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

DATA PACKAGE

VOLATILE ORGANICS

PROJECT NAME : NJ DRINKING WATER PT

CHEMTECH CONSULTING GROUP

284 Sheffield St,

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : Q1172

ATTENTION : QA Officer

Laboratory Certification ID # 20012

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Cover Page

Order ID : Q1172

Project ID : NJ Drinking Water PT

Client : Chemtech Consulting Group

Lab Sample Number	Client Sample Number
Q1172-01	PT-TURB-WS
Q1172-02	PT-TURB-WS
Q1172-03	PT-MIN-WS
Q1172-04	PT-TM-WS
Q1172-05	PT-HG-WS
Q1172-06	PT-SIO2-WS
Q1172-07	PT-RVOA-WS
Q1172-08	PT-UNRVOA-WS
Q1172-09	PT-THM-WS
Q1172-10	PT-ADD-WS
Q1172-11	PT-EDBCP-WS

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: 3/7/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Chemtech Consulting Group
Project Name: NJ Drinking Water PT
Project # N/A
Chemtech Project # Q1172
Test Name: VOCMS Group2

A. Number of Samples and Date of Receipt:
11 Water samples were received on 01/15/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Hardness, Calcium, Hardness, Total, Mercury, Metals Group3, Metals Group6, Metals Group7, Silica, Turbidity, VOCGC Group 1, VOCMS Group1, VOCMS Group2, VOCMS Group3, VOCMS Group4 and VOCMS Group5. This data package contains results for VOCMS Group2.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_U were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis of VOCMS Group2 was based on method 524.2.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .

The Blank Spike for {VU0211WBS01} with File ID: VU063230.D met requirements for all samples except for tert-Butyl Alcohol[53%]failing high but no positive hit in associated sample therefore no corrective action taken.

The Blank Spike Duplicate for {VU0211WBSD01} with File ID: VU063231.D met requirements for all samples except for tert-Butyl Alcohol[58%]failing high but no positive hit in associated sample therefore no corrective action taken.

The Blank analysis did not indicate the presence of lab contamination.
The %RSD is greater than 20% in the Initial Calibration method (524U021025DW.M) for Naphthalene, tert-Butyl Alcohol these compounds are passing on Linear Regression.

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

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Sample PT-UNRVOA-WS was diluted due to high concentration.

E. Additional Comments:

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

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

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

Signature_____

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DATA REPORTING QUALIFIERS- ORGANIC

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

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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1172 MATRIX: Water

METHOD: 524.2

		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 (524U021025DW.M) for Naphthalene, tert-Butyl Alcohol these compounds are passing on Linear Regression. The Continuous Calibration met the requirements .		✓	
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The Blank Spike for {VU0211WBS01} with File ID: VU063230.D met requirements for all samples except for tert-Butyl Alcohol[53%]failing high but no positive hit in associated sample therefore no corrective action taken. The Blank Spike Duplicate for {VU0211WBSD01} with File ID: VU063231.D met requirements for all samples except for tert-Butyl Alcohol[58%]failing high but no positive hit in associated sample therefore no corrective action taken.			✓
9.	Internal Standard Area/Retention Time Shift Meet Criteria Comments:			✓

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

		NA	NO	YES
10.	Analysis Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

Sample PT-UNRVOA-WS was diluted due to high concentration.

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

_____ _____

QA REVIEW Date

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

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1172

	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:** 03/07/2025

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LAB CHRONICLE

OrderID:	Q1172	**OrderDate:**	1/23/2025 2:53:00 PM
Client:	Chemtech Consulting Group	**Project:**	NJ Drinking Water PT
Contact:	QA Officer	**Location:**	QA Office,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1172-07	**PT-RVOA-WS**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group1	524.2			02/11/25	
Q1172-07DL	**PT-RVOA-WSDL**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group1	524.2			02/11/25	
Q1172-08	**PT-UNRVOA-WS**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group2	524.2			02/11/25	
Q1172-08DL	**PT-UNRVOA-WSDL**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group2	524.2			02/13/25	
Q1172-09	**PT-THM-WS**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group4	524.2			02/11/25	
Q1172-09DL	**PT-THM-WSDL**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group4	524.2			02/11/25	
Q1172-10	**PT-ADD-WS**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group3	524.2			02/12/25	
Q1172-10DL	**PT-ADD-WSDL**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group3	524.2			02/12/25	
Q1172-11	**PT-EDBCP-WS**	**Water**			**01/13/25**			**01/15/25**
			VOCMS Group5	524.2			02/11/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1172

Client: Chemtech Consulting Group

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**PT-UNRVOA-WS**							
Q1172-08	PT-UNRVOA-WS	Water	Chloromethane	12.8		0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Trichlorofluoromethane	17.3	E	0.21	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Methyl tert-Butyl Ether	41.3	E	0.12	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Methylene Chloride	0.82		0.47	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,1-Dichloroethane	11.6		0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	2,2-Dichloropropane	2.90		0.14	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Bromochloromethane	17.6	E	0.16	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,1-Dichloropropene	5.40		0.11	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Dibromomethane	11.7		0.14	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	t-1,3-Dichloropropene	14.5		0.11	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	cis-1,3-Dichloropropene	17.1	E	0.11	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,3-Dichloropropane	12.6		0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,1,1,2-Tetrachloroethane	3.20		0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Isopropylbenzene	6.20		0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,1,2,2-Tetrachloroethane	5.70		0.12	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,2,3-Trichloropropane	7.70		0.21	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Bromobenzene	17.0	E	0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	n-propylbenzene	9.60		0.16	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	2-Chlorotoluene	4.50		0.14	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,3,5-Trimethylbenzene	7.00		0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	4-Chlorotoluene	10.7		0.14	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	tert-Butylbenzene	5.80		0.11	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,2,4-Trimethylbenzene	15.6	E	0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	sec-Butylbenzene	19.7	E	0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	p-Isopropyltoluene	3.60		0.16	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,3-Dichlorobenzene	4.80		0.13	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	n-Butylbenzene	15.7	E	0.28	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,2,4-Trichlorobenzene	0.47	J	0.21	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Hexachlorobutadiene	13.8		0.14	0.50	ug/L
Q1172-08	PT-UNRVOA-WS	Water	Naphthalene	4.50		0.31	1.00	ug/L
Q1172-08	PT-UNRVOA-WS	Water	1,2,3-Trichlorobenzene	26.0	E	0.25	0.50	ug/L
			Total Voc :	347				
			Total Concentration:	347				
Client ID:	**PT-UNRVOA-WSDL**							
Q1172-08DL	PT-UNRVOA-WSL	Water	Chloromethane	15.8	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSL	Water	Trichlorofluoromethane	20.0	D	1.10	2.50	ug/L

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Hit Summary Sheet
SW-846

SDG No.: Q1172

Client: Chemtech Consulting Group

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q1172-08DL	PT-UNRVOA-WSD	Water	Methyl tert-Butyl Ether	47.3	D	0.60	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,1-Dichloroethane	13.8	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	2,2-Dichloropropane	3.50	D	0.70	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	Bromochloromethane	20.3	D	0.80	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,1-Dichloropropene	6.50	D	0.55	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	Dibromomethane	13.8	D	0.70	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	t-1,3-Dichloropropene	15.7	D	0.55	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	cis-1,3-Dichloropropene	19.2	D	0.55	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,3-Dichloropropane	14.7	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,1,1,2-Tetrachloroethane	3.80	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	Isopropylbenzene	6.90	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,1,2,2-Tetrachloroethane	7.30	D	0.60	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,2,3-Trichloropropane	9.50	D	1.10	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	Bromobenzene	19.3	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	n-propylbenzene	9.50	D	0.80	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	2-Chlorotoluene	5.20	D	0.70	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,3,5-Trimethylbenzene	7.10	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	4-Chlorotoluene	12.1	D	0.70	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	tert-Butylbenzene	6.40	D	0.55	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,2,4-Trimethylbenzene	16.4	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	sec-Butylbenzene	22.0	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	p-Isopropyltoluene	4.00	D	0.80	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,3-Dichlorobenzene	6.00	D	0.65	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	n-Butylbenzene	16.7	D	1.40	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	Hexachlorobutadiene	18.2	D	0.70	2.50	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	Naphthalene	8.50	D	1.60	5.00	ug/L
Q1172-08DL	PT-UNRVOA-WSD	Water	1,2,3-Trichlorobenzene	26.7	D	1.30	2.50	ug/L
			Total Voc :	396				
			Total Concentration:	396				

QC SUMMARY

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Surrogate Summary

SDG No.: Q1172

Client: Chemtech Consulting Group

Analytical Method: SW524.2

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
Q1172-08	PT-UNRVOA-WS	1,2-Dichlorobenzene-d4	1	1.06	107	70	130
		4-Bromofluorobenzene	1	1.05	105	70	130
Q1172-08DL	PT-UNRVOA-WSDL	1,2-Dichlorobenzene-d4	1	1.08	109	70	130
		4-Bromofluorobenzene	1	1.02	102	70	130
VU0211WBL01	VU0211WBL01	1,2-Dichlorobenzene-d4	1	0.82	82	70	130
		4-Bromofluorobenzene	1	0.81	81	70	130
VU0211WBS01	VU0211WBS01	1,2-Dichlorobenzene-d4	1	0.94	94	70	130
		4-Bromofluorobenzene	1	0.98	98	70	130
VU0211WBSD0	VU0211WBSD01	1,2-Dichlorobenzene-d4	1	0.96	96	70	130
		4-Bromofluorobenzene	1	1.03	103	70	130
VU0213WBL01	VU0213WBL01	1,2-Dichlorobenzene-d4	1	0.81	81	70	130
		4-Bromofluorobenzene	1	0.87	87	70	130
VU0213WBS01	VU0213WBS01	1,2-Dichlorobenzene-d4	1	0.99	99	70	130
		4-Bromofluorobenzene	1	1.03	103	70	130

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1172

Client: Chemtech Consulting Group

Analytical Method: SW524.2 **Datafile :** VU063230.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VU0211WBS01	Dichlorodifluoromethane	2	1.90	ug/L	95			70	130	
	Chloromethane	2	1.90	ug/L	95			70	130	
	Vinyl Chloride	2	2.00	ug/L	100			70	130	
	Bromomethane	2	2.20	ug/L	110			70	130	
	Chloroethane	2	2.00	ug/L	100			70	130	
	Tetrahydrofuran	4	3.40	ug/L	85			70	130	
	Trichlorofluoromethane	2	2.10	ug/L	105			70	130	
	1,1,2-Trichloro-1,2,2-trifluoroethane	2	2.00	ug/L	100			70	130	
	tert-Butyl Alcohol	20	10.6	ug/L	53		*	70	130	
	Diethyl Ether	2	1.90	ug/L	95			70	130	
	1,1-Dichloroethene	2	2.00	ug/L	100			70	130	
	Acrylonitrile	4	3.60	ug/L	90			70	130	
	Acetone	10	8.90	ug/L	89			70	130	
	Carbon disulfide	2	2.00	ug/L	100			70	130	
	Methyl tert-butyl Ether	2	1.90	ug/L	95			70	130	
	Methyl acrylate	2	1.90	ug/L	95			70	130	
	Methylene Chloride	2	1.90	ug/L	95			70	130	
	trans-1,2-Dichloroethene	2	2.00	ug/L	100			70	130	
	1,1-Dichloroethane	2	1.90	ug/L	95			70	130	
	Cyclohexane	2	1.90	ug/L	95			70	130	
	2-Butanone	10	8.90	ug/L	89			70	130	
	Carbon Tetrachloride	2	2.00	ug/L	100			70	130	
	2,2-Dichloropropane	2	2.00	ug/L	100			70	130	
	cis-1,2-Dichloroethene	2	1.90	ug/L	95			70	130	
	Bromochloromethane	2	2.00	ug/L	100			70	130	
	Chloroform	2	2.00	ug/L	100			70	130	
	1,1,1-Trichloroethane	2	2.00	ug/L	100			70	130	
	Methylcyclohexane	2	2.00	ug/L	100			70	130	
	1,1-Dichloropropene	2	2.00	ug/L	100			70	130	
	Propionitrile	10	8.90	ug/L	89			70	130	
	Benzene	2	1.90	ug/L	95			70	130	
	1,2-Dichloroethane	2	1.90	ug/L	95			70	130	
	Trichloroethene	2	2.00	ug/L	100			70	130	
	1,2-Dichloropropane	2	1.90	ug/L	95			70	130	
	1-Chlorobutane	2	1.90	ug/L	95			70	130	
	Dibromomethane	2	1.90	ug/L	95			70	130	
	Bromodichloromethane	2	2.00	ug/L	100			70	130	
	4-Methyl-2-Pentanone	10	9.40	ug/L	94			70	130	
	Toluene	2	2.00	ug/L	100			70	130	
	t-1,3-Dichloropropene	2	2.00	ug/L	100			70	130	
	cis-1,3-Dichloropropene	2	2.00	ug/L	100			70	130	
	1,1,2-Trichloroethane	2	1.90	ug/L	95			70	130	
	1,3-Dichloropropane	2	1.90	ug/L	95			70	130	
	2-Hexanone	10	9.10	ug/L	91			70	130	
	Dibromochloromethane	2	2.00	ug/L	100			70	130	
	1,2-Dibromoethane	2	1.90	ug/L	95			70	130	
	Tetrachloroethene	2	2.00	ug/L	100			70	130	
	Chlorobenzene	2	2.00	ug/L	100			70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1172

Client: Chemtech Consulting Group

Analytical Method: SW524.2 **Datafile :** VU063230.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VU0211WBS01	1,1,1,2-Tetrachloroethane	2	1.90	ug/L	95			70	130	
	Hexachloroethane	2	1.80	ug/L	90			70	130	
	Ethyl Benzene	2	1.90	ug/L	95			70	130	
	m/p-Xylenes	4	3.90	ug/L	98			70	130	
	o-Xylene	2	1.90	ug/L	95			70	130	
	Styrene	2	1.90	ug/L	95			70	130	
	Bromoform	2	1.90	ug/L	95			70	130	
	Isopropylbenzene	2	1.90	ug/L	95			70	130	
	1,1,2,2-Tetrachloroethane	2	1.90	ug/L	95			70	130	
	1,2,3-Trichloropropane	2	2.00	ug/L	100			70	130	
	Bromobenzene	2	2.00	ug/L	100			70	130	
	N-propylbenzene	2	2.00	ug/L	100			70	130	
	2-Chlorotoluene	2	2.00	ug/L	100			70	130	
	1,3,5-Trimethylbenzene	2	2.00	ug/L	100			70	130	
	4-Chlorotoluene	2	2.00	ug/L	100			70	130	
	tert-Butylbenzene	2	1.90	ug/L	95			70	130	
	1,2,4-Trimethylbenzene	2	1.90	ug/L	95			70	130	
	Sec-butylbenzene	2	2.00	ug/L	100			70	130	
	p-Isopropyltoluene	2	1.90	ug/L	95			70	130	
	1,3-Dichlorobenzene	2	1.90	ug/L	95			70	130	
	1,4-Dichlorobenzene	2	2.00	ug/L	100			70	130	
	n-Butylbenzene	2	1.80	ug/L	90			70	130	
	1,2-Dichlorobenzene	2	1.90	ug/L	95			70	130	
	1,2-Dibromo-3-Chloropropane	2	1.80	ug/L	90			70	130	
	1,2,4-Trichlorobenzene	2	1.90	ug/L	95			70	130	
	Hexachlorobutadiene	2	2.00	ug/L	100			70	130	
	Naphthalene	2	1.90	ug/L	95			70	130	
	1,2,3-Trichlorobenzene	2	1.80	ug/L	90			70	130	
	Iodomethane	2	1.90	ug/L	95			70	130	
	Allyl Chloride	2	1.90	ug/L	95			70	130	
	Methacrylonitrile	2	1.80	ug/L	90			70	130	
	Methyl methacrylate	4	3.60	ug/L	90			70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1172

Client: Chemtech Consulting Group

Analytical Method: SW524.2 **Datafile :** VU063231.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VU0211WBSD01	Dichlorodifluoromethane	2	1.90	ug/L	95	0		70	130	20
	Chloromethane	2	1.80	ug/L	90	5		70	130	20
	Vinyl Chloride	2	1.90	ug/L	95	5		70	130	20
	Bromomethane	2	2.20	ug/L	110	0		70	130	20
	Chloroethane	2	1.80	ug/L	90	11		70	130	20
	Tetrahydrofuran	4	3.60	ug/L	90	6		70	130	20
	Trichlorofluoromethane	2	2.00	ug/L	100	5		70	130	20
	1,1,2-Trichloro-1,2,2-trifluoroethane	2	1.90	ug/L	95	5		70	130	20
	tert-Butyl Alcohol	20	11.5	ug/L	58	9	*	70	130	20
	Diethyl Ether	2	1.80	ug/L	90	5		70	130	20
	1,1-Dichloroethene	2	1.90	ug/L	95	5		70	130	20
	Acrylonitrile	4	3.50	ug/L	88	2		70	130	20
	Acetone	10	8.70	ug/L	87	2		70	130	20
	Carbon disulfide	2	1.90	ug/L	95	5		70	130	20
	Methyl tert-butyl Ether	2	1.90	ug/L	95	0		70	130	20
	Methyl acrylate	2	1.80	ug/L	90	5		70	130	20
	Methylene Chloride	2	1.90	ug/L	95	0		70	130	20
	trans-1,2-Dichloroethene	2	1.90	ug/L	95	5		70	130	20
	1,1-Dichloroethane	2	1.90	ug/L	95	0		70	130	20
	Cyclohexane	2	1.90	ug/L	95	0		70	130	20
	2-Butanone	10	8.70	ug/L	87	2		70	130	20
	Carbon Tetrachloride	2	1.90	ug/L	95	5		70	130	20
	2,2-Dichloropropane	2	1.90	ug/L	95	5		70	130	20
	cis-1,2-Dichloroethene	2	1.90	ug/L	95	0		70	130	20
	Bromochloromethane	2	1.90	ug/L	95	5		70	130	20
	Chloroform	2	1.90	ug/L	95	5		70	130	20
	1,1,1-Trichloroethane	2	1.90	ug/L	95	5		70	130	20
	Methylcyclohexane	2	1.90	ug/L	95	5		70	130	20
	1,1-Dichloropropene	2	1.90	ug/L	95	5		70	130	20
	Propionitrile	10	8.70	ug/L	87	2		70	130	20
	Benzene	2	1.90	ug/L	95	0		70	130	20
	1,2-Dichloroethane	2	1.80	ug/L	90	5		70	130	20
	Trichloroethene	2	2.00	ug/L	100	0		70	130	20
	1,2-Dichloropropane	2	1.90	ug/L	95	0		70	130	20
	1-Chlorobutane	2	1.80	ug/L	90	5		70	130	20
	Dibromomethane	2	1.90	ug/L	95	0		70	130	20
	Bromodichloromethane	2	2.00	ug/L	100	0		70	130	20
	4-Methyl-2-Pentanone	10	9.10	ug/L	91	3		70	130	20
	Toluene	2	1.90	ug/L	95	5		70	130	20
	t-1,3-Dichloropropene	2	1.90	ug/L	95	5		70	130	20
	cis-1,3-Dichloropropene	2	1.90	ug/L	95	5		70	130	20
	1,1,2-Trichloroethane	2	1.90	ug/L	95	0		70	130	20
	1,3-Dichloropropane	2	1.90	ug/L	95	0		70	130	20
	2-Hexanone	10	8.80	ug/L	88	3		70	130	20
	Dibromochloromethane	2	1.90	ug/L	95	5		70	130	20
	1,2-Dibromoethane	2	1.90	ug/L	95	0		70	130	20
	Tetrachloroethene	2	2.00	ug/L	100	0		70	130	20
	Chlorobenzene	2	1.90	ug/L	95	5		70	130	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1172

Client: Chemtech Consulting Group

Analytical Method: SW524.2 **Datafile :** VU063231.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VU0211WBSD01	1,1,1,2-Tetrachloroethane	2	1.90	ug/L	95	0		70	130	20
	Hexachloroethane	2	1.80	ug/L	90	0		70	130	20
	Ethyl Benzene	2	1.80	ug/L	90	5		70	130	20
	m/p-Xylenes	4	3.70	ug/L	93	5		70	130	20
	o-Xylene	2	1.90	ug/L	95	0		70	130	20
	Styrene	2	1.80	ug/L	90	5		70	130	20
	Bromoform	2	1.80	ug/L	90	5		70	130	20
	Isopropylbenzene	2	1.90	ug/L	95	0		70	130	20
	1,1,2,2-Tetrachloroethane	2	1.90	ug/L	95	0		70	130	20
	1,2,3-Trichloropropane	2	1.80	ug/L	90	11		70	130	20
	Bromobenzene	2	1.90	ug/L	95	5		70	130	20
	N-propylbenzene	2	1.90	ug/L	95	5		70	130	20
	2-Chlorotoluene	2	1.90	ug/L	95	5		70	130	20
	1,3,5-Trimethylbenzene	2	1.90	ug/L	95	5		70	130	20
	4-Chlorotoluene	2	1.90	ug/L	95	5		70	130	20
	tert-Butylbenzene	2	1.90	ug/L	95	0		70	130	20
	1,2,4-Trimethylbenzene	2	1.80	ug/L	90	5		70	130	20
	Sec-butylbenzene	2	1.90	ug/L	95	5		70	130	20
	p-Isopropyltoluene	2	1.90	ug/L	95	0		70	130	20
	1,3-Dichlorobenzene	2	1.90	ug/L	95	0		70	130	20
	1,4-Dichlorobenzene	2	1.90	ug/L	95	5		70	130	20
	n-Butylbenzene	2	1.90	ug/L	95	5		70	130	20
	1,2-Dichlorobenzene	2	1.90	ug/L	95	0		70	130	20
	1,2-Dibromo-3-Chloropropane	2	1.80	ug/L	90	0		70	130	20
	1,2,4-Trichlorobenzene	2	2.00	ug/L	100	5		70	130	20
	Hexachlorobutadiene	2	1.90	ug/L	95	5		70	130	20
	Naphthalene	2	2.10	ug/L	105	10		70	130	20
	1,2,3-Trichlorobenzene	2	2.00	ug/L	100	11		70	130	20
	Iodomethane	2	1.90	ug/L	95	0		70	130	20
	Allyl Chloride	2	1.80	ug/L	90	5		70	130	20
	Methacrylonitrile	2	1.80	ug/L	90	0		70	130	20
	Methyl methacrylate	4	3.70	ug/L	93	3		70	130	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1172

Client: Chemtech Consulting Group

Analytical Method: SW524.2 **Datafile :** VU063264.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VU0213WBS01	Dichlorodifluoromethane	2	2.10	ug/L	105			70	130	
	Chloromethane	2	2.10	ug/L	105			70	130	
	Vinyl Chloride	2	2.10	ug/L	105			70	130	
	Bromomethane	2	2.40	ug/L	120			70	130	
	Chloroethane	2	2.00	ug/L	100			70	130	
	Tetrahydrofuran	4	3.90	ug/L	98			70	130	
	Trichlorofluoromethane	2	2.10	ug/L	105			70	130	
	1,1,2-Trichloro-1,2,2-trifluoroethane	2	2.20	ug/L	110			70	130	
	tert-Butyl Alcohol	20	21.1	ug/L	106			70	130	
	Diethyl Ether	2	2.10	ug/L	105			70	130	
	1,1-Dichloroethene	2	2.10	ug/L	105			70	130	
	Acrylonitrile	4	4.20	ug/L	105			70	130	
	Acetone	10	11.0	ug/L	110			70	130	
	Carbon disulfide	2	2.10	ug/L	105			70	130	
	Methyl tert-butyl Ether	2	2.10	ug/L	105			70	130	
	Methyl acrylate	2	2.00	ug/L	100			70	130	
	Methylene Chloride	2	2.20	ug/L	110			70	130	
	trans-1,2-Dichloroethene	2	2.20	ug/L	110			70	130	
	1,1-Dichloroethane	2	2.20	ug/L	110			70	130	
	Cyclohexane	2	2.10	ug/L	105			70	130	
	2-Butanone	10	10.2	ug/L	102			70	130	
	Carbon Tetrachloride	2	2.10	ug/L	105			70	130	
	2,2-Dichloropropane	2	2.00	ug/L	100			70	130	
	cis-1,2-Dichloroethene	2	2.20	ug/L	110			70	130	
	Bromochloromethane	2	2.20	ug/L	110			70	130	
	Chloroform	2	2.10	ug/L	105			70	130	
	1,1,1-Trichloroethane	2	2.20	ug/L	110			70	130	
	Methylcyclohexane	2	2.10	ug/L	105			70	130	
	1,1-Dichloropropene	2	2.10	ug/L	105			70	130	
	Propionitrile	10	10.5	ug/L	105			70	130	
	Benzene	2	2.10	ug/L	105			70	130	
	1,2-Dichloroethane	2	2.10	ug/L	105			70	130	
	Trichloroethene	2	2.20	ug/L	110			70	130	
	1,2-Dichloropropane	2	2.10	ug/L	105			70	130	
	1-Chlorobutane	2	2.10	ug/L	105			70	130	
	Dibromomethane	2	2.10	ug/L	105			70	130	
	Bromodichloromethane	2	2.20	ug/L	110			70	130	
	4-Methyl-2-Pentanone	10	10.4	ug/L	104			70	130	
	Toluene	2	2.10	ug/L	105			70	130	
	t-1,3-Dichloropropene	2	2.10	ug/L	105			70	130	
	cis-1,3-Dichloropropene	2	2.00	ug/L	100			70	130	
	1,1,2-Trichloroethane	2	2.20	ug/L	110			70	130	
	1,3-Dichloropropane	2	2.20	ug/L	110			70	130	
	2-Hexanone	10	9.80	ug/L	98			70	130	
	Dibromochloromethane	2	2.10	ug/L	105			70	130	
	1,2-Dibromoethane	2	2.20	ug/L	110			70	130	
	Tetrachloroethene	2	2.20	ug/L	110			70	130	
	Chlorobenzene	2	2.20	ug/L	110			70	130	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1172

Client: Chemtech Consulting Group

Analytical Method: SW524.2 **Datafile :** VU063264.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VU0213WBS01	1,1,1,2-Tetrachloroethane	2	2.10	ug/L	105			70	130	
	Hexachloroethane	2	2.10	ug/L	105			70	130	
	Ethyl Benzene	2	2.00	ug/L	100			70	130	
	m/p-Xylenes	4	4.20	ug/L	105			70	130	
	o-Xylene	2	2.10	ug/L	105			70	130	
	Styrene	2	2.10	ug/L	105			70	130	
	Bromoform	2	2.10	ug/L	105			70	130	
	Isopropylbenzene	2	2.10	ug/L	105			70	130	
	1,1,2,2-Tetrachloroethane	2	2.10	ug/L	105			70	130	
	1,2,3-Trichloropropane	2	2.00	ug/L	100			70	130	
	Bromobenzene	2	2.20	ug/L	110			70	130	
	N-propylbenzene	2	2.10	ug/L	105			70	130	
	2-Chlorotoluene	2	2.20	ug/L	110			70	130	
	1,3,5-Trimethylbenzene	2	2.10	ug/L	105			70	130	
	4-Chlorotoluene	2	2.10	ug/L	105			70	130	
	tert-Butylbenzene	2	2.10	ug/L	105			70	130	
	1,2,4-Trimethylbenzene	2	2.10	ug/L	105			70	130	
	Sec-butylbenzene	2	2.20	ug/L	110			70	130	
	p-Isopropyltoluene	2	2.10	ug/L	105			70	130	
	1,3-Dichlorobenzene	2	2.10	ug/L	105			70	130	
	1,4-Dichlorobenzene	2	2.20	ug/L	110			70	130	
	n-Butylbenzene	2	2.10	ug/L	105			70	130	
	1,2-Dichlorobenzene	2	2.10	ug/L	105			70	130	
	1,2-Dibromo-3-Chloropropane	2	2.10	ug/L	105			70	130	
	1,2,4-Trichlorobenzene	2	2.20	ug/L	110			70	130	
	Hexachlorobutadiene	2	2.20	ug/L	110			70	130	
	Naphthalene	2	2.00	ug/L	100			70	130	
	1,2,3-Trichlorobenzene	2	2.10	ug/L	105			70	130	
	Iodomethane	2	1.90	ug/L	95			70	130	
	Allyl Chloride	2	2.10	ug/L	105			70	130	
	Methacrylonitrile	2	2.00	ug/L	100			70	130	
	Methyl methacrylate	4	4.20	ug/L	105			70	130	

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VU0211WBL01

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG NO.: Q1172

Lab File ID: VU063229.D Lab Sample ID: VU0211WBL01

Date Analyzed: 02/11/2025 Time Analyzed: 11:14

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_U

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VU0211WBS01	VU0211WBS01	VU063230.D	02/11/2025
VU0211WBSD01	VU0211WBSD01	VU063231.D	02/11/2025
PT-UNRVOA-WS	Q1172-08	VU063239.D	02/11/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VU0213WBL01

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG NO.: Q1172

Lab File ID: VU063263.D Lab Sample ID: VU0213WBL01

Date Analyzed: 02/13/2025 Time Analyzed: 13:05

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_U

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VU0213WBS01	VU0213WBS01	VU063264.D	02/13/2025
PT-UNRVOA-WSDL	Q1172-08DL	VU063266.D	02/13/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG NO.: Q1172

Lab File ID: VU063218.D BFB Injection Date: 02/10/2025

Instrument ID: MSVOA_U BFB Injection Time: 09:06

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	52.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.4 (0.5) 1
174	50.0 - 100.0% of mass 95	79.1
175	5.0 - 9.0% of mass 174	5.8 (7.3) 1
176	95.0 - 101.0% of mass 174	77.5 (98.1) 1
177	5.0 - 9.0% of mass 176	4.8 (6.2) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC0.5	VSTDICC0.5	VU063219.D	02/10/2025	12:59
VSTDICC001	VSTDICC001	VU063220.D	02/10/2025	13:23
VSTDICC002	VSTDICC002	VU063221.D	02/10/2025	13:58
VSTDICC005	VSTDICC005	VU063222.D	02/10/2025	14:23
VSTDICCC010	VSTDICCC010	VU063223.D	02/10/2025	15:06
VSTDICC015	VSTDICC015	VU063224.D	02/10/2025	15:33

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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG NO.: Q1172

Lab File ID: VU063226.D BFB Injection Date: 02/11/2025

Instrument ID: MSVOA_U BFB Injection Time: 08:11

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	52
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	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	77.3
175	5.0 - 9.0% of mass 174	5.7 (7.4) 1
176	95.0 - 101.0% of mass 174	74.3 (96.2) 1
177	5.0 - 9.0% of mass 176	4.9 (6.5) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VU063228.D	02/11/2025	10:01
VU0211WBL01	VU0211WBL01	VU063229.D	02/11/2025	11:14
VU0211WBS01	VU0211WBS01	VU063230.D	02/11/2025	12:07
VU0211WBSD01	VU0211WBSD01	VU063231.D	02/11/2025	12:31
PT-UNRVOA-WS	Q1172-08	VU063239.D	02/11/2025	16:36

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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG NO.: Q1172

Lab File ID: VU063261.D BFB Injection Date: 02/13/2025

Instrument ID: MSVOA_U BFB Injection Time: 08:06

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	53.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6 (0.7) 1
174	50.0 - 100.0% of mass 95	79.6
175	5.0 - 9.0% of mass 174	5.9 (7.4) 1
176	95.0 - 101.0% of mass 174	76.9 (96.6) 1
177	5.0 - 9.0% of mass 176	5.1 (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:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VU063262.D	02/13/2025	08:36
VU0213WBL01	VU0213WBL01	VU063263.D	02/13/2025	13:05
VU0213WBS01	VU0213WBS01	VU063264.D	02/13/2025	13:42
PT-UNRVOA-WSDL	Q1172-08DL	VU063266.D	02/13/2025	16:37

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG NO.: Q1172

Lab File ID: VU063228.D Date Analyzed: 02/11/2025

Instrument ID: MSVOA_U Time Analyzed: 10:01

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	58984	6.11	0	0.00	0	0.00
UPPER LIMIT	76679.2	6.607	0		0	
LOWER LIMIT	41288.8	5.607	0		0	
EPA SAMPLE NO.						
PT-UNRVOA-WS	53598	6.11	0	0.00	0	0.00
VU0211WBL01	52216	6.11	0	0.00	0	0.00
VU0211WBS01	55425	6.11	0	0.00	0	0.00
VU0211WBSD01	54780	6.10	0	0.00	0	0.00

IS1 = Fluorobenzene
IS2 =
IS3 =

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG NO.: Q1172

Lab File ID: VU063262.D Date Analyzed: 02/13/2025

Instrument ID: MSVOA_U Time Analyzed: 08:36

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	54046	6.11	0	0.00	0	0.00
UPPER LIMIT	70259.8	6.607	0		0	
LOWER LIMIT	37832.2	5.607	0		0	
EPA SAMPLE NO.						
PT-UNRVOA-WSDL	45506	6.10	0	0.00	0	0.00
VU0213WBL01	46092	6.11	0	0.00	0	0.00
VU0213WBS01	49713	6.11	0	0.00	0	0.00

IS1 = Fluorobenzene
IS2 =
IS3 =

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

SAMPLE DATA

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-UNRVOA-WS	SDG No.:	Q1172
Lab Sample ID:	Q1172-08	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063239.D	1		02/11/25 16:36	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.14	U	0.14	0.50	ug/L
74-87-3	Chloromethane	12.8		0.13	0.50	ug/L
75-01-4	Vinyl Chloride	0.13	U	0.13	0.50	ug/L
74-83-9	Bromomethane	0.18	U	0.18	0.50	ug/L
75-00-3	Chloroethane	0.14	U	0.14	0.50	ug/L
109-99-9	Tetrahydrofuran	0.44	U	0.44	1.00	ug/L
75-69-4	Trichlorofluoromethane	17.3	E	0.21	0.50	ug/L
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.14	U	0.14	0.50	ug/L
75-65-0	tert-Butyl Alcohol	8.60	UQ	8.60	10.0	ug/L
60-29-7	Diethyl Ether	0.13	U	0.13	0.50	ug/L
75-35-4	1,1-Dichloroethene	0.12	U	0.12	0.50	ug/L
107-13-1	Acrylonitrile	0.44	U	0.44	1.00	ug/L
67-64-1	Acetone	1.10	U	1.10	2.50	ug/L
75-15-0	Carbon Disulfide	0.13	U	0.13	0.50	ug/L
1634-04-4	Methyl tert-Butyl Ether	41.3	E	0.12	0.50	ug/L
96-33-3	Methyl acrylate	0.28	U	0.28	0.50	ug/L
75-09-2	Methylene Chloride	0.82		0.47	0.50	ug/L
156-60-5	trans-1,2-Dichloroethene	0.14	U	0.14	0.50	ug/L
75-34-3	1,1-Dichloroethane	11.6		0.13	0.50	ug/L
110-82-7	Cyclohexane	0.14	U	0.14	0.50	ug/L
78-93-3	2-Butanone	0.68	U	0.68	2.50	ug/L
56-23-5	Carbon Tetrachloride	0.14	U	0.14	0.50	ug/L
594-20-7	2,2-Dichloropropane	2.90		0.14	0.50	ug/L
156-59-2	cis-1,2-Dichloroethene	0.13	U	0.13	0.50	ug/L
74-97-5	Bromochloromethane	17.6	E	0.16	0.50	ug/L
67-66-3	Chloroform	0.13	U	0.13	0.50	ug/L
71-55-6	1,1,1-Trichloroethane	0.12	U	0.12	0.50	ug/L
108-87-2	Methylcyclohexane	0.12	U	0.12	0.50	ug/L
563-58-6	1,1-Dichloropropene	5.40		0.11	0.50	ug/L
107-12-0	Propionitrile	1.00	U	1.00	2.50	ug/L

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-UNRVOA-WS	SDG No.:	Q1172
Lab Sample ID:	Q1172-08	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063239.D	1		02/11/25 16:36	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	0.11	U	0.11	0.50	ug/L
107-06-2	1,2-Dichloroethane	0.16	U	0.16	0.50	ug/L
79-01-6	Trichloroethene	0.13	U	0.13	0.50	ug/L
78-87-5	1,2-Dichloropropane	0.13	U	0.13	0.50	ug/L
109-69-3	1-Chlorobutane	0.12	U	0.12	0.50	ug/L
74-95-3	Dibromomethane	11.7		0.14	0.50	ug/L
75-27-4	Bromodichloromethane	0.12	U	0.12	0.50	ug/L
108-10-1	4-Methyl-2-Pentanone	0.60	U	0.60	2.50	ug/L
108-88-3	Toluene	0.11	U	0.11	0.50	ug/L
10061-02-6	t-1,3-Dichloropropene	14.5		0.11	0.50	ug/L
10061-01-5	cis-1,3-Dichloropropene	17.1	E	0.11	0.50	ug/L
79-00-5	1,1,2-Trichloroethane	0.13	U	0.13	0.50	ug/L
142-28-9	1,3-Dichloropropane	12.6		0.13	0.50	ug/L
591-78-6	2-Hexanone	0.57	U	0.57	2.50	ug/L
124-48-1	Dibromochloromethane	0.13	U	0.13	0.50	ug/L
106-93-4	1,2-Dibromoethane	0.13	U	0.13	0.50	ug/L
127-18-4	Tetrachloroethene	0.14	U	0.14	0.50	ug/L
108-90-7	Chlorobenzene	0.11	U	0.11	0.50	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	3.20		0.13	0.50	ug/L
67-72-1	Hexachloroethane	0.12	U	0.12	0.50	ug/L
100-41-4	Ethyl Benzene	0.12	U	0.12	0.50	ug/L
179601-23-1	m/p-Xylenes	0.23	U	0.23	1.00	ug/L
1330-20-7	Total Xylenes	0.35	U	0.35	1.50	ug/L
95-47-6	o-Xylene	0.12	U	0.12	0.50	ug/L
100-42-5	Styrene	0.13	U	0.13	0.50	ug/L
75-25-2	Bromoform	0.14	U	0.14	0.50	ug/L
98-82-8	Isopropylbenzene	6.20		0.13	0.50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	5.70		0.12	0.50	ug/L
96-18-4	1,2,3-Trichloropropane	7.70		0.21	0.50	ug/L
108-86-1	Bromobenzene	17.0	E	0.13	0.50	ug/L
103-65-1	n-propylbenzene	9.60		0.16	0.50	ug/L

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-UNRVOA-WS	SDG No.:	Q1172
Lab Sample ID:	Q1172-08	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063239.D	1		02/11/25 16:36	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
95-49-8	2-Chlorotoluene	4.50		0.14	0.50	ug/L
108-67-8	1,3,5-Trimethylbenzene	7.00		0.13	0.50	ug/L
106-43-4	4-Chlorotoluene	10.7		0.14	0.50	ug/L
98-06-6	tert-Butylbenzene	5.80		0.11	0.50	ug/L
95-63-6	1,2,4-Trimethylbenzene	15.6	E	0.13	0.50	ug/L
135-98-8	sec-Butylbenzene	19.7	E	0.13	0.50	ug/L
99-87-6	p-Isopropyltoluene	3.60		0.16	0.50	ug/L
541-73-1	1,3-Dichlorobenzene	4.80		0.13	0.50	ug/L
106-46-7	1,4-Dichlorobenzene	0.14	U	0.14	0.50	ug/L
104-51-8	n-Butylbenzene	15.7	E	0.28	0.50	ug/L
95-50-1	1,2-Dichlorobenzene	0.14	U	0.14	0.50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.23	U	0.23	0.50	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.47	J	0.21	0.50	ug/L
87-68-3	Hexachlorobutadiene	13.8		0.14	0.50	ug/L
91-20-3	Naphthalene	4.50		0.31	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	26.0	E	0.25	0.50	ug/L
74-88-4	Iodomethane	0.16	U	0.16	1.00	ug/L
107-05-1	Allyl Chloride	0.11	U	0.11	0.50	ug/L
126-98-7	Methacrylonitrile	0.19	U	0.19	0.50	ug/L
80-62-6	Methyl methacrylate	0.24	U	0.24	1.00	ug/L
SURROGATES						
2199-69-1	1,2-Dichlorobenzene-d4	1.10		70 - 130	107%	SPK: 1
460-00-4	4-Bromofluorobenzene	1.10		70 - 130	105%	SPK: 1
INTERNAL STANDARDS						
462-06-6	Fluorobenzene	53600	6.107			

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-UNRVOA-WS	SDG No.:	Q1172
Lab Sample ID:	Q1172-08	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063239.D	1		02/11/25 16:36	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063239.D
Acq On : 11 Feb 2025 16:36
Operator : MD/SY
Sample : Q1172-08
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Quant Time: Feb 12 03:20:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

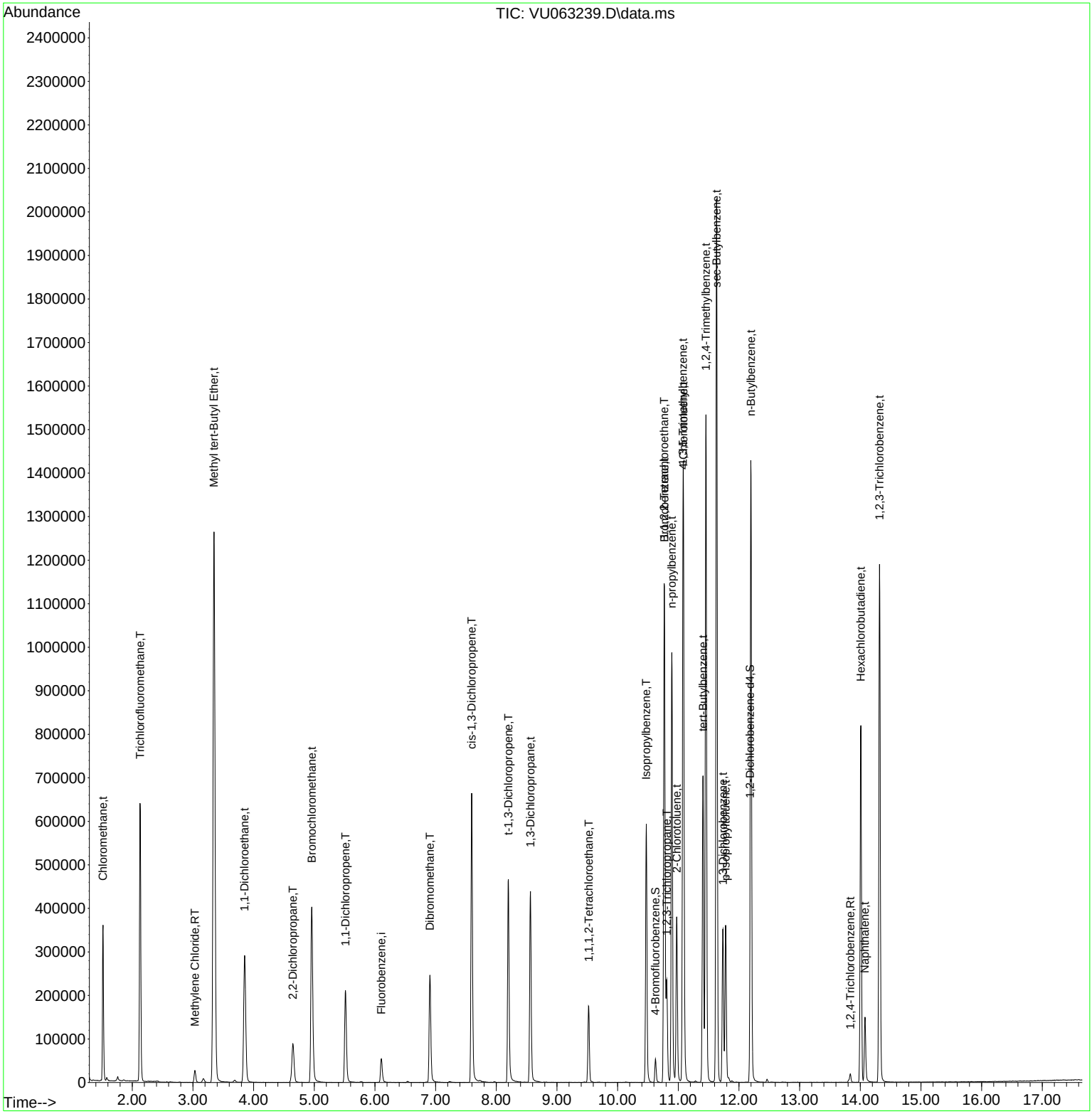
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.107	96	53598	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.624	95	18604	1.052	ug/l	0.00
Spiked Amount 1.000			Recovery = 105.000%			
68) 1,2-Dichlorobenzene-d4	12.183	152	19587	1.065	ug/l	0.00
Spiked Amount 1.000			Recovery = 107.000%			
Target Compounds						Qvalue
3) Chloromethane	1.518	50	257581	12.844	ug/l	99
7) Trichlorofluoromethane	2.129	101	407921	17.349	ug/l	98
15) Methylene Chloride	3.033	84	13691	0.815	ug/l	95
17) 1,1-Dichloroethane	3.853	63	340449	11.638	ug/l	99
21) 2,2-Dichloropropane	4.650	77	66297	2.905	ug/l	94
25) Methyl tert-Butyl Ether	3.348	73	1402973	41.311	ug/l	99
26) Bromochloromethane	4.959	128	128944	17.592	ug/l	99
29) 1,1-Dichloropropene	5.515	75	115804	5.407	ug/l	99
43) Dibromomethane	6.907	93	102337	11.725	ug/l	98
50) t-1,3-Dichloropropene	8.200	75	268942	14.460	ug/l	97
51) cis-1,3-Dichloropropene	7.595	75	393743	17.137	ug/l	99
53) 1,3-Dichloropropane	8.563	76	262279	12.553	ug/l	99
60) 1,1,1,2-Tetrachloroethane	9.524	131	46415	3.231	ug/l	99
69) Isopropylbenzene	10.473	105	369443	6.235	ug/l	99
70) 1,1,2,2-Tetrachloroethane	10.769	83	90927	5.733	ug/l	97
71) 1,2,3-Trichloropropane	10.811	75	91550	7.683	ug/l #	95
72) Bromobenzene	10.772	156	271067	16.978	ug/l	96
73) n-propylbenzene	10.894	120	162026	9.550	ug/l	99
74) 2-Chlorotoluene	10.975	126	70864	4.532	ug/l	97
75) 1,3,5-Trimethylbenzene	11.077	105	382209	6.961	ug/l	99
76) 4-Chlorotoluene	11.087	126	172020	10.729	ug/l	90
77) tert-Butylbenzene	11.409	119	320379	5.770	ug/l	88
78) 1,2,4-Trimethylbenzene	11.457	105	849031	15.585	ug/l	100
79) sec-Butylbenzene	11.630	105	1390508	19.668	ug/l	100
81) p-Isopropyltoluene	11.782	119	200968	3.602	ug/l	99
82) 1,3-Dichlorobenzene	11.737	146	147818	4.773	ug/l	99
84) n-Butylbenzene	12.196	91	786049	15.711	ug/l	99
87) 1,2,4-Trichlorobenzene	13.836	180	6810	0.469	ug/l #	1
88) Hexachlorobutadiene	14.010	225	143463	13.830	ug/l	98
89) Naphthalene	14.077	128	125578	4.527	ug/l	99
90) 1,2,3-Trichlorobenzene	14.318	180	368738	25.964	ug/l	98

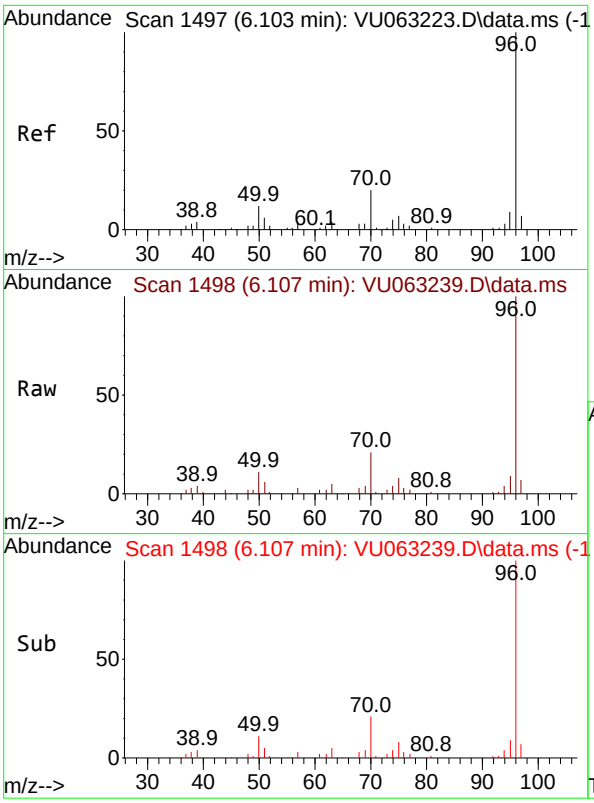
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063239.D
Acq On : 11 Feb 2025 16:36
Operator : MD/SY
Sample : Q1172-08
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Quant Time: Feb 12 03:20:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration



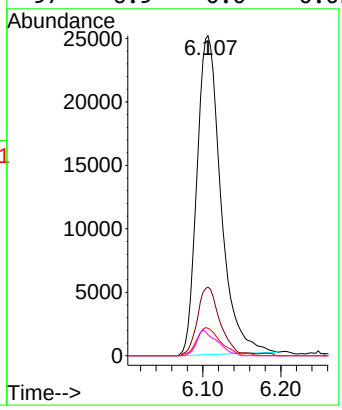


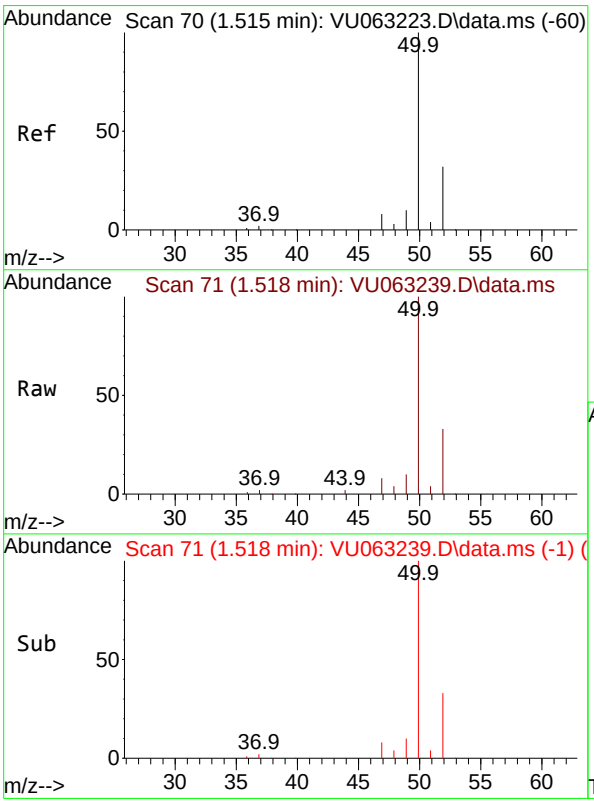
#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.107 min Scan# 14
Delta R.T. 0.004 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion: 96 Resp: 53598

Ion	Ratio	Lower	Upper
96	100		
70	19.7	15.6	23.4
95	8.1	7.3	10.9
97	6.9	0.0	0.0#

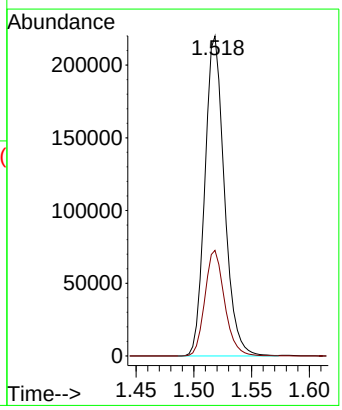


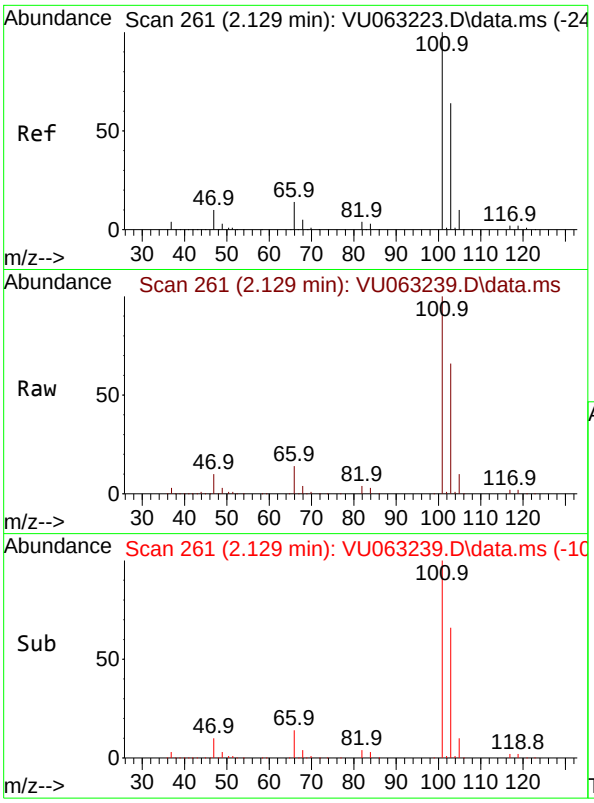


#3
Chloromethane
Concen: 12.844 ug/l
RT: 1.518 min Scan# 71
Delta R.T. 0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion: 50 Resp: 257581

Ion	Ratio	Lower	Upper
50	100		
52	33.0	25.8	38.8



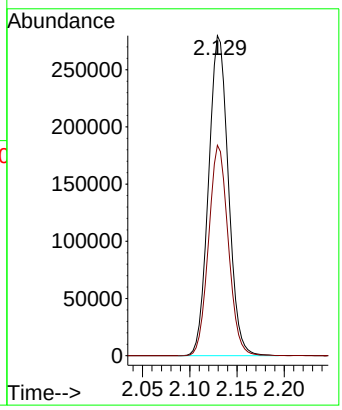


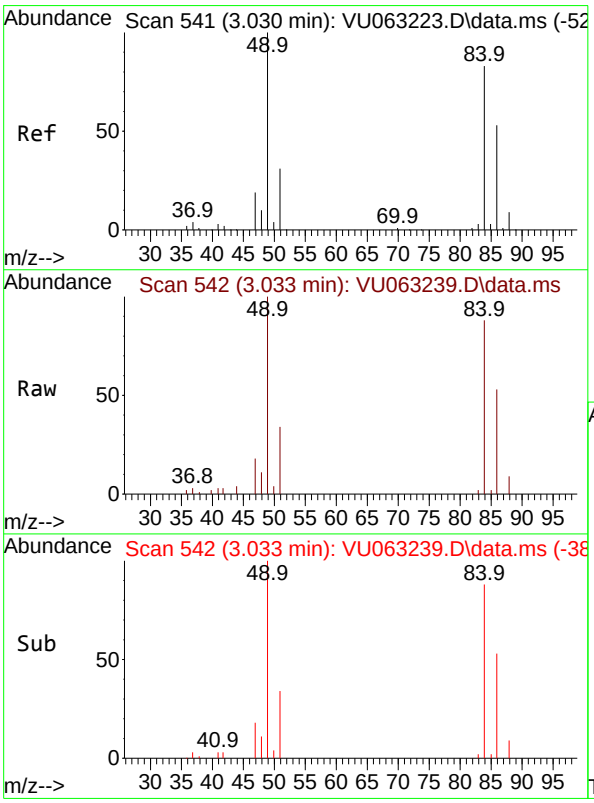
#7
Trichlorofluoromethane
Concen: 17.349 ug/l
RT: 2.129 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:101 Resp: 407921

Ion	Ratio	Lower	Upper
101	100		
103	65.7	51.4	77.2

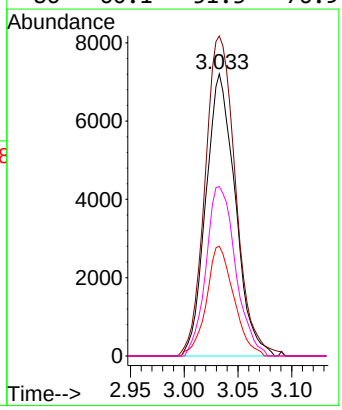


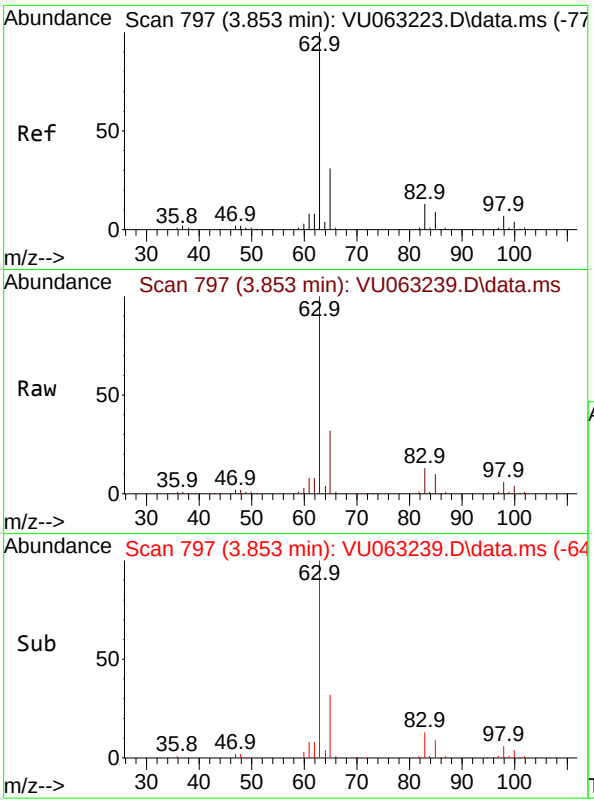


#15
Methylene Chloride
Concen: 0.815 ug/l
RT: 3.033 min Scan# 542
Delta R.T. 0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion: 84 Resp: 13691

Ion	Ratio	Lower	Upper
84	100		
49	113.4	96.4	144.6
51	38.9	0.0	74.8
86	60.1	51.3	76.9



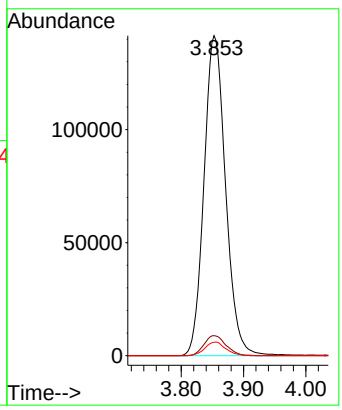


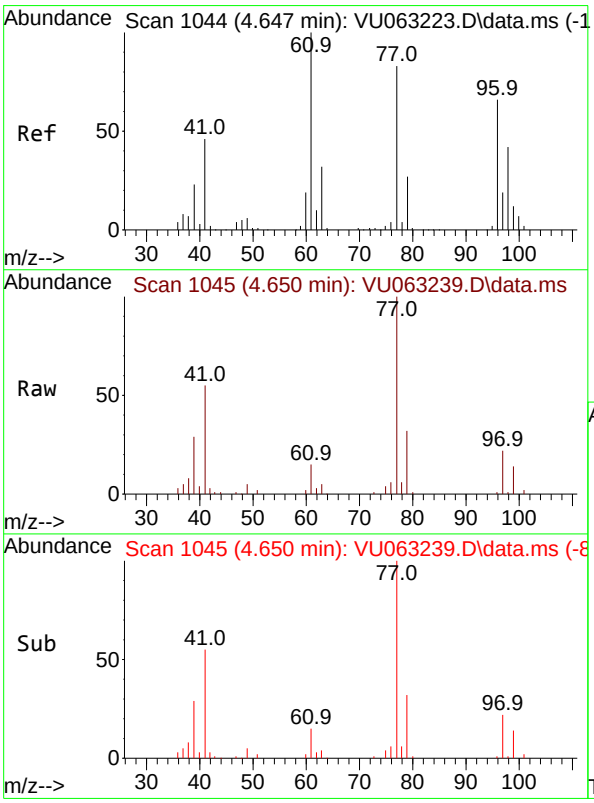
#17
1,1-Dichloroethane
Concen: 11.638 ug/l
RT: 3.853 min Scan# 7
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion: 63 Resp: 340449

Ion	Ratio	Lower	Upper
63	100		
98	6.2	3.3	9.9
100	4.2	2.1	6.2

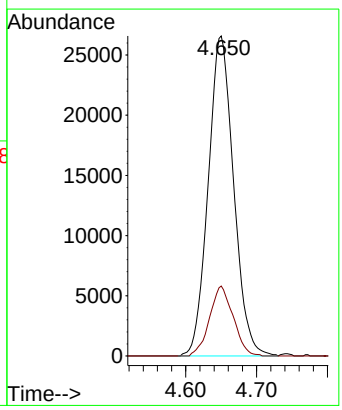


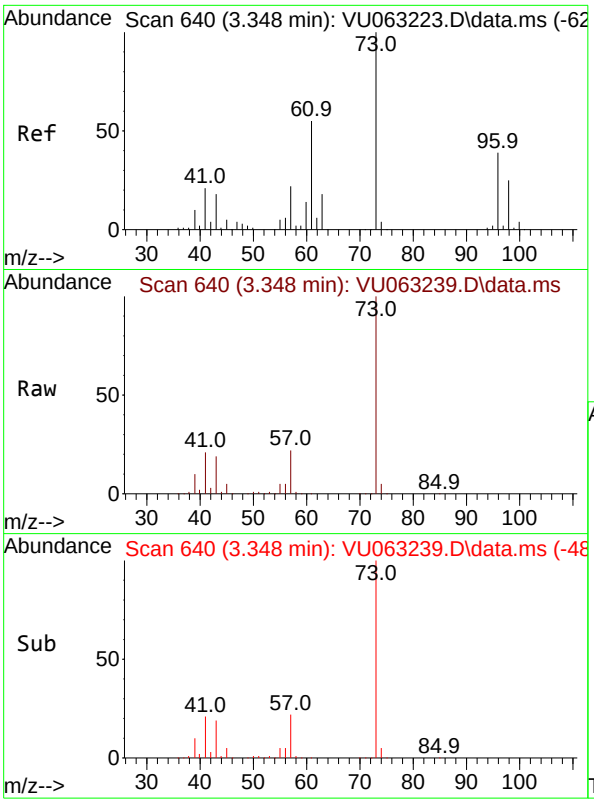


#21
2,2-Dichloropropane
Concen: 2.905 ug/l
RT: 4.650 min Scan# 1045
Delta R.T. 0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion: 77 Resp: 66297

Ion	Ratio	Lower	Upper
77	100		
97	20.3	18.5	27.7



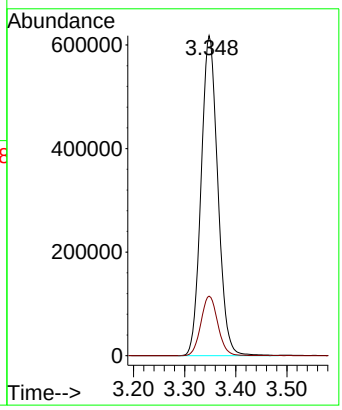


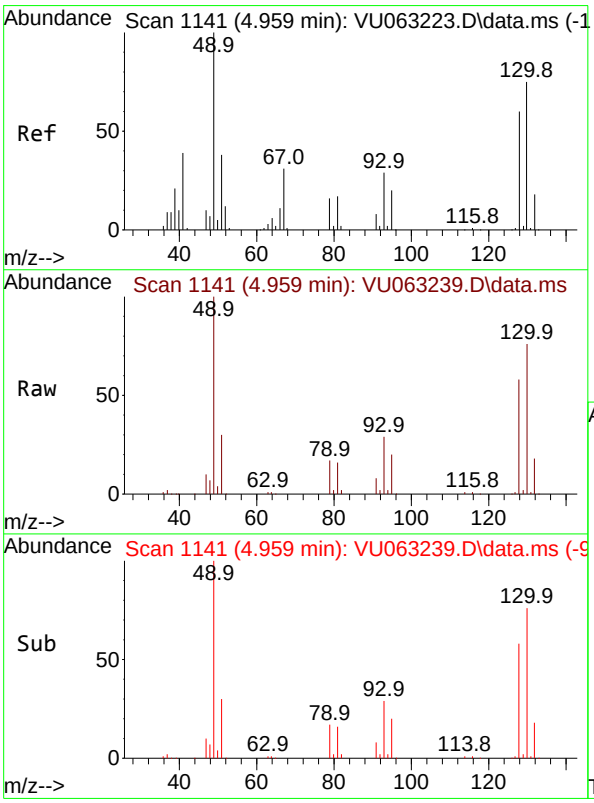
#25
Methyl tert-Butyl Ether
Concen: 41.311 ug/l
RT: 3.348 min Scan# 64
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion: 73 Resp: 1402973

Ion	Ratio	Lower	Upper
73	100		
43	18.9	14.9	22.3

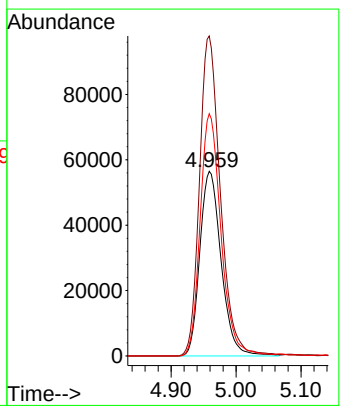


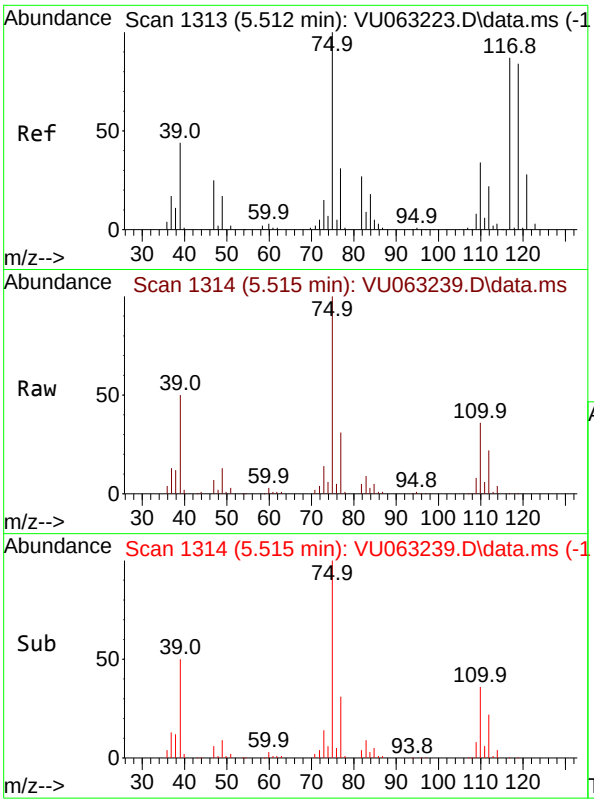


#26
Bromochloromethane
Concen: 17.592 ug/l
RT: 4.959 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:128 Resp: 128944

Ion	Ratio	Lower	Upper
128	100		
49	170.0	0.0	343.4
130	128.7	102.9	154.3



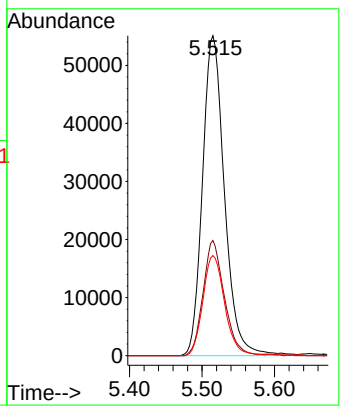


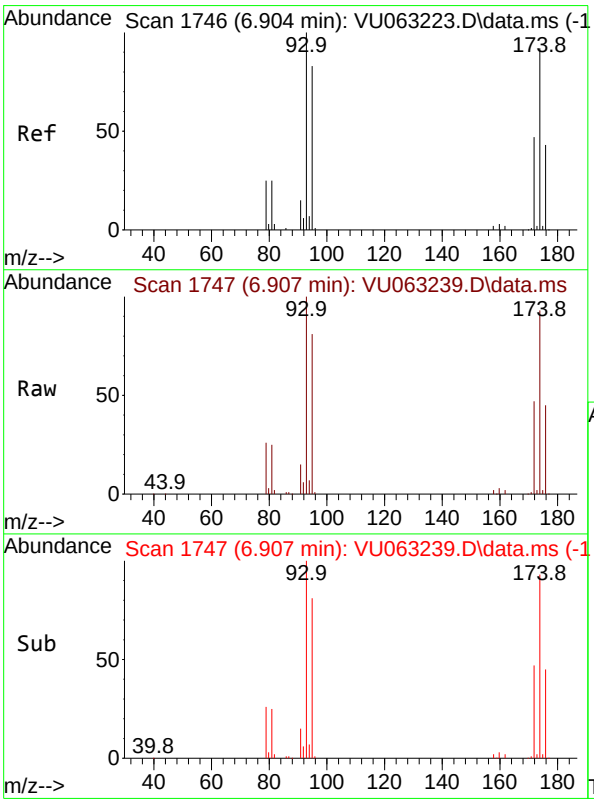
#29
1,1-Dichloropropene
Concen: 5.407 ug/l
RT: 5.515 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion: 75 Resp: 115804

Ion	Ratio	Lower	Upper
75	100		
110	34.8	17.2	51.5
77	31.0	24.6	37.0

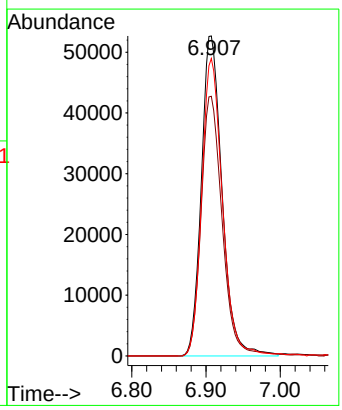


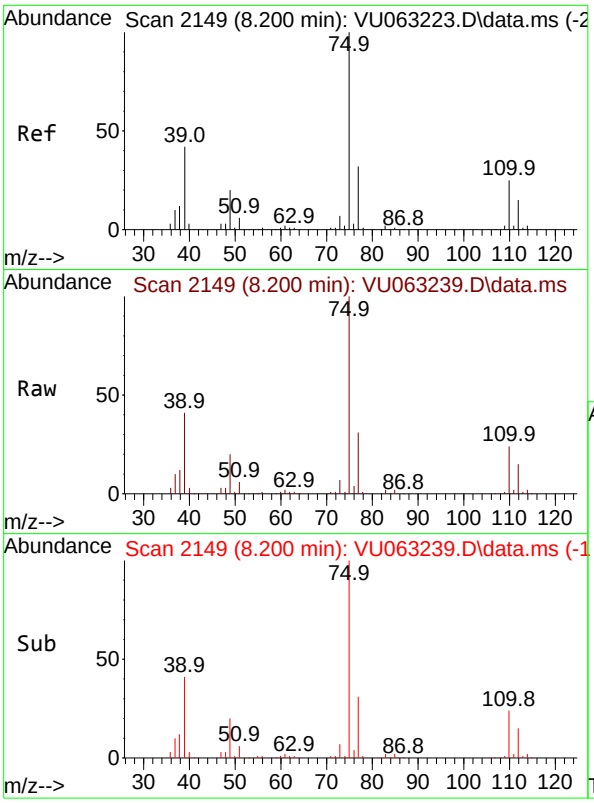


#43
Dibromomethane
Concen: 11.725 ug/l
RT: 6.907 min Scan# 1747
Delta R.T. 0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion: 93 Resp: 102337

Ion	Ratio	Lower	Upper
93	100		
95	82.5	67.2	100.8
174	92.3	75.7	113.5



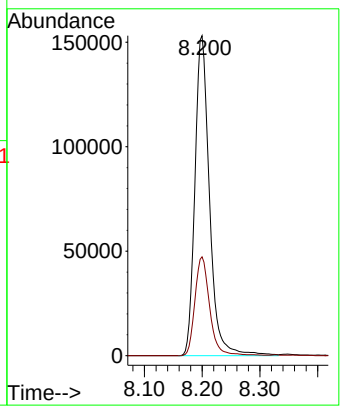


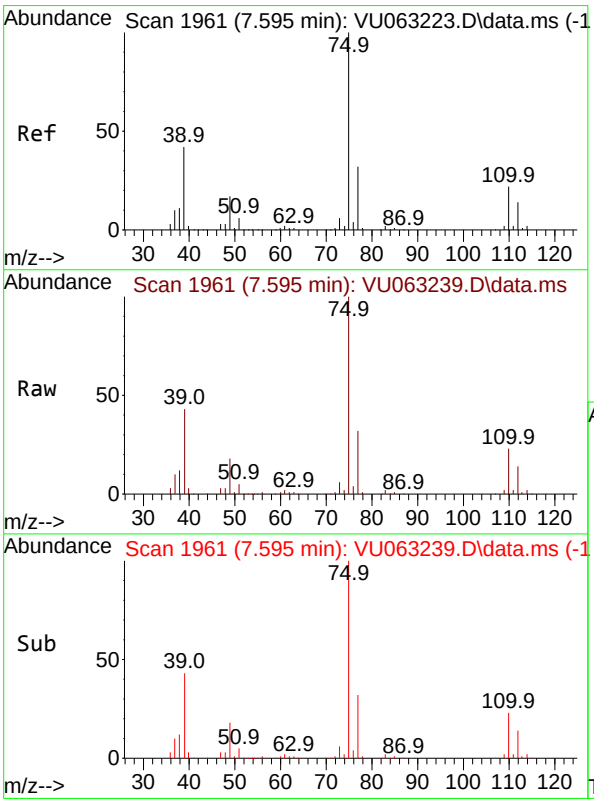
#50
t-1,3-Dichloropropene
Concen: 14.460 ug/l
RT: 8.200 min Scan# 21
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion: 75 Resp: 268942

Ion	Ratio	Lower	Upper
75	100		
77	30.9	25.9	38.9

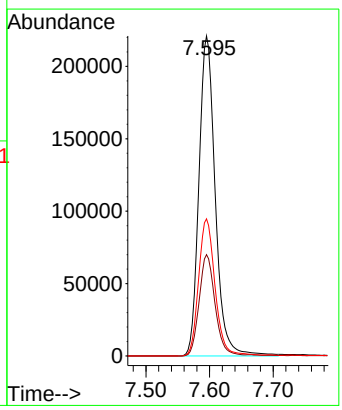


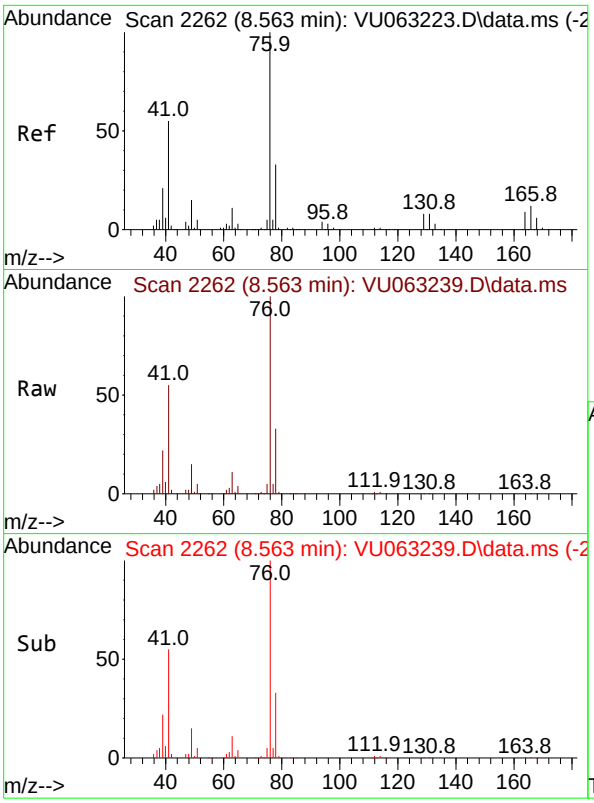


#51
cis-1,3-Dichloropropene
Concen: 17.137 ug/l
RT: 7.595 min Scan# 1961
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion: 75 Resp: 393743

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.3	37.9
39	42.9	33.5	50.3



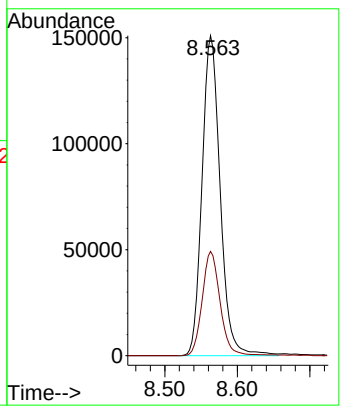


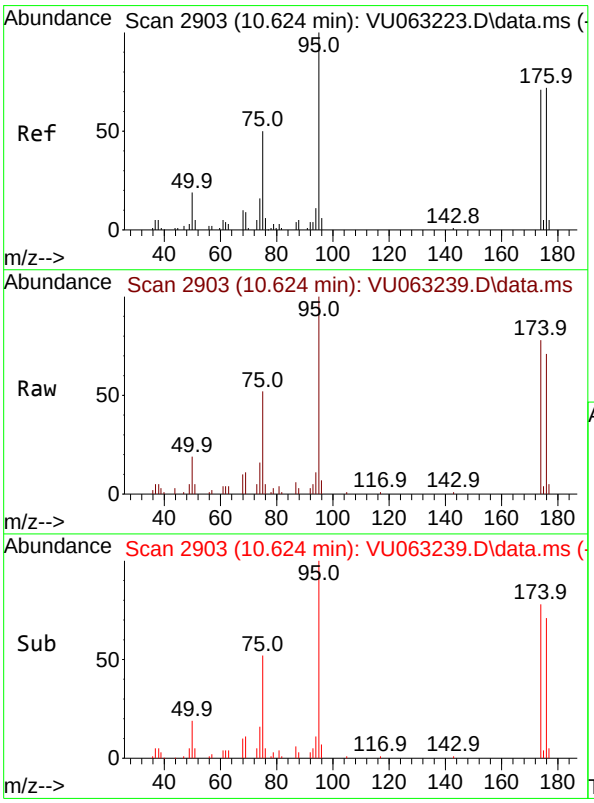
#53
1,3-Dichloropropane
Concen: 12.553 ug/l
RT: 8.563 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion: 76 Resp: 262279

Ion	Ratio	Lower	Upper
76	100		
78	32.3	26.3	39.5

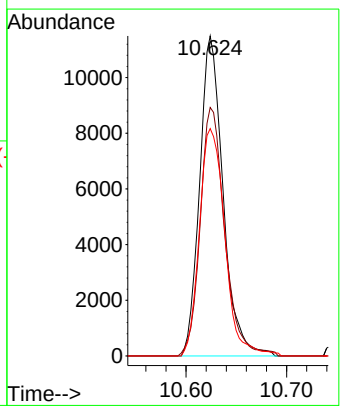


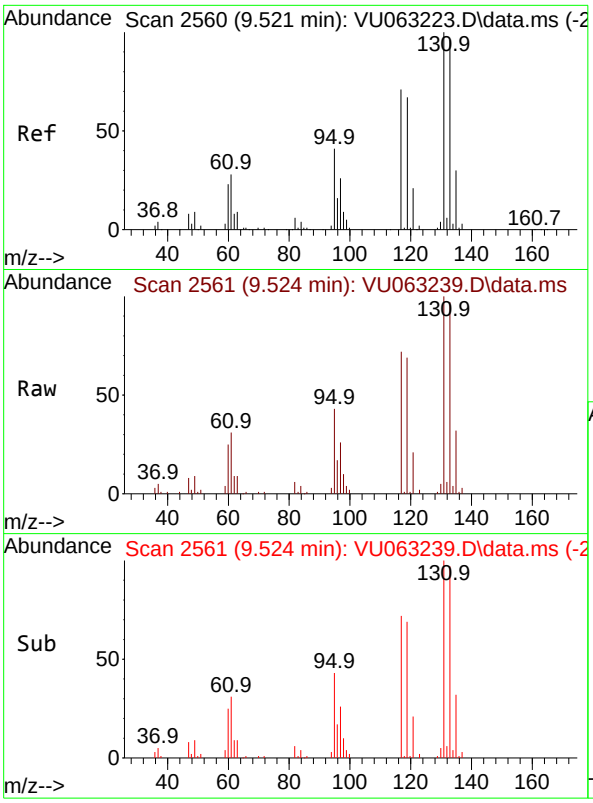


#57
4-Bromofluorobenzene
Concen: 1.052 ug/l
RT: 10.624 min Scan# 2903
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion: 95 Resp: 18604

Ion	Ratio	Lower	Upper
95	100		
174	81.1	58.6	88.0
176	77.3	58.2	87.4



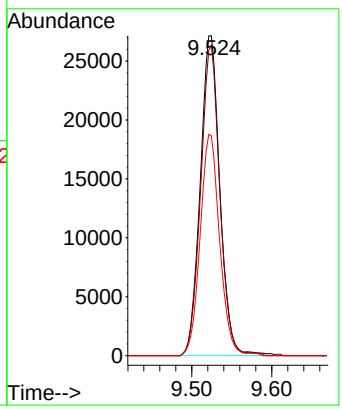


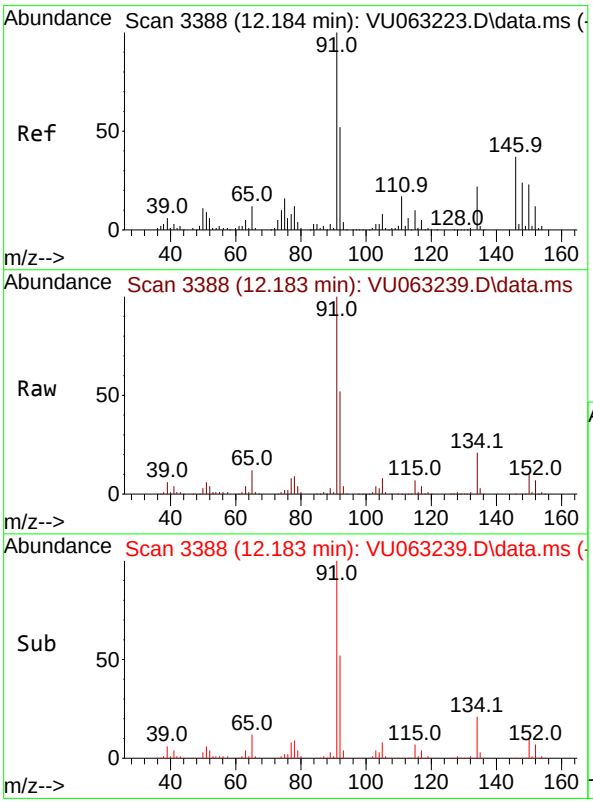
#60
1,1,1,2-Tetrachloroethane
Concen: 3.231 ug/l
RT: 9.524 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:131 Resp: 46415

Ion	Ratio	Lower	Upper
131	100		
133	94.7	76.7	115.1
119	68.7	54.4	81.6

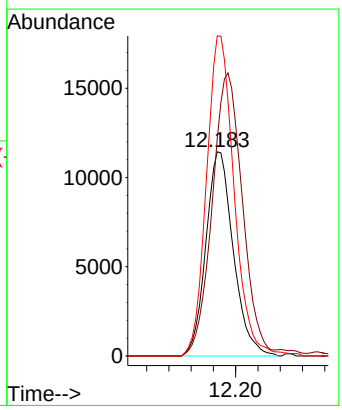


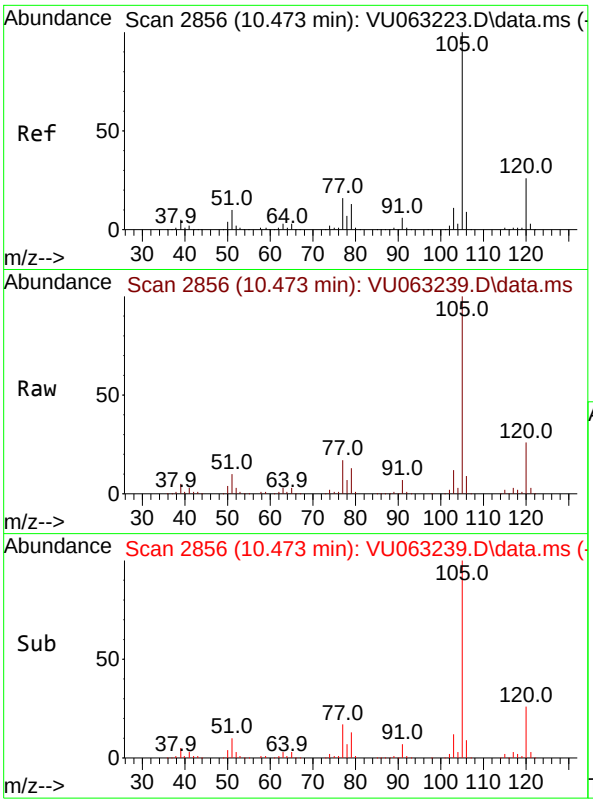


#68
1,2-Dichlorobenzene-d4
Concen: 1.065 ug/l
RT: 12.183 min Scan# 3388
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:152 Resp: 19587

Ion	Ratio	Lower	Upper
152	100		
115	152.3	0.0	275.2
150	158.1	0.0	658.4



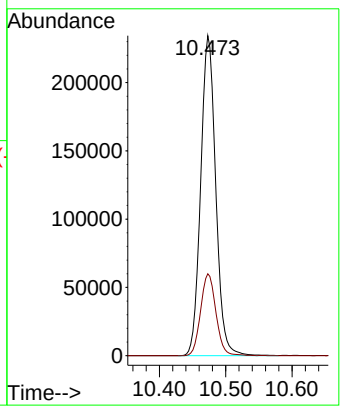


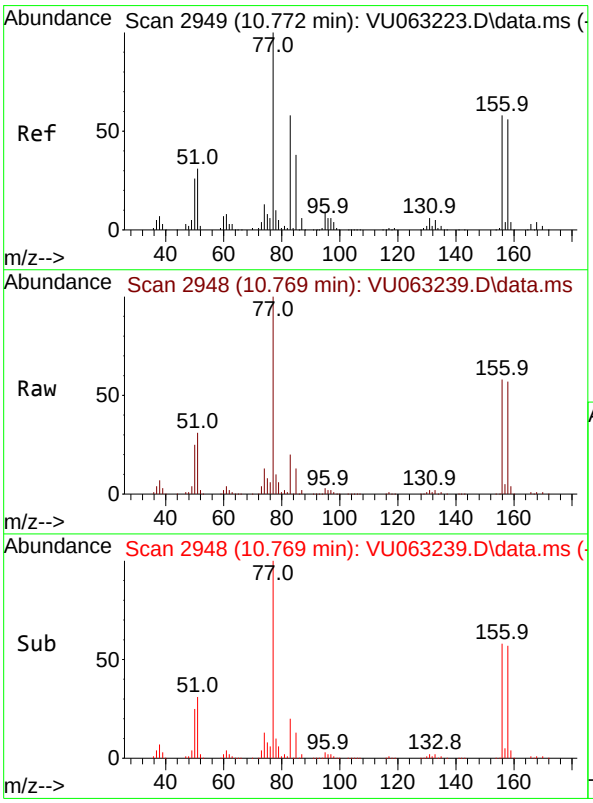
#69
Isopropylbenzene
Concen: 6.235 ug/l
RT: 10.473 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:105 Resp: 369443

Ion	Ratio	Lower	Upper
105	100		
120	25.9	12.8	38.4

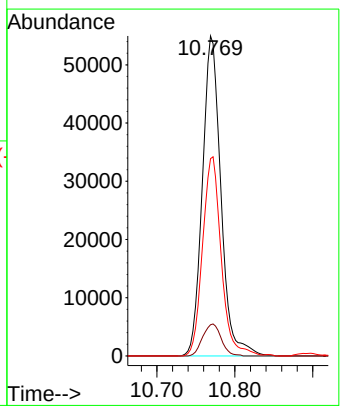


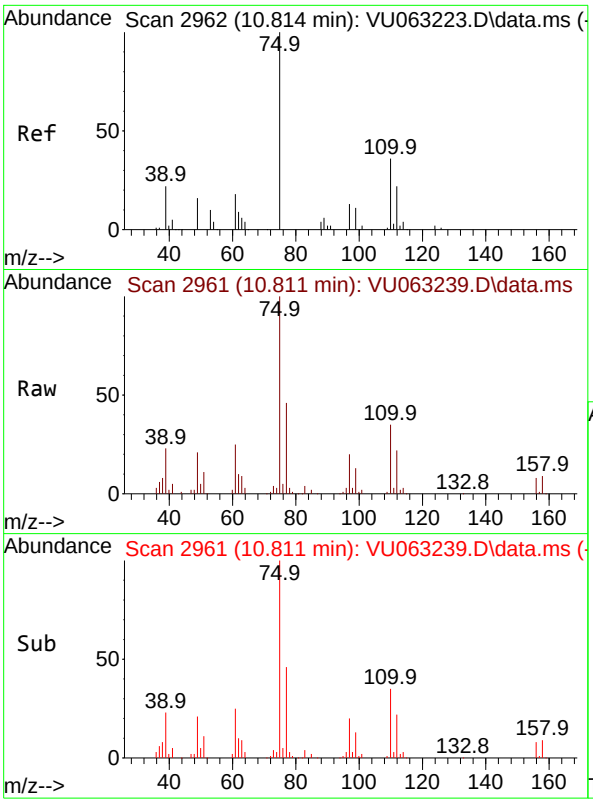


#70
1,1,2,2-Tetrachloroethane
Concen: 5.733 ug/l
RT: 10.769 min Scan# 2948
Delta R.T. -0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion: 83 Resp: 90927

Ion	Ratio	Lower	Upper
83	100		
131	10.0	7.4	11.0
85	62.6	51.8	77.8



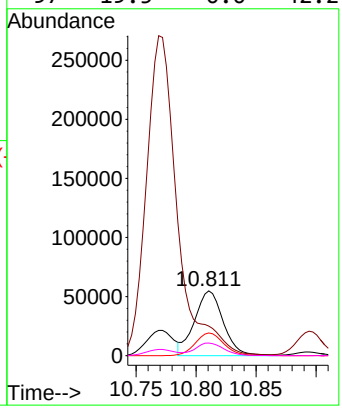


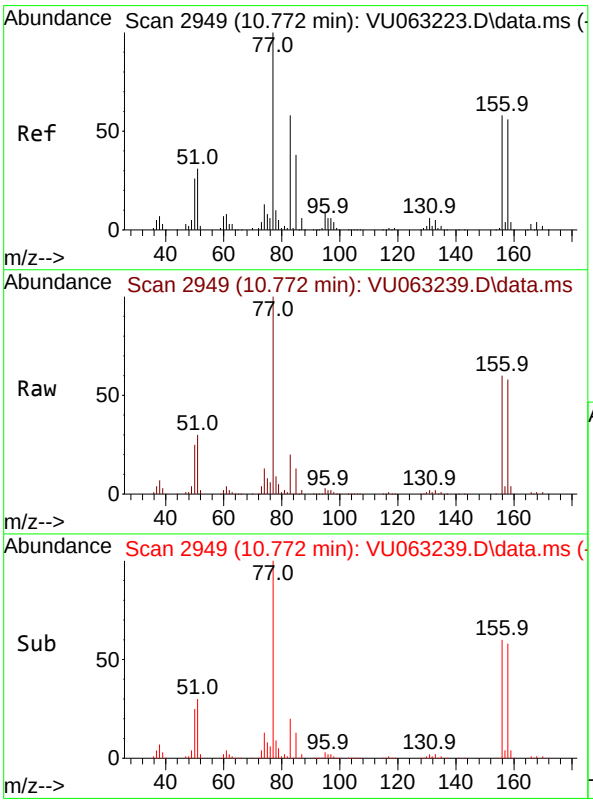
#71
1,2,3-Trichloropropane
Concen: 7.683 ug/l
RT: 10.811 min Scan# 2
Delta R.T. -0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion: 75 Resp: 91550

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	35.0	0.0	77.0
97	19.5	0.0	42.2

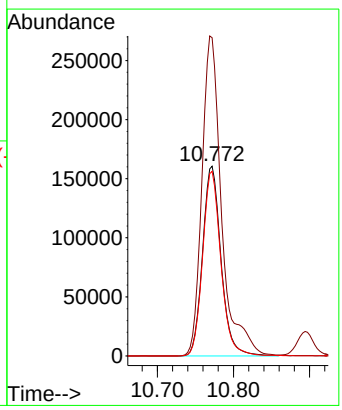


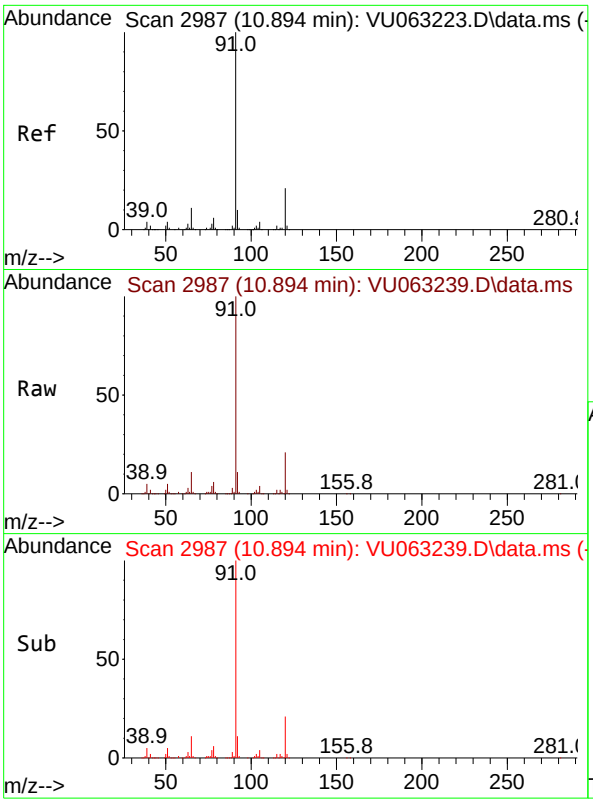


#72
Bromobenzene
Concen: 16.978 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:156 Resp: 271067

Ion	Ratio	Lower	Upper
156	100		
77	179.8	0.0	343.6
158	96.5	0.0	193.0



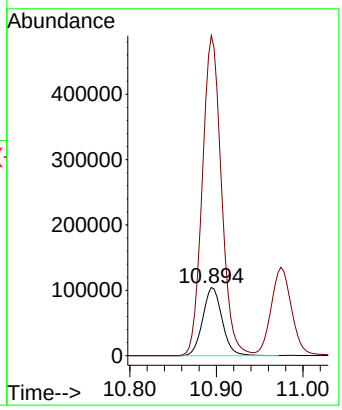


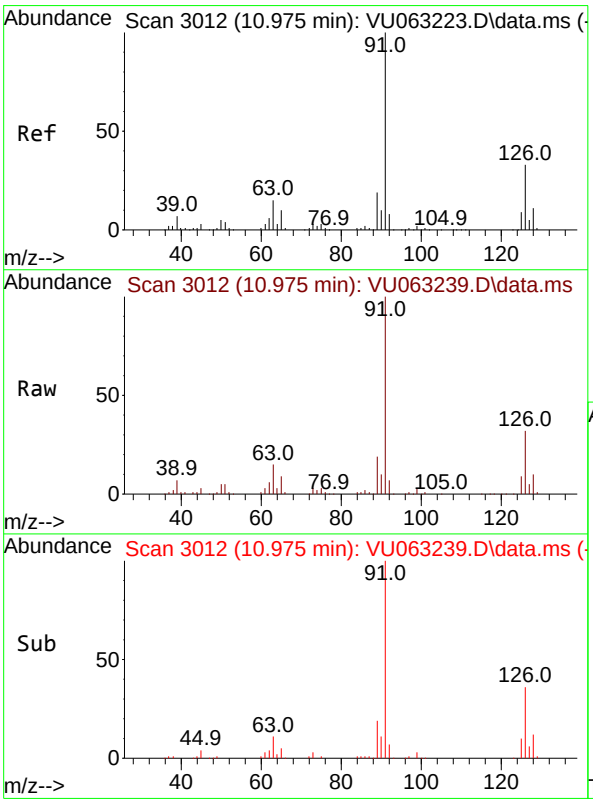
#73
n-propylbenzene
Concen: 9.550 ug/l
RT: 10.894 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:120 Resp: 162026

Ion	Ratio	Lower	Upper
120	100		
91	465.0	369.8	554.6

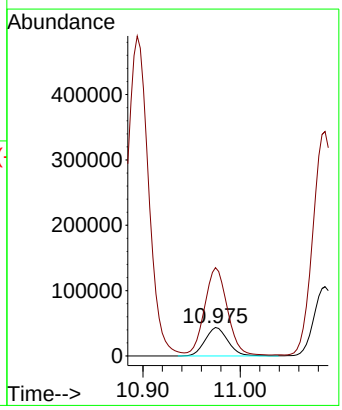


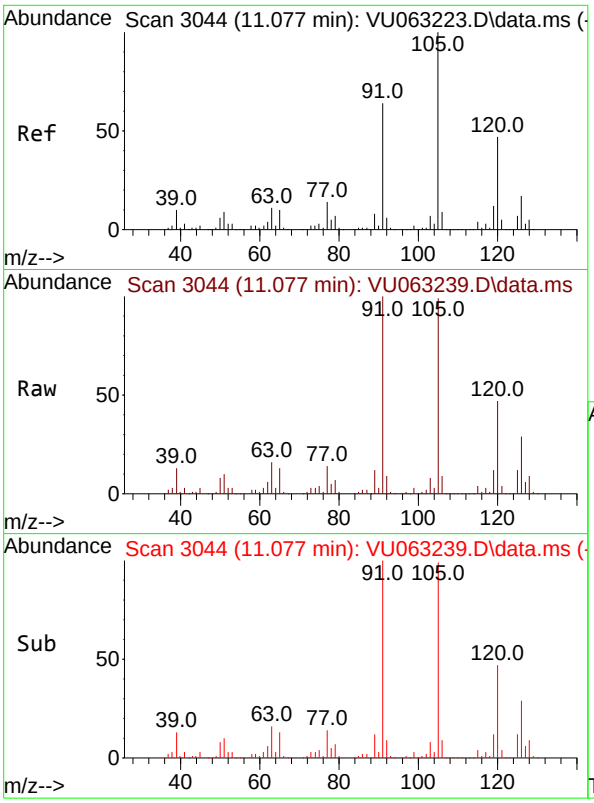


#74
2-Chlorotoluene
Concen: 4.532 ug/l
RT: 10.975 min Scan# 3012
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:126 Resp: 70864

Ion	Ratio	Lower	Upper
126	100		
91	305.5	0.0	623.8



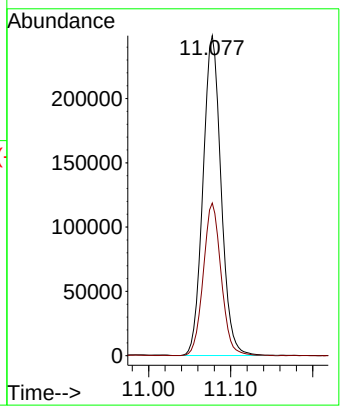


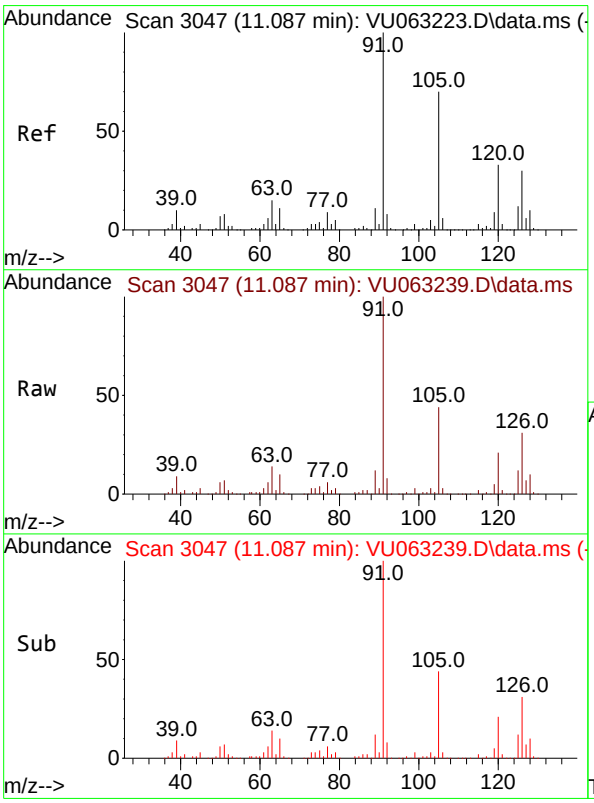
#75
1,3,5-Trimethylbenzene
Concen: 6.961 ug/l
RT: 11.077 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:105 Resp: 382209

Ion	Ratio	Lower	Upper
105	100		
120	47.2	37.3	55.9

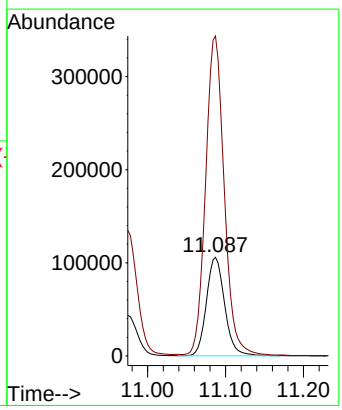


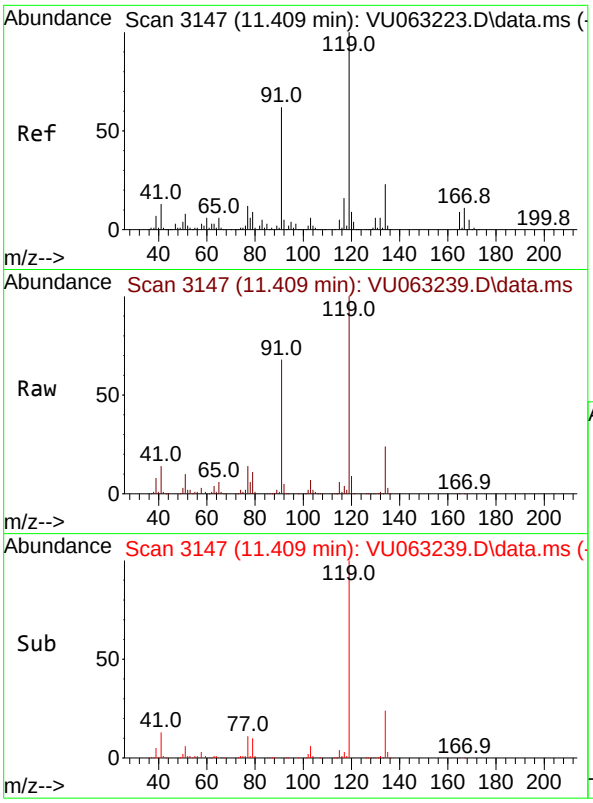


#76
4-Chlorotoluene
Concen: 10.729 ug/l
RT: 11.087 min Scan# 3047
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:126 Resp: 172020

Ion	Ratio	Lower	Upper
126	100		
91	330.4	0.0	703.6



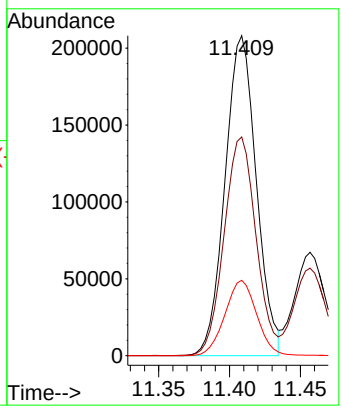


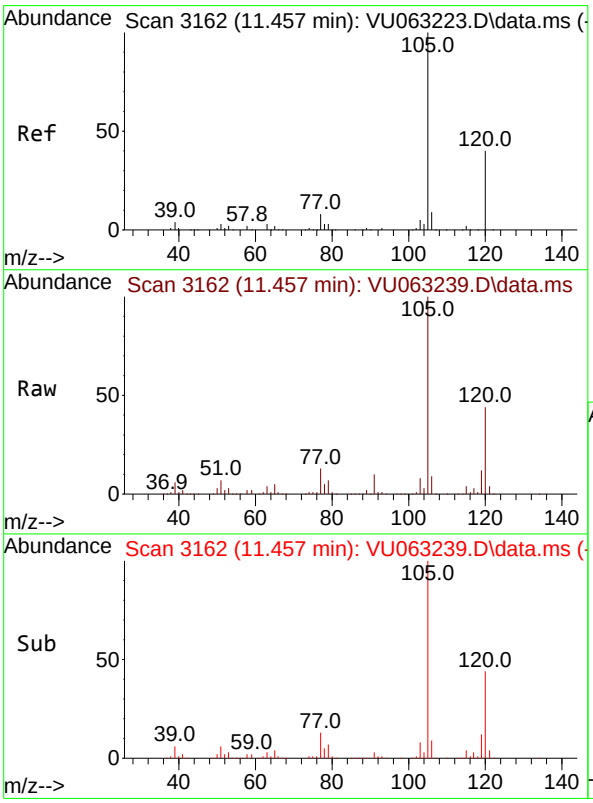
#77
tert-Butylbenzene
Concen: 5.770 ug/l
RT: 11.409 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:119 Resp: 320379

Ion	Ratio	Lower	Upper
119	100		
91	69.8	29.4	88.3
134	24.0	17.6	26.4

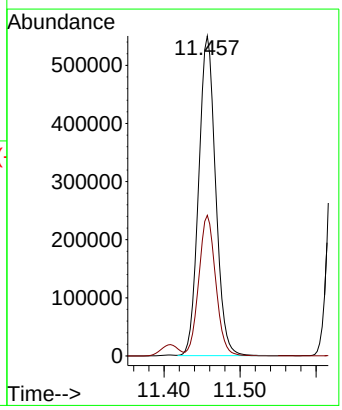


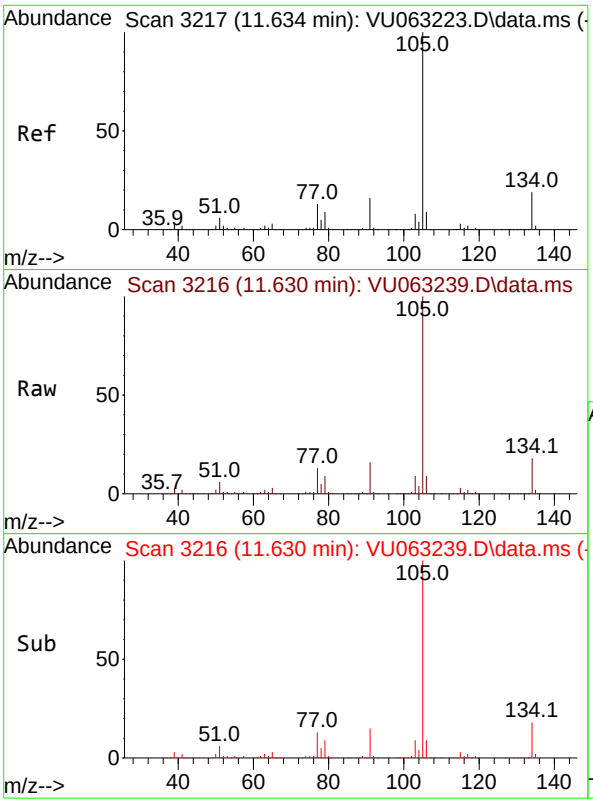


#78
1,2,4-Trimethylbenzene
Concen: 15.585 ug/l
RT: 11.457 min Scan# 3162
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:105 Resp: 849031

Ion	Ratio	Lower	Upper
105	100		
120	44.1	21.9	65.7



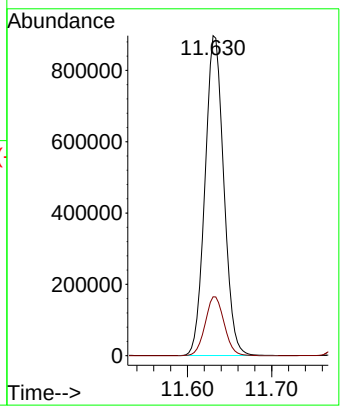


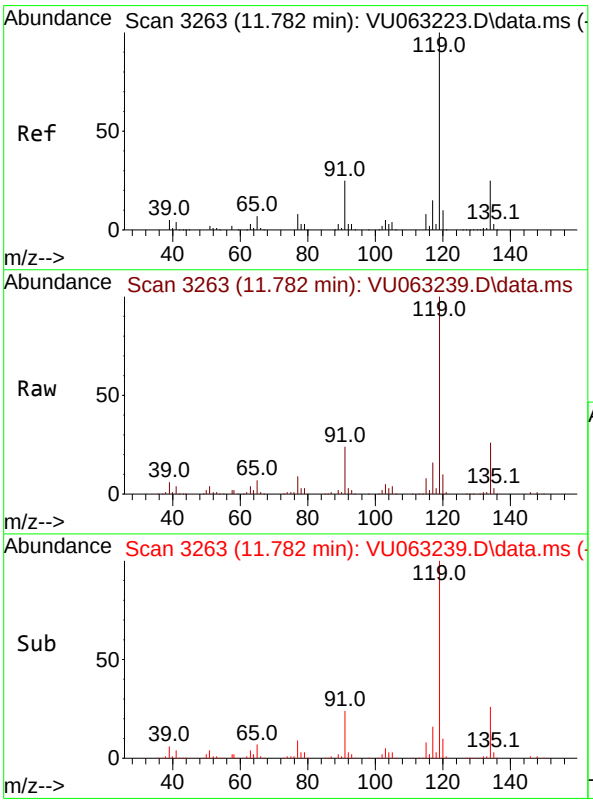
#79
sec-Butylbenzene
Concen: 19.668 ug/l
RT: 11.630 min Scan# 3
Delta R.T. -0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:105 Resp: 1390508

Ion	Ratio	Lower	Upper
105	100		
134	18.7	15.1	22.7

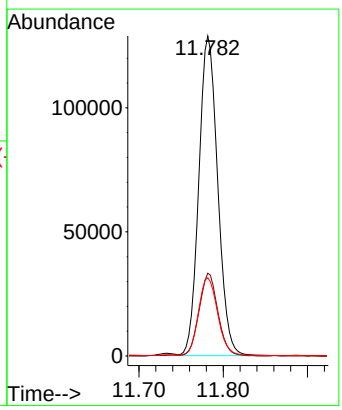


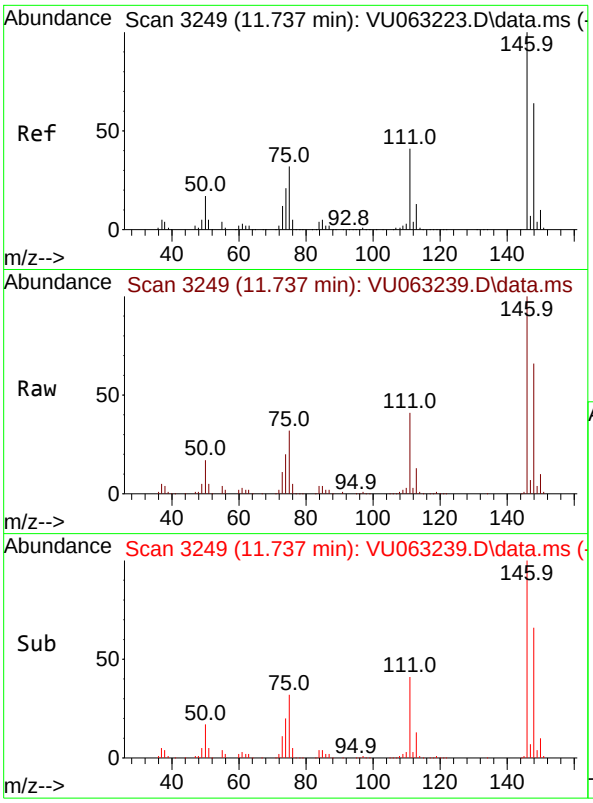


#81
p-Isopropyltoluene
Concen: 3.602 ug/l
RT: 11.782 min Scan# 3263
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:119 Resp: 200968

Ion	Ratio	Lower	Upper
119	100		
134	25.8	20.3	30.5
91	24.9	19.4	29.2



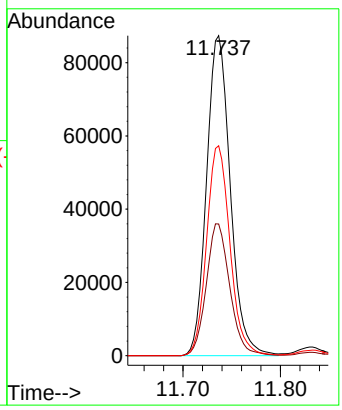


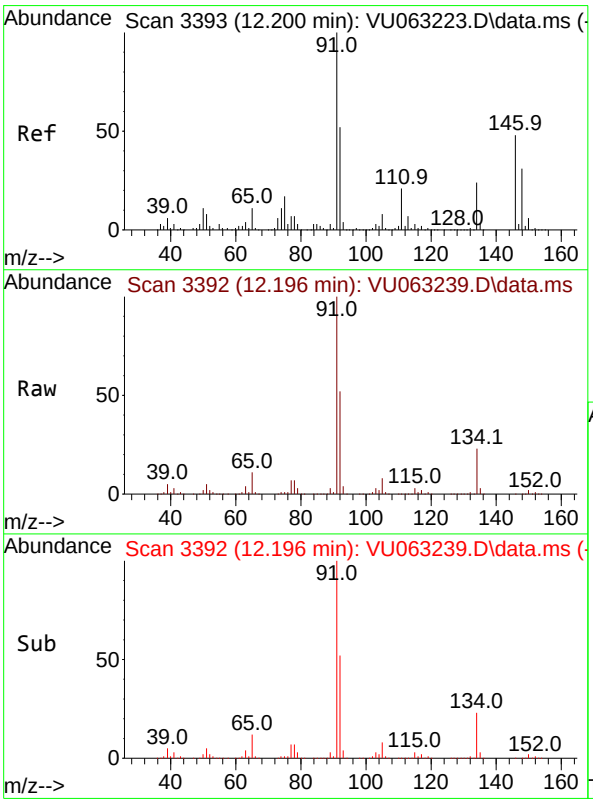
#82
1,3-Dichlorobenzene
Concen: 4.773 ug/l
RT: 11.737 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:146 Resp: 147818

Ion	Ratio	Lower	Upper
146	100		
111	40.9	32.8	49.2
148	64.6	51.1	76.7

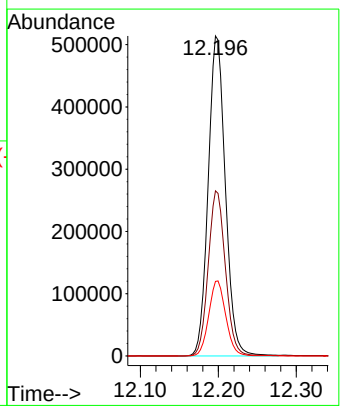


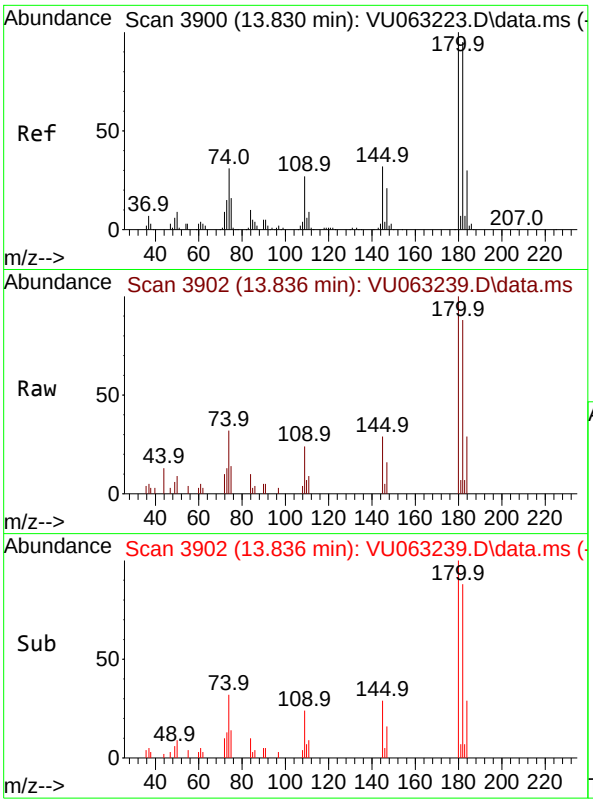


#84
n-Butylbenzene
Concen: 15.711 ug/l
RT: 12.196 min Scan# 3392
Delta R.T. -0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion: 91 Resp: 786049

Ion	Ratio	Lower	Upper
91	100		
92	51.7	41.8	62.8
134	23.4	18.6	28.0



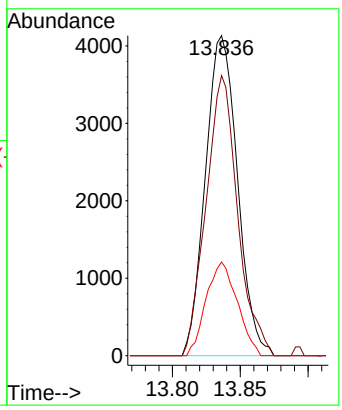


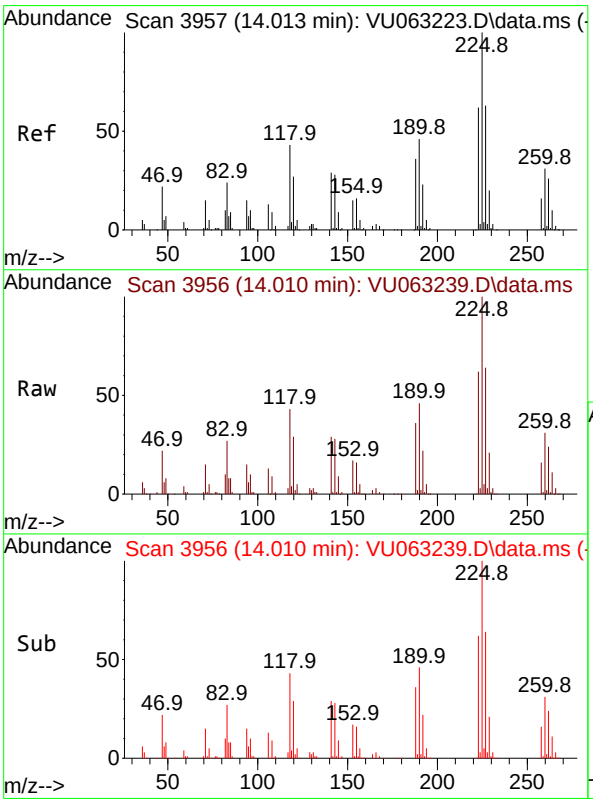
#87
1,2,4-Trichlorobenzene
Concen: 0.469 ug/l
RT: 13.836 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:180 Resp: 6810

Ion	Ratio	Lower	Upper
180	100		
182	0.0	76.6	115.0#
145	199.5	25.4	38.2#

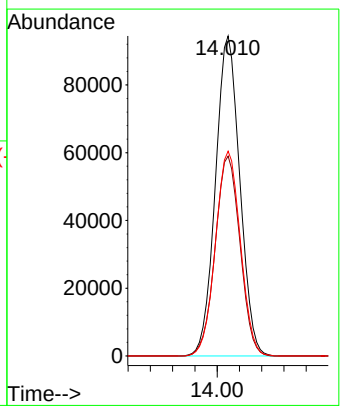


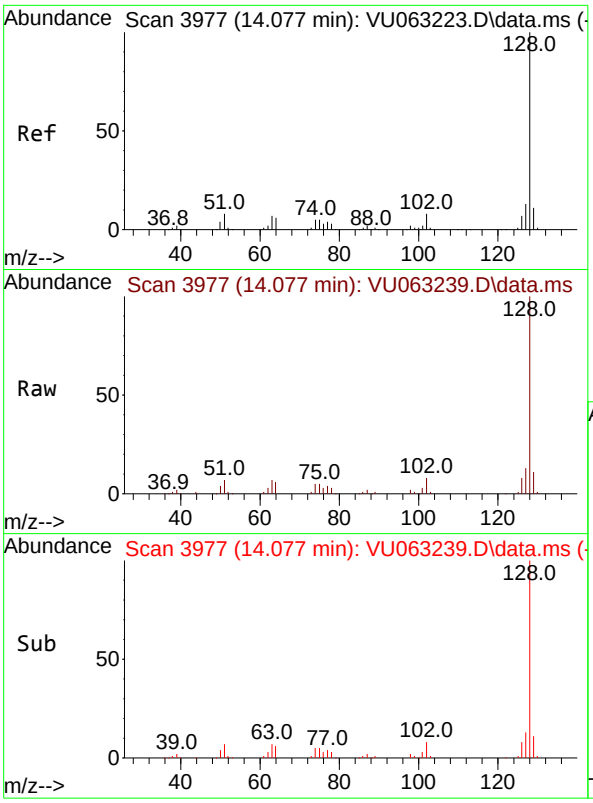


#88
Hexachlorobutadiene
Concen: 13.830 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:225 Resp: 143463

Ion	Ratio	Lower	Upper
225	100		
223	63.7	49.5	74.3
227	65.6	51.0	76.4



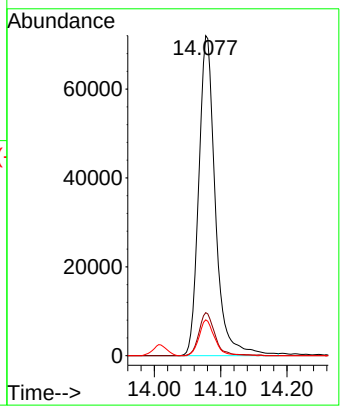


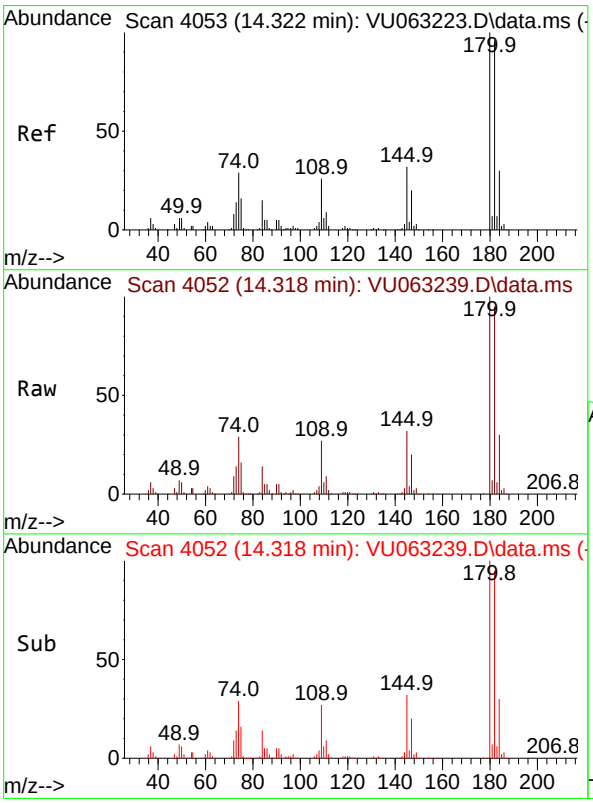
#89
Naphthalene
Concen: 4.527 ug/l
RT: 14.077 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WS

Tgt Ion:128 Resp: 125578

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.6	16.0
129	10.6	8.6	13.0

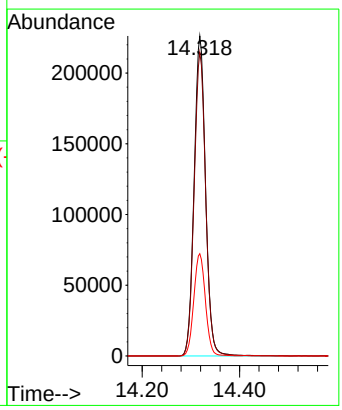




#90
1,2,3-Trichlorobenzene
Concen: 25.964 ug/l
RT: 14.318 min Scan# 4052
Delta R.T. -0.003 min
Lab File: VU063239.D
Acq: 11 Feb 2025 16:36

Tgt Ion:180 Resp: 368738

Ion	Ratio	Lower	Upper
180	100		
182	95.6	78.2	117.2
145	32.5	26.1	39.1



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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-UNRVOA-WSDL	SDG No.:	Q1172
Lab Sample ID:	Q1172-08DL	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063266.D	5		02/13/25 16:37	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.70	UD	0.70	2.50	ug/L
74-87-3	Chloromethane	15.8	D	0.65	2.50	ug/L
75-01-4	Vinyl Chloride	0.65	UD	0.65	2.50	ug/L
74-83-9	Bromomethane	0.90	UD	0.90	2.50	ug/L
75-00-3	Chloroethane	0.70	UD	0.70	2.50	ug/L
109-99-9	Tetrahydrofuran	2.20	UD	2.20	5.00	ug/L
75-69-4	Trichlorofluoromethane	20.0	D	1.10	2.50	ug/L
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.70	UD	0.70	2.50	ug/L
75-65-0	tert-Butyl Alcohol	43.2	UD	43.2	50.0	ug/L
60-29-7	Diethyl Ether	0.65	UD	0.65	2.50	ug/L
75-35-4	1,1-Dichloroethene	0.60	UD	0.60	2.50	ug/L
107-13-1	Acrylonitrile	2.20	UD	2.20	5.00	ug/L
67-64-1	Acetone	5.50	UD	5.50	12.5	ug/L
75-15-0	Carbon Disulfide	0.65	UD	0.65	2.50	ug/L
1634-04-4	Methyl tert-Butyl Ether	47.3	D	0.60	2.50	ug/L
96-33-3	Methyl acrylate	1.40	UD	1.40	2.50	ug/L
75-09-2	Methylene Chloride	2.40	UD	2.40	2.50	ug/L
156-60-5	trans-1,2-Dichloroethene	0.70	UD	0.70	2.50	ug/L
75-34-3	1,1-Dichloroethane	13.8	D	0.65	2.50	ug/L
110-82-7	Cyclohexane	0.70	UD	0.70	2.50	ug/L
78-93-3	2-Butanone	3.40	UD	3.40	12.5	ug/L
56-23-5	Carbon Tetrachloride	0.70	UD	0.70	2.50	ug/L
594-20-7	2,2-Dichloropropane	3.50	D	0.70	2.50	ug/L
156-59-2	cis-1,2-Dichloroethene	0.65	UD	0.65	2.50	ug/L
74-97-5	Bromochloromethane	20.3	D	0.80	2.50	ug/L
67-66-3	Chloroform	0.65	UD	0.65	2.50	ug/L
71-55-6	1,1,1-Trichloroethane	0.60	UD	0.60	2.50	ug/L
108-87-2	Methylcyclohexane	0.60	UD	0.60	2.50	ug/L
563-58-6	1,1-Dichloropropene	6.50	D	0.55	2.50	ug/L
107-12-0	Propionitrile	5.20	UD	5.20	12.5	ug/L

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-UNRVOA-WSDL	SDG No.:	Q1172
Lab Sample ID:	Q1172-08DL	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063266.D	5		02/13/25 16:37	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	0.55	UD	0.55	2.50	ug/L
107-06-2	1,2-Dichloroethane	0.80	UD	0.80	2.50	ug/L
79-01-6	Trichloroethene	0.65	UD	0.65	2.50	ug/L
78-87-5	1,2-Dichloropropane	0.65	UD	0.65	2.50	ug/L
109-69-3	1-Chlorobutane	0.60	UD	0.60	2.50	ug/L
74-95-3	Dibromomethane	13.8	D	0.70	2.50	ug/L
75-27-4	Bromodichloromethane	0.60	UD	0.60	2.50	ug/L
108-10-1	4-Methyl-2-Pentanone	3.00	UD	3.00	12.5	ug/L
108-88-3	Toluene	0.55	UD	0.55	2.50	ug/L
10061-02-6	t-1,3-Dichloropropene	15.7	D	0.55	2.50	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.2	D	0.55	2.50	ug/L
79-00-5	1,1,2-Trichloroethane	0.65	UD	0.65	2.50	ug/L
142-28-9	1,3-Dichloropropane	14.7	D	0.65	2.50	ug/L
591-78-6	2-Hexanone	2.90	UD	2.90	12.5	ug/L
124-48-1	Dibromochloromethane	0.65	UD	0.65	2.50	ug/L
106-93-4	1,2-Dibromoethane	0.65	UD	0.65	2.50	ug/L
127-18-4	Tetrachloroethene	0.70	UD	0.70	2.50	ug/L
108-90-7	Chlorobenzene	0.55	UD	0.55	2.50	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	3.80	D	0.65	2.50	ug/L
67-72-1	Hexachloroethane	0.60	UD	0.60	2.50	ug/L
100-41-4	Ethyl Benzene	0.60	UD	0.60	2.50	ug/L
179601-23-1	m/p-Xylenes	1.20	UD	1.20	5.00	ug/L
1330-20-7	Total Xylenes	1.80	UD	1.80	7.50	ug/L
95-47-6	o-Xylene	0.60	UD	0.60	2.50	ug/L
100-42-5	Styrene	0.65	UD	0.65	2.50	ug/L
75-25-2	Bromoform	0.70	UD	0.70	2.50	ug/L
98-82-8	Isopropylbenzene	6.90	D	0.65	2.50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	7.30	D	0.60	2.50	ug/L
96-18-4	1,2,3-Trichloropropane	9.50	D	1.10	2.50	ug/L
108-86-1	Bromobenzene	19.3	D	0.65	2.50	ug/L
103-65-1	n-propylbenzene	9.50	D	0.80	2.50	ug/L

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-UNRVOA-WSDL	SDG No.:	Q1172
Lab Sample ID:	Q1172-08DL	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063266.D	5		02/13/25 16:37	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
95-49-8	2-Chlorotoluene	5.20	D	0.70	2.50	ug/L
108-67-8	1,3,5-Trimethylbenzene	7.10	D	0.65	2.50	ug/L
106-43-4	4-Chlorotoluene	12.1	D	0.70	2.50	ug/L
98-06-6	tert-Butylbenzene	6.40	D	0.55	2.50	ug/L
95-63-6	1,2,4-Trimethylbenzene	16.4	D	0.65	2.50	ug/L
135-98-8	sec-Butylbenzene	22.0	D	0.65	2.50	ug/L
99-87-6	p-Isopropyltoluene	4.00	D	0.80	2.50	ug/L
541-73-1	1,3-Dichlorobenzene	6.00	D	0.65	2.50	ug/L
106-46-7	1,4-Dichlorobenzene	0.70	UD	0.70	2.50	ug/L
104-51-8	n-Butylbenzene	16.7	D	1.40	2.50	ug/L
95-50-1	1,2-Dichlorobenzene	0.70	UD	0.70	2.50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.20	UD	1.20	2.50	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.10	UD	1.10	2.50	ug/L
87-68-3	Hexachlorobutadiene	18.2	D	0.70	2.50	ug/L
91-20-3	Naphthalene	8.50	D	1.60	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	26.7	D	1.30	2.50	ug/L
74-88-4	Iodomethane	0.80	UD	0.80	5.00	ug/L
107-05-1	Allyl Chloride	0.55	UD	0.55	2.50	ug/L
126-98-7	Methacrylonitrile	0.95	UD	0.95	2.50	ug/L
80-62-6	Methyl methacrylate	1.20	UD	1.20	5.00	ug/L
SURROGATES						
2199-69-1	1,2-Dichlorobenzene-d4	1.10		70 - 130	109%	SPK: 1
460-00-4	4-Bromofluorobenzene	1.00		70 - 130	102%	SPK: 1
INTERNAL STANDARDS						
462-06-6	Fluorobenzene	45500	6.103			

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	01/13/25
Project:	NJ Drinking Water PT	Date Received:	01/15/25
Client Sample ID:	PT-UNRVOA-WSDL	SDG No.:	Q1172
Lab Sample ID:	Q1172-08DL	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063266.D	5		02/13/25 16:37	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063266.D
Acq On : 13 Feb 2025 16:37
Operator : MD/SY
Sample : Q1172-08DL 5X
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Quant Time: Feb 14 04:45:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

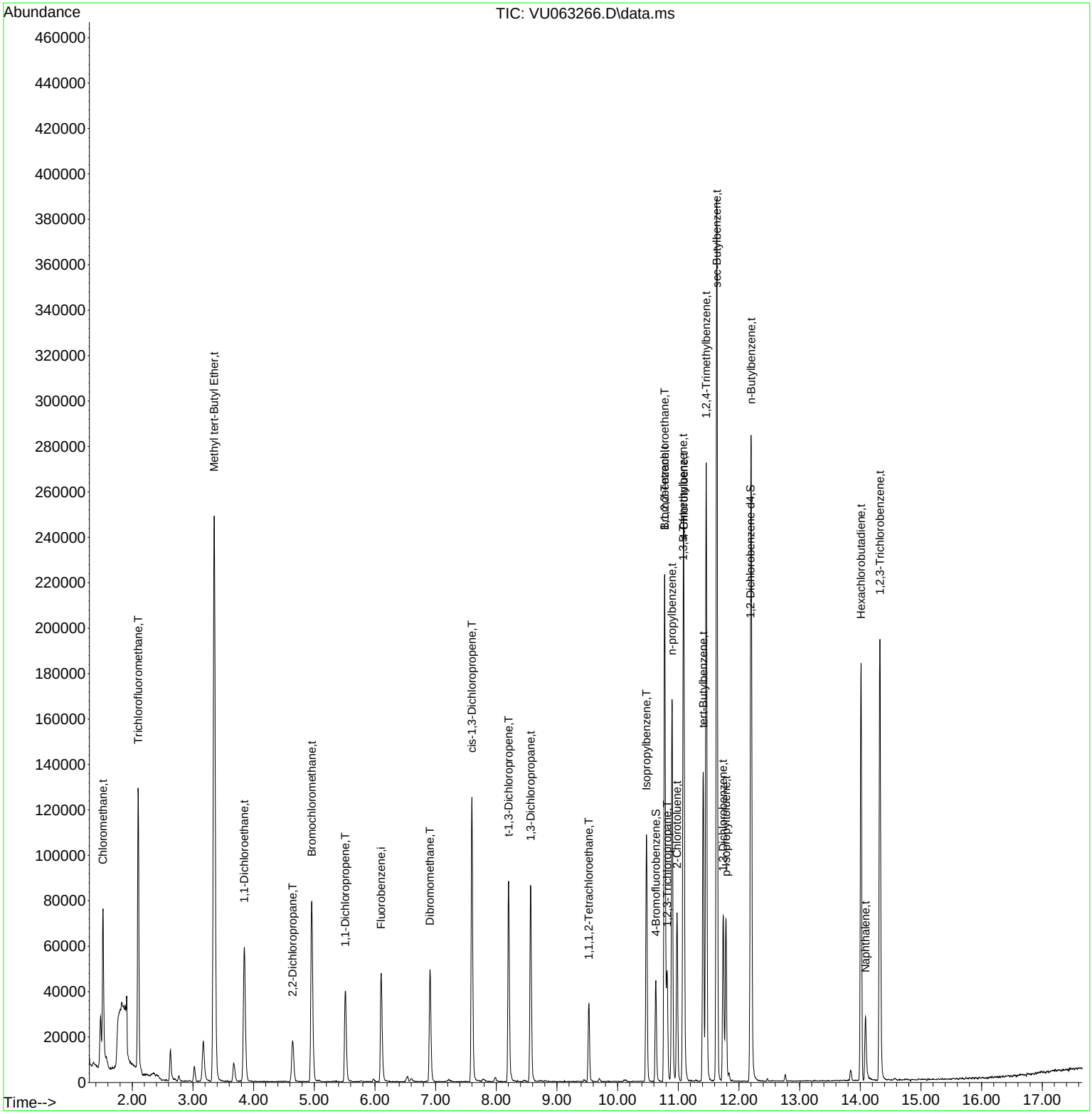
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.103	96	45506	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.630	95	15292	1.019	ug/l	0.00
Spiked Amount 1.000			Recovery = 102.000%			
68) 1,2-Dichlorobenzene-d4	12.190	152	16940	1.085	ug/l	0.00
Spiked Amount 1.000			Recovery = 109.000%			
Target Compounds						Qvalue
3) Chloromethane	1.518	50	53909	3.166	ug/l	98
7) Trichlorofluoromethane	2.097	101	80035	4.009	ug/l	100
17) 1,1-Dichloroethane	3.846	63	68684	2.765	ug/l	99
21) 2,2-Dichloropropane	4.644	77	13370	0.690	ug/l	91
25) Methyl tert-Butyl Ether	3.351	73	272906	9.465	ug/l	99
26) Bromochloromethane	4.959	128	25269	4.061	ug/l	99
29) 1,1-Dichloropropene	5.512	75	23615	1.299	ug/l	99
43) Dibromomethane	6.907	93	20459	2.761	ug/l	100
50) t-1,3-Dichloropropene	8.203	75	49437	3.131	ug/l	97
51) cis-1,3-Dichloropropene	7.598	75	74724	3.831	ug/l	100
53) 1,3-Dichloropropane	8.566	76	52000	2.931	ug/l	99
60) 1,1,1,2-Tetrachloroethane	9.528	131	9339	0.766	ug/l	97
69) Isopropylbenzene	10.476	105	68948	1.370	ug/l	98
70) 1,1,2,2-Tetrachloroethane	10.775	83	19521	1.450	ug/l #	94
71) 1,2,3-Trichloropropane	10.817	75	19186	1.896	ug/l #	95
72) Bromobenzene	10.775	156	52410	3.866	ug/l	94
73) n-propylbenzene	10.897	120	27477	1.908	ug/l	97
74) 2-Chlorotoluene	10.981	126	13781	1.038	ug/l	100
75) 1,3,5-Trimethylbenzene	11.081	105	65754	1.411	ug/l	99
76) 4-Chlorotoluene	11.093	126	32946	2.420	ug/l	88
77) tert-Butylbenzene	11.412	119	60529	1.284	ug/l	89
78) 1,2,4-Trimethylbenzene	11.460	105	152063	3.288	ug/l	99
79) sec-Butylbenzene	11.634	105	263980	4.398	ug/l	99
81) p-Isopropyltoluene	11.788	119	38267	0.808	ug/l	99
82) 1,3-Dichlorobenzene	11.740	146	31484	1.197	ug/l	99
84) n-Butylbenzene	12.203	91	141973	3.342	ug/l	98
88) Hexachlorobutadiene	14.013	225	32095	3.644	ug/l	99
89) Naphthalene	14.087	128	28867	1.705	ug/l	98
90) 1,2,3-Trichlorobenzene	14.325	180	64499	5.349	ug/l	98

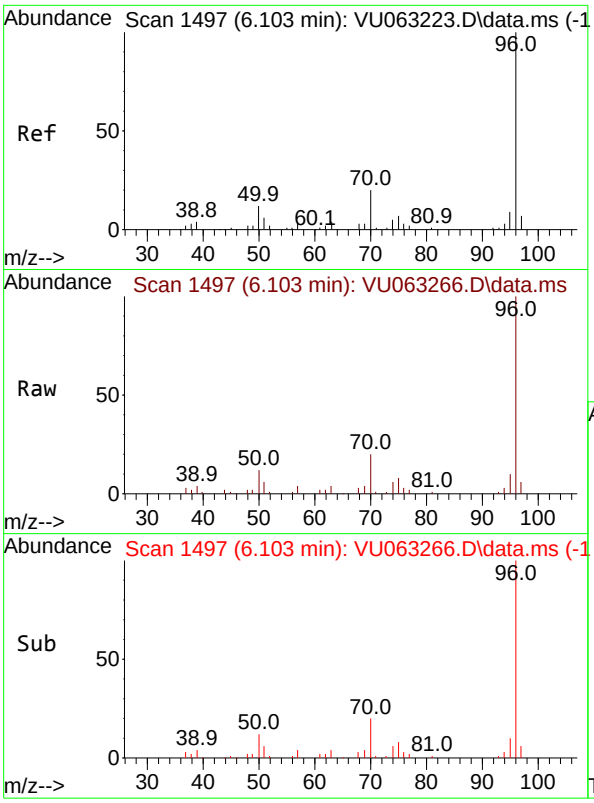
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063266.D
Acq On : 13 Feb 2025 16:37
Operator : MD/SY
Sample : Q1172-08DL 5X
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Quant Time: Feb 14 04:45:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration



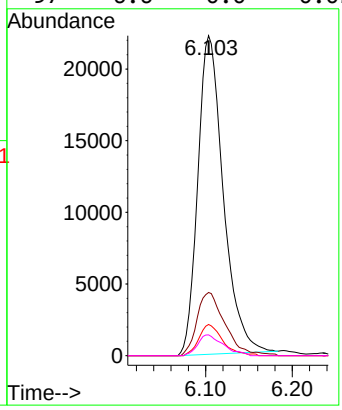


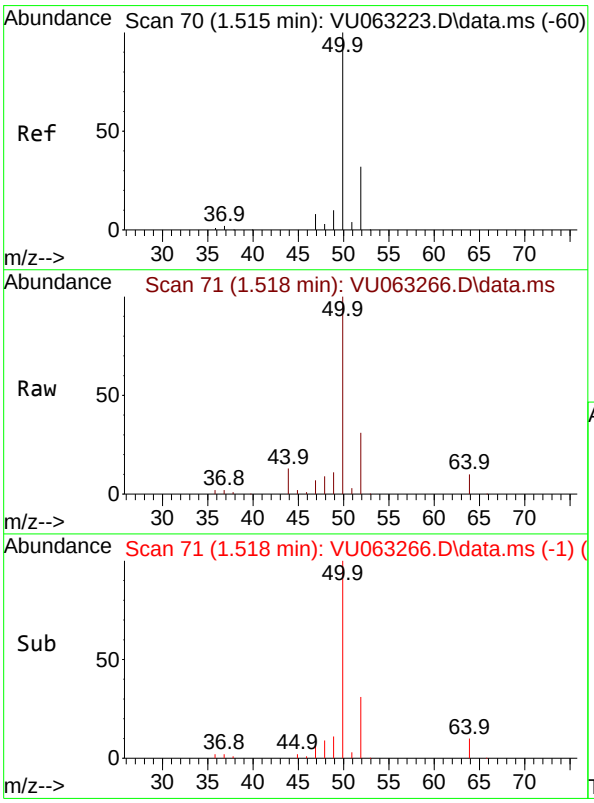
#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.103 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion: 96 Resp: 45506

Ion	Ratio	Lower	Upper
96	100		
70	21.8	15.6	23.4
95	9.1	7.3	10.9
97	6.6	0.0	0.0#

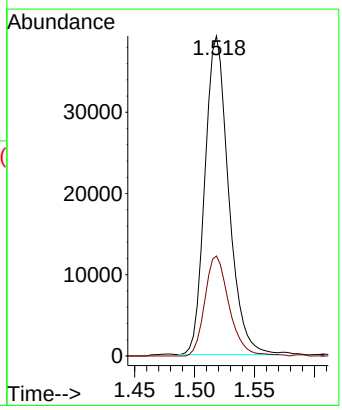


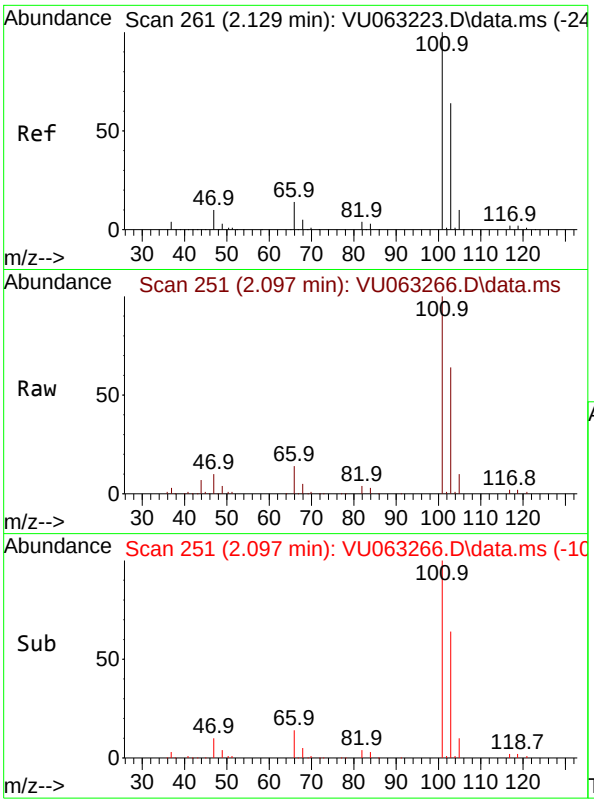


#3
Chloromethane
Concen: 3.166 ug/l
RT: 1.518 min Scan# 71
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion: 50 Resp: 53909

Ion	Ratio	Lower	Upper
50	100		
52	31.4	25.8	38.8



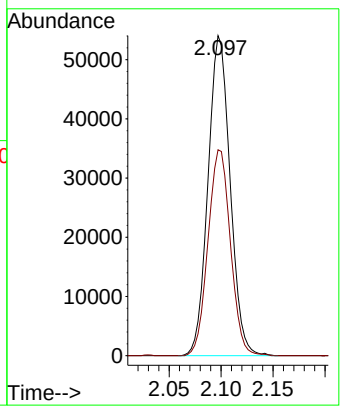


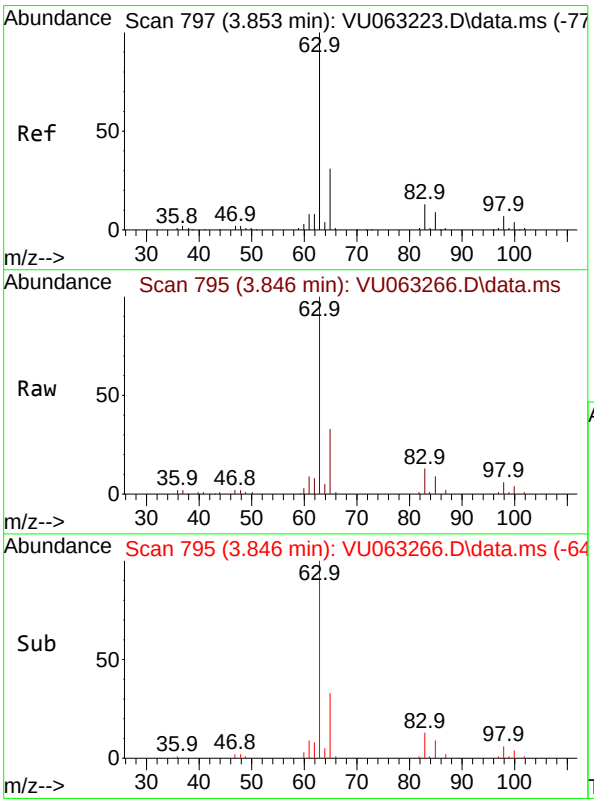
#7
Trichlorofluoromethane
Concen: 4.009 ug/l
RT: 2.097 min Scan# 2
Delta R.T. -0.032 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:101 Resp: 80035

Ion	Ratio	Lower	Upper
101	100		
103	64.3	51.4	77.2

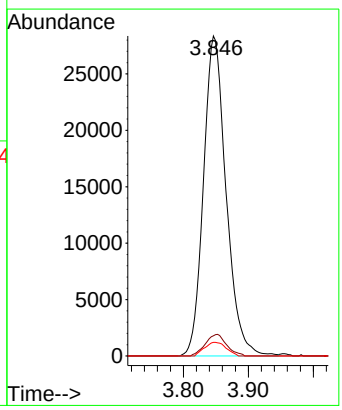


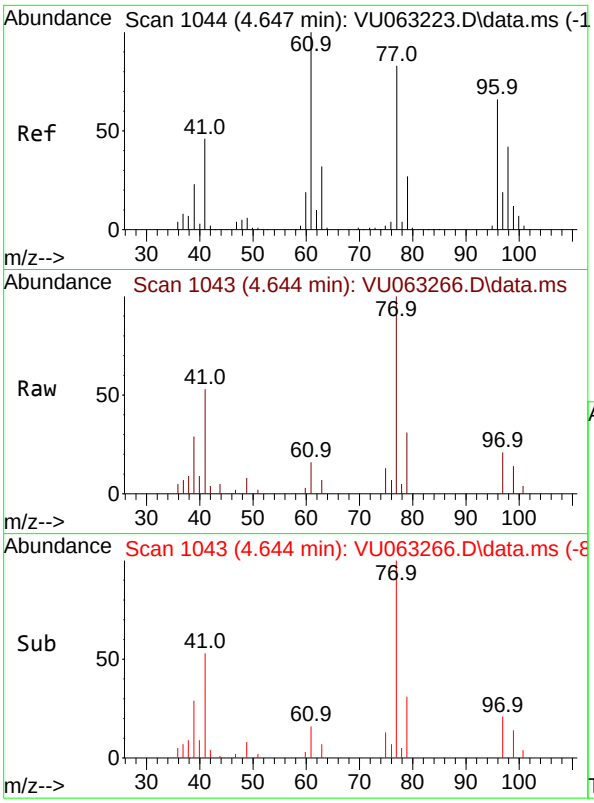


#17
1,1-Dichloroethane
Concen: 2.765 ug/l
RT: 3.846 min Scan# 795
Delta R.T. -0.007 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion: 63 Resp: 68684

Ion	Ratio	Lower	Upper
63	100		
98	6.3	3.3	9.9
100	4.2	2.1	6.2



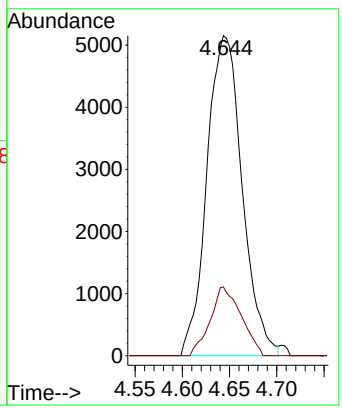


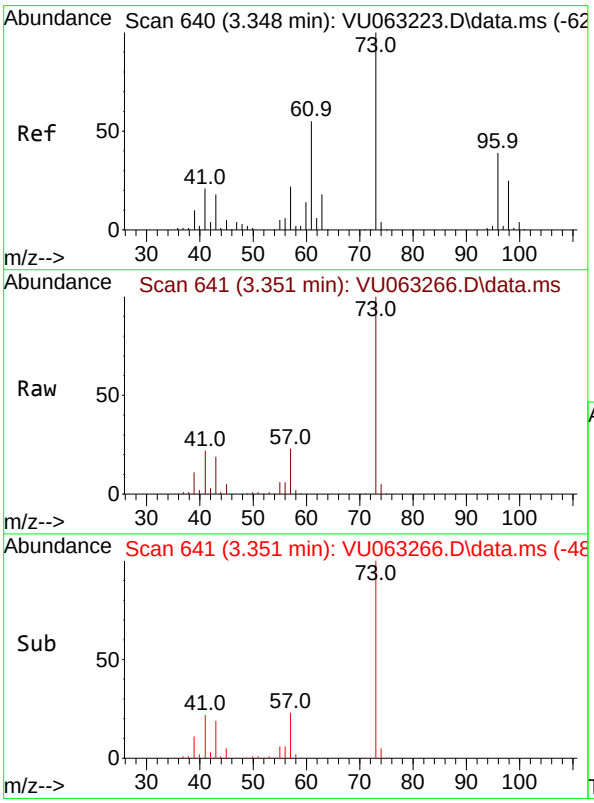
#21
2,2-Dichloropropane
Concen: 0.690 ug/l
RT: 4.644 min Scan# 1
Delta R.T. -0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion: 77 Resp: 13370

Ion	Ratio	Lower	Upper
77	100		
97	18.8	18.5	27.7

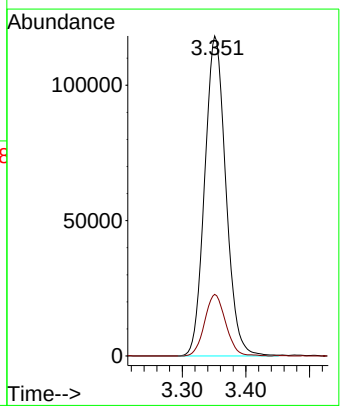


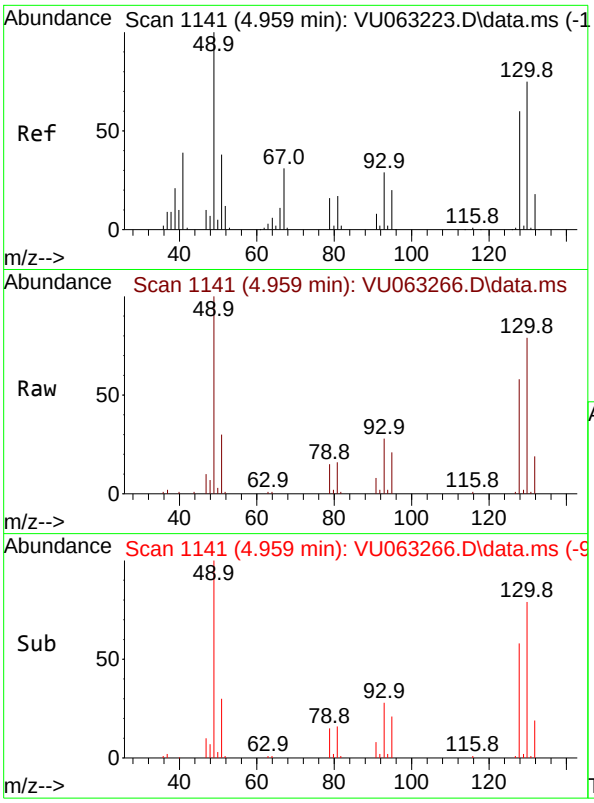


#25
Methyl tert-Butyl Ether
Concen: 9.465 ug/l
RT: 3.351 min Scan# 641
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion: 73 Resp: 272906

Ion	Ratio	Lower	Upper
73	100		
43	19.2	14.9	22.3



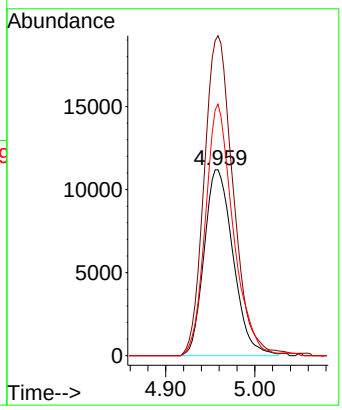


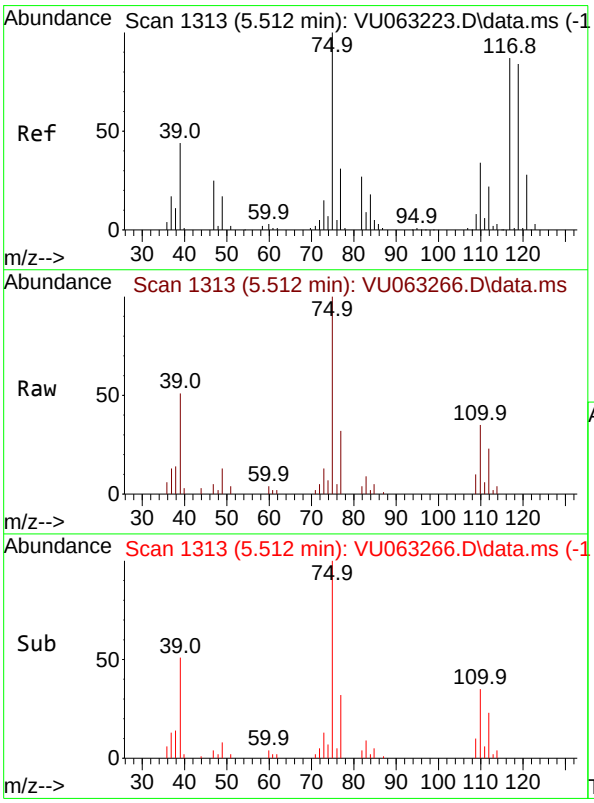
#26
Bromochloromethane
Concen: 4.061 ug/l
RT: 4.959 min Scan# 11
Delta R.T. -0.000 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:128 Resp: 25269

Ion	Ratio	Lower	Upper
128	100		
49	172.5	0.0	343.4
130	129.6	102.9	154.3

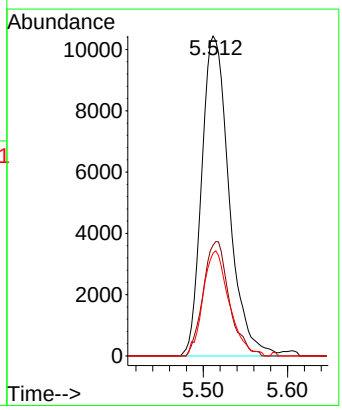


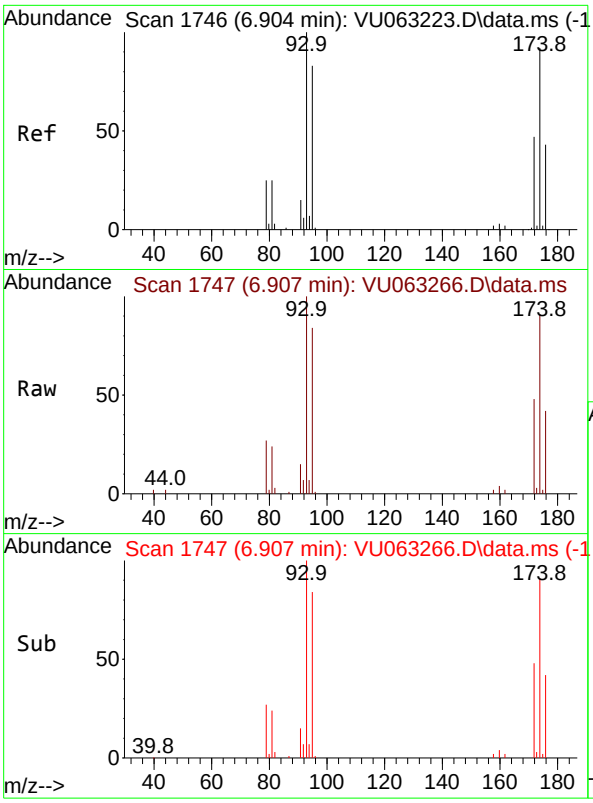


#29
1,1-Dichloropropene
Concen: 1.299 ug/l
RT: 5.512 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion: 75 Resp: 23615

Ion	Ratio	Lower	Upper
75	100		
110	34.0	17.2	51.5
77	31.4	24.6	37.0



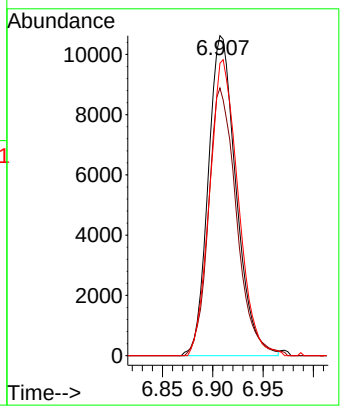


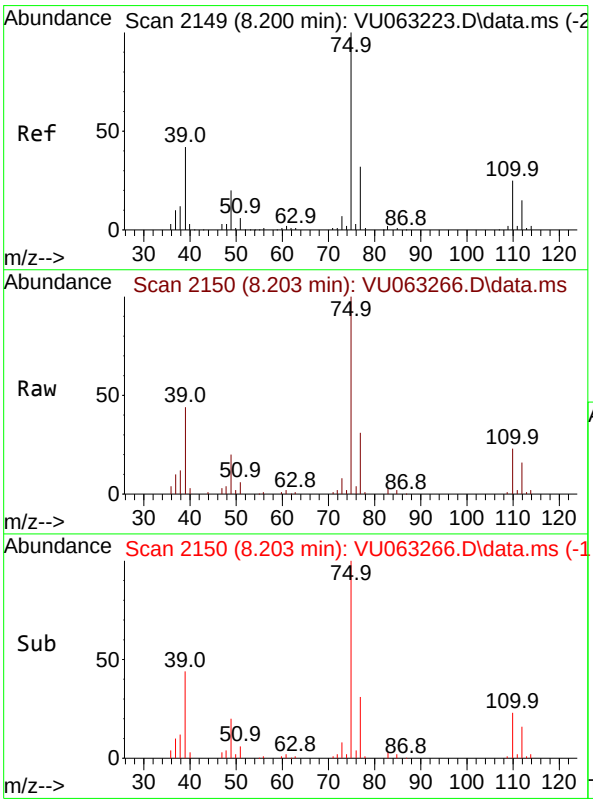
#43
Dibromomethane
Concen: 2.761 ug/l
RT: 6.907 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion: 93 Resp: 20459

Ion	Ratio	Lower	Upper
93	100		
95	84.0	67.2	100.8
174	94.7	75.7	113.5

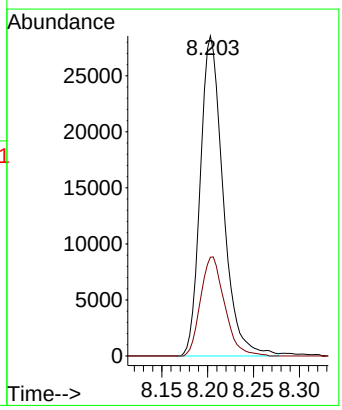


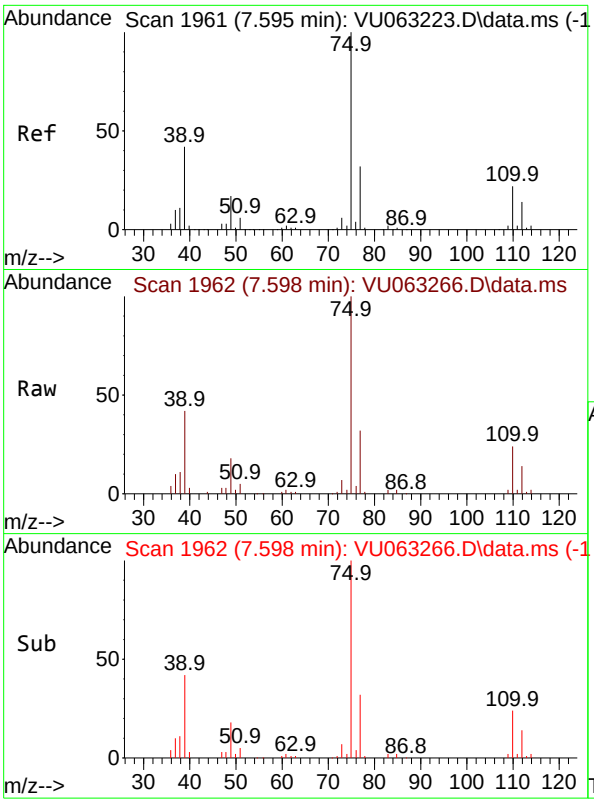


#50
t-1,3-Dichloropropene
Concen: 3.131 ug/l
RT: 8.203 min Scan# 2150
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion: 75 Resp: 49437

Ion	Ratio	Lower	Upper
75	100		
77	30.9	25.9	38.9



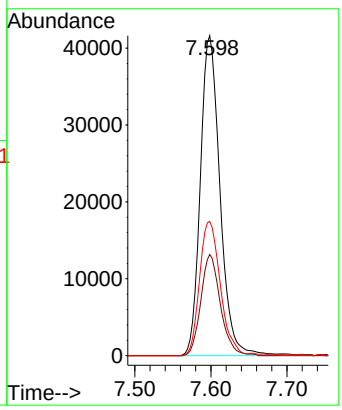


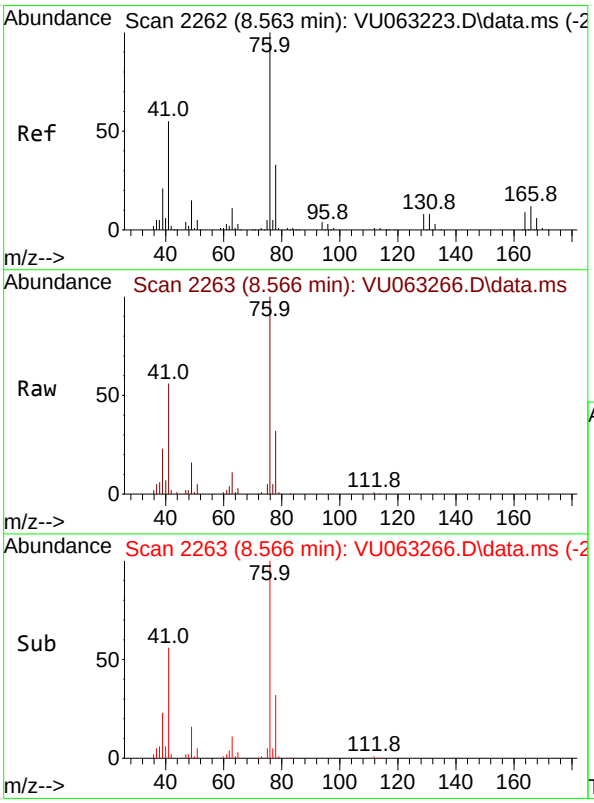
#51
cis-1,3-Dichloropropene
Concen: 3.831 ug/l
RT: 7.598 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion: 75 Resp: 74724

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.3	37.9
39	42.0	33.5	50.3

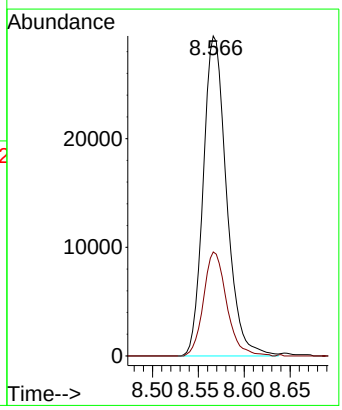


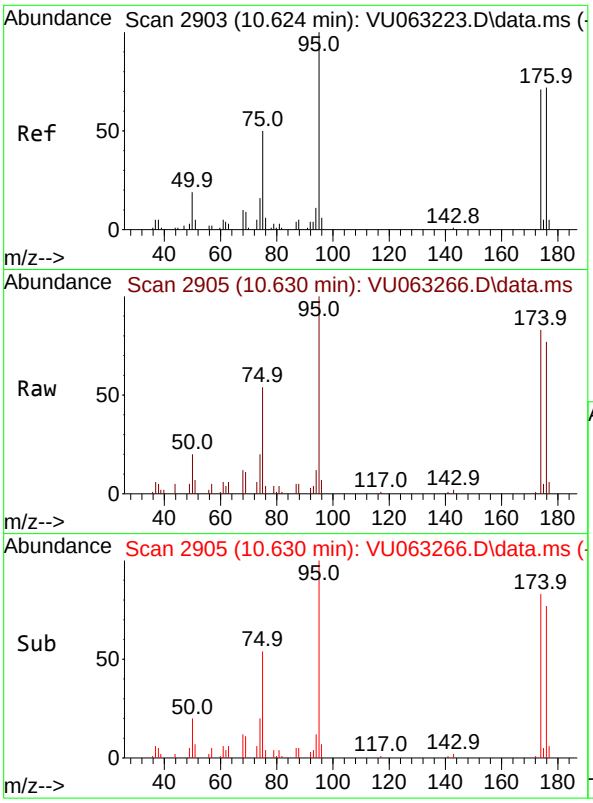


#53
1,3-Dichloropropane
Concen: 2.931 ug/l
RT: 8.566 min Scan# 2263
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion: 76 Resp: 52000

Ion	Ratio	Lower	Upper
76	100		
78	32.3	26.3	39.5



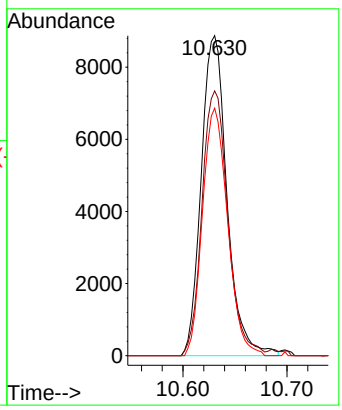


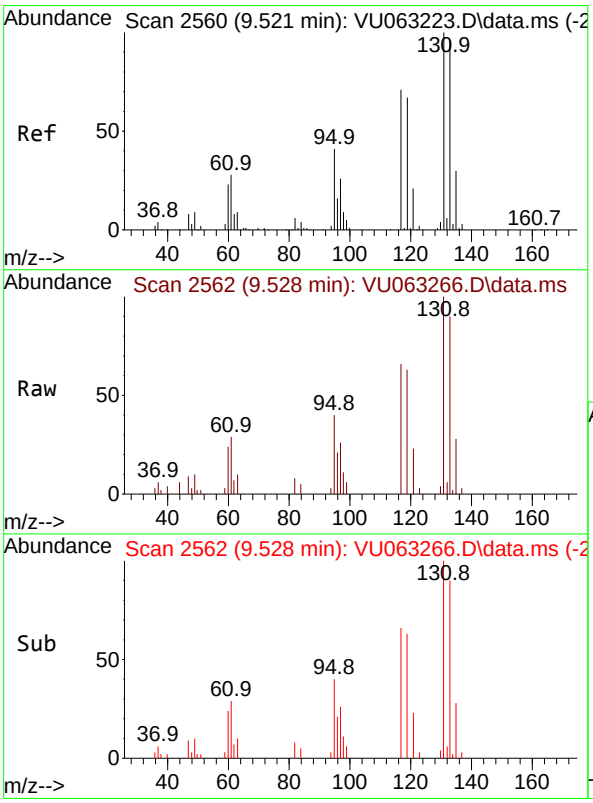
#57
4-Bromofluorobenzene
Concen: 1.019 ug/l
RT: 10.630 min Scan# 2
Delta R.T. 0.006 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion: 95 Resp: 15292

Ion	Ratio	Lower	Upper
95	100		
174	83.1	58.6	88.0
176	75.6	58.2	87.4

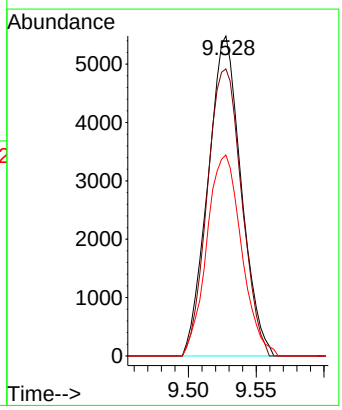


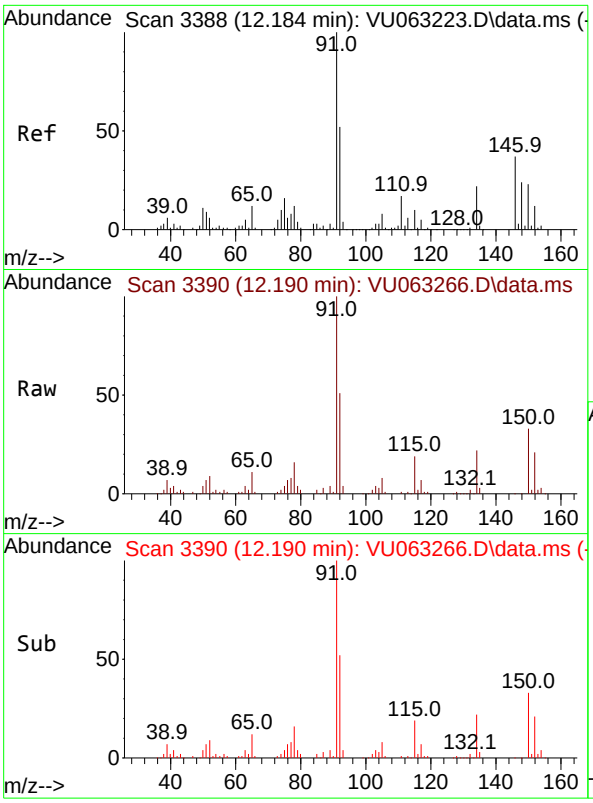


#60
1,1,1,2-Tetrachloroethane
Concen: 0.766 ug/l
RT: 9.528 min Scan# 2562
Delta R.T. 0.006 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:131 Resp: 9339

Ion	Ratio	Lower	Upper
131	100		
133	92.9	76.7	115.1
119	65.7	54.4	81.6



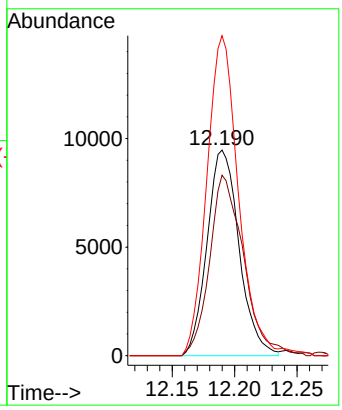


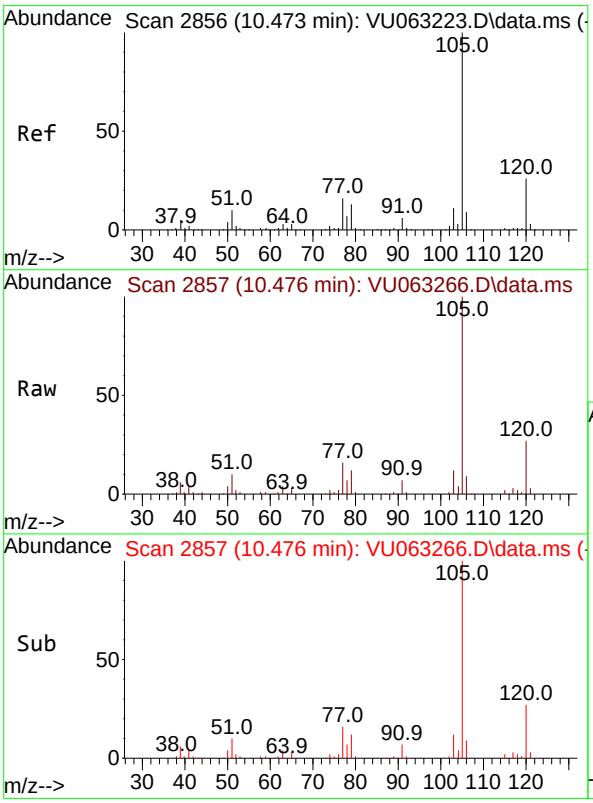
#68
1,2-Dichlorobenzene-d4
Concen: 1.085 ug/l
RT: 12.190 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:152 Resp: 16940

Ion	Ratio	Lower	Upper
152	100		
115	93.1	0.0	275.2
150	154.6	0.0	658.4

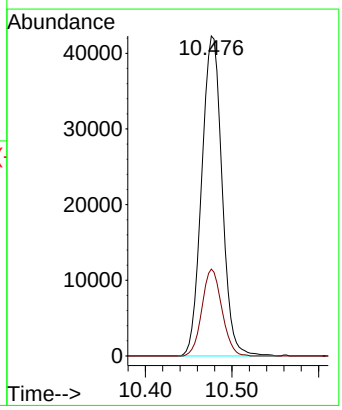


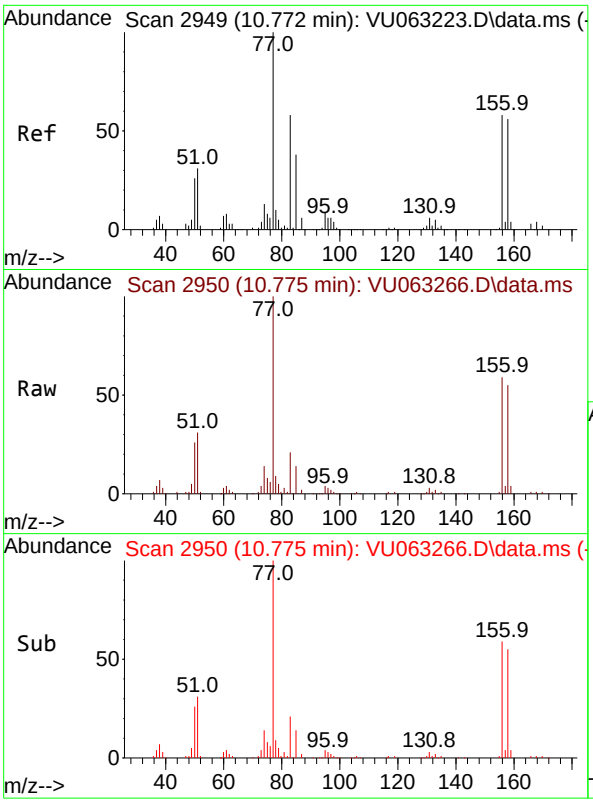


#69
Isopropylbenzene
Concen: 1.370 ug/l
RT: 10.476 min Scan# 2857
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:105 Resp: 68948

Ion	Ratio	Lower	Upper
105	100		
120	26.5	12.8	38.4



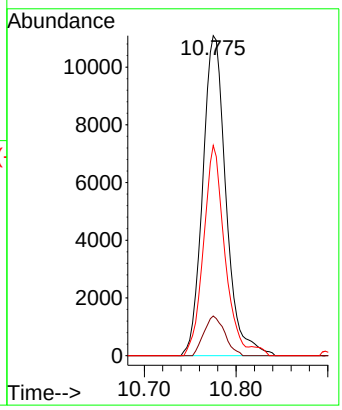


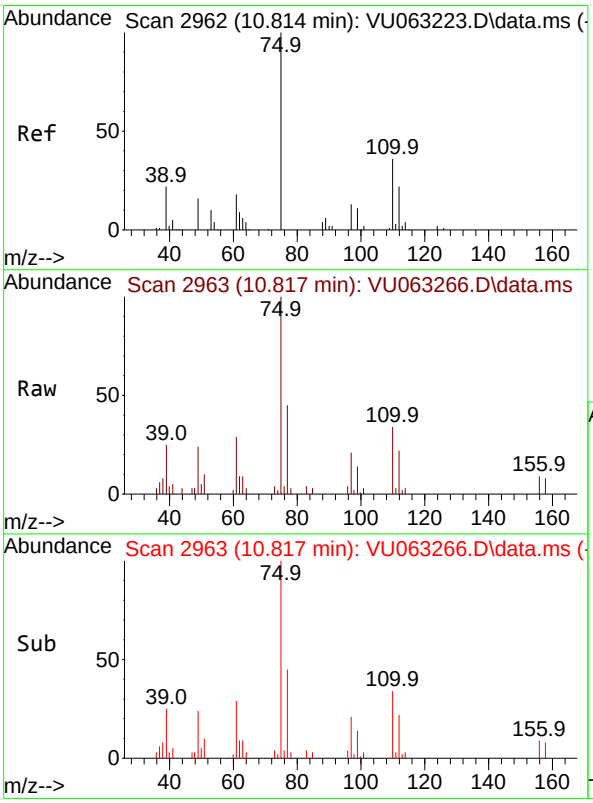
#70
1,1,2,2-Tetrachloroethane
Concen: 1.450 ug/l
RT: 10.775 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion: 83 Resp: 19521

Ion	Ratio	Lower	Upper
83	100		
131	11.1	7.4	11.0#
85	59.6	51.8	77.8

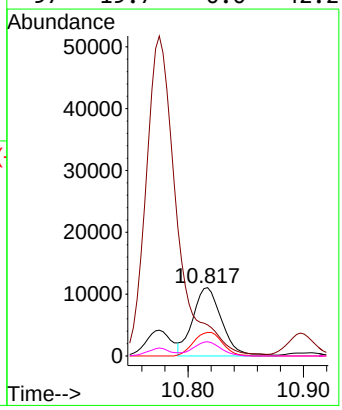


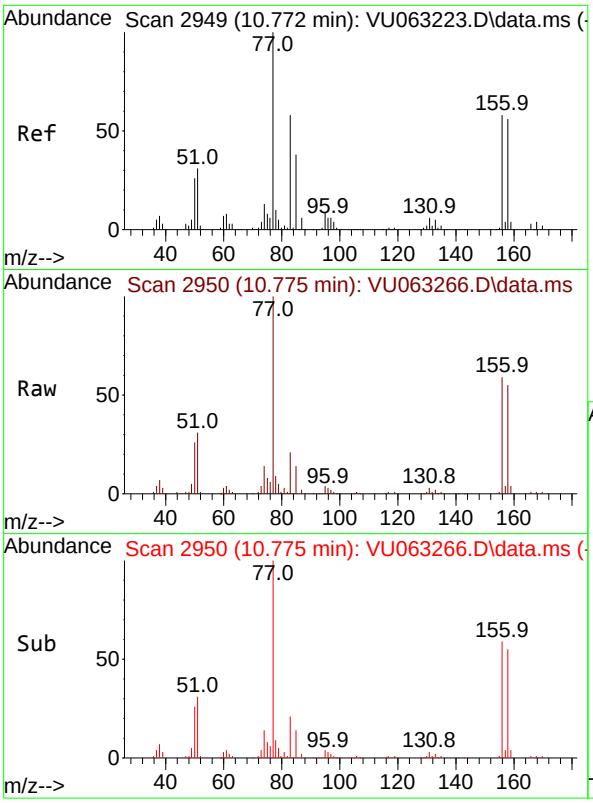


#71
1,2,3-Trichloropropane
Concen: 1.896 ug/l
RT: 10.817 min Scan# 2963
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion: 75 Resp: 19186

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	34.5	0.0	77.0
97	19.7	0.0	42.2



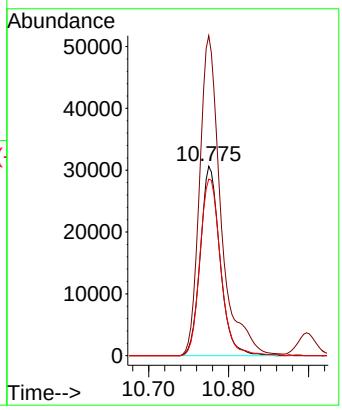


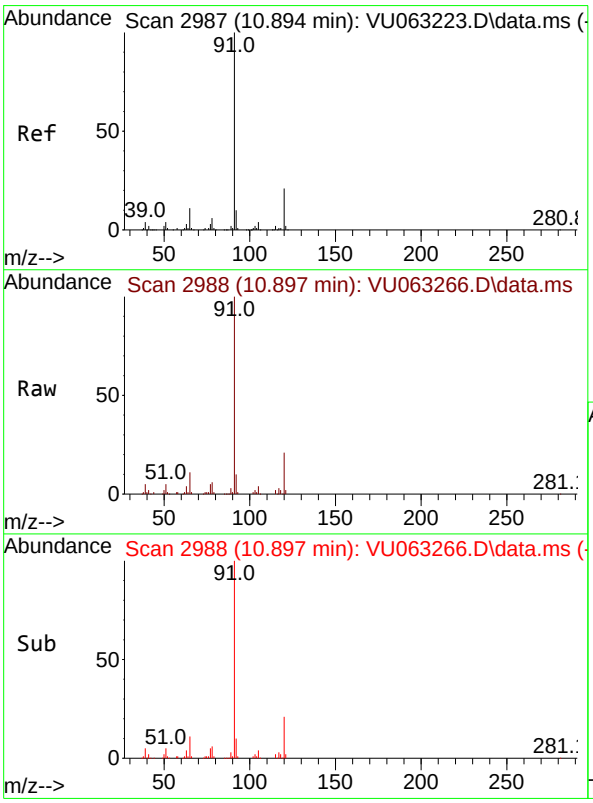
#72
Bromobenzene
Concen: 3.866 ug/l
RT: 10.775 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:156 Resp: 52410

Ion	Ratio	Lower	Upper
156	100		
77	183.0	0.0	343.6
158	98.0	0.0	193.0

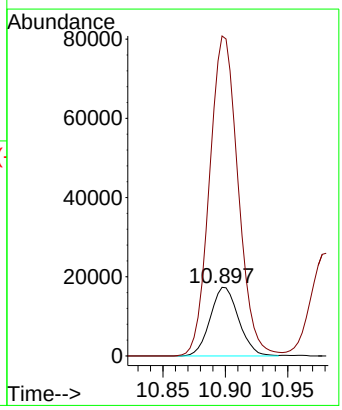


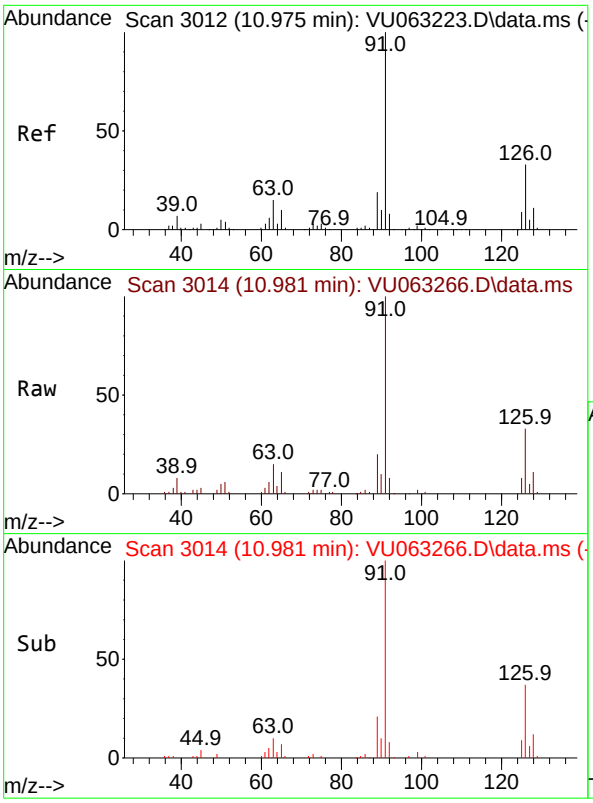


#73
n-propylbenzene
Concen: 1.908 ug/l
RT: 10.897 min Scan# 2988
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:120 Resp: 27477

Ion	Ratio	Lower	Upper
120	100		
91	470.3	369.8	554.6



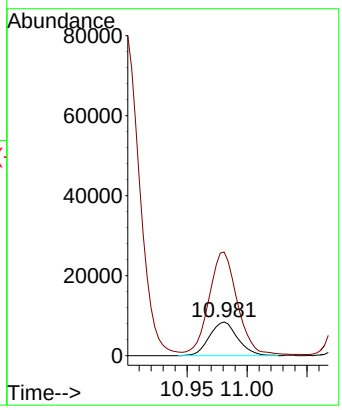


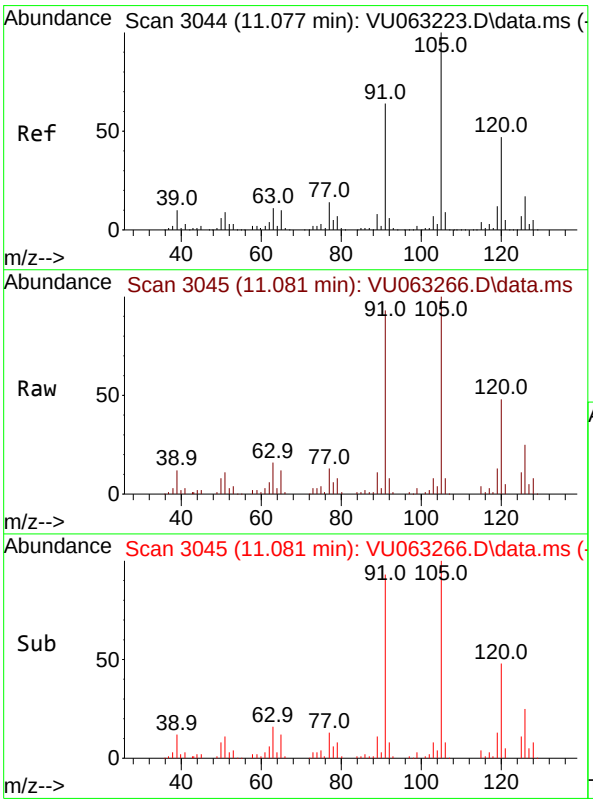
#74
2-Chlorotoluene
Concen: 1.038 ug/l
RT: 10.981 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:126 Resp: 13781

Ion	Ratio	Lower	Upper
126	100		
91	311.5	0.0	623.8

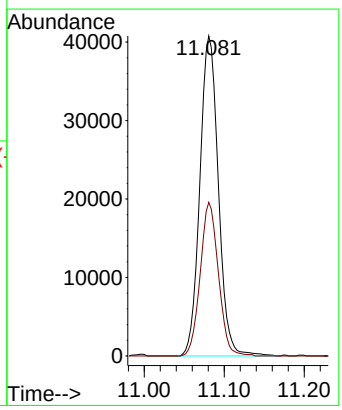


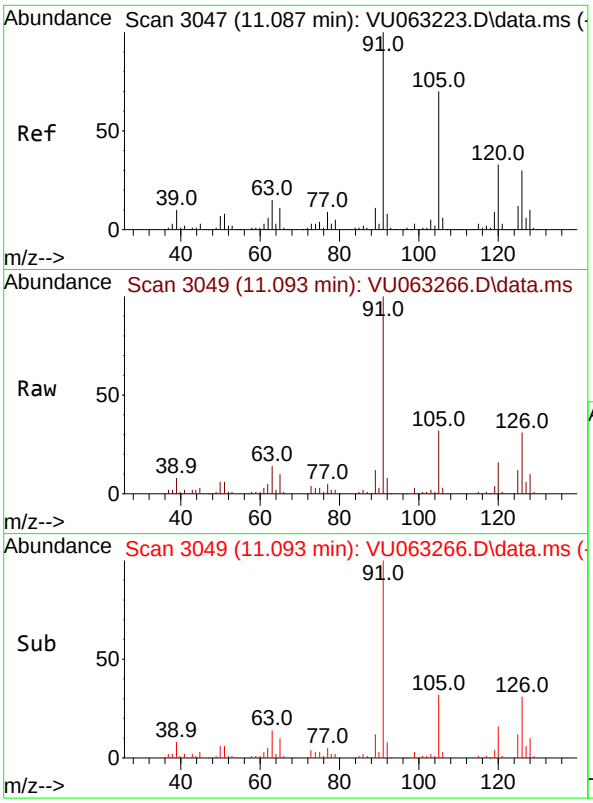


#75
1,3,5-Trimethylbenzene
Concen: 1.411 ug/l
RT: 11.081 min Scan# 3045
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:105 Resp: 65754

Ion	Ratio	Lower	Upper
105	100		
120	47.1	37.3	55.9



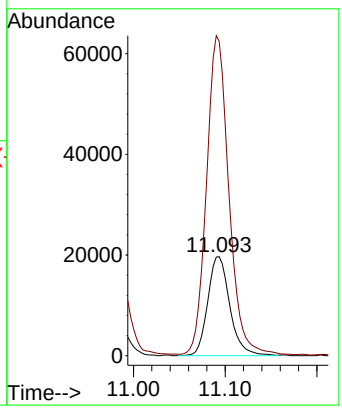


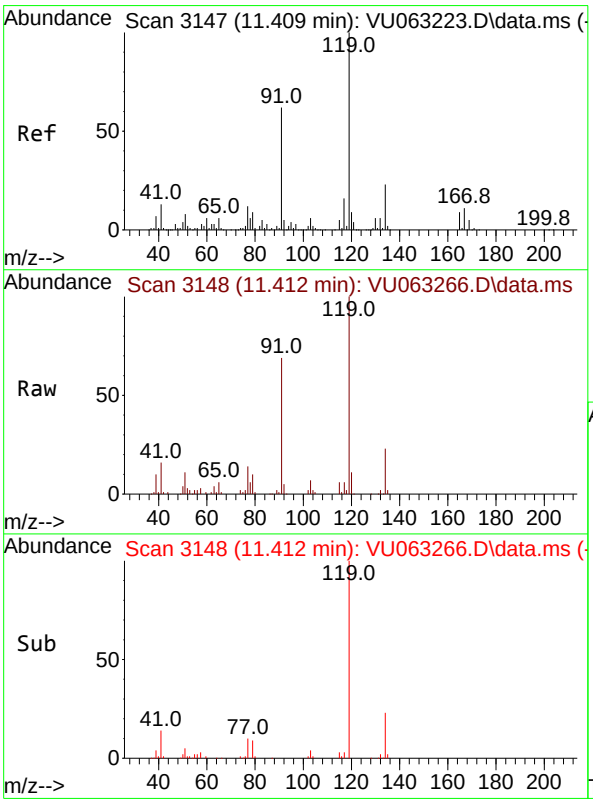
#76
4-Chlorotoluene
Concen: 2.420 ug/l
RT: 11.093 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:126 Resp: 32946

Ion	Ratio	Lower	Upper
126	100		
91	326.0	0.0	703.6

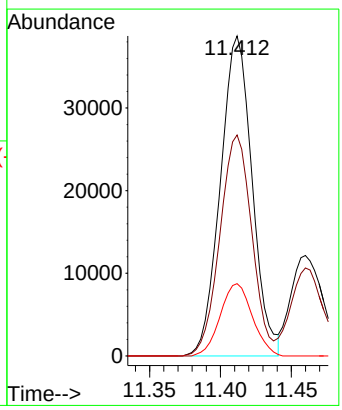


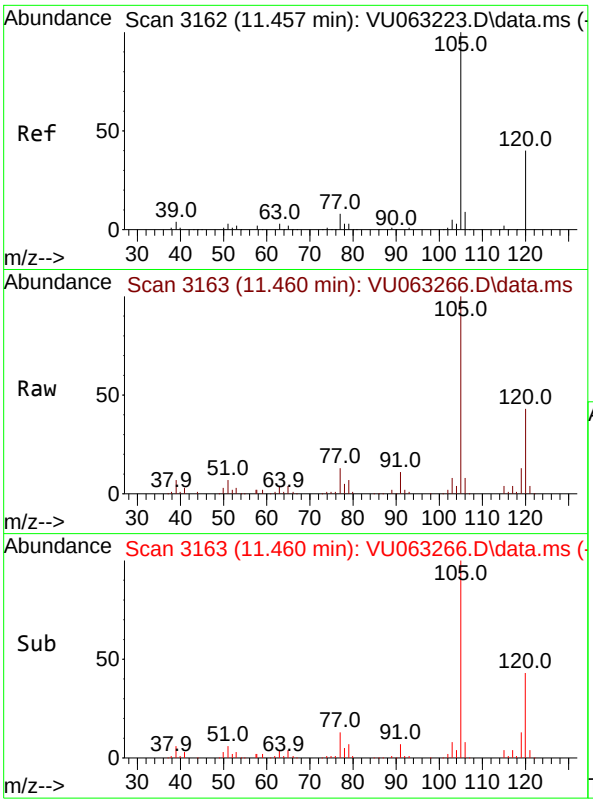


#77
tert-Butylbenzene
Concen: 1.284 ug/l
RT: 11.412 min Scan# 3148
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:119 Resp: 60529

Ion	Ratio	Lower	Upper
119	100		
91	69.3	29.4	88.3
134	22.8	17.6	26.4



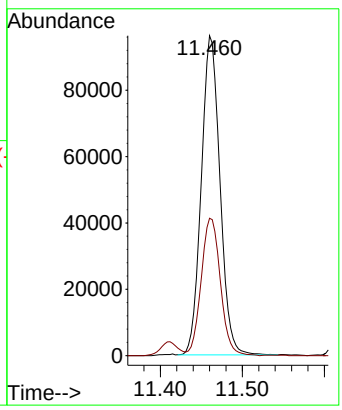


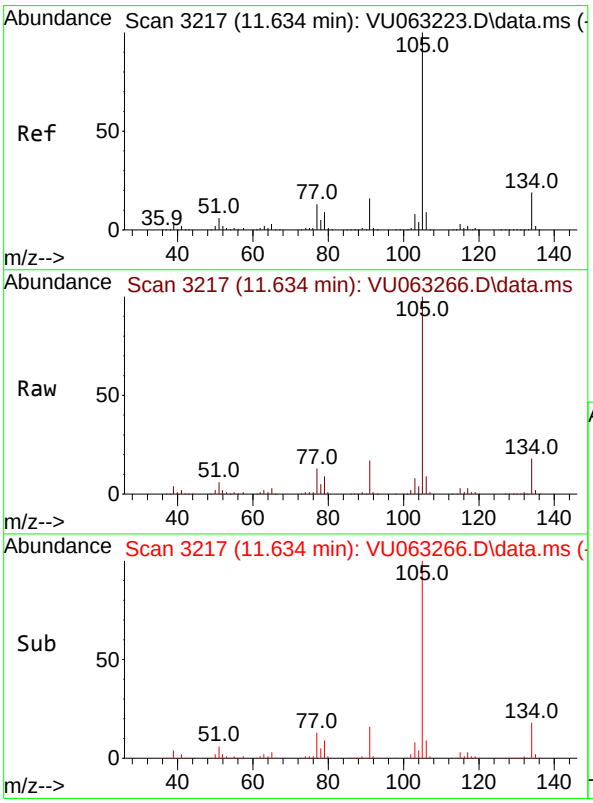
#78
1,2,4-Trimethylbenzene
Concen: 3.288 ug/l
RT: 11.460 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:105 Resp: 152063

Ion	Ratio	Lower	Upper
105	100		
120	44.3	21.9	65.7

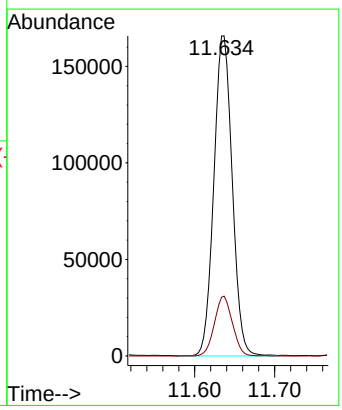


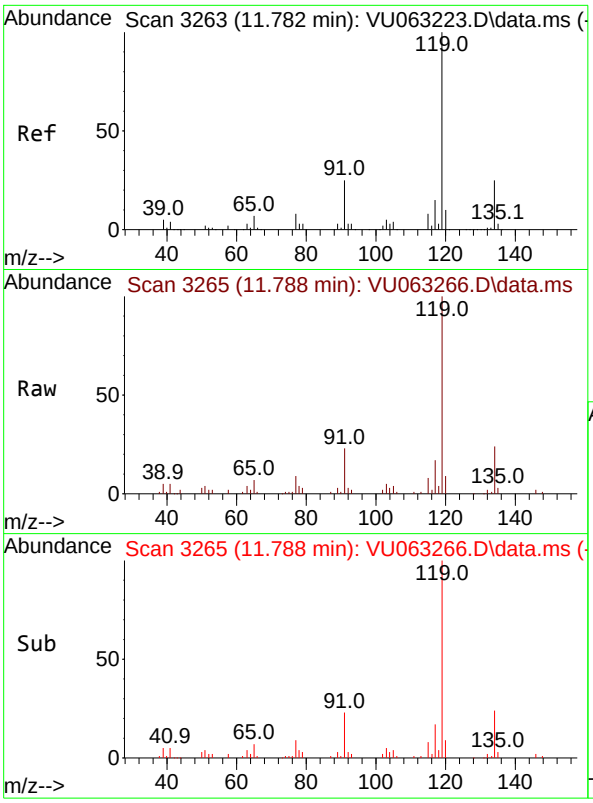


#79
sec-Butylbenzene
Concen: 4.398 ug/l
RT: 11.634 min Scan# 3217
Delta R.T. -0.000 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:105 Resp: 263980

Ion	Ratio	Lower	Upper
105	100		
134	18.2	15.1	22.7



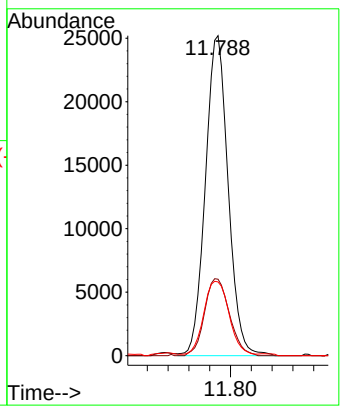


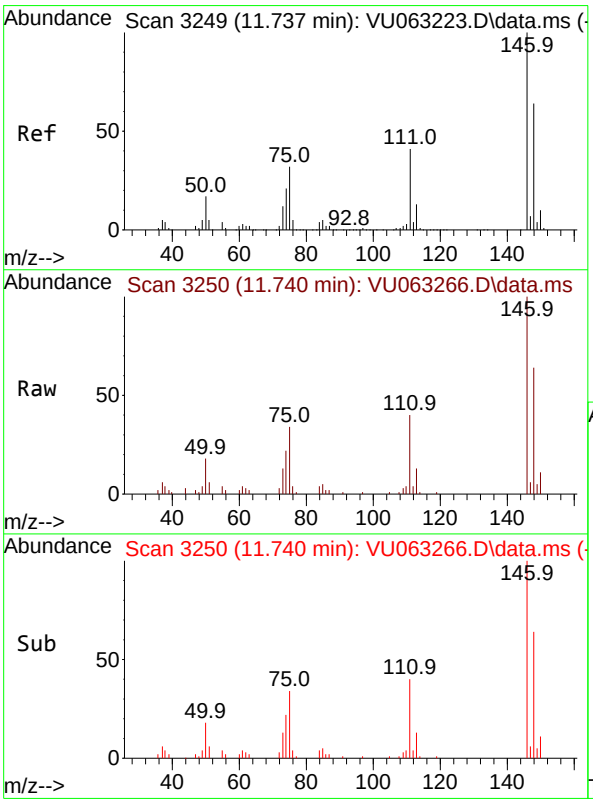
#81
p-Isopropyltoluene
Concen: 0.808 ug/l
RT: 11.788 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:119 Resp: 38267

Ion	Ratio	Lower	Upper
119	100		
134	26.3	20.3	30.5
91	24.8	19.4	29.2

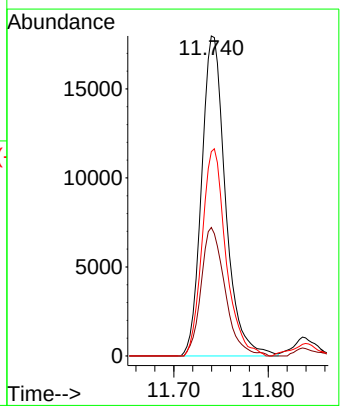


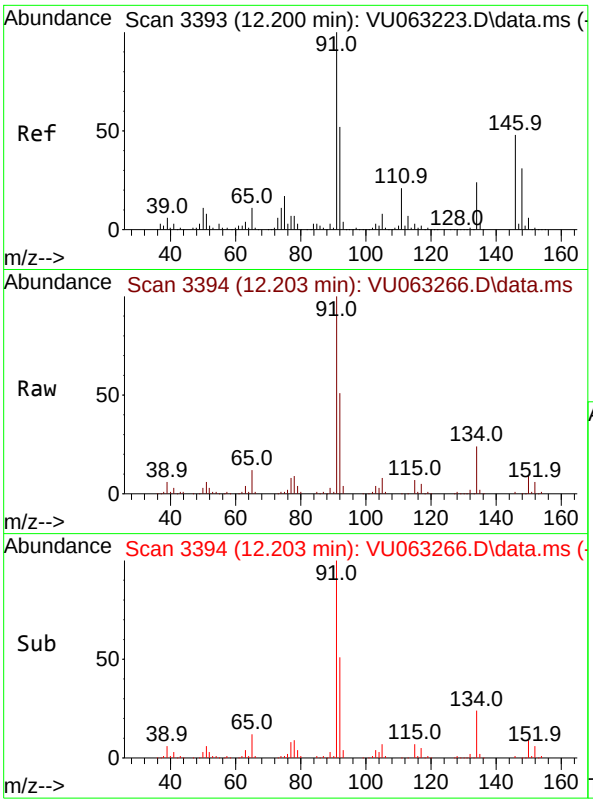


#82
1,3-Dichlorobenzene
Concen: 1.197 ug/l
RT: 11.740 min Scan# 3250
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:146 Resp: 31484

Ion	Ratio	Lower	Upper
146	100		
111	40.4	32.8	49.2
148	64.6	51.1	76.7



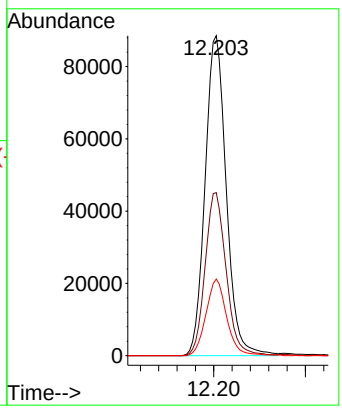


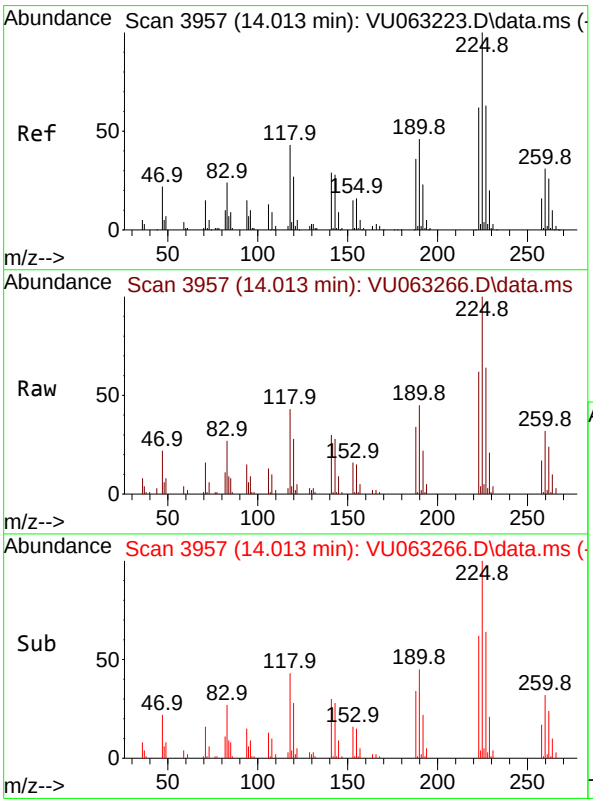
#84
n-Butylbenzene
Concen: 3.342 ug/l
RT: 12.203 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion: 91 Resp: 141973

Ion	Ratio	Lower	Upper
91	100		
92	50.6	41.8	62.8
134	23.5	18.6	28.0

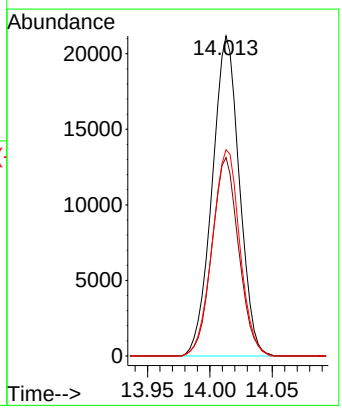


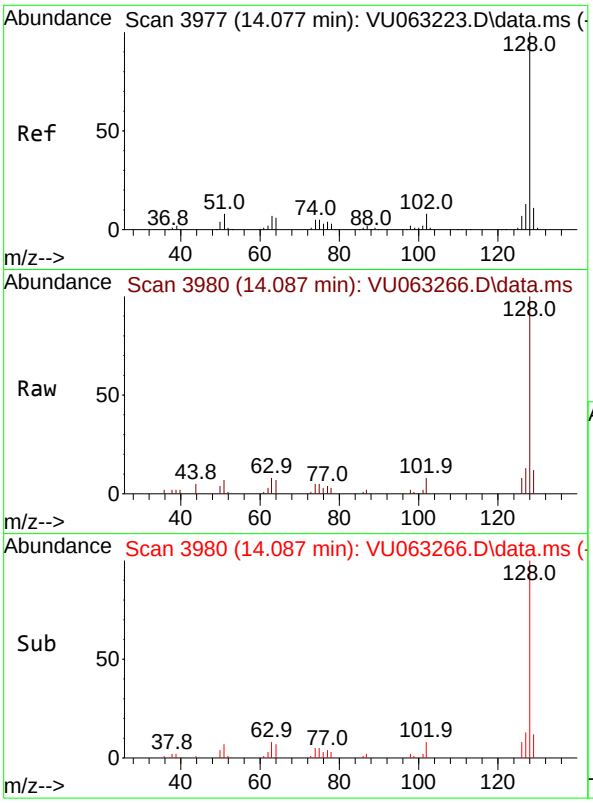


#88
Hexachlorobutadiene
Concen: 3.644 ug/l
RT: 14.013 min Scan# 3957
Delta R.T. -0.000 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:225 Resp: 32095

Ion	Ratio	Lower	Upper
225	100		
223	61.4	49.5	74.3
227	65.4	51.0	76.4



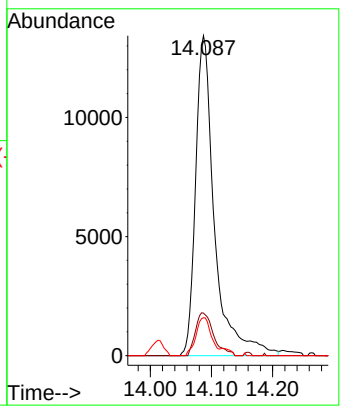


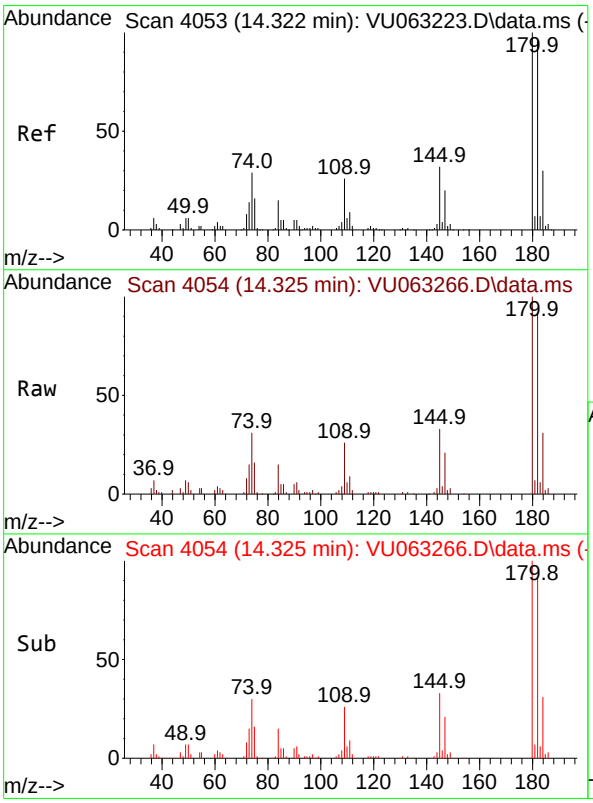
#89
Naphthalene
Concen: 1.705 ug/l
RT: 14.087 min Scan# 3
Delta R.T. 0.010 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion:128 Resp: 28867

Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.6	16.0
129	9.6	8.6	13.0

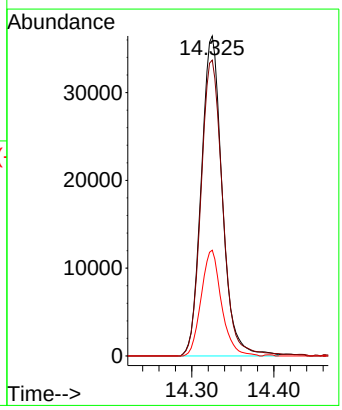




#90
1,2,3-Trichlorobenzene
Concen: 5.349 ug/l
RT: 14.325 min Scan# 4054
Delta R.T. 0.003 min
Lab File: VU063266.D
Acq: 13 Feb 2025 16:37

Tgt Ion:180 Resp: 64499

Ion	Ratio	Lower	Upper
180	100		
182	95.8	78.2	117.2
145	32.1	26.1	39.1



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: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Calibration Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF0.5 = VU063219.D RRF001 = VU063220.D RRF002 = VU063221.D
RRF005 = VU063222.D RRF010 = VU063223.D RRF015 = VU063224.D

COMPOUND	RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.326	0.362	0.329	0.325	0.305	0.302	0.325	6.7
Chloromethane	0.390	0.400	0.389	0.368	0.352	0.344	0.374	6.1
Vinyl Chloride	0.364	0.390	0.367	0.376	0.366	0.357	0.370	3.1
Bromomethane	0.198	0.201	0.125	0.189	0.191		0.181	17.6
Chloroethane	0.245	0.259	0.233	0.223	0.222	0.216	0.233	7.1
Tetrahydrofuran	0.046	0.046	0.049	0.044	0.051	0.046	0.047	5.9
Trichlorofluoromethane	0.426	0.473	0.452	0.443	0.423	0.416	0.439	4.8
1,1,2-Trichloro-1,2,2-trifluoroeth	0.259	0.272	0.253	0.250	0.231	0.230	0.249	6.5
tert-Butyl Alcohol		0.039	0.027	0.022	0.024	0.021	0.026	27
Diethyl Ether	0.223	0.231	0.215	0.218	0.216	0.203	0.218	4.2
1,1-Dichloroethene	0.256	0.274	0.253	0.250	0.248	0.241	0.254	4.3
Acrylonitrile	0.051	0.056	0.059	0.060	0.065	0.059	0.059	7.6
Acetone	0.050	0.047	0.044	0.042	0.047	0.040	0.045	8.4
Carbon Disulfide	0.944	0.945	0.880	0.869	0.861	0.822	0.887	5.5
Methyl tert-Butyl Ether	0.582	0.652	0.618	0.642	0.673	0.635	0.634	4.9
Methyl acrylate	0.118	0.146	0.150	0.157	0.165	0.153	0.148	10.9
Methylene Chloride	0.332	0.333	0.313	0.309	0.304	0.289	0.313	5.4
trans-1,2-Dichloroethene	0.292	0.305	0.287	0.288	0.287	0.279	0.290	3
1,1-Dichloroethane	0.523	0.592	0.552	0.549	0.538	0.520	0.546	4.8
Cyclohexane	0.415	0.423	0.423	0.457	0.453	0.460	0.439	4.6
2-Butanone	0.071	0.072	0.067	0.071	0.079	0.070	0.072	5.3
Carbon Tetrachloride	0.371	0.417	0.379	0.383	0.378	0.369	0.383	4.6
2,2-Dichloropropane	0.434	0.463	0.413	0.421	0.418	0.407	0.426	4.7
cis-1,2-Dichloroethene	0.297	0.332	0.306	0.316	0.316	0.310	0.313	3.7
Bromochloromethane	0.133	0.150	0.132	0.139	0.137	0.130	0.137	5.3
Chloroform	0.546	0.588	0.543	0.556	0.546	0.526	0.551	3.7
1,1,1-Trichloroethane	0.433	0.466	0.448	0.459	0.442	0.429	0.446	3.3
Methylcyclohexane	0.377	0.448	0.418	0.461	0.448	0.458	0.435	7.4
1,1-Dichloropropene	0.368	0.416	0.404	0.404	0.408	0.399	0.400	4.1
Propionitrile	0.016	0.020	0.023	0.022	0.025	0.024	0.022	14.5

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

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Calibration Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF0.5 = VU063219.D RRF001 = VU063220.D RRF002 = VU063221.D
RRF005 = VU063222.D RRF010 = VU063223.D RRF015 = VU063224.D

COMPOUND	RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015	$\overline{RRF}$	% RSD
Benzene	1.163	1.280	1.242	1.256	1.232	1.199	1.229	3.4
1,2-Dichloroethane	0.351	0.371	0.358	0.357	0.355	0.335	0.355	3.3
Trichloroethene	0.287	0.311	0.294	0.290	0.291	0.281	0.292	3.4
1,2-Dichloropropane	0.314	0.333	0.319	0.323	0.326	0.314	0.322	2.3
1-Chlorobutane	0.484	0.555	0.547	0.578	0.565	0.552	0.547	5.9
Dibromomethane	0.161	0.173	0.163	0.164	0.163	0.153	0.163	4
Bromodichloromethane	0.332	0.402	0.386	0.393	0.391	0.371	0.379	6.7
4-Methyl-2-Pentanone	0.147	0.155	0.166	0.176	0.197	0.182	0.171	10.6
Toluene	0.607	0.705	0.706	0.745	0.744	0.732	0.707	7.4
t-1,3-Dichloropropene	0.284	0.343	0.343	0.362	0.383	0.368	0.347	9.9
cis-1,3-Dichloropropene	0.378	0.427	0.430	0.435	0.459	0.444	0.429	6.4
1,1,2-Trichloroethane	0.211	0.225	0.219	0.221	0.228	0.214	0.220	3
1,3-Dichloropropane	0.354	0.408	0.393	0.400	0.405	0.379	0.390	5.2
2-Hexanone	0.094	0.109	0.115	0.118	0.136	0.128	0.117	12.6
Dibromochloromethane	0.238	0.257	0.246	0.256	0.267	0.252	0.253	4
1,2-Dibromoethane	0.194	0.206	0.202	0.209	0.219	0.205	0.206	4
Tetrachloroethene	0.242	0.258	0.236	0.250	0.234	0.225	0.241	4.9
Chlorobenzene	0.676	0.752	0.745	0.775	0.768	0.758	0.746	4.8
1,1,1,2-Tetrachloroethane	0.254	0.279	0.264	0.269	0.274	0.268	0.268	3.2
Hexachloroethane	0.179	0.215	0.214	0.210	0.222	0.232	0.212	8.5
Ethyl Benzene	1.075	1.229	1.246	1.363	1.403	1.399	1.286	10
m/p-Xylenes	0.374	0.444	0.475	0.526	0.536	0.528	0.480	13.2
o-Xylene	0.374	0.449	0.469	0.502	0.514	0.513	0.470	11.5
Styrene	0.562	0.675	0.721	0.815	0.856	0.862	0.748	15.8
Bromoform	0.127	0.139	0.142	0.145	0.156	0.151	0.143	7.1
Isopropylbenzene	0.889	1.035	1.086	1.184	1.212	1.226	1.106	11.7
1,1,2,2-Tetrachloroethane	0.260	0.304	0.306	0.292	0.310	0.303	0.296	6.2
1,2,3-Trichloropropane	0.220	0.222	0.246	0.213	0.204	0.230	0.222	6.5
Bromobenzene	0.253	0.303	0.295	0.308	0.314	0.314	0.298	7.8
n-propylbenzene	0.242	0.286	0.314	0.344	0.354	0.359	0.317	14.5

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

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Calibration Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF0.5 = VU063219.D RRF001 = VU063220.D RRF002 = VU063221.D
RRF005 = VU063222.D RRF010 = VU063223.D RRF015 = VU063224.D

COMPOUND	RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015	$\overline{RRF}$	% RSD
2-Chlorotoluene	0.228	0.278	0.292	0.315	0.316	0.321	0.292	12.1
1,3,5-Trimethylbenzene	0.741	0.939	1.024	1.125	1.148	1.169	1.024	16
4-Chlorotoluene	0.237	0.292	0.297	0.320	0.321	0.327	0.299	11.2
tert-Butylbenzene	0.854	0.987	1.030	1.074	1.118	1.153	1.036	10.3
1,2,4-Trimethylbenzene	0.709	0.905	1.009	1.126	1.157	1.192	1.016	18.1
sec-Butylbenzene	1.016	1.226	1.318	1.415	1.442	1.498	1.319	13.4
p-Isopropyltoluene	0.745	0.942	1.033	1.137	1.168	1.222	1.041	17
1,3-Dichlorobenzene	0.531	0.551	0.589	0.589	0.596	0.611	0.578	5.2
1,4-Dichlorobenzene	0.485	0.514	0.581	0.593	0.601	0.617	0.565	9.4
n-Butylbenzene	0.693	0.822	0.907	0.992	1.044	1.142	0.933	17.3
1,2-Dichlorobenzene	0.481	0.538	0.571	0.563	0.574	0.604	0.555	7.6
1,2-Dibromo-3-Chloropropane	0.031	0.041	0.039	0.043	0.049	0.046	0.042	14.6
1,2,4-Trichlorobenzene	0.206	0.246	0.253	0.282	0.308	0.331	0.271	16.7
Hexachlorobutadiene	0.186	0.197	0.203	0.191	0.182	0.202	0.194	4.4
Naphthalene	0.315	0.335	0.379	0.441	0.556	0.592	0.436	26.5
1,2,3-Trichlorobenzene	0.219	0.237	0.239	0.275	0.303	0.318	0.265	15.1
1,2-Dichlorobenzene-d4	0.314	0.328	0.350	0.336	0.344	0.388	0.343	7.4
4-Bromofluorobenzene	0.302	0.311	0.330	0.321	0.358	0.356	0.330	7
Iodomethane		0.411	0.389	0.411	0.405	0.378	0.399	3.6
Allyl Chloride	0.340	0.390	0.369	0.364	0.365	0.357	0.364	4.5
Methacrylonitrile	0.062	0.067	0.079	0.087	0.098	0.091	0.080	17.3
Methyl methacrylate	0.112	0.126	0.128	0.148	0.161	0.147	0.137	13.3

* 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_U

Method Path : Z:\voasrv\HPCHEM1\MSVOA_U\Method\
Method File : 524U021025DW.M
Title : METHOD 524.2 VOLATILES DRINKING WATER
Last Update : Tue Feb 11 08:42:19 2025
Response Via : Initial Calibration

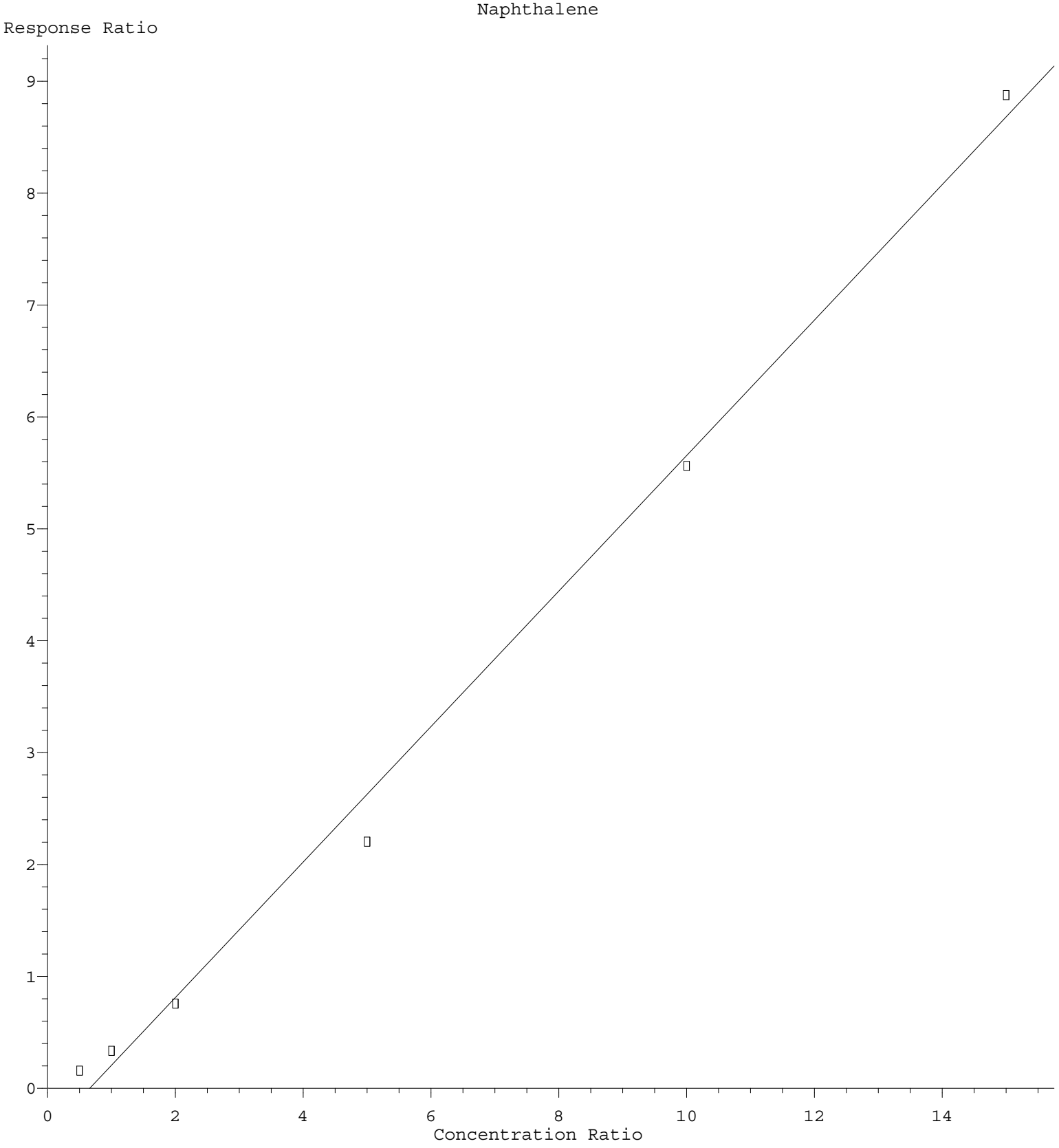
Calibration Files
0.5 =VU063219.D 1 =VU063220.D 2 =VU063221.D 5 =VU063222.D 10 =VU063223.D 15 =VU063224.D

		Compound	0.5	1	2	5	10	15	Avg	%RSD
1)	i	Fluorobenzene	----------	ISTD	----------					
2)	T	Dichlorodifluo...	0.326	0.362	0.329	0.325	0.305	0.302	0.325	6.65
3)	t	Chloromethane	0.390	0.400	0.389	0.368	0.352	0.344	0.374	6.06
4)	Rt	Vinyl Chloride	0.364	0.390	0.367	0.376	0.366	0.357	0.370	3.13
5)	T	Bromomethane	0.198	0.201	0.125	0.189	0.191		0.181	17.62
6)	T	Chloroethane	0.245	0.259	0.233	0.223	0.222	0.216	0.233	7.09
7)	T	Trichlorofluor...	0.426	0.473	0.452	0.443	0.423	0.416	0.439	4.85
8)		1,1,2-Trichlor...	0.259	0.272	0.253	0.250	0.231	0.230	0.249	6.54
9)	Rt	1,1-Dichloroet...	0.256	0.274	0.253	0.250	0.248	0.241	0.254	4.34
10)	t	Iodomethane		0.411	0.389	0.411	0.405	0.378	0.399	3.63
11)	t	Allyl Chloride	0.340	0.390	0.369	0.364	0.365	0.357	0.364	4.45
12)	t	Acrylonitrile	0.051	0.056	0.059	0.060	0.065	0.059	0.059	7.58
13)	T	Acetone	0.050	0.047	0.044	0.042	0.047	0.040	0.045	8.41
14)	T	Carbon Disulfide	0.944	0.945	0.880	0.869	0.861	0.822	0.887	5.49
15)	RT	Methylene Chlo...	0.332	0.333	0.313	0.309	0.304	0.289	0.313	5.41
16)	RT	trans-1,2-Dich...	0.292	0.305	0.287	0.288	0.287	0.279	0.290	3.01
17)	t	1,1-Dichloroet...	0.523	0.592	0.552	0.549	0.538	0.520	0.546	4.80
18)	T	2-Butanone	0.071	0.072	0.067	0.071	0.079	0.070	0.072	5.29
19)		Cyclohexane	0.415	0.423	0.423	0.457	0.453	0.460	0.439	4.65
20)		Methylcyclohexane	0.377	0.448	0.418	0.461	0.448	0.458	0.435	7.44
21)	T	2,2-Dichloropr...	0.434	0.463	0.413	0.421	0.418	0.407	0.426	4.71
22)	RT	cis-1,2-Dichlo...	0.297	0.332	0.306	0.316	0.316	0.310	0.313	3.74
23)	t	Diethyl Ether	0.223	0.231	0.215	0.218	0.216	0.203	0.218	4.22
24)	t	tert-Butyl Alc...		0.039	0.027	0.022	0.024	0.021	0.026	27.01
25)	t	Methyl tert-Bu...	0.582	0.652	0.618	0.642	0.673	0.635	0.634	4.89
26)	t	Bromochloromet...	0.133	0.150	0.132	0.139	0.137	0.130	0.137	5.31
27)	t	Chloroform	0.546	0.588	0.543	0.556	0.546	0.526	0.551	3.74
28)	RT	1,1,1-Trichlor...	0.433	0.466	0.448	0.459	0.442	0.429	0.446	3.26
29)	T	1,1-Dichloropr...	0.368	0.416	0.404	0.404	0.408	0.399	0.400	4.14
30)	RT	Carbon Tetrach...	0.371	0.417	0.379	0.383	0.378	0.369	0.383	4.62
31)	t	Isopropyl Ether	0.718	0.786	0.766	0.785	0.814	0.808	0.779	4.45
32)		Ethyl-t-butyl ...	0.648	0.686	0.691	0.726	0.755	0.746	0.709	5.72
33)		Tert-Amyl meth...	0.540	0.604	0.585	0.637	0.688	0.661	0.619	8.69
34)	t	Propionitrile	0.016	0.020	0.023	0.022	0.025	0.024	0.022	14.47
35)	RT	Benzene	1.163	1.280	1.242	1.256	1.232	1.199	1.229	3.40
36)	RT	1,2-Dichloroet...	0.351	0.371	0.358	0.357	0.355	0.335	0.355	3.35
37)	RT	Trichloroethene	0.287	0.311	0.294	0.290	0.291	0.281	0.292	3.43
38)	Rt	1,2-Dichloropr...	0.314	0.333	0.319	0.323	0.326	0.314	0.322	2.27
39)	t	Methacrylonitrile	0.062	0.067	0.079	0.087	0.098	0.091	0.080	17.33
40)	t	Methyl acrylate	0.118	0.146	0.150	0.157	0.165	0.153	0.148	10.87
41)	t	Tetrahydrofuran	0.046	0.046	0.049	0.044	0.051	0.046	0.047	5.91
42)	t	1-Chlorobutane	0.484	0.555	0.547	0.578	0.565	0.552	0.547	5.95
43)	T	Dibromomethane	0.161	0.173	0.163	0.164	0.163	0.153	0.163	3.96
44)	T	Bromodichlorom...	0.332	0.402	0.386	0.393	0.391	0.371	0.379	6.67
45)	T	4-Methyl-2-Pen...	0.147	0.155	0.166	0.176	0.197	0.182	0.171	10.64
46)	t	t-1,4-Dichloro...	0.071	0.084	0.088	0.072	0.084	0.082	0.080	8.79
47)	t	Methyl methacr...	0.112	0.126	0.128	0.148	0.161	0.147	0.137	13.27
48)	t	Ethyl methacry...	0.194	0.227	0.244	0.270	0.314	0.296	0.258	17.35
49)	Rt	Toluene	0.607	0.705	0.706	0.745	0.744	0.732	0.707	7.37
50)	T	t-1,3-Dichloro...	0.284	0.343	0.343	0.362	0.383	0.368	0.347	9.93
51)	T	cis-1,3-Dichlo...	0.378	0.427	0.430	0.435	0.459	0.444	0.429	6.40
52)	RT	1,1,2-Trichlor...	0.211	0.225	0.219	0.221	0.228	0.214	0.220	2.98
53)	t	1,3-Dichloropr...	0.354	0.408	0.393	0.400	0.405	0.379	0.390	5.20
54)	t	2-Hexanone	0.094	0.109	0.115	0.118	0.136	0.128	0.117	12.64
55)	t	Dibromochlorom...	0.238	0.257	0.246	0.256	0.267	0.252	0.253	3.96
56)	T	1,2-Dibromoethane	0.194	0.206	0.202	0.209	0.219	0.205	0.206	4.03
57)	S	4-Bromofluorob...	0.302	0.311	0.330	0.321	0.358	0.356	0.330	7.00

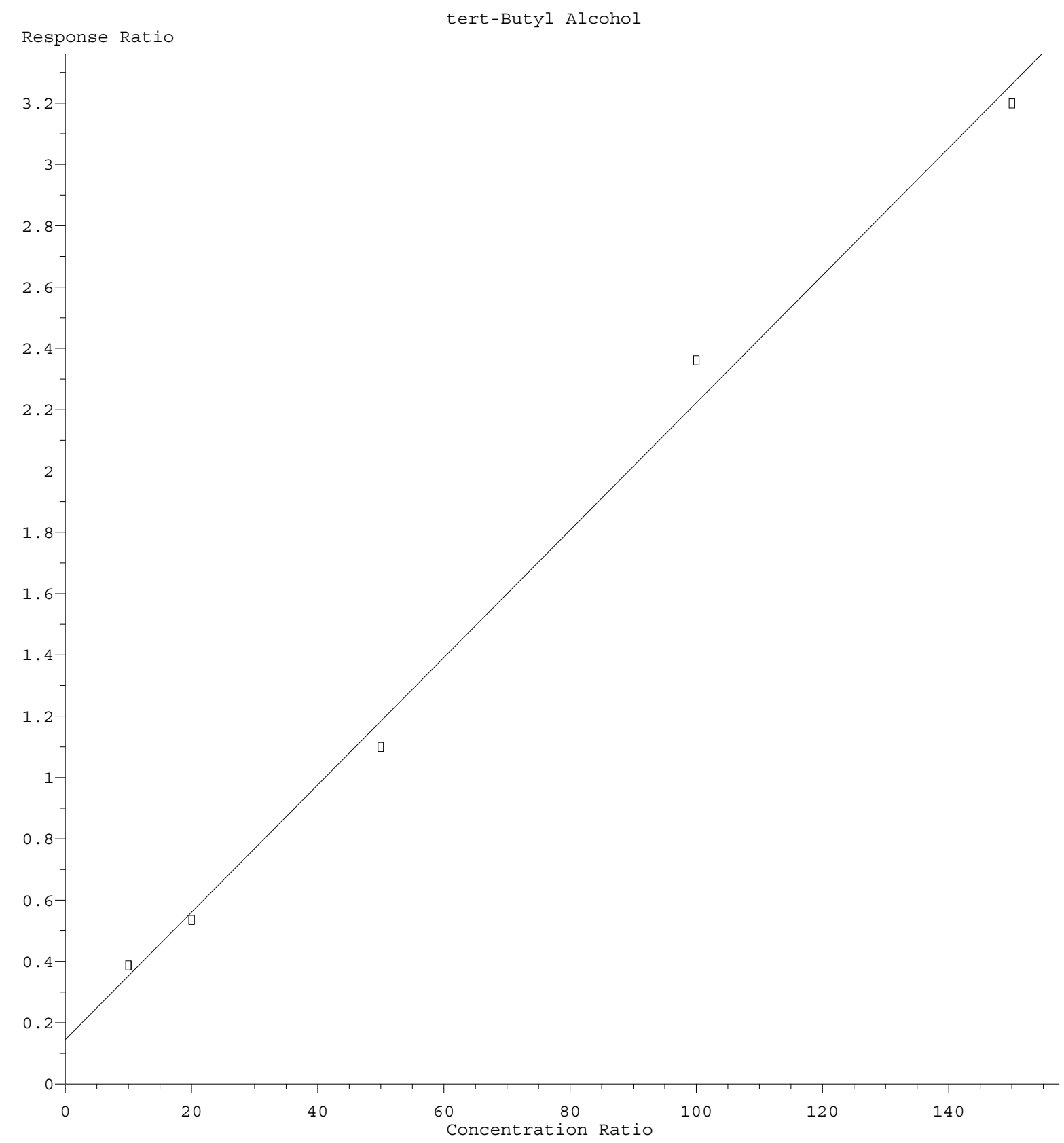
Method Path : Z:\voasrv\HPCHEM1\MSVOA_U\Method\
Method File : 524U021025DW.M

58)	RT	Tetrachloroethene	0.242	0.258	0.236	0.250	0.234	0.225	0.241	4.94
59)	Rt	Chlorobenzene	0.676	0.752	0.745	0.775	0.768	0.758	0.746	4.79
60)	T	1,1,1,2-Tetrac...	0.254	0.279	0.264	0.269	0.274	0.268	0.268	3.18
61)	t	Pentachloroethane	0.209	0.246	0.251	0.240	0.241	0.250	0.239	6.51
62)	t	Hexachloroethane	0.179	0.215	0.214	0.210	0.222	0.232	0.212	8.47
63)	Rt	Ethyl Benzene	1.075	1.229	1.246	1.363	1.403	1.399	1.286	9.96
64)	RT	m/p-Xylenes	0.374	0.444	0.475	0.526	0.536	0.528	0.480	13.21
65)	RT	o-Xylene	0.374	0.449	0.469	0.502	0.514	0.513	0.470	11.48
66)	RT	Styrene	0.562	0.675	0.721	0.815	0.856	0.862	0.748	15.82
67)	t	Bromoform	0.127	0.139	0.142	0.145	0.156	0.151	0.143	7.11
68)	S	1,2-Dichlorobe...	0.314	0.328	0.350	0.336	0.344	0.388	0.343	7.36
69)	T	Isopropylbenzene	0.889	1.035	1.086	1.184	1.212	1.226	1.106	11.74
70)	T	1,1,2,2-Tetrac...	0.260	0.304	0.306	0.292	0.310	0.303	0.296	6.25
71)	T	1,2,3-Trichlor...	0.220	0.222	0.246	0.213	0.204	0.230	0.222	6.49
72)	t	Bromobenzene	0.253	0.303	0.295	0.308	0.314	0.314	0.298	7.83
73)	t	n-propylbenzene	0.242	0.286	0.314	0.344	0.354	0.359	0.317	14.49
74)	t	2-Chlorotoluene	0.228	0.278	0.292	0.315	0.316	0.321	0.292	12.05
75)	t	1,3,5-Trimethy...	0.741	0.939	1.024	1.125	1.148	1.169	1.024	15.99
76)	t	4-Chlorotoluene	0.237	0.292	0.297	0.320	0.321	0.327	0.299	11.24
77)	t	tert-Butylbenzene	0.854	0.987	1.030	1.074	1.118	1.153	1.036	10.34
78)	t	1,2,4-Trimethy...	0.709	0.905	1.009	1.126	1.157	1.192	1.016	18.12
79)	t	sec-Butylbenzene	1.016	1.226	1.318	1.415	1.442	1.498	1.319	13.42
80)		Nitrobenzene		0.004	0.006	0.007	0.009	0.009	0.007	30.30
81)	t	p-Isopropyltol...	0.745	0.942	1.033	1.137	1.168	1.222	1.041	16.95
82)	t	1,3-Dichlorobe...	0.531	0.551	0.589	0.589	0.596	0.611	0.578	5.23
83)	Rt	1,4-Dichlorobe...	0.485	0.514	0.581	0.593	0.601	0.617	0.565	9.37
84)	t	n-Butylbenzene	0.693	0.822	0.907	0.992	1.044	1.142	0.933	17.26
85)	Rt	1,2-Dichlorobe...	0.481	0.538	0.571	0.563	0.574	0.604	0.555	7.60
86)	t	1,2-Dibromo-3-...	0.031	0.041	0.039	0.043	0.049	0.046	0.042	14.63
87)	Rt	1,2,4-Trichlor...	0.206	0.246	0.253	0.282	0.308	0.331	0.271	16.72
88)	t	Hexachlorobuta...	0.186	0.197	0.203	0.191	0.182	0.202	0.194	4.41
89)	t	Naphthalene	0.315	0.335	0.379	0.441	0.556	0.592	0.436	26.52
90)	t	1,2,3-Trichlor...	0.219	0.237	0.239	0.275	0.303	0.318	0.265	15.07

(#) = Out of Range



Response = 6.053e-001 * Amt - 3.976e-001
Coef of Det (r^2) = 0.994995 Curve Fit: Linear
Method Name: Z:\vocsrv\HPCHEM1\MSVOA U\Method\524U021025DW.M
Calibration Table Last Updated: Tue Feb 11 08:42:19 2025



Response = 2.078e-002 * Amt + 1.449e-001
Coef of Det (r^2) = 0.994628 Curve Fit: Linear
Method Name: Z:\wpsrv\HPCHEM1\MSVOA U\Method\524U021025DW.M
Calibration Table Last Updated: Tue Feb 11 08:42:19 2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063219.D
Acq On : 10 Feb 2025 12:59
Operator : MD/SY
Sample : VSTDICC0.5
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 03:57:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	6.107	96	49900	1.000	ug/l		# 0.00
System Monitoring Compounds							
57) 4-Bromofluorobenzene	10.627	95	15091	0.917	ug/l		0.00
Spiked Amount 1.000			Recovery =	92.000%			
68) 1,2-Dichlorobenzene-d4	12.187	152	15652	0.914	ug/l		0.00
Spiked Amount 1.000			Recovery =	91.000%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	8130	0.501	ug/l		99
3) Chloromethane	1.518	50	9740	0.522	ug/l		100
4) Vinyl Chloride	1.599	62	9090	0.492	ug/l		98
5) Bromomethane	1.849	94	4941	0.578	ug/l		82
6) Chloroethane	1.927	64	6121	0.526	ug/l		90
7) Trichlorofluoromethane	2.129	101	10617	0.485	ug/l		92
8) 1,1,2-Trichloro-1,2,2-...	2.570	101	6464	0.520	ug/l		95
9) 1,1-Dichloroethene	2.573	96	6378	0.504	ug/l		95
11) Allyl Chloride	2.917	41	8493	0.467	ug/l		91
12) Acrylonitrile	3.332	53	2569m	0.893	ug/l		
13) Acetone	2.618	43	6197	2.760	ug/l		90
14) Carbon Disulfide	2.782	76	23559	0.532	ug/l		100
15) Methylene Chloride	3.033	84	8284	0.530	ug/l		96
16) trans-1,2-Dichloroethene	3.348	96	7275	0.504	ug/l		99
17) 1,1-Dichloroethane	3.856	63	13044	0.479	ug/l		96
18) 2-Butanone	4.730	43	8910m	2.456	ug/l		
19) Cyclohexane	5.377	56	10342m	0.473	ug/l		
20) Methylcyclohexane	6.753	83	9399	0.433	ug/l		96
21) 2,2-Dichloropropane	4.653	77	10817	0.509	ug/l		95
22) cis-1,2-Dichloroethene	4.663	96	7417	0.475	ug/l		91
23) Diethyl Ether	2.367	59	5553	0.511	ug/l		95
25) Methyl tert-Butyl Ether	3.354	73	14531	0.460	ug/l		98
26) Bromochloromethane	4.968	128	3323	0.487	ug/l		95
27) Chloroform	5.081	83	13627	0.496	ug/l		93
28) 1,1,1-Trichloroethane	5.306	97	10801	0.485	ug/l		98
29) 1,1-Dichloropropene	5.518	75	9175	0.460	ug/l		99
30) Carbon Tetrachloride	5.515	117	9251	0.485	ug/l		93
31) Isopropyl Ether	3.978	45	17908	0.461	ug/l		98
32) Ethyl-t-butyl ether	4.492	59	16177	0.458	ug/l		99
33) Tert-Amyl methyl ether	5.930	73	13471	0.436	ug/l		99
34) Propionitrile	4.801	54	2034m	1.809	ug/l		
35) Benzene	5.769	78	29011	0.473	ug/l		98
36) 1,2-Dichloroethane	5.791	62	8750	0.494	ug/l	#	95
37) Trichloroethene	6.537	130	7149	0.490	ug/l		94
38) 1,2-Dichloropropane	6.782	63	7842	0.489	ug/l		98
39) Methacrylonitrile	5.017	41	1535m	0.382	ug/l		
40) Methyl acrylate	4.920	55	2955m	0.403	ug/l		
41) Tetrahydrofuran	5.065	42	2289	0.970	ug/l	#	58
42) 1-Chlorobutane	5.451	56	12081	0.443	ug/l		92
43) Dibromomethane	6.910	93	4024	0.495	ug/l		94
44) Bromodichloromethane	7.100	83	8280	0.438	ug/l	#	99
45) 4-Methyl-2-Pentanone	7.785	43	18398	2.160	ug/l	#	91
46) t-1,4-Dichloro-2-butene	10.823	75	3537m	0.839	ug/l		

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063219.D
Acq On : 10 Feb 2025 12:59
Operator : MD/SY
Sample : VSTDICC0.5
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 03:57:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
47) Methyl methacrylate	6.965	69	5580m	0.815 ug/l	
48) Ethyl methacrylate	8.332	69	4839	0.377 ug/l	91
49) Toluene	7.962	92	15136	0.429 ug/l	97
50) t-1,3-Dichloropropene	8.209	75	7086	0.409 ug/l	99
51) cis-1,3-Dichloropropene	7.605	75	9424	0.441 ug/l	91
52) 1,1,2-Trichloroethane	8.393	97	5257	0.480 ug/l	94
53) 1,3-Dichloropropane	8.566	76	8834	0.454 ug/l	96
54) 2-Hexanone	8.685	43	11692m	2.011 ug/l	
55) Dibromochloromethane	8.801	129	5934	0.471 ug/l	97
56) 1,2-Dibromoethane	8.917	107	4834	0.470 ug/l	90
58) Tetrachloroethene	8.544	164	6044	0.503 ug/l	88
59) Chlorobenzene	9.441	112	16870	0.453 ug/l	96
60) 1,1,1,2-Tetrachloroethane	9.524	131	6349	0.475 ug/l	97
61) Pentachloroethane	11.418	117	5212	0.436 ug/l	98
62) Hexachloroethane	12.466	117	4467	0.423 ug/l	97
63) Ethyl Benzene	9.563	91	26810	0.418 ug/l	98
64) m/p-Xylenes	9.685	106	18658	0.778 ug/l	96
65) o-Xylene	10.094	106	9329	0.398 ug/l	99
66) Styrene	10.113	104	14012	0.375 ug/l	98
67) Bromoform	10.283	173	3160	0.442 ug/l	95
69) Isopropylbenzene	10.476	105	22191	0.402 ug/l	99
70) 1,1,2,2-Tetrachloroethane	10.772	83	6493	0.440 ug/l	97
71) 1,2,3-Trichloropropane	10.817	75	5487m	0.490 ug/l	
72) Bromobenzene	10.778	156	6302	0.424 ug/l	92
73) n-propylbenzene	10.901	120	6029	0.382 ug/l	97
74) 2-Chlorotoluene	10.981	126	5699	0.392 ug/l	97
75) 1,3,5-Trimethylbenzene	11.081	105	18487	0.362 ug/l	98
76) 4-Chlorotoluene	11.093	126	5912	0.396 ug/l	88
77) tert-Butylbenzene	11.412	119	21304	0.412 ug/l	95
78) 1,2,4-Trimethylbenzene	11.460	105	17694	0.349 ug/l	95
79) sec-Butylbenzene	11.637	105	25352	0.385 ug/l	100
81) p-Isopropyltoluene	11.785	119	18576	0.358 ug/l	98
82) 1,3-Dichlorobenzene	11.740	146	13255	0.460 ug/l	97
83) 1,4-Dichlorobenzene	11.833	146	12096	0.429 ug/l	99
84) n-Butylbenzene	12.206	91	17297	0.369 ug/l	95
85) 1,2-Dichlorobenzene	12.209	146	11996	0.433 ug/l	98
86) 1,2-Dibromo-3-Chloropr...	12.997	75	779	0.376 ug/l	90
87) 1,2,4-Trichlorobenzene	13.839	180	5130	0.380 ug/l	94
88) Hexachlorobutadiene	14.013	225	4651	0.482 ug/l	96
89) Naphthalene	14.097	128	7859	0.899 ug/l #	93
90) 1,2,3-Trichlorobenzene	14.328	180	5453	0.412 ug/l	98

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

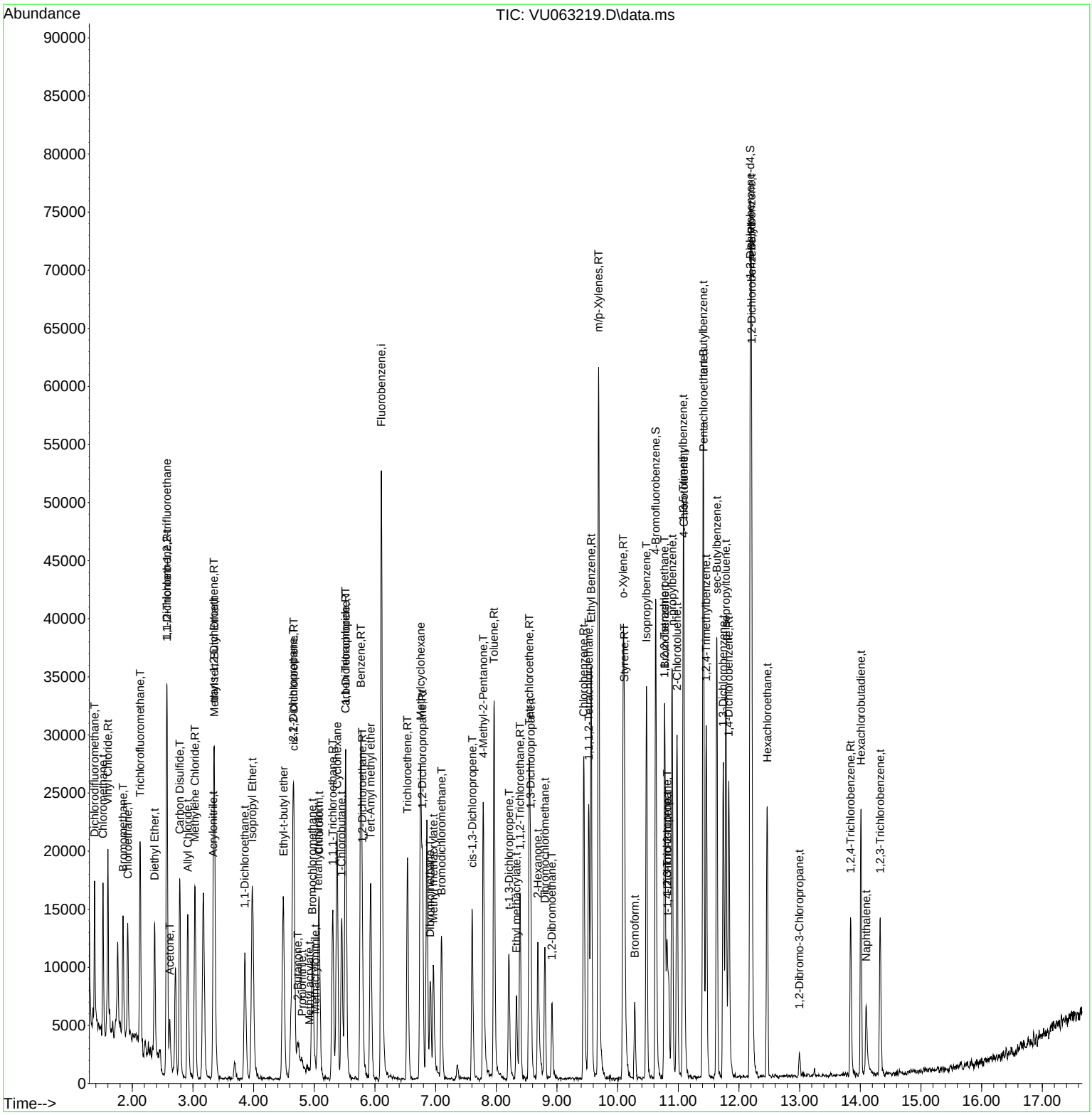
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063219.D
Acq On : 10 Feb 2025 12:59
Operator : MD/SY
Sample : VSTDICC0.5
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

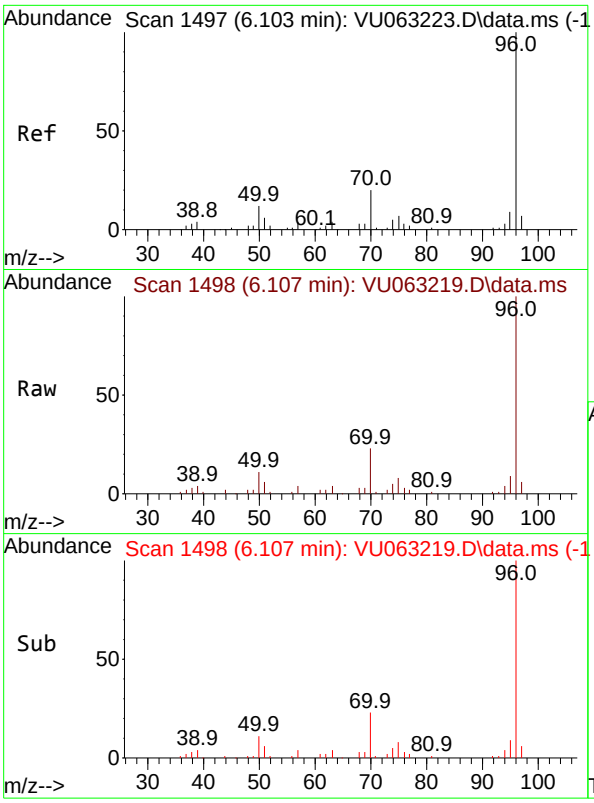
Quant Time: Feb 11 03:57:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

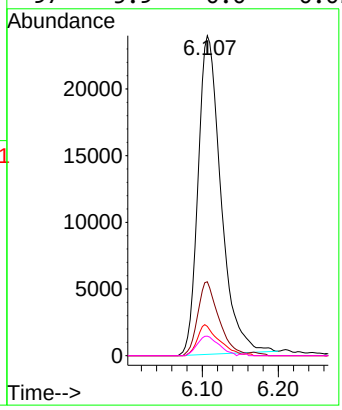




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.107 min Scan# 14
Delta R.T. 0.004 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 96 Resp: 4990

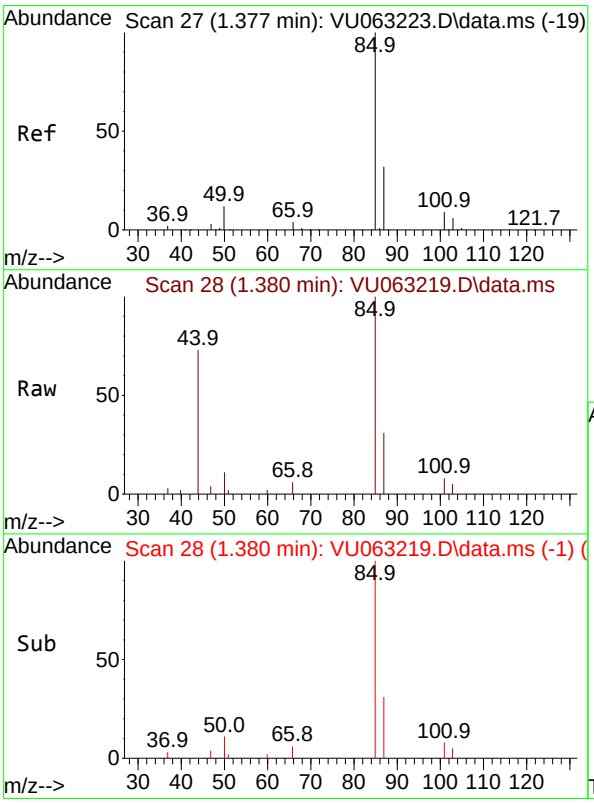
Ion	Ratio	Lower	Upper
96	100		
70	20.5	15.6	23.4
95	8.6	7.3	10.9
97	5.9	0.0	0.0#



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

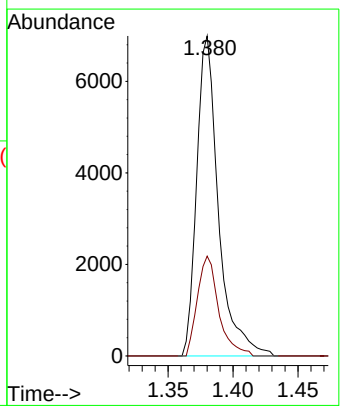
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

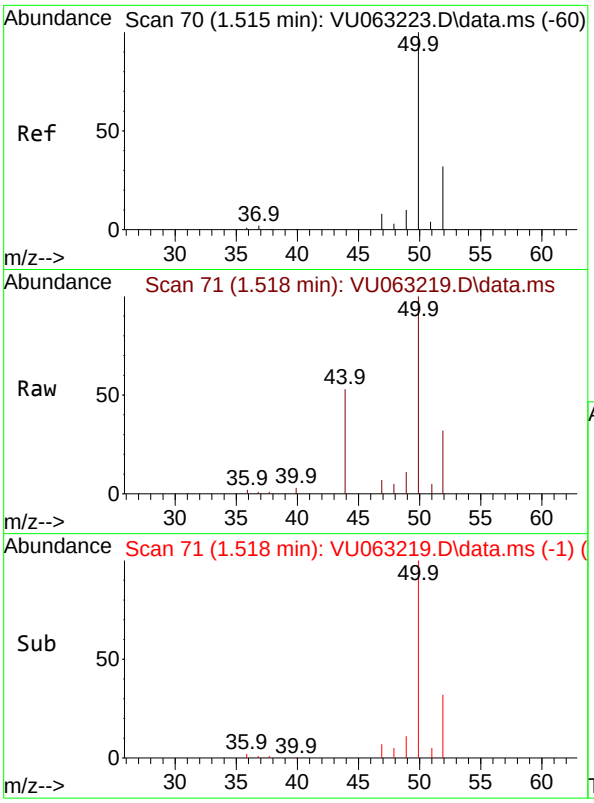


#2
Dichlorodifluoromethane
Concen: 0.501 ug/l
RT: 1.380 min Scan# 28
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 85 Resp: 8130

Ion	Ratio	Lower	Upper
85	100		
87	31.2	16.0	48.0

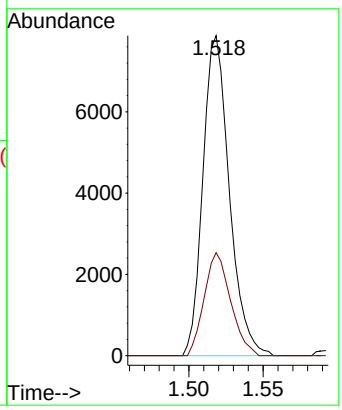




#3
Chloromethane
Concen: 0.522 ug/l
RT: 1.518 min Scan# 7
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 50 Resp: 974

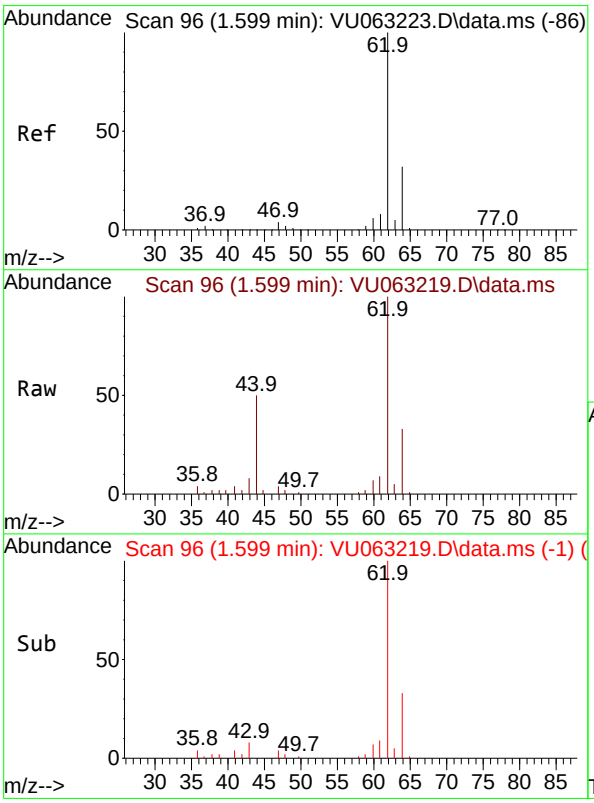
Ion	Ratio	Lower	Upper
50	100		
52	32.2	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

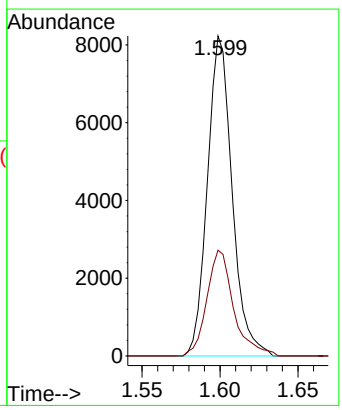
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

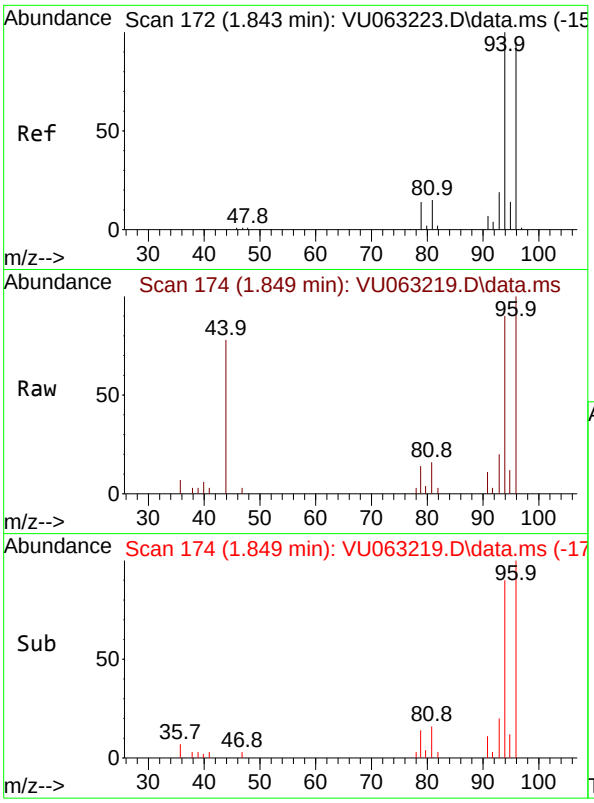


#4
Vinyl Chloride
Concen: 0.492 ug/l
RT: 1.599 min Scan# 96
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 62 Resp: 9090

Ion	Ratio	Lower	Upper
62	100		
64	33.0	25.4	38.0

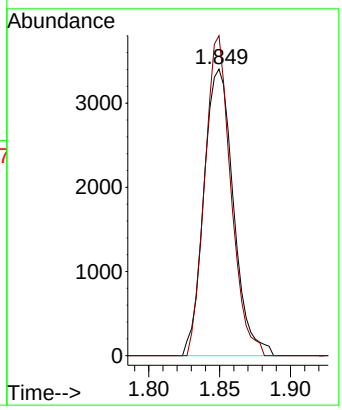




#5
Bromomethane
Concen: 0.578 ug/l
RT: 1.849 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 94 Resp: 494

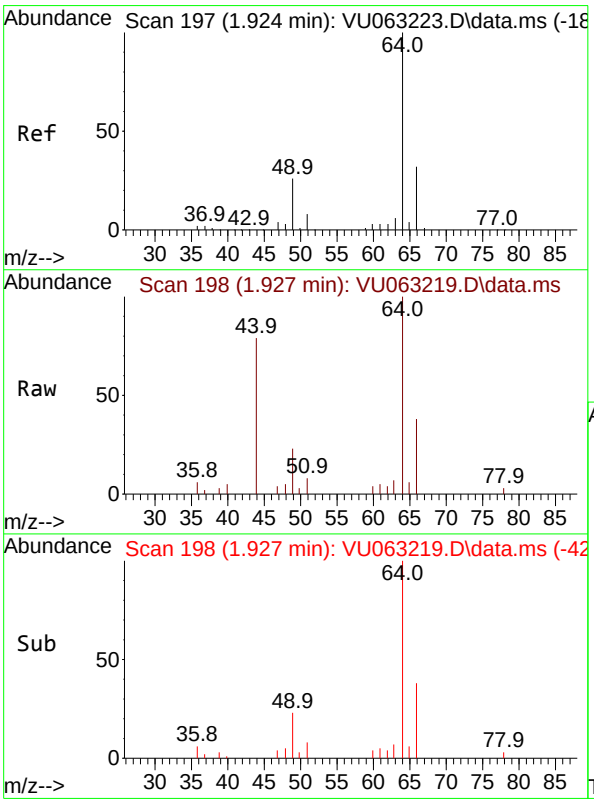
Ion	Ratio	Lower	Upper
94	100		
96	111.7	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

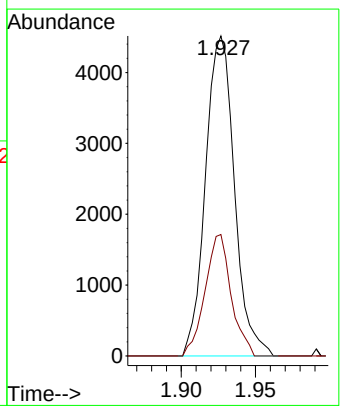
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

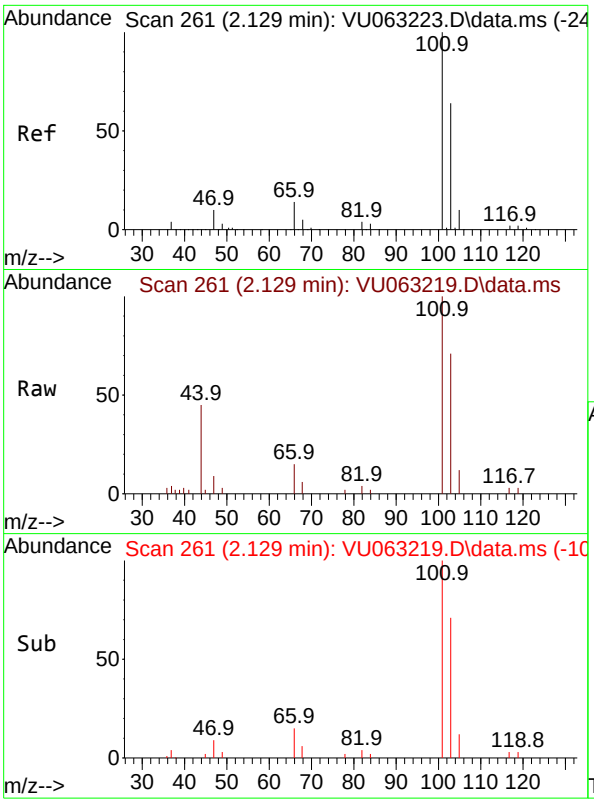


#6
Chloroethane
Concen: 0.526 ug/l
RT: 1.927 min Scan# 198
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 64 Resp: 6121

Ion	Ratio	Lower	Upper
64	100		
66	38.0	25.8	38.8





#7
Trichlorofluoromethane
Concen: 0.485 ug/l
RT: 2.129 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:101 Resp: 1061

Ion	Ratio	Lower	Upper
101	100		
103	70.6	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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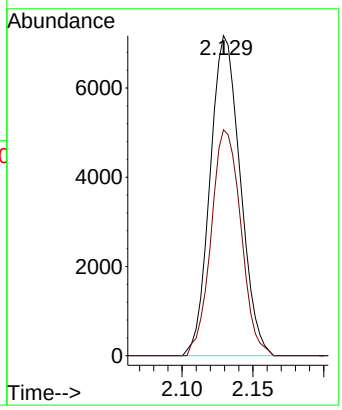
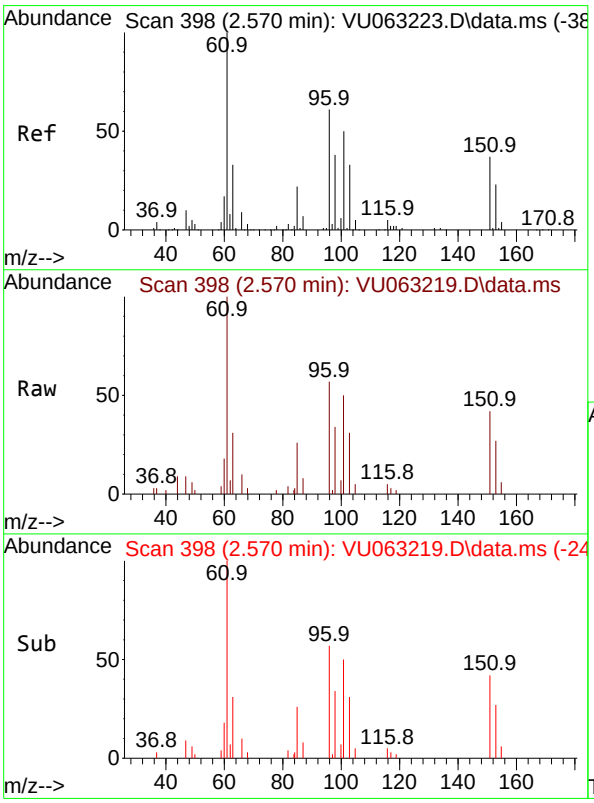
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

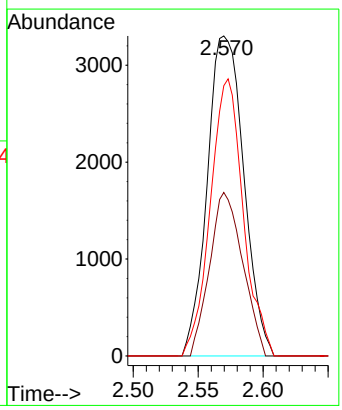


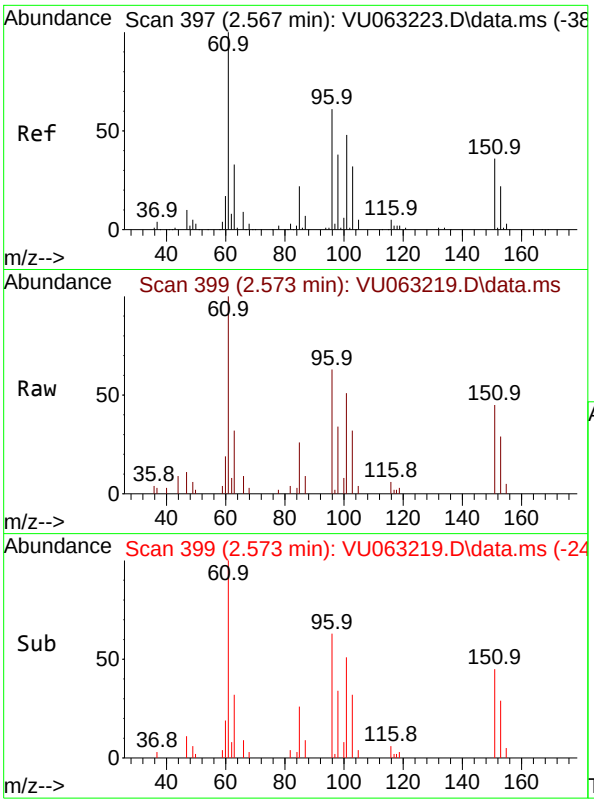


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.520 ug/l
RT: 2.570 min Scan# 398
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:101 Resp: 6464

Ion	Ratio	Lower	Upper
101	100		
85	46.2	35.4	53.0
151	77.9	58.5	87.7

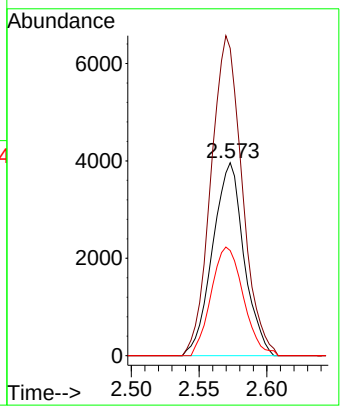




#9
1,1-Dichloroethene
Concen: 0.504 ug/l
RT: 2.573 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 96 Resp: 637

Ion	Ratio	Lower	Upper
96	100		
61	159.4	0.0	492.9
98	54.5	0.0	124.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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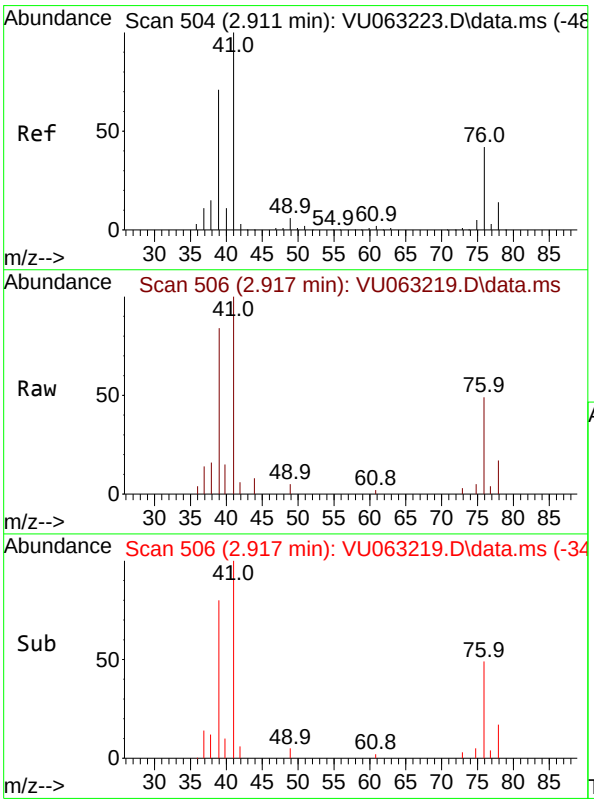
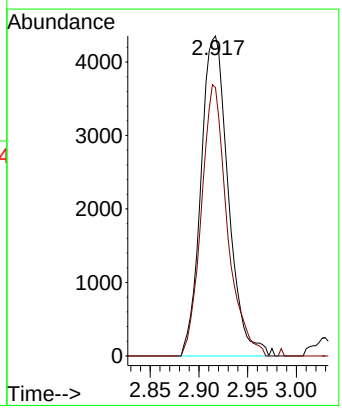
Supervised By :Mahesh Dadoda 02/12/2025

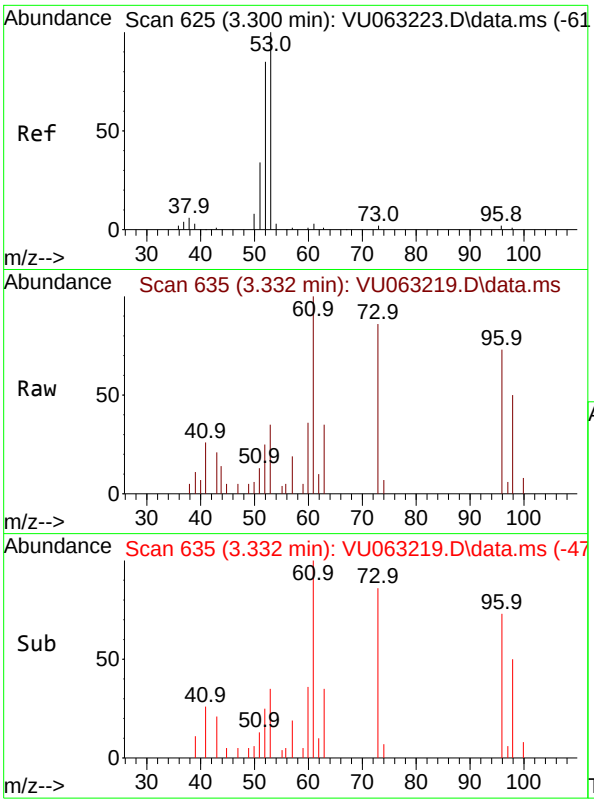


#11
Allyl Chloride
Concen: 0.467 ug/l
RT: 2.917 min Scan# 506
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 41 Resp: 8493

Ion	Ratio	Lower	Upper
41	100		
39	80.2	57.9	86.9

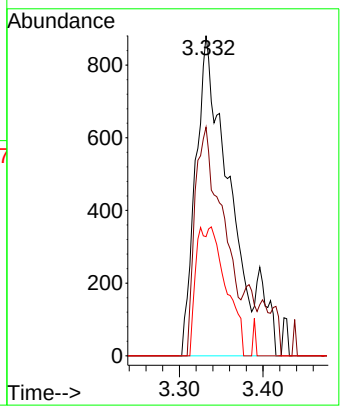




#12
Acrylonitrile
Concen: 0.893 ug/l m
RT: 3.332 min Scan# 6
Delta R.T. 0.032 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 53 Resp: 256

Ion	Ratio	Lower	Upper
53	100		
52	57.8	64.2	96.2#
51	12.6	30.8	46.2#



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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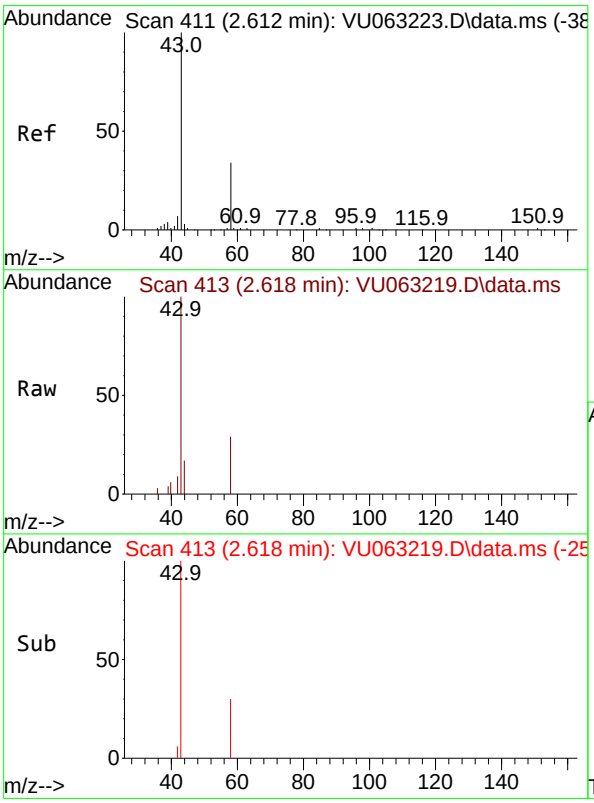
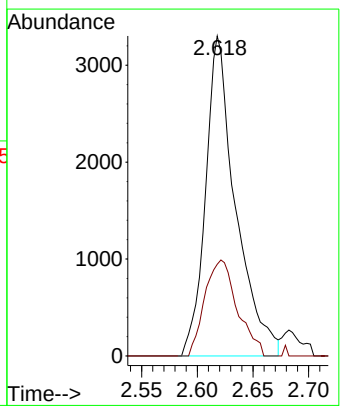
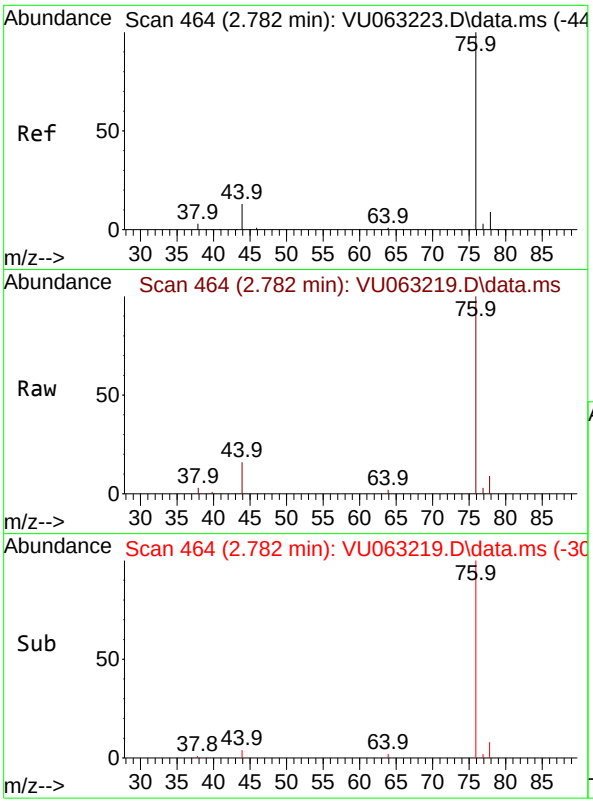


#13
Acetone
Concen: 2.760 ug/l
RT: 2.618 min Scan# 413
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 43 Resp: 6197

Ion	Ratio	Lower	Upper
43	100		
58	28.6	27.4	41.0

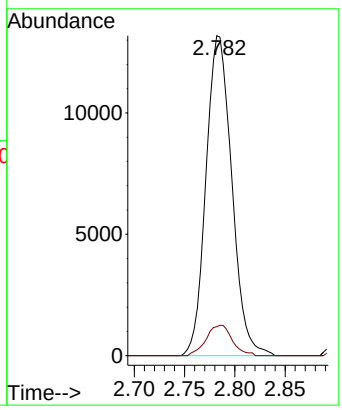




#14
Carbon Disulfide
Concen: 0.532 ug/l
RT: 2.782 min Scan# 4
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 76 Resp: 2355

Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.2	10.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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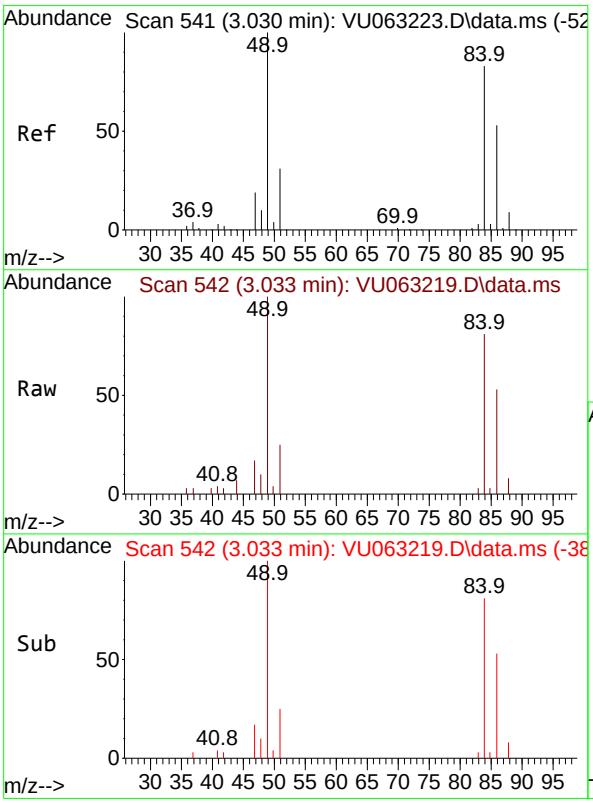
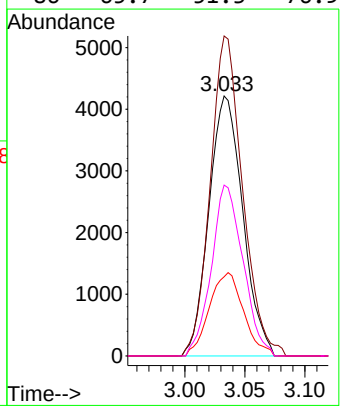
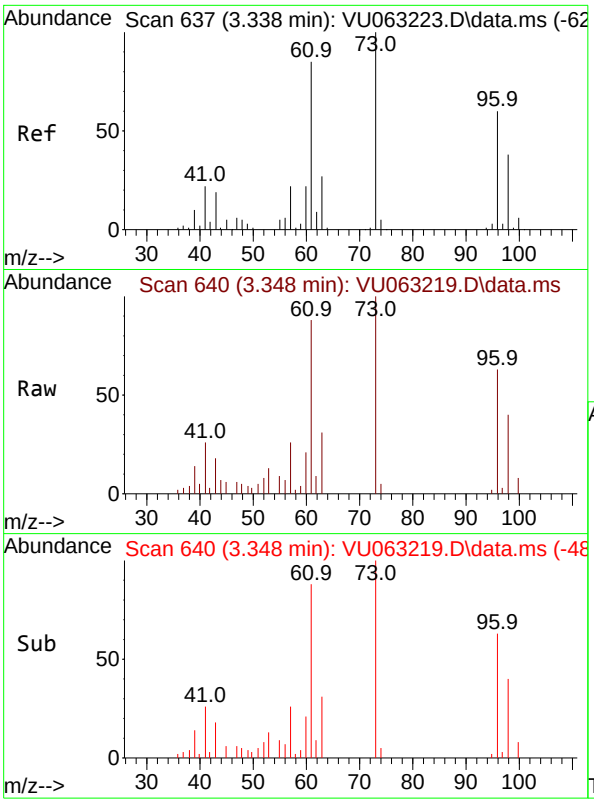


#15
Methylene Chloride
Concen: 0.530 ug/l
RT: 3.033 min Scan# 542
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 84 Resp: 8284

Ion	Ratio	Lower	Upper
84	100		
49	123.1	96.4	144.6
51	30.5	0.0	74.8
86	65.7	51.3	76.9

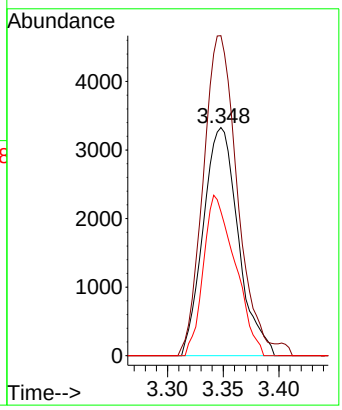




#16
trans-1,2-Dichloroethene
Concen: 0.504 ug/l
RT: 3.348 min Scan# 64
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 96 Resp: 727

Ion	Ratio	Lower	Upper
96	100		
61	140.2	113.4	170.2
98	63.1	51.2	76.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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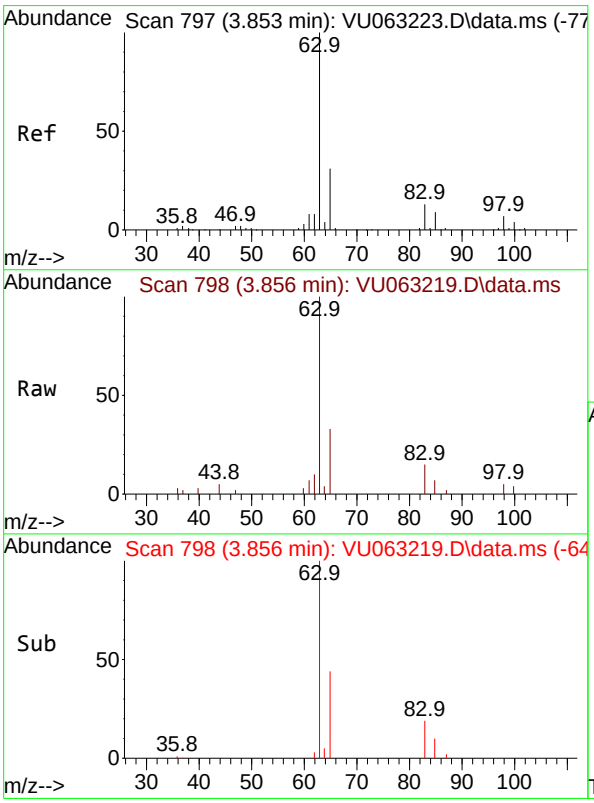
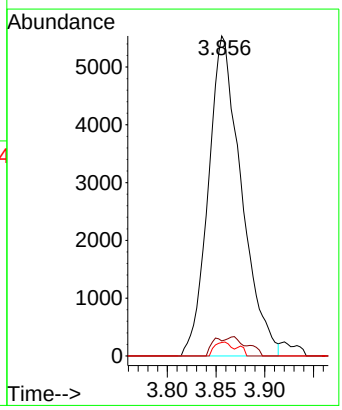
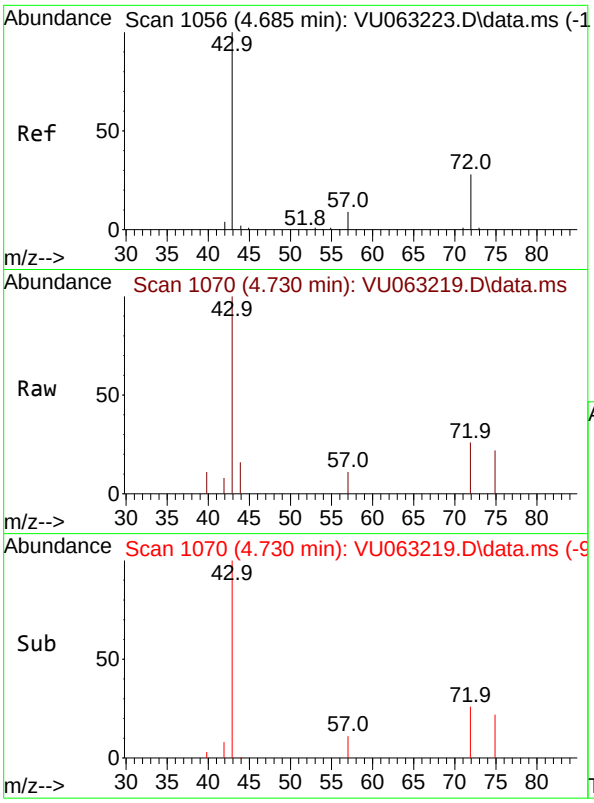


#17
1,1-Dichloroethane
Concen: 0.479 ug/l
RT: 3.856 min Scan# 798
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 63 Resp: 13044

Ion	Ratio	Lower	Upper
63	100		
98	4.7	3.3	9.9
100	4.2	2.1	6.2

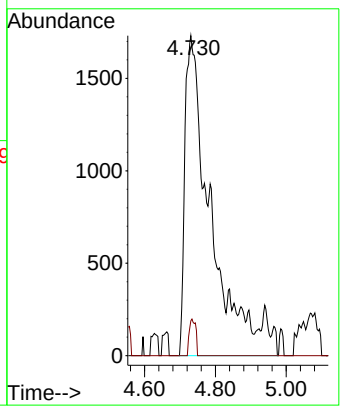




#18
2-Butanone
Concen: 2.456 ug/l m
RT: 4.730 min Scan# 1
Delta R.T. 0.045 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 43 Resp: 891

Ion	Ratio	Lower	Upper
43	100		
57	10.9	0.0	17.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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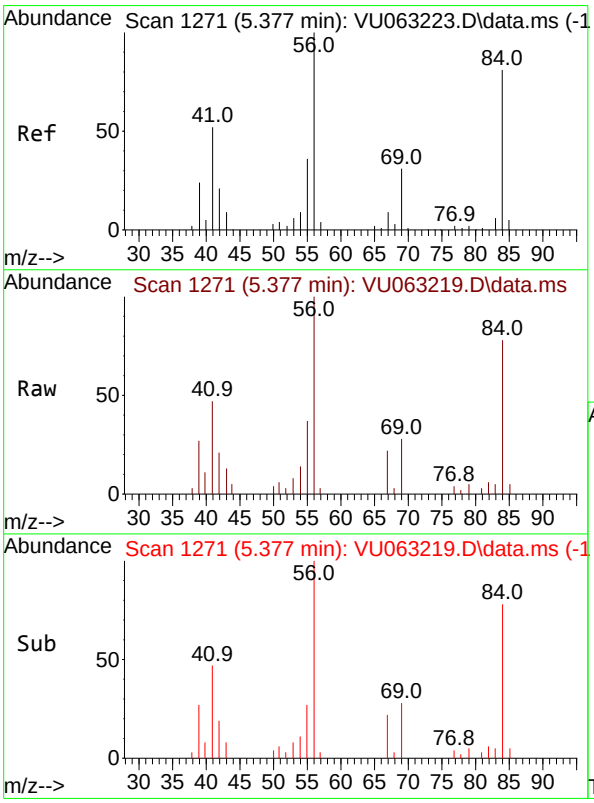
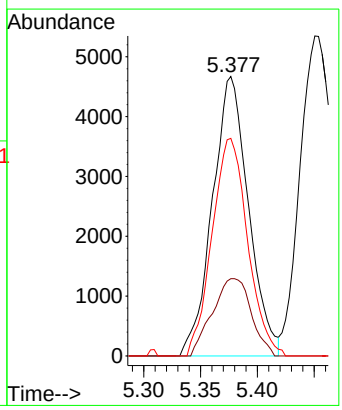
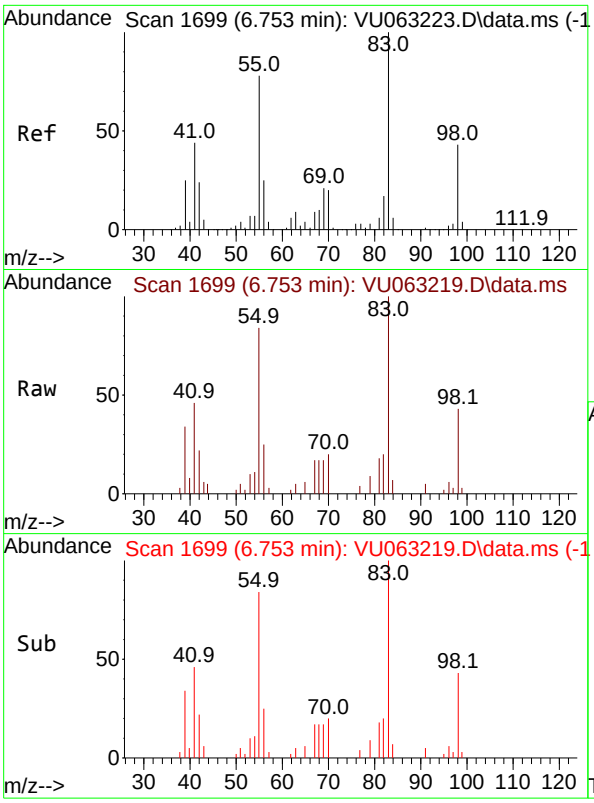


#19
Cyclohexane
Concen: 0.473 ug/l m
RT: 5.377 min Scan# 1271
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 56 Resp: 10342

Ion	Ratio	Lower	Upper
56	100		
69	29.7	24.5	36.7
84	76.6	65.2	97.8

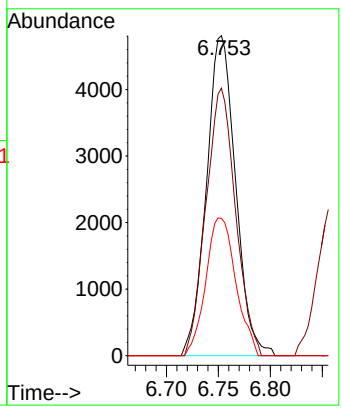




#20
Methylcyclohexane
Concen: 0.433 ug/l
RT: 6.753 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 83 Resp: 939

Ion	Ratio	Lower	Upper
83	100		
55	84.6	63.1	94.7
98	44.2	35.2	52.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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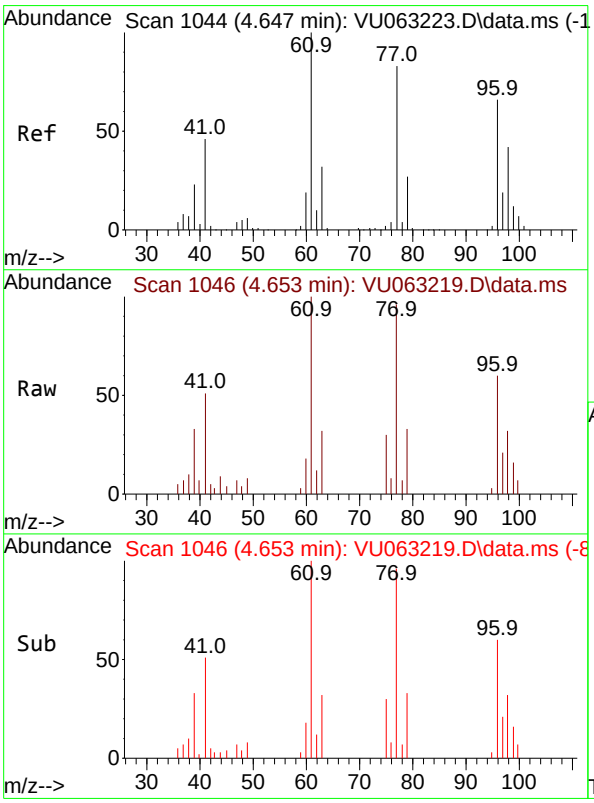
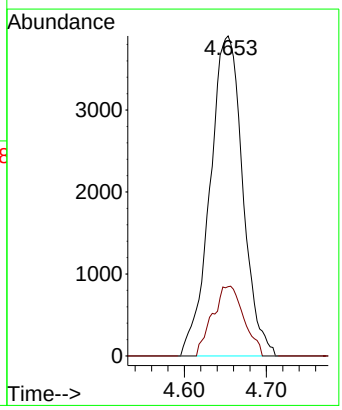
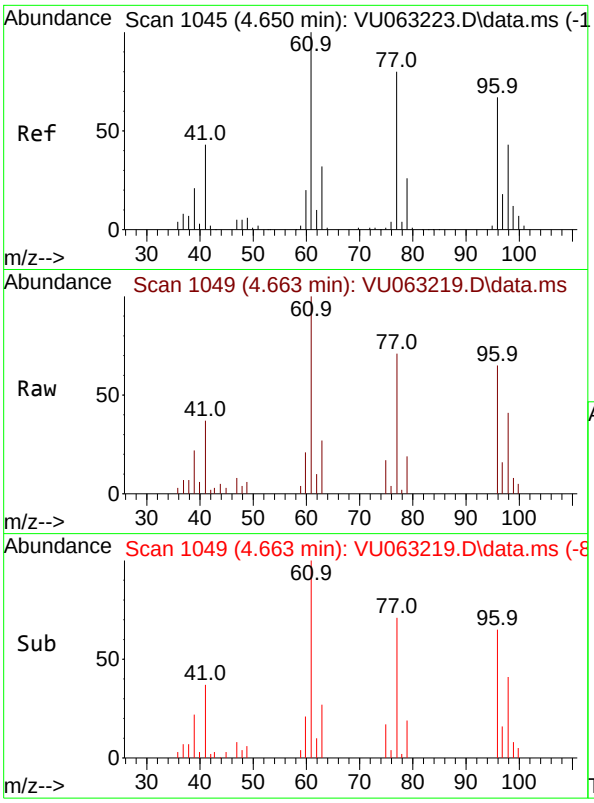


#21
2,2-Dichloropropane
Concen: 0.509 ug/l
RT: 4.653 min Scan# 1046
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 77 Resp: 10817

Ion	Ratio	Lower	Upper
77	100		
97	20.9	18.5	27.7

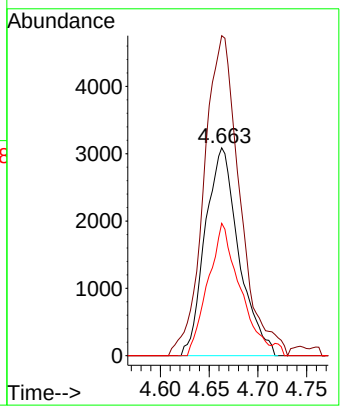




#22
cis-1,2-Dichloroethene
Concen: 0.475 ug/l
RT: 4.663 min Scan# 1
Delta R.T. 0.013 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 96 Resp: 741

Ion	Ratio	Lower	Upper
96	100		
61	163.8	0.0	373.3
98	60.6	31.9	95.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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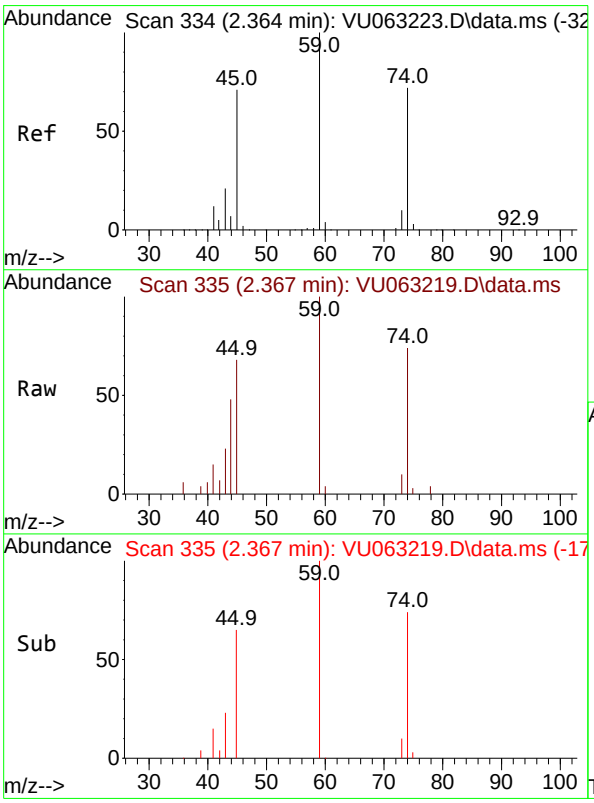
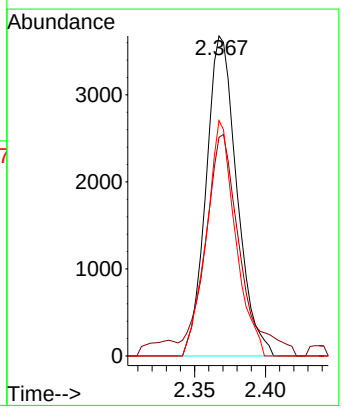
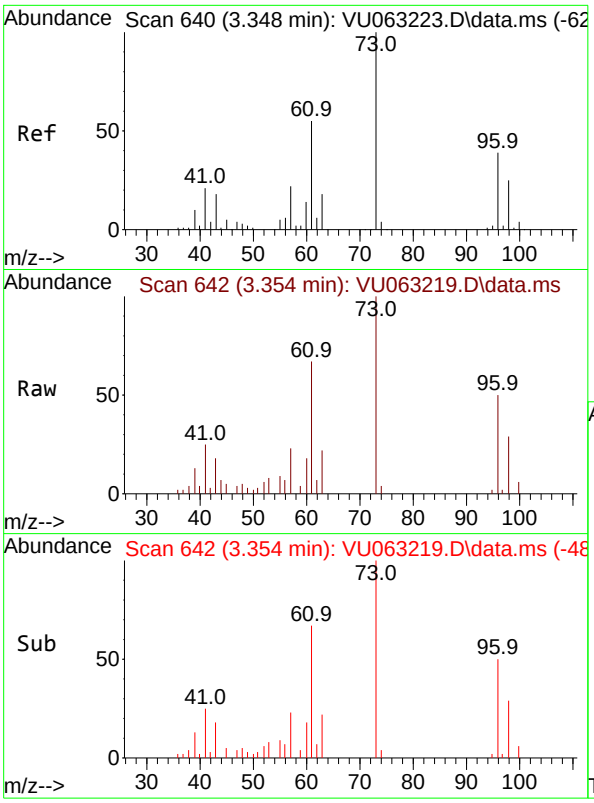


#23
Diethyl Ether
Concen: 0.511 ug/l
RT: 2.367 min Scan# 335
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 59 Resp: 5553

Ion	Ratio	Lower	Upper
59	100		
45	77.3	57.8	86.6
74	69.4	57.7	86.5

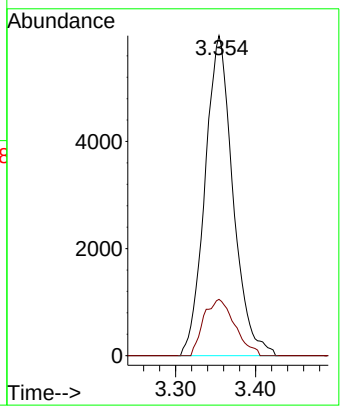




#25
Methyl tert-Butyl Ether
Concen: 0.460 ug/l
RT: 3.354 min Scan# 64
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 73 Resp: 1453

Ion	Ratio	Lower	Upper
73	100		
43	19.6	14.9	22.3



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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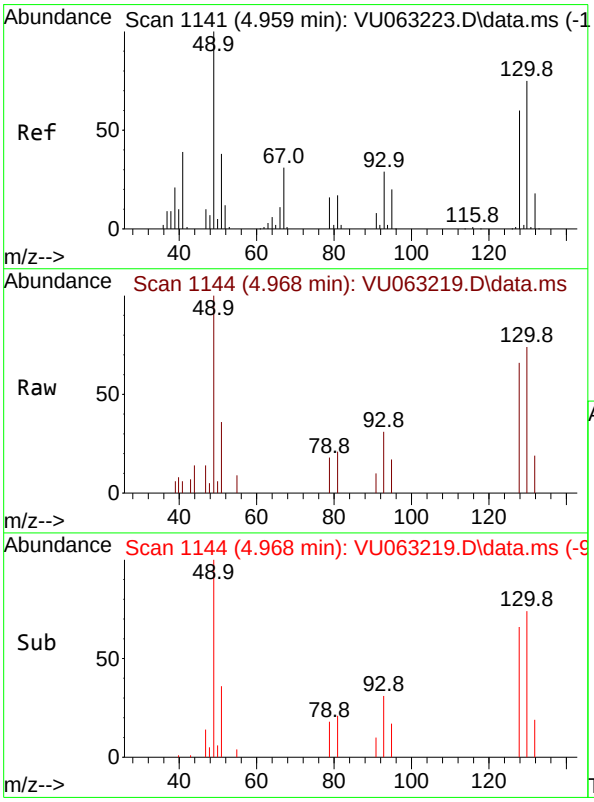
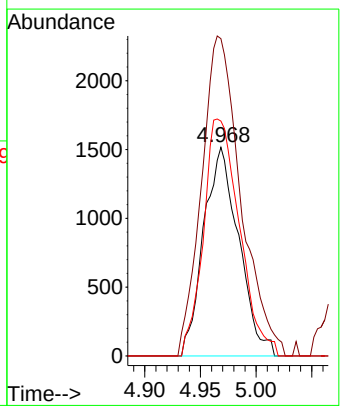
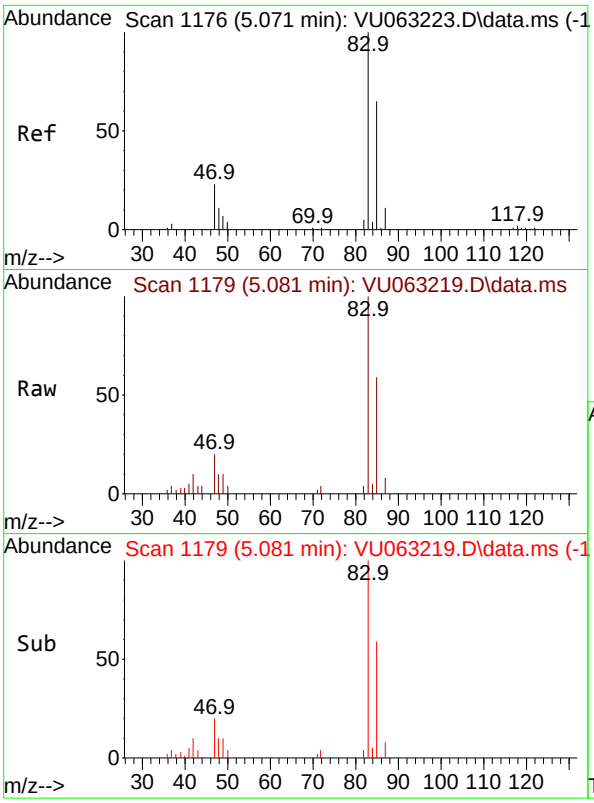


#26
Bromochloromethane
Concen: 0.487 ug/l
RT: 4.968 min Scan# 1144
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:128 Resp: 3323

Ion	Ratio	Lower	Upper
128	100		
49	171.5	0.0	343.4
130	116.6	102.9	154.3

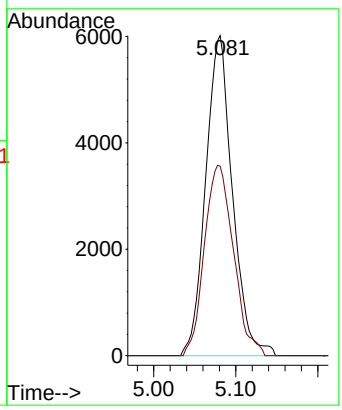




#27
Chloroform
Concen: 0.496 ug/l
RT: 5.081 min Scan# 1
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 83 Resp: 1362

Ion	Ratio	Lower	Upper
83	100		
85	59.2	0.0	129.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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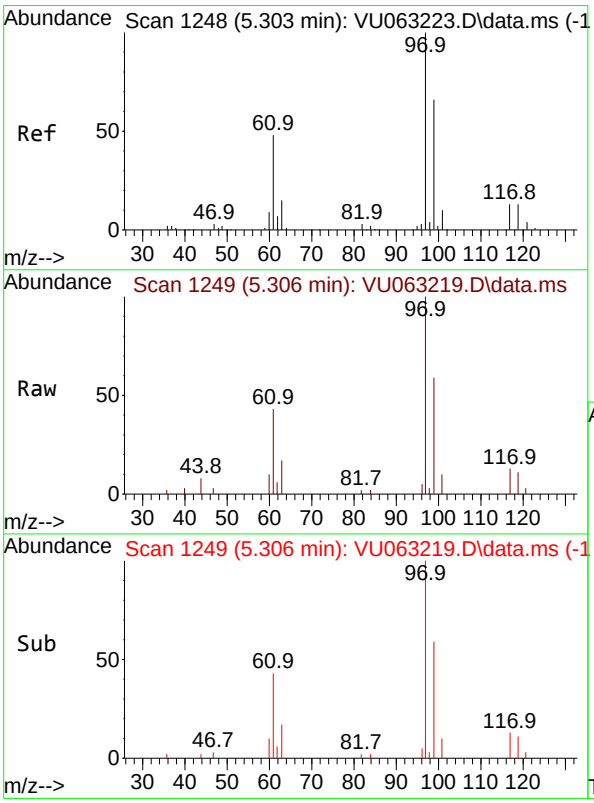
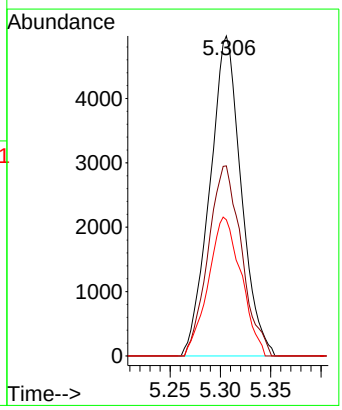
Supervised By :Mahesh Dadoda 02/12/2025

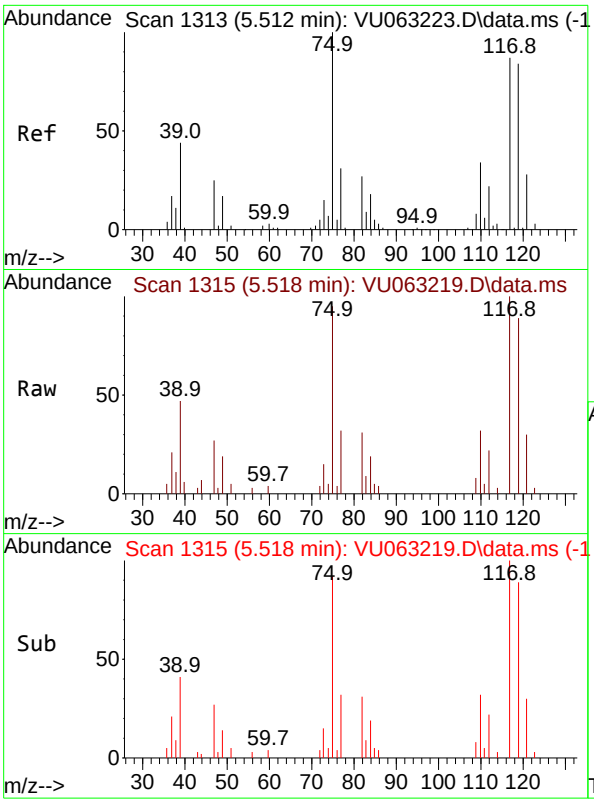


#28
1,1,1-Trichloroethane
Concen: 0.485 ug/l
RT: 5.306 min Scan# 1249
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 97 Resp: 10801

Ion	Ratio	Lower	Upper
97	100		
99	63.2	32.4	97.0
61	45.5	23.8	71.2

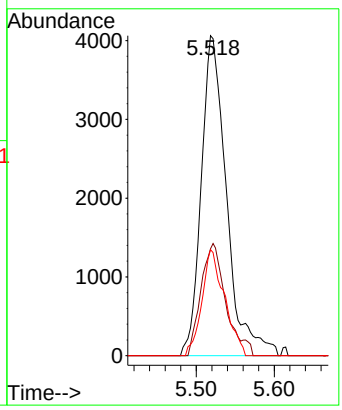




#29
1,1-Dichloropropene
Concen: 0.460 ug/l
RT: 5.518 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 75 Resp: 917

Ion	Ratio	Lower	Upper
75	100		
110	34.4	17.2	51.5
77	29.6	24.6	37.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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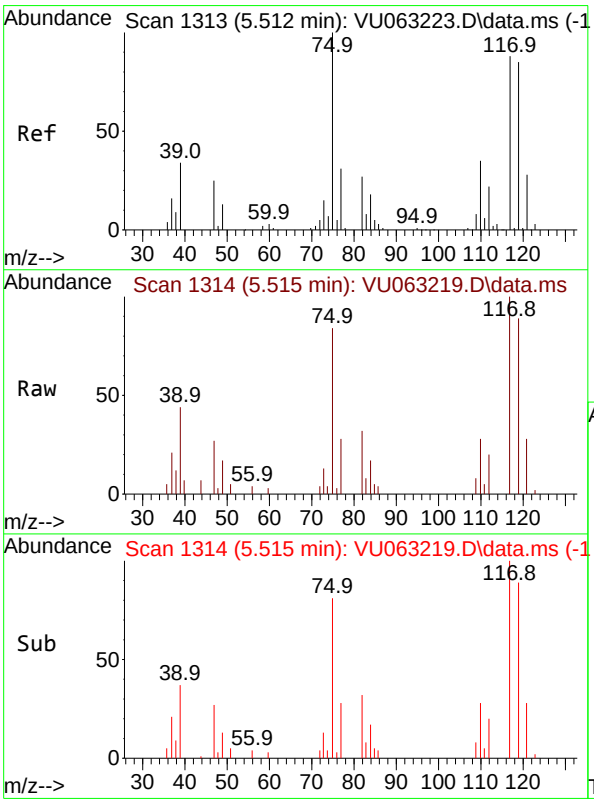
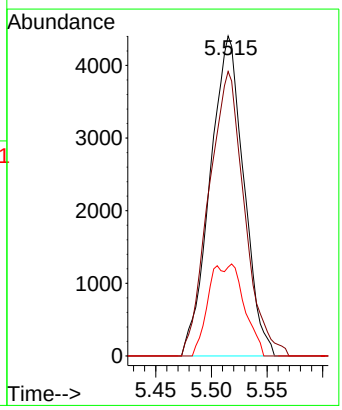
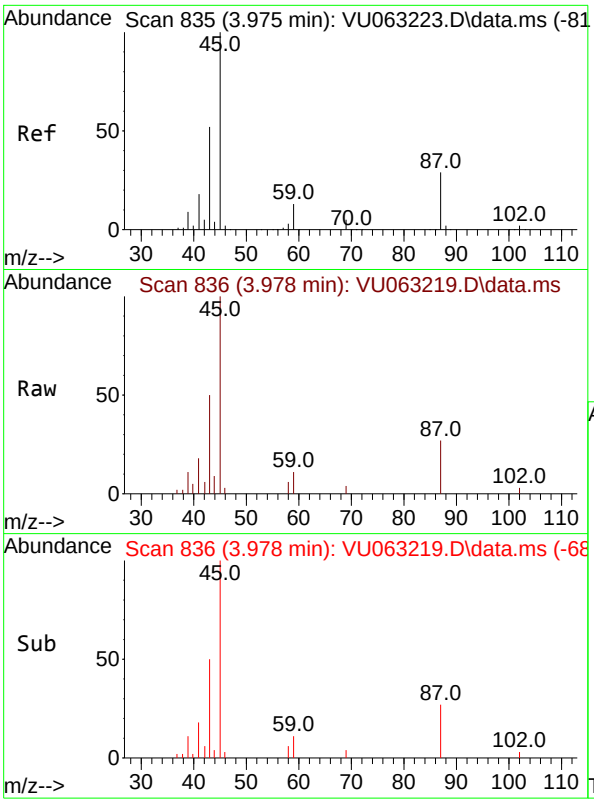


#30
Carbon Tetrachloride
Concen: 0.485 ug/l
RT: 5.515 min Scan# 1314
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:117 Resp: 9251

Ion	Ratio	Lower	Upper
117	100		
119	88.9	76.7	115.1
121	27.7	25.5	38.3

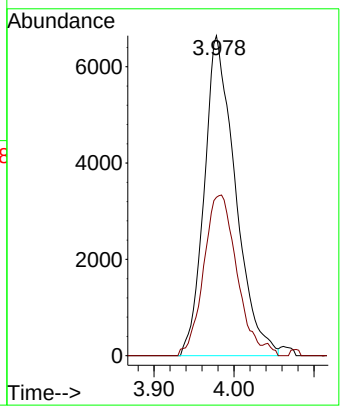




#31
Isopropyl Ether
Concen: 0.461 ug/l
RT: 3.978 min Scan# 8
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 45 Resp: 1790

Ion	Ratio	Lower	Upper
45	100		
43	53.0	25.7	77.1



Instrument :
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ClientSampleId :
VSTDICC0.5

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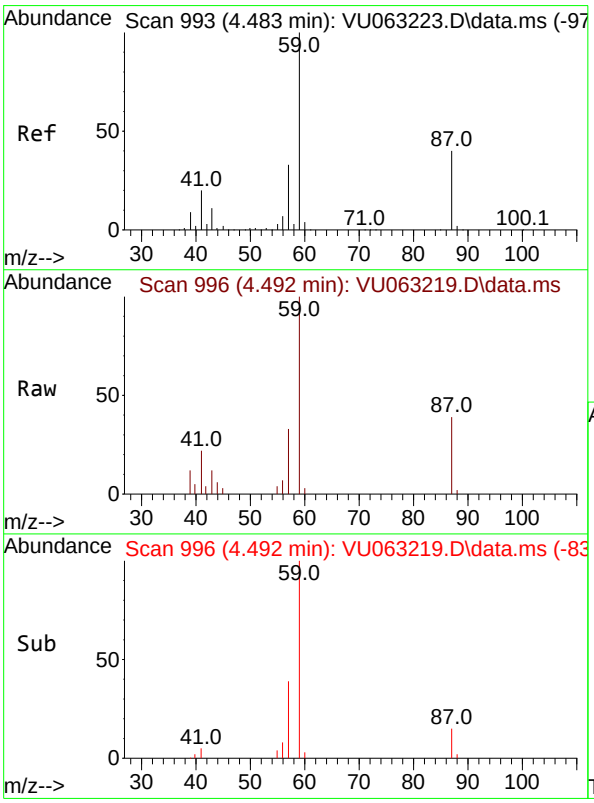
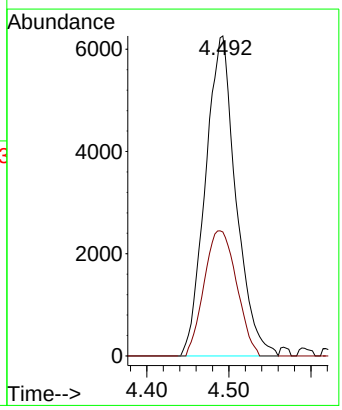
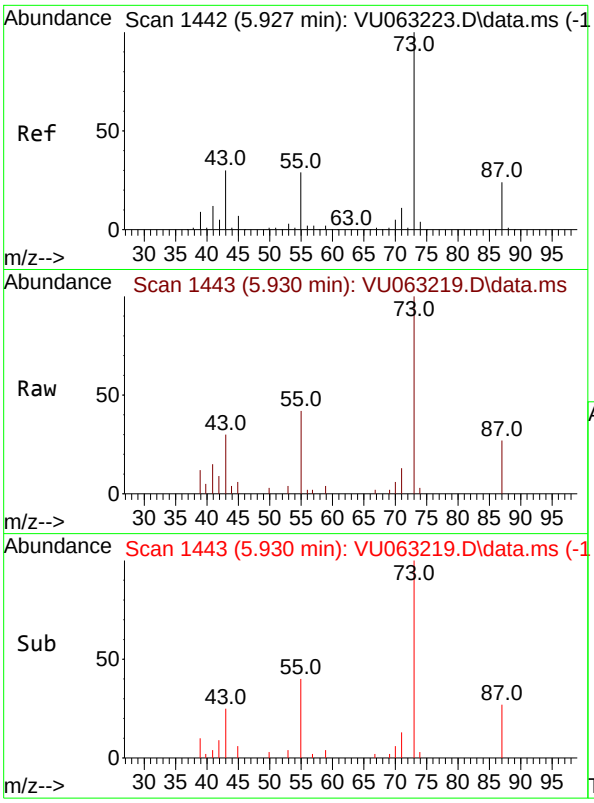


#32
Ethyl-t-butyl ether
Concen: 0.458 ug/l
RT: 4.492 min Scan# 996
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 59 Resp: 16177

Ion	Ratio	Lower	Upper
59	100		
87	41.6	32.6	49.0

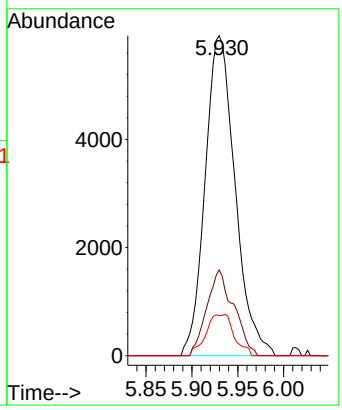




#33
Tert-Amyl methyl ether
Concen: 0.436 ug/l
RT: 5.930 min Scan# 14
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 73 Resp: 1347

Ion	Ratio	Lower	Upper
73	100		
87	24.1	18.9	28.3
71	12.0	9.0	13.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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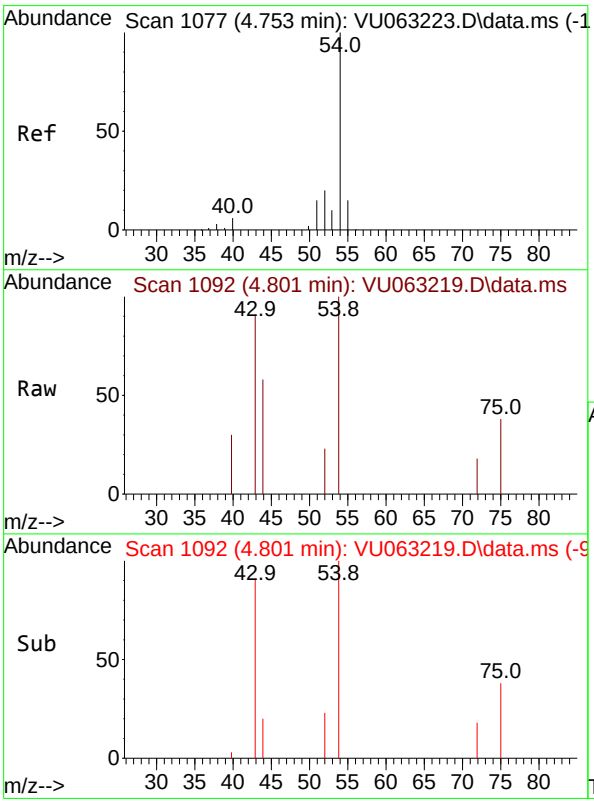
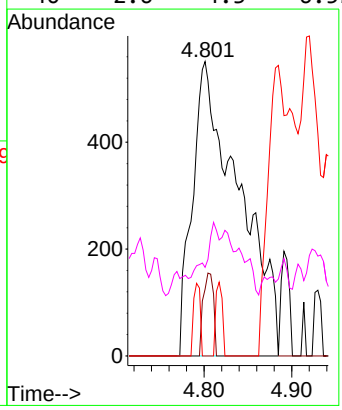
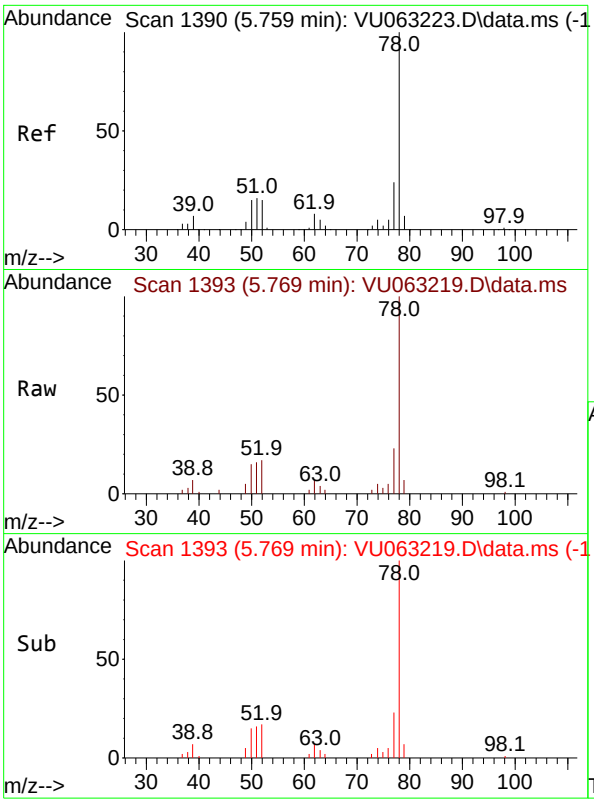


#34
Propionitrile
Concen: 1.809 ug/l m
RT: 4.801 min Scan# 1092
Delta R.T. 0.048 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 54 Resp: 2034

Ion	Ratio	Lower	Upper
54	100		
52	6.2	16.3	24.5#
55	3.5	11.8	17.6#
40	2.6	4.3	6.5#





#35
Benzene
Concen: 0.473 ug/l
RT: 5.769 min Scan# 1
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 78 Resp: 2901

Ion	Ratio	Lower	Upper
78	100		
77	22.6	19.0	28.4

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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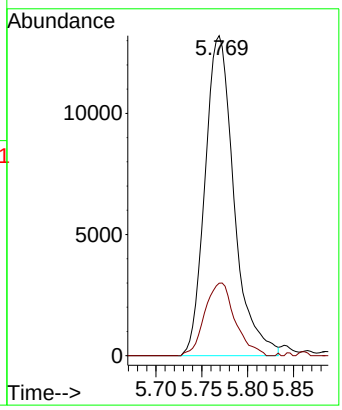
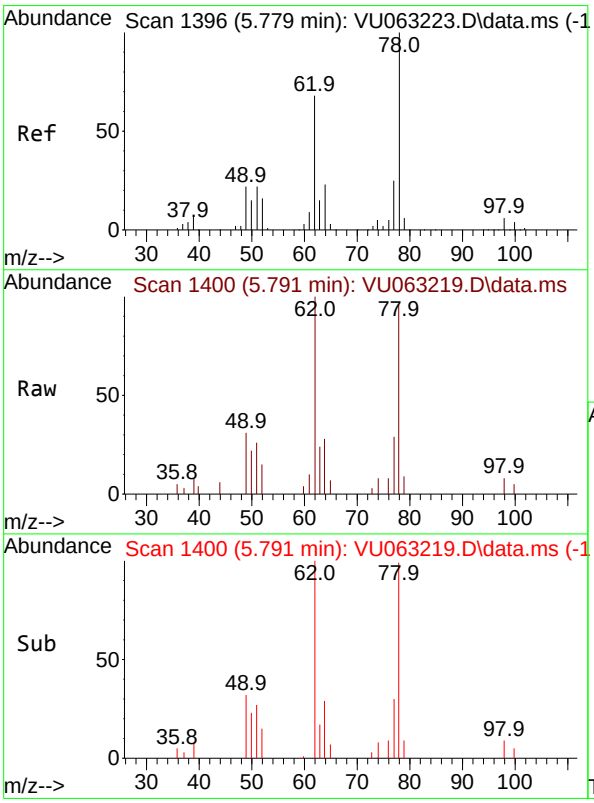
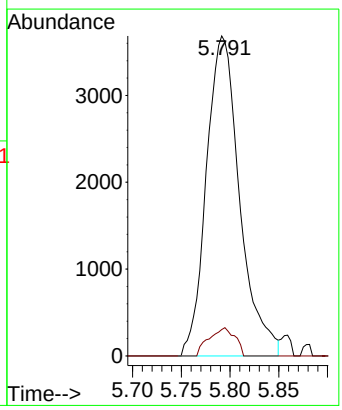


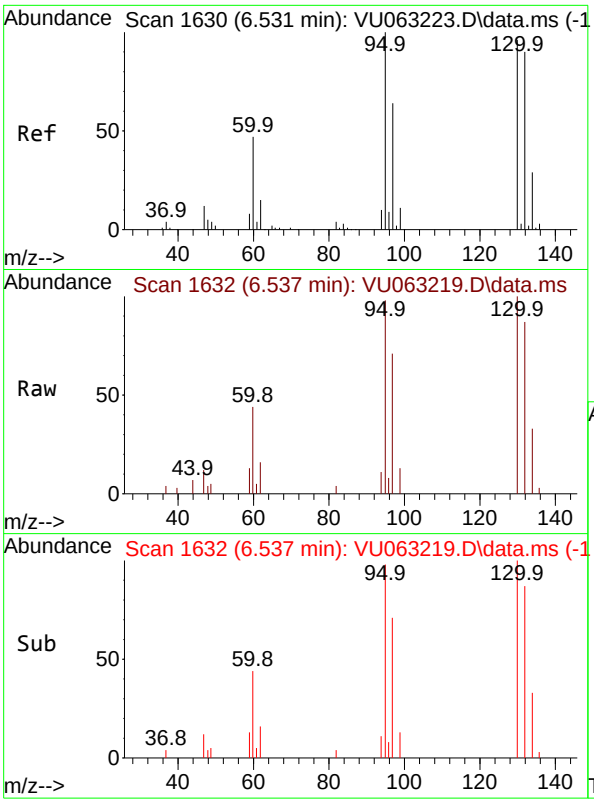


#36
1,2-Dichloroethane
Concen: 0.494 ug/l
RT: 5.791 min Scan# 1400
Delta R.T. 0.013 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 62 Resp: 8750

Ion	Ratio	Lower	Upper
62	100		
98	6.9	6.9	10.3#

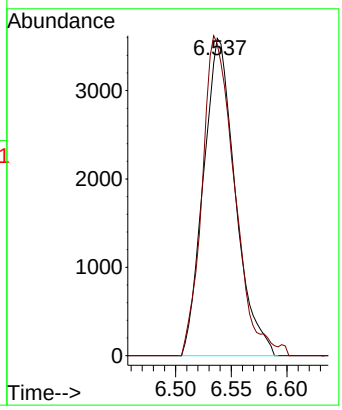




#37
Trichloroethene
Concen: 0.490 ug/l
RT: 6.537 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:130 Resp: 714

Ion	Ratio	Lower	Upper
130	100		
95	98.3	83.2	124.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations
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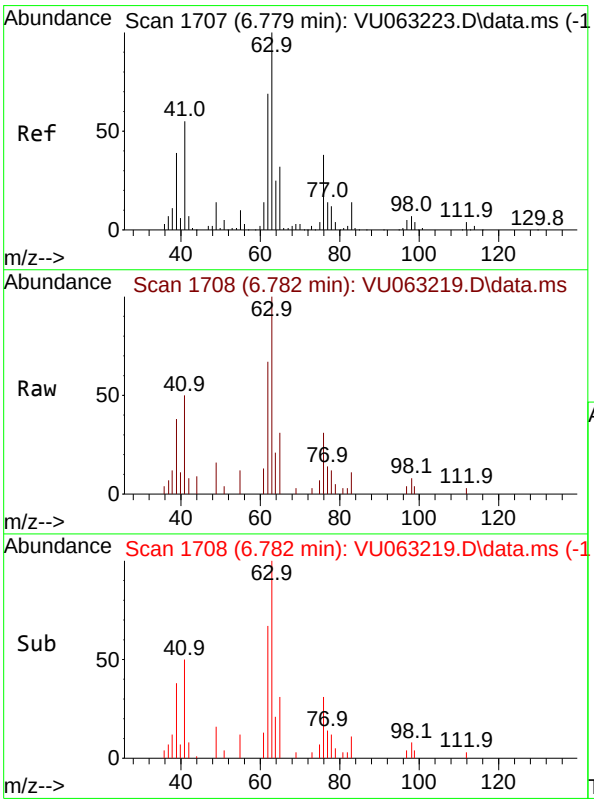
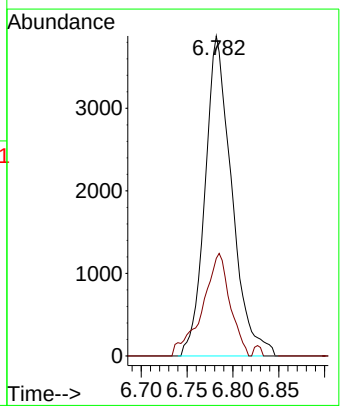
Supervised By :Mahesh Dadoda 02/12/2025

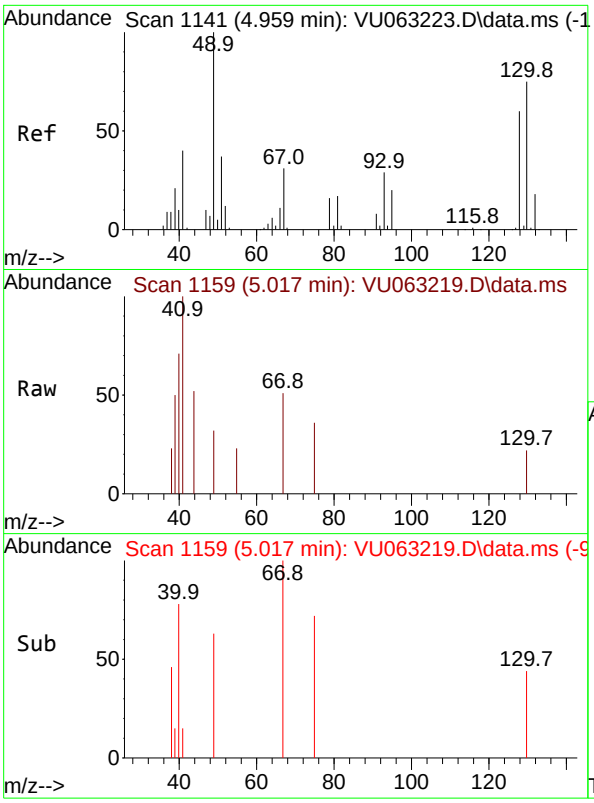


#38
1,2-Dichloropropane
Concen: 0.489 ug/l
RT: 6.782 min Scan# 1708
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 63 Resp: 7842

Ion	Ratio	Lower	Upper
63	100		
65	30.5	25.3	37.9

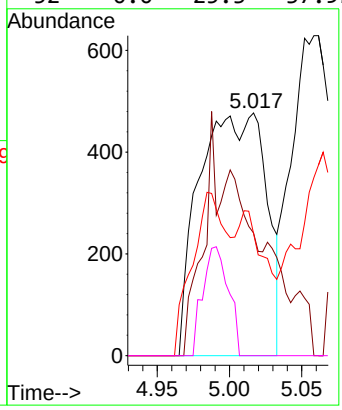




#39
Methacrylonitrile
Concen: 0.382 ug/l m
RT: 5.017 min Scan# 1
Delta R.T. 0.058 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 41 Resp: 153

Ion	Ratio	Lower	Upper
41	100		
67	14.5	64.5	96.7#
39	0.0	43.0	64.6#
52	0.0	25.3	37.9#



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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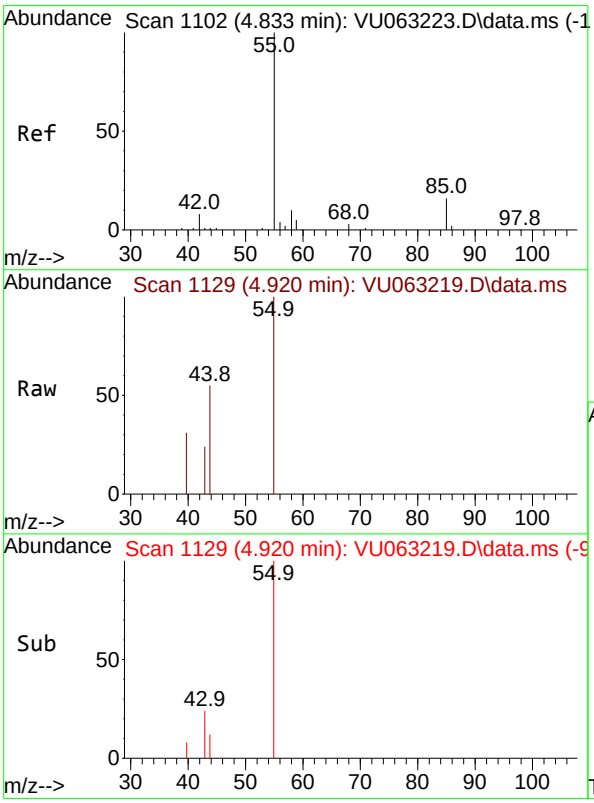
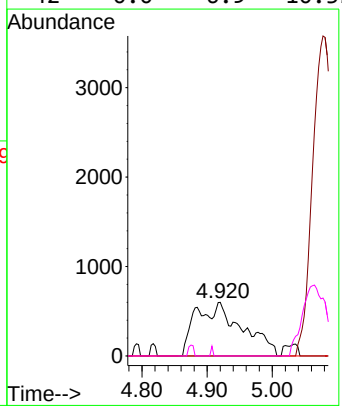
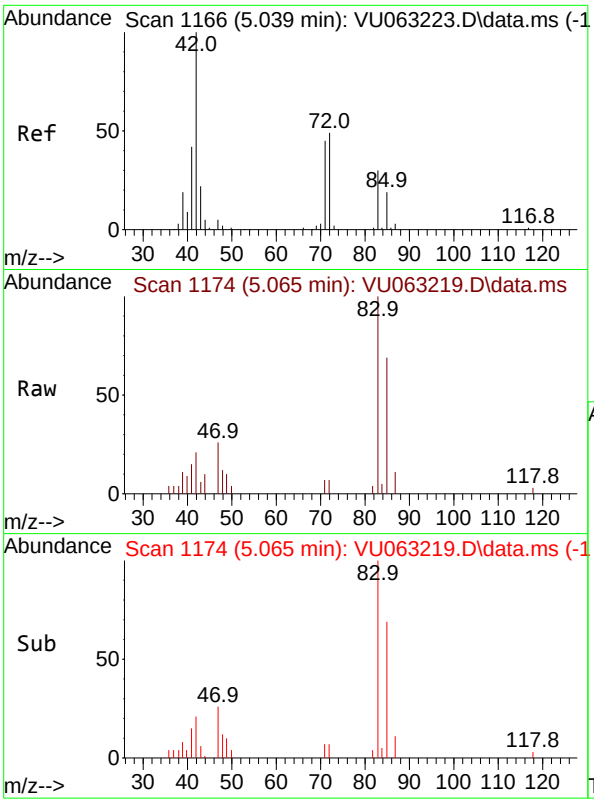


#40
Methyl acrylate
Concen: 0.403 ug/l m
RT: 4.920 min Scan# 1129
Delta R.T. 0.087 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 55 Resp: 2955

Ion	Ratio	Lower	Upper
55	100		
85	0.0	13.3	19.9#
58	0.0	7.3	10.9#
42	0.0	6.9	10.3#

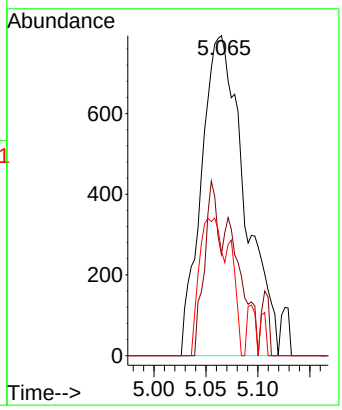




#41
Tetrahydrofuran
Concen: 0.970 ug/l
RT: 5.065 min Scan# 11
Delta R.T. 0.026 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 42 Resp: 228

Ion	Ratio	Lower	Upper
42	100		
72	18.8	41.5	62.3#
71	23.0	37.2	55.8#



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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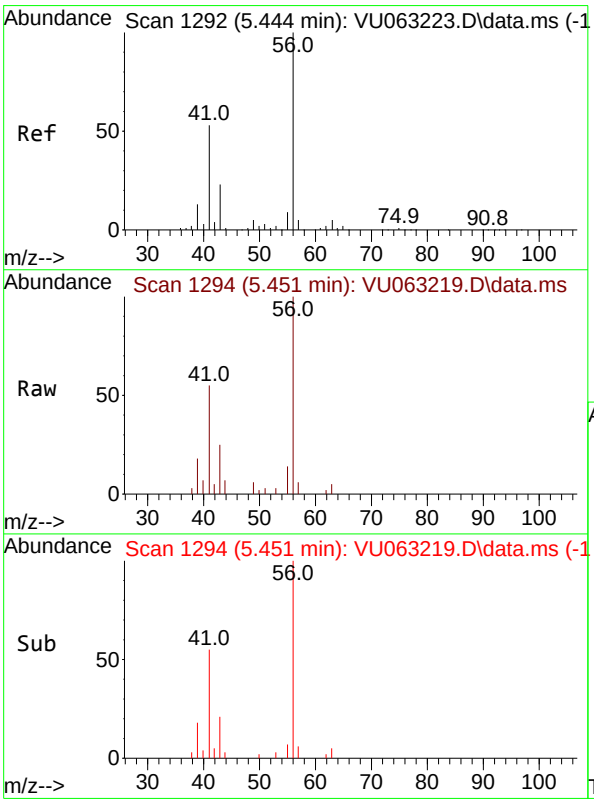
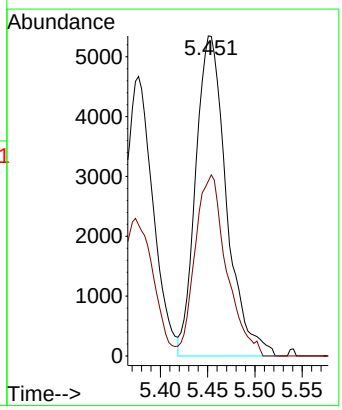
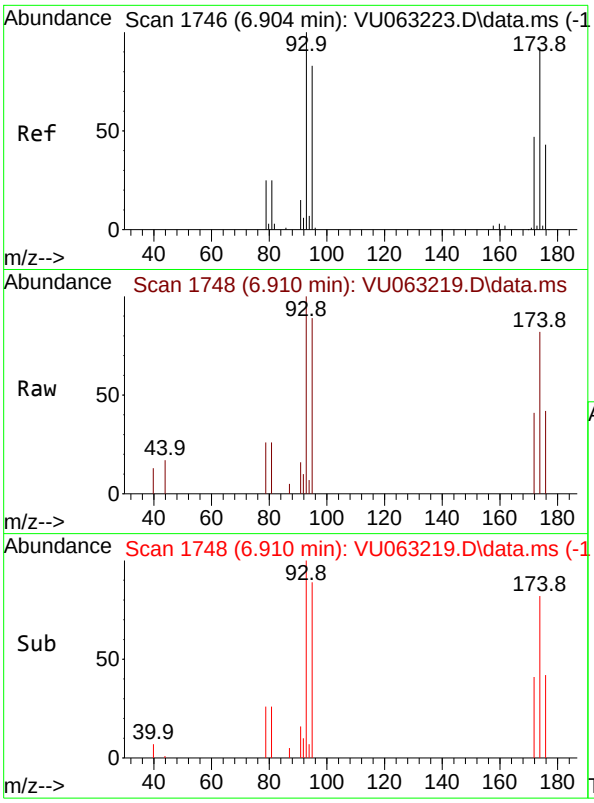


#42
1-Chlorobutane
Concen: 0.443 ug/l
RT: 5.451 min Scan# 1294
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 56 Resp: 12081

Ion	Ratio	Lower	Upper
56	100		
41	58.0	26.3	78.8

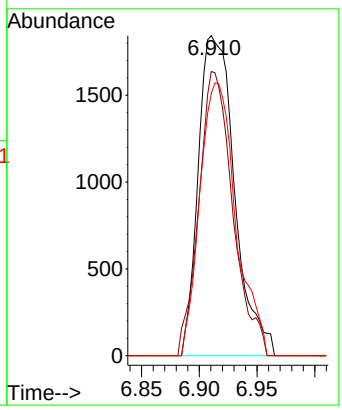




#43
Dibromomethane
Concen: 0.495 ug/l
RT: 6.910 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 93 Resp: 402

Ion	Ratio	Lower	Upper
93	100		
95	82.9	67.2	100.8
174	84.6	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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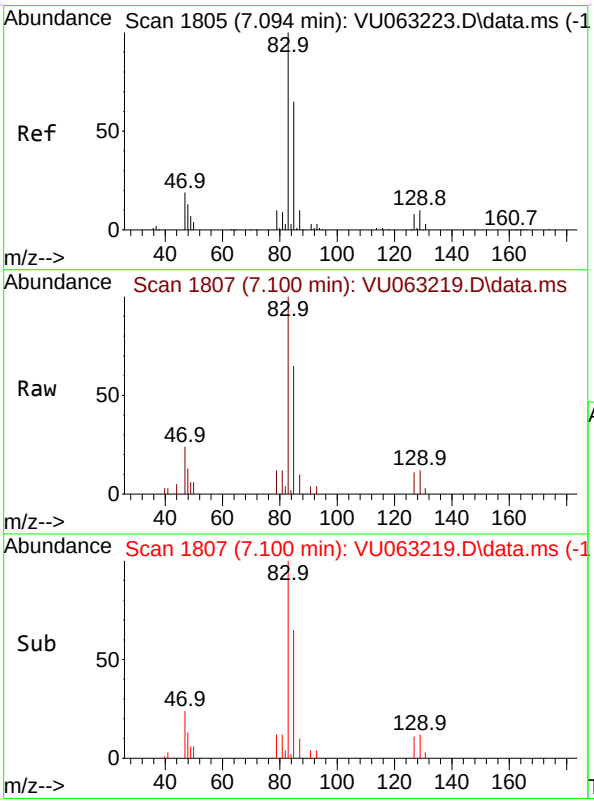
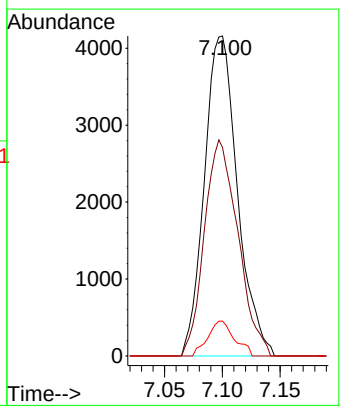
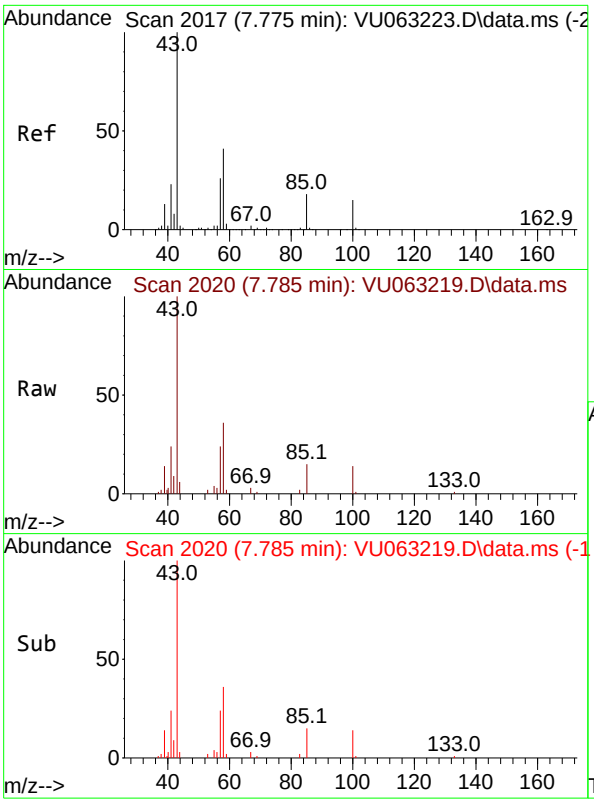


#44
Bromodichloromethane
Concen: 0.438 ug/l
RT: 7.100 min Scan# 1807
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 83 Resp: 8280

Ion	Ratio	Lower	Upper
83	100		
85	65.2	51.7	77.5
127	10.9	6.7	10.1#

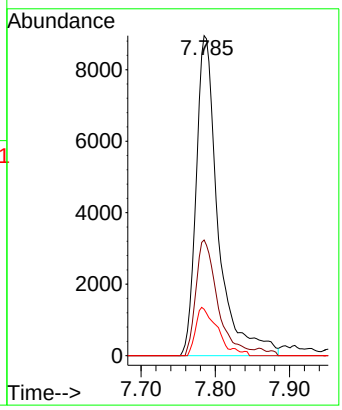




#45
4-Methyl-2-Pentanone
Concen: 2.160 ug/l
RT: 7.785 min Scan# 2
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 43 Resp: 1839

Ion	Ratio	Lower	Upper
43	100		
58	36.0	20.8	62.5
85	14.1	14.8	22.2#



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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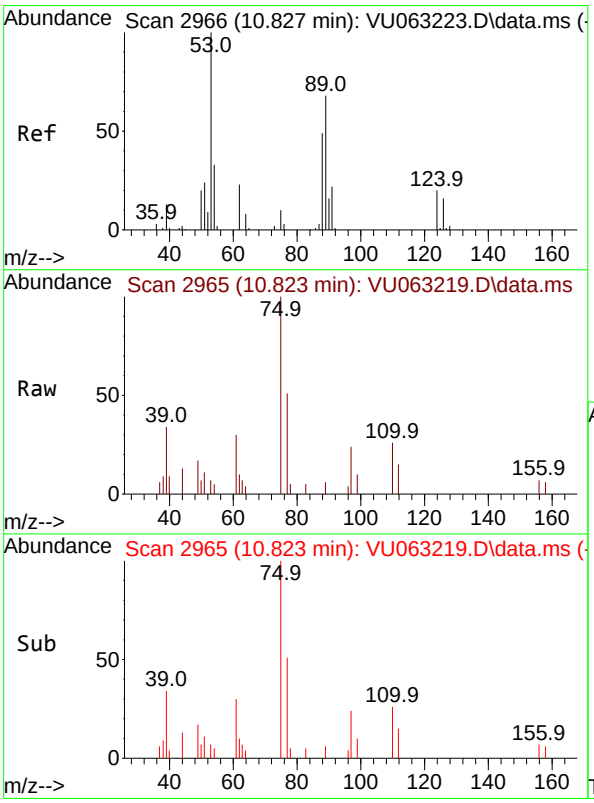
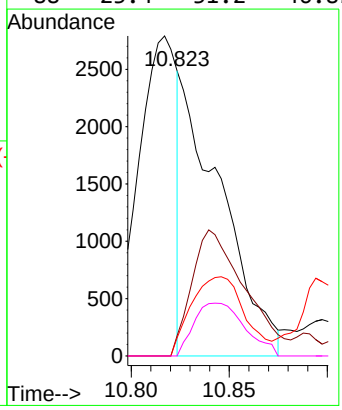
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

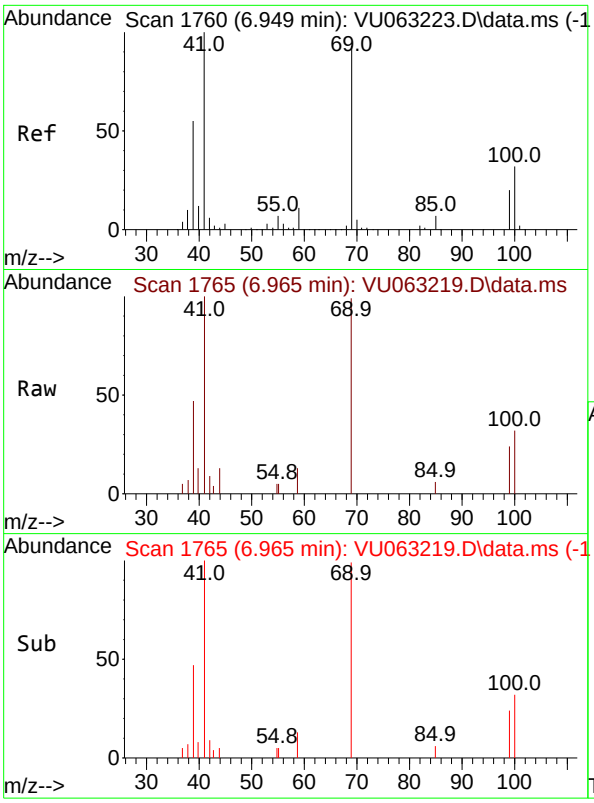


#46
t-1,4-Dichloro-2-butene
Concen: 0.839 ug/l m
RT: 10.823 min Scan# 2965
Delta R.T. -0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 75 Resp: 3537

Ion	Ratio	Lower	Upper
75	100		
53	59.0	64.5	96.7#
89	37.1	43.4	65.2#
88	23.4	31.2	46.8#

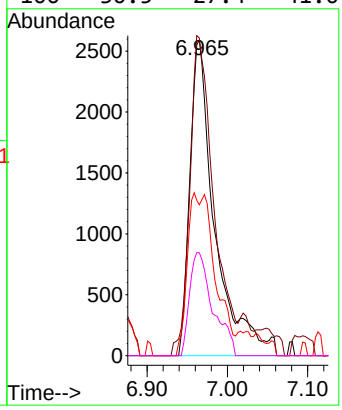




#47
Methyl methacrylate
Concen: 0.815 ug/l m
RT: 6.965 min Scan# 1
Delta R.T. 0.016 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 69 Resp: 558

Ion	Ratio	Lower	Upper
69	100		
41	97.2	0.0	217.0
39	25.7	47.7	71.5#
100	30.5	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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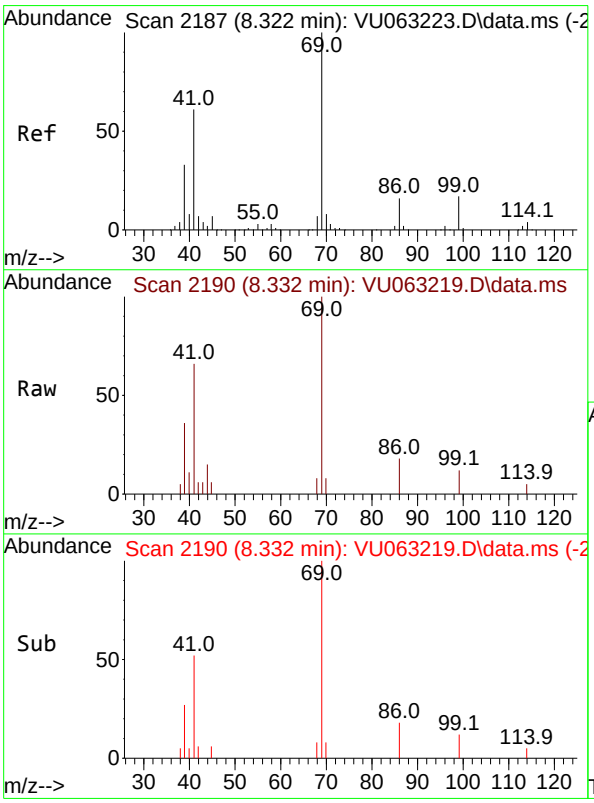
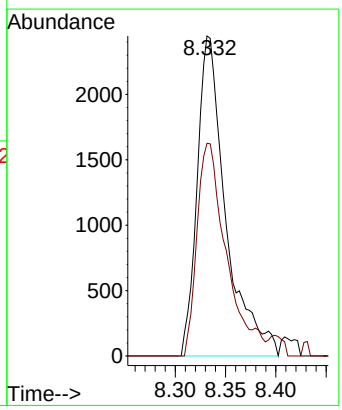
Supervised By :Mahesh Dadoda 02/12/2025

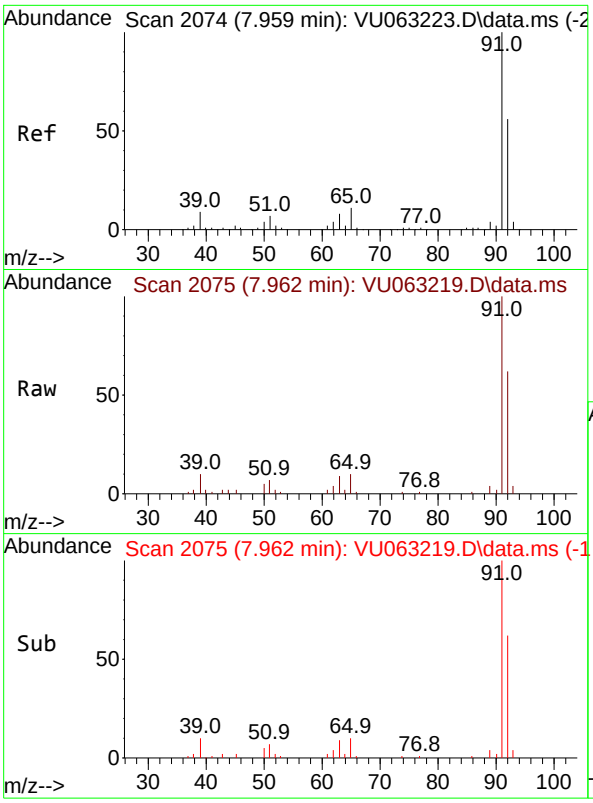


#48
Ethyl methacrylate
Concen: 0.377 ug/l
RT: 8.332 min Scan# 2190
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 69 Resp: 4839

Ion	Ratio	Lower	Upper
69	100		
41	68.2	30.6	92.0

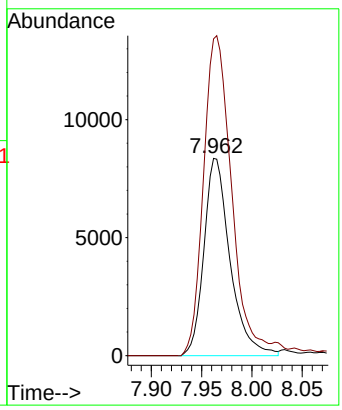




#49
Toluene
Concen: 0.429 ug/l
RT: 7.962 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 92 Resp: 1513

Ion	Ratio	Lower	Upper
92	100		
91	173.4	141.8	212.6



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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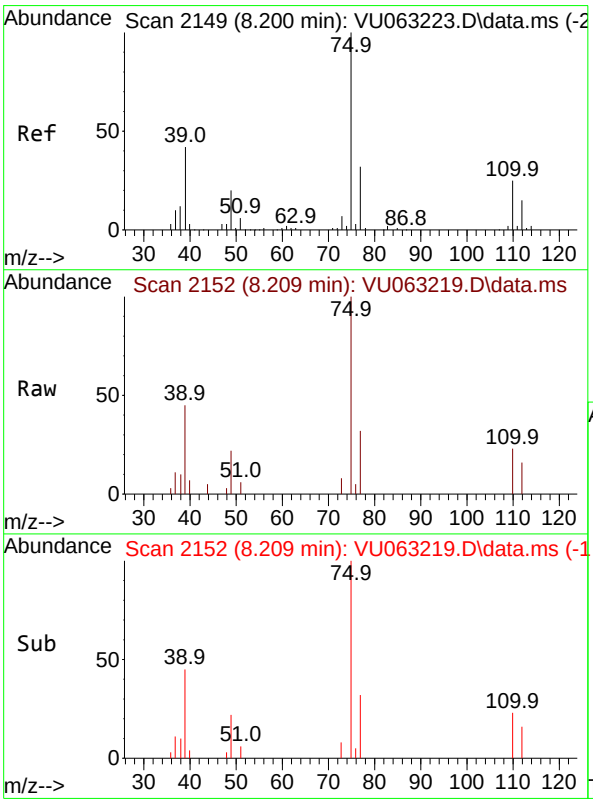
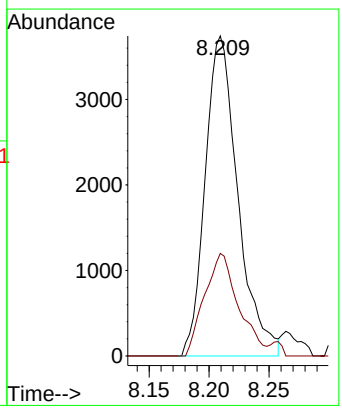
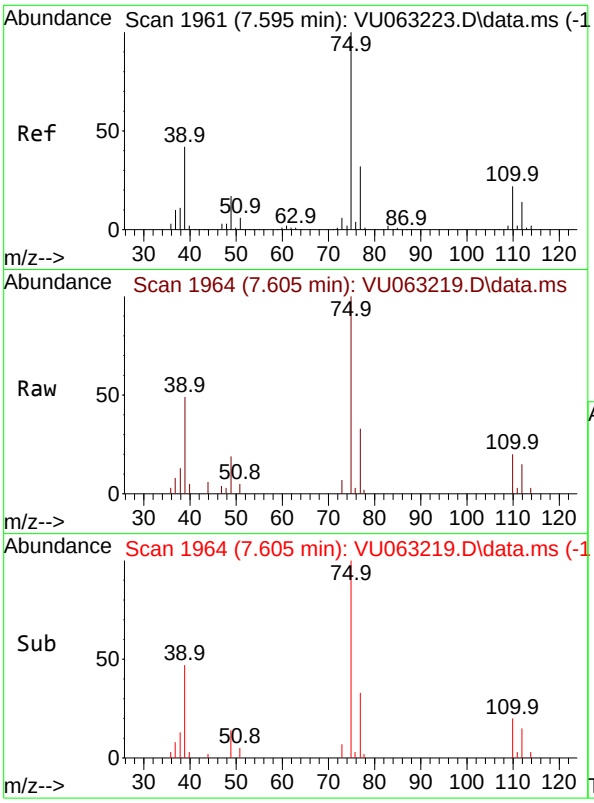


#50
t-1,3-Dichloropropene
Concen: 0.409 ug/l
RT: 8.209 min Scan# 2152
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 75 Resp: 7086

Ion	Ratio	Lower	Upper
75	100		
77	32.1	25.9	38.9

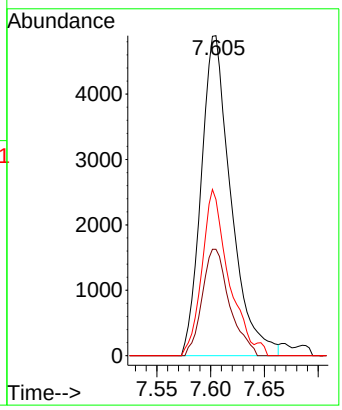




#51
cis-1,3-Dichloropropene
Concen: 0.441 ug/l
RT: 7.605 min Scan# 1
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 75 Resp: 942

Ion	Ratio	Lower	Upper
75	100		
77	35.5	25.3	37.9
39	48.8	33.5	50.3



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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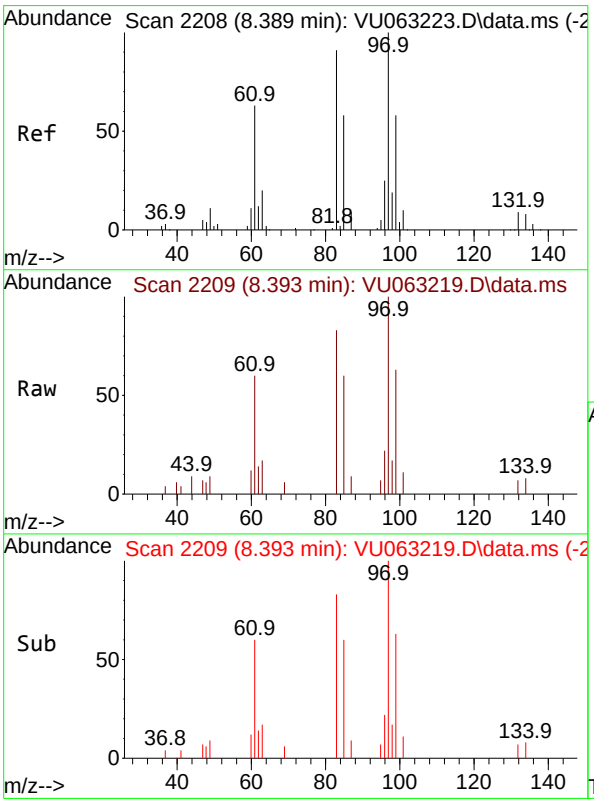
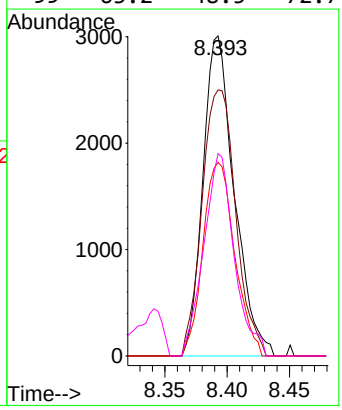
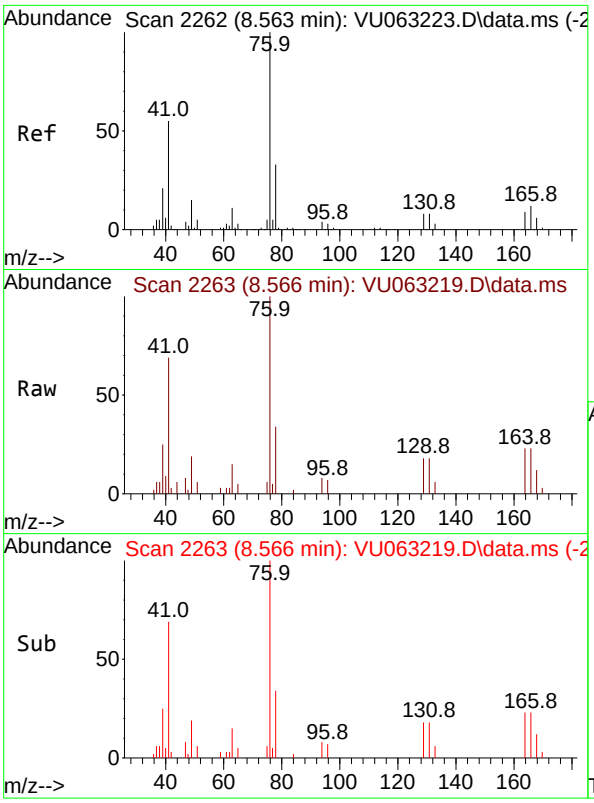


#52
1,1,2-Trichloroethane
Concen: 0.480 ug/l
RT: 8.393 min Scan# 2209
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 97 Resp: 5257

Ion	Ratio	Lower	Upper
97	100		
83	83.1	73.0	109.4
85	60.5	46.3	69.5
99	63.2	48.5	72.7

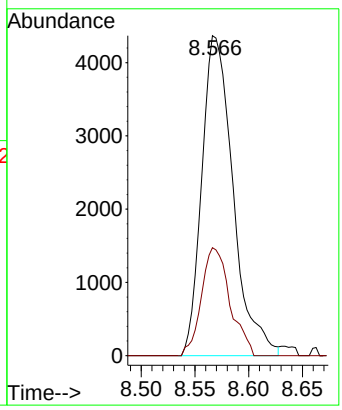




#53
1,3-Dichloropropane
Concen: 0.454 ug/l
RT: 8.566 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 76 Resp: 883

Ion	Ratio	Lower	Upper
76	100		
78	30.9	26.3	39.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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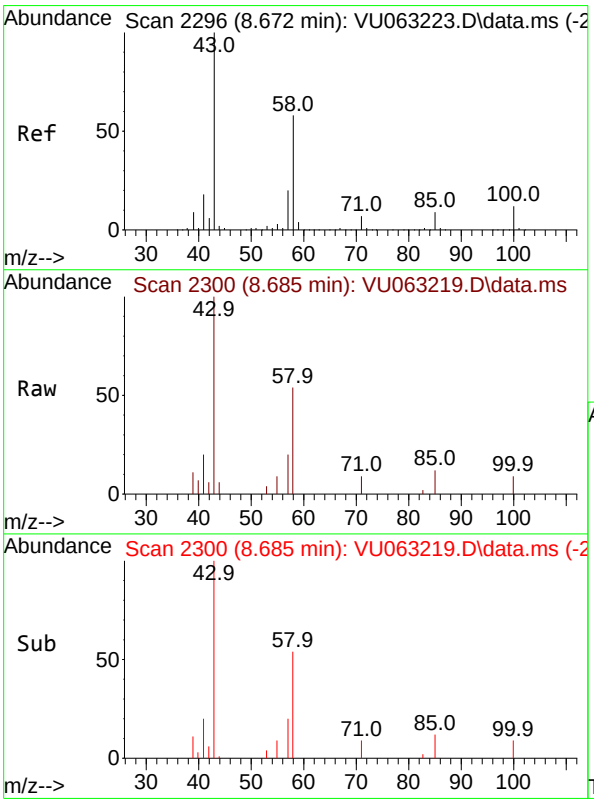
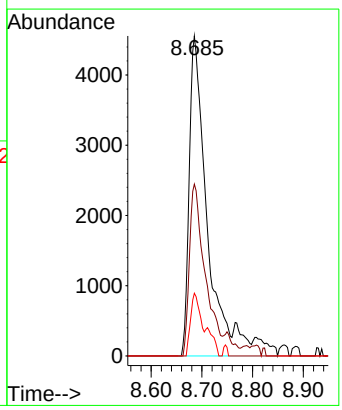
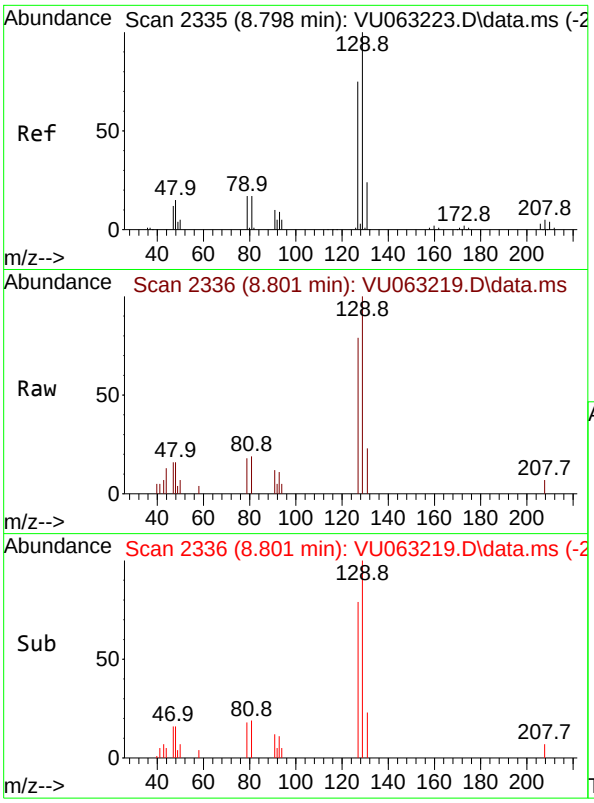


#54
2-Hexanone
Concen: 2.011 ug/l m
RT: 8.685 min Scan# 2300
Delta R.T. 0.013 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 43 Resp: 11692

Ion	Ratio	Lower	Upper
43	100		
58	44.7	38.0	78.0
57	10.5	0.0	39.1

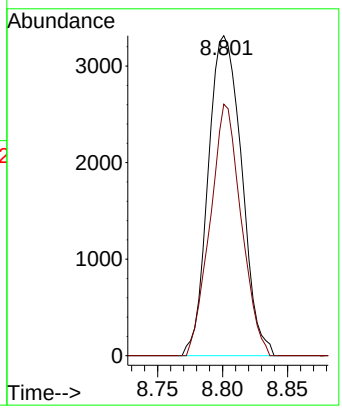




#55
Dibromochloromethane
Concen: 0.471 ug/l
RT: 8.801 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:129 Resp: 593

Ion	Ratio	Lower	Upper
129	100		
127	73.0	60.4	90.6



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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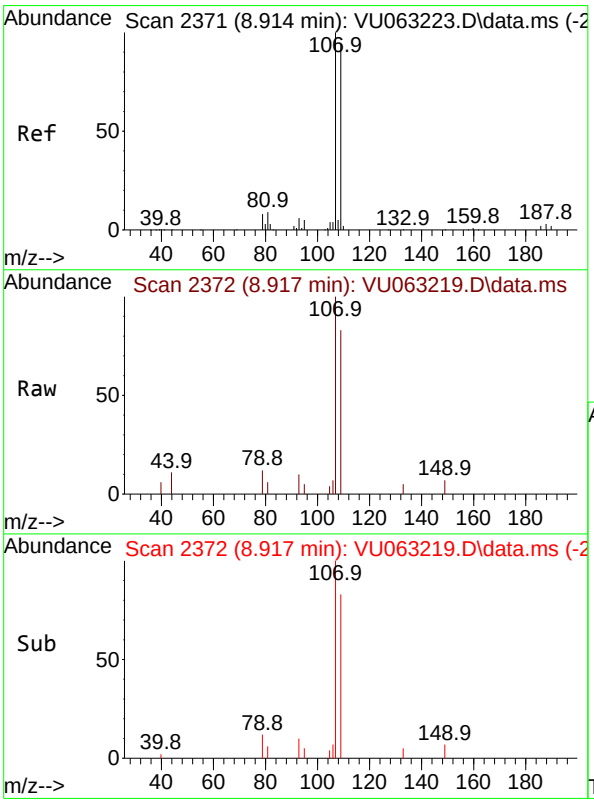
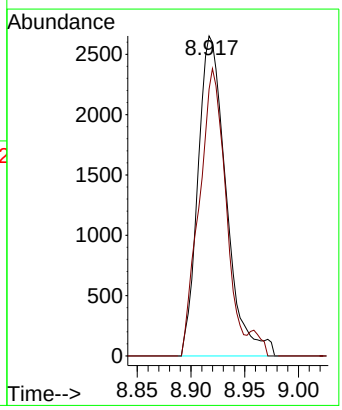
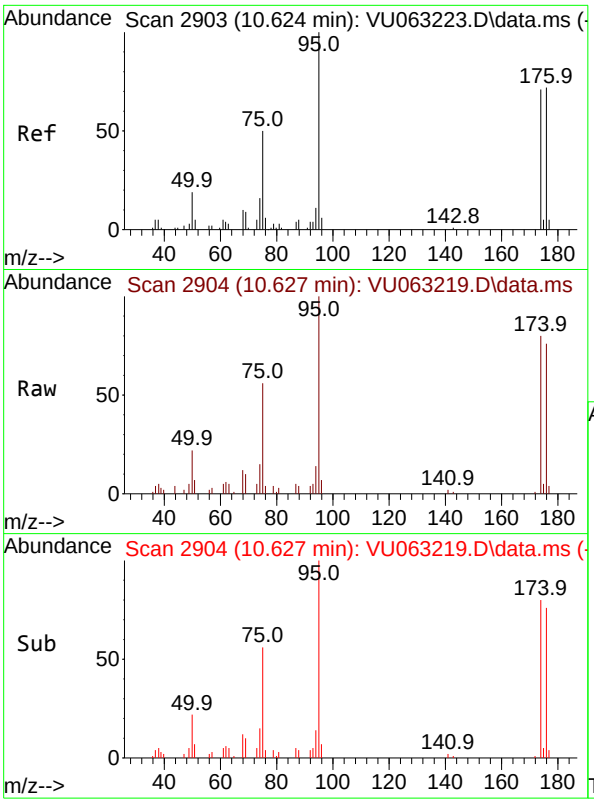


#56
1,2-Dibromoethane
Concen: 0.470 ug/l
RT: 8.917 min Scan# 2372
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:107 Resp: 4834

Ion	Ratio	Lower	Upper
107	100		
109	84.1	0.0	187.8

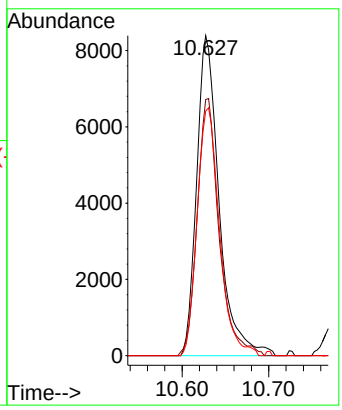




#57
4-Bromofluorobenzene
Concen: 0.917 ug/l
RT: 10.627 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 95 Resp: 1509

Ion	Ratio	Lower	Upper
95	100		
174	78.4	58.6	88.0
176	77.1	58.2	87.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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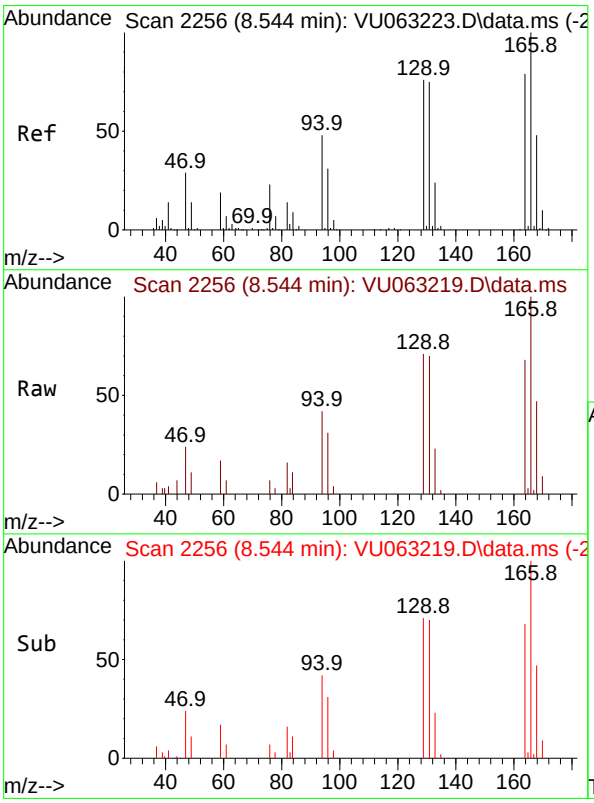
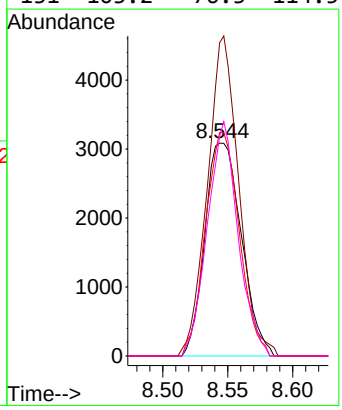
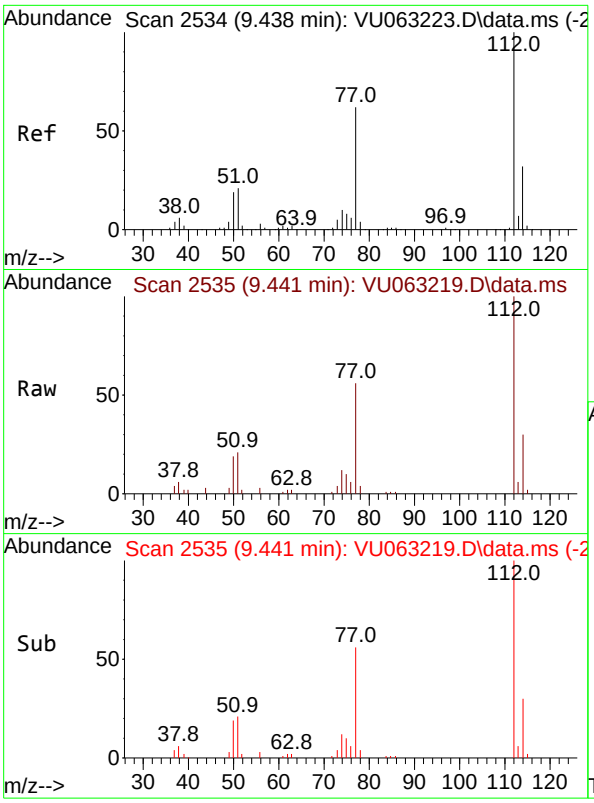


#58
Tetrachloroethene
Concen: 0.503 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:164 Resp: 6044

Ion	Ratio	Lower	Upper
164	100		
166	147.2	101.4	152.0
129	105.0	77.0	115.4
131	103.2	76.3	114.5

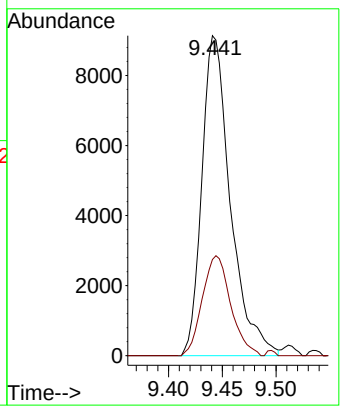




#59
Chlorobenzene
Concen: 0.453 ug/l
RT: 9.441 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:112 Resp: 1687

Ion	Ratio	Lower	Upper
112	100		
114	30.0	25.7	38.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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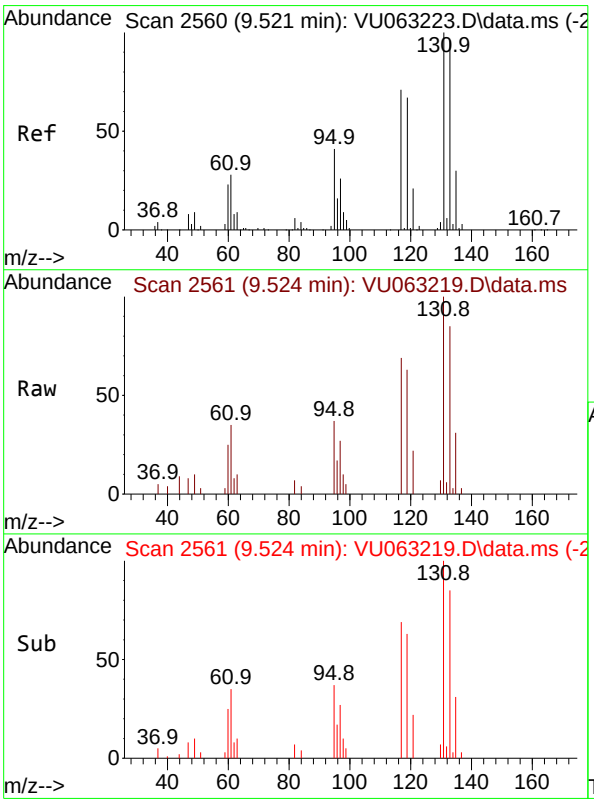
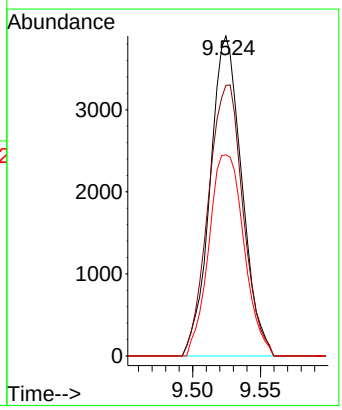
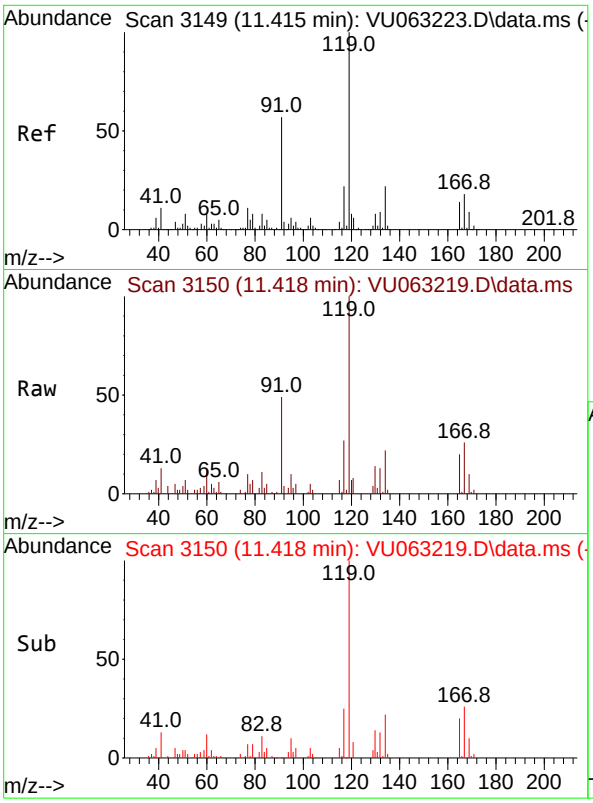


#60
1,1,1,2-Tetrachloroethane
Concen: 0.475 ug/l
RT: 9.524 min Scan# 2561
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:131 Resp: 6349

Ion	Ratio	Lower	Upper
131	100		
133	92.8	76.7	115.1
119	69.5	54.4	81.6

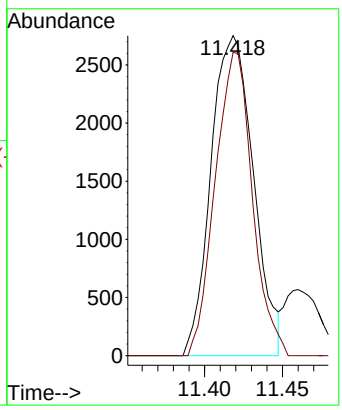




#61
Pentachloroethane
Concen: 0.436 ug/l
RT: 11.418 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:117 Resp: 521

Ion	Ratio	Lower	Upper
117	100		
167	82.8	65.0	97.6



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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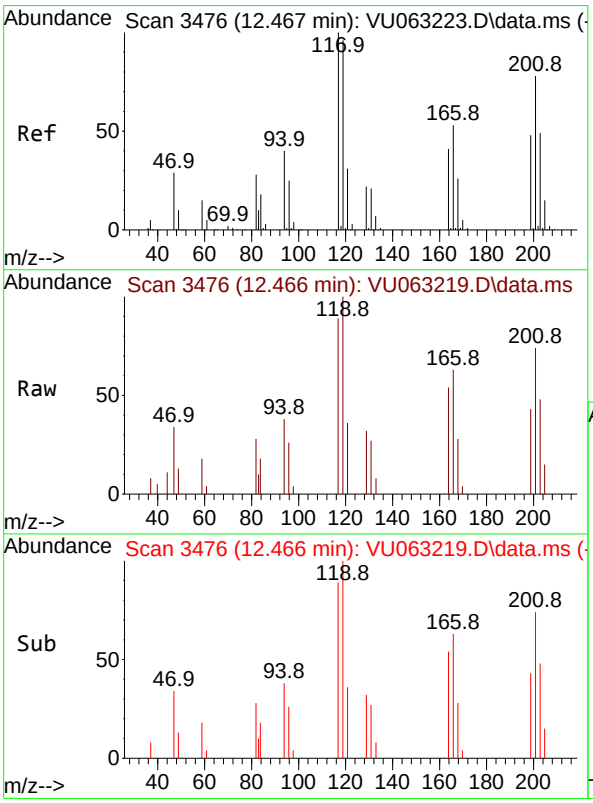
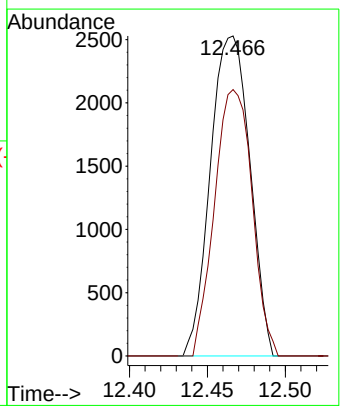
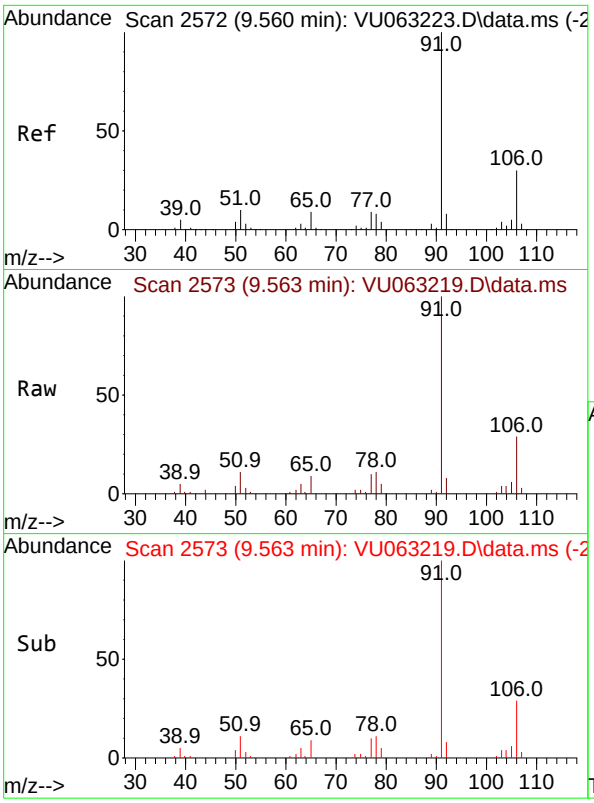


#62
Hexachloroethane
Concen: 0.423 ug/l
RT: 12.466 min Scan# 3476
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:117 Resp: 4467

Ion	Ratio	Lower	Upper
117	100		
201	79.0	61.3	91.9





#63
Ethyl Benzene
Concen: 0.418 ug/l
RT: 9.563 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 91 Resp: 2681

Ion	Ratio	Lower	Upper
91	100		
106	28.8	24.2	36.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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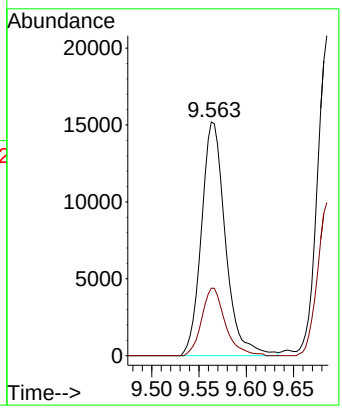
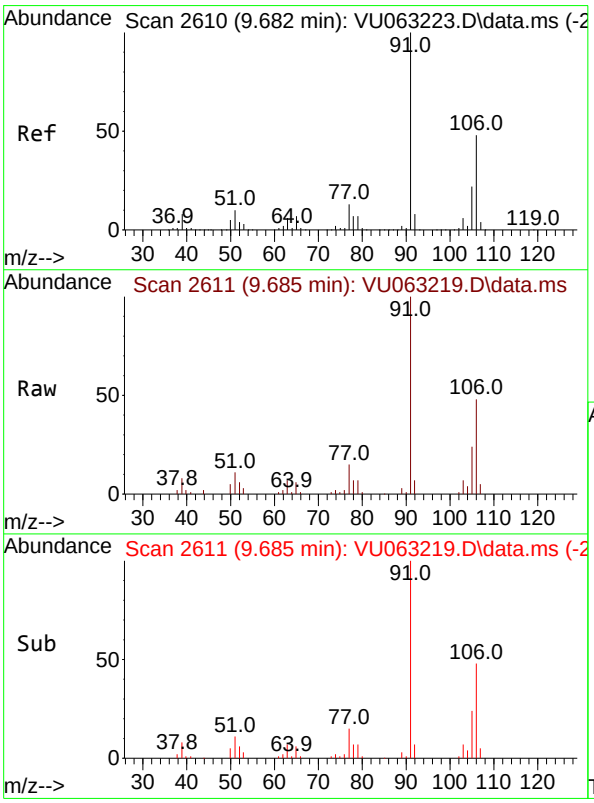
Supervised By :Mahesh Dadoda 02/12/2025

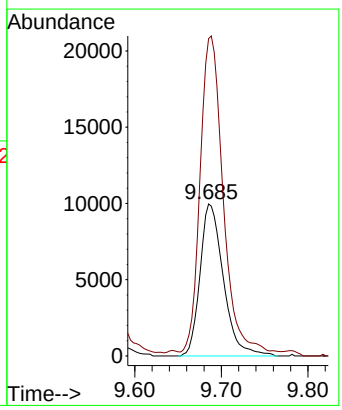


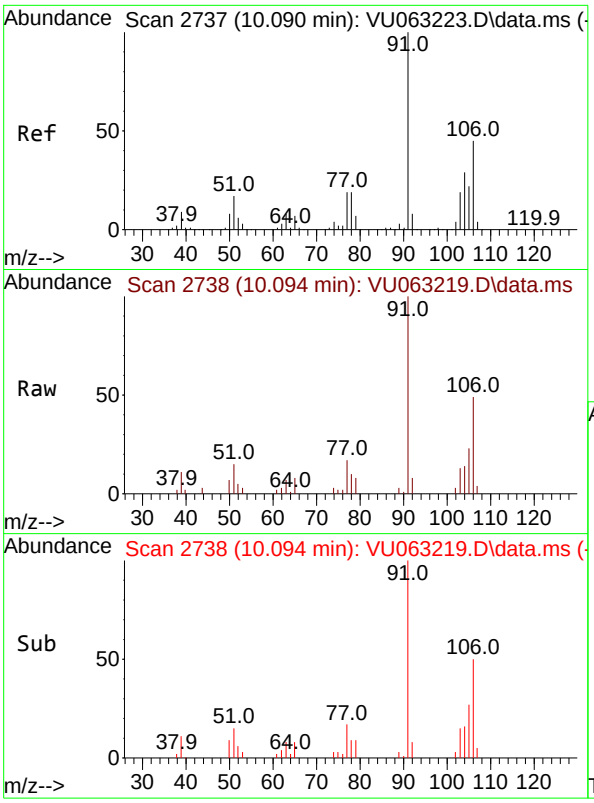


#64
m/p-Xylenes
Concen: 0.778 ug/l
RT: 9.685 min Scan# 2611
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:106 Resp: 18658

Ion	Ratio	Lower	Upper
106	100		
91	201.9	166.9	250.3

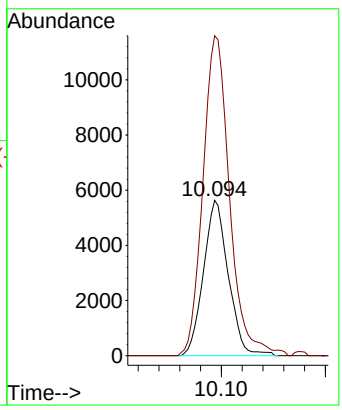




#65
o-Xylene
Concen: 0.398 ug/l
RT: 10.094 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:106 Resp: 932

Ion	Ratio	Lower	Upper
106	100		
91	220.7	110.9	332.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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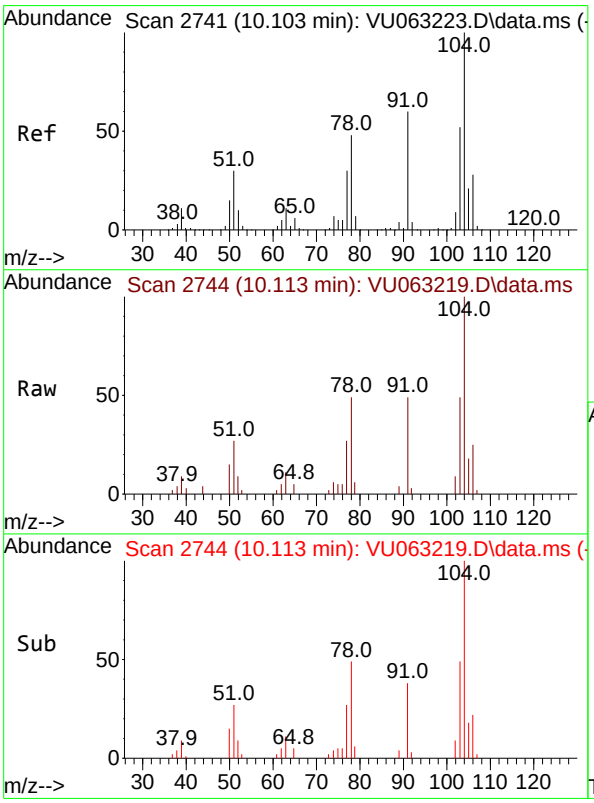
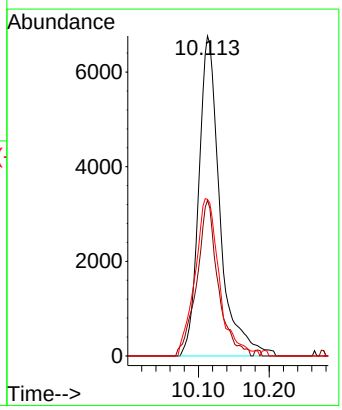
Supervised By :Mahesh Dadoda 02/12/2025

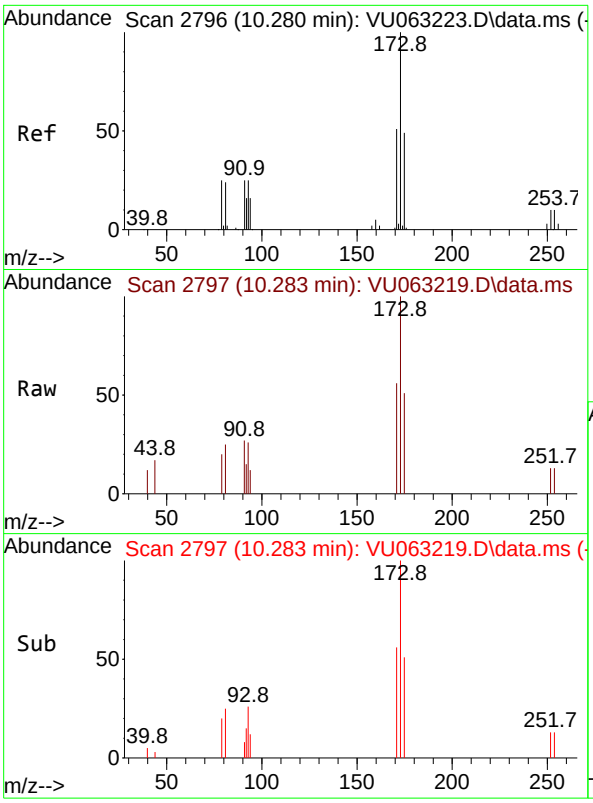


#66
Styrene
Concen: 0.375 ug/l
RT: 10.113 min Scan# 2744
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:104 Resp: 14012

Ion	Ratio	Lower	Upper
104	100		
78	48.9	41.2	61.8
103	56.6	44.8	67.2

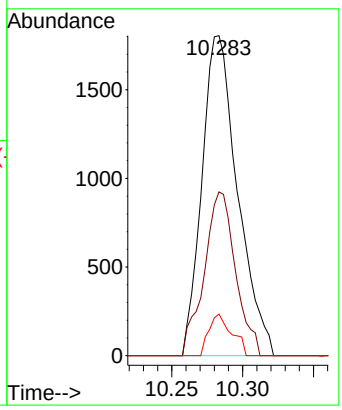




#67
Bromoform
Concen: 0.442 ug/l
RT: 10.283 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:173 Resp: 316

Ion	Ratio	Lower	Upper
173	100		
175	44.9	39.0	58.4
254	8.4	7.7	11.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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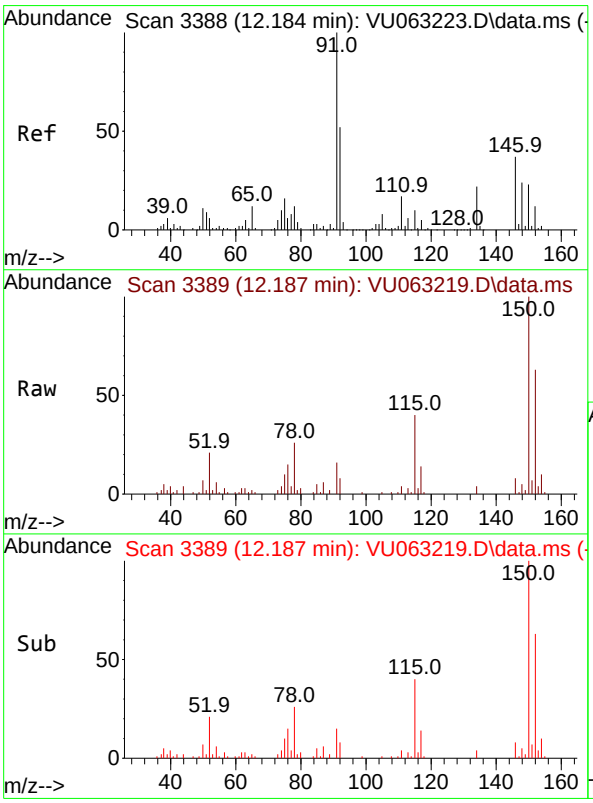
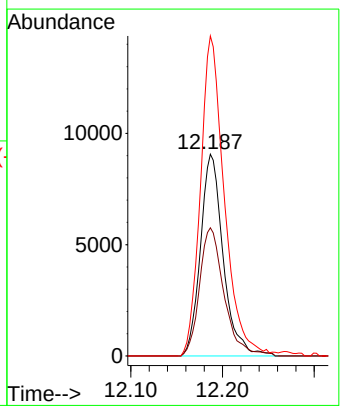
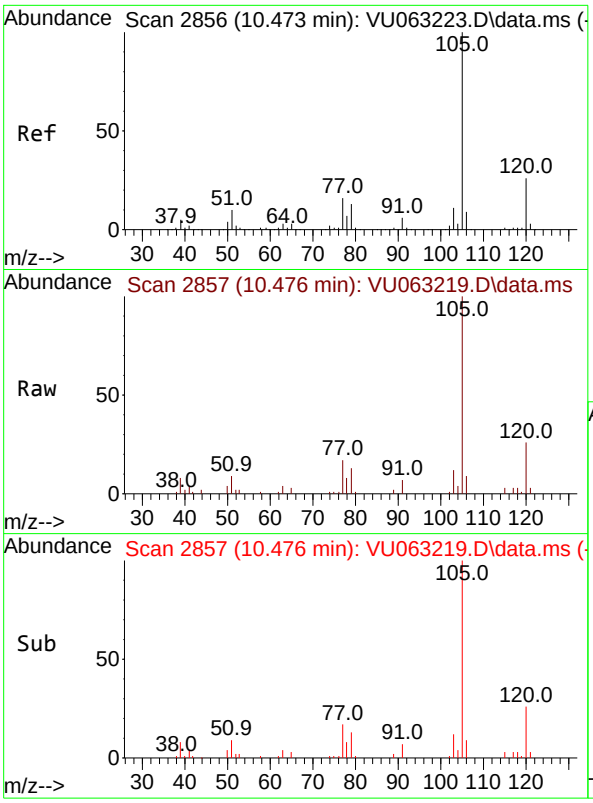


#68
1,2-Dichlorobenzene-d4
Concen: 0.914 ug/l
RT: 12.187 min Scan# 3389
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:152 Resp: 15652

Ion	Ratio	Lower	Upper
152	100		
115	68.2	0.0	275.2
150	166.4	0.0	658.4

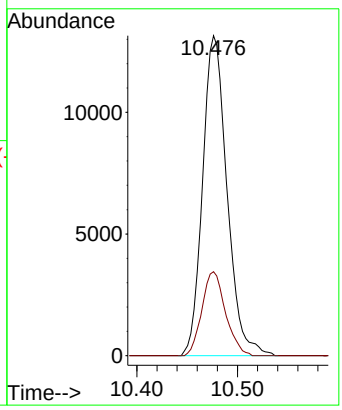




#69
Isopropylbenzene
Concen: 0.402 ug/l
RT: 10.476 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:105 Resp: 2219

Ion	Ratio	Lower	Upper
105	100		
120	25.3	12.8	38.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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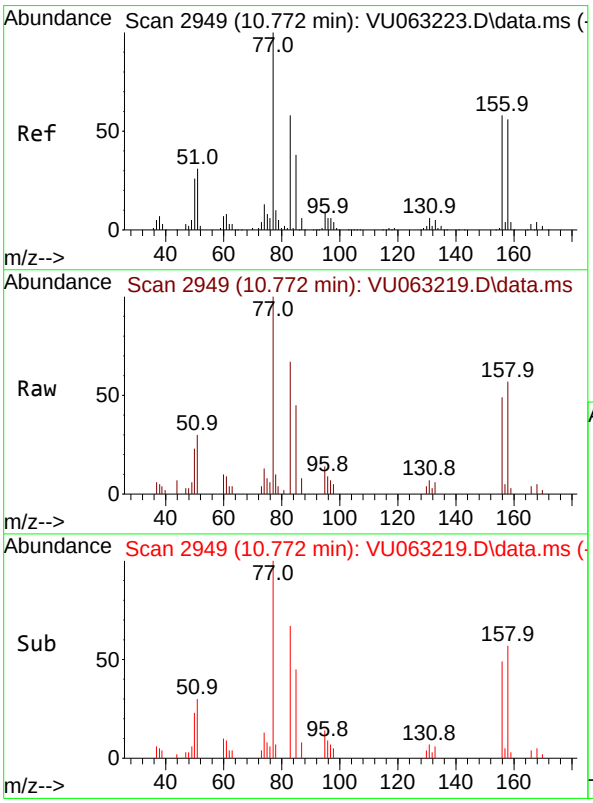
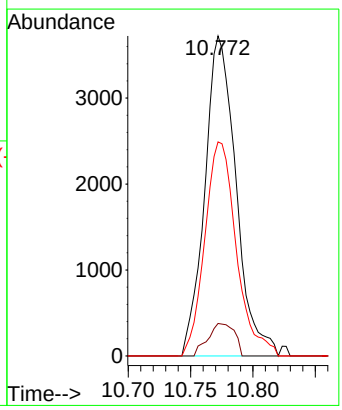
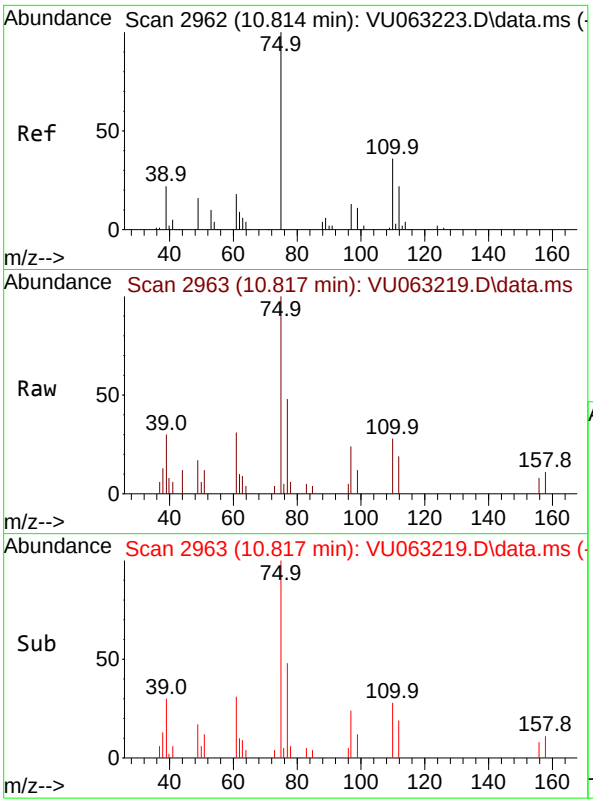


#70
1,1,2,2-Tetrachloroethane
Concen: 0.440 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 83 Resp: 6493

Ion	Ratio	Lower	Upper
83	100		
131	8.6	7.4	11.0
85	67.6	51.8	77.8

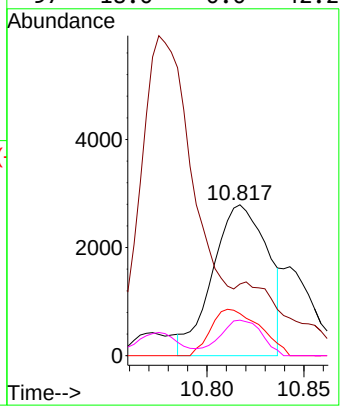




#71
1,2,3-Trichloropropane
Concen: 0.490 ug/l m
RT: 10.817 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 75 Resp: 548

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	27.4	0.0	77.0
97	18.0	0.0	42.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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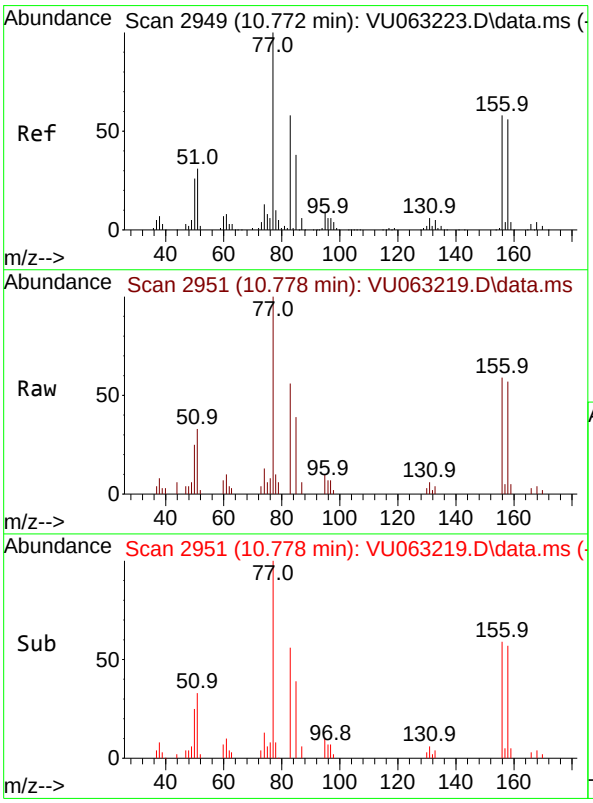
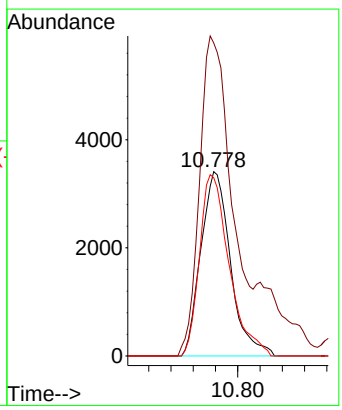
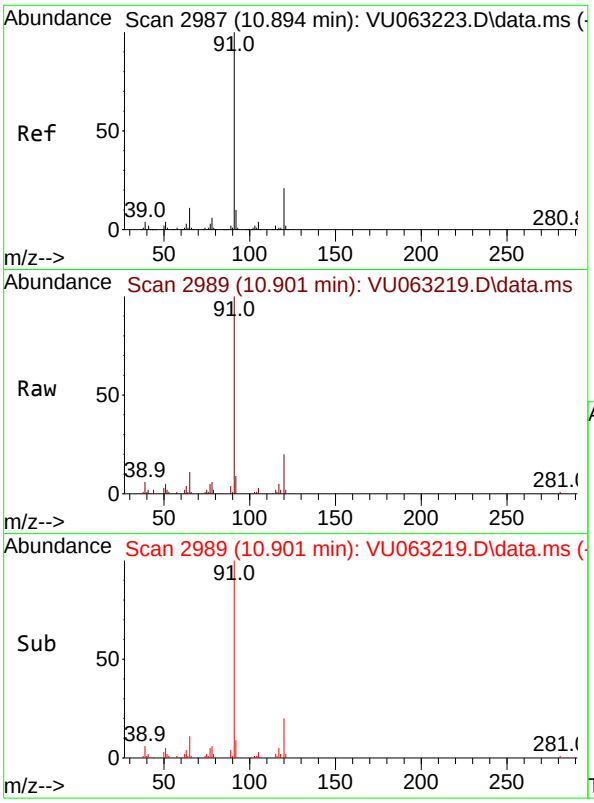


#72
Bromobenzene
Concen: 0.424 ug/l
RT: 10.778 min Scan# 2951
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:156 Resp: 6302

Ion	Ratio	Lower	Upper
156	100		
77	186.6	0.0	343.6
158	98.3	0.0	193.0





#73
n-propylbenzene
Concen: 0.382 ug/l
RT: 10.901 min Scan# 2
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:120 Resp: 602

Ion	Ratio	Lower	Upper
120	100		
91	469.0	369.8	554.6

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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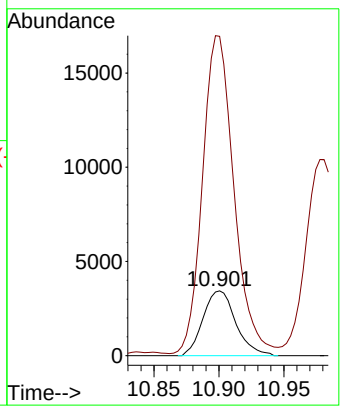
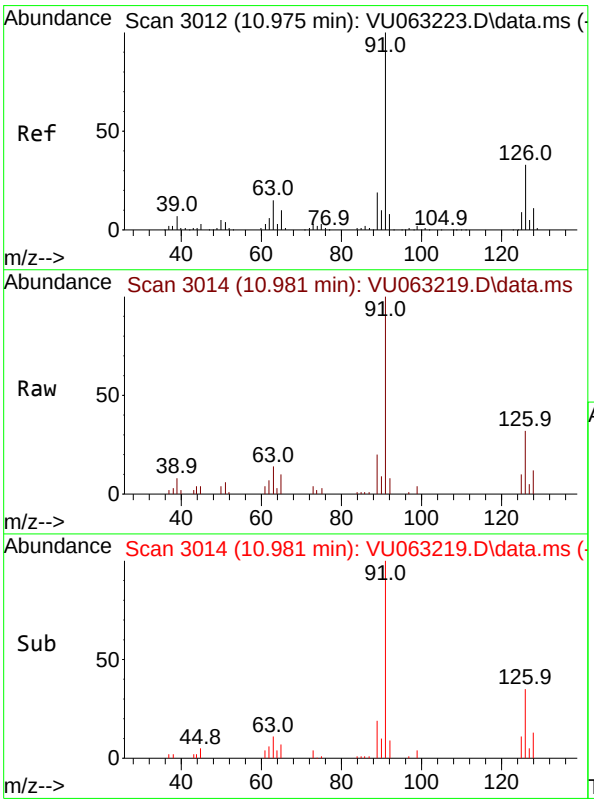
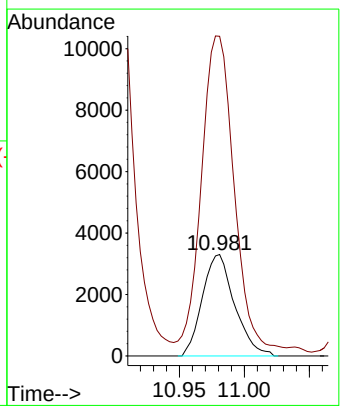


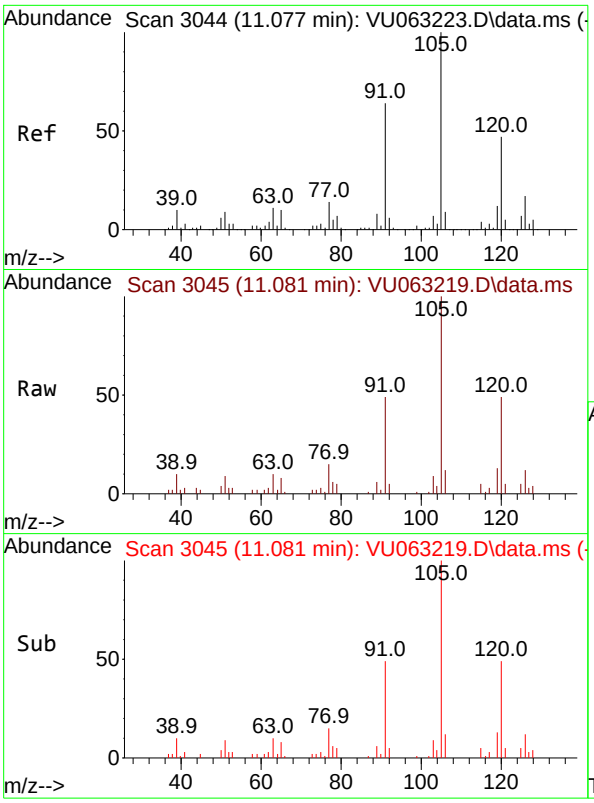


#74
2-Chlorotoluene
Concen: 0.392 ug/l
RT: 10.981 min Scan# 3014
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:126 Resp: 5699

Ion	Ratio	Lower	Upper
126	100		
91	306.6	0.0	623.8

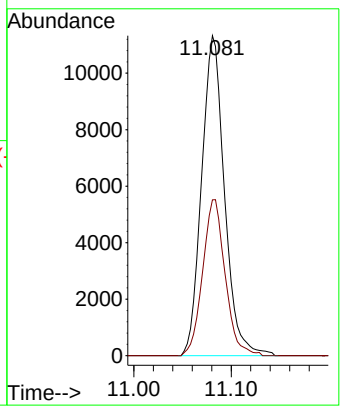




#75
1,3,5-Trimethylbenzene
Concen: 0.362 ug/l
RT: 11.081 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:105 Resp: 1848

Ion	Ratio	Lower	Upper
105	100		
120	48.0	37.3	55.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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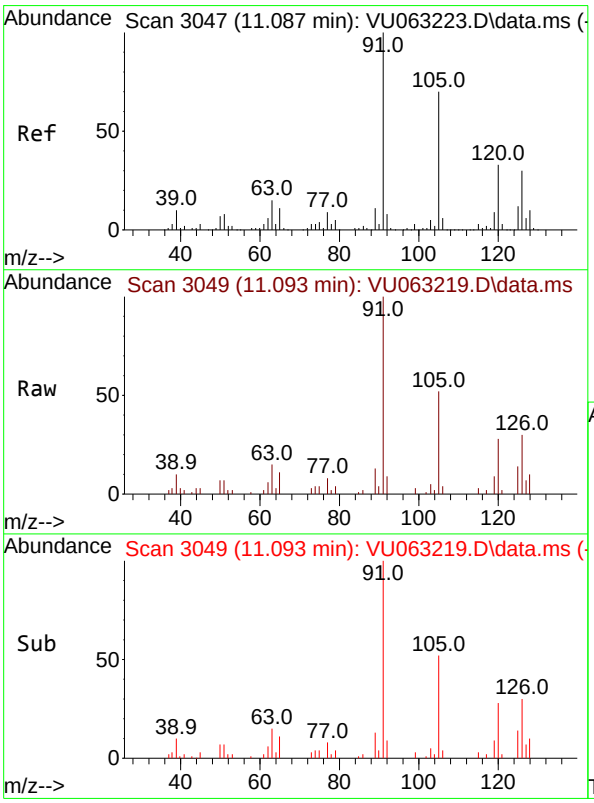
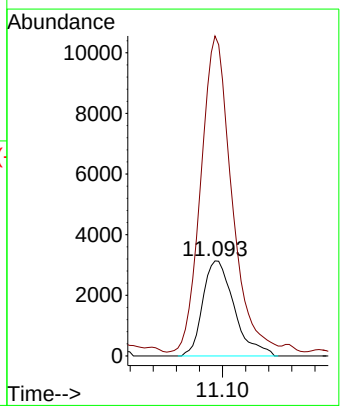
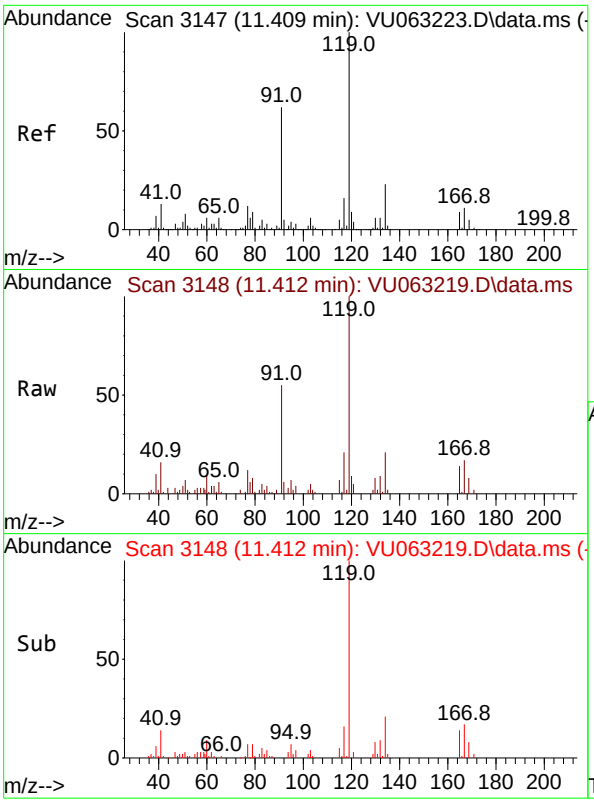


#76
4-Chlorotoluene
Concen: 0.396 ug/l
RT: 11.093 min Scan# 3049
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:126 Resp: 5912

Ion	Ratio	Lower	Upper
126	100		
91	326.4	0.0	703.6

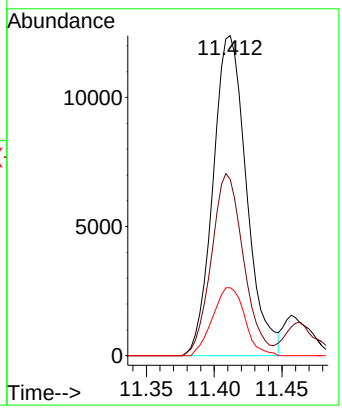




#77
tert-Butylbenzene
Concen: 0.412 ug/l
RT: 11.412 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:119 Resp: 2130

Ion	Ratio	Lower	Upper
119	100		
91	54.7	29.4	88.3
134	20.4	17.6	26.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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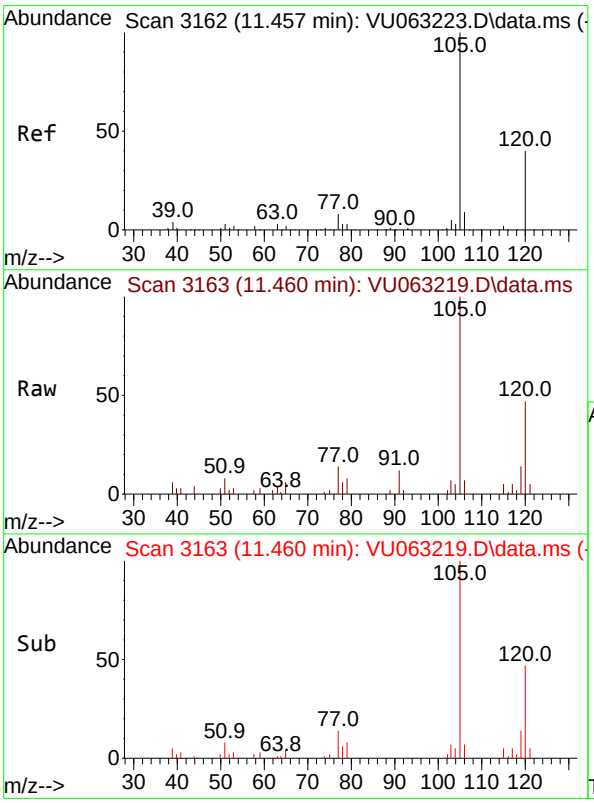
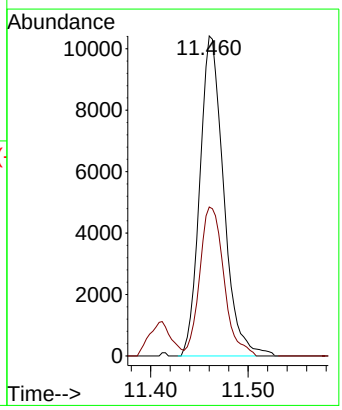
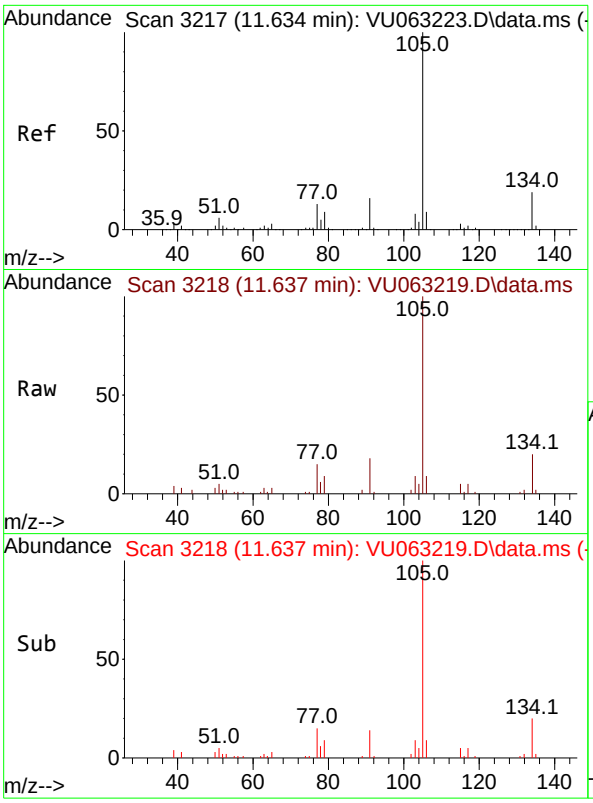


#78
1,2,4-Trimethylbenzene
Concen: 0.349 ug/l
RT: 11.460 min Scan# 3163
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:105 Resp: 17694

Ion	Ratio	Lower	Upper
105	100		
120	47.2	21.9	65.7





#79
sec-Butylbenzene
Concen: 0.385 ug/l
RT: 11.637 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:105 Resp: 2535

Ion	Ratio	Lower	Upper
105	100		
134	18.9	15.1	22.7

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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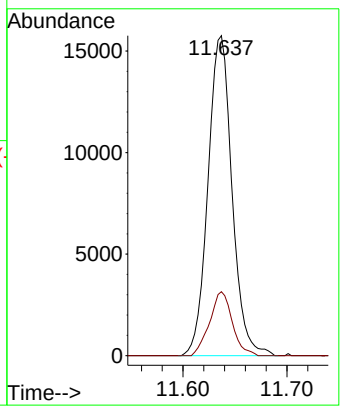
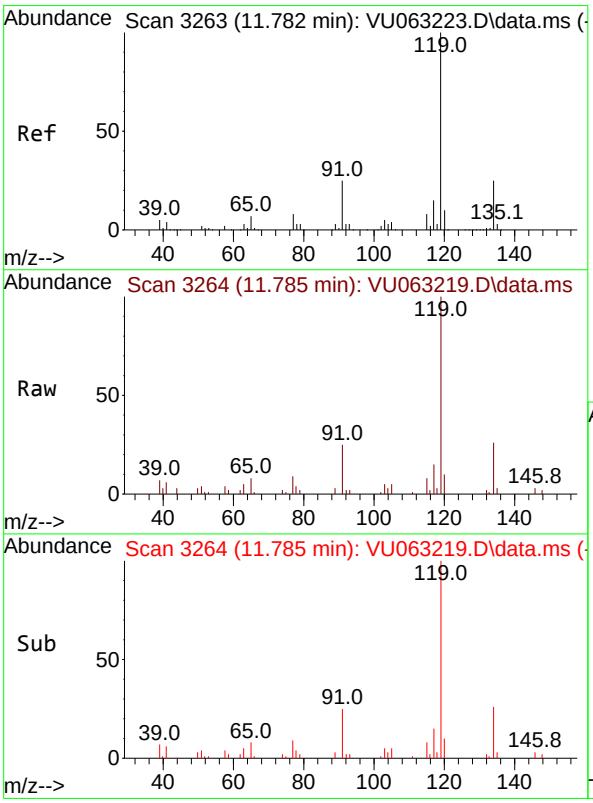
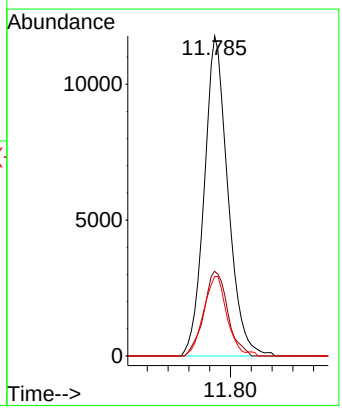


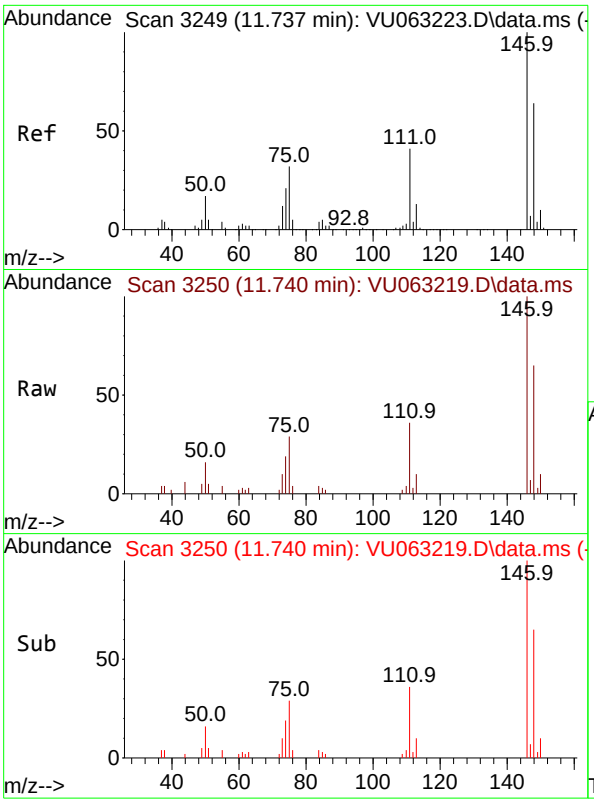


#81
p-Isopropyltoluene
Concen: 0.358 ug/l
RT: 11.785 min Scan# 3264
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:119 Resp: 18576

Ion	Ratio	Lower	Upper
119	100		
134	26.6	20.3	30.5
91	24.7	19.4	29.2

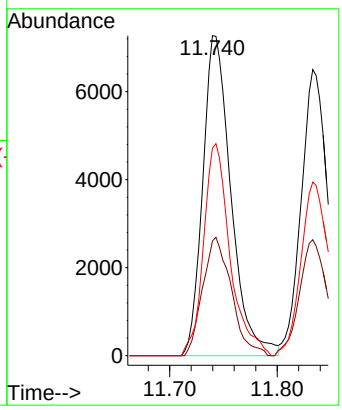




#82
1,3-Dichlorobenzene
Concen: 0.460 ug/l
RT: 11.740 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:146 Resp: 1325

Ion	Ratio	Lower	Upper
146	100		
111	37.7	32.8	49.2
148	62.2	51.1	76.7



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

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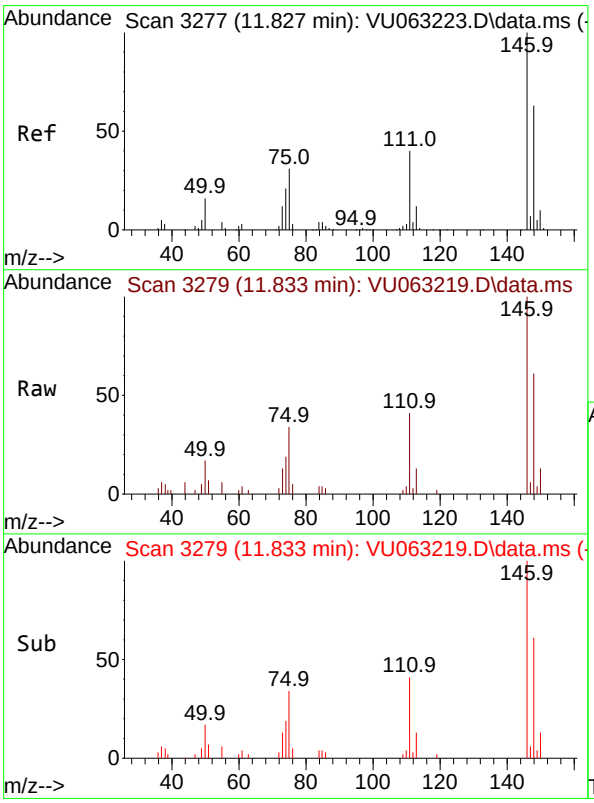
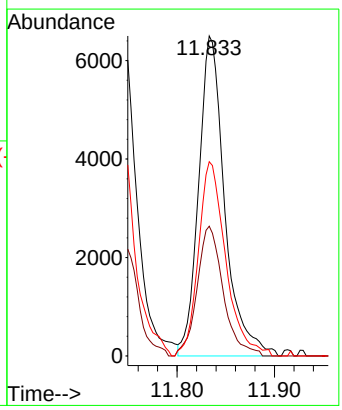
Supervised By :Mahesh Dadoda 02/12/2025

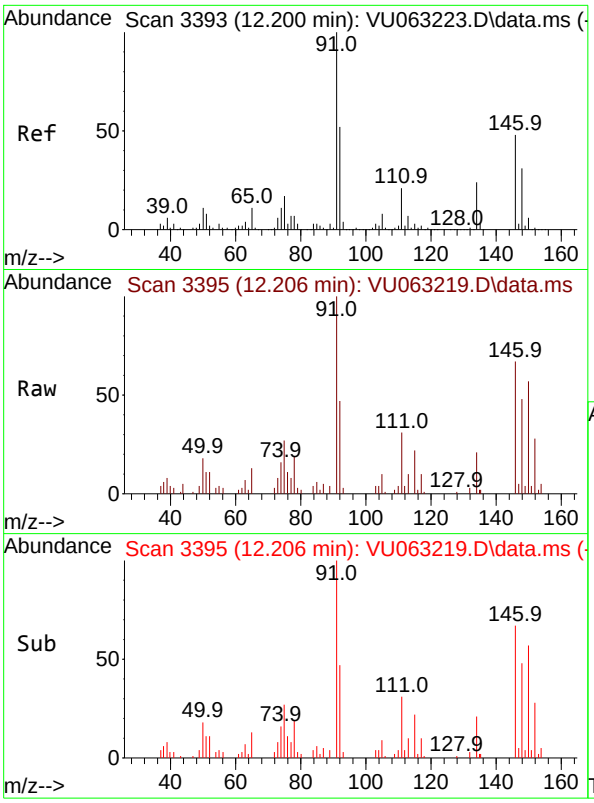


#83
1,4-Dichlorobenzene
Concen: 0.429 ug/l
RT: 11.833 min Scan# 3279
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:146 Resp: 12096

Ion	Ratio	Lower	Upper
146	100		
111	40.6	32.1	48.1
148	63.6	50.2	75.4

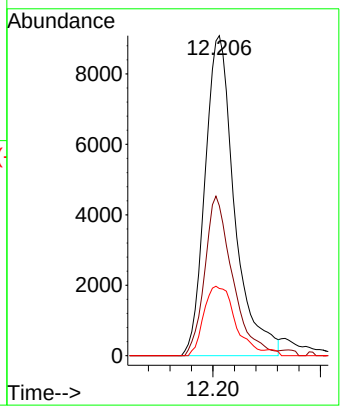




#84
n-Butylbenzene
Concen: 0.369 ug/l
RT: 12.206 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion: 91 Resp: 1729

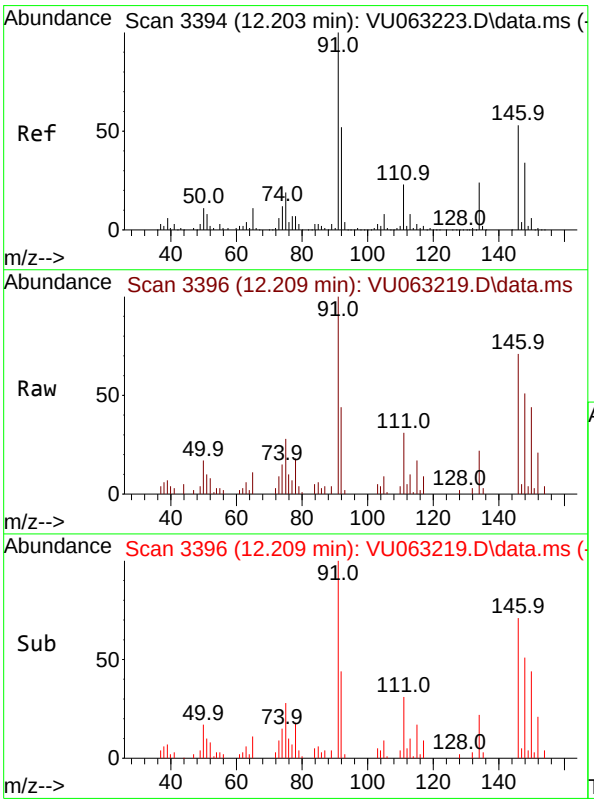
Ion	Ratio	Lower	Upper
91	100		
92	47.1	41.8	62.8
134	23.1	18.6	28.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

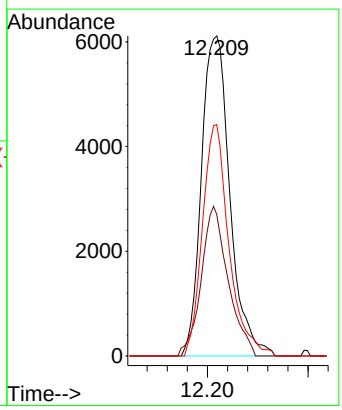
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

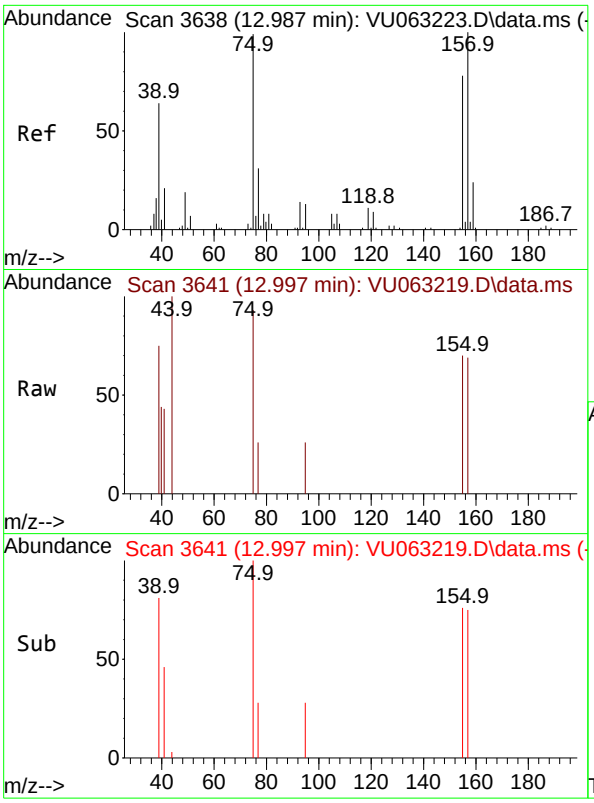


#85
1,2-Dichlorobenzene
Concen: 0.433 ug/l
RT: 12.209 min Scan# 3396
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:146 Resp: 11996

Ion	Ratio	Lower	Upper
146	100		
111	44.2	21.9	65.7
148	67.4	32.3	96.9





#86
1,2-Dibromo-3-Chloropropane
Concen: 0.376 ug/l
RT: 12.997 min Scan# 3
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

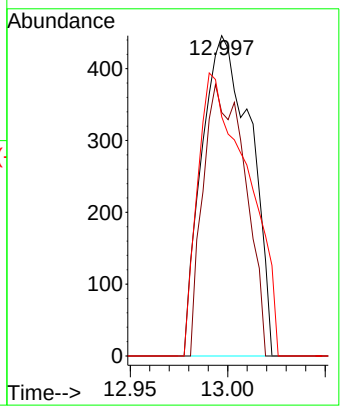
Tgt Ion: 75 Resp: 77

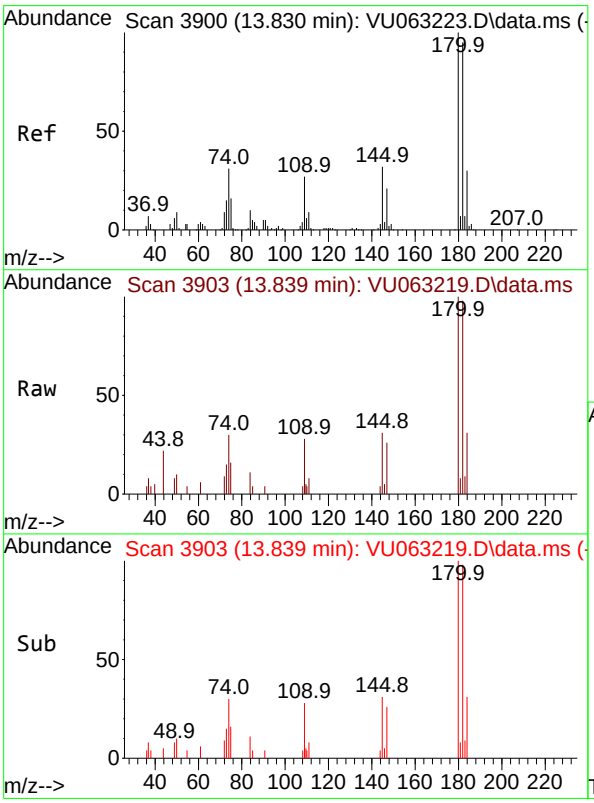
Ion	Ratio	Lower	Upper
75	100		
155	72.8	63.5	95.3
157	91.0	81.8	122.6

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

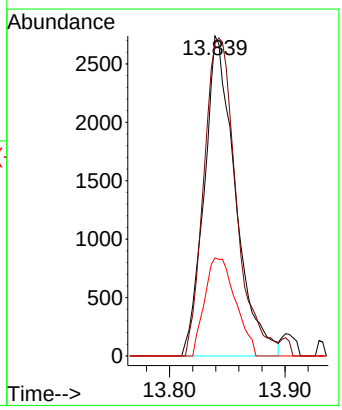


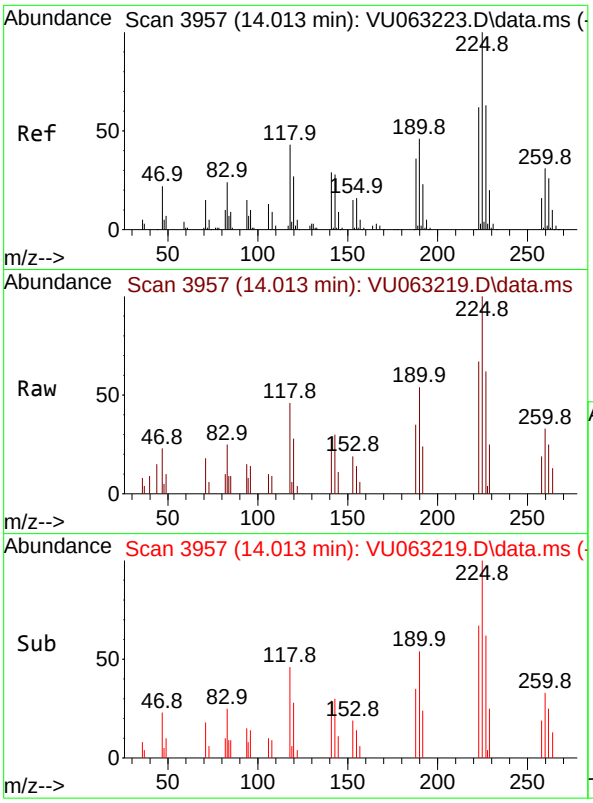


#87
1,2,4-Trichlorobenzene
Concen: 0.380 ug/l
RT: 13.839 min Scan# 3903
Delta R.T. 0.010 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:180 Resp: 5130

Ion	Ratio	Lower	Upper
180	100		
182	103.3	76.6	115.0
145	30.3	25.4	38.2

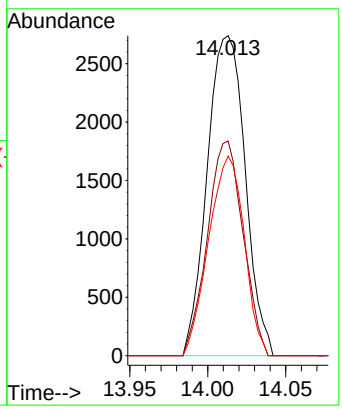




#88
Hexachlorobutadiene
Concen: 0.482 ug/l
RT: 14.013 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:225 Resp: 465

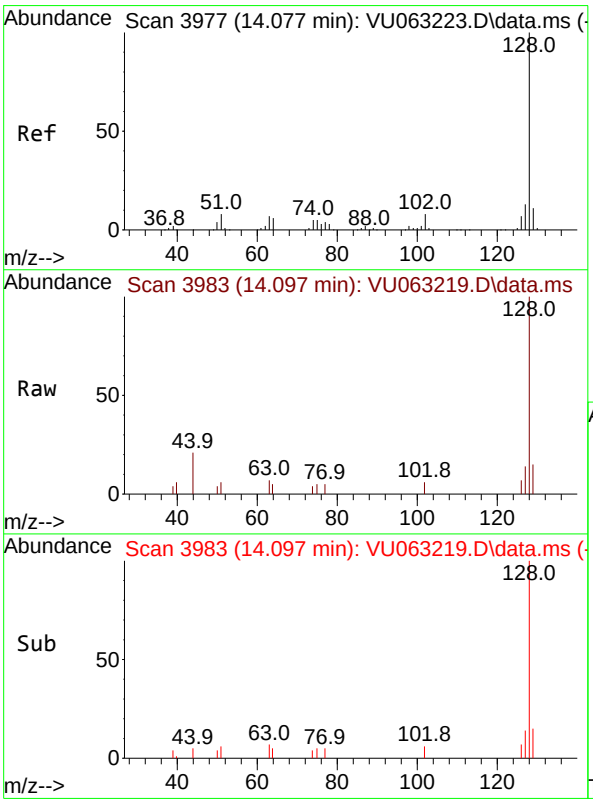
Ion	Ratio	Lower	Upper
225	100		
223	62.8	49.5	74.3
227	58.2	51.0	76.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

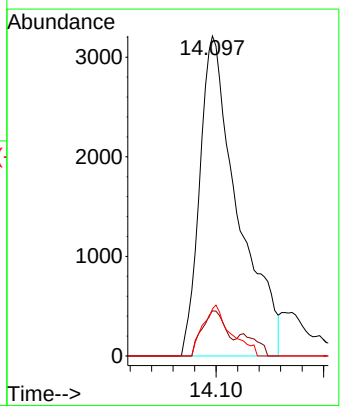
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

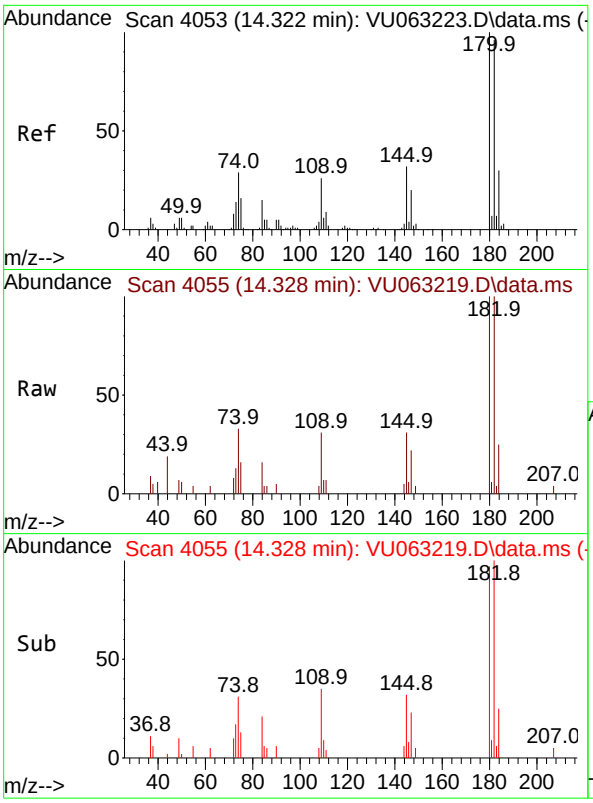


#89
Naphthalene
Concen: 0.899 ug/l
RT: 14.097 min Scan# 3983
Delta R.T. 0.019 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:128 Resp: 7859

Ion	Ratio	Lower	Upper
128	100		
127	8.9	10.6	16.0#
129	11.5	8.6	13.0

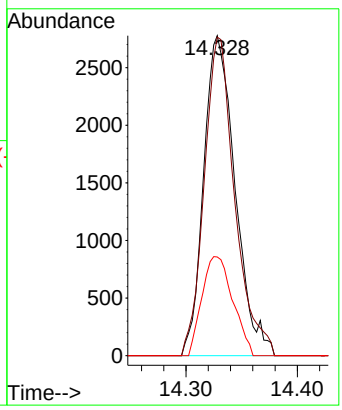




#90
1,2,3-Trichlorobenzene
Concen: 0.412 ug/l
RT: 14.328 min Scan# 4
Delta R.T. 0.006 min
Lab File: VU063219.D
Acq: 10 Feb 2025 12:59

Tgt Ion:180 Resp: 545

Ion	Ratio	Lower	Upper
180	100		
182	96.5	78.2	117.2
145	30.3	26.1	39.1



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063220.D
Acq On : 10 Feb 2025 13:23
Operator : MD/SY
Sample : VSTDICC001
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 03:57:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.107	96	51567	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.627	95	16040	0.943	ug/l	0.00
Spiked Amount 1.000			Recovery = 94.000%			
68) 1,2-Dichlorobenzene-d4	12.187	152	16904	0.956	ug/l	0.00
Spiked Amount 1.000			Recovery = 96.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.380	85	18689	1.115	ug/l	97
3) Chloromethane	1.518	50	20645	1.070	ug/l	98
4) Vinyl Chloride	1.599	62	20135	1.055	ug/l	99
5) Bromomethane	1.846	94	10384	1.176	ug/l	96
6) Chloroethane	1.924	64	13381	1.113	ug/l	95
7) Trichlorofluoromethane	2.129	101	24378	1.078	ug/l	98
8) 1,1,2-Trichloro-1,2,2-...	2.567	101	14009	1.091	ug/l	98
9) 1,1-Dichloroethene	2.570	96	14118	1.079	ug/l	97
10) Iodomethane	2.711	142	21185	1.030	ug/l	98
11) Allyl Chloride	2.914	41	20123	1.071	ug/l	97
12) Acrylonitrile	3.322	53	5799	1.950	ug/l	99
13) Acetone	2.618	43	12193	5.255	ug/l	98
14) Carbon Disulfide	2.782	76	48738	1.065	ug/l	99
15) Methylene Chloride	3.033	84	17173	1.063	ug/l	95
16) trans-1,2-Dichloroethene	3.345	96	15731	1.054	ug/l	98
17) 1,1-Dichloroethane	3.856	63	30538	1.085	ug/l	98
18) 2-Butanone	4.711	43	18530m	4.944	ug/l	
19) Cyclohexane	5.374	56	21832m	0.965	ug/l	
20) Methylcyclohexane	6.753	83	23086	1.029	ug/l	99
21) 2,2-Dichloropropane	4.650	77	23852	1.086	ug/l	98
22) cis-1,2-Dichloroethene	4.657	96	17134	1.062	ug/l	98
23) Diethyl Ether	2.367	59	11921	1.062	ug/l	95
24) tert-Butyl Alcohol	3.165	59	19963	11.656	ug/l #	89
25) Methyl tert-Butyl Ether	3.351	73	33609	1.029	ug/l	98
26) Bromochloromethane	4.962	128	7742	1.098	ug/l	96
27) Chloroform	5.075	83	30302	1.067	ug/l	94
28) 1,1,1-Trichloroethane	5.300	97	24038	1.045	ug/l	96
29) 1,1-Dichloropropene	5.518	75	21427	1.040	ug/l	99
30) Carbon Tetrachloride	5.512	117	21505	1.090	ug/l	90
31) Isopropyl Ether	3.978	45	40509	1.008	ug/l	96
32) Ethyl-t-butyl ether	4.486	59	35372	0.968	ug/l	98
33) Tert-Amyl methyl ether	5.927	73	31129	0.975	ug/l	99
34) Propionitrile	4.782	54	5038m	4.335	ug/l	
35) Benzene	5.766	78	65980	1.041	ug/l	99
36) 1,2-Dichloroethane	5.788	62	19157	1.048	ug/l	97
37) Trichloroethene	6.534	130	16013	1.063	ug/l	97
38) 1,2-Dichloropropane	6.782	63	17158	1.035	ug/l	93
39) Methacrylonitrile	4.978	41	3478	0.838	ug/l #	84
40) Methyl acrylate	4.866	55	7528m	0.993	ug/l	
41) Tetrahydrofuran	5.049	42	4693	1.924	ug/l	91
42) 1-Chlorobutane	5.448	56	28598	1.014	ug/l	99
43) Dibromomethane	6.907	93	8944	1.065	ug/l	93
44) Bromodichloromethane	7.094	83	20720	1.060	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063220.D
Acq On : 10 Feb 2025 13:23
Operator : MD/SY
Sample : VSTDICC001
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 03:57:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) 4-Methyl-2-Pentanone	7.782	43	39981	4.541	ug/l		96
46) t-1,4-Dichloro-2-butene	10.820	75	8630m	1.981	ug/l		
47) Methyl methacrylate	6.956	69	12987	1.836	ug/l		98
48) Ethyl methacrylate	8.328	69	11711	0.882	ug/l		100
49) Toluene	7.962	92	36357	0.998	ug/l		100
50) t-1,3-Dichloropropene	8.206	75	17681	0.988	ug/l		98
51) cis-1,3-Dichloropropene	7.599	75	22033	0.997	ug/l		99
52) 1,1,2-Trichloroethane	8.393	97	11610	1.025	ug/l		97
53) 1,3-Dichloropropane	8.566	76	21023	1.046	ug/l		99
54) 2-Hexanone	8.679	43	28078m	4.673	ug/l		
55) Dibromochloromethane	8.801	129	13259	1.018	ug/l		98
56) 1,2-Dibromoethane	8.917	107	10628	1.001	ug/l		94
58) Tetrachloroethene	8.544	164	13296	1.071	ug/l		95
59) Chlorobenzene	9.441	112	38774	1.008	ug/l		99
60) 1,1,1,2-Tetrachloroethane	9.525	131	14393	1.041	ug/l		99
61) Pentachloroethane	11.418	117	12686	1.027	ug/l		94
62) Hexachloroethane	12.463	117	11074	1.014	ug/l		93
63) Ethyl Benzene	9.560	91	63398	0.956	ug/l		99
64) m/p-Xylenes	9.685	106	45748	1.847	ug/l		99
65) o-Xylene	10.090	106	23138	0.954	ug/l		100
66) Styrene	10.110	104	34785	0.901	ug/l		99
67) Bromoform	10.280	173	7192	0.973	ug/l	#	97
69) Isopropylbenzene	10.473	105	53372	0.936	ug/l		98
70) 1,1,2,2-Tetrachloroethane	10.772	83	15680	1.027	ug/l		97
71) 1,2,3-Trichloropropane	10.814	75	11462m	0.991	ug/l		
72) Bromobenzene	10.775	156	15611	1.016	ug/l		95
73) n-propylbenzene	10.898	120	14761	0.904	ug/l		95
74) 2-Chlorotoluene	10.975	126	14317	0.952	ug/l		95
75) 1,3,5-Trimethylbenzene	11.078	105	48403	0.916	ug/l		99
76) 4-Chlorotoluene	11.090	126	15039	0.975	ug/l		89
77) tert-Butylbenzene	11.409	119	50914	0.953	ug/l		98
78) 1,2,4-Trimethylbenzene	11.460	105	46689	0.891	ug/l		100
79) sec-Butylbenzene	11.634	105	63226	0.930	ug/l		99
80) Nitrobenzene	13.232	77	1014	5.911	ug/l	#	57
81) p-Isopropyltoluene	11.785	119	48578	0.905	ug/l		99
82) 1,3-Dichlorobenzene	11.737	146	28406	0.953	ug/l		98
83) 1,4-Dichlorobenzene	11.830	146	26529	0.910	ug/l		94
84) n-Butylbenzene	12.200	91	42404	0.876	ug/l		97
85) 1,2-Dichlorobenzene	12.203	146	27742	0.969	ug/l		99
86) 1,2-Dibromo-3-Chloropr...	12.997	75	2103	0.982	ug/l		89
87) 1,2,4-Trichlorobenzene	13.836	180	12695	0.909	ug/l		99
88) Hexachlorobutadiene	14.010	225	10179	1.020	ug/l		97
89) Naphthalene	14.090	128	17271	1.192	ug/l		97
90) 1,2,3-Trichlorobenzene	14.325	180	12218	0.894	ug/l		96

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

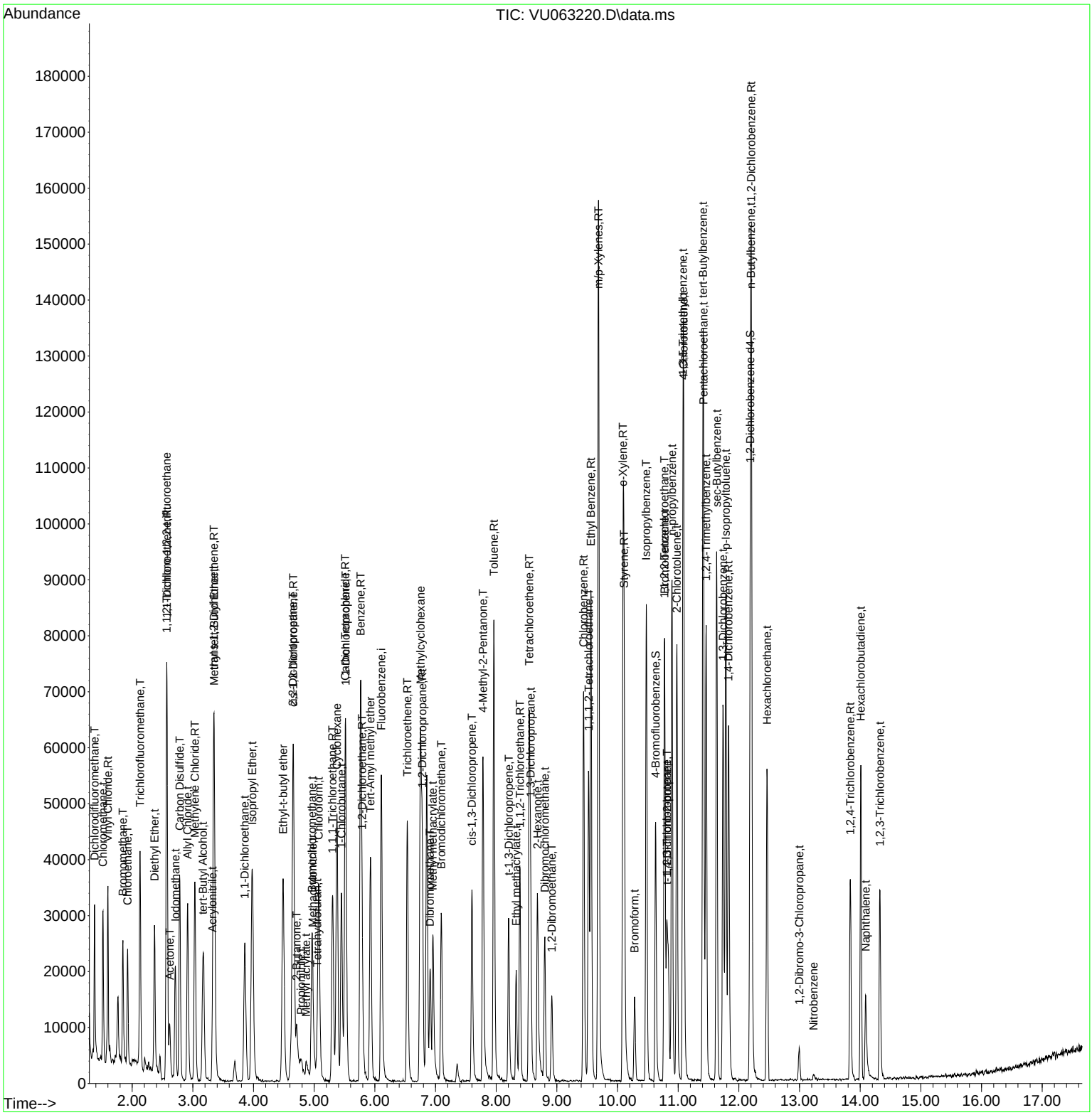
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063220.D
Acq On : 10 Feb 2025 13:23
Operator : MD/SY
Sample : VSTDICC001
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 4 Sample Multiplier: 1

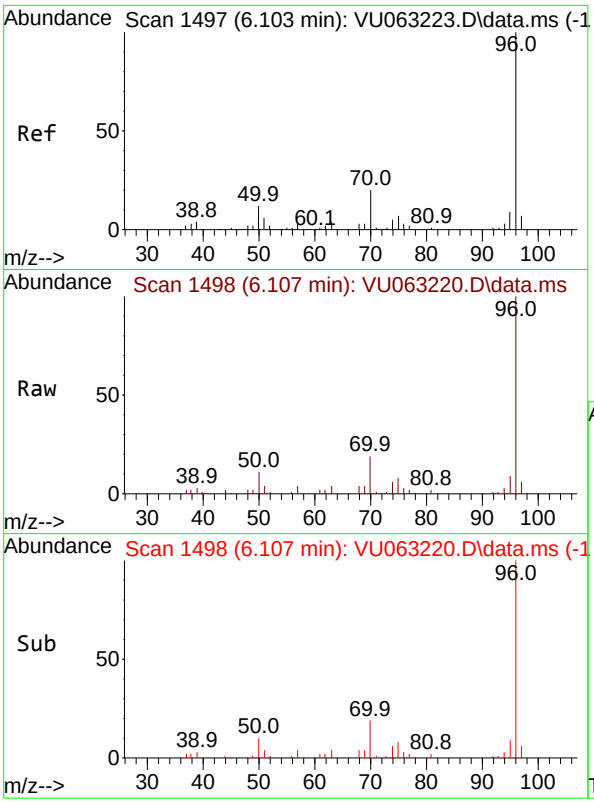
Quant Time: Feb 11 03:57:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

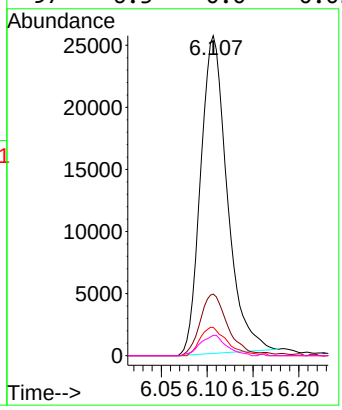




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.107 min Scan# 14
Delta R.T. 0.004 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 96 Resp: 5156

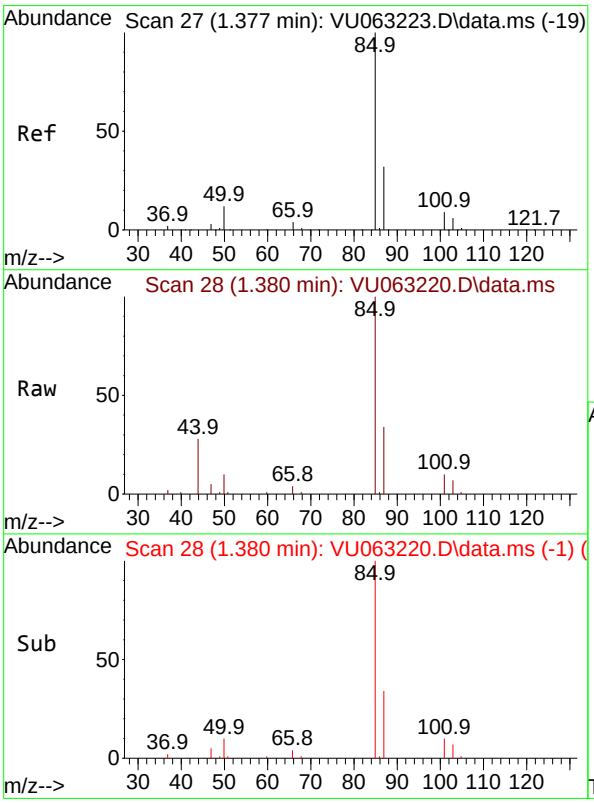
Ion	Ratio	Lower	Upper
96	100		
70	18.8	15.6	23.4
95	9.2	7.3	10.9
97	6.3	0.0	0.0#



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

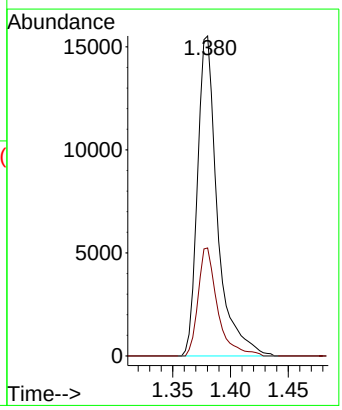
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

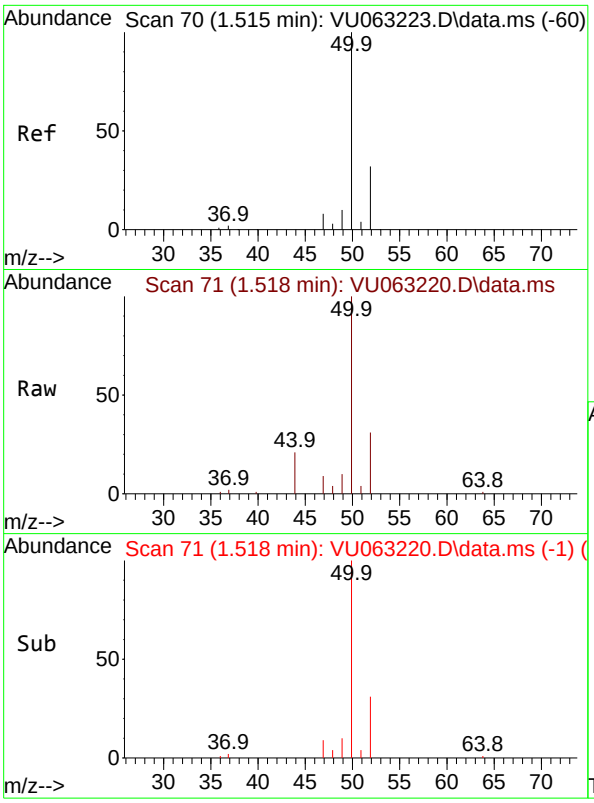


#2
Dichlorodifluoromethane
Concen: 1.115 ug/l
RT: 1.380 min Scan# 28
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 85 Resp: 18689

Ion	Ratio	Lower	Upper
85	100		
87	33.8	16.0	48.0

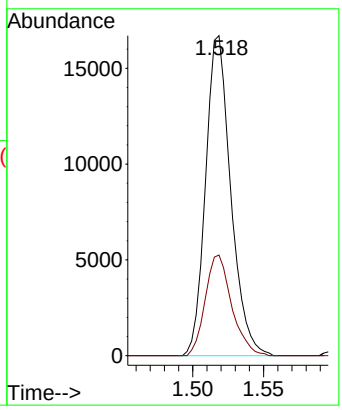




#3
Chloromethane
Concen: 1.070 ug/l
RT: 1.518 min Scan# 7
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 50 Resp: 2064

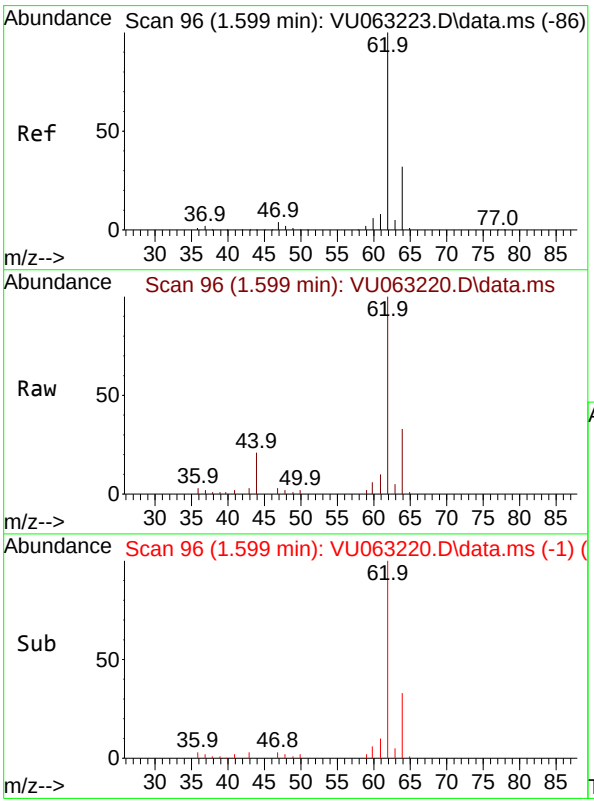
Ion	Ratio	Lower	Upper
50	100		
52	31.5	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

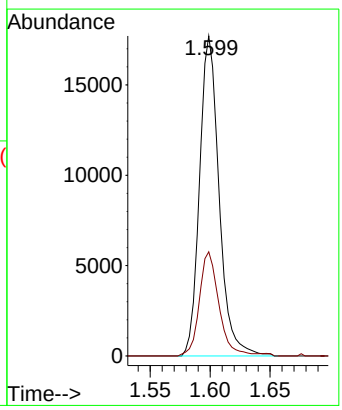
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

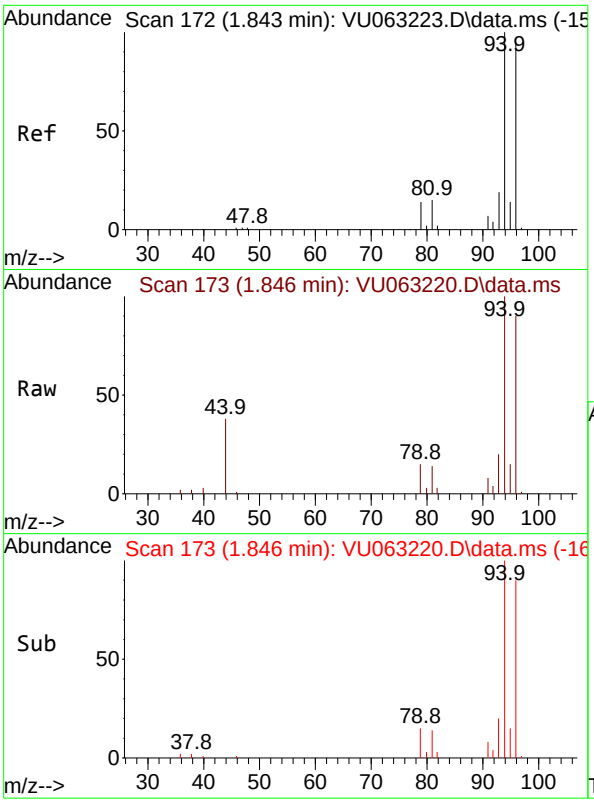


#4
Vinyl Chloride
Concen: 1.055 ug/l
RT: 1.599 min Scan# 96
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 62 Resp: 20135

Ion	Ratio	Lower	Upper
62	100		
64	32.5	25.4	38.0

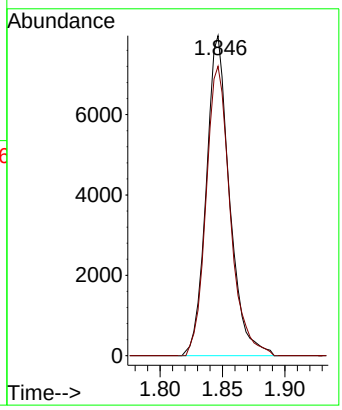




#5
Bromomethane
Concen: 1.176 ug/l
RT: 1.846 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 94 Resp: 1038

Ion	Ratio	Lower	Upper
94	100		
96	90.4	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

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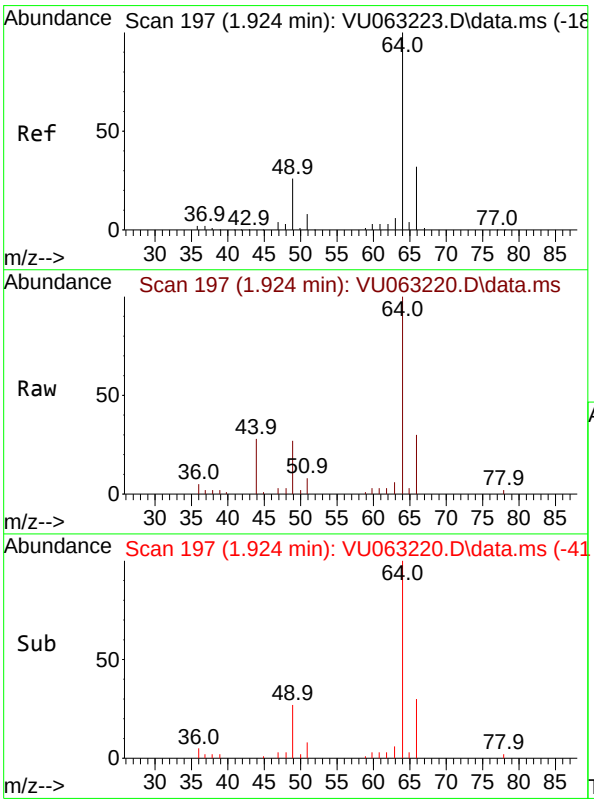
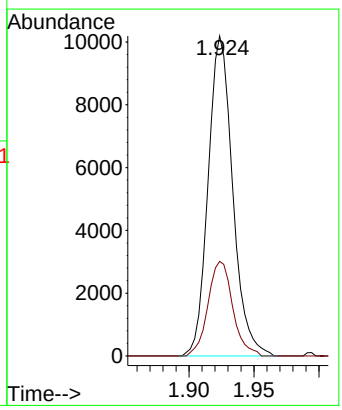
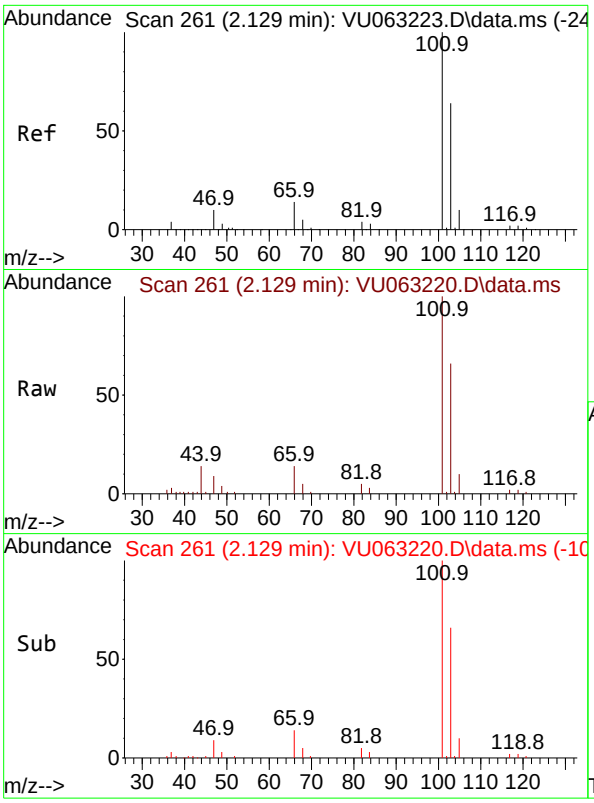


#6
Chloroethane
Concen: 1.113 ug/l
RT: 1.924 min Scan# 197
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 64 Resp: 13381

Ion	Ratio	Lower	Upper
64	100		
66	29.6	25.8	38.8

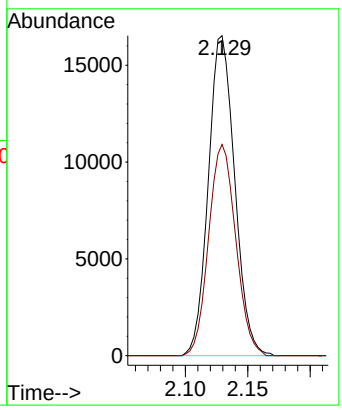




#7
Trichlorofluoromethane
Concen: 1.078 ug/l
RT: 2.129 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:101 Resp: 2437

Ion	Ratio	Lower	Upper
101	100		
103	66.0	51.4	77.2



Instrument :
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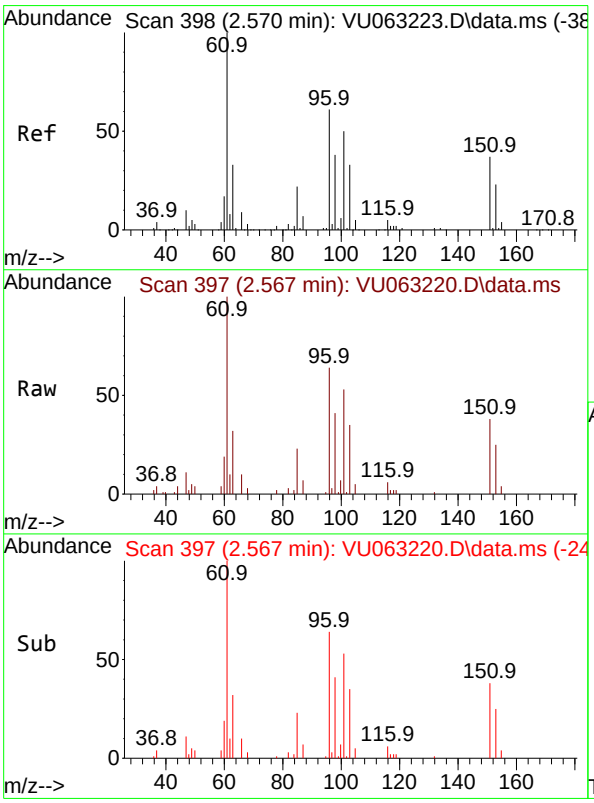
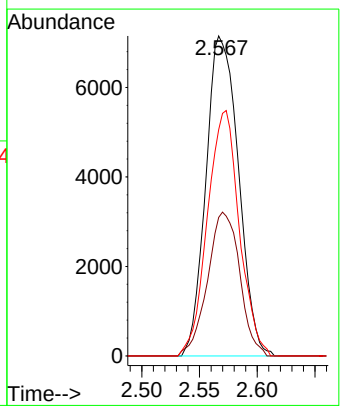
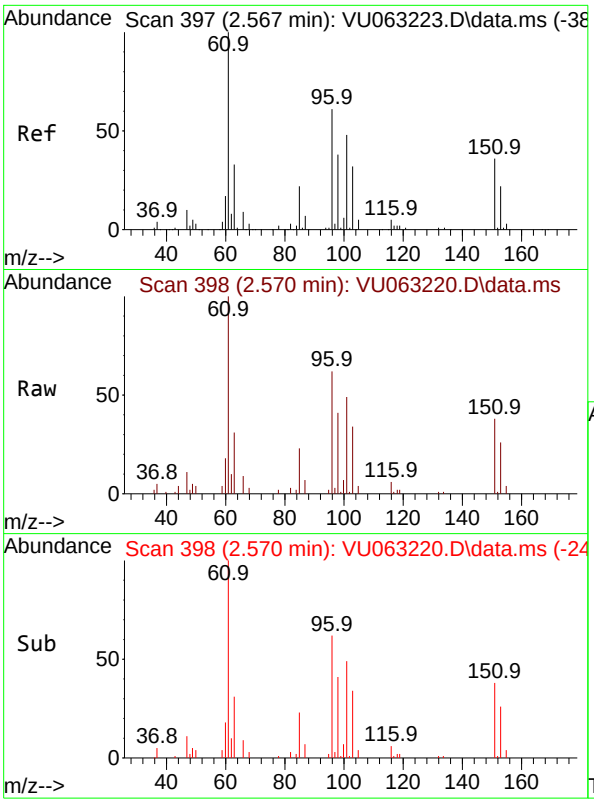


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 1.091 ug/l
RT: 2.567 min Scan# 397
Delta R.T. -0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:101 Resp: 14009

Ion	Ratio	Lower	Upper
101	100		
85	44.4	35.4	53.0
151	75.2	58.5	87.7

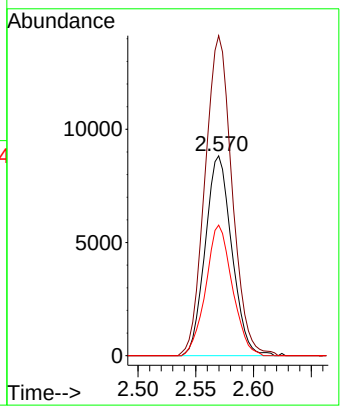




#9
1,1-Dichloroethene
Concen: 1.079 ug/l
RT: 2.570 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 96 Resp: 1411

Ion	Ratio	Lower	Upper
96	100		
61	160.1	0.0	492.9
98	65.4	0.0	124.0



Instrument :
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ClientSampleId :
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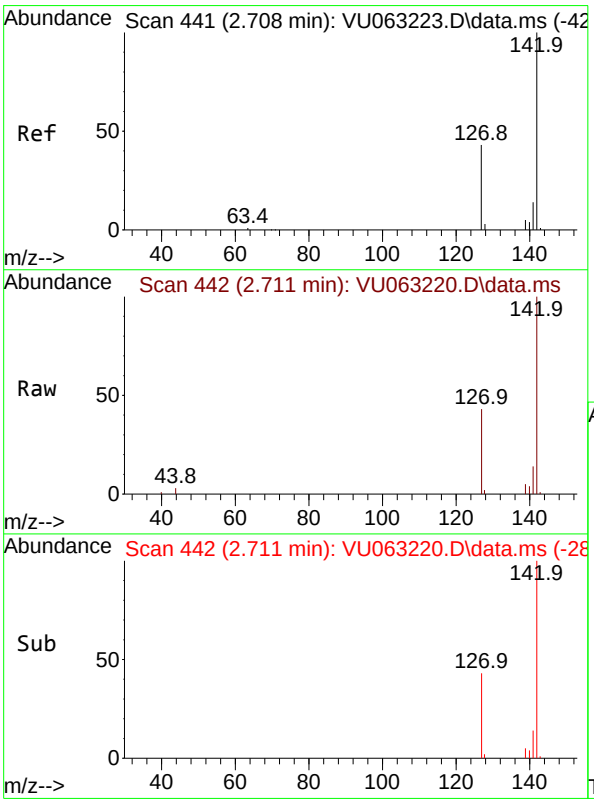
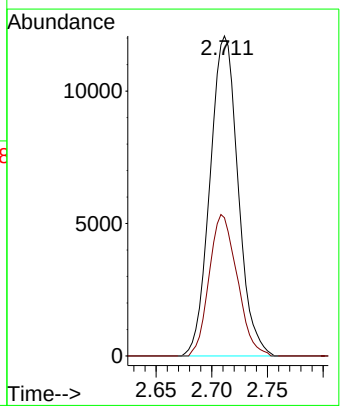
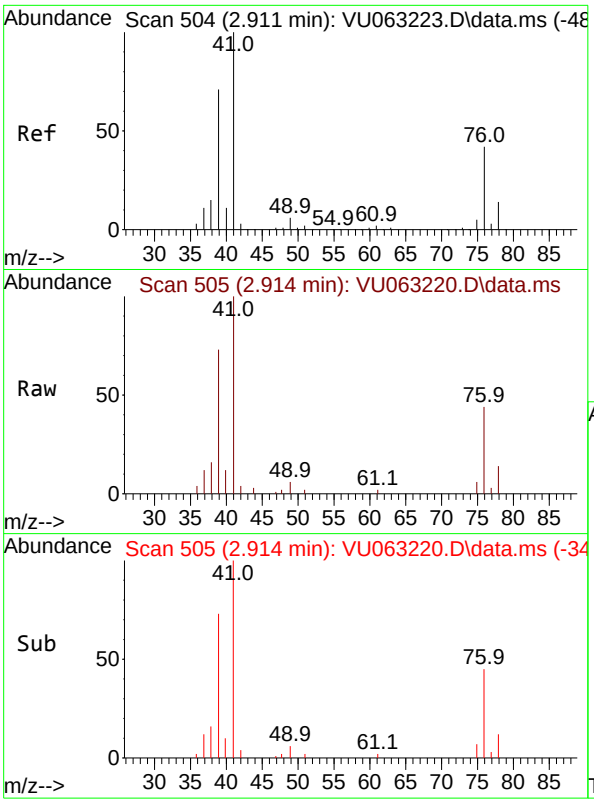


#10
Iodomethane
Concen: 1.030 ug/l
RT: 2.711 min Scan# 442
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:142 Resp: 21185

Ion	Ratio	Lower	Upper
142	100		
127	44.1	34.5	51.7

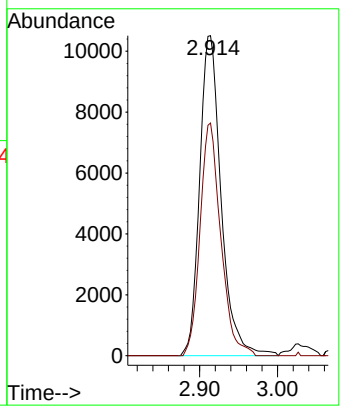




#11
Allyl Chloride
Concen: 1.071 ug/l
RT: 2.914 min Scan# 5
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 41 Resp: 2012

Ion	Ratio	Lower	Upper
41	100		
39	70.1	57.9	86.9



Instrument :
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ClientSampleId :
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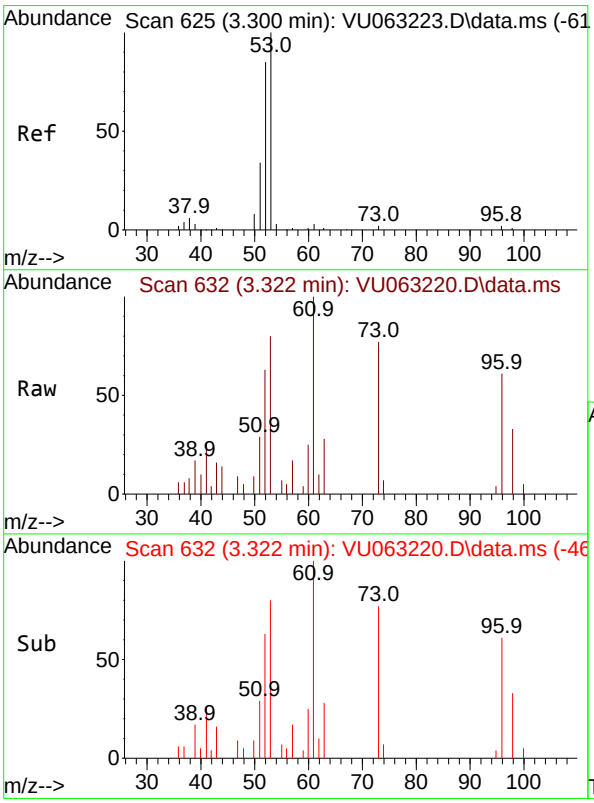
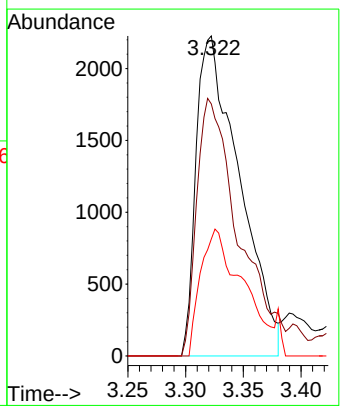
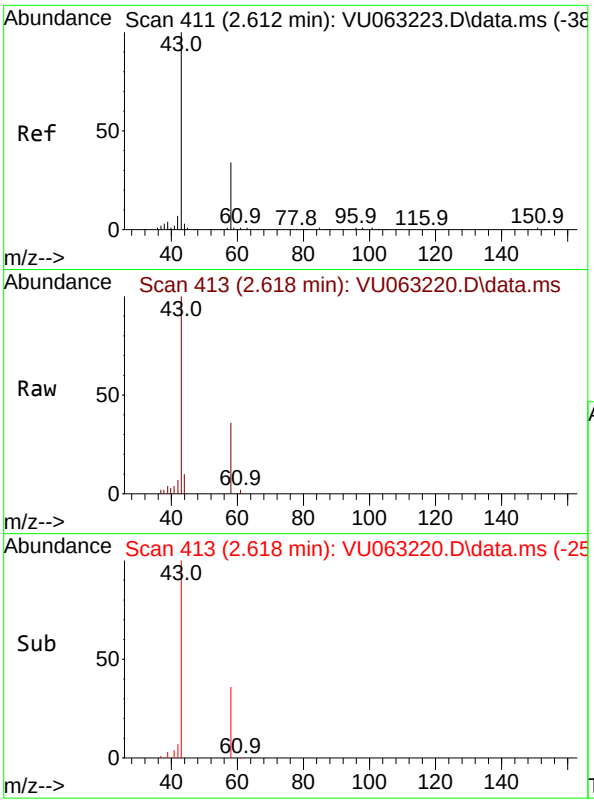


#12
Acrylonitrile
Concen: 1.950 ug/l
RT: 3.322 min Scan# 632
Delta R.T. 0.023 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 53 Resp: 5799

Ion	Ratio	Lower	Upper
53	100		
52	79.0	64.2	96.2
51	38.4	30.8	46.2





#13
Acetone
Concen: 5.255 ug/l
RT: 2.618 min Scan# 41
Delta R.T. 0.006 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 43 Resp: 1219

Ion	Ratio	Lower	Upper
43	100		
58	35.6	27.4	41.0

Instrument :
MSVOA_U
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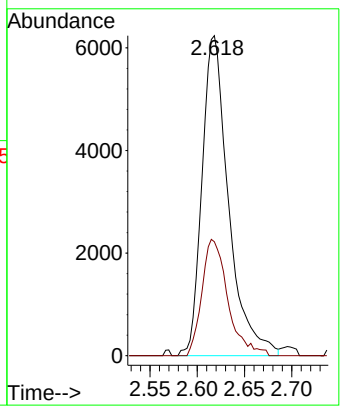
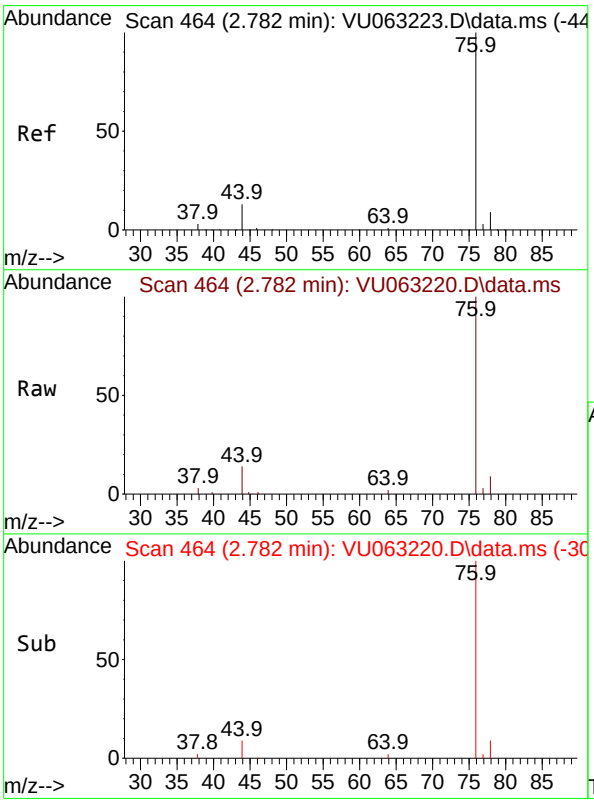
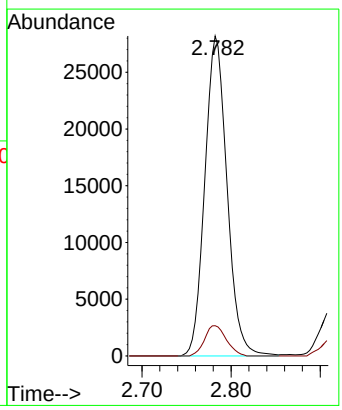


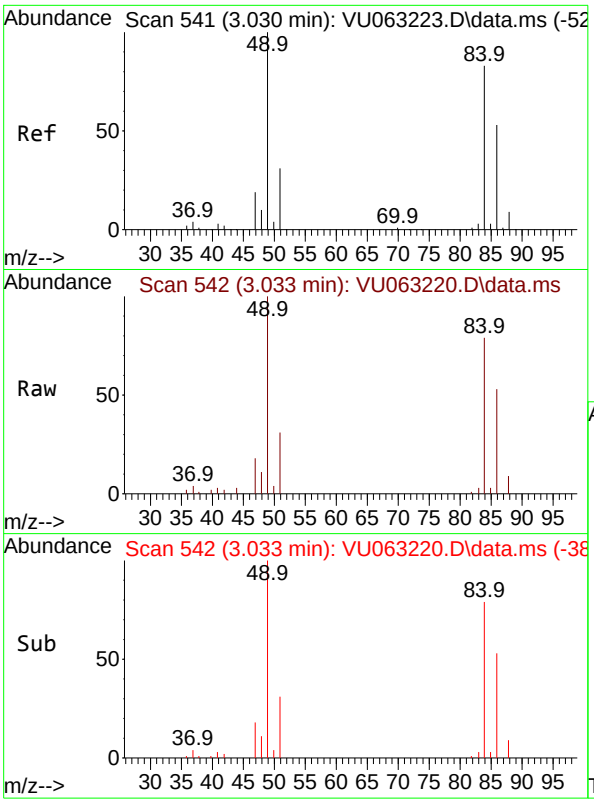


#14
Carbon Disulfide
Concen: 1.065 ug/l
RT: 2.782 min Scan# 464
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 76 Resp: 48738

Ion	Ratio	Lower	Upper
76	100		
78	9.4	7.2	10.8

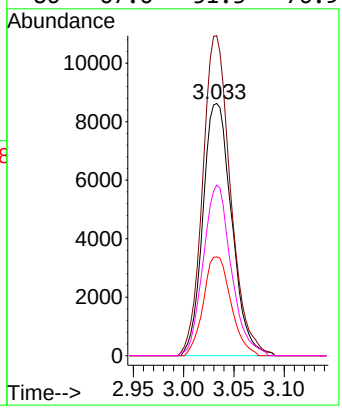




#15
Methylene Chloride
Concen: 1.063 ug/l
RT: 3.033 min Scan# 54
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 84 Resp: 1717

Ion	Ratio	Lower	Upper
84	100		
49	126.9	96.4	144.6
51	39.2	0.0	74.8
86	67.6	51.3	76.9



Instrument :
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ClientSampleId :
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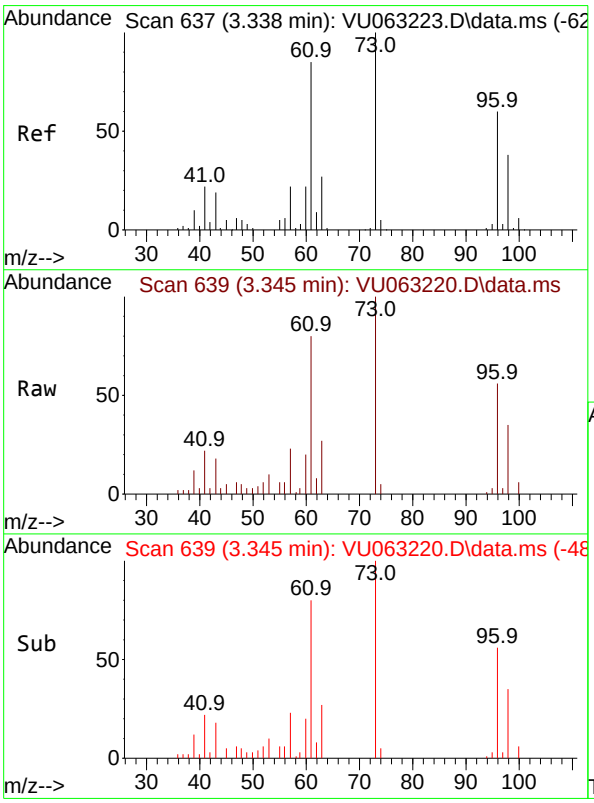
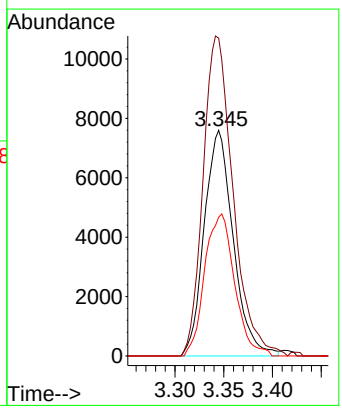
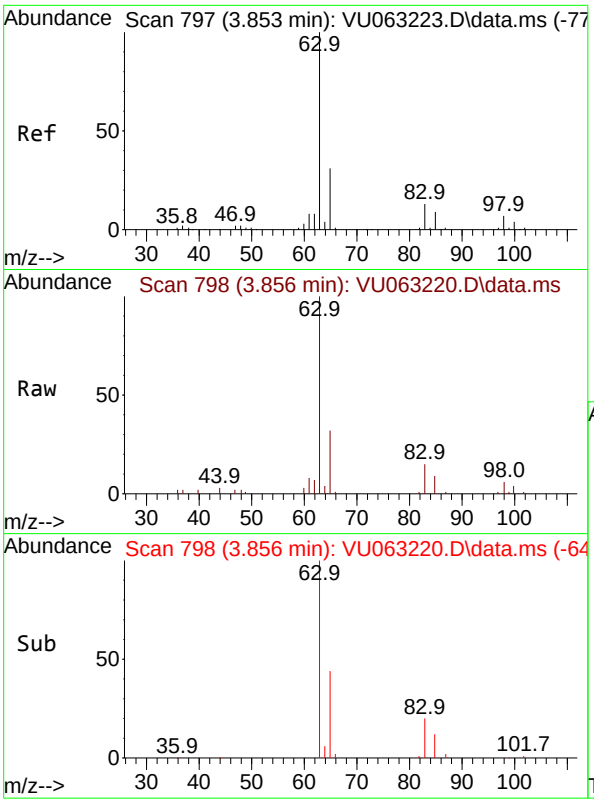


#16
trans-1,2-Dichloroethene
Concen: 1.054 ug/l
RT: 3.345 min Scan# 639
Delta R.T. 0.006 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 96 Resp: 15731

Ion	Ratio	Lower	Upper
96	100		
61	140.9	113.4	170.2
98	61.5	51.2	76.8

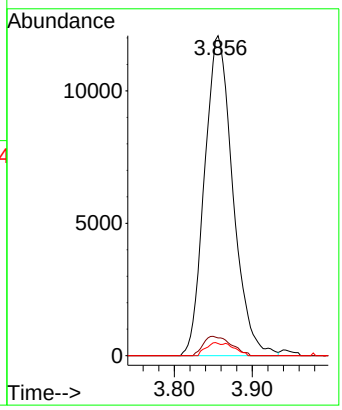




#17
1,1-Dichloroethane
Concen: 1.085 ug/l
RT: 3.856 min Scan# 7
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 63 Resp: 3053

Ion	Ratio	Lower	Upper
63	100		
98	5.6	3.3	9.9
100	3.8	2.1	6.2



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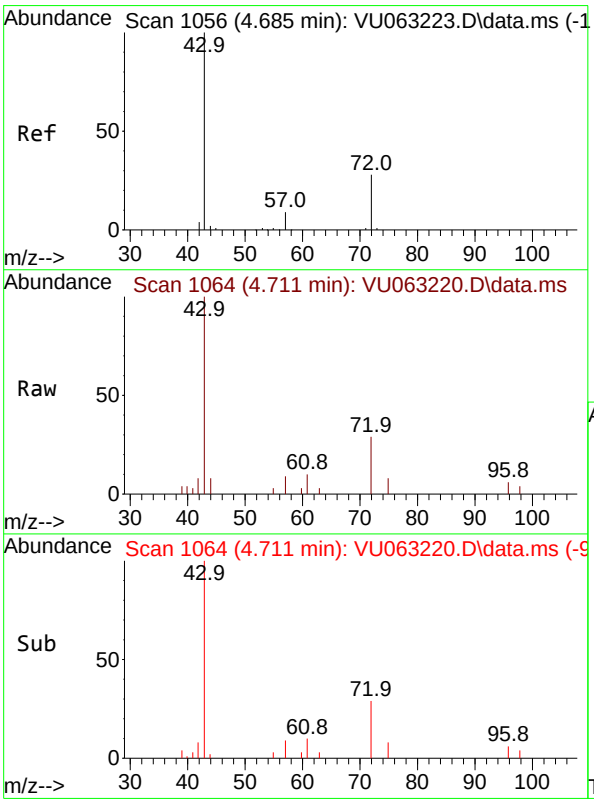
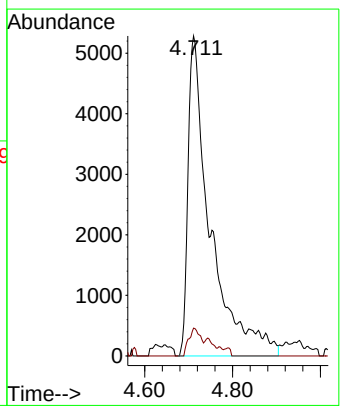
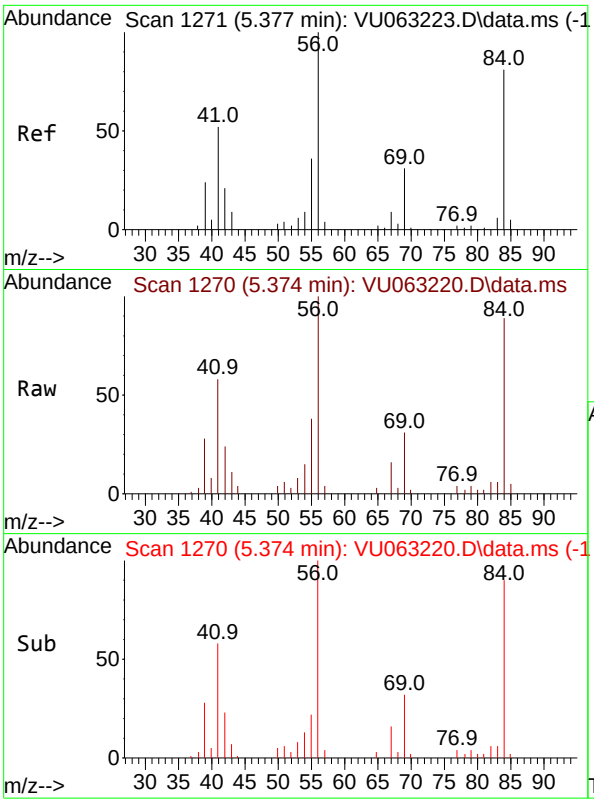


#18
2-Butanone
Concen: 4.944 ug/l m
RT: 4.711 min Scan# 1064
Delta R.T. 0.026 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 43 Resp: 18530

Ion	Ratio	Lower	Upper
43	100		
57	8.7	0.0	17.0

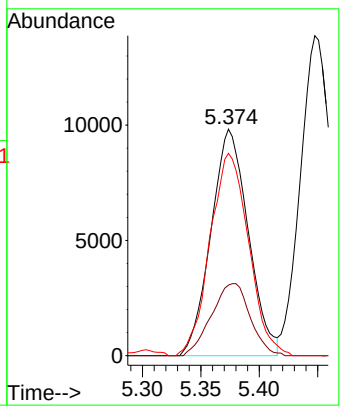




#19
Cyclohexane
Concen: 0.965 ug/l m
RT: 5.374 min Scan# 1
Delta R.T. -0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 56 Resp: 2183

Ion	Ratio	Lower	Upper
56	100		
69	33.0	24.5	36.7
84	92.3	65.2	97.8



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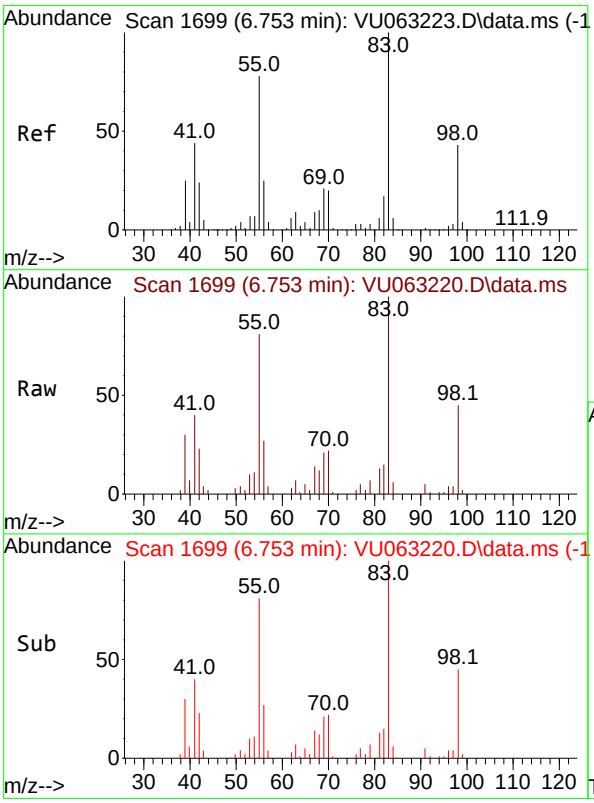
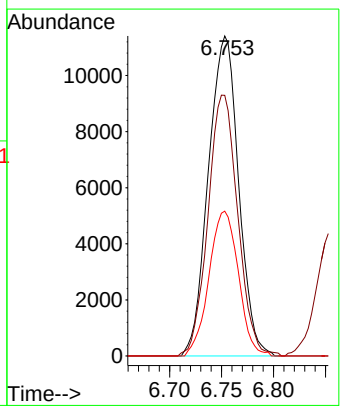
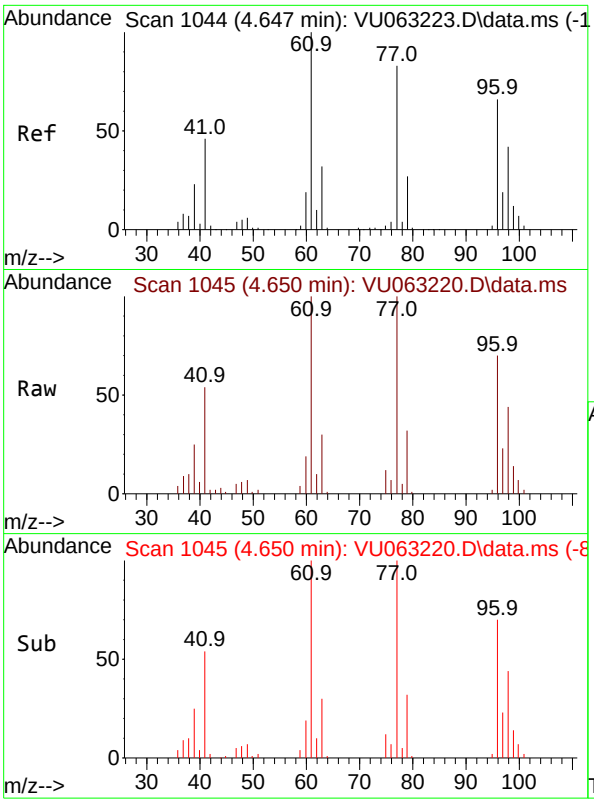


#20
Methylcyclohexane
Concen: 1.029 ug/l
RT: 6.753 min Scan# 1699
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 83 Resp: 23086

Ion	Ratio	Lower	Upper
83	100		
55	80.3	63.1	94.7
98	44.1	35.2	52.8

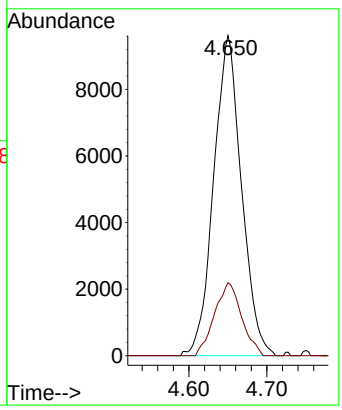




#21
2,2-Dichloropropane
Concen: 1.086 ug/l
RT: 4.650 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 77 Resp: 2385

Ion	Ratio	Lower	Upper
77	100		
97	22.2	18.5	27.7



Instrument :
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ClientSampleId :
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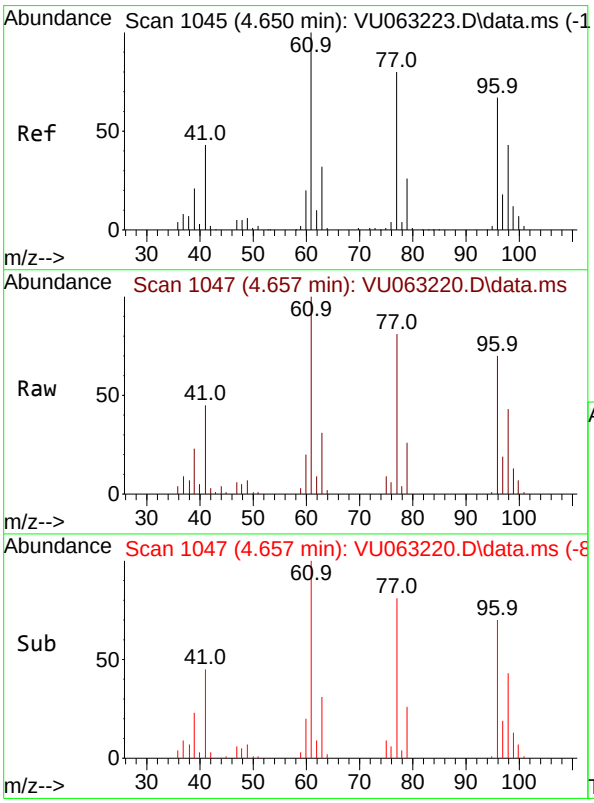
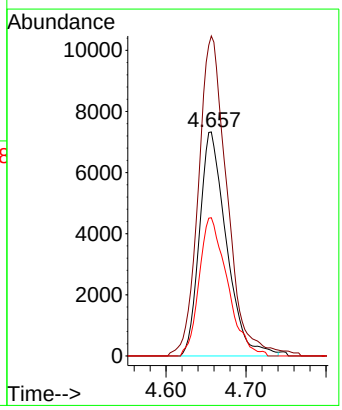
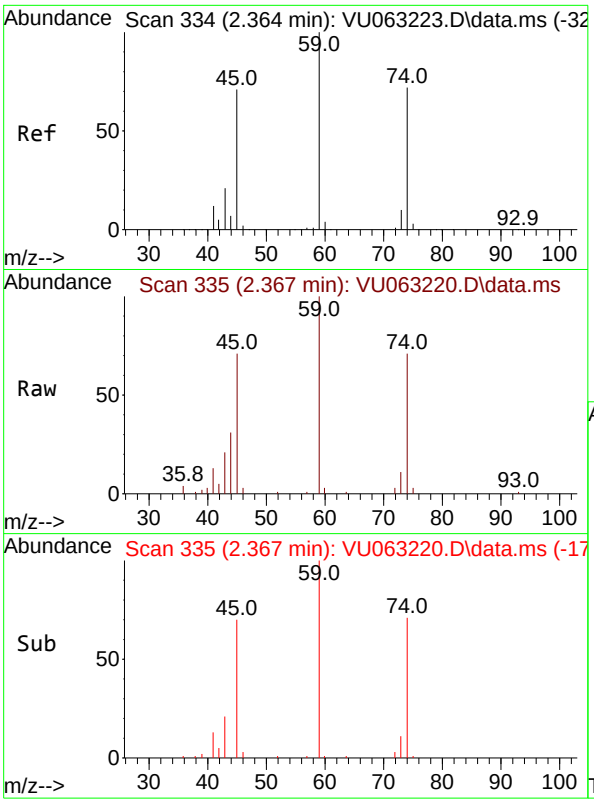


#22
cis-1,2-Dichloroethene
Concen: 1.062 ug/l
RT: 4.657 min Scan# 1047
Delta R.T. 0.007 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 96 Resp: 17134

Ion	Ratio	Lower	Upper
96	100		
61	152.5	0.0	373.3
98	64.7	31.9	95.9





#23
Diethyl Ether
Concen: 1.062 ug/l
RT: 2.367 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 59 Resp: 1192

Ion	Ratio	Lower	Upper
59	100		
45	79.7	57.8	86.6
74	73.1	57.7	86.5

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

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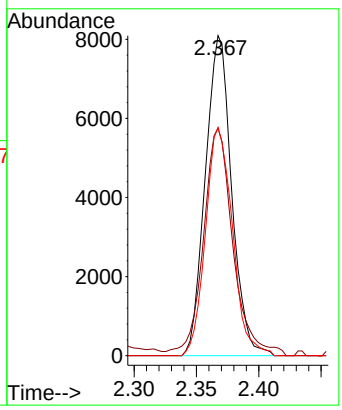
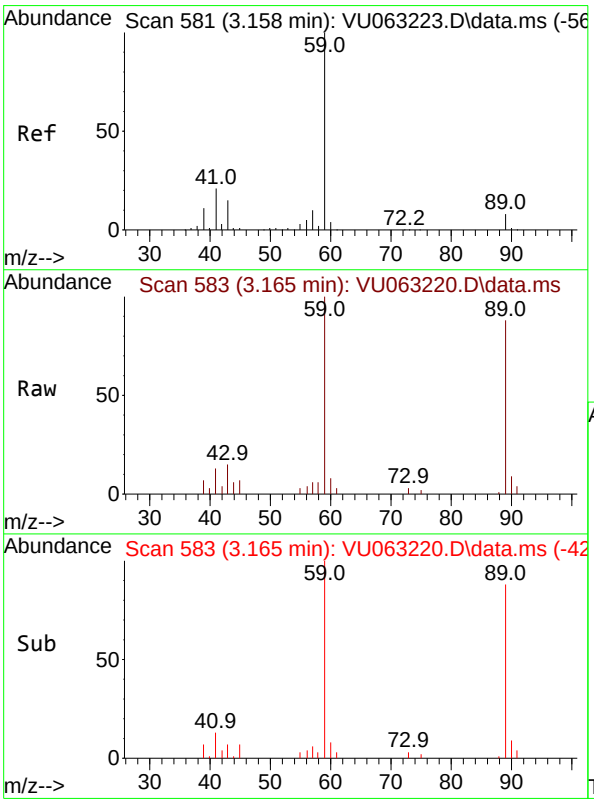
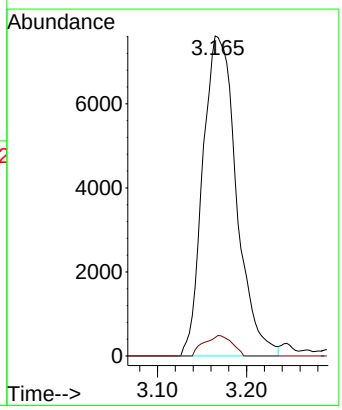


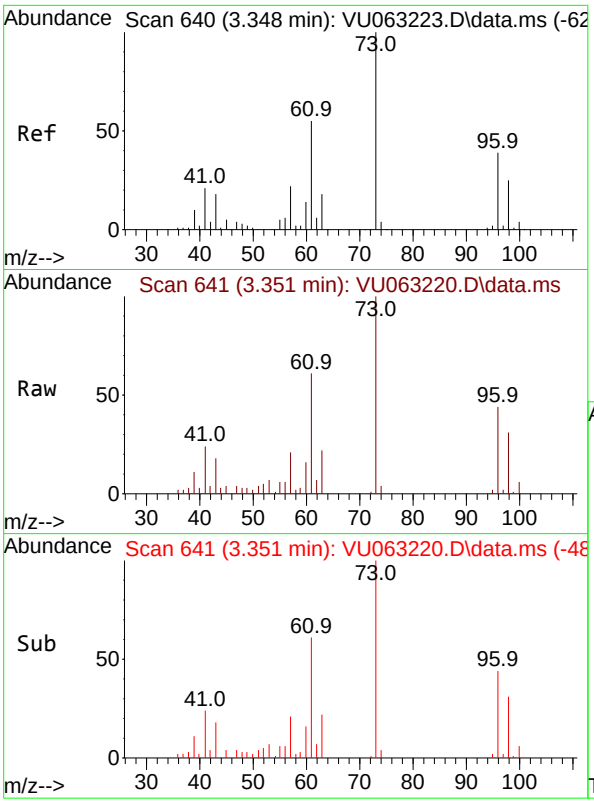


#24
tert-Butyl Alcohol
Concen: 11.656 ug/l
RT: 3.165 min Scan# 583
Delta R.T. 0.007 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 59 Resp: 19963

Ion	Ratio	Lower	Upper
59	100		
57	5.3	7.5	11.3#

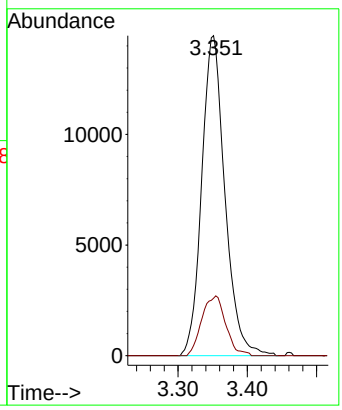




#25
Methyl tert-Butyl Ether
Concen: 1.029 ug/l
RT: 3.351 min Scan# 64
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 73 Resp: 3360

Ion	Ratio	Lower	Upper
73	100		
43	19.3	14.9	22.3



Instrument :
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ClientSampleId :
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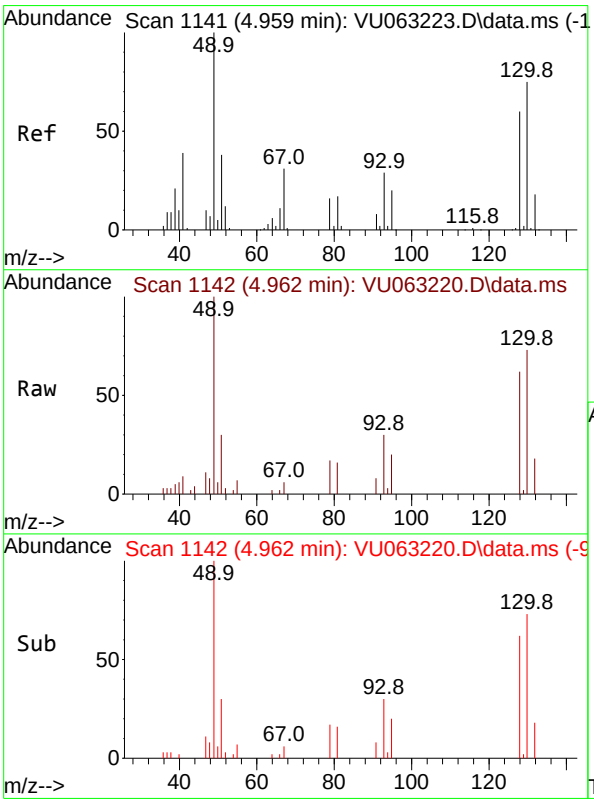
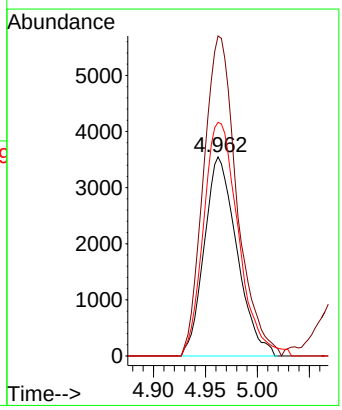
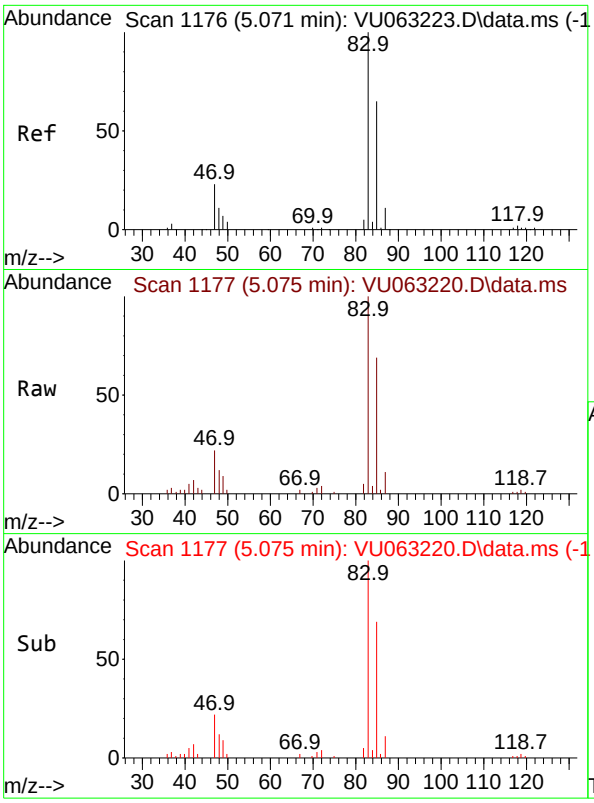


#26
Bromochloromethane
Concen: 1.098 ug/l
RT: 4.962 min Scan# 1142
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:128 Resp: 7742

Ion	Ratio	Lower	Upper
128	100		
49	164.2	0.0	343.4
130	125.4	102.9	154.3

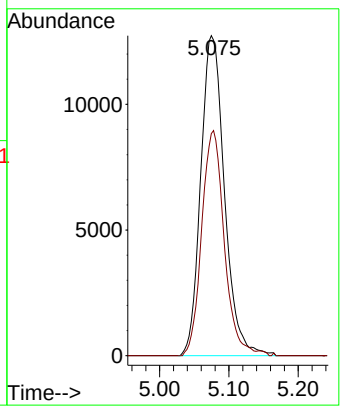




#27
Chloroform
Concen: 1.067 ug/l
RT: 5.075 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 83 Resp: 3030

Ion	Ratio	Lower	Upper
83	100		
85	69.4	0.0	129.8



Instrument :
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ClientSampleId :
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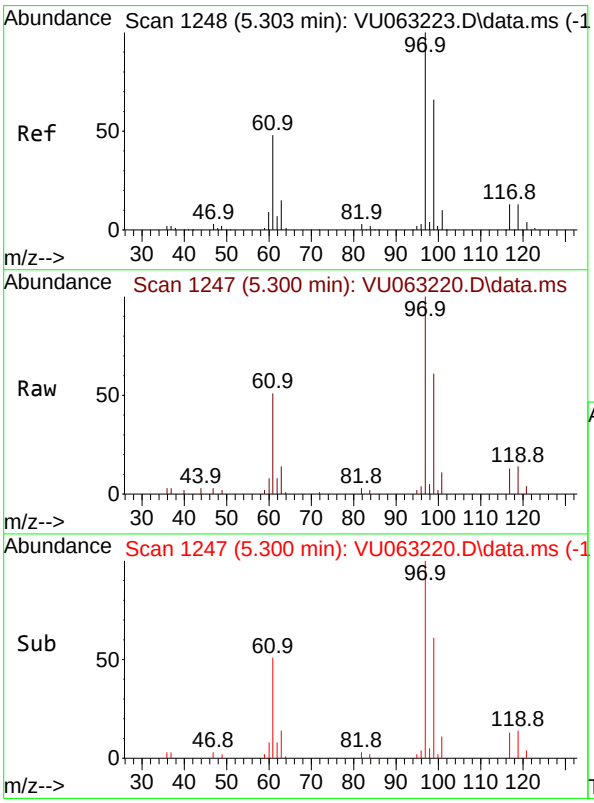
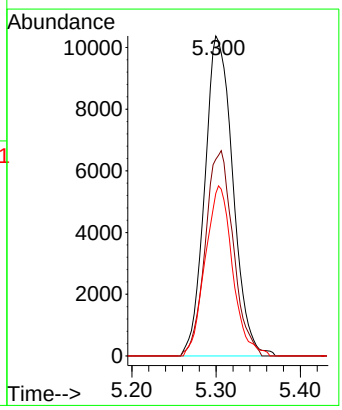
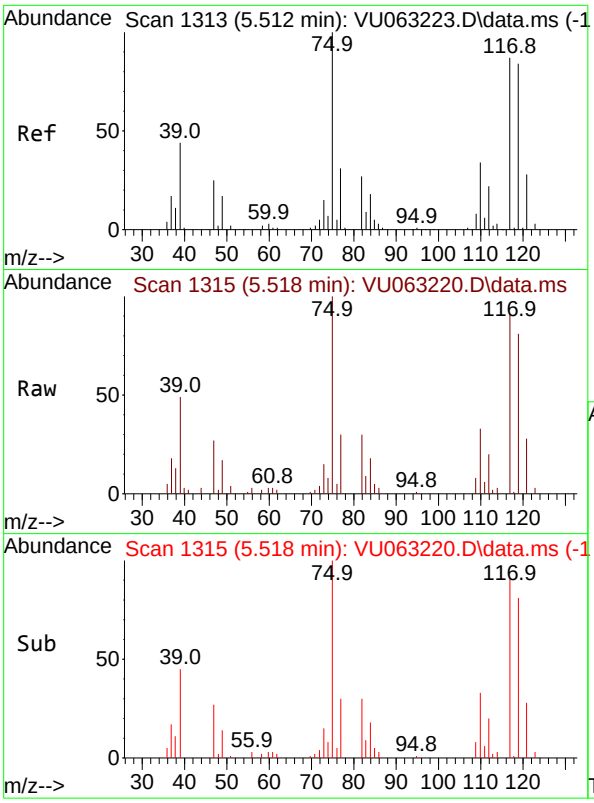


#28
1,1,1-Trichloroethane
Concen: 1.045 ug/l
RT: 5.300 min Scan# 1247
Delta R.T. -0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 97 Resp: 24038

Ion	Ratio	Lower	Upper
97	100		
99	63.6	32.4	97.0
61	51.8	23.8	71.2

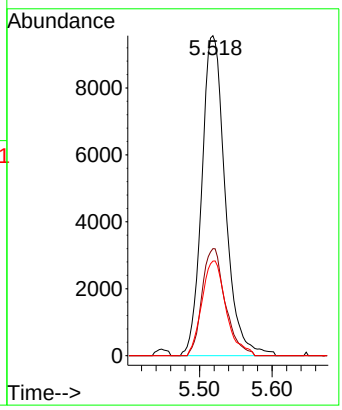




#29
1,1-Dichloropropene
Concen: 1.040 ug/l
RT: 5.518 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 75 Resp: 2142

Ion	Ratio	Lower	Upper
75	100		
110	33.1	17.2	51.5
77	30.5	24.6	37.0



Instrument :
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ClientSampleId :
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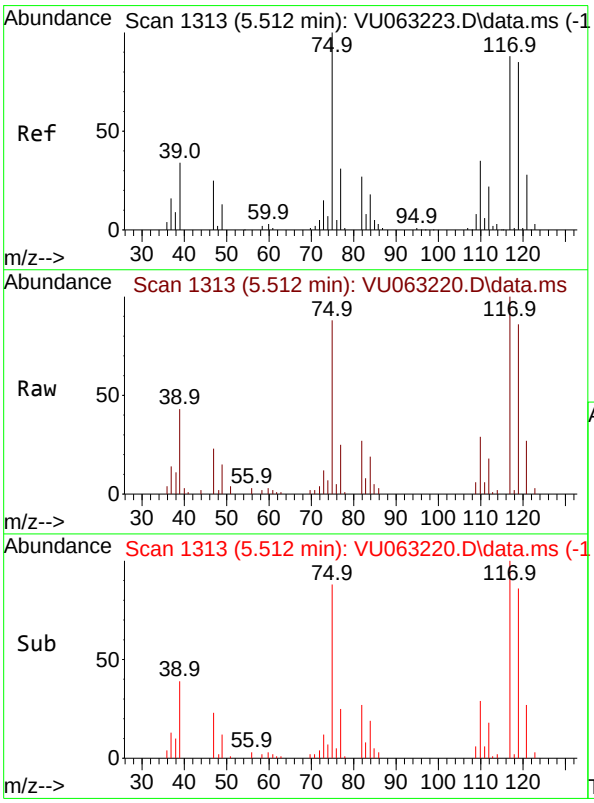
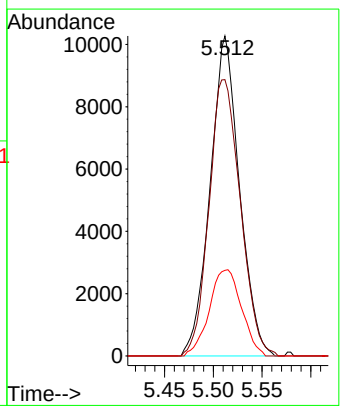
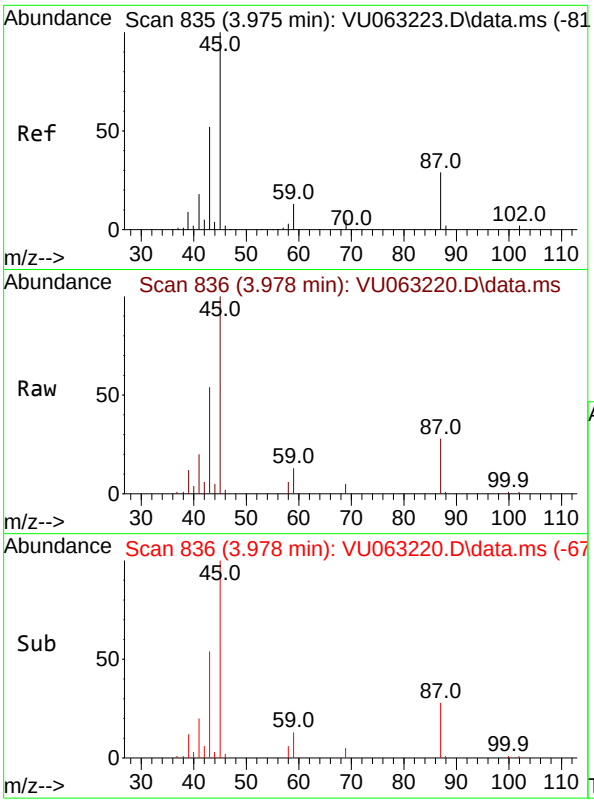


#30
Carbon Tetrachloride
Concen: 1.090 ug/l
RT: 5.512 min Scan# 1313
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:117 Resp: 21505

Ion	Ratio	Lower	Upper
117	100		
119	86.4	76.7	115.1
121	26.7	25.5	38.3

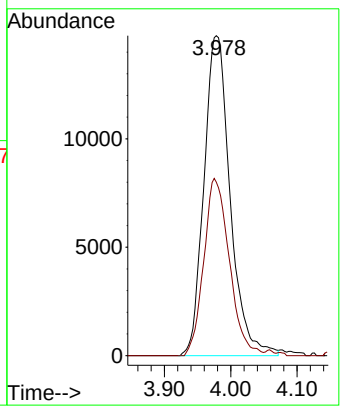




#31
Isopropyl Ether
Concen: 1.008 ug/l
RT: 3.978 min Scan# 8
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 45 Resp: 4050

Ion	Ratio	Lower	Upper
45	100		
43	54.0	25.7	77.1



Instrument :
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ClientSampleId :
VSTDICC001

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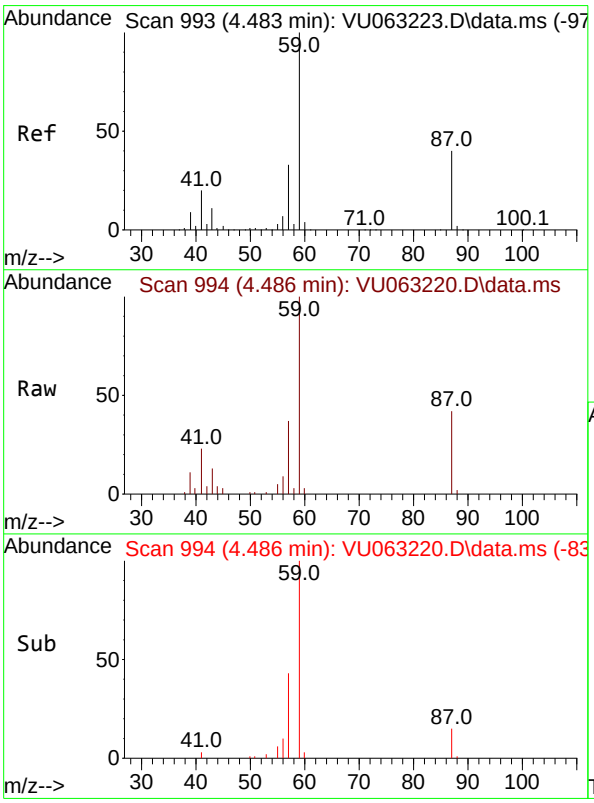
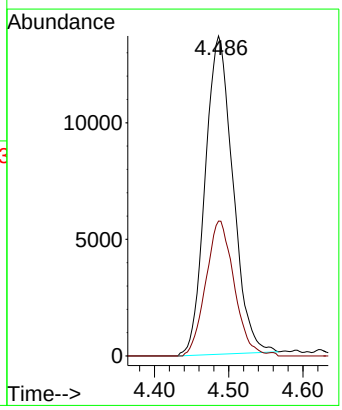
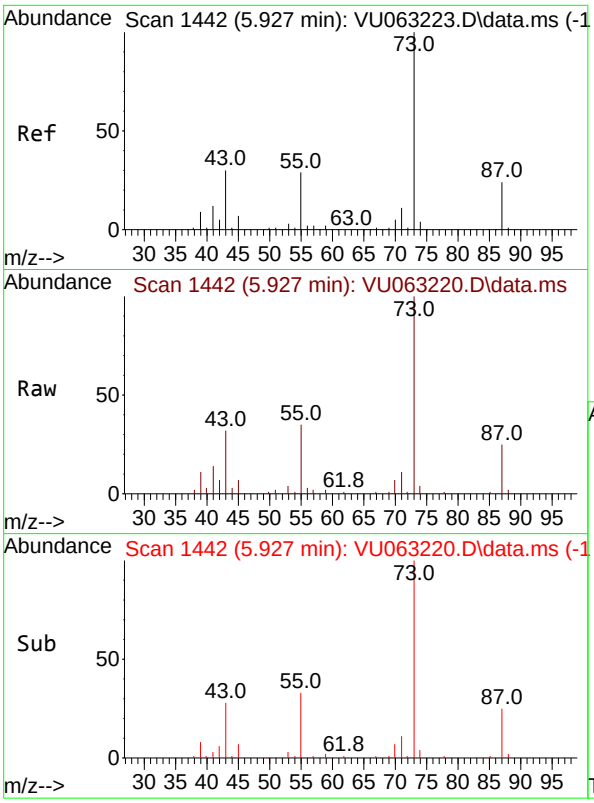


#32
Ethyl-t-butyl ether
Concen: 0.968 ug/l
RT: 4.486 min Scan# 994
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 59 Resp: 35372

Ion	Ratio	Lower	Upper
59	100		
87	42.1	32.6	49.0

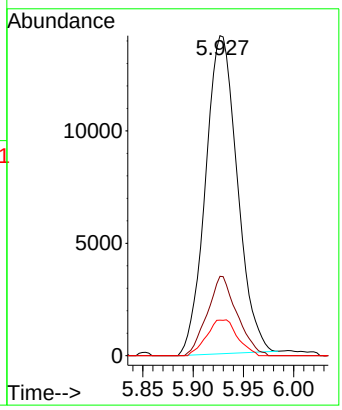




#33
Tert-Amyl methyl ether
Concen: 0.975 ug/l
RT: 5.927 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 73 Resp: 3112

Ion	Ratio	Lower	Upper
73	100		
87	23.3	18.9	28.3
71	10.9	9.0	13.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

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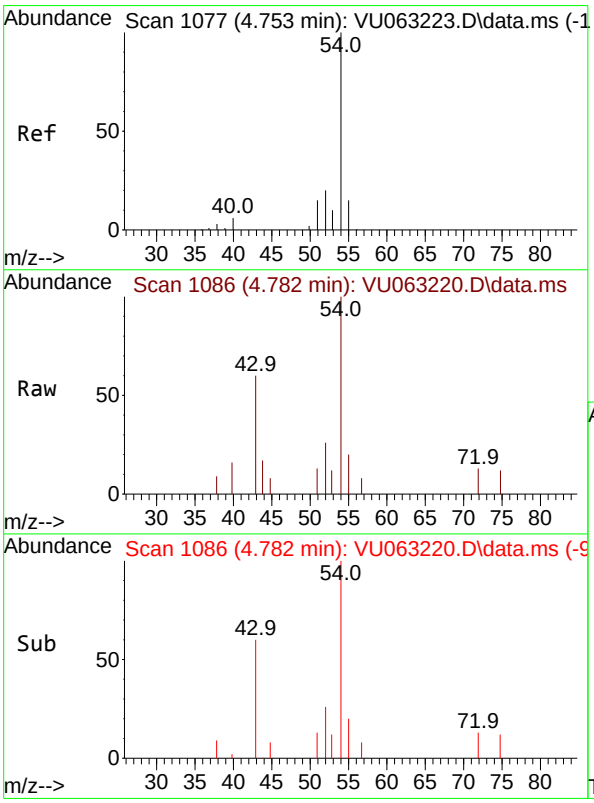
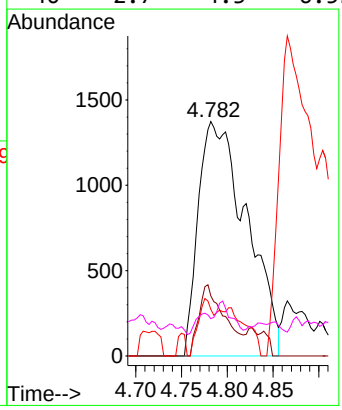
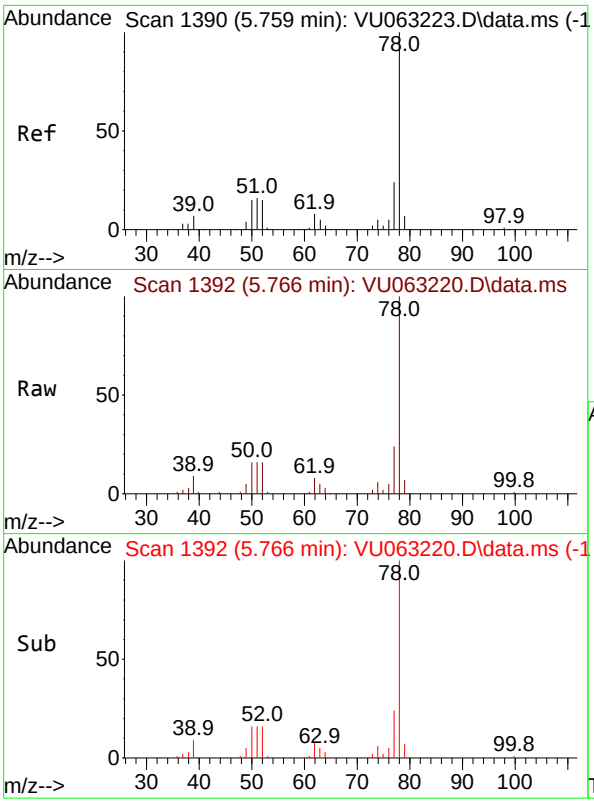


#34
Propionitrile
Concen: 4.335 ug/l m
RT: 4.782 min Scan# 1086
Delta R.T. 0.029 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 54 Resp: 5038

Ion	Ratio	Lower	Upper
54	100		
52	16.5	16.3	24.5
55	7.3	11.8	17.6#
40	2.7	4.3	6.5#

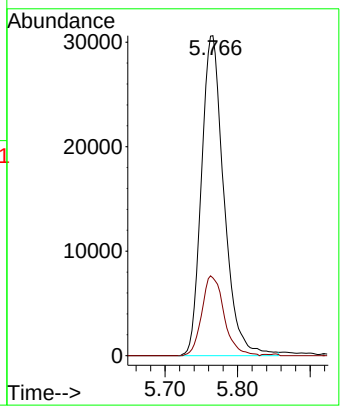




#35
Benzene
Concen: 1.041 ug/l
RT: 5.766 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 78 Resp: 6598

Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.0	28.4



Instrument :
MSVOA_U
ClientSampleId :
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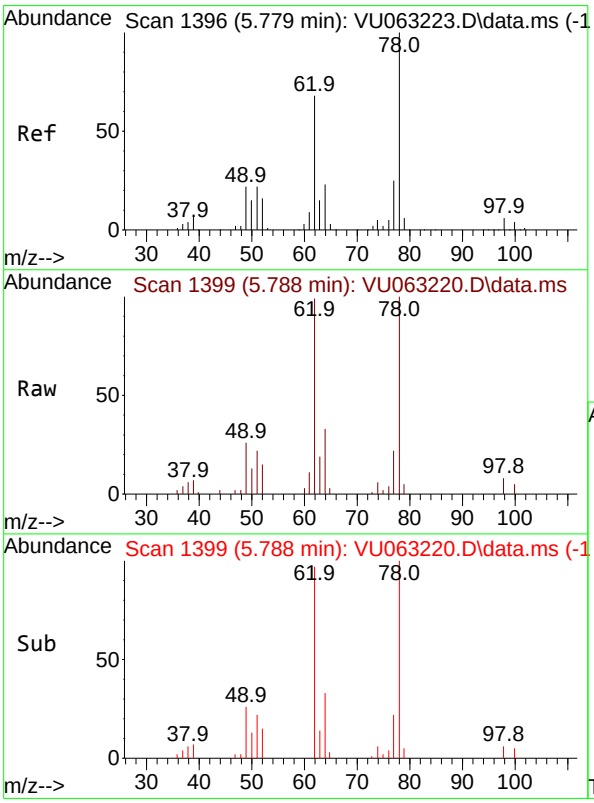
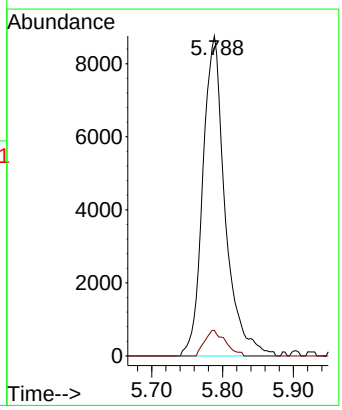
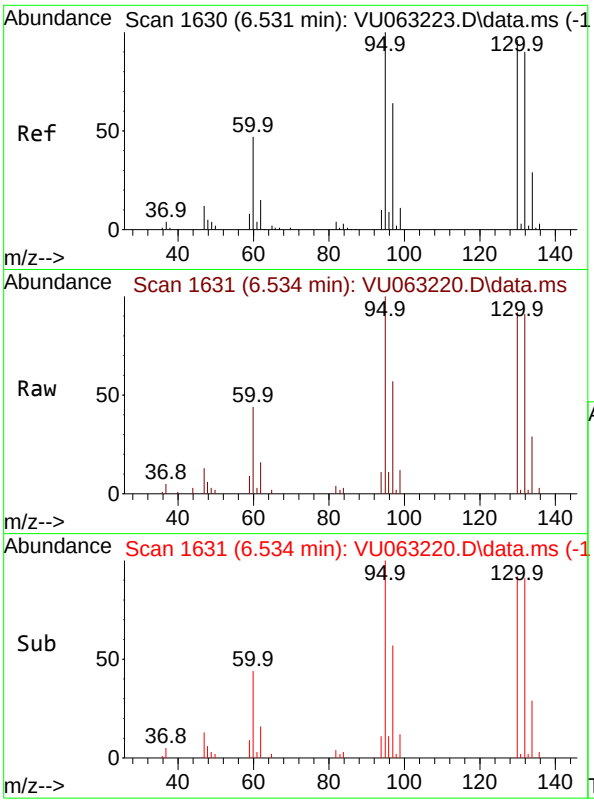


#36
1,2-Dichloroethane
Concen: 1.048 ug/l
RT: 5.788 min Scan# 1399
Delta R.T. 0.010 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 62 Resp: 19157

Ion	Ratio	Lower	Upper
62	100		
98	7.4	6.9	10.3

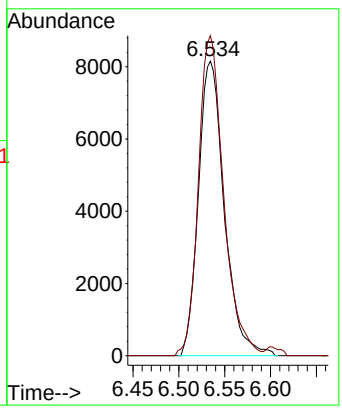




#37
Trichloroethene
Concen: 1.063 ug/l
RT: 6.534 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:130 Resp: 1601

Ion	Ratio	Lower	Upper
130	100		
95	106.9	83.2	124.8



Instrument :
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ClientSampleId :
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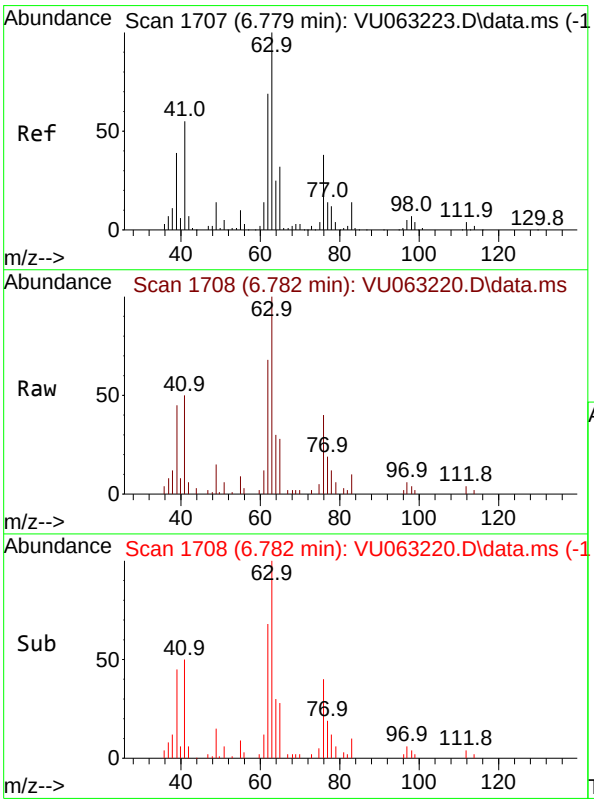
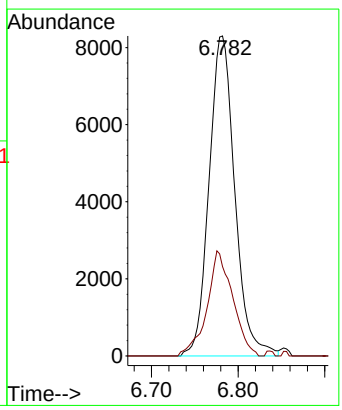
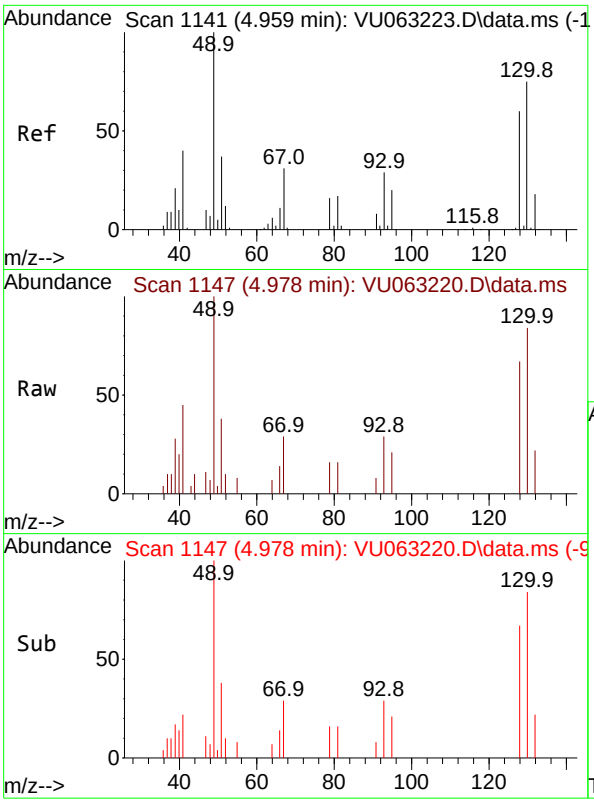


#38
1,2-Dichloropropane
Concen: 1.035 ug/l
RT: 6.782 min Scan# 1708
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 63 Resp: 17158

Ion	Ratio	Lower	Upper
63	100		
65	28.0	25.3	37.9

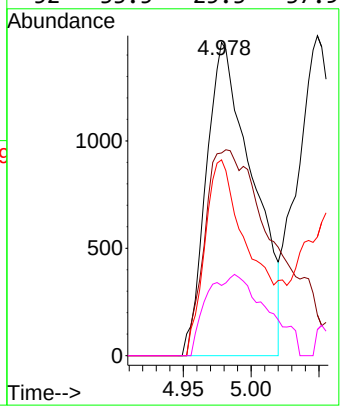




#39
Methacrylonitrile
Concen: 0.838 ug/l
RT: 4.978 min Scan# 1
Delta R.T. 0.019 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 41 Resp: 347

Ion	Ratio	Lower	Upper
41	100		
67	101.4	64.5	96.7#
39	61.6	43.0	64.6
52	33.5	25.3	37.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

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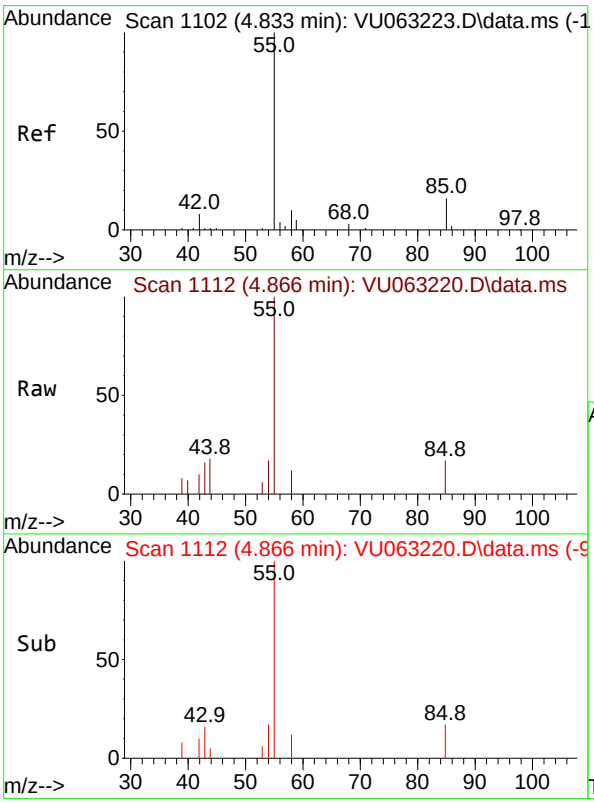
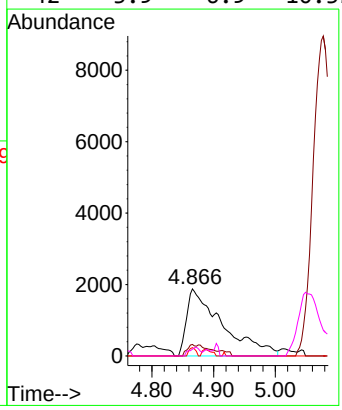
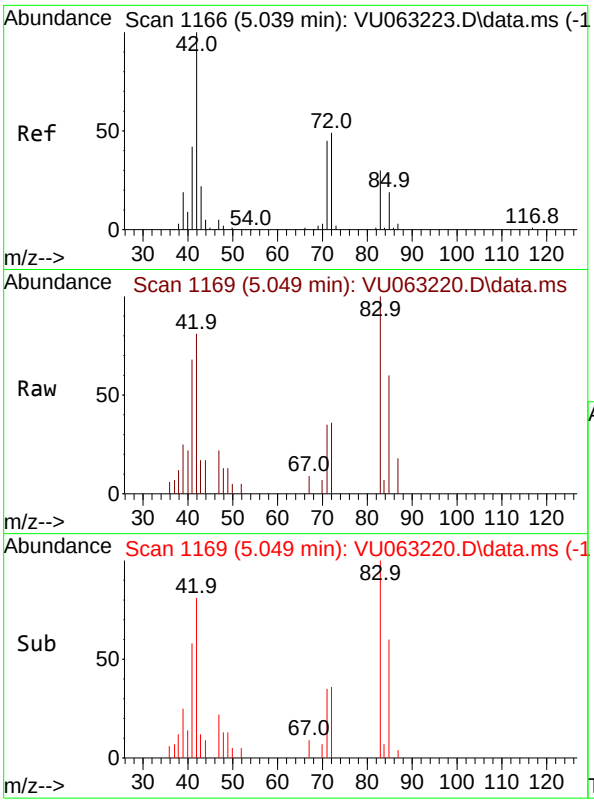


#40
Methyl acrylate
Concen: 0.993 ug/l m
RT: 4.866 min Scan# 1112
Delta R.T. 0.032 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 55 Resp: 7528

Ion	Ratio	Lower	Upper
55	100		
85	0.0	13.3	19.9#
58	2.3	7.3	10.9#
42	3.9	6.9	10.3#

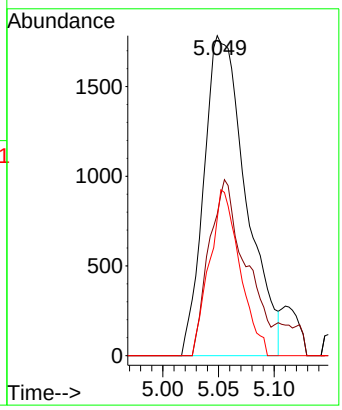




#41
Tetrahydrofuran
Concen: 1.924 ug/l
RT: 5.049 min Scan# 1
Delta R.T. 0.010 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 42 Resp: 469

Ion	Ratio	Lower	Upper
42	100		
72	47.9	41.5	62.3
71	37.6	37.2	55.8



Instrument :
MSVOA_U
ClientSampleId :
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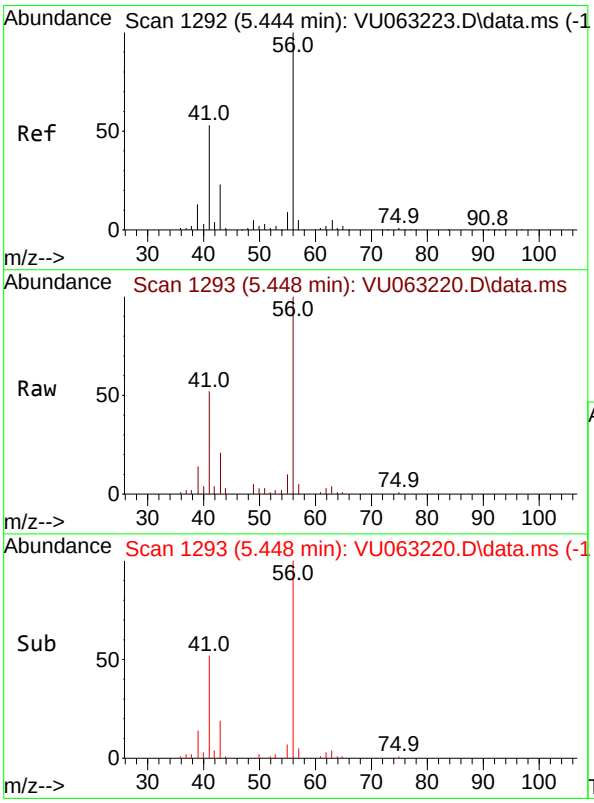
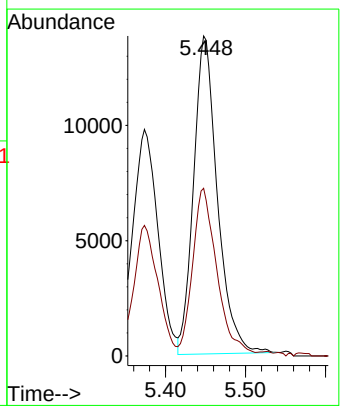
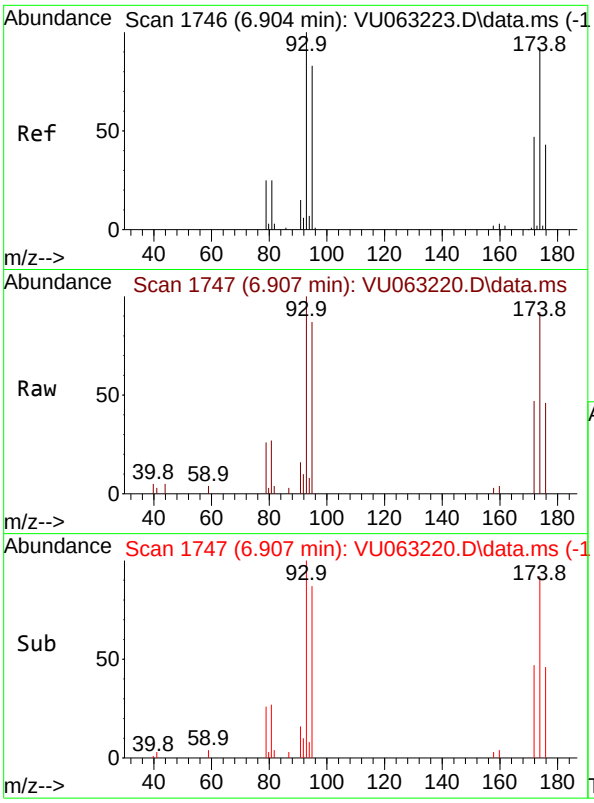


#42
1-Chlorobutane
Concen: 1.014 ug/l
RT: 5.448 min Scan# 1293
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 56 Resp: 28598

Ion	Ratio	Lower	Upper
56	100		
41	51.7	26.3	78.8

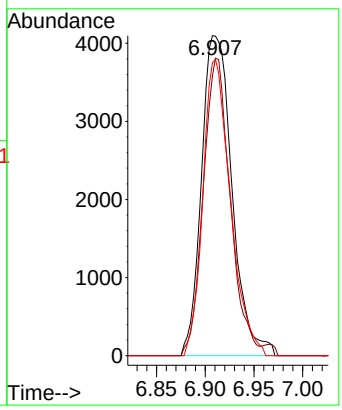




#43
Dibromomethane
Concen: 1.065 ug/l
RT: 6.907 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 93 Resp: 894

Ion	Ratio	Lower	Upper
93	100		
95	81.7	67.2	100.8
174	83.3	75.7	113.5



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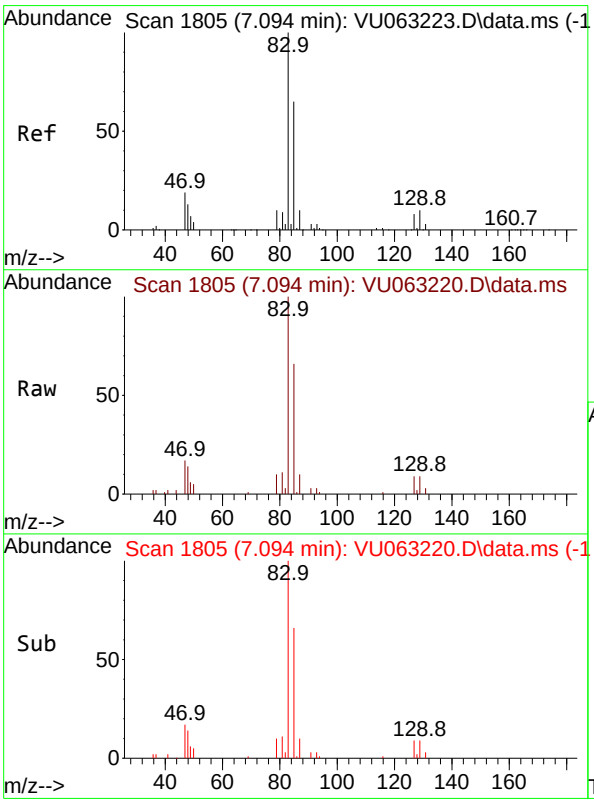
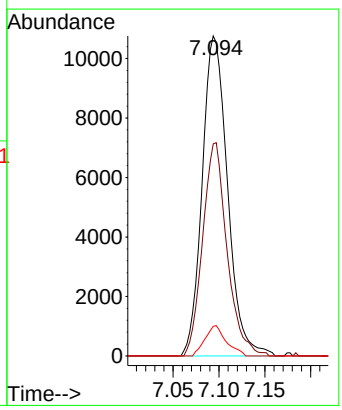
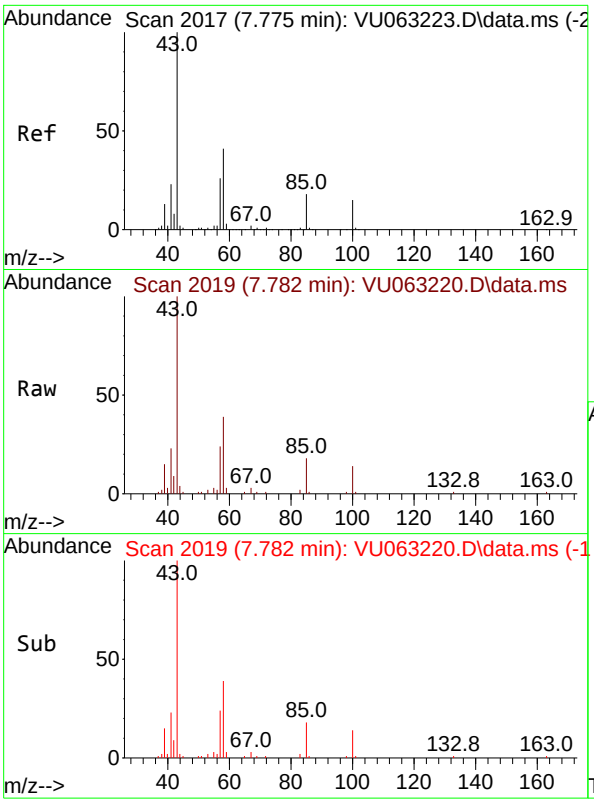


#44
Bromodichloromethane
Concen: 1.060 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 83 Resp: 20720

Ion	Ratio	Lower	Upper
83	100		
85	66.3	51.7	77.5
127	9.2	6.7	10.1

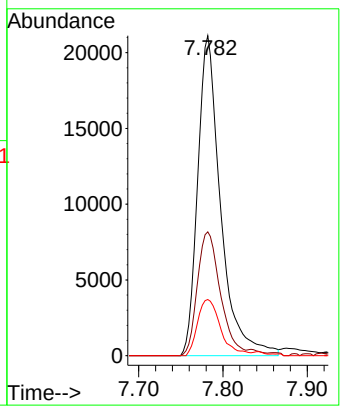




#45
4-Methyl-2-Pentanone
Concen: 4.541 ug/l
RT: 7.782 min Scan# 2
Delta R.T. 0.006 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 43 Resp: 3998

Ion	Ratio	Lower	Upper
43	100		
58	38.7	20.8	62.5
85	17.7	14.8	22.2



Instrument :
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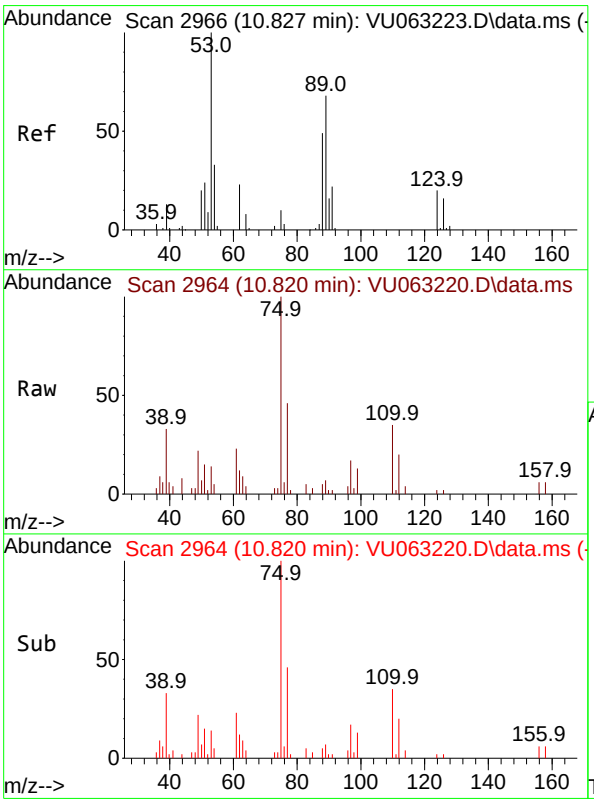
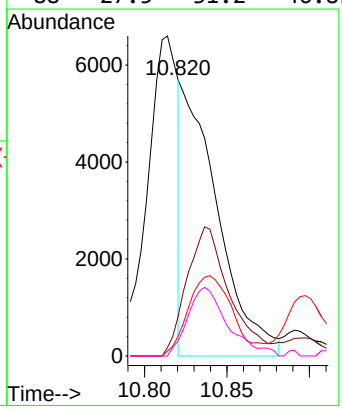
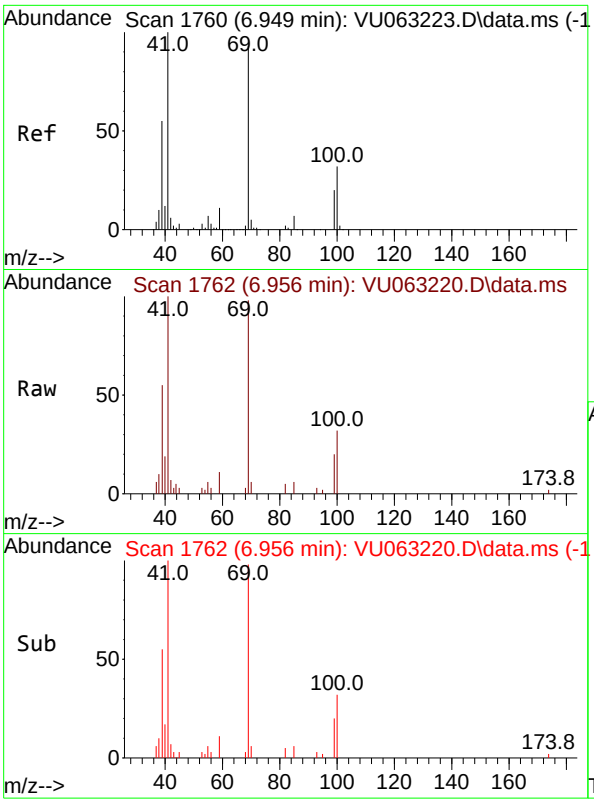


#46
t-1,4-Dichloro-2-butene
Concen: 1.981 ug/l m
RT: 10.820 min Scan# 2964
Delta R.T. -0.006 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 75 Resp: 8630

Ion	Ratio	Lower	Upper
75	100		
53	55.7	64.5	96.7#
89	36.6	43.4	65.2#
88	27.5	31.2	46.8#

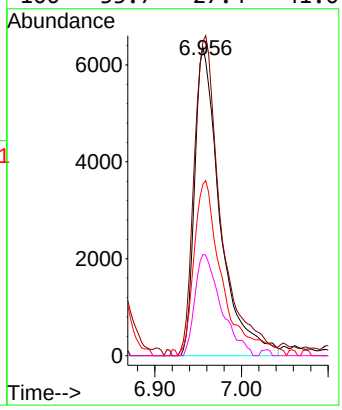




#47
Methyl methacrylate
Concen: 1.836 ug/l
RT: 6.956 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 69 Resp: 1298

Ion	Ratio	Lower	Upper
69	100		
41	109.0	0.0	217.0
39	62.7	47.7	71.5
100	33.7	27.4	41.0



Instrument :
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ClientSampleId :
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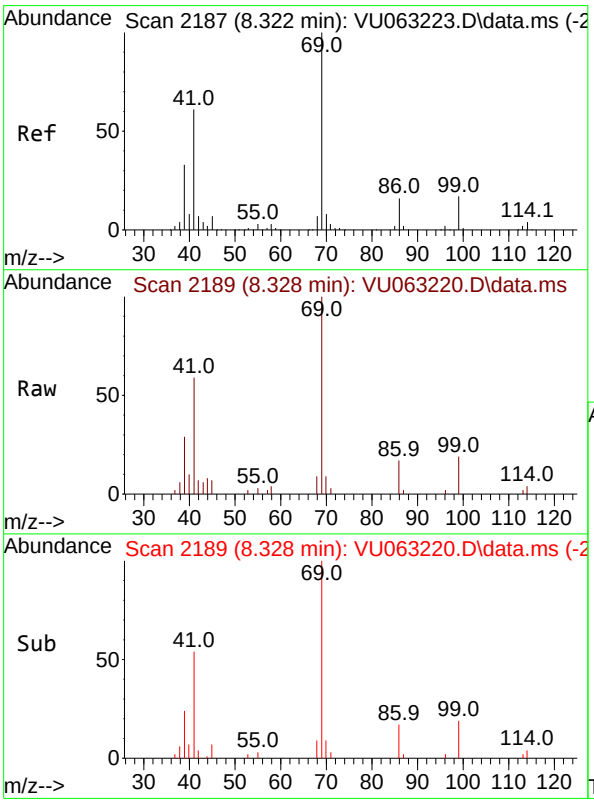
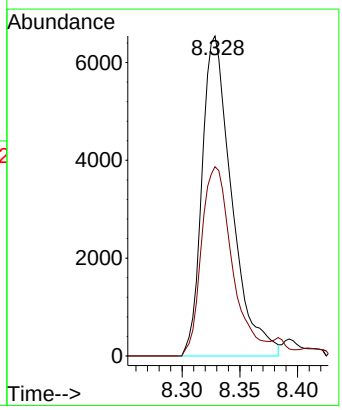
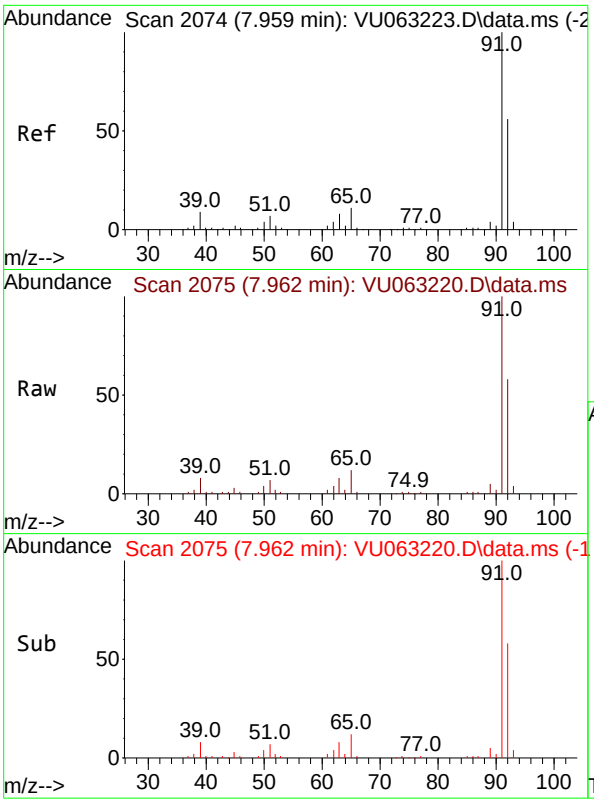


#48
Ethyl methacrylate
Concen: 0.882 ug/l
RT: 8.328 min Scan# 2189
Delta R.T. 0.007 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 69 Resp: 11711

Ion	Ratio	Lower	Upper
69	100		
41	61.3	30.6	92.0

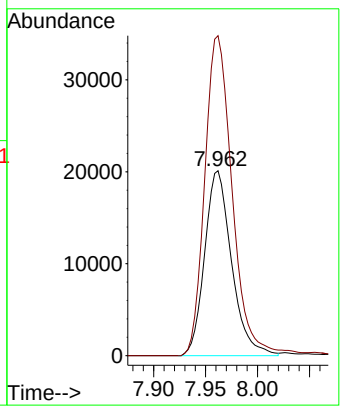




#49
Toluene
Concen: 0.998 ug/l
RT: 7.962 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 92 Resp: 3635

Ion	Ratio	Lower	Upper
92	100		
91	176.9	141.8	212.6



Instrument :
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ClientSampleId :
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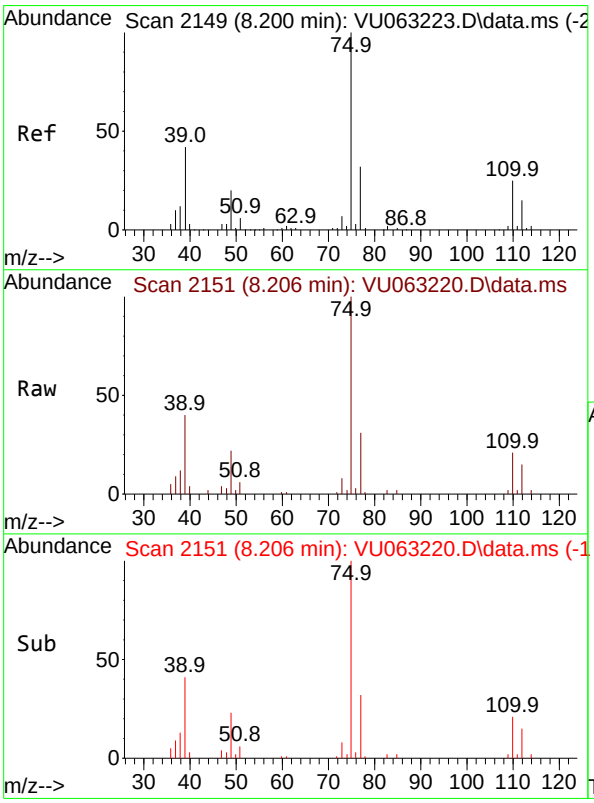
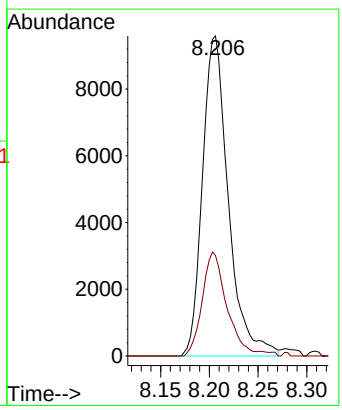
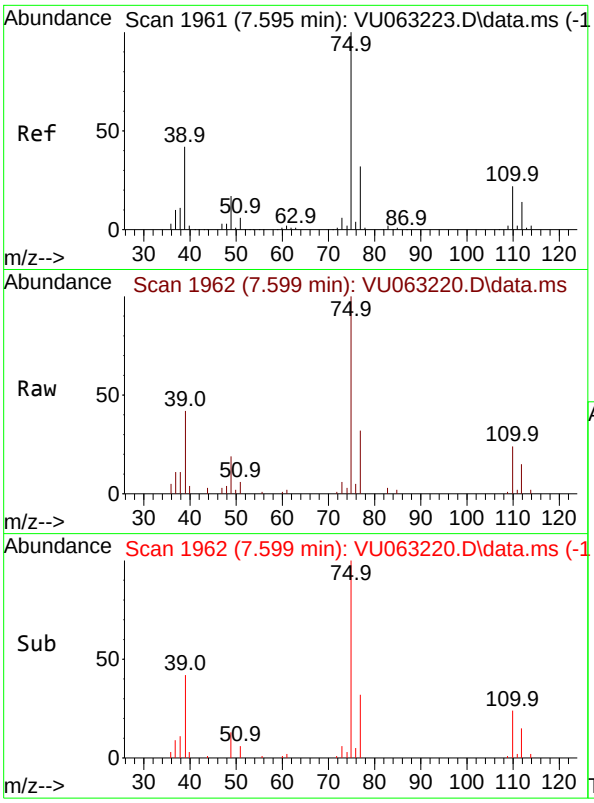


#50
t-1,3-Dichloropropene
Concen: 0.988 ug/l
RT: 8.206 min Scan# 2151
Delta R.T. 0.007 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 75 Resp: 17681

Ion	Ratio	Lower	Upper
75	100		
77	31.4	25.9	38.9

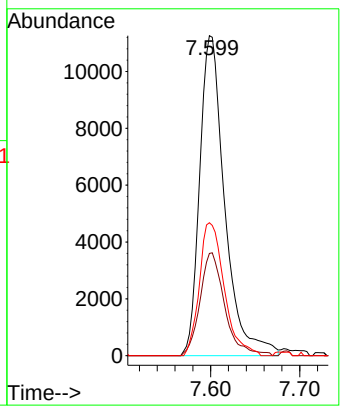




#51
cis-1,3-Dichloropropene
Concen: 0.997 ug/l
RT: 7.599 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 75 Resp: 2203

Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.3	37.9
39	41.5	33.5	50.3



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

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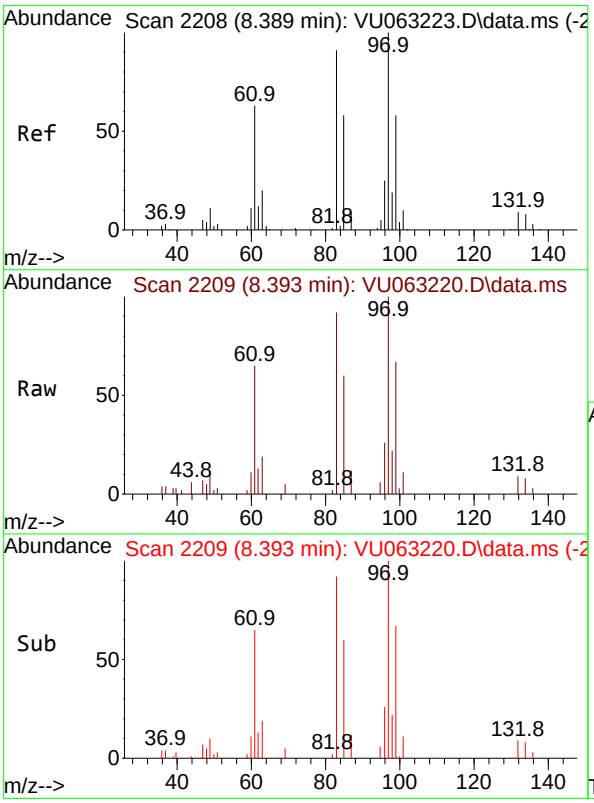
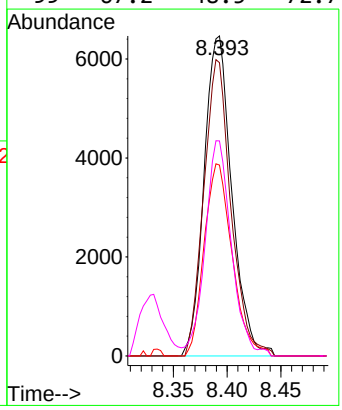
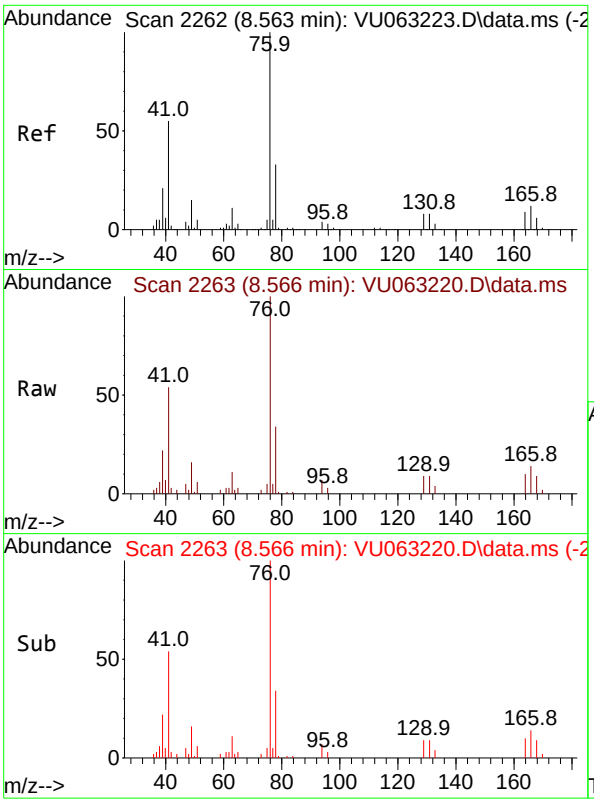


#52
1,1,2-Trichloroethane
Concen: 1.025 ug/l
RT: 8.393 min Scan# 2209
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 97 Resp: 11610

Ion	Ratio	Lower	Upper
97	100		
83	91.6	73.0	109.4
85	59.6	46.3	69.5
99	67.2	48.5	72.7

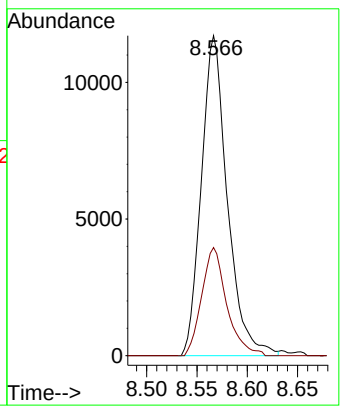




#53
1,3-Dichloropropane
Concen: 1.046 ug/l
RT: 8.566 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 76 Resp: 2102

Ion	Ratio	Lower	Upper
76	100		
78	32.5	26.3	39.5



Instrument :
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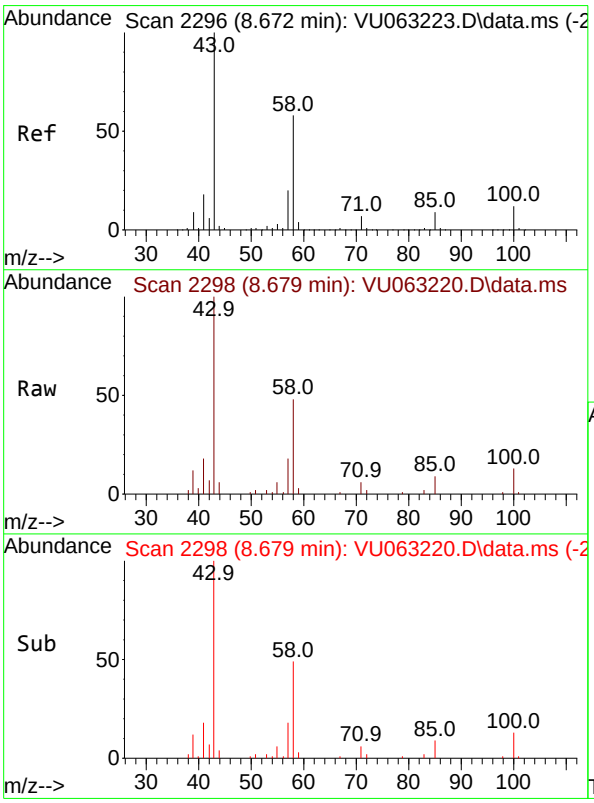
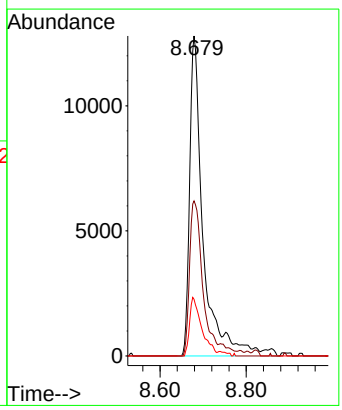
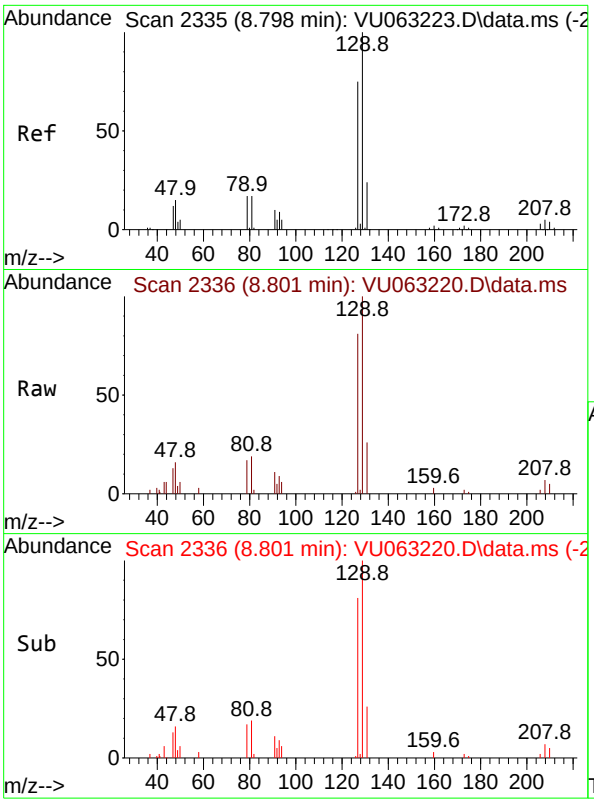


#54
2-Hexanone
Concen: 4.673 ug/l m
RT: 8.679 min Scan# 2298
Delta R.T. 0.006 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 43 Resp: 28078

Ion	Ratio	Lower	Upper
43	100		
58	46.0	38.0	78.0
57	16.4	0.0	39.1

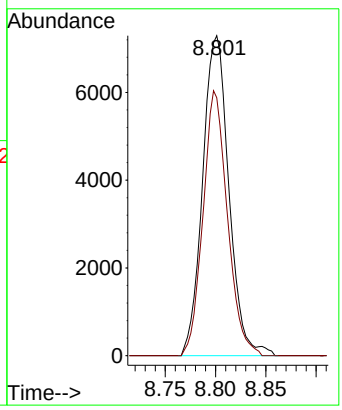




#55
Dibromochloromethane
Concen: 1.018 ug/l
RT: 8.801 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:129 Resp: 1325

Ion	Ratio	Lower	Upper
129	100		
127	77.0	60.4	90.6



Instrument :
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ClientSampleId :
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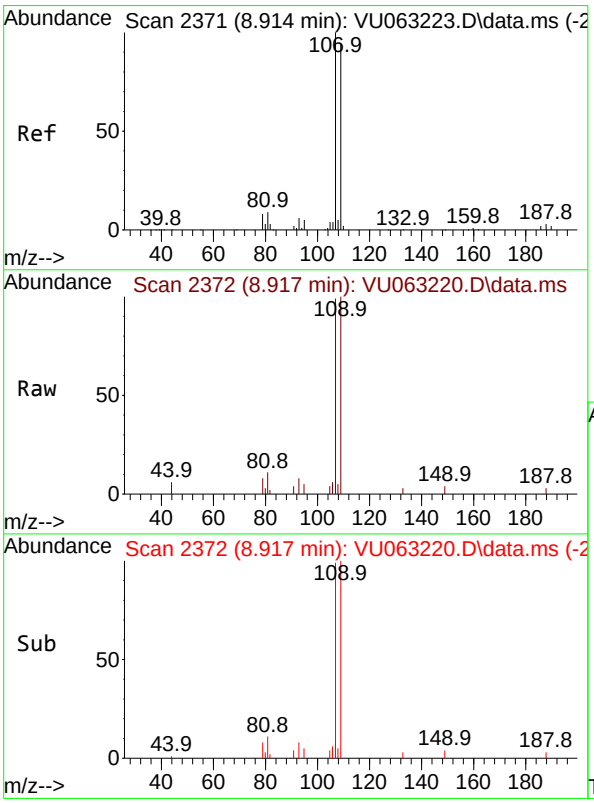
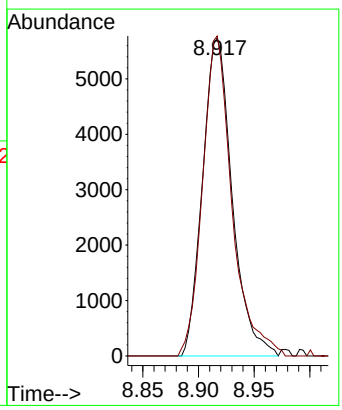
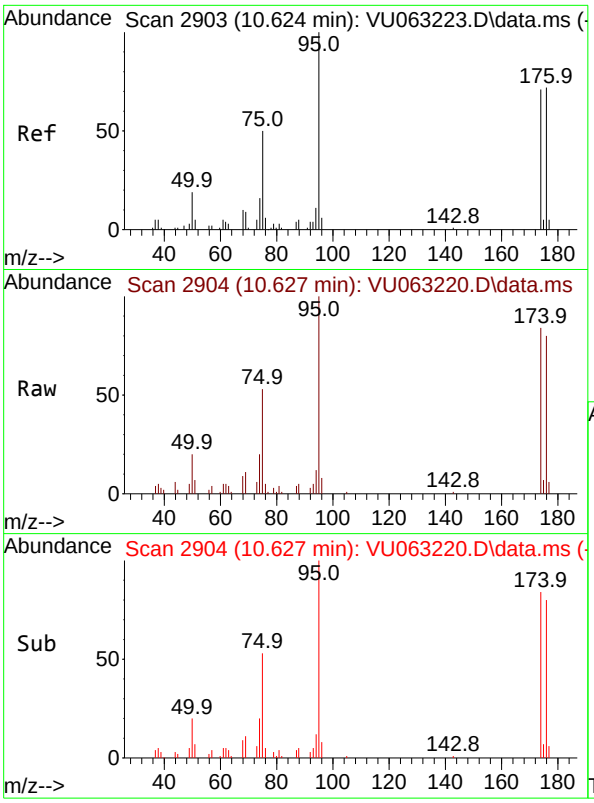


#56
1,2-Dibromoethane
Concen: 1.001 ug/l
RT: 8.917 min Scan# 2372
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:107 Resp: 10628

Ion	Ratio	Lower	Upper
107	100		
109	99.6	0.0	187.8

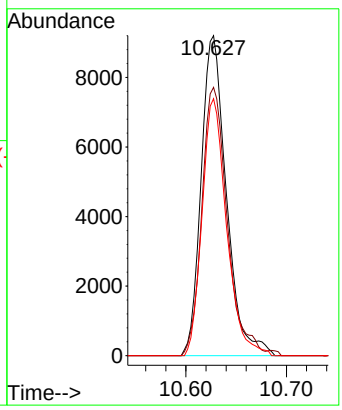




#57
4-Bromofluorobenzene
Concen: 0.943 ug/l
RT: 10.627 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 95 Resp: 1604

Ion	Ratio	Lower	Upper
95	100		
174	84.4	58.6	88.0
176	78.3	58.2	87.4



Instrument :
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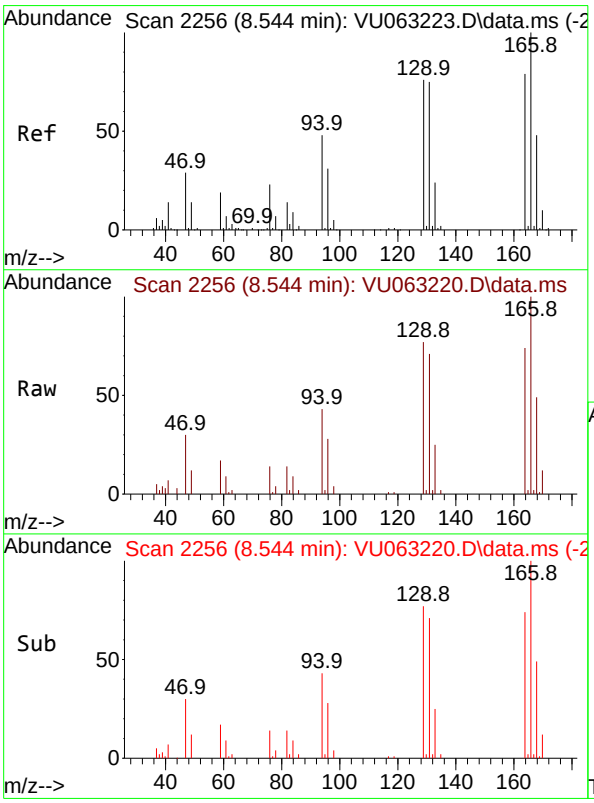
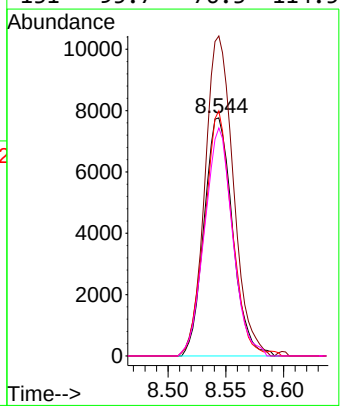
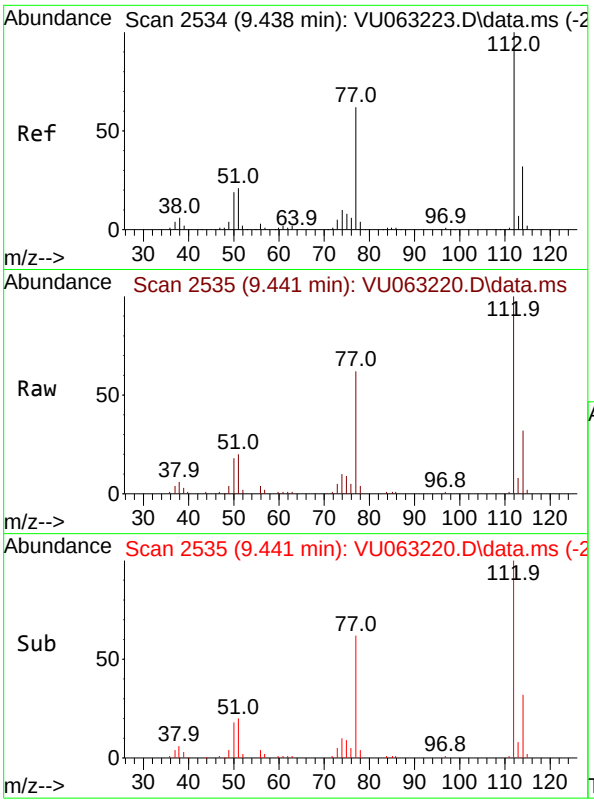


#58
Tetrachloroethene
Concen: 1.071 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:164 Resp: 13296

Ion	Ratio	Lower	Upper
164	100		
166	134.4	101.4	152.0
129	102.9	77.0	115.4
131	95.7	76.3	114.5

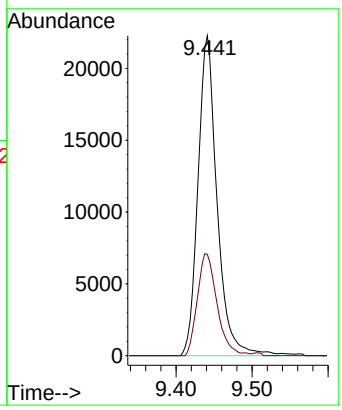




#59
Chlorobenzene
Concen: 1.008 ug/l
RT: 9.441 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:112 Resp: 3877

Ion	Ratio	Lower	Upper
112	100		
114	31.7	25.7	38.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

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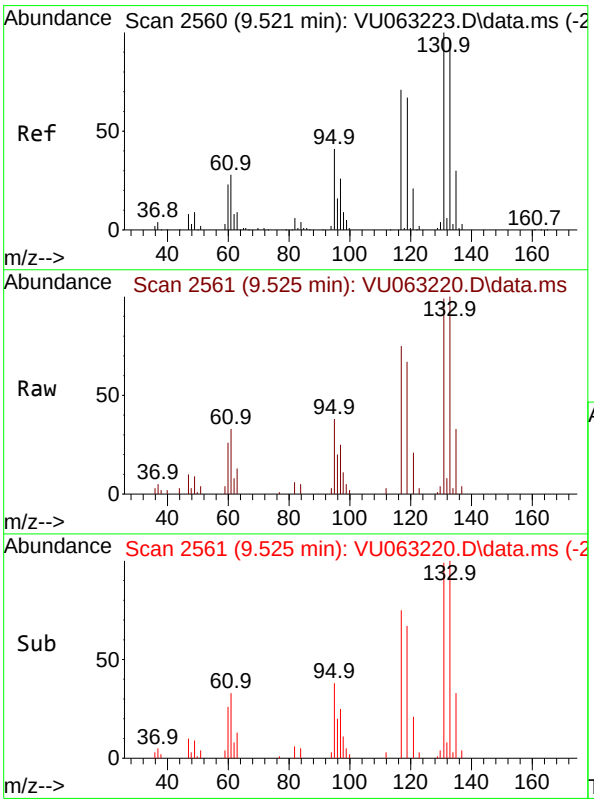
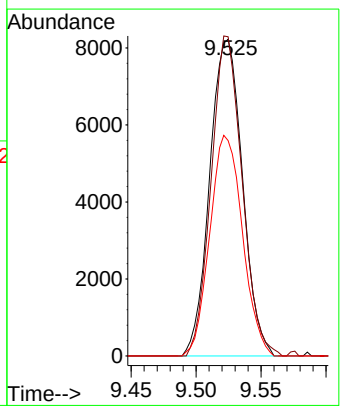
Supervised By :Mahesh Dadoda 02/12/2025

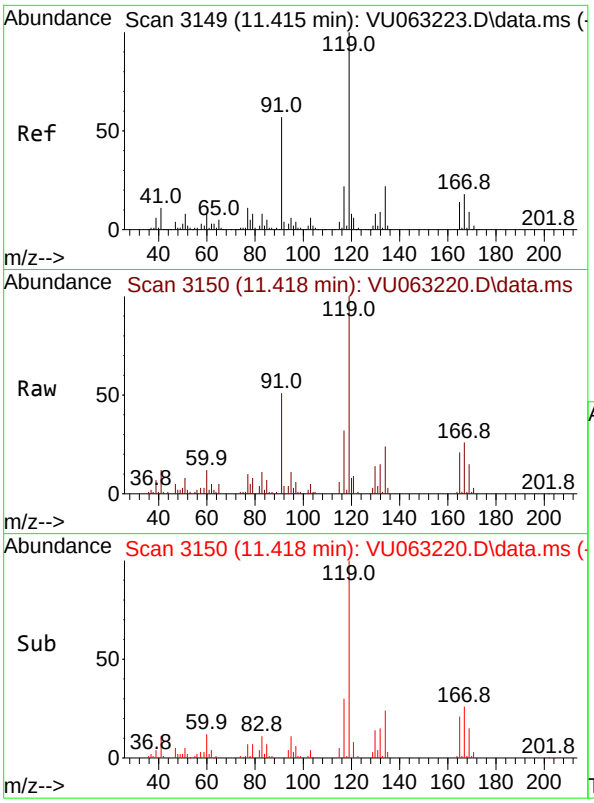


#60
1,1,1,2-Tetrachloroethane
Concen: 1.041 ug/l
RT: 9.525 min Scan# 2561
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:131 Resp: 14393

Ion	Ratio	Lower	Upper
131	100		
133	95.6	76.7	115.1
119	69.6	54.4	81.6

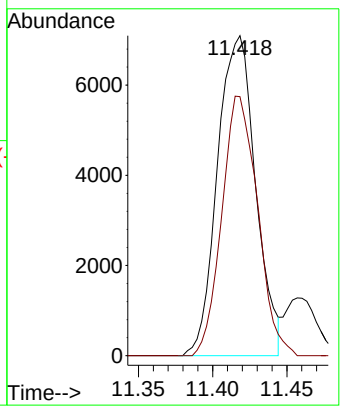




#61
Pentachloroethane
Concen: 1.027 ug/l
RT: 11.418 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:117 Resp: 1268

Ion	Ratio	Lower	Upper
117	100		
167	76.1	65.0	97.6



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

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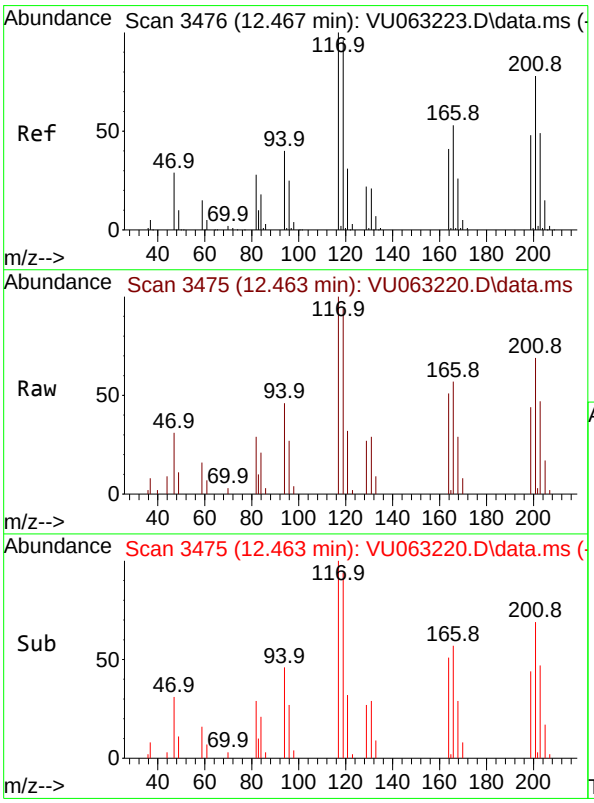
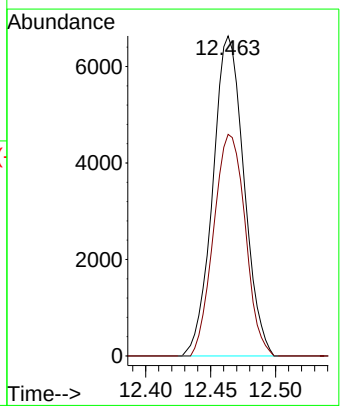
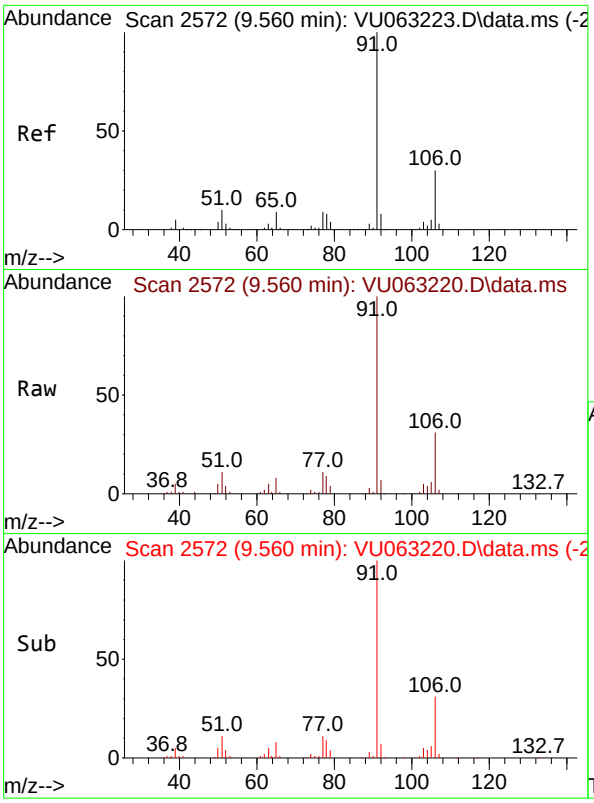


#62
Hexachloroethane
Concen: 1.014 ug/l
RT: 12.463 min Scan# 3475
Delta R.T. -0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:117 Resp: 11074

Ion	Ratio	Lower	Upper
117	100		
201	70.2	61.3	91.9

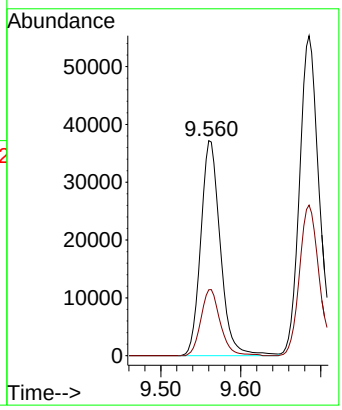




#63
Ethyl Benzene
Concen: 0.956 ug/l
RT: 9.560 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 91 Resp: 6339

Ion	Ratio	Lower	Upper
91	100		
106	30.7	24.2	36.2



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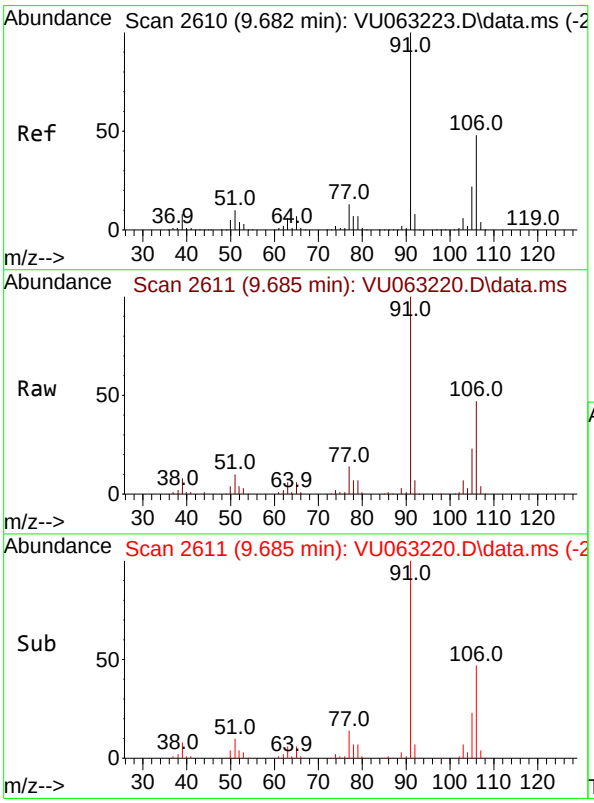
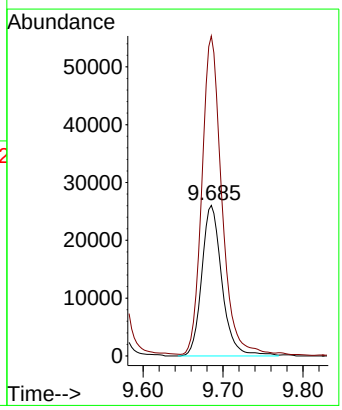
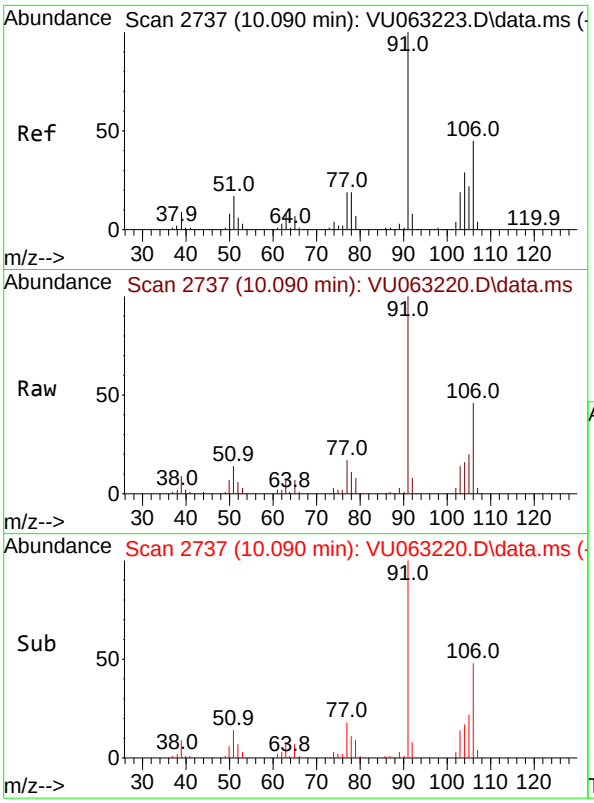


#64
m/p-Xylenes
Concen: 1.847 ug/l
RT: 9.685 min Scan# 2611
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:106 Resp: 45748

Ion	Ratio	Lower	Upper
106	100		
91	207.1	166.9	250.3

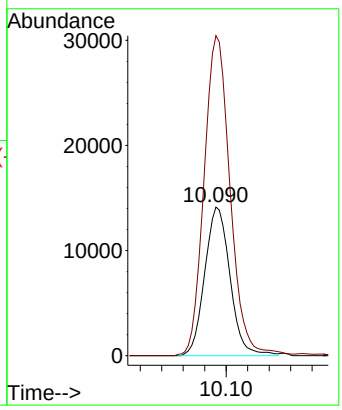




#65
o-Xylene
Concen: 0.954 ug/l
RT: 10.090 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:106 Resp: 2313

Ion	Ratio	Lower	Upper
106	100		
91	221.5	110.9	332.9



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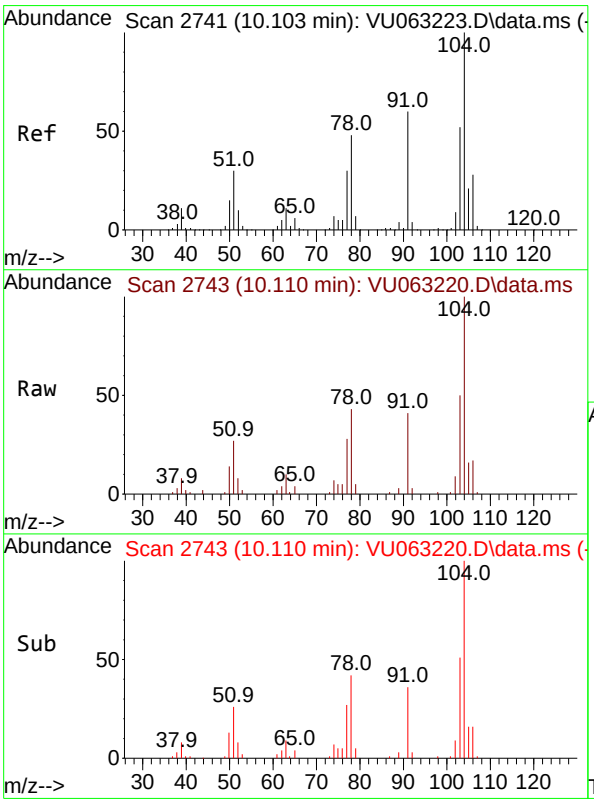
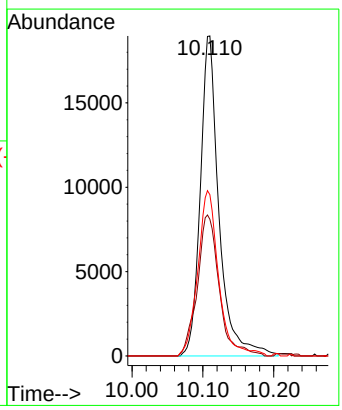
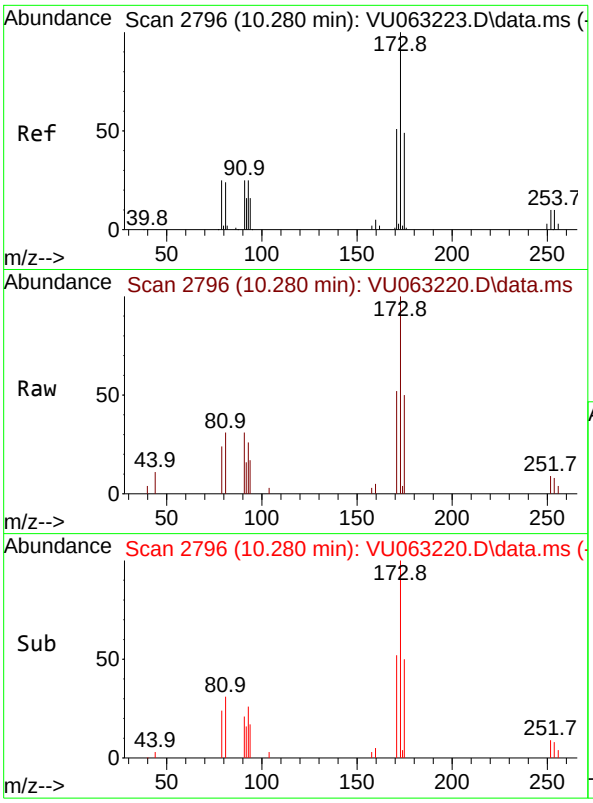


#66
Styrene
Concen: 0.901 ug/l
RT: 10.110 min Scan# 2743
Delta R.T. 0.007 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:104 Resp: 34785

Ion	Ratio	Lower	Upper
104	100		
78	51.5	41.2	61.8
103	57.5	44.8	67.2

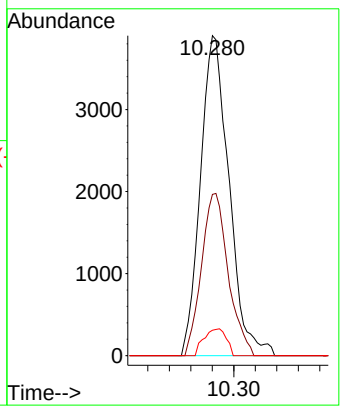




#67
Bromoform
Concen: 0.973 ug/l
RT: 10.280 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:173 Resp: 719

Ion	Ratio	Lower	Upper
173	100		
175	47.4	39.0	58.4
254	6.6	7.7	11.5#



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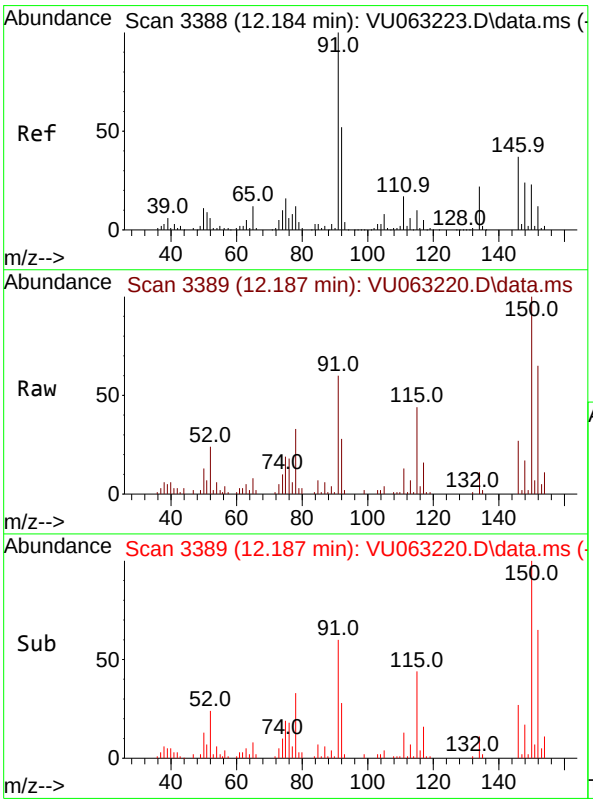
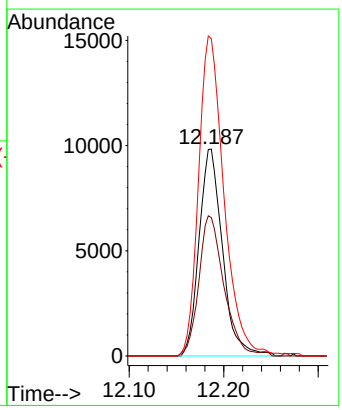
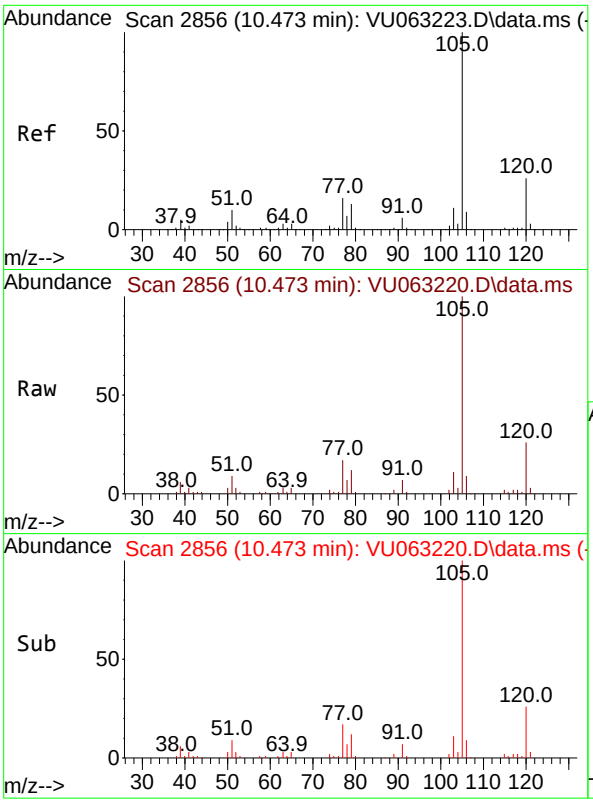


#68
1,2-Dichlorobenzene-d4
Concen: 0.956 ug/l
RT: 12.187 min Scan# 3389
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:152 Resp: 16904

Ion	Ratio	Lower	Upper
152	100		
115	72.2	0.0	275.2
150	168.3	0.0	658.4

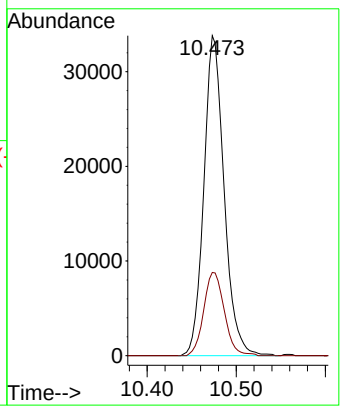




#69
Isopropylbenzene
Concen: 0.936 ug/l
RT: 10.473 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:105 Resp: 5337

Ion	Ratio	Lower	Upper
105	100		
120	26.5	12.8	38.4



Instrument :
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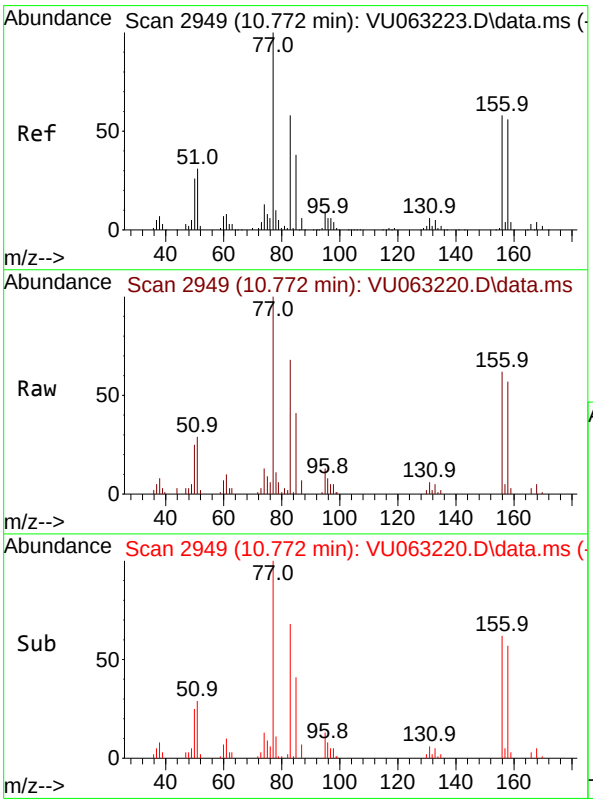
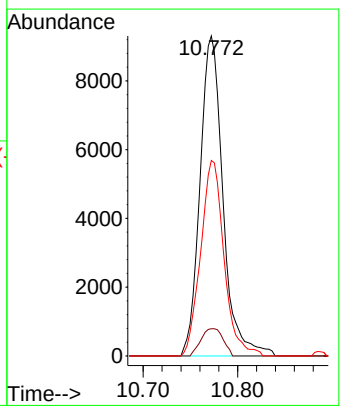
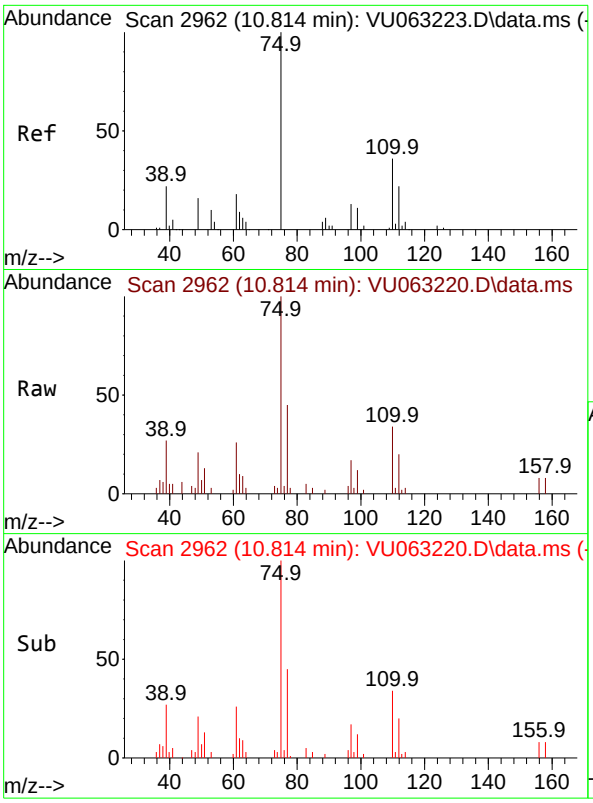


#70
1,1,2,2-Tetrachloroethane
Concen: 1.027 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 83 Resp: 15680

Ion	Ratio	Lower	Upper
83	100		
131	8.2	7.4	11.0
85	62.2	51.8	77.8

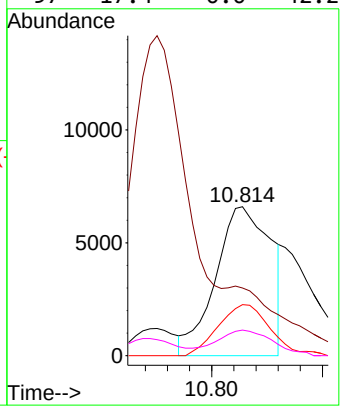




#71
1,2,3-Trichloropropane
Concen: 0.991 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 75 Resp: 1146

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	32.3	0.0	77.0
97	17.4	0.0	42.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

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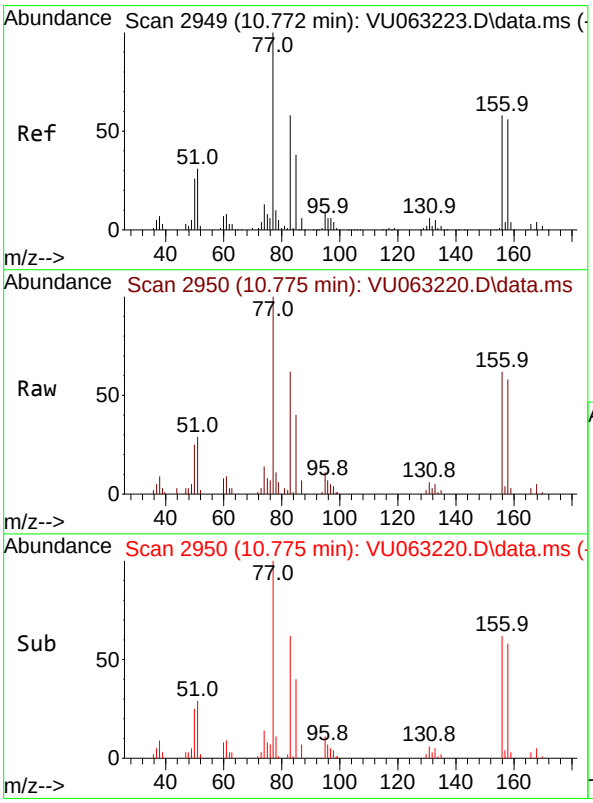
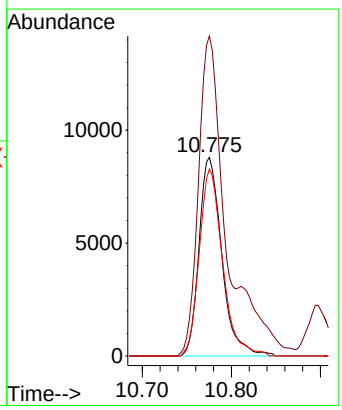
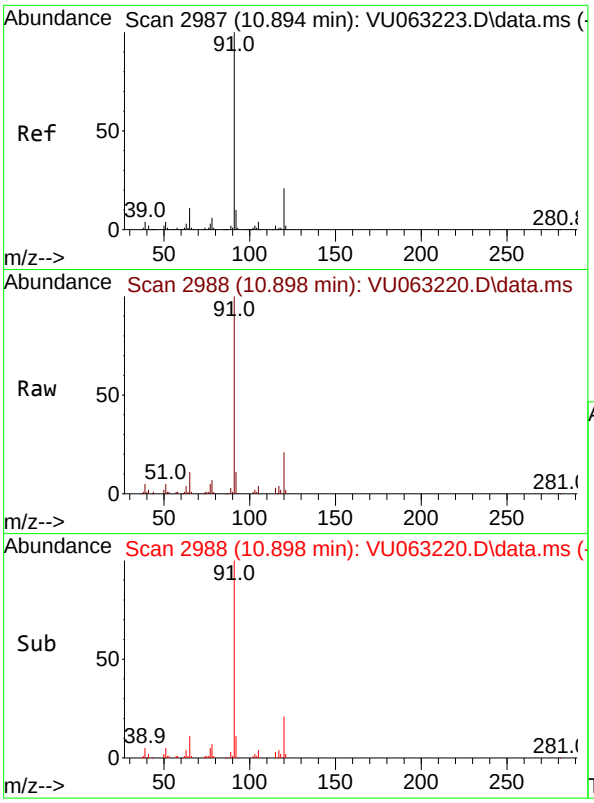


#72
Bromobenzene
Concen: 1.016 ug/l
RT: 10.775 min Scan# 2950
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:156 Resp: 15611

Ion	Ratio	Lower	Upper
156	100		
77	161.9	0.0	343.6
158	96.3	0.0	193.0

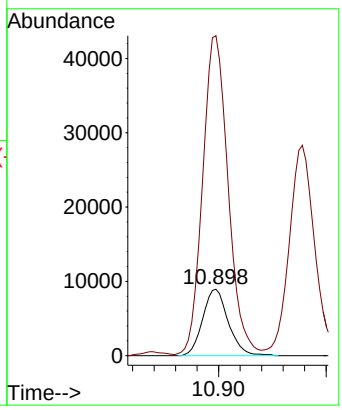




#73
n-propylbenzene
Concen: 0.904 ug/l
RT: 10.898 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:120 Resp: 1476

Ion	Ratio	Lower	Upper
120	100		
91	476.2	369.8	554.6



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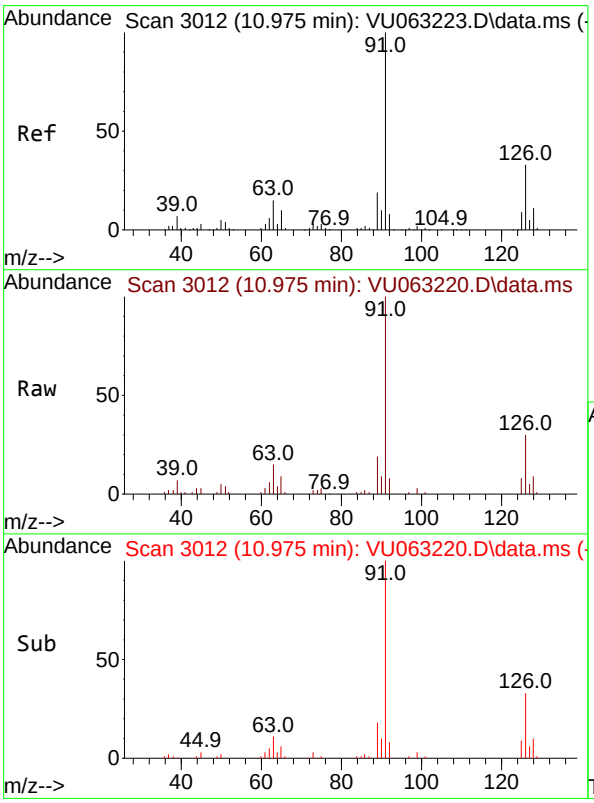
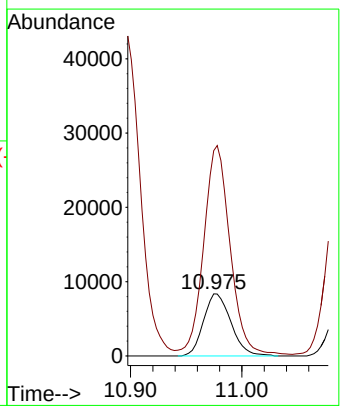
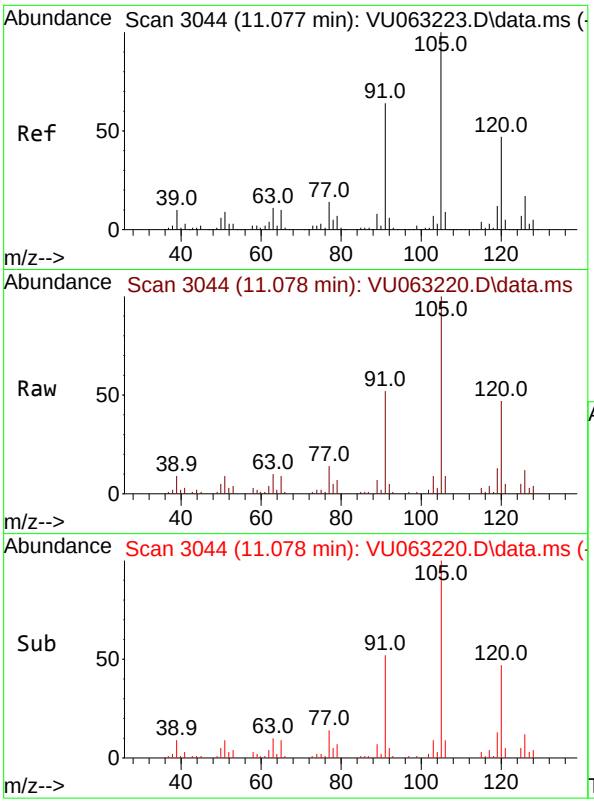


#74
2-Chlorotoluene
Concen: 0.952 ug/l
RT: 10.975 min Scan# 3012
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:126 Resp: 14317

Ion	Ratio	Lower	Upper
126	100		
91	322.6	0.0	623.8

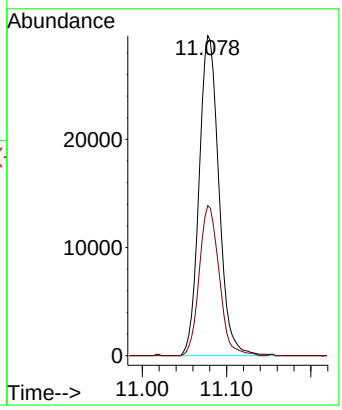




#75
1,3,5-Trimethylbenzene
Concen: 0.916 ug/l
RT: 11.078 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:105 Resp: 4840

Ion	Ratio	Lower	Upper
105	100		
120	47.2	37.3	55.9



Instrument :
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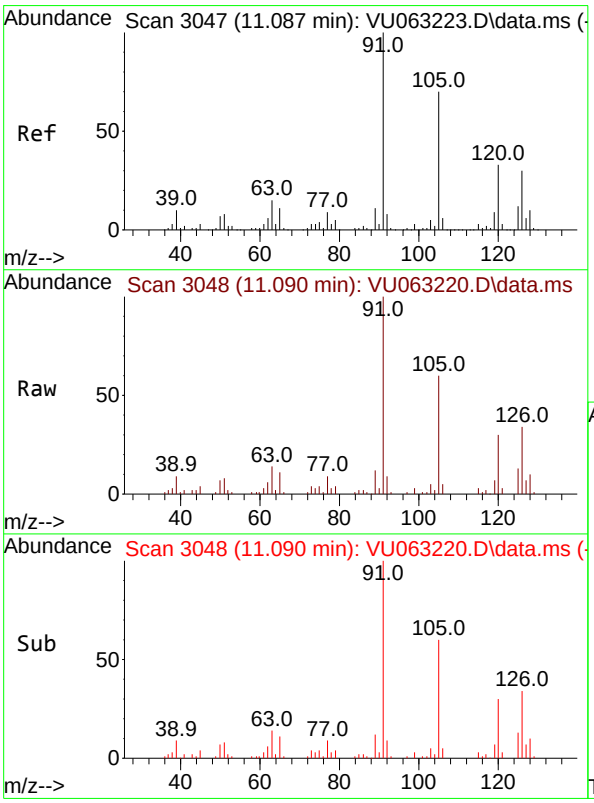
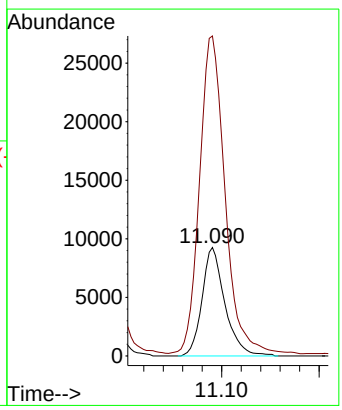
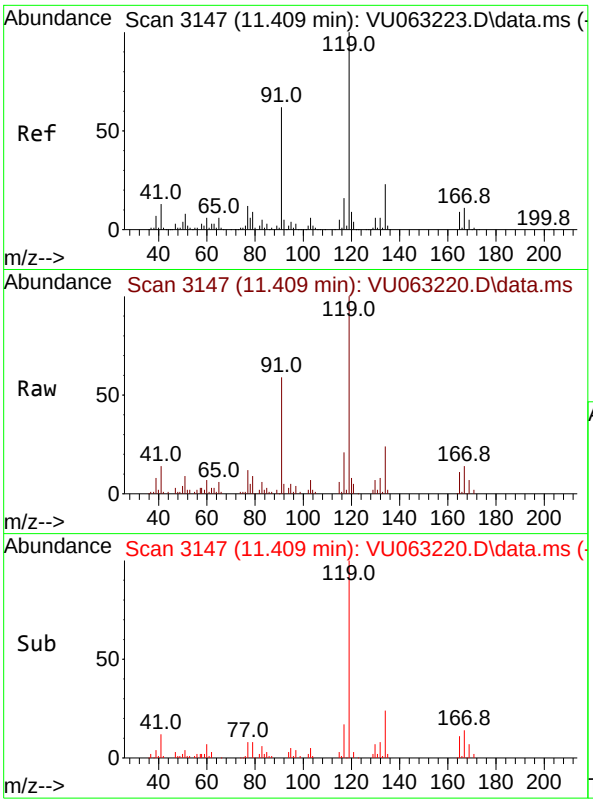


#76
4-Chlorotoluene
Concen: 0.975 ug/l
RT: 11.090 min Scan# 3048
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:126 Resp: 15039

Ion	Ratio	Lower	Upper
126	100		
91	327.4	0.0	703.6

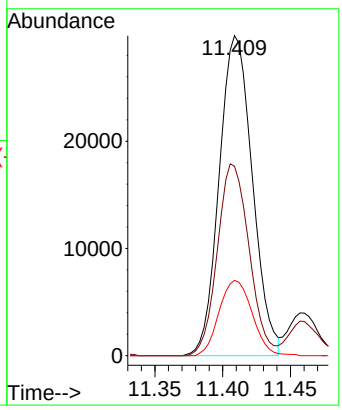




#77
tert-Butylbenzene
Concen: 0.953 ug/l
RT: 11.409 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:119 Resp: 5091

Ion	Ratio	Lower	Upper
119	100		
91	57.4	29.4	88.3
134	23.4	17.6	26.4



Instrument :
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ClientSampleId :
VSTDICC001

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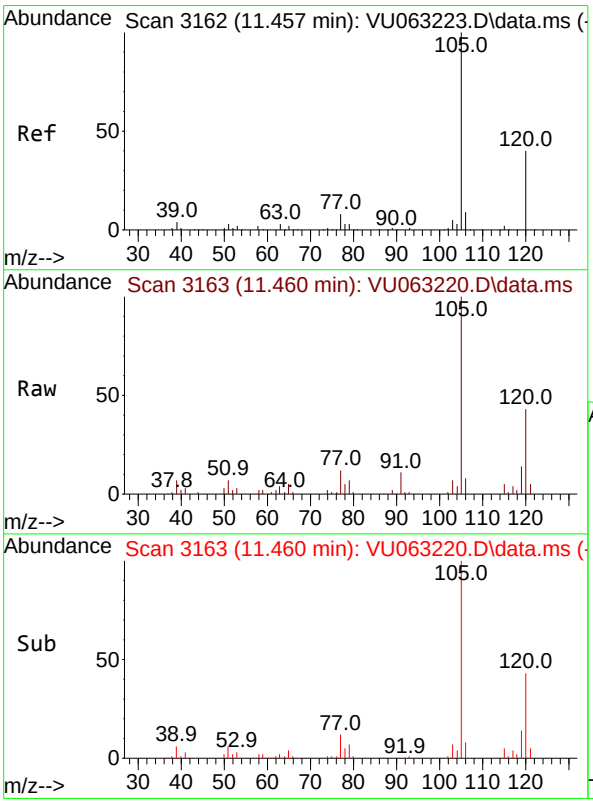
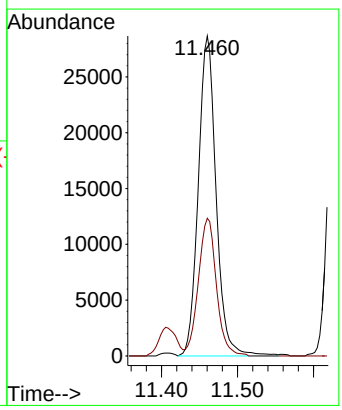
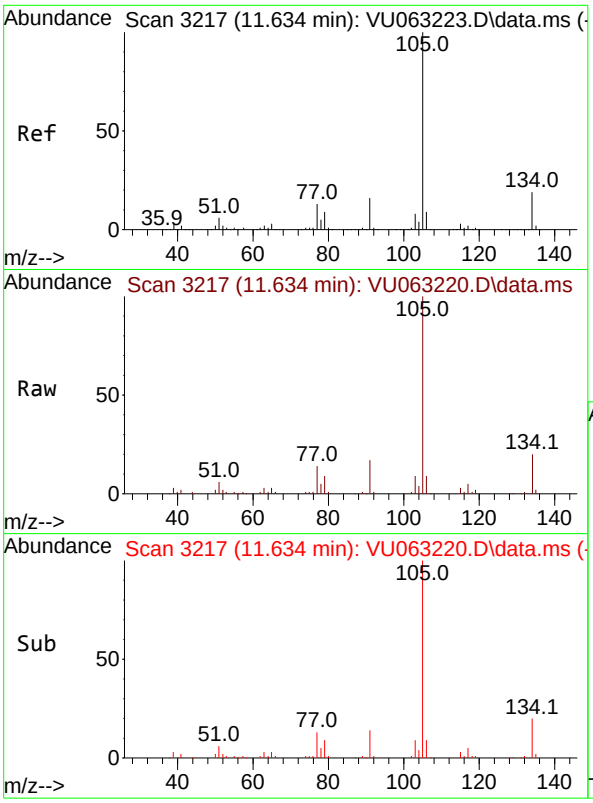


#78
1,2,4-Trimethylbenzene
Concen: 0.891 ug/l
RT: 11.460 min Scan# 3163
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:105 Resp: 46689

Ion	Ratio	Lower	Upper
105	100		
120	43.8	21.9	65.7





#79
sec-Butylbenzene
Concen: 0.930 ug/l
RT: 11.634 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

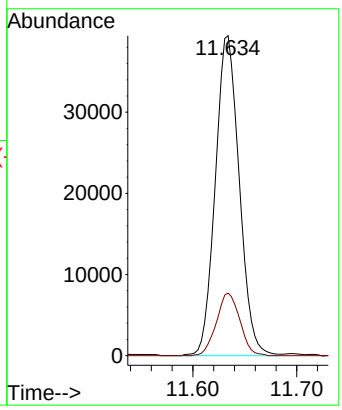
Tgt Ion:105 Resp: 6322

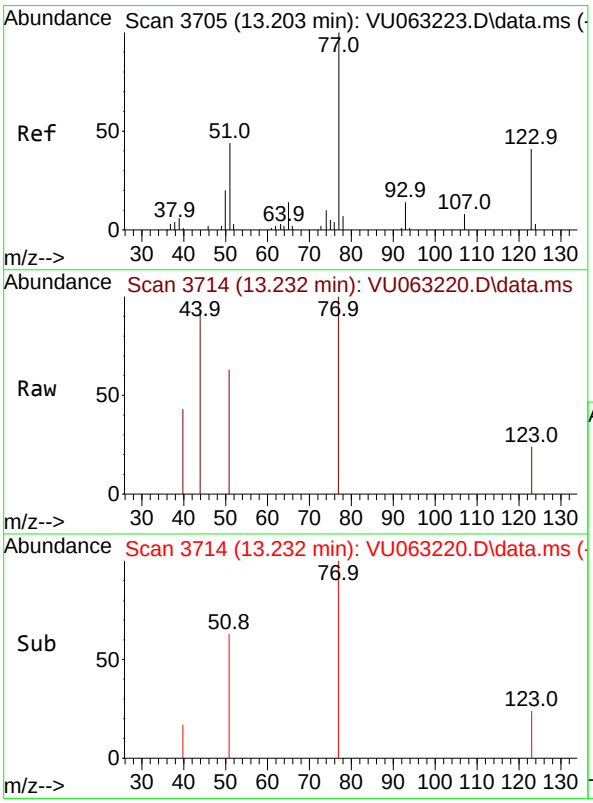
Ion	Ratio	Lower	Upper
105	100		
134	19.1	15.1	22.7

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

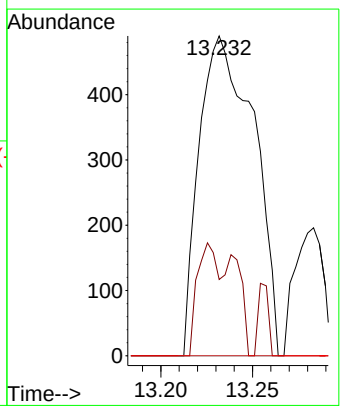


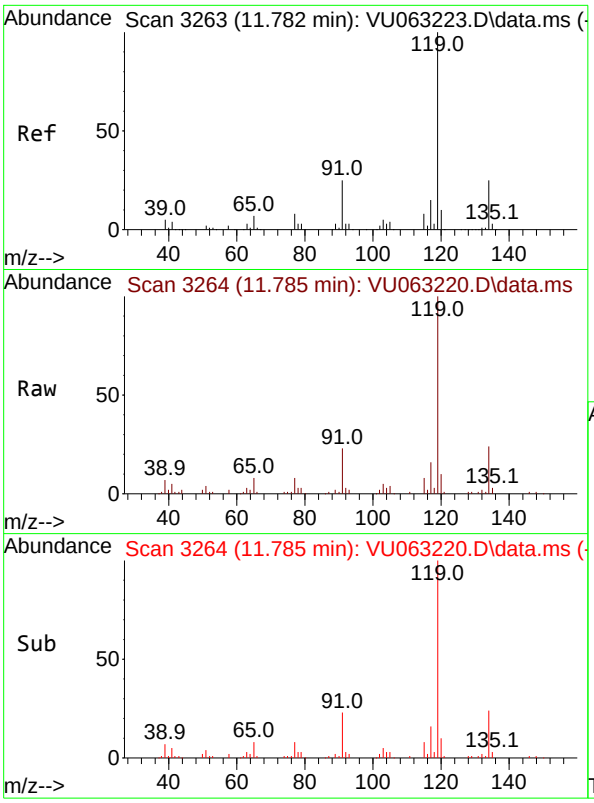


#80
Nitrobenzene
Concen: 5.911 ug/l
RT: 13.232 min Scan# 3714
Delta R.T. 0.029 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 77 Resp: 1014

Ion	Ratio	Lower	Upper
77	100		
123	13.5	18.9	67.1#
65	0.0	11.9	15.1#

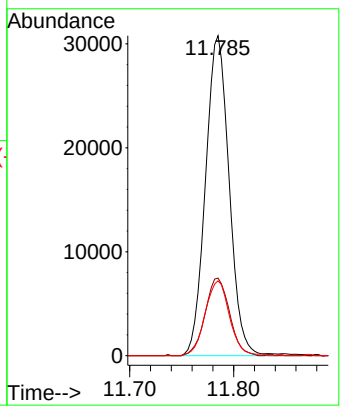




#81
p-Isopropyltoluene
Concen: 0.905 ug/l
RT: 11.785 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:119 Resp: 4857

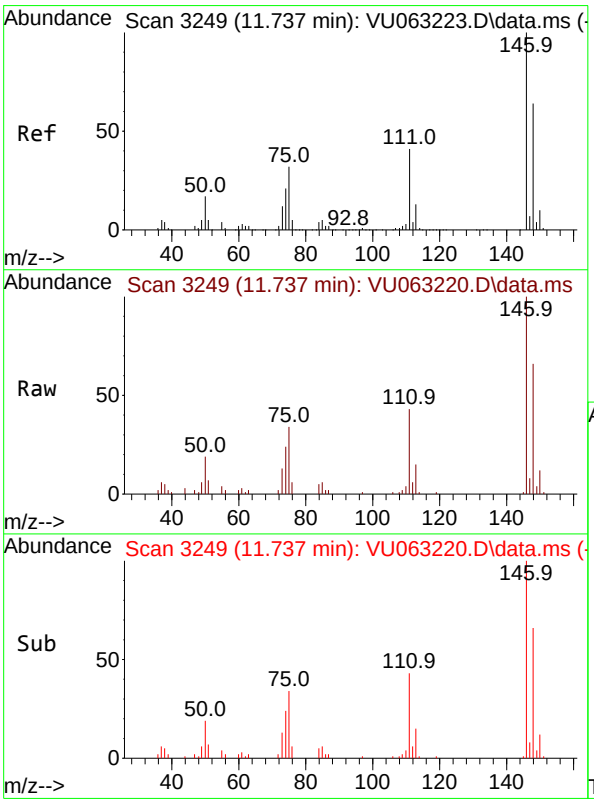
Ion	Ratio	Lower	Upper
119	100		
134	25.0	20.3	30.5
91	24.1	19.4	29.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

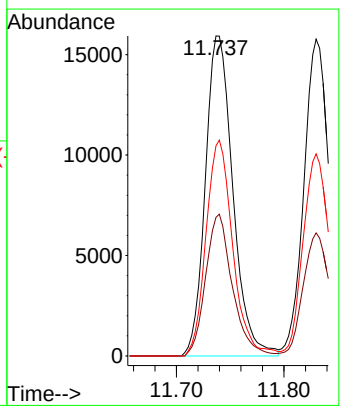
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

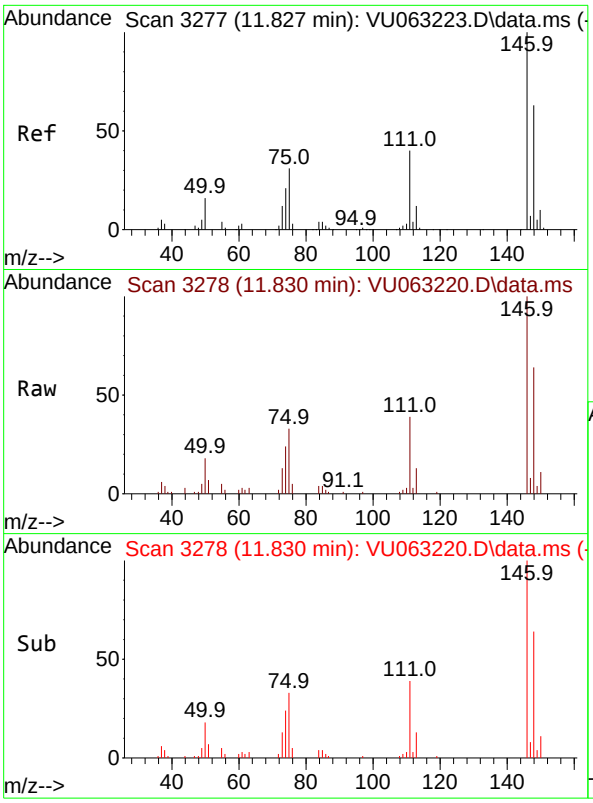


#82
1,3-Dichlorobenzene
Concen: 0.953 ug/l
RT: 11.737 min Scan# 3249
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:146 Resp: 28406

Ion	Ratio	Lower	Upper
146	100		
111	42.9	32.8	49.2
148	65.4	51.1	76.7

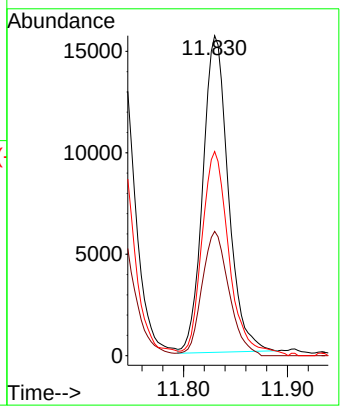




#83
1,4-Dichlorobenzene
Concen: 0.910 ug/l
RT: 11.830 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:146 Resp: 2652

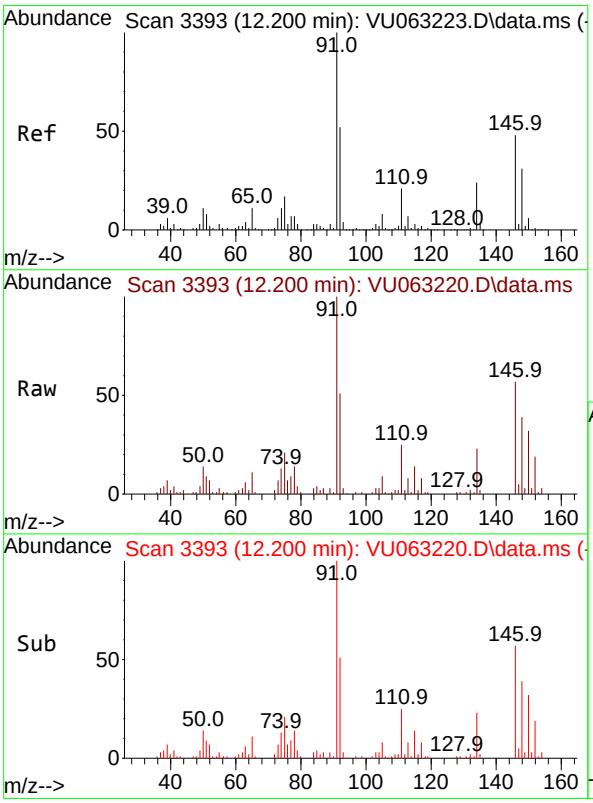
Ion	Ratio	Lower	Upper
146	100		
111	41.5	32.1	48.1
148	69.0	50.2	75.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

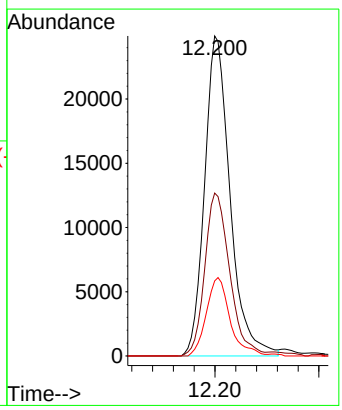
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

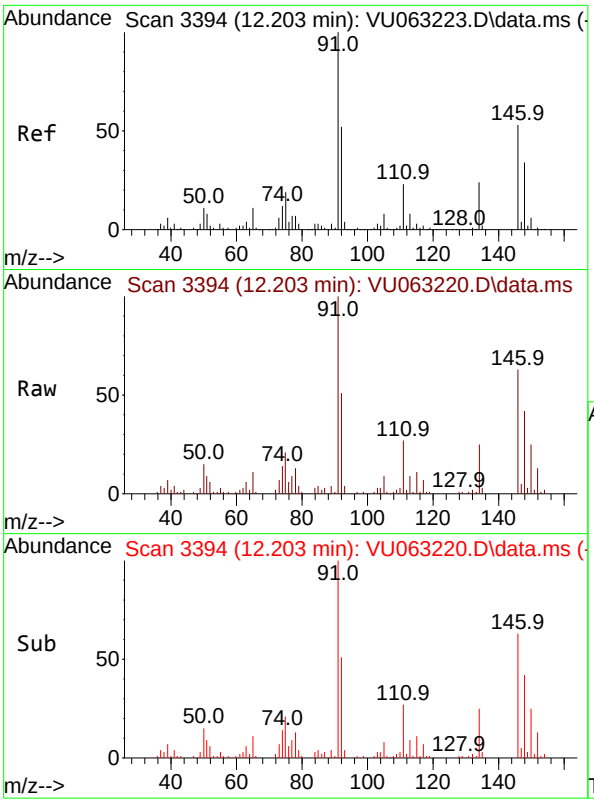


#84
n-Butylbenzene
Concen: 0.876 ug/l
RT: 12.200 min Scan# 3393
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 91 Resp: 42404

Ion	Ratio	Lower	Upper
91	100		
92	49.9	41.8	62.8
134	22.8	18.6	28.0

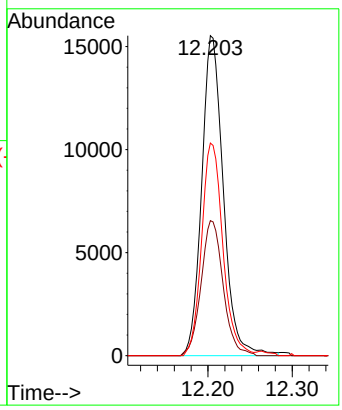




#85
1,2-Dichlorobenzene
Concen: 0.969 ug/l
RT: 12.203 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:146 Resp: 2774

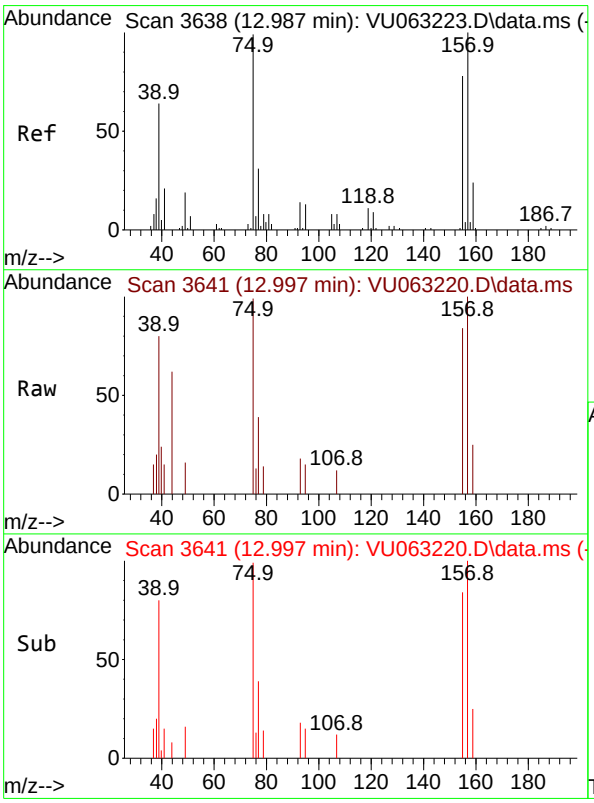
Ion	Ratio	Lower	Upper
146	100		
111	43.0	21.9	65.7
148	65.4	32.3	96.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

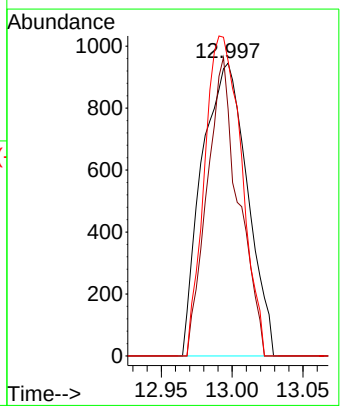
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

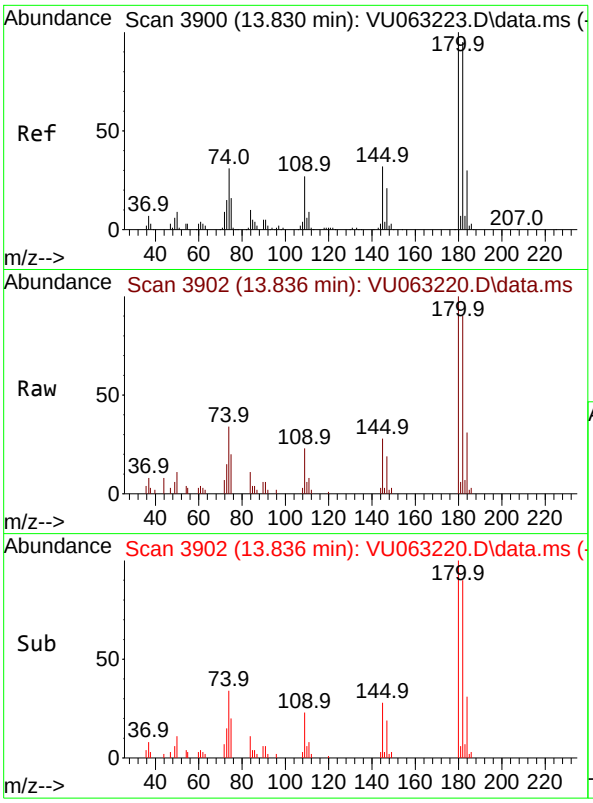


#86
1,2-Dibromo-3-Chloropropane
Concen: 0.982 ug/l
RT: 12.997 min Scan# 3641
Delta R.T. 0.010 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion: 75 Resp: 2103

Ion	Ratio	Lower	Upper
75	100		
155	71.2	63.5	95.3
157	89.2	81.8	122.6

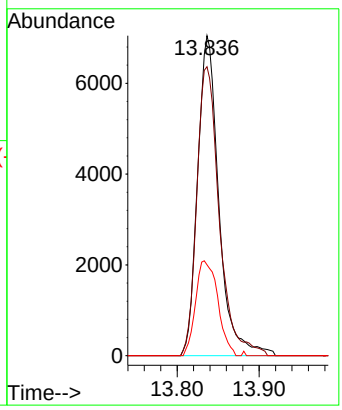




#87
1,2,4-Trichlorobenzene
Concen: 0.909 ug/l
RT: 13.836 min Scan# 3
Delta R.T. 0.007 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:180 Resp: 1269

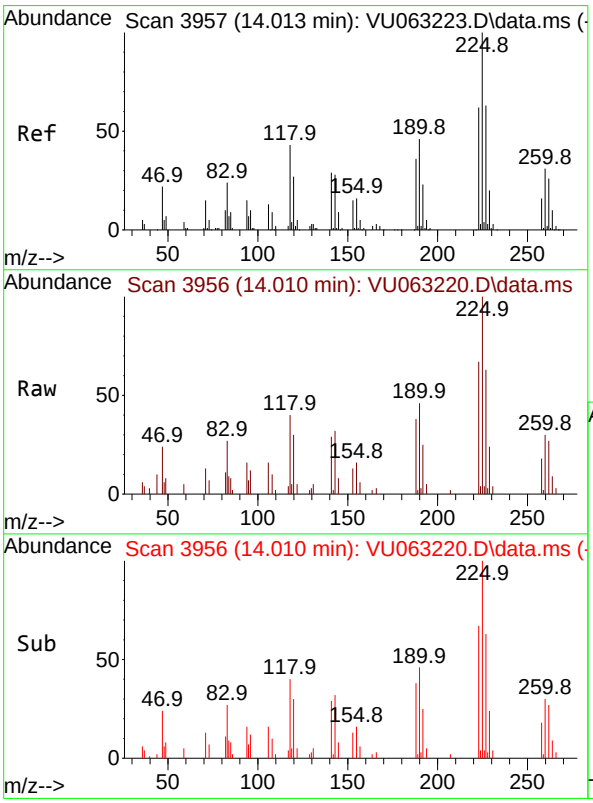
Ion	Ratio	Lower	Upper
180	100		
182	95.4	76.6	115.0
145	30.9	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

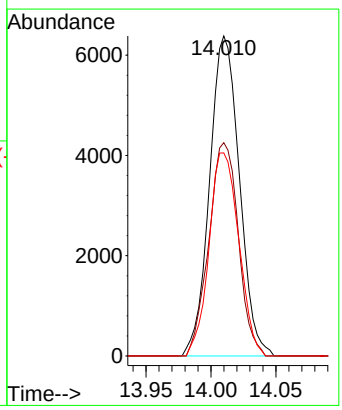
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

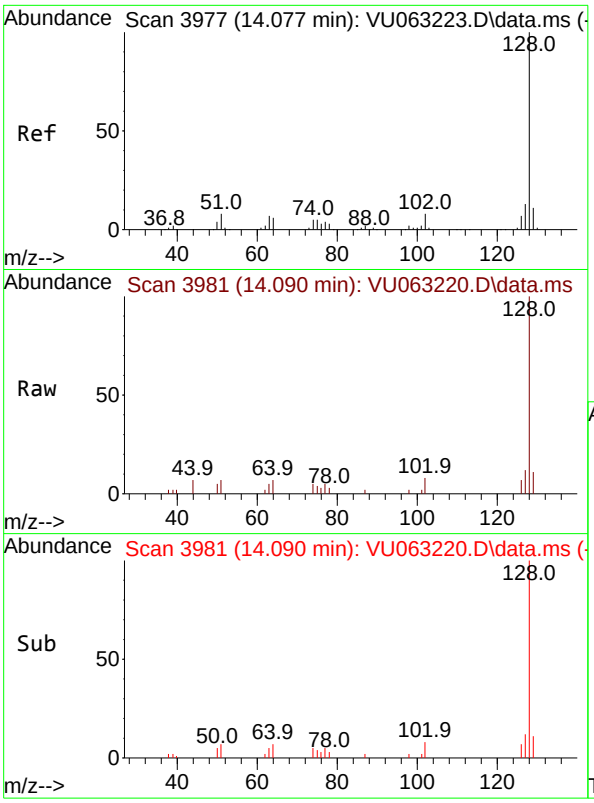


#88
Hexachlorobutadiene
Concen: 1.020 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:225 Resp: 10179

Ion	Ratio	Lower	Upper
225	100		
223	65.9	49.5	74.3
227	63.2	51.0	76.4

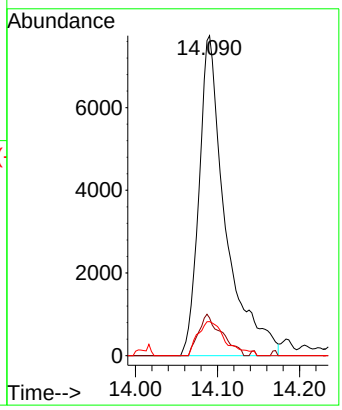




#89
Naphthalene
Concen: 1.192 ug/l
RT: 14.090 min Scan# 3
Delta R.T. 0.013 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:128 Resp: 1727

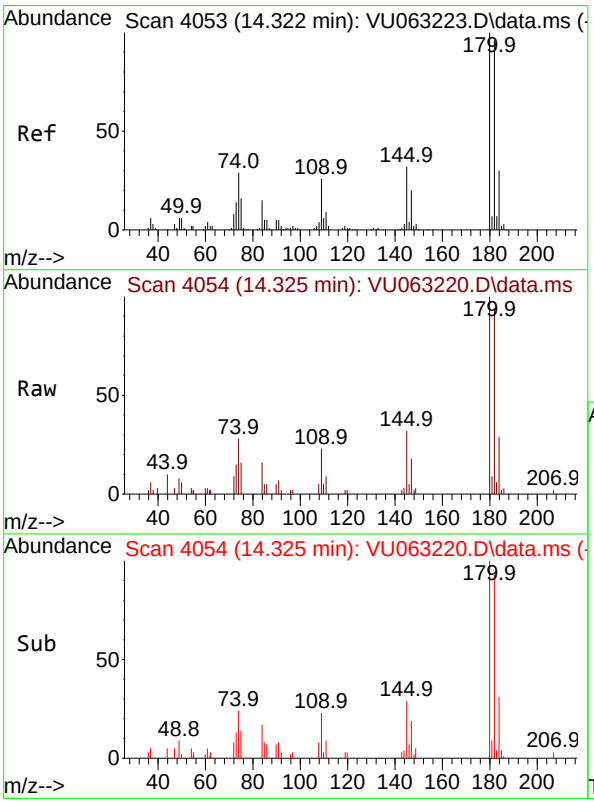
Ion	Ratio	Lower	Upper
128	100		
127	11.3	10.6	16.0
129	11.3	8.6	13.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

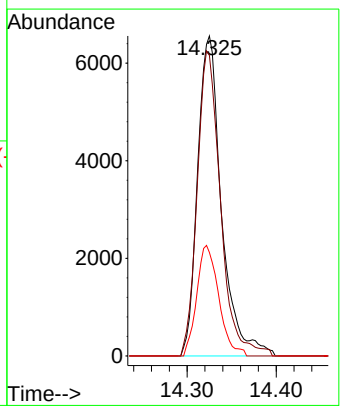
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025



#90
1,2,3-Trichlorobenzene
Concen: 0.894 ug/l
RT: 14.325 min Scan# 4054
Delta R.T. 0.003 min
Lab File: VU063220.D
Acq: 10 Feb 2025 13:23

Tgt Ion:180 Resp: 12218

Ion	Ratio	Lower	Upper
180	100		
182	93.2	78.2	117.2
145	31.9	26.1	39.1



Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063221.D
Acq On : 10 Feb 2025 13:58
Operator : MD/SY
Sample : VSTDICC002
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 03:58:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.103	96	53430	1.000 ug/l	# 0.00
System Monitoring Compounds					
57) 4-Bromofluorobenzene	10.624	95	17627	1.000 ug/l	0.00
Spiked Amount 1.000			Recovery = 100.000%		
68) 1,2-Dichlorobenzene-d4	12.184	152	18679	1.019 ug/l	0.00
Spiked Amount 1.000			Recovery = 102.000%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.377	85	35165	2.026 ug/l	97
3) Chloromethane	1.515	50	41607	2.081 ug/l	97
4) Vinyl Chloride	1.596	62	39263	1.985 ug/l	100
5) Bromomethane	1.821	94	13311	1.455 ug/l	99
6) Chloroethane	1.904	64	24932	2.001 ug/l	97
7) Trichlorofluoromethane	2.116	101	48274	2.060 ug/l	99
8) 1,1,2-Trichloro-1,2,2-...	2.563	101	27021	2.031 ug/l	98
9) 1,1-Dichloroethene	2.563	96	27058	1.996 ug/l	97
10) Iodomethane	2.705	142	41566	1.951 ug/l	100
11) Allyl Chloride	2.907	41	39456	2.026 ug/l	99
12) Acrylonitrile	3.316	53	12654	4.107 ug/l #	86
13) Acetone	2.618	43	23537	9.790 ug/l	93
14) Carbon Disulfide	2.776	76	94065	1.985 ug/l	98
15) Methylene Chloride	3.026	84	33474	1.999 ug/l	97
16) trans-1,2-Dichloroethene	3.338	96	30710	1.985 ug/l	99
17) 1,1-Dichloroethane	3.849	63	59018	2.024 ug/l	98
18) 2-Butanone	4.702	43	35904	9.245 ug/l	100
19) Cyclohexane	5.374	56	45197m	1.929 ug/l	
20) Methylcyclohexane	6.750	83	44636	1.921 ug/l	96
21) 2,2-Dichloropropane	4.647	77	44095	1.938 ug/l	99
22) cis-1,2-Dichloroethene	4.653	96	32738	1.958 ug/l	98
23) Diethyl Ether	2.364	59	22999	1.977 ug/l	98
24) tert-Butyl Alcohol	3.178	59	28594	18.780 ug/l #	86
25) Methyl tert-Butyl Ether	3.348	73	66015	1.950 ug/l	98
26) Bromochloromethane	4.959	128	14111	1.931 ug/l	96
27) Chloroform	5.075	83	58030	1.972 ug/l	97
28) 1,1,1-Trichloroethane	5.300	97	47900	2.009 ug/l	99
29) 1,1-Dichloropropene	5.512	75	43166	2.022 ug/l	99
30) Carbon Tetrachloride	5.509	117	40459	1.979 ug/l	99
31) Isopropyl Ether	3.975	45	81829	1.966 ug/l	97
32) Ethyl-t-butyl ether	4.483	59	73881	1.951 ug/l	97
33) Tert-Amyl methyl ether	5.927	73	62542	1.891 ug/l	97
34) Propionitrile	4.776	54	12222	10.151 ug/l #	92
35) Benzene	5.763	78	132758	2.022 ug/l	98
36) 1,2-Dichloroethane	5.782	62	38273	2.020 ug/l	100
37) Trichloroethene	6.531	130	31430	2.013 ug/l	98
38) 1,2-Dichloropropane	6.779	63	34066	1.983 ug/l	99
39) Methacrylonitrile	4.968	41	8407	1.955 ug/l	97
40) Methyl acrylate	4.856	55	16003m	2.038 ug/l	
41) Tetrahydrofuran	5.049	42	10378	4.106 ug/l #	88
42) 1-Chlorobutane	5.444	56	58462	2.001 ug/l	98
43) Dibromomethane	6.910	93	17367	1.996 ug/l	95
44) Bromodichloromethane	7.094	83	41213	2.035 ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063221.D
Acq On : 10 Feb 2025 13:58
Operator : MD/SY
Sample : VSTDICC002
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 03:58:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 4-Methyl-2-Pentanone	7.782	43	88945	9.751	ug/l	98
46) t-1,4-Dichloro-2-butene	10.820	75	18852m	4.176	ug/l	
47) Methyl methacrylate	6.955	69	27411	3.740	ug/l	95
48) Ethyl methacrylate	8.325	69	26103	1.897	ug/l	96
49) Toluene	7.959	92	75472	1.999	ug/l	100
50) t-1,3-Dichloropropene	8.203	75	36608	1.974	ug/l	98
51) cis-1,3-Dichloropropene	7.599	75	45949	2.006	ug/l	97
52) 1,1,2-Trichloroethane	8.390	97	23377	1.993	ug/l	98
53) 1,3-Dichloropropane	8.566	76	41970	2.015	ug/l	100
54) 2-Hexanone	8.679	43	61467	9.874	ug/l	97
55) Dibromochloromethane	8.798	129	26319	1.950	ug/l	98
56) 1,2-Dibromoethane	8.914	107	21639	1.967	ug/l	100
58) Tetrachloroethene	8.544	164	25204	1.959	ug/l	98
59) Chlorobenzene	9.438	112	79653	1.999	ug/l	99
60) 1,1,1,2-Tetrachloroethane	9.525	131	28159	1.966	ug/l	98
61) Pentachloroethane	11.415	117	26815	2.096	ug/l	95
62) Hexachloroethane	12.463	117	22824	2.017	ug/l	99
63) Ethyl Benzene	9.560	91	133142	1.938	ug/l	99
64) m/p-Xylenes	9.685	106	101491	3.954	ug/l	98
65) o-Xylene	10.090	106	50127	1.995	ug/l	97
66) Styrene	10.106	104	77021	1.926	ug/l	100
67) Bromoform	10.283	173	15177	1.981	ug/l	97
69) Isopropylbenzene	10.476	105	116075	1.965	ug/l	100
70) 1,1,2,2-Tetrachloroethane	10.772	83	32740	2.071	ug/l	99
71) 1,2,3-Trichloropropane	10.814	75	26243m	2.189	ug/l	
72) Bromobenzene	10.775	156	31558	1.983	ug/l	95
73) n-propylbenzene	10.897	120	33538	1.983	ug/l	96
74) 2-Chlorotoluene	10.978	126	31255	2.005	ug/l	97
75) 1,3,5-Trimethylbenzene	11.078	105	109465	2.000	ug/l	99
76) 4-Chlorotoluene	11.090	126	31781	1.988	ug/l	98
77) tert-Butylbenzene	11.409	119	110066	1.988	ug/l	100
78) 1,2,4-Trimethylbenzene	11.460	105	107777	1.985	ug/l	99
79) sec-Butylbenzene	11.634	105	140803	1.998	ug/l	100
80) Nitrobenzene	13.219	77	3216m	10.179	ug/l	
81) p-Isopropyltoluene	11.785	119	110370	1.984	ug/l	100
82) 1,3-Dichlorobenzene	11.737	146	62914	2.038	ug/l	99
83) 1,4-Dichlorobenzene	11.827	146	62036	2.055	ug/l	99
84) n-Butylbenzene	12.200	91	96950	1.933	ug/l	99
85) 1,2-Dichlorobenzene	12.203	146	61011	2.057	ug/l	98
86) 1,2-Dibromo-3-Chloropr...	12.994	75	4203	1.894	ug/l	98
87) 1,2,4-Trichlorobenzene	13.836	180	27020	1.867	ug/l	97
88) Hexachlorobutadiene	14.010	225	21652	2.094	ug/l	99
89) Naphthalene	14.084	128	40458	1.891	ug/l	98
90) 1,2,3-Trichlorobenzene	14.322	180	25501	1.801	ug/l	99

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

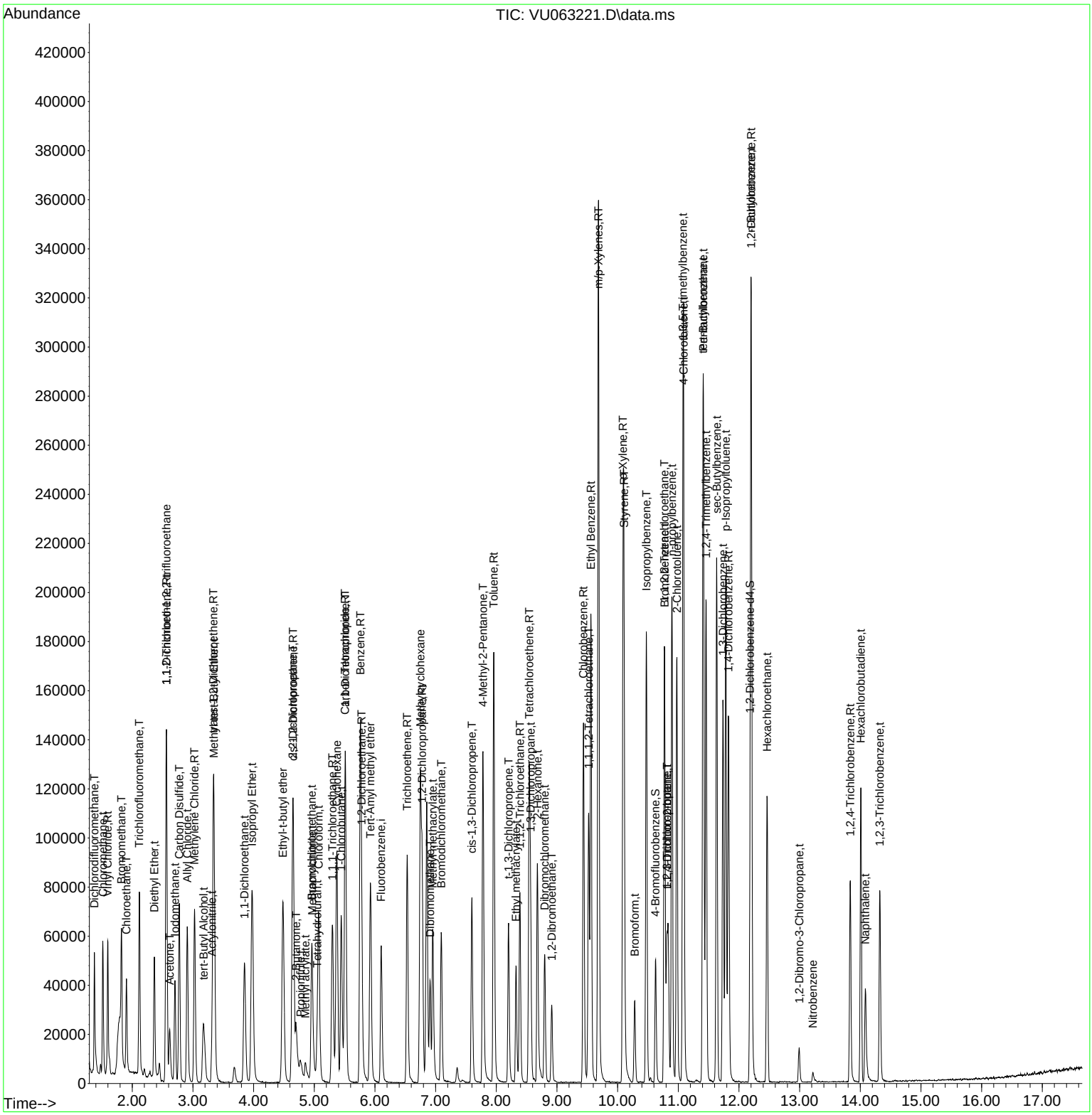
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063221.D
Acq On : 10 Feb 2025 13:58
Operator : MD/SY
Sample : VSTDICC002
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 5 Sample Multiplier: 1

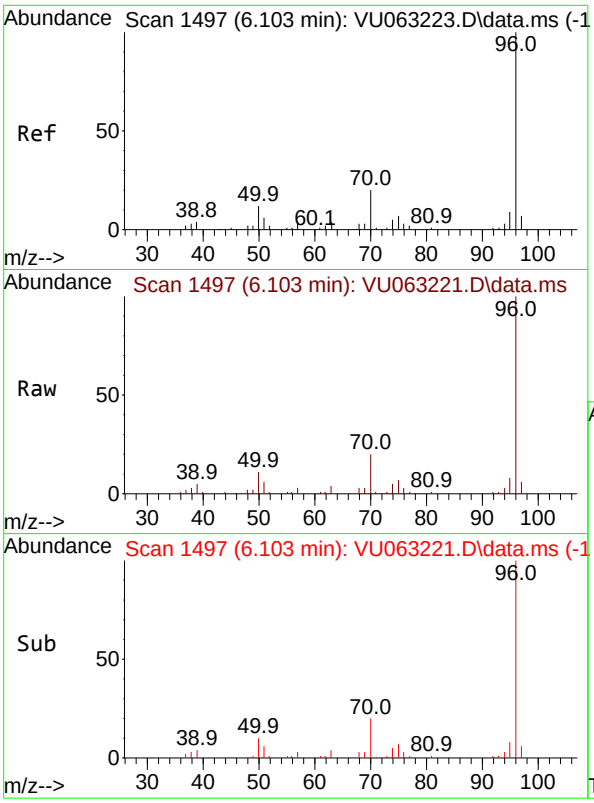
Quant Time: Feb 11 03:58:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

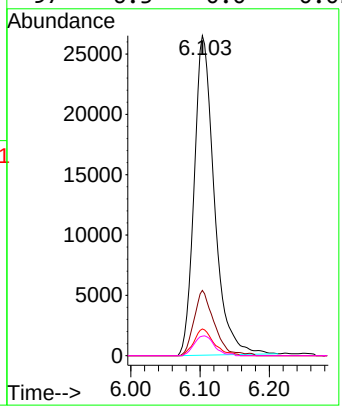




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.103 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 96 Resp: 5343

Ion	Ratio	Lower	Upper
96	100		
70	19.4	15.6	23.4
95	8.3	7.3	10.9
97	6.3	0.0	0.0#



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

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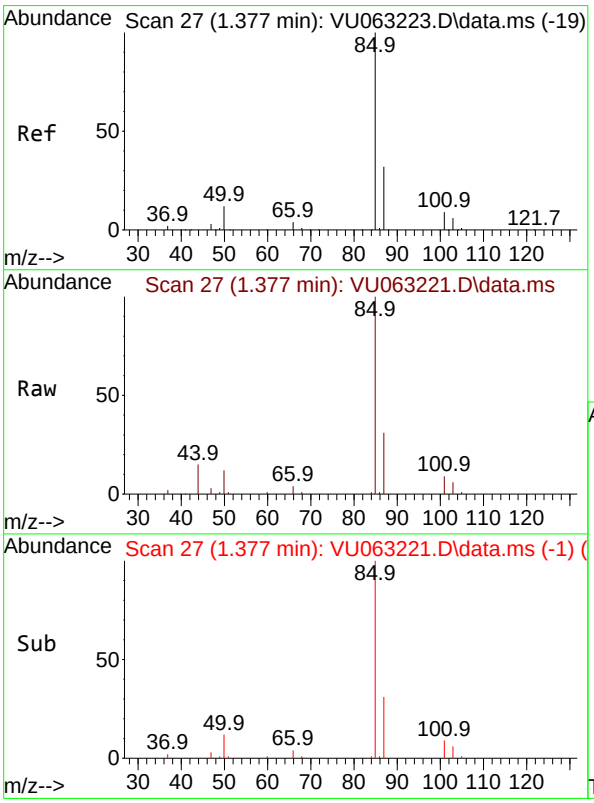
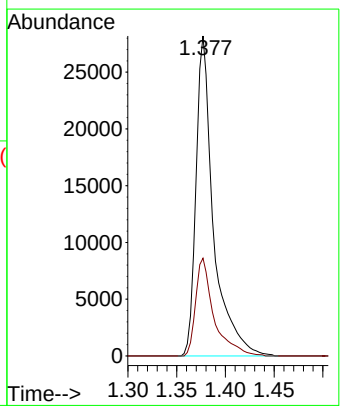
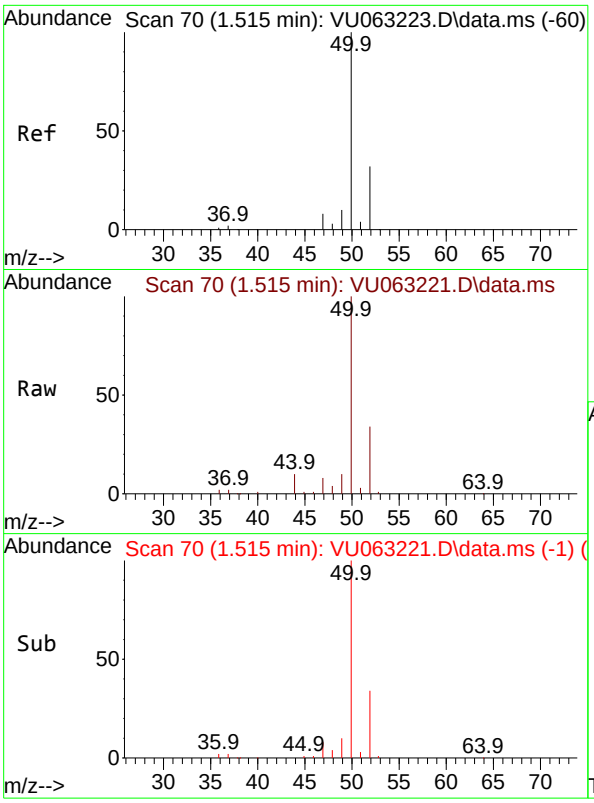


#2
Dichlorodifluoromethane
Concen: 2.026 ug/l
RT: 1.377 min Scan# 27
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 85 Resp: 35165

Ion	Ratio	Lower	Upper
85	100		
87	30.5	16.0	48.0

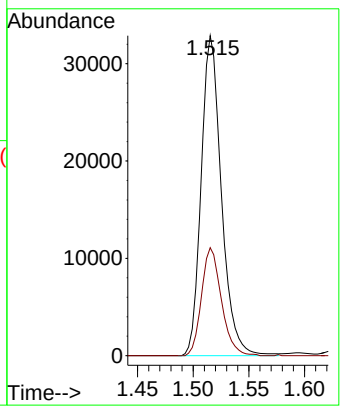




#3
Chloromethane
Concen: 2.081 ug/l
RT: 1.515 min Scan# 7
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 50 Resp: 4160

Ion	Ratio	Lower	Upper
50	100		
52	33.8	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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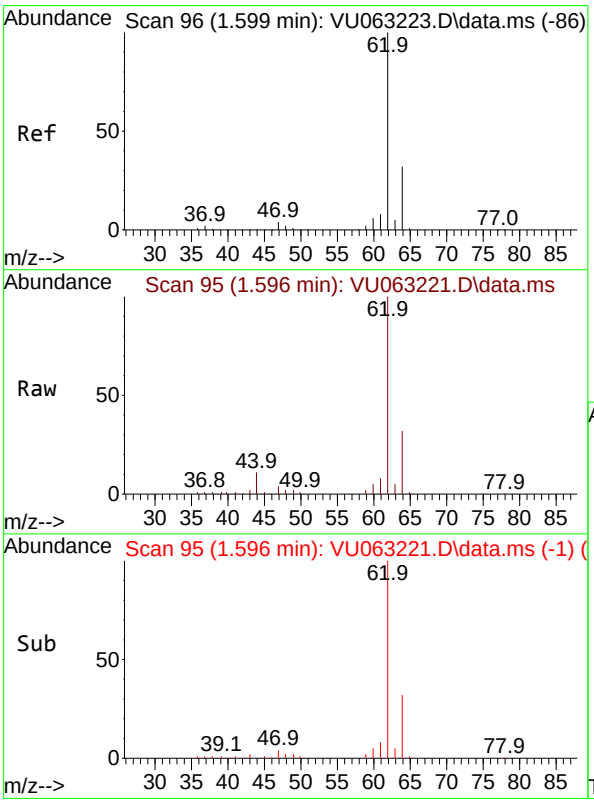
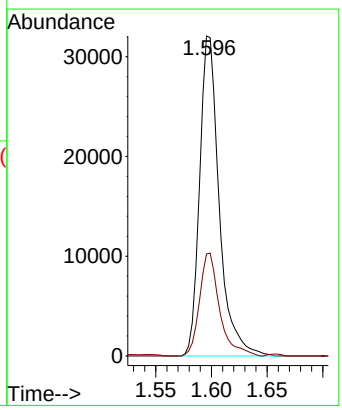
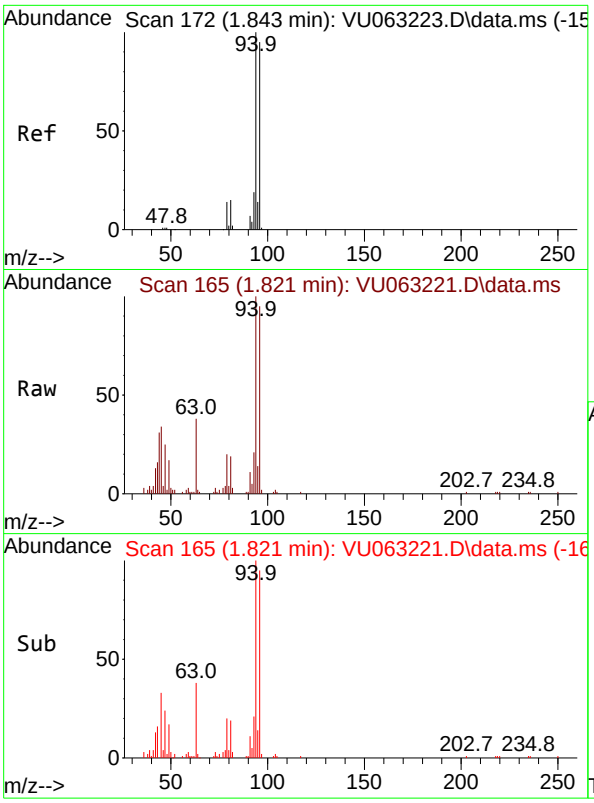


#4
Vinyl Chloride
Concen: 1.985 ug/l
RT: 1.596 min Scan# 95
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 62 Resp: 39263

Ion	Ratio	Lower	Upper
62	100		
64	31.9	25.4	38.0

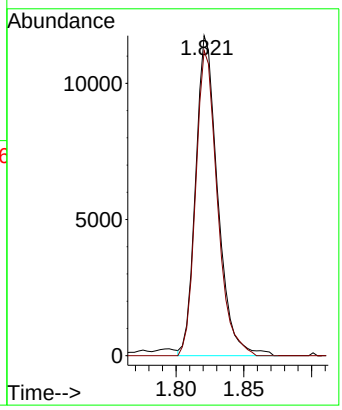




#5
Bromomethane
Concen: 1.455 ug/l
RT: 1.821 min Scan# 1
Delta R.T. -0.022 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 94 Resp: 1331

Ion	Ratio	Lower	Upper
94	100		
96	95.3	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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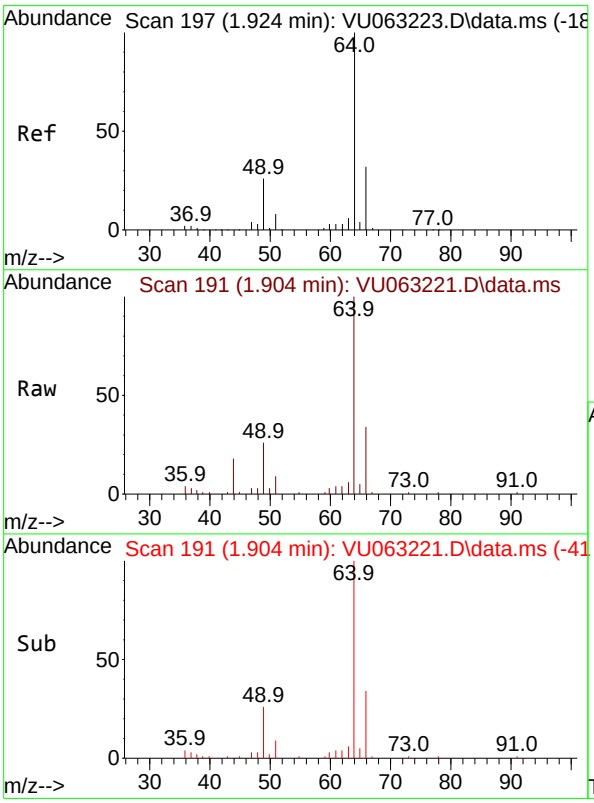
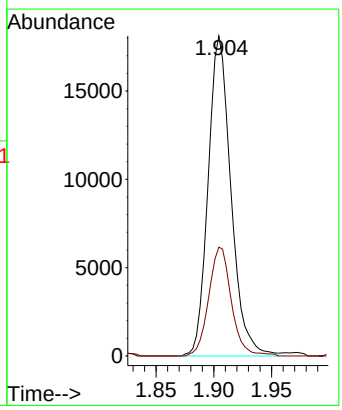
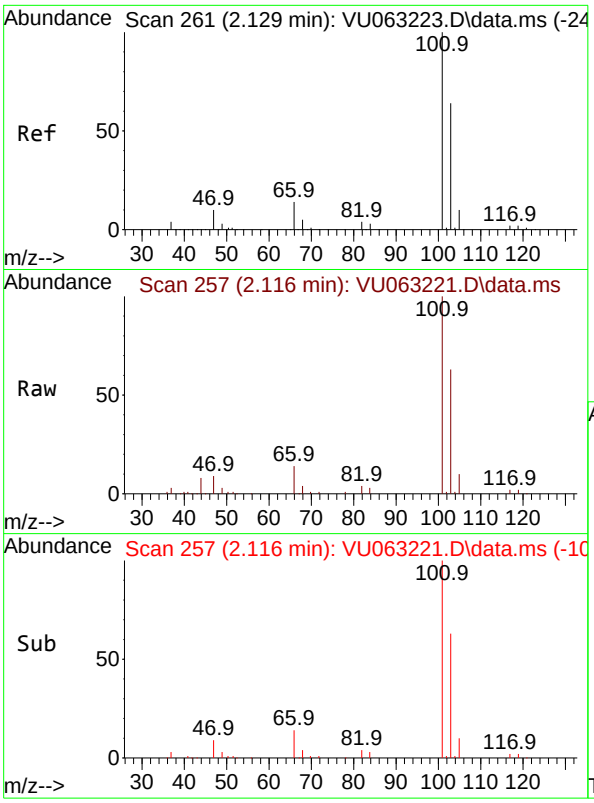


#6
Chloroethane
Concen: 2.001 ug/l
RT: 1.904 min Scan# 191
Delta R.T. -0.019 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 64 Resp: 24932

Ion	Ratio	Lower	Upper
64	100		
66	34.0	25.8	38.8





#7
Trichlorofluoromethane
Concen: 2.060 ug/l
RT: 2.116 min Scan# 2
Delta R.T. -0.013 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:101 Resp: 4827

Ion	Ratio	Lower	Upper
101	100		
103	63.3	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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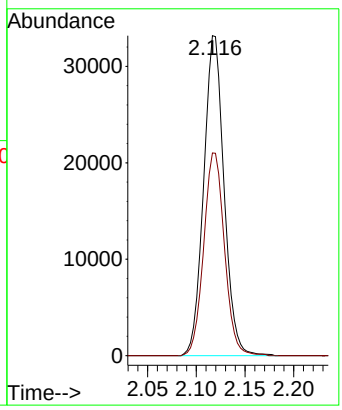
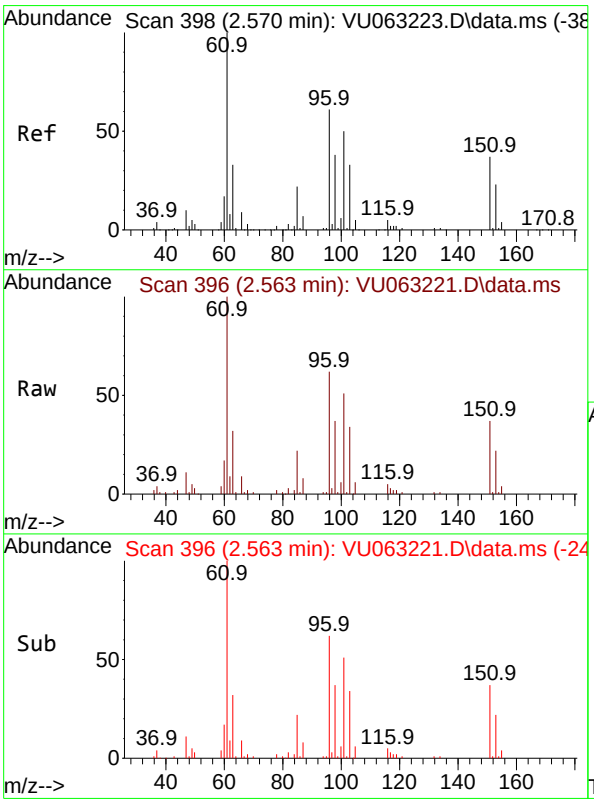
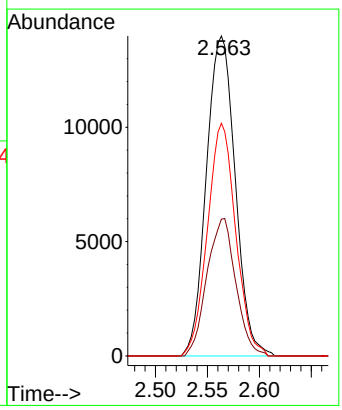


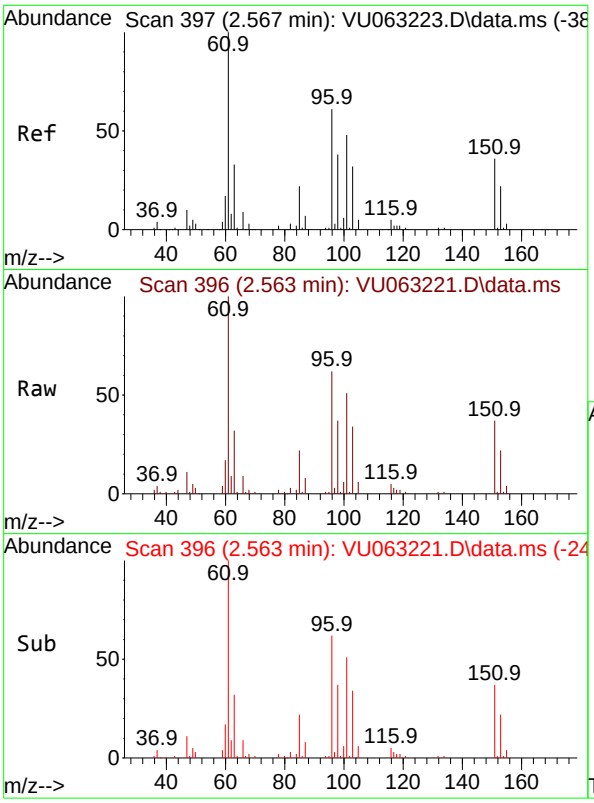


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 2.031 ug/l
RT: 2.563 min Scan# 396
Delta R.T. -0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:101 Resp: 27021

Ion	Ratio	Lower	Upper
101	100		
85	42.9	35.4	53.0
151	71.2	58.5	87.7

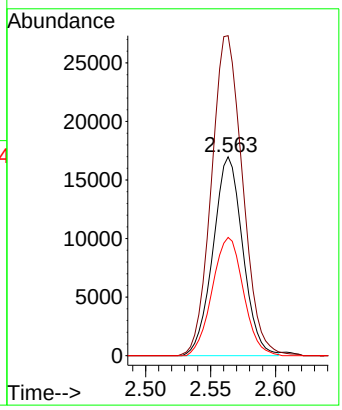




#9
1,1-Dichloroethene
Concen: 1.996 ug/l
RT: 2.563 min Scan# 3
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 96 Resp: 2705

Ion	Ratio	Lower	Upper
96	100		
61	160.9	0.0	492.9
98	59.4	0.0	124.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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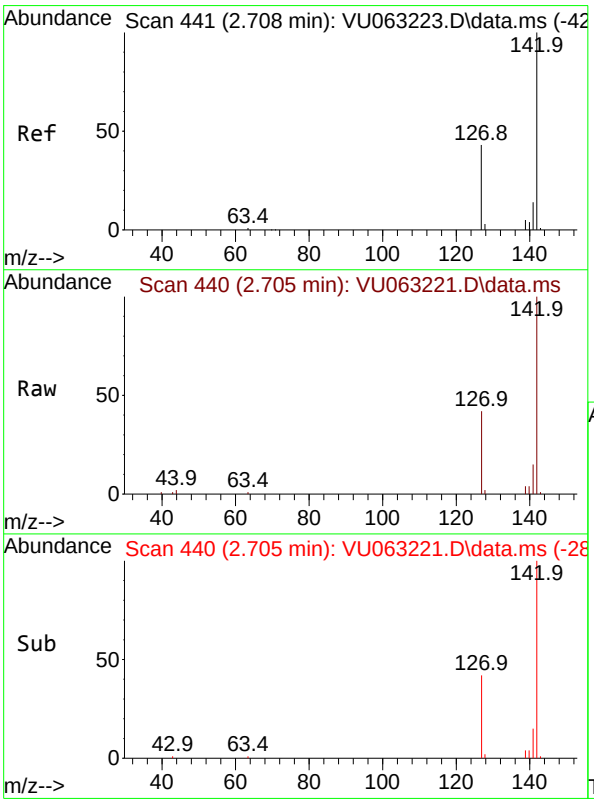
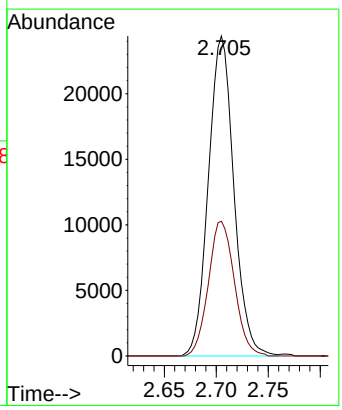
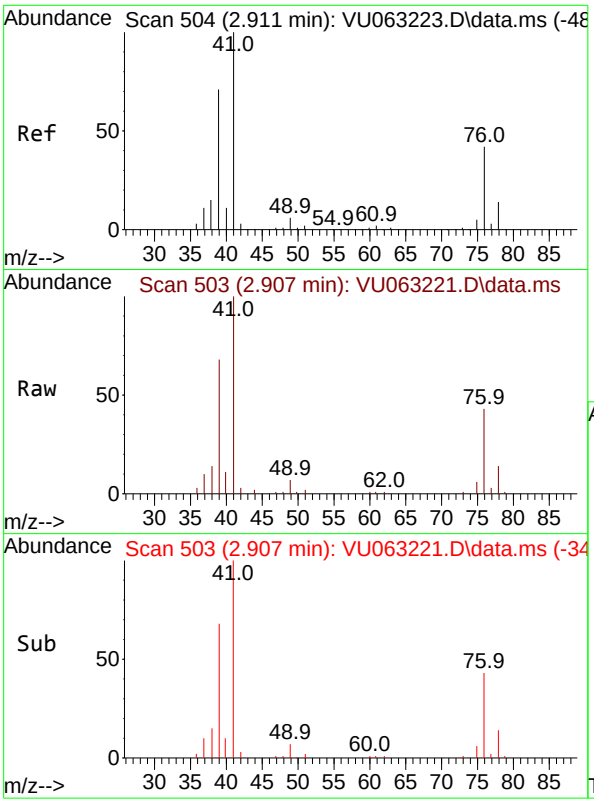


#10
Iodomethane
Concen: 1.951 ug/l
RT: 2.705 min Scan# 440
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:142 Resp: 41566

Ion	Ratio	Lower	Upper
142	100		
127	43.1	34.5	51.7





#11
Allyl Chloride
Concen: 2.026 ug/l
RT: 2.907 min Scan# 5
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 41 Resp: 3945

Ion	Ratio	Lower	Upper
41	100		
39	71.6	57.9	86.9

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations
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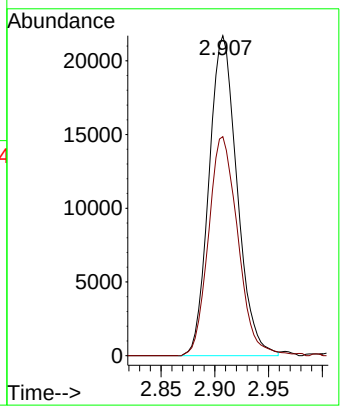
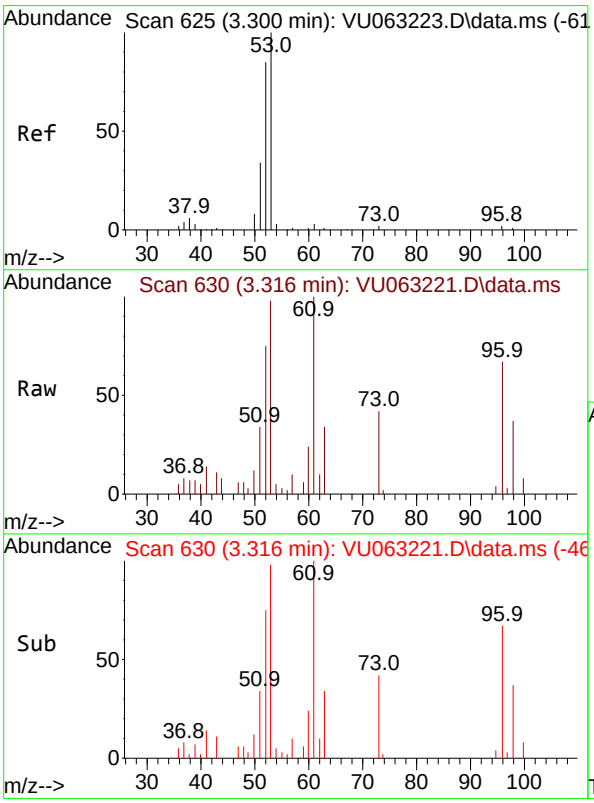
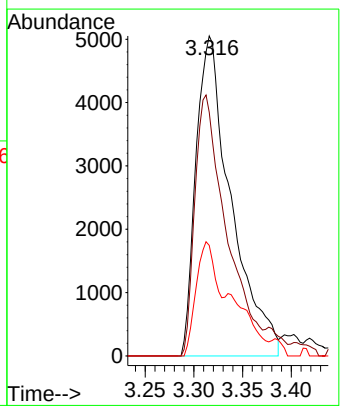


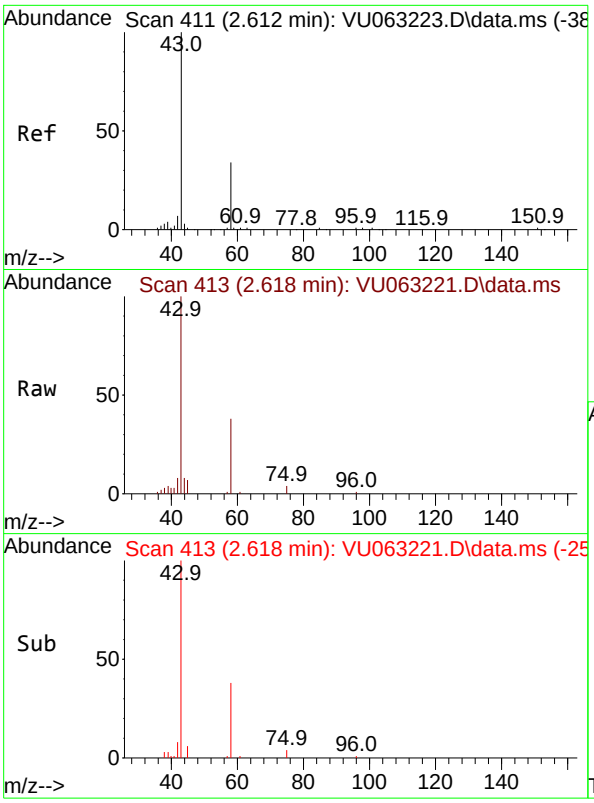


#12
Acrylonitrile
Concen: 4.107 ug/l
RT: 3.316 min Scan# 630
Delta R.T. 0.016 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 53 Resp: 12654

Ion	Ratio	Lower	Upper
53	100		
52	73.3	64.2	96.2
51	22.6	30.8	46.2#

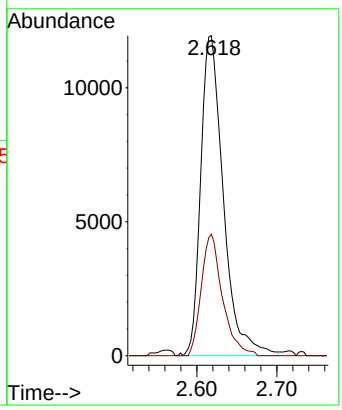




#13
Acetone
Concen: 9.790 ug/l
RT: 2.618 min Scan# 4
Delta R.T. 0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 43 Resp: 2353

Ion	Ratio	Lower	Upper
43	100		
58	38.0	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations
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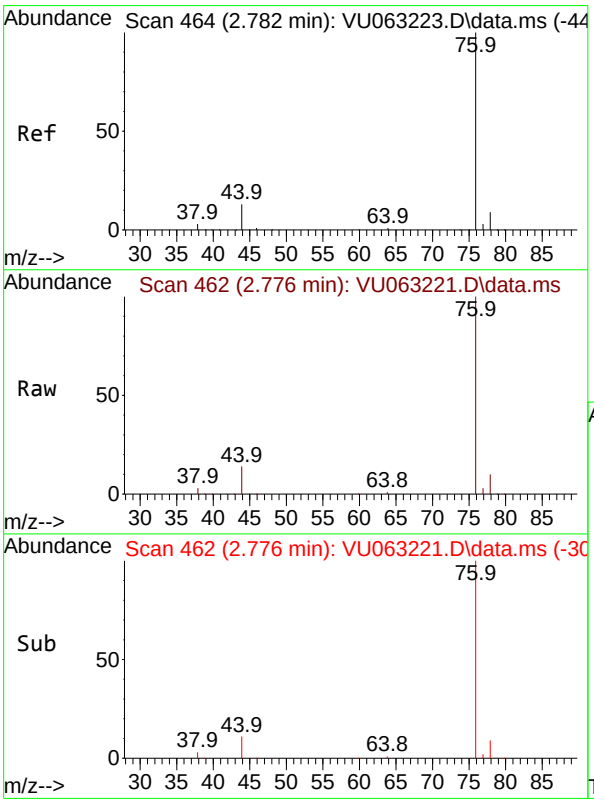
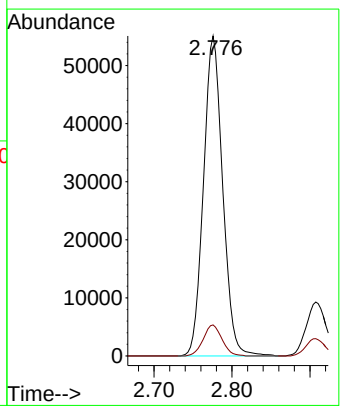
Supervised By :Mahesh Dadoda 02/12/2025

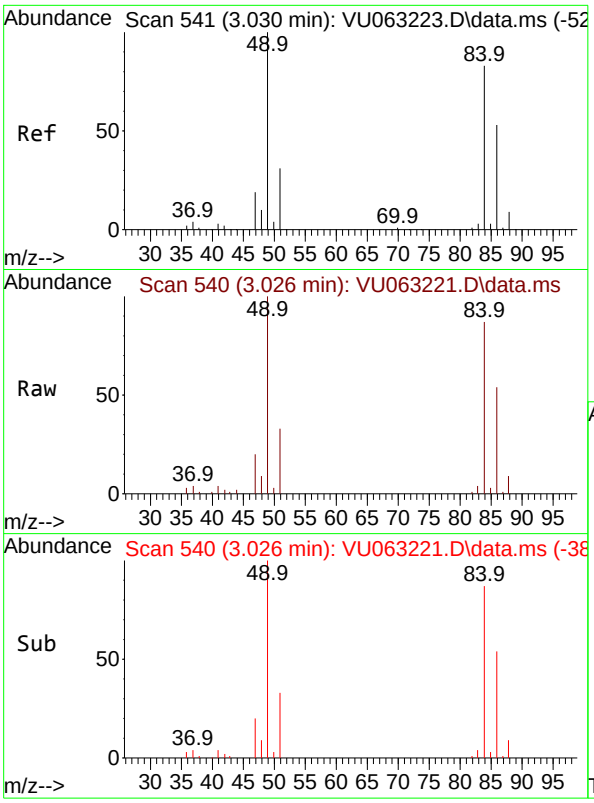


#14
Carbon Disulfide
Concen: 1.985 ug/l
RT: 2.776 min Scan# 462
Delta R.T. -0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 76 Resp: 94065

Ion	Ratio	Lower	Upper
76	100		
78	9.7	7.2	10.8

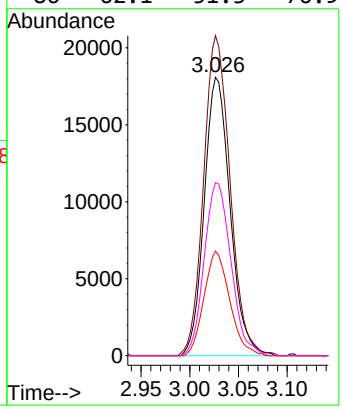




#15
Methylene Chloride
Concen: 1.999 ug/l
RT: 3.026 min Scan# 54
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 84 Resp: 3347

Ion	Ratio	Lower	Upper
84	100		
49	114.9	96.4	144.6
51	37.6	0.0	74.8
86	62.1	51.3	76.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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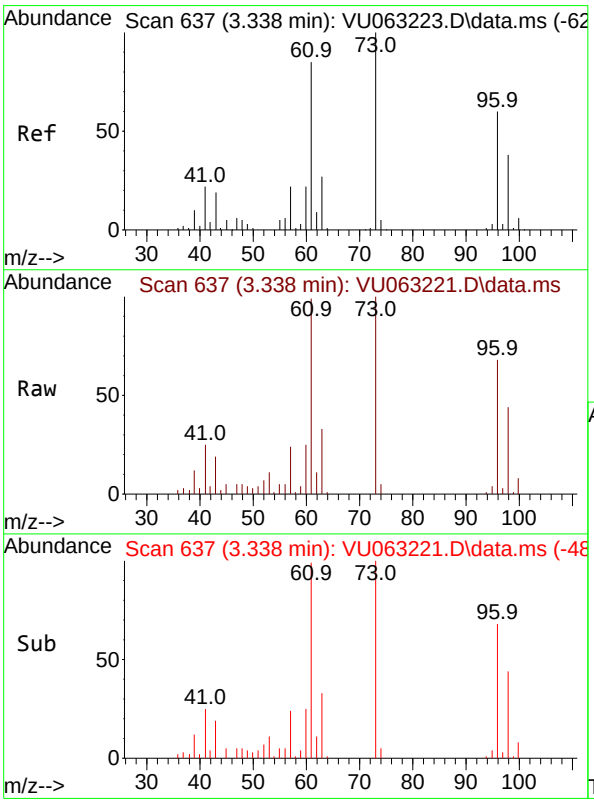
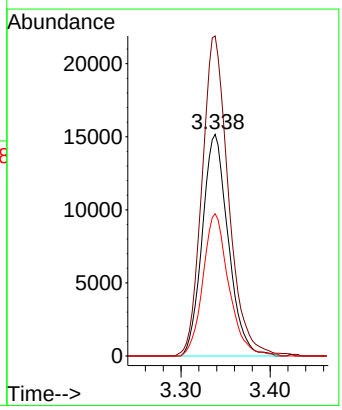
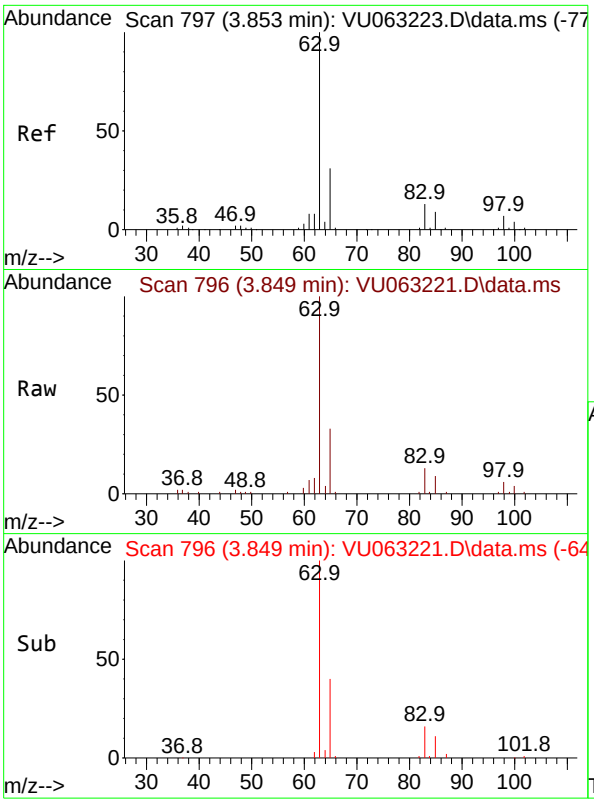


#16
trans-1,2-Dichloroethene
Concen: 1.985 ug/l
RT: 3.338 min Scan# 637
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 96 Resp: 30710

Ion	Ratio	Lower	Upper
96	100		
61	143.5	113.4	170.2
98	64.2	51.2	76.8

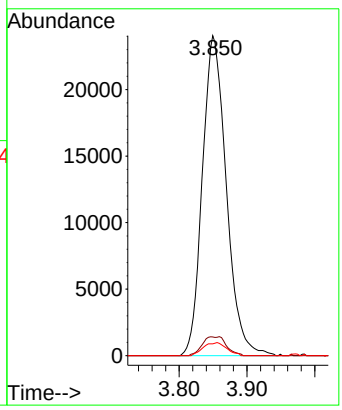




#17
1,1-Dichloroethane
Concen: 2.024 ug/l
RT: 3.849 min Scan# 7
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 63 Resp: 5901

Ion	Ratio	Lower	Upper
63	100		
98	5.8	3.3	9.9
100	3.7	2.1	6.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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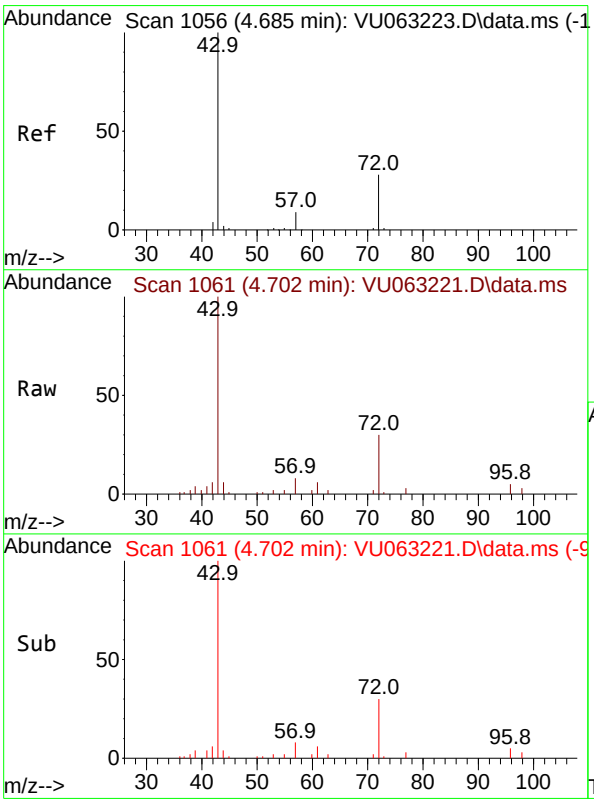
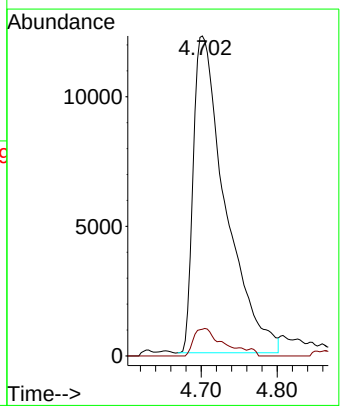
Supervised By :Mahesh Dadoda 02/12/2025

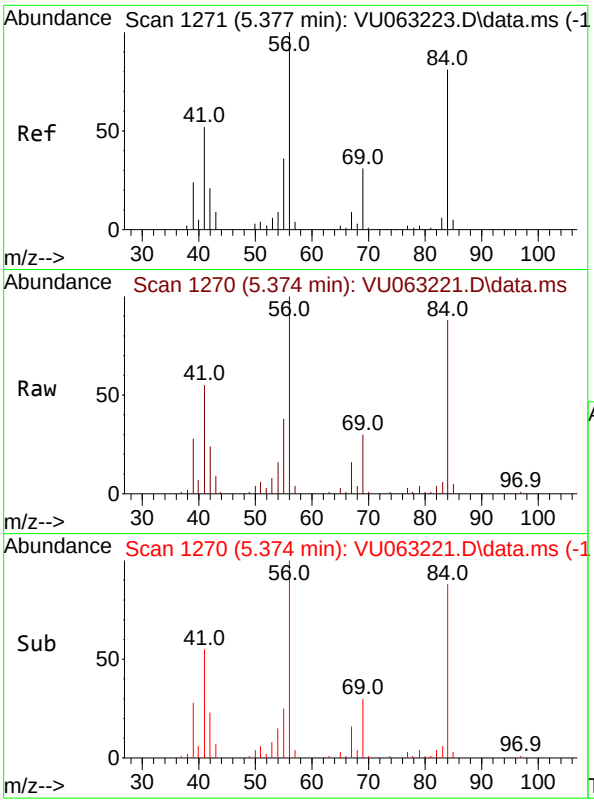


#18
2-Butanone
Concen: 9.245 ug/l
RT: 4.702 min Scan# 1061
Delta R.T. 0.016 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 43 Resp: 35904

Ion	Ratio	Lower	Upper
43	100		
57	8.5	0.0	17.0

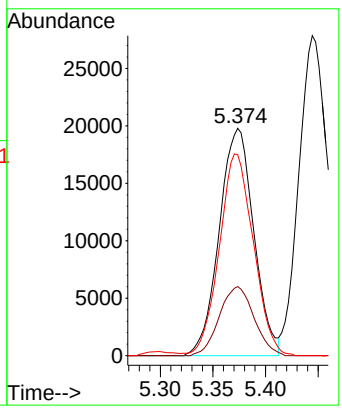




#19
Cyclohexane
Concen: 1.929 ug/l m
RT: 5.374 min Scan# 1
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 56 Resp: 4519

Ion	Ratio	Lower	Upper
56	100		
69	30.4	24.5	36.7
84	86.2	65.2	97.8



Instrument :
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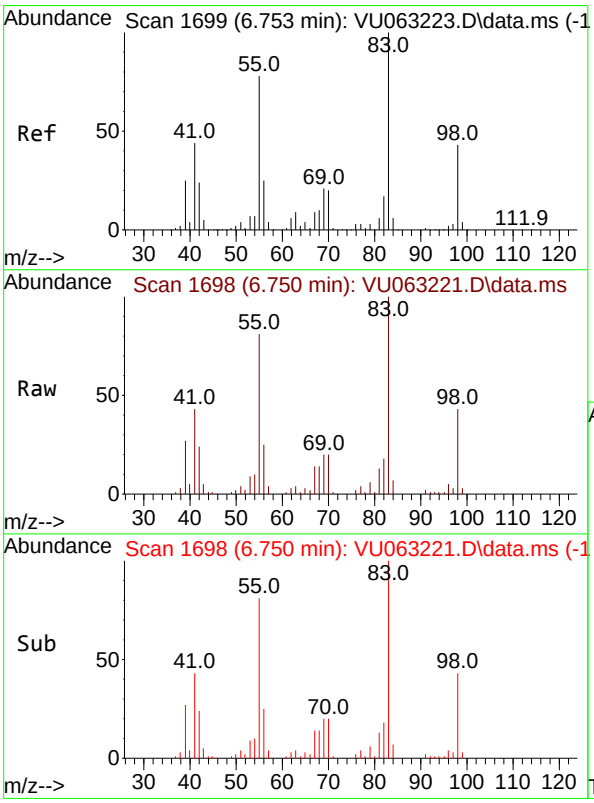
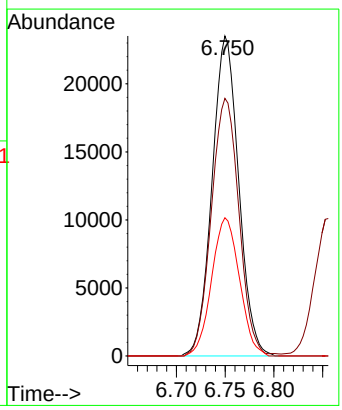
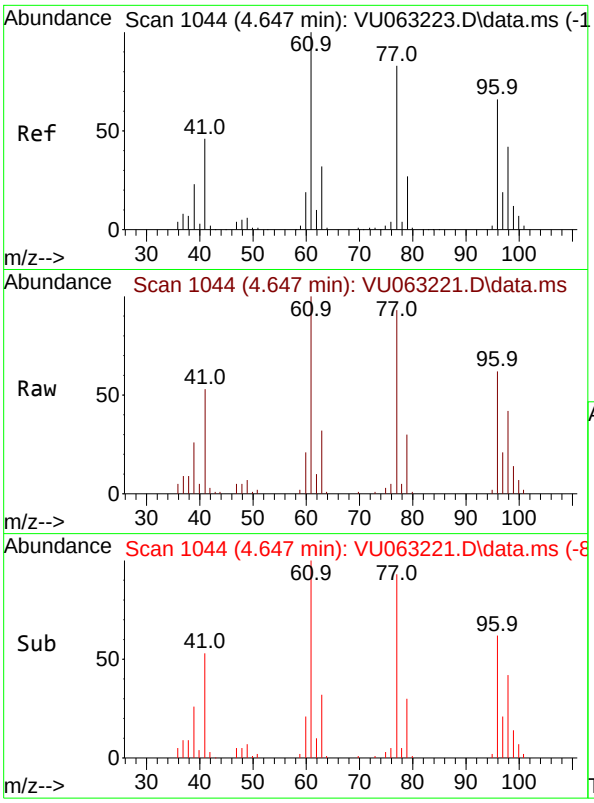


#20
Methylcyclohexane
Concen: 1.921 ug/l
RT: 6.750 min Scan# 1698
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 83 Resp: 44636

Ion	Ratio	Lower	Upper
83	100		
55	82.9	63.1	94.7
98	45.2	35.2	52.8

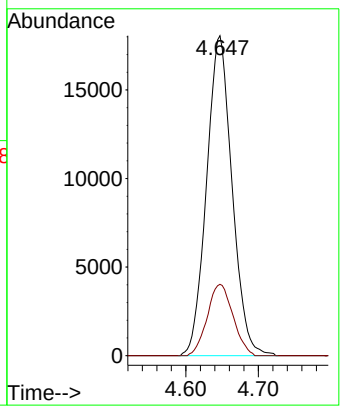




#21
2,2-Dichloropropane
Concen: 1.938 ug/l
RT: 4.647 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 77 Resp: 4409

Ion	Ratio	Lower	Upper
77	100		
97	22.5	18.5	27.7



Instrument :
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ClientSampleId :
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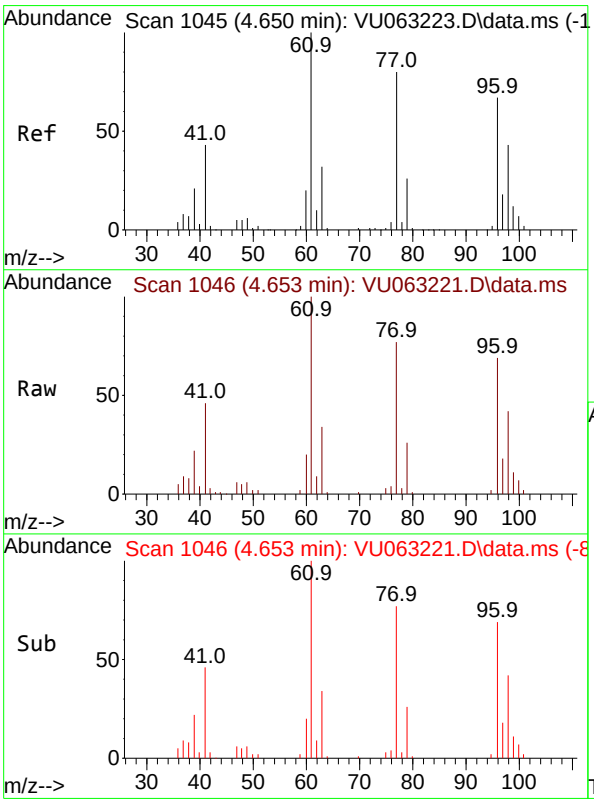
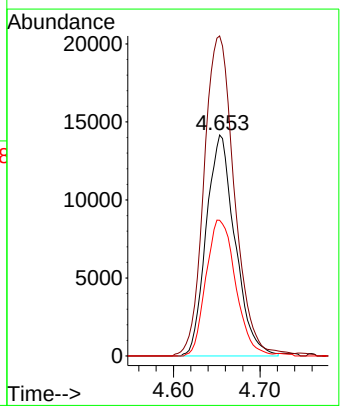
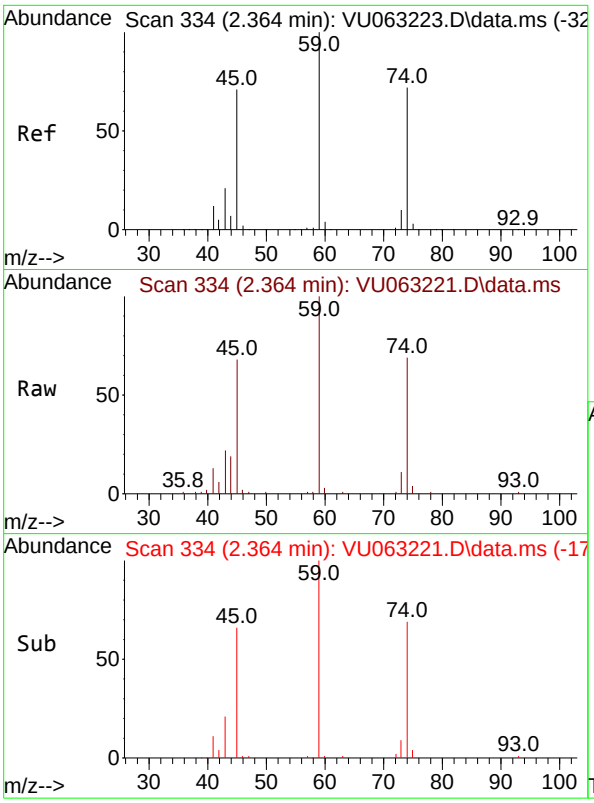


#22
cis-1,2-Dichloroethene
Concen: 1.958 ug/l
RT: 4.653 min Scan# 1046
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 96 Resp: 32738

Ion	Ratio	Lower	Upper
96	100		
61	153.1	0.0	373.3
98	63.1	31.9	95.9

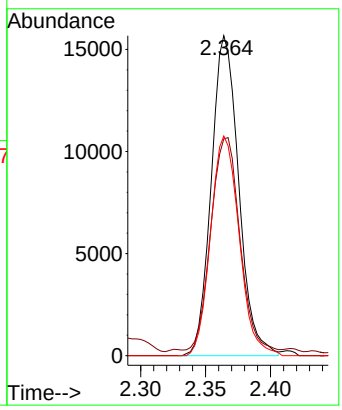




#23
Diethyl Ether
Concen: 1.977 ug/l
RT: 2.364 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 59 Resp: 2299

Ion	Ratio	Lower	Upper
59	100		
45	69.8	57.8	86.6
74	71.4	57.7	86.5



Instrument :
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ClientSampleId :
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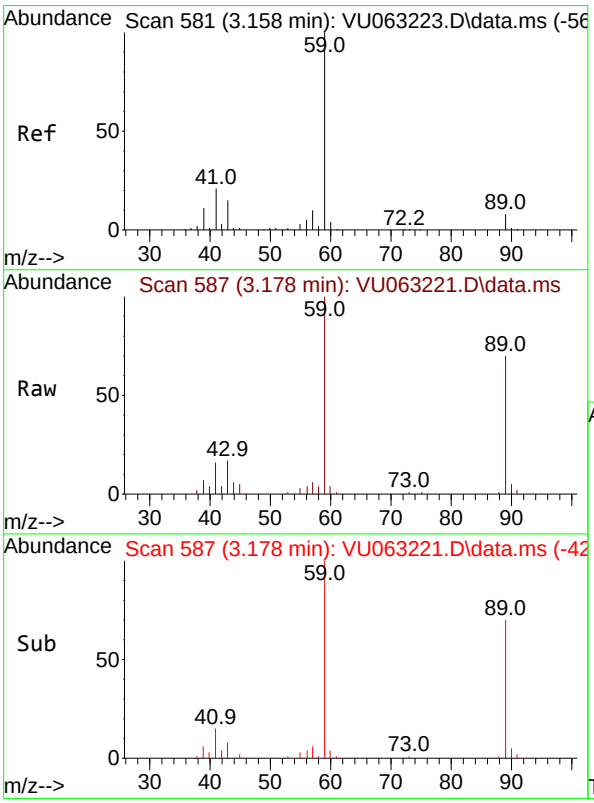
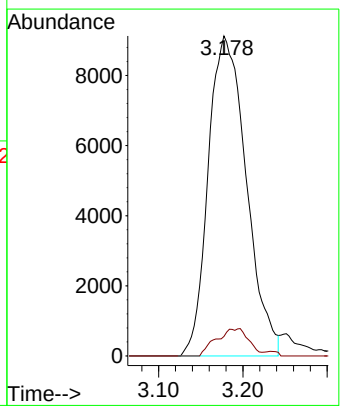
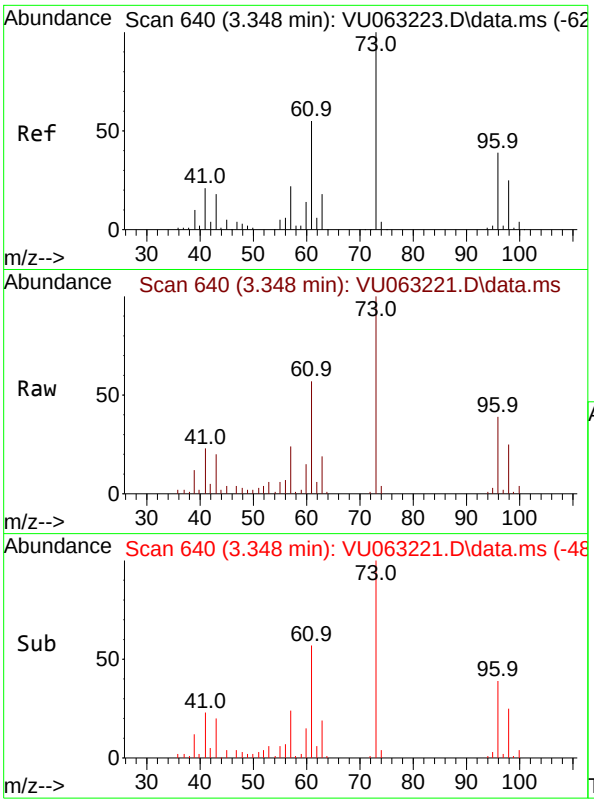


#24
tert-Butyl Alcohol
Concen: 18.780 ug/l
RT: 3.178 min Scan# 587
Delta R.T. 0.019 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 59 Resp: 28594

Ion	Ratio	Lower	Upper
59	100		
57	4.4	7.5	11.3#

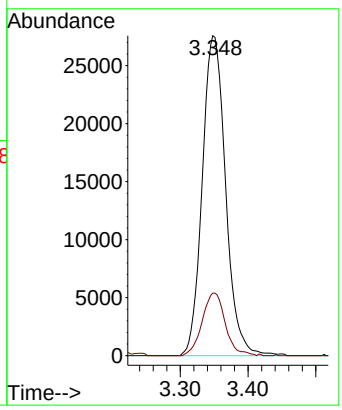




#25
Methyl tert-Butyl Ether
Concen: 1.950 ug/l
RT: 3.348 min Scan# 64
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 73 Resp: 6601

Ion	Ratio	Lower	Upper
73	100		
43	19.4	14.9	22.3



Instrument :
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ClientSampleId :
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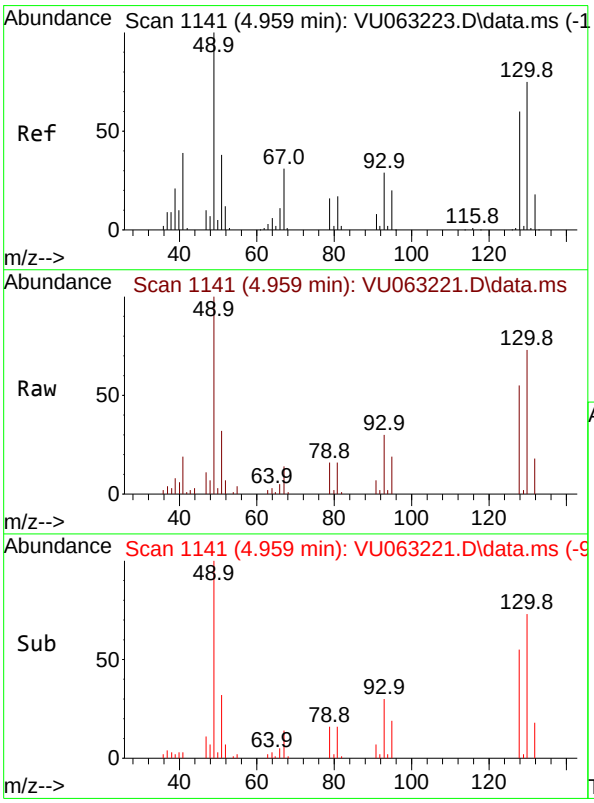
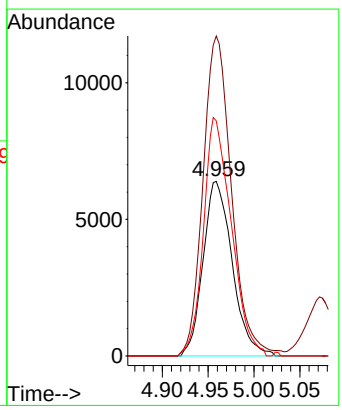
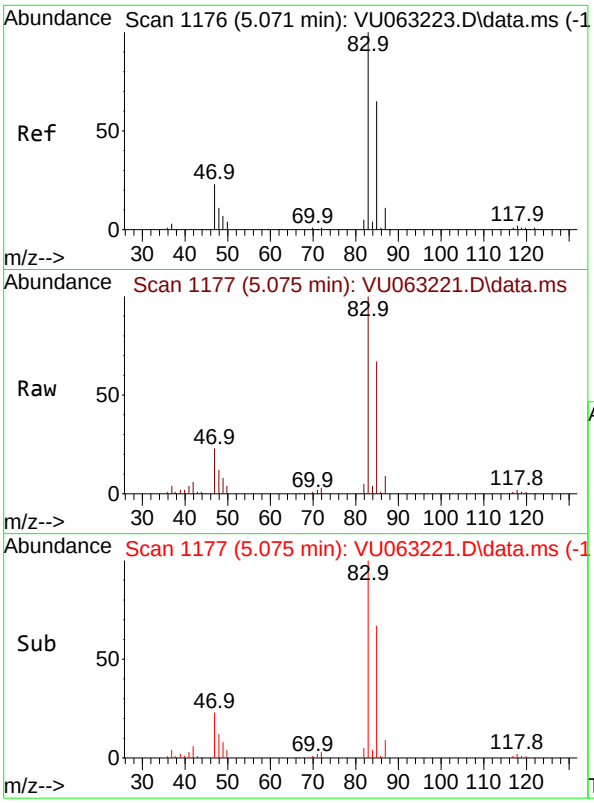


#26
Bromochloromethane
Concen: 1.931 ug/l
RT: 4.959 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:128 Resp: 14111

Ion	Ratio	Lower	Upper
128	100		
49	179.3	0.0	343.4
130	130.6	102.9	154.3

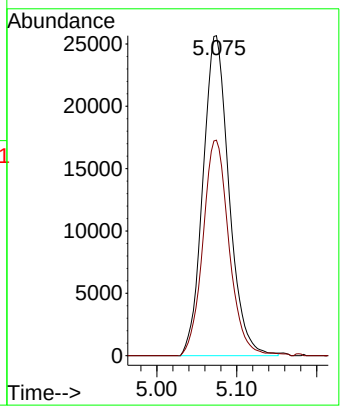




#27
Chloroform
Concen: 1.972 ug/l
RT: 5.075 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 83 Resp: 5803

Ion	Ratio	Lower	Upper
83	100		
85	67.3	0.0	129.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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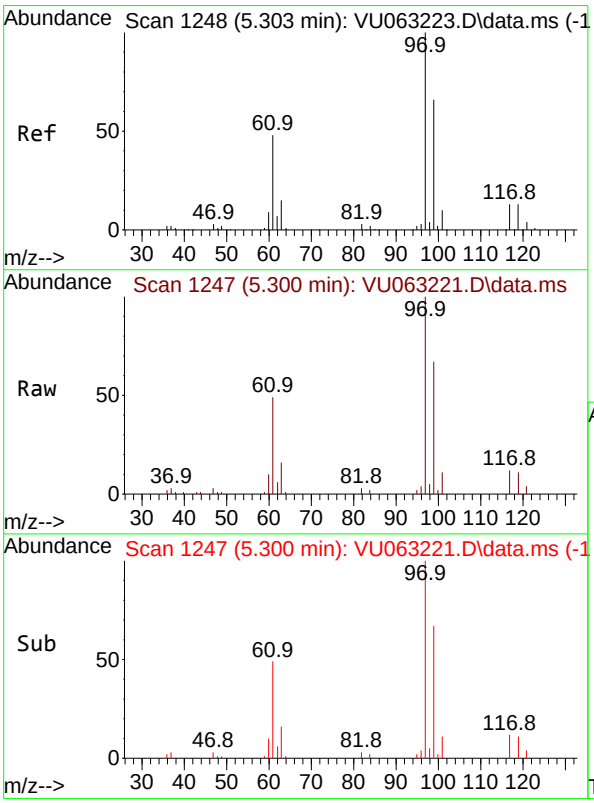
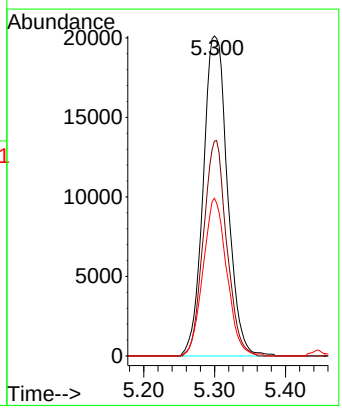
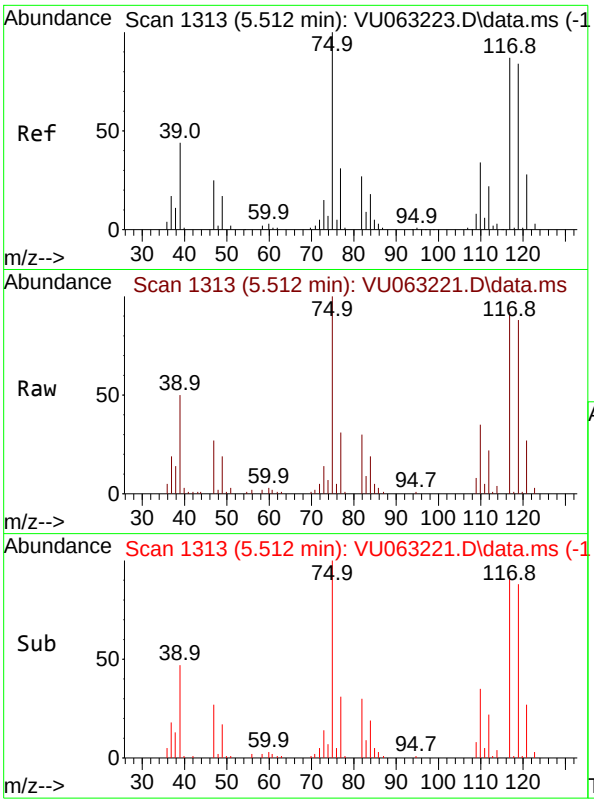


#28
1,1,1-Trichloroethane
Concen: 2.009 ug/l
RT: 5.300 min Scan# 1247
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 97 Resp: 47900

Ion	Ratio	Lower	Upper
97	100		
99	64.2	32.4	97.0
61	47.9	23.8	71.2

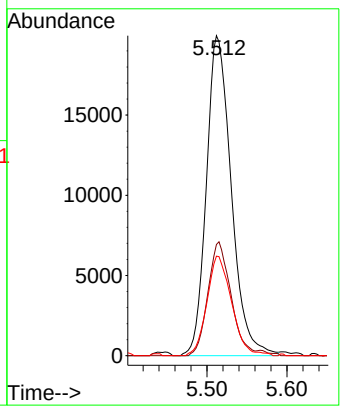




#29
1,1-Dichloropropene
Concen: 2.022 ug/l
RT: 5.512 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 75 Resp: 4316

Ion	Ratio	Lower	Upper
75	100		
110	32.7	17.2	51.5
77	30.8	24.6	37.0



Instrument :
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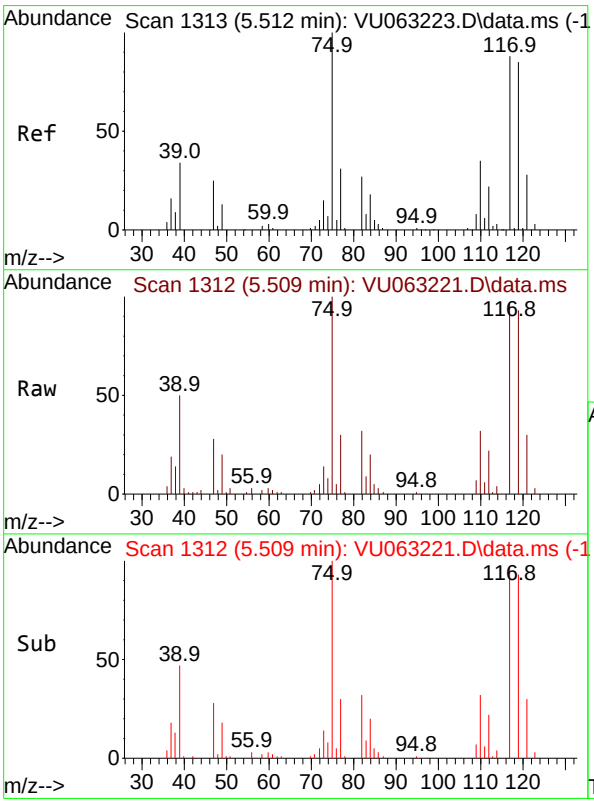
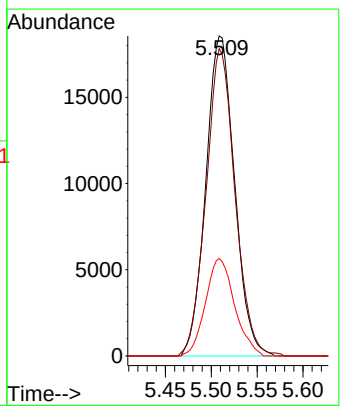
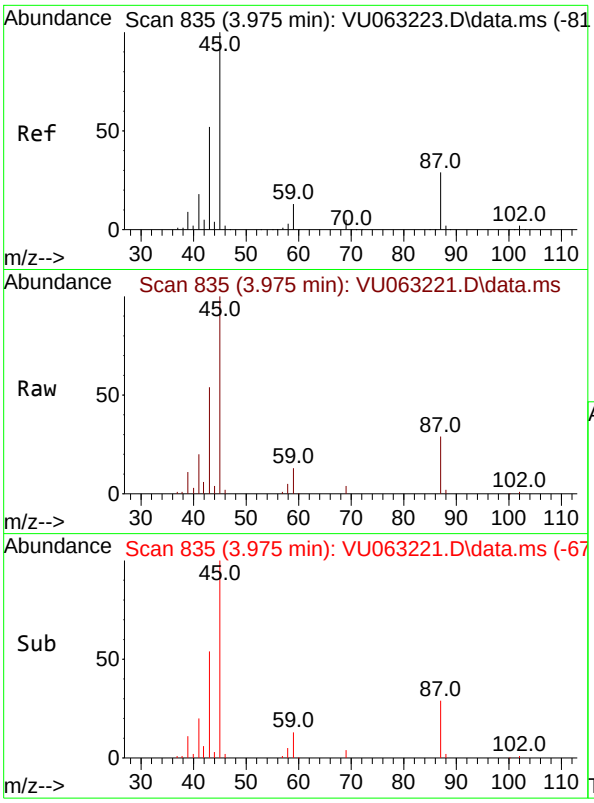


#30
Carbon Tetrachloride
Concen: 1.979 ug/l
RT: 5.509 min Scan# 1312
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:117 Resp: 40459

Ion	Ratio	Lower	Upper
117	100		
119	96.0	76.7	115.1
121	30.5	25.5	38.3

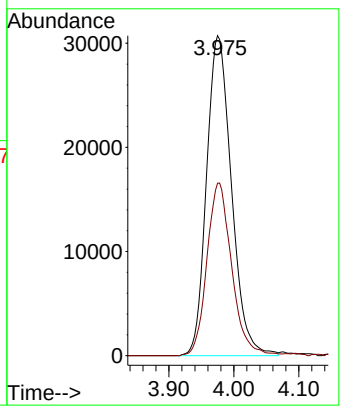




#31
Isopropyl Ether
Concen: 1.966 ug/l
RT: 3.975 min Scan# 8
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 45 Resp: 8182

Ion	Ratio	Lower	Upper
45	100		
43	53.7	25.7	77.1



Instrument :
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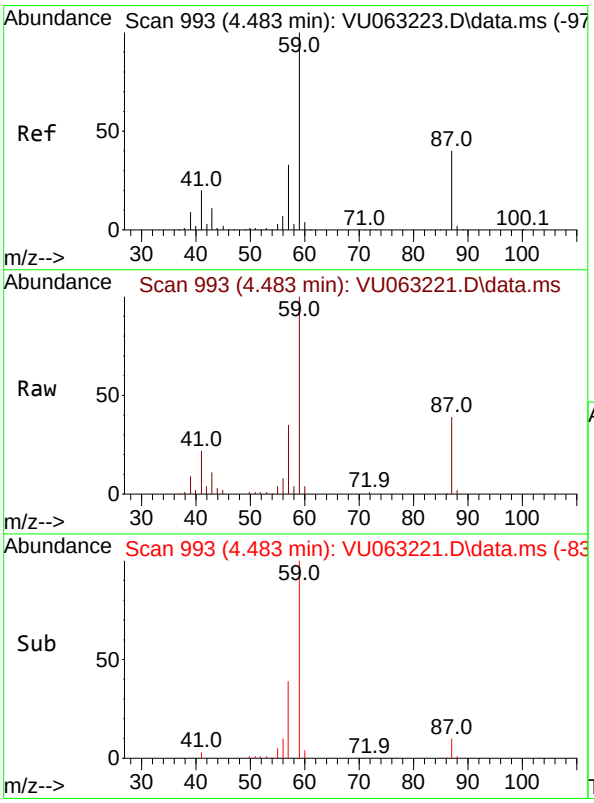
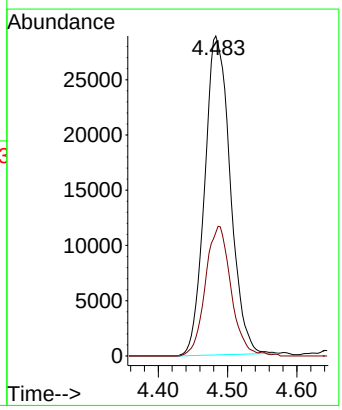
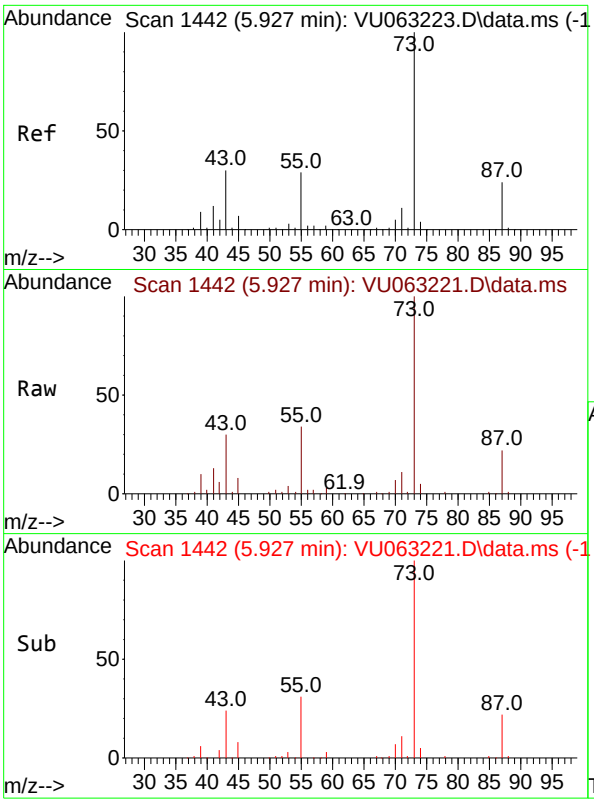


#32
Ethyl-t-butyl ether
Concen: 1.951 ug/l
RT: 4.483 min Scan# 993
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 59 Resp: 73881

Ion	Ratio	Lower	Upper
59	100		
87	39.2	32.6	49.0

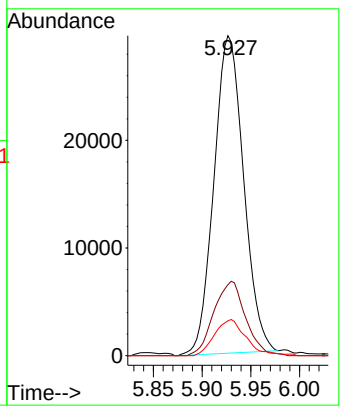




#33
Tert-Amyl methyl ether
Concen: 1.891 ug/l
RT: 5.927 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 73 Resp: 6254

Ion	Ratio	Lower	Upper
73	100		
87	24.9	18.9	28.3
71	12.2	9.0	13.4



Instrument :
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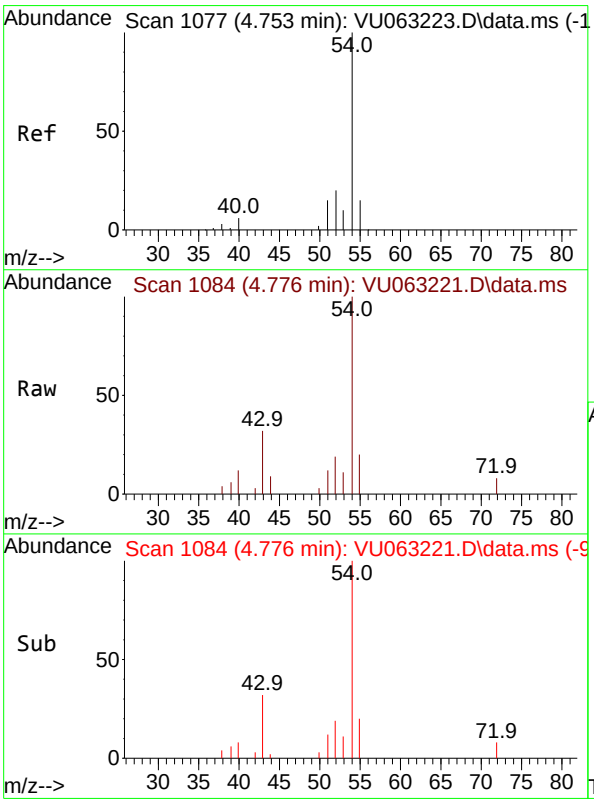
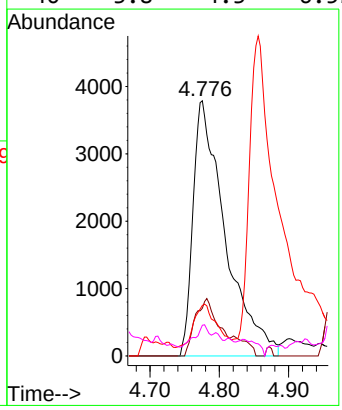
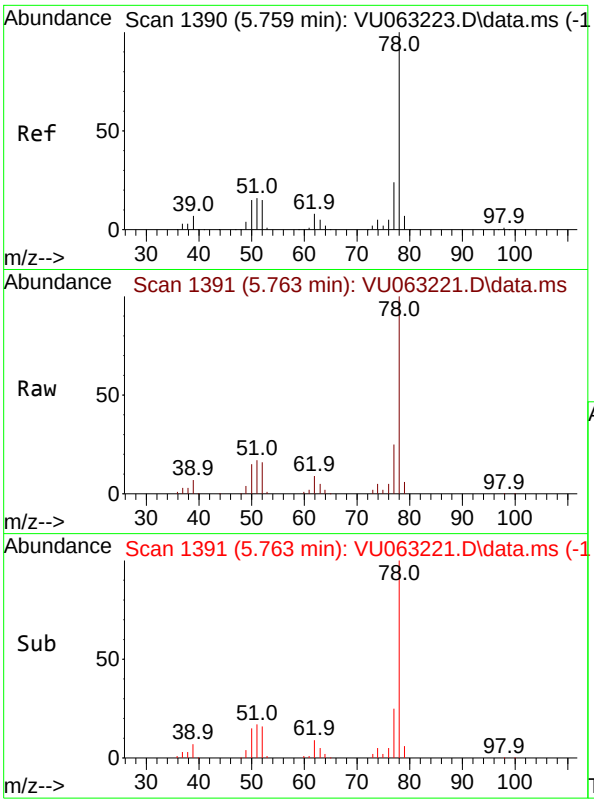


#34
Propionitrile
Concen: 10.151 ug/l
RT: 4.776 min Scan# 1084
Delta R.T. 0.023 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 54 Resp: 12222

Ion	Ratio	Lower	Upper
54	100		
52	16.1	16.3	24.5#
55	11.4	11.8	17.6#
40	3.8	4.3	6.5#

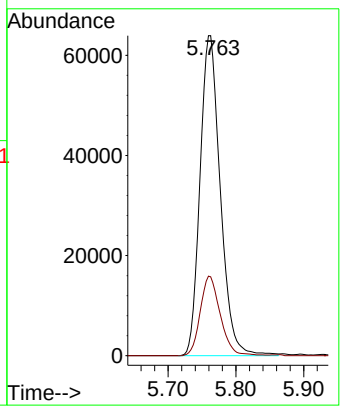




#35
Benzene
Concen: 2.022 ug/l
RT: 5.763 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 78 Resp: 13275

Ion	Ratio	Lower	Upper
78	100		
77	24.6	19.0	28.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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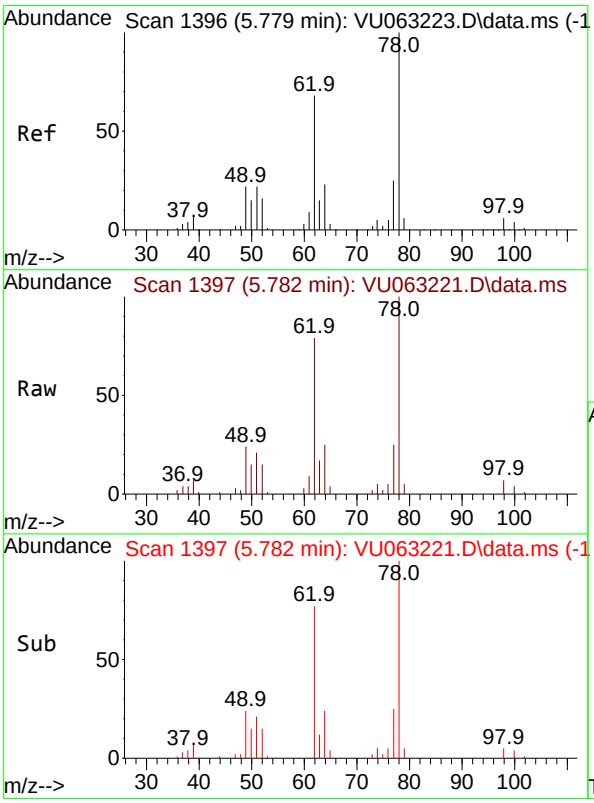
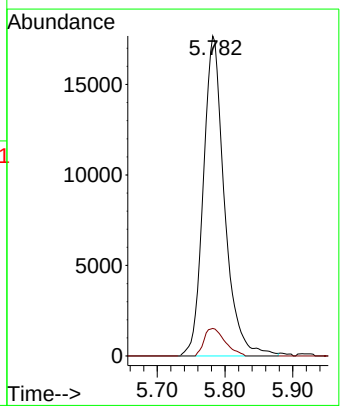
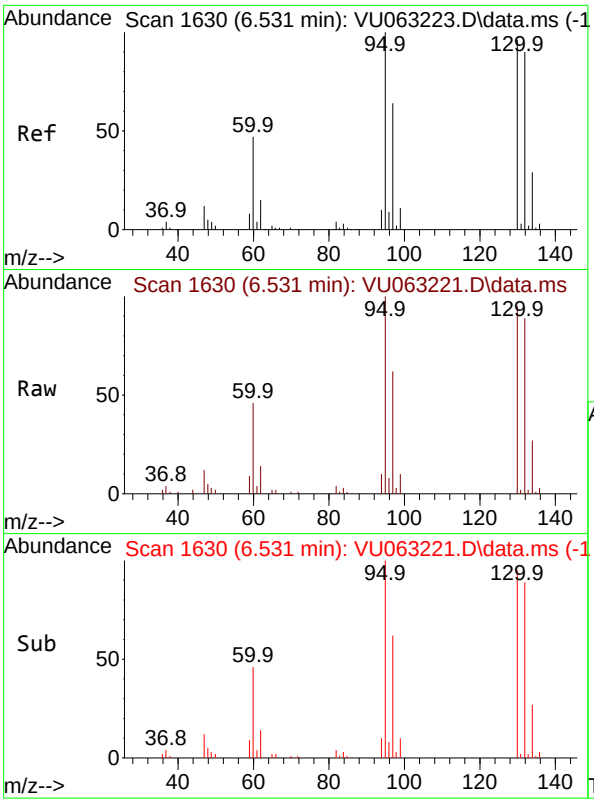


#36
1,2-Dichloroethane
Concen: 2.020 ug/l
RT: 5.782 min Scan# 1397
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 62 Resp: 38273

Ion	Ratio	Lower	Upper
62	100		
98	8.5	6.9	10.3

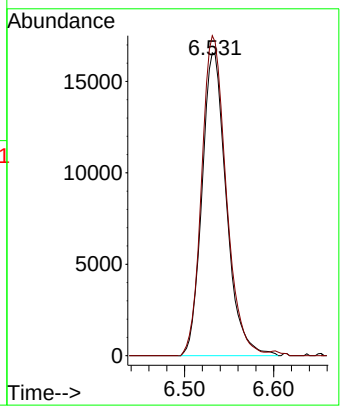




#37
Trichloroethene
Concen: 2.013 ug/l
RT: 6.531 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:130 Resp: 3143

Ion	Ratio	Lower	Upper
130	100		
95	105.6	83.2	124.8



Instrument :
MSVOA_U
ClientSampleId :
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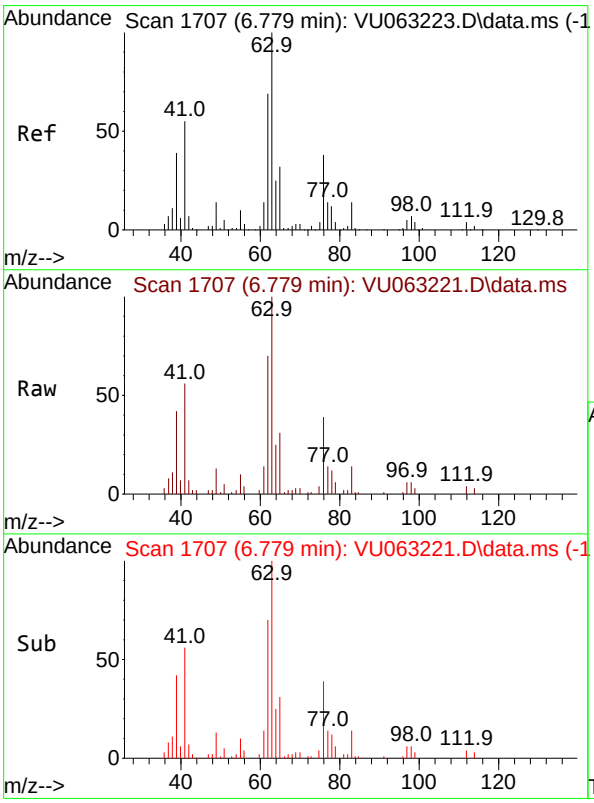
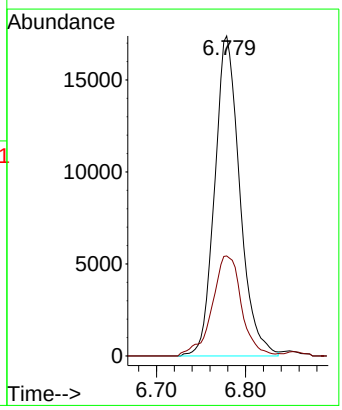
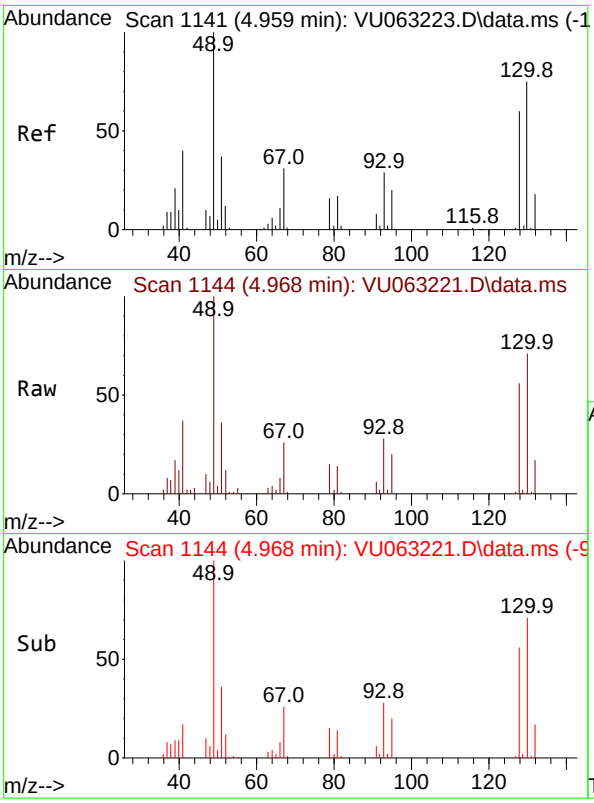


#38
1,2-Dichloropropane
Concen: 1.983 ug/l
RT: 6.779 min Scan# 1707
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 63 Resp: 34066

Ion	Ratio	Lower	Upper
63	100		
65	31.3	25.3	37.9

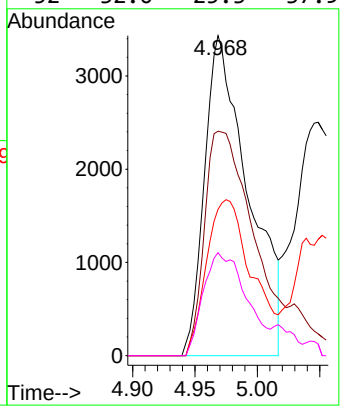




#39
Methacrylonitrile
Concen: 1.955 ug/l
RT: 4.968 min Scan# 1
Delta R.T. 0.010 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 41 Resp: 840

Ion	Ratio	Lower	Upper
41	100		
67	78.1	64.5	96.7
39	51.0	43.0	64.6
52	32.0	25.3	37.9



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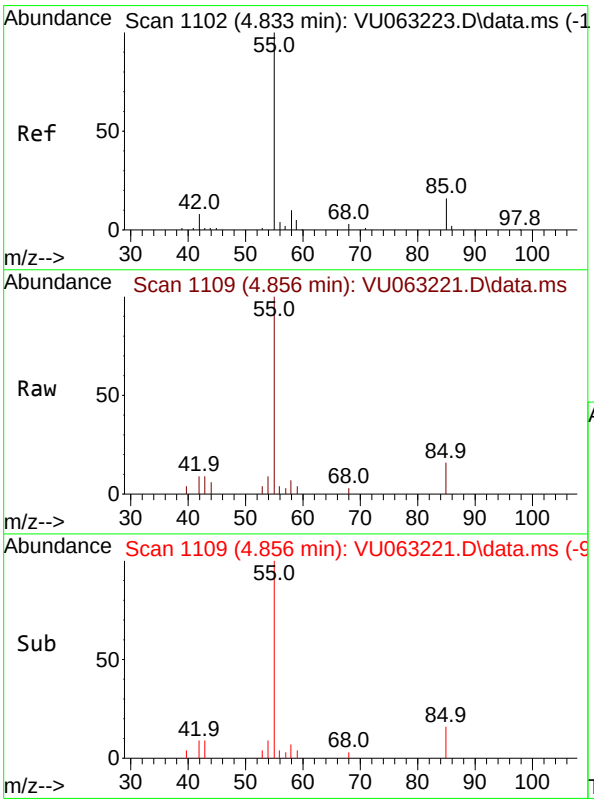
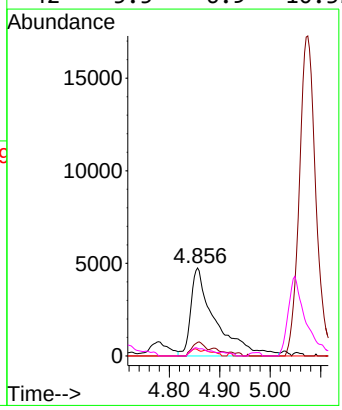
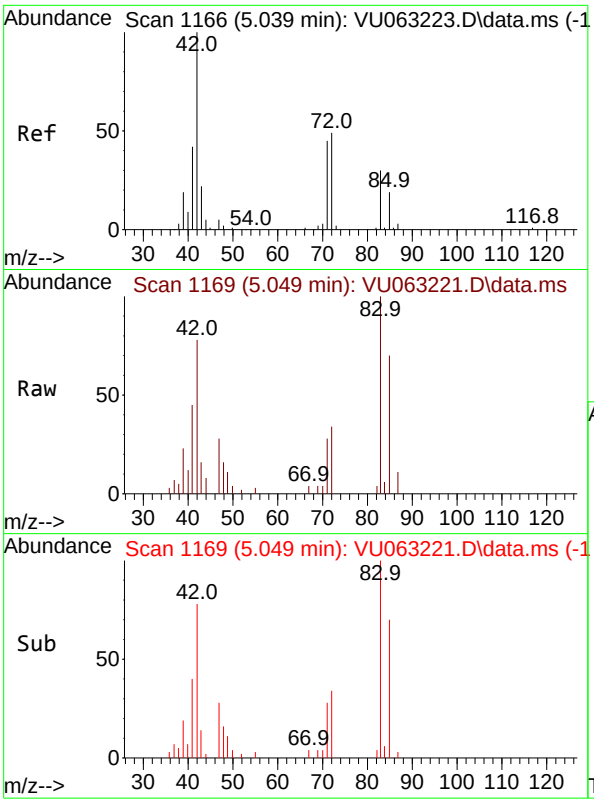


#40
Methyl acrylate
Concen: 2.038 ug/l m
RT: 4.856 min Scan# 1109
Delta R.T. 0.023 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 55 Resp: 16003

Ion	Ratio	Lower	Upper
55	100		
85	8.6	13.3	19.9#
58	3.0	7.3	10.9#
42	5.5	6.9	10.3#

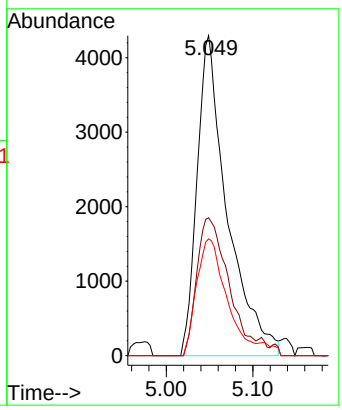




#41
Tetrahydrofuran
Concen: 4.106 ug/l
RT: 5.049 min Scan# 1
Delta R.T. 0.010 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 42 Resp: 1037

Ion	Ratio	Lower	Upper
42	100		
72	45.1	41.5	62.3
71	36.2	37.2	55.8



Instrument :
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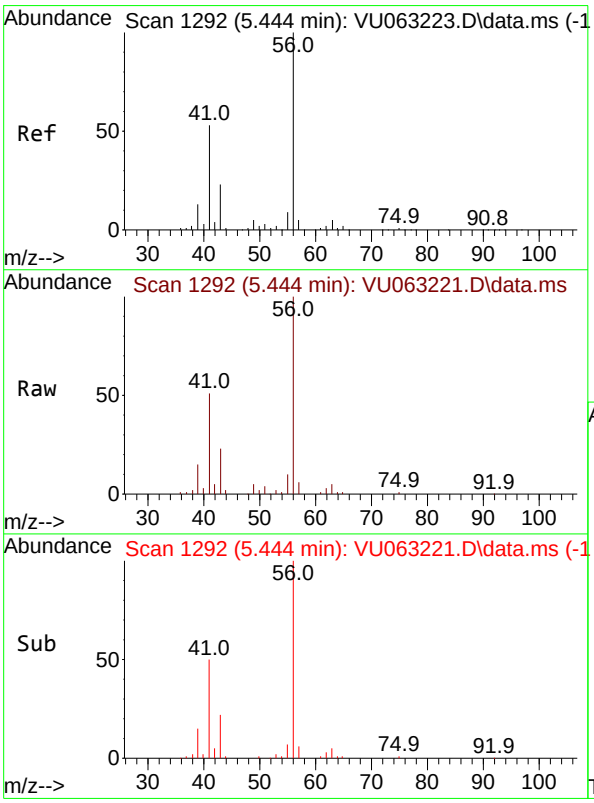
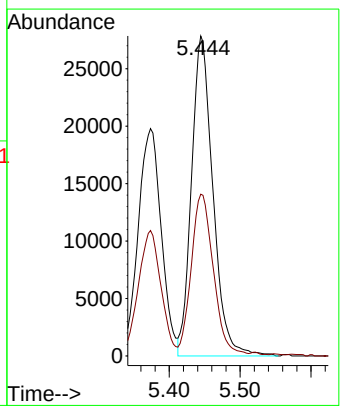
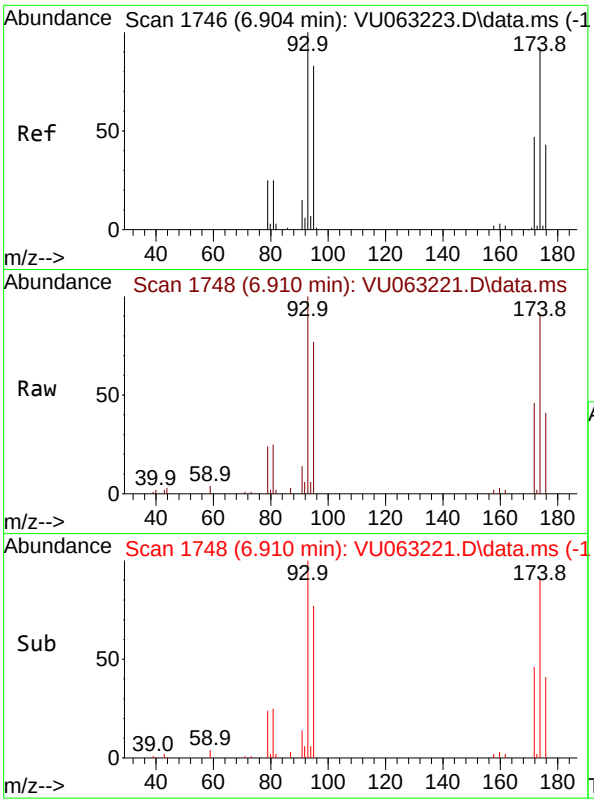


#42
1-Chlorobutane
Concen: 2.001 ug/l
RT: 5.444 min Scan# 1292
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 56 Resp: 58462

Ion	Ratio	Lower	Upper
56	100		
41	51.0	26.3	78.8

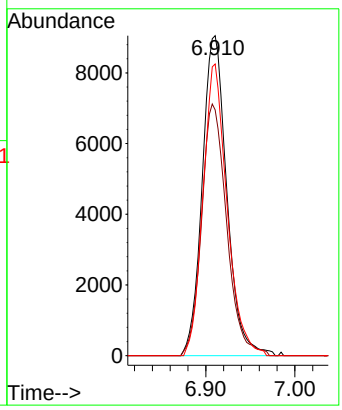




#43
Dibromomethane
Concen: 1.996 ug/l
RT: 6.910 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 93 Resp: 1736

Ion	Ratio	Lower	Upper
93	100		
95	80.0	67.2	100.8
174	89.2	75.7	113.5



Instrument :
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ClientSampleId :
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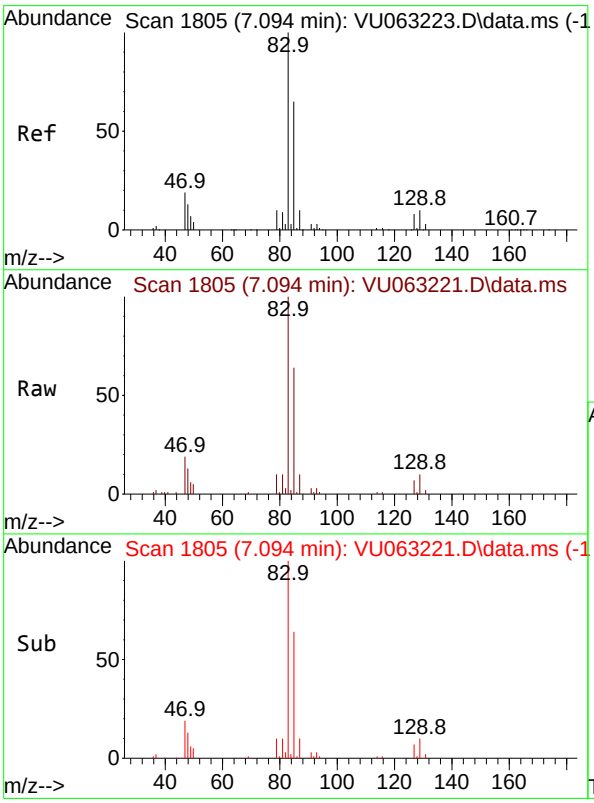
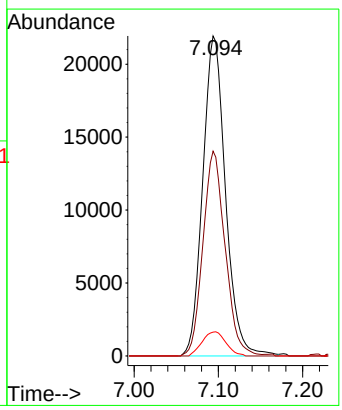
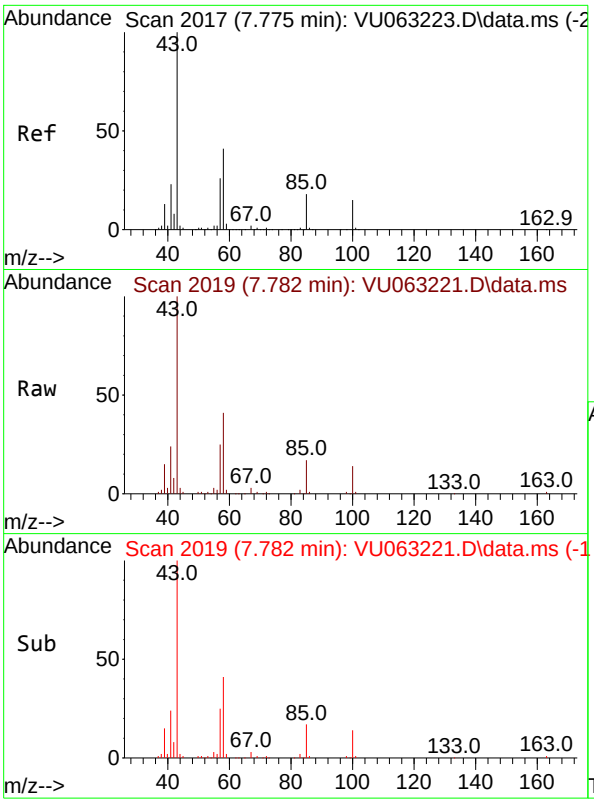


#44
Bromodichloromethane
Concen: 2.035 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 83 Resp: 41213

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.7	77.5
127	7.4	6.7	10.1

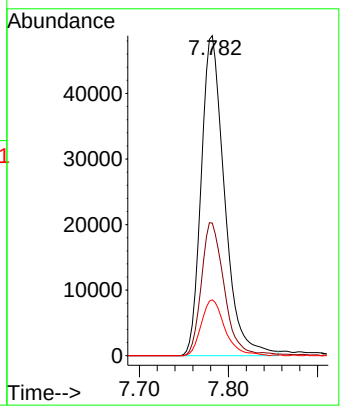




#45
4-Methyl-2-Pentanone
Concen: 9.751 ug/l
RT: 7.782 min Scan# 2
Delta R.T. 0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 43 Resp: 8894

Ion	Ratio	Lower	Upper
43	100		
58	40.2	20.8	62.5
85	17.7	14.8	22.2



Instrument :
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ClientSampleId :
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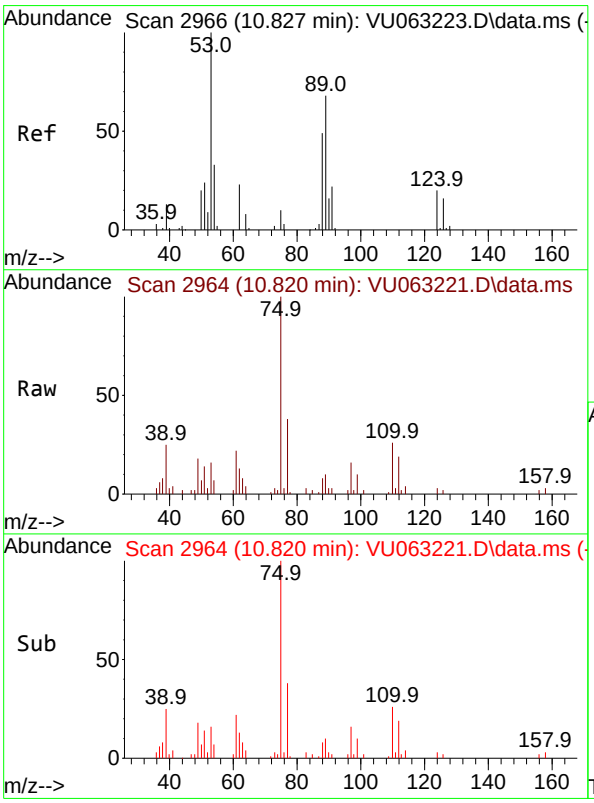
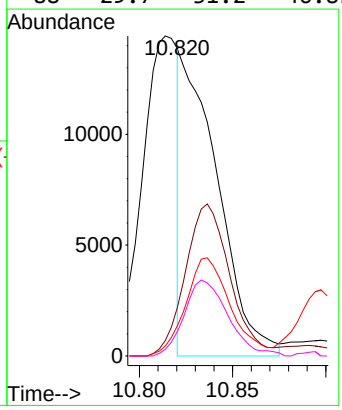
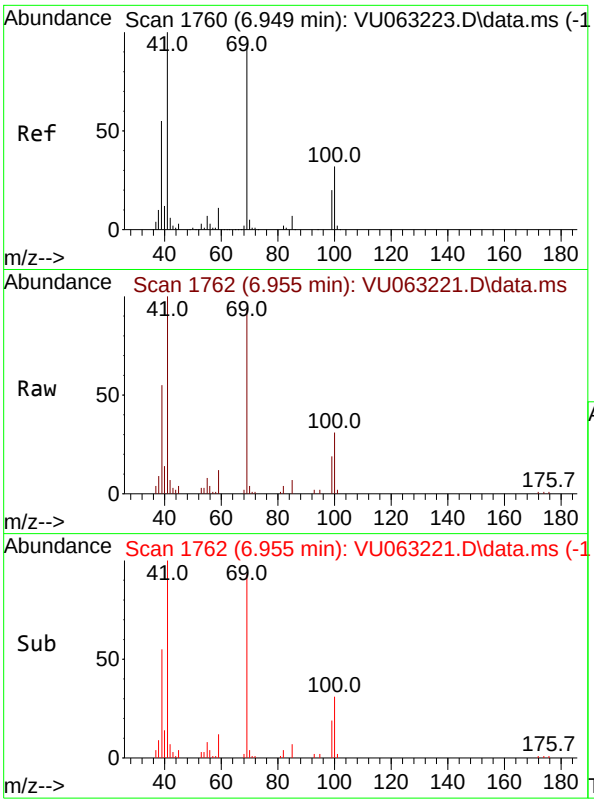


#46
t-1,4-Dichloro-2-butene
Concen: 4.176 ug/l m
RT: 10.820 min Scan# 2964
Delta R.T. -0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 75 Resp: 18852

Ion	Ratio	Lower	Upper
75	100		
53	60.4	64.5	96.7#
89	39.0	43.4	65.2#
88	29.7	31.2	46.8#

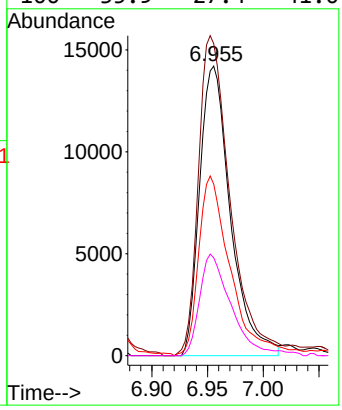




#47
Methyl methacrylate
Concen: 3.740 ug/l
RT: 6.955 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 69 Resp: 2741

Ion	Ratio	Lower	Upper
69	100		
41	113.8	0.0	217.0
39	64.1	47.7	71.5
100	35.9	27.4	41.0



Instrument :
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ClientSampleId :
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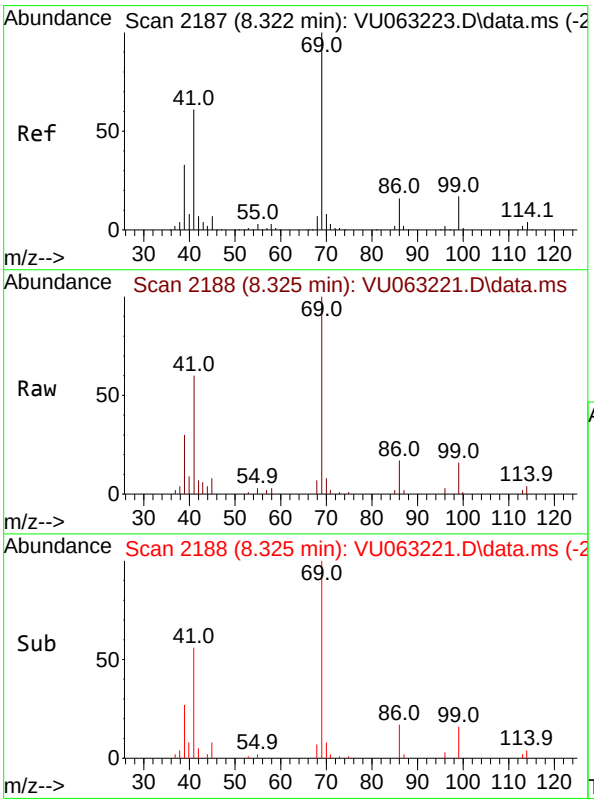
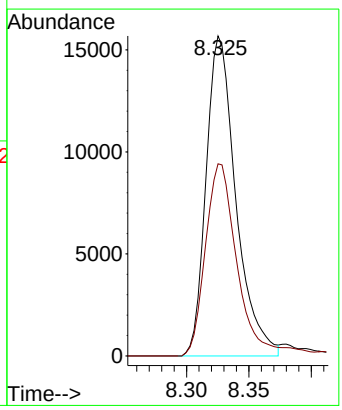
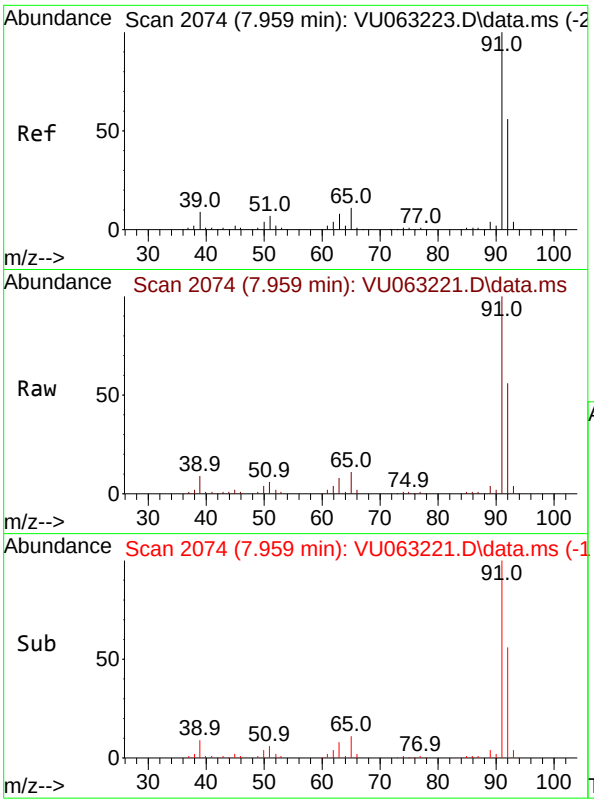


#48
Ethyl methacrylate
Concen: 1.897 ug/l
RT: 8.325 min Scan# 2188
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 69 Resp: 26103

Ion	Ratio	Lower	Upper
69	100		
41	64.5	30.6	92.0

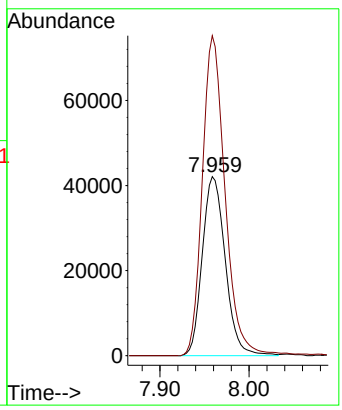




#49
Toluene
Concen: 1.999 ug/l
RT: 7.959 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 92 Resp: 7547

Ion	Ratio	Lower	Upper
92	100		
91	176.6	141.8	212.6



Instrument :
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ClientSampleId :
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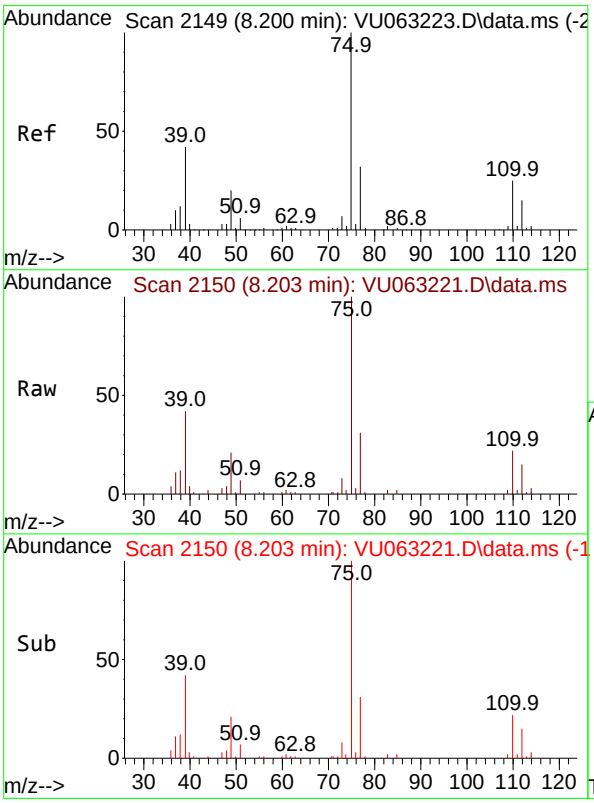
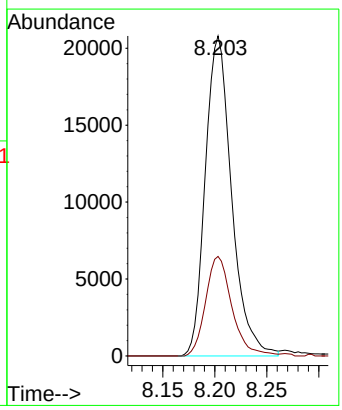
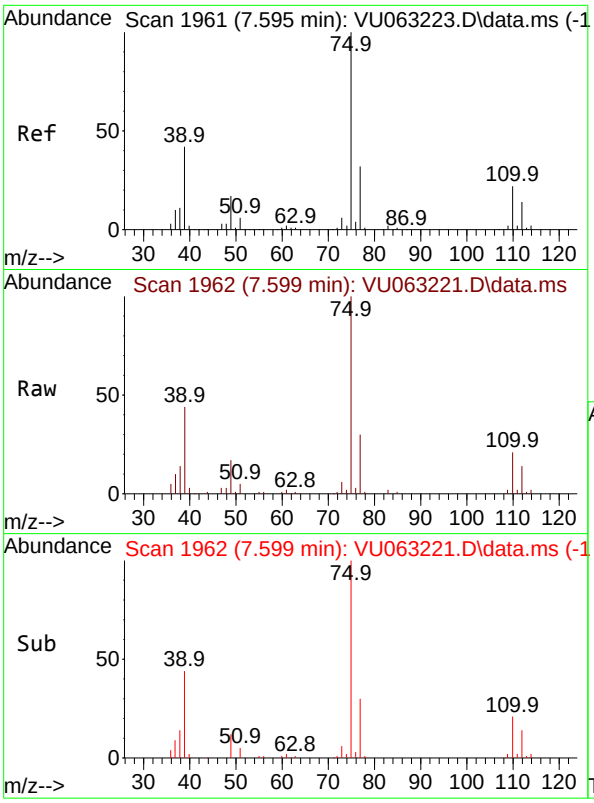


#50
t-1,3-Dichloropropene
Concen: 1.974 ug/l
RT: 8.203 min Scan# 2150
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 75 Resp: 36608

Ion	Ratio	Lower	Upper
75	100		
77	31.1	25.9	38.9

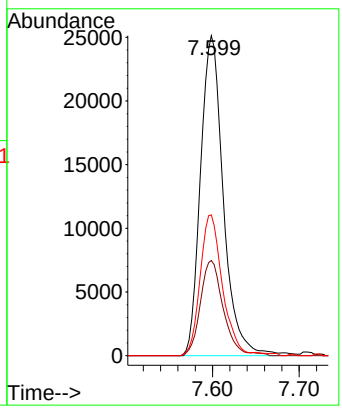




#51
cis-1,3-Dichloropropene
Concen: 2.006 ug/l
RT: 7.599 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 75 Resp: 4594

Ion	Ratio	Lower	Upper
75	100		
77	29.7	25.3	37.9
39	44.0	33.5	50.3



Instrument :
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ClientSampleId :
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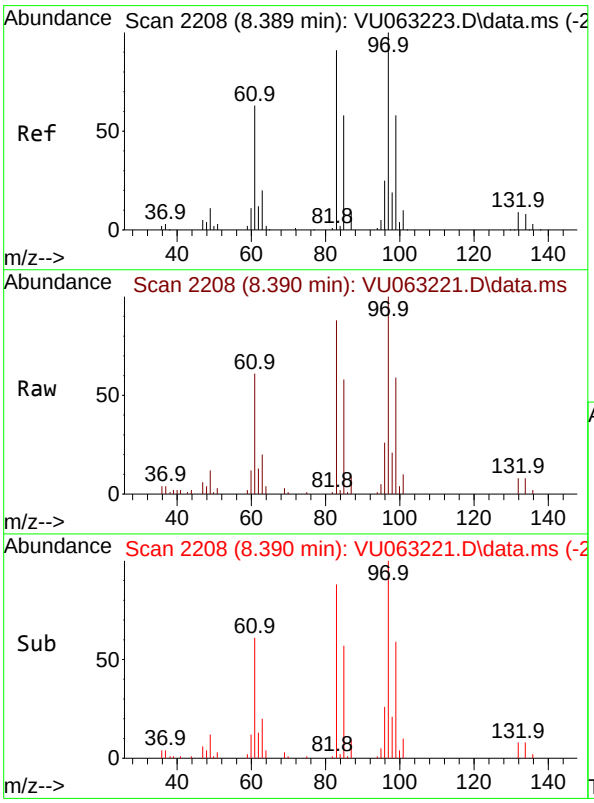
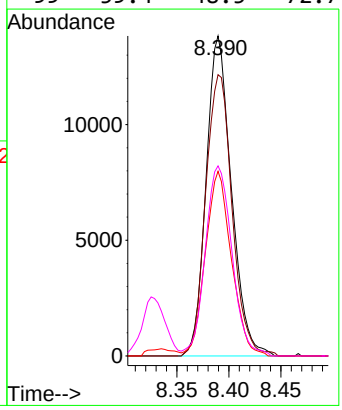
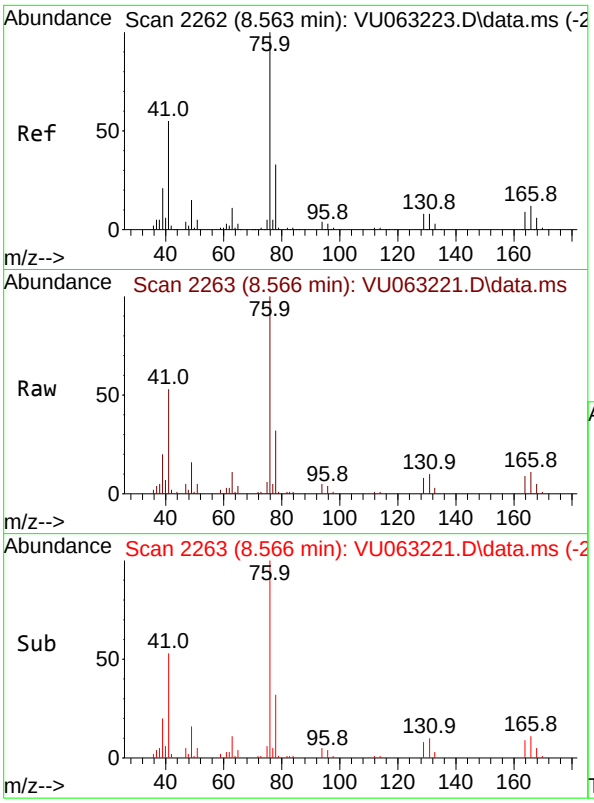


#52
1,1,2-Trichloroethane
Concen: 1.993 ug/l
RT: 8.390 min Scan# 2208
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 97 Resp: 23377

Ion	Ratio	Lower	Upper
97	100		
83	87.9	73.0	109.4
85	57.7	46.3	69.5
99	59.4	48.5	72.7

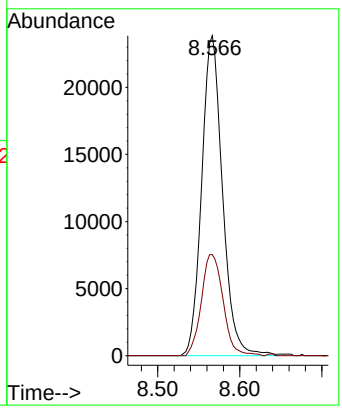




#53
1,3-Dichloropropane
Concen: 2.015 ug/l
RT: 8.566 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 76 Resp: 4197

Ion	Ratio	Lower	Upper
76	100		
78	33.0	26.3	39.5



Instrument :
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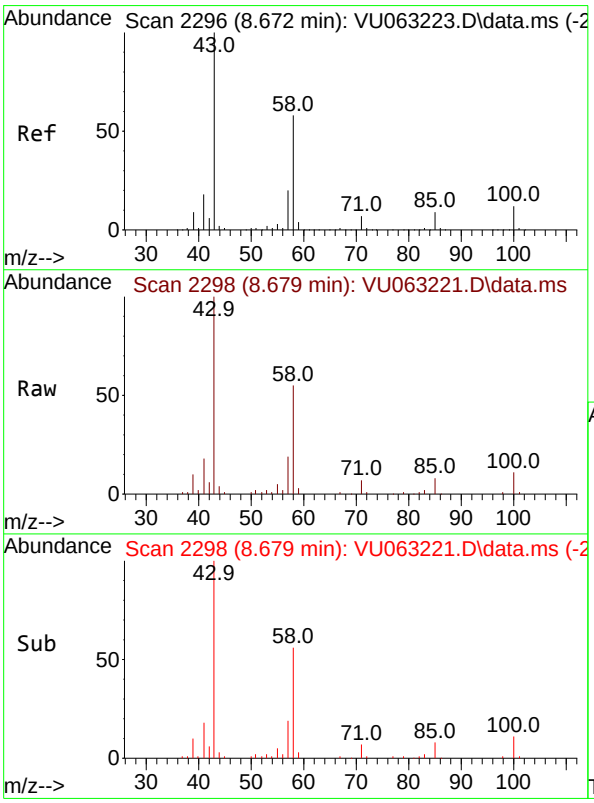
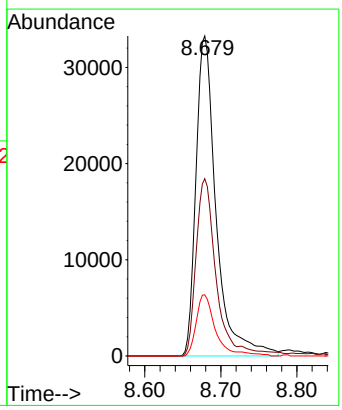
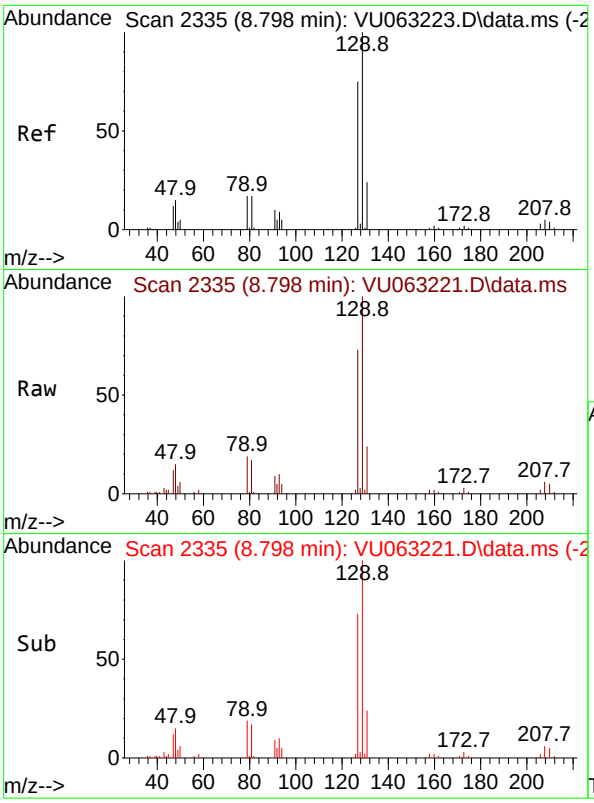


#54
2-Hexanone
Concen: 9.874 ug/l
RT: 8.679 min Scan# 2298
Delta R.T. 0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 43 Resp: 61467

Ion	Ratio	Lower	Upper
43	100		
58	55.4	38.0	78.0
57	18.3	0.0	39.1

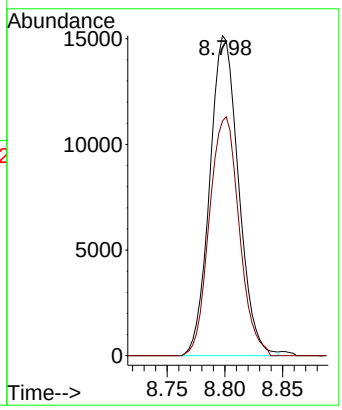




#55
Dibromochloromethane
Concen: 1.950 ug/l
RT: 8.798 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:129 Resp: 2631

Ion	Ratio	Lower	Upper
129	100		
127	77.0	60.4	90.6



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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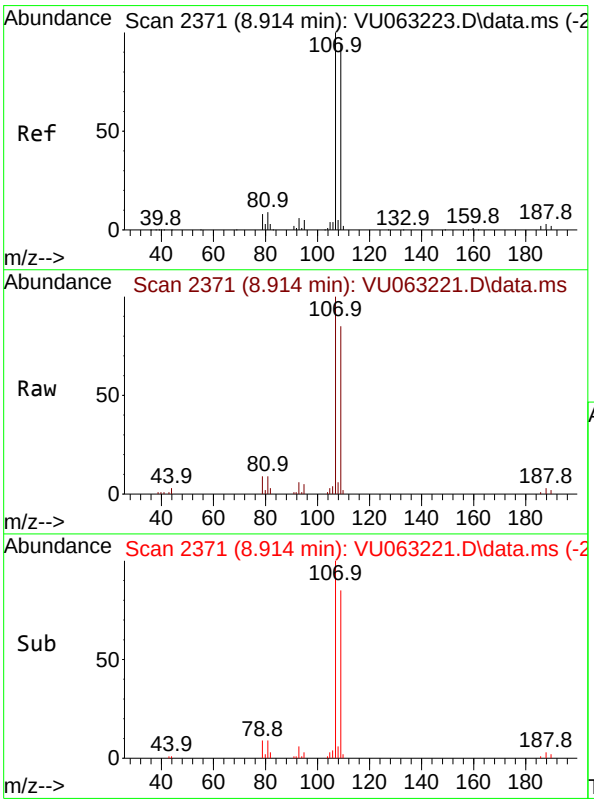
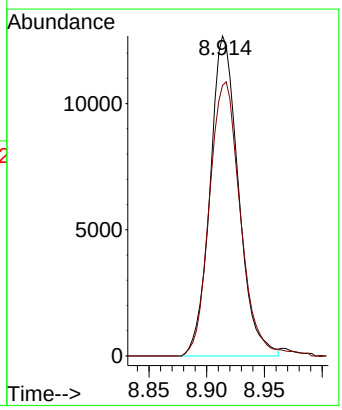
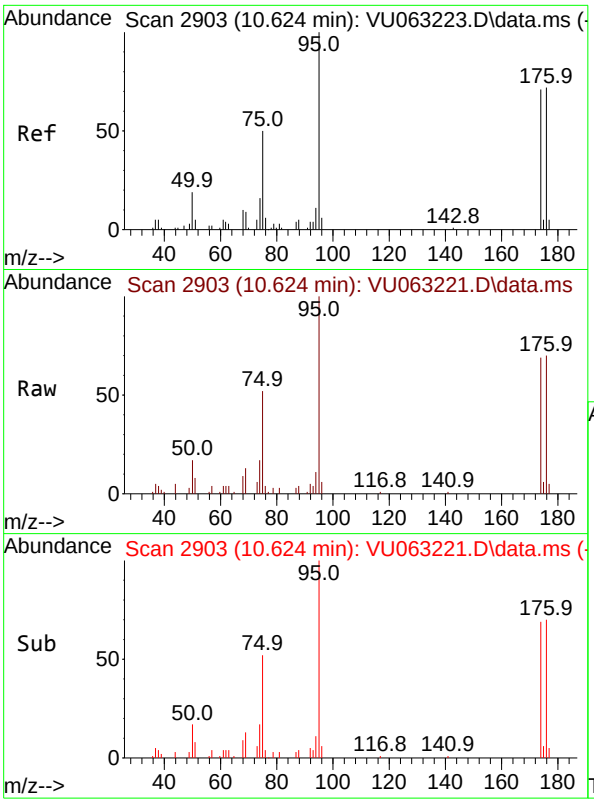


#56
1,2-Dibromoethane
Concen: 1.967 ug/l
RT: 8.914 min Scan# 2371
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:107 Resp: 21639

Ion	Ratio	Lower	Upper
107	100		
109	93.6	0.0	187.8

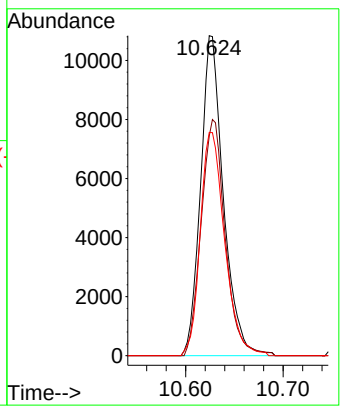




#57
4-Bromofluorobenzene
Concen: 1.000 ug/l
RT: 10.624 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 95 Resp: 1762

Ion	Ratio	Lower	Upper
95	100		
174	77.7	58.6	88.0
176	74.7	58.2	87.4



Instrument :
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ClientSampleId :
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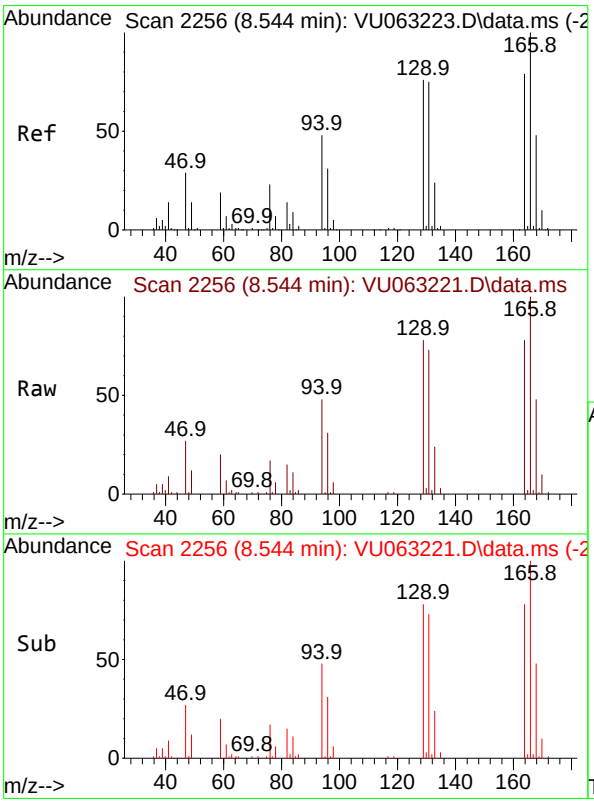
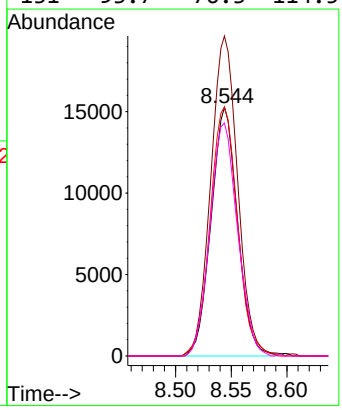
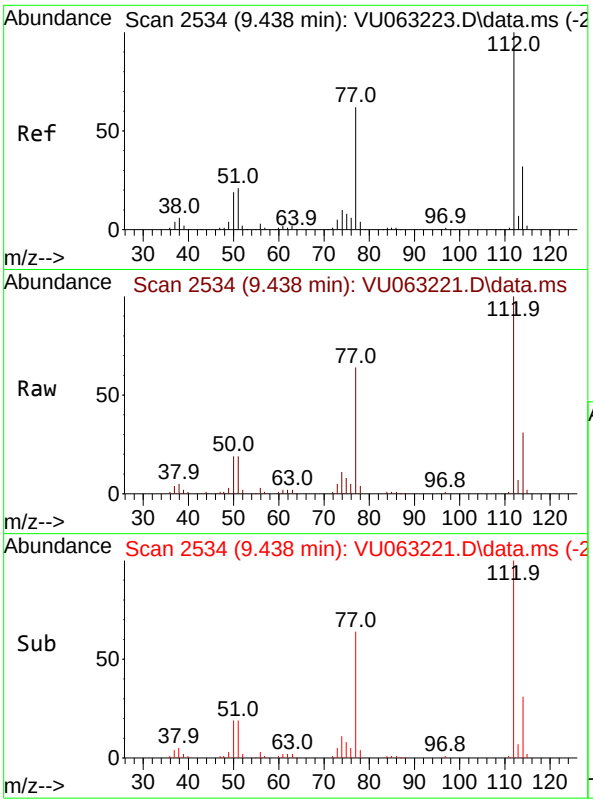


#58
Tetrachloroethene
Concen: 1.959 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:164 Resp: 25204

Ion	Ratio	Lower	Upper
164	100		
166	128.7	101.4	152.0
129	100.2	77.0	115.4
131	93.7	76.3	114.5

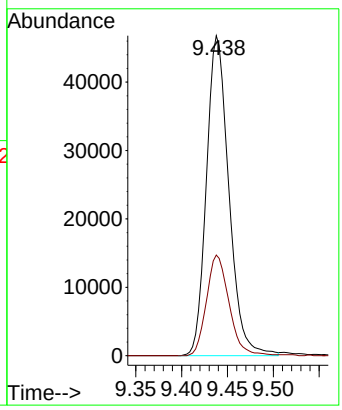




#59
Chlorobenzene
Concen: 1.999 ug/l
RT: 9.438 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:112 Resp: 7965

Ion	Ratio	Lower	Upper
112	100		
114	31.4	25.7	38.5



Instrument :
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ClientSampleId :
VSTDICC002

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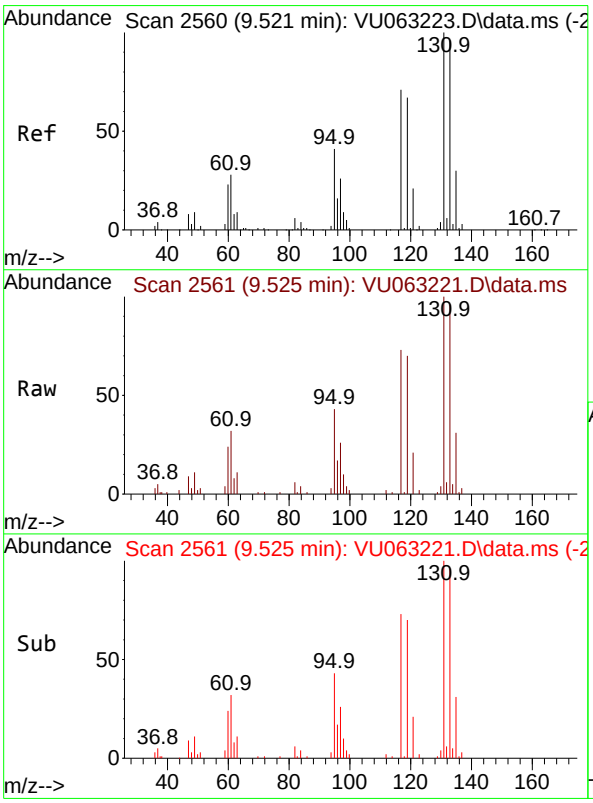
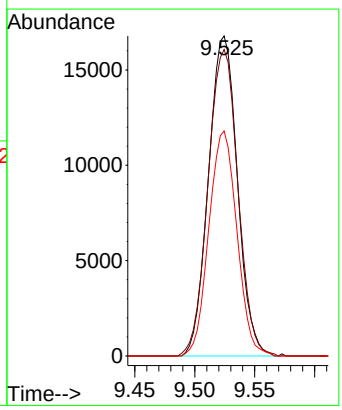
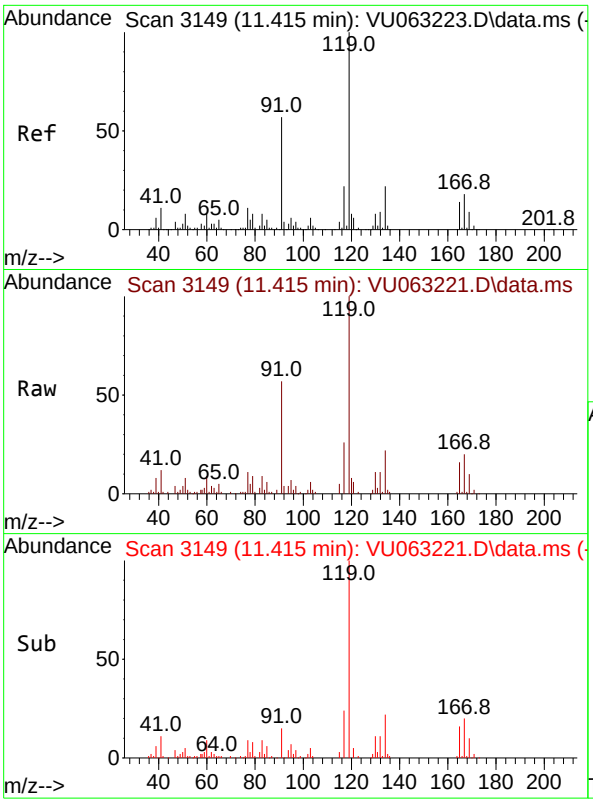


#60
1,1,1,2-Tetrachloroethane
Concen: 1.966 ug/l
RT: 9.525 min Scan# 2561
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:131 Resp: 28159

Ion	Ratio	Lower	Upper
131	100		
133	98.9	76.7	115.1
119	68.1	54.4	81.6





#61
Pentachloroethane
Concen: 2.096 ug/l
RT: 11.415 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:117 Resp: 2681

Ion	Ratio	Lower	Upper
117	100		
167	76.4	65.0	97.6

Instrument :
MSVOA_U
ClientSampleId :
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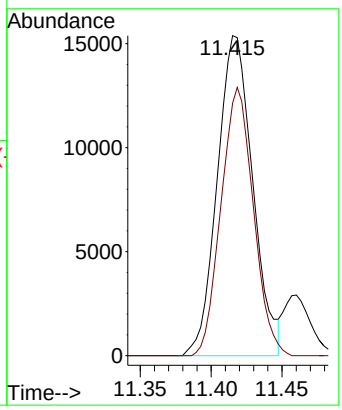
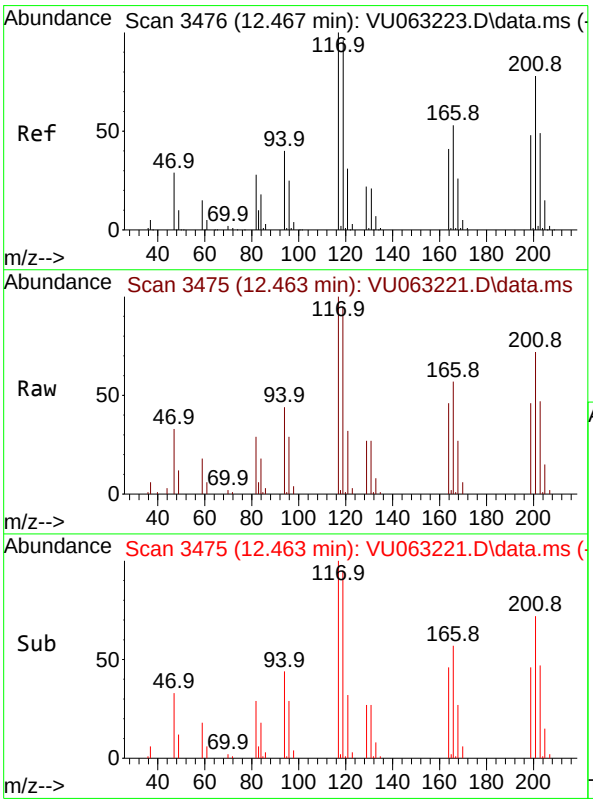
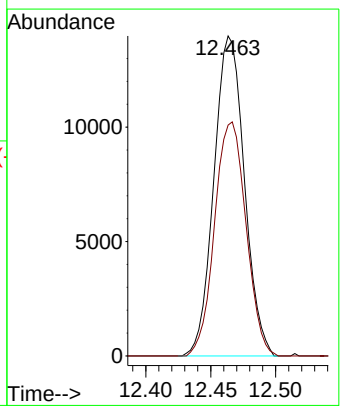


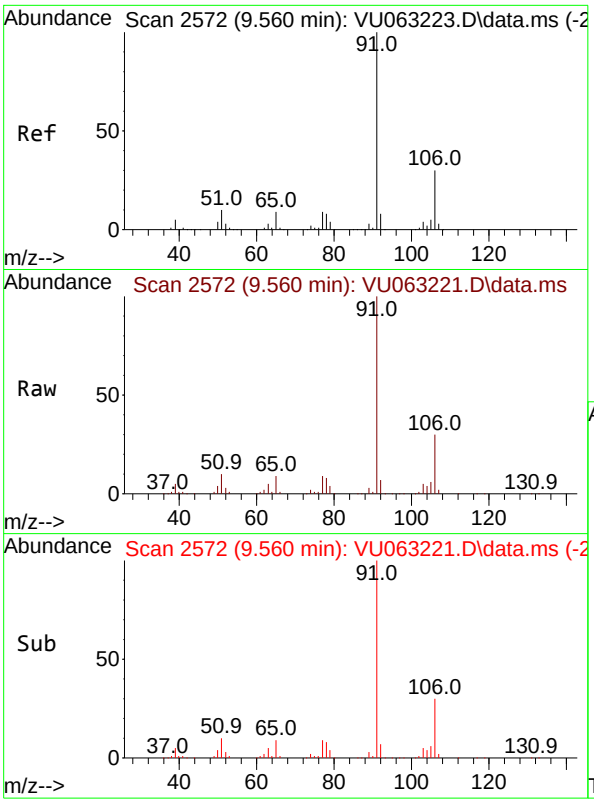


#62
Hexachloroethane
Concen: 2.017 ug/l
RT: 12.463 min Scan# 3475
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:117 Resp: 22824

Ion	Ratio	Lower	Upper
117	100		
201	75.4	61.3	91.9





#63
Ethyl Benzene
Concen: 1.938 ug/l
RT: 9.560 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 91 Resp: 13314

Ion	Ratio	Lower	Upper
91	100		
106	29.8	24.2	36.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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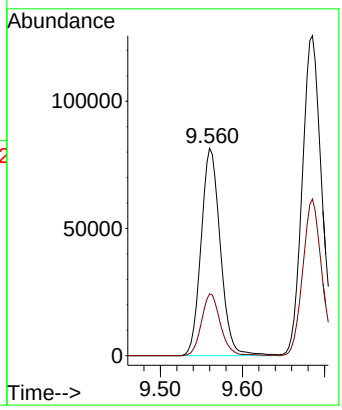
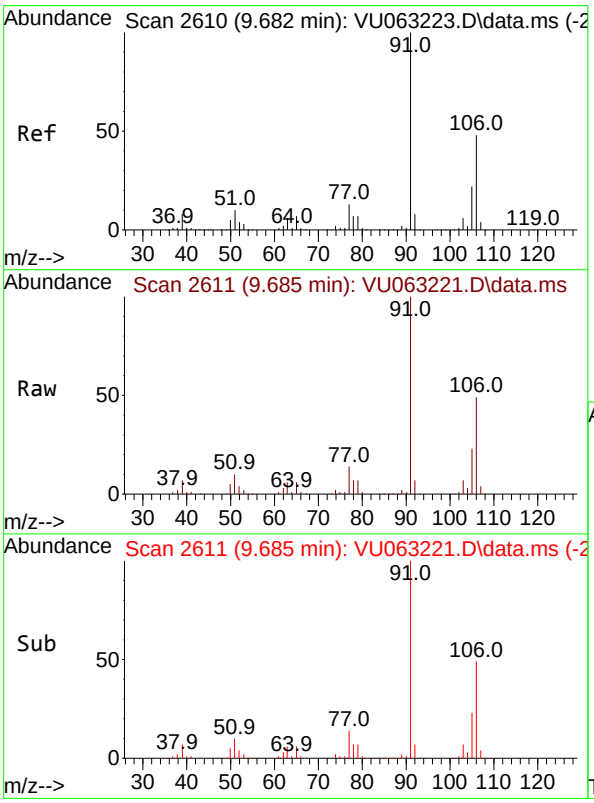
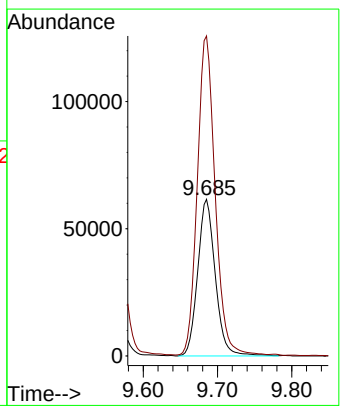


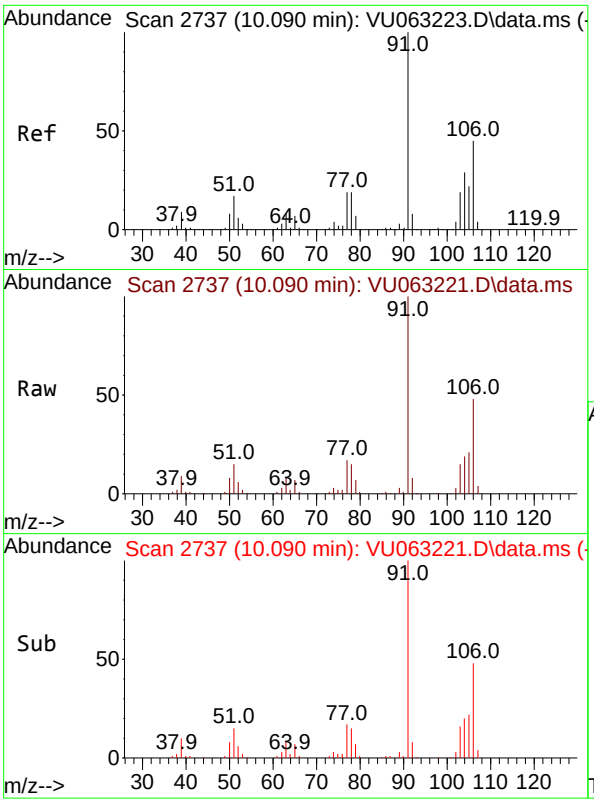


#64
m/p-Xylenes
Concen: 3.954 ug/l
RT: 9.685 min Scan# 2611
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:106 Resp: 101491

Ion	Ratio	Lower	Upper
106	100		
91	205.7	166.9	250.3

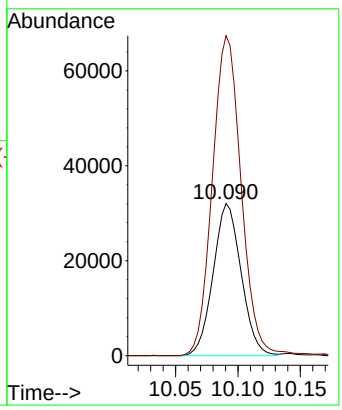




#65
o-Xylene
Concen: 1.995 ug/l
RT: 10.090 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:106 Resp: 5012

Ion	Ratio	Lower	Upper
106	100		
91	217.6	110.9	332.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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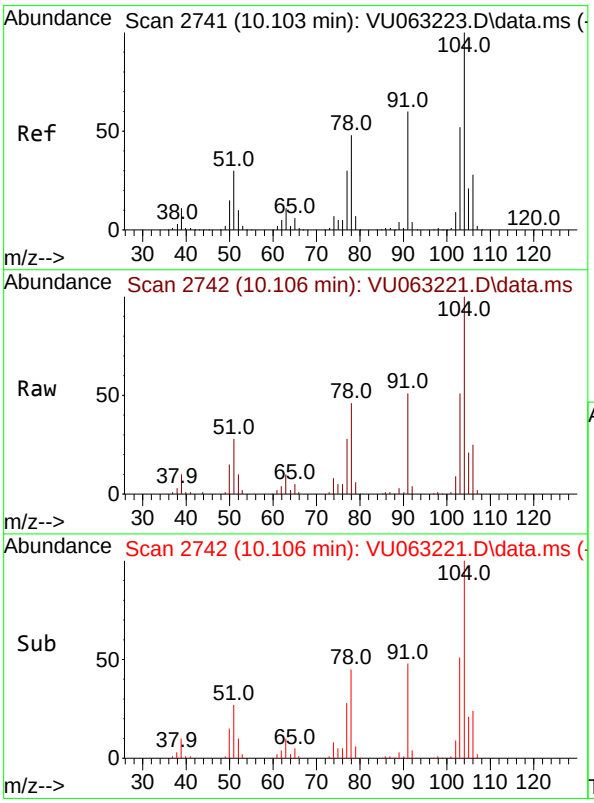
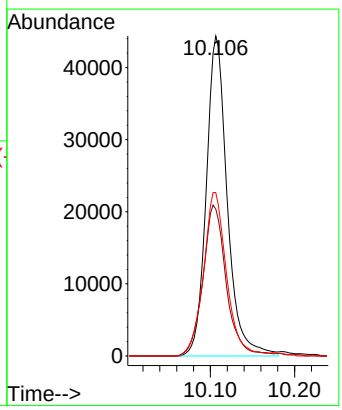
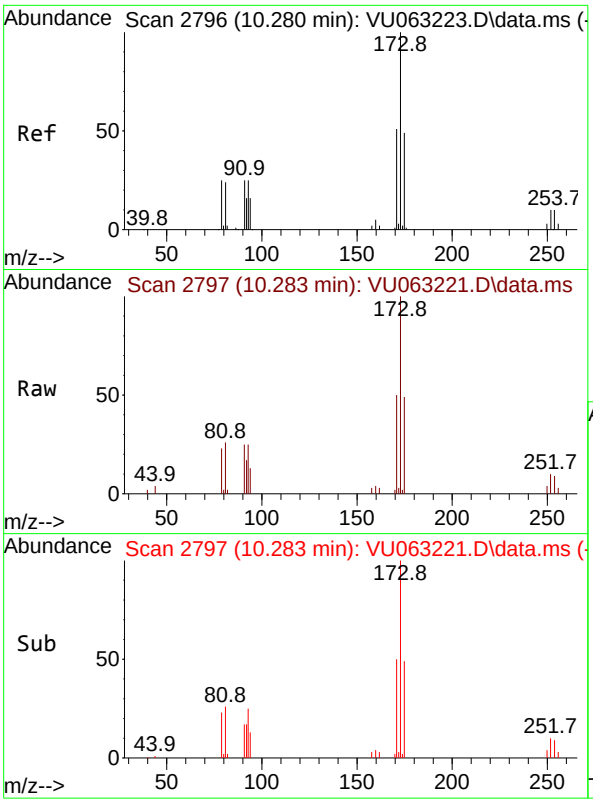


#66
Styrene
Concen: 1.926 ug/l
RT: 10.106 min Scan# 2742
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:104 Resp: 77021

Ion	Ratio	Lower	Upper
104	100		
78	52.1	41.2	61.8
103	56.0	44.8	67.2

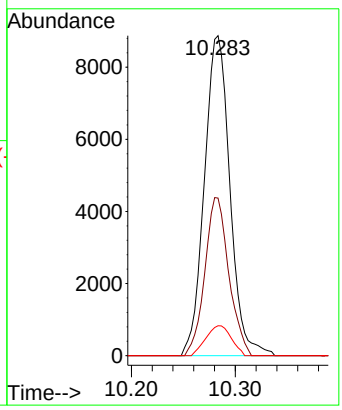




#67
Bromoform
Concen: 1.981 ug/l
RT: 10.283 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:173 Resp: 1517

Ion	Ratio	Lower	Upper
173	100		
175	46.3	39.0	58.4
254	9.3	7.7	11.5



Instrument :
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ClientSampleId :
VSTDICC002

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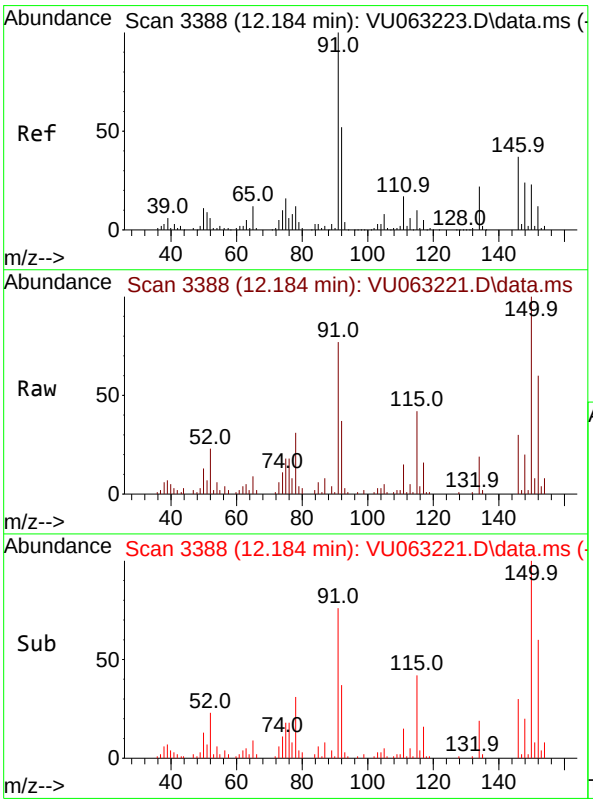
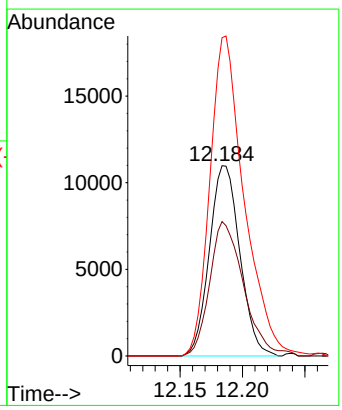
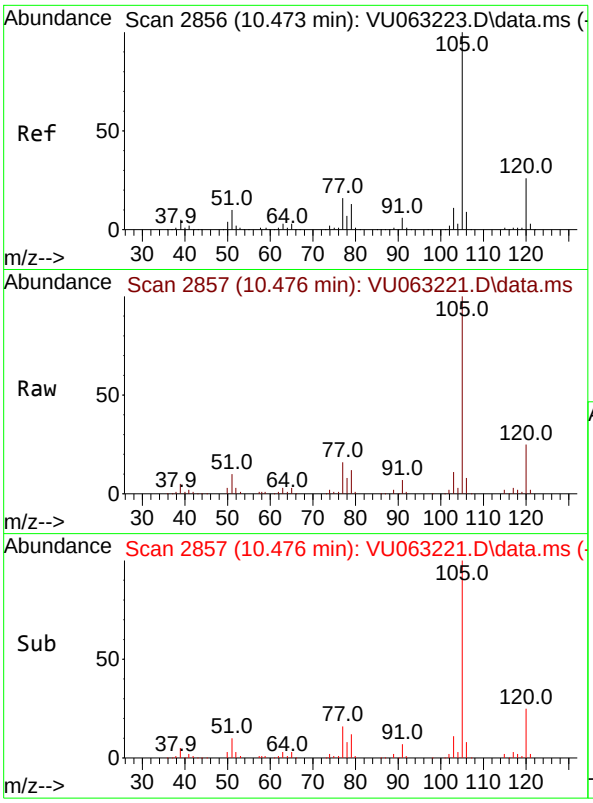


#68
1,2-Dichlorobenzene-d4
Concen: 1.019 ug/l
RT: 12.184 min Scan# 3388
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:152 Resp: 18679

Ion	Ratio	Lower	Upper
152	100		
115	78.6	0.0	275.2
150	189.0	0.0	658.4





#69
Isopropylbenzene
Concen: 1.965 ug/l
RT: 10.476 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:105 Resp: 11607

Ion	Ratio	Lower	Upper
105	100		
120	25.7	12.8	38.4

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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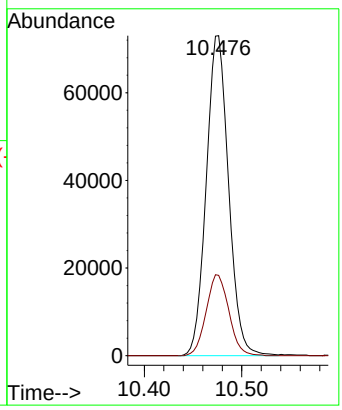
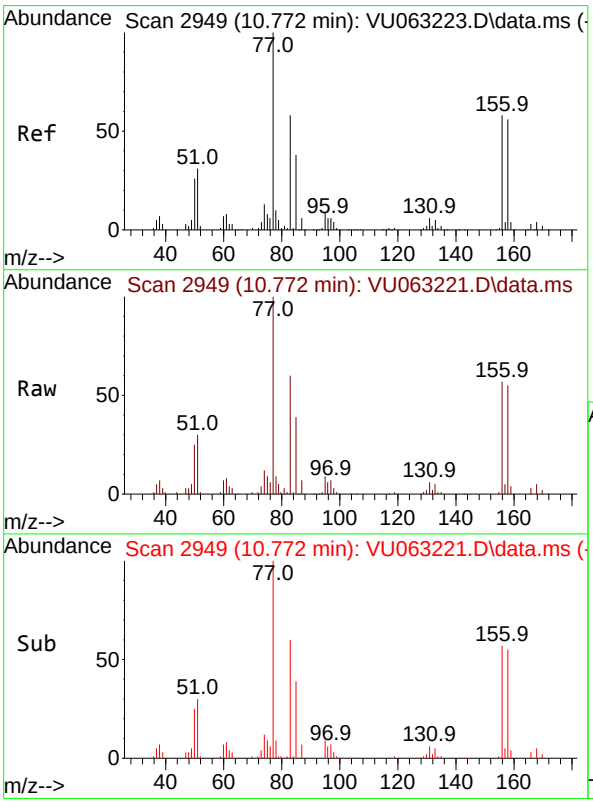
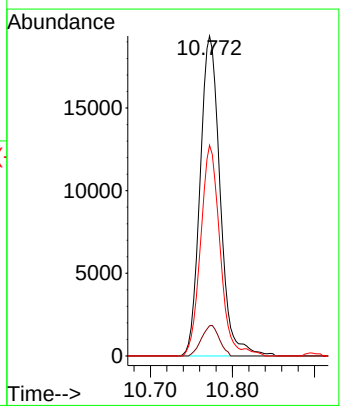


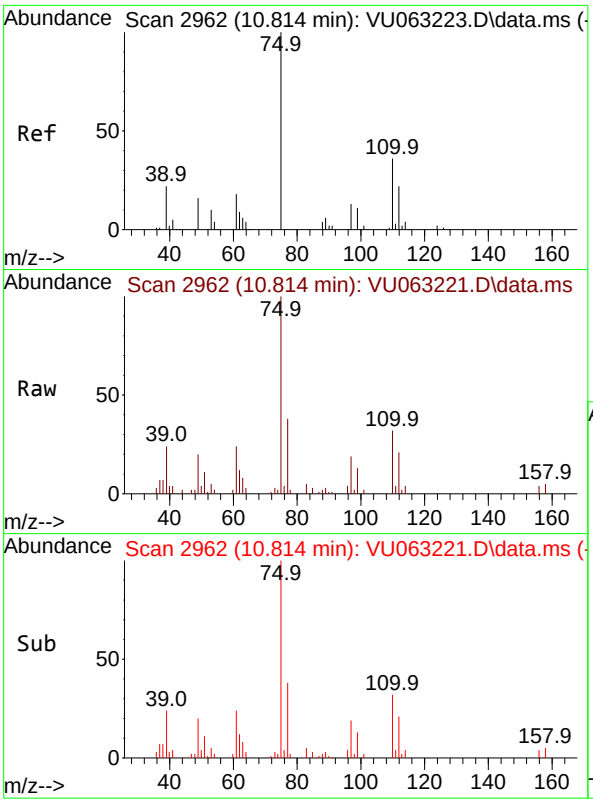


#70
1,1,2,2-Tetrachloroethane
Concen: 2.071 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 83 Resp: 32740

Ion	Ratio	Lower	Upper
83	100		
131	8.5	7.4	11.0
85	64.1	51.8	77.8

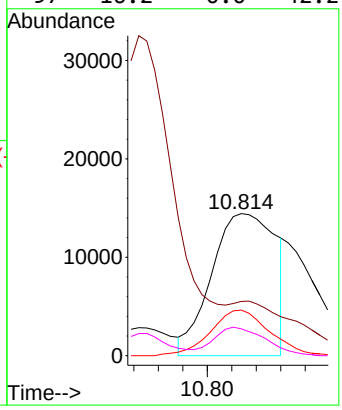




#71
1,2,3-Trichloropropane
Concen: 2.189 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 75 Resp: 2624

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	29.6	0.0	77.0
97	16.2	0.0	42.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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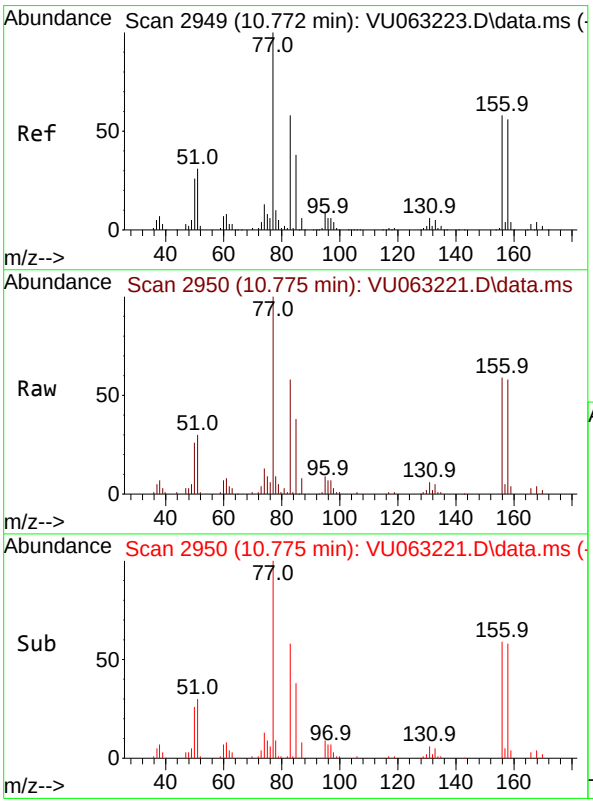
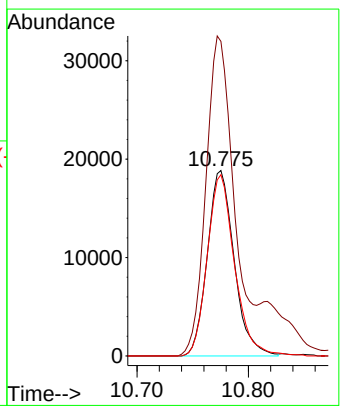
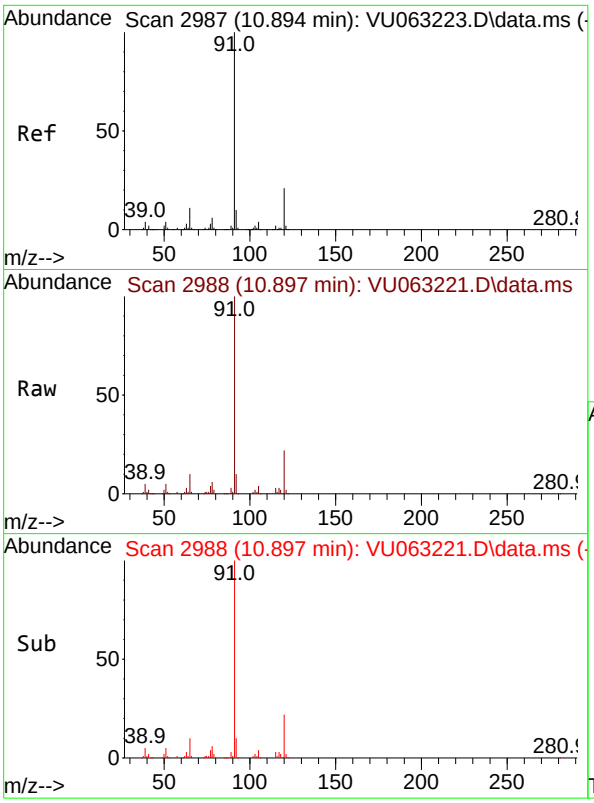


#72
Bromobenzene
Concen: 1.983 ug/l
RT: 10.775 min Scan# 2950
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:156 Resp: 31558

Ion	Ratio	Lower	Upper
156	100		
77	179.9	0.0	343.6
158	99.7	0.0	193.0

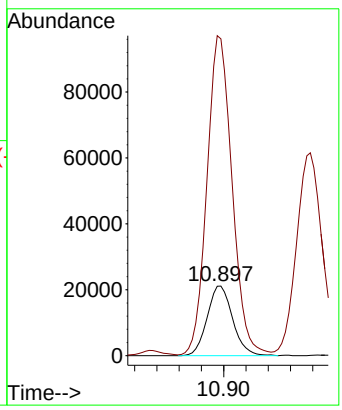




#73
n-propylbenzene
Concen: 1.983 ug/l
RT: 10.897 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:120 Resp: 3353

Ion	Ratio	Lower	Upper
120	100		
91	452.1	369.8	554.6



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations
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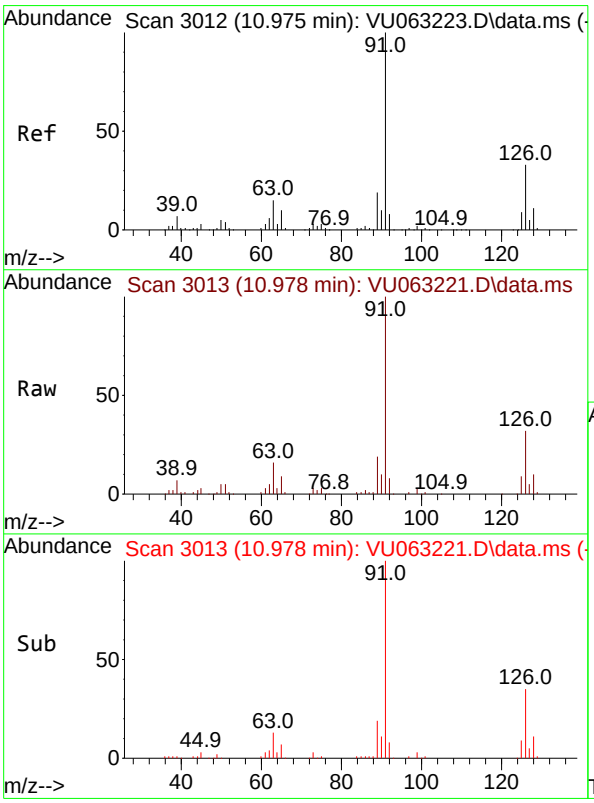
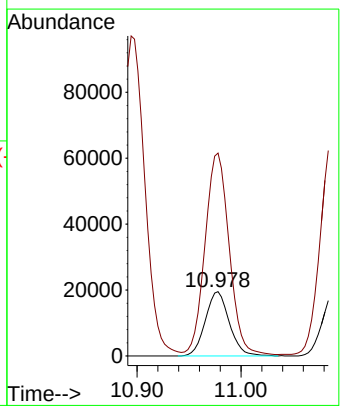
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

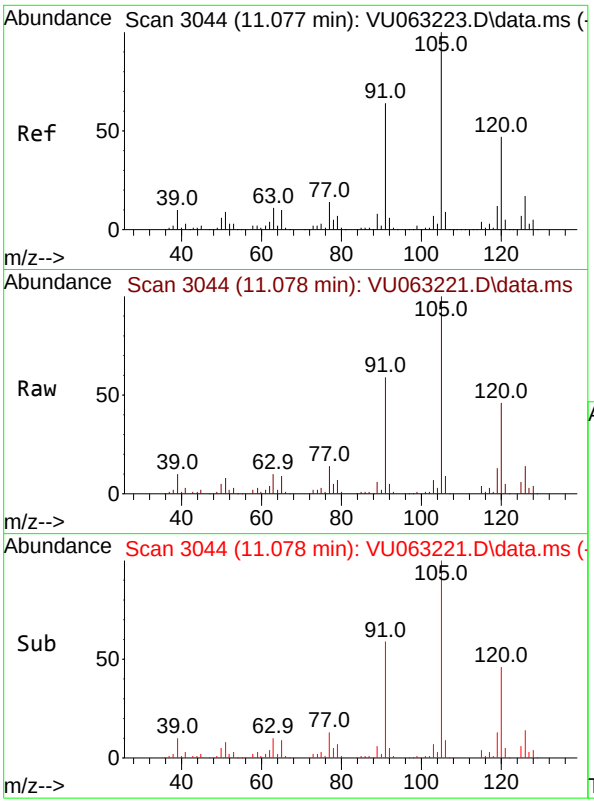


#74
2-Chlorotoluene
Concen: 2.005 ug/l
RT: 10.978 min Scan# 3013
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:126 Resp: 31255

Ion	Ratio	Lower	Upper
126	100		
91	317.2	0.0	623.8

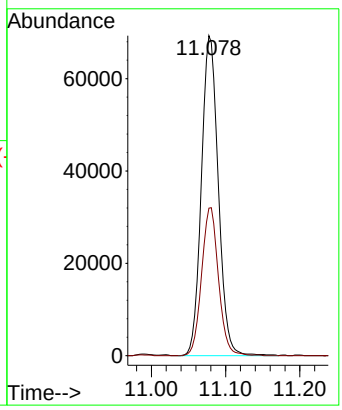




#75
1,3,5-Trimethylbenzene
Concen: 2.000 ug/l
RT: 11.078 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:105 Resp: 10946

Ion	Ratio	Lower	Upper
105	100		
120	46.1	37.3	55.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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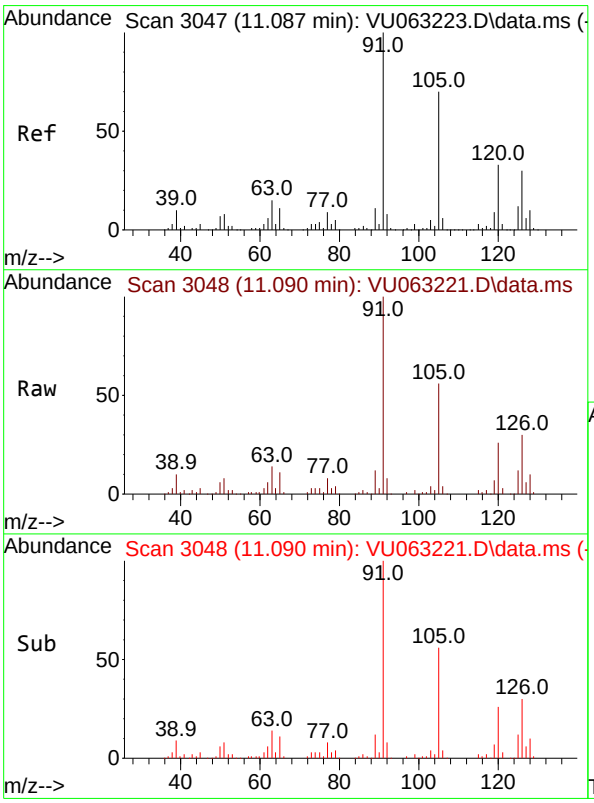
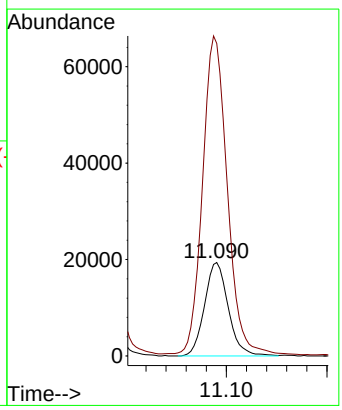
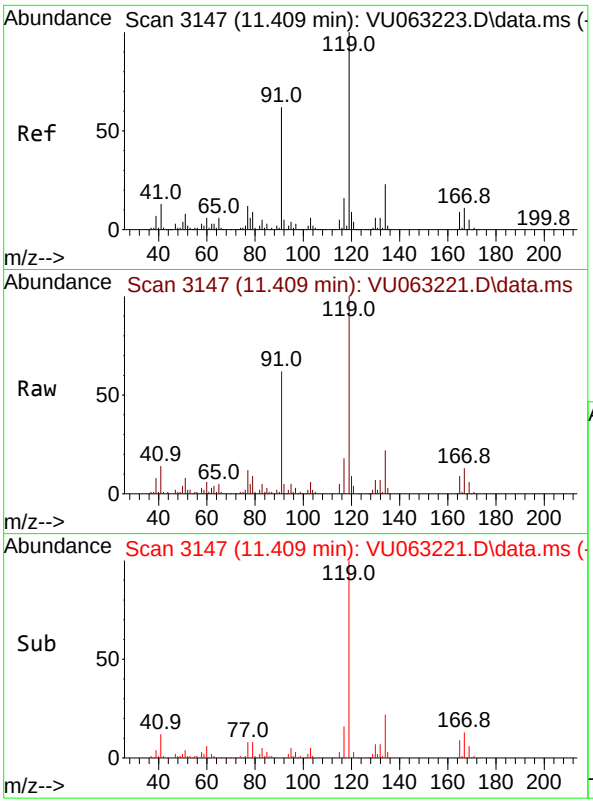


#76
4-Chlorotoluene
Concen: 1.988 ug/l
RT: 11.090 min Scan# 3048
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:126 Resp: 31781

Ion	Ratio	Lower	Upper
126	100		
91	355.9	0.0	703.6

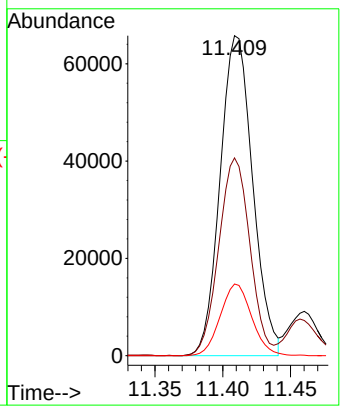




#77
tert-Butylbenzene
Concen: 1.988 ug/l
RT: 11.409 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:119 Resp: 11006

Ion	Ratio	Lower	Upper
119	100		
91	59.1	29.4	88.3
134	21.7	17.6	26.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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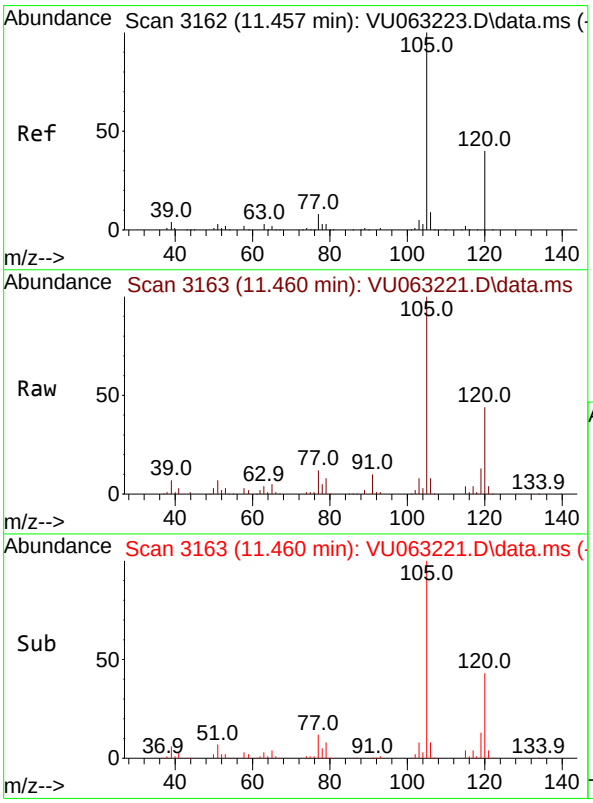
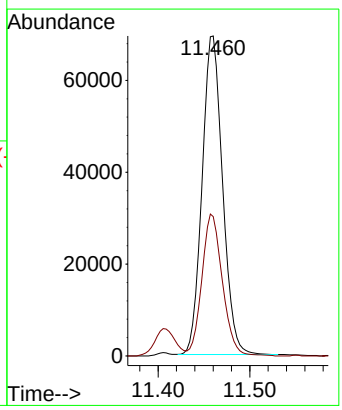
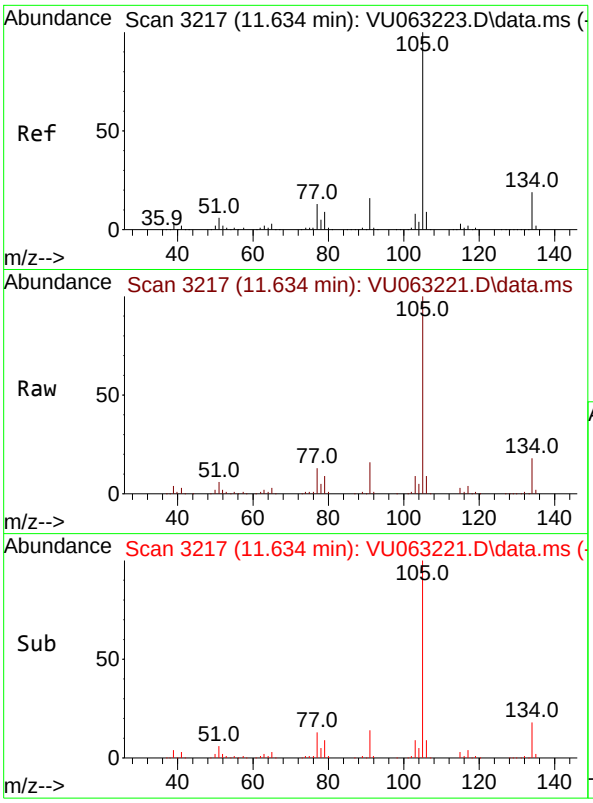


#78
1,2,4-Trimethylbenzene
Concen: 1.985 ug/l
RT: 11.460 min Scan# 3163
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:105 Resp: 107777

Ion	Ratio	Lower	Upper
105	100		
120	44.7	21.9	65.7





#79
sec-Butylbenzene
Concen: 1.998 ug/l
RT: 11.634 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:105 Resp: 14080

Ion	Ratio	Lower	Upper
105	100		
134	18.7	15.1	22.7

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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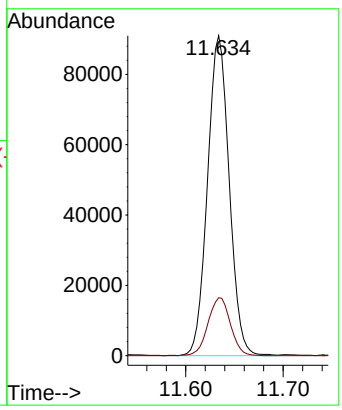
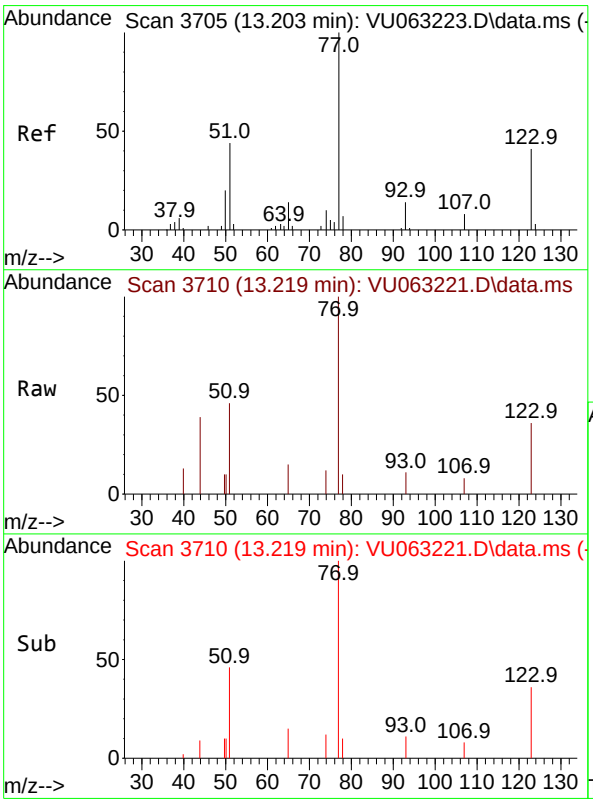
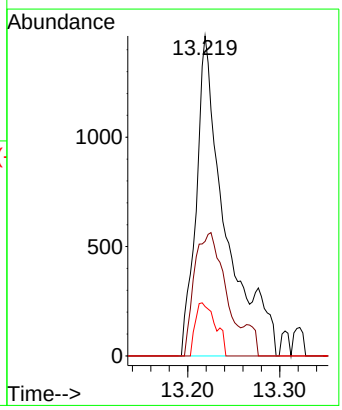


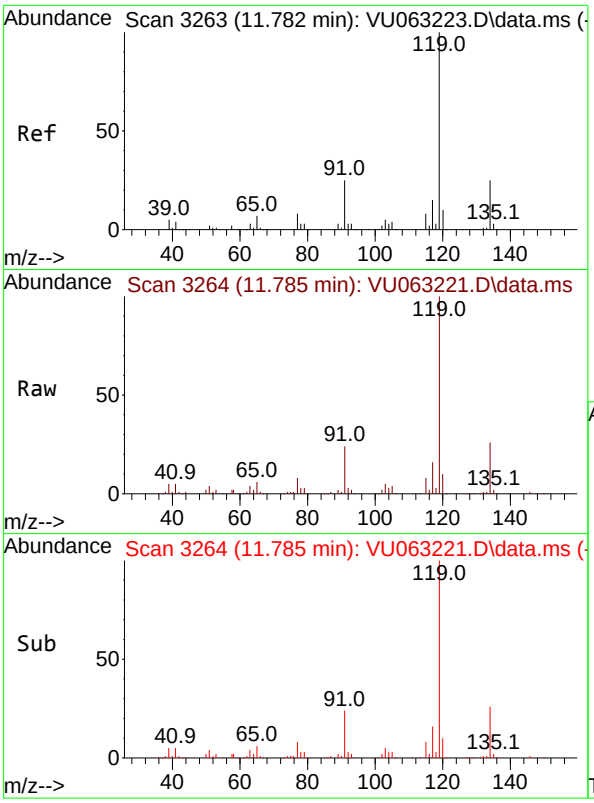


#80
Nitrobenzene
Concen: 10.179 ug/l m
RT: 13.219 min Scan# 3710
Delta R.T. 0.016 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 77 Resp: 3216

Ion	Ratio	Lower	Upper
77	100		
123	32.9	18.9	67.1
65	11.5	11.9	15.1#

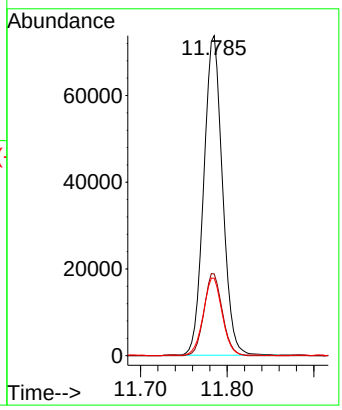




#81
p-Isopropyltoluene
Concen: 1.984 ug/l
RT: 11.785 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:119 Resp: 11037

Ion	Ratio	Lower	Upper
119	100		
134	25.2	20.3	30.5
91	24.2	19.4	29.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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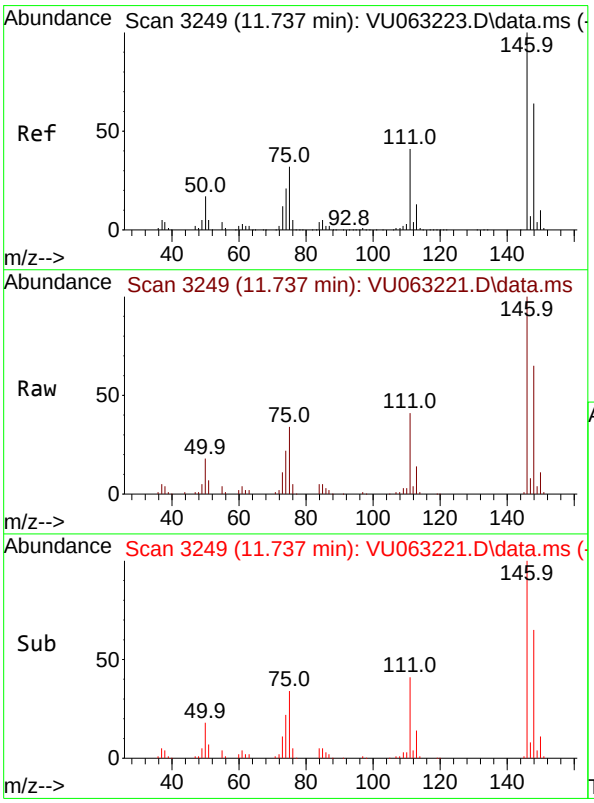
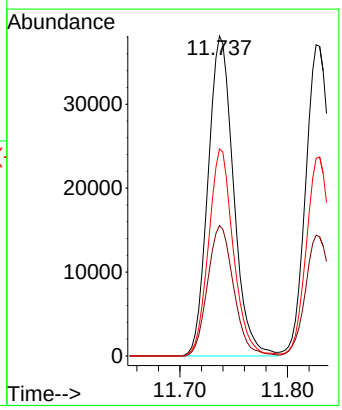
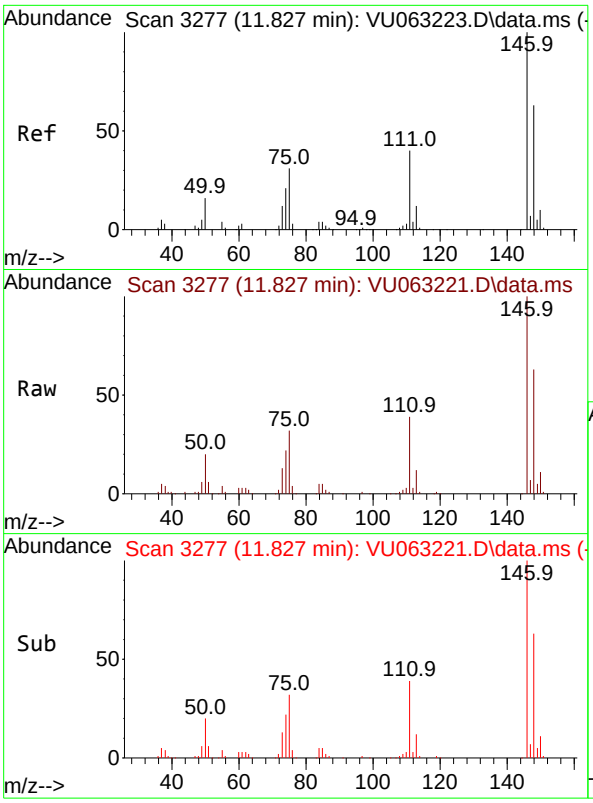


#82
1,3-Dichlorobenzene
Concen: 2.038 ug/l
RT: 11.737 min Scan# 3249
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:146 Resp: 62914

Ion	Ratio	Lower	Upper
146	100		
111	41.4	32.8	49.2
148	63.0	51.1	76.7

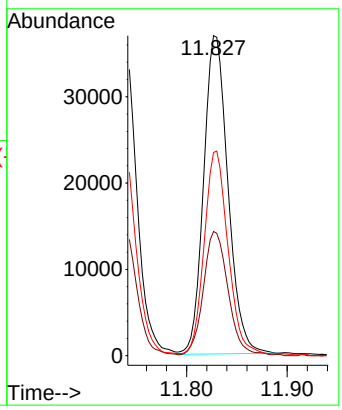




#83
1,4-Dichlorobenzene
Concen: 2.055 ug/l
RT: 11.827 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:146 Resp: 6203

Ion	Ratio	Lower	Upper
146	100		
111	39.9	32.1	48.1
148	62.2	50.2	75.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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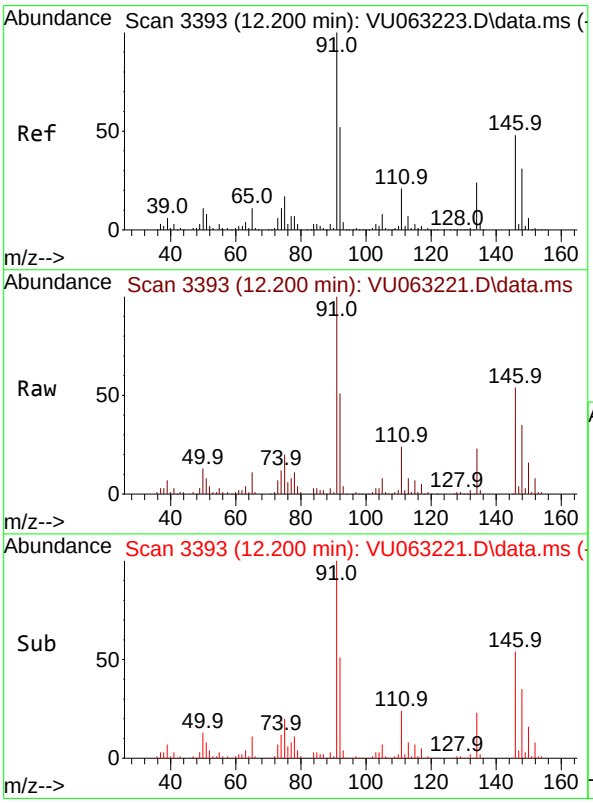
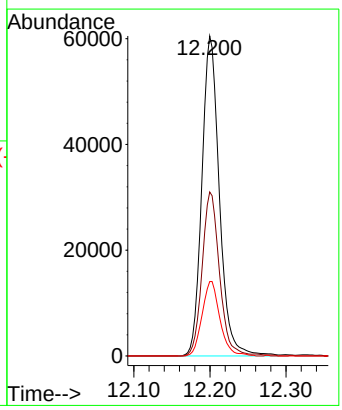
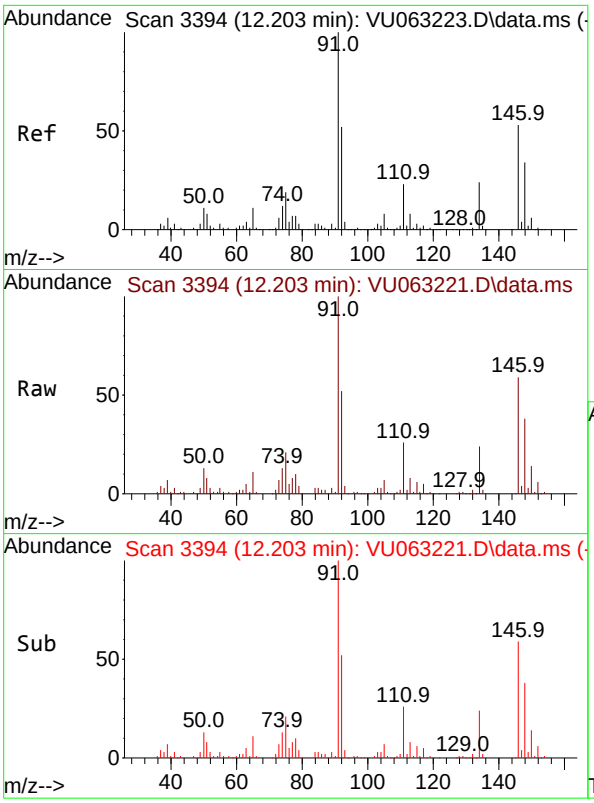


#84
n-Butylbenzene
Concen: 1.933 ug/l
RT: 12.200 min Scan# 3393
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 91 Resp: 96950

Ion	Ratio	Lower	Upper
91	100		
92	51.1	41.8	62.8
134	23.6	18.6	28.0

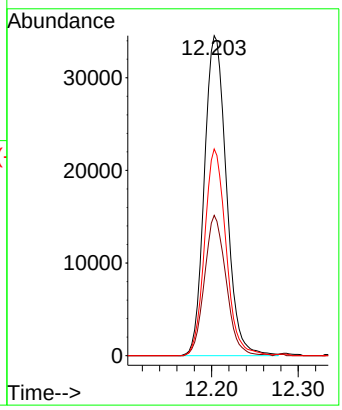




#85
1,2-Dichlorobenzene
Concen: 2.057 ug/l
RT: 12.203 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:146 Resp: 6101

Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.9	65.7
148	62.9	32.3	96.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations
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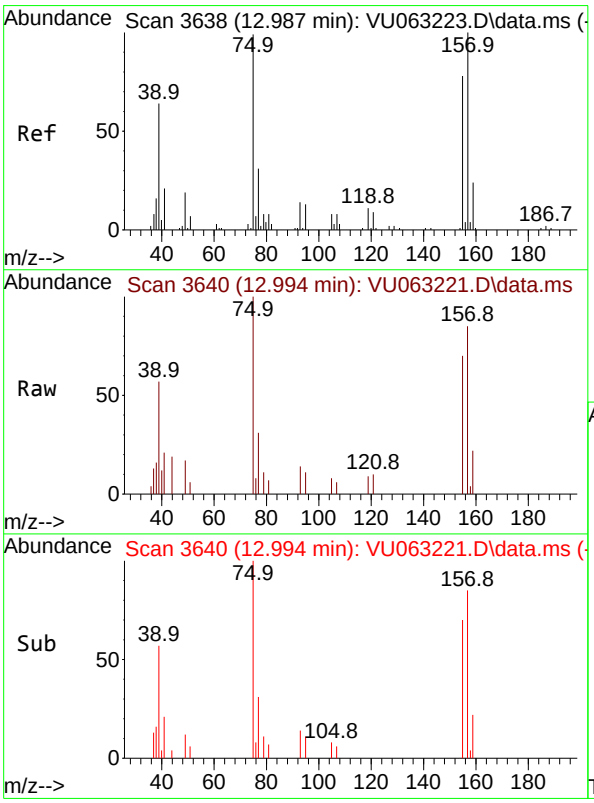
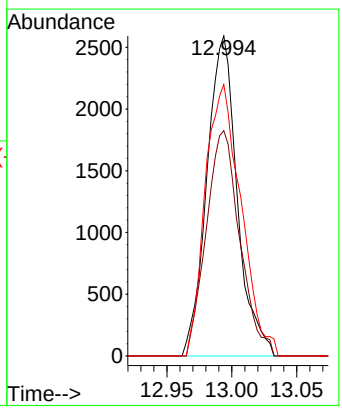
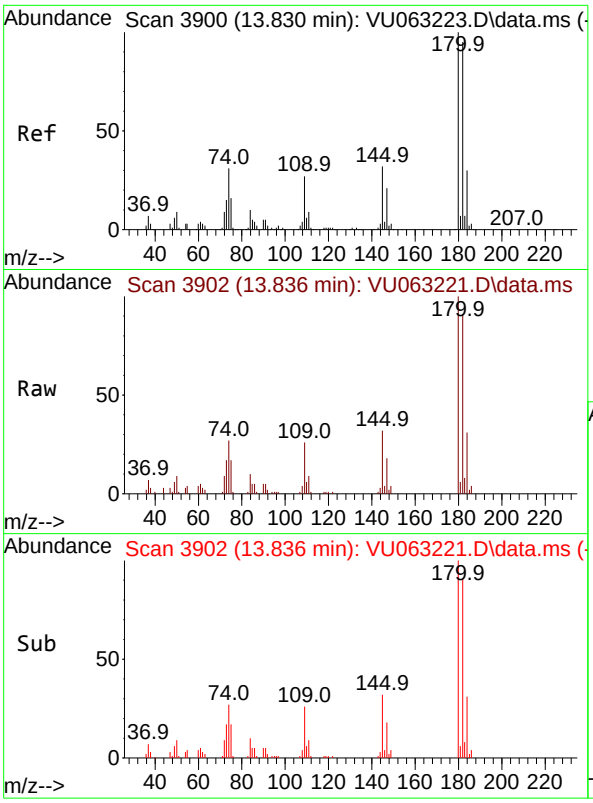


#86
1,2-Dibromo-3-Chloropropane
Concen: 1.894 ug/l
RT: 12.994 min Scan# 3640
Delta R.T. 0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion: 75 Resp: 4203

Ion	Ratio	Lower	Upper
75	100		
155	77.8	63.5	95.3
157	99.9	81.8	122.6

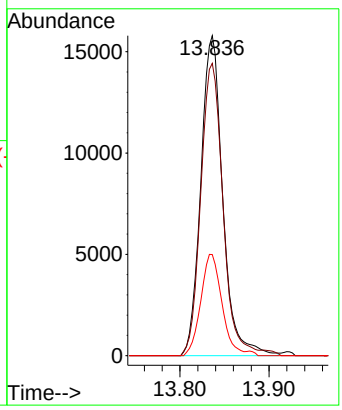




#87
1,2,4-Trichlorobenzene
Concen: 1.867 ug/l
RT: 13.836 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:180 Resp: 2702

Ion	Ratio	Lower	Upper
180	100		
182	93.1	76.6	115.0
145	30.9	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

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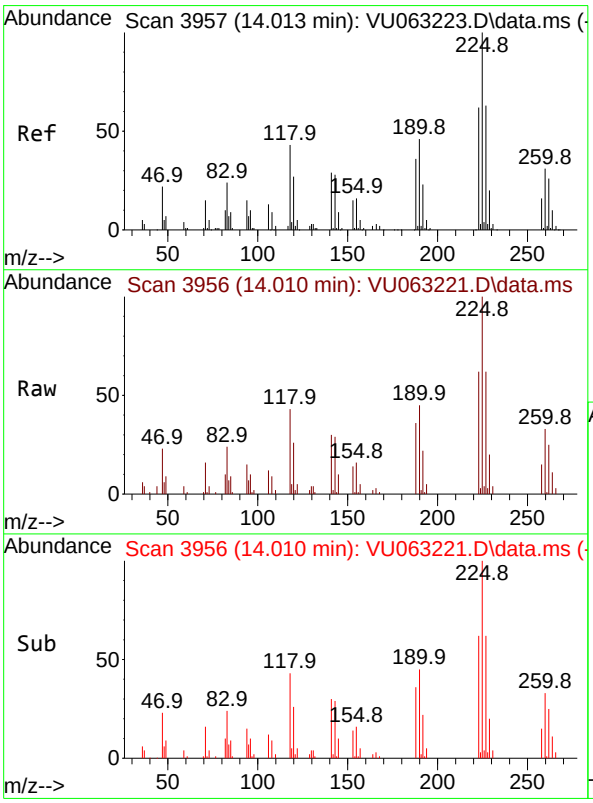
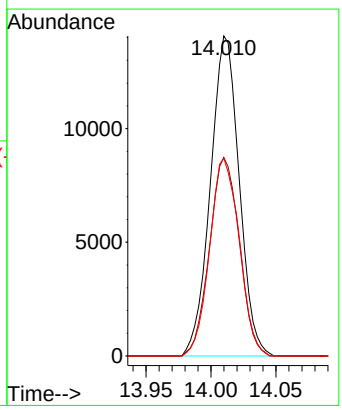
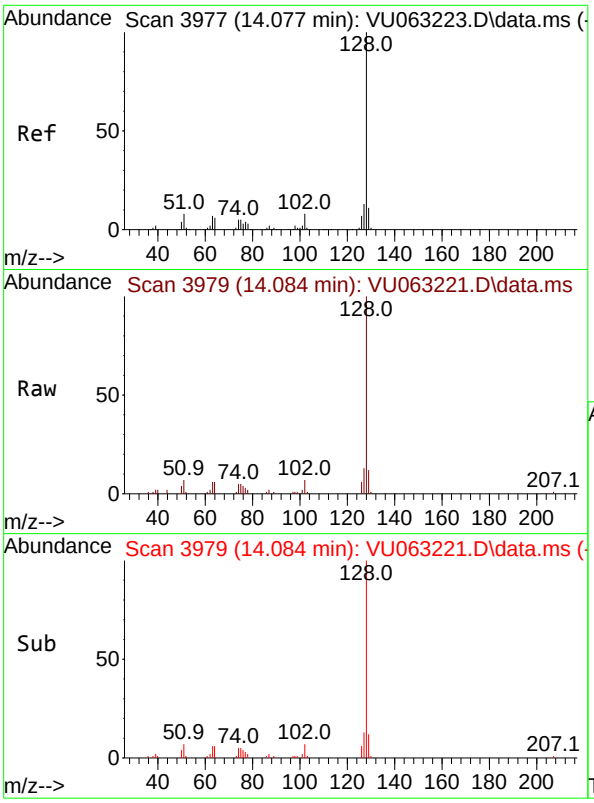


#88
Hexachlorobutadiene
Concen: 2.094 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:225 Resp: 21652

Ion	Ratio	Lower	Upper
225	100		
223	64.0	49.5	74.3
227	63.7	51.0	76.4

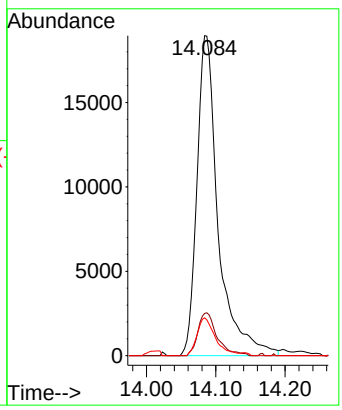




#89
Naphthalene
Concen: 1.891 ug/l
RT: 14.084 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:128 Resp: 4045

Ion	Ratio	Lower	Upper
128	100		
127	12.1	10.6	16.0
129	10.2	8.6	13.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

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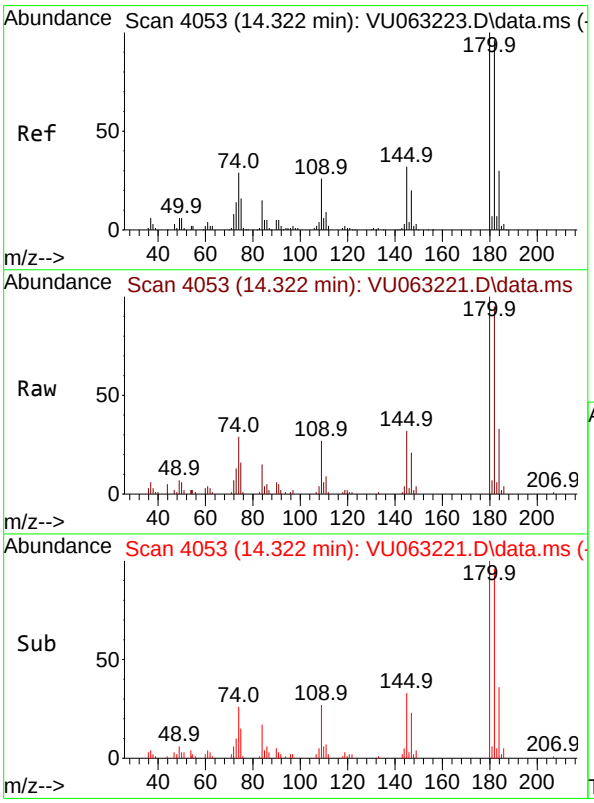
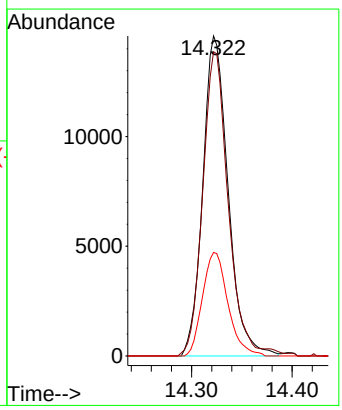


#90
1,2,3-Trichlorobenzene
Concen: 1.801 ug/l
RT: 14.322 min Scan# 4053
Delta R.T. 0.000 min
Lab File: VU063221.D
Acq: 10 Feb 2025 13:58

Tgt Ion:180 Resp: 25501

Ion	Ratio	Lower	Upper
180	100		
182	96.0	78.2	117.2
145	32.5	26.1	39.1



Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063222.D
Acq On : 10 Feb 2025 14:23
Operator : MD/SY
Sample : VSTDICC005
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 03:59:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.103	96	55729	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.624	95	17913	0.974	ug/l	0.00
Spiked Amount 1.000			Recovery = 97.000%			
68) 1,2-Dichlorobenzene-d4	12.184	152	18704	0.978	ug/l	0.00
Spiked Amount 1.000			Recovery = 98.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.380	85	90512	4.999	ug/l	99
3) Chloromethane	1.518	50	102545	4.918	ug/l	99
4) Vinyl Chloride	1.599	62	104693	5.075	ug/l	99
5) Bromomethane	1.843	94	52801	5.534	ug/l	99
6) Chloroethane	1.924	64	62097	4.779	ug/l	98
7) Trichlorofluoromethane	2.129	101	123320	5.044	ug/l	100
8) 1,1,2-Trichloro-1,2,2-...	2.570	101	69588	5.015	ug/l	99
9) 1,1-Dichloroethene	2.567	96	69679	4.928	ug/l	96
10) Iodomethane	2.708	142	114428	5.148	ug/l	100
11) Allyl Chloride	2.911	41	101481	4.996	ug/l	100
12) Acrylonitrile	3.306	53	33591	10.453	ug/l	99
13) Acetone	2.612	43	58550	23.349	ug/l	96
14) Carbon Disulfide	2.782	76	242244	4.900	ug/l	100
15) Methylene Chloride	3.033	84	86216	4.936	ug/l	99
16) trans-1,2-Dichloroethene	3.338	96	80123	4.965	ug/l	98
17) 1,1-Dichloroethane	3.853	63	152899	5.027	ug/l	100
18) 2-Butanone	4.689	43	98391	24.289	ug/l	97
19) Cyclohexane	5.374	56	127410m	5.213	ug/l	
20) Methylcyclohexane	6.750	83	128499	5.302	ug/l	100
21) 2,2-Dichloropropane	4.647	77	117171	4.938	ug/l	98
22) cis-1,2-Dichloroethene	4.653	96	87987	5.046	ug/l	98
23) Diethyl Ether	2.364	59	60657	5.000	ug/l	97
24) tert-Butyl Alcohol	3.161	59	61281	45.943	ug/l	98
25) Methyl tert-Butyl Ether	3.348	73	178876	5.066	ug/l	99
26) Bromochloromethane	4.959	128	38617	5.067	ug/l	99
27) Chloroform	5.071	83	155011	5.050	ug/l	99
28) 1,1,1-Trichloroethane	5.300	97	127899	5.144	ug/l	99
29) 1,1-Dichloropropene	5.512	75	112514	5.052	ug/l	99
30) Carbon Tetrachloride	5.509	117	106762	5.007	ug/l	97
31) Isopropyl Ether	3.975	45	218715	5.037	ug/l	97
32) Ethyl-t-butyl ether	4.486	59	202182	5.120	ug/l	100
33) Tert-Amyl methyl ether	5.927	73	177493	5.144	ug/l	98
34) Propionitrile	4.759	54	31294	24.919	ug/l	96
35) Benzene	5.759	78	349985	5.111	ug/l	100
36) 1,2-Dichloroethane	5.779	62	99553	5.037	ug/l	99
37) Trichloroethene	6.531	130	80810	4.962	ug/l	93
38) 1,2-Dichloropropane	6.779	63	90072	5.026	ug/l	98
39) Methacrylonitrile	4.962	41	24242	5.404	ug/l	97
40) Methyl acrylate	4.840	55	43877m	5.358	ug/l	
41) Tetrahydrofuran	5.042	42	24329	9.229	ug/l	97
42) 1-Chlorobutane	5.444	56	160975	5.283	ug/l	98
43) Dibromomethane	6.907	93	45659	5.031	ug/l	97
44) Bromodichloromethane	7.094	83	109612	5.189	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063222.D
Acq On : 10 Feb 2025 14:23
Operator : MD/SY
Sample : VSTDICC005
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 03:59:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 4-Methyl-2-Pentanone	7.779	43	245466	25.799	ug/l	99
46) t-1,4-Dichloro-2-butene	10.824	75	40225m	8.544	ug/l	
47) Methyl methacrylate	6.949	69	82725	10.822	ug/l	97
48) Ethyl methacrylate	8.322	69	75186	5.238	ug/l	99
49) Toluene	7.959	92	207542	5.270	ug/l	100
50) t-1,3-Dichloropropene	8.200	75	100975	5.221	ug/l	99
51) cis-1,3-Dichloropropene	7.595	75	121107	5.070	ug/l	96
52) 1,1,2-Trichloroethane	8.386	97	61701	5.042	ug/l	98
53) 1,3-Dichloropropane	8.563	76	111566	5.136	ug/l	99
54) 2-Hexanone	8.672	43	163849	25.235	ug/l	98
55) Dibromochloromethane	8.798	129	71240	5.061	ug/l	98
56) 1,2-Dibromoethane	8.914	107	58284	5.079	ug/l	99
58) Tetrachloroethene	8.544	164	69703	5.194	ug/l	97
59) Chlorobenzene	9.438	112	215989	5.198	ug/l	99
60) 1,1,1,2-Tetrachloroethane	9.521	131	74952	5.018	ug/l	98
61) Pentachloroethane	11.415	117	66930	5.016	ug/l	96
62) Hexachloroethane	12.463	117	58399	4.947	ug/l	99
63) Ethyl Benzene	9.560	91	379921	5.301	ug/l	99
64) m/p-Xylenes	9.682	106	293404	10.960	ug/l	99
65) o-Xylene	10.090	106	139940	5.340	ug/l	98
66) Styrene	10.103	104	227199	5.448	ug/l	99
67) Bromoform	10.280	173	40369	5.053	ug/l	99
69) Isopropylbenzene	10.473	105	329990	5.356	ug/l	99
70) 1,1,2,2-Tetrachloroethane	10.769	83	81338	4.932	ug/l	99
71) 1,2,3-Trichloropropane	10.814	75	59228m	4.736	ug/l	
72) Bromobenzene	10.772	156	85960	5.178	ug/l	98
73) n-propylbenzene	10.894	120	95937	5.439	ug/l	99
74) 2-Chlorotoluene	10.975	126	87769	5.399	ug/l	98
75) 1,3,5-Trimethylbenzene	11.078	105	313345	5.489	ug/l	100
76) 4-Chlorotoluene	11.087	126	89247	5.353	ug/l	99
77) tert-Butylbenzene	11.409	119	299259	5.183	ug/l	99
78) 1,2,4-Trimethylbenzene	11.457	105	313777	5.539	ug/l	99
79) sec-Butylbenzene	11.634	105	394157	5.362	ug/l	99
80) Nitrobenzene	13.209	77	10183m	23.083	ug/l	
81) p-Isopropyltoluene	11.782	119	316807	5.461	ug/l	100
82) 1,3-Dichlorobenzene	11.737	146	164073	5.096	ug/l	99
83) 1,4-Dichlorobenzene	11.827	146	165157	5.244	ug/l	99
84) n-Butylbenzene	12.200	91	276461	5.285	ug/l	98
85) 1,2-Dichlorobenzene	12.203	146	156956	5.072	ug/l	100
86) 1,2-Dibromo-3-Chloropr...	12.987	75	12084	5.220	ug/l	96
87) 1,2,4-Trichlorobenzene	13.830	180	78516	5.203	ug/l	98
88) Hexachlorobutadiene	14.010	225	53269	4.939	ug/l	99
89) Naphthalene	14.081	128	122840	4.286	ug/l	99
90) 1,2,3-Trichlorobenzene	14.319	180	76620	5.189	ug/l	98

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

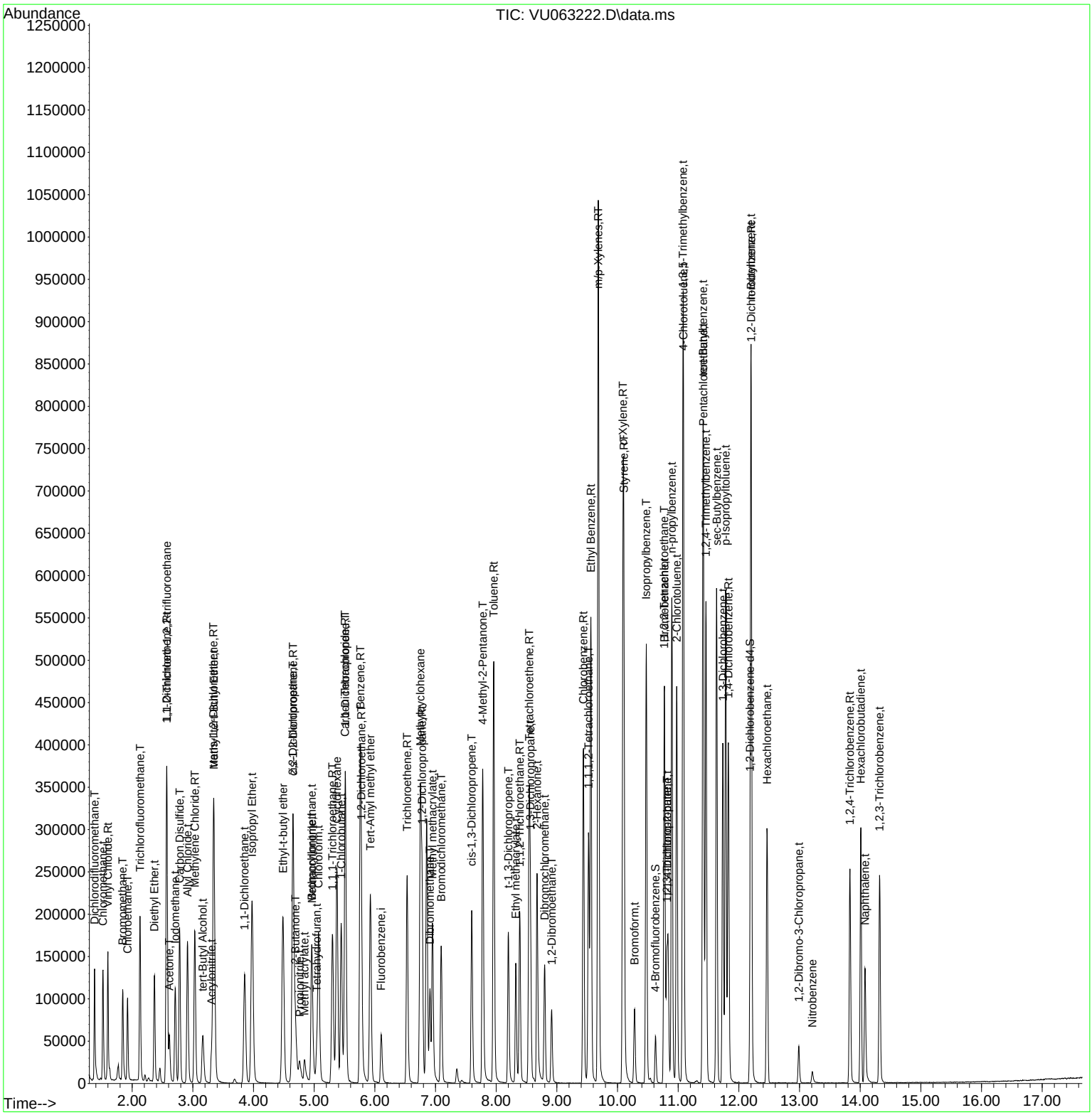
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063222.D
Acq On : 10 Feb 2025 14:23
Operator : MD/SY
Sample : VSTDICC005
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 6 Sample Multiplier: 1

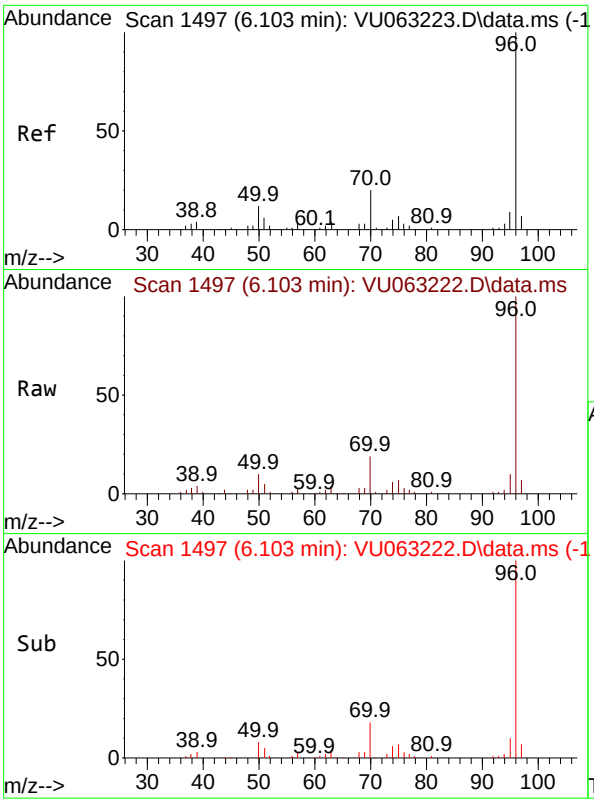
Quant Time: Feb 11 03:59:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

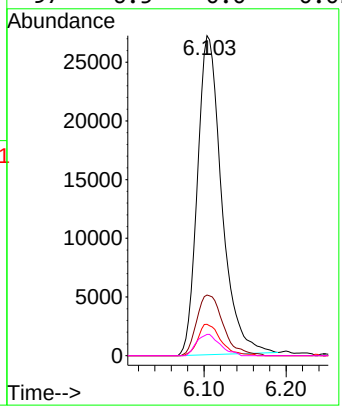




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.103 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 96 Resp: 5572

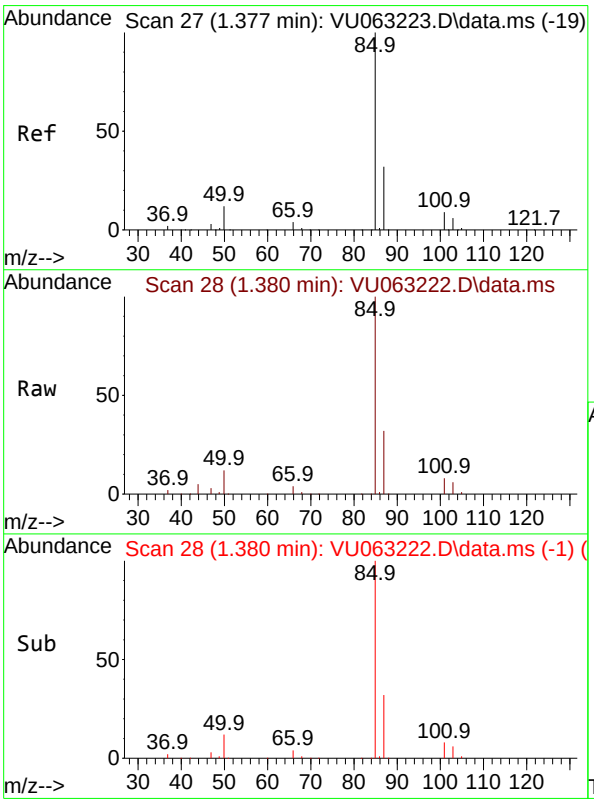
Ion	Ratio	Lower	Upper
96	100		
70	20.8	15.6	23.4
95	9.3	7.3	10.9
97	6.5	0.0	0.0#



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

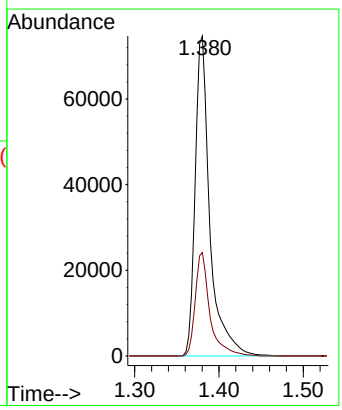
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

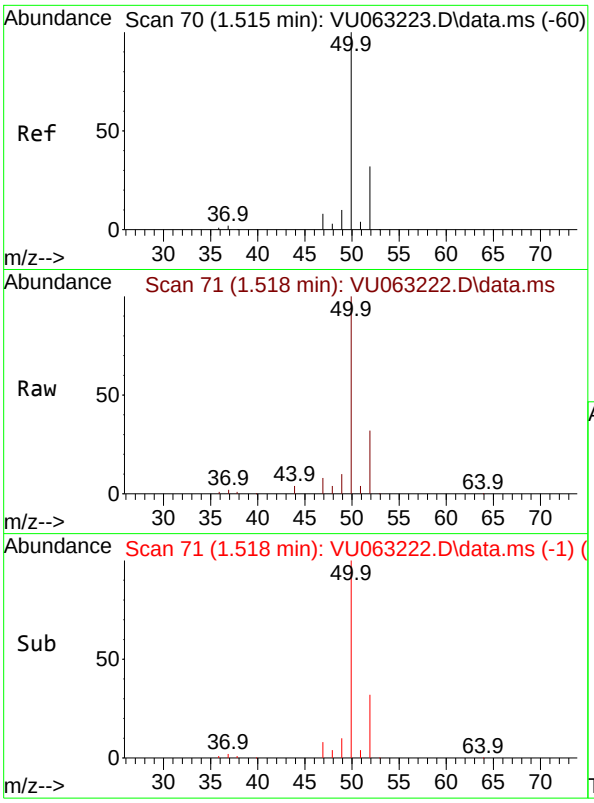


#2
Dichlorodifluoromethane
Concen: 4.999 ug/l
RT: 1.380 min Scan# 28
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 85 Resp: 90512

Ion	Ratio	Lower	Upper
85	100		
87	32.3	16.0	48.0

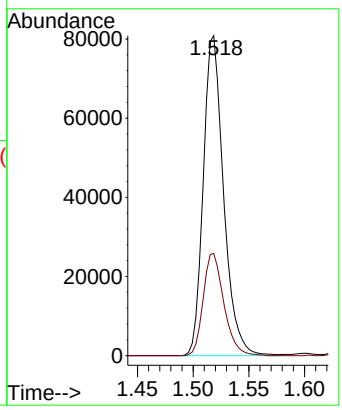




#3
Chloromethane
Concen: 4.918 ug/l
RT: 1.518 min Scan# 7
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 50 Resp: 10254

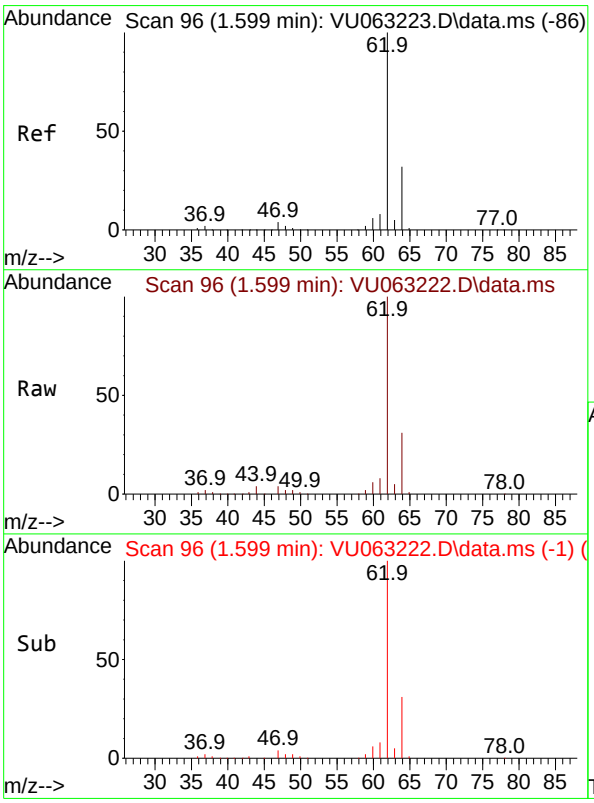
Ion	Ratio	Lower	Upper
50	100		
52	31.9	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

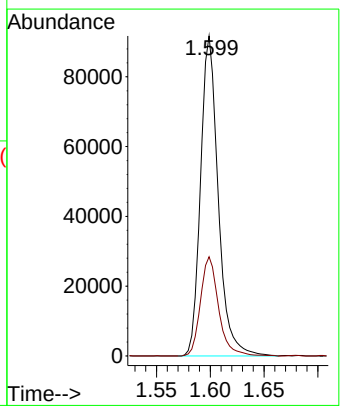
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

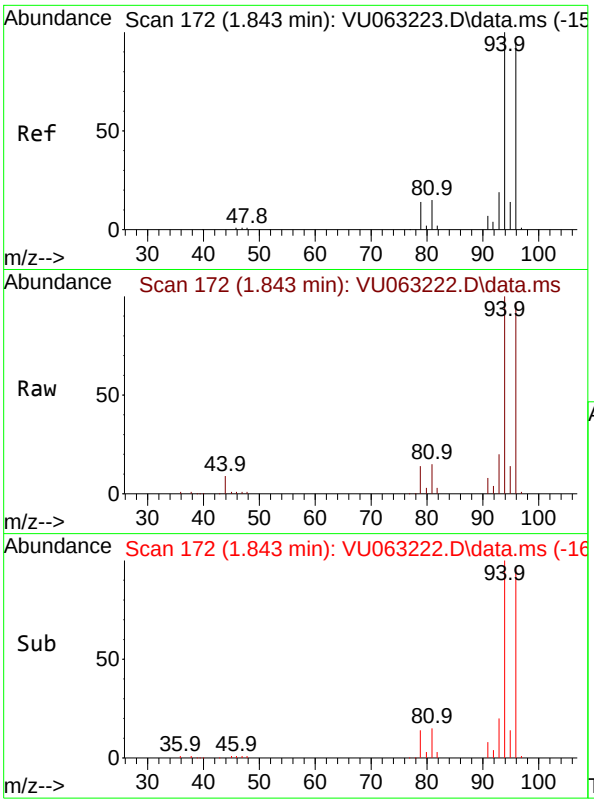


#4
Vinyl Chloride
Concen: 5.075 ug/l
RT: 1.599 min Scan# 96
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 62 Resp: 104693

Ion	Ratio	Lower	Upper
62	100		
64	31.0	25.4	38.0

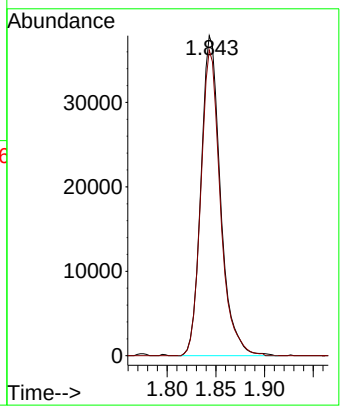




#5
Bromomethane
Concen: 5.534 ug/l
RT: 1.843 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 94 Resp: 5280

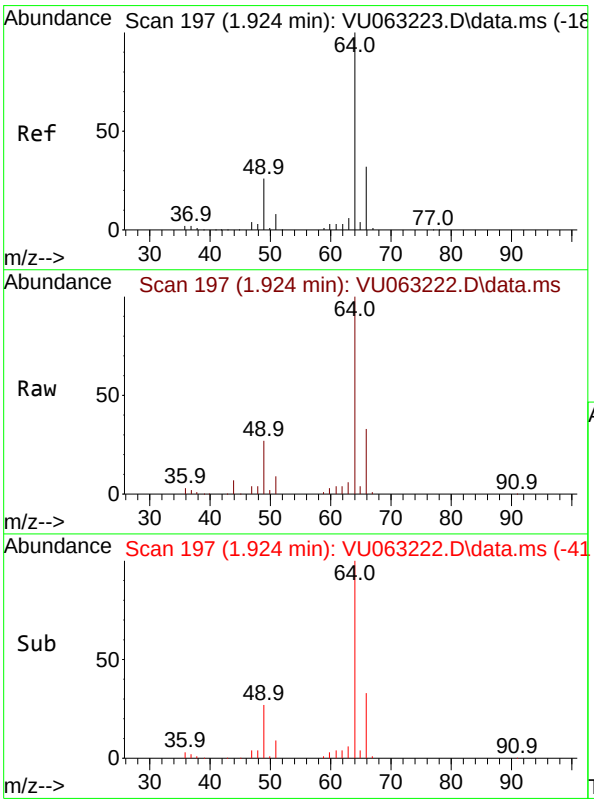
Ion	Ratio	Lower	Upper
94	100		
96	95.6	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

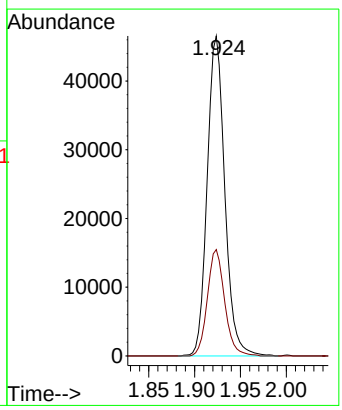
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

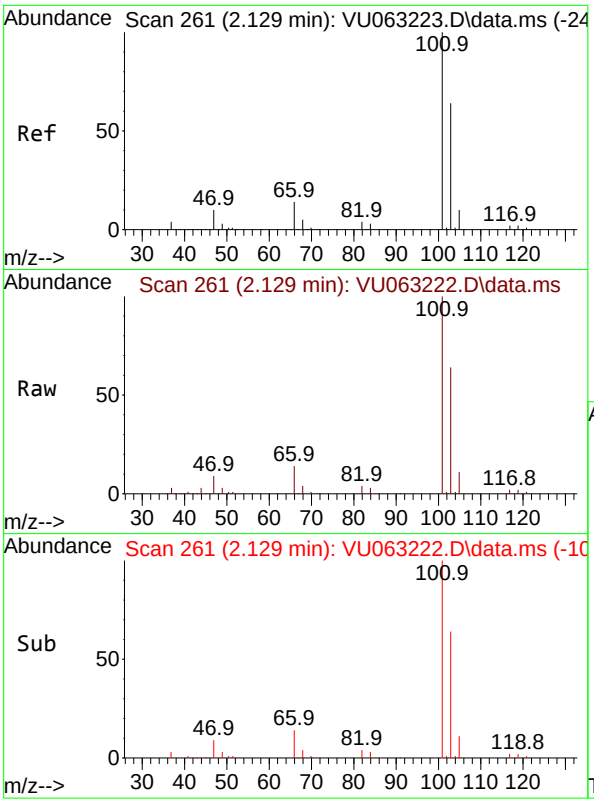


#6
Chloroethane
Concen: 4.779 ug/l
RT: 1.924 min Scan# 197
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 64 Resp: 62097

Ion	Ratio	Lower	Upper
64	100		
66	33.3	25.8	38.8





#7
Trichlorofluoromethane
Concen: 5.044 ug/l
RT: 2.129 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

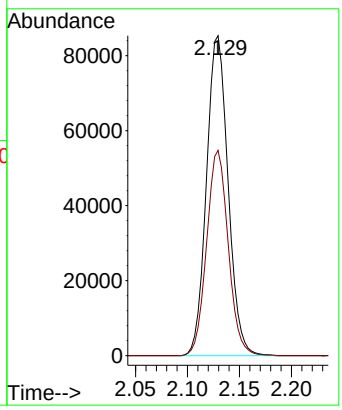
Tgt Ion:101 Resp: 12332

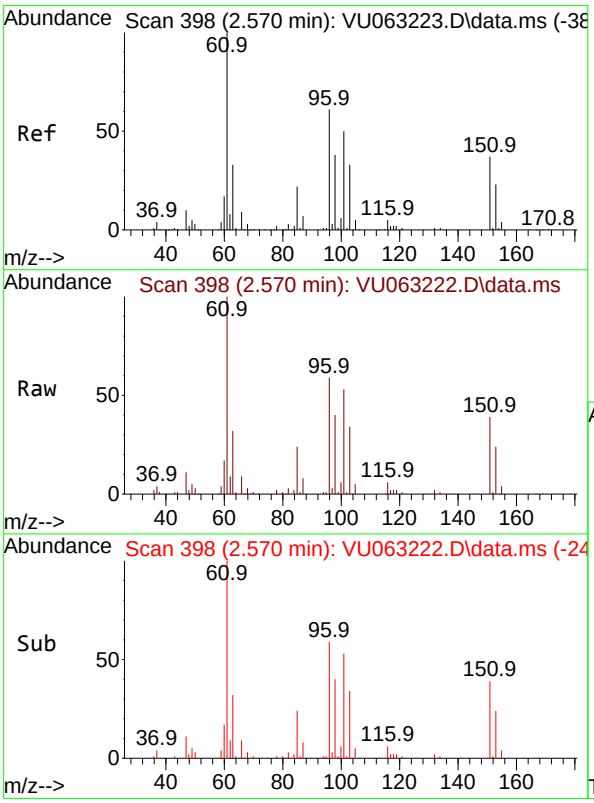
Ion	Ratio	Lower	Upper
101	100		
103	64.1	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

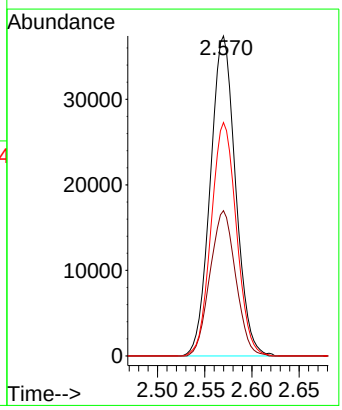


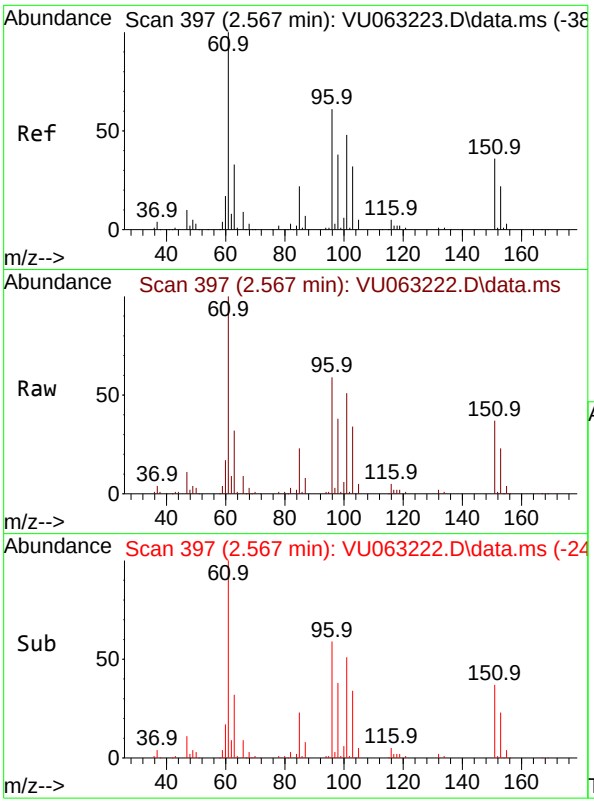


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 5.015 ug/l
RT: 2.570 min Scan# 398
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:101 Resp: 69588

Ion	Ratio	Lower	Upper
101	100		
85	46.1	35.4	53.0
151	72.8	58.5	87.7

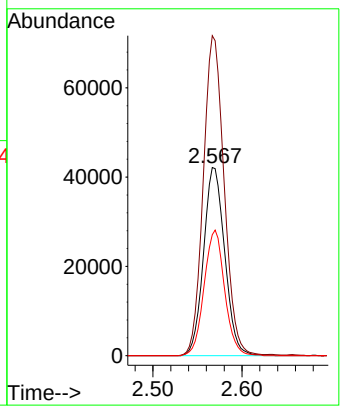




#9
1,1-Dichloroethene
Concen: 4.928 ug/l
RT: 2.567 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 96 Resp: 6967

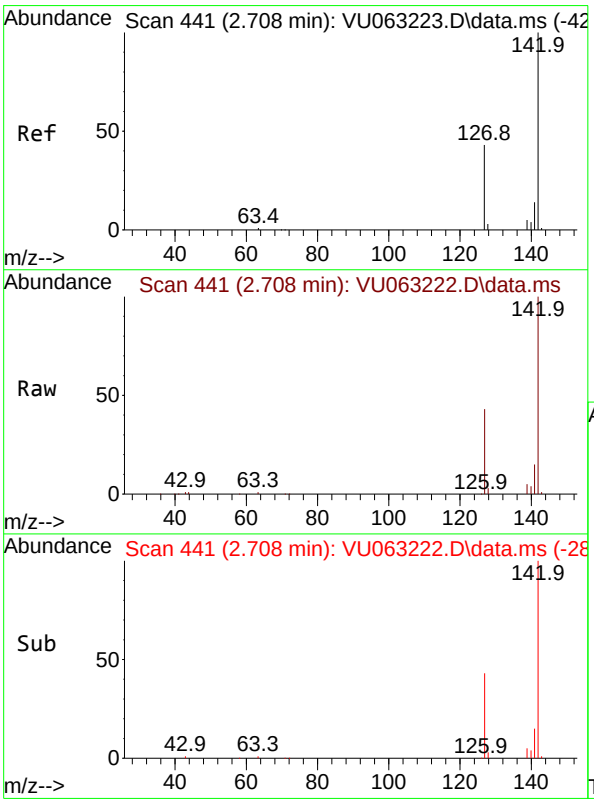
Ion	Ratio	Lower	Upper
96	100		
61	170.1	0.0	492.9
98	64.3	0.0	124.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

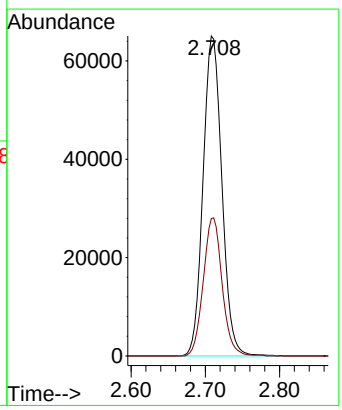
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

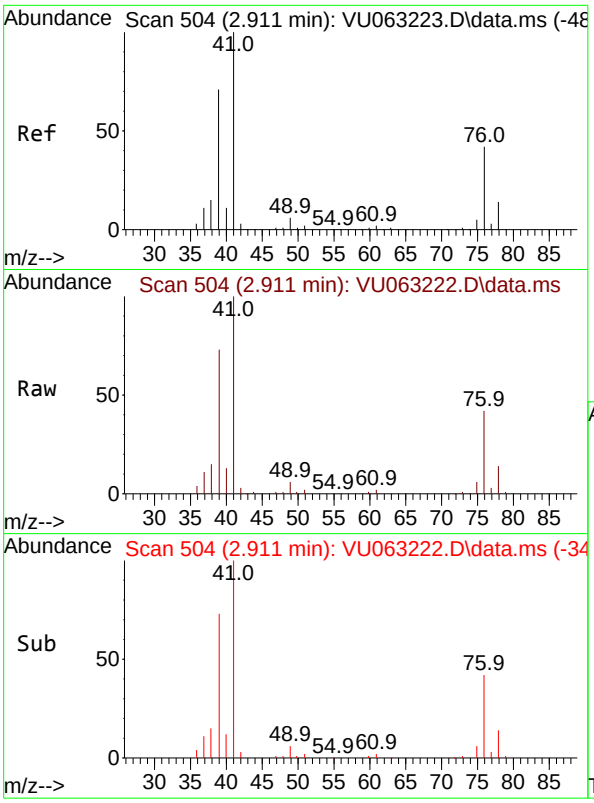


#10
Iodomethane
Concen: 5.148 ug/l
RT: 2.708 min Scan# 441
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:142 Resp: 114428

Ion	Ratio	Lower	Upper
142	100		
127	43.1	34.5	51.7

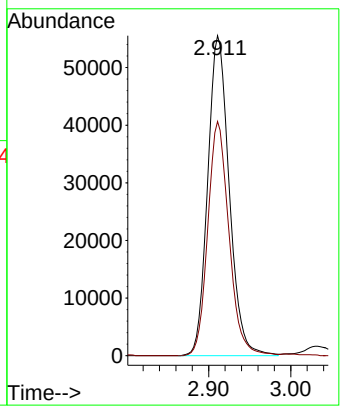




#11
Allyl Chloride
Concen: 4.996 ug/l
RT: 2.911 min Scan# 5
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 41 Resp: 10148

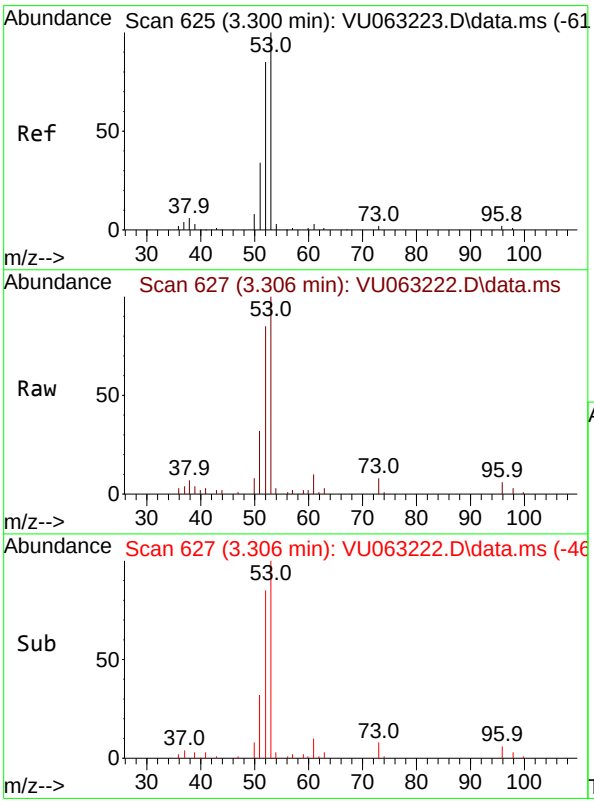
Ion	Ratio	Lower	Upper
41	100		
39	72.1	57.9	86.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

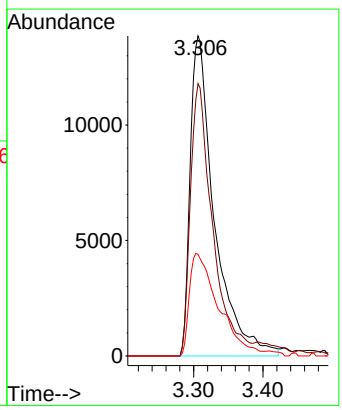
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

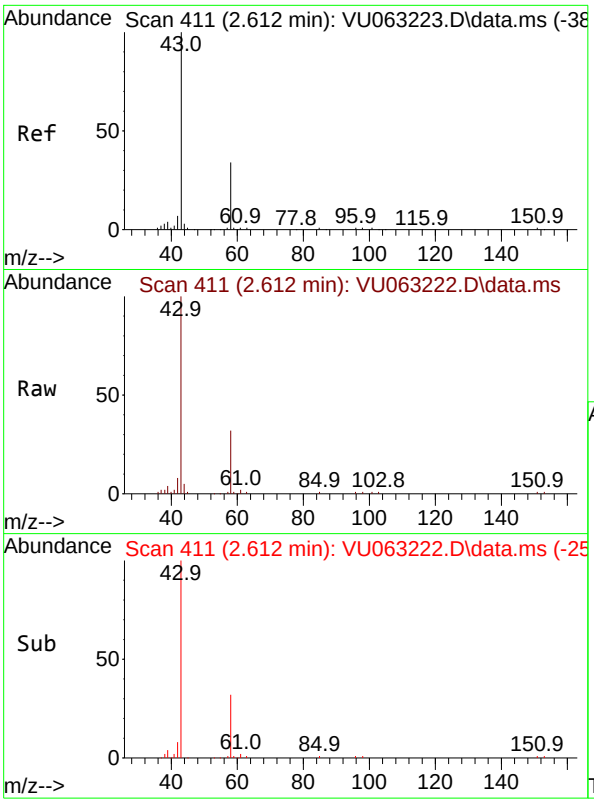


#12
Acrylonitrile
Concen: 10.453 ug/l
RT: 3.306 min Scan# 627
Delta R.T. 0.006 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 53 Resp: 33591

Ion	Ratio	Lower	Upper
53	100		
52	78.3	64.2	96.2
51	38.5	30.8	46.2

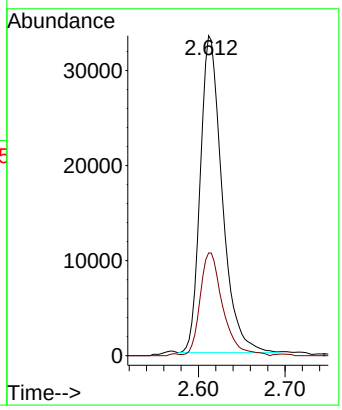




#13
Acetone
Concen: 23.349 ug/l
RT: 2.612 min Scan# 4
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 43 Resp: 5855

Ion	Ratio	Lower	Upper
43	100		
58	32.0	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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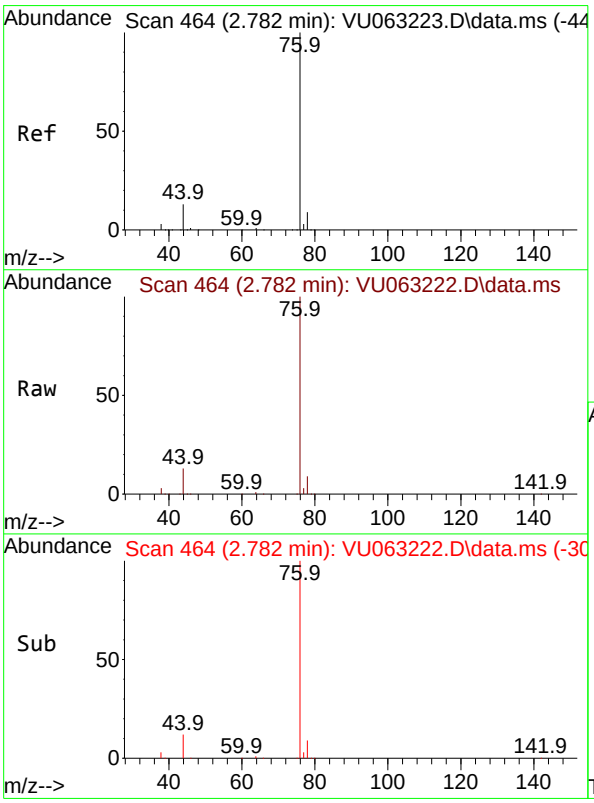
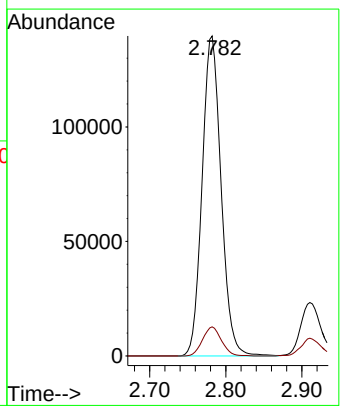
Supervised By :Mahesh Dadoda 02/12/2025

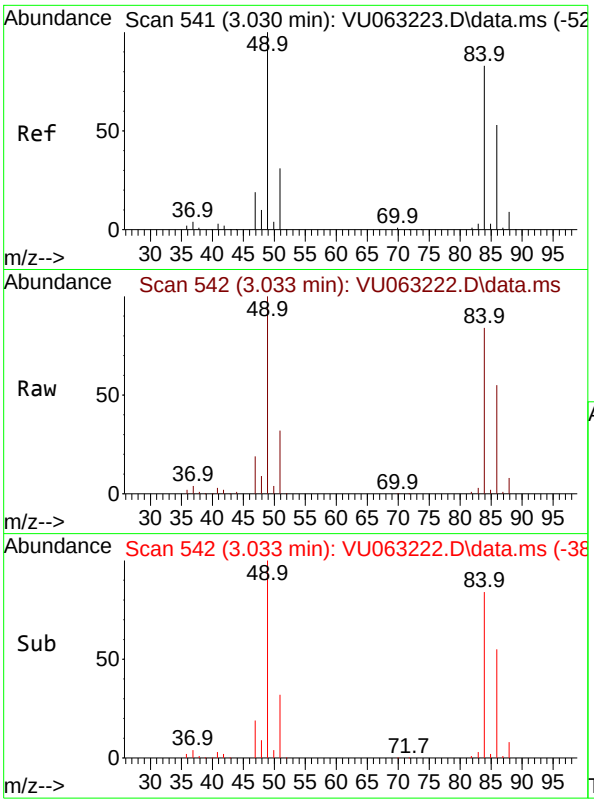


#14
Carbon Disulfide
Concen: 4.900 ug/l
RT: 2.782 min Scan# 464
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 76 Resp: 242244

Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.2	10.8

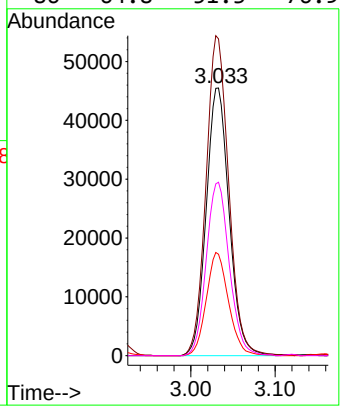




#15
Methylene Chloride
Concen: 4.936 ug/l
RT: 3.033 min Scan# 54
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 84 Resp: 8621

Ion	Ratio	Lower	Upper
84	100		
49	118.4	96.4	144.6
51	37.9	0.0	74.8
86	64.8	51.3	76.9



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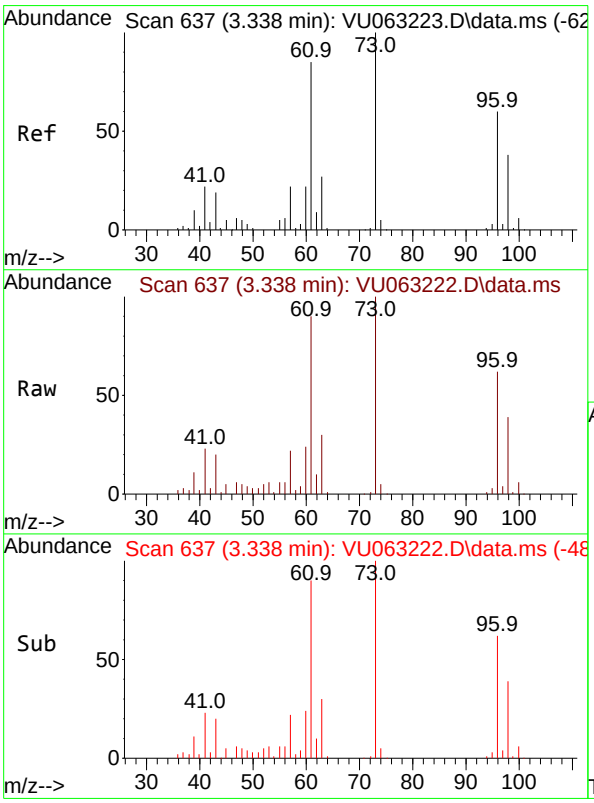
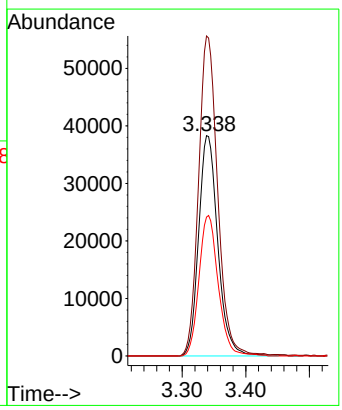
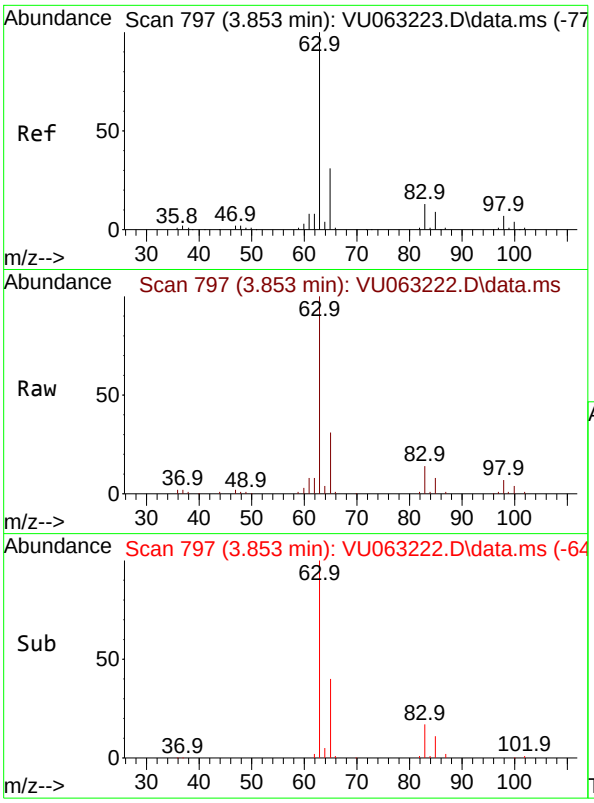


#16
trans-1,2-Dichloroethene
Concen: 4.965 ug/l
RT: 3.338 min Scan# 637
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 96 Resp: 80123

Ion	Ratio	Lower	Upper
96	100		
61	145.3	113.4	170.2
98	63.0	51.2	76.8

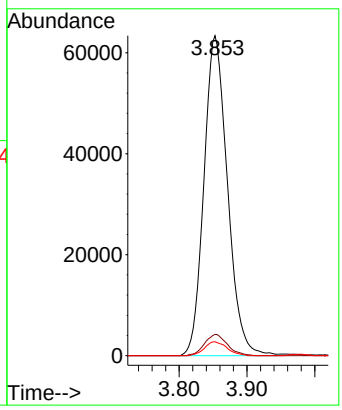




#17
1,1-Dichloroethane
Concen: 5.027 ug/l
RT: 3.853 min Scan# 7
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 63 Resp: 15289

Ion	Ratio	Lower	Upper
63	100		
98	6.6	3.3	9.9
100	4.3	2.1	6.2



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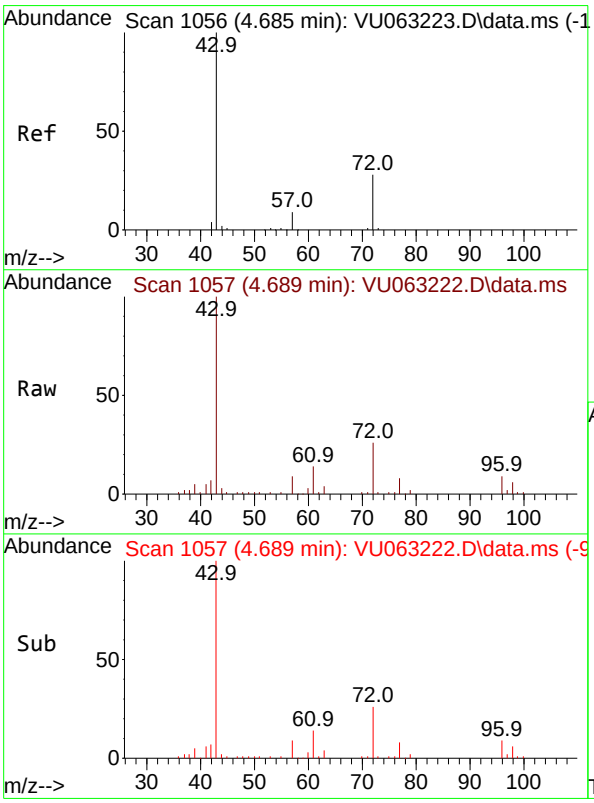
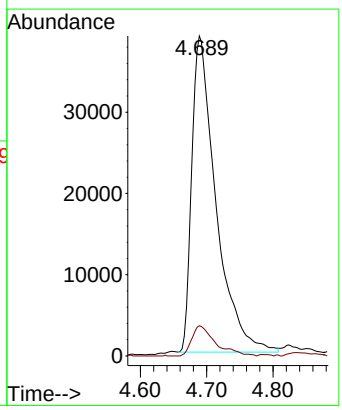
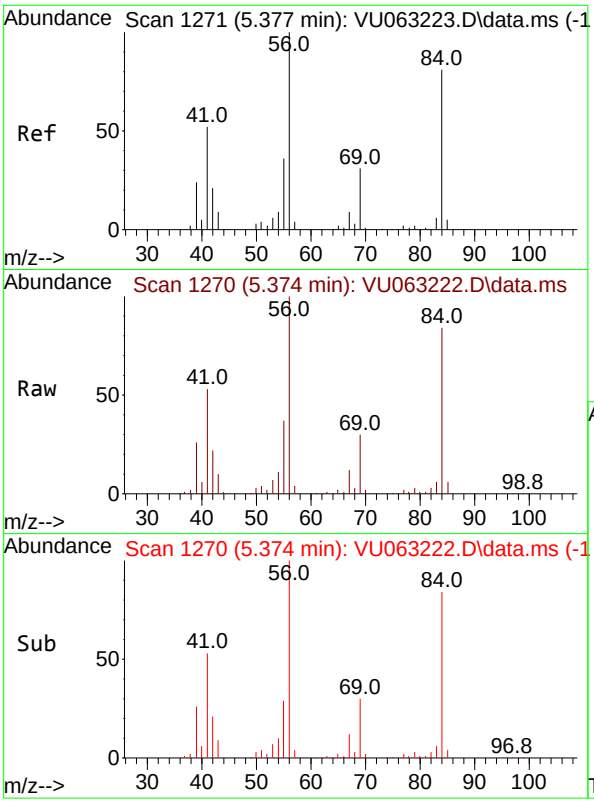


#18
2-Butanone
Concen: 24.289 ug/l
RT: 4.689 min Scan# 1057
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 43 Resp: 98391

Ion	Ratio	Lower	Upper
43	100		
57	9.5	0.0	17.0

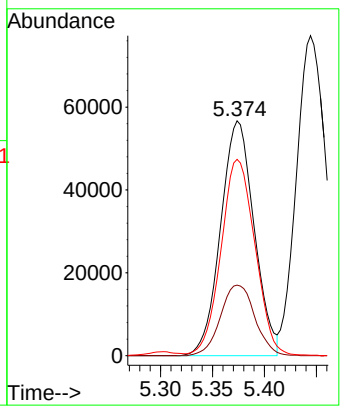




#19
Cyclohexane
Concen: 5.213 ug/l m
RT: 5.374 min Scan# 1
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 56 Resp: 12741

Ion	Ratio	Lower	Upper
56	100		
69	30.9	24.5	36.7
84	83.4	65.2	97.8



Instrument :
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ClientSampleId :
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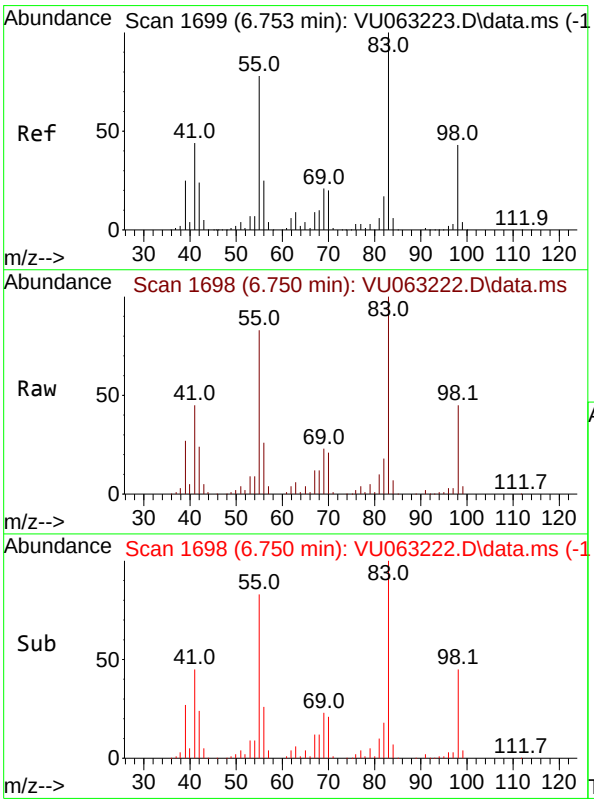
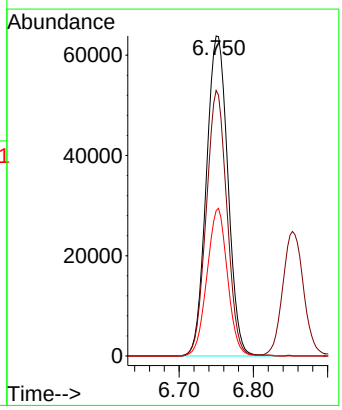
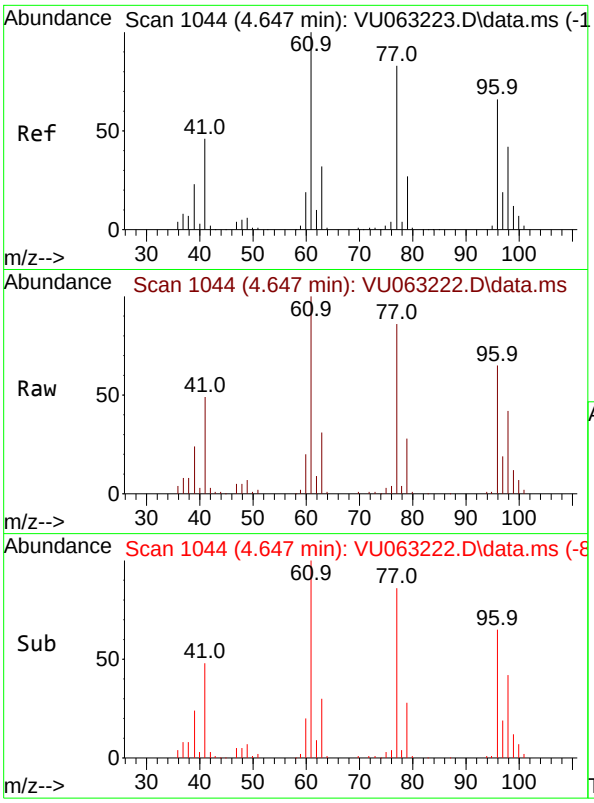


#20
Methylcyclohexane
Concen: 5.302 ug/l
RT: 6.750 min Scan# 1698
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 83 Resp: 128499

Ion	Ratio	Lower	Upper
83	100		
55	78.9	63.1	94.7
98	43.6	35.2	52.8

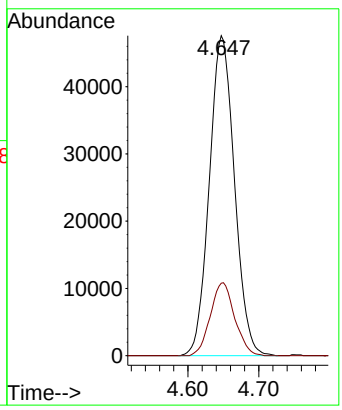




#21
2,2-Dichloropropane
Concen: 4.938 ug/l
RT: 4.647 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 77 Resp: 11717

Ion	Ratio	Lower	Upper
77	100		
97	22.1	18.5	27.7



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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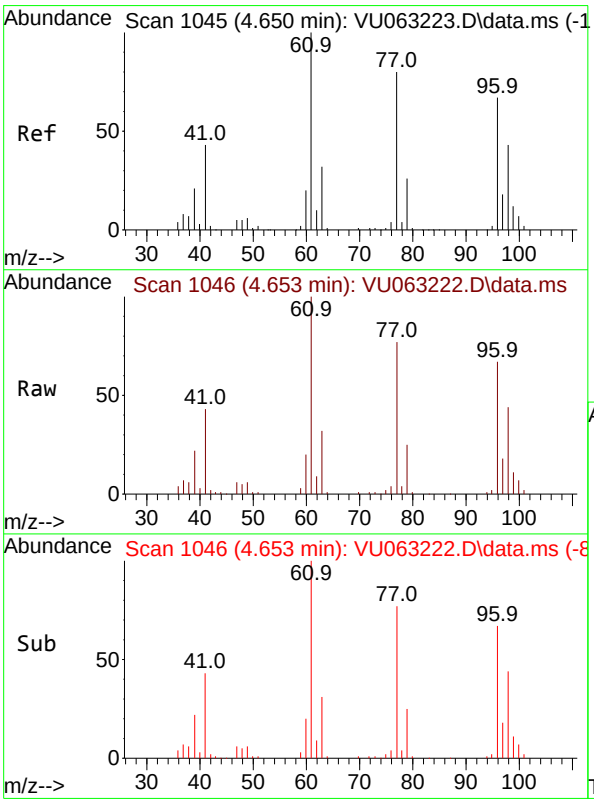
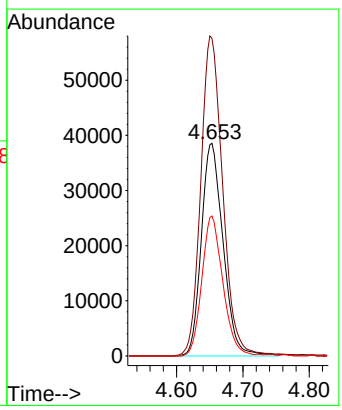
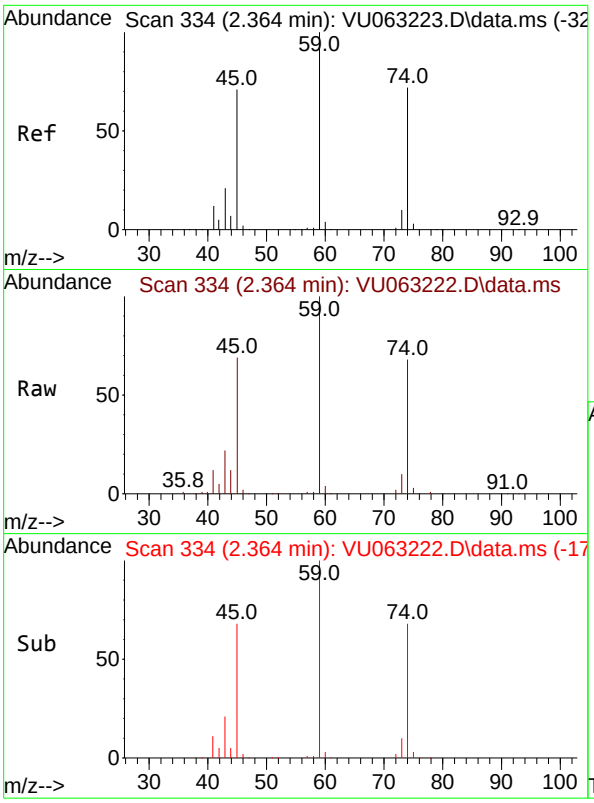


#22
cis-1,2-Dichloroethene
Concen: 5.046 ug/l
RT: 4.653 min Scan# 1046
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 96 Resp: 87987

Ion	Ratio	Lower	Upper
96	100		
61	152.1	0.0	373.3
98	63.4	31.9	95.9

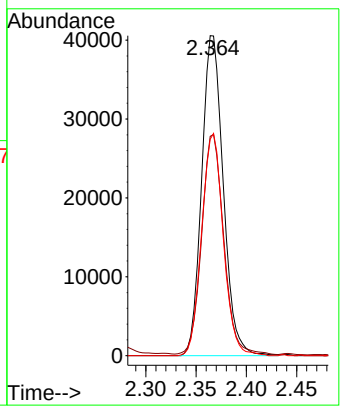




#23
Diethyl Ether
Concen: 5.000 ug/l
RT: 2.364 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 59 Resp: 6065

Ion	Ratio	Lower	Upper
59	100		
45	69.8	57.8	86.6
74	69.7	57.7	86.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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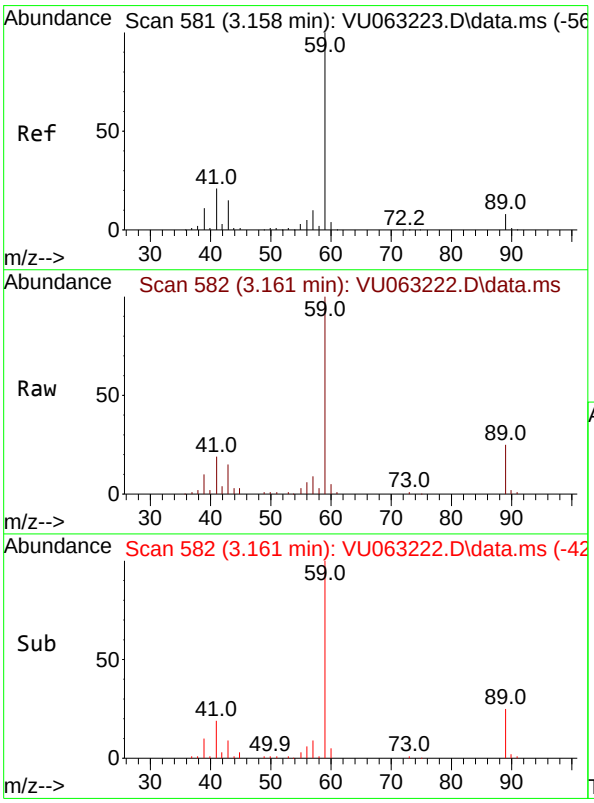
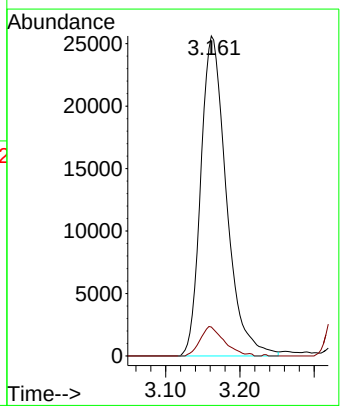
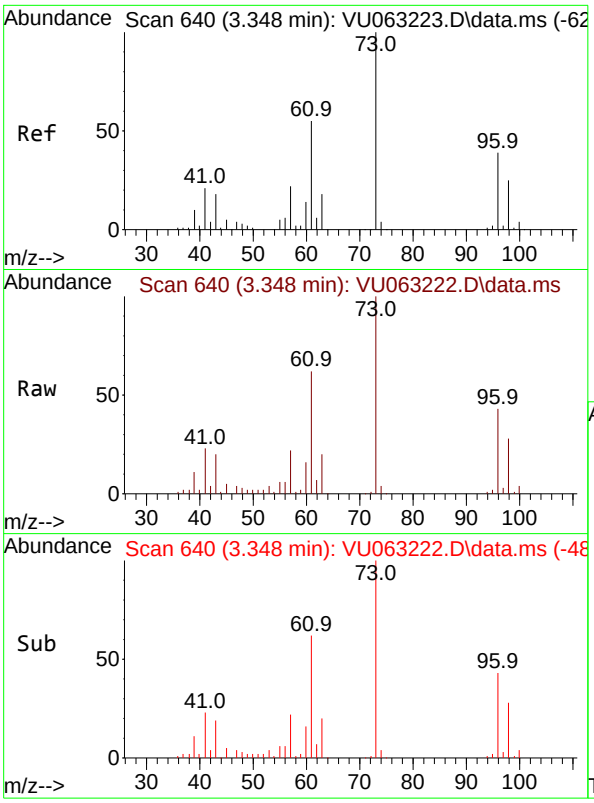


#24
tert-Butyl Alcohol
Concen: 45.943 ug/l
RT: 3.161 min Scan# 582
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 59 Resp: 61281

Ion	Ratio	Lower	Upper
59	100		
57	8.6	7.5	11.3

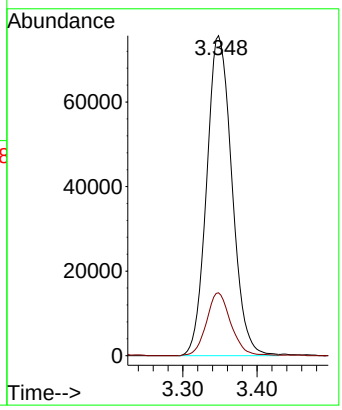




#25
Methyl tert-Butyl Ether
Concen: 5.066 ug/l
RT: 3.348 min Scan# 64
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 73 Resp: 17887

Ion	Ratio	Lower	Upper
73	100		
43	19.0	14.9	22.3



Instrument :
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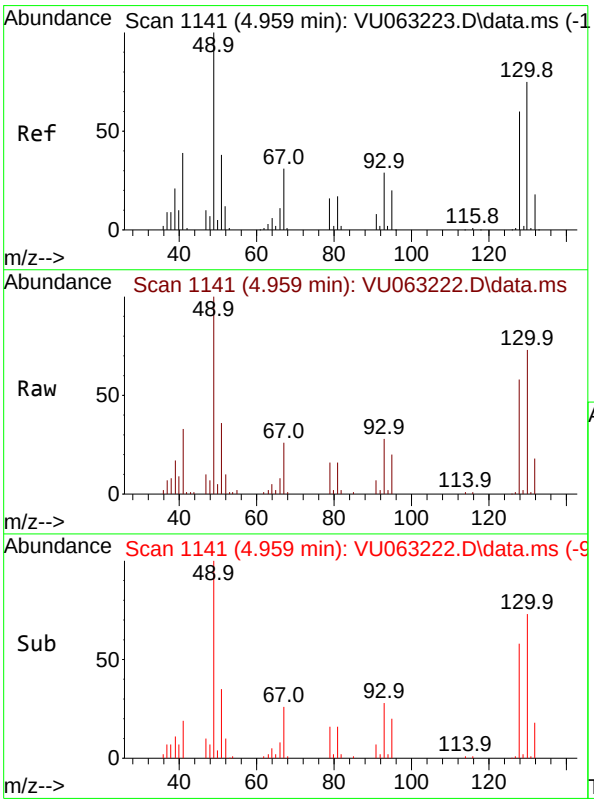
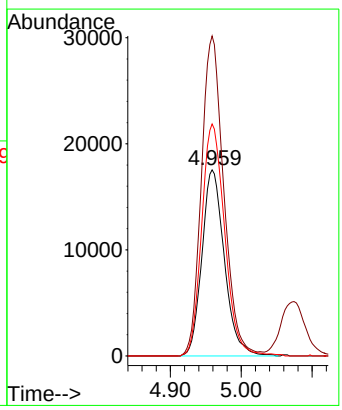
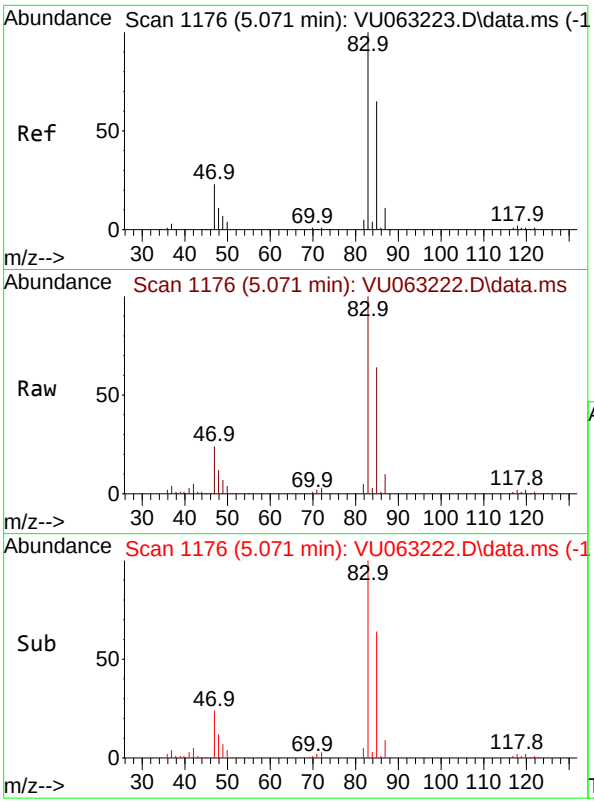


#26
Bromochloromethane
Concen: 5.067 ug/l
RT: 4.959 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:128 Resp: 38617

Ion	Ratio	Lower	Upper
128	100		
49	171.4	0.0	343.4
130	127.4	102.9	154.3

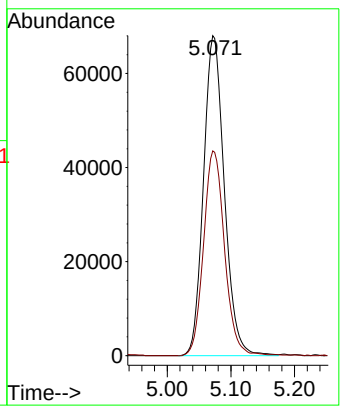




#27
Chloroform
Concen: 5.050 ug/l
RT: 5.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 83 Resp: 15501

Ion	Ratio	Lower	Upper
83	100		
85	64.0	0.0	129.8



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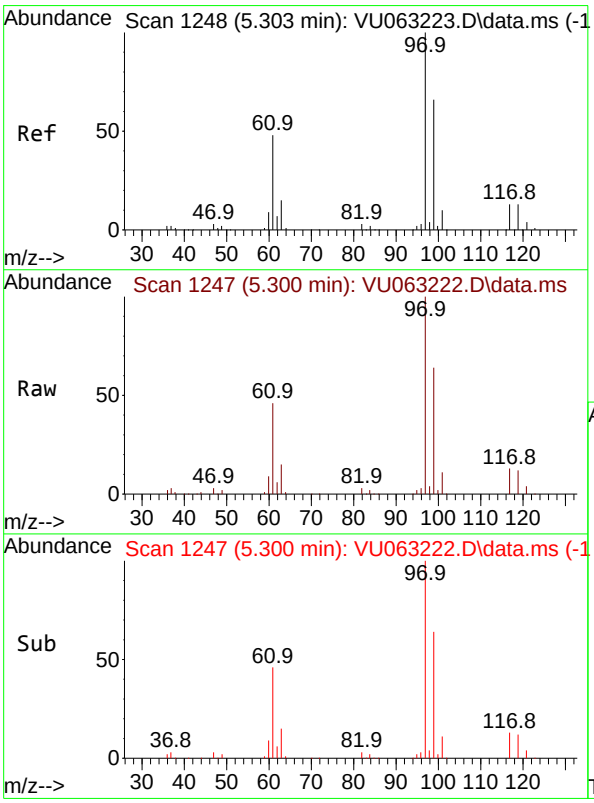
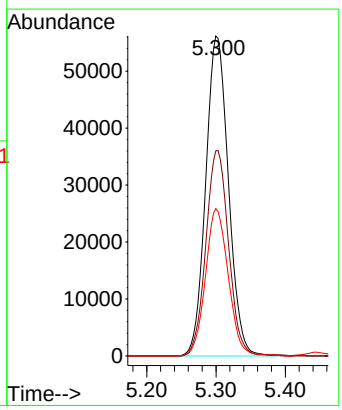
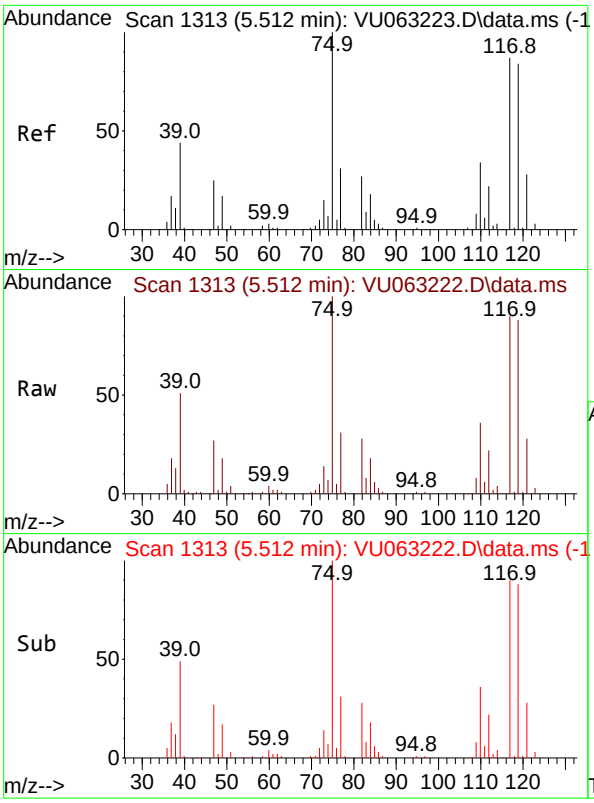


#28
1,1,1-Trichloroethane
Concen: 5.144 ug/l
RT: 5.300 min Scan# 1247
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 97 Resp: 127899

Ion	Ratio	Lower	Upper
97	100		
99	64.1	32.4	97.0
61	46.2	23.8	71.2

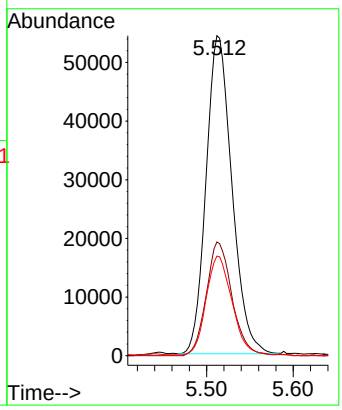




#29
1,1-Dichloropropene
Concen: 5.052 ug/l
RT: 5.512 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 75 Resp: 11251

Ion	Ratio	Lower	Upper
75	100		
110	35.5	17.2	51.5
77	30.9	24.6	37.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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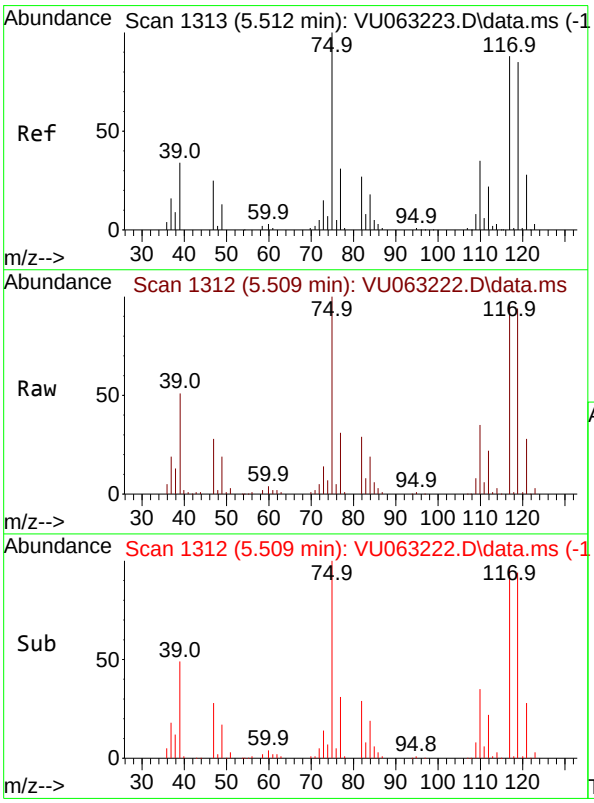
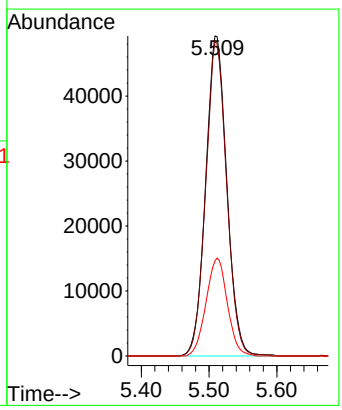
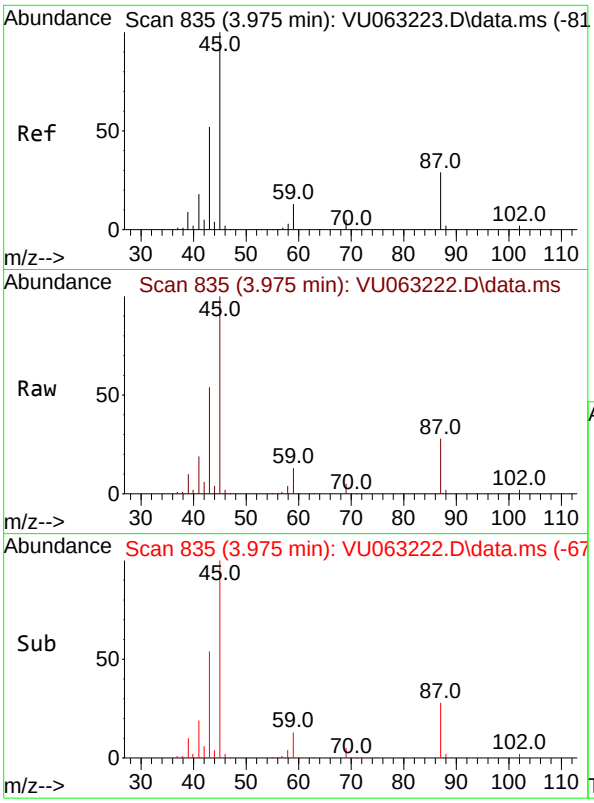


#30
Carbon Tetrachloride
Concen: 5.007 ug/l
RT: 5.509 min Scan# 1312
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:117 Resp: 106762

Ion	Ratio	Lower	Upper
117	100		
119	98.3	76.7	115.1
121	29.7	25.5	38.3

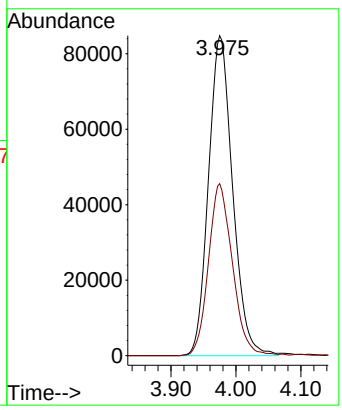




#31
Isopropyl Ether
Concen: 5.037 ug/l
RT: 3.975 min Scan# 8
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 45 Resp: 21871

Ion	Ratio	Lower	Upper
45	100		
43	53.4	25.7	77.1



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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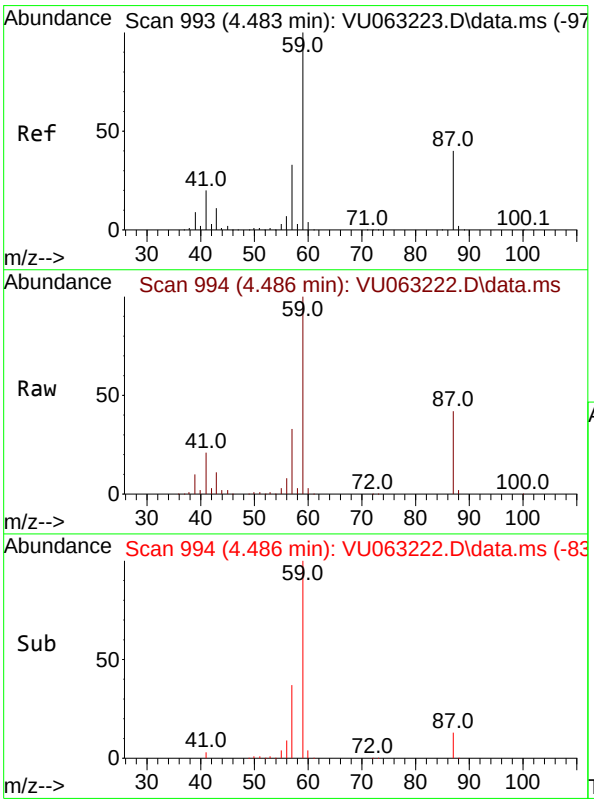
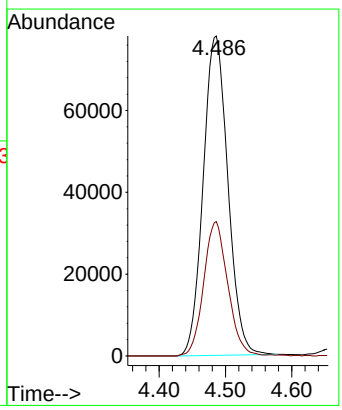
Supervised By :Mahesh Dadoda 02/12/2025

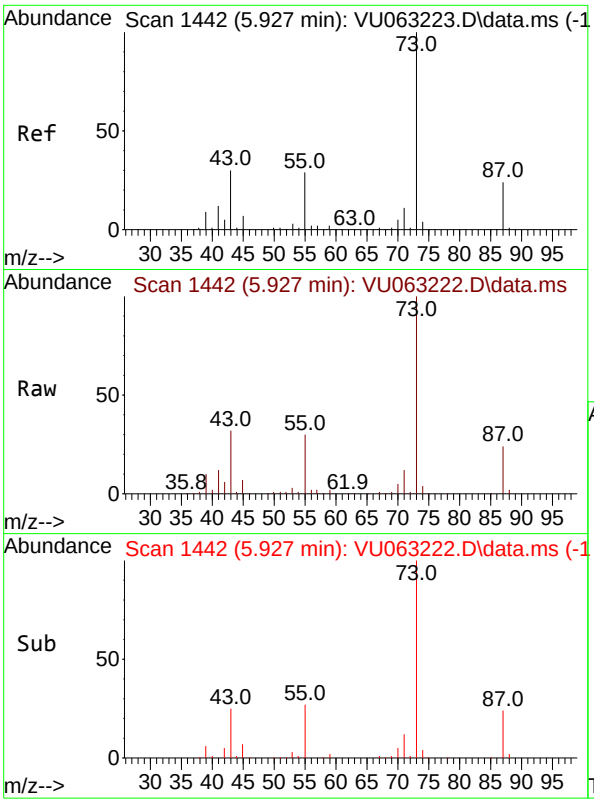


#32
Ethyl-t-butyl ether
Concen: 5.120 ug/l
RT: 4.486 min Scan# 994
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 59 Resp: 202182

Ion	Ratio	Lower	Upper
59	100		
87	40.5	32.6	49.0

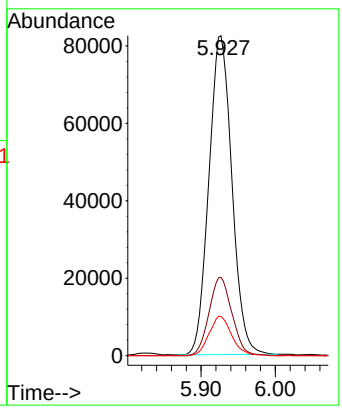




#33
Tert-Amyl methyl ether
Concen: 5.144 ug/l
RT: 5.927 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 73 Resp: 17749

Ion	Ratio	Lower	Upper
73	100		
87	24.4	18.9	28.3
71	12.2	9.0	13.4



Instrument :
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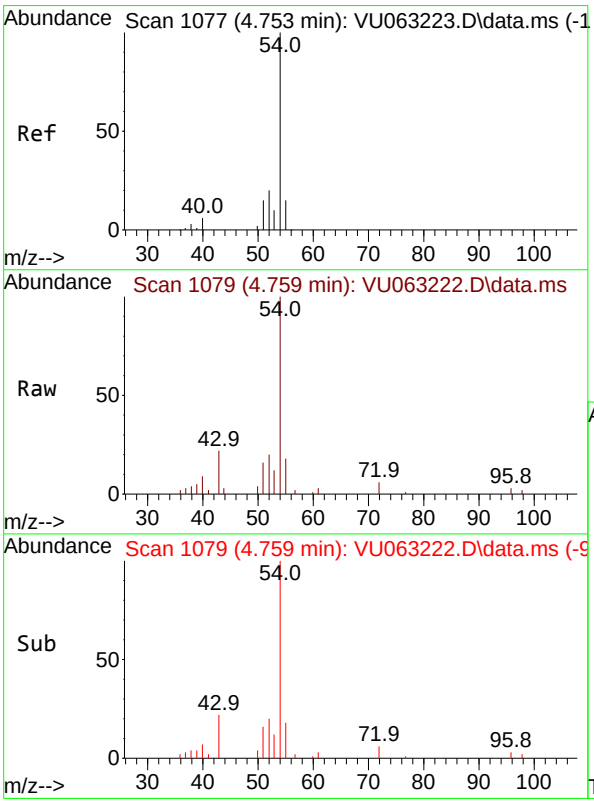
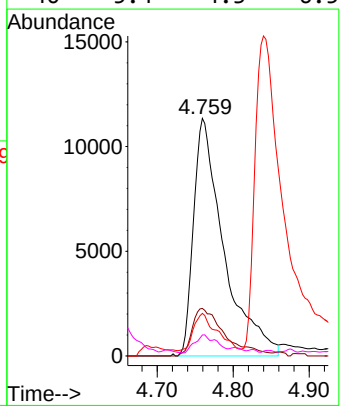
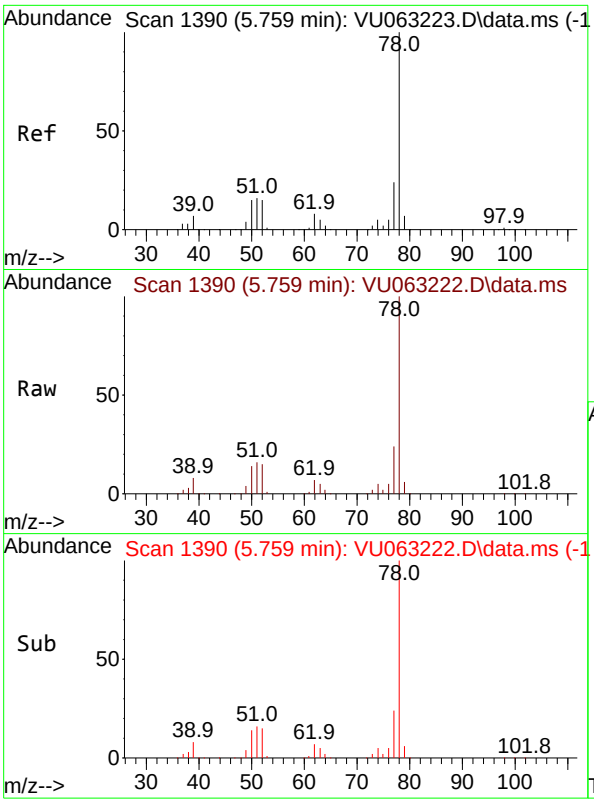


#34
Propionitrile
Concen: 24.919 ug/l
RT: 4.759 min Scan# 1079
Delta R.T. 0.006 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 54 Resp: 31294

Ion	Ratio	Lower	Upper
54	100		
52	21.5	16.3	24.5
55	11.9	11.8	17.6
40	5.4	4.3	6.5

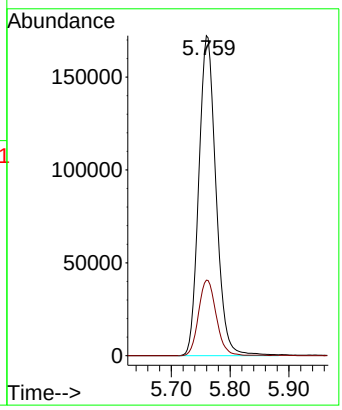




#35
Benzene
Concen: 5.111 ug/l
RT: 5.759 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 78 Resp: 34998

Ion	Ratio	Lower	Upper
78	100		
77	23.6	19.0	28.4



Instrument :
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ClientSampleId :
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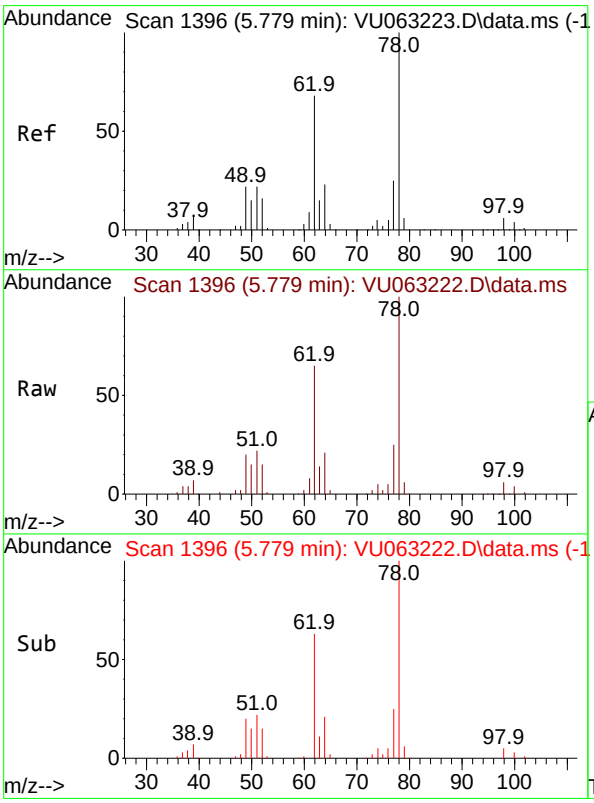
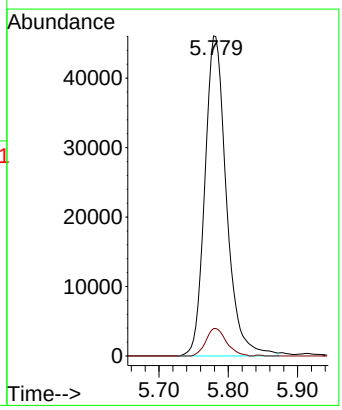
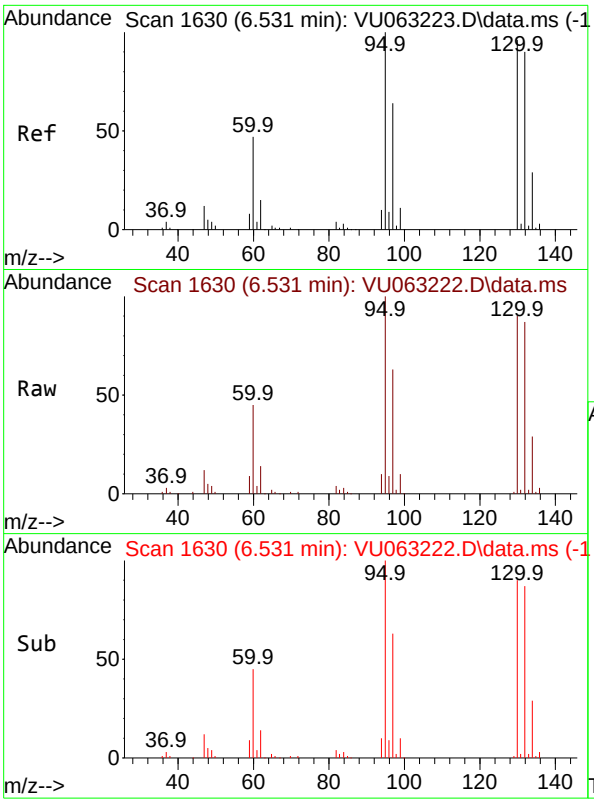


#36
1,2-Dichloroethane
Concen: 5.037 ug/l
RT: 5.779 min Scan# 1396
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 62 Resp: 99553

Ion	Ratio	Lower	Upper
62	100		
98	8.2	6.9	10.3

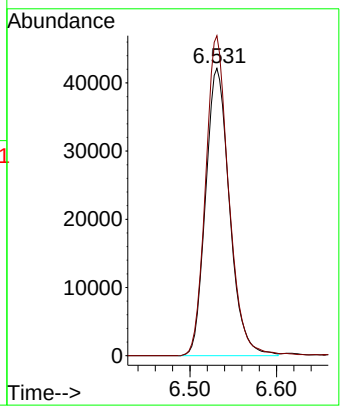




#37
Trichloroethene
Concen: 4.962 ug/l
RT: 6.531 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:130 Resp: 8081

Ion	Ratio	Lower	Upper
130	100		
95	111.3	83.2	124.8



Instrument :
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ClientSampleId :
VSTDICC005

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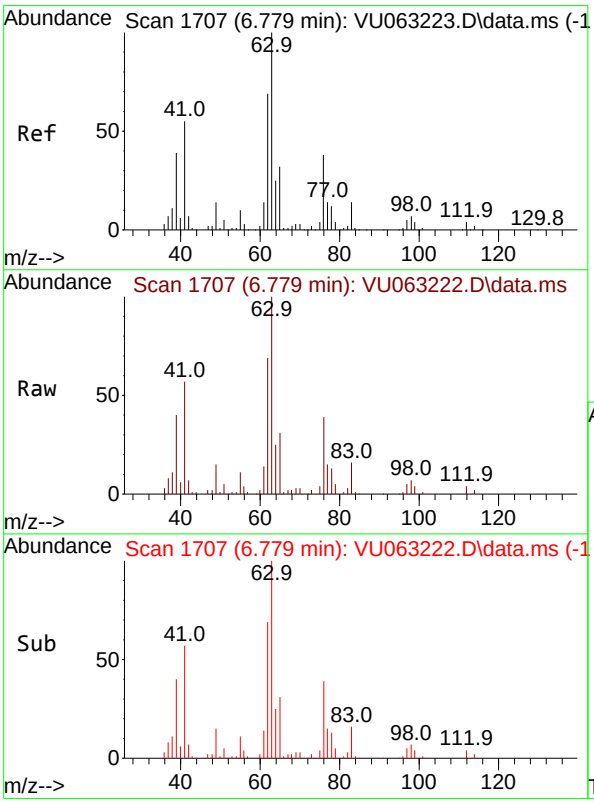
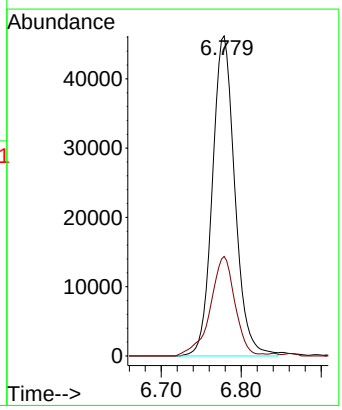
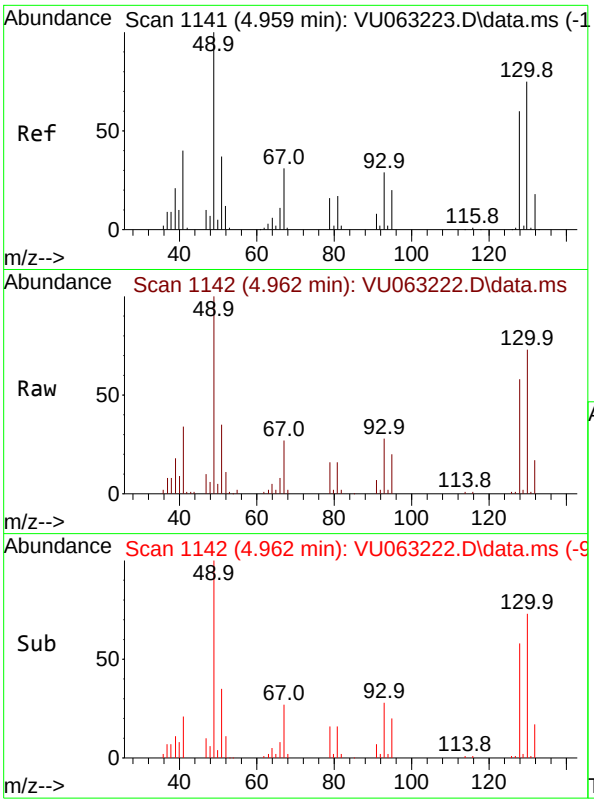


#38
1,2-Dichloropropane
Concen: 5.026 ug/l
RT: 6.779 min Scan# 1707
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 63 Resp: 90072

Ion	Ratio	Lower	Upper
63	100		
65	30.7	25.3	37.9

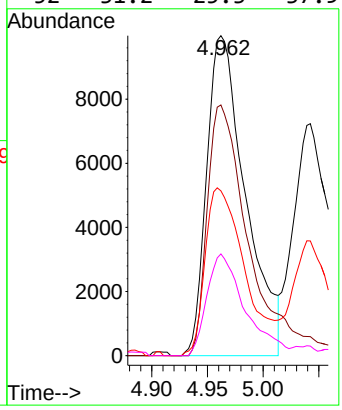




#39
Methacrylonitrile
Concen: 5.404 ug/l
RT: 4.962 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 41 Resp: 2424

Ion	Ratio	Lower	Upper
41	100		
67	84.7	64.5	96.7
39	53.0	43.0	64.6
52	31.2	25.3	37.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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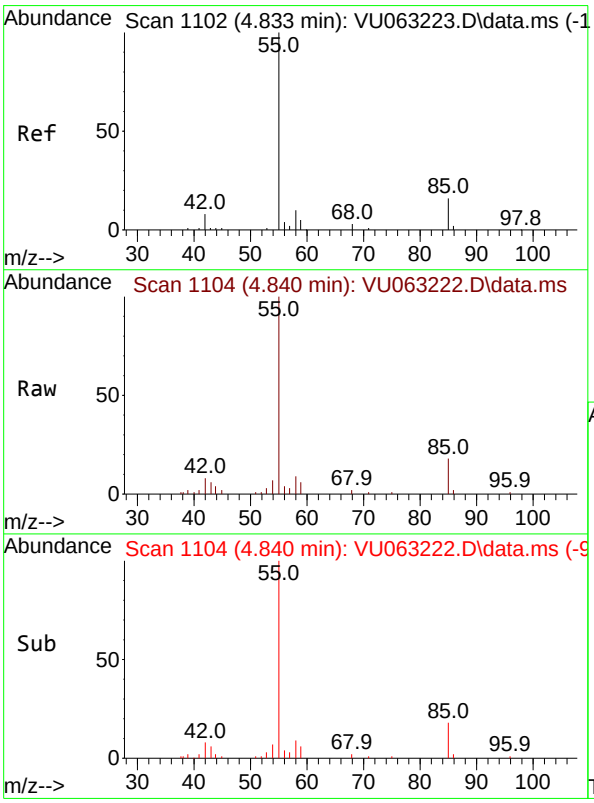
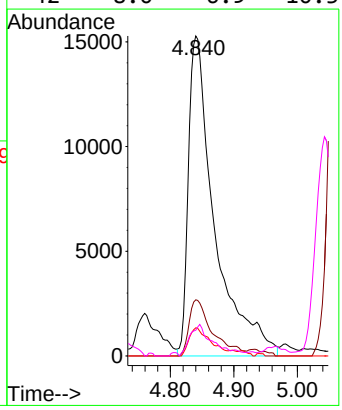
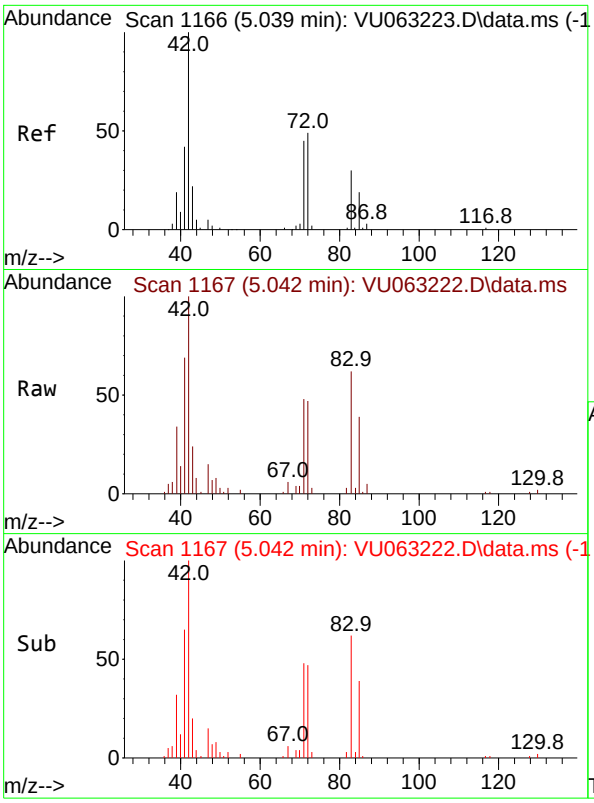


#40
Methyl acrylate
Concen: 5.358 ug/l m
RT: 4.840 min Scan# 1104
Delta R.T. 0.006 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 55 Resp: 43877

Ion	Ratio	Lower	Upper
55	100		
85	15.7	13.3	19.9
58	7.2	7.3	10.9#
42	8.0	6.9	10.3

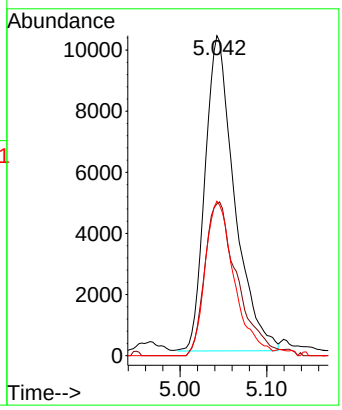




#41
Tetrahydrofuran
Concen: 9.229 ug/l
RT: 5.042 min Scan# 11
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 42 Resp: 2432

Ion	Ratio	Lower	Upper
42	100		
72	53.6	41.5	62.3
71	48.7	37.2	55.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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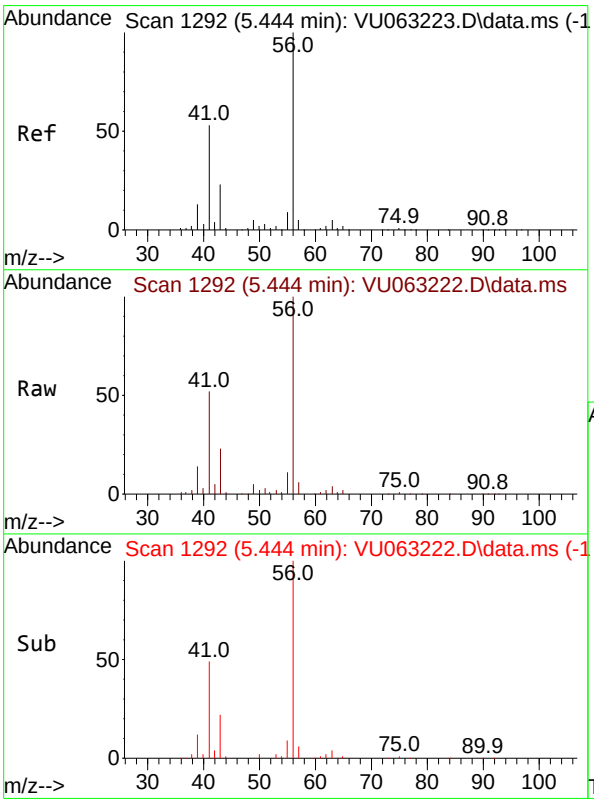
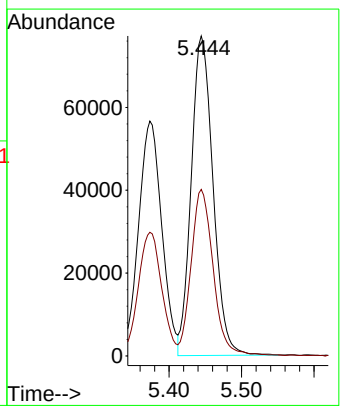
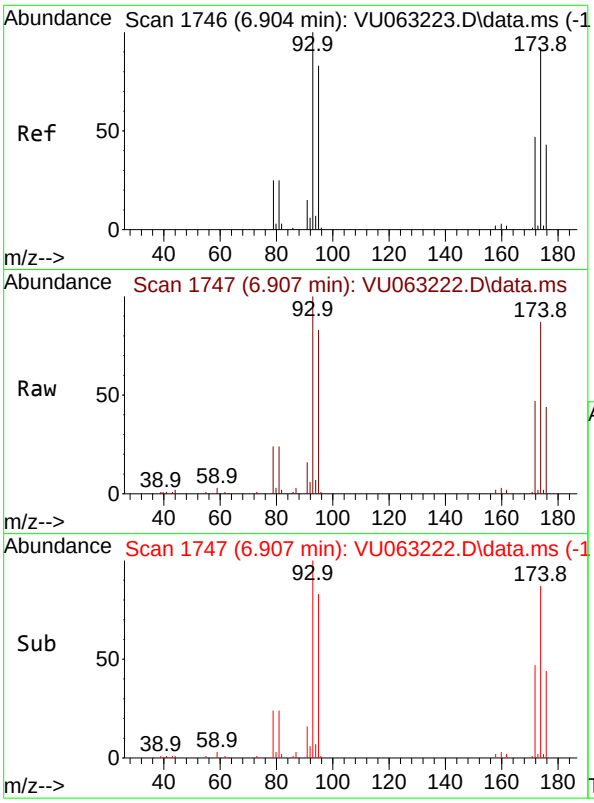


#42
1-Chlorobutane
Concen: 5.283 ug/l
RT: 5.444 min Scan# 1292
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 56 Resp: 160975

Ion	Ratio	Lower	Upper
56	100		
41	51.3	26.3	78.8

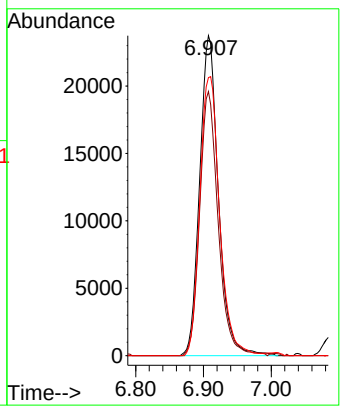




#43
Dibromomethane
Concen: 5.031 ug/l
RT: 6.907 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 93 Resp: 4565

Ion	Ratio	Lower	Upper
93	100		
95	81.3	67.2	100.8
174	92.0	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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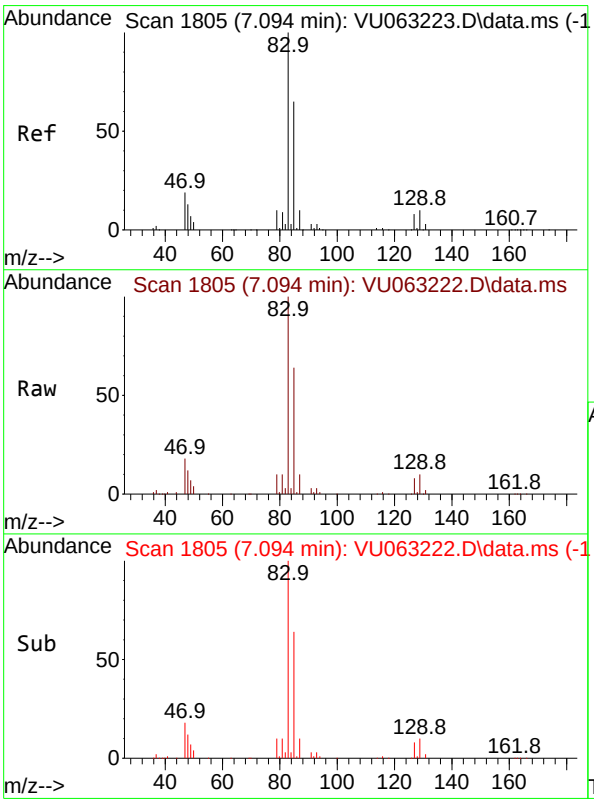
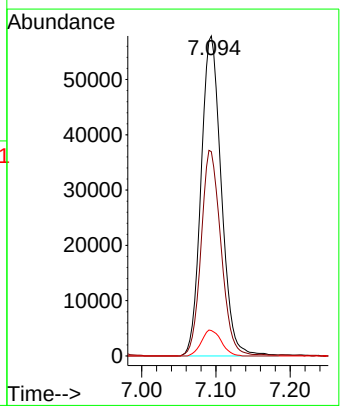
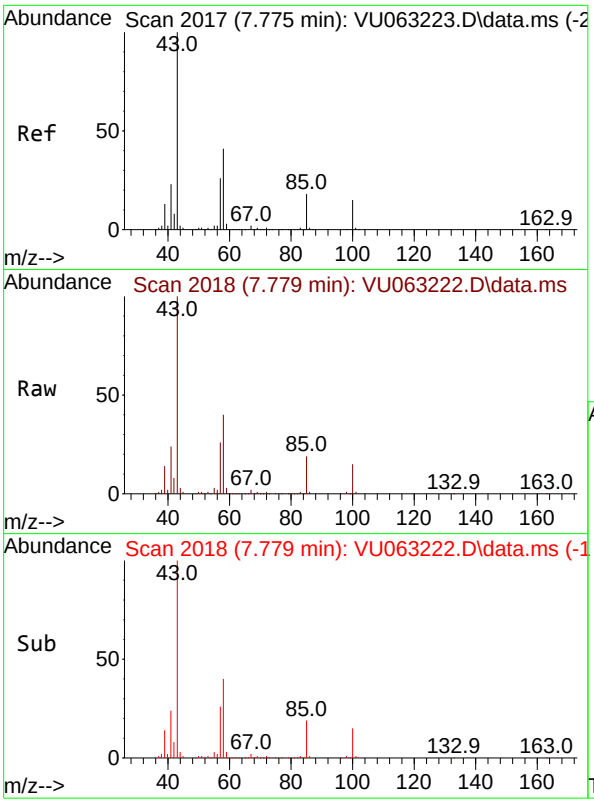


#44
Bromodichloromethane
Concen: 5.189 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 83 Resp: 109612

Ion	Ratio	Lower	Upper
83	100		
85	63.9	51.7	77.5
127	8.0	6.7	10.1

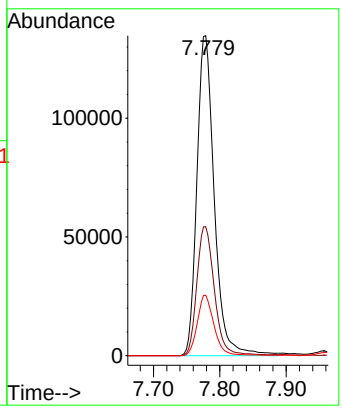




#45
4-Methyl-2-Pentanone
Concen: 25.799 ug/l
RT: 7.779 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 43 Resp: 24546

Ion	Ratio	Lower	Upper
43	100		
58	40.8	20.8	62.5
85	18.0	14.8	22.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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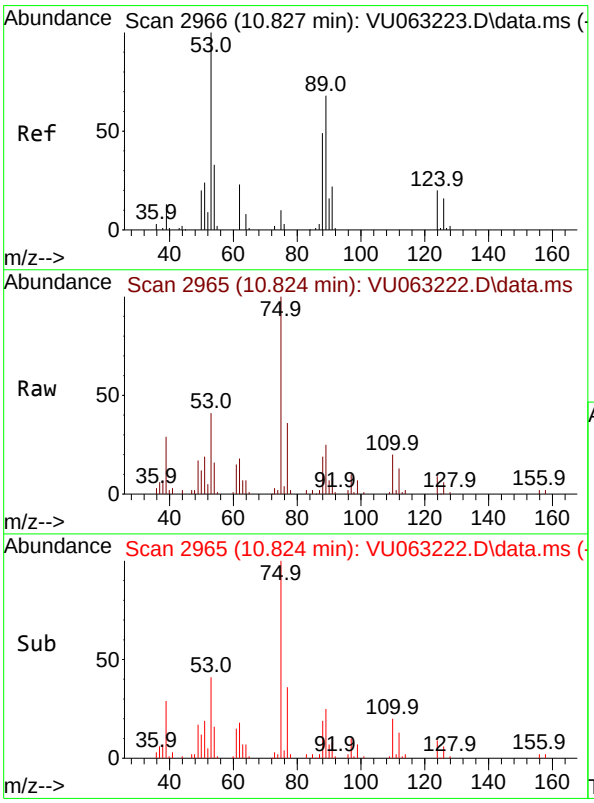
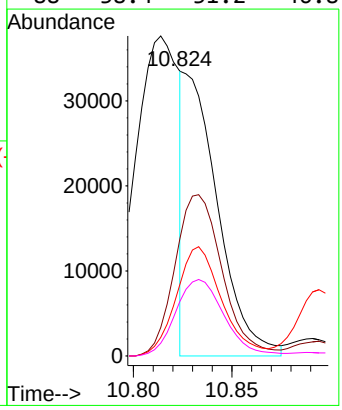
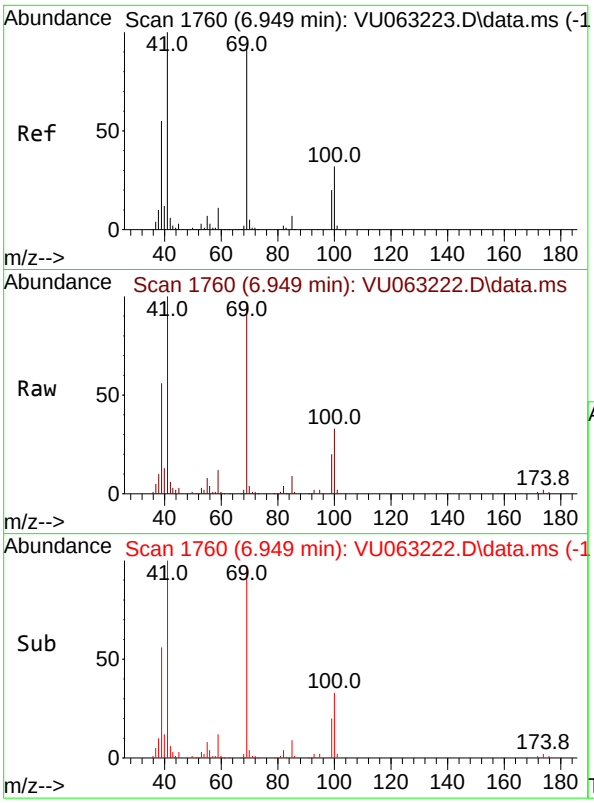


#46
t-1,4-Dichloro-2-butene
Concen: 8.544 ug/l m
RT: 10.824 min Scan# 2965
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 75 Resp: 40225

Ion	Ratio	Lower	Upper
75	100		
53	79.1	64.5	96.7
89	51.4	43.4	65.2
88	38.4	31.2	46.8

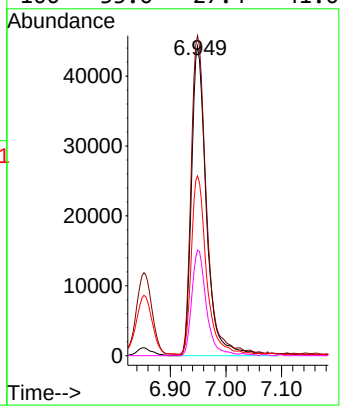




#47
Methyl methacrylate
Concen: 10.822 ug/l
RT: 6.949 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 69 Resp: 8272

Ion	Ratio	Lower	Upper
69	100		
41	103.9	0.0	217.0
39	58.1	47.7	71.5
100	33.0	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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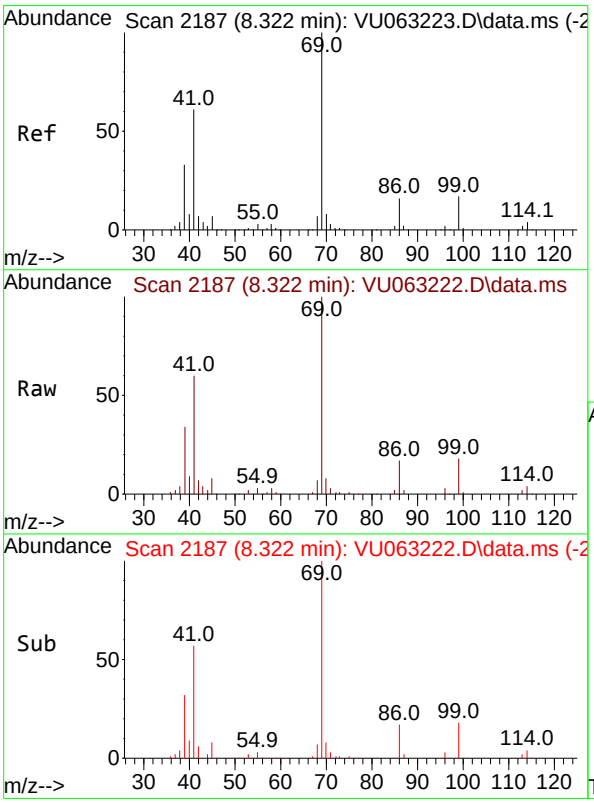
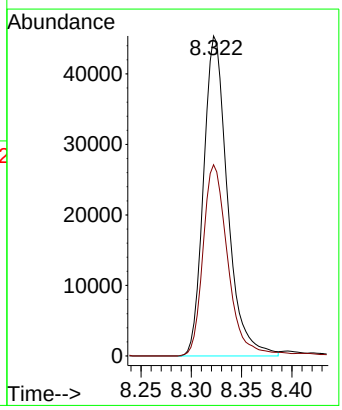
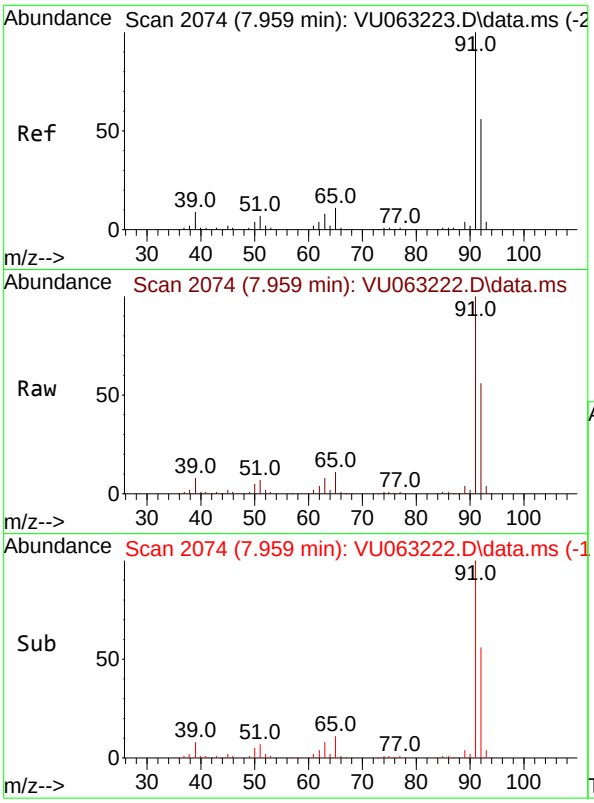


#48
Ethyl methacrylate
Concen: 5.238 ug/l
RT: 8.322 min Scan# 2187
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 69 Resp: 75186

Ion	Ratio	Lower	Upper
69	100		
41	62.0	30.6	92.0





#49
Toluene
Concen: 5.270 ug/l
RT: 7.959 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 92 Resp: 20754

Ion	Ratio	Lower	Upper
92	100		
91	177.1	141.8	212.6

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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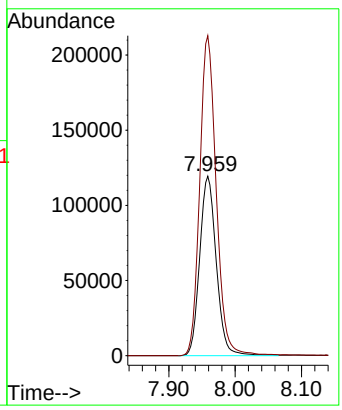
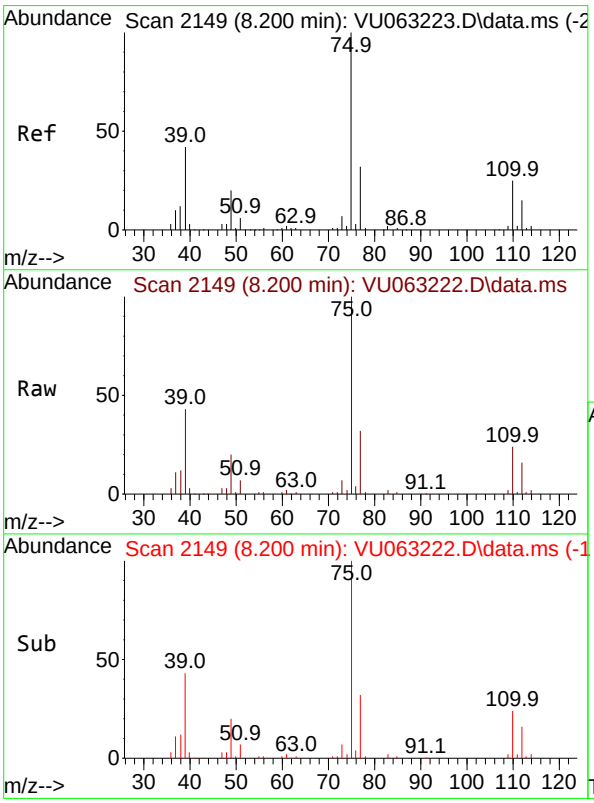
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

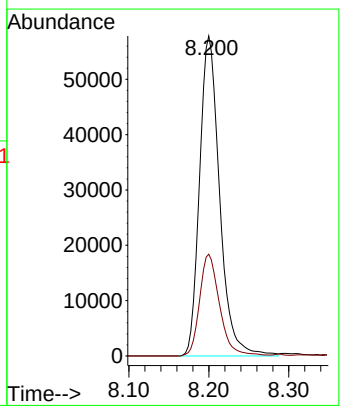


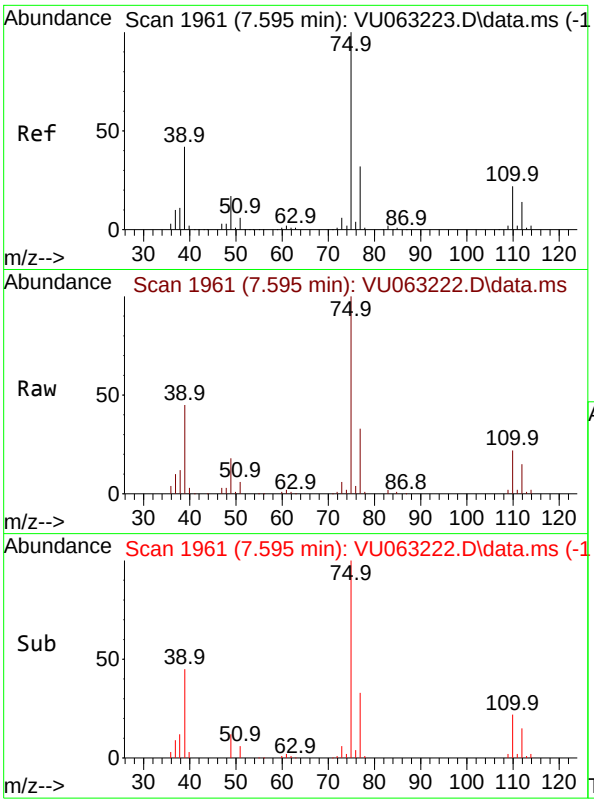


#50
t-1,3-Dichloropropene
Concen: 5.221 ug/l
RT: 8.200 min Scan# 2149
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 75 Resp: 100975

Ion	Ratio	Lower	Upper
75	100		
77	31.8	25.9	38.9

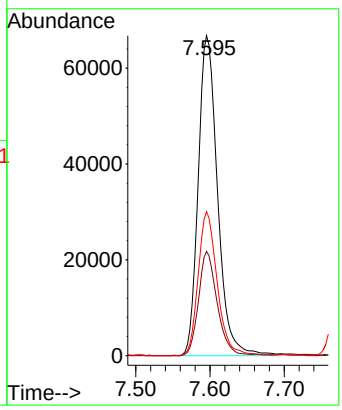




#51
cis-1,3-Dichloropropene
Concen: 5.070 ug/l
RT: 7.595 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 75 Resp: 12110

Ion	Ratio	Lower	Upper
75	100		
77	32.6	25.3	37.9
39	45.0	33.5	50.3



Instrument :
MSVOA_U
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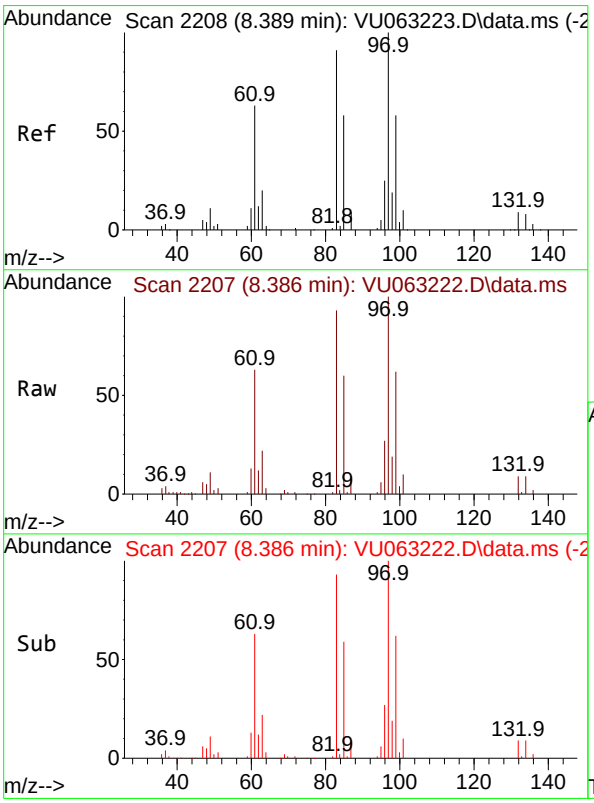
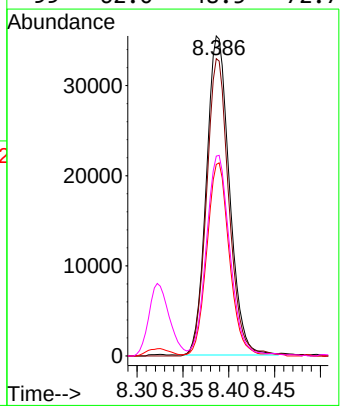
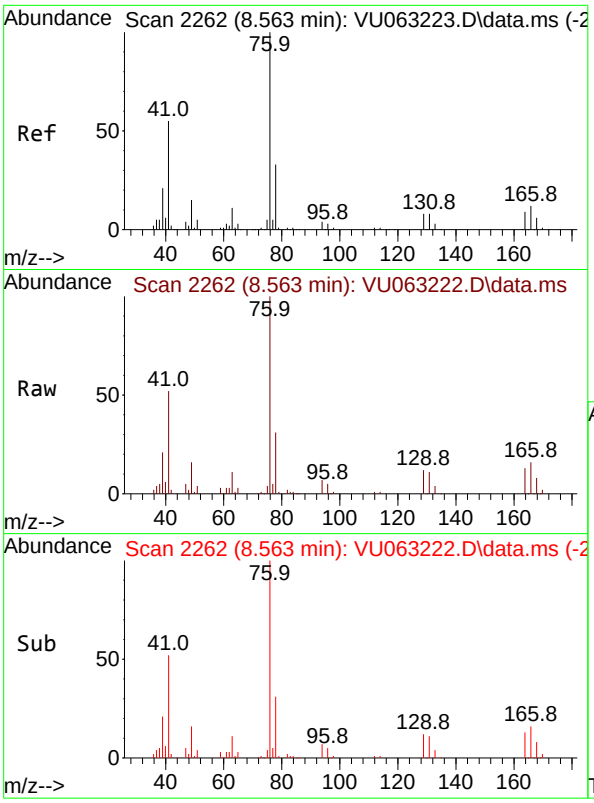


#52
1,1,2-Trichloroethane
Concen: 5.042 ug/l
RT: 8.386 min Scan# 2207
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 97 Resp: 61701

Ion	Ratio	Lower	Upper
97	100		
83	93.2	73.0	109.4
85	59.6	46.3	69.5
99	62.0	48.5	72.7

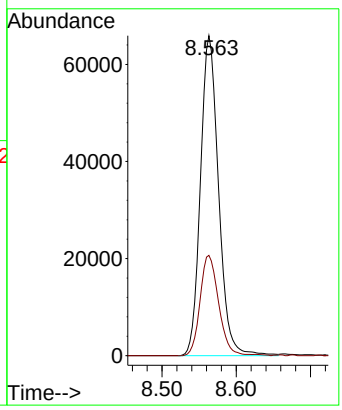




#53
1,3-Dichloropropane
Concen: 5.136 ug/l
RT: 8.563 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 76 Resp: 11156

Ion	Ratio	Lower	Upper
76	100		
78	32.3	26.3	39.5



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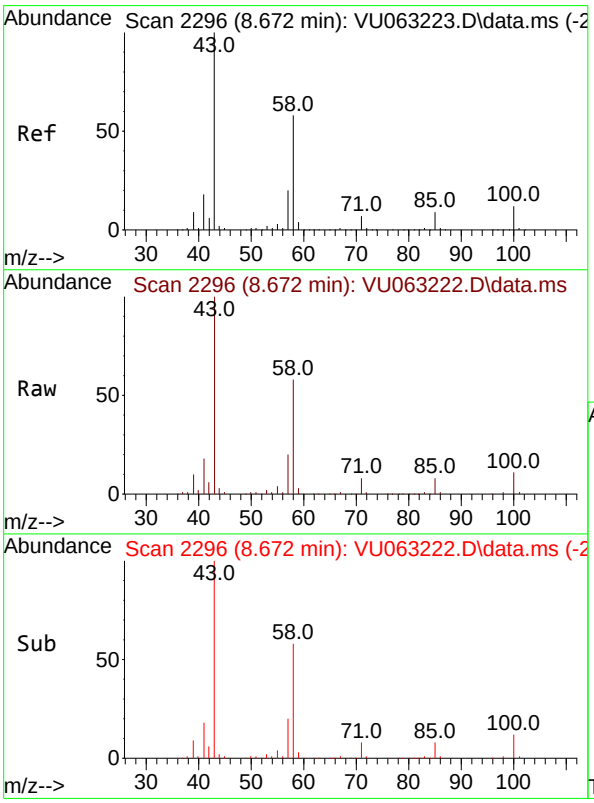
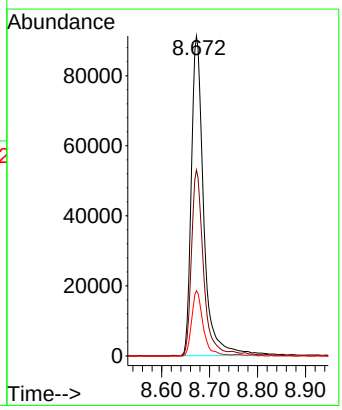
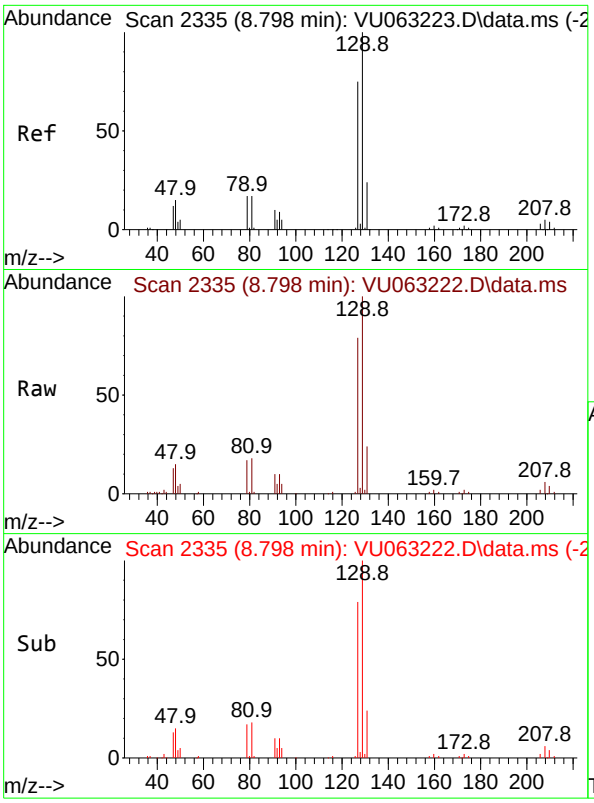


#54
2-Hexanone
Concen: 25.235 ug/l
RT: 8.672 min Scan# 2296
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 43 Resp: 163849

Ion	Ratio	Lower	Upper
43	100		
58	55.7	38.0	78.0
57	18.9	0.0	39.1





#55
Dibromochloromethane
Concen: 5.061 ug/l
RT: 8.798 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:129 Resp: 7124

Ion	Ratio	Lower	Upper
129	100		
127	77.1	60.4	90.6

Instrument :
MSVOA_U
ClientSampleId :
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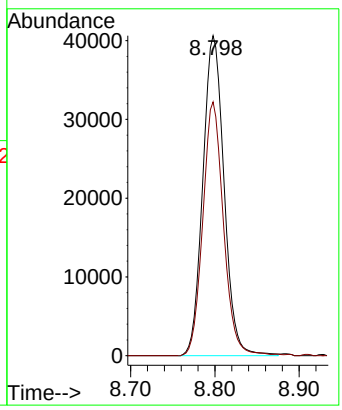
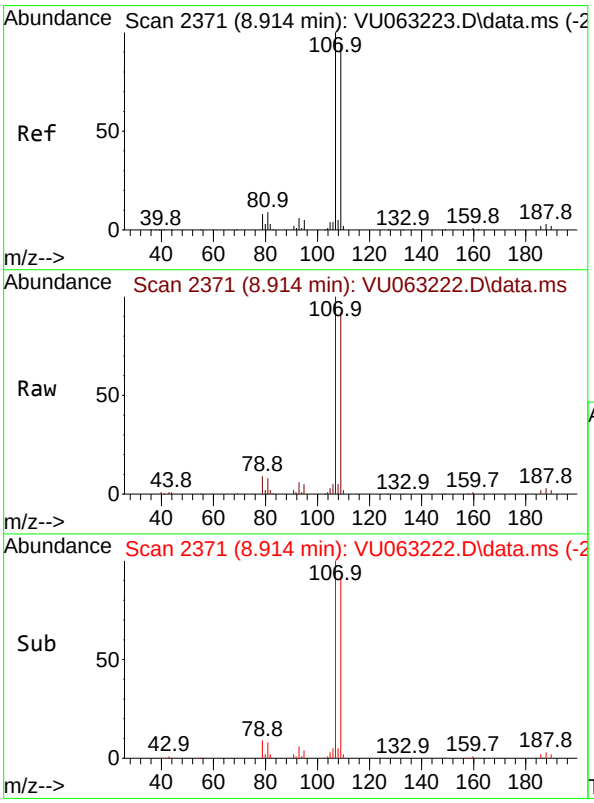
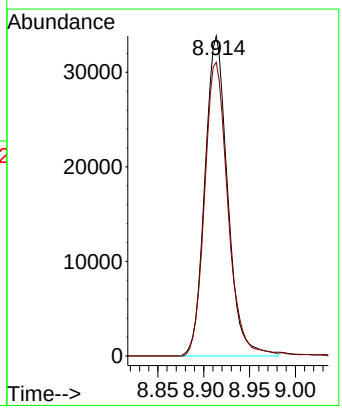


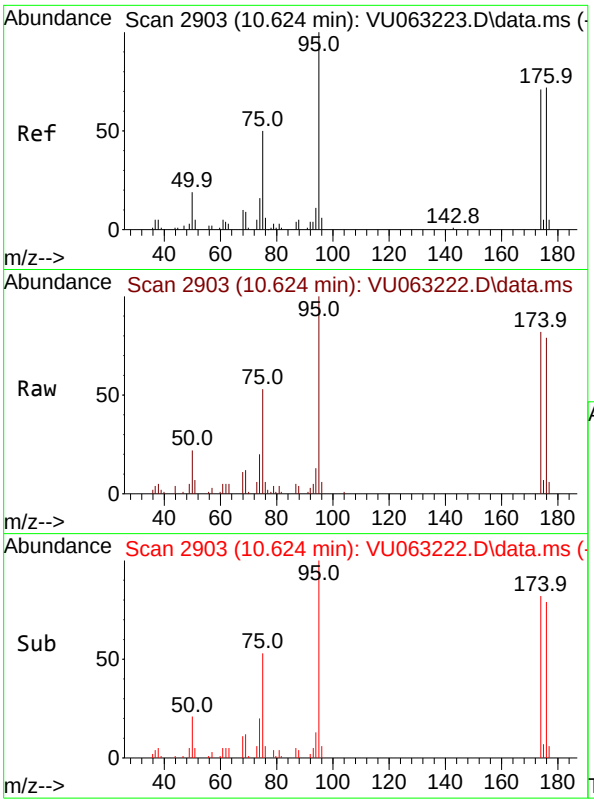


#56
1,2-Dibromoethane
Concen: 5.079 ug/l
RT: 8.914 min Scan# 2371
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:107 Resp: 58284

Ion	Ratio	Lower	Upper
107	100		
109	94.6	0.0	187.8

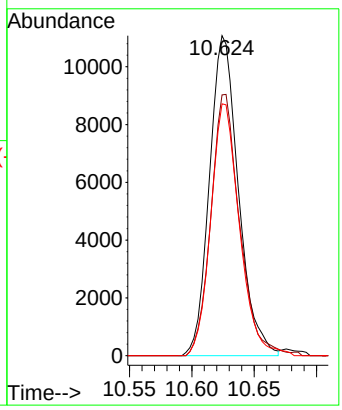




#57
4-Bromofluorobenzene
Concen: 0.974 ug/l
RT: 10.624 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 95 Resp: 1791

Ion	Ratio	Lower	Upper
95	100		
174	81.3	58.6	88.0
176	78.3	58.2	87.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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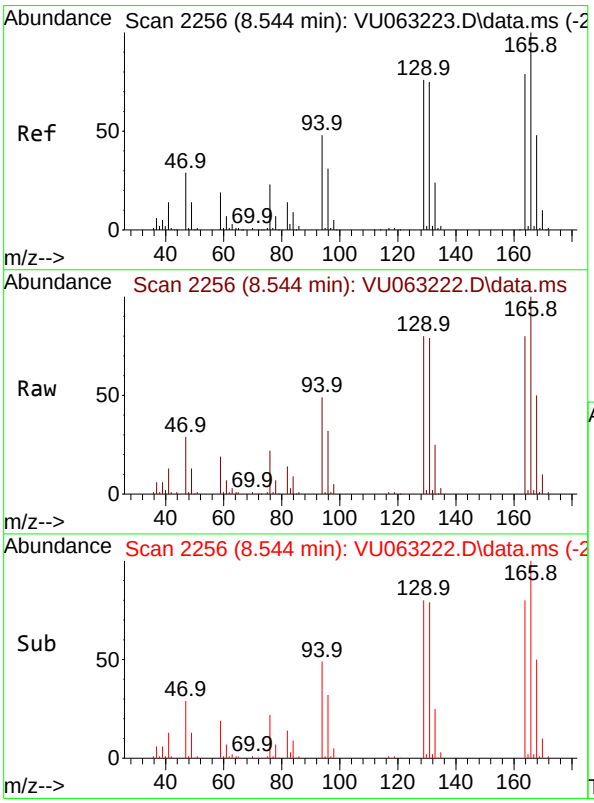
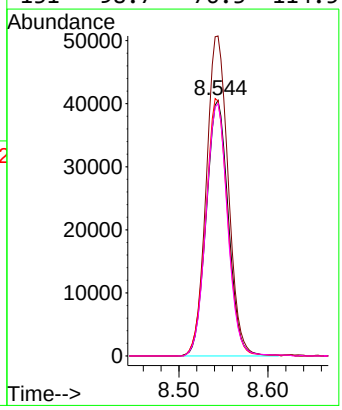
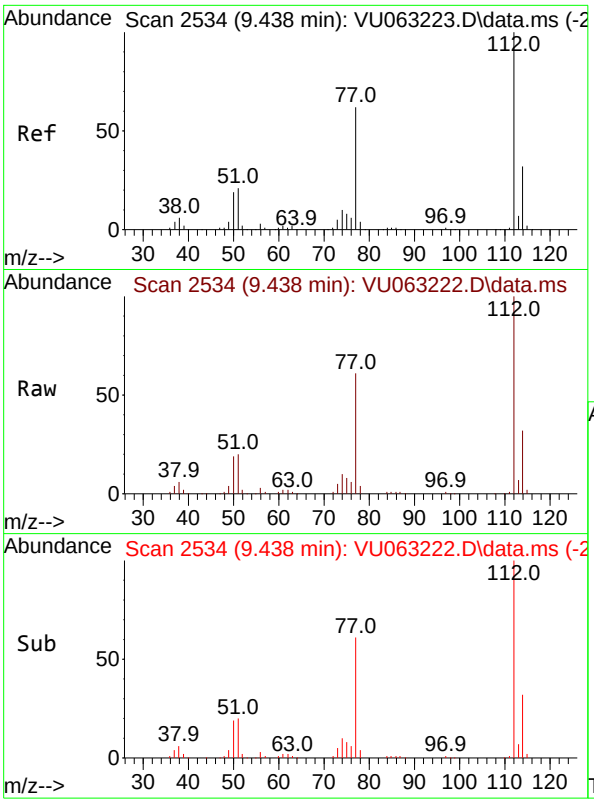


#58
Tetrachloroethene
Concen: 5.194 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:164 Resp: 69703

Ion	Ratio	Lower	Upper
164	100		
166	125.2	101.4	152.0
129	99.7	77.0	115.4
131	98.7	76.3	114.5

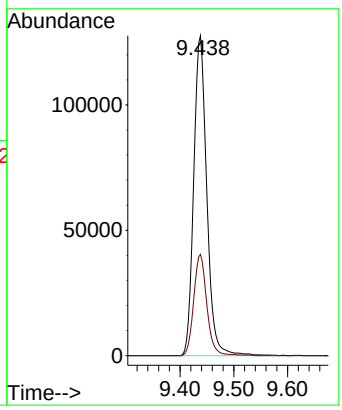




#59
Chlorobenzene
Concen: 5.198 ug/l
RT: 9.438 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:112 Resp: 21598

Ion	Ratio	Lower	Upper
112	100		
114	31.7	25.7	38.5



Instrument :
MSVOA_U
ClientSampleId :
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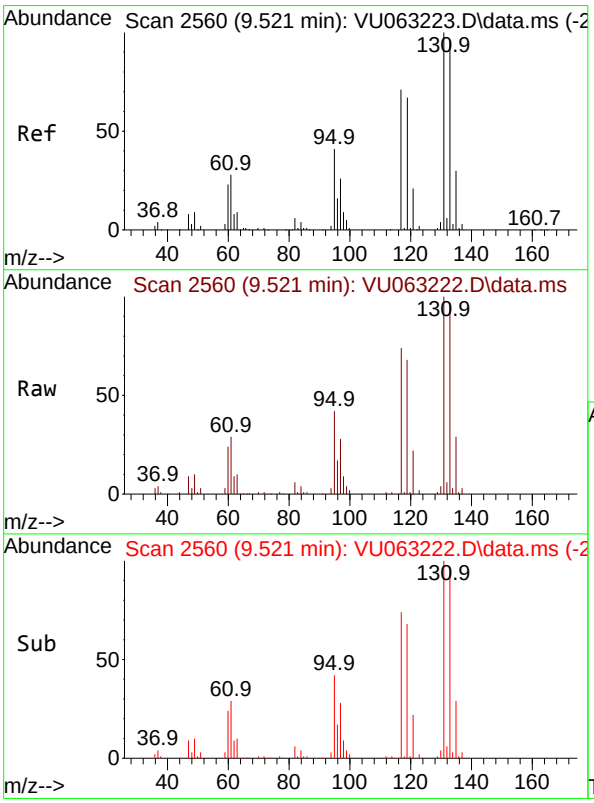
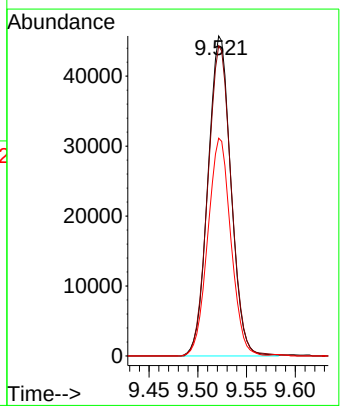
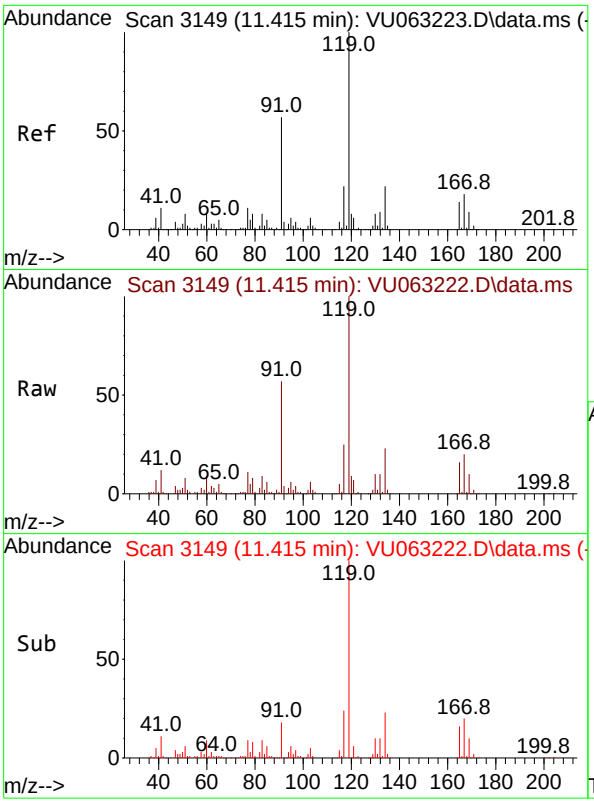


#60
1,1,1,2-Tetrachloroethane
Concen: 5.018 ug/l
RT: 9.521 min Scan# 2560
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:131 Resp: 74952

Ion	Ratio	Lower	Upper
131	100		
133	98.9	76.7	115.1
119	68.6	54.4	81.6

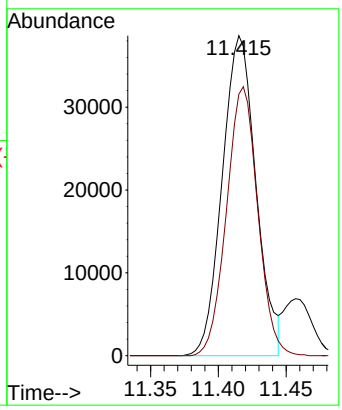




#61
Pentachloroethane
Concen: 5.016 ug/l
RT: 11.415 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:117 Resp: 6693

Ion	Ratio	Lower	Upper
117	100		
167	77.9	65.0	97.6



Instrument :
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ClientSampleId :
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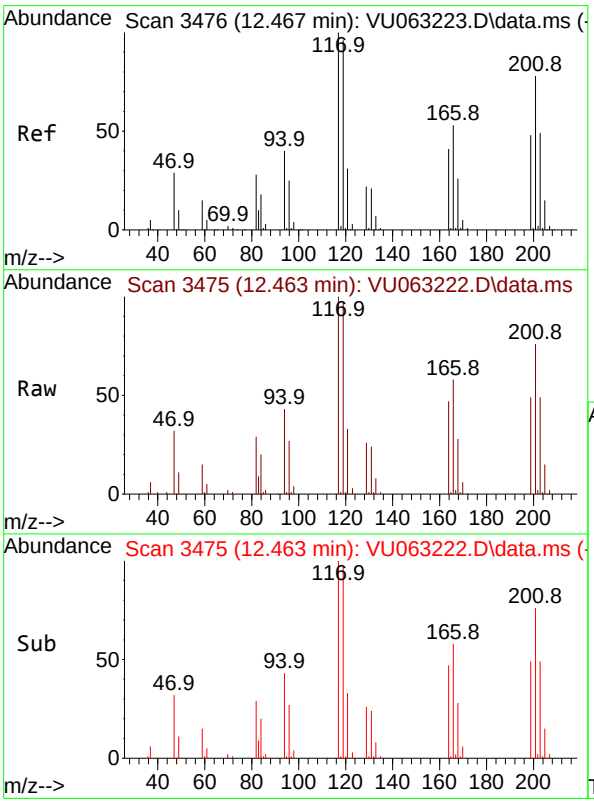
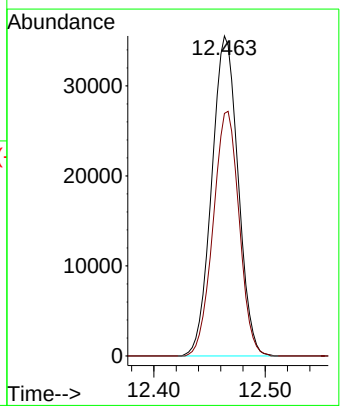
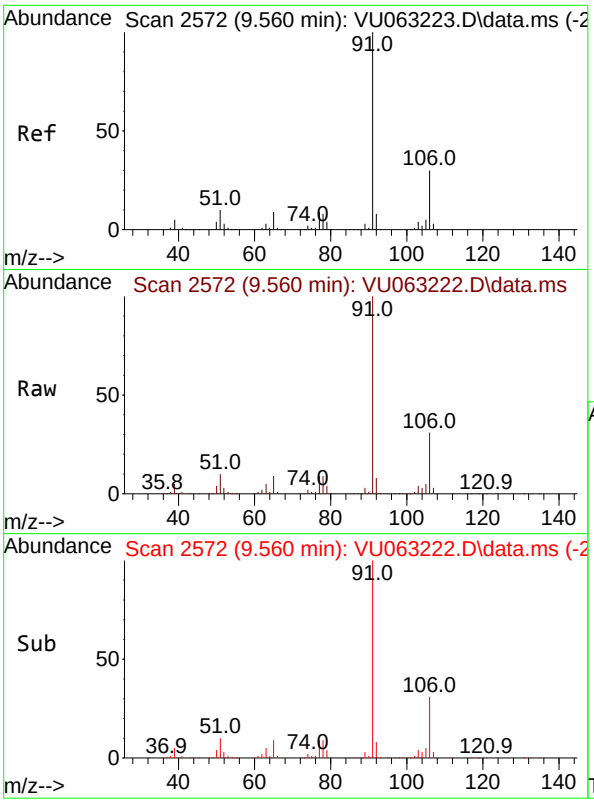


#62
Hexachloroethane
Concen: 4.947 ug/l
RT: 12.463 min Scan# 3475
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:117 Resp: 58399

Ion	Ratio	Lower	Upper
117	100		
201	75.3	61.3	91.9

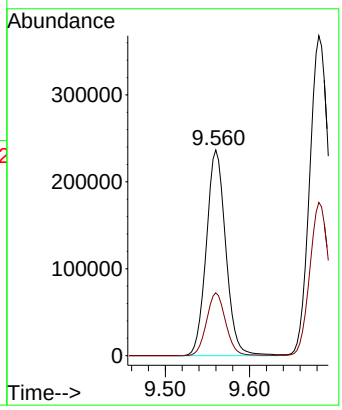




#63
Ethyl Benzene
Concen: 5.301 ug/l
RT: 9.560 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 91 Resp: 37992

Ion	Ratio	Lower	Upper
91	100		
106	30.6	24.2	36.2



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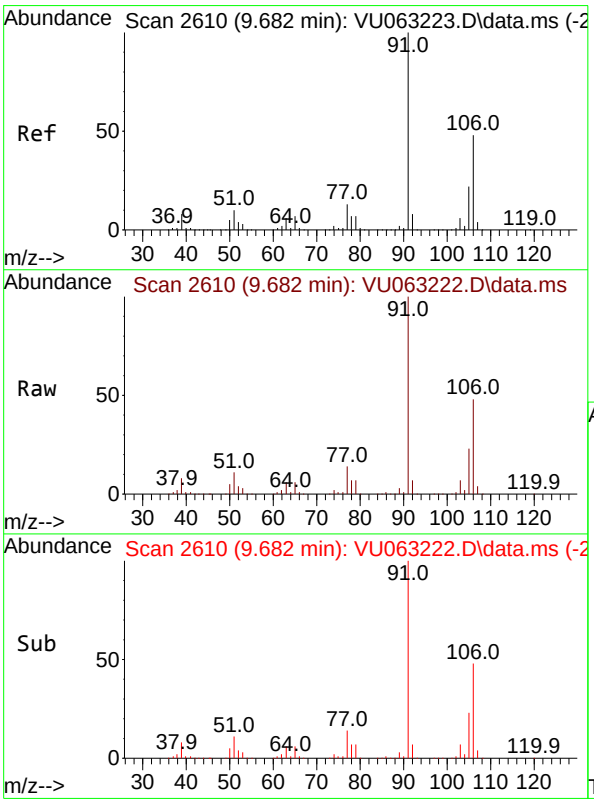
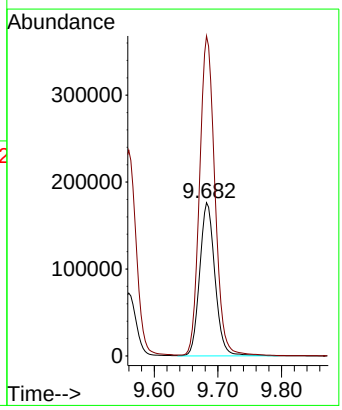
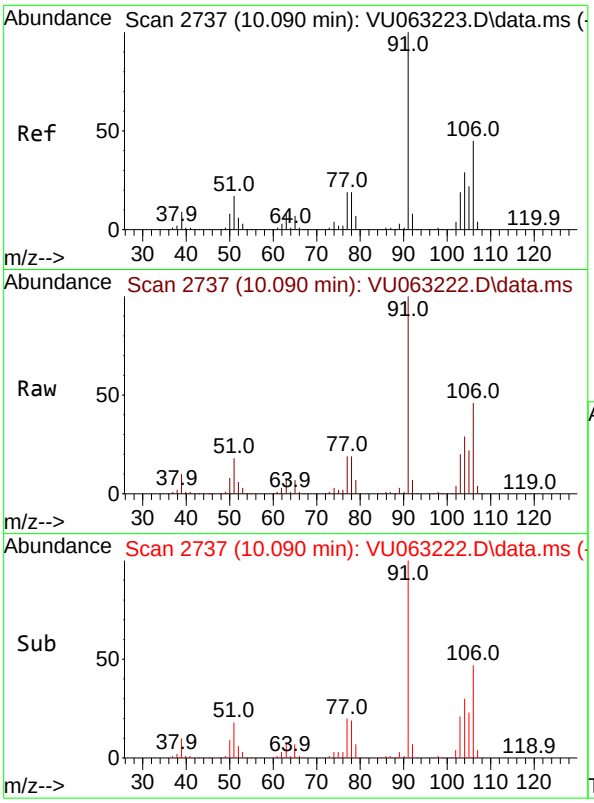


#64
m/p-Xylenes
Concen: 10.960 ug/l
RT: 9.682 min Scan# 2610
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:106 Resp: 293404

Ion	Ratio	Lower	Upper
106	100		
91	209.6	166.9	250.3

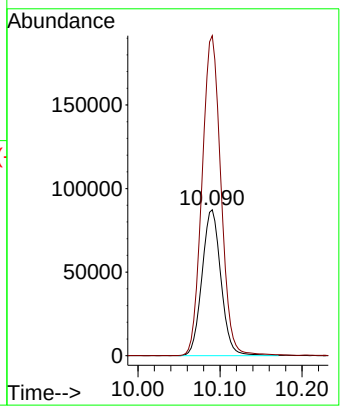




#65
o-Xylene
Concen: 5.340 ug/l
RT: 10.090 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:106 Resp: 13994

Ion	Ratio	Lower	Upper
106	100		
91	219.4	110.9	332.9



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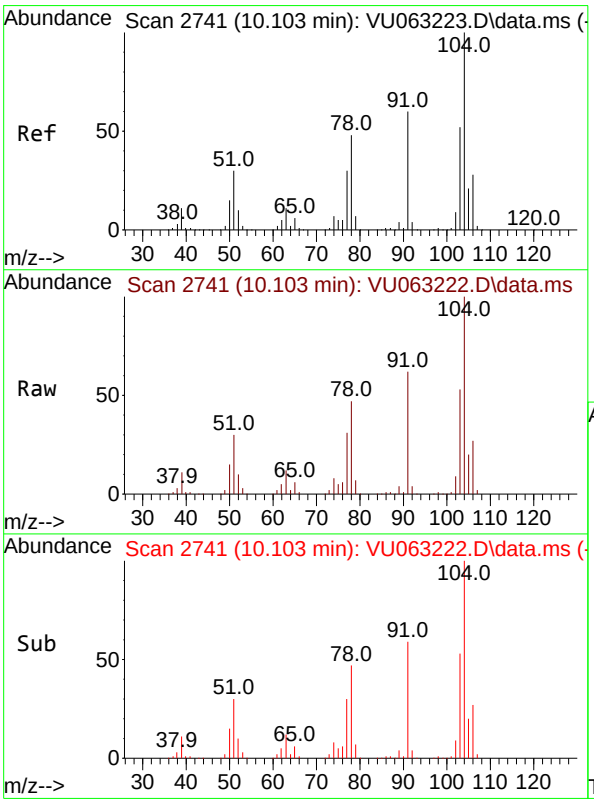
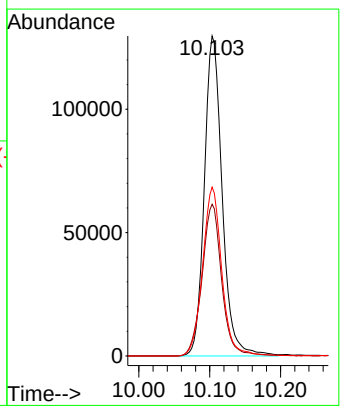
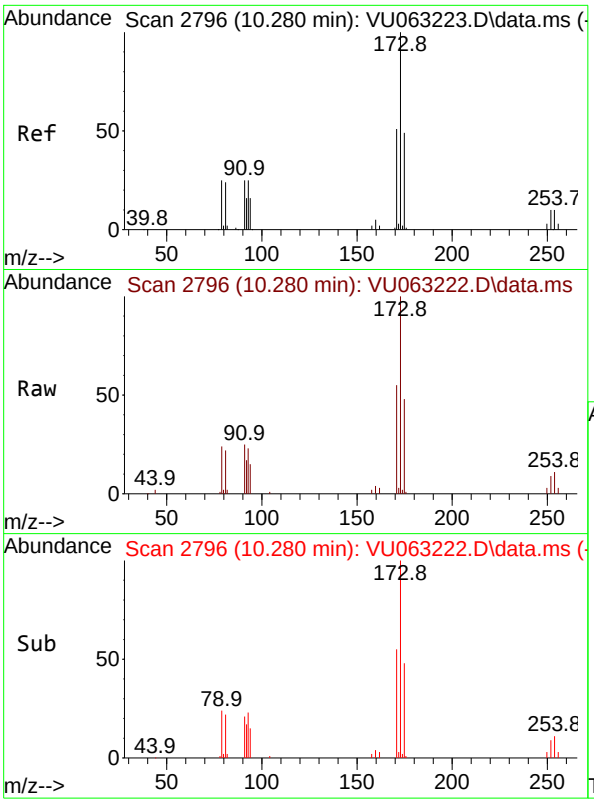


#66
Styrene
Concen: 5.448 ug/l
RT: 10.103 min Scan# 2741
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:104 Resp: 227199

Ion	Ratio	Lower	Upper
104	100		
78	52.1	41.2	61.8
103	56.8	44.8	67.2

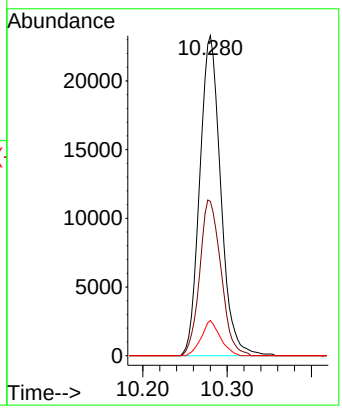




#67
Bromoform
Concen: 5.053 ug/l
RT: 10.280 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:173 Resp: 4036

Ion	Ratio	Lower	Upper
173	100		
175	49.3	39.0	58.4
254	9.9	7.7	11.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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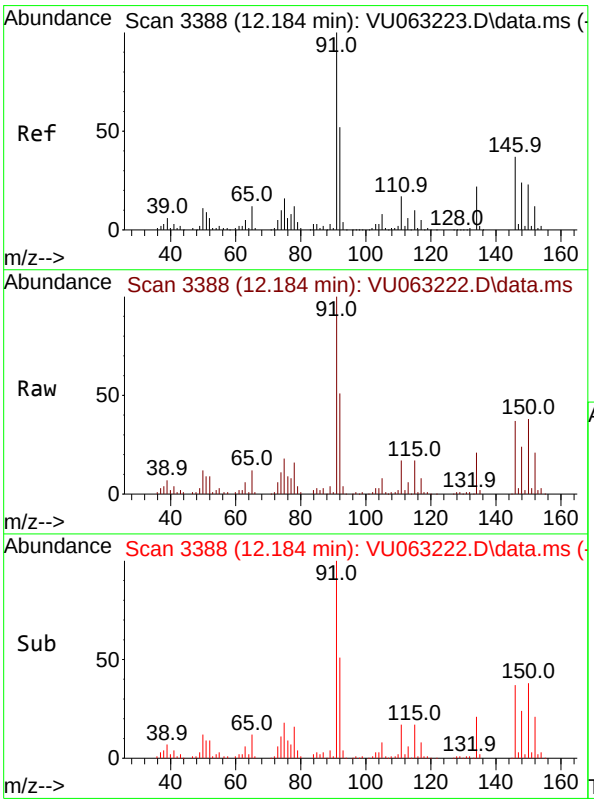
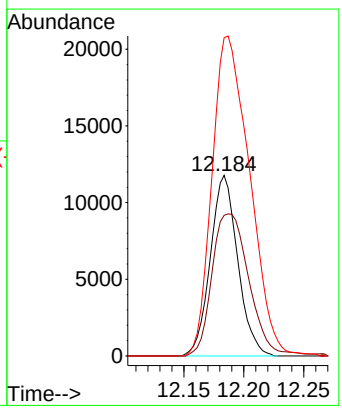
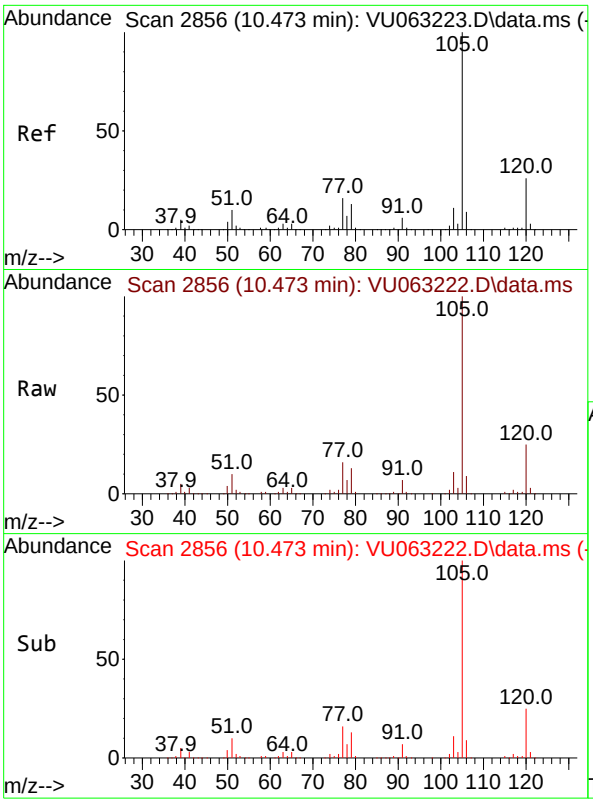


#68
1,2-Dichlorobenzene-d4
Concen: 0.978 ug/l
RT: 12.184 min Scan# 3388
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:152 Resp: 18704

Ion	Ratio	Lower	Upper
152	100		
115	105.9	0.0	275.2
150	243.0	0.0	658.4





#69
Isopropylbenzene
Concen: 5.356 ug/l
RT: 10.473 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:105 Resp: 32999

Ion	Ratio	Lower	Upper
105	100		
120	25.3	12.8	38.4

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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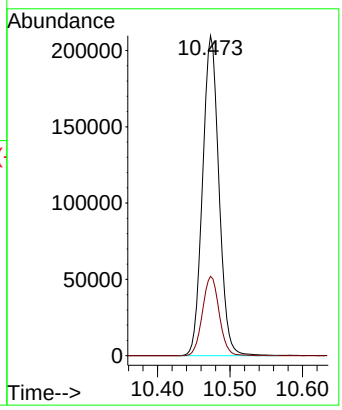
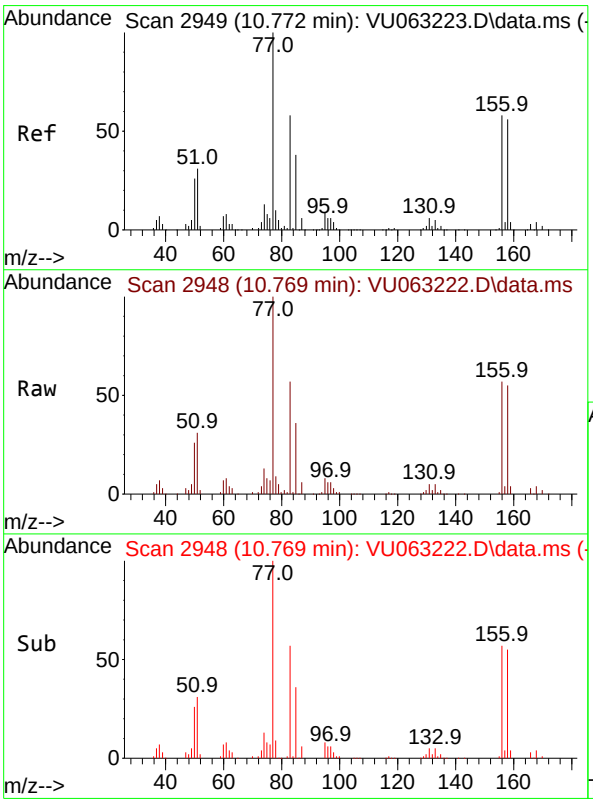
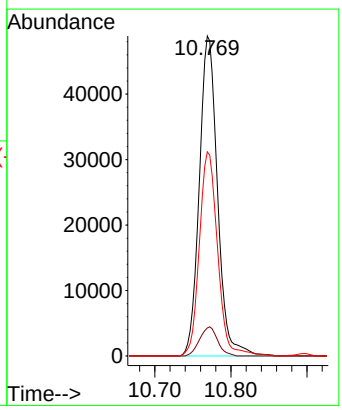


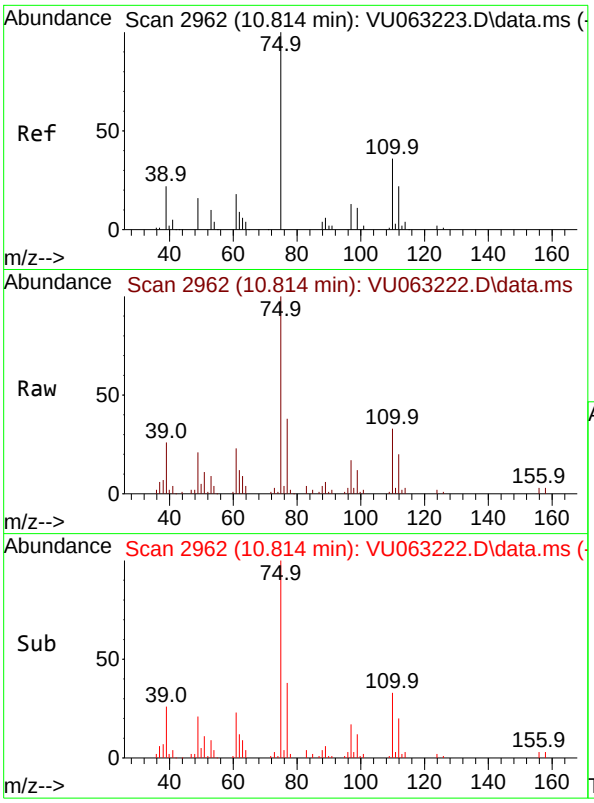


#70
1,1,2,2-Tetrachloroethane
Concen: 4.932 ug/l
RT: 10.769 min Scan# 2948
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 83 Resp: 81338

Ion	Ratio	Lower	Upper
83	100		
131	9.0	7.4	11.0
85	63.7	51.8	77.8

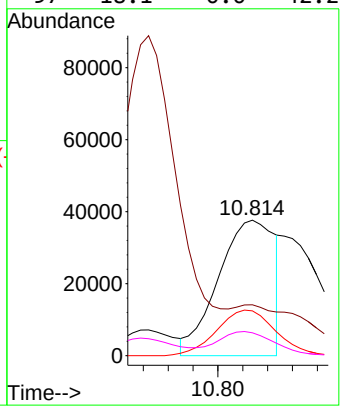




#71
1,2,3-Trichloropropane
Concen: 4.736 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 75 Resp: 5922

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	35.6	0.0	77.0
97	18.1	0.0	42.2



Instrument :
MSVOA_U
ClientSampleId :
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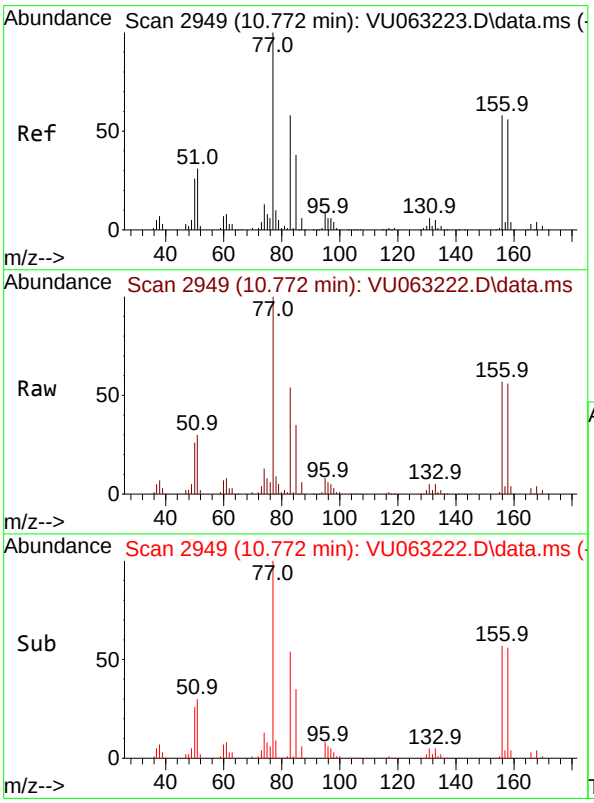
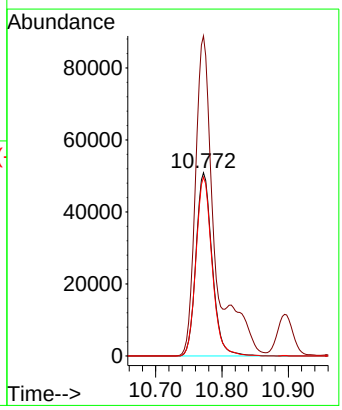
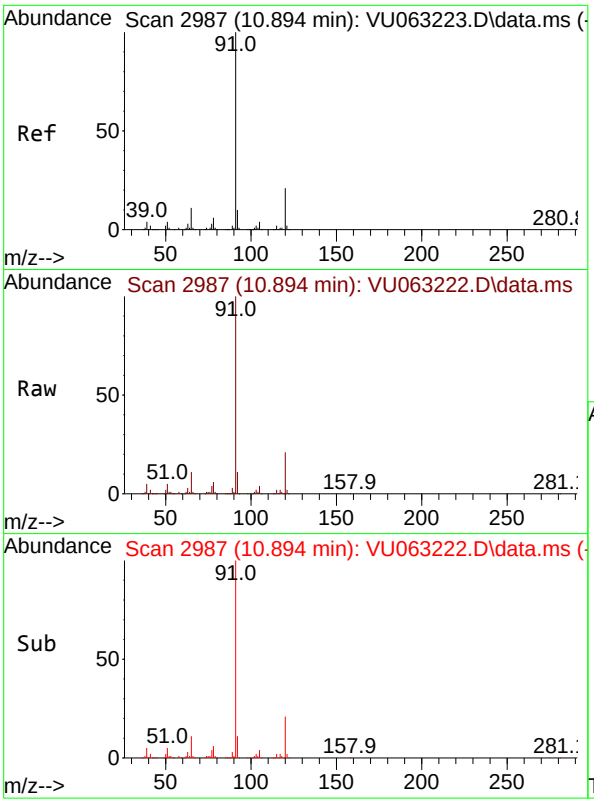


#72
Bromobenzene
Concen: 5.178 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:156 Resp: 85960

Ion	Ratio	Lower	Upper
156	100		
77	175.5	0.0	343.6
158	97.1	0.0	193.0





#73
n-propylbenzene
Concen: 5.439 ug/l
RT: 10.894 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:120 Resp: 9593

Ion	Ratio	Lower	Upper
120	100		
91	464.6	369.8	554.6

Instrument :
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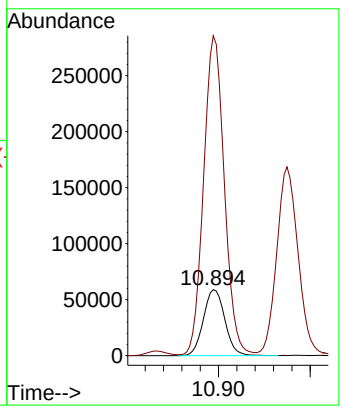
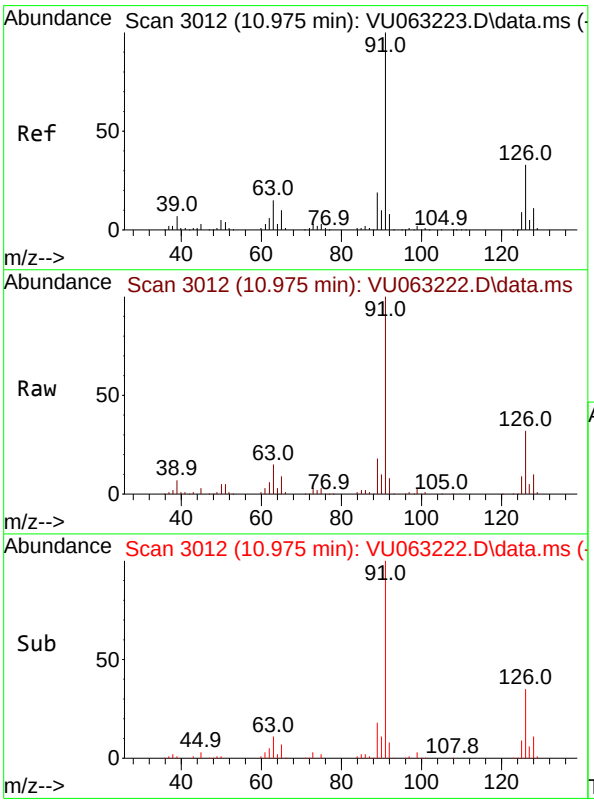
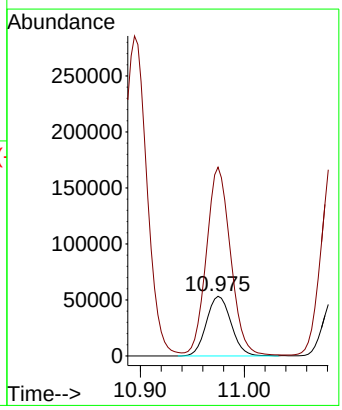


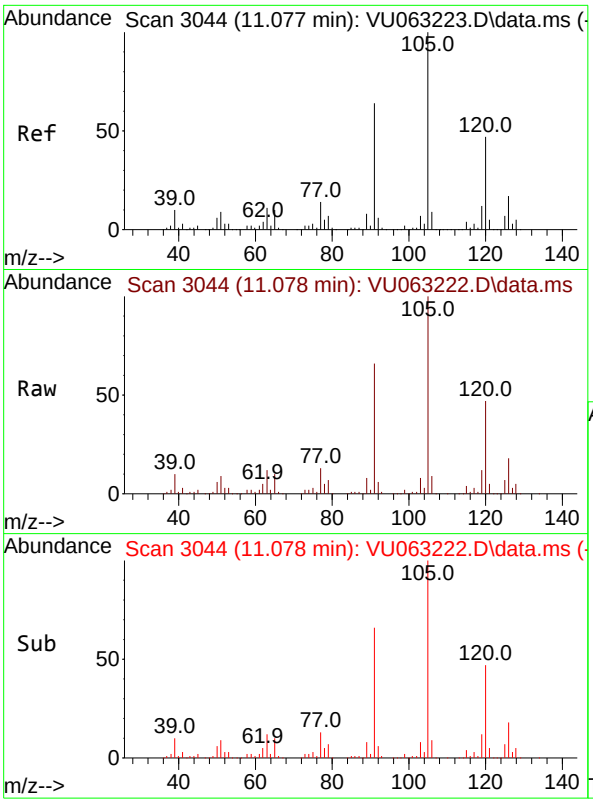


#74
2-Chlorotoluene
Concen: 5.399 ug/l
RT: 10.975 min Scan# 3012
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:126 Resp: 87769

Ion	Ratio	Lower	Upper
126	100		
91	307.9	0.0	623.8





#75
1,3,5-Trimethylbenzene
Concen: 5.489 ug/l
RT: 11.078 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:105 Resp: 31334

Ion	Ratio	Lower	Upper
105	100		
120	46.6	37.3	55.9

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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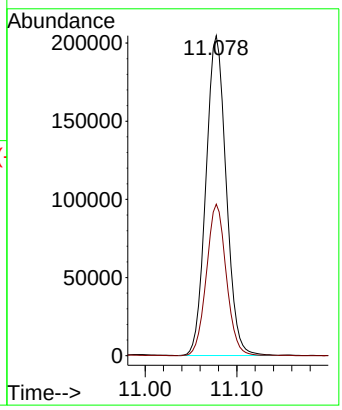
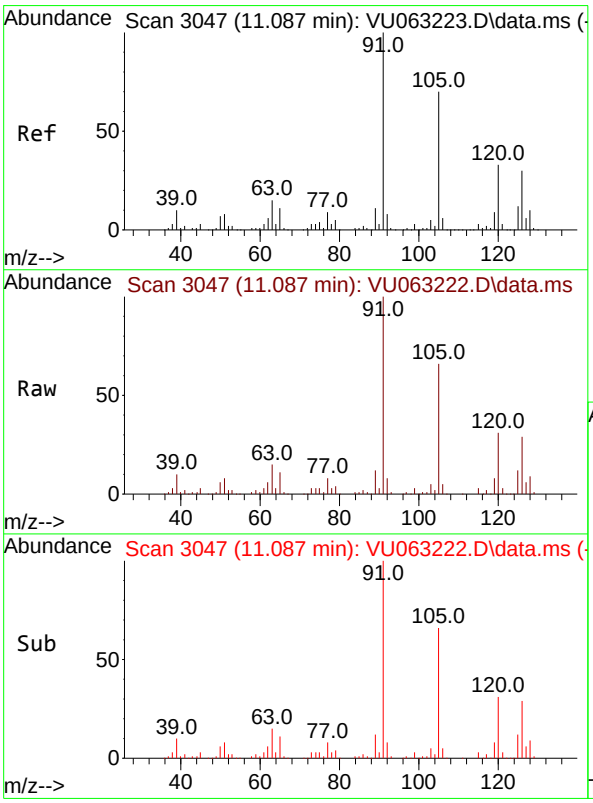
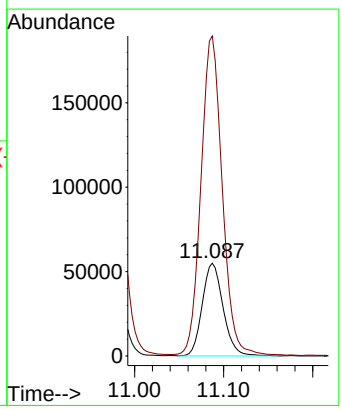


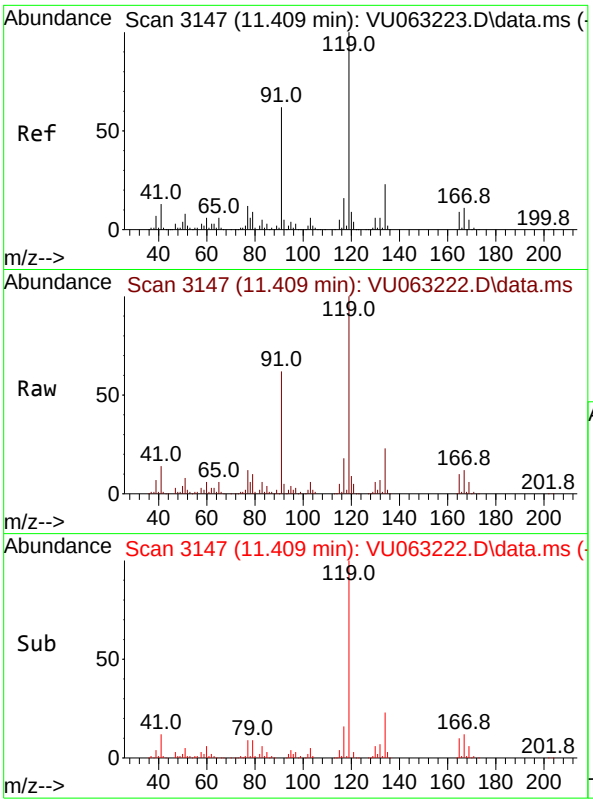


#76
4-Chlorotoluene
Concen: 5.353 ug/l
RT: 11.087 min Scan# 3047
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:126 Resp: 89247

Ion	Ratio	Lower	Upper
126	100		
91	349.6	0.0	703.6

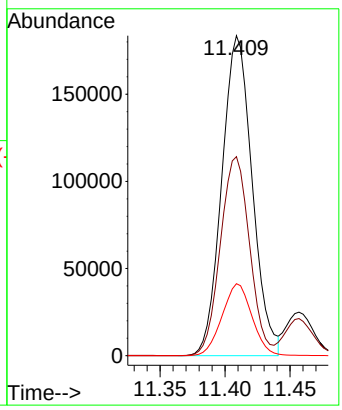




#77
tert-Butylbenzene
Concen: 5.183 ug/l
RT: 11.409 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:119 Resp: 29925

Ion	Ratio	Lower	Upper
119	100		
91	59.8	29.4	88.3
134	22.2	17.6	26.4



Instrument :
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ClientSampleId :
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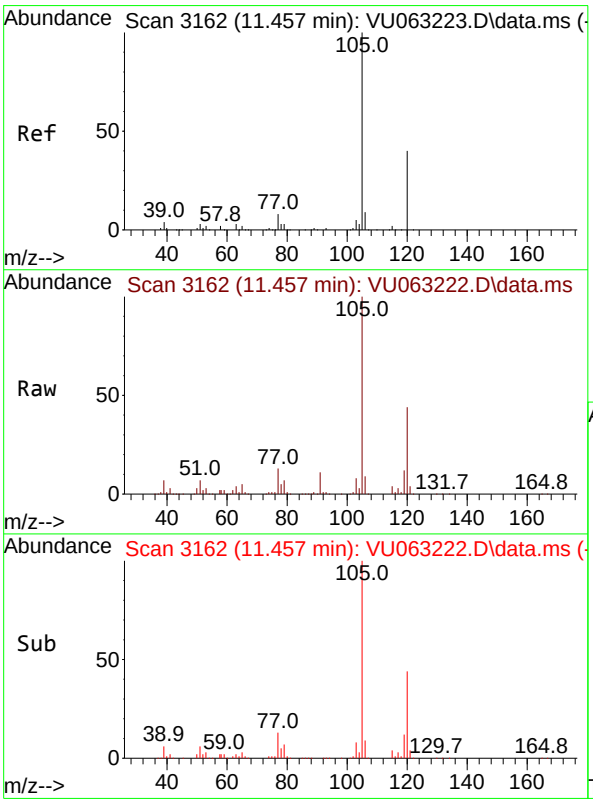
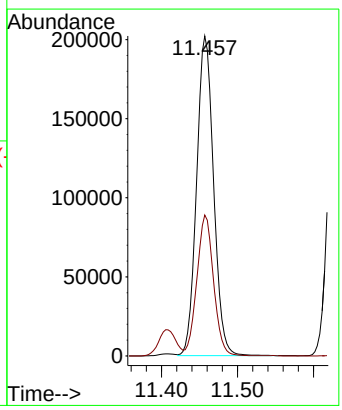
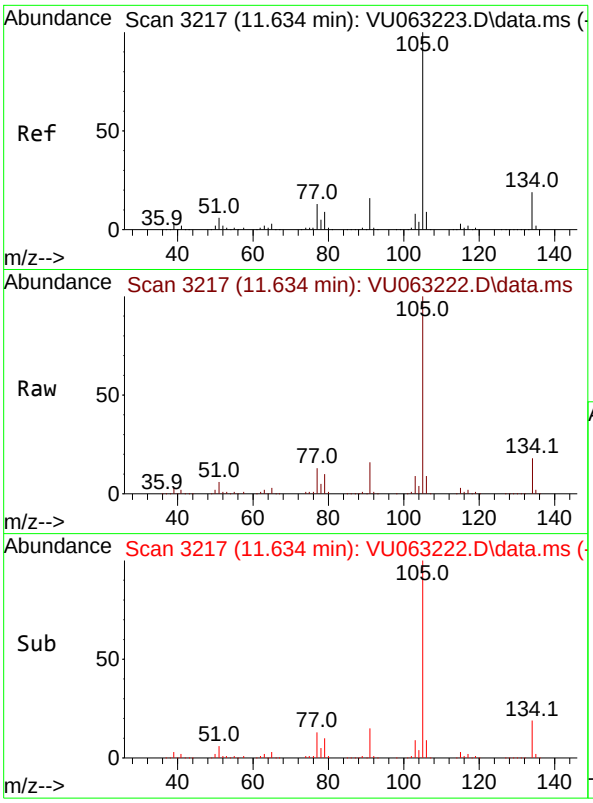


#78
1,2,4-Trimethylbenzene
Concen: 5.539 ug/l
RT: 11.457 min Scan# 3162
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:105 Resp: 313777

Ion	Ratio	Lower	Upper
105	100		
120	43.3	21.9	65.7

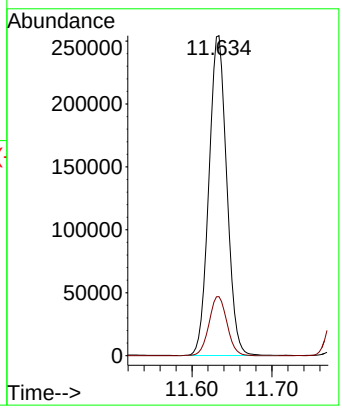




#79
sec-Butylbenzene
Concen: 5.362 ug/l
RT: 11.634 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:105 Resp: 39415

Ion	Ratio	Lower	Upper
105	100		
134	18.7	15.1	22.7



Instrument :
MSVOA_U
ClientSampleId :
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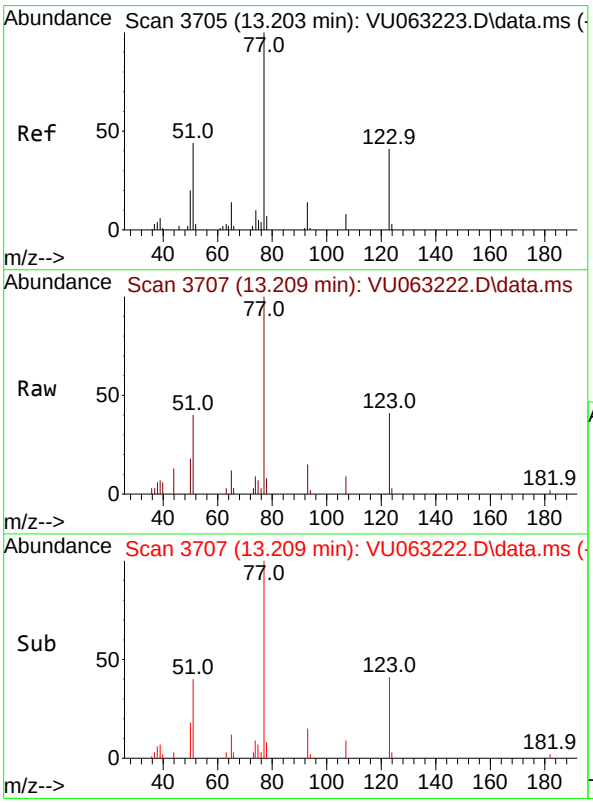
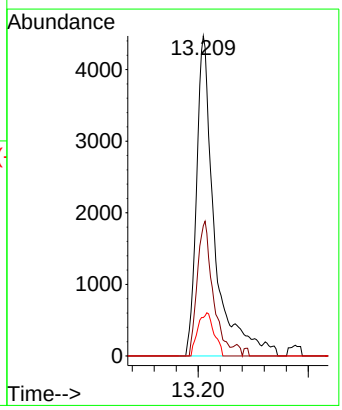
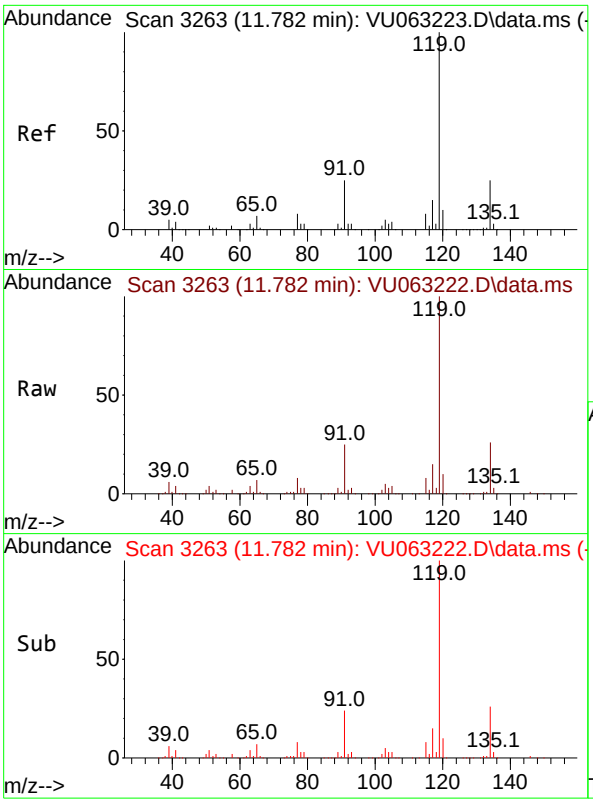


#80
Nitrobenzene
Concen: 23.083 ug/l m
RT: 13.209 min Scan# 3707
Delta R.T. 0.006 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 77 Resp: 10183

Ion	Ratio	Lower	Upper
77	100		
123	33.5	18.9	67.1
65	12.1	11.9	15.1

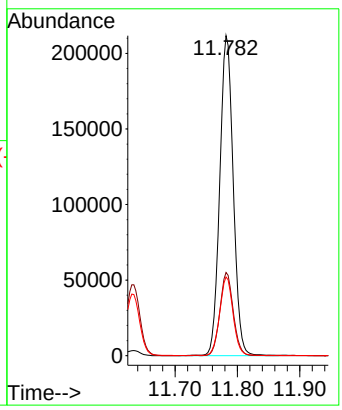




#81
p-Isopropyltoluene
Concen: 5.461 ug/l
RT: 11.782 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:119 Resp: 31680

Ion	Ratio	Lower	Upper
119	100		
134	25.7	20.3	30.5
91	24.2	19.4	29.2



Instrument :
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ClientSampleId :
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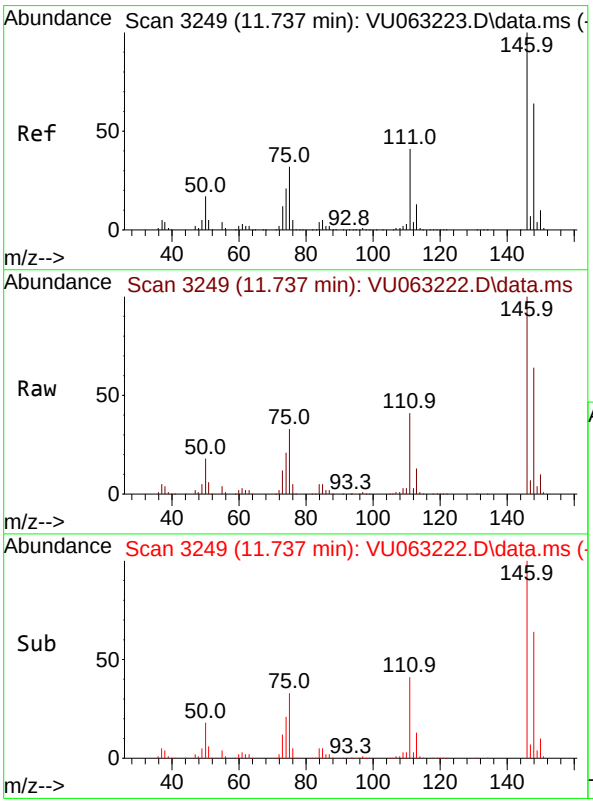
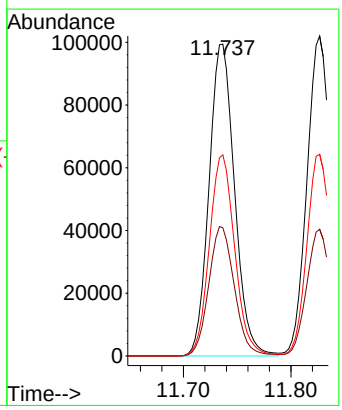
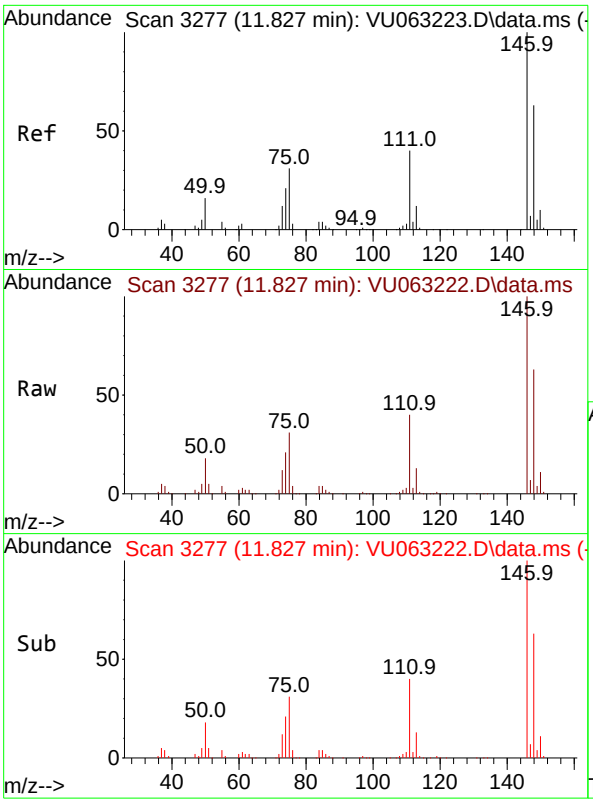


#82
1,3-Dichlorobenzene
Concen: 5.096 ug/l
RT: 11.737 min Scan# 3249
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:146 Resp: 164073

Ion	Ratio	Lower	Upper
146	100		
111	41.7	32.8	49.2
148	64.2	51.1	76.7

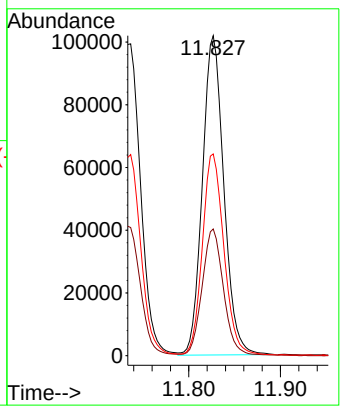




#83
1,4-Dichlorobenzene
Concen: 5.244 ug/l
RT: 11.827 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:146 Resp: 16515

Ion	Ratio	Lower	Upper
146	100		
111	39.8	32.1	48.1
148	63.3	50.2	75.4



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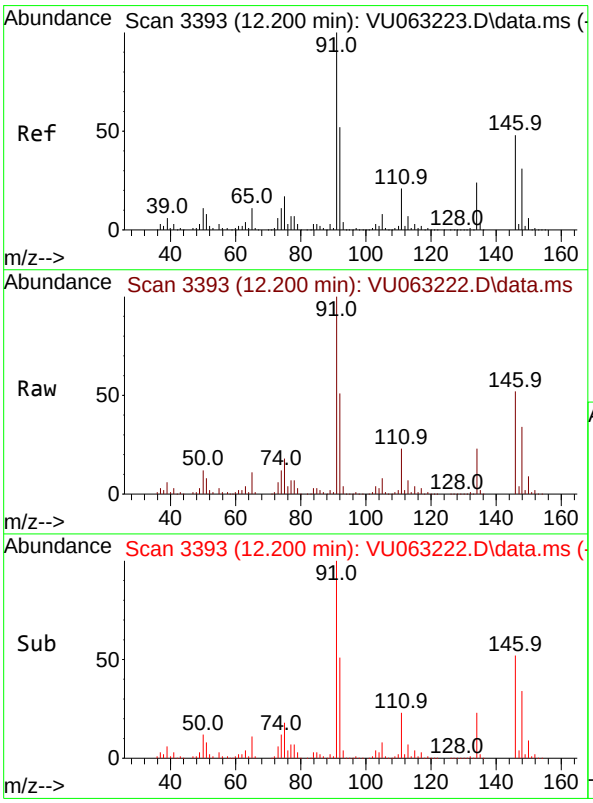
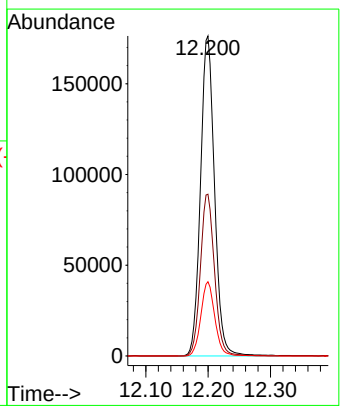
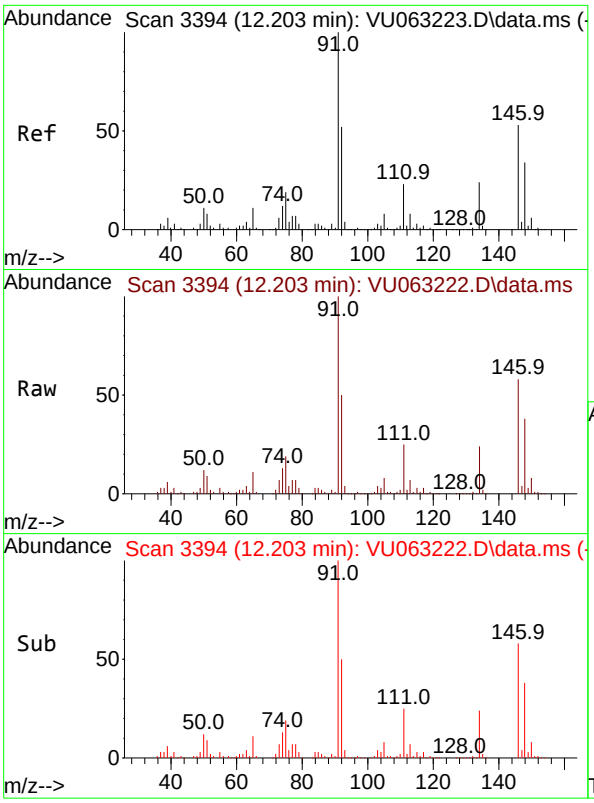


#84
n-Butylbenzene
Concen: 5.285 ug/l
RT: 12.200 min Scan# 3393
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 91 Resp: 276461

Ion	Ratio	Lower	Upper
91	100		
92	50.7	41.8	62.8
134	23.0	18.6	28.0

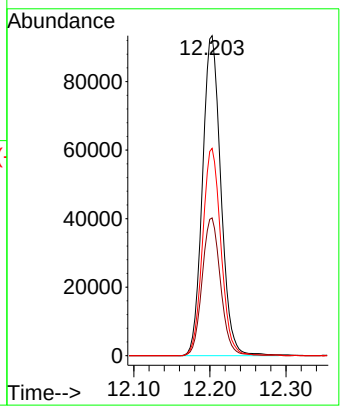




#85
1,2-Dichlorobenzene
Concen: 5.072 ug/l
RT: 12.203 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:146 Resp: 15695

Ion	Ratio	Lower	Upper
146	100		
111	43.1	21.9	65.7
148	64.6	32.3	96.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

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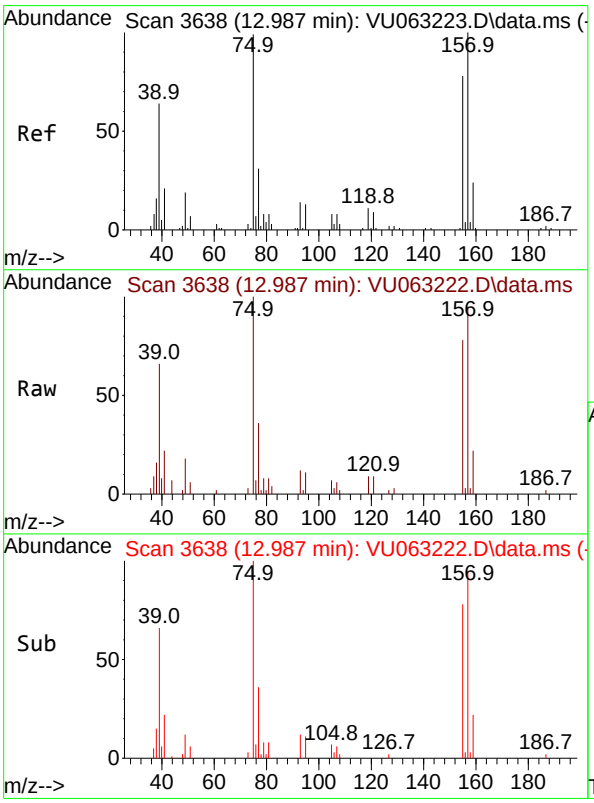
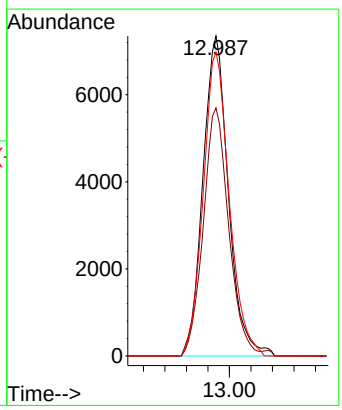
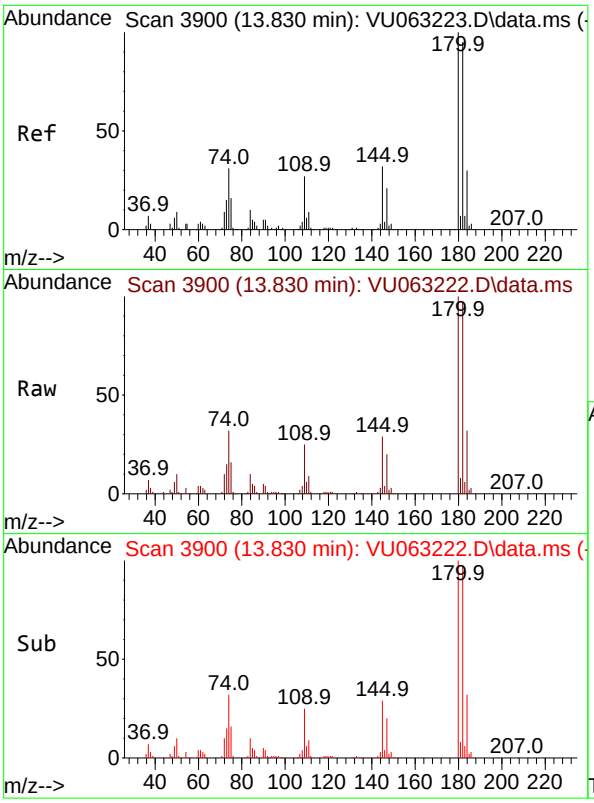


#86
1,2-Dibromo-3-Chloropropane
Concen: 5.220 ug/l
RT: 12.987 min Scan# 3638
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion: 75 Resp: 12084

Ion	Ratio	Lower	Upper
75	100		
155	77.3	63.5	95.3
157	96.9	81.8	122.6

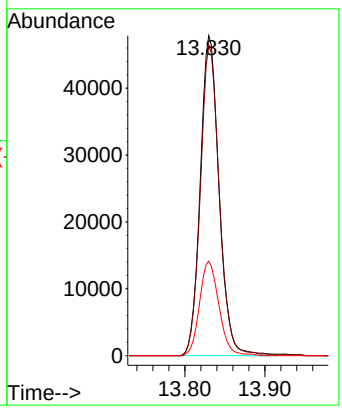




#87
1,2,4-Trichlorobenzene
Concen: 5.203 ug/l
RT: 13.830 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:180 Resp: 7851

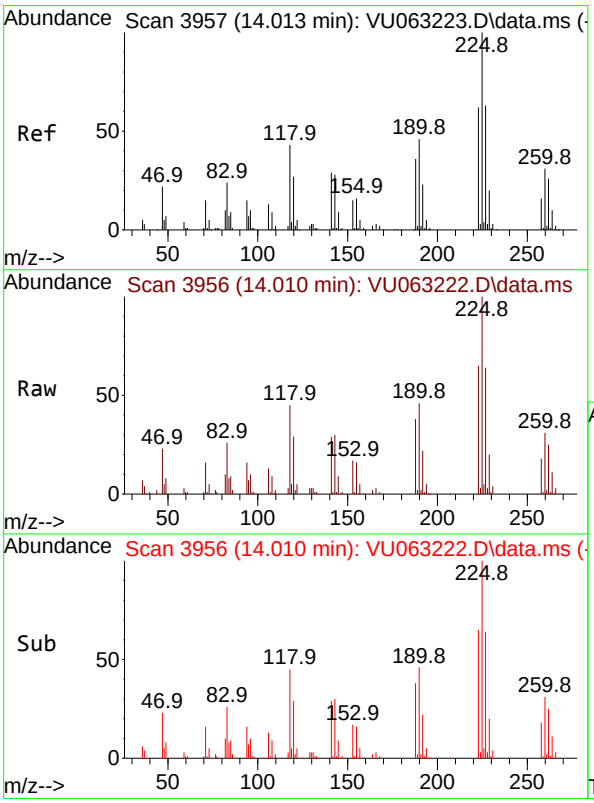
Ion	Ratio	Lower	Upper
180	100		
182	97.4	76.6	115.0
145	30.4	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

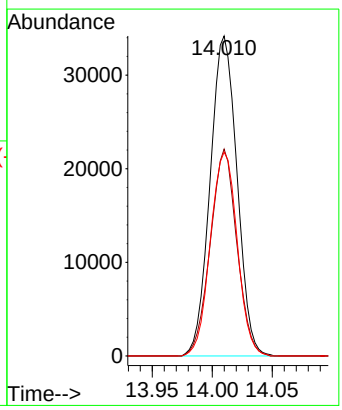
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

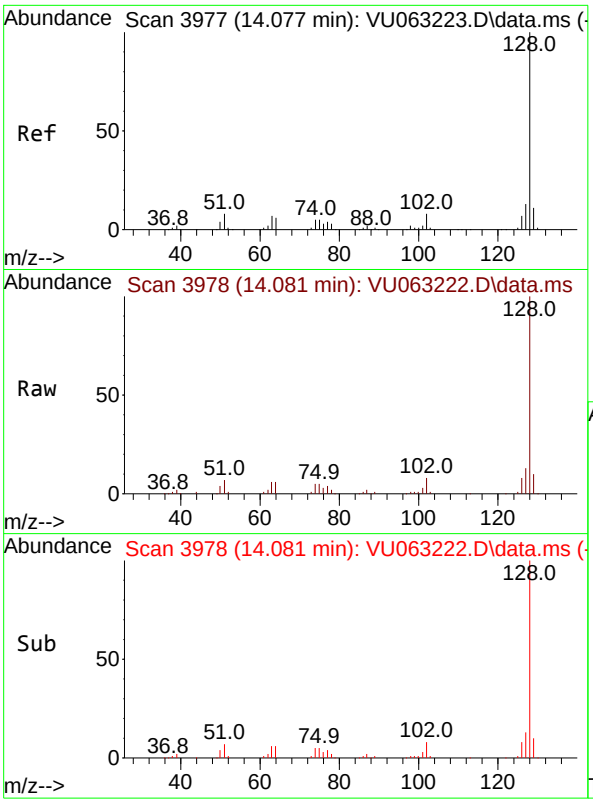


#88
Hexachlorobutadiene
Concen: 4.939 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:225 Resp: 53269

Ion	Ratio	Lower	Upper
225	100		
223	63.8	49.5	74.3
227	63.6	51.0	76.4

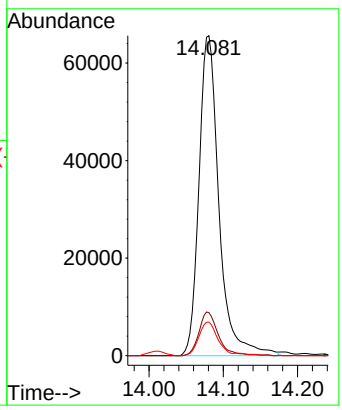




#89
Naphthalene
Concen: 4.286 ug/l
RT: 14.081 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:128 Resp: 12284

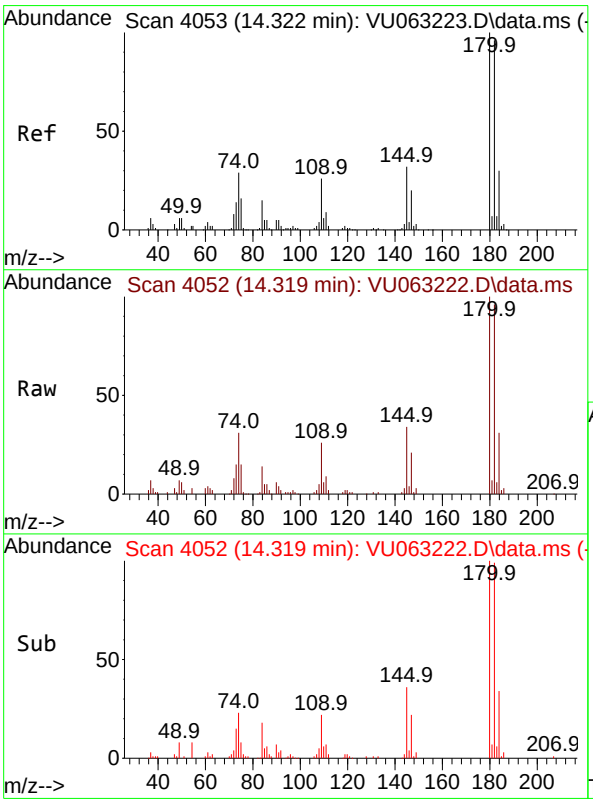
Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.6	16.0
129	9.8	8.6	13.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

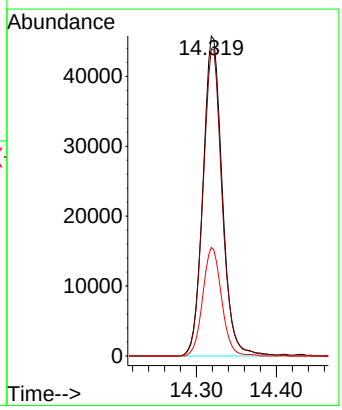
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025



#90
1,2,3-Trichlorobenzene
Concen: 5.189 ug/l
RT: 14.319 min Scan# 4052
Delta R.T. -0.003 min
Lab File: VU063222.D
Acq: 10 Feb 2025 14:23

Tgt Ion:180 Resp: 76620

Ion	Ratio	Lower	Upper
180	100		
182	95.8	78.2	117.2
145	33.2	26.1	39.1



Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063223.D
Acq On : 10 Feb 2025 15:06
Operator : MD/SY
Sample : VSTDICCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 04:00:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.103	96	57821	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.624	95	20703	1.085	ug/l	0.00
Spiked Amount 1.000			Recovery = 109.000%			
68) 1,2-Dichlorobenzene-d4	12.184	152	19878	1.002	ug/l	0.00
Spiked Amount 1.000			Recovery = 100.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.377	85	176288	9.384	ug/l	100
3) Chloromethane	1.515	50	203794	9.420	ug/l	100
4) Vinyl Chloride	1.599	62	211768	9.893	ug/l	100
5) Bromomethane	1.843	94	110441	11.156	ug/l	100
6) Chloroethane	1.924	64	128364	9.521	ug/l	100
7) Trichlorofluoromethane	2.129	101	244670	9.646	ug/l	100
8) 1,1,2-Trichloro-1,2,2-...	2.570	101	133515	9.273	ug/l	100
9) 1,1-Dichloroethene	2.567	96	143583	9.788	ug/l	100
10) Iodomethane	2.708	142	234351	10.162	ug/l	100
11) Allyl Chloride	2.911	41	211288	10.026	ug/l	100
12) Acrylonitrile	3.300	53	74970	22.485	ug/l	100
13) Acetone	2.612	43	136864	52.606	ug/l	100
14) Carbon Disulfide	2.782	76	497871	9.707	ug/l	100
15) Methylene Chloride	3.030	84	175770	9.699	ug/l	100
16) trans-1,2-Dichloroethene	3.338	96	166021	9.916	ug/l	100
17) 1,1-Dichloroethane	3.853	63	311213	9.862	ug/l	100
18) 2-Butanone	4.685	43	227157	54.048	ug/l	100
19) Cyclohexane	5.377	56	262184m	10.340	ug/l	
20) Methylcyclohexane	6.753	83	259112	10.304	ug/l	100
21) 2,2-Dichloropropane	4.647	77	241757	9.820	ug/l	100
22) cis-1,2-Dichloroethene	4.650	96	182447	10.086	ug/l	100
23) Diethyl Ether	2.364	59	125036	9.933	ug/l	100
24) tert-Butyl Alcohol	3.158	59	136525	106.650	ug/l	100
25) Methyl tert-Butyl Ether	3.348	73	388982	10.617	ug/l	100
26) Bromochloromethane	4.959	128	78959	9.986	ug/l	100
27) Chloroform	5.071	83	315662	9.912	ug/l	100
28) 1,1,1-Trichloroethane	5.303	97	255321	9.897	ug/l	100
29) 1,1-Dichloropropene	5.512	75	235647	10.198	ug/l	100
30) Carbon Tetrachloride	5.512	117	218368	9.870	ug/l	100
31) Isopropyl Ether	3.975	45	470393	10.441	ug/l	100
32) Ethyl-t-butyl ether	4.483	59	436320	10.649	ug/l	100
33) Tert-Amyl methyl ether	5.927	73	397764	11.111	ug/l	100
34) Propionitrile	4.753	54	71557	54.918	ug/l	100
35) Benzene	5.759	78	712587	10.030	ug/l	100
36) 1,2-Dichloroethane	5.779	62	205344	10.014	ug/l	100
37) Trichloroethene	6.531	130	168312	9.962	ug/l	100
38) 1,2-Dichloropropane	6.779	63	188716	10.148	ug/l	100
39) Methacrylonitrile	4.959	41	56424	12.123	ug/l	100
40) Methyl acrylate	4.833	55	95663	11.258	ug/l	100
41) Tetrahydrofuran	5.039	42	59516	21.760	ug/l	100
42) 1-Chlorobutane	5.444	56	326490	10.327	ug/l	100
43) Dibromomethane	6.904	93	94106	9.994	ug/l	100
44) Bromodichloromethane	7.094	83	225813	10.303	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063223.D
Acq On : 10 Feb 2025 15:06
Operator : MD/SY
Sample : VSTDICCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 04:00:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 4-Methyl-2-Pentanone	7.775	43	568881	57.627	ug/l	100
46) t-1,4-Dichloro-2-butene	10.827	75	97536m	19.967	ug/l	
47) Methyl methacrylate	6.949	69	186394	23.502	ug/l	100
48) Ethyl methacrylate	8.322	69	181630	12.196	ug/l	100
49) Toluene	7.959	92	430442	10.535	ug/l	100
50) t-1,3-Dichloropropene	8.200	75	221262	11.027	ug/l	100
51) cis-1,3-Dichloropropene	7.595	75	265202	10.700	ug/l	100
52) 1,1,2-Trichloroethane	8.389	97	131655	10.370	ug/l	100
53) 1,3-Dichloropropane	8.563	76	234008	10.382	ug/l	100
54) 2-Hexanone	8.672	43	392522	58.266	ug/l	100
55) Dibromochloromethane	8.798	129	154464	10.575	ug/l	100
56) 1,2-Dibromoethane	8.914	107	126673	10.638	ug/l	100
58) Tetrachloroethene	8.544	164	135324	9.719	ug/l	100
59) Chlorobenzene	9.438	112	443950	10.297	ug/l	100
60) 1,1,1,2-Tetrachloroethane	9.521	131	158424	10.222	ug/l	100
61) Pentachloroethane	11.415	117	139274	10.060	ug/l	100
62) Hexachloroethane	12.467	117	128179	10.465	ug/l	100
63) Ethyl Benzene	9.560	91	811424	10.912	ug/l	100
64) m/p-Xylenes	9.682	106	619391	22.300	ug/l	100
65) o-Xylene	10.090	106	297309	10.934	ug/l	100
66) Styrene	10.103	104	495181	11.443	ug/l	100
67) Bromoform	10.280	173	90220	10.883	ug/l	100
69) Isopropylbenzene	10.473	105	700805	10.963	ug/l	100
70) 1,1,2,2-Tetrachloroethane	10.772	83	179045	10.464	ug/l	100
71) 1,2,3-Trichloropropane	10.814	75	117848m	9.083	ug/l	
72) Bromobenzene	10.772	156	181776	10.554	ug/l	100
73) n-propylbenzene	10.894	120	204779	11.189	ug/l	100
74) 2-Chlorotoluene	10.975	126	182649	10.829	ug/l	100
75) 1,3,5-Trimethylbenzene	11.077	105	664048	11.211	ug/l	100
76) 4-Chlorotoluene	11.087	126	185864	10.745	ug/l	100
77) tert-Butylbenzene	11.409	119	646436	10.791	ug/l	100
78) 1,2,4-Trimethylbenzene	11.457	105	668930	11.382	ug/l	100
79) sec-Butylbenzene	11.634	105	833792	10.932	ug/l	100
80) Nitrobenzene	13.203	77	25795	50.821	ug/l	100
81) p-Isopropyltoluene	11.782	119	675304	11.219	ug/l	100
82) 1,3-Dichlorobenzene	11.737	146	344574	10.314	ug/l	100
83) 1,4-Dichlorobenzene	11.827	146	347616	10.638	ug/l	100
84) n-Butylbenzene	12.200	91	603657	11.122	ug/l	100
85) 1,2-Dichlorobenzene	12.203	146	332012	10.342	ug/l	100
86) 1,2-Dibromo-3-Chloropr...	12.987	75	28133	11.713	ug/l	100
87) 1,2,4-Trichlorobenzene	13.830	180	177895	11.361	ug/l	100
88) Hexachlorobutadiene	14.013	225	105064	9.389	ug/l	100
89) Naphthalene	14.077	128	321601	9.843	ug/l	100
90) 1,2,3-Trichlorobenzene	14.322	180	174986	11.421	ug/l	100

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

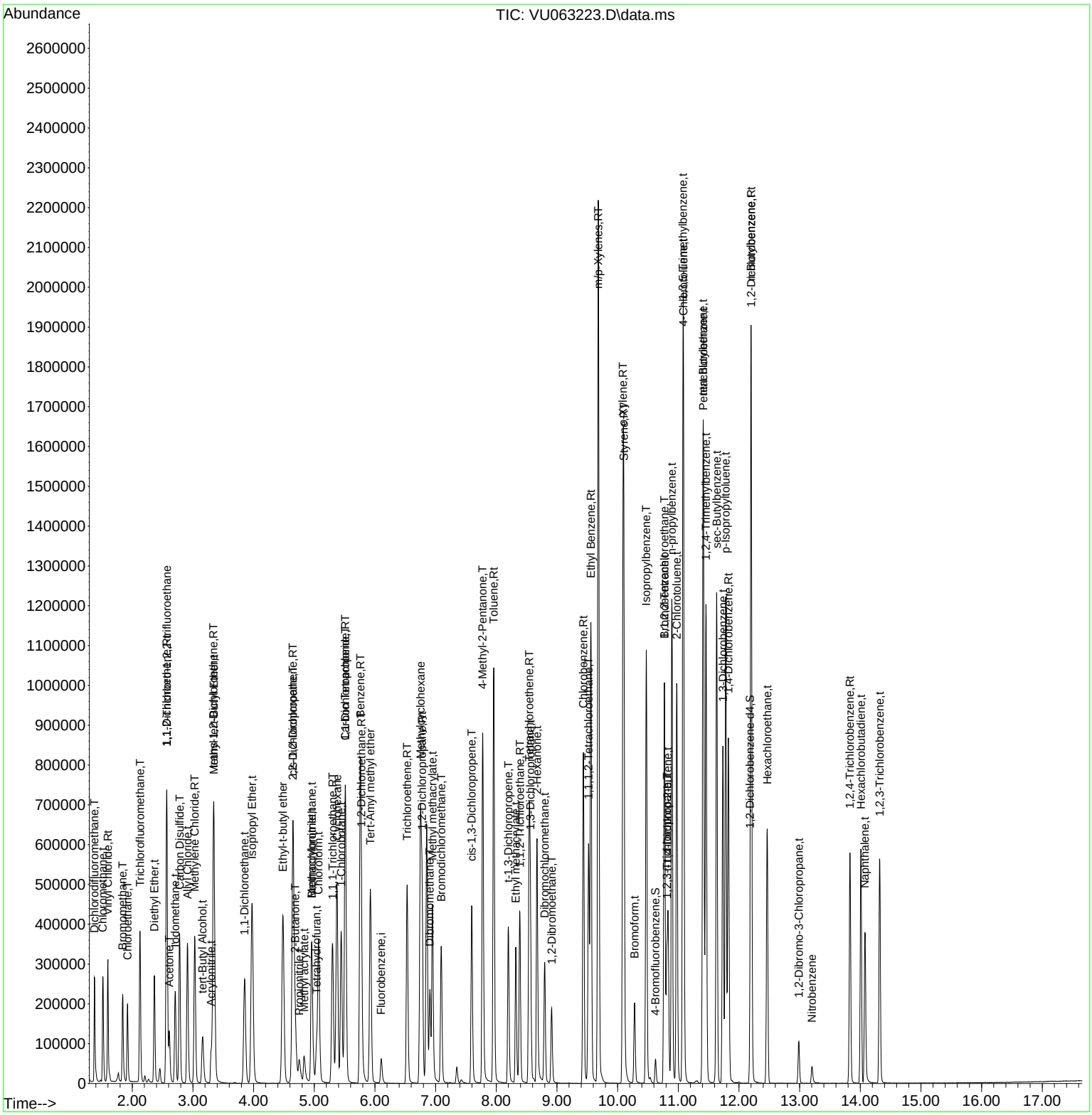
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063223.D
Acq On : 10 Feb 2025 15:06
Operator : MD/SY
Sample : VSTDICCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 7 Sample Multiplier: 1

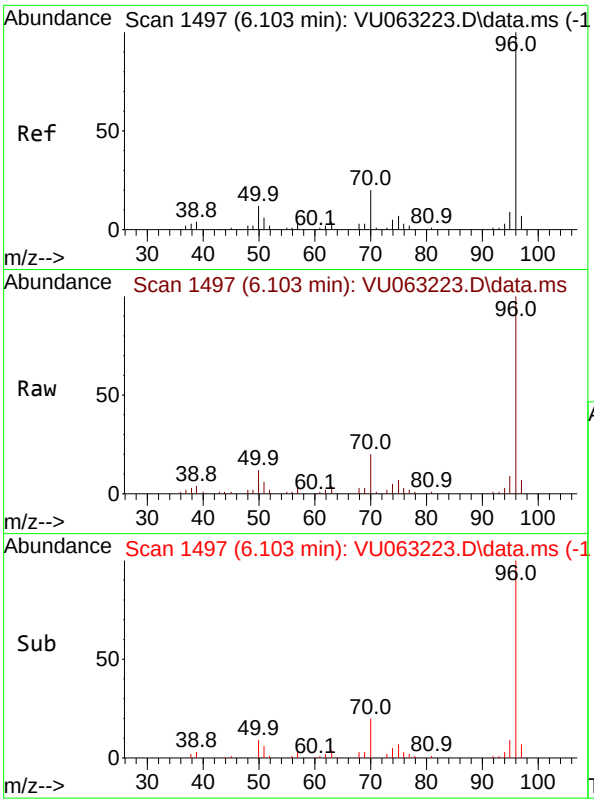
Quant Time: Feb 11 04:00:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

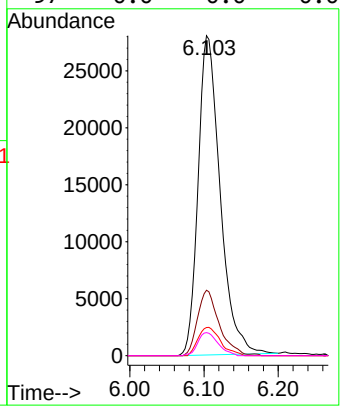




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.103 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 96 Resp: 5782

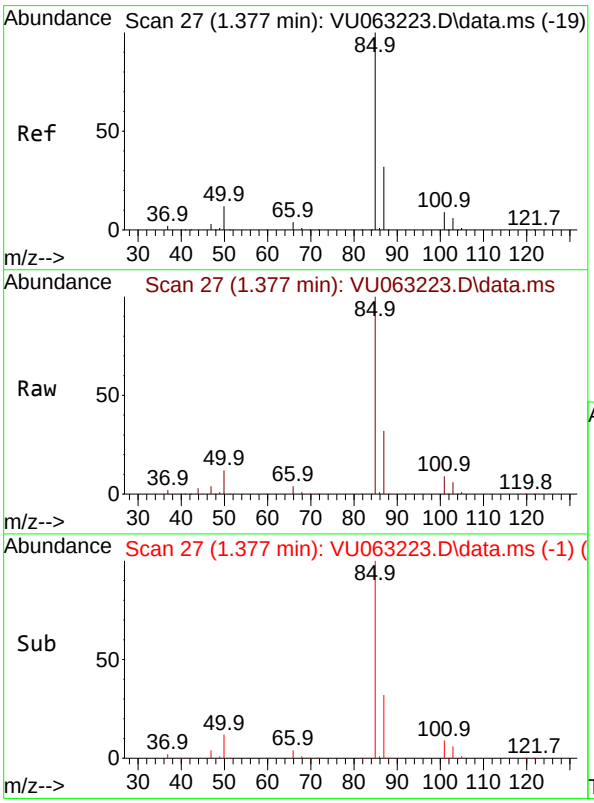
Ion	Ratio	Lower	Upper
96	100		
70	19.5	15.6	23.4
95	9.1	7.3	10.9
97	0.0	0.0	0.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

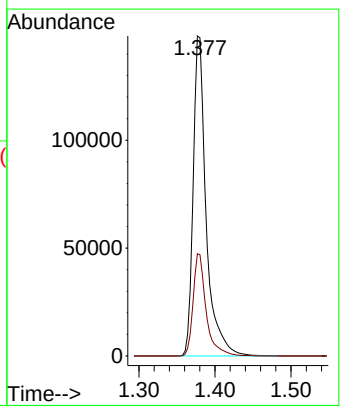
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

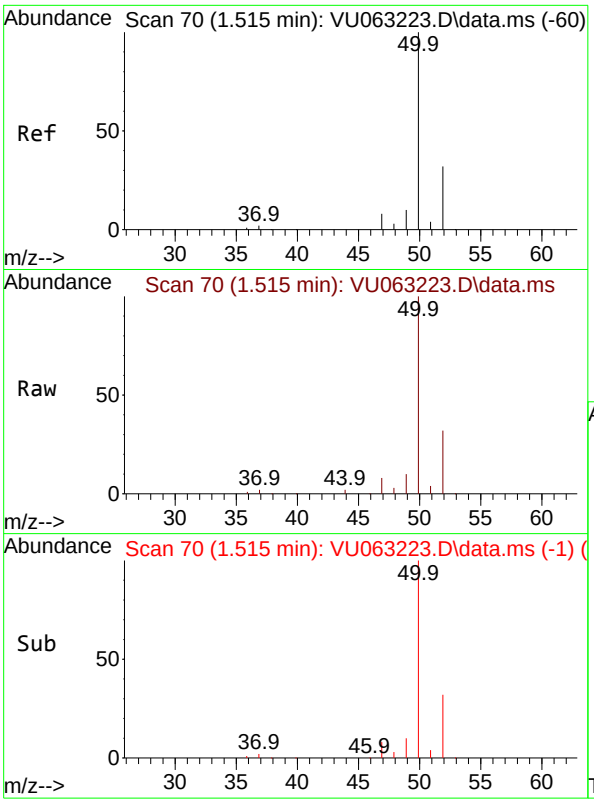


#2
Dichlorodifluoromethane
Concen: 9.384 ug/l
RT: 1.377 min Scan# 27
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 85 Resp: 176288

Ion	Ratio	Lower	Upper
85	100		
87	32.0	16.0	48.0

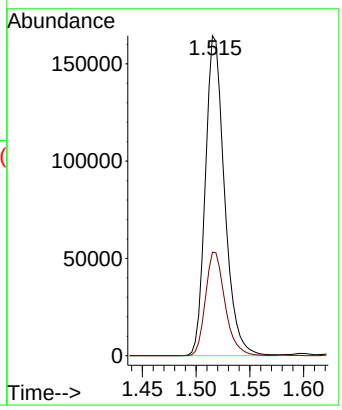




#3
Chloromethane
Concen: 9.420 ug/l
RT: 1.515 min Scan# 7
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 50 Resp: 20379

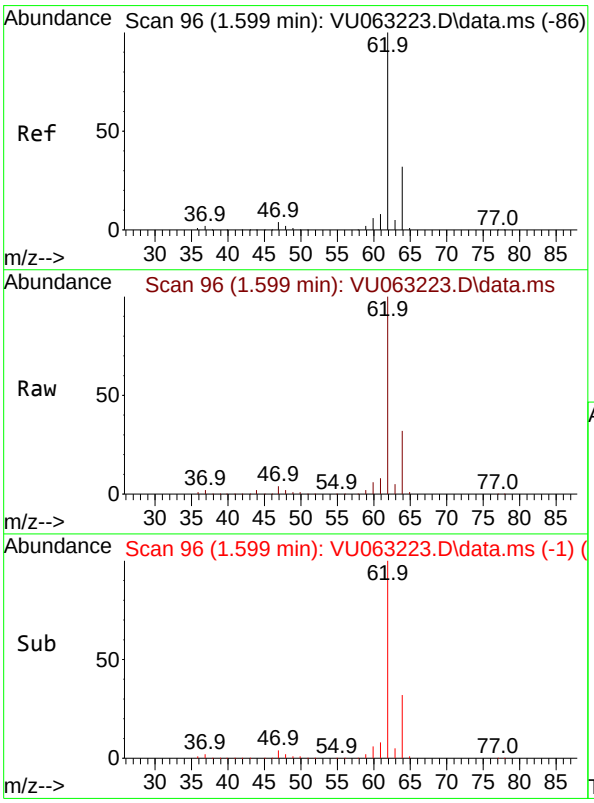
Ion	Ratio	Lower	Upper
50	100		
52	32.3	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

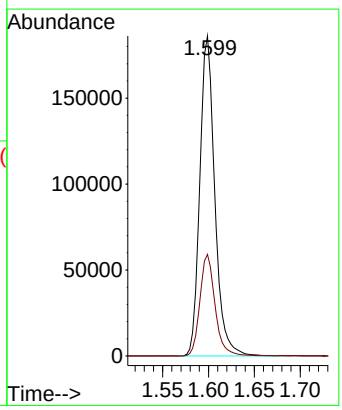
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

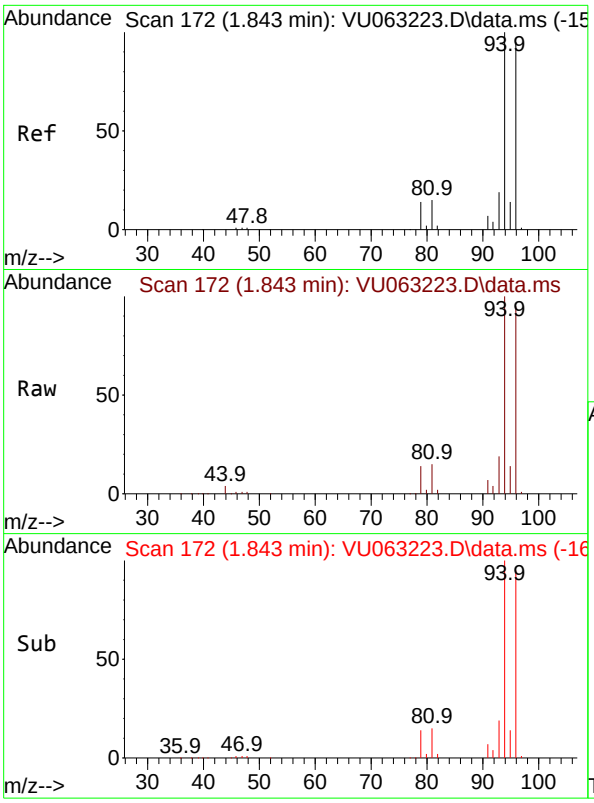


#4
Vinyl Chloride
Concen: 9.893 ug/l
RT: 1.599 min Scan# 96
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 62 Resp: 211768

Ion	Ratio	Lower	Upper
62	100		
64	31.7	25.4	38.0

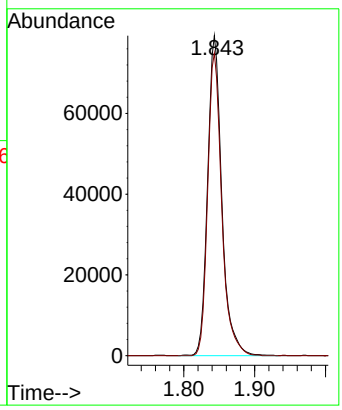




#5
Bromomethane
Concen: 11.156 ug/l
RT: 1.843 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 94 Resp: 11044

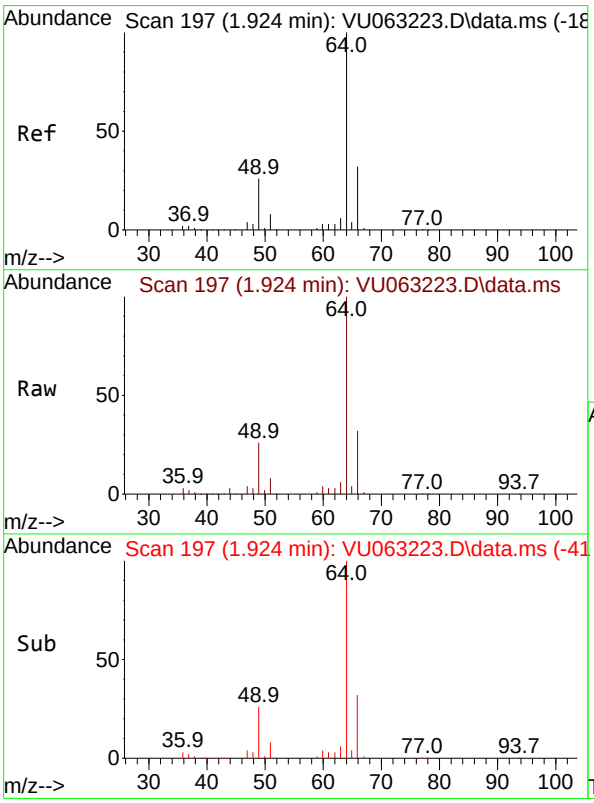
Ion	Ratio	Lower	Upper
94	100		
96	94.6	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

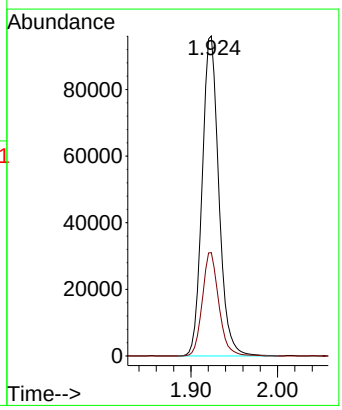
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

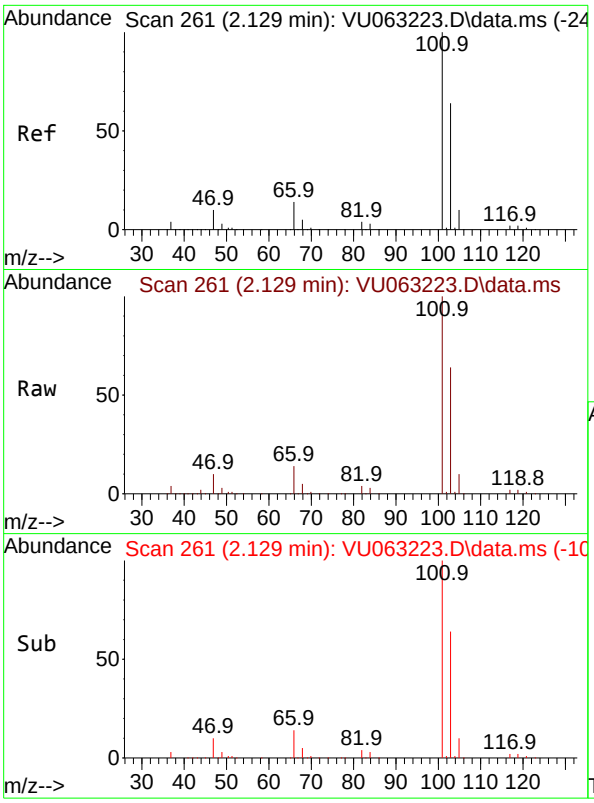


#6
Chloroethane
Concen: 9.521 ug/l
RT: 1.924 min Scan# 197
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 64 Resp: 128364

Ion	Ratio	Lower	Upper
64	100		
66	32.3	25.8	38.8





#7
Trichlorofluoromethane
Concen: 9.646 ug/l
RT: 2.129 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:101 Resp: 24467

Ion	Ratio	Lower	Upper
101	100		
103	64.3	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

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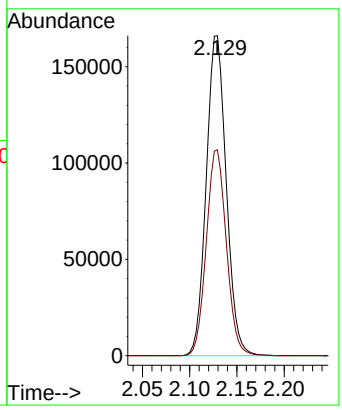
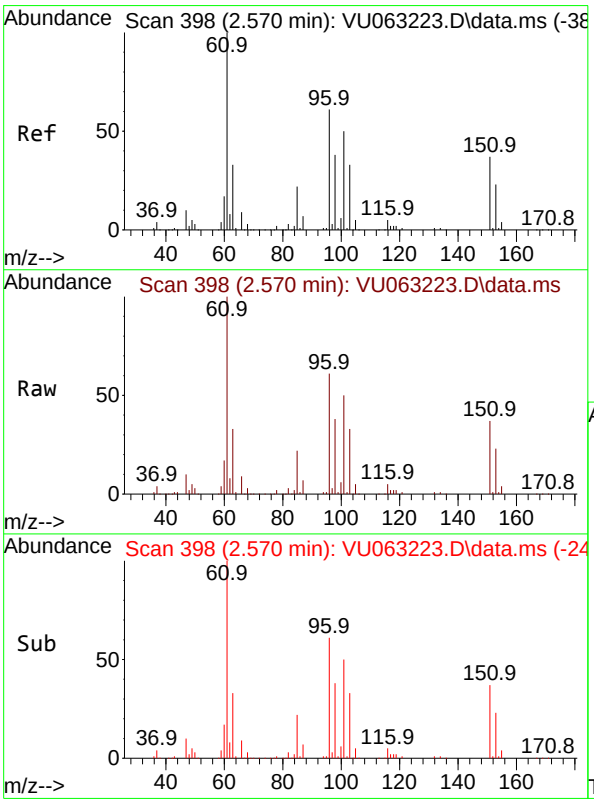
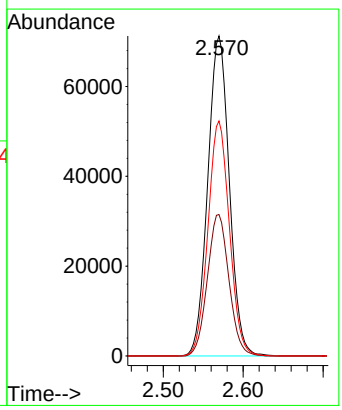


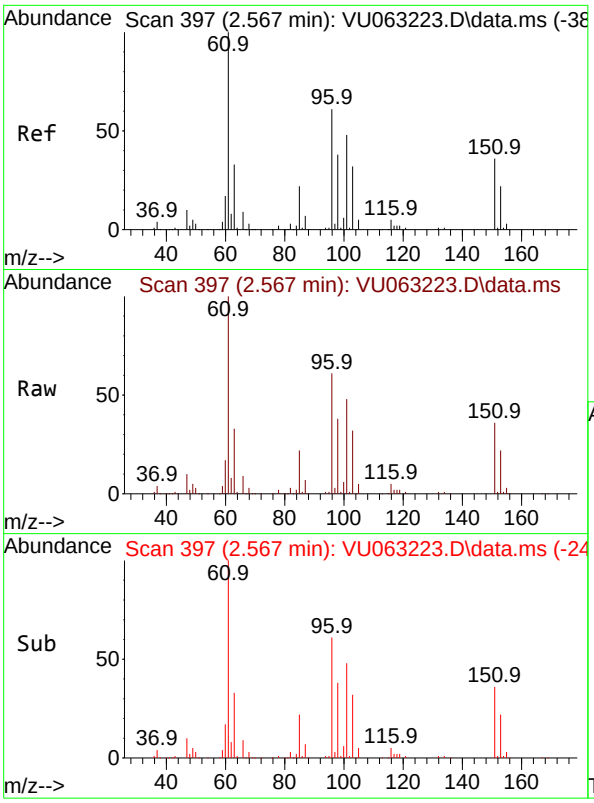


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 9.273 ug/l
RT: 2.570 min Scan# 398
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:101 Resp: 133515

Ion	Ratio	Lower	Upper
101	100		
85	44.2	35.4	53.0
151	73.1	58.5	87.7

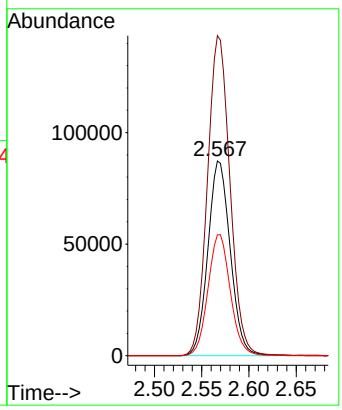




#9
1,1-Dichloroethene
Concen: 9.788 ug/l
RT: 2.567 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 96 Resp: 14358

Ion	Ratio	Lower	Upper
96	100		
61	164.3	0.0	492.9
98	62.0	0.0	124.0



Instrument :
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ClientSampleId :
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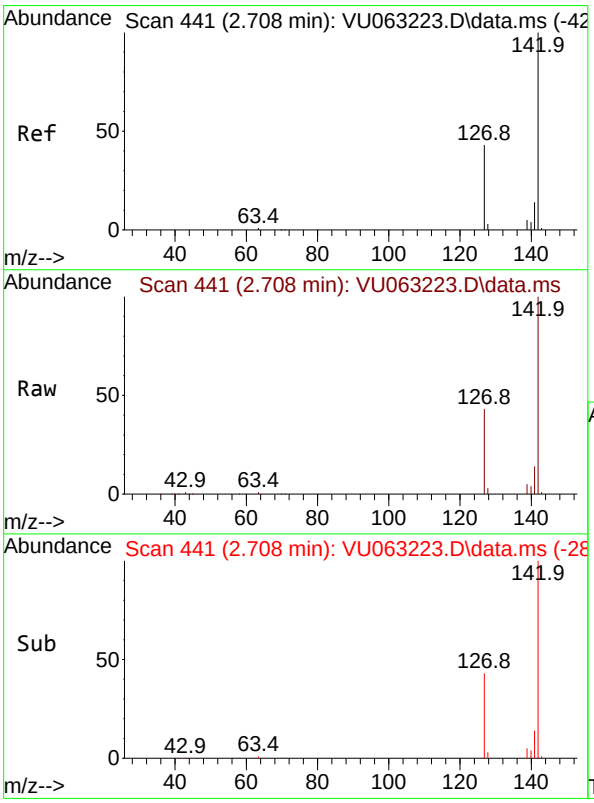
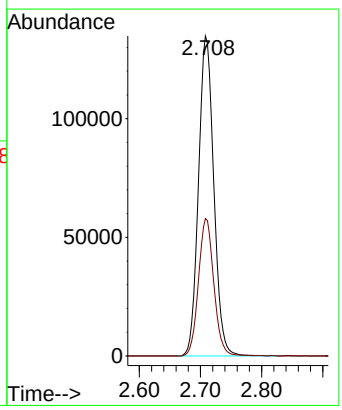
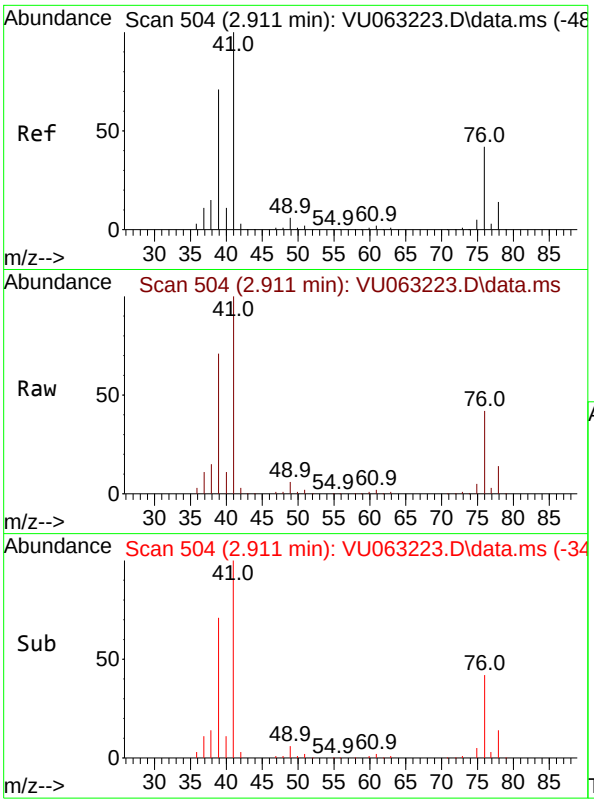


#10
Iodomethane
Concen: 10.162 ug/l
RT: 2.708 min Scan# 441
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:142 Resp: 234351

Ion	Ratio	Lower	Upper
142	100		
127	43.1	34.5	51.7

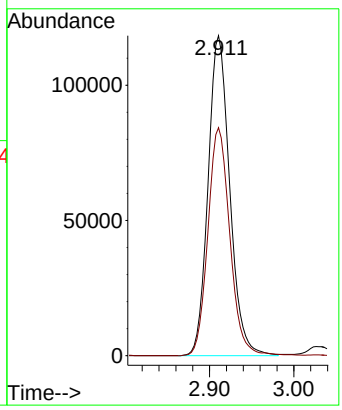




#11
Allyl Chloride
Concen: 10.026 ug/l
RT: 2.911 min Scan# 5
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 41 Resp: 21128

Ion	Ratio	Lower	Upper
41	100		
39	72.4	57.9	86.9



Instrument :
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ClientSampleId :
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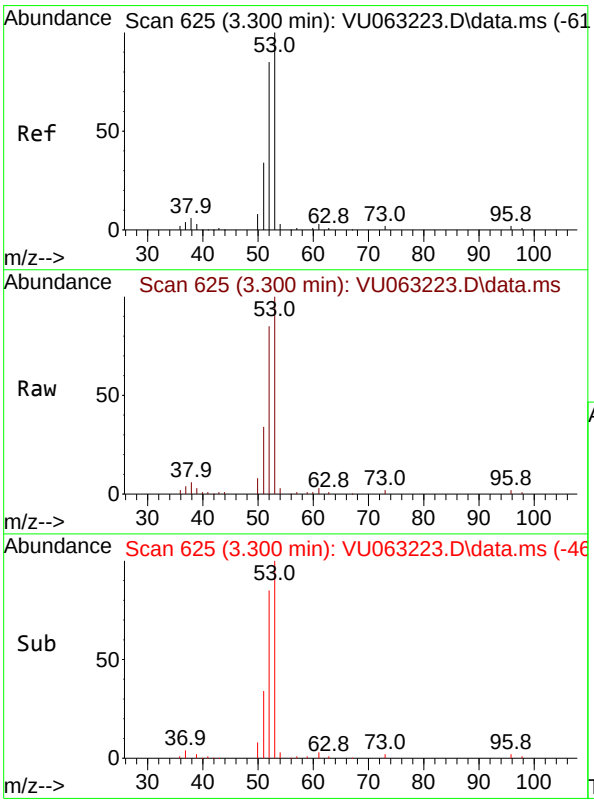
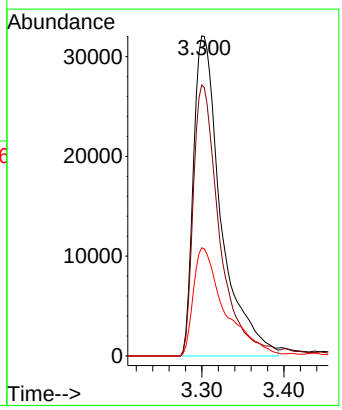
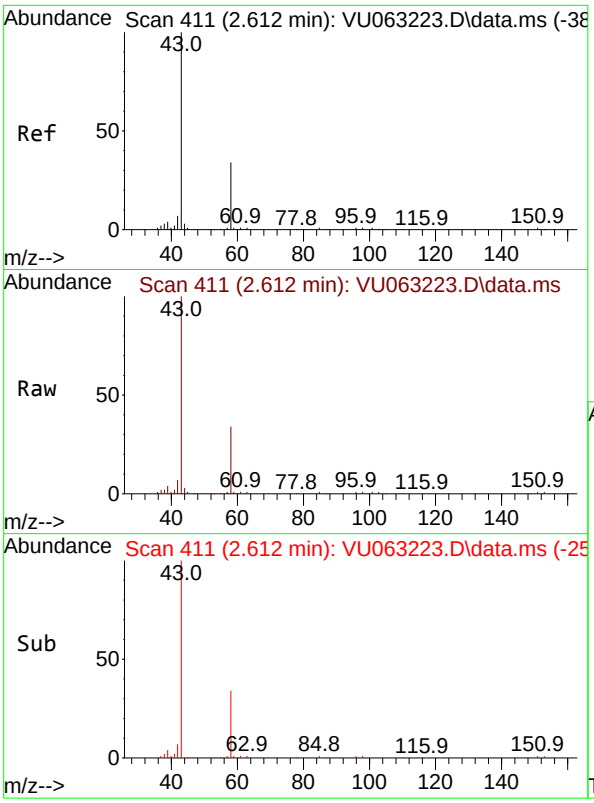


#12
Acrylonitrile
Concen: 22.485 ug/l
RT: 3.300 min Scan# 625
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 53 Resp: 74970

Ion	Ratio	Lower	Upper
53	100		
52	80.2	64.2	96.2
51	38.5	30.8	46.2

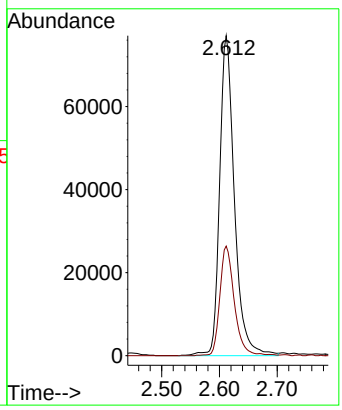




#13
Acetone
Concen: 52.606 ug/l
RT: 2.612 min Scan# 4
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 43 Resp: 13686

Ion	Ratio	Lower	Upper
43	100		
58	34.2	27.4	41.0



Instrument :
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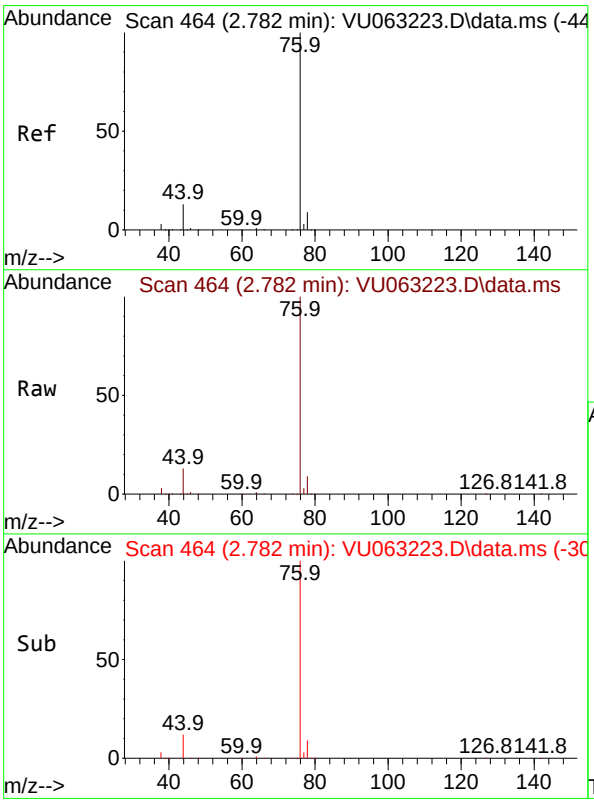
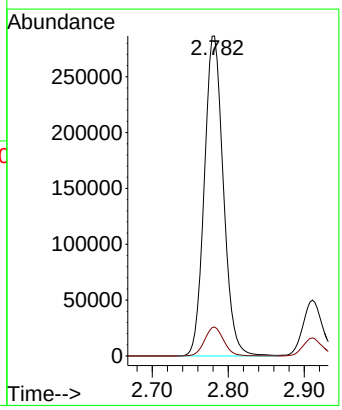
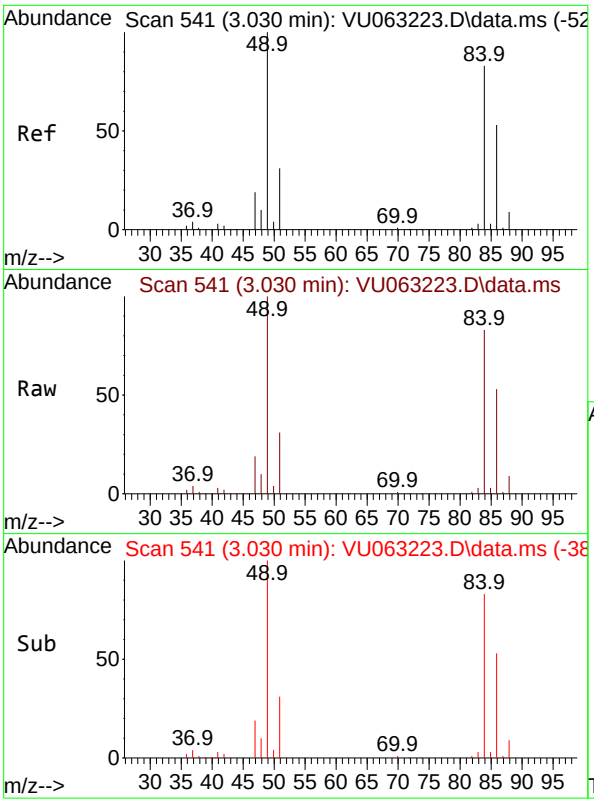


#14
Carbon Disulfide
Concen: 9.707 ug/l
RT: 2.782 min Scan# 464
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 76 Resp: 497871

Ion	Ratio	Lower	Upper
76	100		
78	9.0	7.2	10.8

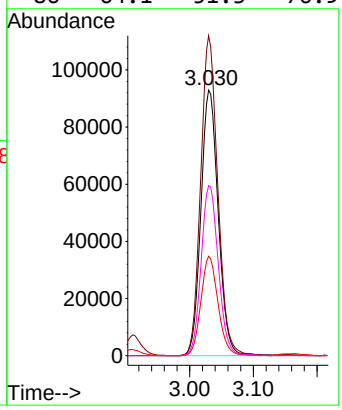




#15
Methylene Chloride
Concen: 9.699 ug/l
RT: 3.030 min Scan# 54
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 84 Resp: 17577

Ion	Ratio	Lower	Upper
84	100		
49	120.5	96.4	144.6
51	37.4	0.0	74.8
86	64.1	51.3	76.9



Instrument :
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ClientSampleId :
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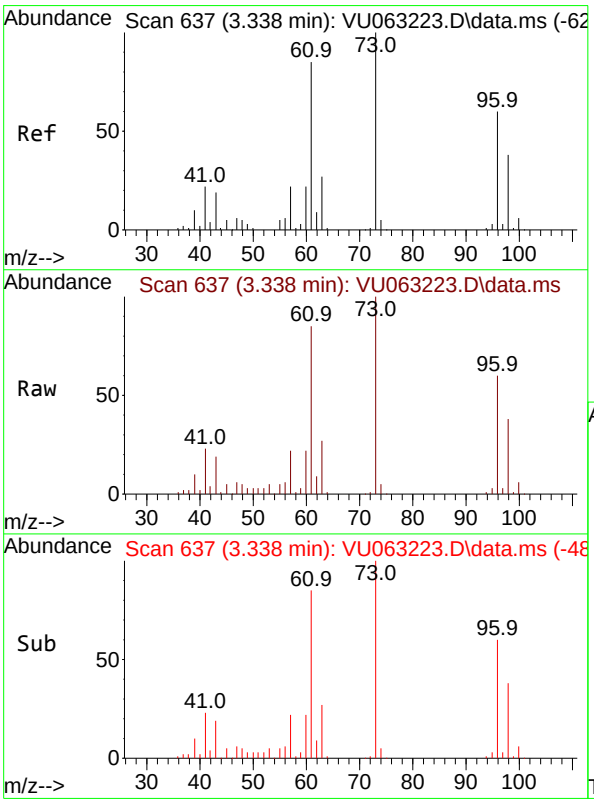
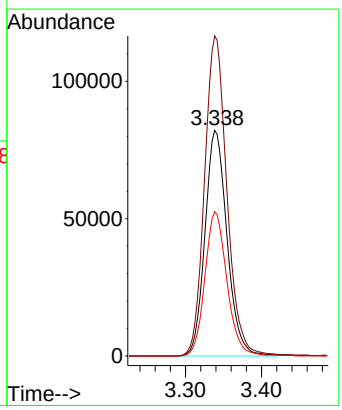
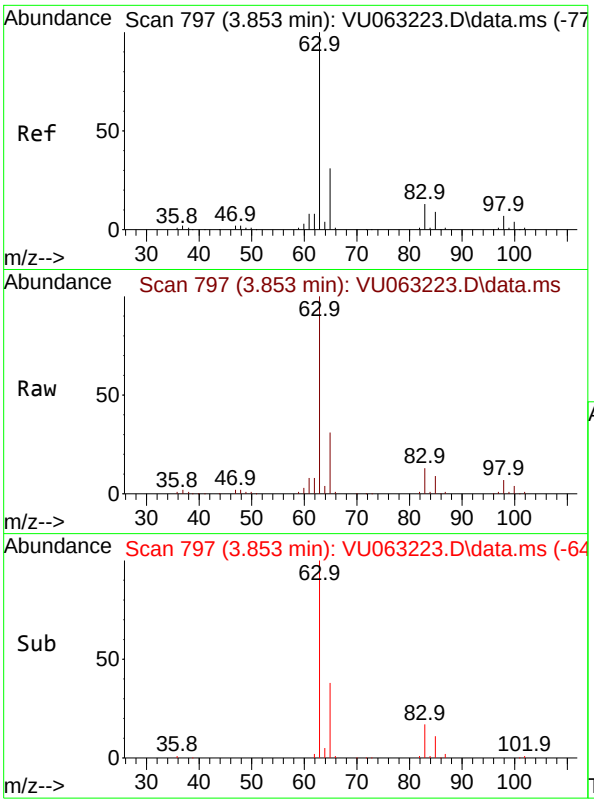


#16
trans-1,2-Dichloroethene
Concen: 9.916 ug/l
RT: 3.338 min Scan# 637
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 96 Resp: 166021

Ion	Ratio	Lower	Upper
96	100		
61	141.8	113.4	170.2
98	64.0	51.2	76.8

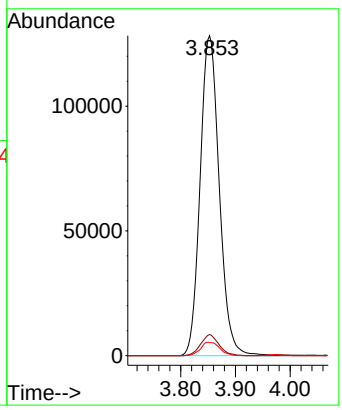




#17
1,1-Dichloroethane
Concen: 9.862 ug/l
RT: 3.853 min Scan# 7
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 63 Resp: 31121

Ion	Ratio	Lower	Upper
63	100		
98	6.6	3.3	9.9
100	4.1	2.1	6.2



Instrument :
MSVOA_U
ClientSampleId :
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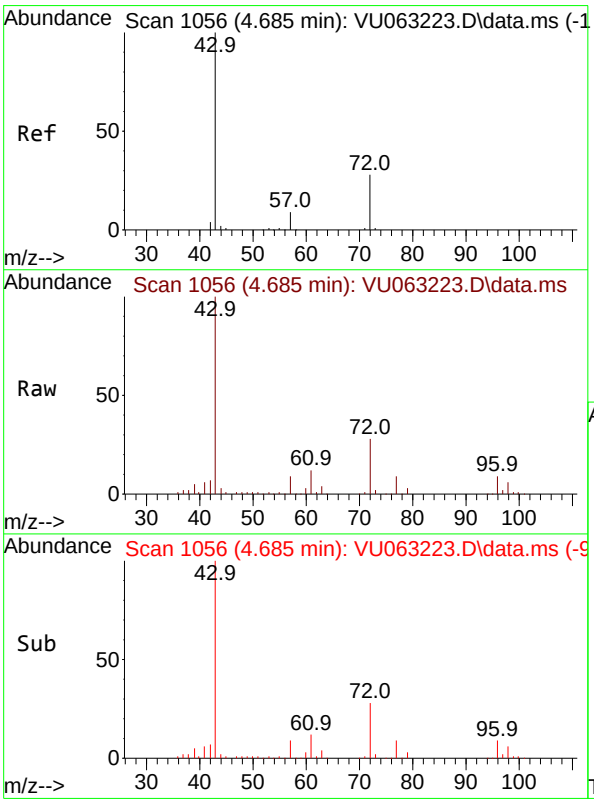
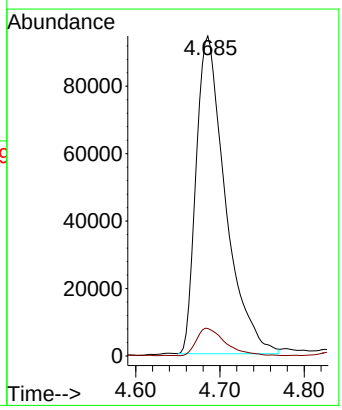
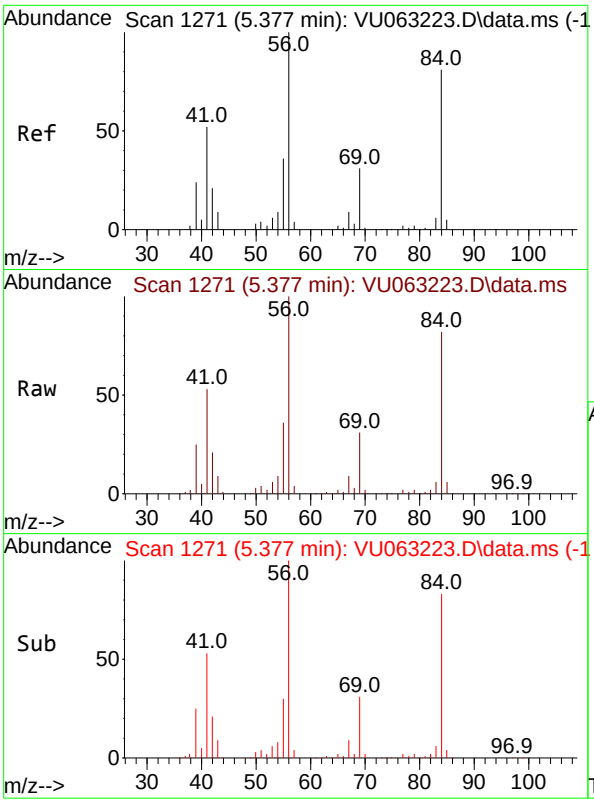


#18
2-Butanone
Concen: 54.048 ug/l
RT: 4.685 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 43 Resp: 227157

Ion	Ratio	Lower	Upper
43	100		
57	8.5	0.0	17.0

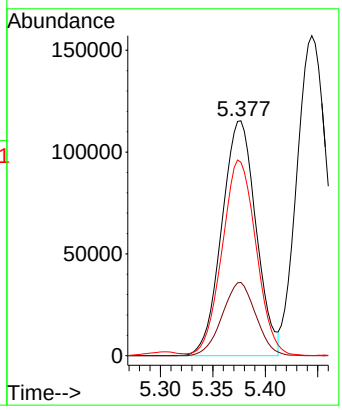




#19
Cyclohexane
Concen: 10.340 ug/l m
RT: 5.377 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 56 Resp: 26218

Ion	Ratio	Lower	Upper
56	100		
69	30.6	24.5	36.7
84	81.5	65.2	97.8



Instrument :
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ClientSampleId :
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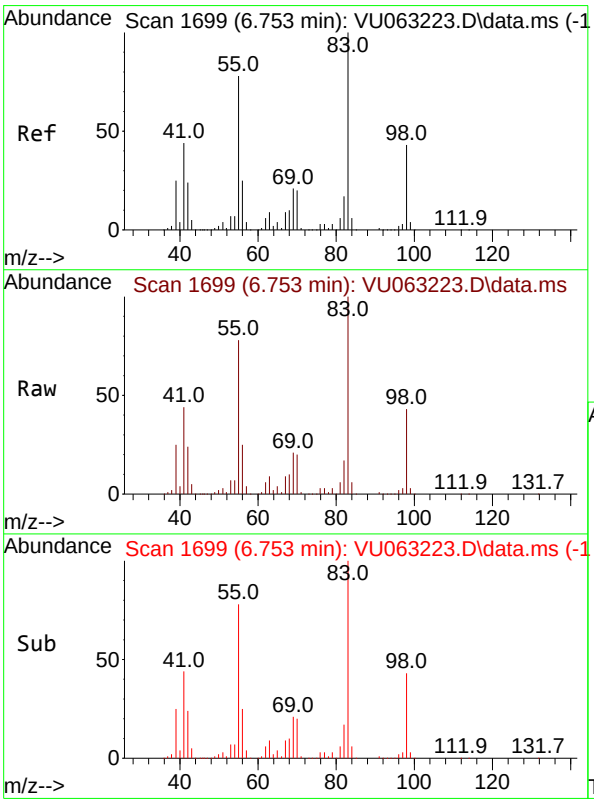
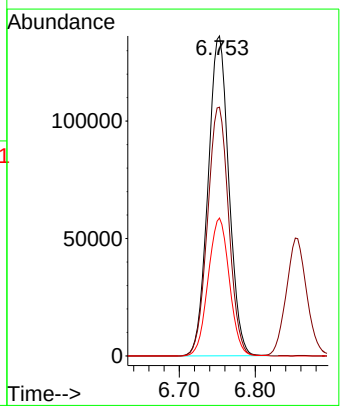
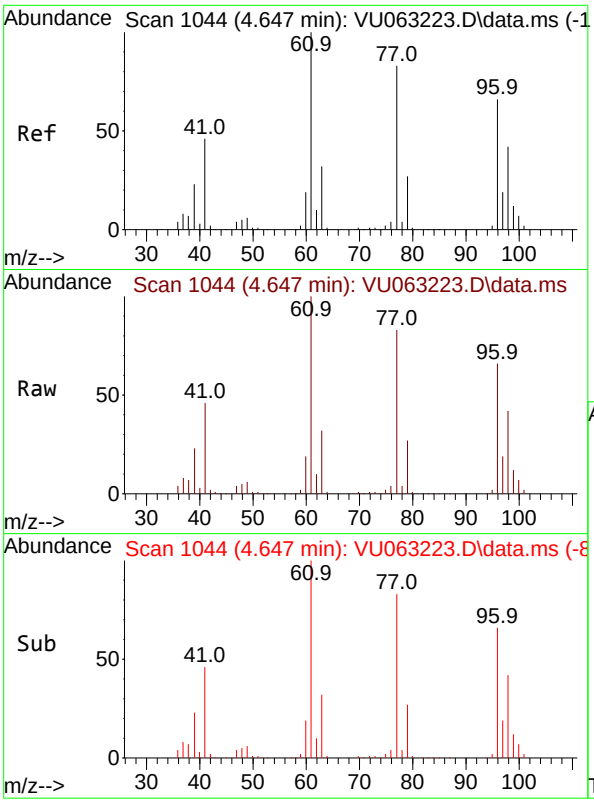


#20
Methylcyclohexane
Concen: 10.304 ug/l
RT: 6.753 min Scan# 1699
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 83 Resp: 259112

Ion	Ratio	Lower	Upper
83	100		
55	78.9	63.1	94.7
98	44.0	35.2	52.8

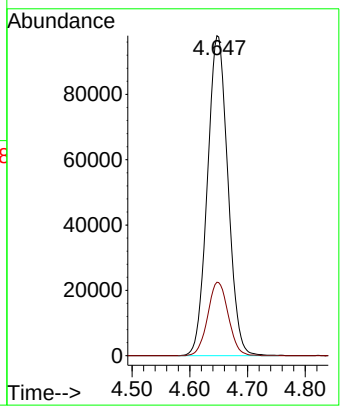




#21
2,2-Dichloropropane
Concen: 9.820 ug/l
RT: 4.647 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 77 Resp: 24175

Ion	Ratio	Lower	Upper
77	100		
97	23.1	18.5	27.7



Instrument :
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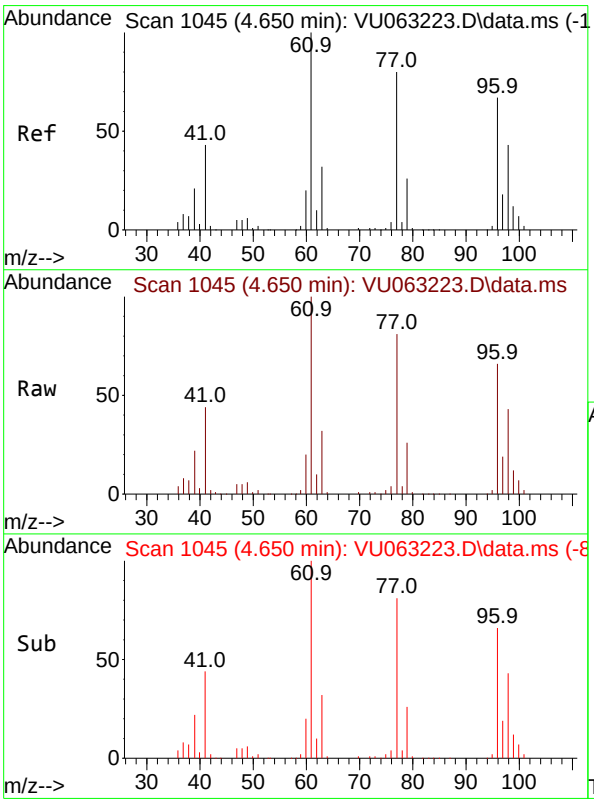
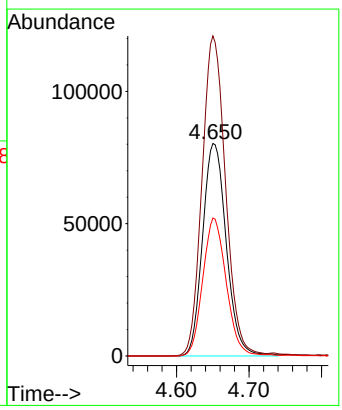
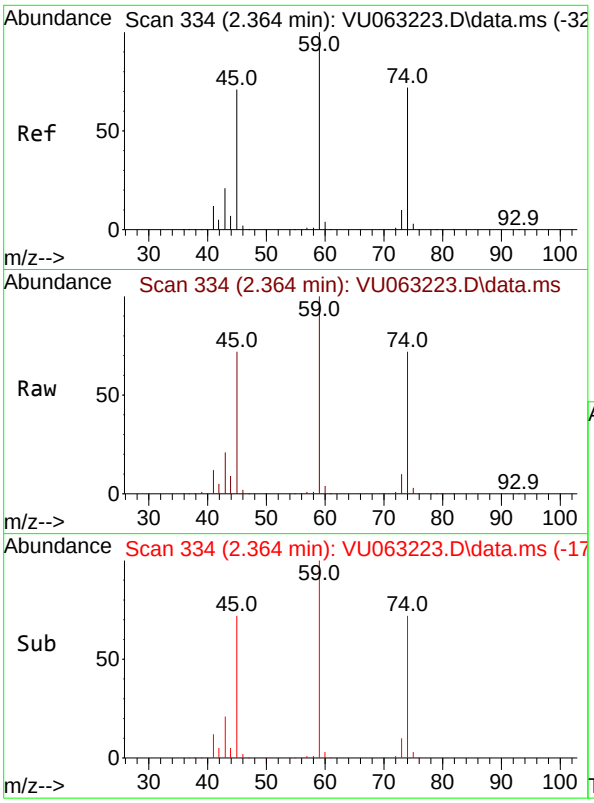


#22
cis-1,2-Dichloroethene
Concen: 10.086 ug/l
RT: 4.650 min Scan# 1045
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 96 Resp: 182447

Ion	Ratio	Lower	Upper
96	100		
61	149.3	0.0	373.3
98	63.9	31.9	95.9

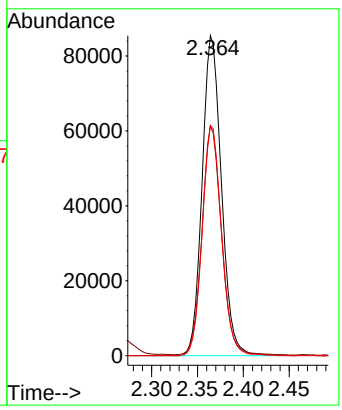




#23
Diethyl Ether
Concen: 9.933 ug/l
RT: 2.364 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 59 Resp: 12503

Ion	Ratio	Lower	Upper
59	100		
45	72.2	57.8	86.6
74	72.1	57.7	86.5



Instrument :
MSVOA_U
ClientSampleId :
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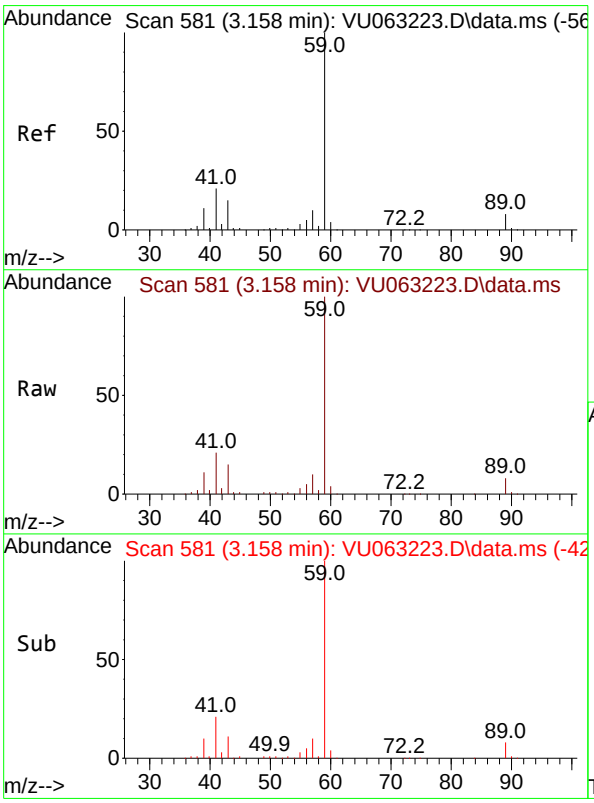
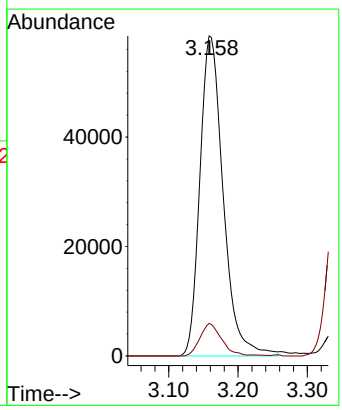
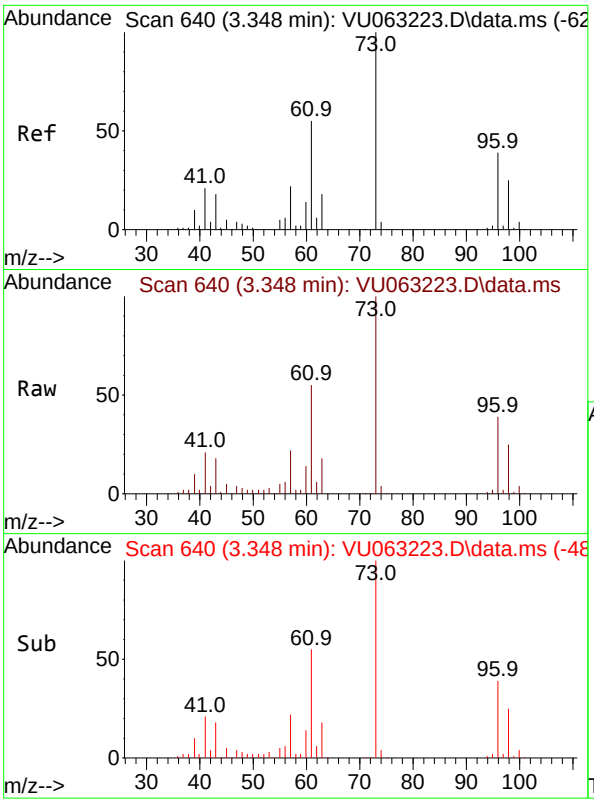


#24
tert-Butyl Alcohol
Concen: 106.650 ug/l
RT: 3.158 min Scan# 581
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 59 Resp: 136525

Ion	Ratio	Lower	Upper
59	100		
57	9.4	7.5	11.3

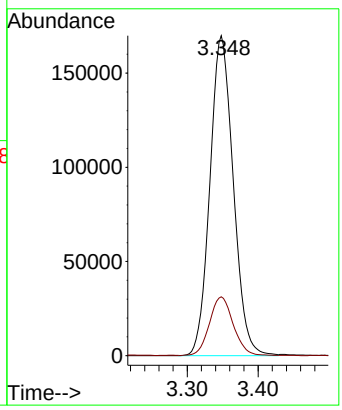




#25
Methyl tert-Butyl Ether
Concen: 10.617 ug/l
RT: 3.348 min Scan# 64
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 73 Resp: 38898

Ion	Ratio	Lower	Upper
73	100		
43	18.6	14.9	22.3



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

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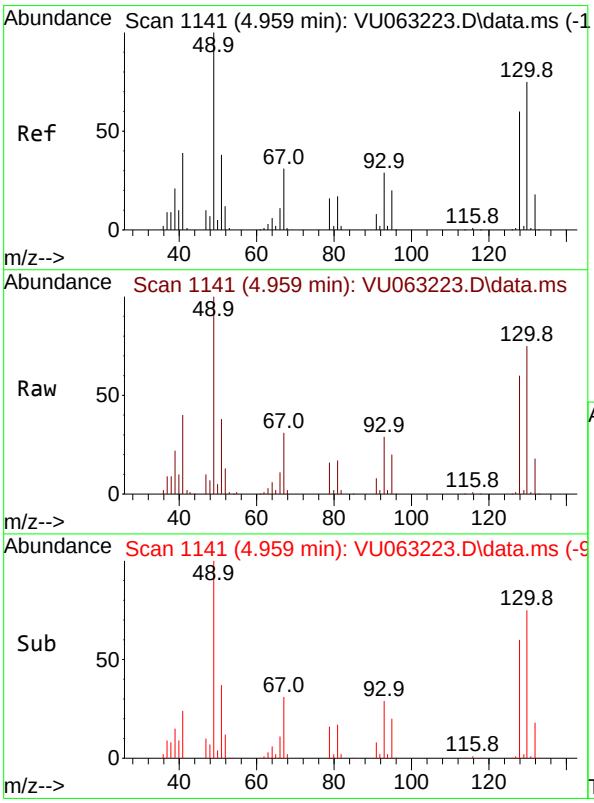
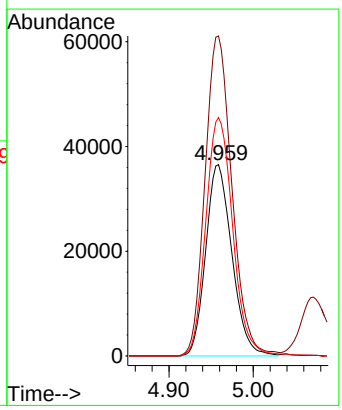
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

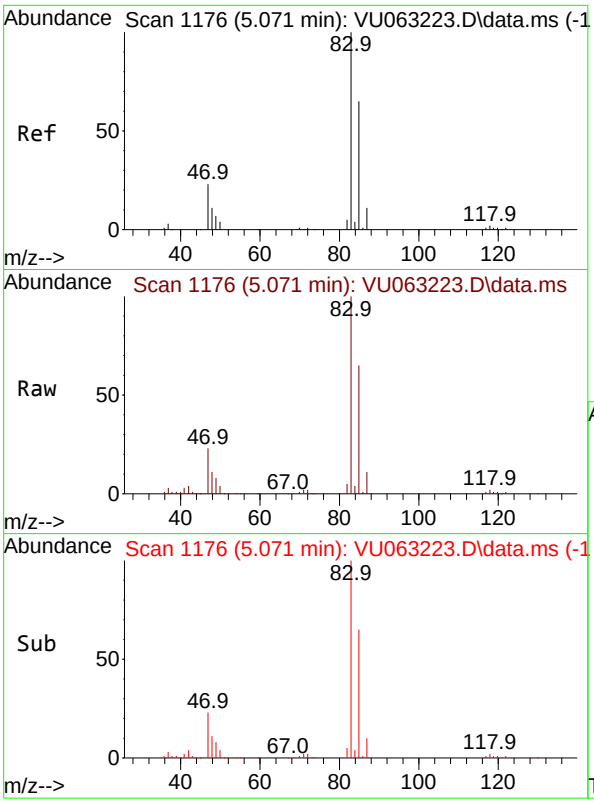


#26
Bromochloromethane
Concen: 9.986 ug/l
RT: 4.959 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:128 Resp: 78959

Ion	Ratio	Lower	Upper
128	100		
49	171.7	0.0	343.4
130	128.6	102.9	154.3

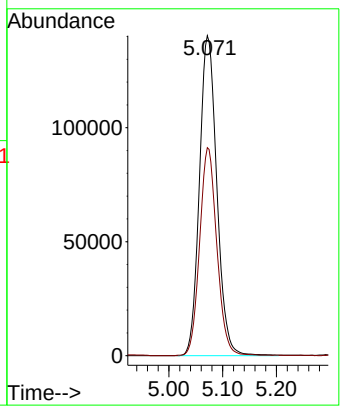




#27
Chloroform
Concen: 9.912 ug/l
RT: 5.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 83 Resp: 31566

Ion	Ratio	Lower	Upper
83	100		
85	64.9	0.0	129.8



Instrument :
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ClientSampleId :
VSTDICCC010

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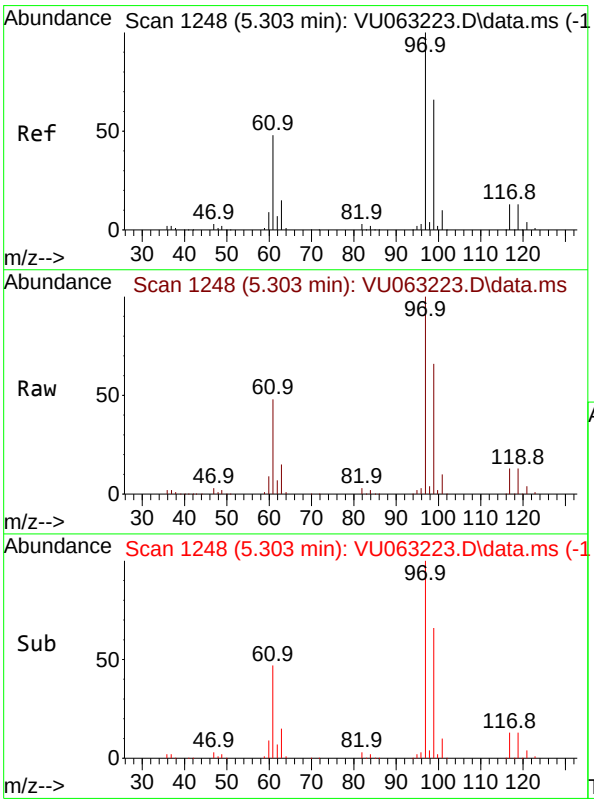
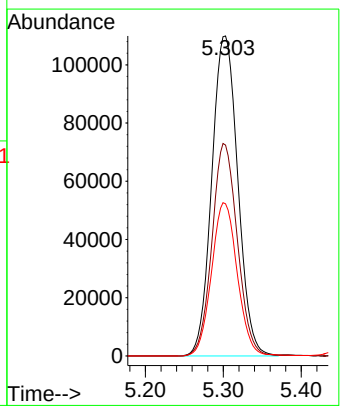
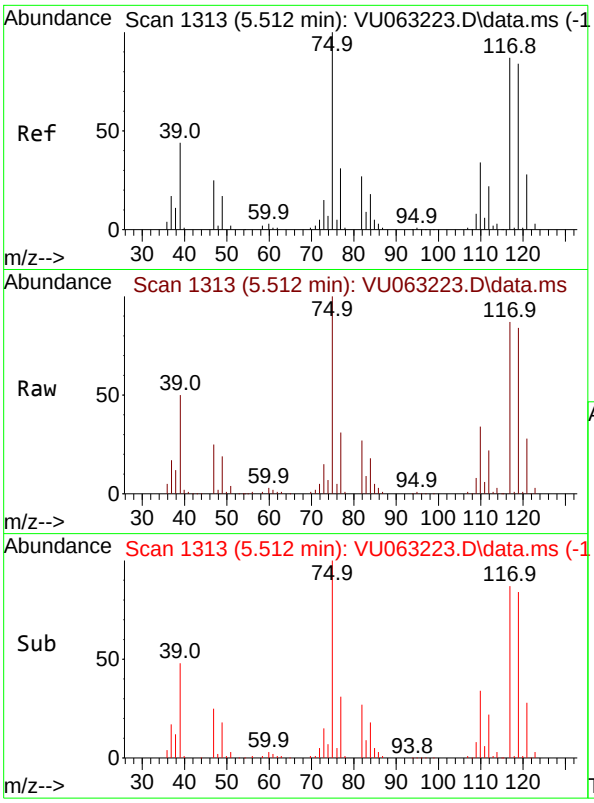


#28
1,1,1-Trichloroethane
Concen: 9.897 ug/l
RT: 5.303 min Scan# 1248
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 97 Resp: 255321

Ion	Ratio	Lower	Upper
97	100		
99	64.7	32.4	97.0
61	47.5	23.8	71.2

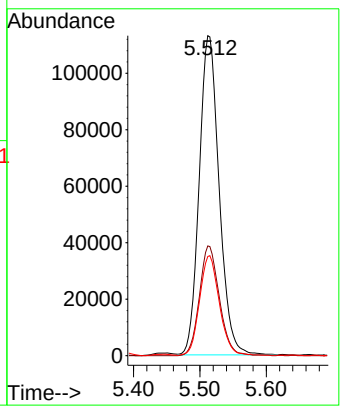




#29
1,1-Dichloropropene
Concen: 10.198 ug/l
RT: 5.512 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 75 Resp: 23564

Ion	Ratio	Lower	Upper
75	100		
110	34.3	17.2	51.5
77	30.8	24.6	37.0



Instrument :
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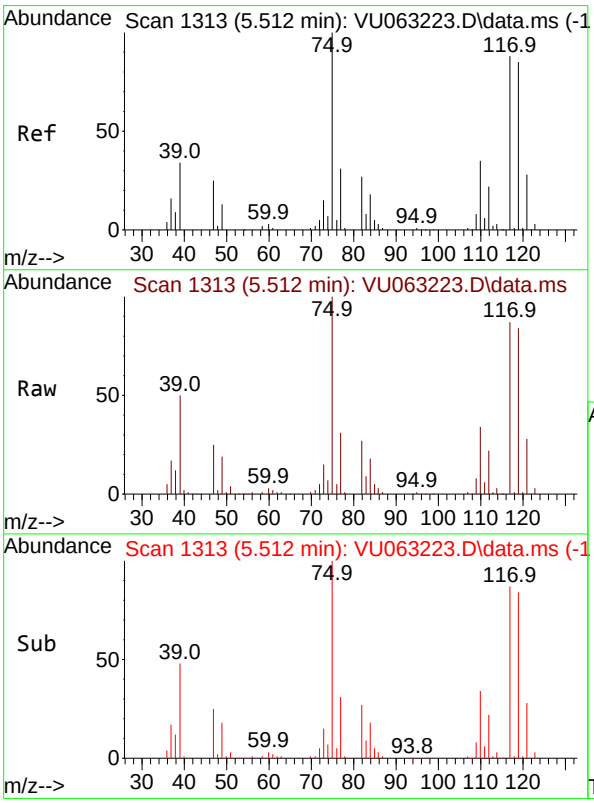
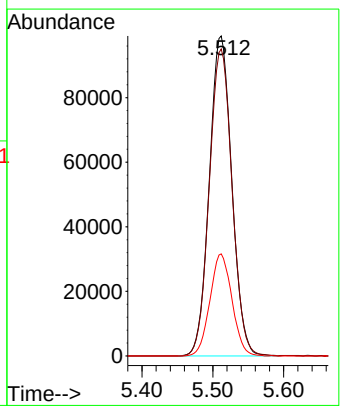
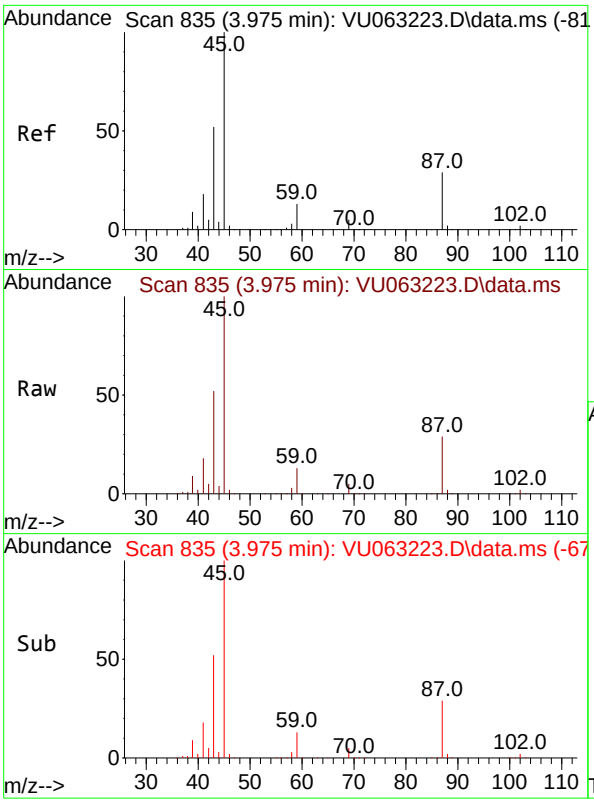


#30
Carbon Tetrachloride
Concen: 9.870 ug/l
RT: 5.512 min Scan# 1313
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:117 Resp: 218368

Ion	Ratio	Lower	Upper
117	100		
119	95.9	76.7	115.1
121	31.9	25.5	38.3

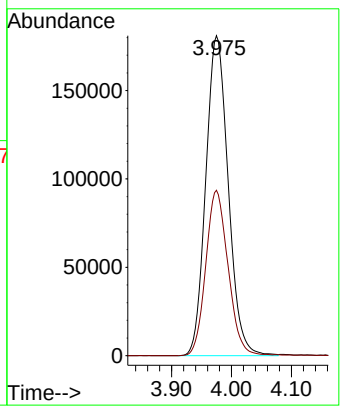




#31
Isopropyl Ether
Concen: 10.441 ug/l
RT: 3.975 min Scan# 8
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 45 Resp: 47039

Ion	Ratio	Lower	Upper
45	100		
43	51.4	25.7	77.1



Instrument :
MSVOA_U
ClientSampleId :
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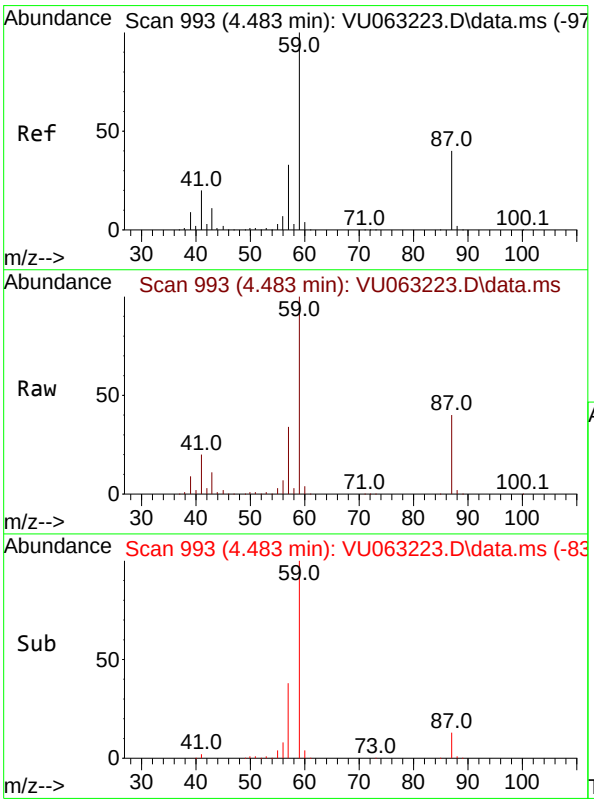
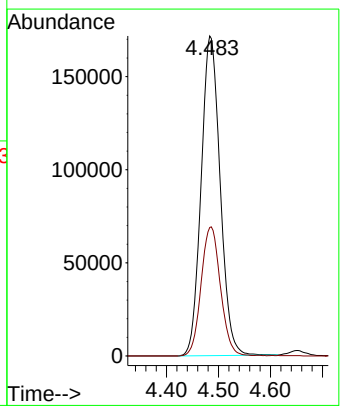
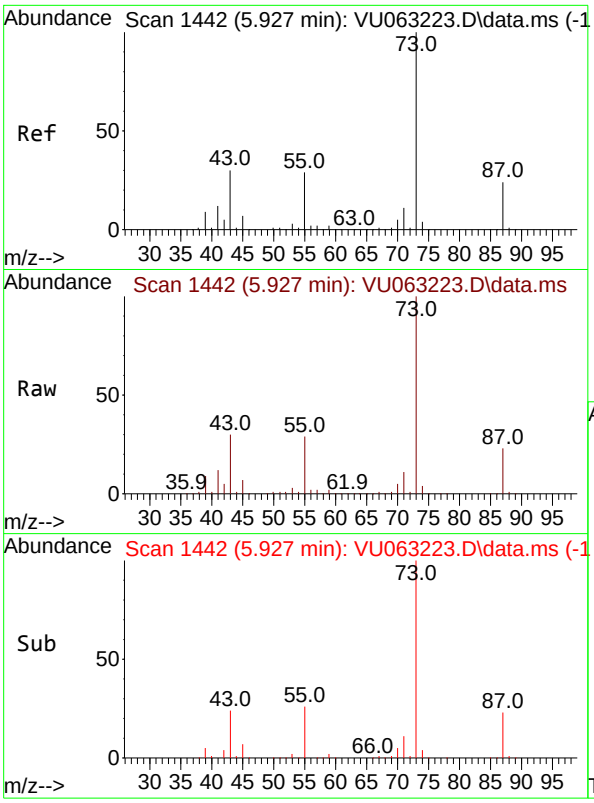


#32
Ethyl-t-butyl ether
Concen: 10.649 ug/l
RT: 4.483 min Scan# 993
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 59 Resp: 436320

Ion	Ratio	Lower	Upper
59	100		
87	40.8	32.6	49.0

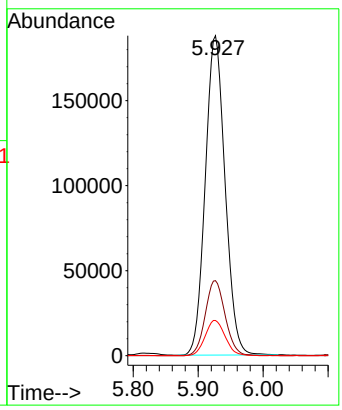




#33
Tert-Amyl methyl ether
Concen: 11.111 ug/l
RT: 5.927 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 73 Resp: 39776

Ion	Ratio	Lower	Upper
73	100		
87	23.6	18.9	28.3
71	11.2	9.0	13.4



Instrument :
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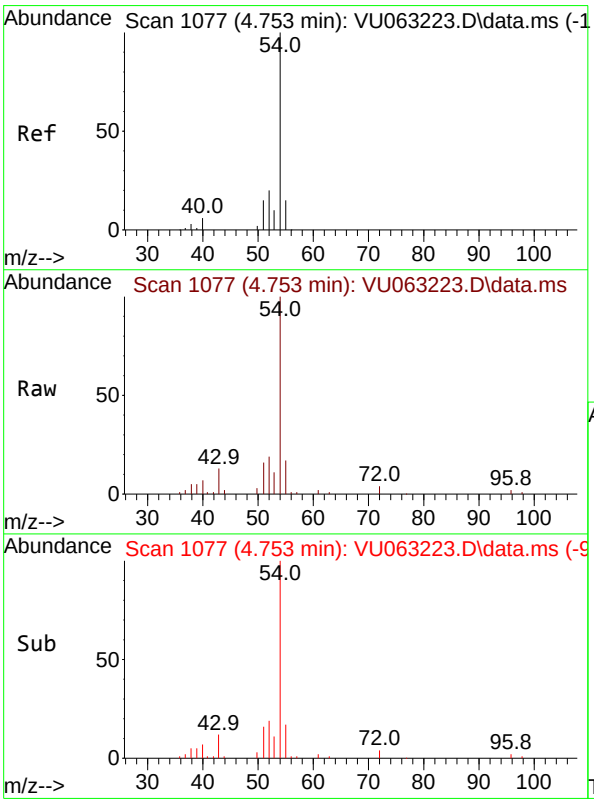
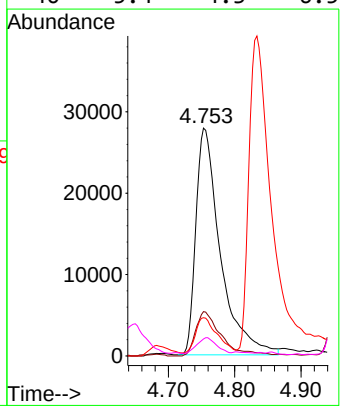
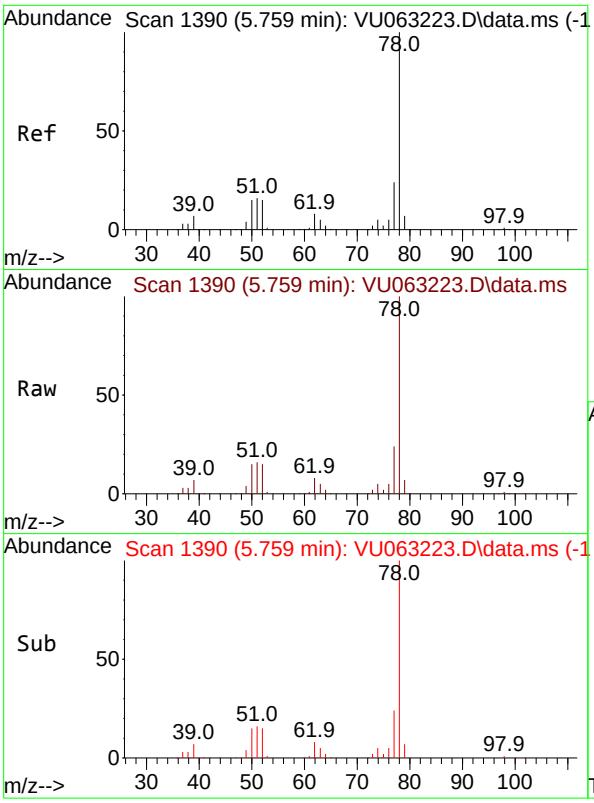


#34
Propionitrile
Concen: 54.918 ug/l
RT: 4.753 min Scan# 1077
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 54 Resp: 71557

Ion	Ratio	Lower	Upper
54	100		
52	20.4	16.3	24.5
55	14.7	11.8	17.6
40	5.4	4.3	6.5

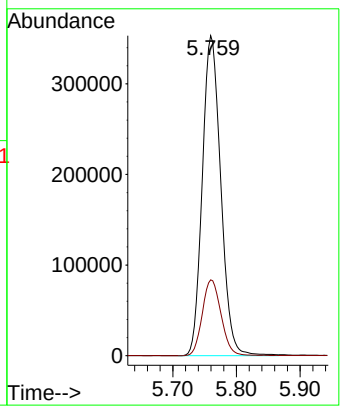




#35
Benzene
Concen: 10.030 ug/l
RT: 5.759 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 78 Resp: 71258

Ion	Ratio	Lower	Upper
78	100		
77	23.7	19.0	28.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

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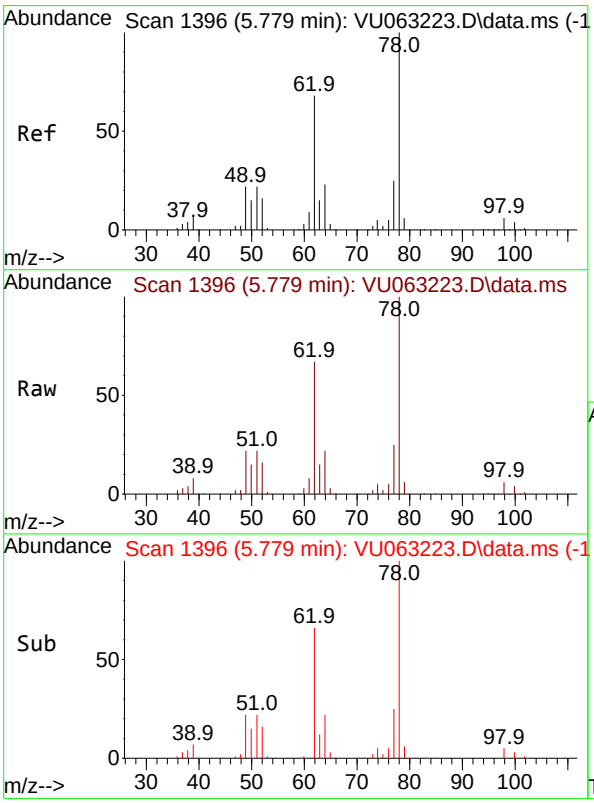
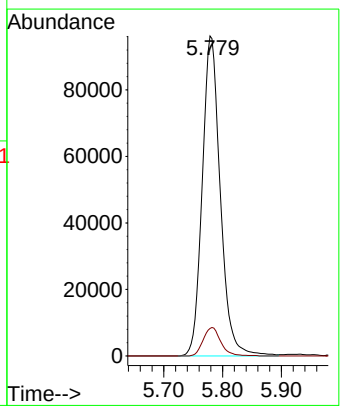
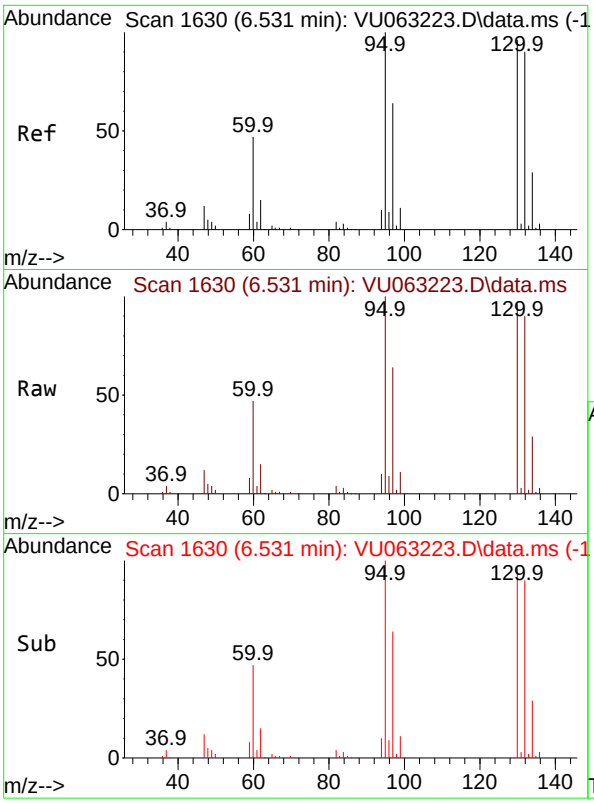


#36
1,2-Dichloroethane
Concen: 10.014 ug/l
RT: 5.779 min Scan# 1396
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 62 Resp: 205344

Ion	Ratio	Lower	Upper
62	100		
98	8.6	6.9	10.3

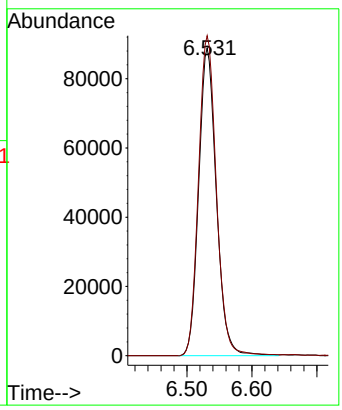




#37
Trichloroethene
Concen: 9.962 ug/l
RT: 6.531 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:130 Resp: 16831

Ion	Ratio	Lower	Upper
130	100		
95	104.0	83.2	124.8



Instrument :
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ClientSampleId :
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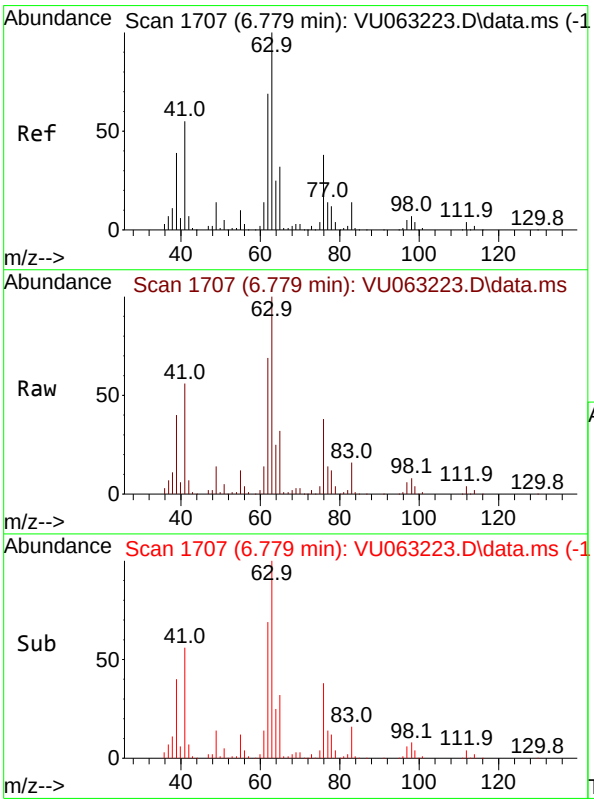
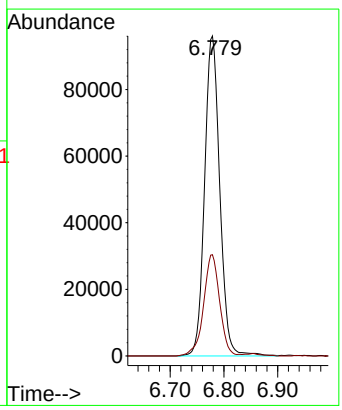
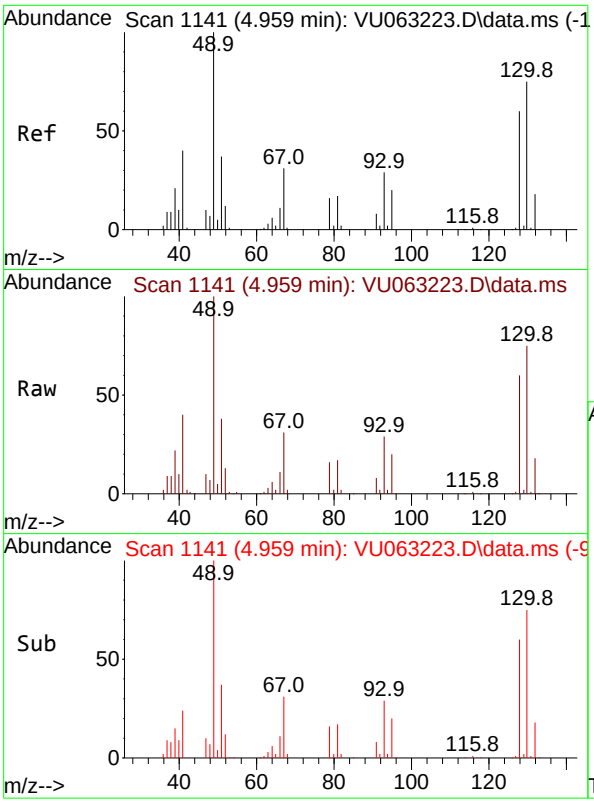


#38
1,2-Dichloropropane
Concen: 10.148 ug/l
RT: 6.779 min Scan# 1707
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 63 Resp: 188716

Ion	Ratio	Lower	Upper
63	100		
65	31.6	25.3	37.9

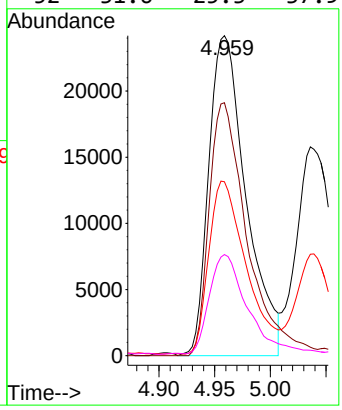




#39
Methacrylonitrile
Concen: 12.123 ug/l
RT: 4.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 41 Resp: 5642

Ion	Ratio	Lower	Upper
41	100		
67	80.6	64.5	96.7
39	53.8	43.0	64.6
52	31.6	25.3	37.9



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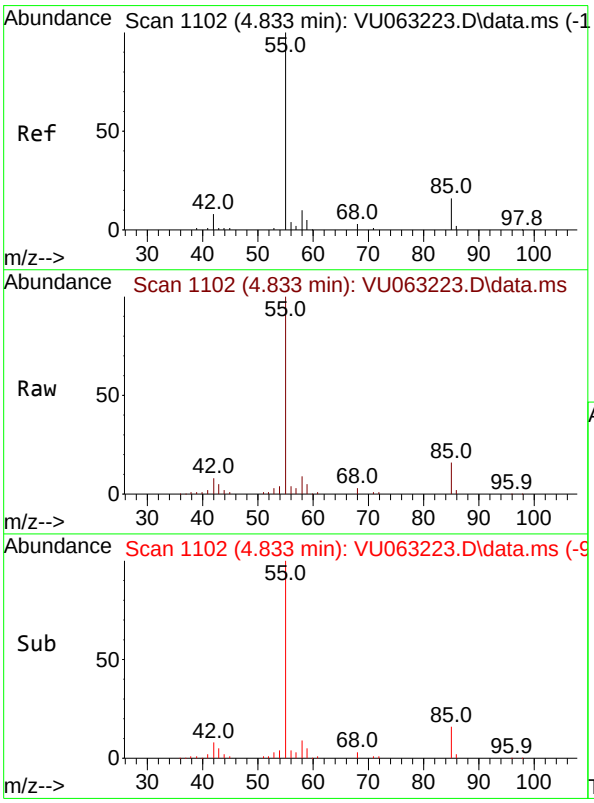
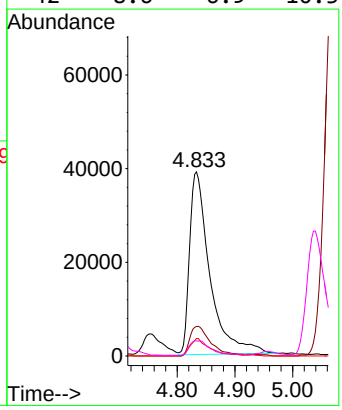
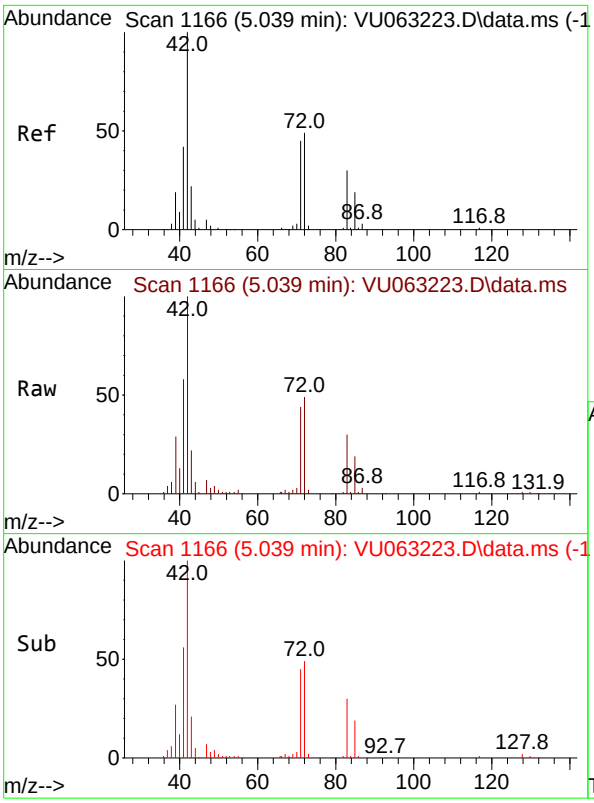


#40
Methyl acrylate
Concen: 11.258 ug/l
RT: 4.833 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 55 Resp: 95663

Ion	Ratio	Lower	Upper
55	100		
85	16.6	13.3	19.9
58	9.1	7.3	10.9
42	8.6	6.9	10.3

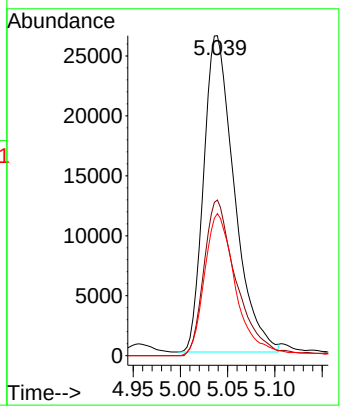




#41
Tetrahydrofuran
Concen: 21.760 ug/l
RT: 5.039 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 42 Resp: 5951

Ion	Ratio	Lower	Upper
42	100		
72	51.9	41.5	62.3
71	46.5	37.2	55.8



Instrument :
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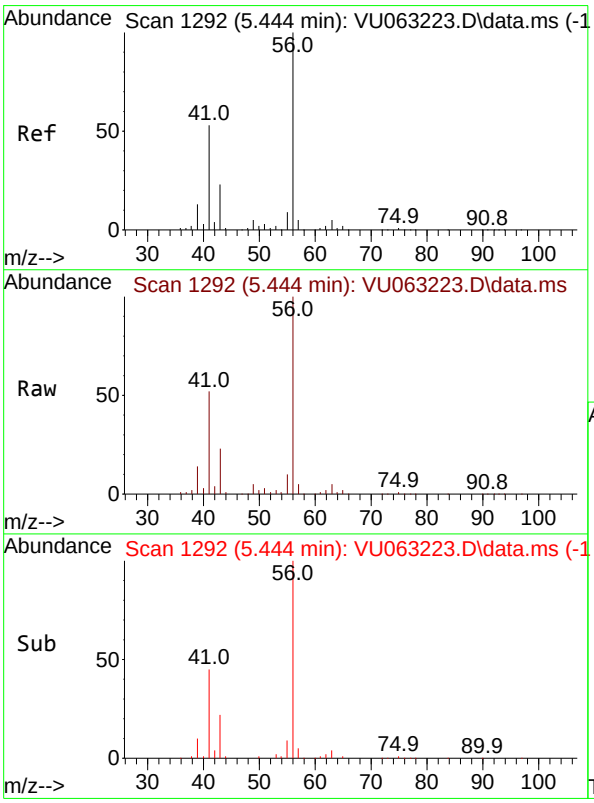
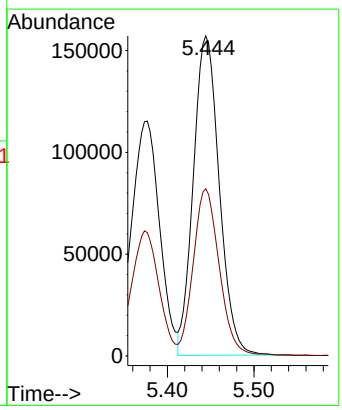
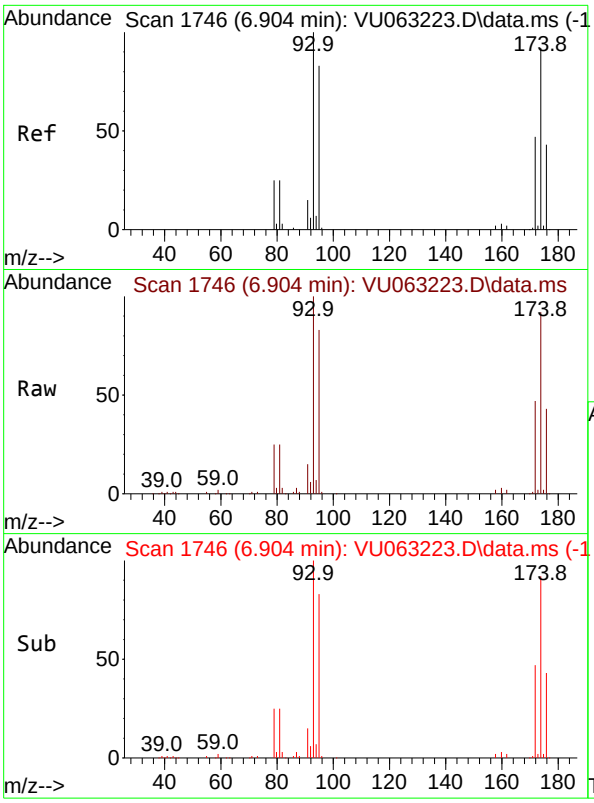


#42
1-Chlorobutane
Concen: 10.327 ug/l
RT: 5.444 min Scan# 1292
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 56 Resp: 326490

Ion	Ratio	Lower	Upper
56	100		
41	52.5	26.3	78.8

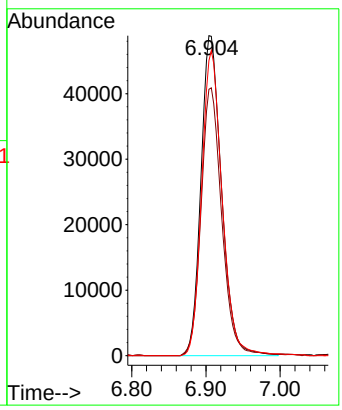




#43
Dibromomethane
Concen: 9.994 ug/l
RT: 6.904 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 93 Resp: 9410

Ion	Ratio	Lower	Upper
93	100		
95	84.0	67.2	100.8
174	94.6	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

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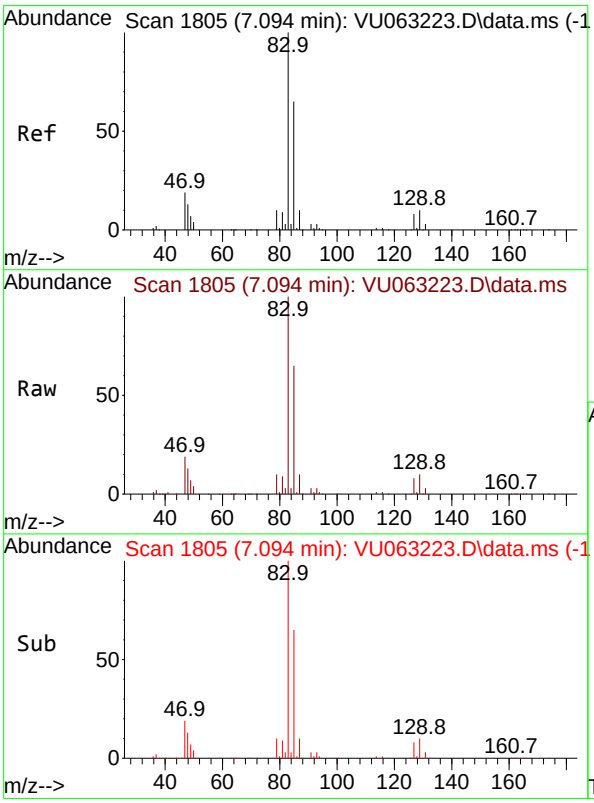
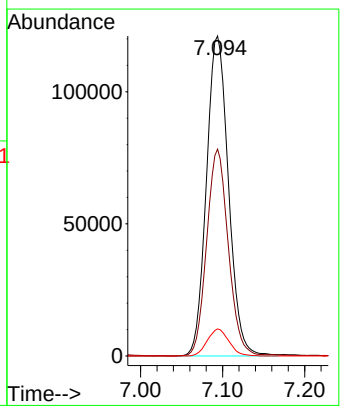
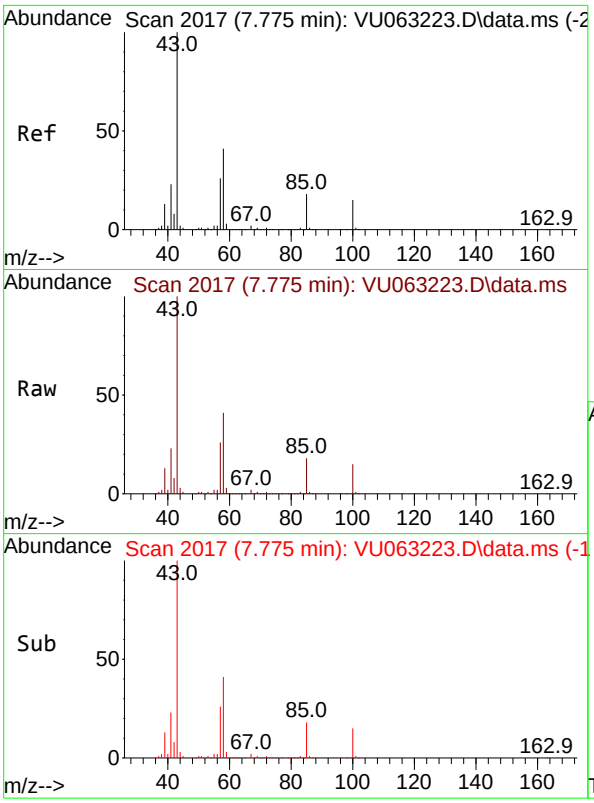


#44
Bromodichloromethane
Concen: 10.303 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 83 Resp: 225813

Ion	Ratio	Lower	Upper
83	100		
85	64.6	51.7	77.5
127	8.4	6.7	10.1

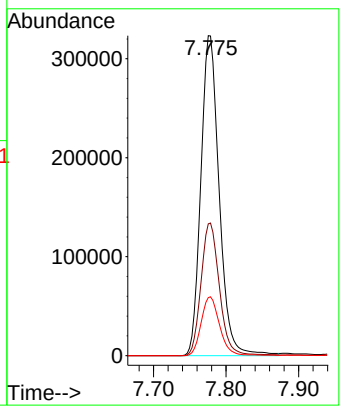




#45
4-Methyl-2-Pentanone
Concen: 57.627 ug/l
RT: 7.775 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 43 Resp: 56888

Ion	Ratio	Lower	Upper
43	100		
58	41.7	20.8	62.5
85	18.5	14.8	22.2



Instrument :
MSVOA_U
ClientSampleId :
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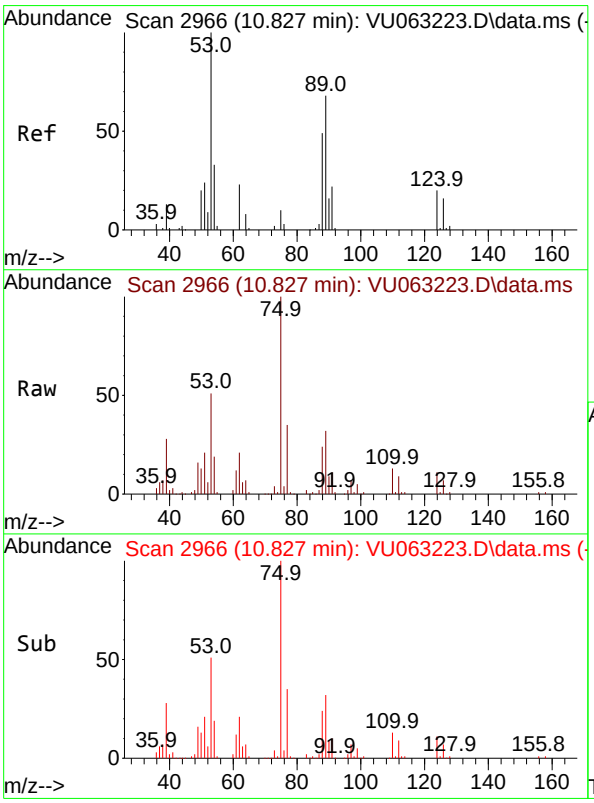
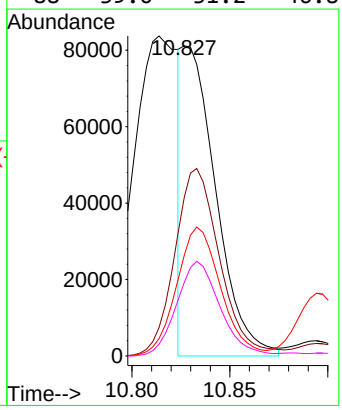
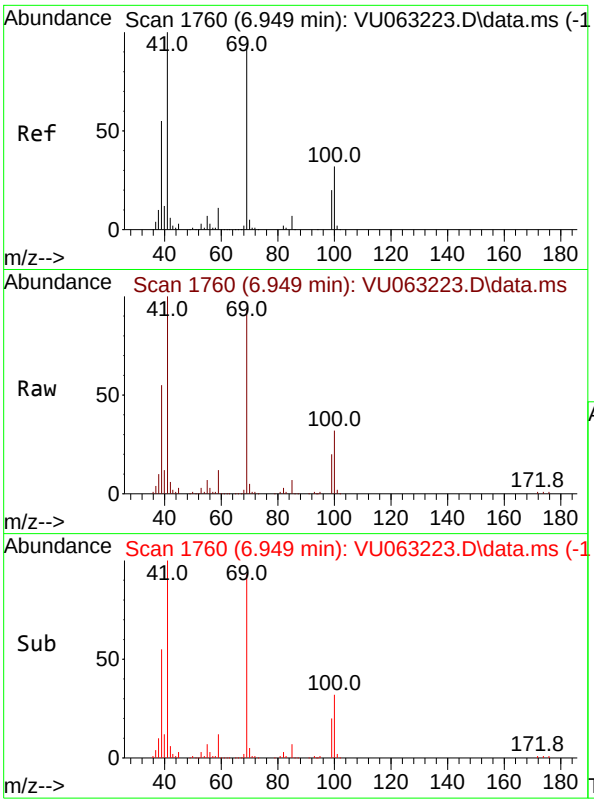


#46
t-1,4-Dichloro-2-butene
Concen: 19.967 ug/l m
RT: 10.827 min Scan# 2966
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 75 Resp: 97536

Ion	Ratio	Lower	Upper
75	100		
53	80.6	64.5	96.7
89	54.3	43.4	65.2
88	39.0	31.2	46.8

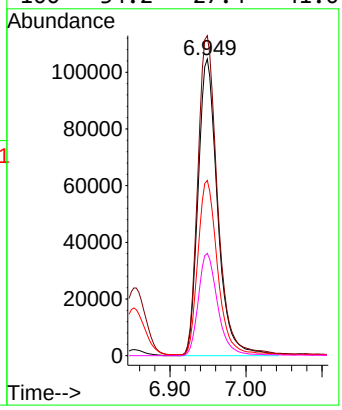




#47
Methyl methacrylate
Concen: 23.502 ug/l
RT: 6.949 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 69 Resp: 18639

Ion	Ratio	Lower	Upper
69	100		
41	108.5	0.0	217.0
39	59.6	47.7	71.5
100	34.2	27.4	41.0



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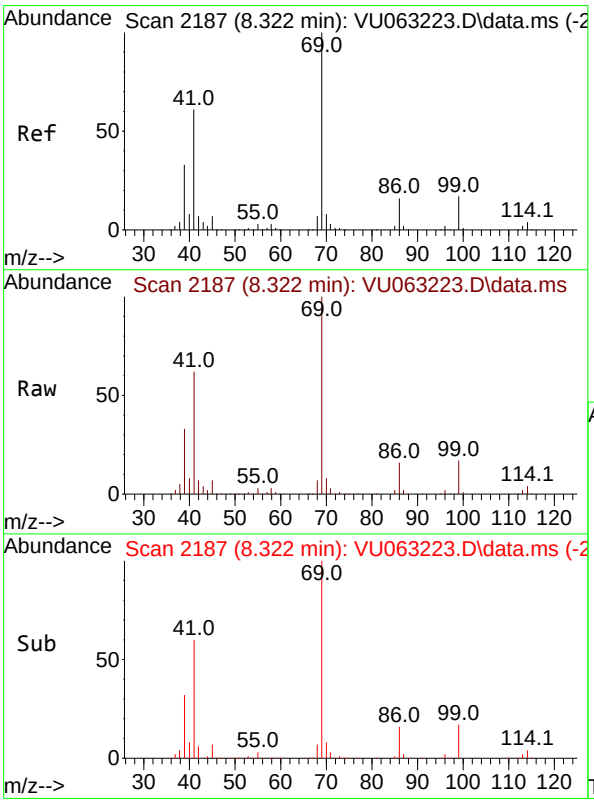
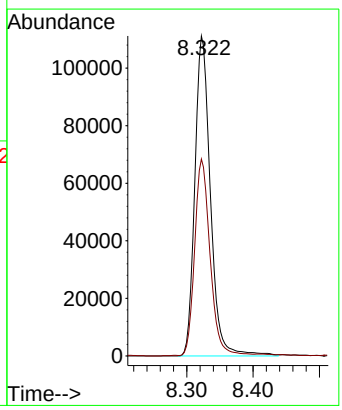
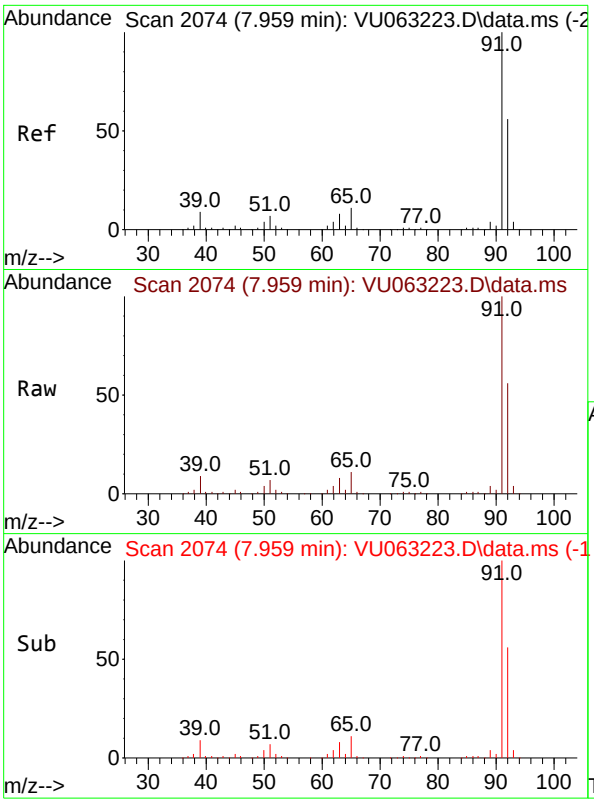


#48
Ethyl methacrylate
Concen: 12.196 ug/l
RT: 8.322 min Scan# 2187
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 69 Resp: 181630

Ion	Ratio	Lower	Upper
69	100		
41	61.3	30.6	92.0

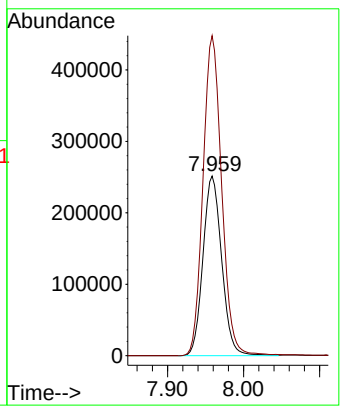




#49
Toluene
Concen: 10.535 ug/l
RT: 7.959 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 92 Resp: 43044

Ion	Ratio	Lower	Upper
92	100		
91	177.2	141.8	212.6



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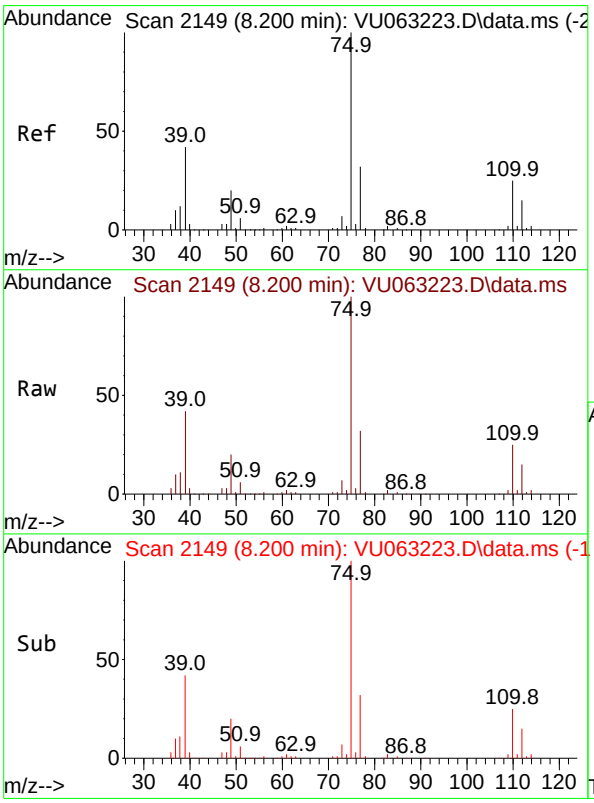
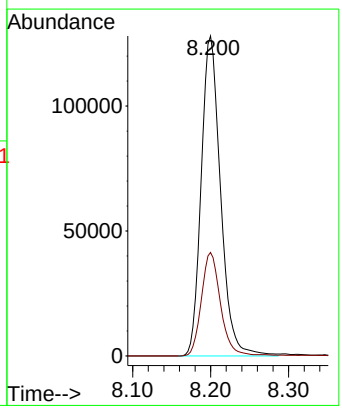
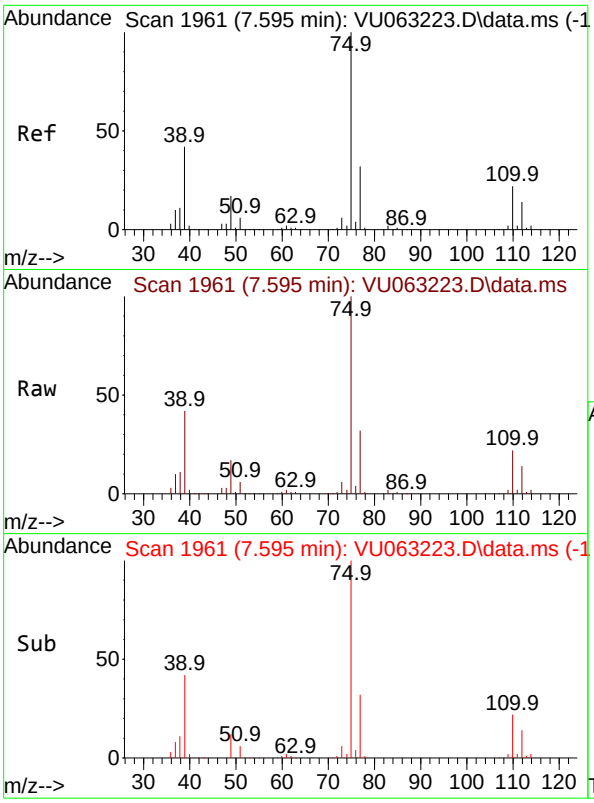


#50
t-1,3-Dichloropropene
Concen: 11.027 ug/l
RT: 8.200 min Scan# 2149
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 75 Resp: 221262

Ion	Ratio	Lower	Upper
75	100		
77	32.4	25.9	38.9

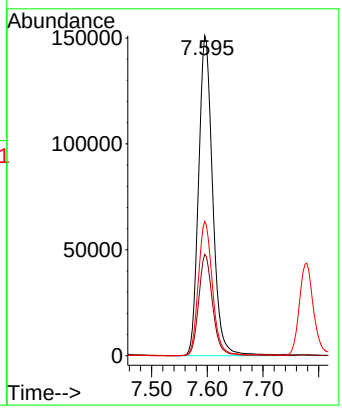




#51
cis-1,3-Dichloropropene
Concen: 10.700 ug/l
RT: 7.595 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 75 Resp: 26520

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.3	37.9
39	41.9	33.5	50.3



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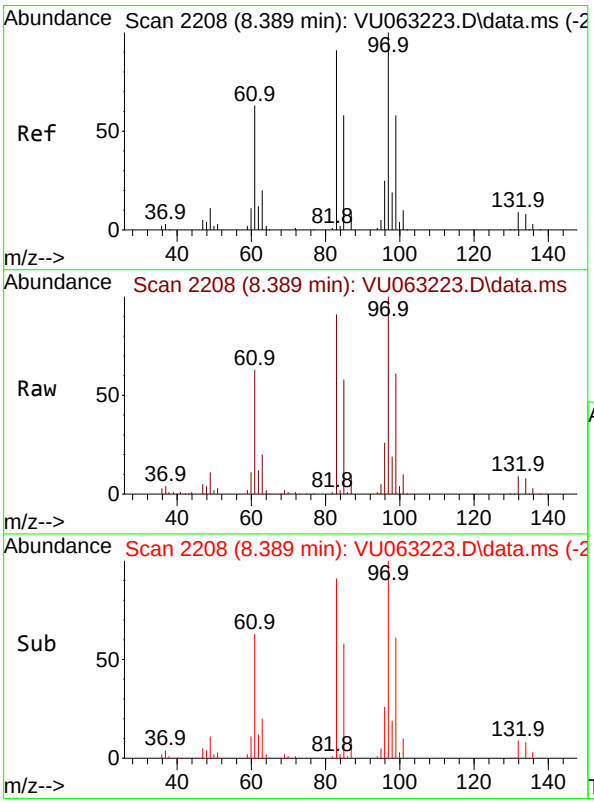
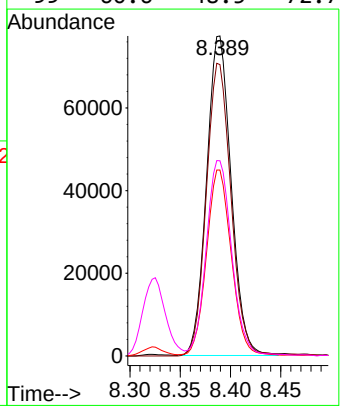
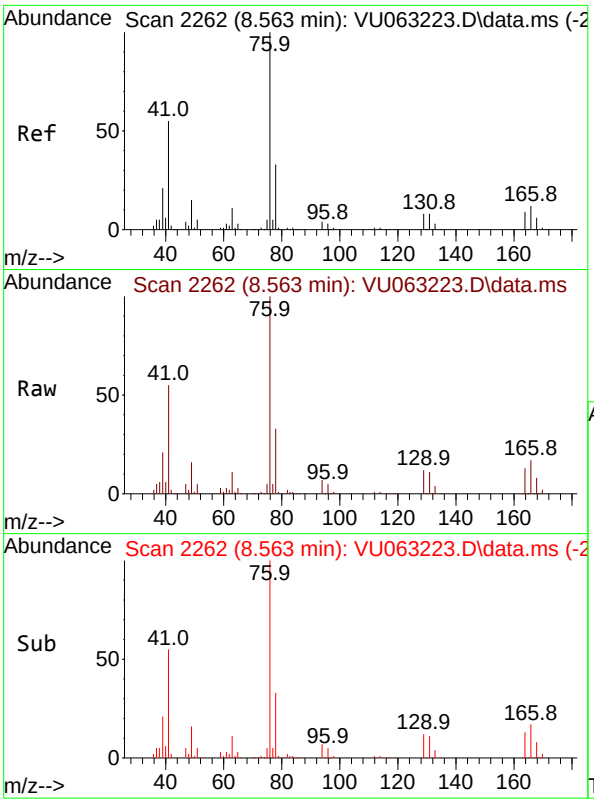


#52
1,1,2-Trichloroethane
Concen: 10.370 ug/l
RT: 8.389 min Scan# 2208
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 97 Resp: 131655

Ion	Ratio	Lower	Upper
97	100		
83	91.2	73.0	109.4
85	57.9	46.3	69.5
99	60.6	48.5	72.7

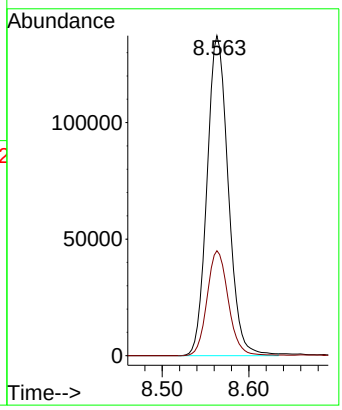




#53
1,3-Dichloropropane
Concen: 10.382 ug/l
RT: 8.563 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 76 Resp: 23400

Ion	Ratio	Lower	Upper
76	100		
78	32.9	26.3	39.5



Instrument :
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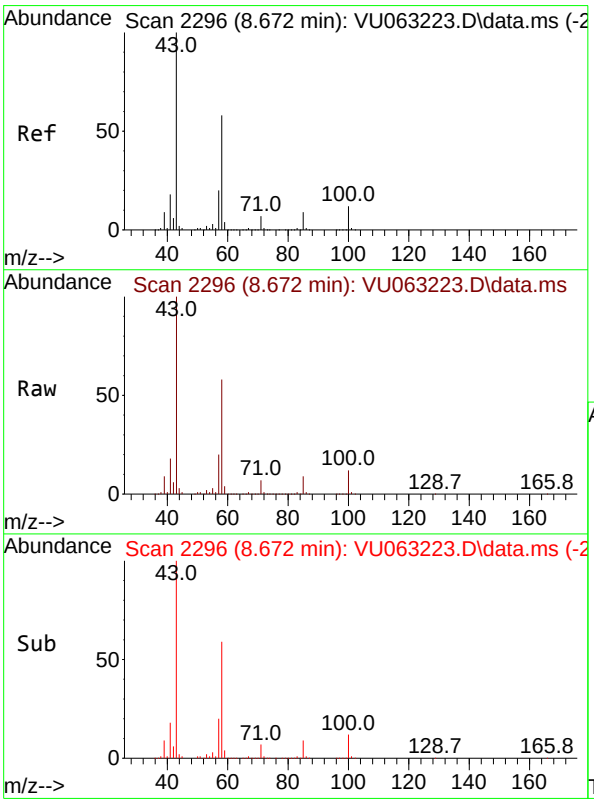
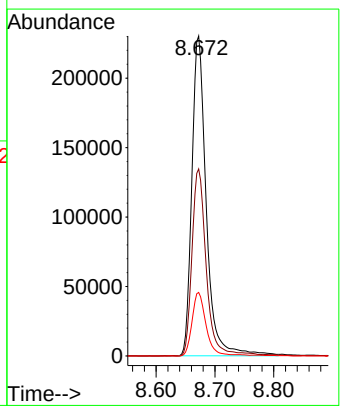
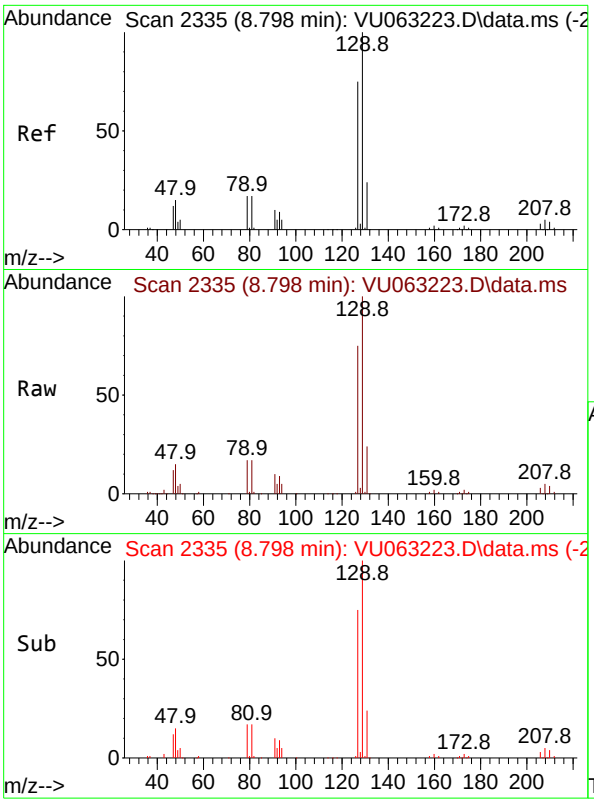


#54
2-Hexanone
Concen: 58.266 ug/l
RT: 8.672 min Scan# 2296
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 43 Resp: 392522

Ion	Ratio	Lower	Upper
43	100		
58	58.0	38.0	78.0
57	19.1	0.0	39.1

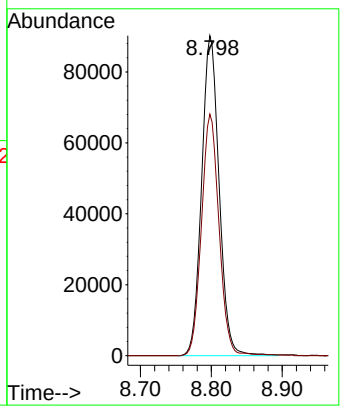




#55
Dibromochloromethane
Concen: 10.575 ug/l
RT: 8.798 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:129 Resp: 15446

Ion	Ratio	Lower	Upper
129	100		
127	75.5	60.4	90.6



Instrument :
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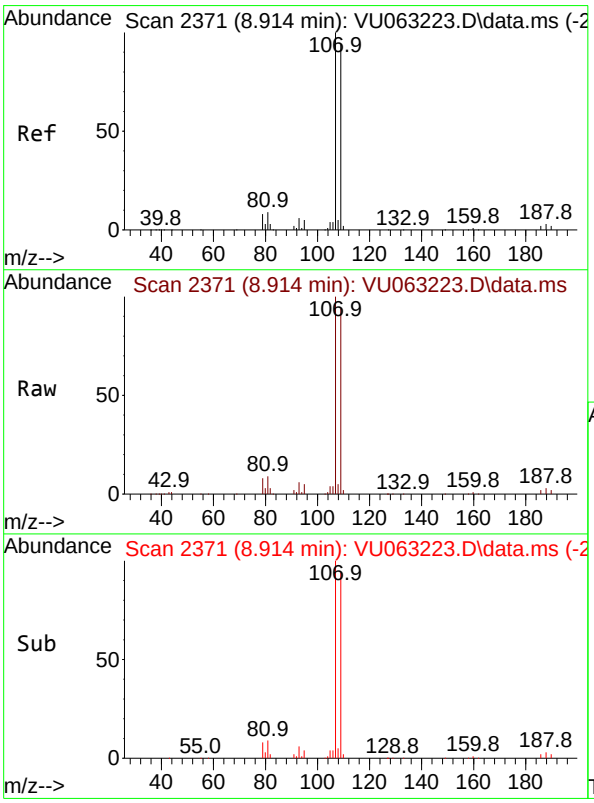
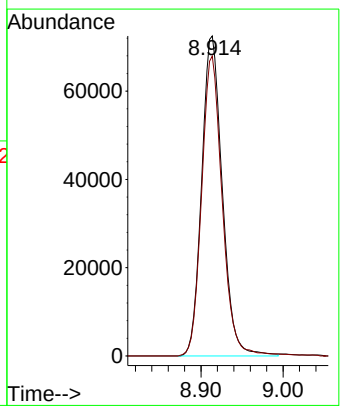
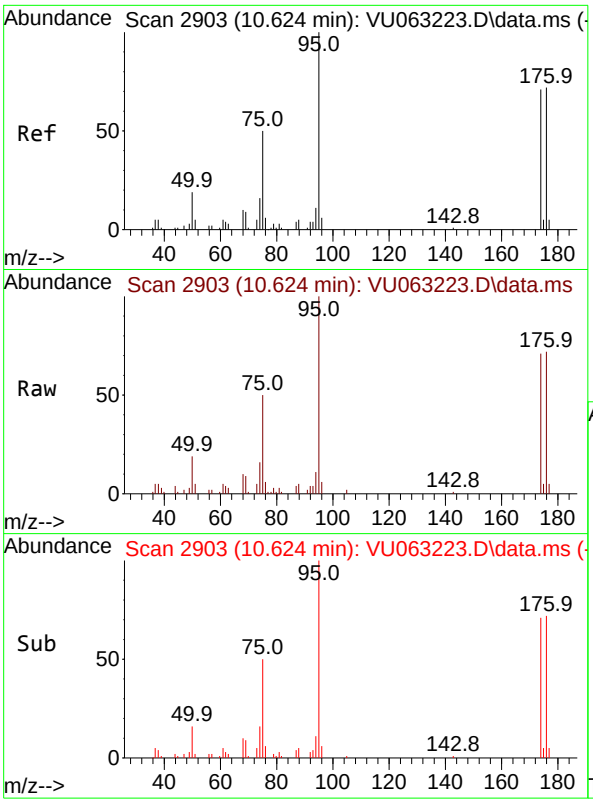


#56
1,2-Dibromoethane
Concen: 10.638 ug/l
RT: 8.914 min Scan# 2371
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:107 Resp: 126673

Ion	Ratio	Lower	Upper
107	100		
109	93.9	0.0	187.8

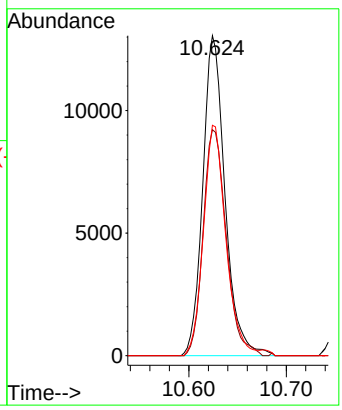




#57
4-Bromofluorobenzene
Concen: 1.085 ug/l
RT: 10.624 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 95 Resp: 2070

Ion	Ratio	Lower	Upper
95	100		
174	73.3	58.6	88.0
176	72.8	58.2	87.4



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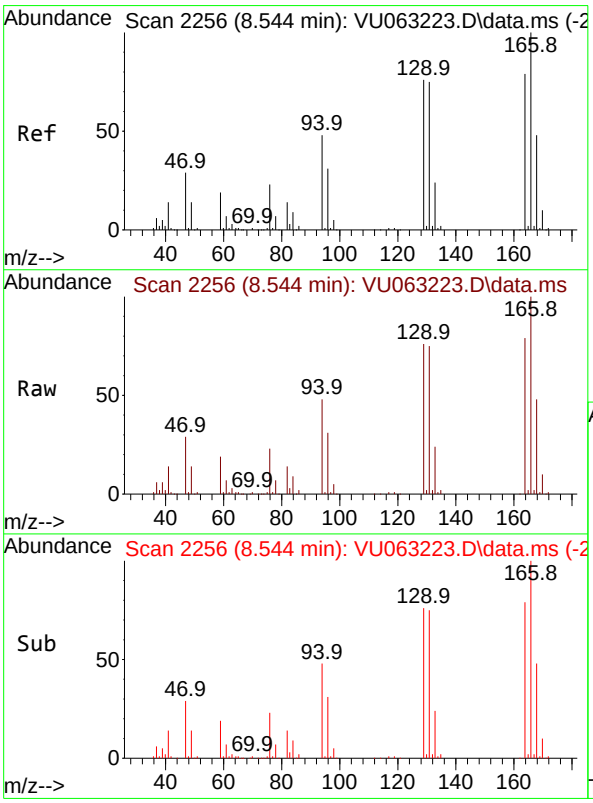
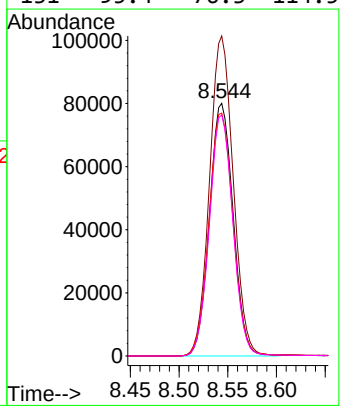
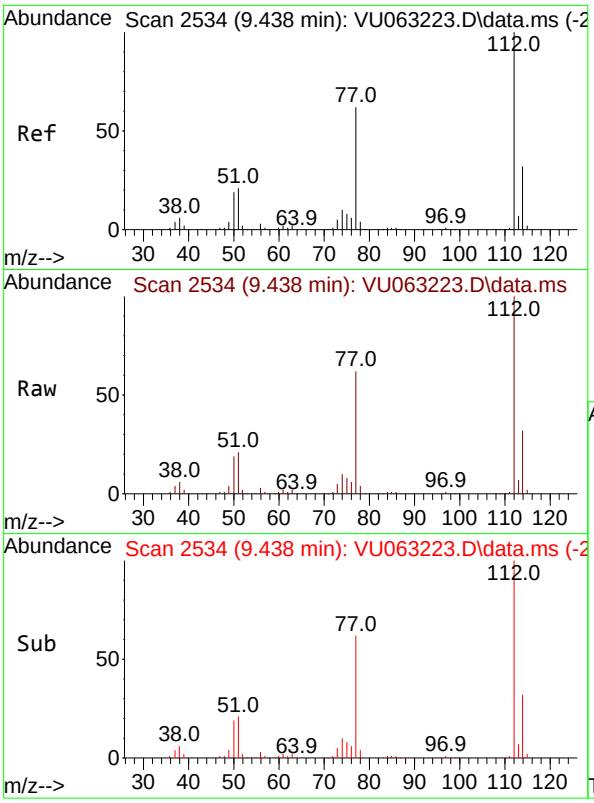


#58
Tetrachloroethene
Concen: 9.719 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:164 Resp: 135324

Ion	Ratio	Lower	Upper
164	100		
166	126.7	101.4	152.0
129	96.2	77.0	115.4
131	95.4	76.3	114.5

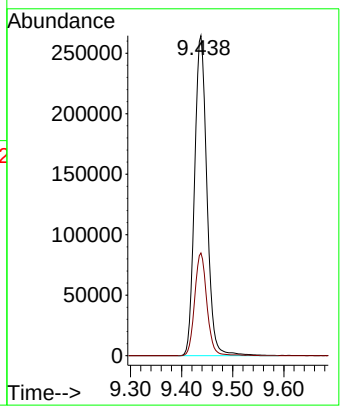




#59
Chlorobenzene
Concen: 10.297 ug/l
RT: 9.438 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:112 Resp: 44395

Ion	Ratio	Lower	Upper
112	100		
114	32.1	25.7	38.5



Instrument :
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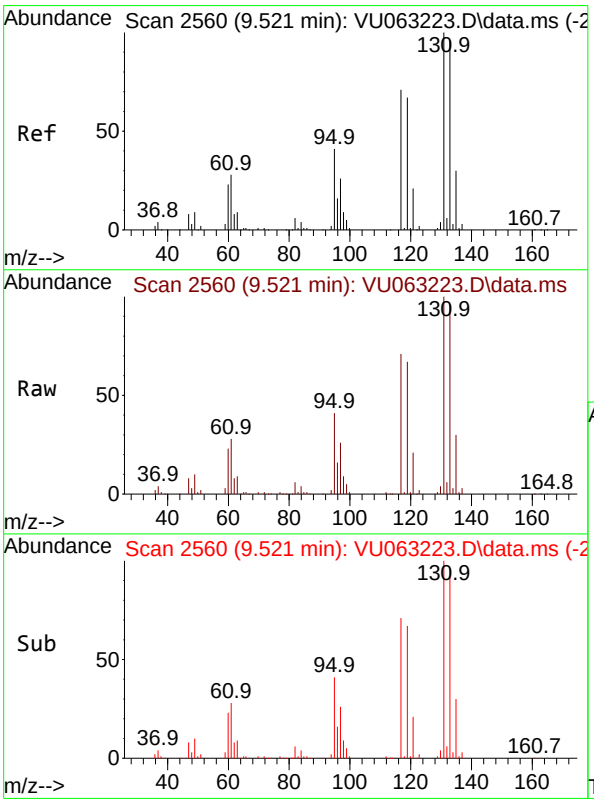
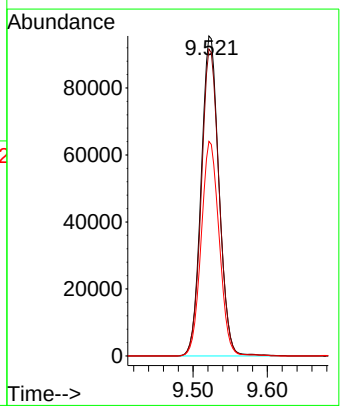
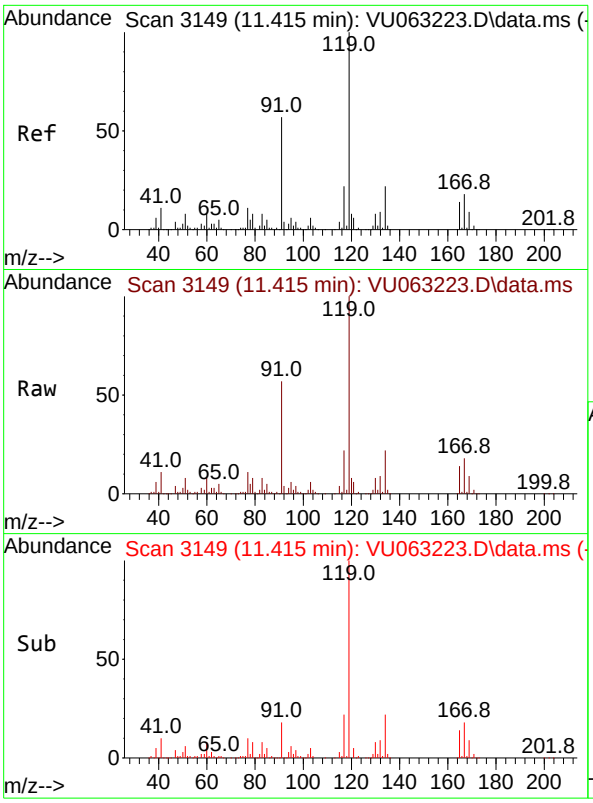


#60
1,1,1,2-Tetrachloroethane
Concen: 10.222 ug/l
RT: 9.521 min Scan# 2560
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:131 Resp: 158424

Ion	Ratio	Lower	Upper
131	100		
133	95.9	76.7	115.1
119	68.0	54.4	81.6

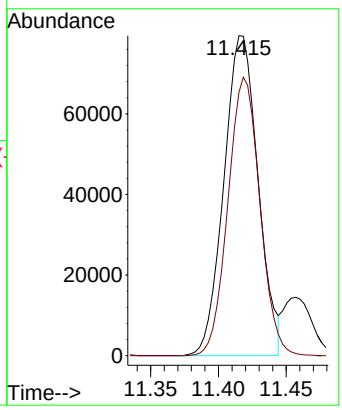




#61
Pentachloroethane
Concen: 10.060 ug/l
RT: 11.415 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:117 Resp: 13927

Ion	Ratio	Lower	Upper
117	100		
167	81.3	65.0	97.6



Instrument :
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ClientSampleId :
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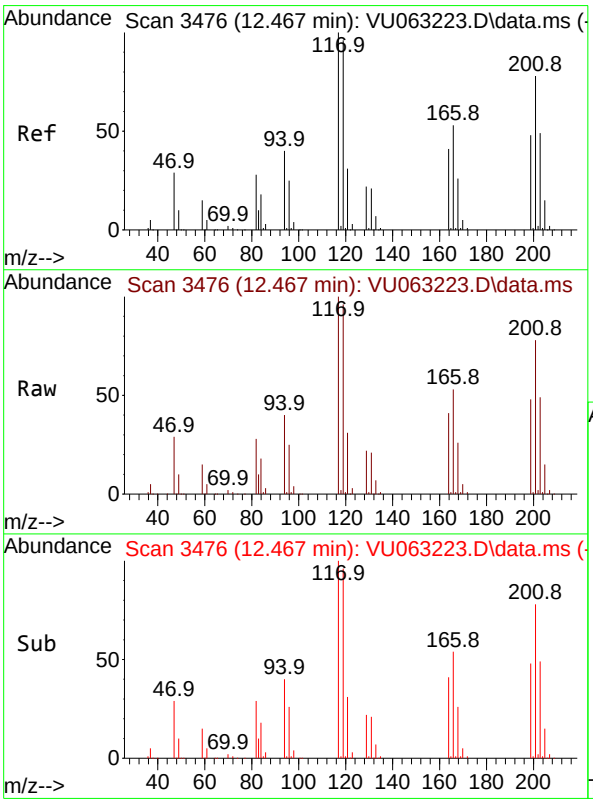
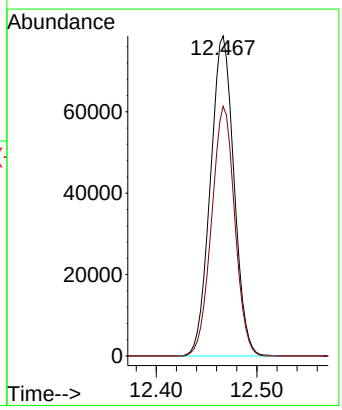
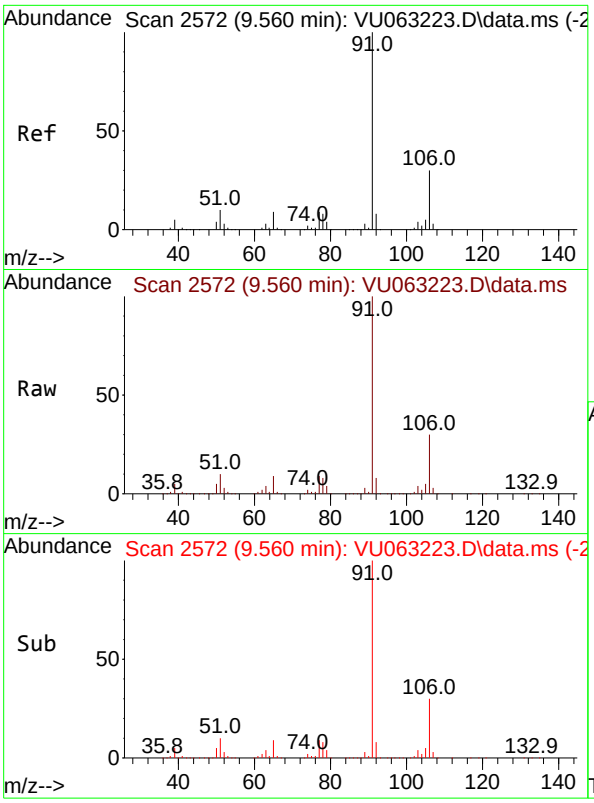


#62
Hexachloroethane
Concen: 10.465 ug/l
RT: 12.467 min Scan# 3476
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:117 Resp: 128179

Ion	Ratio	Lower	Upper
117	100		
201	76.6	61.3	91.9

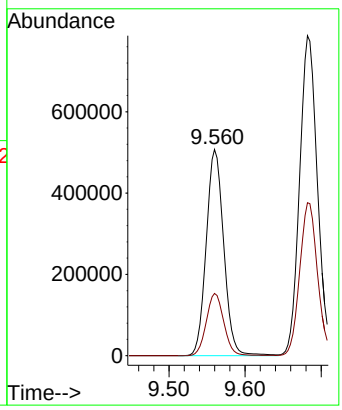




#63
Ethyl Benzene
Concen: 10.912 ug/l
RT: 9.560 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 91 Resp: 81142

Ion	Ratio	Lower	Upper
91	100		
106	30.2	24.2	36.2



Instrument :
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ClientSampleId :
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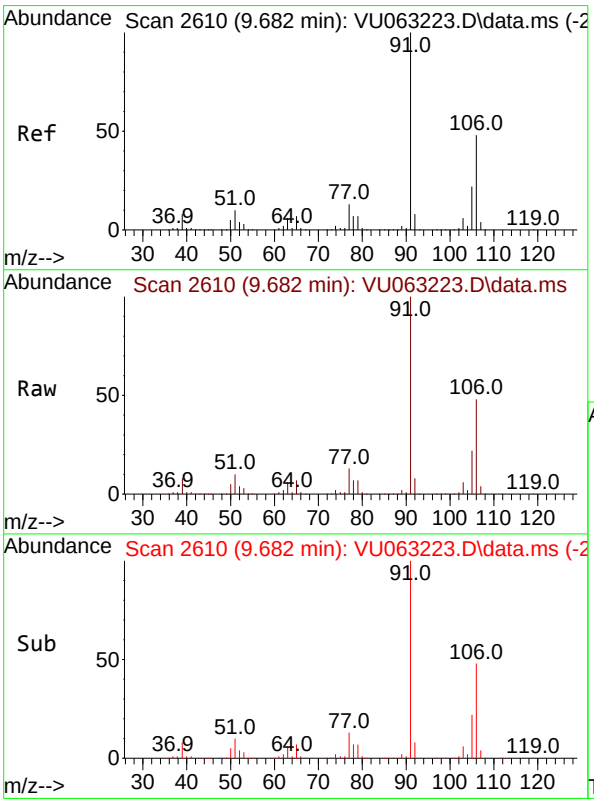
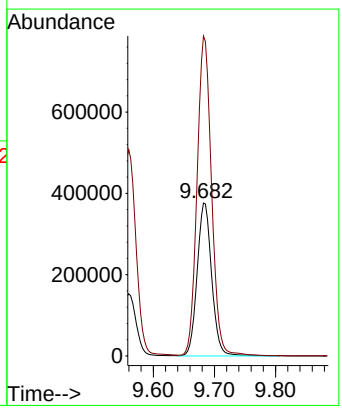
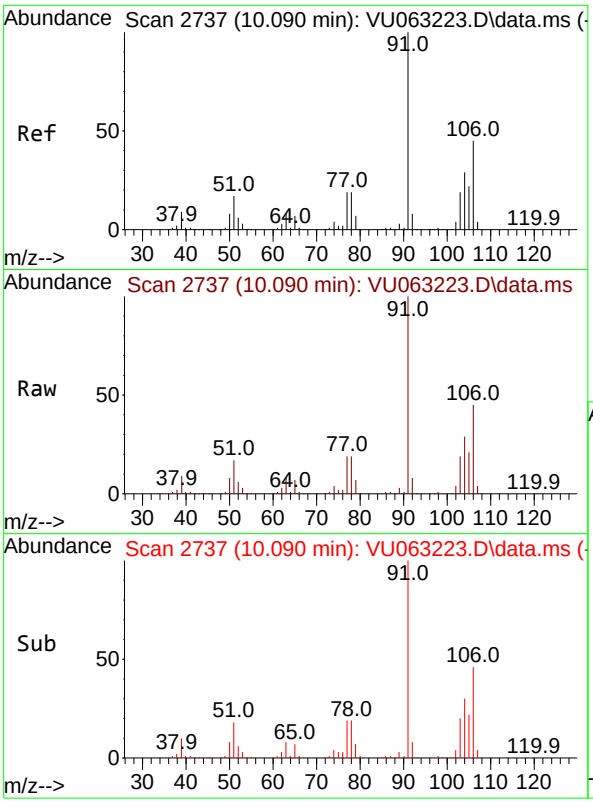


#64
m/p-Xylenes
Concen: 22.300 ug/l
RT: 9.682 min Scan# 2610
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:106 Resp: 619391

Ion	Ratio	Lower	Upper
106	100		
91	208.6	166.9	250.3

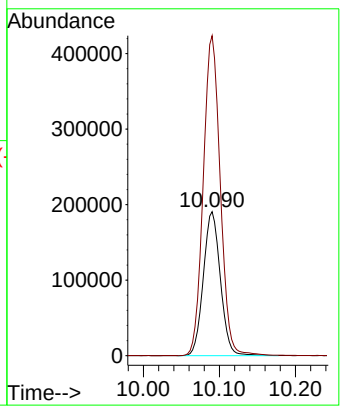




#65
o-Xylene
Concen: 10.934 ug/l
RT: 10.090 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:106 Resp: 29730

Ion	Ratio	Lower	Upper
106	100		
91	221.9	110.9	332.9



Instrument :
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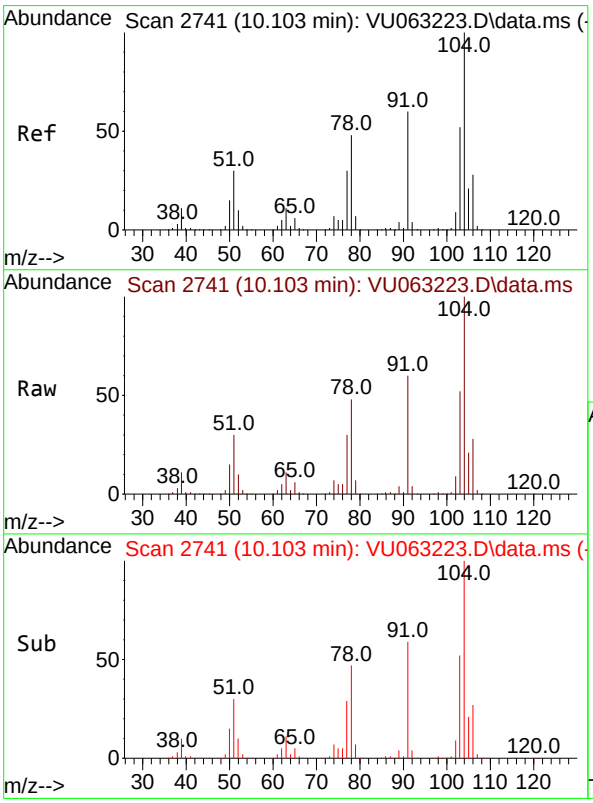
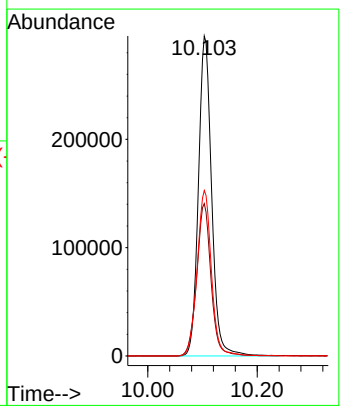
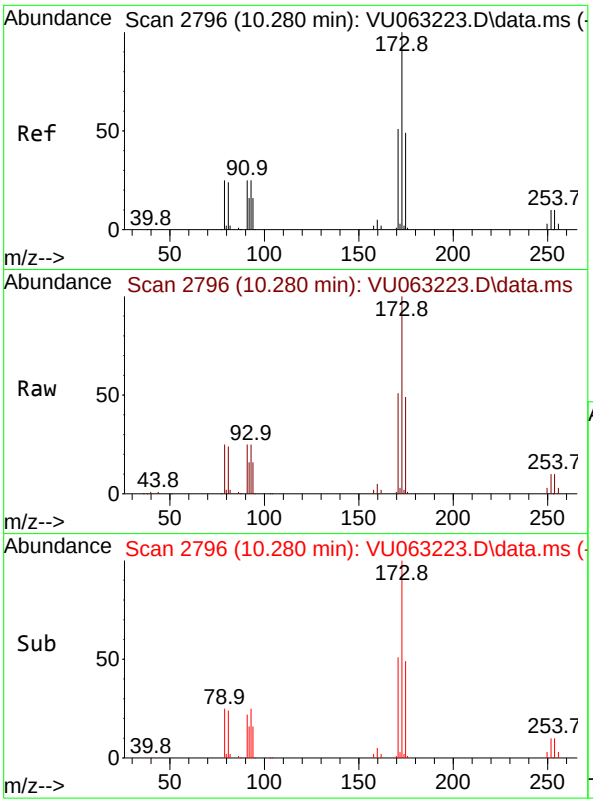


#66
Styrene
Concen: 11.443 ug/l
RT: 10.103 min Scan# 2741
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:104 Resp: 495181

Ion	Ratio	Lower	Upper
104	100		
78	51.5	41.2	61.8
103	56.0	44.8	67.2

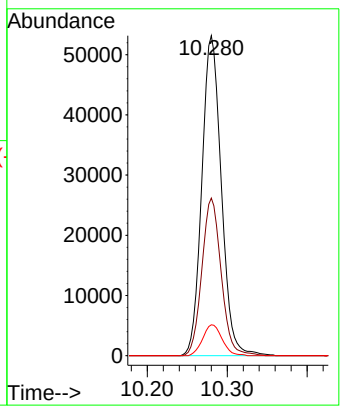




#67
Bromoform
Concen: 10.883 ug/l
RT: 10.280 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:173 Resp: 9022

Ion	Ratio	Lower	Upper
173	100		
175	48.7	39.0	58.4
254	9.6	7.7	11.5



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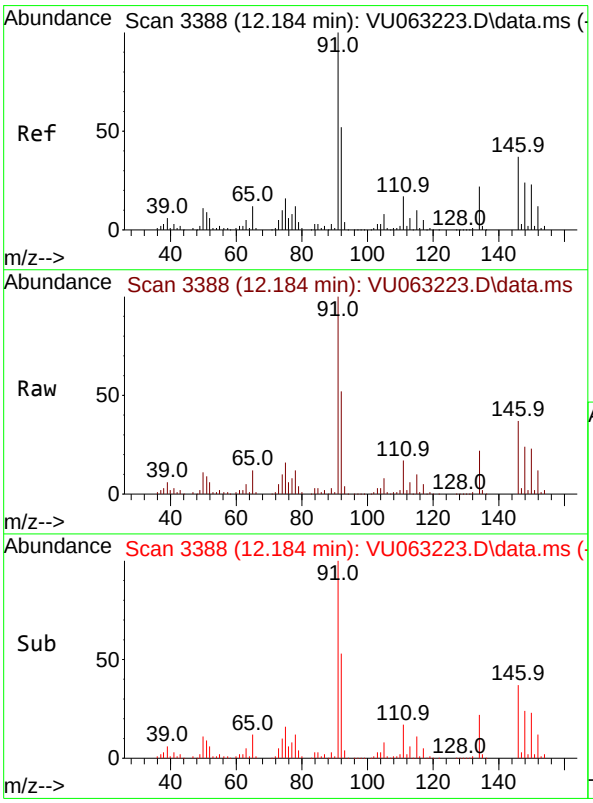
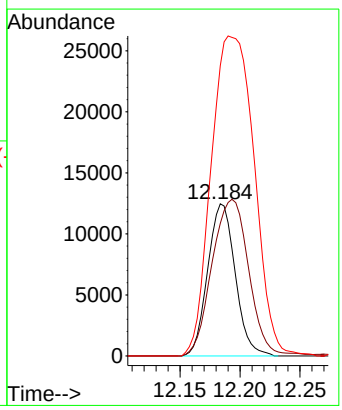
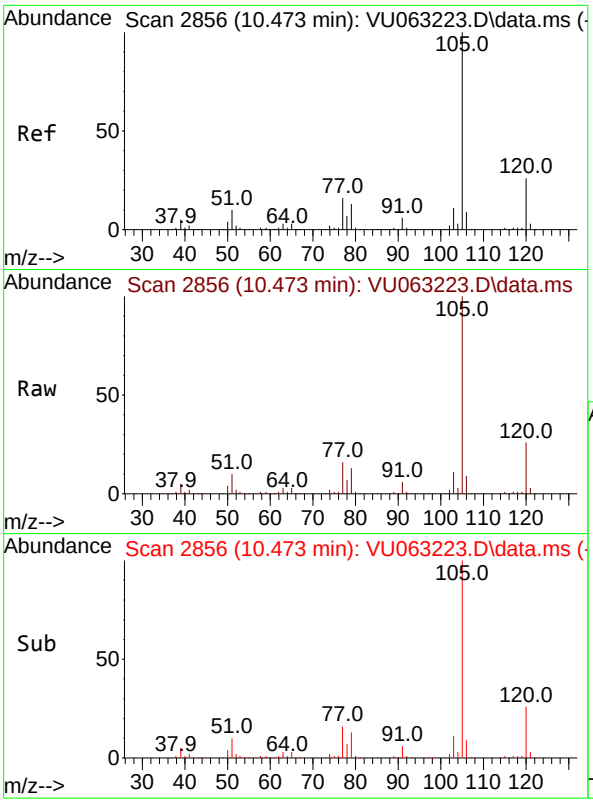


#68
1,2-Dichlorobenzene-d4
Concen: 1.002 ug/l
RT: 12.184 min Scan# 3388
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:152 Resp: 19878

Ion	Ratio	Lower	Upper
152	100		
115	137.6	0.0	275.2
150	329.2	0.0	658.4

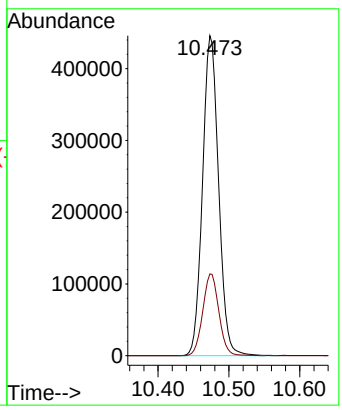




#69
Isopropylbenzene
Concen: 10.963 ug/l
RT: 10.473 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:105 Resp: 70080

Ion	Ratio	Lower	Upper
105	100		
120	25.6	12.8	38.4



Instrument :
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ClientSampleId :
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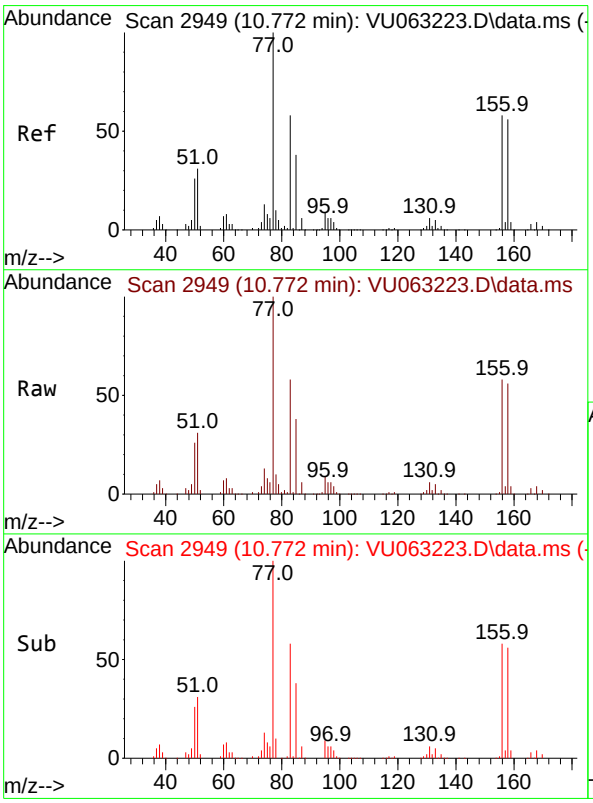
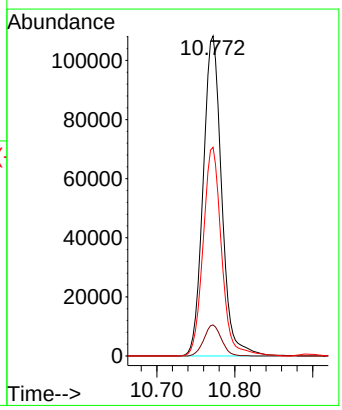
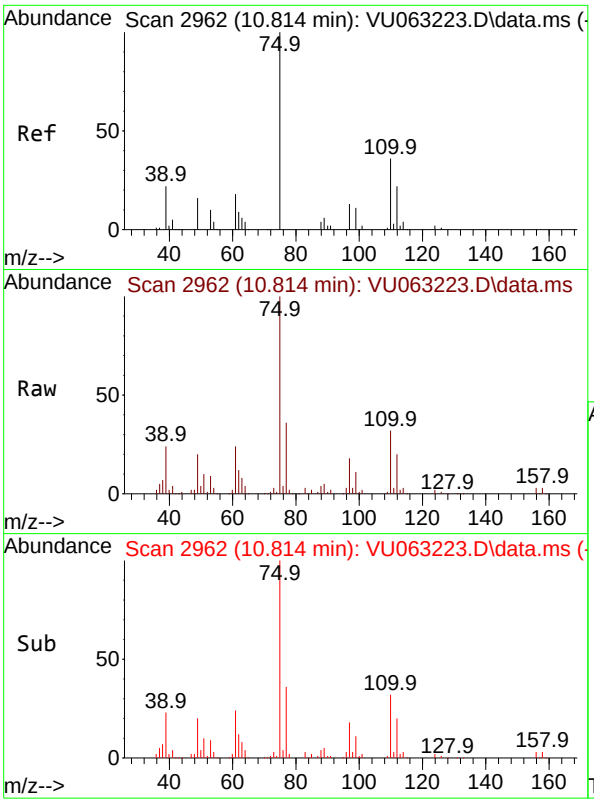


#70
1,1,2,2-Tetrachloroethane
Concen: 10.464 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 83 Resp: 179045

Ion	Ratio	Lower	Upper
83	100		
131	9.2	7.4	11.0
85	64.8	51.8	77.8

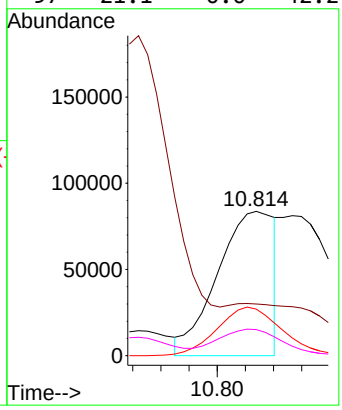




#71
1,2,3-Trichloropropane
Concen: 9.083 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 75 Resp: 11784

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	38.5	0.0	77.0
97	21.1	0.0	42.2



Instrument :
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ClientSampleId :
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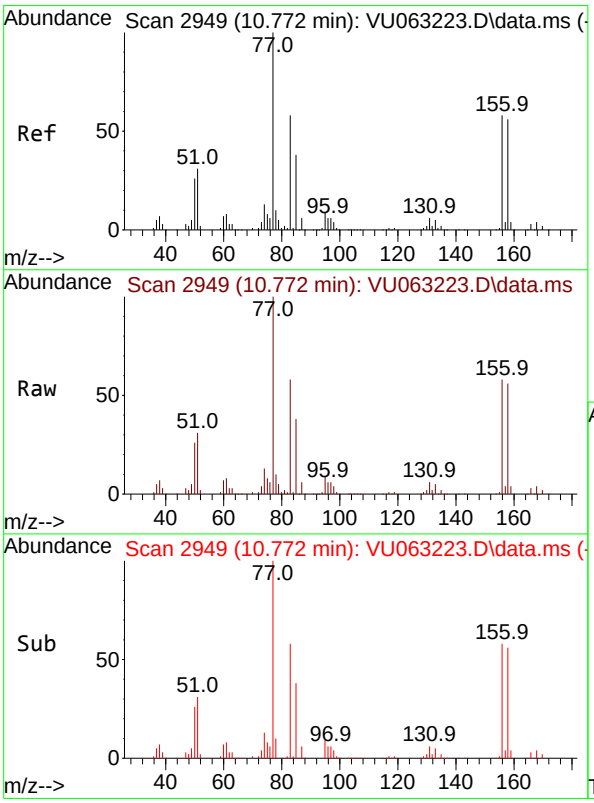
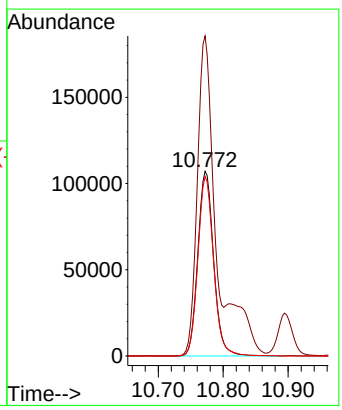
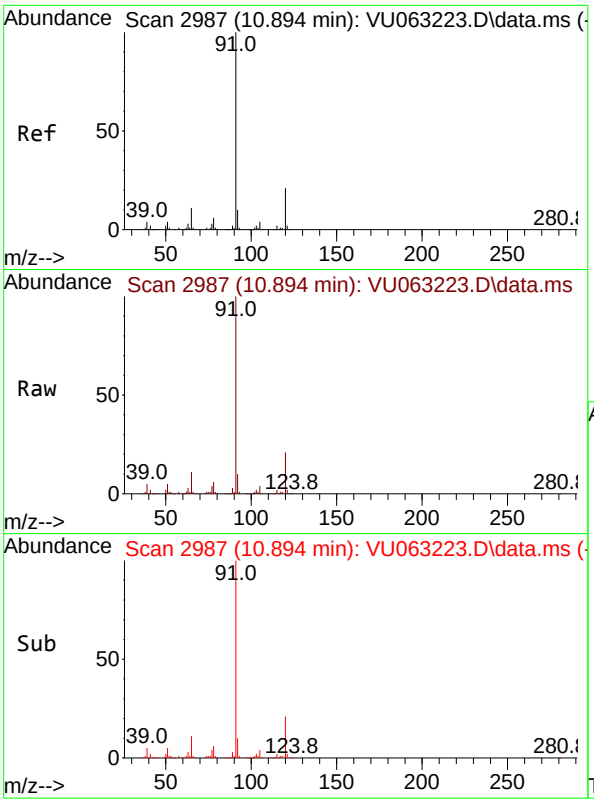


#72
Bromobenzene
Concen: 10.554 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:156 Resp: 181776

Ion	Ratio	Lower	Upper
156	100		
77	171.8	0.0	343.6
158	96.5	0.0	193.0

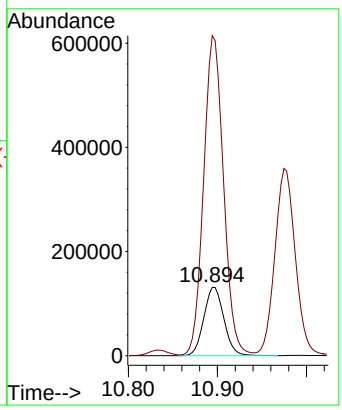




#73
n-propylbenzene
Concen: 11.189 ug/l
RT: 10.894 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:120 Resp: 20477

Ion	Ratio	Lower	Upper
120	100		
91	462.2	369.8	554.6



Instrument :
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ClientSampleId :
VSTDICCC010

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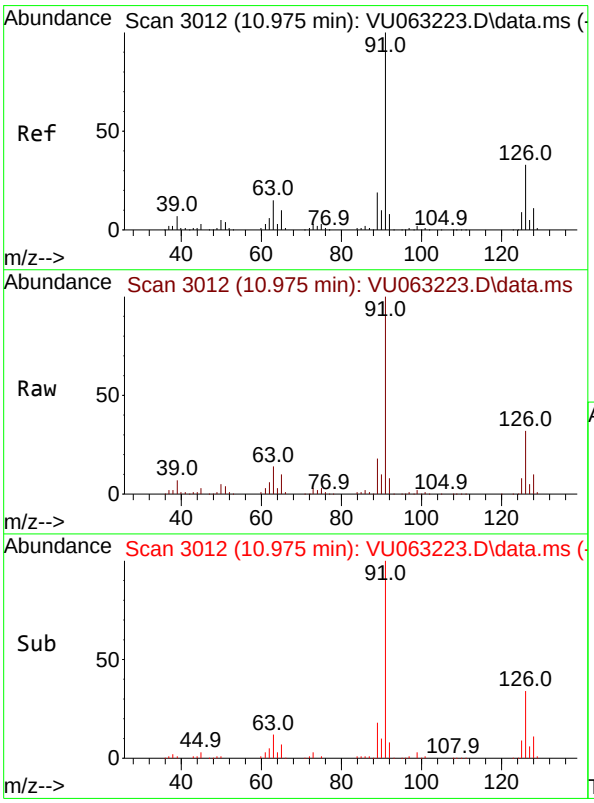
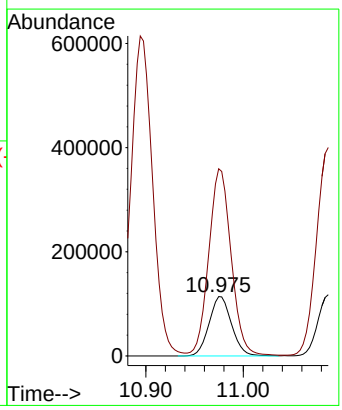
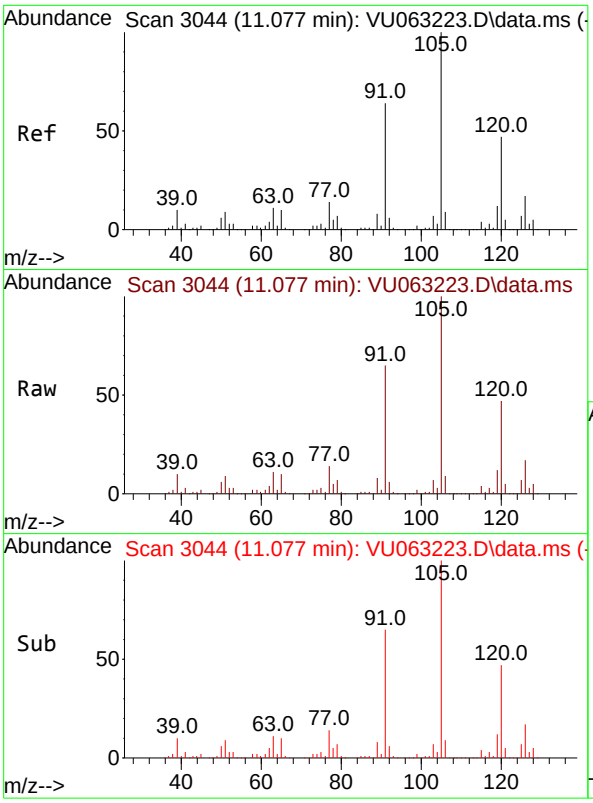


#74
2-Chlorotoluene
Concen: 10.829 ug/l
RT: 10.975 min Scan# 3012
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:126 Resp: 182649

Ion	Ratio	Lower	Upper
126	100		
91	311.9	0.0	623.8





#75
1,3,5-Trimethylbenzene
Concen: 11.211 ug/l
RT: 11.077 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:105 Resp: 66404

Ion	Ratio	Lower	Upper
105	100		
120	46.6	37.3	55.9

Instrument :
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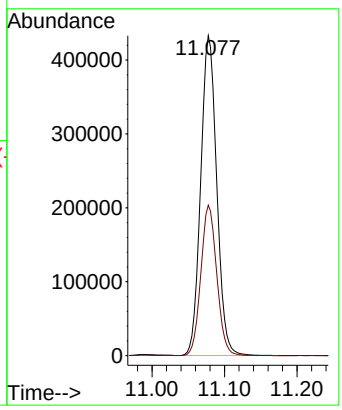
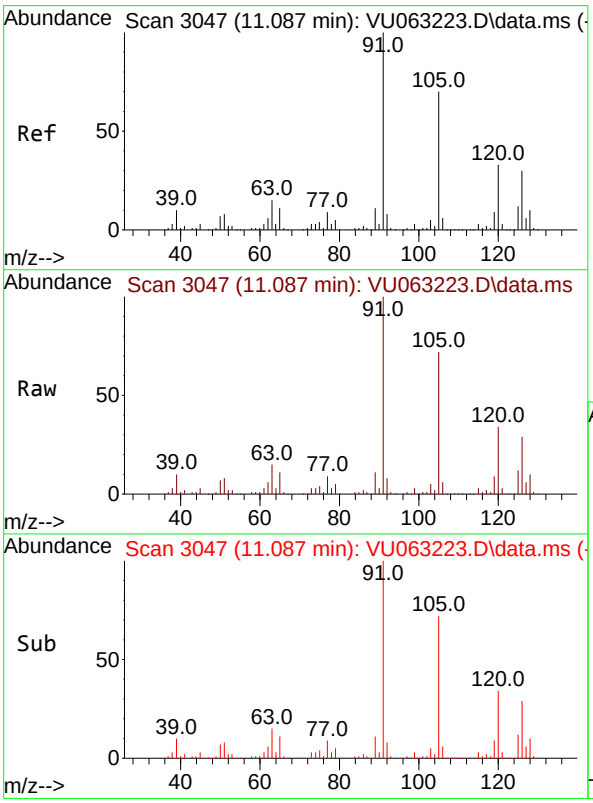
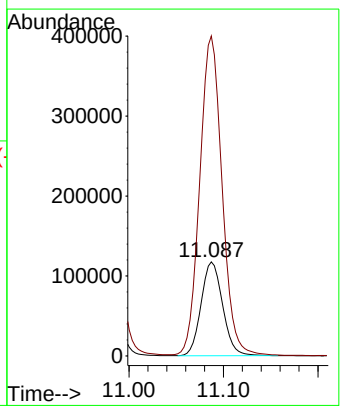


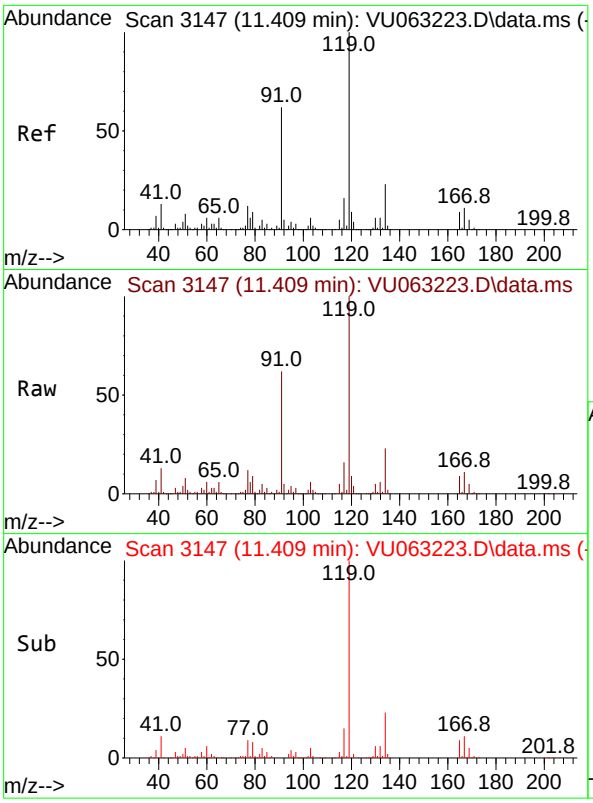


#76
4-Chlorotoluene
Concen: 10.745 ug/l
RT: 11.087 min Scan# 3047
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:126 Resp: 185864

Ion	Ratio	Lower	Upper
126	100		
91	351.8	0.0	703.6

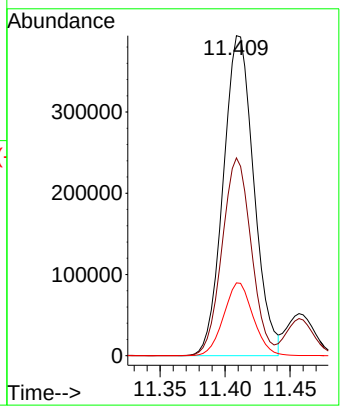




#77
tert-Butylbenzene
Concen: 10.791 ug/l
RT: 11.409 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:119 Resp: 64643

Ion	Ratio	Lower	Upper
119	100		
91	58.9	29.4	88.3
134	22.0	17.6	26.4



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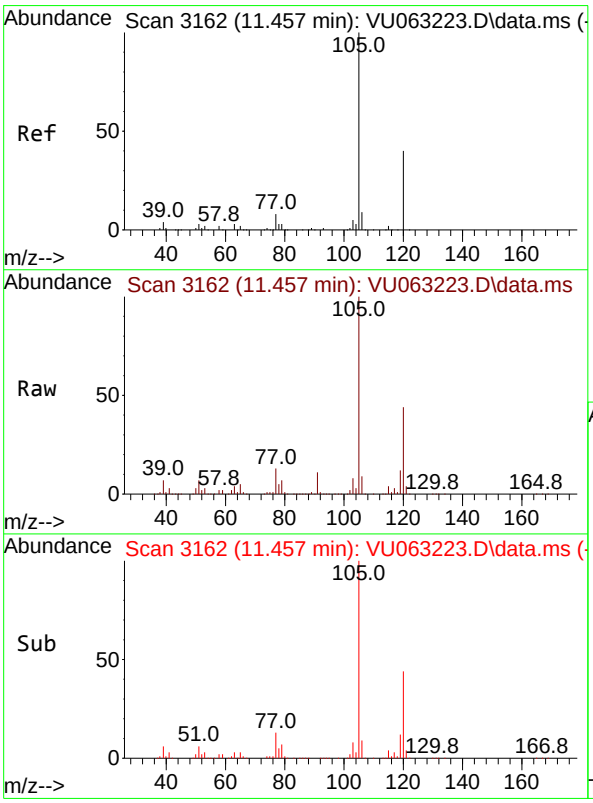
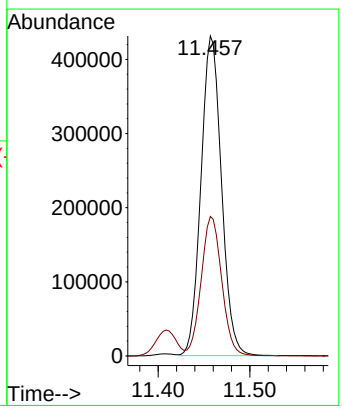
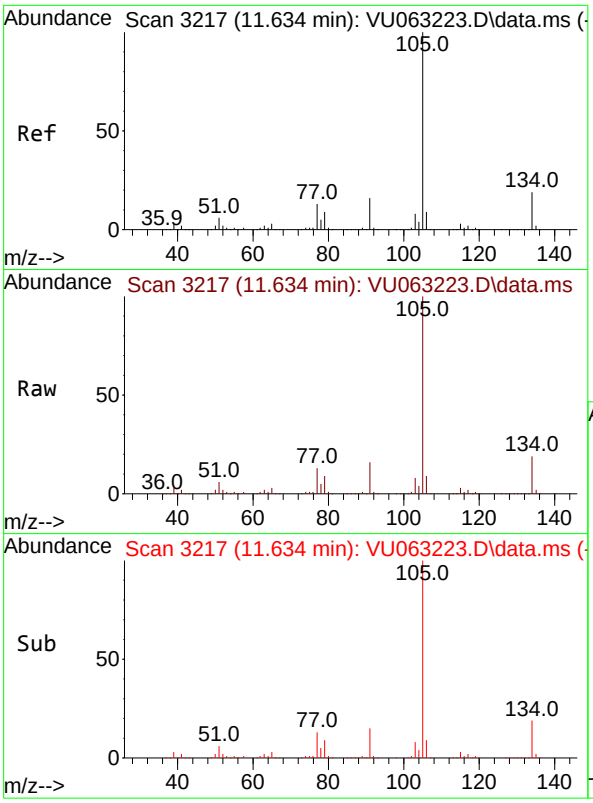


#78
1,2,4-Trimethylbenzene
Concen: 11.382 ug/l
RT: 11.457 min Scan# 3162
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:105 Resp: 668930

Ion	Ratio	Lower	Upper
105	100		
120	43.8	21.9	65.7





#79
sec-Butylbenzene
Concen: 10.932 ug/l
RT: 11.634 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:105 Resp: 83379

Ion	Ratio	Lower	Upper
105	100		
134	18.9	15.1	22.7

Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

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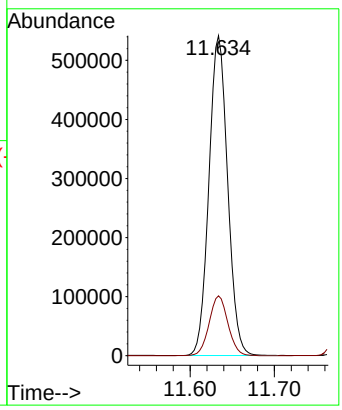
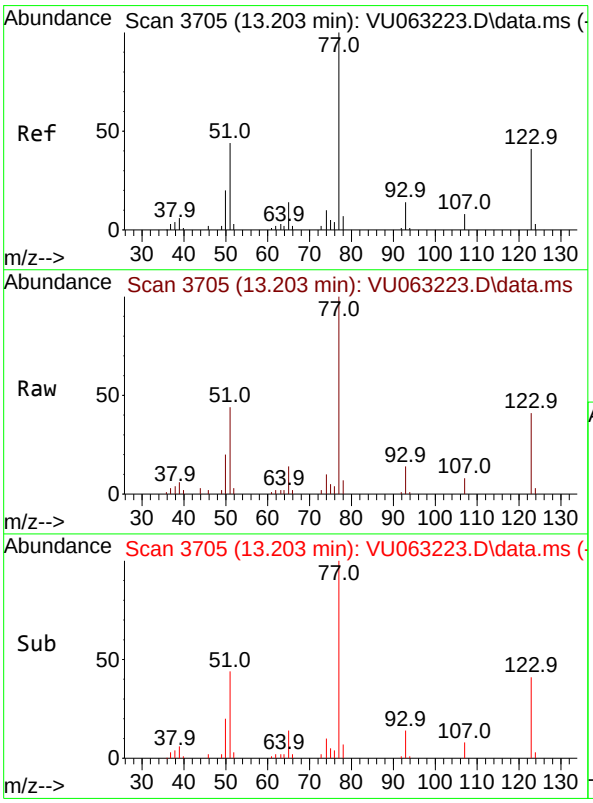
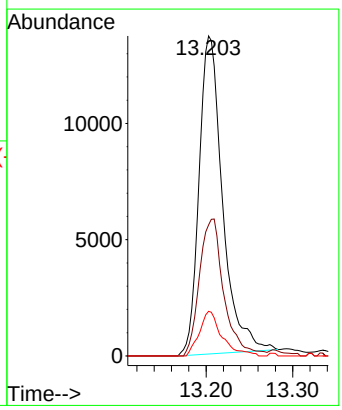


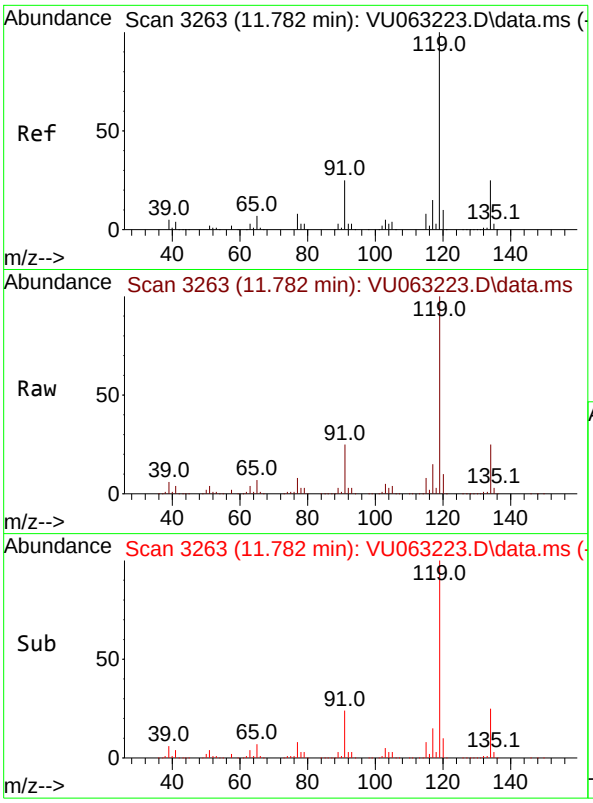


#80
Nitrobenzene
Concen: 50.821 ug/l
RT: 13.203 min Scan# 3705
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 77 Resp: 25795

Ion	Ratio	Lower	Upper
77	100		
123	43.0	18.9	67.1
65	13.5	11.9	15.1

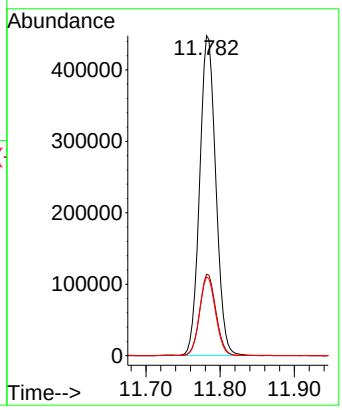




#81
p-Isopropyltoluene
Concen: 11.219 ug/l
RT: 11.782 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:119 Resp: 67530

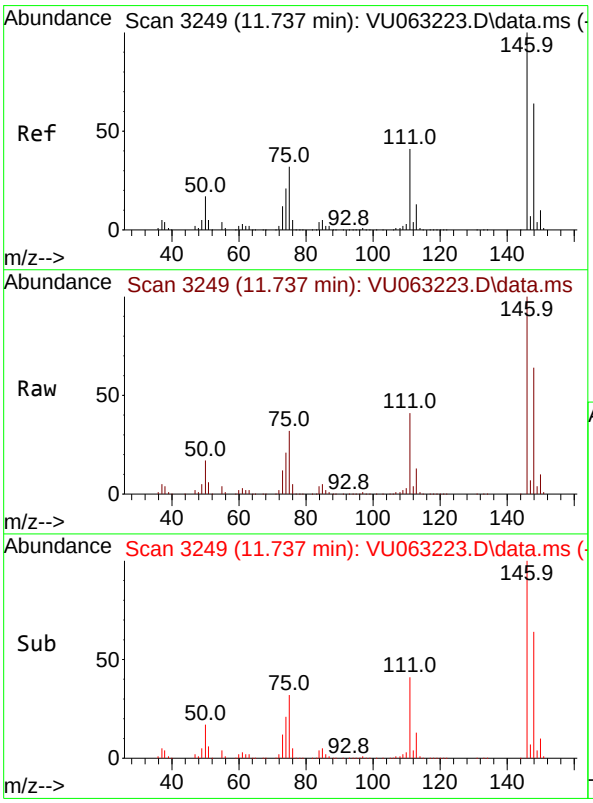
Ion	Ratio	Lower	Upper
119	100		
134	25.4	20.3	30.5
91	24.3	19.4	29.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

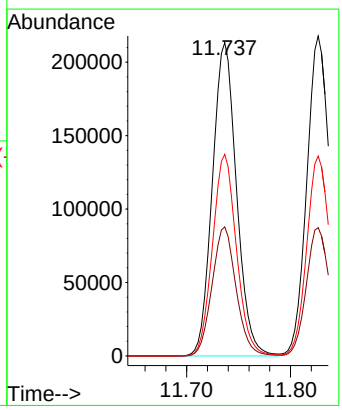
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

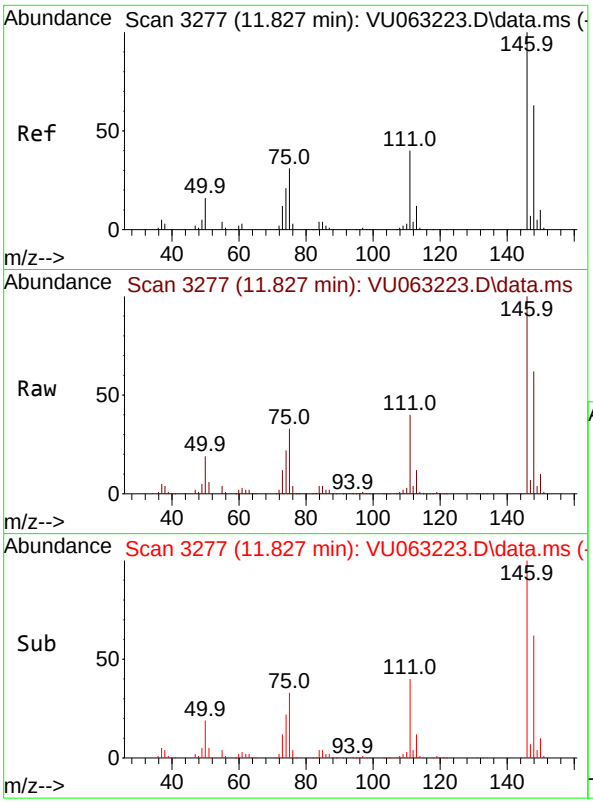


#82
1,3-Dichlorobenzene
Concen: 10.314 ug/l
RT: 11.737 min Scan# 3249
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:146 Resp: 344574

Ion	Ratio	Lower	Upper
146	100		
111	41.0	32.8	49.2
148	63.9	51.1	76.7

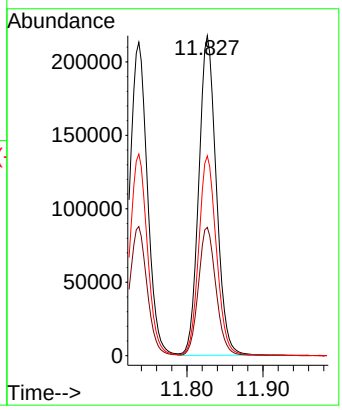




#83
1,4-Dichlorobenzene
Concen: 10.638 ug/l
RT: 11.827 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:146 Resp: 34761

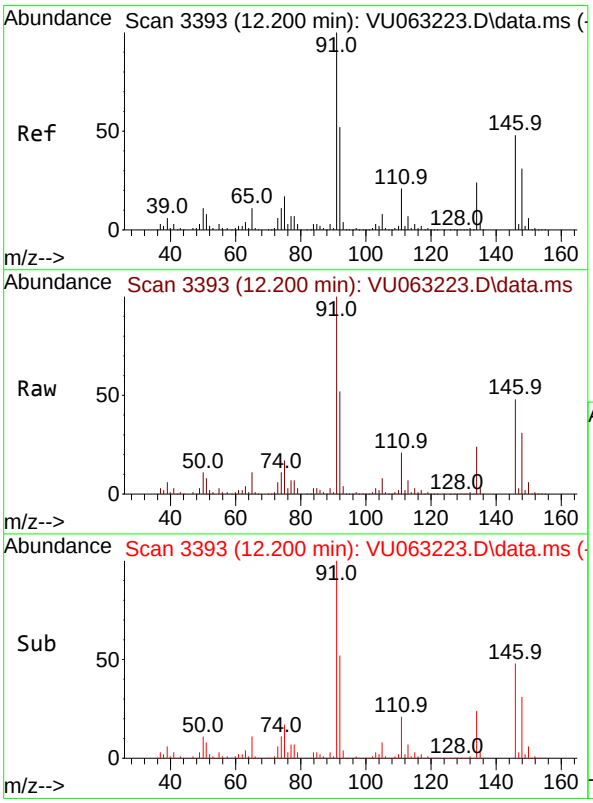
Ion	Ratio	Lower	Upper
146	100		
111	40.1	32.1	48.1
148	62.8	50.2	75.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

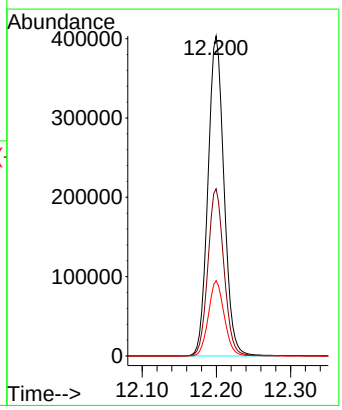
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

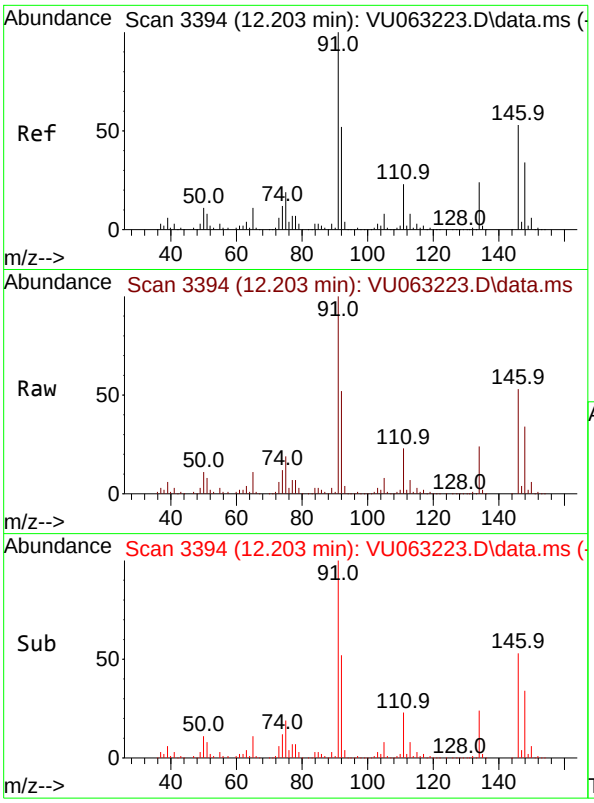


#84
n-Butylbenzene
Concen: 11.122 ug/l
RT: 12.200 min Scan# 3393
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 91 Resp: 603657

Ion	Ratio	Lower	Upper
91	100		
92	52.3	41.8	62.8
134	23.3	18.6	28.0

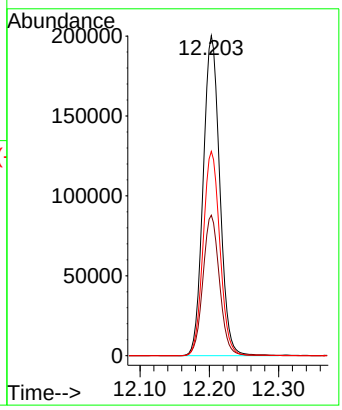




#85
1,2-Dichlorobenzene
Concen: 10.342 ug/l
RT: 12.203 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:146 Resp: 33201

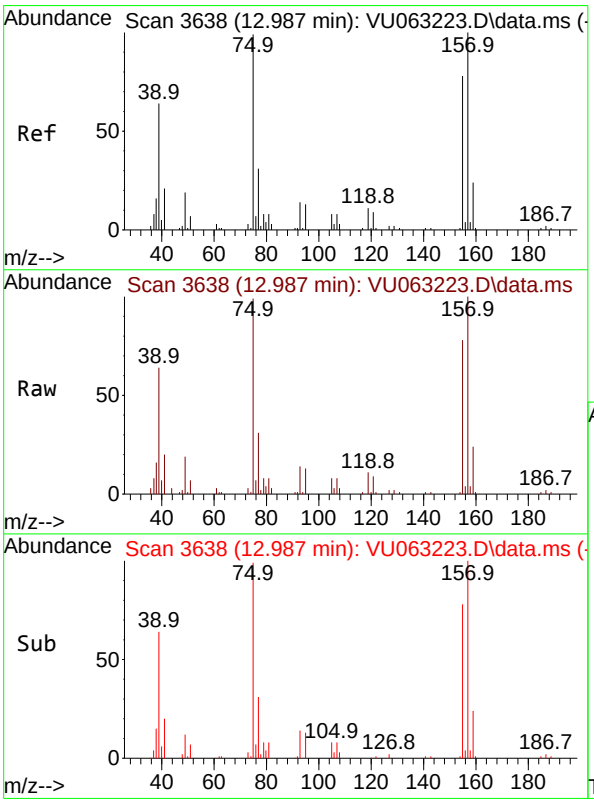
Ion	Ratio	Lower	Upper
146	100		
111	43.8	21.9	65.7
148	64.6	32.3	96.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

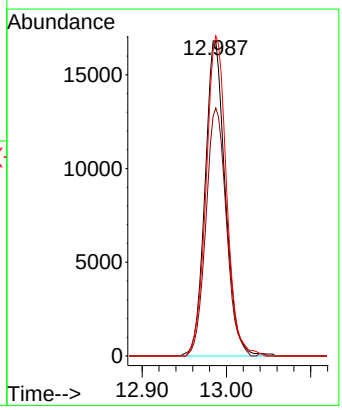
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

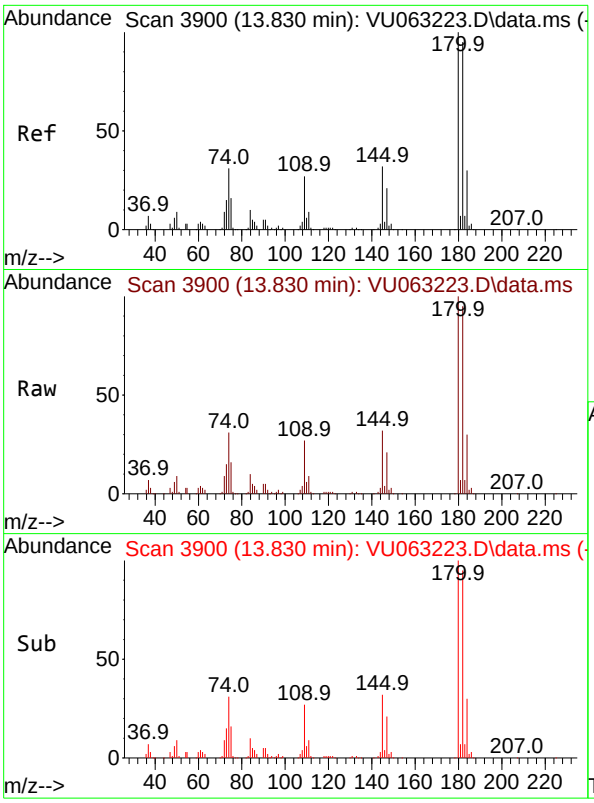


#86
1,2-Dibromo-3-Chloropropane
Concen: 11.713 ug/l
RT: 12.987 min Scan# 3638
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion: 75 Resp: 28133

Ion	Ratio	Lower	Upper
75	100		
155	79.4	63.5	95.3
157	102.2	81.8	122.6

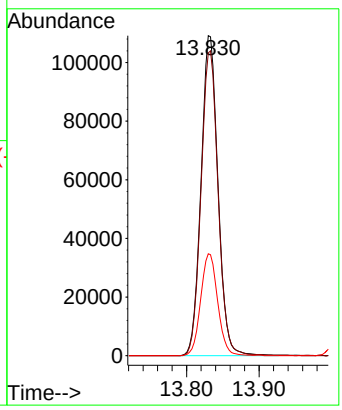




#87
1,2,4-Trichlorobenzene
Concen: 11.361 ug/l
RT: 13.830 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:180 Resp: 17789

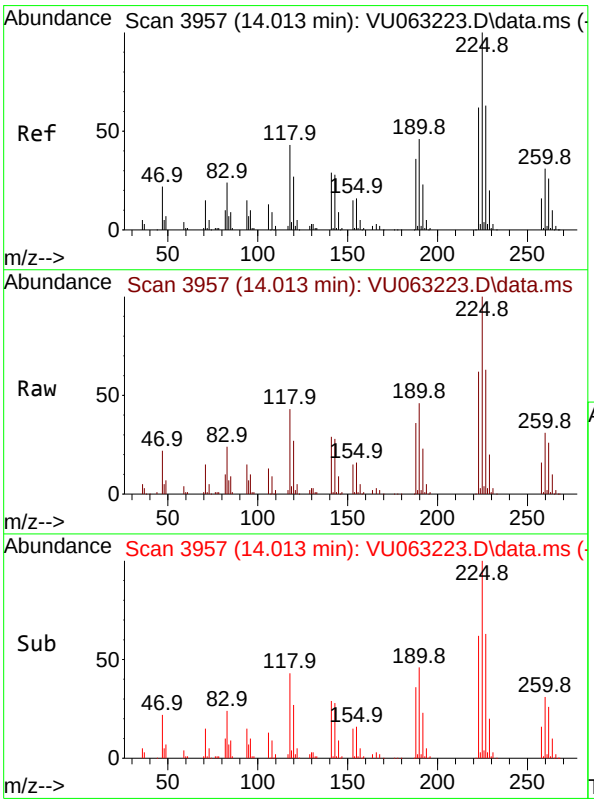
Ion	Ratio	Lower	Upper
180	100		
182	95.8	76.6	115.0
145	31.8	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

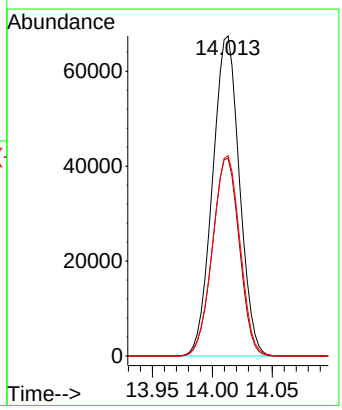
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

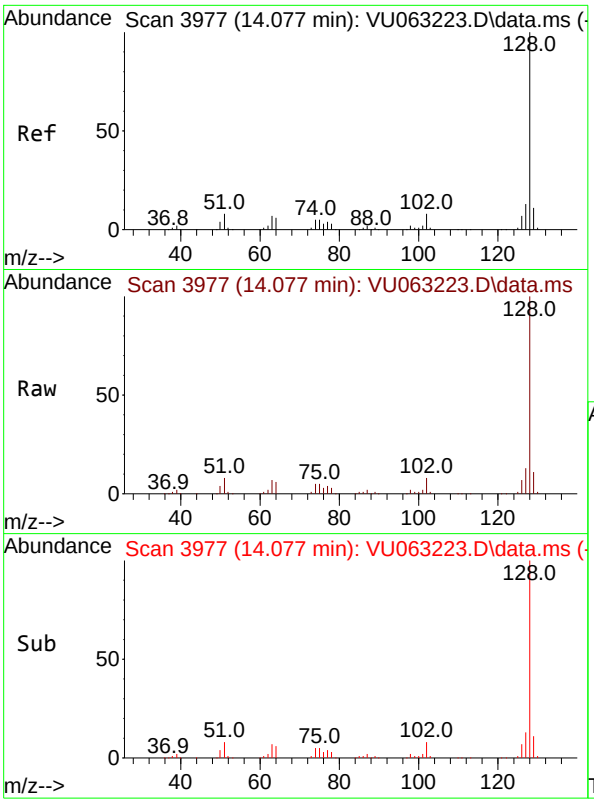


#88
Hexachlorobutadiene
Concen: 9.389 ug/l
RT: 14.013 min Scan# 3957
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:225 Resp: 105064

Ion	Ratio	Lower	Upper
225	100		
223	61.9	49.5	74.3
227	63.7	51.0	76.4

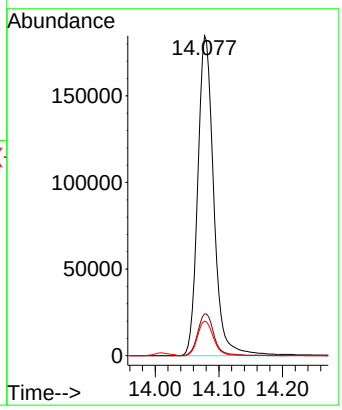




#89
Naphthalene
Concen: 9.843 ug/l
RT: 14.077 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:128 Resp: 32160

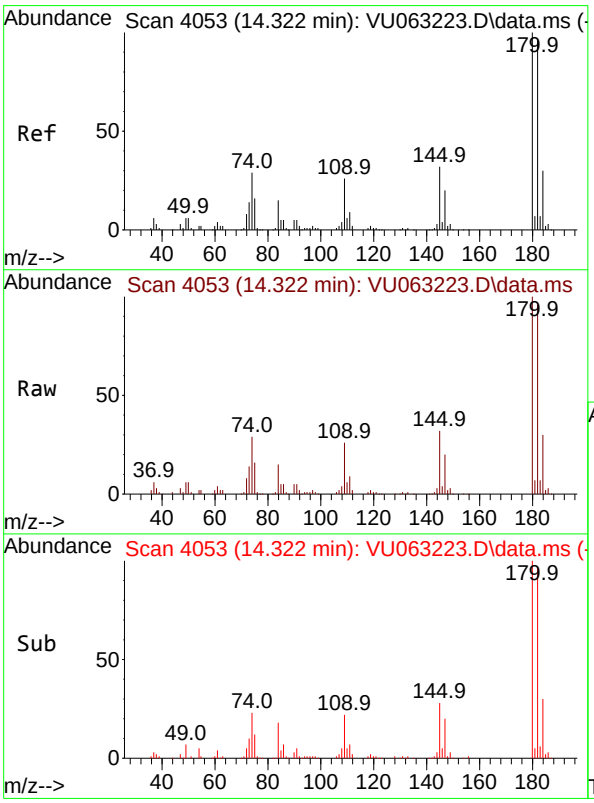
Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.6	16.0
129	10.8	8.6	13.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

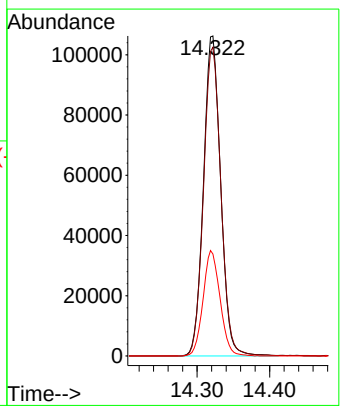
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025



#90
1,2,3-Trichlorobenzene
Concen: 11.421 ug/l
RT: 14.322 min Scan# 4053
Delta R.T. 0.000 min
Lab File: VU063223.D
Acq: 10 Feb 2025 15:06

Tgt Ion:180 Resp: 174986

Ion	Ratio	Lower	Upper
180	100		
182	97.7	78.2	117.2
145	32.6	26.1	39.1



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063224.D
Acq On : 10 Feb 2025 15:33
Operator : MD/SY
Sample : VSTDICC015
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 11 04:01:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.103	96	58075	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.624	95	20689	1.080	ug/l	0.00
Spiked Amount 1.000			Recovery = 108.000%			
68) 1,2-Dichlorobenzene-d4	12.184	152	22516	1.130	ug/l	0.00
Spiked Amount 1.000			Recovery = 113.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.377	85	263402	13.960	ug/l	100
3) Chloromethane	1.515	50	300062	13.809	ug/l	97
4) Vinyl Chloride	1.596	62	311009	14.466	ug/l	100
6) Chloroethane	1.904	64	188210	13.899	ug/l	99
7) Trichlorofluoromethane	2.116	101	362692	14.236	ug/l	100
8) 1,1,2-Trichloro-1,2,2-...	2.563	101	200170	13.842	ug/l	99
9) 1,1-Dichloroethene	2.560	96	210091	14.259	ug/l	98
10) Iodomethane	2.705	142	329697	14.234	ug/l	99
11) Allyl Chloride	2.904	41	311245	14.705	ug/l	100
12) Acrylonitrile	3.300	53	102914	30.731	ug/l	99
13) Acetone	2.612	43	172446	65.992	ug/l	100
14) Carbon Disulfide	2.776	76	716395	13.906	ug/l	100
15) Methylene Chloride	3.026	84	251659	13.825	ug/l	99
16) trans-1,2-Dichloroethene	3.335	96	242715	14.434	ug/l	98
17) 1,1-Dichloroethane	3.846	63	453378	14.304	ug/l	100
18) 2-Butanone	4.685	43	304814	72.208	ug/l	99
19) Cyclohexane	5.370	56	400586m	15.729	ug/l	
20) Methylcyclohexane	6.750	83	398925	15.795	ug/l	99
21) 2,2-Dichloropropane	4.644	77	354900	14.352	ug/l	100
22) cis-1,2-Dichloroethene	4.647	96	270006	14.861	ug/l	100
23) Diethyl Ether	2.364	59	177089	14.007	ug/l	100
24) tert-Butyl Alcohol	3.177	59	185785	146.971	ug/l	100
25) Methyl tert-Butyl Ether	3.348	73	553339	15.037	ug/l	99
26) Bromochloromethane	4.952	128	113229	14.257	ug/l	98
27) Chloroform	5.071	83	457911	14.316	ug/l	100
28) 1,1,1-Trichloroethane	5.300	97	373842	14.428	ug/l	99
29) 1,1-Dichloropropene	5.509	75	347711	14.983	ug/l	99
30) Carbon Tetrachloride	5.509	117	321059	14.448	ug/l	99
31) Isopropyl Ether	3.975	45	703540	15.547	ug/l	98
32) Ethyl-t-butyl ether	4.483	59	649553	15.784	ug/l	99
33) Tert-Amyl methyl ether	5.923	73	575729	16.013	ug/l	100
34) Propionitrile	4.753	54	103055	78.746	ug/l	99
35) Benzene	5.756	78	1044796	14.641	ug/l	99
36) 1,2-Dichloroethane	5.775	62	291840	14.170	ug/l	100
37) Trichloroethene	6.528	130	244774	14.424	ug/l	100
38) 1,2-Dichloropropane	6.775	63	273676	14.653	ug/l	99
39) Methacrylonitrile	4.956	41	79040	16.908	ug/l	99
40) Methyl acrylate	4.830	55	133276	15.616	ug/l	99
41) Tetrahydrofuran	5.036	42	79845	29.065	ug/l	99
42) 1-Chlorobutane	5.441	56	481169	15.153	ug/l	99
43) Dibromomethane	6.904	93	133485	14.114	ug/l	98
44) Bromodichloromethane	7.090	83	323143	14.680	ug/l	99
45) 4-Methyl-2-Pentanone	7.779	43	794494	80.129	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063224.D
Acq On : 10 Feb 2025 15:33
Operator : MD/SY
Sample : VSTDICC015
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quant Time: Feb 11 04:01:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) t-1,4-Dichloro-2-butene	10.827	75	143327m	29.213 ug/l	
47) Methyl methacrylate	6.946	69	256757	32.232 ug/l	100
48) Ethyl methacrylate	8.322	69	257931	17.244 ug/l	100
49) Toluene	7.955	92	638079	15.549 ug/l	100
50) t-1,3-Dichloropropene	8.197	75	320246	15.891 ug/l	98
51) cis-1,3-Dichloropropene	7.595	75	386542	15.527 ug/l	99
52) 1,1,2-Trichloroethane	8.386	97	186154	14.598 ug/l	98
53) 1,3-Dichloropropane	8.563	76	330381	14.594 ug/l	99
54) 2-Hexanone	8.672	43	557608	82.409 ug/l	99
55) Dibromochloromethane	8.798	129	219151	14.939 ug/l	97
56) 1,2-Dibromoethane	8.910	107	178579	14.932 ug/l	99
58) Tetrachloroethene	8.541	164	195759	13.998 ug/l	99
59) Chlorobenzene	9.434	112	659996	15.241 ug/l	100
60) 1,1,1,2-Tetrachloroethane	9.521	131	233573	15.005 ug/l	99
61) Pentachloroethane	11.415	117	217502	15.642 ug/l	100
62) Hexachloroethane	12.463	117	202372	16.451 ug/l	100
63) Ethyl Benzene	9.560	91	1218926	16.321 ug/l	99
64) m/p-Xylenes	9.682	106	919492	32.960 ug/l	99
65) o-Xylene	10.090	106	447318	16.379 ug/l	100
66) Styrene	10.103	104	750530	17.269 ug/l	100
67) Bromoform	10.280	173	131670	15.814 ug/l	99
69) Isopropylbenzene	10.473	105	1068251	16.638 ug/l	100
70) 1,1,2,2-Tetrachloroethane	10.769	83	264258	15.376 ug/l	100
71) 1,2,3-Trichloropropane	10.814	75	200210m	15.363 ug/l	
72) Bromobenzene	10.772	156	273315	15.799 ug/l	99
73) n-propylbenzene	10.894	120	312734	17.012 ug/l	100
74) 2-Chlorotoluene	10.975	126	279514	16.499 ug/l	98
75) 1,3,5-Trimethylbenzene	11.077	105	1018594	17.122 ug/l	100
76) 4-Chlorotoluene	11.087	126	284996	16.404 ug/l	100
77) tert-Butylbenzene	11.409	119	1004388	16.693 ug/l	100
78) 1,2,4-Trimethylbenzene	11.457	105	1038794	17.598 ug/l	99
79) sec-Butylbenzene	11.630	105	1305019	17.036 ug/l	100
80) Nitrobenzene	13.200	77	39246	75.007 ug/l	99
81) p-Isopropyltoluene	11.782	119	1064335	17.605 ug/l	100
82) 1,3-Dichlorobenzene	11.733	146	532282	15.863 ug/l	99
83) 1,4-Dichlorobenzene	11.827	146	537516	16.378 ug/l	99
84) n-Butylbenzene	12.196	91	994690	18.246 ug/l	100
85) 1,2-Dichlorobenzene	12.200	146	526346	16.323 ug/l	99
86) 1,2-Dibromo-3-Chloropr...	12.987	75	39960	16.565 ug/l	98
87) 1,2,4-Trichlorobenzene	13.830	180	288112	18.320 ug/l	99
88) Hexachlorobutadiene	14.010	225	175875	15.648 ug/l	99
89) Naphthalene	14.077	128	515515	15.328 ug/l	100
90) 1,2,3-Trichlorobenzene	14.318	180	277101	18.007 ug/l	98

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

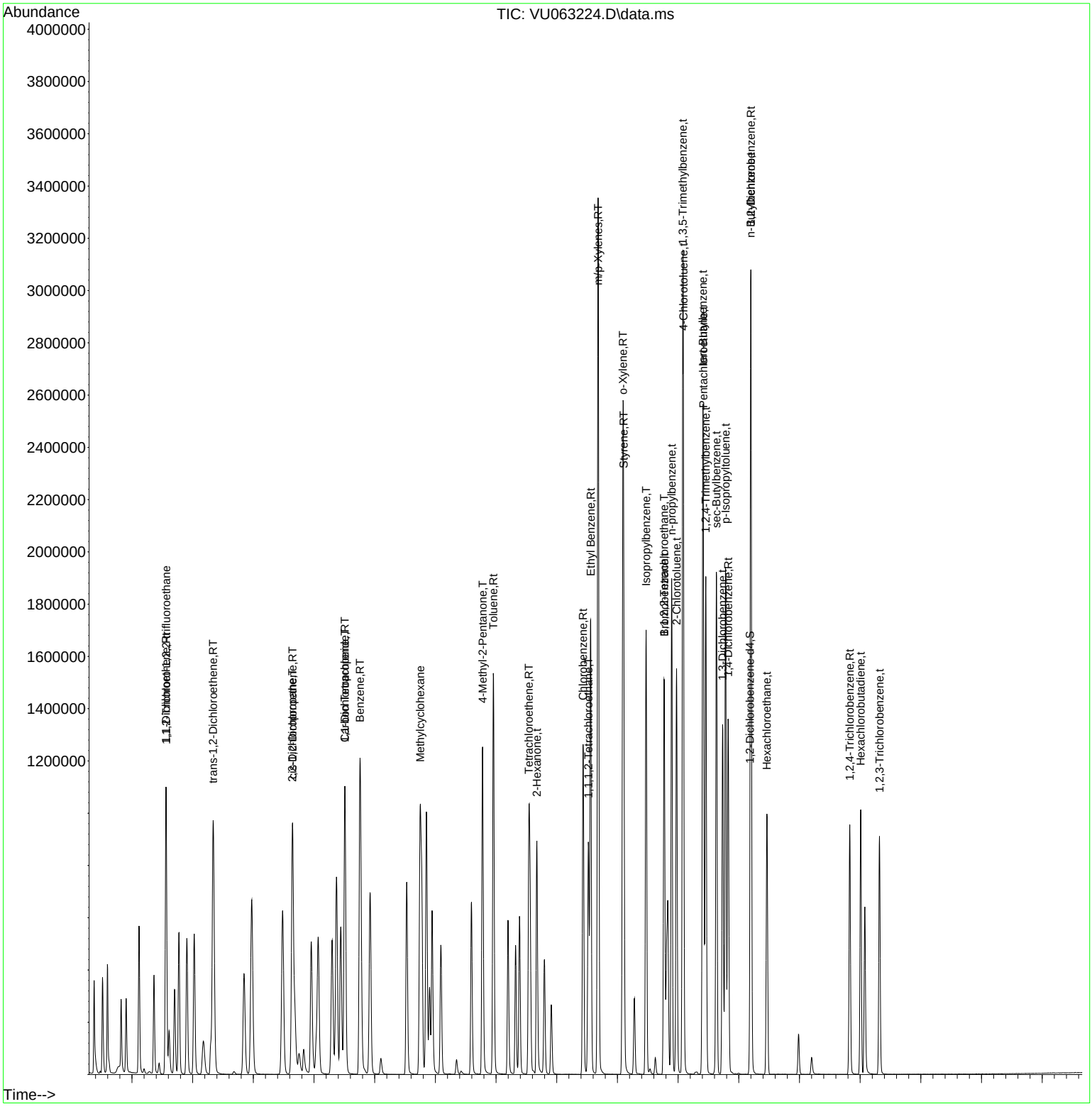
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063224.D
Acq On : 10 Feb 2025 15:33
Operator : MD/SY
Sample : VSTDICC015
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 8 Sample Multiplier: 1

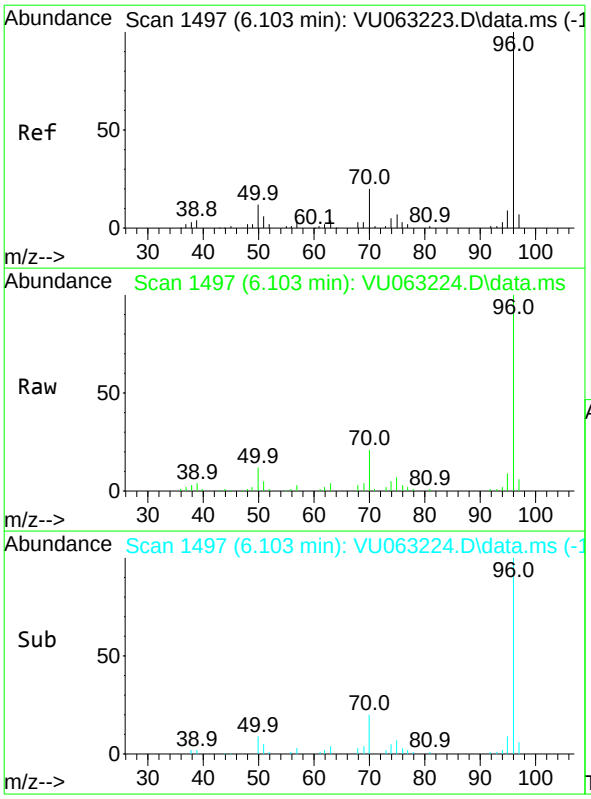
Quant Time: Feb 11 04:01:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 03:56:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

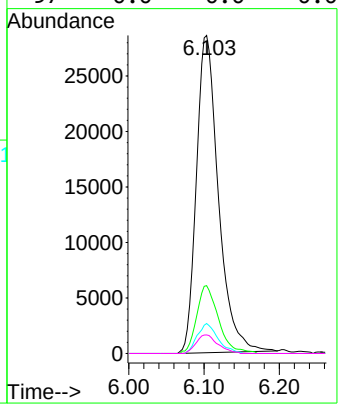




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.103 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 96 Resp: 58075

Ion	Ratio	Lower	Upper
96	100		
70	21.2	15.6	23.4
95	8.9	7.3	10.9
97	0.0	0.0	0.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

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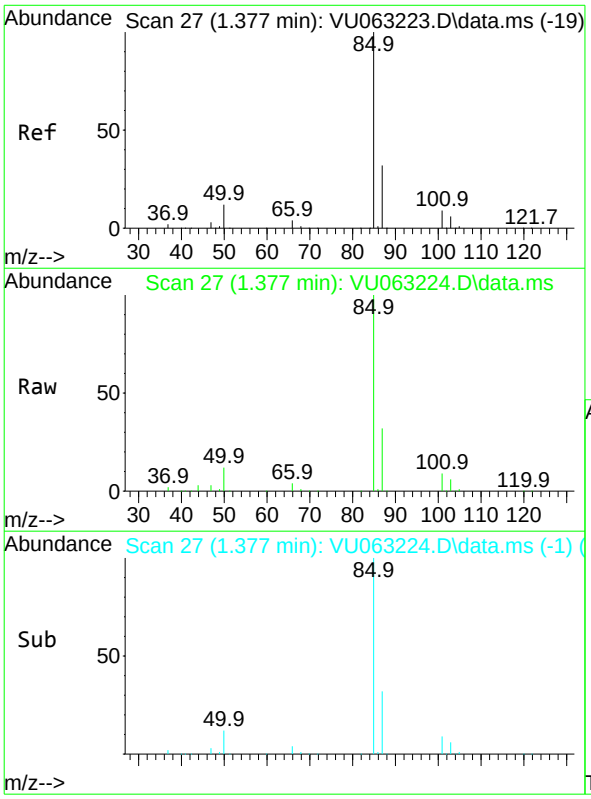
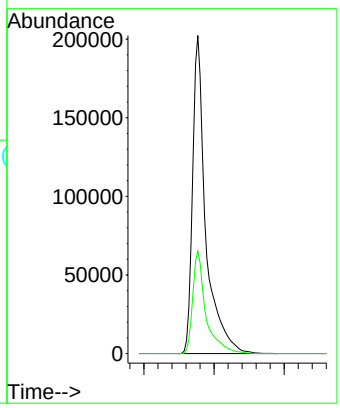
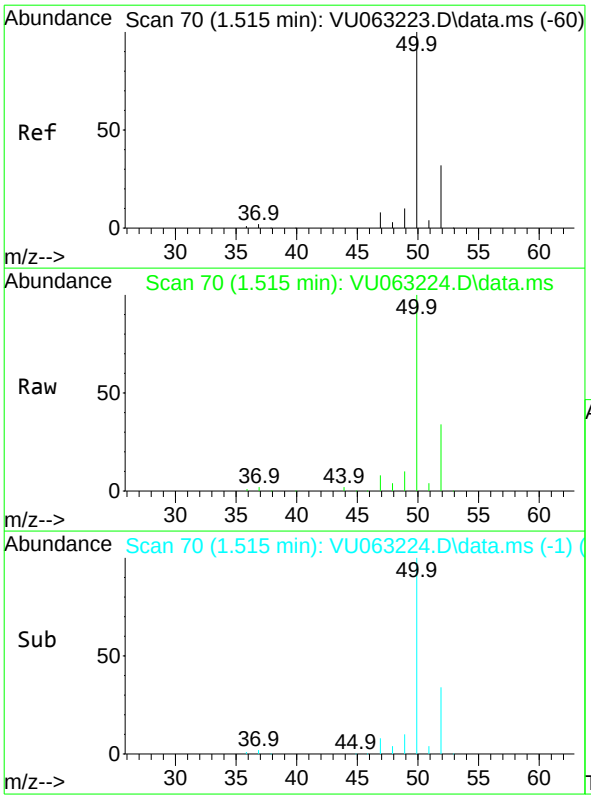


#2
Dichlorodifluoromethane
Concen: 13.960 ug/l
RT: 1.377 min Scan# 27
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 85 Resp: 263402

Ion	Ratio	Lower	Upper
85	100		
87	32.2	16.0	48.0

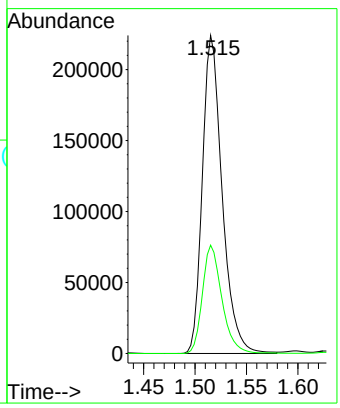




#3
Chloromethane
Concen: 13.809 ug/l
RT: 1.515 min Scan# 70
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 50 Resp: 300062

Ion	Ratio	Lower	Upper
50	100		
52	34.1	25.8	38.8



Instrument :
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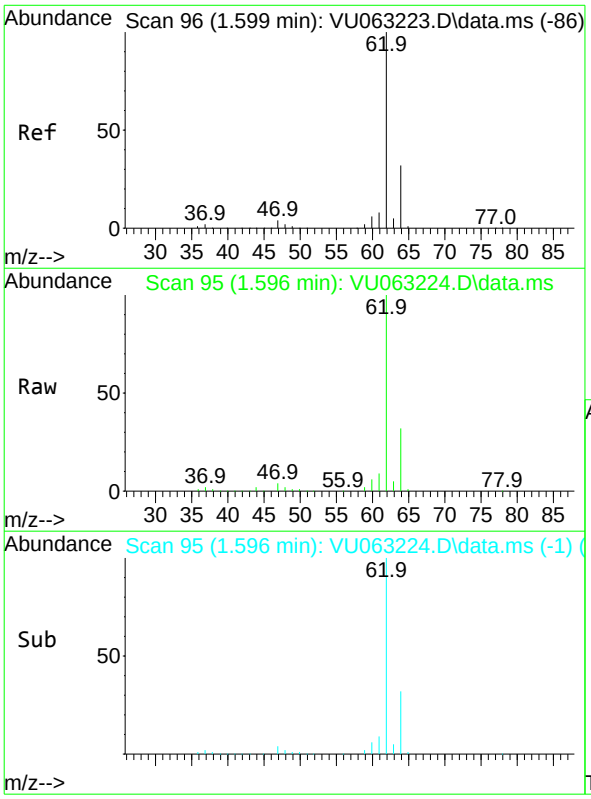
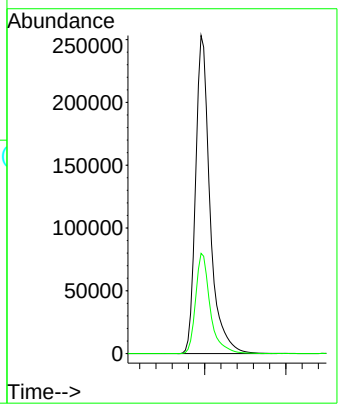
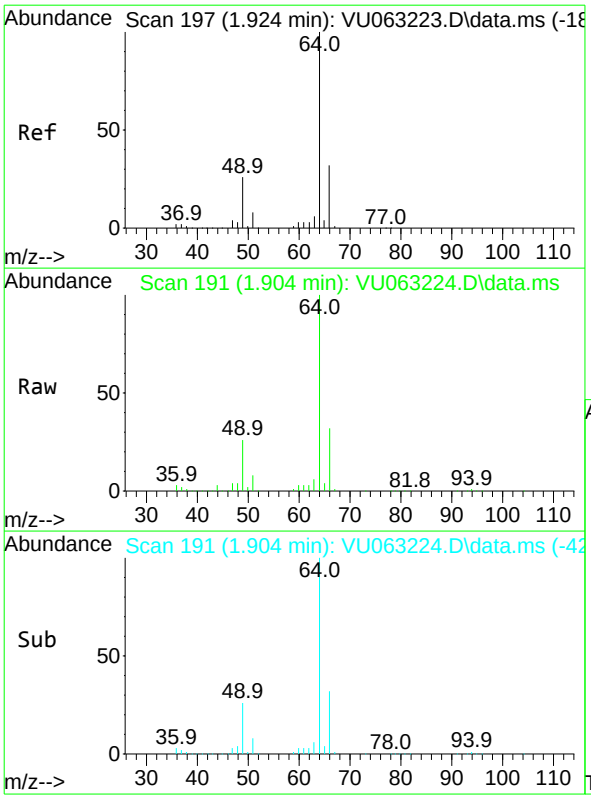


#4
Vinyl Chloride
Concen: 14.466 ug/l
RT: 1.596 min Scan# 95
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 62 Resp: 311009

Ion	Ratio	Lower	Upper
62	100		
64	31.5	25.4	38.0

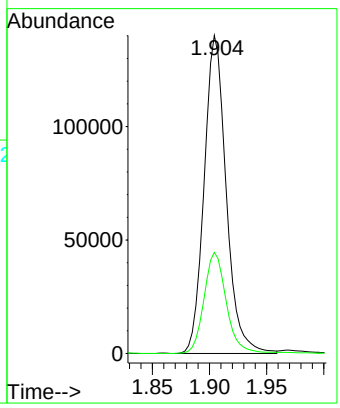




#6
Chloroethane
Concen: 13.899 ug/l
RT: 1.904 min Scan# 19
Delta R.T. -0.019 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 64 Resp: 188210

Ion	Ratio	Lower	Upper
64	100		
66	31.7	25.8	38.8



Instrument :
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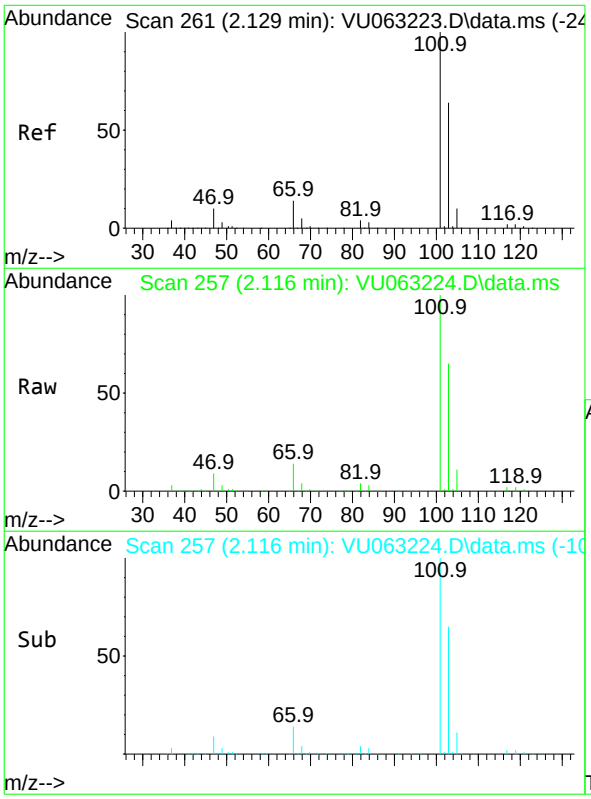
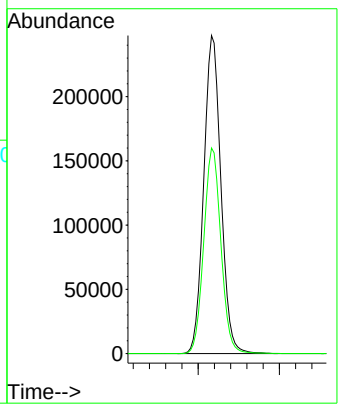
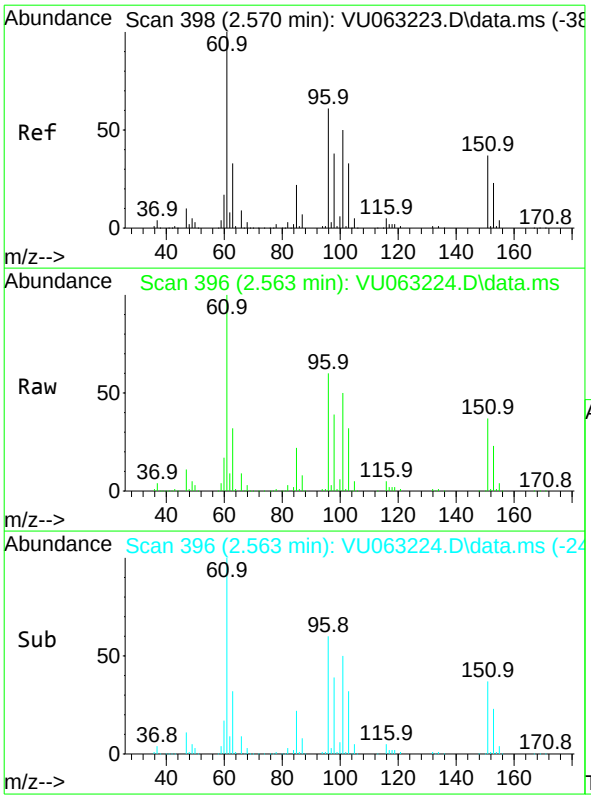


#7
Trichlorofluoromethane
Concen: 14.236 ug/l
RT: 2.116 min Scan# 257
Delta R.T. -0.013 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:101 Resp: 362692

Ion	Ratio	Lower	Upper
101	100		
103	64.6	51.4	77.2





#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 13.842 ug/l
RT: 2.563 min Scan# 39
Delta R.T. -0.006 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:101 Resp: 200170

Ion	Ratio	Lower	Upper
101	100		
85	44.3	35.4	53.0
151	72.0	58.5	87.7

Instrument :
MSVOA_U
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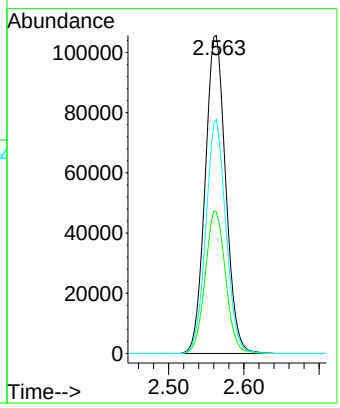
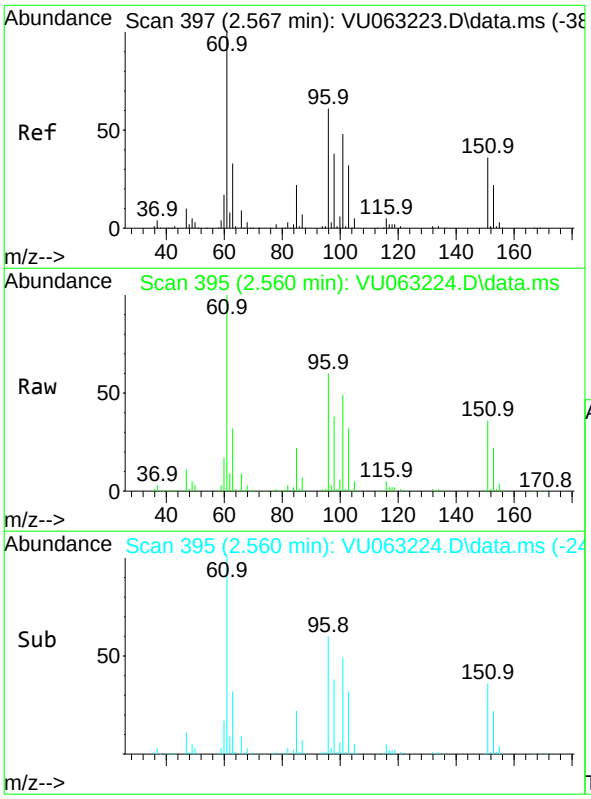
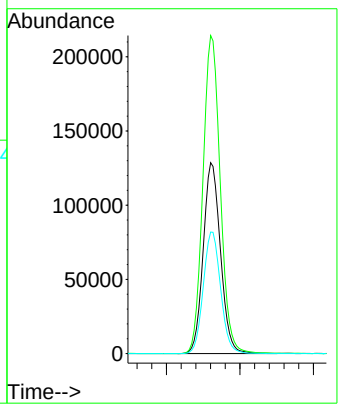


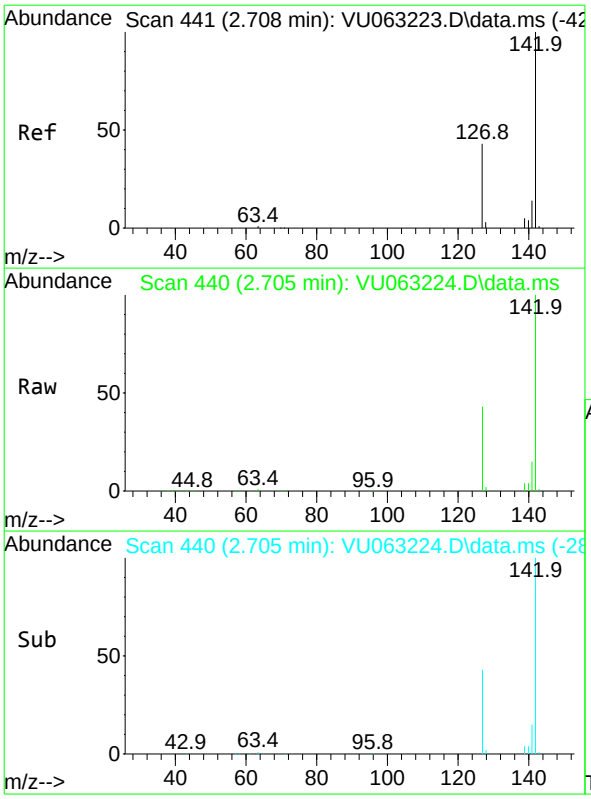


#9
1,1-Dichloroethene
Concen: 14.259 ug/l
RT: 2.560 min Scan# 395
Delta R.T. -0.006 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 96 Resp: 210091

Ion	Ratio	Lower	Upper
96	100		
61	166.6	0.0	492.9
98	63.7	0.0	124.0

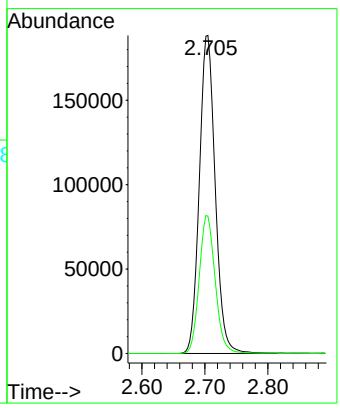




#10
Iodomethane
Concen: 14.234 ug/l
RT: 2.705 min Scan# 44
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:142 Resp: 329697

Ion	Ratio	Lower	Upper
142	100		
127	43.7	34.5	51.7



Instrument :
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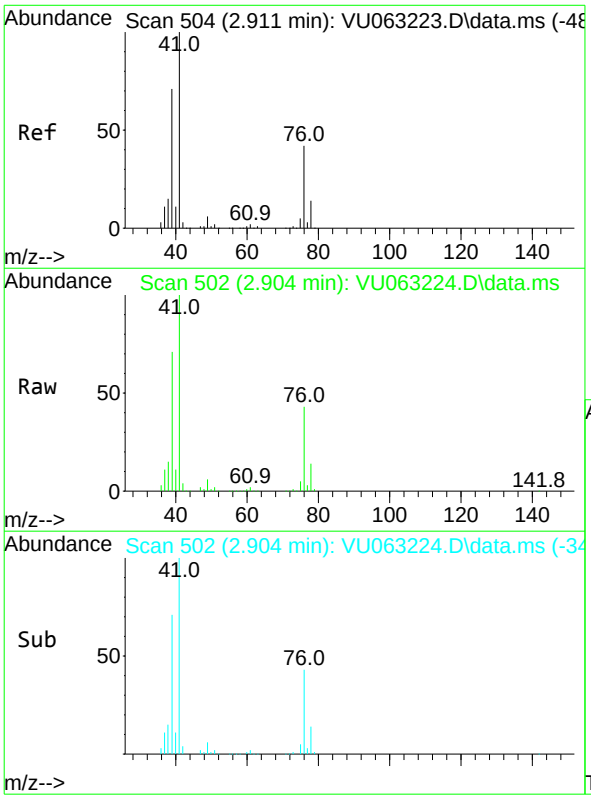
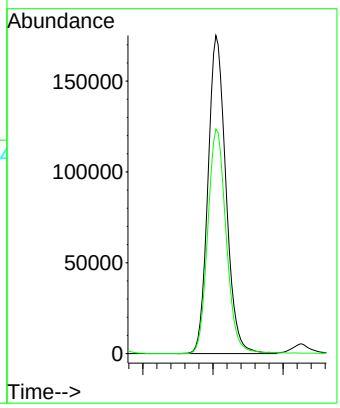
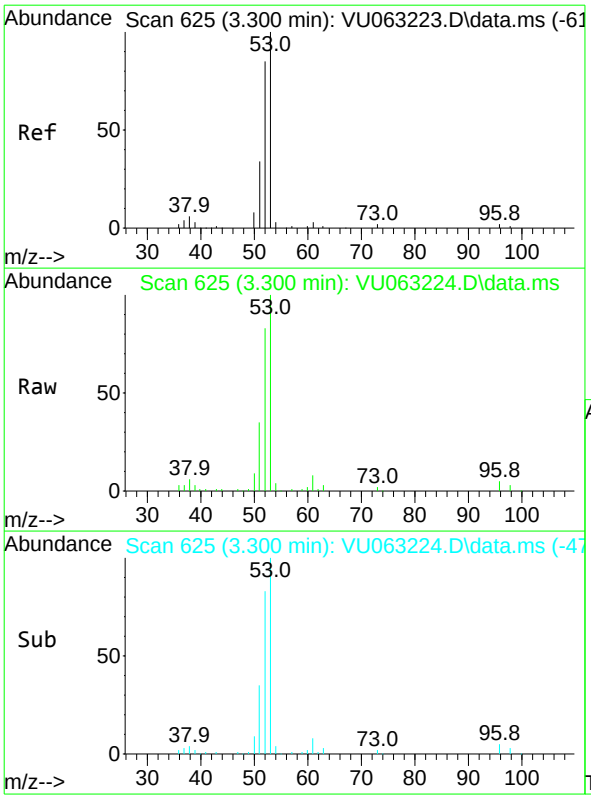


#11
Allyl Chloride
Concen: 14.705 ug/l
RT: 2.904 min Scan# 502
Delta R.T. -0.006 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 41 Resp: 311245

Ion	Ratio	Lower	Upper
41	100		
39	72.4	57.9	86.9

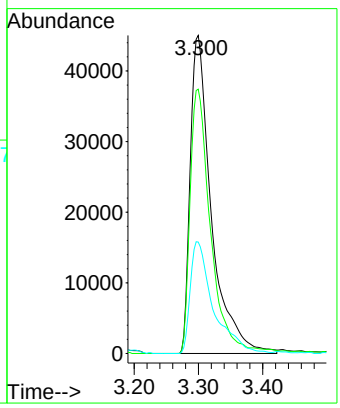




#12
Acrylonitrile
Concen: 30.731 ug/l
RT: 3.300 min Scan# 62
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 53 Resp: 102914

Ion	Ratio	Lower	Upper
53	100		
52	80.8	64.2	96.2
51	38.3	30.8	46.2



Instrument :
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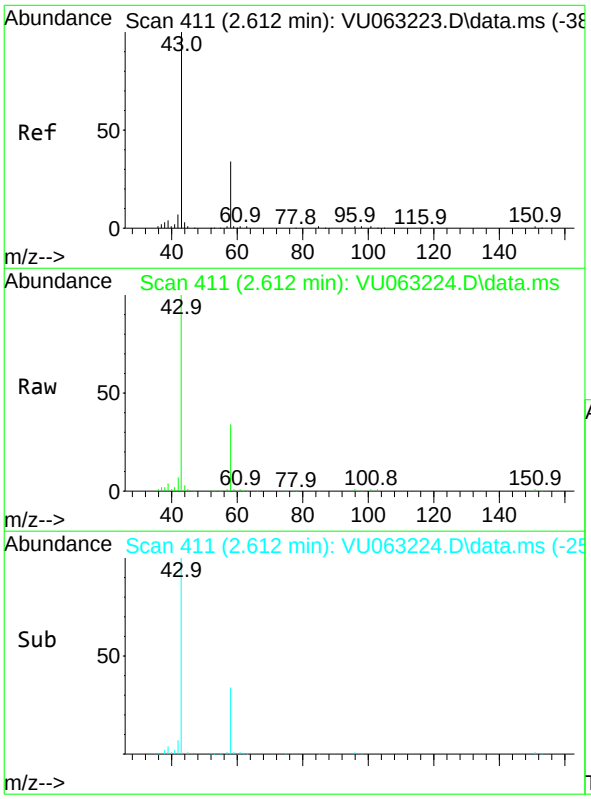
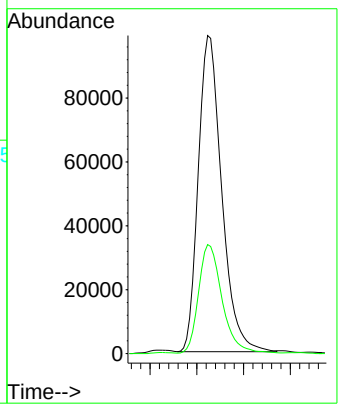
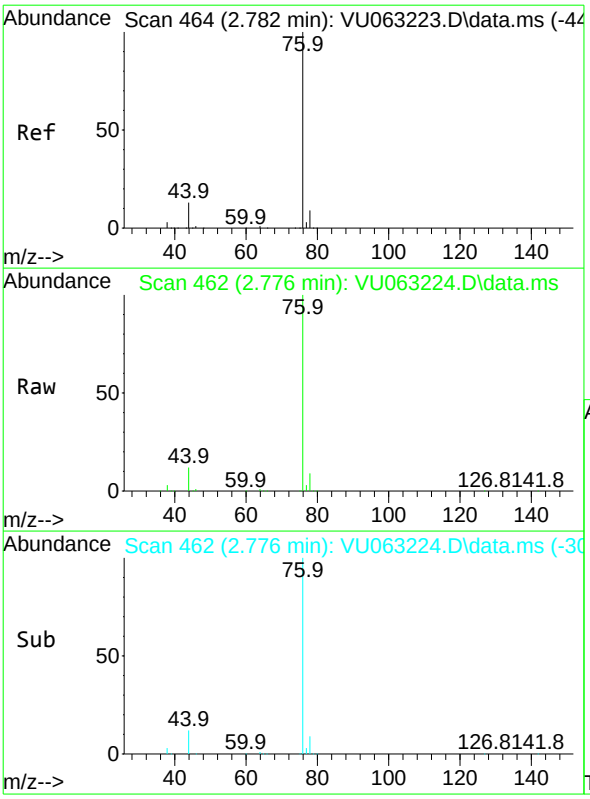


#13
Acetone
Concen: 65.992 ug/l
RT: 2.612 min Scan# 411
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 43 Resp: 172446

Ion	Ratio	Lower	Upper
43	100		
58	34.3	27.4	41.0

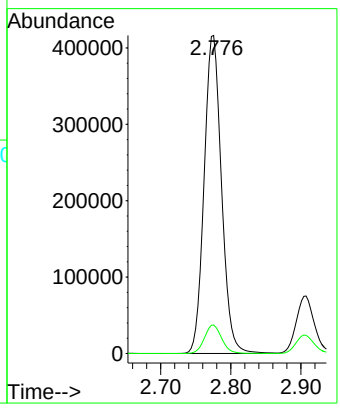




#14
Carbon Disulfide
Concen: 13.906 ug/l
RT: 2.776 min Scan# 46
Delta R.T. -0.006 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 76 Resp: 716395

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.2	10.8



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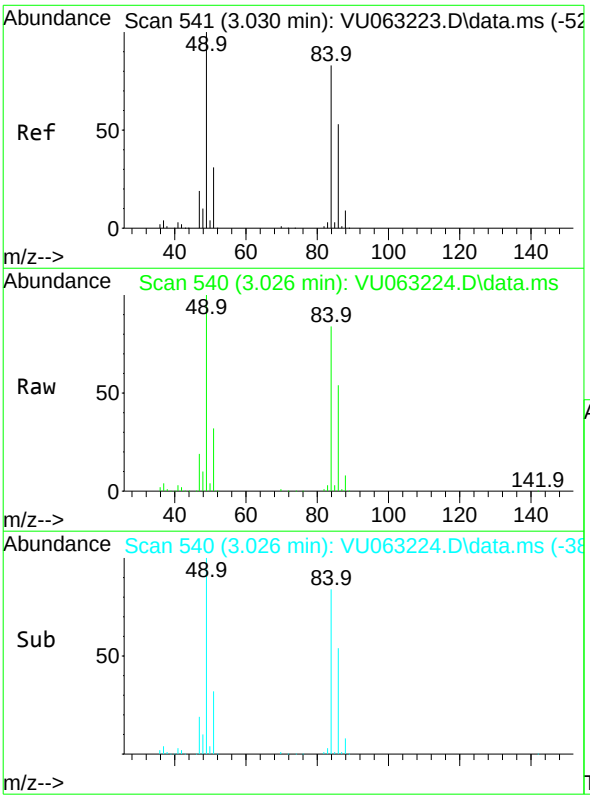
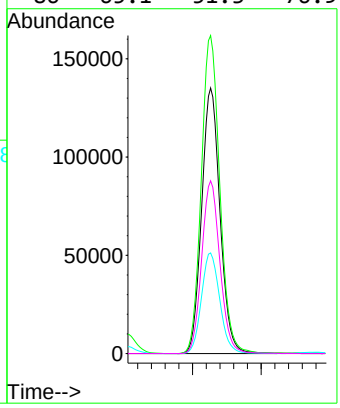
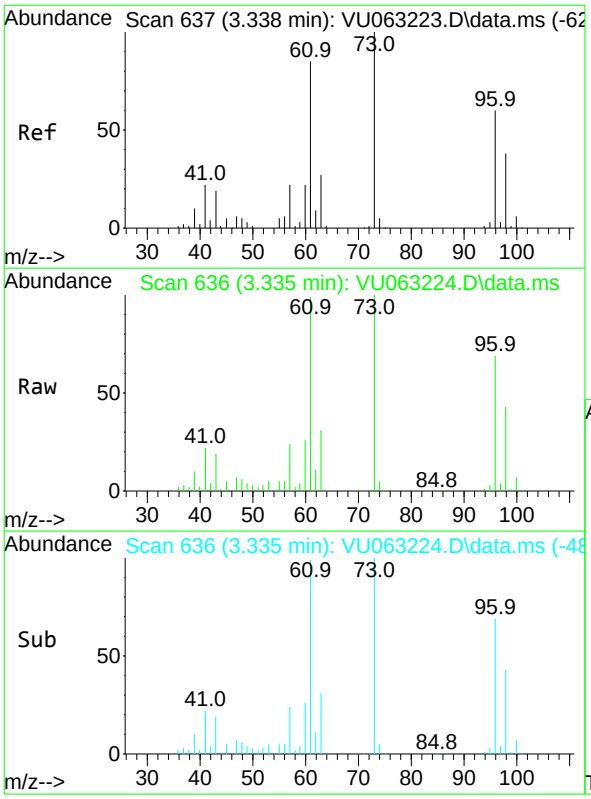


#15
Methylene Chloride
Concen: 13.825 ug/l
RT: 3.026 min Scan# 540
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 84 Resp: 251659

Ion	Ratio	Lower	Upper
84	100		
49	119.7	96.4	144.6
51	37.9	0.0	74.8
86	65.1	51.3	76.9

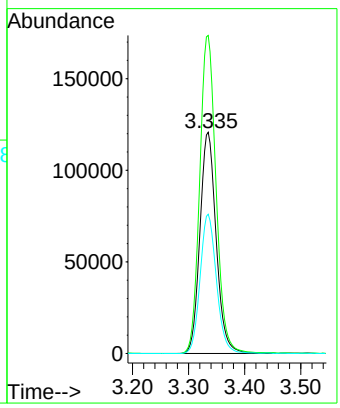




#16
trans-1,2-Dichloroethene
Concen: 14.434 ug/l
RT: 3.335 min Scan# 63
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 96 Resp: 242715

Ion	Ratio	Lower	Upper
96	100		
61	143.8	113.4	170.2
98	62.9	51.2	76.8



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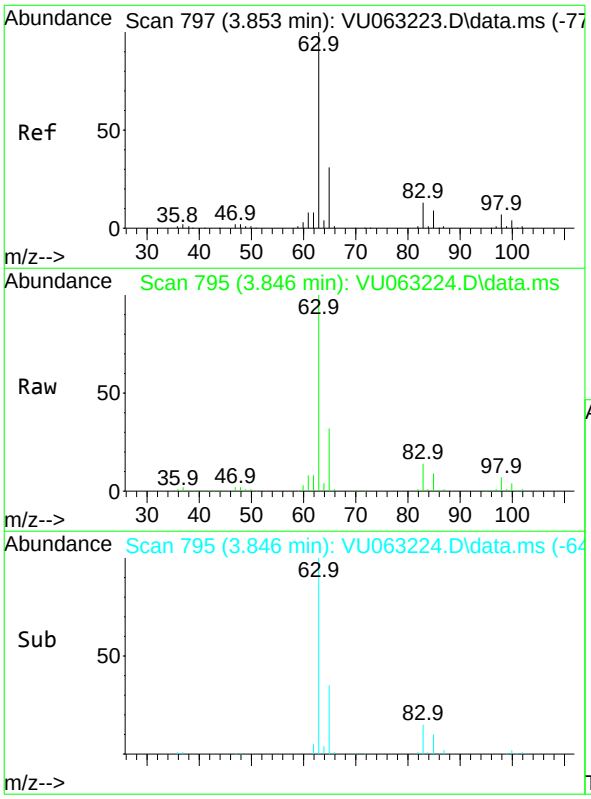
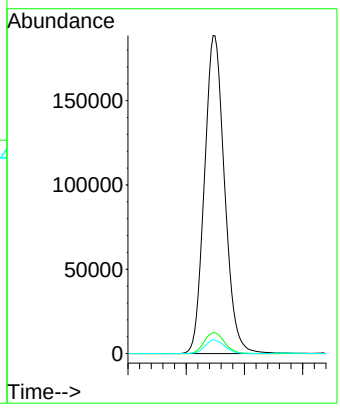
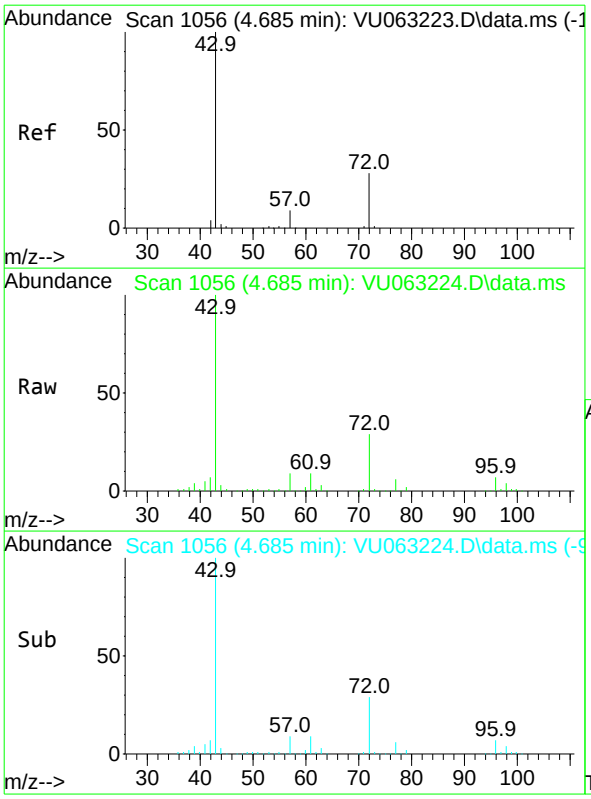


#17
1,1-Dichloroethane
Concen: 14.304 ug/l
RT: 3.846 min Scan# 795
Delta R.T. -0.006 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 63 Resp: 453378

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	4.3	2.1	6.2

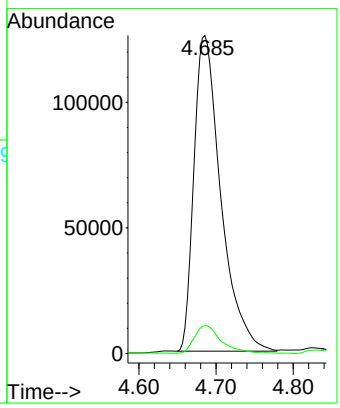




#18
2-Butanone
Concen: 72.208 ug/l
RT: 4.685 min Scan# 10
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 43 Resp: 304814

Ion	Ratio	Lower	Upper
43	100		
57	8.7	0.0	17.0



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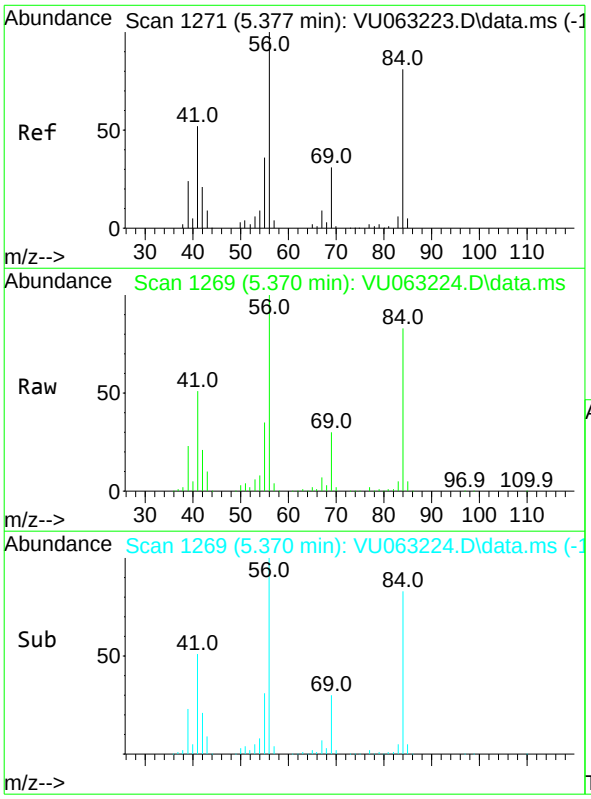
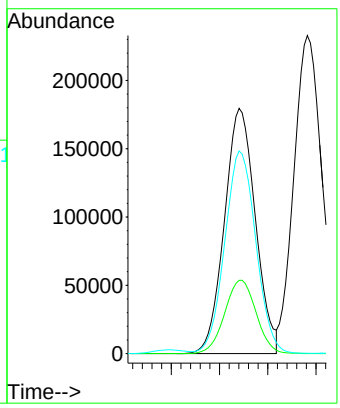
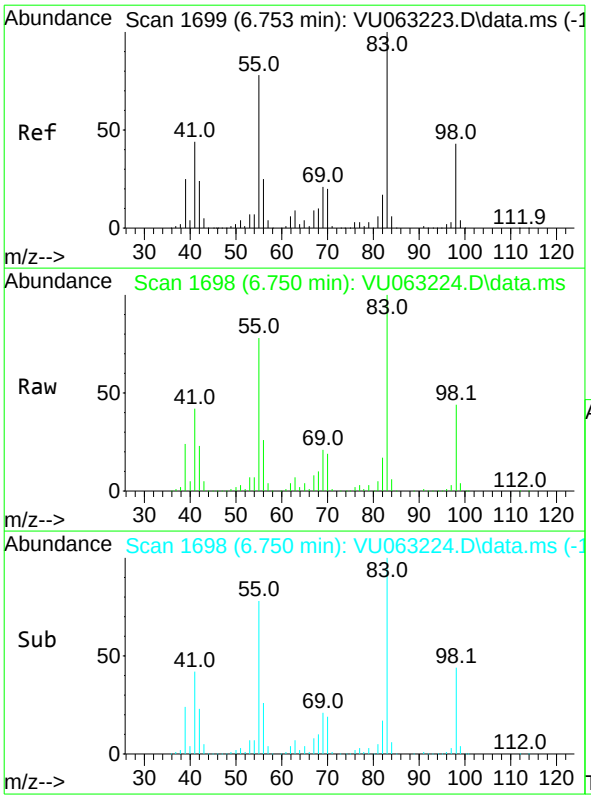


#19
Cyclohexane
Concen: 15.729 ug/l m
RT: 5.370 min Scan# 1269
Delta R.T. -0.006 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 56 Resp: 400586

Ion	Ratio	Lower	Upper
56	100		
69	30.3	24.5	36.7
84	81.7	65.2	97.8

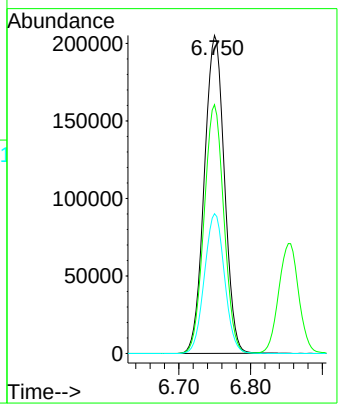




#20
Methylcyclohexane
Concen: 15.795 ug/l
RT: 6.750 min Scan# 16
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 83 Resp: 398925

Ion	Ratio	Lower	Upper
83	100		
55	77.0	63.1	94.7
98	44.1	35.2	52.8



Instrument :
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ClientSampleId :
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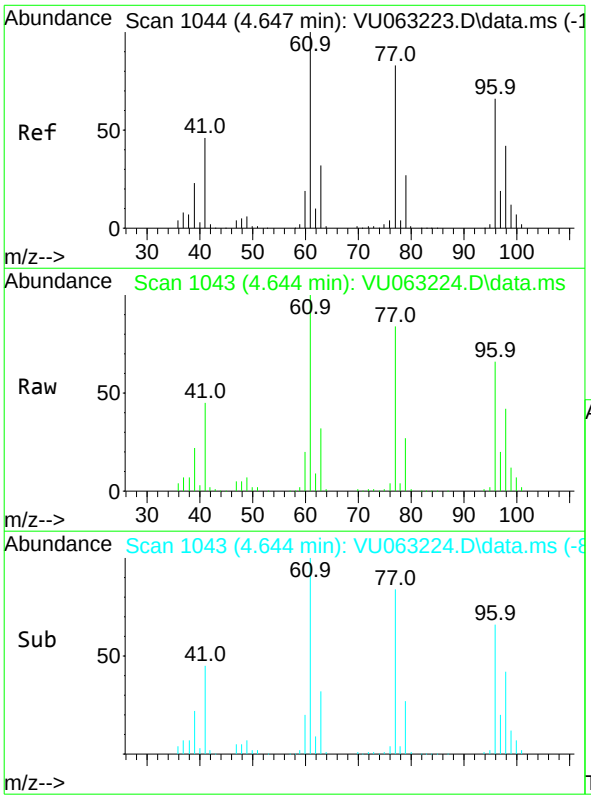
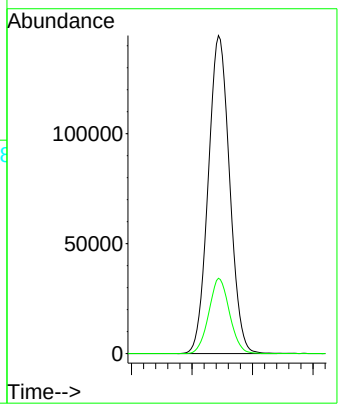
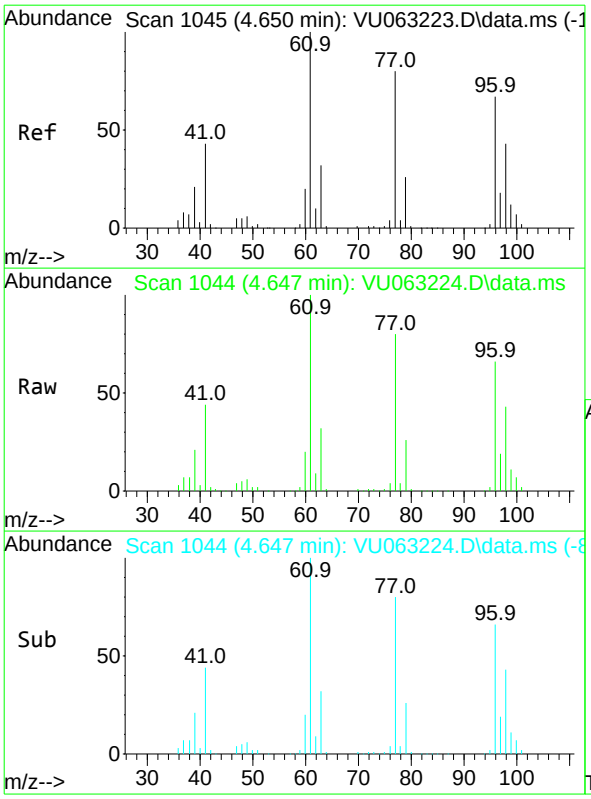


#21
2,2-Dichloropropane
Concen: 14.352 ug/l
RT: 4.644 min Scan# 1043
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 77 Resp: 354900

Ion	Ratio	Lower	Upper
77	100		
97	22.9	18.5	27.7

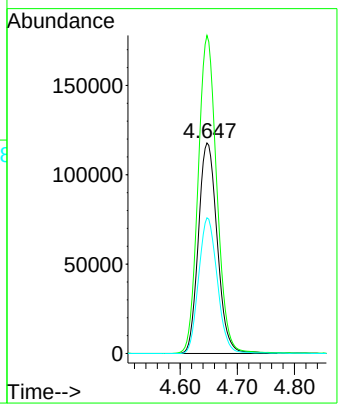




#22
cis-1,2-Dichloroethene
Concen: 14.861 ug/l
RT: 4.647 min Scan# 10
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 96 Resp: 270006

Ion	Ratio	Lower	Upper
96	100		
61	149.6	0.0	373.3
98	63.7	31.9	95.9



Instrument :
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ClientSampleId :
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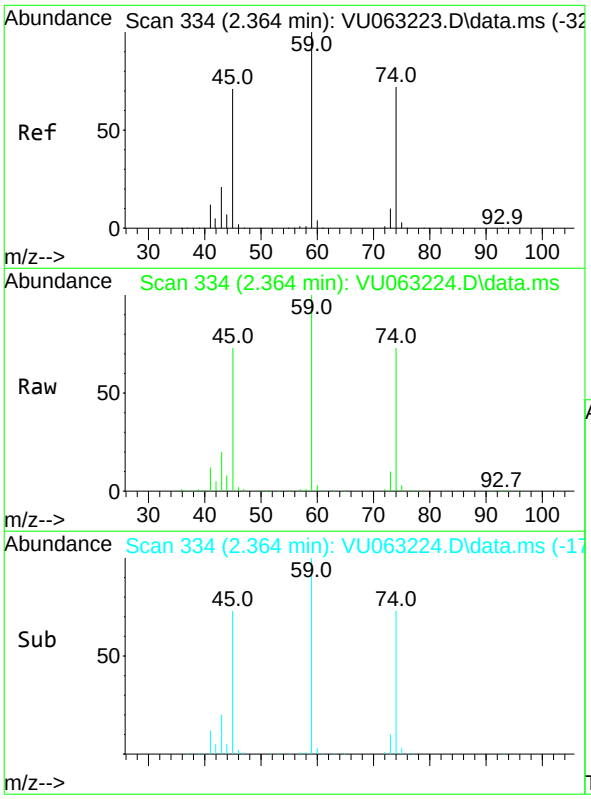
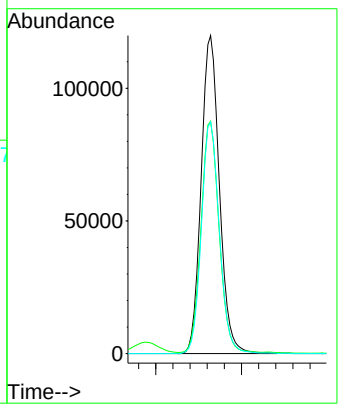
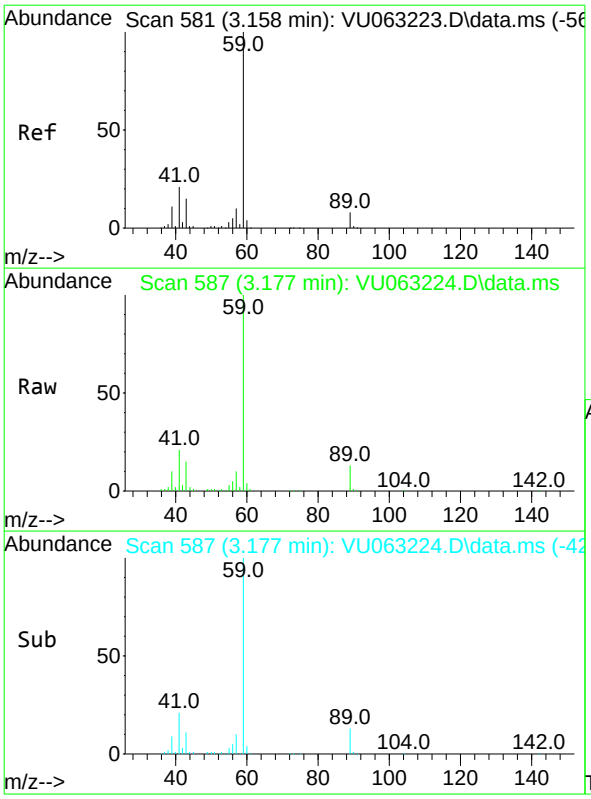


#23
Diethyl Ether
Concen: 14.007 ug/l
RT: 2.364 min Scan# 334
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 59 Resp: 177089

Ion	Ratio	Lower	Upper
59	100		
45	71.8	57.8	86.6
74	71.8	57.7	86.5

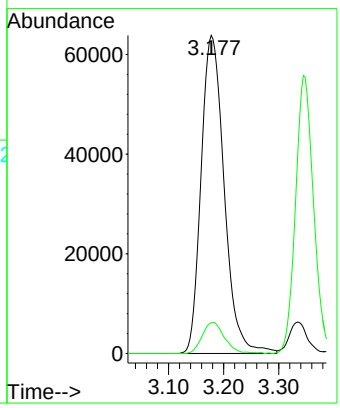




#24
tert-Butyl Alcohol
Concen: 146.971 ug/l
RT: 3.177 min Scan# 58
Delta R.T. 0.019 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 59 Resp: 185785

Ion	Ratio	Lower	Upper
59	100		
57	9.5	7.5	11.3



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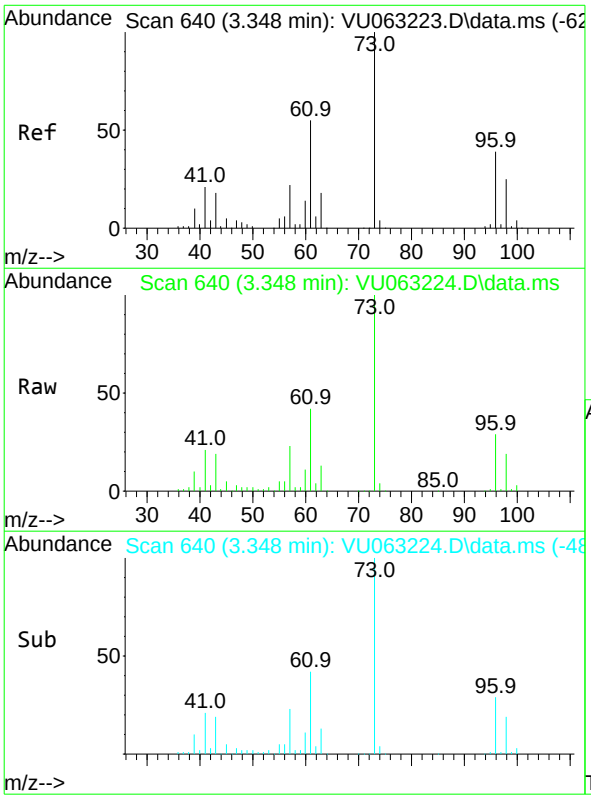
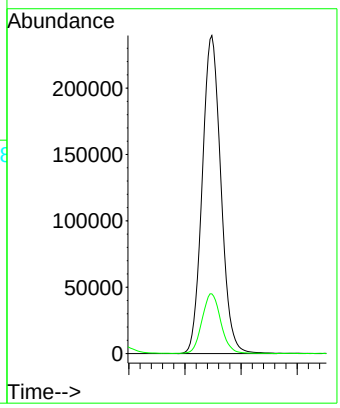
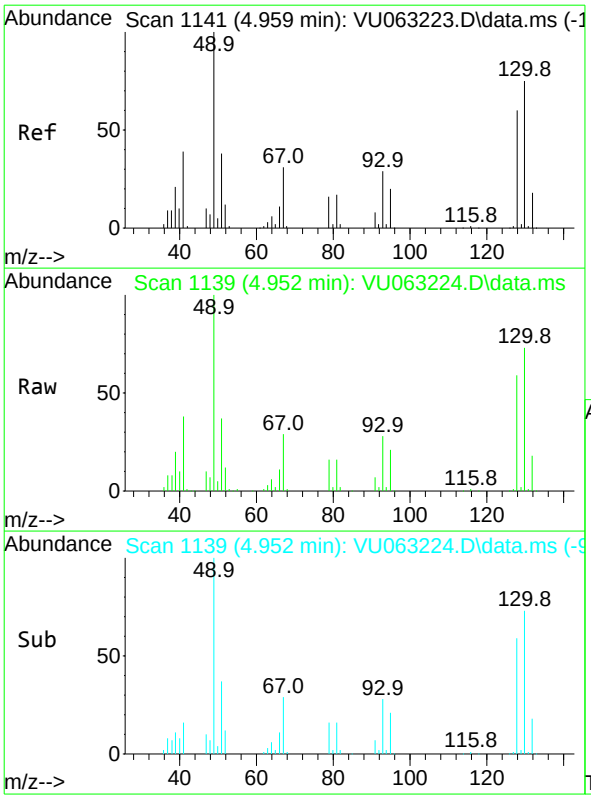


#25
Methyl tert-Butyl Ether
Concen: 15.037 ug/l
RT: 3.348 min Scan# 640
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 73 Resp: 553339

Ion	Ratio	Lower	Upper
73	100		
43	18.9	14.9	22.3





#26
Bromochloromethane
Concen: 14.257 ug/l
RT: 4.952 min Scan# 11
Delta R.T. -0.006 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:128 Resp: 113229

Ion	Ratio	Lower	Upper
128	100		
49	170.1	0.0	343.4
130	126.0	102.9	154.3

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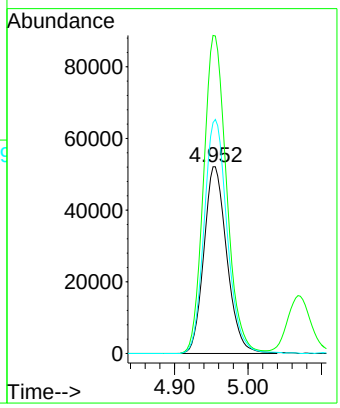
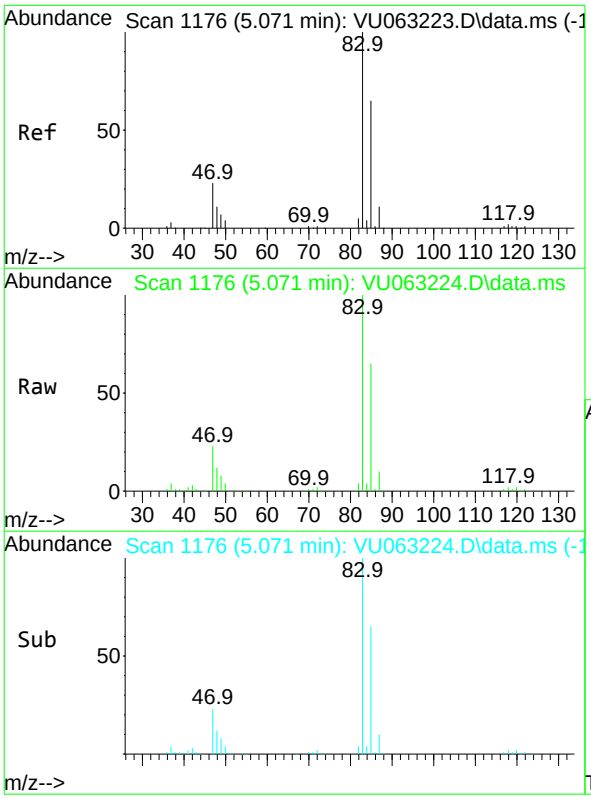
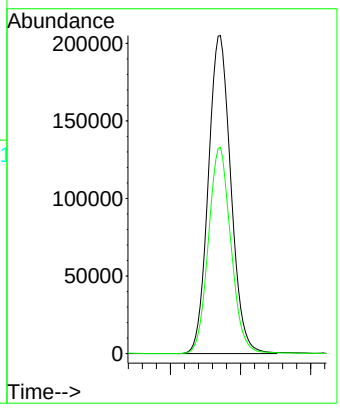


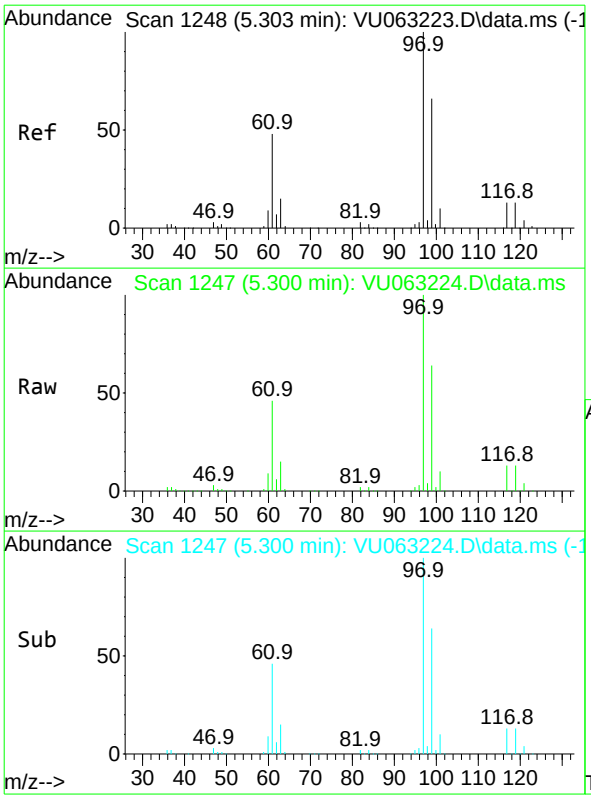


#27
Chloroform
Concen: 14.316 ug/l
RT: 5.071 min Scan# 1176
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 83 Resp: 457911

Ion	Ratio	Lower	Upper
83	100		
85	64.9	0.0	129.8

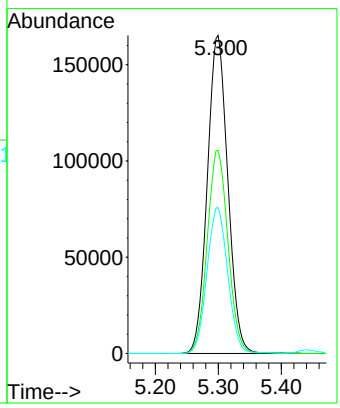




#28
1,1,1-Trichloroethane
Concen: 14.428 ug/l
RT: 5.300 min Scan# 12
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 97 Resp: 373842

Ion	Ratio	Lower	Upper
97	100		
99	64.4	32.4	97.0
61	46.5	23.8	71.2



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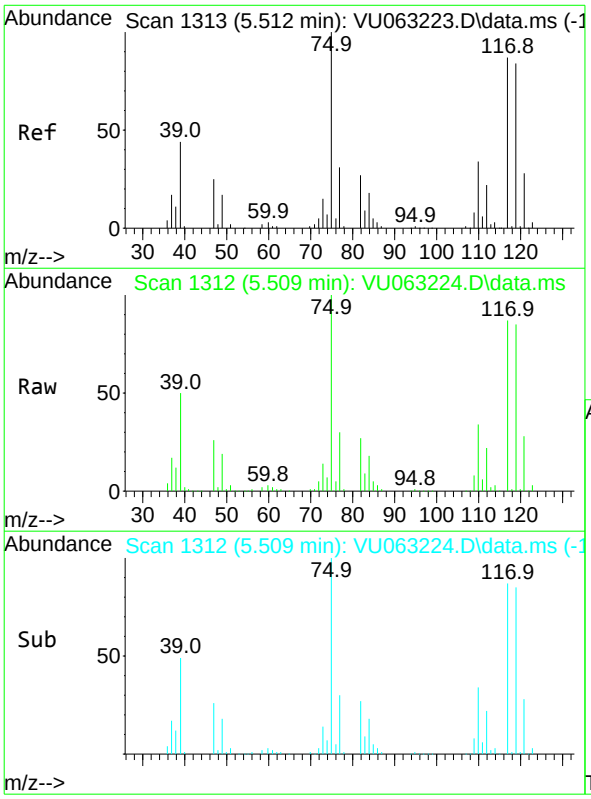
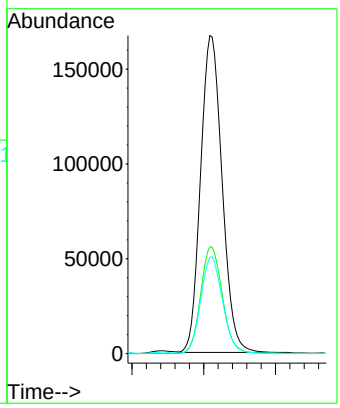
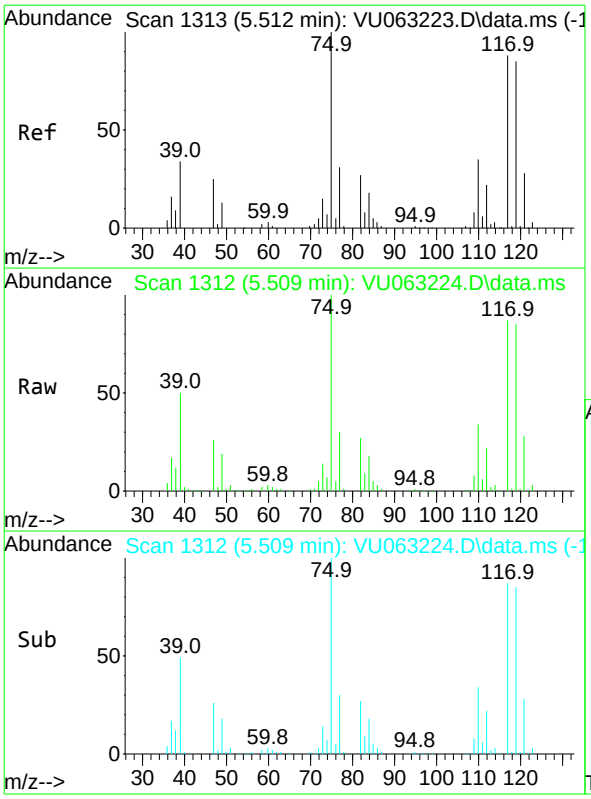


#29
1,1-Dichloropropene
Concen: 14.983 ug/l
RT: 5.509 min Scan# 1312
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 75 Resp: 347711

Ion	Ratio	Lower	Upper
75	100		
110	34.1	17.2	51.5
77	30.5	24.6	37.0

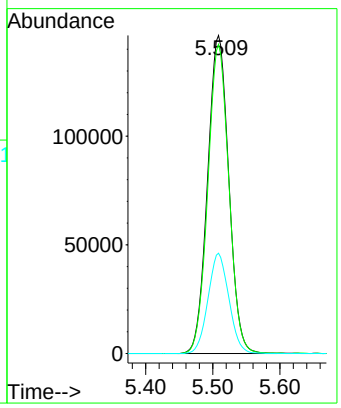




#30
Carbon Tetrachloride
Concen: 14.448 ug/l
RT: 5.509 min Scan# 13
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:117 Resp: 321059

Ion	Ratio	Lower	Upper
117	100		
119	97.2	76.7	115.1
121	31.5	25.5	38.3



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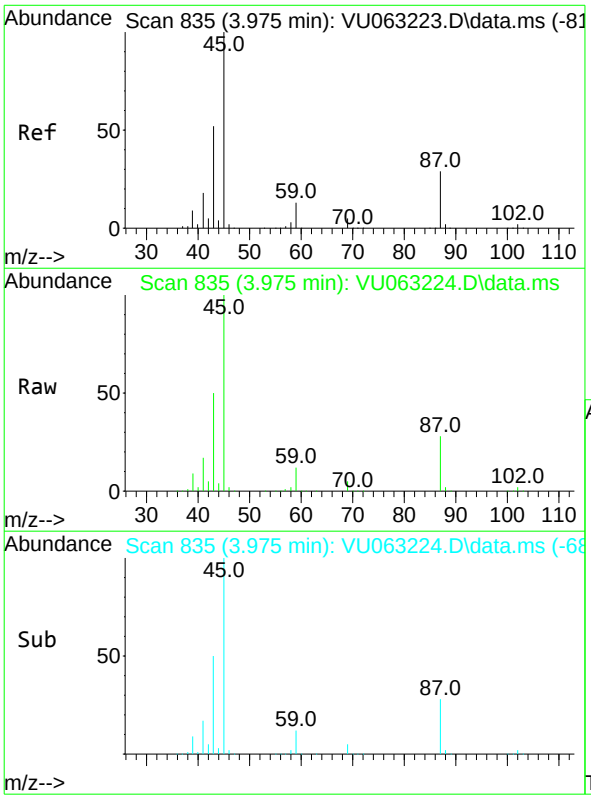
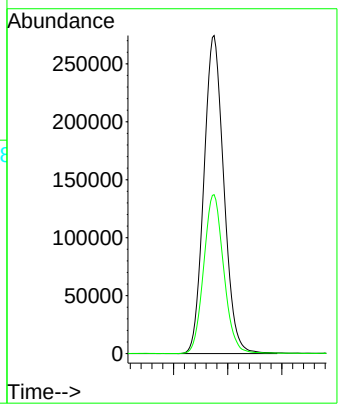
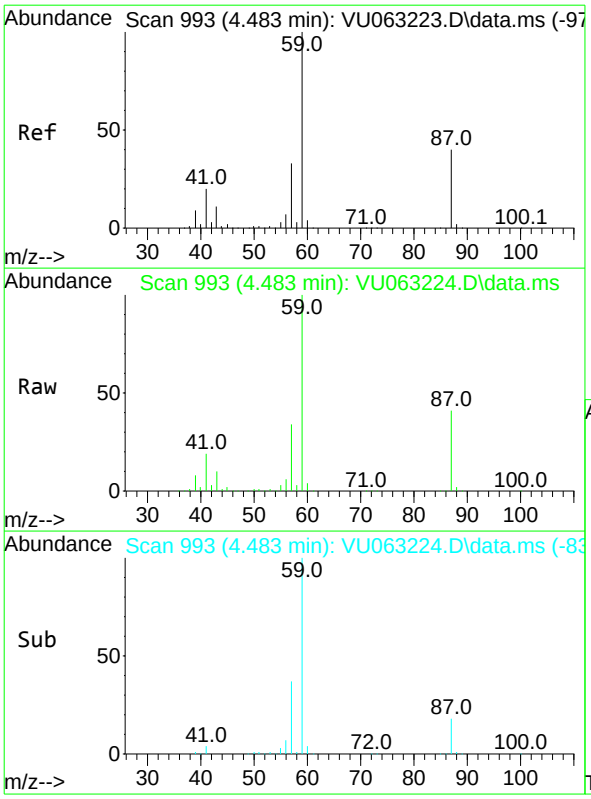


#31
Isopropyl Ether
Concen: 15.547 ug/l
RT: 3.975 min Scan# 835
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 45 Resp: 703540

Ion	Ratio	Lower	Upper
45	100		
43	50.1	25.7	77.1





#32
Ethyl-t-butyl ether
Concen: 15.784 ug/l
RT: 4.483 min Scan# 99
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 59 Resp: 649553

Ion	Ratio	Lower	Upper
59	100		
87	41.1	32.6	49.0

Instrument :
MSVOA_U
ClientSampleId :
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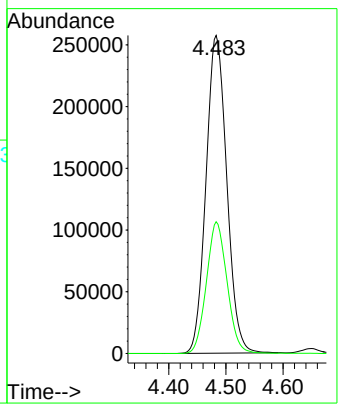
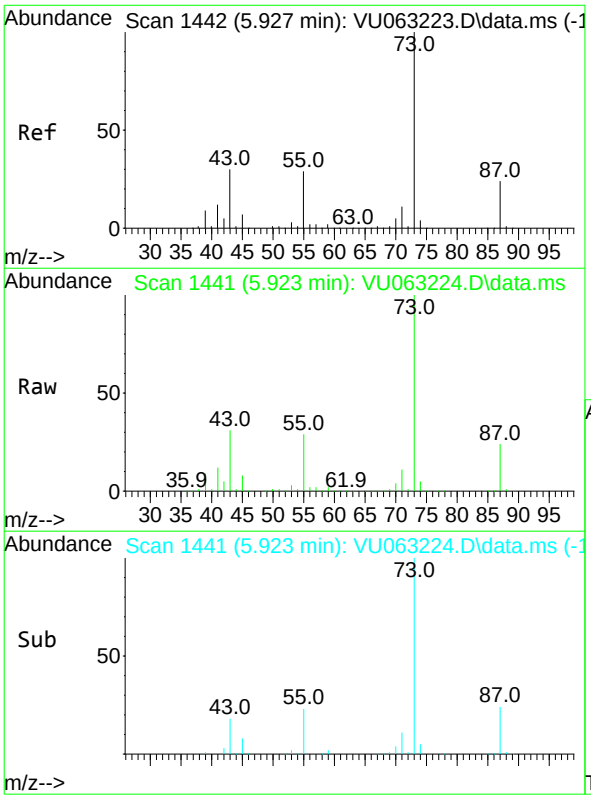
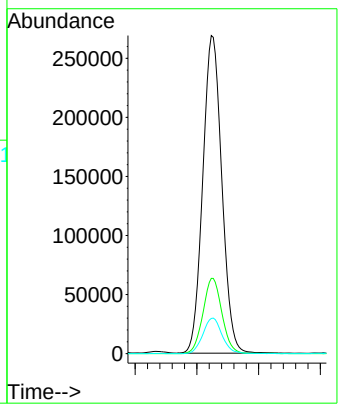


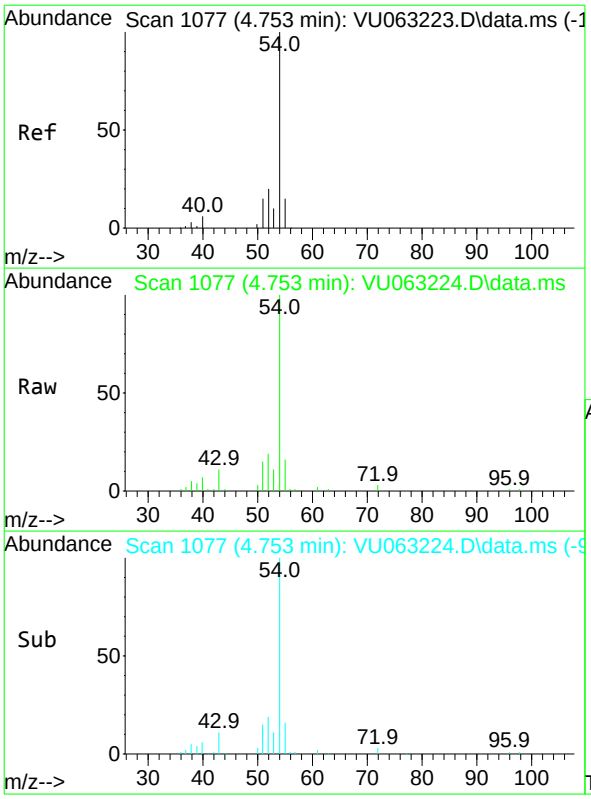


#33
Tert-Amyl methyl ether
Concen: 16.013 ug/l
RT: 5.923 min Scan# 1441
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 73 Resp: 575729

Ion	Ratio	Lower	Upper
73	100		
87	23.5	18.9	28.3
71	11.3	9.0	13.4

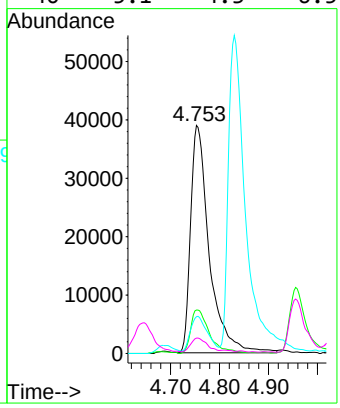




#34
Propionitrile
Concen: 78.746 ug/l
RT: 4.753 min Scan# 10
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 54 Resp: 103055

Ion	Ratio	Lower	Upper
54	100		
52	19.3	16.3	24.5
55	14.7	11.8	17.6
40	5.1	4.3	6.5



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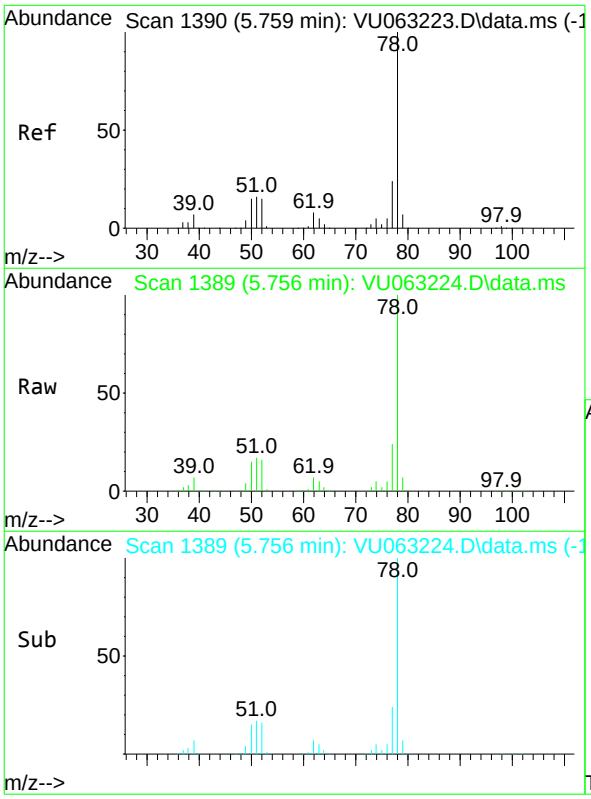
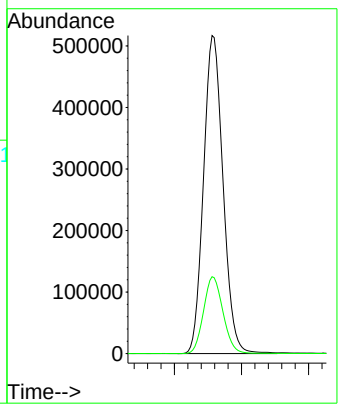
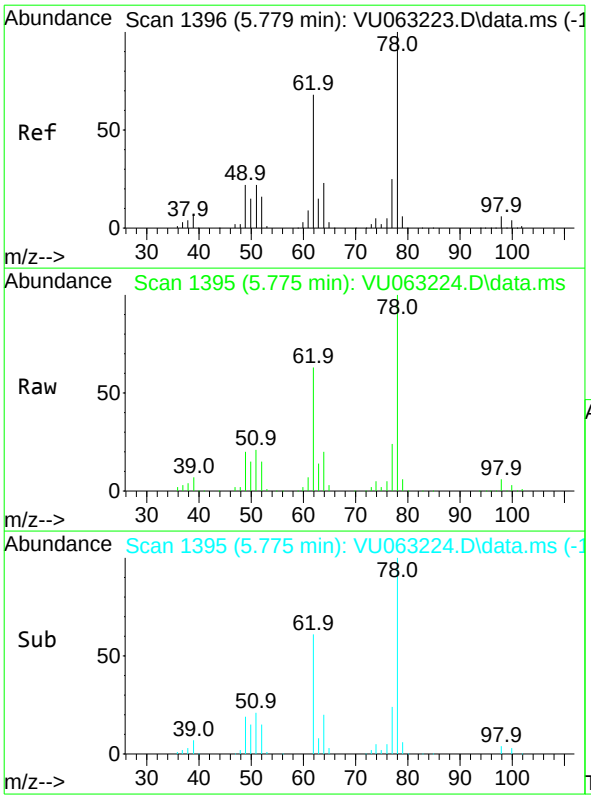


#35
Benzene
Concen: 14.641 ug/l
RT: 5.756 min Scan# 1389
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 78 Resp: 1044796

Ion	Ratio	Lower	Upper
78	100		
77	24.2	19.0	28.4

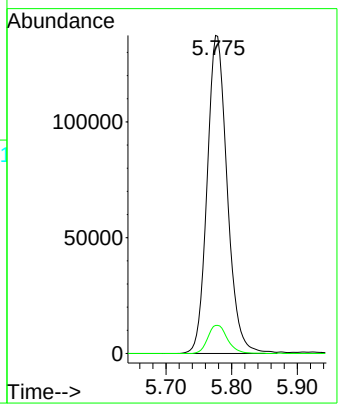




#36
1,2-Dichloroethane
Concen: 14.170 ug/l
RT: 5.775 min Scan# 13
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 62 Resp: 291840

Ion	Ratio	Lower	Upper
62	100		
98	8.7	6.9	10.3



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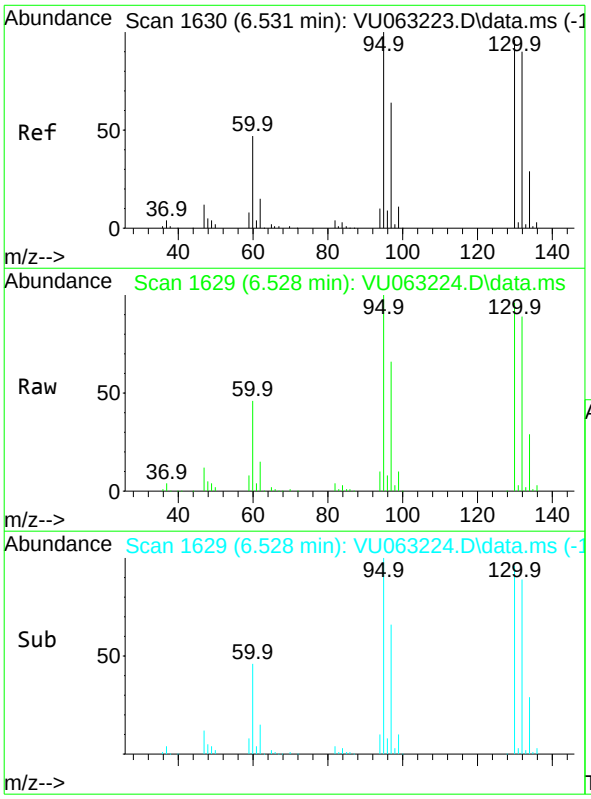
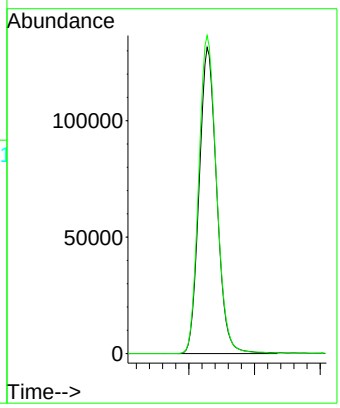
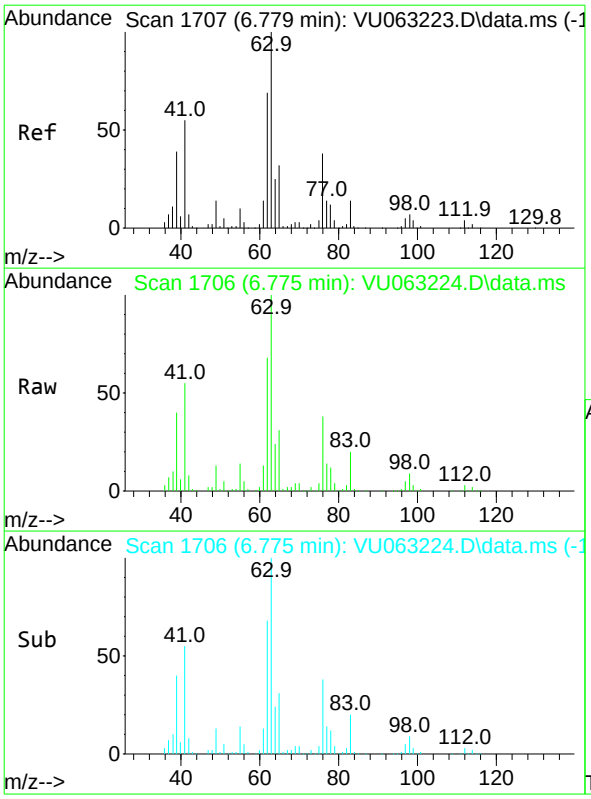


#37
Trichloroethene
Concen: 14.424 ug/l
RT: 6.528 min Scan# 1629
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:130 Resp: 244774

Ion	Ratio	Lower	Upper
130	100		
95	103.9	83.2	124.8

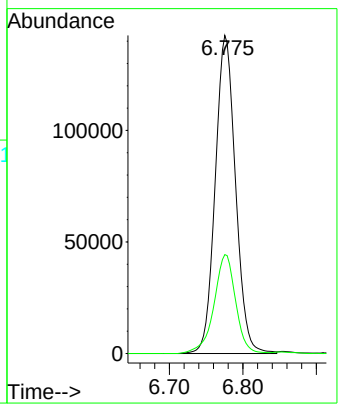




#38
1,2-Dichloropropane
Concen: 14.653 ug/l
RT: 6.775 min Scan# 17
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 63 Resp: 273676

Ion	Ratio	Lower	Upper
63	100		
65	31.1	25.3	37.9



Instrument :
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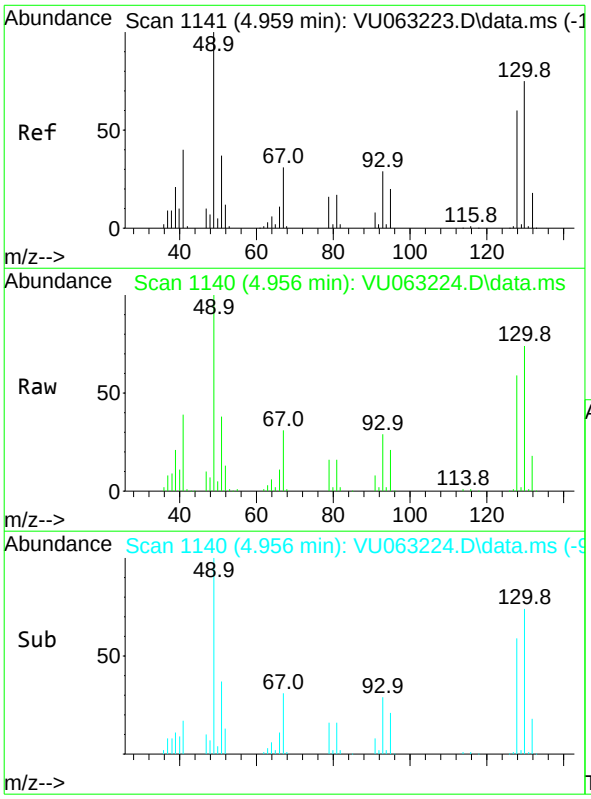
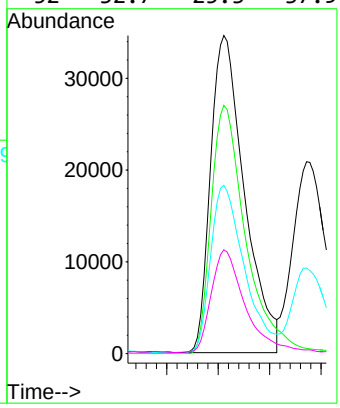
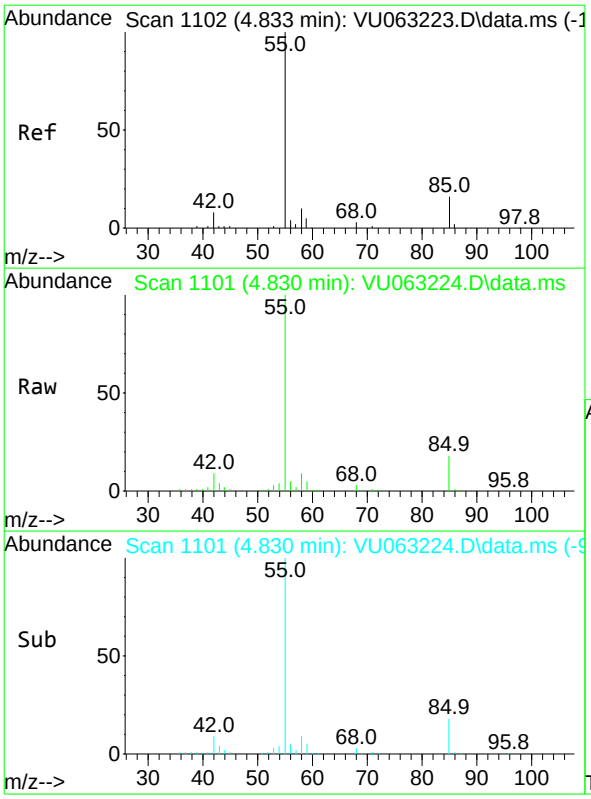


#39
Methacrylonitrile
Concen: 16.908 ug/l
RT: 4.956 min Scan# 1140
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 41 Resp: 79040

Ion	Ratio	Lower	Upper
41	100		
67	80.5	64.5	96.7
39	53.2	43.0	64.6
52	32.7	25.3	37.9

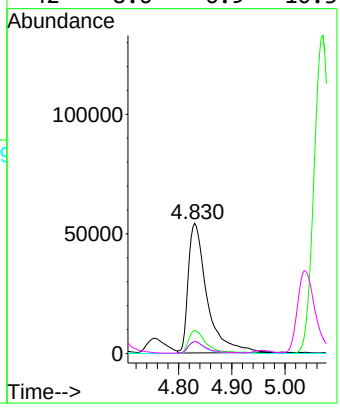




#40
Methyl acrylate
Concen: 15.616 ug/l
RT: 4.830 min Scan# 11
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 55 Resp: 133276

Ion	Ratio	Lower	Upper
55	100		
85	17.1	13.3	19.9
58	8.6	7.3	10.9
42	8.6	6.9	10.3



Instrument :
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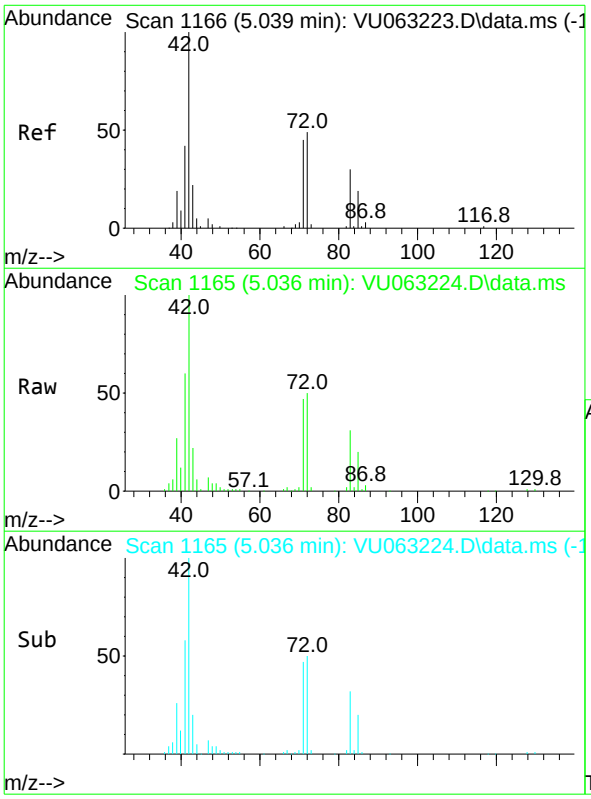
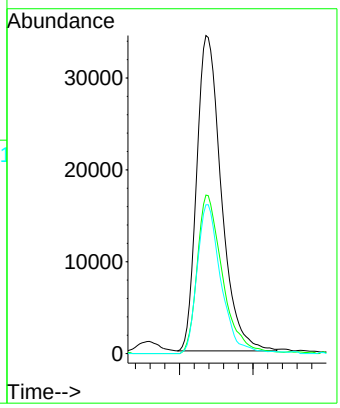
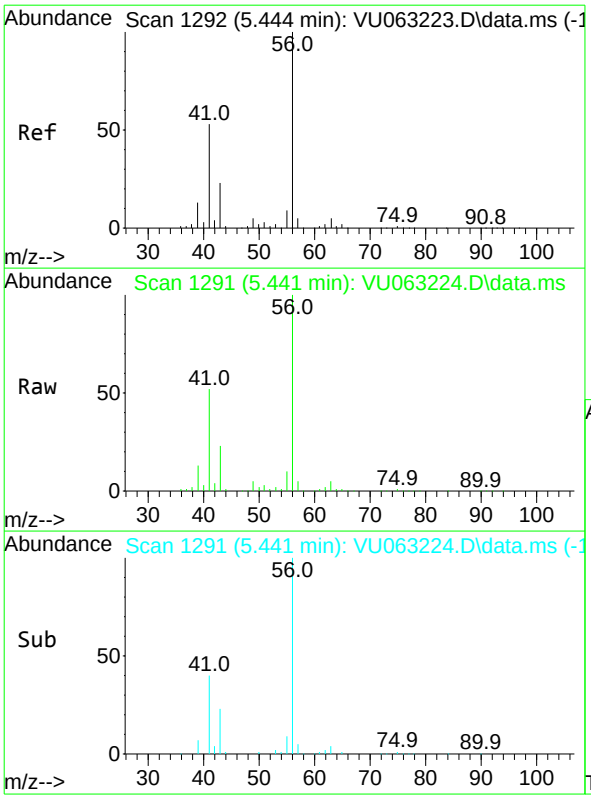


#41
Tetrahydrofuran
Concen: 29.065 ug/l
RT: 5.036 min Scan# 1165
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 42 Resp: 79845

Ion	Ratio	Lower	Upper
42	100		
72	51.6	41.5	62.3
71	45.6	37.2	55.8

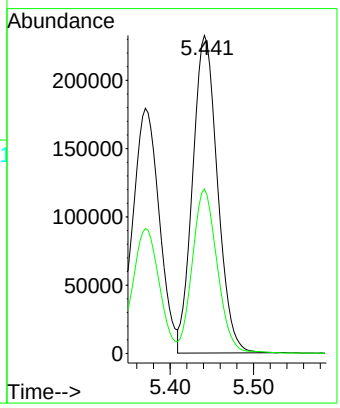




#42
1-Chlorobutane
Concen: 15.153 ug/l
RT: 5.441 min Scan# 12
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 56 Resp: 481169

Ion	Ratio	Lower	Upper
56	100		
41	51.7	26.3	78.8



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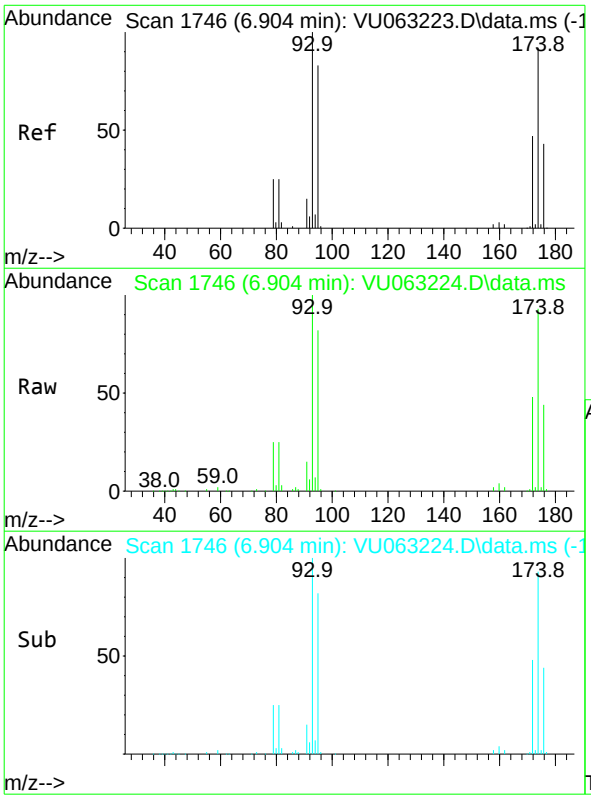
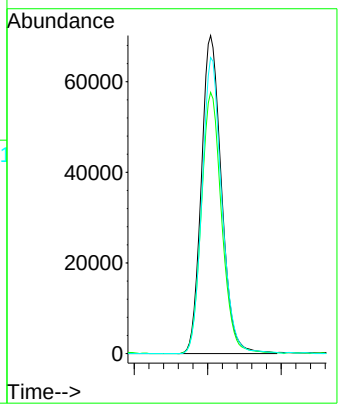
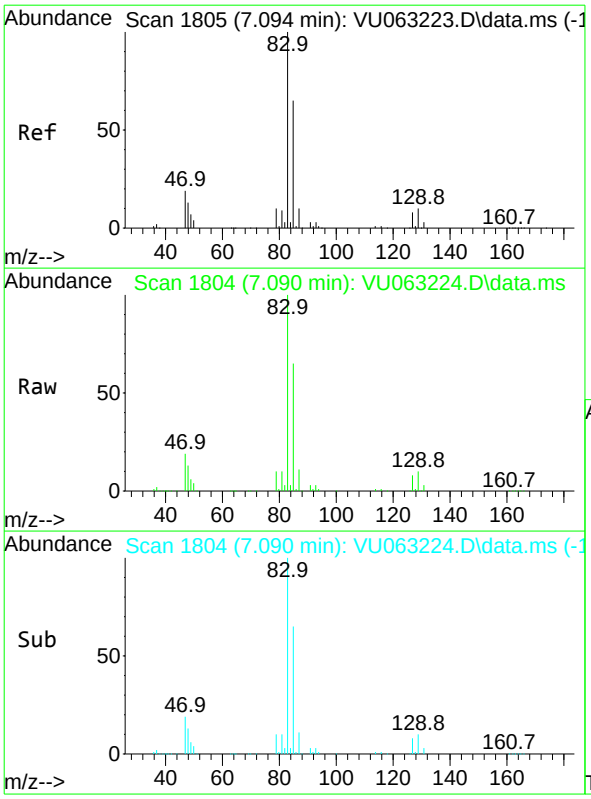


#43
Dibromomethane
Concen: 14.114 ug/l
RT: 6.904 min Scan# 1746
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 93 Resp: 133485

Ion	Ratio	Lower	Upper
93	100		
95	82.7	67.2	100.8
174	91.6	75.7	113.5

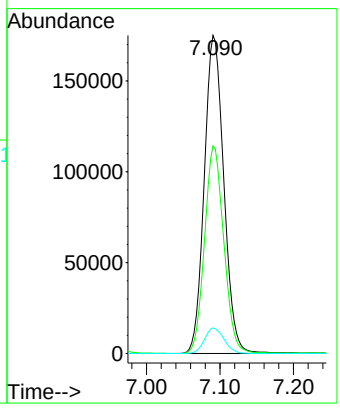




#44
Bromodichloromethane
Concen: 14.680 ug/l
RT: 7.090 min Scan# 18
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 83 Resp: 323143

Ion	Ratio	Lower	Upper
83	100		
85	65.3	51.7	77.5
127	8.1	6.7	10.1



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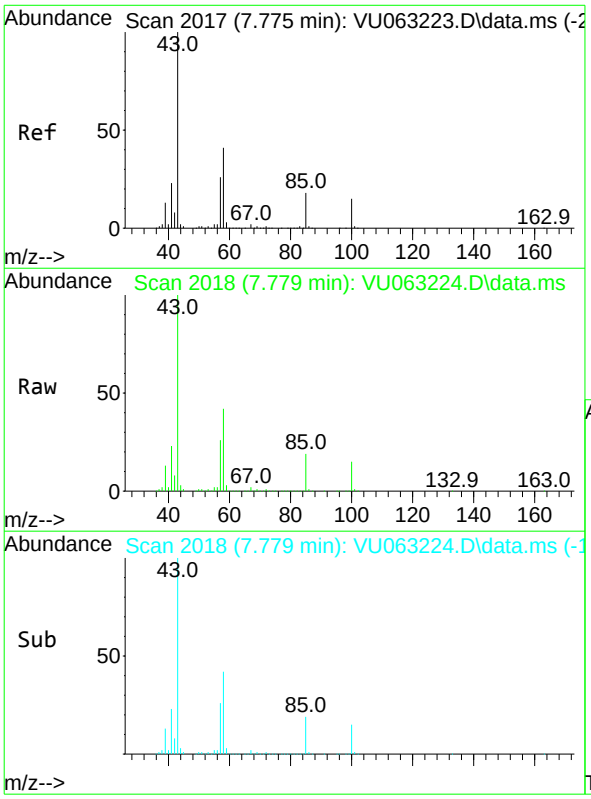
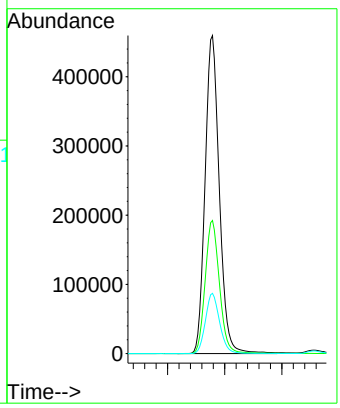
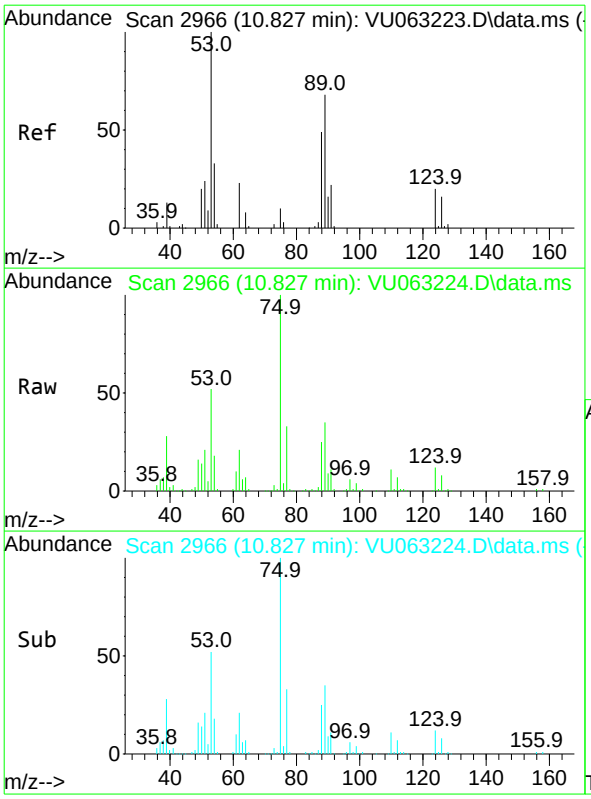


#45
4-Methyl-2-Pentanone
Concen: 80.129 ug/l
RT: 7.779 min Scan# 2018
Delta R.T. 0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 43 Resp: 794494

Ion	Ratio	Lower	Upper
43	100		
58	42.1	20.8	62.5
85	19.0	14.8	22.2

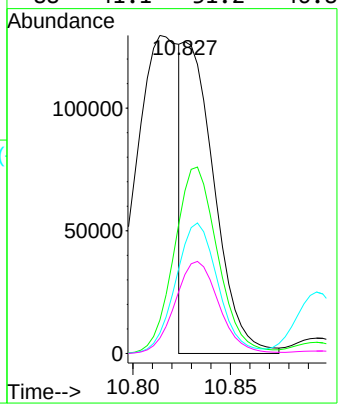




#46
t-1,4-Dichloro-2-butene
Concen: 29.213 ug/l m
RT: 10.827 min Scan# 29
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 75 Resp: 143327

Ion	Ratio	Lower	Upper
75	100		
53	82.4	64.5	96.7
89	56.3	43.4	65.2
88	41.1	31.2	46.8



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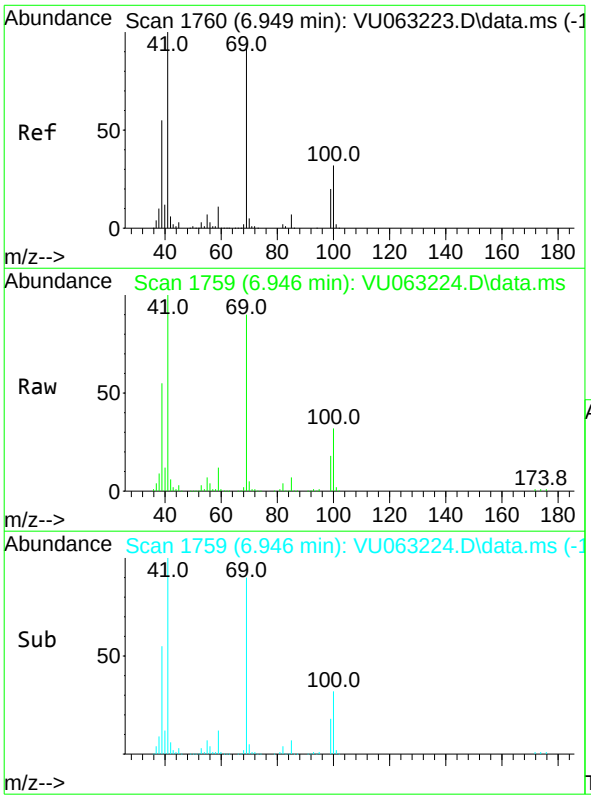
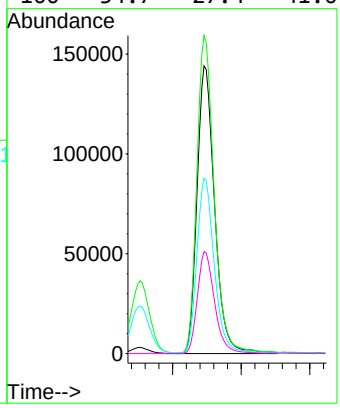
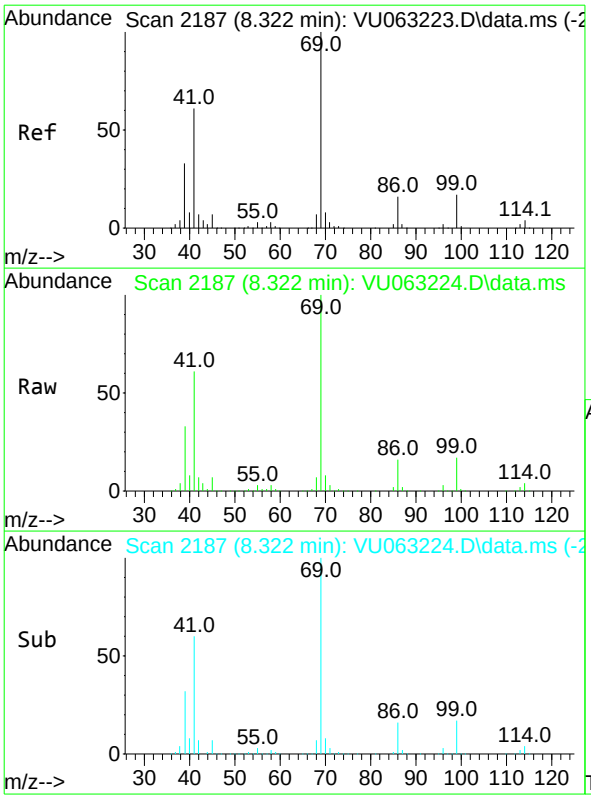


#47
Methyl methacrylate
Concen: 32.232 ug/l
RT: 6.946 min Scan# 1759
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 69 Resp: 256757

Ion	Ratio	Lower	Upper
69	100		
41	108.6	0.0	217.0
39	59.9	47.7	71.5
100	34.7	27.4	41.0

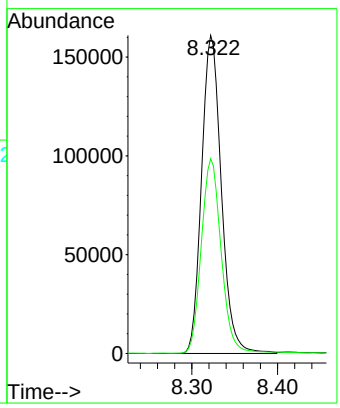




#48
Ethyl methacrylate
Concen: 17.244 ug/l
RT: 8.322 min Scan# 21
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 69 Resp: 257931

Ion	Ratio	Lower	Upper
69	100		
41	61.3	30.6	92.0



Instrument :
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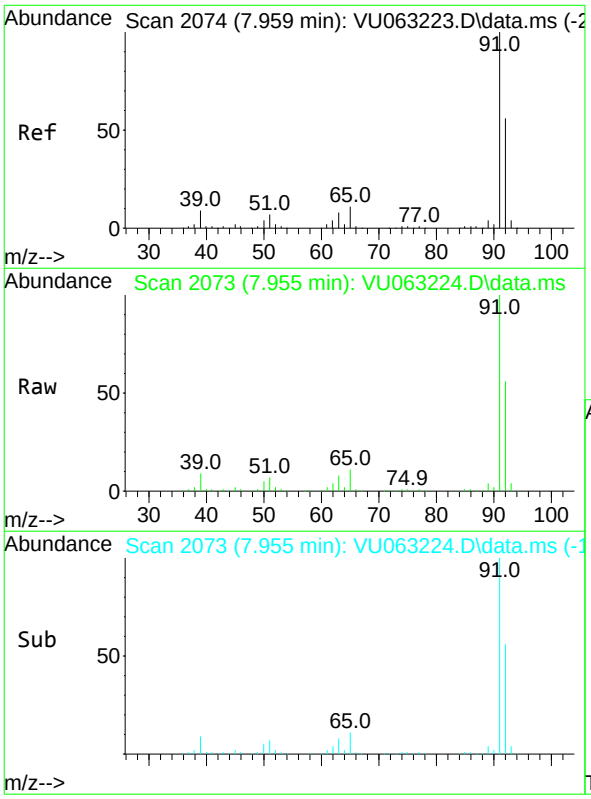
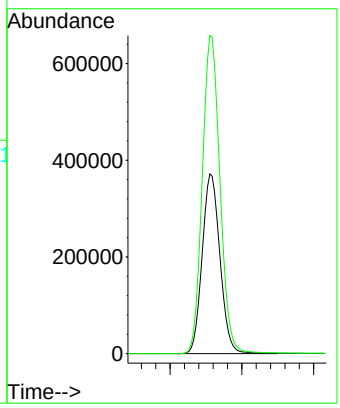
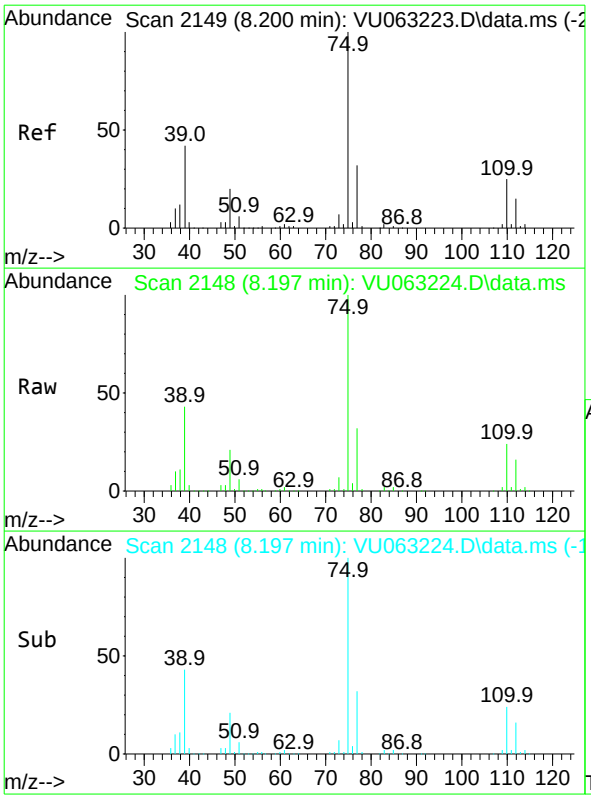


#49
Toluene
Concen: 15.549 ug/l
RT: 7.955 min Scan# 2073
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 92 Resp: 638079

Ion	Ratio	Lower	Upper
92	100		
91	177.1	141.8	212.6

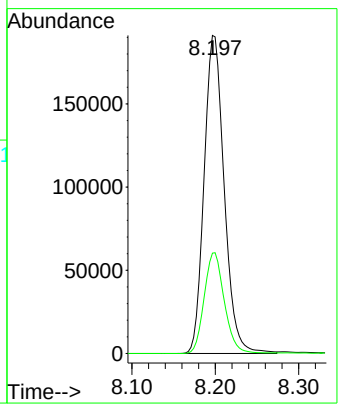




#50
t-1,3-Dichloropropene
Concen: 15.891 ug/l
RT: 8.197 min Scan# 21
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 75 Resp: 320246

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.9	38.9



Instrument :
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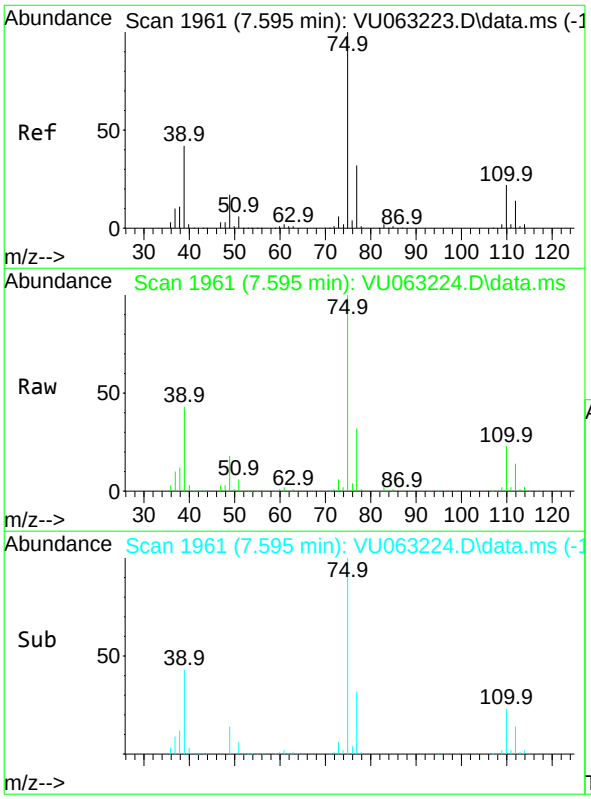
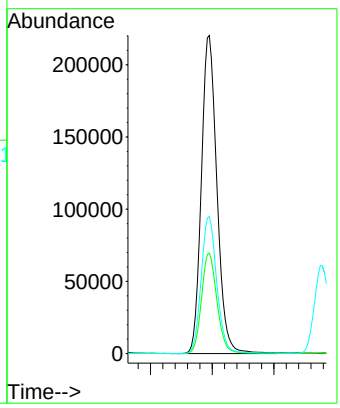
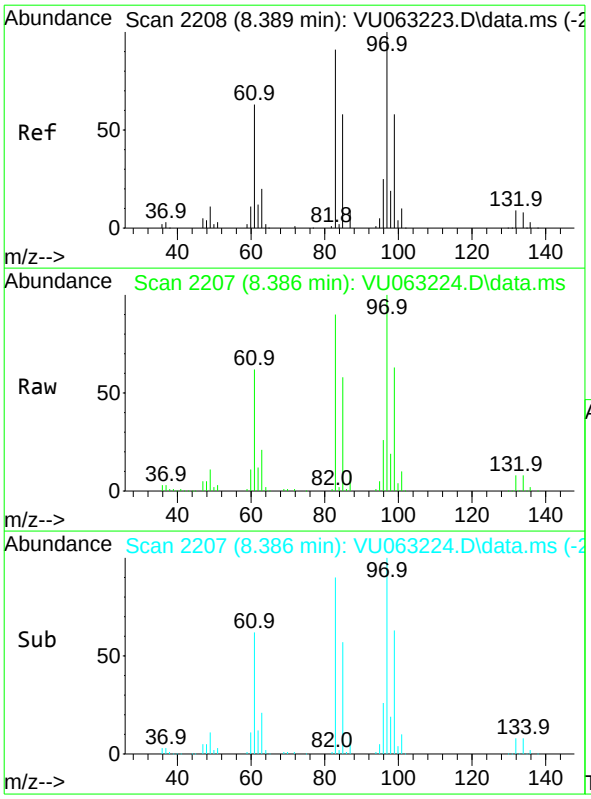


#51
cis-1,3-Dichloropropene
Concen: 15.527 ug/l
RT: 7.595 min Scan# 1961
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 75 Resp: 386542

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.3	37.9
39	43.0	33.5	50.3

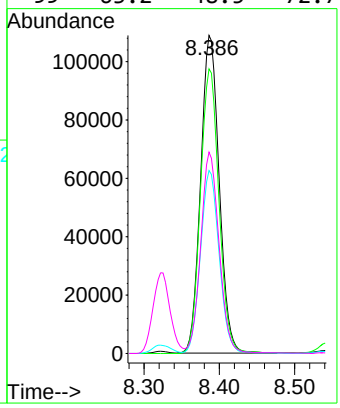




#52
1,1,2-Trichloroethane
Concen: 14.598 ug/l
RT: 8.386 min Scan# 22
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 97 Resp: 186154

Ion	Ratio	Lower	Upper
97	100		
83	89.6	73.0	109.4
85	57.5	46.3	69.5
99	63.2	48.5	72.7



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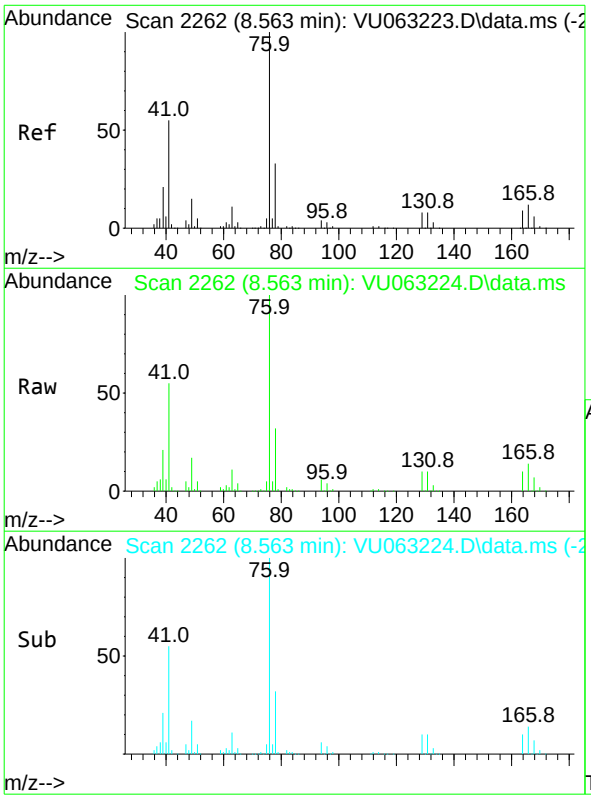
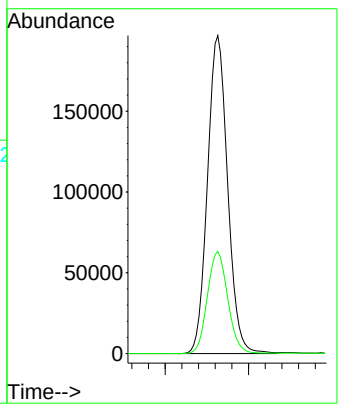
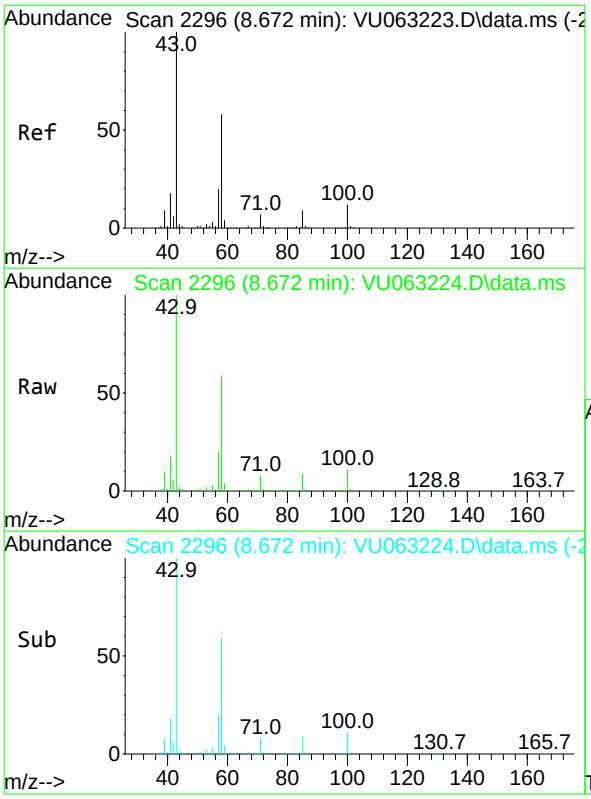


#53
1,3-Dichloropropane
Concen: 14.594 ug/l
RT: 8.563 min Scan# 2262
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 76 Resp: 330381

Ion	Ratio	Lower	Upper
76	100		
78	32.6	26.3	39.5

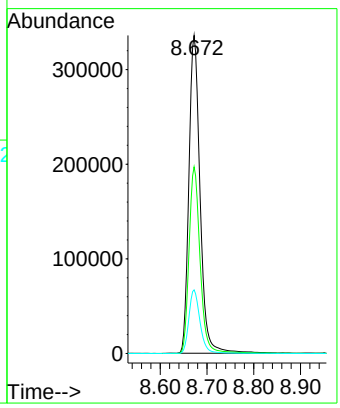




#54
2-Hexanone
Concen: 82.409 ug/l
RT: 8.672 min Scan# 22
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 43 Resp: 557608

Ion	Ratio	Lower	Upper
43	100		
58	58.4	38.0	78.0
57	19.8	0.0	39.1



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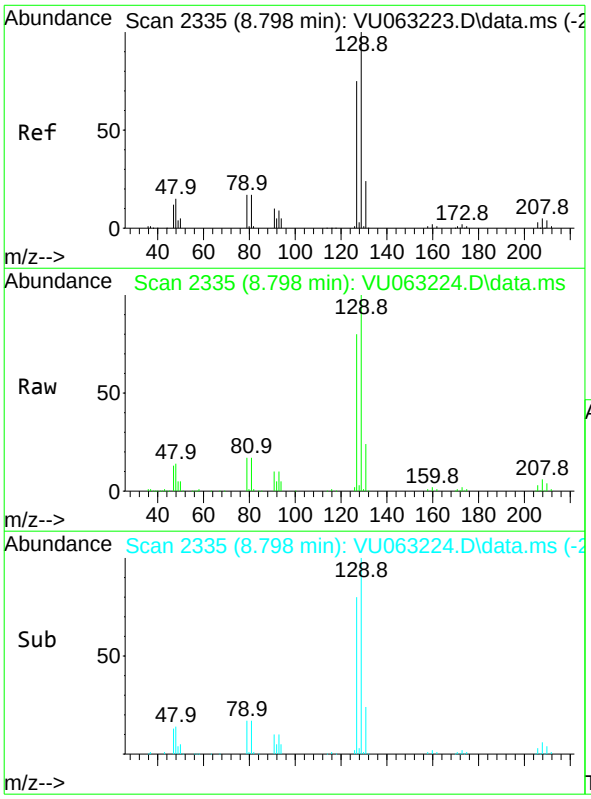
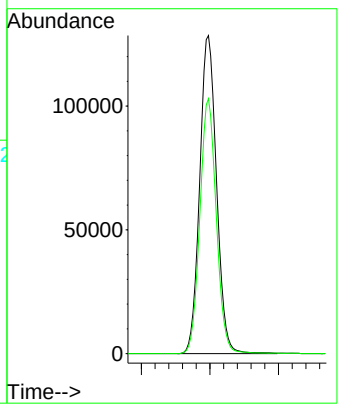
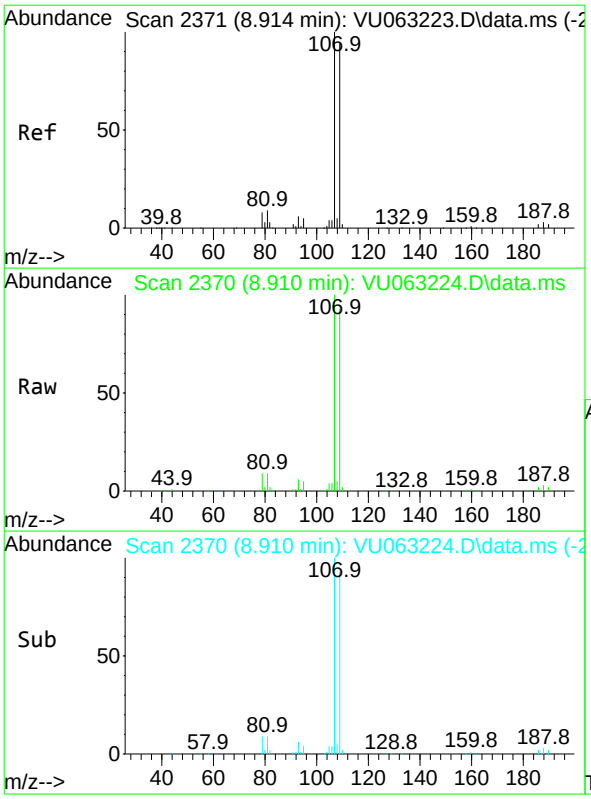


#55
Dibromochloromethane
Concen: 14.939 ug/l
RT: 8.798 min Scan# 2335
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:129 Resp: 219151

Ion	Ratio	Lower	Upper
129	100		
127	78.2	60.4	90.6

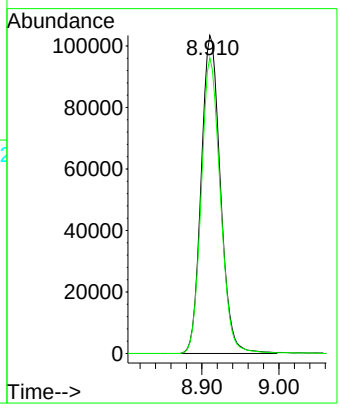




#56
1,2-Dibromoethane
Concen: 14.932 ug/l
RT: 8.910 min Scan# 23
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:107 Resp: 178579

Ion	Ratio	Lower	Upper
107	100		
109	92.5	0.0	187.8



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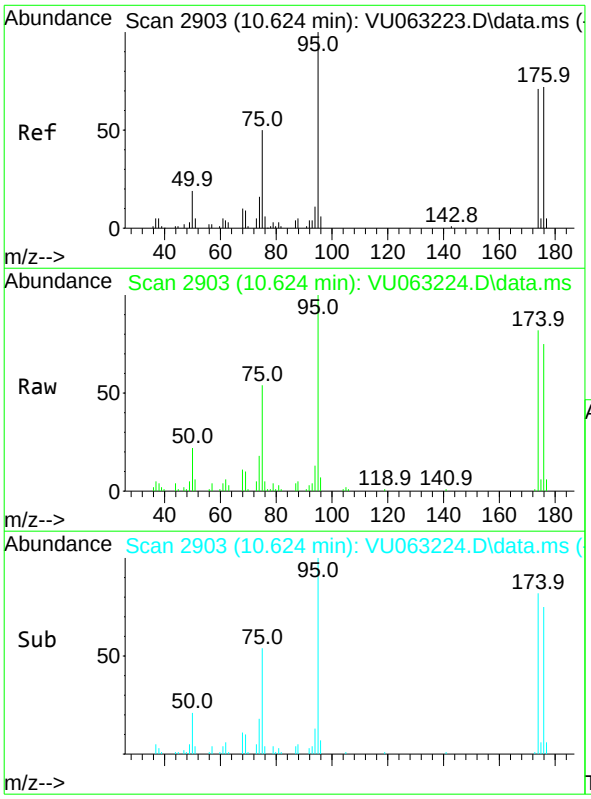
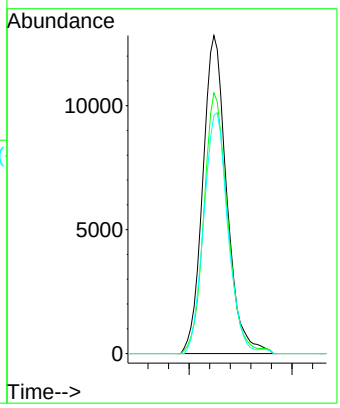
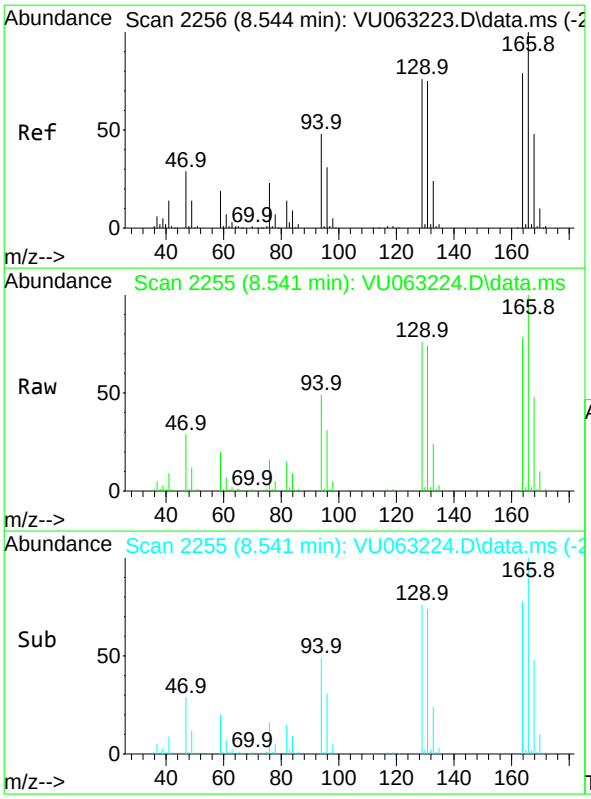


#57
4-Bromofluorobenzene
Concen: 1.080 ug/l
RT: 10.624 min Scan# 2903
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 95 Resp: 20689

Ion	Ratio	Lower	Upper
95	100		
174	81.3	58.6	88.0
176	77.0	58.2	87.4

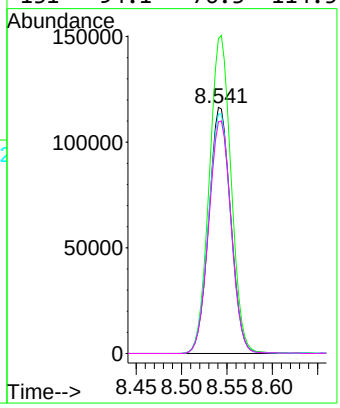




#58
Tetrachloroethene
Concen: 13.998 ug/l
RT: 8.541 min Scan# 22
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:164 Resp: 195759

Ion	Ratio	Lower	Upper
164	100		
166	128.0	101.4	152.0
129	97.4	77.0	115.4
131	94.1	76.3	114.5



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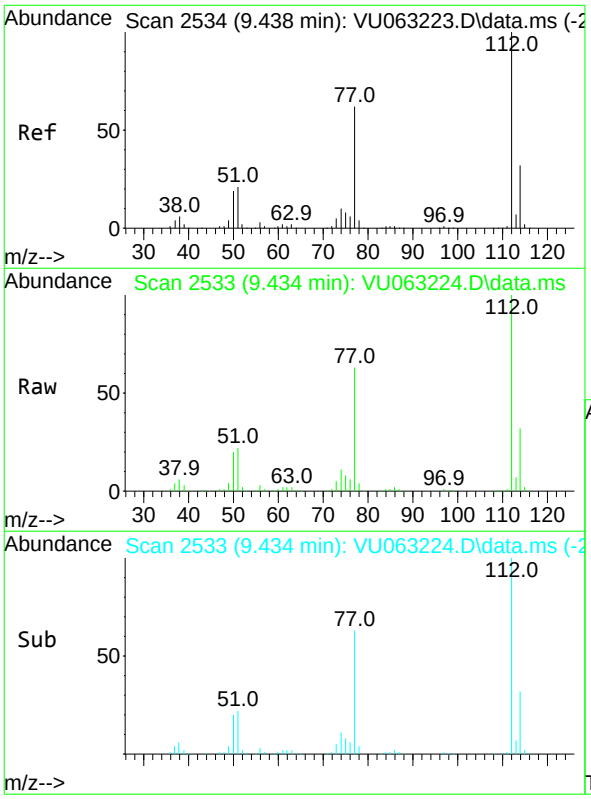
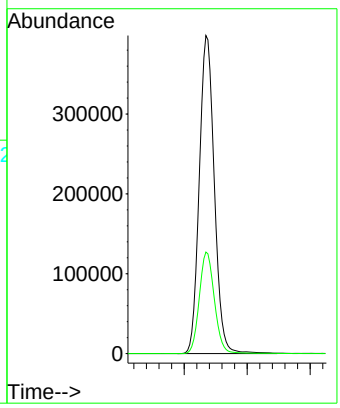
Supervised By :Mahesh Dadoda 02/12/2025

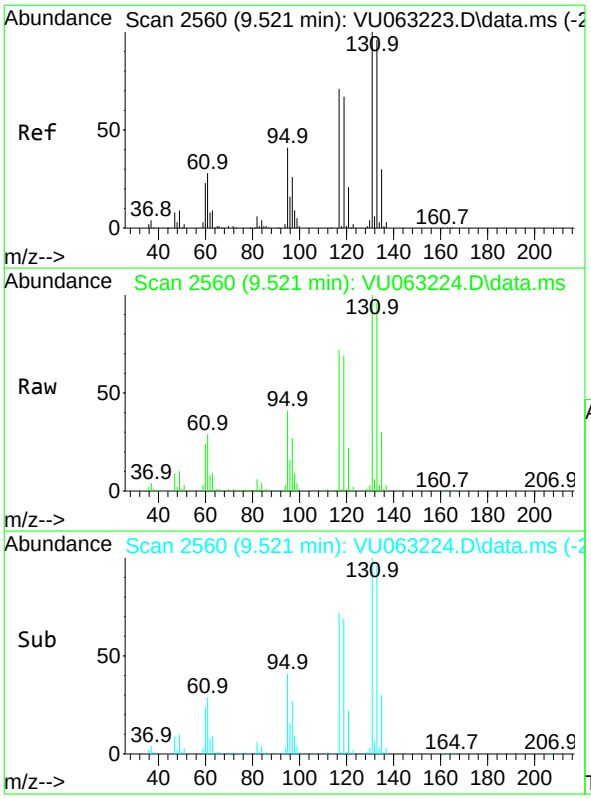


#59
Chlorobenzene
Concen: 15.241 ug/l
RT: 9.434 min Scan# 2533
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:112 Resp: 659996

Ion	Ratio	Lower	Upper
112	100		
114	31.9	25.7	38.5





#60
1,1,1,2-Tetrachloroethane
Concen: 15.005 ug/l
RT: 9.521 min Scan# 25
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:131 Resp: 233573

Ion	Ratio	Lower	Upper
131	100		
133	95.3	76.7	115.1
119	68.6	54.4	81.6

Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

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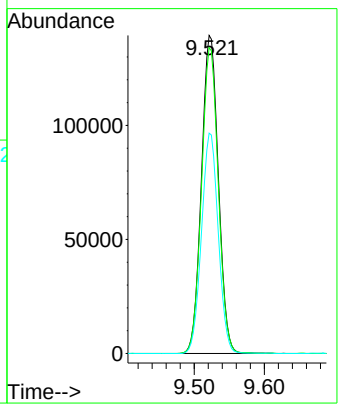
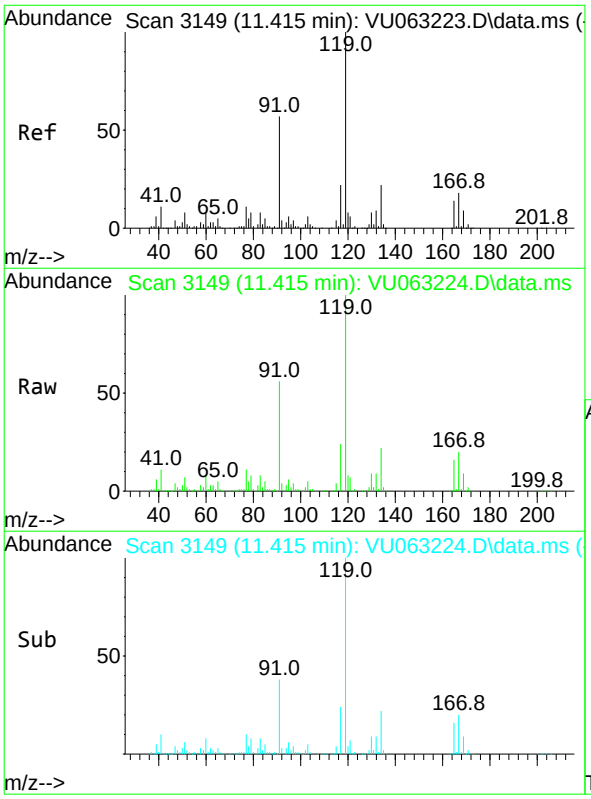
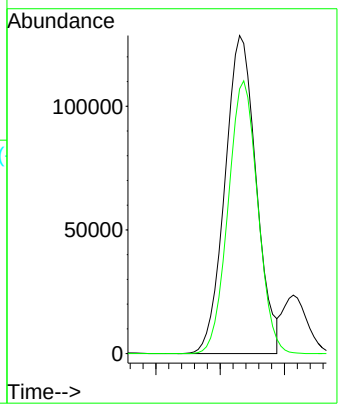


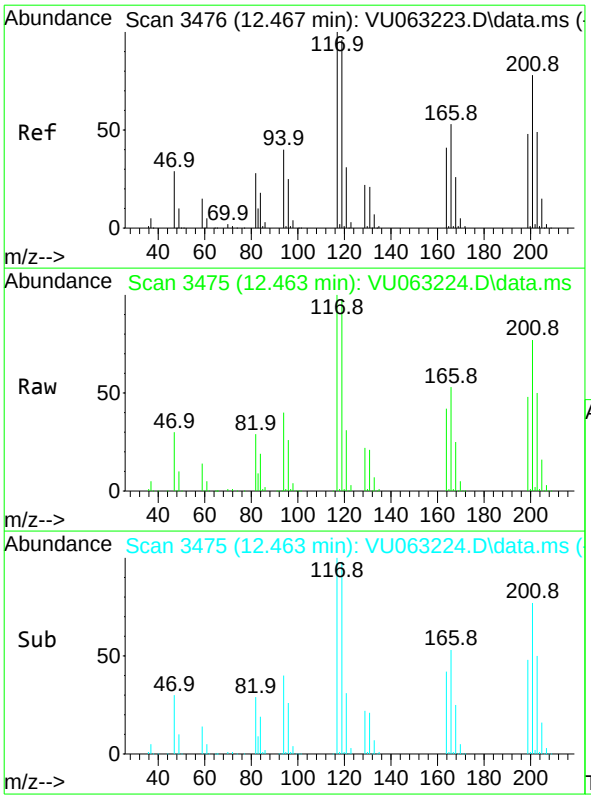


#61
Pentachloroethane
Concen: 15.642 ug/l
RT: 11.415 min Scan# 3149
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:117 Resp: 217502

Ion	Ratio	Lower	Upper
117	100		
167	80.9	65.0	97.6





#62
Hexachloroethane
Concen: 16.451 ug/l
RT: 12.463 min Scan# 34
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:117 Resp: 202372

Ion	Ratio	Lower	Upper
117	100		
201	76.5	61.3	91.9

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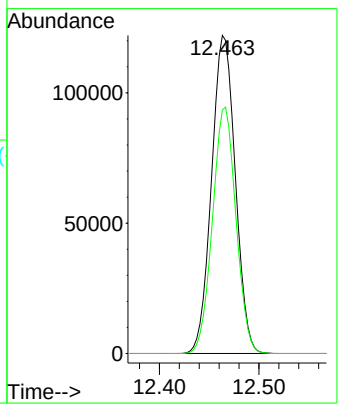
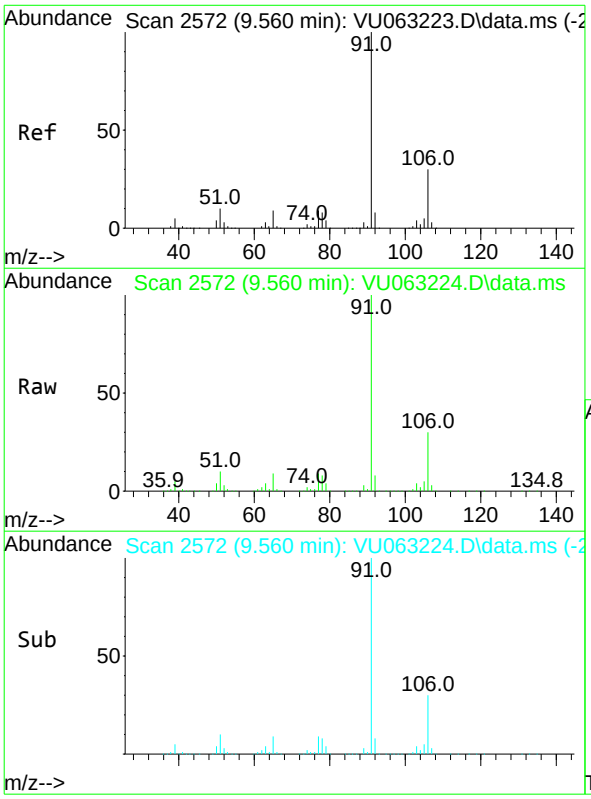
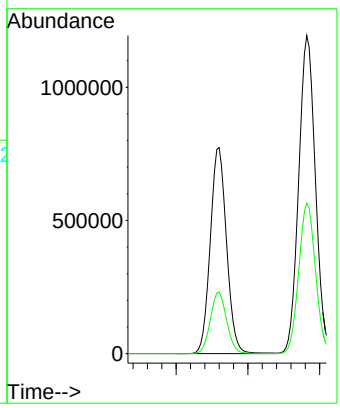


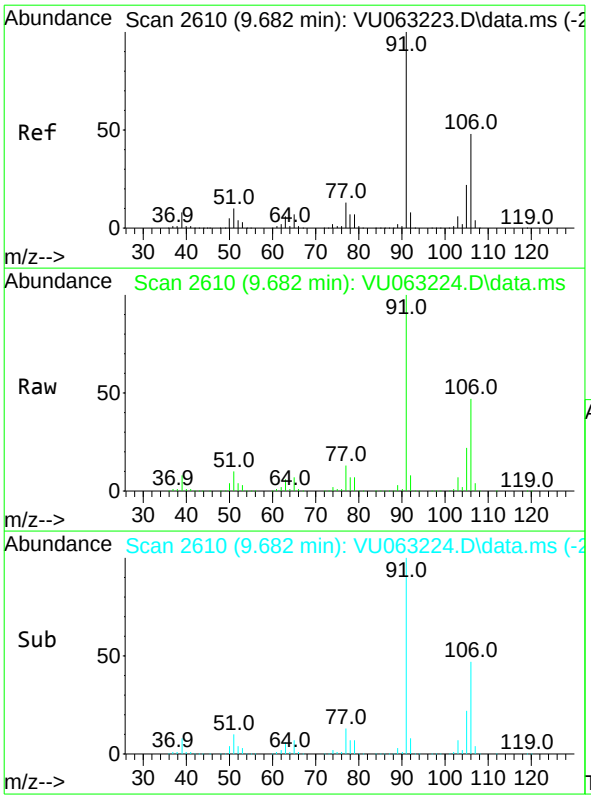


#63
Ethyl Benzene
Concen: 16.321 ug/l
RT: 9.560 min Scan# 2572
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 91 Resp: 1218926

Ion	Ratio	Lower	Upper
91	100		
106	29.8	24.2	36.2

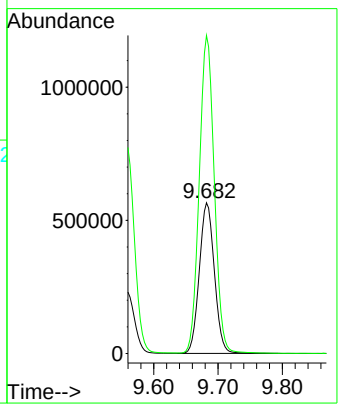




#64
m/p-Xylenes
Concen: 32.960 ug/l
RT: 9.682 min Scan# 26
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:106 Resp: 919492

Ion	Ratio	Lower	Upper
106	100		
91	210.6	166.9	250.3



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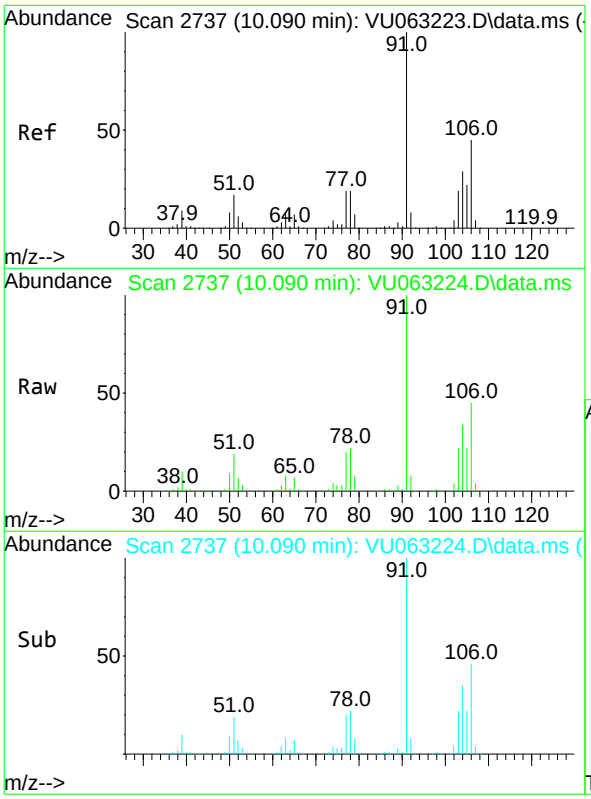
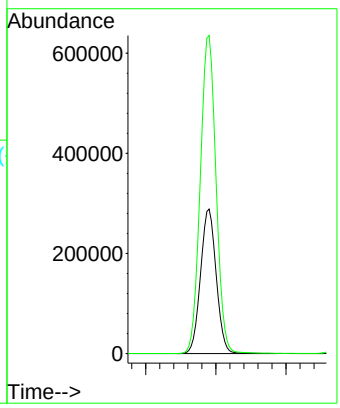
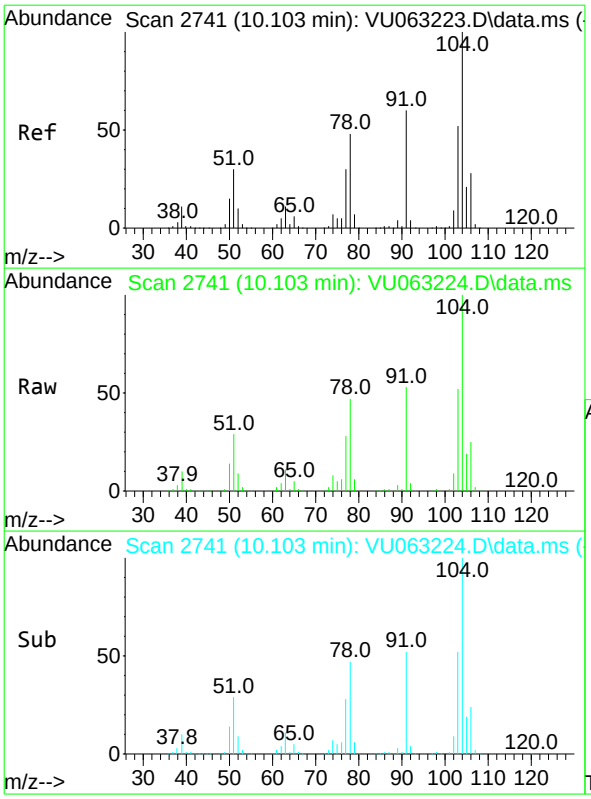


#65
o-Xylene
Concen: 16.379 ug/l
RT: 10.090 min Scan# 2737
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:106 Resp: 447318

Ion	Ratio	Lower	Upper
106	100		
91	221.7	110.9	332.9

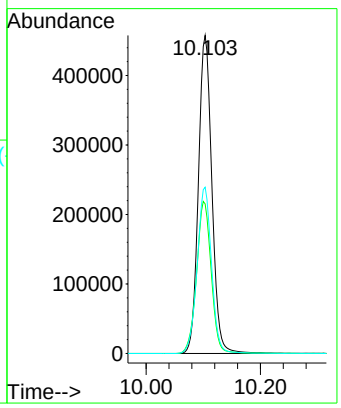




#66
Styrene
Concen: 17.269 ug/l
RT: 10.103 min Scan# 27
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:104 Resp: 750530

Ion	Ratio	Lower	Upper
104	100		
78	51.7	41.2	61.8
103	55.7	44.8	67.2



Instrument :
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ClientSampleId :
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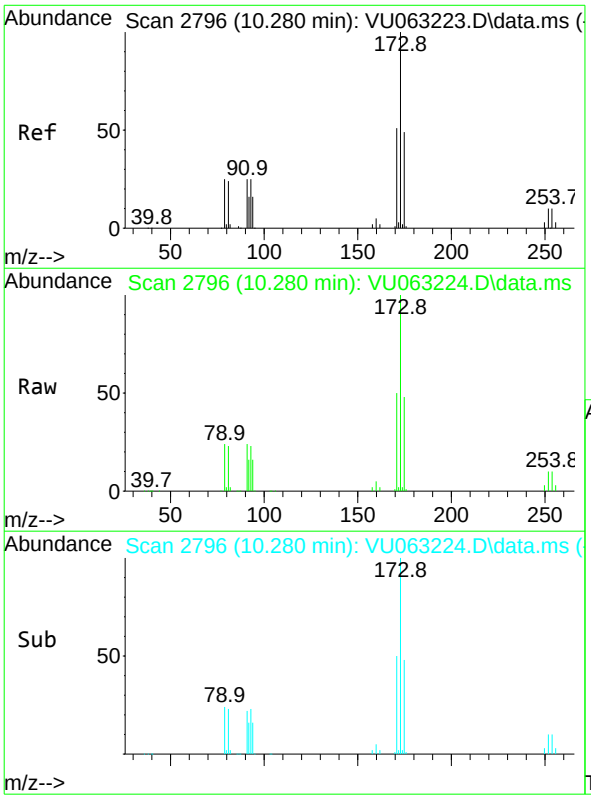
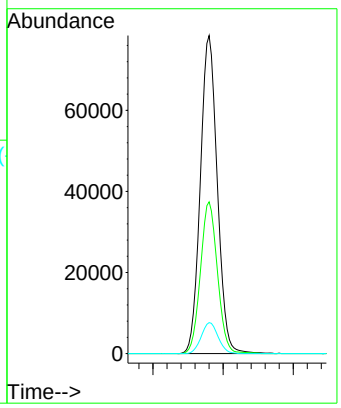
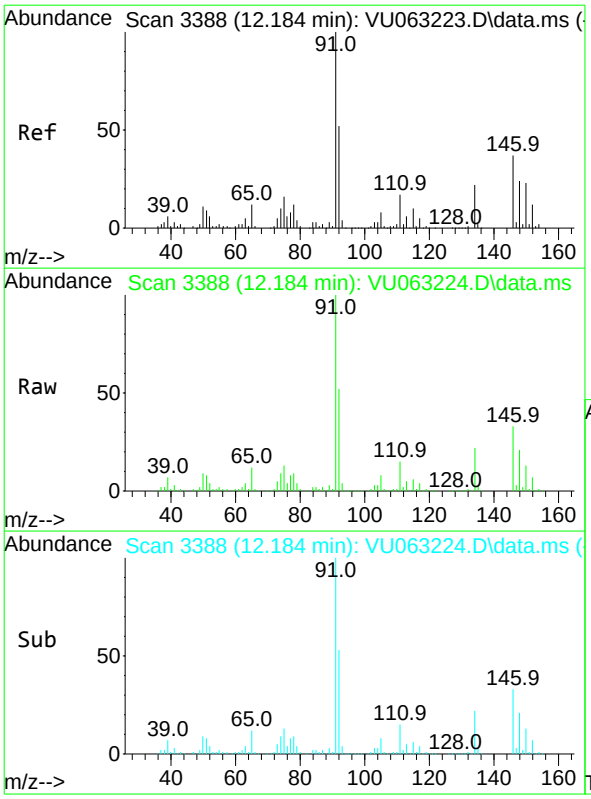


#67
Bromoform
Concen: 15.814 ug/l
RT: 10.280 min Scan# 2796
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:173 Resp: 131670

Ion	Ratio	Lower	Upper
173	100		
175	47.8	39.0	58.4
254	9.7	7.7	11.5

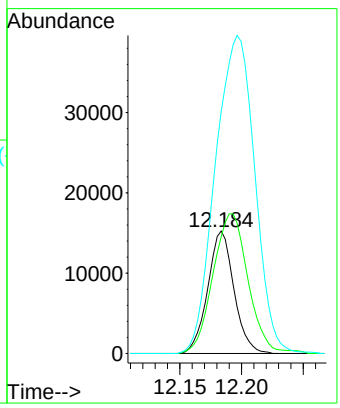




#68
1,2-Dichlorobenzene-d4
Concen: 1.130 ug/l
RT: 12.184 min Scan# 33
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:152 Resp: 22516

Ion	Ratio	Lower	Upper
152	100		
115	152.9	0.0	275.2
150	390.7	0.0	658.4



Instrument :
MSVOA_U
ClientSampleId :
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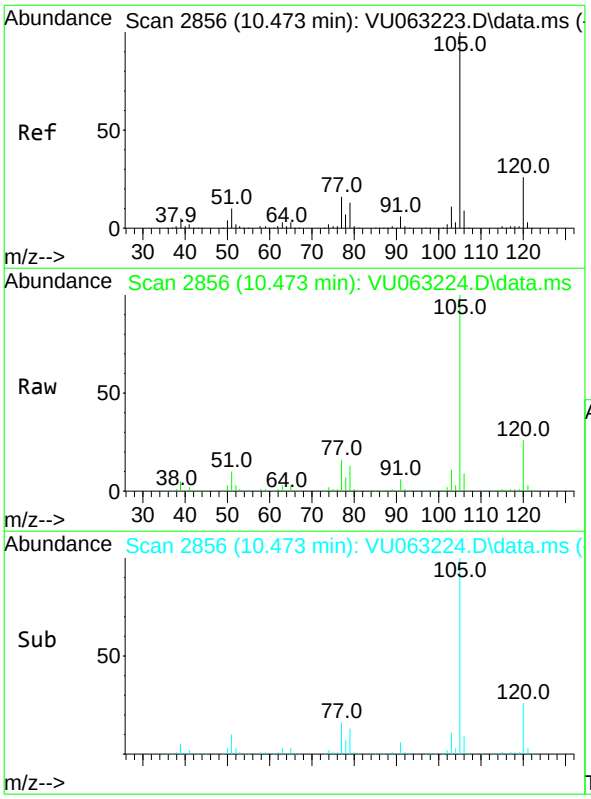
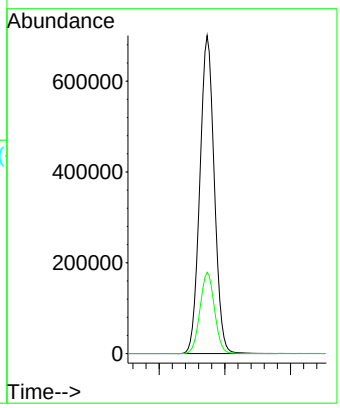
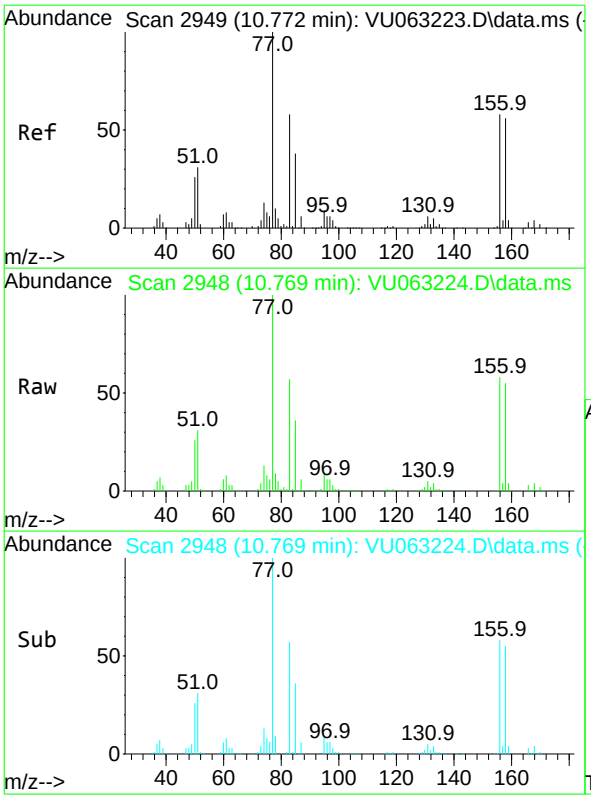


#69
Isopropylbenzene
Concen: 16.638 ug/l
RT: 10.473 min Scan# 2856
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:105 Resp: 1068251

Ion	Ratio	Lower	Upper
105	100		
120	25.7	12.8	38.4

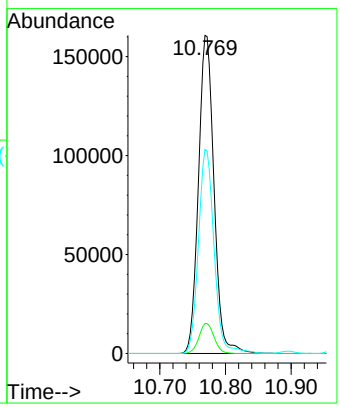




#70
1,1,2,2-Tetrachloroethane
Concen: 15.376 ug/l
RT: 10.769 min Scan# 29
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 83 Resp: 264258

Ion	Ratio	Lower	Upper
83	100		
131	9.2	7.4	11.0
85	64.5	51.8	77.8



Instrument :
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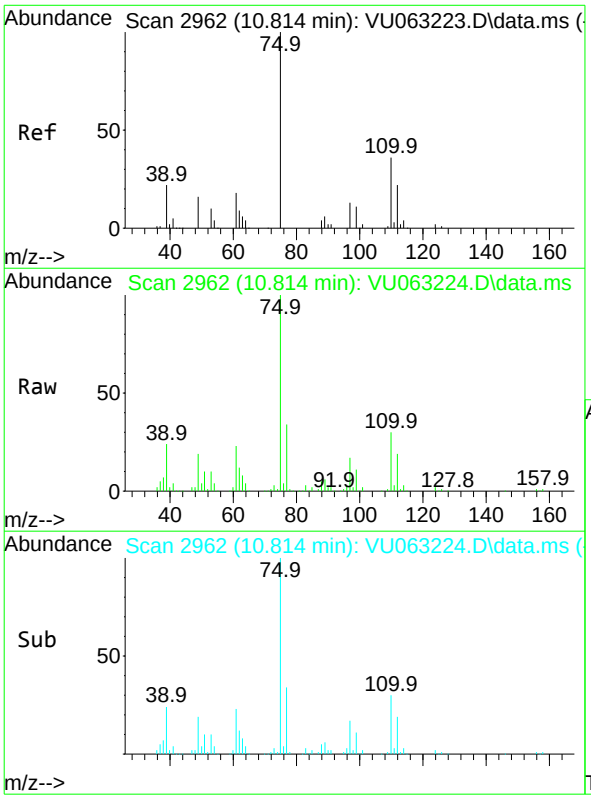
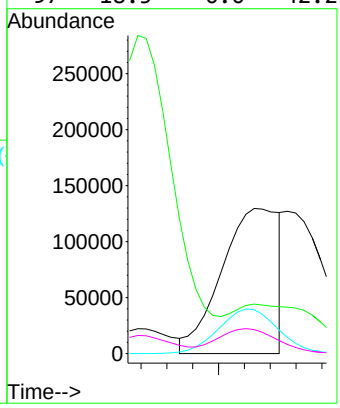
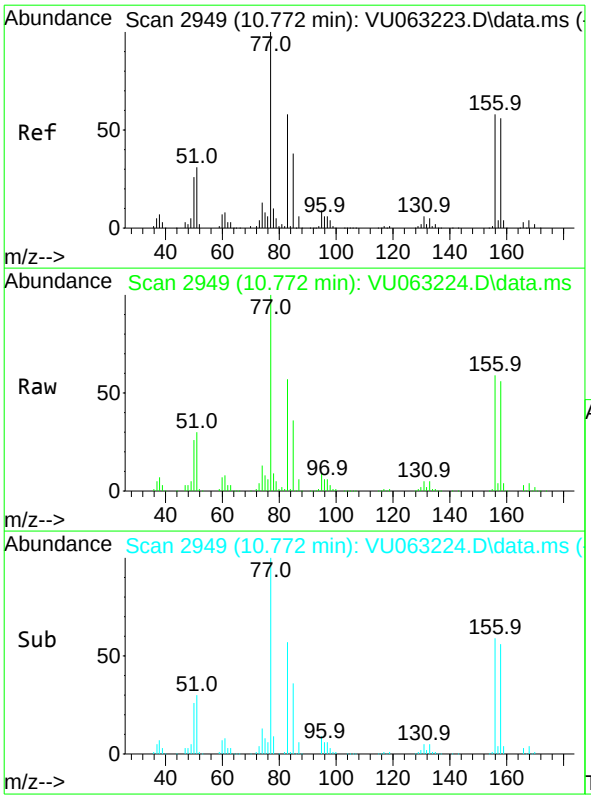


#71
1,2,3-Trichloropropane
Concen: 15.363 ug/l m
RT: 10.814 min Scan# 2962
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 75 Resp: 200210

Ion	Ratio	Lower	Upper
75	100		
77	47.8	0.0	0.0#
110	31.9	0.0	77.0
97	18.5	0.0	42.2





#72
Bromobenzene
Concen: 15.799 ug/l
RT: 10.772 min Scan# 29
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:156 Resp: 273315

Ion	Ratio	Lower	Upper
156	100		
77	174.0	0.0	343.6
158	96.2	0.0	193.0

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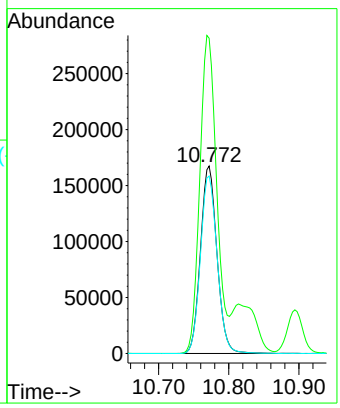
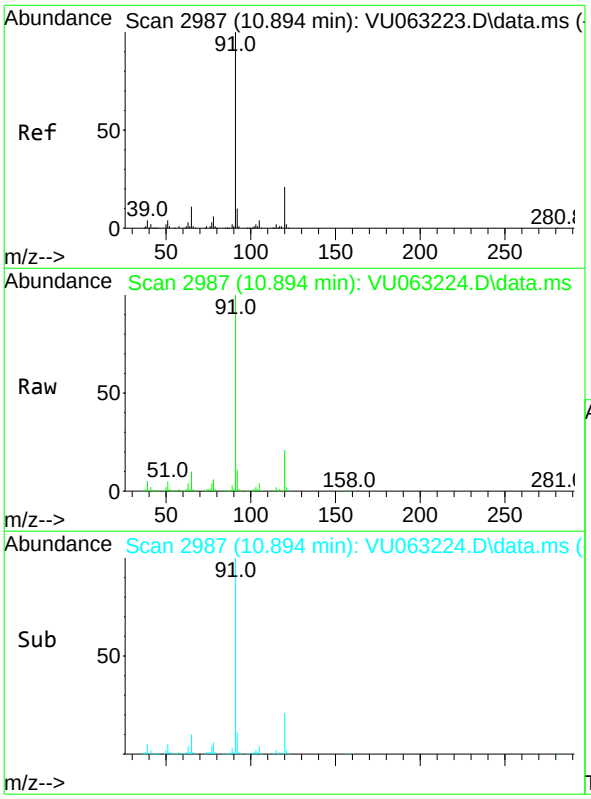
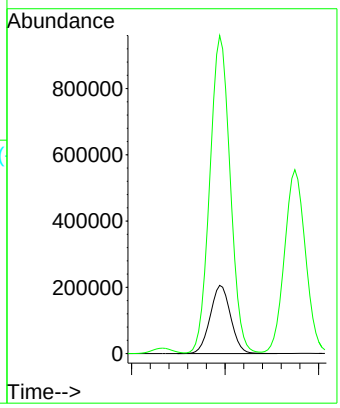


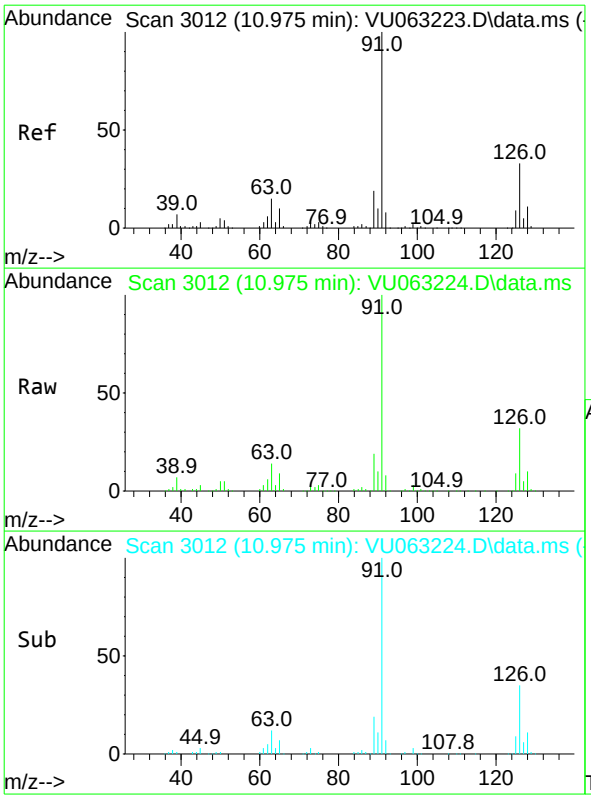


#73
n-propylbenzene
Concen: 17.012 ug/l
RT: 10.894 min Scan# 2987
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:120 Resp: 312734

Ion	Ratio	Lower	Upper
120	100		
91	462.7	369.8	554.6

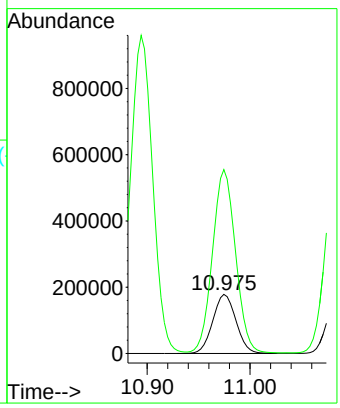




#74
2-Chlorotoluene
Concen: 16.499 ug/l
RT: 10.975 min Scan# 30
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:126 Resp: 279514

Ion	Ratio	Lower	Upper
126	100		
91	307.9	0.0	623.8



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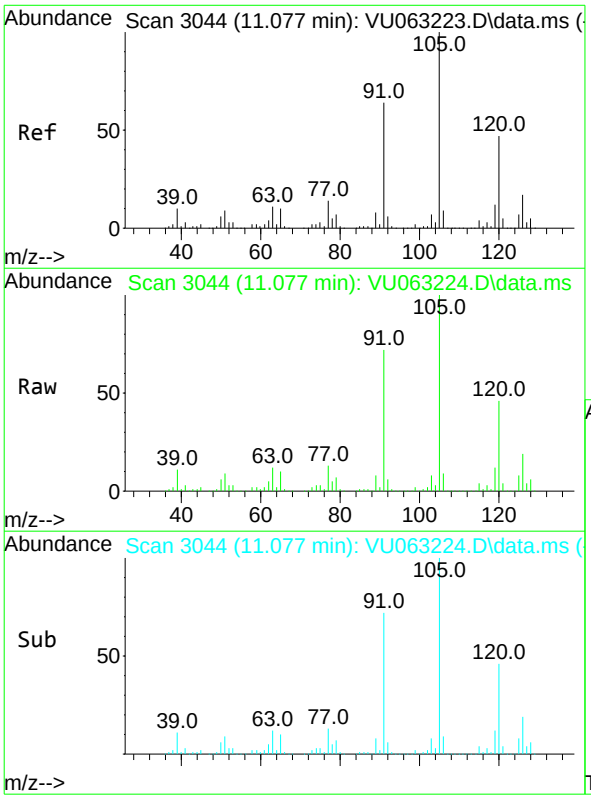
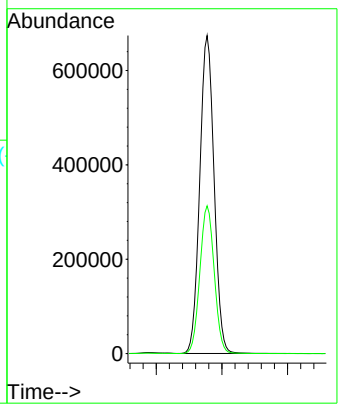
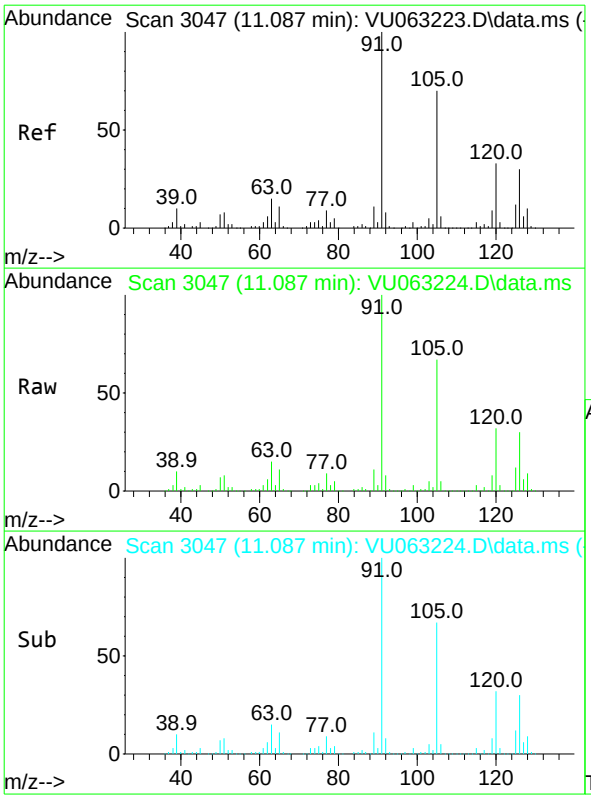


#75
1,3,5-Trimethylbenzene
Concen: 17.122 ug/l
RT: 11.077 min Scan# 3044
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:105 Resp: 1018594

Ion	Ratio	Lower	Upper
105	100		
120	46.7	37.3	55.9

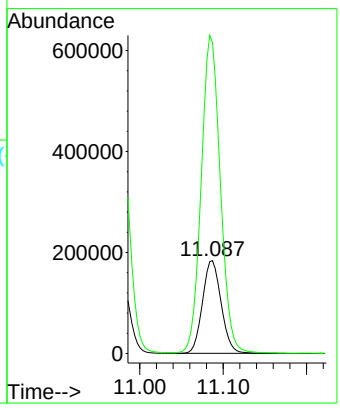




#76
4-Chlorotoluene
Concen: 16.404 ug/l
RT: 11.087 min Scan# 30
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:126 Resp: 284996

Ion	Ratio	Lower	Upper
126	100		
91	351.8	0.0	703.6



Instrument :
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ClientSampleId :
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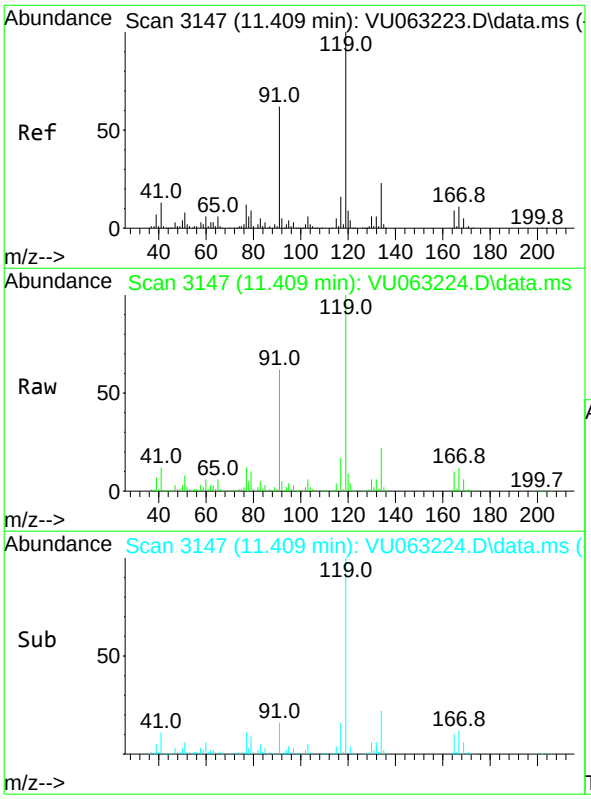
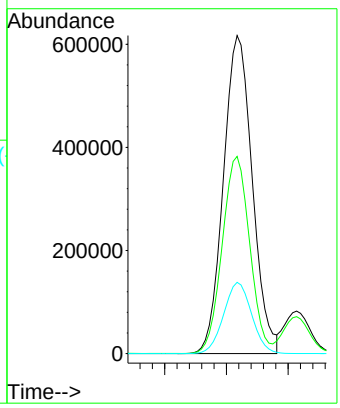
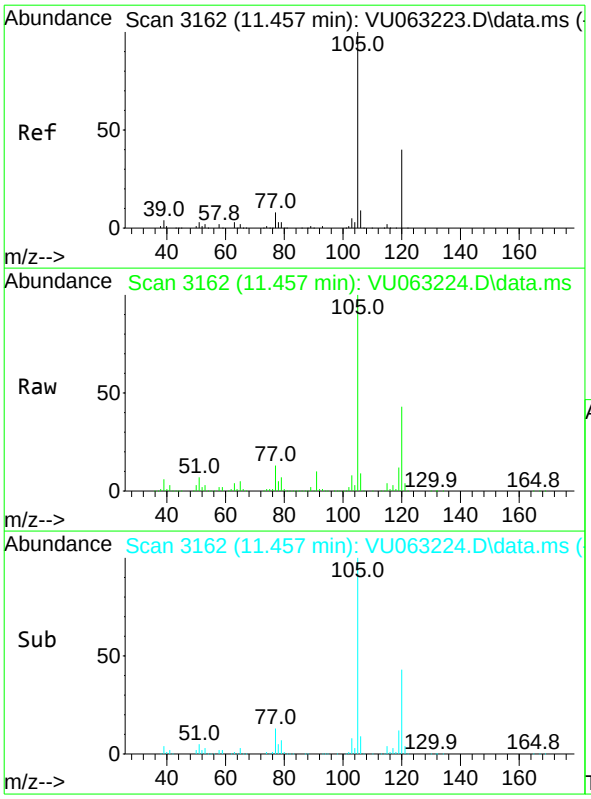


#77
tert-Butylbenzene
Concen: 16.693 ug/l
RT: 11.409 min Scan# 3147
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:119 Resp: 1004388

Ion	Ratio	Lower	Upper
119	100		
91	59.1	29.4	88.3
134	21.7	17.6	26.4

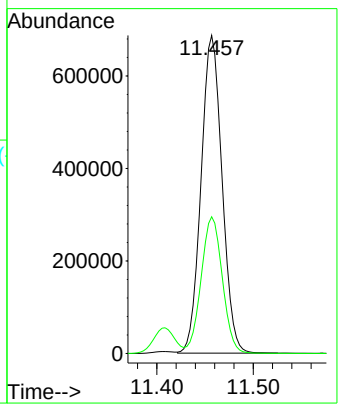




#78
1,2,4-Trimethylbenzene
Concen: 17.598 ug/l
RT: 11.457 min Scan# 31
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:105 Resp: 1038794

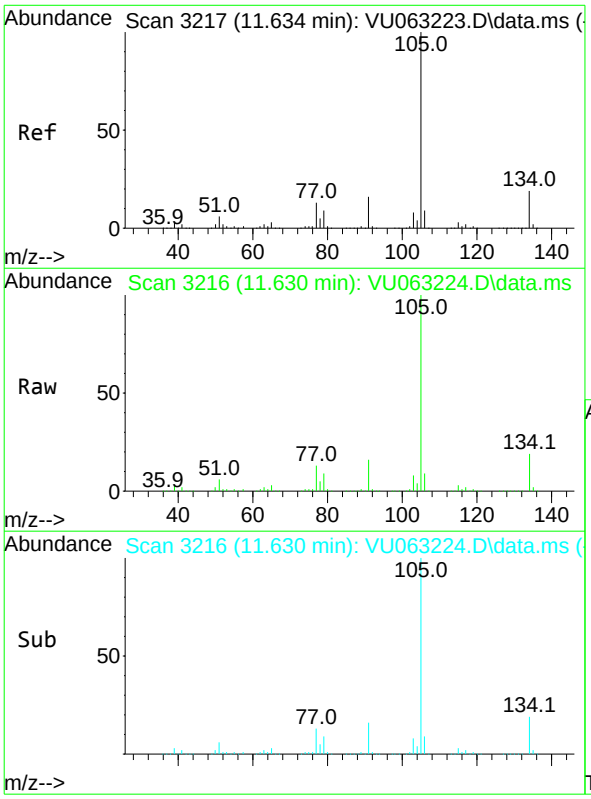
Ion	Ratio	Lower	Upper
105	100		
120	43.4	21.9	65.7



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

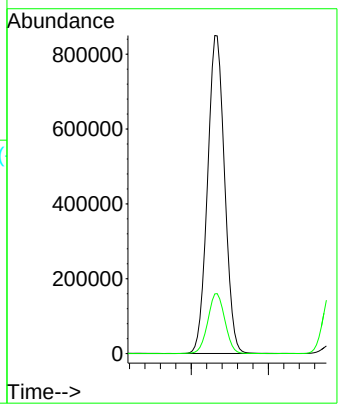
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

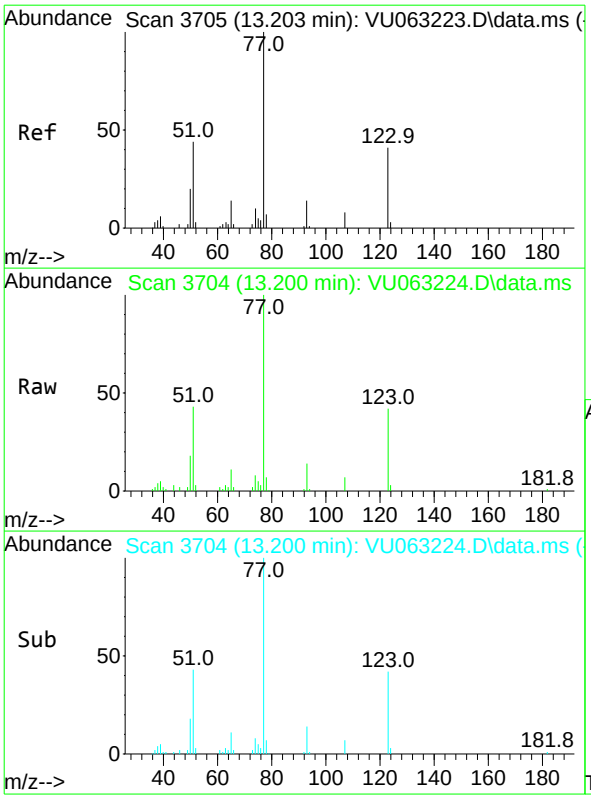


#79
sec-Butylbenzene
Concen: 17.036 ug/l
RT: 11.630 min Scan# 3216
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:105 Resp: 1305019

Ion	Ratio	Lower	Upper
105	100		
134	18.9	15.1	22.7

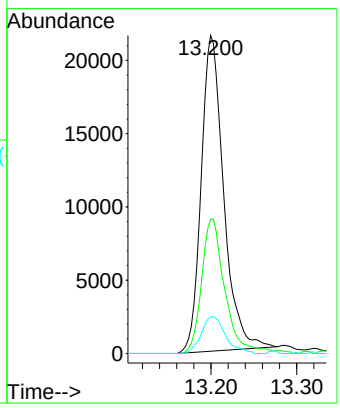




#80
Nitrobenzene
Concen: 75.007 ug/l
RT: 13.200 min Scan# 37
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 77 Resp: 39246

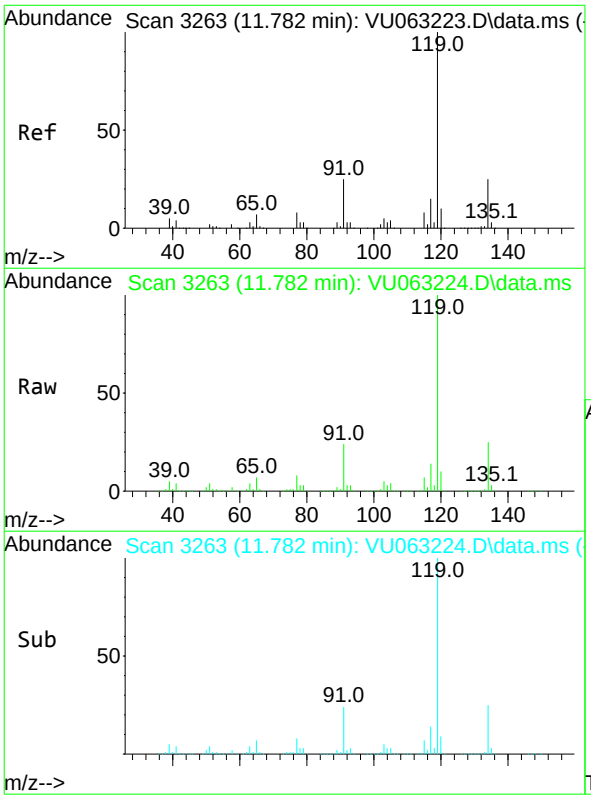
Ion	Ratio	Lower	Upper
77	100		
123	42.5	18.9	67.1
65	12.5	11.9	15.1



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

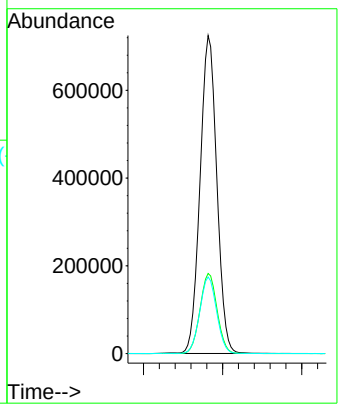
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

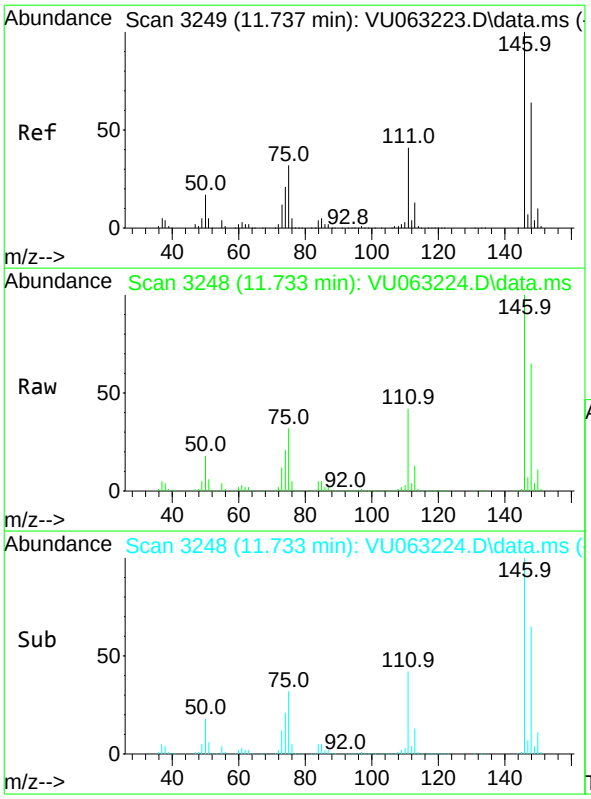


#81
p-Isopropyltoluene
Concen: 17.605 ug/l
RT: 11.782 min Scan# 3263
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:119 Resp: 1064335

Ion	Ratio	Lower	Upper
119	100		
134	25.7	20.3	30.5
91	24.1	19.4	29.2

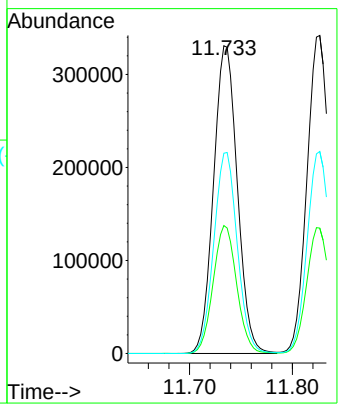




#82
1,3-Dichlorobenzene
Concen: 15.863 ug/l
RT: 11.733 min Scan# 32
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:146 Resp: 532282

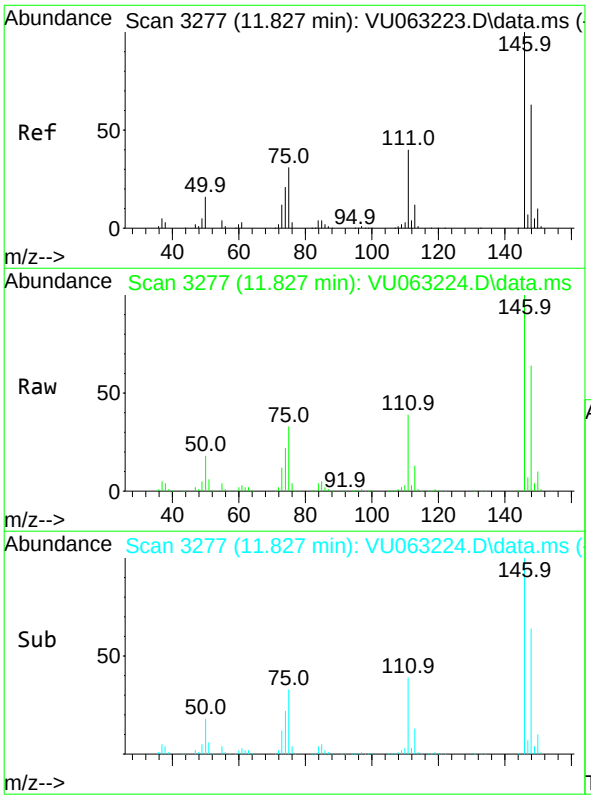
Ion	Ratio	Lower	Upper
146	100		
111	41.1	32.8	49.2
148	64.5	51.1	76.7



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

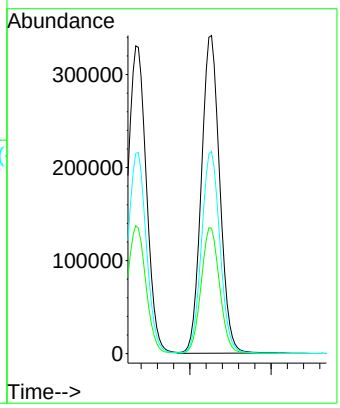
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

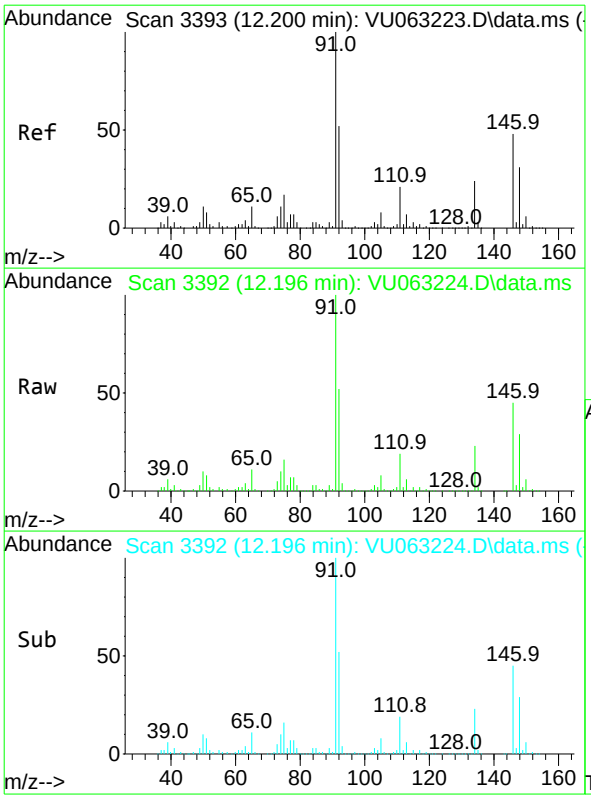


#83
1,4-Dichlorobenzene
Concen: 16.378 ug/l
RT: 11.827 min Scan# 3277
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:146 Resp: 537516

Ion	Ratio	Lower	Upper
146	100		
111	39.8	32.1	48.1
148	63.5	50.2	75.4

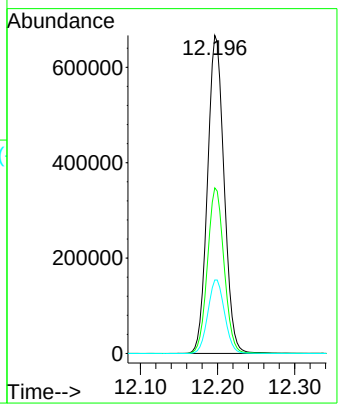




#84
n-Butylbenzene
Concen: 18.246 ug/l
RT: 12.196 min Scan# 33
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 91 Resp: 994690

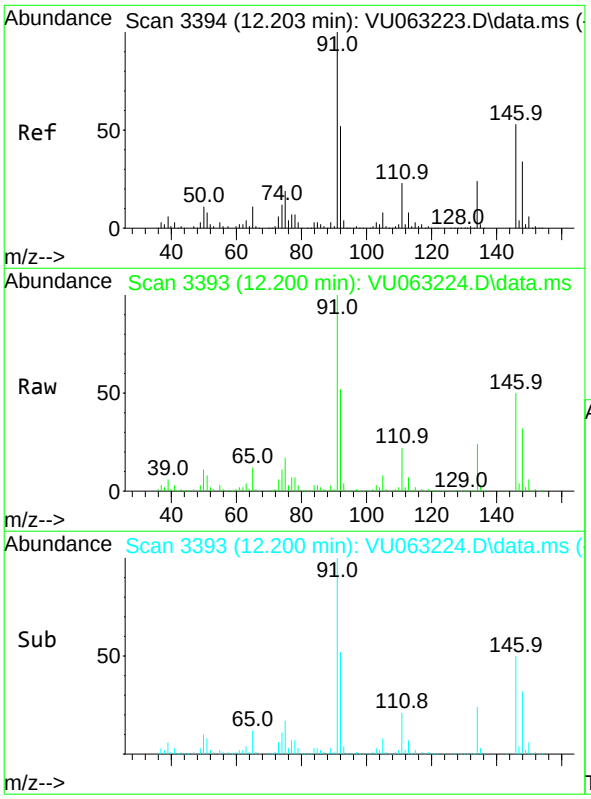
Ion	Ratio	Lower	Upper
91	100		
92	52.1	41.8	62.8
134	23.4	18.6	28.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

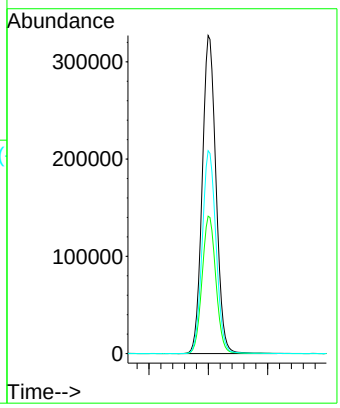
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

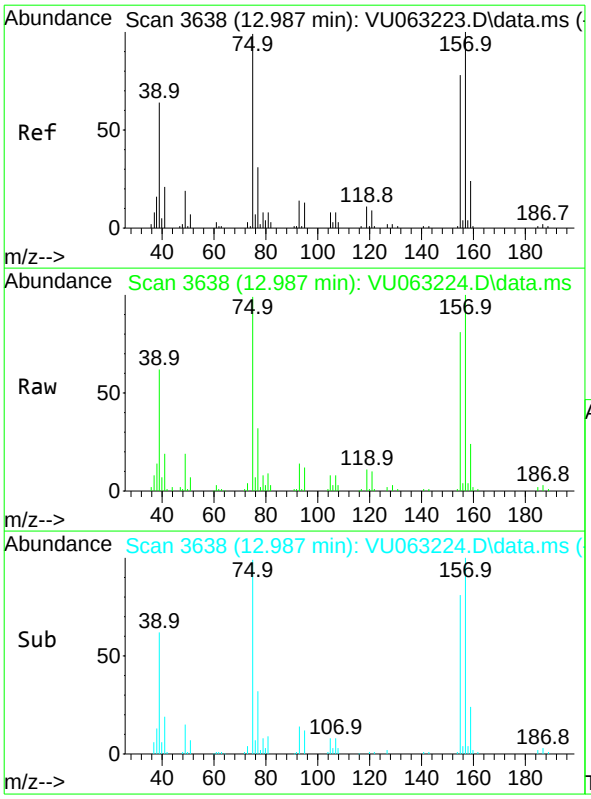


#85
1,2-Dichlorobenzene
Concen: 16.323 ug/l
RT: 12.200 min Scan# 3393
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:146 Resp: 526346

Ion	Ratio	Lower	Upper
146	100		
111	43.4	21.9	65.7
148	64.1	32.3	96.9

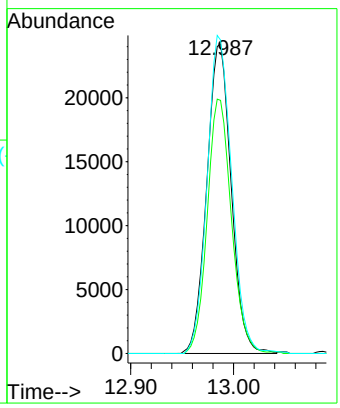




#86
1,2-Dibromo-3-Chloropropane
Concen: 16.565 ug/l
RT: 12.987 min Scan# 36
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion: 75 Resp: 39960

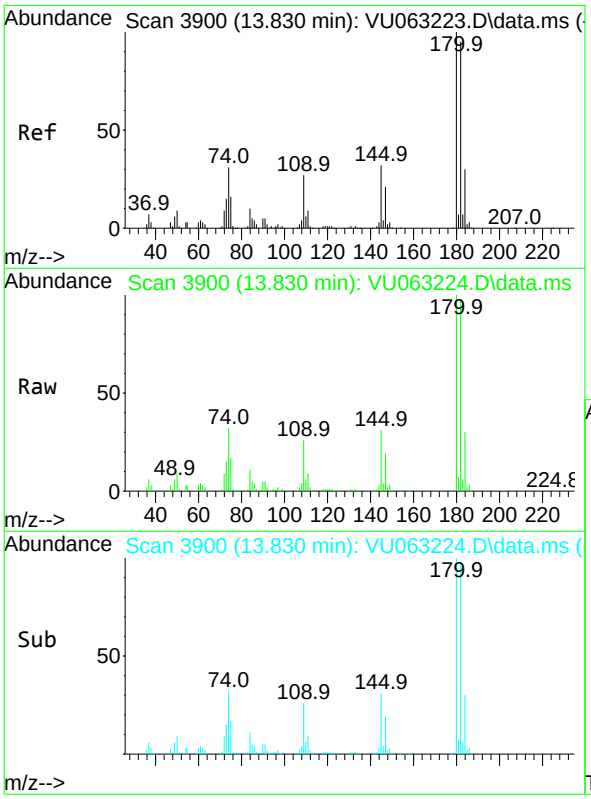
Ion	Ratio	Lower	Upper
75	100		
155	81.3	63.5	95.3
157	103.4	81.8	122.6



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

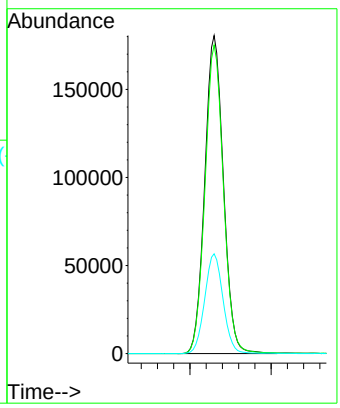
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

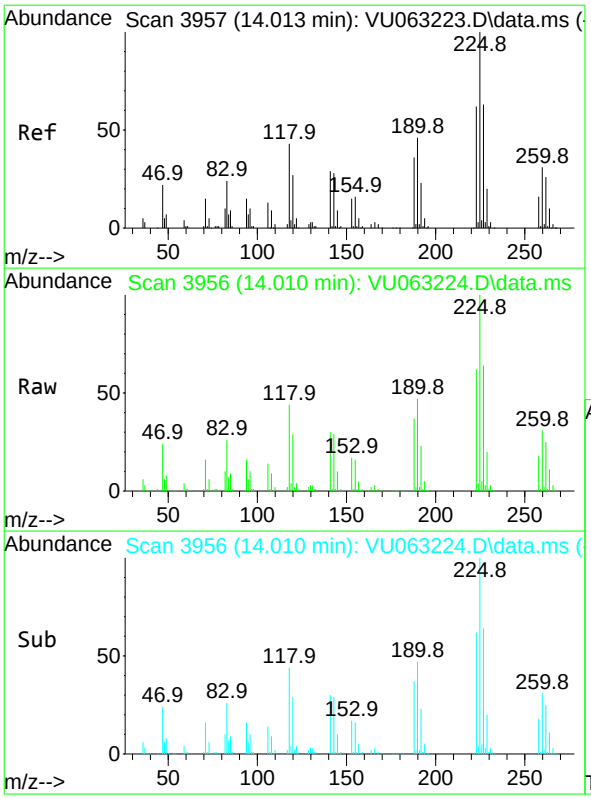


#87
1,2,4-Trichlorobenzene
Concen: 18.320 ug/l
RT: 13.830 min Scan# 3900
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:180 Resp: 288112

Ion	Ratio	Lower	Upper
180	100		
182	96.1	76.6	115.0
145	30.9	25.4	38.2

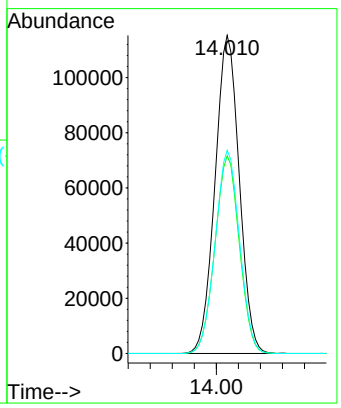




#88
Hexachlorobutadiene
Concen: 15.648 ug/l
RT: 14.010 min Scan# 39
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:225 Resp: 175875

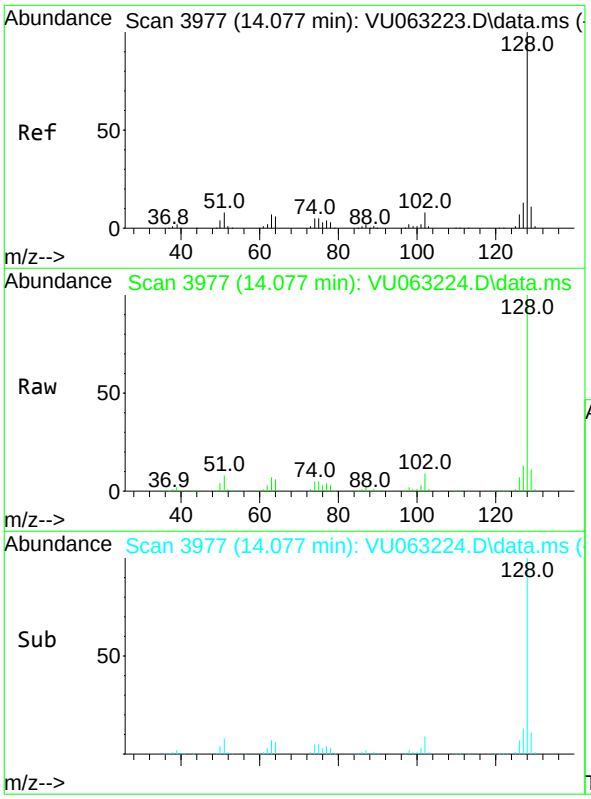
Ion	Ratio	Lower	Upper
225	100		
223	62.6	49.5	74.3
227	64.4	51.0	76.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

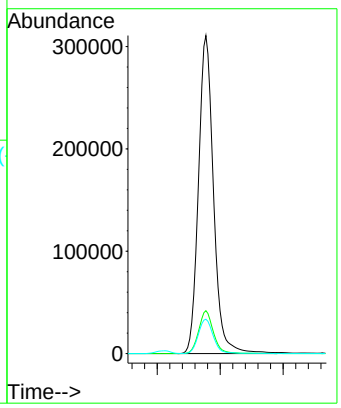
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

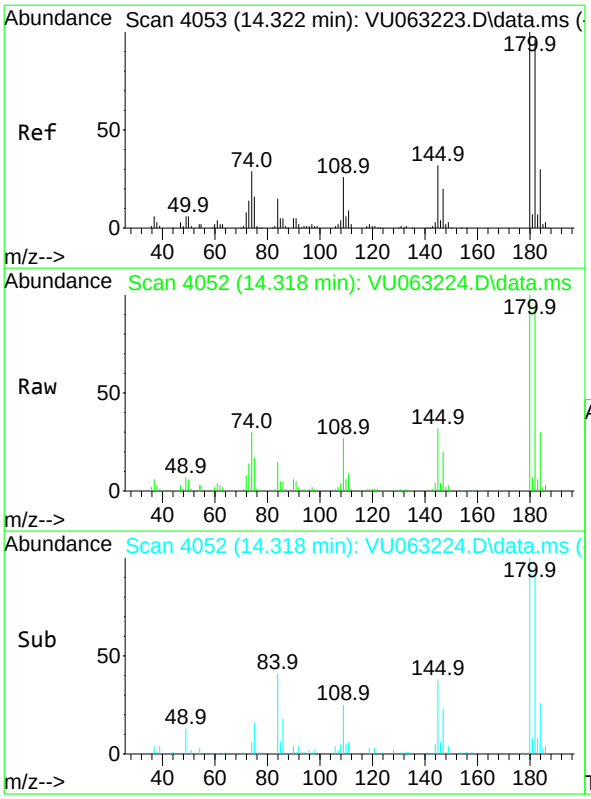


#89
Naphthalene
Concen: 15.328 ug/l
RT: 14.077 min Scan# 3977
Delta R.T. -0.000 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:128 Resp: 515515

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	16.0
129	10.5	8.6	13.0

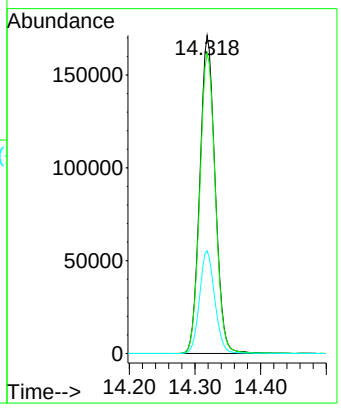




#90
1,2,3-Trichlorobenzene
Concen: 18.007 ug/l
RT: 14.318 min Scan# 40
Delta R.T. -0.003 min
Lab File: VU063224.D
Acq: 10 Feb 2025 15:33

Tgt Ion:180 Resp: 277101

Ion	Ratio	Lower	Upper
180	100		
182	95.6	78.2	117.2
145	32.0	26.1	39.1



Instrument :
MSVOA_U
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063227.D
Acq On : 11 Feb 2025 08:50
Operator : MD/SY
Sample : VSTDICV010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 12 03:08:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.106	96	56495	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.624	95	25232	1.354	ug/l	0.00
Spiked Amount 1.000			Recovery = 135.000%			
68) 1,2-Dichlorobenzene-d4	12.183	152	18463	0.953	ug/l	0.00
Spiked Amount 1.000			Recovery = 95.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.380	85	113504	6.184	ug/l	99
3) Chloromethane	1.515	50	146642	6.937	ug/l	98
4) Vinyl Chloride	1.599	62	161150	7.705	ug/l	99
5) Bromomethane	1.849	94	95220	9.317	ug/l	95
6) Chloroethane	1.923	64	105662	8.021	ug/l	99
7) Trichlorofluoromethane	2.129	101	209914	8.470	ug/l	100
8) 1,1,2-Trichloro-1,2,2-...	2.570	101	136239	9.685	ug/l	99
9) 1,1-Dichloroethene	2.570	96	135994	9.488	ug/l	99
10) Iodomethane	2.711	142	206755	9.176	ug/l	99
11) Allyl Chloride	2.914	41	206293	10.019	ug/l	98
12) Acrylonitrile	3.303	53	159992	48.397	ug/l	98
13) Acetone	2.621	43	117956	46.402	ug/l	100
14) Carbon Disulfide	2.785	76	402996	8.041	ug/l	100
15) Methylene Chloride	3.033	84	156673	8.848	ug/l	99
16) trans-1,2-Dichloroethene	3.341	96	144812	8.852	ug/l	99
17) 1,1-Dichloroethane	3.853	63	282308	9.156	ug/l	99
18) 2-Butanone	4.692	43	186600	46.124	ug/l	99
19) Cyclohexane	5.377	56	233963m	9.443	ug/l	
20) Methylcyclohexane	6.753	83	249729	10.164	ug/l	99
21) 2,2-Dichloropropane	4.650	77	229157	9.526	ug/l	99
22) cis-1,2-Dichloroethene	4.650	96	176178	9.968	ug/l	100
23) Diethyl Ether	2.367	59	102821	8.360	ug/l	99
24) tert-Butyl Alcohol	3.193	59	45647	31.908	ug/l #	88
25) Methyl tert-Butyl Ether	3.348	73	345681	9.657	ug/l	100
26) Bromochloromethane	4.959	128	73733	9.544	ug/l	99
27) Chloroform	5.074	83	289263	9.296	ug/l	99
28) 1,1,1-Trichloroethane	5.303	97	239040	9.483	ug/l	98
29) 1,1-Dichloropropene	5.515	75	196807	8.717	ug/l	99
30) Carbon Tetrachloride	5.512	117	201284	9.311	ug/l	98
31) Isopropyl Ether	3.975	45	463697	10.534	ug/l #	1
34) Propionitrile	4.762	54	122058	100.030	ug/l	98
35) Benzene	5.759	78	645948	9.305	ug/l	99
36) 1,2-Dichloroethane	5.782	62	170414	8.506	ug/l	99
37) Trichloroethene	6.531	130	146452	8.871	ug/l	98
38) 1,2-Dichloropropane	6.778	63	159772	8.794	ug/l	97
39) Methacrylonitrile	4.962	41	46732	10.277	ug/l	96
40) Methyl acrylate	4.836	55	82118	9.798	ug/l #	93
41) Tetrahydrofuran	5.039	42	123058	46.529	ug/l	98
42) 1-Chlorobutane	5.444	56	300232	9.720	ug/l	99
43) Dibromomethane	6.907	93	83308	9.055	ug/l	97
44) Bromodichloromethane	7.094	83	215139	10.047	ug/l	99
45) 4-Methyl-2-Pentanone	7.778	43	470573	48.787	ug/l	100
46) t-1,4-Dichloro-2-butene	10.820	75	49406m	10.896	ug/l	

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063227.D
Acq On : 11 Feb 2025 08:50
Operator : MD/SY
Sample : VSTDICV010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 12 03:08:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) Methyl methacrylate	6.949	69	75036	9.683	ug/l	97
48) Ethyl methacrylate	8.322	69	150671	10.355	ug/l	99
49) Toluene	7.958	92	394103	9.872	ug/l	100
50) t-1,3-Dichloropropene	8.200	75	190233	9.703	ug/l	99
51) cis-1,3-Dichloropropene	7.595	75	225683	9.319	ug/l	99
52) 1,1,2-Trichloroethane	8.386	97	112663	9.082	ug/l	97
53) 1,3-Dichloropropane	8.563	76	196173	8.908	ug/l	99
54) 2-Hexanone	8.675	43	318084	48.325	ug/l	99
55) Dibromochloromethane	8.798	129	136481	9.564	ug/l	98
56) 1,2-Dibromoethane	8.913	107	104935	9.020	ug/l	99
58) Tetrachloroethene	8.544	164	131195	9.644	ug/l	98
59) Chlorobenzene	9.438	112	411460	9.767	ug/l	100
60) 1,1,1,2-Tetrachloroethane	9.521	131	138560	9.150	ug/l	98
61) Pentachloroethane	11.415	117	127090	9.395	ug/l	98
62) Hexachloroethane	12.463	117	117375	9.808	ug/l	99
63) Ethyl Benzene	9.560	91	753103	10.366	ug/l	99
64) m/p-Xylenes	9.682	106	574738	21.178	ug/l	98
65) o-Xylene	10.090	106	275873	10.384	ug/l	99
66) Styrene	10.103	104	457882	10.830	ug/l	100
67) Bromoform	10.280	173	77802	9.606	ug/l	99
69) Isopropylbenzene	10.473	105	734939	11.767	ug/l	100
70) 1,1,2,2-Tetrachloroethane	10.769	83	142854	8.545	ug/l	99
71) 1,2,3-Trichloropropane	10.814	75	106046m	8.443	ug/l	
72) Bromobenzene	10.772	156	167353	9.945	ug/l	99
73) n-propylbenzene	10.894	120	192125	10.744	ug/l	97
74) 2-Chlorotoluene	10.974	126	172282	10.454	ug/l	99
75) 1,3,5-Trimethylbenzene	11.077	105	628091	10.853	ug/l	100
76) 4-Chlorotoluene	11.087	126	175303	10.373	ug/l	99
77) tert-Butylbenzene	11.409	119	606100	10.355	ug/l	99
78) 1,2,4-Trimethylbenzene	11.457	105	617064	10.746	ug/l	100
79) sec-Butylbenzene	11.634	105	809829	10.867	ug/l	100
80) Nitrobenzene	13.212	77	3697m	10.731	ug/l	
81) p-Isopropyltoluene	11.781	119	651414	11.076	ug/l	100
82) 1,3-Dichlorobenzene	11.736	146	326539	10.004	ug/l	99
83) 1,4-Dichlorobenzene	11.826	146	323813	10.142	ug/l	99
84) n-Butylbenzene	12.199	91	606308	11.497	ug/l	99
85) 1,2-Dichlorobenzene	12.203	146	304825	9.718	ug/l	99
86) 1,2-Dibromo-3-Chloropr...	12.984	75	20970	8.936	ug/l	97
87) 1,2,4-Trichlorobenzene	13.830	180	184275	12.045	ug/l	99
88) Hexachlorobutadiene	14.010	225	107826	9.862	ug/l	100
89) Naphthalene	14.077	128	270551	8.568	ug/l	99
90) 1,2,3-Trichlorobenzene	14.318	180	156676	10.466	ug/l	97

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

Quantitation Report (QT Reviewed)

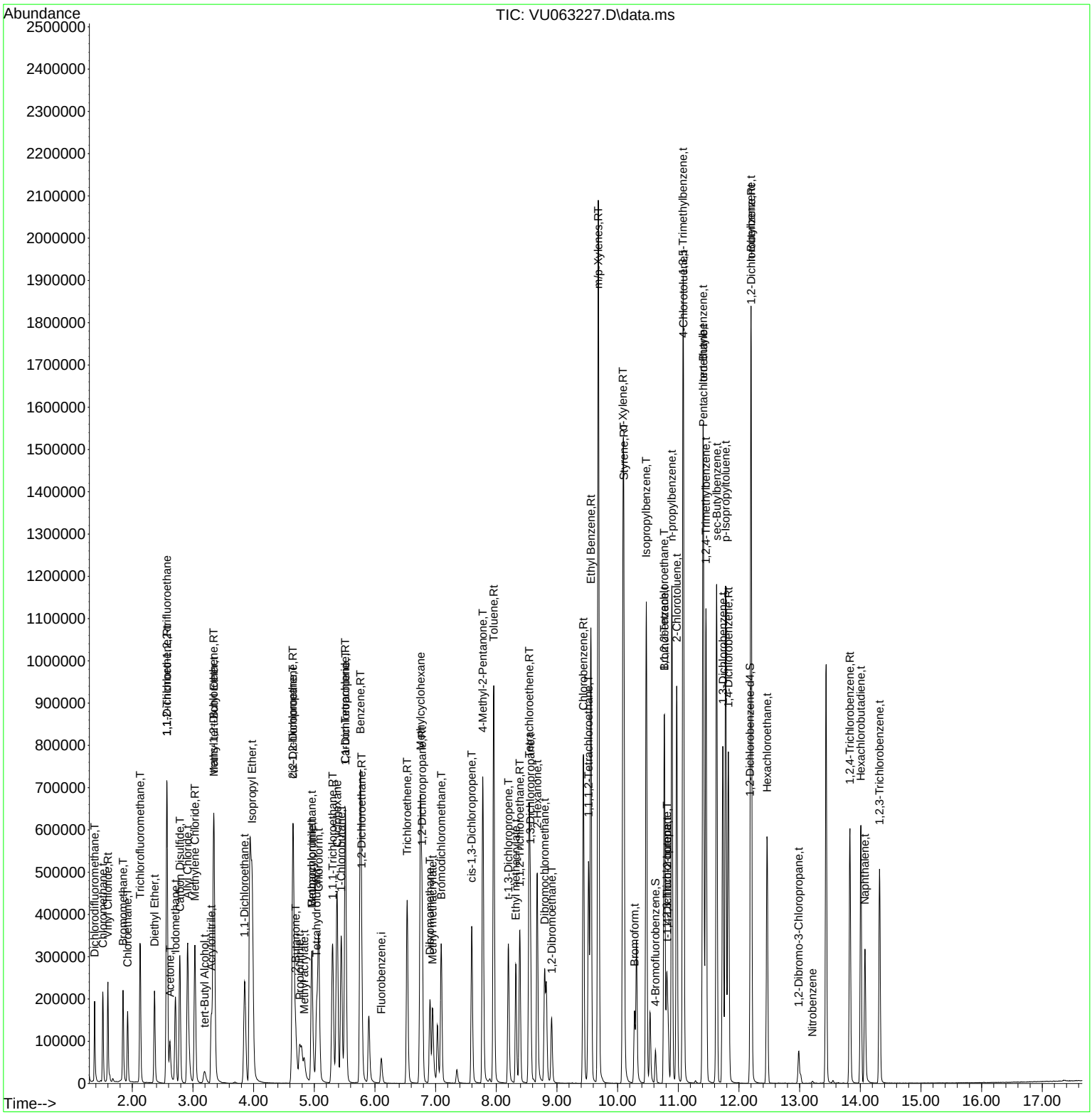
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063227.D
Acq On : 11 Feb 2025 08:50
Operator : MD/SY
Sample : VSTDICV010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

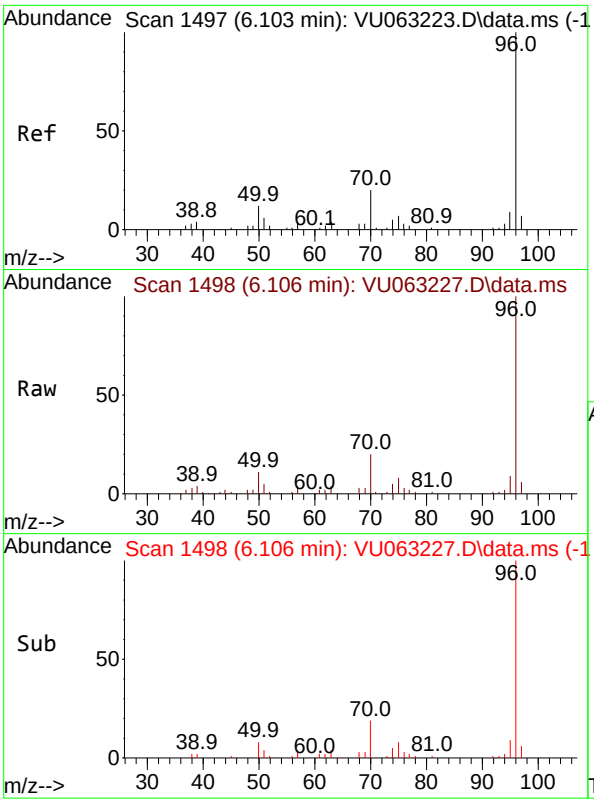
Quant Time: Feb 12 03:08:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

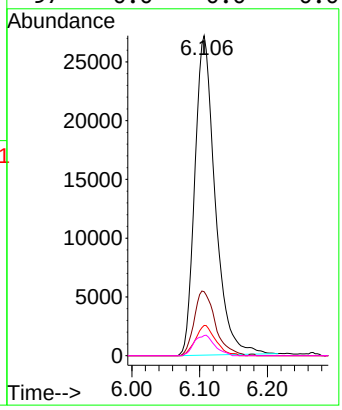




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.106 min Scan# 14
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 96 Resp: 5649

Ion	Ratio	Lower	Upper
96	100		
70	21.0	15.6	23.4
95	9.4	7.3	10.9
97	0.0	0.0	0.0



Instrument :
MSVOA_U
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Manual Integrations
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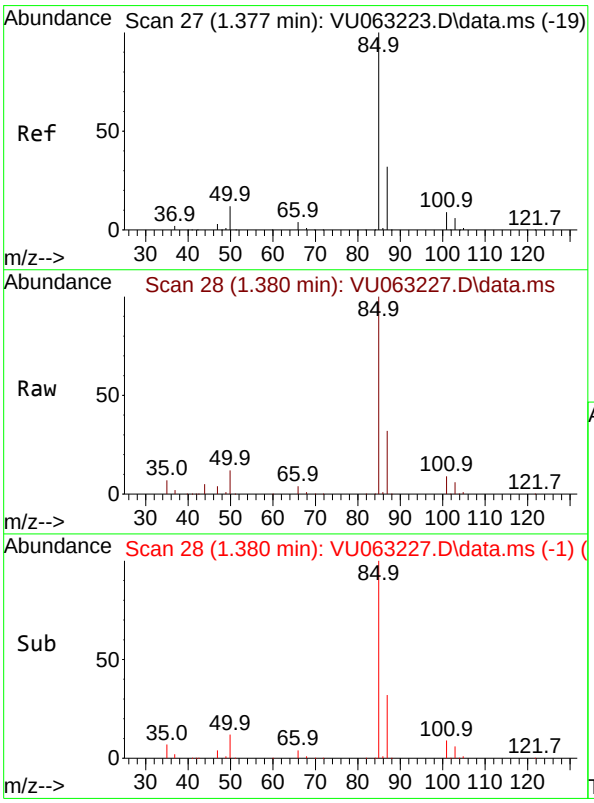
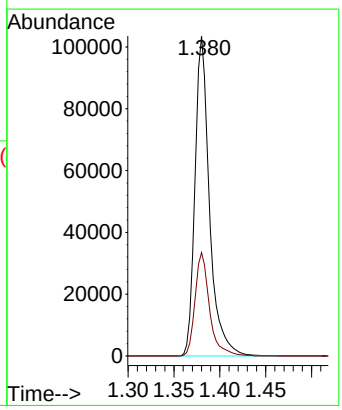
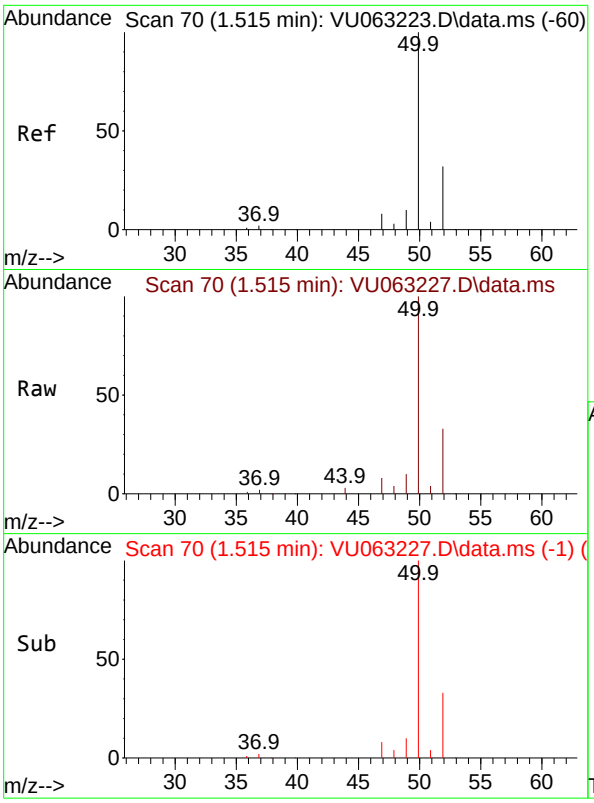


#2
Dichlorodifluoromethane
Concen: 6.184 ug/l
RT: 1.380 min Scan# 28
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 85 Resp: 113504

Ion	Ratio	Lower	Upper
85	100		
87	32.3	16.0	48.0

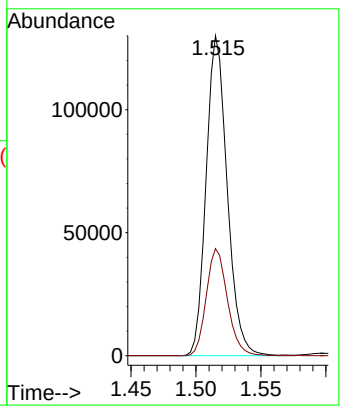




#3
Chloromethane
Concen: 6.937 ug/l
RT: 1.515 min Scan# 7
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 50 Resp: 14664

Ion	Ratio	Lower	Upper
50	100		
52	33.5	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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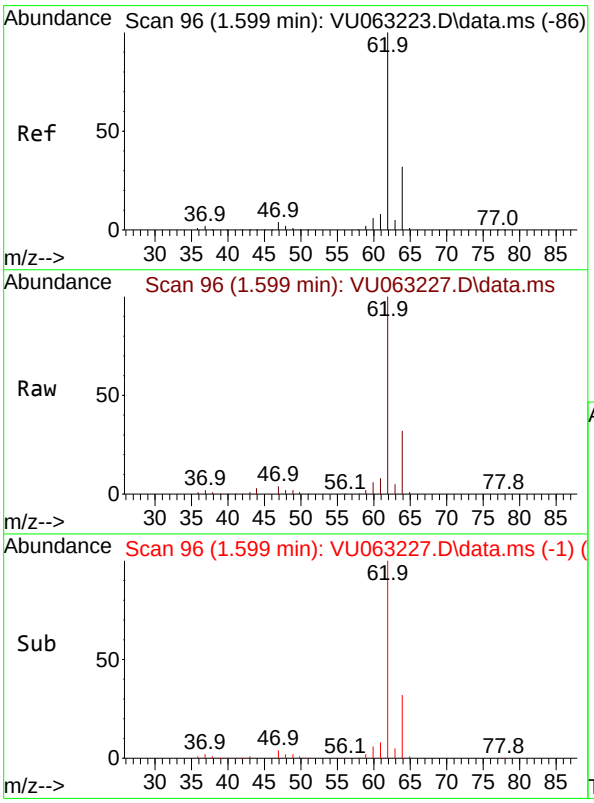
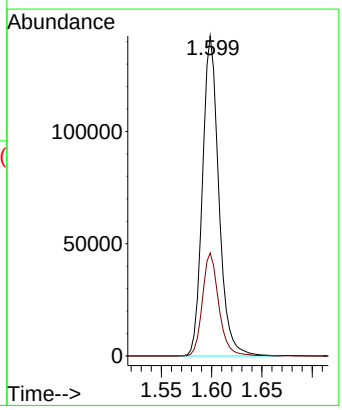
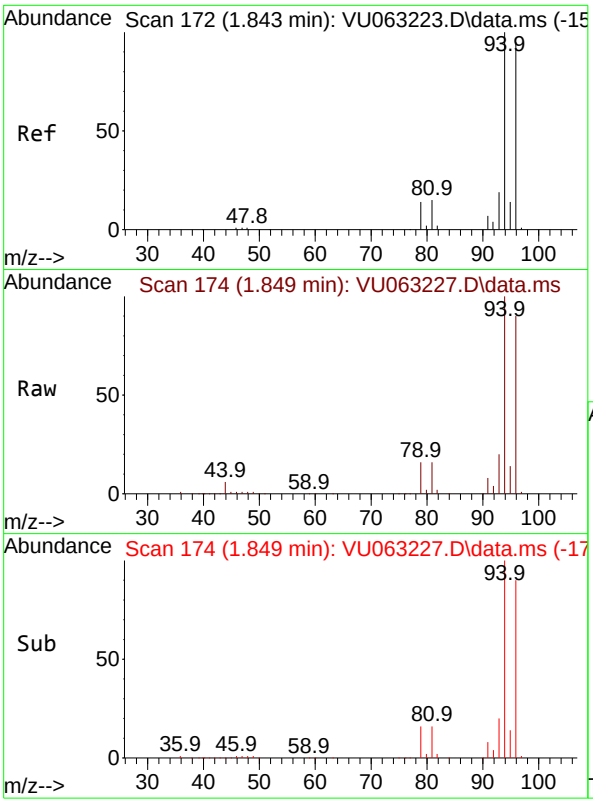


#4
Vinyl Chloride
Concen: 7.705 ug/l
RT: 1.599 min Scan# 96
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 62 Resp: 161150

Ion	Ratio	Lower	Upper
62	100		
64	32.2	25.4	38.0

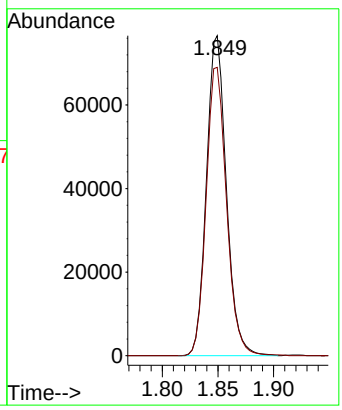




#5
Bromomethane
Concen: 9.317 ug/l
RT: 1.849 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 94 Resp: 9522

Ion	Ratio	Lower	Upper
94	100		
96	90.1	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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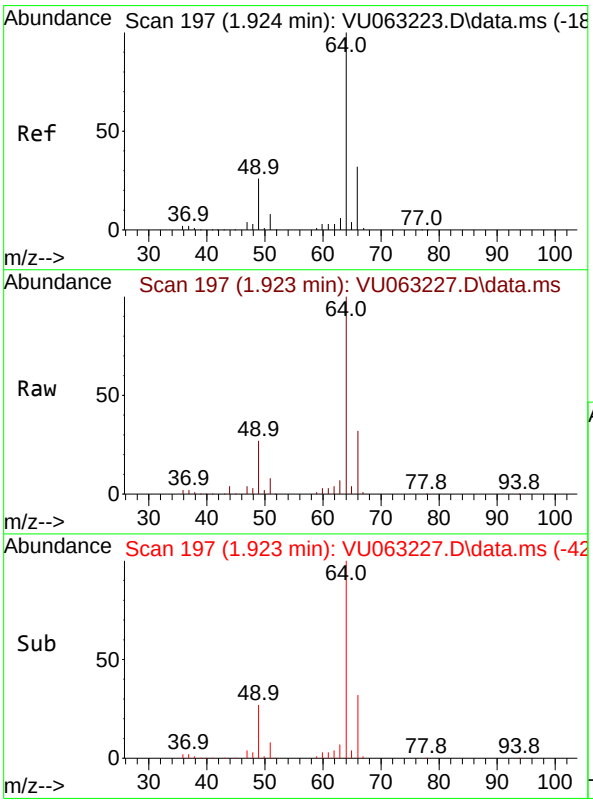
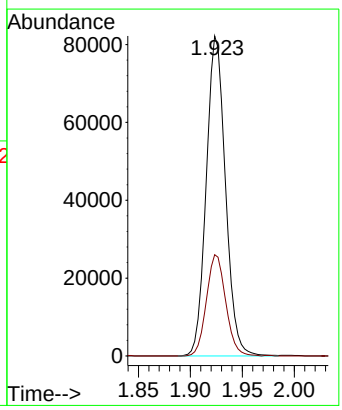
Supervised By :Mahesh Dadoda 02/12/2025

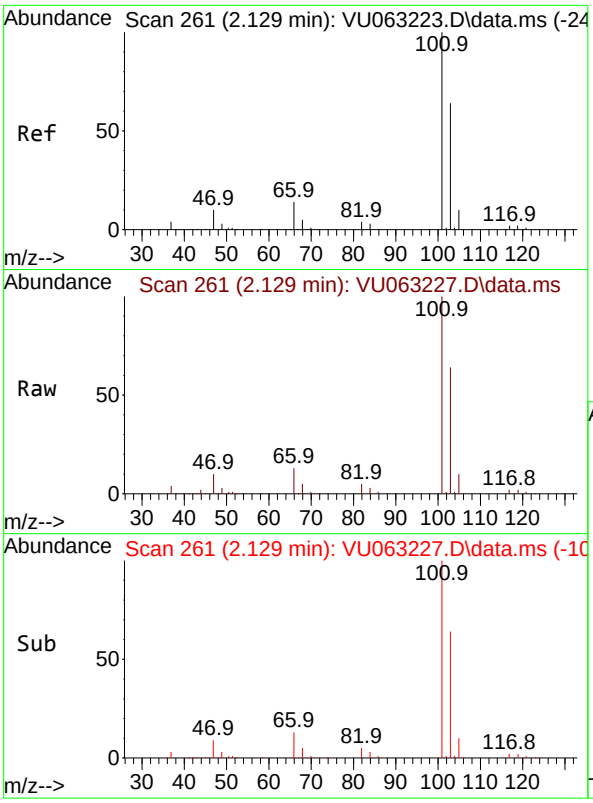


#6
Chloroethane
Concen: 8.021 ug/l
RT: 1.923 min Scan# 197
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 64 Resp: 105662

Ion	Ratio	Lower	Upper
64	100		
66	31.7	25.8	38.8





#7
Trichlorofluoromethane
Concen: 8.470 ug/l
RT: 2.129 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:101 Resp: 20991

Ion	Ratio	Lower	Upper
101	100		
103	64.0	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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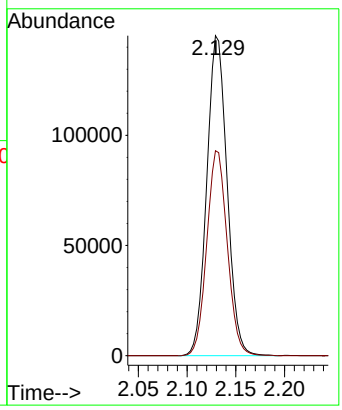
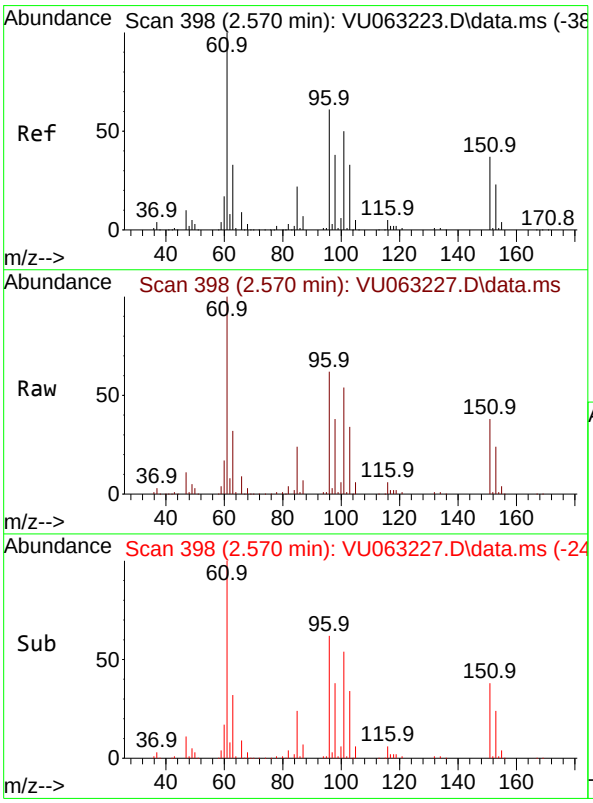
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

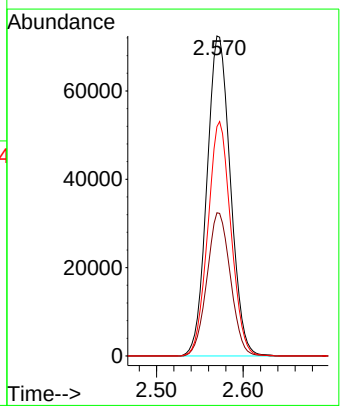


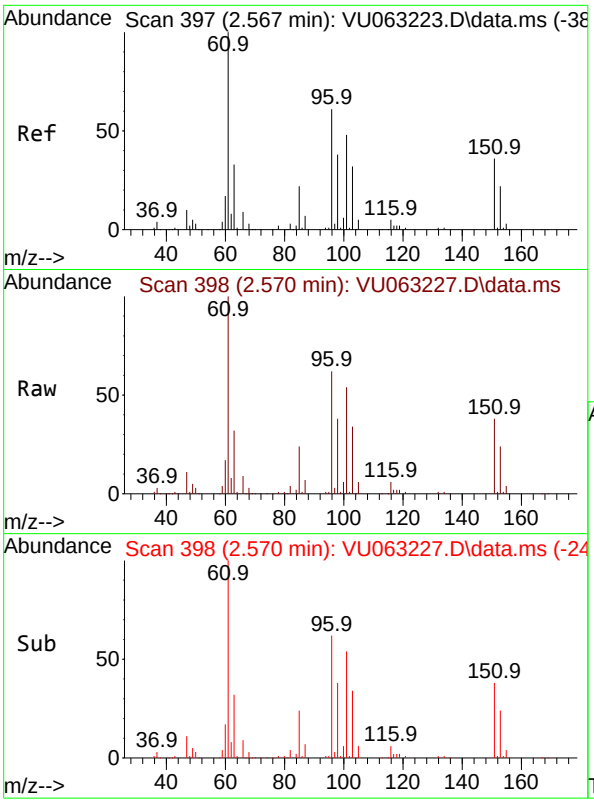


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 9.685 ug/l
RT: 2.570 min Scan# 398
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:101 Resp: 136239

Ion	Ratio	Lower	Upper
101	100		
85	44.7	35.4	53.0
151	72.2	58.5	87.7

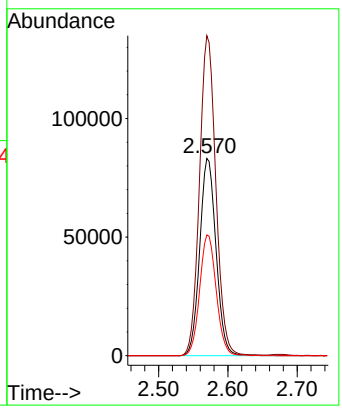




#9
1,1-Dichloroethene
Concen: 9.488 ug/l
RT: 2.570 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 96 Resp: 13599

Ion	Ratio	Lower	Upper
96	100		
61	162.2	0.0	492.9
98	61.2	0.0	124.0



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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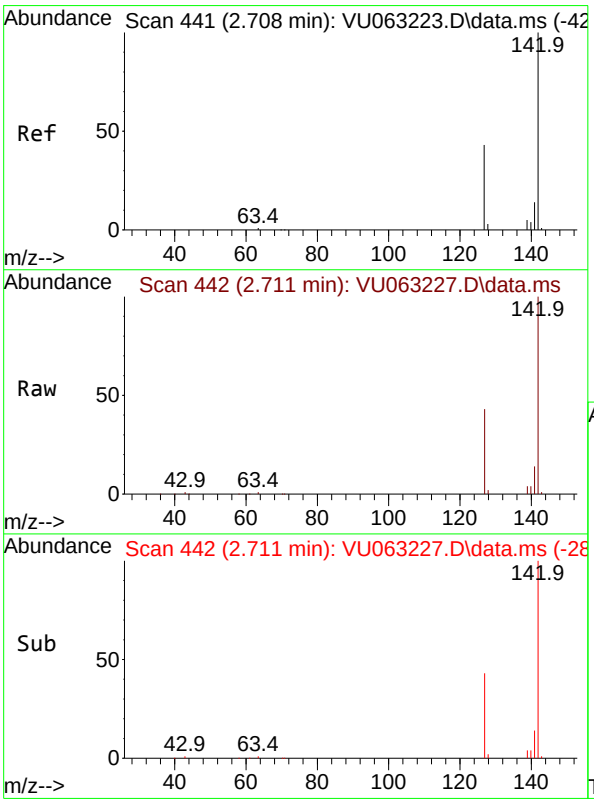
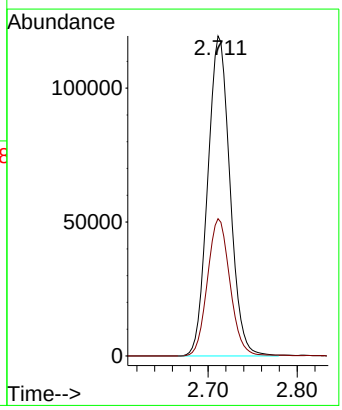
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

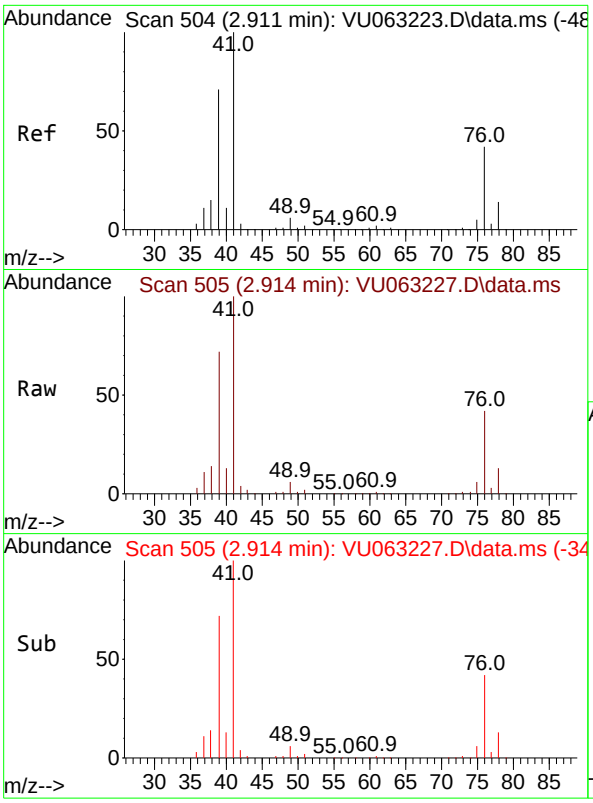


#10
Iodomethane
Concen: 9.176 ug/l
RT: 2.711 min Scan# 442
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:142 Resp: 206755

Ion	Ratio	Lower	Upper
142	100		
127	43.7	34.5	51.7

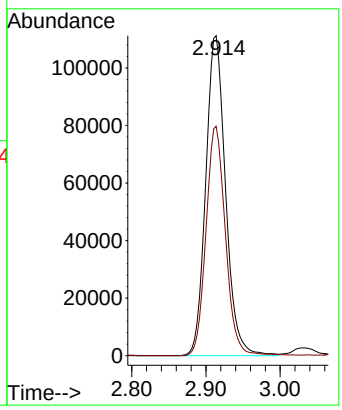




#11
Allyl Chloride
Concen: 10.019 ug/l
RT: 2.914 min Scan# 5
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 41 Resp: 20629

Ion	Ratio	Lower	Upper
41	100		
39	70.4	57.9	86.9



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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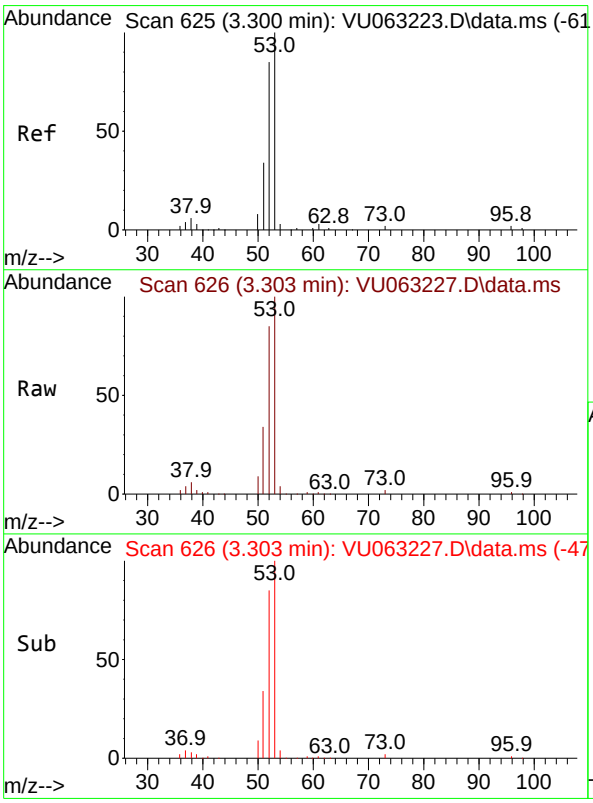
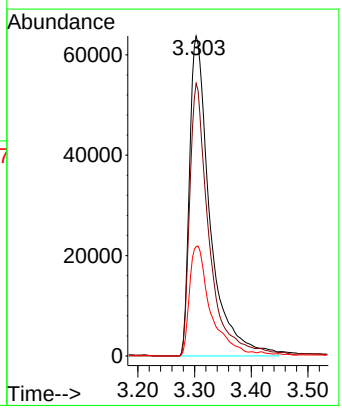
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

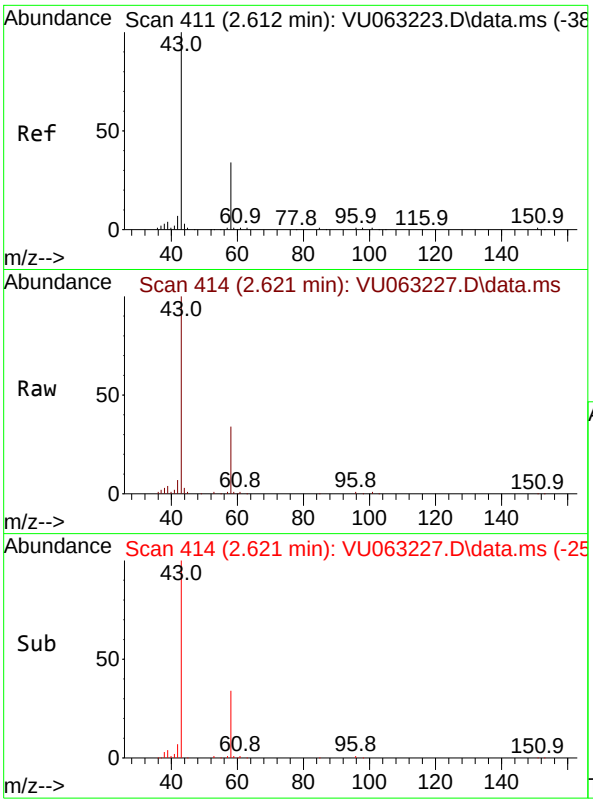


#12
Acrylonitrile
Concen: 48.397 ug/l
RT: 3.303 min Scan# 626
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 53 Resp: 159992

Ion	Ratio	Lower	Upper
53	100		
52	80.5	64.2	96.2
51	35.2	30.8	46.2

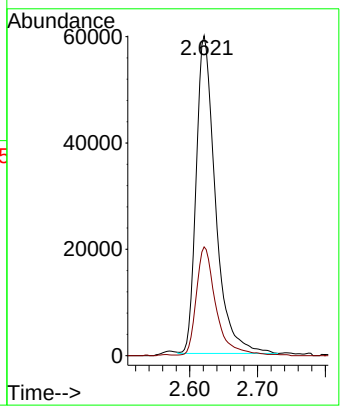




#13
Acetone
Concen: 46.402 ug/l
RT: 2.621 min Scan# 4
Delta R.T. 0.009 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 43 Resp: 11795

Ion	Ratio	Lower	Upper
43	100		
58	34.1	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
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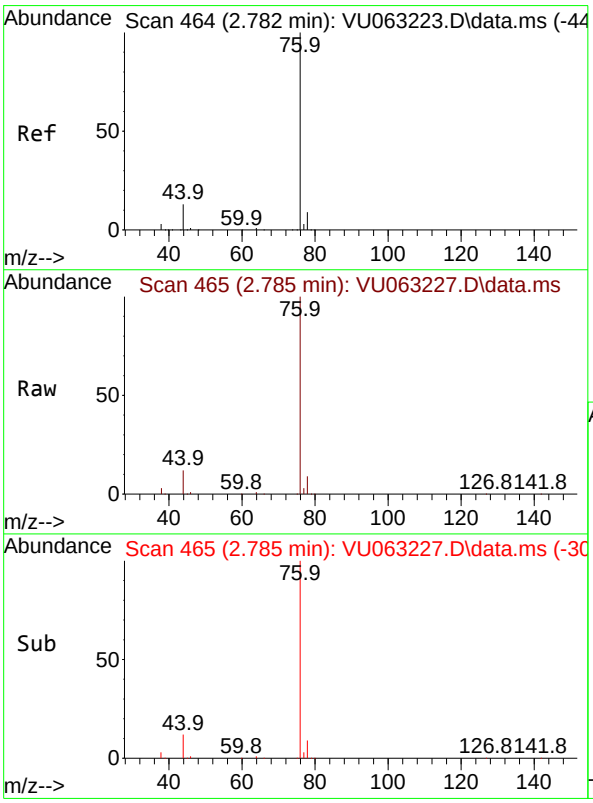
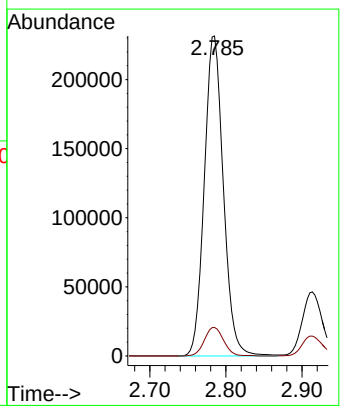
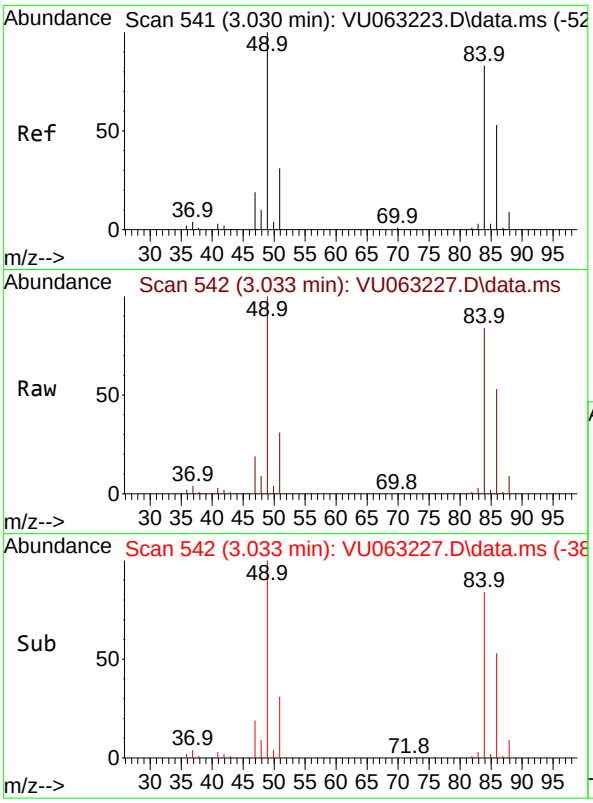


#14
Carbon Disulfide
Concen: 8.041 ug/l
RT: 2.785 min Scan# 465
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 76 Resp: 402996

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.2	10.8

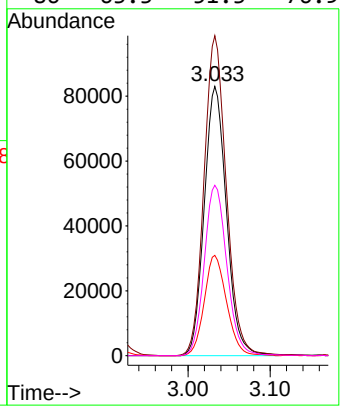




#15
Methylene Chloride
Concen: 8.848 ug/l
RT: 3.033 min Scan# 54
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 84 Resp: 15667

Ion	Ratio	Lower	Upper
84	100		
49	118.7	96.4	144.6
51	37.3	0.0	74.8
86	63.3	51.3	76.9



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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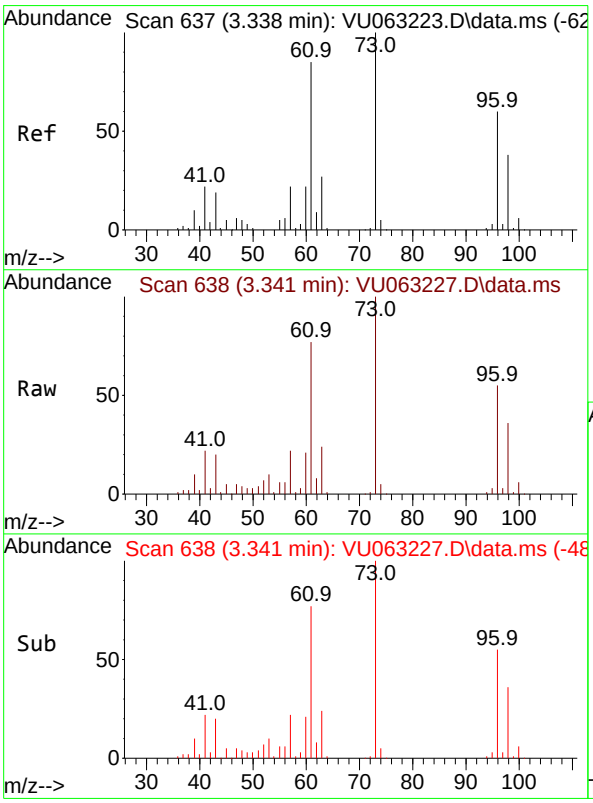
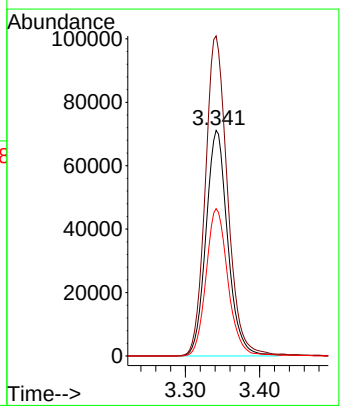
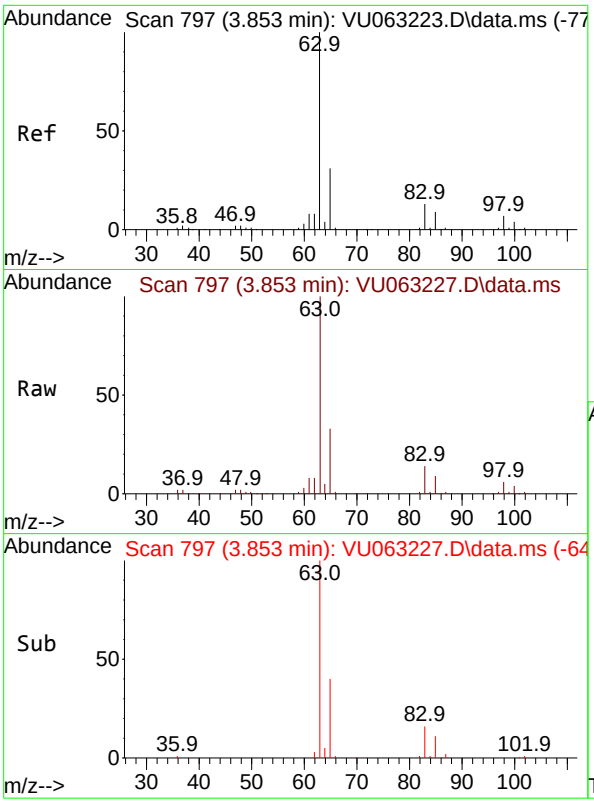


#16
trans-1,2-Dichloroethene
Concen: 8.852 ug/l
RT: 3.341 min Scan# 638
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 96 Resp: 144812

Ion	Ratio	Lower	Upper
96	100		
61	141.8	113.4	170.2
98	65.3	51.2	76.8

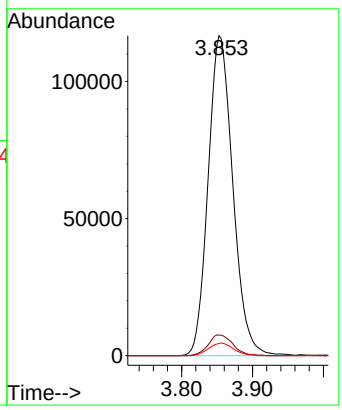




#17
1,1-Dichloroethane
Concen: 9.156 ug/l
RT: 3.853 min Scan# 7
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 63 Resp: 28230

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	3.8	2.1	6.2



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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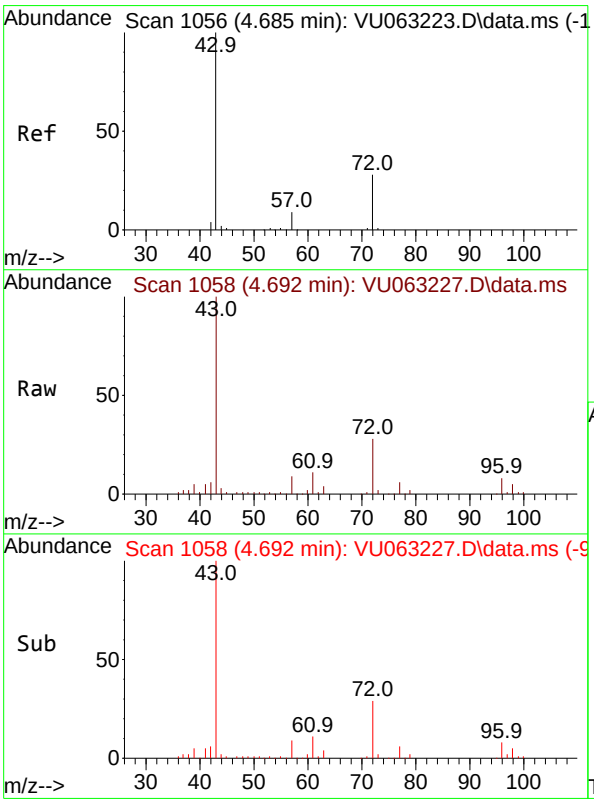
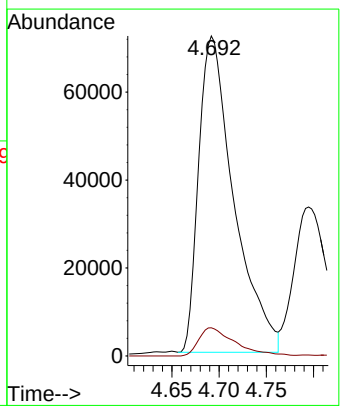
Supervised By :Mahesh Dadoda 02/12/2025

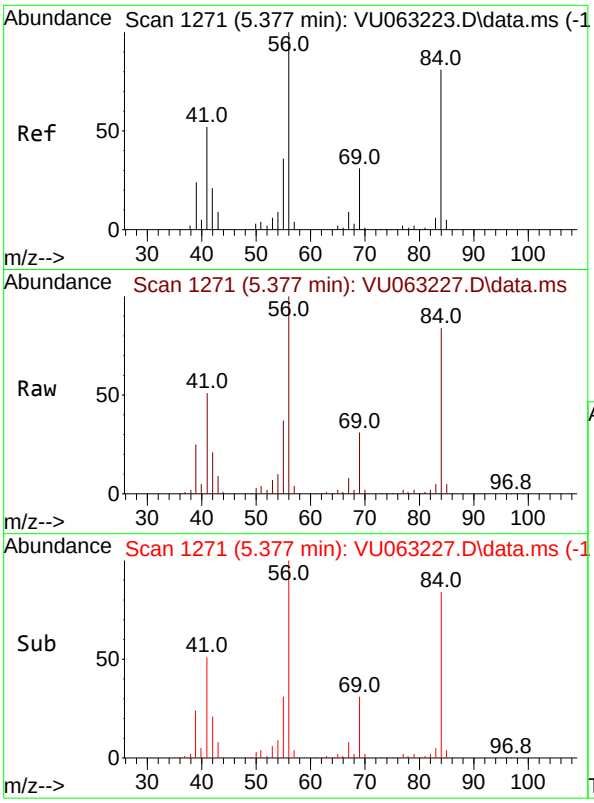


#18
2-Butanone
Concen: 46.124 ug/l
RT: 4.692 min Scan# 1058
Delta R.T. 0.006 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 43 Resp: 186600

Ion	Ratio	Lower	Upper
43	100		
57	8.9	0.0	17.0

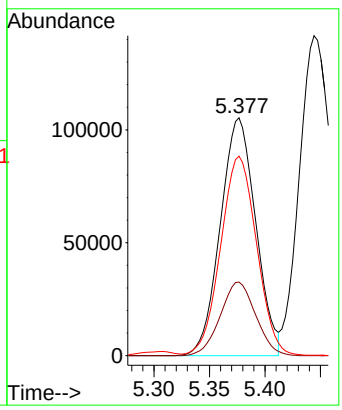




#19
Cyclohexane
Concen: 9.443 ug/l m
RT: 5.377 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 56 Resp: 23396

Ion	Ratio	Lower	Upper
56	100		
69	30.9	24.5	36.7
84	84.2	65.2	97.8



Instrument :
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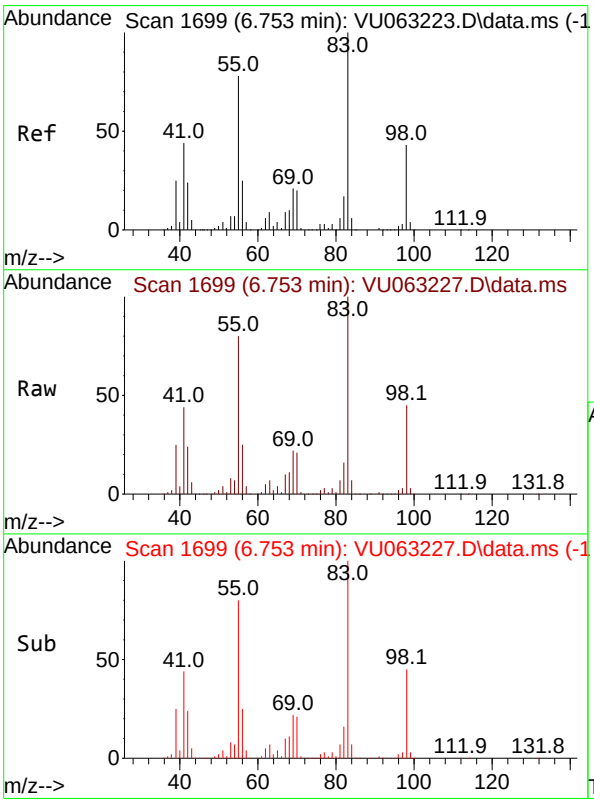
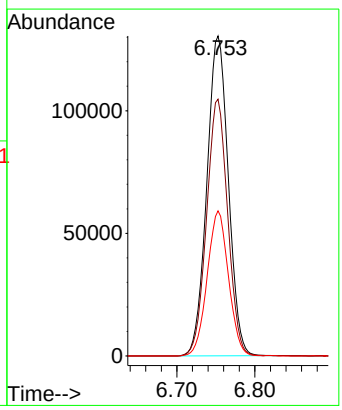
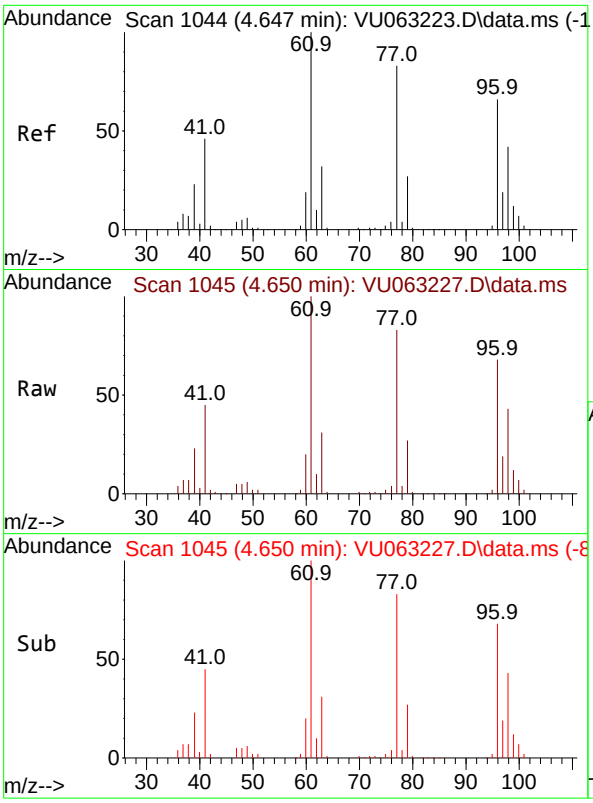


#20
Methylcyclohexane
Concen: 10.164 ug/l
RT: 6.753 min Scan# 1699
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 83 Resp: 249729

Ion	Ratio	Lower	Upper
83	100		
55	79.2	63.1	94.7
98	45.0	35.2	52.8

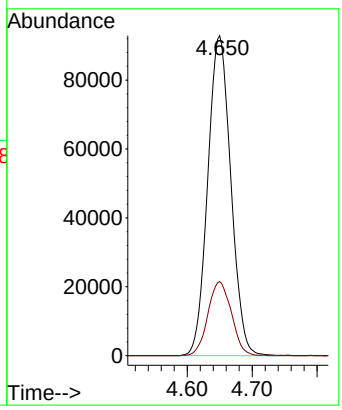




#21
2,2-Dichloropropane
Concen: 9.526 ug/l
RT: 4.650 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 77 Resp: 22915

Ion	Ratio	Lower	Upper
77	100		
97	23.6	18.5	27.7



Instrument :
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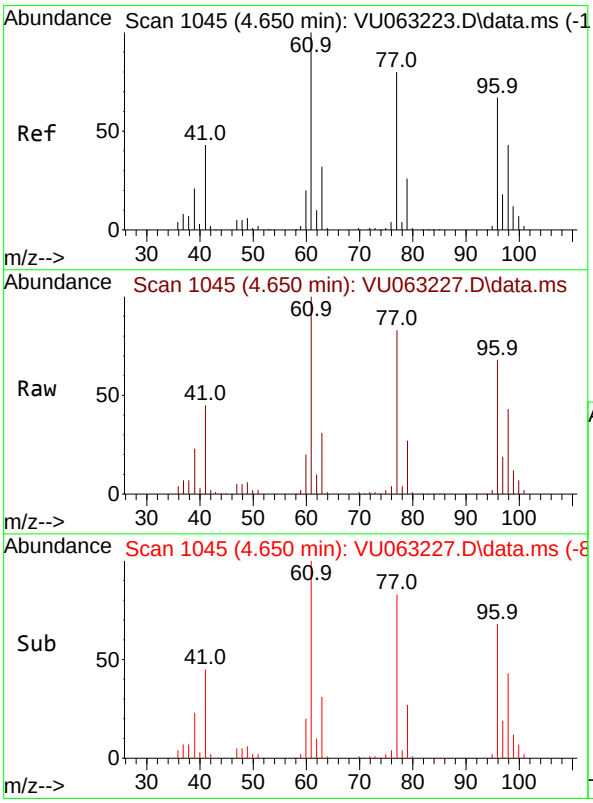
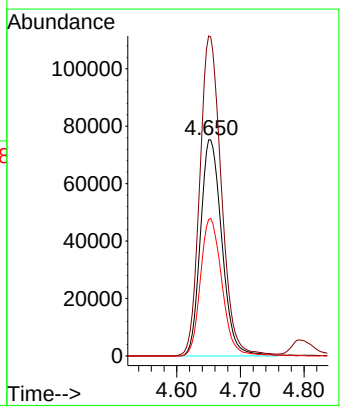
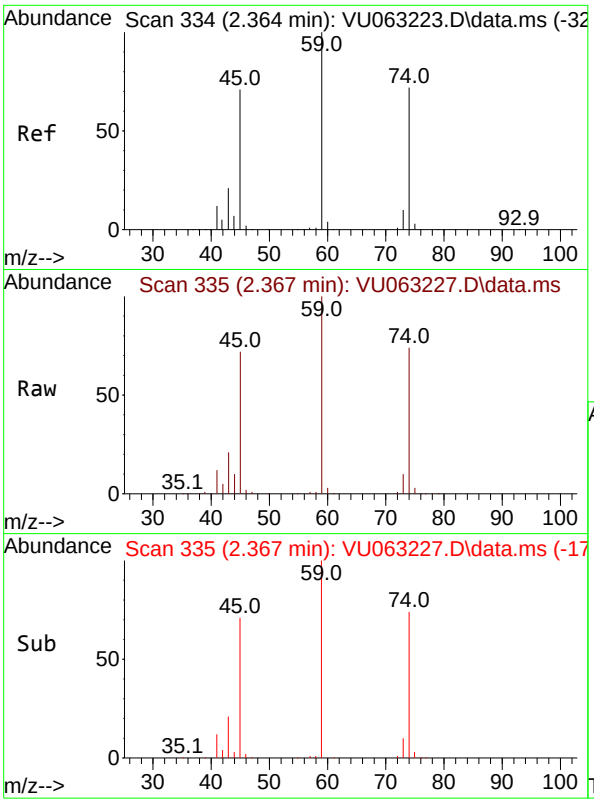


#22
cis-1,2-Dichloroethene
Concen: 9.968 ug/l
RT: 4.650 min Scan# 1045
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 96 Resp: 176178

Ion	Ratio	Lower	Upper
96	100		
61	148.9	0.0	373.3
98	63.6	31.9	95.9

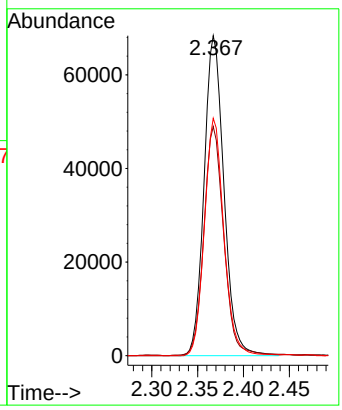




#23
Diethyl Ether
Concen: 8.360 ug/l
RT: 2.367 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 59 Resp: 10282

Ion	Ratio	Lower	Upper
59	100		
45	71.8	57.8	86.6
74	72.6	57.7	86.5



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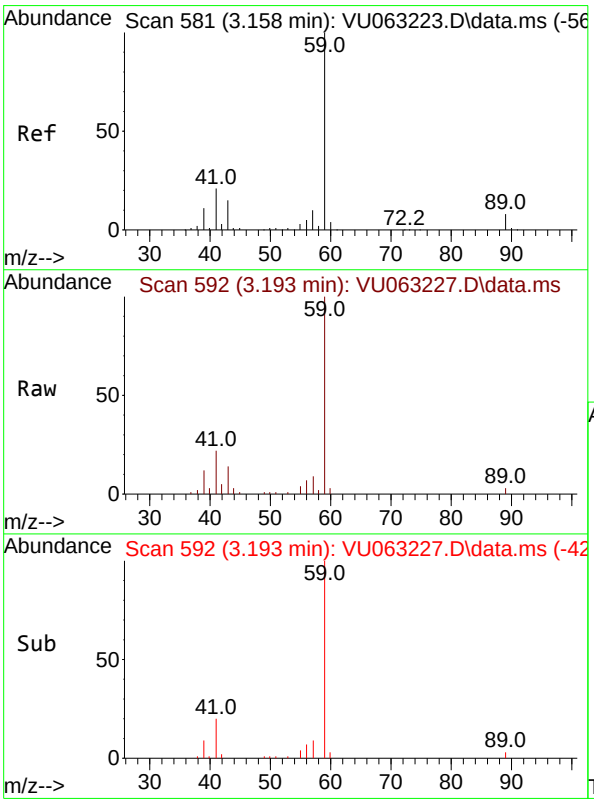
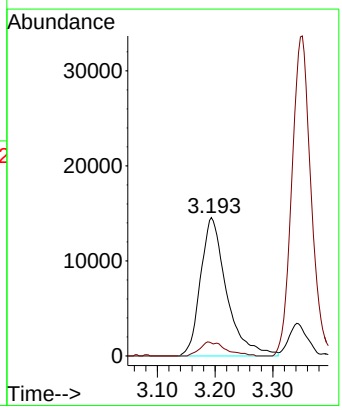
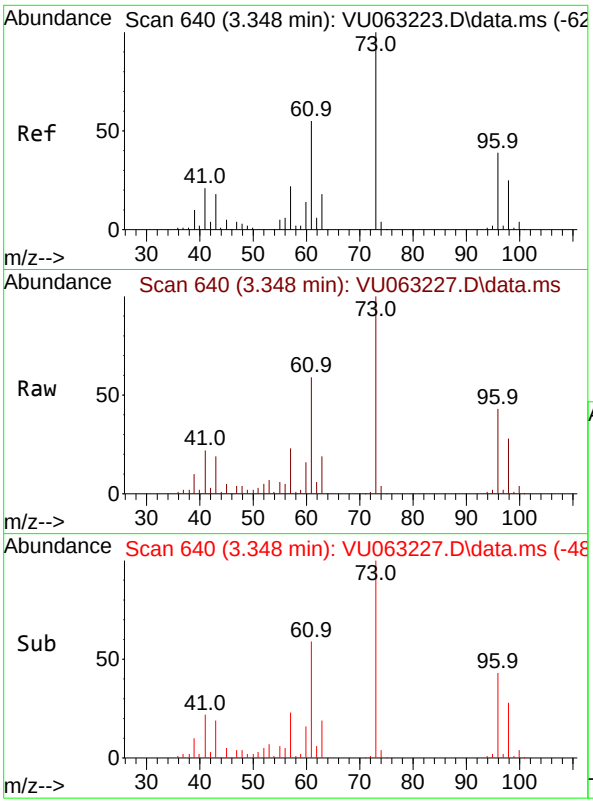


#24
tert-Butyl Alcohol
Concen: 31.908 ug/l
RT: 3.193 min Scan# 592
Delta R.T. 0.035 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 59 Resp: 45647

Ion	Ratio	Lower	Upper
59	100		
57	5.1	7.5	11.3#

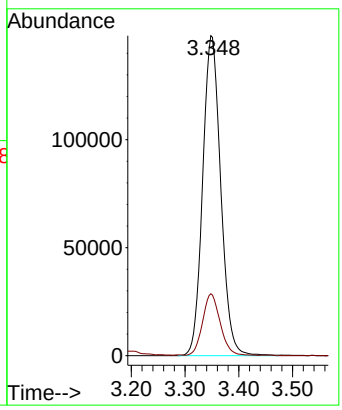




#25
Methyl tert-Butyl Ether
Concen: 9.657 ug/l
RT: 3.348 min Scan# 64
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 73 Resp: 34568

Ion	Ratio	Lower	Upper
73	100		
43	18.7	14.9	22.3



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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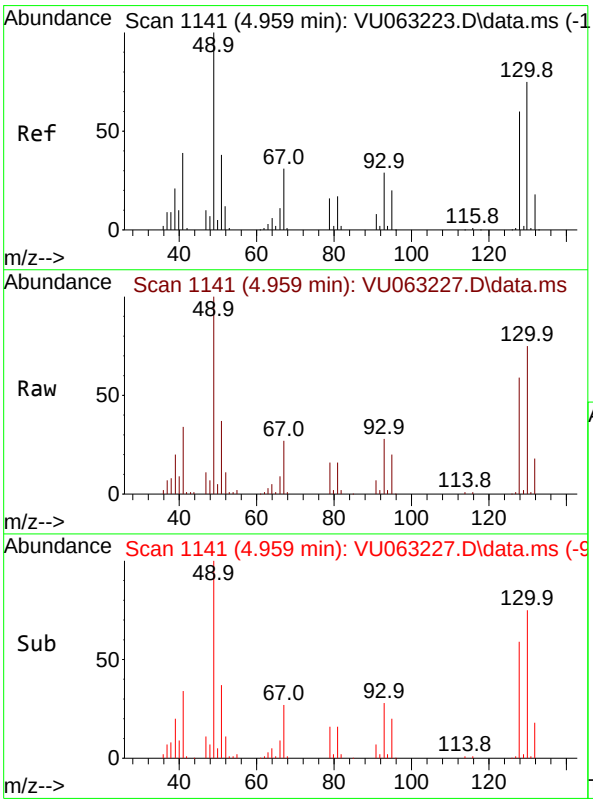
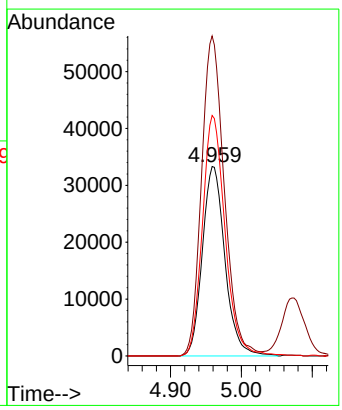
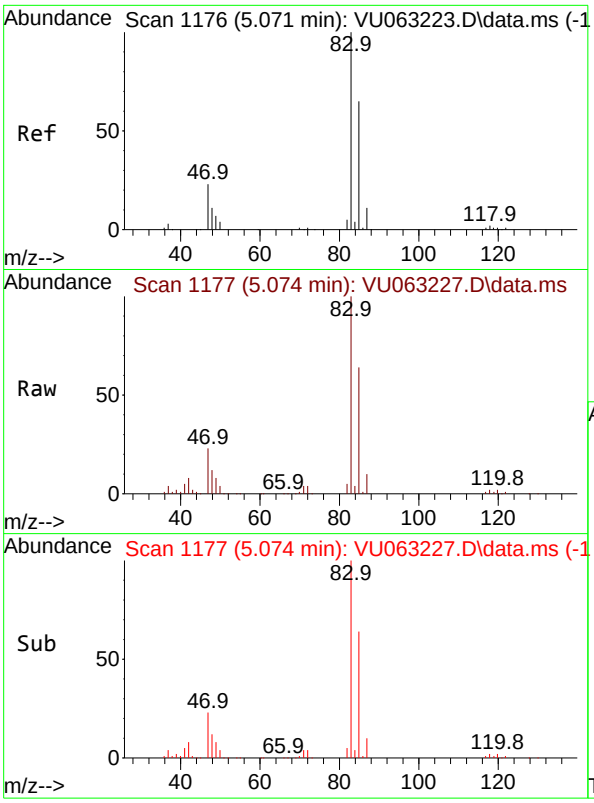


#26
Bromochloromethane
Concen: 9.544 ug/l
RT: 4.959 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:128 Resp: 73733

Ion	Ratio	Lower	Upper
128	100		
49	170.0	0.0	343.4
130	127.6	102.9	154.3





#27
Chloroform
Concen: 9.296 ug/l
RT: 5.074 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 83 Resp: 28926

Ion	Ratio	Lower	Upper
83	100		
85	64.3	0.0	129.8

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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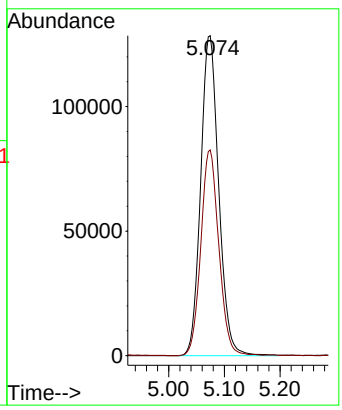
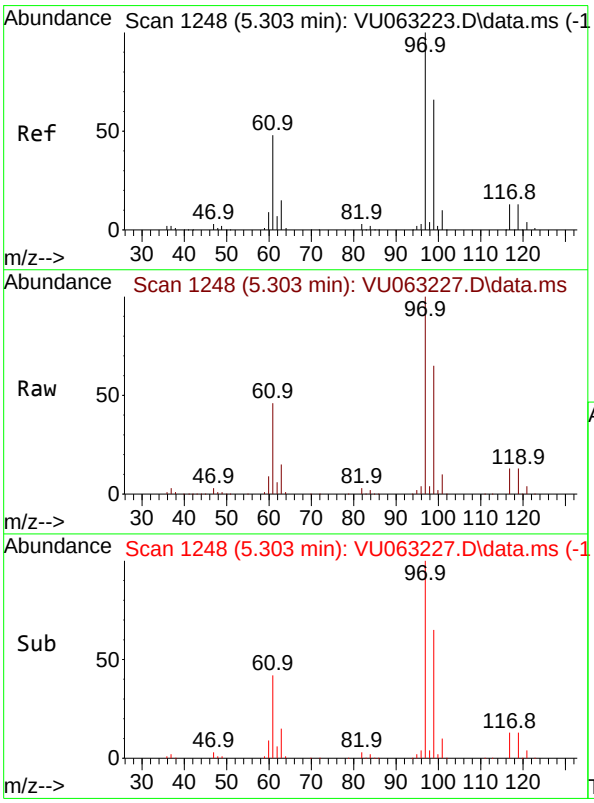
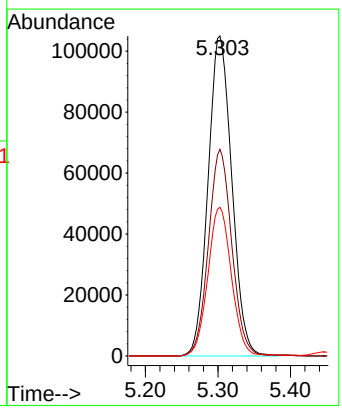


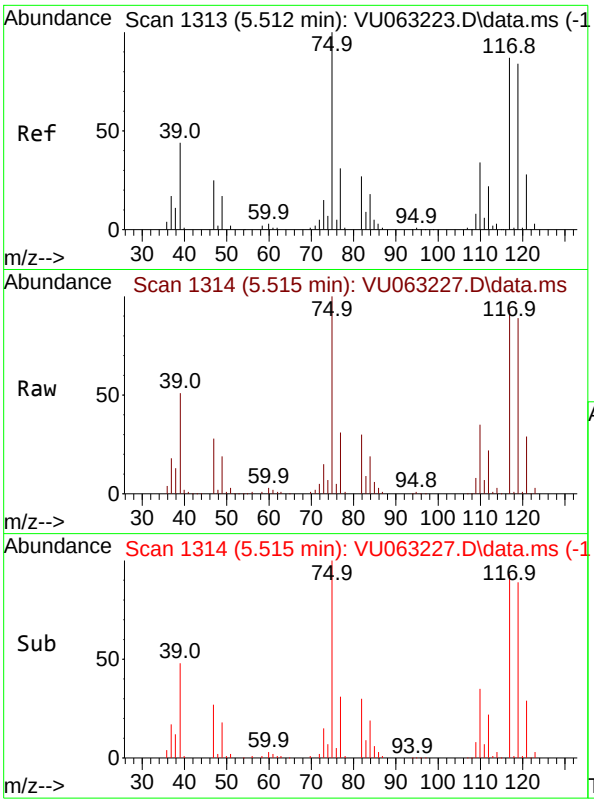


#28
1,1,1-Trichloroethane
Concen: 9.483 ug/l
RT: 5.303 min Scan# 1248
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 97 Resp: 239040

Ion	Ratio	Lower	Upper
97	100		
99	63.5	32.4	97.0
61	46.1	23.8	71.2

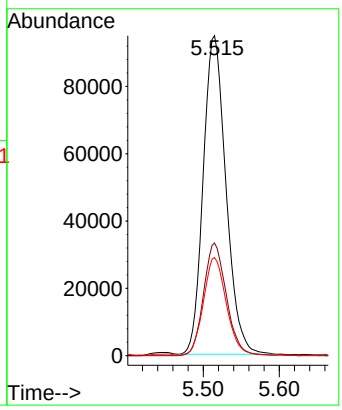




#29
1,1-Dichloropropene
Concen: 8.717 ug/l
RT: 5.515 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 75 Resp: 19680

Ion	Ratio	Lower	Upper
75	100		
110	35.5	17.2	51.5
77	30.9	24.6	37.0



Instrument :
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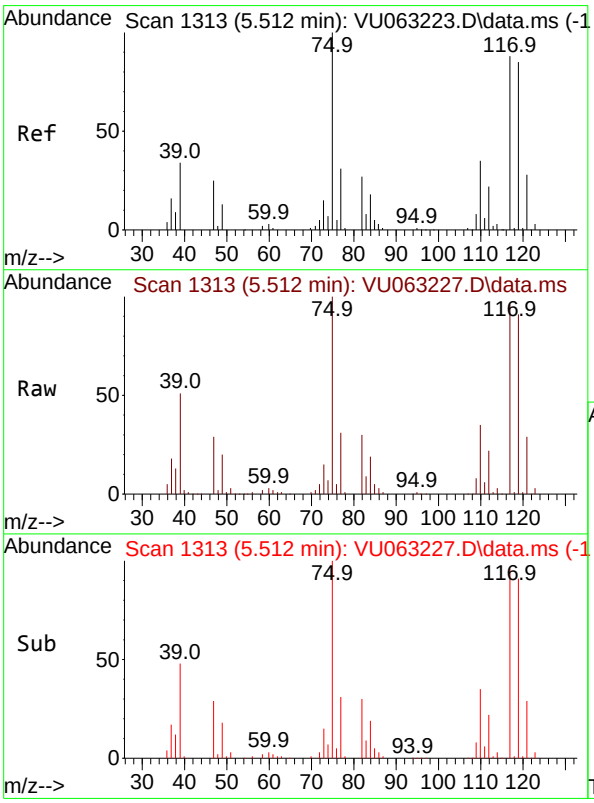
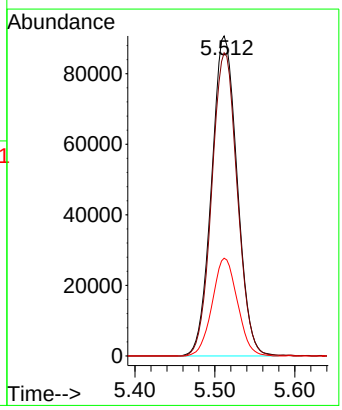
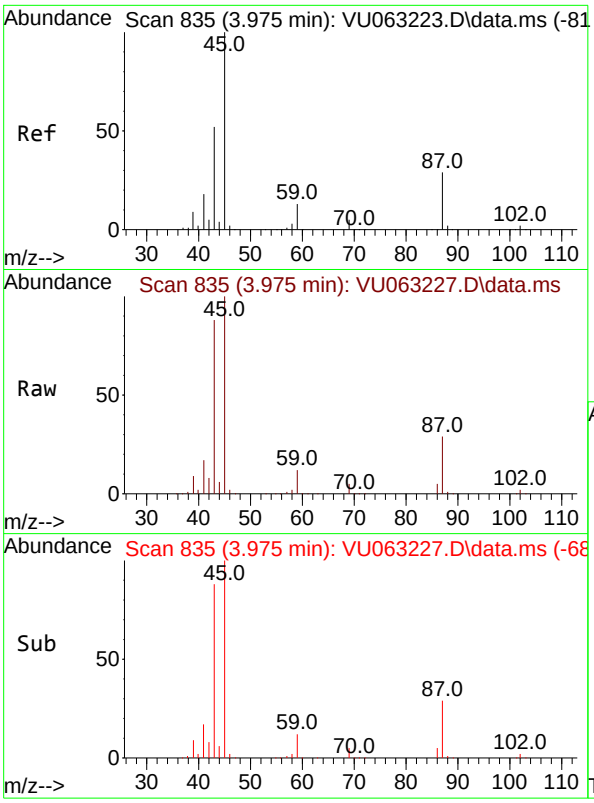


#30
Carbon Tetrachloride
Concen: 9.311 ug/l
RT: 5.512 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:117 Resp: 201284

Ion	Ratio	Lower	Upper
117	100		
119	94.7	76.7	115.1
121	30.5	25.5	38.3

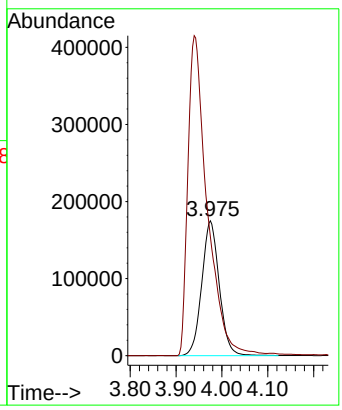




#31
Isopropyl Ether
Concen: 10.534 ug/l
RT: 3.975 min Scan# 8
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 45 Resp: 46369

Ion	Ratio	Lower	Upper
45	100		
43	262.2	25.7	77.1#



Instrument :
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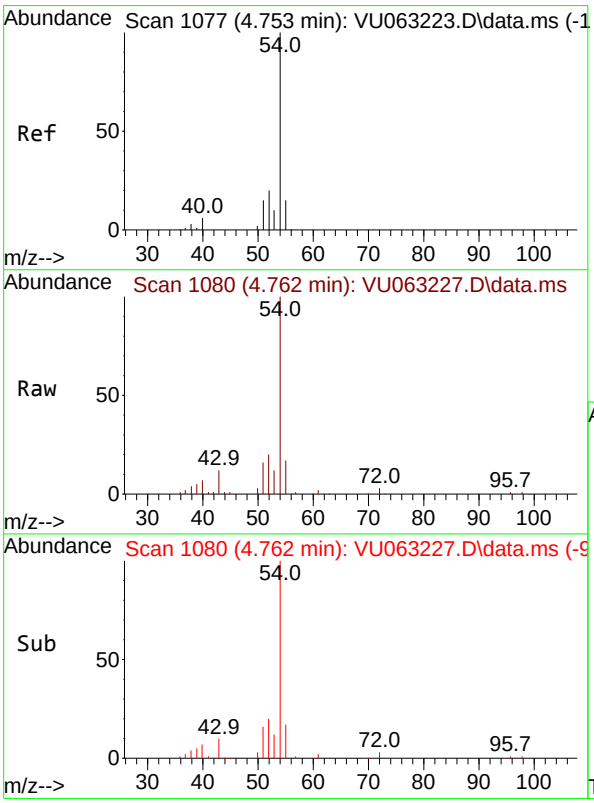
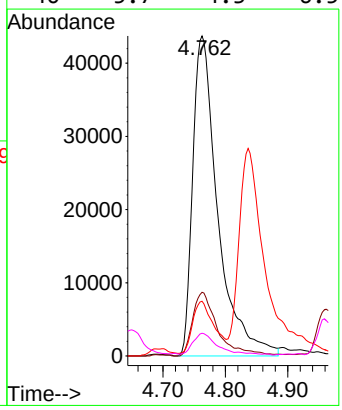
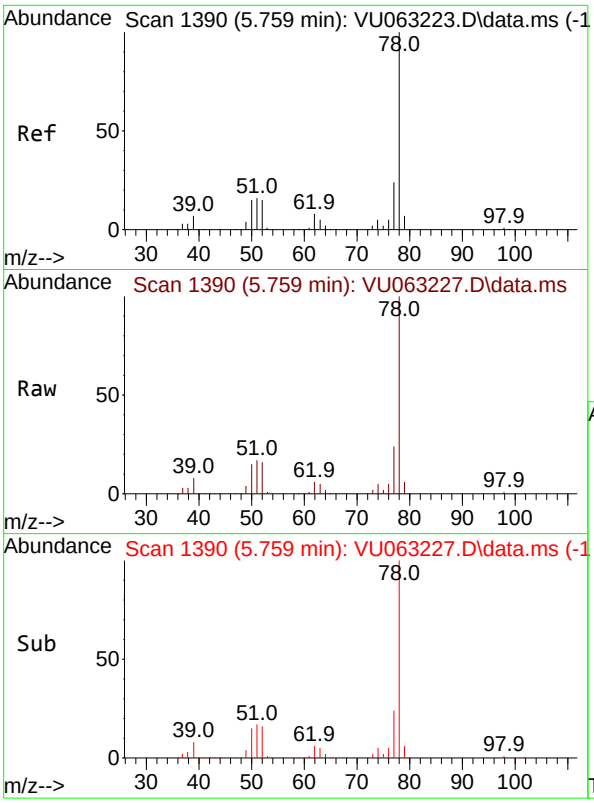


#34
Propionitrile
Concen: 100.030 ug/l
RT: 4.762 min Scan# 1080
Delta R.T. 0.009 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 54 Resp: 122058

Ion	Ratio	Lower	Upper
54	100		
52	19.8	16.3	24.5
55	13.7	11.8	17.6
40	5.7	4.3	6.5

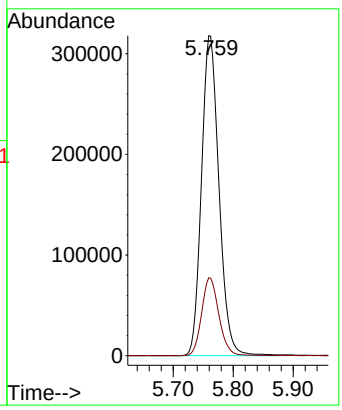




#35
Benzene
Concen: 9.305 ug/l
RT: 5.759 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 78 Resp: 64594

Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.0	28.4



Instrument :
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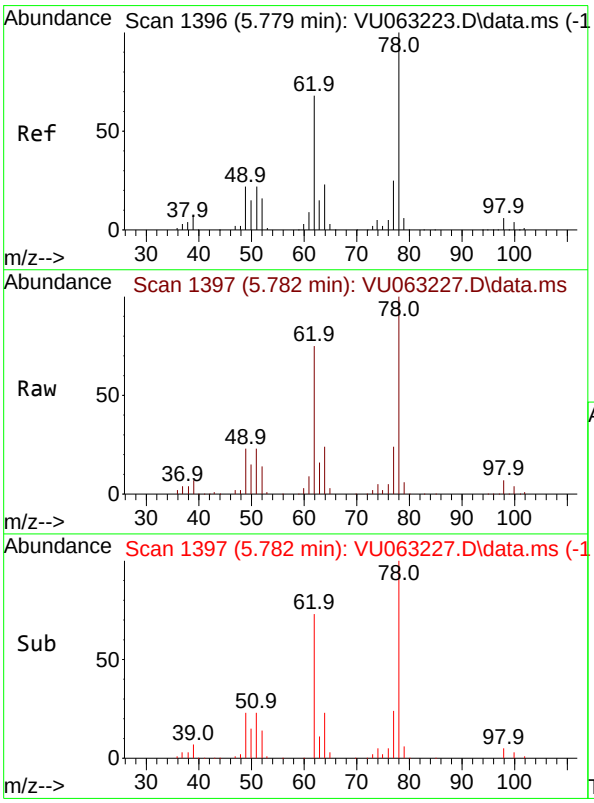
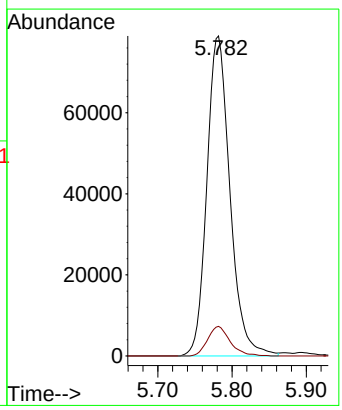
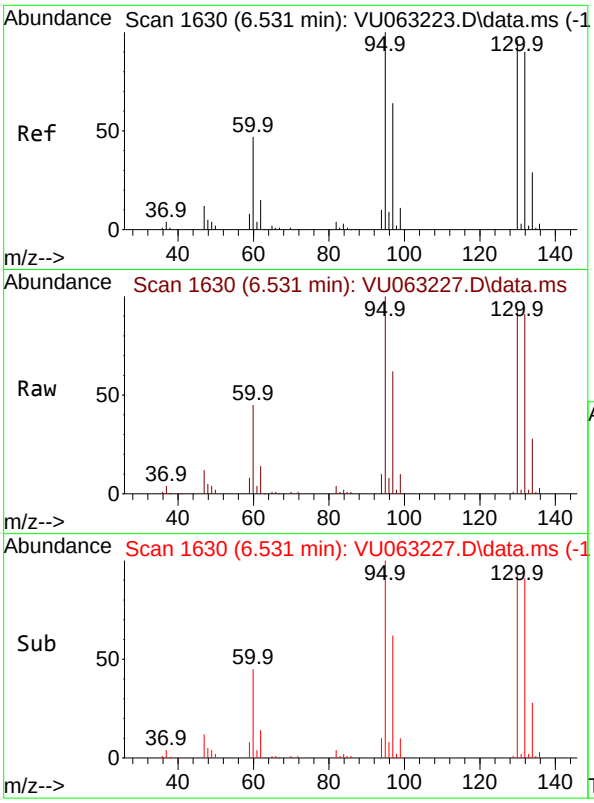


#36
1,2-Dichloroethane
Concen: 8.506 ug/l
RT: 5.782 min Scan# 1397
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 62 Resp: 170414

Ion	Ratio	Lower	Upper
62	100		
98	9.0	6.9	10.3

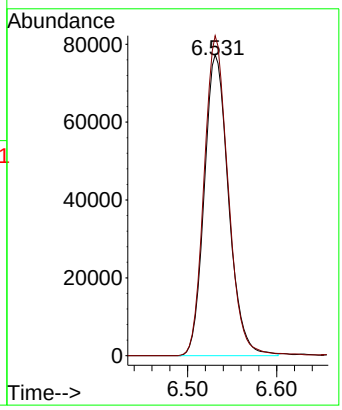




#37
Trichloroethene
Concen: 8.871 ug/l
RT: 6.531 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:130 Resp: 14645

Ion	Ratio	Lower	Upper
130	100		
95	106.3	83.2	124.8



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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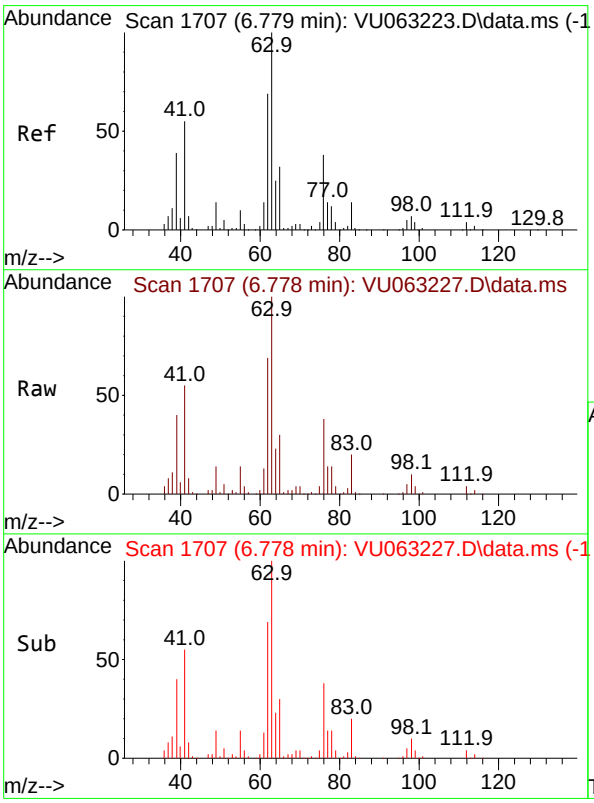
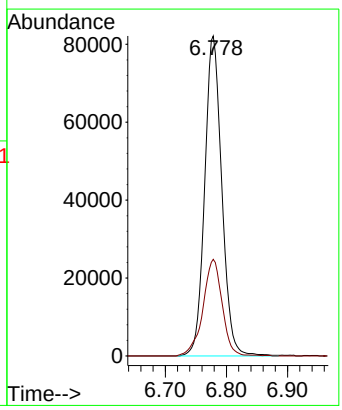
Supervised By :Mahesh Dadoda 02/12/2025

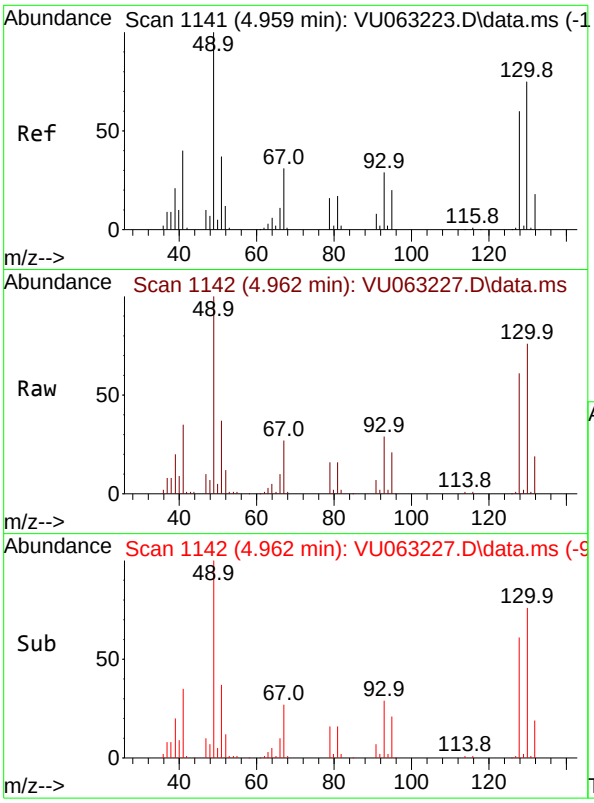


#38
1,2-Dichloropropane
Concen: 8.794 ug/l
RT: 6.778 min Scan# 1707
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 63 Resp: 159772

Ion	Ratio	Lower	Upper
63	100		
65	30.2	25.3	37.9

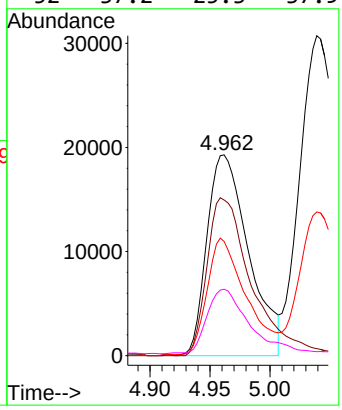




#39
Methacrylonitrile
Concen: 10.277 ug/l
RT: 4.962 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 41 Resp: 4673

Ion	Ratio	Lower	Upper
41	100		
67	84.8	64.5	96.7
39	53.8	43.0	64.6
52	37.2	25.3	37.9



Instrument :
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ClientSampleId :
ICVVU021025

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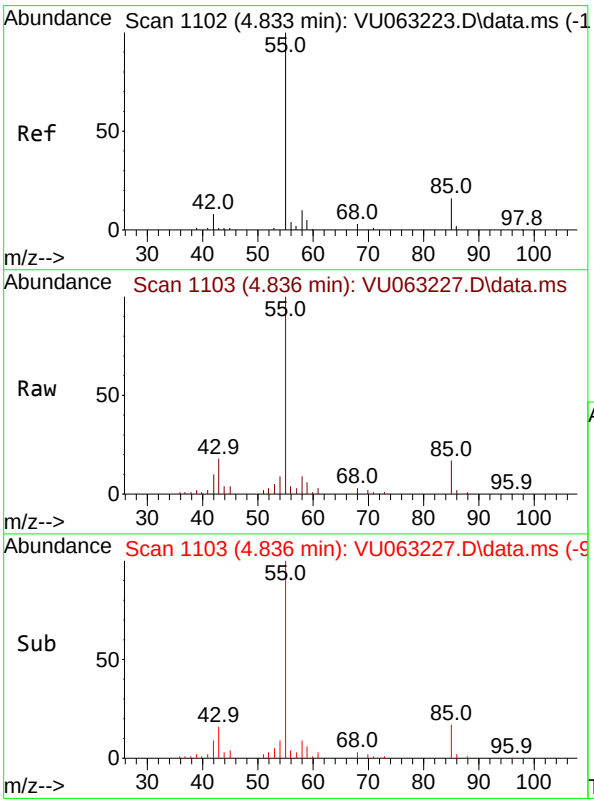
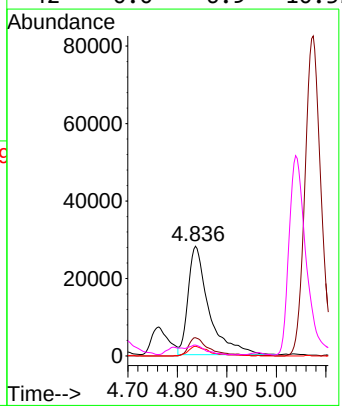
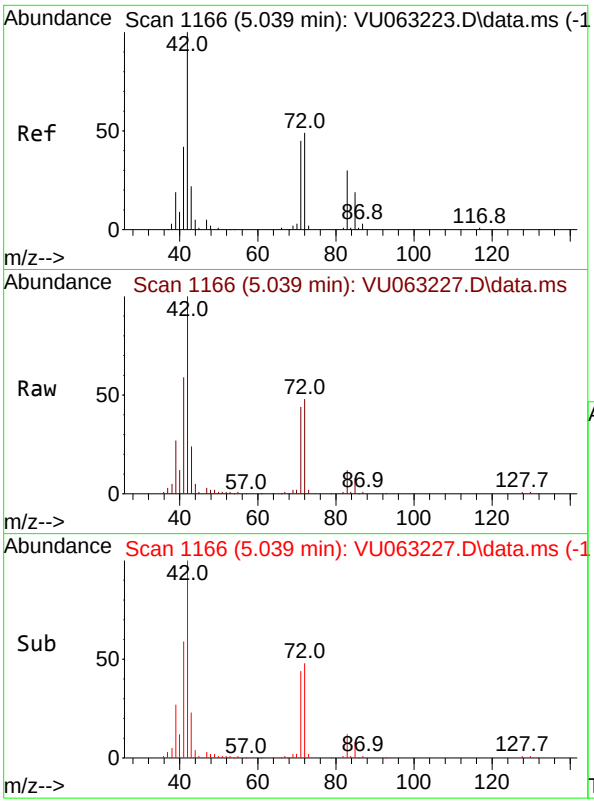


#40
Methyl acrylate
Concen: 9.798 ug/l
RT: 4.836 min Scan# 1103
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 55 Resp: 82118

Ion	Ratio	Lower	Upper
55	100		
85	16.6	13.3	19.9
58	8.2	7.3	10.9
42	0.0	6.9	10.3#

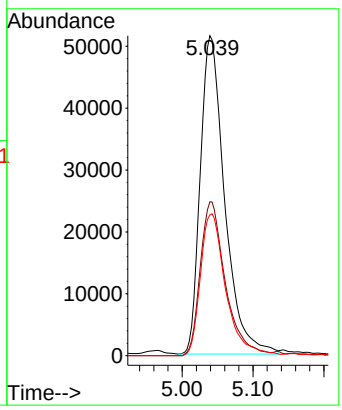




#41
Tetrahydrofuran
Concen: 46.529 ug/l
RT: 5.039 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 42 Resp: 12305

Ion	Ratio	Lower	Upper
42	100		
72	49.7	41.5	62.3
71	46.2	37.2	55.8



Instrument :
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ClientSampleId :
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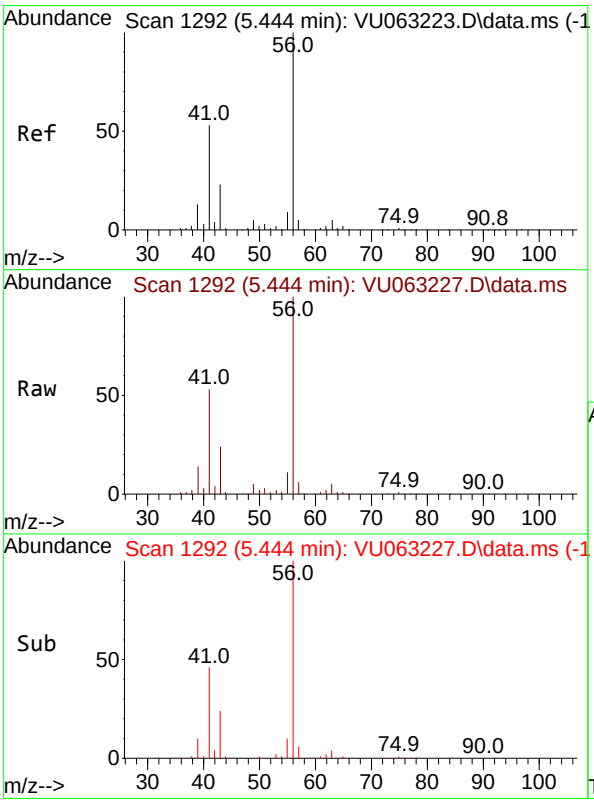
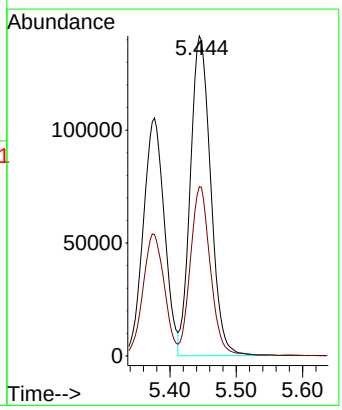
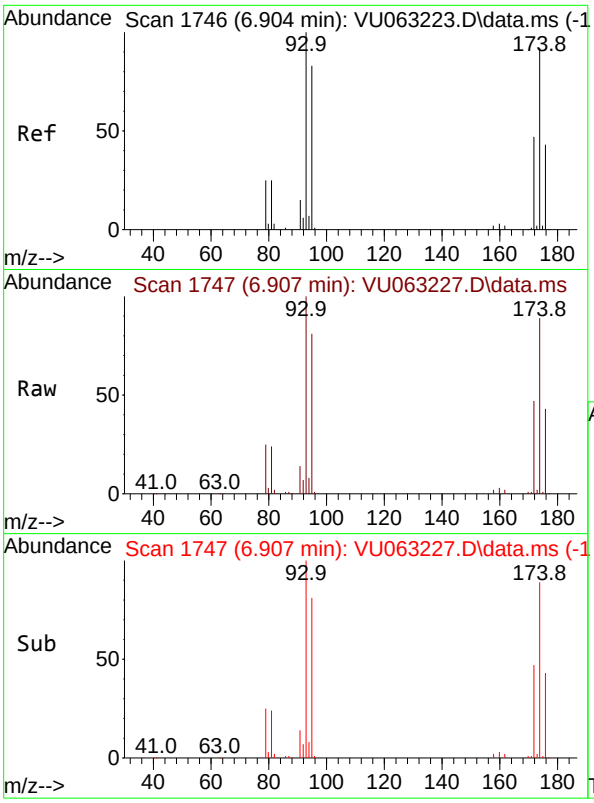


#42
1-Chlorobutane
Concen: 9.720 ug/l
RT: 5.444 min Scan# 1292
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 56 Resp: 300232

Ion	Ratio	Lower	Upper
56	100		
41	51.9	26.3	78.8

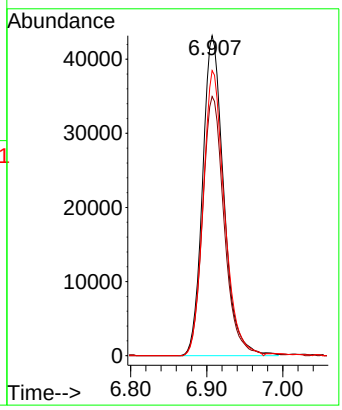




#43
Dibromomethane
Concen: 9.055 ug/l
RT: 6.907 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 93 Resp: 8330

Ion	Ratio	Lower	Upper
93	100		
95	82.4	67.2	100.8
174	89.9	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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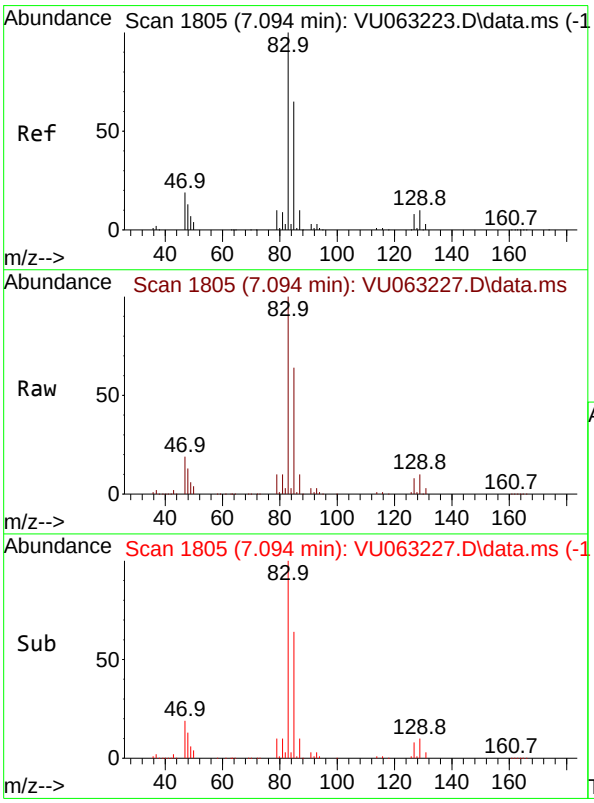
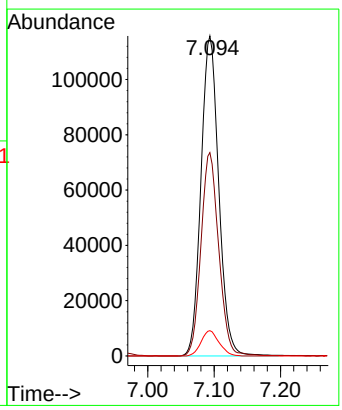
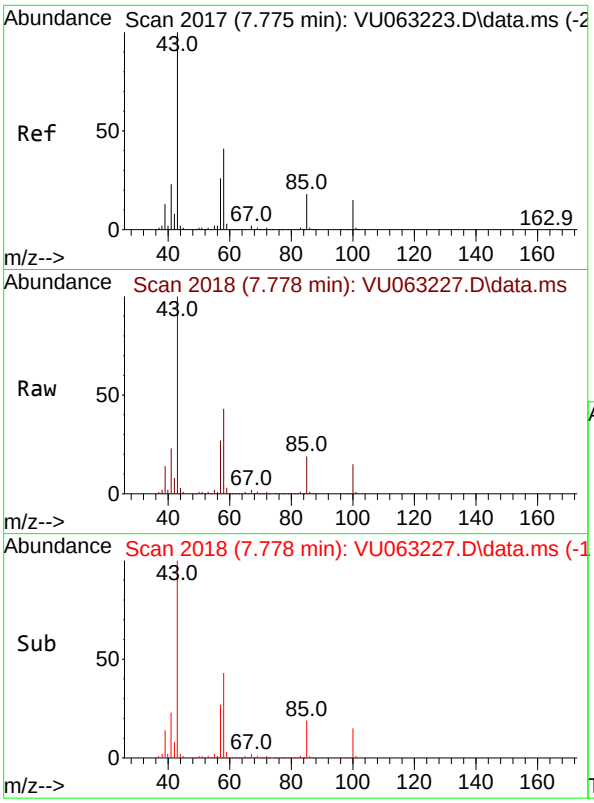


#44
Bromodichloromethane
Concen: 10.047 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 83 Resp: 215139

Ion	Ratio	Lower	Upper
83	100		
85	63.6	51.7	77.5
127	7.9	6.7	10.1

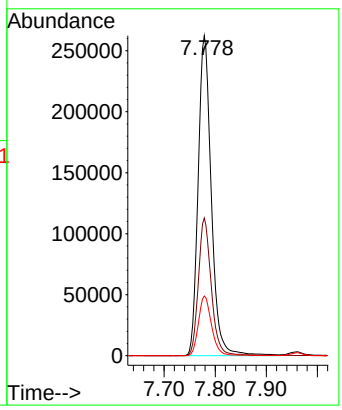




#45
4-Methyl-2-Pentanone
Concen: 48.787 ug/l
RT: 7.778 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 43 Resp: 47057

Ion	Ratio	Lower	Upper
43	100		
58	42.1	20.8	62.5
85	18.5	14.8	22.2



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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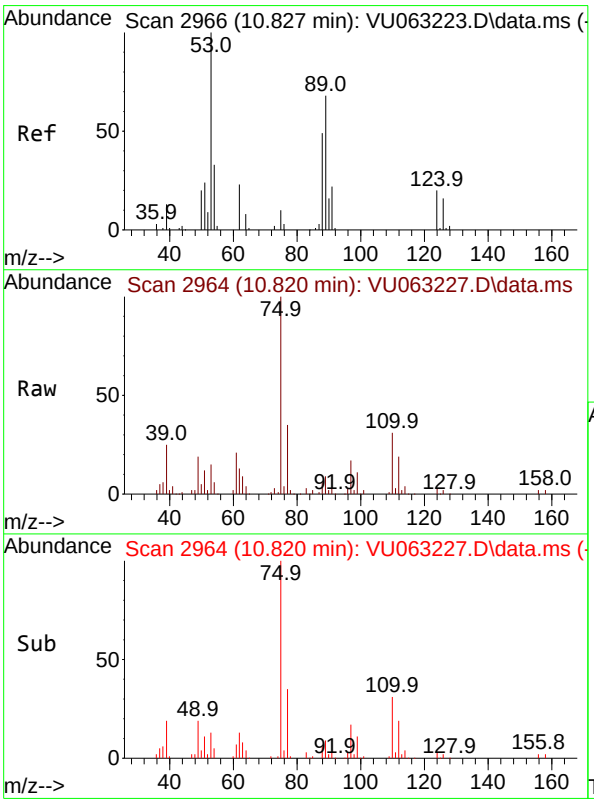
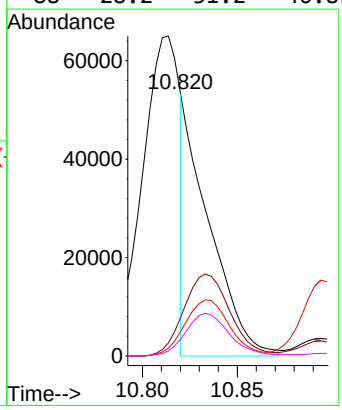
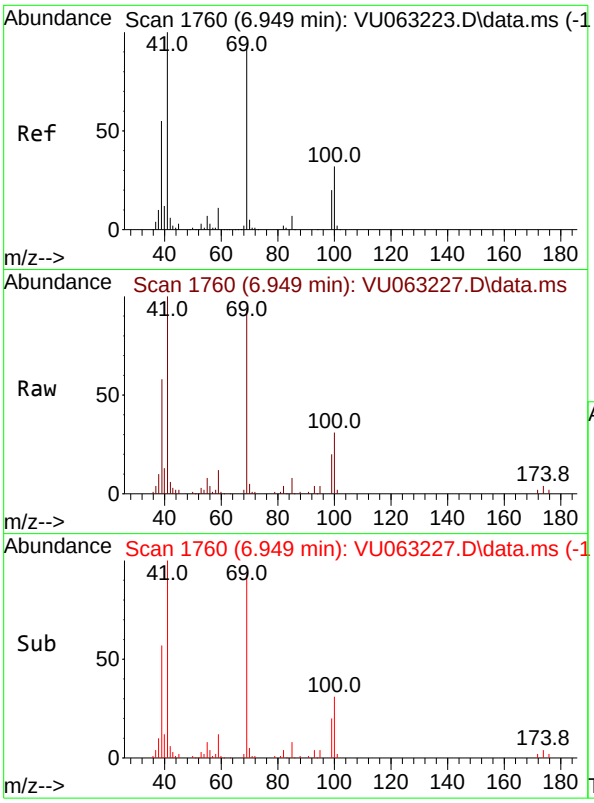


#46
t-1,4-Dichloro-2-butene
Concen: 10.896 ug/l m
RT: 10.820 min Scan# 2964
Delta R.T. -0.007 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 75 Resp: 49406

Ion	Ratio	Lower	Upper
75	100		
53	57.3	64.5	96.7#
89	37.9	43.4	65.2#
88	28.2	31.2	46.8#

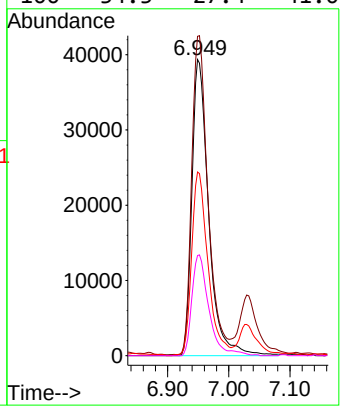




#47
Methyl methacrylate
Concen: 9.683 ug/l
RT: 6.949 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 69 Resp: 7503

Ion	Ratio	Lower	Upper
69	100		
41	103.9	0.0	217.0
39	60.4	47.7	71.5
100	34.3	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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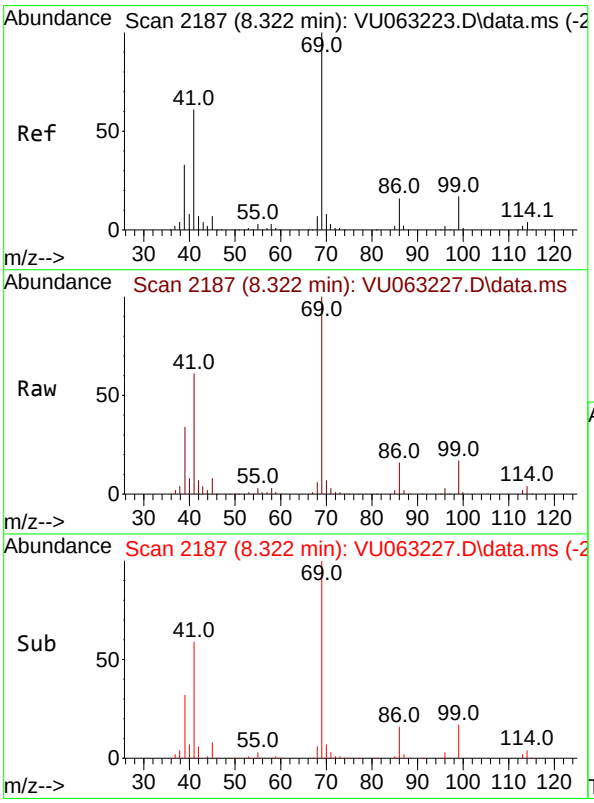
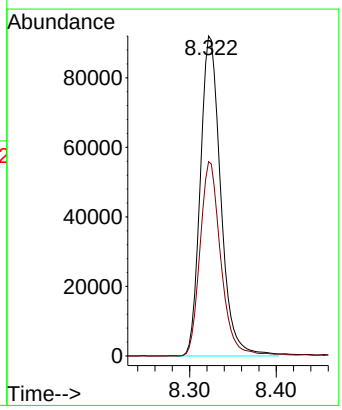
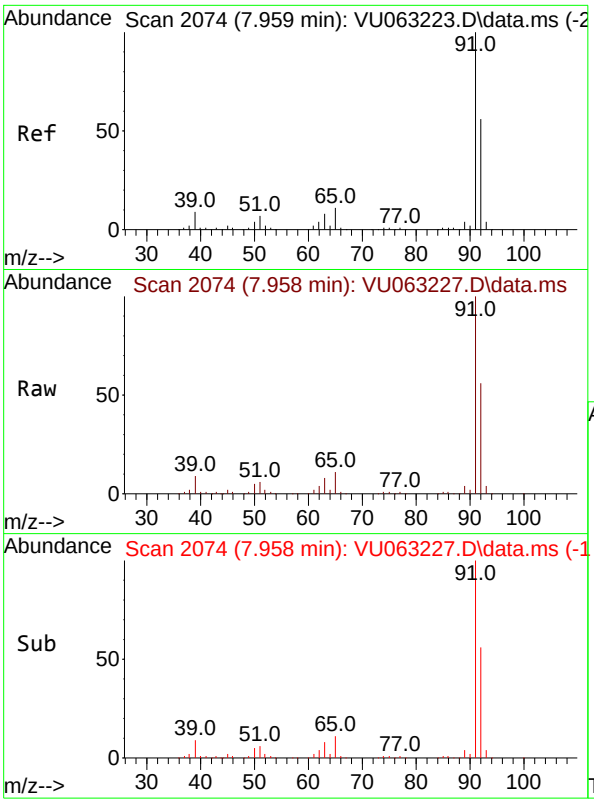


#48
Ethyl methacrylate
Concen: 10.355 ug/l
RT: 8.322 min Scan# 2187
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 69 Resp: 150671

Ion	Ratio	Lower	Upper
69	100		
41	62.1	30.6	92.0

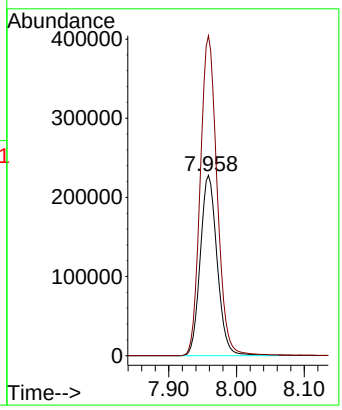




#49
Toluene
Concen: 9.872 ug/l
RT: 7.958 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 92 Resp: 39410

Ion	Ratio	Lower	Upper
92	100		
91	177.5	141.8	212.6



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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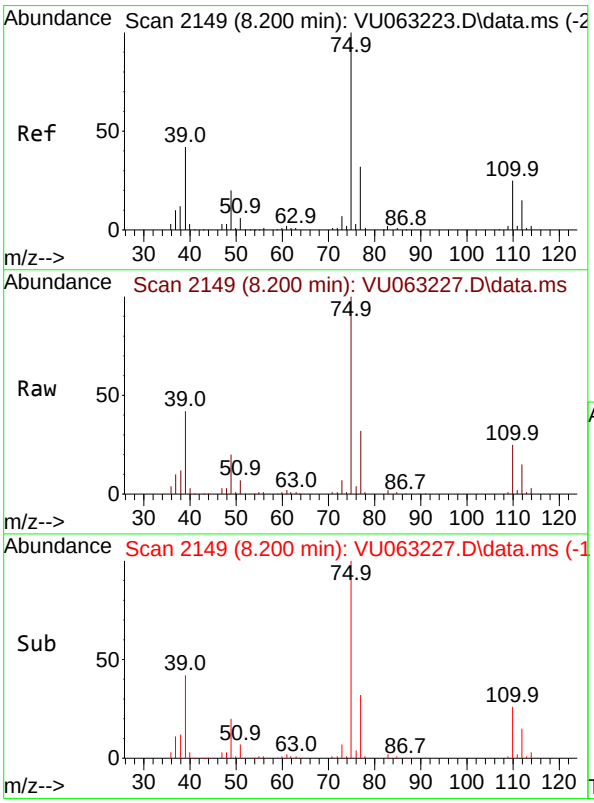
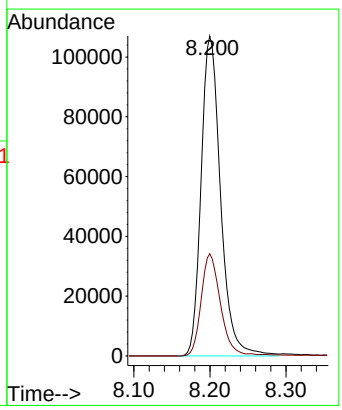
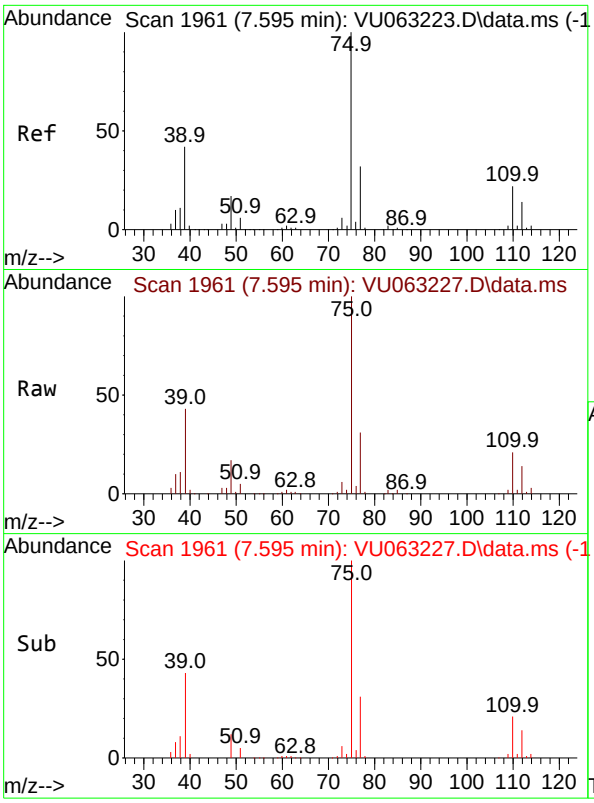


#50
t-1,3-Dichloropropene
Concen: 9.703 ug/l
RT: 8.200 min Scan# 2149
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 75 Resp: 190233

Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.9	38.9

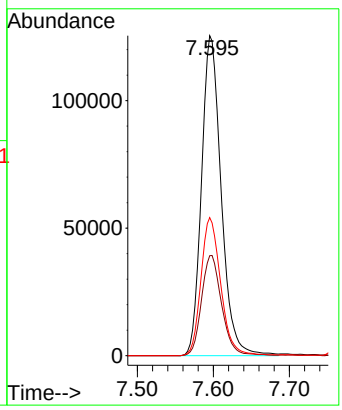




#51
cis-1,3-Dichloropropene
Concen: 9.319 ug/l
RT: 7.595 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 75 Resp: 22568

Ion	Ratio	Lower	Upper
75	100		
77	31.2	25.3	37.9
39	43.1	33.5	50.3



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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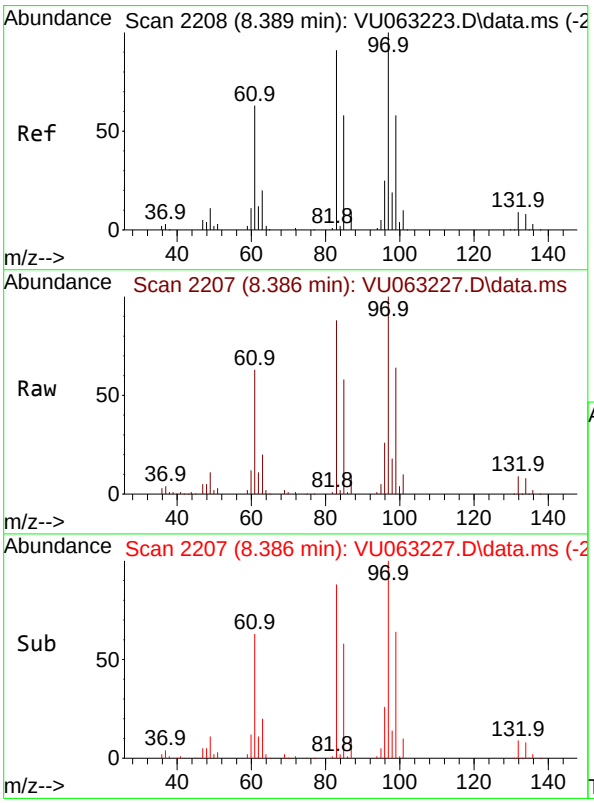
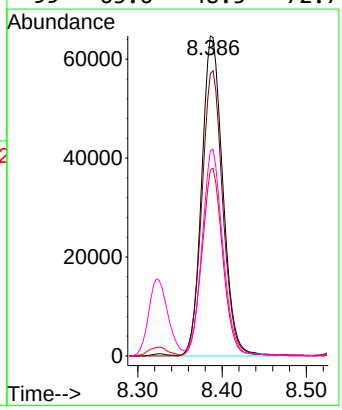
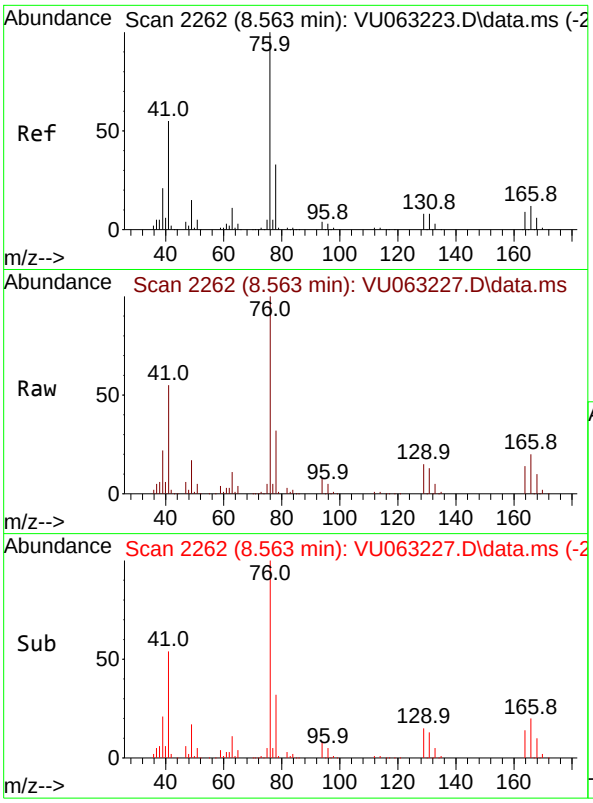


#52
1,1,2-Trichloroethane
Concen: 9.082 ug/l
RT: 8.386 min Scan# 2207
Delta R.T. -0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 97 Resp: 112663

Ion	Ratio	Lower	Upper
97	100		
83	88.2	73.0	109.4
85	57.9	46.3	69.5
99	63.6	48.5	72.7

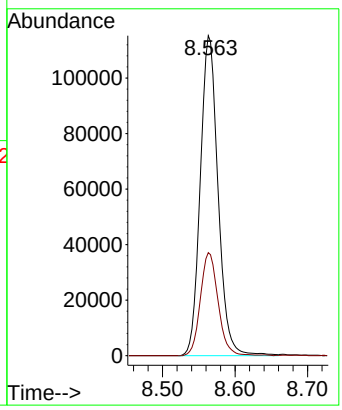




#53
1,3-Dichloropropane
Concen: 8.908 ug/l
RT: 8.563 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 76 Resp: 19617

Ion	Ratio	Lower	Upper
76	100		
78	32.1	26.3	39.5



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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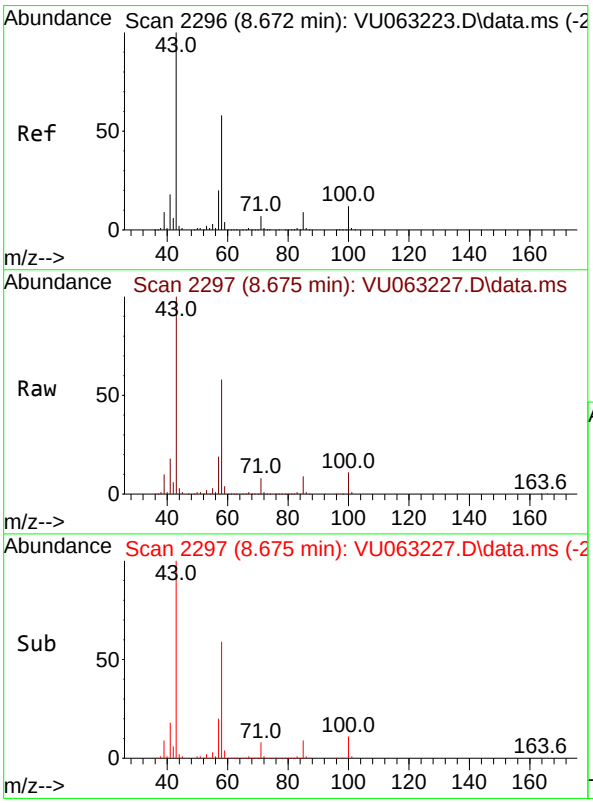
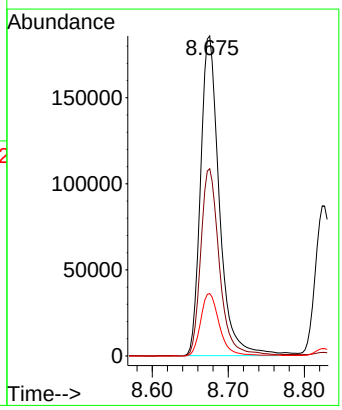
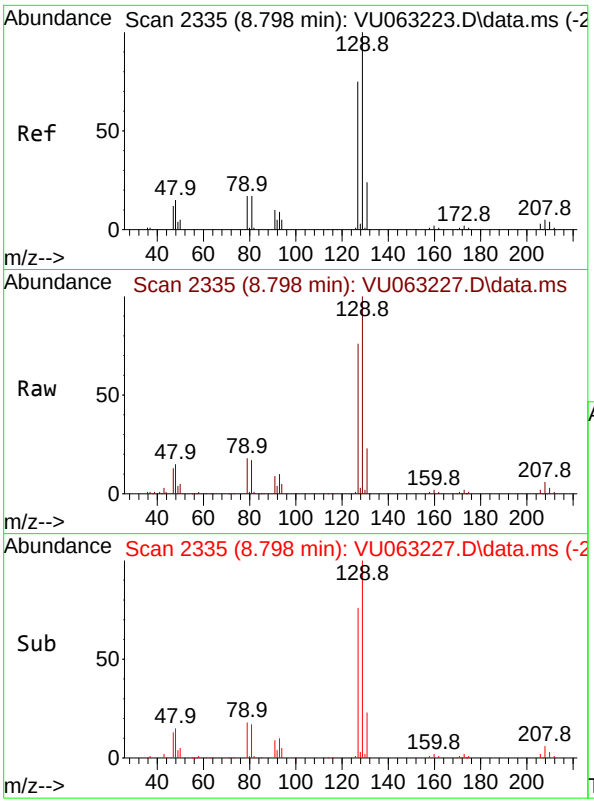


#54
2-Hexanone
Concen: 48.325 ug/l
RT: 8.675 min Scan# 2297
Delta R.T. 0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 43 Resp: 318084

Ion	Ratio	Lower	Upper
43	100		
58	58.5	38.0	78.0
57	19.6	0.0	39.1

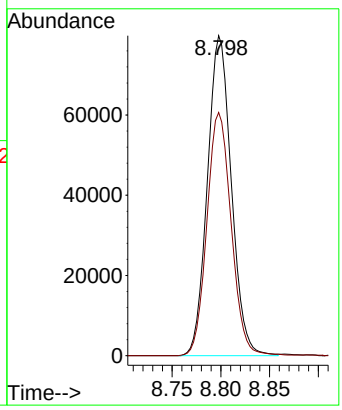




#55
Dibromochloromethane
Concen: 9.564 ug/l
RT: 8.798 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:129 Resp: 13648

Ion	Ratio	Lower	Upper
129	100		
127	77.0	60.4	90.6



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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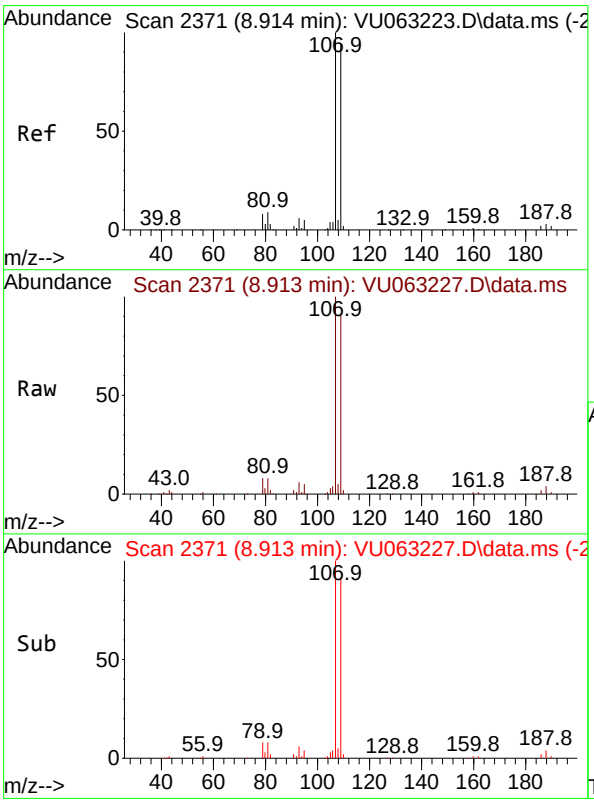
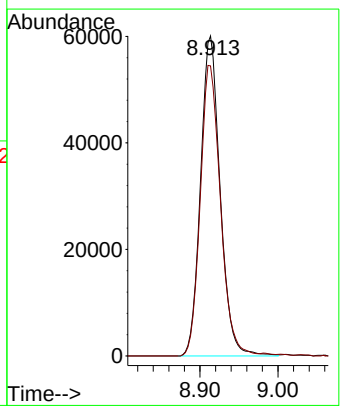
Supervised By :Mahesh Dadoda 02/12/2025

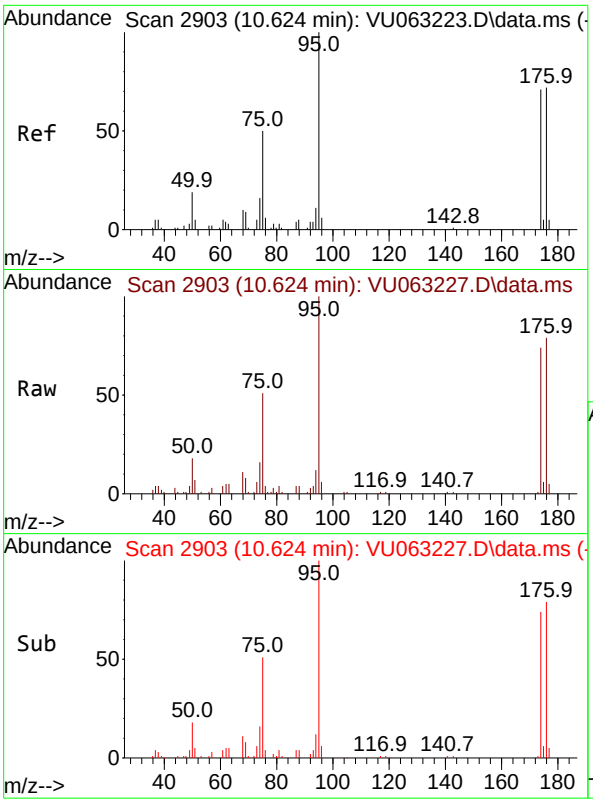


#56
1,2-Dibromoethane
Concen: 9.020 ug/l
RT: 8.913 min Scan# 2371
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:107 Resp: 104935

Ion	Ratio	Lower	Upper
107	100		
109	93.4	0.0	187.8

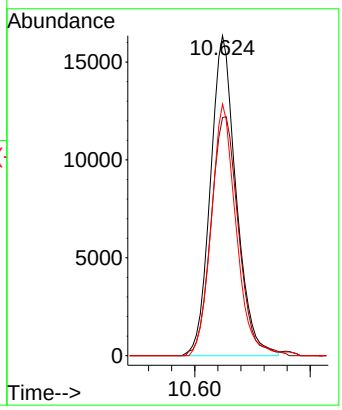




#57
4-Bromofluorobenzene
Concen: 1.354 ug/l
RT: 10.624 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 95 Resp: 2523

Ion	Ratio	Lower	Upper
95	100		
174	80.2	58.6	88.0
176	76.2	58.2	87.4



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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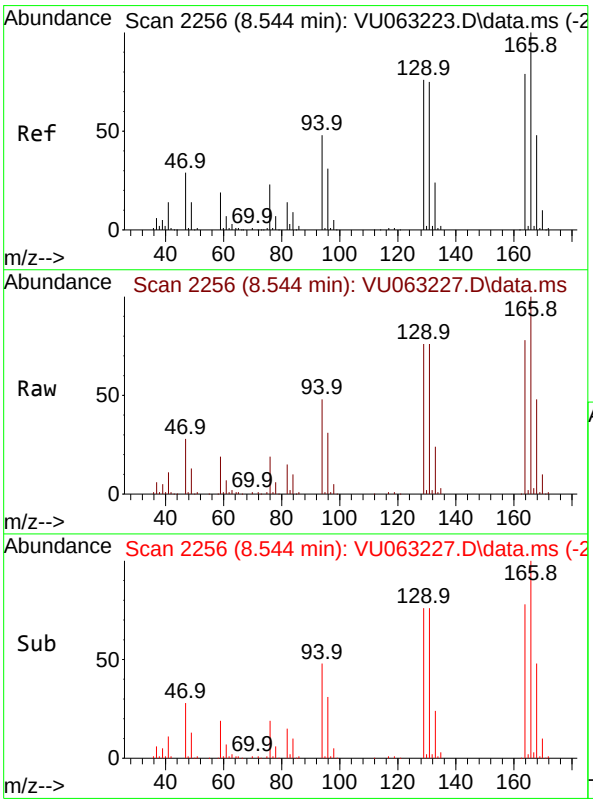
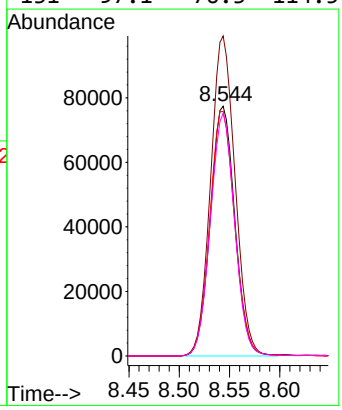
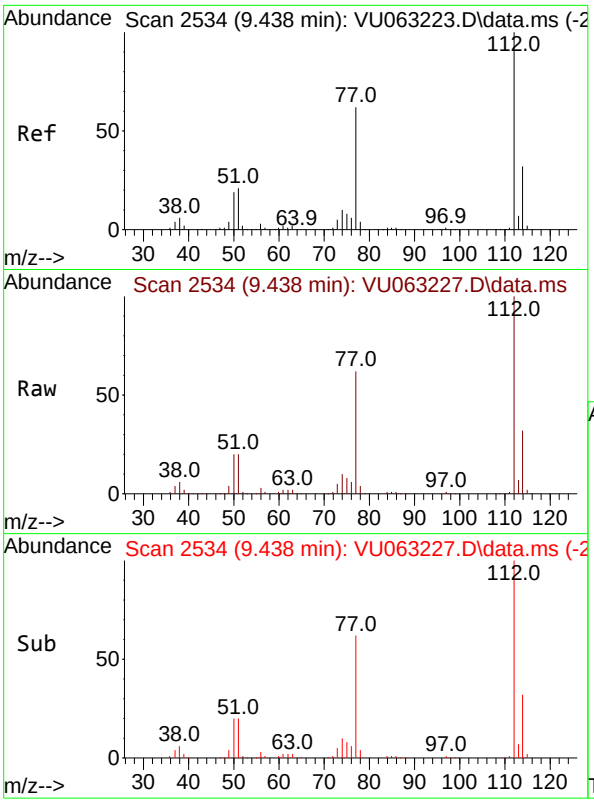


#58
Tetrachloroethene
Concen: 9.644 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:164 Resp: 131195

Ion	Ratio	Lower	Upper
164	100		
166	128.1	101.4	152.0
129	97.9	77.0	115.4
131	97.1	76.3	114.5

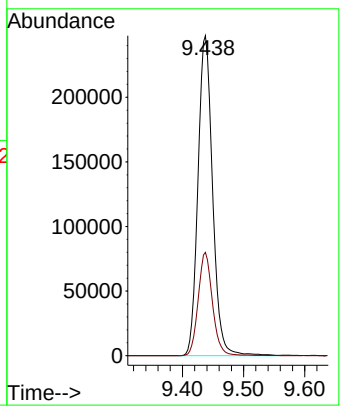




#59
Chlorobenzene
Concen: 9.767 ug/l
RT: 9.438 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:112 Resp: 41146

Ion	Ratio	Lower	Upper
112	100		
114	32.3	25.7	38.5



Instrument :
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ClientSampleId :
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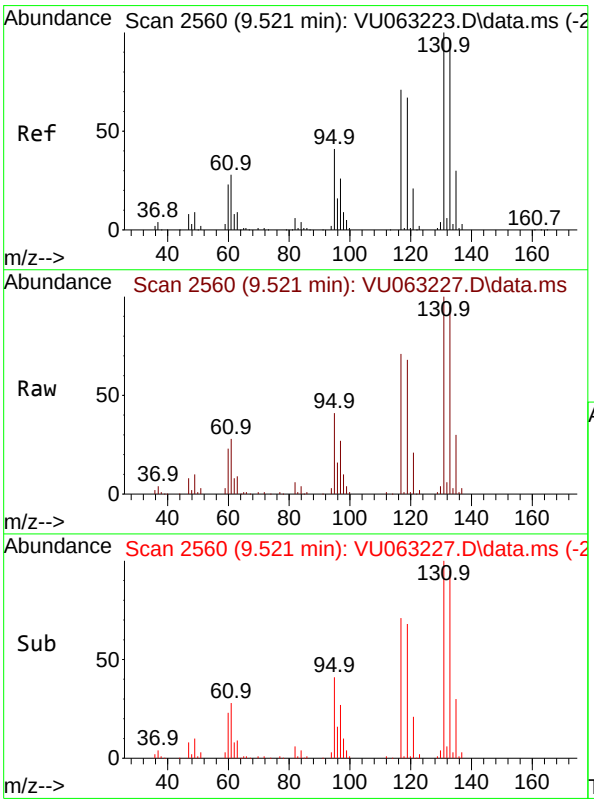
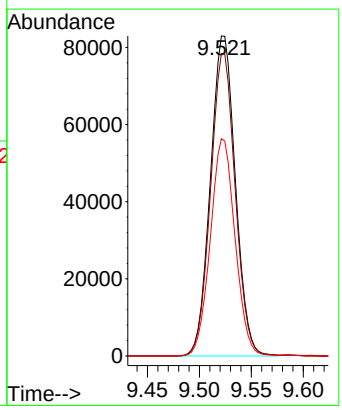
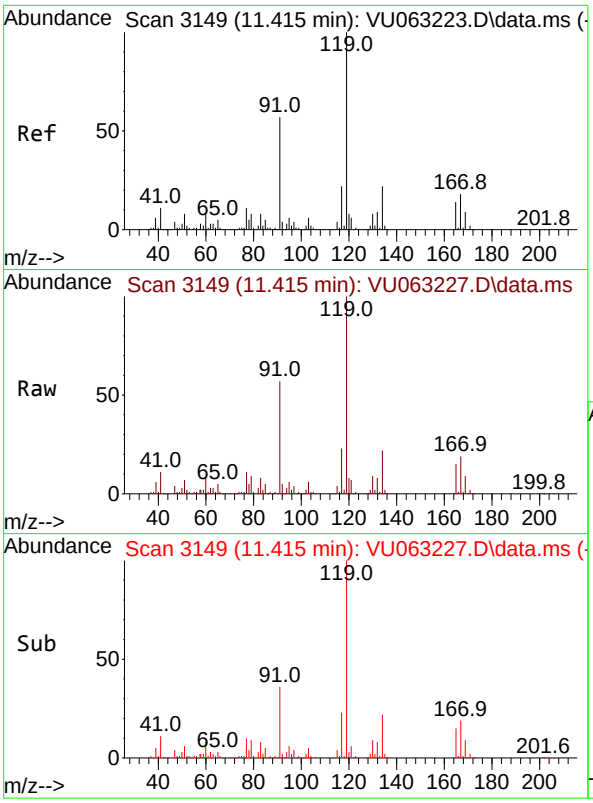


#60
1,1,1,2-Tetrachloroethane
Concen: 9.150 ug/l
RT: 9.521 min Scan# 2560
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:131 Resp: 138560

Ion	Ratio	Lower	Upper
131	100		
133	93.7	76.7	115.1
119	67.2	54.4	81.6

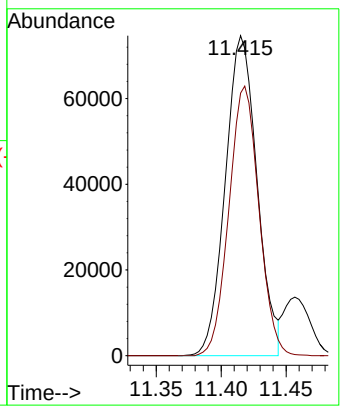




#61
Pentachloroethane
Concen: 9.395 ug/l
RT: 11.415 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:117 Resp: 12709

Ion	Ratio	Lower	Upper
117	100		
167	79.6	65.0	97.6



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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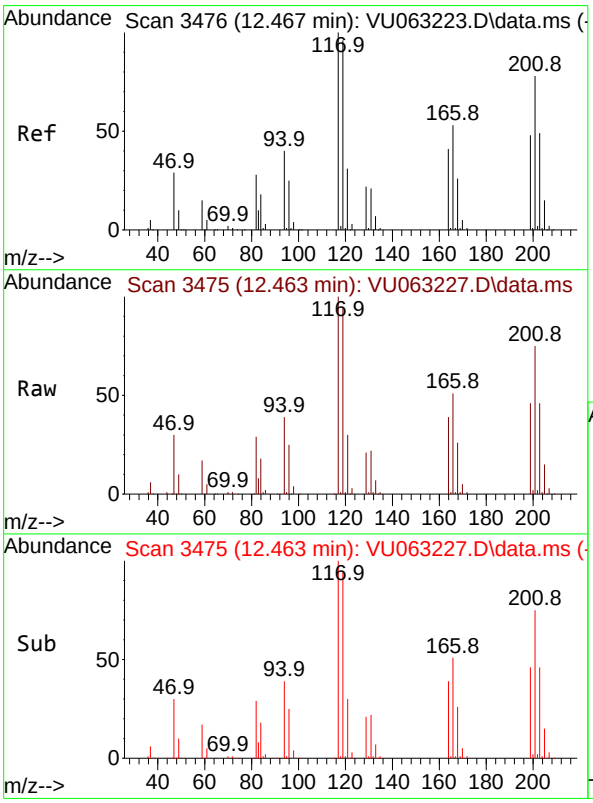
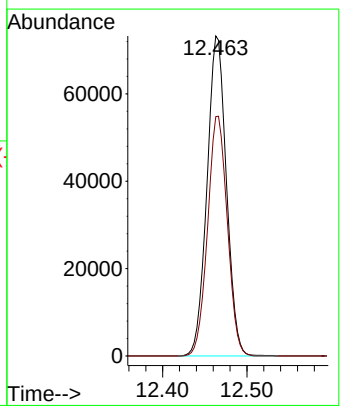
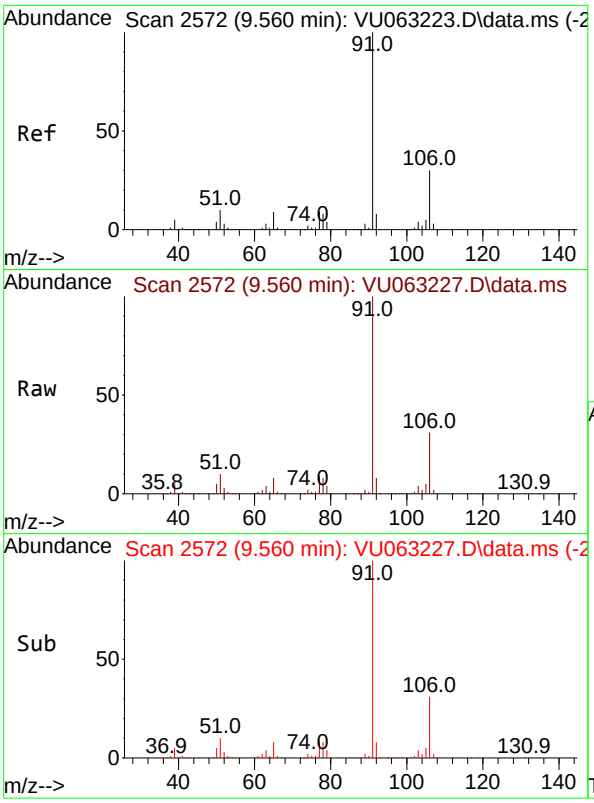


#62
Hexachloroethane
Concen: 9.808 ug/l
RT: 12.463 min Scan# 3475
Delta R.T. -0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:117 Resp: 117375

Ion	Ratio	Lower	Upper
117	100		
201	75.9	61.3	91.9

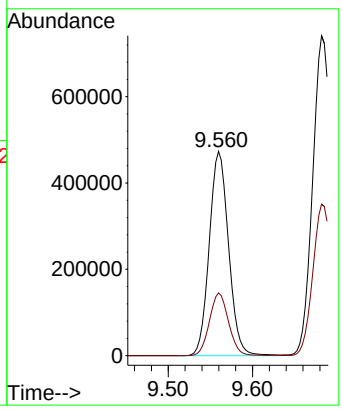




#63
Ethyl Benzene
Concen: 10.366 ug/l
RT: 9.560 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 91 Resp: 75310

Ion	Ratio	Lower	Upper
91	100		
106	30.7	24.2	36.2



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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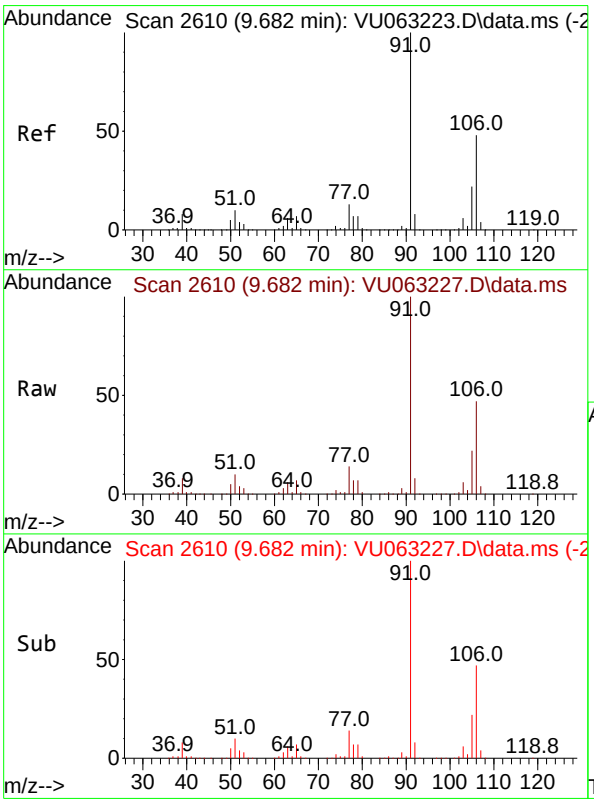
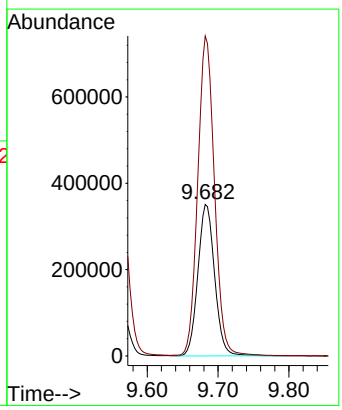
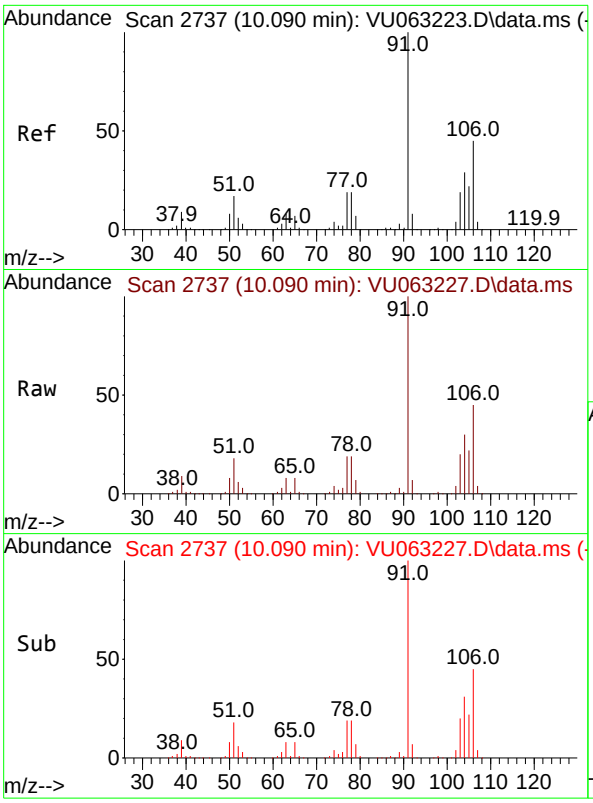


#64
m/p-Xylenes
Concen: 21.178 ug/l
RT: 9.682 min Scan# 2610
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:106 Resp: 574738

Ion	Ratio	Lower	Upper
106	100		
91	211.3	166.9	250.3

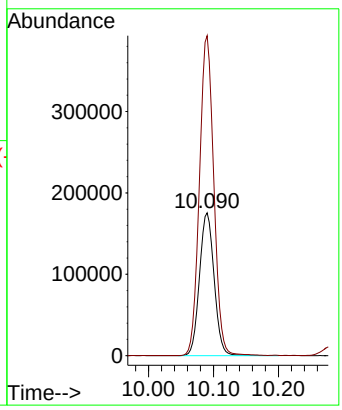




#65
o-Xylene
Concen: 10.384 ug/l
RT: 10.090 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:106 Resp: 27587

Ion	Ratio	Lower	Upper
106	100		
91	219.6	110.9	332.9



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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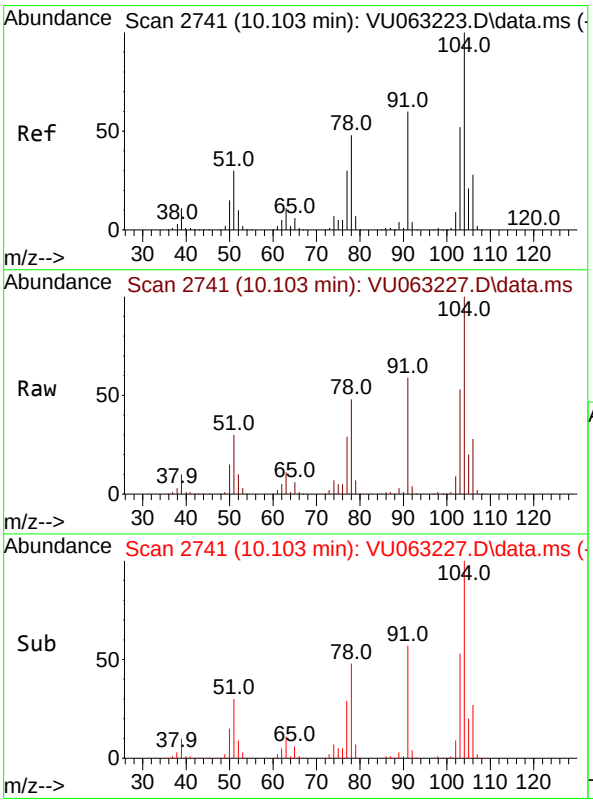
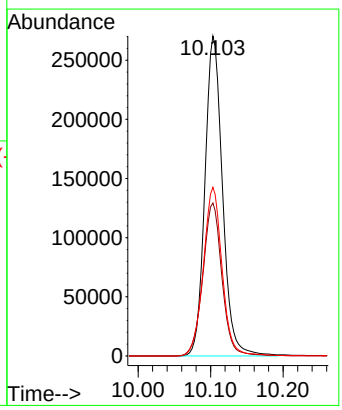
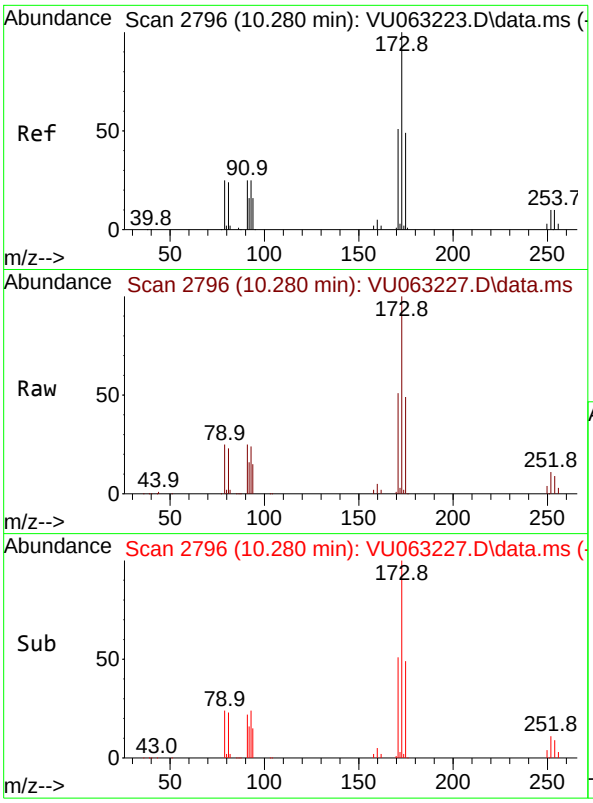


#66
Styrene
Concen: 10.830 ug/l
RT: 10.103 min Scan# 2741
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:104 Resp: 457882

Ion	Ratio	Lower	Upper
104	100		
78	51.8	41.2	61.8
103	56.3	44.8	67.2





#67
Bromoform
Concen: 9.606 ug/l
RT: 10.280 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:173 Resp: 7780

Ion	Ratio	Lower	Upper
173	100		
175	48.0	39.0	58.4
254	9.7	7.7	11.5

Instrument :
MSVOA_U
ClientSampleId :
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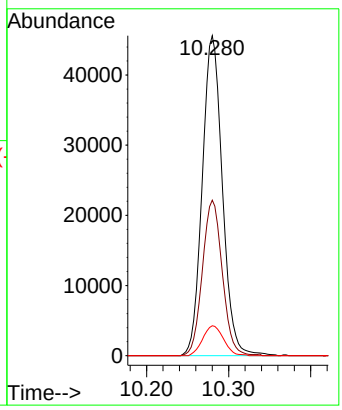
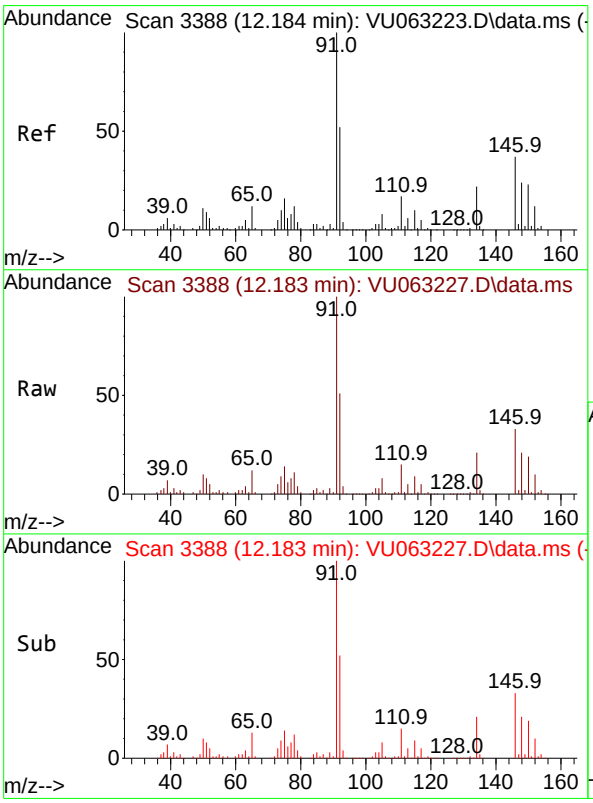
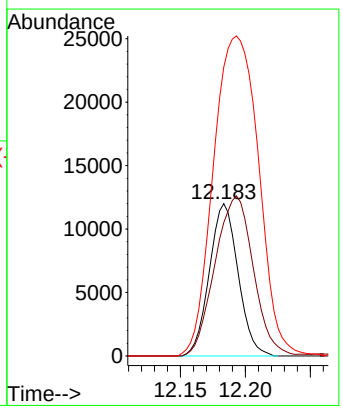


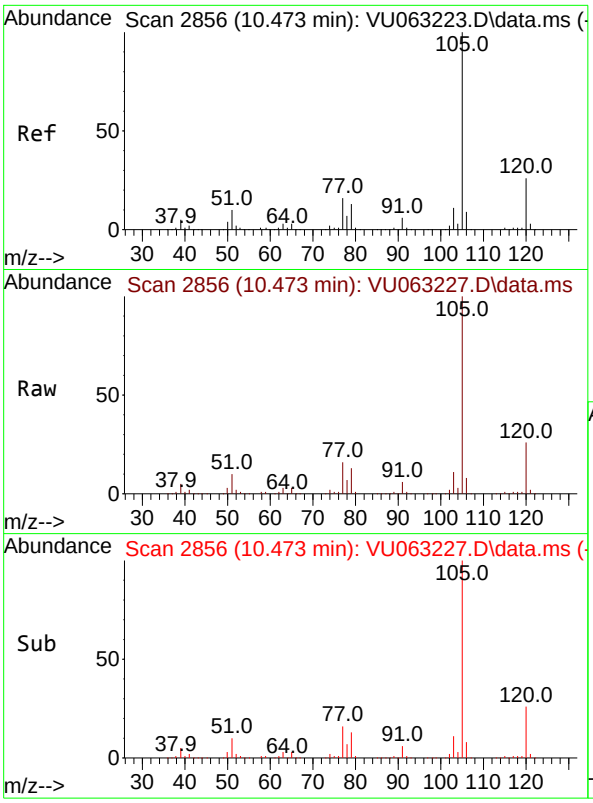


#68
1,2-Dichlorobenzene-d4
Concen: 0.953 ug/l
RT: 12.183 min Scan# 3388
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:152 Resp: 18463

Ion	Ratio	Lower	Upper
152	100		
115	140.1	0.0	275.2
150	330.7	0.0	658.4

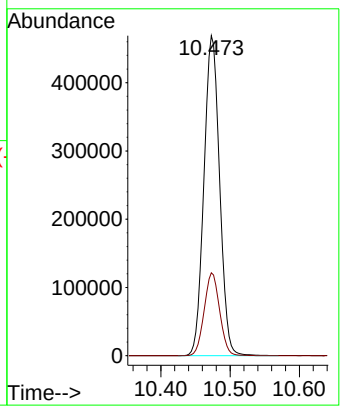




#69
Isopropylbenzene
Concen: 11.767 ug/l
RT: 10.473 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:105 Resp: 73493

Ion	Ratio	Lower	Upper
105	100		
120	25.5	12.8	38.4



Instrument :
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ClientSampleId :
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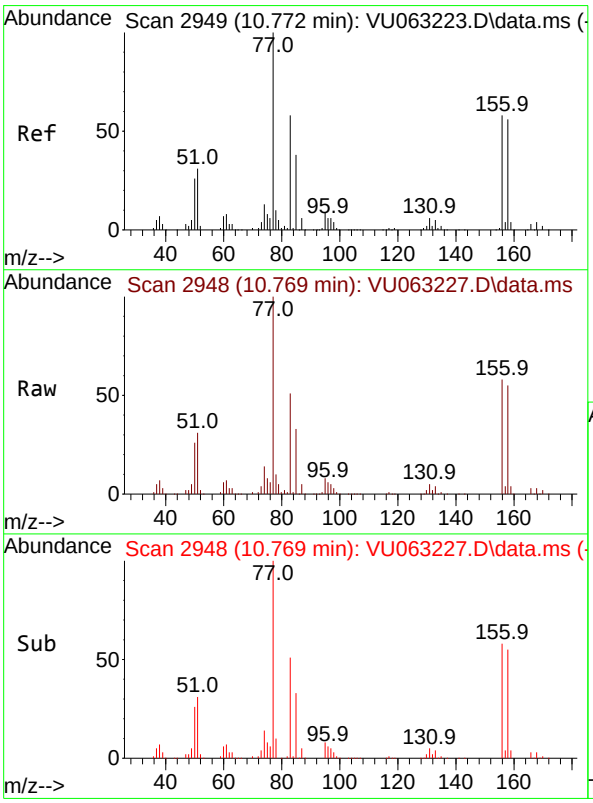
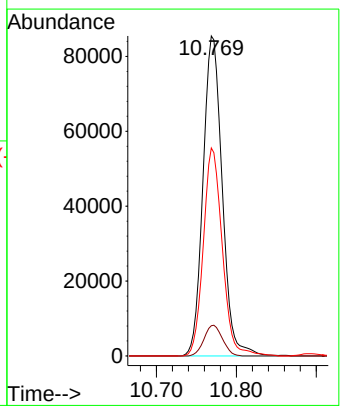
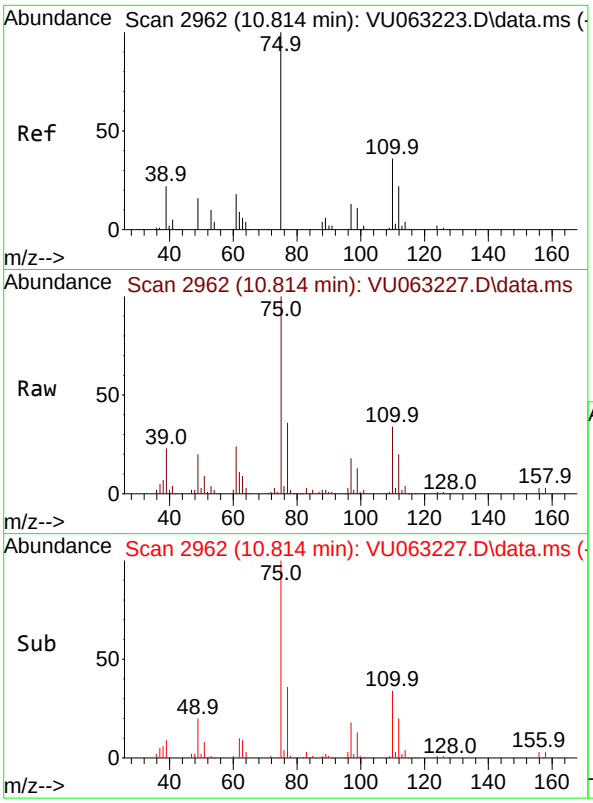


#70
1,1,2,2-Tetrachloroethane
Concen: 8.545 ug/l
RT: 10.769 min Scan# 2948
Delta R.T. -0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 83 Resp: 142854

Ion	Ratio	Lower	Upper
83	100		
131	9.2	7.4	11.0
85	64.1	51.8	77.8

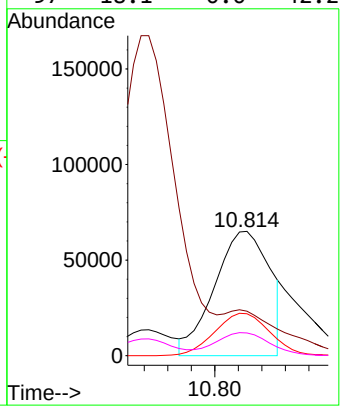




#71
1,2,3-Trichloropropane
Concen: 8.443 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 75 Resp: 10604

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	34.3	0.0	77.0
97	18.1	0.0	42.2



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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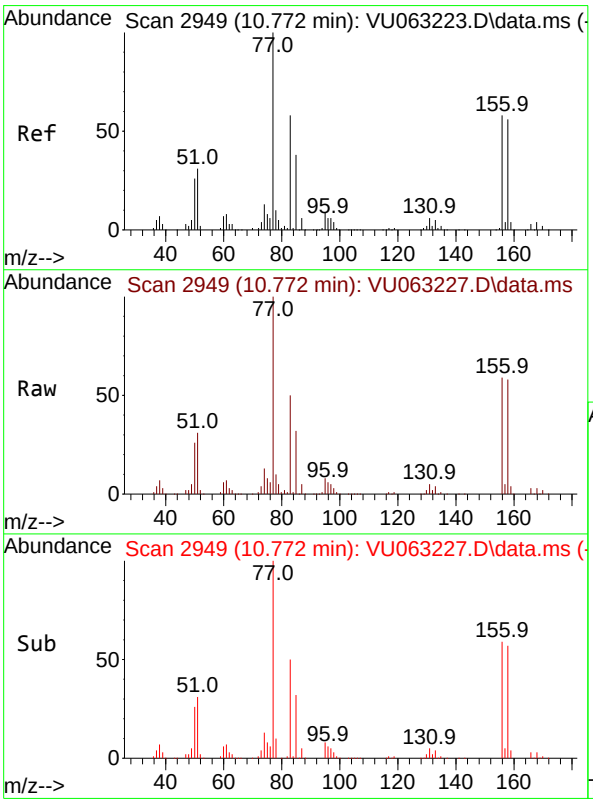
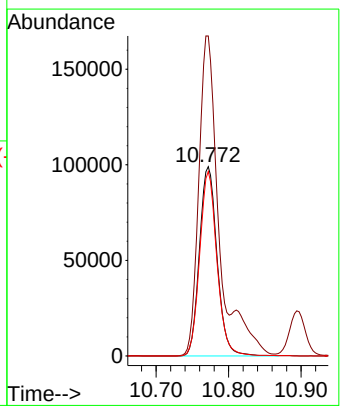
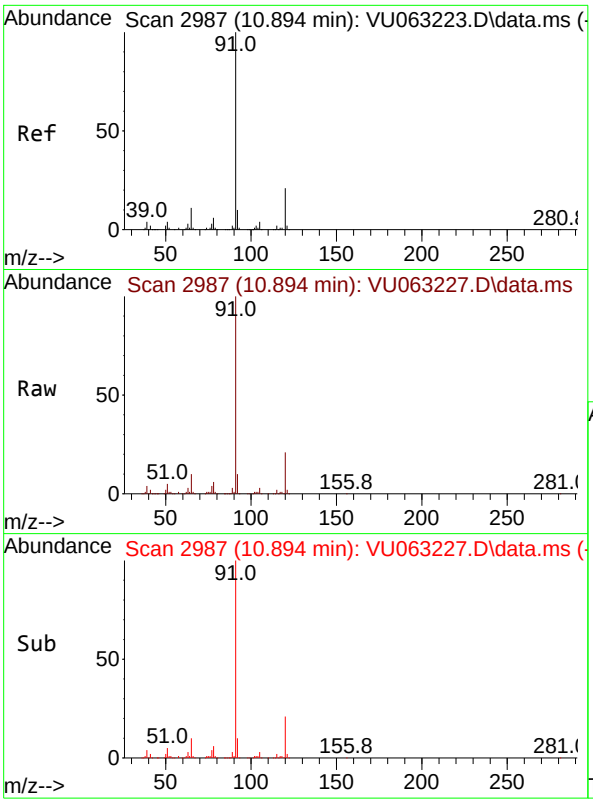


#72
Bromobenzene
Concen: 9.945 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:156 Resp: 167353

Ion	Ratio	Lower	Upper
156	100		
77	169.8	0.0	343.6
158	95.6	0.0	193.0

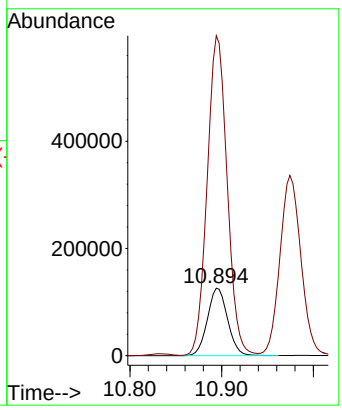




#73
n-propylbenzene
Concen: 10.744 ug/l
RT: 10.894 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:120 Resp: 19212

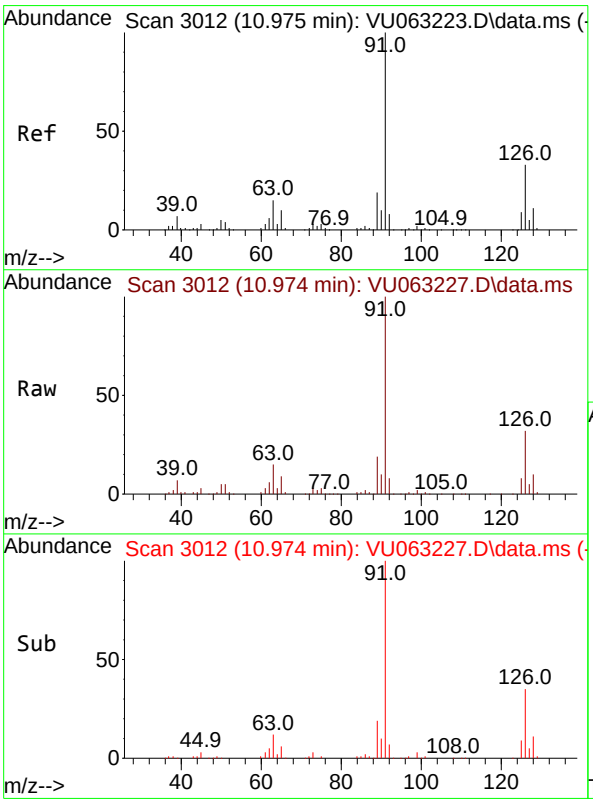
Ion	Ratio	Lower	Upper
120	100		
91	469.3	369.8	554.6



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
APPROVED

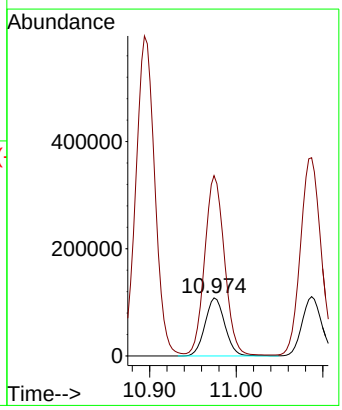
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

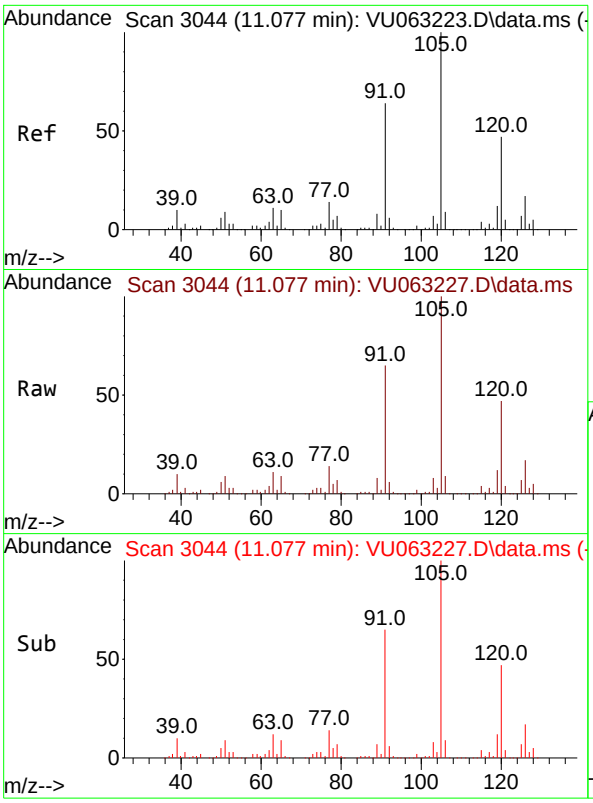


#74
2-Chlorotoluene
Concen: 10.454 ug/l
RT: 10.974 min Scan# 3012
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:126 Resp: 172282

Ion	Ratio	Lower	Upper
126	100		
91	310.4	0.0	623.8

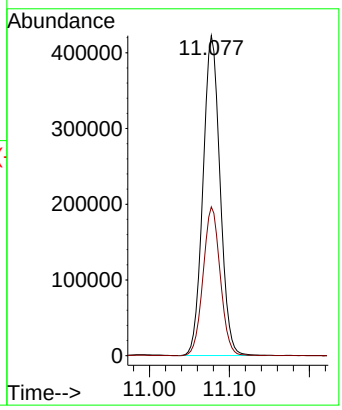




#75
1,3,5-Trimethylbenzene
Concen: 10.853 ug/l
RT: 11.077 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:105 Resp: 62809

Ion	Ratio	Lower	Upper
105	100		
120	46.7	37.3	55.9



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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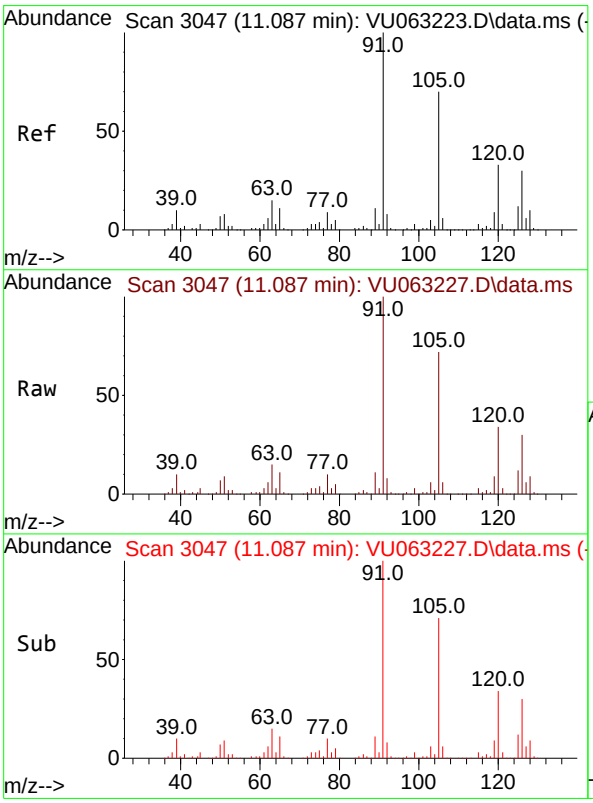
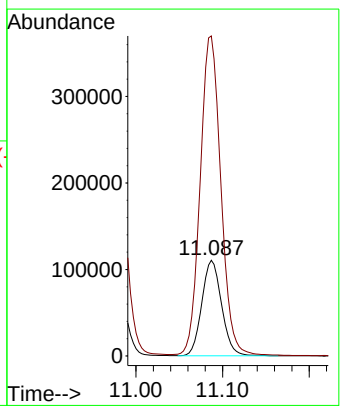
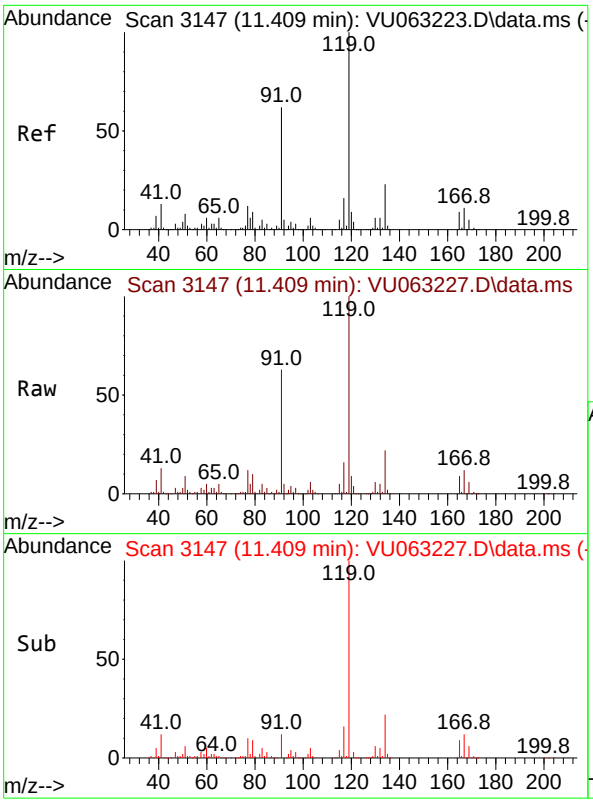


#76
4-Chlorotoluene
Concen: 10.373 ug/l
RT: 11.087 min Scan# 3047
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:126 Resp: 175303

Ion	Ratio	Lower	Upper
126	100		
91	350.0	0.0	703.6

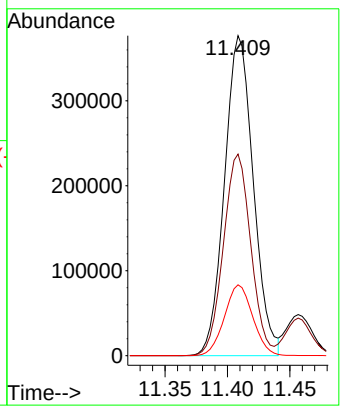




#77
tert-Butylbenzene
Concen: 10.355 ug/l
RT: 11.409 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:119 Resp: 60610

Ion	Ratio	Lower	Upper
119	100		
91	59.9	29.4	88.3
134	21.8	17.6	26.4



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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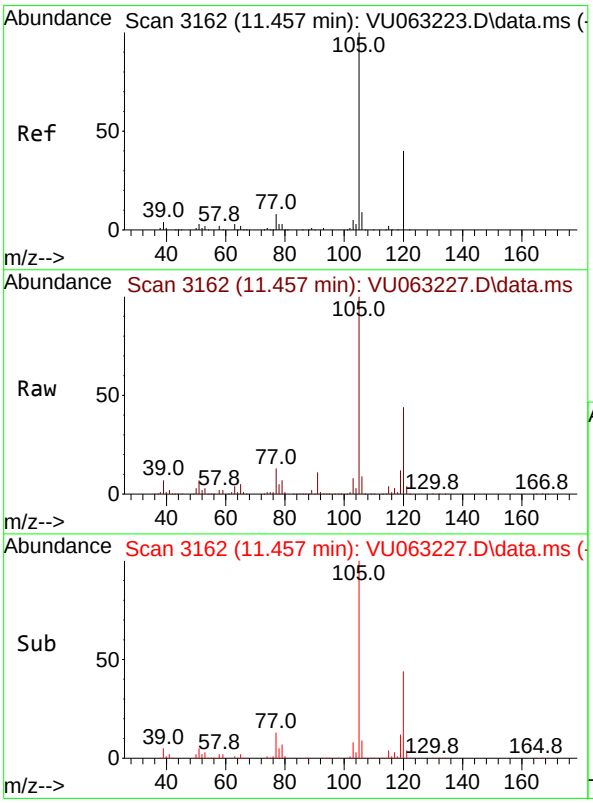
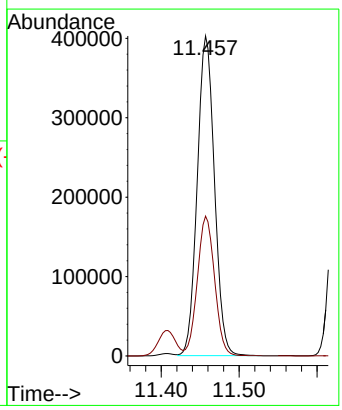
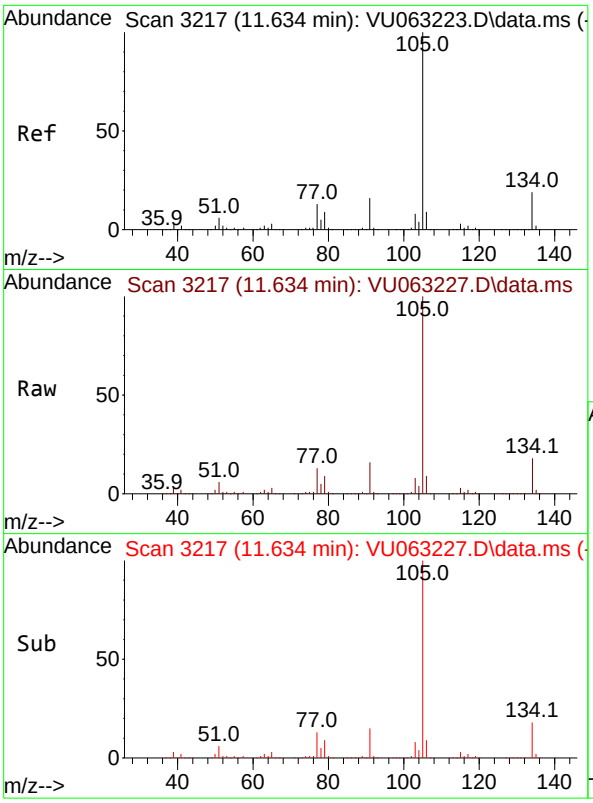


#78
1,2,4-Trimethylbenzene
Concen: 10.746 ug/l
RT: 11.457 min Scan# 3162
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:105 Resp: 617064

Ion	Ratio	Lower	Upper
105	100		
120	43.9	21.9	65.7





#79
sec-Butylbenzene
Concen: 10.867 ug/l
RT: 11.634 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

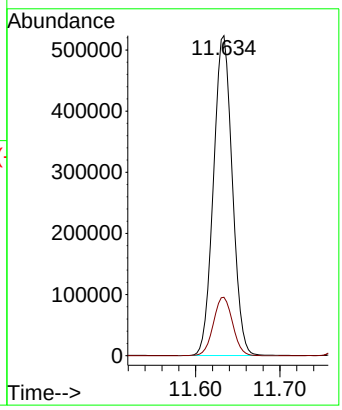
Tgt Ion:105 Resp: 80982

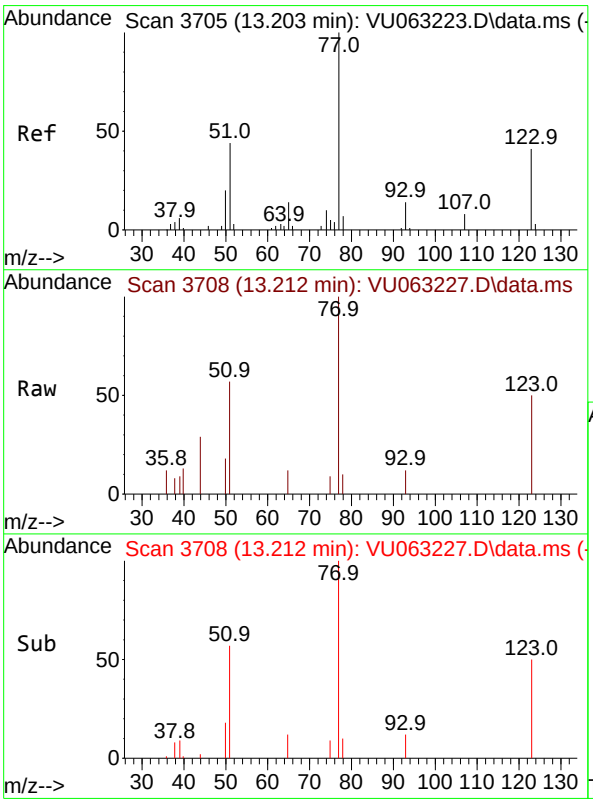
Ion	Ratio	Lower	Upper
105	100		
134	18.7	15.1	22.7

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

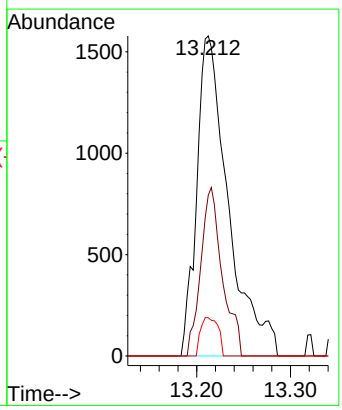


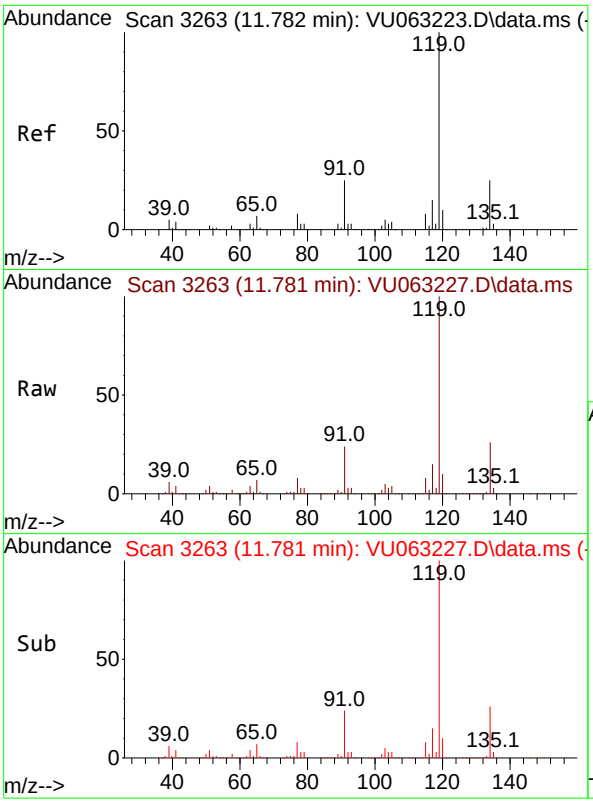


#80
Nitrobenzene
Concen: 10.731 ug/l m
RT: 13.212 min Scan# 3708
Delta R.T. 0.009 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 77 Resp: 3697

Ion	Ratio	Lower	Upper
77	100		
123	35.8	18.9	67.1
65	0.0	11.9	15.1#

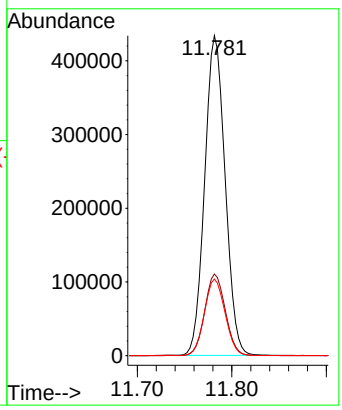




#81
p-Isopropyltoluene
Concen: 11.076 ug/l
RT: 11.781 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:119 Resp: 65141

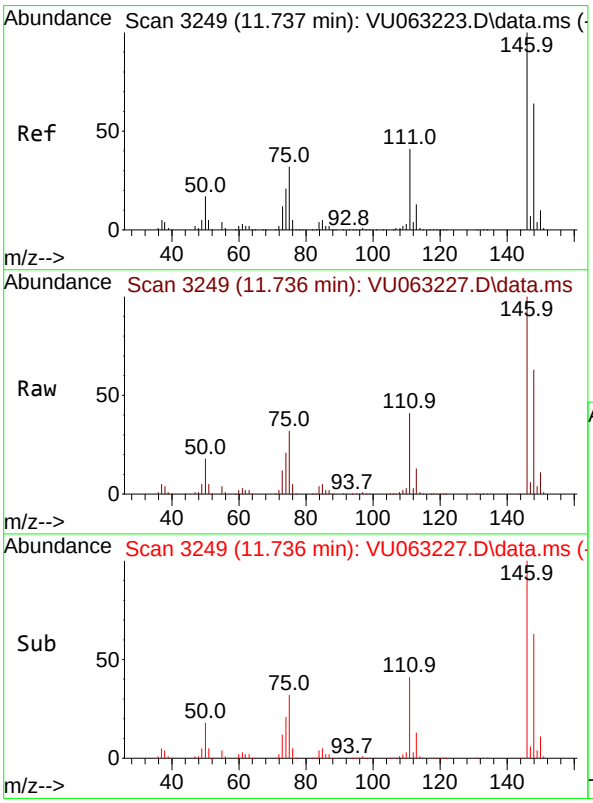
Ion	Ratio	Lower	Upper
119	100		
134	25.7	20.3	30.5
91	24.2	19.4	29.2



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
APPROVED

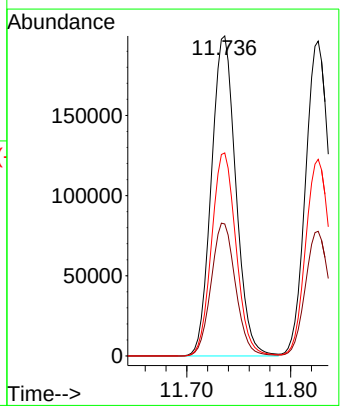
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

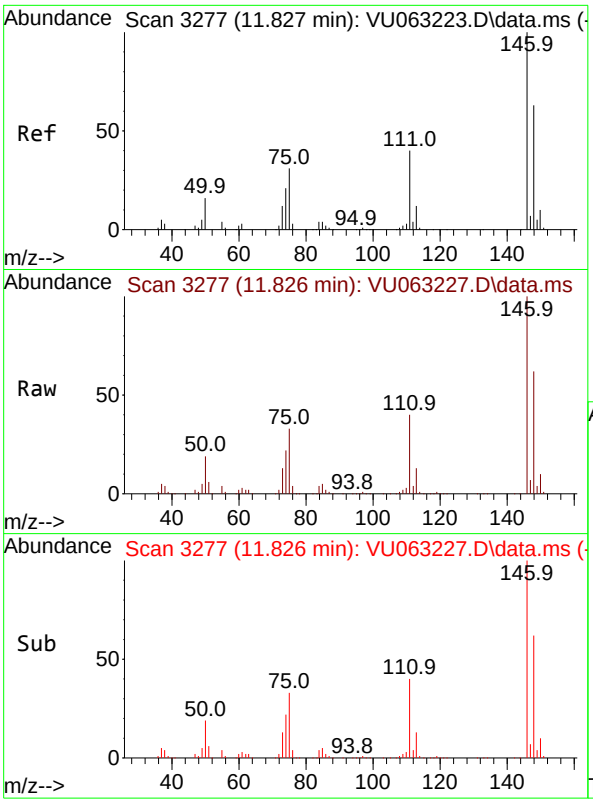


#82
1,3-Dichlorobenzene
Concen: 10.004 ug/l
RT: 11.736 min Scan# 3249
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:146 Resp: 326539

Ion	Ratio	Lower	Upper
146	100		
111	41.4	32.8	49.2
148	63.5	51.1	76.7

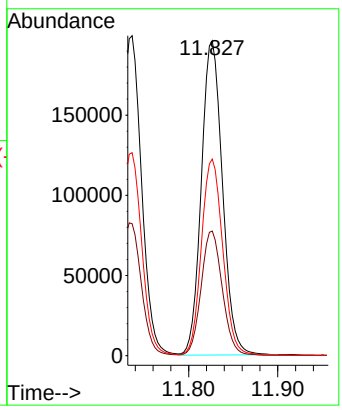




#83
1,4-Dichlorobenzene
Concen: 10.142 ug/l
RT: 11.826 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:146 Resp: 32381

Ion	Ratio	Lower	Upper
146	100		
111	39.4	32.1	48.1
148	63.3	50.2	75.4



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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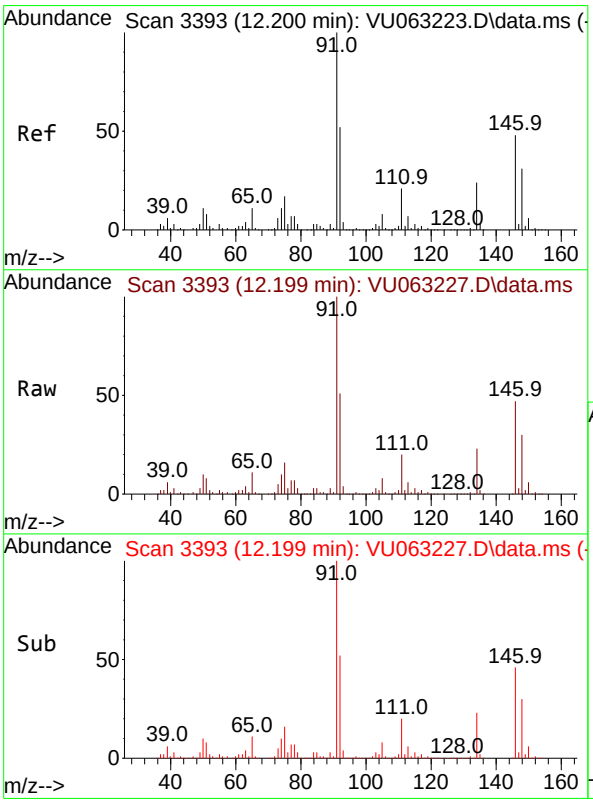
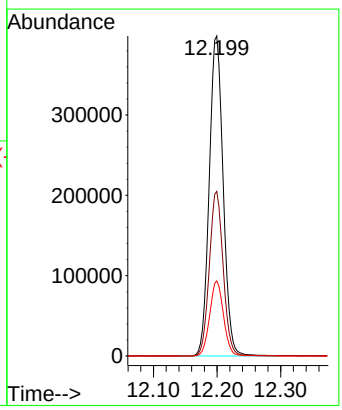
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

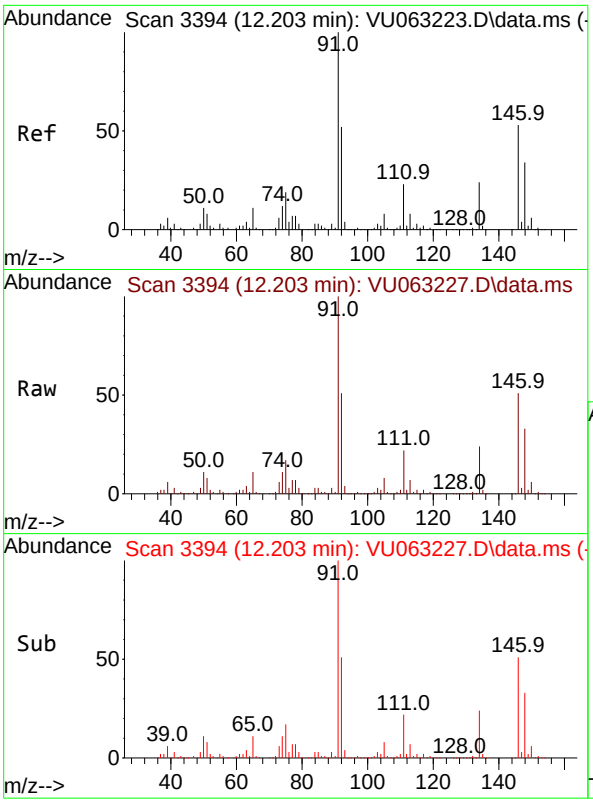


#84
n-Butylbenzene
Concen: 11.497 ug/l
RT: 12.199 min Scan# 3393
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 91 Resp: 606308

Ion	Ratio	Lower	Upper
91	100		
92	51.2	41.8	62.8
134	23.2	18.6	28.0

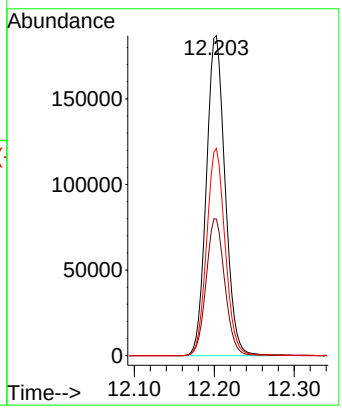




#85
1,2-Dichlorobenzene
Concen: 9.718 ug/l
RT: 12.203 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:146 Resp: 30482

Ion	Ratio	Lower	Upper
146	100		
111	42.7	21.9	65.7
148	63.9	32.3	96.9



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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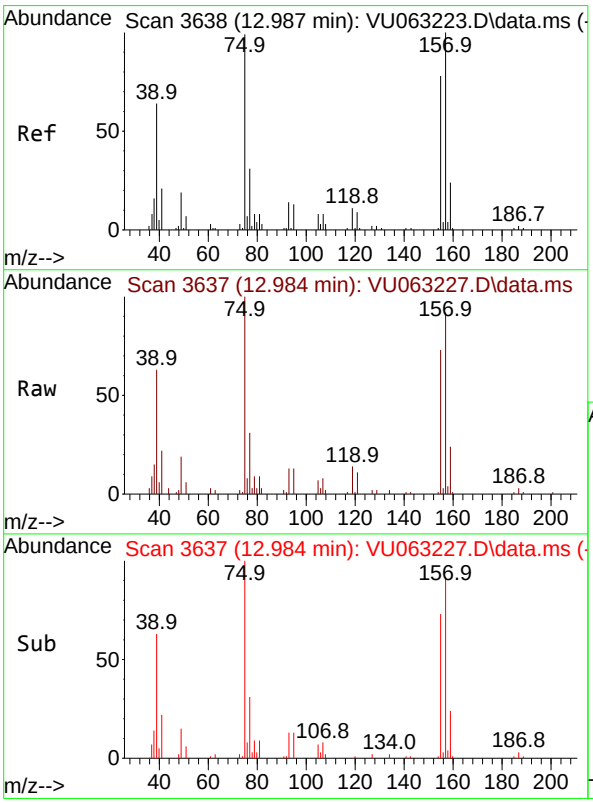
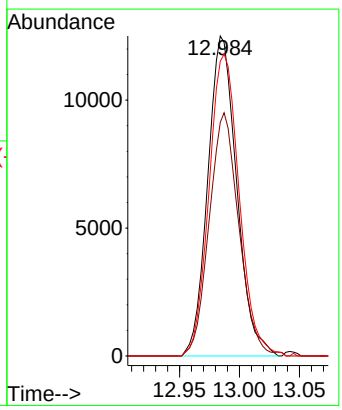
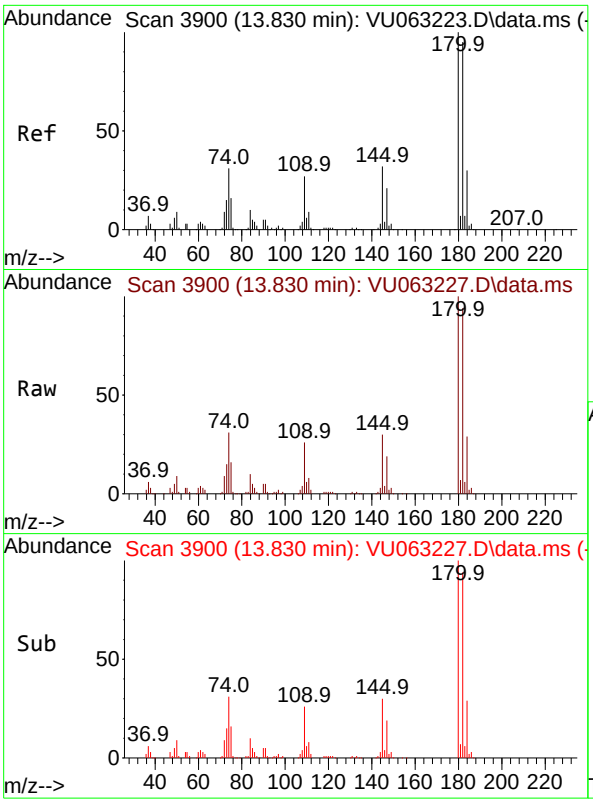


#86
1,2-Dibromo-3-Chloropropane
Concen: 8.936 ug/l
RT: 12.984 min Scan# 3637
Delta R.T. -0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion: 75 Resp: 20970

Ion	Ratio	Lower	Upper
75	100		
155	77.9	63.5	95.3
157	98.4	81.8	122.6

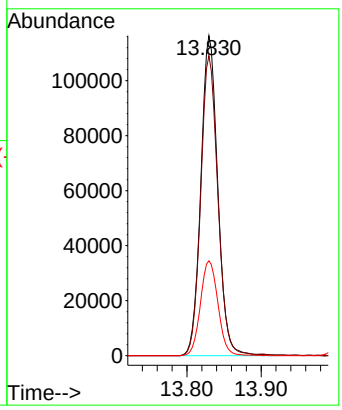




#87
1,2,4-Trichlorobenzene
Concen: 12.045 ug/l
RT: 13.830 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:180 Resp: 18427

Ion	Ratio	Lower	Upper
180	100		
182	94.5	76.6	115.0
145	30.7	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Manual Integrations
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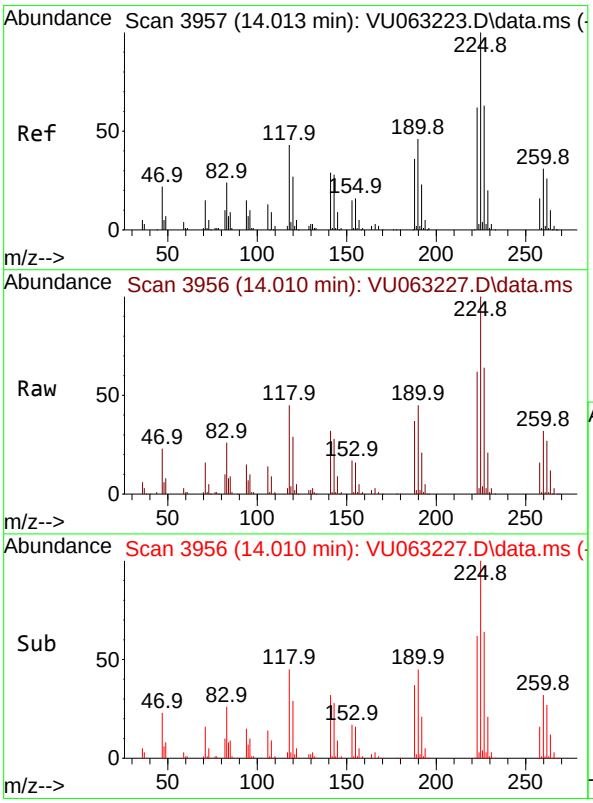
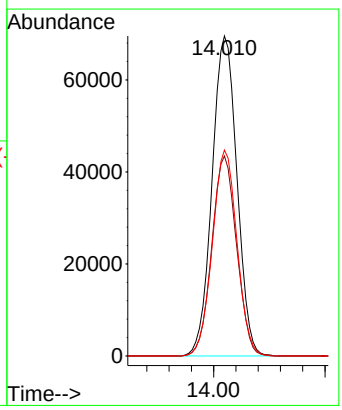
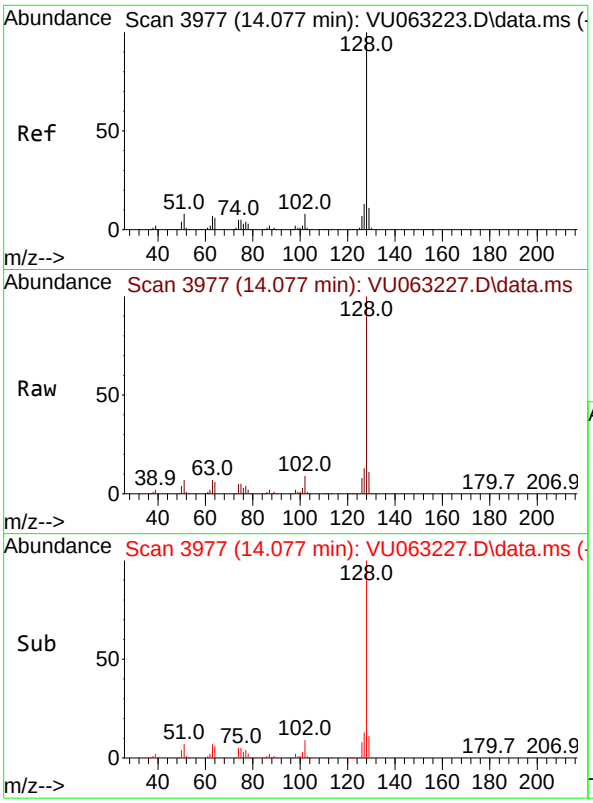


#88
Hexachlorobutadiene
Concen: 9.862 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:225 Resp: 107826

Ion	Ratio	Lower	Upper
225	100		
223	62.2	49.5	74.3
227	63.7	51.0	76.4

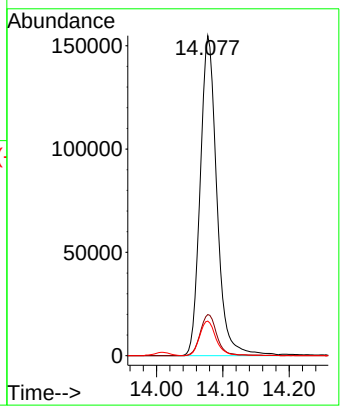




#89
Naphthalene
Concen: 8.568 ug/l
RT: 14.077 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:128 Resp: 27055

Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.6	16.0
129	10.8	8.6	13.0



Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

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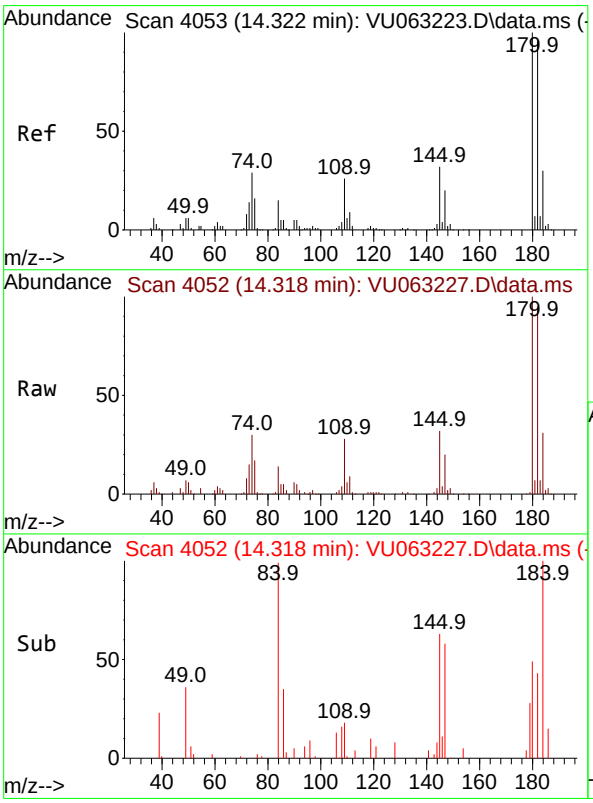
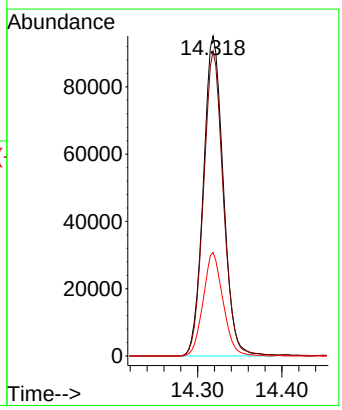


#90
1,2,3-Trichlorobenzene
Concen: 10.466 ug/l
RT: 14.318 min Scan# 4052
Delta R.T. -0.003 min
Lab File: VU063227.D
Acq: 11 Feb 2025 08:50

Tgt Ion:180 Resp: 156676

Ion	Ratio	Lower	Upper
180	100		
182	94.5	78.2	117.2
145	32.2	26.1	39.1



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063227.D
Acq On : 11 Feb 2025 08:50
Operator : MD/SY
Sample : VSTDICV010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Quant Time: Feb 12 03:08:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Fluorobenzene	1.000	1.000	0.0	98	0.00
2	T	Dichlorodifluoromethane	0.325	0.201	38.2#	64	0.00
3	t	Chloromethane	0.374	0.260	30.5#	72	0.00
4	Rt	Vinyl Chloride	0.370	0.285	23.0	76	0.00
5	T	Bromomethane	0.181	0.169	6.6	86	0.00
6	T	Chloroethane	0.233	0.187	19.7	82	0.00
7	T	Trichlorofluoromethane	0.439	0.372	15.3	86	0.00
8		1,1,2-Trichloro-1,2,2-trifl	0.249	0.241	3.2	102	0.00
9	Rt	1,1-Dichloroethene	0.254	0.241	5.1	95	0.00
10	t	Iodomethane	0.399	0.366	8.3	88	0.00
11	t	Allyl Chloride	0.364	0.365	-0.3	98	0.00
12	t	Acrylonitrile	0.059	0.142	-140.7#	213#	0.00
13	T	Acetone	0.045	0.042	6.7	86	0.00
14	T	Carbon Disulfide	0.887	0.713	19.6	81	0.00
15	RT	Methylene Chloride	0.313	0.277	11.5	89	0.00
16	RT	trans-1,2-Dichloroethene	0.290	0.256	11.7	87	0.00
17	t	1,1-Dichloroethane	0.546	0.500	8.4	91	0.00
18	T	2-Butanone	0.072	0.066	8.3	82	0.00
19		Cyclohexane	0.439	0.414	5.7	89	0.00
20		Methylcyclohexane	0.435	0.442	-1.6	96	0.00
21	T	2,2-Dichloropropane	0.426	0.406	4.7	95	0.00
22	RT	cis-1,2-Dichloroethene	0.313	0.312	0.3	97	0.00
23	t	Diethyl Ether	0.218	0.182	16.5	82	0.00
24	t	tert-Butyl Alcohol	0.026	0.008	69.2#	33	0.04
25	t	Methyl tert-Butyl Ether	0.634	0.612	3.5	89	0.00
26	t	Bromochloromethane	0.137	0.131	4.4	93	0.00
27	t	Chloroform	0.551	0.512	7.1	92	0.00
28	RT	1,1,1-Trichloroethane	0.446	0.423	5.2	94	0.00
29	T	1,1-Dichloropropene	0.400	0.348	13.0	84	0.00
30	RT	Carbon Tetrachloride	0.383	0.356	7.0	92	0.00
31	t	Isopropyl Ether	0.779	0.821	-5.4	99	0.00
32		Ethyl-t-butyl ether	0.709	0.000	100.0#	0#	-4.48#
33		Tert-Amyl methyl ether	0.619	0.000	100.0#	0#	-5.93#
34	t	Propionitrile	0.022	0.043	-95.5#	171	0.00
35	RT	Benzene	1.229	1.143	7.0	91	0.00
36	RT	1,2-Dichloroethane	0.355	0.302	14.9	83	0.00
37	RT	Trichloroethene	0.292	0.259	11.3	87	0.00
38	Rt	1,2-Dichloropropane	0.322	0.283	12.1	85	0.00
39	t	Methacrylonitrile	0.080	0.083	-3.8	83	0.00
40	t	Methyl acrylate	0.148	0.145	2.0	86	0.00
41	t	Tetrahydrofuran	0.047	0.109	-131.9#	207#	0.00
42	t	1-Chlorobutane	0.547	0.531	2.9	92	0.00
43	T	Dibromomethane	0.163	0.147	9.8	89	0.00
44	T	Bromodichloromethane	0.379	0.381	-0.5	95	0.00
45	T	4-Methyl-2-Pentanone	0.171	0.167	2.3	83	0.00
46	t	t-1,4-Dichloro-2-butene	0.080	0.044	45.0#	51	0.00
47	t	Methyl methacrylate	0.137	0.066	51.8#	40	0.00
48	t	Ethyl methacrylate	0.258	0.267	-3.5	83	0.00
49	Rt	Toluene	0.707	0.698	1.3	92	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063227.D
Acq On : 11 Feb 2025 08:50
Operator : MD/SY
Sample : VSTDICV010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Quant Time: Feb 12 03:08:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
50	T	t-1,3-Dichloropropene	0.347	0.337	2.9	86	0.00
51	T	cis-1,3-Dichloropropene	0.429	0.399	7.0	85	0.00
52	RT	1,1,2-Trichloroethane	0.220	0.199	9.5	86	0.00
53	t	1,3-Dichloropropane	0.390	0.347	11.0	84	0.00
54	t	2-Hexanone	0.117	0.113	3.4	81	0.00
55	t	Dibromochloromethane	0.253	0.242	4.3	88	0.00
56	T	1,2-Dibromoethane	0.206	0.186	9.7	83	0.00
57	S	4-Bromofluorobenzene	0.330	0.447	-35.5#	122	0.00
58	RT	Tetrachloroethene	0.241	0.232	3.7	97	0.00
59	Rt	Chlorobenzene	0.746	0.728	2.4	93	0.00
60	T	1,1,1,2-Tetrachloroethane	0.268	0.245	8.6	87	0.00
61	t	Pentachloroethane	0.239	0.225	5.9	91	0.00
62	t	Hexachloroethane	0.212	0.208	1.9	92	0.00
63	Rt	Ethyl Benzene	1.286	1.333	-3.7	93	0.00
64	RT	m/p-Xylenes	0.480	0.509	-6.0	93	0.00
65	RT	o-Xylene	0.470	0.488	-3.8	93	0.00
66	RT	Styrene	0.748	0.810	-8.3	92	0.00
67	t	Bromoform	0.143	0.138	3.5	86	0.00
68	S	1,2-Dichlorobenzene-d4	0.343	0.327	4.7	93	0.00
69	T	Isopropylbenzene	1.106	1.301	-17.6	105	0.00
70	T	1,1,2,2-Tetrachloroethane	0.296	0.253	14.5	80	0.00
71	T	1,2,3-Trichloropropane	0.222	0.188	15.3	90	0.00
72	t	Bromobenzene	0.298	0.296	0.7	92	0.00
73	t	n-propylbenzene	0.317	0.340	-7.3	94	0.00
74	t	2-Chlorotoluene	0.292	0.305	-4.5	94	0.00
75	t	1,3,5-Trimethylbenzene	1.024	1.112	-8.6	95	0.00
76	t	4-Chlorotoluene	0.299	0.310	-3.7	94	0.00
77	t	tert-Butylbenzene	1.036	1.073	-3.6	94	0.00
78	t	1,2,4-Trimethylbenzene	1.016	1.092	-7.5	92	0.00
79	t	sec-Butylbenzene	1.319	1.433	-8.6	97	0.00
80		Nitrobenzene	0.007	0.001	85.7#	14#	0.00
81	t	p-Isopropyltoluene	1.041	1.153	-10.8	96	0.00
82	t	1,3-Dichlorobenzene	0.578	0.578	0.0	95	0.00
83	Rt	1,4-Dichlorobenzene	0.565	0.573	-1.4	93	0.00
84	t	n-Butylbenzene	0.933	1.073	-15.0	100	0.00
85	Rt	1,2-Dichlorobenzene	0.555	0.540	2.7	92	0.00
86	t	1,2-Dibromo-3-Chloropropane	0.042	0.037	11.9	75	0.00
87	Rt	1,2,4-Trichlorobenzene	0.271	0.326	-20.3	104	0.00
88	t	Hexachlorobutadiene	0.194	0.191	1.5	103	0.00
89	t	Naphthalene	0.436	0.479	-9.9	84	0.00
90	t	1,2,3-Trichlorobenzene	0.265	0.277	-4.5	90	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063227.D
Acq On : 11 Feb 2025 08:50
Operator : MD/SY
Sample : VSTDICV010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Quant Time: Feb 12 03:08:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	i	Fluorobenzene	1.000	1.000	0.0	98	0.00
2	T	Dichlorodifluoromethane	10.000	6.184	38.2#	64	0.00
3	t	Chloromethane	10.000	6.937	30.6#	72	0.00
4	Rt	Vinyl Chloride	10.000	7.705	22.9	76	0.00
5	T	Bromomethane	10.000	9.317	6.8	86	0.00
6	T	Chloroethane	10.000	8.021	19.8	82	0.00
7	T	Trichlorofluoromethane	10.000	8.470	15.3	86	0.00
8		1,1,2-Trichloro-1,2,2-trifl	10.000	9.685	3.1	102	0.00
9	Rt	1,1-Dichloroethene	10.000	9.488	5.1	95	0.00
10	t	Iodomethane	10.000	9.176	8.2	88	0.00
11	t	Allyl Chloride	10.000	10.019	-0.2	98	0.00
12	t	Acrylonitrile	20.000	48.397	-142.0#	213	0.00
13	T	Acetone	50.000	46.402	7.2	86	0.00
14	T	Carbon Disulfide	10.000	8.041	19.6	81	0.00
15	RT	Methylene Chloride	10.000	8.848	11.5	89	0.00
16	RT	trans-1,2-Dichloroethene	10.000	8.852	11.5	87	0.00
17	t	1,1-Dichloroethane	10.000	9.156	8.4	91	0.00
18	T	2-Butanone	50.000	46.124	7.8	82	0.00
19		Cyclohexane	10.000	9.443	5.6	89	0.00
20		Methylcyclohexane	10.000	10.164	-1.6	96	0.00
21	T	2,2-Dichloropropane	10.000	9.526	4.7	95	0.00
22	RT	cis-1,2-Dichloroethene	10.000	9.968	0.3	97	0.00
23	t	Diethyl Ether	10.000	8.360	16.4	82	0.00
24	t	tert-Butyl Alcohol	100.000	31.908	68.1#	33	0.04
25	t	Methyl tert-Butyl Ether	10.000	9.657	3.4	89	0.00
26	t	Bromochloromethane	10.000	9.544	4.6	93	0.00
27	t	Chloroform	10.000	9.296	7.0	92	0.00
28	RT	1,1,1-Trichloroethane	10.000	9.483	5.2	94	0.00
29	T	1,1-Dichloropropene	10.000	8.717	12.8	84	0.00
30	RT	Carbon Tetrachloride	10.000	9.311	6.9	92	0.00
31	t	Isopropyl Ether	10.000	10.534	-5.3	99	0.00
32		Ethyl-t-butyl ether	10.000	0.000	100.0#	0	-4.48#
33		Tert-Amyl methyl ether	10.000	0.000	100.0#	0	-5.93#
34	t	Propionitrile	50.000	100.030	-100.1#	171	0.00
35	RT	Benzene	10.000	9.305	7.0	91	0.00
36	RT	1,2-Dichloroethane	10.000	8.506	14.9	83	0.00
37	RT	Trichloroethene	10.000	8.871	11.3	87	0.00
38	Rt	1,2-Dichloropropane	10.000	8.794	12.1	85	0.00
39	t	Methacrylonitrile	10.000	10.277	-2.8	83	0.00
40	t	Methyl acrylate	10.000	9.798	2.0	86	0.00
41	t	Tetrahydrofuran	20.000	46.529	-132.6#	207	0.00
42	t	1-Chlorobutane	10.000	9.720	2.8	92	0.00
43	T	Dibromomethane	10.000	9.055	9.5	89	0.00
44	T	Bromodichloromethane	10.000	10.047	-0.5	95	0.00
45	T	4-Methyl-2-Pentanone	50.000	48.787	2.4	83	0.00
46	t	t-1,4-Dichloro-2-butene	20.000	10.896	45.5#	51	0.00
47	t	Methyl methacrylate	20.000	9.683	51.6#	40	0.00
48	t	Ethyl methacrylate	10.000	10.355	-3.6	83	0.00
49	Rt	Toluene	10.000	9.872	1.3	92	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063227.D
Acq On : 11 Feb 2025 08:50
Operator : MD/SY
Sample : VSTDICV010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
ICVVU021025

Quant Time: Feb 12 03:08:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
50	T	t-1,3-Dichloropropene	10.000	9.703	3.0	86	0.00
51	T	cis-1,3-Dichloropropene	10.000	9.319	6.8	85	0.00
52	RT	1,1,2-Trichloroethane	10.000	9.082	9.2	86	0.00
53	t	1,3-Dichloropropane	10.000	8.908	10.9	84	0.00
54	t	2-Hexanone	50.000	48.325	3.3	81	0.00
55	t	Dibromochloromethane	10.000	9.564	4.4	88	0.00
56	T	1,2-Dibromoethane	10.000	9.020	9.8	83	0.00
57	S	4-Bromofluorobenzene	1.000	1.354	-35.4#	122	0.00
58	RT	Tetrachloroethene	10.000	9.644	3.6	97	0.00
59	Rt	Chlorobenzene	10.000	9.767	2.3	93	0.00
60	T	1,1,1,2-Tetrachloroethane	10.000	9.150	8.5	87	0.00
61	t	Pentachloroethane	10.000	9.395	6.1	91	0.00
62	t	Hexachloroethane	10.000	9.808	1.9	92	0.00
63	Rt	Ethyl Benzene	10.000	10.366	-3.7	93	0.00
64	RT	m/p-Xylenes	20.000	21.178	-5.9	93	0.00
65	RT	o-Xylene	10.000	10.384	-3.8	93	0.00
66	RT	Styrene	10.000	10.830	-8.3	92	0.00
67	t	Bromoform	10.000	9.606	3.9	86	0.00
68	S	1,2-Dichlorobenzene-d4	1.000	0.953	4.7	93	0.00
69	T	Isopropylbenzene	10.000	11.767	-17.7	105	0.00
70	T	1,1,2,2-Tetrachloroethane	10.000	8.545	14.6	80	0.00
71	T	1,2,3-Trichloropropane	10.000	8.443	15.6	90	0.00
72	t	Bromobenzene	10.000	9.945	0.5	92	0.00
73	t	n-propylbenzene	10.000	10.744	-7.4	94	0.00
74	t	2-Chlorotoluene	10.000	10.454	-4.5	94	0.00
75	t	1,3,5-Trimethylbenzene	10.000	10.853	-8.5	95	0.00
76	t	4-Chlorotoluene	10.000	10.373	-3.7	94	0.00
77	t	tert-Butylbenzene	10.000	10.355	-3.6	94	0.00
78	t	1,2,4-Trimethylbenzene	10.000	10.746	-7.5	92	0.00
79	t	sec-Butylbenzene	10.000	10.867	-8.7	97	0.00
80		Nitrobenzene	50.000	10.731	78.5#	14	0.00
81	t	p-Isopropyltoluene	10.000	11.076	-10.8	96	0.00
82	t	1,3-Dichlorobenzene	10.000	10.004	-0.0	95	0.00
83	Rt	1,4-Dichlorobenzene	10.000	10.142	-1.4	93	0.00
84	t	n-Butylbenzene	10.000	11.497	-15.0	100	0.00
85	Rt	1,2-Dichlorobenzene	10.000	9.718	2.8	92	0.00
86	t	1,2-Dibromo-3-Chloropropane	10.000	8.936	10.6	75	0.00
87	Rt	1,2,4-Trichlorobenzene	10.000	12.045	-20.4	104	0.00
88	t	Hexachlorobutadiene	10.000	9.862	1.4	103	0.00
89	t	Naphthalene	10.000	8.568	14.3	84	0.00
90	t	1,2,3-Trichlorobenzene	10.000	10.466	-4.7	90	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date/Time: 02/11/2025 10:01

Lab File ID: VU063228.D Init. Calib. Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.325	0.286		-12	30
Chloromethane	0.374	0.311		-16.84	30
Vinyl Chloride	0.370	0.325		-12.16	30
Bromomethane	0.171	0.183		7.02	30
Chloroethane	0.233	0.202		-13.31	30
Tetrahydrofuran	0.047	0.042		-10.64	30
Trichlorofluoromethane	0.439	0.394		-10.25	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.249	0.228		-8.43	30
tert-Butyl Alcohol	0.026	0.017		-34.62	30
Diethyl Ether	0.218	0.182		-16.51	30
1,1-Dichloroethene	0.254	0.226		-11.02	30
Acrylonitrile	0.059	0.054		-8.48	30
Acetone	0.045	0.037		-17.78	30
Carbon Disulfide	0.887	0.776		-12.51	30
Methyl tert-Butyl Ether	0.634	0.586		-7.57	30
Methyl acrylate	0.148	0.125		-15.54	30
Methylene Chloride	0.313	0.271		-13.42	30
trans-1,2-Dichloroethene	0.290	0.261		-10	30
1,1-Dichloroethane	0.546	0.485		-11.17	30
Cyclohexane	0.439	0.427		-2.73	30
2-Butanone	0.072	0.064		-11.11	30
Carbon Tetrachloride	0.383	0.349		-8.88	30
2,2-Dichloropropane	0.426	0.394		-7.51	30
cis-1,2-Dichloroethene	0.313	0.284		-9.27	30
Bromochloromethane	0.137	0.122		-10.95	30
Chloroform	0.551	0.488		-11.43	30
1,1,1-Trichloroethane	0.446	0.407		-8.74	30
Methylcyclohexane	0.435	0.448		2.99	30
1,1-Dichloropropene	0.400	0.376		-6	30
Propionitrile	0.022	0.021		-4.55	30
Benzene	1.229	1.118		-9.03	30
1,2-Dichloroethane	0.355	0.307		-13.52	30
Trichloroethene	0.292	0.266		-8.9	30
1,2-Dichloropropane	0.322	0.292		-9.32	30
1-Chlorobutane	0.547	0.524		-4.2	30
Dibromomethane	0.163	0.144		-11.66	30
Bromodichloromethane	0.379	0.346		-8.71	30
4-Methyl-2-Pentanone	0.171	0.162		-5.26	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date/Time: 02/11/2025 10:01

Lab File ID: VU063228.D Init. Calib. Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Toluene	0.707	0.684		-3.25	30
t-1,3-Dichloropropene	0.347	0.340		-2.02	30
cis-1,3-Dichloropropene	0.429	0.400		-6.76	30
1,1,2-Trichloroethane	0.220	0.201		-8.64	30
1,3-Dichloropropane	0.390	0.355		-8.97	30
2-Hexanone	0.117	0.111		-5.13	30
Dibromochloromethane	0.253	0.232		-8.3	30
1,2-Dibromoethane	0.206	0.190		-7.77	30
Tetrachloroethene	0.241	0.225		-6.64	30
Chlorobenzene	0.746	0.709		-4.96	30
1,1,1,2-Tetrachloroethane	0.268	0.247		-7.84	30
Hexachloroethane	0.212	0.198		-6.6	30
Ethyl Benzene	1.286	1.288		0.16	30
m/p-Xylenes	0.480	0.492		2.5	30
o-Xylene	0.470	0.471		0.21	30
Styrene	0.748	0.766		2.41	30
Bromoform	0.143	0.130		-9.09	30
Isopropylbenzene	1.106	1.125		1.72	30
1,1,2,2-Tetrachloroethane	0.296	0.261		-11.82	30
1,2,3-Trichloropropane	0.222	0.211		-4.95	30
Bromobenzene	0.298	0.282		-5.37	30
n-propylbenzene	0.317	0.329		3.79	30
2-Chlorotoluene	0.292	0.289		-1.03	30
1,3,5-Trimethylbenzene	1.024	1.050		2.54	30
4-Chlorotoluene	0.299	0.300		0.33	30
tert-Butylbenzene	1.036	1.025		-1.06	30
1,2,4-Trimethylbenzene	1.016	1.058		4.13	30
sec-Butylbenzene	1.319	1.355		2.73	30
p-Isopropyltoluene	1.041	1.100		5.67	30
1,3-Dichlorobenzene	0.578	0.544		-5.88	30
1,4-Dichlorobenzene	0.565	0.544		-3.72	30
n-Butylbenzene	0.933	1.032		10.61	30
1,2-Dichlorobenzene	0.555	0.517		-6.85	30
1,2-Dibromo-3-Chloropropane	0.042	0.039		-7.14	30
1,2,4-Trichlorobenzene	0.271	0.297		9.59	30
Hexachlorobutadiene	0.194	0.187		-3.61	30
Naphthalene	0.436	0.499		14.45	30
1,2,3-Trichlorobenzene	0.265	0.280		5.66	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date/Time: 02/11/2025 10:01

Lab File ID: VU063228.D Init. Calib. Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
1,2-Dichlorobenzene-d4	0.343	0.340		-0.88	30
4-Bromofluorobenzene	0.330	0.353		6.97	30
Iodomethane	0.399	0.374		-6.27	30
Allyl Chloride	0.364	0.334		-8.24	30
Methacrylonitrile	0.080	0.079		-1.25	30
Methyl methacrylate	0.137	0.135		-1.46	30

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_U\Data\VU021125\
Data File : VU063228.D
Acq On : 11 Feb 2025 10:01
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 12 03:08:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.107	96	58984	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.624	95	20817	1.070	ug/l	0.00
Spiked Amount 1.000			Recovery = 107.000%			
68) 1,2-Dichlorobenzene-d4	12.183	152	20041	0.990	ug/l	0.00
Spiked Amount 1.000			Recovery = 99.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.377	85	168588	8.797	ug/l	99
3) Chloromethane	1.512	50	183150	8.299	ug/l	99
4) Vinyl Chloride	1.595	62	191877	8.787	ug/l	99
5) Bromomethane	1.846	94	108143	10.135	ug/l	100
6) Chloroethane	1.923	64	118959	8.649	ug/l	99
7) Trichlorofluoromethane	2.129	101	232107	8.970	ug/l	100
8) 1,1,2-Trichloro-1,2,2-...	2.570	101	134615	9.165	ug/l	100
9) 1,1-Dichloroethene	2.570	96	133273	8.906	ug/l	99
10) Iodomethane	2.708	142	220323	9.365	ug/l	100
11) Allyl Chloride	2.911	41	197158	9.171	ug/l	99
12) Acrylonitrile	3.306	53	63729	18.464	ug/l	97
13) Acetone	2.621	43	108004	40.694	ug/l	98
14) Carbon Disulfide	2.782	76	457748	8.748	ug/l	100
15) Methylene Chloride	3.030	84	159891	8.649	ug/l	99
16) trans-1,2-Dichloroethene	3.338	96	154228	9.030	ug/l	97
17) 1,1-Dichloroethane	3.853	63	285900	8.881	ug/l	100
18) 2-Butanone	4.692	43	189230	44.800	ug/l	99
19) Cyclohexane	5.373	56	251683m	9.729	ug/l	
20) Methylcyclohexane	6.753	83	264092	10.295	ug/l	99
21) 2,2-Dichloropropane	4.647	77	232569	9.260	ug/l	100
22) cis-1,2-Dichloroethene	4.650	96	167648	9.085	ug/l	98
23) Diethyl Ether	2.364	59	107509	8.373	ug/l	94
24) tert-Butyl Alcohol	3.190	59	97948	72.937	ug/l	99
25) Methyl tert-Butyl Ether	3.348	73	345688	9.249	ug/l	100
26) Bromochloromethane	4.959	128	71801	8.902	ug/l	99
27) Chloroform	5.071	83	287897	8.862	ug/l	100
28) 1,1,1-Trichloroethane	5.303	97	240282	9.130	ug/l	99
29) 1,1-Dichloropropene	5.512	75	221821	9.411	ug/l	99
30) Carbon Tetrachloride	5.512	117	205723	9.115	ug/l	97
31) Isopropyl Ether	3.975	45	438504	9.541	ug/l	98
32) Ethyl-t-butyl ether	4.483	59	404506	9.678	ug/l	100
33) Tert-Amyl methyl ether	5.926	73	355235	9.728	ug/l	100
34) Propionitrile	4.769	54	62417	48.994	ug/l	97
35) Benzene	5.759	78	659362	9.098	ug/l	99
36) 1,2-Dichloroethane	5.779	62	181267	8.666	ug/l	99
37) Trichloroethene	6.531	130	157032	9.111	ug/l	99
38) 1,2-Dichloropropane	6.779	63	172356	9.086	ug/l	99
39) Methacrylonitrile	4.959	41	46751	9.847	ug/l	96
40) Methyl acrylate	4.837	55	73871	8.442	ug/l	96
41) Tetrahydrofuran	5.046	42	49020	17.753	ug/l	99
42) 1-Chlorobutane	5.444	56	309030	9.582	ug/l	99
43) Dibromomethane	6.907	93	85171	8.867	ug/l	97
44) Bromodichloromethane	7.094	83	204300	9.138	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063228.D
Acq On : 11 Feb 2025 10:01
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 12 03:08:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 4-Methyl-2-Pentanone	7.779	43	477721	47.438	ug/l	99
46) t-1,4-Dichloro-2-butene	10.817	75	104119m	21.994	ug/l	
47) Methyl methacrylate	6.949	69	158763	19.623	ug/l	99
48) Ethyl methacrylate	8.322	69	156800	10.321	ug/l	99
49) Toluene	7.959	92	403234	9.675	ug/l	100
50) t-1,3-Dichloropropene	8.200	75	200824	9.811	ug/l	99
51) cis-1,3-Dichloropropene	7.595	75	236098	9.338	ug/l	98
52) 1,1,2-Trichloroethane	8.389	97	118560	9.154	ug/l	99
53) 1,3-Dichloropropane	8.563	76	209175	9.097	ug/l	99
54) 2-Hexanone	8.676	43	327783	47.697	ug/l	99
55) Dibromochloromethane	8.798	129	136618	9.169	ug/l	98
56) 1,2-Dibromoethane	8.914	107	112027	9.223	ug/l	99
58) Tetrachloroethene	8.544	164	132957	9.361	ug/l	99
59) Chlorobenzene	9.438	112	418432	9.514	ug/l	100
60) 1,1,1,2-Tetrachloroethane	9.521	131	145537	9.206	ug/l	100
61) Pentachloroethane	11.415	117	125203	8.865	ug/l	99
62) Hexachloroethane	12.463	117	116848	9.352	ug/l	99
63) Ethyl Benzene	9.560	91	759839	10.017	ug/l	100
64) m/p-Xylenes	9.682	106	579956	20.468	ug/l	99
65) o-Xylene	10.090	106	277570	10.007	ug/l	99
66) Styrene	10.103	104	451617	10.231	ug/l	100
67) Bromoform	10.280	173	76919	9.096	ug/l	99
69) Isopropylbenzene	10.473	105	663578	10.176	ug/l	100
70) 1,1,2,2-Tetrachloroethane	10.772	83	153961	8.820	ug/l	99
71) 1,2,3-Trichloropropane	10.814	75	124385m	9.485	ug/l	
72) Bromobenzene	10.772	156	166186	9.459	ug/l	100
73) n-propylbenzene	10.894	120	194100	10.396	ug/l	98
74) 2-Chlorotoluene	10.975	126	170502	9.909	ug/l	99
75) 1,3,5-Trimethylbenzene	11.077	105	619325	10.250	ug/l	100
76) 4-Chlorotoluene	11.087	126	177057	10.034	ug/l	97
77) tert-Butylbenzene	11.409	119	604402	9.891	ug/l	99
78) 1,2,4-Trimethylbenzene	11.457	105	624278	10.413	ug/l	99
79) sec-Butylbenzene	11.634	105	798973	10.269	ug/l	99
80) Nitrobenzene	13.203	77	19933m	39.429	ug/l	
81) p-Isopropyltoluene	11.782	119	648966	10.569	ug/l	100
82) 1,3-Dichlorobenzene	11.733	146	320582	9.407	ug/l	100
83) 1,4-Dichlorobenzene	11.827	146	320867	9.626	ug/l	99
84) n-Butylbenzene	12.196	91	608967	11.060	ug/l	99
85) 1,2-Dichlorobenzene	12.203	146	304747	9.305	ug/l	99
86) 1,2-Dibromo-3-Chloropr...	12.987	75	22925	9.357	ug/l	96
87) 1,2,4-Trichlorobenzene	13.830	180	175153	10.965	ug/l	99
88) Hexachlorobutadiene	14.010	225	110172	9.651	ug/l	98
89) Naphthalene	14.077	128	294274	8.899	ug/l	99
90) 1,2,3-Trichlorobenzene	14.318	180	165126	10.565	ug/l	99

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

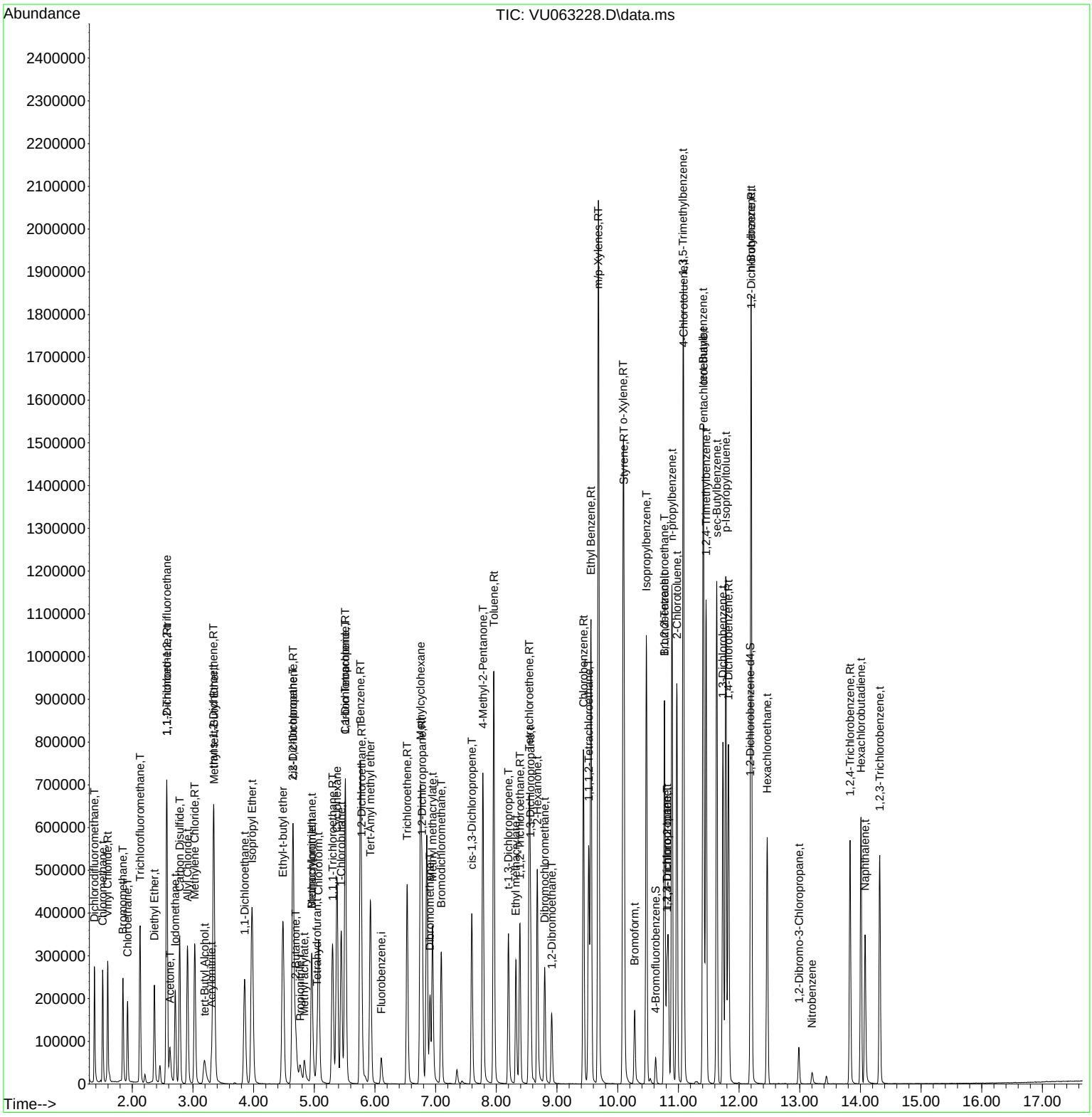
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063228.D
Acq On : 11 Feb 2025 10:01
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

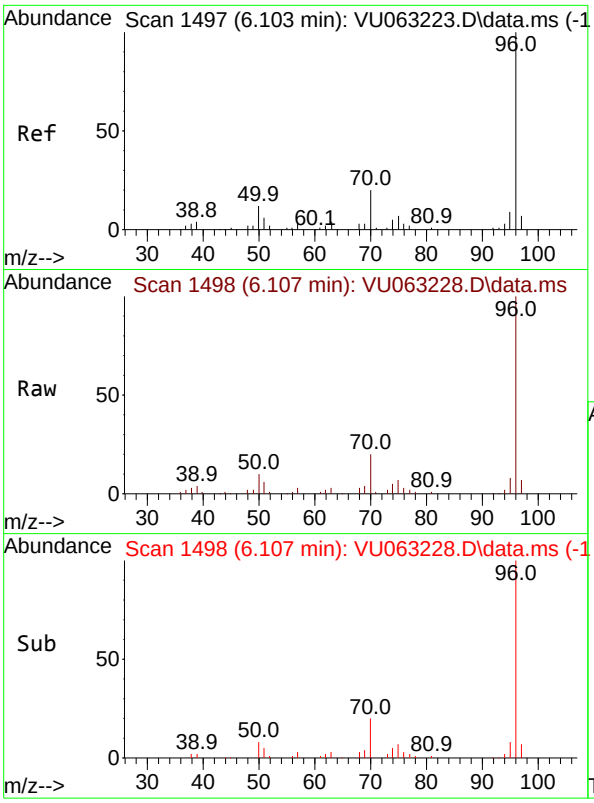
Quant Time: Feb 12 03:08:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

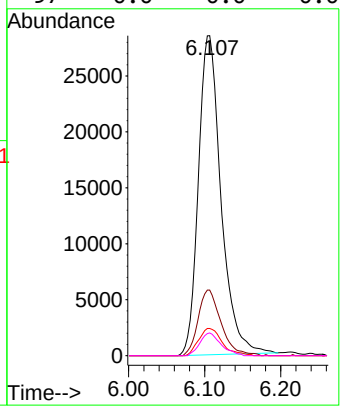




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.107 min Scan# 14
Delta R.T. 0.004 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 96 Resp: 5898

Ion	Ratio	Lower	Upper
96	100		
70	20.8	15.6	23.4
95	8.9	7.3	10.9
97	0.0	0.0	0.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Amit Patel 02/12/2025
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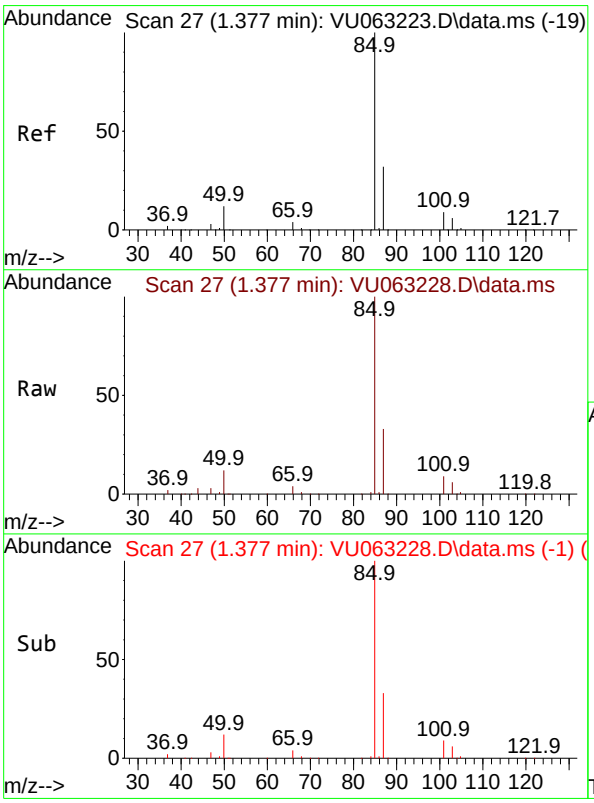
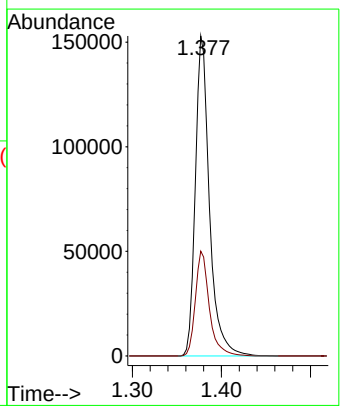
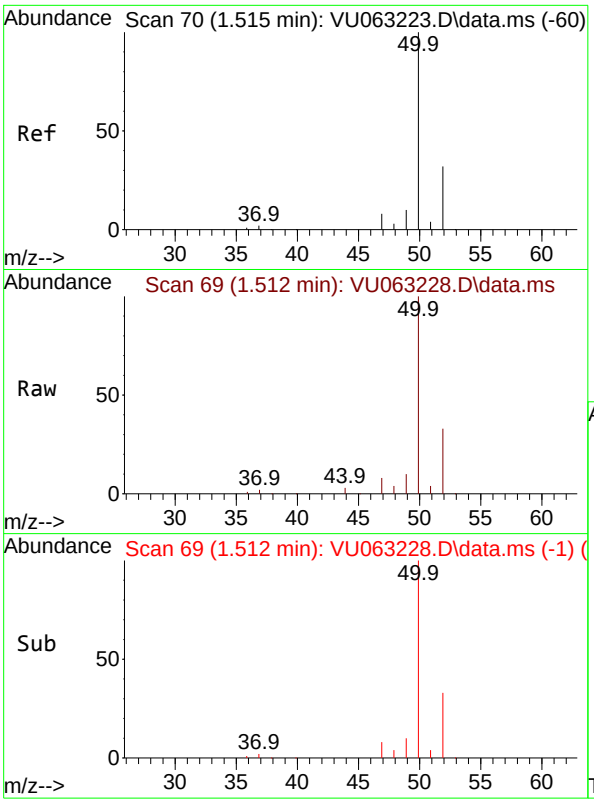


#2
Dichlorodifluoromethane
Concen: 8.797 ug/l
RT: 1.377 min Scan# 27
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 85 Resp: 168588

Ion	Ratio	Lower	Upper
85	100		
87	32.8	16.0	48.0

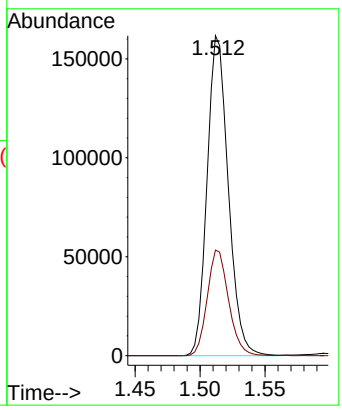




#3
Chloromethane
Concen: 8.299 ug/l
RT: 1.512 min Scan# 6
Delta R.T. -0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 50 Resp: 18315

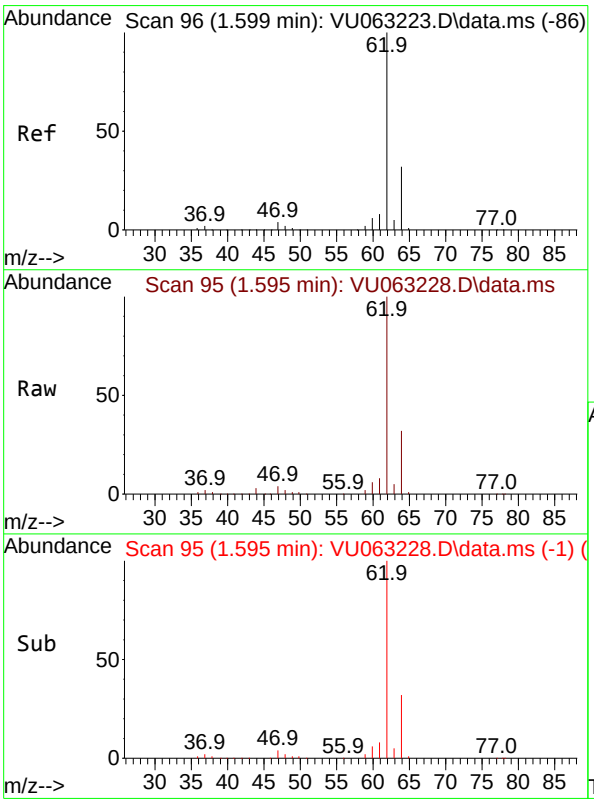
Ion	Ratio	Lower	Upper
50	100		
52	33.0	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

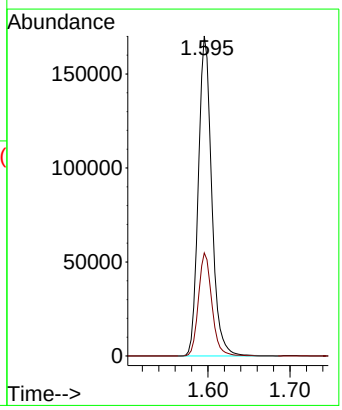
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

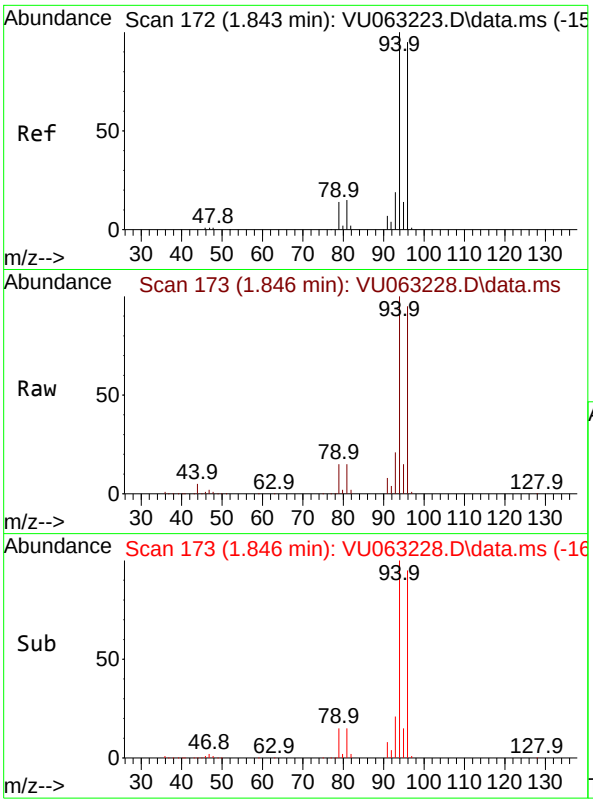


#4
Vinyl Chloride
Concen: 8.787 ug/l
RT: 1.595 min Scan# 95
Delta R.T. -0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 62 Resp: 191877

Ion	Ratio	Lower	Upper
62	100		
64	32.2	25.4	38.0

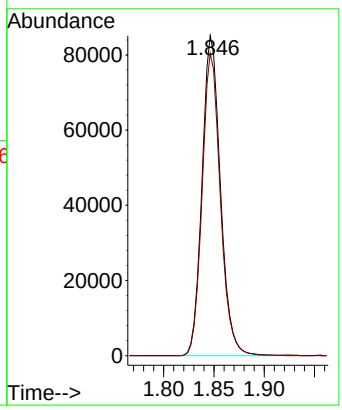




#5
Bromomethane
Concen: 10.135 ug/l
RT: 1.846 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 94 Resp: 10814

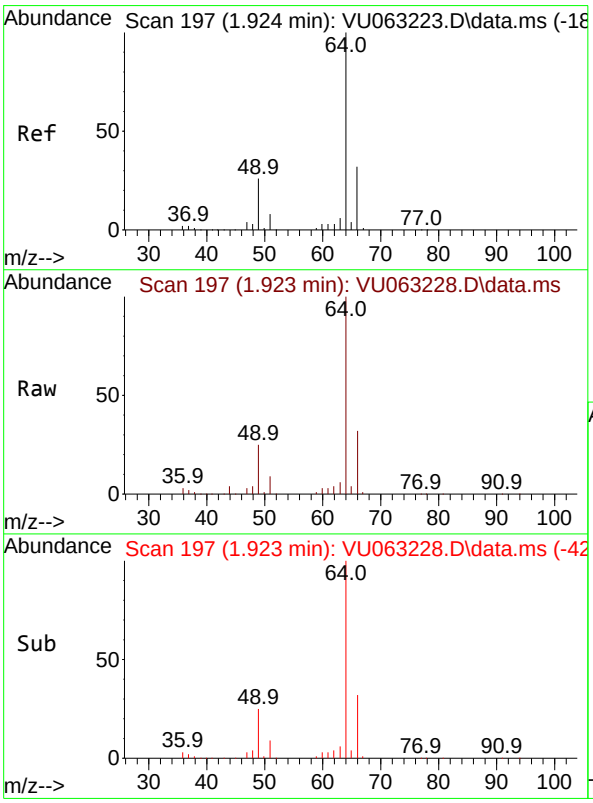
Ion	Ratio	Lower	Upper
94	100		
96	94.5	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

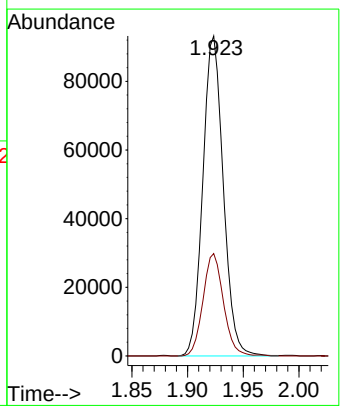
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

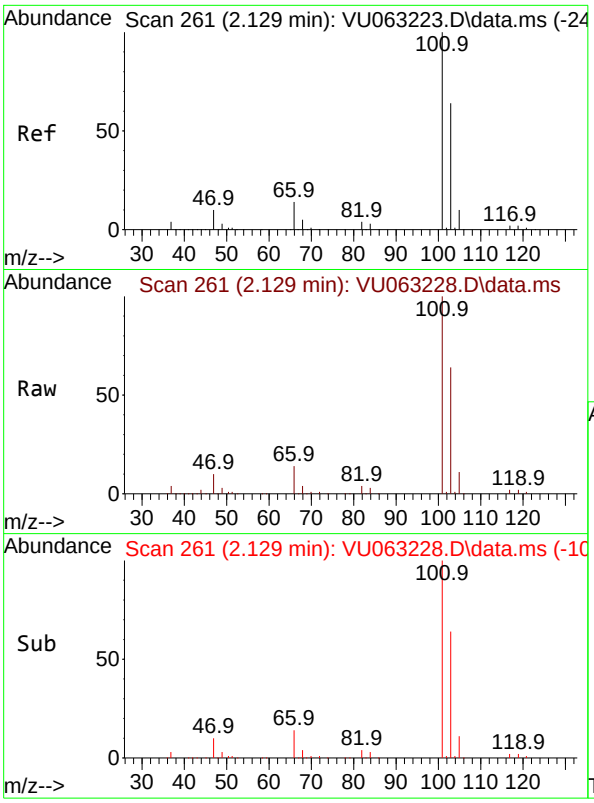


#6
Chloroethane
Concen: 8.649 ug/l
RT: 1.923 min Scan# 197
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 64 Resp: 118959

Ion	Ratio	Lower	Upper
64	100		
66	32.0	25.8	38.8





#7
Trichlorofluoromethane
Concen: 8.970 ug/l
RT: 2.129 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

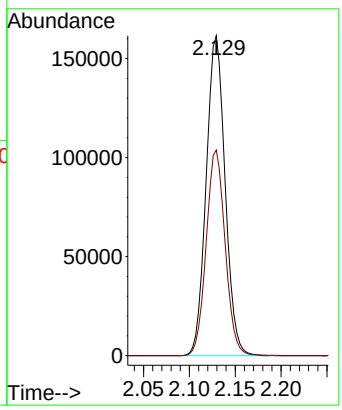
Tgt Ion:101 Resp: 23210

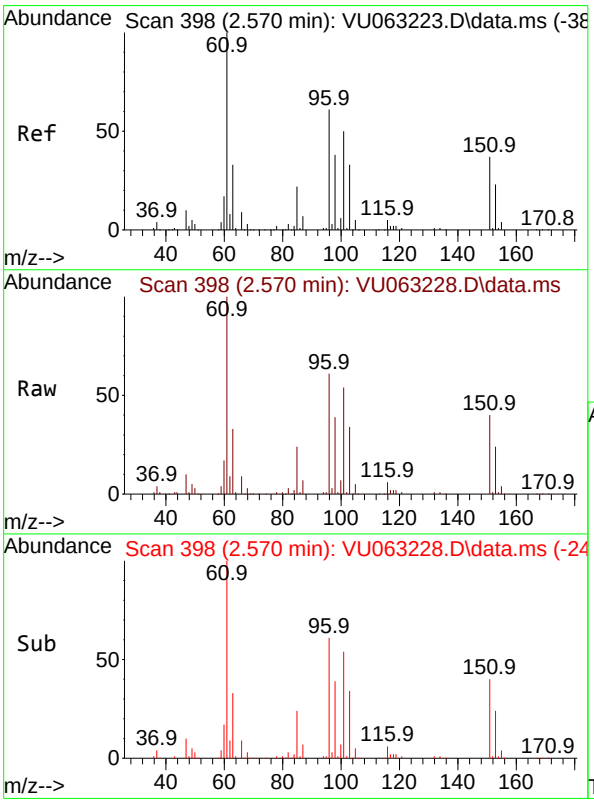
Ion	Ratio	Lower	Upper
101	100		
103	64.2	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

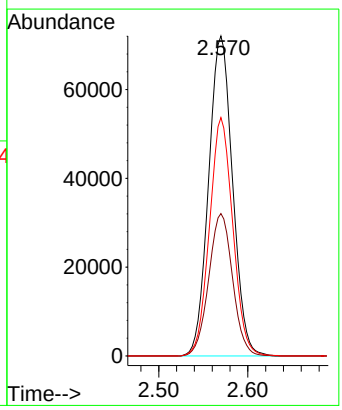


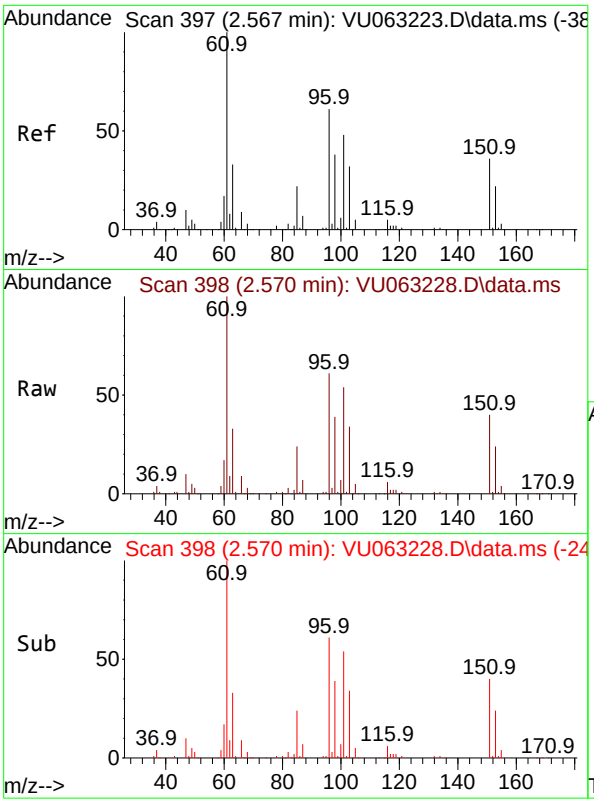


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 9.165 ug/l
RT: 2.570 min Scan# 398
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:101 Resp: 134615

Ion	Ratio	Lower	Upper
101	100		
85	44.3	35.4	53.0
151	72.6	58.5	87.7





#9
1,1-Dichloroethene
Concen: 8.906 ug/l
RT: 2.570 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 96 Resp: 13327

Ion	Ratio	Lower	Upper
96	100		
61	165.1	0.0	492.9
98	64.9	0.0	124.0

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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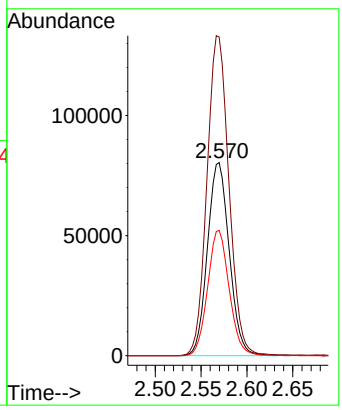
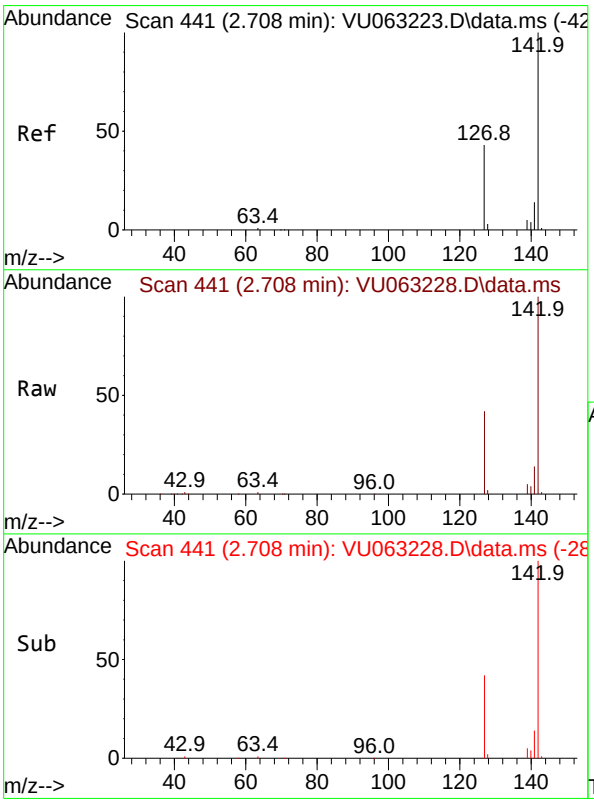
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

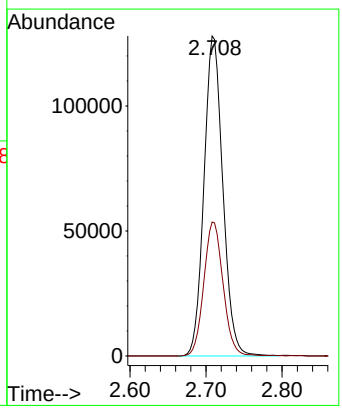


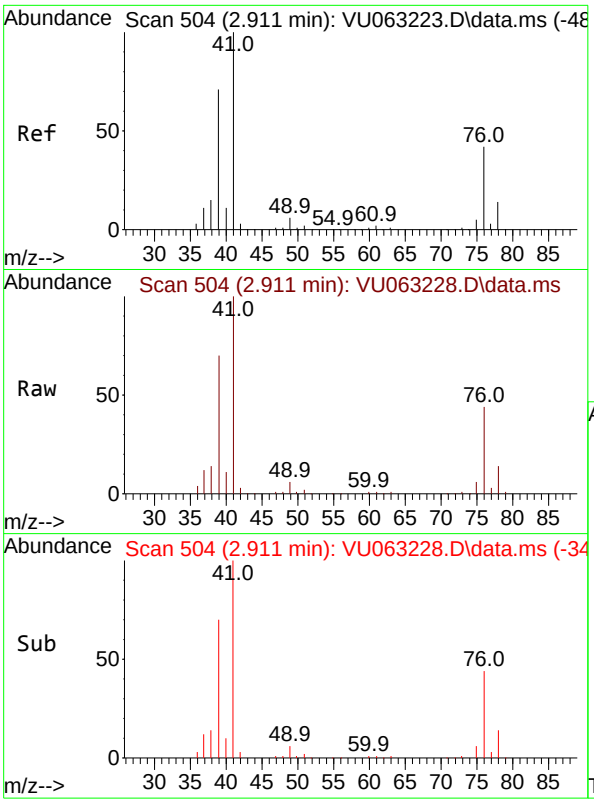


#10
Iodomethane
Concen: 9.365 ug/l
RT: 2.708 min Scan# 441
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:142 Resp: 220323

Ion	Ratio	Lower	Upper
142	100		
127	42.8	34.5	51.7





#11
Allyl Chloride
Concen: 9.171 ug/l
RT: 2.911 min Scan# 5
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 41 Resp: 19715

Ion	Ratio	Lower	Upper
41	100		
39	71.6	57.9	86.9

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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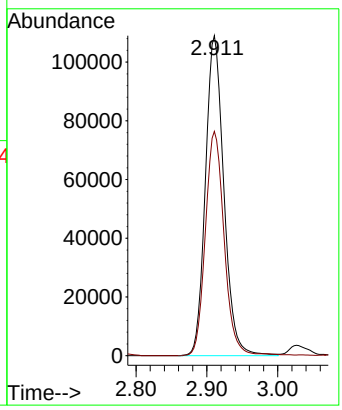
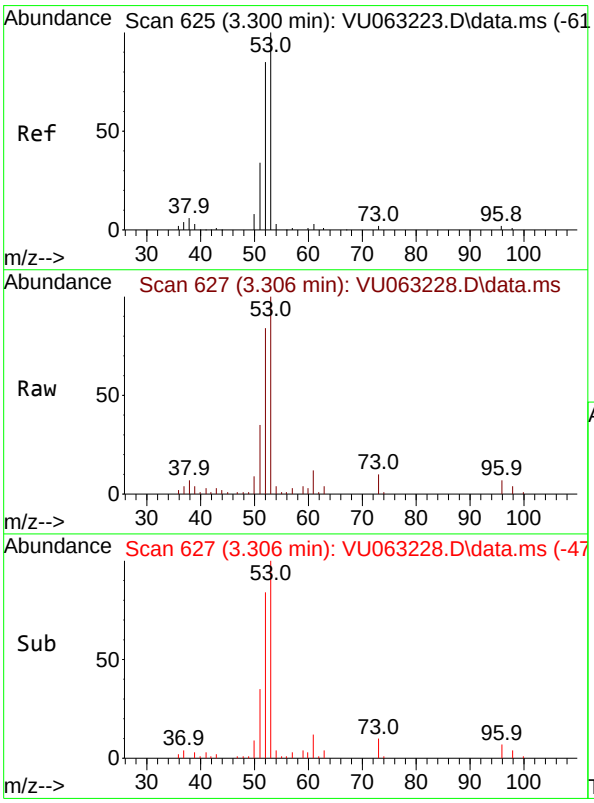
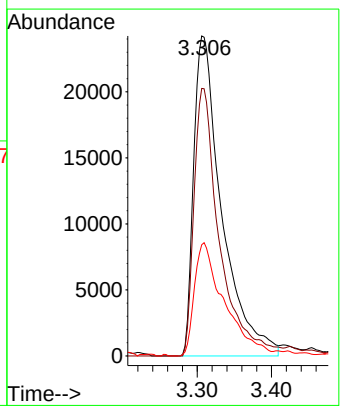


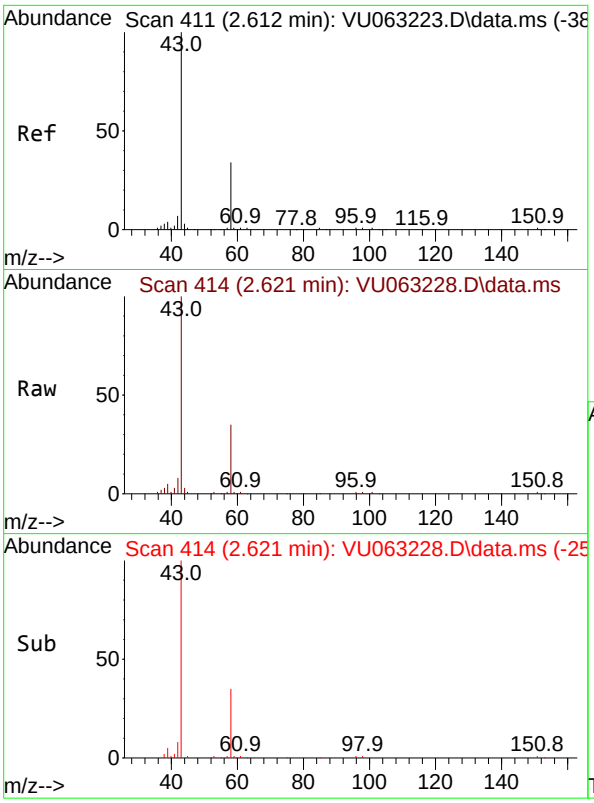


#12
Acrylonitrile
Concen: 18.464 ug/l
RT: 3.306 min Scan# 627
Delta R.T. 0.006 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 53 Resp: 63729

Ion	Ratio	Lower	Upper
53	100		
52	76.3	64.2	96.2
51	37.9	30.8	46.2

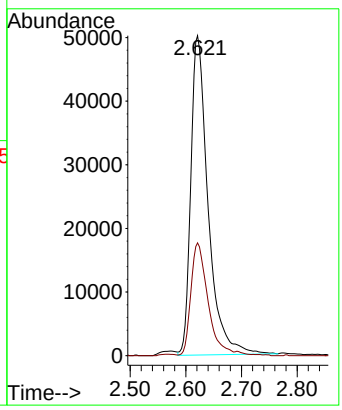




#13
Acetone
Concen: 40.694 ug/l
RT: 2.621 min Scan# 4
Delta R.T. 0.010 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 43 Resp: 10800

Ion	Ratio	Lower	Upper
43	100		
58	35.5	27.4	41.0



Instrument :
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ClientSampleId :
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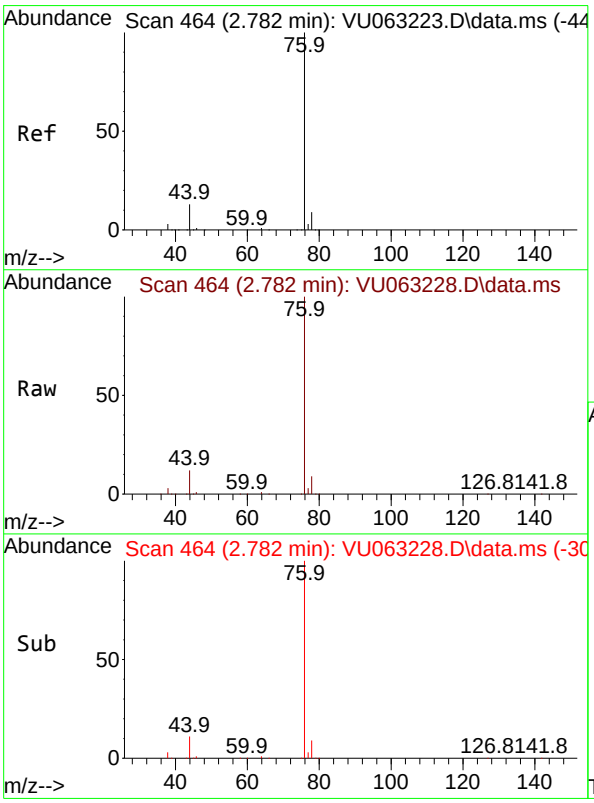
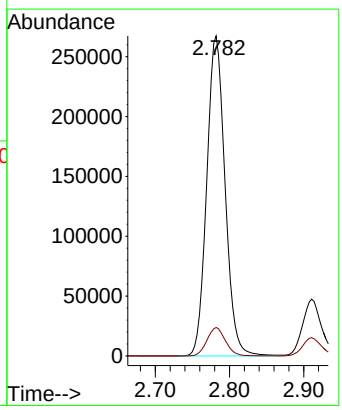
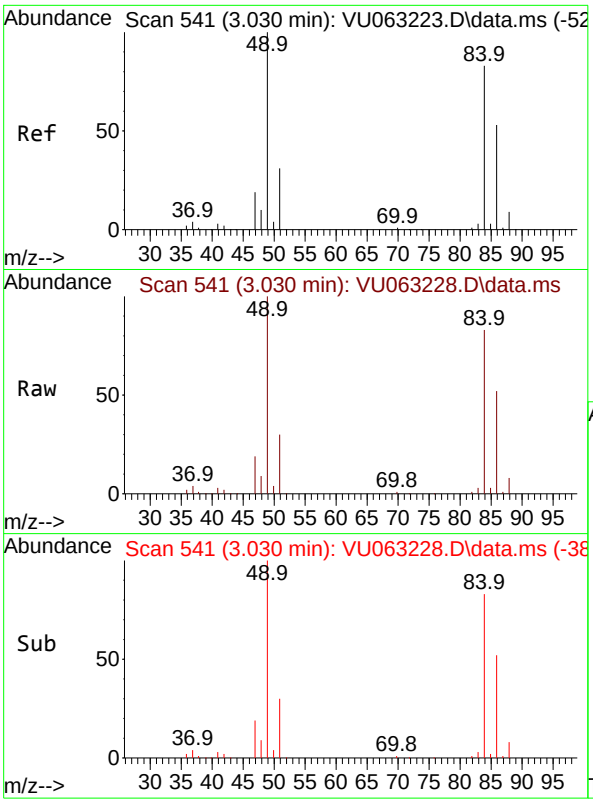


#14
Carbon Disulfide
Concen: 8.748 ug/l
RT: 2.782 min Scan# 464
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 76 Resp: 457748

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.2	10.8

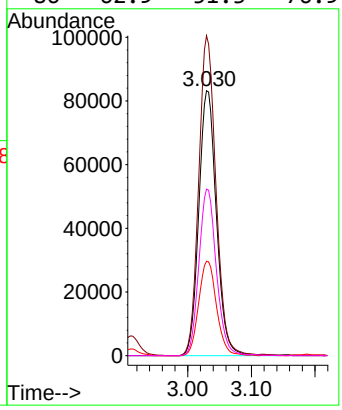




#15
Methylene Chloride
Concen: 8.649 ug/l
RT: 3.030 min Scan# 54
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 84 Resp: 15989

Ion	Ratio	Lower	Upper
84	100		
49	120.8	96.4	144.6
51	35.7	0.0	74.8
86	62.9	51.3	76.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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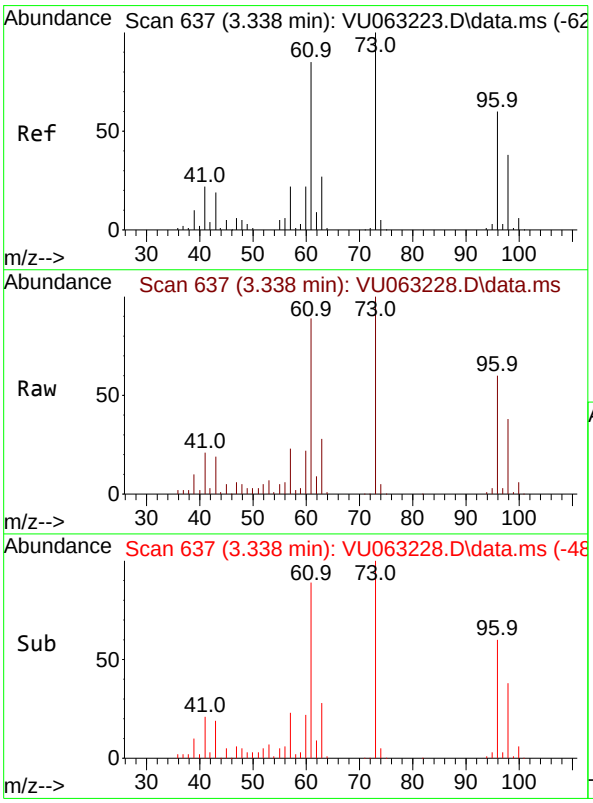
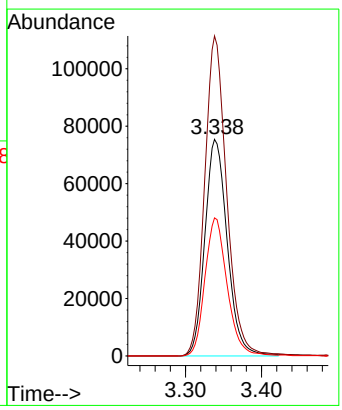
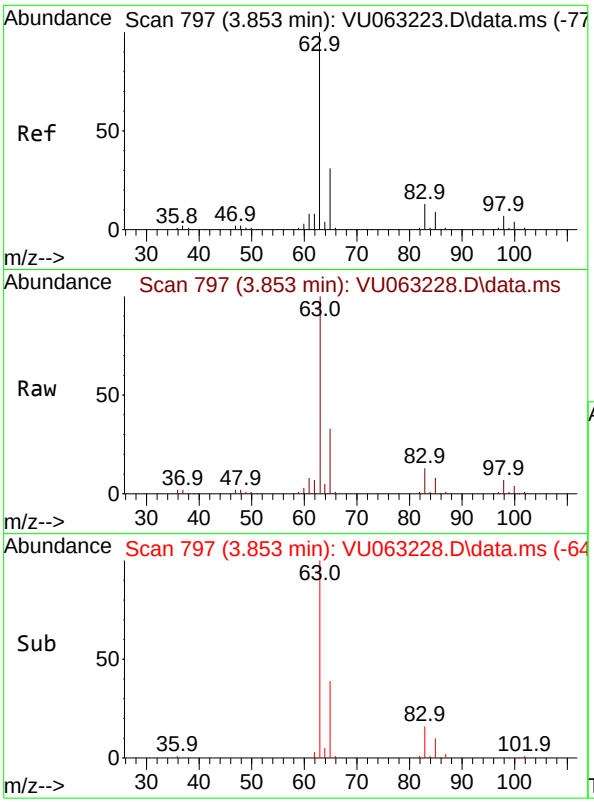


#16
trans-1,2-Dichloroethene
Concen: 9.030 ug/l
RT: 3.338 min Scan# 637
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 96 Resp: 154228

Ion	Ratio	Lower	Upper
96	100		
61	147.7	113.4	170.2
98	63.7	51.2	76.8

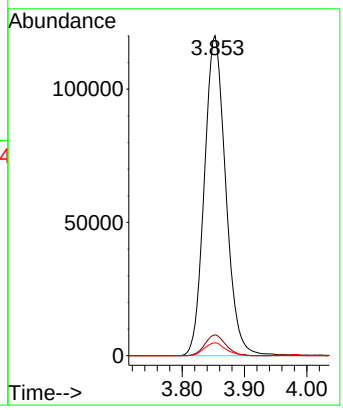




#17
1,1-Dichloroethane
Concen: 8.881 ug/l
RT: 3.853 min Scan# 7
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 63 Resp: 28590

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	4.0	2.1	6.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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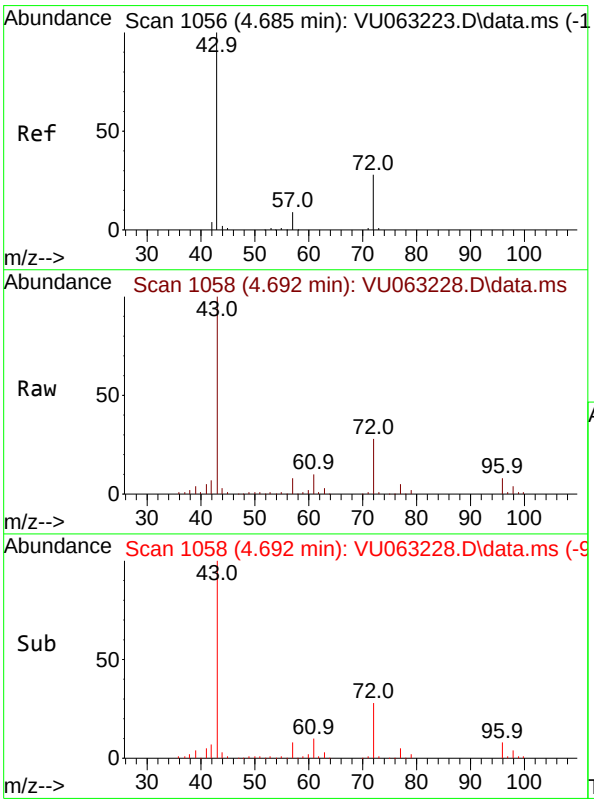
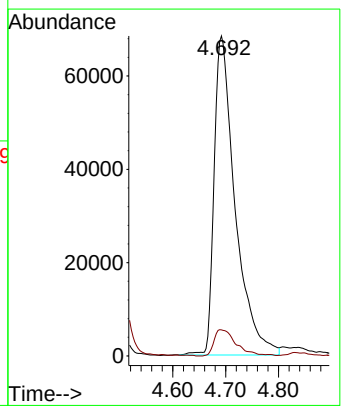
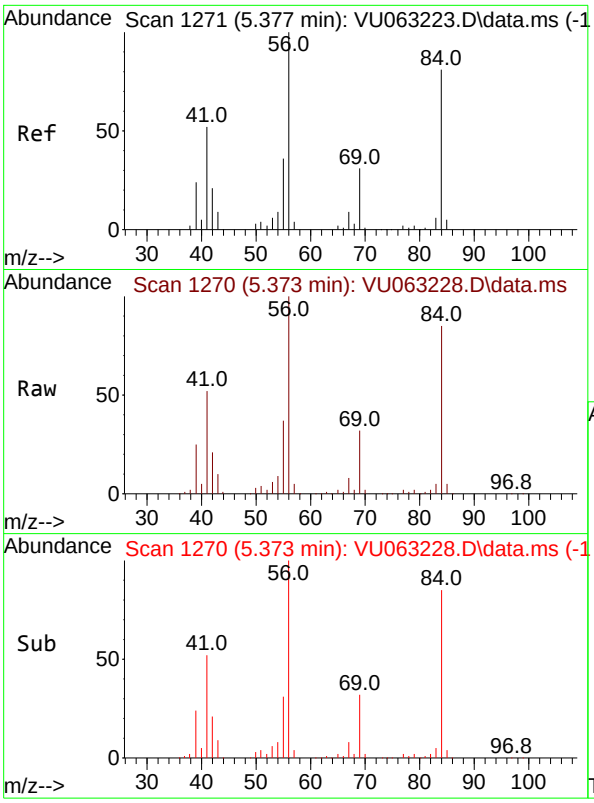


#18
2-Butanone
Concen: 44.800 ug/l
RT: 4.692 min Scan# 1058
Delta R.T. 0.006 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 43 Resp: 189230

Ion	Ratio	Lower	Upper
43	100		
57	8.0	0.0	17.0

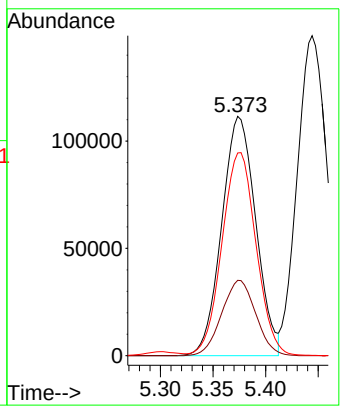




#19
Cyclohexane
Concen: 9.729 ug/l m
RT: 5.373 min Scan# 1
Delta R.T. -0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 56 Resp: 25168

Ion	Ratio	Lower	Upper
56	100		
69	31.4	24.5	36.7
84	83.6	65.2	97.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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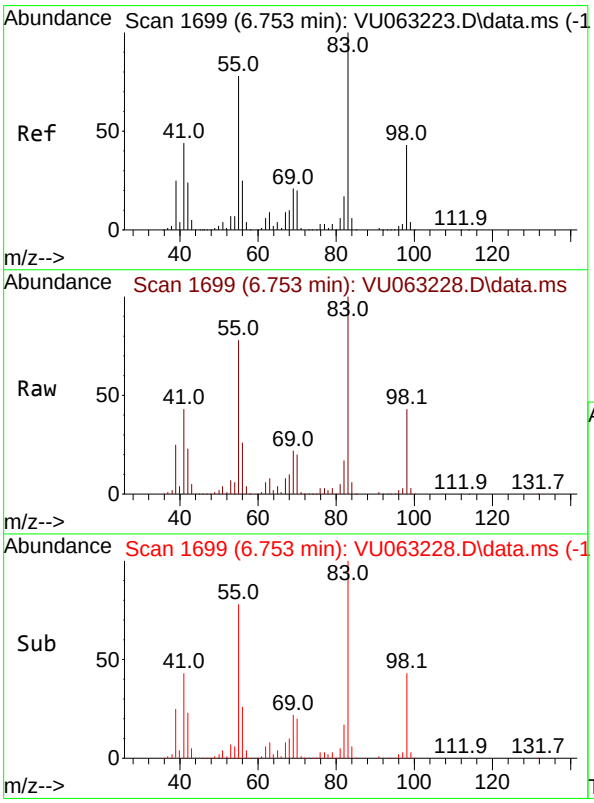
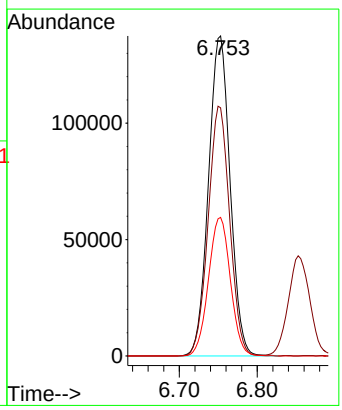
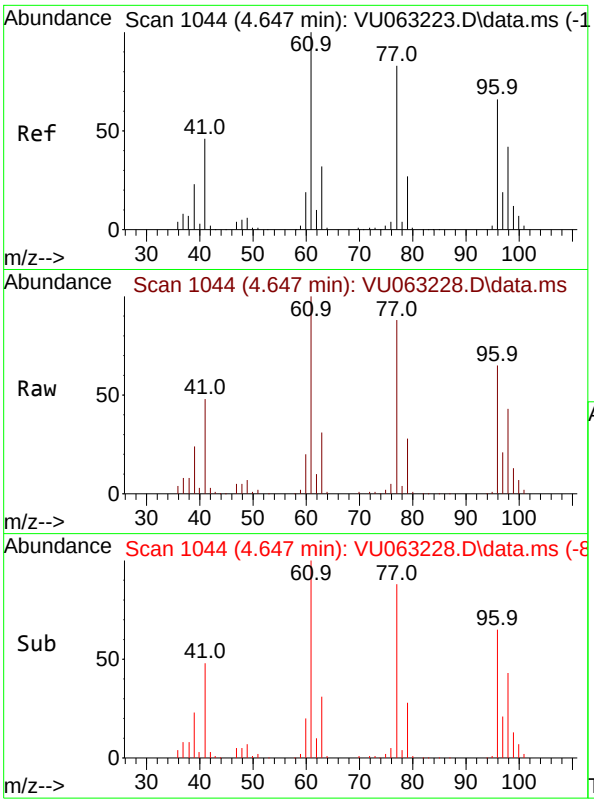


#20
Methylcyclohexane
Concen: 10.295 ug/l
RT: 6.753 min Scan# 1699
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 83 Resp: 264092

Ion	Ratio	Lower	Upper
83	100		
55	77.6	63.1	94.7
98	44.1	35.2	52.8

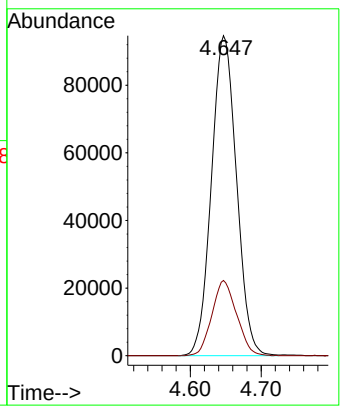




#21
2,2-Dichloropropane
Concen: 9.260 ug/l
RT: 4.647 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 77 Resp: 23256

Ion	Ratio	Lower	Upper
77	100		
97	23.1	18.5	27.7



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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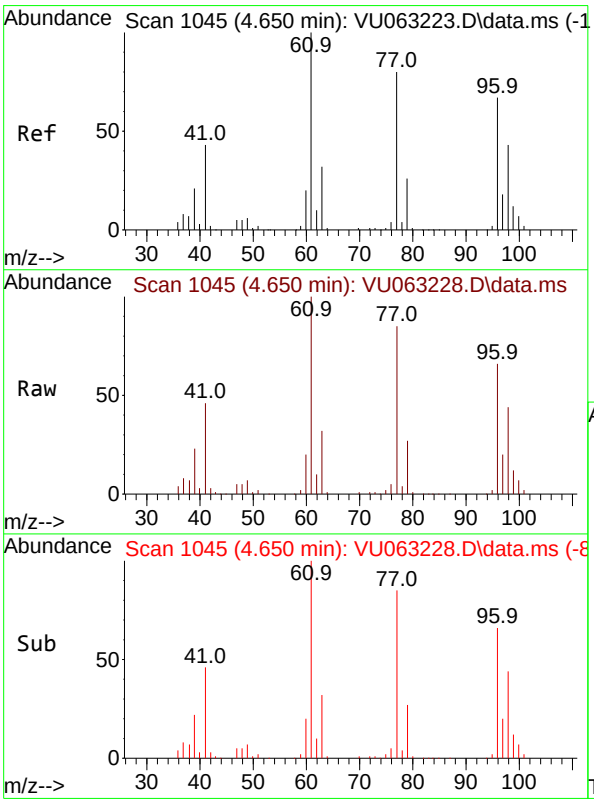
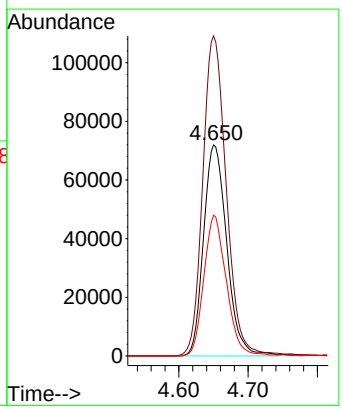
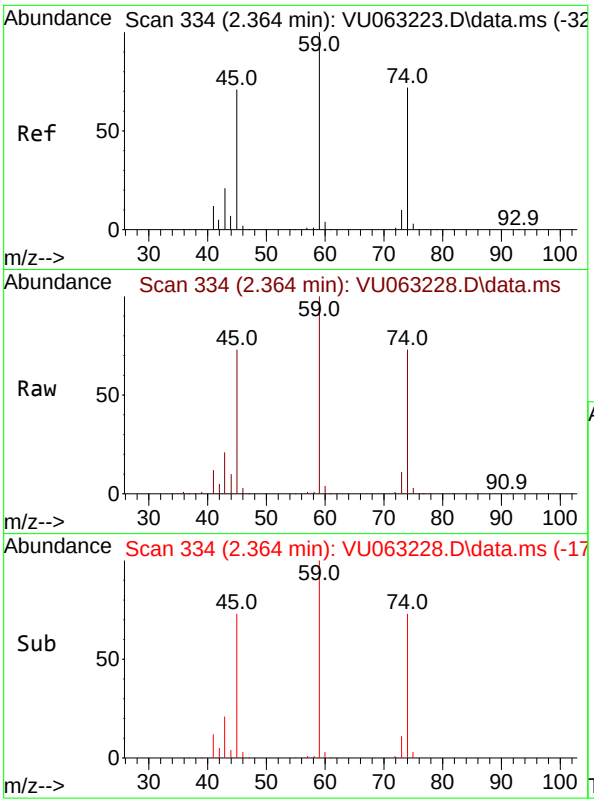


#22
cis-1,2-Dichloroethene
Concen: 9.085 ug/l
RT: 4.650 min Scan# 1045
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 96 Resp: 167648

Ion	Ratio	Lower	Upper
96	100		
61	153.2	0.0	373.3
98	64.5	31.9	95.9





#23
Diethyl Ether
Concen: 8.373 ug/l
RT: 2.364 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 59 Resp: 10750

Ion	Ratio	Lower	Upper
59	100		
45	80.4	57.8	86.6
74	73.5	57.7	86.5

Instrument :
MSVOA_U
ClientSampleId :
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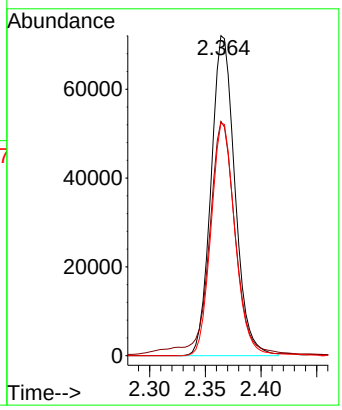
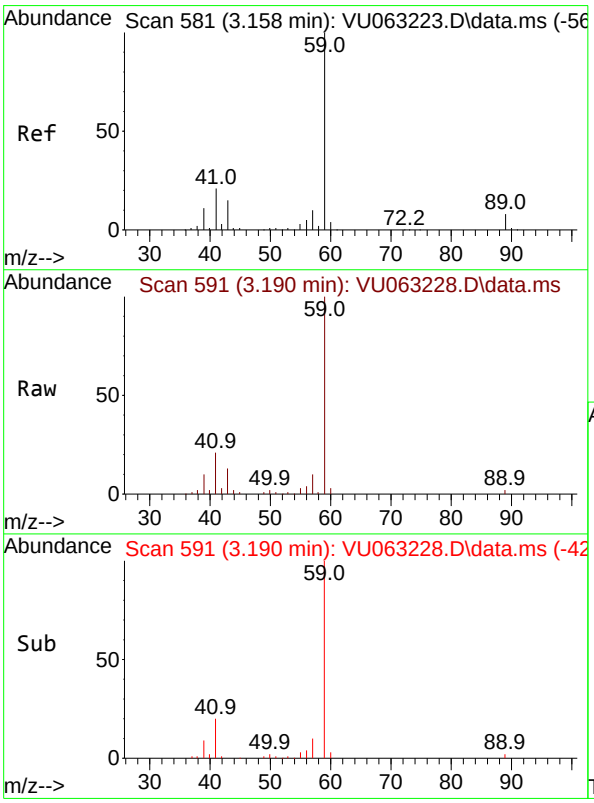
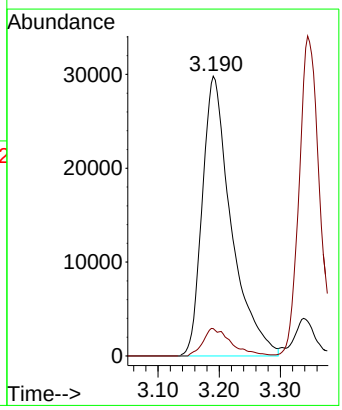


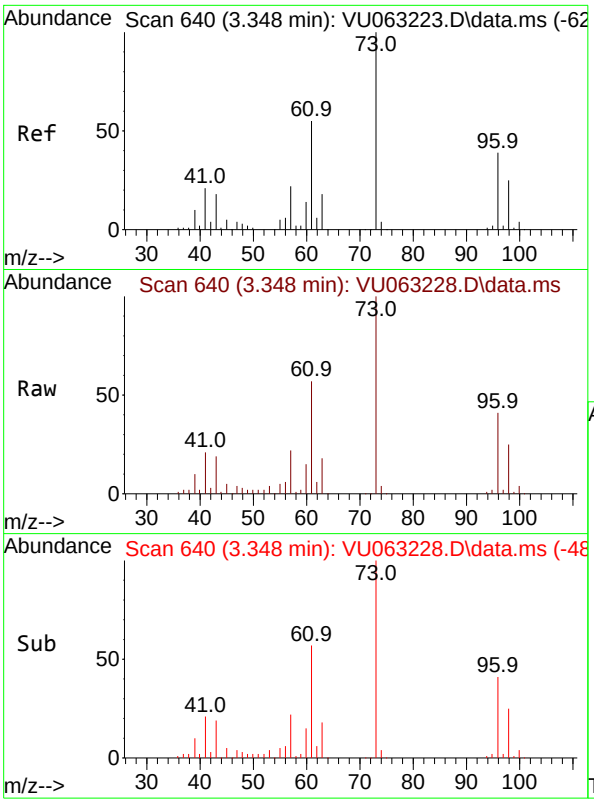


#24
tert-Butyl Alcohol
Concen: 72.937 ug/l
RT: 3.190 min Scan# 591
Delta R.T. 0.032 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 59 Resp: 97948

Ion	Ratio	Lower	Upper
59	100		
57	9.7	7.5	11.3

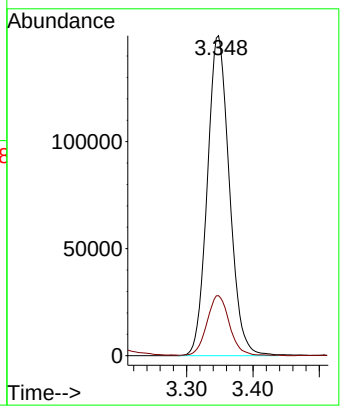




#25
Methyl tert-Butyl Ether
Concen: 9.249 ug/l
RT: 3.348 min Scan# 64
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 73 Resp: 34568

Ion	Ratio	Lower	Upper
73	100		
43	18.8	14.9	22.3



Instrument :
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ClientSampleId :
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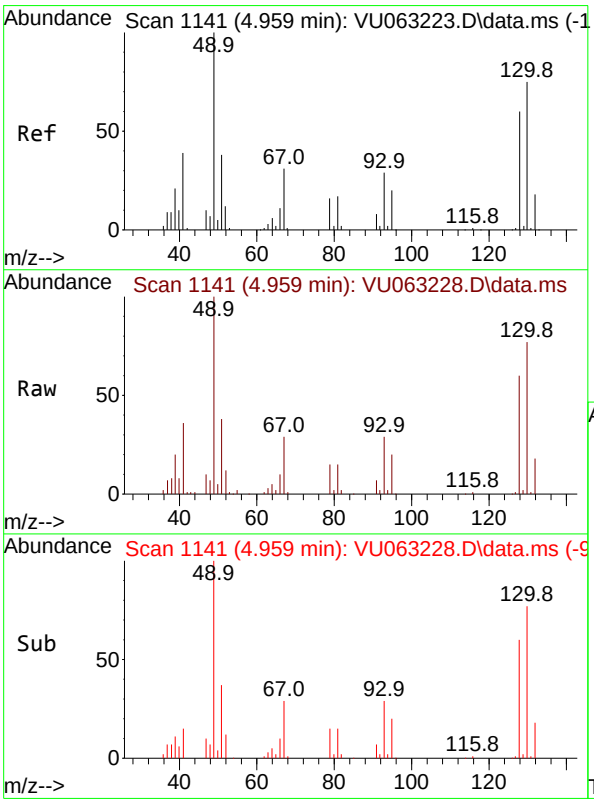
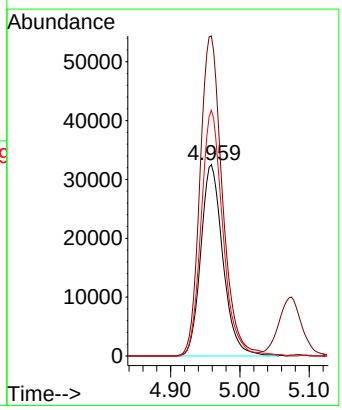
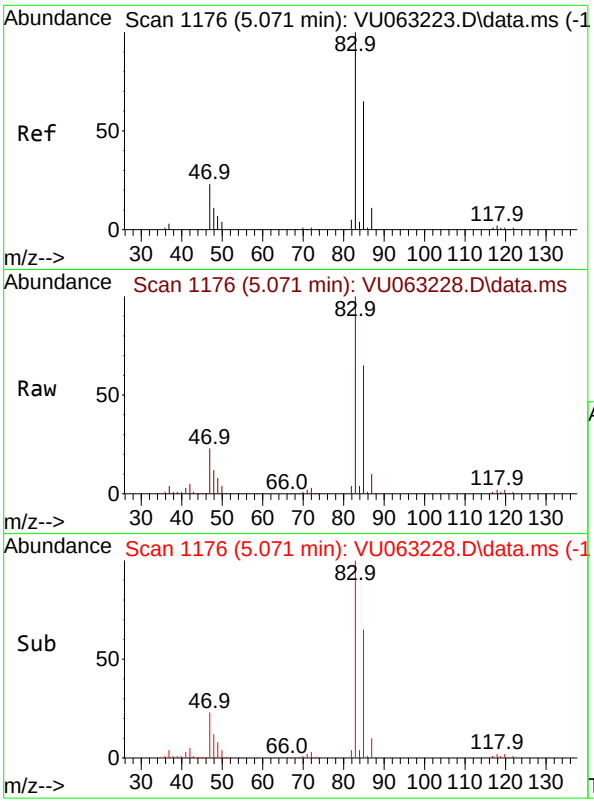


#26
Bromochloromethane
Concen: 8.902 ug/l
RT: 4.959 min Scan# 1141
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:128 Resp: 71801

Ion	Ratio	Lower	Upper
128	100		
49	169.6	0.0	343.4
130	127.3	102.9	154.3

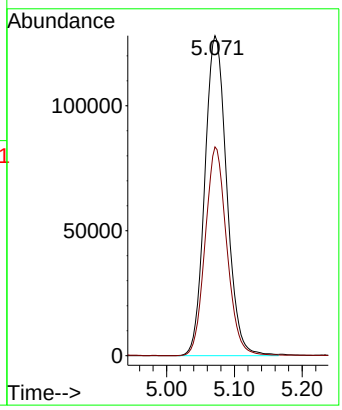




#27
Chloroform
Concen: 8.862 ug/l
RT: 5.071 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 83 Resp: 28789

Ion	Ratio	Lower	Upper
83	100		
85	65.2	0.0	129.8



Instrument :
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ClientSampleId :
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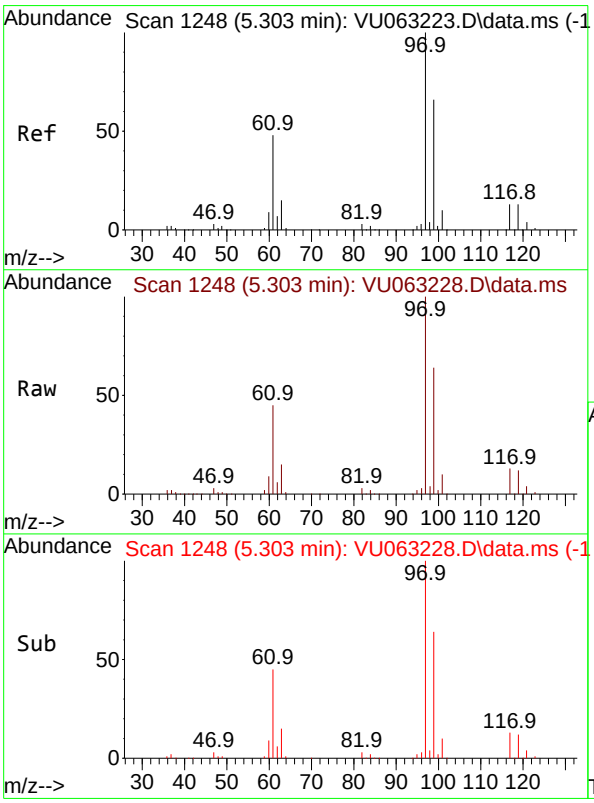
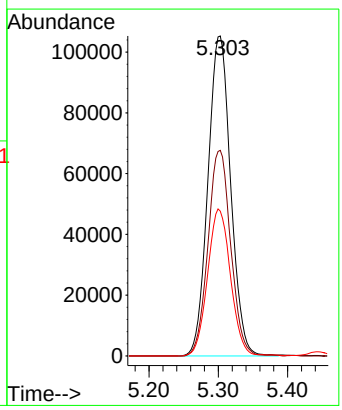
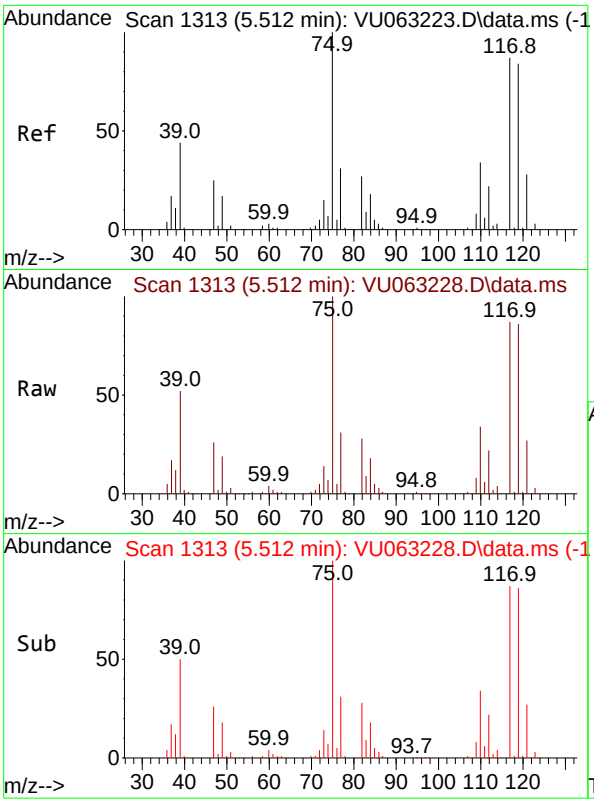


#28
1,1,1-Trichloroethane
Concen: 9.130 ug/l
RT: 5.303 min Scan# 1248
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 97 Resp: 240282

Ion	Ratio	Lower	Upper
97	100		
99	64.3	32.4	97.0
61	46.4	23.8	71.2

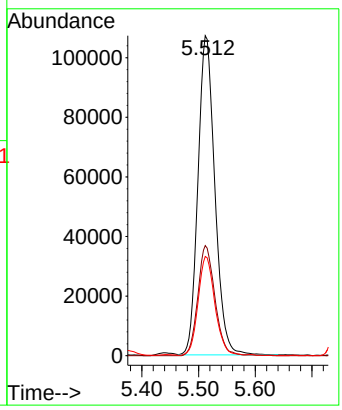




#29
1,1-Dichloropropene
Concen: 9.411 ug/l
RT: 5.512 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 75 Resp: 22182

Ion	Ratio	Lower	Upper
75	100		
110	35.0	17.2	51.5
77	30.5	24.6	37.0



Instrument :
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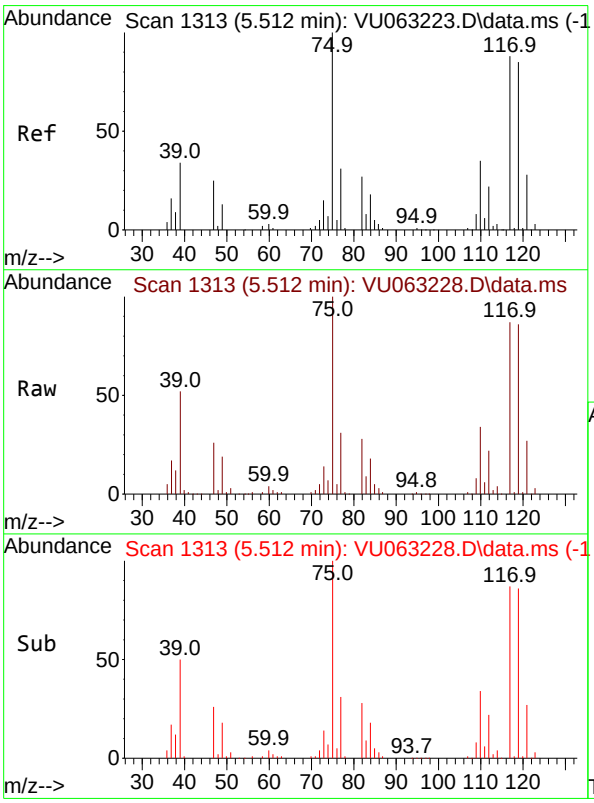
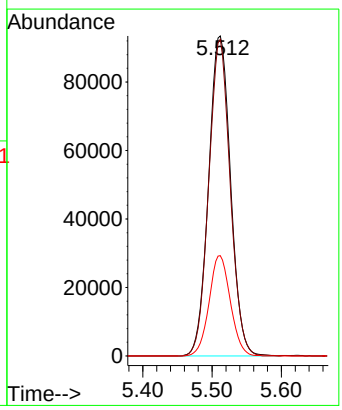
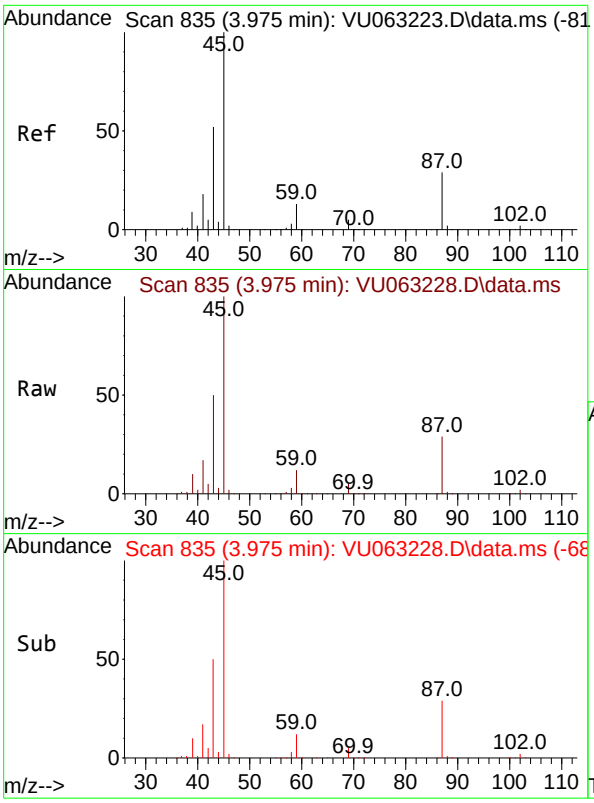


#30
Carbon Tetrachloride
Concen: 9.115 ug/l
RT: 5.512 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:117 Resp: 205723

Ion	Ratio	Lower	Upper
117	100		
119	99.0	76.7	115.1
121	31.4	25.5	38.3

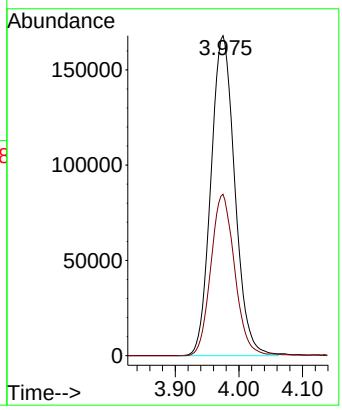




#31
Isopropyl Ether
Concen: 9.541 ug/l
RT: 3.975 min Scan# 8
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 45 Resp: 43850

Ion	Ratio	Lower	Upper
45	100		
43	50.1	25.7	77.1



Instrument :
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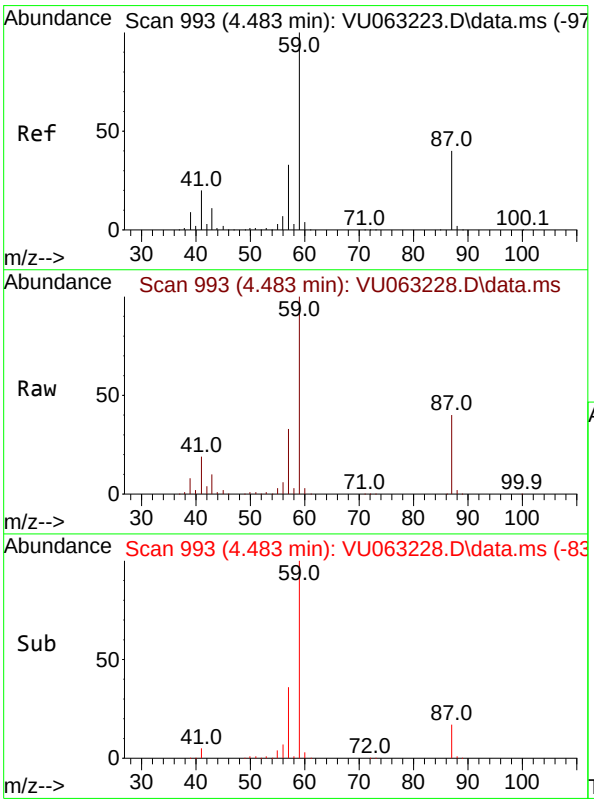
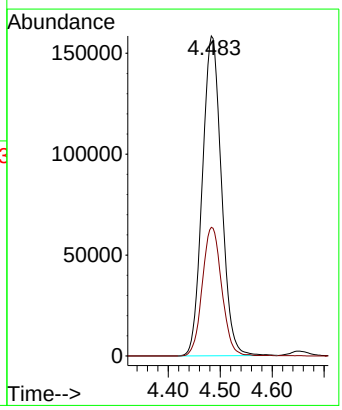
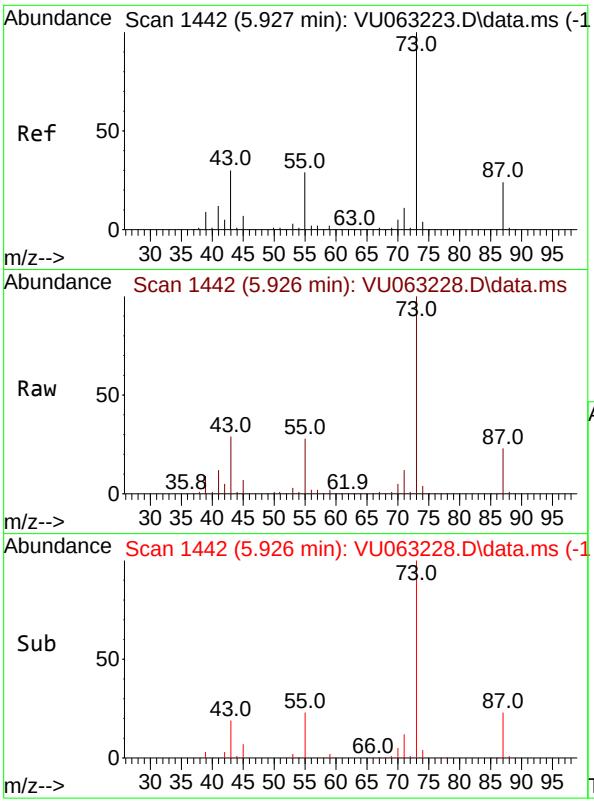


#32
Ethyl-t-butyl ether
Concen: 9.678 ug/l
RT: 4.483 min Scan# 993
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 59 Resp: 404506

Ion	Ratio	Lower	Upper
59	100		
87	40.6	32.6	49.0





#33
Tert-Amyl methyl ether
Concen: 9.728 ug/l
RT: 5.926 min Scan# 14
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 73 Resp: 35523

Ion	Ratio	Lower	Upper
73	100		
87	23.5	18.9	28.3
71	11.4	9.0	13.4

Instrument :
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ClientSampleId :
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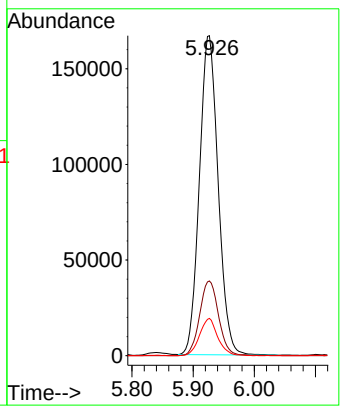
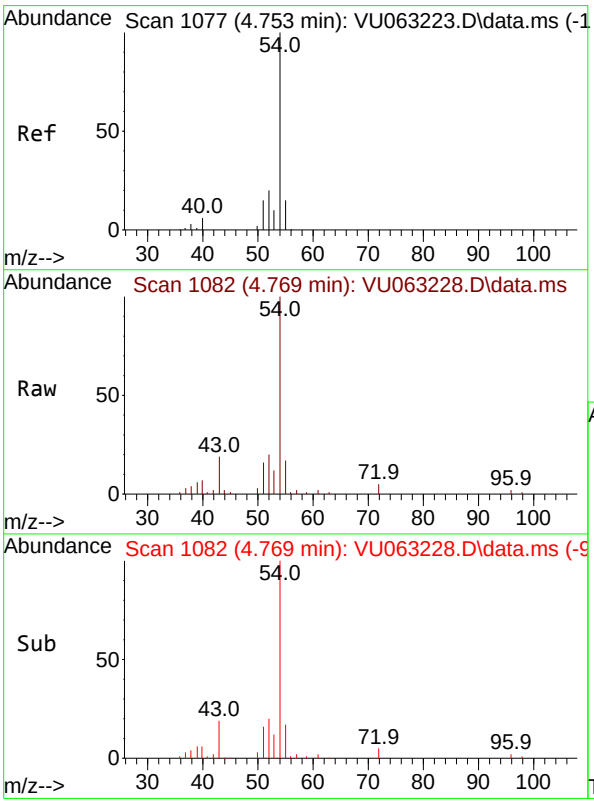
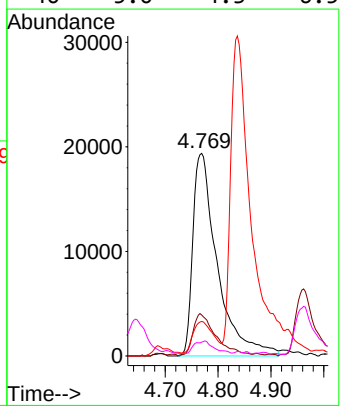


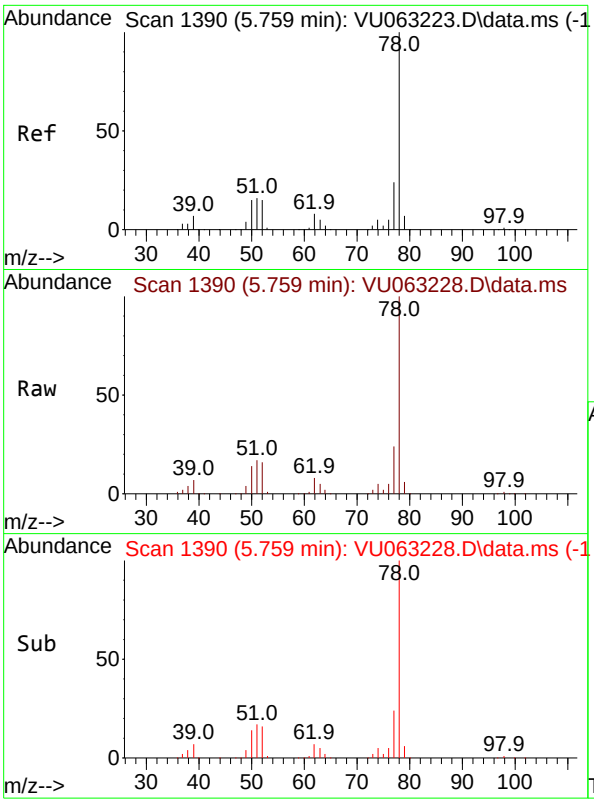


#34
Propionitrile
Concen: 48.994 ug/l
RT: 4.769 min Scan# 1082
Delta R.T. 0.016 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 54 Resp: 62417

Ion	Ratio	Lower	Upper
54	100		
52	19.6	16.3	24.5
55	12.7	11.8	17.6
40	5.0	4.3	6.5

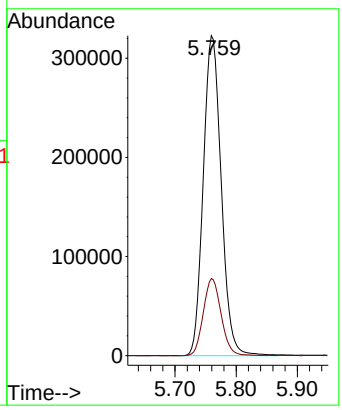




#35
Benzene
Concen: 9.098 ug/l
RT: 5.759 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 78 Resp: 65936

Ion	Ratio	Lower	Upper
78	100		
77	24.1	19.0	28.4



Instrument :
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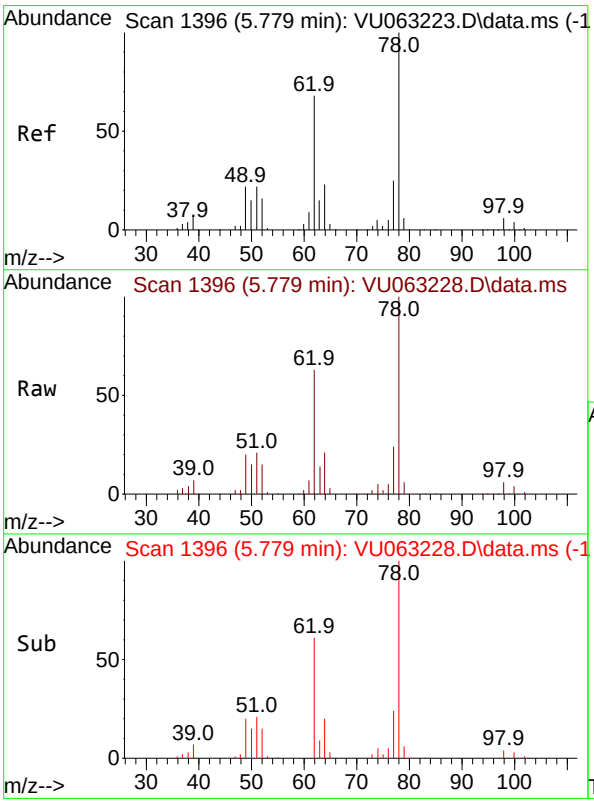
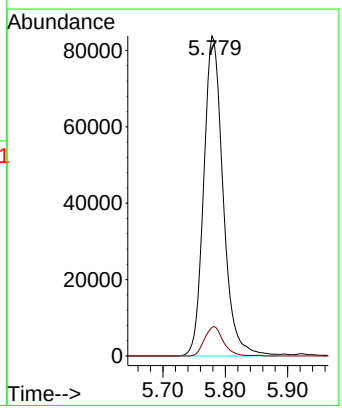
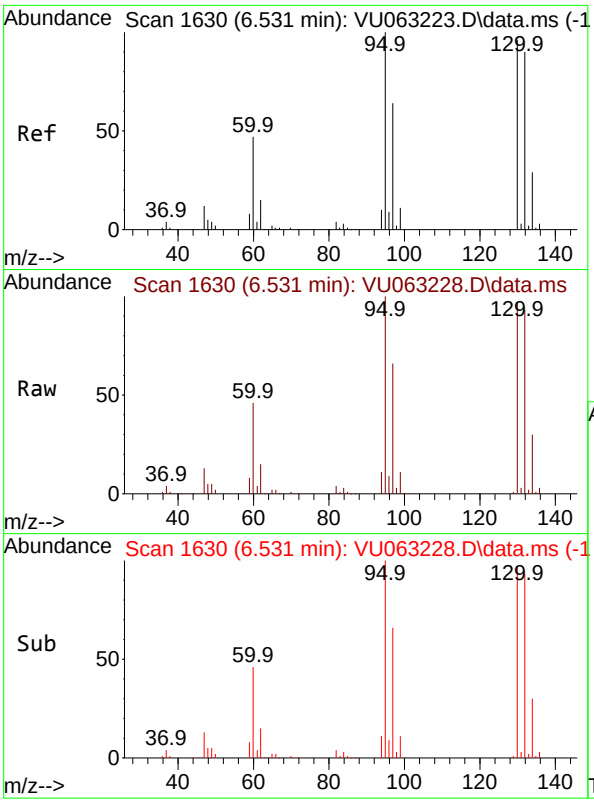


#36
1,2-Dichloroethane
Concen: 8.666 ug/l
RT: 5.779 min Scan# 1396
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 62 Resp: 181267

Ion	Ratio	Lower	Upper
62	100		
98	8.8	6.9	10.3

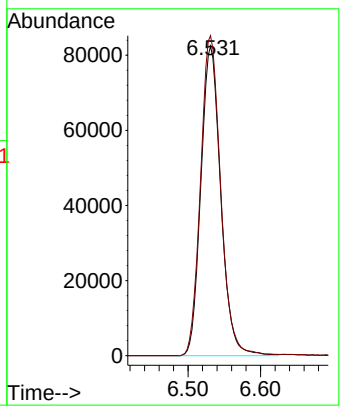




#37
Trichloroethene
Concen: 9.111 ug/l
RT: 6.531 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:130 Resp: 15703

Ion	Ratio	Lower	Upper
130	100		
95	103.4	83.2	124.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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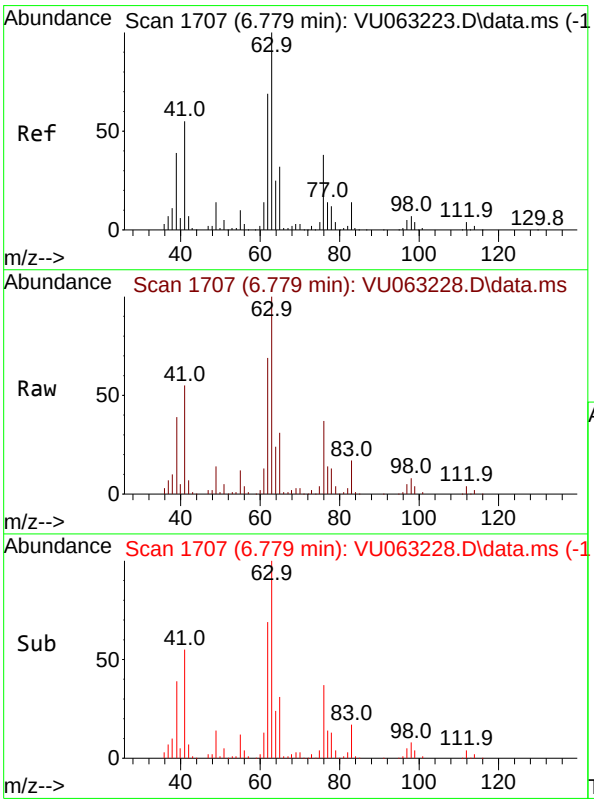
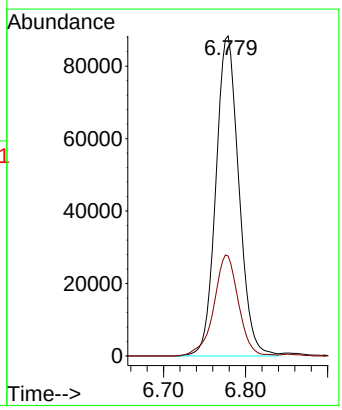
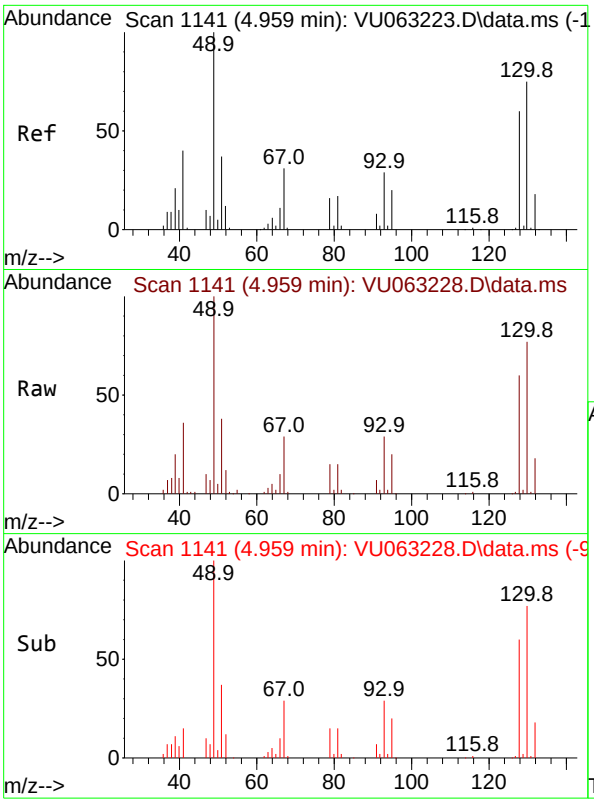


#38
1,2-Dichloropropane
Concen: 9.086 ug/l
RT: 6.779 min Scan# 1707
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 63 Resp: 172356

Ion	Ratio	Lower	Upper
63	100		
65	31.1	25.3	37.9

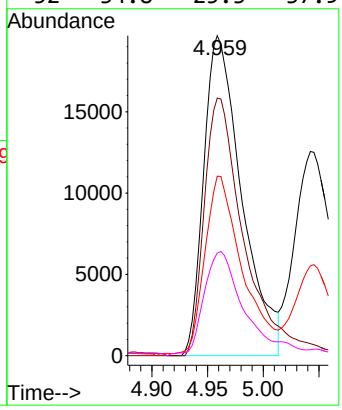




#39
Methacrylonitrile
Concen: 9.847 ug/l
RT: 4.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 41 Resp: 4675

Ion	Ratio	Lower	Upper
41	100		
67	85.0	64.5	96.7
39	54.0	43.0	64.6
52	34.8	25.3	37.9



Instrument :
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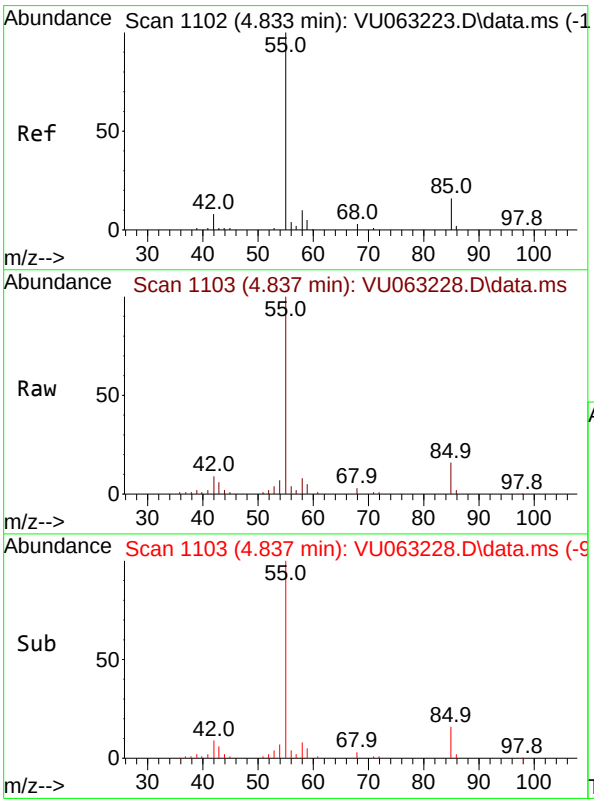
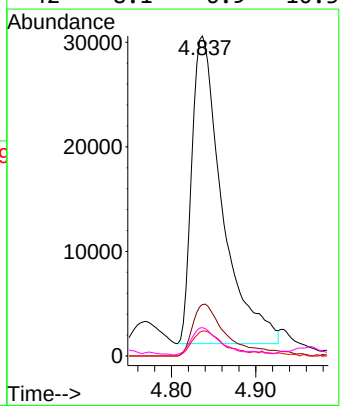
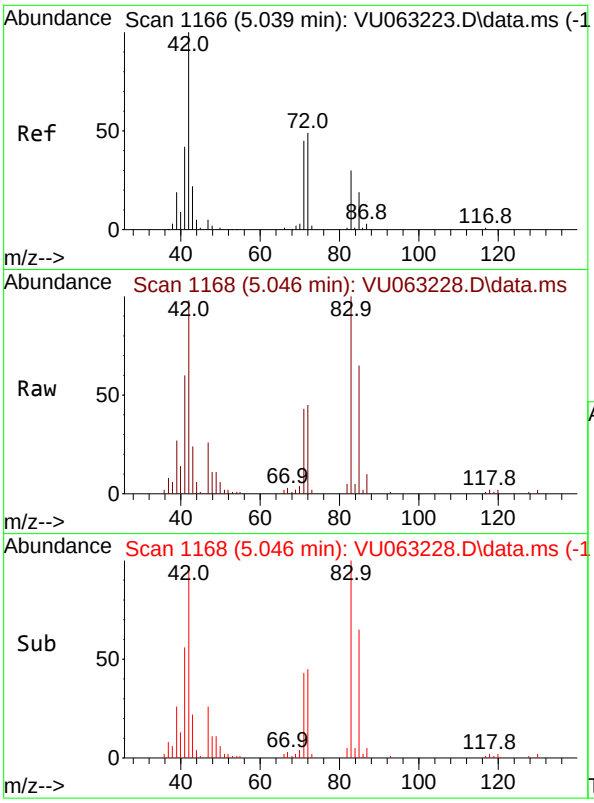


#40
Methyl acrylate
Concen: 8.442 ug/l
RT: 4.837 min Scan# 1103
Delta R.T. 0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 55 Resp: 73871

Ion	Ratio	Lower	Upper
55	100		
85	19.4	13.3	19.9
58	8.3	7.3	10.9
42	8.1	6.9	10.3

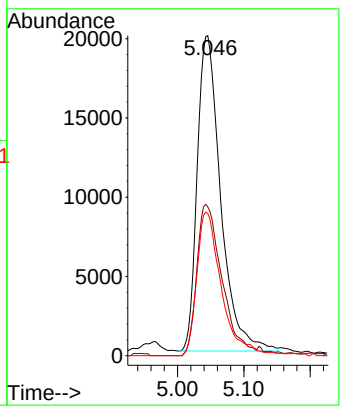




#41
Tetrahydrofuran
Concen: 17.753 ug/l
RT: 5.046 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 42 Resp: 4902

Ion	Ratio	Lower	Upper
42	100		
72	51.3	41.5	62.3
71	47.8	37.2	55.8



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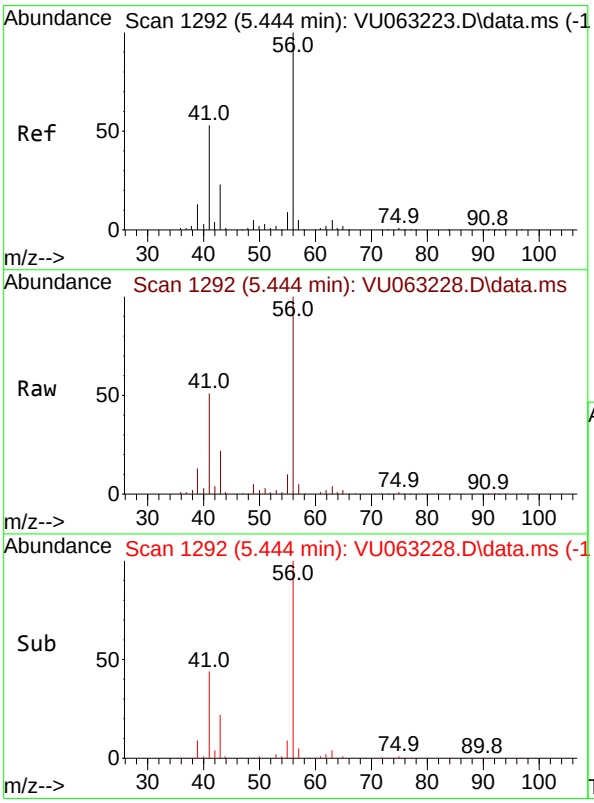
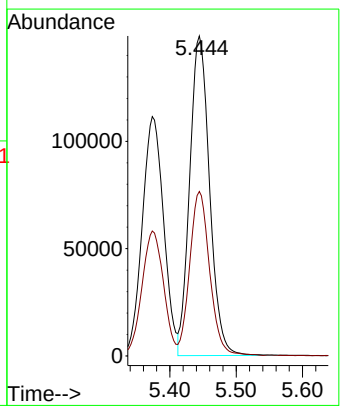
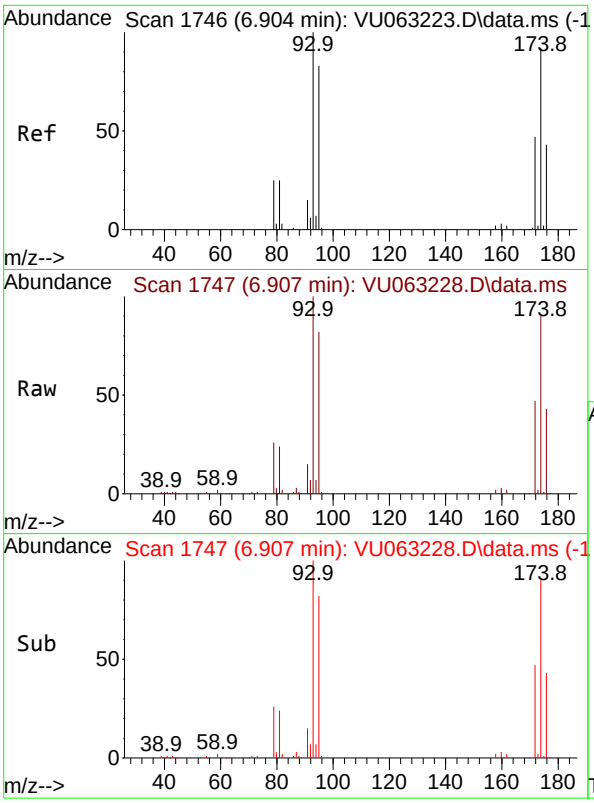


#42
1-Chlorobutane
Concen: 9.582 ug/l
RT: 5.444 min Scan# 1292
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 56 Resp: 309030

Ion	Ratio	Lower	Upper
56	100		
41	51.6	26.3	78.8

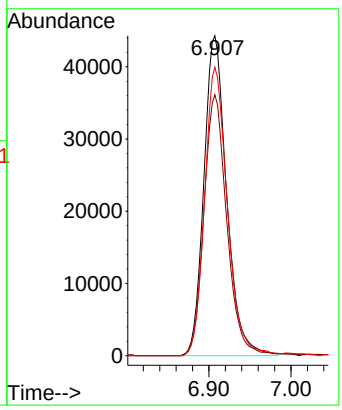




#43
Dibromomethane
Concen: 8.867 ug/l
RT: 6.907 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 93 Resp: 8517

Ion	Ratio	Lower	Upper
93	100		
95	82.6	67.2	100.8
174	90.4	75.7	113.5



Instrument :
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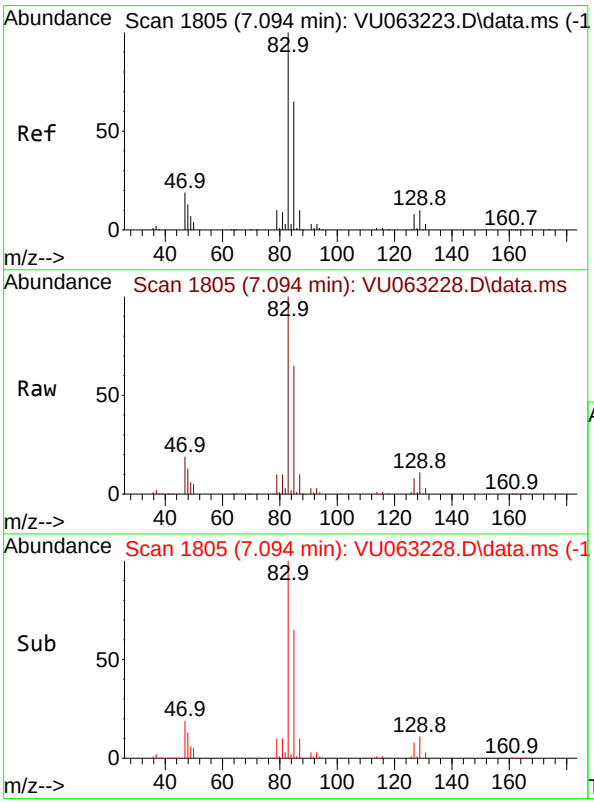
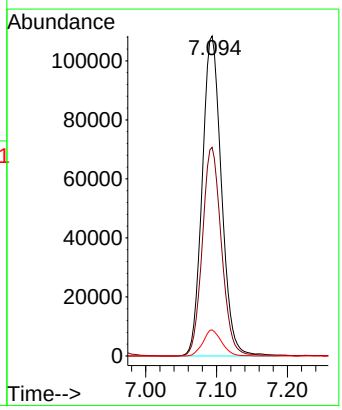
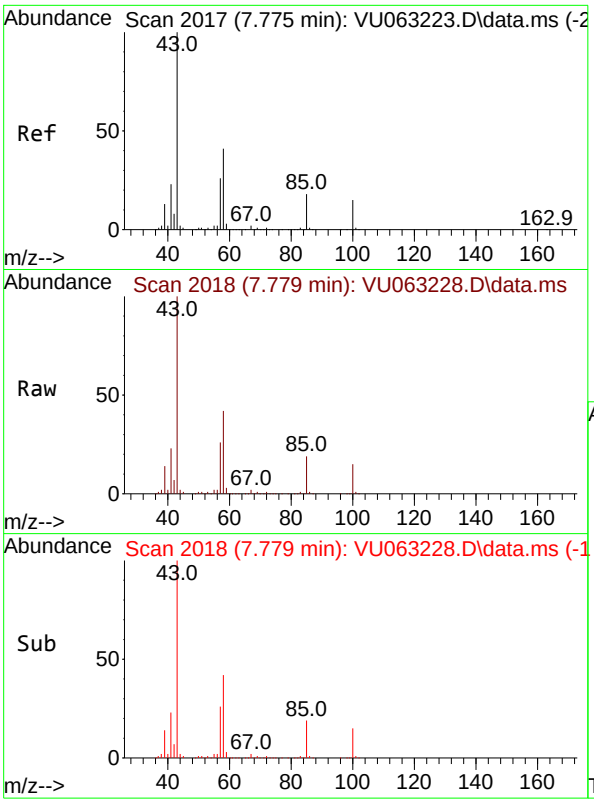


#44
Bromodichloromethane
Concen: 9.138 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 83 Resp: 204300

Ion	Ratio	Lower	Upper
83	100		
85	65.2	51.7	77.5
127	8.1	6.7	10.1

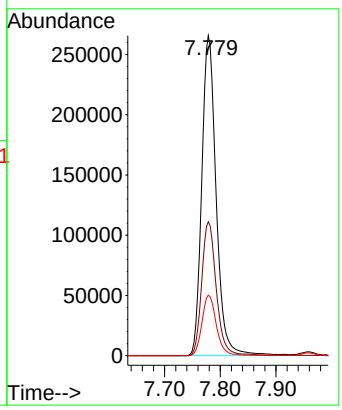




#45
4-Methyl-2-Pentanone
Concen: 47.438 ug/l
RT: 7.779 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 43 Resp: 47772

Ion	Ratio	Lower	Upper
43	100		
58	41.9	20.8	62.5
85	19.0	14.8	22.2



Instrument :
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ClientSampleId :
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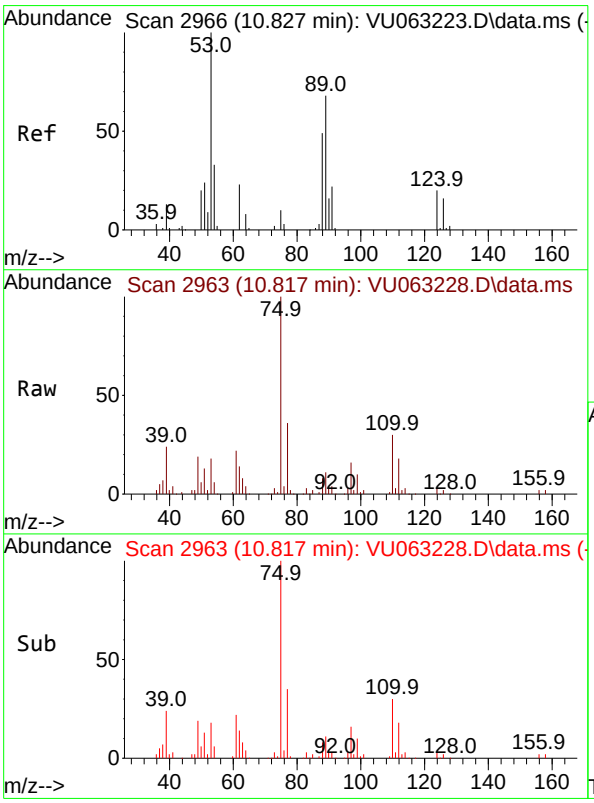
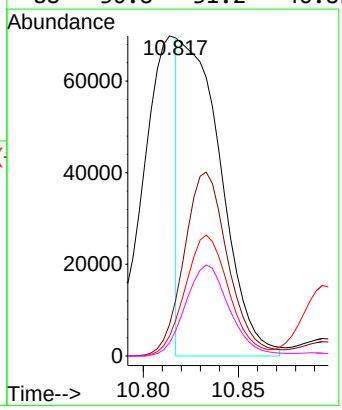
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

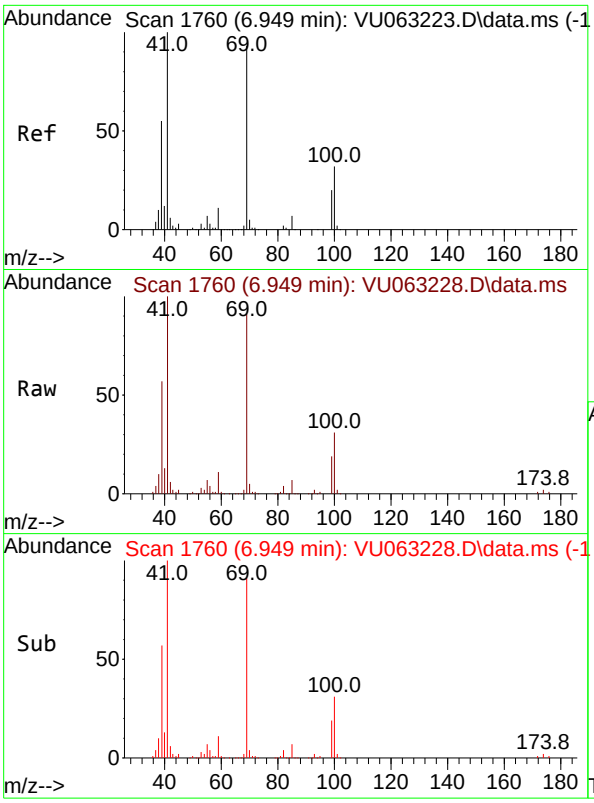


#46
t-1,4-Dichloro-2-butene
Concen: 21.994 ug/l m
RT: 10.817 min Scan# 2963
Delta R.T. -0.010 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 75 Resp: 104119

Ion	Ratio	Lower	Upper
75	100		
53	62.2	64.5	96.7#
89	40.8	43.4	65.2#
88	30.8	31.2	46.8#

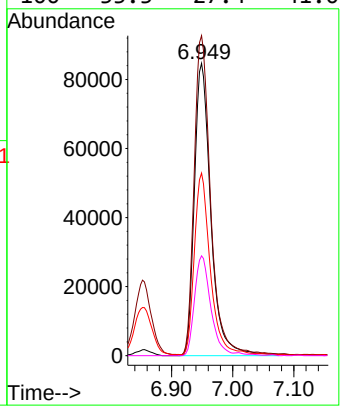




#47
Methyl methacrylate
Concen: 19.623 ug/l
RT: 6.949 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 69 Resp: 15876

Ion	Ratio	Lower	Upper
69	100		
41	107.9	0.0	217.0
39	59.9	47.7	71.5
100	33.3	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
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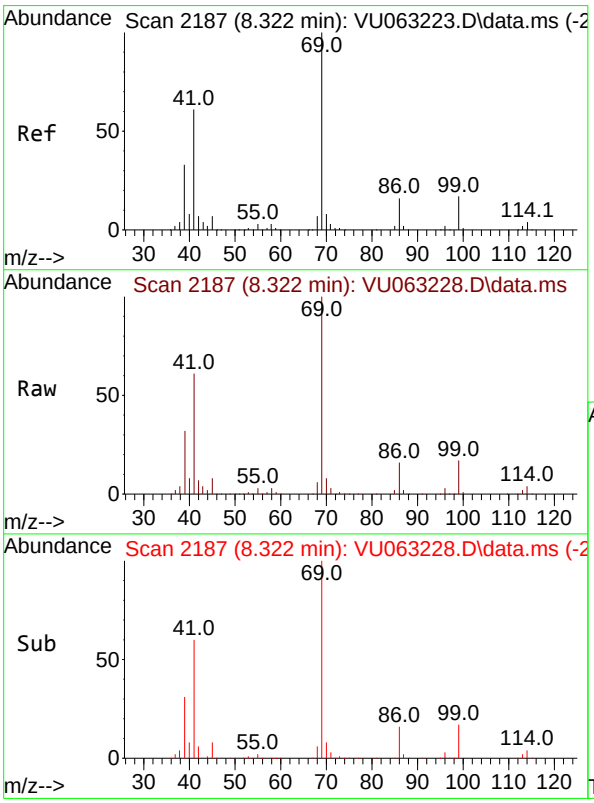
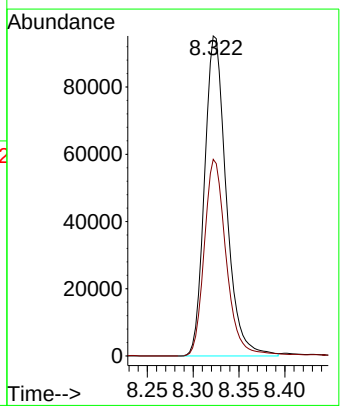
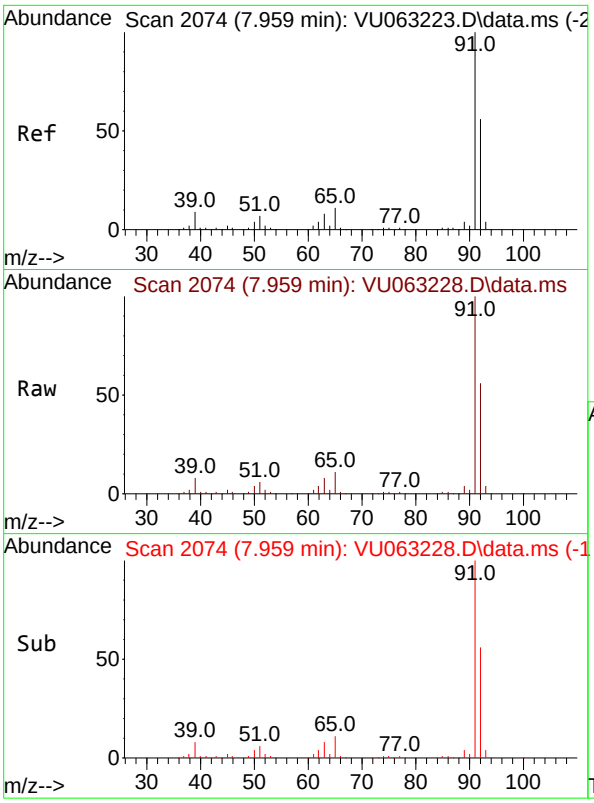


#48
Ethyl methacrylate
Concen: 10.321 ug/l
RT: 8.322 min Scan# 2187
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 69 Resp: 156800

Ion	Ratio	Lower	Upper
69	100		
41	62.0	30.6	92.0

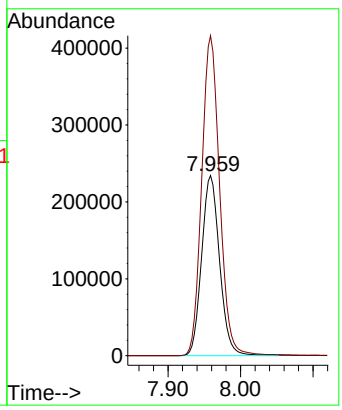




#49
Toluene
Concen: 9.675 ug/l
RT: 7.959 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 92 Resp: 40323

Ion	Ratio	Lower	Upper
92	100		
91	177.8	141.8	212.6



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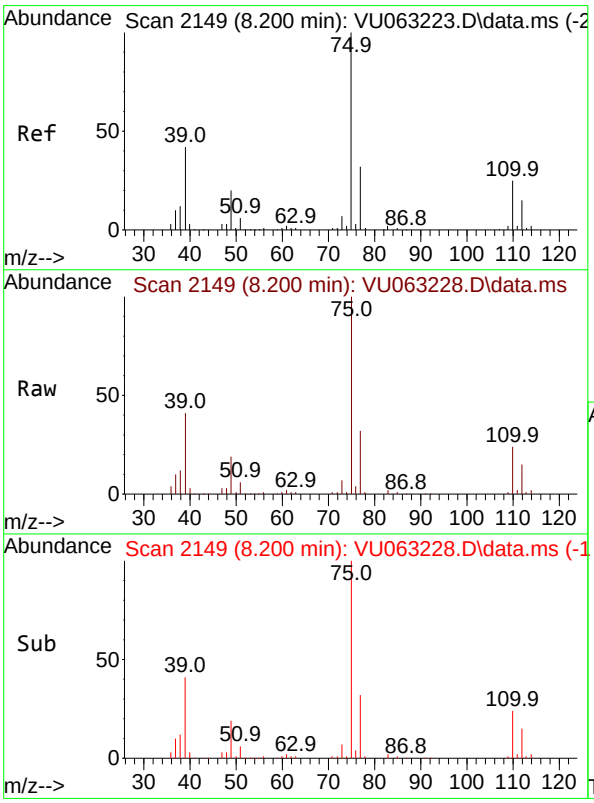
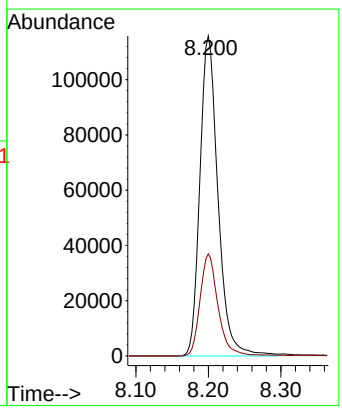
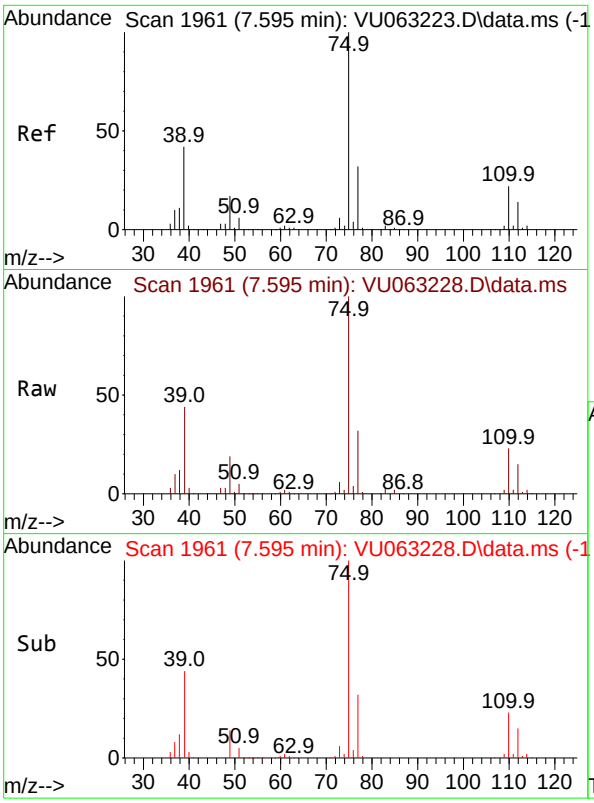


#50
t-1,3-Dichloropropene
Concen: 9.811 ug/l
RT: 8.200 min Scan# 2149
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 75 Resp: 200824

Ion	Ratio	Lower	Upper
75	100		
77	31.9	25.9	38.9

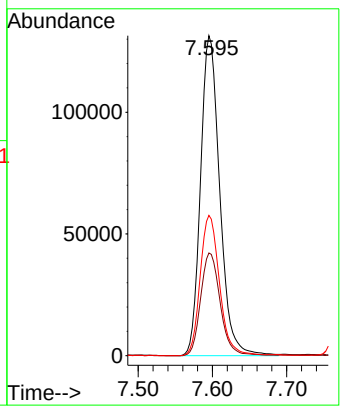




#51
cis-1,3-Dichloropropene
Concen: 9.338 ug/l
RT: 7.595 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 75 Resp: 23609

Ion	Ratio	Lower	Upper
75	100		
77	32.1	25.3	37.9
39	43.8	33.5	50.3



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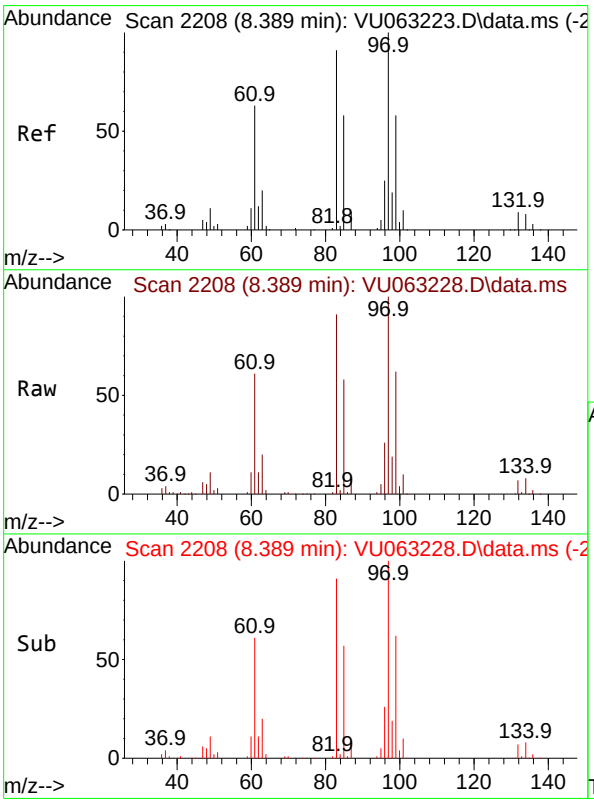
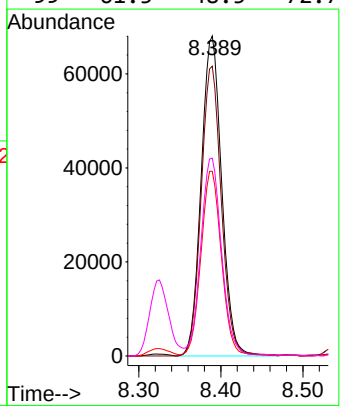
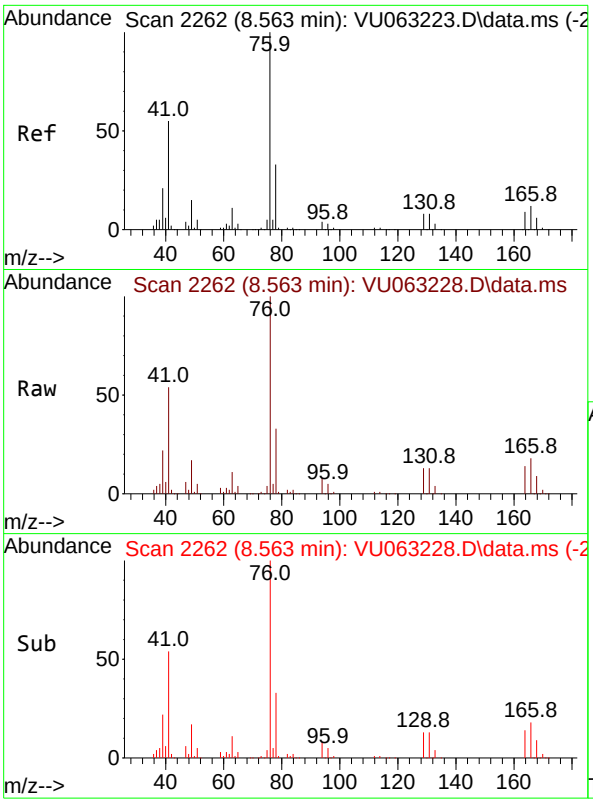


#52
1,1,2-Trichloroethane
Concen: 9.154 ug/l
RT: 8.389 min Scan# 2208
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 97 Resp: 118560

Ion	Ratio	Lower	Upper
97	100		
83	90.5	73.0	109.4
85	57.7	46.3	69.5
99	61.5	48.5	72.7

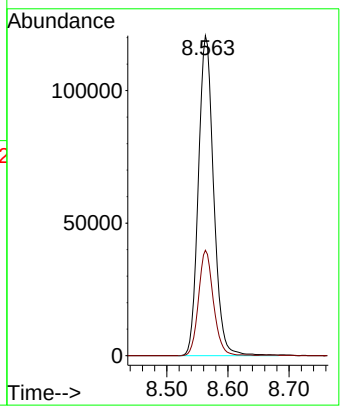




#53
1,3-Dichloropropane
Concen: 9.097 ug/l
RT: 8.563 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 76 Resp: 20917

Ion	Ratio	Lower	Upper
76	100		
78	32.3	26.3	39.5



Instrument :
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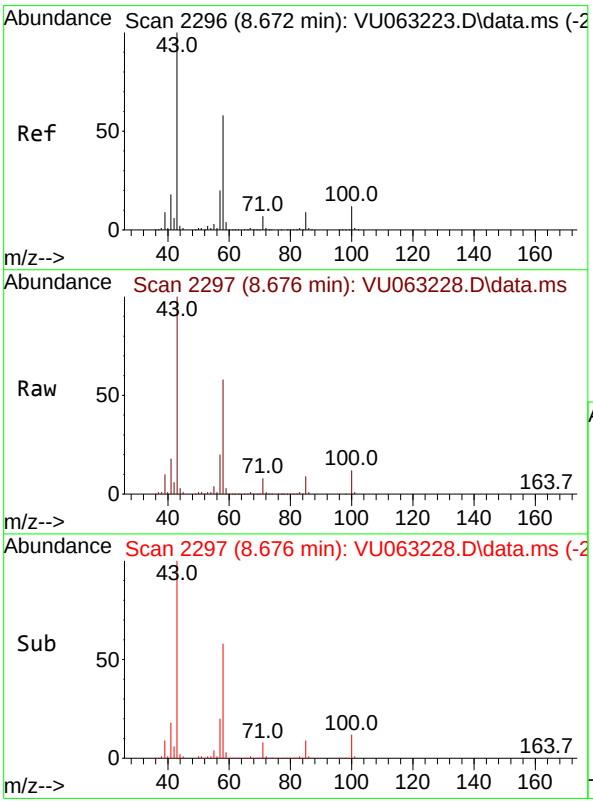
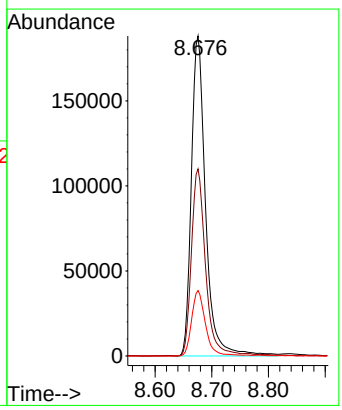
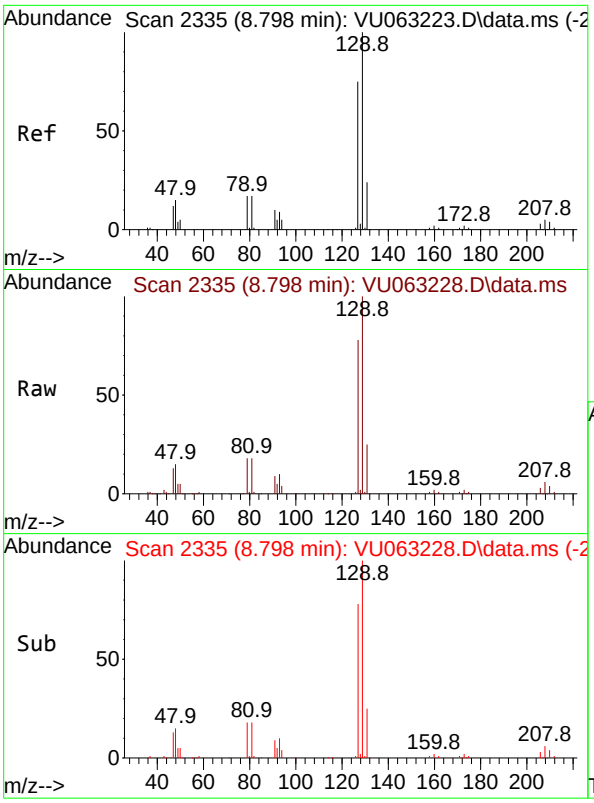


#54
2-Hexanone
Concen: 47.697 ug/l
RT: 8.676 min Scan# 2297
Delta R.T. 0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 43 Resp: 327783

Ion	Ratio	Lower	Upper
43	100		
58	57.7	38.0	78.0
57	19.8	0.0	39.1

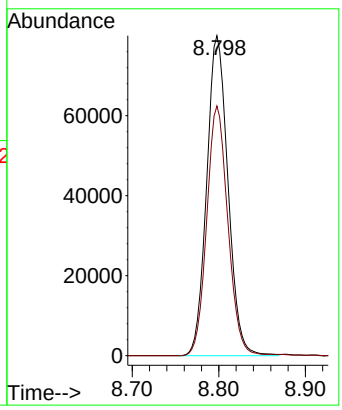




#55
Dibromochloromethane
Concen: 9.169 ug/l
RT: 8.798 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:129 Resp: 13661

Ion	Ratio	Lower	Upper
129	100		
127	77.3	60.4	90.6



Instrument :
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ClientSampleId :
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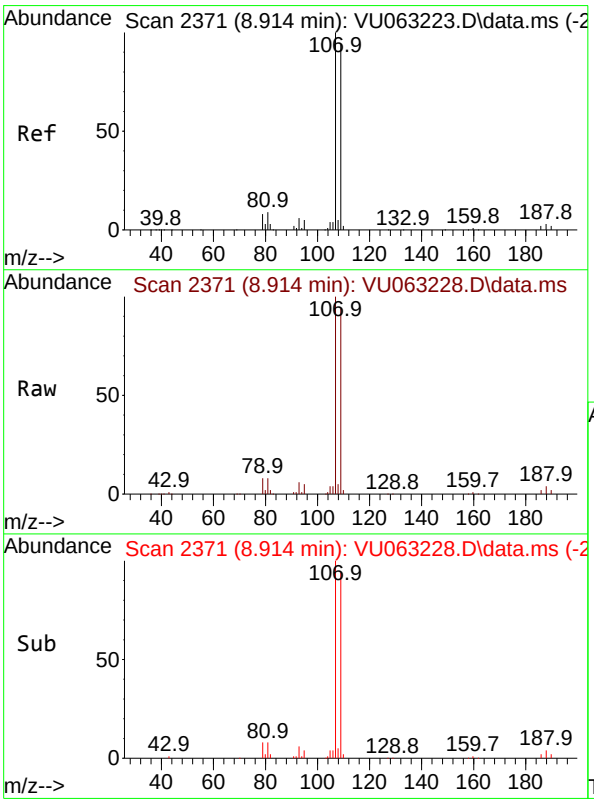
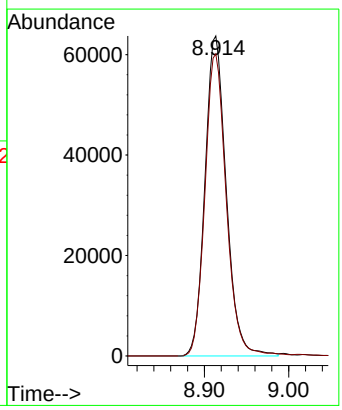
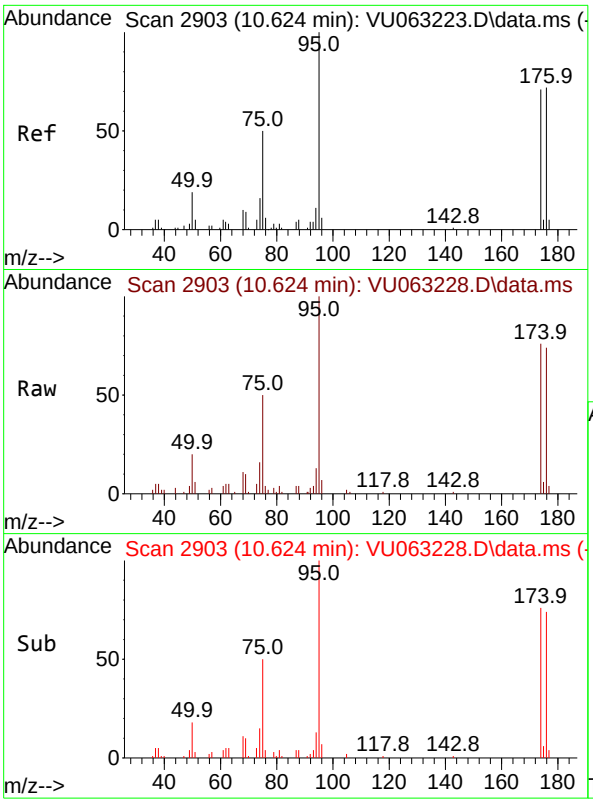


#56
1,2-Dibromoethane
Concen: 9.223 ug/l
RT: 8.914 min Scan# 2371
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:107 Resp: 112027

Ion	Ratio	Lower	Upper
107	100		
109	94.8	0.0	187.8

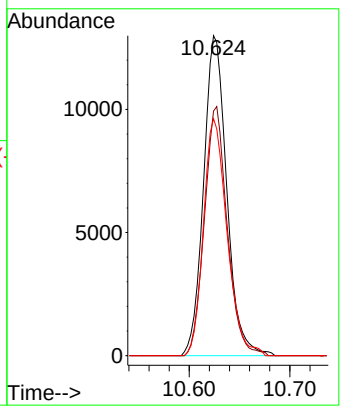




#57
4-Bromofluorobenzene
Concen: 1.070 ug/l
RT: 10.624 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 95 Resp: 2081

Ion	Ratio	Lower	Upper
95	100		
174	76.7	58.6	88.0
176	75.1	58.2	87.4



Instrument :
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ClientSampleId :
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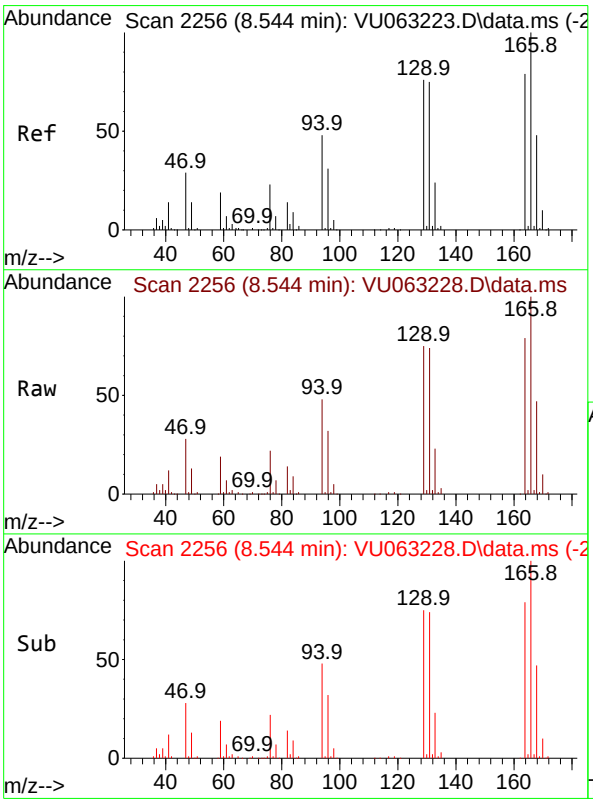
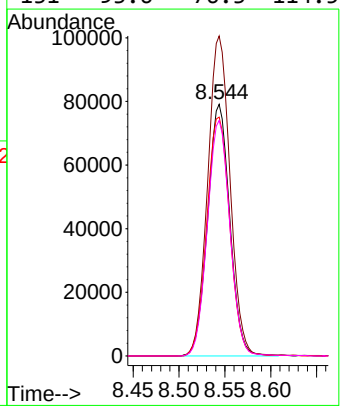
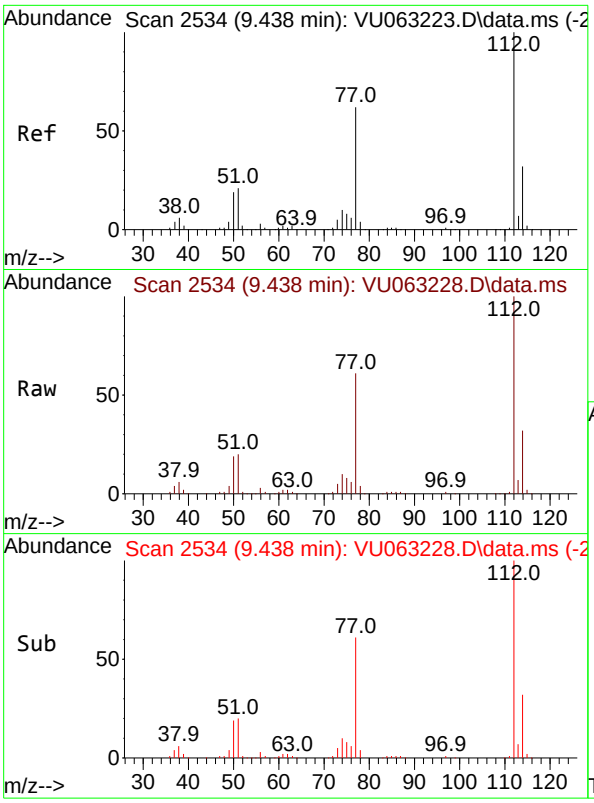


#58
Tetrachloroethene
Concen: 9.361 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:164 Resp: 132957

Ion	Ratio	Lower	Upper
164	100		
166	127.2	101.4	152.0
129	94.9	77.0	115.4
131	93.6	76.3	114.5

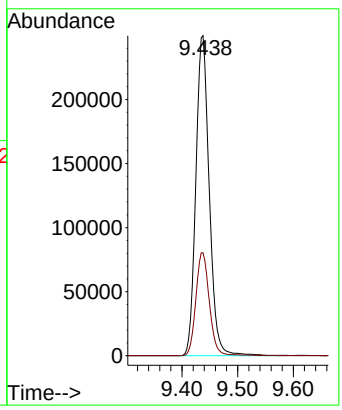




#59
Chlorobenzene
Concen: 9.514 ug/l
RT: 9.438 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:112 Resp: 41843

Ion	Ratio	Lower	Upper
112	100		
114	32.2	25.7	38.5



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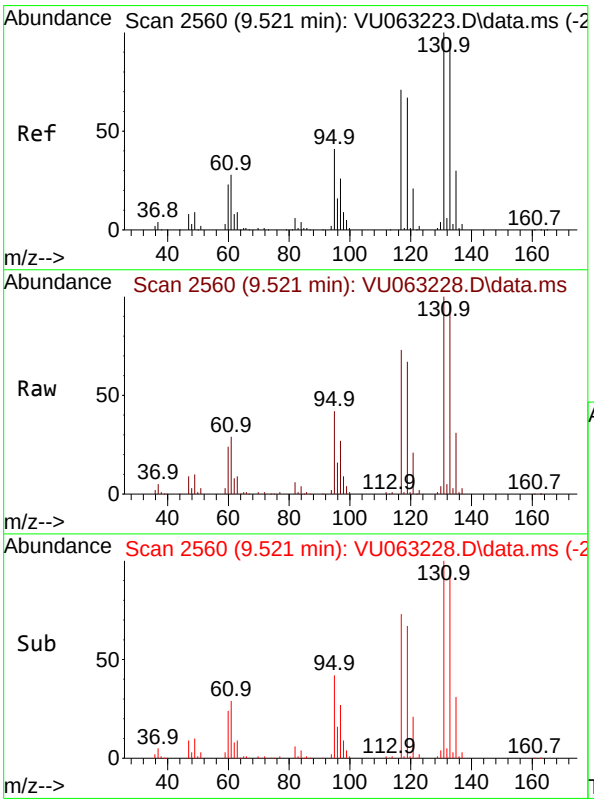
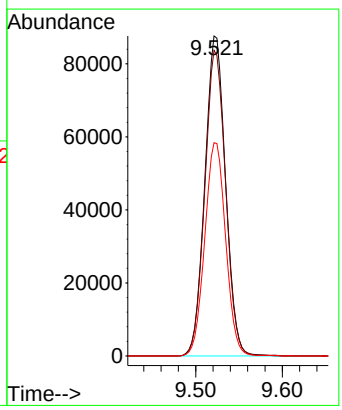
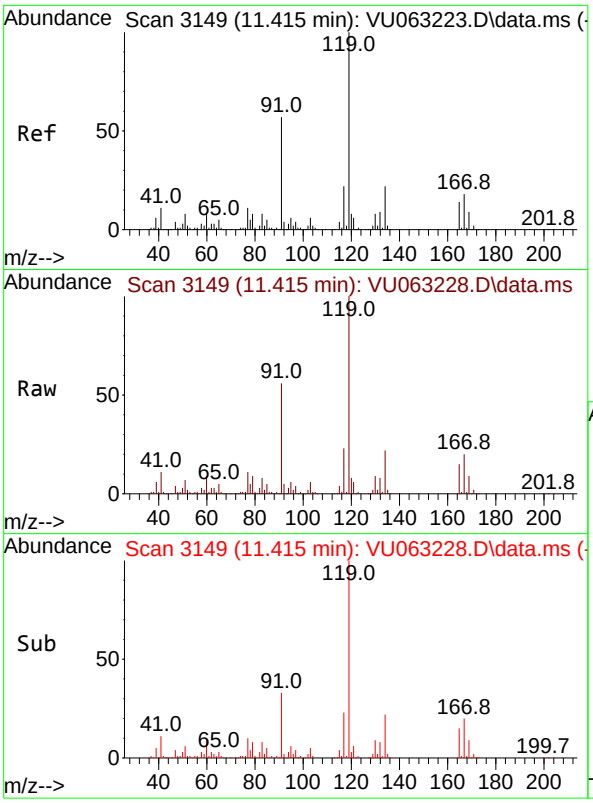


#60
1,1,1,2-Tetrachloroethane
Concen: 9.206 ug/l
RT: 9.521 min Scan# 2560
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:131 Resp: 145537

Ion	Ratio	Lower	Upper
131	100		
133	95.9	76.7	115.1
119	67.2	54.4	81.6

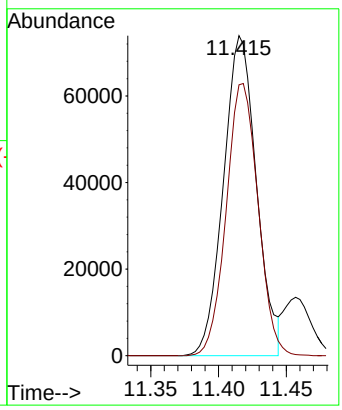




#61
Pentachloroethane
Concen: 8.865 ug/l
RT: 11.415 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:117 Resp: 12520

Ion	Ratio	Lower	Upper
117	100		
167	82.0	65.0	97.6



Instrument :
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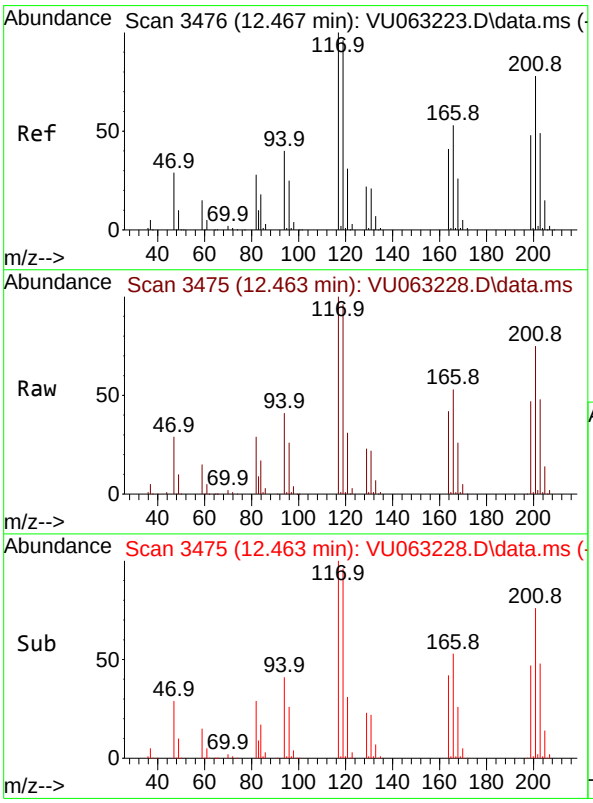
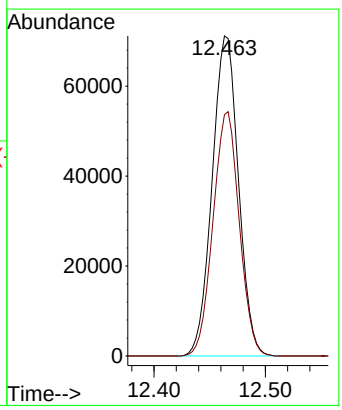
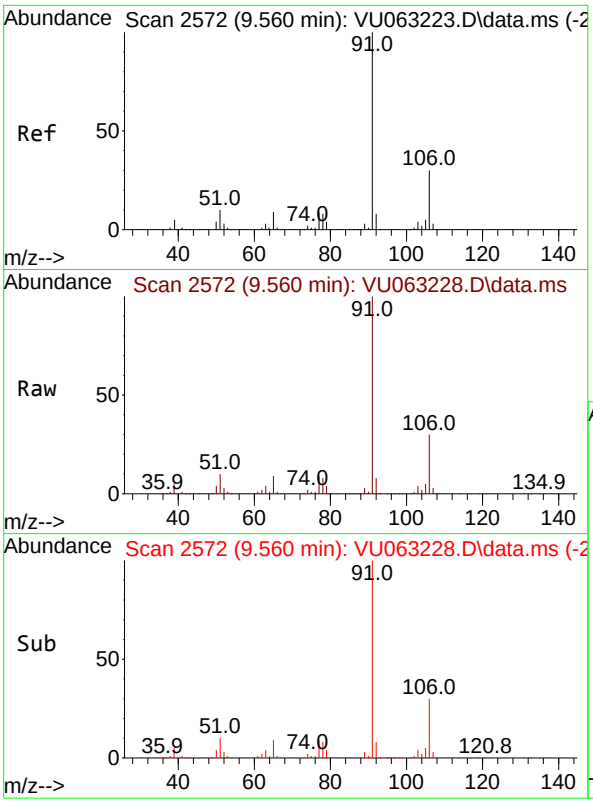


#62
Hexachloroethane
Concen: 9.352 ug/l
RT: 12.463 min Scan# 3475
Delta R.T. -0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:117 Resp: 116848

Ion	Ratio	Lower	Upper
117	100		
201	76.1	61.3	91.9

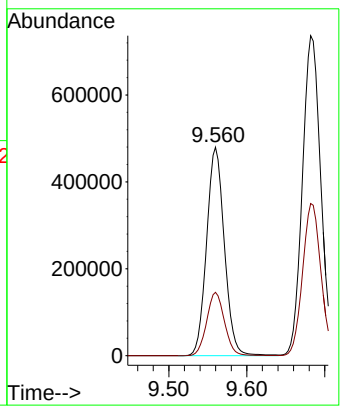




#63
Ethyl Benzene
Concen: 10.017 ug/l
RT: 9.560 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 91 Resp: 75983

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.2	36.2



Instrument :
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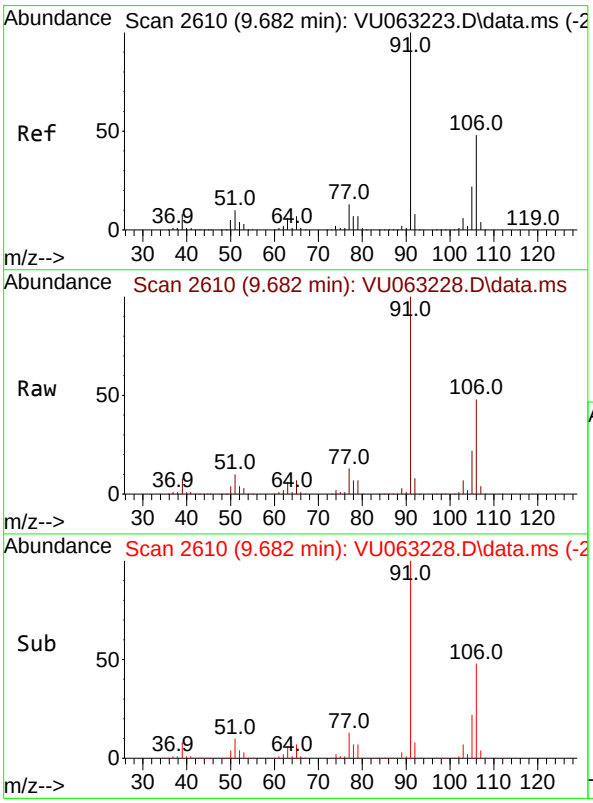
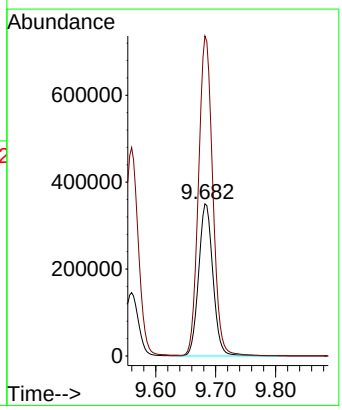
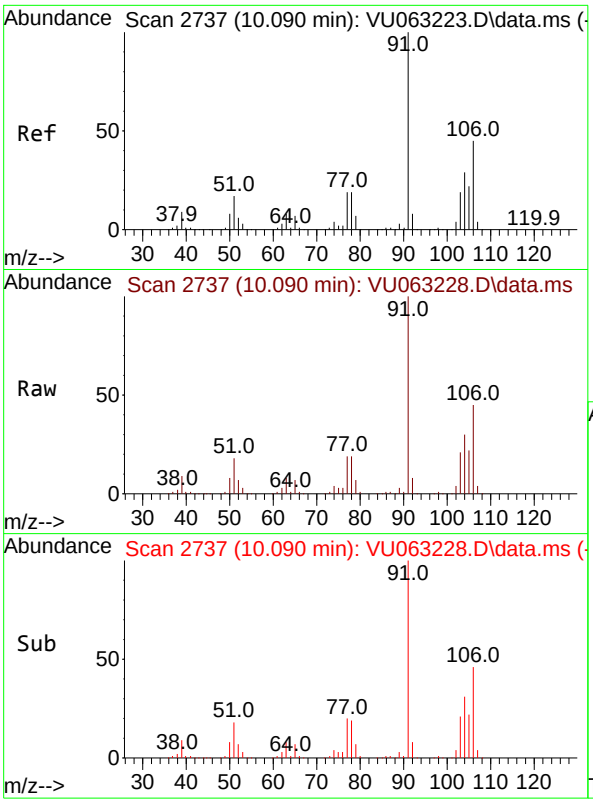


#64
m/p-Xylenes
Concen: 20.468 ug/l
RT: 9.682 min Scan# 2610
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:106 Resp: 579956

Ion	Ratio	Lower	Upper
106	100		
91	210.0	166.9	250.3

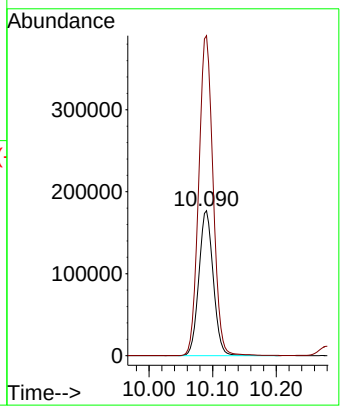




#65
o-Xylene
Concen: 10.007 ug/l
RT: 10.090 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:106 Resp: 27757

Ion	Ratio	Lower	Upper
106	100		
91	220.3	110.9	332.9



Instrument :
MSVOA_U
ClientSampleId :
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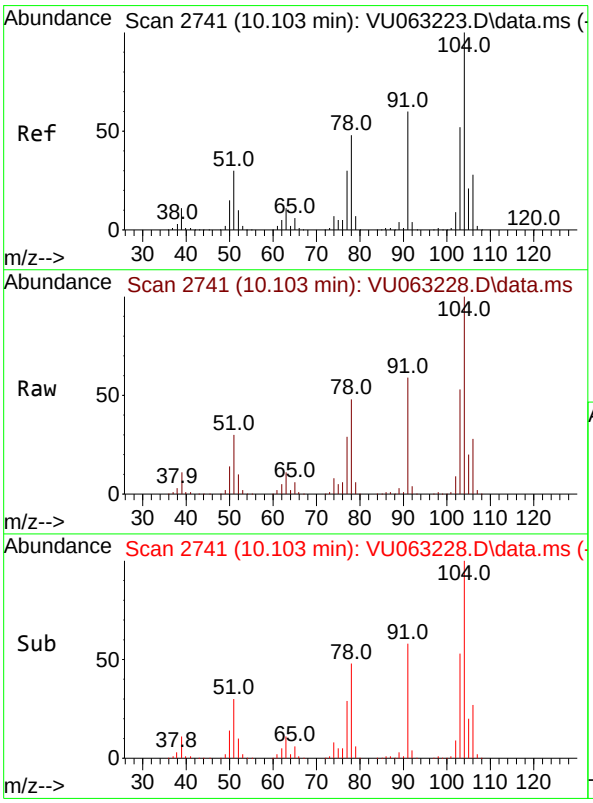
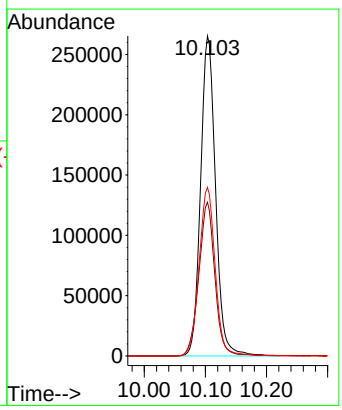
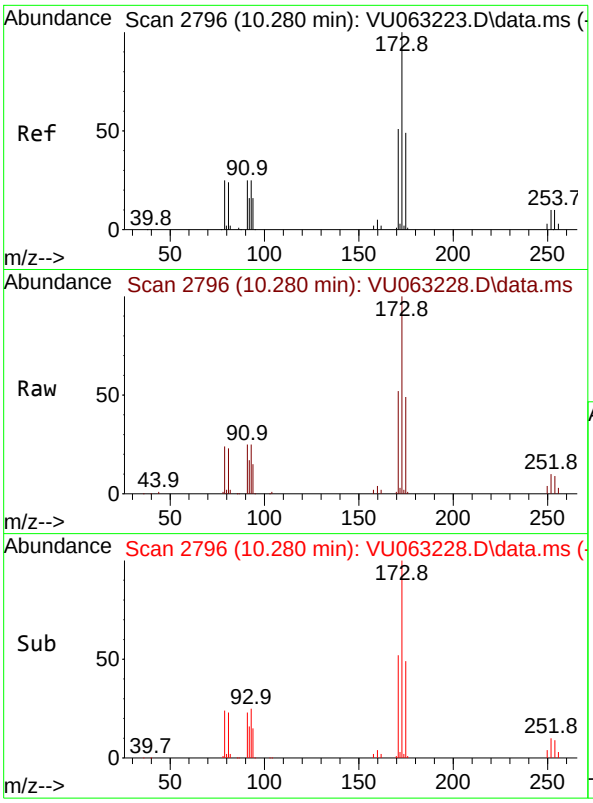


#66
Styrene
Concen: 10.231 ug/l
RT: 10.103 min Scan# 2741
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:104 Resp: 451617

Ion	Ratio	Lower	Upper
104	100		
78	51.5	41.2	61.8
103	56.7	44.8	67.2





#67
Bromoform
Concen: 9.096 ug/l
RT: 10.280 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:173 Resp: 7691

Ion	Ratio	Lower	Upper
173	100		
175	47.8	39.0	58.4
254	9.3	7.7	11.5

Instrument :
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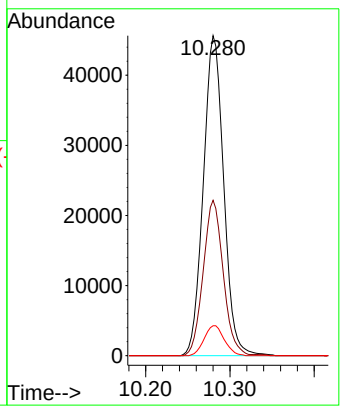
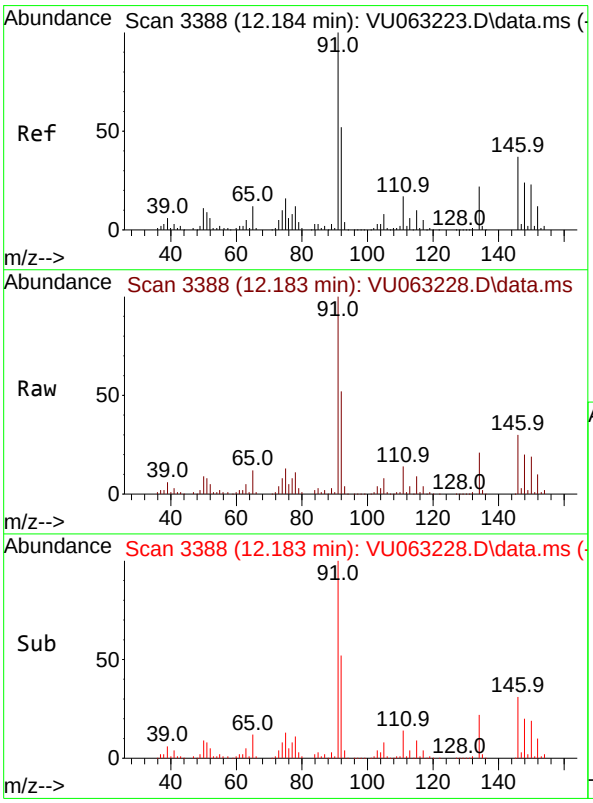
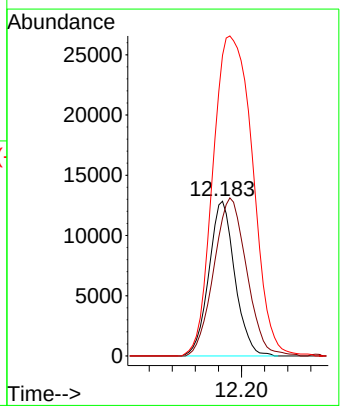


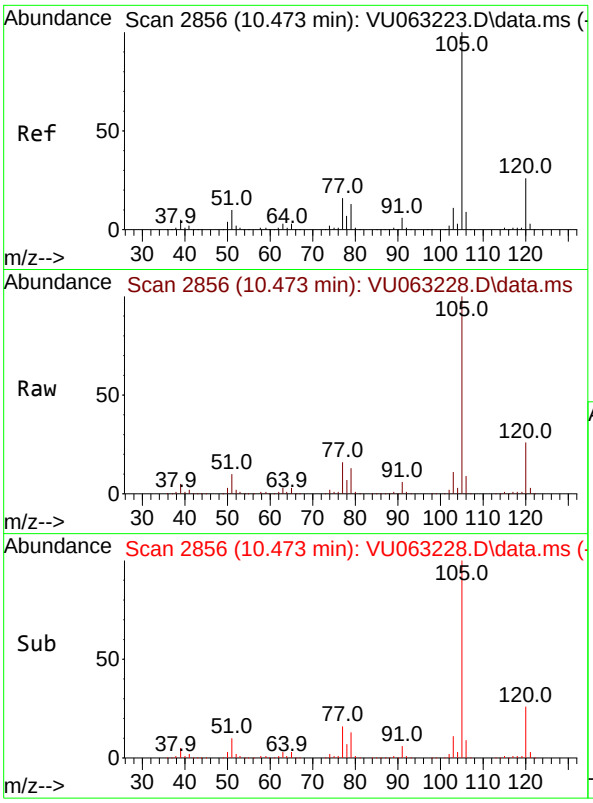


#68
1,2-Dichlorobenzene-d4
Concen: 0.990 ug/l
RT: 12.183 min Scan# 3388
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:152 Resp: 20041

Ion	Ratio	Lower	Upper
152	100		
115	129.1	0.0	275.2
150	316.0	0.0	658.4

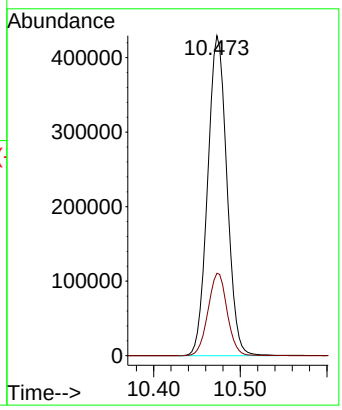




#69
Isopropylbenzene
Concen: 10.176 ug/l
RT: 10.473 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:105 Resp: 66357

Ion	Ratio	Lower	Upper
105	100		
120	25.6	12.8	38.4



Instrument :
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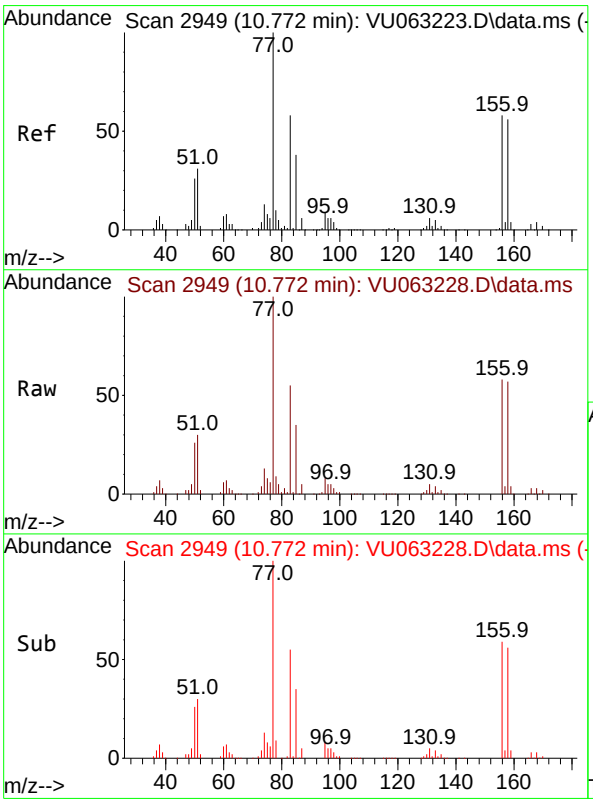
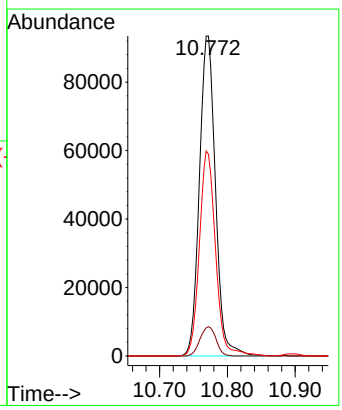
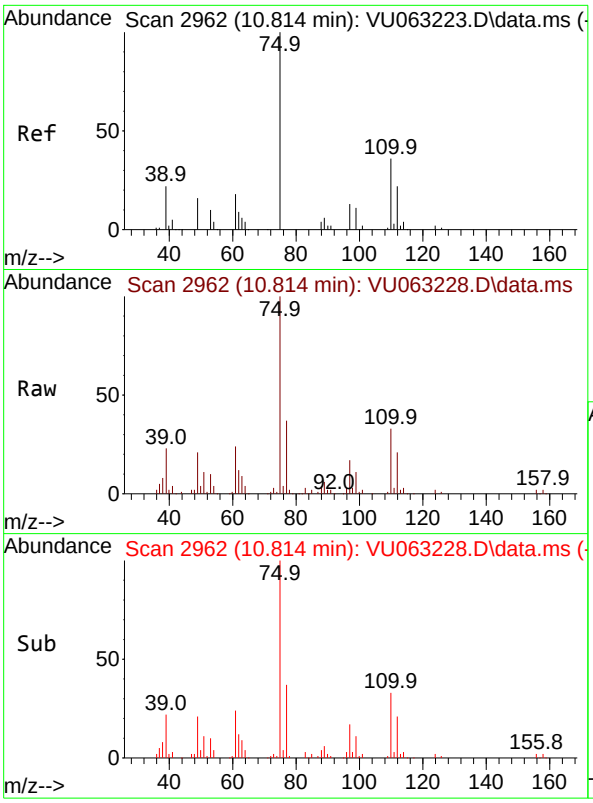


#70
1,1,2,2-Tetrachloroethane
Concen: 8.820 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 83 Resp: 153961

Ion	Ratio	Lower	Upper
83	100		
131	9.0	7.4	11.0
85	64.3	51.8	77.8

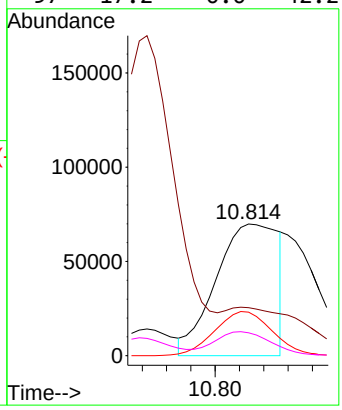




#71
1,2,3-Trichloropropane
Concen: 9.485 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 75 Resp: 12438

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	31.2	0.0	77.0
97	17.2	0.0	42.2



Instrument :
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ClientSampleId :
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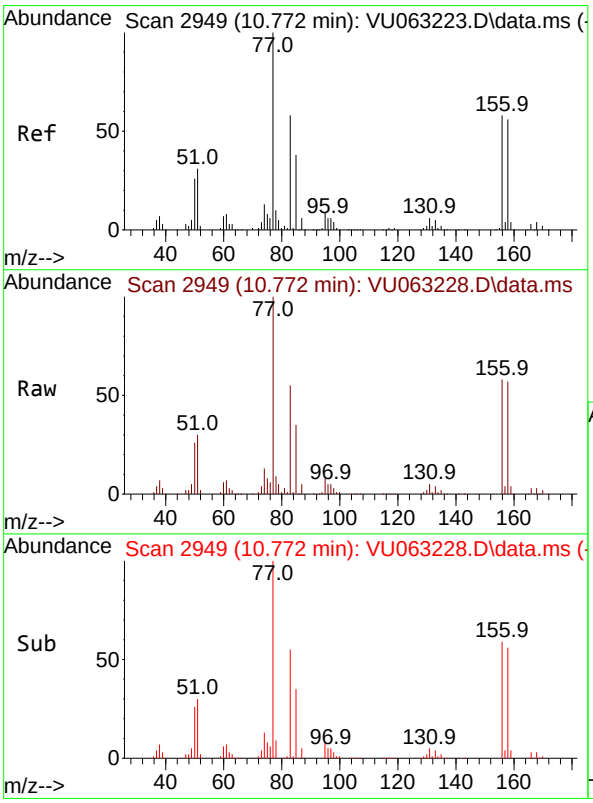
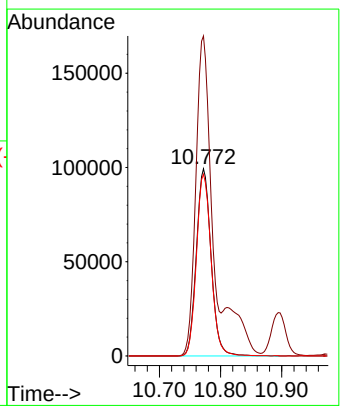
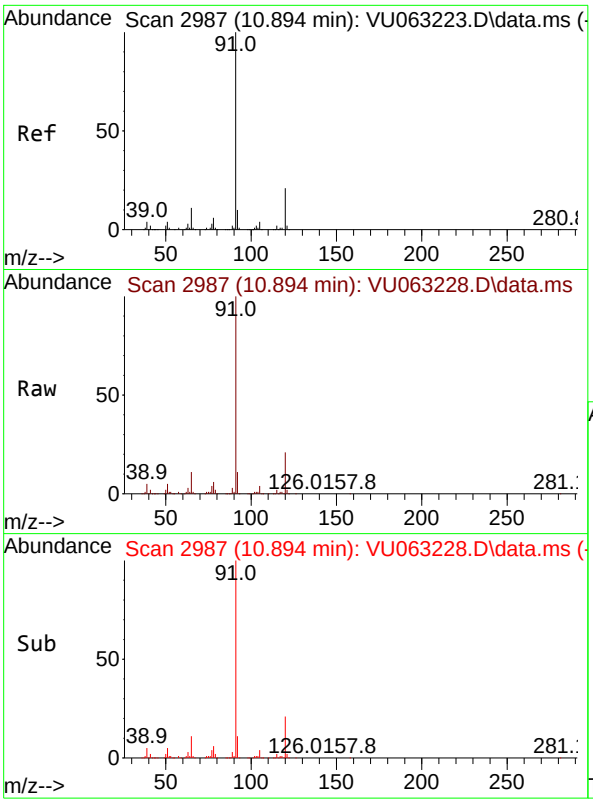


#72
Bromobenzene
Concen: 9.459 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:156 Resp: 166186

Ion	Ratio	Lower	Upper
156	100		
77	171.7	0.0	343.6
158	97.1	0.0	193.0





#73
n-propylbenzene
Concen: 10.396 ug/l
RT: 10.894 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:120 Resp: 19410

Ion	Ratio	Lower	Upper
120	100		
91	467.7	369.8	554.6

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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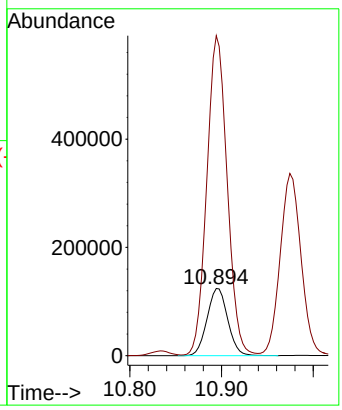
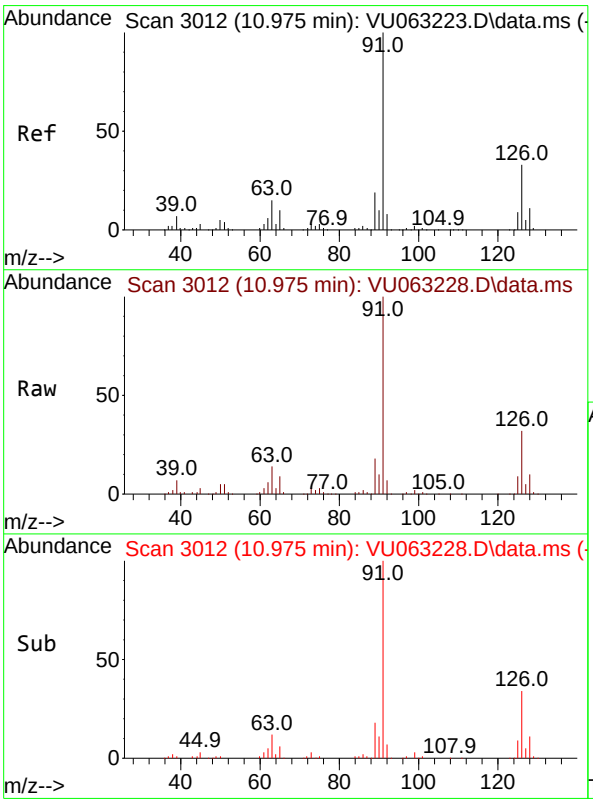
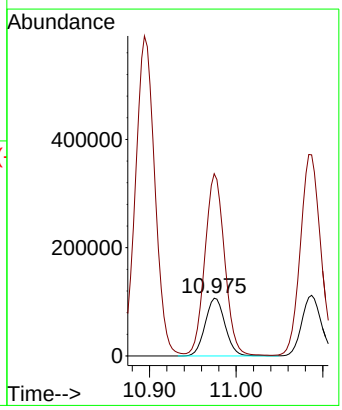


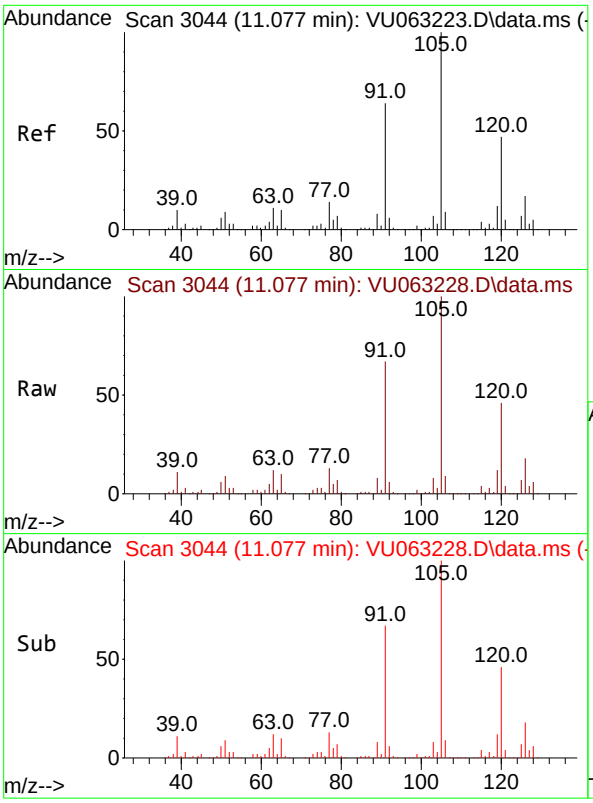


#74
2-Chlorotoluene
Concen: 9.909 ug/l
RT: 10.975 min Scan# 3012
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:126 Resp: 170502

Ion	Ratio	Lower	Upper
126	100		
91	310.3	0.0	623.8

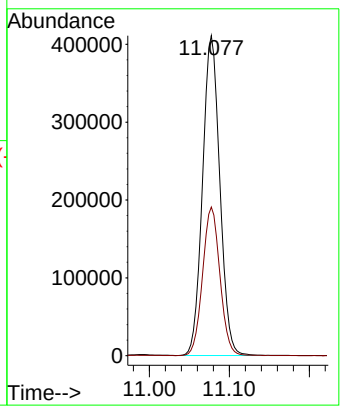




#75
1,3,5-Trimethylbenzene
Concen: 10.250 ug/l
RT: 11.077 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:105 Resp: 61932

Ion	Ratio	Lower	Upper
105	100		
120	46.6	37.3	55.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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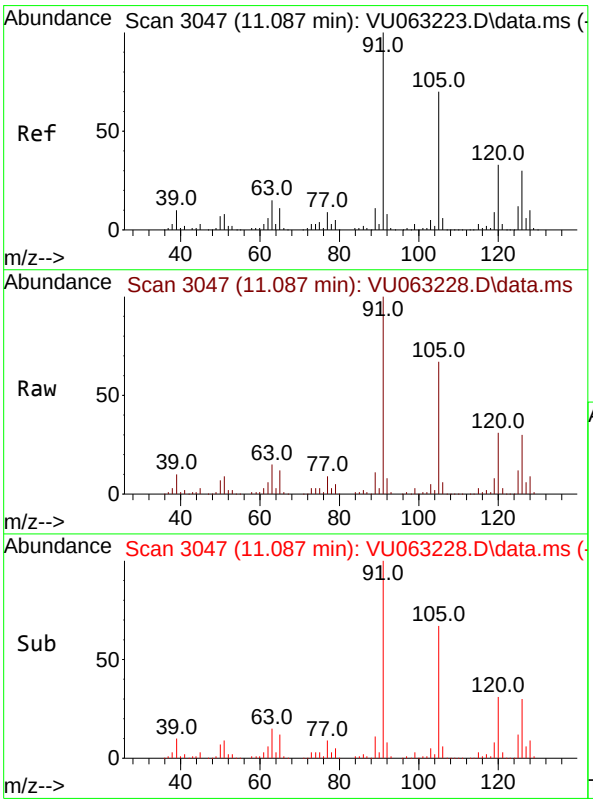
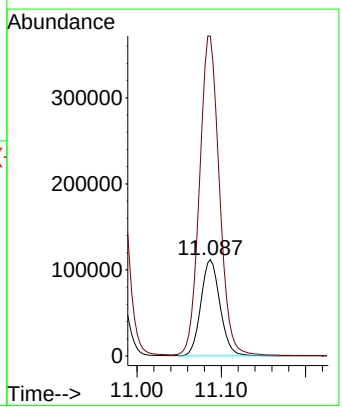
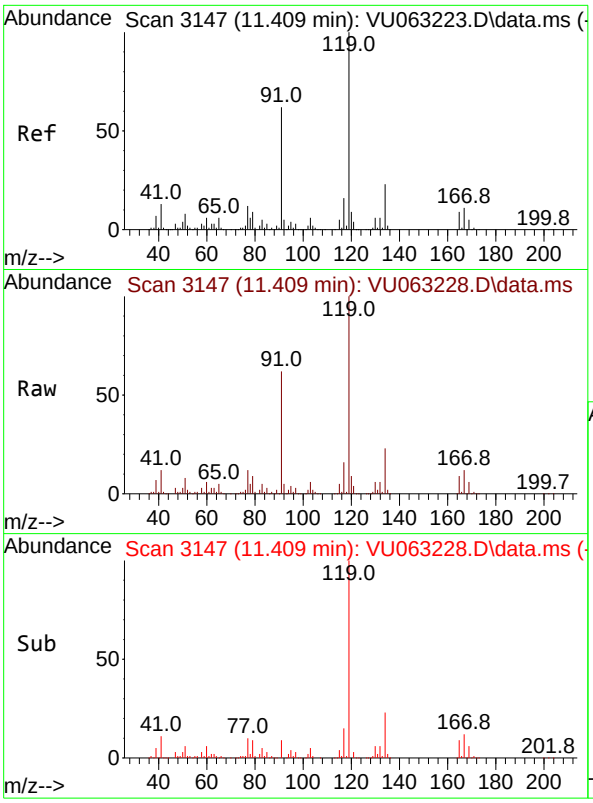


#76
4-Chlorotoluene
Concen: 10.034 ug/l
RT: 11.087 min Scan# 3047
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:126 Resp: 177057

Ion	Ratio	Lower	Upper
126	100		
91	345.0	0.0	703.6

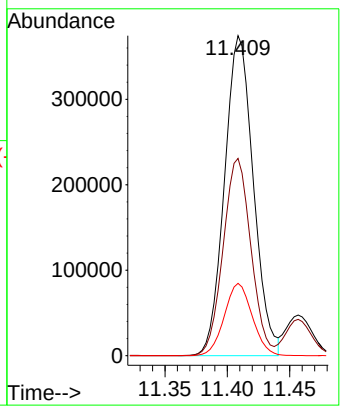




#77
tert-Butylbenzene
Concen: 9.891 ug/l
RT: 11.409 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:119 Resp: 60440

Ion	Ratio	Lower	Upper
119	100		
91	59.4	29.4	88.3
134	21.9	17.6	26.4



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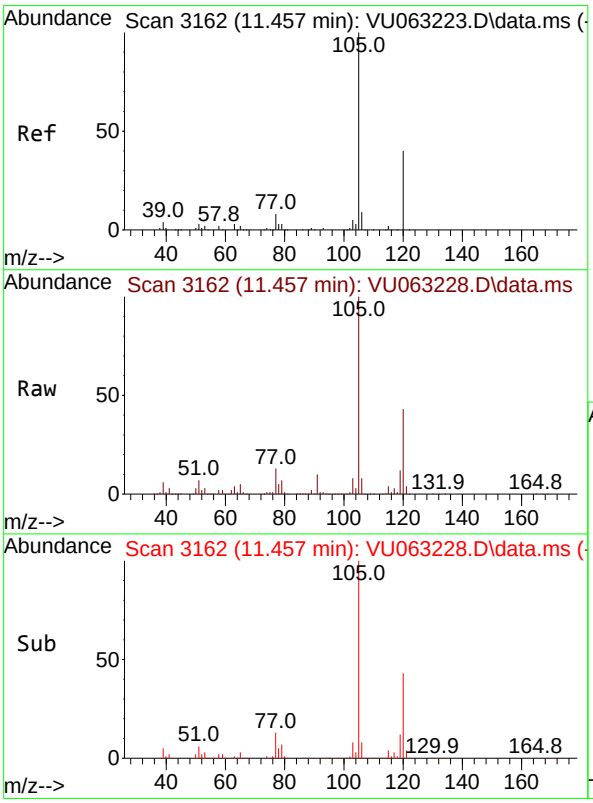
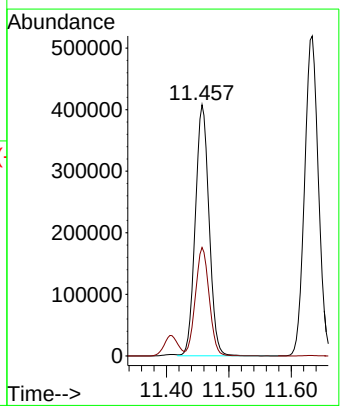
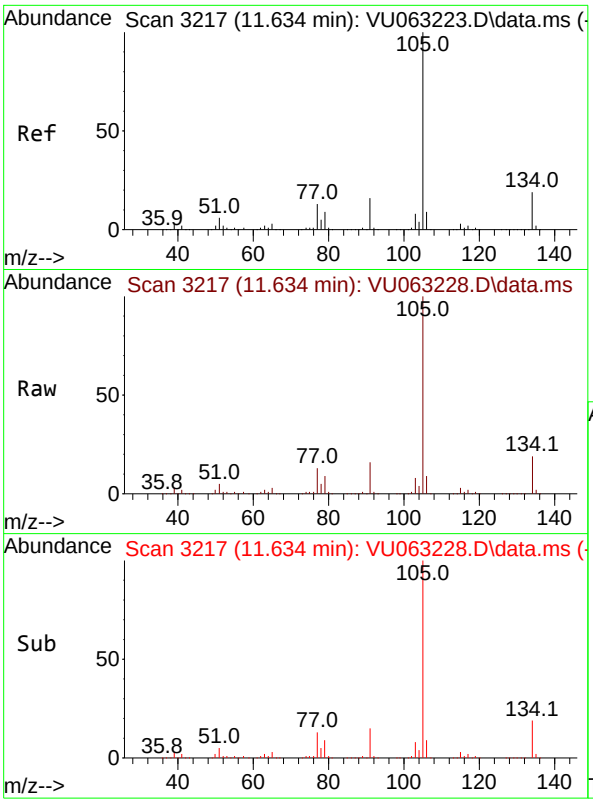


#78
1,2,4-Trimethylbenzene
Concen: 10.413 ug/l
RT: 11.457 min Scan# 3162
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:105 Resp: 624278

Ion	Ratio	Lower	Upper
105	100		
120	43.4	21.9	65.7

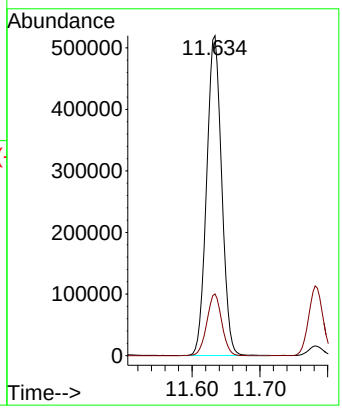




#79
sec-Butylbenzene
Concen: 10.269 ug/l
RT: 11.634 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:105 Resp: 79897

Ion	Ratio	Lower	Upper
105	100		
134	19.2	15.1	22.7



Instrument :
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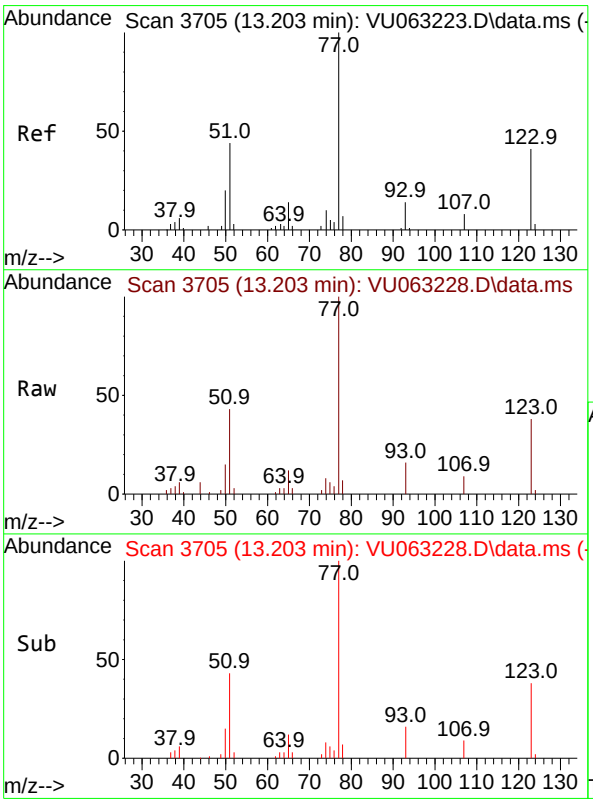
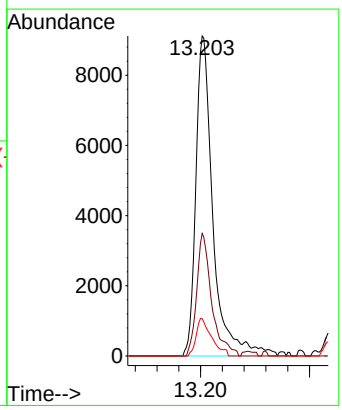
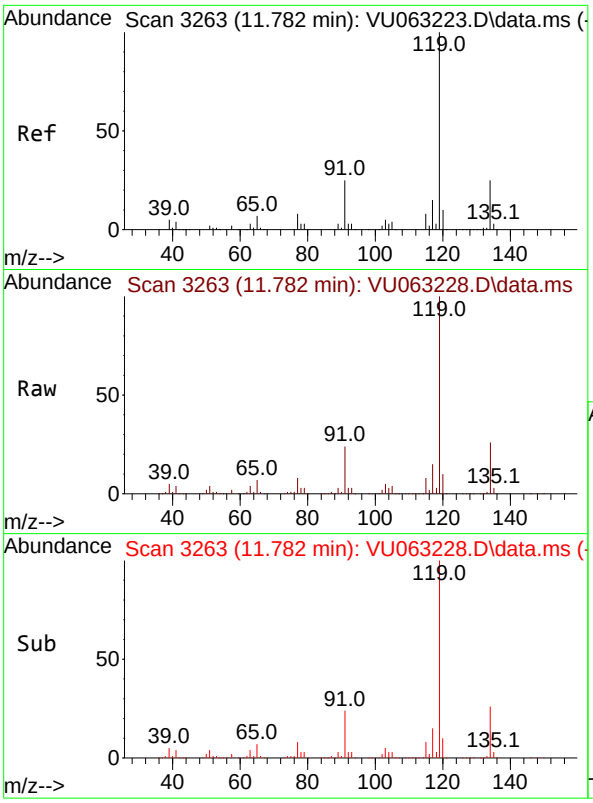


#80
Nitrobenzene
Concen: 39.429 ug/l m
RT: 13.203 min Scan# 3705
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 77 Resp: 19933

Ion	Ratio	Lower	Upper
77	100		
123	33.5	18.9	67.1
65	10.5	11.9	15.1#

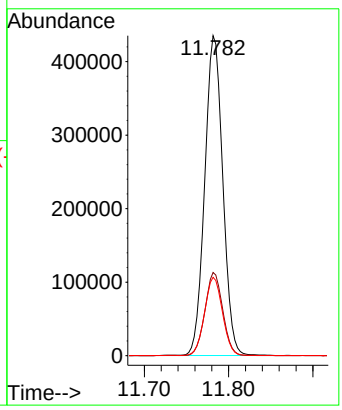




#81
p-Isopropyltoluene
Concen: 10.569 ug/l
RT: 11.782 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:119 Resp: 64896

Ion	Ratio	Lower	Upper
119	100		
134	25.7	20.3	30.5
91	24.2	19.4	29.2



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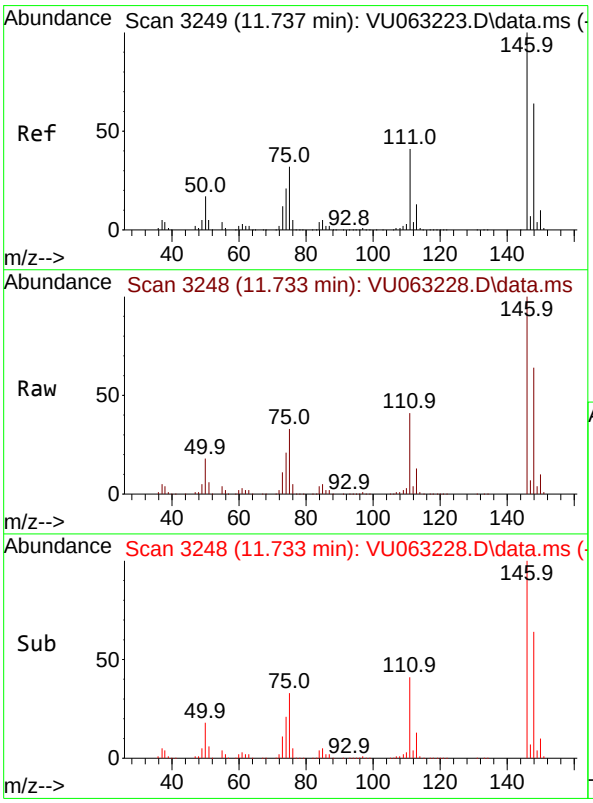
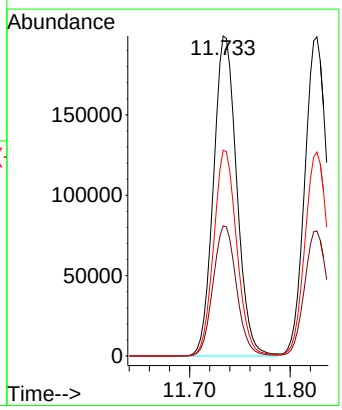
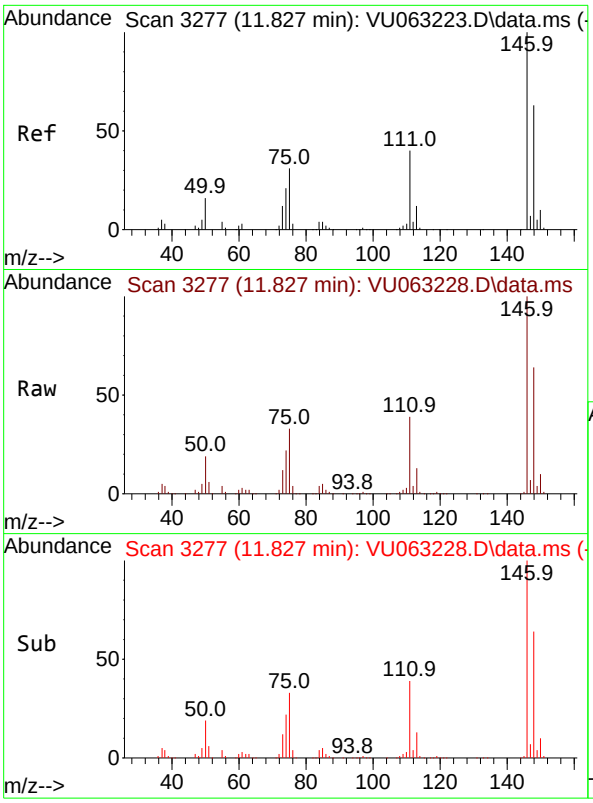


#82
1,3-Dichlorobenzene
Concen: 9.407 ug/l
RT: 11.733 min Scan# 3248
Delta R.T. -0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:146 Resp: 320582

Ion	Ratio	Lower	Upper
146	100		
111	40.8	32.8	49.2
148	63.8	51.1	76.7

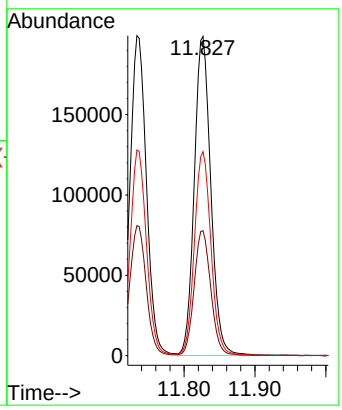




#83
1,4-Dichlorobenzene
Concen: 9.626 ug/l
RT: 11.827 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:146 Resp: 32086

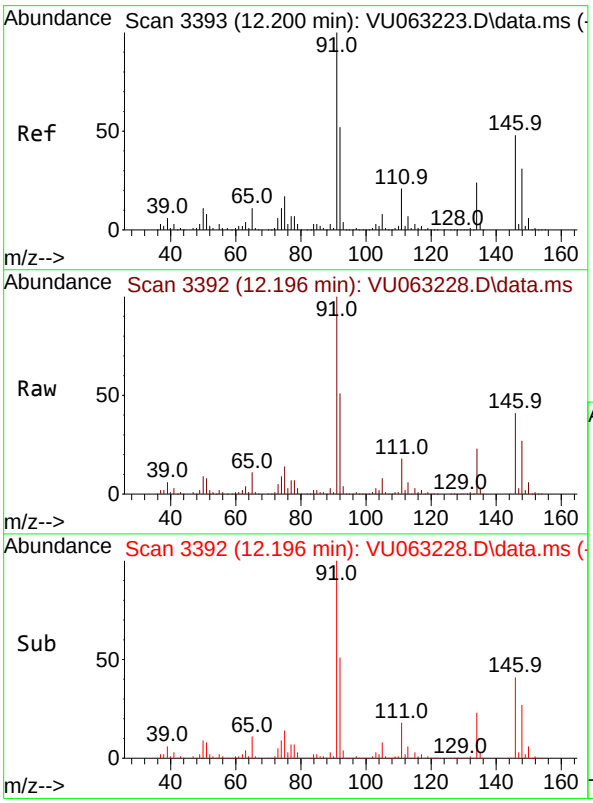
Ion	Ratio	Lower	Upper
146	100		
111	39.4	32.1	48.1
148	63.8	50.2	75.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

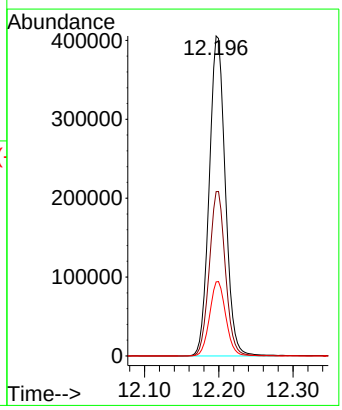
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

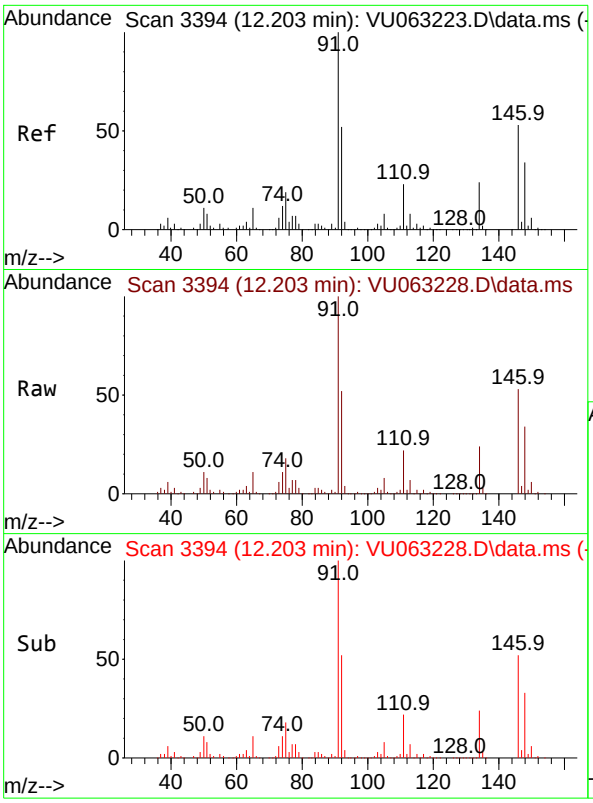


#84
n-Butylbenzene
Concen: 11.060 ug/l
RT: 12.196 min Scan# 3392
Delta R.T. -0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 91 Resp: 608967

Ion	Ratio	Lower	Upper
91	100		
92	51.4	41.8	62.8
134	23.4	18.6	28.0

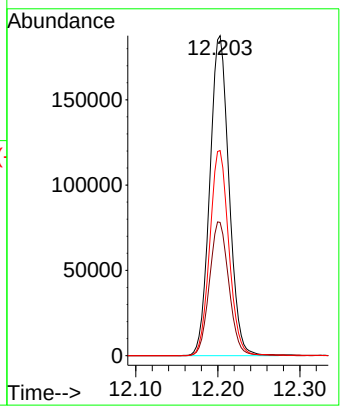




#85
1,2-Dichlorobenzene
Concen: 9.305 ug/l
RT: 12.203 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:146 Resp: 30474

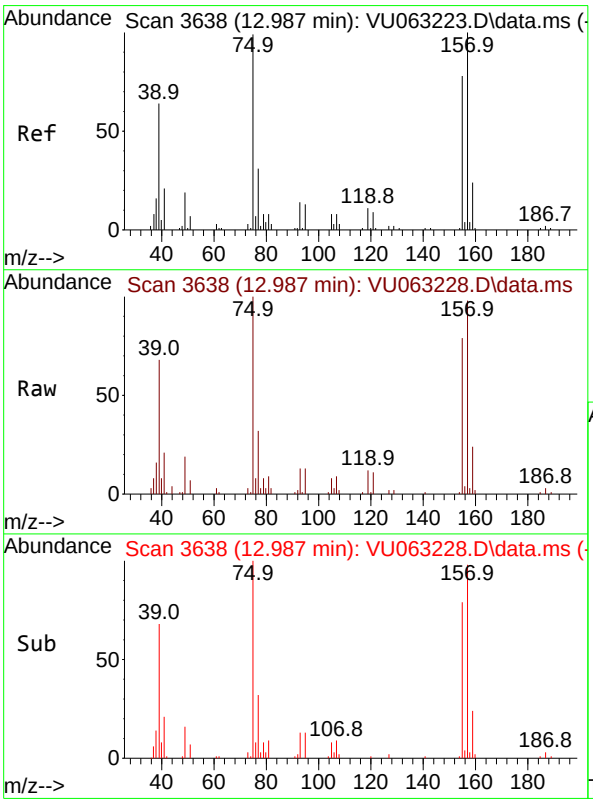
Ion	Ratio	Lower	Upper
146	100		
111	42.3	21.9	65.7
148	63.9	32.3	96.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

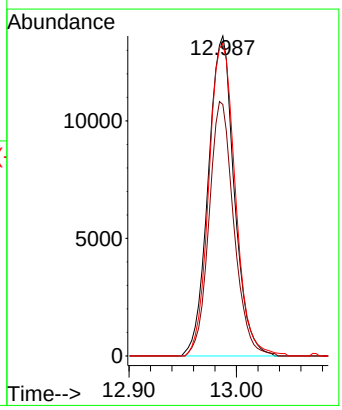
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

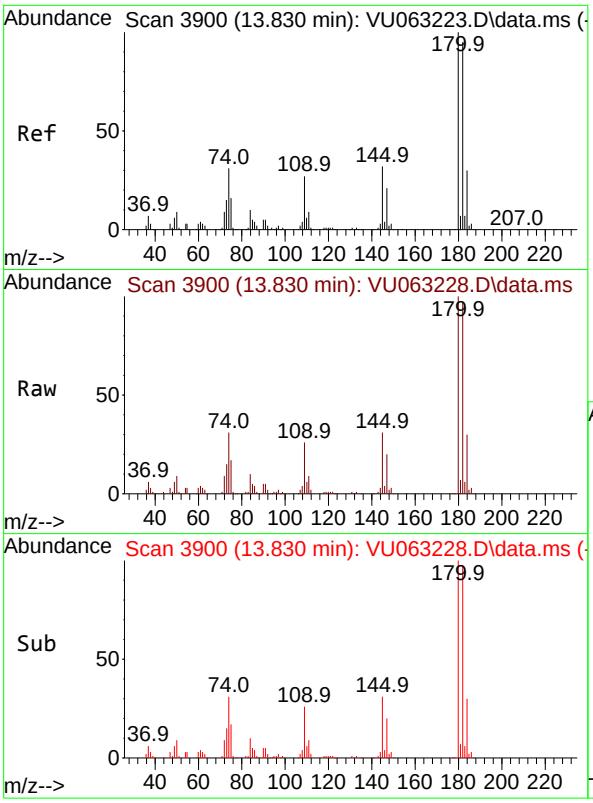


#86
1,2-Dibromo-3-Chloropropane
Concen: 9.357 ug/l
RT: 12.987 min Scan# 3638
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion: 75 Resp: 22925

Ion	Ratio	Lower	Upper
75	100		
155	75.6	63.5	95.3
157	99.0	81.8	122.6

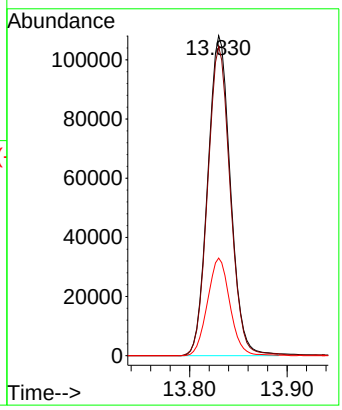




#87
1,2,4-Trichlorobenzene
Concen: 10.965 ug/l
RT: 13.830 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:180 Resp: 17515

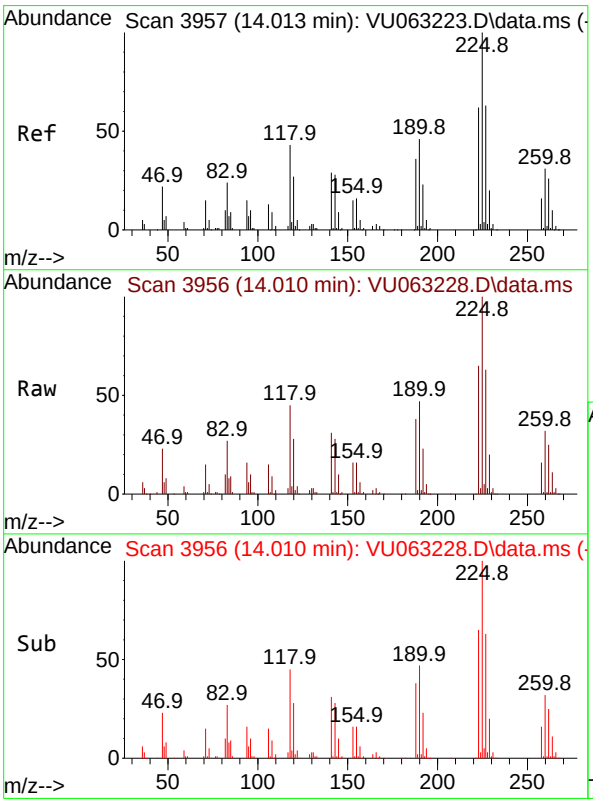
Ion	Ratio	Lower	Upper
180	100		
182	96.1	76.6	115.0
145	30.2	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

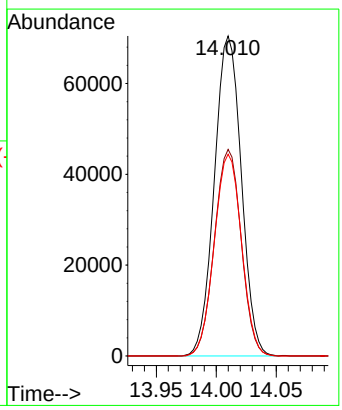
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

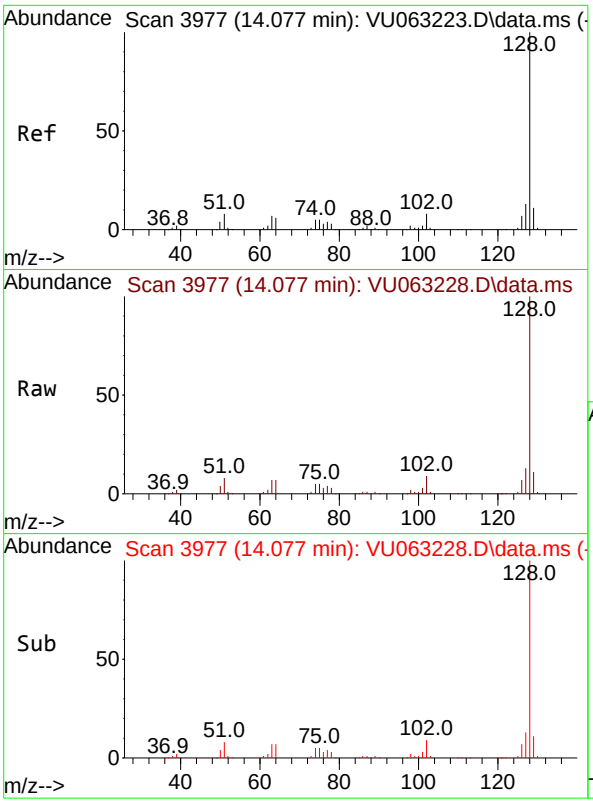


#88
Hexachlorobutadiene
Concen: 9.651 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:225 Resp: 110172

Ion	Ratio	Lower	Upper
225	100		
223	64.1	49.5	74.3
227	63.5	51.0	76.4

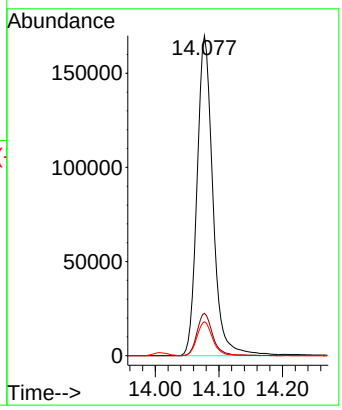




#89
Naphthalene
Concen: 8.899 ug/l
RT: 14.077 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:128 Resp: 29427

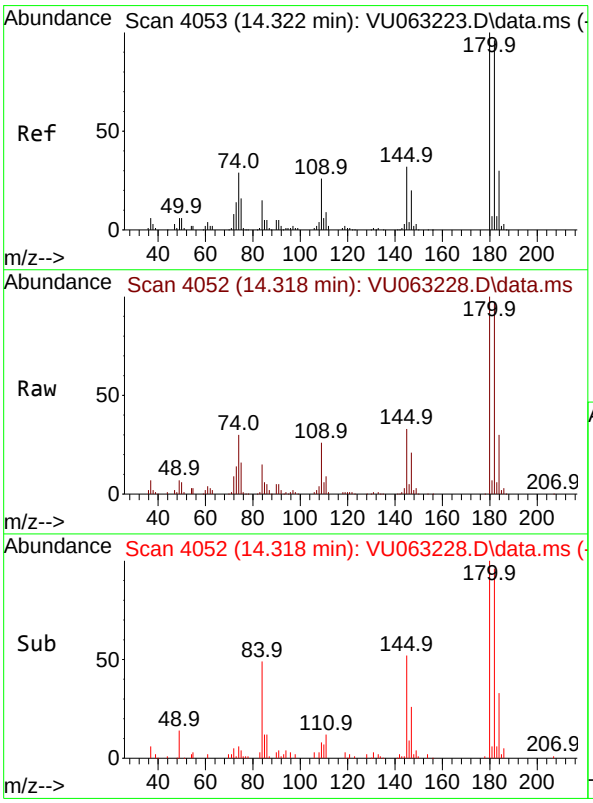
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.6	16.0
129	10.6	8.6	13.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

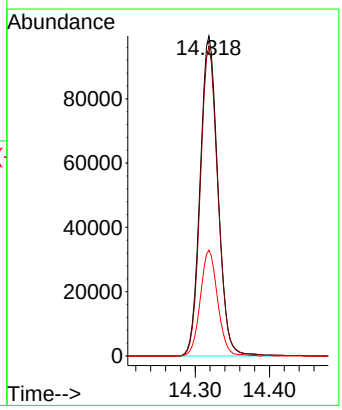
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025



#90
1,2,3-Trichlorobenzene
Concen: 10.565 ug/l
RT: 14.318 min Scan# 4052
Delta R.T. -0.003 min
Lab File: VU063228.D
Acq: 11 Feb 2025 10:01

Tgt Ion:180 Resp: 165126

Ion	Ratio	Lower	Upper
180	100		
182	96.0	78.2	117.2
145	32.2	26.1	39.1



Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063228.D
Acq On : 11 Feb 2025 10:01
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_U
LabSampleId :
VSTDCCC010

Quant Time: Feb 12 03:08:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Fluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	0.325	0.286	12.0	96	0.00
3	t	Chloromethane	0.374	0.311	16.8	90	0.00
4	Rt	Vinyl Chloride	0.370	0.325	12.2	91	0.00
5	T	Bromomethane	0.181	0.183	-1.1	98	0.00
6	T	Chloroethane	0.233	0.202	13.3	93	0.00
7	T	Trichlorofluoromethane	0.439	0.394	10.3	95	0.00
8		1,1,2-Trichloro-1,2,2-trifl	0.249	0.228	8.4	101	0.00
9	Rt	1,1-Dichloroethene	0.254	0.226	11.0	93	0.00
10	t	Iodomethane	0.399	0.374	6.3	94	0.00
11	t	Allyl Chloride	0.364	0.334	8.2	93	0.00
12	t	Acrylonitrile	0.059	0.054	8.5	85	0.00
13	T	Acetone	0.045	0.037	17.8	79	0.00
14	T	Carbon Disulfide	0.887	0.776	12.5	92	0.00
15	RT	Methylene Chloride	0.313	0.271	13.4	91	0.00
16	RT	trans-1,2-Dichloroethene	0.290	0.261	10.0	93	0.00
17	t	1,1-Dichloroethane	0.546	0.485	11.2	92	0.00
18	T	2-Butanone	0.072	0.064	11.1	83	0.00
19		Cyclohexane	0.439	0.427	2.7	96	0.00
20		Methylcyclohexane	0.435	0.448	-3.0	102	0.00
21	T	2,2-Dichloropropane	0.426	0.394	7.5	96	0.00
22	RT	cis-1,2-Dichloroethene	0.313	0.284	9.3	92	0.00
23	t	Diethyl Ether	0.218	0.182	16.5	86	0.00
24	t	tert-Butyl Alcohol	0.026	0.017	34.6#	72	0.03
25	t	Methyl tert-Butyl Ether	0.634	0.586	7.6	89	0.00
26	t	Bromochloromethane	0.137	0.122	10.9	91	0.00
27	t	Chloroform	0.551	0.488	11.4	91	0.00
28	RT	1,1,1-Trichloroethane	0.446	0.407	8.7	94	0.00
29	T	1,1-Dichloropropene	0.400	0.376	6.0	94	0.00
30	RT	Carbon Tetrachloride	0.383	0.349	8.9	94	0.00
31	t	Isopropyl Ether	0.779	0.743	4.6	93	0.00
32		Ethyl-t-butyl ether	0.709	0.686	3.2	93	0.00
33		Tert-Amyl methyl ether	0.619	0.602	2.7	89	0.00
34	t	Propionitrile	0.022	0.021	4.5	87	0.02
35	RT	Benzene	1.229	1.118	9.0	93	0.00
36	RT	1,2-Dichloroethane	0.355	0.307	13.5	88	0.00
37	RT	Trichloroethene	0.292	0.266	8.9	93	0.00
38	Rt	1,2-Dichloropropane	0.322	0.292	9.3	91	0.00
39	t	Methacrylonitrile	0.080	0.079	1.3	83	0.00
40	t	Methyl acrylate	0.148	0.125	15.5	77	0.00
41	t	Tetrahydrofuran	0.047	0.042	10.6	82	0.00
42	t	1-Chlorobutane	0.547	0.524	4.2	95	0.00
43	T	Dibromomethane	0.163	0.144	11.7	91	0.00
44	T	Bromodichloromethane	0.379	0.346	8.7	90	0.00
45	T	4-Methyl-2-Pentanone	0.171	0.162	5.3	84	0.00
46	t	t-1,4-Dichloro-2-butene	0.080	0.088	-10.0	107	0.00
47	t	Methyl methacrylate	0.137	0.135	1.5	85	0.00
48	t	Ethyl methacrylate	0.258	0.266	-3.1	86	0.00
49	Rt	Toluene	0.707	0.684	3.3	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063228.D
Acq On : 11 Feb 2025 10:01
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_U
LabSampleId :
VSTDCCC010

Quant Time: Feb 12 03:08:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
50	T	t-1,3-Dichloropropene	0.347	0.340	2.0	91	0.00
51	T	cis-1,3-Dichloropropene	0.429	0.400	6.8	89	0.00
52	RT	1,1,2-Trichloroethane	0.220	0.201	8.6	90	0.00
53	t	1,3-Dichloropropane	0.390	0.355	9.0	89	0.00
54	t	2-Hexanone	0.117	0.111	5.1	84	0.00
55	t	Dibromochloromethane	0.253	0.232	8.3	88	0.00
56	T	1,2-Dibromoethane	0.206	0.190	7.8	88	0.00
57	S	4-Bromofluorobenzene	0.330	0.353	-7.0	101	0.00
58	RT	Tetrachloroethene	0.241	0.225	6.6	98	0.00
59	Rt	Chlorobenzene	0.746	0.709	5.0	94	0.00
60	T	1,1,1,2-Tetrachloroethane	0.268	0.247	7.8	92	0.00
61	t	Pentachloroethane	0.239	0.212	11.3	90	0.00
62	t	Hexachloroethane	0.212	0.198	6.6	91	0.00
63	Rt	Ethyl Benzene	1.286	1.288	-0.2	94	0.00
64	RT	m/p-Xylenes	0.480	0.492	-2.5	94	0.00
65	RT	o-Xylene	0.470	0.471	-0.2	93	0.00
66	RT	Styrene	0.748	0.766	-2.4	91	0.00
67	t	Bromoform	0.143	0.130	9.1	85	0.00
68	S	1,2-Dichlorobenzene-d4	0.343	0.340	0.9	101	0.00
69	T	Isopropylbenzene	1.106	1.125	-1.7	95	0.00
70	T	1,1,2,2-Tetrachloroethane	0.296	0.261	11.8	86	0.00
71	T	1,2,3-Trichloropropane	0.222	0.211	5.0	106	0.00
72	t	Bromobenzene	0.298	0.282	5.4	91	0.00
73	t	n-propylbenzene	0.317	0.329	-3.8	95	0.00
74	t	2-Chlorotoluene	0.292	0.289	1.0	93	0.00
75	t	1,3,5-Trimethylbenzene	1.024	1.050	-2.5	93	0.00
76	t	4-Chlorotoluene	0.299	0.300	-0.3	95	0.00
77	t	tert-Butylbenzene	1.036	1.025	1.1	93	0.00
78	t	1,2,4-Trimethylbenzene	1.016	1.058	-4.1	93	0.00
79	t	sec-Butylbenzene	1.319	1.355	-2.7	96	0.00
80		Nitrobenzene	0.007	0.007	0.0	77	0.00
81	t	p-Isopropyltoluene	1.041	1.100	-5.7	96	0.00
82	t	1,3-Dichlorobenzene	0.578	0.544	5.9	93	0.00
83	Rt	1,4-Dichlorobenzene	0.565	0.544	3.7	92	0.00
84	t	n-Butylbenzene	0.933	1.032	-10.6	101	0.00
85	Rt	1,2-Dichlorobenzene	0.555	0.517	6.8	92	0.00
86	t	1,2-Dibromo-3-Chloropropane	0.042	0.039	7.1	81	0.00
87	Rt	1,2,4-Trichlorobenzene	0.271	0.297	-9.6	98	0.00
88	t	Hexachlorobutadiene	0.194	0.187	3.6	105	0.00
89	t	Naphthalene	0.436	0.499	-14.4	92	0.00
90	t	1,2,3-Trichlorobenzene	0.265	0.280	-5.7	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063228.D
Acq On : 11 Feb 2025 10:01
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_U
LabSampleId :
VSTDCCC010

Quant Time: Feb 12 03:08:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	i	Fluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	10.000	8.797	12.0	96	0.00
3	t	Chloromethane	10.000	8.299	17.0	90	0.00
4	Rt	Vinyl Chloride	10.000	8.787	12.1	91	0.00
5	T	Bromomethane	10.000	10.135	-1.3	98	0.00
6	T	Chloroethane	10.000	8.649	13.5	93	0.00
7	T	Trichlorofluoromethane	10.000	8.970	10.3	95	0.00
8		1,1,2-Trichloro-1,2,2-trifl	10.000	9.165	8.4	101	0.00
9	Rt	1,1-Dichloroethene	10.000	8.906	10.9	93	0.00
10	t	Iodomethane	10.000	9.365	6.3	94	0.00
11	t	Allyl Chloride	10.000	9.171	8.3	93	0.00
12	t	Acrylonitrile	20.000	18.464	7.7	85	0.00
13	T	Acetone	50.000	40.694	18.6	79	0.00
14	T	Carbon Disulfide	10.000	8.748	12.5	92	0.00
15	RT	Methylene Chloride	10.000	8.649	13.5	91	0.00
16	RT	trans-1,2-Dichloroethene	10.000	9.030	9.7	93	0.00
17	t	1,1-Dichloroethane	10.000	8.881	11.2	92	0.00
18	T	2-Butanone	50.000	44.800	10.4	83	0.00
19		Cyclohexane	10.000	9.729	2.7	96	0.00
20		Methylcyclohexane	10.000	10.295	-2.9	102	0.00
21	T	2,2-Dichloropropane	10.000	9.260	7.4	96	0.00
22	RT	cis-1,2-Dichloroethene	10.000	9.085	9.1	92	0.00
23	t	Diethyl Ether	10.000	8.373	16.3	86	0.00
24	t	tert-Butyl Alcohol	100.000	72.937	27.1	72	0.03
25	t	Methyl tert-Butyl Ether	10.000	9.249	7.5	89	0.00
26	t	Bromochloromethane	10.000	8.902	11.0	91	0.00
27	t	Chloroform	10.000	8.862	11.4	91	0.00
28	RT	1,1,1-Trichloroethane	10.000	9.130	8.7	94	0.00
29	T	1,1-Dichloropropene	10.000	9.411	5.9	94	0.00
30	RT	Carbon Tetrachloride	10.000	9.115	8.8	94	0.00
31	t	Isopropyl Ether	10.000	9.541	4.6	93	0.00
32		Ethyl-t-butyl ether	10.000	9.678	3.2	93	0.00
33		Tert-Amyl methyl ether	10.000	9.728	2.7	89	0.00
34	t	Propionitrile	50.000	48.994	2.0	87	0.02
35	RT	Benzene	10.000	9.098	9.0	93	0.00
36	RT	1,2-Dichloroethane	10.000	8.666	13.3	88	0.00
37	RT	Trichloroethene	10.000	9.111	8.9	93	0.00
38	Rt	1,2-Dichloropropane	10.000	9.086	9.1	91	0.00
39	t	Methacrylonitrile	10.000	9.847	1.5	83	0.00
40	t	Methyl acrylate	10.000	8.442	15.6	77	0.00
41	t	Tetrahydrofuran	20.000	17.753	11.2	82	0.00
42	t	1-Chlorobutane	10.000	9.582	4.2	95	0.00
43	T	Dibromomethane	10.000	8.867	11.3	91	0.00
44	T	Bromodichloromethane	10.000	9.138	8.6	90	0.00
45	T	4-Methyl-2-Pentanone	50.000	47.438	5.1	84	0.00
46	t	t-1,4-Dichloro-2-butene	20.000	21.994	-10.0	107	0.00
47	t	Methyl methacrylate	20.000	19.623	1.9	85	0.00
48	t	Ethyl methacrylate	10.000	10.321	-3.2	86	0.00
49	Rt	Toluene	10.000	9.675	3.2	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063228.D
Acq On : 11 Feb 2025 10:01
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_U
LabSampleId :
VSTDCCC010

Quant Time: Feb 12 03:08:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
50	T	t-1,3-Dichloropropene	10.000	9.811	1.9	91	0.00
51	T	cis-1,3-Dichloropropene	10.000	9.338	6.6	89	0.00
52	RT	1,1,2-Trichloroethane	10.000	9.154	8.5	90	0.00
53	t	1,3-Dichloropropane	10.000	9.097	9.0	89	0.00
54	t	2-Hexanone	50.000	47.697	4.6	84	0.00
55	t	Dibromochloromethane	10.000	9.169	8.3	88	0.00
56	T	1,2-Dibromoethane	10.000	9.223	7.8	88	0.00
57	S	4-Bromofluorobenzene	1.000	1.070	-7.0	101	0.00
58	RT	Tetrachloroethene	10.000	9.361	6.4	98	0.00
59	Rt	Chlorobenzene	10.000	9.514	4.9	94	0.00
60	T	1,1,1,2-Tetrachloroethane	10.000	9.206	7.9	92	0.00
61	t	Pentachloroethane	10.000	8.865	11.3	90	0.00
62	t	Hexachloroethane	10.000	9.352	6.5	91	0.00
63	Rt	Ethyl Benzene	10.000	10.017	-0.2	94	0.00
64	RT	m/p-Xylenes	20.000	20.468	-2.3	94	0.00
65	RT	o-Xylene	10.000	10.007	-0.1	93	0.00
66	RT	Styrene	10.000	10.231	-2.3	91	0.00
67	t	Bromoform	10.000	9.096	9.0	85	0.00
68	S	1,2-Dichlorobenzene-d4	1.000	0.990	1.0	101	0.00
69	T	Isopropylbenzene	10.000	10.176	-1.8	95	0.00
70	T	1,1,2,2-Tetrachloroethane	10.000	8.820	11.8	86	0.00
71	T	1,2,3-Trichloropropane	10.000	9.485	5.2	106	0.00
72	t	Bromobenzene	10.000	9.459	5.4	91	0.00
73	t	n-propylbenzene	10.000	10.396	-4.0	95	0.00
74	t	2-Chlorotoluene	10.000	9.909	0.9	93	0.00
75	t	1,3,5-Trimethylbenzene	10.000	10.250	-2.5	93	0.00
76	t	4-Chlorotoluene	10.000	10.034	-0.3	95	0.00
77	t	tert-Butylbenzene	10.000	9.891	1.1	93	0.00
78	t	1,2,4-Trimethylbenzene	10.000	10.413	-4.1	93	0.00
79	t	sec-Butylbenzene	10.000	10.269	-2.7	96	0.00
80		Nitrobenzene	50.000	39.429	21.1	77	0.00
81	t	p-Isopropyltoluene	10.000	10.569	-5.7	96	0.00
82	t	1,3-Dichlorobenzene	10.000	9.407	5.9	93	0.00
83	Rt	1,4-Dichlorobenzene	10.000	9.626	3.7	92	0.00
84	t	n-Butylbenzene	10.000	11.060	-10.6	101	0.00
85	Rt	1,2-Dichlorobenzene	10.000	9.305	7.0	92	0.00
86	t	1,2-Dibromo-3-Chloropropane	10.000	9.357	6.4	81	0.00
87	Rt	1,2,4-Trichlorobenzene	10.000	10.965	-9.6	98	0.00
88	t	Hexachlorobutadiene	10.000	9.651	3.5	105	0.00
89	t	Naphthalene	10.000	8.899	11.0	92	0.00
90	t	1,2,3-Trichlorobenzene	10.000	10.565	-5.6	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date/Time: 02/13/2025 08:36

Lab File ID: VU063262.D Init. Calib. Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.325	0.324		-0.31	30
Chloromethane	0.374	0.353		-5.61	30
Vinyl Chloride	0.370	0.368		-0.54	30
Bromomethane	0.171	0.203		18.71	30
Chloroethane	0.233	0.221		-5.15	30
Tetrahydrofuran	0.047	0.048		2.13	30
Trichlorofluoromethane	0.439	0.439		0	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.249	0.259		4.02	30
tert-Butyl Alcohol	0.026	0.022		-15.39	30
Diethyl Ether	0.218	0.213		-2.29	30
1,1-Dichloroethene	0.254	0.256		0.79	30
Acrylonitrile	0.059	0.063		6.78	30
Acetone	0.045	0.046		2.22	30
Carbon Disulfide	0.887	0.874		-1.47	30
Methyl tert-Butyl Ether	0.634	0.673		6.15	30
Methyl acrylate	0.148	0.161		8.78	30
Methylene Chloride	0.313	0.316		0.96	30
trans-1,2-Dichloroethene	0.290	0.297		2.41	30
1,1-Dichloroethane	0.546	0.553		1.28	30
Cyclohexane	0.439	0.482		9.8	30
2-Butanone	0.072	0.077		6.94	30
Carbon Tetrachloride	0.383	0.402		4.96	30
2,2-Dichloropropane	0.426	0.447		4.93	30
cis-1,2-Dichloroethene	0.313	0.334		6.71	30
Bromochloromethane	0.137	0.141		2.92	30
Chloroform	0.551	0.563		2.18	30
1,1,1-Trichloroethane	0.446	0.463		3.81	30
Methylcyclohexane	0.435	0.500		14.94	30
1,1-Dichloropropene	0.400	0.435		8.75	30
Propionitrile	0.022	0.024		9.09	30
Benzene	1.229	1.280		4.15	30
1,2-Dichloroethane	0.355	0.360		1.41	30
Trichloroethene	0.292	0.306		4.8	30
1,2-Dichloropropane	0.322	0.332		3.11	30
1-Chlorobutane	0.547	0.590		7.86	30
Dibromomethane	0.163	0.165		1.23	30
Bromodichloromethane	0.379	0.404		6.6	30
4-Methyl-2-Pentanone	0.171	0.188		9.94	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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Fax : 908 789 8922

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date/Time: 02/13/2025 08:36

Lab File ID: VU063262.D Init. Calib. Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Toluene	0.707	0.782		10.61	30
t-1,3-Dichloropropene	0.347	0.397		14.41	30
cis-1,3-Dichloropropene	0.429	0.470		9.56	30
1,1,2-Trichloroethane	0.220	0.229		4.09	30
1,3-Dichloropropane	0.390	0.407		4.36	30
2-Hexanone	0.117	0.127		8.55	30
Dibromochloromethane	0.253	0.274		8.3	30
1,2-Dibromoethane	0.206	0.216		4.85	30
Tetrachloroethene	0.241	0.256		6.22	30
Chlorobenzene	0.746	0.807		8.18	30
1,1,1,2-Tetrachloroethane	0.268	0.287		7.09	30
Hexachloroethane	0.212	0.232		9.43	30
Ethyl Benzene	1.286	1.468		14.15	30
m/p-Xylenes	0.480	0.564		17.5	30
o-Xylene	0.470	0.533		13.4	30
Styrene	0.748	0.890		18.98	30
Bromoform	0.143	0.156		9.09	30
Isopropylbenzene	1.106	1.283		16	30
1,1,2,2-Tetrachloroethane	0.296	0.310		4.73	30
1,2,3-Trichloropropane	0.222	0.228		2.7	30
Bromobenzene	0.298	0.324		8.73	30
n-propylbenzene	0.317	0.380		19.87	30
2-Chlorotoluene	0.292	0.337		15.41	30
1,3,5-Trimethylbenzene	1.024	1.220		19.14	30
4-Chlorotoluene	0.299	0.344		15.05	30
tert-Butylbenzene	1.036	1.174		13.32	30
1,2,4-Trimethylbenzene	1.016	1.222		20.28	30
sec-Butylbenzene	1.319	1.556		17.97	30
p-Isopropyltoluene	1.041	1.256		20.65	30
1,3-Dichlorobenzene	0.578	0.642		11.07	30
1,4-Dichlorobenzene	0.565	0.629		11.33	30
n-Butylbenzene	0.933	1.167		25.08	30
1,2-Dichlorobenzene	0.555	0.604		8.83	30
1,2-Dibromo-3-Chloropropane	0.042	0.044		4.76	30
1,2,4-Trichlorobenzene	0.271	0.330		21.77	30
Hexachlorobutadiene	0.194	0.220		13.4	30
Naphthalene	0.436	0.505		15.83	30
1,2,3-Trichlorobenzene	0.265	0.308		16.23	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172

Instrument ID: MSVOA_U Calibration Date/Time: 02/13/2025 08:36

Lab File ID: VU063262.D Init. Calib. Date(s): 02/10/2025 02/10/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:59 15:33

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
1,2-Dichlorobenzene-d4	0.343	0.363		5.83	30
4-Bromofluorobenzene	0.330	0.425		28.79	30
Iodomethane	0.399	0.414		3.76	30
Allyl Chloride	0.364	0.374		2.75	30
Methacrylonitrile	0.080	0.095		18.75	30
Methyl methacrylate	0.137	0.157		14.6	30

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_U\Data\VU021325\
Data File : VU063262.D
Acq On : 13 Feb 2025 08:36
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 14 04:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.107	96	54046	1.000 ug/l	# 0.00
System Monitoring Compounds					
57) 4-Bromofluorobenzene	10.624	95	22963	1.288 ug/l	0.00
Spiked Amount 1.000			Recovery = 129.000%		
68) 1,2-Dichlorobenzene-d4	12.184	152	19595	1.057 ug/l	0.00
Spiked Amount 1.000			Recovery = 106.000%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.377	85	175072	9.970 ug/l	100
3) Chloromethane	1.515	50	191024	9.446 ug/l	97
4) Vinyl Chloride	1.599	62	198865	9.939 ug/l	99
5) Bromomethane	1.837	94	109476	11.198 ug/l	99
6) Chloroethane	1.920	64	119311	9.468 ug/l	100
7) Trichlorofluoromethane	2.126	101	237121	10.001 ug/l	99
8) 1,1,2-Trichloro-1,2,2-...	2.570	101	139754	10.385 ug/l	98
9) 1,1-Dichloroethene	2.567	96	138594	10.108 ug/l	99
10) Iodomethane	2.708	142	223580	10.372 ug/l	100
11) Allyl Chloride	2.911	41	202062	10.258 ug/l	99
12) Acrylonitrile	3.300	53	67738	21.419 ug/l	98
13) Acetone	2.612	43	124539	51.212 ug/l	99
14) Carbon Disulfide	2.779	76	472271	9.851 ug/l	100
15) Methylene Chloride	3.030	84	170726	10.078 ug/l	99
16) trans-1,2-Dichloroethene	3.338	96	160700	10.269 ug/l	96
17) 1,1-Dichloroethane	3.853	63	298904	10.133 ug/l	100
18) 2-Butanone	4.685	43	208686	53.920 ug/l	99
19) Cyclohexane	5.374	56	260727m	11.000 ug/l	
20) Methylcyclohexane	6.753	83	270015	11.488 ug/l	100
21) 2,2-Dichloropropane	4.647	77	241665	10.502 ug/l	100
22) cis-1,2-Dichloroethene	4.650	96	180546	10.678 ug/l	100
23) Diethyl Ether	2.364	59	115003	9.774 ug/l	99
24) tert-Butyl Alcohol	3.161	59	116839	97.059 ug/l	100
25) Methyl tert-Butyl Ether	3.348	73	363897	10.626 ug/l	98
26) Bromochloromethane	4.959	128	76113	10.298 ug/l	99
27) Chloroform	5.071	83	304404	10.226 ug/l	100
28) 1,1,1-Trichloroethane	5.303	97	249979	10.367 ug/l	100
29) 1,1-Dichloropropene	5.512	75	235028	10.882 ug/l	100
30) Carbon Tetrachloride	5.509	117	217105	10.498 ug/l	98
31) Isopropyl Ether	3.975	45	454455	10.792 ug/l	100
32) Ethyl-t-butyl ether	4.483	59	419919	10.965 ug/l	100
33) Tert-Amyl methyl ether	5.927	73	373708	11.169 ug/l	99
34) Propionitrile	4.756	54	65197	55.852 ug/l	99
35) Benzene	5.759	78	691804	10.417 ug/l	100
36) 1,2-Dichloroethane	5.779	62	194480	10.147 ug/l	100
37) Trichloroethene	6.531	130	165198	10.460 ug/l	97
38) 1,2-Dichloropropane	6.779	63	179574	10.331 ug/l	99
39) Methacrylonitrile	4.959	41	51380	11.811 ug/l	97
40) Methyl acrylate	4.833	55	86798	10.826 ug/l	99
41) Tetrahydrofuran	5.039	42	52296	20.669 ug/l	99
42) 1-Chlorobutane	5.444	56	318733	10.786 ug/l	99
43) Dibromomethane	6.904	93	89368	10.154 ug/l	99
44) Bromodichloromethane	7.094	83	218078	10.646 ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063262.D
Acq On : 13 Feb 2025 08:36
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 14 04:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 4-Methyl-2-Pentanone	7.775	43	508561	55.115	ug/l	100
46) t-1,4-Dichloro-2-butene	10.814	75	207484	47.833	ug/l #	54
47) Methyl methacrylate	6.949	69	169420	22.854	ug/l	99
48) Ethyl methacrylate	8.322	69	163932	11.777	ug/l	100
49) Toluene	7.959	92	422883	11.073	ug/l	100
50) t-1,3-Dichloropropene	8.200	75	214427	11.433	ug/l	97
51) cis-1,3-Dichloropropene	7.595	75	254233	10.974	ug/l	98
52) 1,1,2-Trichloroethane	8.386	97	123518	10.409	ug/l	98
53) 1,3-Dichloropropane	8.563	76	220105	10.448	ug/l	100
54) 2-Hexanone	8.672	43	344198	54.661	ug/l	99
55) Dibromochloromethane	8.798	129	148145	10.851	ug/l	99
56) 1,2-Dibromoethane	8.914	107	116797	10.494	ug/l	99
58) Tetrachloroethene	8.544	164	138117	10.612	ug/l	99
59) Chlorobenzene	9.438	112	436133	10.822	ug/l	99
60) 1,1,1,2-Tetrachloroethane	9.524	131	155286	10.720	ug/l	100
61) Pentachloroethane	11.415	117	135426	10.465	ug/l	100
62) Hexachloroethane	12.463	117	125589	10.970	ug/l	99
63) Ethyl Benzene	9.560	91	793194	11.412	ug/l	100
64) m/p-Xylenes	9.682	106	610169	23.502	ug/l	100
65) o-Xylene	10.090	106	288272	11.342	ug/l	100
66) Styrene	10.103	104	480803	11.887	ug/l	100
67) Bromoform	10.280	173	84170	10.863	ug/l	99
69) Isopropylbenzene	10.473	105	693224	11.602	ug/l	100
70) 1,1,2,2-Tetrachloroethane	10.769	83	167442	10.469	ug/l	98
71) 1,2,3-Trichloropropane	10.814	75	123109m	10.245	ug/l	
72) Bromobenzene	10.772	156	175175	10.881	ug/l	100
73) n-propylbenzene	10.894	120	205289	12.000	ug/l	99
74) 2-Chlorotoluene	10.975	126	182021	11.545	ug/l	98
75) 1,3,5-Trimethylbenzene	11.078	105	659181	11.906	ug/l	99
76) 4-Chlorotoluene	11.087	126	186115	11.511	ug/l	98
77) tert-Butylbenzene	11.409	119	634392	11.330	ug/l	99
78) 1,2,4-Trimethylbenzene	11.457	105	660280	12.019	ug/l	100
79) sec-Butylbenzene	11.634	105	841072	11.798	ug/l	99
80) Nitrobenzene	13.203	77	22316m	47.324	ug/l	
81) p-Isopropyltoluene	11.782	119	678948	12.067	ug/l	99
82) 1,3-Dichlorobenzene	11.737	146	347219	11.119	ug/l	99
83) 1,4-Dichlorobenzene	11.827	146	339958	11.131	ug/l	99
84) n-Butylbenzene	12.200	91	630516	12.498	ug/l	99
85) 1,2-Dichlorobenzene	12.203	146	326538	10.882	ug/l	98
86) 1,2-Dibromo-3-Chloropr...	12.987	75	24031	10.704	ug/l	100
87) 1,2,4-Trichlorobenzene	13.830	180	178379	12.188	ug/l	98
88) Hexachlorobutadiene	14.010	225	118917	11.369	ug/l	99
89) Naphthalene	14.077	128	273163	9.007	ug/l	100
90) 1,2,3-Trichlorobenzene	14.319	180	166618	11.635	ug/l	97

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

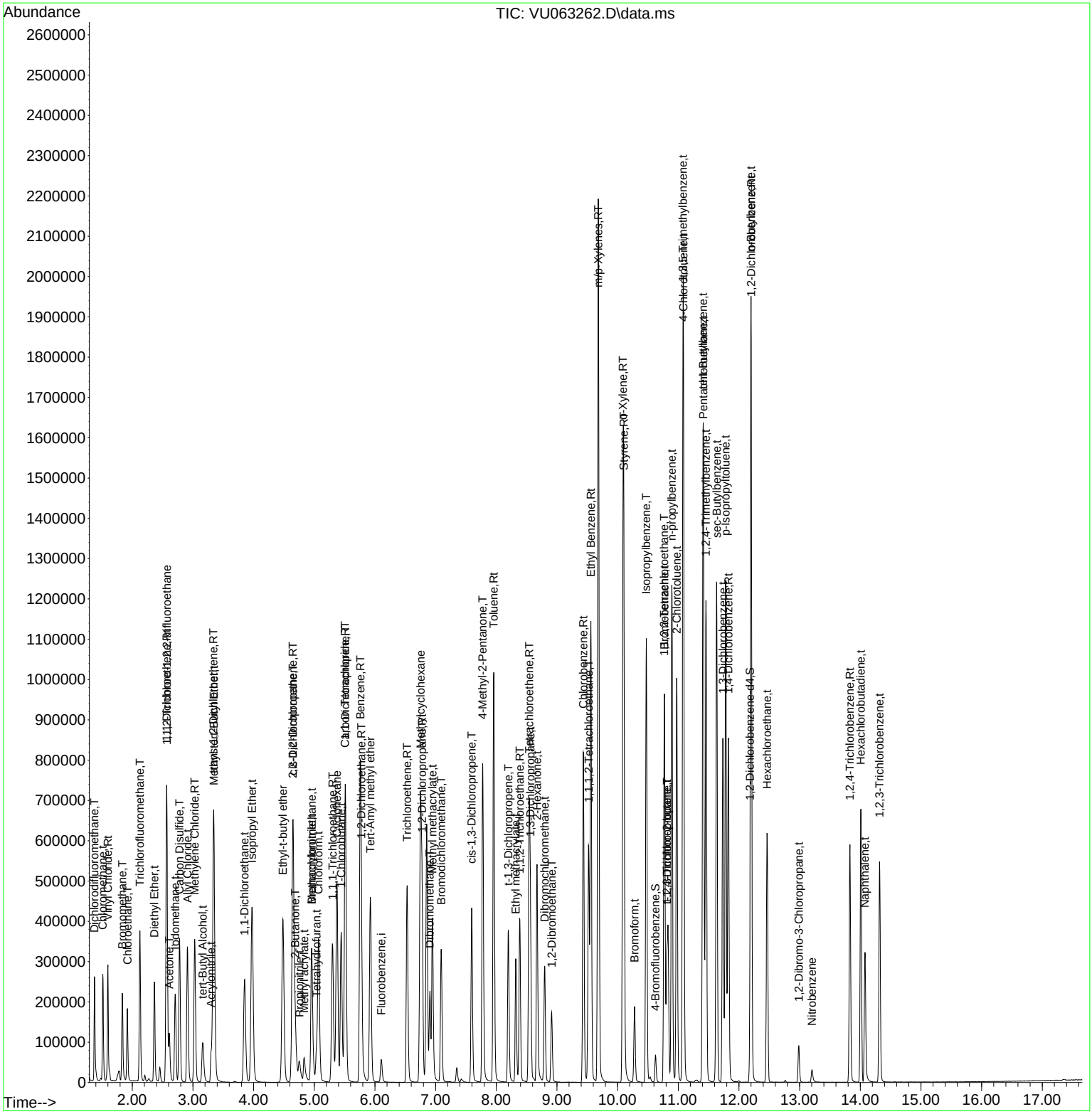
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063262.D
Acq On : 13 Feb 2025 08:36
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

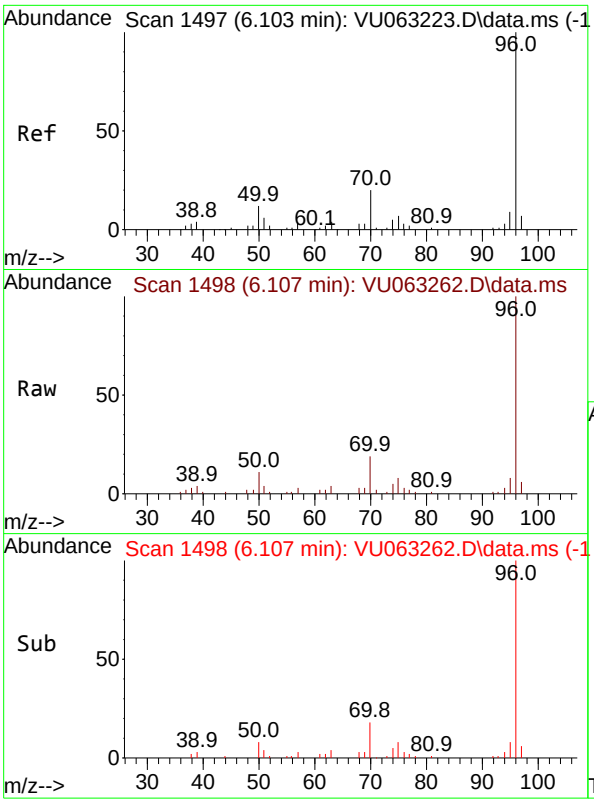
Quant Time: Feb 14 04:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

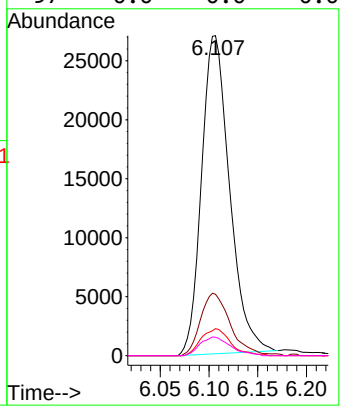




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.107 min Scan# 14
Delta R.T. 0.004 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 96 Resp: 5404

Ion	Ratio	Lower	Upper
96	100		
70	21.0	15.6	23.4
95	8.9	7.3	10.9
97	0.0	0.0	0.0



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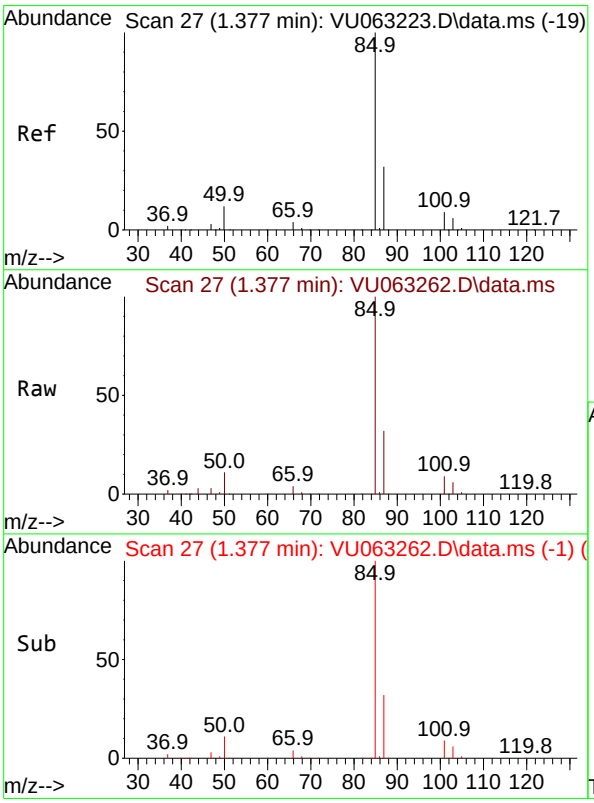
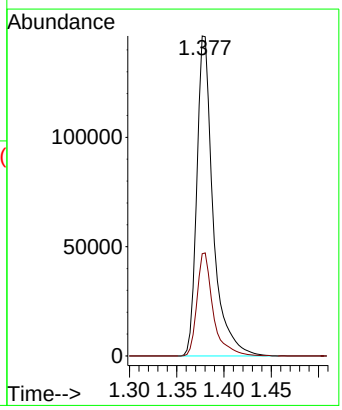
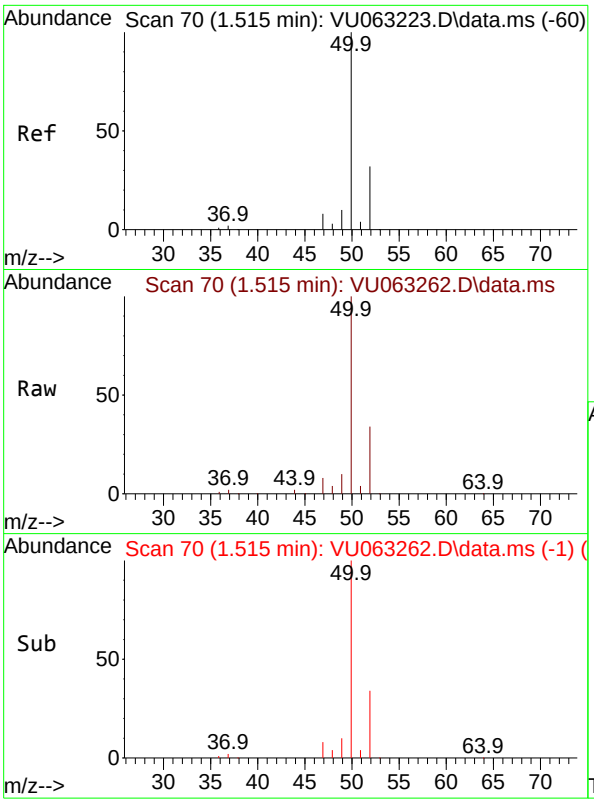


#2
Dichlorodifluoromethane
Concen: 9.970 ug/l
RT: 1.377 min Scan# 27
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 85 Resp: 175072

Ion	Ratio	Lower	Upper
85	100		
87	32.0	16.0	48.0

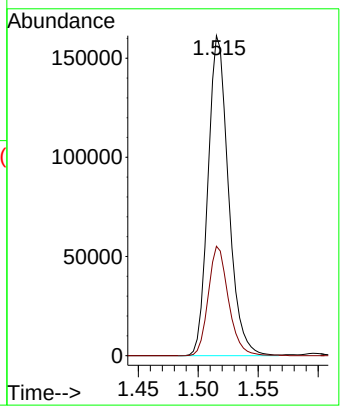




#3
Chloromethane
Concen: 9.446 ug/l
RT: 1.515 min Scan# 7
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 50 Resp: 19102

Ion	Ratio	Lower	Upper
50	100		
52	34.2	25.8	38.8



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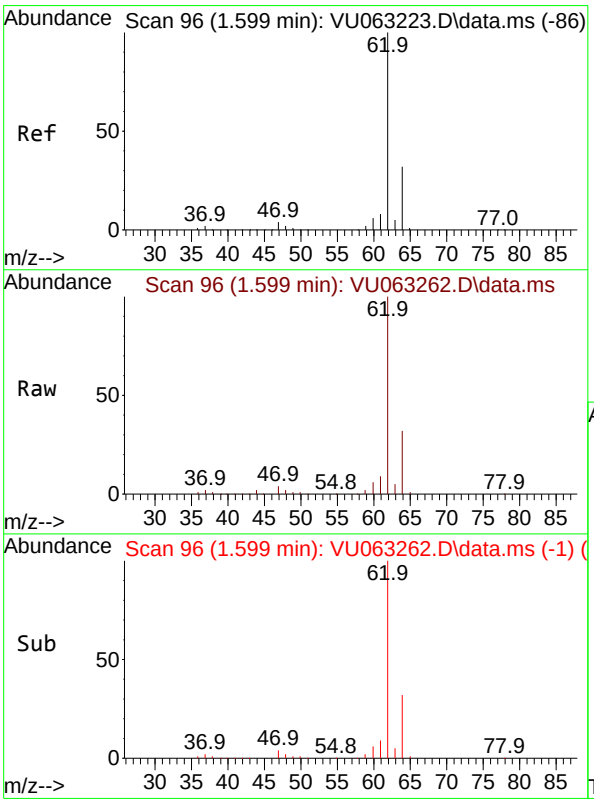
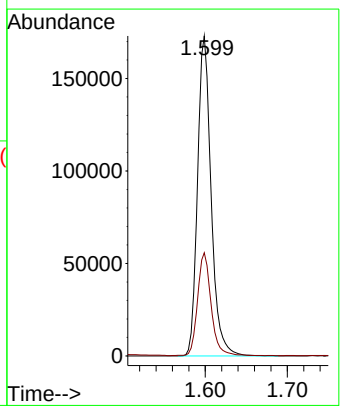
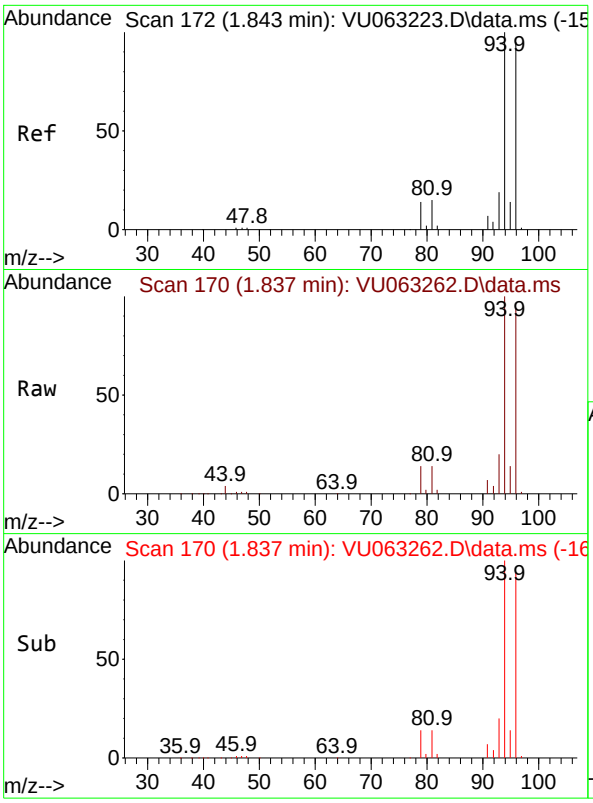


#4
Vinyl Chloride
Concen: 9.939 ug/l
RT: 1.599 min Scan# 96
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 62 Resp: 198865

Ion	Ratio	Lower	Upper
62	100		
64	32.2	25.4	38.0

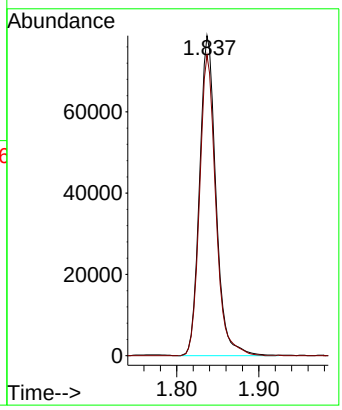




#5
Bromomethane
Concen: 11.198 ug/l
RT: 1.837 min Scan# 1
Delta R.T. -0.006 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 94 Resp: 10947

Ion	Ratio	Lower	Upper
94	100		
96	93.9	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
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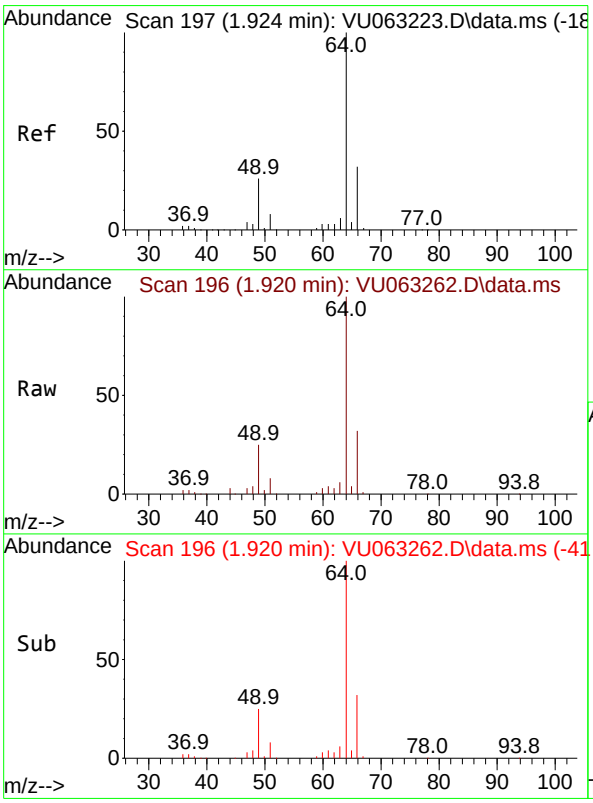
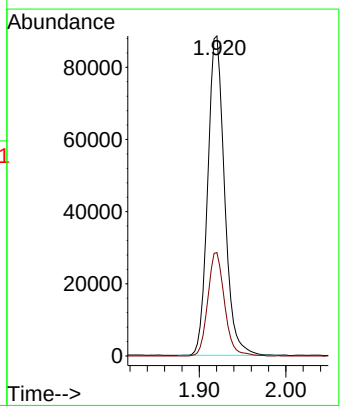
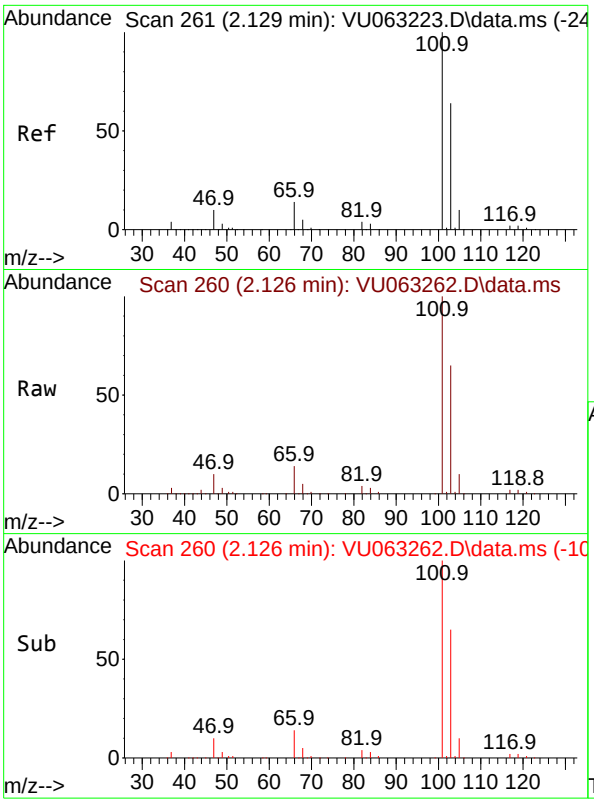


#6
Chloroethane
Concen: 9.468 ug/l
RT: 1.920 min Scan# 196
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 64 Resp: 119311

Ion	Ratio	Lower	Upper
64	100		
66	32.4	25.8	38.8





#7
Trichlorofluoromethane
Concen: 10.001 ug/l
RT: 2.126 min Scan# 2
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:101 Resp: 23712

Ion	Ratio	Lower	Upper
101	100		
103	64.9	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
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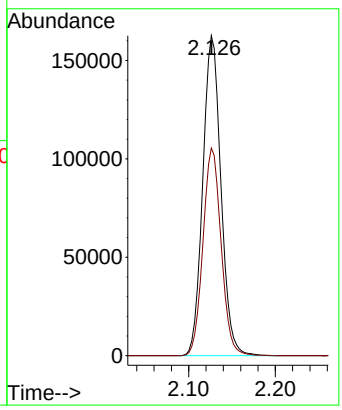
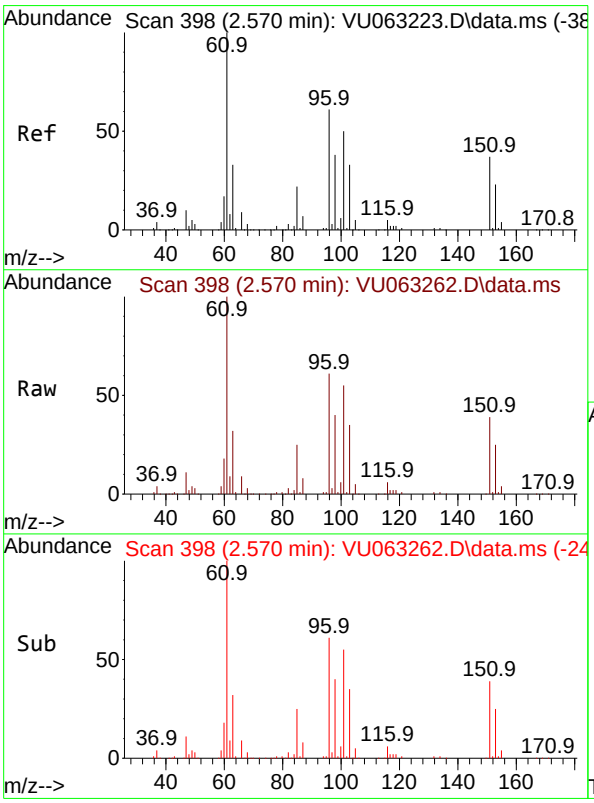
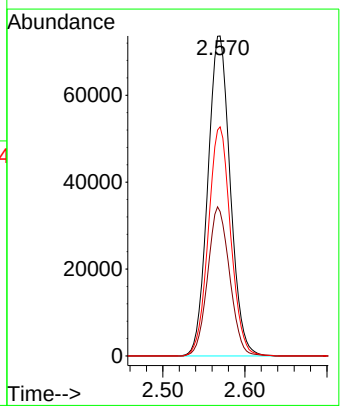


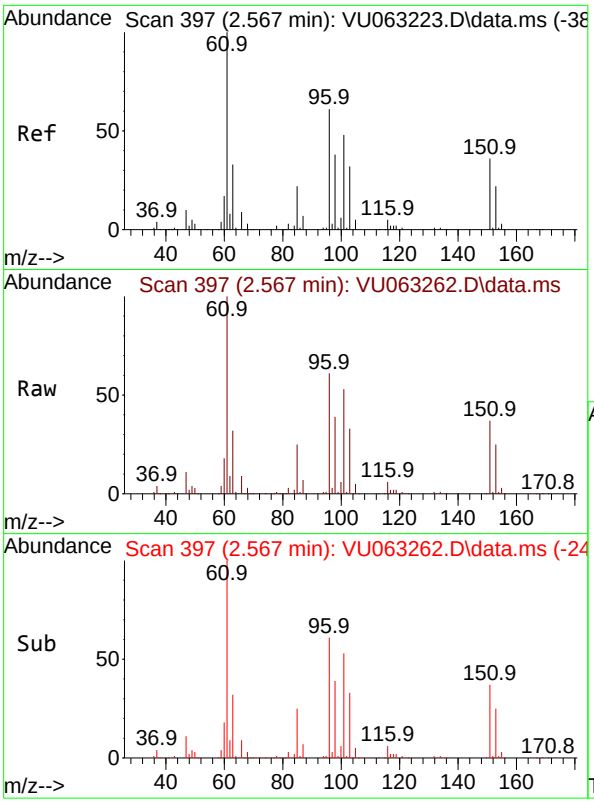


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 10.385 ug/l
RT: 2.570 min Scan# 398
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:101 Resp: 139754

Ion	Ratio	Lower	Upper
101	100		
85	45.5	35.4	53.0
151	71.2	58.5	87.7

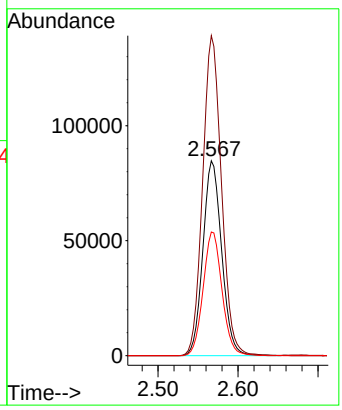




#9
1,1-Dichloroethene
Concen: 10.108 ug/l
RT: 2.567 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 96 Resp: 13859

Ion	Ratio	Lower	Upper
96	100		
61	164.2	0.0	492.9
98	63.5	0.0	124.0



Instrument :
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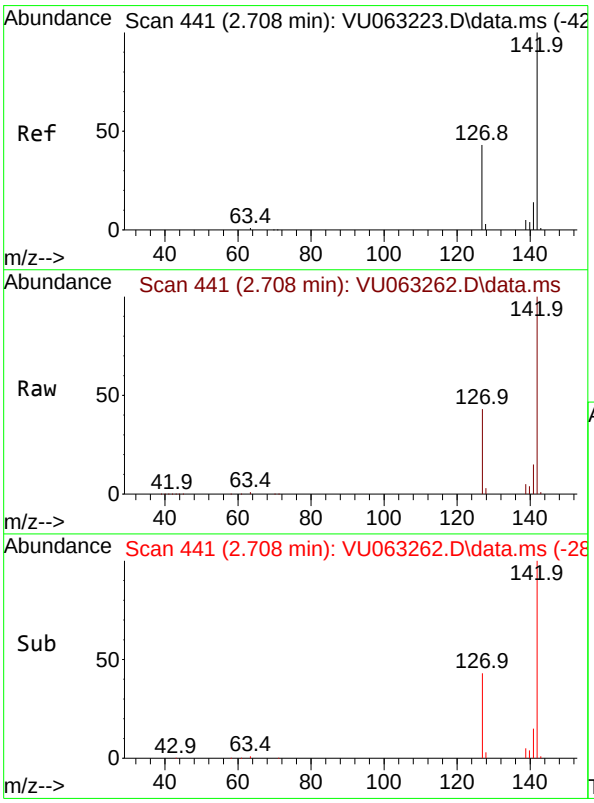
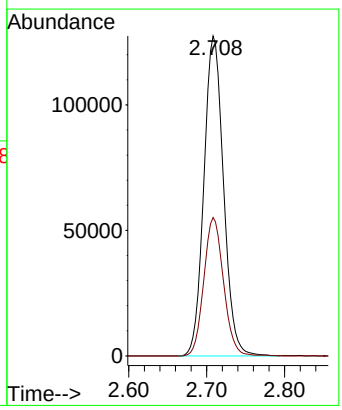
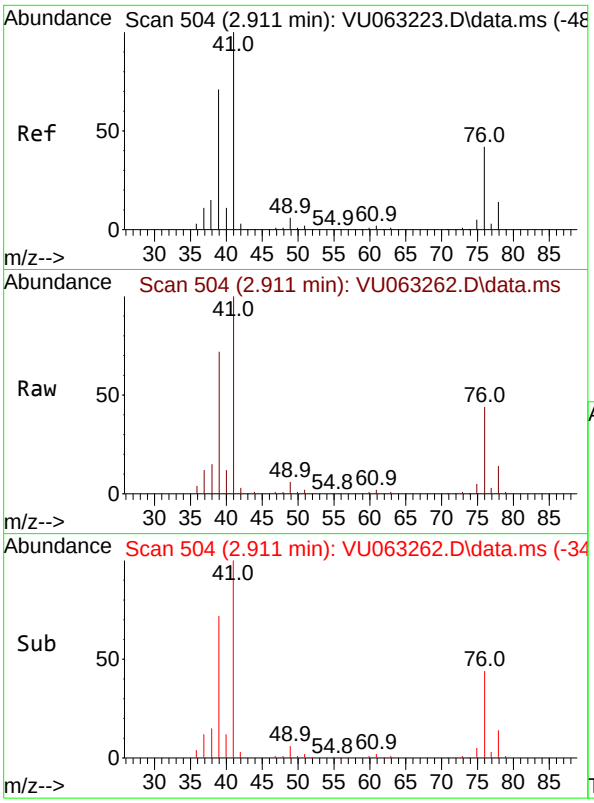


#10
Iodomethane
Concen: 10.372 ug/l
RT: 2.708 min Scan# 441
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:142 Resp: 223580

Ion	Ratio	Lower	Upper
142	100		
127	43.4	34.5	51.7

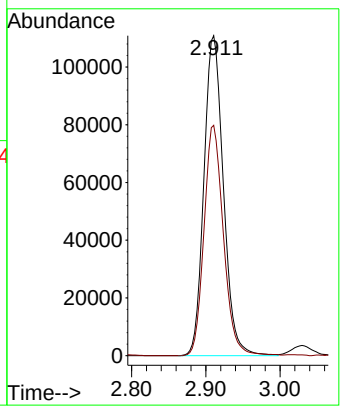




#11
Allyl Chloride
Concen: 10.258 ug/l
RT: 2.911 min Scan# 5
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 41 Resp: 20206

Ion	Ratio	Lower	Upper
41	100		
39	71.8	57.9	86.9



Instrument :
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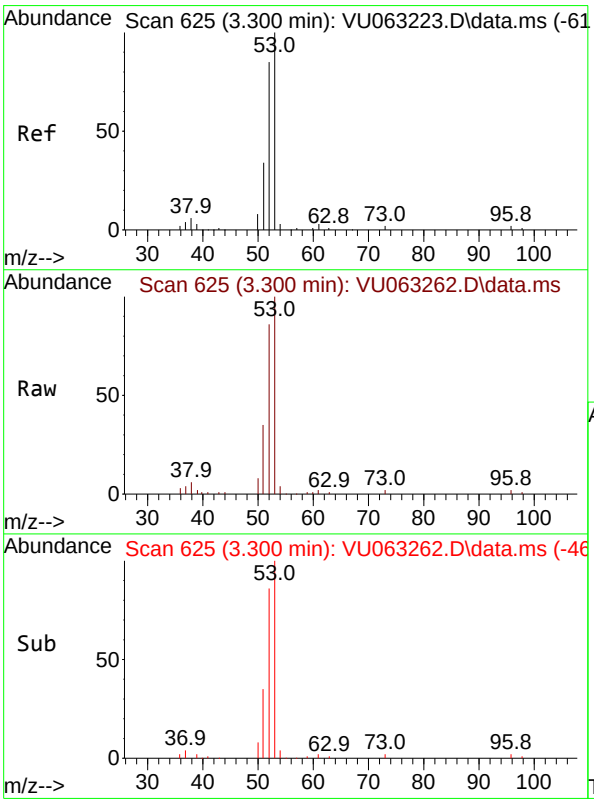
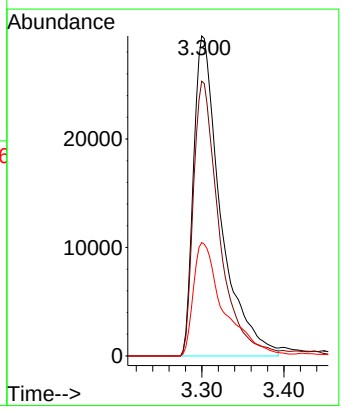
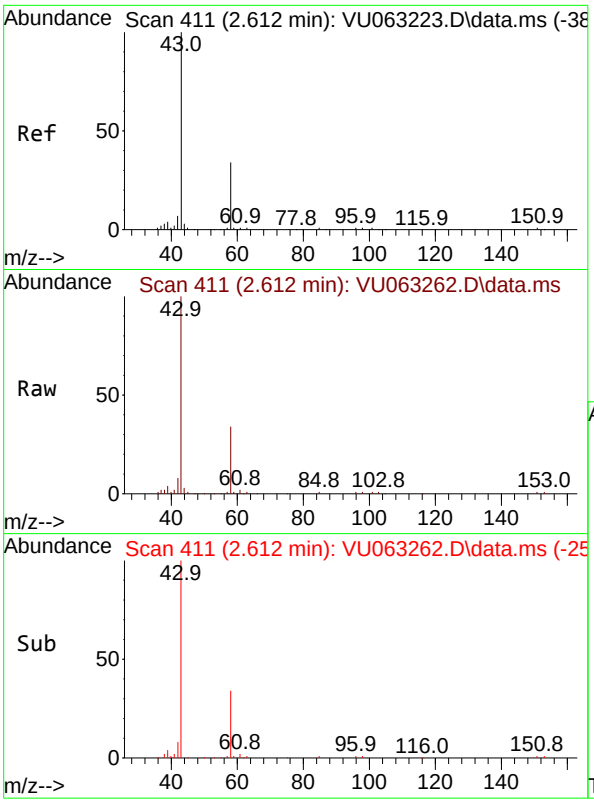


#12
Acrylonitrile
Concen: 21.419 ug/l
RT: 3.300 min Scan# 625
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 53 Resp: 67738

Ion	Ratio	Lower	Upper
53	100		
52	81.7	64.2	96.2
51	39.7	30.8	46.2





#13
Acetone
Concen: 51.212 ug/l
RT: 2.612 min Scan# 41
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 43 Resp: 12453

Ion	Ratio	Lower	Upper
43	100		
58	34.5	27.4	41.0

Instrument :
MSVOA_U
ClientSampleId :
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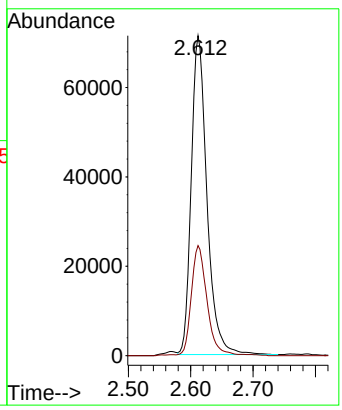
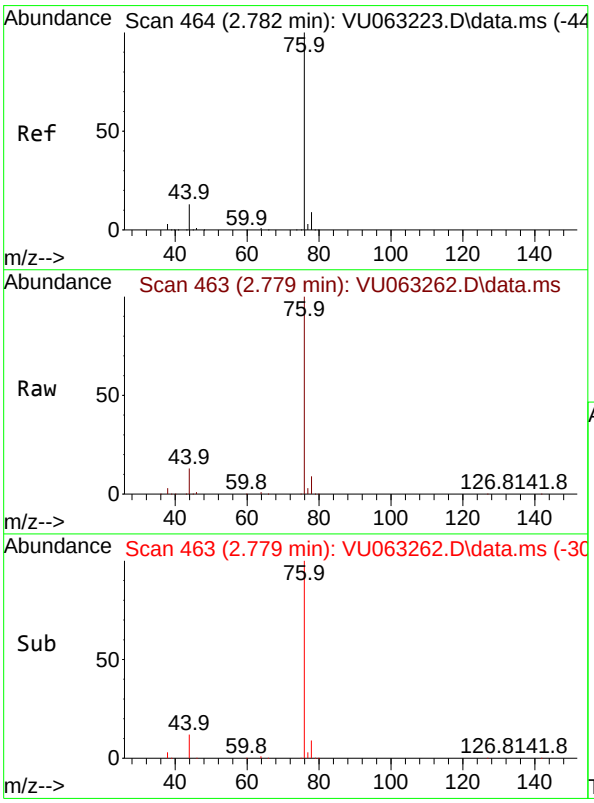
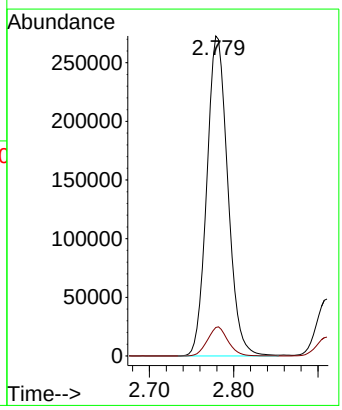


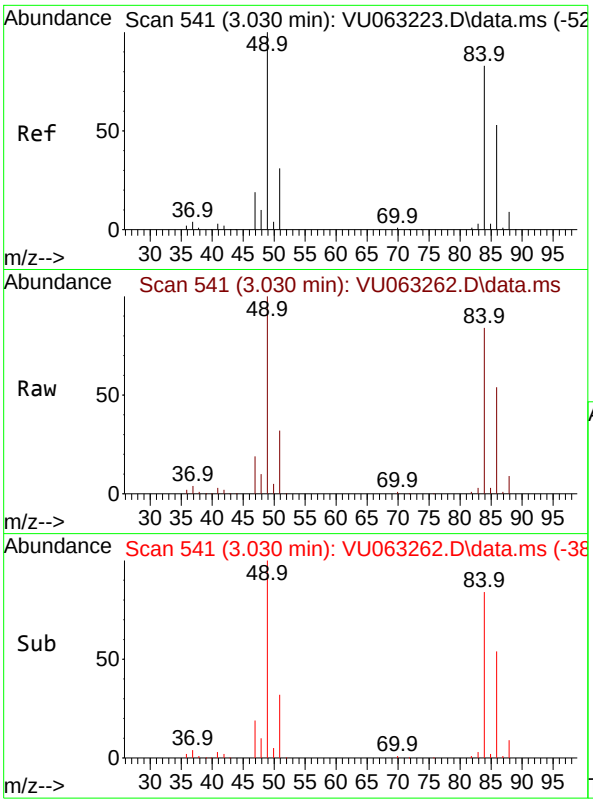


#14
Carbon Disulfide
Concen: 9.851 ug/l
RT: 2.779 min Scan# 463
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 76 Resp: 472271

Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.2	10.8

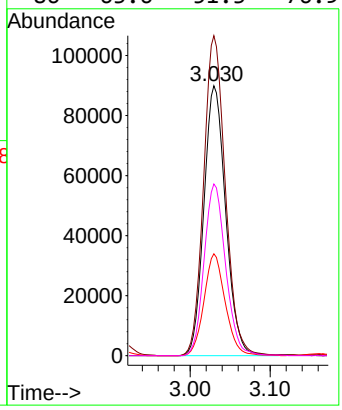




#15
Methylene Chloride
Concen: 10.078 ug/l
RT: 3.030 min Scan# 54
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 84 Resp: 17072

Ion	Ratio	Lower	Upper
84	100		
49	118.5	96.4	144.6
51	37.7	0.0	74.8
86	63.6	51.3	76.9



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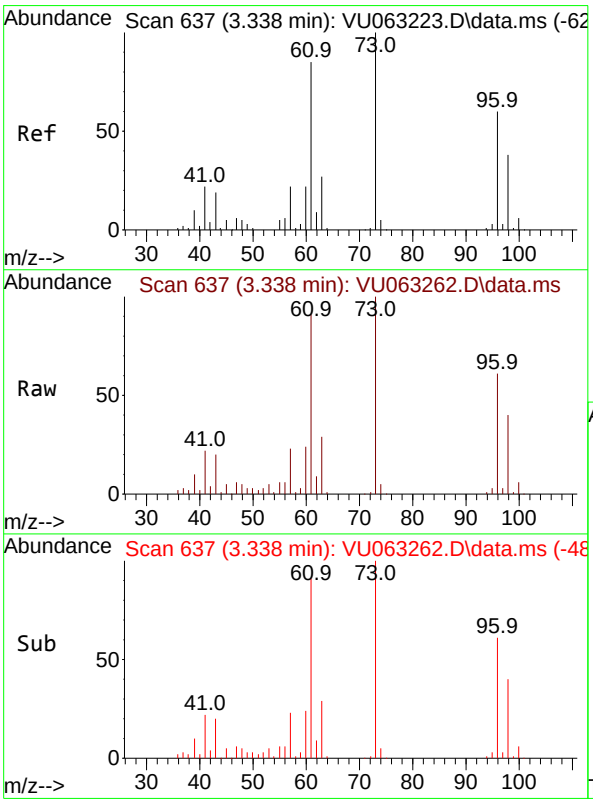
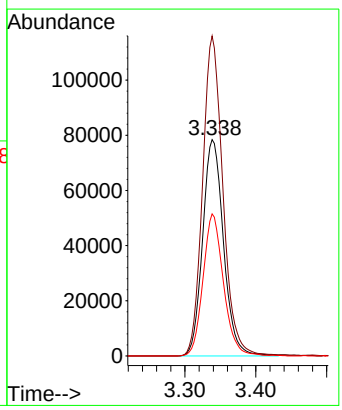
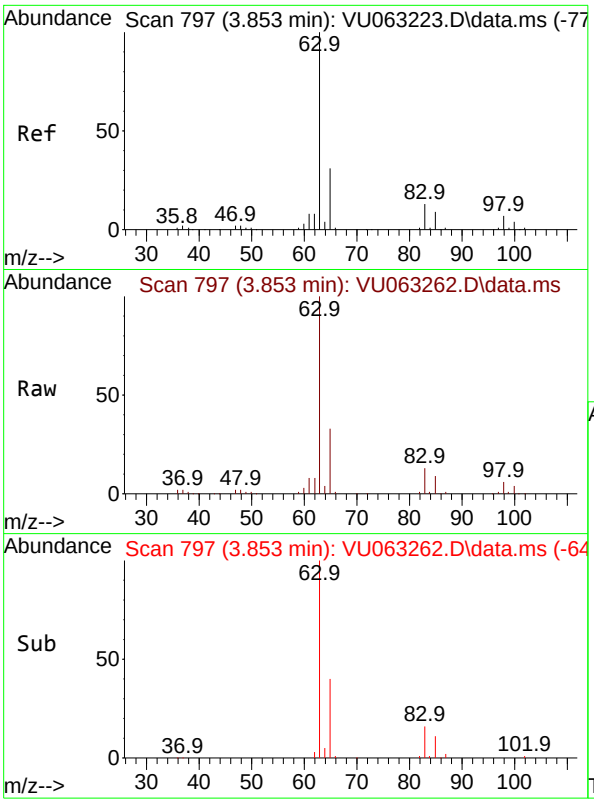


#16
trans-1,2-Dichloroethene
Concen: 10.269 ug/l
RT: 3.338 min Scan# 637
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 96 Resp: 160700

Ion	Ratio	Lower	Upper
96	100		
61	147.9	113.4	170.2
98	65.7	51.2	76.8

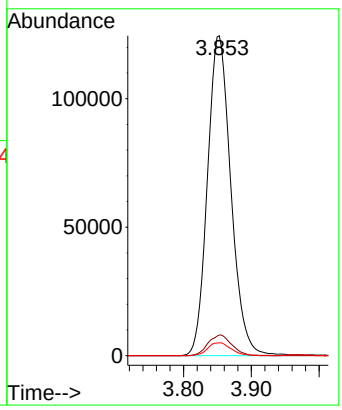




#17
1,1-Dichloroethane
Concen: 10.133 ug/l
RT: 3.853 min Scan# 7
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 63 Resp: 29890

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	4.1	2.1	6.2



Instrument :
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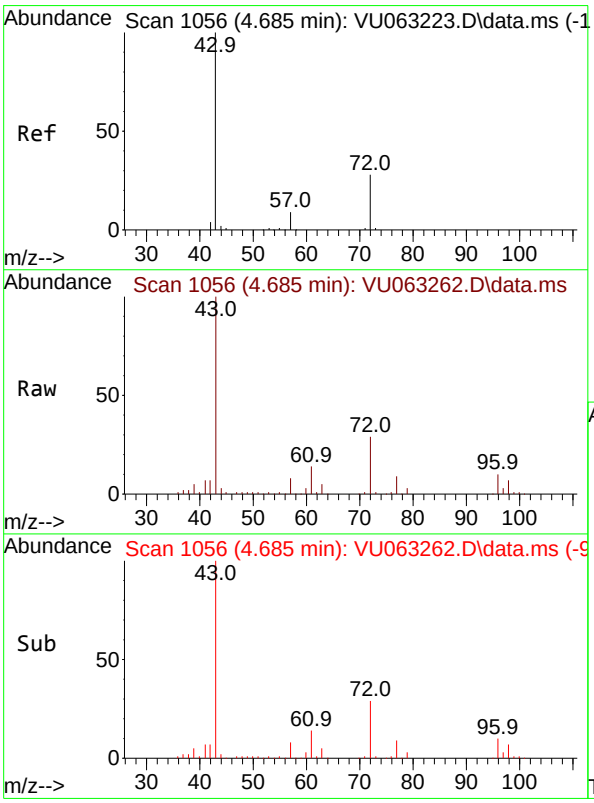
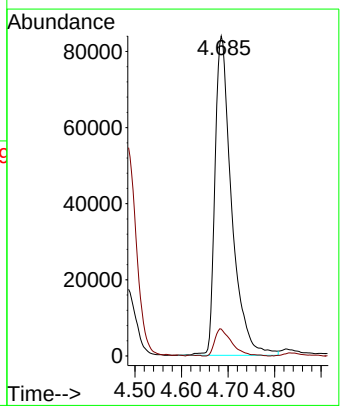
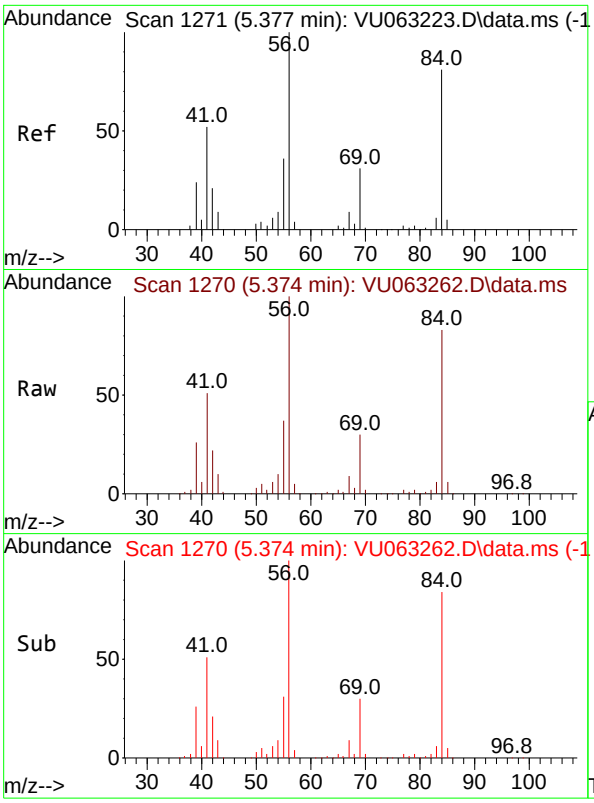


#18
2-Butanone
Concen: 53.920 ug/l
RT: 4.685 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 43 Resp: 208686

Ion	Ratio	Lower	Upper
43	100		
57	8.2	0.0	17.0

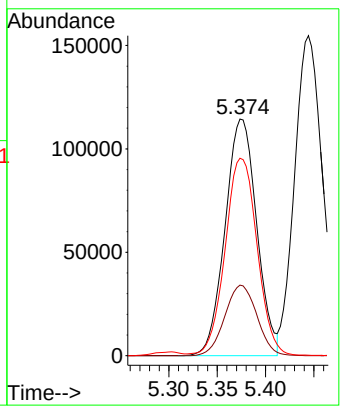




#19
Cyclohexane
Concen: 11.000 ug/l m
RT: 5.374 min Scan# 1
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 56 Resp: 26072

Ion	Ratio	Lower	Upper
56	100		
69	30.2	24.5	36.7
84	83.0	65.2	97.8



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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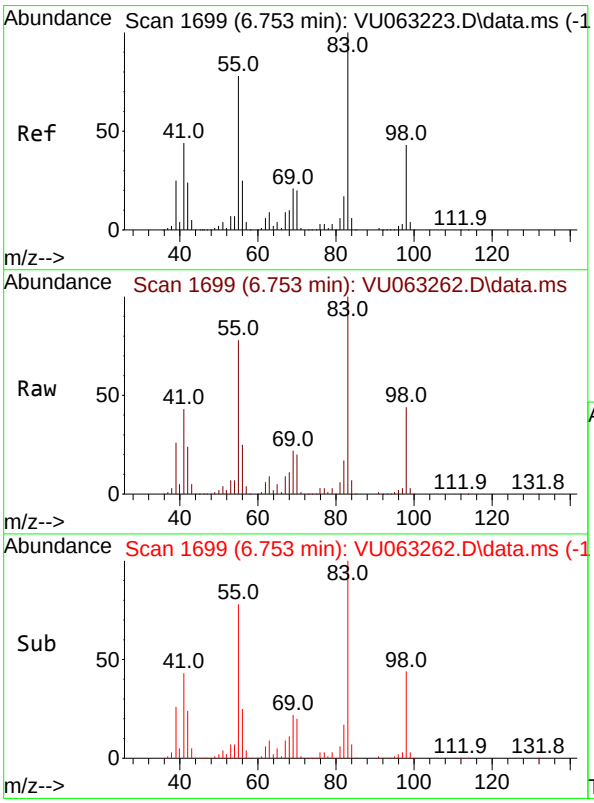
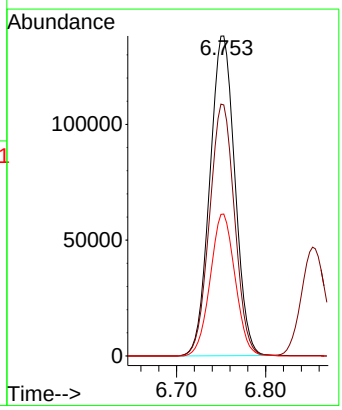
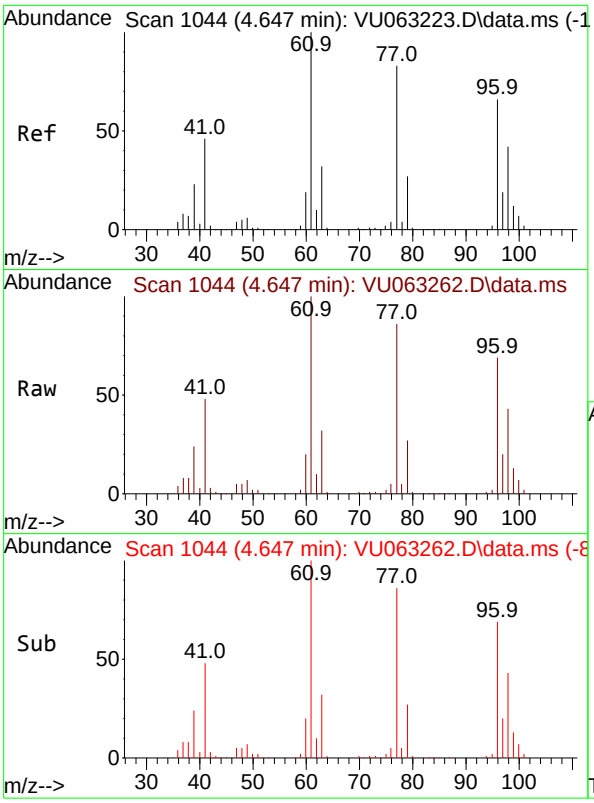


#20
Methylcyclohexane
Concen: 11.488 ug/l
RT: 6.753 min Scan# 1699
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 83 Resp: 270015

Ion	Ratio	Lower	Upper
83	100		
55	78.5	63.1	94.7
98	44.1	35.2	52.8

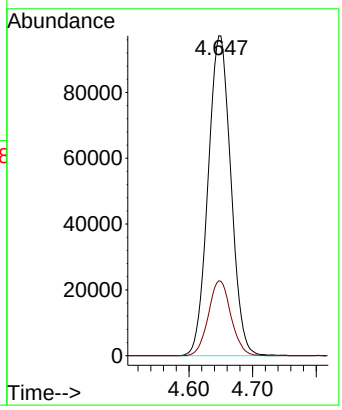




#21
2,2-Dichloropropane
Concen: 10.502 ug/l
RT: 4.647 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 77 Resp: 24166

Ion	Ratio	Lower	Upper
77	100		
97	23.2	18.5	27.7



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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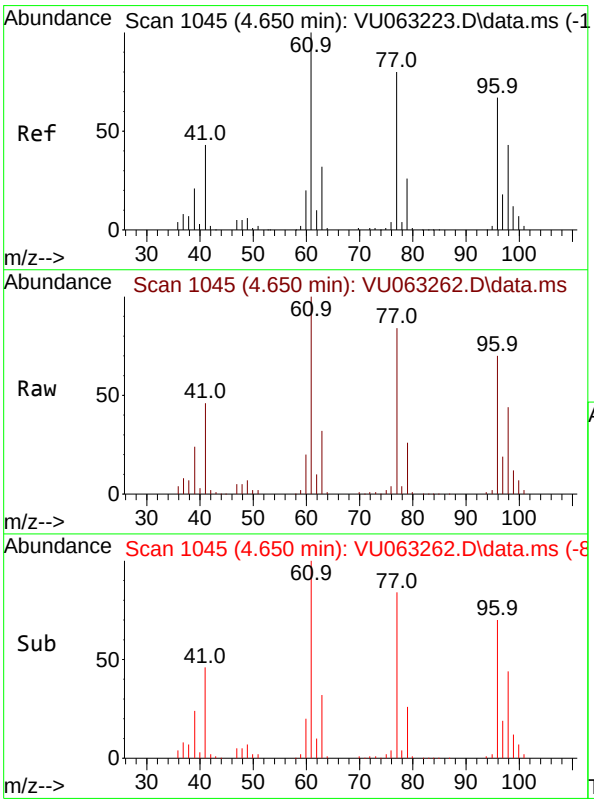
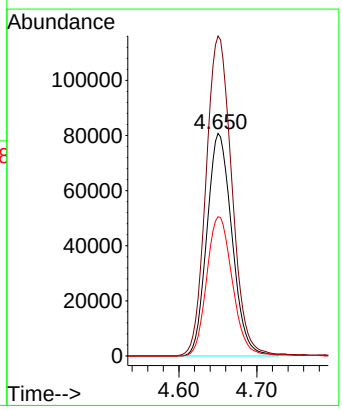
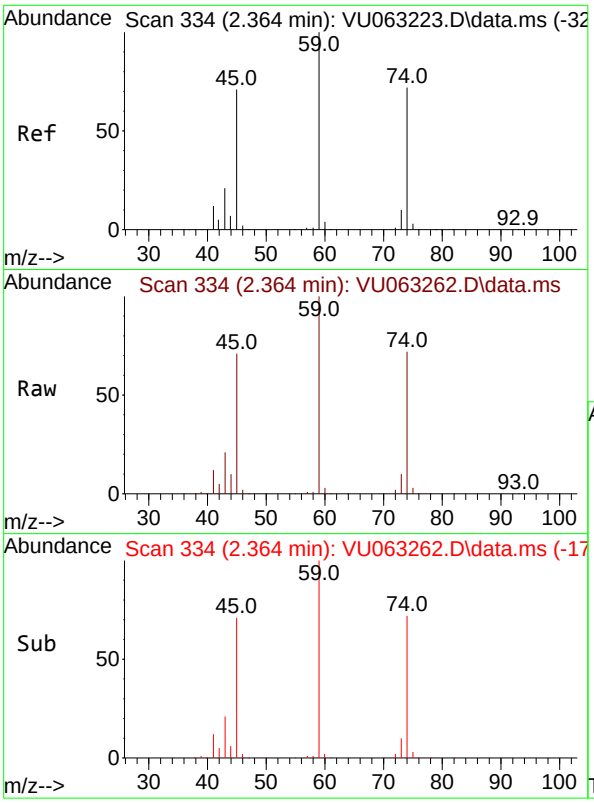


#22
cis-1,2-Dichloroethene
Concen: 10.678 ug/l
RT: 4.650 min Scan# 1045
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 96 Resp: 180546

Ion	Ratio	Lower	Upper
96	100		
61	148.5	0.0	373.3
98	63.8	31.9	95.9





#23
Diethyl Ether
Concen: 9.774 ug/l
RT: 2.364 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 59 Resp: 11500

Ion	Ratio	Lower	Upper
59	100		
45	72.1	57.8	86.6
74	72.8	57.7	86.5

Instrument :
MSVOA_U
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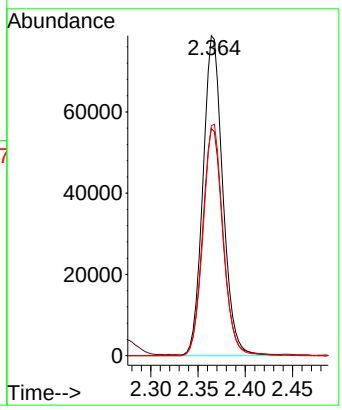
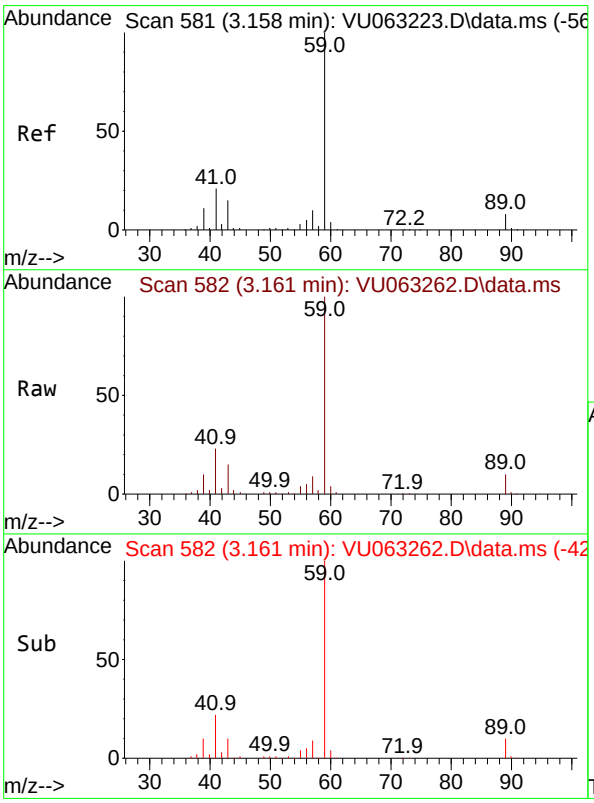
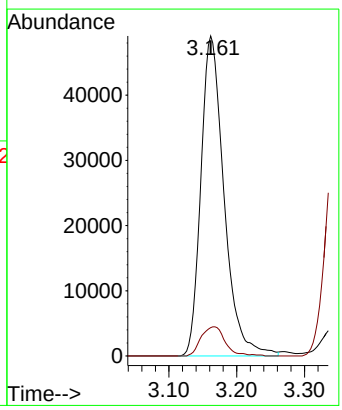


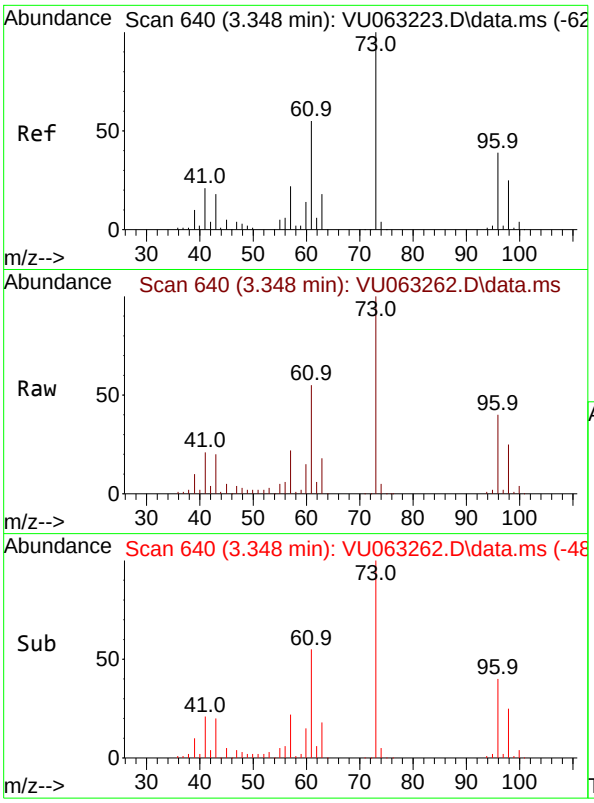


#24
tert-Butyl Alcohol
Concen: 97.059 ug/l
RT: 3.161 min Scan# 582
Delta R.T. 0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 59 Resp: 116839

Ion	Ratio	Lower	Upper
59	100		
57	9.4	7.5	11.3

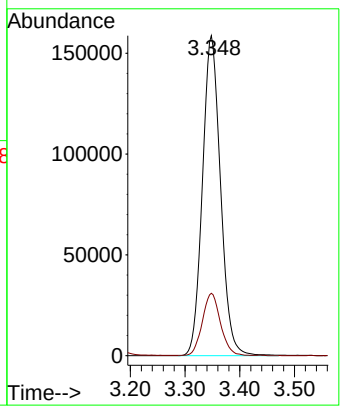




#25
Methyl tert-Butyl Ether
Concen: 10.626 ug/l
RT: 3.348 min Scan# 64
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 73 Resp: 36389

Ion	Ratio	Lower	Upper
73	100		
43	19.3	14.9	22.3



Instrument :
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ClientSampleId :
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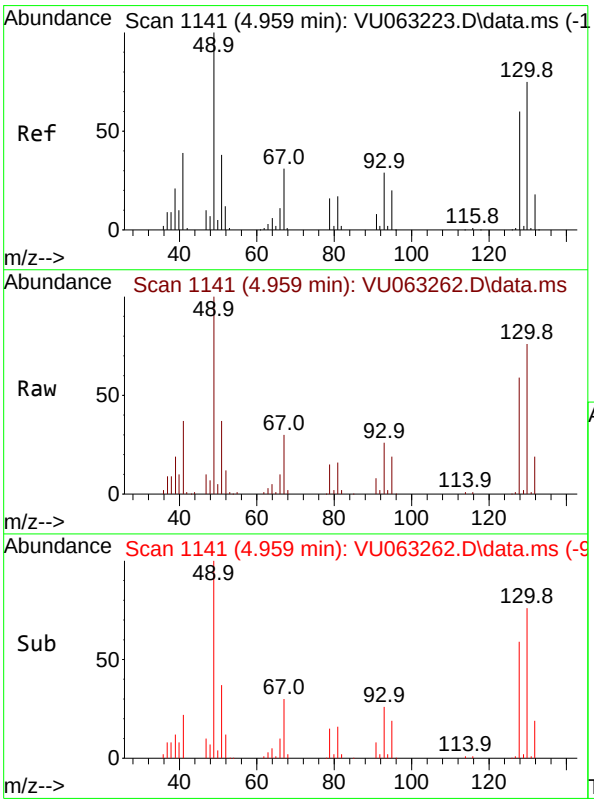
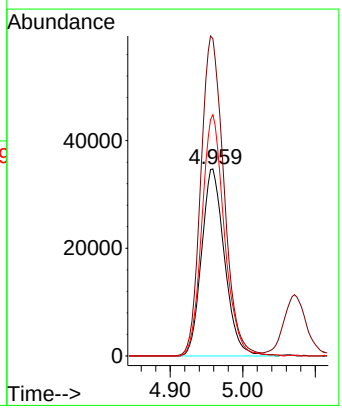
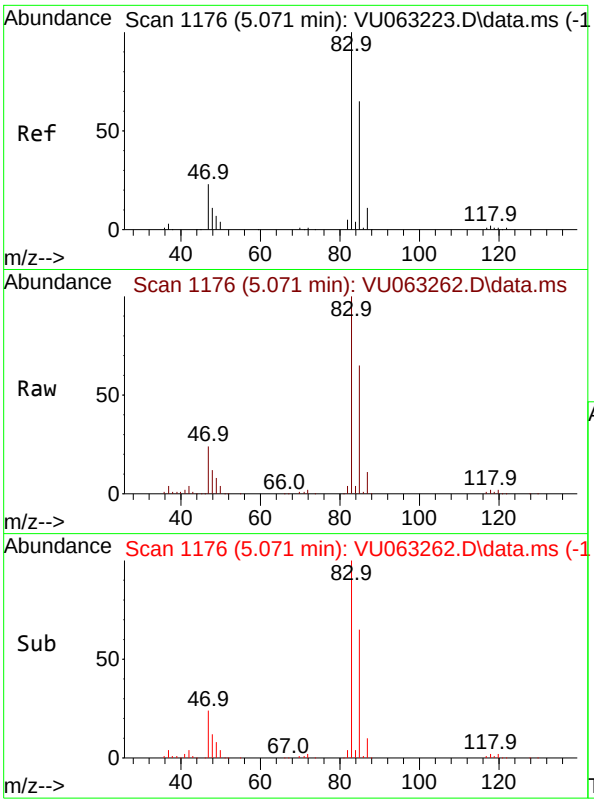


#26
Bromochloromethane
Concen: 10.298 ug/l
RT: 4.959 min Scan# 1141
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:128 Resp: 76113

Ion	Ratio	Lower	Upper
128	100		
49	172.1	0.0	343.4
130	126.7	102.9	154.3

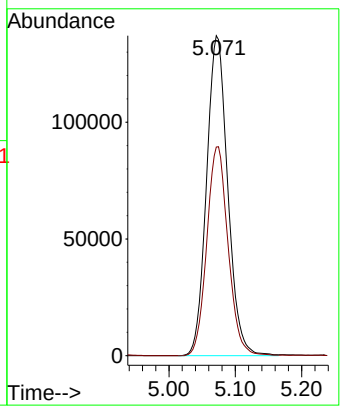




#27
Chloroform
Concen: 10.226 ug/l
RT: 5.071 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 83 Resp: 30440

Ion	Ratio	Lower	Upper
83	100		
85	65.2	0.0	129.8



Instrument :
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ClientSampleId :
VSTDCCC010

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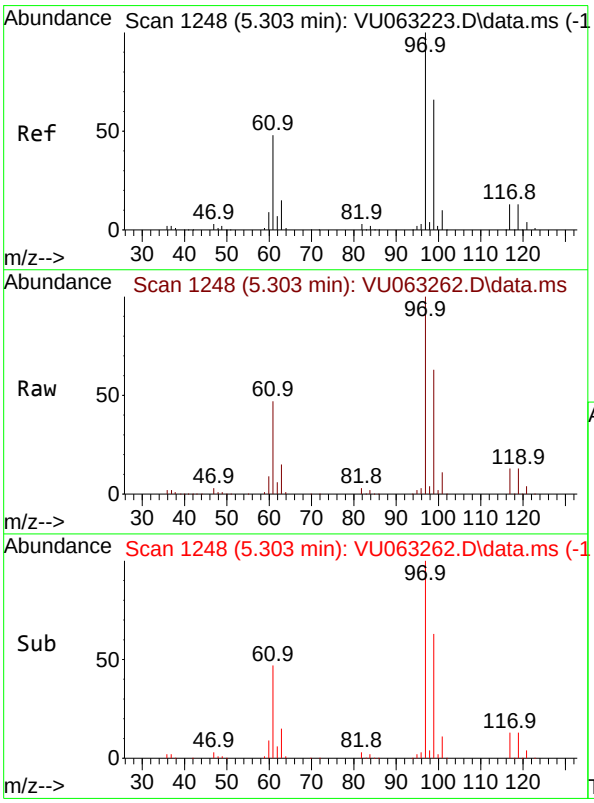
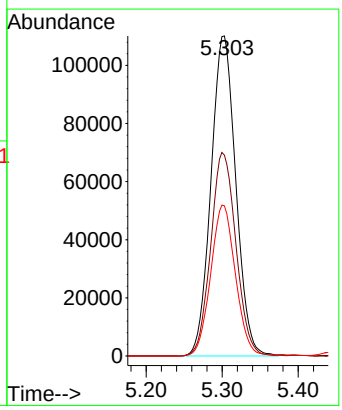
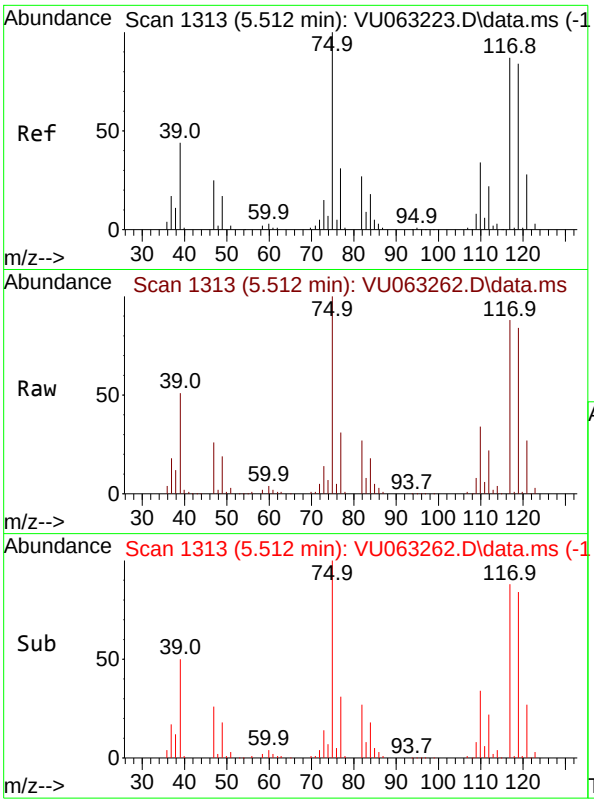


#28
1,1,1-Trichloroethane
Concen: 10.367 ug/l
RT: 5.303 min Scan# 1248
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 97 Resp: 249979

Ion	Ratio	Lower	Upper
97	100		
99	64.5	32.4	97.0
61	47.1	23.8	71.2

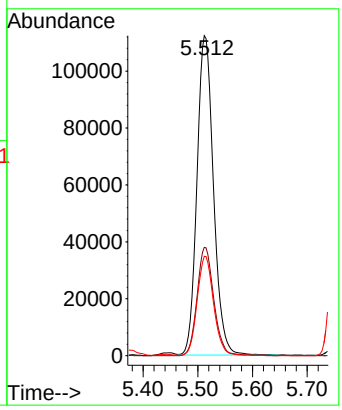




#29
1,1-Dichloropropene
Concen: 10.882 ug/l
RT: 5.512 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 75 Resp: 23502

Ion	Ratio	Lower	Upper
75	100		
110	34.3	17.2	51.5
77	30.5	24.6	37.0



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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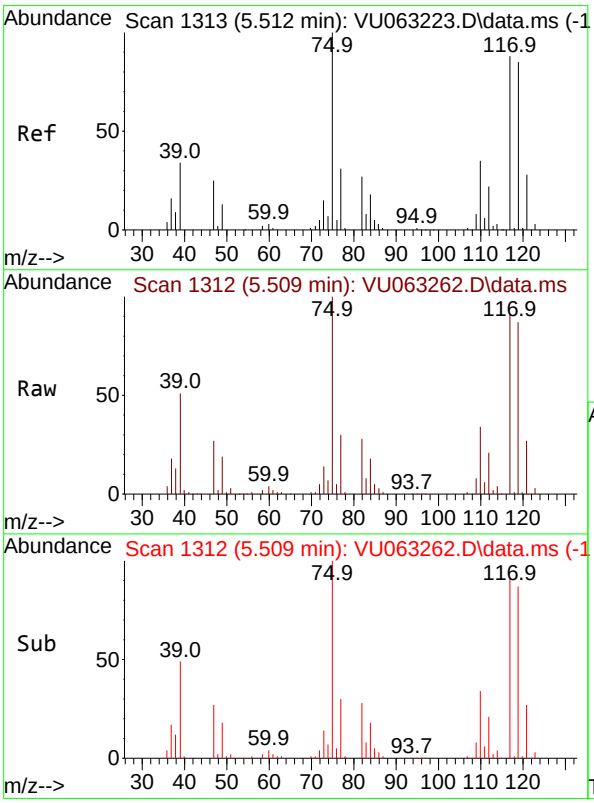
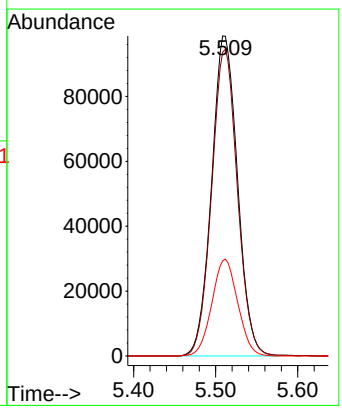
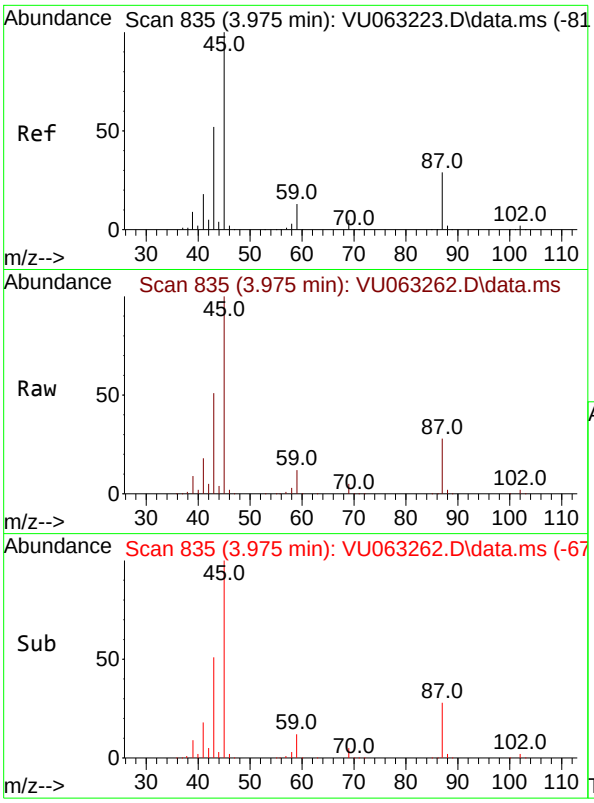


#30
Carbon Tetrachloride
Concen: 10.498 ug/l
RT: 5.509 min Scan# 1312
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:117 Resp: 217105

Ion	Ratio	Lower	Upper
117	100		
119	94.9	76.7	115.1
121	29.7	25.5	38.3

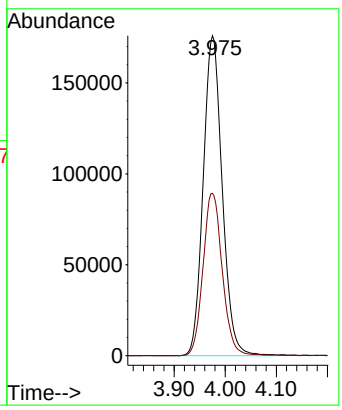




#31
Isopropyl Ether
Concen: 10.792 ug/l
RT: 3.975 min Scan# 8
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 45 Resp: 45445

Ion	Ratio	Lower	Upper
45	100		
43	51.4	25.7	77.1



Instrument :
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ClientSampleId :
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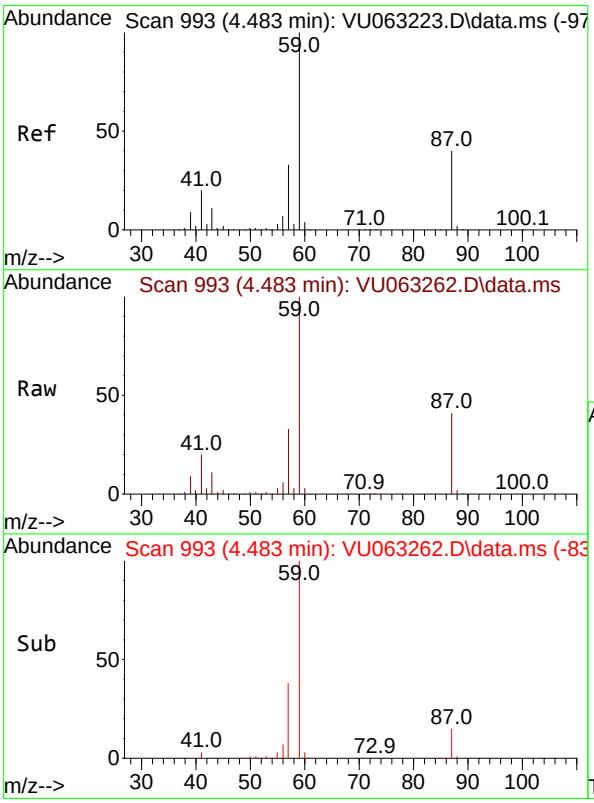
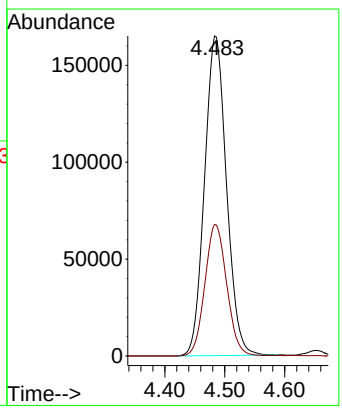
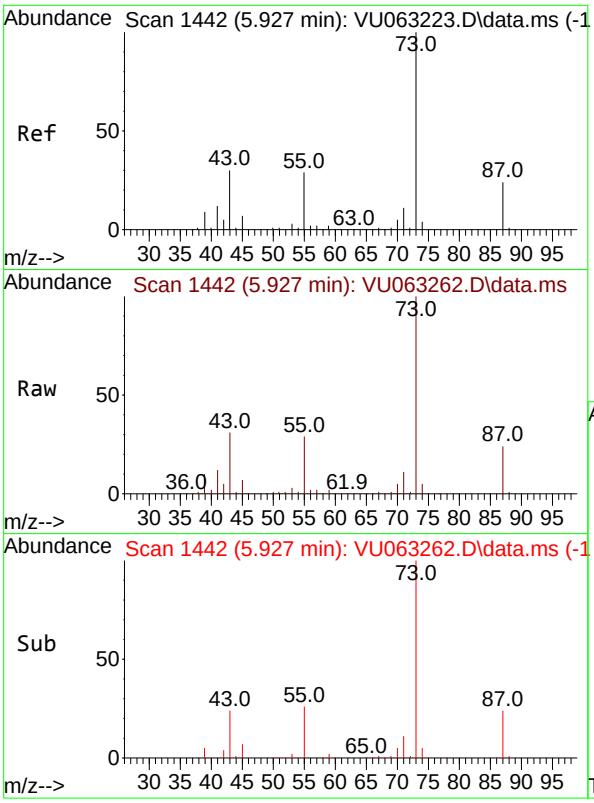


#32
Ethyl-t-butyl ether
Concen: 10.965 ug/l
RT: 4.483 min Scan# 993
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 59 Resp: 419919

Ion	Ratio	Lower	Upper
59	100		
87	40.7	32.6	49.0

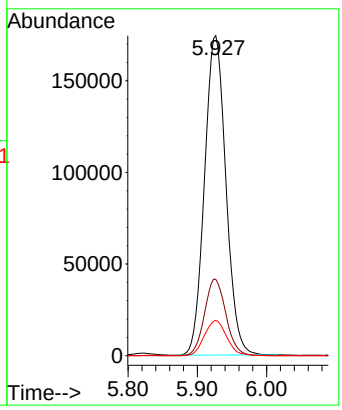




#33
Tert-Amyl methyl ether
Concen: 11.169 ug/l
RT: 5.927 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 73 Resp: 37370

Ion	Ratio	Lower	Upper
73	100		
87	24.0	18.9	28.3
71	11.4	9.0	13.4



Instrument :
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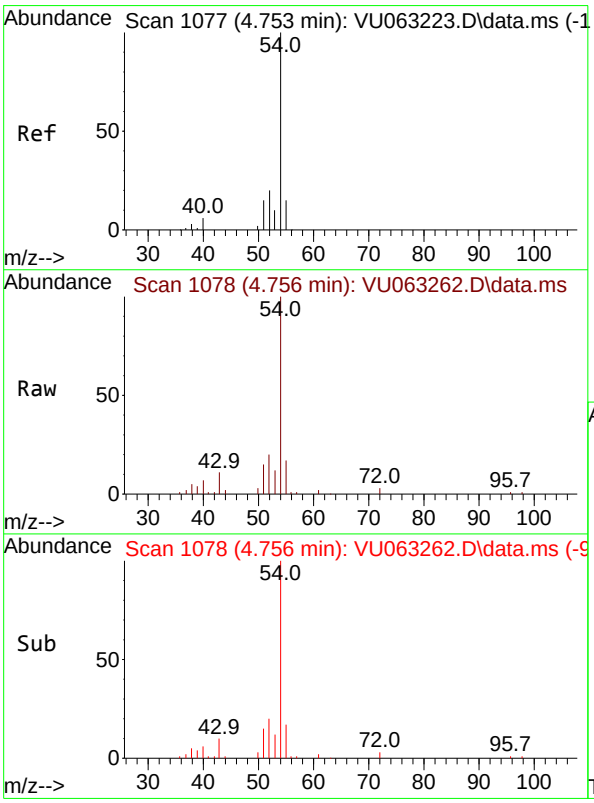
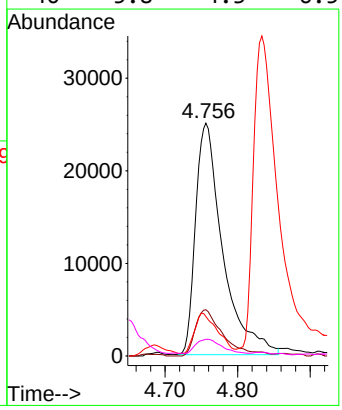
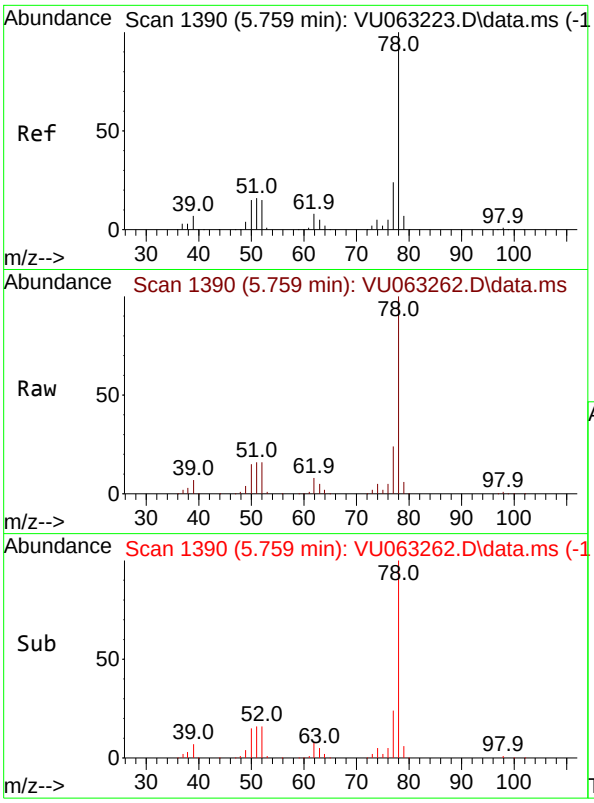


#34
Propionitrile
Concen: 55.852 ug/l
RT: 4.756 min Scan# 1078
Delta R.T. 0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 54 Resp: 65197

Ion	Ratio	Lower	Upper
54	100		
52	20.6	16.3	24.5
55	15.8	11.8	17.6
40	5.8	4.3	6.5

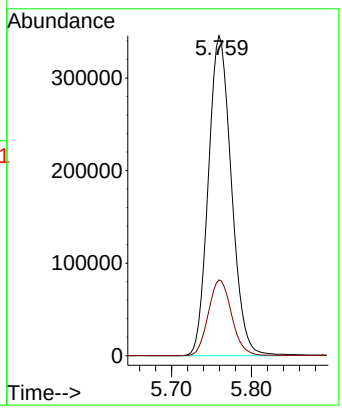




#35
Benzene
Concen: 10.417 ug/l
RT: 5.759 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 78 Resp: 69180

Ion	Ratio	Lower	Upper
78	100		
77	23.7	19.0	28.4



Instrument :
MSVOA_U
ClientSampleId :
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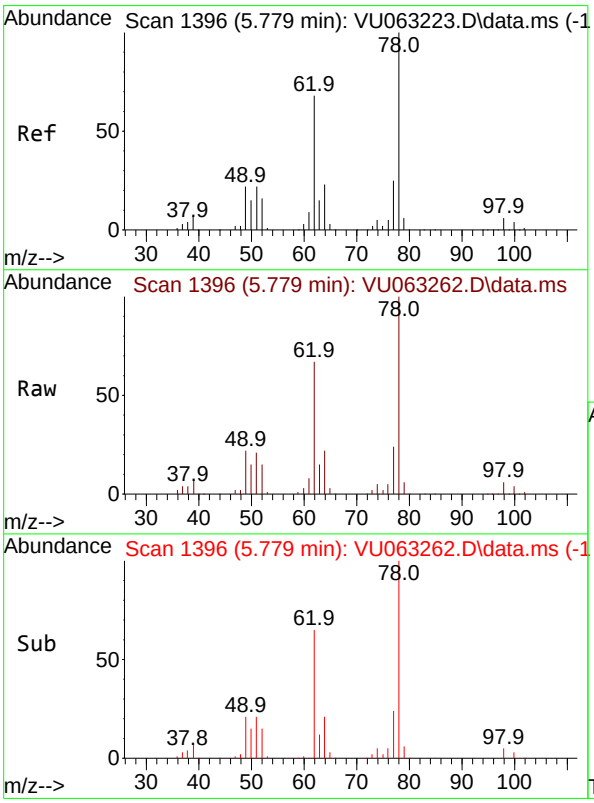
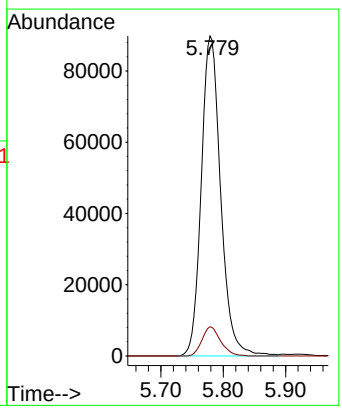
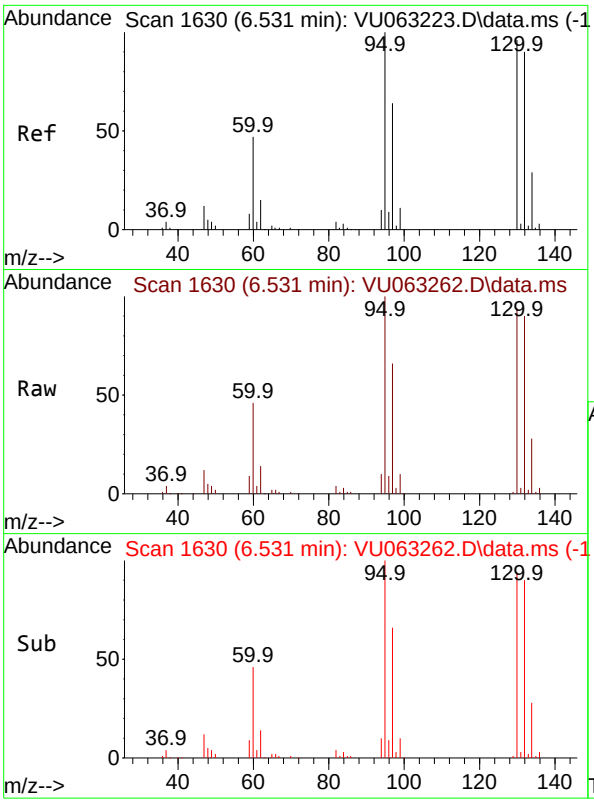


#36
1,2-Dichloroethane
Concen: 10.147 ug/l
RT: 5.779 min Scan# 1396
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 62 Resp: 194480

Ion	Ratio	Lower	Upper
62	100		
98	8.7	6.9	10.3

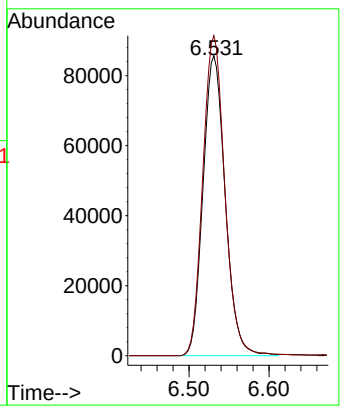




#37
Trichloroethene
Concen: 10.460 ug/l
RT: 6.531 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:130 Resp: 16519

Ion	Ratio	Lower	Upper
130	100		
95	106.7	83.2	124.8



Instrument :
MSVOA_U
ClientSampleId :
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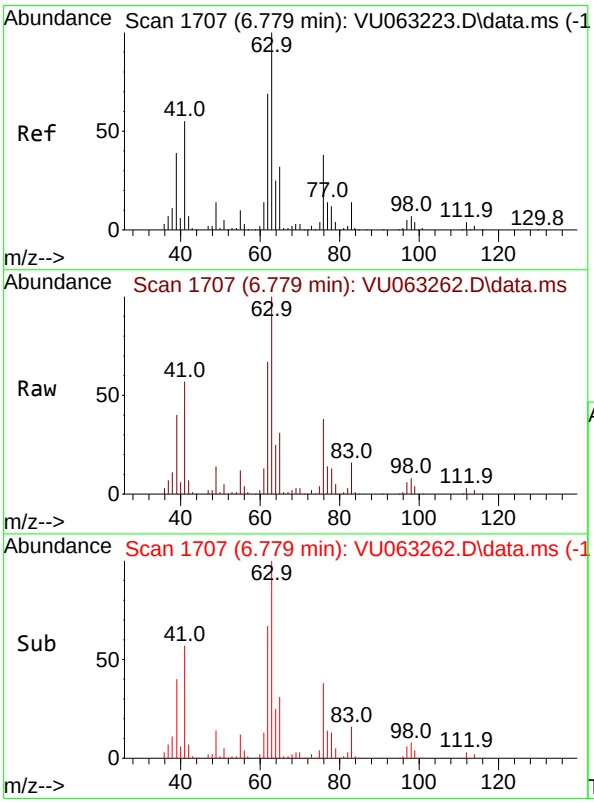
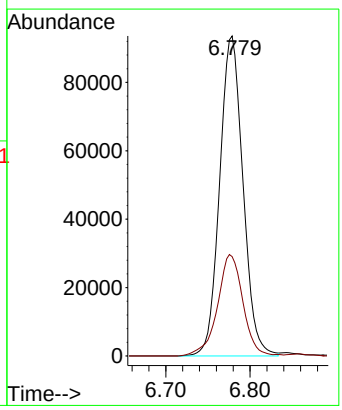
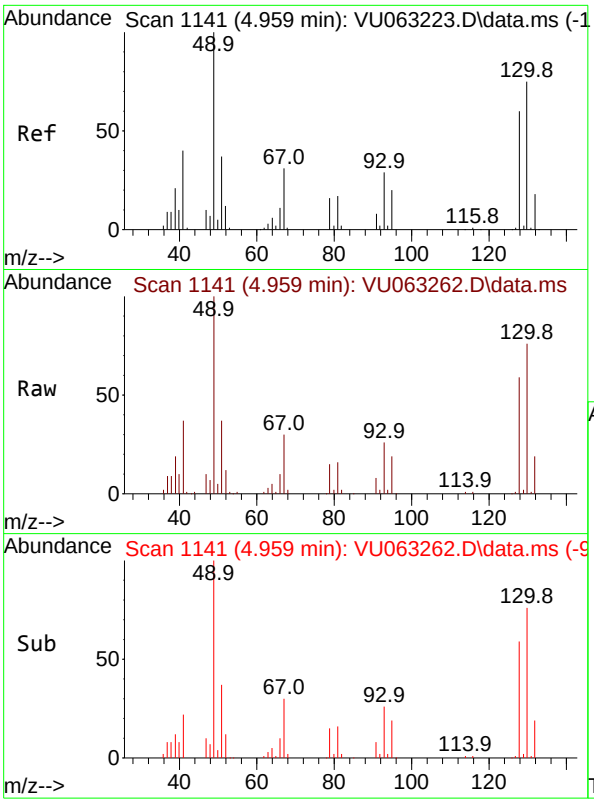


#38
1,2-Dichloropropane
Concen: 10.331 ug/l
RT: 6.779 min Scan# 1707
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 63 Resp: 179574

Ion	Ratio	Lower	Upper
63	100		
65	31.1	25.3	37.9

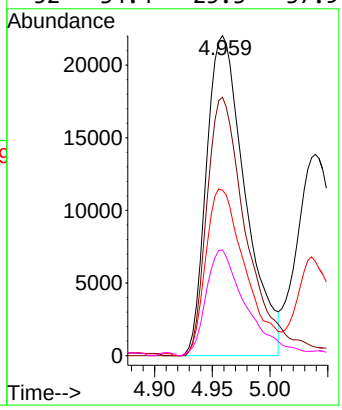




#39
Methacrylonitrile
Concen: 11.811 ug/l
RT: 4.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 41 Resp: 5138

Ion	Ratio	Lower	Upper
41	100		
67	84.3	64.5	96.7
39	54.1	43.0	64.6
52	34.4	25.3	37.9



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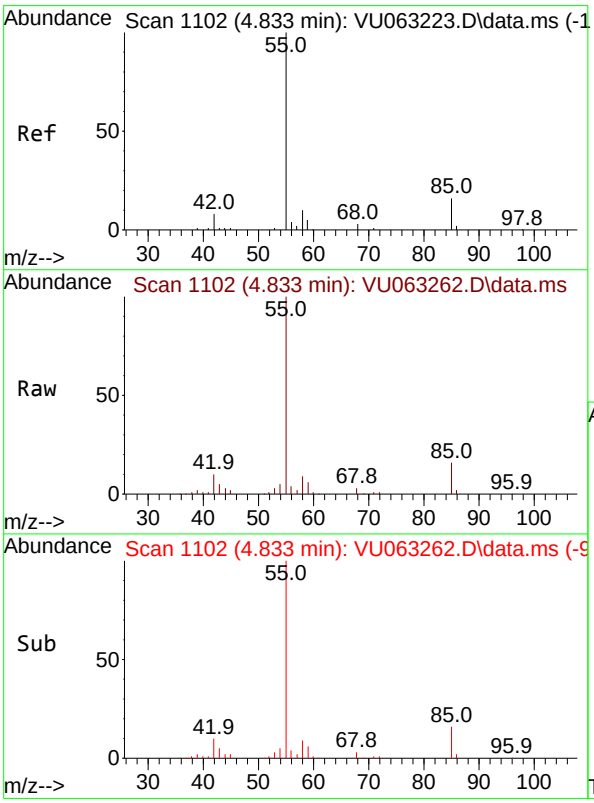
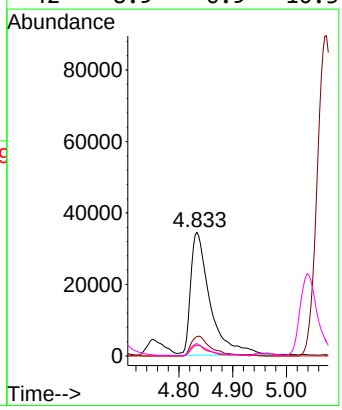
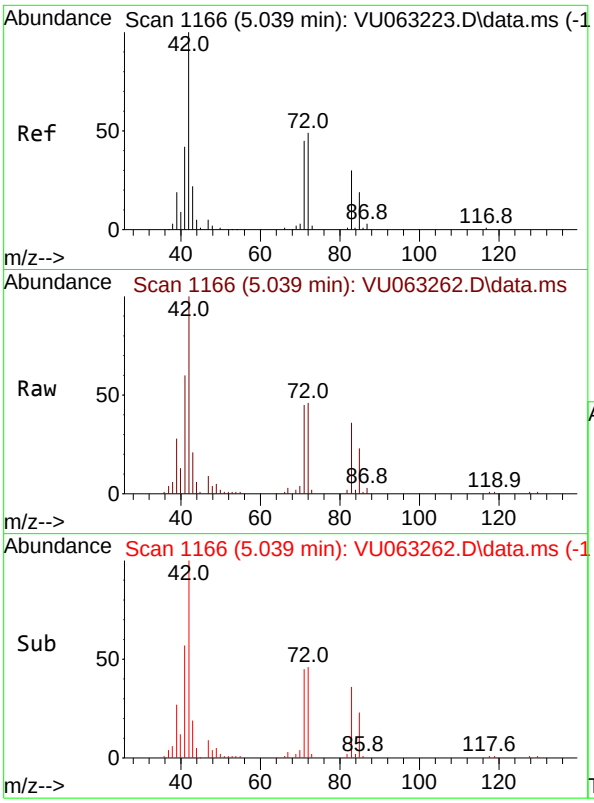


#40
Methyl acrylate
Concen: 10.826 ug/l
RT: 4.833 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 55 Resp: 86798

Ion	Ratio	Lower	Upper
55	100		
85	16.3	13.3	19.9
58	7.8	7.3	10.9
42	8.9	6.9	10.3

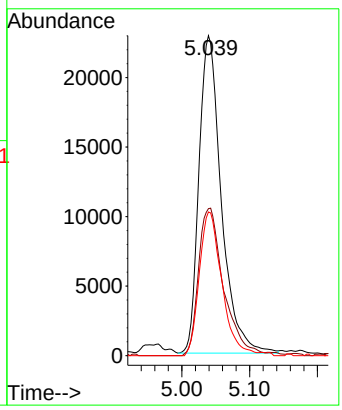




#41
Tetrahydrofuran
Concen: 20.669 ug/l
RT: 5.039 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 42 Resp: 5229

Ion	Ratio	Lower	Upper
42	100		
72	52.0	41.5	62.3
71	45.6	37.2	55.8



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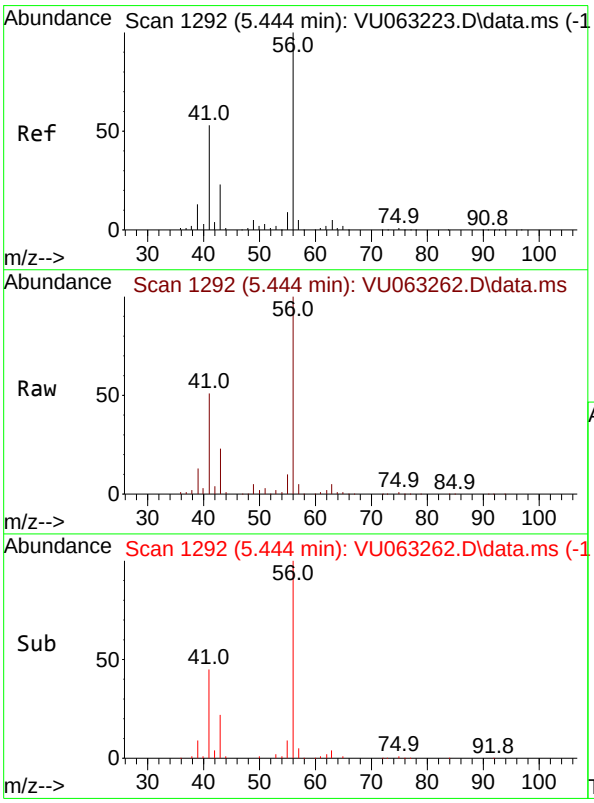
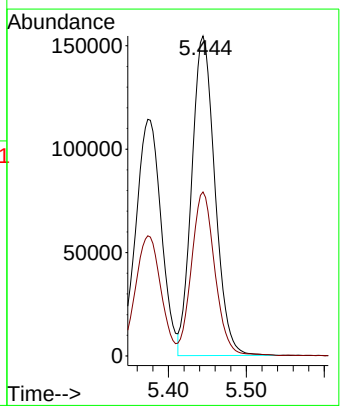
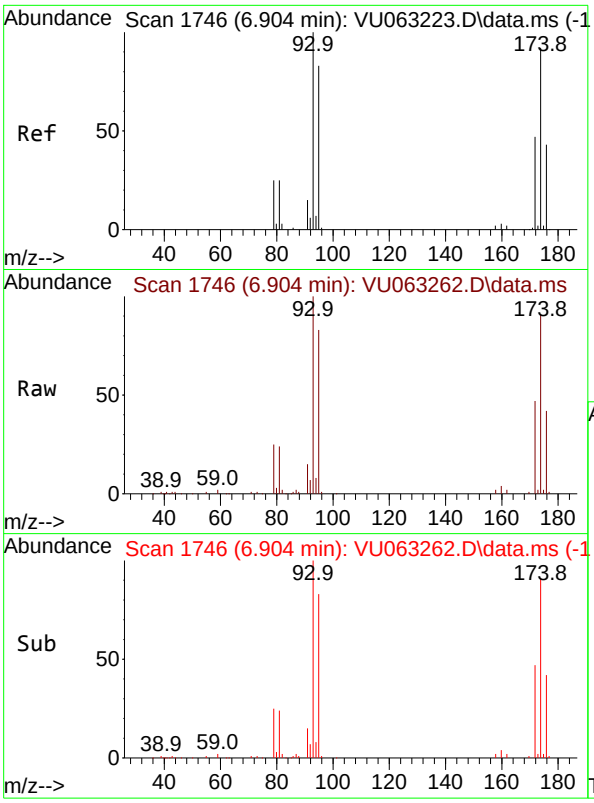


#42
1-Chlorobutane
Concen: 10.786 ug/l
RT: 5.444 min Scan# 1292
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 56 Resp: 318733

Ion	Ratio	Lower	Upper
56	100		
41	52.1	26.3	78.8

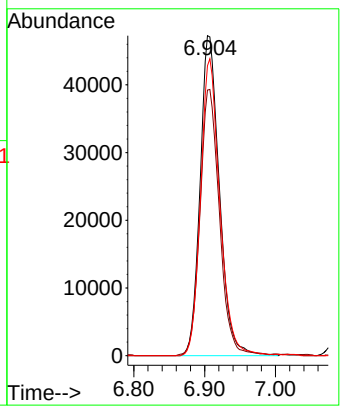




#43
Dibromomethane
Concen: 10.154 ug/l
RT: 6.904 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 93 Resp: 8936

Ion	Ratio	Lower	Upper
93	100		
95	83.7	67.2	100.8
174	92.7	75.7	113.5



Instrument :
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ClientSampleId :
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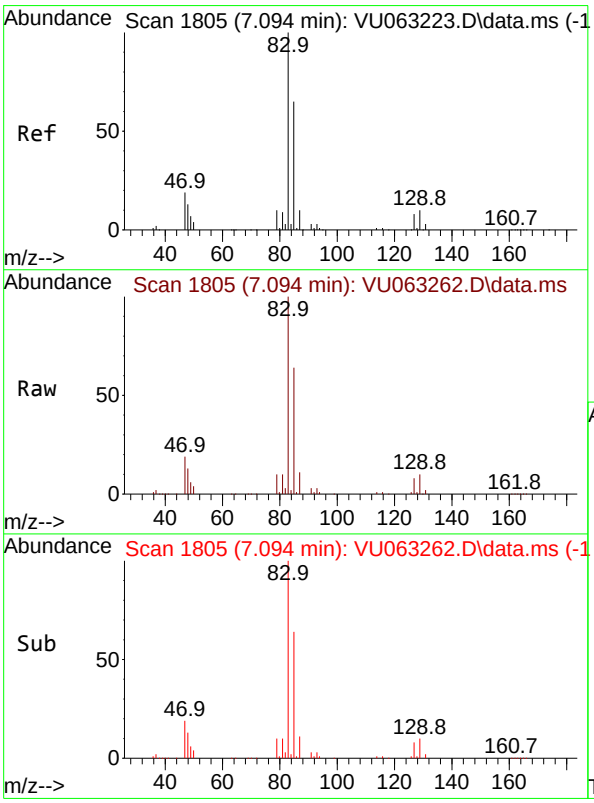
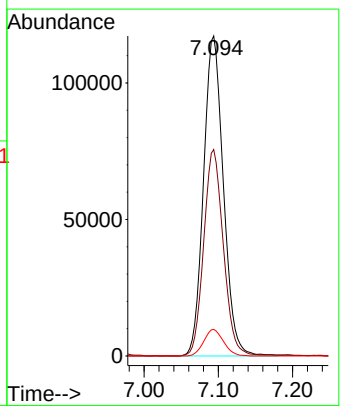
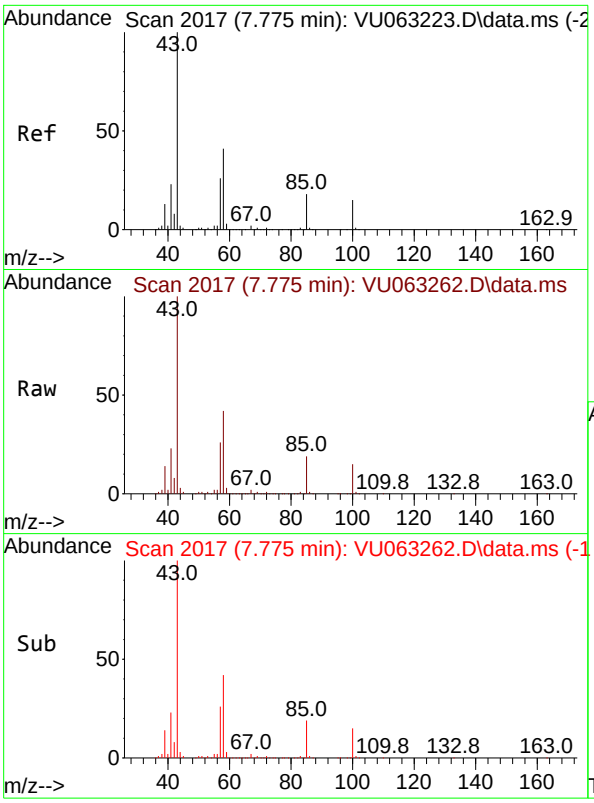


#44
Bromodichloromethane
Concen: 10.646 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 83 Resp: 218078

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.7	77.5
127	8.3	6.7	10.1

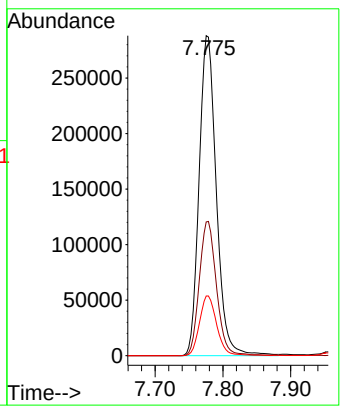




#45
4-Methyl-2-Pentanone
Concen: 55.115 ug/l
RT: 7.775 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 43 Resp: 50856

Ion	Ratio	Lower	Upper
43	100		
58	41.8	20.8	62.5
85	18.7	14.8	22.2



Instrument :
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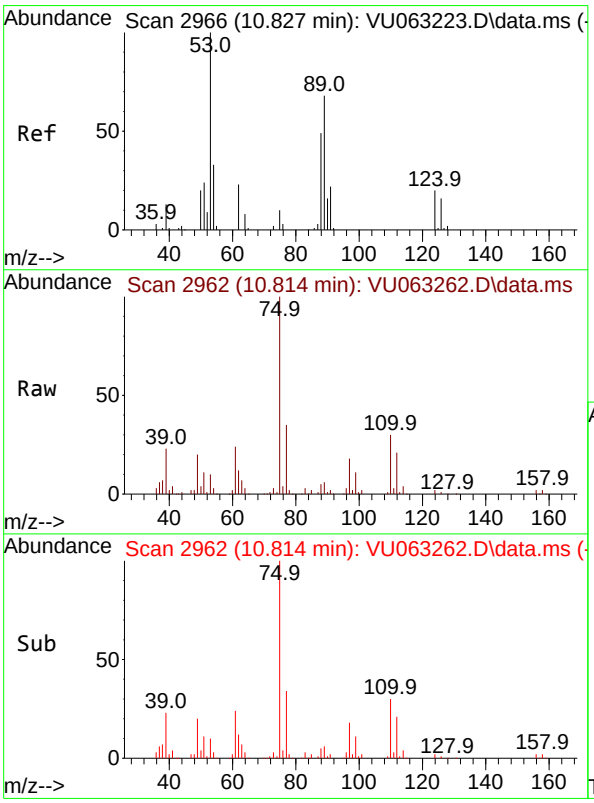
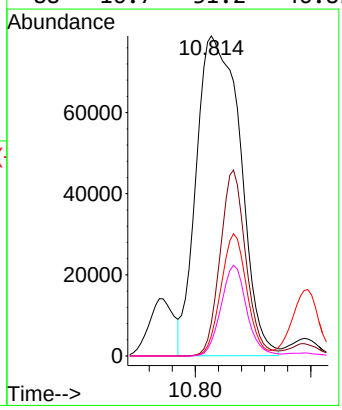
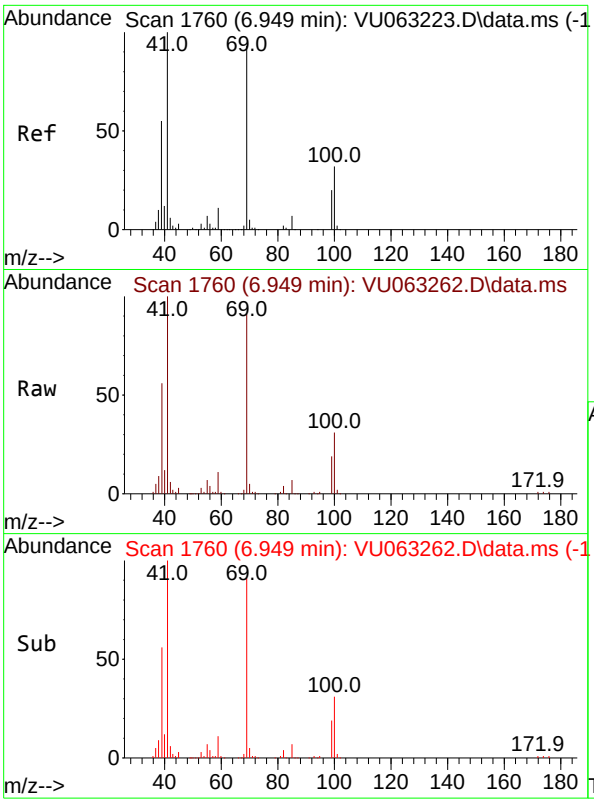


#46
t-1,4-Dichloro-2-butene
Concen: 47.833 ug/l
RT: 10.814 min Scan# 2962
Delta R.T. -0.013 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 75 Resp: 207484

Ion	Ratio	Lower	Upper
75	100		
53	34.3	64.5	96.7#
89	22.8	43.4	65.2#
88	16.7	31.2	46.8#

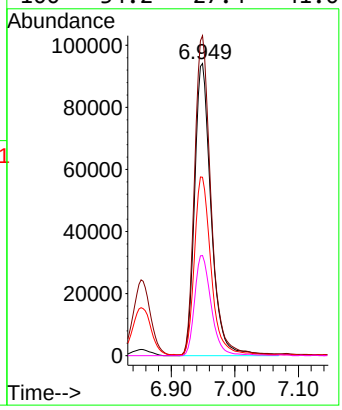




#47
Methyl methacrylate
Concen: 22.854 ug/l
RT: 6.949 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 69 Resp: 16942

Ion	Ratio	Lower	Upper
69	100		
41	108.5	0.0	217.0
39	61.3	47.7	71.5
100	34.2	27.4	41.0



Instrument :
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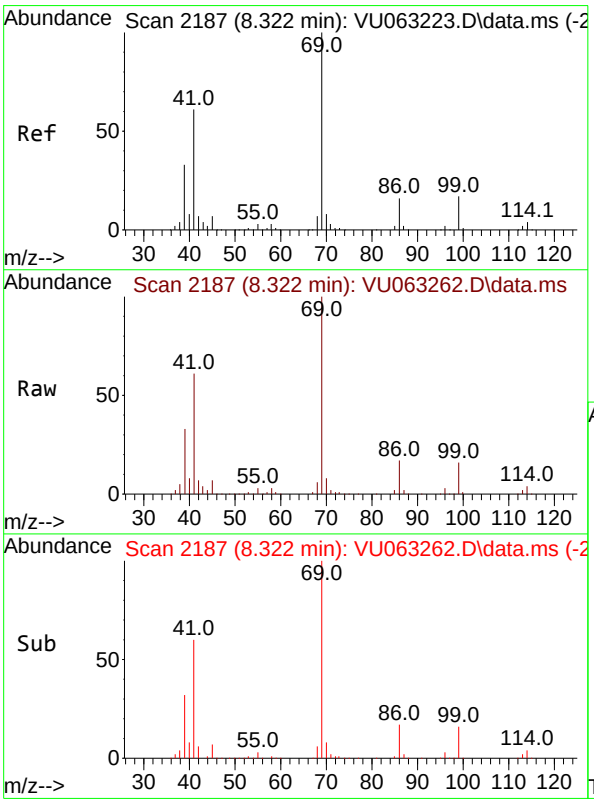
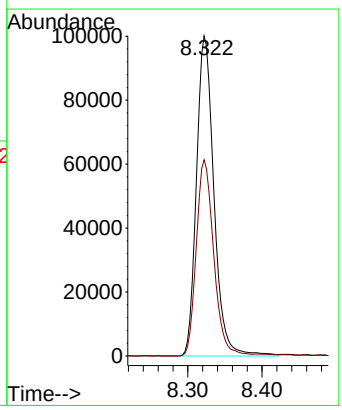
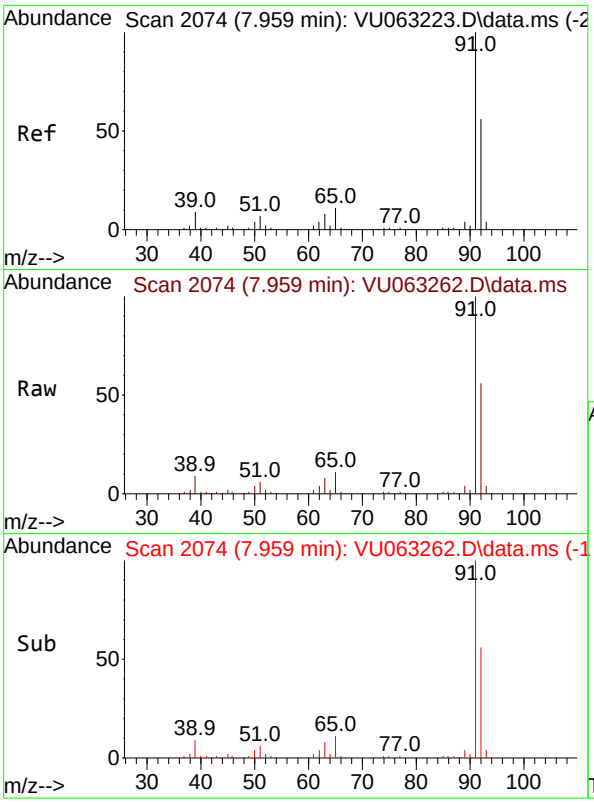


#48
Ethyl methacrylate
Concen: 11.777 ug/l
RT: 8.322 min Scan# 2187
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 69 Resp: 163932

Ion	Ratio	Lower	Upper
69	100		
41	61.1	30.6	92.0





#49
Toluene
Concen: 11.073 ug/l
RT: 7.959 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 92 Resp: 42288

Ion	Ratio	Lower	Upper
92	100		
91	177.1	141.8	212.6

Instrument :
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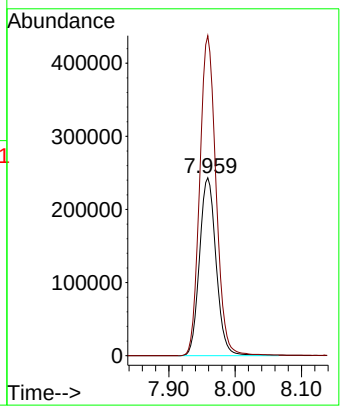
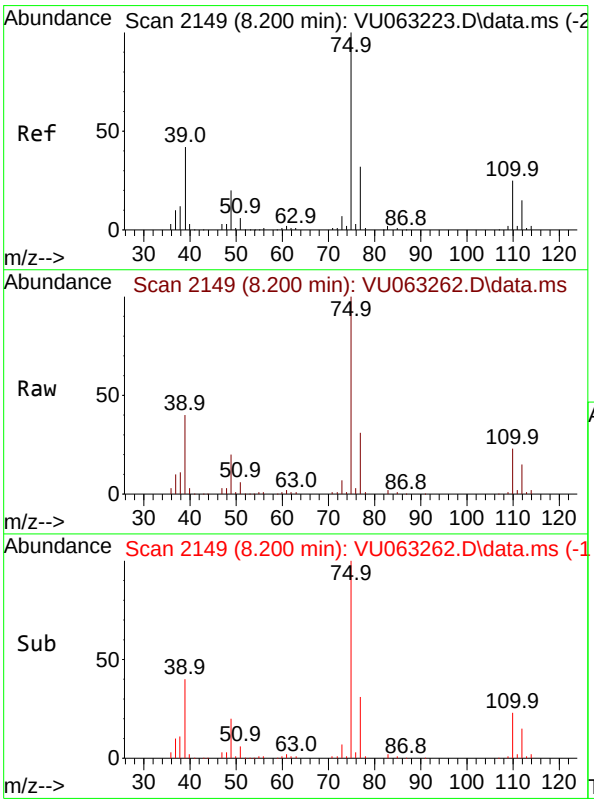
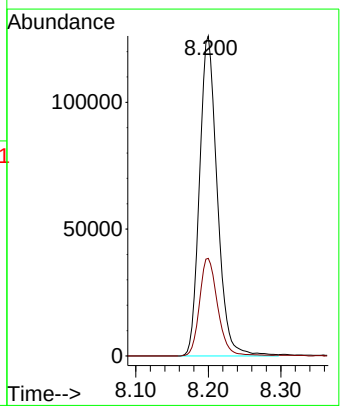


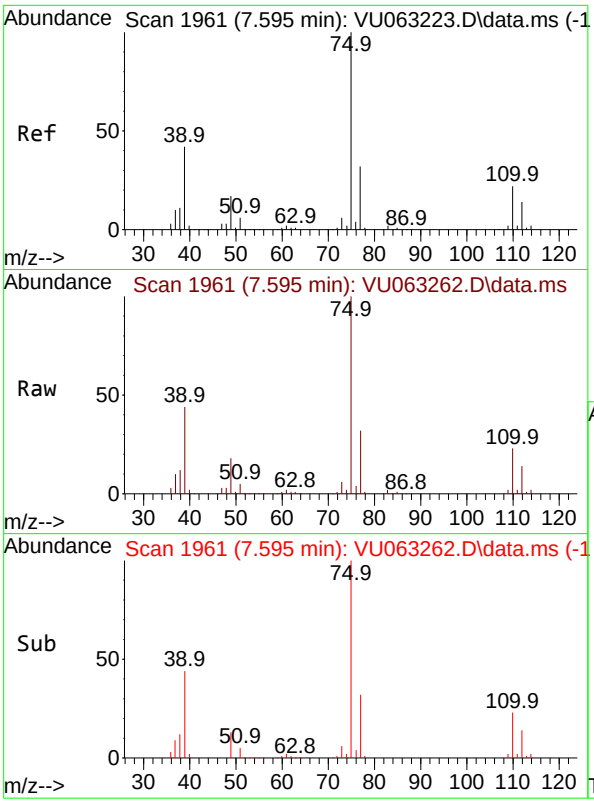


#50
t-1,3-Dichloropropene
Concen: 11.433 ug/l
RT: 8.200 min Scan# 2149
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 75 Resp: 214427

Ion	Ratio	Lower	Upper
75	100		
77	30.5	25.9	38.9

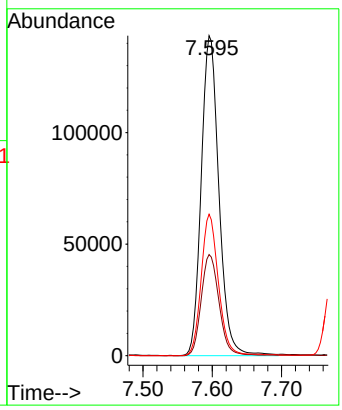




#51
cis-1,3-Dichloropropene
Concen: 10.974 ug/l
RT: 7.595 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 75 Resp: 25423

Ion	Ratio	Lower	Upper
75	100		
77	31.6	25.3	37.9
39	44.2	33.5	50.3



Instrument :
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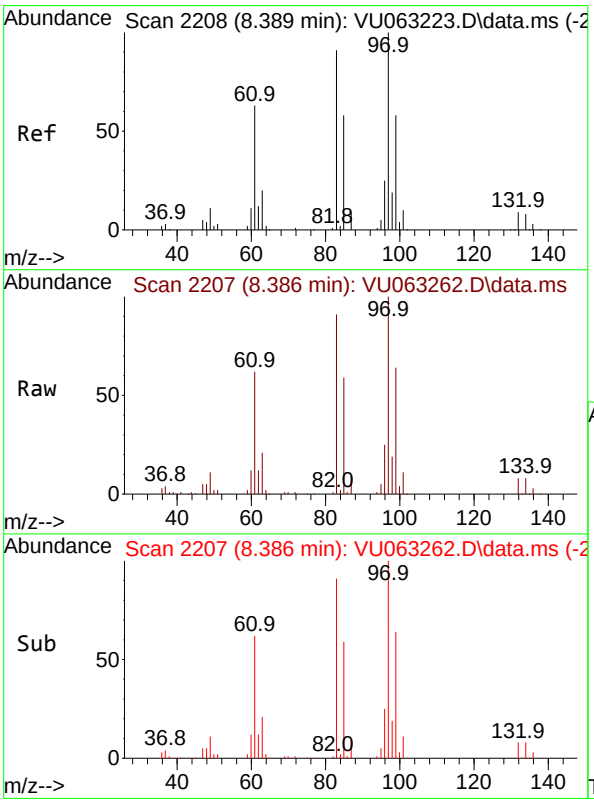
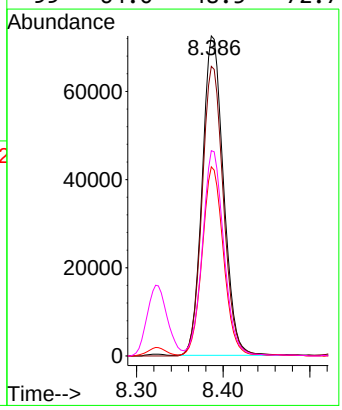
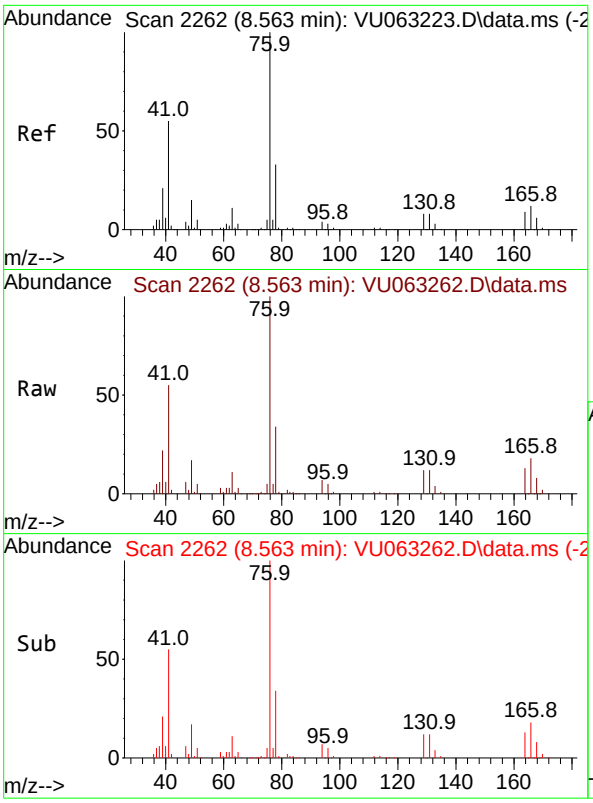


#52
1,1,2-Trichloroethane
Concen: 10.409 ug/l
RT: 8.386 min Scan# 2207
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 97 Resp: 123518

Ion	Ratio	Lower	Upper
97	100		
83	90.7	73.0	109.4
85	58.9	46.3	69.5
99	64.0	48.5	72.7

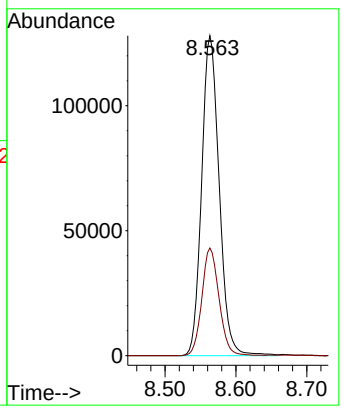




#53
1,3-Dichloropropane
Concen: 10.448 ug/l
RT: 8.563 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 76 Resp: 22010

Ion	Ratio	Lower	Upper
76	100		
78	33.0	26.3	39.5



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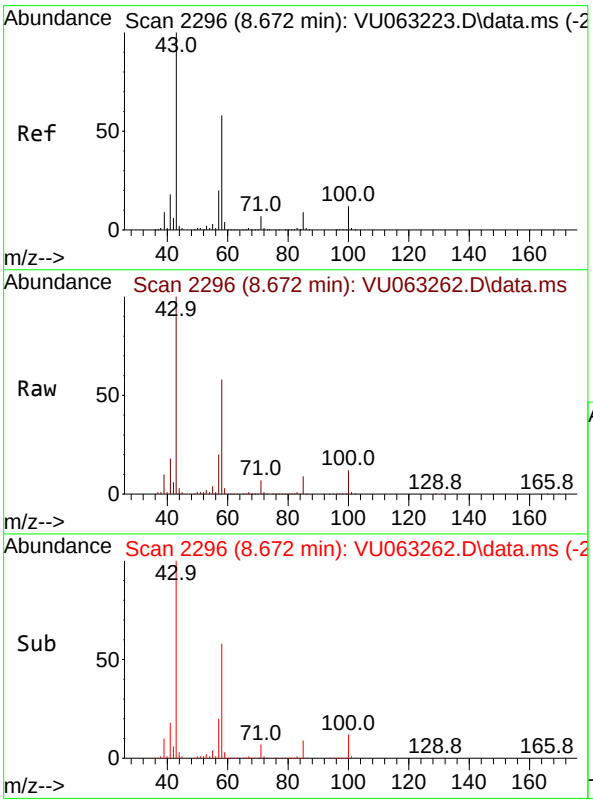
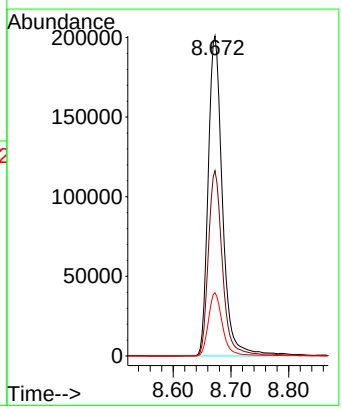
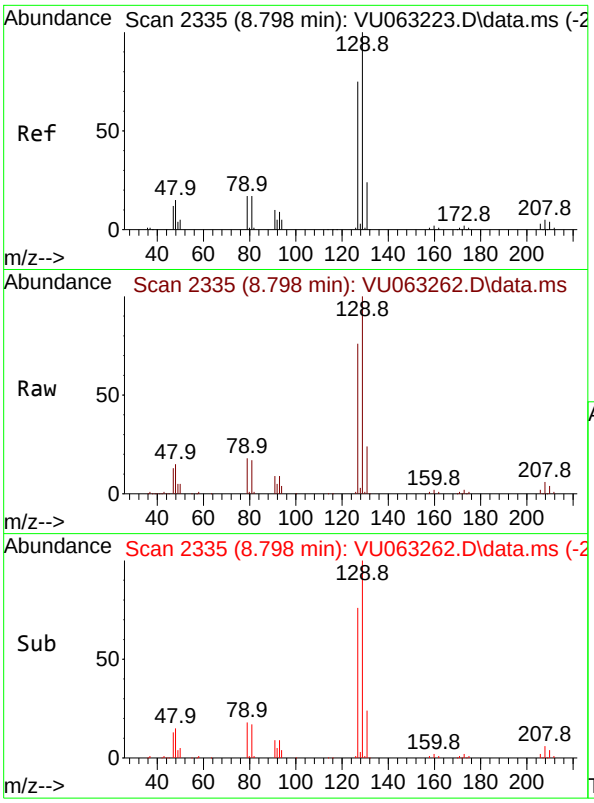


#54
2-Hexanone
Concen: 54.661 ug/l
RT: 8.672 min Scan# 2296
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 43 Resp: 344198

Ion	Ratio	Lower	Upper
43	100		
58	56.9	38.0	78.0
57	19.6	0.0	39.1

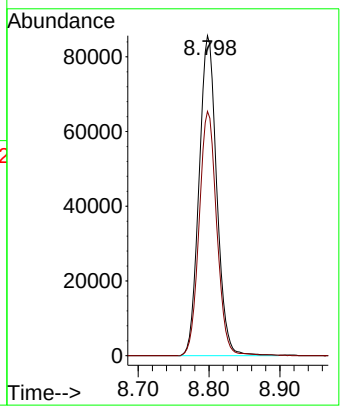




#55
Dibromochloromethane
Concen: 10.851 ug/l
RT: 8.798 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:129 Resp: 14814

Ion	Ratio	Lower	Upper
129	100		
127	76.3	60.4	90.6



Instrument :
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ClientSampleId :
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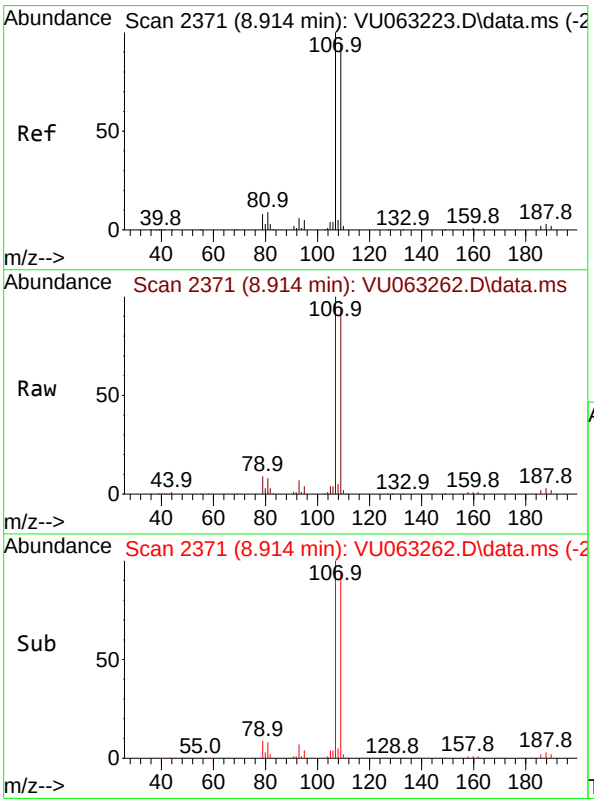
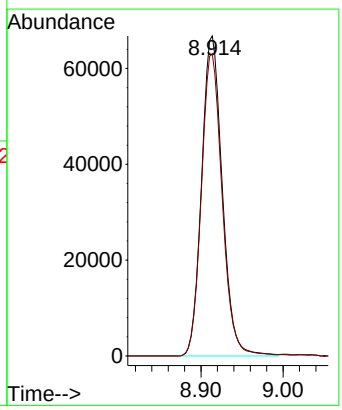
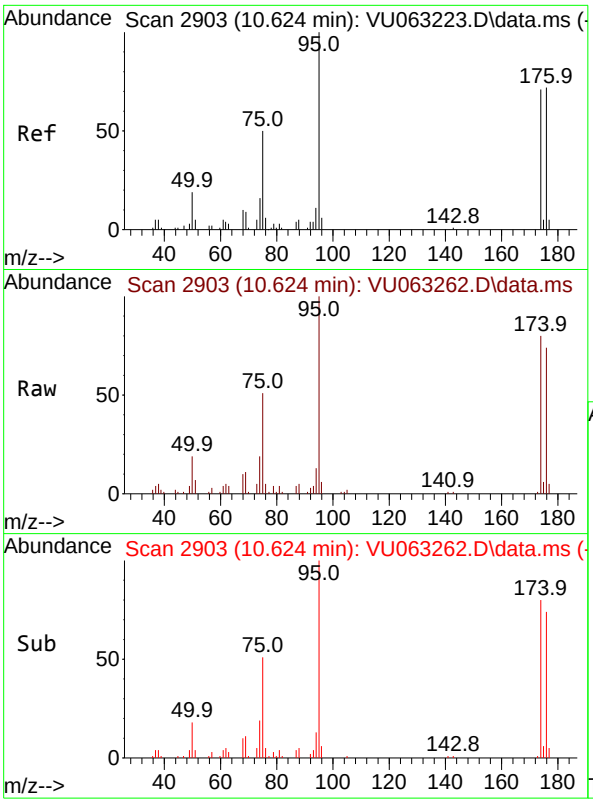


#56
1,2-Dibromoethane
Concen: 10.494 ug/l
RT: 8.914 min Scan# 2371
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:107 Resp: 116797

Ion	Ratio	Lower	Upper
107	100		
109	94.9	0.0	187.8

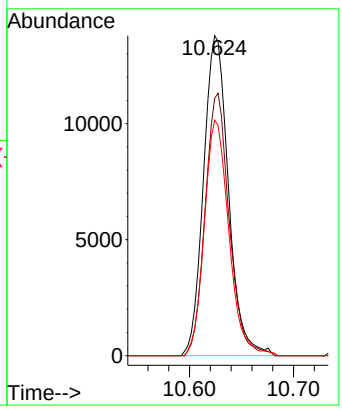




#57
4-Bromofluorobenzene
Concen: 1.288 ug/l
RT: 10.624 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 95 Resp: 2296

Ion	Ratio	Lower	Upper
95	100		
174	79.7	58.6	88.0
176	72.7	58.2	87.4



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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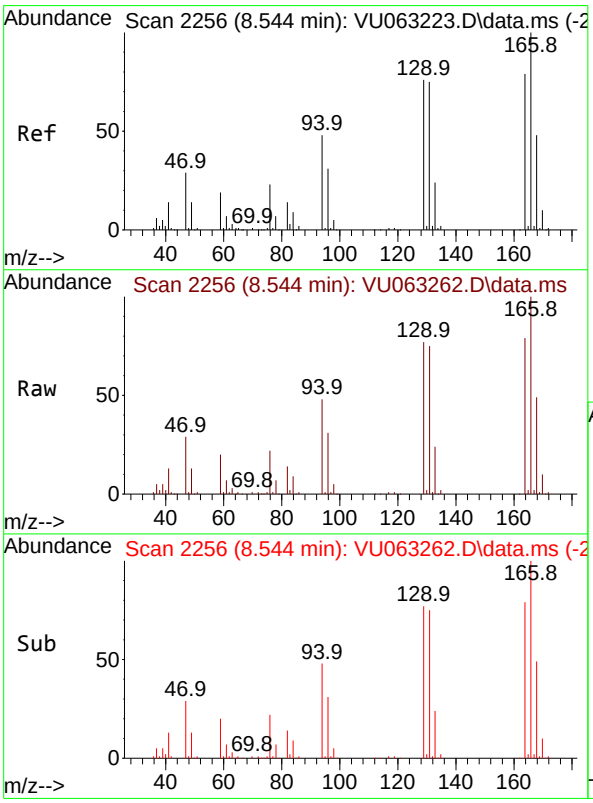
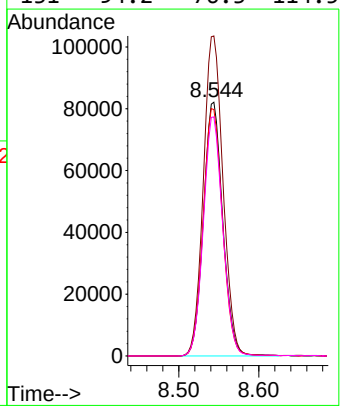
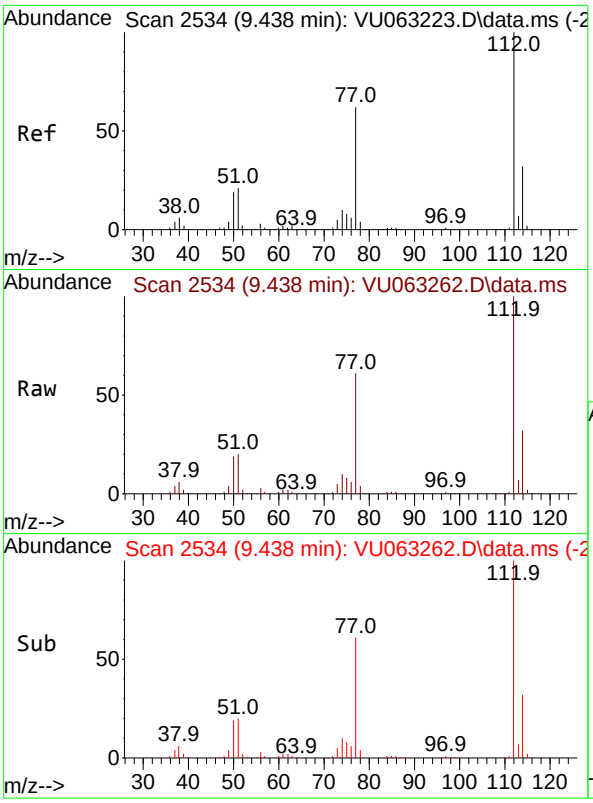


#58
Tetrachloroethene
Concen: 10.612 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:164 Resp: 138117

Ion	Ratio	Lower	Upper
164	100		
166	126.1	101.4	152.0
129	97.1	77.0	115.4
131	94.2	76.3	114.5

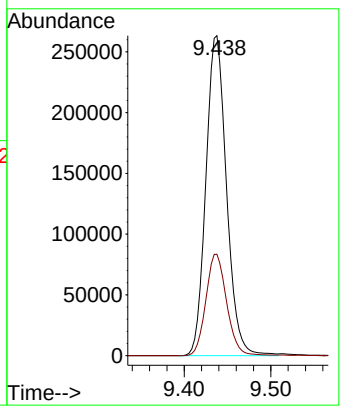




#59
Chlorobenzene
Concen: 10.822 ug/l
RT: 9.438 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:112 Resp: 43613

Ion	Ratio	Lower	Upper
112	100		
114	31.7	25.7	38.5



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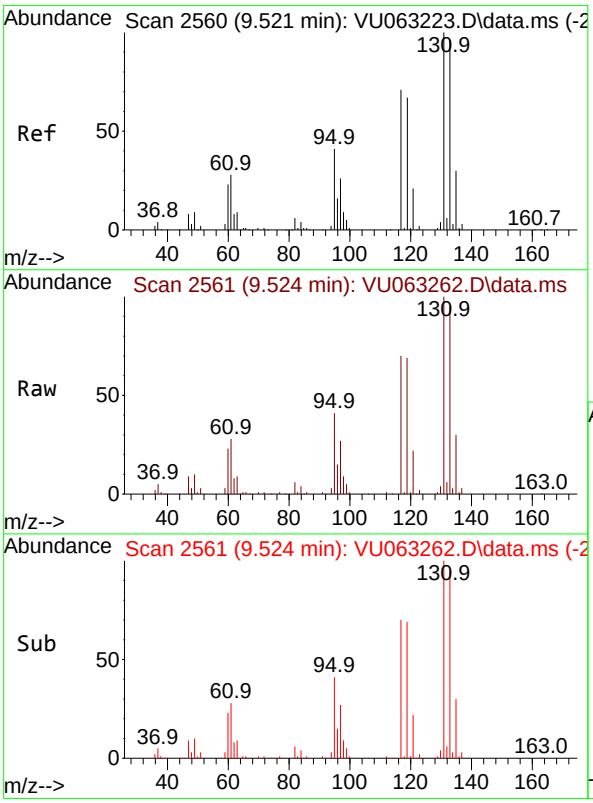
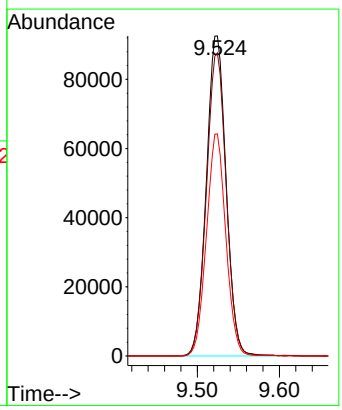
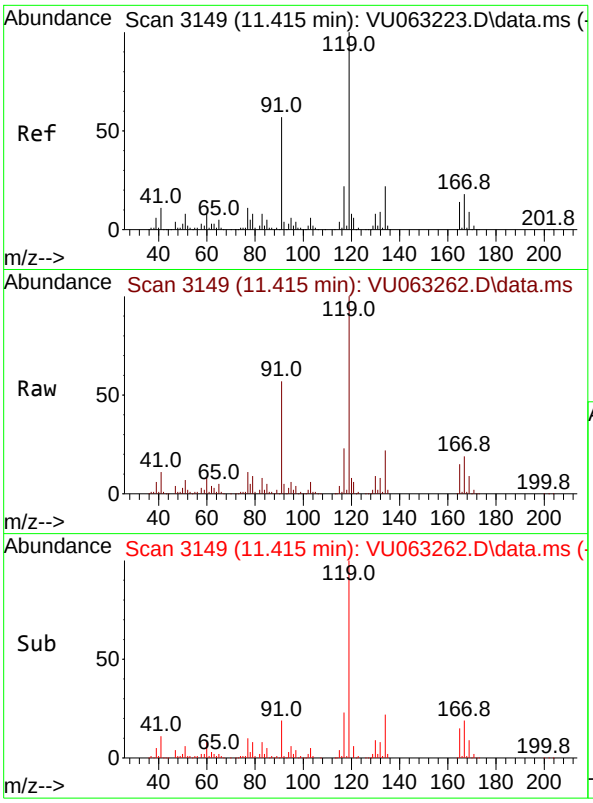


#60
1,1,1,2-Tetrachloroethane
Concen: 10.720 ug/l
RT: 9.524 min Scan# 2561
Delta R.T. 0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:131 Resp: 155286

Ion	Ratio	Lower	Upper
131	100		
133	95.1	76.7	115.1
119	68.0	54.4	81.6

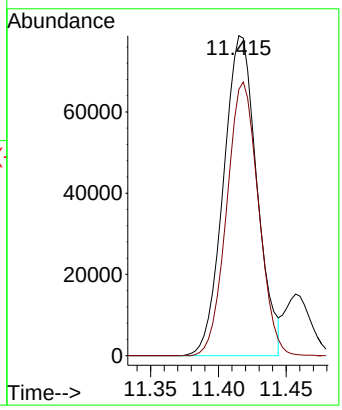




#61
Pentachloroethane
Concen: 10.465 ug/l
RT: 11.415 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:117 Resp: 13542

Ion	Ratio	Lower	Upper
117	100		
167	81.0	65.0	97.6



Instrument :
MSVOA_U
ClientSampleId :
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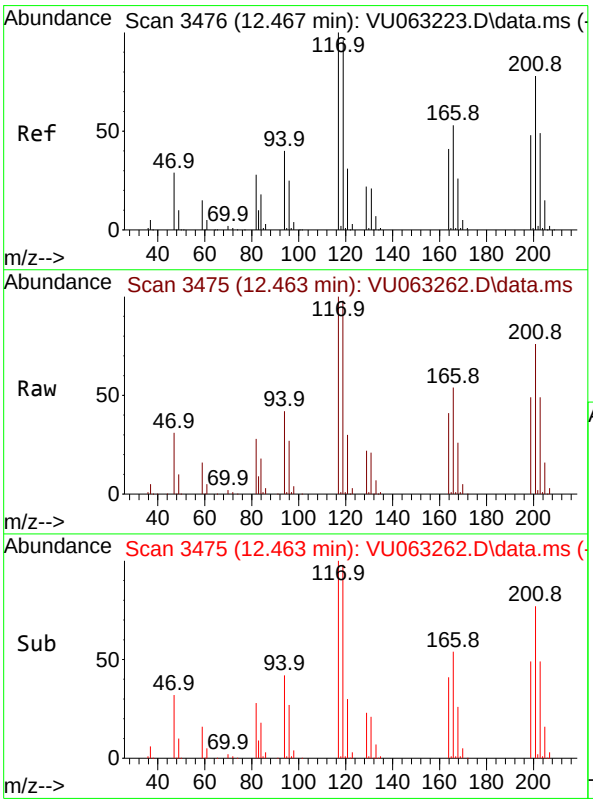
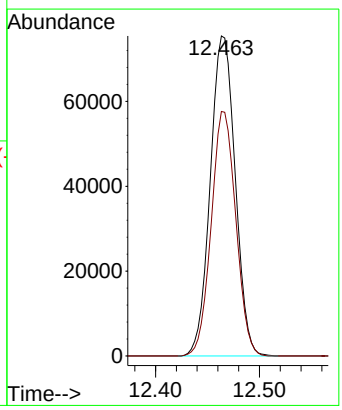
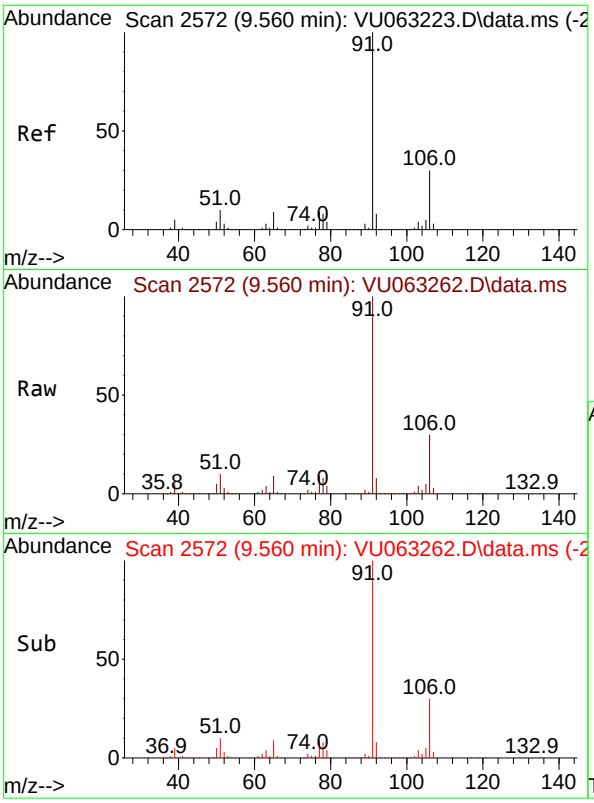


#62
Hexachloroethane
Concen: 10.970 ug/l
RT: 12.463 min Scan# 3475
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:117 Resp: 125589

Ion	Ratio	Lower	Upper
117	100		
201	75.4	61.3	91.9





#63
Ethyl Benzene
Concen: 11.412 ug/l
RT: 9.560 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 91 Resp: 79319

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.2	36.2

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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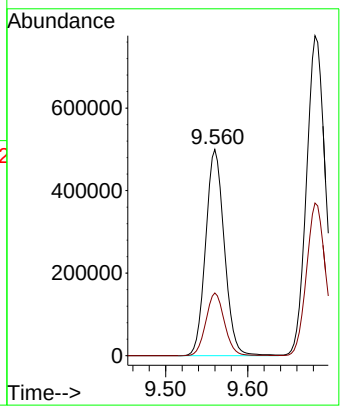
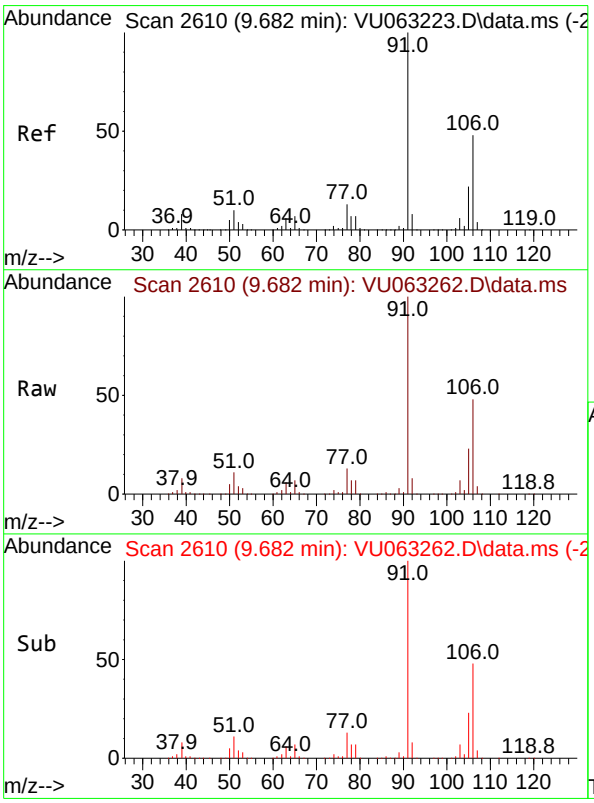
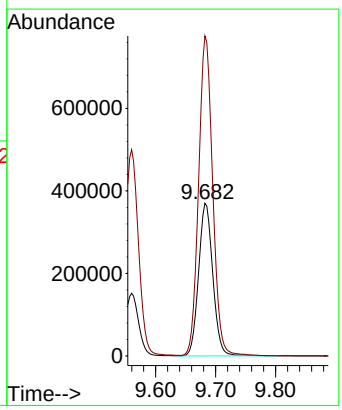


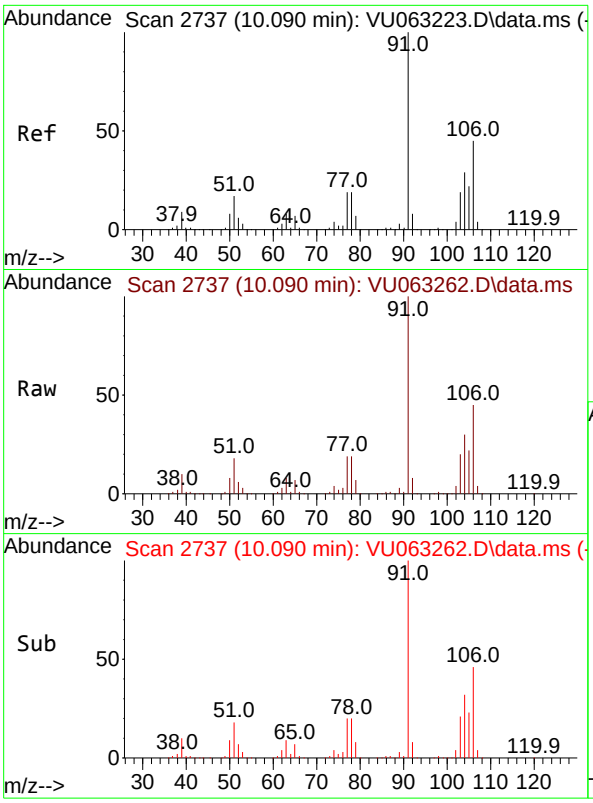


#64
m/p-Xylenes
Concen: 23.502 ug/l
RT: 9.682 min Scan# 2610
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:106 Resp: 610169

Ion	Ratio	Lower	Upper
106	100		
91	208.3	166.9	250.3





#65
o-Xylene
Concen: 11.342 ug/l
RT: 10.090 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:106 Resp: 28827

Ion	Ratio	Lower	Upper
106	100		
91	221.5	110.9	332.9

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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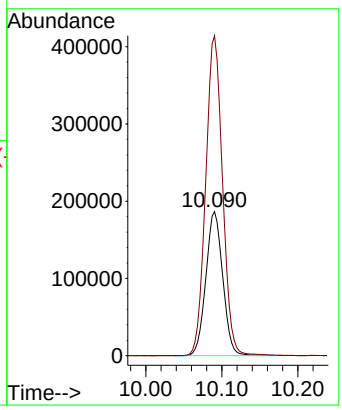
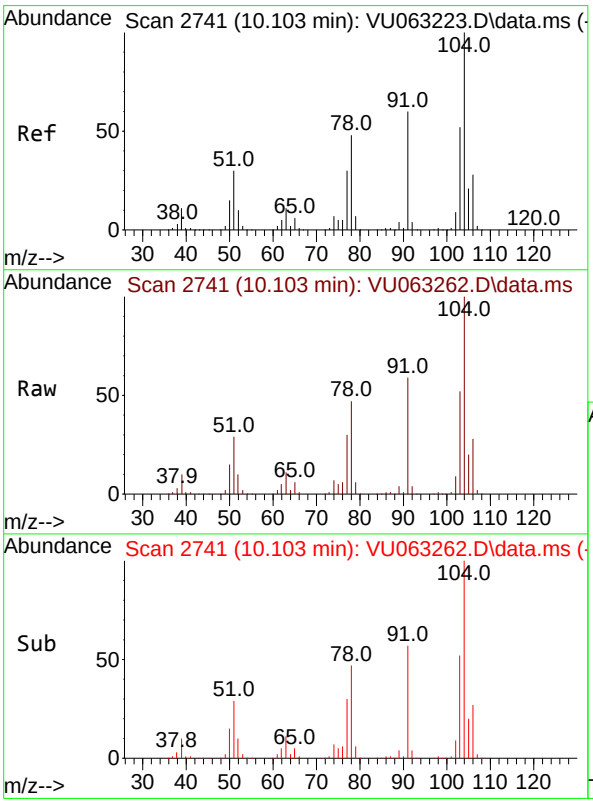
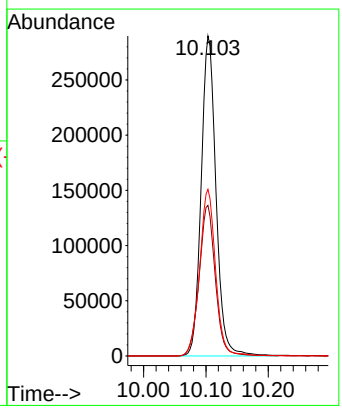


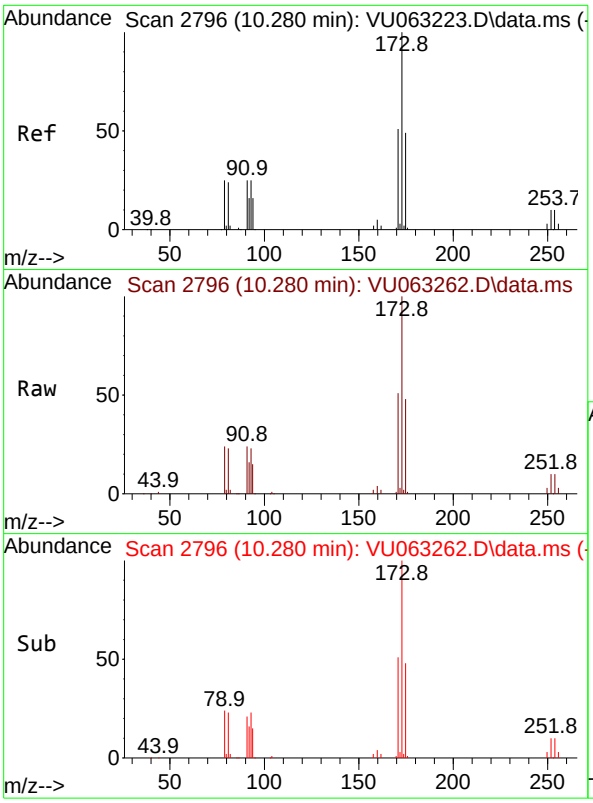


#66
Styrene
Concen: 11.887 ug/l
RT: 10.103 min Scan# 2741
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:104 Resp: 480803

Ion	Ratio	Lower	Upper
104	100		
78	51.0	41.2	61.8
103	55.8	44.8	67.2

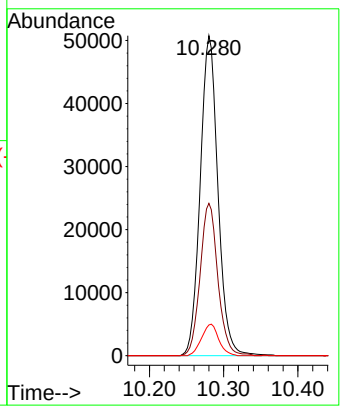




#67
Bromoform
Concen: 10.863 ug/l
RT: 10.280 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:173 Resp: 8417

Ion	Ratio	Lower	Upper
173	100		
175	47.6	39.0	58.4
254	9.5	7.7	11.5



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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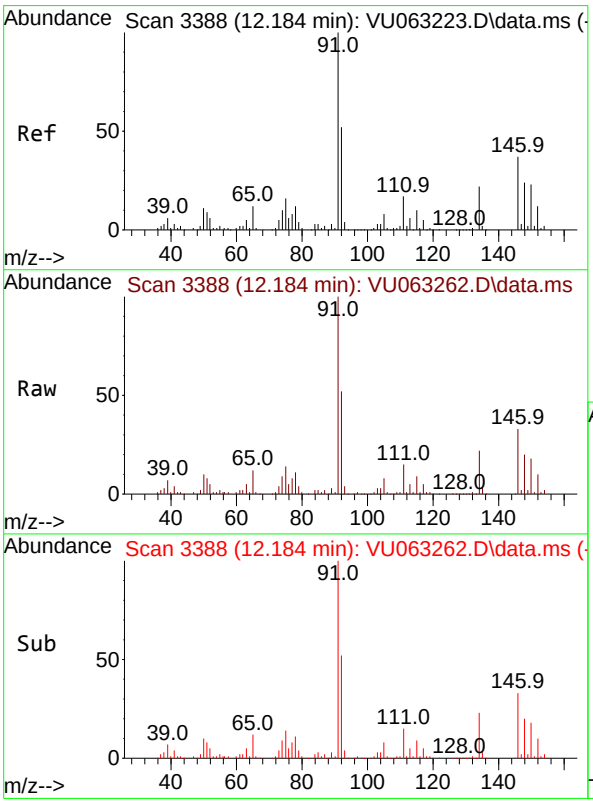
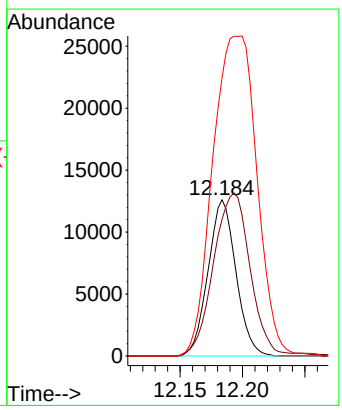
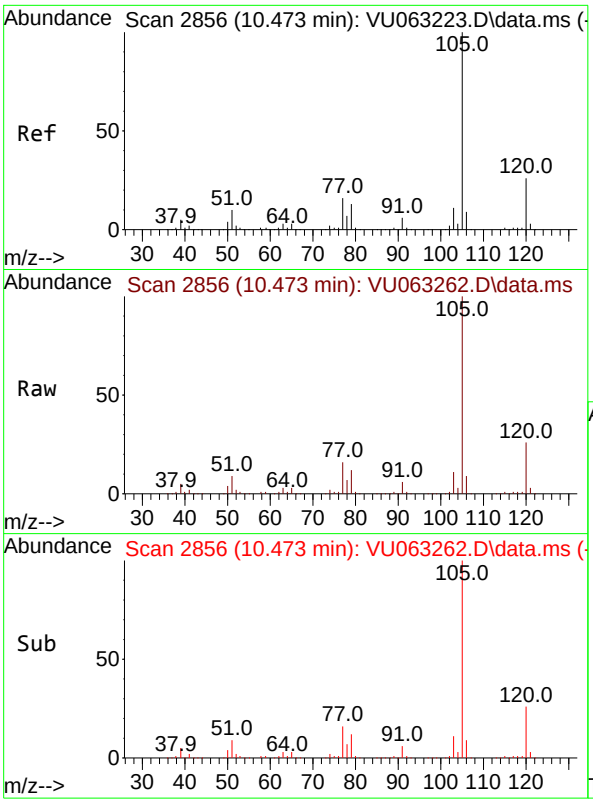


#68
1,2-Dichlorobenzene-d4
Concen: 1.057 ug/l
RT: 12.184 min Scan# 3388
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:152 Resp: 19595

Ion	Ratio	Lower	Upper
152	100		
115	138.1	0.0	275.2
150	324.7	0.0	658.4





#69
Isopropylbenzene
Concen: 11.602 ug/l
RT: 10.473 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:105 Resp: 69322

Ion	Ratio	Lower	Upper
105	100		
120	25.8	12.8	38.4

Instrument :
MSVOA_U
ClientSampleId :
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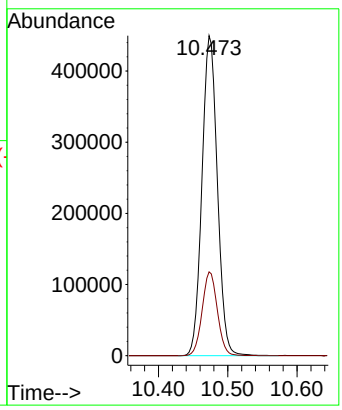
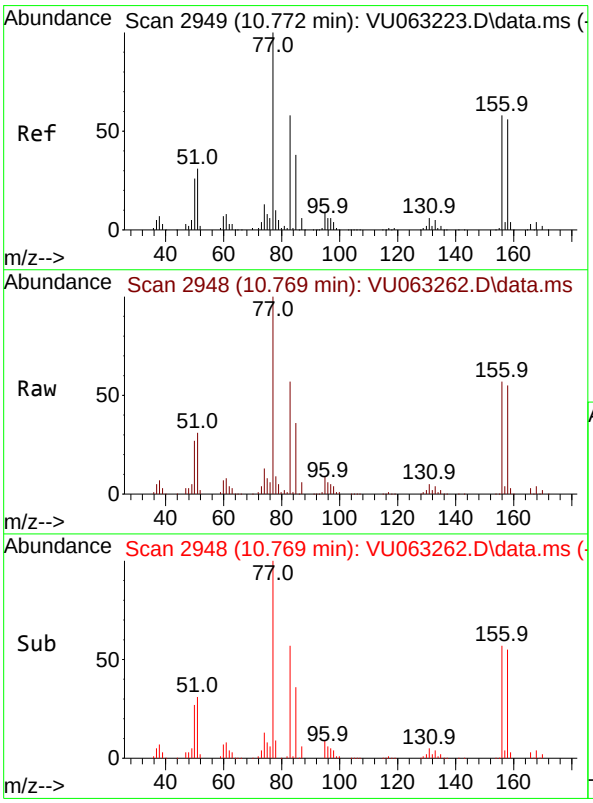
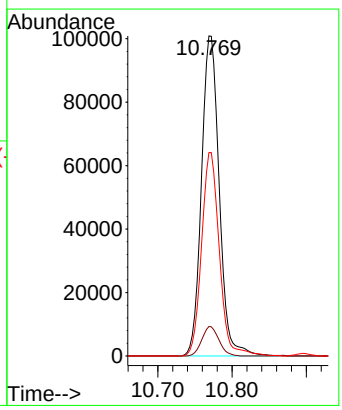


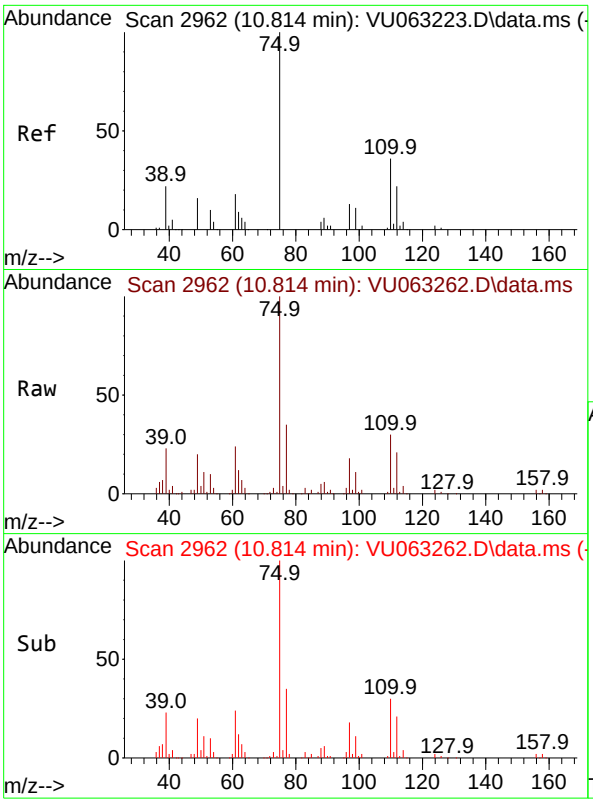


#70
1,1,2,2-Tetrachloroethane
Concen: 10.469 ug/l
RT: 10.769 min Scan# 2948
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 83 Resp: 167442

Ion	Ratio	Lower	Upper
83	100		
131	8.8	7.4	11.0
85	63.5	51.8	77.8

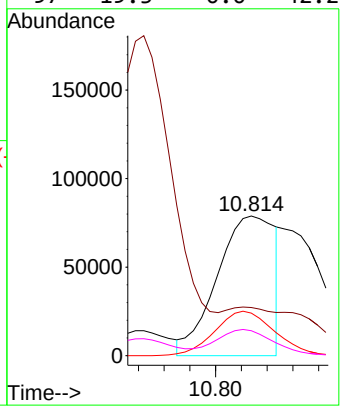




#71
1,2,3-Trichloropropane
Concen: 10.245 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 75 Resp: 12310

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	33.3	0.0	77.0
97	19.3	0.0	42.2



Instrument :
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ClientSampleId :
VSTDCCC010

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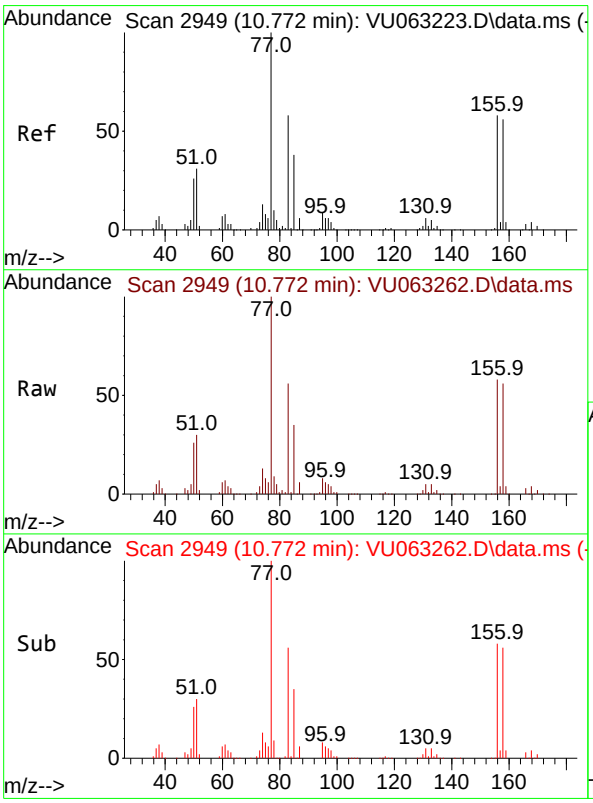
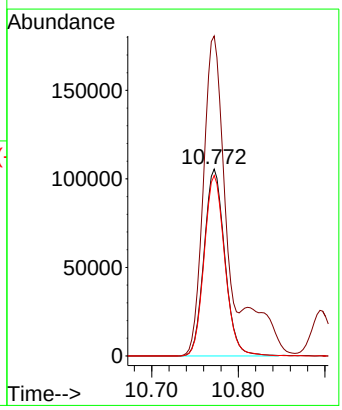
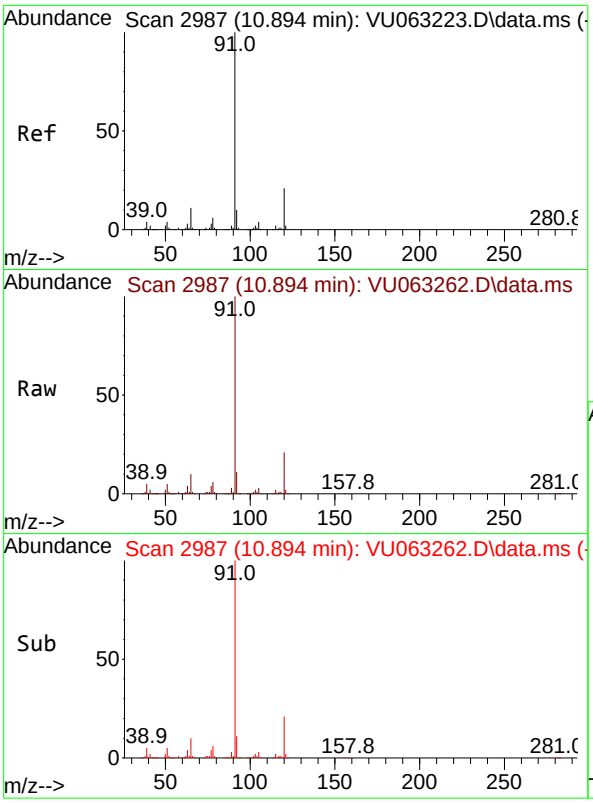


#72
Bromobenzene
Concen: 10.881 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:156 Resp: 175175

Ion	Ratio	Lower	Upper
156	100		
77	172.3	0.0	343.6
158	96.6	0.0	193.0





#73
n-propylbenzene
Concen: 12.000 ug/l
RT: 10.894 min Scan# 2
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:120 Resp: 20528

Ion	Ratio	Lower	Upper
120	100		
91	465.5	369.8	554.6

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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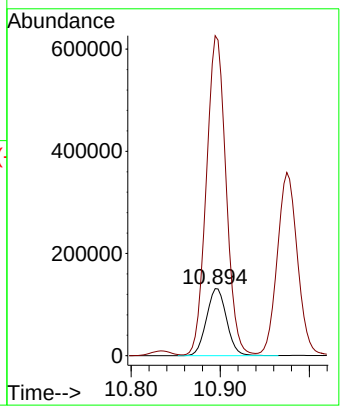
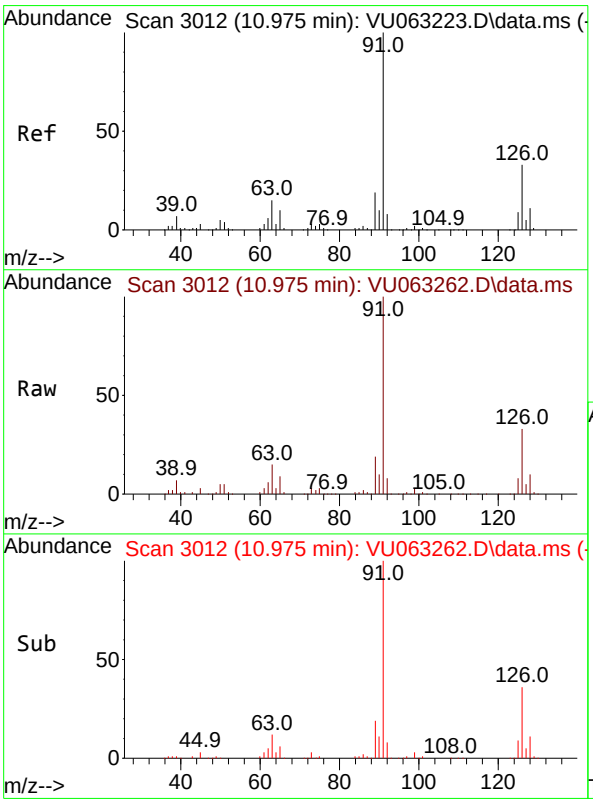
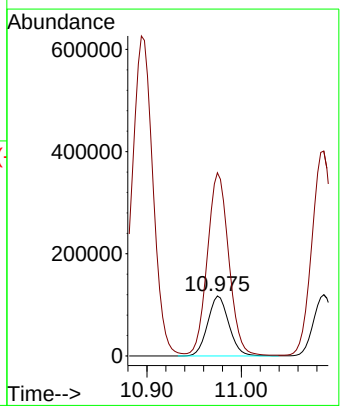


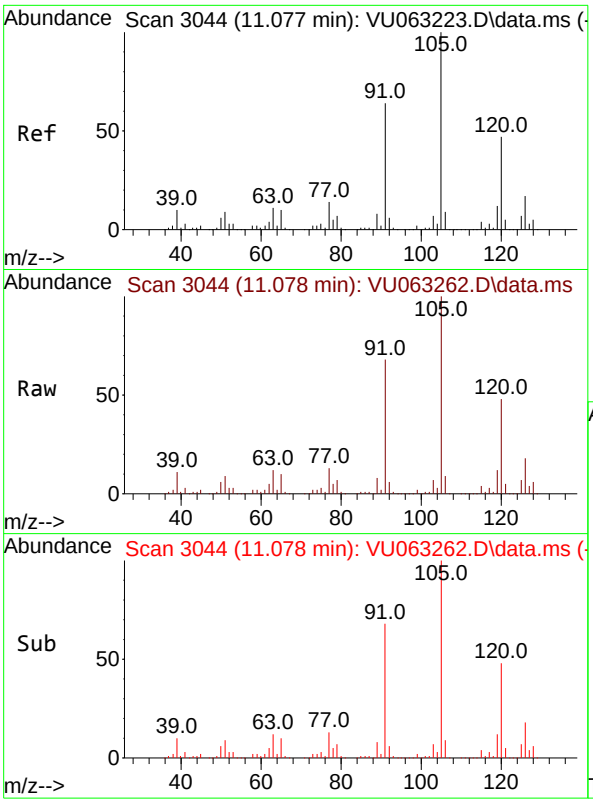


#74
2-Chlorotoluene
Concen: 11.545 ug/l
RT: 10.975 min Scan# 3012
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:126 Resp: 182021

Ion	Ratio	Lower	Upper
126	100		
91	307.8	0.0	623.8

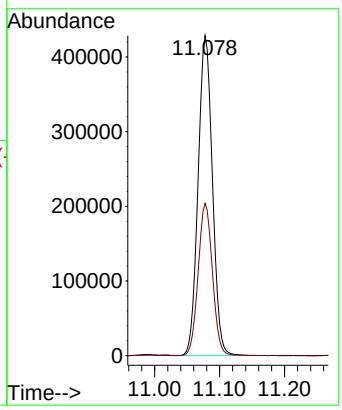




#75
1,3,5-Trimethylbenzene
Concen: 11.906 ug/l
RT: 11.078 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:105 Resp: 65918

Ion	Ratio	Lower	Upper
105	100		
120	47.3	37.3	55.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
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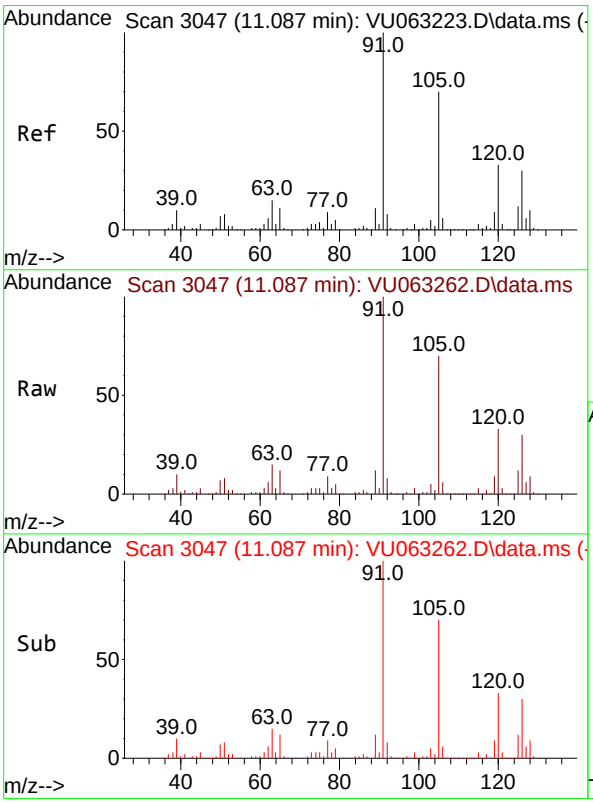
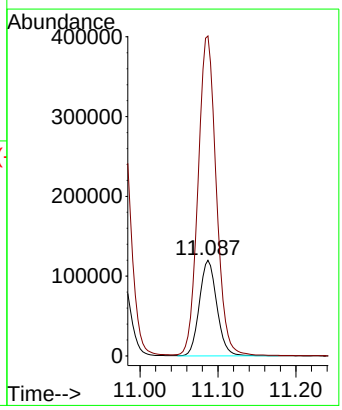
Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

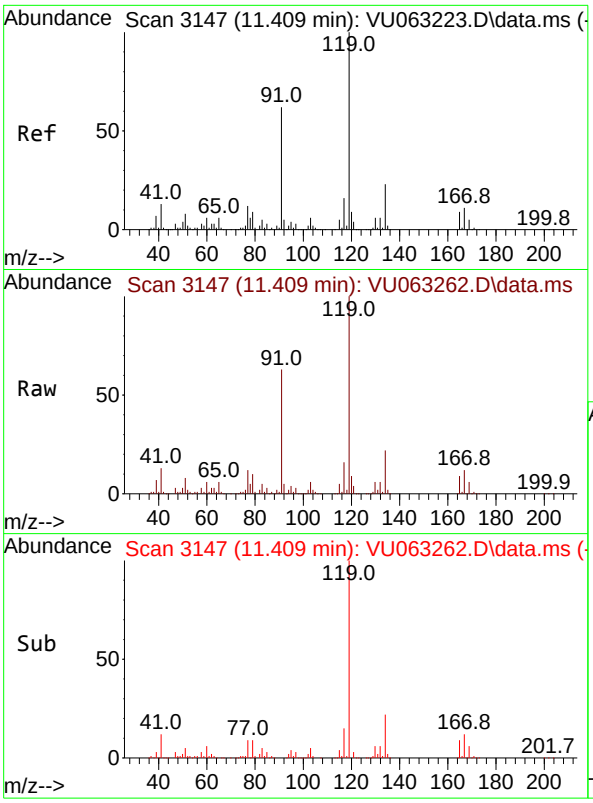


#76
4-Chlorotoluene
Concen: 11.511 ug/l
RT: 11.087 min Scan# 3047
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:126 Resp: 186115

Ion	Ratio	Lower	Upper
126	100		
91	348.4	0.0	703.6





#77
tert-Butylbenzene
Concen: 11.330 ug/l
RT: 11.409 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:119 Resp: 63439

Ion	Ratio	Lower	Upper
119	100		
91	59.6	29.4	88.3
134	22.0	17.6	26.4

Instrument :
MSVOA_U
ClientSampleId :
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Manual Integrations
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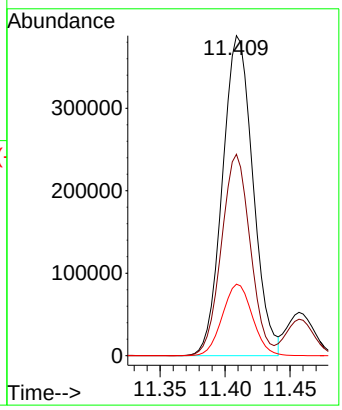
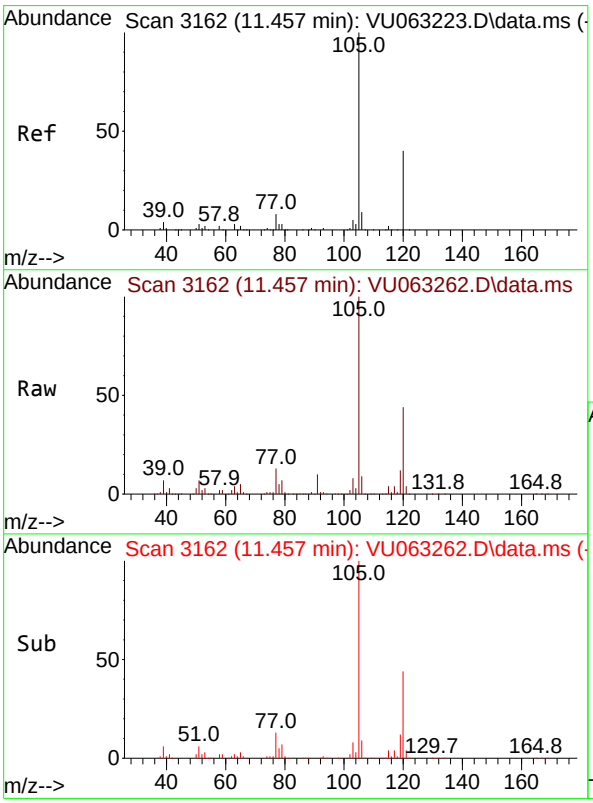
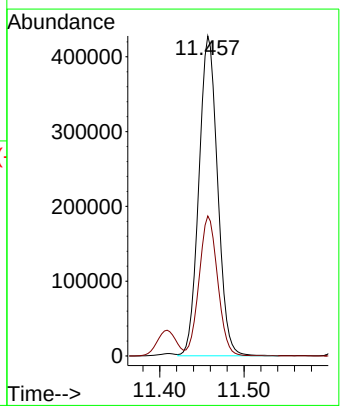


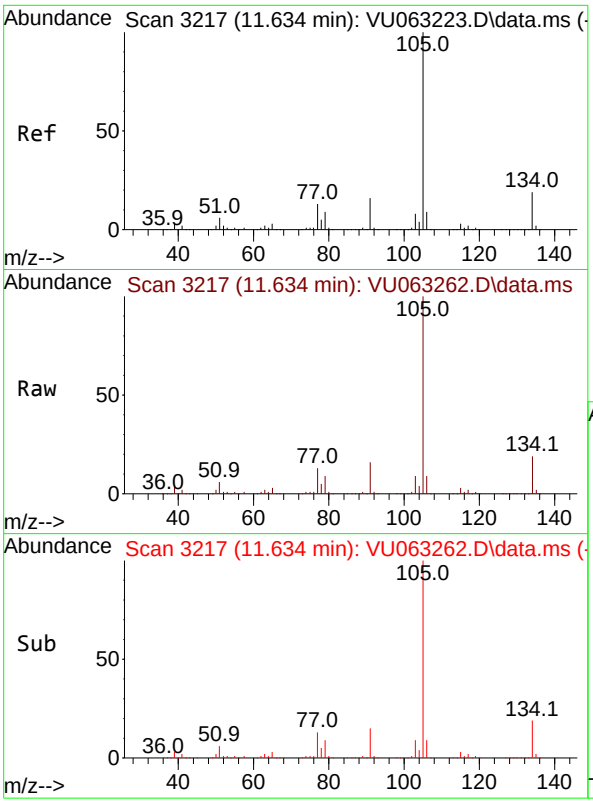


#78
1,2,4-Trimethylbenzene
Concen: 12.019 ug/l
RT: 11.457 min Scan# 3162
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:105 Resp: 660280

Ion	Ratio	Lower	Upper
105	100		
120	43.5	21.9	65.7





#79
sec-Butylbenzene
Concen: 11.798 ug/l
RT: 11.634 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:105 Resp: 84107

Ion	Ratio	Lower	Upper
105	100		
134	18.7	15.1	22.7

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
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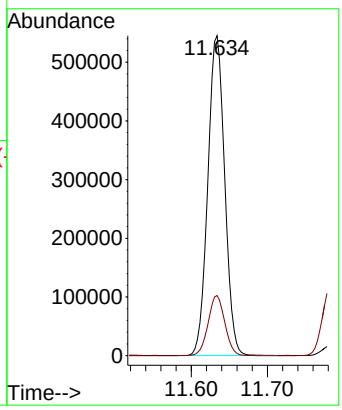
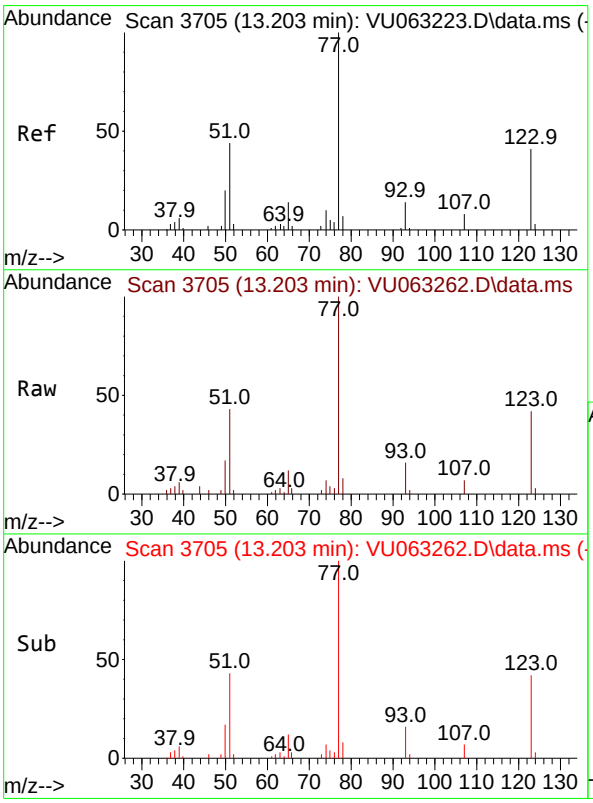
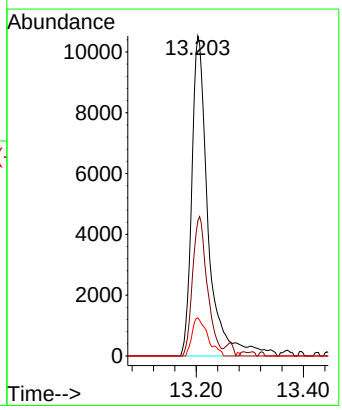


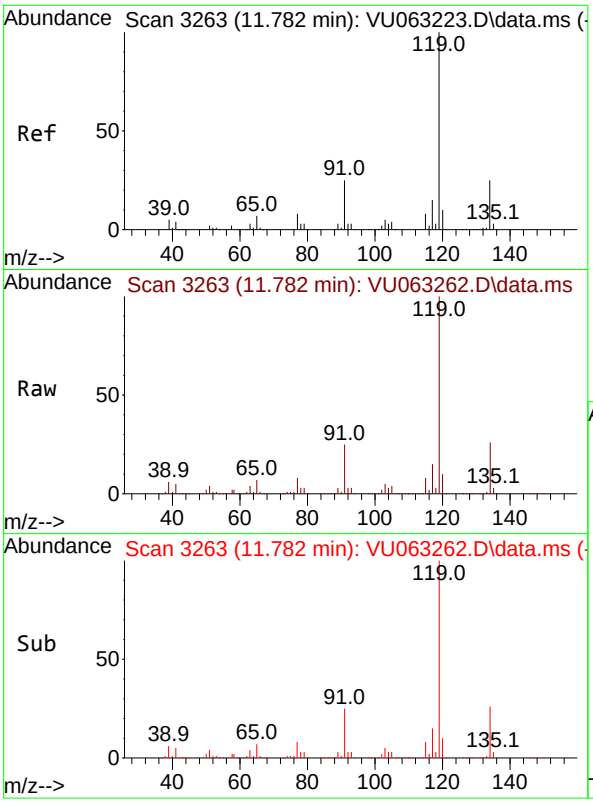


#80
Nitrobenzene
Concen: 47.324 ug/l m
RT: 13.203 min Scan# 3705
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 77 Resp: 22316

Ion	Ratio	Lower	Upper
77	100		
123	36.7	18.9	67.1
65	11.4	11.9	15.1#

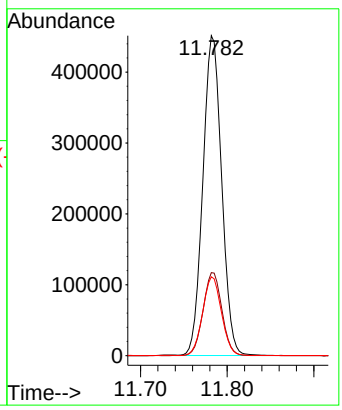




#81
p-Isopropyltoluene
Concen: 12.067 ug/l
RT: 11.782 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:119 Resp: 67894

Ion	Ratio	Lower	Upper
119	100		
134	26.1	20.3	30.5
91	24.5	19.4	29.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

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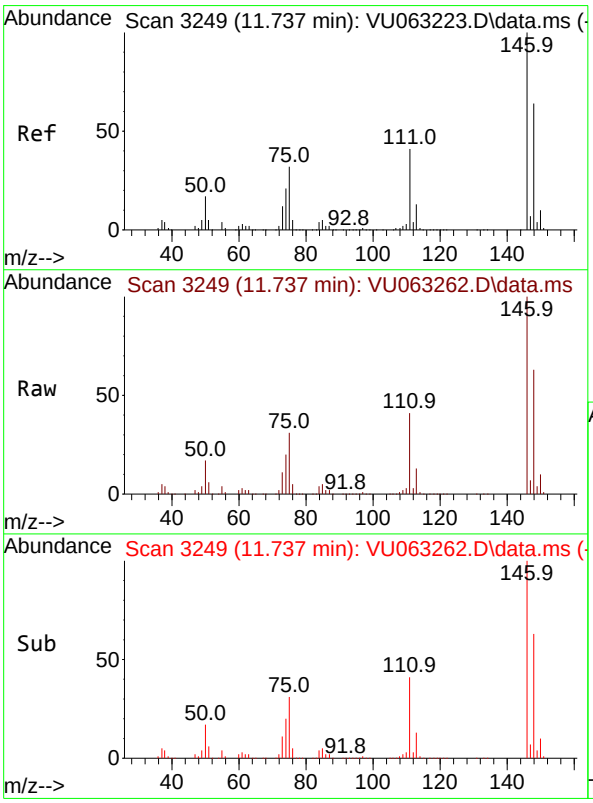
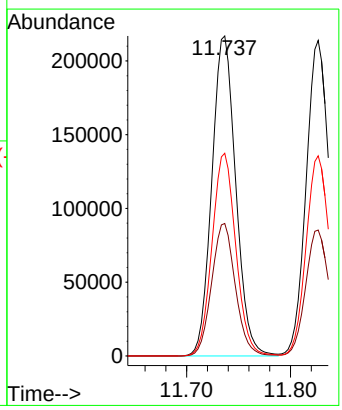
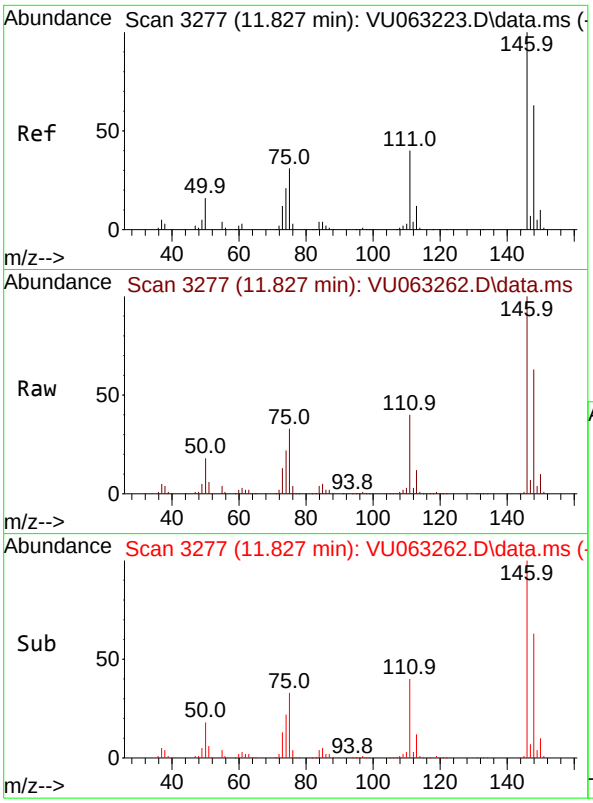


#82
1,3-Dichlorobenzene
Concen: 11.119 ug/l
RT: 11.737 min Scan# 3249
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:146 Resp: 347219

Ion	Ratio	Lower	Upper
146	100		
111	41.1	32.8	49.2
148	63.2	51.1	76.7





#83
1,4-Dichlorobenzene
Concen: 11.131 ug/l
RT: 11.827 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:146 Resp: 33995

Ion	Ratio	Lower	Upper
146	100		
111	40.2	32.1	48.1
148	63.8	50.2	75.4

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
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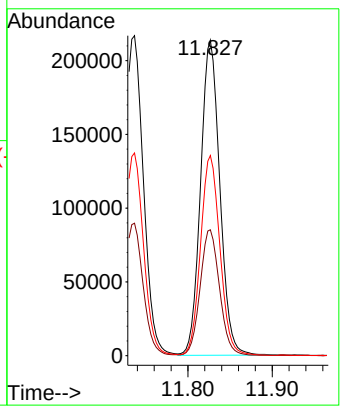
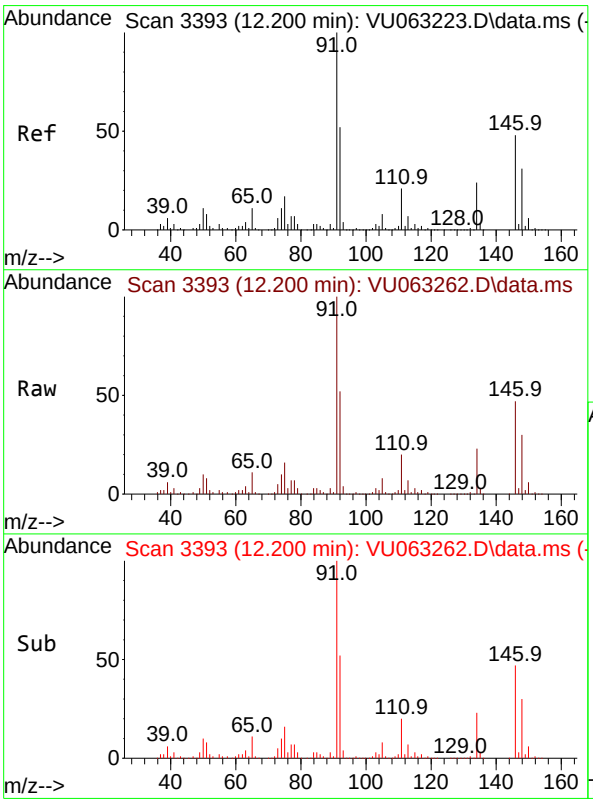
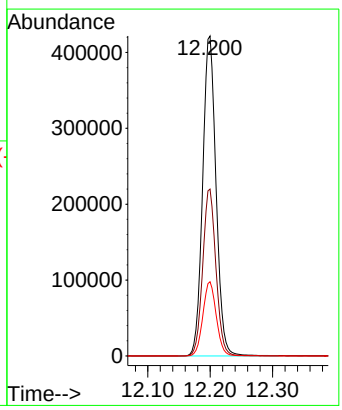


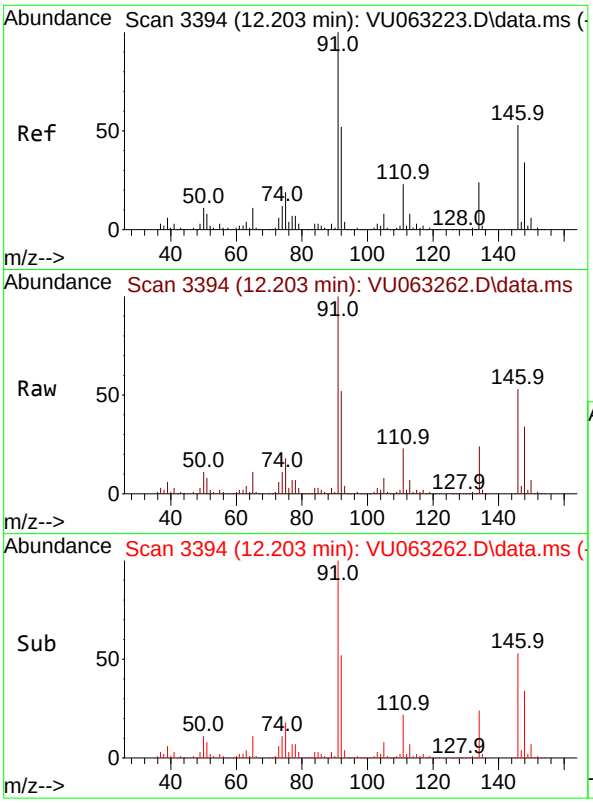


#84
n-Butylbenzene
Concen: 12.498 ug/l
RT: 12.200 min Scan# 3393
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 91 Resp: 630516

Ion	Ratio	Lower	Upper
91	100		
92	51.6	41.8	62.8
134	23.2	18.6	28.0

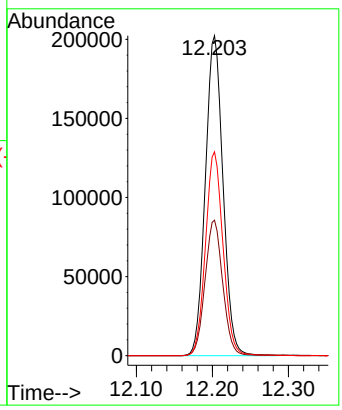




#85
1,2-Dichlorobenzene
Concen: 10.882 ug/l
RT: 12.203 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:146 Resp: 32653

Ion	Ratio	Lower	Upper
146	100		
111	42.5	21.9	65.7
148	63.1	32.3	96.9



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
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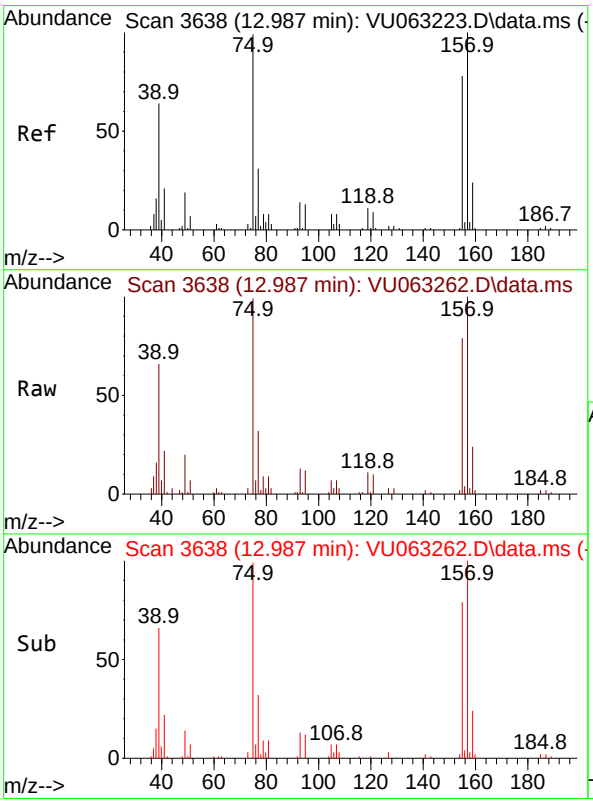
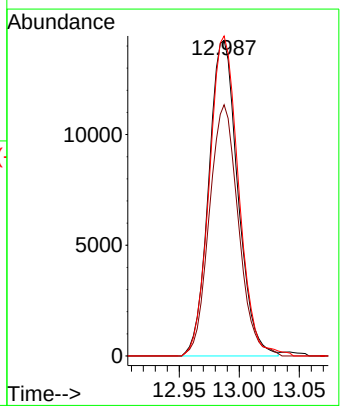
Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

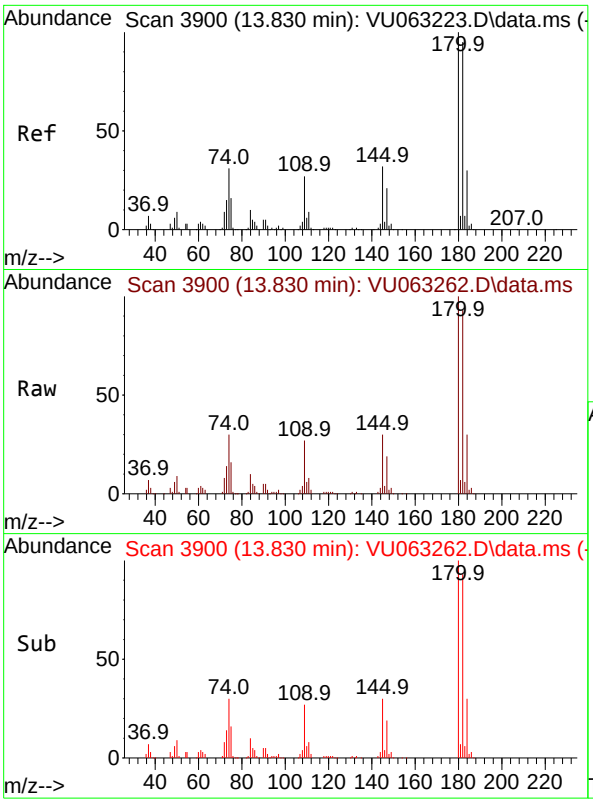


#86
1,2-Dibromo-3-Chloropropane
Concen: 10.704 ug/l
RT: 12.987 min Scan# 3638
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion: 75 Resp: 24031

Ion	Ratio	Lower	Upper
75	100		
155	79.3	63.5	95.3
157	101.9	81.8	122.6

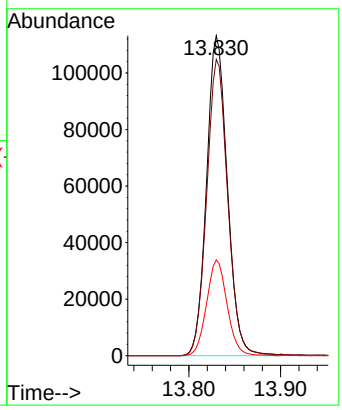




#87
1,2,4-Trichlorobenzene
Concen: 12.188 ug/l
RT: 13.830 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:180 Resp: 17837

Ion	Ratio	Lower	Upper
180	100		
182	94.0	76.6	115.0
145	29.6	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

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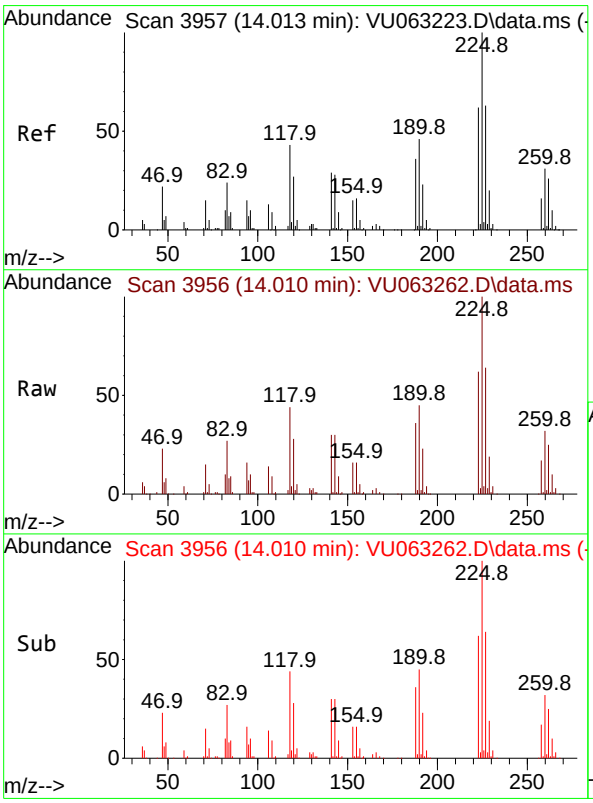
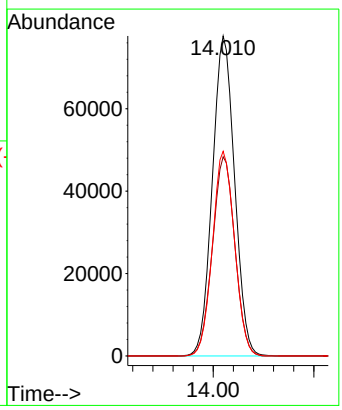
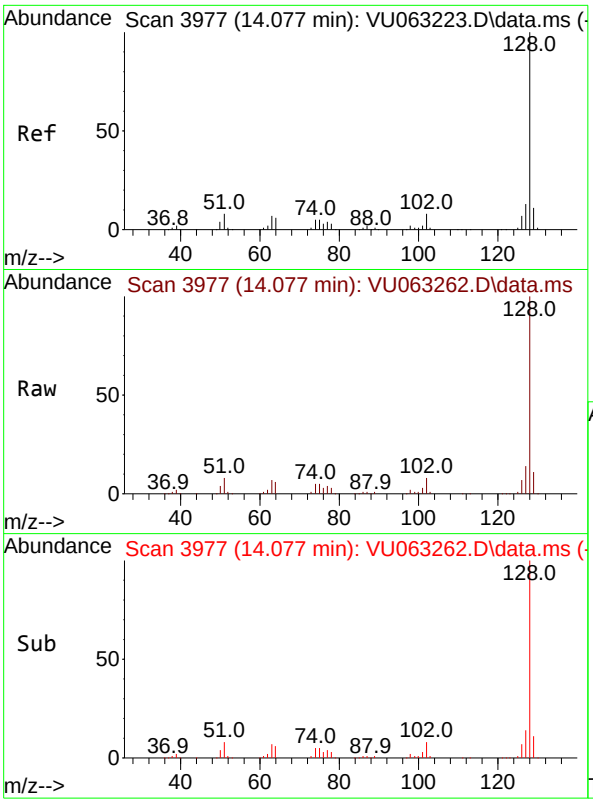


#88
Hexachlorobutadiene
Concen: 11.369 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:225 Resp: 118917

Ion	Ratio	Lower	Upper
225	100		
223	62.9	49.5	74.3
227	63.5	51.0	76.4





#89
Naphthalene
Concen: 9.007 ug/l
RT: 14.077 min Scan# 3
Delta R.T. 0.000 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:128 Resp: 27316

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	16.0
129	10.8	8.6	13.0

Instrument :
MSVOA_U
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

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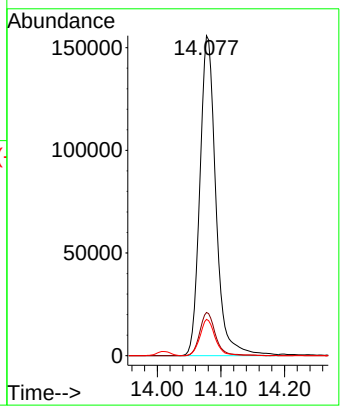
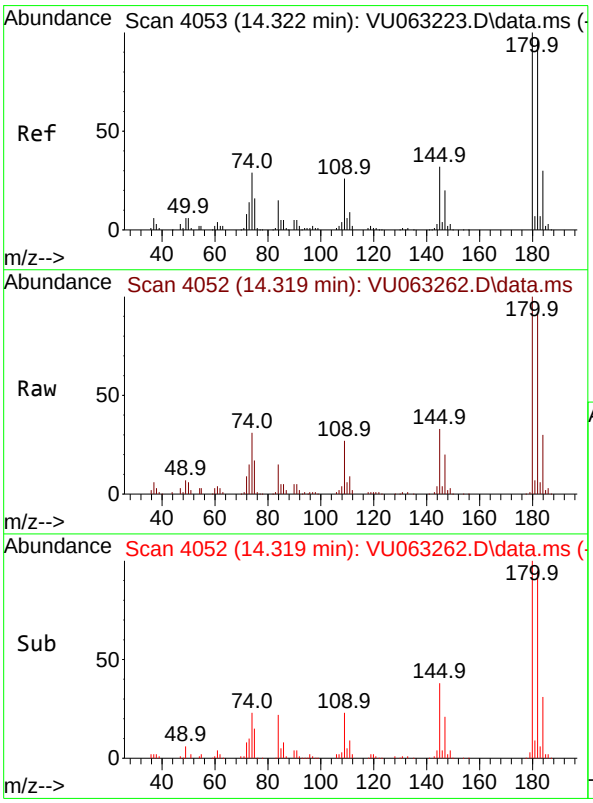
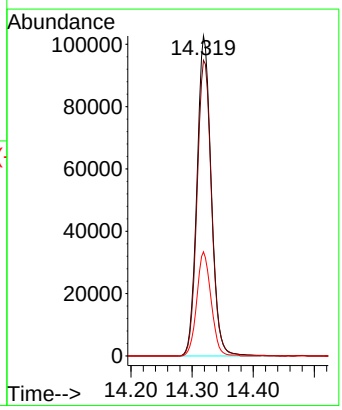




#90
1,2,3-Trichlorobenzene
Concen: 11.635 ug/l
RT: 14.319 min Scan# 4052
Delta R.T. -0.003 min
Lab File: VU063262.D
Acq: 13 Feb 2025 08:36

Tgt Ion:180 Resp: 166618

Ion	Ratio	Lower	Upper
180	100		
182	93.6	78.2	117.2
145	32.5	26.1	39.1



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Data File : VU063262.D
Acq On : 13 Feb 2025 08:36
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
LabSampleId :
VSTDCCC010

Quant Time: Feb 14 04:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Fluorobenzene	1.000	1.000	0.0	93	0.00
2	T	Dichlorodifluoromethane	0.325	0.324	0.3	99	0.00
3	t	Chloromethane	0.374	0.353	5.6	94	0.00
4	Rt	Vinyl Chloride	0.370	0.368	0.5	94	0.00
5	T	Bromomethane	0.181	0.203	-12.2	99	0.00
6	T	Chloroethane	0.233	0.221	5.2	93	0.00
7	T	Trichlorofluoromethane	0.439	0.439	0.0	97	0.00
8		1,1,2-Trichloro-1,2,2-trifl	0.249	0.259	-4.0	105	0.00
9	Rt	1,1-Dichloroethene	0.254	0.256	-0.8	97	0.00
10	t	Iodomethane	0.399	0.414	-3.8	95	0.00
11	t	Allyl Chloride	0.364	0.374	-2.7	96	0.00
12	t	Acrylonitrile	0.059	0.063	-6.8	90	0.00
13	T	Acetone	0.045	0.046	-2.2	91	0.00
14	T	Carbon Disulfide	0.887	0.874	1.5	95	0.00
15	RT	Methylene Chloride	0.313	0.316	-1.0	97	0.00
16	RT	trans-1,2-Dichloroethene	0.290	0.297	-2.4	97	0.00
17	t	1,1-Dichloroethane	0.546	0.553	-1.3	96	0.00
18	T	2-Butanone	0.072	0.077	-6.9	92	0.00
19		Cyclohexane	0.439	0.482	-9.8	99	0.00
20		Methylcyclohexane	0.435	0.500	-14.9	104	0.00
21	T	2,2-Dichloropropane	0.426	0.447	-4.9	100	0.00
22	RT	cis-1,2-Dichloroethene	0.313	0.334	-6.7	99	0.00
23	t	Diethyl Ether	0.218	0.213	2.3	92	0.00
24	t	tert-Butyl Alcohol	0.026	0.022	15.4	86	0.00
25	t	Methyl tert-Butyl Ether	0.634	0.673	-6.2	94	0.00
26	t	Bromochloromethane	0.137	0.141	-2.9	96	0.00
27	t	Chloroform	0.551	0.563	-2.2	96	0.00
28	RT	1,1,1-Trichloroethane	0.446	0.463	-3.8	98	0.00
29	T	1,1-Dichloropropene	0.400	0.435	-8.7	100	0.00
30	RT	Carbon Tetrachloride	0.383	0.402	-5.0	99	0.00
31	t	Isopropyl Ether	0.779	0.841	-8.0	97	0.00
32		Ethyl-t-butyl ether	0.709	0.777	-9.6	96	0.00
33		Tert-Amyl methyl ether	0.619	0.691	-11.6	94	0.00
34	t	Propionitrile	0.022	0.024	-9.1	91	0.00
35	RT	Benzene	1.229	1.280	-4.1	97	0.00
36	RT	1,2-Dichloroethane	0.355	0.360	-1.4	95	0.00
37	RT	Trichloroethene	0.292	0.306	-4.8	98	0.00
38	Rt	1,2-Dichloropropane	0.322	0.332	-3.1	95	0.00
39	t	Methacrylonitrile	0.080	0.095	-18.8	91	0.00
40	t	Methyl acrylate	0.148	0.161	-8.8	91	0.00
41	t	Tetrahydrofuran	0.047	0.048	-2.1	88	0.00
42	t	1-Chlorobutane	0.547	0.590	-7.9	98	0.00
43	T	Dibromomethane	0.163	0.165	-1.2	95	0.00
44	T	Bromodichloromethane	0.379	0.404	-6.6	97	0.00
45	T	4-Methyl-2-Pentanone	0.171	0.188	-9.9	89	0.00
46	t	t-1,4-Dichloro-2-butene	0.080	0.192	-140.0#	213#	-0.01
47	t	Methyl methacrylate	0.137	0.157	-14.6	91	0.00
48	t	Ethyl methacrylate	0.258	0.303	-17.4	90	0.00
49	Rt	Toluene	0.707	0.782	-10.6	98	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063262.D
Acq On : 13 Feb 2025 08:36
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
LabSampleId :
VSTDCCC010

Quant Time: Feb 14 04:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
50	T	t-1,3-Dichloropropene	0.347	0.397	-14.4	97	0.00
51	T	cis-1,3-Dichloropropene	0.429	0.470	-9.6	96	0.00
52	RT	1,1,2-Trichloroethane	0.220	0.229	-4.1	94	0.00
53	t	1,3-Dichloropropane	0.390	0.407	-4.4	94	0.00
54	t	2-Hexanone	0.117	0.127	-8.5	88	0.00
55	t	Dibromochloromethane	0.253	0.274	-8.3	96	0.00
56	T	1,2-Dibromoethane	0.206	0.216	-4.9	92	0.00
57	S	4-Bromofluorobenzene	0.330	0.425	-28.8	111	0.00
58	RT	Tetrachloroethene	0.241	0.256	-6.2	102	0.00
59	Rt	Chlorobenzene	0.746	0.807	-8.2	98	0.00
60	T	1,1,1,2-Tetrachloroethane	0.268	0.287	-7.1	98	0.00
61	t	Pentachloroethane	0.239	0.251	-5.0	97	0.00
62	t	Hexachloroethane	0.212	0.232	-9.4	98	0.00
63	Rt	Ethyl Benzene	1.286	1.468	-14.2	98	0.00
64	RT	m/p-Xylenes	0.480	0.564	-17.5	99	0.00
65	RT	o-Xylene	0.470	0.533	-13.4	97	0.00
66	RT	Styrene	0.748	0.890	-19.0	97	0.00
67	t	Bromoform	0.143	0.156	-9.1	93	0.00
68	S	1,2-Dichlorobenzene-d4	0.343	0.363	-5.8	99	0.00
69	T	Isopropylbenzene	1.106	1.283	-16.0	99	0.00
70	T	1,1,2,2-Tetrachloroethane	0.296	0.310	-4.7	94	0.00
71	T	1,2,3-Trichloropropane	0.222	0.228	-2.7	104	0.00
72	t	Bromobenzene	0.298	0.324	-8.7	96	0.00
73	t	n-propylbenzene	0.317	0.380	-19.9	100	0.00
74	t	2-Chlorotoluene	0.292	0.337	-15.4	100	0.00
75	t	1,3,5-Trimethylbenzene	1.024	1.220	-19.1	99	0.00
76	t	4-Chlorotoluene	0.299	0.344	-15.1	100	0.00
77	t	tert-Butylbenzene	1.036	1.174	-13.3	98	0.00
78	t	1,2,4-Trimethylbenzene	1.016	1.222	-20.3	99	0.00
79	t	sec-Butylbenzene	1.319	1.556	-18.0	101	0.00
80		Nitrobenzene	0.007	0.008	-14.3	87	0.00
81	t	p-Isopropyltoluene	1.041	1.256	-20.7	101	0.00
82	t	1,3-Dichlorobenzene	0.578	0.642	-11.1	101	0.00
83	Rt	1,4-Dichlorobenzene	0.565	0.629	-11.3	98	0.00
84	t	n-Butylbenzene	0.933	1.167	-25.1	104	0.00
85	Rt	1,2-Dichlorobenzene	0.555	0.604	-8.8	98	0.00
86	t	1,2-Dibromo-3-Chloropropane	0.042	0.044	-4.8	85	0.00
87	Rt	1,2,4-Trichlorobenzene	0.271	0.330	-21.8	100	0.00
88	t	Hexachlorobutadiene	0.194	0.220	-13.4	113	0.00
89	t	Naphthalene	0.436	0.505	-15.8	85	0.00
90	t	1,2,3-Trichlorobenzene	0.265	0.308	-16.2	95	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063262.D
Acq On : 13 Feb 2025 08:36
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
LabSampleId :
VSTDCCC010

Quant Time: Feb 14 04:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	i	Fluorobenzene	1.000	1.000	0.0	93	0.00
2	T	Dichlorodifluoromethane	10.000	9.970	0.3	99	0.00
3	t	Chloromethane	10.000	9.446	5.5	94	0.00
4	Rt	Vinyl Chloride	10.000	9.939	0.6	94	0.00
5	T	Bromomethane	10.000	11.198	-12.0	99	0.00
6	T	Chloroethane	10.000	9.468	5.3	93	0.00
7	T	Trichlorofluoromethane	10.000	10.001	-0.0	97	0.00
8		1,1,2-Trichloro-1,2,2-trifl	10.000	10.385	-3.8	105	0.00
9	Rt	1,1-Dichloroethene	10.000	10.108	-1.1	97	0.00
10	t	Iodomethane	10.000	10.372	-3.7	95	0.00
11	t	Allyl Chloride	10.000	10.258	-2.6	96	0.00
12	t	Acrylonitrile	20.000	21.419	-7.1	90	0.00
13	T	Acetone	50.000	51.212	-2.4	91	0.00
14	T	Carbon Disulfide	10.000	9.851	1.5	95	0.00
15	RT	Methylene Chloride	10.000	10.078	-0.8	97	0.00
16	RT	trans-1,2-Dichloroethene	10.000	10.269	-2.7	97	0.00
17	t	1,1-Dichloroethane	10.000	10.133	-1.3	96	0.00
18	T	2-Butanone	50.000	53.920	-7.8	92	0.00
19		Cyclohexane	10.000	11.000	-10.0	99	0.00
20		Methylcyclohexane	10.000	11.488	-14.9	104	0.00
21	T	2,2-Dichloropropane	10.000	10.502	-5.0	100	0.00
22	RT	cis-1,2-Dichloroethene	10.000	10.678	-6.8	99	0.00
23	t	Diethyl Ether	10.000	9.774	2.3	92	0.00
24	t	tert-Butyl Alcohol	100.000	97.059	2.9	86	0.00
25	t	Methyl tert-Butyl Ether	10.000	10.626	-6.3	94	0.00
26	t	Bromochloromethane	10.000	10.298	-3.0	96	0.00
27	t	Chloroform	10.000	10.226	-2.3	96	0.00
28	RT	1,1,1-Trichloroethane	10.000	10.367	-3.7	98	0.00
29	T	1,1-Dichloropropene	10.000	10.882	-8.8	100	0.00
30	RT	Carbon Tetrachloride	10.000	10.498	-5.0	99	0.00
31	t	Isopropyl Ether	10.000	10.792	-7.9	97	0.00
32		Ethyl-t-butyl ether	10.000	10.965	-9.6	96	0.00
33		Tert-Amyl methyl ether	10.000	11.169	-11.7	94	0.00
34	t	Propionitrile	50.000	55.852	-11.7	91	0.00
35	RT	Benzene	10.000	10.417	-4.2	97	0.00
36	RT	1,2-Dichloroethane	10.000	10.147	-1.5	95	0.00
37	RT	Trichloroethene	10.000	10.460	-4.6	98	0.00
38	Rt	1,2-Dichloropropane	10.000	10.331	-3.3	95	0.00
39	t	Methacrylonitrile	10.000	11.811	-18.1	91	0.00
40	t	Methyl acrylate	10.000	10.826	-8.3	91	0.00
41	t	Tetrahydrofuran	20.000	20.669	-3.3	88	0.00
42	t	1-Chlorobutane	10.000	10.786	-7.9	98	0.00
43	T	Dibromomethane	10.000	10.154	-1.5	95	0.00
44	T	Bromodichloromethane	10.000	10.646	-6.5	97	0.00
45	T	4-Methyl-2-Pentanone	50.000	55.115	-10.2	89	0.00
46	t	t-1,4-Dichloro-2-butene	20.000	47.833	-139.2#	213	-0.01
47	t	Methyl methacrylate	20.000	22.854	-14.3	91	0.00
48	t	Ethyl methacrylate	10.000	11.777	-17.8	90	0.00
49	Rt	Toluene	10.000	11.073	-10.7	98	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063262.D
Acq On : 13 Feb 2025 08:36
Operator : MD/SY
Sample : VSTDCCC010
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_U
LabSampleId :
VSTDCCC010

Quant Time: Feb 14 04:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
50	T	t-1,3-Dichloropropene	10.000	11.433	-14.3	97	0.00
51	T	cis-1,3-Dichloropropene	10.000	10.974	-9.7	96	0.00
52	RT	1,1,2-Trichloroethane	10.000	10.409	-4.1	94	0.00
53	t	1,3-Dichloropropane	10.000	10.448	-4.5	94	0.00
54	t	2-Hexanone	50.000	54.661	-9.3	88	0.00
55	t	Dibromochloromethane	10.000	10.851	-8.5	96	0.00
56	T	1,2-Dibromoethane	10.000	10.494	-4.9	92	0.00
57	S	4-Bromofluorobenzene	1.000	1.288	-28.8	111	0.00
58	RT	Tetrachloroethene	10.000	10.612	-6.1	102	0.00
59	Rt	Chlorobenzene	10.000	10.822	-8.2	98	0.00
60	T	1,1,1,2-Tetrachloroethane	10.000	10.720	-7.2	98	0.00
61	t	Pentachloroethane	10.000	10.465	-4.6	97	0.00
62	t	Hexachloroethane	10.000	10.970	-9.7	98	0.00
63	Rt	Ethyl Benzene	10.000	11.412	-14.1	98	0.00
64	RT	m/p-Xylenes	20.000	23.502	-17.5	99	0.00
65	RT	o-Xylene	10.000	11.342	-13.4	97	0.00
66	RT	Styrene	10.000	11.887	-18.9	97	0.00
67	t	Bromoform	10.000	10.863	-8.6	93	0.00
68	S	1,2-Dichlorobenzene-d4	1.000	1.057	-5.7	99	0.00
69	T	Isopropylbenzene	10.000	11.602	-16.0	99	0.00
70	T	1,1,2,2-Tetrachloroethane	10.000	10.469	-4.7	94	0.00
71	T	1,2,3-Trichloropropane	10.000	10.245	-2.4	104	0.00
72	t	Bromobenzene	10.000	10.881	-8.8	96	0.00
73	t	n-propylbenzene	10.000	12.000	-20.0	100	0.00
74	t	2-Chlorotoluene	10.000	11.545	-15.4	100	0.00
75	t	1,3,5-Trimethylbenzene	10.000	11.906	-19.1	99	0.00
76	t	4-Chlorotoluene	10.000	11.511	-15.1	100	0.00
77	t	tert-Butylbenzene	10.000	11.330	-13.3	98	0.00
78	t	1,2,4-Trimethylbenzene	10.000	12.019	-20.2	99	0.00
79	t	sec-Butylbenzene	10.000	11.798	-18.0	101	0.00
80		Nitrobenzene	50.000	47.324	5.4	87	0.00
81	t	p-Isopropyltoluene	10.000	12.067	-20.7	101	0.00
82	t	1,3-Dichlorobenzene	10.000	11.119	-11.2	101	0.00
83	Rt	1,4-Dichlorobenzene	10.000	11.131	-11.3	98	0.00
84	t	n-Butylbenzene	10.000	12.498	-25.0	104	0.00
85	Rt	1,2-Dichlorobenzene	10.000	10.882	-8.8	98	0.00
86	t	1,2-Dibromo-3-Chloropropane	10.000	10.704	-7.0	85	0.00
87	Rt	1,2,4-Trichlorobenzene	10.000	12.188	-21.9	100	0.00
88	t	Hexachlorobutadiene	10.000	11.369	-13.7	113	0.00
89	t	Naphthalene	10.000	9.007	9.9	85	0.00
90	t	1,2,3-Trichlorobenzene	10.000	11.635	-16.3	95	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

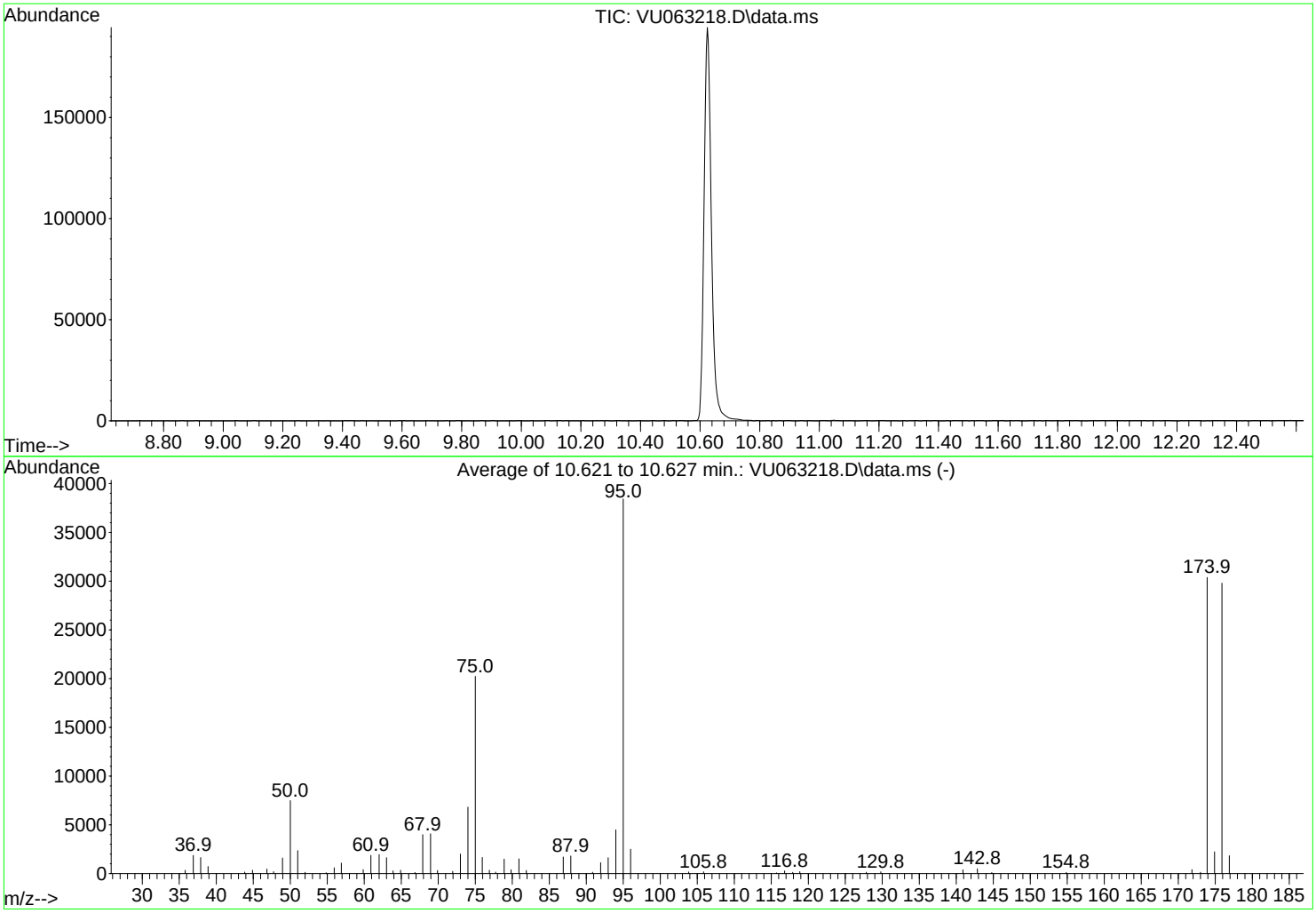
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021025\
Data File : VU063218.D
Acq On : 10 Feb 2025 09:06
Operator : MD/SY
Sample : BFB
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
BFB

Integration File: rteint.p

Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Title : METHOD 524.2 VOLATILES DRINKING WATER
Last Update : Tue Feb 11 08:42:19 2025



AutoFind: Scans 2902, 2903, 2904; Background Corrected with Scan 2890

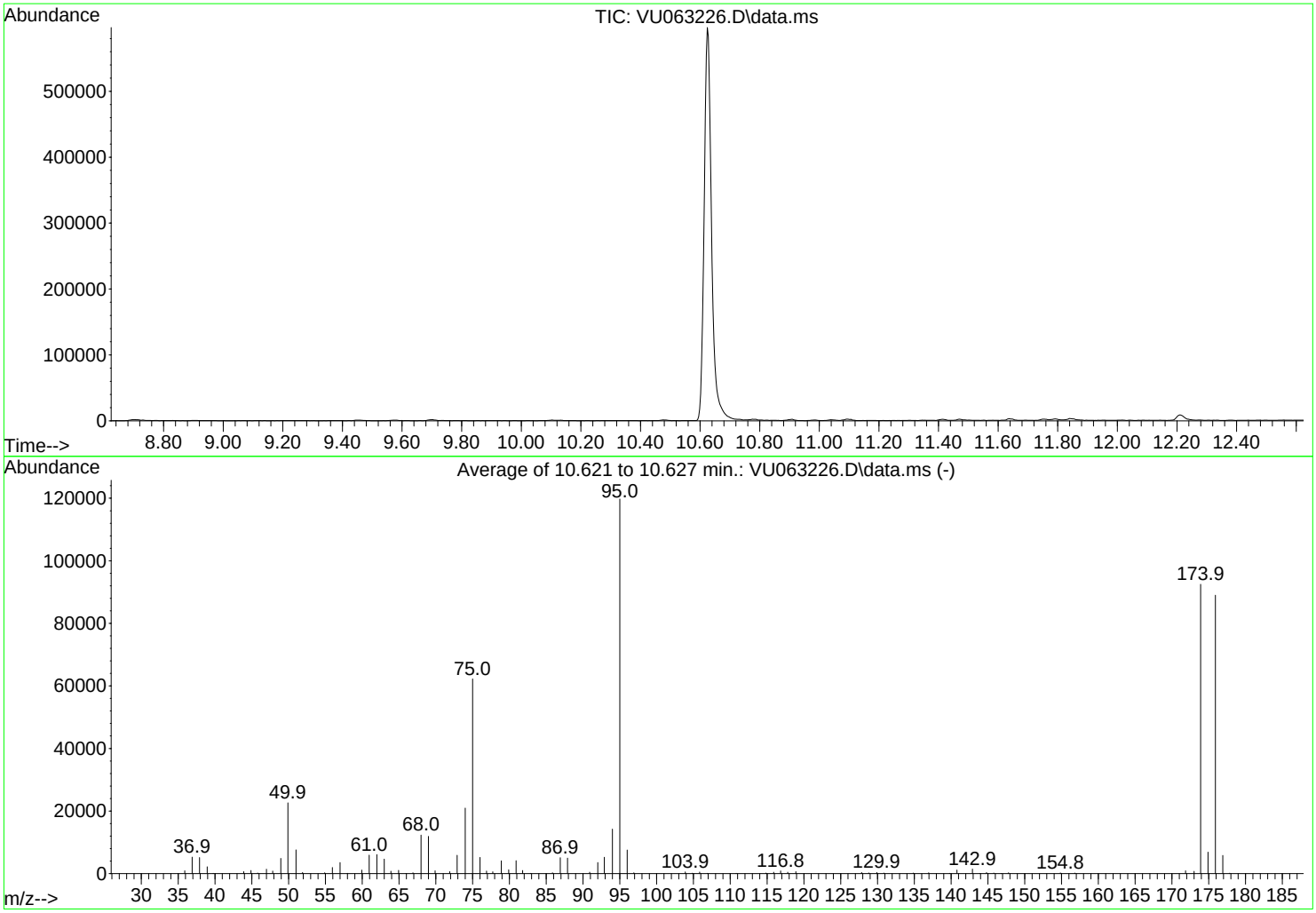
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	7489	PASS
75	95	30	60	52.7	20232	PASS
95	95	100	100	100.0	38421	PASS
96	95	5	9	6.5	2505	PASS
173	174	0.00	2	0.5	139	PASS
174	95	50	100	79.1	30381	PASS
175	174	5	9	7.3	2224	PASS
176	174	95	101	98.1	29792	PASS
177	176	5	9	6.2	1844	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063226.D
Acq On : 11 Feb 2025 08:11
Operator : MD/SY
Sample : BFB
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
BFB

Integration File: rteint.p

Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Title : METHOD 524.2 VOLATILES DRINKING WATER
Last Update : Tue Feb 11 08:42:19 2025



AutoFind: Scans 2902, 2903, 2904; Background Corrected with Scan 2889

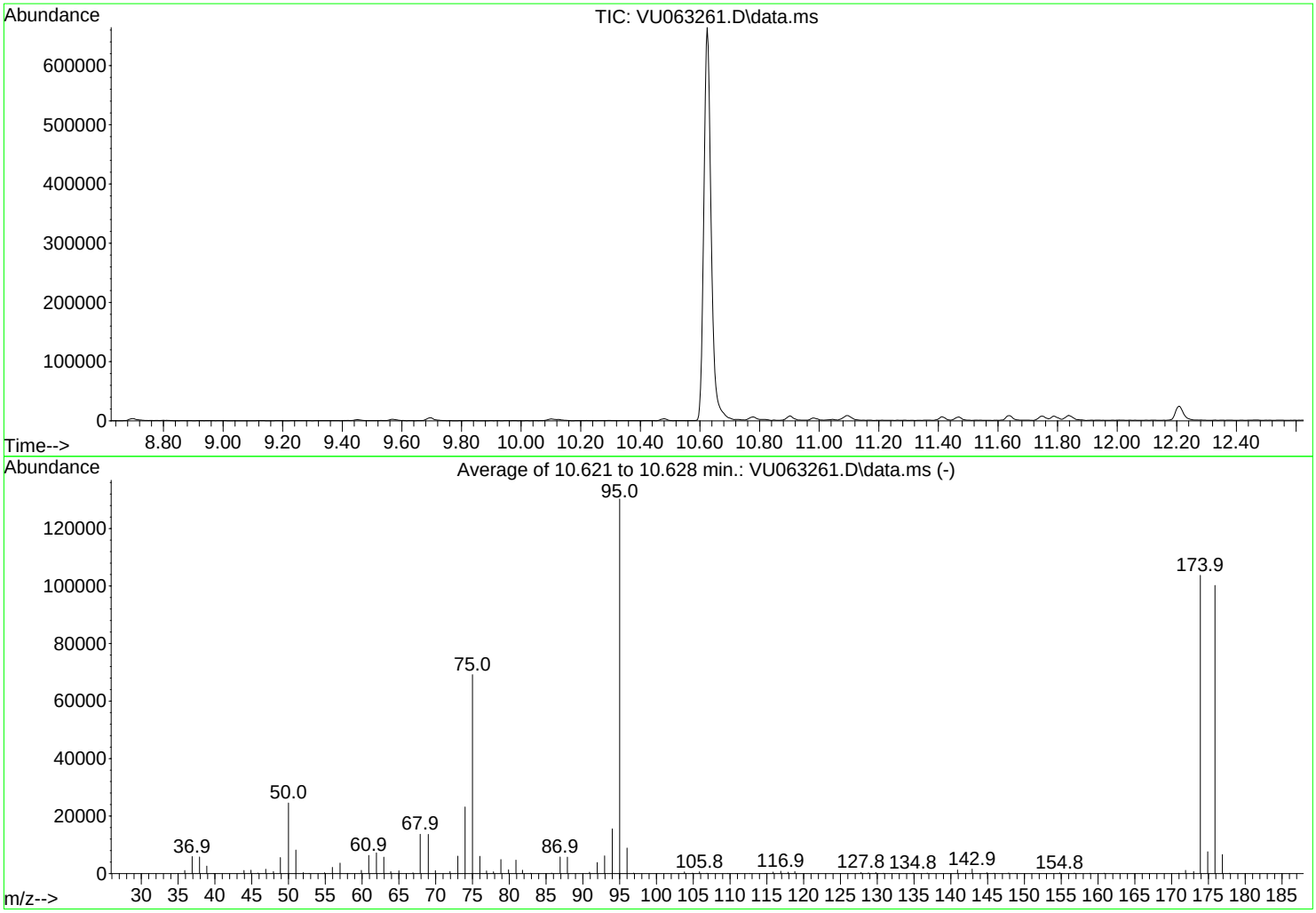
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.9	22621	PASS
75	95	30	60	52.0	62235	PASS
95	95	100	100	100.0	119757	PASS
96	95	5	9	6.3	7557	PASS
173	174	0.00	2	0.8	738	PASS
174	95	50	100	77.3	92515	PASS
175	174	5	9	7.4	6861	PASS
176	174	95	101	96.2	88989	PASS
177	176	5	9	6.5	5816	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063261.D
Acq On : 13 Feb 2025 08:06
Operator : MD/SY
Sample : BFB
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
BFB

Integration File: rteint.p

Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Title : METHOD 524.2 VOLATILES DRINKING WATER
Last Update : Tue Feb 11 08:42:19 2025



AutoFind: Scans 2902, 2903, 2904; Background Corrected with Scan 2888

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.9	24589	PASS
75	95	30	60	53.1	69179	PASS
95	95	100	100	100.0	130275	PASS
96	95	5	9	6.8	8880	PASS
173	174	0.00	2	0.7	745	PASS
174	95	50	100	79.6	103747	PASS
175	174	5	9	7.4	7635	PASS
176	174	95	101	96.6	100208	PASS
177	176	5	9	6.6	6618	PASS

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBL01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBL01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063229.D	1		02/11/25 11:14	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.14	U	0.14	0.50	ug/L
74-87-3	Chloromethane	0.13	U	0.13	0.50	ug/L
75-01-4	Vinyl Chloride	0.13	U	0.13	0.50	ug/L
74-83-9	Bromomethane	0.18	U	0.18	0.50	ug/L
75-00-3	Chloroethane	0.14	U	0.14	0.50	ug/L
109-99-9	Tetrahydrofuran	0.44	U	0.44	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.21	U	0.21	0.50	ug/L
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.14	U	0.14	0.50	ug/L
75-65-0	tert-Butyl Alcohol	8.60	U	8.60	10.0	ug/L
60-29-7	Diethyl Ether	0.13	U	0.13	0.50	ug/L
75-35-4	1,1-Dichloroethene	0.12	U	0.12	0.50	ug/L
107-13-1	Acrylonitrile	0.44	U	0.44	1.00	ug/L
67-64-1	Acetone	1.10	U	1.10	2.50	ug/L
75-15-0	Carbon Disulfide	0.13	U	0.13	0.50	ug/L
1634-04-4	Methyl tert-Butyl Ether	0.12	U	0.12	0.50	ug/L
96-33-3	Methyl acrylate	0.28	U	0.28	0.50	ug/L
75-09-2	Methylene Chloride	0.47	U	0.47	0.50	ug/L
156-60-5	trans-1,2-Dichloroethene	0.14	U	0.14	0.50	ug/L
75-34-3	1,1-Dichloroethane	0.13	U	0.13	0.50	ug/L
110-82-7	Cyclohexane	0.14	U	0.14	0.50	ug/L
78-93-3	2-Butanone	0.68	U	0.68	2.50	ug/L
56-23-5	Carbon Tetrachloride	0.14	U	0.14	0.50	ug/L
594-20-7	2,2-Dichloropropane	0.14	U	0.14	0.50	ug/L
156-59-2	cis-1,2-Dichloroethene	0.13	U	0.13	0.50	ug/L
74-97-5	Bromochloromethane	0.16	U	0.16	0.50	ug/L
67-66-3	Chloroform	0.13	U	0.13	0.50	ug/L
71-55-6	1,1,1-Trichloroethane	0.12	U	0.12	0.50	ug/L
108-87-2	Methylcyclohexane	0.12	U	0.12	0.50	ug/L
563-58-6	1,1-Dichloropropene	0.11	U	0.11	0.50	ug/L
107-12-0	Propionitrile	1.00	U	1.00	2.50	ug/L

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

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBL01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBL01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063229.D	1		02/11/25 11:14	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	0.11	U	0.11	0.50	ug/L
107-06-2	1,2-Dichloroethane	0.16	U	0.16	0.50	ug/L
79-01-6	Trichloroethene	0.13	U	0.13	0.50	ug/L
78-87-5	1,2-Dichloropropane	0.13	U	0.13	0.50	ug/L
109-69-3	1-Chlorobutane	0.12	U	0.12	0.50	ug/L
74-95-3	Dibromomethane	0.14	U	0.14	0.50	ug/L
75-27-4	Bromodichloromethane	0.12	U	0.12	0.50	ug/L
108-10-1	4-Methyl-2-Pentanone	0.60	U	0.60	2.50	ug/L
108-88-3	Toluene	0.11	U	0.11	0.50	ug/L
10061-02-6	t-1,3-Dichloropropene	0.11	U	0.11	0.50	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.11	U	0.11	0.50	ug/L
79-00-5	1,1,2-Trichloroethane	0.13	U	0.13	0.50	ug/L
142-28-9	1,3-Dichloropropane	0.13	U	0.13	0.50	ug/L
591-78-6	2-Hexanone	0.57	U	0.57	2.50	ug/L
124-48-1	Dibromochloromethane	0.13	U	0.13	0.50	ug/L
106-93-4	1,2-Dibromoethane	0.13	U	0.13	0.50	ug/L
127-18-4	Tetrachloroethene	0.14	U	0.14	0.50	ug/L
108-90-7	Chlorobenzene	0.11	U	0.11	0.50	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	0.13	U	0.13	0.50	ug/L
67-72-1	Hexachloroethane	0.12	U	0.12	0.50	ug/L
100-41-4	Ethyl Benzene	0.12	U	0.12	0.50	ug/L
179601-23-1	m/p-Xylenes	0.23	U	0.23	1.00	ug/L
1330-20-7	Total Xylenes	0.35	U	0.35	1.50	ug/L
95-47-6	o-Xylene	0.12	U	0.12	0.50	ug/L
100-42-5	Styrene	0.13	U	0.13	0.50	ug/L
75-25-2	Bromoform	0.14	U	0.14	0.50	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	0.50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.12	U	0.12	0.50	ug/L
96-18-4	1,2,3-Trichloropropane	0.21	U	0.21	0.50	ug/L
108-86-1	Bromobenzene	0.13	U	0.13	0.50	ug/L
103-65-1	n-propylbenzene	0.16	U	0.16	0.50	ug/L

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBL01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBL01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063229.D	1		02/11/25 11:14	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
95-49-8	2-Chlorotoluene	0.14	U	0.14	0.50	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.13	U	0.13	0.50	ug/L
106-43-4	4-Chlorotoluene	0.14	U	0.14	0.50	ug/L
98-06-6	tert-Butylbenzene	0.11	U	0.11	0.50	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.13	U	0.13	0.50	ug/L
135-98-8	sec-Butylbenzene	0.13	U	0.13	0.50	ug/L
99-87-6	p-Isopropyltoluene	0.16	U	0.16	0.50	ug/L
541-73-1	1,3-Dichlorobenzene	0.13	U	0.13	0.50	ug/L
106-46-7	1,4-Dichlorobenzene	0.14	U	0.14	0.50	ug/L
104-51-8	n-Butylbenzene	0.28	U	0.28	0.50	ug/L
95-50-1	1,2-Dichlorobenzene	0.14	U	0.14	0.50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.23	U	0.23	0.50	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.21	U	0.21	0.50	ug/L
87-68-3	Hexachlorobutadiene	0.14	U	0.14	0.50	ug/L
91-20-3	Naphthalene	0.31	U	0.31	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.25	U	0.25	0.50	ug/L
74-88-4	Iodomethane	0.16	U	0.16	1.00	ug/L
107-05-1	Allyl Chloride	0.11	U	0.11	0.50	ug/L
126-98-7	Methacrylonitrile	0.19	U	0.19	0.50	ug/L
80-62-6	Methyl methacrylate	0.24	U	0.24	1.00	ug/L
SURROGATES						
2199-69-1	1,2-Dichlorobenzene-d4	0.82		70 - 130	82%	SPK: 1
460-00-4	4-Bromofluorobenzene	0.81		70 - 130	81%	SPK: 1
INTERNAL STANDARDS						
462-06-6	Fluorobenzene	52200	6.107			

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBL01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBL01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063229.D	1		02/11/25 11:14	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063229.D
Acq On : 11 Feb 2025 11:14
Operator : MD/SY
Sample : VU0211WBL01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBL01

Quant Time: Feb 12 03:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

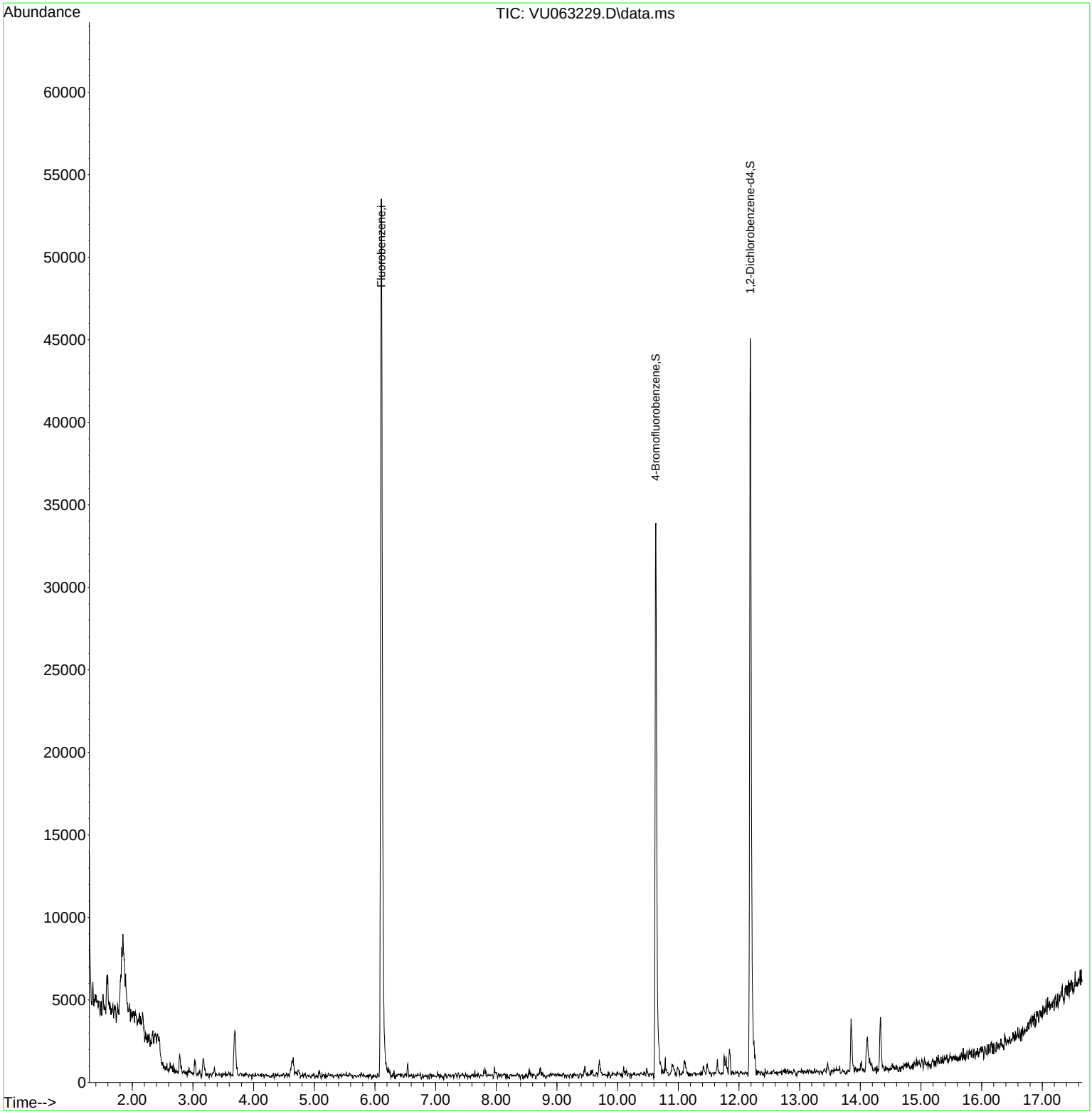
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.107	96	52216	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.627	95	13937	0.809	ug/l	0.00
Spiked Amount 1.000			Recovery = 81.000%			
68) 1,2-Dichlorobenzene-d4	12.187	152	14680	0.820	ug/l	0.00
Spiked Amount 1.000			Recovery = 82.000%			
Target Compounds						Qvalue

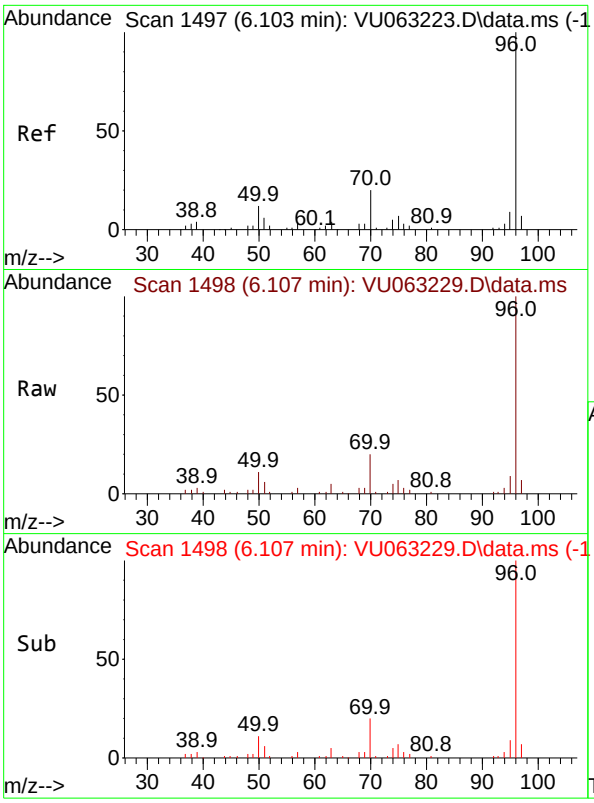
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063229.D
Acq On : 11 Feb 2025 11:14
Operator : MD/SY
Sample : VU0211WBL01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBL01

Quant Time: Feb 12 03:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration



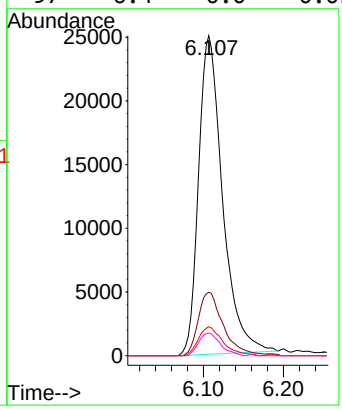


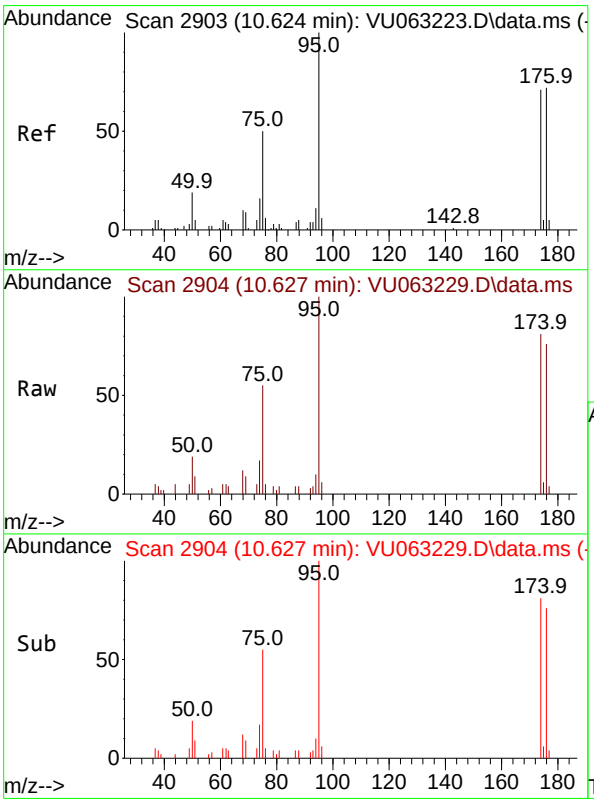
#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.107 min Scan# 14
Delta R.T. 0.004 min
Lab File: VU063229.D
Acq: 11 Feb 2025 11:14

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBL01

Tgt Ion: 96 Resp: 52216

Ion	Ratio	Lower	Upper
96	100		
70	20.0	15.6	23.4
95	9.2	7.3	10.9
97	6.4	0.0	0.0#

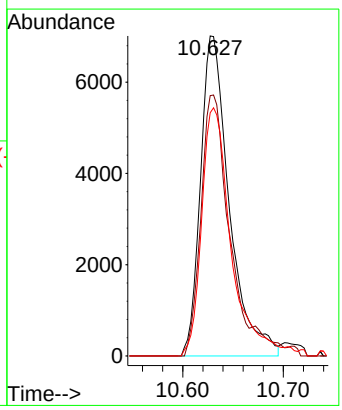


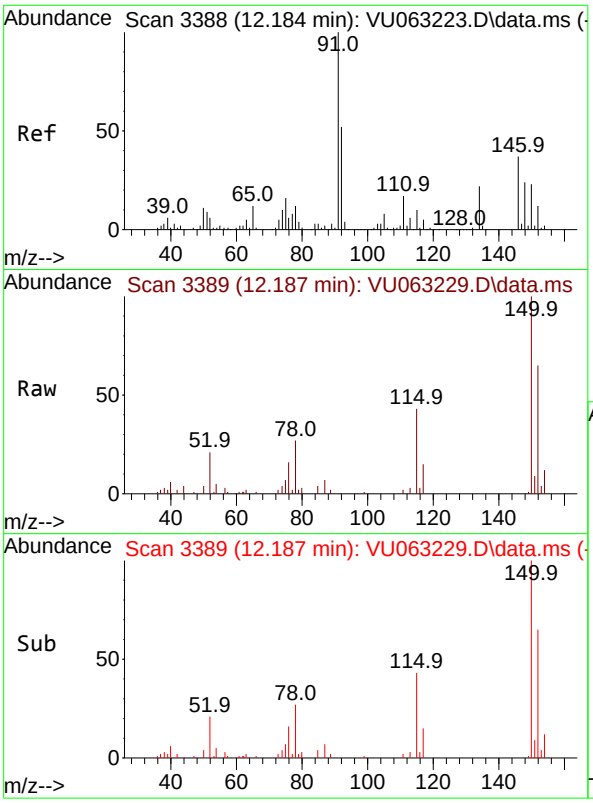


#57
4-Bromofluorobenzene
Concen: 0.809 ug/l
RT: 10.627 min Scan# 2904
Delta R.T. 0.003 min
Lab File: VU063229.D
Acq: 11 Feb 2025 11:14

Tgt Ion: 95 Resp: 13937

Ion	Ratio	Lower	Upper
95	100		
174	82.6	58.6	88.0
176	80.1	58.2	87.4



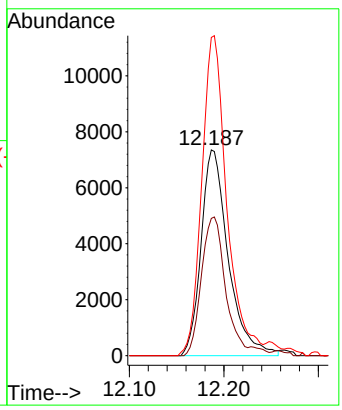


#68
1,2-Dichlorobenzene-d4
Concen: 0.820 ug/l
RT: 12.187 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063229.D
Acq: 11 Feb 2025 11:14

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBL01

Tgt Ion:152 Resp: 14680

Ion	Ratio	Lower	Upper
152	100		
115	61.4	0.0	275.2
150	143.3	0.0	658.4



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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0213WBL01	SDG No.:	Q1172
Lab Sample ID:	VU0213WBL01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063263.D	1		02/13/25 13:05	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.14	U	0.14	0.50	ug/L
74-87-3	Chloromethane	0.13	U	0.13	0.50	ug/L
75-01-4	Vinyl Chloride	0.13	U	0.13	0.50	ug/L
74-83-9	Bromomethane	0.18	U	0.18	0.50	ug/L
75-00-3	Chloroethane	0.14	U	0.14	0.50	ug/L
109-99-9	Tetrahydrofuran	0.44	U	0.44	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.21	U	0.21	0.50	ug/L
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.14	U	0.14	0.50	ug/L
75-65-0	tert-Butyl Alcohol	8.60	U	8.60	10.0	ug/L
60-29-7	Diethyl Ether	0.13	U	0.13	0.50	ug/L
75-35-4	1,1-Dichloroethene	0.12	U	0.12	0.50	ug/L
107-13-1	Acrylonitrile	0.44	U	0.44	1.00	ug/L
67-64-1	Acetone	1.10	U	1.10	2.50	ug/L
75-15-0	Carbon Disulfide	0.13	U	0.13	0.50	ug/L
1634-04-4	Methyl tert-Butyl Ether	0.12	U	0.12	0.50	ug/L
96-33-3	Methyl acrylate	0.28	U	0.28	0.50	ug/L
75-09-2	Methylene Chloride	0.47	U	0.47	0.50	ug/L
156-60-5	trans-1,2-Dichloroethene	0.14	U	0.14	0.50	ug/L
75-34-3	1,1-Dichloroethane	0.13	U	0.13	0.50	ug/L
110-82-7	Cyclohexane	0.14	U	0.14	0.50	ug/L
78-93-3	2-Butanone	0.68	U	0.68	2.50	ug/L
56-23-5	Carbon Tetrachloride	0.14	U	0.14	0.50	ug/L
594-20-7	2,2-Dichloropropane	0.14	U	0.14	0.50	ug/L
156-59-2	cis-1,2-Dichloroethene	0.13	U	0.13	0.50	ug/L
74-97-5	Bromochloromethane	0.16	U	0.16	0.50	ug/L
67-66-3	Chloroform	0.13	U	0.13	0.50	ug/L
71-55-6	1,1,1-Trichloroethane	0.12	U	0.12	0.50	ug/L
108-87-2	Methylcyclohexane	0.12	U	0.12	0.50	ug/L
563-58-6	1,1-Dichloropropene	0.11	U	0.11	0.50	ug/L
107-12-0	Propionitrile	1.00	U	1.00	2.50	ug/L

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0213WBL01	SDG No.:	Q1172
Lab Sample ID:	VU0213WBL01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063263.D	1		02/13/25 13:05	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	0.11	U	0.11	0.50	ug/L
107-06-2	1,2-Dichloroethane	0.16	U	0.16	0.50	ug/L
79-01-6	Trichloroethene	0.13	U	0.13	0.50	ug/L
78-87-5	1,2-Dichloropropane	0.13	U	0.13	0.50	ug/L
109-69-3	1-Chlorobutane	0.12	U	0.12	0.50	ug/L
74-95-3	Dibromomethane	0.14	U	0.14	0.50	ug/L
75-27-4	Bromodichloromethane	0.12	U	0.12	0.50	ug/L
108-10-1	4-Methyl-2-Pentanone	0.60	U	0.60	2.50	ug/L
108-88-3	Toluene	0.11	U	0.11	0.50	ug/L
10061-02-6	t-1,3-Dichloropropene	0.11	U	0.11	0.50	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.11	U	0.11	0.50	ug/L
79-00-5	1,1,2-Trichloroethane	0.13	U	0.13	0.50	ug/L
142-28-9	1,3-Dichloropropane	0.13	U	0.13	0.50	ug/L
591-78-6	2-Hexanone	0.57	U	0.57	2.50	ug/L
124-48-1	Dibromochloromethane	0.13	U	0.13	0.50	ug/L
106-93-4	1,2-Dibromoethane	0.13	U	0.13	0.50	ug/L
127-18-4	Tetrachloroethene	0.14	U	0.14	0.50	ug/L
108-90-7	Chlorobenzene	0.11	U	0.11	0.50	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	0.13	U	0.13	0.50	ug/L
67-72-1	Hexachloroethane	0.12	U	0.12	0.50	ug/L
100-41-4	Ethyl Benzene	0.12	U	0.12	0.50	ug/L
179601-23-1	m/p-Xylenes	0.23	U	0.23	1.00	ug/L
1330-20-7	Total Xylenes	0.35	U	0.35	1.50	ug/L
95-47-6	o-Xylene	0.12	U	0.12	0.50	ug/L
100-42-5	Styrene	0.13	U	0.13	0.50	ug/L
75-25-2	Bromoform	0.14	U	0.14	0.50	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	0.50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.12	U	0.12	0.50	ug/L
96-18-4	1,2,3-Trichloropropane	0.21	U	0.21	0.50	ug/L
108-86-1	Bromobenzene	0.13	U	0.13	0.50	ug/L
103-65-1	n-propylbenzene	0.16	U	0.16	0.50	ug/L

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0213WBL01	SDG No.:	Q1172
Lab Sample ID:	VU0213WBL01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063263.D	1		02/13/25 13:05	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
95-49-8	2-Chlorotoluene	0.14	U	0.14	0.50	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.13	U	0.13	0.50	ug/L
106-43-4	4-Chlorotoluene	0.14	U	0.14	0.50	ug/L
98-06-6	tert-Butylbenzene	0.11	U	0.11	0.50	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.13	U	0.13	0.50	ug/L
135-98-8	sec-Butylbenzene	0.13	U	0.13	0.50	ug/L
99-87-6	p-Isopropyltoluene	0.16	U	0.16	0.50	ug/L
541-73-1	1,3-Dichlorobenzene	0.13	U	0.13	0.50	ug/L
106-46-7	1,4-Dichlorobenzene	0.14	U	0.14	0.50	ug/L
104-51-8	n-Butylbenzene	0.28	U	0.28	0.50	ug/L
95-50-1	1,2-Dichlorobenzene	0.14	U	0.14	0.50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.23	U	0.23	0.50	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.21	U	0.21	0.50	ug/L
87-68-3	Hexachlorobutadiene	0.14	U	0.14	0.50	ug/L
91-20-3	Naphthalene	0.31	U	0.31	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.25	U	0.25	0.50	ug/L
74-88-4	Iodomethane	0.16	U	0.16	1.00	ug/L
107-05-1	Allyl Chloride	0.11	U	0.11	0.50	ug/L
126-98-7	Methacrylonitrile	0.19	U	0.19	0.50	ug/L
80-62-6	Methyl methacrylate	0.24	U	0.24	1.00	ug/L
SURROGATES						
2199-69-1	1,2-Dichlorobenzene-d4	0.81		70 - 130	81%	SPK: 1
460-00-4	4-Bromofluorobenzene	0.87		70 - 130	87%	SPK: 1
INTERNAL STANDARDS						
462-06-6	Fluorobenzene	46100	6.107			

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0213WBL01	SDG No.:	Q1172
Lab Sample ID:	VU0213WBL01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063263.D	1		02/13/25 13:05	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063263.D
Acq On : 13 Feb 2025 13:05
Operator : MD/SY
Sample : VU0213WBL01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBL01

Quant Time: Feb 14 04:44:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

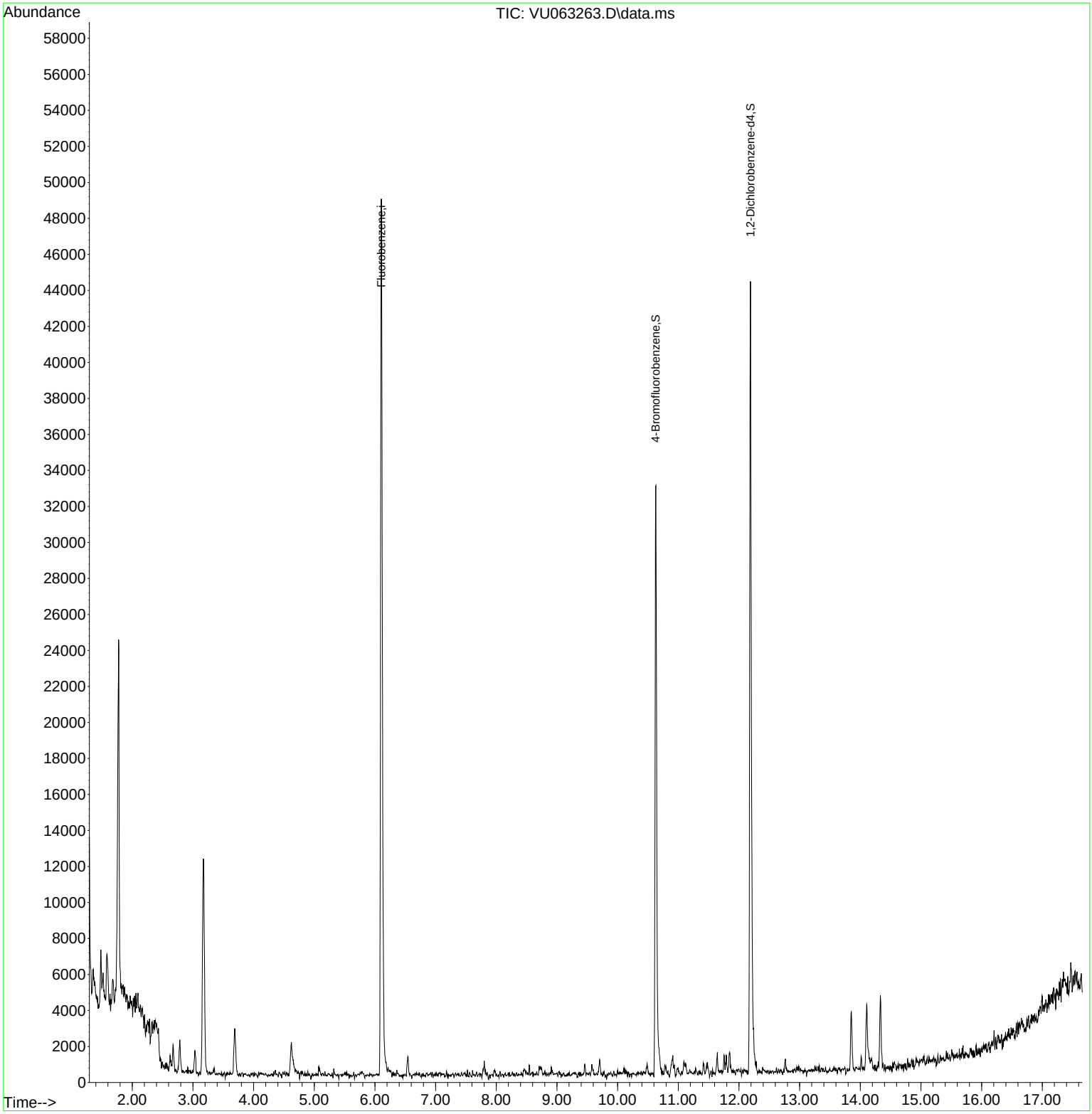
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.107	96	46092	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.627	95	13151	0.865	ug/l	0.00
Spiked Amount 1.000			Recovery = 86.000%			
68) 1,2-Dichlorobenzene-d4	12.190	152	12766	0.807	ug/l	0.00
Spiked Amount 1.000			Recovery = 81.000%			
Target Compounds						Qvalue

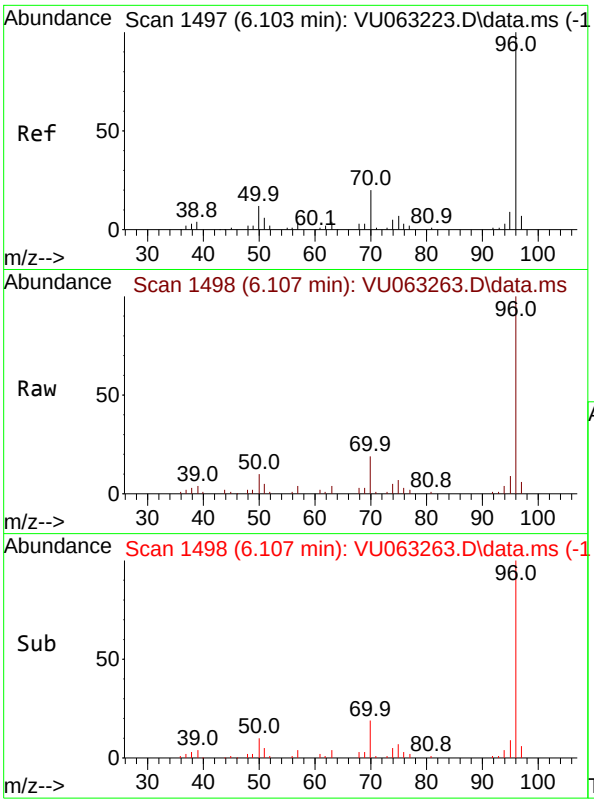
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063263.D
Acq On : 13 Feb 2025 13:05
Operator : MD/SY
Sample : VU0213WBL01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBL01

Quant Time: Feb 14 04:44:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration



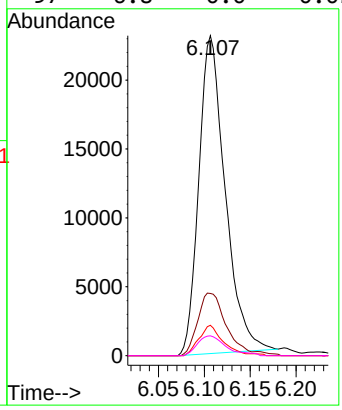


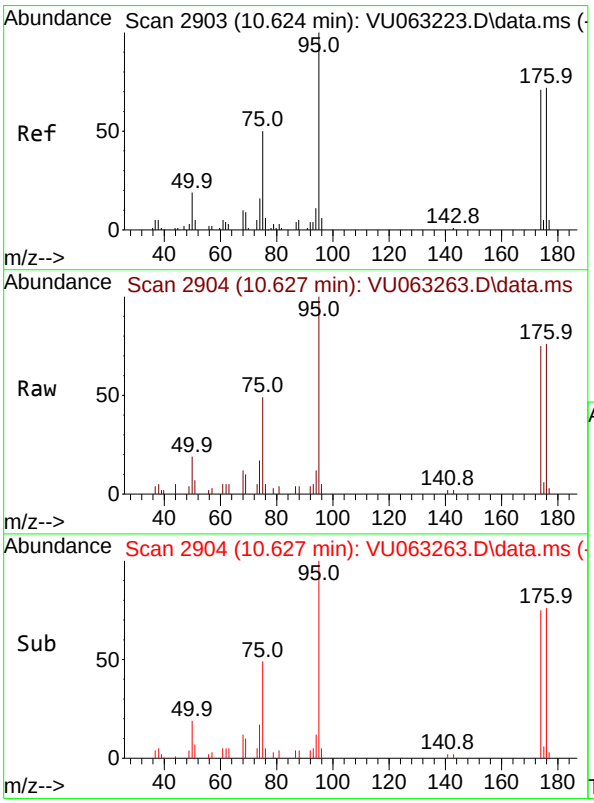
#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.107 min Scan# 14
Delta R.T. 0.004 min
Lab File: VU063263.D
Acq: 13 Feb 2025 13:05

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBL01

Tgt Ion: 96 Resp: 46092

Ion	Ratio	Lower	Upper
96	100		
70	19.5	15.6	23.4
95	8.0	7.3	10.9
97	6.8	0.0	0.0#

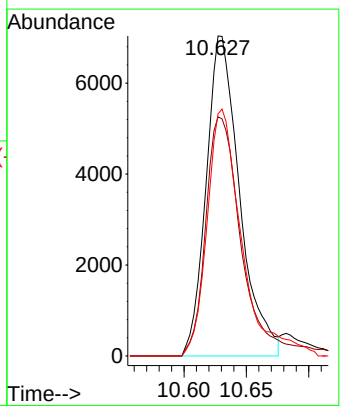


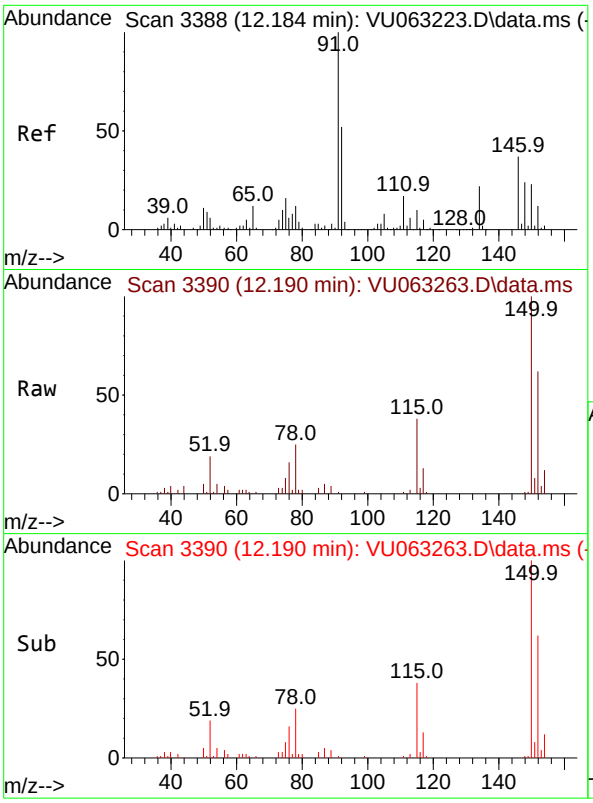


#57
4-Bromofluorobenzene
Concen: 0.865 ug/l
RT: 10.627 min Scan# 2904
Delta R.T. 0.003 min
Lab File: VU063263.D
Acq: 13 Feb 2025 13:05

Tgt Ion: 95 Resp: 13151

Ion	Ratio	Lower	Upper
95	100		
174	80.3	58.6	88.0
176	79.7	58.2	87.4



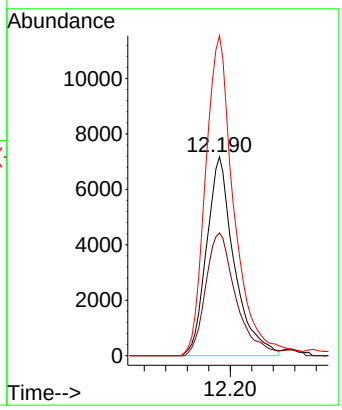


#68
1,2-Dichlorobenzene-d4
Concen: 0.807 ug/l
RT: 12.190 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063263.D
Acq: 13 Feb 2025 13:05

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBL01

Tgt Ion:152 Resp: 12766

Ion	Ratio	Lower	Upper
152	100		
115	67.9	0.0	275.2
150	166.4	0.0	658.4



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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBS01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBS01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063230.D	1		02/11/25 12:07	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	1.90		0.14	0.50	ug/L
74-87-3	Chloromethane	1.90		0.13	0.50	ug/L
75-01-4	Vinyl Chloride	2.00		0.13	0.50	ug/L
74-83-9	Bromomethane	2.20		0.18	0.50	ug/L
75-00-3	Chloroethane	2.00		0.14	0.50	ug/L
109-99-9	Tetrahydrofuran	3.40		0.44	1.00	ug/L
75-69-4	Trichlorofluoromethane	2.10		0.21	0.50	ug/L
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.00		0.14	0.50	ug/L
75-65-0	tert-Butyl Alcohol	10.6		8.60	10.0	ug/L
60-29-7	Diethyl Ether	1.90		0.13	0.50	ug/L
75-35-4	1,1-Dichloroethene	2.00		0.12	0.50	ug/L
107-13-1	Acrylonitrile	3.60		0.44	1.00	ug/L
67-64-1	Acetone	8.90		1.10	2.50	ug/L
75-15-0	Carbon Disulfide	2.00		0.13	0.50	ug/L
1634-04-4	Methyl tert-Butyl Ether	1.90		0.12	0.50	ug/L
96-33-3	Methyl acrylate	1.90		0.28	0.50	ug/L
75-09-2	Methylene Chloride	1.90		0.47	0.50	ug/L
156-60-5	trans-1,2-Dichloroethene	2.00		0.14	0.50	ug/L
75-34-3	1,1-Dichloroethane	1.90		0.13	0.50	ug/L
110-82-7	Cyclohexane	1.90		0.14	0.50	ug/L
78-93-3	2-Butanone	8.90		0.68	2.50	ug/L
56-23-5	Carbon Tetrachloride	2.00		0.14	0.50	ug/L
594-20-7	2,2-Dichloropropane	2.00		0.14	0.50	ug/L
156-59-2	cis-1,2-Dichloroethene	1.90		0.13	0.50	ug/L
74-97-5	Bromochloromethane	2.00		0.16	0.50	ug/L
67-66-3	Chloroform	2.00		0.13	0.50	ug/L
71-55-6	1,1,1-Trichloroethane	2.00		0.12	0.50	ug/L
108-87-2	Methylcyclohexane	2.00		0.12	0.50	ug/L
563-58-6	1,1-Dichloropropene	2.00		0.11	0.50	ug/L
107-12-0	Propionitrile	8.90		1.00	2.50	ug/L

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBS01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBS01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063230.D	1		02/11/25 12:07	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	1.90		0.11	0.50	ug/L
107-06-2	1,2-Dichloroethane	1.90		0.16	0.50	ug/L
79-01-6	Trichloroethene	2.00		0.13	0.50	ug/L
78-87-5	1,2-Dichloropropane	1.90		0.13	0.50	ug/L
109-69-3	1-Chlorobutane	1.90		0.12	0.50	ug/L
74-95-3	Dibromomethane	1.90		0.14	0.50	ug/L
75-27-4	Bromodichloromethane	2.00		0.12	0.50	ug/L
108-10-1	4-Methyl-2-Pentanone	9.40		0.60	2.50	ug/L
108-88-3	Toluene	2.00		0.11	0.50	ug/L
10061-02-6	t-1,3-Dichloropropene	2.00		0.11	0.50	ug/L
10061-01-5	cis-1,3-Dichloropropene	2.00		0.11	0.50	ug/L
79-00-5	1,1,2-Trichloroethane	1.90		0.13	0.50	ug/L
142-28-9	1,3-Dichloropropane	1.90		0.13	0.50	ug/L
591-78-6	2-Hexanone	9.10		0.57	2.50	ug/L
124-48-1	Dibromochloromethane	2.00		0.13	0.50	ug/L
106-93-4	1,2-Dibromoethane	1.90		0.13	0.50	ug/L
127-18-4	Tetrachloroethene	2.00		0.14	0.50	ug/L
108-90-7	Chlorobenzene	2.00		0.11	0.50	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	1.90		0.13	0.50	ug/L
67-72-1	Hexachloroethane	1.80		0.12	0.50	ug/L
100-41-4	Ethyl Benzene	1.90		0.12	0.50	ug/L
179601-23-1	m/p-Xylenes	3.90		0.23	1.00	ug/L
1330-20-7	Total Xylenes	5.80		0.35	1.50	ug/L
95-47-6	o-Xylene	1.90		0.12	0.50	ug/L
100-42-5	Styrene	1.90		0.13	0.50	ug/L
75-25-2	Bromoform	1.90		0.14	0.50	ug/L
98-82-8	Isopropylbenzene	1.90		0.13	0.50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.90		0.12	0.50	ug/L
96-18-4	1,2,3-Trichloropropane	2.00		0.21	0.50	ug/L
108-86-1	Bromobenzene	2.00		0.13	0.50	ug/L
103-65-1	n-propylbenzene	2.00		0.16	0.50	ug/L

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBS01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBS01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063230.D	1		02/11/25 12:07	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
95-49-8	2-Chlorotoluene	2.00		0.14	0.50	ug/L
108-67-8	1,3,5-Trimethylbenzene	2.00		0.13	0.50	ug/L
106-43-4	4-Chlorotoluene	2.00		0.14	0.50	ug/L
98-06-6	tert-Butylbenzene	1.90		0.11	0.50	ug/L
95-63-6	1,2,4-Trimethylbenzene	1.90		0.13	0.50	ug/L
135-98-8	sec-Butylbenzene	2.00		0.13	0.50	ug/L
99-87-6	p-Isopropyltoluene	1.90		0.16	0.50	ug/L
541-73-1	1,3-Dichlorobenzene	1.90		0.13	0.50	ug/L
106-46-7	1,4-Dichlorobenzene	2.00		0.14	0.50	ug/L
104-51-8	n-Butylbenzene	1.80		0.28	0.50	ug/L
95-50-1	1,2-Dichlorobenzene	1.90		0.14	0.50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.80		0.23	0.50	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.90		0.21	0.50	ug/L
87-68-3	Hexachlorobutadiene	2.00		0.14	0.50	ug/L
91-20-3	Naphthalene	1.90		0.31	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.80		0.25	0.50	ug/L
74-88-4	Iodomethane	1.90		0.16	1.00	ug/L
107-05-1	Allyl Chloride	1.90		0.11	0.50	ug/L
126-98-7	Methacrylonitrile	1.80		0.19	0.50	ug/L
80-62-6	Methyl methacrylate	3.60		0.24	1.00	ug/L
SURROGATES						
2199-69-1	1,2-Dichlorobenzene-d4	0.94		70 - 130	94%	SPK: 1
460-00-4	4-Bromofluorobenzene	0.98		70 - 130	98%	SPK: 1
INTERNAL STANDARDS						
462-06-6	Fluorobenzene	55400	6.106			

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBS01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBS01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063230.D	1		02/11/25 12:07	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063230.D
Acq On : 11 Feb 2025 12:07
Operator : MD/SY
Sample : VU0211WBS01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 12 03:16:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.106	96	55425	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.627	95	17934	0.981	ug/l	0.00
Spiked Amount 1.000			Recovery = 98.000%			
68) 1,2-Dichlorobenzene-d4	12.187	152	17795	0.936	ug/l	0.00
Spiked Amount 1.000			Recovery = 94.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.380	85	34881	1.937	ug/l	100
3) Chloromethane	1.515	50	39366	1.898	ug/l	98
4) Vinyl Chloride	1.599	62	40631	1.980	ug/l	100
5) Bromomethane	1.849	94	22200	2.214	ug/l	98
6) Chloroethane	1.923	64	25320	1.959	ug/l	98
7) Trichlorofluoromethane	2.129	101	50024	2.057	ug/l	97
8) 1,1,2-Trichloro-1,2,2-...	2.570	101	27957	2.026	ug/l	100
9) 1,1-Dichloroethene	2.570	96	28143	2.001	ug/l	98
10) Iodomethane	2.711	142	42948	1.943	ug/l	96
11) Allyl Chloride	2.914	41	38956	1.928	ug/l	99
12) Acrylonitrile	3.325	53	11706	3.609	ug/l	97
13) Acetone	2.631	43	22228	8.913	ug/l	95
14) Carbon Disulfide	2.782	76	97781	1.989	ug/l	99
15) Methylene Chloride	3.033	84	32623	1.878	ug/l	99
16) trans-1,2-Dichloroethene	3.345	96	31649	1.972	ug/l	95
17) 1,1-Dichloroethane	3.856	63	58713	1.941	ug/l	100
18) 2-Butanone	4.714	43	35261	8.884	ug/l	94
19) Cyclohexane	5.373	56	47343m	1.948	ug/l	
20) Methylcyclohexane	6.753	83	49192	2.041	ug/l	98
21) 2,2-Dichloropropane	4.650	77	46690	1.978	ug/l	99
22) cis-1,2-Dichloroethene	4.656	96	33572	1.936	ug/l	99
23) Diethyl Ether	2.367	59	22508	1.865	ug/l	92
24) tert-Butyl Alcohol	3.200	59	20238m	10.598	ug/l	
25) Methyl tert-Butyl Ether	3.351	73	66762	1.901	ug/l	97
26) Bromochloromethane	4.962	128	14812	1.954	ug/l	97
27) Chloroform	5.078	83	60066	1.968	ug/l	95
28) 1,1,1-Trichloroethane	5.306	97	48266	1.952	ug/l	99
29) 1,1-Dichloropropene	5.518	75	44151	1.993	ug/l	99
30) Carbon Tetrachloride	5.515	117	43154	2.035	ug/l	97
31) Isopropyl Ether	3.978	45	82853	1.918	ug/l	99
32) Ethyl-t-butyl ether	4.486	59	75741	1.929	ug/l	100
33) Tert-Amyl methyl ether	5.930	73	65301	1.903	ug/l	98
34) Propionitrile	4.785	54	10600	8.855	ug/l #	87
35) Benzene	5.762	78	132307	1.943	ug/l	96
36) 1,2-Dichloroethane	5.785	62	38000	1.933	ug/l	99
37) Trichloroethene	6.534	130	33039	2.040	ug/l	98
38) 1,2-Dichloropropane	6.782	63	34557	1.939	ug/l	97
39) Methacrylonitrile	4.975	41	8038	1.802	ug/l #	86
40) Methyl acrylate	4.865	55	15318m	1.863	ug/l	
41) Tetrahydrofuran	5.058	42	8769	3.380	ug/l	95
42) 1-Chlorobutane	5.447	56	58303	1.924	ug/l	95
43) Dibromomethane	6.914	93	17206	1.906	ug/l	99
44) Bromodichloromethane	7.097	83	41643	1.982	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063230.D
Acq On : 11 Feb 2025 12:07
Operator : MD/SY
Sample : VU0211WBS01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 12 03:16:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) 4-Methyl-2-Pentanone	7.785	43	89316	9.439 ug/l	99
46) t-1,4-Dichloro-2-butene	10.820	75	18247m	4.102 ug/l	
47) Methyl methacrylate	6.955	69	27667	3.639 ug/l	94
48) Ethyl methacrylate	8.328	69	26252	1.839 ug/l	99
49) Toluene	7.962	92	78140	1.995 ug/l	99
50) t-1,3-Dichloropropene	8.206	75	37997	1.976 ug/l	97
51) cis-1,3-Dichloropropene	7.598	75	46394	1.953 ug/l	98
52) 1,1,2-Trichloroethane	8.389	97	23627	1.941 ug/l	97
53) 1,3-Dichloropropane	8.566	76	41879	1.938 ug/l	99
54) 2-Hexanone	8.682	43	58847	9.113 ug/l	98
55) Dibromochloromethane	8.801	129	27354	1.954 ug/l	99
56) 1,2-Dibromoethane	8.917	107	22029	1.930 ug/l	99
58) Tetrachloroethene	8.544	164	27268	2.043 ug/l	97
59) Chlorobenzene	9.438	112	81191	1.965 ug/l	98
60) 1,1,1,2-Tetrachloroethane	9.524	131	28863	1.943 ug/l	99
61) Pentachloroethane	11.418	117	24877	1.875 ug/l	96
62) Hexachloroethane	12.466	117	21187	1.805 ug/l	99
63) Ethyl Benzene	9.563	91	137062	1.923 ug/l	100
64) m/p-Xylenes	9.685	106	104430	3.922 ug/l	97
65) o-Xylene	10.090	106	49629	1.904 ug/l	97
66) Styrene	10.110	104	77051	1.858 ug/l	98
67) Bromoform	10.283	173	14840	1.868 ug/l	99
69) Isopropylbenzene	10.476	105	119341	1.948 ug/l	99
70) 1,1,2,2-Tetrachloroethane	10.772	83	30580	1.864 ug/l	98
71) 1,2,3-Trichloropropane	10.814	75	24894m	2.020 ug/l	
72) Bromobenzene	10.775	156	32516	1.969 ug/l	98
73) n-propylbenzene	10.897	120	34231	1.951 ug/l	97
74) 2-Chlorotoluene	10.978	126	32733	2.025 ug/l	98
75) 1,3,5-Trimethylbenzene	11.081	105	111469	1.963 ug/l	100
76) 4-Chlorotoluene	11.090	126	32504	1.960 ug/l	99
77) tert-Butylbenzene	11.412	119	111932	1.949 ug/l	99
78) 1,2,4-Trimethylbenzene	11.460	105	105544	1.873 ug/l	100
79) sec-Butylbenzene	11.634	105	143488	1.963 ug/l	99
80) Nitrobenzene	13.225	77	2628m	8.833 ug/l	
81) p-Isopropyltoluene	11.785	119	110271	1.911 ug/l	99
82) 1,3-Dichlorobenzene	11.740	146	61914	1.933 ug/l	99
83) 1,4-Dichlorobenzene	11.830	146	61090	1.950 ug/l	99
84) n-Butylbenzene	12.199	91	95124	1.839 ug/l	99
85) 1,2-Dichlorobenzene	12.206	146	59757	1.942 ug/l	97
86) 1,2-Dibromo-3-Chloropr...	12.990	75	4088	1.776 ug/l	98
87) 1,2,4-Trichlorobenzene	13.836	180	28591	1.905 ug/l	99
88) Hexachlorobutadiene	14.010	225	21893	2.041 ug/l	97
89) Naphthalene	14.084	128	41131	1.883 ug/l	96
90) 1,2,3-Trichlorobenzene	14.322	180	26648	1.815 ug/l	98

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

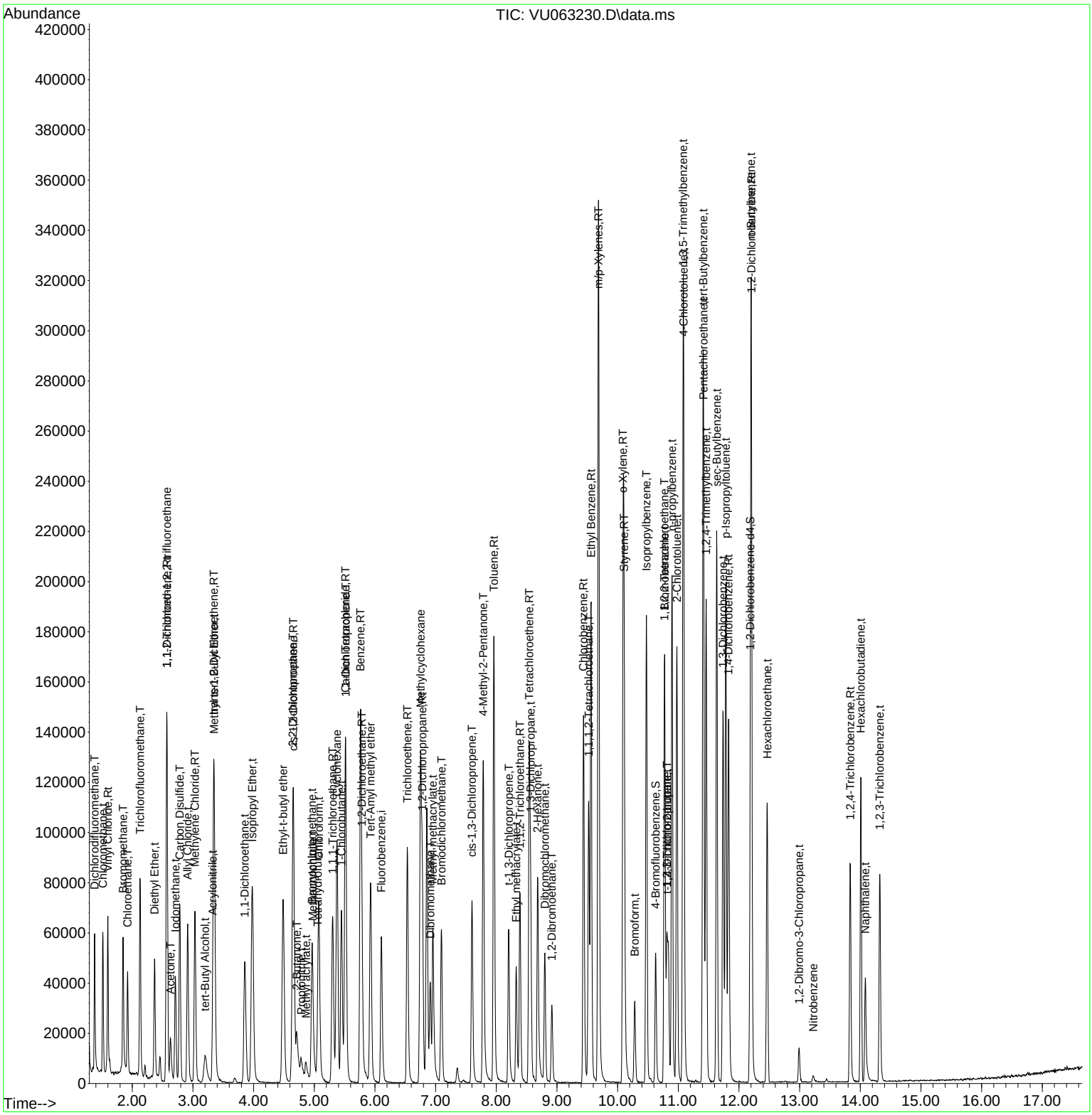
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063230.D
Acq On : 11 Feb 2025 12:07
Operator : MD/SY
Sample : VU0211WBS01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 7 Sample Multiplier: 1

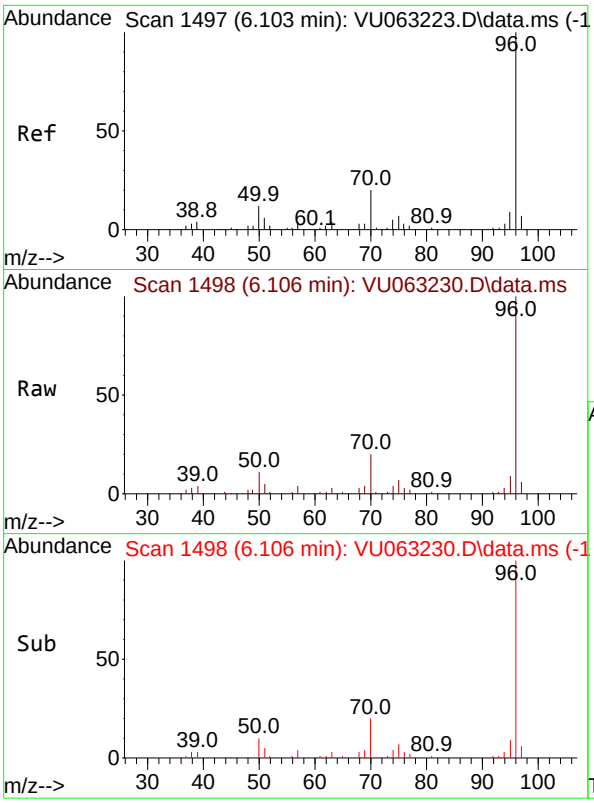
Quant Time: Feb 12 03:16:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

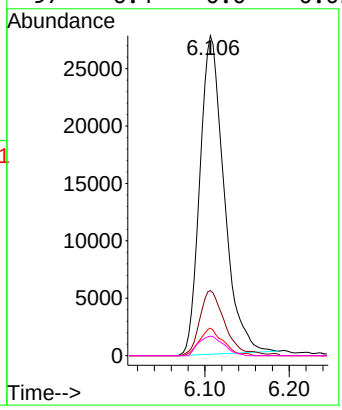




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.106 min Scan# 14
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 96 Resp: 5542

Ion	Ratio	Lower	Upper
96	100		
70	20.4	15.6	23.4
95	8.4	7.3	10.9
97	6.4	0.0	0.0#



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations
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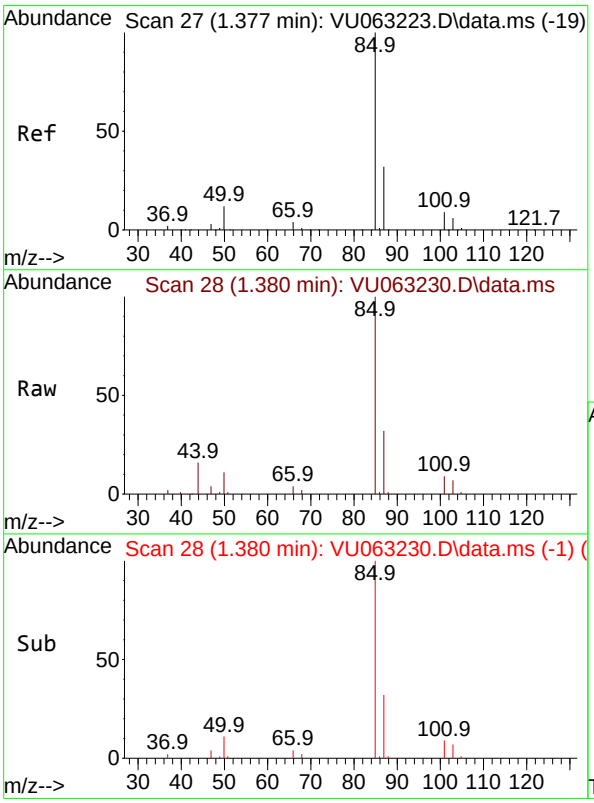
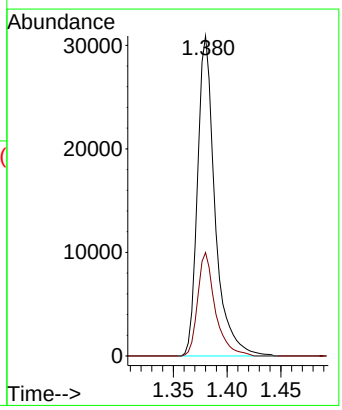
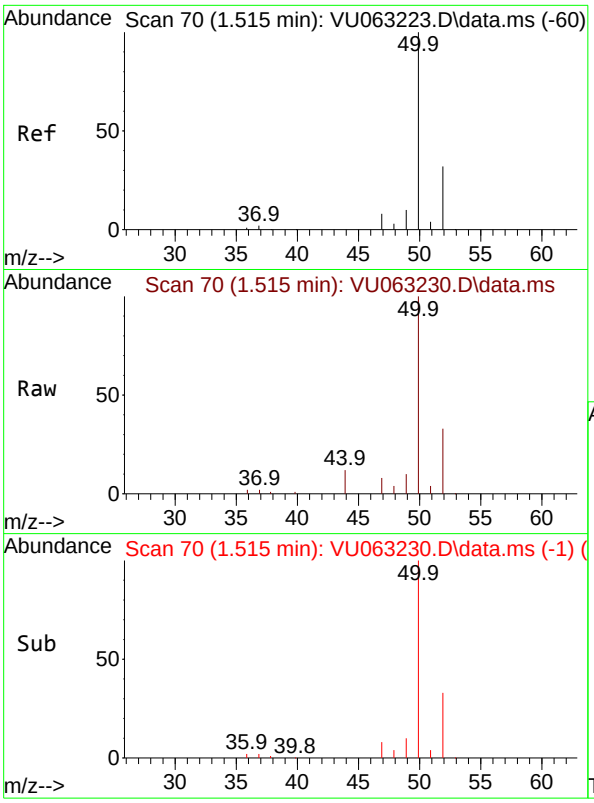


#2
Dichlorodifluoromethane
Concen: 1.937 ug/l
RT: 1.380 min Scan# 28
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 85 Resp: 34881

Ion	Ratio	Lower	Upper
85	100		
87	32.3	16.0	48.0

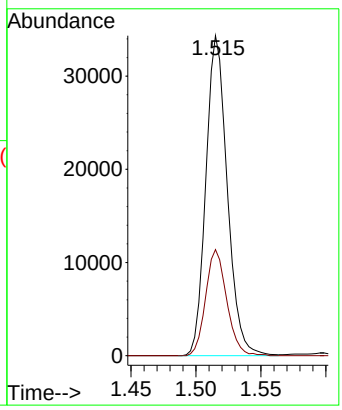




#3
Chloromethane
Concen: 1.898 ug/l
RT: 1.515 min Scan# 7(
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 50 Resp: 3936(

Ion	Ratio	Lower	Upper
50	100		
52	33.2	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

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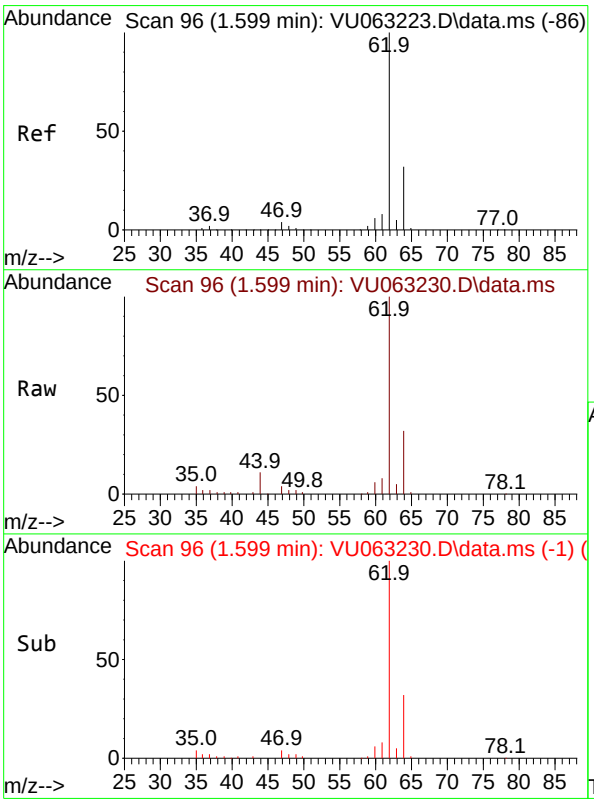
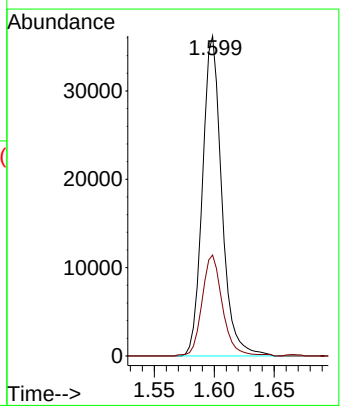
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

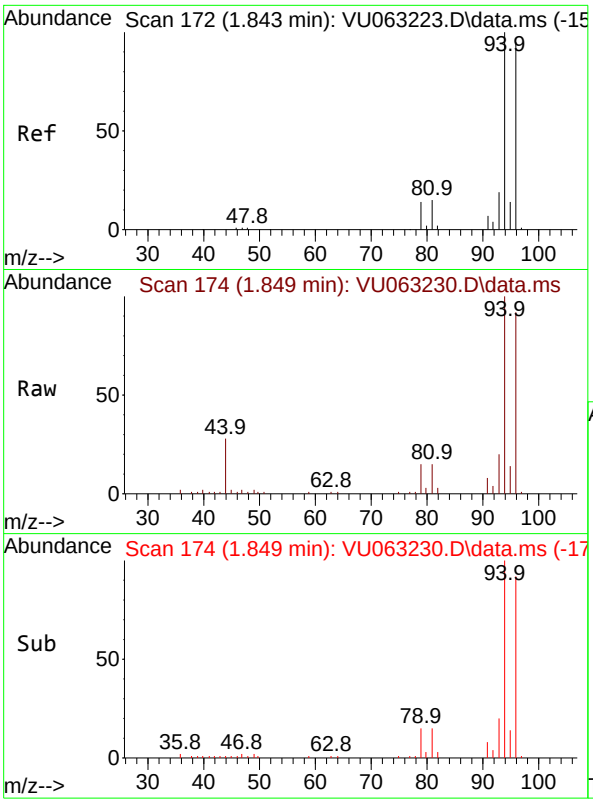


#4
Vinyl Chloride
Concen: 1.980 ug/l
RT: 1.599 min Scan# 96
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 62 Resp: 40631

Ion	Ratio	Lower	Upper
62	100		
64	31.6	25.4	38.0

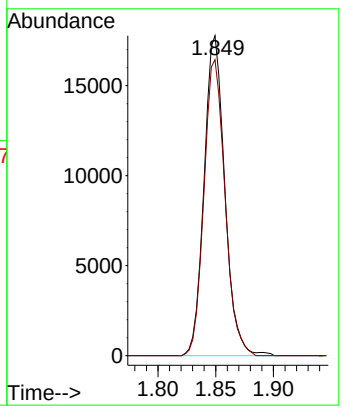




#5
Bromomethane
Concen: 2.214 ug/l
RT: 1.849 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 94 Resp: 2220

Ion	Ratio	Lower	Upper
94	100		
96	92.5	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations
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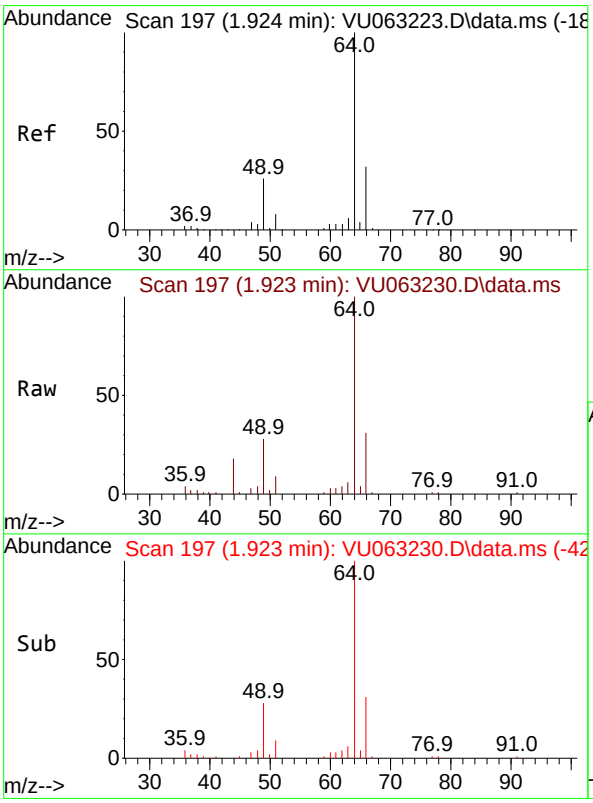
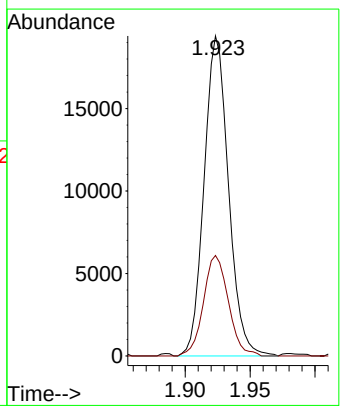
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

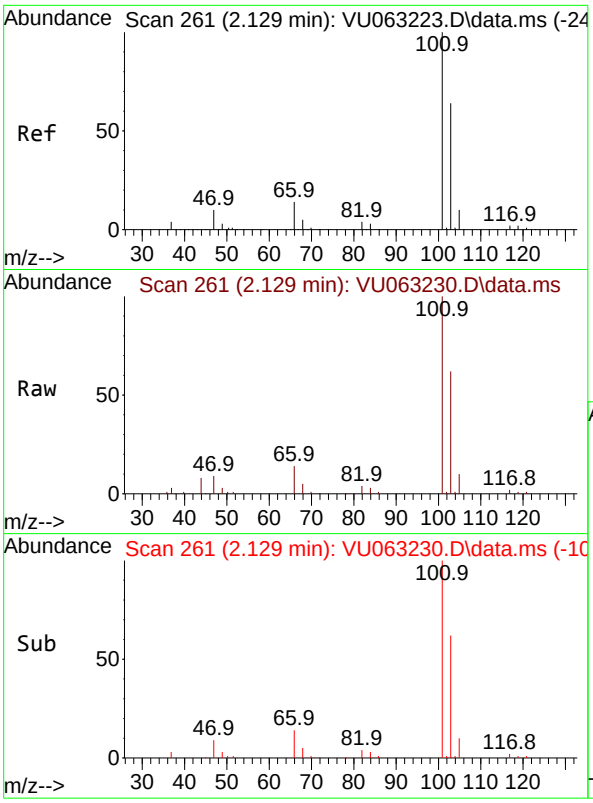


#6
Chloroethane
Concen: 1.959 ug/l
RT: 1.923 min Scan# 197
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 64 Resp: 25320

Ion	Ratio	Lower	Upper
64	100		
66	31.4	25.8	38.8





#7
Trichlorofluoromethane
Concen: 2.057 ug/l
RT: 2.129 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:101 Resp: 5002

Ion	Ratio	Lower	Upper
101	100		
103	62.3	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations
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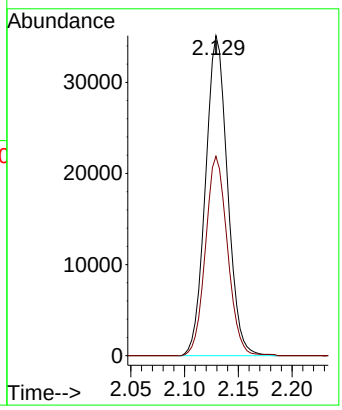
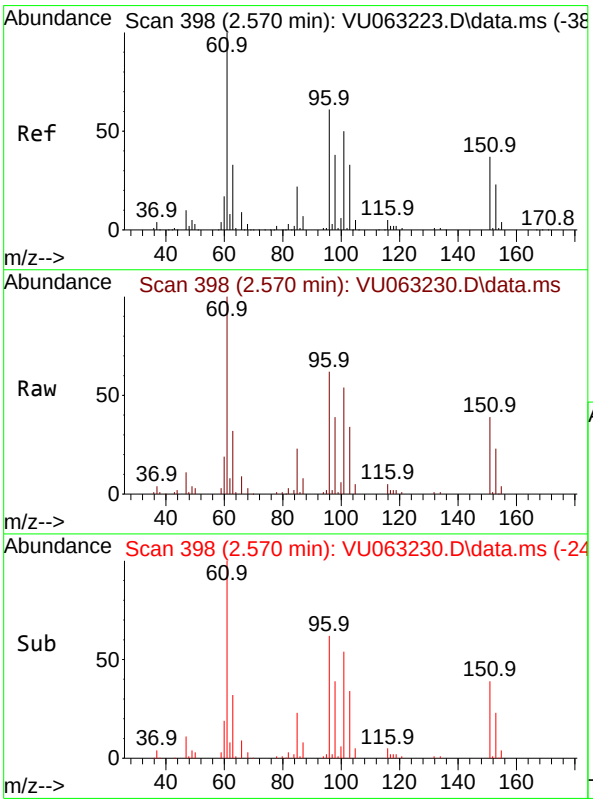
Supervised By :Mahesh Dadoda 02/12/2025

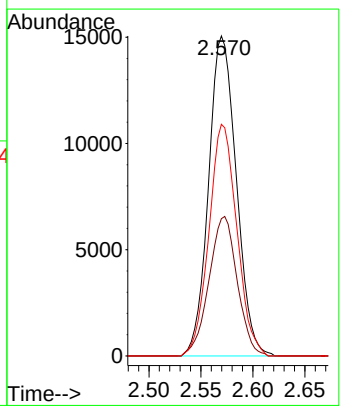


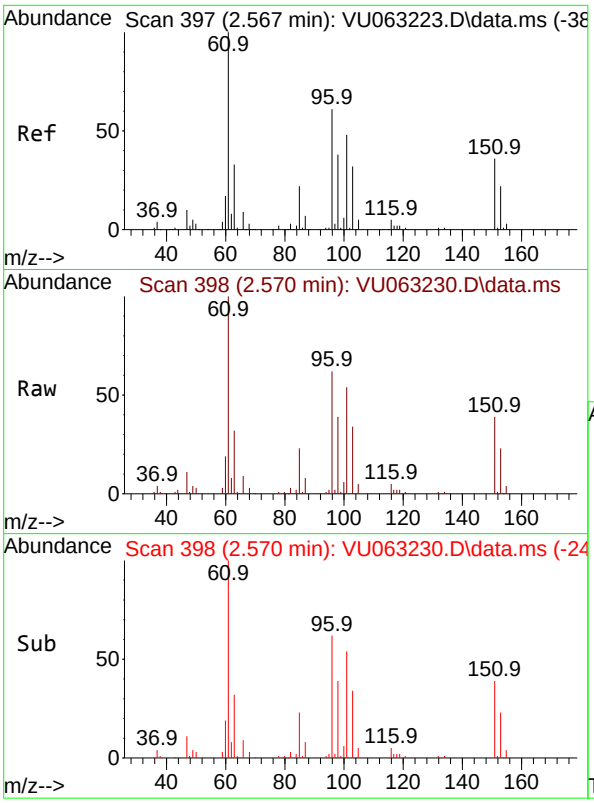


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 2.026 ug/l
RT: 2.570 min Scan# 398
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:101 Resp: 27957

Ion	Ratio	Lower	Upper
101	100		
85	44.4	35.4	53.0
151	72.8	58.5	87.7

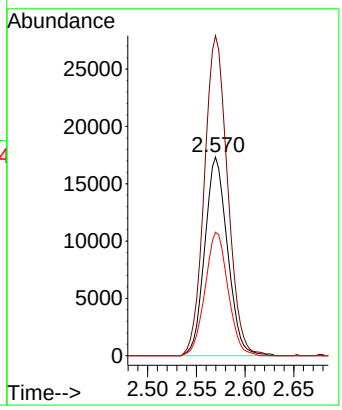




#9
1,1-Dichloroethene
Concen: 2.001 ug/l
RT: 2.570 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 96 Resp: 2814

Ion	Ratio	Lower	Upper
96	100		
61	161.2	0.0	492.9
98	62.2	0.0	124.0



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations
APPROVED

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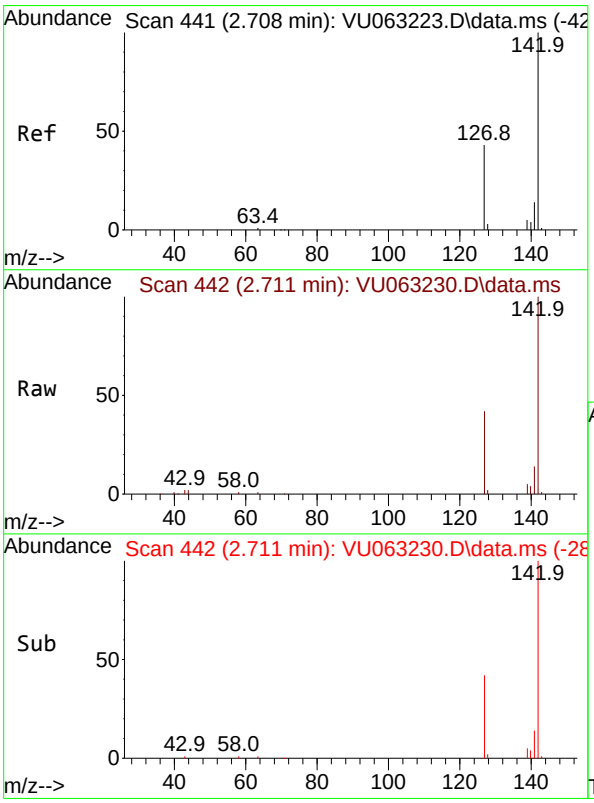
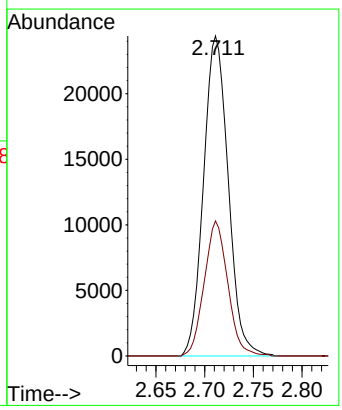
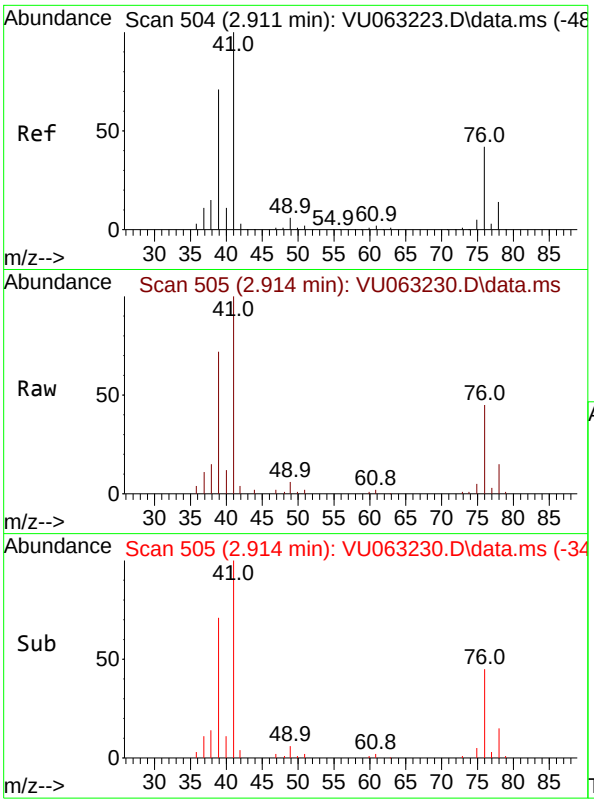


#10
Iodomethane
Concen: 1.943 ug/l
RT: 2.711 min Scan# 442
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:142 Resp: 42948

Ion	Ratio	Lower	Upper
142	100		
127	40.3	34.5	51.7

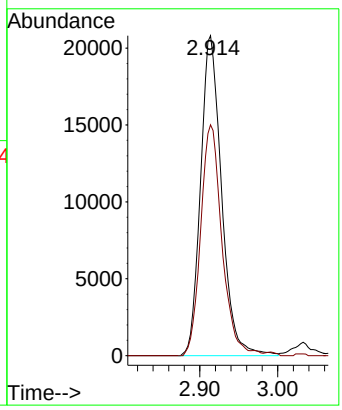




#11
Allyl Chloride
Concen: 1.928 ug/l
RT: 2.914 min Scan# 5
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 41 Resp: 3895

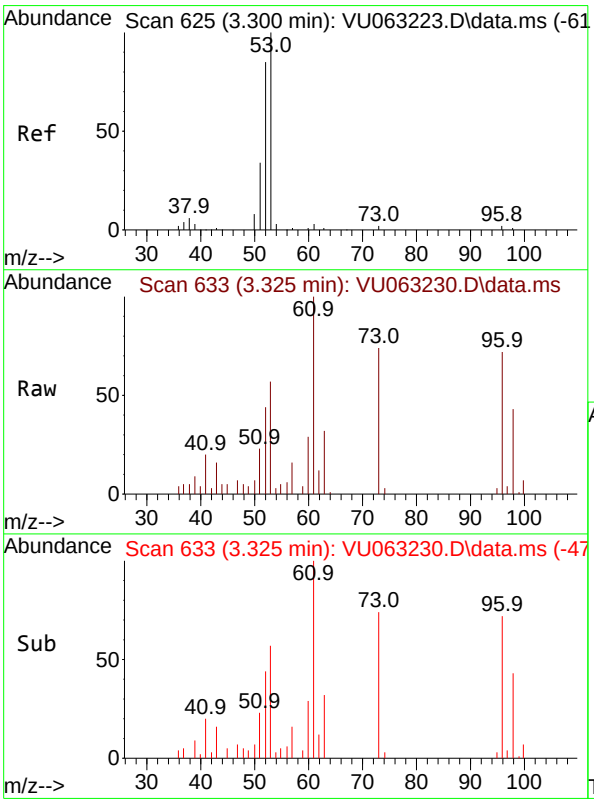
Ion	Ratio	Lower	Upper
41	100		
39	72.8	57.9	86.9



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations
APPROVED

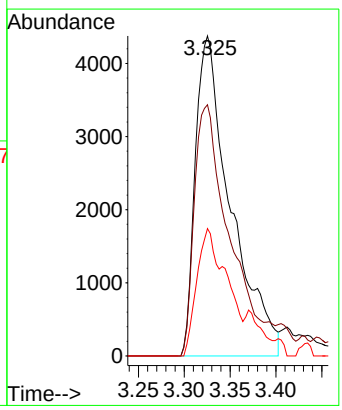
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

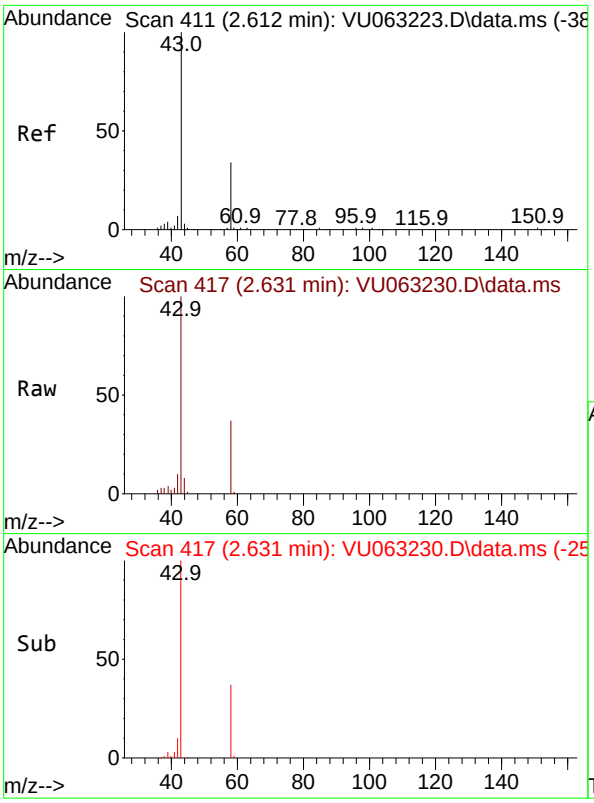


#12
Acrylonitrile
Concen: 3.609 ug/l
RT: 3.325 min Scan# 633
Delta R.T. 0.026 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 53 Resp: 11706

Ion	Ratio	Lower	Upper
53	100		
52	79.3	64.2	96.2
51	34.0	30.8	46.2

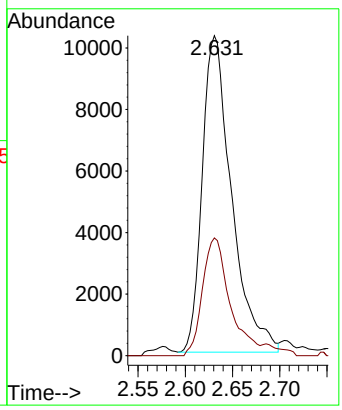




#13
Acetone
Concen: 8.913 ug/l
RT: 2.631 min Scan# 4
Delta R.T. 0.019 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 43 Resp: 2222

Ion	Ratio	Lower	Upper
43	100		
58	37.2	27.4	41.0



Instrument :
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ClientSampleId :
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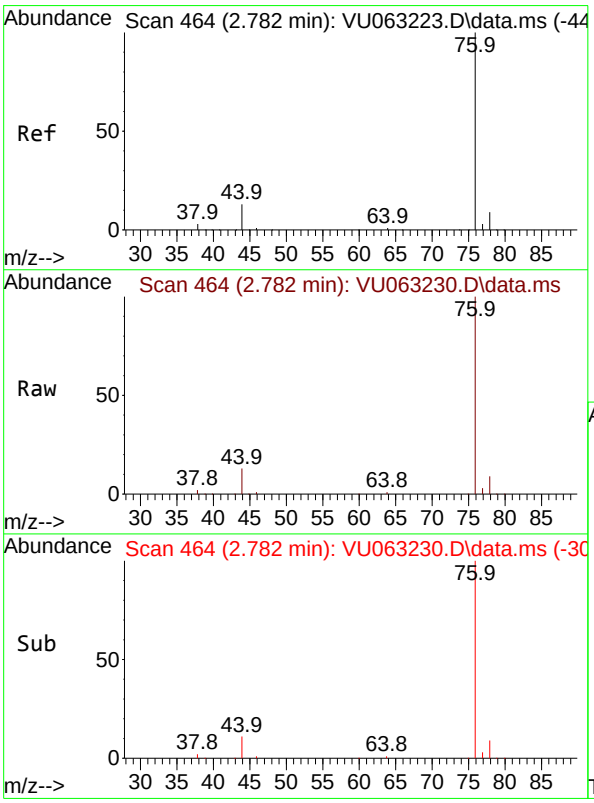
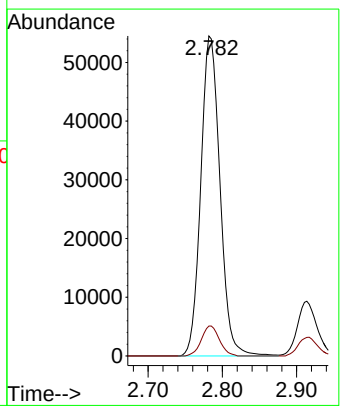
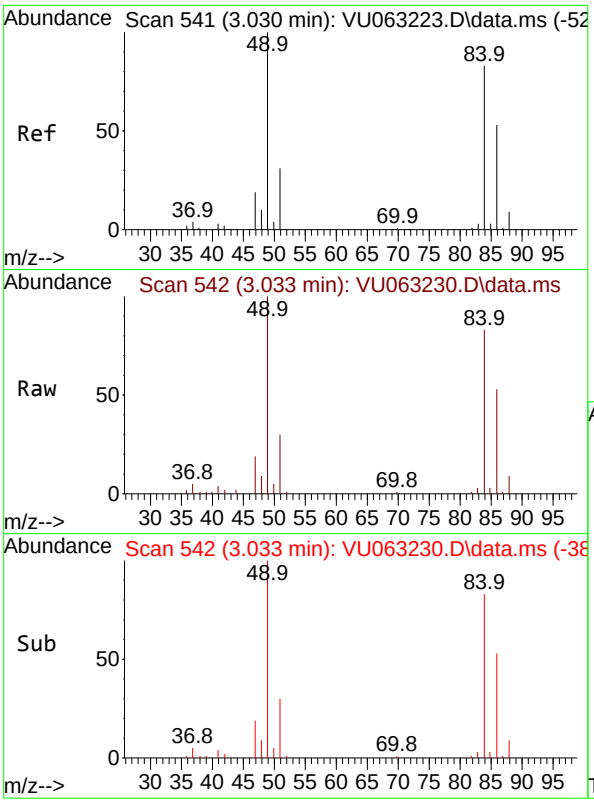


#14
Carbon Disulfide
Concen: 1.989 ug/l
RT: 2.782 min Scan# 464
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 76 Resp: 97781

Ion	Ratio	Lower	Upper
76	100		
78	9.3	7.2	10.8

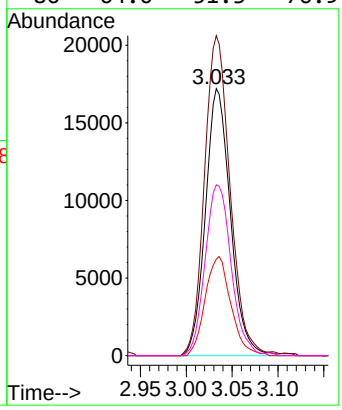




#15
Methylene Chloride
Concen: 1.878 ug/l
RT: 3.033 min Scan# 54
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 84 Resp: 3262

Ion	Ratio	Lower	Upper
84	100		
49	119.9	96.4	144.6
51	36.1	0.0	74.8
86	64.0	51.3	76.9



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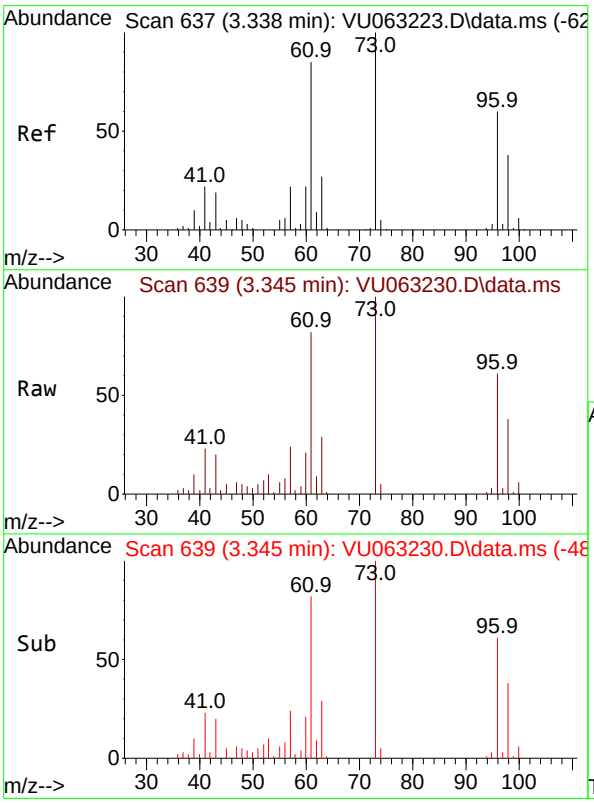
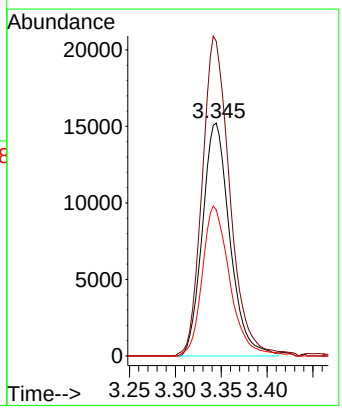
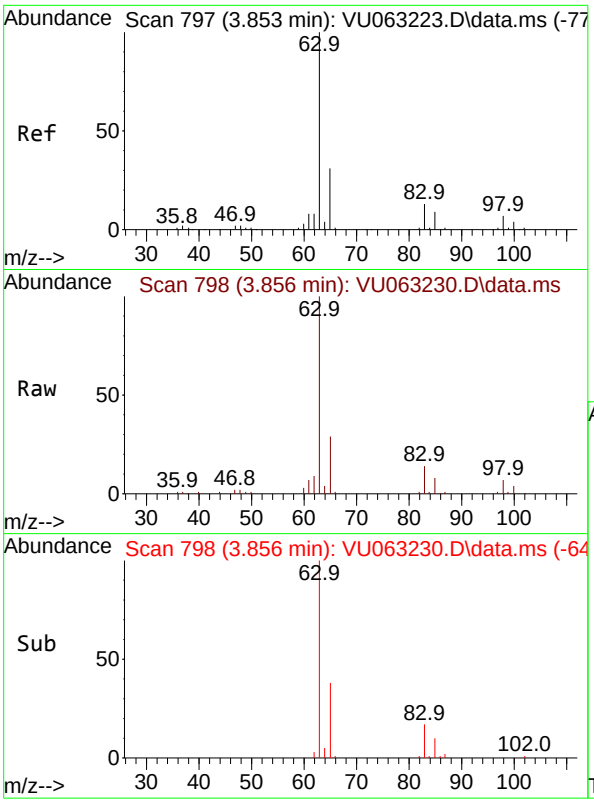


#16
trans-1,2-Dichloroethene
Concen: 1.972 ug/l
RT: 3.345 min Scan# 639
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 96 Resp: 31649

Ion	Ratio	Lower	Upper
96	100		
61	134.1	113.4	170.2
98	62.7	51.2	76.8

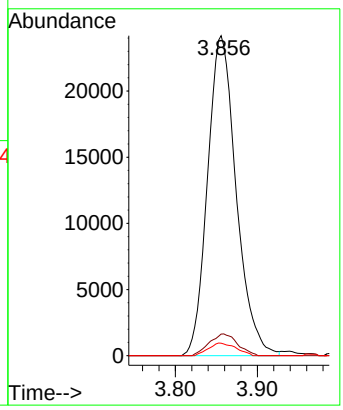




#17
1,1-Dichloroethane
Concen: 1.941 ug/l
RT: 3.856 min Scan# 7
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 63 Resp: 5871

Ion	Ratio	Lower	Upper
63	100		
98	6.7	3.3	9.9
100	3.9	2.1	6.2



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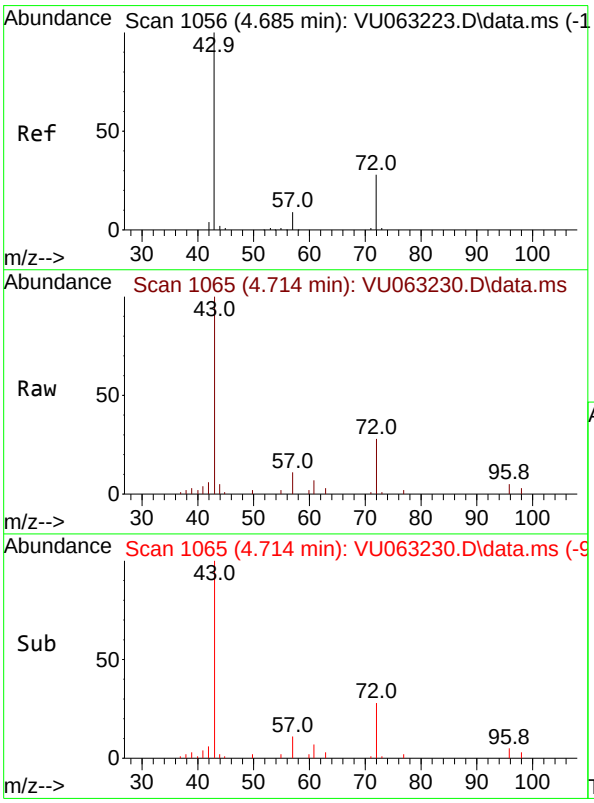
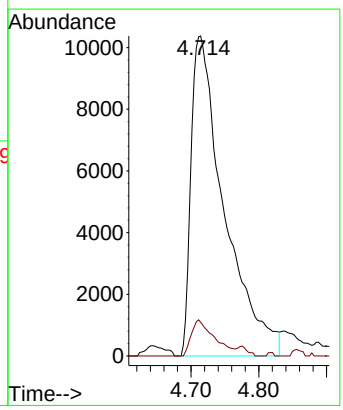
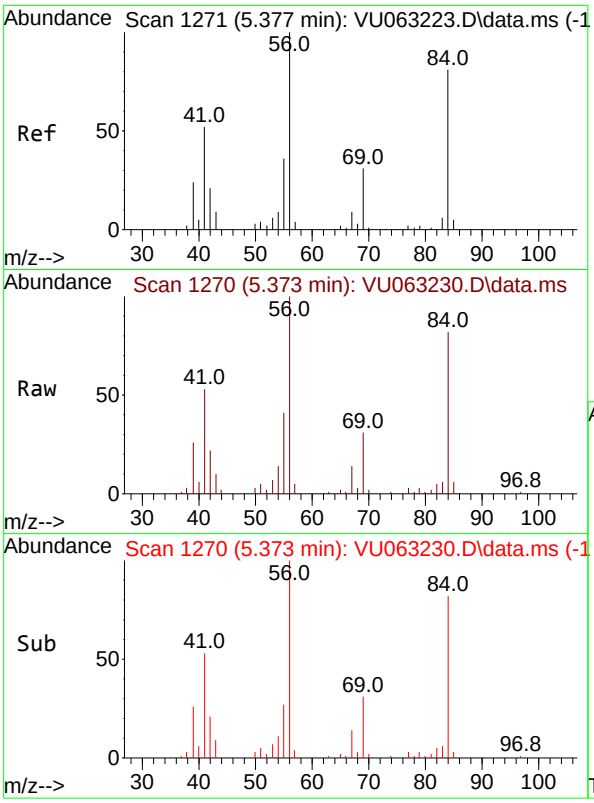


#18
2-Butanone
Concen: 8.884 ug/l
RT: 4.714 min Scan# 1065
Delta R.T. 0.029 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 43 Resp: 35261

Ion	Ratio	Lower	Upper
43	100		
57	10.6	0.0	17.0

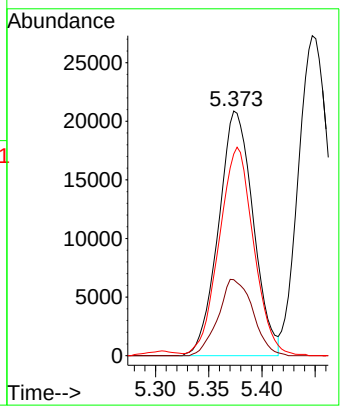




#19
Cyclohexane
Concen: 1.948 ug/l m
RT: 5.373 min Scan# 1
Delta R.T. -0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 56 Resp: 4734

Ion	Ratio	Lower	Upper
56	100		
69	31.1	24.5	36.7
84	83.8	65.2	97.8



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ClientSampleId :
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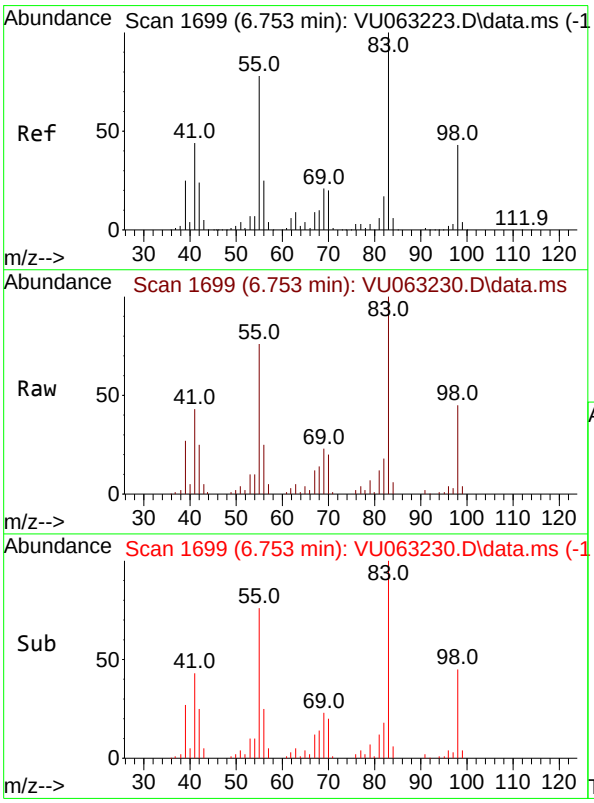
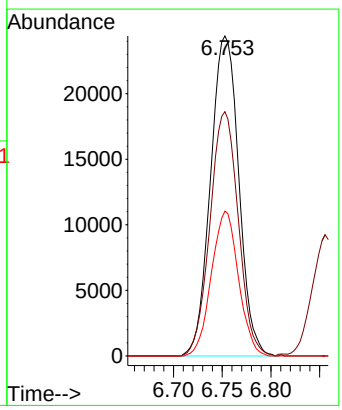
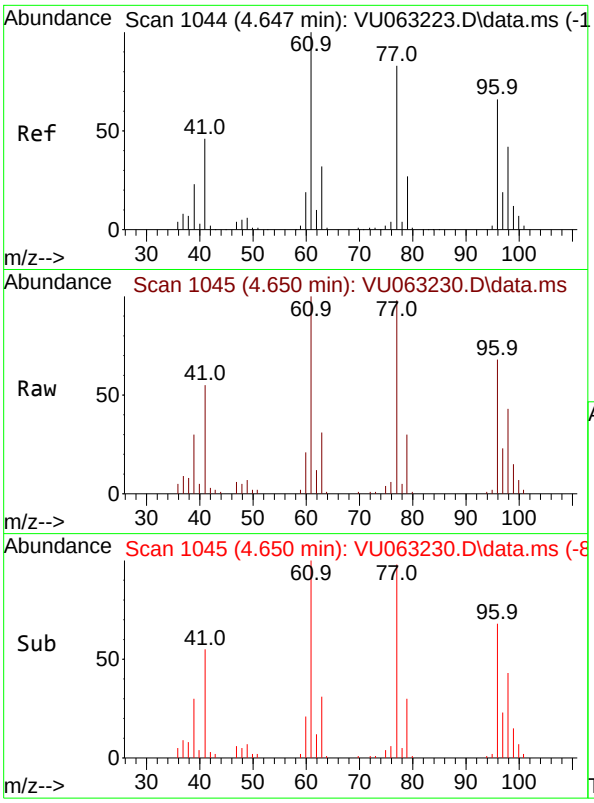


#20
Methylcyclohexane
Concen: 2.041 ug/l
RT: 6.753 min Scan# 1699
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 83 Resp: 49192

Ion	Ratio	Lower	Upper
83	100		
55	76.4	63.1	94.7
98	43.3	35.2	52.8

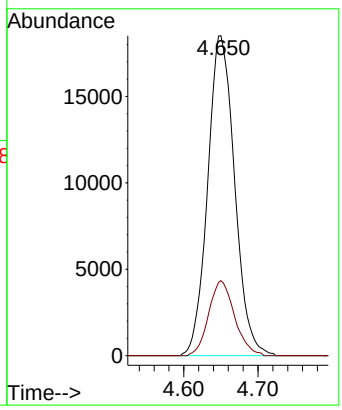




#21
2,2-Dichloropropane
Concen: 1.978 ug/l
RT: 4.650 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 77 Resp: 4669

Ion	Ratio	Lower	Upper
77	100		
97	22.5	18.5	27.7



Instrument :
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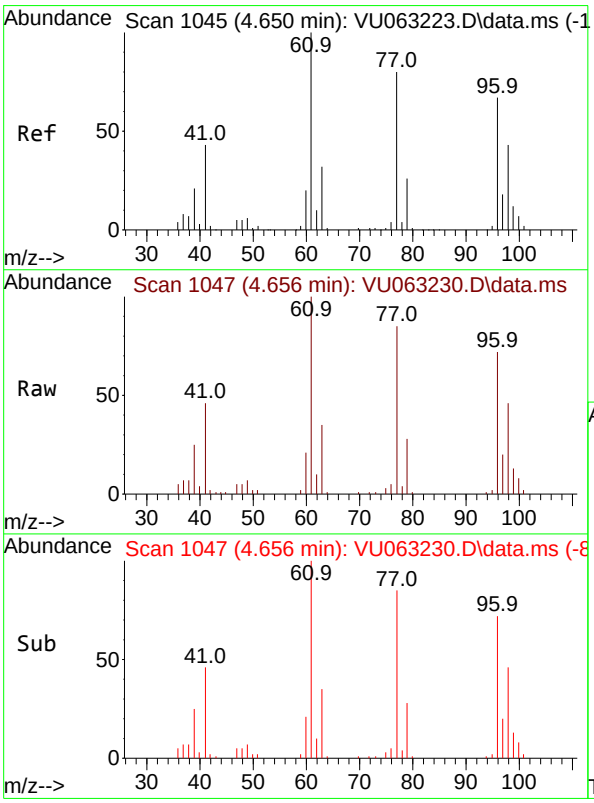
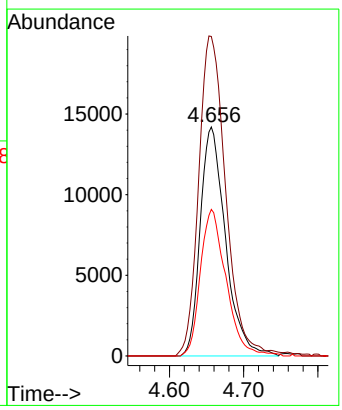
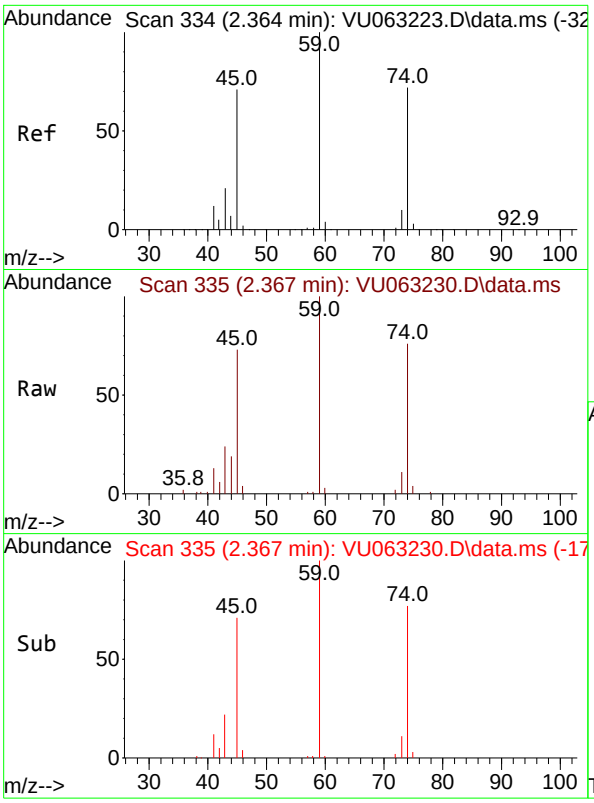


#22
cis-1,2-Dichloroethene
Concen: 1.936 ug/l
RT: 4.656 min Scan# 1047
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 96 Resp: 33572

Ion	Ratio	Lower	Upper
96	100		
61	149.7	0.0	373.3
98	65.2	31.9	95.9

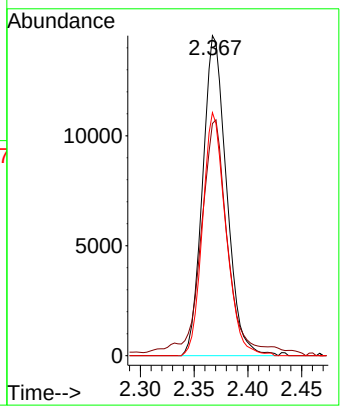




#23
Diethyl Ether
Concen: 1.865 ug/l
RT: 2.367 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 59 Resp: 2250

Ion	Ratio	Lower	Upper
59	100		
45	84.3	57.8	86.6
74	73.9	57.7	86.5



Instrument :
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ClientSampleId :
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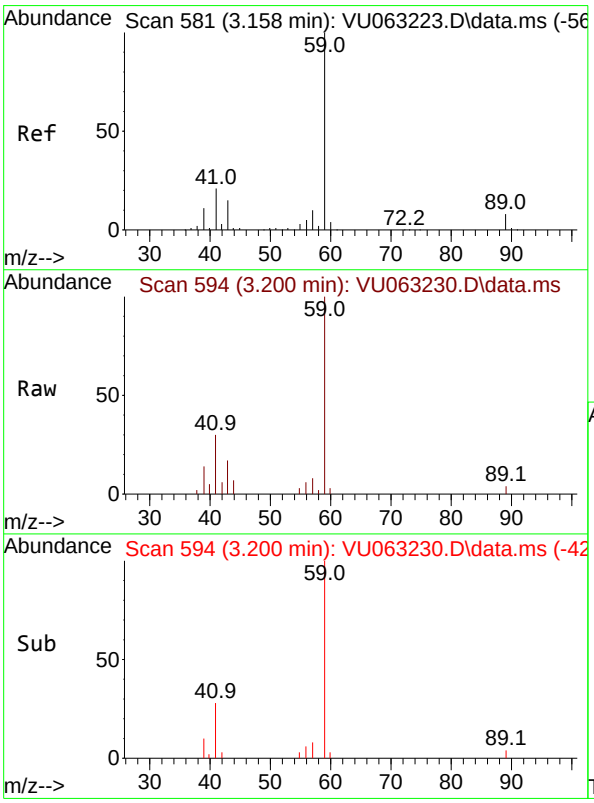
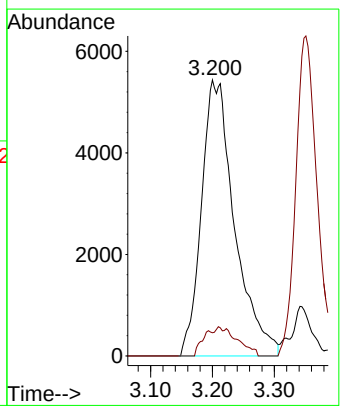
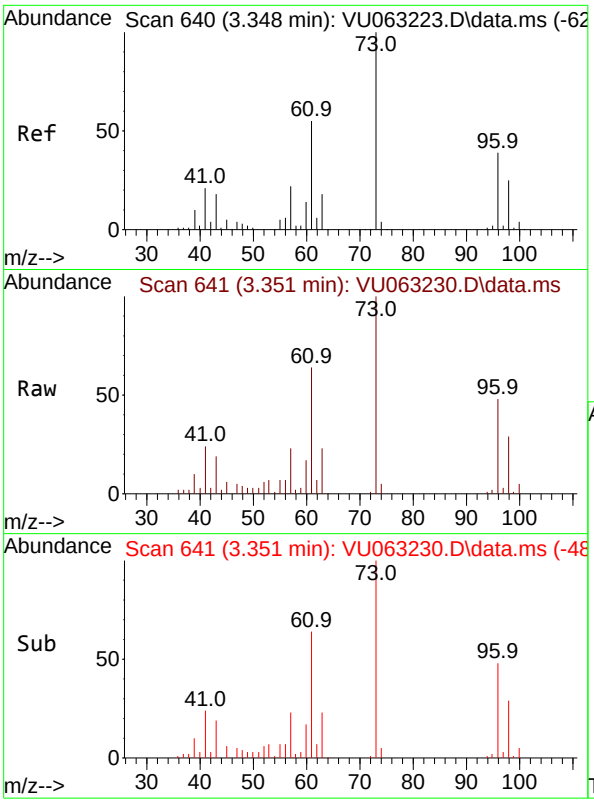


#24
tert-Butyl Alcohol
Concen: 10.598 ug/l m
RT: 3.200 min Scan# 594
Delta R.T. 0.042 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 59 Resp: 20238

Ion	Ratio	Lower	Upper
59	100		
57	3.1	7.5	11.3#

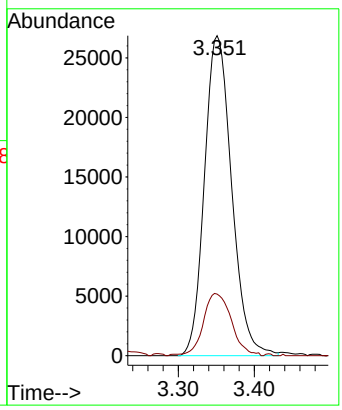




#25
Methyl tert-Butyl Ether
Concen: 1.901 ug/l
RT: 3.351 min Scan# 64
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 73 Resp: 6676

Ion	Ratio	Lower	Upper
73	100		
43	20.1	14.9	22.3



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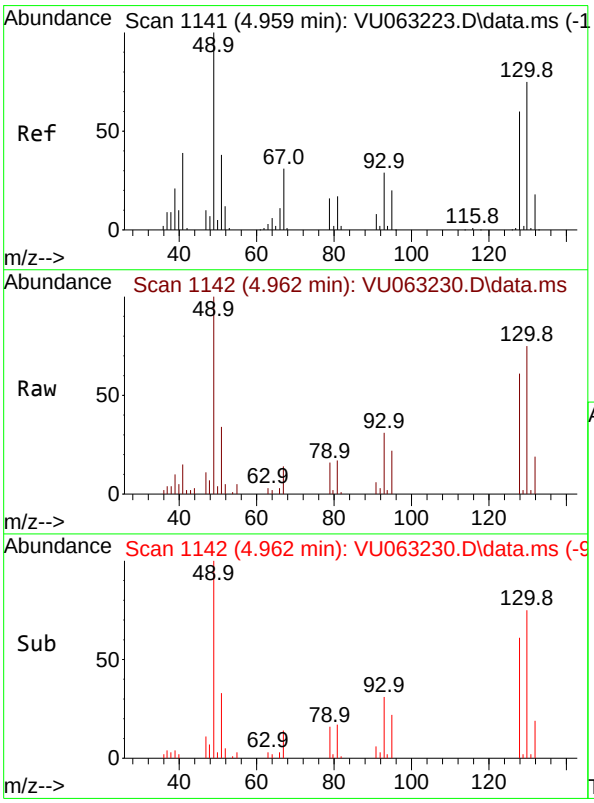
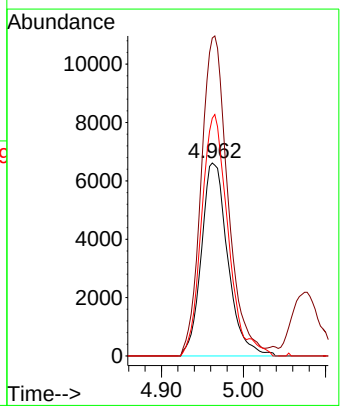
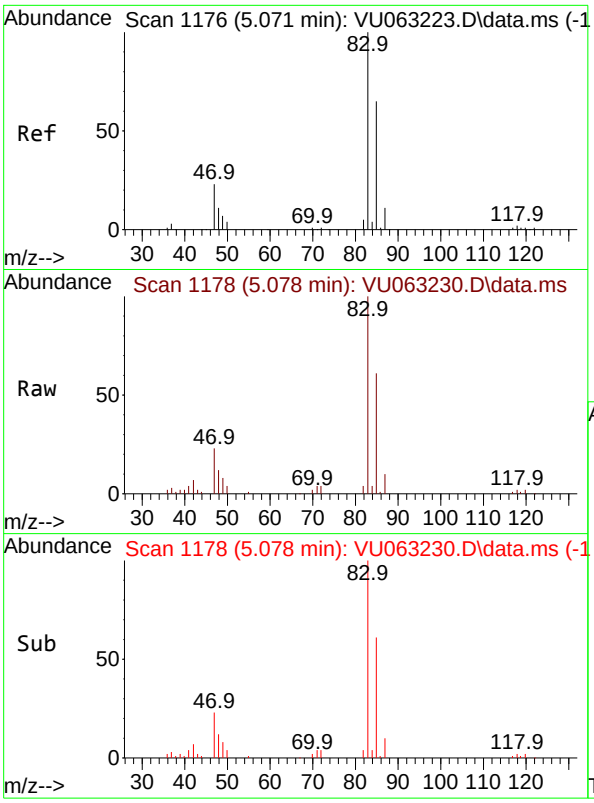


#26
Bromochloromethane
Concen: 1.954 ug/l
RT: 4.962 min Scan# 1142
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:128 Resp: 14812

Ion	Ratio	Lower	Upper
128	100		
49	167.8	0.0	343.4
130	125.4	102.9	154.3

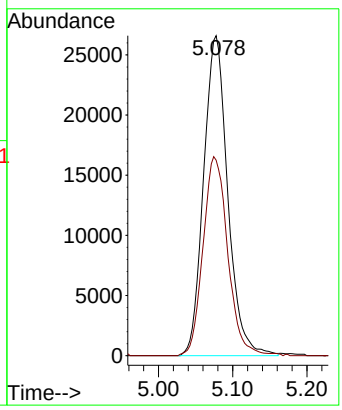




#27
Chloroform
Concen: 1.968 ug/l
RT: 5.078 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 83 Resp: 6006

Ion	Ratio	Lower	Upper
83	100		
85	61.1	0.0	129.8



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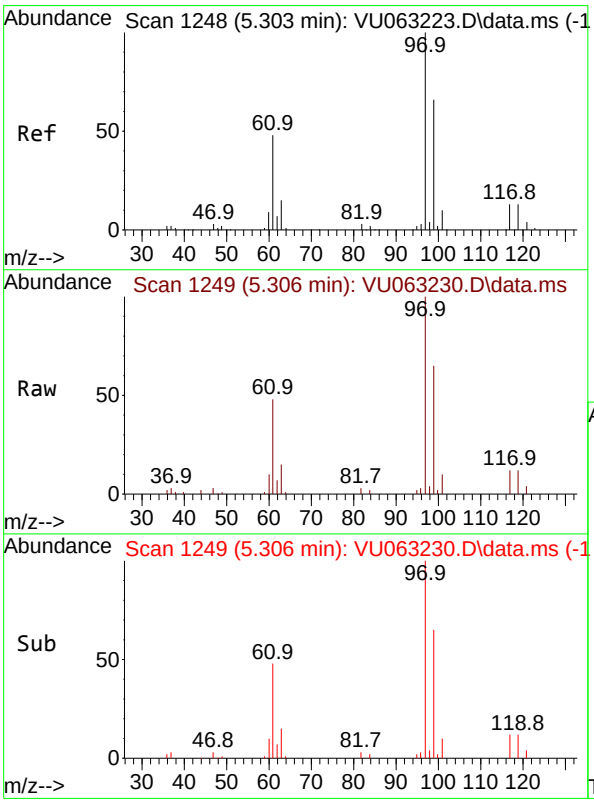
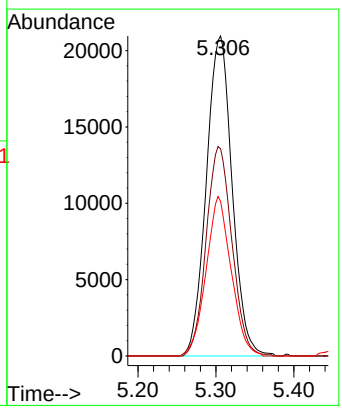
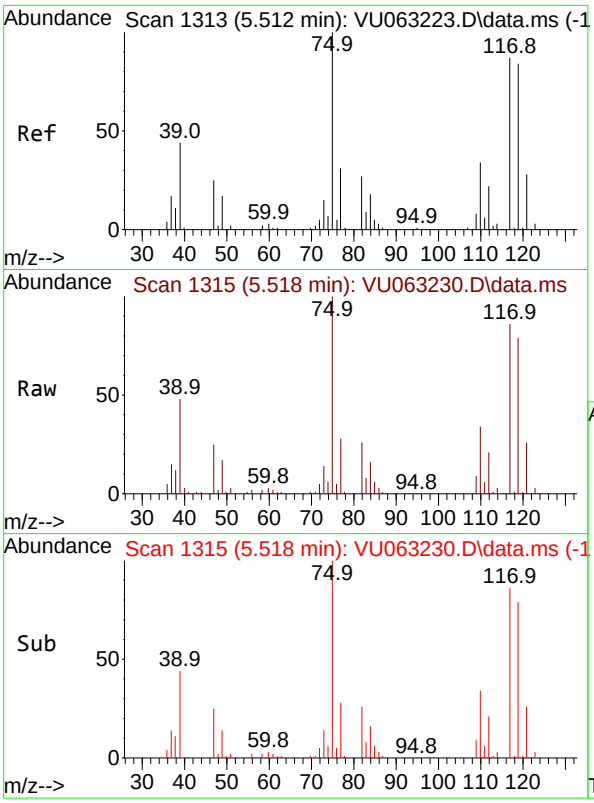


#28
1,1,1-Trichloroethane
Concen: 1.952 ug/l
RT: 5.306 min Scan# 1249
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 97 Resp: 48266

Ion	Ratio	Lower	Upper
97	100		
99	65.3	32.4	97.0
61	48.5	23.8	71.2

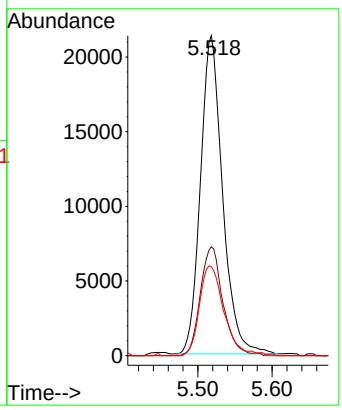




#29
1,1-Dichloropropene
Concen: 1.993 ug/l
RT: 5.518 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 75 Resp: 4415

Ion	Ratio	Lower	Upper
75	100		
110	34.7	17.2	51.5
77	31.1	24.6	37.0



Instrument :
MSVOA_U
ClientSampleId :
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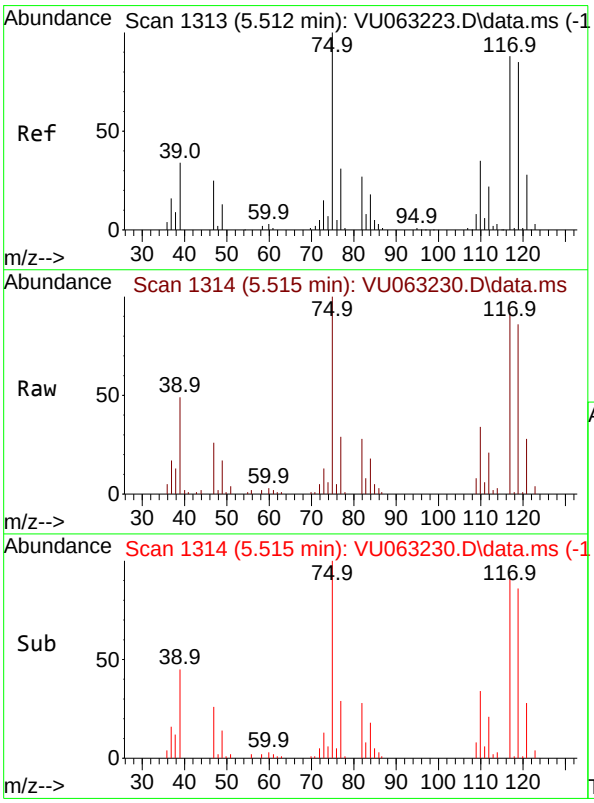
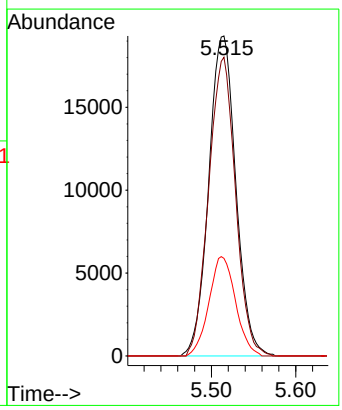
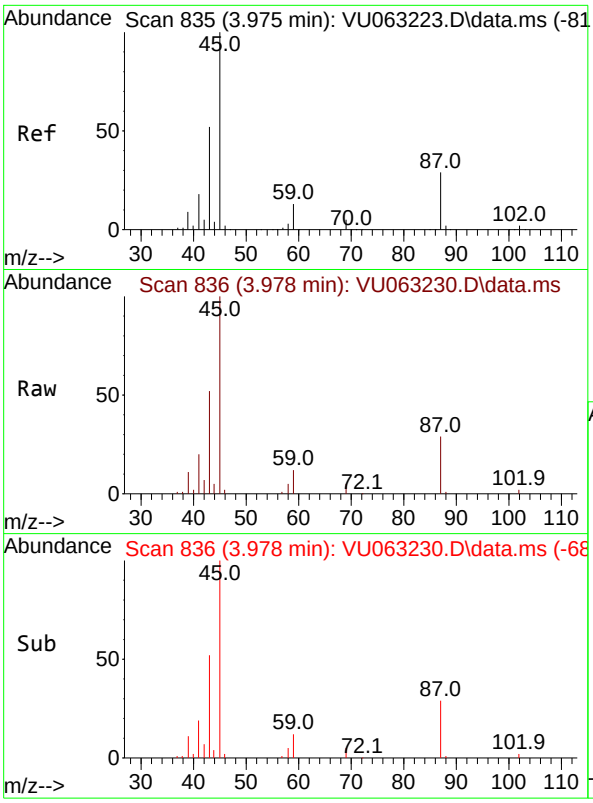


#30
Carbon Tetrachloride
Concen: 2.035 ug/l
RT: 5.515 min Scan# 1314
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:117 Resp: 43154

Ion	Ratio	Lower	Upper
117	100		
119	93.3	76.7	115.1
121	30.5	25.5	38.3

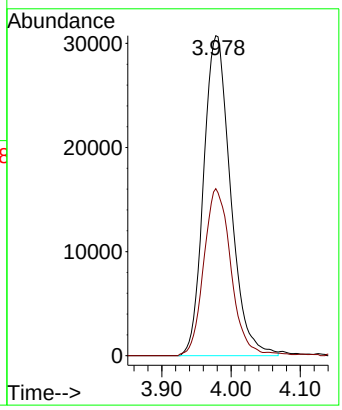




#31
Isopropyl Ether
Concen: 1.918 ug/l
RT: 3.978 min Scan# 8
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 45 Resp: 8285

Ion	Ratio	Lower	Upper
45	100		
43	52.2	25.7	77.1



Instrument :
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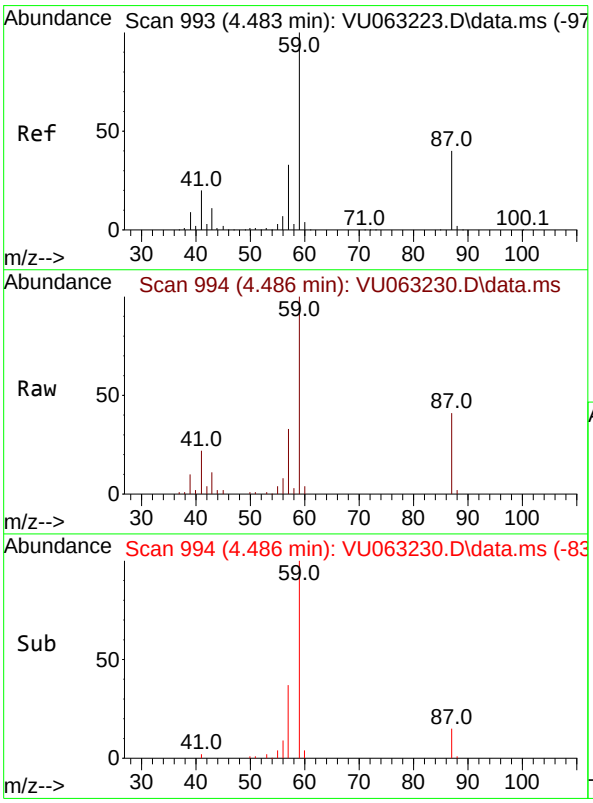
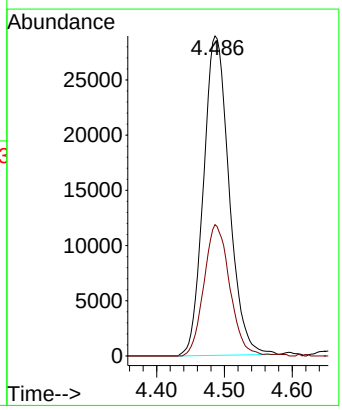
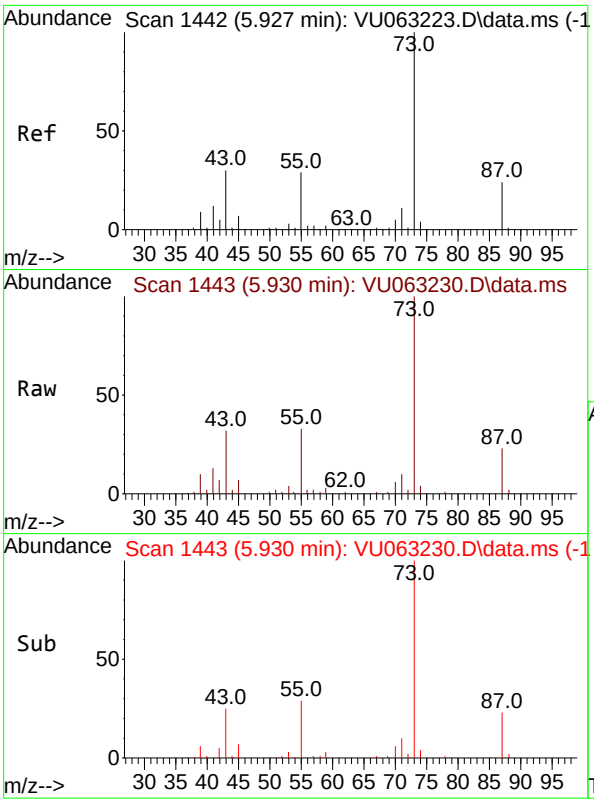


#32
Ethyl-t-butyl ether
Concen: 1.929 ug/l
RT: 4.486 min Scan# 994
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 59 Resp: 75741

Ion	Ratio	Lower	Upper
59	100		
87	40.9	32.6	49.0

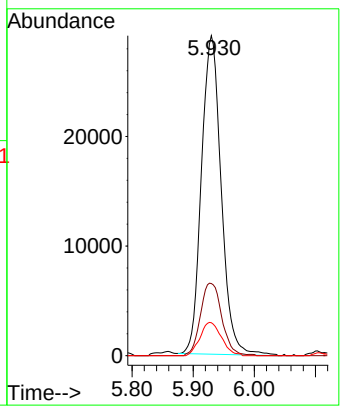




#33
Tert-Amyl methyl ether
Concen: 1.903 ug/l
RT: 5.930 min Scan# 14
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 73 Resp: 6530

Ion	Ratio	Lower	Upper
73	100		
87	24.6	18.9	28.3
71	11.3	9.0	13.4



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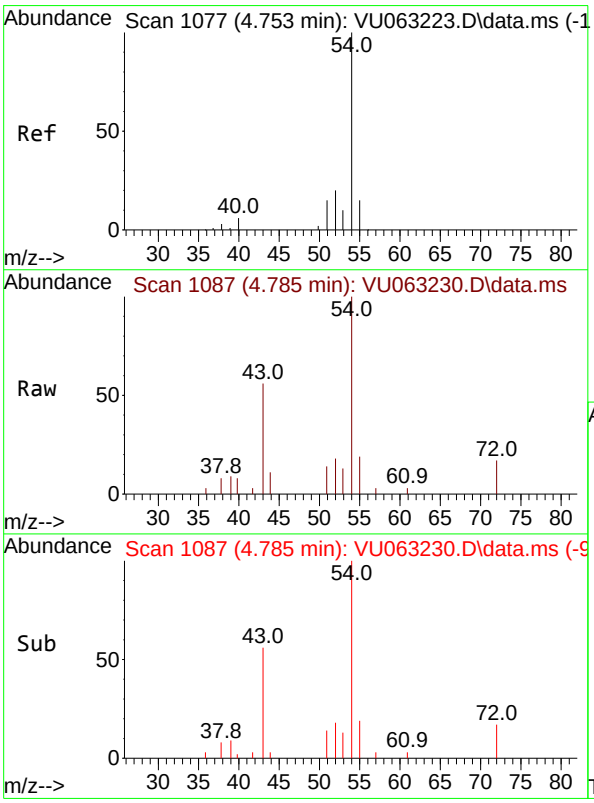
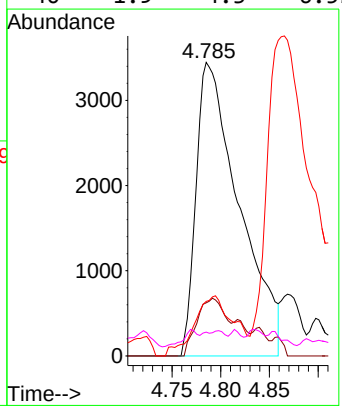
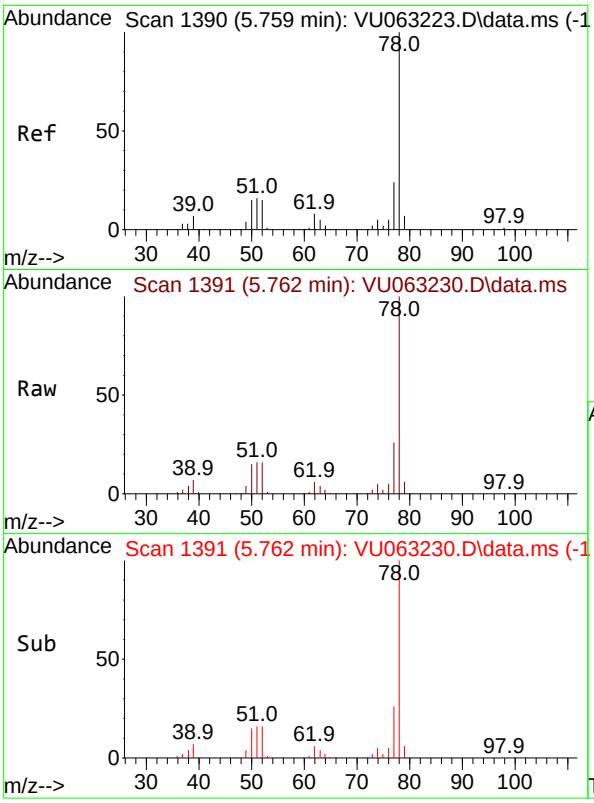


#34
Propionitrile
Concen: 8.855 ug/l
RT: 4.785 min Scan# 1087
Delta R.T. 0.032 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 54 Resp: 10600

Ion	Ratio	Lower	Upper
54	100		
52	13.1	16.3	24.5#
55	18.7	11.8	17.6#
40	1.9	4.3	6.5#

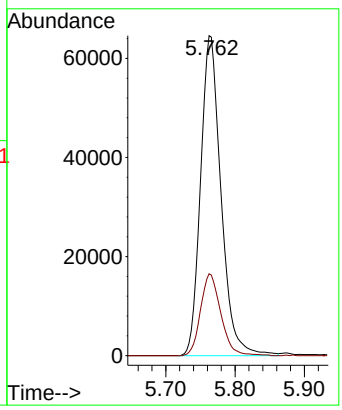




#35
Benzene
Concen: 1.943 ug/l
RT: 5.762 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 78 Resp: 13230

Ion	Ratio	Lower	Upper
78	100		
77	25.6	19.0	28.4



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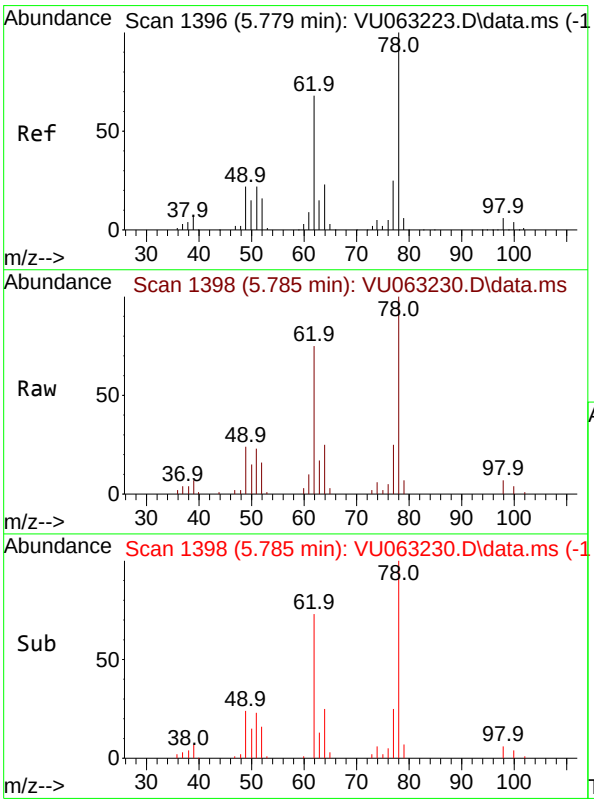
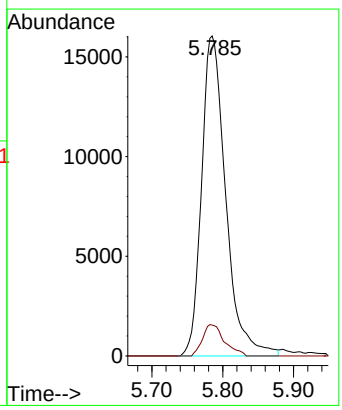
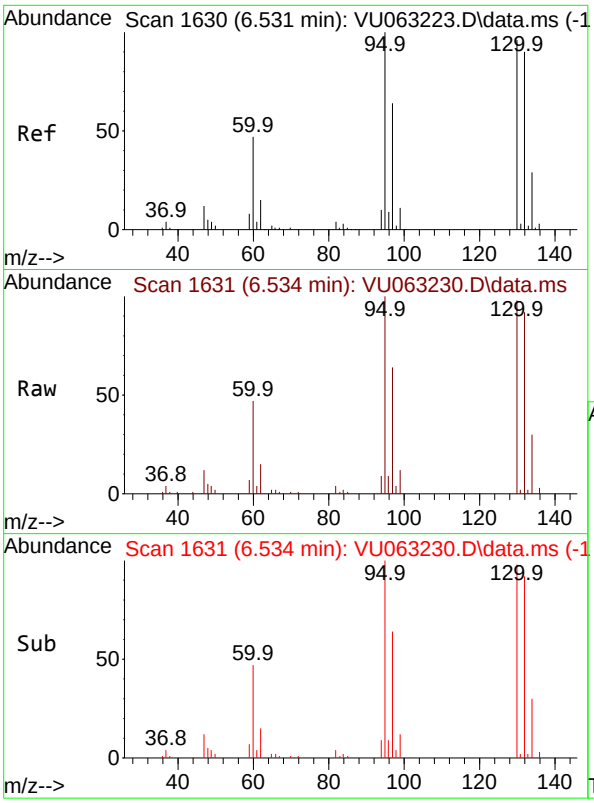


#36
1,2-Dichloroethane
Concen: 1.933 ug/l
RT: 5.785 min Scan# 1398
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 62 Resp: 38000

Ion	Ratio	Lower	Upper
62	100		
98	8.9	6.9	10.3

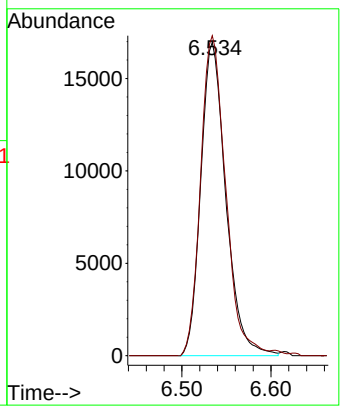




#37
Trichloroethene
Concen: 2.040 ug/l
RT: 6.534 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:130 Resp: 3303

Ion	Ratio	Lower	Upper
130	100		
95	102.1	83.2	124.8



Instrument :
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ClientSampleId :
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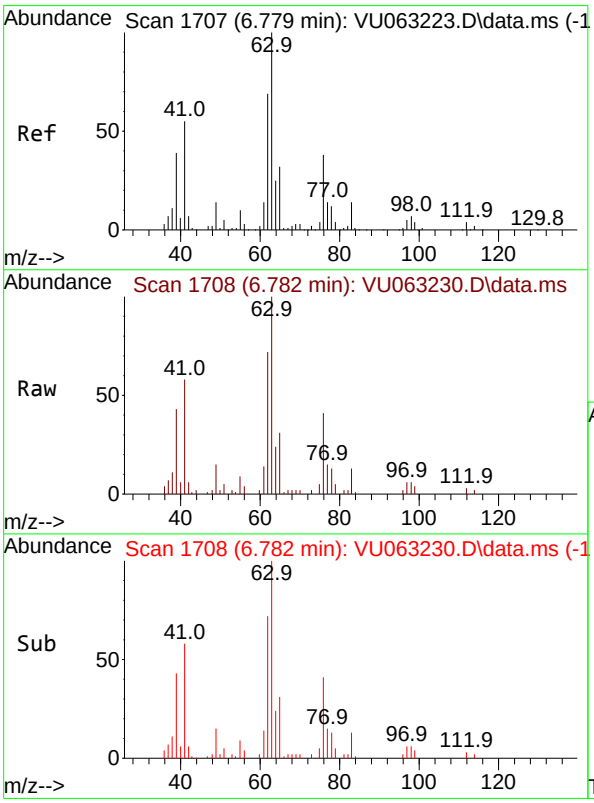
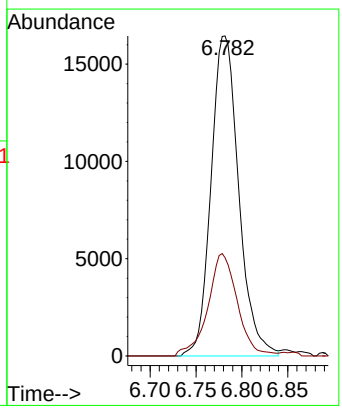
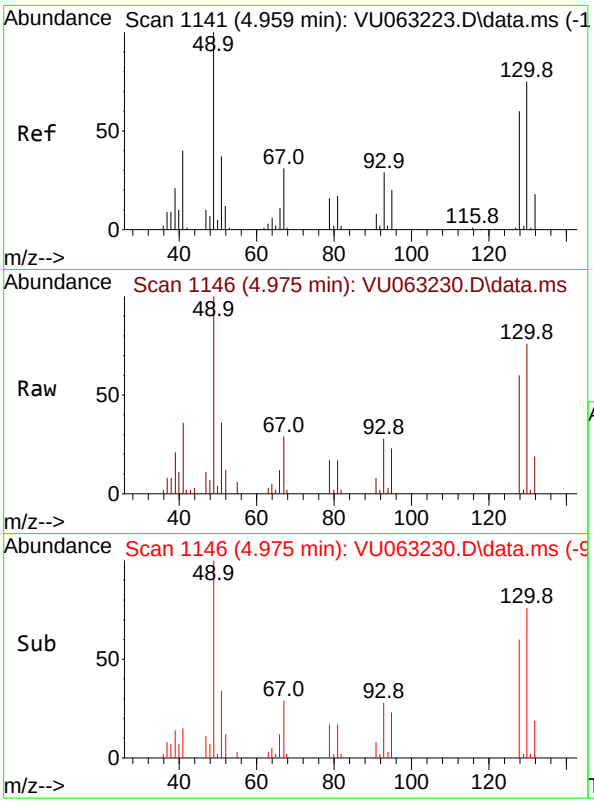


#38
1,2-Dichloropropane
Concen: 1.939 ug/l
RT: 6.782 min Scan# 1708
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 63 Resp: 34557

Ion	Ratio	Lower	Upper
63	100		
65	29.9	25.3	37.9

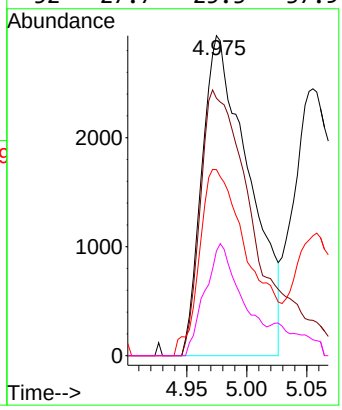




#39
Methacrylonitrile
Concen: 1.802 ug/l
RT: 4.975 min Scan# 1
Delta R.T. 0.016 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 41 Resp: 803

Ion	Ratio	Lower	Upper
41	100		
67	97.5	64.5	96.7#
39	61.8	43.0	64.6
52	27.7	25.3	37.9



Instrument :
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ClientSampleId :
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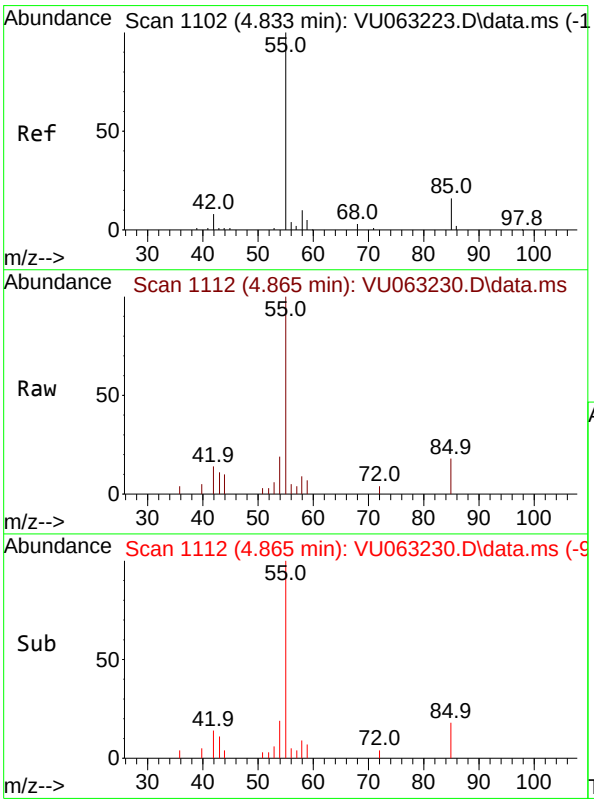
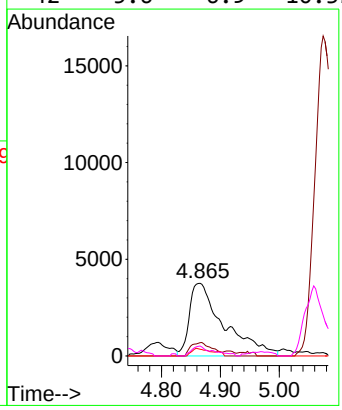
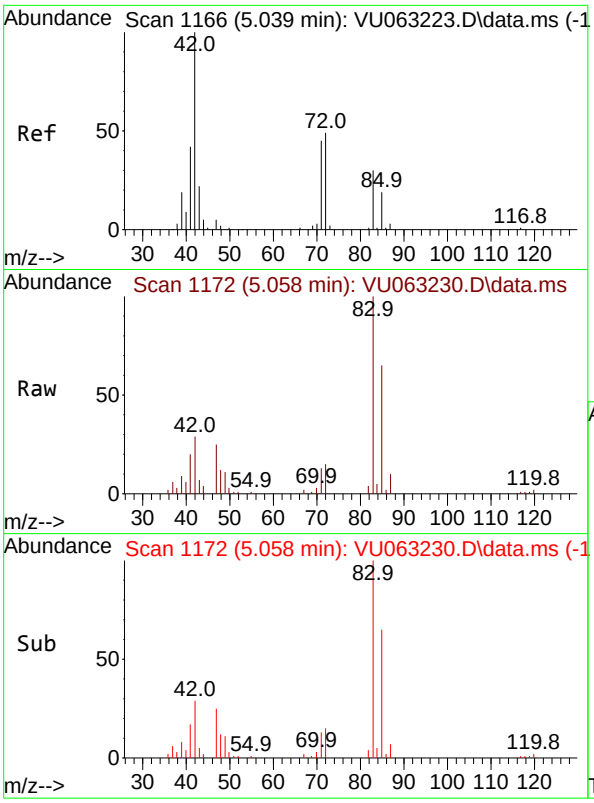


#40
Methyl acrylate
Concen: 1.863 ug/l m
RT: 4.865 min Scan# 1112
Delta R.T. 0.032 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 55 Resp: 15318

Ion	Ratio	Lower	Upper
55	100		
85	11.2	13.3	19.9#
58	5.2	7.3	10.9#
42	5.6	6.9	10.3#

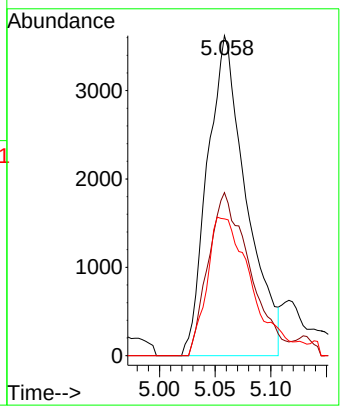




#41
Tetrahydrofuran
Concen: 3.380 ug/l
RT: 5.058 min Scan# 1
Delta R.T. 0.019 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 42 Resp: 876

Ion	Ratio	Lower	Upper
42	100		
72	54.7	41.5	62.3
71	50.5	37.2	55.8



Instrument :
MSVOA_U
ClientSampleId :
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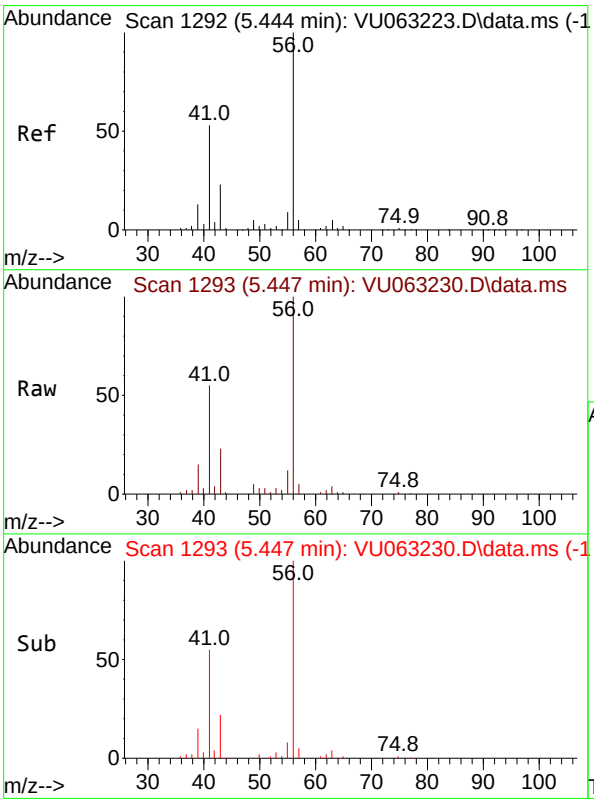
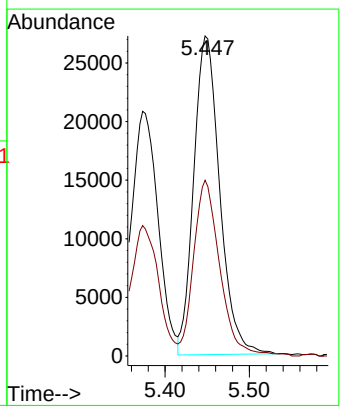
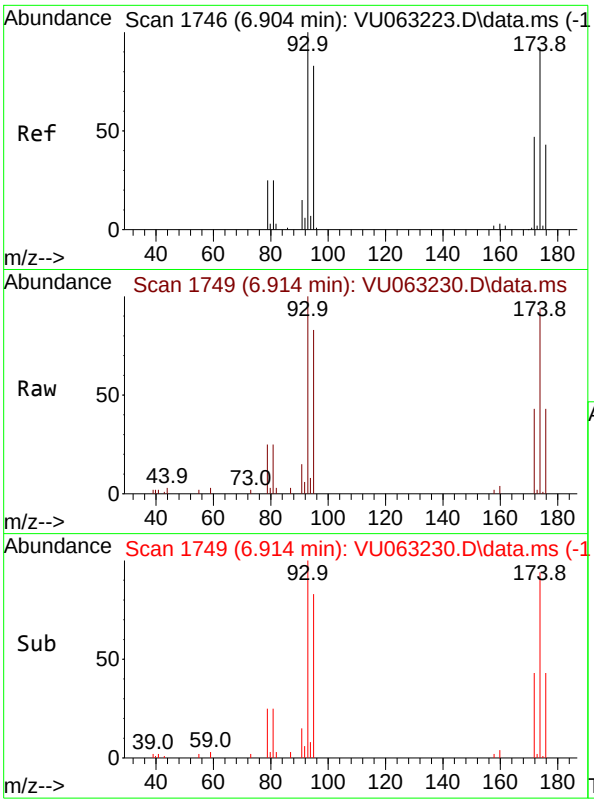


#42
1-Chlorobutane
Concen: 1.924 ug/l
RT: 5.447 min Scan# 1293
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 56 Resp: 58303

Ion	Ratio	Lower	Upper
56	100		
41	55.7	26.3	78.8

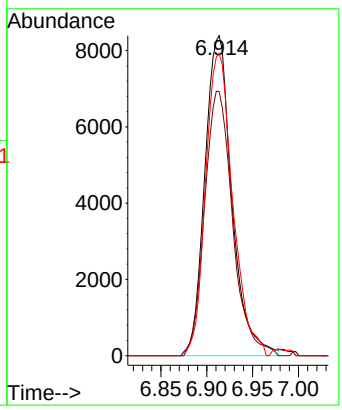




#43
Dibromomethane
Concen: 1.906 ug/l
RT: 6.914 min Scan# 1
Delta R.T. 0.009 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 93 Resp: 1720

Ion	Ratio	Lower	Upper
93	100		
95	85.5	67.2	100.8
174	95.0	75.7	113.5



Instrument :
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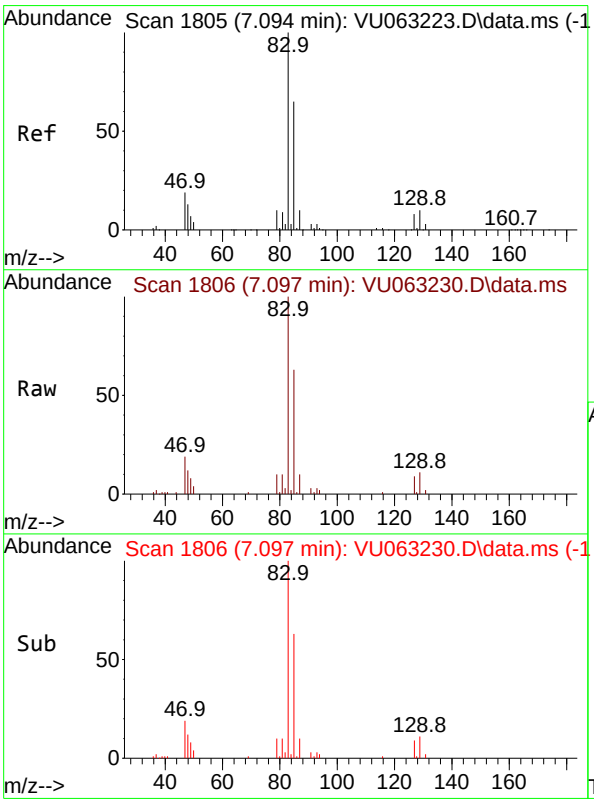
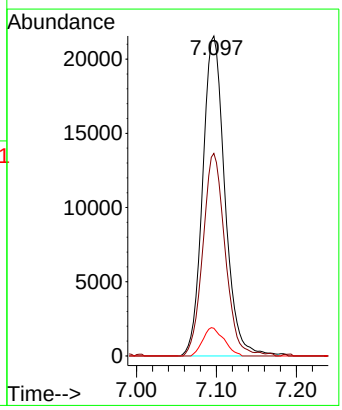
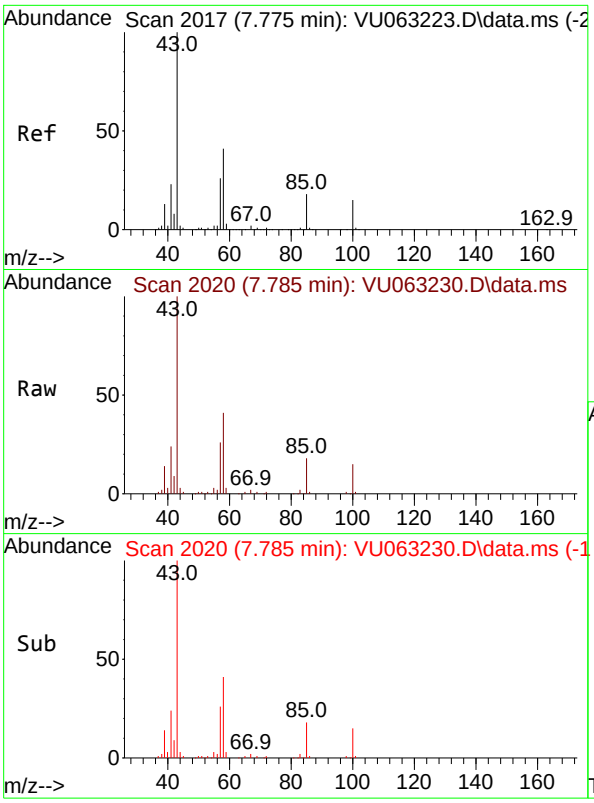


#44
Bromodichloromethane
Concen: 1.982 ug/l
RT: 7.097 min Scan# 1806
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 83 Resp: 41643

Ion	Ratio	Lower	Upper
83	100		
85	63.3	51.7	77.5
127	9.6	6.7	10.1

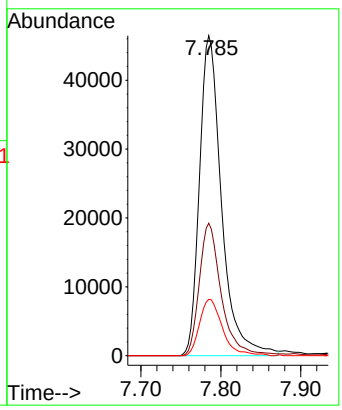




#45
4-Methyl-2-Pentanone
Concen: 9.439 ug/l
RT: 7.785 min Scan# 2
Delta R.T. 0.009 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 43 Resp: 8931

Ion	Ratio	Lower	Upper
43	100		
58	41.3	20.8	62.5
85	18.1	14.8	22.2



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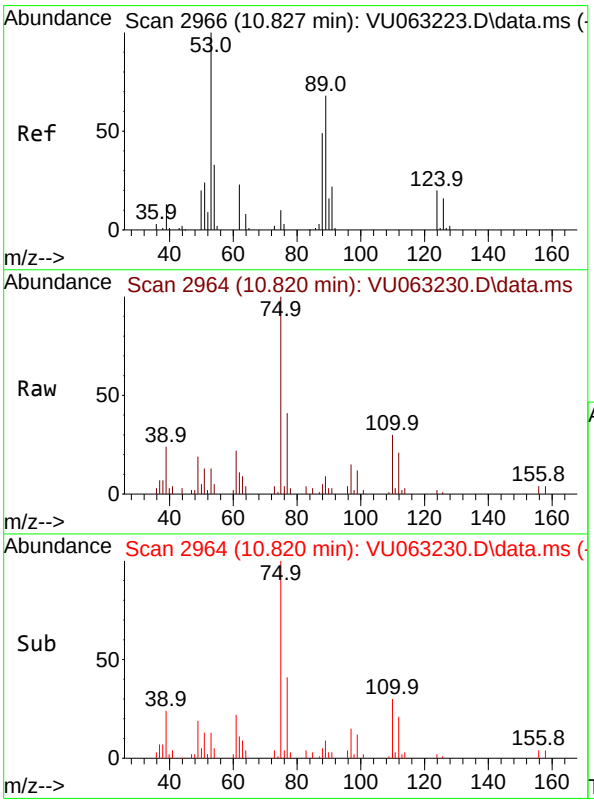
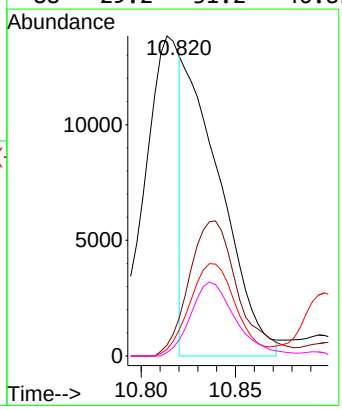
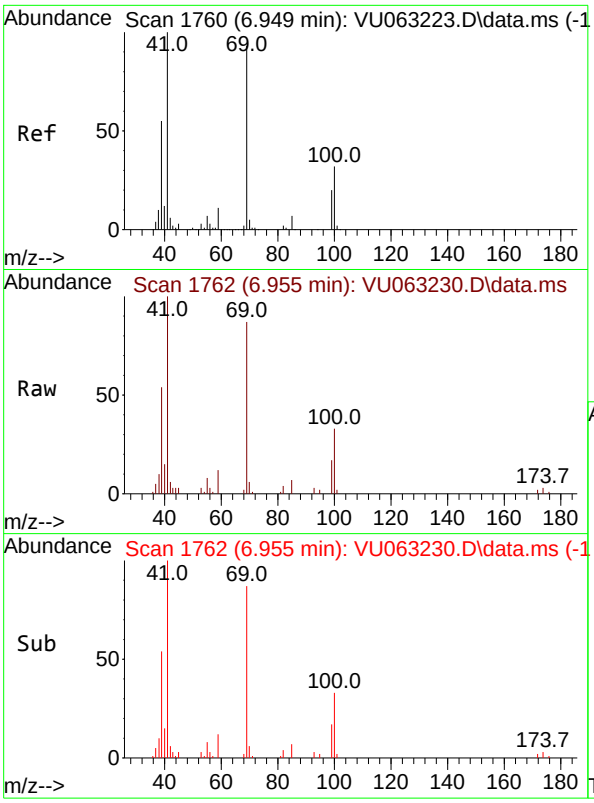


#46
t-1,4-Dichloro-2-butene
Concen: 4.102 ug/l m
RT: 10.820 min Scan# 2964
Delta R.T. -0.007 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 75 Resp: 18247

Ion	Ratio	Lower	Upper
75	100		
53	58.3	64.5	96.7#
89	37.6	43.4	65.2#
88	29.2	31.2	46.8#

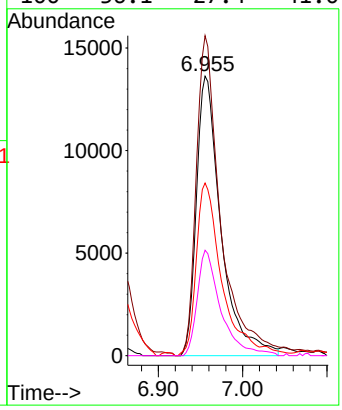




#47
Methyl methacrylate
Concen: 3.639 ug/l
RT: 6.955 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 69 Resp: 2766

Ion	Ratio	Lower	Upper
69	100		
41	114.8	0.0	217.0
39	64.7	47.7	71.5
100	36.1	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

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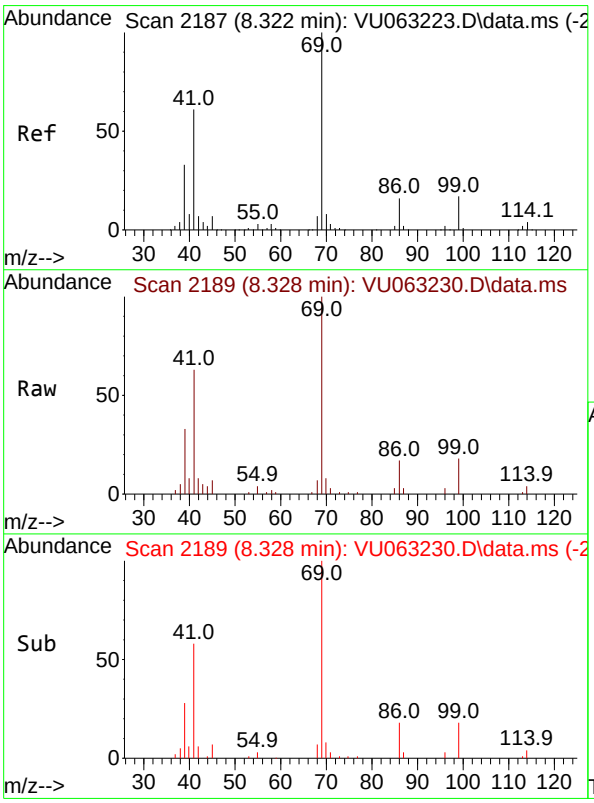
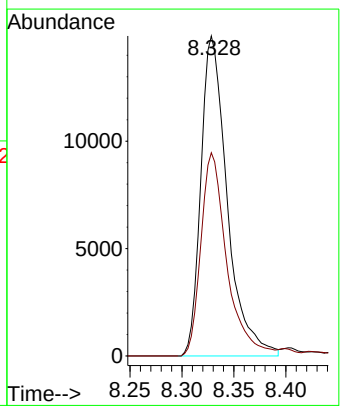
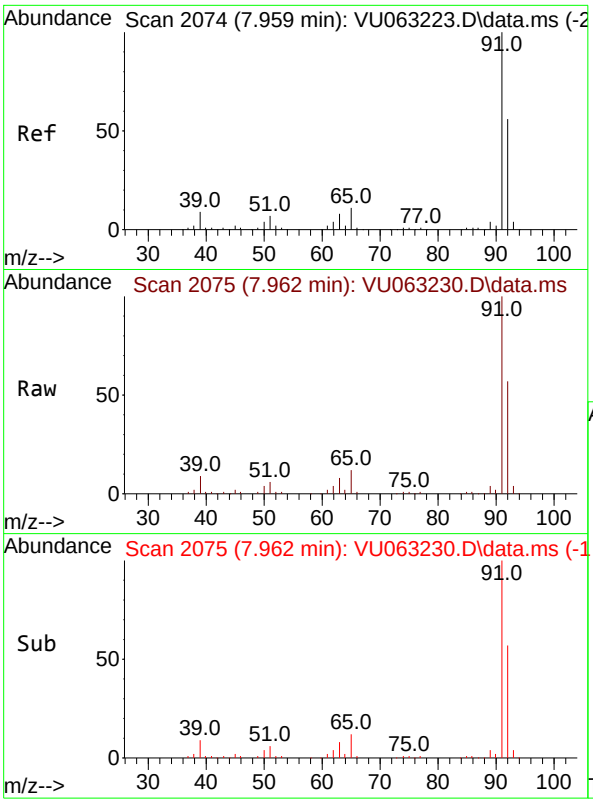


#48
Ethyl methacrylate
Concen: 1.839 ug/l
RT: 8.328 min Scan# 2189
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 69 Resp: 26252

Ion	Ratio	Lower	Upper
69	100		
41	62.4	30.6	92.0

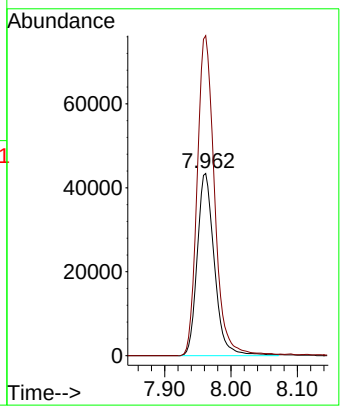




#49
Toluene
Concen: 1.995 ug/l
RT: 7.962 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 92 Resp: 7814

Ion	Ratio	Lower	Upper
92	100		
91	178.2	141.8	212.6



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

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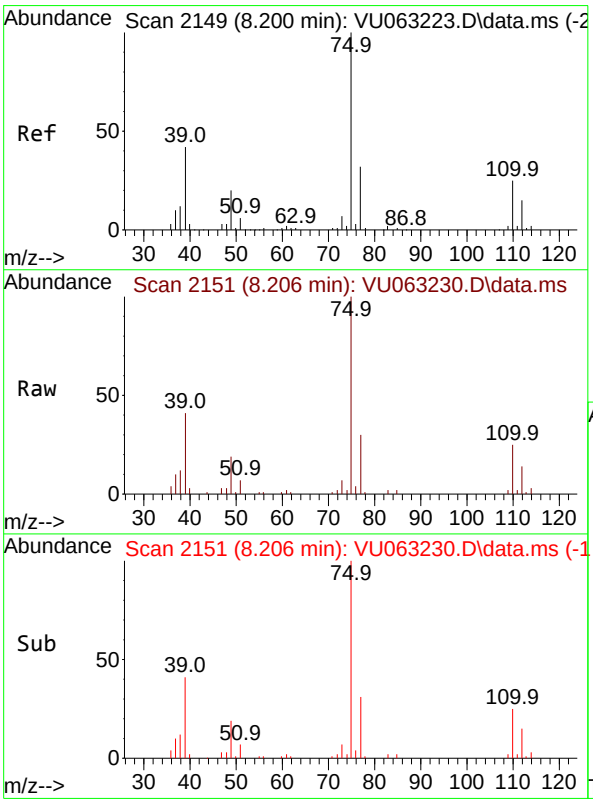
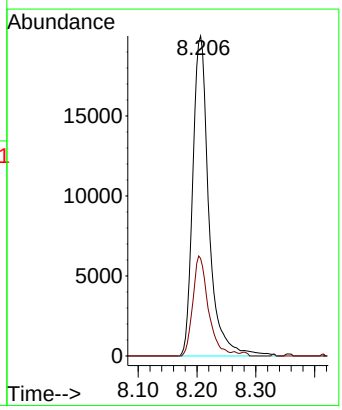
Supervised By :Mahesh Dadoda 02/12/2025

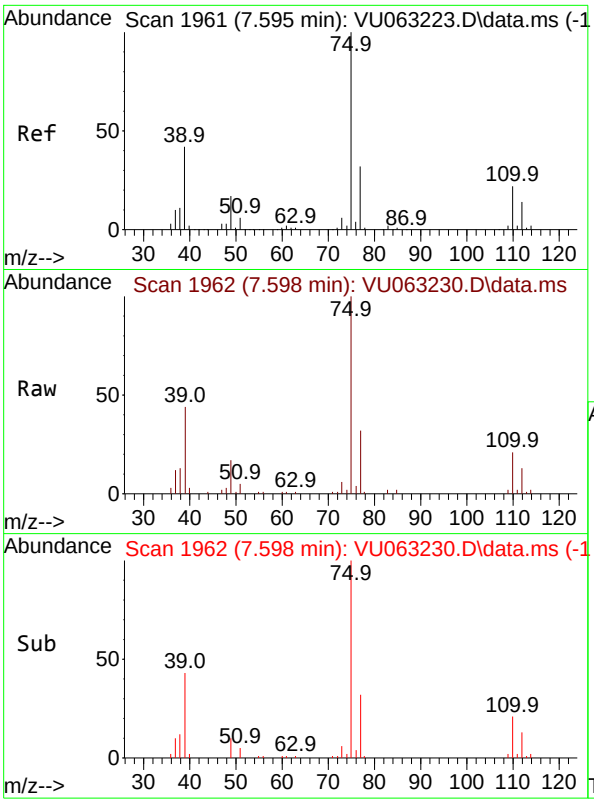


#50
t-1,3-Dichloropropene
Concen: 1.976 ug/l
RT: 8.206 min Scan# 2151
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 75 Resp: 37997

Ion	Ratio	Lower	Upper
75	100		
77	30.4	25.9	38.9

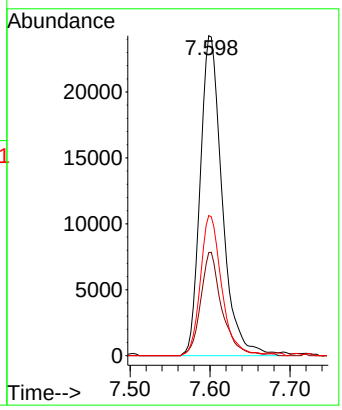




#51
cis-1,3-Dichloropropene
Concen: 1.953 ug/l
RT: 7.598 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 75 Resp: 4639

Ion	Ratio	Lower	Upper
75	100		
77	32.2	25.3	37.9
39	43.2	33.5	50.3



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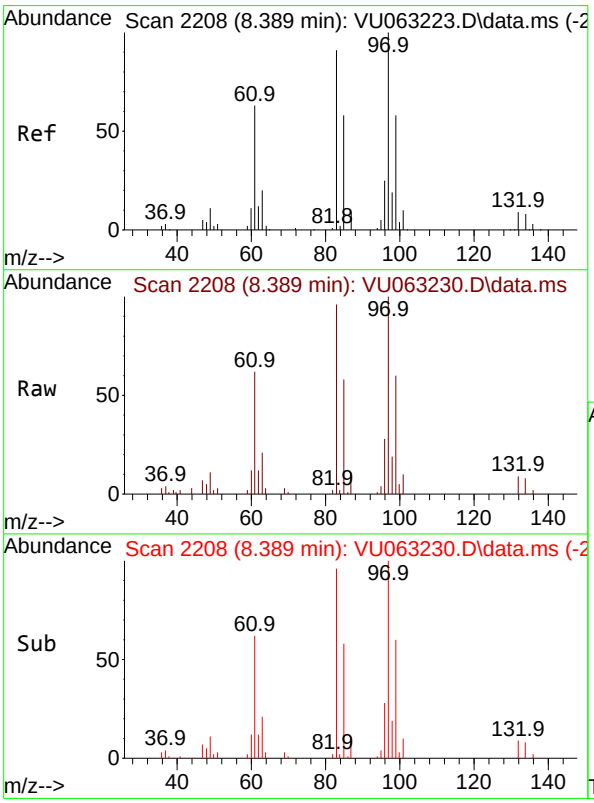
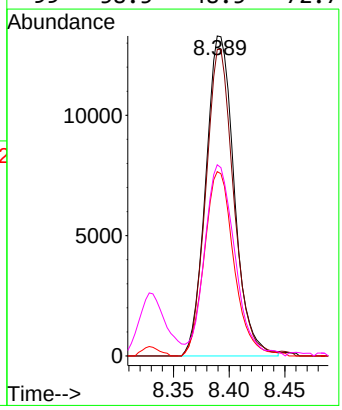
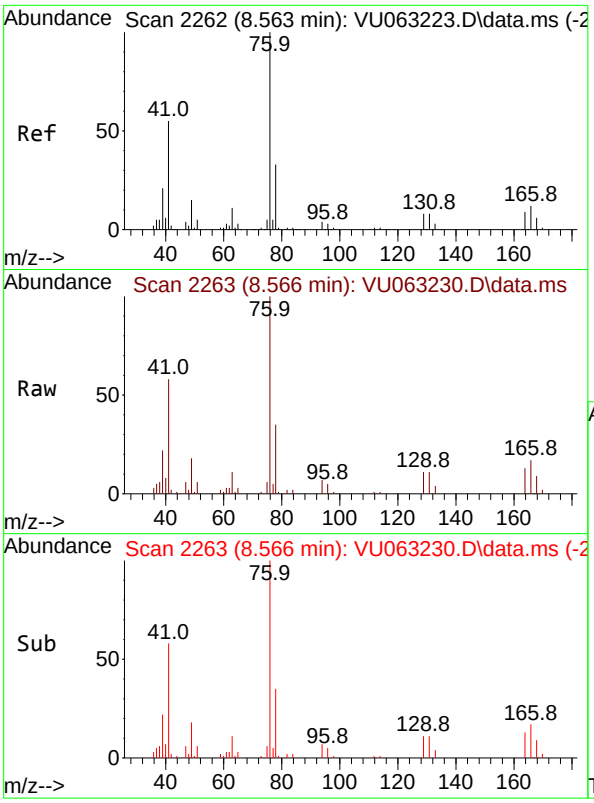


#52
1,1,2-Trichloroethane
Concen: 1.941 ug/l
RT: 8.389 min Scan# 2208
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 97 Resp: 23627

Ion	Ratio	Lower	Upper
97	100		
83	95.7	73.0	109.4
85	57.6	46.3	69.5
99	58.5	48.5	72.7

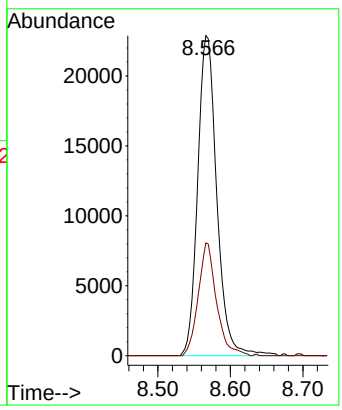




#53
1,3-Dichloropropane
Concen: 1.938 ug/l
RT: 8.566 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 76 Resp: 4187

Ion	Ratio	Lower	Upper
76	100		
78	33.6	26.3	39.5



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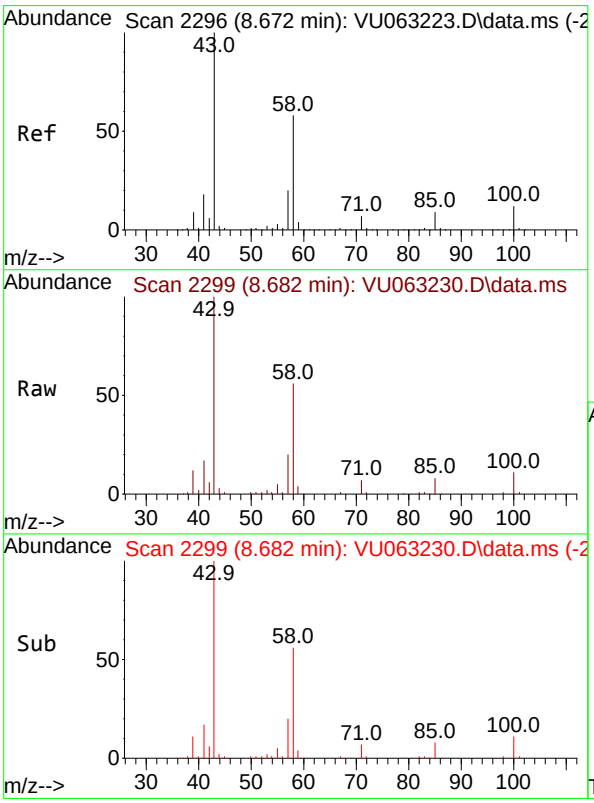
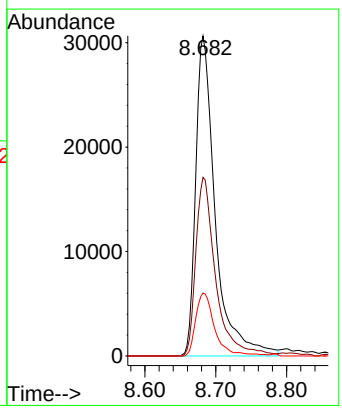
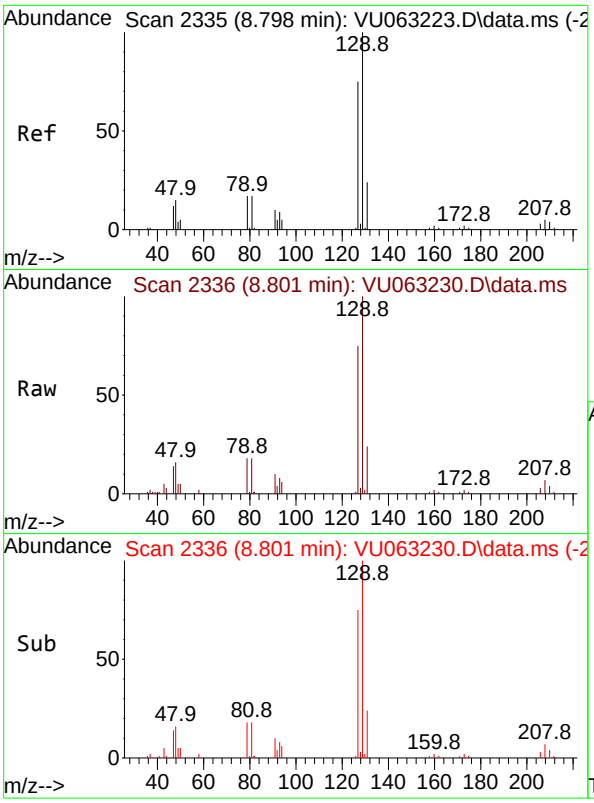


#54
2-Hexanone
Concen: 9.113 ug/l
RT: 8.682 min Scan# 2299
Delta R.T. 0.009 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 43 Resp: 58847

Ion	Ratio	Lower	Upper
43	100		
58	56.5	38.0	78.0
57	19.2	0.0	39.1

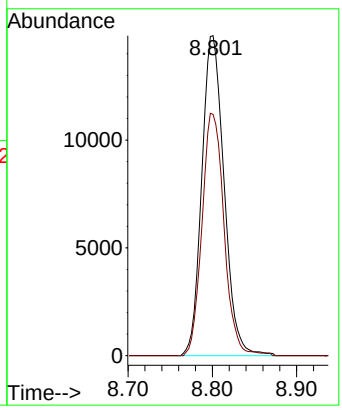




#55
Dibromochloromethane
Concen: 1.954 ug/l
RT: 8.801 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:129 Resp: 2735

Ion	Ratio	Lower	Upper
129	100		
127	74.5	60.4	90.6



Instrument :
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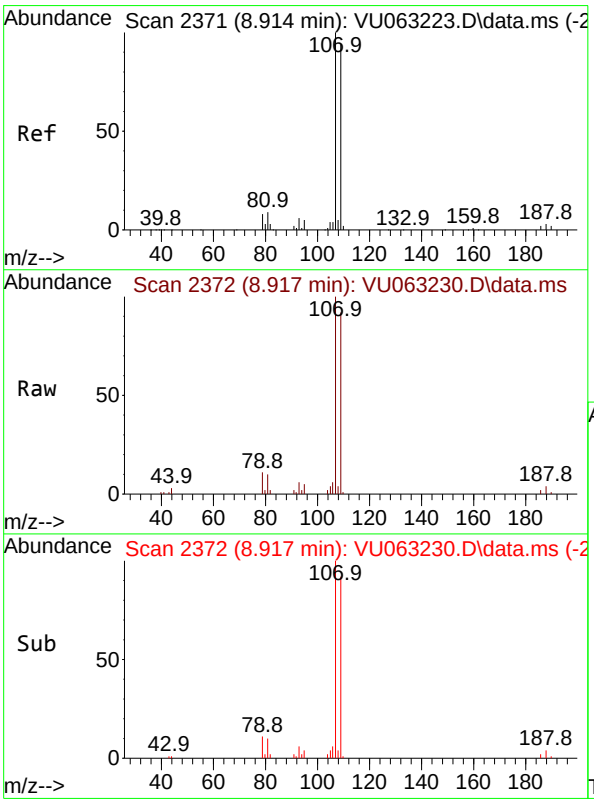
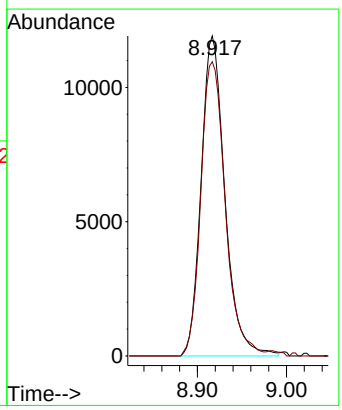
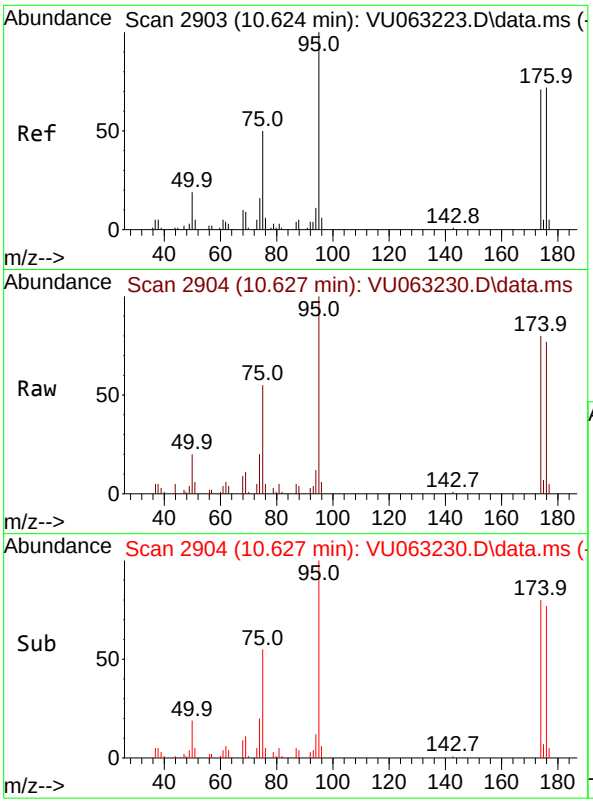


#56
1,2-Dibromoethane
Concen: 1.930 ug/l
RT: 8.917 min Scan# 2372
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:107 Resp: 22029

Ion	Ratio	Lower	Upper
107	100		
109	94.8	0.0	187.8

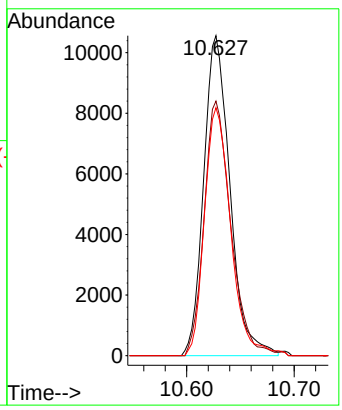




#57
4-Bromofluorobenzene
Concen: 0.981 ug/l
RT: 10.627 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 95 Resp: 1793

Ion	Ratio	Lower	Upper
95	100		
174	80.9	58.6	88.0
176	77.4	58.2	87.4



Instrument :
MSVOA_U
ClientSampleId :
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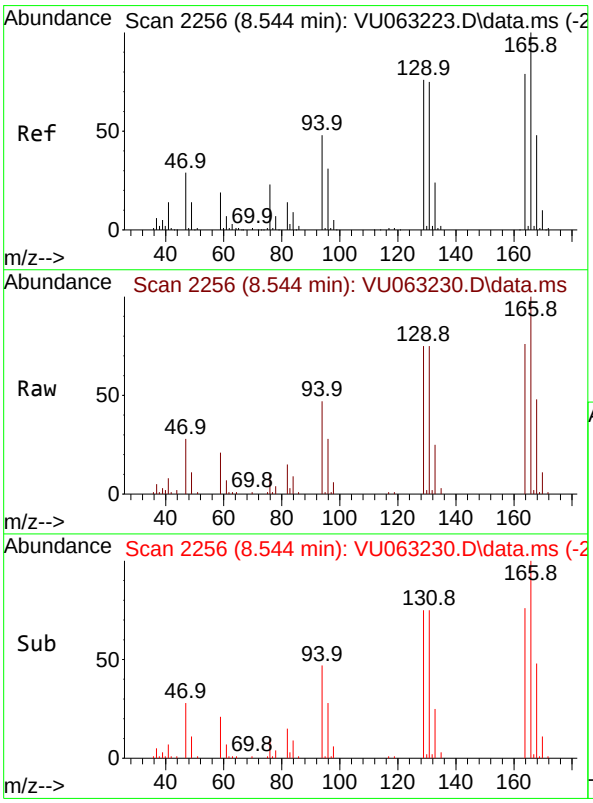
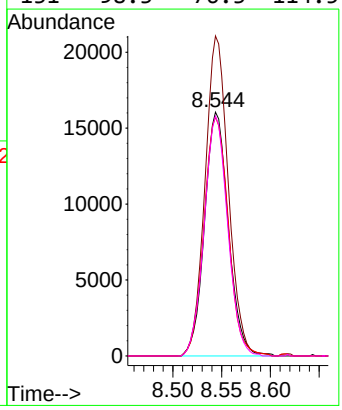
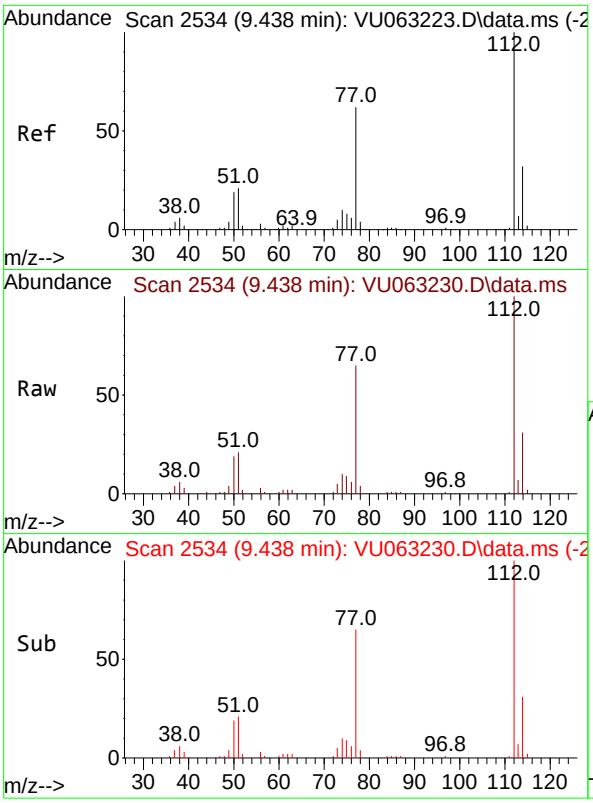


#58
Tetrachloroethene
Concen: 2.043 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:164 Resp: 27268

Ion	Ratio	Lower	Upper
164	100		
166	131.2	101.4	152.0
129	98.0	77.0	115.4
131	98.3	76.3	114.5

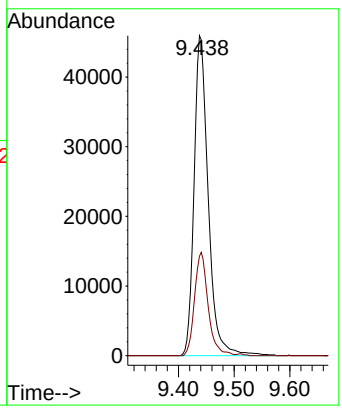




#59
Chlorobenzene
Concen: 1.965 ug/l
RT: 9.438 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:112 Resp: 8119

Ion	Ratio	Lower	Upper
112	100		
114	31.1	25.7	38.5



Instrument :
MSVOA_U
ClientSampleId :
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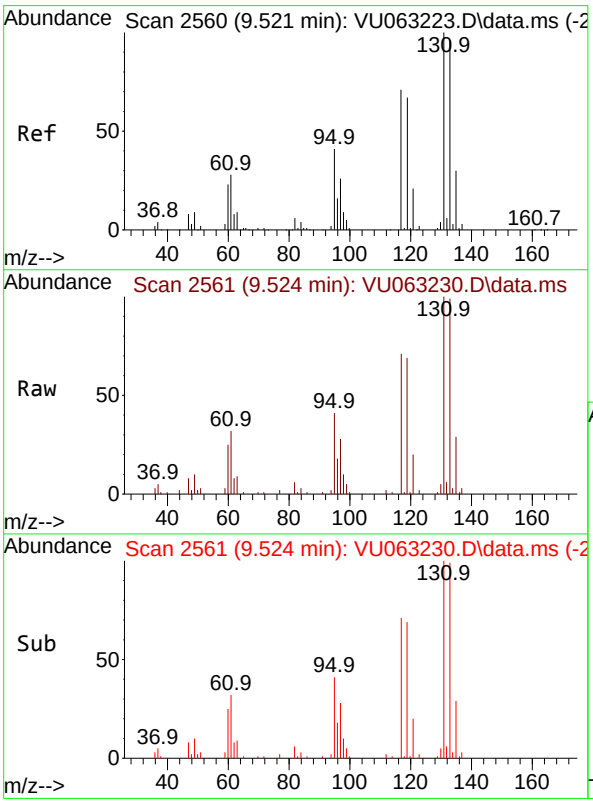
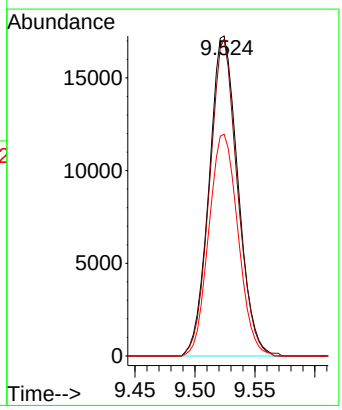
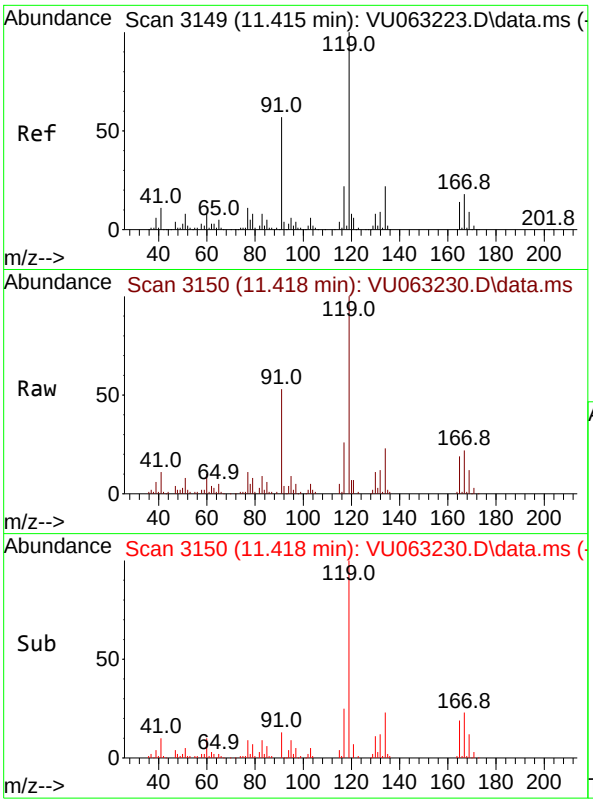


#60
1,1,1,2-Tetrachloroethane
Concen: 1.943 ug/l
RT: 9.524 min Scan# 2561
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:131 Resp: 28863

Ion	Ratio	Lower	Upper
131	100		
133	95.8	76.7	115.1
119	70.0	54.4	81.6

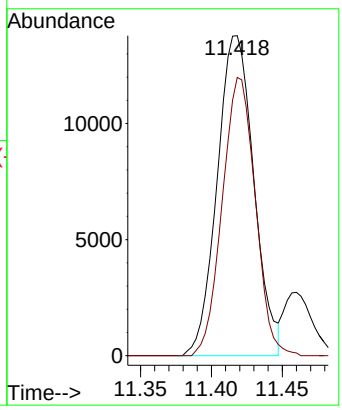




#61
Pentachloroethane
Concen: 1.875 ug/l
RT: 11.418 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:117 Resp: 2487

Ion	Ratio	Lower	Upper
117	100		
167	78.1	65.0	97.6



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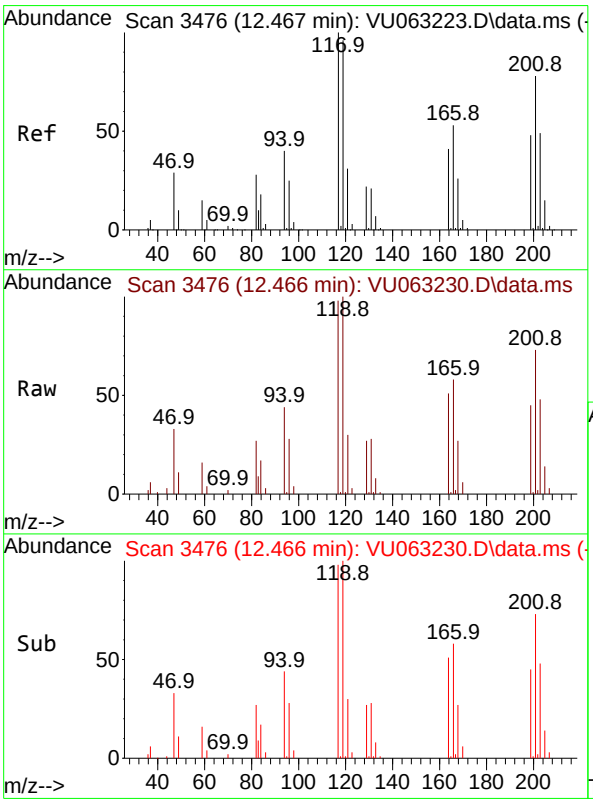
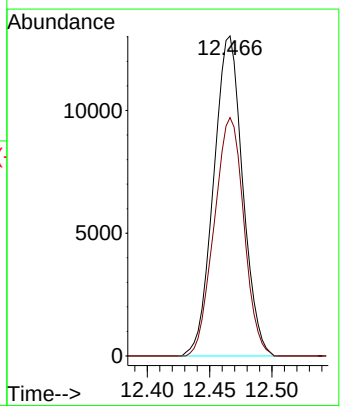
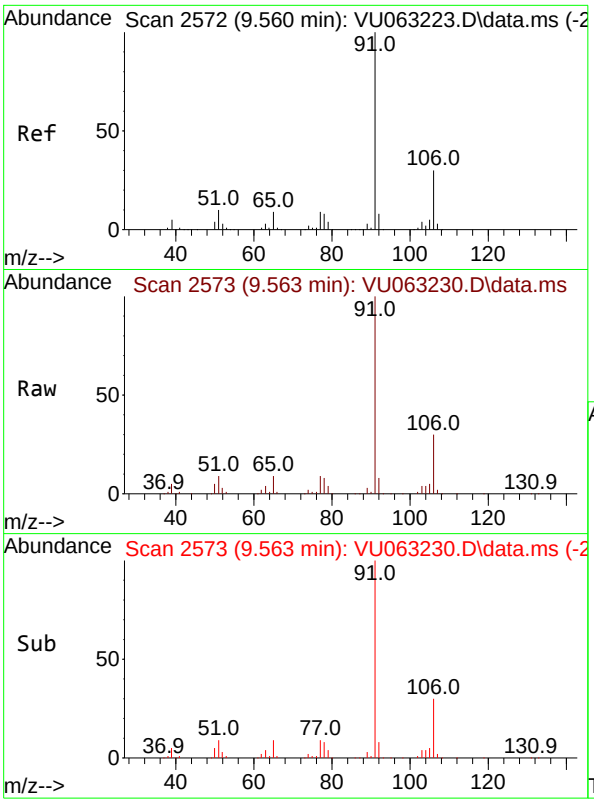


#62
Hexachloroethane
Concen: 1.805 ug/l
RT: 12.466 min Scan# 3476
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:117 Resp: 21187

Ion	Ratio	Lower	Upper
117	100		
201	76.1	61.3	91.9





#63
Ethyl Benzene
Concen: 1.923 ug/l
RT: 9.563 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 91 Resp: 13706

Ion	Ratio	Lower	Upper
91	100		
106	30.1	24.2	36.2

Instrument :
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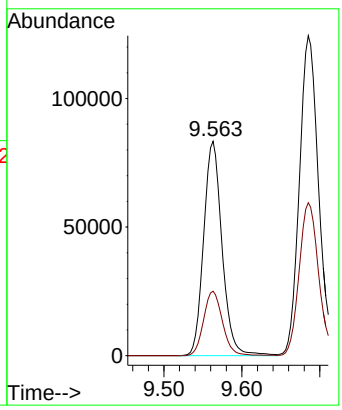
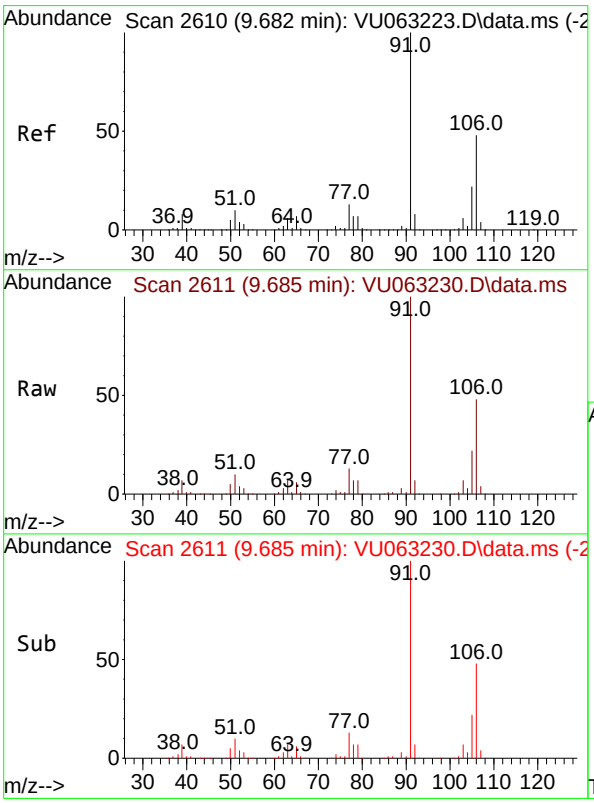
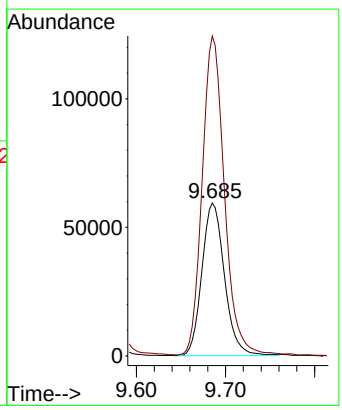


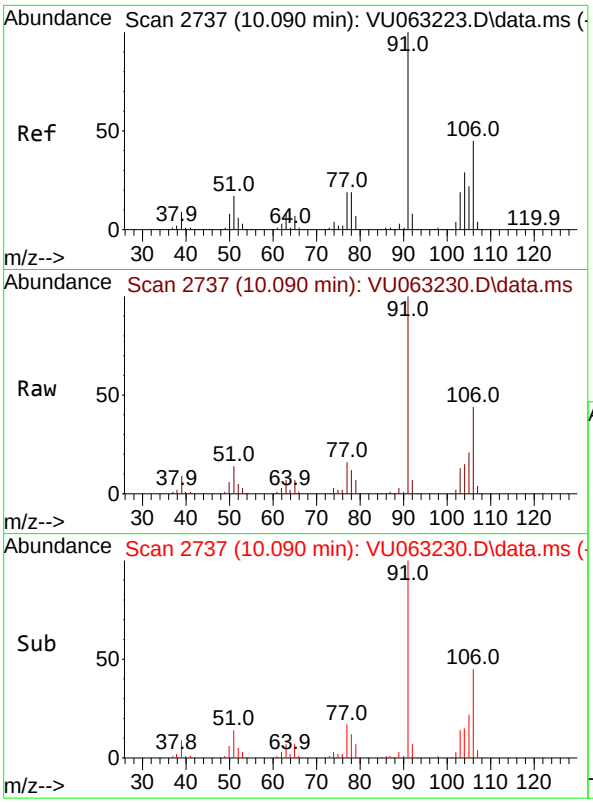


#64
m/p-Xylenes
Concen: 3.922 ug/l
RT: 9.685 min Scan# 2611
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:106 Resp: 104430

Ion	Ratio	Lower	Upper
106	100		
91	204.7	166.9	250.3

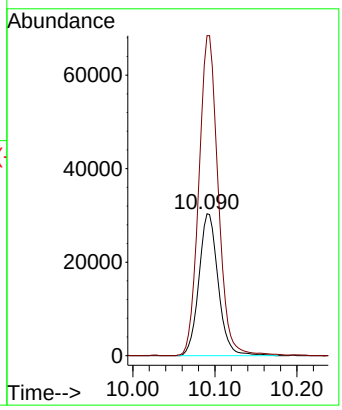




#65
o-Xylene
Concen: 1.904 ug/l
RT: 10.090 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:106 Resp: 4962

Ion	Ratio	Lower	Upper
106	100		
91	226.3	110.9	332.9



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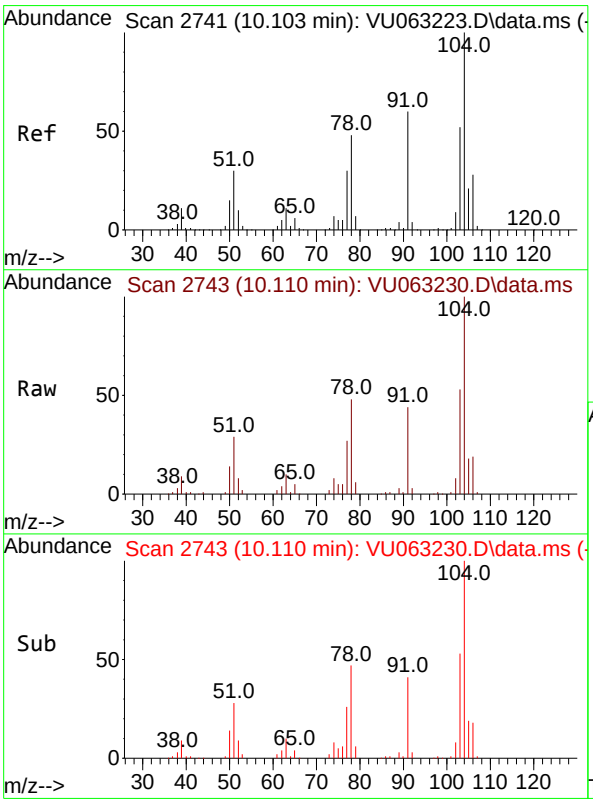
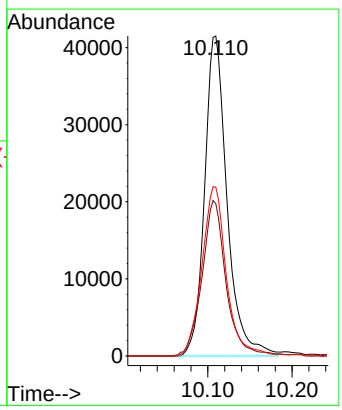
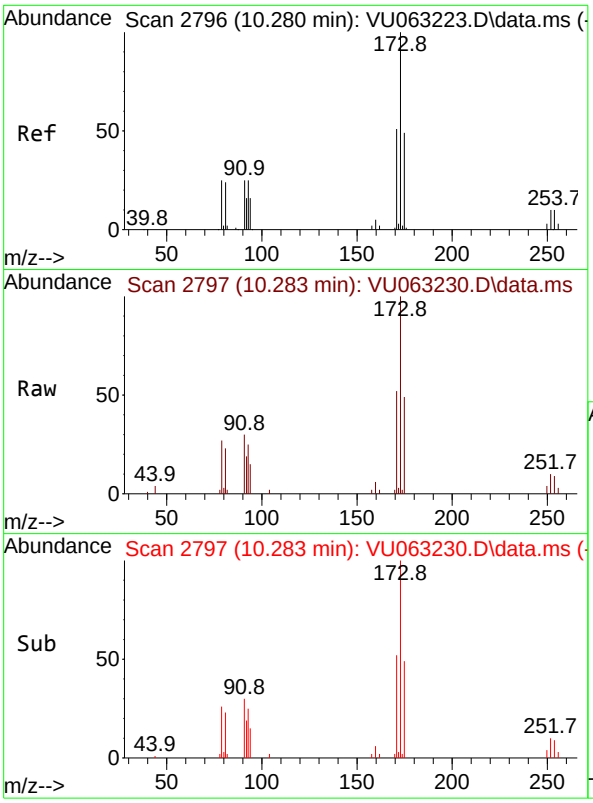


#66
Styrene
Concen: 1.858 ug/l
RT: 10.110 min Scan# 2743
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:104 Resp: 77051

Ion	Ratio	Lower	Upper
104	100		
78	52.1	41.2	61.8
103	57.8	44.8	67.2





#67
Bromoform
Concen: 1.868 ug/l
RT: 10.283 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:173 Resp: 1484

Ion	Ratio	Lower	Upper
173	100		
175	49.2	39.0	58.4
254	8.6	7.7	11.5

Instrument :
MSVOA_U
ClientSampleId :
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Reviewed By :Amit Patel 02/12/2025
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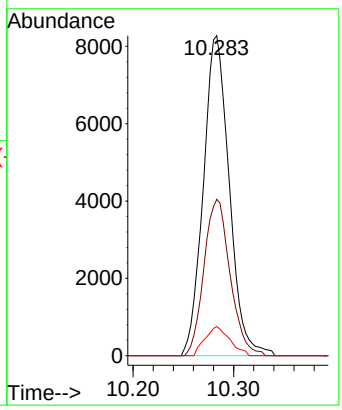
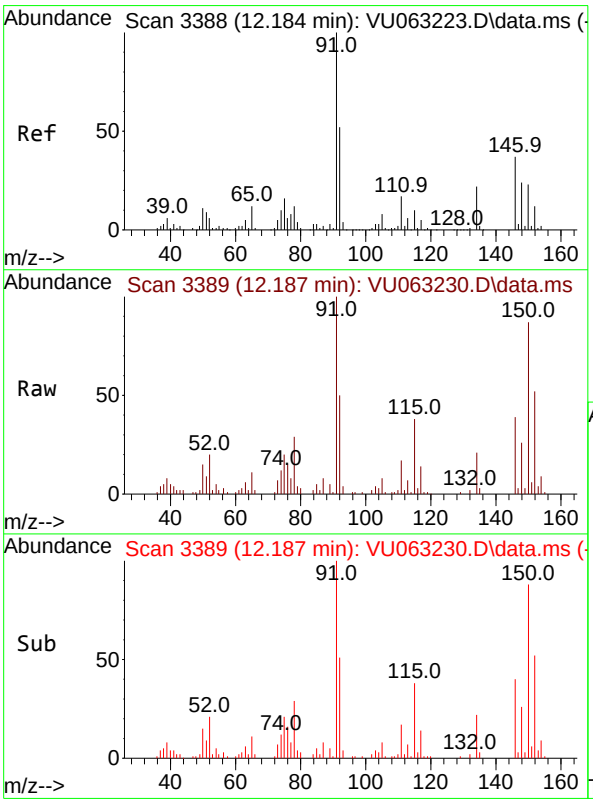
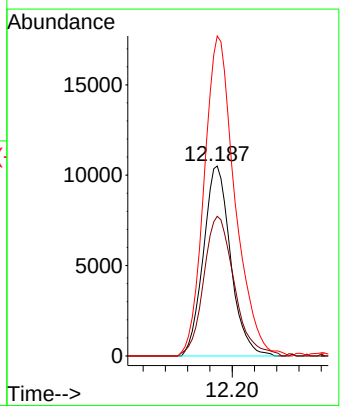


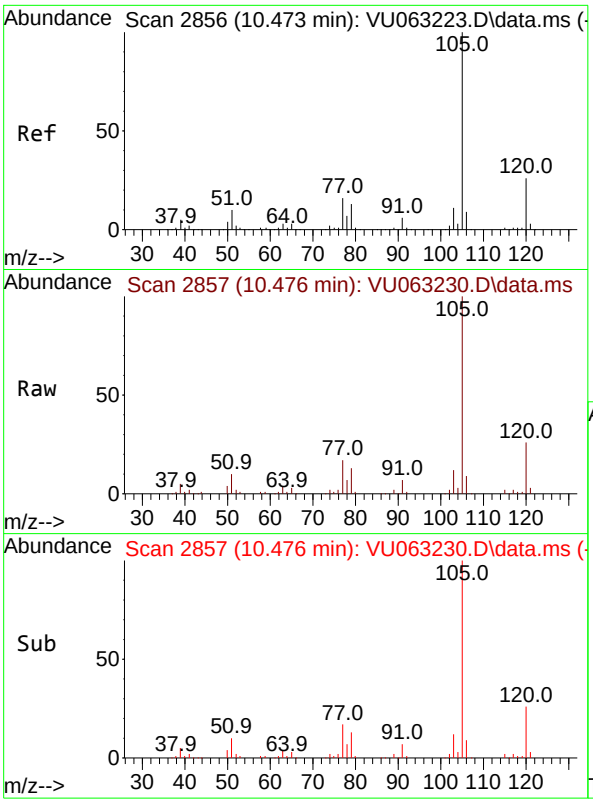


#68
1,2-Dichlorobenzene-d4
Concen: 0.936 ug/l
RT: 12.187 min Scan# 3389
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:152 Resp: 17795

Ion	Ratio	Lower	Upper
152	100		
115	82.7	0.0	275.2
150	190.1	0.0	658.4

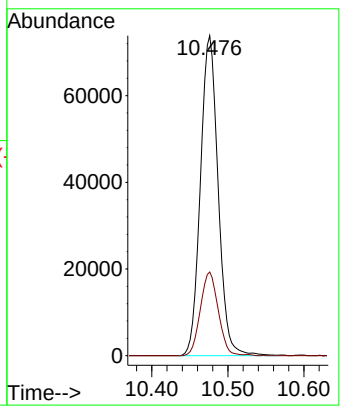




#69
Isopropylbenzene
Concen: 1.948 ug/l
RT: 10.476 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:105 Resp: 11934

Ion	Ratio	Lower	Upper
105	100		
120	26.3	12.8	38.4



Instrument :
MSVOA_U
ClientSampleId :
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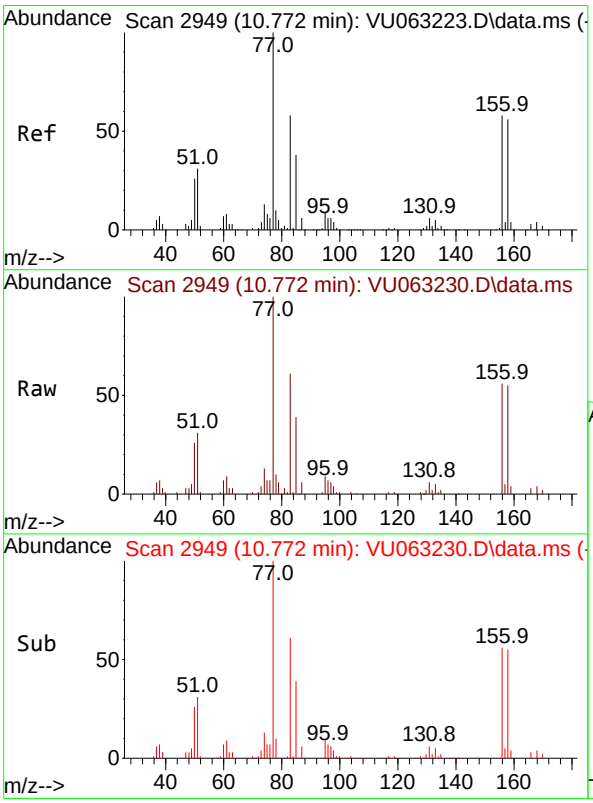
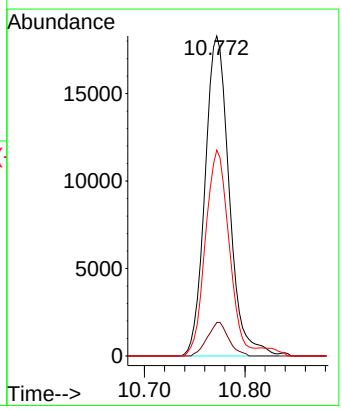
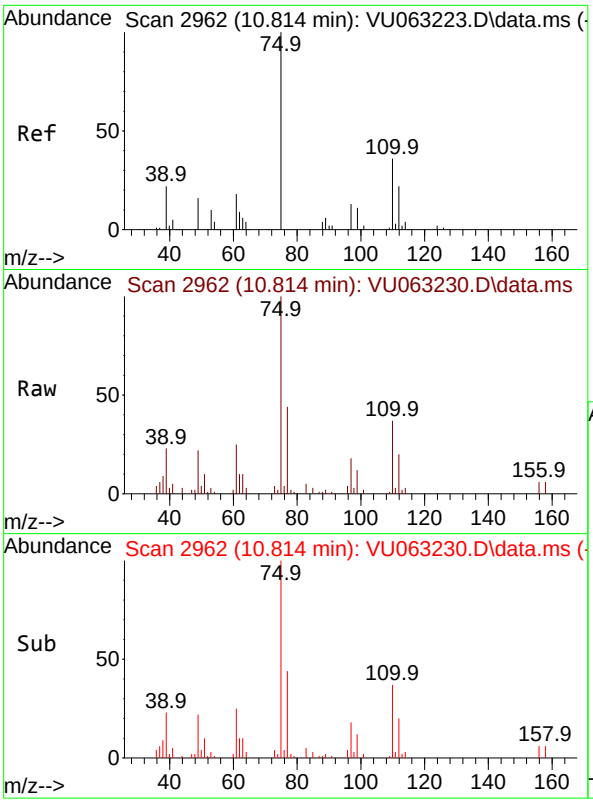


#70
1,1,2,2-Tetrachloroethane
Concen: 1.864 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 83 Resp: 30580

Ion	Ratio	Lower	Upper
83	100		
131	9.2	7.4	11.0
85	63.1	51.8	77.8

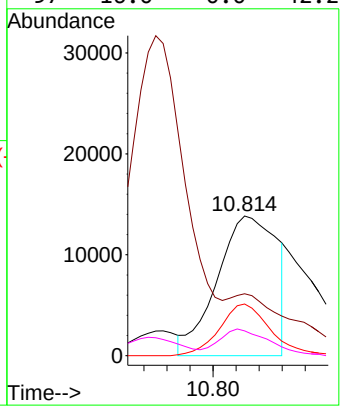




#71
1,2,3-Trichloropropane
Concen: 2.020 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 75 Resp: 2489

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	31.6	0.0	77.0
97	16.0	0.0	42.2



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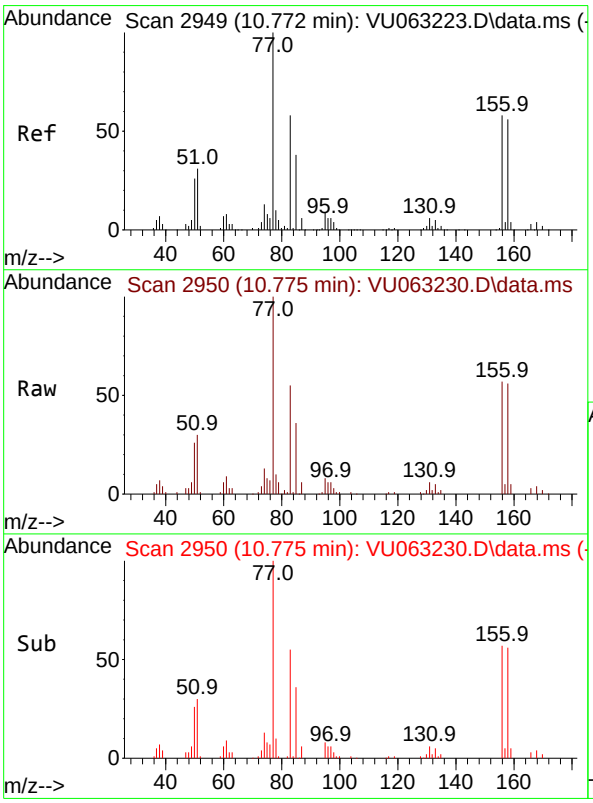
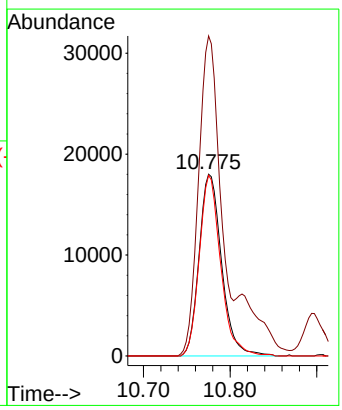
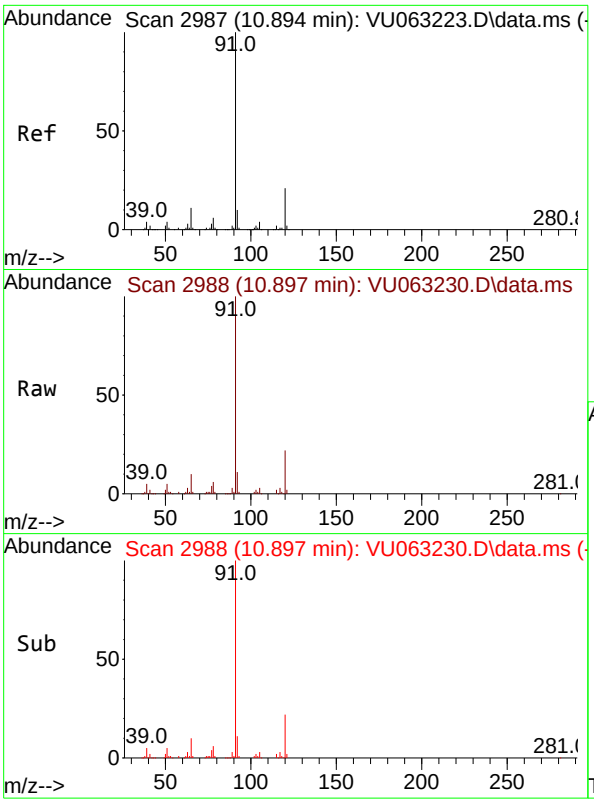


#72
Bromobenzene
Concen: 1.969 ug/l
RT: 10.775 min Scan# 2950
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:156 Resp: 32516

Ion	Ratio	Lower	Upper
156	100		
77	168.7	0.0	343.6
158	94.8	0.0	193.0

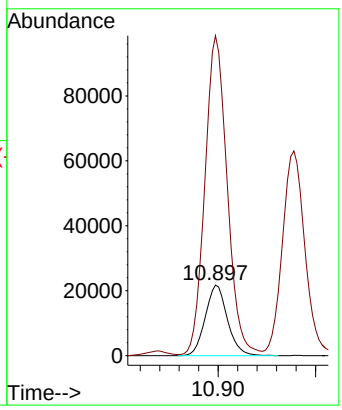




#73
n-propylbenzene
Concen: 1.951 ug/l
RT: 10.897 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:120 Resp: 3423

Ion	Ratio	Lower	Upper
120	100		
91	454.5	369.8	554.6



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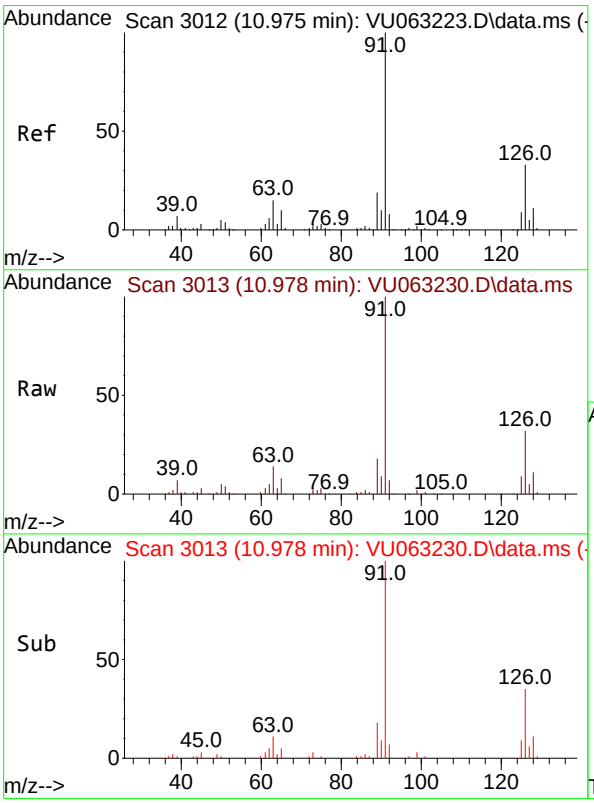
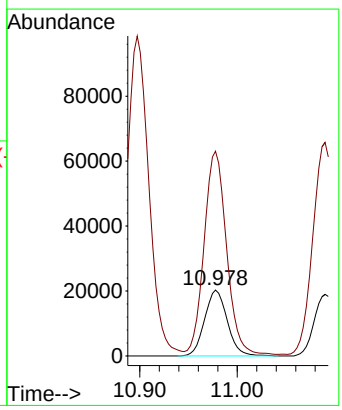
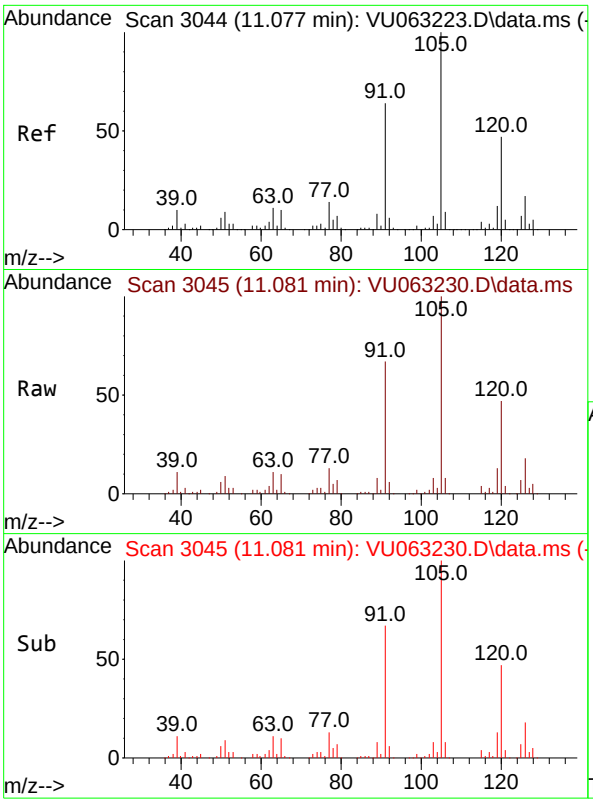


#74
2-Chlorotoluene
Concen: 2.025 ug/l
RT: 10.978 min Scan# 3013
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:126 Resp: 32733

Ion	Ratio	Lower	Upper
126	100		
91	307.0	0.0	623.8

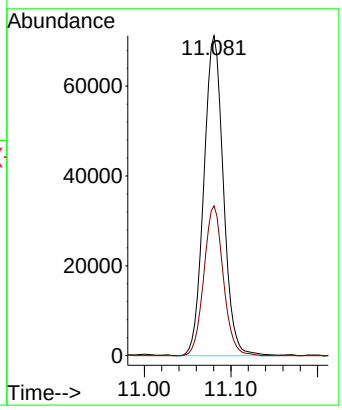




#75
1,3,5-Trimethylbenzene
Concen: 1.963 ug/l
RT: 11.081 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:105 Resp: 11146

Ion	Ratio	Lower	Upper
105	100		
120	46.6	37.3	55.9



Instrument :
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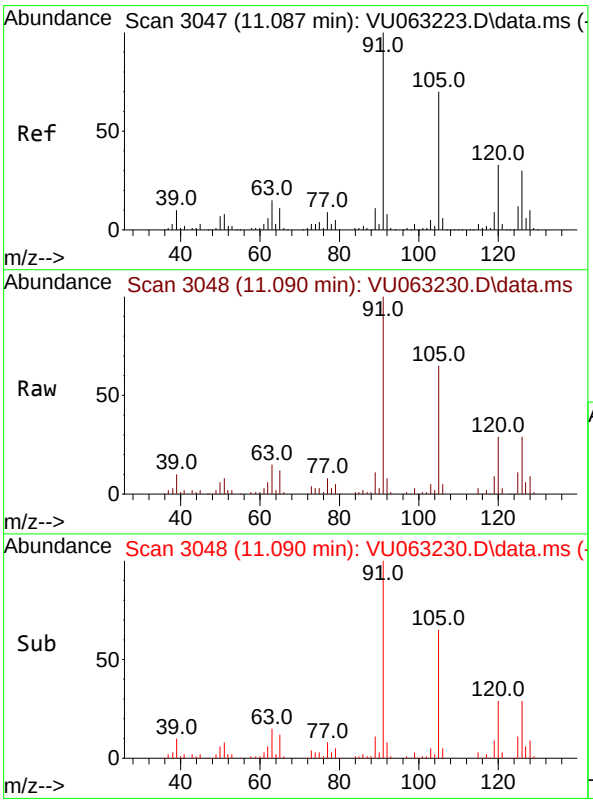
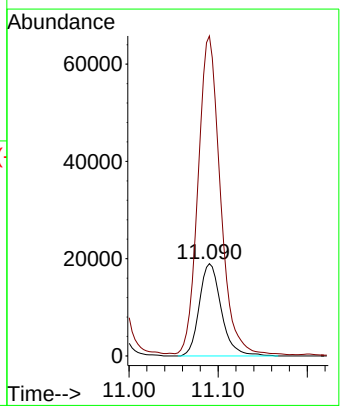
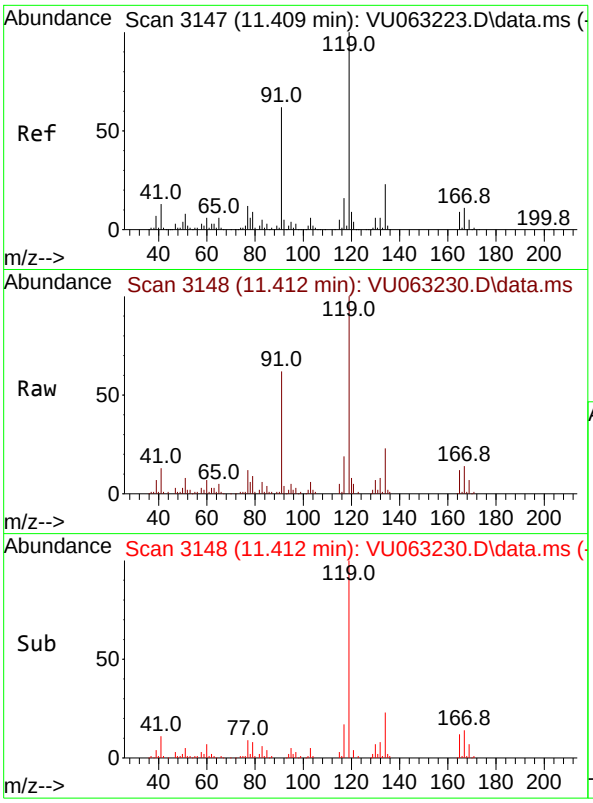


#76
4-Chlorotoluene
Concen: 1.960 ug/l
RT: 11.090 min Scan# 3048
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:126 Resp: 32504

Ion	Ratio	Lower	Upper
126	100		
91	350.2	0.0	703.6

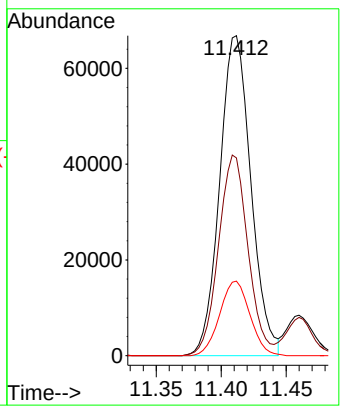




#77
tert-Butylbenzene
Concen: 1.949 ug/l
RT: 11.412 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:119 Resp: 11193

Ion	Ratio	Lower	Upper
119	100		
91	59.2	29.4	88.3
134	22.5	17.6	26.4



Instrument :
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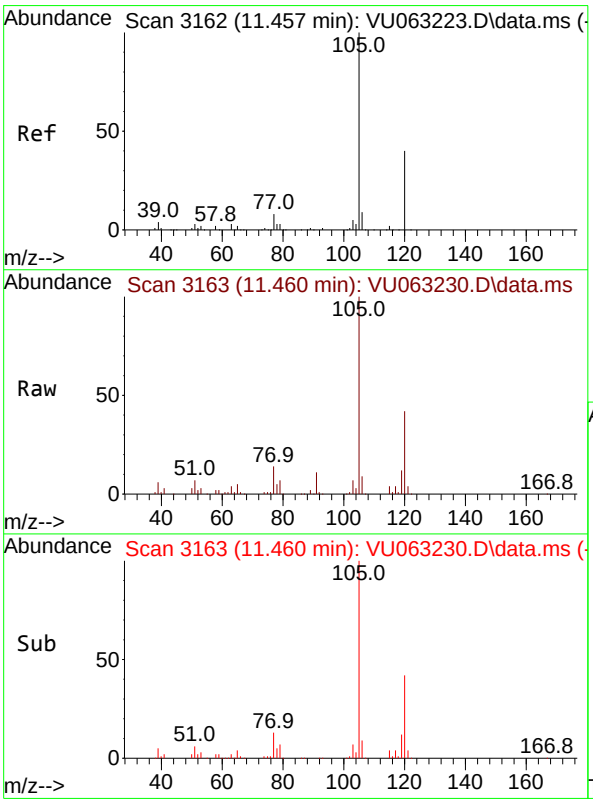
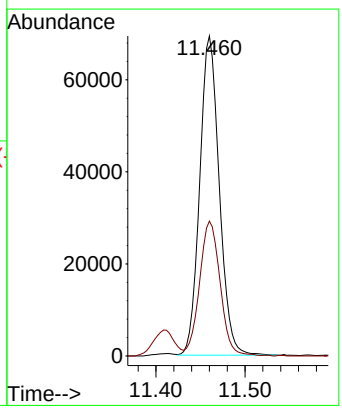
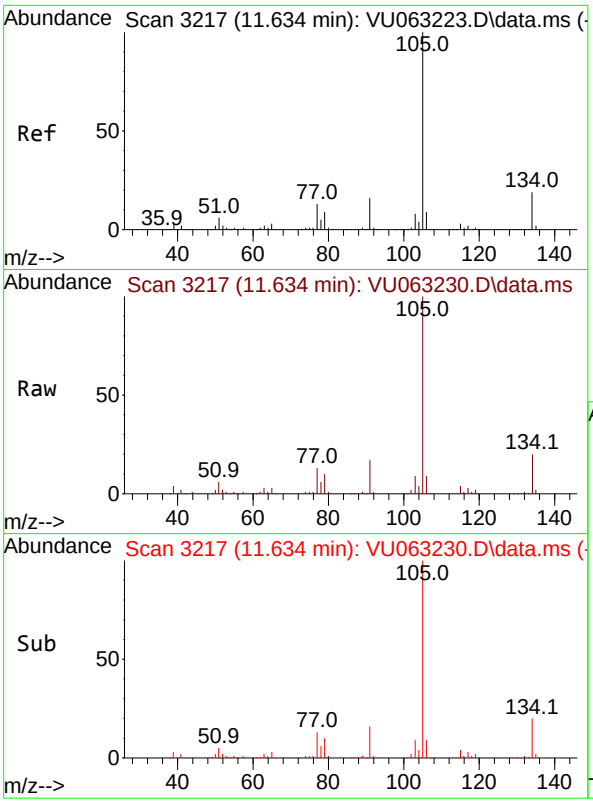


#78
1,2,4-Trimethylbenzene
Concen: 1.873 ug/l
RT: 11.460 min Scan# 3163
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:105 Resp: 105544

Ion	Ratio	Lower	Upper
105	100		
120	44.0	21.9	65.7





#79
sec-Butylbenzene
Concen: 1.963 ug/l
RT: 11.634 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:105 Resp: 14348

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.1	22.7

Instrument :
MSVOA_U
ClientSampleId :
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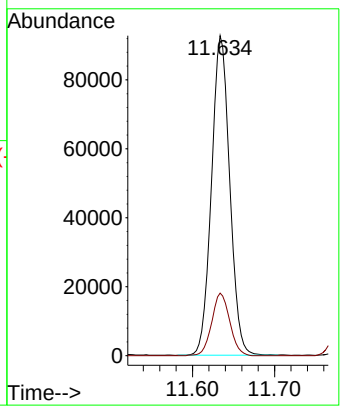
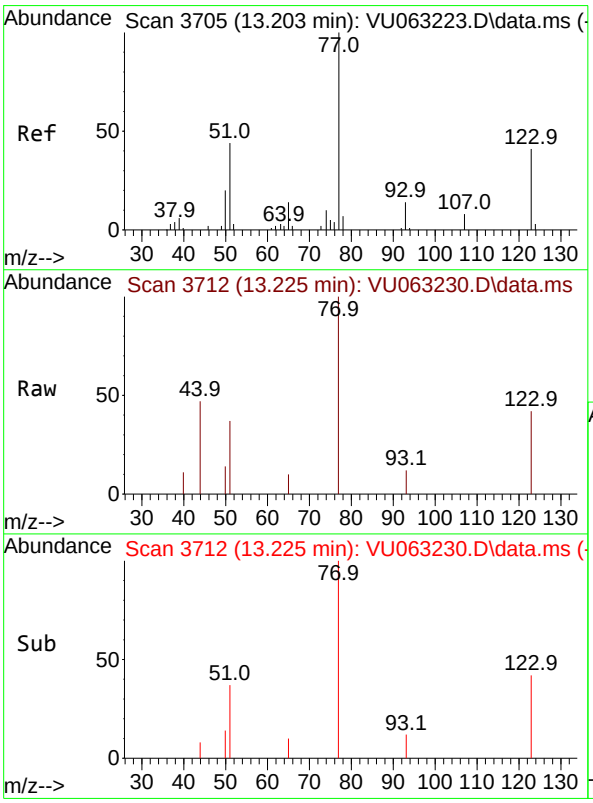
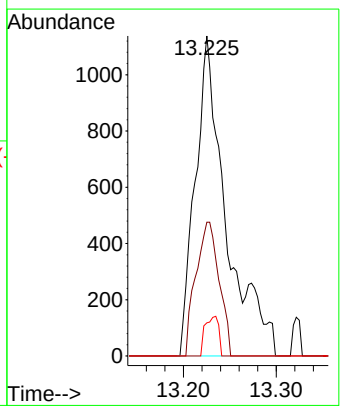


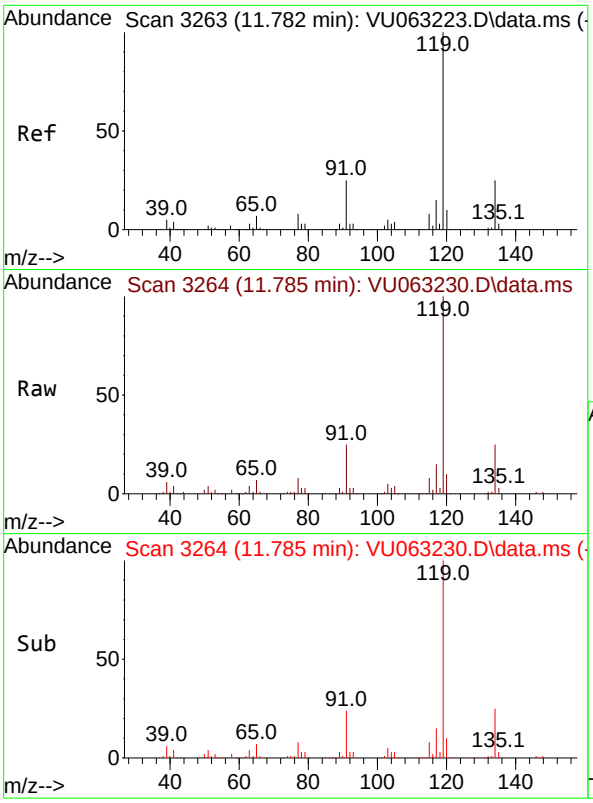


#80
Nitrobenzene
Concen: 8.833 ug/l m
RT: 13.225 min Scan# 3712
Delta R.T. 0.022 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 77 Resp: 2628

Ion	Ratio	Lower	Upper
77	100		
123	31.4	18.9	67.1
65	5.4	11.9	15.1#

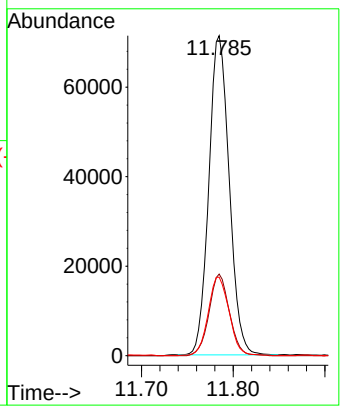




#81
p-Isopropyltoluene
Concen: 1.911 ug/l
RT: 11.785 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:119 Resp: 11027

Ion	Ratio	Lower	Upper
119	100		
134	25.5	20.3	30.5
91	25.4	19.4	29.2



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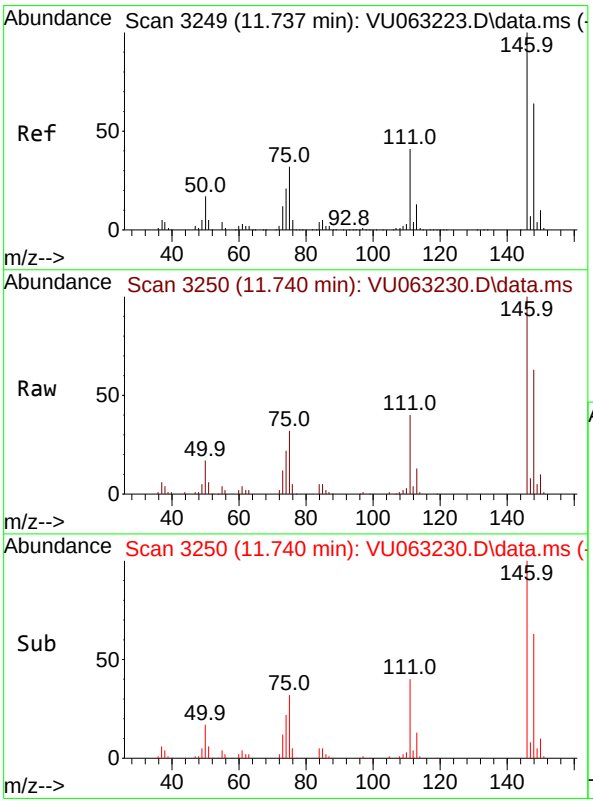
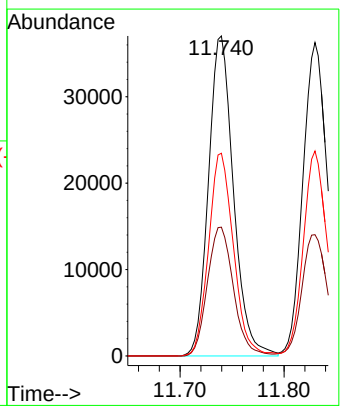
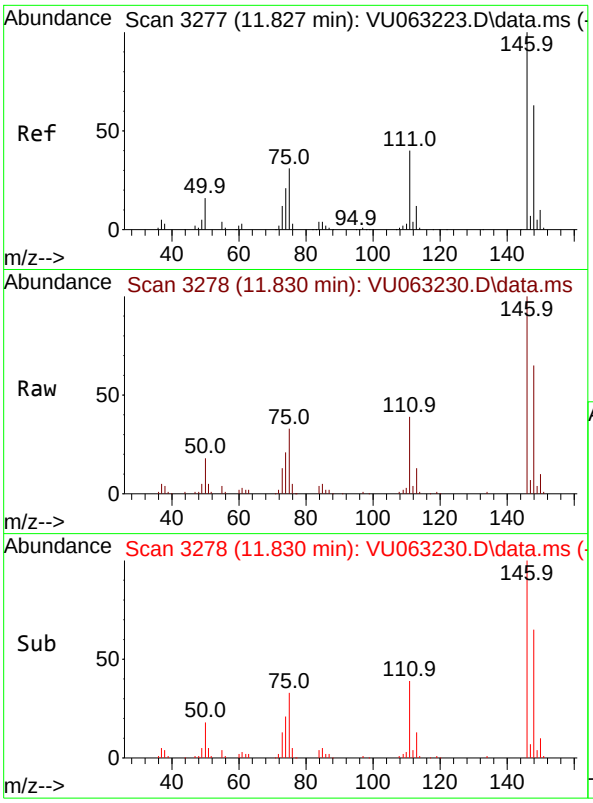


#82
1,3-Dichlorobenzene
Concen: 1.933 ug/l
RT: 11.740 min Scan# 3250
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:146 Resp: 61914

Ion	Ratio	Lower	Upper
146	100		
111	41.9	32.8	49.2
148	63.2	51.1	76.7

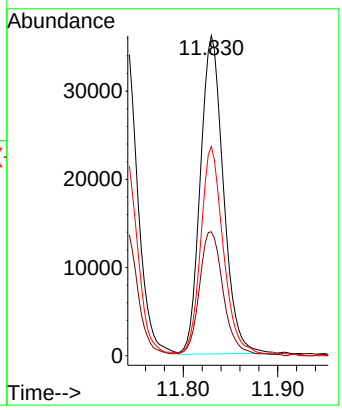




#83
1,4-Dichlorobenzene
Concen: 1.950 ug/l
RT: 11.830 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:146 Resp: 6109

Ion	Ratio	Lower	Upper
146	100		
111	41.0	32.1	48.1
148	63.6	50.2	75.4



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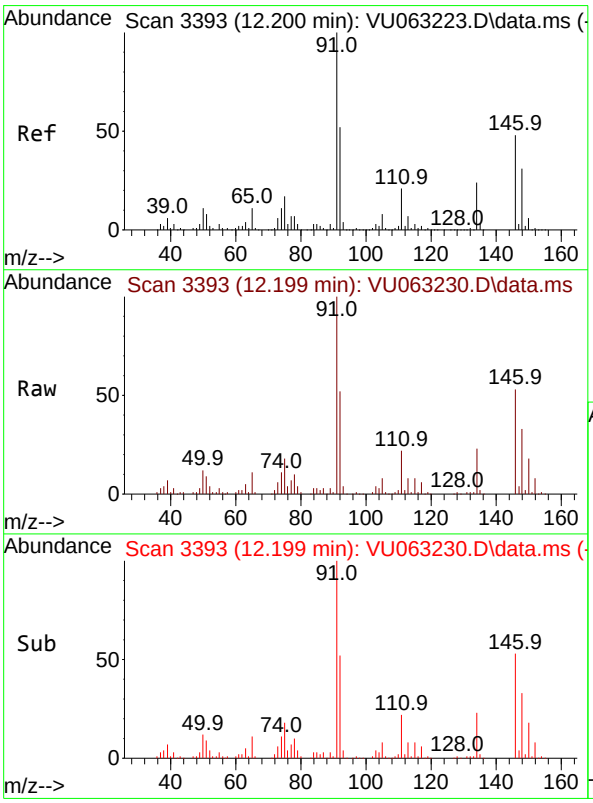
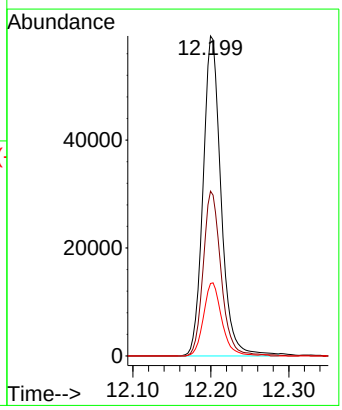
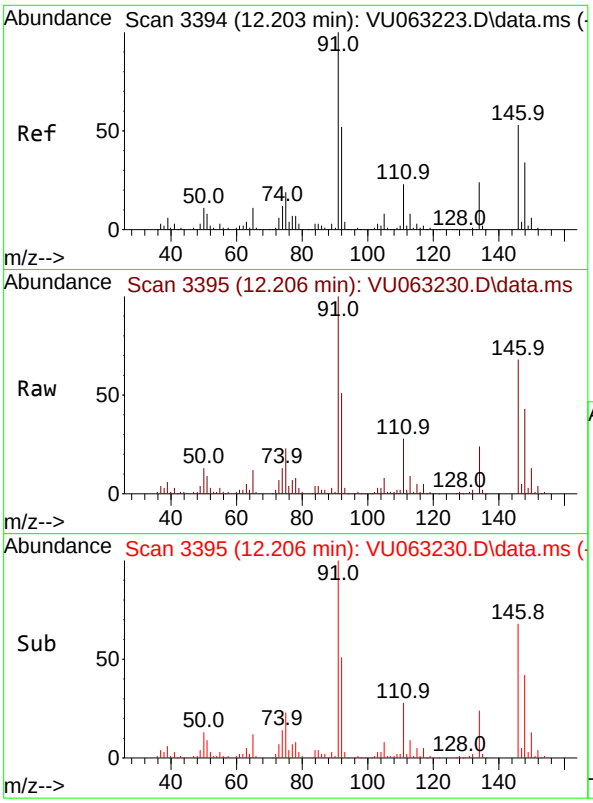


#84
n-Butylbenzene
Concen: 1.839 ug/l
RT: 12.199 min Scan# 3393
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 91 Resp: 95124

Ion	Ratio	Lower	Upper
91	100		
92	51.1	41.8	62.8
134	23.2	18.6	28.0

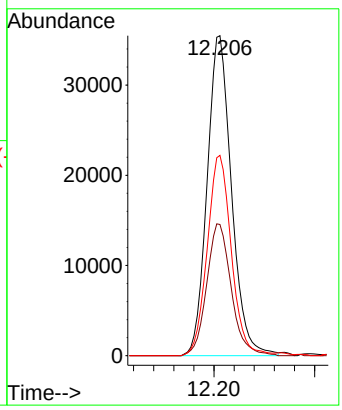




#85
1,2-Dichlorobenzene
Concen: 1.942 ug/l
RT: 12.206 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:146 Resp: 5975

Ion	Ratio	Lower	Upper
146	100		
111	41.4	21.9	65.7
148	62.1	32.3	96.9



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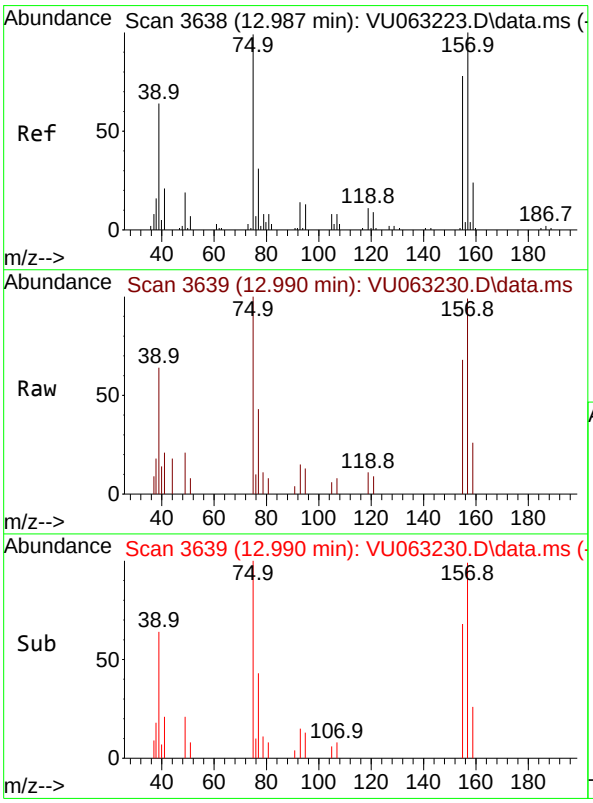
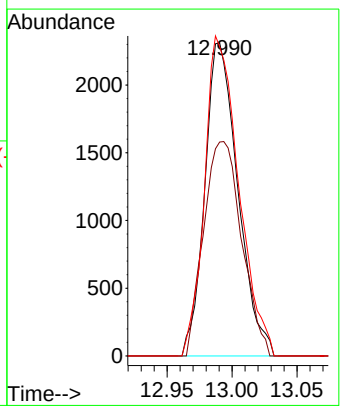
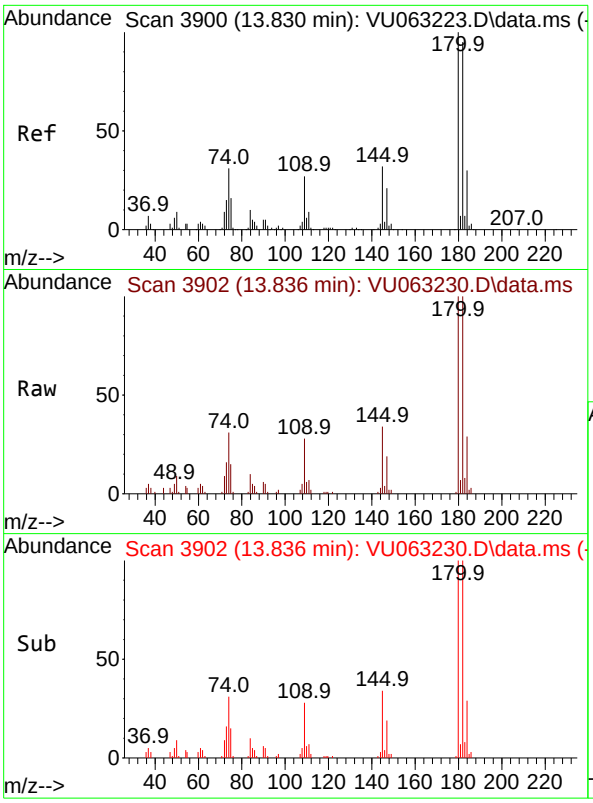


#86
1,2-Dibromo-3-Chloropropane
Concen: 1.776 ug/l
RT: 12.990 min Scan# 3639
Delta R.T. 0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion: 75 Resp: 4088

Ion	Ratio	Lower	Upper
75	100		
155	78.8	63.5	95.3
157	105.6	81.8	122.6

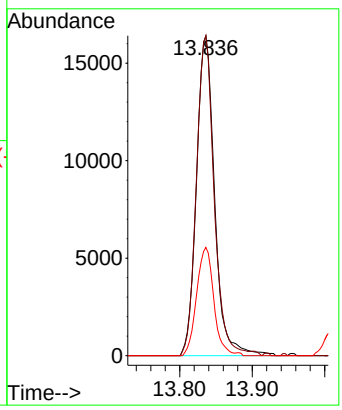




#87
1,2,4-Trichlorobenzene
Concen: 1.905 ug/l
RT: 13.836 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:180 Resp: 2859

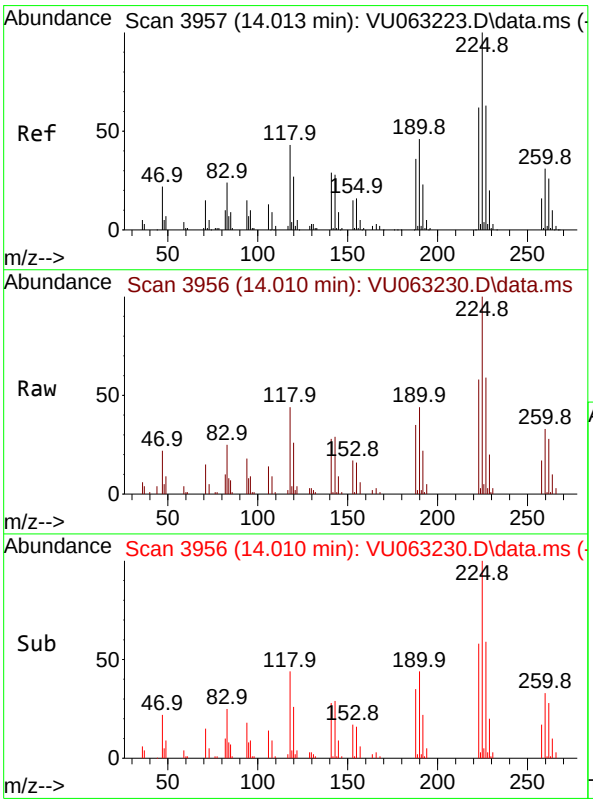
Ion	Ratio	Lower	Upper
180	100		
182	97.3	76.6	115.0
145	31.9	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations
APPROVED

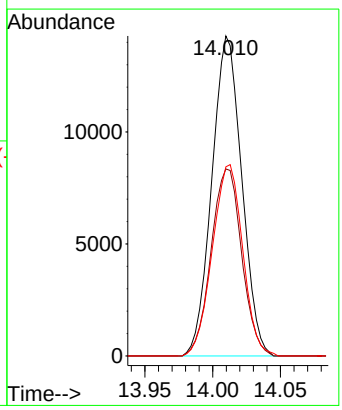
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

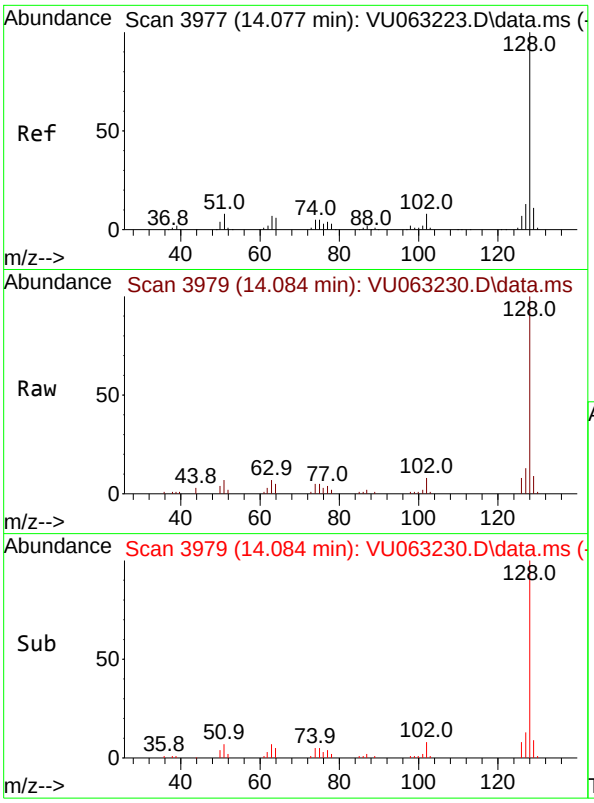


#88
Hexachlorobutadiene
Concen: 2.041 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:225 Resp: 21893

Ion	Ratio	Lower	Upper
225	100		
223	59.9	49.5	74.3
227	60.9	51.0	76.4

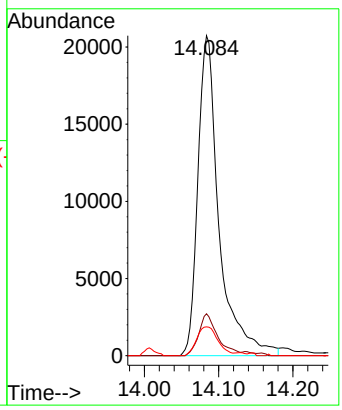




#89
Naphthalene
Concen: 1.883 ug/l
RT: 14.084 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:128 Resp: 4113

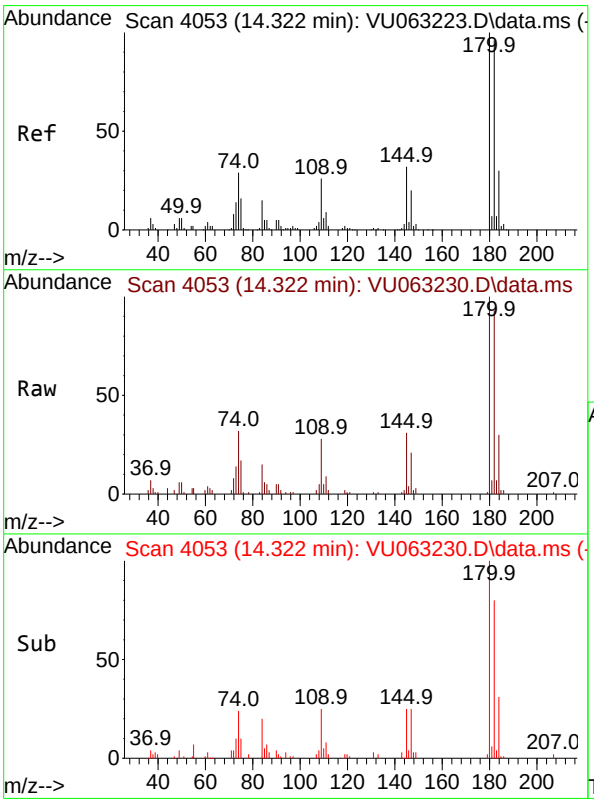
Ion	Ratio	Lower	Upper
128	100		
127	11.7	10.6	16.0
129	9.0	8.6	13.0



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBS01

Manual Integrations
APPROVED

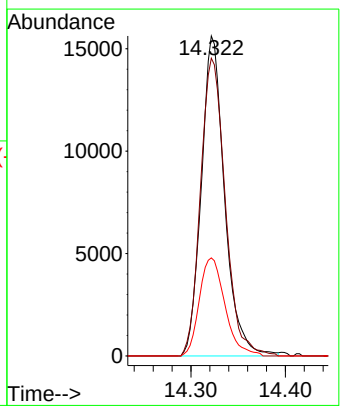
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025



#90
1,2,3-Trichlorobenzene
Concen: 1.815 ug/l
RT: 14.322 min Scan# 4053
Delta R.T. -0.000 min
Lab File: VU063230.D
Acq: 11 Feb 2025 12:07

Tgt Ion:180 Resp: 26648

Ion	Ratio	Lower	Upper
180	100		
182	99.1	78.2	117.2
145	33.8	26.1	39.1



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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0213WBS01	SDG No.:	Q1172
Lab Sample ID:	VU0213WBS01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063264.D	1		02/13/25 13:42	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	2.10		0.14	0.50	ug/L
74-87-3	Chloromethane	2.10		0.13	0.50	ug/L
75-01-4	Vinyl Chloride	2.10		0.13	0.50	ug/L
74-83-9	Bromomethane	2.40		0.18	0.50	ug/L
75-00-3	Chloroethane	2.00		0.14	0.50	ug/L
109-99-9	Tetrahydrofuran	3.90		0.44	1.00	ug/L
75-69-4	Trichlorofluoromethane	2.10		0.21	0.50	ug/L
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.20		0.14	0.50	ug/L
75-65-0	tert-Butyl Alcohol	21.1		8.60	10.0	ug/L
60-29-7	Diethyl Ether	2.10		0.13	0.50	ug/L
75-35-4	1,1-Dichloroethene	2.10		0.12	0.50	ug/L
107-13-1	Acrylonitrile	4.20		0.44	1.00	ug/L
67-64-1	Acetone	11.0		1.10	2.50	ug/L
75-15-0	Carbon Disulfide	2.10		0.13	0.50	ug/L
1634-04-4	Methyl tert-Butyl Ether	2.10		0.12	0.50	ug/L
96-33-3	Methyl acrylate	2.00		0.28	0.50	ug/L
75-09-2	Methylene Chloride	2.20		0.47	0.50	ug/L
156-60-5	trans-1,2-Dichloroethene	2.20		0.14	0.50	ug/L
75-34-3	1,1-Dichloroethane	2.20		0.13	0.50	ug/L
110-82-7	Cyclohexane	2.10		0.14	0.50	ug/L
78-93-3	2-Butanone	10.2		0.68	2.50	ug/L
56-23-5	Carbon Tetrachloride	2.10		0.14	0.50	ug/L
594-20-7	2,2-Dichloropropane	2.00		0.14	0.50	ug/L
156-59-2	cis-1,2-Dichloroethene	2.20		0.13	0.50	ug/L
74-97-5	Bromochloromethane	2.20		0.16	0.50	ug/L
67-66-3	Chloroform	2.10		0.13	0.50	ug/L
71-55-6	1,1,1-Trichloroethane	2.20		0.12	0.50	ug/L
108-87-2	Methylcyclohexane	2.10		0.12	0.50	ug/L
563-58-6	1,1-Dichloropropene	2.10		0.11	0.50	ug/L
107-12-0	Propionitrile	10.5		1.00	2.50	ug/L

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0213WBS01	SDG No.:	Q1172
Lab Sample ID:	VU0213WBS01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063264.D	1		02/13/25 13:42	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	2.10		0.11	0.50	ug/L
107-06-2	1,2-Dichloroethane	2.10		0.16	0.50	ug/L
79-01-6	Trichloroethene	2.20		0.13	0.50	ug/L
78-87-5	1,2-Dichloropropane	2.10		0.13	0.50	ug/L
109-69-3	1-Chlorobutane	2.10		0.12	0.50	ug/L
74-95-3	Dibromomethane	2.10		0.14	0.50	ug/L
75-27-4	Bromodichloromethane	2.20		0.12	0.50	ug/L
108-10-1	4-Methyl-2-Pentanone	10.4		0.60	2.50	ug/L
108-88-3	Toluene	2.10		0.11	0.50	ug/L
10061-02-6	t-1,3-Dichloropropene	2.10		0.11	0.50	ug/L
10061-01-5	cis-1,3-Dichloropropene	2.00		0.11	0.50	ug/L
79-00-5	1,1,2-Trichloroethane	2.20		0.13	0.50	ug/L
142-28-9	1,3-Dichloropropane	2.20		0.13	0.50	ug/L
591-78-6	2-Hexanone	9.80		0.57	2.50	ug/L
124-48-1	Dibromochloromethane	2.10		0.13	0.50	ug/L
106-93-4	1,2-Dibromoethane	2.20		0.13	0.50	ug/L
127-18-4	Tetrachloroethene	2.20		0.14	0.50	ug/L
108-90-7	Chlorobenzene	2.20		0.11	0.50	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	2.10		0.13	0.50	ug/L
67-72-1	Hexachloroethane	2.10		0.12	0.50	ug/L
100-41-4	Ethyl Benzene	2.00		0.12	0.50	ug/L
179601-23-1	m/p-Xylenes	4.20		0.23	1.00	ug/L
1330-20-7	Total Xylenes	6.30		0.35	1.50	ug/L
95-47-6	o-Xylene	2.10		0.12	0.50	ug/L
100-42-5	Styrene	2.10		0.13	0.50	ug/L
75-25-2	Bromoform	2.10		0.14	0.50	ug/L
98-82-8	Isopropylbenzene	2.10		0.13	0.50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	2.10		0.12	0.50	ug/L
96-18-4	1,2,3-Trichloropropane	2.00		0.21	0.50	ug/L
108-86-1	Bromobenzene	2.20		0.13	0.50	ug/L
103-65-1	n-propylbenzene	2.10		0.16	0.50	ug/L

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0213WBS01	SDG No.:	Q1172
Lab Sample ID:	VU0213WBS01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063264.D	1		02/13/25 13:42	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
95-49-8	2-Chlorotoluene	2.20		0.14	0.50	ug/L
108-67-8	1,3,5-Trimethylbenzene	2.10		0.13	0.50	ug/L
106-43-4	4-Chlorotoluene	2.10		0.14	0.50	ug/L
98-06-6	tert-Butylbenzene	2.10		0.11	0.50	ug/L
95-63-6	1,2,4-Trimethylbenzene	2.10		0.13	0.50	ug/L
135-98-8	sec-Butylbenzene	2.20		0.13	0.50	ug/L
99-87-6	p-Isopropyltoluene	2.10		0.16	0.50	ug/L
541-73-1	1,3-Dichlorobenzene	2.10		0.13	0.50	ug/L
106-46-7	1,4-Dichlorobenzene	2.20		0.14	0.50	ug/L
104-51-8	n-Butylbenzene	2.10		0.28	0.50	ug/L
95-50-1	1,2-Dichlorobenzene	2.10		0.14	0.50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	2.10		0.23	0.50	ug/L
120-82-1	1,2,4-Trichlorobenzene	2.20		0.21	0.50	ug/L
87-68-3	Hexachlorobutadiene	2.20		0.14	0.50	ug/L
91-20-3	Naphthalene	2.00		0.31	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	2.10		0.25	0.50	ug/L
74-88-4	Iodomethane	1.90		0.16	1.00	ug/L
107-05-1	Allyl Chloride	2.10		0.11	0.50	ug/L
126-98-7	Methacrylonitrile	2.00		0.19	0.50	ug/L
80-62-6	Methyl methacrylate	4.20		0.24	1.00	ug/L
SURROGATES						
2199-69-1	1,2-Dichlorobenzene-d4	0.99		70 - 130	99%	SPK: 1
460-00-4	4-Bromofluorobenzene	1.00		70 - 130	103%	SPK: 1
INTERNAL STANDARDS						
462-06-6	Fluorobenzene	49700	6.107			

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0213WBS01	SDG No.:	Q1172
Lab Sample ID:	VU0213WBS01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063264.D	1		02/13/25 13:42	VU021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063264.D
Acq On : 13 Feb 2025 13:42
Operator : MD/SY
Sample : VU0213WBS01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 14 04:44:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	6.107	96	49713	1.000	ug/l		# 0.00
System Monitoring Compounds							
57) 4-Bromofluorobenzene	10.627	95	16859	1.028	ug/l		0.00
Spiked Amount 1.000			Recovery = 103.000%				
68) 1,2-Dichlorobenzene-d4	12.187	152	16929	0.993	ug/l		0.00
Spiked Amount 1.000			Recovery = 99.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.380	85	34534	2.138	ug/l		95
3) Chloromethane	1.518	50	39869	2.143	ug/l		98
4) Vinyl Chloride	1.599	62	39200	2.130	ug/l		98
5) Bromomethane	1.843	94	21418	2.382	ug/l		94
6) Chloroethane	1.923	64	23350	2.014	ug/l		99
7) Trichlorofluoromethane	2.129	101	46695	2.141	ug/l		95
8) 1,1,2-Trichloro-1,2,2-...	2.566	101	26777	2.163	ug/l		99
9) 1,1-Dichloroethene	2.570	96	26939	2.136	ug/l		100
10) Iodomethane	2.708	142	38154	1.924	ug/l		99
11) Allyl Chloride	2.914	41	38136	2.105	ug/l		99
12) Acrylonitrile	3.312	53	12169	4.183	ug/l	#	92
13) Acetone	2.618	43	24529	10.966	ug/l		100
14) Carbon Disulfide	2.782	76	93411	2.118	ug/l		99
15) Methylene Chloride	3.033	84	33760	2.167	ug/l		97
16) trans-1,2-Dichloroethene	3.341	96	31108	2.161	ug/l		99
17) 1,1-Dichloroethane	3.856	63	59047	2.176	ug/l		99
18) 2-Butanone	4.701	43	36232	10.178	ug/l		97
19) Cyclohexane	5.377	56	44793m	2.055	ug/l		
20) Methylcyclohexane	6.753	83	45601	2.109	ug/l		99
21) 2,2-Dichloropropane	4.650	77	43173	2.040	ug/l		99
22) cis-1,2-Dichloroethene	4.653	96	33849	2.176	ug/l		98
23) Diethyl Ether	2.367	59	22594	2.088	ug/l		98
24) tert-Butyl Alcohol	3.168	59	29029	21.127	ug/l	#	93
25) Methyl tert-Butyl Ether	3.348	73	66280	2.104	ug/l		98
26) Bromochloromethane	4.962	128	14888	2.190	ug/l		99
27) Chloroform	5.074	83	57911	2.115	ug/l		98
28) 1,1,1-Trichloroethane	5.303	97	47889	2.159	ug/l		98
29) 1,1-Dichloropropene	5.515	75	41318	2.080	ug/l		97
30) Carbon Tetrachloride	5.512	117	40821	2.146	ug/l		98
31) Isopropyl Ether	3.978	45	79132	2.043	ug/l		96
32) Ethyl-t-butyl ether	4.486	59	72442	2.056	ug/l		99
33) Tert-Amyl methyl ether	5.926	73	64979	2.111	ug/l		99
34) Propionitrile	4.775	54	11252	10.479	ug/l	#	97
35) Benzene	5.763	78	131079	2.146	ug/l		99
36) 1,2-Dichloroethane	5.782	62	37320	2.117	ug/l		100
37) Trichloroethene	6.534	130	31314	2.156	ug/l		98
38) 1,2-Dichloropropane	6.779	63	34039	2.129	ug/l		96
39) Methacrylonitrile	4.972	41	7993	1.997	ug/l		94
40) Methyl acrylate	4.853	55	14767m	2.002	ug/l		
41) Tetrahydrofuran	5.049	42	9080	3.902	ug/l		96
42) 1-Chlorobutane	5.447	56	56663	2.085	ug/l		100
43) Dibromomethane	6.910	93	17120	2.115	ug/l		98
44) Bromodichloromethane	7.094	83	41195	2.186	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063264.D
Acq On : 13 Feb 2025 13:42
Operator : MD/SY
Sample : VU0213WBS01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 14 04:44:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 4-Methyl-2-Pentanone	7.778	43	88051	10.374	ug/l	98
46) t-1,4-Dichloro-2-butene	10.823	75	15843m	3.971	ug/l	
47) Methyl methacrylate	6.952	69	28345	4.157	ug/l	96
48) Ethyl methacrylate	8.325	69	25480	1.990	ug/l	95
49) Toluene	7.962	92	74130	2.110	ug/l	99
50) t-1,3-Dichloropropene	8.203	75	35922	2.082	ug/l	98
51) cis-1,3-Dichloropropene	7.598	75	43661	2.049	ug/l	97
52) 1,1,2-Trichloroethane	8.393	97	23993	2.198	ug/l	97
53) 1,3-Dichloropropane	8.566	76	42329	2.184	ug/l	99
54) 2-Hexanone	8.676	43	56755	9.799	ug/l	96
55) Dibromochloromethane	8.801	129	26299	2.094	ug/l	95
56) 1,2-Dibromoethane	8.917	107	22640	2.211	ug/l	99
58) Tetrachloroethene	8.544	164	26557	2.218	ug/l	99
59) Chlorobenzene	9.441	112	80078	2.160	ug/l	98
60) 1,1,1,2-Tetrachloroethane	9.524	131	28448	2.135	ug/l	98
61) Pentachloroethane	11.418	117	25817	2.169	ug/l	95
62) Hexachloroethane	12.466	117	21992	2.088	ug/l	100
63) Ethyl Benzene	9.563	91	130110	2.035	ug/l	98
64) m/p-Xylenes	9.685	106	100610	4.213	ug/l	98
65) o-Xylene	10.094	106	48889	2.091	ug/l	99
66) Styrene	10.106	104	77415	2.081	ug/l	99
67) Bromoform	10.283	173	14977	2.101	ug/l	98
69) Isopropylbenzene	10.476	105	113999	2.074	ug/l	99
70) 1,1,2,2-Tetrachloroethane	10.772	83	31391	2.134	ug/l	99
71) 1,2,3-Trichloropropane	10.817	75	22085m	1.998	ug/l	
72) Bromobenzene	10.775	156	32233	2.177	ug/l	97
73) n-propylbenzene	10.897	120	33301	2.116	ug/l	100
74) 2-Chlorotoluene	10.978	126	31471	2.170	ug/l	100
75) 1,3,5-Trimethylbenzene	11.081	105	108102	2.123	ug/l	99
76) 4-Chlorotoluene	11.090	126	31896	2.145	ug/l	96
77) tert-Butylbenzene	11.412	119	108110	2.099	ug/l	99
78) 1,2,4-Trimethylbenzene	11.460	105	107772	2.133	ug/l	100
79) sec-Butylbenzene	11.634	105	142624	2.175	ug/l	99
80) Nitrobenzene	13.225	77	3060m	10.322	ug/l	
81) p-Isopropyltoluene	11.785	119	106202	2.052	ug/l	98
82) 1,3-Dichlorobenzene	11.740	146	61598	2.145	ug/l	99
83) 1,4-Dichlorobenzene	11.830	146	60439	2.151	ug/l	99
84) n-Butylbenzene	12.200	91	95901	2.067	ug/l	99
85) 1,2-Dichlorobenzene	12.206	146	58198	2.108	ug/l	99
86) 1,2-Dibromo-3-Chloropr...	12.994	75	4410	2.136	ug/l	92
87) 1,2,4-Trichlorobenzene	13.836	180	29346	2.180	ug/l	96
88) Hexachlorobutadiene	14.013	225	20891	2.171	ug/l	96
89) Naphthalene	14.084	128	41543	2.037	ug/l	98
90) 1,2,3-Trichlorobenzene	14.325	180	27174	2.063	ug/l	98

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

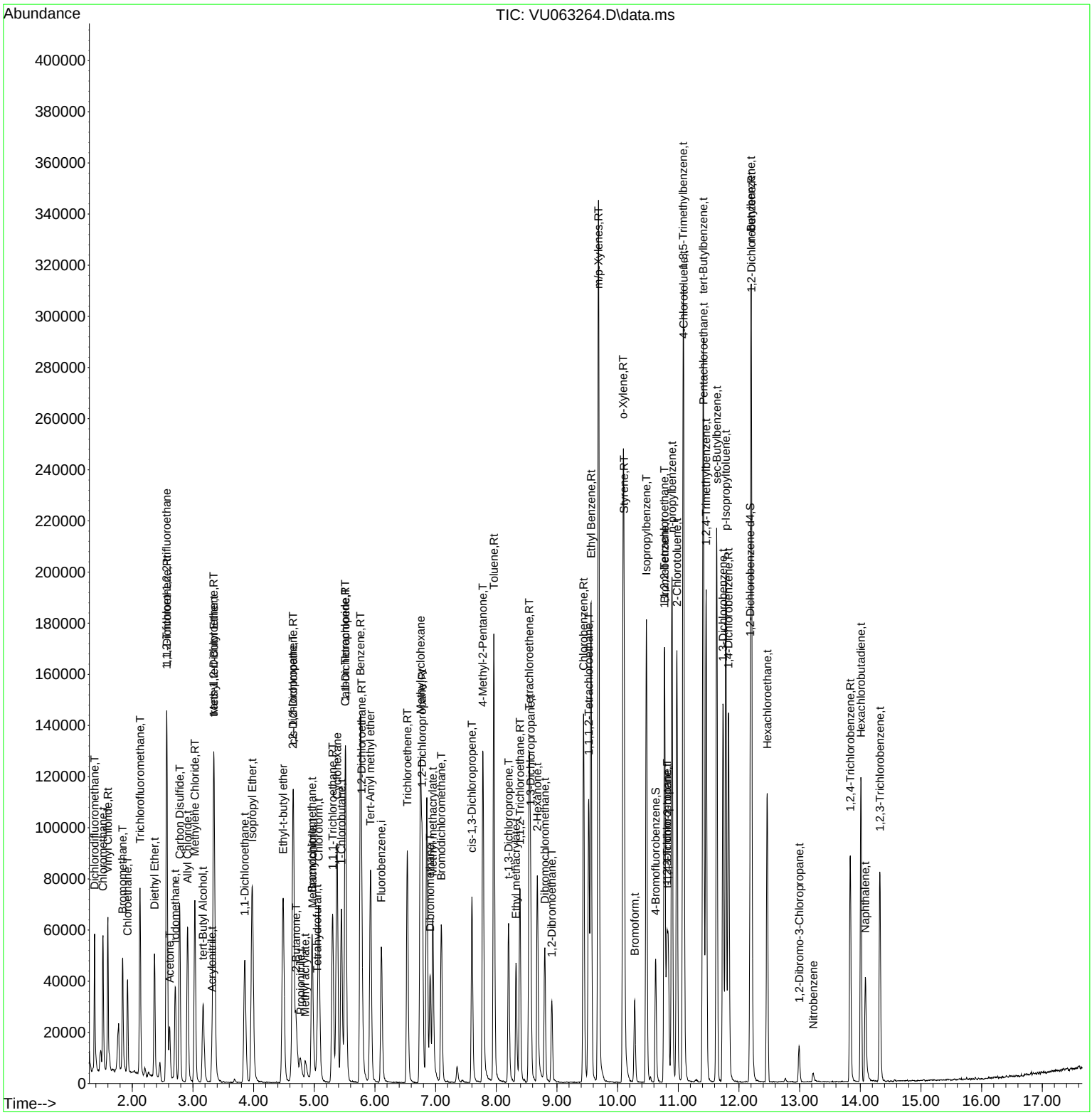
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021325\
Data File : VU063264.D
Acq On : 13 Feb 2025 13:42
Operator : MD/SY
Sample : VU0213WBS01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 5 Sample Multiplier: 1

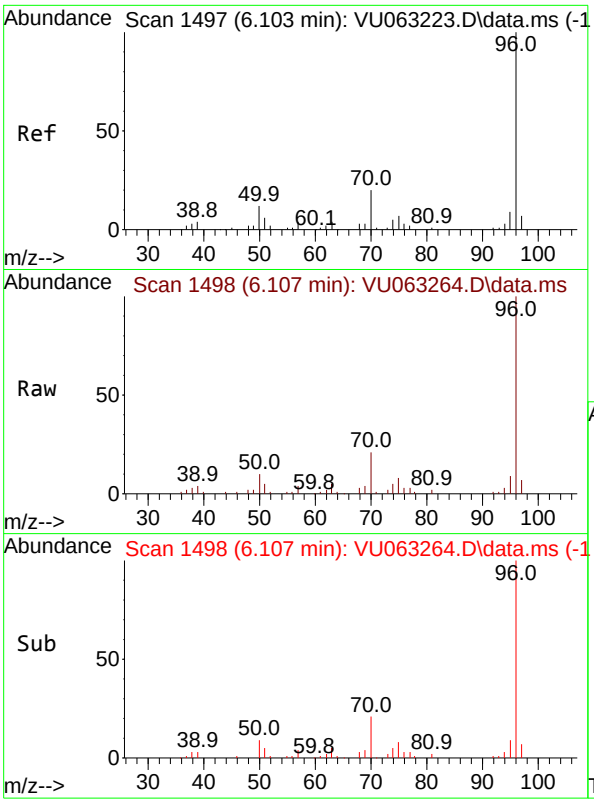
Quant Time: Feb 14 04:44:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

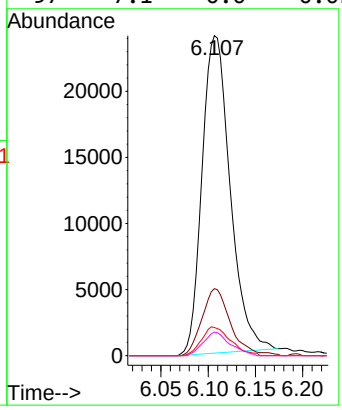




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.107 min Scan# 14
Delta R.T. 0.004 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 96 Resp: 4971

Ion	Ratio	Lower	Upper
96	100		
70	21.5	15.6	23.4
95	9.3	7.3	10.9
97	7.1	0.0	0.0#



Instrument :
MSVOA_U
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VU0213WBS01

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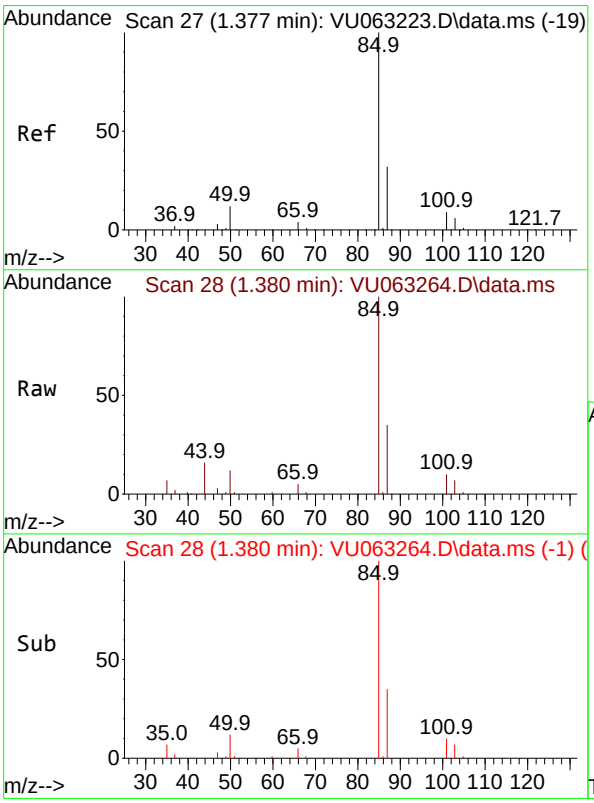
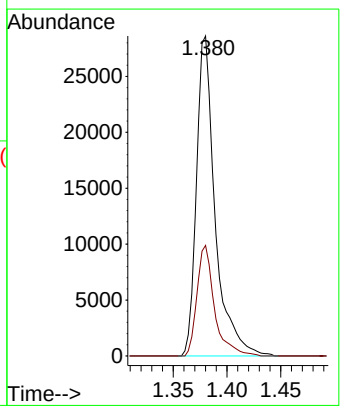
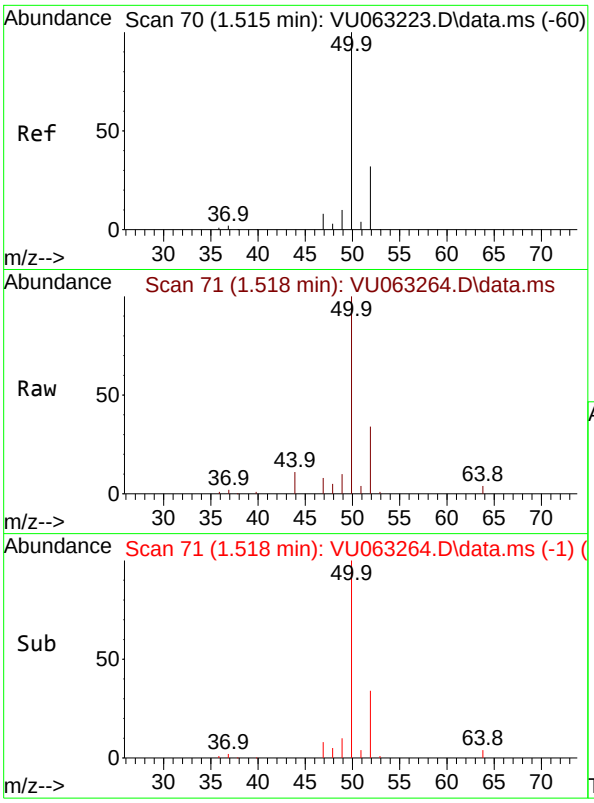


#2
Dichlorodifluoromethane
Concen: 2.138 ug/l
RT: 1.380 min Scan# 28
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 85 Resp: 34534

Ion	Ratio	Lower	Upper
85	100		
87	34.5	16.0	48.0

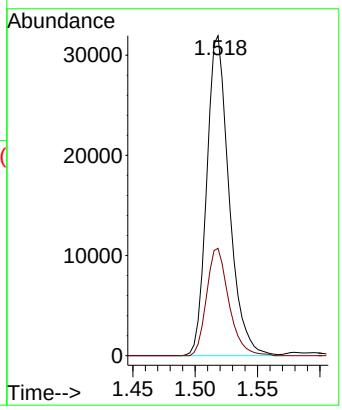




#3
Chloromethane
Concen: 2.143 ug/l
RT: 1.518 min Scan# 7
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 50 Resp: 3986

Ion	Ratio	Lower	Upper
50	100		
52	33.5	25.8	38.8



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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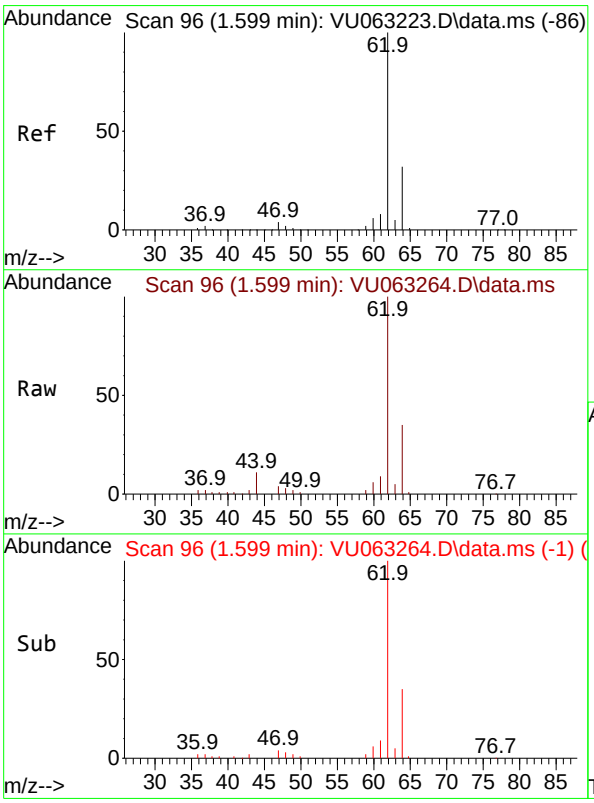
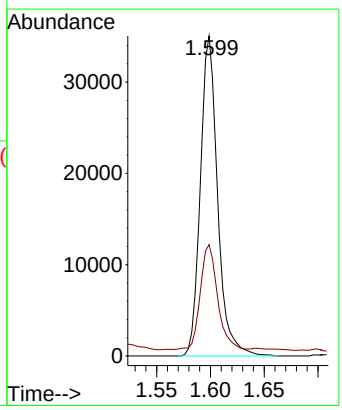
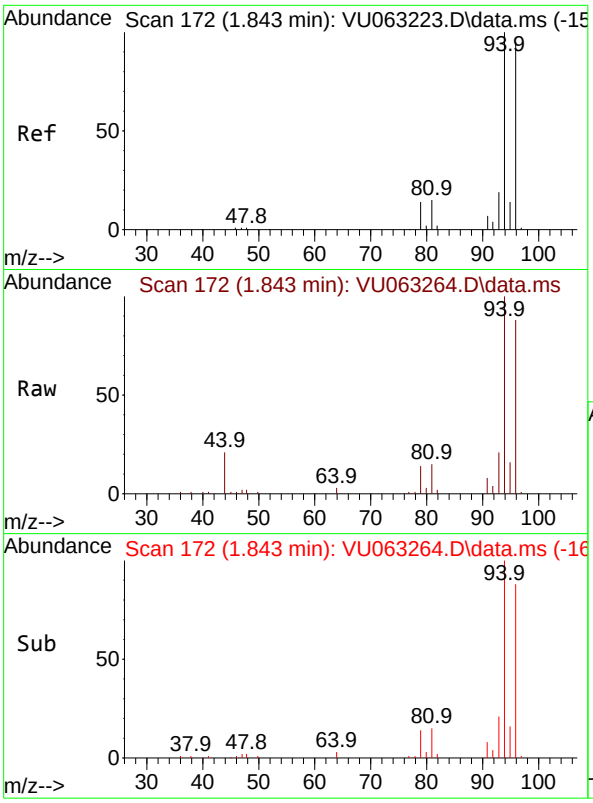


#4
Vinyl Chloride
Concen: 2.130 ug/l
RT: 1.599 min Scan# 96
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 62 Resp: 39200

Ion	Ratio	Lower	Upper
62	100		
64	32.7	25.4	38.0

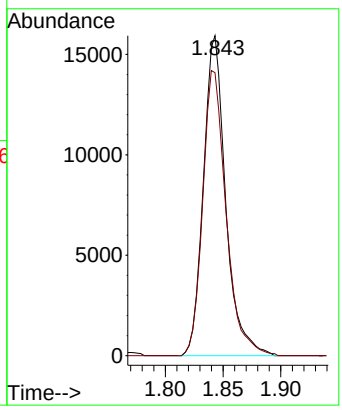




#5
Bromomethane
Concen: 2.382 ug/l
RT: 1.843 min Scan# 1
Delta R.T. 0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 94 Resp: 2141

Ion	Ratio	Lower	Upper
94	100		
96	88.4	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
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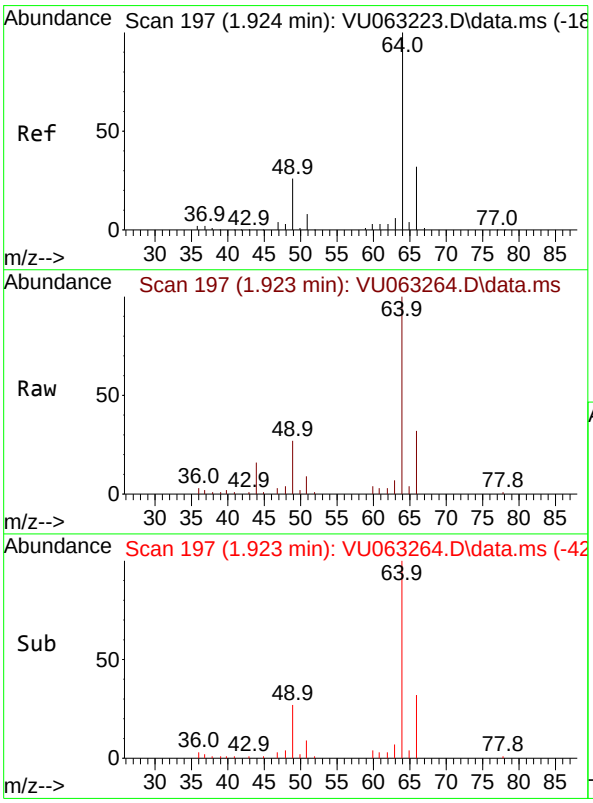
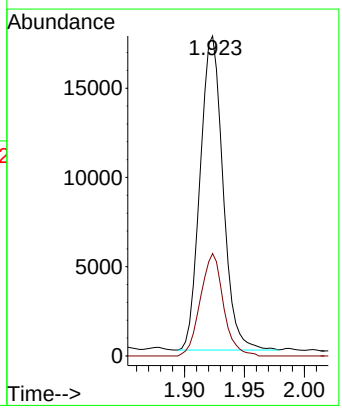
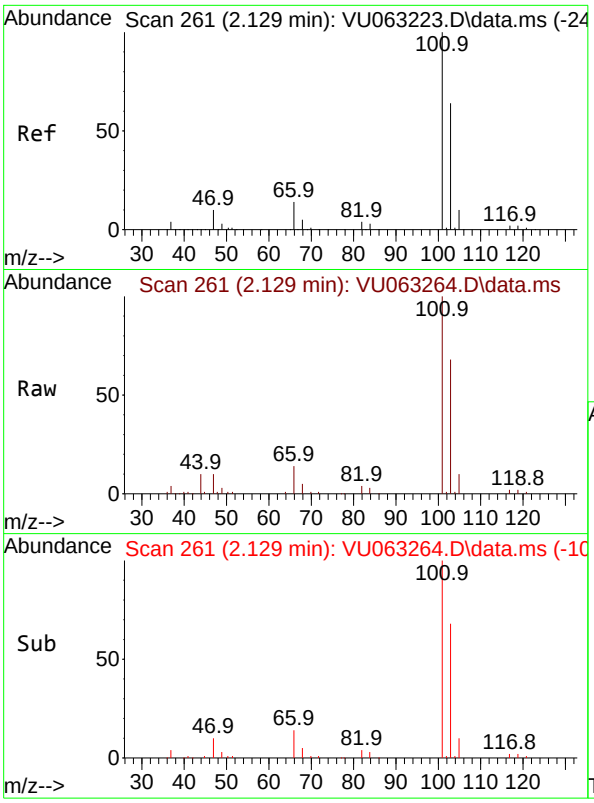


#6
Chloroethane
Concen: 2.014 ug/l
RT: 1.923 min Scan# 197
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 64 Resp: 23350

Ion	Ratio	Lower	Upper
64	100		
66	32.6	25.8	38.8





#7
Trichlorofluoromethane
Concen: 2.141 ug/l
RT: 2.129 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:101 Resp: 4669

Ion	Ratio	Lower	Upper
101	100		
103	68.0	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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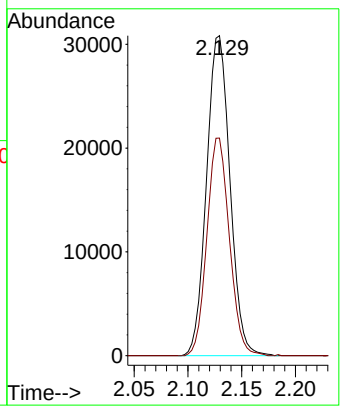
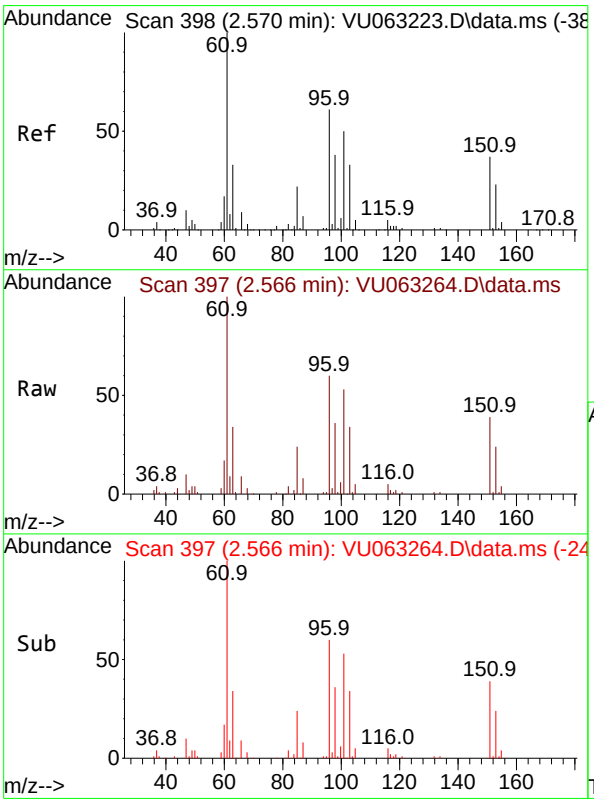
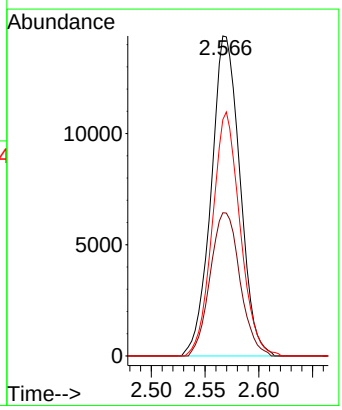


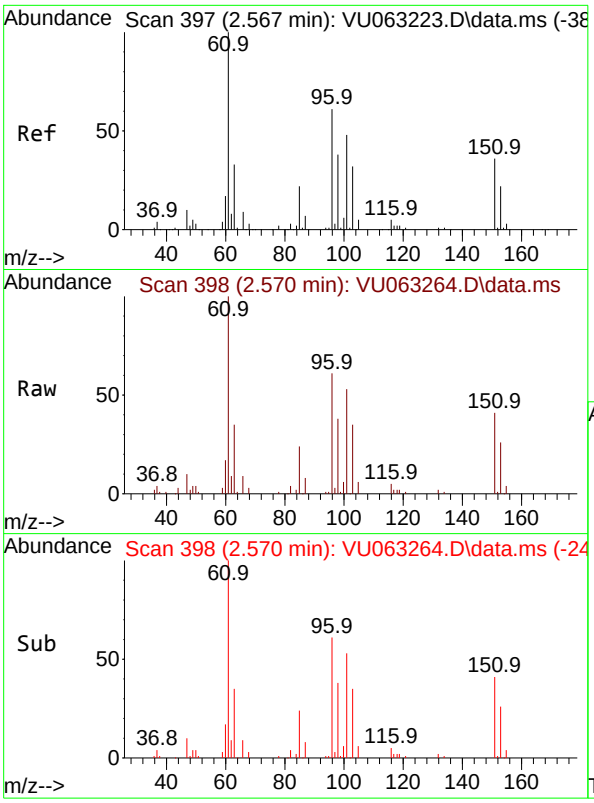


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 2.163 ug/l
RT: 2.566 min Scan# 397
Delta R.T. -0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:101 Resp: 26777

Ion	Ratio	Lower	Upper
101	100		
85	46.2	35.4	53.0
151	73.4	58.5	87.7

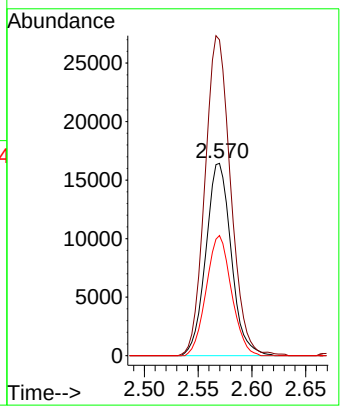




#9
1,1-Dichloroethene
Concen: 2.136 ug/l
RT: 2.570 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 96 Resp: 2693

Ion	Ratio	Lower	Upper
96	100		
61	164.1	0.0	492.9
98	62.4	0.0	124.0



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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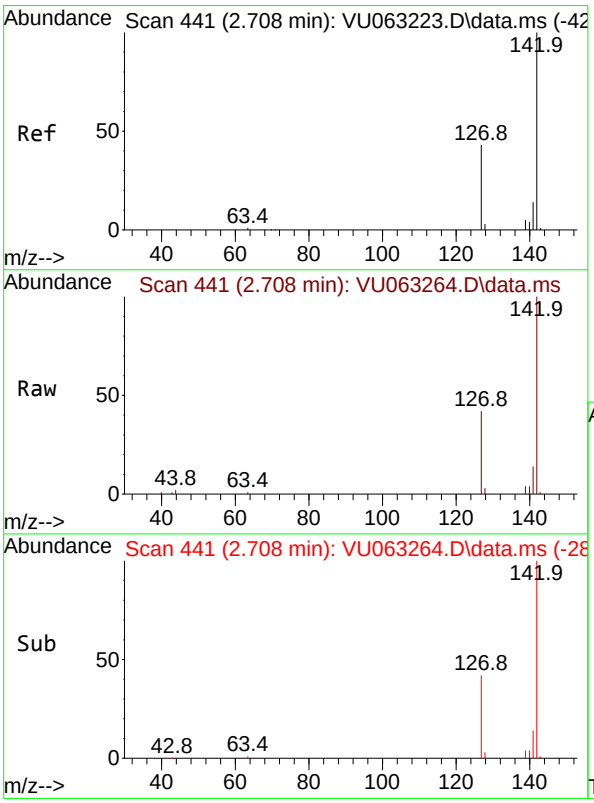
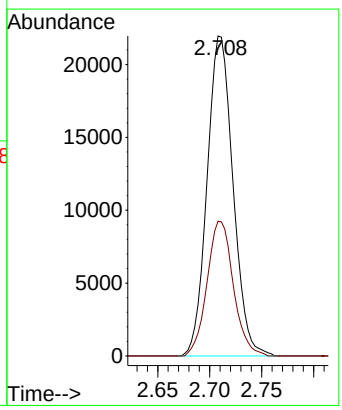
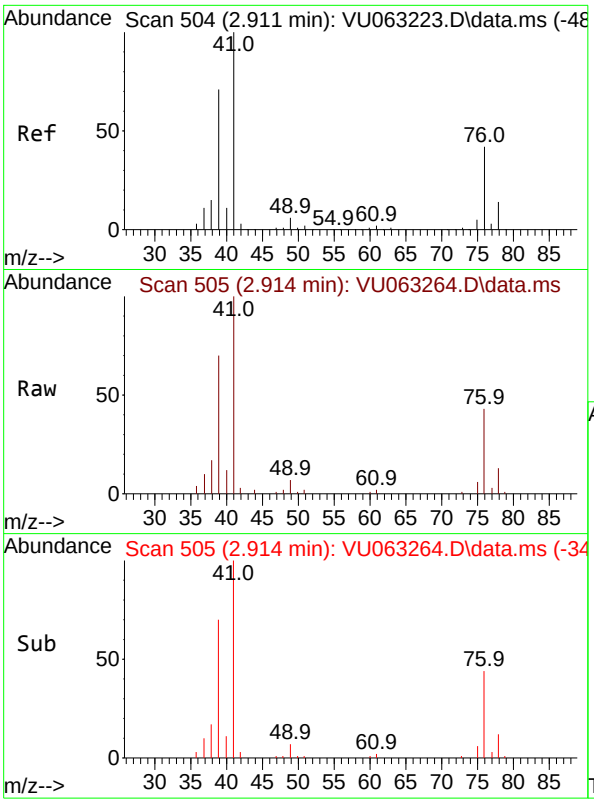


#10
Iodomethane
Concen: 1.924 ug/l
RT: 2.708 min Scan# 441
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:142 Resp: 38154

Ion	Ratio	Lower	Upper
142	100		
127	42.7	34.5	51.7

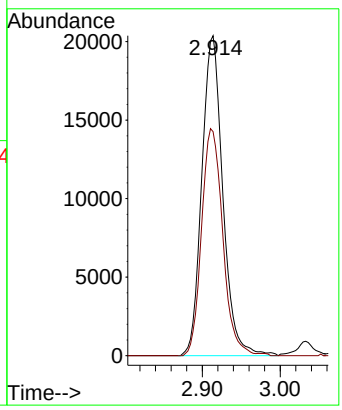




#11
Allyl Chloride
Concen: 2.105 ug/l
RT: 2.914 min Scan# 5
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 41 Resp: 3813

Ion	Ratio	Lower	Upper
41	100		
39	71.5	57.9	86.9



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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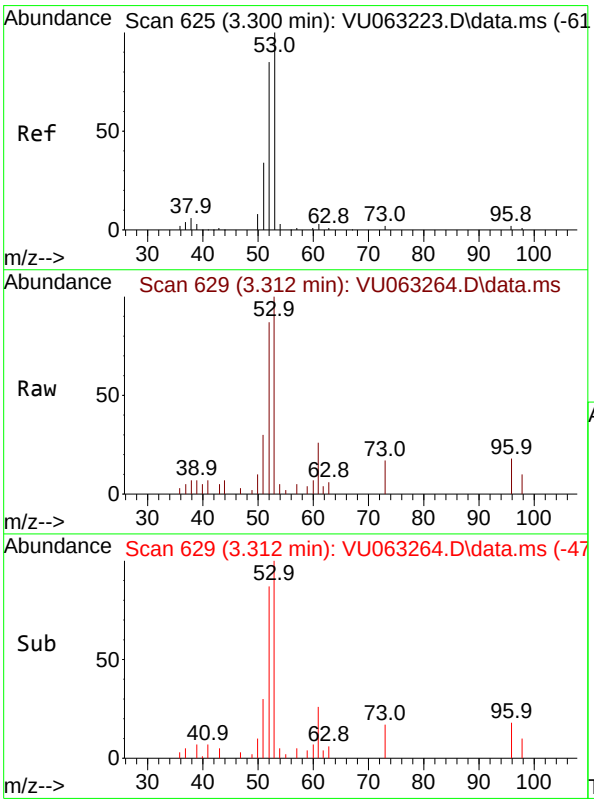
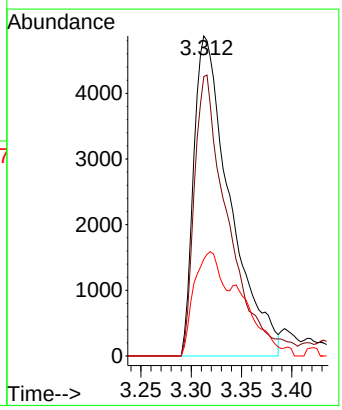
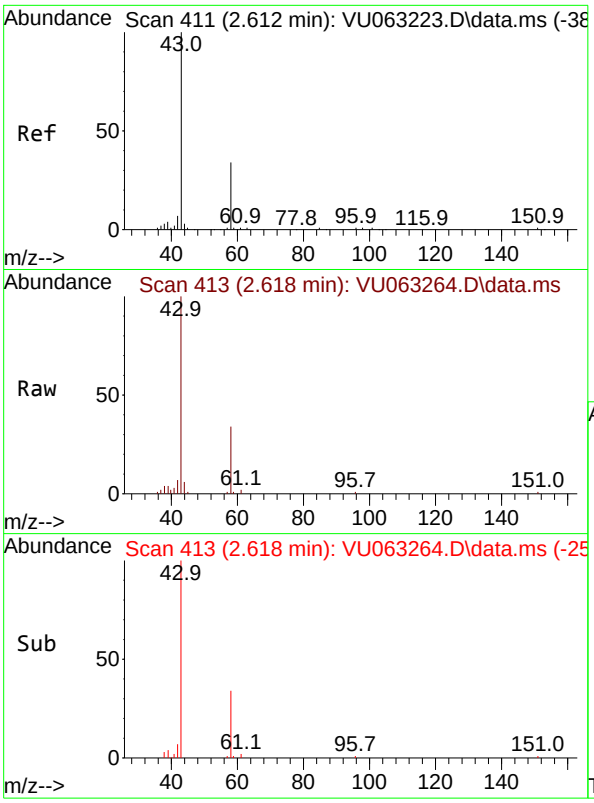


#12
Acrylonitrile
Concen: 4.183 ug/l
RT: 3.312 min Scan# 629
Delta R.T. 0.013 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 53 Resp: 12169

Ion	Ratio	Lower	Upper
53	100		
52	82.3	64.2	96.2
51	26.9	30.8	46.2#

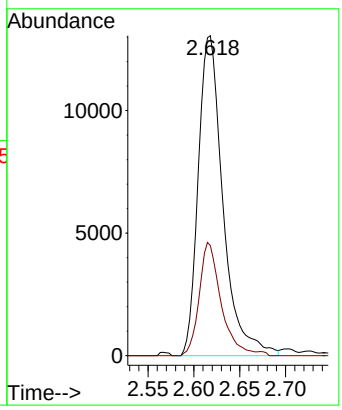




#13
Acetone
Concen: 10.966 ug/l
RT: 2.618 min Scan# 41
Delta R.T. 0.006 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 43 Resp: 2452

Ion	Ratio	Lower	Upper
43	100		
58	34.4	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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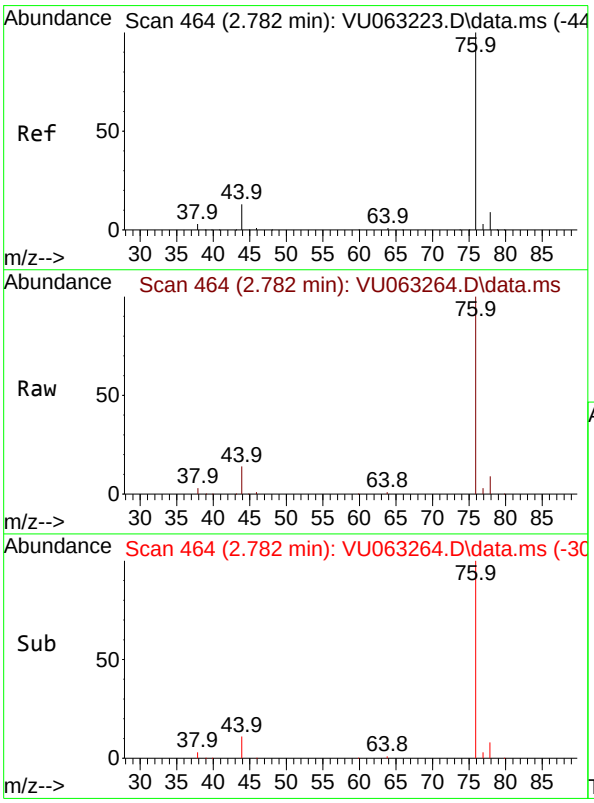
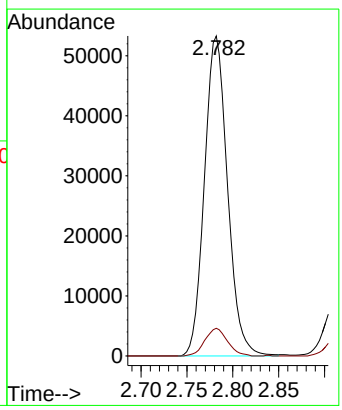
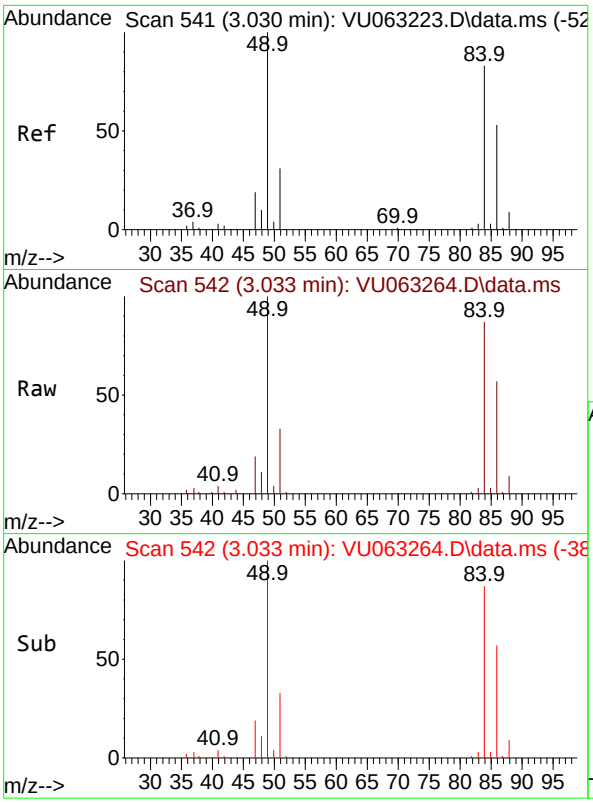


#14
Carbon Disulfide
Concen: 2.118 ug/l
RT: 2.782 min Scan# 464
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 76 Resp: 93411

Ion	Ratio	Lower	Upper
76	100		
78	8.7	7.2	10.8

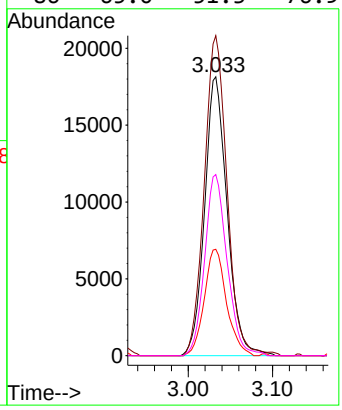




#15
Methylene Chloride
Concen: 2.167 ug/l
RT: 3.033 min Scan# 54
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 84 Resp: 3376

Ion	Ratio	Lower	Upper
84	100		
49	114.8	96.4	144.6
51	38.2	0.0	74.8
86	65.0	51.3	76.9



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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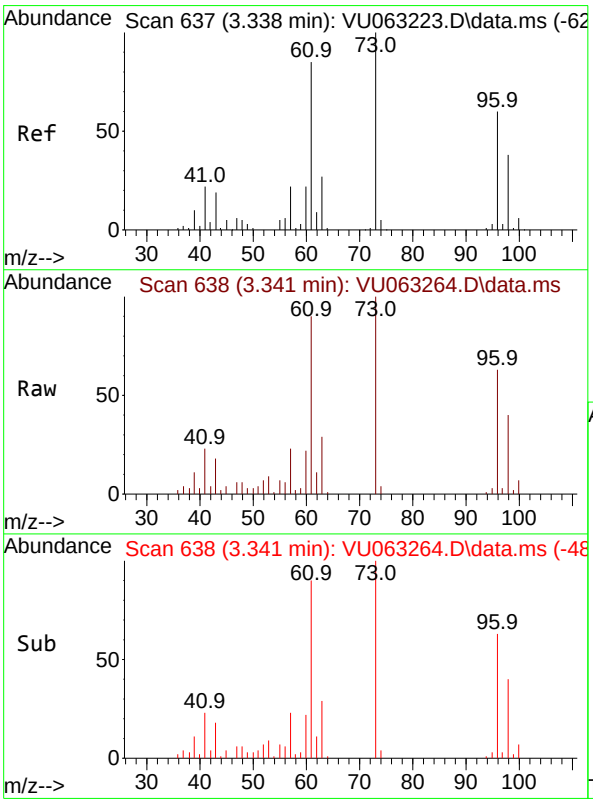
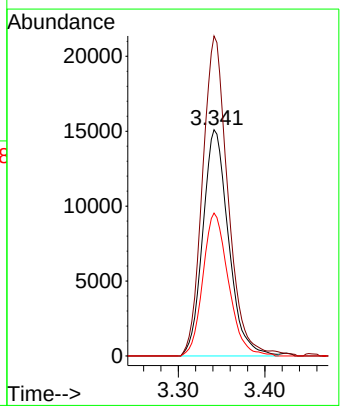
Reviewed By :Mahesh Dadoda 02/14/2025
Supervised By :Semsettin Yesilyurt 02/14/2025

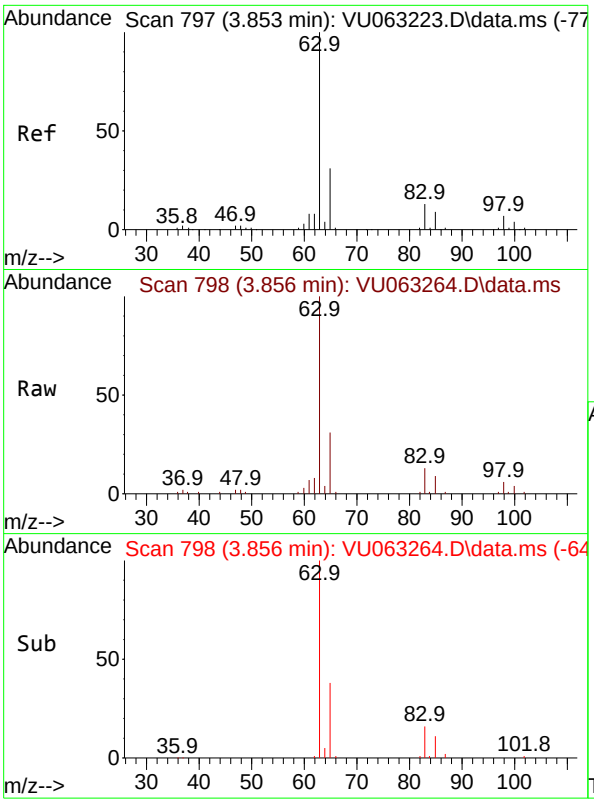


#16
trans-1,2-Dichloroethene
Concen: 2.161 ug/l
RT: 3.341 min Scan# 638
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 96 Resp: 31108

Ion	Ratio	Lower	Upper
96	100		
61	141.5	113.4	170.2
98	63.1	51.2	76.8

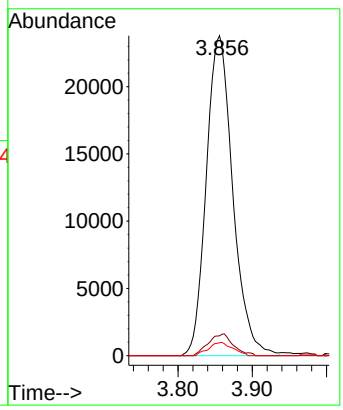




#17
1,1-Dichloroethane
Concen: 2.176 ug/l
RT: 3.856 min Scan# 7
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 63 Resp: 5904

Ion	Ratio	Lower	Upper
63	100		
98	6.2	3.3	9.9
100	4.1	2.1	6.2



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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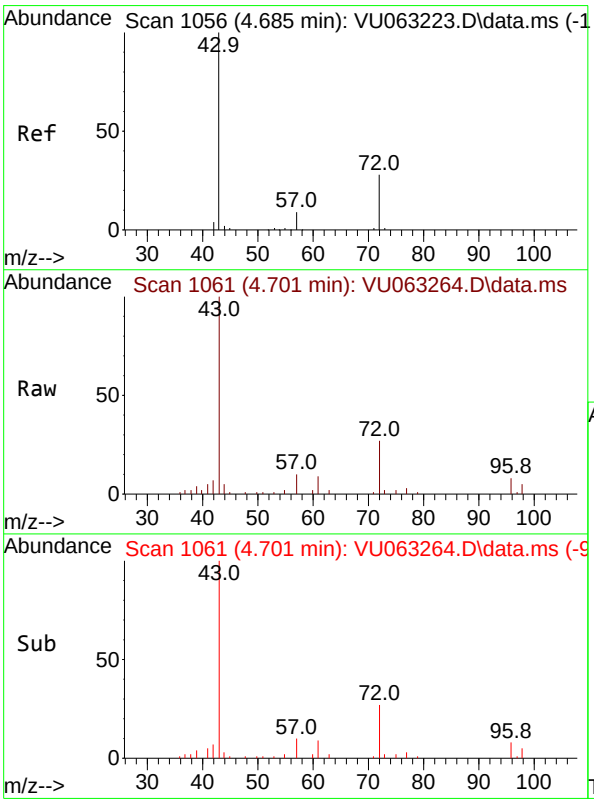
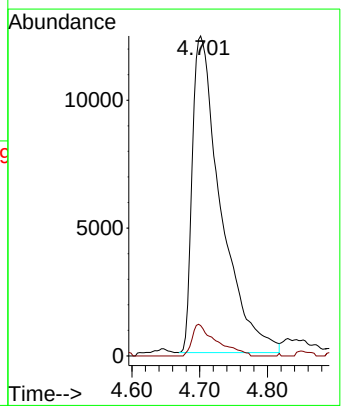
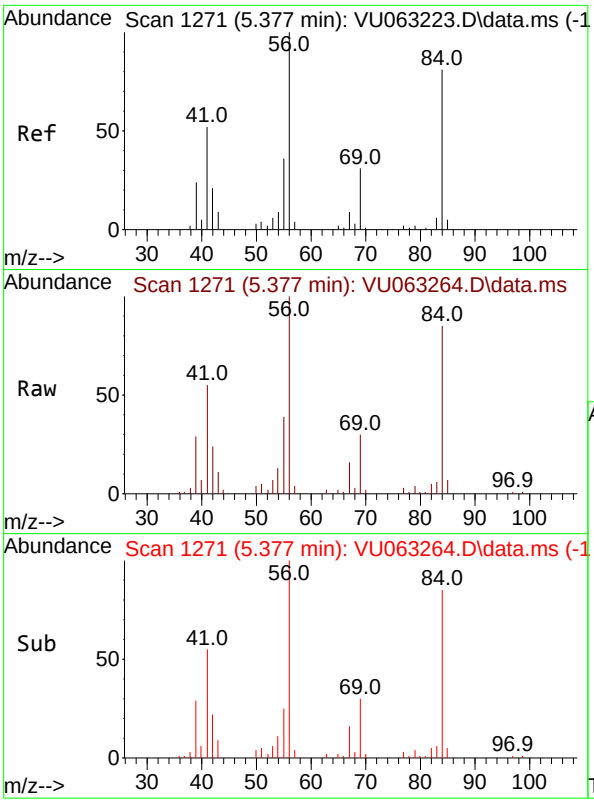


#18
2-Butanone
Concen: 10.178 ug/l
RT: 4.701 min Scan# 1061
Delta R.T. 0.016 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 43 Resp: 36232

Ion	Ratio	Lower	Upper
43	100		
57	9.6	0.0	17.0

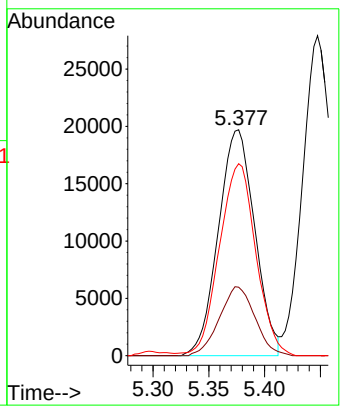




#19
Cyclohexane
Concen: 2.055 ug/l m
RT: 5.377 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 56 Resp: 4479

Ion	Ratio	Lower	Upper
56	100		
69	29.7	24.5	36.7
84	83.6	65.2	97.8



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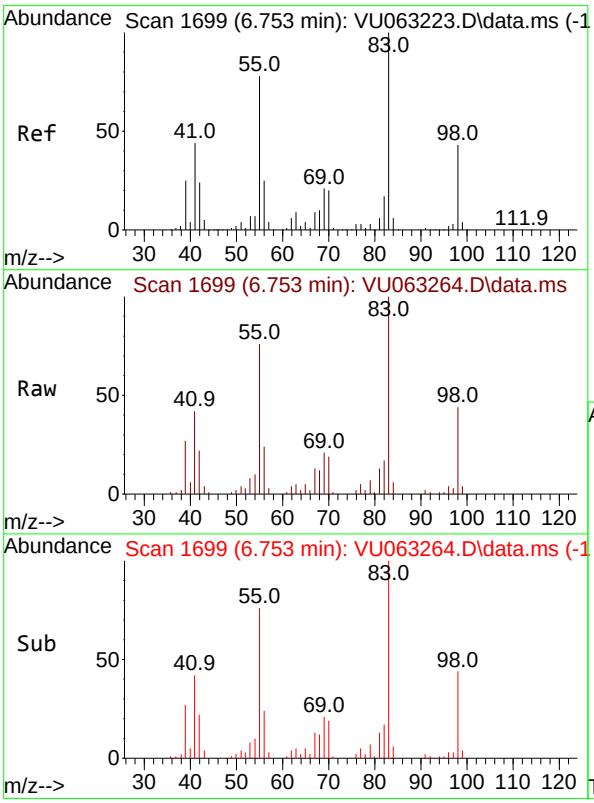
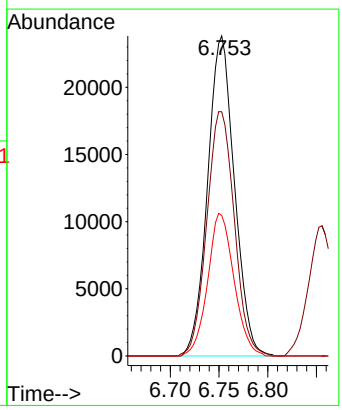
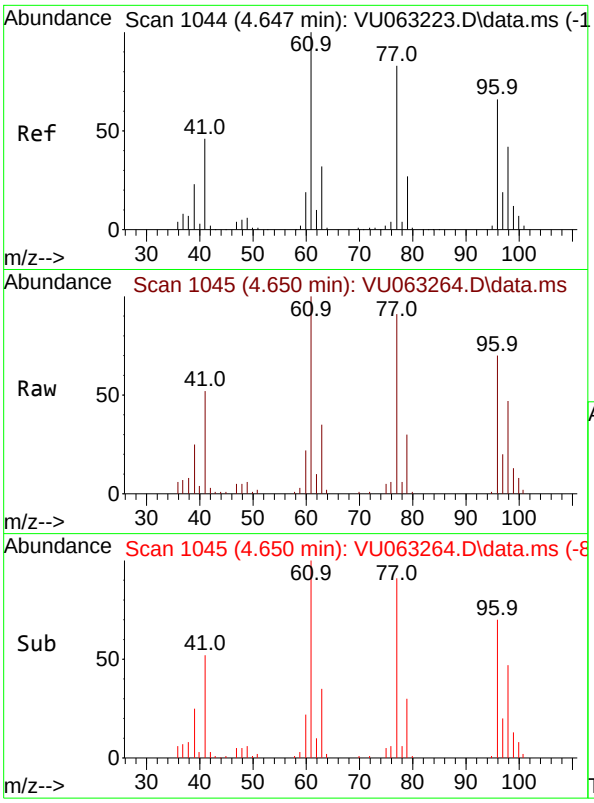


#20
Methylcyclohexane
Concen: 2.109 ug/l
RT: 6.753 min Scan# 1699
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 83 Resp: 45601

Ion	Ratio	Lower	Upper
83	100		
55	78.4	63.1	94.7
98	43.7	35.2	52.8

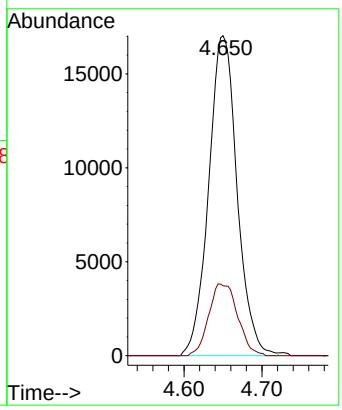




#21
2,2-Dichloropropane
Concen: 2.040 ug/l
RT: 4.650 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 77 Resp: 4317

Ion	Ratio	Lower	Upper
77	100		
97	22.8	18.5	27.7



Instrument :
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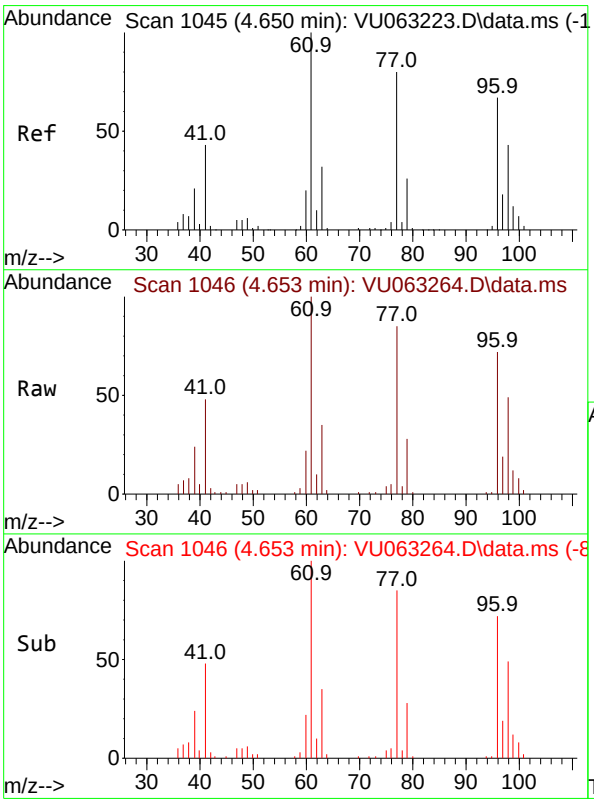
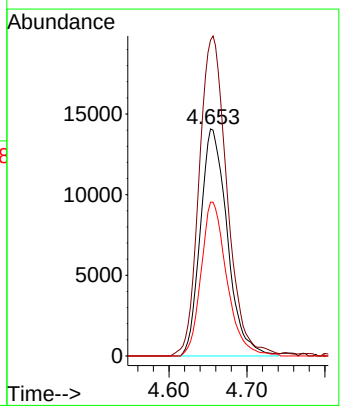
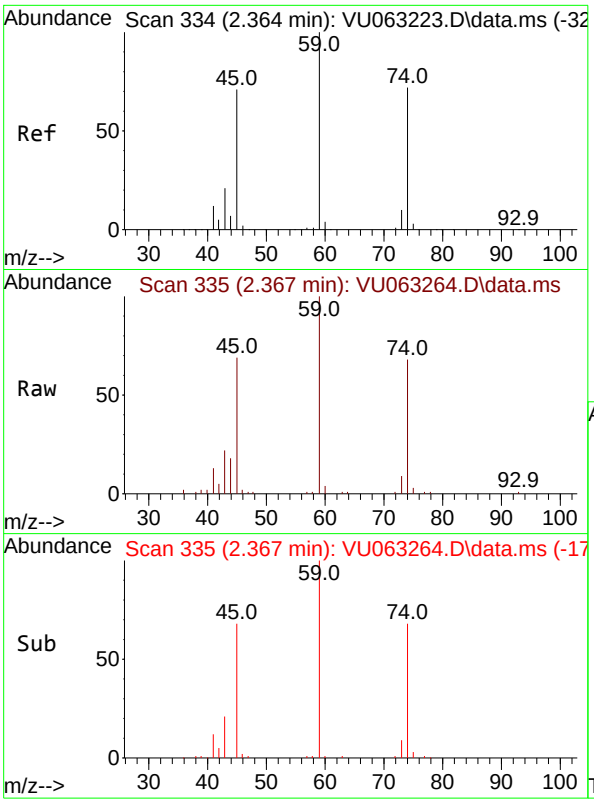


#22
cis-1,2-Dichloroethene
Concen: 2.176 ug/l
RT: 4.653 min Scan# 1046
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 96 Resp: 33849

Ion	Ratio	Lower	Upper
96	100		
61	145.8	0.0	373.3
98	64.7	31.9	95.9





#23
Diethyl Ether
Concen: 2.088 ug/l
RT: 2.367 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 59 Resp: 2259

Ion	Ratio	Lower	Upper
59	100		
45	71.3	57.8	86.6
74	69.5	57.7	86.5

Instrument :
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ClientSampleId :
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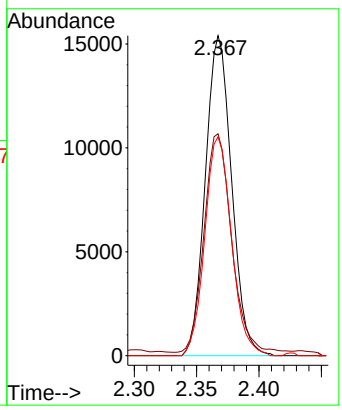
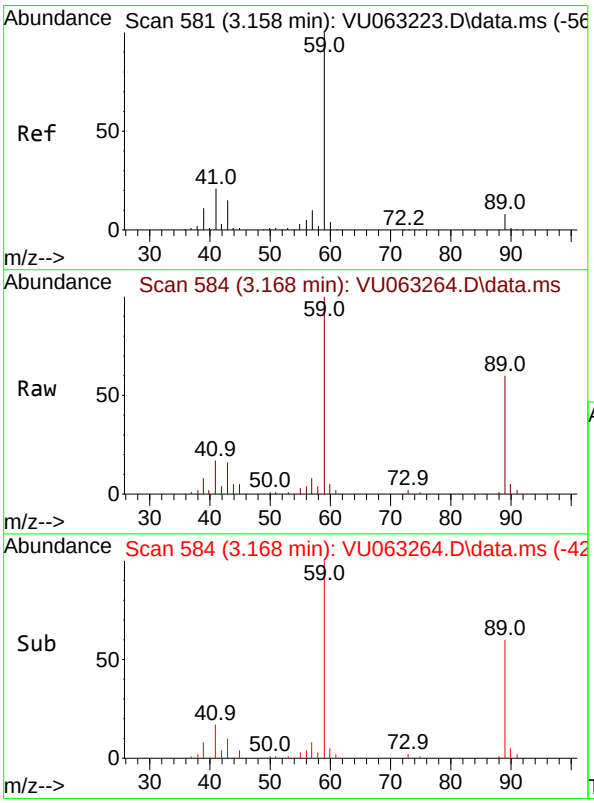
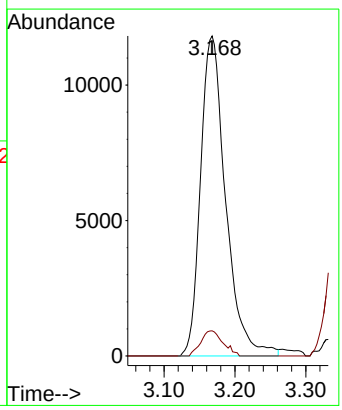


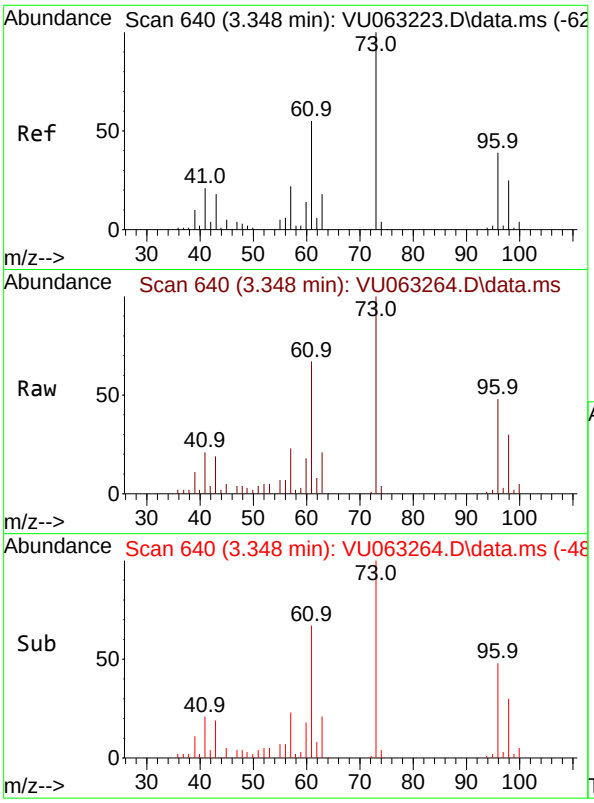


#24
tert-Butyl Alcohol
Concen: 21.127 ug/l
RT: 3.168 min Scan# 584
Delta R.T. 0.010 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 59 Resp: 29029

Ion	Ratio	Lower	Upper
59	100		
57	7.0	7.5	11.3#

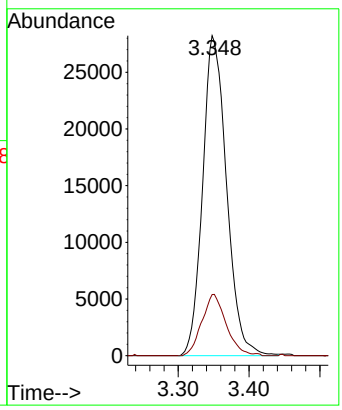




#25
Methyl tert-Butyl Ether
Concen: 2.104 ug/l
RT: 3.348 min Scan# 64
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 73 Resp: 6628

Ion	Ratio	Lower	Upper
73	100		
43	19.4	14.9	22.3



Instrument :
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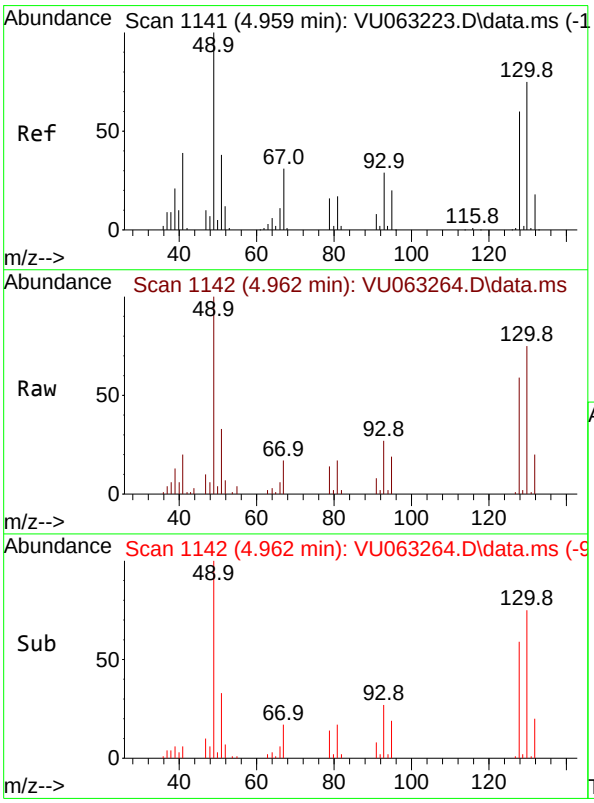
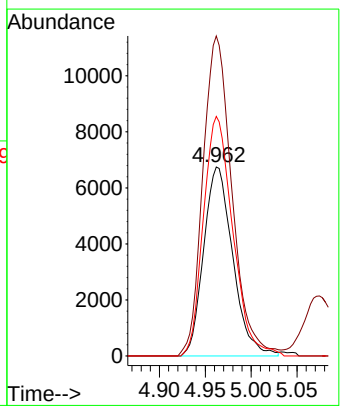
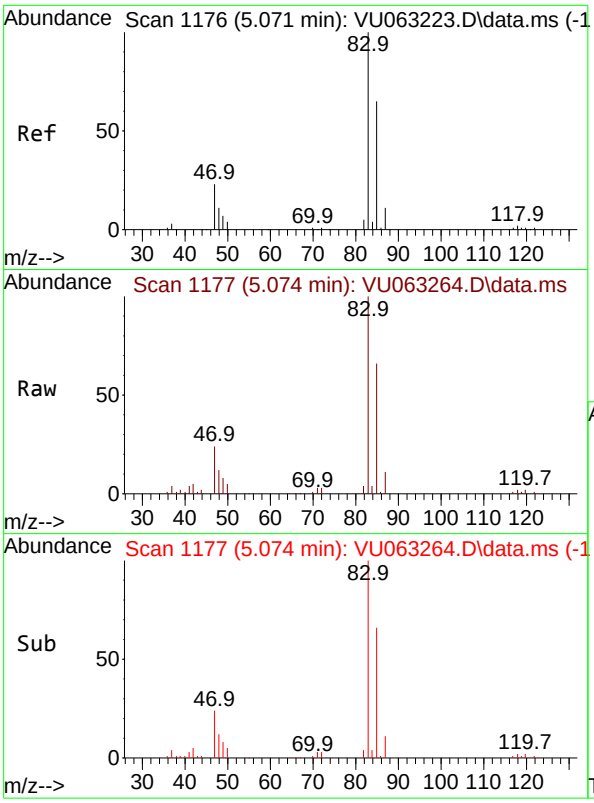


#26
Bromochloromethane
Concen: 2.190 ug/l
RT: 4.962 min Scan# 1142
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:128 Resp: 14888

Ion	Ratio	Lower	Upper
128	100		
49	168.8	0.0	343.4
130	128.0	102.9	154.3

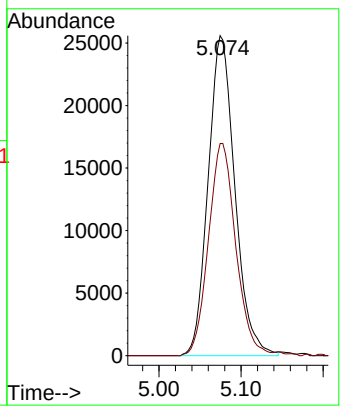




#27
Chloroform
Concen: 2.115 ug/l
RT: 5.074 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 83 Resp: 5791

Ion	Ratio	Lower	Upper
83	100		
85	66.3	0.0	129.8



Instrument :
MSVOA_U
ClientSampleId :
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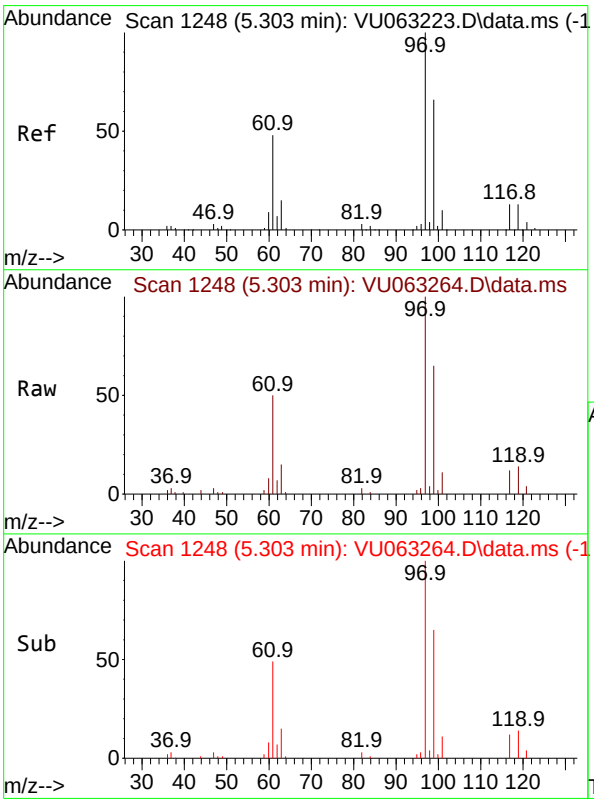
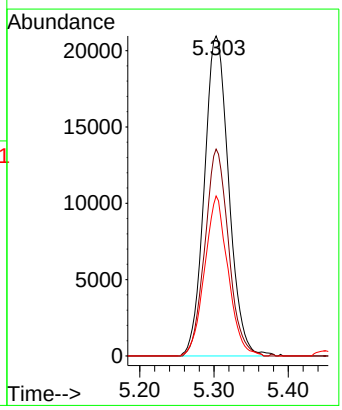
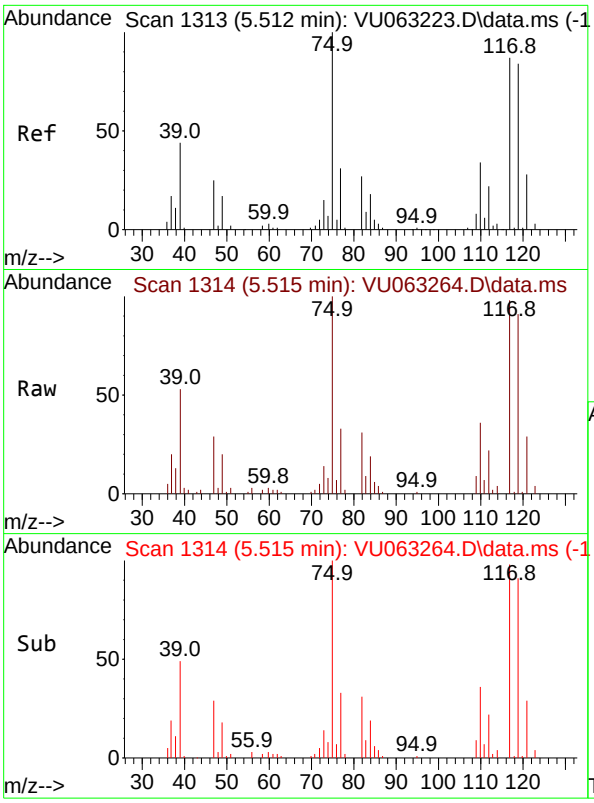


#28
1,1,1-Trichloroethane
Concen: 2.159 ug/l
RT: 5.303 min Scan# 1248
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 97 Resp: 47889

Ion	Ratio	Lower	Upper
97	100		
99	62.7	32.4	97.0
61	48.2	23.8	71.2

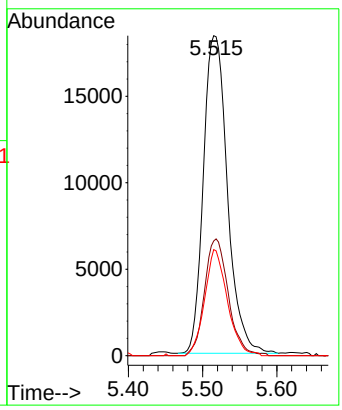




#29
1,1-Dichloropropene
Concen: 2.080 ug/l
RT: 5.515 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 75 Resp: 4131

Ion	Ratio	Lower	Upper
75	100		
110	36.3	17.2	51.5
77	31.6	24.6	37.0



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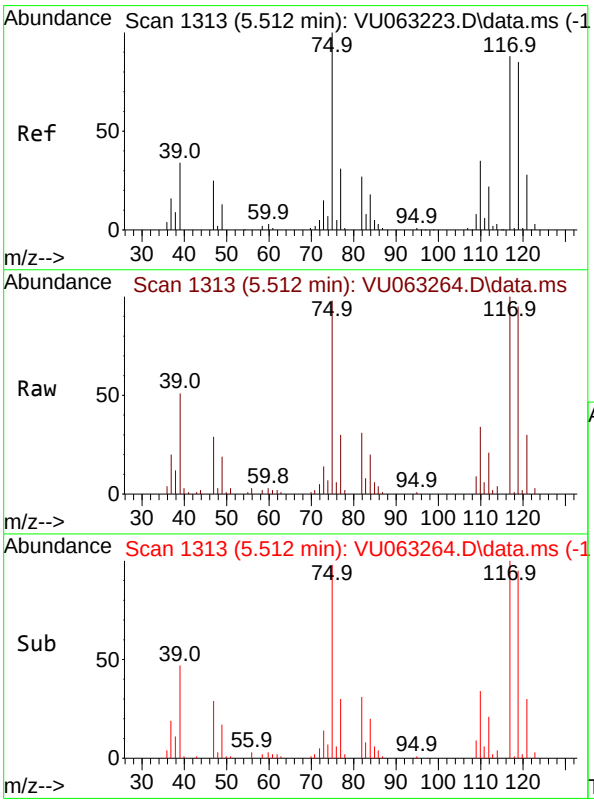
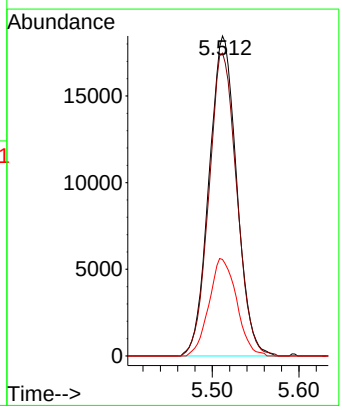
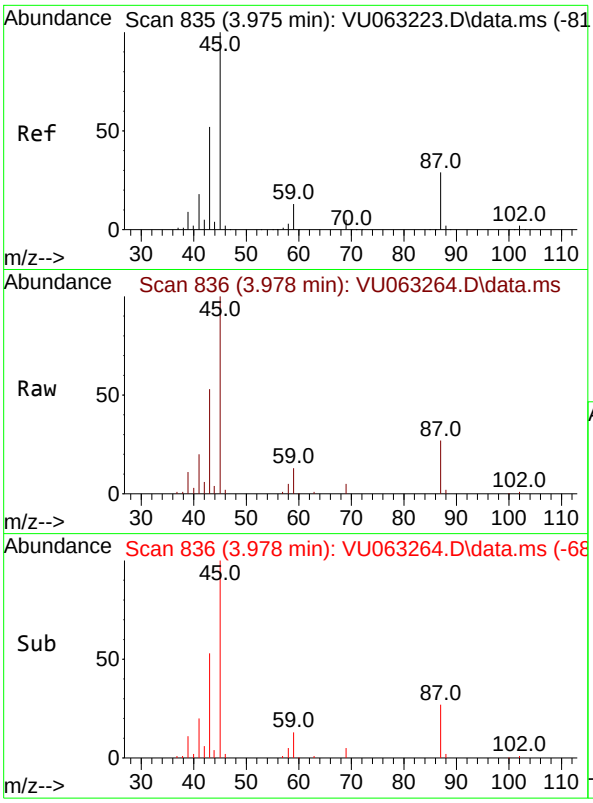


#30
Carbon Tetrachloride
Concen: 2.146 ug/l
RT: 5.512 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:117 Resp: 40821

Ion	Ratio	Lower	Upper
117	100		
119	94.6	76.7	115.1
121	30.2	25.5	38.3

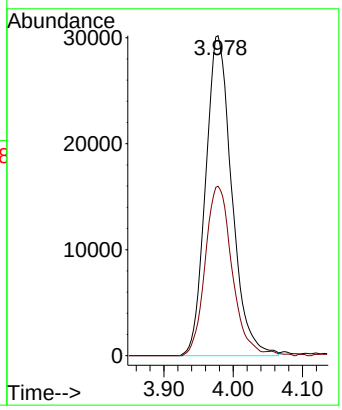




#31
Isopropyl Ether
Concen: 2.043 ug/l
RT: 3.978 min Scan# 8
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 45 Resp: 7913

Ion	Ratio	Lower	Upper
45	100		
43	54.0	25.7	77.1



Instrument :
MSVOA_U
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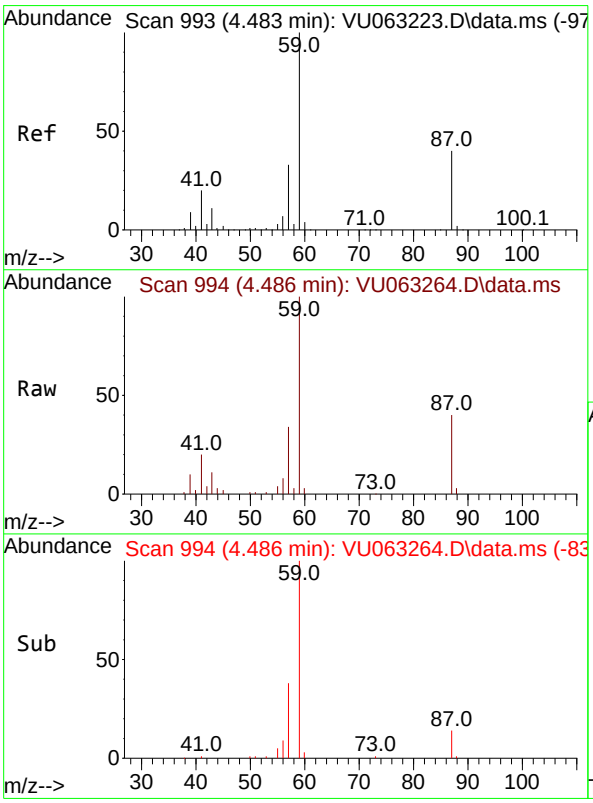
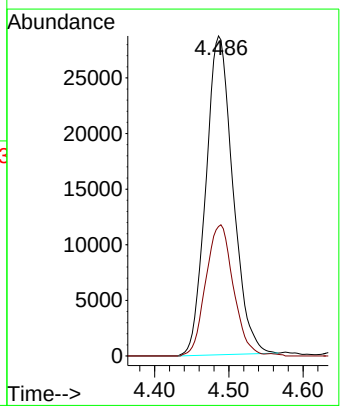
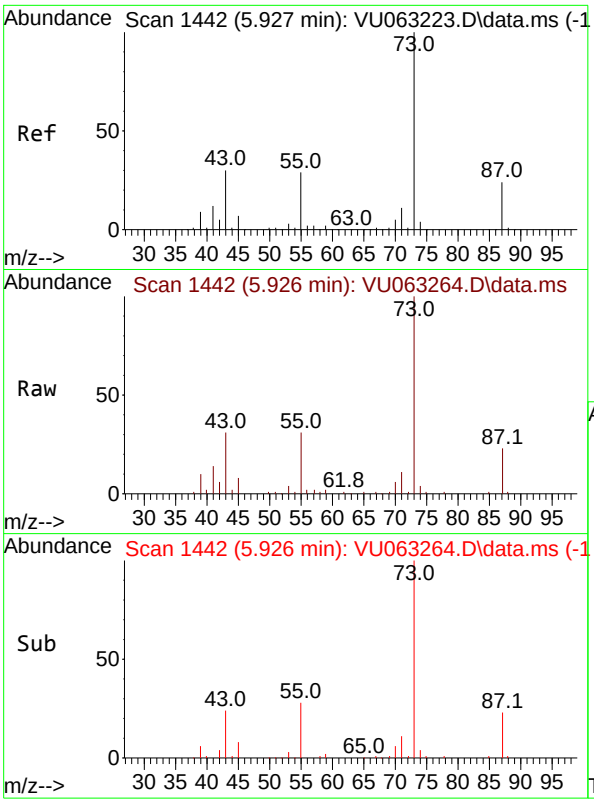


#32
Ethyl-t-butyl ether
Concen: 2.056 ug/l
RT: 4.486 min Scan# 994
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 59 Resp: 72442

Ion	Ratio	Lower	Upper
59	100		
87	41.1	32.6	49.0





#33
Tert-Amyl methyl ether
Concen: 2.111 ug/l
RT: 5.926 min Scan# 14
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 73 Resp: 6497

Ion	Ratio	Lower	Upper
73	100		
87	24.2	18.9	28.3
71	11.3	9.0	13.4

Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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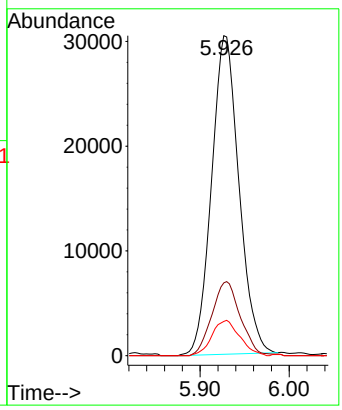
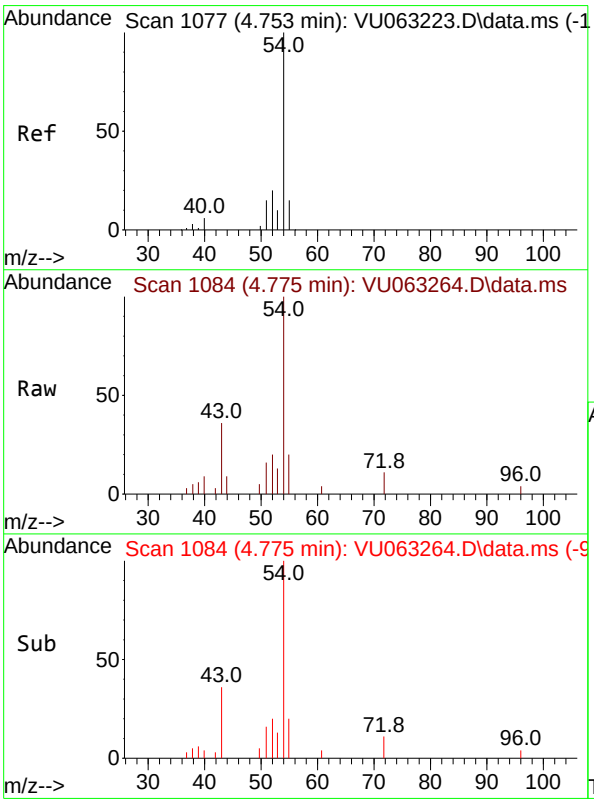
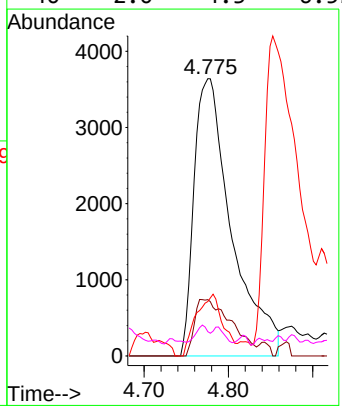


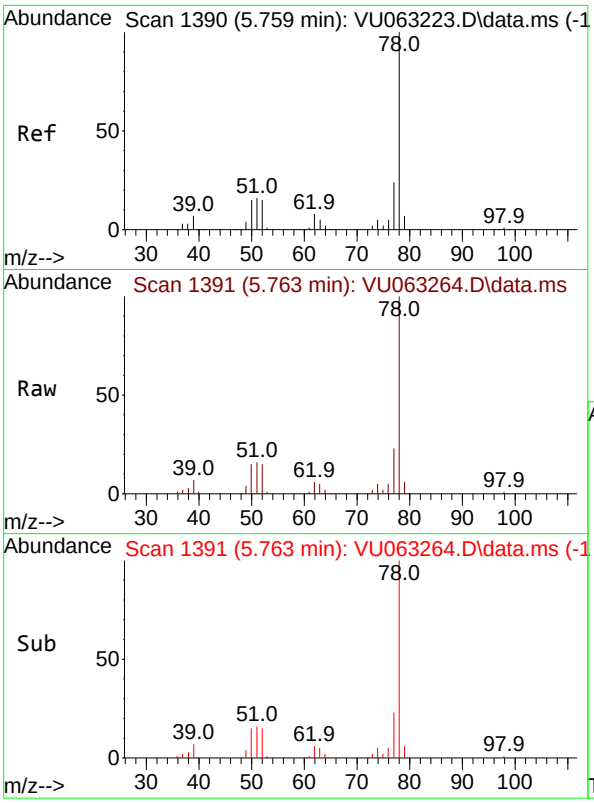


#34
Propionitrile
Concen: 10.479 ug/l
RT: 4.775 min Scan# 1084
Delta R.T. 0.022 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 54 Resp: 11252

Ion	Ratio	Lower	Upper
54	100		
52	20.0	16.3	24.5
55	16.2	11.8	17.6
40	2.0	4.3	6.5#

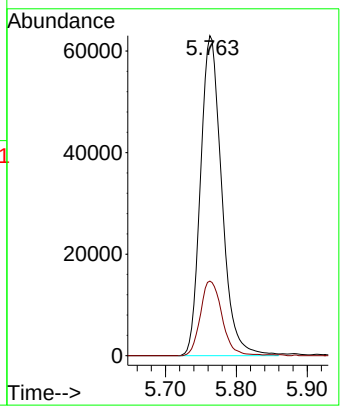




#35
Benzene
Concen: 2.146 ug/l
RT: 5.763 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 78 Resp: 13107

Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.0	28.4



Instrument :
MSVOA_U
ClientSampleId :
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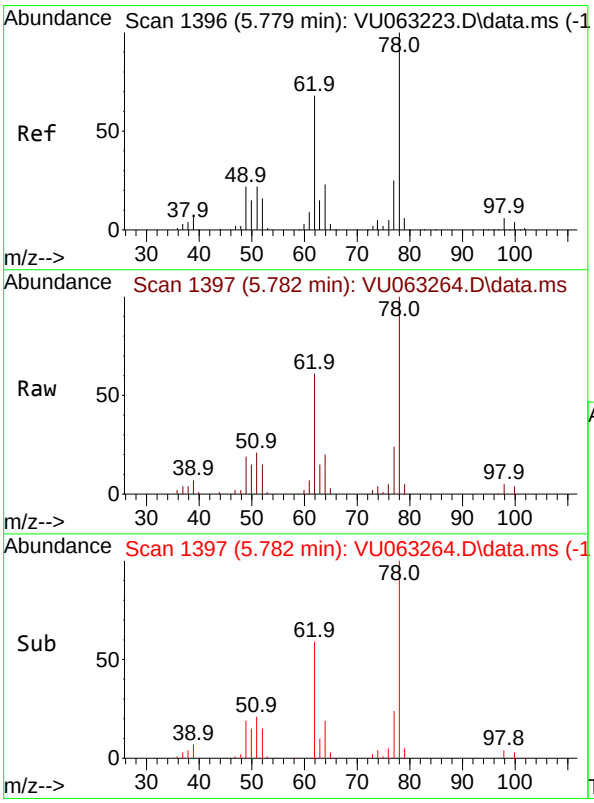
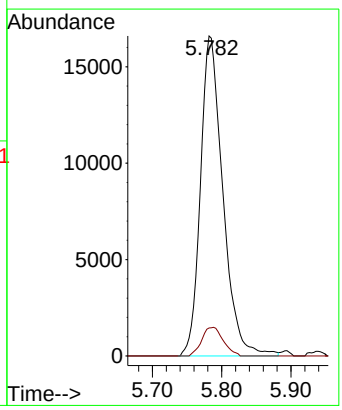
Supervised By :Semsettin Yesilyurt 02/14/2025

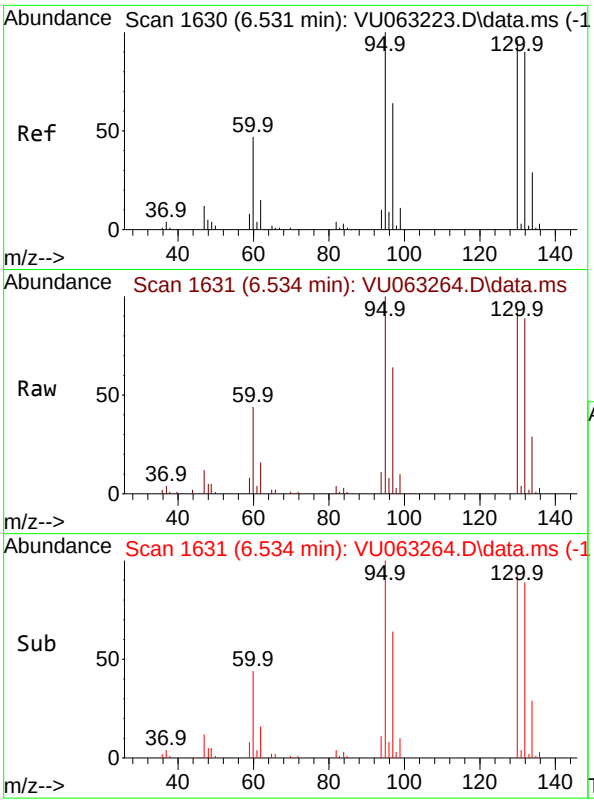


#36
1,2-Dichloroethane
Concen: 2.117 ug/l
RT: 5.782 min Scan# 1397
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 62 Resp: 37320

Ion	Ratio	Lower	Upper
62	100		
98	8.6	6.9	10.3

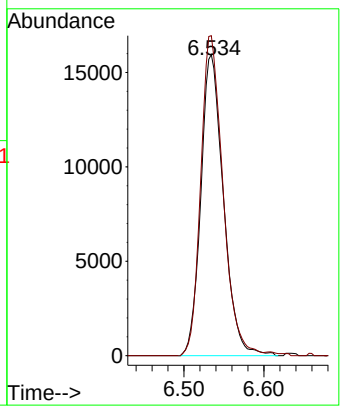




#37
Trichloroethene
Concen: 2.156 ug/l
RT: 6.534 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:130 Resp: 3131

Ion	Ratio	Lower	Upper
130	100		
95	106.3	83.2	124.8



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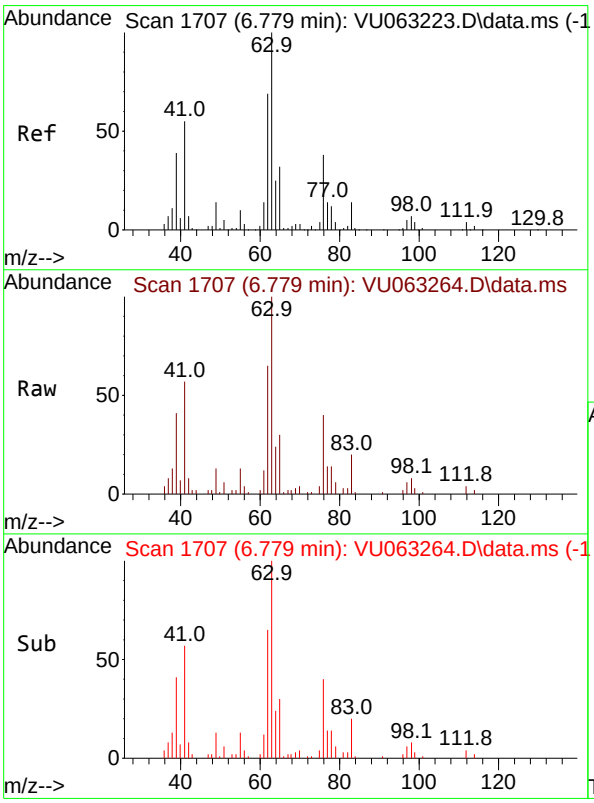
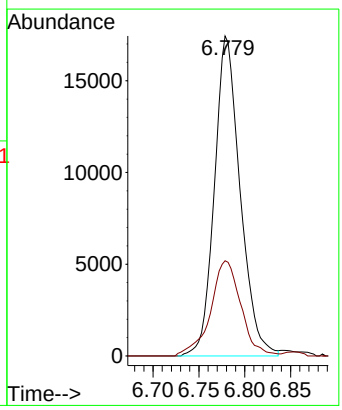
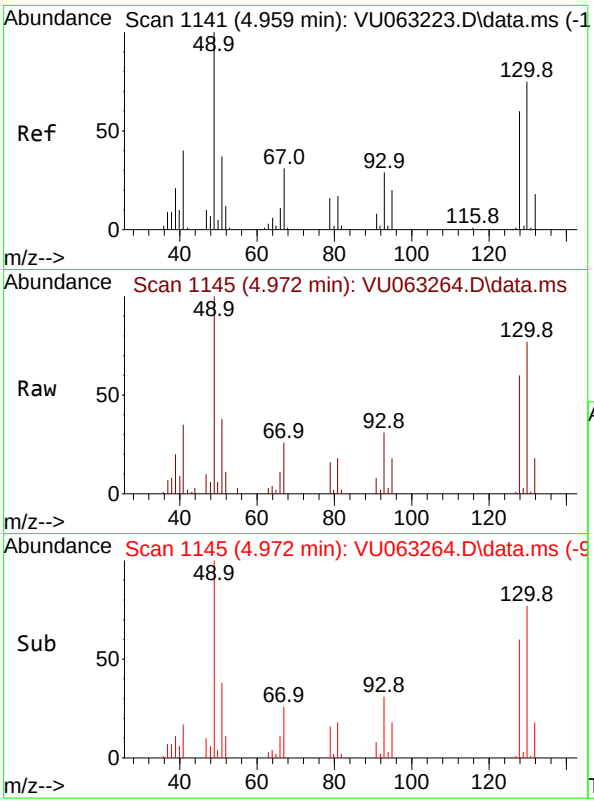


#38
1,2-Dichloropropane
Concen: 2.129 ug/l
RT: 6.779 min Scan# 1707
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 63 Resp: 34039

Ion	Ratio	Lower	Upper
63	100		
65	29.1	25.3	37.9

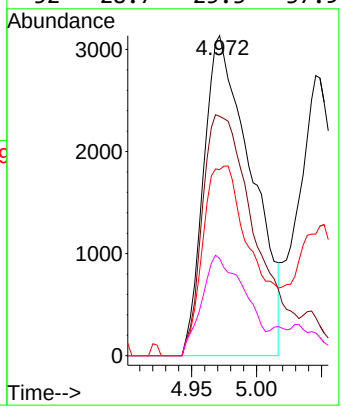




#39
Methacrylonitrile
Concen: 1.997 ug/l
RT: 4.972 min Scan# 1
Delta R.T. 0.013 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 41 Resp: 799

Ion	Ratio	Lower	Upper
41	100		
67	83.7	64.5	96.7
39	61.8	43.0	64.6
52	28.7	25.3	37.9



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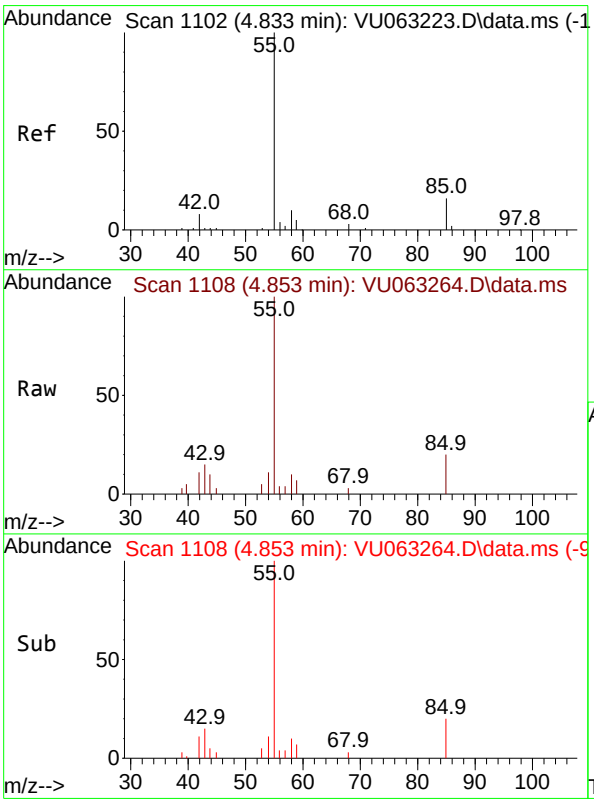
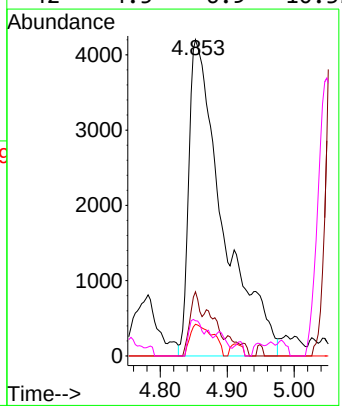
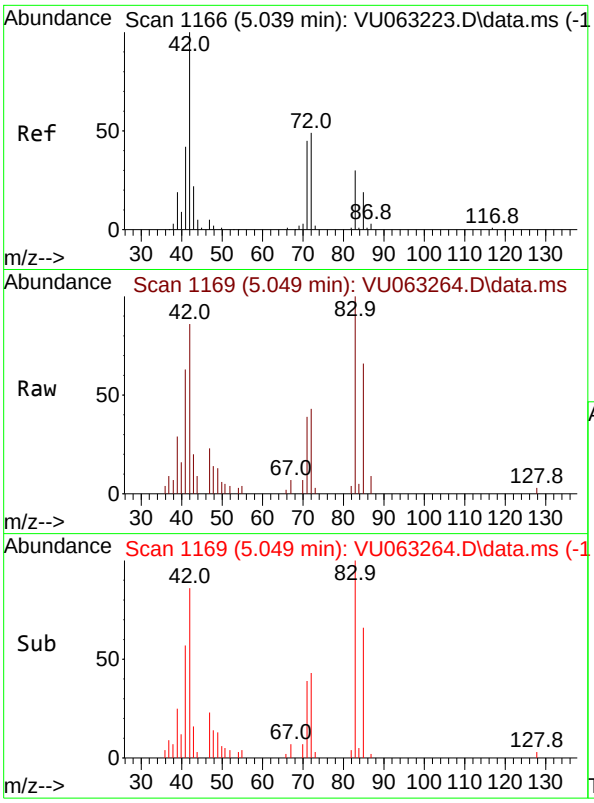


#40
Methyl acrylate
Concen: 2.002 ug/l m
RT: 4.853 min Scan# 1108
Delta R.T. 0.019 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 55 Resp: 14767

Ion	Ratio	Lower	Upper
55	100		
85	0.0	13.3	19.9#
58	6.6	7.3	10.9#
42	4.5	6.9	10.3#

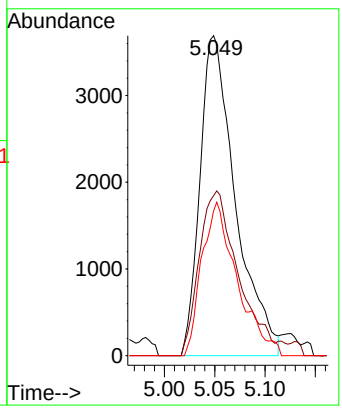




#41
Tetrahydrofuran
Concen: 3.902 ug/l
RT: 5.049 min Scan# 1
Delta R.T. 0.010 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 42 Resp: 908

Ion	Ratio	Lower	Upper
42	100		
72	56.3	41.5	62.3
71	47.6	37.2	55.8



Instrument :
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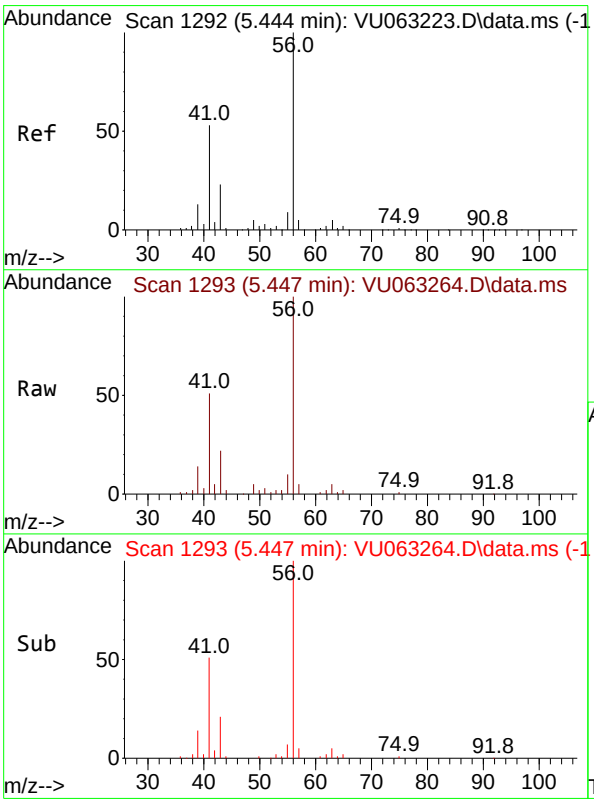
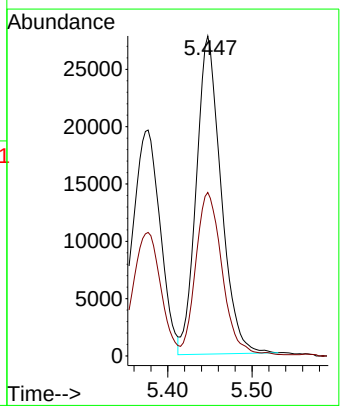
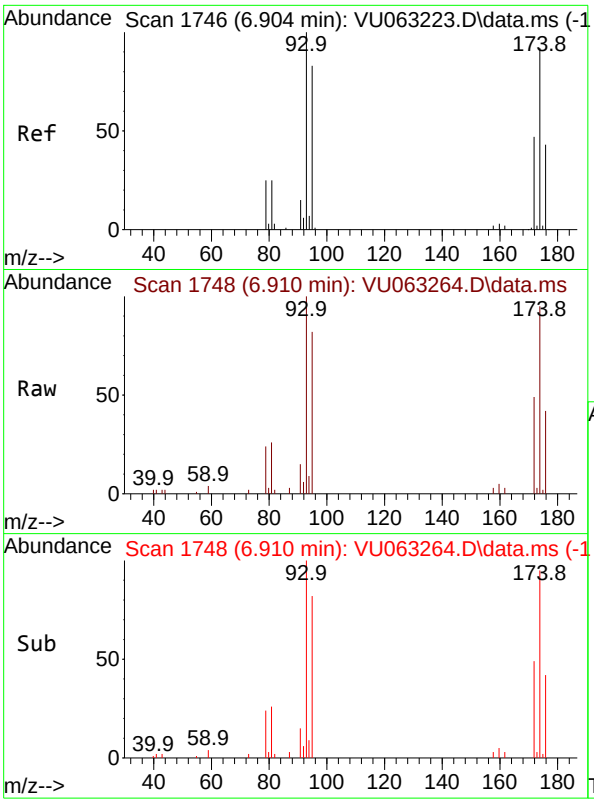


#42
1-Chlorobutane
Concen: 2.085 ug/l
RT: 5.447 min Scan# 1293
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 56 Resp: 56663

Ion	Ratio	Lower	Upper
56	100		
41	52.8	26.3	78.8

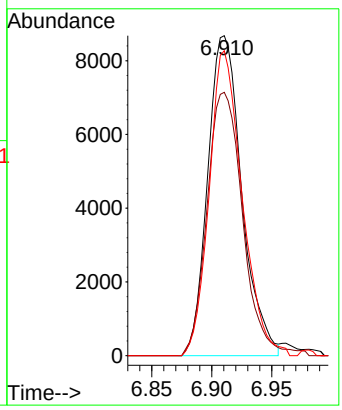




#43
Dibromomethane
Concen: 2.115 ug/l
RT: 6.910 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 93 Resp: 1712

Ion	Ratio	Lower	Upper
93	100		
95	86.4	67.2	100.8
174	92.6	75.7	113.5



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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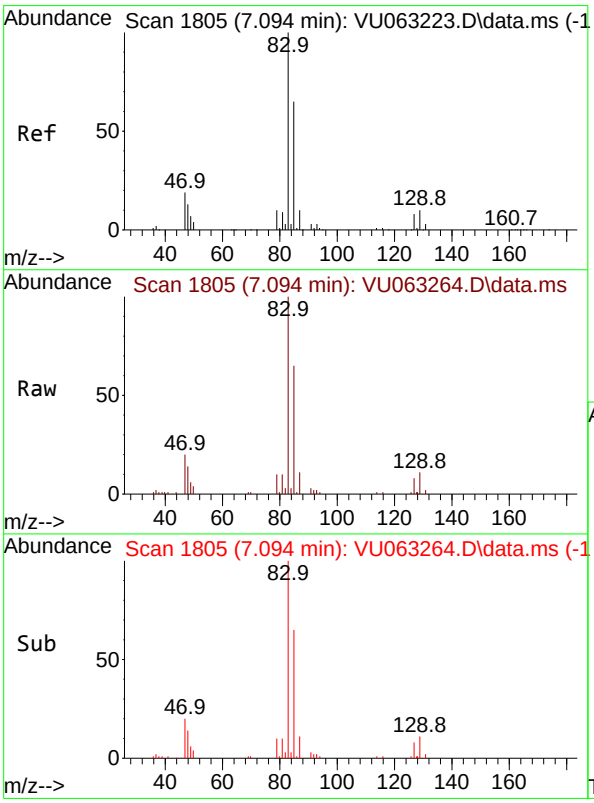
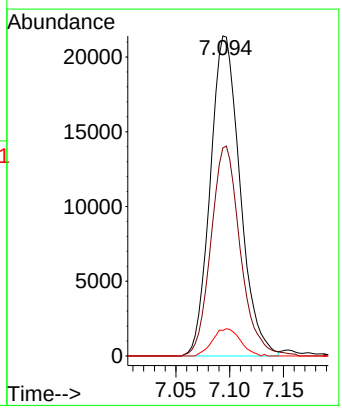
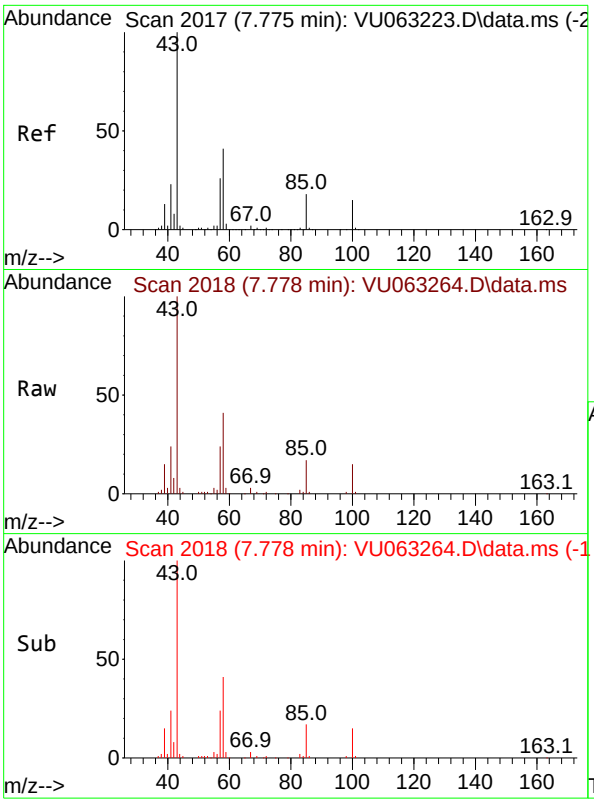


#44
Bromodichloromethane
Concen: 2.186 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 83 Resp: 41195

Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.7	77.5
127	8.6	6.7	10.1

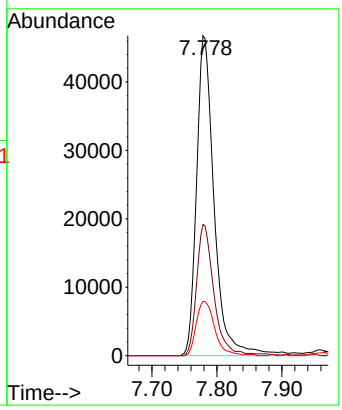




#45
4-Methyl-2-Pentanone
Concen: 10.374 ug/l
RT: 7.778 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 43 Resp: 8805

Ion	Ratio	Lower	Upper
43	100		
58	40.2	20.8	62.5
85	17.9	14.8	22.2



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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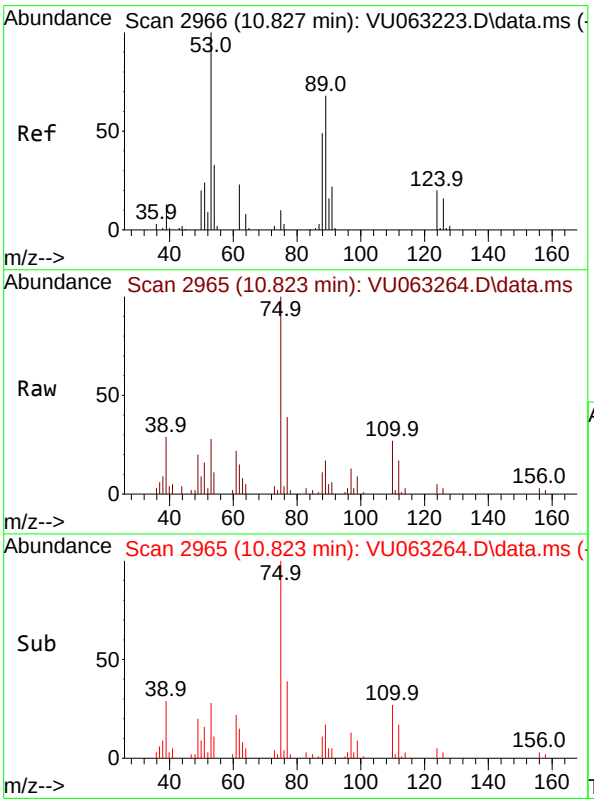
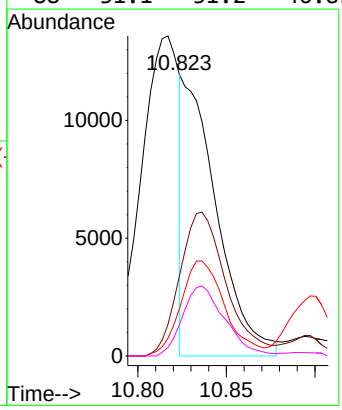
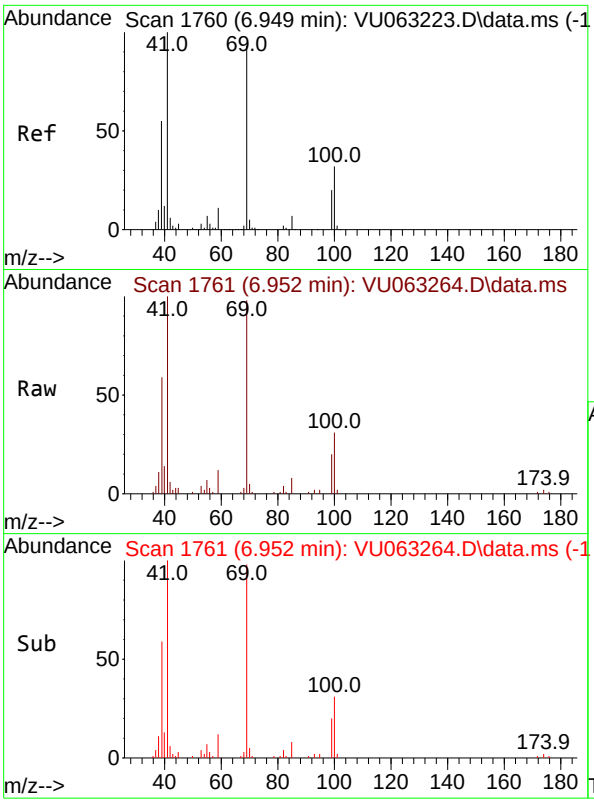


#46
t-1,4-Dichloro-2-butene
Concen: 3.971 ug/l m
RT: 10.823 min Scan# 2965
Delta R.T. -0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 75 Resp: 15843

Ion	Ratio	Lower	Upper
75	100		
53	70.6	64.5	96.7
89	44.3	43.4	65.2
88	31.1	31.2	46.8#

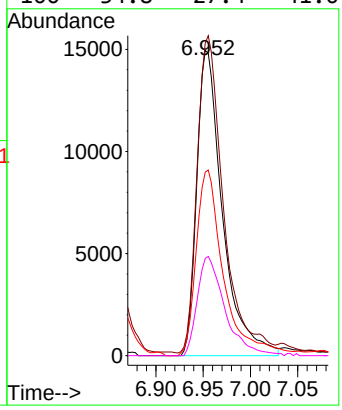




#47
Methyl methacrylate
Concen: 4.157 ug/l
RT: 6.952 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 69 Resp: 2834

Ion	Ratio	Lower	Upper
69	100		
41	105.7	0.0	217.0
39	64.6	47.7	71.5
100	34.8	27.4	41.0



Instrument :
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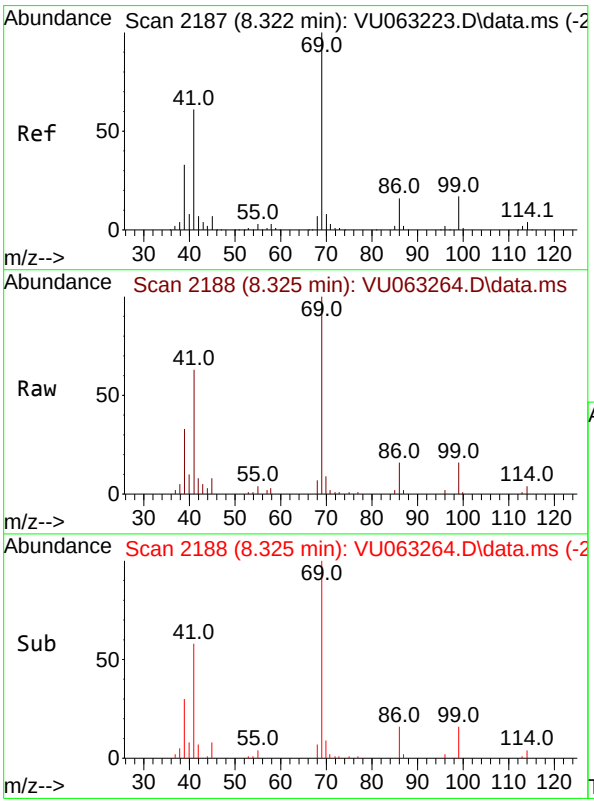
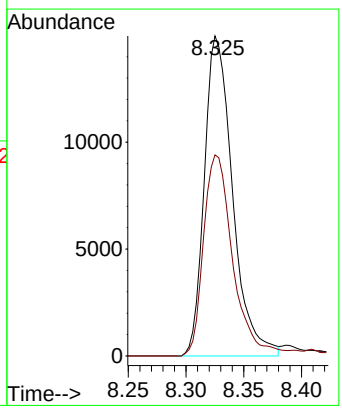
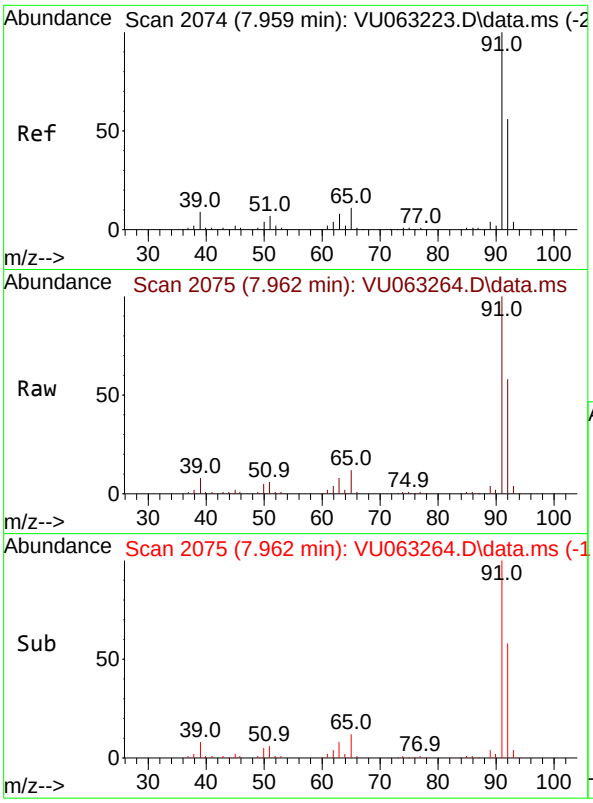


#48
Ethyl methacrylate
Concen: 1.990 ug/l
RT: 8.325 min Scan# 2188
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 69 Resp: 25480

Ion	Ratio	Lower	Upper
69	100		
41	65.1	30.6	92.0





#49
Toluene
Concen: 2.110 ug/l
RT: 7.962 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 92 Resp: 7413

Ion	Ratio	Lower	Upper
92	100		
91	178.3	141.8	212.6

Instrument :
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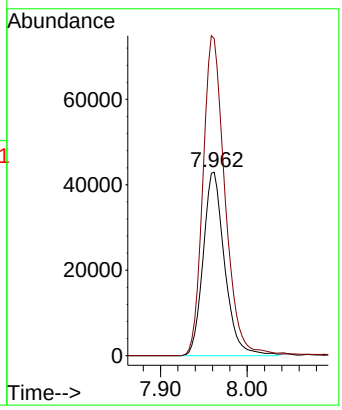
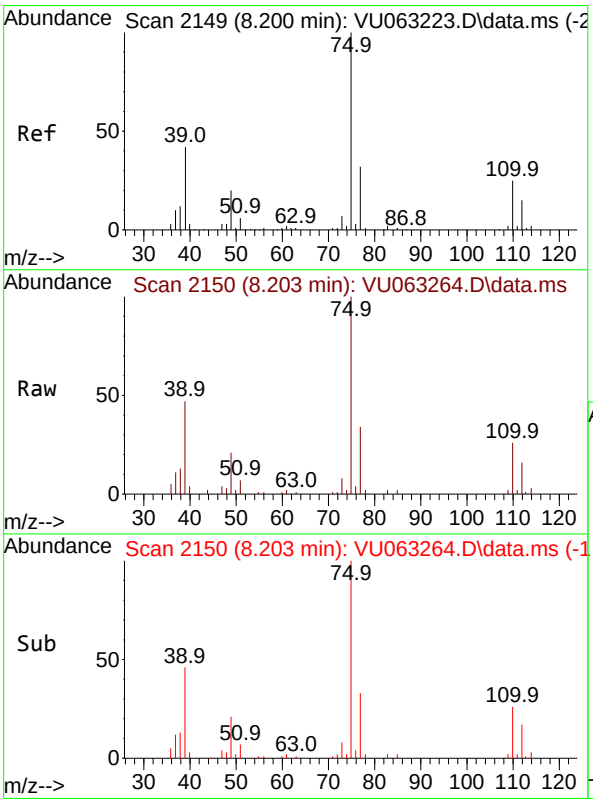
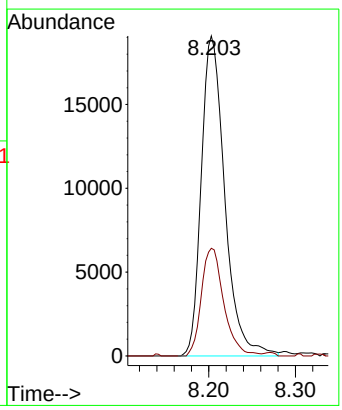


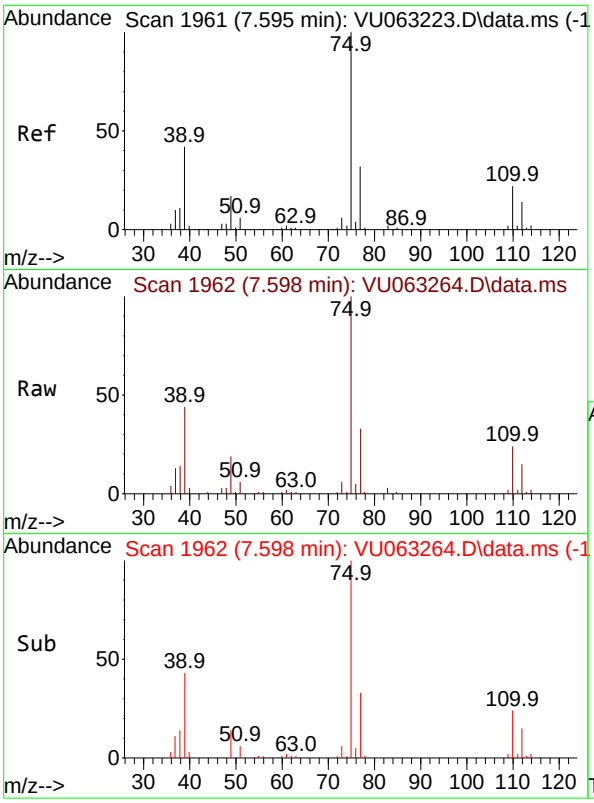


#50
t-1,3-Dichloropropene
Concen: 2.082 ug/l
RT: 8.203 min Scan# 2150
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 75 Resp: 35922

Ion	Ratio	Lower	Upper
75	100		
77	33.6	25.9	38.9

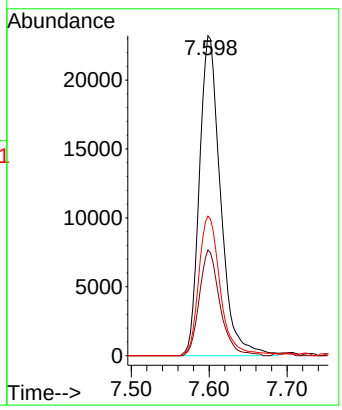




#51
cis-1,3-Dichloropropene
Concen: 2.049 ug/l
RT: 7.598 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 75 Resp: 4366

Ion	Ratio	Lower	Upper
75	100		
77	33.0	25.3	37.9
39	43.6	33.5	50.3



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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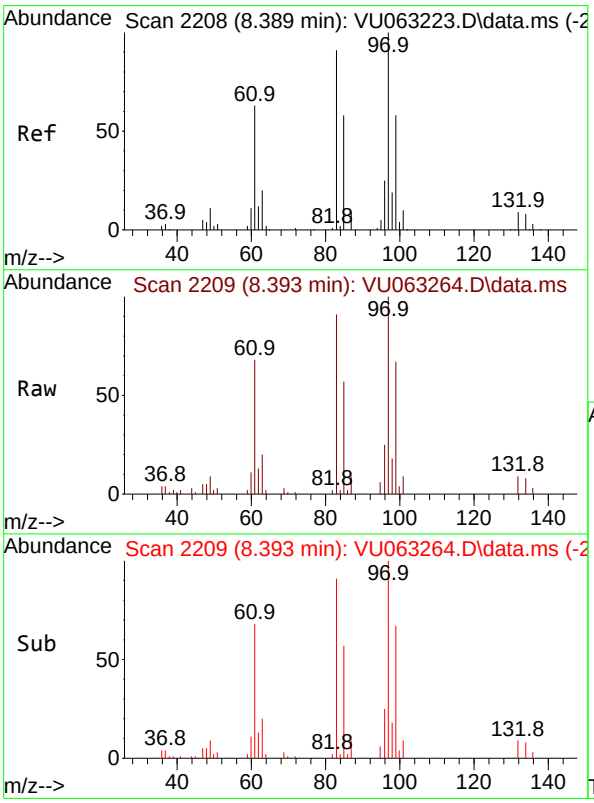
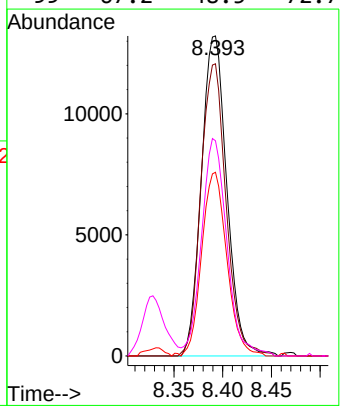
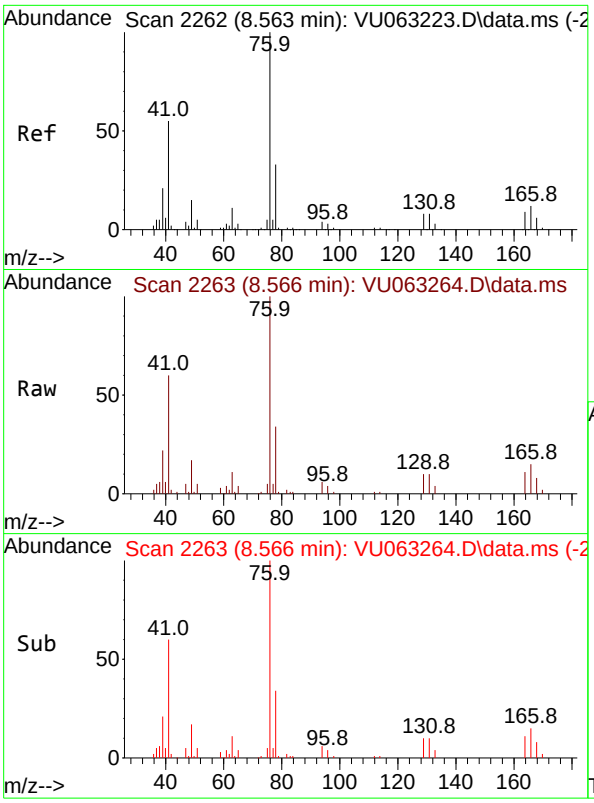


#52
1,1,2-Trichloroethane
Concen: 2.198 ug/l
RT: 8.393 min Scan# 2209
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 97 Resp: 23993

Ion	Ratio	Lower	Upper
97	100		
83	91.3	73.0	109.4
85	57.4	46.3	69.5
99	67.2	48.5	72.7

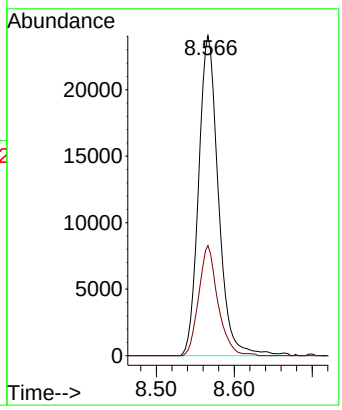




#53
1,3-Dichloropropane
Concen: 2.184 ug/l
RT: 8.566 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 76 Resp: 4232

Ion	Ratio	Lower	Upper
76	100		
78	33.4	26.3	39.5



Instrument :
MSVOA_U
ClientSampleId :
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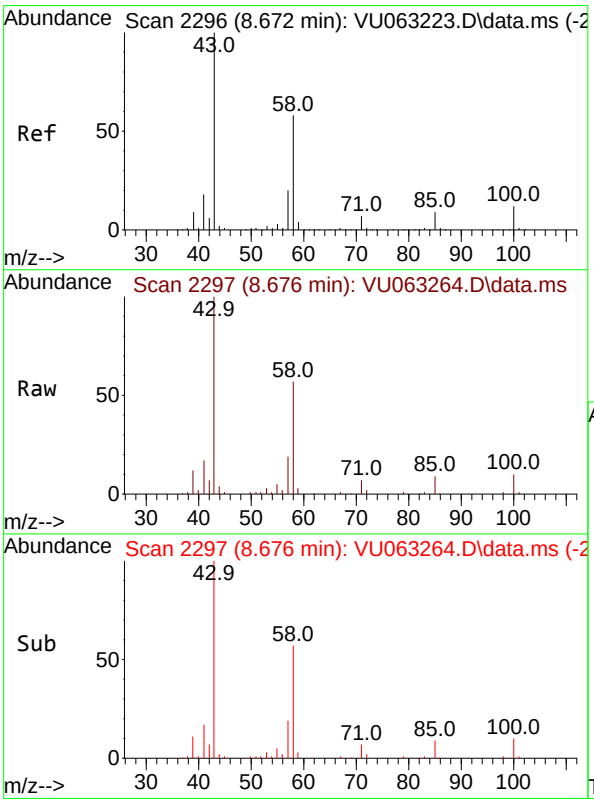
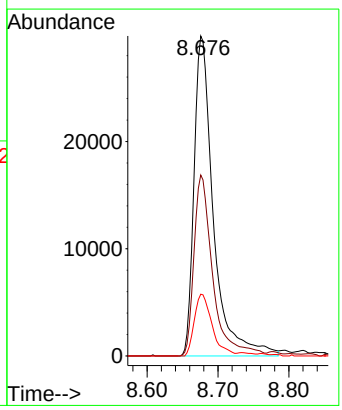
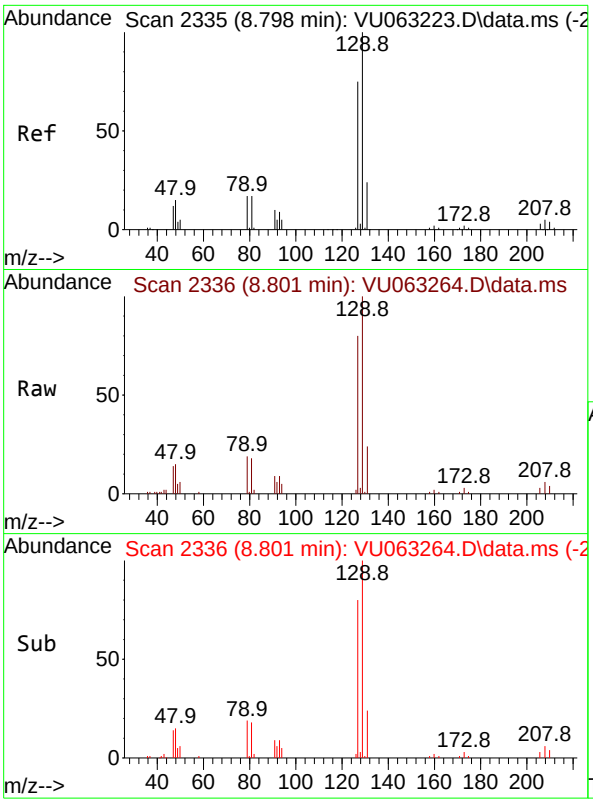


#54
2-Hexanone
Concen: 9.799 ug/l
RT: 8.676 min Scan# 2297
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 43 Resp: 56755

Ion	Ratio	Lower	Upper
43	100		
58	54.7	38.0	78.0
57	17.7	0.0	39.1

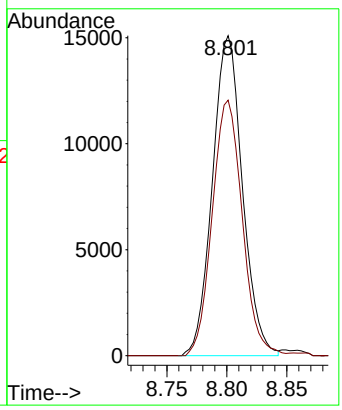




#55
Dibromochloromethane
Concen: 2.094 ug/l
RT: 8.801 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:129 Resp: 2629

Ion	Ratio	Lower	Upper
129	100		
127	79.8	60.4	90.6



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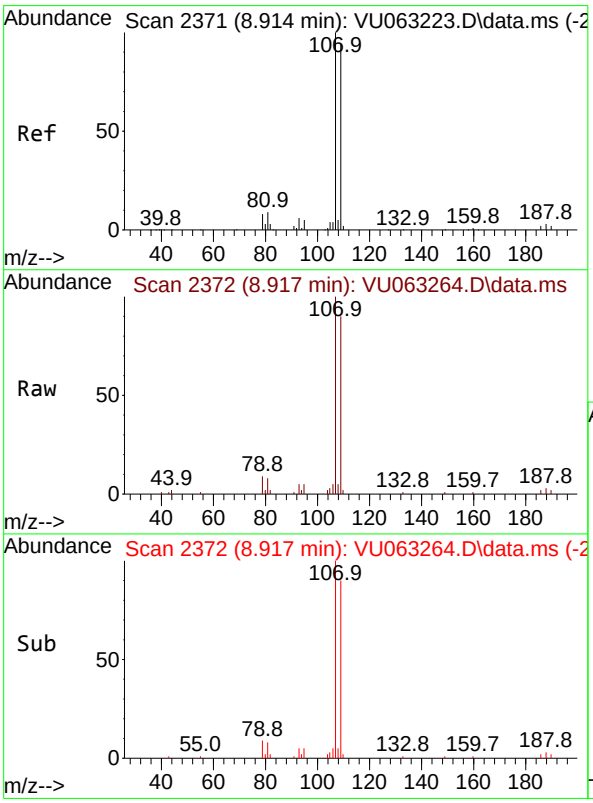
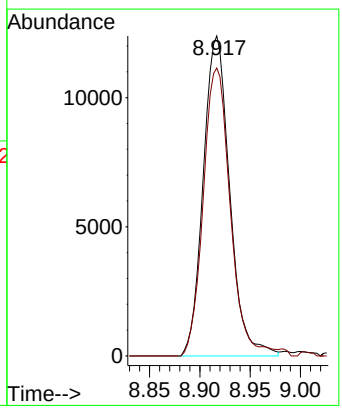
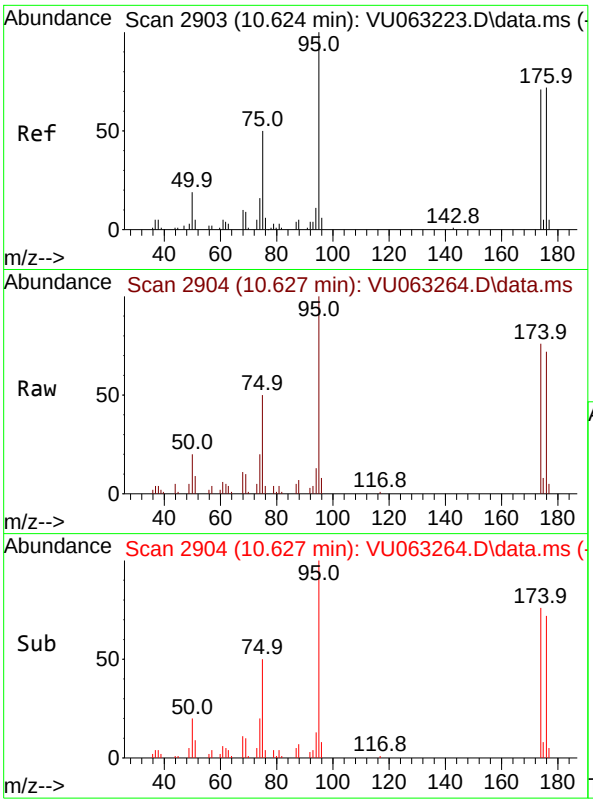


#56
1,2-Dibromoethane
Concen: 2.211 ug/l
RT: 8.917 min Scan# 2372
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:107 Resp: 22640

Ion	Ratio	Lower	Upper
107	100		
109	92.5	0.0	187.8

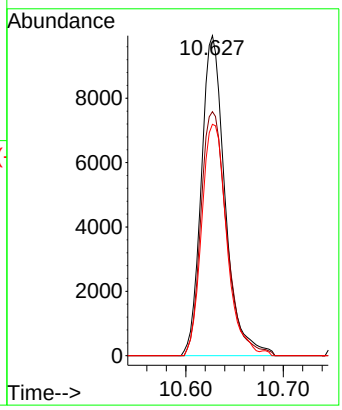




#57
4-Bromofluorobenzene
Concen: 1.028 ug/l
RT: 10.627 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 95 Resp: 1685

Ion	Ratio	Lower	Upper
95	100		
174	82.5	58.6	88.0
176	76.3	58.2	87.4



Instrument :
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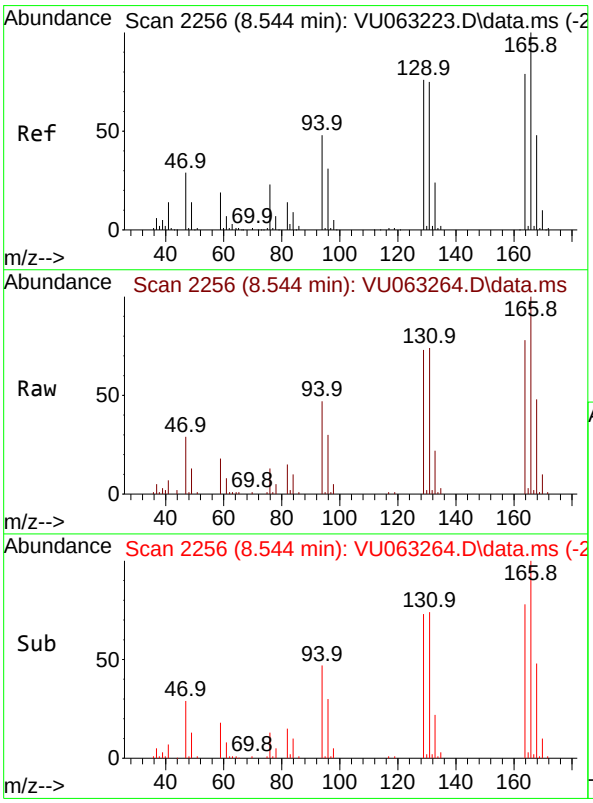
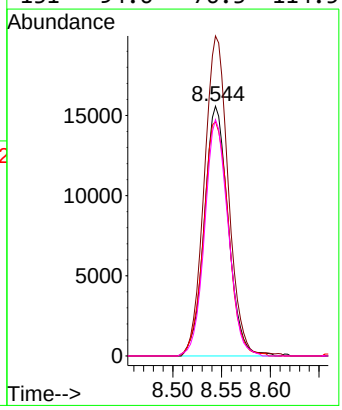
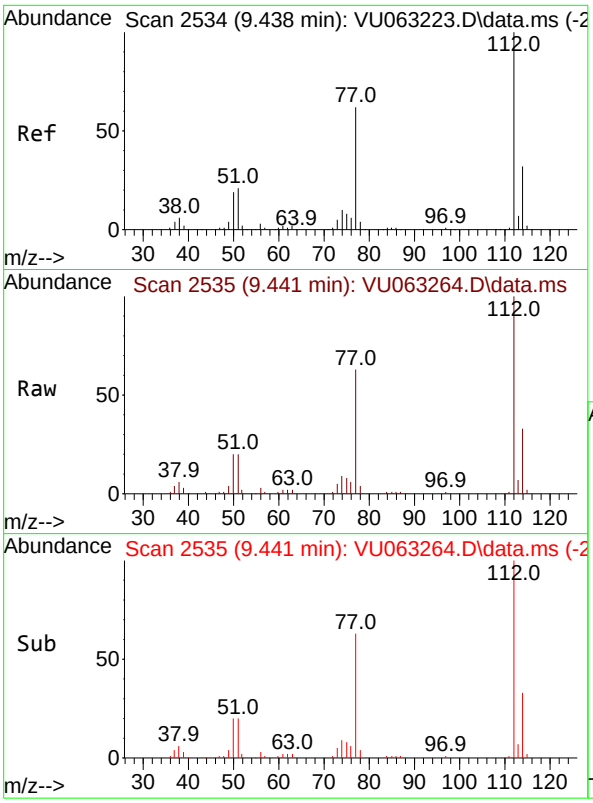


#58
Tetrachloroethene
Concen: 2.218 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:164 Resp: 26557

Ion	Ratio	Lower	Upper
164	100		
166	128.1	101.4	152.0
129	93.9	77.0	115.4
131	94.6	76.3	114.5

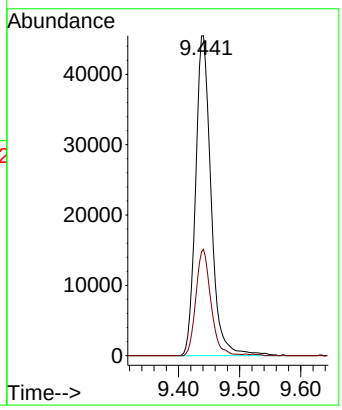




#59
Chlorobenzene
Concen: 2.160 ug/l
RT: 9.441 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:112 Resp: 8007

Ion	Ratio	Lower	Upper
112	100		
114	33.2	25.7	38.5



Instrument :
MSVOA_U
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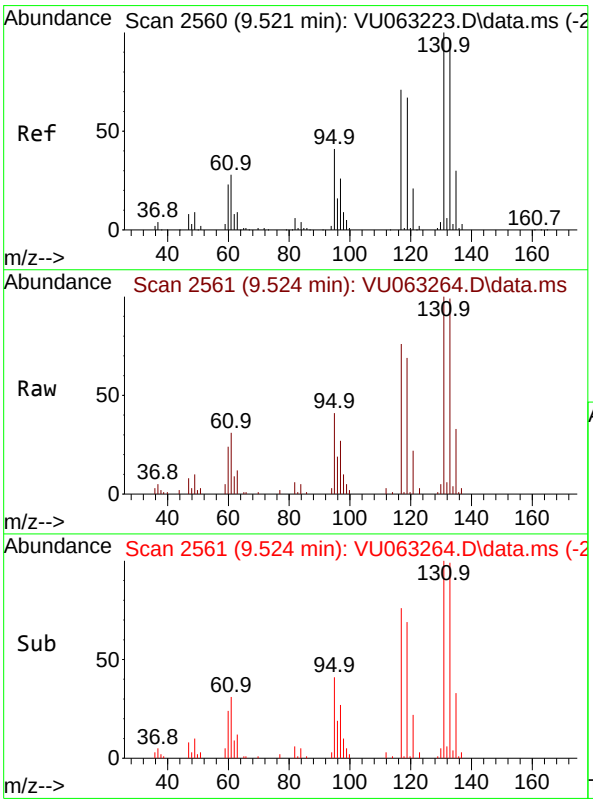
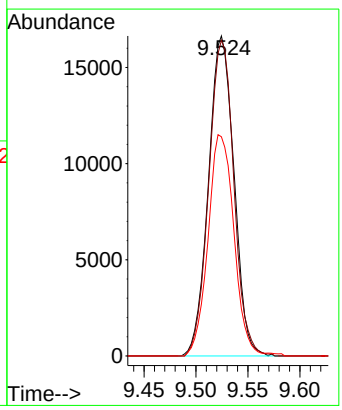
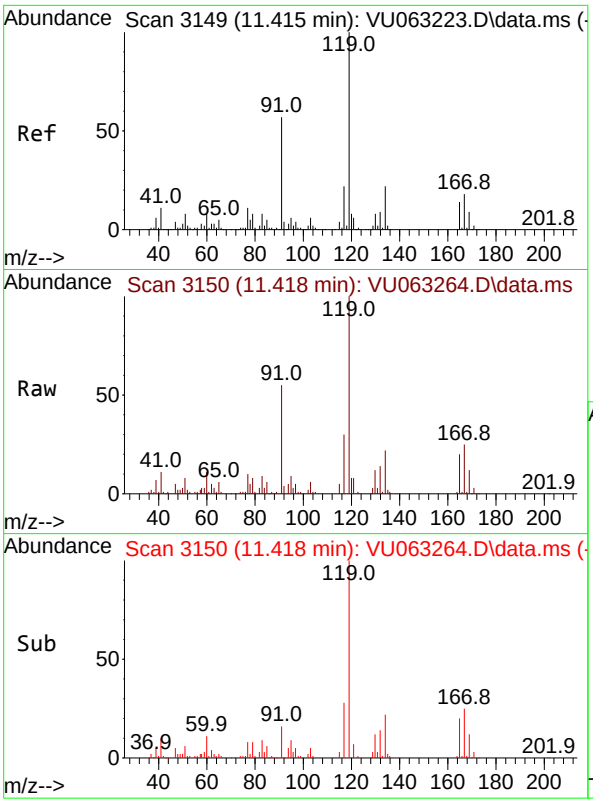


#60
1,1,1,2-Tetrachloroethane
Concen: 2.135 ug/l
RT: 9.524 min Scan# 2561
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:131 Resp: 28448

Ion	Ratio	Lower	Upper
131	100		
133	97.0	76.7	115.1
119	70.3	54.4	81.6





#61
Pentachloroethane
Concen: 2.169 ug/l
RT: 11.418 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:117 Resp: 2581

Ion	Ratio	Lower	Upper
117	100		
167	77.0	65.0	97.6

Instrument :
MSVOA_U
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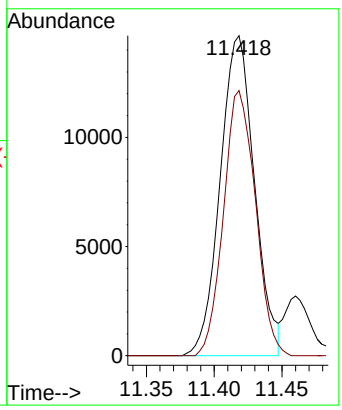
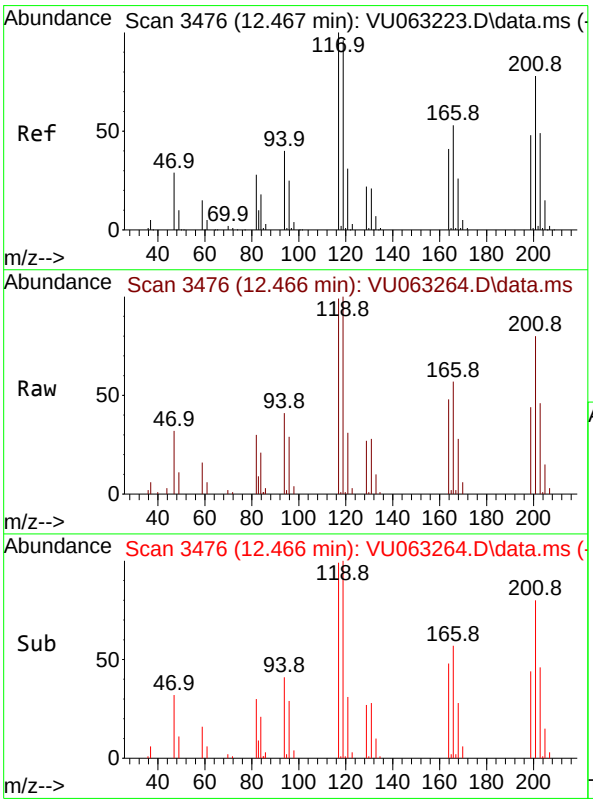
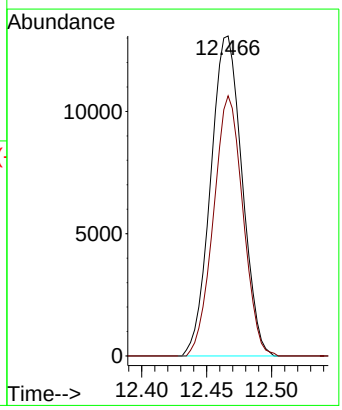


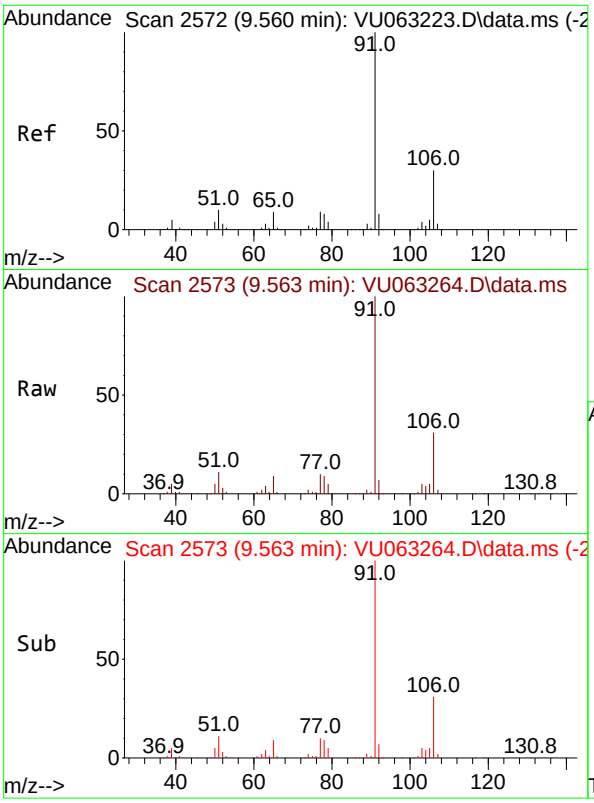


#62
Hexachloroethane
Concen: 2.088 ug/l
RT: 12.466 min Scan# 3476
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:117 Resp: 21992

Ion	Ratio	Lower	Upper
117	100		
201	76.3	61.3	91.9

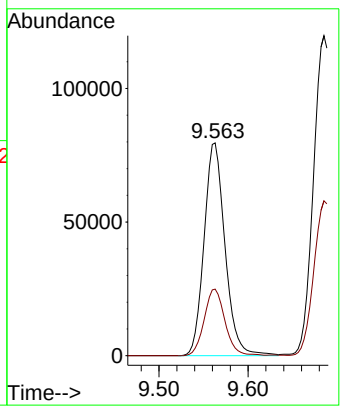




#63
Ethyl Benzene
Concen: 2.035 ug/l
RT: 9.563 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 91 Resp: 13011

Ion	Ratio	Lower	Upper
91	100		
106	31.3	24.2	36.2



Instrument :
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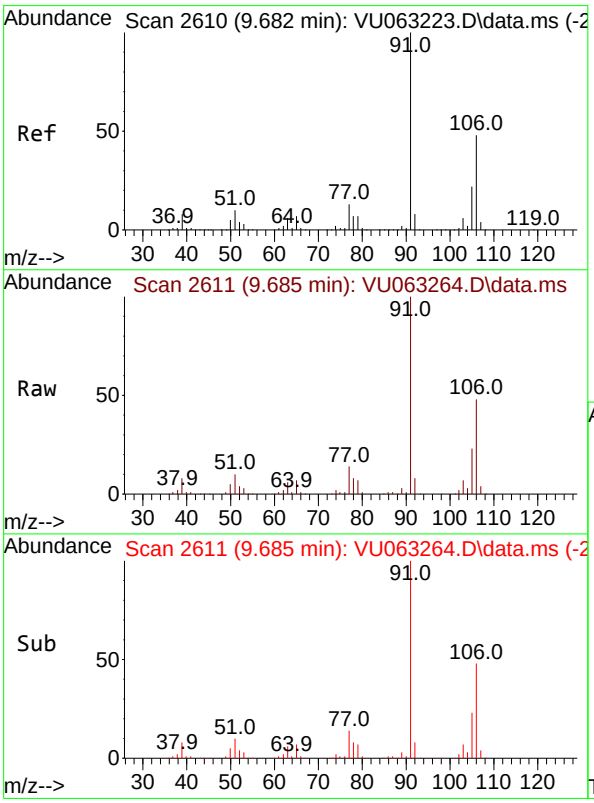
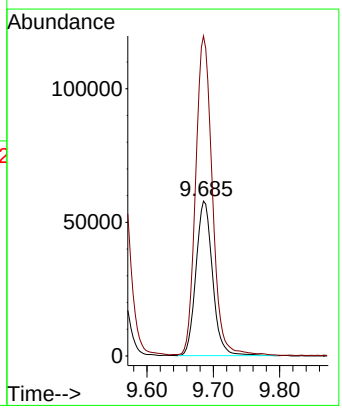
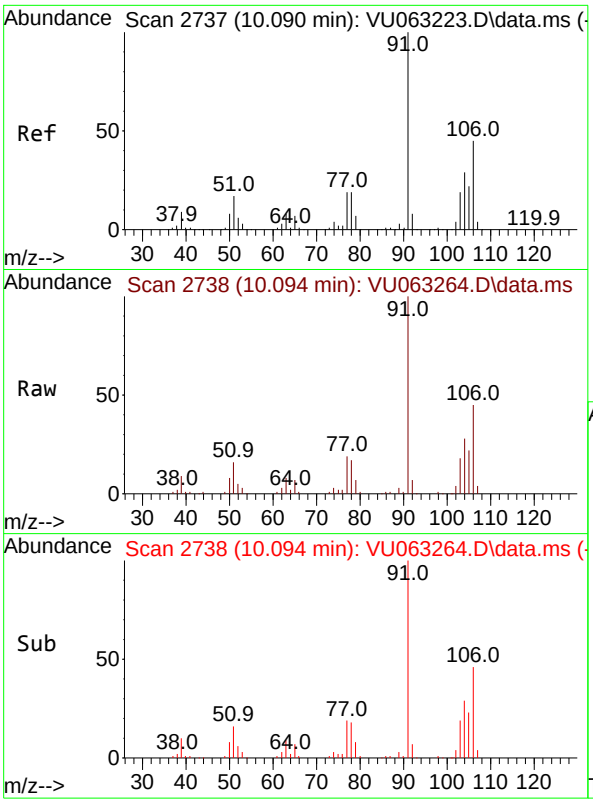


#64
m/p-Xylenes
Concen: 4.213 ug/l
RT: 9.685 min Scan# 2611
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:106 Resp: 100610

Ion	Ratio	Lower	Upper
106	100		
91	205.0	166.9	250.3

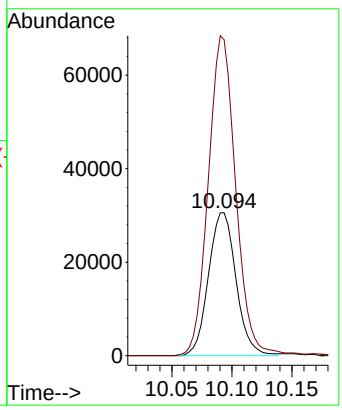




#65
o-Xylene
Concen: 2.091 ug/l
RT: 10.094 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:106 Resp: 4888

Ion	Ratio	Lower	Upper
106	100		
91	222.8	110.9	332.9



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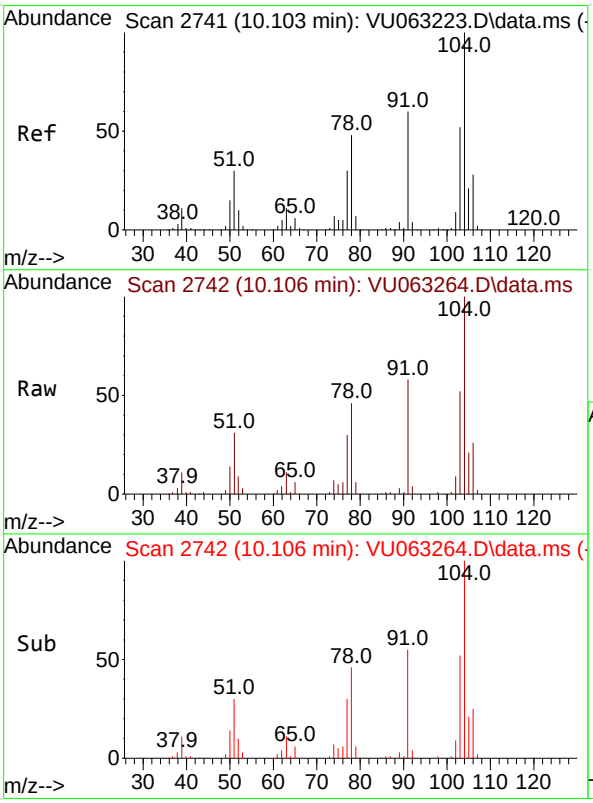
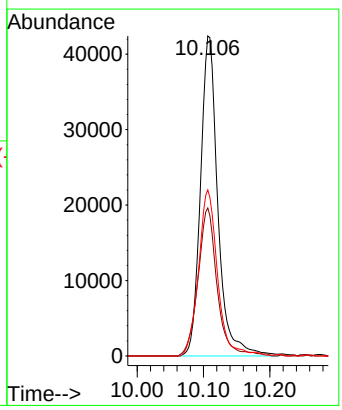
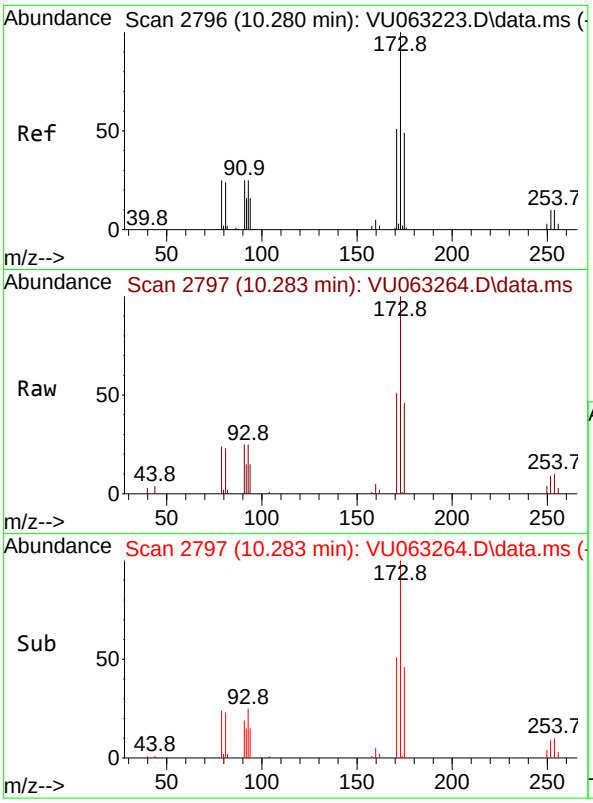


#66
Styrene
Concen: 2.081 ug/l
RT: 10.106 min Scan# 2742
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:104 Resp: 77415

Ion	Ratio	Lower	Upper
104	100		
78	50.7	41.2	61.8
103	56.0	44.8	67.2





#67
Bromoform
Concen: 2.101 ug/l
RT: 10.283 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:173 Resp: 1497

Ion	Ratio	Lower	Upper
173	100		
175	47.6	39.0	58.4
254	8.4	7.7	11.5

Instrument :
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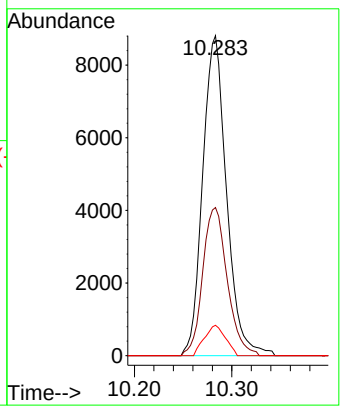
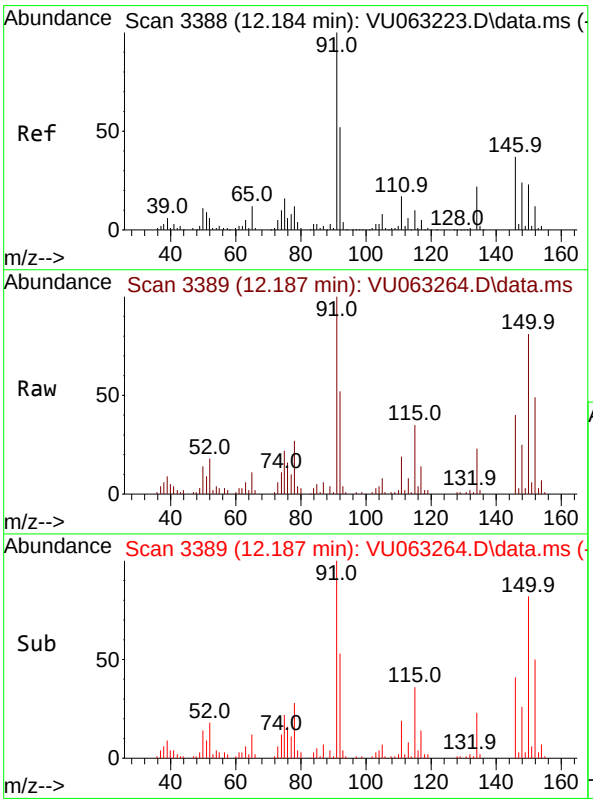
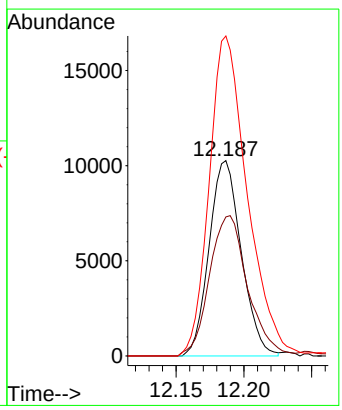


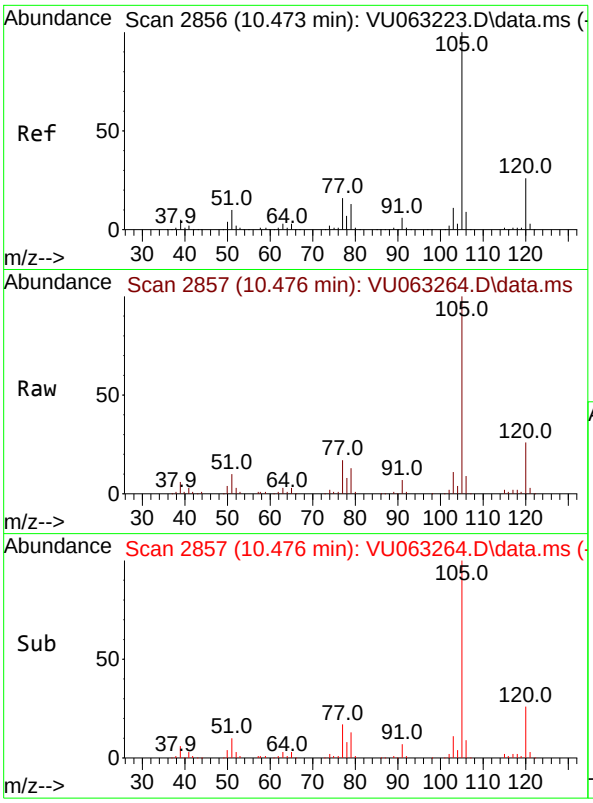


#68
1,2-Dichlorobenzene-d4
Concen: 0.993 ug/l
RT: 12.187 min Scan# 3389
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:152 Resp: 16929

Ion	Ratio	Lower	Upper
152	100		
115	85.0	0.0	275.2
150	193.9	0.0	658.4

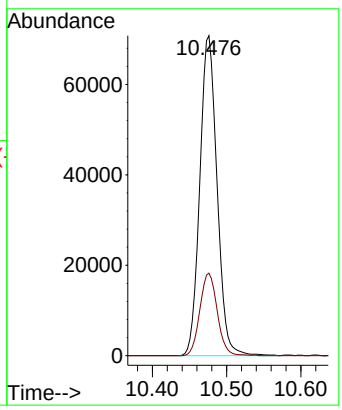




#69
Isopropylbenzene
Concen: 2.074 ug/l
RT: 10.476 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:105 Resp: 113999

Ion	Ratio	Lower	Upper
105	100		
120	26.0	12.8	38.4



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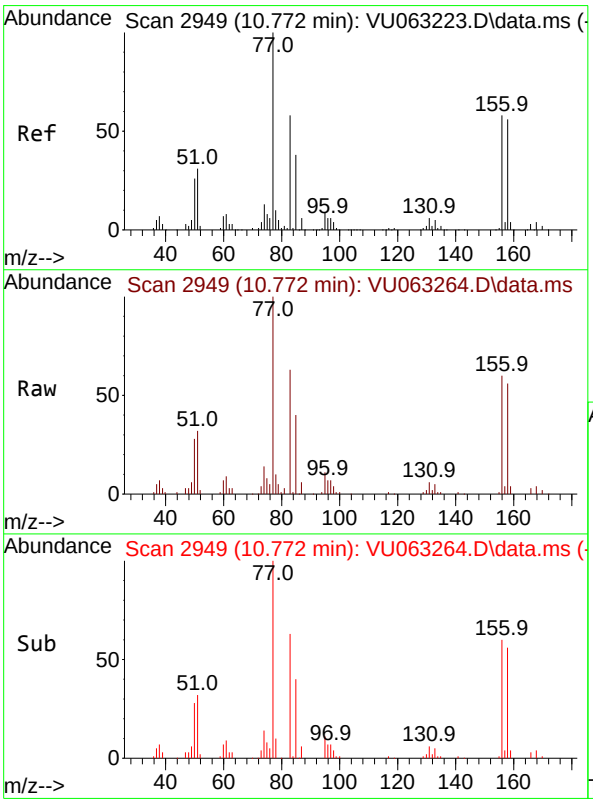
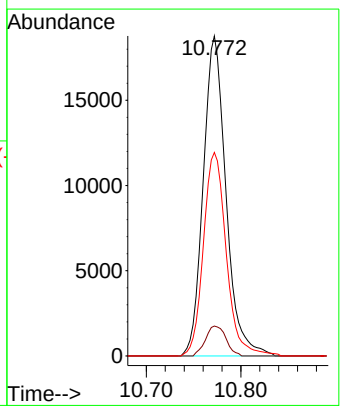
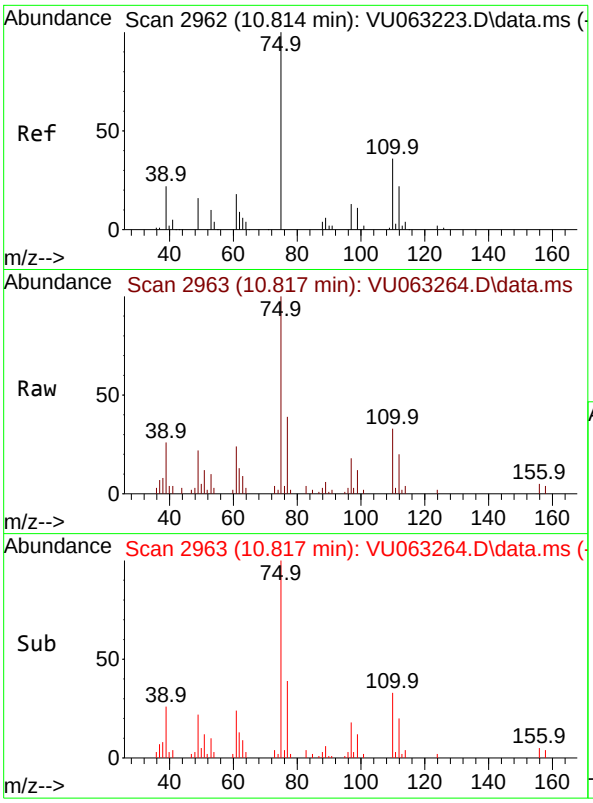


#70
1,1,2,2-Tetrachloroethane
Concen: 2.134 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 83 Resp: 31391

Ion	Ratio	Lower	Upper
83	100		
131	8.4	7.4	11.0
85	64.0	51.8	77.8

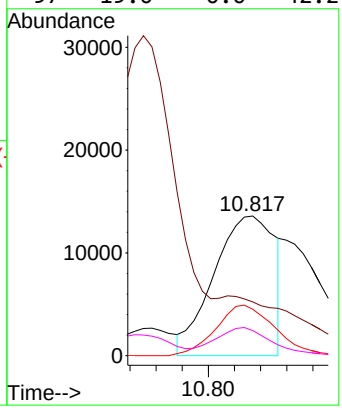




#71
1,2,3-Trichloropropane
Concen: 1.998 ug/l m
RT: 10.817 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 75 Resp: 2208

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	35.2	0.0	77.0
97	19.0	0.0	42.2



Instrument :
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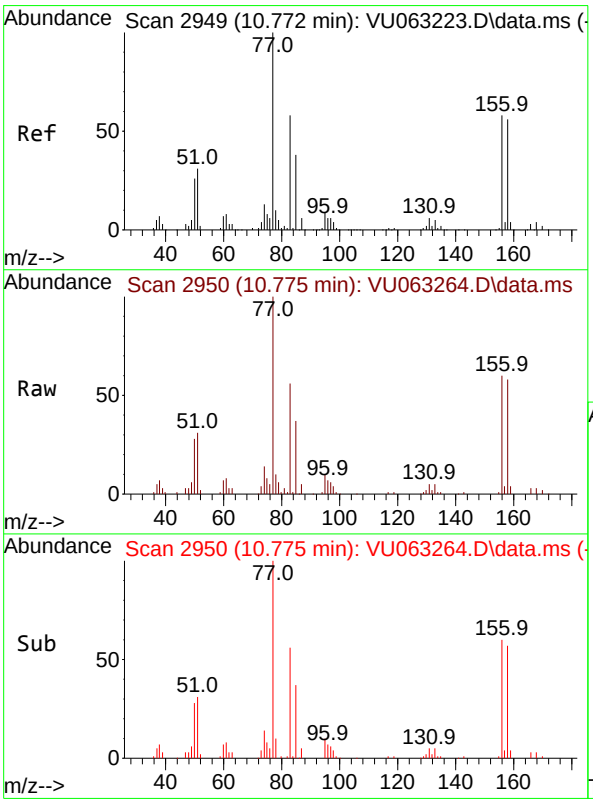
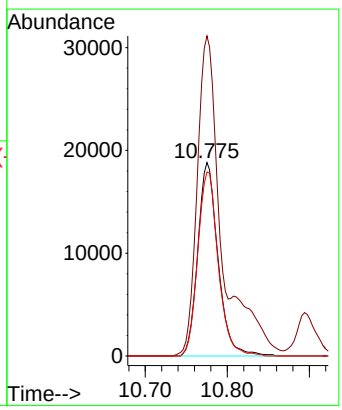
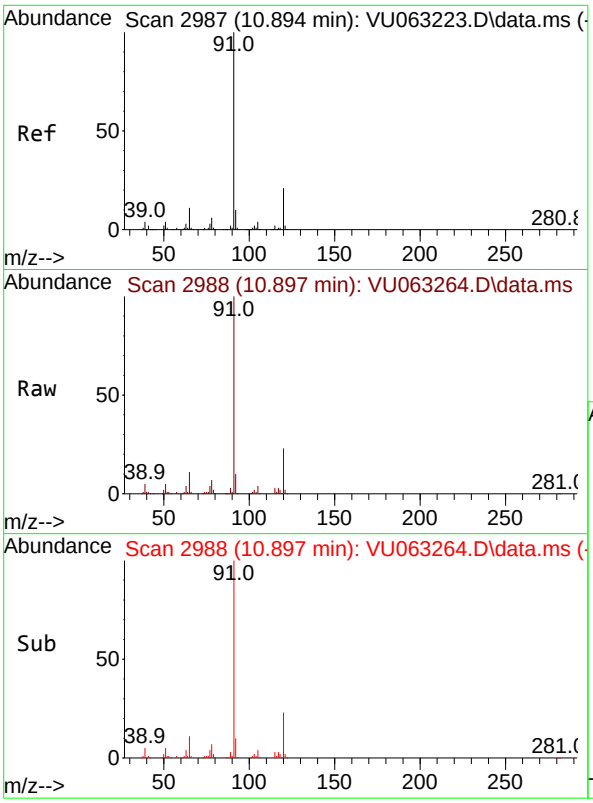


#72
Bromobenzene
Concen: 2.177 ug/l
RT: 10.775 min Scan# 2950
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:156 Resp: 32233

Ion	Ratio	Lower	Upper
156	100		
77	165.5	0.0	343.6
158	96.2	0.0	193.0

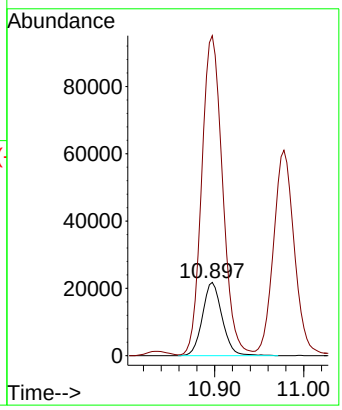




#73
n-propylbenzene
Concen: 2.116 ug/l
RT: 10.897 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:120 Resp: 3330

Ion	Ratio	Lower	Upper
120	100		
91	461.6	369.8	554.6



Instrument :
MSVOA_U
ClientSampleId :
VU0213WBS01

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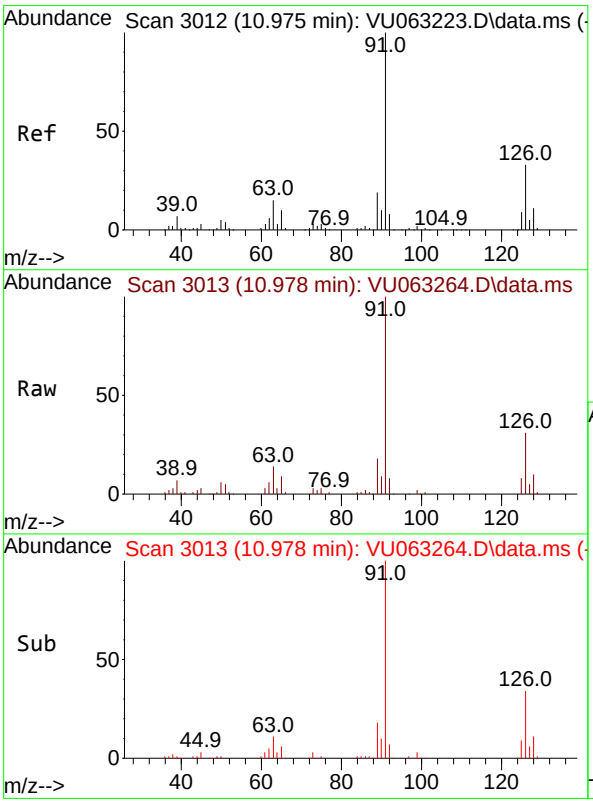
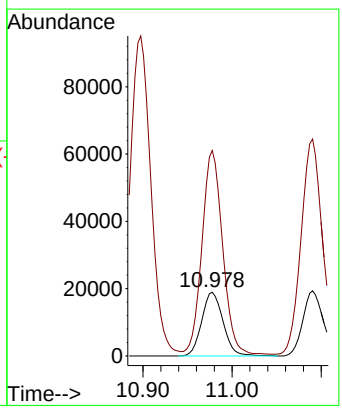
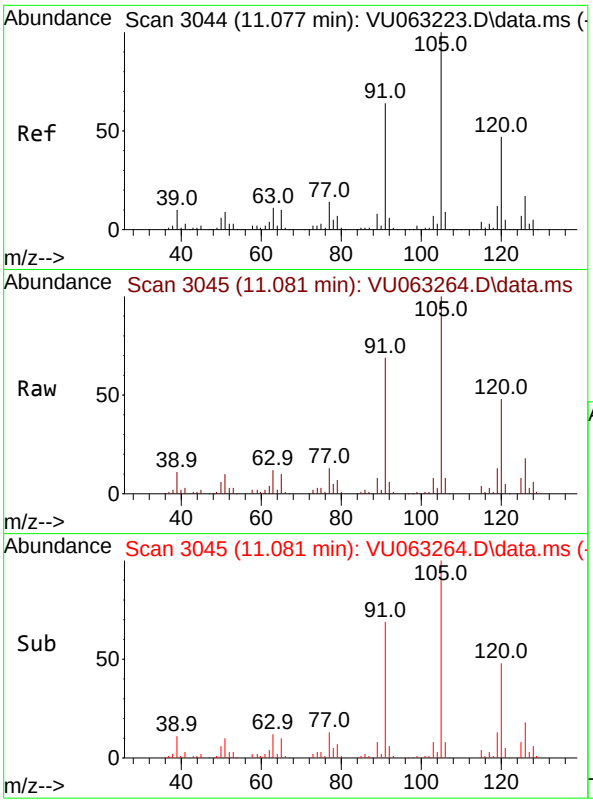


#74
2-Chlorotoluene
Concen: 2.170 ug/l
RT: 10.978 min Scan# 3013
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:126 Resp: 31471

Ion	Ratio	Lower	Upper
126	100		
91	312.5	0.0	623.8

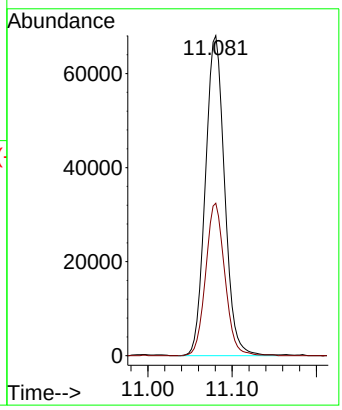




#75
1,3,5-Trimethylbenzene
Concen: 2.123 ug/l
RT: 11.081 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:105 Resp: 10810

Ion	Ratio	Lower	Upper
105	100		
120	47.5	37.3	55.9



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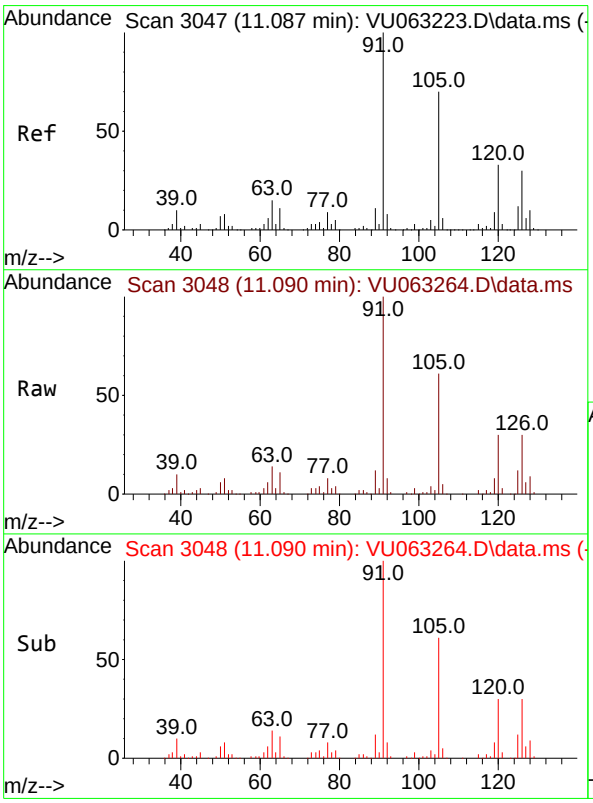
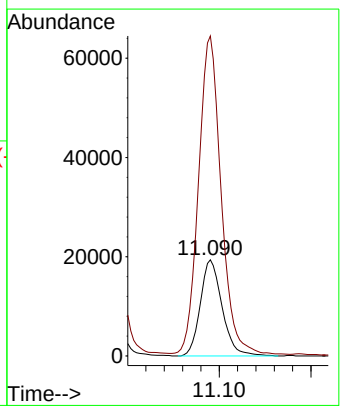
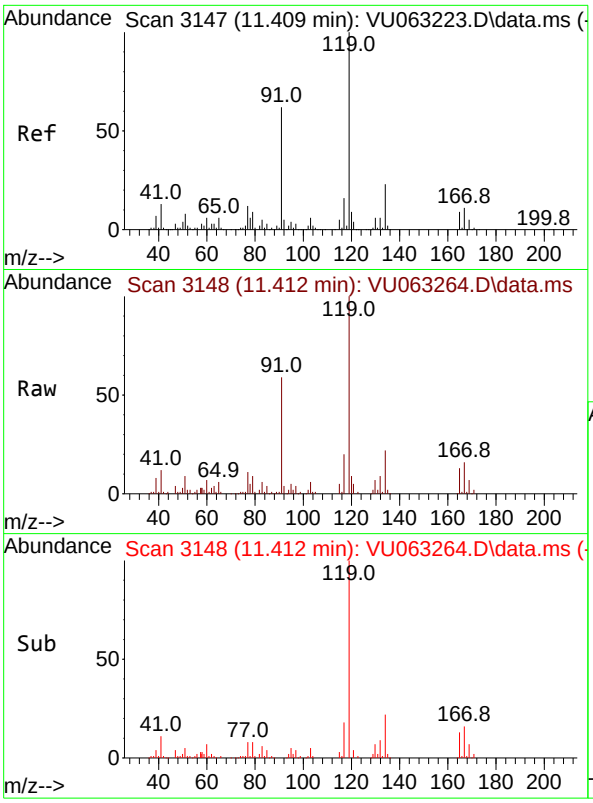


#76
4-Chlorotoluene
Concen: 2.145 ug/l
RT: 11.090 min Scan# 3048
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:126 Resp: 31896

Ion	Ratio	Lower	Upper
126	100		
91	343.6	0.0	703.6

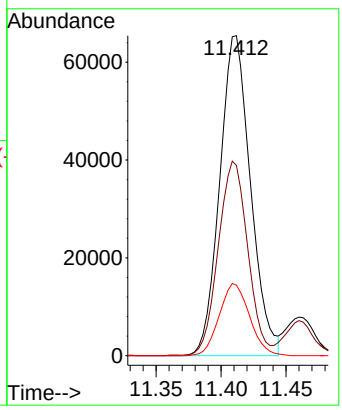




#77
tert-Butylbenzene
Concen: 2.099 ug/l
RT: 11.412 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:119 Resp: 10811

Ion	Ratio	Lower	Upper
119	100		
91	57.6	29.4	88.3
134	22.1	17.6	26.4



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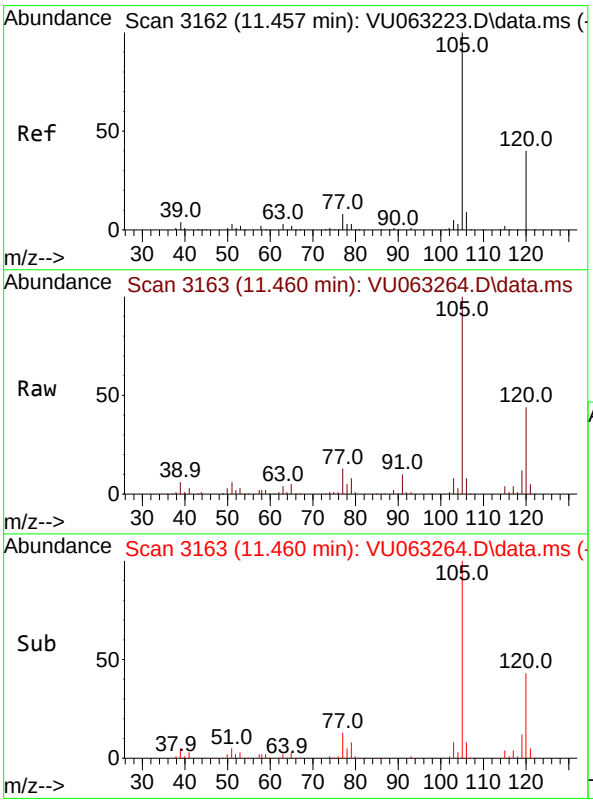
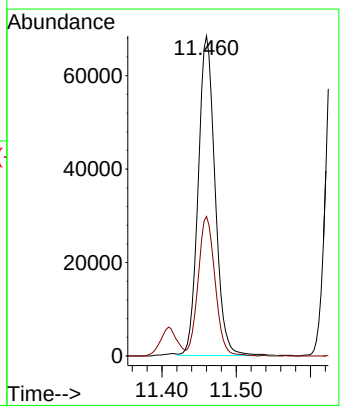
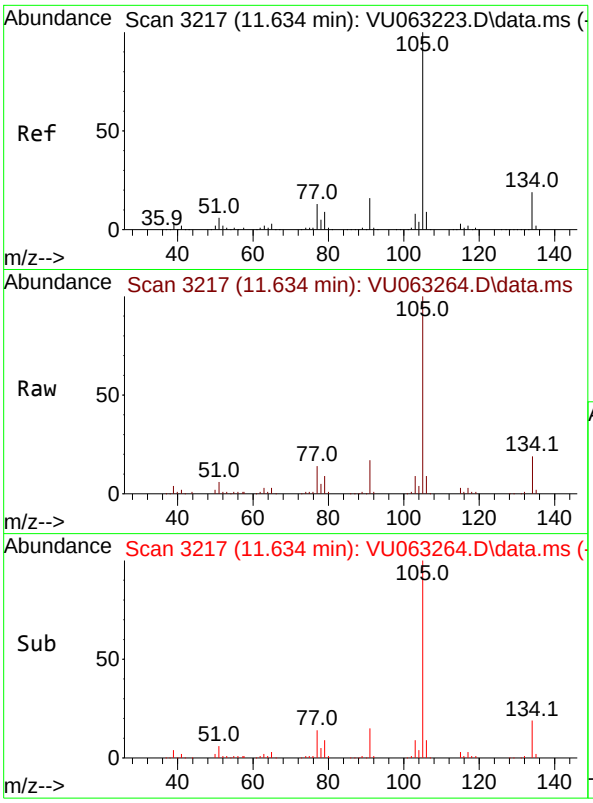


#78
1,2,4-Trimethylbenzene
Concen: 2.133 ug/l
RT: 11.460 min Scan# 3163
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:105 Resp: 107772

Ion	Ratio	Lower	Upper
105	100		
120	44.0	21.9	65.7





#79
sec-Butylbenzene
Concen: 2.175 ug/l
RT: 11.634 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:105 Resp: 14262

Ion	Ratio	Lower	Upper
105	100		
134	18.6	15.1	22.7

Instrument :
MSVOA_U
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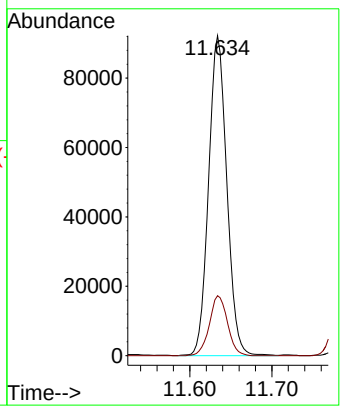
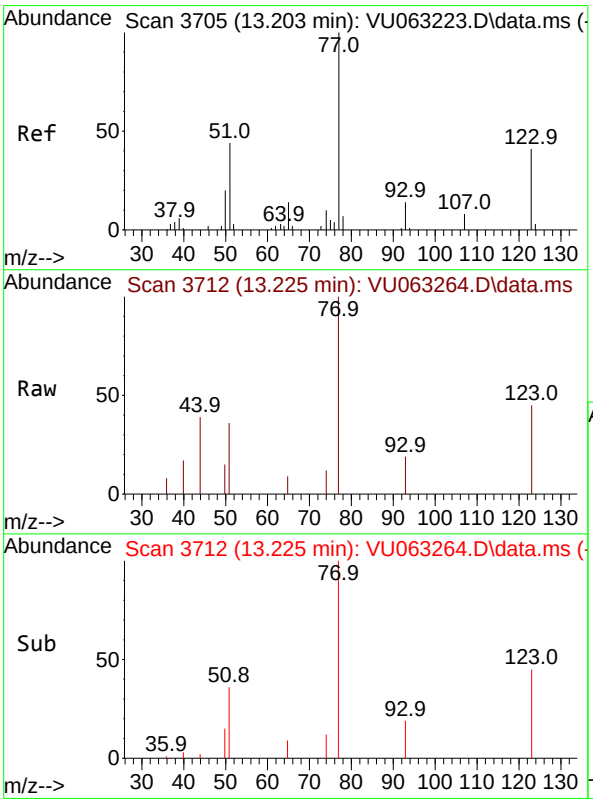
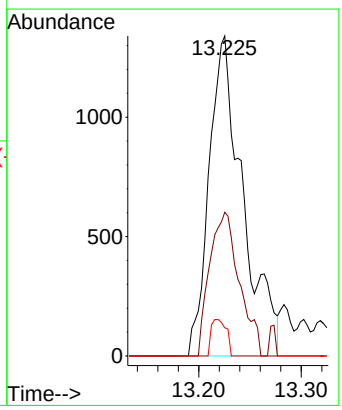


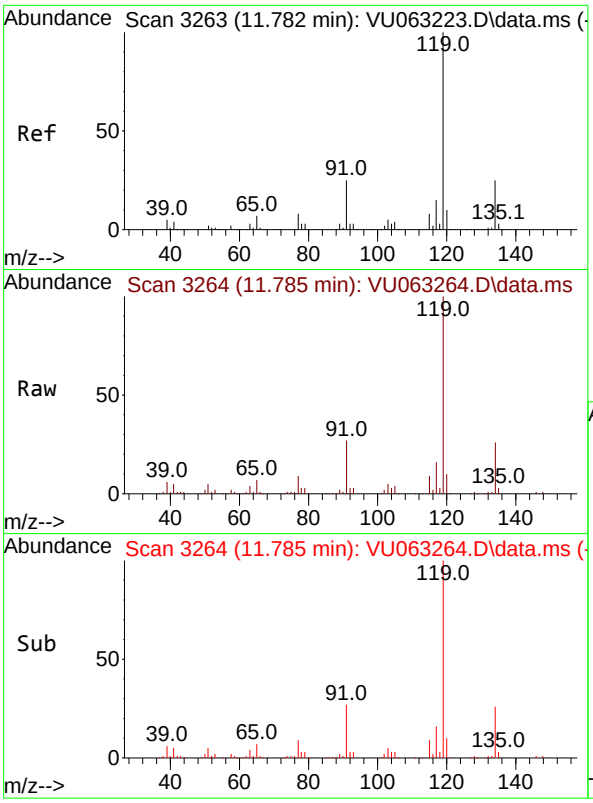


#80
Nitrobenzene
Concen: 10.322 ug/l m
RT: 13.225 min Scan# 3712
Delta R.T. 0.022 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 77 Resp: 3060

Ion	Ratio	Lower	Upper
77	100		
123	39.6	18.9	67.1
65	5.1	11.9	15.1#

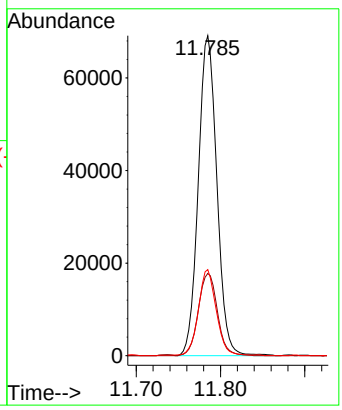




#81
p-Isopropyltoluene
Concen: 2.052 ug/l
RT: 11.785 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:119 Resp: 10620

Ion	Ratio	Lower	Upper
119	100		
134	26.4	20.3	30.5
91	25.3	19.4	29.2



Instrument :
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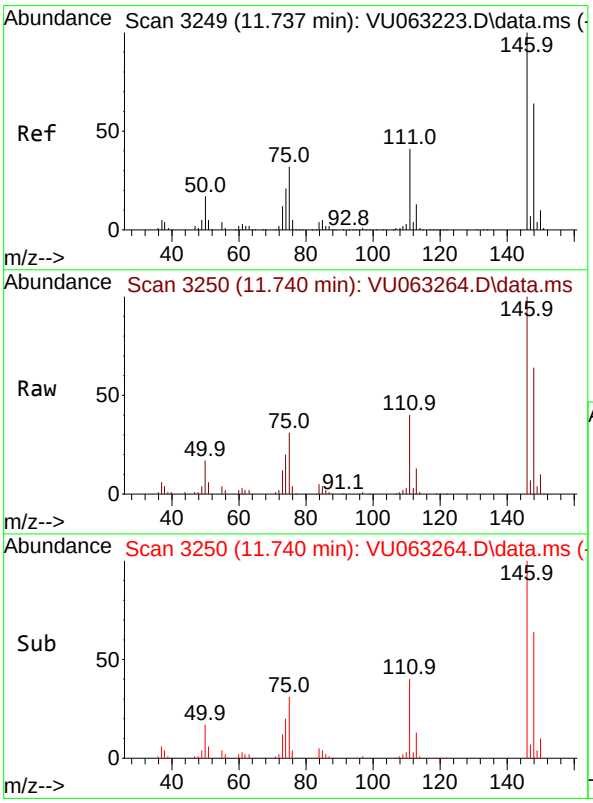
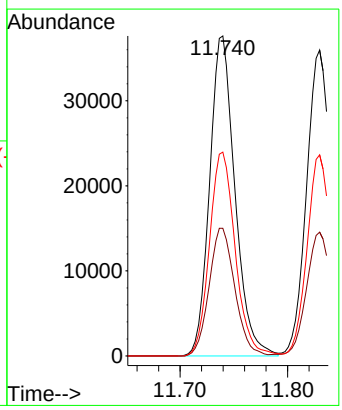
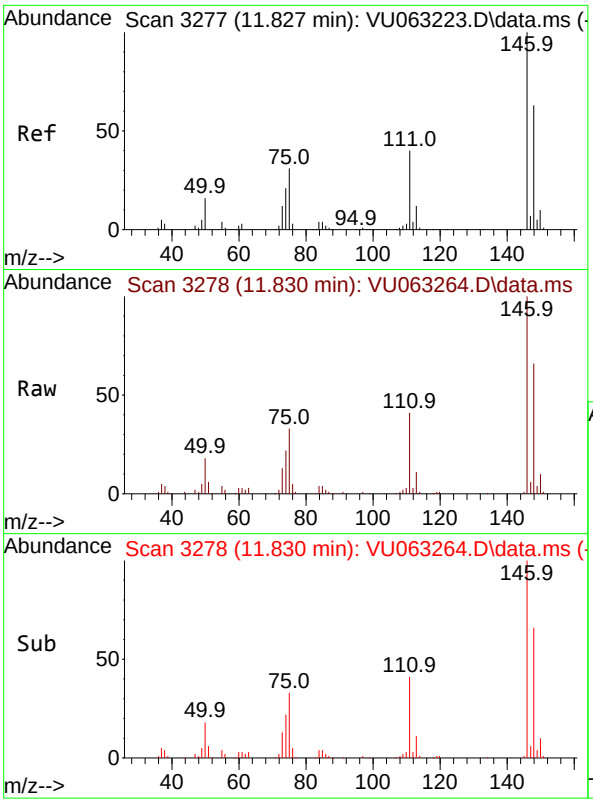


#82
1,3-Dichlorobenzene
Concen: 2.145 ug/l
RT: 11.740 min Scan# 3250
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:146 Resp: 61598

Ion	Ratio	Lower	Upper
146	100		
111	40.5	32.8	49.2
148	64.9	51.1	76.7

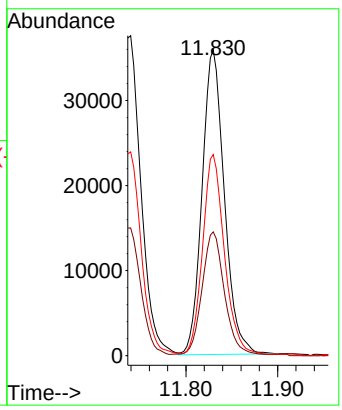




#83
1,4-Dichlorobenzene
Concen: 2.151 ug/l
RT: 11.830 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:146 Resp: 6043

Ion	Ratio	Lower	Upper
146	100		
111	40.2	32.1	48.1
148	64.3	50.2	75.4



Instrument :
MSVOA_U
ClientSampleId :
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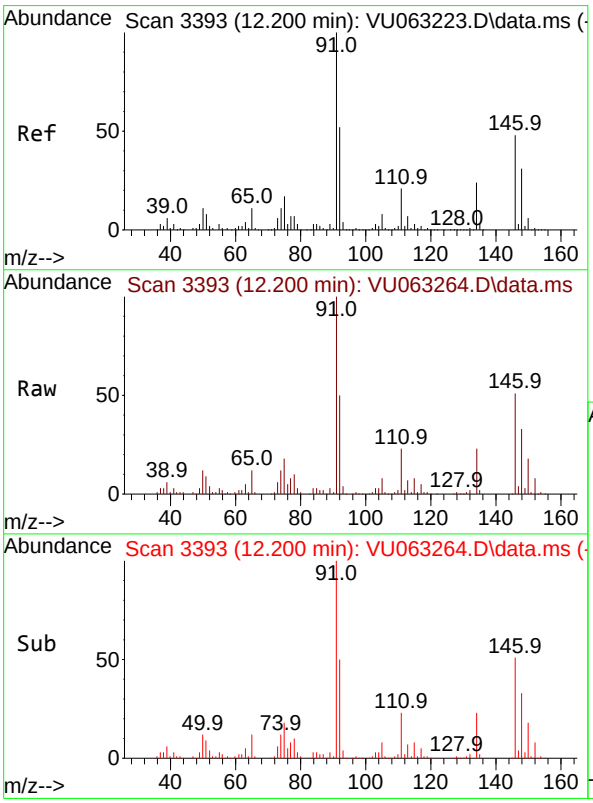
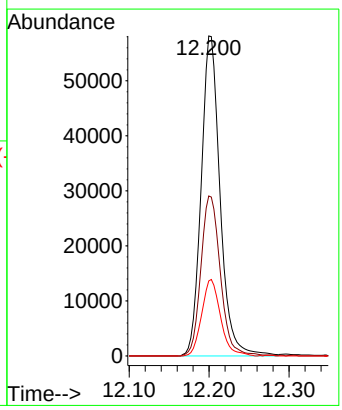
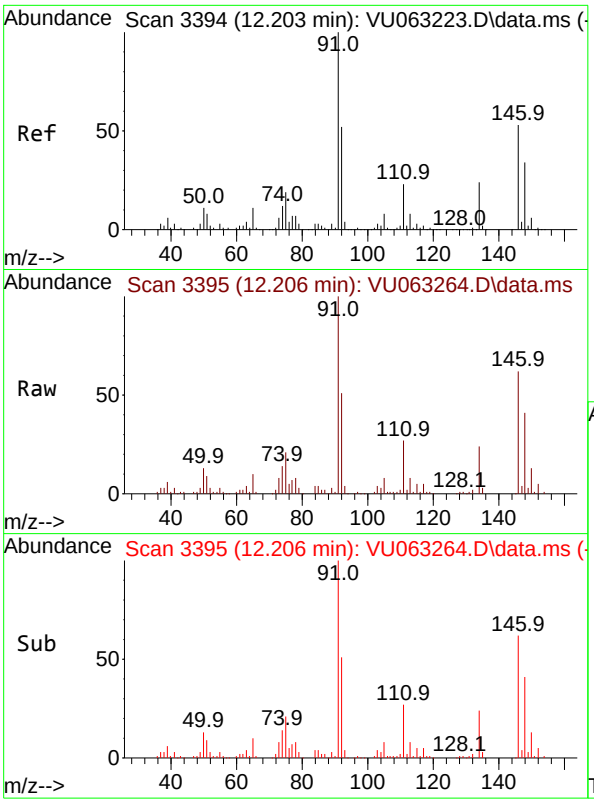


#84
n-Butylbenzene
Concen: 2.067 ug/l
RT: 12.200 min Scan# 3393
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 91 Resp: 95901

Ion	Ratio	Lower	Upper
91	100		
92	51.5	41.8	62.8
134	23.8	18.6	28.0

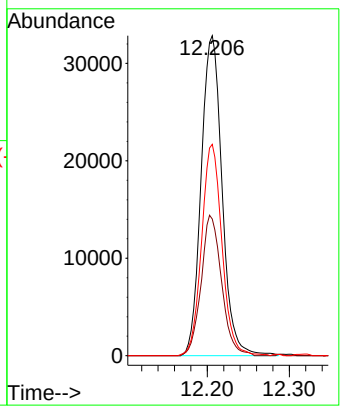




#85
1,2-Dichlorobenzene
Concen: 2.108 ug/l
RT: 12.206 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:146 Resp: 5819

Ion	Ratio	Lower	Upper
146	100		
111	42.8	21.9	65.7
148	64.4	32.3	96.9



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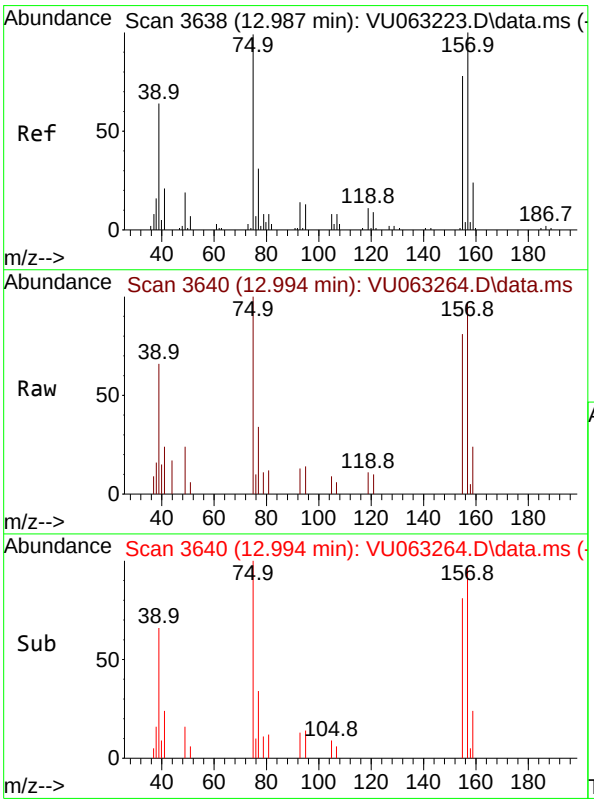
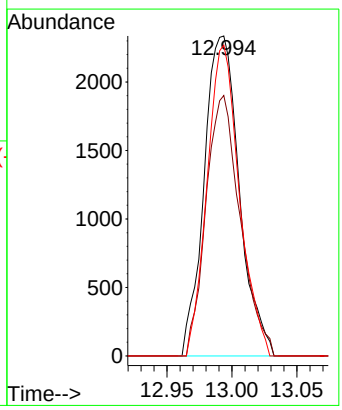
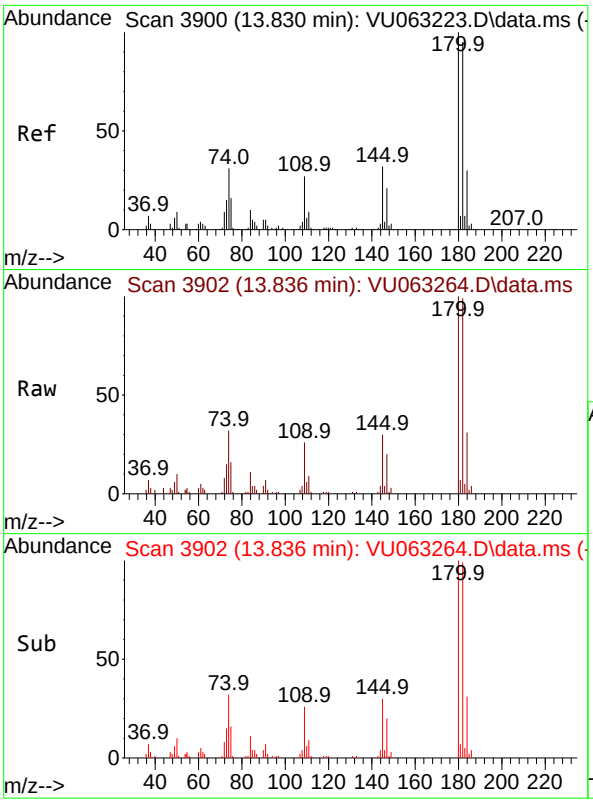


#86
1,2-Dibromo-3-Chloropropane
Concen: 2.136 ug/l
RT: 12.994 min Scan# 3640
Delta R.T. 0.006 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion: 75 Resp: 4410

Ion	Ratio	Lower	Upper
75	100		
155	79.1	63.5	95.3
157	88.8	81.8	122.6

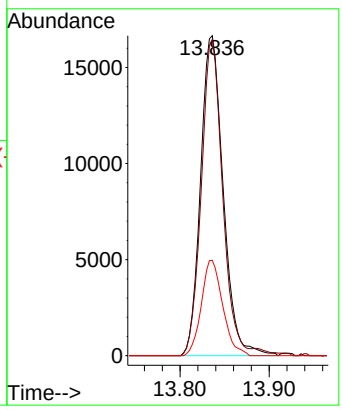




#87
1,2,4-Trichlorobenzene
Concen: 2.180 ug/l
RT: 13.836 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:180 Resp: 2934

Ion	Ratio	Lower	Upper
180	100		
182	92.3	76.6	115.0
145	28.1	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
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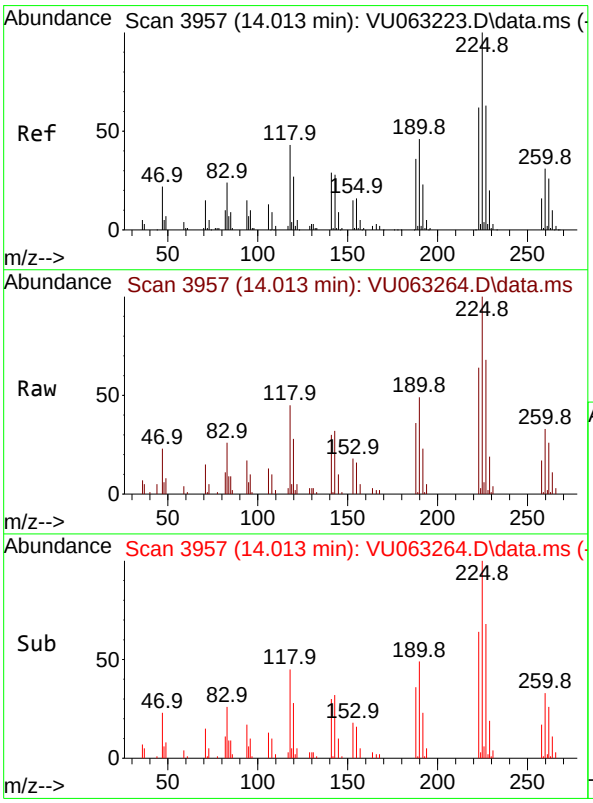
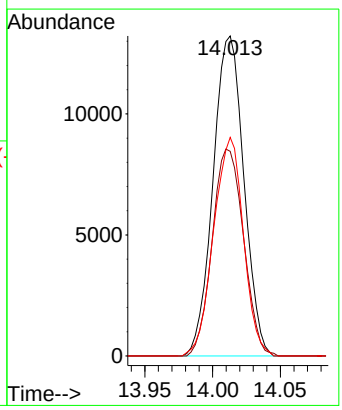
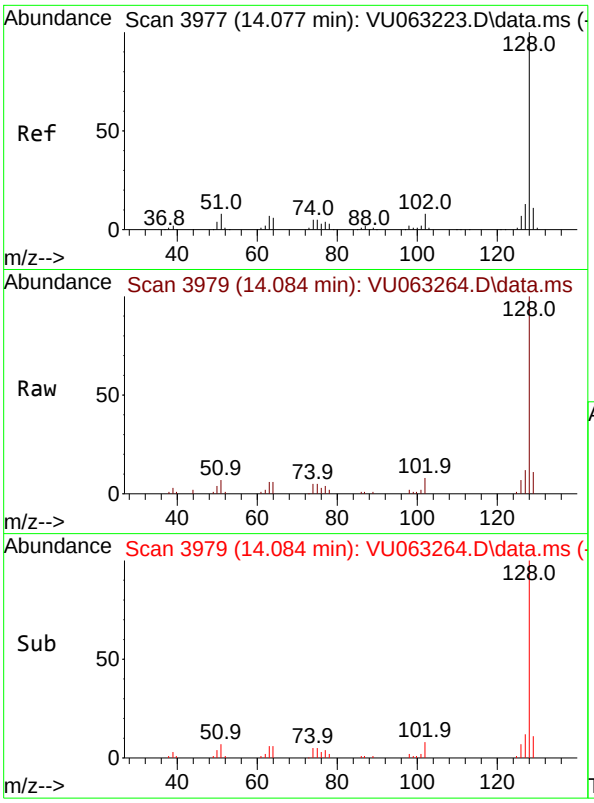


#88
Hexachlorobutadiene
Concen: 2.171 ug/l
RT: 14.013 min Scan# 3957
Delta R.T. -0.000 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:225 Resp: 20891

Ion	Ratio	Lower	Upper
225	100		
223	65.6	49.5	74.3
227	66.1	51.0	76.4

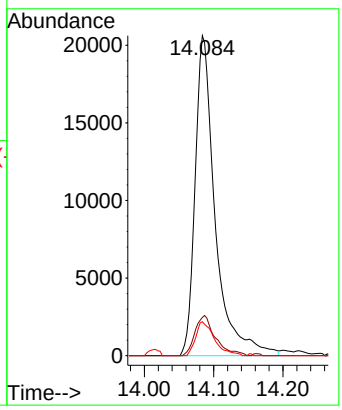




#89
Naphthalene
Concen: 2.037 ug/l
RT: 14.084 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:128 Resp: 4154

Ion	Ratio	Lower	Upper
128	100		
127	12.7	10.6	16.0
129	9.9	8.6	13.0



Instrument :
MSVOA_U
ClientSampleId :
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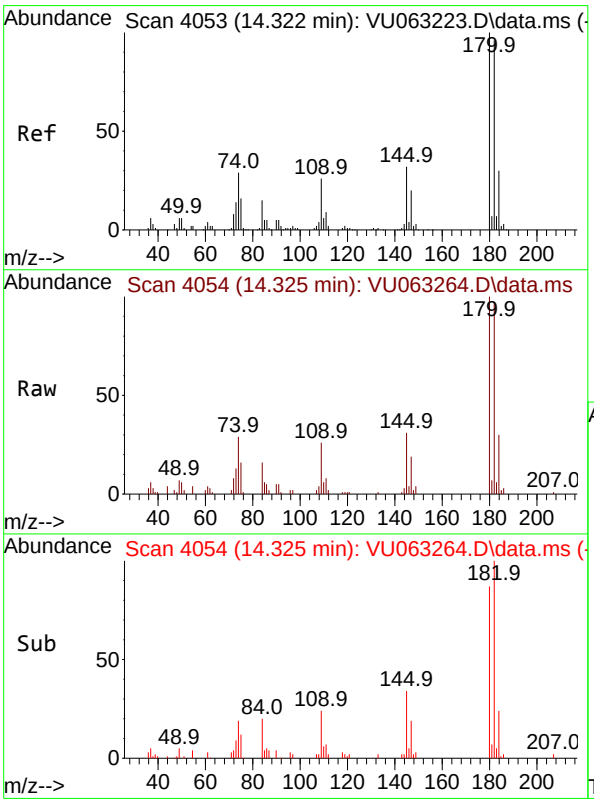
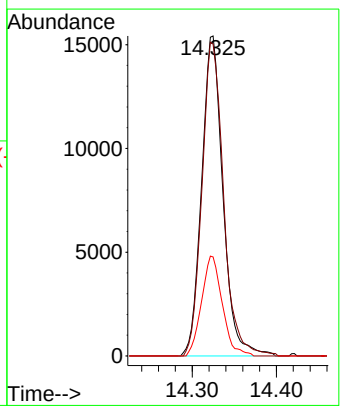


#90
1,2,3-Trichlorobenzene
Concen: 2.063 ug/l
RT: 14.325 min Scan# 4054
Delta R.T. 0.003 min
Lab File: VU063264.D
Acq: 13 Feb 2025 13:42

Tgt Ion:180 Resp: 27174

Ion	Ratio	Lower	Upper
180	100		
182	99.4	78.2	117.2
145	30.3	26.1	39.1



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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBSD01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBSD01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063231.D	1		02/11/25 12:31	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	1.90		0.14	0.50	ug/L
74-87-3	Chloromethane	1.80		0.13	0.50	ug/L
75-01-4	Vinyl Chloride	1.90		0.13	0.50	ug/L
74-83-9	Bromomethane	2.20		0.18	0.50	ug/L
75-00-3	Chloroethane	1.80		0.14	0.50	ug/L
109-99-9	Tetrahydrofuran	3.60		0.44	1.00	ug/L
75-69-4	Trichlorofluoromethane	2.00		0.21	0.50	ug/L
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.90		0.14	0.50	ug/L
75-65-0	tert-Butyl Alcohol	11.5		8.60	10.0	ug/L
60-29-7	Diethyl Ether	1.80		0.13	0.50	ug/L
75-35-4	1,1-Dichloroethene	1.90		0.12	0.50	ug/L
107-13-1	Acrylonitrile	3.50		0.44	1.00	ug/L
67-64-1	Acetone	8.70		1.10	2.50	ug/L
75-15-0	Carbon Disulfide	1.90		0.13	0.50	ug/L
1634-04-4	Methyl tert-Butyl Ether	1.90		0.12	0.50	ug/L
96-33-3	Methyl acrylate	1.80		0.28	0.50	ug/L
75-09-2	Methylene Chloride	1.90		0.47	0.50	ug/L
156-60-5	trans-1,2-Dichloroethene	1.90		0.14	0.50	ug/L
75-34-3	1,1-Dichloroethane	1.90		0.13	0.50	ug/L
110-82-7	Cyclohexane	1.90		0.14	0.50	ug/L
78-93-3	2-Butanone	8.70		0.68	2.50	ug/L
56-23-5	Carbon Tetrachloride	1.90		0.14	0.50	ug/L
594-20-7	2,2-Dichloropropane	1.90		0.14	0.50	ug/L
156-59-2	cis-1,2-Dichloroethene	1.90		0.13	0.50	ug/L
74-97-5	Bromochloromethane	1.90		0.16	0.50	ug/L
67-66-3	Chloroform	1.90		0.13	0.50	ug/L
71-55-6	1,1,1-Trichloroethane	1.90		0.12	0.50	ug/L
108-87-2	Methylcyclohexane	1.90		0.12	0.50	ug/L
563-58-6	1,1-Dichloropropene	1.90		0.11	0.50	ug/L
107-12-0	Propionitrile	8.70		1.00	2.50	ug/L

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

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBSD01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBSD01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063231.D	1		02/11/25 12:31	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	1.90		0.11	0.50	ug/L
107-06-2	1,2-Dichloroethane	1.80		0.16	0.50	ug/L
79-01-6	Trichloroethene	2.00		0.13	0.50	ug/L
78-87-5	1,2-Dichloropropane	1.90		0.13	0.50	ug/L
109-69-3	1-Chlorobutane	1.80		0.12	0.50	ug/L
74-95-3	Dibromomethane	1.90		0.14	0.50	ug/L
75-27-4	Bromodichloromethane	2.00		0.12	0.50	ug/L
108-10-1	4-Methyl-2-Pentanone	9.10		0.60	2.50	ug/L
108-88-3	Toluene	1.90		0.11	0.50	ug/L
10061-02-6	t-1,3-Dichloropropene	1.90		0.11	0.50	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.90		0.11	0.50	ug/L
79-00-5	1,1,2-Trichloroethane	1.90		0.13	0.50	ug/L
142-28-9	1,3-Dichloropropane	1.90		0.13	0.50	ug/L
591-78-6	2-Hexanone	8.80		0.57	2.50	ug/L
124-48-1	Dibromochloromethane	1.90		0.13	0.50	ug/L
106-93-4	1,2-Dibromoethane	1.90		0.13	0.50	ug/L
127-18-4	Tetrachloroethene	2.00		0.14	0.50	ug/L
108-90-7	Chlorobenzene	1.90		0.11	0.50	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	1.90		0.13	0.50	ug/L
67-72-1	Hexachloroethane	1.80		0.12	0.50	ug/L
100-41-4	Ethyl Benzene	1.80		0.12	0.50	ug/L
179601-23-1	m/p-Xylenes	3.70		0.23	1.00	ug/L
1330-20-7	Total Xylenes	5.60		0.35	1.50	ug/L
95-47-6	o-Xylene	1.90		0.12	0.50	ug/L
100-42-5	Styrene	1.80		0.13	0.50	ug/L
75-25-2	Bromoform	1.80		0.14	0.50	ug/L
98-82-8	Isopropylbenzene	1.90		0.13	0.50	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.90		0.12	0.50	ug/L
96-18-4	1,2,3-Trichloropropane	1.80		0.21	0.50	ug/L
108-86-1	Bromobenzene	1.90		0.13	0.50	ug/L
103-65-1	n-propylbenzene	1.90		0.16	0.50	ug/L

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBSD01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBSD01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063231.D	1		02/11/25 12:31	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
95-49-8	2-Chlorotoluene	1.90		0.14	0.50	ug/L
108-67-8	1,3,5-Trimethylbenzene	1.90		0.13	0.50	ug/L
106-43-4	4-Chlorotoluene	1.90		0.14	0.50	ug/L
98-06-6	tert-Butylbenzene	1.90		0.11	0.50	ug/L
95-63-6	1,2,4-Trimethylbenzene	1.80		0.13	0.50	ug/L
135-98-8	sec-Butylbenzene	1.90		0.13	0.50	ug/L
99-87-6	p-Isopropyltoluene	1.90		0.16	0.50	ug/L
541-73-1	1,3-Dichlorobenzene	1.90		0.13	0.50	ug/L
106-46-7	1,4-Dichlorobenzene	1.90		0.14	0.50	ug/L
104-51-8	n-Butylbenzene	1.90		0.28	0.50	ug/L
95-50-1	1,2-Dichlorobenzene	1.90		0.14	0.50	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.80		0.23	0.50	ug/L
120-82-1	1,2,4-Trichlorobenzene	2.00		0.21	0.50	ug/L
87-68-3	Hexachlorobutadiene	1.90		0.14	0.50	ug/L
91-20-3	Naphthalene	2.10		0.31	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	2.00		0.25	0.50	ug/L
74-88-4	Iodomethane	1.90		0.16	1.00	ug/L
107-05-1	Allyl Chloride	1.80		0.11	0.50	ug/L
126-98-7	Methacrylonitrile	1.80		0.19	0.50	ug/L
80-62-6	Methyl methacrylate	3.70		0.24	1.00	ug/L
SURROGATES						
2199-69-1	1,2-Dichlorobenzene-d4	0.96		70 - 130	96%	SPK: 1
460-00-4	4-Bromofluorobenzene	1.00		70 - 130	103%	SPK: 1
INTERNAL STANDARDS						
462-06-6	Fluorobenzene	54800	6.103			

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Drinking Water PT	Date Received:	
Client Sample ID:	VU0211WBSD01	SDG No.:	Q1172
Lab Sample ID:	VU0211WBSD01	Matrix:	Water
Analytical Method:	E524.2	% Solid:	0
Sample Wt/Vol:	25 Units: mL	Final Vol:	25000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VU063231.D	1		02/11/25 12:31	VU021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063231.D
Acq On : 11 Feb 2025 12:31
Operator : MD/SY
Sample : VU0211WBSD01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 12 03:17:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.103	96	54780	1.000 ug/l	# 0.00
System Monitoring Compounds					
57) 4-Bromofluorobenzene	10.627	95	18663	1.033 ug/l	0.00
Spiked Amount 1.000			Recovery = 103.000%		
68) 1,2-Dichlorobenzene-d4	12.183	152	18049	0.961 ug/l	0.00
Spiked Amount 1.000			Recovery = 96.000%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.380	85	33113	1.860 ug/l	98
3) Chloromethane	1.515	50	37175	1.814 ug/l	97
4) Vinyl Chloride	1.599	62	38868	1.917 ug/l	100
5) Bromomethane	1.846	94	21592	2.179 ug/l	93
6) Chloroethane	1.923	64	22977	1.799 ug/l	96
7) Trichlorofluoromethane	2.129	101	46922	1.953 ug/l	98
8) 1,1,2-Trichloro-1,2,2-...	2.570	101	26150	1.917 ug/l	99
9) 1,1-Dichloroethene	2.570	96	26901	1.936 ug/l	98
10) Iodomethane	2.711	142	40470	1.852 ug/l	100
11) Allyl Chloride	2.914	41	35836	1.795 ug/l	93
12) Acrylonitrile	3.322	53	11247	3.509 ug/l	97
13) Acetone	2.624	43	21459	8.706 ug/l	97
14) Carbon Disulfide	2.782	76	91922	1.892 ug/l	99
15) Methylene Chloride	3.033	84	32676	1.903 ug/l	95
16) trans-1,2-Dichloroethene	3.341	96	29942	1.888 ug/l	97
17) 1,1-Dichloroethane	3.856	63	56108	1.877 ug/l	99
18) 2-Butanone	4.711	43	34023	8.673 ug/l	97
19) Cyclohexane	5.377	56	44912m	1.869 ug/l	
20) Methylcyclohexane	6.750	83	44579	1.871 ug/l	98
21) 2,2-Dichloropropane	4.650	77	44541	1.910 ug/l	98
22) cis-1,2-Dichloroethene	4.656	96	32128	1.875 ug/l	97
23) Diethyl Ether	2.367	59	21752	1.824 ug/l	99
24) tert-Butyl Alcohol	3.184	59	20987	11.463 ug/l #	87
25) Methyl tert-Butyl Ether	3.351	73	64764	1.866 ug/l	100
26) Bromochloromethane	4.962	128	14122	1.885 ug/l	98
27) Chloroform	5.074	83	57379	1.902 ug/l	100
28) 1,1,1-Trichloroethane	5.303	97	47038	1.925 ug/l	99
29) 1,1-Dichloropropene	5.515	75	41492	1.895 ug/l	99
30) Carbon Tetrachloride	5.512	117	39937	1.905 ug/l	93
31) Isopropyl Ether	3.978	45	78534	1.840 ug/l	98
32) Ethyl-t-butyl ether	4.489	59	71285	1.836 ug/l	99
33) Tert-Amyl methyl ether	5.926	73	64175	1.892 ug/l	99
34) Propionitrile	4.782	54	10345	8.743 ug/l #	89
35) Benzene	5.762	78	127531	1.895 ug/l	99
36) 1,2-Dichloroethane	5.785	62	35880	1.847 ug/l	98
37) Trichloroethene	6.534	130	31454	1.965 ug/l	95
38) 1,2-Dichloropropane	6.778	63	33332	1.892 ug/l	98
39) Methacrylonitrile	4.975	41	7882	1.788 ug/l	93
40) Methyl acrylate	4.856	55	14998m	1.846 ug/l	
41) Tetrahydrofuran	5.052	42	9149	3.568 ug/l	94
42) 1-Chlorobutane	5.447	56	54703	1.826 ug/l	98
43) Dibromomethane	6.907	93	16512	1.851 ug/l	98
44) Bromodichloromethane	7.094	83	40544	1.953 ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063231.D
Acq On : 11 Feb 2025 12:31
Operator : MD/SY
Sample : VU0211WBSD01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 12 03:17:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

Manual Integrations APPROVED
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
45) 4-Methyl-2-Pentanone	7.782	43	84721	9.059 ug/l	98
46) t-1,4-Dichloro-2-butene	10.823	75	15342m	3.490 ug/l	
47) Methyl methacrylate	6.955	69	27905	3.714 ug/l	99
48) Ethyl methacrylate	8.328	69	26666	1.890 ug/l	97
49) Toluene	7.958	92	73665	1.903 ug/l	98
50) t-1,3-Dichloropropene	8.203	75	35883	1.888 ug/l	98
51) cis-1,3-Dichloropropene	7.598	75	44229	1.884 ug/l	99
52) 1,1,2-Trichloroethane	8.389	97	22475	1.869 ug/l	95
53) 1,3-Dichloropropane	8.566	76	39762	1.862 ug/l	99
54) 2-Hexanone	8.679	43	55875	8.755 ug/l	96
55) Dibromochloromethane	8.798	129	25680	1.856 ug/l	96
56) 1,2-Dibromoethane	8.913	107	21428	1.899 ug/l	99
58) Tetrachloroethene	8.544	164	26480	2.007 ug/l	99
59) Chlorobenzene	9.438	112	78809	1.929 ug/l	98
60) 1,1,1,2-Tetrachloroethane	9.524	131	27412	1.867 ug/l	98
61) Pentachloroethane	11.415	117	23456	1.788 ug/l	98
62) Hexachloroethane	12.463	117	20644	1.779 ug/l	100
63) Ethyl Benzene	9.560	91	129864	1.843 ug/l	98
64) m/p-Xylenes	9.685	106	97083	3.689 ug/l	97
65) o-Xylene	10.090	106	47893	1.859 ug/l	99
66) Styrene	10.106	104	74164	1.809 ug/l	98
67) Bromoform	10.280	173	14362	1.829 ug/l	99
69) Isopropylbenzene	10.473	105	113031	1.866 ug/l	99
70) 1,1,2,2-Tetrachloroethane	10.772	83	30438	1.878 ug/l	98
71) 1,2,3-Trichloropropane	10.814	75	22418m	1.841 ug/l	
72) Bromobenzene	10.775	156	31774	1.947 ug/l	87
73) n-propylbenzene	10.894	120	32378	1.867 ug/l	97
74) 2-Chlorotoluene	10.978	126	30928	1.935 ug/l	97
75) 1,3,5-Trimethylbenzene	11.077	105	105240	1.875 ug/l	99
76) 4-Chlorotoluene	11.090	126	31460	1.920 ug/l	98
77) tert-Butylbenzene	11.408	119	105468	1.858 ug/l	99
78) 1,2,4-Trimethylbenzene	11.460	105	100273	1.801 ug/l	99
79) sec-Butylbenzene	11.634	105	137558	1.904 ug/l	99
80) Nitrobenzene	13.219	77	3153m	9.901 ug/l	
81) p-Isopropyltoluene	11.781	119	105707	1.854 ug/l	99
82) 1,3-Dichlorobenzene	11.736	146	59568	1.882 ug/l	100
83) 1,4-Dichlorobenzene	11.830	146	57308	1.851 ug/l	96
84) n-Butylbenzene	12.199	91	94788	1.854 ug/l	99
85) 1,2-Dichlorobenzene	12.203	146	57519	1.891 ug/l	97
86) 1,2-Dibromo-3-Chloropr...	12.987	75	4147	1.822 ug/l	97
87) 1,2,4-Trichlorobenzene	13.833	180	30065	2.027 ug/l	97
88) Hexachlorobutadiene	14.010	225	20647	1.948 ug/l	97
89) Naphthalene	14.084	128	46812	2.069 ug/l	97
90) 1,2,3-Trichlorobenzene	14.322	180	28334	1.952 ug/l	98

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

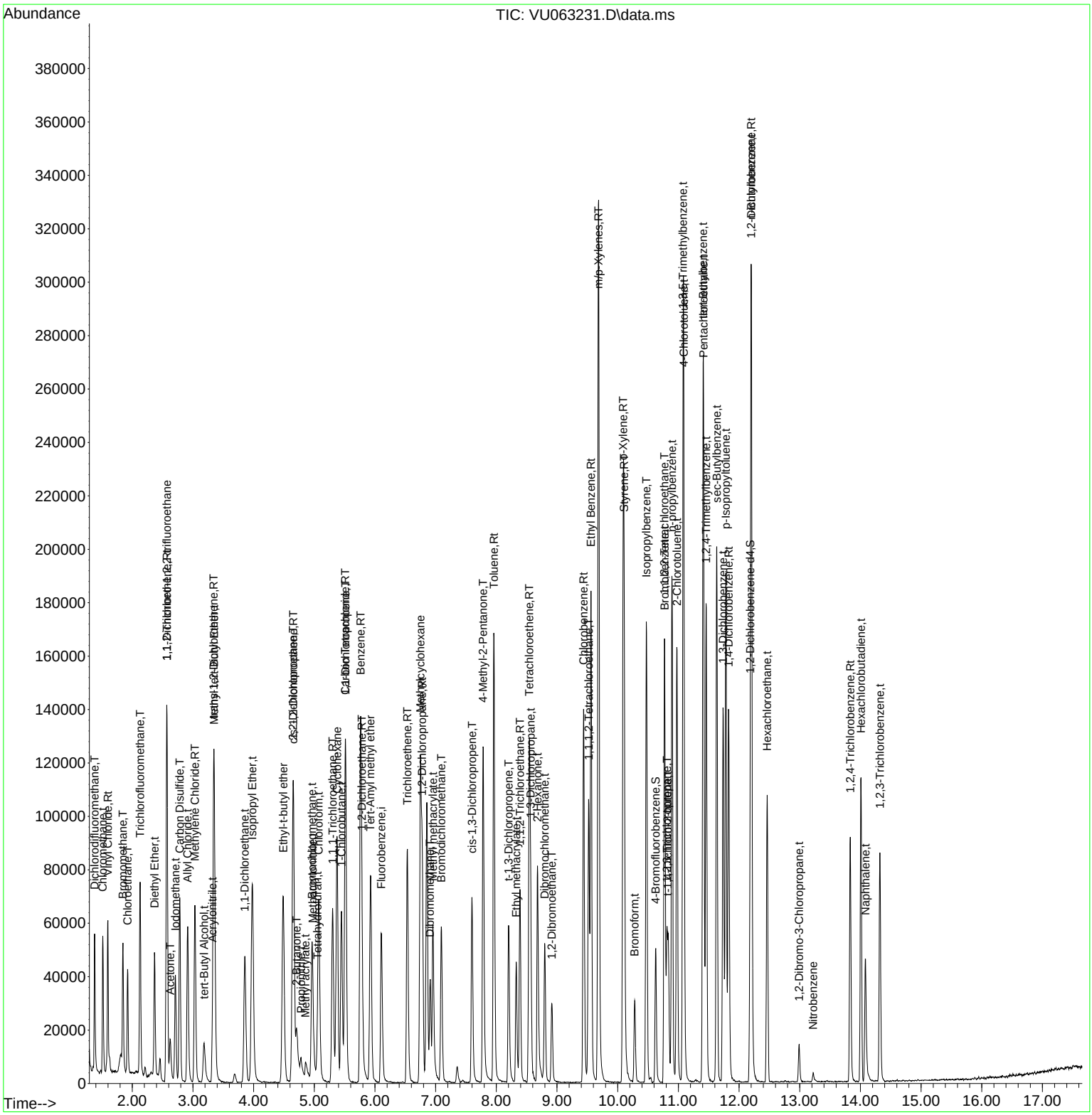
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU021125\
Data File : VU063231.D
Acq On : 11 Feb 2025 12:31
Operator : MD/SY
Sample : VU0211WBSD01
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 8 Sample Multiplier: 1

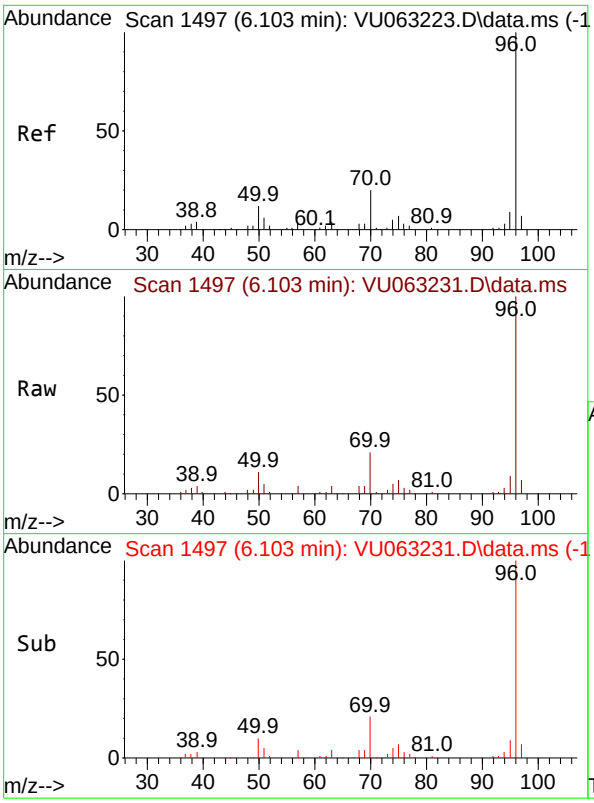
Quant Time: Feb 12 03:17:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U021025DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Feb 11 08:42:19 2025
Response via : Initial Calibration

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

Manual Integrations APPROVED

Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

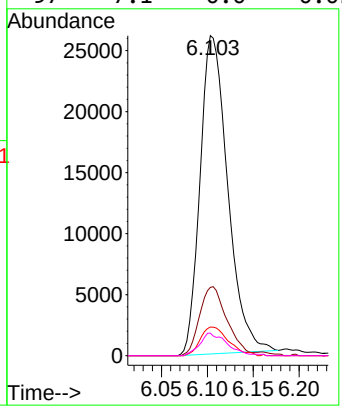




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.103 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 96 Resp: 5478

Ion	Ratio	Lower	Upper
96	100		
70	20.2	15.6	23.4
95	9.1	7.3	10.9
97	7.1	0.0	0.0#



Instrument :
MSVOA_U
ClientSampleId :
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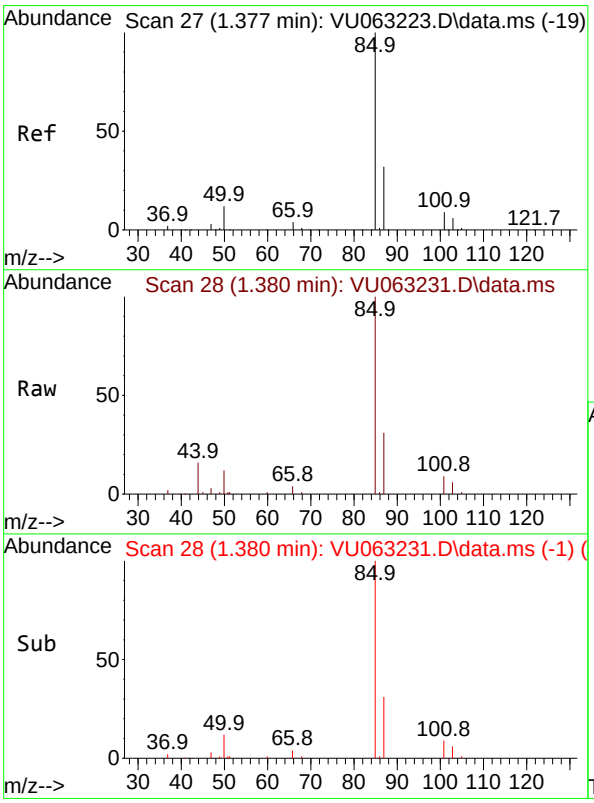
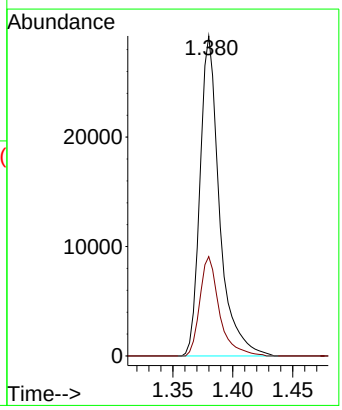
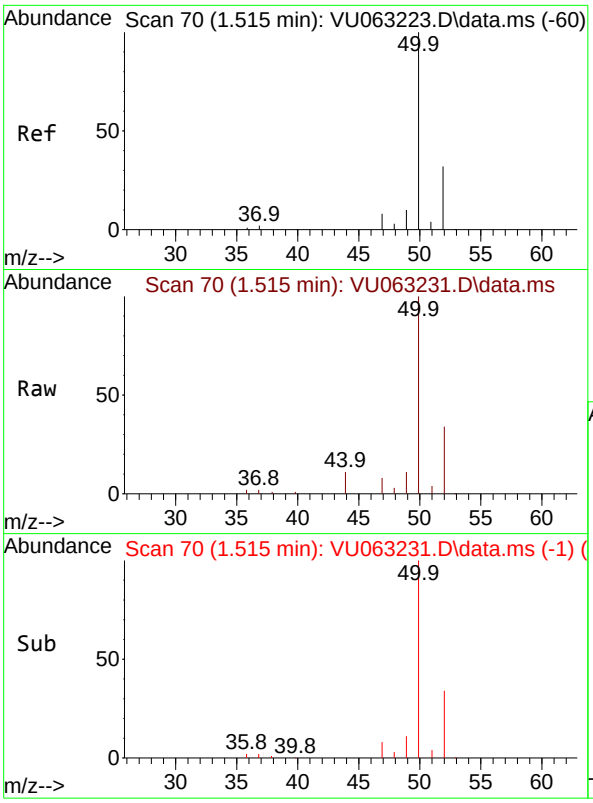


#2
Dichlorodifluoromethane
Concen: 1.860 ug/l
RT: 1.380 min Scan# 28
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 85 Resp: 33113

Ion	Ratio	Lower	Upper
85	100		
87	31.1	16.0	48.0

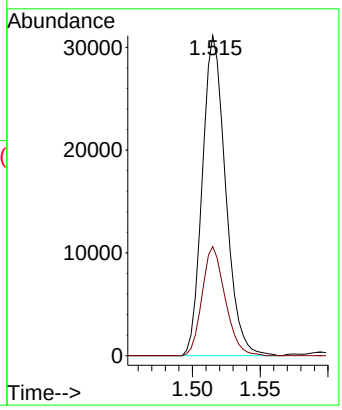




#3
Chloromethane
Concen: 1.814 ug/l
RT: 1.515 min Scan# 7(
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 50 Resp: 3717

Ion	Ratio	Lower	Upper
50	100		
52	34.1	25.8	38.8



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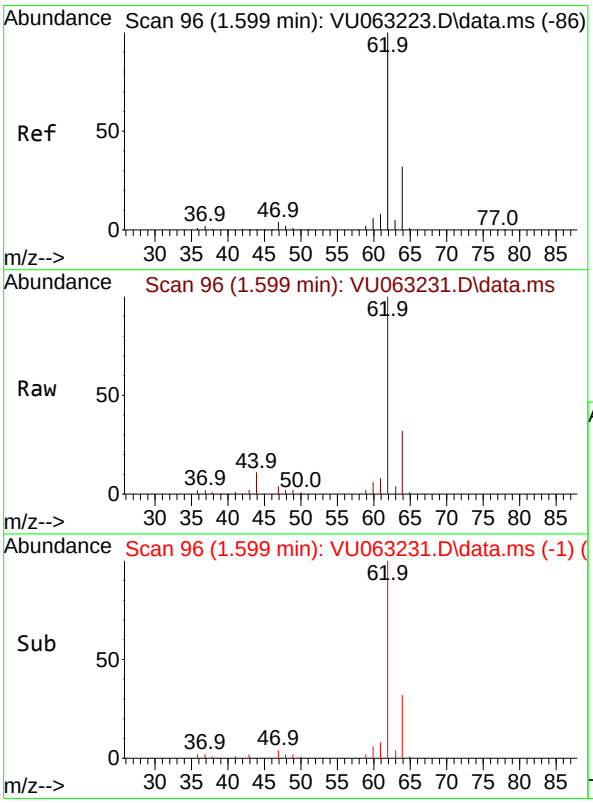
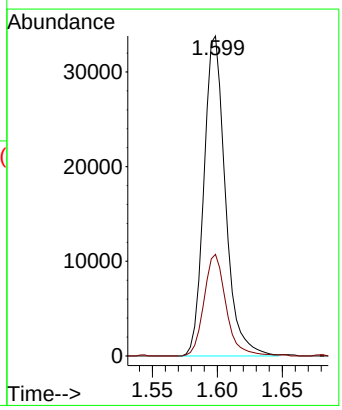
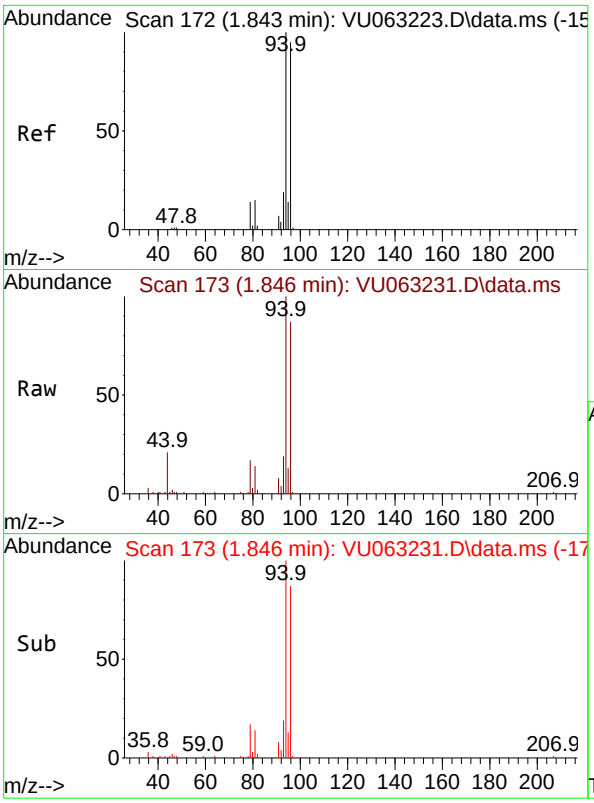


#4
Vinyl Chloride
Concen: 1.917 ug/l
RT: 1.599 min Scan# 96
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 62 Resp: 38868

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.4	38.0

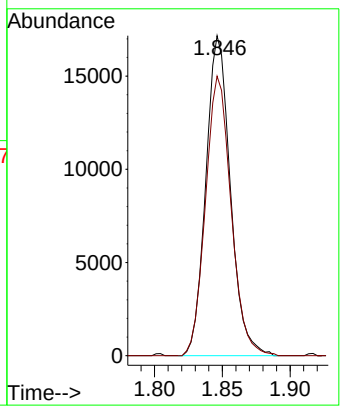




#5
Bromomethane
Concen: 2.179 ug/l
RT: 1.846 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 94 Resp: 2159

Ion	Ratio	Lower	Upper
94	100		
96	87.4	75.7	113.5



Instrument :
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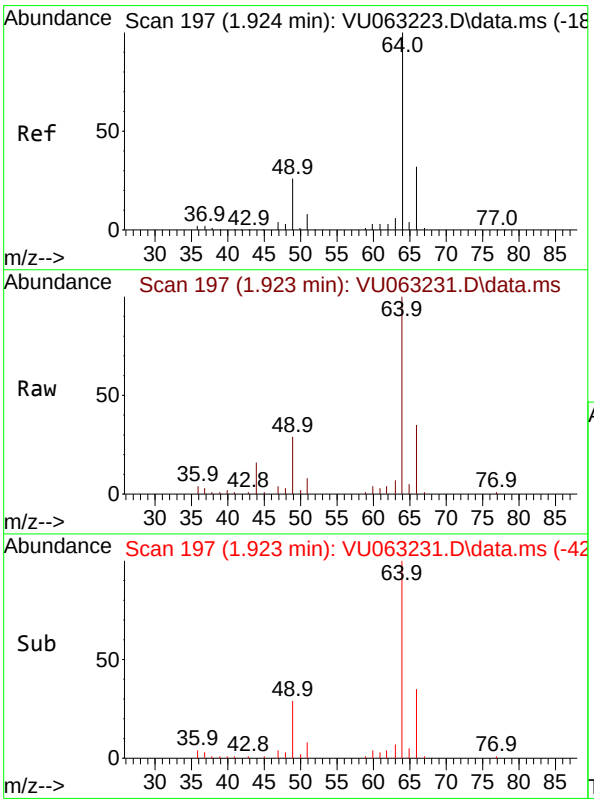
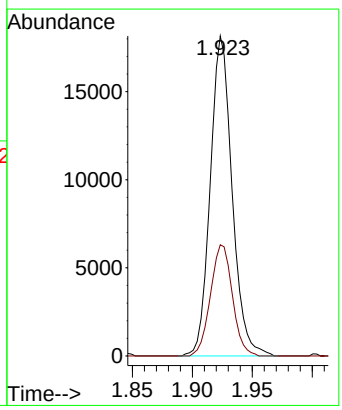
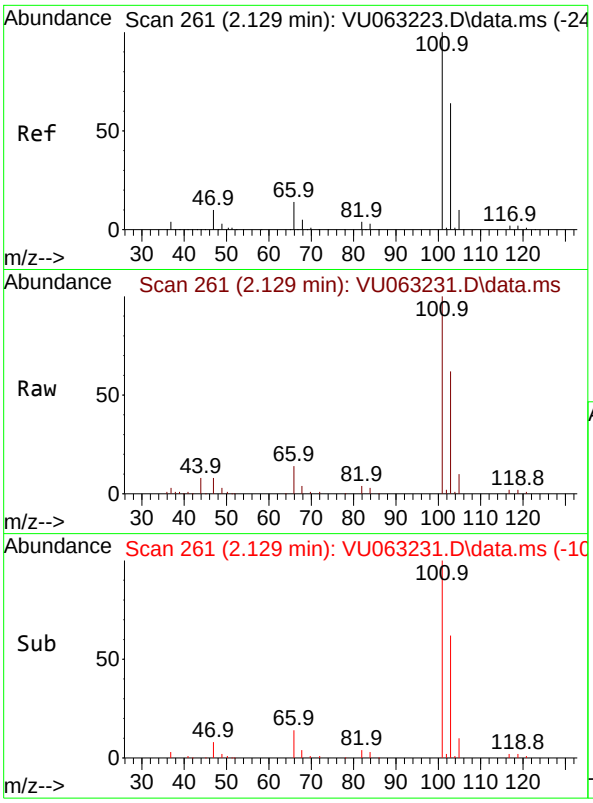


#6
Chloroethane
Concen: 1.799 ug/l
RT: 1.923 min Scan# 197
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 64 Resp: 22977

Ion	Ratio	Lower	Upper
64	100		
66	34.8	25.8	38.8





#7
Trichlorofluoromethane
Concen: 1.953 ug/l
RT: 2.129 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:101 Resp: 4692

Ion	Ratio	Lower	Upper
101	100		
103	62.4	51.4	77.2

Instrument :
MSVOA_U
ClientSampleId :
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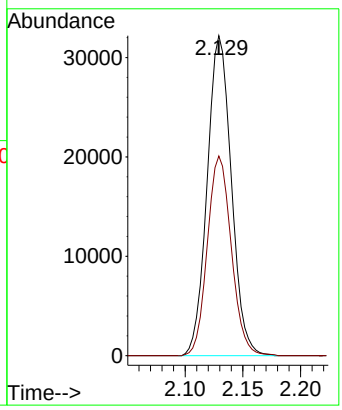
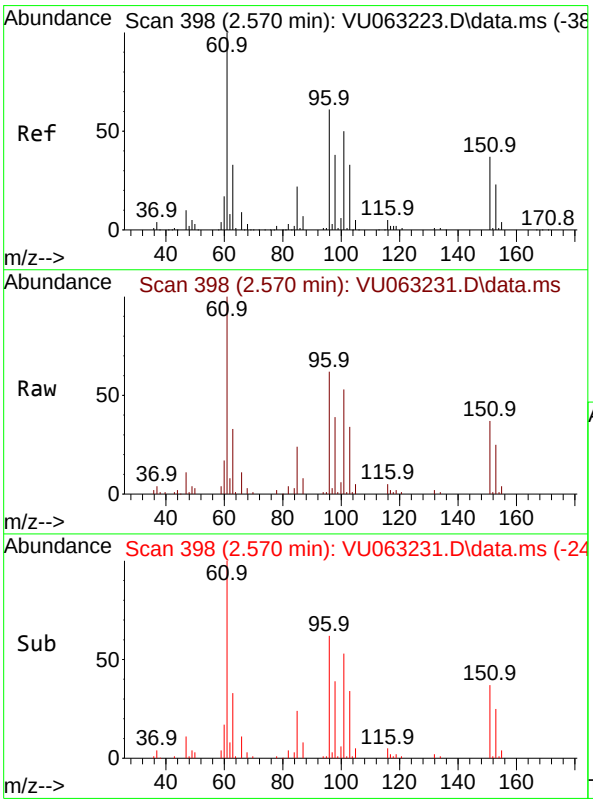
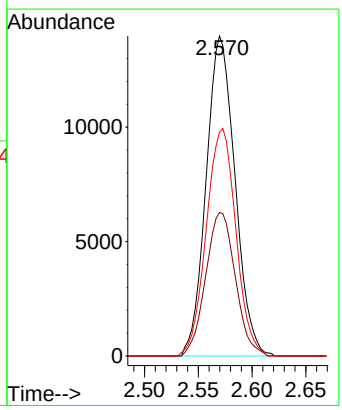


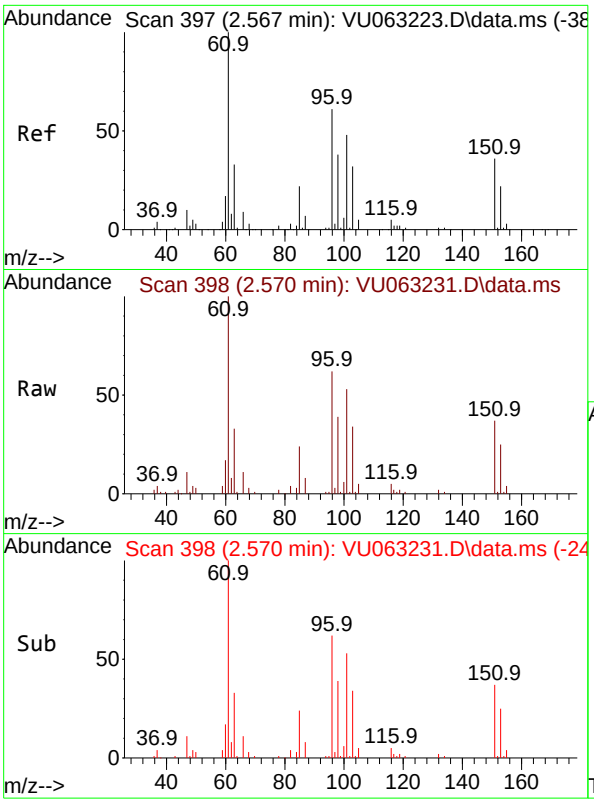


#8
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 1.917 ug/l
RT: 2.570 min Scan# 398
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:101 Resp: 26150

Ion	Ratio	Lower	Upper
101	100		
85	45.9	35.4	53.0
151	72.9	58.5	87.7

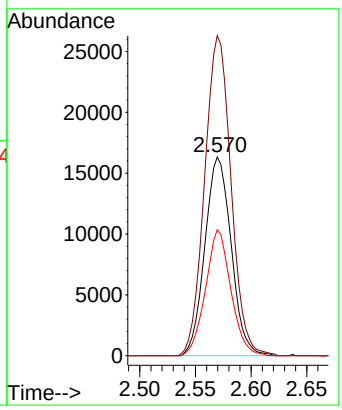




#9
1,1-Dichloroethene
Concen: 1.936 ug/l
RT: 2.570 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 96 Resp: 2690

Ion	Ratio	Lower	Upper
96	100		
61	161.0	0.0	492.9
98	63.3	0.0	124.0



Instrument :
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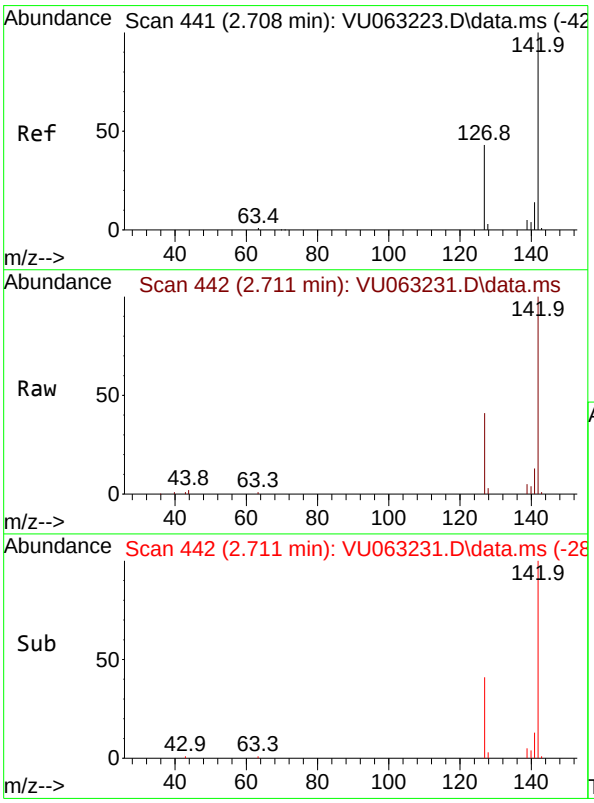
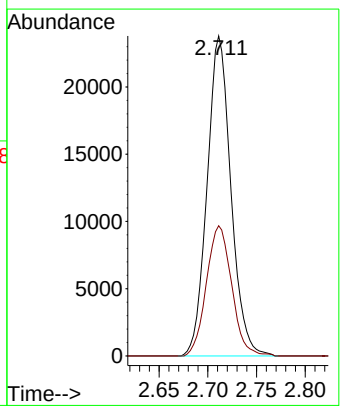
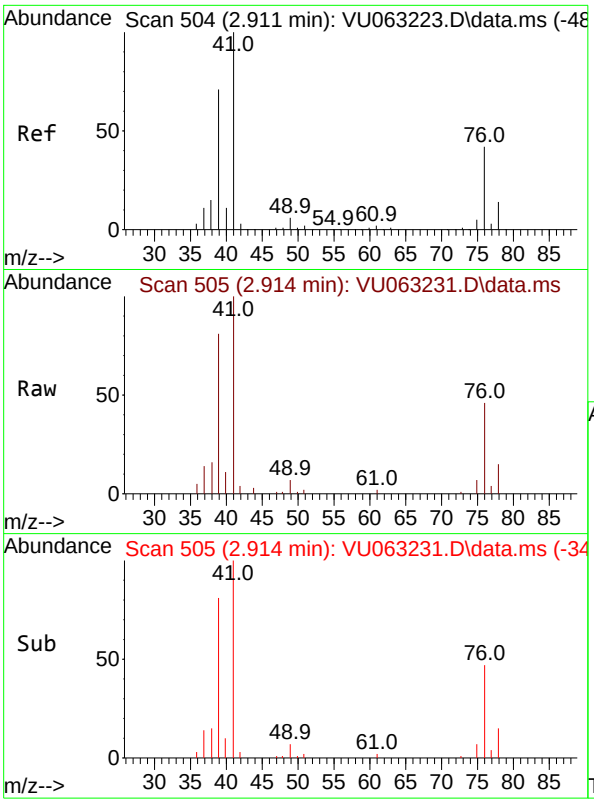


#10
Iodomethane
Concen: 1.852 ug/l
RT: 2.711 min Scan# 442
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:142 Resp: 40470

Ion	Ratio	Lower	Upper
142	100		
127	43.2	34.5	51.7

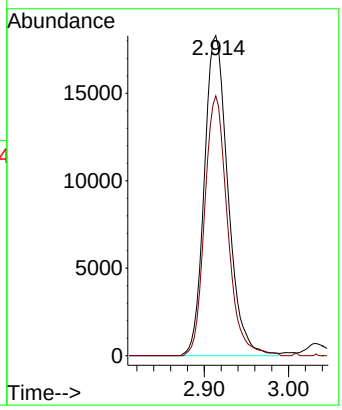




#11
Allyl Chloride
Concen: 1.795 ug/l
RT: 2.914 min Scan# 5
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 41 Resp: 3583

Ion	Ratio	Lower	Upper
41	100		
39	78.1	57.9	86.9



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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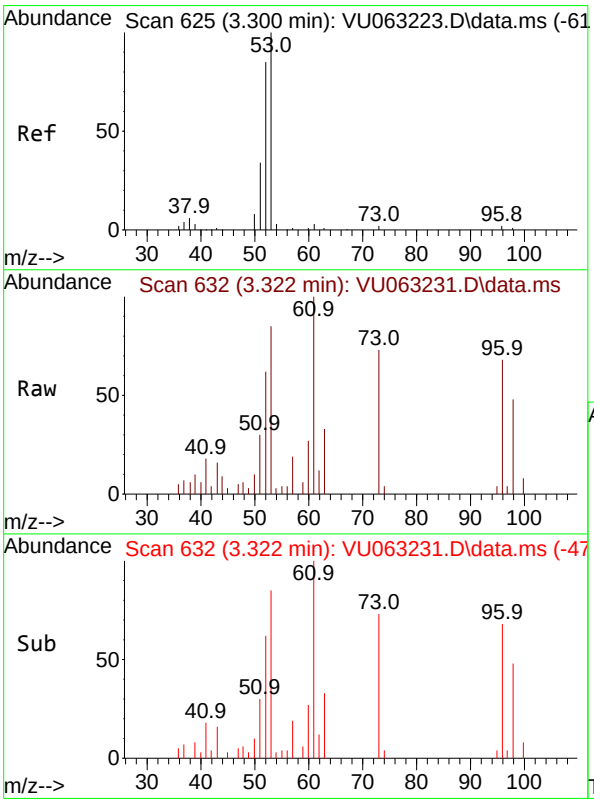
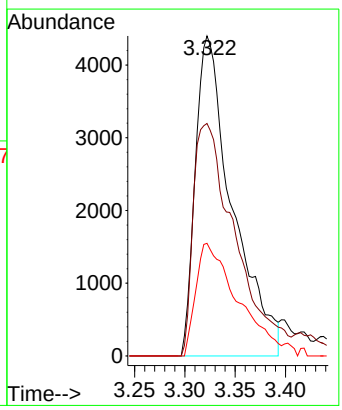
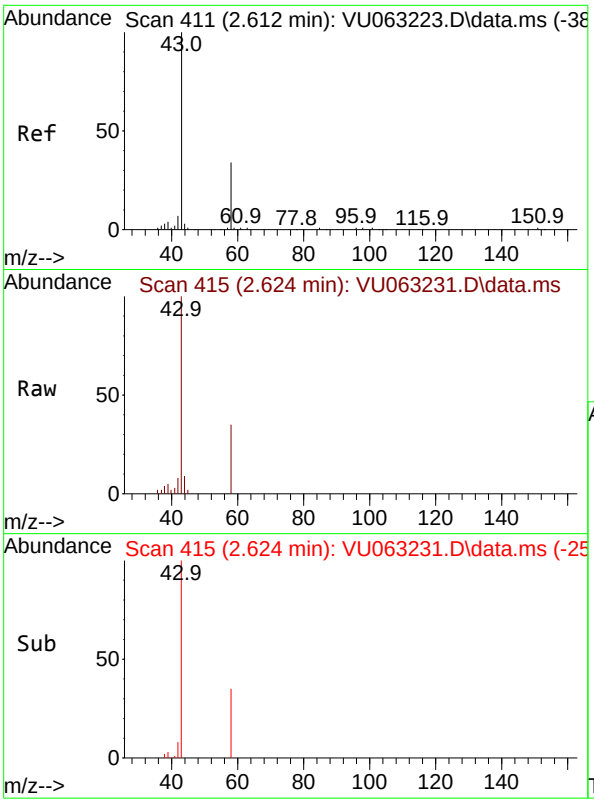


#12
Acrylonitrile
Concen: 3.509 ug/l
RT: 3.322 min Scan# 632
Delta R.T. 0.022 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 53 Resp: 11247

Ion	Ratio	Lower	Upper
53	100		
52	83.1	64.2	96.2
51	39.8	30.8	46.2

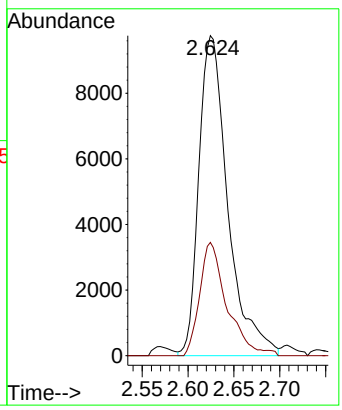




#13
Acetone
Concen: 8.706 ug/l
RT: 2.624 min Scan# 4
Delta R.T. 0.013 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 43 Resp: 2145

Ion	Ratio	Lower	Upper
43	100		
58	35.8	27.4	41.0



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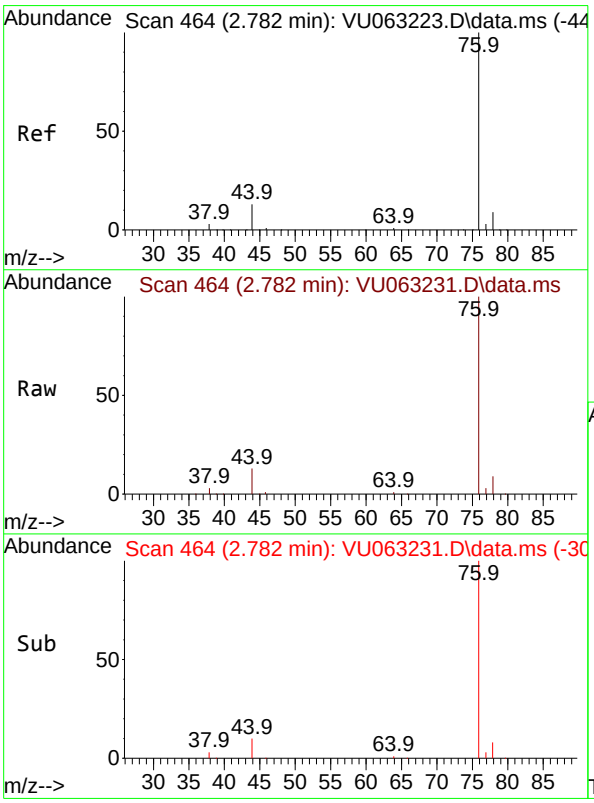
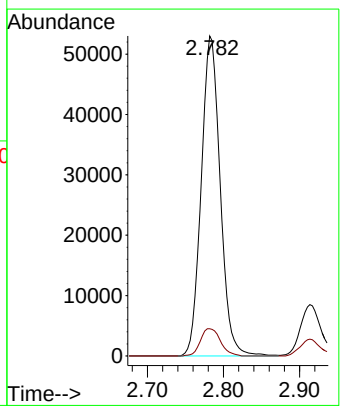
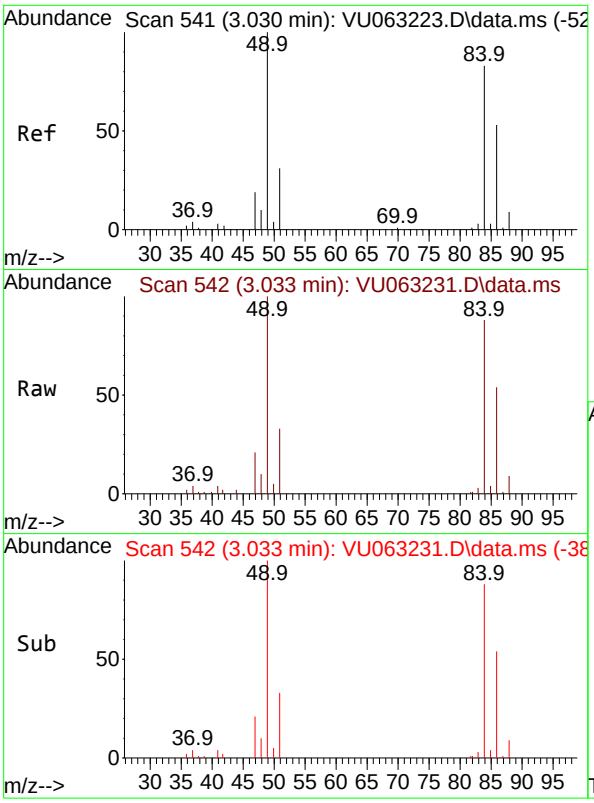


#14
Carbon Disulfide
Concen: 1.892 ug/l
RT: 2.782 min Scan# 464
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 76 Resp: 91922

Ion	Ratio	Lower	Upper
76	100		
78	8.5	7.2	10.8

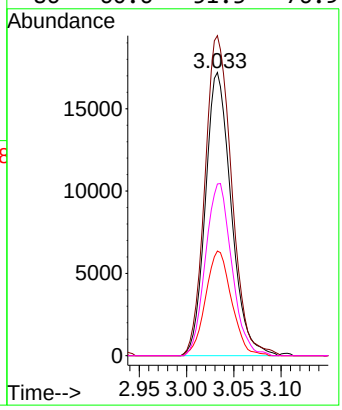




#15
Methylene Chloride
Concen: 1.903 ug/l
RT: 3.033 min Scan# 54
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 84 Resp: 3267

Ion	Ratio	Lower	Upper
84	100		
49	113.0	96.4	144.6
51	36.9	0.0	74.8
86	60.6	51.3	76.9



Instrument :
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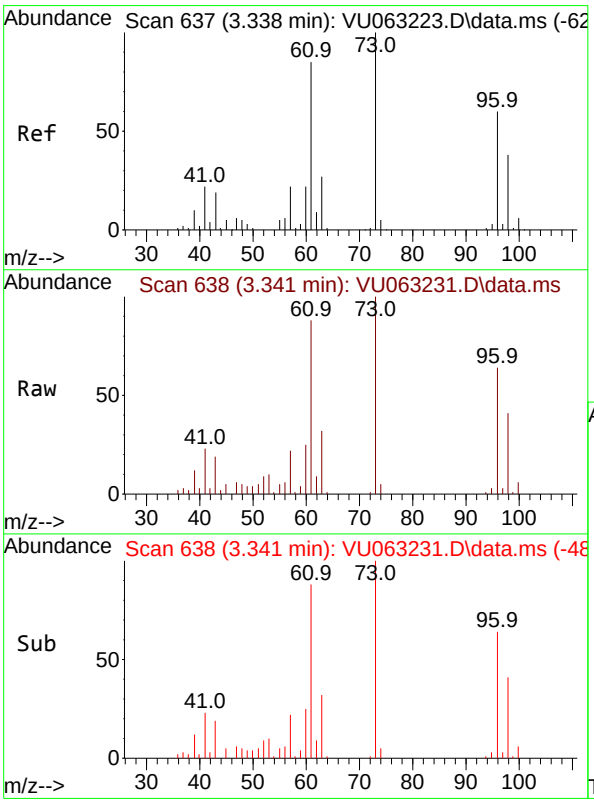
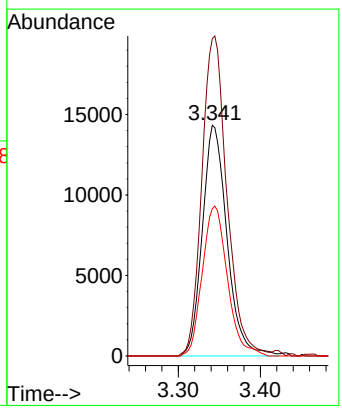
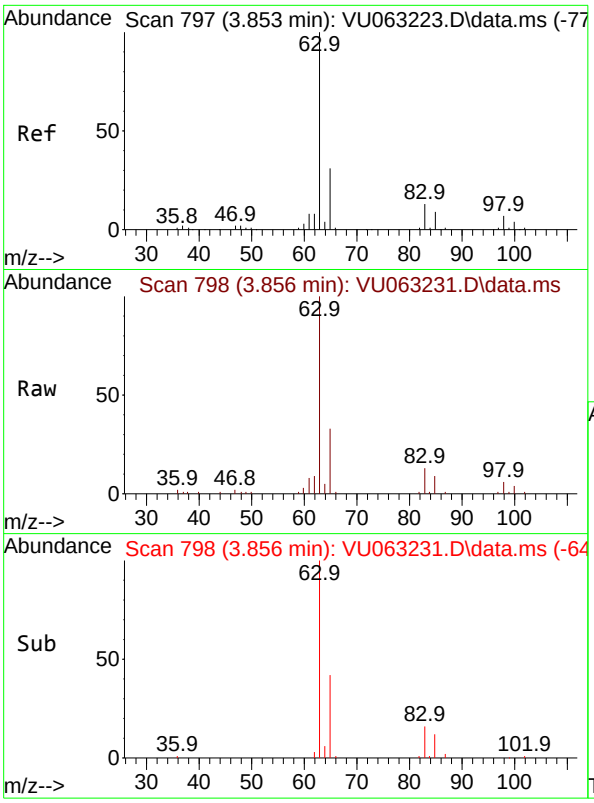


#16
trans-1,2-Dichloroethene
Concen: 1.888 ug/l
RT: 3.341 min Scan# 638
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 96 Resp: 29942

Ion	Ratio	Lower	Upper
96	100		
61	137.5	113.4	170.2
98	63.8	51.2	76.8

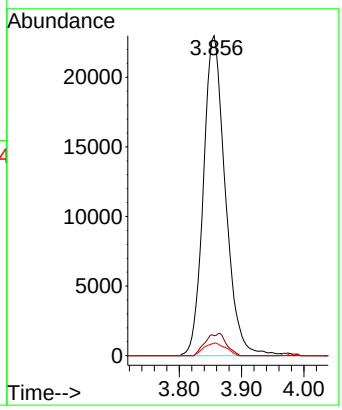




#17
1,1-Dichloroethane
Concen: 1.877 ug/l
RT: 3.856 min Scan# 7
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 63 Resp: 5610

Ion	Ratio	Lower	Upper
63	100		
98	6.2	3.3	9.9
100	3.9	2.1	6.2



Instrument :
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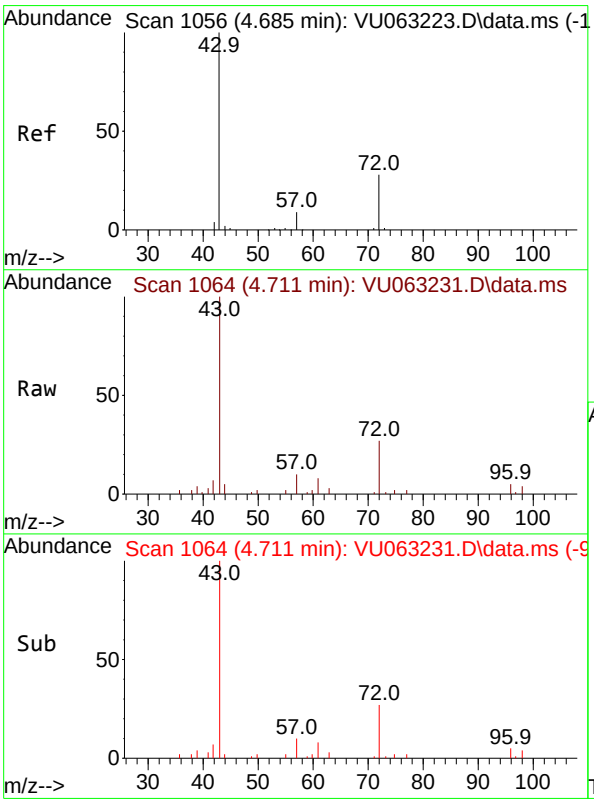
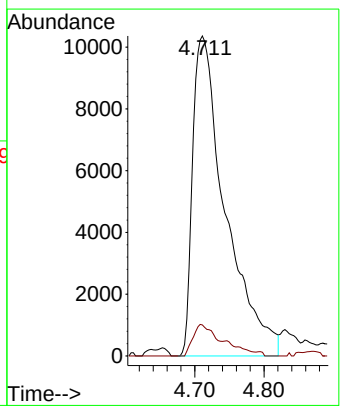
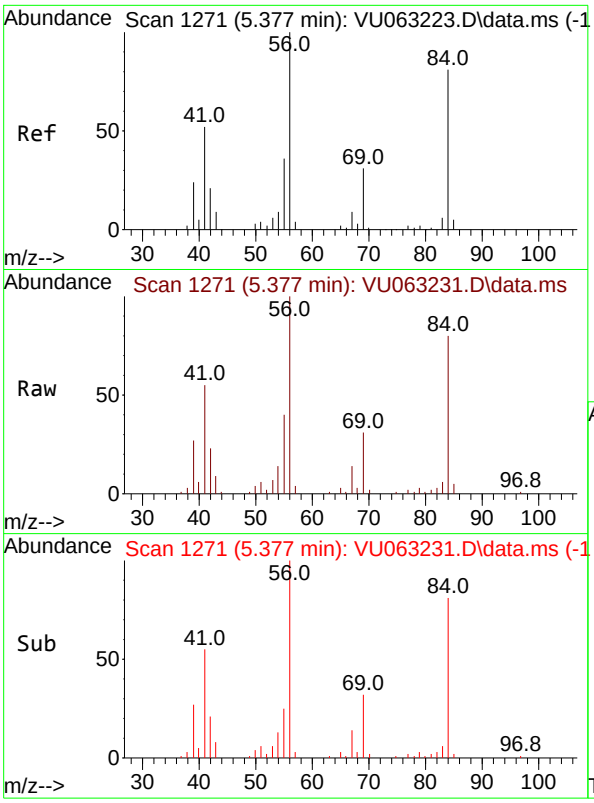


#18
2-Butanone
Concen: 8.673 ug/l
RT: 4.711 min Scan# 1064
Delta R.T. 0.026 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 43 Resp: 34023

Ion	Ratio	Lower	Upper
43	100		
57	9.7	0.0	17.0

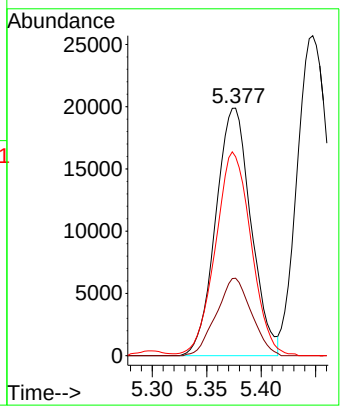




#19
Cyclohexane
Concen: 1.869 ug/l m
RT: 5.377 min Scan# 1
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 56 Resp: 4491

Ion	Ratio	Lower	Upper
56	100		
69	30.9	24.5	36.7
84	82.4	65.2	97.8



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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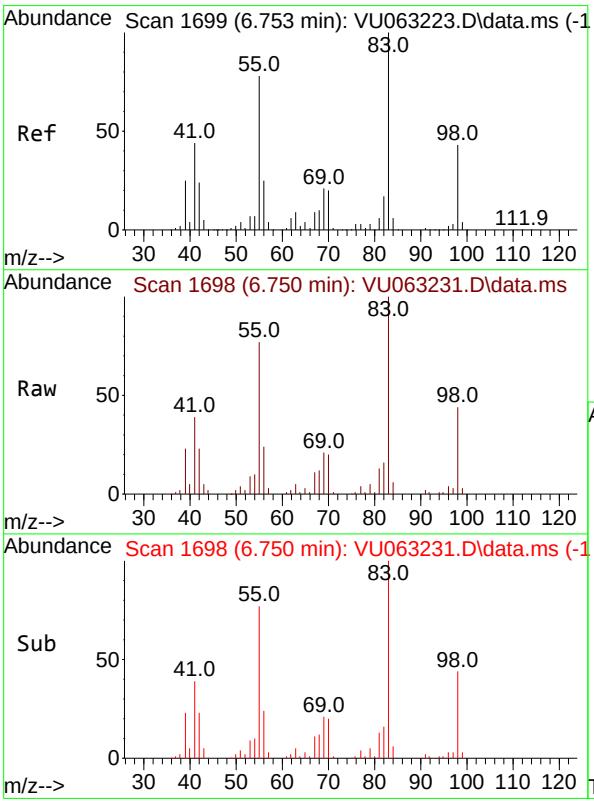
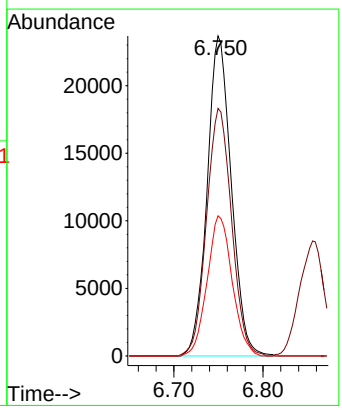
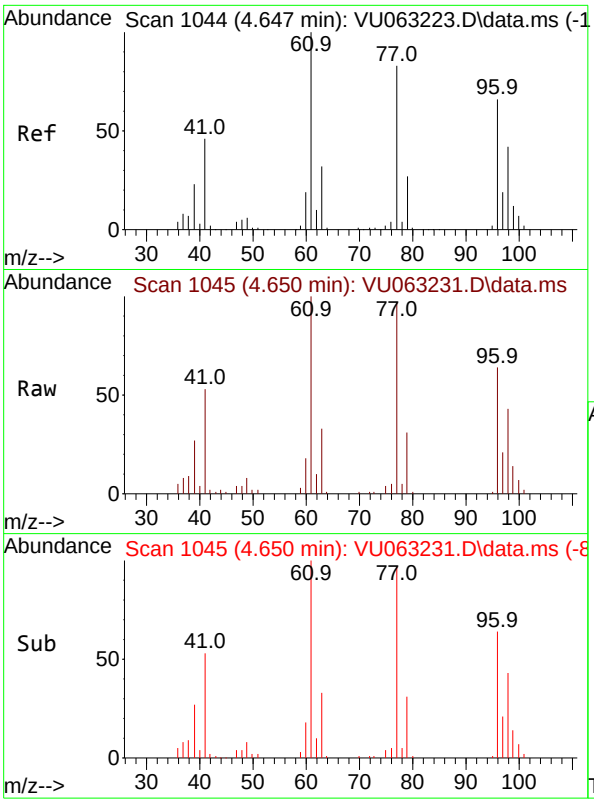


#20
Methylcyclohexane
Concen: 1.871 ug/l
RT: 6.750 min Scan# 1698
Delta R.T. -0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 83 Resp: 44579

Ion	Ratio	Lower	Upper
83	100		
55	80.4	63.1	94.7
98	45.4	35.2	52.8

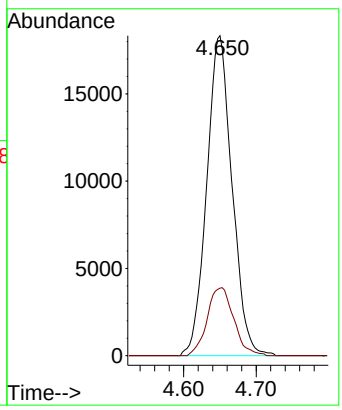




#21
2,2-Dichloropropane
Concen: 1.910 ug/l
RT: 4.650 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 77 Resp: 4454

Ion	Ratio	Lower	Upper
77	100		
97	22.3	18.5	27.7



Instrument :
MSVOA_U
ClientSampleId :
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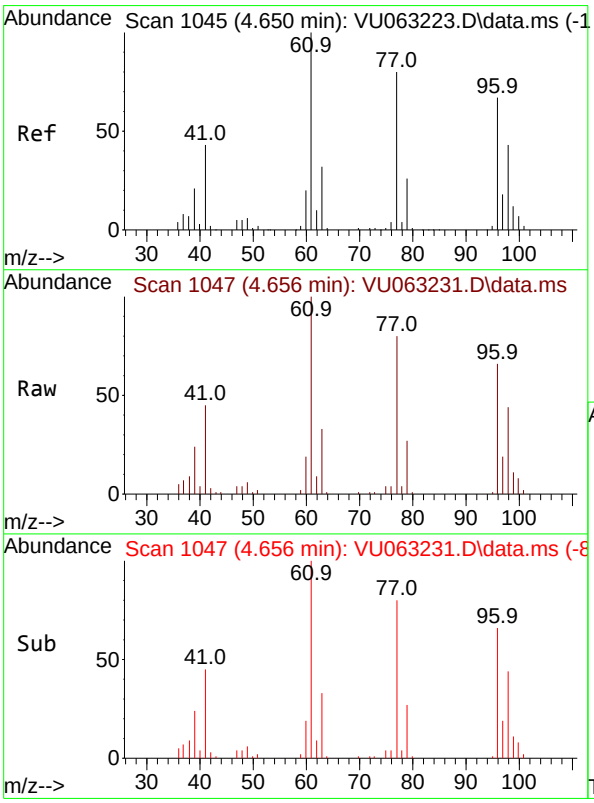
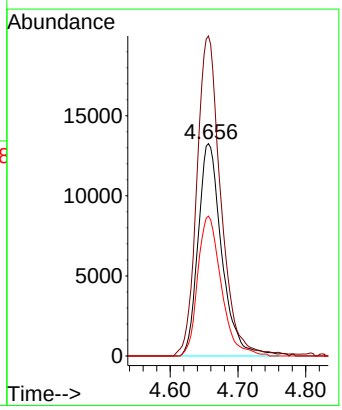
Supervised By :Mahesh Dadoda 02/12/2025

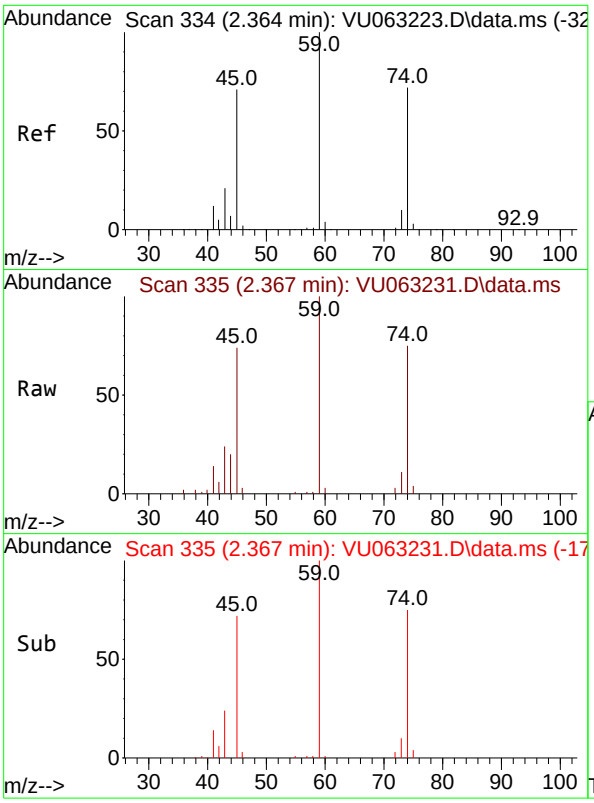


#22
cis-1,2-Dichloroethene
Concen: 1.875 ug/l
RT: 4.656 min Scan# 1047
Delta R.T. 0.006 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 96 Resp: 32128

Ion	Ratio	Lower	Upper
96	100		
61	153.4	0.0	373.3
98	65.5	31.9	95.9

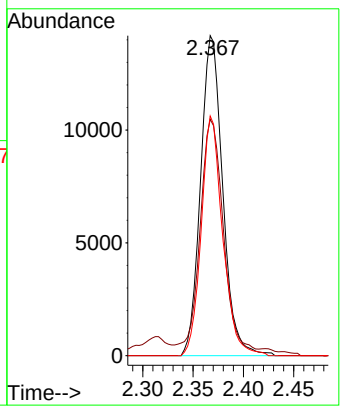




#23
Diethyl Ether
Concen: 1.824 ug/l
RT: 2.367 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 59 Resp: 2175

Ion	Ratio	Lower	Upper
59	100		
45	73.4	57.8	86.6
74	72.7	57.7	86.5



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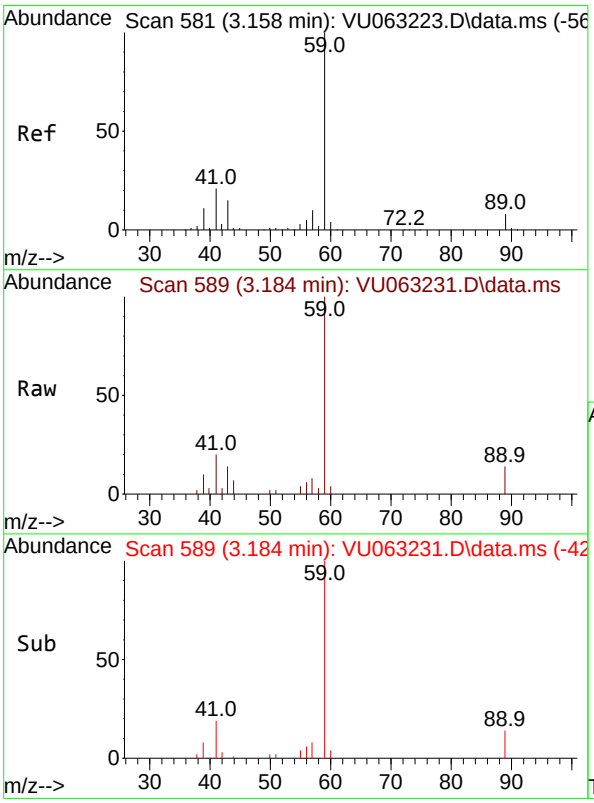
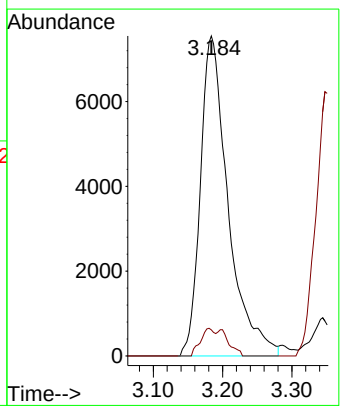
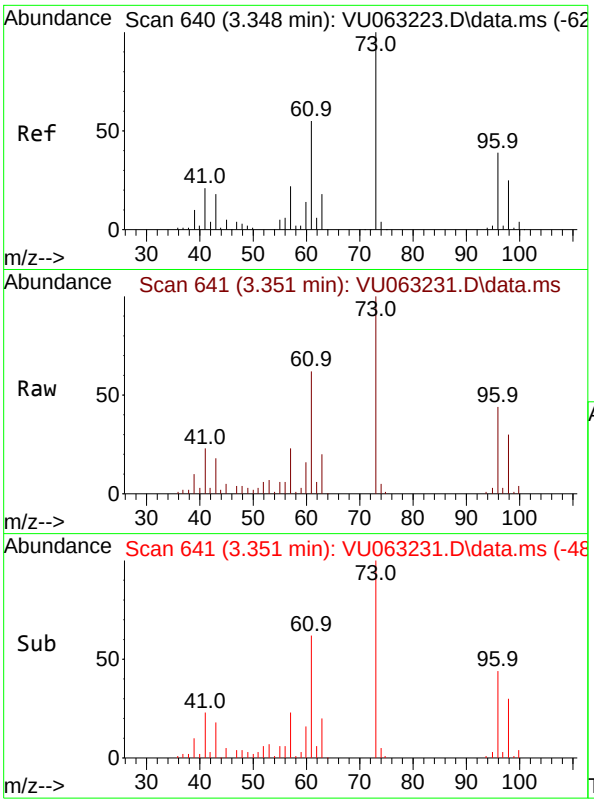


#24
tert-Butyl Alcohol
Concen: 11.463 ug/l
RT: 3.184 min Scan# 589
Delta R.T. 0.026 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 59 Resp: 20987

Ion	Ratio	Lower	Upper
59	100		
57	4.5	7.5	11.3#





#25
Methyl tert-Butyl Ether
Concen: 1.866 ug/l
RT: 3.351 min Scan# 64
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 73 Resp: 6476

Ion	Ratio	Lower	Upper
73	100		
43	18.7	14.9	22.3

Instrument :
MSVOA_U
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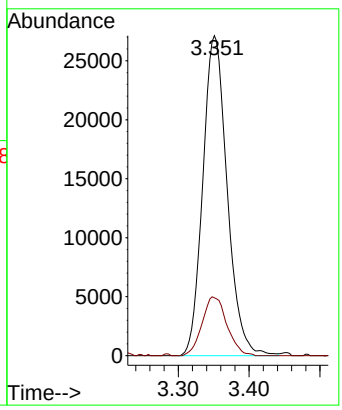
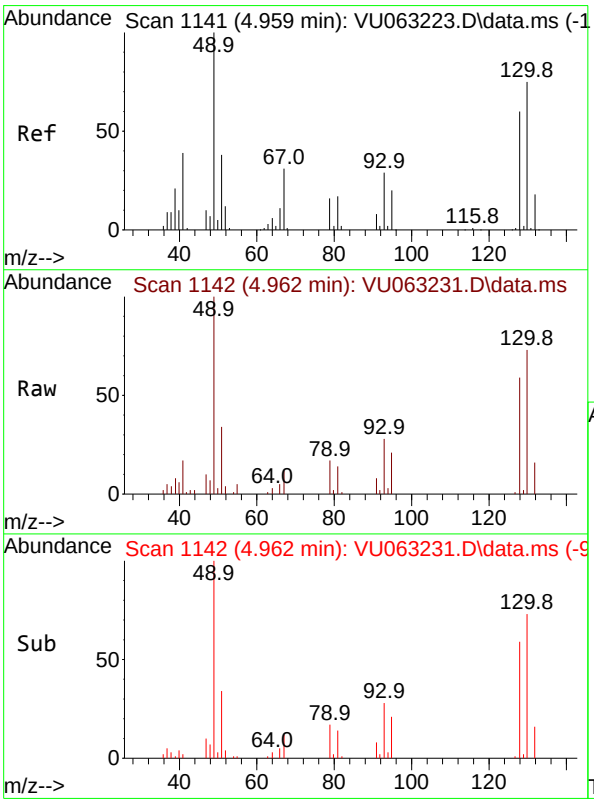
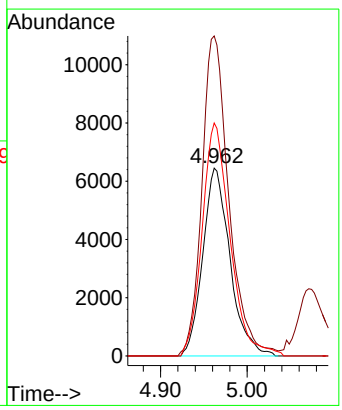


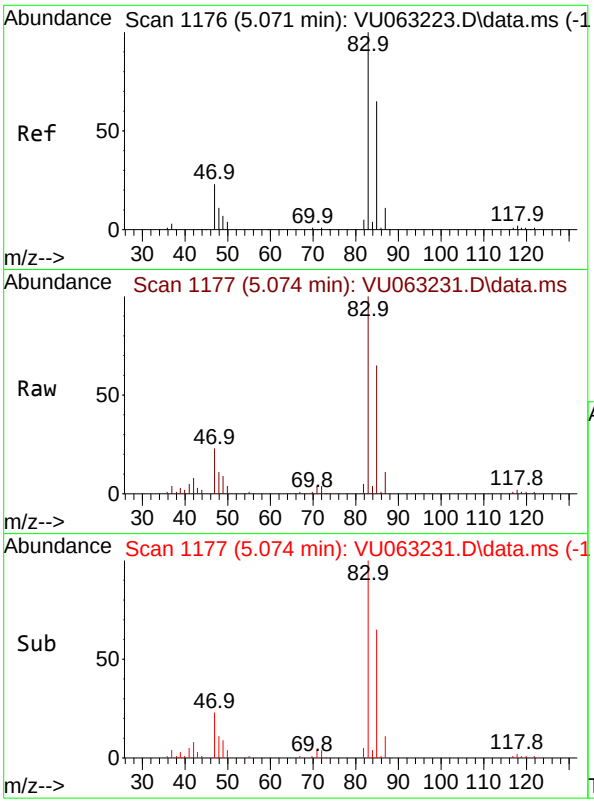


#26
Bromochloromethane
Concen: 1.885 ug/l
RT: 4.962 min Scan# 1142
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:128 Resp: 14122

Ion	Ratio	Lower	Upper
128	100		
49	168.1	0.0	343.4
130	126.8	102.9	154.3

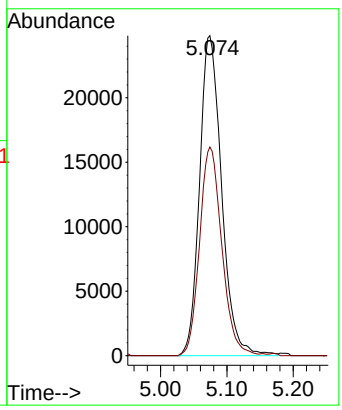




#27
Chloroform
Concen: 1.902 ug/l
RT: 5.074 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 83 Resp: 5737

Ion	Ratio	Lower	Upper
83	100		
85	65.2	0.0	129.8



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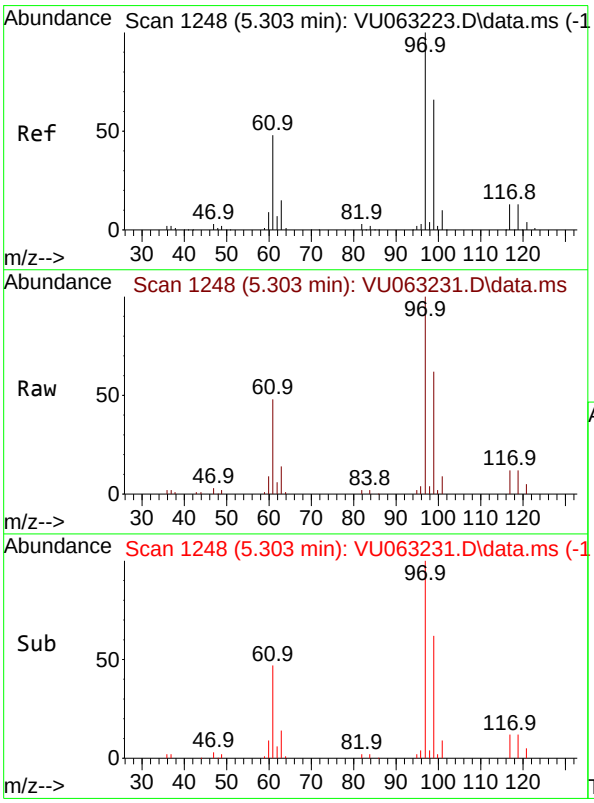
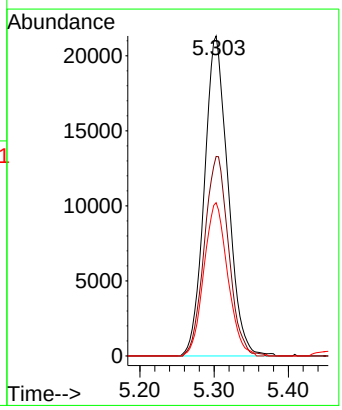
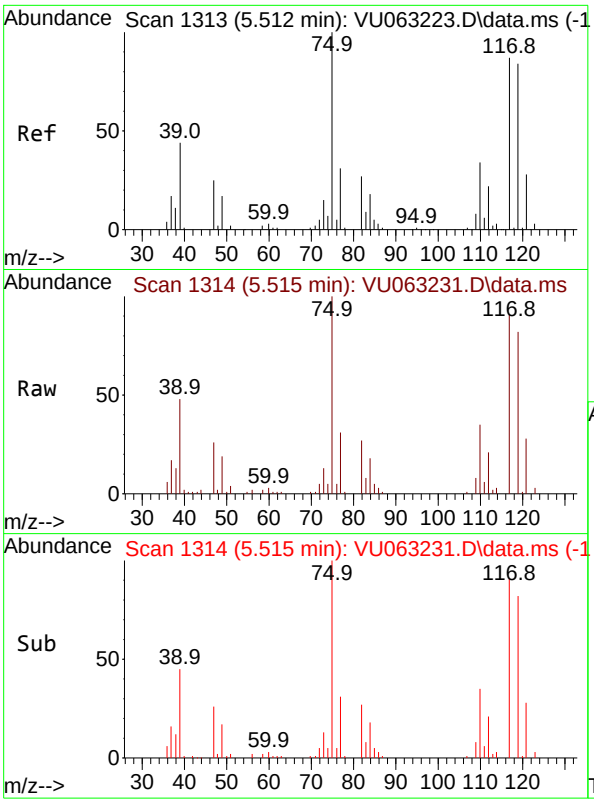


#28
1,1,1-Trichloroethane
Concen: 1.925 ug/l
RT: 5.303 min Scan# 1248
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 97 Resp: 47038

Ion	Ratio	Lower	Upper
97	100		
99	64.1	32.4	97.0
61	48.2	23.8	71.2

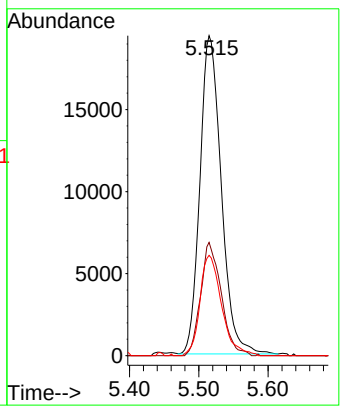




#29
1,1-Dichloropropene
Concen: 1.895 ug/l
RT: 5.515 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 75 Resp: 4149

Ion	Ratio	Lower	Upper
75	100		
110	34.4	17.2	51.5
77	31.9	24.6	37.0



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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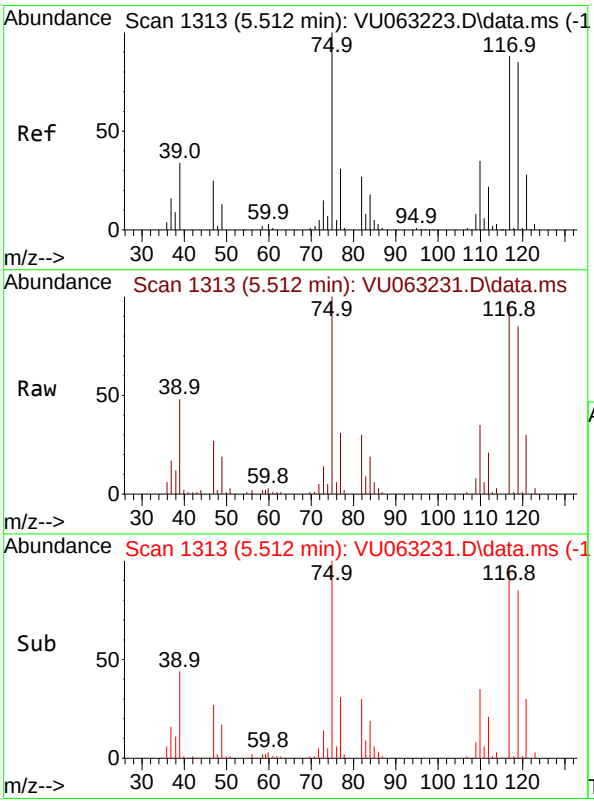
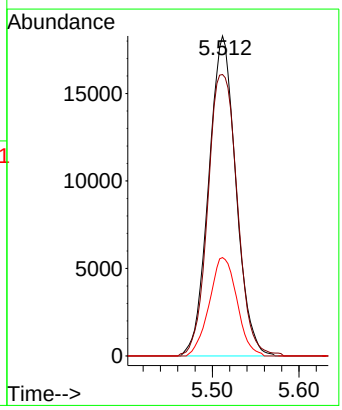
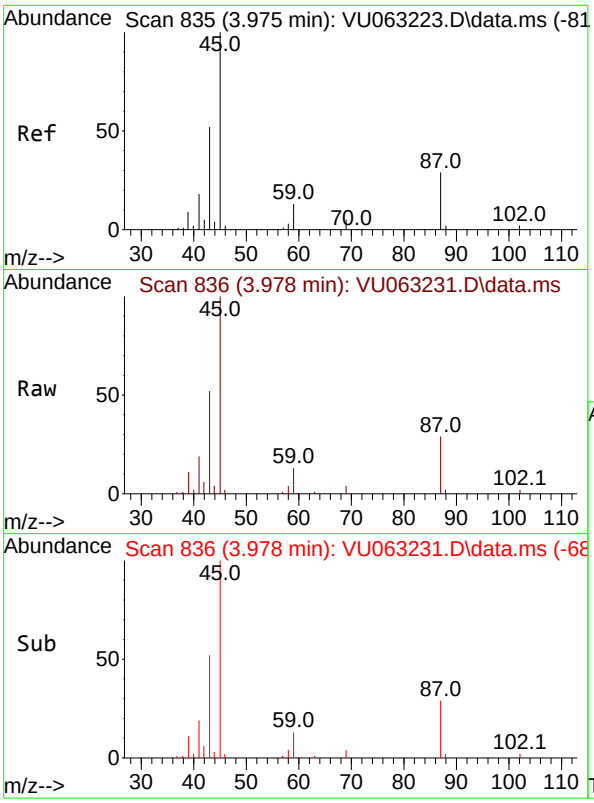


#30
Carbon Tetrachloride
Concen: 1.905 ug/l
RT: 5.512 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:117 Resp: 39937

Ion	Ratio	Lower	Upper
117	100		
119	88.0	76.7	115.1
121	30.8	25.5	38.3

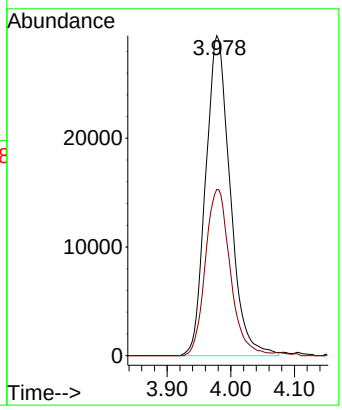




#31
Isopropyl Ether
Concen: 1.840 ug/l
RT: 3.978 min Scan# 8
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 45 Resp: 7853

Ion	Ratio	Lower	Upper
45	100		
43	53.1	25.7	77.1



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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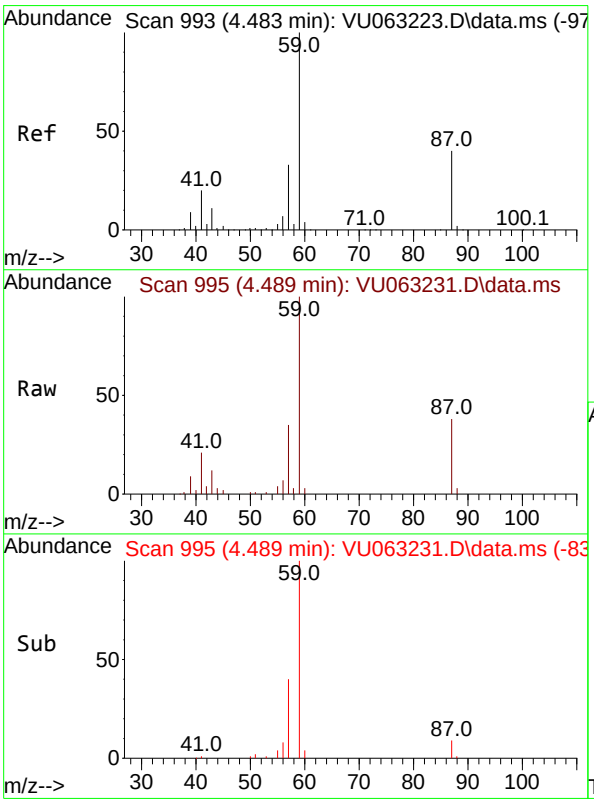
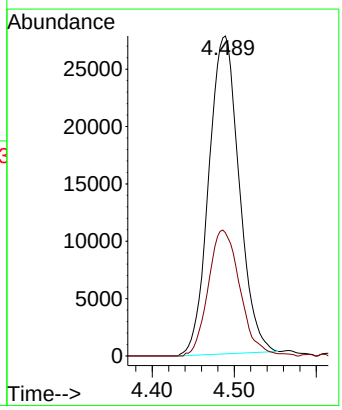
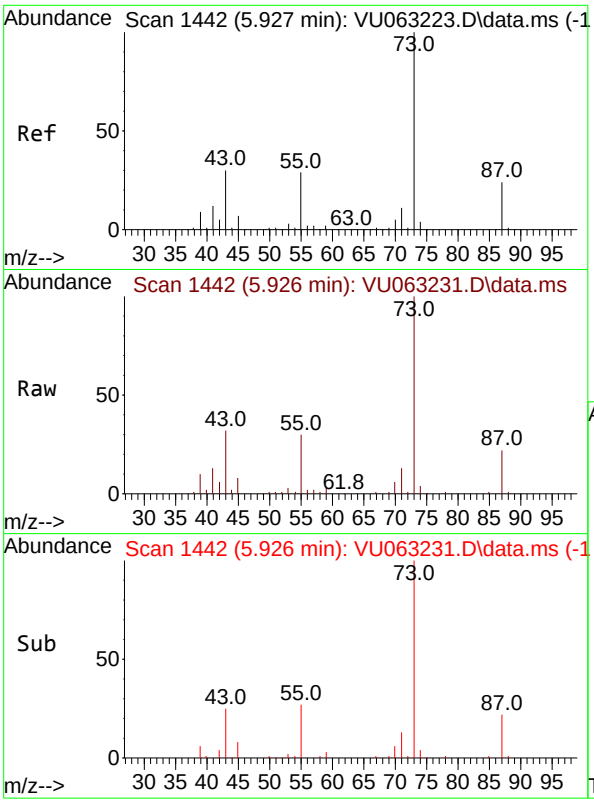


#32
Ethyl-t-butyl ether
Concen: 1.836 ug/l
RT: 4.489 min Scan# 995
Delta R.T. 0.006 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 59 Resp: 71285

Ion	Ratio	Lower	Upper
59	100		
87	41.5	32.6	49.0





#33
Tert-Amyl methyl ether
Concen: 1.892 ug/l
RT: 5.926 min Scan# 14
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 73 Resp: 6417

Ion	Ratio	Lower	Upper
73	100		
87	22.9	18.9	28.3
71	11.7	9.0	13.4

Instrument :
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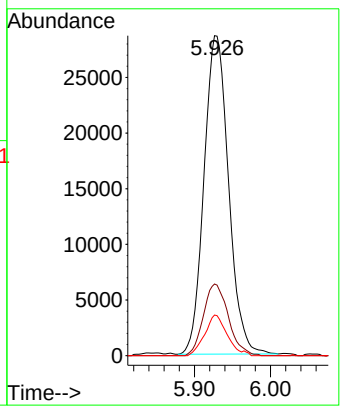
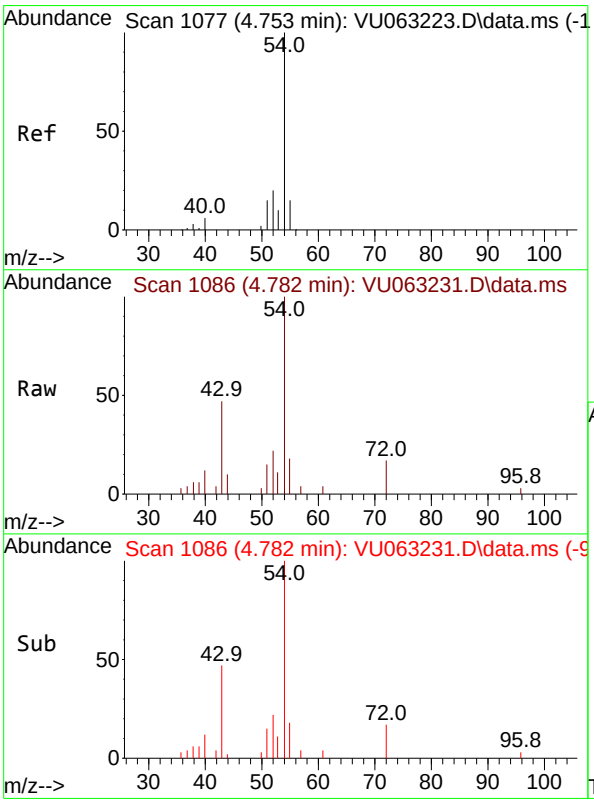
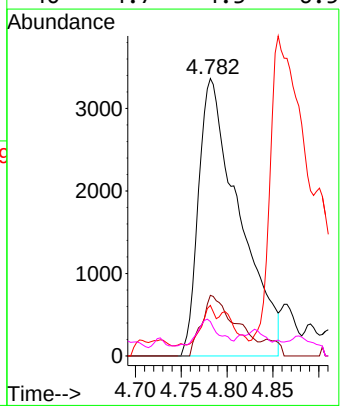


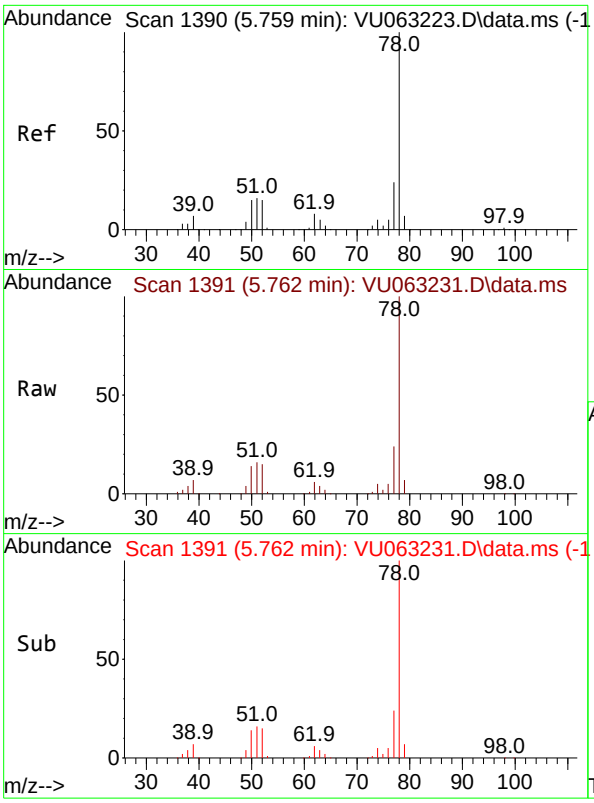


#34
Propionitrile
Concen: 8.743 ug/l
RT: 4.782 min Scan# 1086
Delta R.T. 0.029 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 54 Resp: 10345

Ion	Ratio	Lower	Upper
54	100		
52	18.5	16.3	24.5
55	4.6	11.8	17.6#
40	4.7	4.3	6.5





#35
Benzene
Concen: 1.895 ug/l
RT: 5.762 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 78 Resp: 12753

Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.0	28.4

Instrument :
MSVOA_U
ClientSampleId :
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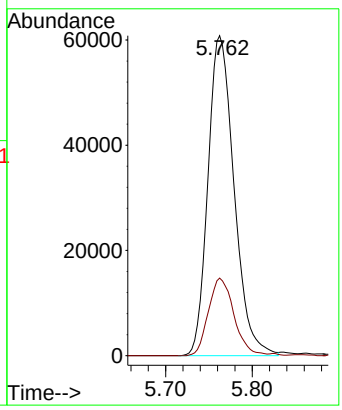
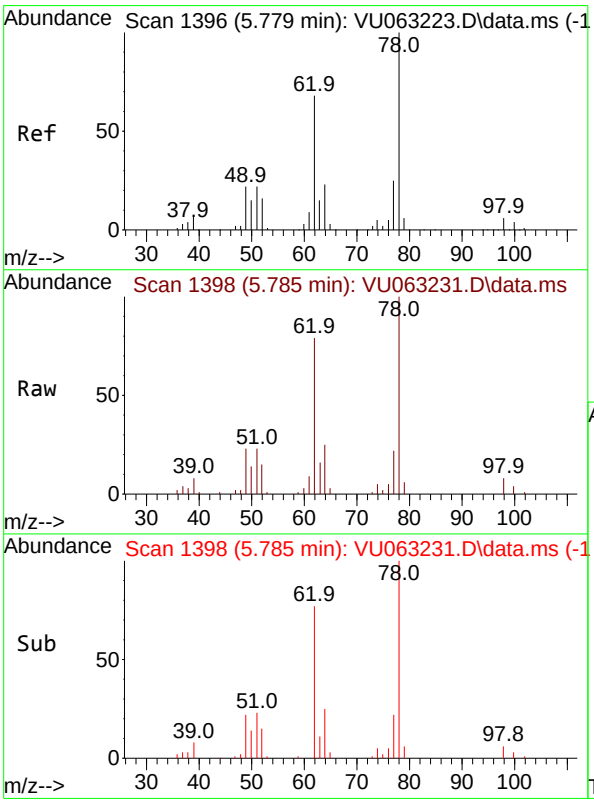
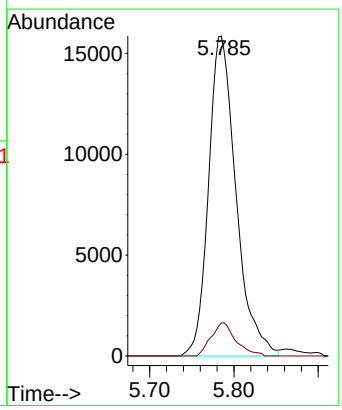


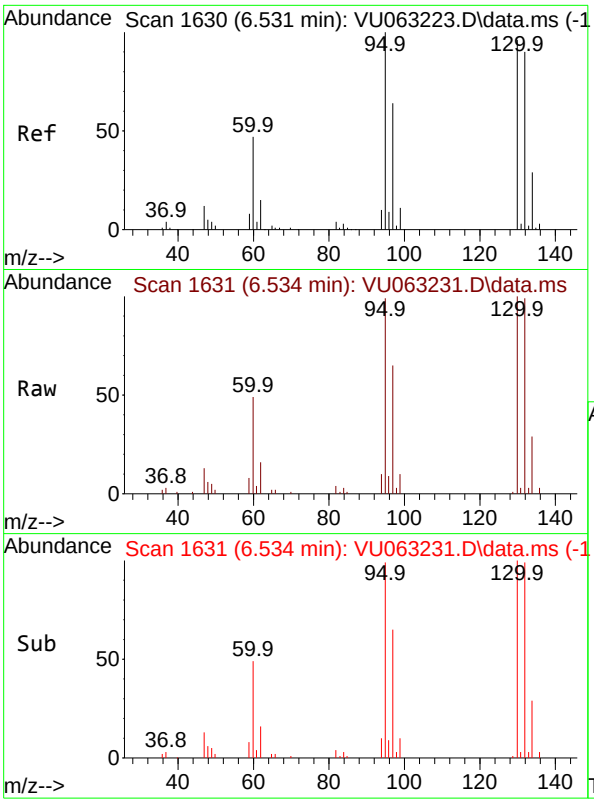


#36
1,2-Dichloroethane
Concen: 1.847 ug/l
RT: 5.785 min Scan# 1398
Delta R.T. 0.006 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 62 Resp: 35880

Ion	Ratio	Lower	Upper
62	100		
98	9.3	6.9	10.3

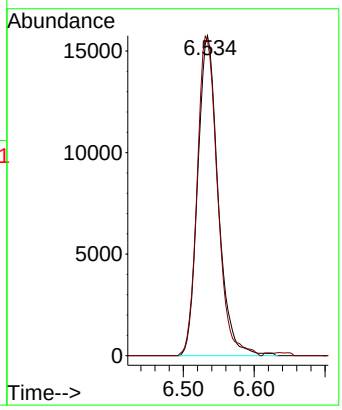




#37
Trichloroethene
Concen: 1.965 ug/l
RT: 6.534 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:130 Resp: 3145

Ion	Ratio	Lower	Upper
130	100		
95	98.5	83.2	124.8



Instrument :
MSVOA_U
ClientSampleId :
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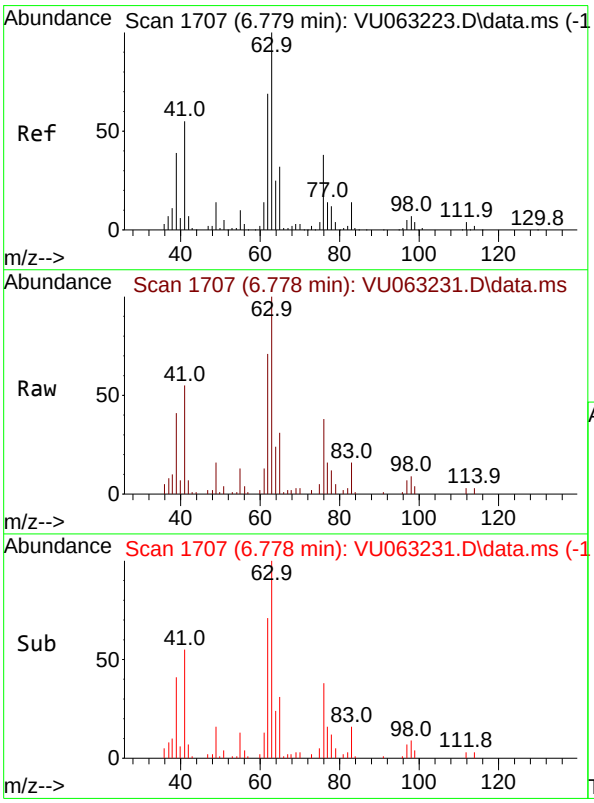
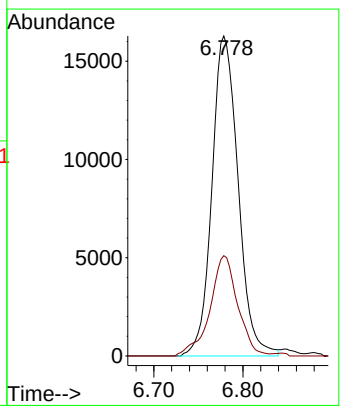
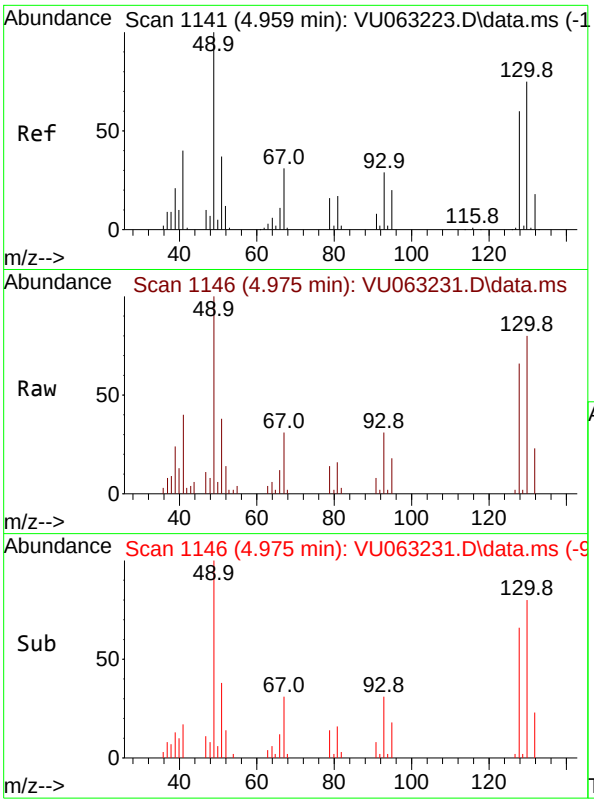


#38
1,2-Dichloropropane
Concen: 1.892 ug/l
RT: 6.778 min Scan# 1707
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 63 Resp: 33332

Ion	Ratio	Lower	Upper
63	100		
65	30.7	25.3	37.9

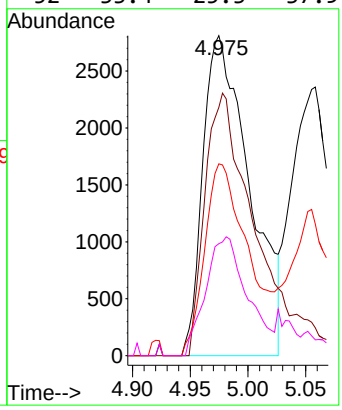




#39
Methacrylonitrile
Concen: 1.788 ug/l
RT: 4.975 min Scan# 1
Delta R.T. 0.016 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 41 Resp: 788

Ion	Ratio	Lower	Upper
41	100		
67	89.5	64.5	96.7
39	56.4	43.0	64.6
52	33.4	25.3	37.9



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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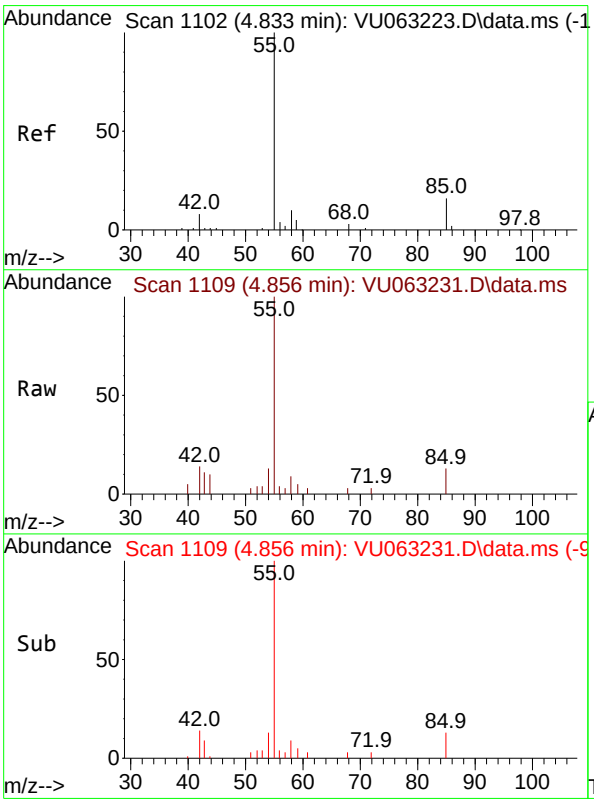
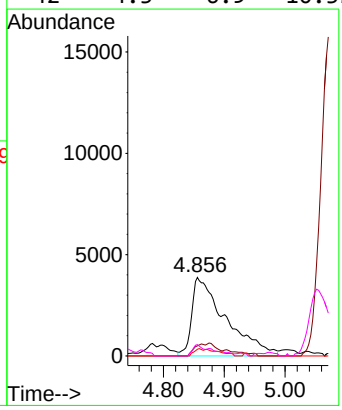
Supervised By :Mahesh Dadoda 02/12/2025

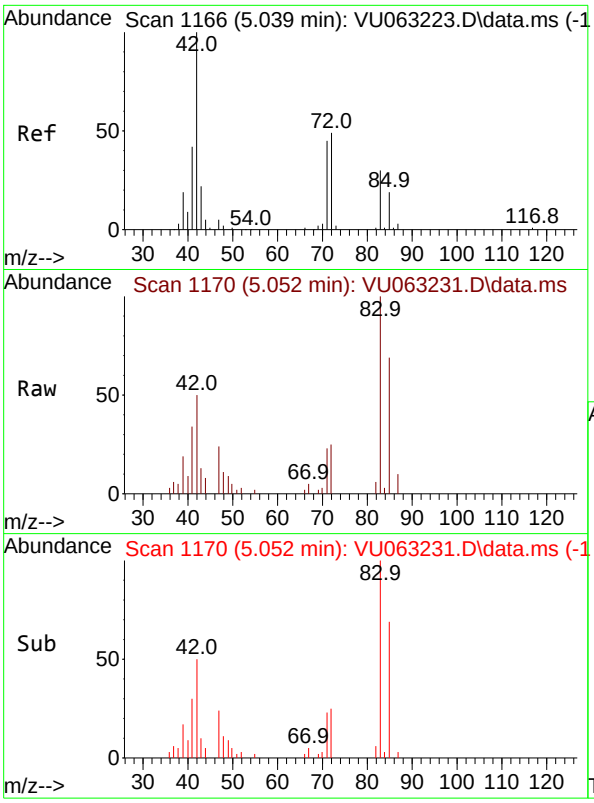


#40
Methyl acrylate
Concen: 1.846 ug/l m
RT: 4.856 min Scan# 1109
Delta R.T. 0.022 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 55 Resp: 14998

Ion	Ratio	Lower	Upper
55	100		
85	0.0	13.3	19.9#
58	2.4	7.3	10.9#
42	4.3	6.9	10.3#

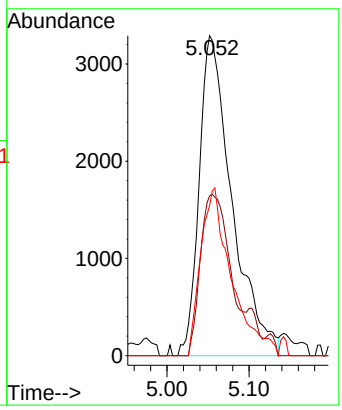




#41
Tetrahydrofuran
Concen: 3.568 ug/l
RT: 5.052 min Scan# 11
Delta R.T. 0.013 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 42 Resp: 9149

Ion	Ratio	Lower	Upper
42	100		
72	45.9	41.5	62.3
71	49.2	37.2	55.8



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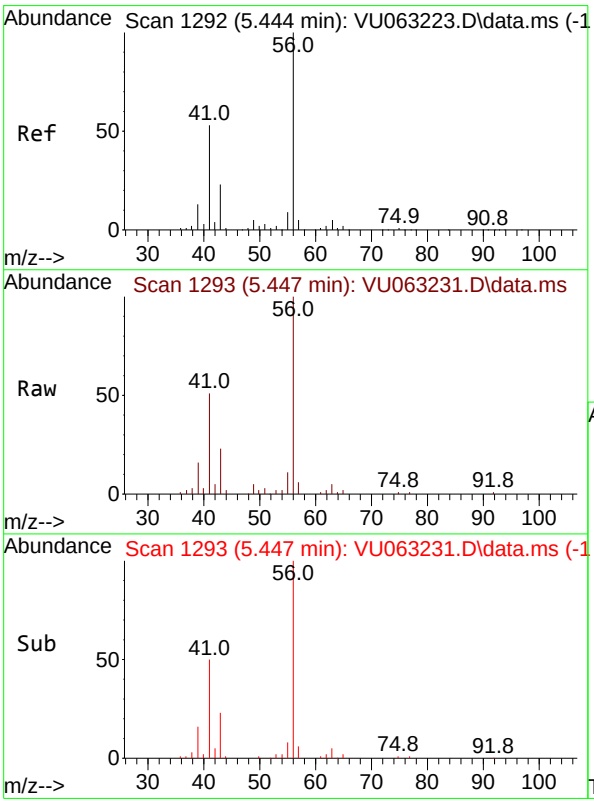
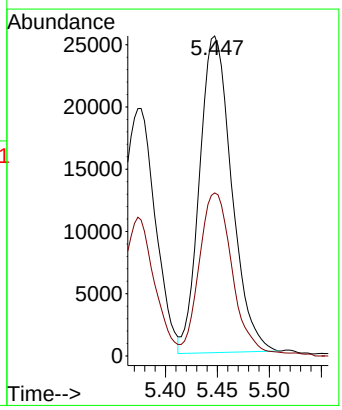
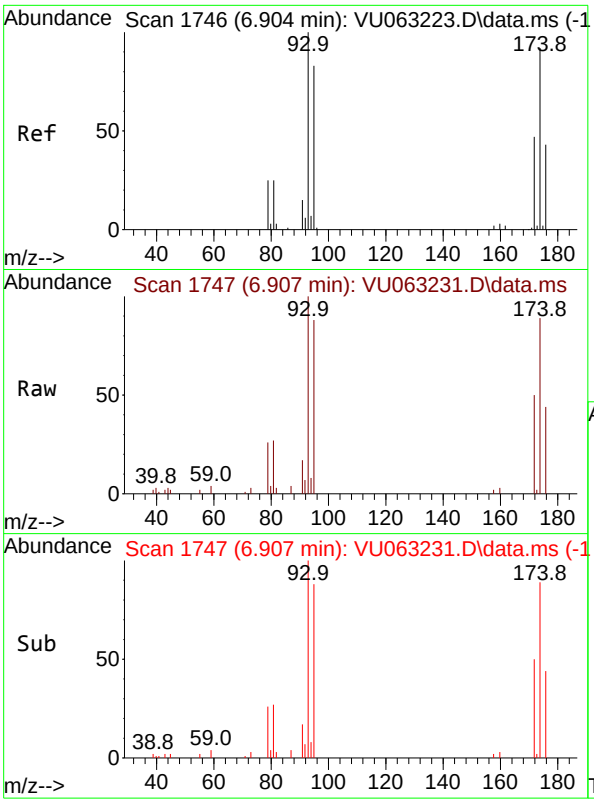


#42
1-Chlorobutane
Concen: 1.826 ug/l
RT: 5.447 min Scan# 1293
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 56 Resp: 54703

Ion	Ratio	Lower	Upper
56	100		
41	53.7	26.3	78.8

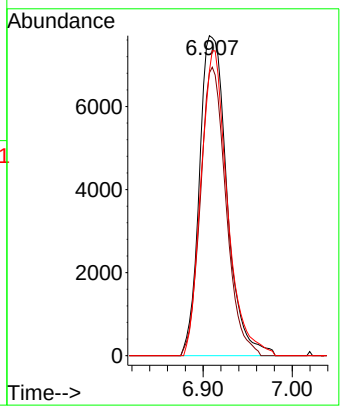




#43
Dibromomethane
Concen: 1.851 ug/l
RT: 6.907 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 93 Resp: 1651

Ion	Ratio	Lower	Upper
93	100		
95	83.8	67.2	100.8
174	91.7	75.7	113.5



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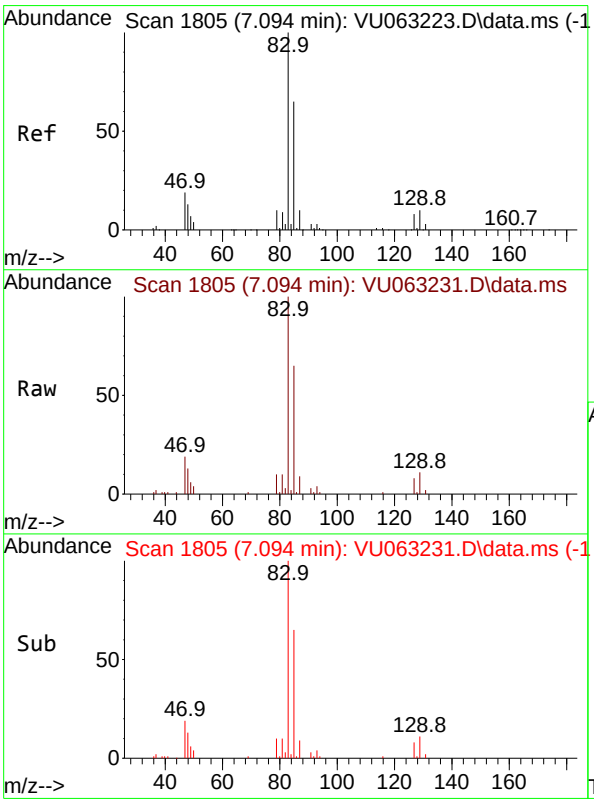
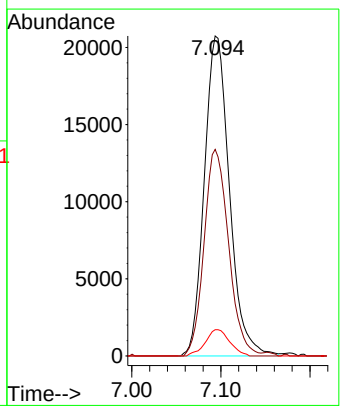
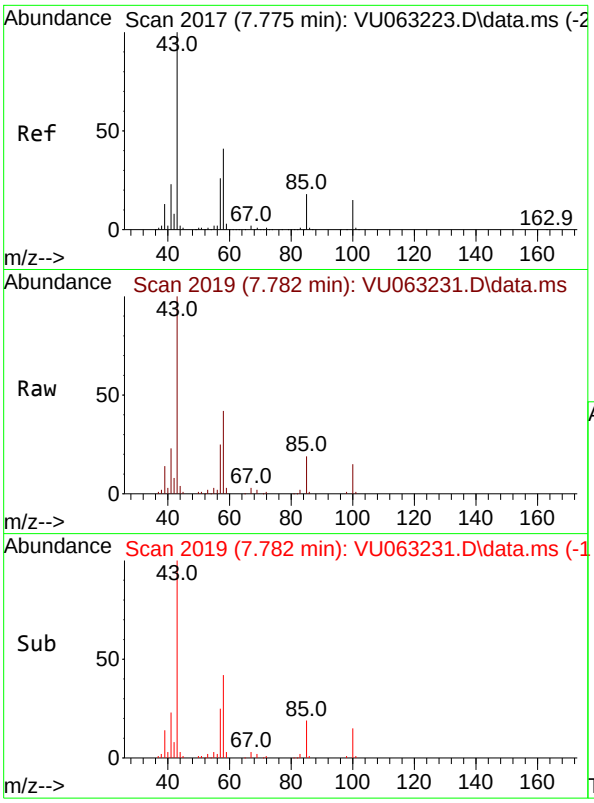


#44
Bromodichloromethane
Concen: 1.953 ug/l
RT: 7.094 min Scan# 1805
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 83 Resp: 40544

Ion	Ratio	Lower	Upper
83	100		
85	64.6	51.7	77.5
127	8.2	6.7	10.1

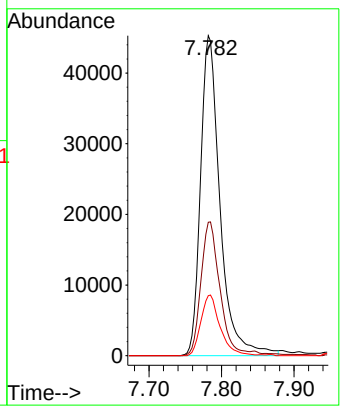




#45
4-Methyl-2-Pentanone
Concen: 9.059 ug/l
RT: 7.782 min Scan# 2
Delta R.T. 0.006 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 43 Resp: 8472

Ion	Ratio	Lower	Upper
43	100		
58	40.4	20.8	62.5
85	18.6	14.8	22.2



Instrument :
MSVOA_U
ClientSampleId :
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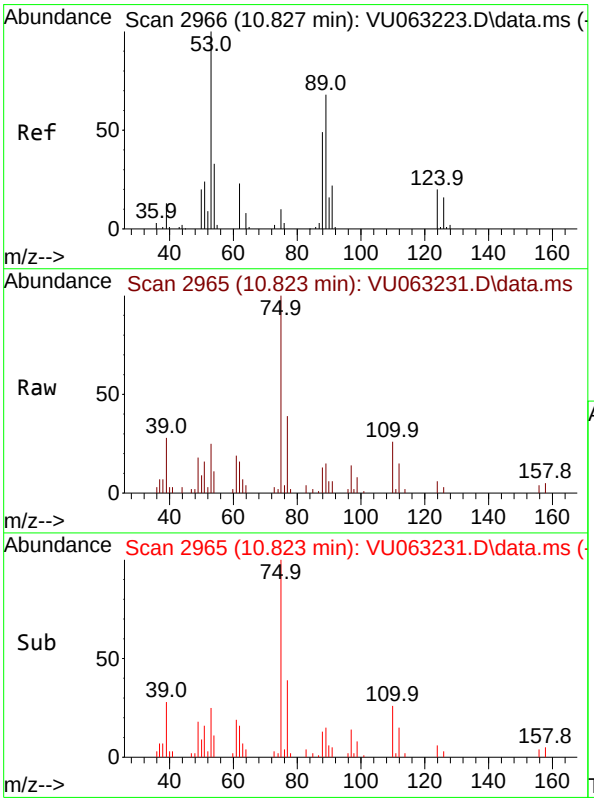
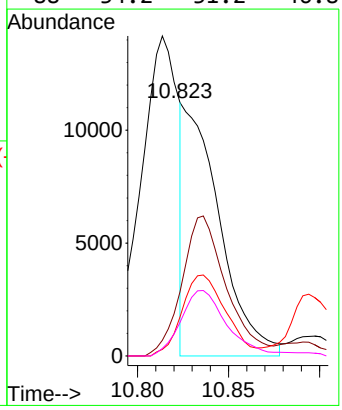
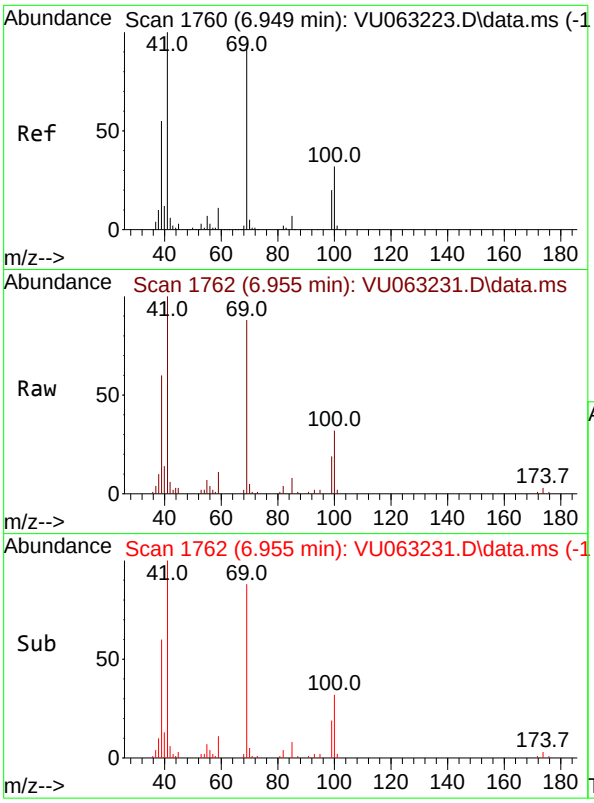


#46
t-1,4-Dichloro-2-butene
Concen: 3.490 ug/l m
RT: 10.823 min Scan# 2965
Delta R.T. -0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 75 Resp: 15342

Ion	Ratio	Lower	Upper
75	100		
53	68.6	64.5	96.7
89	39.0	43.4	65.2#
88	34.2	31.2	46.8

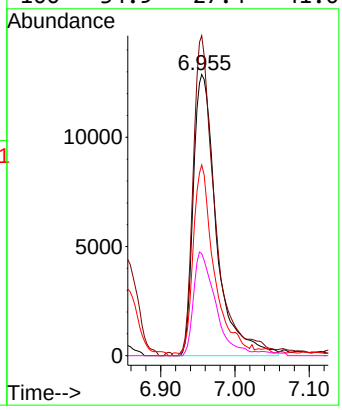




#47
Methyl methacrylate
Concen: 3.714 ug/l
RT: 6.955 min Scan# 1
Delta R.T. 0.006 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 69 Resp: 2790

Ion	Ratio	Lower	Upper
69	100		
41	108.3	0.0	217.0
39	61.9	47.7	71.5
100	34.9	27.4	41.0



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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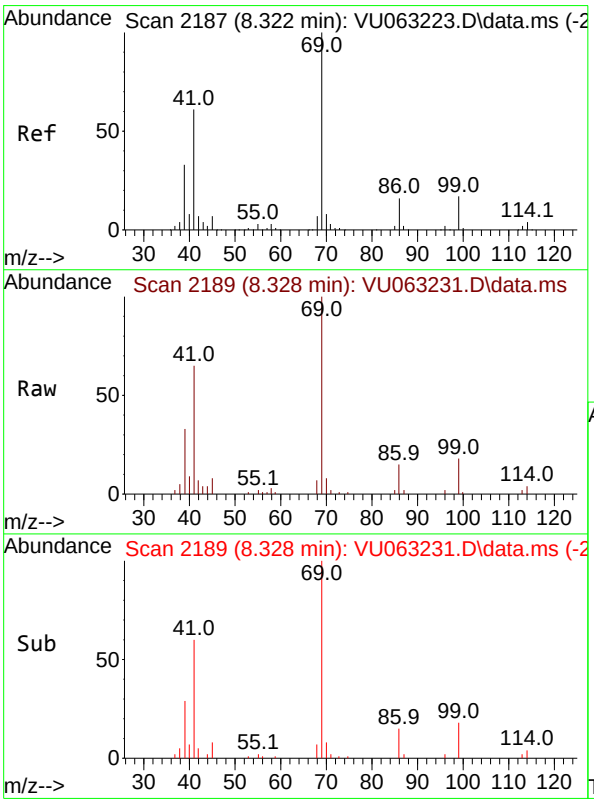
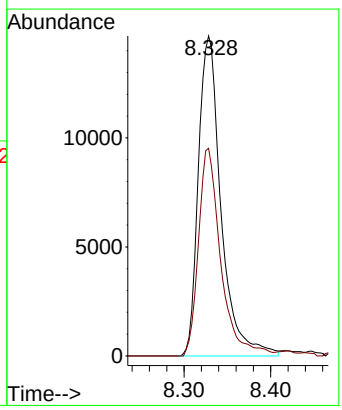
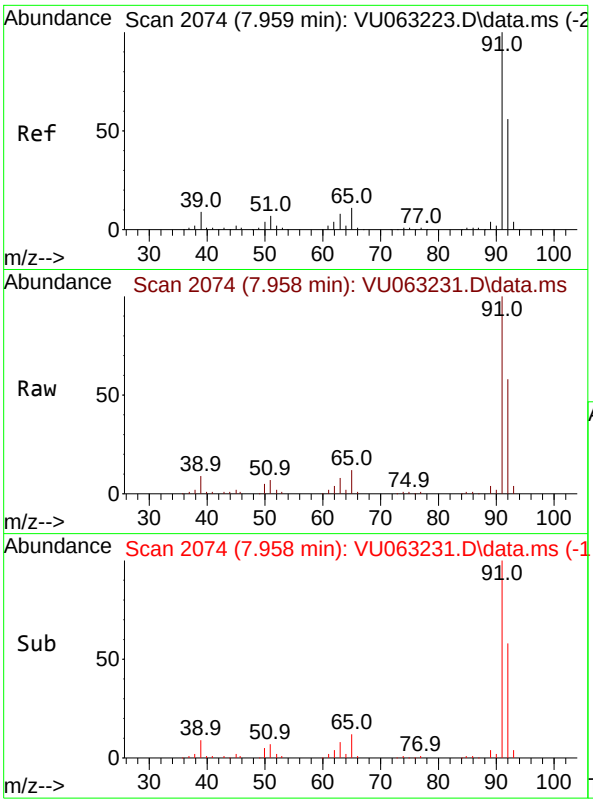


#48
Ethyl methacrylate
Concen: 1.890 ug/l
RT: 8.328 min Scan# 2189
Delta R.T. 0.006 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 69 Resp: 26666

Ion	Ratio	Lower	Upper
69	100		
41	63.7	30.6	92.0

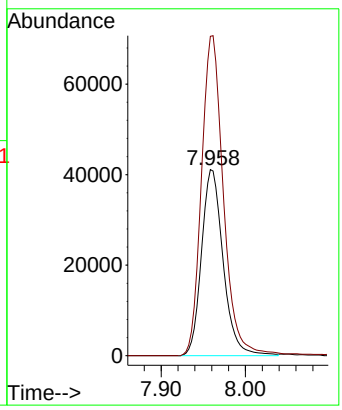




#49
Toluene
Concen: 1.903 ug/l
RT: 7.958 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 92 Resp: 7366

Ion	Ratio	Lower	Upper
92	100		
91	174.3	141.8	212.6



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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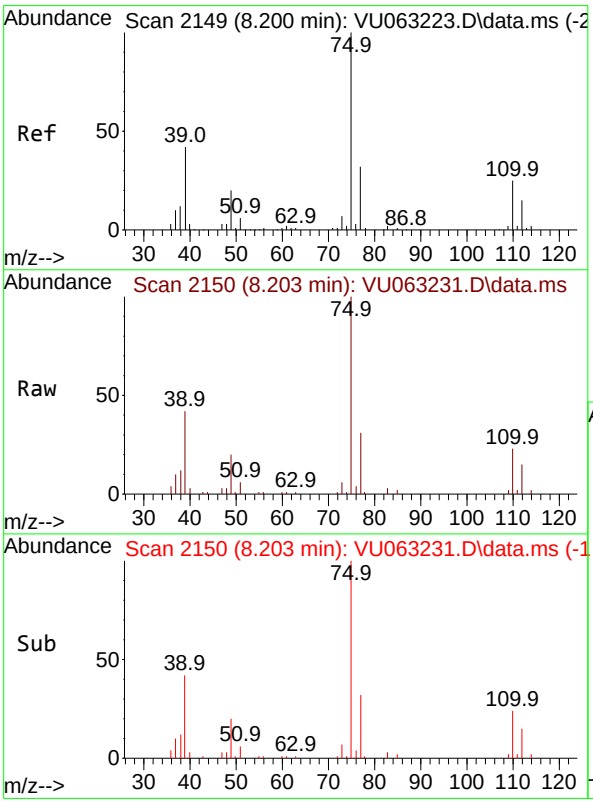
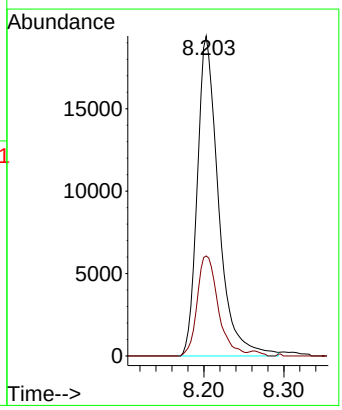
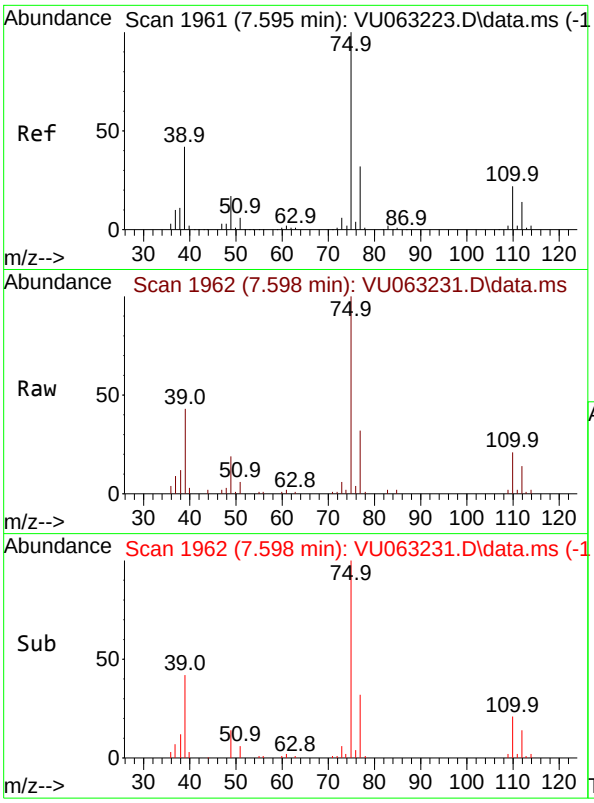


#50
t-1,3-Dichloropropene
Concen: 1.888 ug/l
RT: 8.203 min Scan# 2150
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 75 Resp: 35883

Ion	Ratio	Lower	Upper
75	100		
77	31.2	25.9	38.9

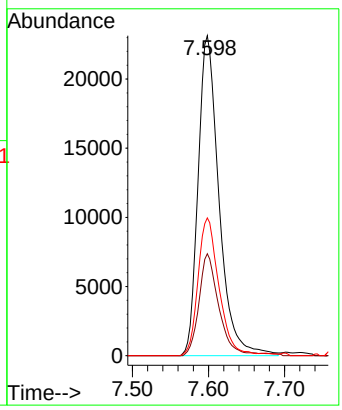




#51
cis-1,3-Dichloropropene
Concen: 1.884 ug/l
RT: 7.598 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 75 Resp: 4422

Ion	Ratio	Lower	Upper
75	100		
77	31.9	25.3	37.9
39	43.1	33.5	50.3



Instrument :
MSVOA_U
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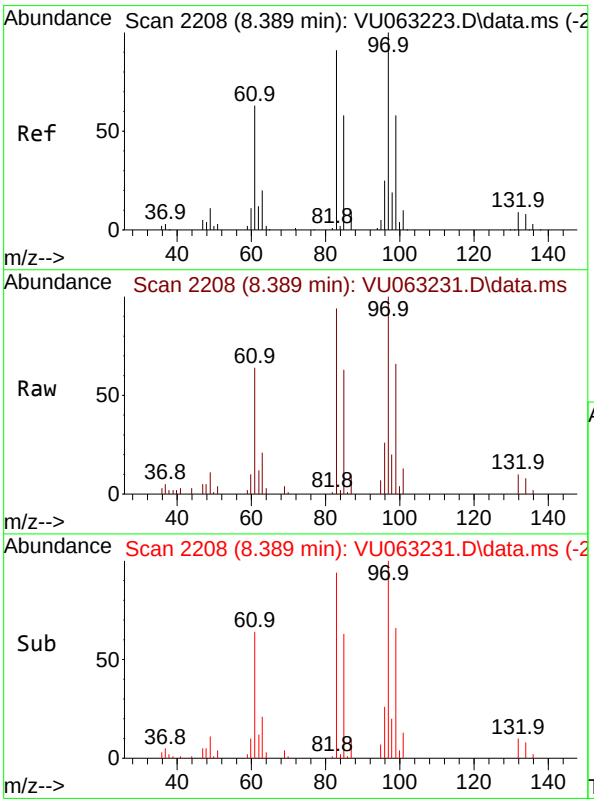
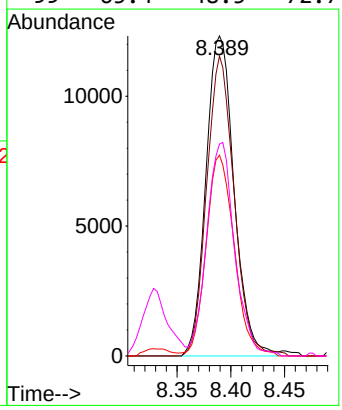
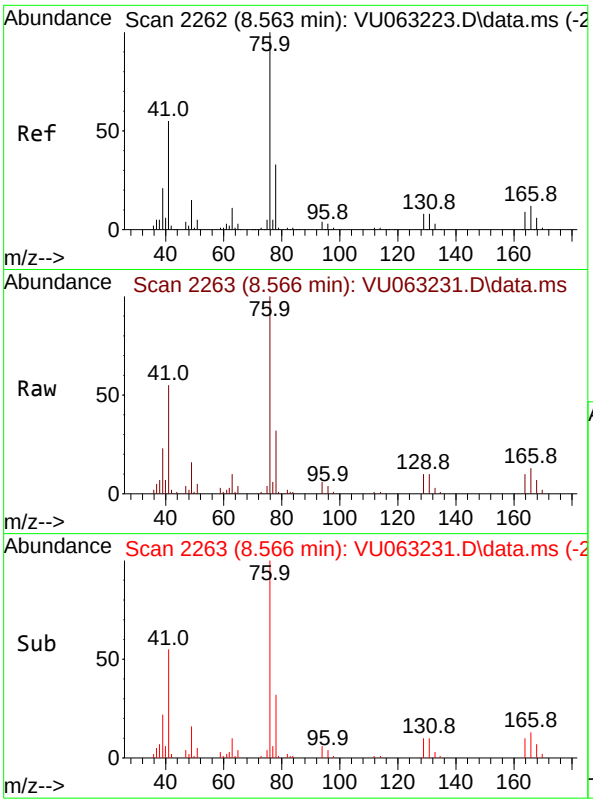


#52
1,1,2-Trichloroethane
Concen: 1.869 ug/l
RT: 8.389 min Scan# 2208
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 97 Resp: 22475

Ion	Ratio	Lower	Upper
97	100		
83	93.8	73.0	109.4
85	62.8	46.3	69.5
99	65.4	48.5	72.7

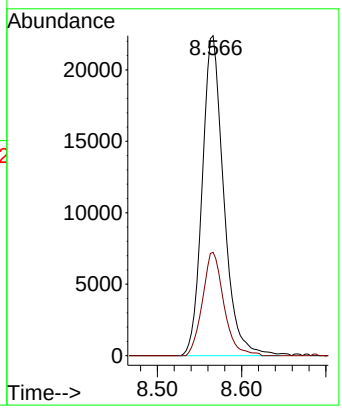




#53
1,3-Dichloropropane
Concen: 1.862 ug/l
RT: 8.566 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 76 Resp: 3976

Ion	Ratio	Lower	Upper
76	100		
78	32.1	26.3	39.5



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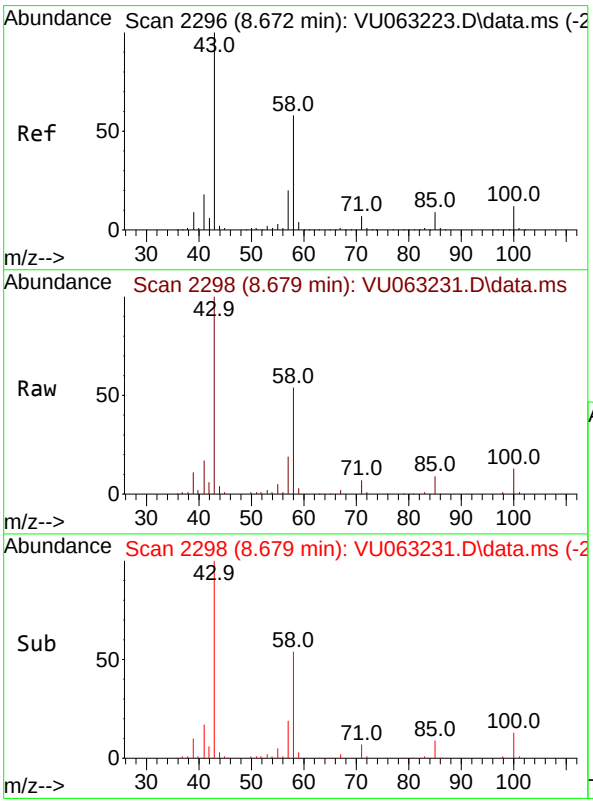
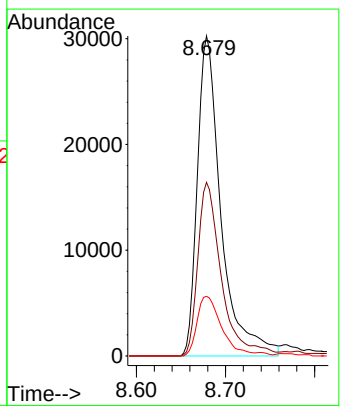
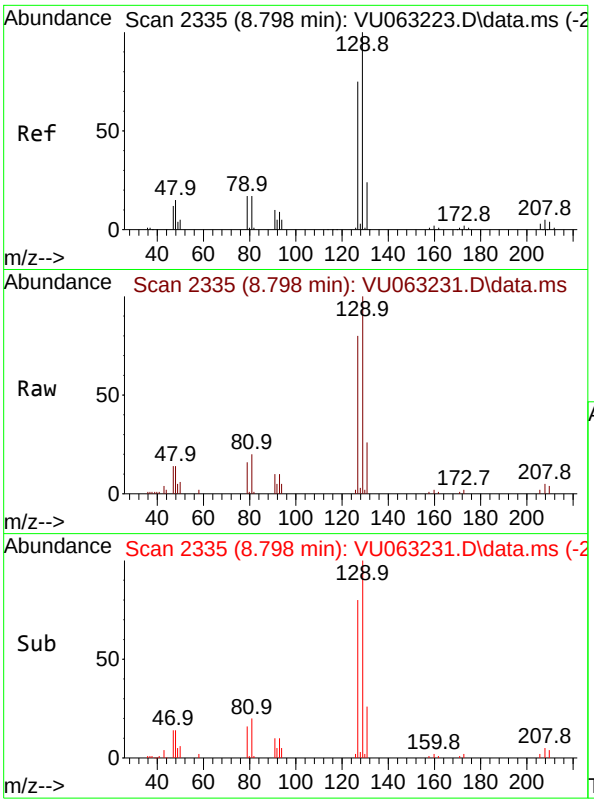


#54
2-Hexanone
Concen: 8.755 ug/l
RT: 8.679 min Scan# 2298
Delta R.T. 0.006 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 43 Resp: 55875

Ion	Ratio	Lower	Upper
43	100		
58	53.9	38.0	78.0
57	19.2	0.0	39.1

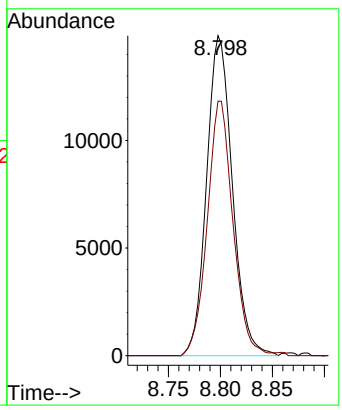




#55
Dibromochloromethane
Concen: 1.856 ug/l
RT: 8.798 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:129 Resp: 2568

Ion	Ratio	Lower	Upper
129	100		
127	79.0	60.4	90.6



Instrument :
MSVOA_U
ClientSampleId :
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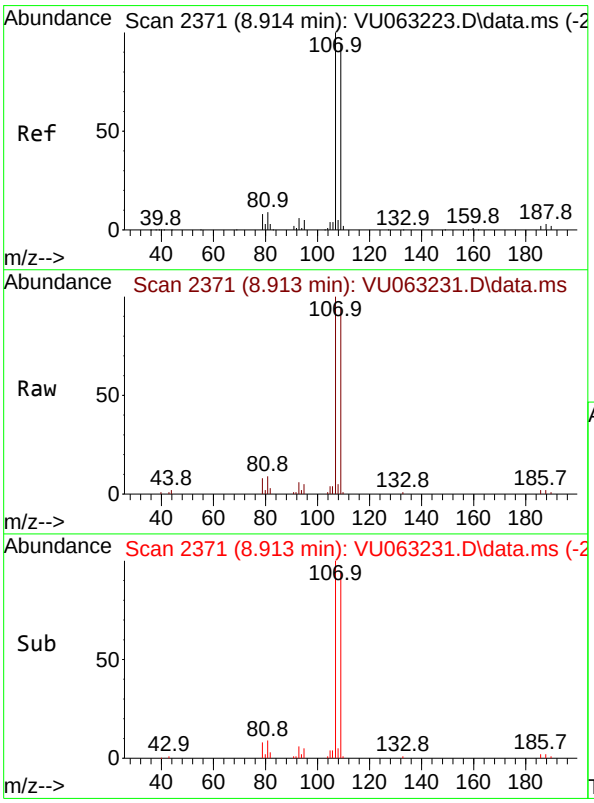
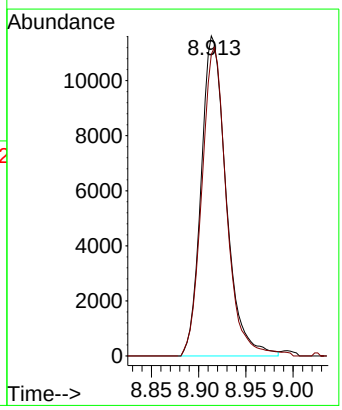
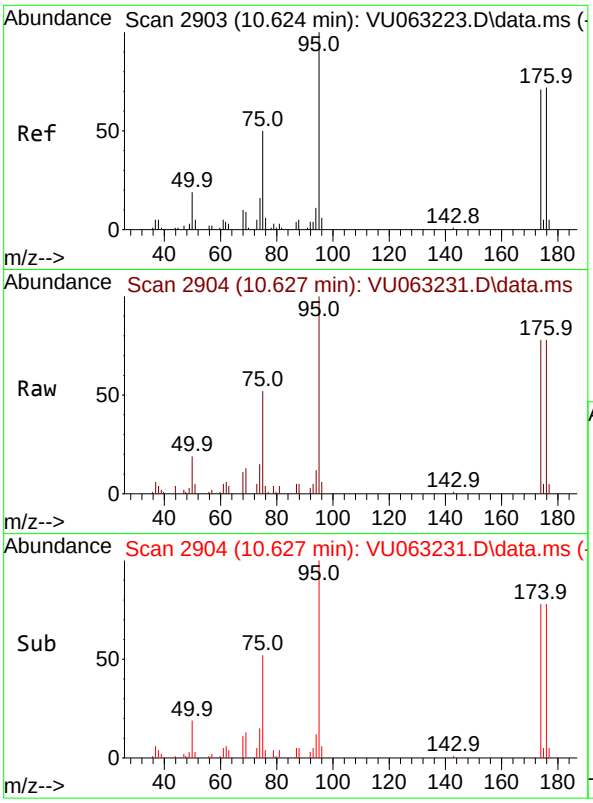


#56
1,2-Dibromoethane
Concen: 1.899 ug/l
RT: 8.913 min Scan# 2371
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:107 Resp: 21428

Ion	Ratio	Lower	Upper
107	100		
109	95.1	0.0	187.8

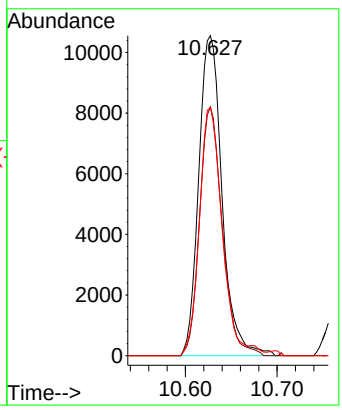




#57
4-Bromofluorobenzene
Concen: 1.033 ug/l
RT: 10.627 min Scan# 2
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 95 Resp: 1866

Ion	Ratio	Lower	Upper
95	100		
174	75.4	58.6	88.0
176	75.8	58.2	87.4



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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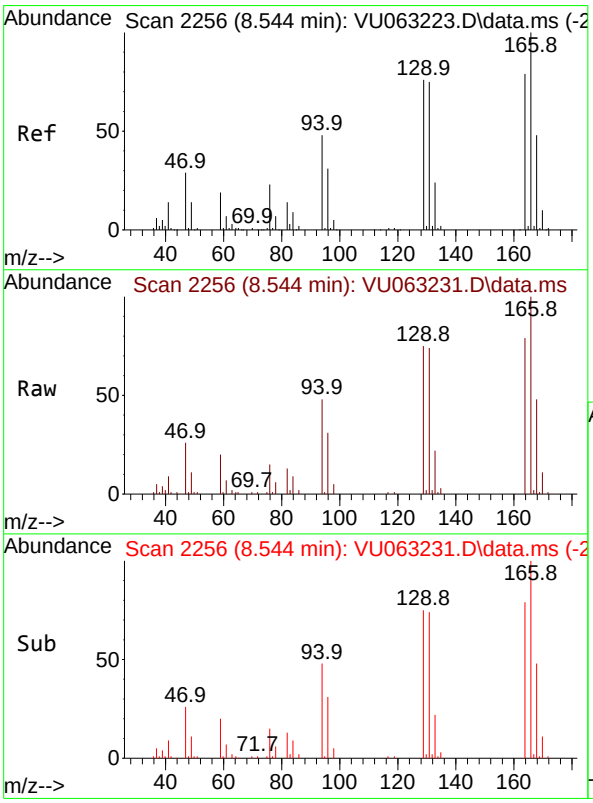
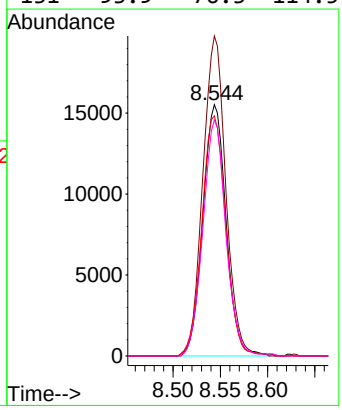
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

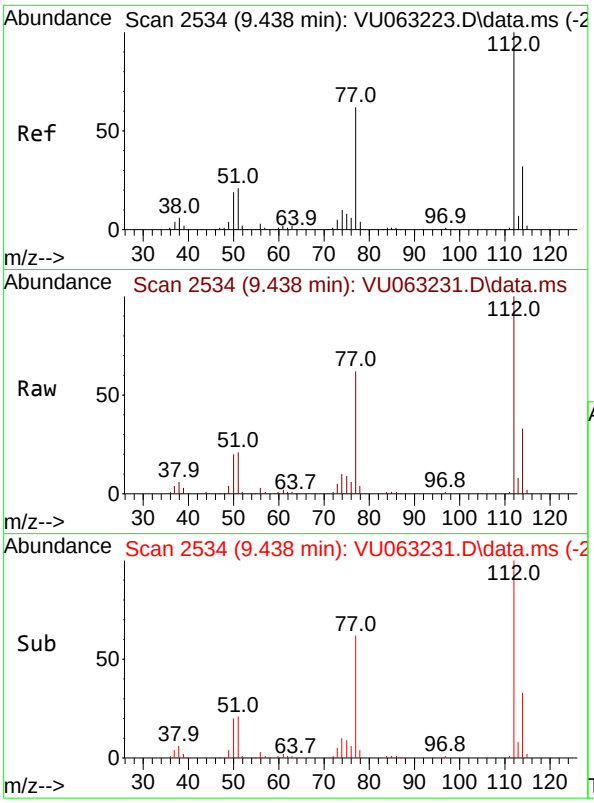


#58
Tetrachloroethene
Concen: 2.007 ug/l
RT: 8.544 min Scan# 2256
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:164 Resp: 26480

Ion	Ratio	Lower	Upper
164	100		
166	127.3	101.4	152.0
129	95.6	77.0	115.4
131	93.9	76.3	114.5

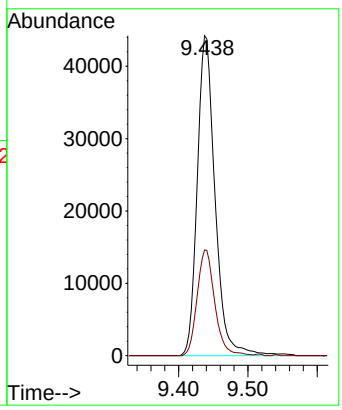




#59
Chlorobenzene
Concen: 1.929 ug/l
RT: 9.438 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:112 Resp: 7880

Ion	Ratio	Lower	Upper
112	100		
114	33.1	25.7	38.5



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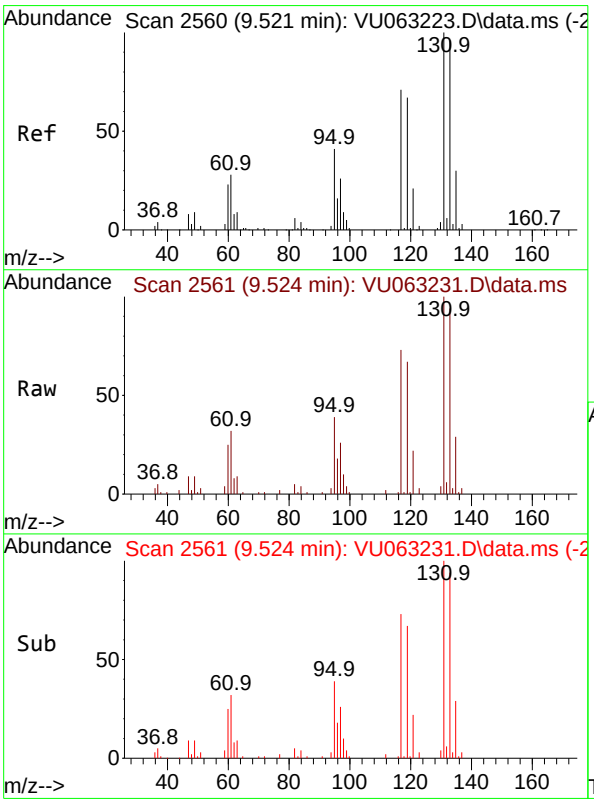
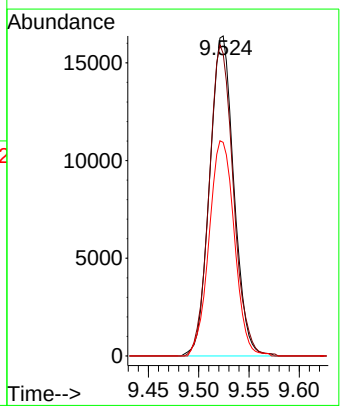
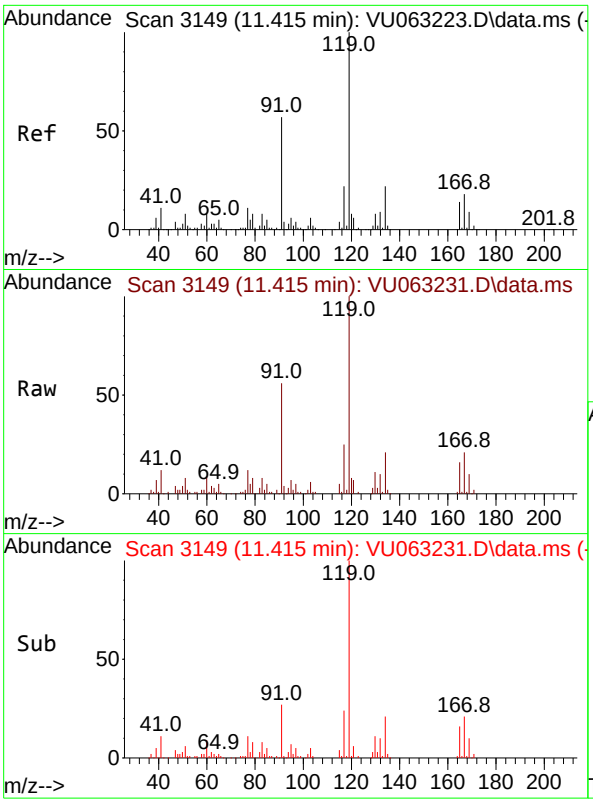


#60
1,1,1,2-Tetrachloroethane
Concen: 1.867 ug/l
RT: 9.524 min Scan# 2561
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:131 Resp: 27412

Ion	Ratio	Lower	Upper
131	100		
133	97.4	76.7	115.1
119	70.2	54.4	81.6

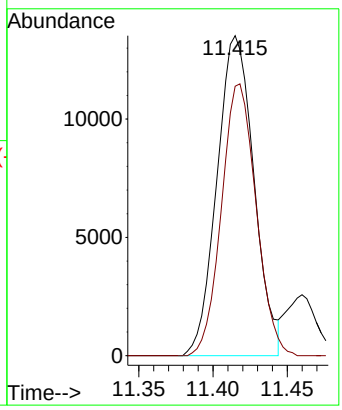




#61
Pentachloroethane
Concen: 1.788 ug/l
RT: 11.415 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:117 Resp: 2345

Ion	Ratio	Lower	Upper
117	100		
167	79.4	65.0	97.6



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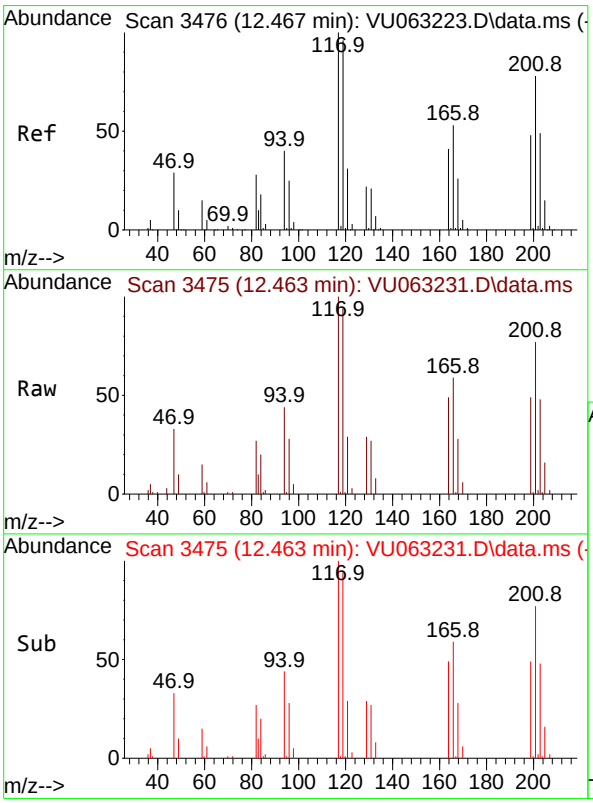
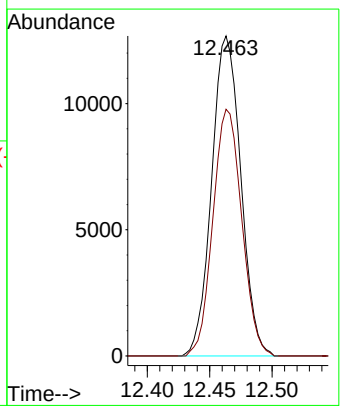
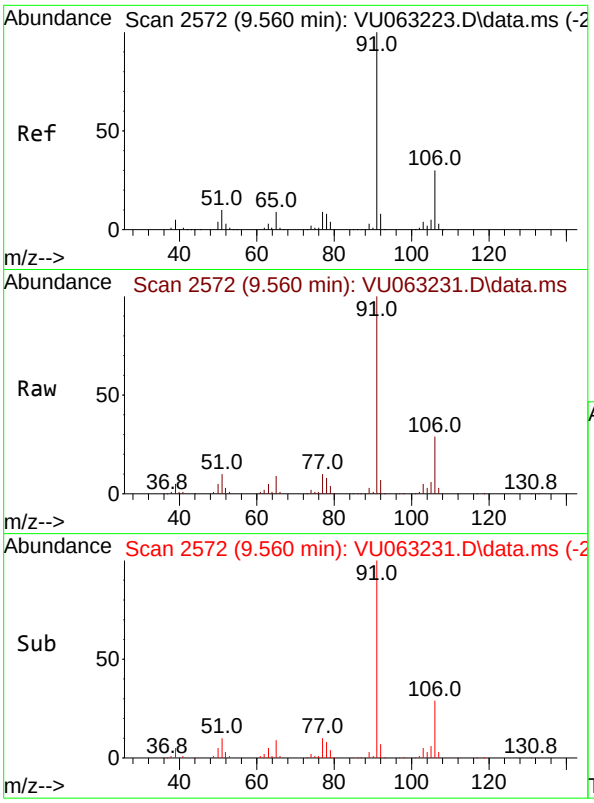


#62
Hexachloroethane
Concen: 1.779 ug/l
RT: 12.463 min Scan# 3475
Delta R.T. -0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:117 Resp: 20644

Ion	Ratio	Lower	Upper
117	100		
201	76.3	61.3	91.9





#63
Ethyl Benzene
Concen: 1.843 ug/l
RT: 9.560 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 91 Resp: 12986

Ion	Ratio	Lower	Upper
91	100		
106	29.4	24.2	36.2

Instrument :
MSVOA_U
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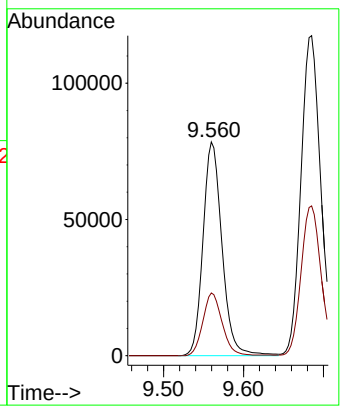
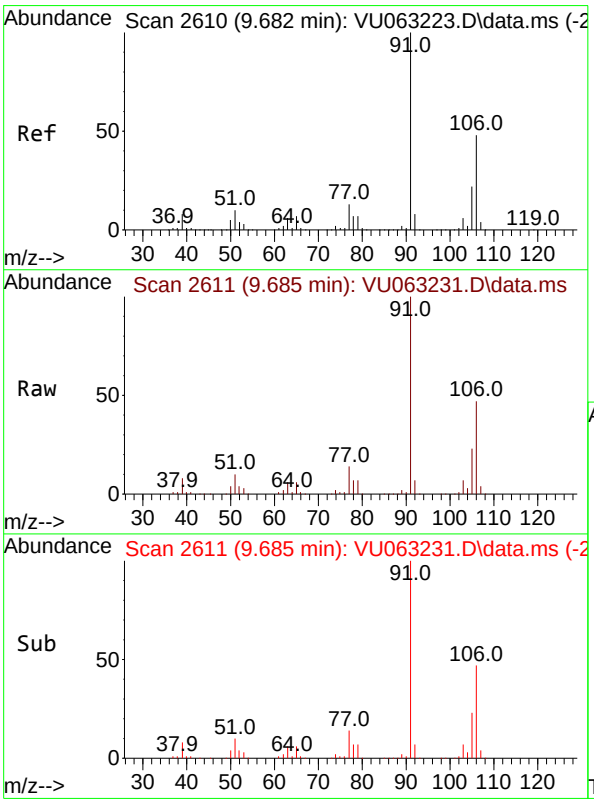
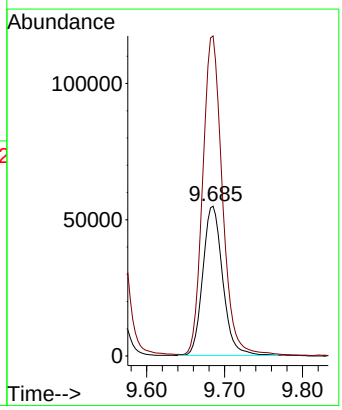


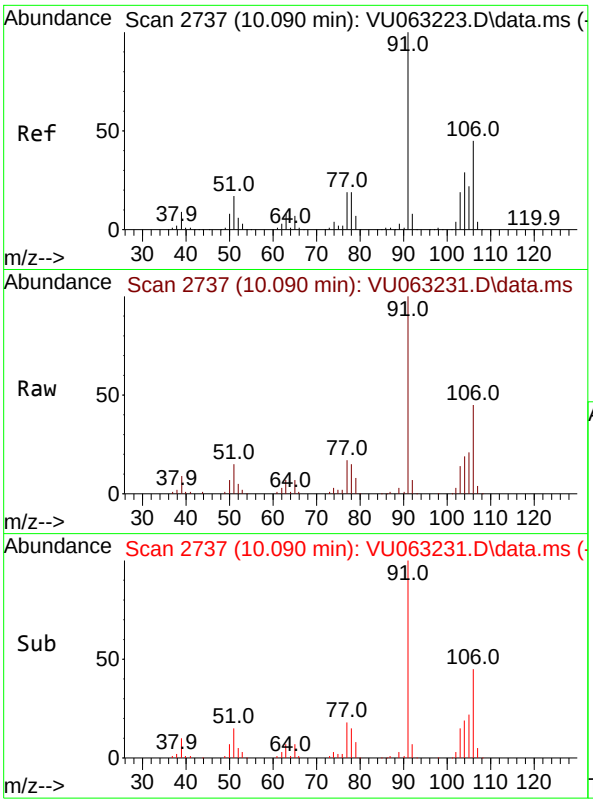


#64
m/p-Xylenes
Concen: 3.689 ug/l
RT: 9.685 min Scan# 2611
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:106 Resp: 97083

Ion	Ratio	Lower	Upper
106	100		
91	213.1	166.9	250.3

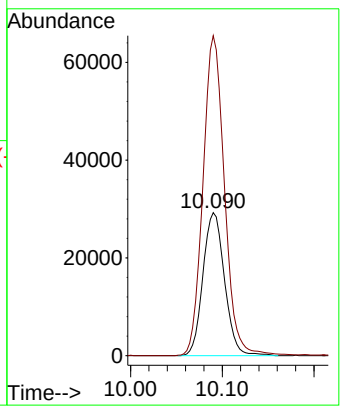




#65
o-Xylene
Concen: 1.859 ug/l
RT: 10.090 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:106 Resp: 4789

Ion	Ratio	Lower	Upper
106	100		
91	223.0	110.9	332.9



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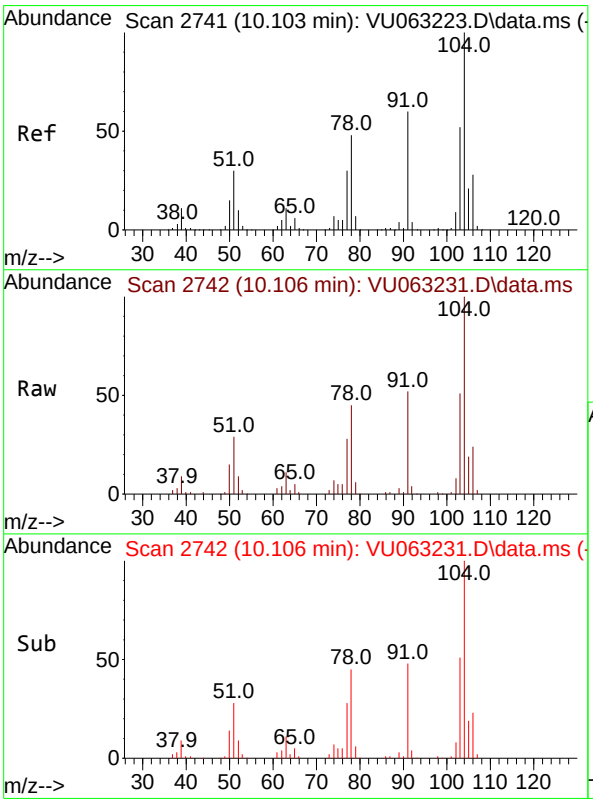
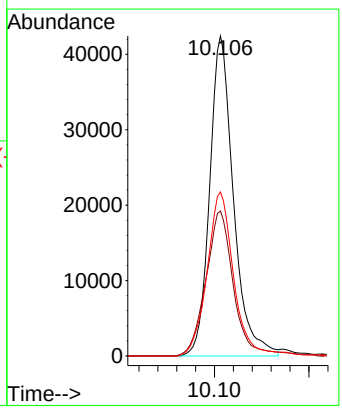
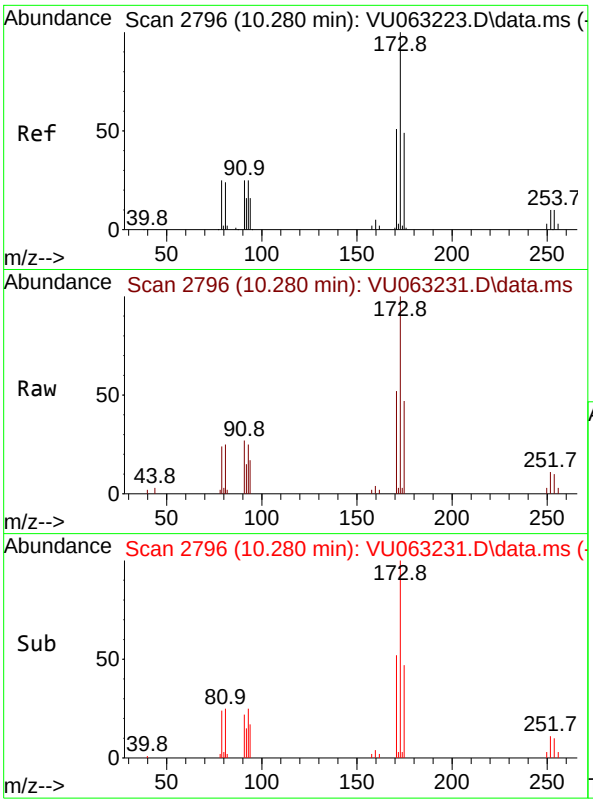


#66
Styrene
Concen: 1.809 ug/l
RT: 10.106 min Scan# 2742
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:104 Resp: 74164

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.2	61.8
103	57.3	44.8	67.2





#67
Bromoform
Concen: 1.829 ug/l
RT: 10.280 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

Tgt Ion:173 Resp: 1436

Ion	Ratio	Lower	Upper
173	100		
175	48.1	39.0	58.4
254	9.9	7.7	11.5

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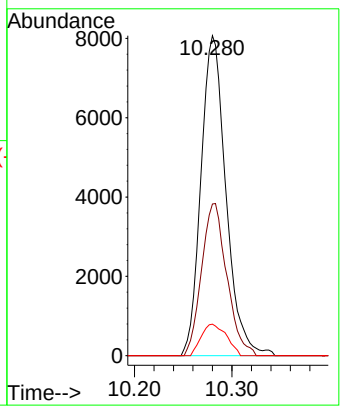
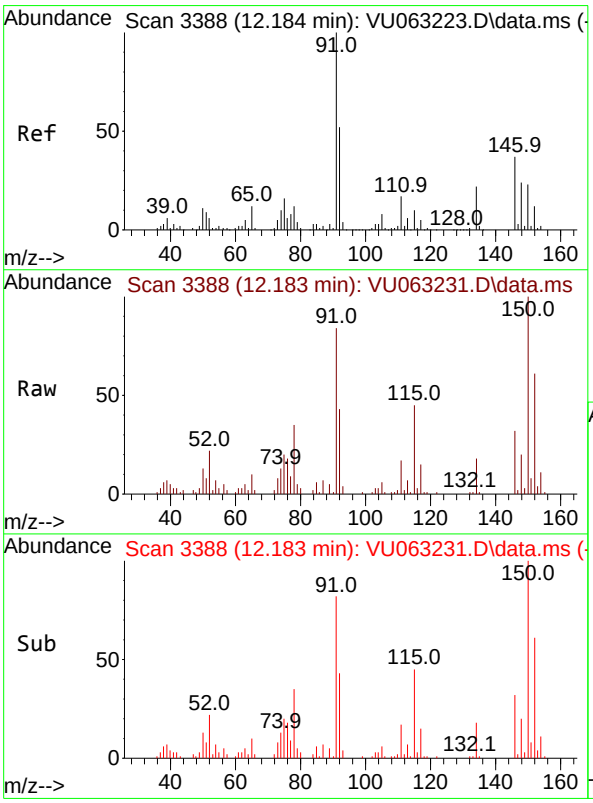
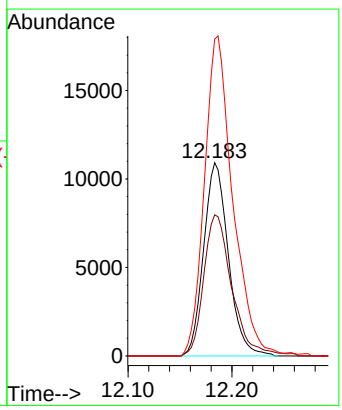


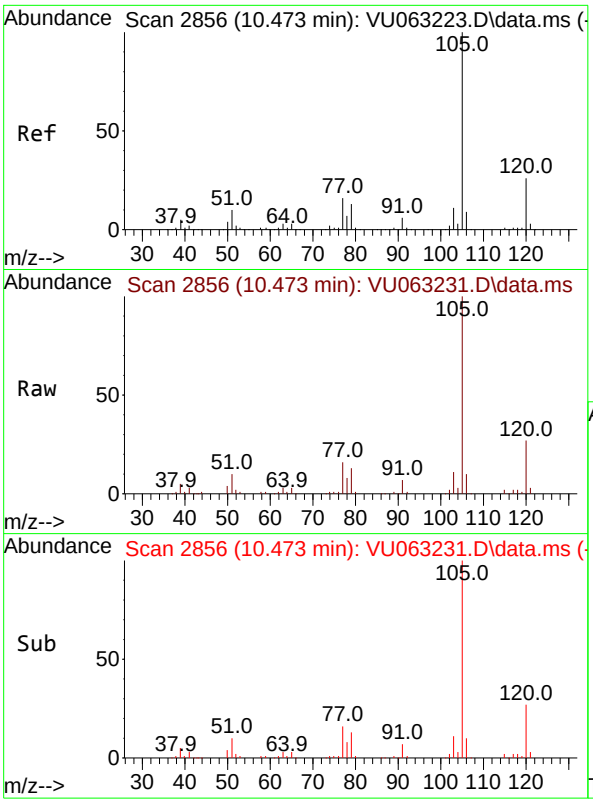


#68
1,2-Dichlorobenzene-d4
Concen: 0.961 ug/l
RT: 12.183 min Scan# 3388
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:152 Resp: 18049

Ion	Ratio	Lower	Upper
152	100		
115	82.5	0.0	275.2
150	190.2	0.0	658.4

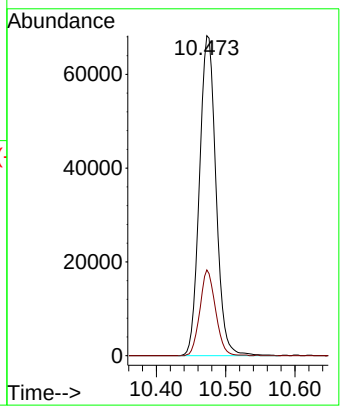




#69
Isopropylbenzene
Concen: 1.866 ug/l
RT: 10.473 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:105 Resp: 11303

Ion	Ratio	Lower	Upper
105	100		
120	25.3	12.8	38.4



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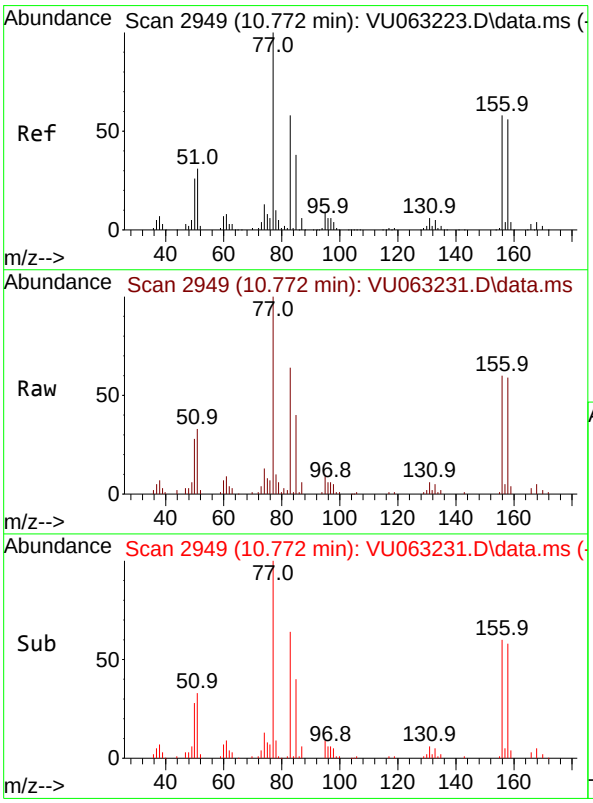
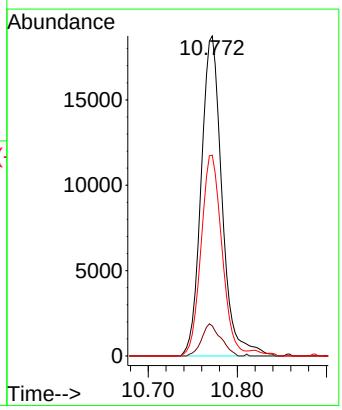
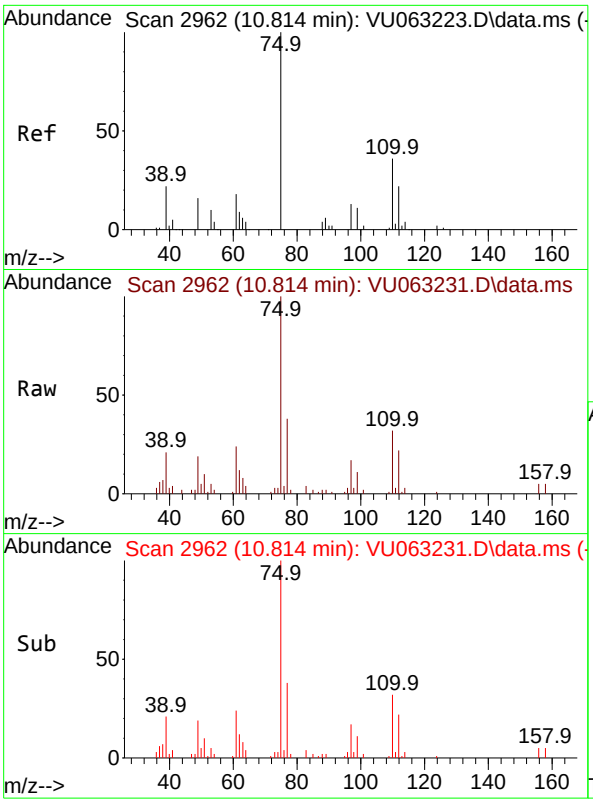


#70
1,1,2,2-Tetrachloroethane
Concen: 1.878 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 83 Resp: 30438

Ion	Ratio	Lower	Upper
83	100		
131	9.2	7.4	11.0
85	62.8	51.8	77.8

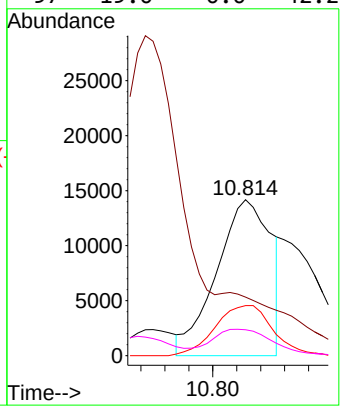




#71
1,2,3-Trichloropropane
Concen: 1.841 ug/l m
RT: 10.814 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 75 Resp: 2241

Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	34.0	0.0	77.0
97	19.0	0.0	42.2



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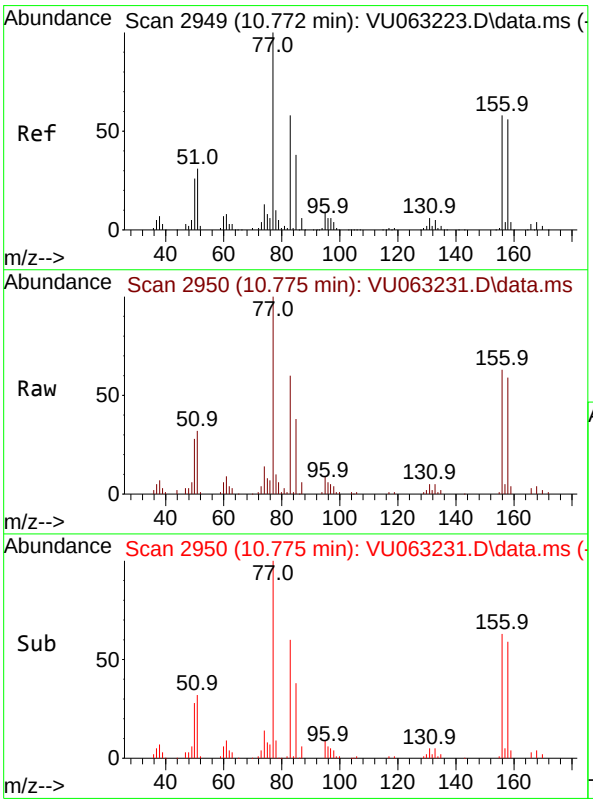
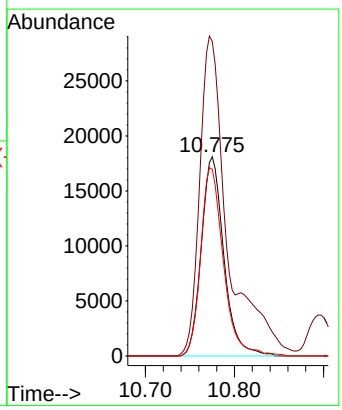
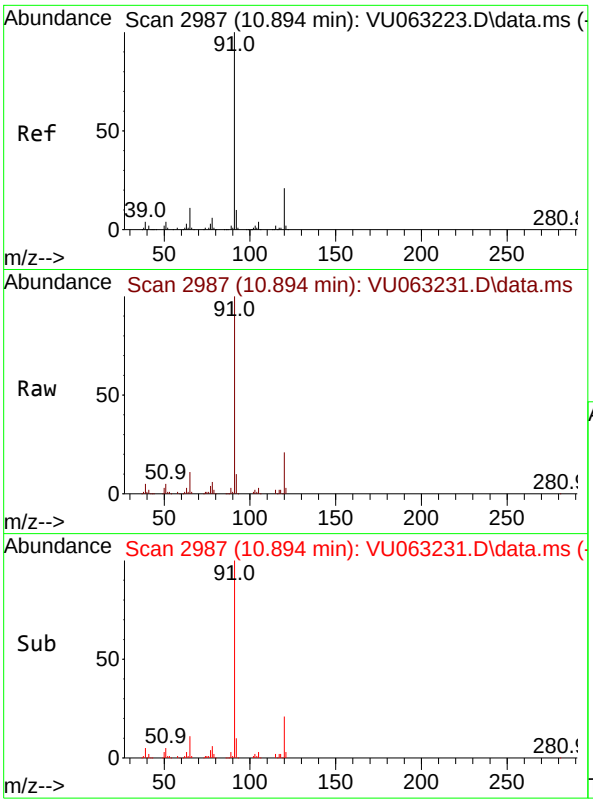


#72
Bromobenzene
Concen: 1.947 ug/l
RT: 10.775 min Scan# 2950
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:156 Resp: 31774

Ion	Ratio	Lower	Upper
156	100		
77	199.5	0.0	343.6
158	95.3	0.0	193.0





#73
n-propylbenzene
Concen: 1.867 ug/l
RT: 10.894 min Scan# 2
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:120 Resp: 3237

Ion	Ratio	Lower	Upper
120	100		
91	453.8	369.8	554.6

Instrument :
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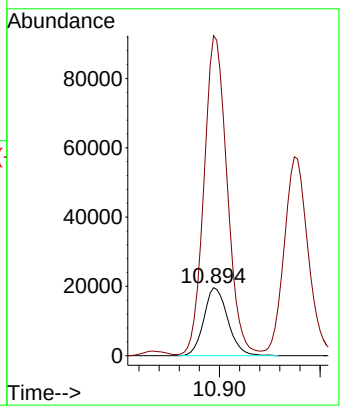
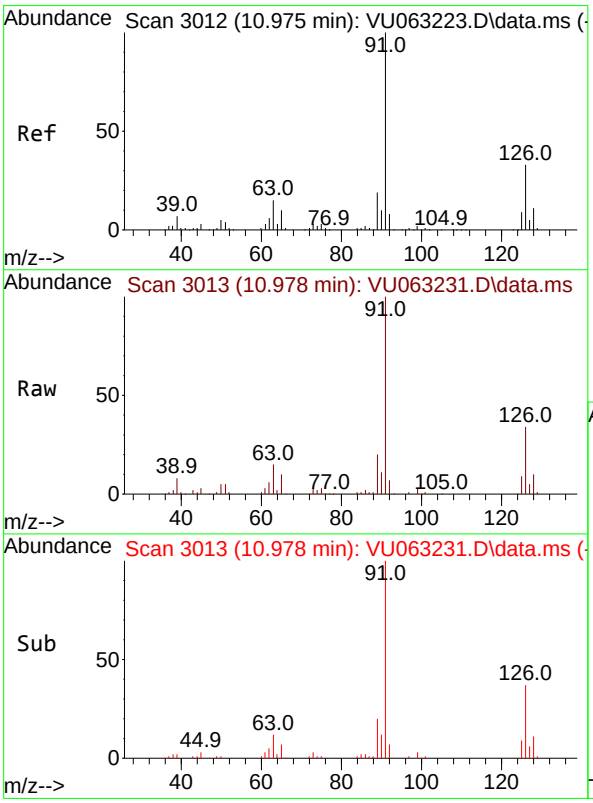
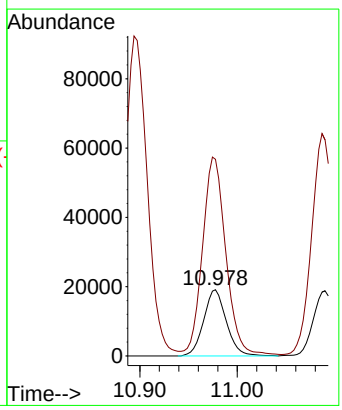


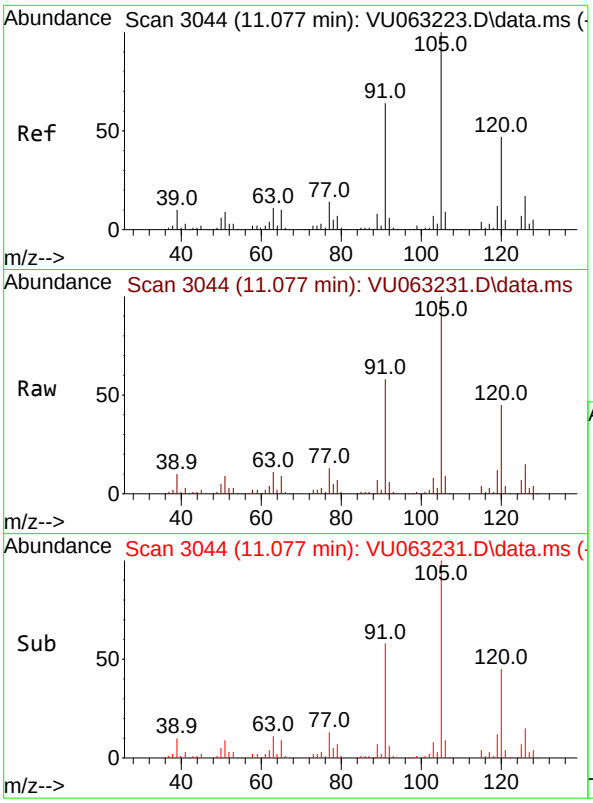


#74
2-Chlorotoluene
Concen: 1.935 ug/l
RT: 10.978 min Scan# 3013
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:126 Resp: 30928

Ion	Ratio	Lower	Upper
126	100		
91	305.5	0.0	623.8





#75
1,3,5-Trimethylbenzene
Concen: 1.875 ug/l
RT: 11.077 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:105 Resp: 10524

Ion	Ratio	Lower	Upper
105	100		
120	45.8	37.3	55.9

Instrument :
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ClientSampleId :
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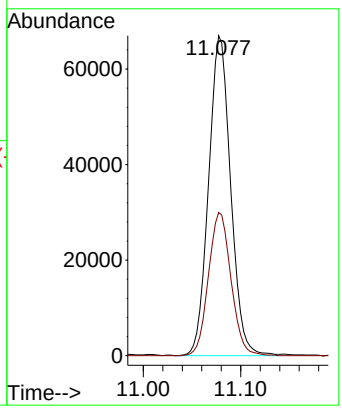
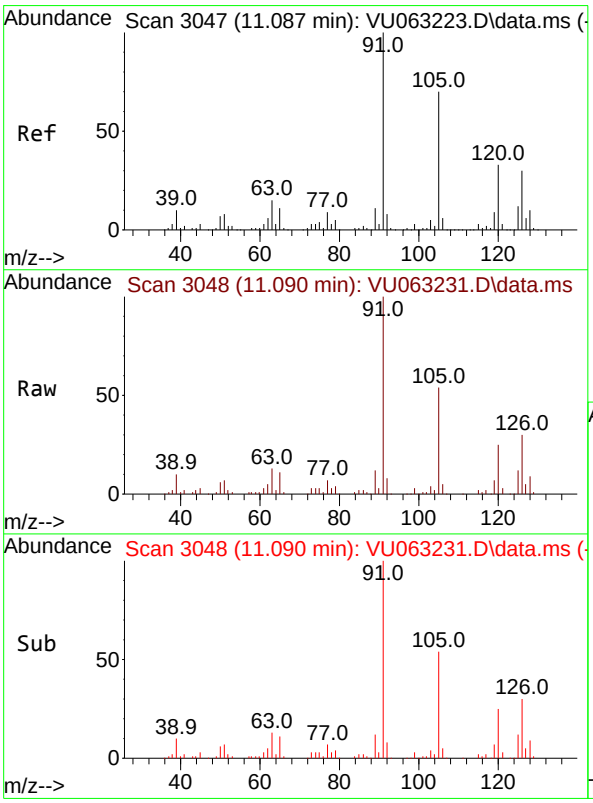
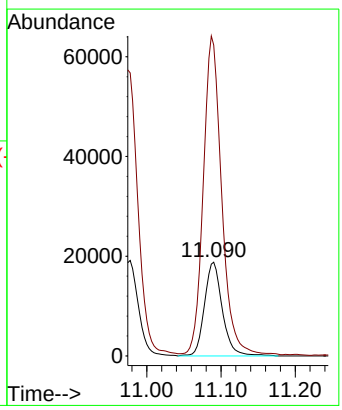


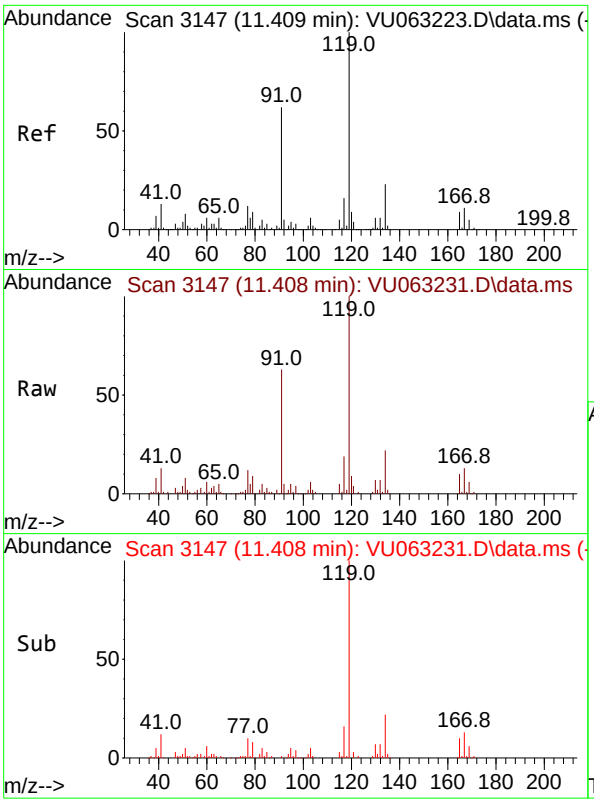


#76
4-Chlorotoluene
Concen: 1.920 ug/l
RT: 11.090 min Scan# 3048
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:126 Resp: 31460

Ion	Ratio	Lower	Upper
126	100		
91	346.9	0.0	703.6





#77
tert-Butylbenzene
Concen: 1.858 ug/l
RT: 11.408 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:119 Resp: 10546

Ion	Ratio	Lower	Upper
119	100		
91	58.8	29.4	88.3
134	20.9	17.6	26.4

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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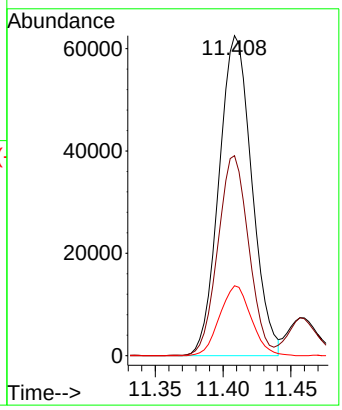
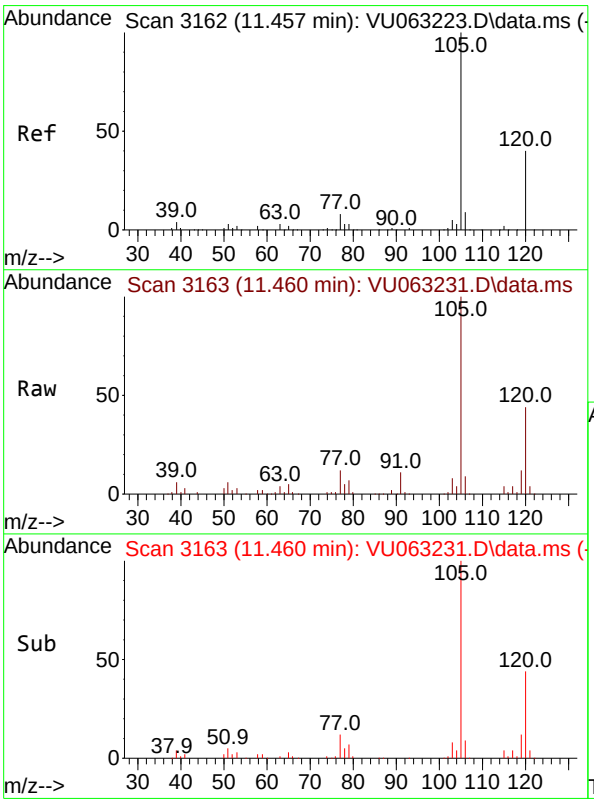
Reviewed By :Amit Patel 02/12/2025
Supervised By :Mahesh Dadoda 02/12/2025

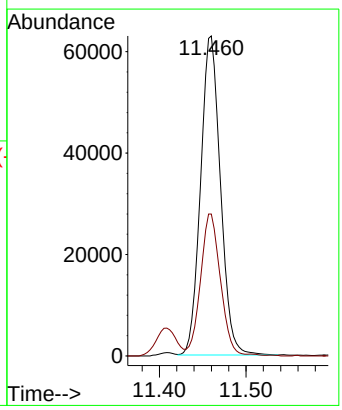


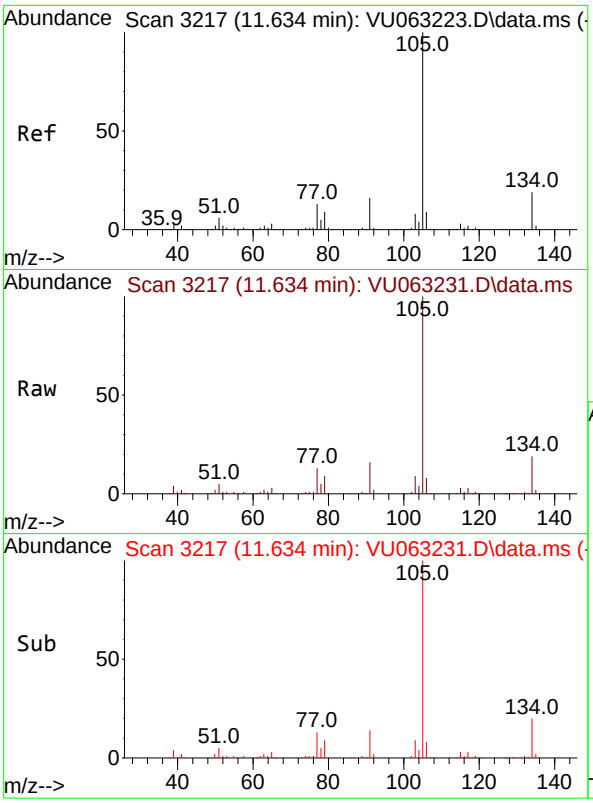


#78
1,2,4-Trimethylbenzene
Concen: 1.801 ug/l
RT: 11.460 min Scan# 3163
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:105 Resp: 100273

Ion	Ratio	Lower	Upper
105	100		
120	44.2	21.9	65.7





#79
sec-Butylbenzene
Concen: 1.904 ug/l
RT: 11.634 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:105 Resp: 13755

Ion	Ratio	Lower	Upper
105	100		
134	19.2	15.1	22.7

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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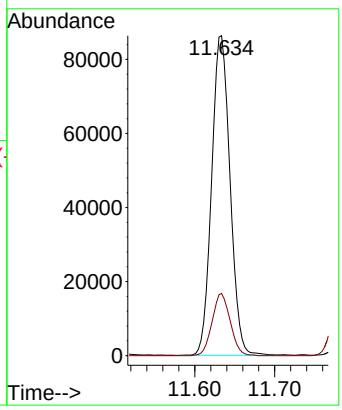
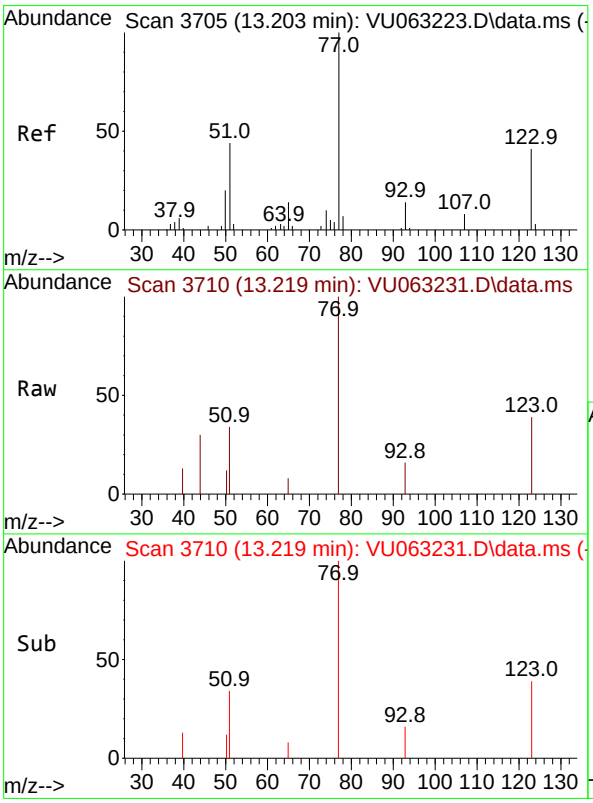
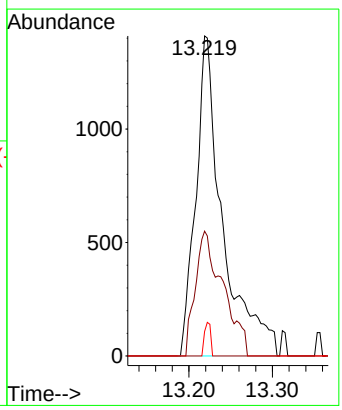


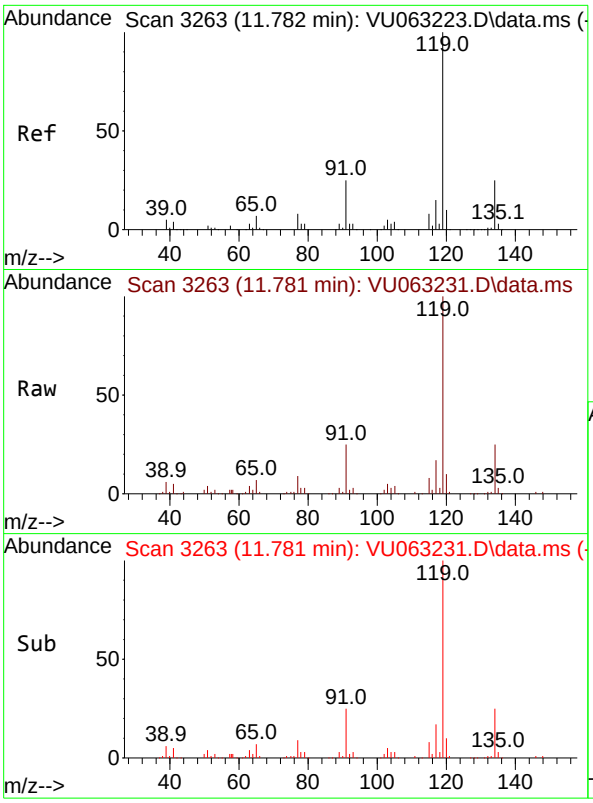


#80
Nitrobenzene
Concen: 9.901 ug/l m
RT: 13.219 min Scan# 3710
Delta R.T. 0.016 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 77 Resp: 3153

Ion	Ratio	Lower	Upper
77	100		
123	40.1	18.9	67.1
65	2.4	11.9	15.1#

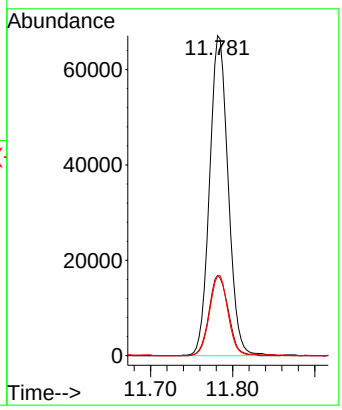




#81
p-Isopropyltoluene
Concen: 1.854 ug/l
RT: 11.781 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:119 Resp: 10570

Ion	Ratio	Lower	Upper
119	100		
134	26.0	20.3	30.5
91	24.7	19.4	29.2



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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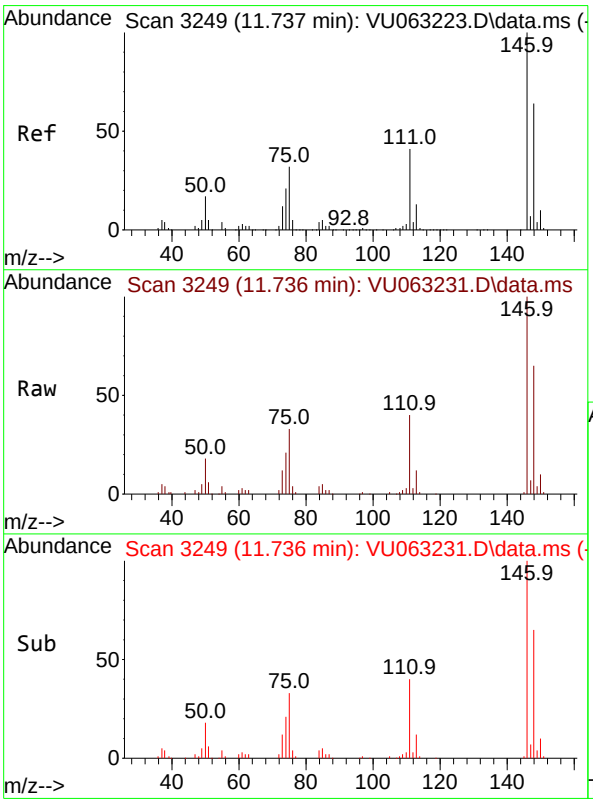
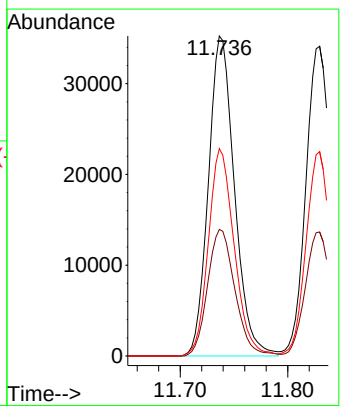
Supervised By :Mahesh Dadoda 02/12/2025

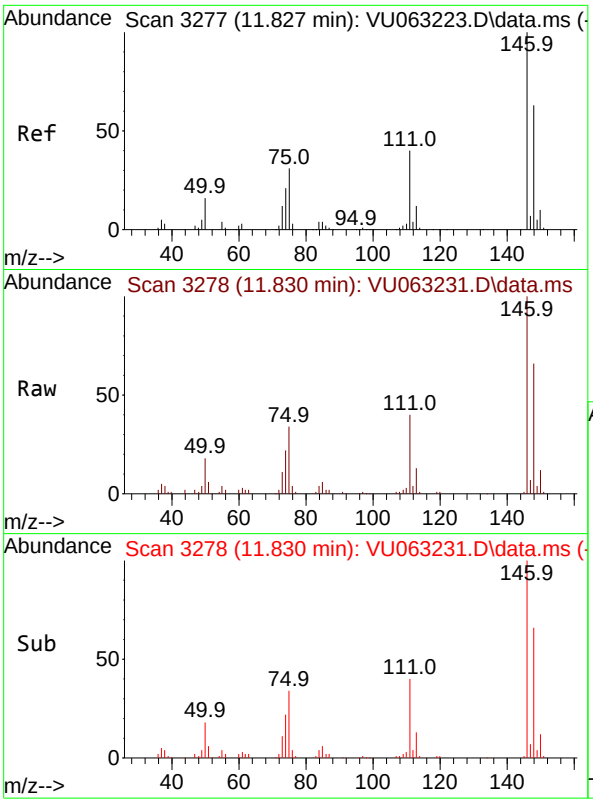


#82
1,3-Dichlorobenzene
Concen: 1.882 ug/l
RT: 11.736 min Scan# 3249
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:146 Resp: 59568

Ion	Ratio	Lower	Upper
146	100		
111	41.4	32.8	49.2
148	64.2	51.1	76.7

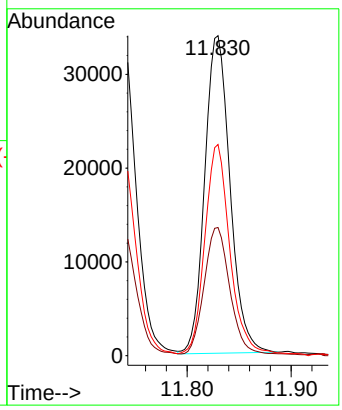




#83
1,4-Dichlorobenzene
Concen: 1.851 ug/l
RT: 11.830 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:146 Resp: 5730

Ion	Ratio	Lower	Upper
146	100		
111	41.1	32.1	48.1
148	67.1	50.2	75.4



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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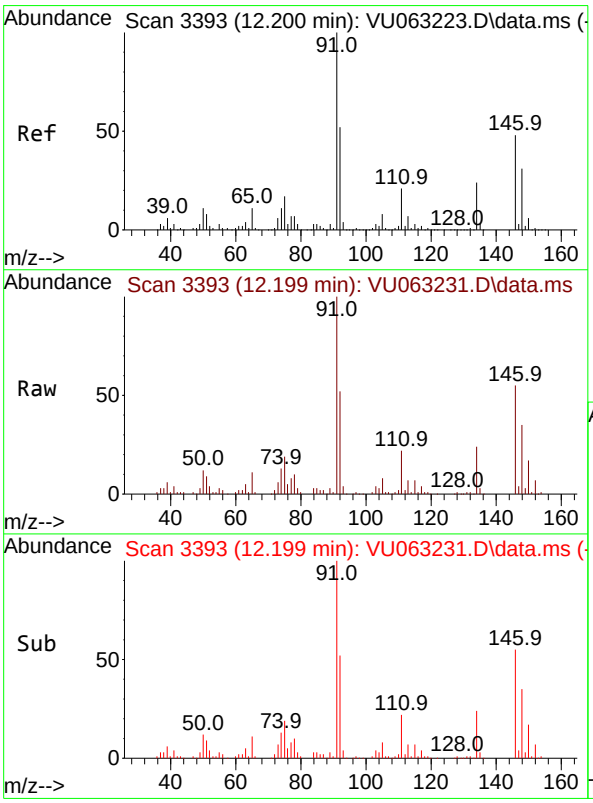
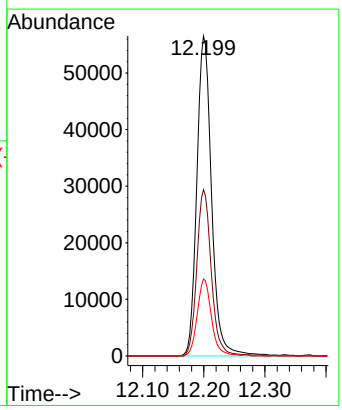
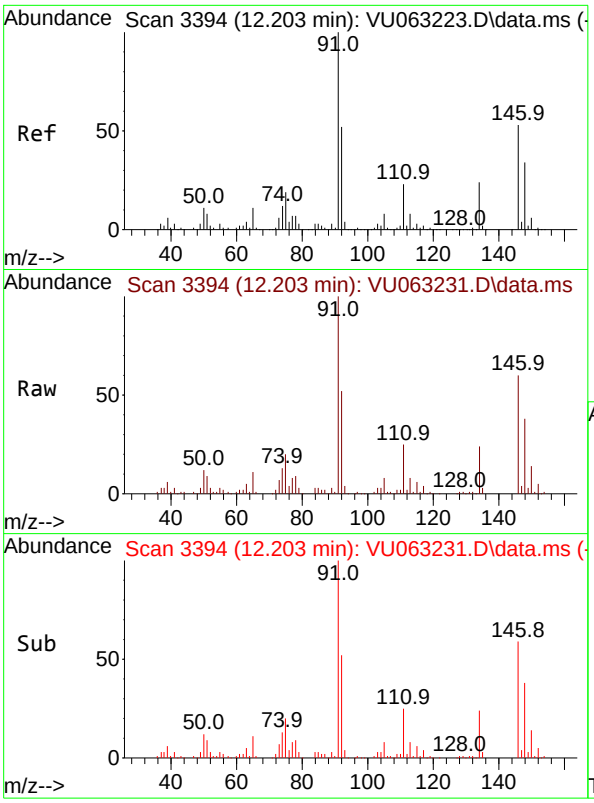


#84
n-Butylbenzene
Concen: 1.854 ug/l
RT: 12.199 min Scan# 3393
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 91 Resp: 94788

Ion	Ratio	Lower	Upper
91	100		
92	51.0	41.8	62.8
134	23.1	18.6	28.0

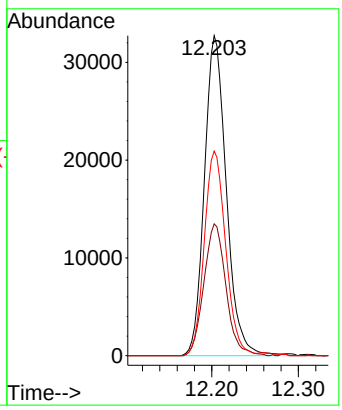




#85
1,2-Dichlorobenzene
Concen: 1.891 ug/l
RT: 12.203 min Scan# 3
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:146 Resp: 5751

Ion	Ratio	Lower	Upper
146	100		
111	41.5	21.9	65.7
148	62.5	32.3	96.9



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

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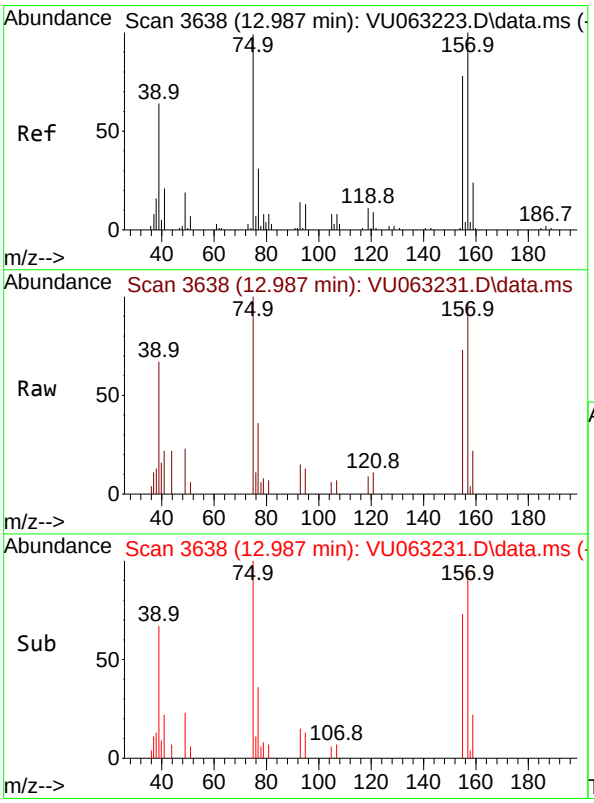
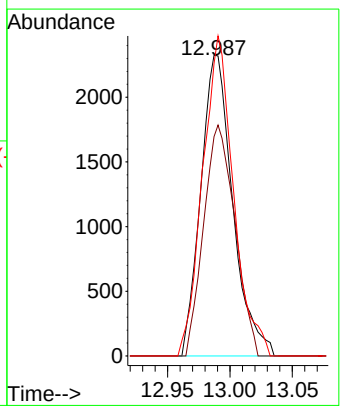
Supervised By :Mahesh Dadoda 02/12/2025

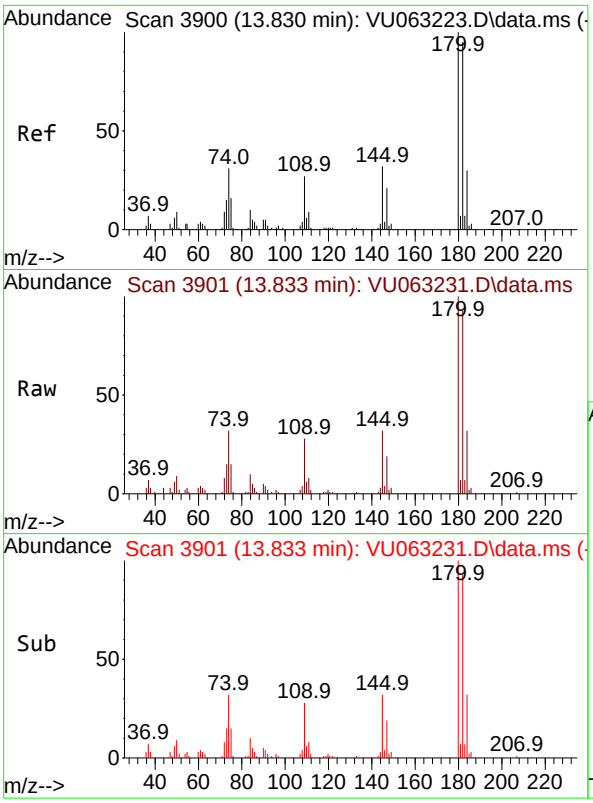


#86
1,2-Dibromo-3-Chloropropane
Concen: 1.822 ug/l
RT: 12.987 min Scan# 3638
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion: 75 Resp: 4147

Ion	Ratio	Lower	Upper
75	100		
155	75.1	63.5	95.3
157	103.0	81.8	122.6

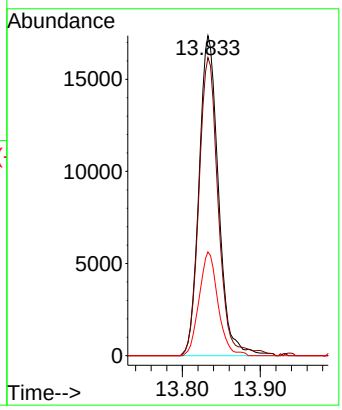




#87
1,2,4-Trichlorobenzene
Concen: 2.027 ug/l
RT: 13.833 min Scan# 3
Delta R.T. 0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:180 Resp: 3006

Ion	Ratio	Lower	Upper
180	100		
182	91.7	76.6	115.0
145	31.5	25.4	38.2



Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

Manual Integrations
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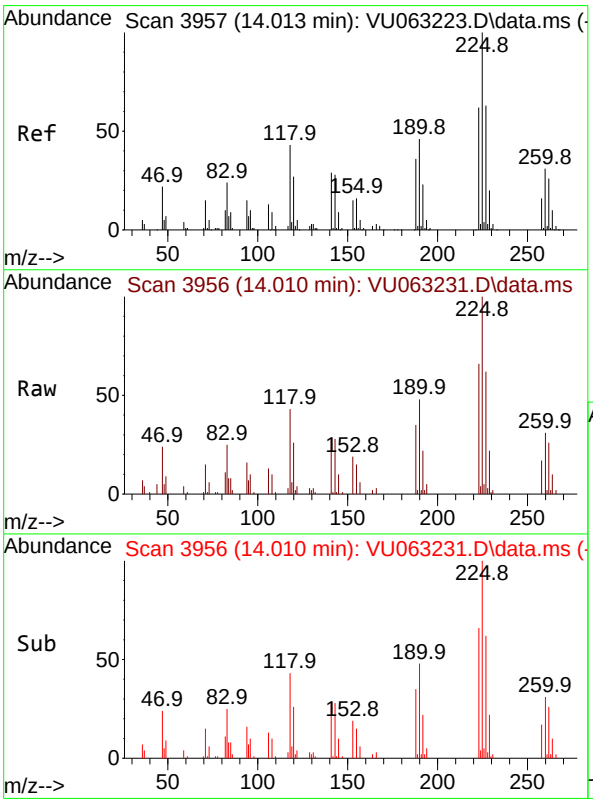
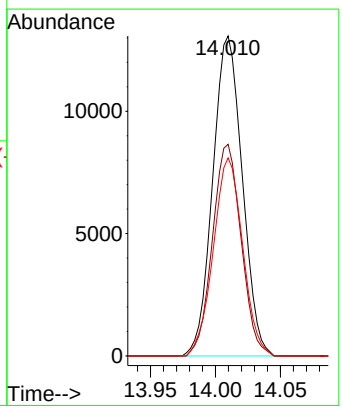
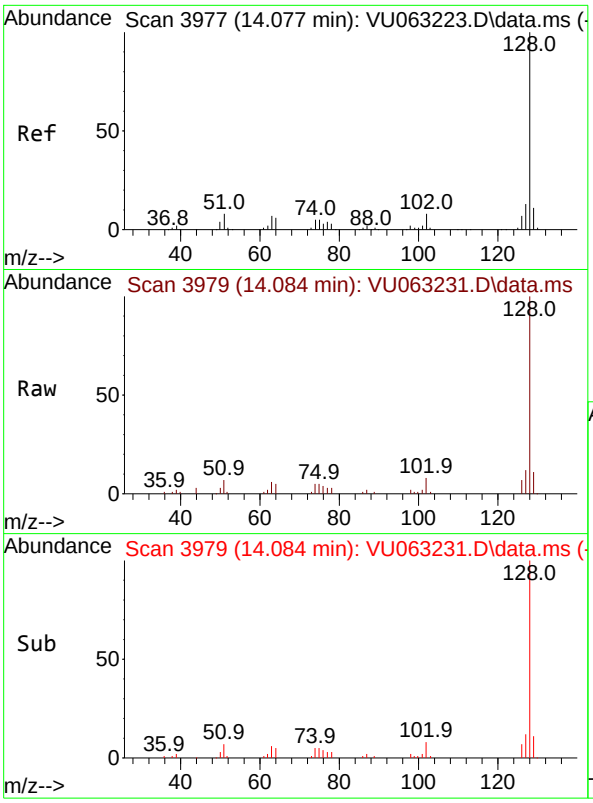


#88
Hexachlorobutadiene
Concen: 1.948 ug/l
RT: 14.010 min Scan# 3956
Delta R.T. -0.003 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:225 Resp: 20647

Ion	Ratio	Lower	Upper
225	100		
223	64.0	49.5	74.3
227	61.5	51.0	76.4





#89
Naphthalene
Concen: 2.069 ug/l
RT: 14.084 min Scan# 3
Delta R.T. 0.006 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:128 Resp: 4681

Ion	Ratio	Lower	Upper
128	100		
127	11.7	10.6	16.0
129	10.2	8.6	13.0

Instrument :
MSVOA_U
ClientSampleId :
VU0211WBSD01

Manual Integrations
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Reviewed By :Amit Patel 02/12/2025
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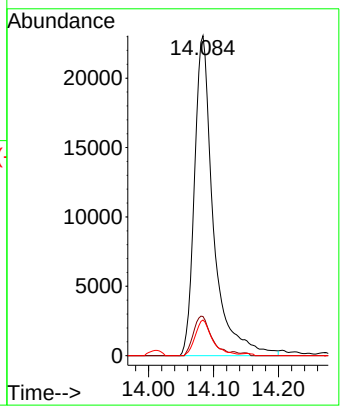
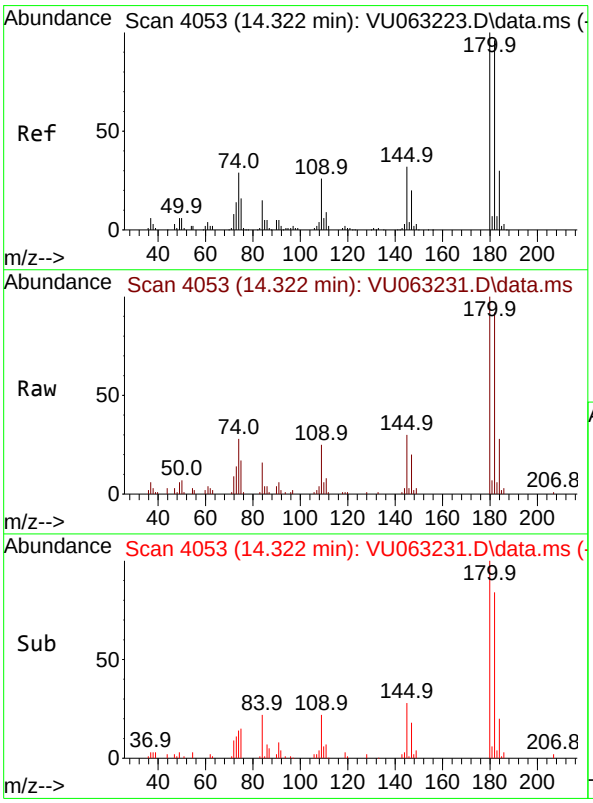
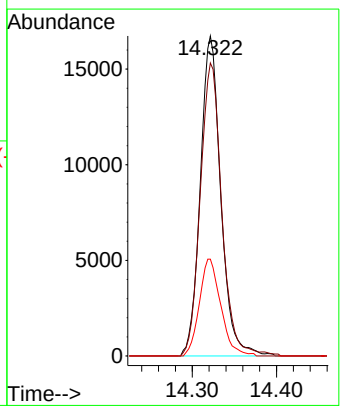




#90
1,2,3-Trichlorobenzene
Concen: 1.952 ug/l
RT: 14.322 min Scan# 4053
Delta R.T. -0.000 min
Lab File: VU063231.D
Acq: 11 Feb 2025 12:31

Tgt Ion:180 Resp: 28334

Ion	Ratio	Lower	Upper
180	100		
182	96.0	78.2	117.2
145	31.6	26.1	39.1



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Manual Integration Report

Sequence:	VU021025	Instrument	MSVOA_u

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.5	VU063219.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	2-Butanone	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	2-Hexanone	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	Acrylonitrile	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	Cyclohexane	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	Methacrylonitrile	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	Methyl acrylate	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	Methyl methacrylate	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	Propionitrile	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC0.5	VU063219.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:22:31 PM	MMDadoda	2/12/2025 4:22:33 PM	Peak Integrated by Software
VSTDICC001	VU063220.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:22:52 PM	MMDadoda	2/12/2025 4:23:07 PM	Peak Integrated by Software
VSTDICC001	VU063220.D	2-Butanone	Amit	2/12/2025 4:22:52 PM	MMDadoda	2/12/2025 4:23:07 PM	Peak Integrated by Software
VSTDICC001	VU063220.D	2-Hexanone	Amit	2/12/2025 4:22:52 PM	MMDadoda	2/12/2025 4:23:07 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VU021025	Instrument	MSVOA_u

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VU063220.D	Cyclohexane	Amit	2/12/2025 4:22:52 PM	MMDadoda	2/12/2025 4:23:07 PM	Peak Integrated by Software
VSTDICC001	VU063220.D	Methyl acrylate	Amit	2/12/2025 4:22:52 PM	MMDadoda	2/12/2025 4:23:07 PM	Peak Integrated by Software
VSTDICC001	VU063220.D	Propionitrile	Amit	2/12/2025 4:22:52 PM	MMDadoda	2/12/2025 4:23:07 PM	Peak Integrated by Software
VSTDICC001	VU063220.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:22:52 PM	MMDadoda	2/12/2025 4:23:07 PM	Peak Integrated by Software
VSTDICC002	VU063221.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:23:13 PM	MMDadoda	2/12/2025 4:23:18 PM	Peak Integrated by Software
VSTDICC002	VU063221.D	Cyclohexane	Amit	2/12/2025 4:23:13 PM	MMDadoda	2/12/2025 4:23:18 PM	Peak Integrated by Software
VSTDICC002	VU063221.D	Methyl acrylate	Amit	2/12/2025 4:23:13 PM	MMDadoda	2/12/2025 4:23:18 PM	Peak Integrated by Software
VSTDICC002	VU063221.D	Nitrobenzene	Amit	2/12/2025 4:23:13 PM	MMDadoda	2/12/2025 4:23:18 PM	Peak Integrated by Software
VSTDICC002	VU063221.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:23:13 PM	MMDadoda	2/12/2025 4:23:18 PM	Peak Integrated by Software
VSTDICC005	VU063222.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:23:29 PM	MMDadoda	2/12/2025 4:23:42 PM	Peak Integrated by Software
VSTDICC005	VU063222.D	Cyclohexane	Amit	2/12/2025 4:23:29 PM	MMDadoda	2/12/2025 4:23:42 PM	Peak Integrated by Software
VSTDICC005	VU063222.D	Methyl acrylate	Amit	2/12/2025 4:23:29 PM	MMDadoda	2/12/2025 4:23:42 PM	Peak Integrated by Software
VSTDICC005	VU063222.D	Nitrobenzene	Amit	2/12/2025 4:23:29 PM	MMDadoda	2/12/2025 4:23:42 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VU021025	Instrument	MSVOA_u

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VU063222.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:23:29 PM	MMDadoda	2/12/2025 4:23:42 PM	Peak Integrated by Software
VSTDICCC010	VU063223.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:23:38 PM	MMDadoda	2/12/2025 4:23:53 PM	Peak Integrated by Software
VSTDICCC010	VU063223.D	Cyclohexane	Amit	2/12/2025 4:23:38 PM	MMDadoda	2/12/2025 4:23:53 PM	Peak Integrated by Software
VSTDICCC010	VU063223.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:23:38 PM	MMDadoda	2/12/2025 4:23:53 PM	Peak Integrated by Software
VSTDICC015	VU063224.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:23:42 PM	MMDadoda	2/12/2025 4:23:57 PM	Peak Integrated by Software
VSTDICC015	VU063224.D	Cyclohexane	Amit	2/12/2025 4:23:42 PM	MMDadoda	2/12/2025 4:23:57 PM	Peak Integrated by Software
VSTDICC015	VU063224.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:23:42 PM	MMDadoda	2/12/2025 4:23:57 PM	Peak Integrated by Software
VSTDICV010	VU063225.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:23:46 PM	MMDadoda	2/12/2025 4:24:01 PM	Peak Integrated by Software
VSTDICV010	VU063225.D	Cyclohexane	Amit	2/12/2025 4:23:46 PM	MMDadoda	2/12/2025 4:24:01 PM	Peak Integrated by Software
VSTDICV010	VU063225.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:23:46 PM	MMDadoda	2/12/2025 4:24:01 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VU021125	Instrument	MSVOA_u

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV010	VU063227.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:25:04 PM	MMDadoda	2/12/2025 4:25:51 PM	Peak Integrated by Software
VSTDICV010	VU063227.D	Cyclohexane	Amit	2/12/2025 4:25:04 PM	MMDadoda	2/12/2025 4:25:51 PM	Peak Integrated by Software
VSTDICV010	VU063227.D	Nitrobenzene	Amit	2/12/2025 4:25:04 PM	MMDadoda	2/12/2025 4:25:51 PM	Peak Integrated by Software
VSTDICV010	VU063227.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:25:04 PM	MMDadoda	2/12/2025 4:25:51 PM	Peak Integrated by Software
VSTDCCC010	VU063228.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:25:10 PM	MMDadoda	2/12/2025 4:25:54 PM	Peak Integrated by Software
VSTDCCC010	VU063228.D	Cyclohexane	Amit	2/12/2025 4:25:10 PM	MMDadoda	2/12/2025 4:25:54 PM	Peak Integrated by Software
VSTDCCC010	VU063228.D	Nitrobenzene	Amit	2/12/2025 4:25:10 PM	MMDadoda	2/12/2025 4:25:54 PM	Peak Integrated by Software
VSTDCCC010	VU063228.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:25:10 PM	MMDadoda	2/12/2025 4:25:54 PM	Peak Integrated by Software
VU0211WBS01	VU063230.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:25:16 PM	MMDadoda	2/12/2025 4:25:57 PM	Peak Integrated by Software
VU0211WBS01	VU063230.D	Cyclohexane	Amit	2/12/2025 4:25:16 PM	MMDadoda	2/12/2025 4:25:57 PM	Peak Integrated by Software
VU0211WBS01	VU063230.D	Methyl acrylate	Amit	2/12/2025 4:25:16 PM	MMDadoda	2/12/2025 4:25:57 PM	Peak Integrated by Software
VU0211WBS01	VU063230.D	Nitrobenzene	Amit	2/12/2025 4:25:16 PM	MMDadoda	2/12/2025 4:25:57 PM	Peak Integrated by Software
VU0211WBS01	VU063230.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:25:16 PM	MMDadoda	2/12/2025 4:25:57 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VU021125	Instrument	MSVOA_u

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VU0211WBS01	VU063230.D	tert-Butyl Alcohol	Amit	2/12/2025 4:25:16 PM	MMDadoda	2/12/2025 4:25:57 PM	Peak Integrated by Software
VU0211WBSD01	VU063231.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:25:22 PM	MMDadoda	2/12/2025 4:26:00 PM	Peak Integrated by Software
VU0211WBSD01	VU063231.D	Cyclohexane	Amit	2/12/2025 4:25:22 PM	MMDadoda	2/12/2025 4:26:00 PM	Peak Integrated by Software
VU0211WBSD01	VU063231.D	Methyl acrylate	Amit	2/12/2025 4:25:22 PM	MMDadoda	2/12/2025 4:26:00 PM	Peak Integrated by Software
VU0211WBSD01	VU063231.D	Nitrobenzene	Amit	2/12/2025 4:25:22 PM	MMDadoda	2/12/2025 4:26:00 PM	Peak Integrated by Software
VU0211WBSD01	VU063231.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:25:22 PM	MMDadoda	2/12/2025 4:26:00 PM	Peak Integrated by Software
VSTDCCC010	VU063247.D	1,2,3-Trichloropropane	Amit	2/12/2025 4:26:03 PM	MMDadoda	2/12/2025 4:26:35 PM	Peak Integrated by Software
VSTDCCC010	VU063247.D	Cyclohexane	Amit	2/12/2025 4:26:03 PM	MMDadoda	2/12/2025 4:26:35 PM	Peak Integrated by Software
VSTDCCC010	VU063247.D	t-1,4-Dichloro-2-butene	Amit	2/12/2025 4:26:03 PM	MMDadoda	2/12/2025 4:26:35 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VU021325	Instrument	MSVOA_u

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VU063262.D	1,2,3-Trichloropropane	MMDadoda	2/14/2025 11:20:59 AM	SAM	2/14/2025 11:22:56 AM	Peak Integrated by Software
VSTDCCC010	VU063262.D	Cyclohexane	MMDadoda	2/14/2025 11:20:59 AM	SAM	2/14/2025 11:22:56 AM	Peak Integrated by Software
VSTDCCC010	VU063262.D	Nitrobenzene	MMDadoda	2/14/2025 11:20:59 AM	SAM	2/14/2025 11:22:56 AM	Peak Integrated by Software
VU0213WBS01	VU063264.D	1,2,3-Trichloropropane	MMDadoda	2/14/2025 11:21:01 AM	SAM	2/14/2025 11:22:58 AM	Peak Integrated by Software
VU0213WBS01	VU063264.D	Cyclohexane	MMDadoda	2/14/2025 11:21:01 AM	SAM	2/14/2025 11:22:58 AM	Peak Integrated by Software
VU0213WBS01	VU063264.D	Methyl acrylate	MMDadoda	2/14/2025 11:21:01 AM	SAM	2/14/2025 11:22:58 AM	Peak Integrated by Software
VU0213WBS01	VU063264.D	Nitrobenzene	MMDadoda	2/14/2025 11:21:01 AM	SAM	2/14/2025 11:22:58 AM	Peak Integrated by Software
VU0213WBS01	VU063264.D	t-1,4-Dichloro-2-butene	MMDadoda	2/14/2025 11:21:01 AM	SAM	2/14/2025 11:22:58 AM	Peak Integrated by Software
VSTDCCC010	VU063267.D	1,2,3-Trichloropropane	MMDadoda	2/14/2025 11:21:04 AM	SAM	2/14/2025 11:23:01 AM	Peak Integrated by Software
VSTDCCC010	VU063267.D	Cyclohexane	MMDadoda	2/14/2025 11:21:04 AM	SAM	2/14/2025 11:23:01 AM	Peak Integrated by Software
VSTDCCC010	VU063267.D	t-1,4-Dichloro-2-butene	MMDadoda	2/14/2025 11:21:04 AM	SAM	2/14/2025 11:23:01 AM	Peak Integrated by Software

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Instrument ID: MSVOA_U

Daily Analysis Runlog For Sequence/QCBatch ID # VU021025

Review By	Mahesh Dadoda	Review On	2/13/2025 12:08:39 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	2/13/2025 12:10:26 PM		
SubDirectory	VU021025	HP Acquire Method	MSVOA_U	HP Processing Method	524u021025dw.m

STD. NAME	STD REF.#
Tune/Reschk	VP132982
Initial Calibration Stds	VP132975,VP132976,VP132977,VP132978,VP132979,VP132980
CCC	
Internal Standard/PEM	VP132884
ICV/I.BLK	VP132981
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VU063218.D	10 Feb 2025 09:06	MD/SY	Ok
2	VSTDICC0.5	VU063219.D	10 Feb 2025 12:59	MD/SY	Ok,M
3	VSTDICC001	VU063220.D	10 Feb 2025 13:23	MD/SY	Ok,M
4	VSTDICC002	VU063221.D	10 Feb 2025 13:58	MD/SY	Ok,M
5	VSTDICC005	VU063222.D	10 Feb 2025 14:23	MD/SY	Ok,M
6	VSTDICCC010	VU063223.D	10 Feb 2025 15:06	MD/SY	Ok,M
7	VSTDICC015	VU063224.D	10 Feb 2025 15:33	MD/SY	Ok,M
8	VSTDICV010	VU063225.D	10 Feb 2025 16:45	MD/SY	ReRun

M : Manual Integration

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Instrument ID: MSVOA_U

Daily Analysis Runlog For Sequence/QCBatch ID # VU021125

Review By	Amit Patel	Review On	2/12/2025 4:24:48 PM		
Supervise By	Mahesh Dadoda	Supervise On	2/12/2025 4:26:45 PM		
SubDirectory	VU021125	HP Acquire Method	MSVOA_U	HP Processing Method	524u021025dw.m

STD. NAME	STD REF.#
Tune/Reschk	VP132989
Initial Calibration Stds	
CCC	VP132991,VP132992,LOD VP132993,VP132994,VP132995,LOQ VP132996,VP132997
Internal Standard/PEM	VP132884
ICV/I.BLK	VP132990
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VU063226.D	11 Feb 2025 08:11	MD/SY	Ok
2	VSTDICV010	VU063227.D	11 Feb 2025 08:50	MD/SY	Ok,M
3	VSTDCCC010	VU063228.D	11 Feb 2025 10:01	MD/SY	Ok,M
4	VU0211WBL01	VU063229.D	11 Feb 2025 11:14	MD/SY	Ok
5	VU0211WBS01	VU063230.D	11 Feb 2025 12:07	MD/SY	Ok,M
6	VU0211WBSD01	VU063231.D	11 Feb 2025 12:31	MD/SY	Ok,M
7	Q1172-11	VU063232.D	11 Feb 2025 13:02	MD/SY	Ok
8	Q1172-09	VU063233.D	11 Feb 2025 13:28	MD/SY	Dilution
9	Q1172-09DL	VU063234.D	11 Feb 2025 13:55	MD/SY	Ok
10	Q1172-10	VU063235.D	11 Feb 2025 14:20	MD/SY	Not Ok
11	Q1172-10DL	VU063236.D	11 Feb 2025 15:21	MD/SY	Not Ok
12	Q1172-07	VU063237.D	11 Feb 2025 15:45	MD/SY	Dilution
13	Q1172-07DL	VU063238.D	11 Feb 2025 16:11	MD/SY	Ok
14	Q1172-08	VU063239.D	11 Feb 2025 16:36	MD/SY	Dilution
15	Q1172-08DL	VU063240.D	11 Feb 2025 17:01	MD/SY	Not Ok
16	VIBLK	VU063241.D	11 Feb 2025 17:26	MD/SY	Ok
17	Q1168-07	VU063242.D	11 Feb 2025 17:50	MD/SY	Ok,M
18	Q1168-07	VU063243.D	11 Feb 2025 18:15	MD/SY	Ok,M
19	Q1168-07	VU063244.D	11 Feb 2025 18:40	MD/SY	Ok,M
20	Q1168-08	VU063245.D	11 Feb 2025 19:04	MD/SY	Ok,M
21	Q1168-08	VU063246.D	11 Feb 2025 19:29	MD/SY	Ok,M

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Instrument ID: MSVOA_U

Daily Analysis Runlog For Sequence/QCBatch ID # VU021125

Review By	Amit Patel	Review On	2/12/2025 4:24:48 PM				
Supervise By	Mahesh Dadoda	Supervise On	2/12/2025 4:26:45 PM				
SubDirectory	VU021125	HP Acquire Method	MSVOA_U	HP Processing Method	524u021025dw.m		

STD. NAME	STD REF.#
Tune/Reschk	VP132989
Initial Calibration Stds	
CCC	VP132991,VP132992,LOD VP132993,VP132994,VP132995,LOQ VP132996,VP132997
Internal Standard/PEM	VP132884
ICV/I.BLK	VP132990
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	VSTDCCC010	VU063247.D	11 Feb 2025 19:54	MD/SY	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_U

Daily Analysis Runlog For Sequence/QCBatch ID # VU021325

Review By	Mahesh Dadoda	Review On	2/14/2025 11:21:09 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	2/14/2025 11:23:05 AM		
SubDirectory	VU021325	HP Acquire Method	MSVOA_U	HP Processing Method	524u021025dw.m

STD. NAME	STD REF.#
Tune/Reschk	VP133023
Initial Calibration Stds	
CCC	VP133024,VP133025
Internal Standard/PEM	VP132884
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VU063261.D	13 Feb 2025 08:06	MD/SY	Ok
2	VSTDCCC010	VU063262.D	13 Feb 2025 08:36	MD/SY	Ok,M
3	VU0213WBL01	VU063263.D	13 Feb 2025 13:05	MD/SY	Ok
4	VU0213WBS01	VU063264.D	13 Feb 2025 13:42	MD/SY	Ok,M
5	VU0213WBSD01	VU063265.D	13 Feb 2025 14:07	MD/SY	Ok,M
6	Q1172-08DL	VU063266.D	13 Feb 2025 16:37	MD/SY	Ok
7	VSTDCCC010	VU063267.D	13 Feb 2025 18:44	MD/SY	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_U

Daily Analysis Runlog For Sequence/QCBatch ID # VU021025

Review By	Mahesh Dadoda	Review On	2/13/2025 12:08:39 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	2/13/2025 12:10:26 PM		
SubDirectory	VU021025	HP Acquire Method	MSVOA_U	HP Processing Method	524u021025dw.m

STD. NAME	STD REF.#
Tune/Reschk	VP132982
Initial Calibration Stds	VP132975,VP132976,VP132977,VP132978,VP132979,VP132980
CCC	
Internal Standard/PEM	VP132884
ICV/I.BLK	VP132981
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VU063218.D	10 Feb 2025 09:06		MD/SY	Ok
2	VSTDICC0.5	VSTDICC0.5	VU063219.D	10 Feb 2025 12:59		MD/SY	Ok,M
3	VSTDICC001	VSTDICC001	VU063220.D	10 Feb 2025 13:23	524.2	MD/SY	Ok,M
4	VSTDICC002	VSTDICC002	VU063221.D	10 Feb 2025 13:58	Drinking water method	MD/SY	Ok,M
5	VSTDICC005	VSTDICC005	VU063222.D	10 Feb 2025 14:23		MD/SY	Ok,M
6	VSTDICCC010	VSTDICCC010	VU063223.D	10 Feb 2025 15:06		MD/SY	Ok,M
7	VSTDICC015	VSTDICC015	VU063224.D	10 Feb 2025 15:33		MD/SY	Ok,M
8	VSTDICV010	ICVVU021025	VU063225.D	10 Feb 2025 16:45	Fail ,rerun	MD/SY	ReRun

M : Manual Integration

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Instrument ID: MSVOA_U

Daily Analysis Runlog For Sequence/QCBatch ID # VU021125

Review By	Amit Patel	Review On	2/12/2025 4:24:48 PM		
Supervise By	Mahesh Dadoda	Supervise On	2/12/2025 4:26:45 PM		
SubDirectory	VU021125	HP Acquire Method	MSVOA_U	HP Processing Method	524u021025dw.m

STD. NAME	STD REF.#
Tune/Reschk	VP132989
Initial Calibration Stds	
CCC	VP132991,VP132992,LOD VP132993,VP132994,VP132995,LOQ VP132996,VP132997
Internal Standard/PEM	VP132884
ICV/I.BLK	VP132990
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VU063226.D	11 Feb 2025 08:11		MD/SY	Ok
2	VSTDICV010	ICVVU021025	VU063227.D	11 Feb 2025 08:50		MD/SY	Ok,M
3	VSTDCCC010	VSTDCCC010	VU063228.D	11 Feb 2025 10:01		MD/SY	Ok,M
4	VU0211WBL01	VU0211WBL01	VU063229.D	11 Feb 2025 11:14		MD/SY	Ok
5	VU0211WBS01	VU0211WBS01	VU063230.D	11 Feb 2025 12:07	TBA-low recovery	MD/SY	Ok,M
6	VU0211WBSD01	VU0211WBSD01	VU063231.D	11 Feb 2025 12:31	TBA-low recovery	MD/SY	Ok,M
7	Q1172-11	PT-EDBCP-WS	VU063232.D	11 Feb 2025 13:02	PT-EDBCP	MD/SY	Ok
8	Q1172-09	PT-THM-WS	VU063233.D	11 Feb 2025 13:28	PT-THM, Need 5X	MD/SY	Dilution
9	Q1172-09DL	PT-THM-WSDL	VU063234.D	11 Feb 2025 13:55		MD/SY	Ok
10	Q1172-10	PT-ADD-WS	VU063235.D	11 Feb 2025 14:20	rerun,TBA low	MD/SY	Not Ok
11	Q1172-10DL	PT-ADD-WSDL	VU063236.D	11 Feb 2025 15:21	rerun,TBA low	MD/SY	Not Ok
12	Q1172-07	PT-RVOA-WS	VU063237.D	11 Feb 2025 15:45	PT-RVOA ,Need 5X	MD/SY	Dilution
13	Q1172-07DL	PT-RVOA-WSDL	VU063238.D	11 Feb 2025 16:11		MD/SY	Ok
14	Q1172-08	PT-UNRVOA-WS	VU063239.D	11 Feb 2025 16:36	PT-URVOA,Need 5x	MD/SY	Dilution
15	Q1172-08DL	PT-UNRVOA-WSDL	VU063240.D	11 Feb 2025 17:01	prep error,rerun	MD/SY	Not Ok
16	VIBLK	VIBLK	VU063241.D	11 Feb 2025 17:26		MD/SY	Ok
17	Q1168-07	LOD-MDL-WATER-01-(	VU063242.D	11 Feb 2025 17:50	lod-0.25 ppb	MD/SY	Ok,M
18	Q1168-07	LOD-MDL-WATER-01-(	VU063243.D	11 Feb 2025 18:15	lod-0.4 ppb	MD/SY	Ok,M

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Instrument ID: MSVOA_U

Daily Analysis Runlog For Sequence/QCBatch ID # VU021125

Review By	Amit Patel	Review On	2/12/2025 4:24:48 PM		
Supervise By	Mahesh Dadoda	Supervise On	2/12/2025 4:26:45 PM		
SubDirectory	VU021125	HP Acquire Method	MSVOA_U	HP Processing Method	524u021025dw.m

STD. NAME	STD REF.#
Tune/Reschk	VP132989
Initial Calibration Stds	
CCC	VP132991,VP132992,LOD VP132993,VP132994,VP132995,LOQ VP132996,VP132997
Internal Standard/PEM	VP132884
ICV/I.BLK	VP132990
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1168-07	LOD-MDL-WATER-01-(	VU063244.D	11 Feb 2025 18:40	lod-0.8 ppb	MD/SY	Ok,M
20	Q1168-08	LOQ-WATER-02-QT1-2	VU063245.D	11 Feb 2025 19:04	RL-check-0.5ppb	MD/SY	Ok,M
21	Q1168-08	LOQ-WATER-02-QT1-2	VU063246.D	11 Feb 2025 19:29	RL-check-1.0ppb	MD/SY	Ok,M
22	VSTDCCC010	VSTDCCC010EC	VU063247.D	11 Feb 2025 19:54		MD/SY	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_U

Daily Analysis Runlog For Sequence/QCBatch ID # VU021325

Review By	Mahesh Dadoda	Review On	2/14/2025 11:21:09 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	2/14/2025 11:23:05 AM		
SubDirectory	VU021325	HP Acquire Method	MSVOA_U	HP Processing Method	524u021025dw.m

STD. NAME	STD REF.#
Tune/Reschk	VP133023
Initial Calibration Stds	
CCC	VP133024,VP133025
Internal Standard/PEM	VP132884
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VU063261.D	13 Feb 2025 08:06		MD/SY	Ok
2	VSTDCCC010	VSTDCCC010	VU063262.D	13 Feb 2025 08:36		MD/SY	Ok,M
3	VU0213WBL01	VU0213WBL01	VU063263.D	13 Feb 2025 13:05		MD/SY	Ok
4	VU0213WBS01	VU0213WBS01	VU063264.D	13 Feb 2025 13:42		MD/SY	Ok,M
5	VU0213WBSD01	VU0213WBSD01	VU063265.D	13 Feb 2025 14:07		MD/SY	Ok,M
6	Q1172-08DL	PT-UNRVOA-WSDL	VU063266.D	13 Feb 2025 16:37		MD/SY	Ok
7	VSTDCCC010	VSTDCCC010EC	VU063267.D	13 Feb 2025 18:44		MD/SY	Ok,M

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q1172

Test : VOCMS Group2

Prepbatch ID :

Sequence ID/Qc Batch ID: VU021125,VU021325,

Standard ID :
VP131767,VP132098,VP132613,VP132614,VP132883,VP132884,VP132989,VP132990,VP132991,VP132992,VP132994,VP132995,VP132997,VP133023,VP133024,VP133025,

Chemical ID :
LOD VP132993,LOQ VP132996,V13391,V13446,V13466,V13879,V14134,V14154,V14175,V14176,V14419,V14433,V14439,V14521,V14522,V14614,V14624,V14722,V14723,V14724,V14754,V14756,V14801,V14814,V14837,W3112,

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Fax : 908 789 8922

VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP131767	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/27/2024

FROM 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
252	8260 Working STD (BCM)-First source, 100PPM	VP132098	12/12/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/19/2024

FROM 1.25000ml of V13466 + 23.75000ml of V14614 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP132613	01/20/2025	02/28/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 01/29/2025

FROM 0.40000ml of V13446 + 1.00000ml of V14175 + 1.00000ml of V14176 + 1.00000ml of V14433 + 1.00000ml of V14439 + 1.00000ml of V14521 + 1.00000ml of V14522 + 1.00000ml of V14722 + 1.00000ml of V14754 + 1.00000ml of V14756 + 1.00000ml of V14801 + 1.00000ml of V14814 + 1.50000ml of V14723 + 1.50000ml of V14724 + 10.60000ml of V14624 = 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	VP132614	01/20/2025	02/28/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 01/29/2025

FROM 5.62500ml of V14624 + 9.37500ml of VP132613 = 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
553	524 Calibration CC Mix Working STD, 25 PPM	VP132883	02/05/2025	04/07/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 02/14/2025

FROM 0.12500ml of V13879 + 0.12500ml of V14419 + 0.12500ml of V14756 + 0.12500ml of V14837 + 0.25000ml of V14724 + 9.24600ml of V14624 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
552	524 Internal STD and Surrogate Mix, 5 PPM	VP132884	02/05/2025	07/13/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 02/14/2025

FROM 0.02500ml of V14134 + 9.97500ml of V14624 = Final Quantity: 10.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1580	BFB TUNE CHECK-524.2	VP132989	02/11/2025	02/12/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.99000ml of W3112 + 0.00160ml of VP131767 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1099	10 PPB ICV, 524.2	VP132990	02/11/2025	02/12/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.98400ml of W3112 + 0.00400ml of VP132098 + 0.00400ml of VP132614 + 0.00800ml of VP132884 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1131	10 PPB CCC, 524.2	VP132991	02/11/2025	02/12/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.97600ml of W3112 + 0.00800ml of VP132884 + 0.01600ml of VP132883 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1131	10 PPB CCC, 524.2	VP132992	02/11/2025	02/12/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.97600ml of W3112 + 0.00800ml of VP132884 + 0.01600ml of VP132883 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3160	0.4 PPB 524 LOD	VP132994	02/11/2025	02/12/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.99000ml of W3112 + 0.00060ml of VP132883 + 0.00800ml of VP132884 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3918	524 METH.LOD 0.8 PPB	VP132995	02/11/2025	02/12/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.99000ml of W3112 + 0.00130ml of VP132883 + 0.00800ml of VP132884 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1898	524 LOD LOQ, 1PPB	VP132997	02/11/2025	02/12/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.99000ml of W3112 + 0.00160ml of VP132883 + 0.00800ml of VP132884 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1580	BFB TUNE CHECK-524.2	VP133023	02/13/2025	02/14/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.99000ml of W3112 + 0.00160ml of VP131767 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1131	10 PPB CCC, 524.2	VP133024	02/13/2025	02/14/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.97600ml of W3112 + 0.00800ml of VP132884 + 0.01600ml of VP132883 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1131	10 PPB CCC, 524.2	VP133025	02/13/2025	02/14/2025	Amit Patel	None	None	Mahesh Dadoda 02/14/2025

FROM 39.97600ml of W3112 + 0.00800ml of VP132884 + 0.01600ml of VP132883 = Final Quantity: 40.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	11/22/2025	11/22/2024 / SAM	01/13/2023 / SAM	V13391

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0181905	02/28/2025	01/10/2025 / SAM	01/23/2023 / SAM	V13446

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13466

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	564323 / Custom Oxygenates Standard	A0199211	04/17/2025	10/17/2024 / SAM	06/30/2023 / SAM	V13879

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30201 / VOA Mix,500 series method, 524 Internal Std., 2000ug/mL. P&TM, 1mL/ampul	A0168982	02/05/2026	02/05/2025 / SAM	01/18/2024 / SAM	V14134

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	05/18/2025	11/18/2024 / pedro	02/06/2024 / SAM	V14154

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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	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14175

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	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14176

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30601 / VOA Mega Mix, Drinking Water VOA Mega Mix, 524.2 Rev 4.1, 1mL, 2000ug/mL P&TM	A0204639	10/17/2025	10/17/2024 / SAM	06/04/2024 / SAM	V14419

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14433

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14439

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	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14521

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14522

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	06/10/2025	12/10/2024 / SAM	11/26/2024 / SAM	V14614

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	07/13/2025	01/13/2025 / SAM	11/26/2024 / SAM	V14624

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14722

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14723

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14724

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	05/31/2031	01/10/2025 / SAM	12/17/2024 / SAM	V14754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14756

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	A0220563	06/30/2026	01/10/2025 / SAM	01/08/2025 / SAM	V14801

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	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14814

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	560065 / Custom Standard, 524 Std w/ COC [CS 8005]	A0220861	07/20/2025	01/20/2025 / SAM	01/16/2025 / SAM	V14837

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Baxter

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier
Jamie Ethier
Vice President Global Quality

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): Methanol **Lot#** EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 5E-05 Balance Uncertainty 0.021 Flask Uncertainty

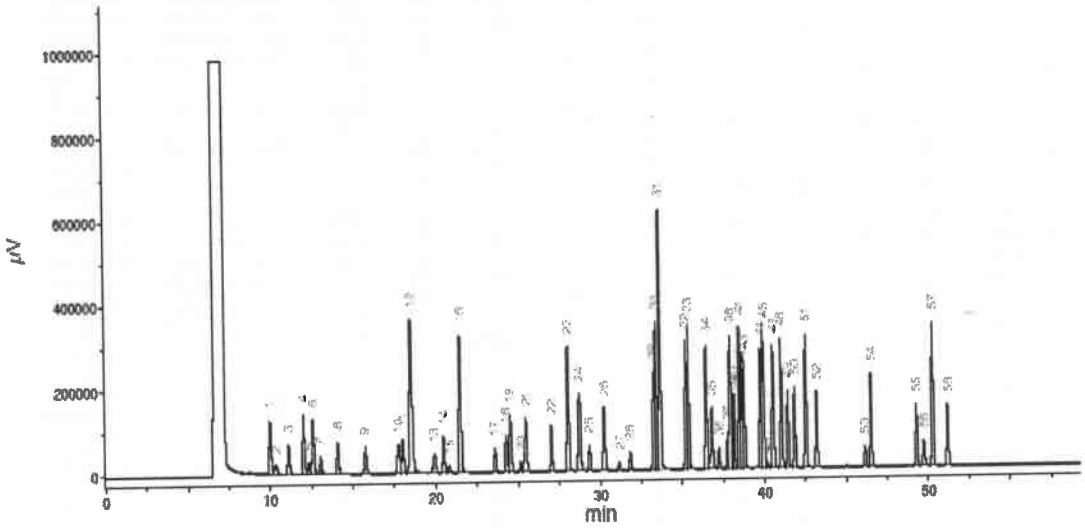
Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(µg/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached 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	(0486)	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)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 848mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	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	40017.8	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 (46mg/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	1999.6	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	1999.6	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	40003.6	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 6040mg/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 sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: 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-1,2,2-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	18.46
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.28
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethene	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.88
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoform	36.18
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	37.93
39	trans-1,4-Dichloro-2-Butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.48
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2023

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.

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): Methanol **Lot#** EG359-USQ12

Formulated By:	Prashant Chauhan	021624	DATE
Reviewed By:	Pedro L. Rentas	021624	DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 5E-05 Balance Uncertainty 0.021 Flask Uncertainty

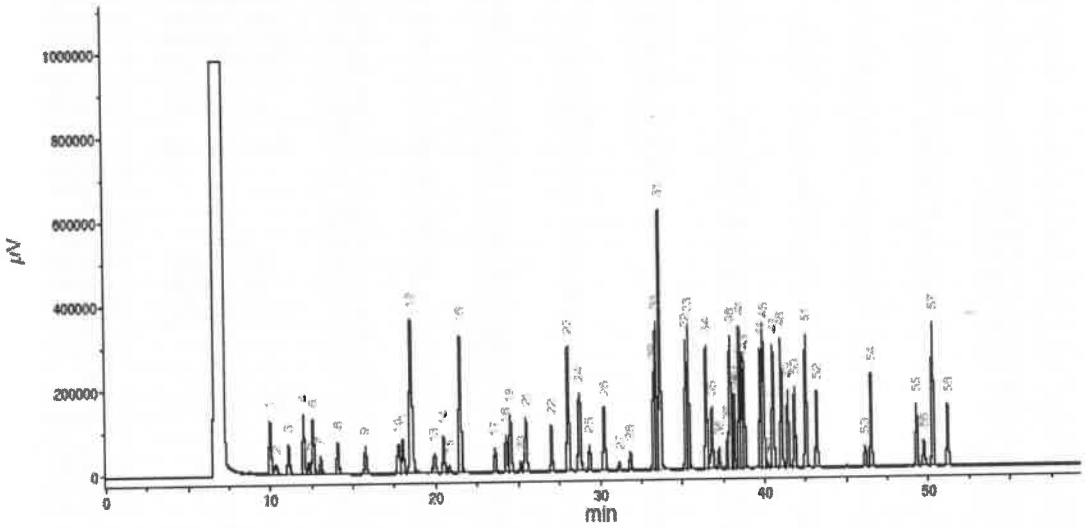
Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(µg/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached 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	(0486)	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	(0361)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 848mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	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	40017.8	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 (46mg/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	1999.6	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	1999.6	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	40003.6	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 6040mg/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 sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: 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-1,2,2-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	18.46
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.28
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethene	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.66
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoform	36.18
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	37.93
39	trans-1,4-Dichloro-2-Butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.48
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

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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	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2023

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 Numb
https://Absolutestandards.co...

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

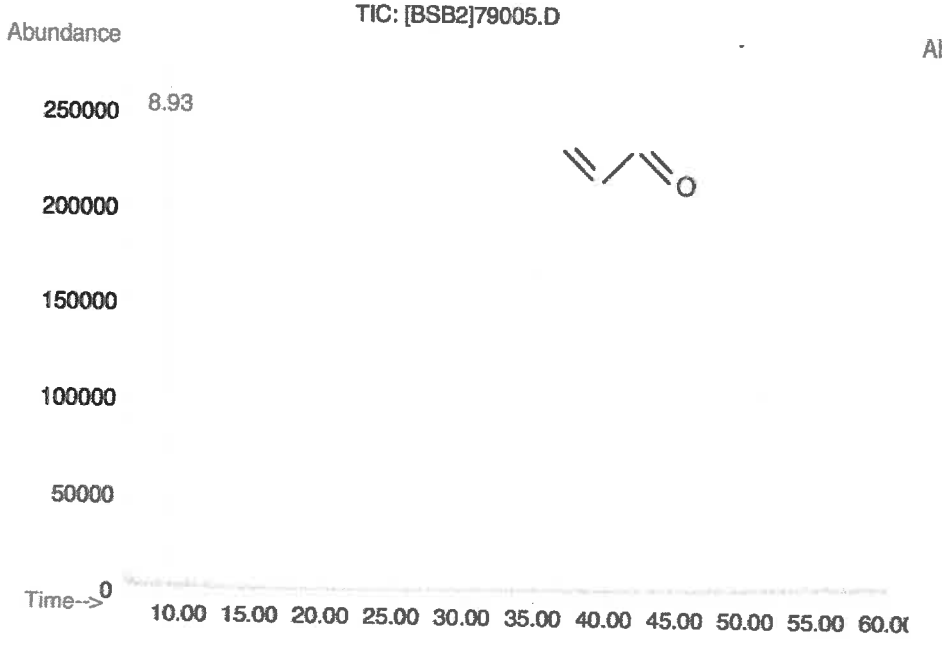
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

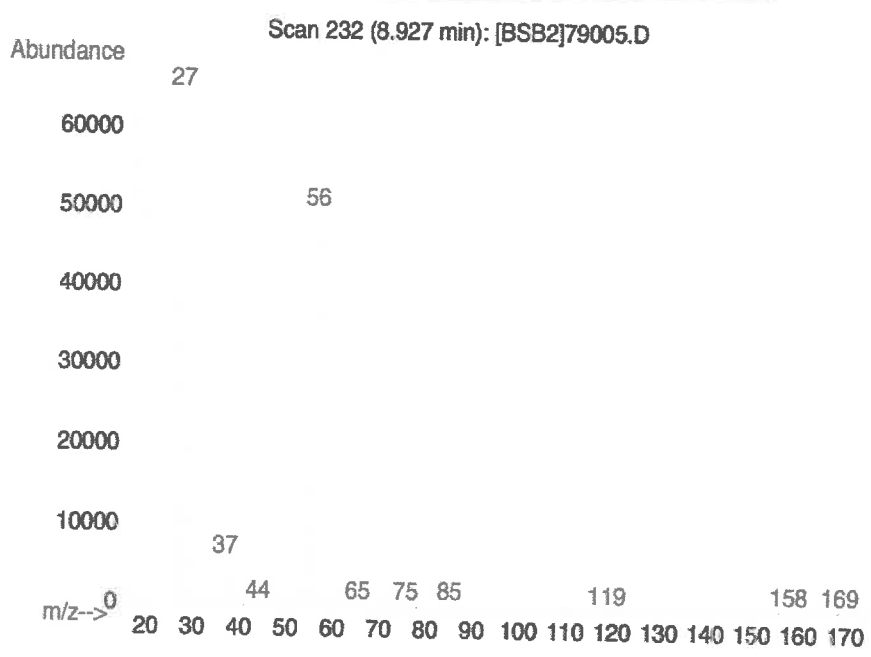
Justin Dippold 091424
Formulated By: Justin Dippold DATE

Pedro Rentas 091424
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Numb
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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

Weight(s) shown below were combined and diluted to (mL): 10.0

Solvent(s): **Lot#**
Water 072324Q

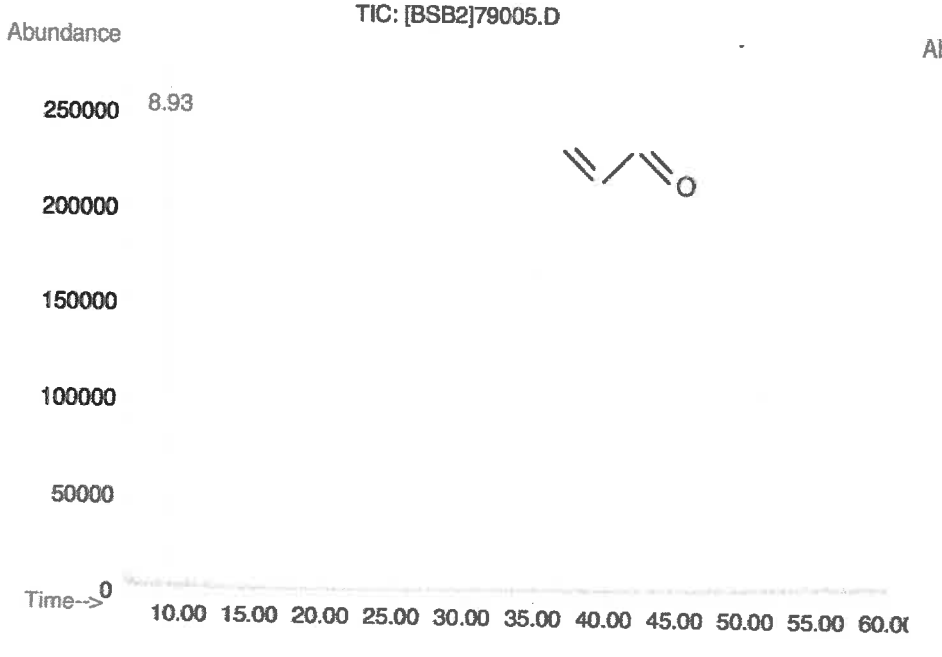
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

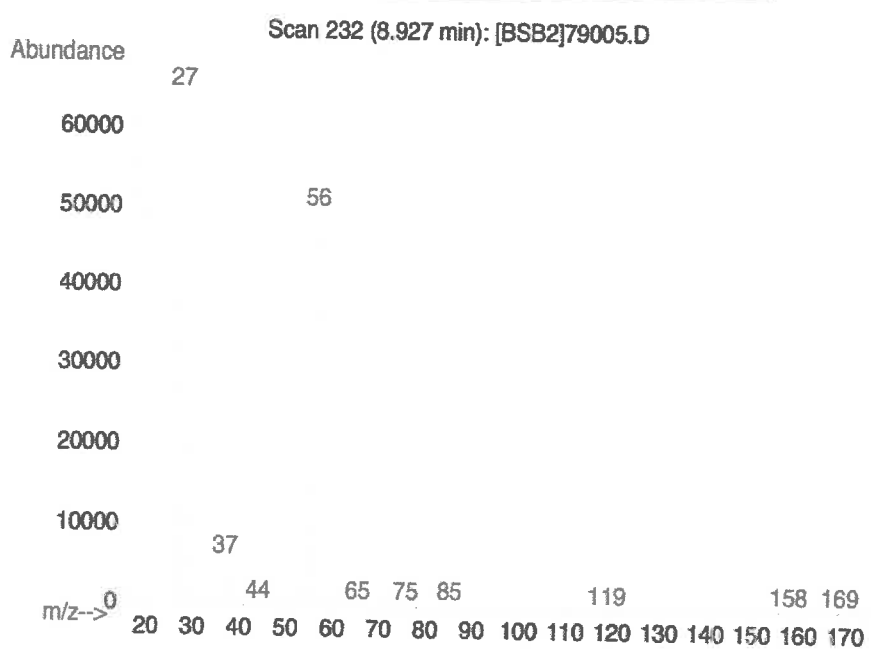
Justin Dippold 091424
Formulated By: Justin Dippold DATE

Pedro Rentas 091424
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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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. : 30201 **Lot No.:** A0168982

Description : 524 Internal Std / Surrogate Mix

524 Internal Std/Surrogate Mix 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Fluorobenzene **CAS #** 462-06-6 **Purity** 99%	(Lot BCBK8171V)	2,008.0 µg/mL	+/- 11.7841 +/- 112.5980 +/- 115.2321	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 **Purity** 99%	(Lot 20401KO)	2,010.0 µg/mL	+/- 11.7958 +/- 112.7101 +/- 115.3469	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 **Purity** 99%	(Lot M-2097)	2,015.5 µg/mL	+/- 11.8281 +/- 113.0185 +/- 115.6625	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

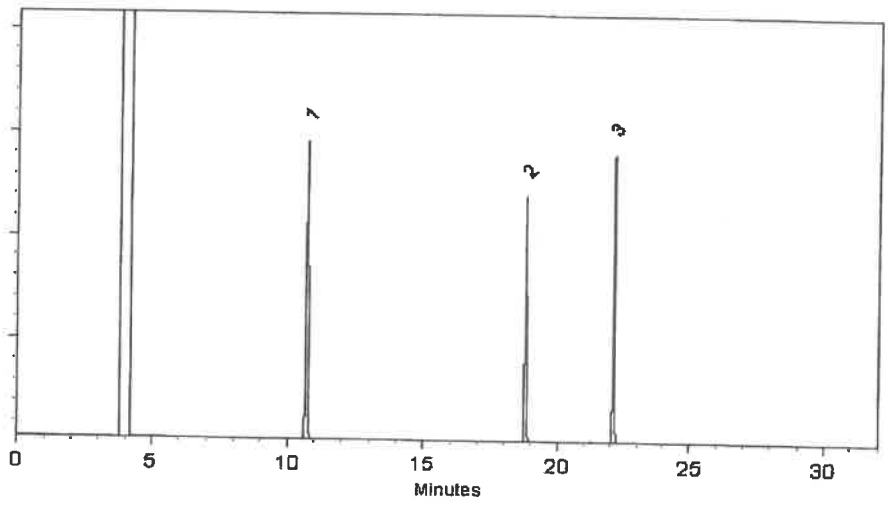
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

Date Mixed: 11-Feb-2021 **Balance:** 1128360905

Alexis Shelow - Operations Tech I

Date Passed: 12-Feb-2021

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 combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules 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 ampules. 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. : 30470 **Lot No.:** A0181905

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 : February 28, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butanol (TBA)		50,126.0	µg/mL	+/- 293.4988	µg/mL	Gravimetric
	CAS # 75-65-0	(Lot SHBM7694)			+/- 1,073.7654	µg/mL	Unstressed
	Purity 99%				+/- 1,104.9494	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

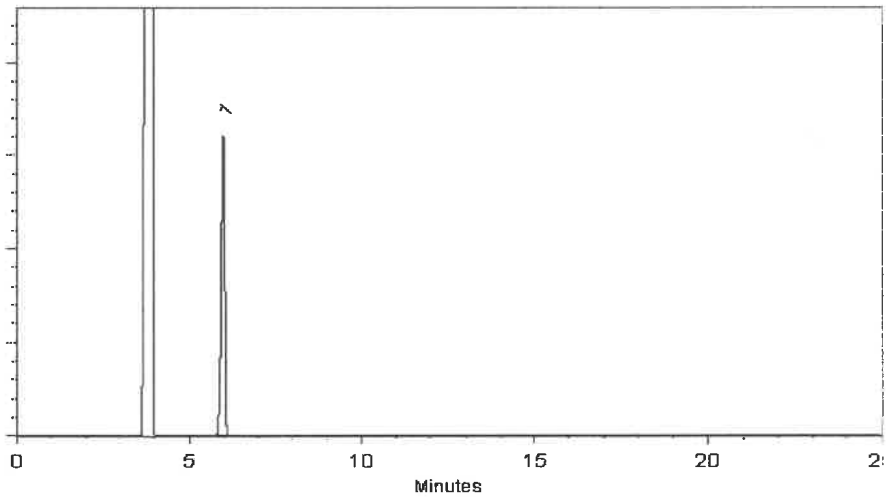
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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



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.

John Friedline - Operations Technician I

Date Mixed: 16-Feb-2022 **Balance:** B442140311

Marlina Cowan - Operations Tech I

Date Passed: 21-Feb-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 combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules 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 ampules. 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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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. : 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.)

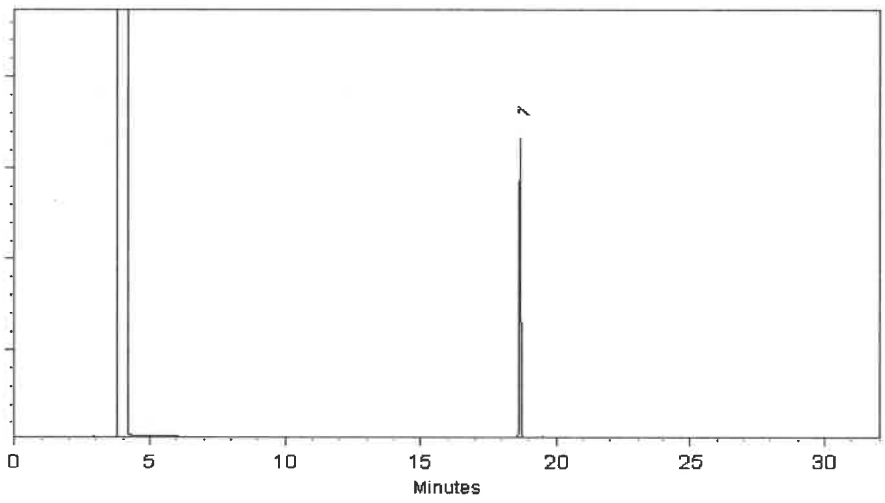
Inj. Temp:
200°C

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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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. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

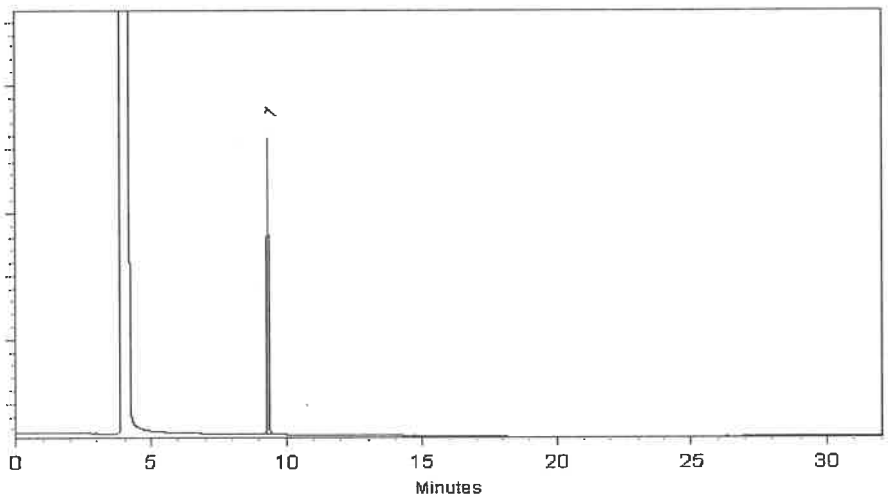
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

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. : 564323 **Lot No.:** A0199211

Description : Custom Oxygenates Standard

Custom Oxygenates Standard 2,000-10,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2028 **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	101619K21F-1	99%	10,093.2 µg/mL	+/- 125.6116
2	Diisopropyl ether (DIPE)	108-20-3	STBK3450	99%	2,011.0 µg/mL	+/- 25.0950
3	Ethyl-tert-butyl ether (ETBE)	637-92-3	MKCP5997	99%	2,009.8 µg/mL	+/- 25.0800
4	tert-Amyl methyl ether (TAME)	994-05-8	HMBJ0825	99%	2,009.2 µg/mL	+/- 25.0726
5	tert-Amyl ethyl ether (TAEE)	919-94-8	IKVYB	97%	2,010.4 µg/mL	+/- 25.0878

* 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.)

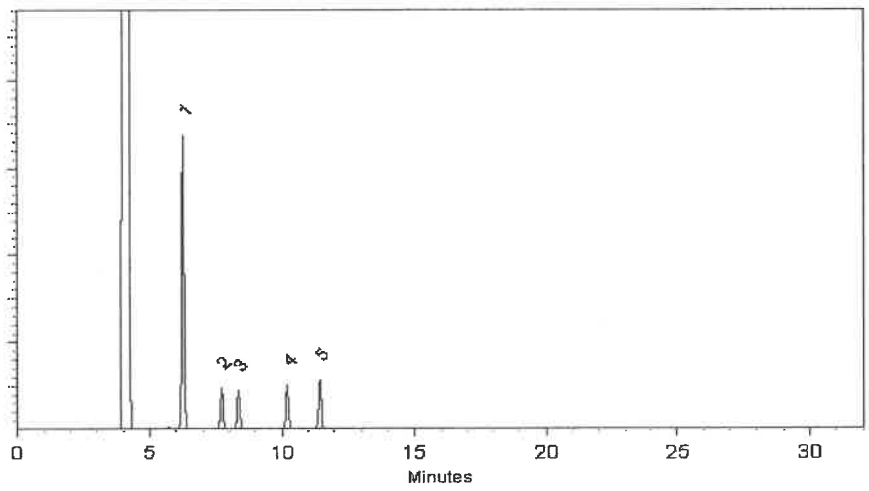
Inj. Temp:
200°C

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.

Bryan Snyder - Operations Tech I

Date Mixed: 22-Jun-2023 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 23-Jun-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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Certificate of Analysis

chromatographic plus

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. : 30601 **Lot No.:** A0204639

Description : Drinking Water VOA MegaMix™, 524.2 Rev 4.1

Drinking Water VOA Mega Mix 524.2 Rev 4.1, 2000µg/mL, P&T Methanol, 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	Diethyl ether (ethyl ether)	60-29-7	SHBQ1495	99%	2,016.9 µg/mL	+/- 70.1908
2	1,1-dichloroethene	75-35-4	SHBG8609V	99%	2,009.6 µg/mL	+/- 69.9229
3	Iodomethane (methyl iodide)	74-88-4	MKCN8012	99%	2,016.5 µg/mL	+/- 70.1787
4	Allyl chloride (3-chloropropene)	107-05-1	RD221118RSR	99%	2,017.0 µg/mL	+/- 69.7168
5	Methylene chloride (dichloromethane)	75-09-2	231383	99%	2,013.2 µg/mL	+/- 70.0499
6	Carbon disulfide	75-15-0	N28F701	99%	2,017.0 µg/mL	+/- 70.1961
7	Acrylonitrile	107-13-1	102466R02E	99%	2,017.1 µg/mL	+/- 70.1995
8	Methyl-tert-butyl ether (MTBE)	1634-04-4	SHBP0179	99%	2,017.0 µg/mL	+/- 69.7168
9	trans-1,2-Dichloroethene	156-60-5	MKCP9516	99%	2,011.9 µg/mL	+/- 70.0038
10	1,1-Dichloroethane	75-34-3	852900	99%	2,010.5 µg/mL	+/- 69.9560
11	Propionitrile	107-12-0	BCCH7430	99%	2,017.0 µg/mL	+/- 70.1943
12	2,2-Dichloropropane	594-20-7	RD230426	99%	2,013.2 µg/mL	+/- 70.0652
13	cis-1,2-Dichloroethene	156-59-2	MKCP7830	99%	2,014.0 µg/mL	+/- 70.0903
14	Methacrylonitrile	126-98-7	1012014	99%	2,015.7 µg/mL	+/- 70.1491
15	Methyl acrylate	96-33-3	SHBG6616V	99%	2,019.0 µg/mL	+/- 70.2639
16	chloroform	67-66-3	SHBN8469	99%	2,009.7 µg/mL	+/- 69.9273

17	Bromochloromethane	74-97-5	230810JLM	99%	2,016.0	µg/mL	+/- 70.1613
18	Tetrahydrofuran	109-99-9	SHBQ0910	99%	2,019.6	µg/mL	+/- 70.2865
19	1,1,1-trichloroethane	71-55-6	RD230728RSR	99%	2,011.1	µg/mL	+/- 69.9769
20	1-Chlorobutane (Butyl chloride)	109-69-3	SHBC2651V	99%	2,015.0	µg/mL	+/- 69.6476
21	1,1-Dichloropropene	563-58-6	230825JLM	99%	2,018.9	µg/mL	+/- 70.2629
22	carbon tetrachloride	56-23-5	SHBP4875	99%	2,011.5	µg/mL	+/- 69.9890
23	1,2-Dichloroethane	107-06-2	SHBQ0693	99%	2,008.7	µg/mL	+/- 69.8916
24	Benzene	71-43-2	MKCS3357	99%	2,017.4	µg/mL	+/- 70.2100
25	Trichloroethene	79-01-6	SHBN3720	99%	2,008.3	µg/mL	+/- 69.8786
26	1,2-Dichloropropane	78-87-5	BCBR0882V	99%	2,012.1	µg/mL	+/- 70.0117
27	Methyl methacrylate	80-62-6	MKCQ2756	99%	2,017.7	µg/mL	+/- 70.2204
28	Chloroacetonitrile	107-14-2	MKBG6249V	99%	2,006.0	µg/mL	+/- 69.3366
29	bromodichloromethane	75-27-4	MKCF8470	99%	2,012.6	µg/mL	+/- 70.0273
30	Dibromomethane	74-95-3	10233302	99%	2,014.7	µg/mL	+/- 70.1153
31	2-Nitropropane	79-46-9	BCCB9352	97%	2,015.9	µg/mL	+/- 70.1562
32	cis-1,3-Dichloropropene	10061-01-5	RD230406RSR	99%	2,005.0	µg/mL	+/- 69.7655
33	Toluene	108-88-3	MKCS9989	99%	2,019.0	µg/mL	+/- 70.2643
34	Ethyl methacrylate	97-63-2	MKCN6206	97%	2,015.4	µg/mL	+/- 70.1393
35	trans-1,3-Dichloropropene	10061-02-6	RD230727RSR	99%	2,011.3	µg/mL	+/- 69.9838
36	1,1,2-Trichloroethane	79-00-5	FGB01	99%	2,013.2	µg/mL	+/- 70.0491
37	1,3-Dichloropropane	142-28-9	BCCH5357	99%	2,017.1	µg/mL	+/- 70.2002
38	Tetrachloroethene	127-18-4	SHBQ0051	99%	2,011.5	µg/mL	+/- 69.9908
39	dibromochloromethane	124-48-1	MKCQ4517	99%	2,006.6	µg/mL	+/- 69.8185
40	1,2-Dibromoethane (EDB)	106-93-4	BCCH7113	99%	2,009.0	µg/mL	+/- 69.9176
41	Chlorobenzene	108-90-7	SHBN6640	99%	2,009.8	µg/mL	+/- 69.9299
42	1,1,1,2-Tetrachloroethane	630-20-6	GC01	99%	2,013.8	µg/mL	+/- 70.0833
43	Ethylbenzene	100-41-4	094632L21G	99%	2,006.8	µg/mL	+/- 69.8411
44	m-Xylene	108-38-3	SHBN6673	99%	2,018.7	µg/mL	+/- 70.2559
45	p-Xylene	106-42-3	SHBP5191	99%	2,008.0	µg/mL	+/- 69.8828
46	o-Xylene	95-47-6	SHBN5105	99%	2,016.3	µg/mL	+/- 70.1724
47	Styrene	100-42-5	MKCQ3390	99%	2,014.8	µg/mL	+/- 70.1209
48	Isopropylbenzene (cumene)	98-82-8	Z20D022	99%	2,011.4	µg/mL	+/- 70.0026
49	bromoform	75-25-2	050494L04R	99%	2,009.6	µg/mL	+/- 69.9255
50	1,1,2,2-Tetrachloroethane	79-34-5	OXACF	99%	2,011.7	µg/mL	+/- 69.9986
51	1,2,3-Trichloropropane	96-18-4	Q91-34	98%	2,013.8	µg/mL	+/- 70.0841
52	trans-1,4-dichloro-2-butene	110-57-6	RP231113CTH	94%	2,017.2	µg/mL	+/- 69.7251

53	n-Propylbenzene	103-65-1	095067T18C	99%	2,018.4	µg/mL	+/- 70.2434
54	Bromobenzene	108-86-1	MKCQ7174	99%	2,016.9	µg/mL	+/- 70.1919
55	1,3,5-Trimethylbenzene	108-67-8	BCCF4166	99%	2,017.0	µg/mL	+/- 70.1961
56	2-Chlorotoluene	95-49-8	235783M23T	99%	2,017.8	µg/mL	+/- 70.2253
57	4-Chlorotoluene	106-43-4	BCCG9286	99%	2,014.1	µg/mL	+/- 70.0958
58	tert-Butylbenzene	98-06-6	STBJ1937	99%	2,005.2	µg/mL	+/- 69.7868
59	1,2,4-Trimethylbenzene	95-63-6	MKCS3775	99%	2,015.9	µg/mL	+/- 70.1571
60	Pentachloroethane	76-01-7	13550700	97%	2,012.8	µg/mL	+/- 69.5699
61	sec-Butylbenzene	135-98-8	MKCP2266	99%	2,011.0	µg/mL	+/- 69.9872
62	p-Isopropyltoluene (p-Cymene)	99-87-6	MKCR6143	99%	2,014.6	µg/mL	+/- 70.1111
63	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	2,003.2	µg/mL	+/- 69.7020
64	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	2,015.0	µg/mL	+/- 70.1108
65	n-Butylbenzene	104-51-8	09418JJ	99%	2,005.3	µg/mL	+/- 69.7882
66	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	2,009.0	µg/mL	+/- 69.9020
67	Hexachloroethane	67-72-1	QTORH	99%	2,016.0	µg/mL	+/- 69.6822
68	1,2-Dibromo-3-chloropropane	96-12-8	HBMVB	97%	2,005.1	µg/mL	+/- 69.7821
69	Nitrobenzene	98-95-3	10224044	99%	2,017.9	µg/mL	+/- 70.2256
70	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	2,015.0	µg/mL	+/- 70.1251
71	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	2,001.7	µg/mL	+/- 69.6639
72	Naphthalene	91-20-3	STBL1057	99%	2,008.9	µg/mL	+/- 69.9149
73	1,2,3-Trichlorobenzene	87-61-6	MKBX7627V	99%	2,012.3	µg/mL	+/- 70.0318

* 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 pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

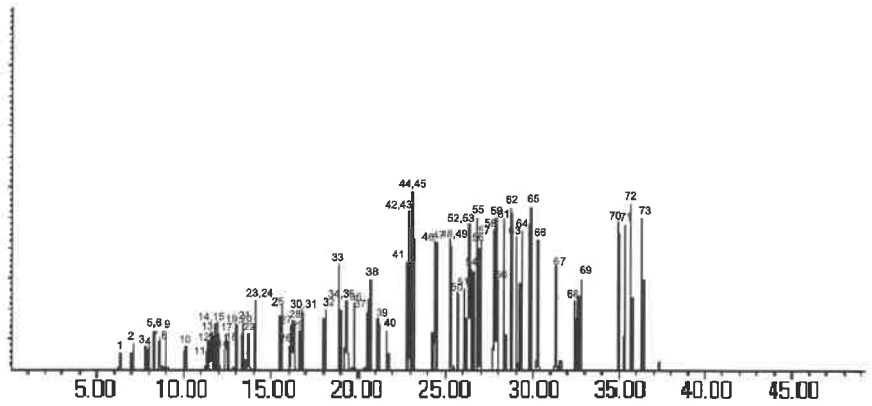
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 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.

John Friedline - Operations Technician I

Date Mixed: 20-Nov-2023 **Balance Serial #** 1128342314

Dillan Murphy - Operations Technician I

Date Passed: 29-Nov-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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Certificate of Analysis

chromatographic plus

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

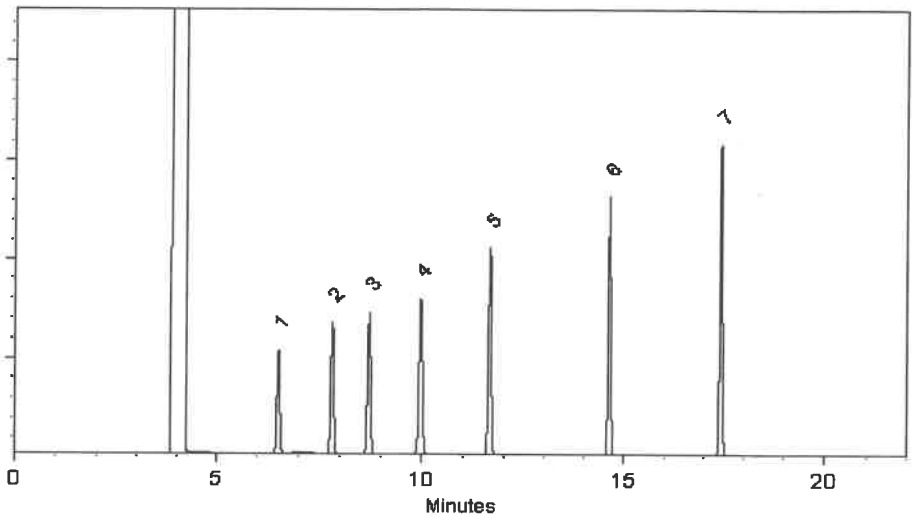
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

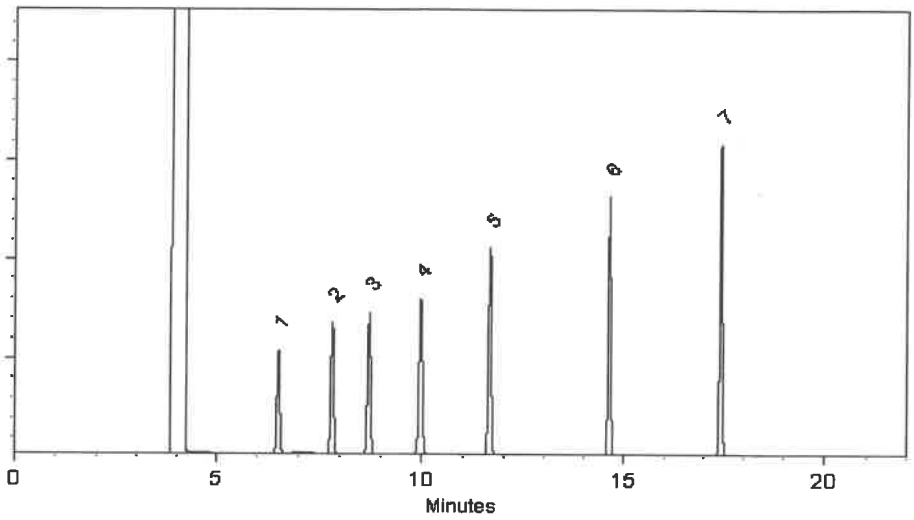
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

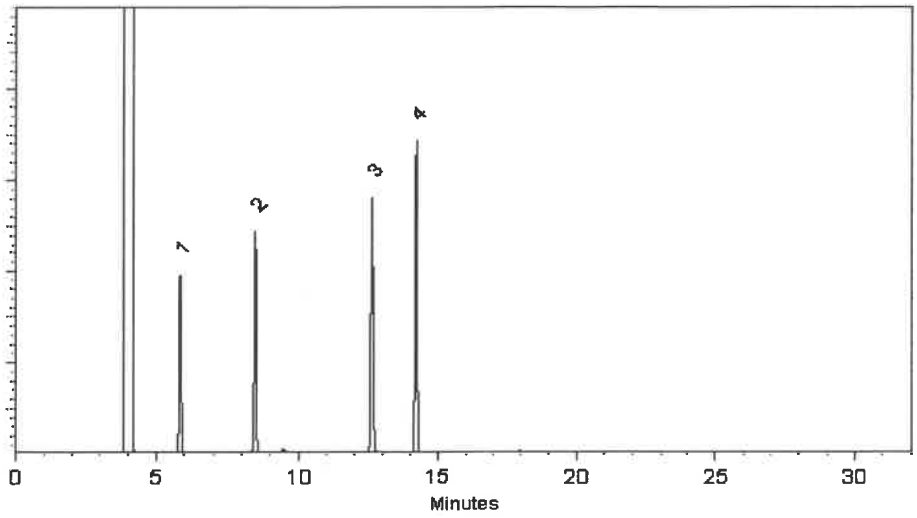
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

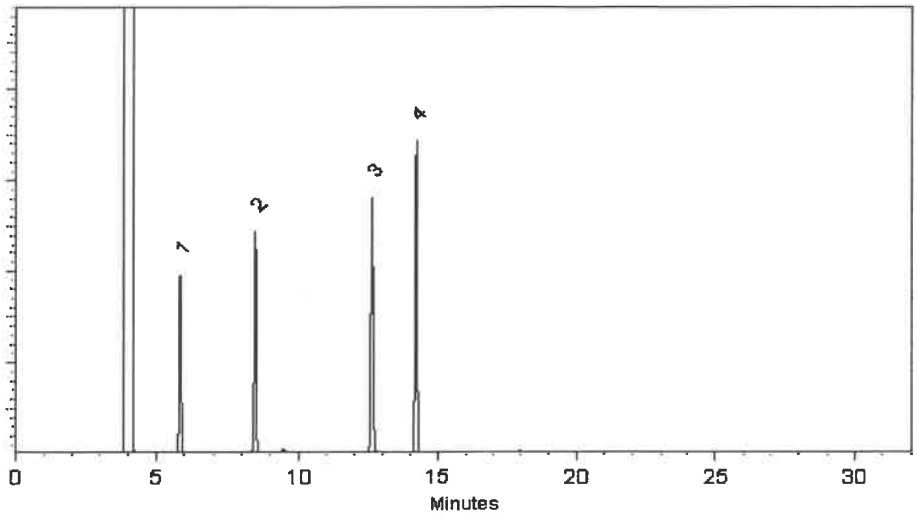
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

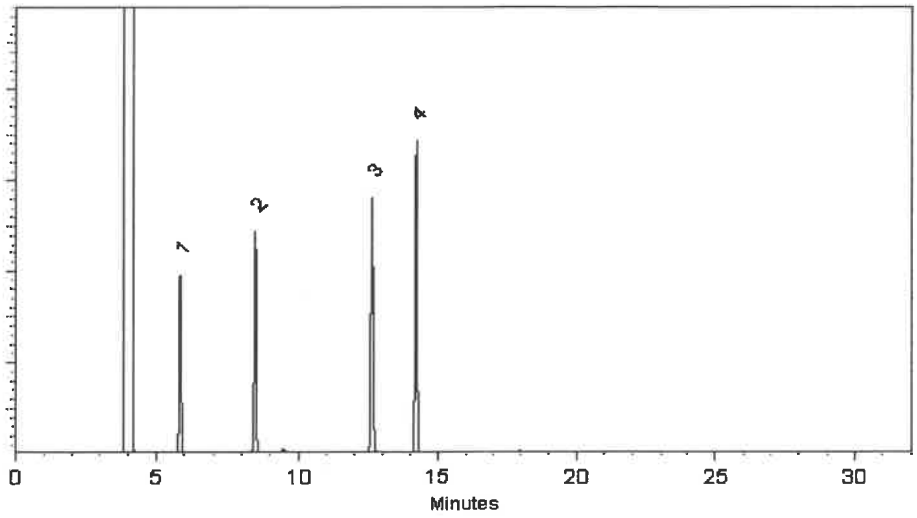
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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30 Vial

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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. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

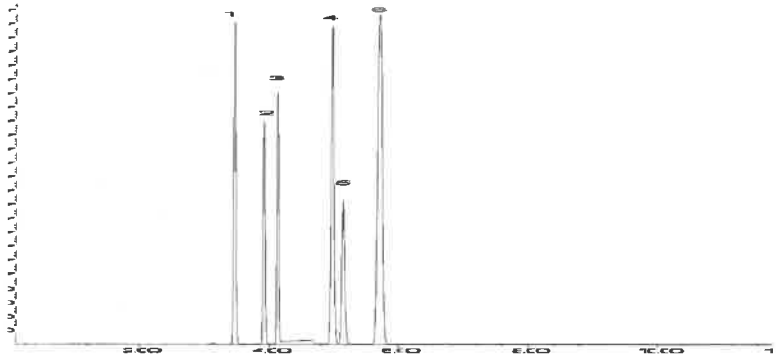
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

30 Vial

Certificate of Analysis

chromatographic plus

V14727 to
V14756

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. : 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.

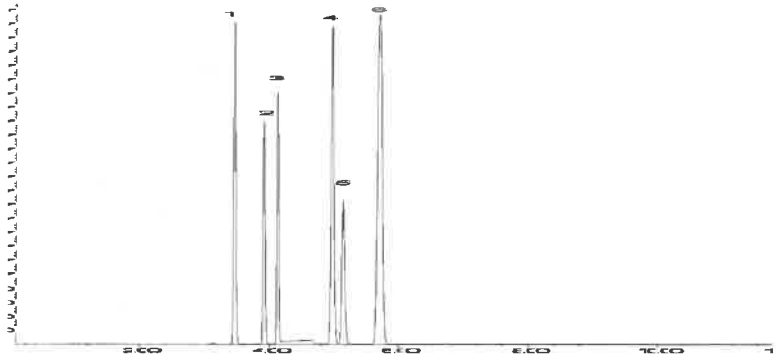
Inj. Temp:
200°C

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.

Zo Vinyl Rec 01/08/25

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA

A2LA ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

A2LA ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic

V14803 - V14822

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

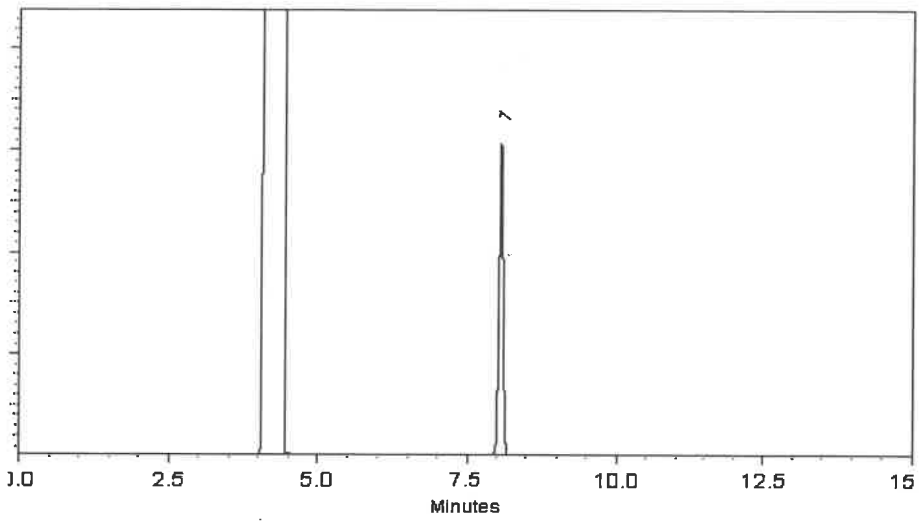
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

10 vial Rec 01/08/25

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic

V14793 to 14802

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-FL **Lot No.:** A0220563

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%	8,060.0 µg/mL	+/- 278.5905

* 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.)

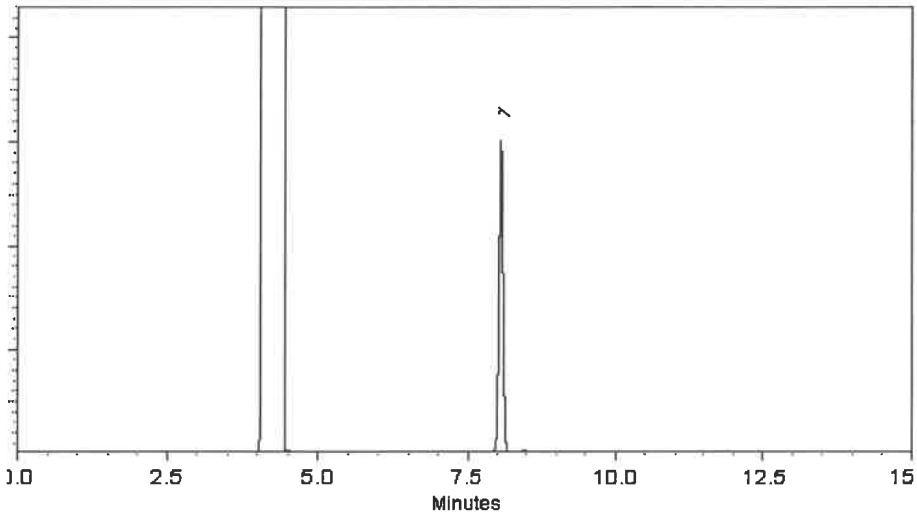
Inj. Temp:
200°C

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.

Tom Suckal - Mix Technician

Date Mixed: 30-Dec-2024 **Balance Serial #** B345965662

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.

Rec 01/16/25

RESTEK

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CERTIFIED REFERENCE MATERIAL

5 vial

Certificate of Analysis

chromatographic

V14837 to V14841

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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. : 560065 **Lot No.:** A0220861

Description : Custom 524 Standard

Custom 524 Standard 2,000-10,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 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	1,1,2-Trichlorotrifluoroethane (CFC-113)	76-13-1	00022779	99%	2,009.0 µg/mL	+/- 69.4402
2	tert-Butanol (TBA)	75-65-0	SHBR5545	99%	10,036.0 µg/mL	+/- 346.8674
3	Acrylonitrile	107-13-1	102466R02E	99%	2,015.0 µg/mL	+/- 69.6476
4	Propionitrile	107-12-0	BCCL0691	99%	8,074.0 µg/mL	+/- 279.0744
5	Tetrahydrofuran	109-99-9	SHBR7392	99%	2,009.0 µg/mL	+/- 69.4402
6	Cyclohexane	110-82-7	SHBS0091	99%	2,014.0 µg/mL	+/- 69.6131
7	Methylcyclohexane	108-87-2	SHBR3777	99%	2,015.0 µg/mL	+/- 69.6476
8	Methyl methacrylate	80-62-6	MKCQ2756	99%	2,011.0 µg/mL	+/- 69.5094
9	trans-1,4-dichloro-2-butene	110-57-6	RD240719ECSB	97%	2,013.7 µg/mL	+/- 69.6034
10	Nitrobenzene	98-95-3	10224044	99%	8,026.0 µg/mL	+/- 277.4153

* 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 pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

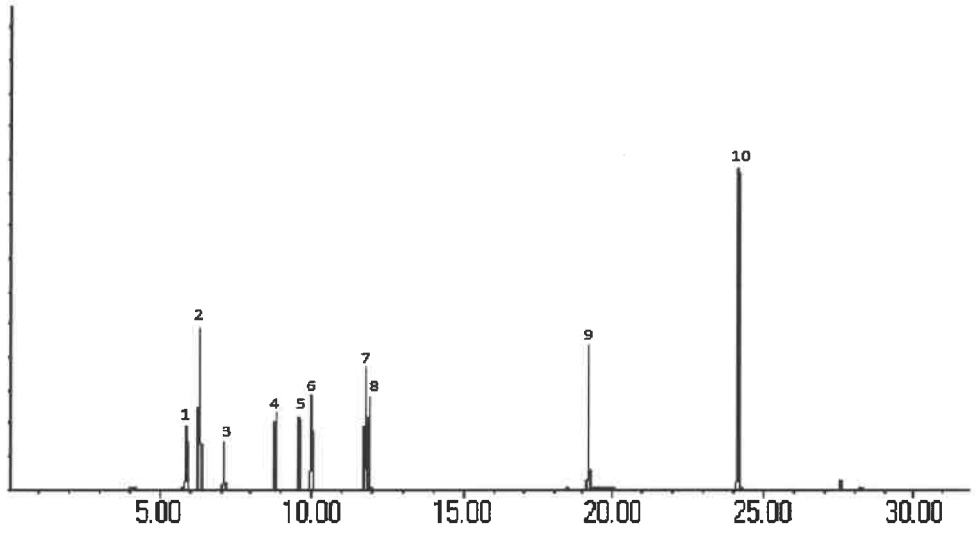
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
25.0 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.

Morgan Craighead - Mix Technician

Date Mixed: 07-Jan-2025 **Balance Serial #** 1128342314

Dillan Murphy - Operations Technician I

Date Passed: 10-Jan-2025

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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Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

SHIPPING DOCUMENTS

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Certified Reference Materials

Packing List

Date	Order #
01/13/2025	333291

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: MA
01/15/2025 10:00

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-974	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WS	WS Trace Metals Set : (TM and HG)		
1	1	0	PT-TM-WS	WS Trace Metals 1	WS0125	9099-04B
1	1	0	PT-HG-WS	WS Trace Metals Mercury	WS0125	9099-05
1	1	0	PT-MIN-WS	WS Minerals Only	WS0125	9099-51
1	1	0	PT-TURB-WS	WS Turbidity	WS0125	9099-13
1	1	0	PT-SIO2-WS	WS Silica	WS0125	9099-17
1	1	0	PT-RVOA-WS	WS Regulated Volatiles	WS0125	9099-21
1	1	0	PT-UNRVOA-WS	WS Unregulated Volatiles	WS0125	9099-22
1	1	0	PT-THM-WS	WS Trihalomethanes	WS0125	9099-23
1	1	0	PT-EDBCP-WS	WS EDB/DBCP/TCP	WS0125	9099-27
1	1	0	PT-ADD-WS	WS Gasoline Additives	WS0125	9099-36

Laboratory Certification

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