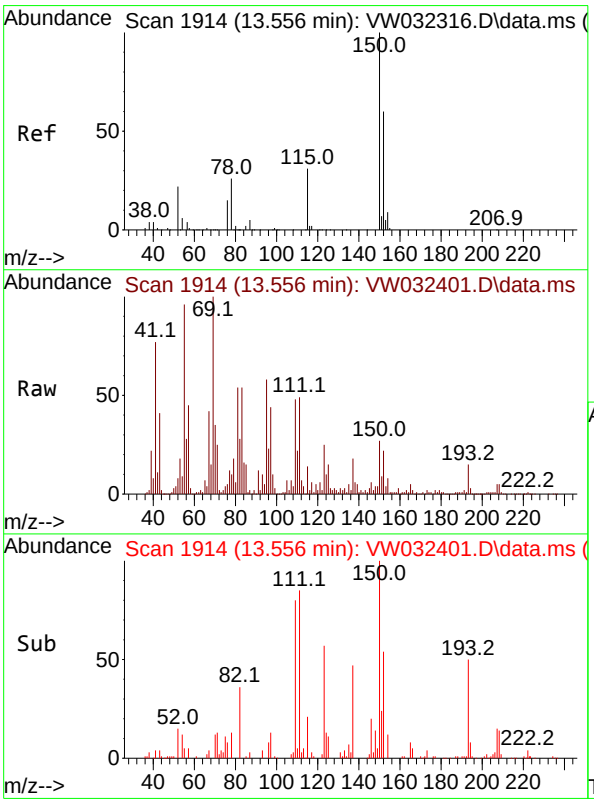
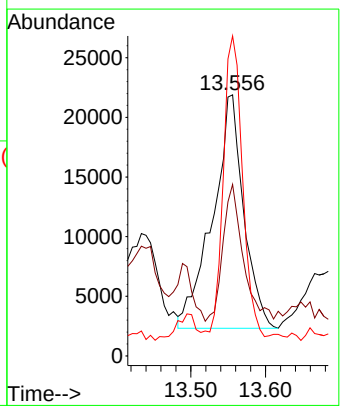
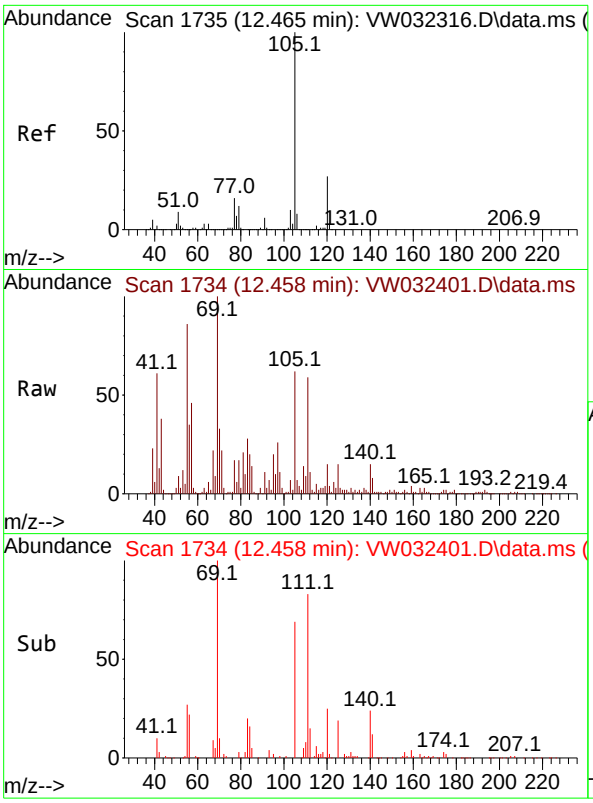


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:152 Resp: 56507

Ion	Ratio	Lower	Upper
152	100		
115	38.1	31.8	95.4
150	79.5	0.0	343.0





#73
Isopropylbenzene
Concen: 27.947 ug/l
RT: 12.458 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:105 Resp: 10804

Ion	Ratio	Lower	Upper
105	100		
120	24.4	13.0	38.9

Instrument :
MSVOA_W
ClientSampleId :
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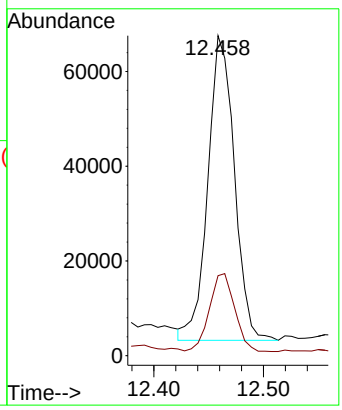
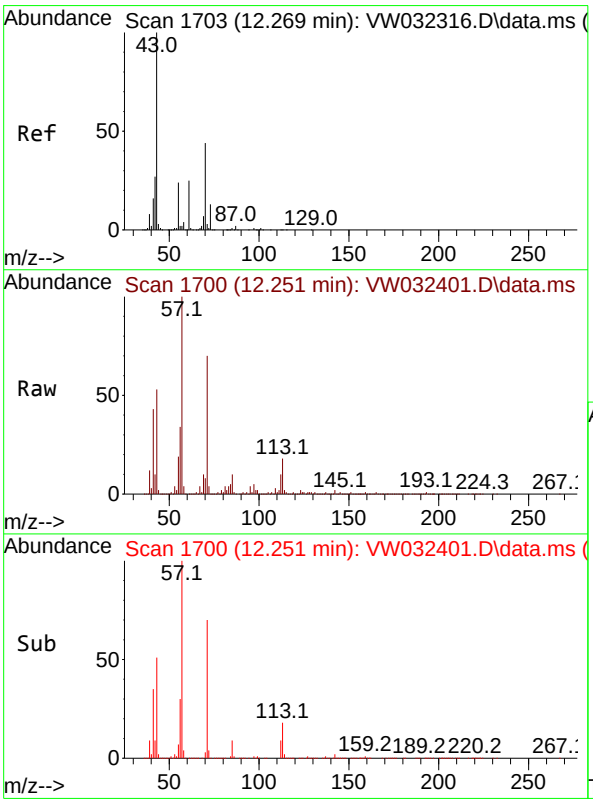
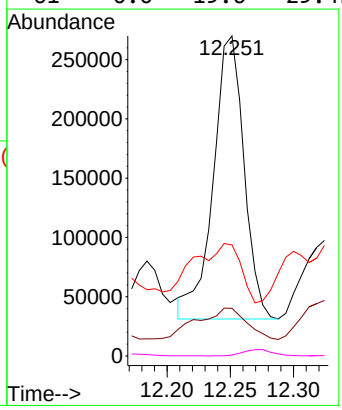


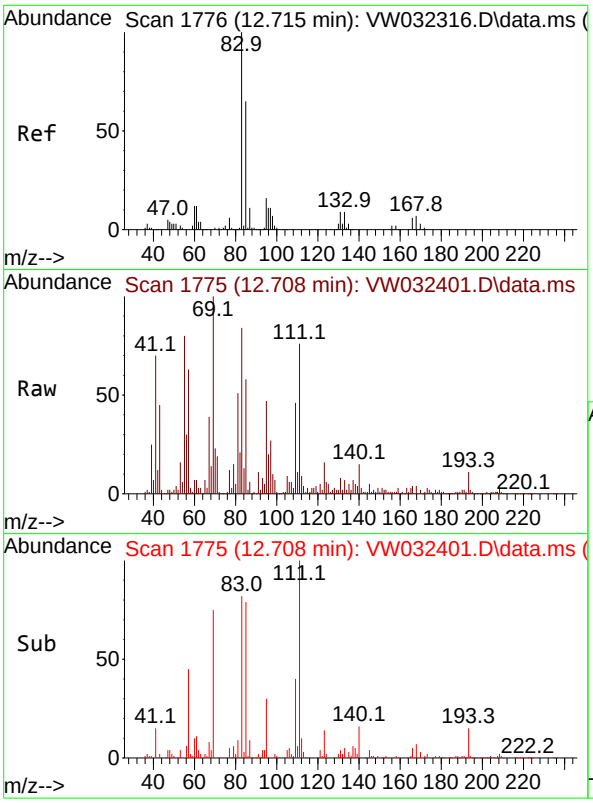


#74
N-amyl acetate
Concen: 327.067 ug/l
RT: 12.251 min Scan# 1700
Delta R.T. -0.018 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 43 Resp: 403370

Ion	Ratio	Lower	Upper
43	100		
70	21.1	35.3	52.9#
55	42.1	19.9	29.9#
61	0.0	19.6	29.4#





#75
1,1,2,2-Tetrachloroethane
Concen: 97.431 ug/l
RT: 12.708 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 83 Resp: 9352

Ion	Ratio	Lower	Upper
83	100		
131	11.5	5.1	15.4
85	137.6	32.2	96.6#

Instrument :
MSVOA_W
ClientSampleId :
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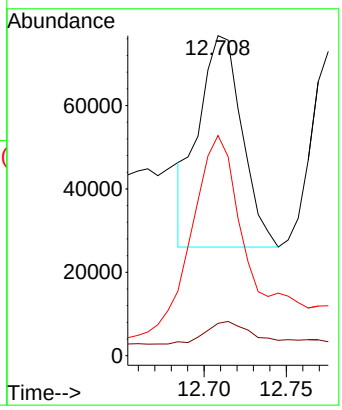
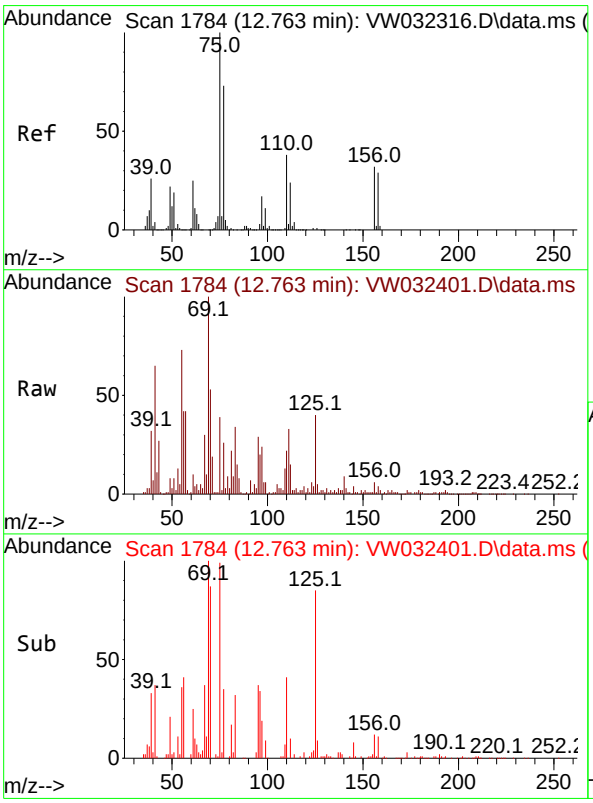
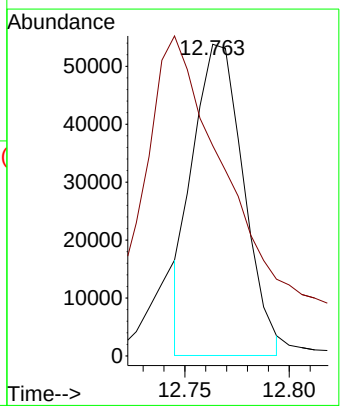


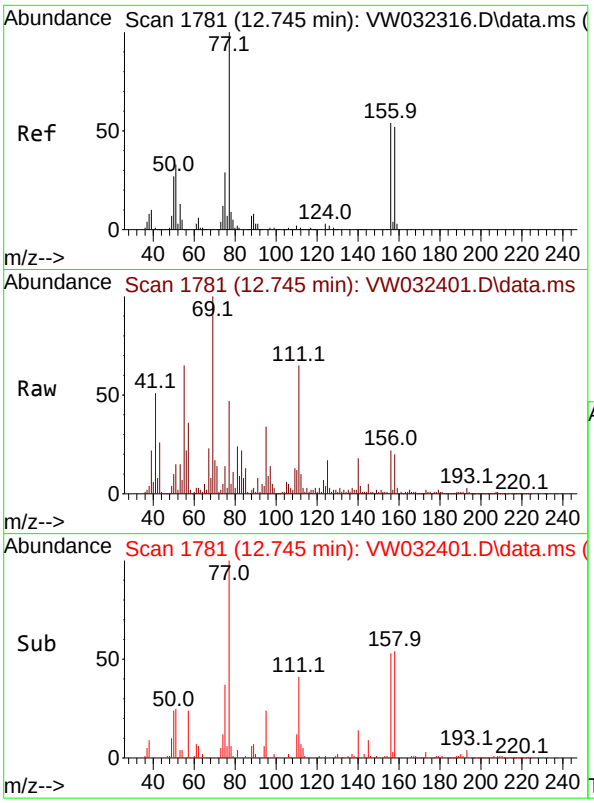


#76
1,2,3-Trichloropropane
Concen: 121.835 ug/l m
RT: 12.763 min Scan# 1784
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 75 Resp: 90597

Ion	Ratio	Lower	Upper
75	100		
77	127.0	141.7	425.1#





#77
Bromobenzene
Concen: 49.353 ug/l
RT: 12.745 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:156 Resp: 4599

Ion	Ratio	Lower	Upper
156	100		
77	250.1	98.6	295.7
158	87.9	48.4	145.0

Instrument :
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ClientSampleId :
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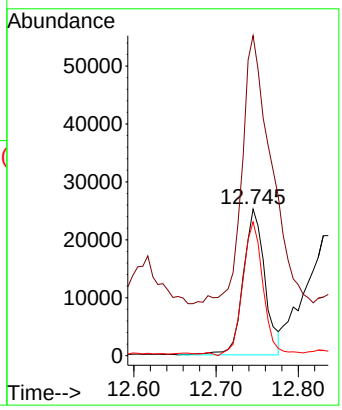
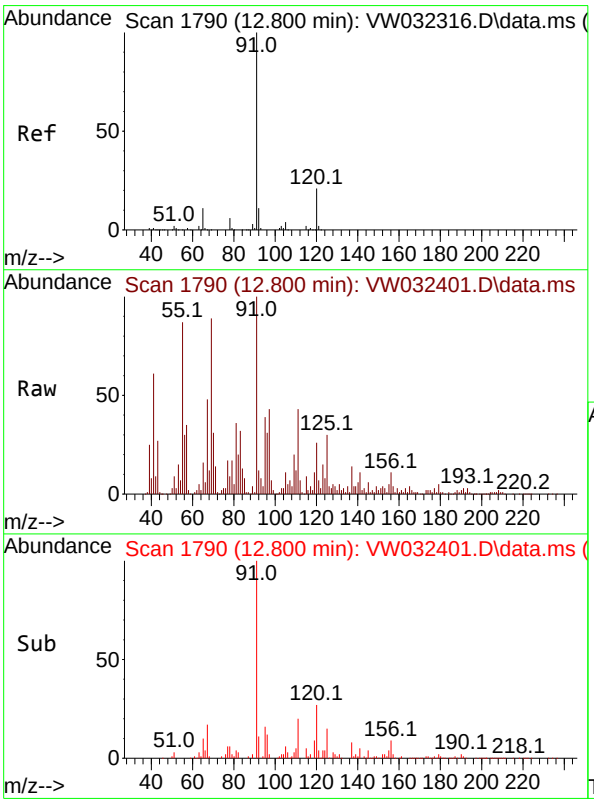
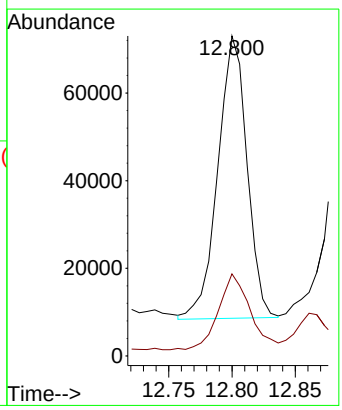


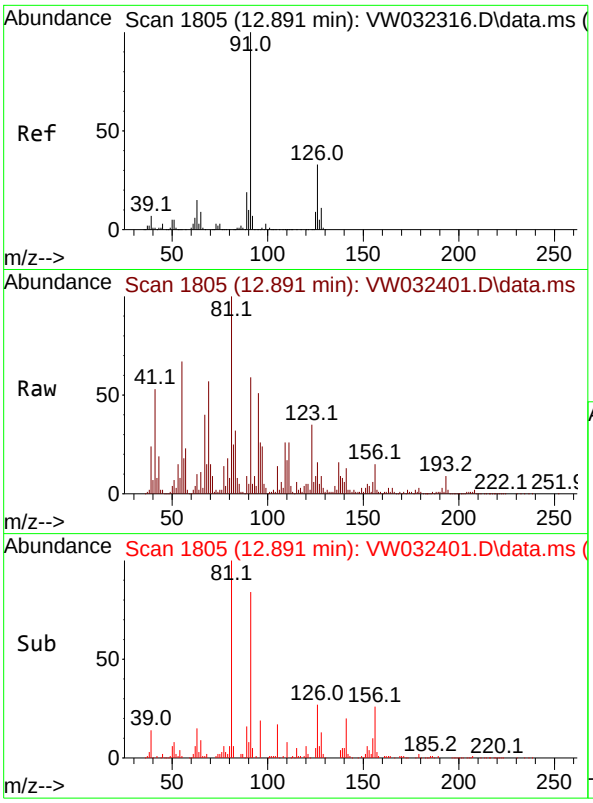


#78
n-propylbenzene
Concen: 21.366 ug/l
RT: 12.800 min Scan# 1790
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 91 Resp: 103177

Ion	Ratio	Lower	Upper
91	100		
120	29.3	11.8	35.4





#79
2-Chlorotoluene
Concen: 31.091 ug/l
RT: 12.891 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 91 Resp: 9180

Ion	Ratio	Lower	Upper
91	100		
126	25.9	16.6	49.7

Instrument :
MSVOA_W
ClientSampleId :
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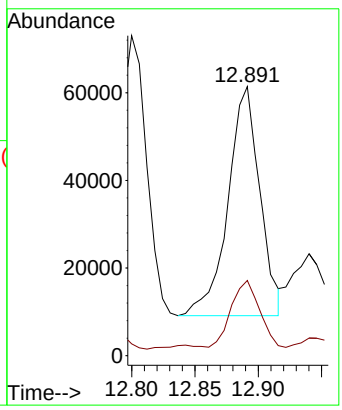
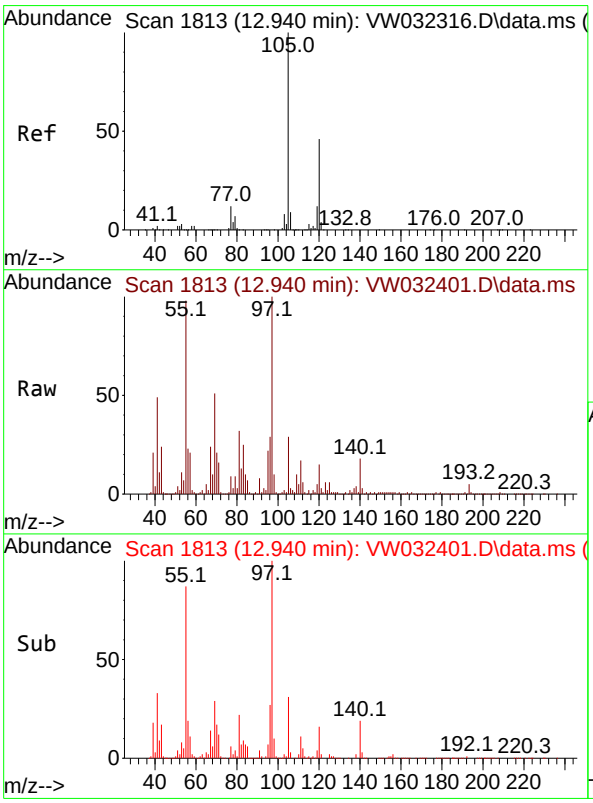
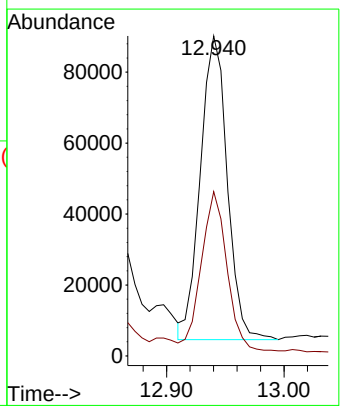


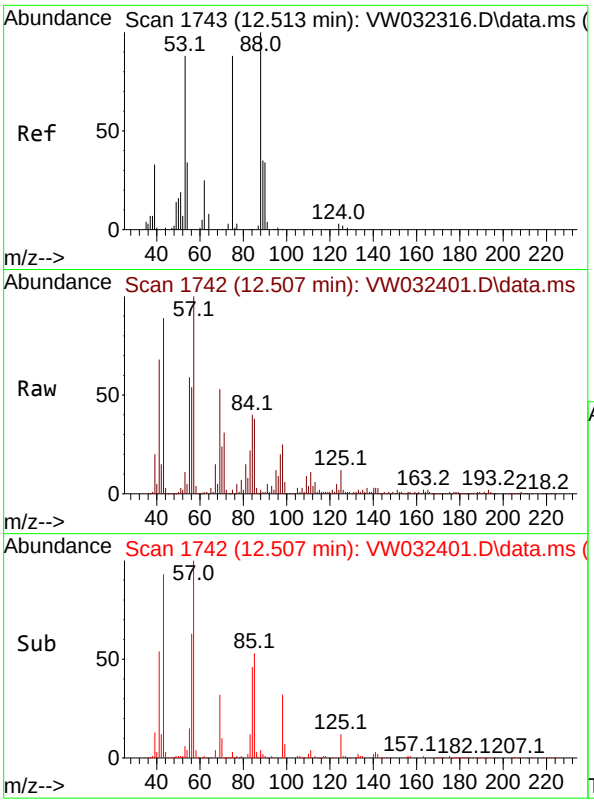


#80
1,3,5-Trimethylbenzene
Concen: 40.661 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:105 Resp: 135924

Ion	Ratio	Lower	Upper
105	100		
120	50.0	24.8	74.4





#81
trans-1,4-Dichloro-2-butene
Concen: 18.574 ug/l
RT: 12.507 min Scan# 1
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 75 Resp: 545

Ion	Ratio	Lower	Upper
75	100		
53	313.7	91.0	136.6#
89	0.0	39.4	59.2#

Instrument :
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ClientSampleId :
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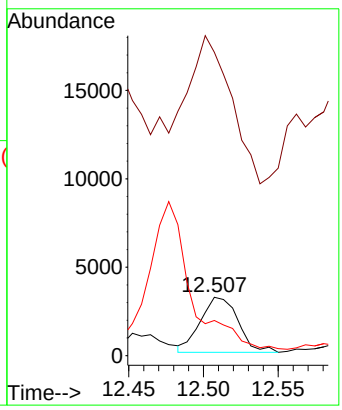
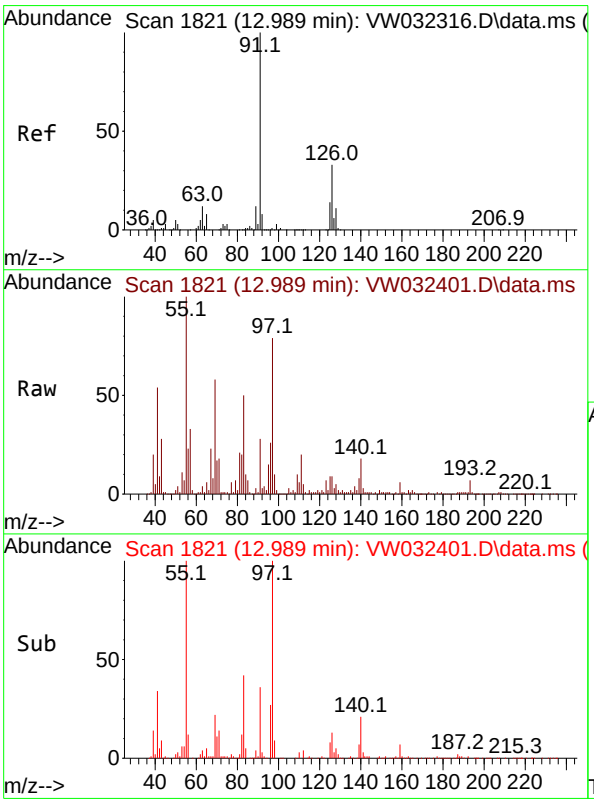
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

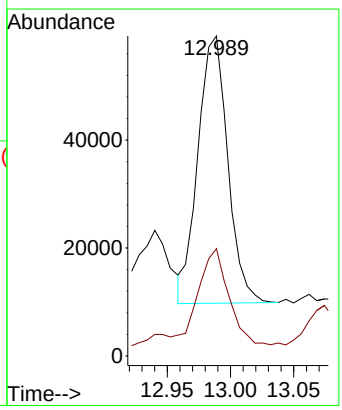


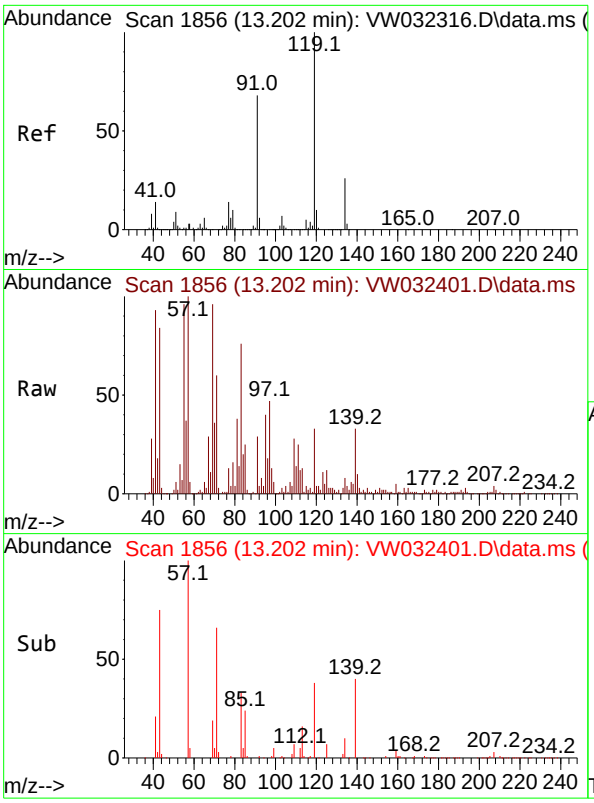


#82
4-Chlorotoluene
Concen: 25.910 ug/l
RT: 12.989 min Scan# 1821
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 91 Resp: 81339

Ion	Ratio	Lower	Upper
91	100		
126	36.3	16.1	48.2

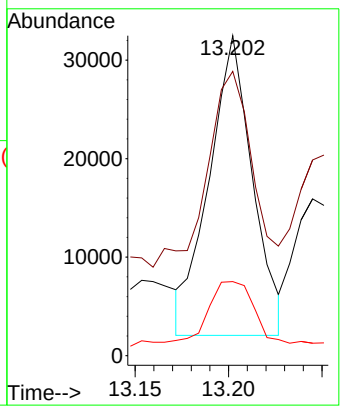




#83
tert-Butylbenzene
Concen: 17.914 ug/l m
RT: 13.202 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:119 Resp: 4913

Ion	Ratio	Lower	Upper
119	100		
91	25.8	33.8	101.3#
134	17.0	12.5	37.5



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
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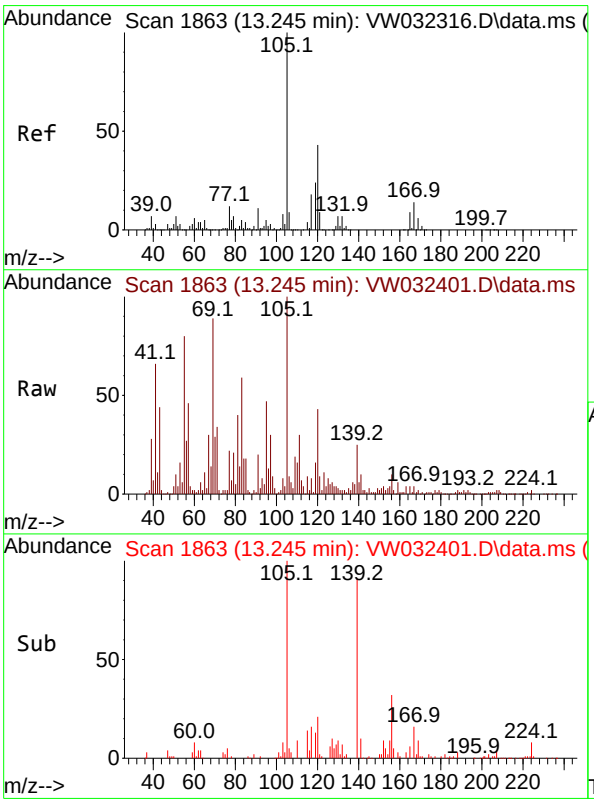
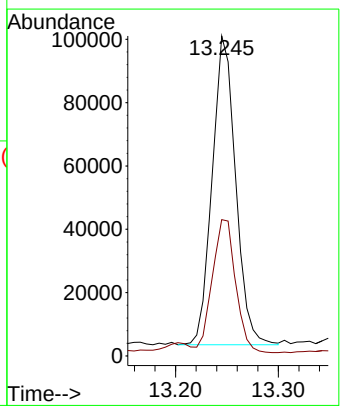
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

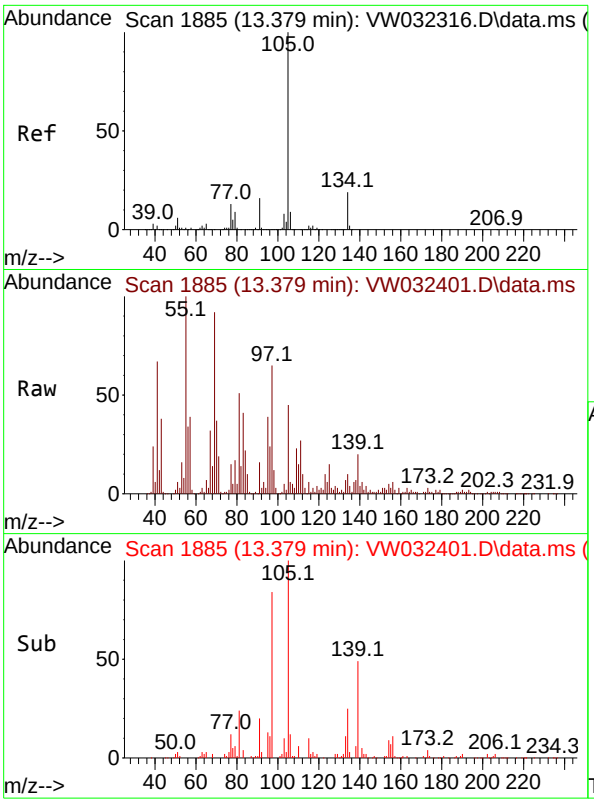


#84
1,2,4-Trimethylbenzene
Concen: 45.430 ug/l
RT: 13.245 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:105 Resp: 154424

Ion	Ratio	Lower	Upper
105	100		
120	42.7	22.1	66.3





#85
sec-Butylbenzene
Concen: 26.405 ug/l
RT: 13.379 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:105 Resp: 11067

Ion	Ratio	Lower	Upper
105	100		
134	27.5	10.1	30.1

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
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Reviewed By :Amit Patel 10/21/2025
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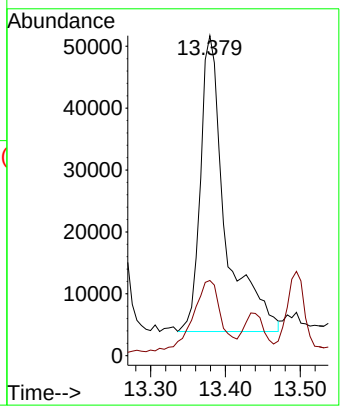
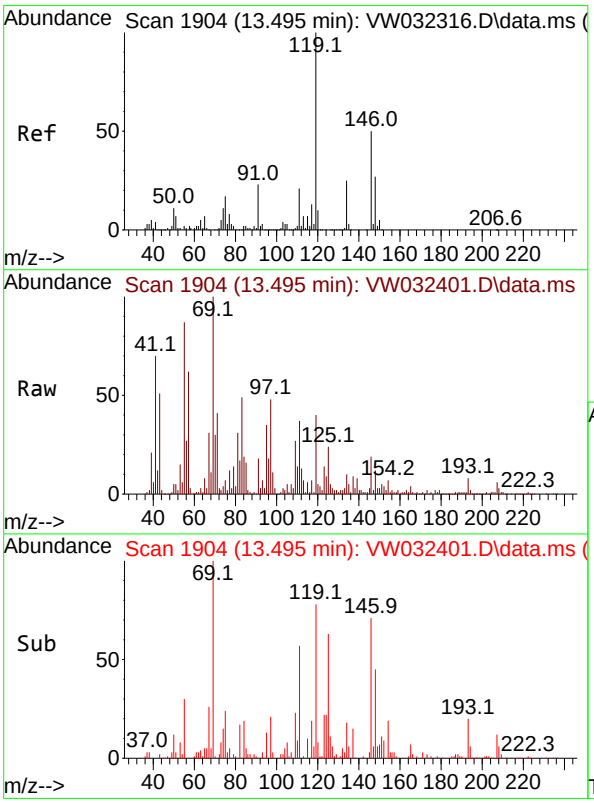
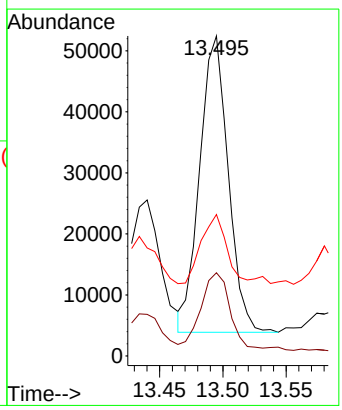


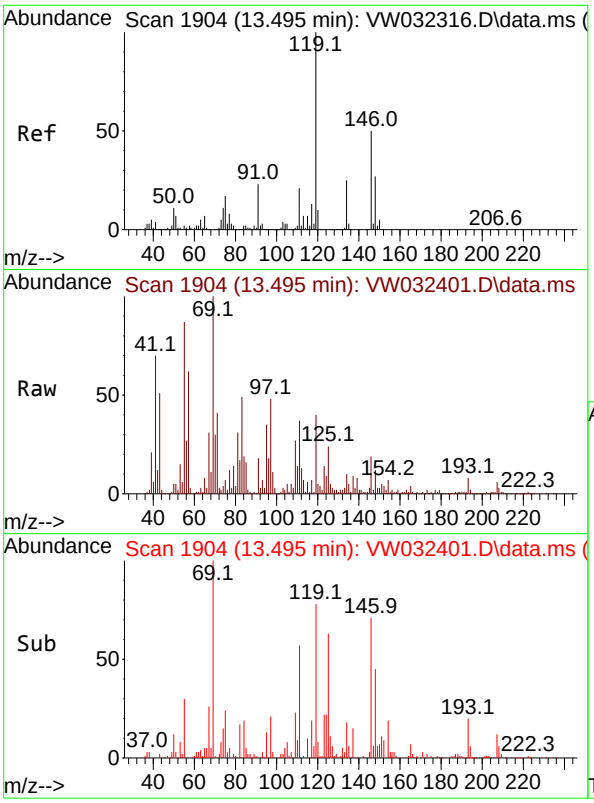


#86
p-Isopropyltoluene
Concen: 21.891 ug/l
RT: 13.495 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:119 Resp: 76135

Ion	Ratio	Lower	Upper
119	100		
134	27.8	12.6	37.6
91	21.7	12.4	37.0

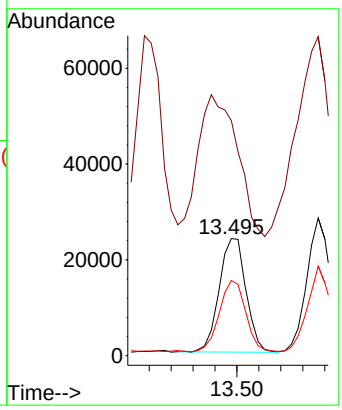




#87
1,3-Dichlorobenzene
Concen: 21.328 ug/l
RT: 13.495 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:146 Resp: 4024

Ion	Ratio	Lower	Upper
146	100		
111	181.2	20.6	61.9#
148	62.3	30.6	92.0



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
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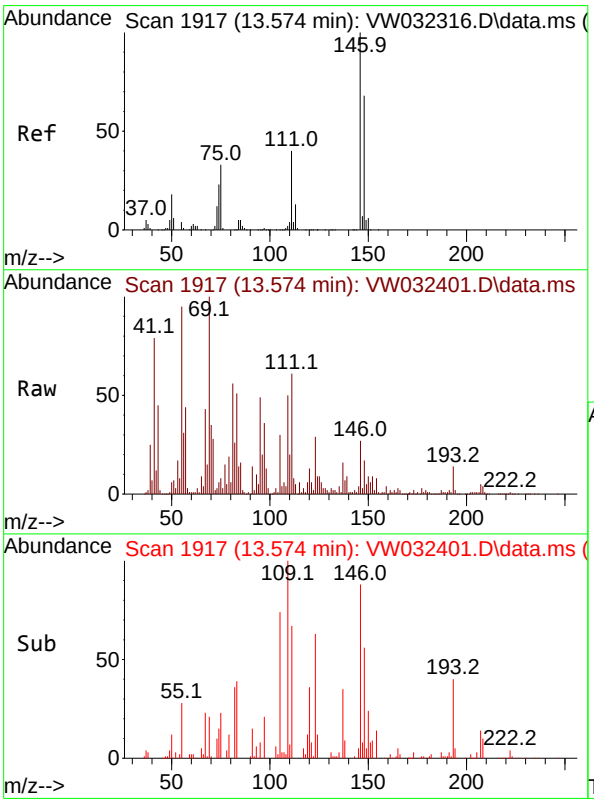
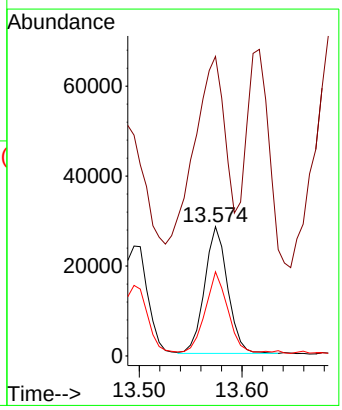
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

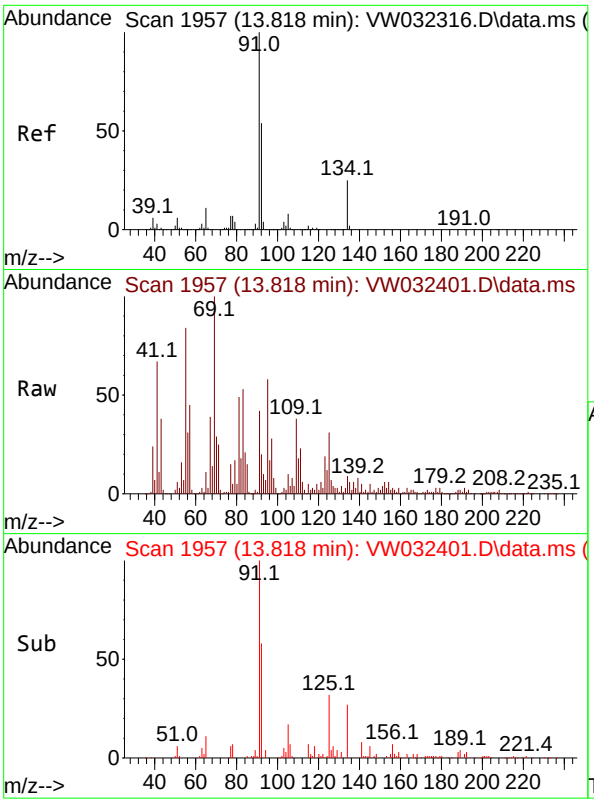


#88
1,4-Dichlorobenzene
Concen: 23.253 ug/l
RT: 13.574 min Scan# 1917
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:146 Resp: 43876

Ion	Ratio	Lower	Upper
146	100		
111	236.5	21.3	63.7#
148	63.5	33.4	100.1





#89
n-Butylbenzene
Concen: 12.138 ug/l
RT: 13.818 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 91 Resp: 4121

Ion	Ratio	Lower	Upper
91	100		
92	64.6	27.0	81.0
134	0.0	13.1	39.3#

Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

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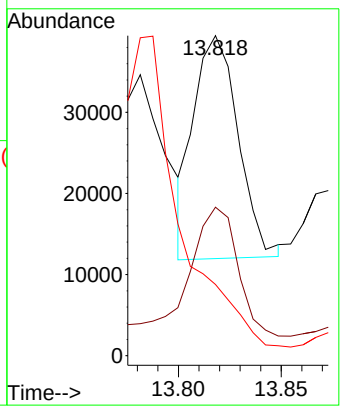
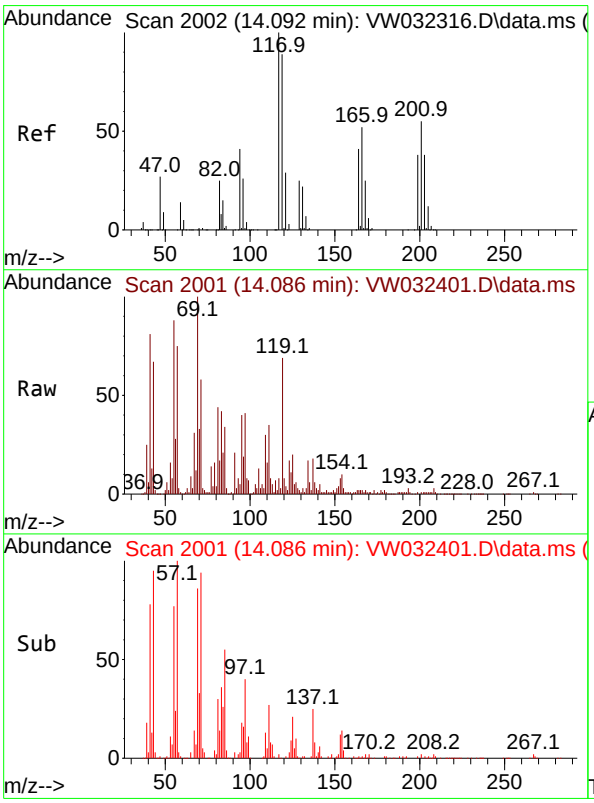
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

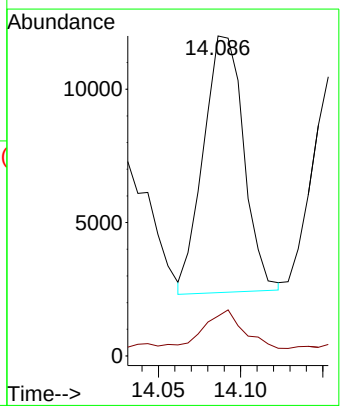


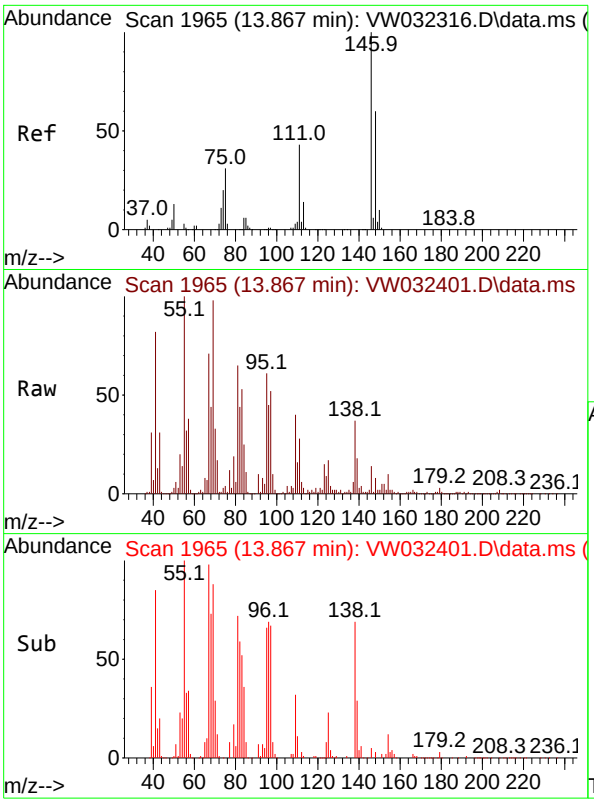


#90
Hexachloroethane
Concen: 26.385 ug/l
RT: 14.086 min Scan# 2001
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:117 Resp: 16448

Ion	Ratio	Lower	Upper
117	100		
201	14.0	32.8	98.4#

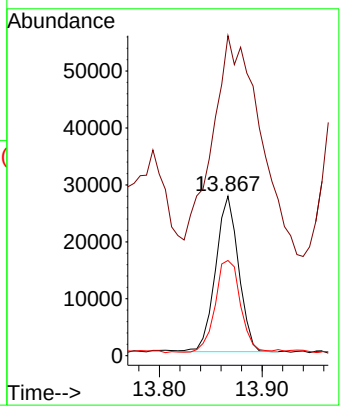




#91
1,2-Dichlorobenzene
Concen: 24.780 ug/l
RT: 13.867 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:146 Resp: 4227

Ion	Ratio	Lower	Upper
146	100		
111	299.2	23.4	70.0#
148	64.9	34.1	102.3



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
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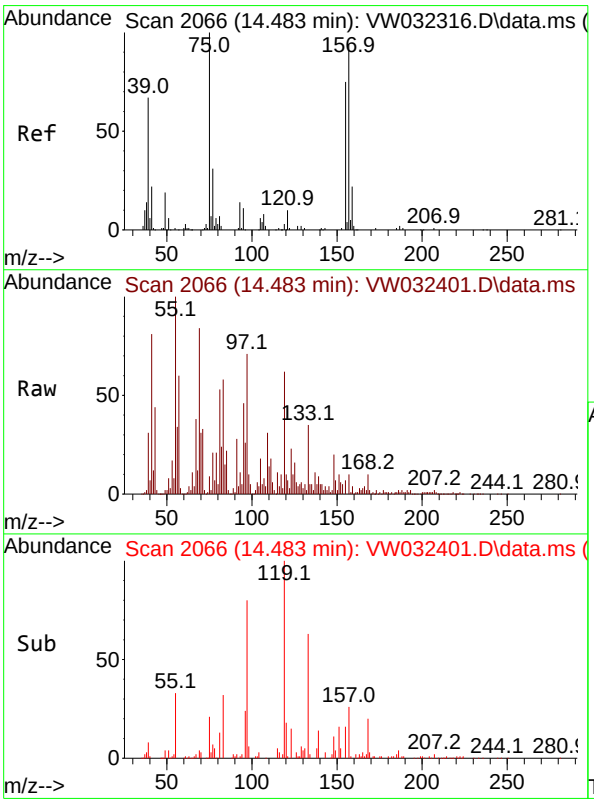
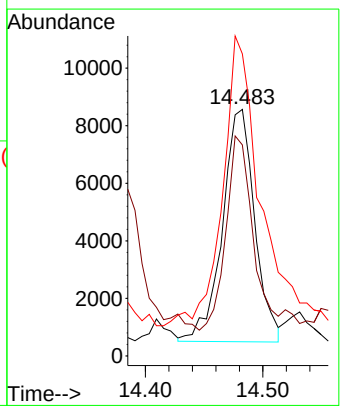
Reviewed By :Amit Patel 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

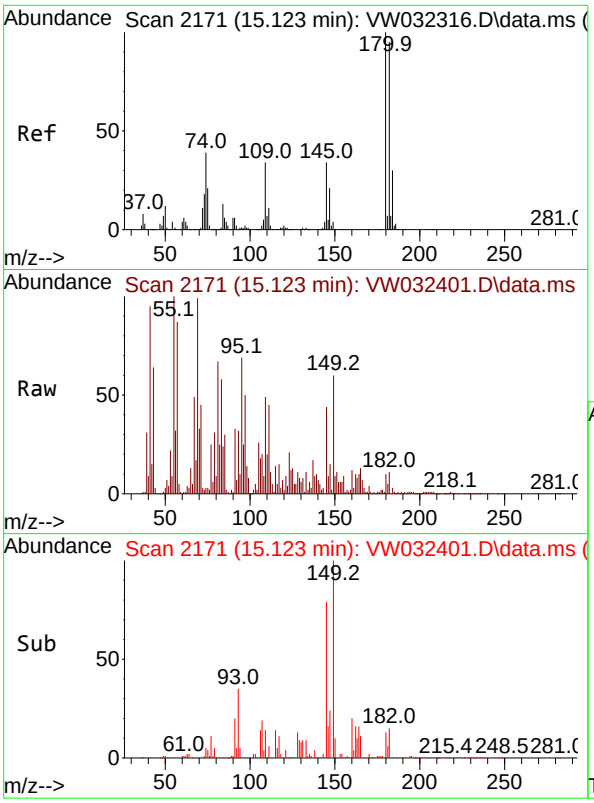


#92
1,2-Dibromo-3-Chloropropane
Concen: 91.774 ug/l
RT: 14.483 min Scan# 2066
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion: 75 Resp: 15424

Ion	Ratio	Lower	Upper
75	100		
155	72.7	40.8	122.5
157	147.2	51.8	155.4

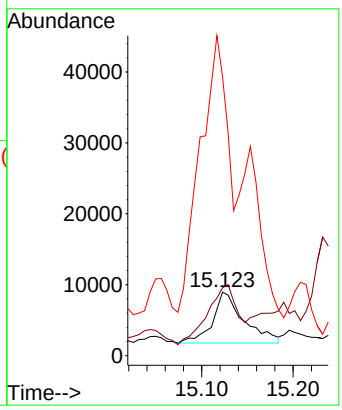




#93
1,2,4-Trichlorobenzene
Concen: 16.728 ug/l
RT: 15.123 min Scan# 21
Delta R.T. 0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:180 Resp: 1711

Ion	Ratio	Lower	Upper
180	100		
182	112.5	47.4	142.2
145	570.0	16.4	49.1#



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
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Reviewed By :Amit Patel 10/21/2025
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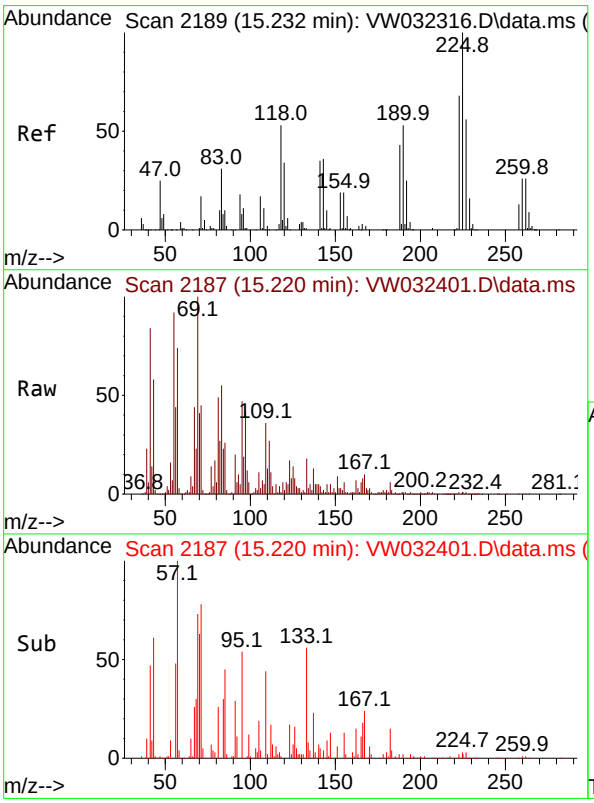
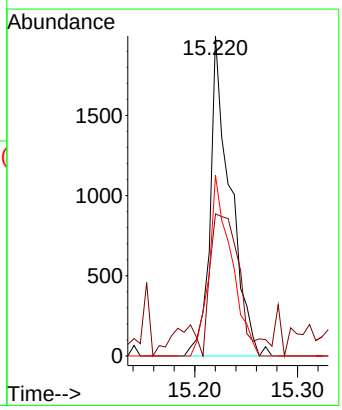
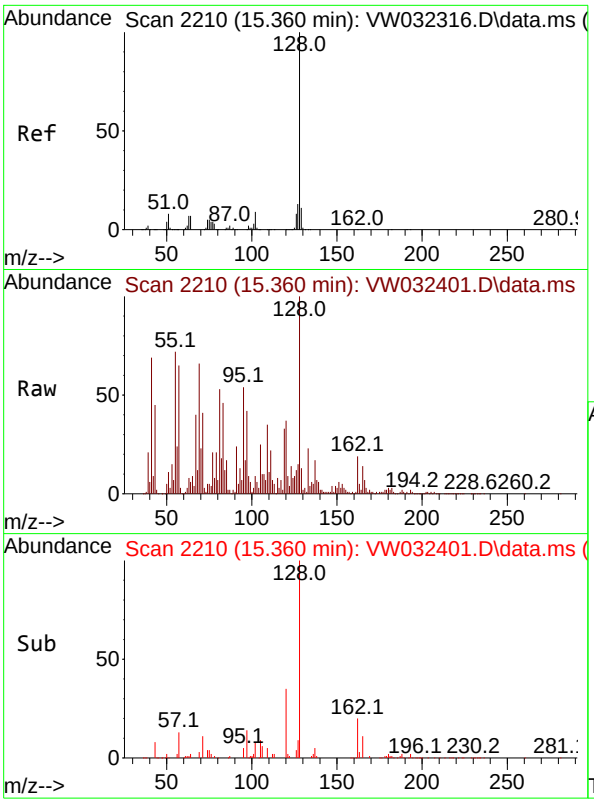


#94
Hexachlorobutadiene
Concen: 5.810 ug/l
RT: 15.220 min Scan# 2187
Delta R.T. -0.006 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:225 Resp: 2717

Ion	Ratio	Lower	Upper
225	100		
223	64.7	29.8	89.3
227	62.4	30.5	91.5

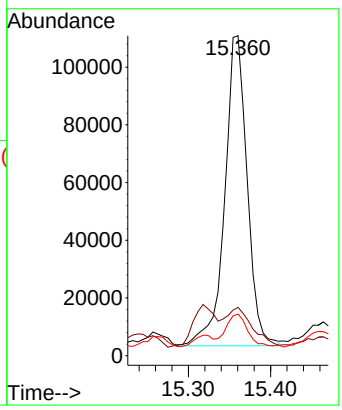




#95
Naphthalene
Concen: 83.105 ug/l
RT: 15.360 min Scan# 2
Delta R.T. -0.000 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:128 Resp: 20414

Ion	Ratio	Lower	Upper
128	100		
127	12.4	10.6	16.0
129	10.6	8.4	12.6



Instrument :
MSVOA_W
ClientSampleId :
PR132-S07-000102-20251017MSD

Manual Integrations
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Reviewed By :Amit Patel 10/21/2025
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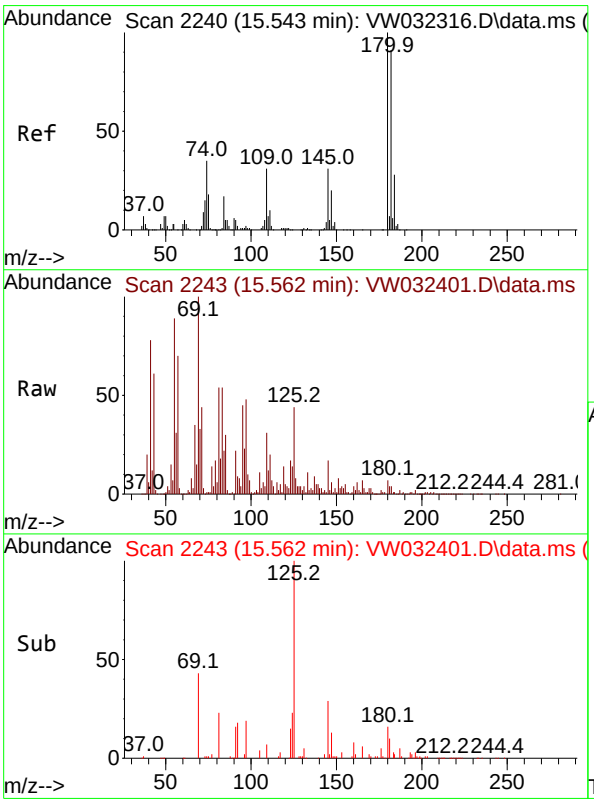
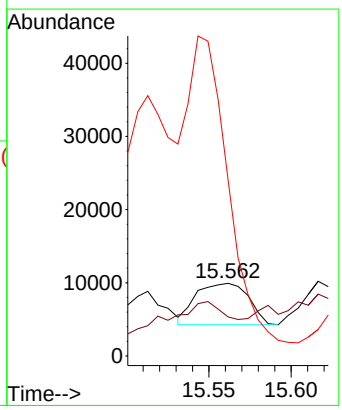


#96
1,2,3-Trichlorobenzene
Concen: 13.081 ug/l
RT: 15.562 min Scan# 2243
Delta R.T. 0.018 min
Lab File: VW032401.D
Acq: 20 Oct 2025 19:42

Tgt Ion:180 Resp: 12612

Ion	Ratio	Lower	Upper
180	100		
182	108.2	47.7	143.1
145	564.8	17.2	51.6#



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Manual Integration Report

Sequence:	VW100125	Instrument	MSVOA_w

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VW032313.D	1,2,3-Trichloropropane	MMDadoda	10/3/2025 2:27:08 AM	SAM	10/3/2025 2:31:09 AM	Peak Integrated by Software
VSTDICC010	VW032314.D	1,2,3-Trichloropropane	MMDadoda	10/3/2025 2:27:10 AM	SAM	10/3/2025 2:31:10 AM	Peak Integrated by Software
VSTDICC020	VW032315.D	1,2,3-Trichloropropane	MMDadoda	10/3/2025 2:27:11 AM	SAM	10/3/2025 2:31:12 AM	Peak Integrated by Software
VSTDICCC050	VW032316.D	1,2,3-Trichloropropane	MMDadoda	10/3/2025 2:27:13 AM	SAM	10/3/2025 2:31:13 AM	Peak Integrated by Software
VSTDICC100	VW032317.D	1,2,3-Trichloropropane	MMDadoda	10/3/2025 2:27:14 AM	SAM	10/3/2025 2:31:14 AM	Peak Integrated by Software
VSTDICC150	VW032318.D	1,2,3-Trichloropropane	MMDadoda	10/3/2025 2:27:16 AM	SAM	10/3/2025 2:31:16 AM	Peak Integrated by Software
VSTDICV050	VW032320.D	1,2,3-Trichloropropane	MMDadoda	10/3/2025 2:27:18 AM	SAM	10/3/2025 2:31:17 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VW102025	Instrument	MSVOA_w

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VW032378.D	1,2,3-Trichloropropane	Amit	10/21/2025 12:23:15 PM	sam	10/21/2025 12:57:29 PM	Peak Integrated by Software
VW1020SBS01	VW032380.D	1,2,3-Trichloropropane	Amit	10/21/2025 12:23:18 PM	sam	10/21/2025 12:57:35 PM	Peak Integrated by Software
Q3395-05	VW032398.D	Methylcyclohexane	Amit	10/21/2025 12:23:52 PM	sam	10/21/2025 12:59:07 PM	Peak Integrated by Software
Q3395-03MS	VW032400.D	1,1,2-Trichloroethane	Amit	10/21/2025 12:23:57 PM	sam	10/21/2025 12:58:21 PM	Peak Integrated by Software
Q3395-03MS	VW032400.D	1,2,3-Trichloropropane	Amit	10/21/2025 12:23:57 PM	sam	10/21/2025 12:58:21 PM	Peak Integrated by Software
Q3395-04MSD	VW032401.D	1,1,2-Trichloroethane	Amit	10/21/2025 12:24:02 PM	sam	10/21/2025 12:58:15 PM	Peak Integrated by Software
Q3395-04MSD	VW032401.D	1,2,3-Trichloropropane	Amit	10/21/2025 12:24:02 PM	sam	10/21/2025 12:58:15 PM	Peak Integrated by Software
Q3395-04MSD	VW032401.D	tert-Butylbenzene	Amit	10/21/2025 12:24:02 PM	sam	10/21/2025 12:58:15 PM	Peak Integrated by Software
Q3395-04MSD	VW032401.D	Vinyl Acetate	Amit	10/21/2025 12:24:02 PM	sam	10/21/2025 12:58:15 PM	Peak Integrated by Software
VSTDCCC050	VW032403.D	1,2,3-Trichloropropane	Amit	10/21/2025 12:24:06 PM	sam	10/21/2025 12:58:11 PM	Peak Integrated by Software

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Fax : 908 789 8922

Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW100125

Review By	Mahesh Dadoda	Review On	10/3/2025 2:27:29 AM				
Supervise By	Semsettin Yesilyurt	Supervise On	10/3/2025 2:31:29 AM				
SubDirectory	VW100125	HP Acquire Method	MSVOA_W	HP Processing Method	82w100125s.m		

STD. NAME	STD REF.#
Tune/Reschk	VP135712
Initial Calibration Stds	VP135713,VP135714,VP135715,VP135716,VP135717,VP135718
CCC	
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VW032312.D	01 Oct 2025 08:12	SY/MD	Ok
2	VSTDICC005	VW032313.D	01 Oct 2025 13:12	SY/MD	Ok,M
3	VSTDICC010	VW032314.D	01 Oct 2025 13:34	SY/MD	Ok,M
4	VSTDICC020	VW032315.D	01 Oct 2025 14:15	SY/MD	Ok,M
5	VSTDICCC050	VW032316.D	01 Oct 2025 14:37	SY/MD	Ok,M
6	VSTDICC100	VW032317.D	01 Oct 2025 14:59	SY/MD	Ok,M
7	VSTDICC150	VW032318.D	01 Oct 2025 15:20	SY/MD	Ok,M
8	VIBLK	VW032319.D	01 Oct 2025 15:42	SY/MD	Ok
9	VSTDICV050	VW032320.D	01 Oct 2025 16:04	SY/MD	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW102025

Review By	Semsettin Yesilyurt	Review On	10/21/2025 1:05:25 PM				
Supervise By	Mahesh Dadoda	Supervise On	10/27/2025 8:11:29 AM				
SubDirectory	VW102025	HP Acquire Method	MSVOA_W	HP Processing Method	82w100125s.m		

STD. NAME	STD REF.#
Tune/Reschk	VP135844
Initial Calibration Stds	
CCC	VP135847,VP135848
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VW032377.D	20 Oct 2025 09:36	SY/MD	Ok
2	VSTDCCC050	VW032378.D	20 Oct 2025 10:20	SY/MD	Ok,M
3	VW1020SBL01	VW032379.D	20 Oct 2025 11:11	SY/MD	Ok
4	VW1020SBS01	VW032380.D	20 Oct 2025 11:41	SY/MD	Ok,M
5	VW1020SBSD01	VW032381.D	20 Oct 2025 12:03	SY/MD	Ok,M
6	Q3363-05	VW032382.D	20 Oct 2025 12:44	SY/MD	Ok
7	Q3375-01	VW032383.D	20 Oct 2025 13:07	SY/MD	Ok
8	Q3375-02	VW032384.D	20 Oct 2025 13:29	SY/MD	Ok
9	Q3375-03	VW032385.D	20 Oct 2025 13:50	SY/MD	Ok
10	Q3375-04	VW032386.D	20 Oct 2025 14:12	SY/MD	Ok
11	Q3375-05	VW032387.D	20 Oct 2025 14:34	SY/MD	Ok
12	Q3376-01	VW032388.D	20 Oct 2025 14:56	SY/MD	Ok,M
13	Q3376-02	VW032389.D	20 Oct 2025 15:18	SY/MD	ReRun
14	Q3376-03	VW032390.D	20 Oct 2025 15:40	SY/MD	Ok,M
15	Q3376-04	VW032391.D	20 Oct 2025 16:02	SY/MD	Ok,M
16	Q3376-05	VW032392.D	20 Oct 2025 16:24	SY/MD	Ok
17	Q3393-01	VW032393.D	20 Oct 2025 16:46	SY/MD	Ok
18	Q3393-02	VW032394.D	20 Oct 2025 17:08	SY/MD	Ok,M
19	Q3393-03	VW032395.D	20 Oct 2025 17:29	SY/MD	ReRun
20	Q3395-01	VW032396.D	20 Oct 2025 17:51	SY/MD	Ok
21	Q3395-02	VW032397.D	20 Oct 2025 18:14	SY/MD	Ok

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Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW102025

Review By	Semsettin Yesilyurt	Review On	10/21/2025 1:05:25 PM				
Supervise By	Mahesh Dadoda	Supervise On	10/27/2025 8:11:29 AM				
SubDirectory	VW102025	HP Acquire Method	MSVOA_W	HP Processing Method	82w100125s.m		

STD. NAME	STD REF.#
Tune/Reschk	VP135844
Initial Calibration Stds	
CCC	VP135847,VP135848
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q3395-05	VW032398.D	20 Oct 2025 18:36	SY/MD	Ok,M
23	Q3395-07	VW032399.D	20 Oct 2025 18:58	SY/MD	Ok
24	Q3395-03MS	VW032400.D	20 Oct 2025 19:20	SY/MD	Ok,M
25	Q3395-04MSD	VW032401.D	20 Oct 2025 19:42	SY/MD	Ok,M
26	VIBLK	VW032402.D	20 Oct 2025 20:04	SY/MD	Ok
27	VSTDCCC050	VW032403.D	20 Oct 2025 20:26	SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW100125

Review By	Mahesh Dadoda	Review On	10/3/2025 2:27:29 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	10/3/2025 2:31:29 AM		
SubDirectory	VW100125	HP Acquire Method	MSVOA_W	HP Processing Method	82w100125s.m

STD. NAME	STD REF.#
Tune/Reschk	VP135712
Initial Calibration Stds	VP135713,VP135714,VP135715,VP135716,VP135717,VP135718
CCC	
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VW032312.D	01 Oct 2025 08:12		SY/MD	Ok
2	VSTDICC005	VSTDICC005	VW032313.D	01 Oct 2025 13:12	Pass for DOD	SY/MD	Ok,M
3	VSTDICC010	VSTDICC010	VW032314.D	01 Oct 2025 13:34	LR-20	SY/MD	Ok,M
4	VSTDICC020	VSTDICC020	VW032315.D	01 Oct 2025 14:15		SY/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VW032316.D	01 Oct 2025 14:37		SY/MD	Ok,M
6	VSTDICC100	VSTDICC100	VW032317.D	01 Oct 2025 14:59		SY/MD	Ok,M
7	VSTDICC150	VSTDICC150	VW032318.D	01 Oct 2025 15:20		SY/MD	Ok,M
8	VIBLK	VIBLK	VW032319.D	01 Oct 2025 15:42		SY/MD	Ok
9	VSTDICV050	ICVVW100125	VW032320.D	01 Oct 2025 16:04		SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW102025

Review By	Semsettin Yesilyurt	Review On	10/21/2025 1:05:25 PM		
Supervise By	Mahesh Dadoda	Supervise On	10/27/2025 8:11:29 AM		
SubDirectory	VW102025	HP Acquire Method	MSVOA_W	HP Processing Method	82w100125s.m

STD. NAME	STD REF.#
Tune/Reschk	VP135844
Initial Calibration Stds	
CCC	VP135847,VP135848
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VW032377.D	20 Oct 2025 09:36		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VW032378.D	20 Oct 2025 10:20		SY/MD	Ok,M
3	VW1020SBL01	VW1020SBL01	VW032379.D	20 Oct 2025 11:11		SY/MD	Ok
4	VW1020SBS01	VW1020SBS01	VW032380.D	20 Oct 2025 11:41		SY/MD	Ok,M
5	VW1020SBSD01	VW1020SBSD01	VW032381.D	20 Oct 2025 12:03		SY/MD	Ok,M
6	Q3363-05	COMP01-20251015	VW032382.D	20 Oct 2025 12:44	vial-B	SY/MD	Ok
7	Q3375-01	PR132-S02-074099-20	VW032383.D	20 Oct 2025 13:07	vial-A	SY/MD	Ok
8	Q3375-02	PR132-S04-000013-20	VW032384.D	20 Oct 2025 13:29	vial-A	SY/MD	Ok
9	Q3375-03	PR132-S05-000057-20	VW032385.D	20 Oct 2025 13:50	vial-A	SY/MD	Ok
10	Q3375-04	PR132-S02-010074-20	VW032386.D	20 Oct 2025 14:12	vial-A	SY/MD	Ok
11	Q3375-05	PR132-DP02-20251016	VW032387.D	20 Oct 2025 14:34	vial-A	SY/MD	Ok
12	Q3376-01	PR132-S05-057082-20	VW032388.D	20 Oct 2025 14:56	vial-A	SY/MD	Ok,M
13	Q3376-02	PR132-DP01-20251016	VW032389.D	20 Oct 2025 15:18	vial-A Surrogate fail	SY/MD	ReRun
14	Q3376-03	PR132-COMP2-20251(	VW032390.D	20 Oct 2025 15:40	vial-A	SY/MD	Ok,M
15	Q3376-04	PR132-S12-047072-20	VW032391.D	20 Oct 2025 16:02	vial-A	SY/MD	Ok,M
16	Q3376-05	PR132-S12-020047-20	VW032392.D	20 Oct 2025 16:24	vial-A	SY/MD	Ok
17	Q3393-01	PR132-S10-000022-20	VW032393.D	20 Oct 2025 16:46	vial-A	SY/MD	Ok
18	Q3393-02	PR132-S10-022047-20	VW032394.D	20 Oct 2025 17:08	vial-A	SY/MD	Ok,M

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Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW102025

Review By	Semsettin Yesilyurt	Review On	10/21/2025 1:05:25 PM		
Supervise By	Mahesh Dadoda	Supervise On	10/27/2025 8:11:29 AM		
SubDirectory	VW102025	HP Acquire Method	MSVOA_W	HP Processing Method	82w100125s.m

STD. NAME	STD REF.#
Tune/Reschk	VP135844
Initial Calibration Stds	
CCC	VP135847,VP135848
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q3393-03	PR132-S08-013038-20	VW032395.D	20 Oct 2025 17:29	vial-A Surrogate fail	SY/MD	ReRun
20	Q3395-01	PR132-S09-000051-20	VW032396.D	20 Oct 2025 17:51	vial-A	SY/MD	Ok
21	Q3395-02	PR132-S07-000102-20	VW032397.D	20 Oct 2025 18:14	vial-A	SY/MD	Ok
22	Q3395-05	PR132-S07-102116-20	VW032398.D	20 Oct 2025 18:36	vial-A	SY/MD	Ok,M
23	Q3395-07	PR132-S08-038048-20	VW032399.D	20 Oct 2025 18:58	vial-A	SY/MD	Ok
24	Q3395-03MS	PR132-S07-000102-20	VW032400.D	20 Oct 2025 19:20	vial-A Internal Standard Fail	SY/MD	Ok,M
25	Q3395-04MSD	PR132-S07-000102-20	VW032401.D	20 Oct 2025 19:42	vial-A Internal Standard Fail	SY/MD	Ok,M
26	VIBLK	VIBLK	VW032402.D	20 Oct 2025 20:04		SY/MD	Ok
27	VSTDCCC050	VSTDCCC050EC	VW032403.D	20 Oct 2025 20:26		SY/MD	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/21/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 10/20/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:15
Out Date: 10/21/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC: LB137589

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q3368-06	OUTSIDE-DUMPSTER	1	1.12	10.63	11.75	8.28	67.4	
Q3368-07	PRESS-SLUDGE	2	1.18	10.30	11.48	7.89	65.1	
Q3393-01	PR132-S10-000022-20251017	3	1.17	10.44	11.61	7.02	56.0	
Q3393-02	PR132-S10-022047-20251017	4	1.14	10.48	11.62	6.8	54.0	
Q3393-03	PR132-S08-013038-20251017	5	1.11	10.85	11.96	6.84	52.8	
Q3393-04	PR132-S06-000021-20251017	6	1.13	10.50	11.63	7.03	56.2	
Q3393-05	PR132-S08-000013-20251017	7	1.12	10.53	11.65	6.6	52.0	
Q3395-01	PR132-S09-000051-20251017	8	1.15	10.48	11.63	6.69	52.9	
Q3395-02	PR132-S07-000102-20251017	9	1.14	10.21	11.35	6.03	47.9	
Q3395-03	Q3395-02MS	10	1.14	10.21	11.35	6.03	47.9	
Q3395-04	Q3395-02MSD	11	1.14	10.21	11.35	6.03	47.9	
Q3395-05	PR132-S07-102116-20251017	12	1.13	10.12	11.25	6.33	51.4	
Q3395-06	PR132-COMP03-20251017	13	1.15	10.74	11.89	8.65	69.8	
Q3395-07	PR132-S08-038048-20251017	14	1.15	10.68	11.83	7.41	58.6	
Q3396-01	A	15	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3396-02	B	16	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3396-03	C	17	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3397-01	TP-7-WC	18	1.14	10.67	11.81	10.66	89.2	
Q3397-02	TP-7-EPH	19	1.18	10.18	11.36	9.81	84.8	
Q3397-03	TP-7-VOC	20	1.14	10.66	11.8	10.55	88.3	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

LB137589

WorkList Name : % SOLID-102025 **WorkList ID :** 192564 **Department :** Wet-Chemistry **Date :** 10-20-2025 15:56:43

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3368-06	OUTSIDE-DUMPSTER	Solid	Percent Solids	Cool 4 deg C	ARAM01	D41	10/16/2025	Chemtech -SO
Q3368-07	PRESS-SLUDGE	Solid	Percent Solids	Cool 4 deg C	ARAM01	D41	10/16/2025	Chemtech -SO
Q3393-01	PR132-S10-000022-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3393-02	PR132-S10-022047-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3393-03	PR132-S08-013038-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3393-04	PR132-S06-000021-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3393-05	PR132-S08-000013-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3395-01	PR132-S09-000051-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3395-02	PR132-S07-000102-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3395-03	Q3395-02MS	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3395-04	Q3395-02MSD	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3395-05	PR132-S07-102116-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3395-06	PR132-COMP03-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3395-07	PR132-S08-038048-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/17/2025	Chemtech -SO
Q3396-01	A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	10/17/2025	Chemtech -SO
Q3396-02	B	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	10/17/2025	Chemtech -SO
Q3396-03	C	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	10/17/2025	Chemtech -SO
Q3397-01	TP-7-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	10/17/2025	Chemtech -SO
Q3397-02	TP-7-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	10/18/2025	Chemtech -SO
Q3397-03	TP-7-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	10/18/2025	Chemtech -SO

Date/Time 10/20/25 16:20
Raw Sample Received by:
Raw Sample Relinquished by:

Date/Time 10/20/25 17:40
Raw Sample Received by:
Raw Sample Relinquished by:

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Prep Standard - Chemical Standard Summary

Order ID : Q3395

Test : VOC-TCLVOA-10

Prepbatch ID :

Sequence ID/Qc Batch ID: VW102025,

Standard ID :
VP133934,VP134147,VP134149,VP134150,VP134934,VP134957,VP135552,VP135553,VP135834,VP135835,VP135844,VP135847,VP135848,

Chemical ID :
V13391,V14200,V14204,V14205,V14290,V14509,V14510,V14531,V14532,V14625,V14636,V14637,V14638,V14639,V14673,V14727,V14728,V14803,V14815,V14844,V14906,V14921,V14928,V14929,V14951,V14952,V15073,V15074,V15075,W3112,

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1917	8260 Internal standard 50 ppm	VP133934	05/16/2025	11/12/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 05/21/2025

FROM 0.10000ml of V14290 + 49.90000ml of V14921 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
252	8260 Working STD (BCM)-First source, 100PPM	VP134147	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 1.00000ml of V14673 + 19.00000ml of V14929 = Final Quantity: 20.000 ml

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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
1811	8260 Working Std(2-CVE)-500ppm	VP134150	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 7.50000ml of V14929 + 12.50000ml of VP134149 = Final Quantity: 20.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
249	8260 Surrogate, 100PPM	VP134934	07/29/2025	01/29/2026	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/06/2025

FROM 0.10000ml of V14906 + 24.90000ml of V14625 = Final Quantity: 25.000 ml

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

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP135552	09/22/2025	11/03/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/26/2025

FROM 0.40000ml of V14844 + 1.00000ml of V14200 + 1.00000ml of V14509 + 1.00000ml of V14510 + 1.00000ml of V14531 + 1.00000ml of V14532 + 1.00000ml of V14727 + 1.00000ml of V14728 + 1.00000ml of V14803 + 1.00000ml of V14815 + 1.00000ml of V14951 + 1.00000ml of V14952 + 1.50000ml of V14204 + 1.50000ml of V14205 + 10.60000ml of V14928 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
244	8260 Calibration Working STD Mix-First source, 100PPM	VP135553	09/22/2025	11/03/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/26/2025

FROM 5.62500ml of V14928 + 9.37500ml of VP135552 = Final Quantity: 15.000 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	VP135834	10/17/2025	11/16/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/17/2025

FROM 1.00000ml of V15073 + 1.50000ml of V15074 + 1.50000ml of V15075 + 21.00000ml of V14928 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
56	8260 Working STD (Acrolein) -first source, 500PPM	VP135835	10/17/2025	11/16/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/17/2025

FROM 7.50000ml of V14928 + 12.50000ml of VP135834 = Final Quantity: 20.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
732	BFB TUNE CHECK - SOIL	VP135844	10/20/2025	10/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/21/2025

FROM 4.99800ml of W3112 + 0.00200ml of VP134957 = Final Quantity: 5.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
773	50 PPB CCC, 8260-SOIL	VP135847	10/20/2025	10/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/21/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP134147 + 0.00250ml of VP134150 + 0.00250ml of VP134934 + 0.00250ml of VP135553 + 0.00250ml of VP135835 + 0.00500ml of VP133934 = Final Quantity: 5.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
773	50 PPB CCC, 8260-SOIL	VP135848	10/20/2025	10/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/21/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP134147 + 0.00250ml of VP134150 + 0.00250ml of VP134934 + 0.00250ml of VP135553 + 0.00250ml of VP135835 + 0.00500ml of VP133934 = Final Quantity: 5.000 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	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14200

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	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14204

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	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14205

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	12/12/2025	12/12/2024 / SAM	04/15/2024 / SAM	V14290

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	03/22/2026	09/22/2025 / sam	09/17/2024 / SAM	V14509

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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.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	03/22/2026	09/22/2025 / sam	09/17/2024 / SAM	V14510

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	03/22/2026	09/22/2025 / sam	09/18/2024 / SAM	V14531

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	03/22/2026	09/22/2025 / sam	09/18/2024 / SAM	V14532

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 #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14636

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14637

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14638

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14639

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14673

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	03/22/2026	09/22/2025 / sam	12/17/2024 / SAM	V14727

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	03/22/2026	09/22/2025 / sam	12/17/2024 / SAM	V14728

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	03/22/2026	09/22/2025 / sam	01/08/2025 / SAM	V14803

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	03/22/2026	09/22/2025 / sam	01/08/2025 / SAM	V14815

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	03/22/2026	09/22/2025 / sam	01/21/2025 / SAM	V14844

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0223904	07/29/2026	07/29/2025 / SAM	03/24/2025 / SAM	V14906

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	11/12/2025	05/12/2025 / SAM	05/09/2025 / SAM	V14921

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	03/22/2026	09/22/2025 / sam	05/09/2025 / SAM	V14928

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 #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0222076	03/22/2026	09/22/2025 / sam	05/19/2025 / SAM	V14951

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	A0222076	03/22/2026	09/22/2025 / sam	05/19/2025 / SAM	V14952

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15073

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15074

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15075

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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0466)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06128PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 846mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 8040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

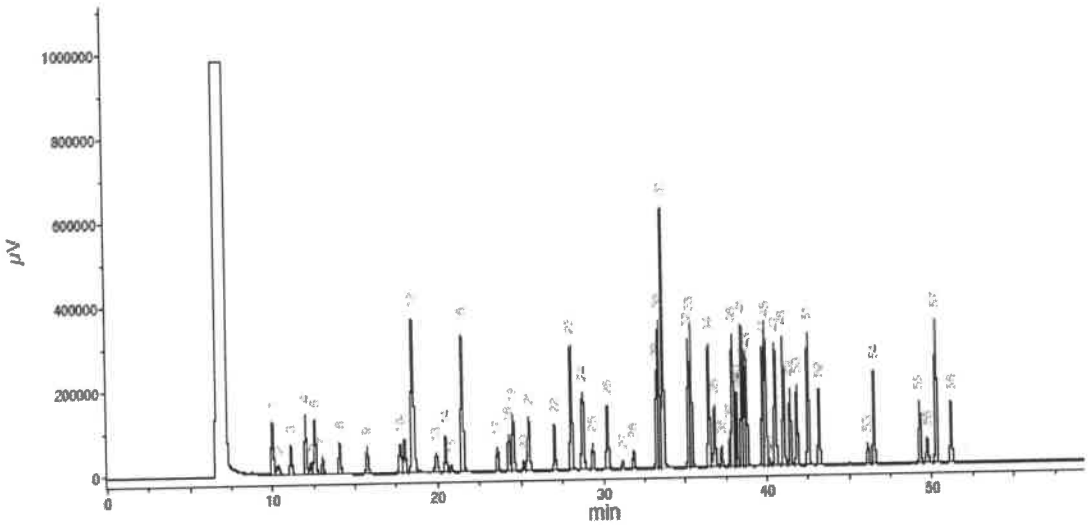
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,3-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropene	19.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.86
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.62
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.07
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.34
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.85
32	o-Xylene	35.33
33	Styrene	35.50
34	Isopropylbenzene/Bromoform	35.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.12
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.58
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.46
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0466)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06128PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 846mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 8040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

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- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
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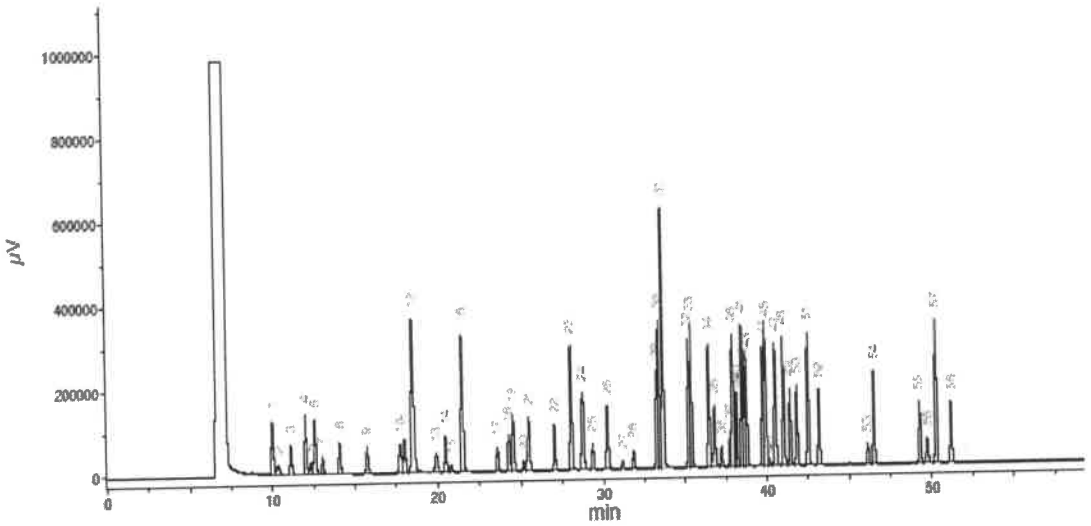
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,3-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropene	19.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.86
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.62
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.07
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.34
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.85
32	o-Xylene	35.33
33	Styrene	35.50
34	Isopropylbenzene/Bromoform	35.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.12
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.58
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.46
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

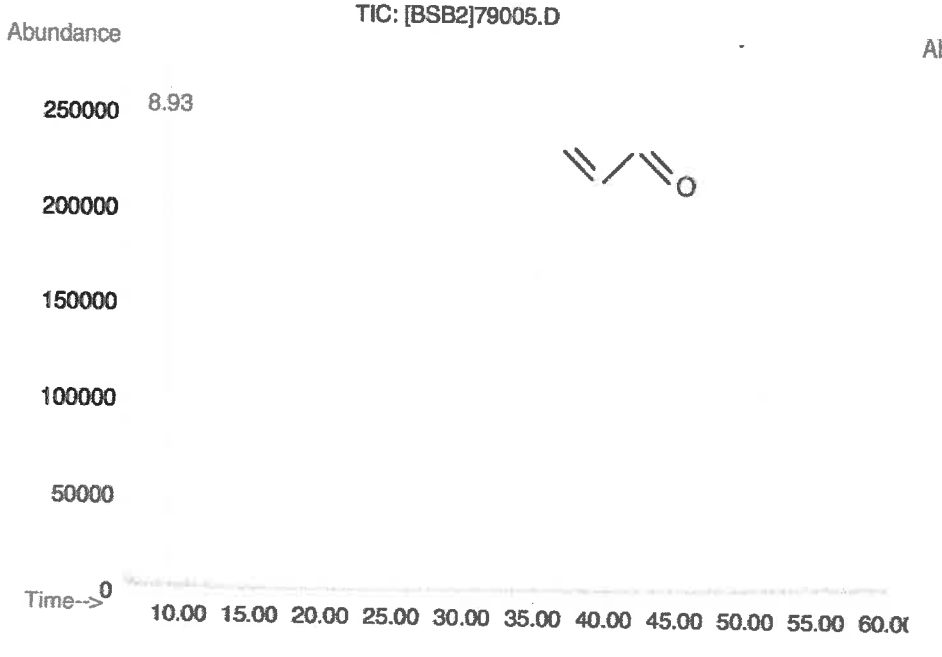
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

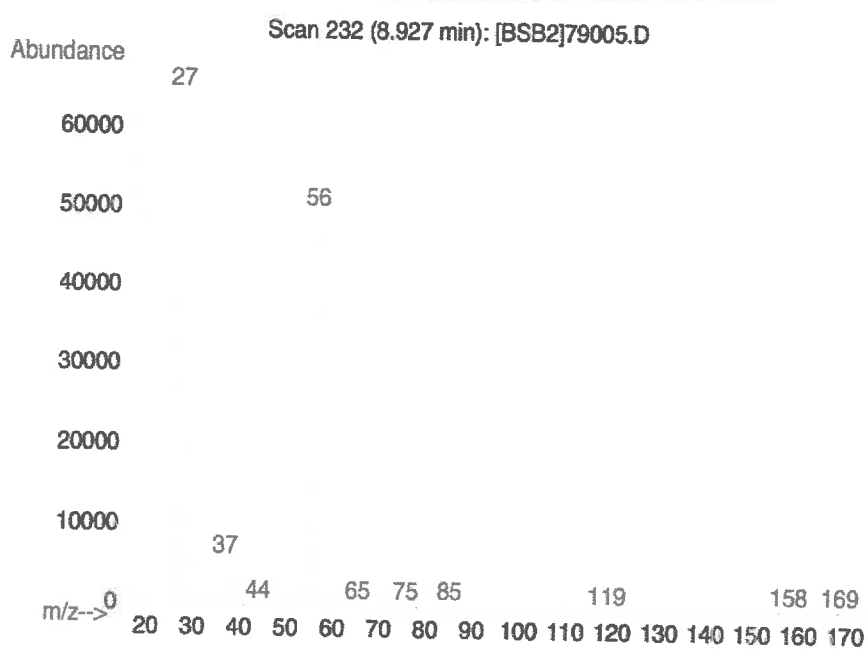
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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Certified Reference Material CRM

Rec 09/16/24 2 Vials

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Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

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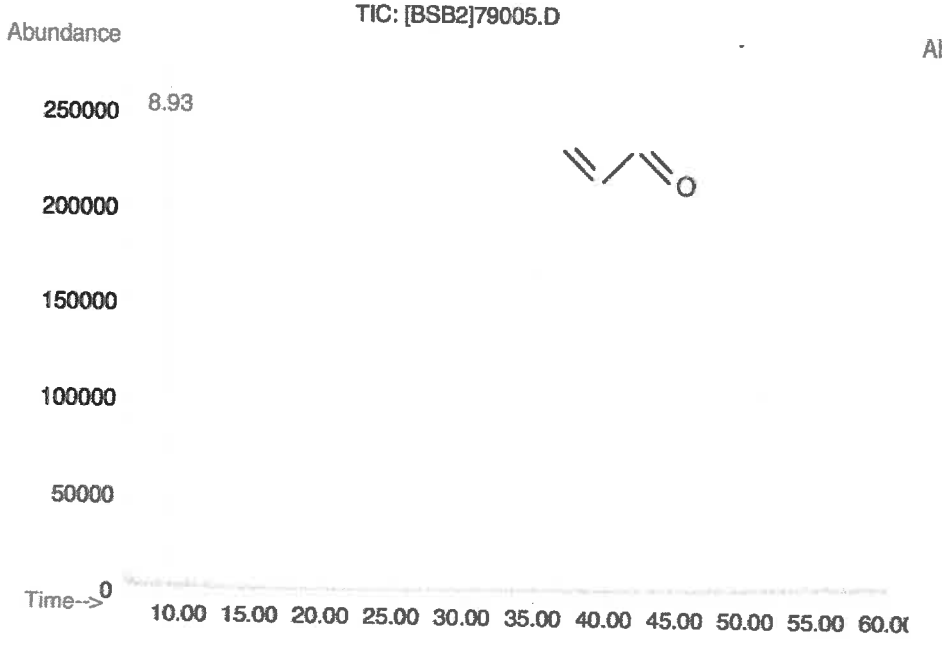
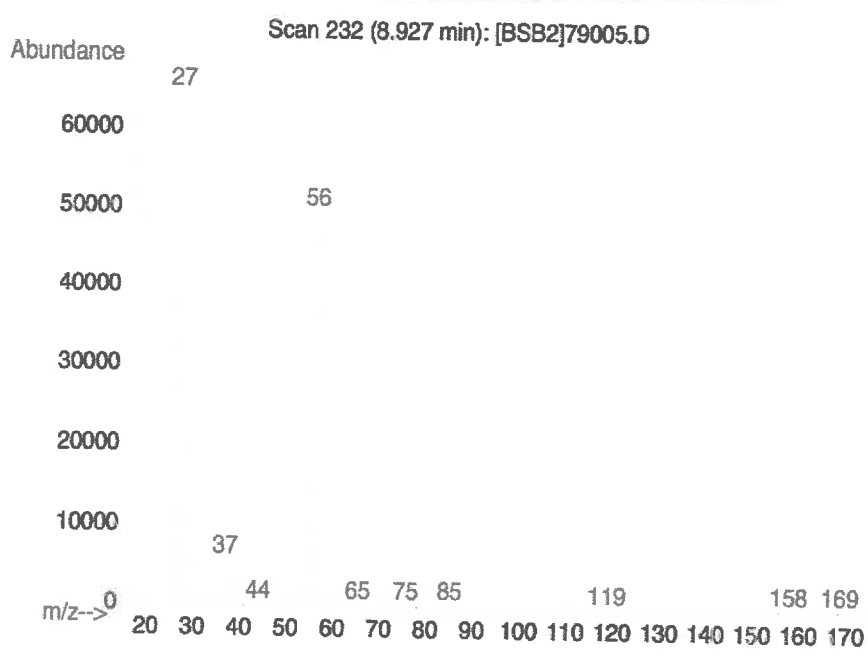
Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro 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.
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- 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 12/6/24
20 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

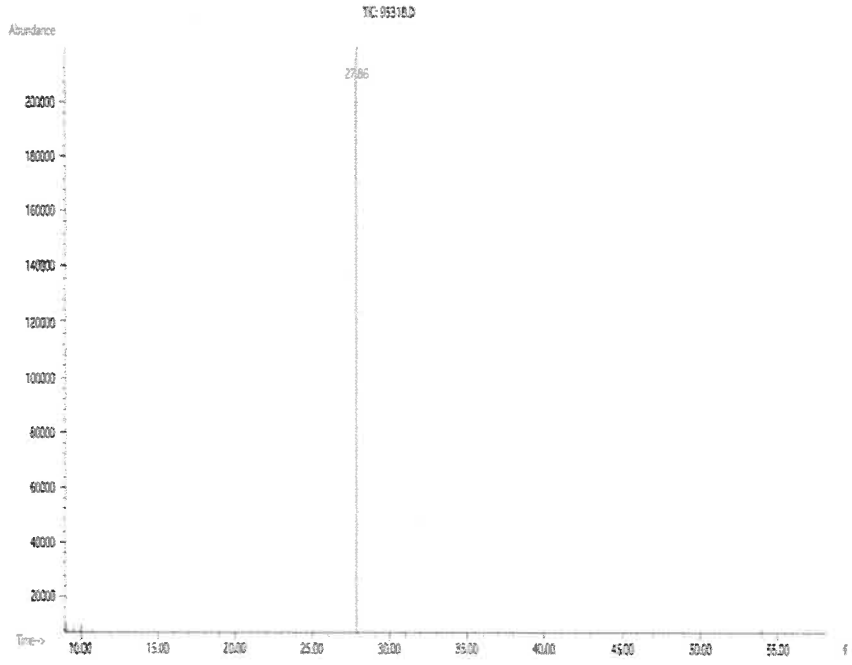
V14630 to V14649

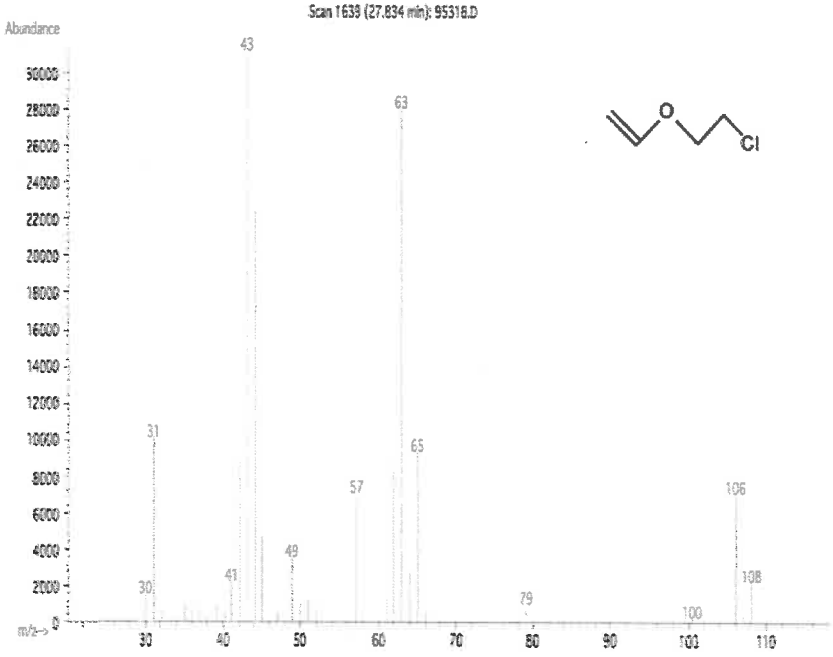
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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.





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Absolute Standards Inc.
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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

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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Certified Reference Material CRM

Rec 12/6/24
20 vial

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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

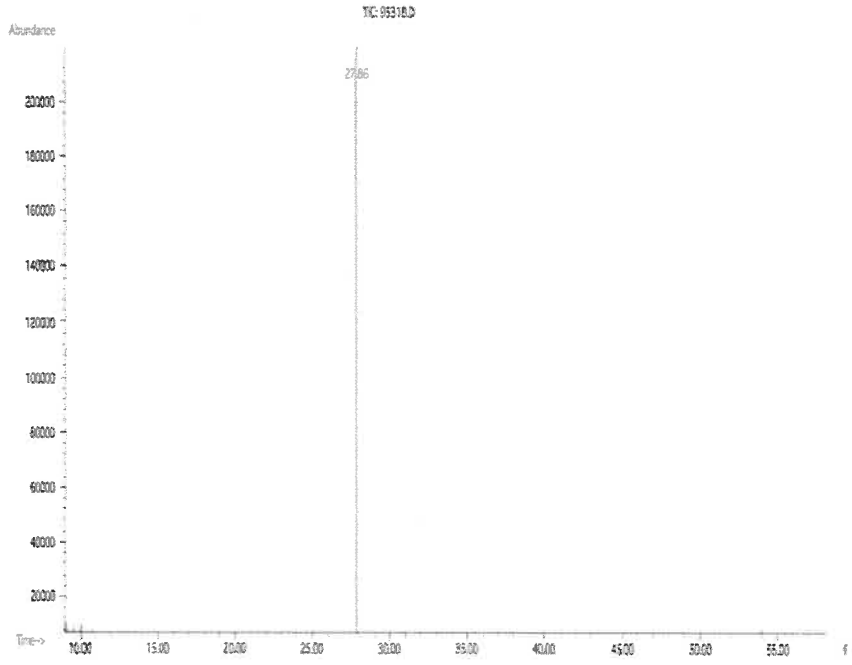
V14630 to V14649

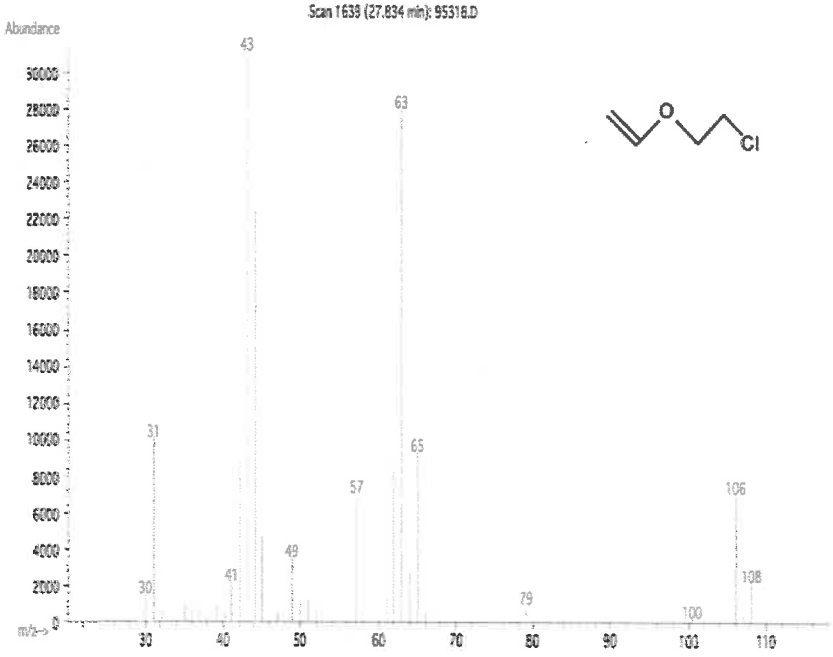
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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.





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Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

V14630 to V14649

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
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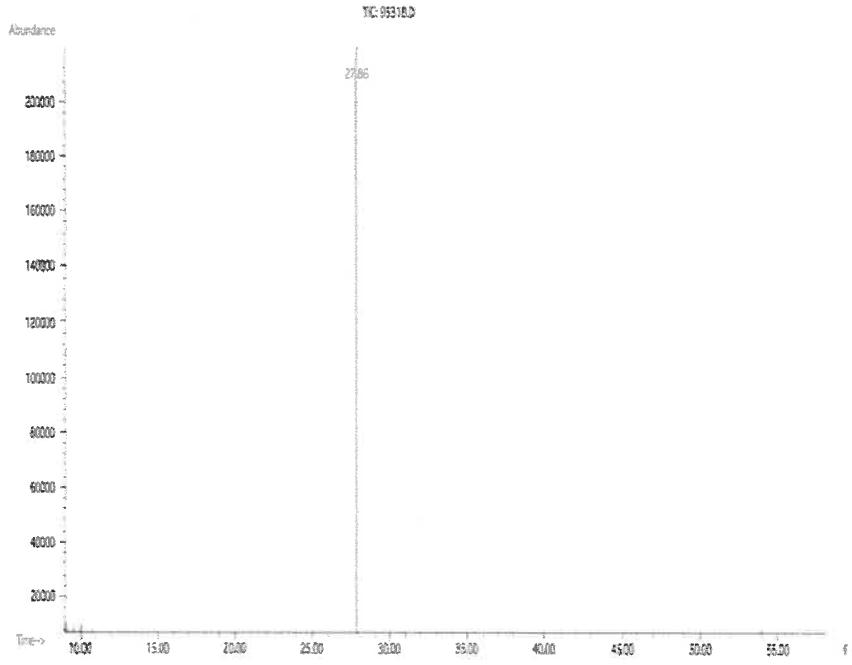
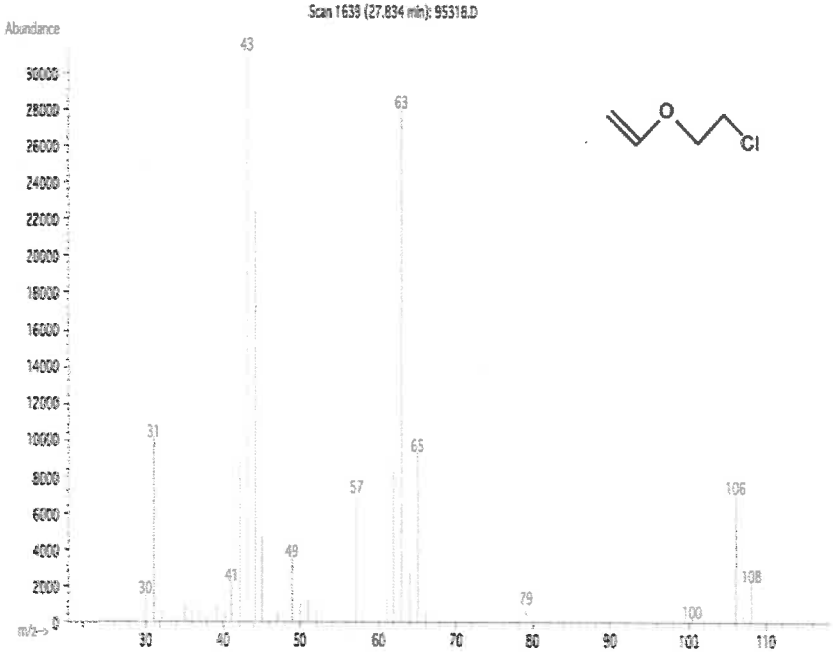
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	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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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**
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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.

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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.
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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.
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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.

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Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
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Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
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Chemical stability Stable under recommended storage conditions.
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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 12/6/24
20 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

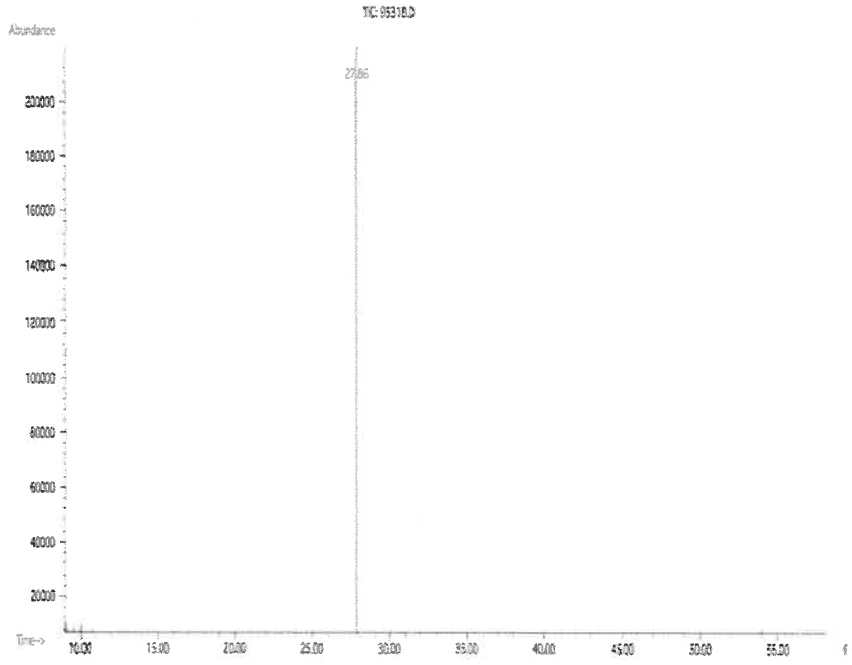
V14630 to V14649

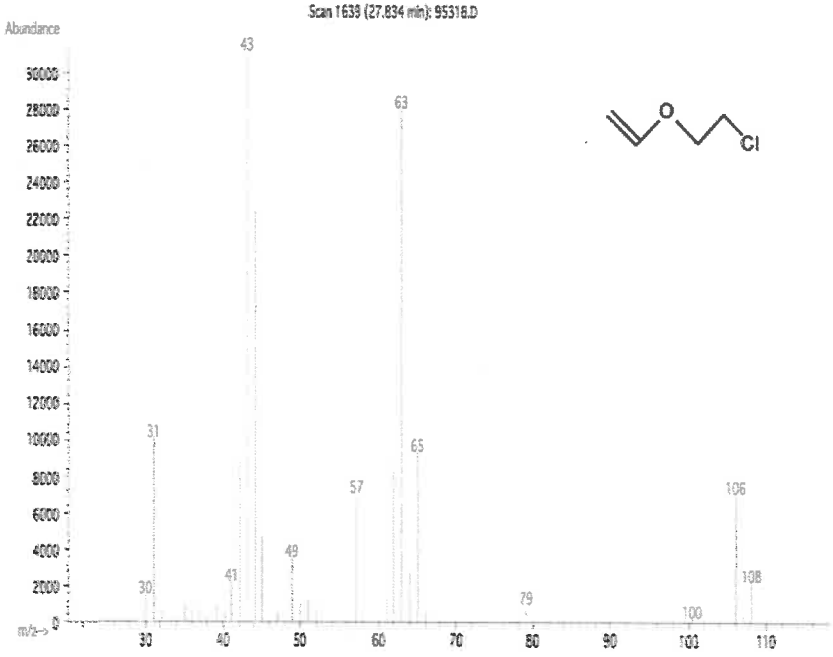
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
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RESTEK
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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.)

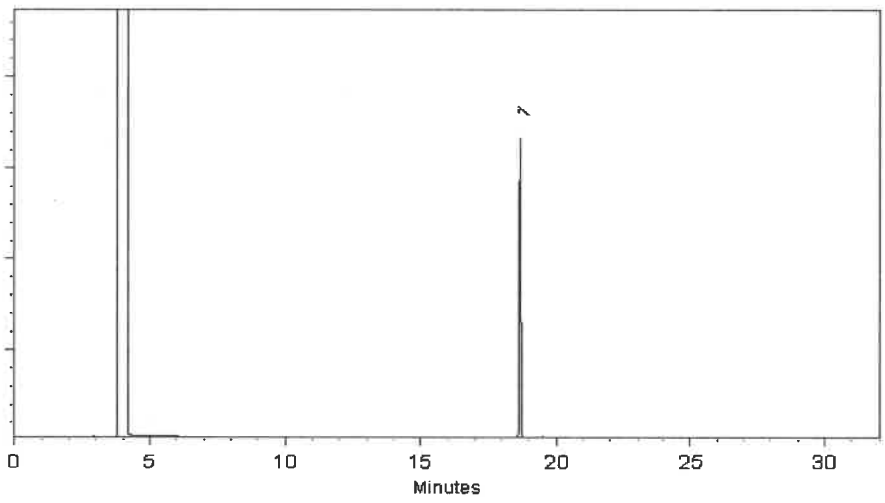
Inj. Temp:
200°C

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.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0200785

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 : November 30, 2026 **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	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

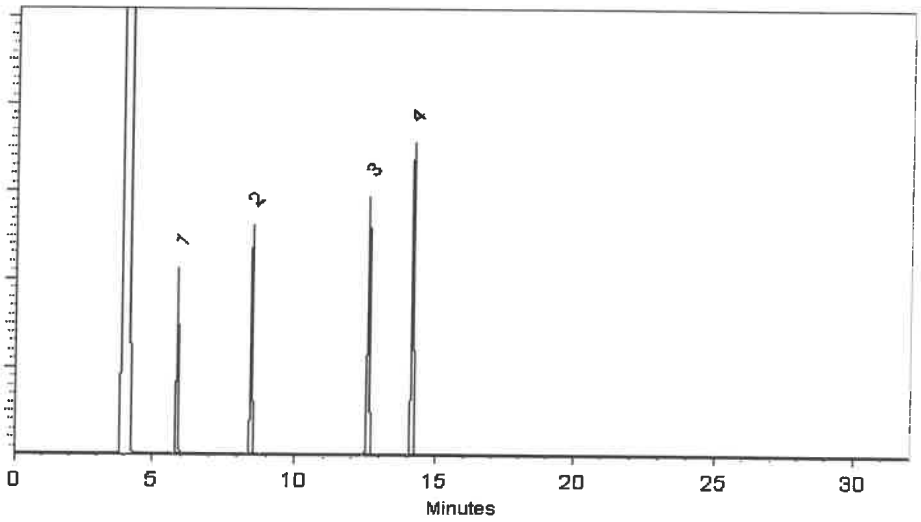
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- 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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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0200785

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 : November 30, 2026 **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	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* 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.)

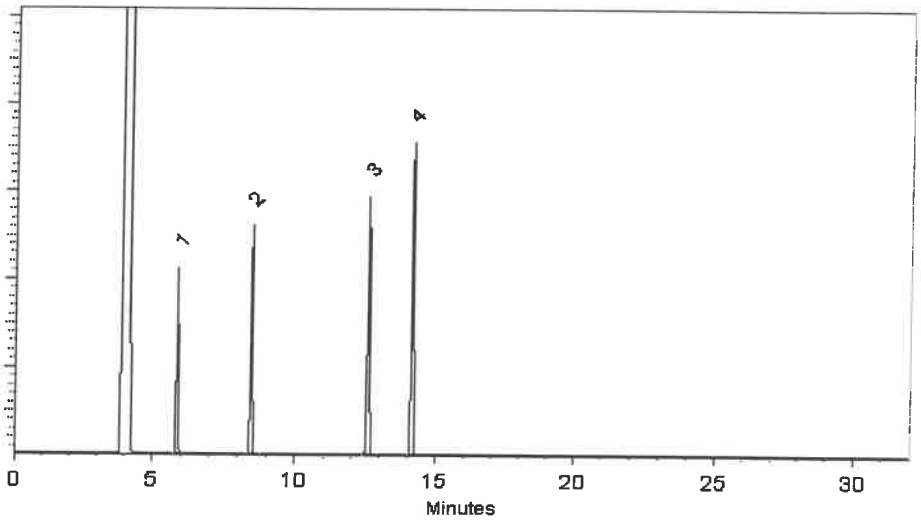
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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- 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:

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Catalog No. : 30006 **Lot No.:** A0200785

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 : November 30, 2026 **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	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

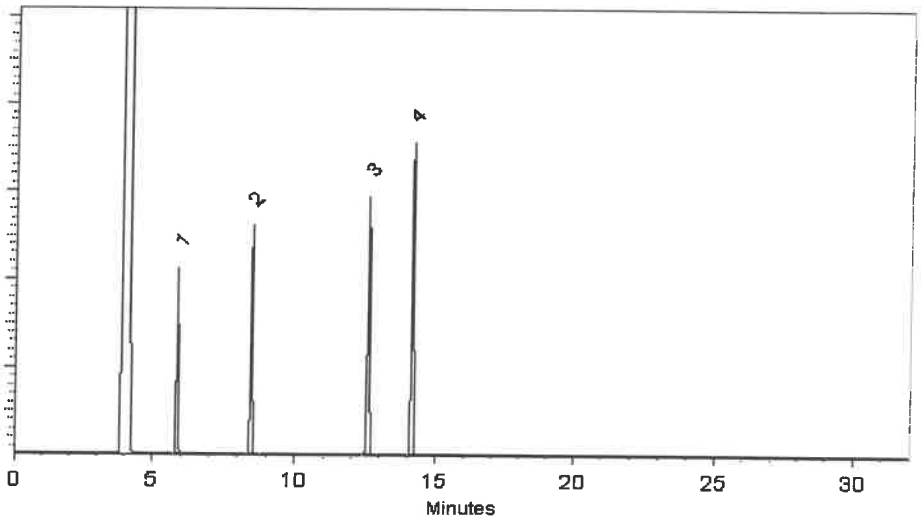
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- 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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gravimetric

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555581 **Lot No.:** A0210184

Description : Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	25,212.0 µg/mL	+/- 1,427.8857
2	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,220.0 µg/mL	+/- 1,428.3388
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,116.0 µg/mL	+/- 1,422.4487
4	Pentafluorobenzene	363-72-4	MKCR9383	99%	25,180.0 µg/mL	+/- 1,426.0734

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Dec: 12/09/24

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V14667 to
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

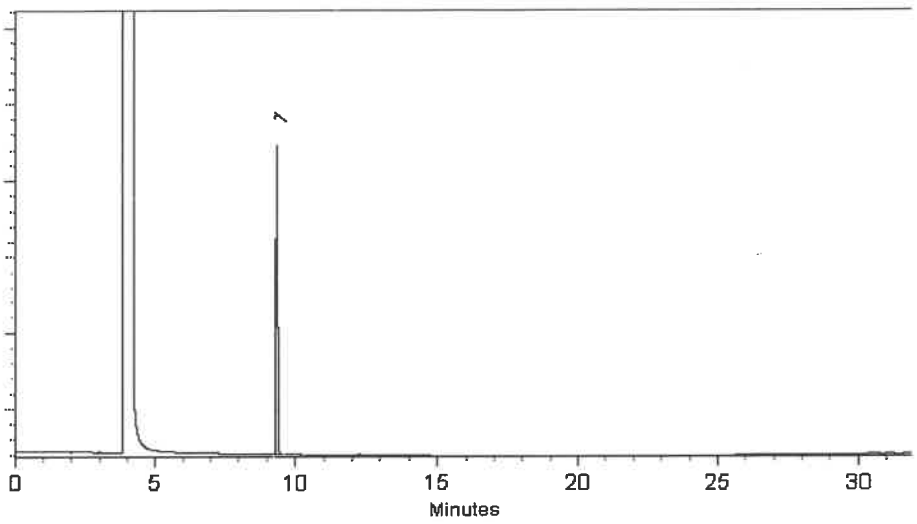
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.

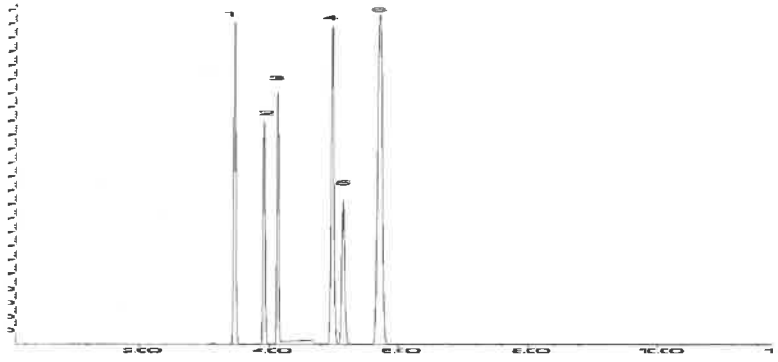
Inj. Temp:
200°C

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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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.

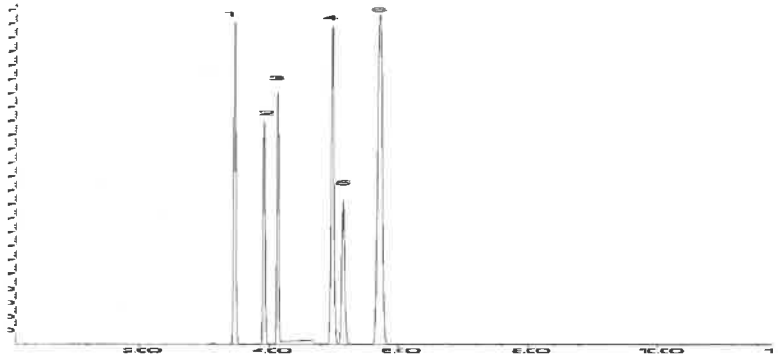
Inj. Temp:
200°C

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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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

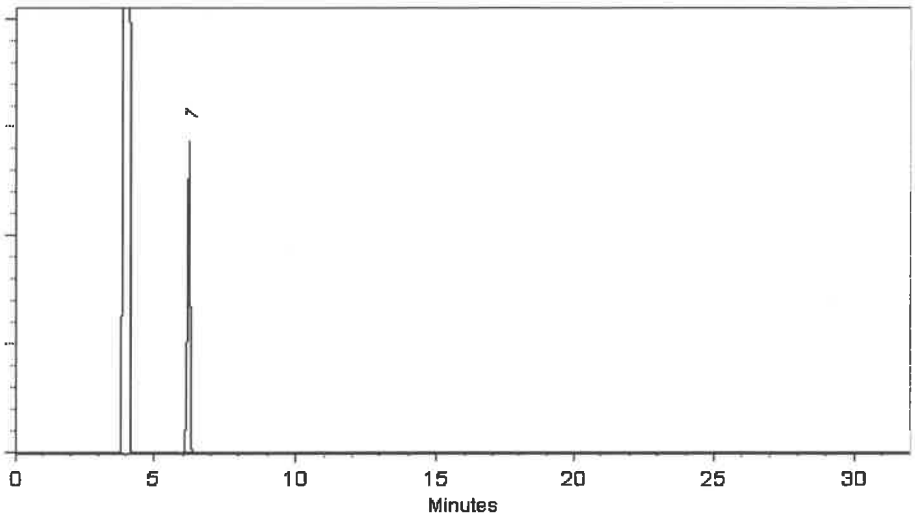
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Zoviny Rec 01/08/21

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Bellefonte, PA 16823-8812
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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

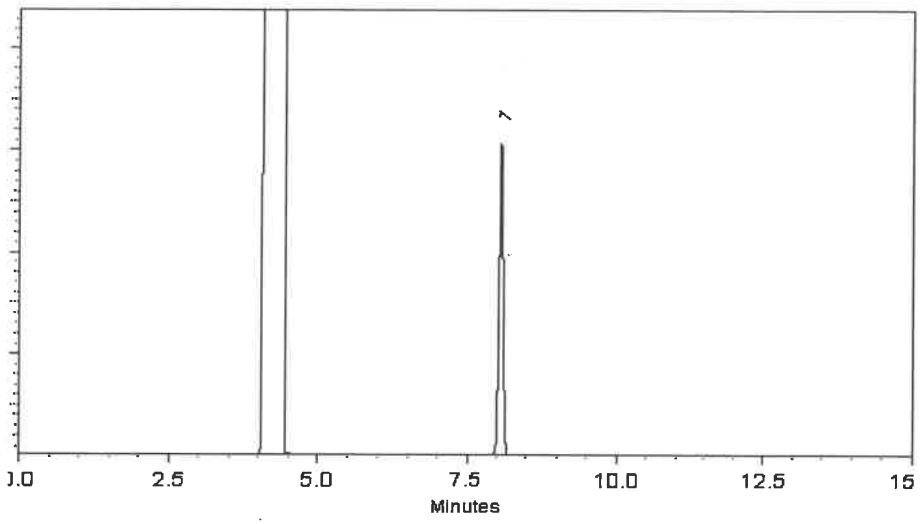
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Zoviny Rec 01/08/21

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

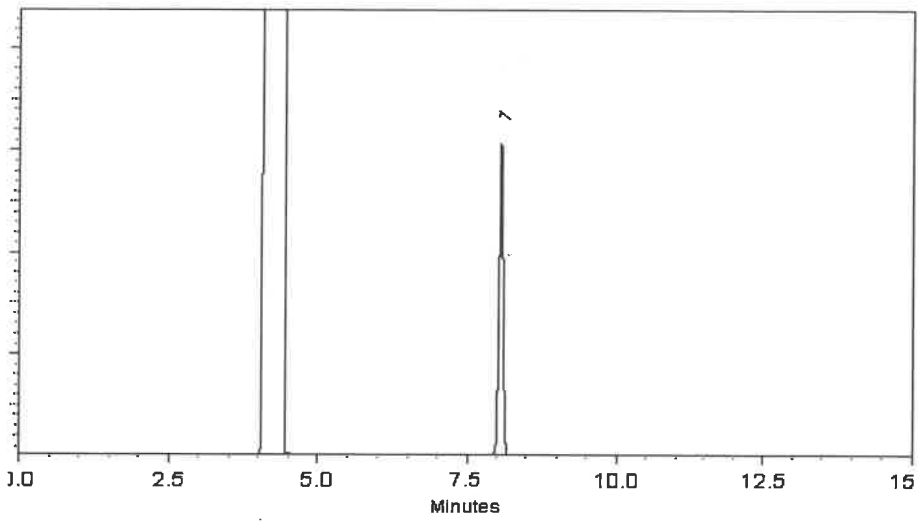
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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10 vial

CERTIFIED REFERENCE MATERIAL

Lee 03/31/25

Certificate of Analysis

gravimetric

V14904 to V14913

ilac-MRA
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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
A2LA ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A0223904

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	25,108.0 µg/mL	+/- 1,421.9957
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	25,108.0 µg/mL	+/- 1,421.9957
3	Dibromofluoromethane	1868-53-7	VENKAT02	99%	25,232.0 µg/mL	+/- 1,429.0184
4	Toluene-d8	2037-26-5	PR-34141	99%	25,156.0 µg/mL	+/- 1,424.7141

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Brittany Federinko - Operations Tech I

Date Mixed: 27-Mar-2025 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

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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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

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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
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Titrable Acid (µeq/g)	≤ 0.3	0.3
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Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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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

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 %
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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

Rec 05/19/25

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Bellefonte, PA 16823-8812
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

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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.:** A0222076

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 : August 31, 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	Methyl acetate	79-20-9	SHBR1889	99%	2,004.0 µg/mL	+/- 69.2674
2	Vinyl acetate	108-05-4	RD240423RSR	99%	2,010.0 µg/mL	+/- 69.4748
3	Ethyl acetate	141-78-6	SHBS3323	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,008.0 µg/mL	+/- 69.4057
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBR2024	99%	2,008.0 µg/mL	+/- 69.4057
7	Amyl acetate	628-63-7	BCBT7442	99%	2,006.7 µg/mL	+/- 69.3596

* 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

Rec 05/19/25

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CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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Catalog No. : 30489 **Lot No.:** A0222076

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

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Expiration Date : August 31, 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	Methyl acetate	79-20-9	SHBR1889	99%	2,004.0 µg/mL	+/- 69.2674
2	Vinyl acetate	108-05-4	RD240423RSR	99%	2,010.0 µg/mL	+/- 69.4748
3	Ethyl acetate	141-78-6	SHBS3323	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,008.0 µg/mL	+/- 69.4057
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBR2024	99%	2,008.0 µg/mL	+/- 69.4057
7	Amyl acetate	628-63-7	BCBT7442	99%	2,006.7 µg/mL	+/- 69.3596

* 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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 10/16/25 5 Vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 101625
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

Expiration Date: 111625
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

V15071 – V15075

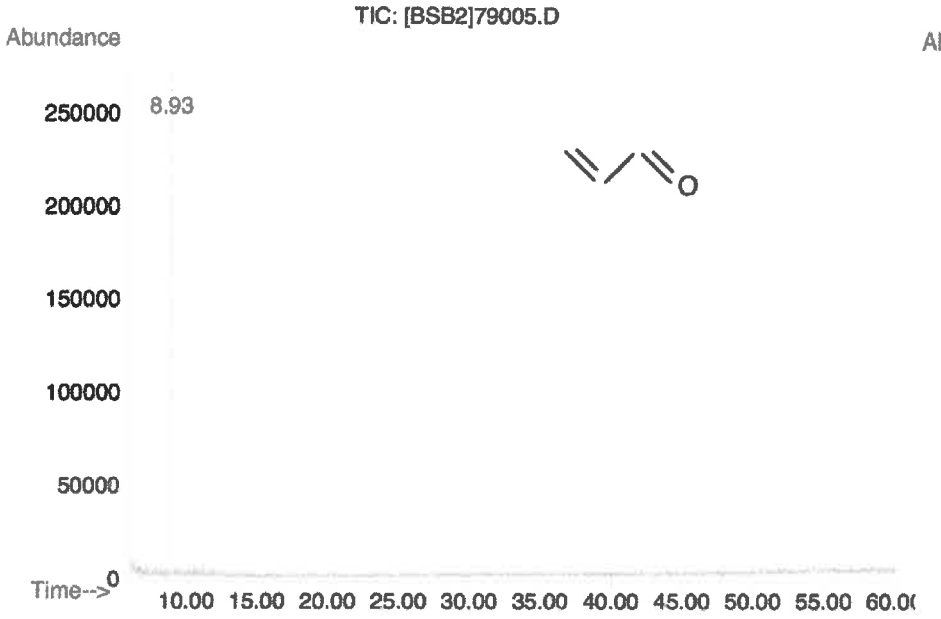
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

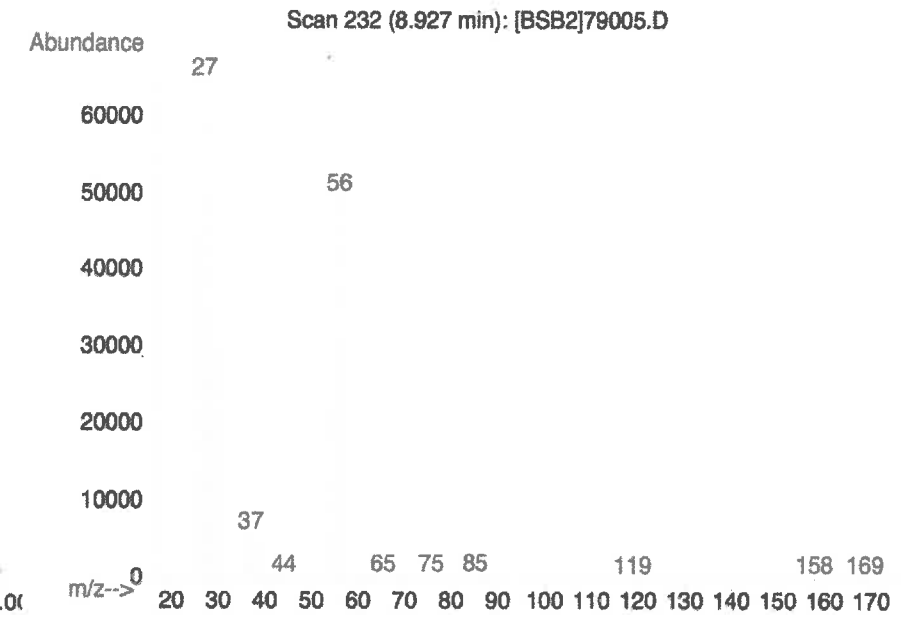
Weight(s) shown below were combined and diluted to (mL): 10.0

Prashant Chauhan		101625
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		101625
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	0.05180	5013.7	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. Goverament 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 10/16/25 5 Vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 101625
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

Expiration Date: 111625
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

V15071 – V15075

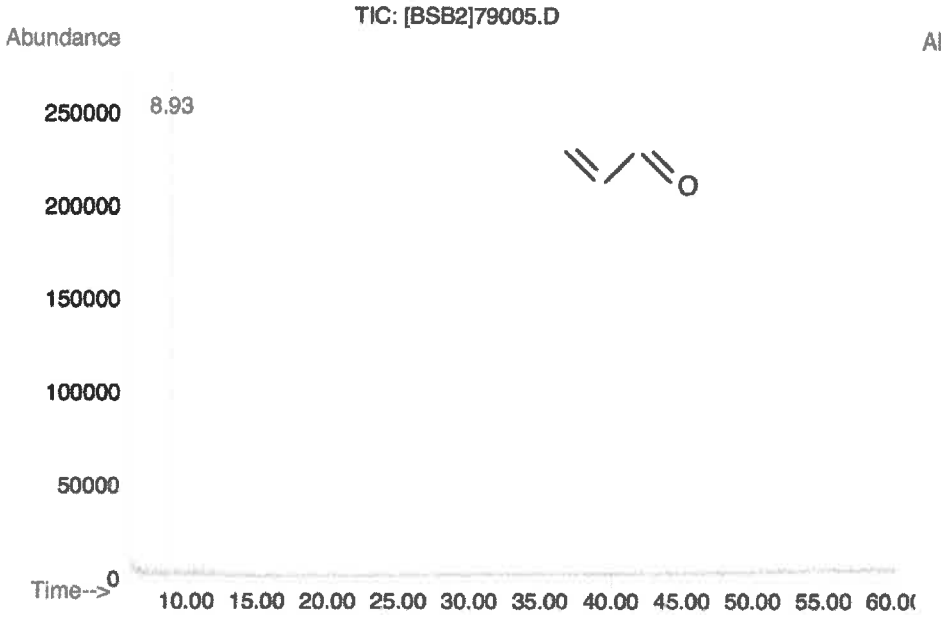
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

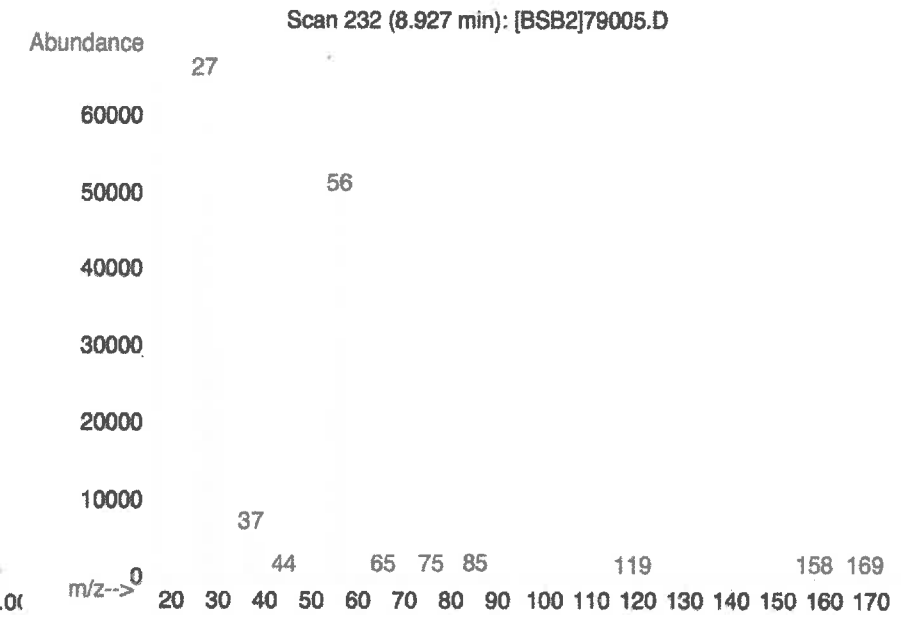
Weight(s) shown below were combined and diluted to (mL): 10.0

Prashant Chauhan		101625
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		101625
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	0.05180	5013.7	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.
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www.absolutestandards.com

Certified Reference Material CRM

Rec 10/16/25 5 Vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 101625
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

Expiration Date: 111625
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

V15071 – V15075

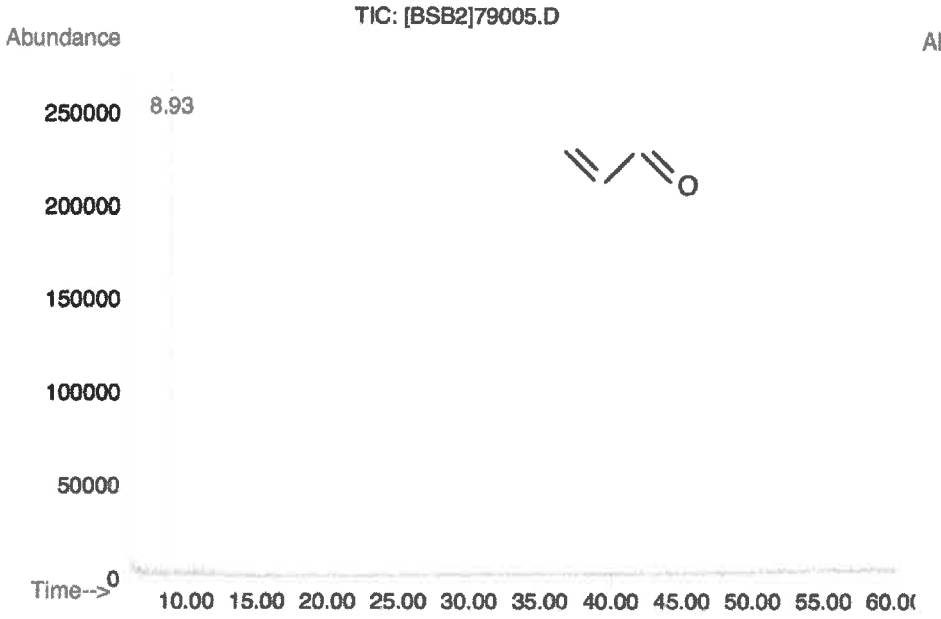
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

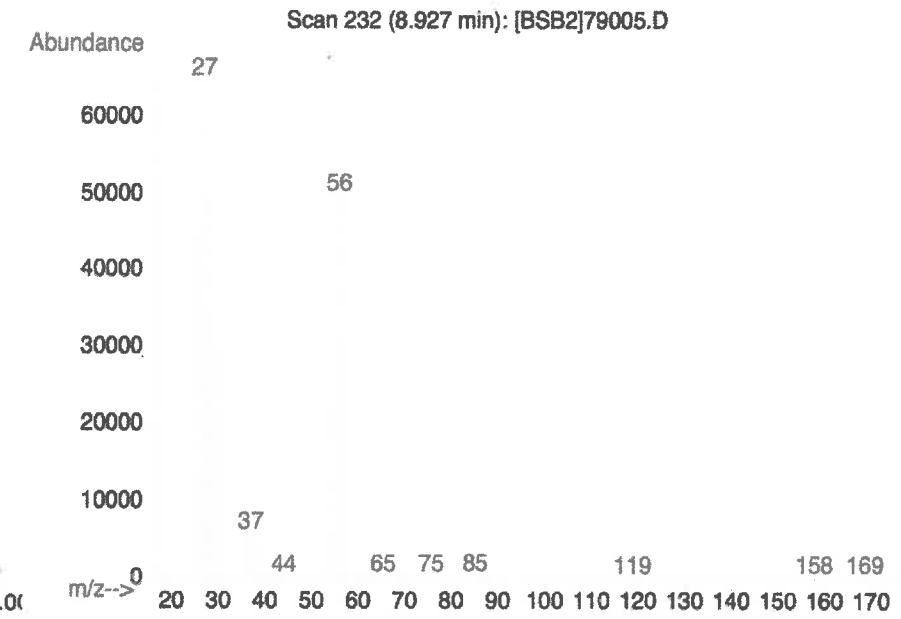
Weight(s) shown below were combined and diluted to (mL): 10.0

Prashant Chauhan		101625
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		101625
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	0.05180	5013.7	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

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

Preservation Log

BalanceID: VOA-SC-2

Review By: sam

Supervise By: MMDadoda

Seq	LabID	Vial A Weight(g)= Total Wt-Tare Wt	Vial A Time	Vial B Weight(g)= Total Wt-Tare Wt	Vial B Time	Vial C Weight(g) Preserve with MeOH	Vial C Time	Methanol ID	Preservation Date	Comments
1	Q3395-01	37.52-32.19=5.33	10:00	36.36-31.09=5.27	10:01	34.02-28.07=5.95	10:02	V14921	10/20/2025	TERRACORE SAMPLE 8260
2	Q3395-02	40.67-36.34=4.33	10:02	35.50-31.13=4.37	10:03	33.42-27.90=5.52	10:04	V14921	10/20/2025	
3	Q3395-03	40.90-35.38=5.52	10:05	36.14-31.09=5.05	10:06	32.79-28.38=4.41	10:07	V14921	10/20/2025	
4	Q3395-04	40.49-35.23=5.26	10:08	37.96-33.26=4.7	10:09	33.45-27.91=5.54	10:10	V14921	10/20/2025	
5	Q3395-05	41.19-36.27=4.92	10:11	35.98-31.09=4.89	10:12	33.15-28.37=4.78	10:13	V14921	10/20/2025	
6	Q3395-07	36.54-31.98=4.56	10:14	36.04-30.81=5.23	10:15	32.43-27.98=4.45	10:16	V14921	10/20/2025	

Instructions : For medium Level analysis, 5ml MeOH added for CLP(SOM/SFAM) method and 10ml for regular 8260.

If the samples are not to be analyzed within 48hrs of sampling, preserve samples immediately, Vials A and B are stored in the VOA-FRZ-2.

Vial C - MeOH preserved vials are kept in VOA-REF #6.

QA Contorl # A3041177

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO. Q3377
QUOTE NO. Q3395
COC Number 2045362

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: AECOM
ADDRESS: 605 3rd Ave
CITY New York STATE: NY ZIP: 10158
ATTENTION: Rob Forstner
PHONE: 212-377-8721 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Port Richmond
PROJECT NO.: 60693795 LOCATION: Staten Isl
PROJECT MANAGER: Rob Forstner
e-mail: Robert.Forstner@aecom.com
PHONE: same FAX:

CLIENT BILLING INFORMATION

BILL TO: AECOM PO#:
ADDRESS: same
CITY STATE: ZIP:
ATTENTION: Rob Forstner PHONE: same

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ EDD FORMAT _____
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced ☐ US EPA CLP
- ☐ NYS ASP A ☒ NYS ASP B
- ☐ Other _____

ANALYSIS

1: SVOCs 2: Pesticides TCL 3: Mercury Metals 4: PCBs Hex Chrome 5: Dioxin 6: Grain Size 7: TPCS 8: VOCs 9:

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8 Methanol	9	COMMENTS
1.	PR132-S09-000051-20251017	S		X	10/17	1235	11	X	X	X	X	X	X	X	X		
2.	PR132-S07-000102-20251017	S		X	10/17	1140	11	X	X	X	X	X	X	X	X		
3.	PR132-S07-000102-20251017MSD	S		X	10/17	1140	10	X	X	X	X	X		X	X		
4.	PR132-S07-000102-20251017-MS	S		X	10/17	1140	10	X	X	X	X	X		X	X		
5.	PR132-S07-10216-20251017	S		X	10/17	1150	11	X	X	X	X	X	X	X	X		
6.	PR132-COMP03-2025-20251017	S	X		10/17	1010	7	X	X	X	X	X	X	X			
7.	Temp Blank	A			10/17		1	X	X	X	X	X			X		
8.	PR132-S08-038048-20251017	S		X	10/17	0840	4								X		
9.																	
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. Jim Aldeson	10/17/25 4pm	1. 1600 10-17-25
2.		2.
3.	10-17-25 1740	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.0 °C
Comments:

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

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WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

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

Laboratory Certification

Certified By	License No.
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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q3395 AECO02
Client Name : AECOM
Client Contact : Rob Forstner
Invoice Name : AECOM
Invoice Contact : Rob Forstner

Order Date : 10/17/2025 4:25:00 PM
Project Name : AE1-CTY 3.2.Z-PR-DOCK
Receive DateTime : 10/17/2025 ~~12:00:00 AM~~ 5:40 pm
Purchase Order :

Project Mgr :
Report Type : NYS ASP B
EDD Type : EQUIS
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3395-01	PR132-S09-000051-20251017	Solid	10/17/2025	12:15					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q3395-02	PR132-S07-000102-20251017	Solid	10/17/2025	11:40					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q3395-03	Q3395-02MS	Solid	10/17/2025	11:40					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q3395-04	Q3395-02MSD	Solid	10/17/2025	11:40					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q3395-05	PR132-S07-102116-20251017	Solid	10/17/2025	11:50					
					VOC-TCLVOA-10		8260D		10 Bus. Days
~~Q3395-06~~	~~PR132-COMP03-20251017~~	~~Solid~~	~~10/17/2025~~	~~10:10~~					
					~~VOC-TCLVOA-10~~		~~8260D~~		~~10 Bus. Days~~
Q3395-07	PR132-S08-038048-20251017	Solid	10/17/2025	08:40					
					VOC-TCLVOA-10		8260D		10 Bus. Days

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q3395 AECO02
Client Name : AECOM
Client Contact : Rob Forstner
Invoice Name : AECOM
Invoice Contact : Rob Forstner

Order Date : 10/17/2025 4:25:00 PM
Project Name : AE1-CTY 3.2.Z-PR-DOCK
Receive DateTime : 10/17/2025 ~~12:00:00 AM~~ 5:40 PM
Purchase Order :

Project Mgr :
Report Type : NYS ASP B
EDD Type : EQUIS
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

Relinguished By : CR
Date / Time : 10/20/25 12:00

Received By : [illegible]
Date / Time : 10/20/25 1200

Storage Area : VOA Refridgerator Room