

DATA PACKAGE VOLATILE ORGANICS

PROJECT NAME : NJ WASTE WATER PT

ALLIANCE TECHNICAL GROUP, LLC - NEWARK

284 Sheffiled Stree

Suite 1

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : Q1502

ATTENTION : Mohammad Ahmed



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q1502

Project ID : NJ Waste Water PT

Client : Alliance Technical Group, LLC - Newark

Lab Sample Number

Q1502-01
Q1502-02
Q1502-03
Q1502-04
Q1502-05
Q1502-06
Q1502-07
Q1502-08
Q1502-09
Q1502-10
Q1502-11
Q1502-12
Q1502-13
Q1502-14
Q1502-15
Q1502-16
Q1502-17
Q1502-18
Q1502-19
Q1502-20
Q1502-21
Q1502-22

Client Sample Number

PT-VOA-WP
PT-VOA-WP
PT-BN-WP
PT-BN-WP
PT-BN-WP
PT-ACIDS-WP
PT-ACIDS-WP
PT-ACIDS-WP
PT-PEST-WP
PT-PEST-WP
PT-CHLR-WP
PT-CHLR-WP
PT-TXP-WP
PT-TXP-WP
PT-PCBW-WP
PT-PCBW-WP
PT-HERB-WP
RR-GAS-WP
RR-DIES-WP
RR-8011-WP
RR-PAH-WP
RR-TRIAZINE-WP

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

Signature : _____

Date: 3/22/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Alliance Technical Group, LLC - Newark

Project Name: NJ Waste Water PT

Project # N/A

Chemtech Project # Q1502

Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:

21 Water samples were received on 03/05/2025.

1 Water sample was received on 03/11/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Herbicide group1, PCB, PESTICIDE Group1, PESTICIDE Group2, PESTICIDE Group3, SVOCMS Group1, SVOCMS Group2, SVOCMS Group3, SVOCMS Group4, SVOCMS Group5, SVOCMS Group6, VOCGC Group 1 and VOCMS Group1. This data package contains results for VOCMS Group1.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI The analysis of VOCMS Group1 was based on method 624.1,8260D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike for {VX0319WBS01} with File ID: VX045341.D met requirements for all samples except for Carbon disulfide[73%], Failing but no positive hit in Associated samples.

The Blank Spike Duplicate for {VX0319WBSD01} with File ID: VX045342.D met requirements for all samples except for Carbon disulfide[68%], Failing but no positive hit in Associated samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

The Tuning criteria met requirements.

E. Additional Comments:

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <35% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 35% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

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

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_____

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 flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
E	Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”.
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1502

MATRIX: Water

METHOD: 624.1,8260-Low

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements. The Initial Calibration met the requirements . The Continuous Calibration met the requirements.		✓	
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The Blank Spike for {VX0319WBS01} with File ID: VX045341.D met requirements for all samples except for Carbon disulfide[73%],Failing but no positive hit in Associated samples. The Blank Spike Duplicate for {VX0319WBSD01} with File ID: VX045342.D met requirements for all samples except for Carbon disulfide[68%],Failing but no positive hit in Associated samples.		✓	
9.	Internal Standard Area/Retention Time Shift Meet Criteria Comments:			✓
10.	Analysis Holding Time Met If not met, list number of days exceeded for each sample: The Holding Times were met for all analysis.		✓	

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

NA NO YES

ADDITIONAL COMMENTS:

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <35% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 35% for the Initial Calibration curve for SW-846 analysis.

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1502

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: 03/24/2025

LAB CHRONICLE

OrderID:	Q1502	OrderDate:	3/6/2025 10:04:07 AM
Client:	Alliance Technical Group, LLC - Newark	Project:	NJ Waste Water PT
Contact:	Mohammad Ahmed	Location:	QA Office,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1502-01	PT-VOA-WP	Water	VOCMS Group1	8260-Low	03/03/25		03/11/25	03/05/25
Q1502-02	PT-VOA-WP	Water	VOCMS Group1	624.1	03/03/25		03/19/25	03/05/25

Hit Summary Sheet
SW-846

SDG No.: Q1502

Client: Alliance Technical Group, LLC - Newark

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	PT-VOA-WP							
Q1502-02	PT-VOA-WP	Water	Bromomethane	67.0		0.80	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Trichlorofluoromethane	89.0		0.80	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	1,1-Dichloroethene	87.4		0.76	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Acetone	160		4.60	25.0	ug/L
Q1502-02	PT-VOA-WP	Water	Methyl tert-Butyl Ether	53.7		0.77	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Methylene Chloride	50.7		0.86	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	trans-1,2-Dichloroethene	77.3		0.82	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	2-Butanone	44.9		2.00	25.0	ug/L
Q1502-02	PT-VOA-WP	Water	Carbon Tetrachloride	31.8		0.74	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	cis-1,2-Dichloroethene	110		0.80	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Chloroform	72.4		0.55	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Benzene	120		0.45	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	1,2-Dichloroethane	39.5		0.50	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Trichloroethene	53.9		0.49	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	1,2-Dichloropropane	80.8		0.46	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Dibromomethane	110		0.59	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Bromodichloromethane	16.9		0.64	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	4-Methyl-2-Pentanone	140		3.00	25.0	ug/L
Q1502-02	PT-VOA-WP	Water	Toluene	110		0.46	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	t-1,3-Dichloropropene	74.0		0.72	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	cis-1,3-Dichloropropene	54.7		0.67	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	2-Hexanone	160		3.20	25.0	ug/L
Q1502-02	PT-VOA-WP	Water	Tetrachloroethene	120		0.84	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Chlorobenzene	120		0.47	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	1,1,1,2-Tetrachloroethane	110		0.62	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Ethyl Benzene	36.1		0.56	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Total Xylenes	223		1.97	15.0	ug/L
Q1502-02	PT-VOA-WP	Water	m/p-Xylenes	72.5		1.30	10.0	ug/L
Q1502-02	PT-VOA-WP	Water	o-Xylene	150		0.67	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Styrene	89.3		0.72	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	1,3,5-Trimethylbenzene	94.0		0.59	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	1,3-Dichlorobenzene	49.4		0.67	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	1,2-Dichlorobenzene	120		0.67	5.00	ug/L
Q1502-02	PT-VOA-WP	Water	Naphthalene	88.7		1.00	5.00	ug/L
Total Voc :					2850			
Total Concentration:					2850			

Hit Summary Sheet
SW-846

SDG No.: Q1502

Client: Alliance Technical Group, LLC - Newark

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16



QC SUMMARY

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Surrogate Summary

SDG No.: **Q1502**

Client: **Alliance Technical Group, LLC - Newark**

Analytical Method: **SW624.1**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1502-02	PT-VOA-WP	1,2-Dichloroethane-d4	30	32.7	109	91	110
		Toluene-d8	30	30.2	101	91	112
		4-Bromofluorobenzene	30	29.9	100	63	112
VX0319WBL01	VX0319WBL01	1,2-Dichloroethane-d4	30	31.2	104	91	110
		Toluene-d8	30	29.5	98	91	112
		4-Bromofluorobenzene	30	28.4	95	63	112
VX0319WBS01	VX0319WBS01	1,2-Dichloroethane-d4	30	32.0	107	91	110
		Toluene-d8	30	31.1	104	91	112
		4-Bromofluorobenzene	30	31.1	104	63	112
VX0319WBSD0	VX0319WBSD01	1,2-Dichloroethane-d4	30	31.9	106	91	110
		Toluene-d8	30	29.6	99	91	112
		4-Bromofluorobenzene	30	30.5	102	63	112

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1502

Client: Alliance Technical Group, LLC - Newark

Analytical Method: SW624.1

Datafile : VX045341.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0319WBS01	Dichlorodifluoromethane	20	17.5	ug/L	88			72	118	
	Chloromethane	20	15.2	ug/L	76			1	205	
	Vinyl Chloride	20	15.7	ug/L	79			5	195	
	Ethyl Acetate	20	22.1	ug/L	111			68	140	
	Bromomethane	20	20.1	ug/L	101			15	185	
	Chloroethane	20	16.5	ug/L	83			40	160	
	Trichlorofluoromethane	20	17.5	ug/L	88			50	150	
	1,1,2-Trichlorotrifluoroethane	20	19.2	ug/L	96			64	127	
	1,1-Dichloroethene	20	17.9	ug/L	90			50	150	
	Acrolein	100	100	ug/L	100			60	140	
	Acrylonitrile	100	110	ug/L	110			60	140	
	Acetone	100	120	ug/L	120			41	148	
	Carbon disulfide	20	14.6	ug/L	73		*	76	107	
	Methyl tert-butyl Ether	20	19.1	ug/L	96			82	114	
	Methylene Chloride	20	18.4	ug/L	92			60	140	
	trans-1,2-Dichloroethene	20	17.5	ug/L	88			70	130	
	Vinyl Acetate	100	96.0	ug/L	96			25	181	
	1,1-Dichloroethane	20	18.8	ug/L	94			70	130	
	2-Butanone	100	120	ug/L	120			69	129	
	Carbon Tetrachloride	20	20.4	ug/L	102			70	130	
	2,2-Dichloropropane	20	18.8	ug/L	94			62	139	
	cis-1,2-Dichloroethene	20	18.3	ug/L	92			81	112	
	Chloroform	20	19.6	ug/L	98			70	135	
	1,1,1-Trichloroethane	20	20.8	ug/L	104			70	130	
	1,1-Dichloropropene	20	19.8	ug/L	99			70	139	
	Benzene	20	19.8	ug/L	99			65	135	
	1,2-Dichloroethane	20	22.5	ug/L	113			70	130	
	Trichloroethene	20	19.3	ug/L	97			65	135	
	1,2-Dichloropropane	20	19.3	ug/L	97			35	165	
	Dibromomethane	20	21.0	ug/L	105			72	138	
	Bromodichloromethane	20	20.8	ug/L	104			65	135	
	4-Methyl-2-Pentanone	100	120	ug/L	120			73	131	
	Toluene	20	20.3	ug/L	102			70	130	
	t-1,3-Dichloropropene	20	18.3	ug/L	92			50	150	
	cis-1,3-Dichloropropene	20	18.8	ug/L	94			25	175	
	1,1,2-Trichloroethane	20	20.1	ug/L	101			70	130	
	1,3-Dichloropropane	20	20.7	ug/L	104			70	141	
	2-Chloroethyl vinyl ether	100	130	ug/L	130			1	225	
	2-Hexanone	100	120	ug/L	120			72	128	
	Dibromochloromethane	20	19.9	ug/L	100			70	135	
	1,2-Dibromoethane	20	20.9	ug/L	104			86	114	
	Tetrachloroethene	20	21.1	ug/L	106			70	130	
	Chlorobenzene	20	19.7	ug/L	99			65	135	
	1,1,1,2-Tetrachloroethane	20	19.9	ug/L	100			63	138	
	Ethyl Benzene	20	20.3	ug/L	102			60	140	
	m/p-Xylenes	40	40.4	ug/L	101			87	111	
	o-Xylene	20	20.2	ug/L	101			87	111	
	Styrene	20	19.5	ug/L	98			85	106	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1502

Client: Alliance Technical Group, LLC - Newark

Analytical Method: SW624.1

Datafile : VX045341.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0319WBS01	Bromoform	20	19.4	ug/L	97			70	130	
	Isopropylbenzene	20	20.5	ug/L	103			86	112	
	1,1,2,2-Tetrachloroethane	20	21.3	ug/L	106			60	140	
	1,2,3-Trichloropropane	20	21.6	ug/L	108			61	148	
	Bromobenzene	20	19.0	ug/L	95			59	142	
	N-propylbenzene	20	20.3	ug/L	102			67	139	
	2-Chlorotoluene	20	20.3	ug/L	102			66	138	
	1,3,5-Trimethylbenzene	20	20.5	ug/L	103			66	139	
	4-Chlorotoluene	20	19.8	ug/L	99			66	141	
	1,2,4-Trimethylbenzene	20	19.8	ug/L	99			63	142	
	Sec-butylbenzene	20	20.2	ug/L	101			63	144	
	p-Isopropyltoluene	20	20.0	ug/L	100			57	147	
	1,3-Dichlorobenzene	20	19.4	ug/L	97			70	130	
	1,4-Dichlorobenzene	20	19.0	ug/L	95			65	135	
	n-Butylbenzene	20	19.4	ug/L	97			49	157	
	1,2-Dichlorobenzene	20	19.6	ug/L	98			65	135	
	1,2-Dibromo-3-Chloropropane	20	21.9	ug/L	110			69	122	
	1,2,4-Trichlorobenzene	20	18.5	ug/L	93			61	118	
	Hexachlorobutadiene	20	19.9	ug/L	100			16	187	
	Naphthalene	20	19.3	ug/L	97			45	152	
	1,2,3-Trichlorobenzene	20	18.6	ug/L	93			38	159	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1502

Client: Alliance Technical Group, LLC - Newark

Analytical Method: SW624.1

Datafile : VX045342.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0319WBSD01	Dichlorodifluoromethane	20	15.1	ug/L	76	15		72	118	20
	Chloromethane	20	15.4	ug/L	77	1		1	205	20
	Vinyl Chloride	20	14.4	ug/L	72	9		5	195	20
	Ethyl Acetate	20	21.9	ug/L	110	1		68	140	20
	Bromomethane	20	19.4	ug/L	97	4		15	185	20
	Chloroethane	20	15.0	ug/L	75	10		40	160	20
	Trichlorofluoromethane	20	16.0	ug/L	80	10		50	150	20
	1,1,2-Trichlorotrifluoroethane	20	17.7	ug/L	89	8		64	127	20
	1,1-Dichloroethene	20	16.3	ug/L	81	11		50	150	20
	Acrolein	100	88.7	ug/L	89	12		60	140	20
	Acrylonitrile	100	110	ug/L	110	0		60	140	20
	Acetone	100	100	ug/L	100	18		41	148	20
	Carbon disulfide	20	13.5	ug/L	68	7	*	76	107	20
	Methyl tert-butyl Ether	20	18.6	ug/L	93	3		82	114	20
	Methylene Chloride	20	17.8	ug/L	89	3		60	140	20
	trans-1,2-Dichloroethene	20	16.7	ug/L	84	5		70	130	20
	Vinyl Acetate	100	98.5	ug/L	99	3		25	181	20
	1,1-Dichloroethane	20	17.9	ug/L	90	4		70	130	20
	2-Butanone	100	120	ug/L	120	0		69	129	20
	Carbon Tetrachloride	20	19.8	ug/L	99	3		70	130	20
	2,2-Dichloropropane	20	18.0	ug/L	90	4		62	139	20
	cis-1,2-Dichloroethene	20	17.3	ug/L	86	7		81	112	20
	Chloroform	20	19.1	ug/L	96	2		70	135	20
	1,1,1-Trichloroethane	20	20.0	ug/L	100	4		70	130	20
	1,1-Dichloropropene	20	19.0	ug/L	95	4		70	139	20
	Benzene	20	19.3	ug/L	97	2		65	135	20
	1,2-Dichloroethane	20	22.7	ug/L	114	1		70	130	20
	Trichloroethene	20	18.6	ug/L	93	4		65	135	20
	1,2-Dichloropropane	20	19.4	ug/L	97	0		35	165	20
	Dibromomethane	20	21.4	ug/L	107	2		72	138	20
	Bromodichloromethane	20	20.7	ug/L	104	0		65	135	20
	4-Methyl-2-Pentanone	100	120	ug/L	120	0		73	131	20
	Toluene	20	18.4	ug/L	92	10		70	130	20
	t-1,3-Dichloropropene	20	18.4	ug/L	92	0		50	150	20
	cis-1,3-Dichloropropene	20	19.4	ug/L	97	3		25	175	20
	1,1,2-Trichloroethane	20	20.8	ug/L	104	3		70	130	20
	1,3-Dichloropropane	20	21.4	ug/L	107	3		70	141	20
	2-Chloroethyl vinyl ether	100	120	ug/L	120	8		1	225	20
	2-Hexanone	100	120	ug/L	120	0		72	128	20
	Dibromochloromethane	20	20.3	ug/L	102	2		70	135	20
	1,2-Dibromoethane	20	21.8	ug/L	109	5		86	114	20
	Tetrachloroethene	20	18.9	ug/L	95	11		70	130	20
	Chlorobenzene	20	19.0	ug/L	95	4		65	135	20
	1,1,1,2-Tetrachloroethane	20	18.9	ug/L	95	5		63	138	20
	Ethyl Benzene	20	18.7	ug/L	94	8		60	140	20
	m/p-Xylenes	40	37.7	ug/L	94	7		87	111	20
	o-Xylene	20	18.9	ug/L	95	6		87	111	20
	Styrene	20	19.1	ug/L	96	2		85	106	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1502

Client: Alliance Technical Group, LLC - Newark

Analytical Method: SW624.1

Datafile : VX045342.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0319WBSD01	Bromoform	20	20.7	ug/L	104	7		70	130	20
	Isopropylbenzene	20	19.3	ug/L	97	6		86	112	20
	1,1,2,2-Tetrachloroethane	20	21.4	ug/L	107	1		60	140	20
	1,2,3-Trichloropropane	20	21.2	ug/L	106	2		61	148	20
	Bromobenzene	20	19.4	ug/L	97	2		59	142	20
	N-propylbenzene	20	18.9	ug/L	95	7		67	139	20
	2-Chlorotoluene	20	19.3	ug/L	97	5		66	138	20
	1,3,5-Trimethylbenzene	20	19.3	ug/L	97	6		66	139	20
	4-Chlorotoluene	20	19.0	ug/L	95	4		66	141	20
	1,2,4-Trimethylbenzene	20	19.3	ug/L	97	2		63	142	20
	Sec-butylbenzene	20	19.5	ug/L	98	3		63	144	20
	p-Isopropyltoluene	20	19.1	ug/L	96	4		57	147	20
	1,3-Dichlorobenzene	20	18.9	ug/L	95	2		70	130	20
	1,4-Dichlorobenzene	20	19.0	ug/L	95	0		65	135	20
	n-Butylbenzene	20	18.2	ug/L	91	6		49	157	20
	1,2-Dichlorobenzene	20	18.9	ug/L	95	3		65	135	20
	1,2-Dibromo-3-Chloropropane	20	21.6	ug/L	108	2		69	122	20
	1,2,4-Trichlorobenzene	20	17.7	ug/L	89	4		61	118	20
	Hexachlorobutadiene	20	19.3	ug/L	97	3		16	187	20
	Naphthalene	20	19.1	ug/L	96	1		45	152	20
	1,2,3-Trichlorobenzene	20	17.7	ug/L	89	4		38	159	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0319WBL01

Lab Name: CHEMTECH

Contract: ALLI03

Lab Code: CHEM Case No.: Q1502

SAS No.: Q1502 SDG NO.: Q1502

Lab File ID: VX045343.D

Lab Sample ID: VX0319WBL01

Date Analyzed: 03/19/2025

Time Analyzed: 12:50

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX0319WBS01	VX0319WBS01	VX045341.D	03/19/2025
VX0319WBSD01	VX0319WBSD01	VX045342.D	03/19/2025
PT-VOA-WP	Q1502-02	VX045344.D	03/19/2025

COMMENTS: _____



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: ALLI03
Lab Code: CHEM Case No.: Q1502 SAS No.: Q1502 SDG NO.: Q1502
Lab File ID: VX045007.D BFB Injection Date: 02/21/2025
Instrument ID: MSVOA_X BFB Injection Time: 09:31
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	21.2
75	30.0 - 60.0% of mass 95	52.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	74.5
175	5.0 - 9.0% of mass 174	5.5 (7.4) 1
176	95.0 - 101.0% of mass 174	71.6 (96.2) 1
177	5.0 - 9.0% of mass 176	4.6 (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
VSTDIC005	VSTDIC005	VX045008.D	02/21/2025	09:58
VSTDIC020	VSTDIC020	VX045009.D	02/21/2025	10:21
VSTDIC050	VSTDIC050	VX045010.D	02/21/2025	10:44
VSTDIC100	VSTDIC100	VX045011.D	02/21/2025	11:07
VSTDIC150	VSTDIC150	VX045012.D	02/21/2025	11:29

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
 BROMOFLUOROBENZENE (BFB)

Lab Name:	<u>CHEMTECH</u>	Contract:	<u>ALLI03</u>
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1502</u>
Lab File ID:	<u>VX045339.D</u>	SAS No.:	<u>Q1502</u>
Instrument ID:	<u>MSVOA_X</u>	SDG NO.:	<u>Q1502</u>
GC Column:	<u>DB-624UI</u>	BFB Injection Date:	<u>03/19/2025</u>
ID:	<u>0.18</u>	BFB Injection Time:	<u>10:11</u>
(mm)		Heated Purge:	<u>Y/N</u>
			<u>N</u>

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23
75	30.0 - 60.0% of mass 95	56.7
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	0.8 (1.1) 1
174	50.0 - 100.0% of mass 95	70.6
175	5.0 - 9.0% of mass 174	5.3 (7.5) 1
176	95.0 - 101.0% of mass 174	67.7 (96) 1
177	5.0 - 9.0% of mass 176	4.6 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC020	VSTDCCC020	VX045340.D	03/19/2025	10:41
VX0319WBS01	VX0319WBS01	VX045341.D	03/19/2025	11:41
VX0319WBSD01	VX0319WBSD01	VX045342.D	03/19/2025	12:15
VX0319WBL01	VX0319WBL01	VX045343.D	03/19/2025	12:50
PT-VOA-WP	Q1502-02	VX045344.D	03/19/2025	13:18

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: ALLI03
Lab Code: CHEM Case No.: Q1502 SAS No.: Q1502 SDG NO.: Q1502
Lab File ID: VX045340.D Date Analyzed: 03/19/2025
Instrument ID: MSVOA_X Time Analyzed: 10:41
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	16449	4.90	86152	6.76	80895	10.05
UPPER LIMIT	32898	5.397	172304	7.257	161790	10.549
LOWER LIMIT	8224.5	4.397	43076	6.257	40447.5	9.549
EPA SAMPLE NO.						
PT-VOA-WP	15107	4.89	80457	6.75	73631	10.05
VX0319WBL01	17082	4.89	85703	6.76	77105	10.05
VX0319WBS01	18710	4.89	97348	6.76	87335	10.05
VX0319WBSD01	15405	4.89	77122	6.76	74535	10.05

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

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

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



SAMPLE DATA

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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	03/03/25	
Project:	NJ Waste Water PT		Date Received:	03/05/25	
Client Sample ID:	PT-VOA-WP		SDG No.:	Q1502	
Lab Sample ID:	Q1502-02		Matrix:	Water	
Analytical Method:	E624.1		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045344.D	1		03/19/25 13:18	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.77	U	0.77	5.00	ug/L
74-87-3	Chloromethane	0.64	U	0.64	5.00	ug/L
75-01-4	Vinyl Chloride	0.83	U	0.83	5.00	ug/L
74-83-9	Bromomethane	67.0		0.80	5.00	ug/L
75-00-3	Chloroethane	2.30	U	2.30	5.00	ug/L
75-69-4	Trichlorofluoromethane	89.0		0.80	5.00	ug/L
75-35-4	1,1-Dichloroethene	87.4		0.76	5.00	ug/L
107-02-8	Acrolein	6.60	U	6.60	25.0	ug/L
107-13-1	Acrylonitrile	2.80	U	2.80	25.0	ug/L
67-64-1	Acetone	160		4.60	25.0	ug/L
75-15-0	Carbon Disulfide	0.82	UQ	0.82	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	53.7		0.77	5.00	ug/L
75-09-2	Methylene Chloride	50.7		0.86	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	77.3		0.82	5.00	ug/L
108-05-4	Vinyl Acetate	3.20	U	3.20	25.0	ug/L
75-34-3	1,1-Dichloroethane	0.68	U	0.68	5.00	ug/L
78-93-3	2-Butanone	44.9		2.00	25.0	ug/L
56-23-5	Carbon Tetrachloride	31.8		0.74	5.00	ug/L
594-20-7	2,2-Dichloropropane	0.66	U	0.66	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	110		0.80	5.00	ug/L
67-66-3	Chloroform	72.4		0.55	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.63	U	0.63	5.00	ug/L
563-58-6	1,1-Dichloropropene	0.63	U	0.63	5.00	ug/L
71-43-2	Benzene	120		0.45	5.00	ug/L
107-06-2	1,2-Dichloroethane	39.5		0.50	5.00	ug/L
79-01-6	Trichloroethene	53.9		0.49	5.00	ug/L
78-87-5	1,2-Dichloropropane	80.8		0.46	5.00	ug/L
74-95-3	Dibromomethane	110		0.59	5.00	ug/L
75-27-4	Bromodichloromethane	16.9		0.64	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	140		3.00	25.0	ug/L

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	03/03/25	
Project:	NJ Waste Water PT		Date Received:	03/05/25	
Client Sample ID:	PT-VOA-WP		SDG No.:	Q1502	
Lab Sample ID:	Q1502-02		Matrix:	Water	
Analytical Method:	E624.1		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045344.D	1		03/19/25 13:18	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-88-3	Toluene	110		0.46	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	74.0		0.72	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	54.7		0.67	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.45	U	0.45	5.00	ug/L
142-28-9	1,3-Dichloropropane	0.44	U	0.44	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	4.60	U	4.60	25.0	ug/L
591-78-6	2-Hexanone	160		3.20	25.0	ug/L
124-48-1	Dibromochloromethane	0.66	U	0.66	5.00	ug/L
106-93-4	1,2-Dibromoethane	0.56	U	0.56	5.00	ug/L
127-18-4	Tetrachloroethene	120		0.84	5.00	ug/L
108-90-7	Chlorobenzene	120		0.47	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	110		0.62	5.00	ug/L
67-72-1	Hexachloroethane	0.98	U	0.98	5.00	ug/L
100-41-4	Ethyl Benzene	36.1		0.56	5.00	ug/L
179601-23-1	m/p-Xylenes	72.5		1.30	10.0	ug/L
1330-20-7	Total Xylenes	223		1.97	15.0	ug/L
95-47-6	o-Xylene	150		0.67	5.00	ug/L
100-42-5	Styrene	89.3		0.72	5.00	ug/L
75-25-2	Bromoform	0.94	U	0.94	5.00	ug/L
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.44	U	0.44	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	0.62	U	0.62	5.00	ug/L
108-86-1	Bromobenzene	0.59	U	0.59	5.00	ug/L
103-65-1	n-propylbenzene	0.67	U	0.67	5.00	ug/L
95-49-8	2-Chlorotoluene	0.64	U	0.64	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	94.0		0.59	5.00	ug/L
106-43-4	4-Chlorotoluene	0.62	U	0.62	5.00	ug/L
98-06-6	tert-butylbenzene	0.71	U	0.71	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.77	U	0.77	5.00	ug/L
135-98-8	sec-Butylbenzene	0.64	U	0.64	5.00	ug/L
99-87-6	p-Isopropyltoluene	0.70	U	0.70	5.00	ug/L

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	03/03/25	
Project:	NJ Waste Water PT		Date Received:	03/05/25	
Client Sample ID:	PT-VOA-WP		SDG No.:	Q1502	
Lab Sample ID:	Q1502-02		Matrix:	Water	
Analytical Method:	E624.1		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI	ID : 0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045344.D	1		03/19/25 13:18	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
541-73-1	1,3-Dichlorobenzene	49.4		0.67	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.81	U	0.81	5.00	ug/L
104-51-8	n-Butylbenzene	0.82	U	0.82	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	120		0.67	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.86	U	0.86	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	1.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	0.68	U	0.68	5.00	ug/L
91-20-3	Naphthalene	88.7		1.00	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	32.7		91 - 110	109%	SPK: 30
2037-26-5	Toluene-d8	30.2		91 - 112	101%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.9		63 - 112	100%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	15100	4.891			
540-36-3	1,4-Difluorobenzene	80500	6.751			
3114-55-4	Chlorobenzene-d5	73600	10.049			

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_X\Data\VX031925\
 Data File : VX045344.D
 Acq On : 19 Mar 2025 13:18
 Operator : JC/MD
 Sample : Q1502-02
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 PT-VOA-WP

Quant Time: Mar 20 01:34:21 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

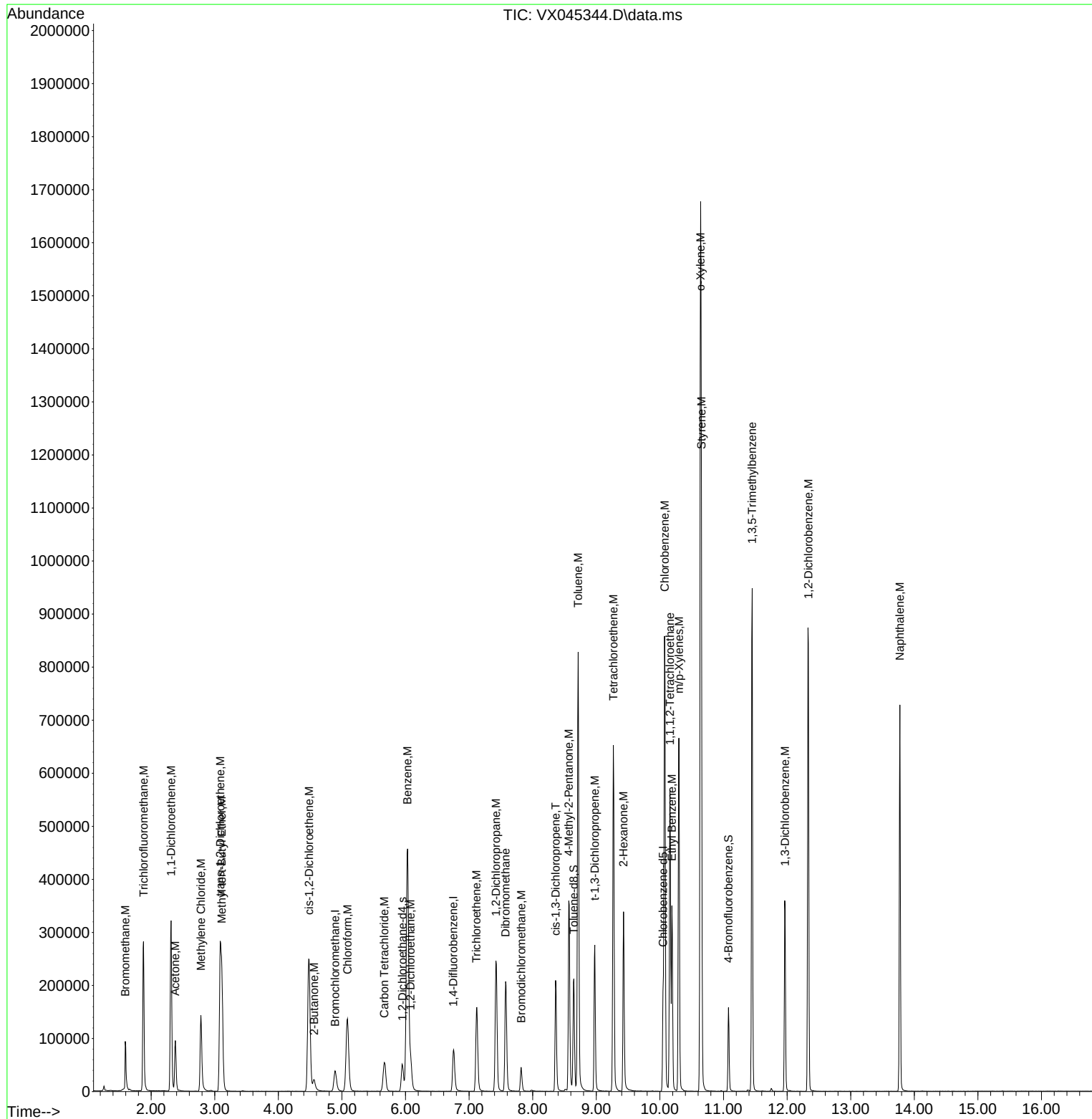
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.891	128	15107	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.751	114	80457	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	73631	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.952	65	48012	32.722	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	= 109.067%	
60) 4-Bromofluorobenzene	11.079	95	41154	29.903	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	= 99.667%	
63) Toluene-d8	8.647	98	122975	30.190	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	= 100.633%	
Target Compounds						Qvalue
5) Bromomethane	1.593	94	34311	66.970	ug/l	98
7) Trichlorofluoromethane	1.880	101	176035	88.988	ug/l	96
10) 1,1-Dichloroethene	2.313	96	100348	87.442	ug/l	89
15) Acetone	2.380	58	29165	163.367	ug/l	85
18) Methylene Chloride	2.782	84	65393	50.661	ug/l	95
19) trans-1,2-Dichloroethene	3.087	96	89760	77.309	ug/l	95
22) cis-1,2-Dichloroethene	4.483	96	151633	108.985	ug/l	93
24) Methyl tert-Butyl Ether	3.111	73	201002	53.664	ug/l	96
25) Chloroform	5.086	83	160307	72.350	ug/l	98
30) 2-Butanone	4.562	43	38399	44.919	ug/l	94
33) Carbon Tetrachloride	5.666	117	48066	31.760	ug/l	96
34) Benzene	6.031	78	535949	115.475	ug/l	98
36) 1,2-Dichloroethane	6.080	62	62842	39.548	ug/l	95
37) Trichloroethene	7.117	130	58554	53.926	ug/l	98
39) 1,2-Dichloropropane	7.421	63	93261	80.823	ug/l	99
40) Dibromomethane	7.574	93	88952	107.426	ug/l	97
41) Bromodichloromethane	7.818	83	27748	16.861	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	117438	74.033	ug/l	100
49) cis-1,3-Dichloropropene	8.360	75	98218	54.696	ug/l	92
58) 4-Methyl-2-Pentanone	8.567	43	227163	135.624	ug/l	99
59) 2-Hexanone	9.427	43	188811	155.956	ug/l	98
61) Tetrachloroethene	9.269	164	111094	122.527	ug/l	95
62) Toluene	8.714	91	521344	106.885	ug/l	98
64) Chlorobenzene	10.073	112	351323	116.236	ug/l	99
65) 1,1,1,2-Tetrachloroethane	10.159	131	111473	111.771	ug/l	100
66) Ethyl Benzene	10.189	91	193001	36.142	ug/l	97
67) m/p-Xylenes	10.299	106	144161	72.457	ug/l	96
68) o-Xylene	10.640	106	288194	147.631	ug/l	98
69) Styrene	10.652	104	291135	89.295	ug/l	90
76) 1,3,5-Trimethylbenzene	11.451	105	390792	94.031	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	106609	49.408	ug/l	97
87) 1,2-Dichlorobenzene	12.335	146	260184	122.894	ug/l	100
91) Naphthalene	13.774	128	401318	88.698	ug/l	100

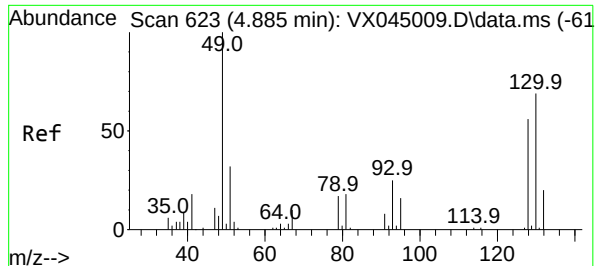
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : VX045344.D
Acq On : 19 Mar 2025 13:18
Operator : JC/MD
Sample : Q1502-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
PT-VOA-WP

Quant Time: Mar 20 01:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration

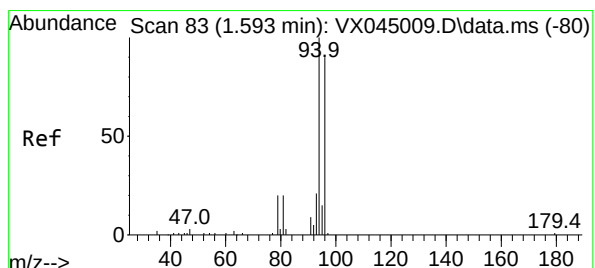
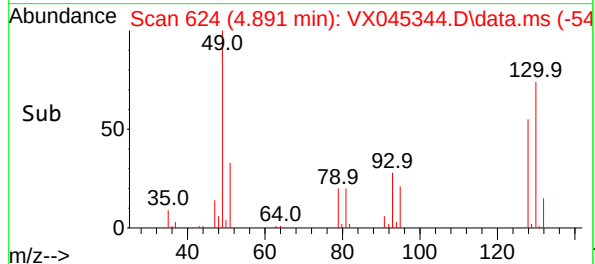
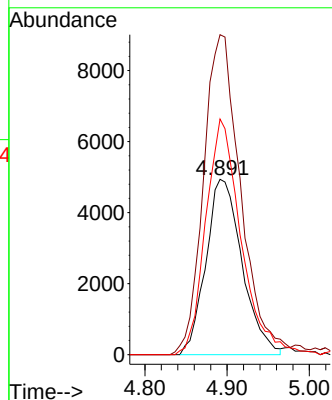
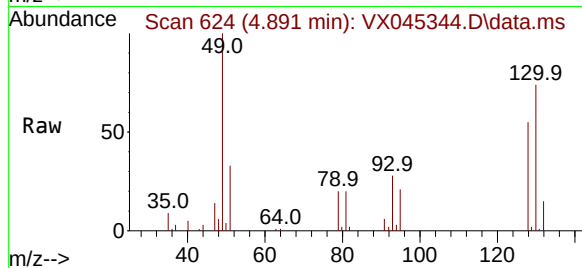




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.891 min Scan# 61
Delta R.T. 0.006 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

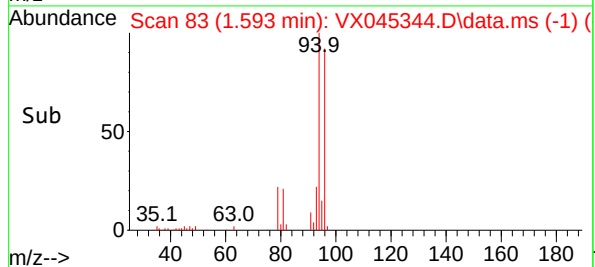
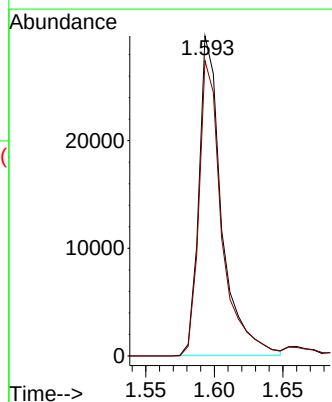
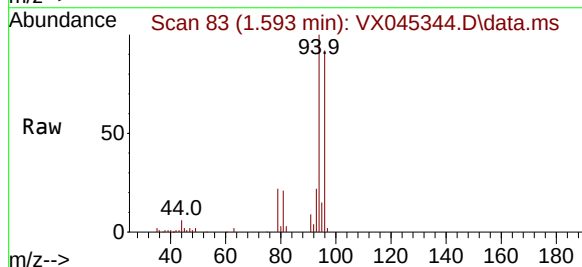
Instrument :
MSVOA_X
ClientSampleId :
PT-VOA-WP

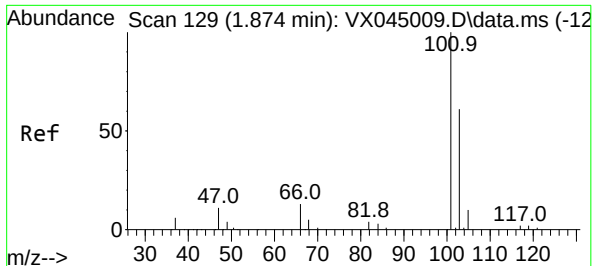
Tgt Ion:128 Resp: 15107
Ion Ratio Lower Upper
128 100
49 186.9 0.0 449.7
130 131.7 0.0 312.7



#5
Bromomethane
Concen: 66.970 ug/l
RT: 1.593 min Scan# 83
Delta R.T. -0.000 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

Tgt Ion: 94 Resp: 34311
Ion Ratio Lower Upper
94 100
96 92.4 72.2 108.4

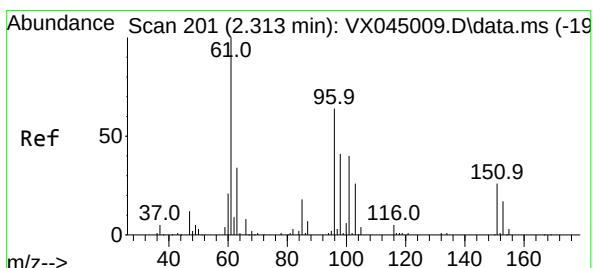
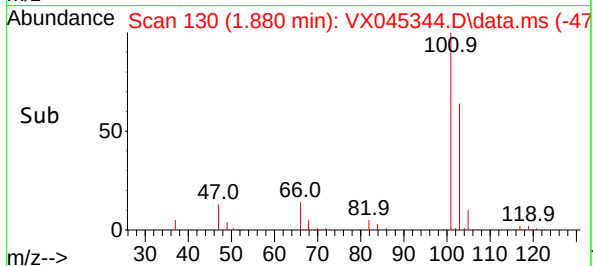
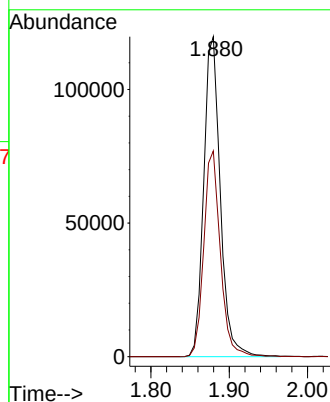
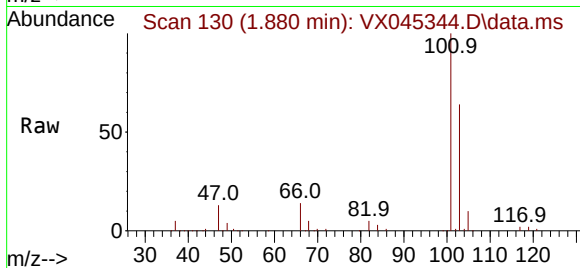




#7
 Trichlorofluoromethane
 Concen: 88.988 ug/l
 RT: 1.880 min Scan# 11
 Delta R.T. 0.006 min
 Lab File: VX045344.D
 Acq: 19 Mar 2025 13:18

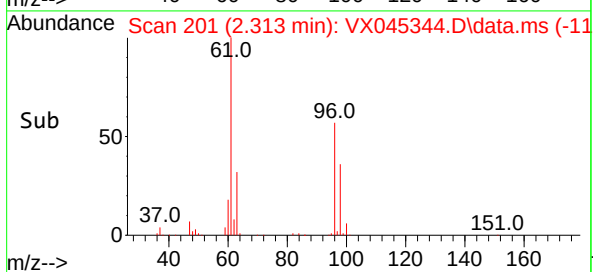
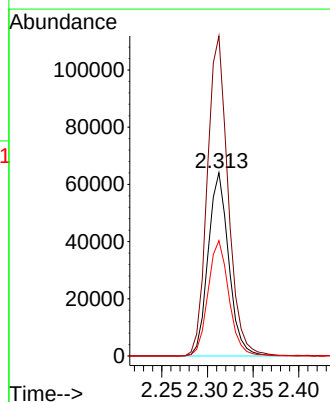
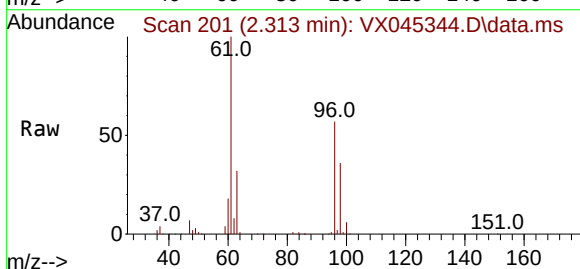
Instrument :
 MSVOA_X
 ClientSampleId :
 PT-VOA-WP

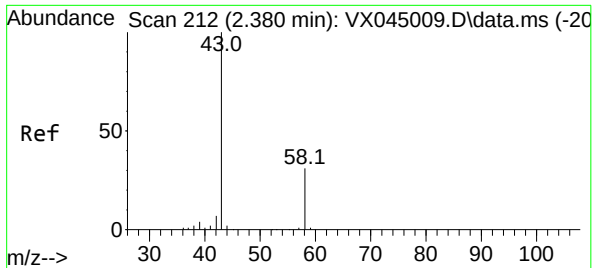
Tgt Ion:101 Resp: 176035
 Ion Ratio Lower Upper
 101 100
 103 64.3 48.8 73.2



#10
 1,1-Dichloroethene
 Concen: 87.442 ug/l
 RT: 2.313 min Scan# 201
 Delta R.T. -0.000 min
 Lab File: VX045344.D
 Acq: 19 Mar 2025 13:18

Tgt Ion: 96 Resp: 100348
 Ion Ratio Lower Upper
 96 100
 61 174.7 124.2 186.2
 98 63.0 51.1 76.7

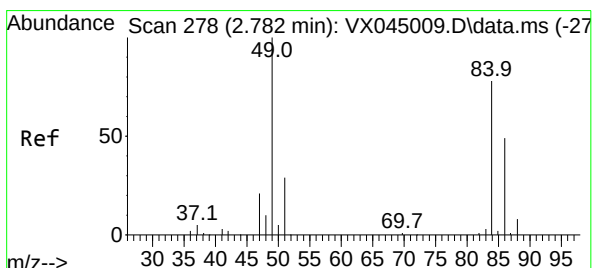
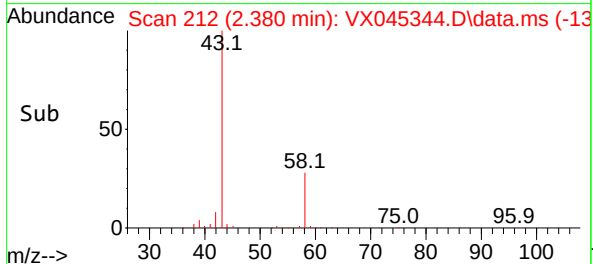
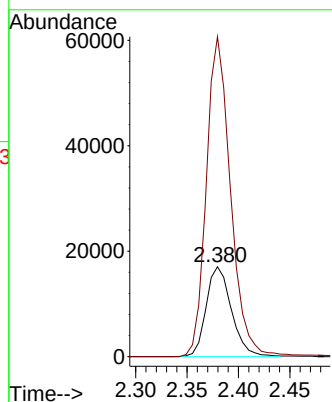
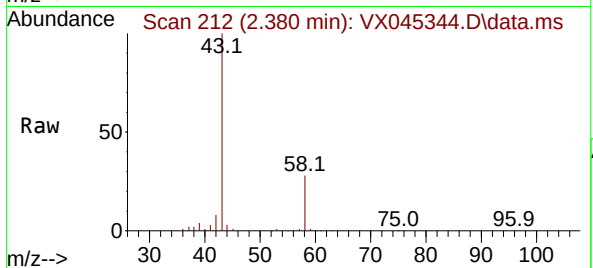




#15
Acetone
Concen: 163.367 ug/l
RT: 2.380 min Scan# 212
Delta R.T. -0.000 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

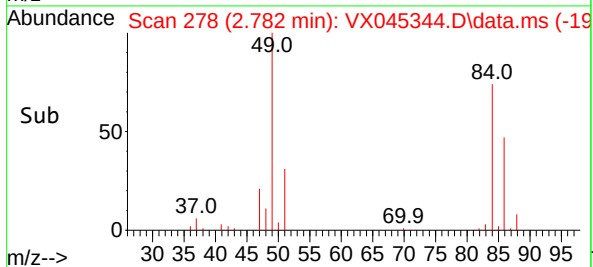
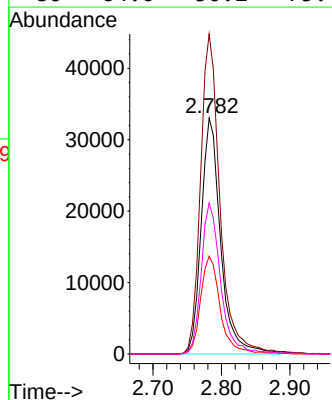
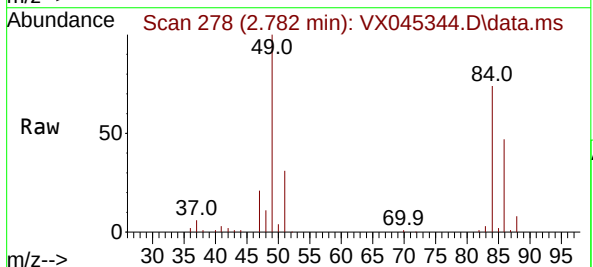
Instrument :
MSVOA_X
ClientSampleId :
PT-VOA-WP

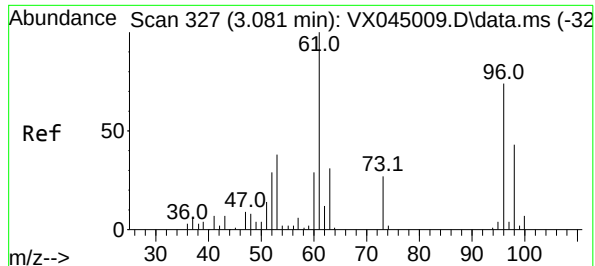
Tgt Ion: 58 Resp: 29165
Ion Ratio Lower Upper
58 100
43 355.2 258.6 388.0



#18
Methylene Chloride
Concen: 50.661 ug/l
RT: 2.782 min Scan# 278
Delta R.T. -0.000 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

Tgt Ion: 84 Resp: 65393
Ion Ratio Lower Upper
84 100
49 135.7 102.8 154.2
51 41.5 30.1 45.1
86 64.0 50.2 75.4





#19

trans-1,2-Dichloroethene

Concen: 77.309 ug/l

RT: 3.087 min Scan# 31

Delta R.T. 0.006 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP

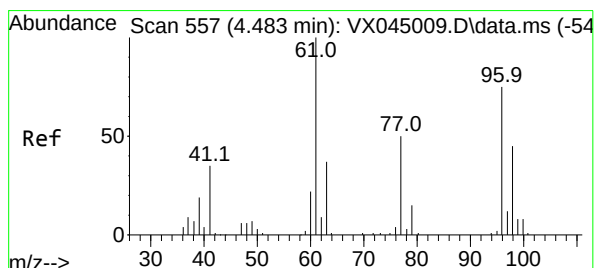
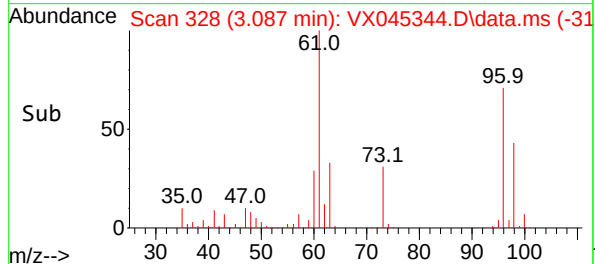
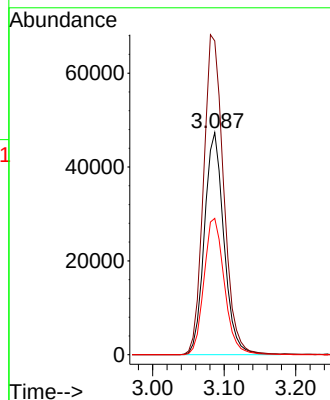
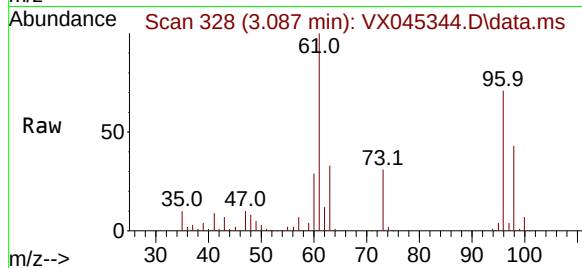
Tgt Ion: 96 Resp: 89760

Ion Ratio Lower Upper

96 100

61 141.3 108.6 163.0

98 61.4 46.5 69.7



#22

cis-1,2-Dichloroethene

Concen: 108.985 ug/l

RT: 4.483 min Scan# 557

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

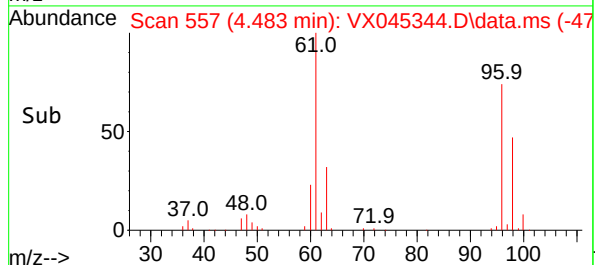
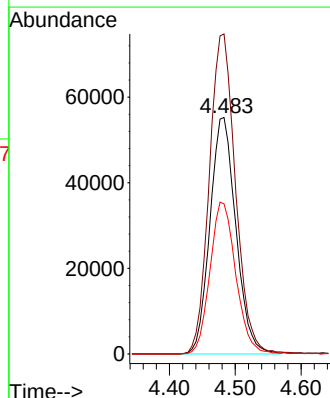
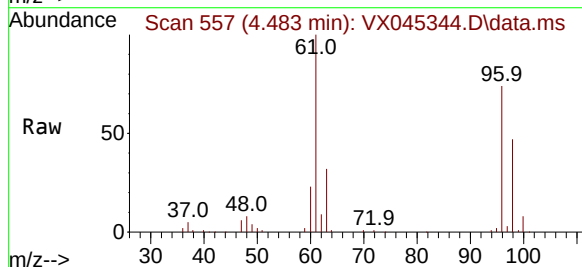
Tgt Ion: 96 Resp: 151633

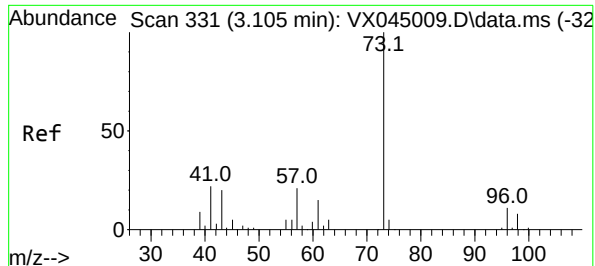
Ion Ratio Lower Upper

96 100

61 136.8 118.9 178.3

98 63.8 50.7 76.1

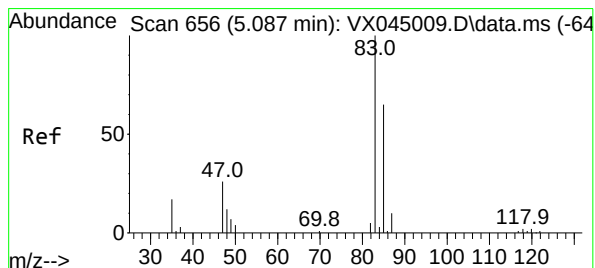
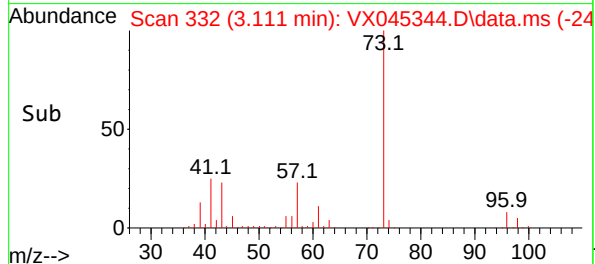
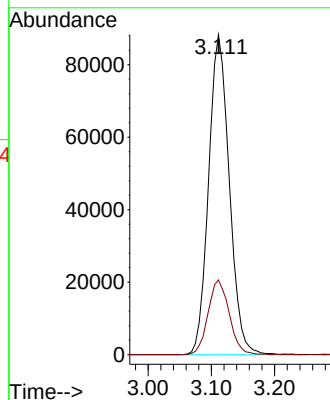
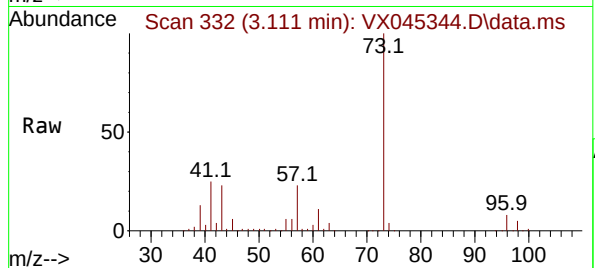




#24
Methyl tert-Butyl Ether
Concen: 53.664 ug/l
RT: 3.111 min Scan# 311
Delta R.T. 0.006 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

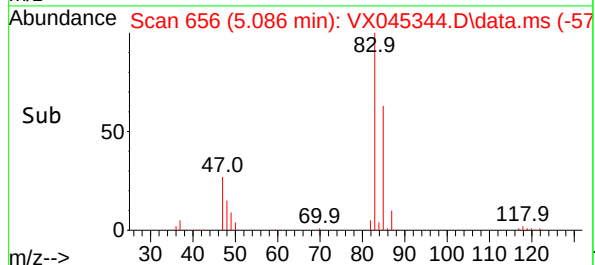
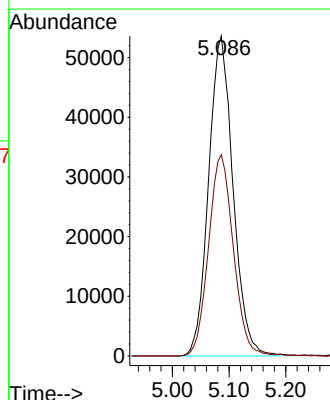
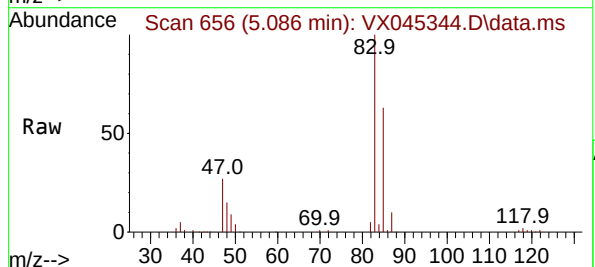
Instrument :
MSVOA_X
ClientSampleId :
PT-VOA-WP

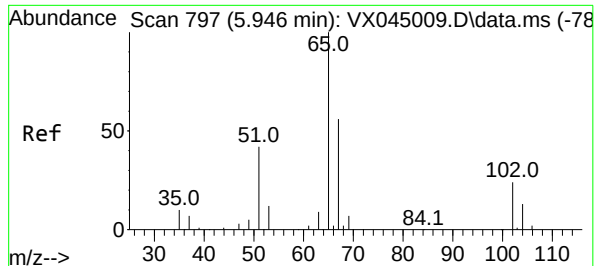
Tgt Ion: 73 Resp: 201002
Ion Ratio Lower Upper
73 100
43 23.8 17.4 26.0



#25
Chloroform
Concen: 72.350 ug/l
RT: 5.086 min Scan# 656
Delta R.T. -0.000 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

Tgt Ion: 83 Resp: 160307
Ion Ratio Lower Upper
83 100
85 62.9 51.7 77.5





#27

1,2-Dichloroethane-d4

Concen: 32.722 ug/l

RT: 5.952 min Scan# 79

Delta R.T. 0.006 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

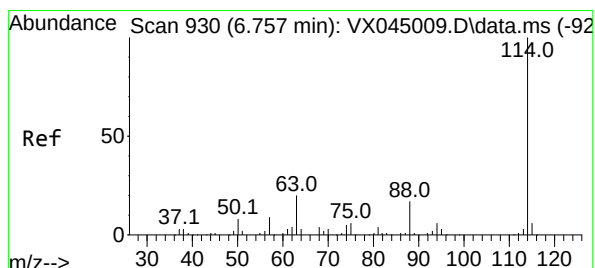
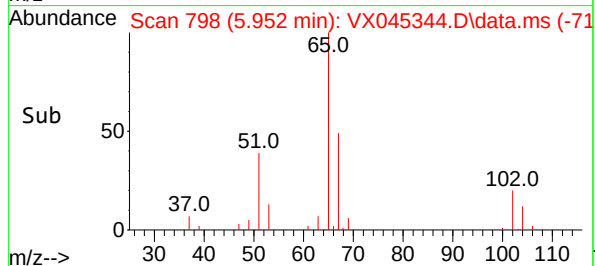
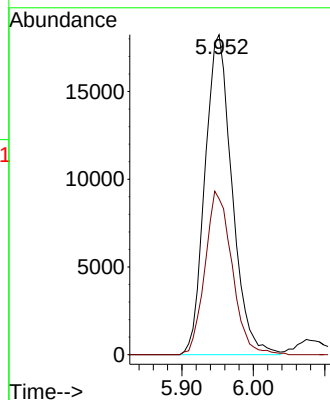
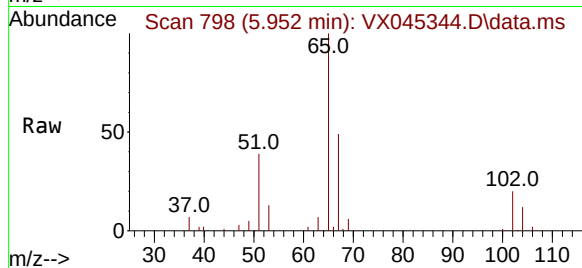
PT-VOA-WP

Tgt Ion: 65 Resp: 48012

Ion Ratio Lower Upper

65 100

67 51.0 42.6 64.0



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.751 min Scan# 929

Delta R.T. -0.006 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

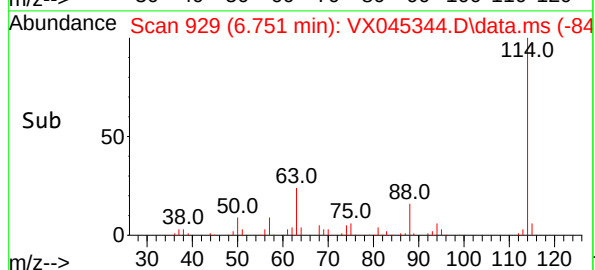
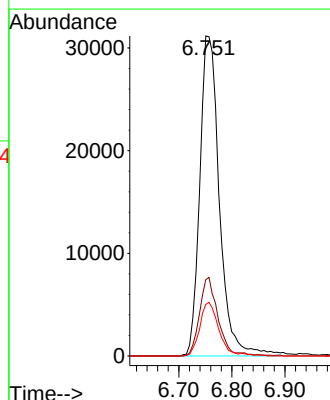
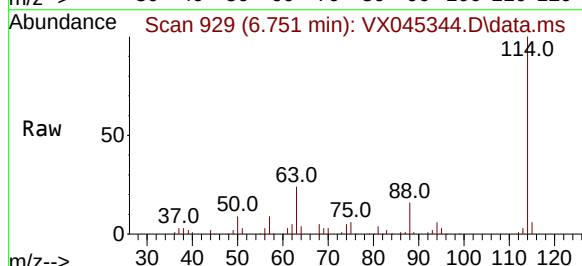
Tgt Ion: 114 Resp: 80457

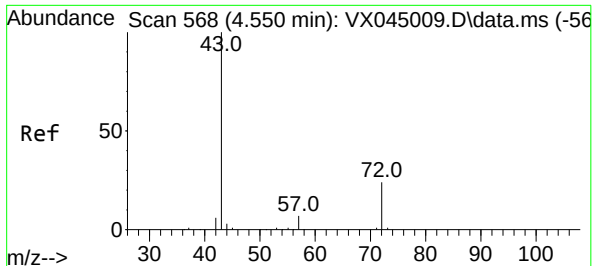
Ion Ratio Lower Upper

114 100

63 22.2 16.8 25.2

88 15.8 12.7 19.1





#30

2-Butanone

Concen: 44.919 ug/l

RT: 4.562 min Scan# 51

Delta R.T. 0.012 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP

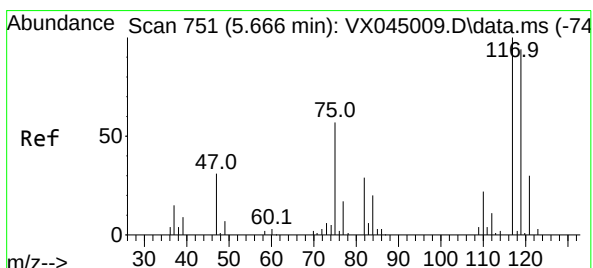
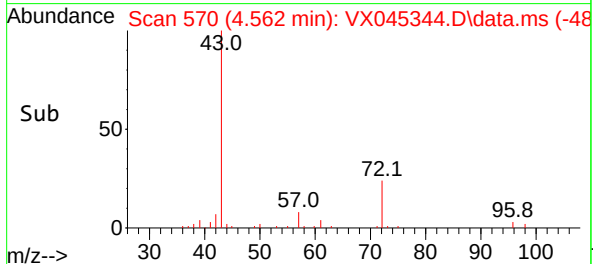
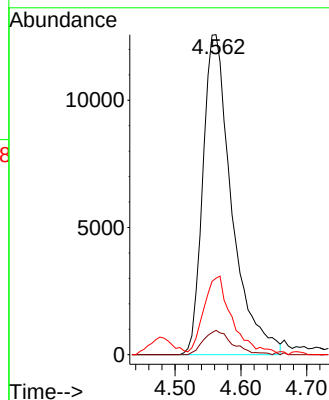
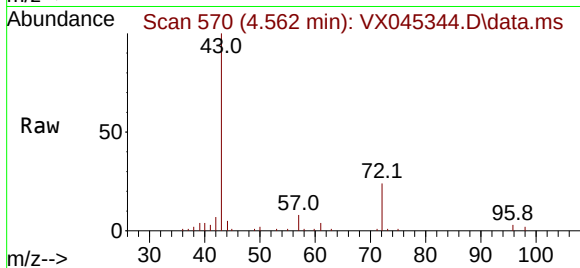
Tgt Ion: 43 Resp: 38399

Ion Ratio Lower Upper

43 100

57 7.3 6.2 9.2

72 21.5 20.2 30.2



#33

Carbon Tetrachloride

Concen: 31.760 ug/l

RT: 5.666 min Scan# 751

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

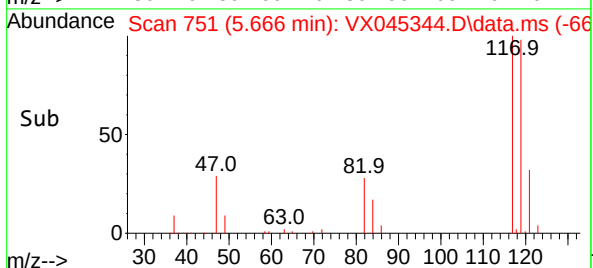
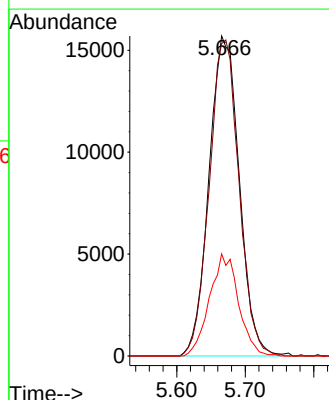
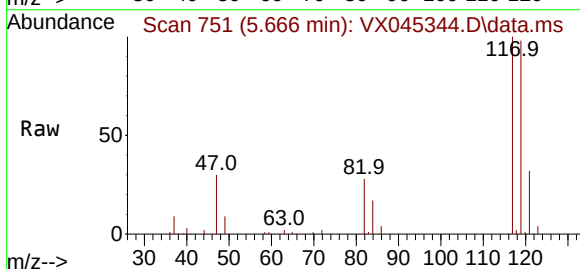
Tgt Ion: 117 Resp: 48066

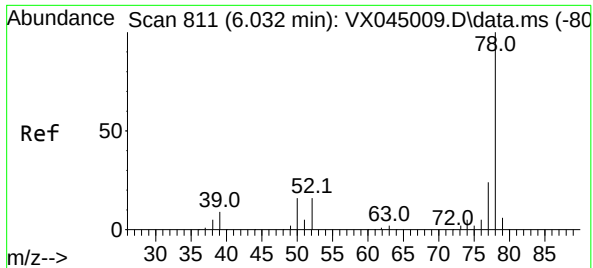
Ion Ratio Lower Upper

117 100

119 97.6 75.1 112.7

121 31.9 23.9 35.9





#34

Benzene

Concen: 115.475 ug/l

RT: 6.031 min Scan# 811

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

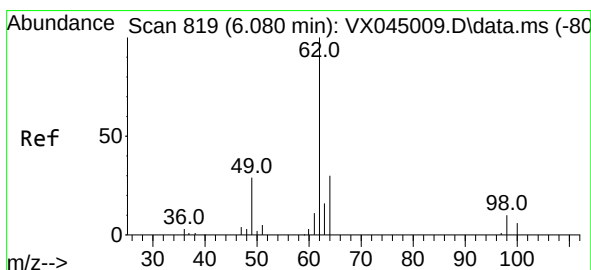
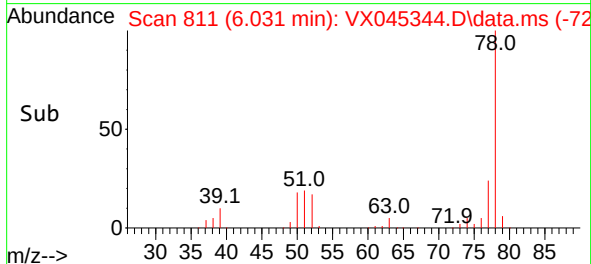
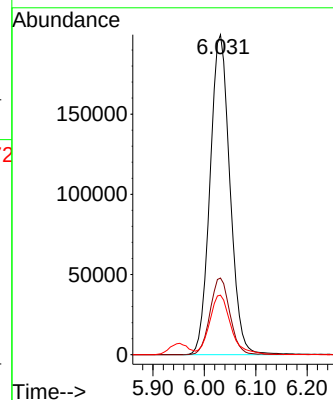
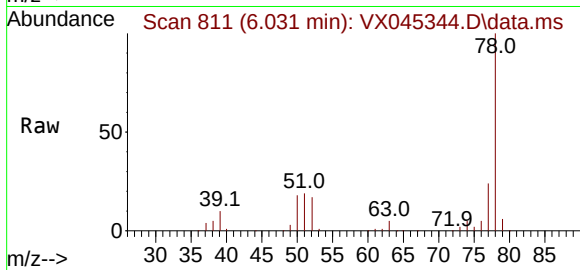
MSVOA_X

ClientSampleId :

PT-VOA-WP

Tgt Ion: 78 Resp: 535949

Ion	Ratio	Lower	Upper
78	100		
77	24.0	19.6	29.4
51	18.5	13.8	20.6



#36

1,2-Dichloroethane

Concen: 39.548 ug/l

RT: 6.080 min Scan# 819

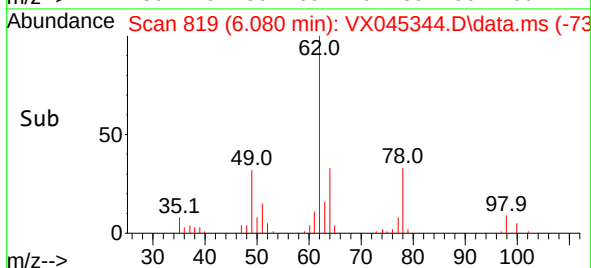
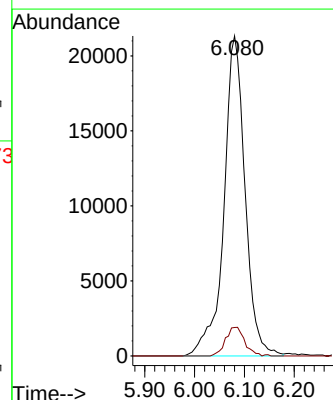
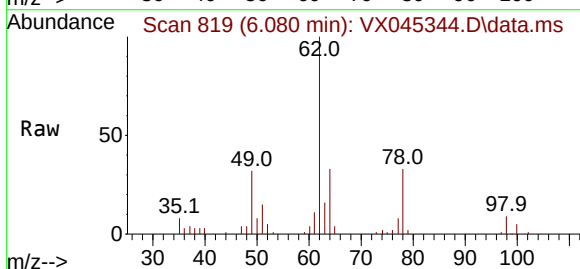
Delta R.T. -0.000 min

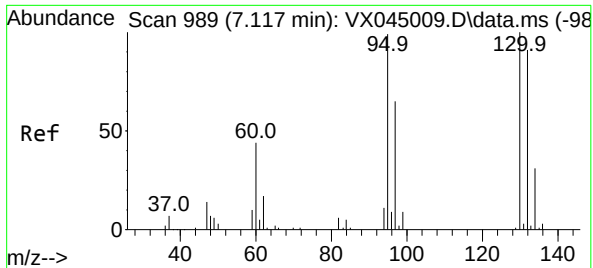
Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Tgt Ion: 62 Resp: 62842

Ion	Ratio	Lower	Upper
62	100		
98	8.1	7.9	11.9





#37

Trichloroethene

Concen: 53.926 ug/l

RT: 7.117 min Scan# 91

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

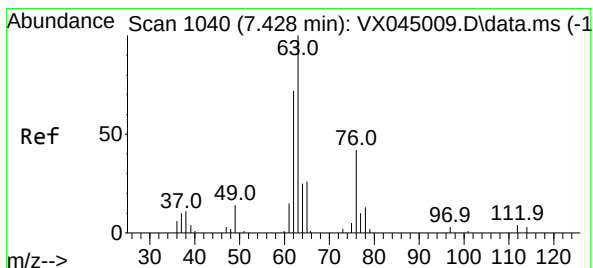
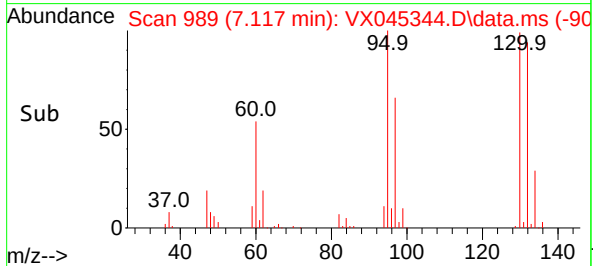
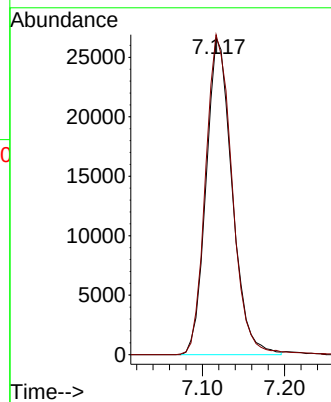
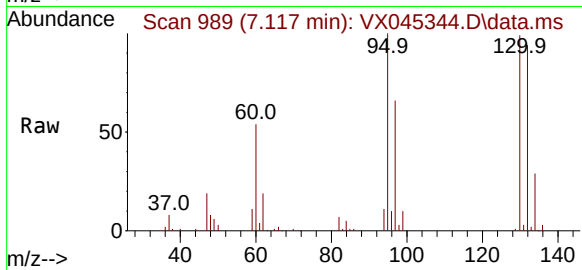
PT-VOA-WP

Tgt Ion:130 Resp: 58554

Ion Ratio Lower Upper

130 100

95 100.7 79.0 118.4



#39

1,2-Dichloropropane

Concen: 80.823 ug/l

RT: 7.421 min Scan# 1039

Delta R.T. -0.006 min

Lab File: VX045344.D

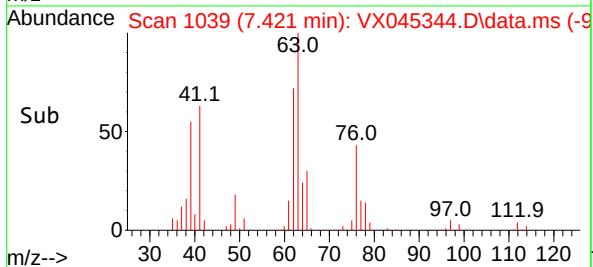
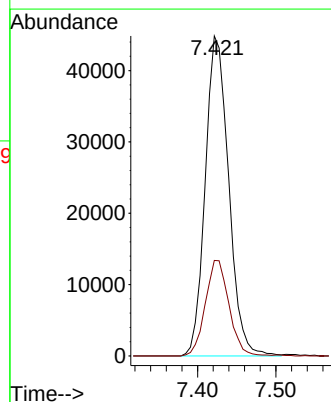
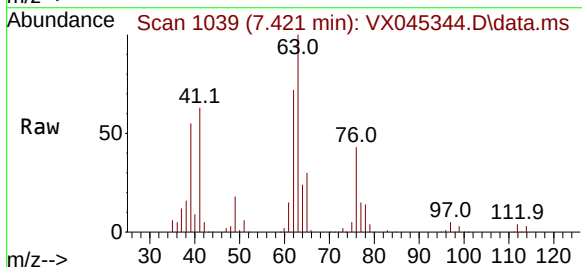
Acq: 19 Mar 2025 13:18

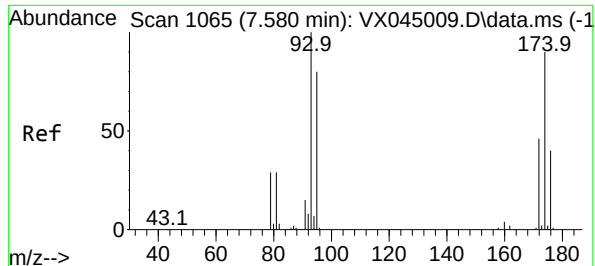
Tgt Ion: 63 Resp: 93261

Ion Ratio Lower Upper

63 100

65 29.8 24.3 36.5





#40

Dibromomethane

Concen: 107.426 ug/l

RT: 7.574 min Scan# 1104

Delta R.T. -0.006 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP

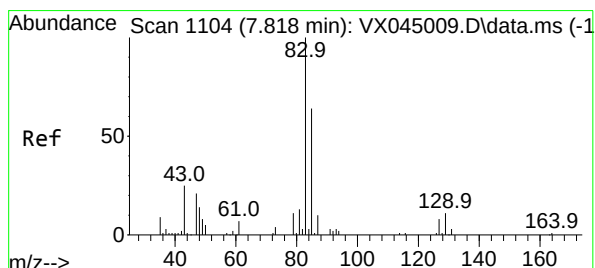
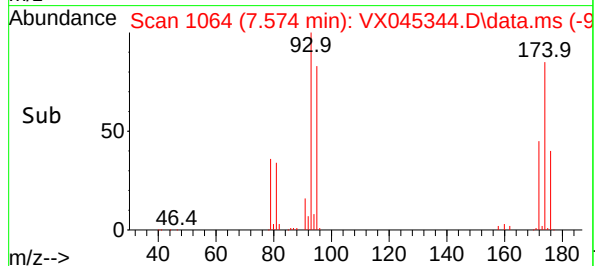
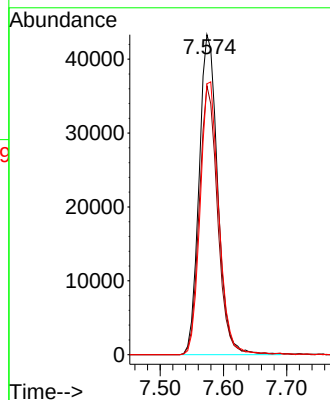
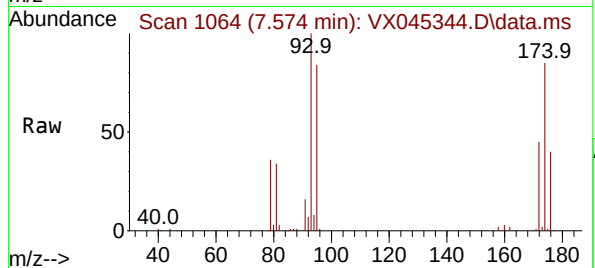
Tgt Ion: 93 Resp: 88952

Ion Ratio Lower Upper

93 100

95 82.1 0.0 162.6

174 84.8 0.0 178.8



#41

Bromodichloromethane

Concen: 16.861 ug/l

RT: 7.818 min Scan# 1104

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

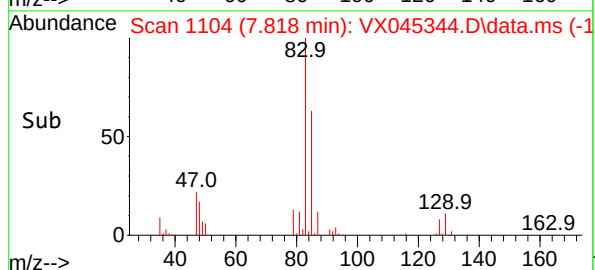
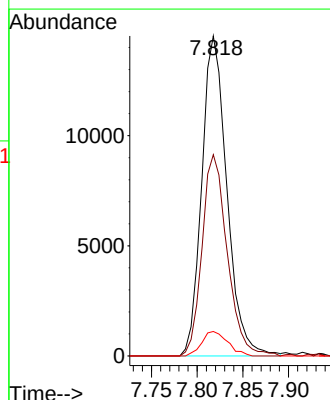
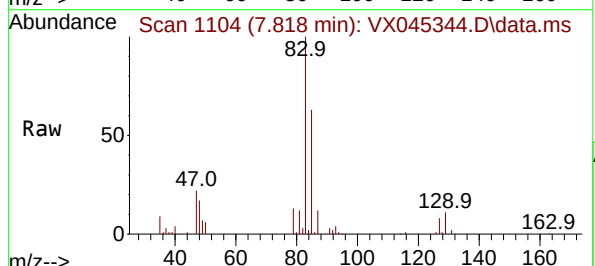
Tgt Ion: 83 Resp: 27748

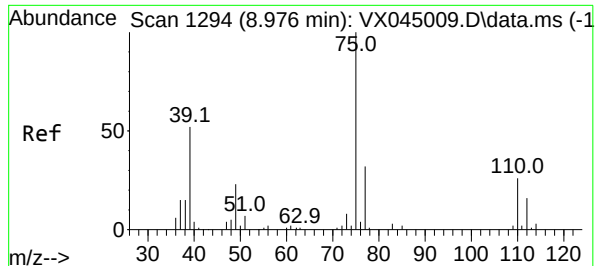
Ion Ratio Lower Upper

83 100

85 62.9 51.0 76.6

127 7.6 6.1 9.1





#48

t-1,3-Dichloropropene

Concen: 74.033 ug/l

RT: 8.976 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

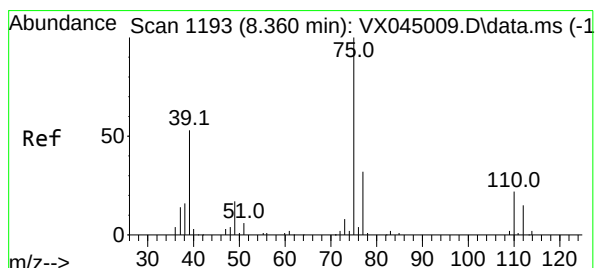
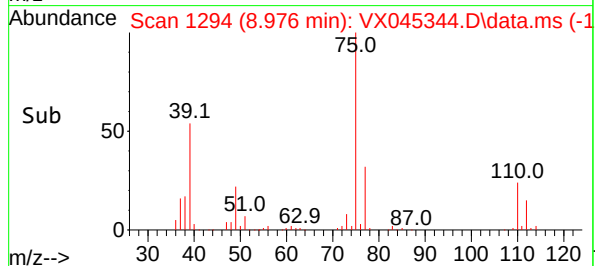
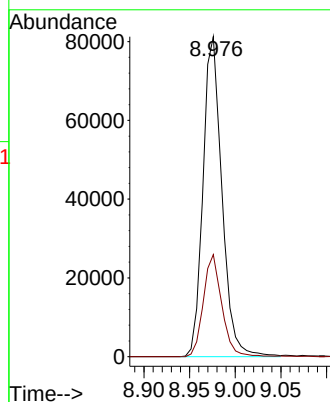
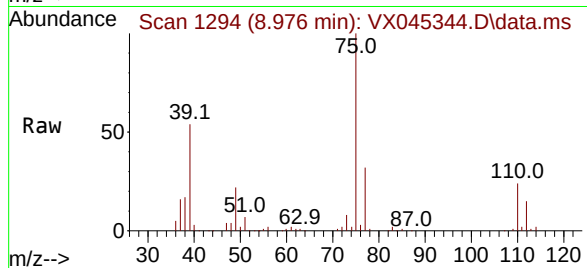
PT-VOA-WP

Tgt Ion: 75 Resp: 117438

Ion Ratio Lower Upper

75 100

77 31.9 25.7 38.5



#49

cis-1,3-Dichloropropene

Concen: 54.696 ug/l

RT: 8.360 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

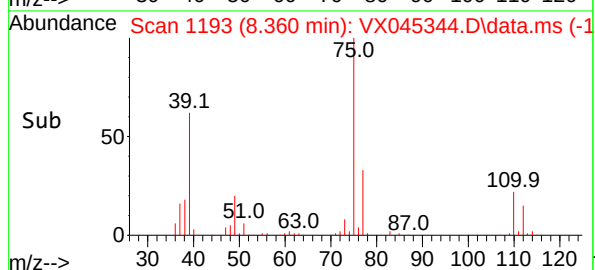
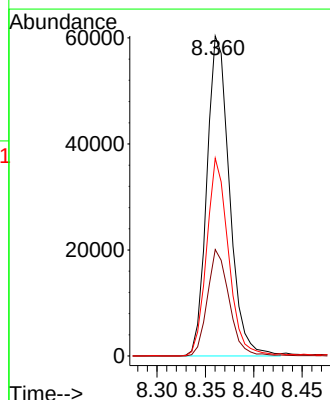
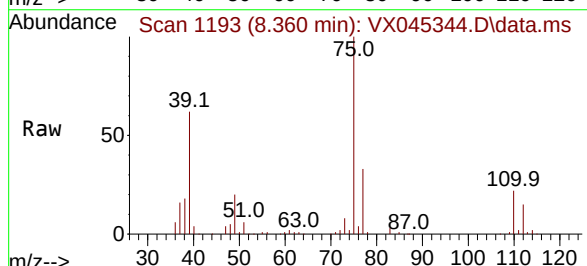
Tgt Ion: 75 Resp: 98218

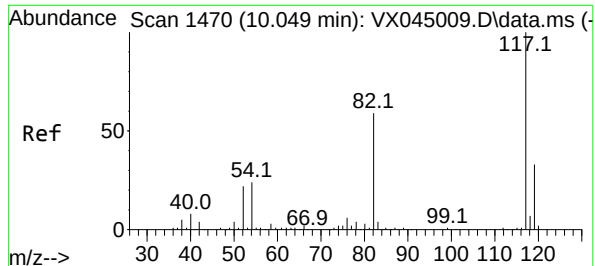
Ion Ratio Lower Upper

75 100

77 33.2 25.9 38.9

39 61.8 42.3 63.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.049 min Scan# 1470

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP

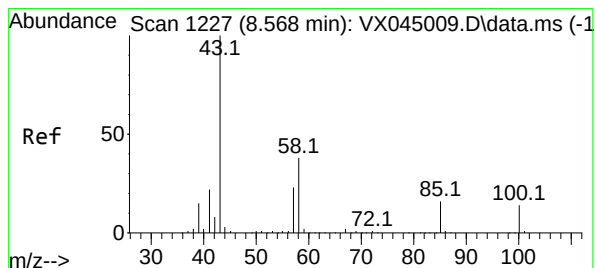
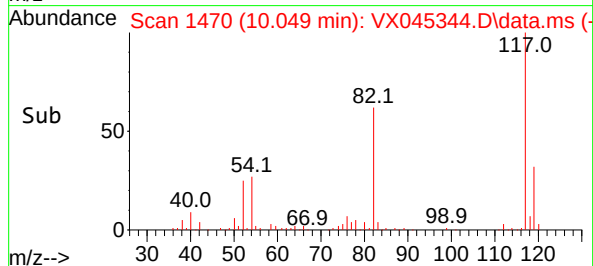
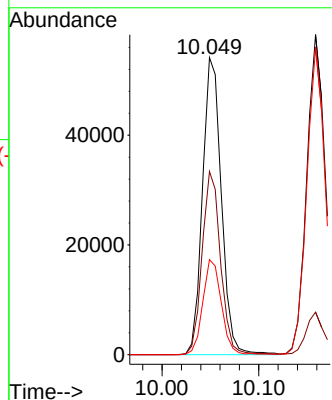
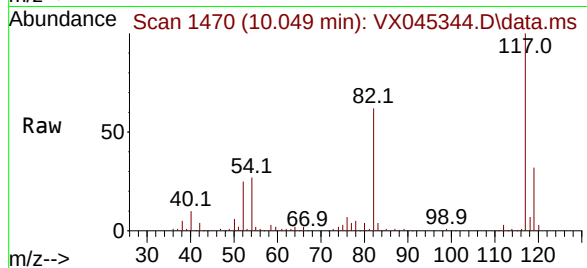
Tgt Ion:117 Resp: 73631

Ion Ratio Lower Upper

117 100

82 59.8 45.8 68.8

119 31.3 25.5 38.3



#58

4-Methyl-2-Pentanone

Concen: 135.624 ug/l

RT: 8.567 min Scan# 1227

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

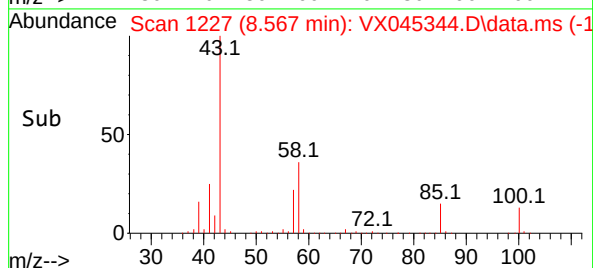
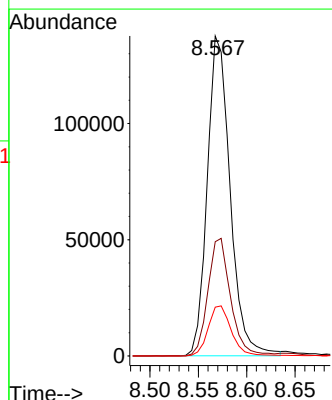
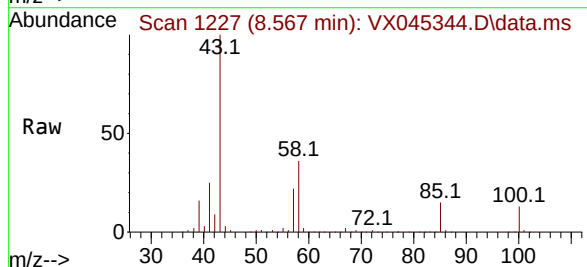
Tgt Ion: 43 Resp: 227163

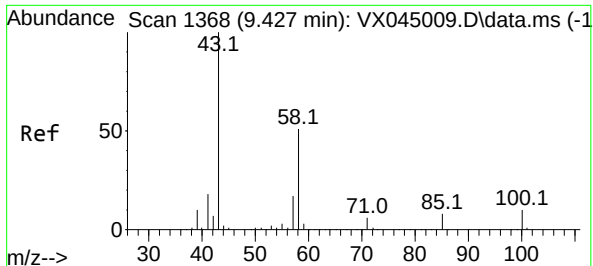
Ion Ratio Lower Upper

43 100

58 36.4 29.5 44.3

85 16.0 12.9 19.3





#59

2-Hexanone

Concen: 155.956 ug/l

RT: 9.427 min Scan# 1368

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP

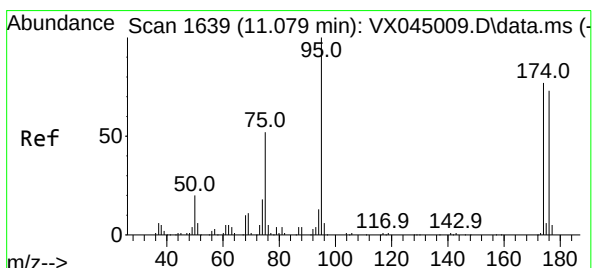
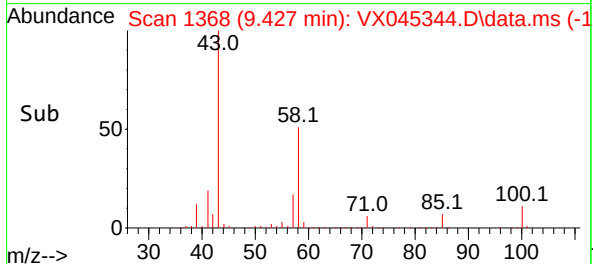
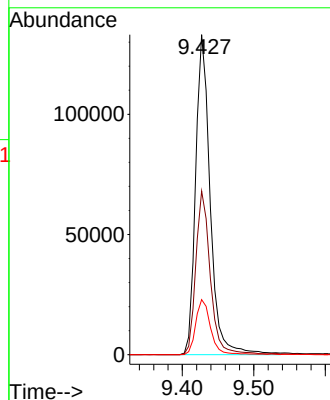
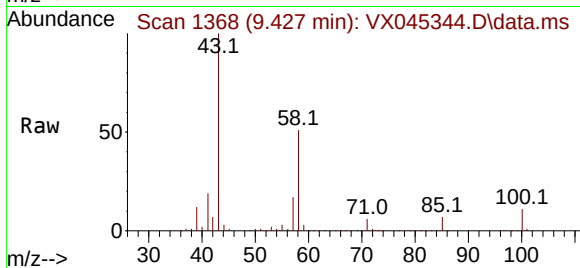
Tgt Ion: 43 Resp: 188811

Ion Ratio Lower Upper

43 100

58 50.7 41.6 62.4

57 17.6 13.8 20.6



#60

4-Bromofluorobenzene

Concen: 29.903 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

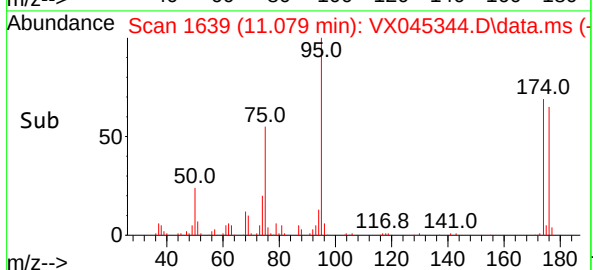
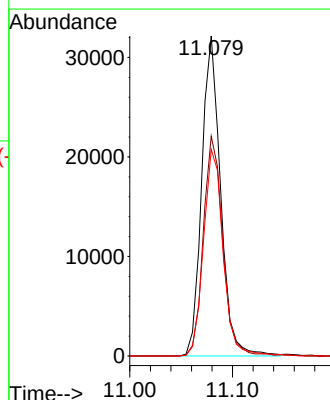
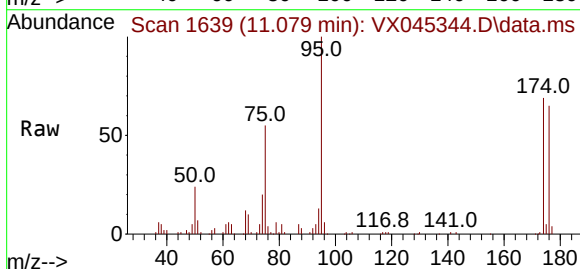
Tgt Ion: 95 Resp: 41154

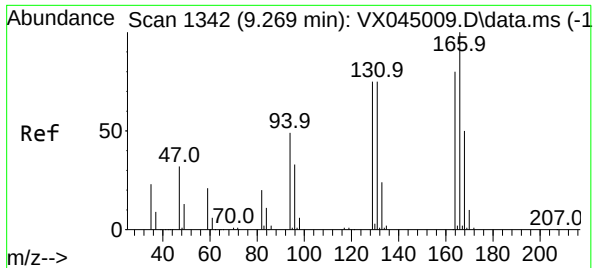
Ion Ratio Lower Upper

95 100

174 69.9 59.5 89.3

176 67.3 55.5 83.3





#61

Tetrachloroethene

Concen: 122.527 ug/l

RT: 9.269 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP

Tgt Ion:164 Resp: 111094

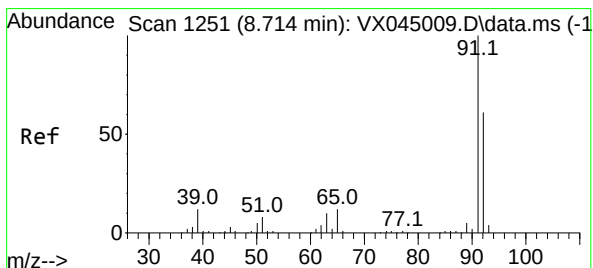
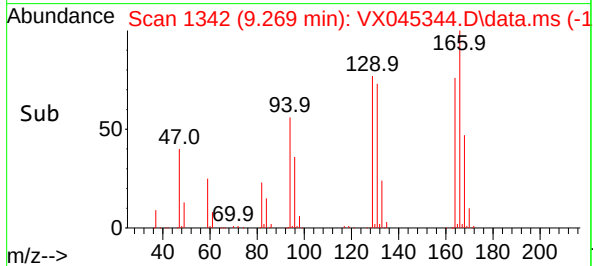
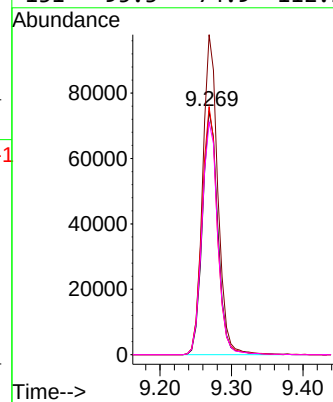
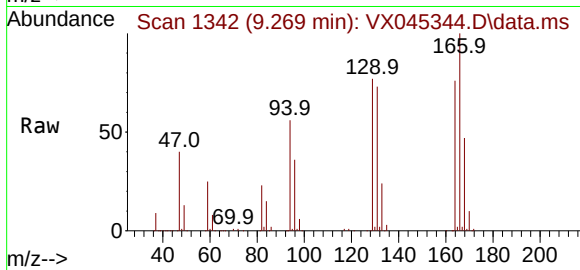
Ion Ratio Lower Upper

164 100

166 131.2 100.3 150.5

129 101.5 75.5 113.3

131 95.3 74.9 112.3



#62

Toluene

Concen: 106.885 ug/l

RT: 8.714 min Scan# 1251

Delta R.T. -0.000 min

Lab File: VX045344.D

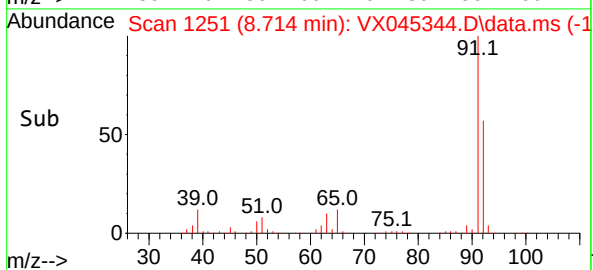
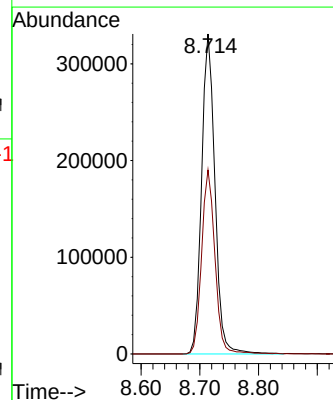
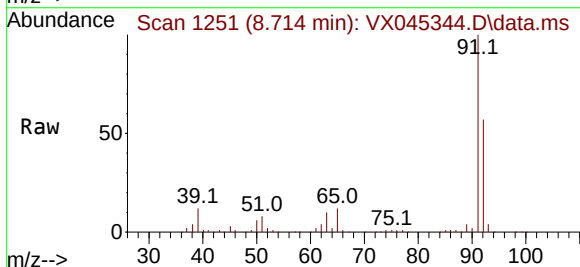
Acq: 19 Mar 2025 13:18

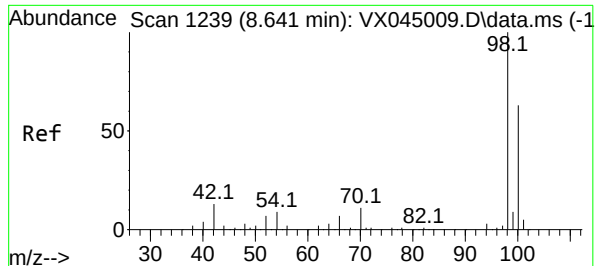
Tgt Ion: 91 Resp: 521344

Ion Ratio Lower Upper

91 100

92 57.4 46.9 70.3





#63

Toluene-d8

Concen: 30.190 ug/l

RT: 8.647 min Scan# 11

Delta R.T. 0.006 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

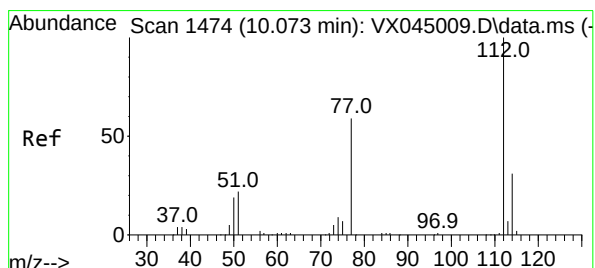
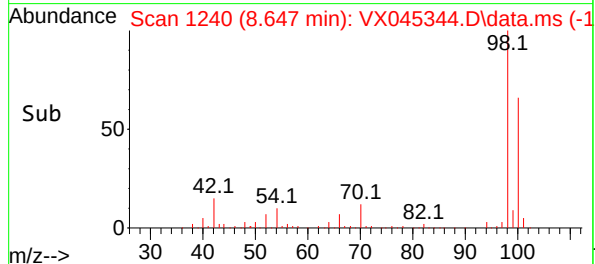
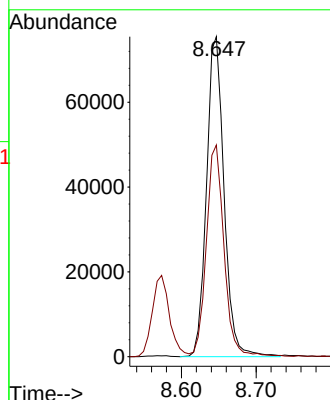
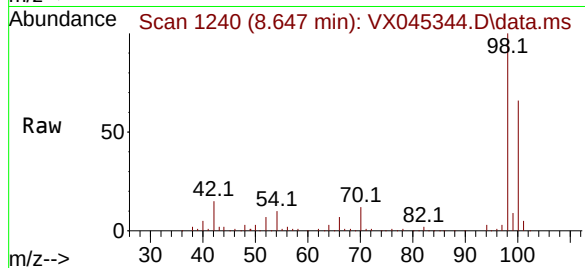
PT-VOA-WP

Tgt Ion: 98 Resp: 122975

Ion Ratio Lower Upper

98 100

100 66.1 51.7 77.5



#64

Chlorobenzene

Concen: 116.236 ug/l

RT: 10.073 min Scan# 1474

Delta R.T. -0.000 min

Lab File: VX045344.D

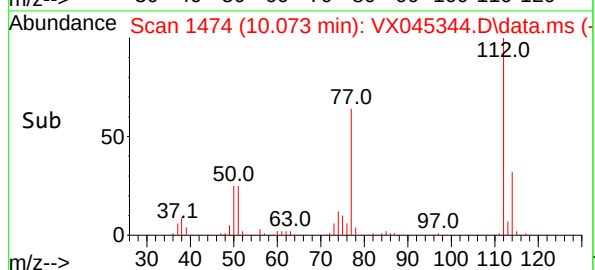
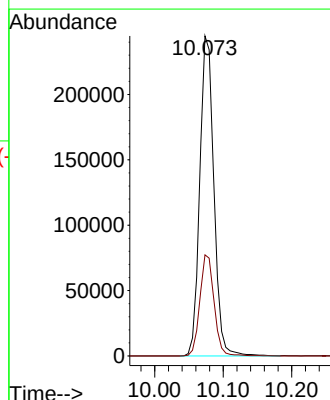
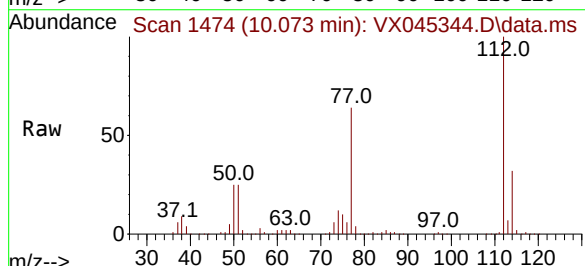
Acq: 19 Mar 2025 13:18

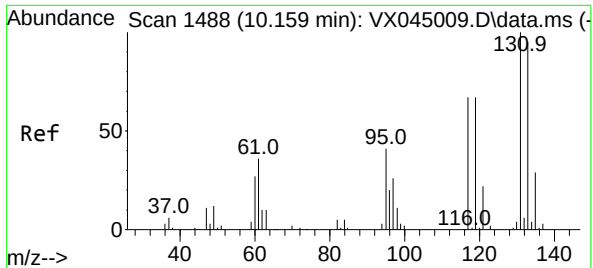
Tgt Ion: 112 Resp: 351323

Ion Ratio Lower Upper

112 100

114 31.6 24.7 37.1

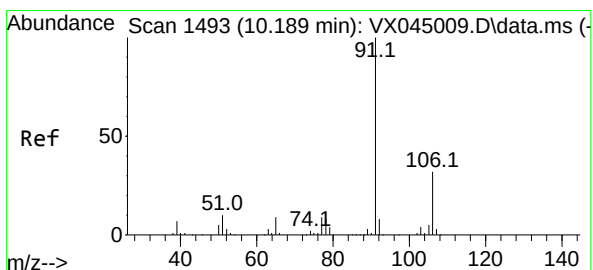
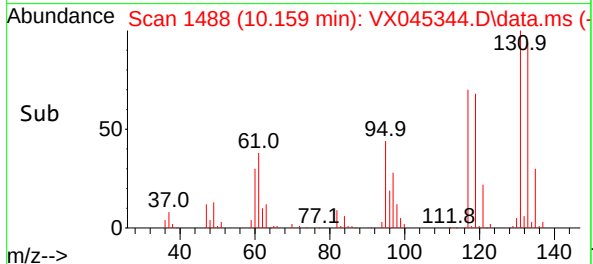
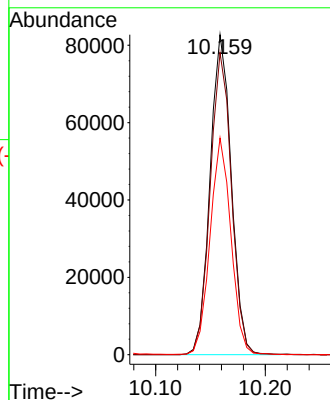
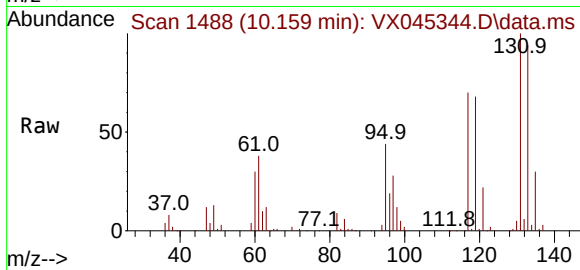




#65
1,1,1,2-Tetrachloroethane
Concen: 111.771 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

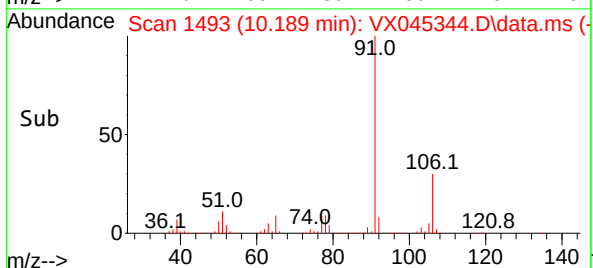
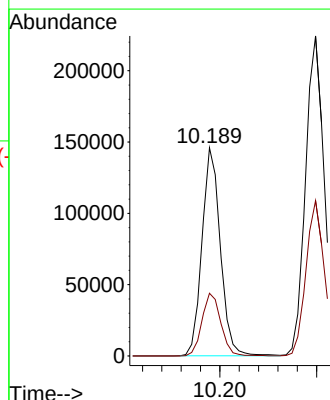
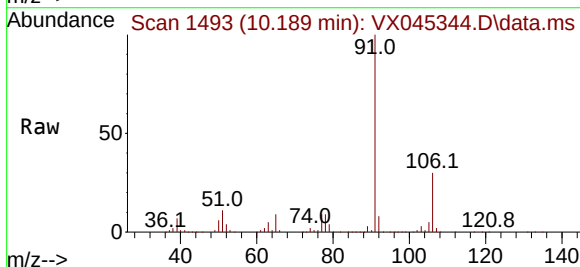
Instrument :
MSVOA_X
ClientSampleId :
PT-VOA-WP

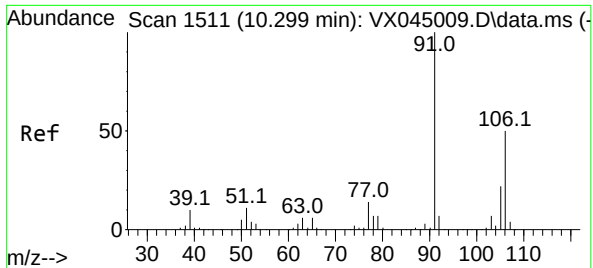
Tgt Ion:131 Resp: 111473
Ion Ratio Lower Upper
131 100
133 94.3 0.0 187.8
119 66.1 0.0 133.0



#66
Ethyl Benzene
Concen: 36.142 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

Tgt Ion: 91 Resp: 193001
Ion Ratio Lower Upper
91 100
106 30.2 25.4 38.2

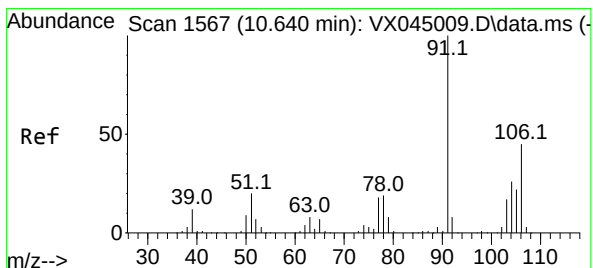
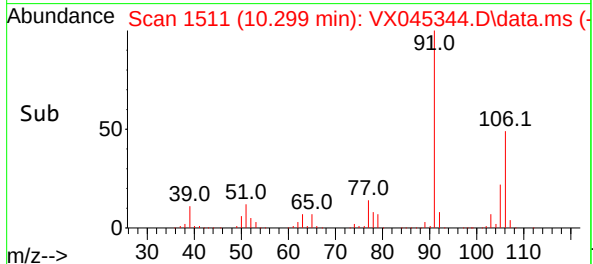
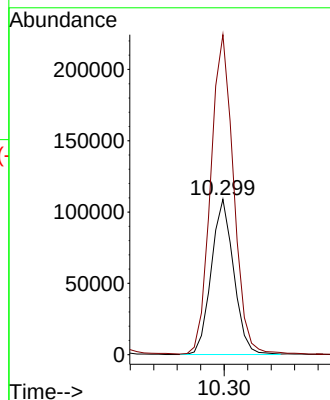
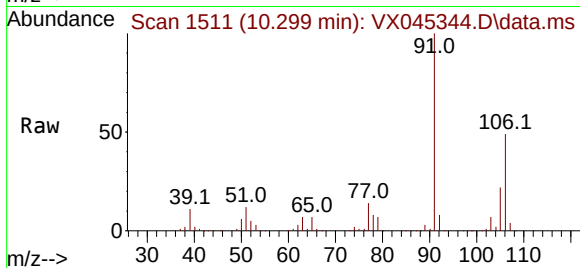




#67
m/p-Xylenes
Concen: 72.457 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

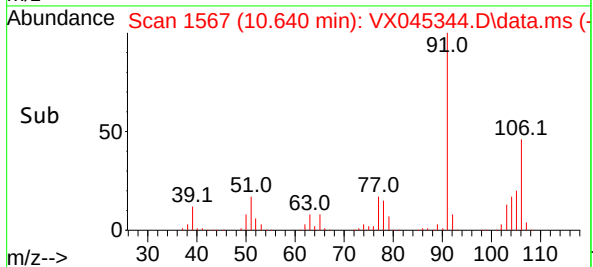
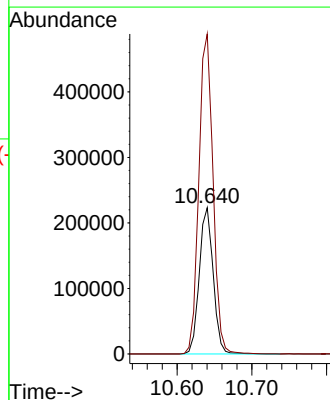
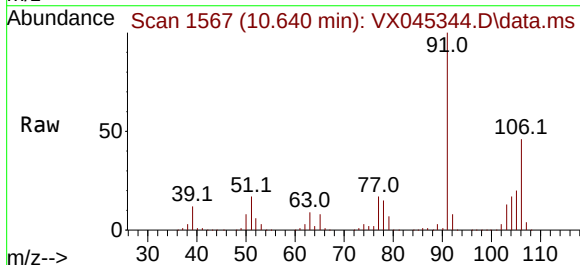
Instrument :
MSVOA_X
ClientSampleId :
PT-VOA-WP

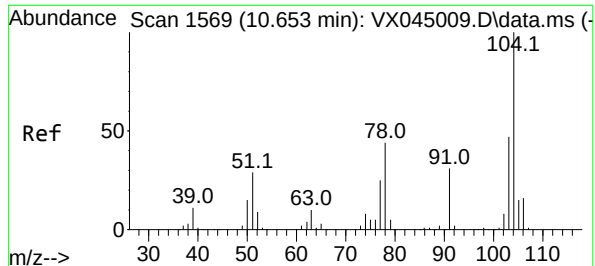
Tgt Ion:106 Resp: 144161
Ion Ratio Lower Upper
106 100
91 210.3 163.7 245.5



#68
o-Xylene
Concen: 147.631 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. -0.000 min
Lab File: VX045344.D
Acq: 19 Mar 2025 13:18

Tgt Ion:106 Resp: 288194
Ion Ratio Lower Upper
106 100
91 222.5 109.7 329.1





#69

Styrene

Concen: 89.295 ug/l

RT: 10.652 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP

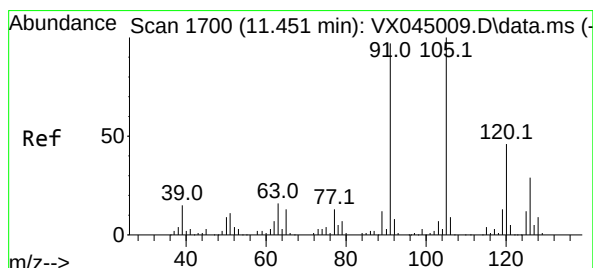
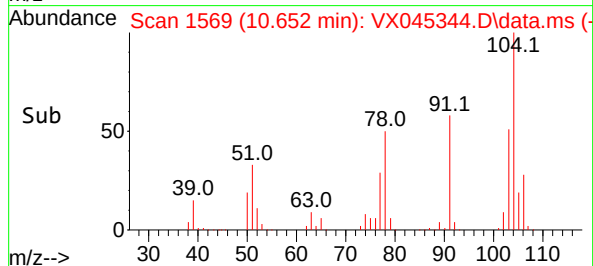
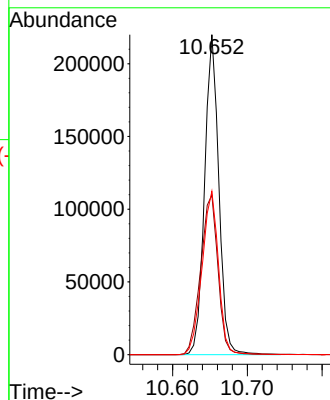
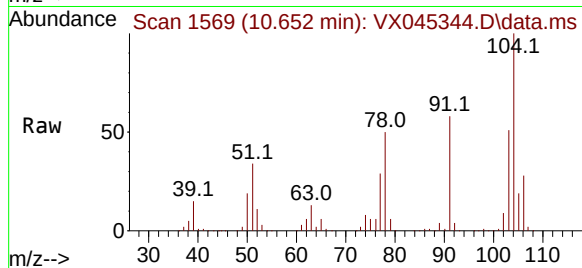
Tgt Ion:104 Resp: 291135

Ion Ratio Lower Upper

104 100

78 60.5 41.4 62.0

103 59.1 43.0 64.4



#76

1,3,5-Trimethylbenzene

Concen: 94.031 ug/l

RT: 11.451 min Scan# 1700

Delta R.T. -0.000 min

Lab File: VX045344.D

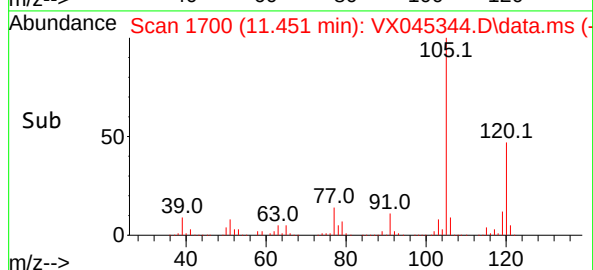
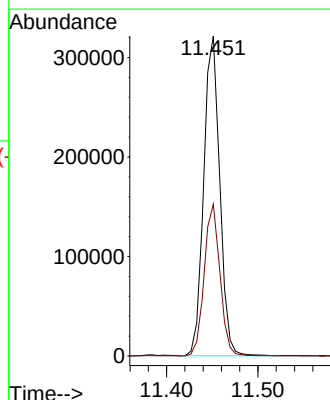
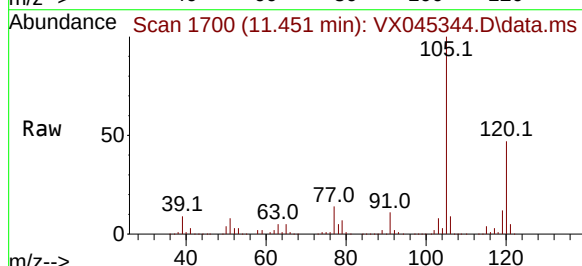
Acq: 19 Mar 2025 13:18

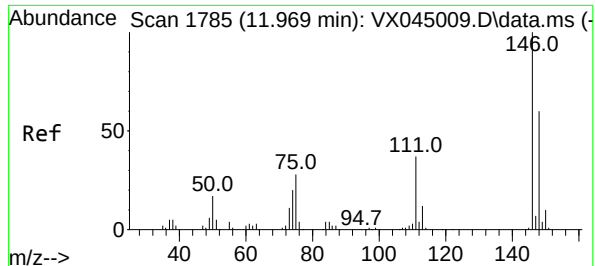
Tgt Ion:105 Resp: 390792

Ion Ratio Lower Upper

105 100

120 46.6 0.0 94.4





#83

1,3-Dichlorobenzene

Concen: 49.408 ug/l

RT: 11.969 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP

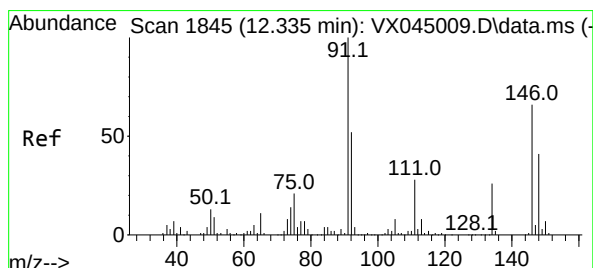
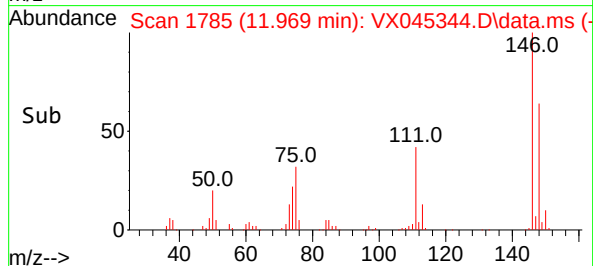
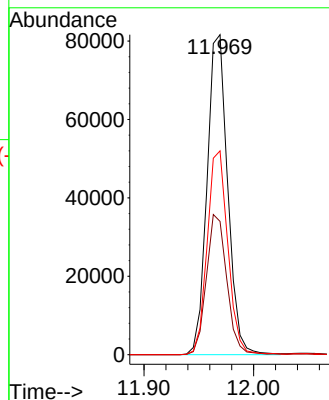
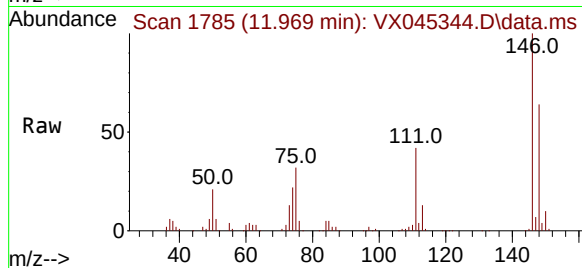
Tgt Ion:146 Resp: 106609

Ion Ratio Lower Upper

146 100

111 43.4 20.2 60.5

148 63.8 31.2 93.6



#87

1,2-Dichlorobenzene

Concen: 122.894 ug/l

RT: 12.335 min Scan# 1845

Delta R.T. -0.000 min

Lab File: VX045344.D

Acq: 19 Mar 2025 13:18

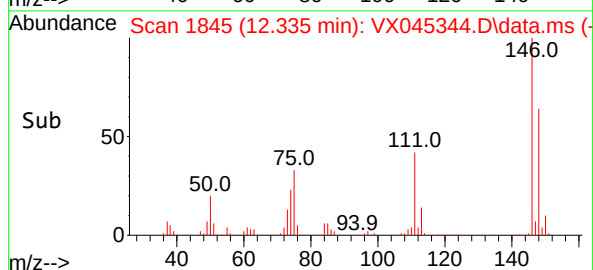
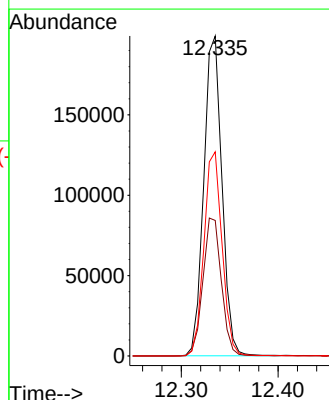
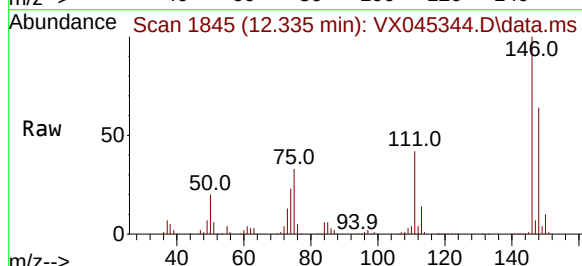
Tgt Ion:146 Resp: 260184

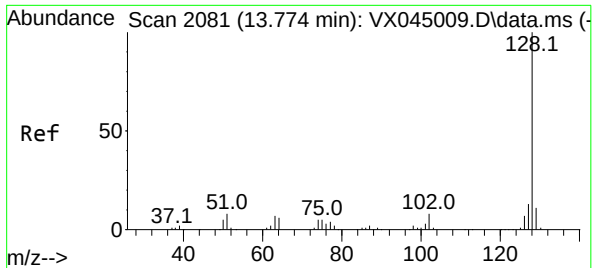
Ion Ratio Lower Upper

146 100

111 43.8 21.7 65.1

148 63.6 31.8 95.4





#91

Naphthalene

Concen: 88.698 ug/l

RT: 13.774 min Scan# 20

Delta R.T. -0.000 min

Lab File: VX045344.D

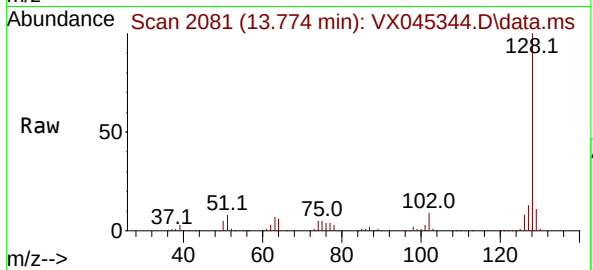
Acq: 19 Mar 2025 13:18

Instrument :

MSVOA_X

ClientSampleId :

PT-VOA-WP



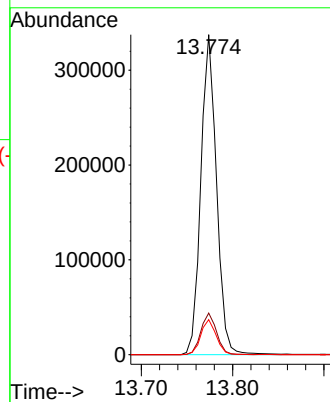
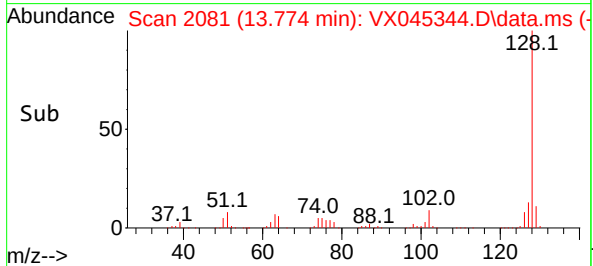
Tgt Ion:128 Resp: 401318

Ion Ratio Lower Upper

128 100

127 13.0 10.5 15.7

129 10.8 8.7 13.1





CALIBRATION SUMMARY

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Fax : 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: ALLI03
 Lab Code: CHEM Case No.: Q1502 SAS No.: Q1502 SDG No.: Q1502
 Instrument ID: MSVOA_X Calibration Date(s): 02/21/2025 02/21/2025
 Heated Purge: (Y/N) N Calibration Time(s): 09:58 11:29
 GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF005 = VX045008.D		RRF020 = VX045009.D		RRF050 = VX045010.D		RRF100 = VX045011.D		RRF150 = VX045012.D		RRF =			
COMPOUND		RRF005	RRF020	RRF050	RRF100	RRF150	RRF								% RSD
Dichlorodifluoromethane		2.499	2.478	2.571	2.428	2.669		2.529							3.7
Chloromethane		3.021	2.986	3.118	2.875	3.145		3.029							3.6
Vinyl Chloride		2.916	2.831	2.918	2.825	3.124		2.923							4.1
Ethyl Acetate		0.552	0.578	0.610	0.606	0.642		0.598							5.7
Bromomethane		1.116	0.976	0.995	0.944	1.056		1.017							6.7
Chloroethane		1.821	1.663	1.752	1.466	1.212		1.583							15.6
Trichlorofluoromethane		3.982	3.712	3.968	3.809	4.170		3.928							4.5
1,1,2-Trichlorotrifluoroethane		2.377	2.192	2.362	2.241	2.493		2.333							5.1
1,1-Dichloroethene		2.200	2.142	2.300	2.262	2.491		2.279							5.8
Acrolein		0.504	0.473	0.527	0.540	0.608		0.530							9.5
Acrylonitrile		1.204	1.244	1.348	1.284	1.384		1.293							5.7
Acetone		0.371	0.352	0.354	0.338	0.358		0.355							3.4
Carbon Disulfide		6.269	5.990	6.491	6.437	7.134		6.464							6.5
Methyl tert-Butyl Ether		7.103	7.021	7.516	7.382	8.169		7.438							6.1
Methylene Chloride		2.462	2.482	2.619	2.509	2.745		2.563							4.6
trans-1,2-Dichloroethene		2.232	2.191	2.345	2.260	2.501		2.306							5.3
Vinyl Acetate		1.136	1.190	1.304	1.244	1.311		1.237							6.1
1,1-Dichloroethane		4.525	4.343	4.508	4.473	4.929		4.555							4.8
2-Butanone		0.320	0.310	0.333	0.308	0.323		0.319							3.2
Carbon Tetrachloride		0.572	0.548	0.576	0.544	0.581		0.564							3
2,2-Dichloropropane		0.614	0.588	0.635	0.616	0.667		0.624							4.7
cis-1,2-Dichloroethene		2.740	2.632	2.729	2.716	2.997		2.763							5
Chloroform		4.272	4.258	4.406	4.293	4.771		4.400							4.9
1,1,1-Trichloroethane		0.674	0.644	0.686	0.644	0.695		0.669							3.5
1,1-Dichloropropene		0.555	0.537	0.563	0.532	0.572		0.552							3.1
Benzene		1.746	1.697	1.785	1.670	1.756		1.731							2.7
1,2-Dichloroethane		0.598	0.581	0.600	0.577	0.607		0.592							2.2
Trichloroethene		0.407	0.400	0.412	0.390	0.415		0.405							2.5
1,2-Dichloropropane		0.430	0.425	0.427	0.427	0.444		0.430							1.8
Dibromomethane		0.318	0.301	0.311	0.298	0.315		0.309							2.9

* 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.



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Fax : 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: ALLI03
 Lab Code: CHEM Case No.: Q1502 SAS No.: Q1502 SDG No.: Q1502
 Instrument ID: MSVOA_X Calibration Date(s): 02/21/2025 02/21/2025
 Heated Purge: (Y/N) N Calibration Time(s): 09:58 11:29
 GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF005 = VX045008.D		RRF020 = VX045009.D		RRF050 = VX045010.D		RRF100 = VX045011.D		RRF150 = VX045012.D		RRF =			
COMPOUND		RRF005	RRF020	RRF050	RRF100	RRF150	RRF								% RSD
Bromodichloromethane		0.610	0.593	0.625	0.601	0.639		0.614							3
4-Methyl-2-Pentanone		0.633	0.680	0.731	0.668	0.701		0.682							5.4
Toluene		2.015	1.952	1.995	1.956	2.019		1.987							1.6
t-1,3-Dichloropropene		0.527	0.530	0.616	0.618	0.666		0.591							10.3
cis-1,3-Dichloropropene		0.614	0.635	0.691	0.682	0.726		0.670							6.7
1,1,2-Trichloroethane		0.405	0.404	0.414	0.389	0.402		0.403							2.2
1,3-Dichloropropane		0.703	0.704	0.724	0.678	0.719		0.706							2.5
2-Chloroethyl vinyl ether		0.301	0.314	0.339	0.326	0.346		0.325							5.6
2-Hexanone		0.446	0.488	0.535	0.482	0.516		0.493							7
Dibromochloromethane		0.427	0.436	0.457	0.440	0.468		0.445							3.8
1,2-Dibromoethane		0.397	0.401	0.423	0.397	0.427		0.409							3.6
Tetrachloroethene		0.389	0.368	0.367	0.356	0.367		0.369							3.3
Chlorobenzene		1.223	1.214	1.244	1.220	1.257		1.231							1.5
1,1,1,2-Tetrachloroethane		0.401	0.394	0.408	0.399	0.429		0.406							3.3
Ethyl Benzene		2.094	2.100	2.220	2.178	2.286		2.176							3.7
m/p-Xylenes		0.785	0.816	0.823	0.799	0.831		0.811							2.3
o-Xylene		0.767	0.798	0.813	0.783	0.816		0.795							2.6
Styrene		1.259	1.318	1.363	1.316	1.386		1.328							3.7
Bromoform		0.251	0.258	0.298	0.281	0.308		0.279							8.9
Isopropylbenzene		1.981	2.041	2.089	2.026	2.126		2.053							2.7
1,1,2,2-Tetrachloroethane		0.665	0.664	0.703	0.647	0.695		0.675							3.4
1,2,3-Trichloropropane		0.539	0.540	0.583	0.540	0.574		0.555							3.9
Bromobenzene		0.462	0.467	0.485	0.463	0.486		0.473							2.5
n-propylbenzene		2.281	2.387	2.539	2.437	2.569		2.443							4.8
2-Chlorotoluene		1.465	1.468	1.503	1.431	1.516		1.477							2.3
1,3,5-Trimethylbenzene		1.638	1.691	1.750	1.654	1.733		1.693							2.9
4-Chlorotoluene		1.580	1.618	1.686	1.623	1.723		1.646							3.5
1,2,4-Trimethylbenzene		1.616	1.705	1.768	1.653	1.739		1.696							3.6
sec-Butylbenzene		2.056	2.118	2.210	2.094	2.228		2.141							3.5
p-Isopropyltoluene		1.614	1.709	1.811	1.733	1.808		1.735							4.7

* 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.



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VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: ALLI03
 Lab Code: CHEM Case No.: Q1502 SAS No.: Q1502 SDG No.: Q1502
 Instrument ID: MSVOA_X Calibration Date(s): 02/21/2025 02/21/2025
 Heated Purge: (Y/N) N Calibration Time(s): 09:58 11:29
 GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF005 = VX045008.D		RRF020 = VX045009.D		RRF050 = VX045010.D	
		RRF100 = VX045011.D		RRF150 = VX045012.D		RRF =	
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
1,3-Dichlorobenzene	0.855	0.874	0.905	0.852	0.910	0.879	3.1
1,4-Dichlorobenzene	0.824	0.854	0.910	0.848	0.897	0.867	4.1
n-Butylbenzene	1.376	1.512	1.675	1.618	1.740	1.584	9
1,2-Dichlorobenzene	0.863	0.868	0.894	0.815	0.872	0.863	3.4
1,2-Dibromo-3-Chloropropane	0.126	0.121	0.133	0.129	0.145	0.131	7.1
1,2,4-Trichlorobenzene	0.461	0.490	0.541	0.539	0.583	0.523	9.1
Hexachlorobutadiene	0.217	0.209	0.213	0.206	0.221	0.213	2.8
Naphthalene	1.606	1.778	1.941	1.861	2.031	1.843	8.8
1,2,3-Trichlorobenzene	0.501	0.523	0.549	0.540	0.578	0.538	5.4
1,2-Dichloroethane-d4	2.881	2.881	2.843	2.920	3.044	2.914	2.7
Toluene-d8	1.652	1.669	1.650	1.677	1.651	1.660	0.7
4-Bromofluorobenzene	0.539	0.560	0.565	0.563	0.578	0.561	2.5

* 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.

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
 Method File : 624X022125W.M
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 Last Update : Sat Feb 22 01:06:36 2025
 Response Via : Initial Calibration

Calibration Files

5 =VX045008.D 20 =VX045009.D 50 =VX045010.D 100 =VX045011.D 150 =VX045012.D

Compound		5	20	50	100	150	Avg	%RSD

1) I	Bromochloromethane	-----ISTD-----						
2) M	Dichlorodifluoro...	2.499	2.478	2.571	2.428	2.669	2.529	3.70
3) M	Chloromethane	3.021	2.986	3.118	2.875	3.145	3.029	3.58
4) M	Vinyl Chloride	2.916	2.831	2.918	2.825	3.124	2.923	4.14
5) M	Bromomethane	1.116	0.976	0.995	0.944	1.056	1.017	6.74
6) M	Chloroethane	1.821	1.663	1.752	1.466	1.212	1.583	15.57
7) M	Trichlorofluorom...	3.982	3.712	3.968	3.809	4.170	3.928	4.48
8) T	Diethyl Ether	1.506	1.429	1.478	1.436	1.582	1.486	4.17
9)	1,1,2-Trichlorot...	2.377	2.192	2.362	2.241	2.493	2.333	5.11
10) M	1,1-Dichloroethene	2.200	2.142	2.300	2.262	2.491	2.279	5.83
11)	Methyl Iodide	1.920	2.177	2.788	2.801	3.210	2.579	20.21
12)	Methyl Acetate	2.518	2.471	2.689	2.611	2.942	2.646	7.02
13) M	Acrolein	0.504	0.473	0.527	0.540	0.608	0.530	9.46
14) M	Acrylonitrile	1.204	1.243	1.348	1.284	1.384	1.293	5.70
15) M	Acetone	0.371	0.352	0.354	0.338	0.358	0.355	3.40
16) M	Carbon Disulfide	6.269	5.990	6.491	6.437	7.134	6.464	6.53
17)	Allyl chloride	4.066	3.950	4.321	4.259	4.716	4.262	6.89
18) M	Methylene Chloride	2.462	2.482	2.619	2.509	2.745	2.563	4.61
19) M	trans-1,2-Dichlo...	2.232	2.191	2.345	2.260	2.501	2.306	5.33
20) T	Diisopropyl ether	7.764	7.784	8.372	8.138	8.897	8.191	5.73
21) M	1,1-Dichloroethane	4.525	4.343	4.508	4.473	4.929	4.555	4.84
22) M	cis-1,2-Dichloro...	2.740	2.632	2.729	2.716	2.997	2.763	4.98
23) M	tert-Butyl Alcohol	0.440	0.425	0.475	0.435	0.481	0.451	5.63
24) M	Methyl tert-Buty...	7.103	7.021	7.516	7.382	8.169	7.438	6.13
25) M	Chloroform	4.272	4.258	4.406	4.293	4.771	4.400	4.90
26)	Cyclohexane	4.050	4.037	4.272	4.100	4.564	4.205	5.28
27) s	1,2-Dichloroetha...	2.881	2.881	2.843	2.920	3.044	2.914	2.67

28) I	1,4-Difluorobenzene	-----ISTD-----						
29)	1,1-Dichloropropene	0.555	0.537	0.563	0.532	0.572	0.552	3.11
30) M	2-Butanone	0.320	0.310	0.333	0.308	0.323	0.319	3.25
31)	2,2-Dichloropropane	0.614	0.588	0.635	0.616	0.667	0.624	4.73
32) M	1,1,1-Trichloroe...	0.674	0.644	0.686	0.644	0.695	0.669	3.51
33) M	Carbon Tetrachlo...	0.572	0.548	0.576	0.544	0.581	0.564	3.01
34) M	Benzene	1.746	1.697	1.785	1.670	1.756	1.731	2.69
35)	Methacrylonitrile	0.307	0.333	0.367	0.341	0.357	0.341	6.80
36) M	1,2-Dichloroethane	0.598	0.581	0.600	0.577	0.607	0.592	2.20
37) M	Trichloroethene	0.407	0.400	0.412	0.390	0.415	0.405	2.47
38)	Methylcyclohexane	0.747	0.700	0.763	0.724	0.770	0.741	3.89
39) M	1,2-Dichloropropane	0.430	0.425	0.427	0.427	0.444	0.430	1.77
40)	Dibromomethane	0.318	0.301	0.311	0.298	0.315	0.309	2.87
41) M	Bromodichloromet...	0.610	0.593	0.625	0.601	0.639	0.614	2.99
42) M	Vinyl Acetate	1.136	1.190	1.304	1.244	1.311	1.237	6.06
43)	Ethyl Acetate	0.552	0.578	0.610	0.606	0.642	0.598	5.72
44)	Isopropyl Acetate	0.889	0.917	1.033	1.005	1.075	0.984	7.97
45) T	1,4-Dioxane	0.010	0.010	0.011	0.010	0.010	0.010	6.57
46)	Methyl methacrylate	0.421	0.456	0.510	0.495	0.530	0.482	9.09
47)	n-amyl Acetate	0.721	0.803	0.922	0.862	0.962	0.854	11.20
48) M	t-1,3-Dichloropr...	0.527	0.530	0.616	0.618	0.666	0.591	10.28
49) T	cis-1,3-Dichloro...	0.614	0.635	0.691	0.682	0.726	0.670	6.72
50) M	1,1,2-Trichloroe...	0.405	0.404	0.414	0.389	0.402	0.403	2.21
51)	Ethyl methacrylate	0.543	0.586	0.676	0.653	0.709	0.633	10.70
52)	1,3-Dichloropropane	0.703	0.704	0.724	0.678	0.719	0.706	2.53
53) M	Dibromochloromet...	0.427	0.436	0.457	0.440	0.468	0.445	3.76
54) M	1,2-Dibromoethane	0.397	0.401	0.423	0.397	0.427	0.409	3.59
55) M	2-Chloroethyl vi...	0.301	0.314	0.339	0.326	0.346	0.325	5.64
56) M	Bromoform	0.251	0.258	0.298	0.281	0.308	0.279	8.85

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
 Method File : 624X022125W.M

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		-----ISTD-----						
57) I	Chlorobenzene-d5							
58) M	4-Methyl-2-Penta...	0.633	0.680	0.731	0.668	0.701	0.682	5.37
59) M	2-Hexanone	0.446	0.488	0.535	0.482	0.516	0.493	6.96
60) S	4-Bromofluoroben...	0.539	0.560	0.565	0.563	0.578	0.561	2.47
61) M	Tetrachloroethene	0.389	0.368	0.367	0.356	0.367	0.369	3.28
62) M	Toluene	2.015	1.952	1.995	1.956	2.019	1.987	1.61
63) S	Toluene-d8	1.652	1.669	1.650	1.677	1.651	1.660	0.75
64) M	Chlorobenzene	1.223	1.214	1.244	1.220	1.257	1.231	1.49
65)	1,1,1,2-Tetrachl...	0.401	0.394	0.408	0.399	0.429	0.406	3.32
66) M	Ethyl Benzene	2.094	2.100	2.220	2.178	2.286	2.176	3.74
67) M	m/p-Xylenes	0.785	0.816	0.823	0.799	0.831	0.811	2.32
68) M	o-Xylene	0.767	0.798	0.813	0.783	0.816	0.795	2.58
69) M	Styrene	1.259	1.318	1.363	1.316	1.386	1.328	3.67
70)	Isopropylbenzene	1.981	2.041	2.089	2.026	2.126	2.053	2.74
71) M	1,1,2,2-Tetrachl...	0.665	0.664	0.703	0.647	0.695	0.675	3.44
72)	1,2,3-Trichlorop...	0.539	0.540	0.583	0.540	0.574	0.555	3.90
73)	Bromobenzene	0.462	0.467	0.485	0.463	0.486	0.473	2.52
74)	n-propylbenzene	2.281	2.387	2.539	2.437	2.569	2.443	4.78
75)	2-Chlorotoluene	1.465	1.468	1.503	1.431	1.516	1.477	2.27
76)	1,3,5-Trimethylb...	1.638	1.691	1.750	1.654	1.733	1.693	2.85
77)	t-1,4-Dichloro-2...	0.133	0.160	0.199	0.203	0.239	0.187	22.02
78)	4-Chlorotoluene	1.580	1.618	1.686	1.623	1.723	1.646	3.50
79)	tert-butylbenzene	1.628	1.703	1.779	1.667	1.753	1.706	3.61
80)	1,2,4-Trimethylb...	1.616	1.705	1.768	1.653	1.739	1.696	3.65
81)	sec-Butylbenzene	2.056	2.118	2.210	2.094	2.228	2.141	3.49
82)	p-Isopropyltoluene	1.614	1.709	1.811	1.733	1.808	1.735	4.67
83) M	1,3-Dichlorobenzene	0.855	0.874	0.905	0.852	0.910	0.879	3.12
84) M	1,4-Dichlorobenzene	0.824	0.854	0.910	0.848	0.897	0.867	4.12
85)	n-Butylbenzene	1.376	1.512	1.675	1.618	1.740	1.584	9.04
86) T	Hexachloroethane	0.264	0.282	0.322	0.314	0.349	0.306	10.94
87) M	1,2-Dichlorobenzene	0.863	0.868	0.894	0.815	0.872	0.863	3.36
88)	1,2-Dibromo-3-Ch...	0.126	0.121	0.133	0.129	0.145	0.131	7.06
89)	1,2,4-Trichlorob...	0.461	0.490	0.541	0.539	0.583	0.523	9.08
90)	Hexachlorobutadiene	0.217	0.209	0.213	0.206	0.221	0.213	2.76
91) M	Naphthalene	1.606	1.778	1.941	1.861	2.031	1.843	8.81
92)	1,2,3-Trichlorob...	0.501	0.523	0.549	0.540	0.578	0.538	5.35

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045008.D
 Acq On : 21 Feb 2025 09:58
 Operator : JC/MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC005

Quant Time: Feb 22 00:46:22 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.885	128	19850	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.751	114	107647	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	98661	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	57190	29.664	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	98.867%		
60) 4-Bromofluorobenzene	11.079	95	53212	28.855	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	96.200%		
63) Toluene-d8	8.641	98	163004	29.865	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	99.533%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.167	85	8269	4.942	ug/l	90
3) Chloromethane	1.295	50	9993	4.986	ug/l	99
4) Vinyl Chloride	1.374	62	9648	4.989	ug/l	97
5) Bromomethane	1.593	94	3693	5.486	ug/l	95
6) Chloroethane	1.666	64	6026	5.753	ug/l #	88
7) Trichlorofluoromethane	1.874	101	13174	5.068	ug/l	95
8) Diethyl Ether	2.130	74	4984	5.068	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.319	101	7865	5.095	ug/l	99
10) 1,1-Dichloroethene	2.313	96	7277	4.826	ug/l	90
11) Methyl Iodide	2.447	142	6353	3.722	ug/l	92
12) Methyl Acetate	2.697	43	8331	4.758	ug/l	99
13) Acrolein	2.233	56	8331	23.736	ug/l	98
14) Acrylonitrile	3.063	53	19916	23.285	ug/l	98
15) Acetone	2.380	58	6140	26.175	ug/l	89
16) Carbon Disulfide	2.502	76	20739	4.849	ug/l	98
17) Allyl chloride	2.654	41	13453	4.770	ug/l	99
18) Methylene Chloride	2.782	84	8146	4.803	ug/l	96
19) trans-1,2-Dichloroethene	3.081	96	7385	4.841	ug/l	90
20) Diisopropyl ether	3.751	45	25687	4.740	ug/l #	87
21) 1,1-Dichloroethane	3.599	63	14970	4.967	ug/l	99
22) cis-1,2-Dichloroethene	4.477	96	9065	4.959	ug/l	95
23) tert-Butyl Alcohol	2.971	59	7280m	24.352	ug/l	
24) Methyl tert-Butyl Ether	3.105	73	23498	4.775	ug/l	96
25) Chloroform	5.087	83	14134	4.855	ug/l	99
26) Cyclohexane	5.452	56	13400	4.816	ug/l #	98
29) 1,1-Dichloropropene	5.690	75	9965	5.032	ug/l	97
30) 2-Butanone	4.562	43	28712	25.103	ug/l	97
31) 2,2-Dichloropropane	4.459	77	11020	4.922	ug/l #	69
32) 1,1,1-Trichloroethane	5.373	97	12088	5.038	ug/l	99
33) Carbon Tetrachloride	5.666	117	10269	5.071	ug/l	91
34) Benzene	6.031	78	31321	5.044	ug/l	97
35) Methacrylonitrile	4.916	41	5515m	4.506	ug/l	
36) 1,2-Dichloroethane	6.074	62	10725	5.045	ug/l #	82
37) Trichloroethene	7.123	130	7309	5.031	ug/l	95
38) Methylcyclohexane	7.373	83	13407	5.042	ug/l	95
39) 1,2-Dichloropropane	7.428	63	7710	4.994	ug/l	96
40) Dibromomethane	7.574	93	5709	5.153	ug/l	97
41) Bromodichloromethane	7.818	83	10949	4.973	ug/l	97
42) Vinyl Acetate	3.715	43	101864	22.951	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045008.D
 Acq On : 21 Feb 2025 09:58
 Operator : JC/MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC005

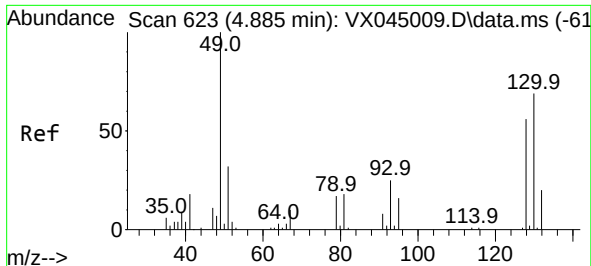
Quant Time: Feb 22 00:46:22 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.709	43	9903	4.617	ug/l #	78
44) Isopropyl Acetate	6.336	43	15951	4.518	ug/l	95
45) 1,4-Dioxane	7.665	88	3476	94.718	ug/l #	94
46) Methyl methacrylate	7.696	41	7550	4.362	ug/l	95
47) n-amyl Acetate	10.842	43	12931	4.221	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	9461	4.458	ug/l	95
49) cis-1,3-Dichloropropene	8.366	75	11016	4.585	ug/l	98
50) 1,1,2-Trichloroethane	9.147	97	7268	5.030	ug/l	96
51) Ethyl methacrylate	9.116	69	9742	4.287	ug/l	97
52) 1,3-Dichloropropane	9.305	76	12611	4.981	ug/l	99
53) Dibromochloromethane	9.519	129	7657	4.791	ug/l	97
54) 1,2-Dibromoethane	9.610	107	7119	4.851	ug/l	95
55) 2-Chloroethyl vinyl ether	8.238	63	26987	23.123	ug/l	97
56) Bromoform	10.799	173	4498	4.491	ug/l	97
58) 4-Methyl-2-Pentanone	8.568	43	52017	23.177	ug/l	99
59) 2-Hexanone	9.427	43	36637	22.584	ug/l	99
61) Tetrachloroethene	9.269	164	6401	5.269	ug/l	99
62) Toluene	8.714	91	33141	5.071	ug/l	95
64) Chlorobenzene	10.073	112	20106	4.965	ug/l	99
65) 1,1,1,2-Tetrachloroethane	10.159	131	6593	4.934	ug/l	98
66) Ethyl Benzene	10.189	91	34439	4.813	ug/l	97
67) m/p-Xylenes	10.299	106	25804	9.679	ug/l	98
68) o-Xylene	10.640	106	12618	4.824	ug/l	97
69) Styrene	10.653	104	20710	4.741	ug/l	97
70) Isopropylbenzene	10.957	105	32576	4.826	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.207	83	10940	4.929	ug/l	99
72) 1,2,3-Trichloropropane	11.238	75	8856m	4.851	ug/l	
73) Bromobenzene	11.195	156	7592	4.886	ug/l	99
74) n-propylbenzene	11.299	91	37507	4.669	ug/l	99
75) 2-Chlorotoluene	11.360	91	24091	4.961	ug/l	97
76) 1,3,5-Trimethylbenzene	11.445	105	26935	4.837	ug/l	97
77) t-1,4-Dichloro-2-butene	11.018	75	2182	3.552	ug/l	82
78) 4-Chlorotoluene	11.451	91	25983	4.800	ug/l	99
79) tert-butylbenzene	11.713	119	26773	4.772	ug/l	99
80) 1,2,4-Trimethylbenzene	11.750	105	26568	4.763	ug/l	97
81) sec-Butylbenzene	11.884	105	33807	4.801	ug/l	99
82) p-Isopropyltoluene	12.006	119	26547	4.653	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	14060	4.863	ug/l	99
84) 1,4-Dichlorobenzene	12.043	146	13556	4.755	ug/l	95
85) n-Butylbenzene	12.329	91	22634	4.344	ug/l	99
86) Hexachloroethane	12.536	117	4340	4.313	ug/l	98
87) 1,2-Dichlorobenzene	12.335	146	14188	5.001	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	12.939	75	2067	4.810	ug/l	86
89) 1,2,4-Trichlorobenzene	13.585	180	7586	4.412	ug/l	98
90) Hexachlorobutadiene	13.725	225	3570	5.091	ug/l	96
91) Naphthalene	13.774	128	26410	4.356	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	8240	4.655	ug/l	99

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



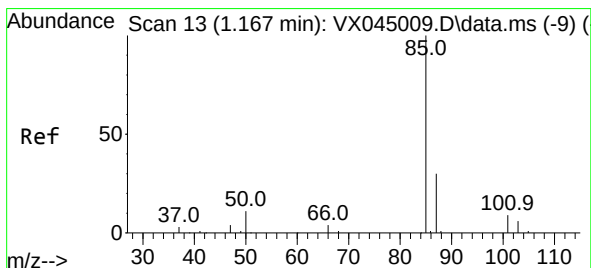
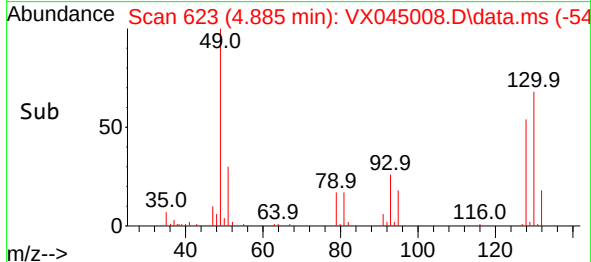
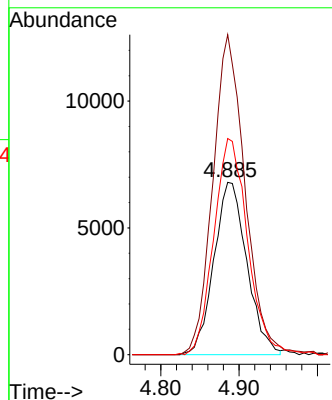
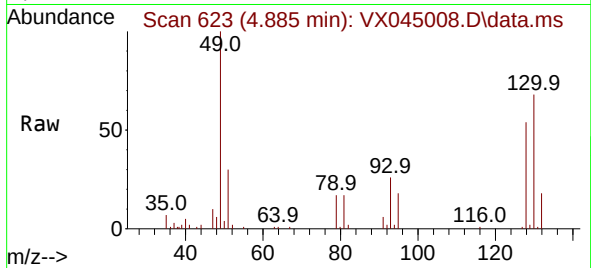
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Bromochloromethane
Concen: 30.000 ug/l
RT: 4.885 min Scan# 61
Delta R.T. 0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Tgt Ion:128 Resp: 19850
Ion Ratio Lower Upper
128 100
49 181.3 0.0 449.7
130 128.7 0.0 312.7

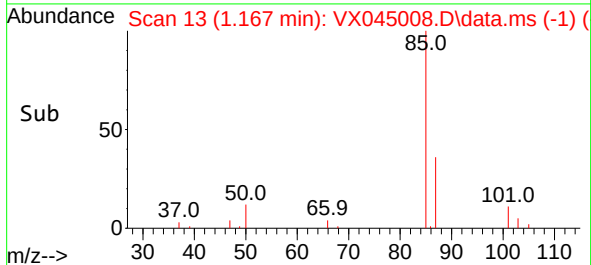
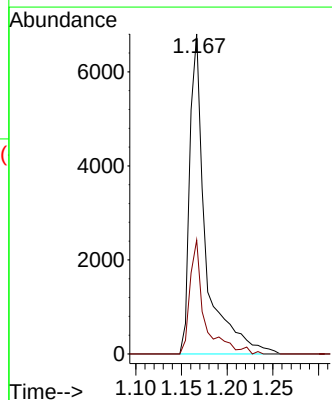
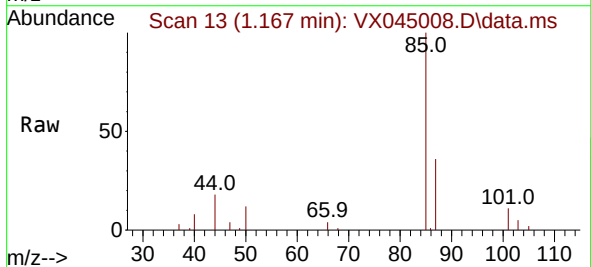
Manual Integrations
APPROVED

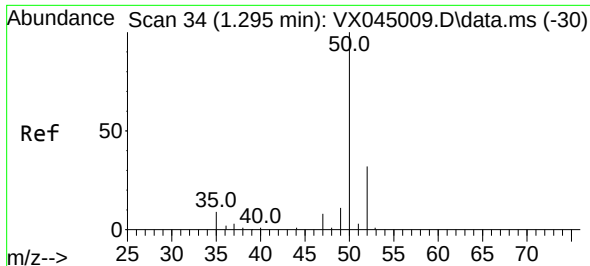
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#2
Dichlorodifluoromethane
Concen: 4.942 ug/l
RT: 1.167 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 85 Resp: 8269
Ion Ratio Lower Upper
85 100
87 35.6 15.1 45.3





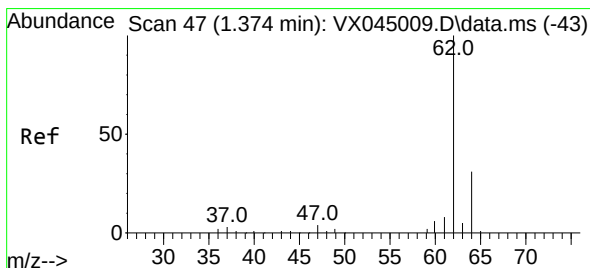
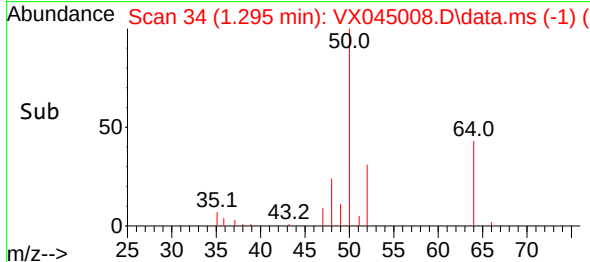
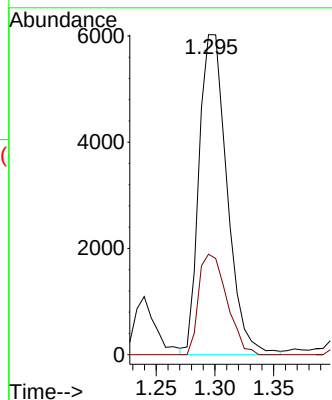
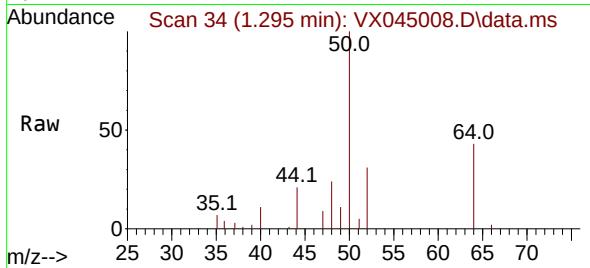
#3
Chloromethane
Concen: 4.986 ug/l
RT: 1.295 min Scan# 34
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Tgt Ion: 50 Resp: 999
Ion Ratio Lower Upper
50 100
52 31.7 25.7 38.5

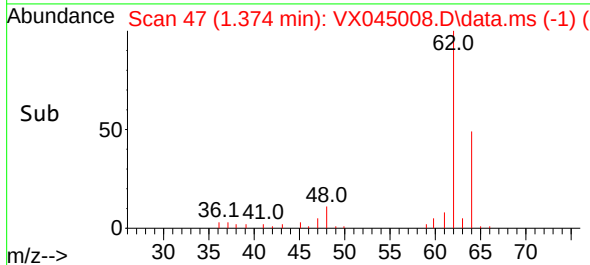
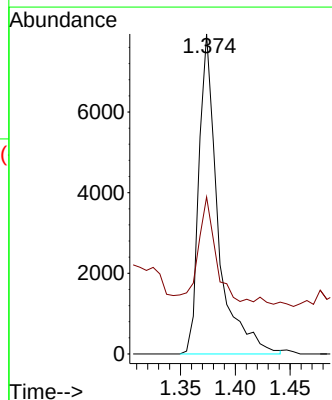
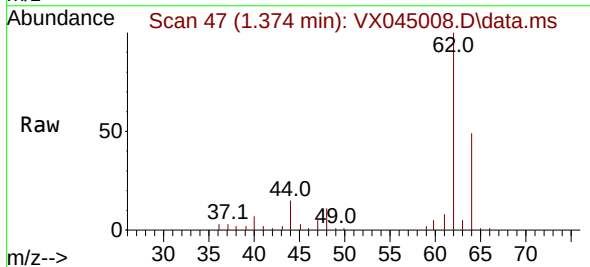
Manual Integrations
APPROVED

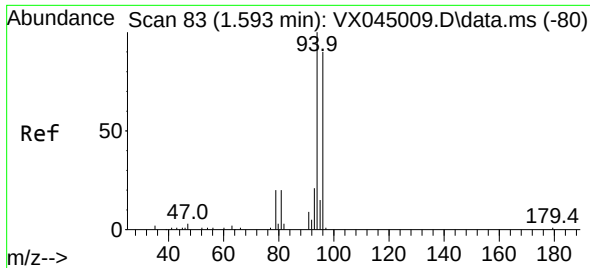
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#4
Vinyl Chloride
Concen: 4.989 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

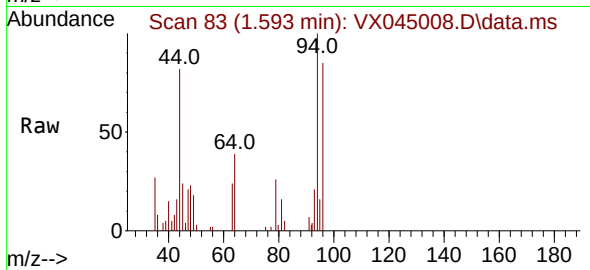
Tgt Ion: 62 Resp: 9648
Ion Ratio Lower Upper
62 100
64 32.8 25.1 37.7





#5
Bromomethane
Concen: 5.486 ug/l
RT: 1.593 min Scan# 83
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

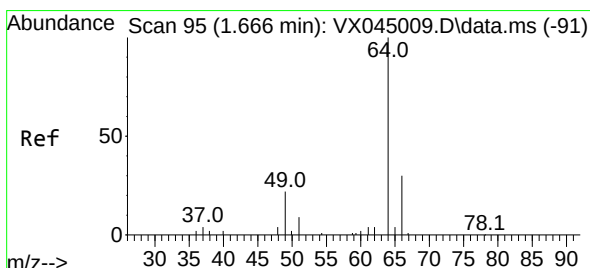
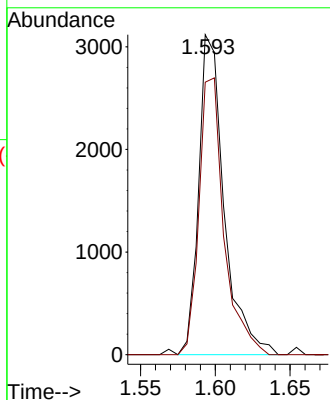
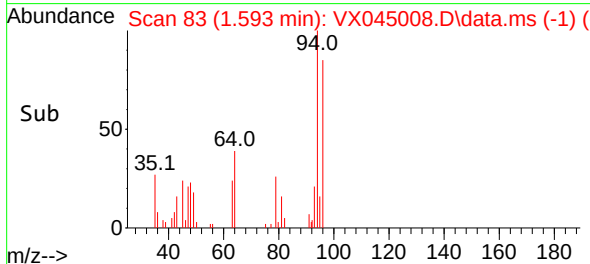
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005



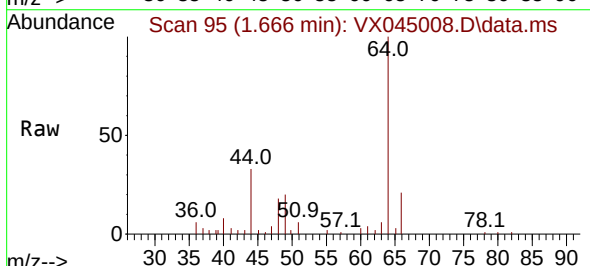
Tgt Ion: 94 Resp: 369
Ion Ratio Lower Upper
94 100
96 85.2 72.2 108.4

Manual Integrations
APPROVED

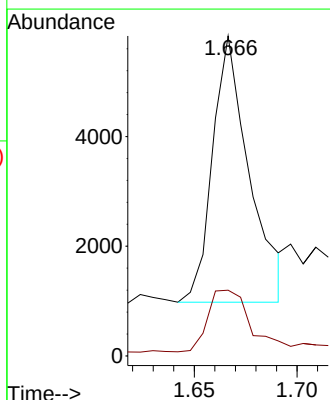
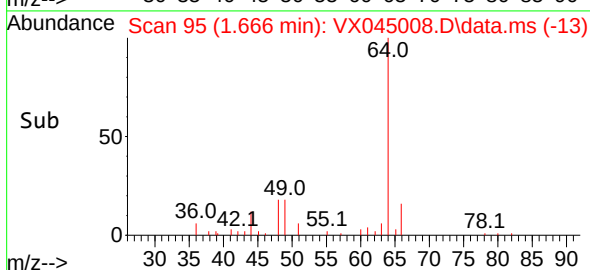
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

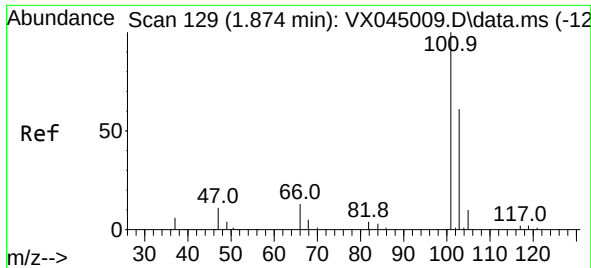


#6
Chloroethane
Concen: 5.753 ug/l
RT: 1.666 min Scan# 95
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



Tgt Ion: 64 Resp: 6026
Ion Ratio Lower Upper
64 100
66 23.1 23.7 35.5#





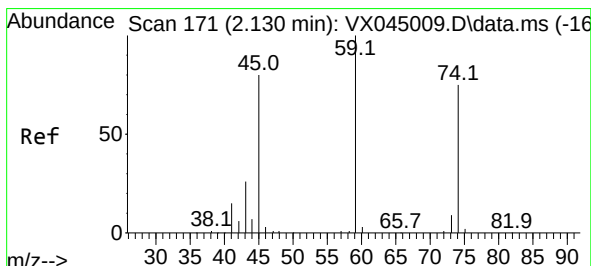
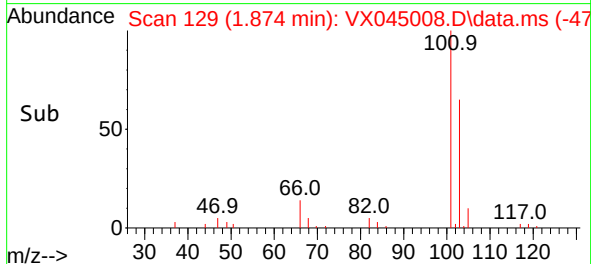
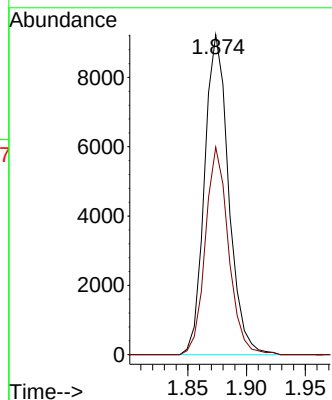
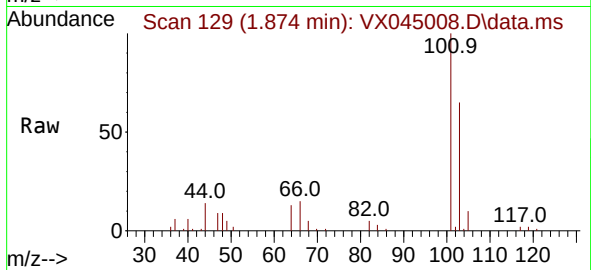
#7
 Trichlorofluoromethane
 Concen: 5.068 ug/l
 RT: 1.874 min Scan# 11
 Delta R.T. -0.000 min
 Lab File: VX045008.D
 Acq: 21 Feb 2025 09:58

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC005

Tgt Ion:101 Resp: 13174
 Ion Ratio Lower Upper
 101 100
 103 64.8 48.8 73.2

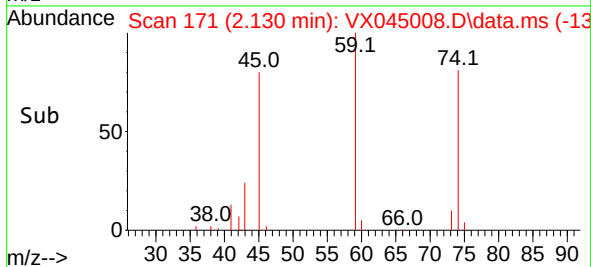
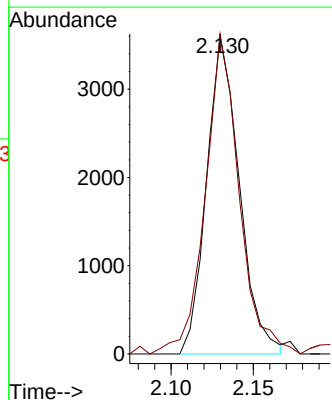
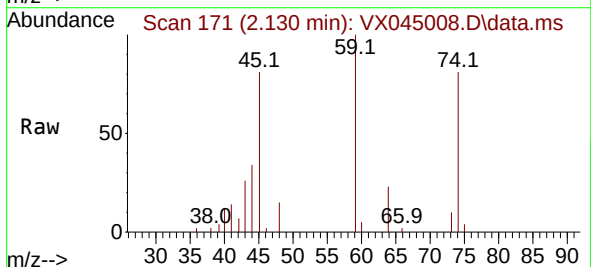
Manual Integrations
 APPROVED

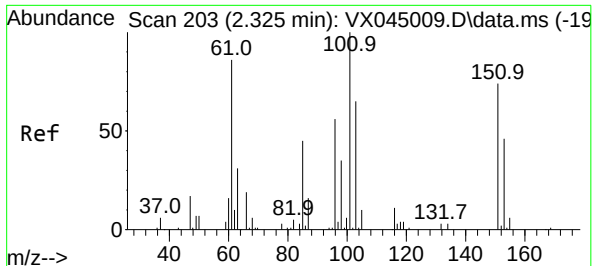
Reviewed By :John Carlone 02/24/2025
 Supervised By :Mahesh Dadoda 02/24/2025



#8
 Diethyl Ether
 Concen: 5.068 ug/l
 RT: 2.130 min Scan# 171
 Delta R.T. -0.000 min
 Lab File: VX045008.D
 Acq: 21 Feb 2025 09:58

Tgt Ion: 74 Resp: 4984
 Ion Ratio Lower Upper
 74 100
 45 103.9 20.8 186.8





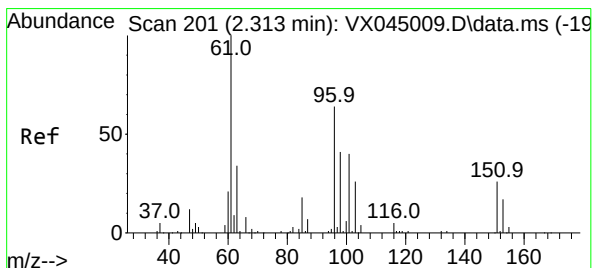
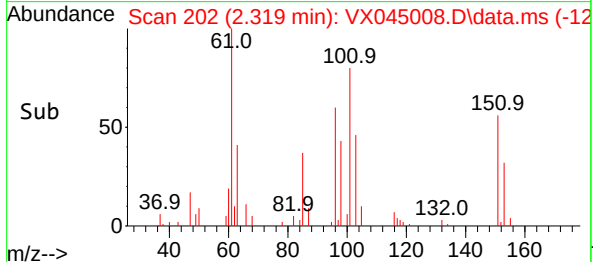
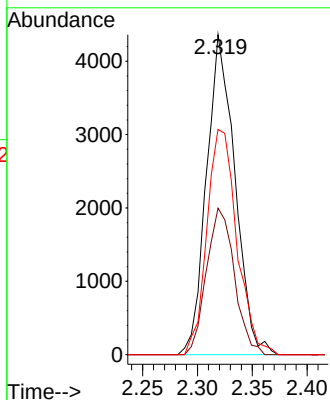
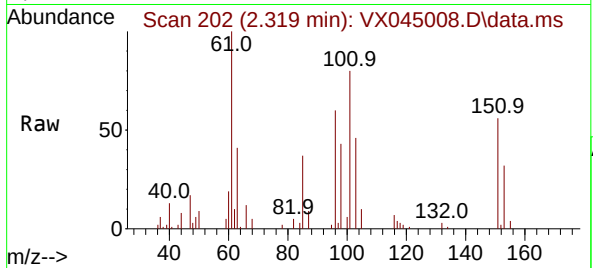
#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.095 ug/l
RT: 2.319 min Scan# 203
Delta R.T. -0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Tgt Ion:101 Resp: 786
Ion Ratio Lower Upper
101 100
85 45.0 0.0 90.6
151 74.3 0.0 147.6

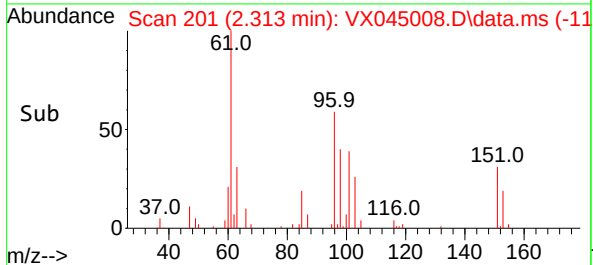
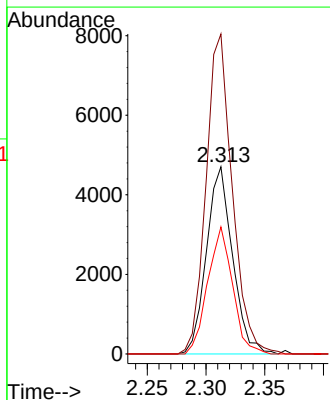
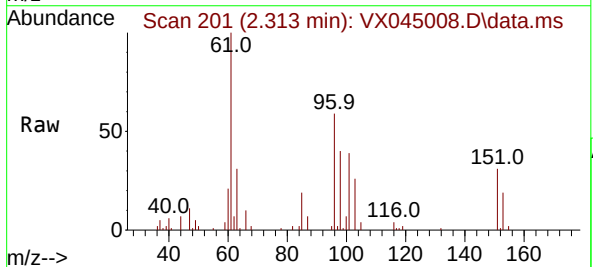
Manual Integrations
APPROVED

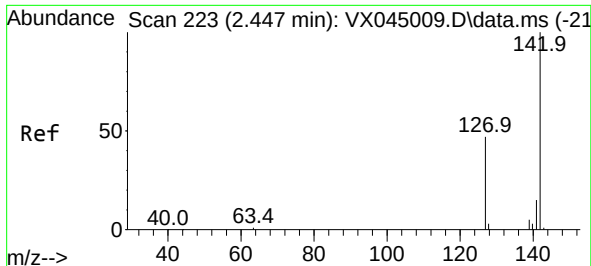
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#10
1,1-Dichloroethene
Concen: 4.826 ug/l
RT: 2.313 min Scan# 201
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

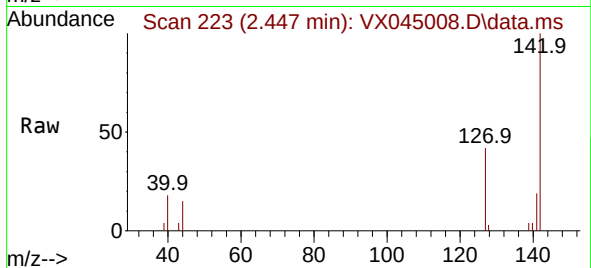
Tgt Ion: 96 Resp: 7277
Ion Ratio Lower Upper
96 100
61 170.9 124.2 186.2
98 67.8 51.1 76.7





#11
Methyl Iodide
Concen: 3.722 ug/l
RT: 2.447 min Scan# 211
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

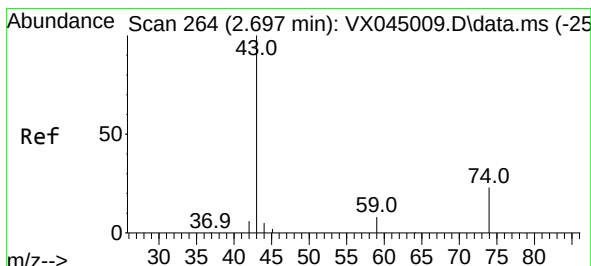
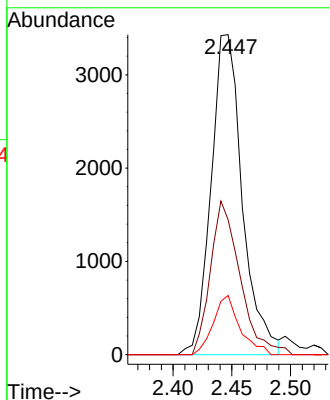
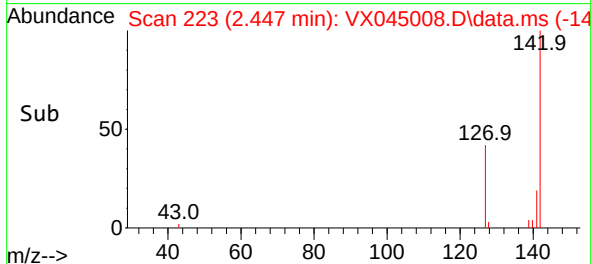
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005



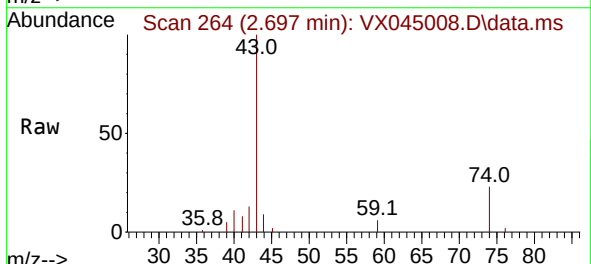
Tgt Ion:142 Resp: 635
Ion Ratio Lower Upper
142 100
127 42.0 23.3 69.9
141 18.9 7.5 22.6

Manual Integrations
APPROVED

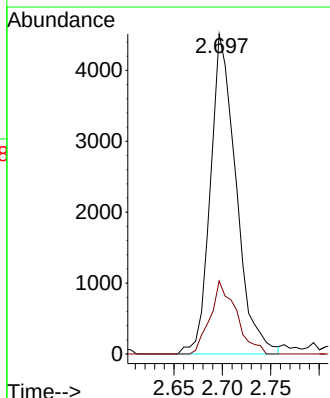
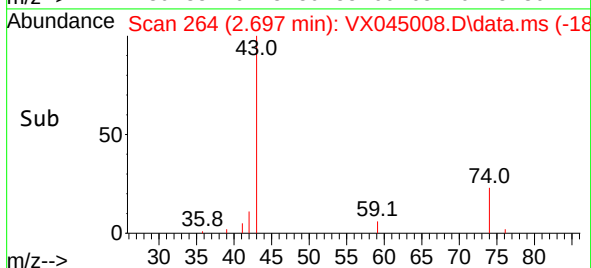
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

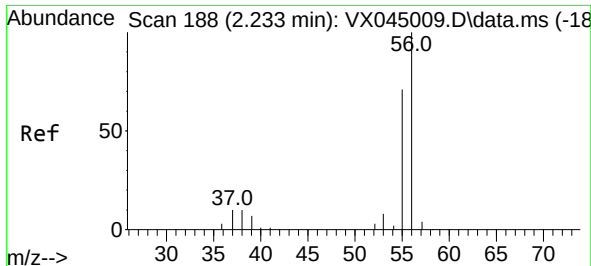


#12
Methyl Acetate
Concen: 4.758 ug/l
RT: 2.697 min Scan# 264
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



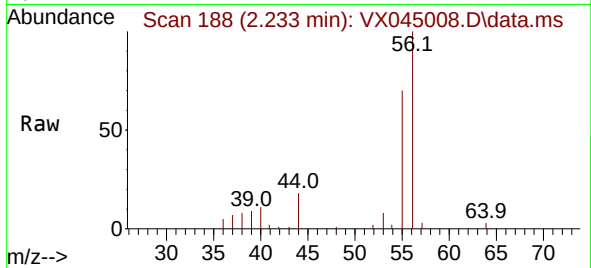
Tgt Ion: 43 Resp: 8331
Ion Ratio Lower Upper
43 100
74 23.1 17.9 26.9





#13
Acrolein
Concen: 23.736 ug/l
RT: 2.233 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

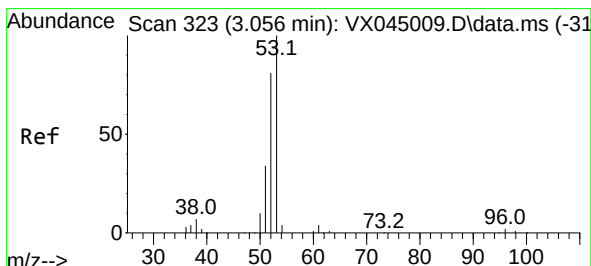
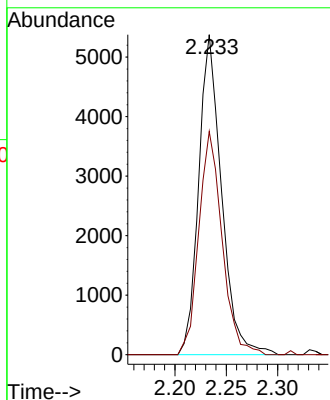
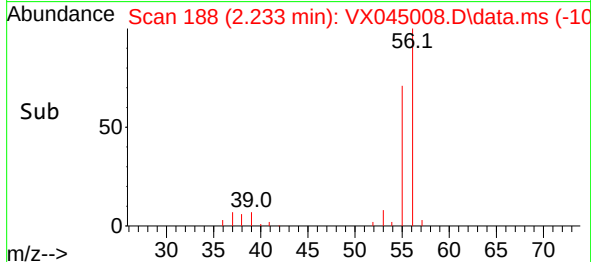
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005



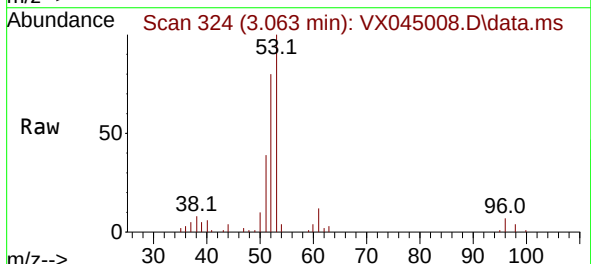
Tgt Ion: 56 Resp: 833
Ion Ratio Lower Upper
56 100
55 71.2 55.4 83.2

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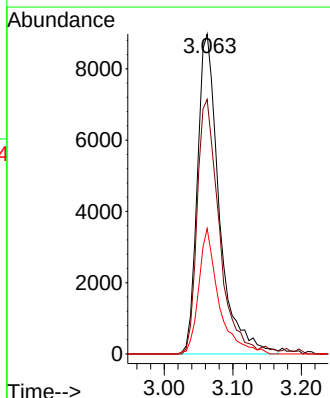
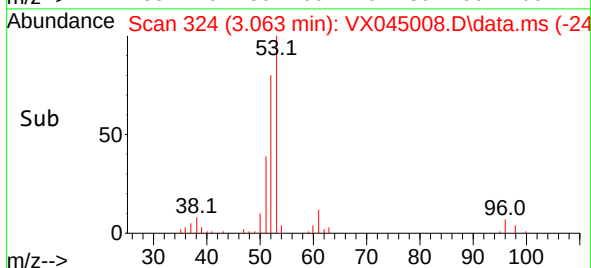
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

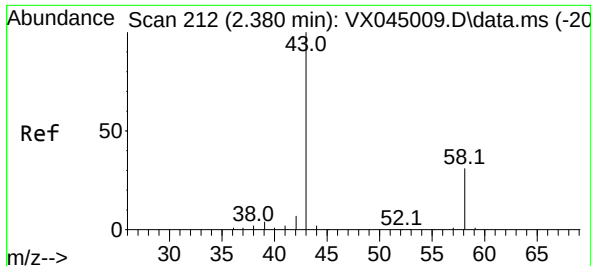


#14
Acrylonitrile
Concen: 23.285 ug/l
RT: 3.063 min Scan# 324
Delta R.T. 0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



Tgt Ion: 53 Resp: 19916
Ion Ratio Lower Upper
53 100
52 79.7 40.9 122.8
51 36.2 18.0 54.0





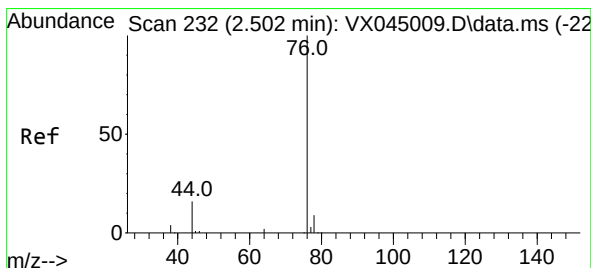
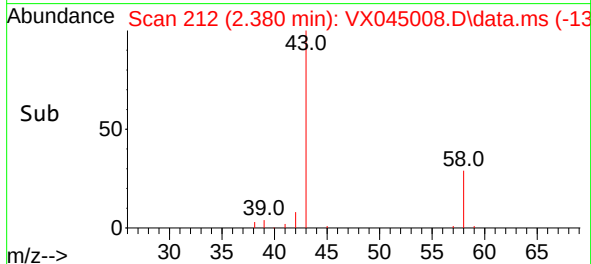
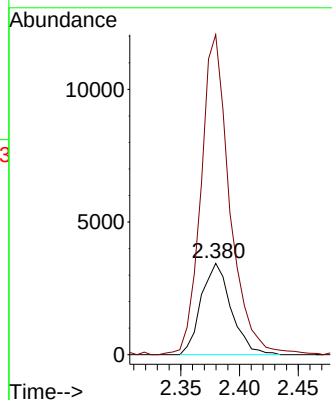
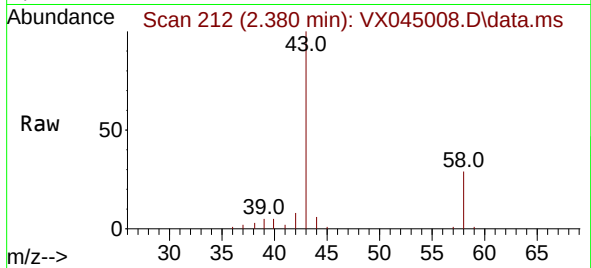
#15
Acetone
Concen: 26.175 ug/l
RT: 2.380 min Scan# 212
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Tgt Ion: 58 Resp: 6140
Ion Ratio Lower Upper
58 100
43 345.3 258.6 388.0

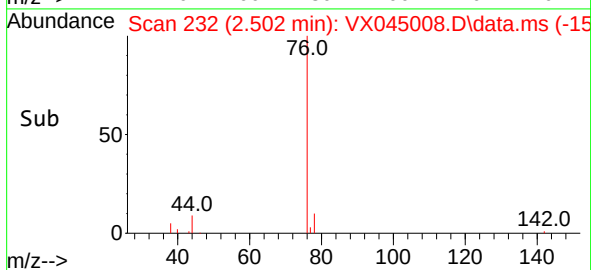
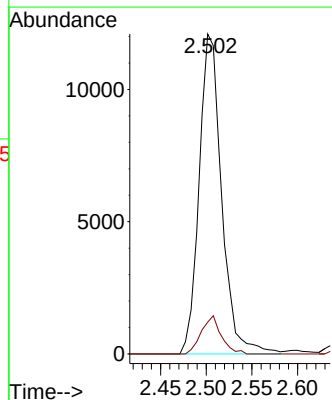
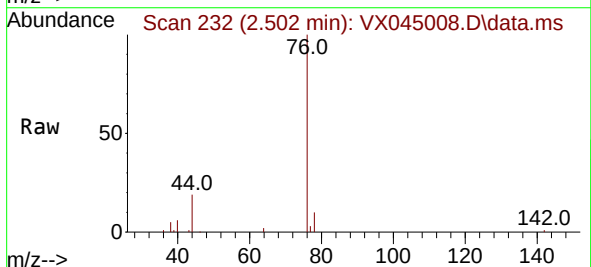
Manual Integrations
APPROVED

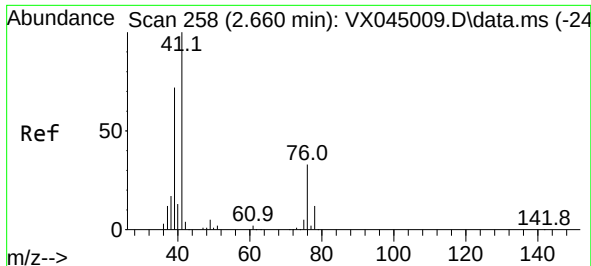
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#16
Carbon Disulfide
Concen: 4.849 ug/l
RT: 2.502 min Scan# 232
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

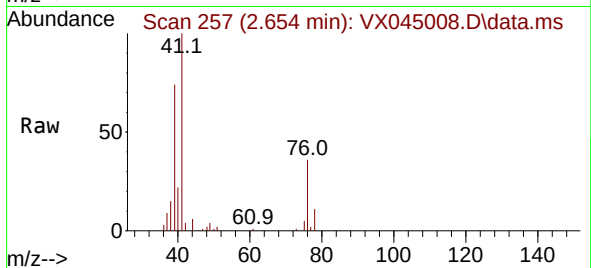
Tgt Ion: 76 Resp: 20739
Ion Ratio Lower Upper
76 100
78 9.9 7.3 10.9





#17
 Allyl chloride
 Concen: 4.770 ug/l
 RT: 2.654 min Scan# 257
 Delta R.T. -0.006 min
 Lab File: VX045008.D
 Acq: 21 Feb 2025 09:58

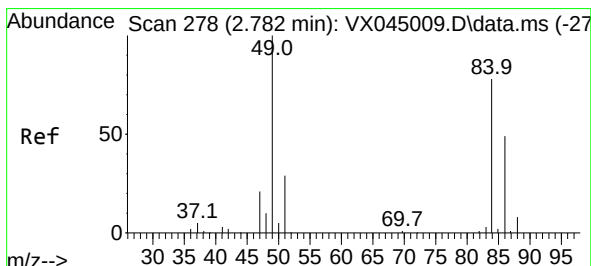
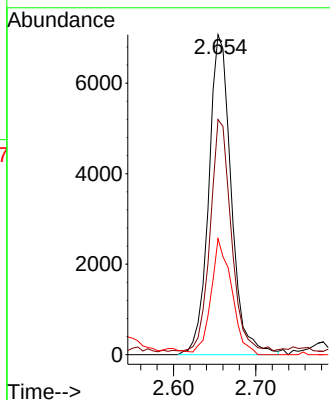
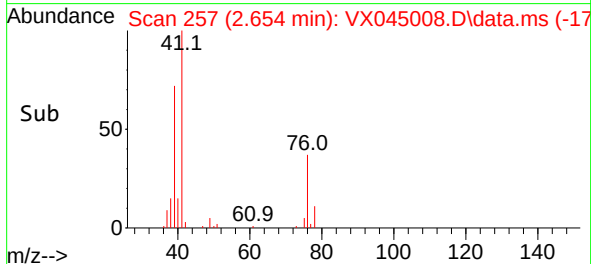
Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDIC005



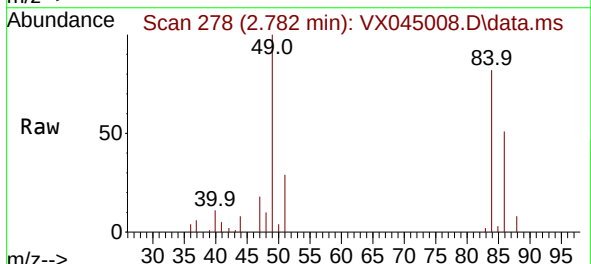
Tgt Ion: 41 Resp: 1345
 Ion Ratio Lower Upper
 41 100
 39 72.3 36.2 108.6
 76 36.3 17.2 51.5

Manual Integrations
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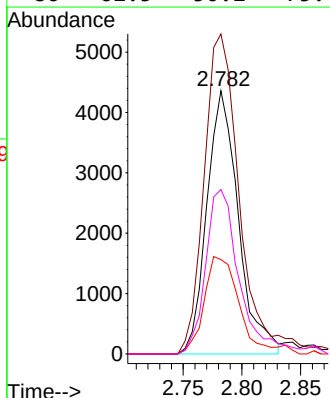
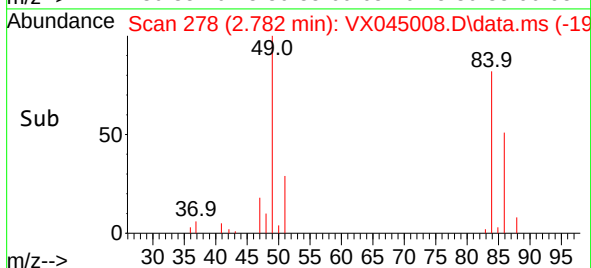
Reviewed By :John Carlone 02/24/2025
 Supervised By :Mahesh Dadoda 02/24/2025

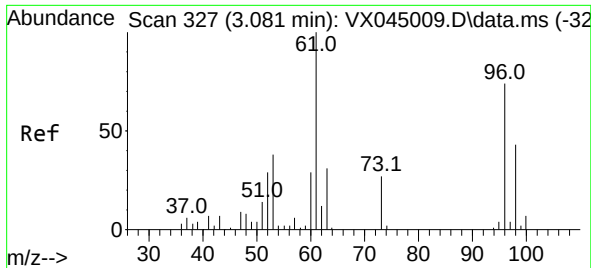


#18
 Methylene Chloride
 Concen: 4.803 ug/l
 RT: 2.782 min Scan# 278
 Delta R.T. -0.000 min
 Lab File: VX045008.D
 Acq: 21 Feb 2025 09:58



Tgt Ion: 84 Resp: 8146
 Ion Ratio Lower Upper
 84 100
 49 121.6 102.8 154.2
 51 35.8 30.1 45.1
 86 62.5 50.2 75.4





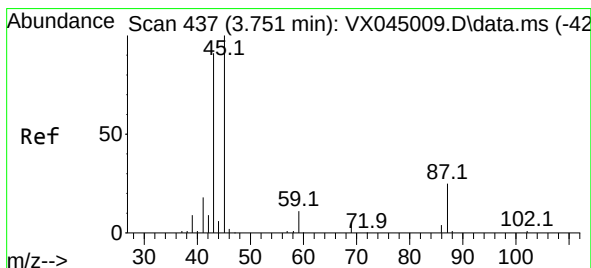
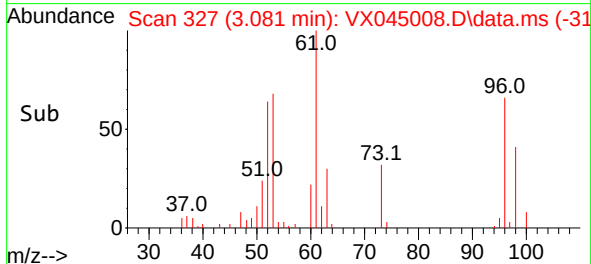
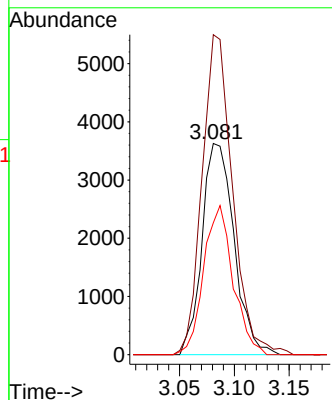
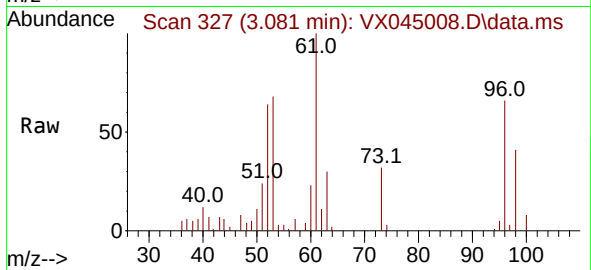
#19
trans-1,2-Dichloroethene
Concen: 4.841 ug/l
RT: 3.081 min Scan# 31
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 96 Resp: 738
Ion Ratio Lower Upper
96 100
61 149.5 108.6 163.0
98 62.5 46.5 69.7

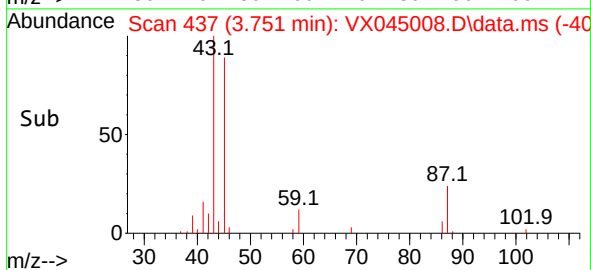
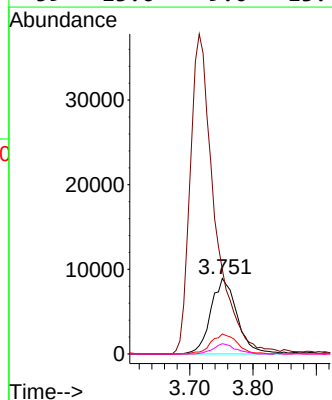
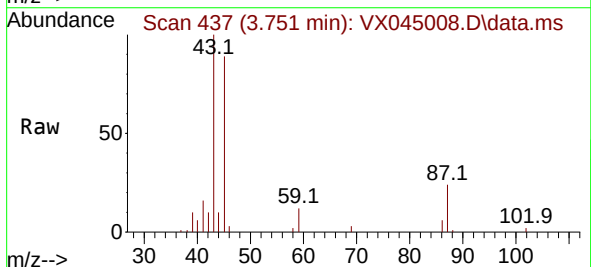
Manual Integrations
APPROVED

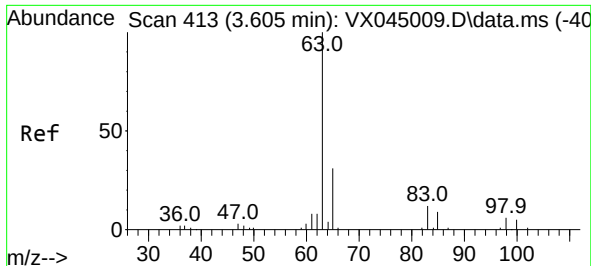
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#20
Diisopropyl ether
Concen: 4.740 ug/l
RT: 3.751 min Scan# 437
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 45 Resp: 25687
Ion Ratio Lower Upper
45 100
43 108.7 74.4 111.6
87 26.5 19.8 29.8
59 13.6 9.0 13.4#





#21

1,1-Dichloroethane

Concen: 4.967 ug/l

RT: 3.599 min Scan# 41

Delta R.T. -0.006 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Instrument :

MSVOA_X

ClientSampleId :

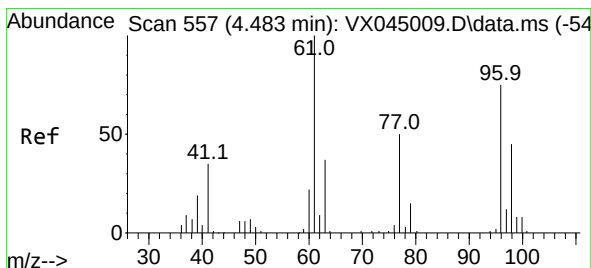
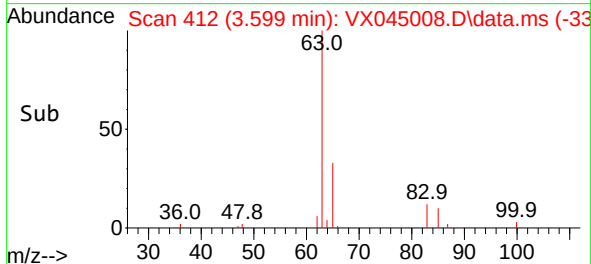
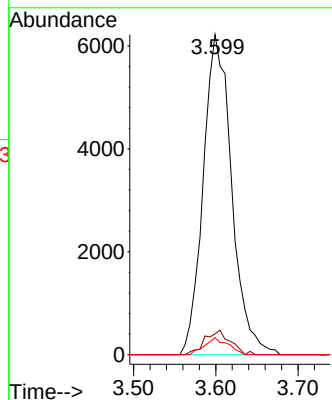
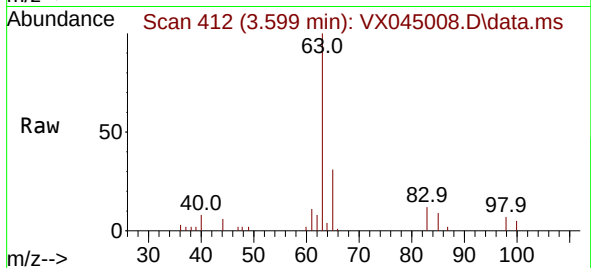
VSTDIC005

Tgt Ion: 63	Resp: 14970
Ion Ratio	Lower Upper
63 100	
98 6.5	3.3 9.8
100 5.3	2.4 7.1

Manual Integrations
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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#22

cis-1,2-Dichloroethene

Concen: 4.959 ug/l

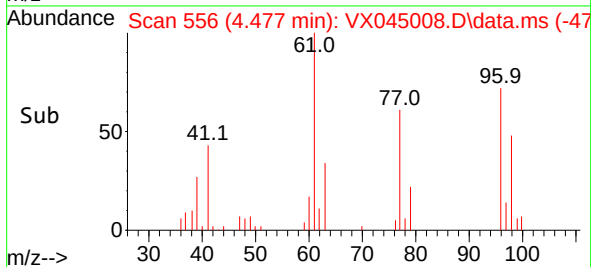
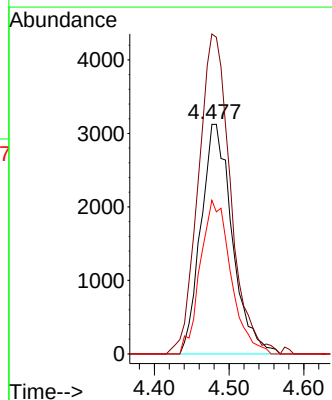
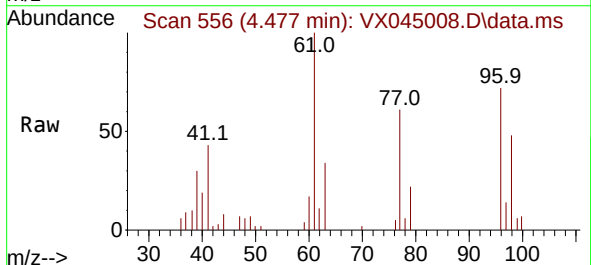
RT: 4.477 min Scan# 556

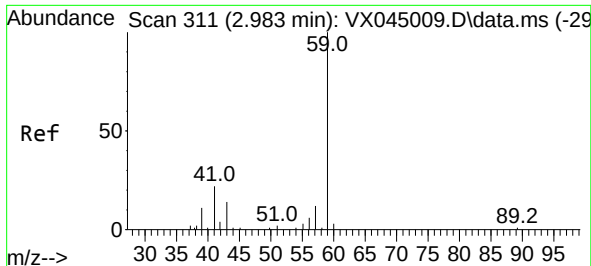
Delta R.T. -0.006 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Tgt Ion: 96	Resp: 9065
Ion Ratio	Lower Upper
96 100	
61 141.8	118.9 178.3
98 65.6	50.7 76.1





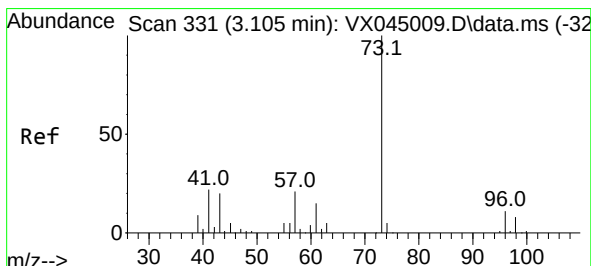
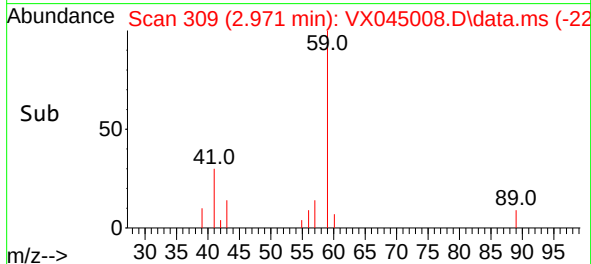
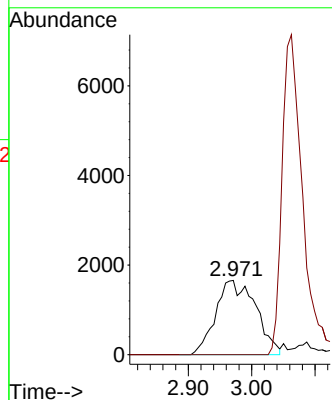
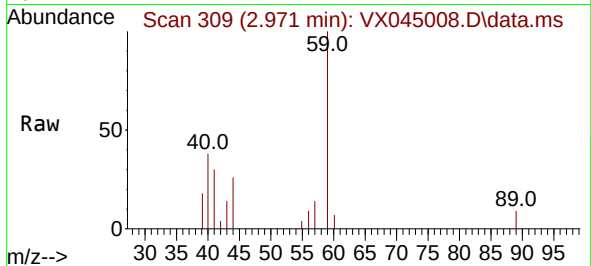
#23
tert-Butyl Alcohol
Concen: 24.352 ug/l m
RT: 2.971 min Scan# 309
Delta R.T. -0.012 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 59 Resp: 7280
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0

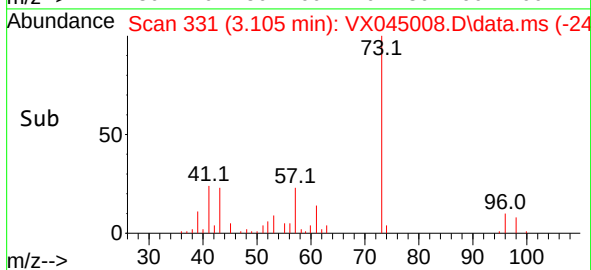
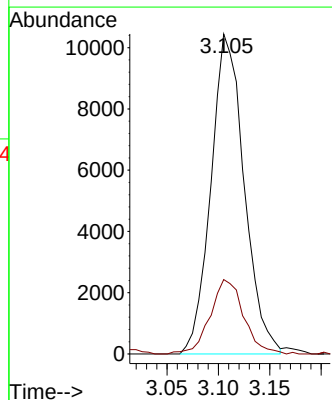
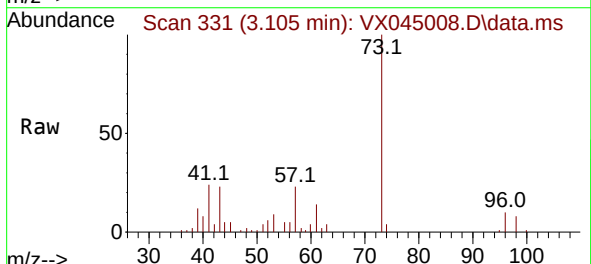
Manual Integrations
APPROVED

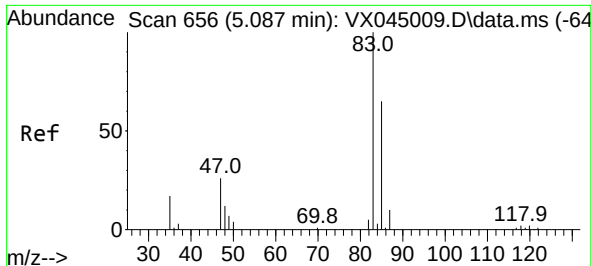
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#24
Methyl tert-Butyl Ether
Concen: 4.775 ug/l
RT: 3.105 min Scan# 331
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 73 Resp: 23498
Ion Ratio Lower Upper
73 100
43 23.4 17.4 26.0





#25

Chloroform

Concen: 4.855 ug/l

RT: 5.087 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC005

Tgt Ion: 83 Resp: 14134

Ion Ratio Lower Upper

83 100

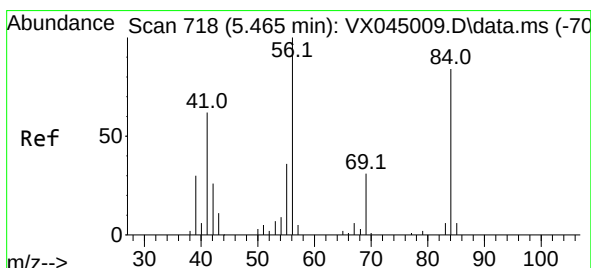
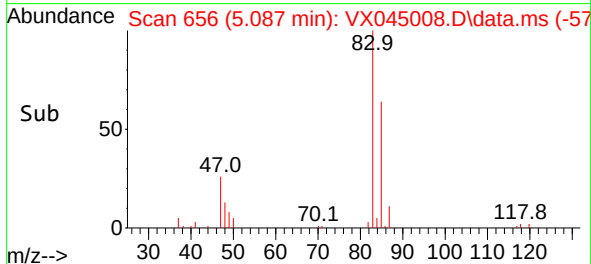
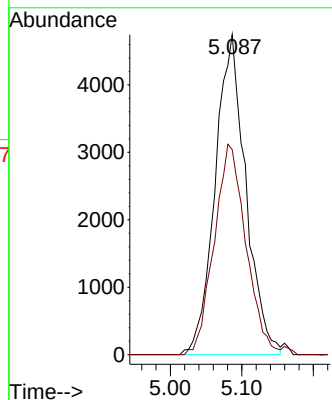
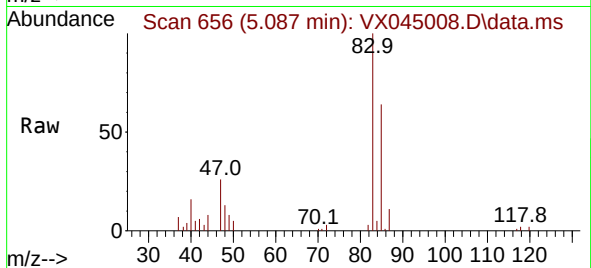
85 64.1 51.7 77.5

Manual Integrations

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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#26

Cyclohexane

Concen: 4.816 ug/l

RT: 5.452 min Scan# 716

Delta R.T. -0.012 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

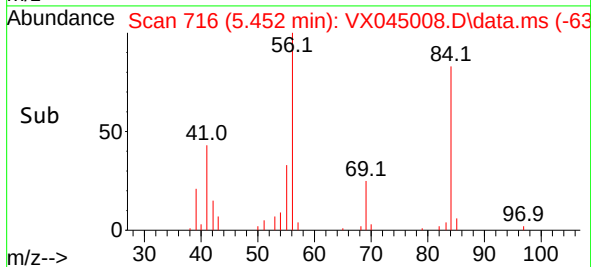
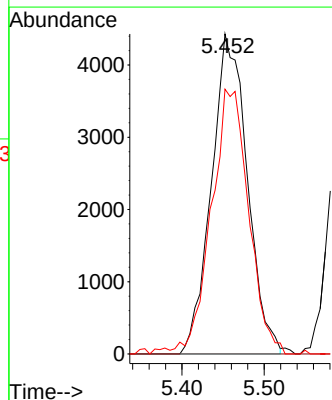
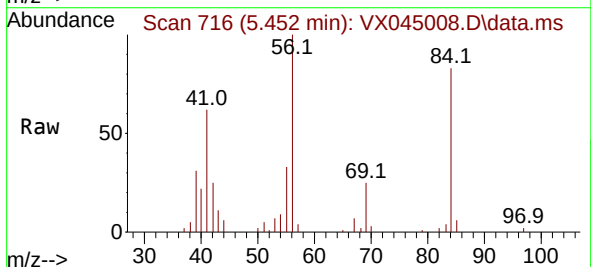
Tgt Ion: 56 Resp: 13400

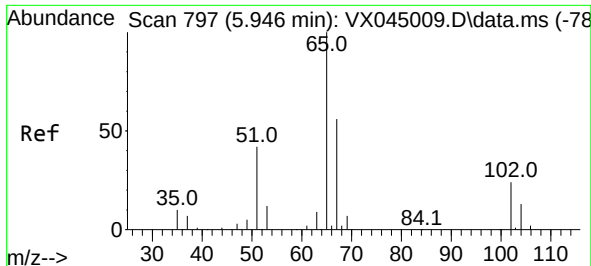
Ion Ratio Lower Upper

56 100

89 0.0 0.0 0.0

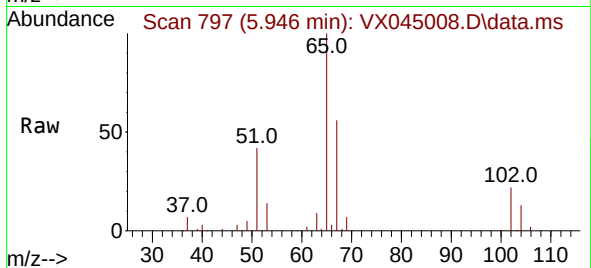
84 86.2 67.1 100.7





#27
1,2-Dichloroethane-d4
Concen: 29.664 ug/l
RT: 5.946 min Scan# 797
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

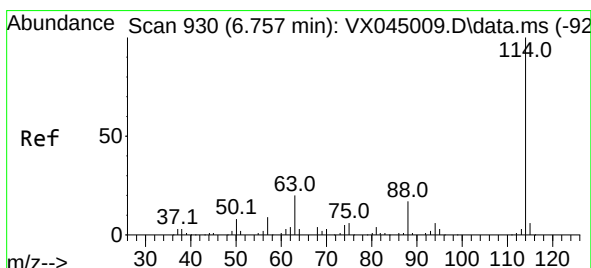
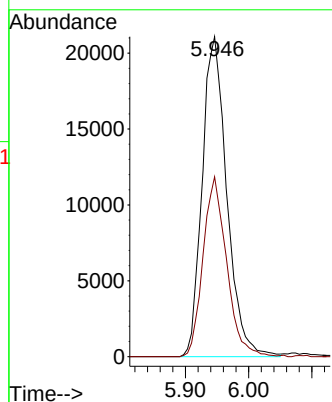
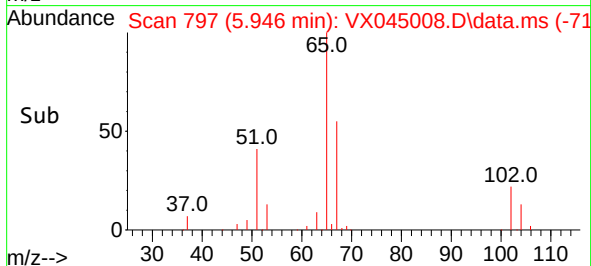
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



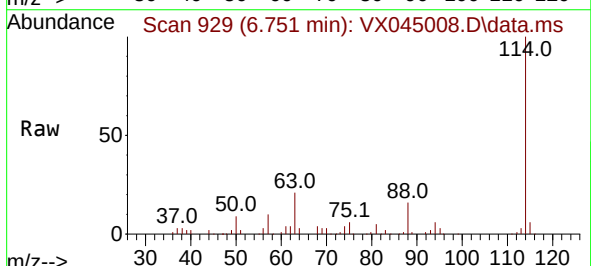
Tgt Ion: 65 Resp: 57190
Ion Ratio Lower Upper
65 100
67 53.7 42.6 64.0

Manual Integrations
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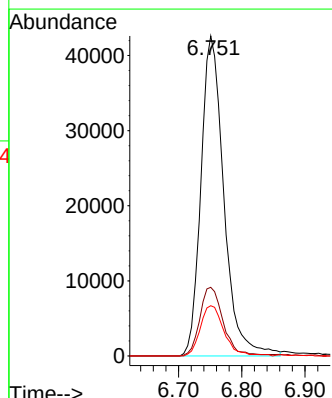
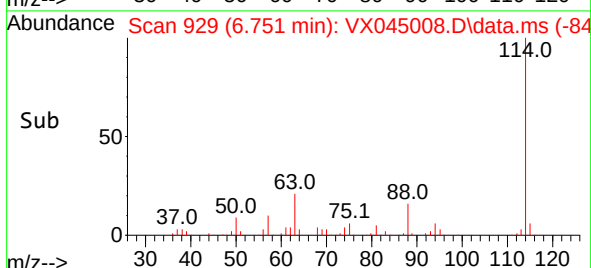
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

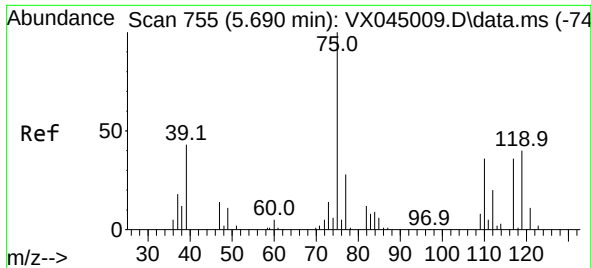


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 6.751 min Scan# 929
Delta R.T. -0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



Tgt Ion:114 Resp: 107647
Ion Ratio Lower Upper
114 100
63 21.2 16.8 25.2
88 16.0 12.7 19.1





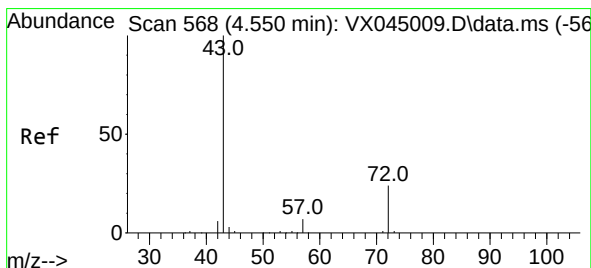
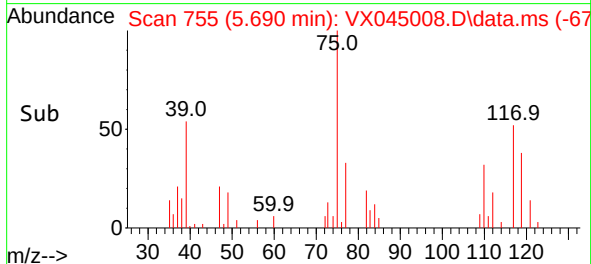
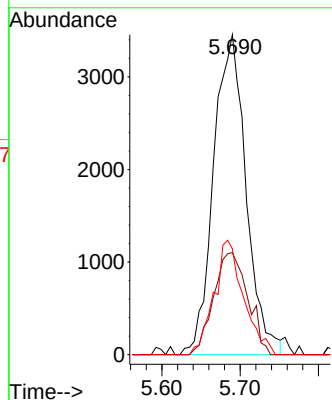
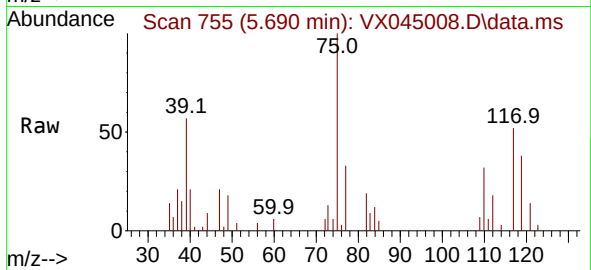
#29
1,1-Dichloropropene
Concen: 5.032 ug/l
RT: 5.690 min Scan# 71
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 75 Resp: 996
Ion Ratio Lower Upper
75 100
110 33.6 0.0 69.2
77 32.5 0.0 61.0

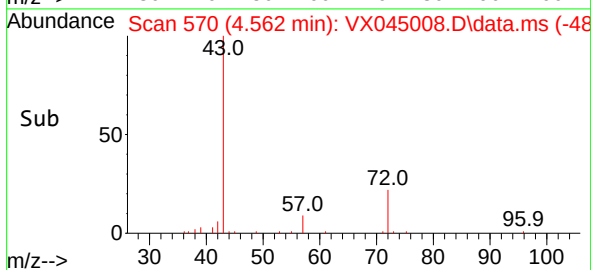
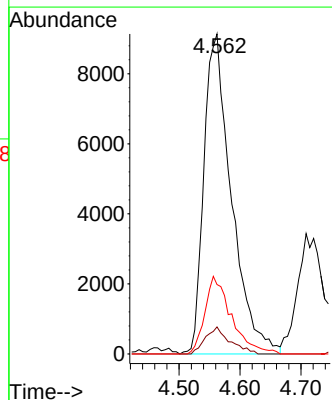
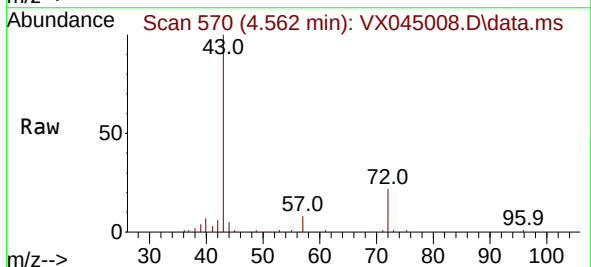
Manual Integrations
APPROVED

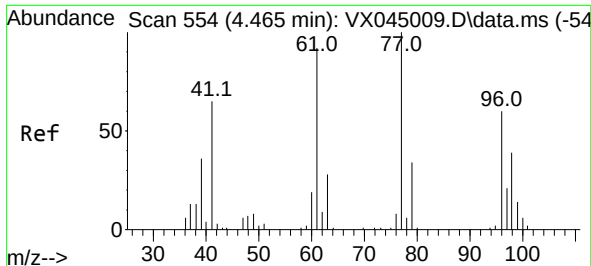
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#30
2-Butanone
Concen: 25.103 ug/l
RT: 4.562 min Scan# 570
Delta R.T. 0.012 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 43 Resp: 28712
Ion Ratio Lower Upper
43 100
57 7.5 6.2 9.2
72 23.4 20.2 30.2





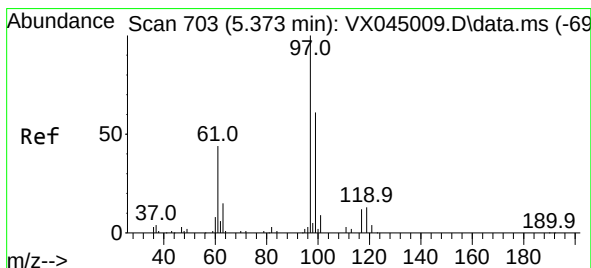
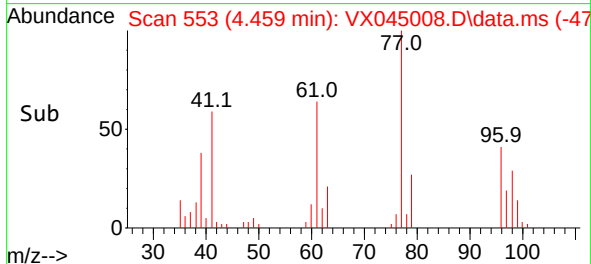
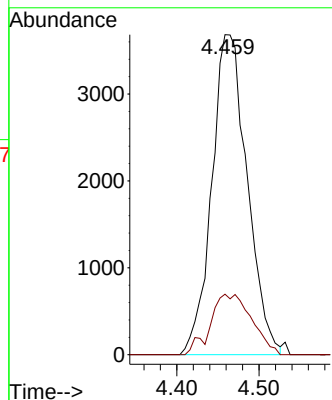
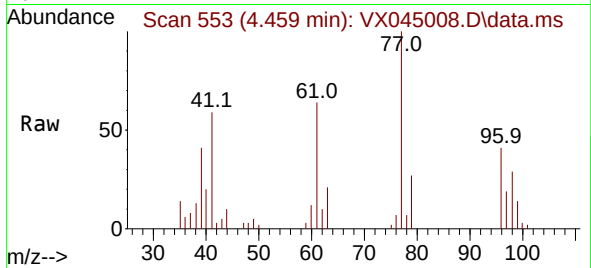
#31
2,2-Dichloropropane
Concen: 4.922 ug/l
RT: 4.459 min Scan# 511
Delta R.T. -0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 77 Resp: 11020
Ion Ratio Lower Upper
77 100
97 7.5 18.0 27.0

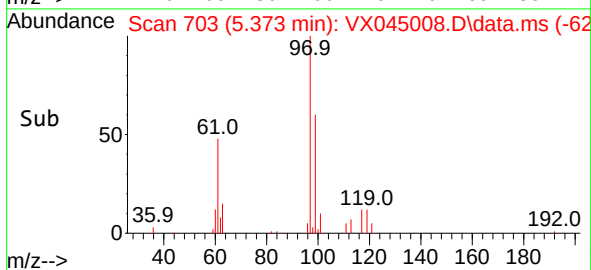
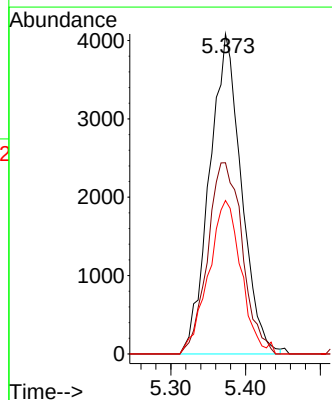
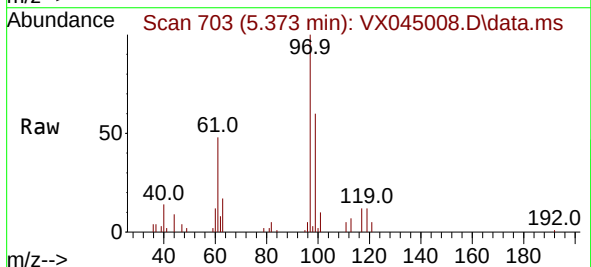
Manual Integrations
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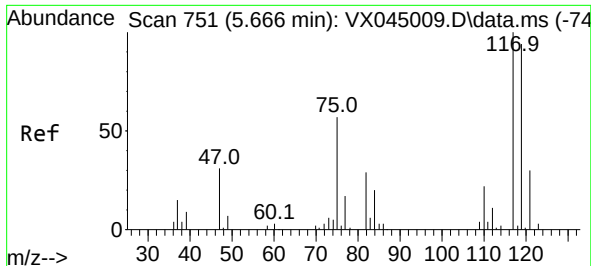
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#32
1,1,1-Trichloroethane
Concen: 5.038 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

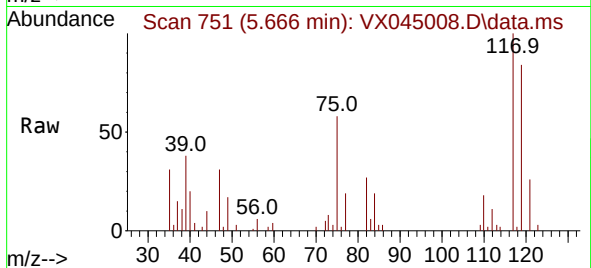
Tgt Ion: 97 Resp: 12088
Ion Ratio Lower Upper
97 100
99 64.9 52.2 78.2
61 48.7 38.5 57.7





#33
Carbon Tetrachloride
Concen: 5.071 ug/l
RT: 5.666 min Scan# 751
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

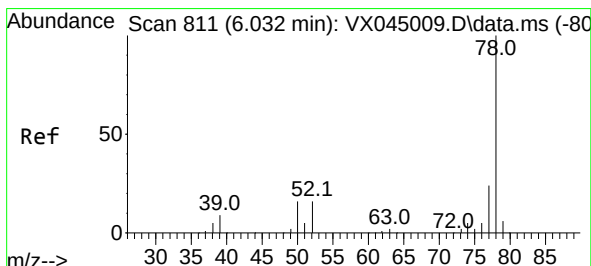
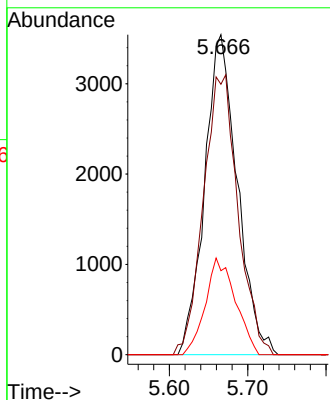
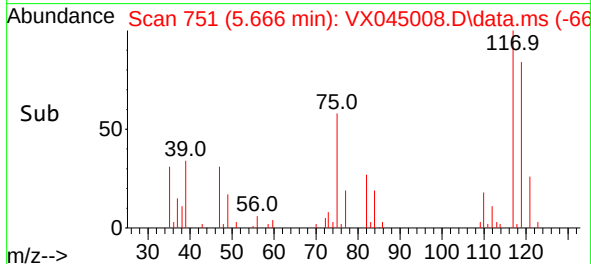
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



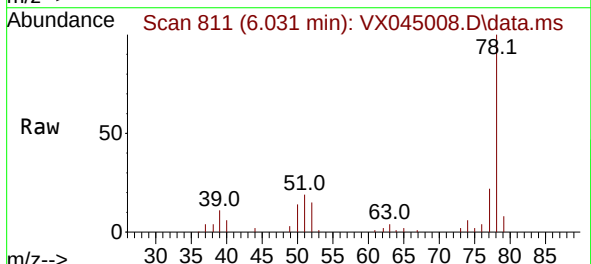
Tgt Ion:117 Resp: 10269
Ion Ratio Lower Upper
117 100
119 84.5 75.1 112.7
121 26.2 23.9 35.9

Manual Integrations
APPROVED

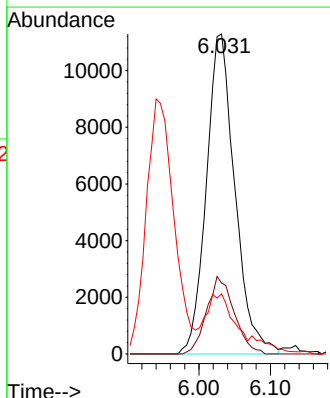
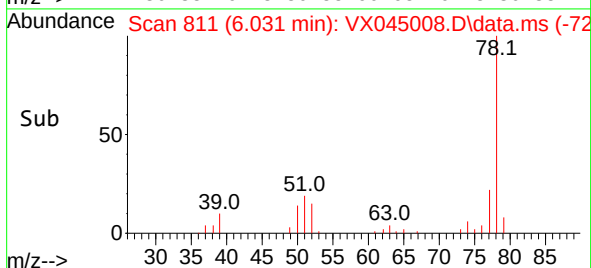
Reviewed By :John Carbone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

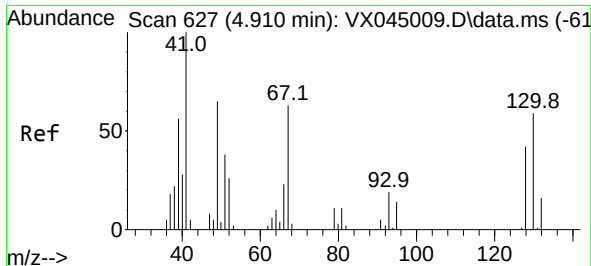


#34
Benzene
Concen: 5.044 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



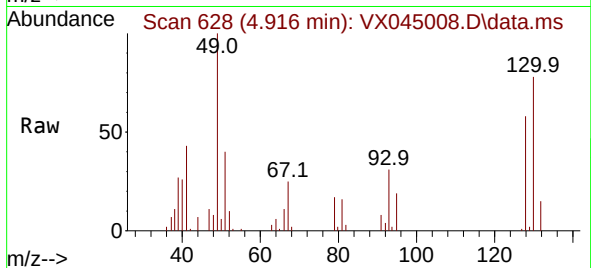
Tgt Ion: 78 Resp: 31321
Ion Ratio Lower Upper
78 100
77 22.2 19.6 29.4
51 17.3 13.8 20.6





#35
Methacrylonitrile
Concen: 4.506 ug/l m
RT: 4.916 min Scan# 61
Delta R.T. 0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

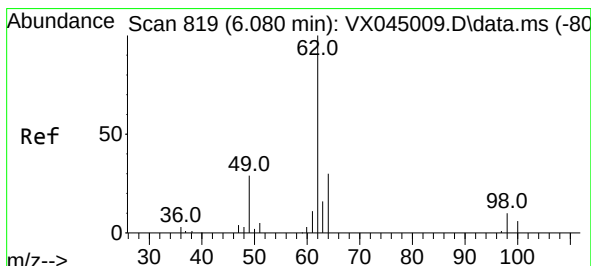
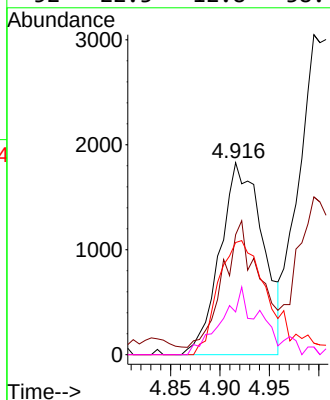
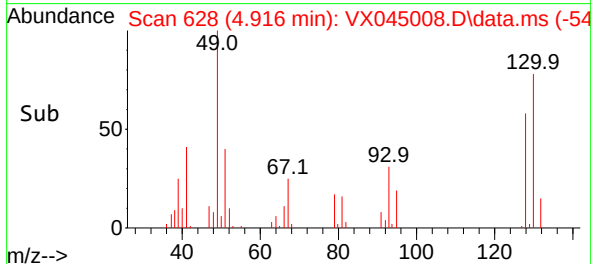
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005



Tgt Ion: 41	Resp: 551
Ion Ratio	Lower Upper
41 100	
39 62.5	27.8 83.4
67 58.4	31.5 94.5
52 22.3	12.8 38.4

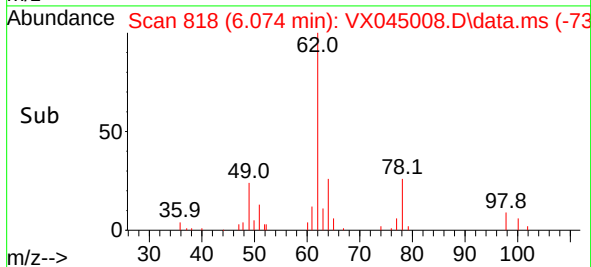
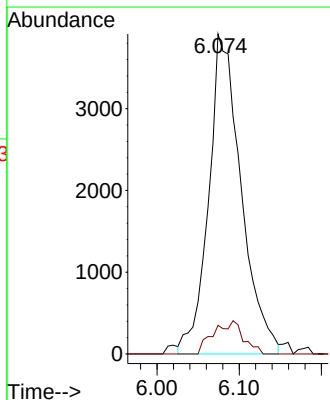
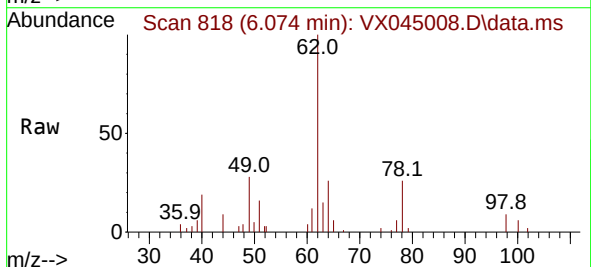
Manual Integrations
APPROVED

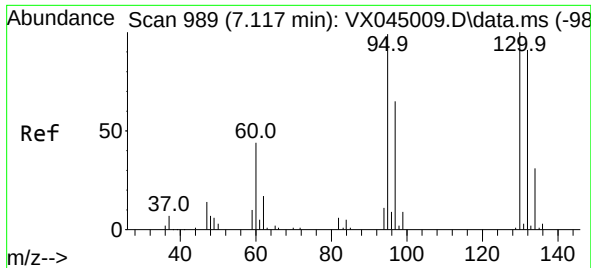
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#36
1,2-Dichloroethane
Concen: 5.045 ug/l
RT: 6.074 min Scan# 818
Delta R.T. -0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 62	Resp: 10725
Ion Ratio	Lower Upper
62 100	
98 3.3	7.9 11.9#





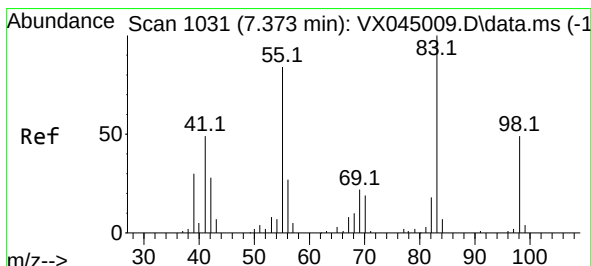
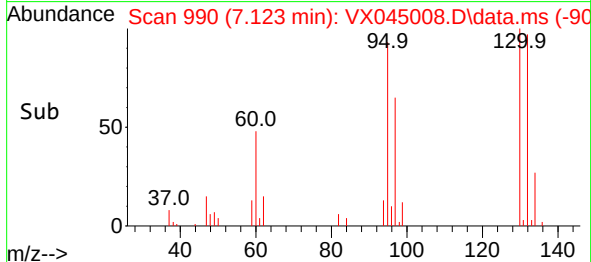
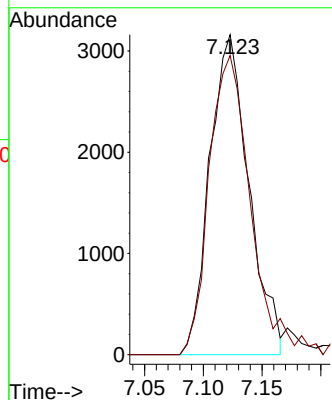
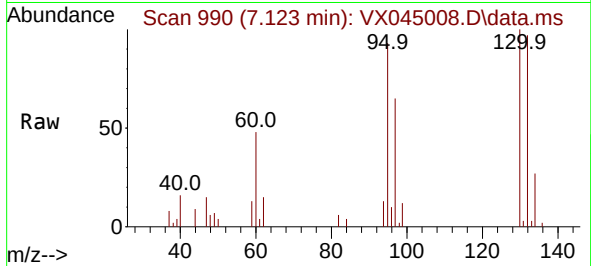
#37
Trichloroethene
Concen: 5.031 ug/l
RT: 7.123 min Scan# 990
Delta R.T. 0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion:130 Resp: 7309
Ion Ratio Lower Upper
130 100
95 93.5 79.0 118.4

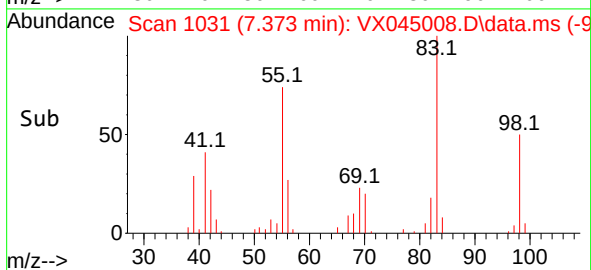
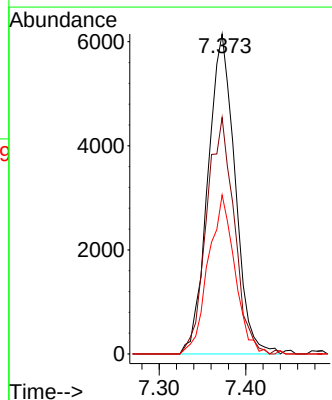
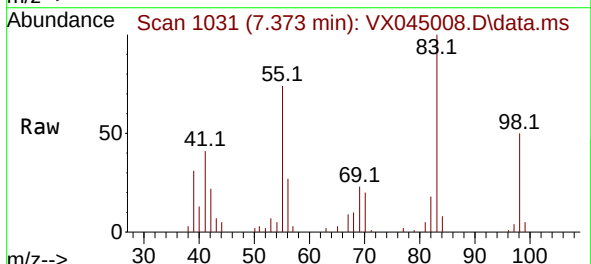
Manual Integrations
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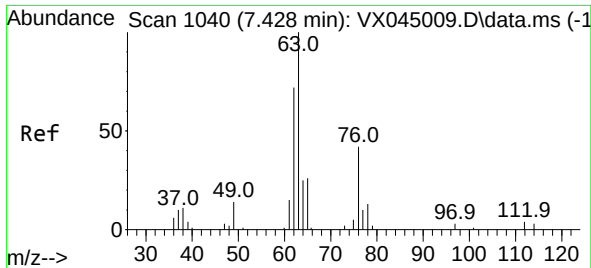
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#38
Methylcyclohexane
Concen: 5.042 ug/l
RT: 7.373 min Scan# 1031
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 83 Resp: 13407
Ion Ratio Lower Upper
83 100
55 75.2 40.6 122.0
98 48.5 24.9 74.6





#39

1,2-Dichloropropane

Concen: 4.994 ug/l

RT: 7.428 min Scan# 1040

Delta R.T. -0.000 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC005

Tgt Ion: 63 Resp: 7710

Ion Ratio Lower Upper

63 100

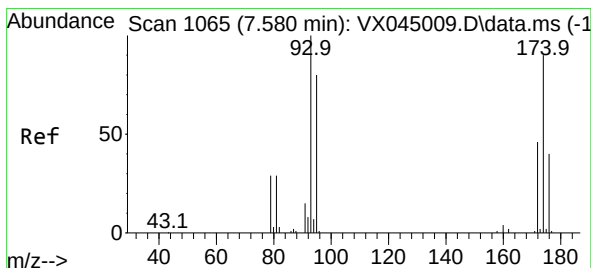
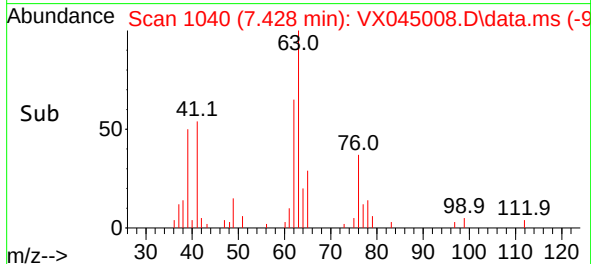
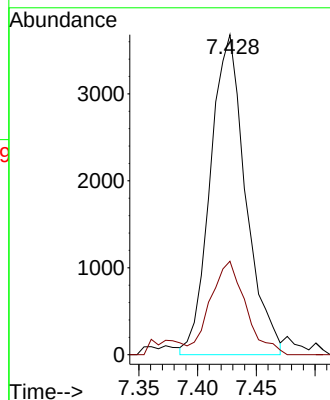
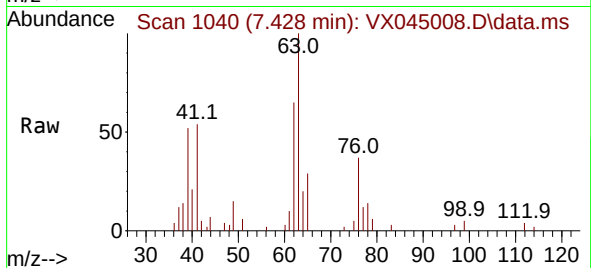
65 28.4 24.3 36.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#40

Dibromomethane

Concen: 5.153 ug/l

RT: 7.574 min Scan# 1064

Delta R.T. -0.006 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

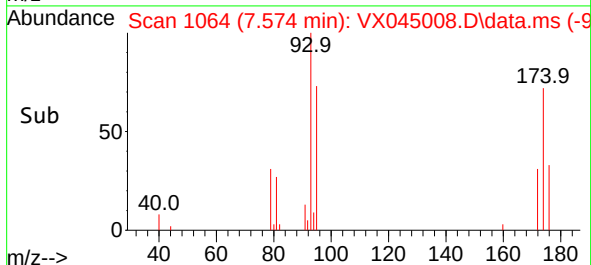
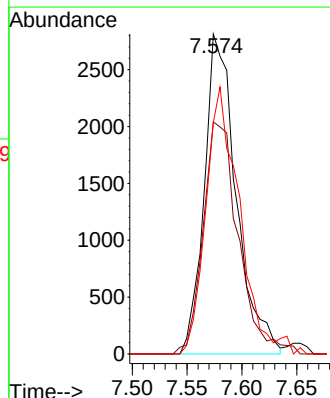
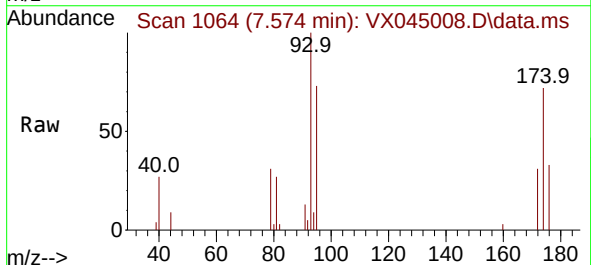
Tgt Ion: 93 Resp: 5709

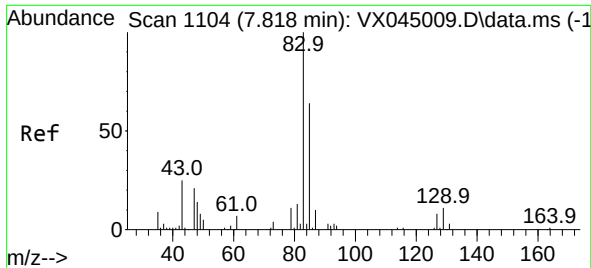
Ion Ratio Lower Upper

93 100

95 79.4 0.0 162.6

174 85.6 0.0 178.8





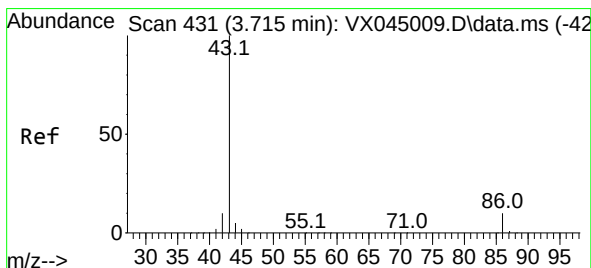
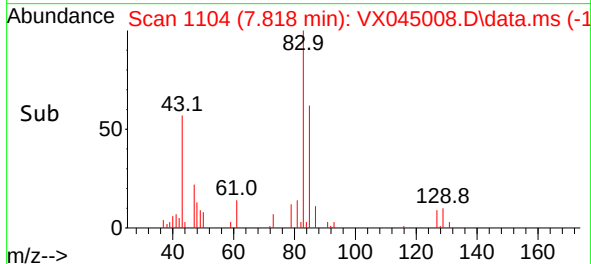
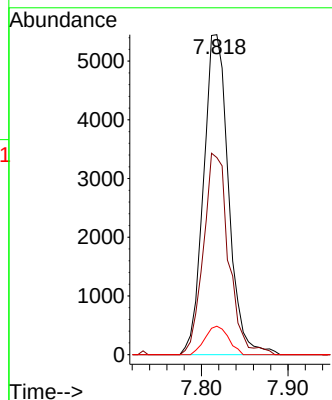
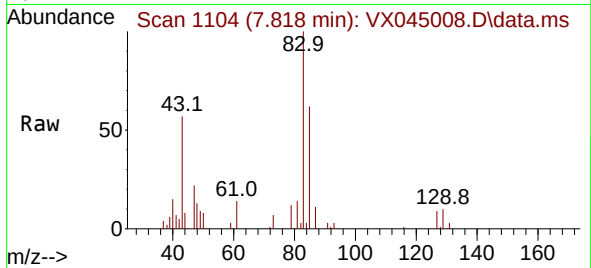
#41
Bromodichloromethane
Concen: 4.973 ug/l
RT: 7.818 min Scan# 1104
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 83 Resp: 10949
Ion Ratio Lower Upper
83 100
85 61.6 51.0 76.6
127 8.9 6.1 9.1

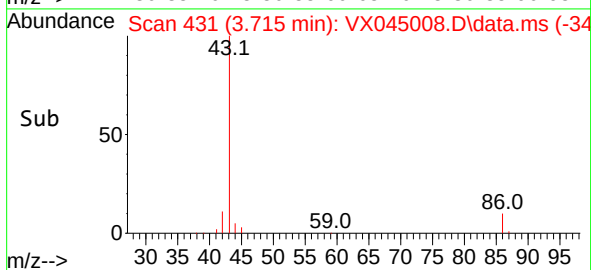
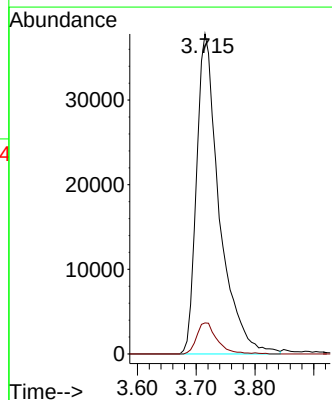
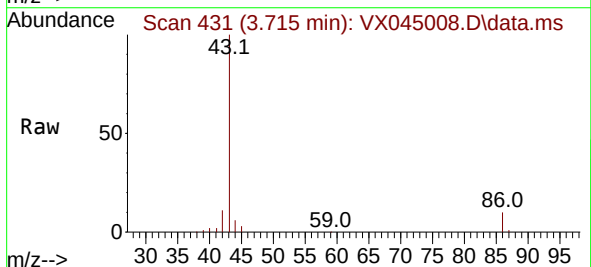
Manual Integrations
APPROVED

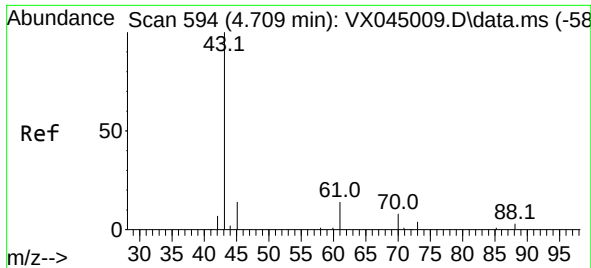
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#42
Vinyl Acetate
Concen: 22.951 ug/l
RT: 3.715 min Scan# 431
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

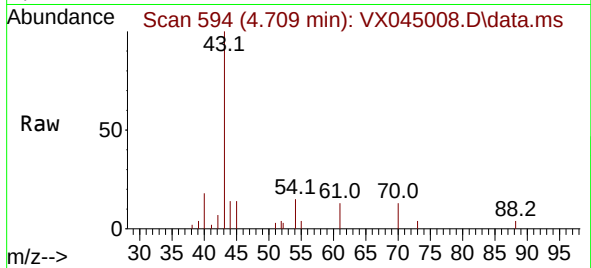
Tgt Ion: 43 Resp: 101864
Ion Ratio Lower Upper
43 100
86 8.6 7.0 10.4





#43
Ethyl Acetate
Concen: 4.617 ug/l
RT: 4.709 min Scan# 594
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

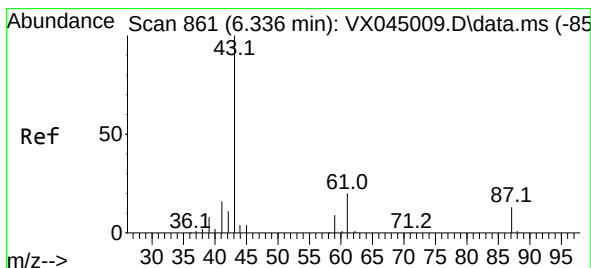
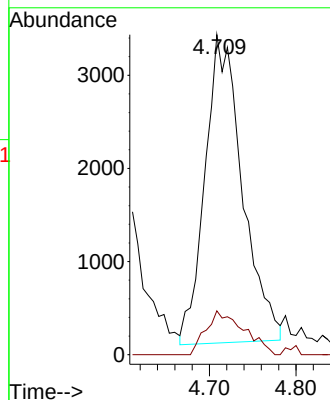
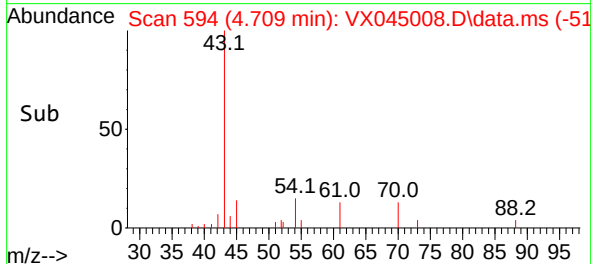
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



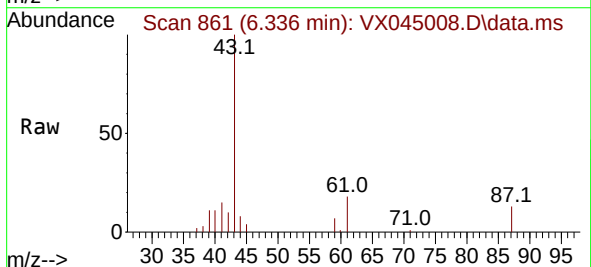
Tgt Ion: 43 Resp: 990
Ion Ratio Lower Upper
43 100
45 6.6 12.7 19.1

Manual Integrations
APPROVED

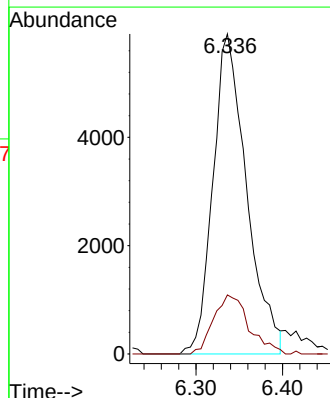
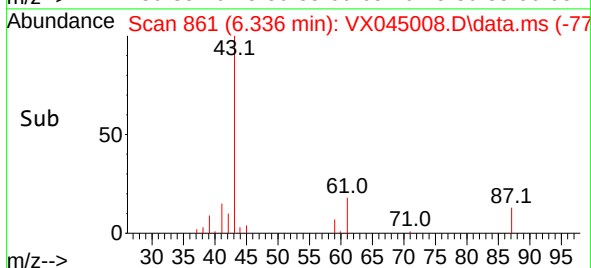
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

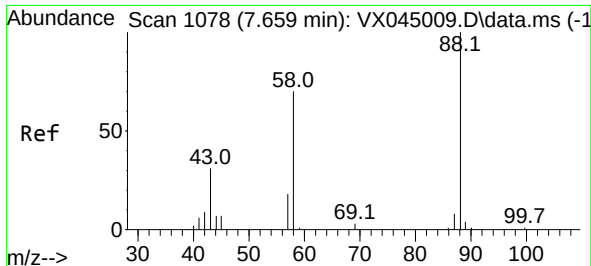


#44
Isopropyl Acetate
Concen: 4.518 ug/l
RT: 6.336 min Scan# 861
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



Tgt Ion: 43 Resp: 15951
Ion Ratio Lower Upper
43 100
61 17.2 15.5 23.3





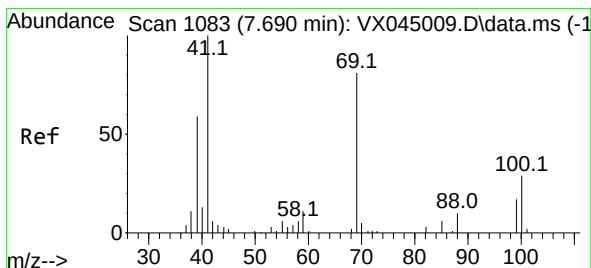
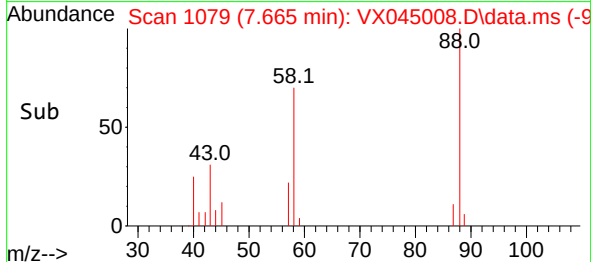
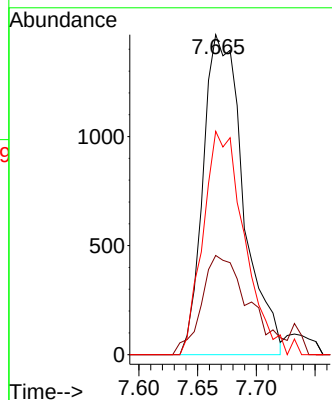
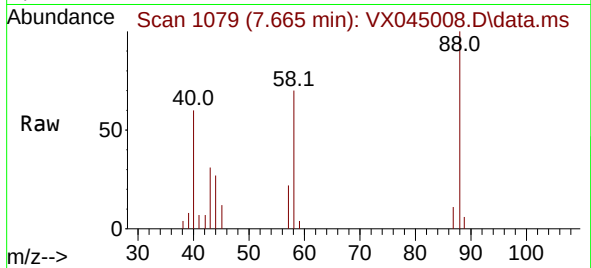
#45
1,4-Dioxane
Concen: 94.718 ug/l
RT: 7.665 min Scan# 1078
Delta R.T. 0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 88 Resp: 3470
Ion Ratio Lower Upper
88 100
43 28.7 29.6 44.4
58 71.4 56.2 84.4

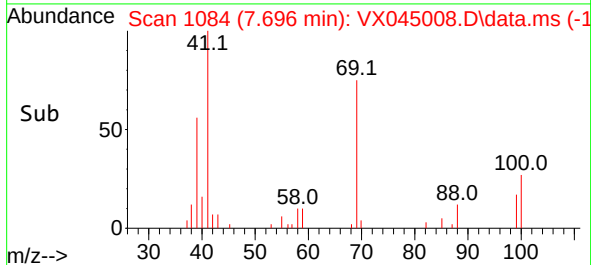
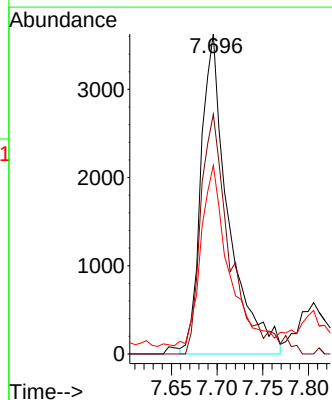
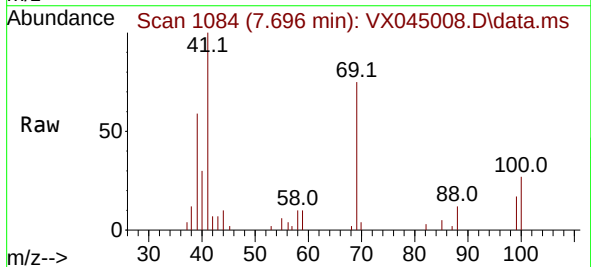
Manual Integrations
APPROVED

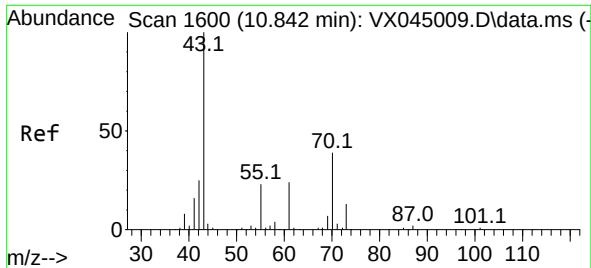
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#46
Methyl methacrylate
Concen: 4.362 ug/l
RT: 7.696 min Scan# 1084
Delta R.T. 0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 41 Resp: 7550
Ion Ratio Lower Upper
41 100
69 76.2 40.7 122.1
39 55.9 29.5 88.5





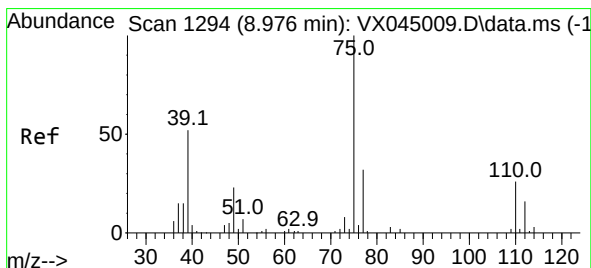
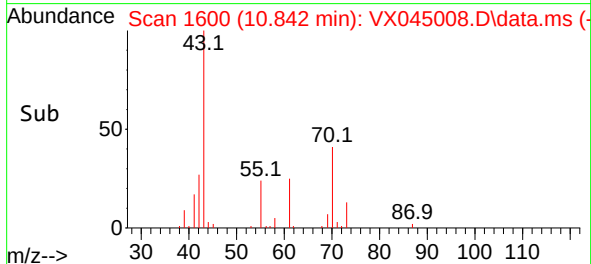
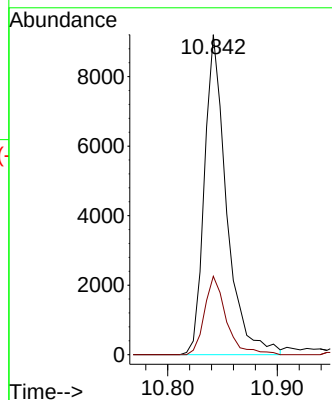
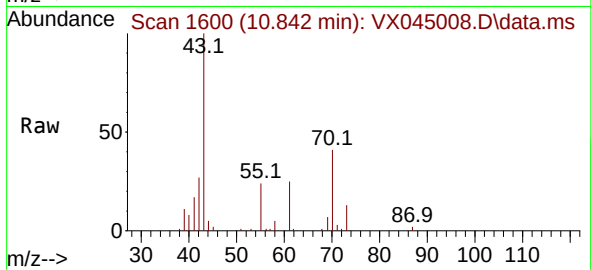
#47
n-amy1 Acetate
Concen: 4.221 ug/l
RT: 10.842 min Scan# 1600
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Tgt Ion: 43 Resp: 1293
Ion Ratio Lower Upper
43 100
55 22.9 18.6 27.8

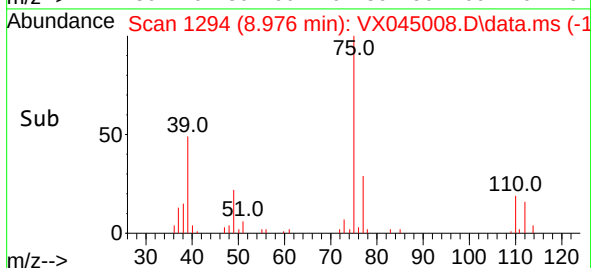
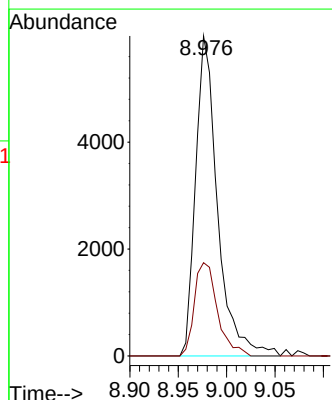
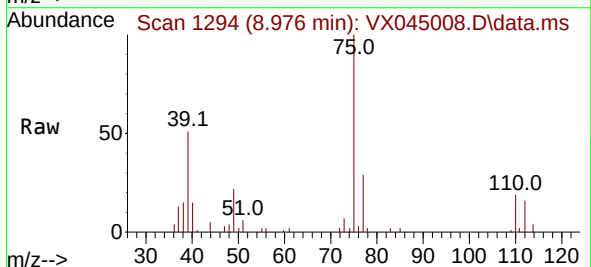
Manual Integrations
APPROVED

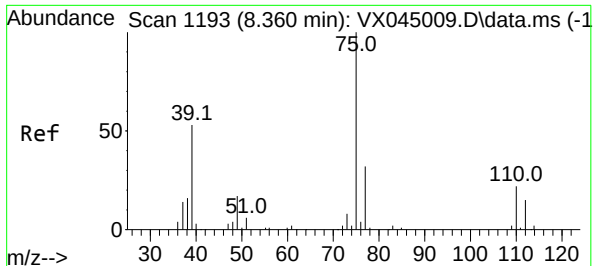
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#48
t-1,3-Dichloropropene
Concen: 4.458 ug/l
RT: 8.976 min Scan# 1294
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 75 Resp: 9461
Ion Ratio Lower Upper
75 100
77 29.2 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 4.585 ug/l

RT: 8.366 min Scan# 1194

Delta R.T. 0.006 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC005

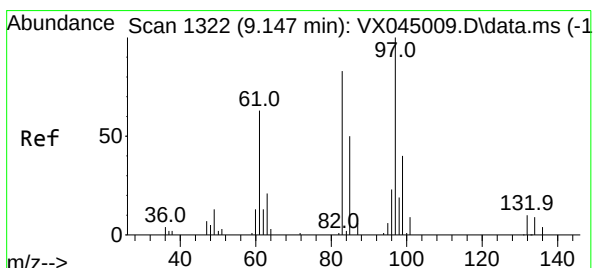
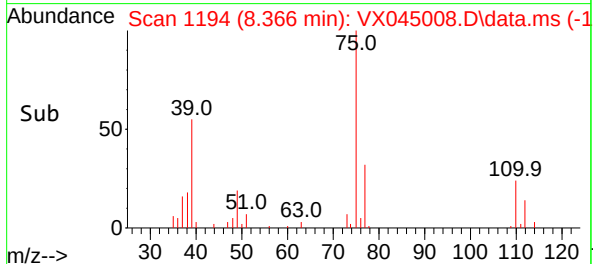
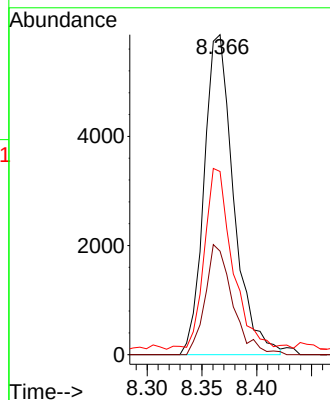
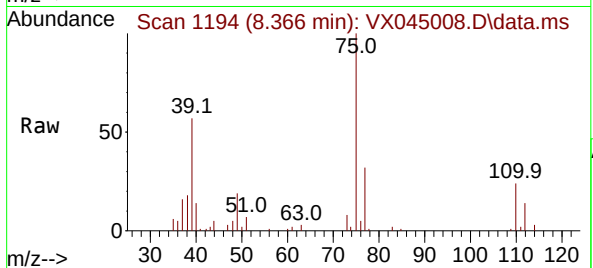
Tgt Ion:	75	Resp:	1101
Ion	Ratio	Lower	Upper
75	100		
77	32.3	25.9	38.9
39	54.7	42.3	63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#50

1,1,2-Trichloroethane

Concen: 5.030 ug/l

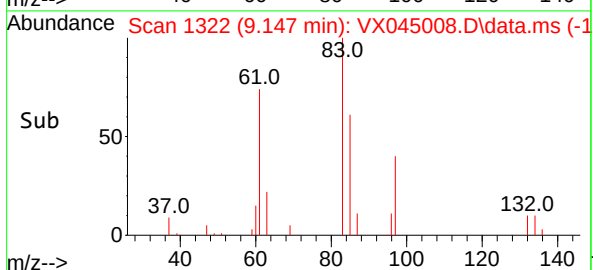
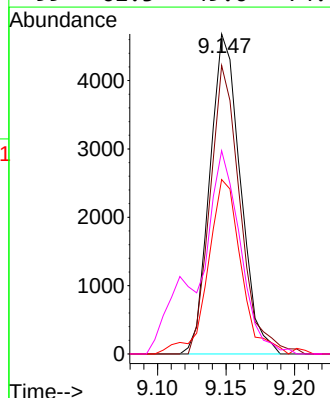
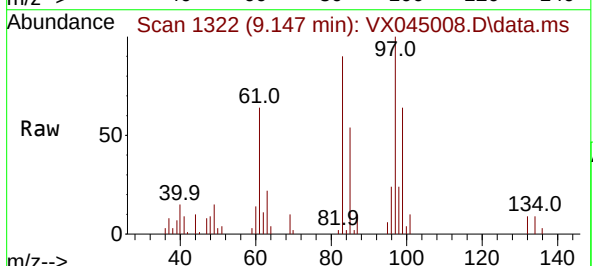
RT: 9.147 min Scan# 1322

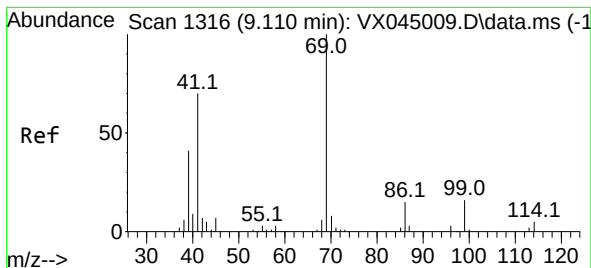
Delta R.T. -0.000 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Tgt Ion:	97	Resp:	7268
Ion	Ratio	Lower	Upper
97	100		
83	90.2	66.0	99.0
85	52.5	42.5	63.7
99	62.3	49.6	74.4





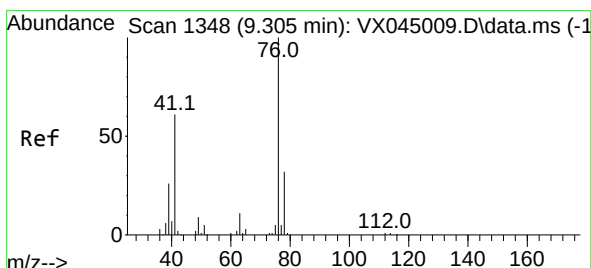
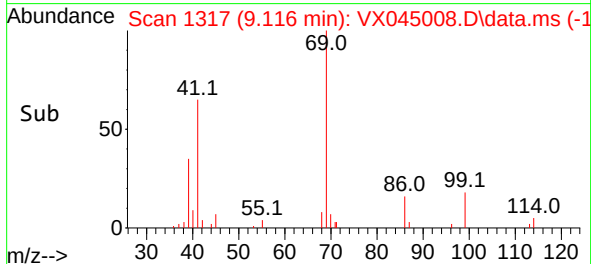
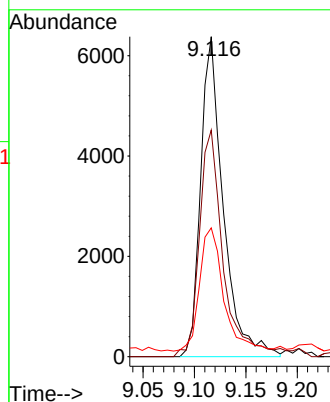
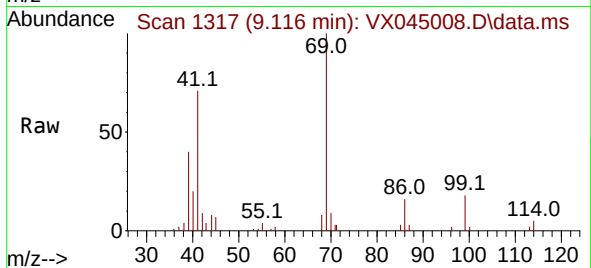
#51
Ethyl methacrylate
Concen: 4.287 ug/l
RT: 9.116 min Scan# 1316
Delta R.T. 0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Tgt Ion: 69 Resp: 974
Ion Ratio Lower Upper
69 100
41 68.6 35.1 105.3
39 38.2 20.5 61.6

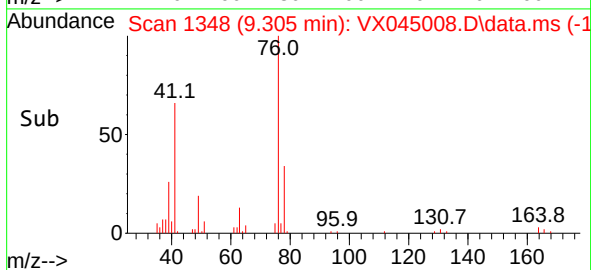
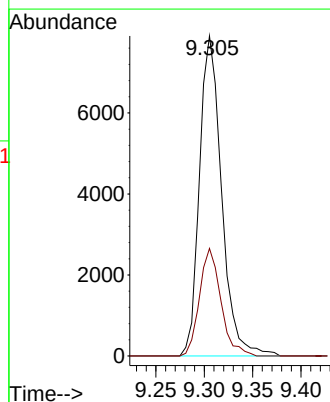
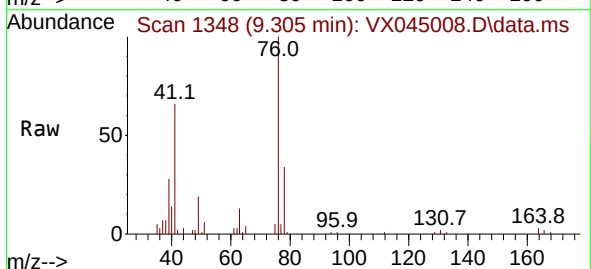
Manual Integrations
APPROVED

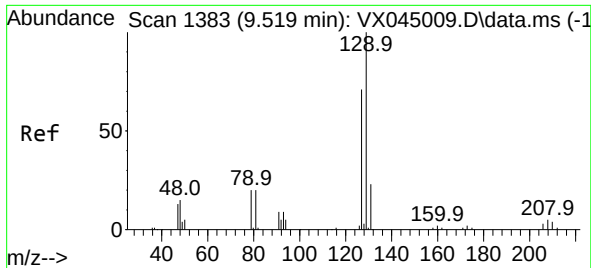
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#52
1,3-Dichloropropane
Concen: 4.981 ug/l
RT: 9.305 min Scan# 1348
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

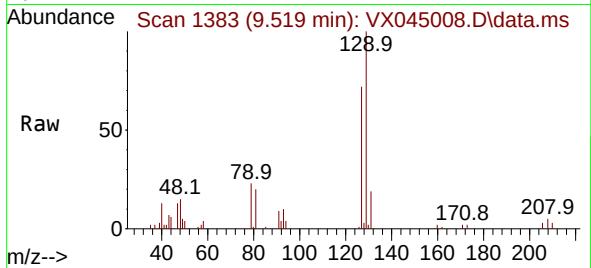
Tgt Ion: 76 Resp: 12611
Ion Ratio Lower Upper
76 100
78 32.5 0.0 63.6





#53
Dibromochloromethane
Concen: 4.791 ug/l
RT: 9.519 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

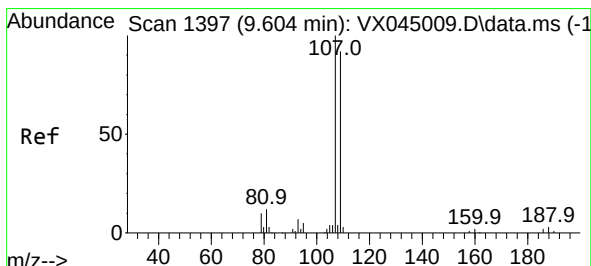
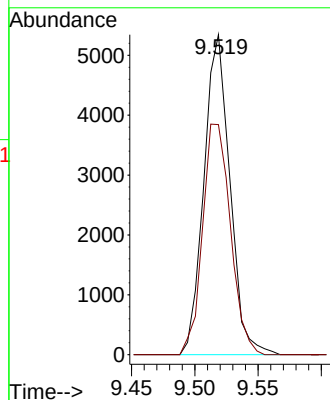
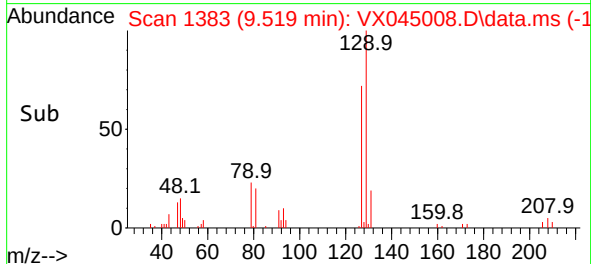
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005



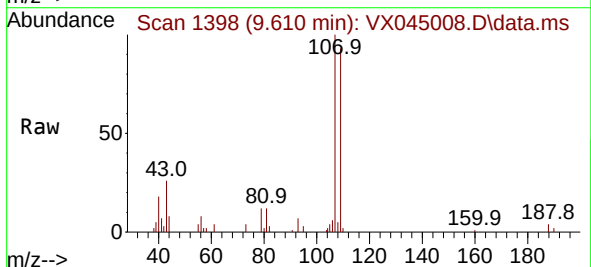
Tgt Ion:129 Resp: 765
Ion Ratio Lower Upper
129 100
127 77.3 37.3 111.9

Manual Integrations
APPROVED

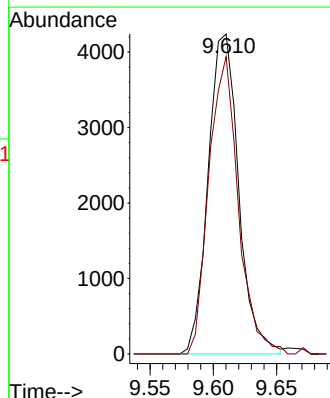
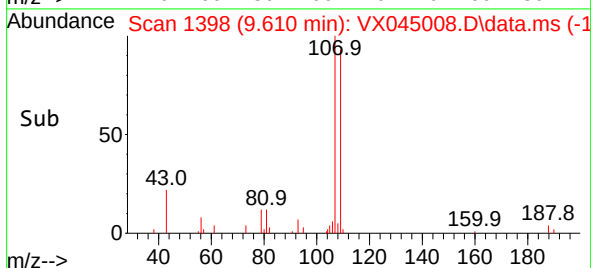
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

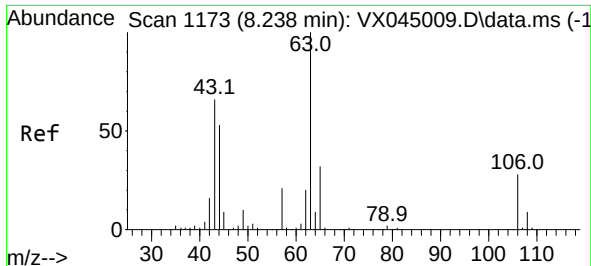


#54
1,2-Dibromoethane
Concen: 4.851 ug/l
RT: 9.610 min Scan# 1398
Delta R.T. 0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



Tgt Ion:107 Resp: 7119
Ion Ratio Lower Upper
107 100
109 89.5 75.8 113.8





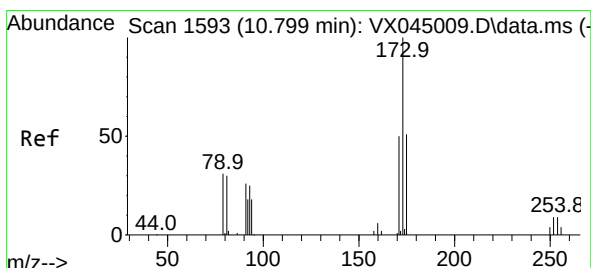
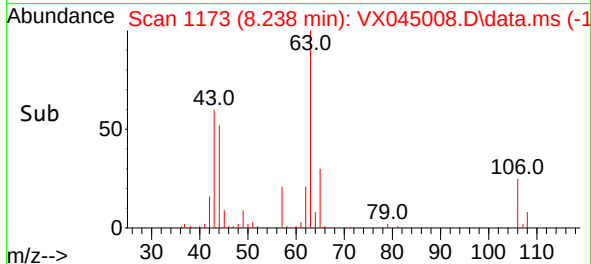
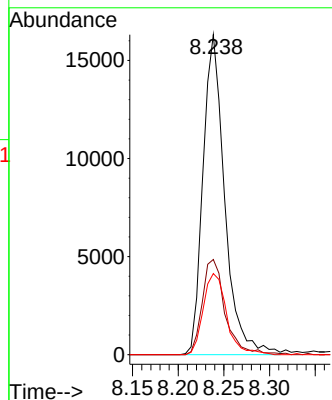
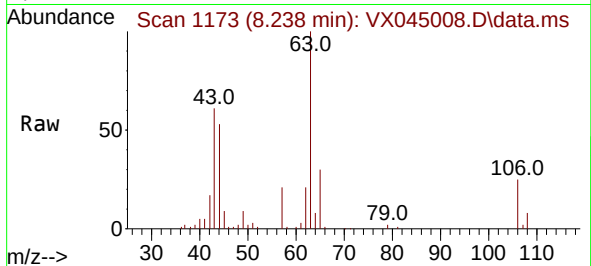
#55
2-Chloroethyl vinyl ether
Concen: 23.123 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 63 Resp: 2698
Ion Ratio Lower Upper
63 100
65 30.5 26.2 39.2
106 27.2 21.2 31.8

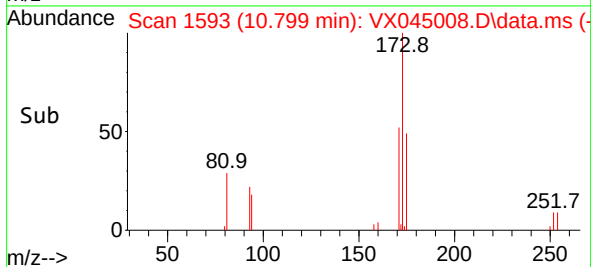
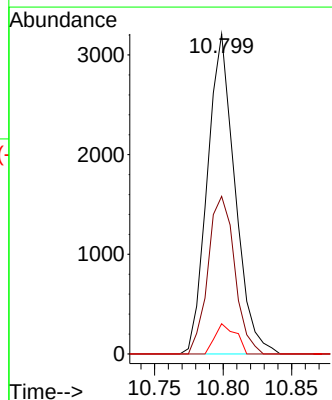
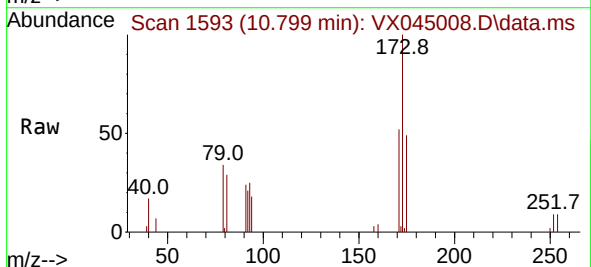
Manual Integrations
APPROVED

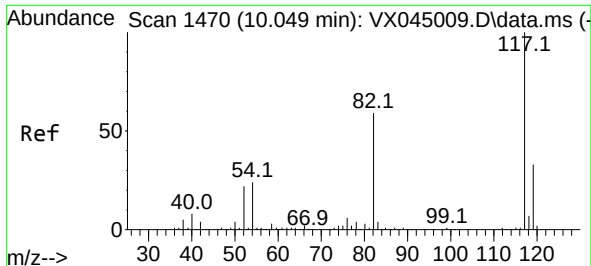
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#56
Bromoform
Concen: 4.491 ug/l
RT: 10.799 min Scan# 1593
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion:173 Resp: 4498
Ion Ratio Lower Upper
173 100
175 47.6 39.6 59.4
254 7.2 6.3 9.5





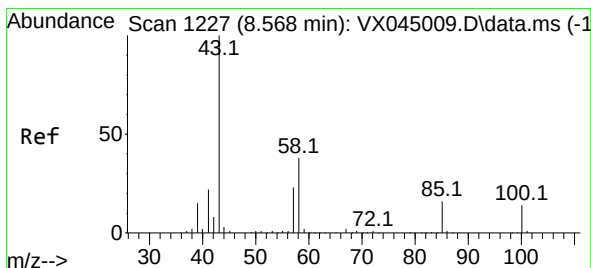
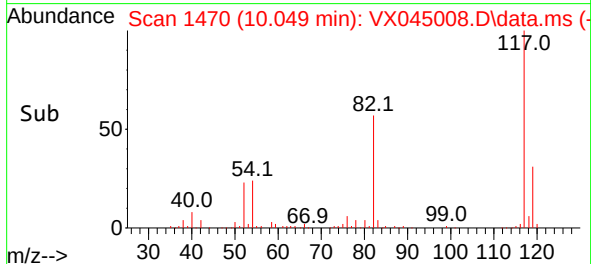
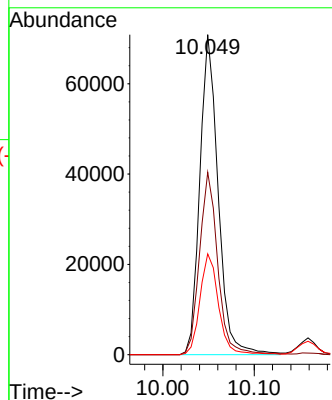
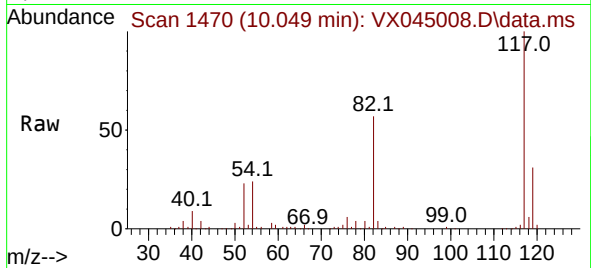
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.049 min Scan# 1470
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument : MSVOA_X
ClientSampleId : VSTDIC005

Tgt Ion: 117 Resp: 9866
Ion Ratio Lower Upper
117 100
82 57.0 45.8 68.8
119 32.0 25.5 38.3

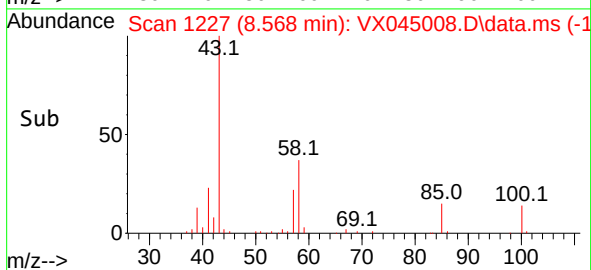
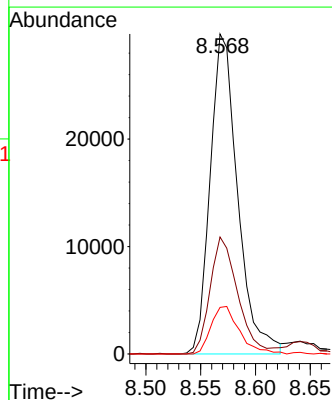
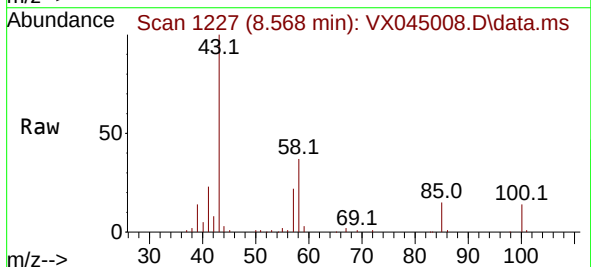
Manual Integrations
APPROVED

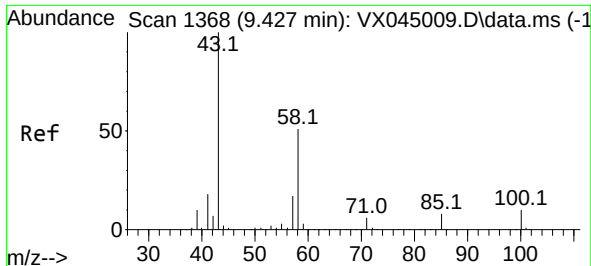
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#58
4-Methyl-2-Pentanone
Concen: 23.177 ug/l
RT: 8.568 min Scan# 1227
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 43 Resp: 52017
Ion Ratio Lower Upper
43 100
58 36.3 29.5 44.3
85 15.3 12.9 19.3





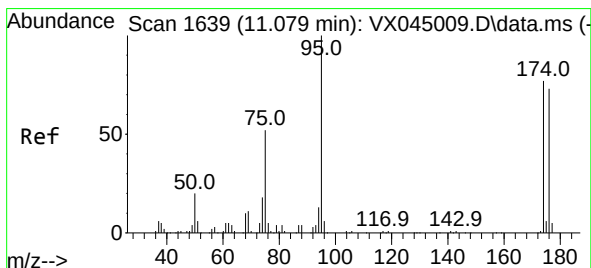
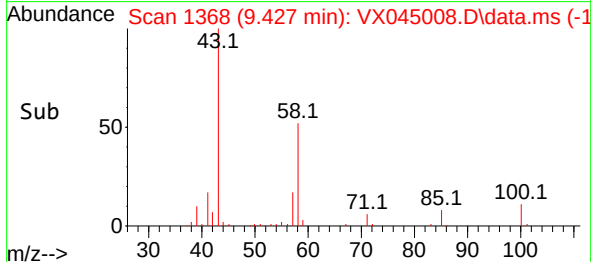
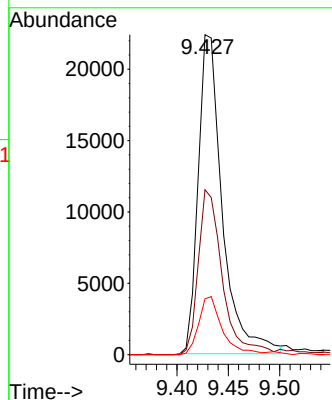
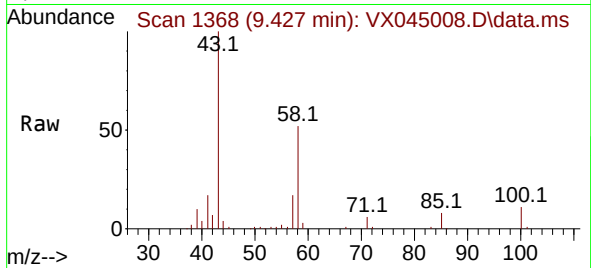
#59
2-Hexanone
Concen: 22.584 ug/l
RT: 9.427 min Scan# 1368
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Tgt Ion:	43	Resp:	3663
Ion Ratio	Lower	Upper	
43	100		
58	51.4	41.6	62.4
57	17.6	13.8	20.6

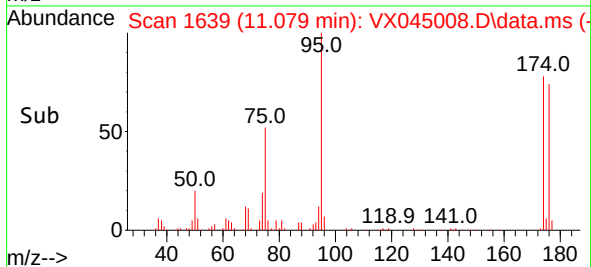
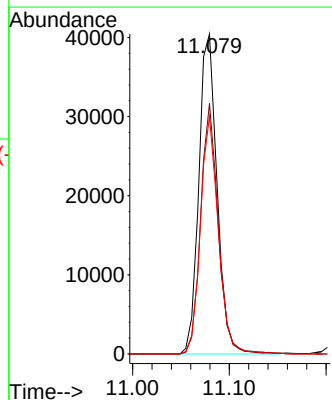
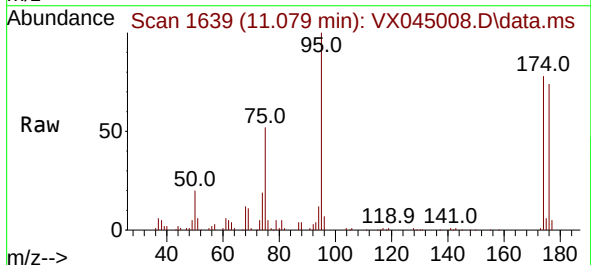
Manual Integrations
APPROVED

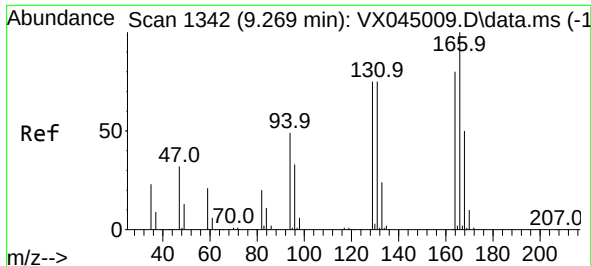
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#60
4-Bromofluorobenzene
Concen: 28.855 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

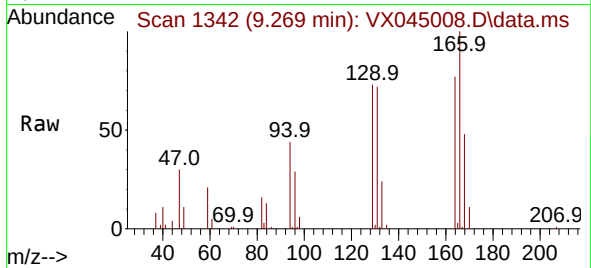
Tgt Ion:	95	Resp:	53212
Ion Ratio	Lower	Upper	
95	100		
174	74.3	59.5	89.3
176	72.7	55.5	83.3





#61
Tetrachloroethene
Concen: 5.269 ug/l
RT: 9.269 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

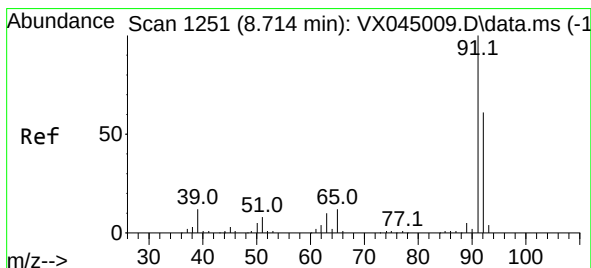
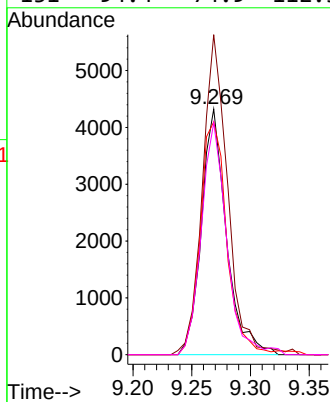
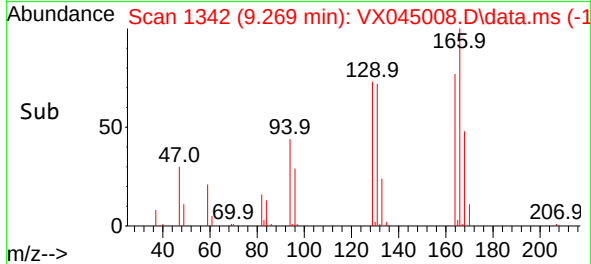
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



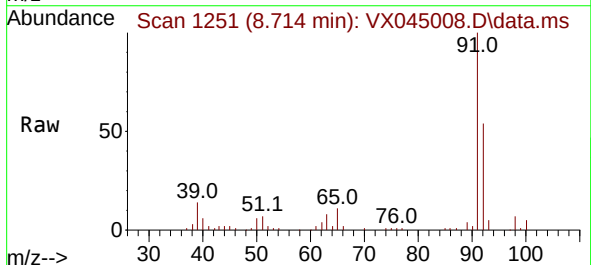
Tgt Ion:164 Resp: 640
Ion Ratio Lower Upper
164 100
166 128.6 100.3 150.5
129 94.8 75.5 113.3
131 94.4 74.9 112.3

Manual Integrations
APPROVED

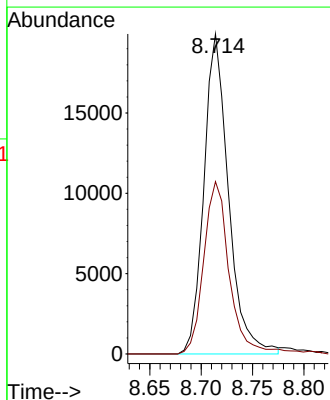
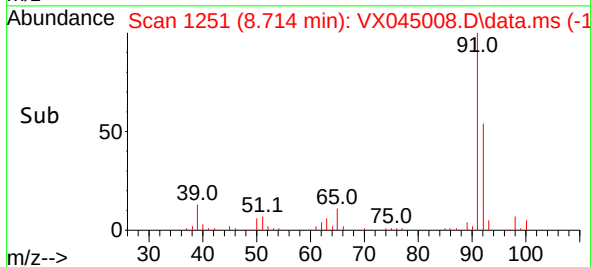
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

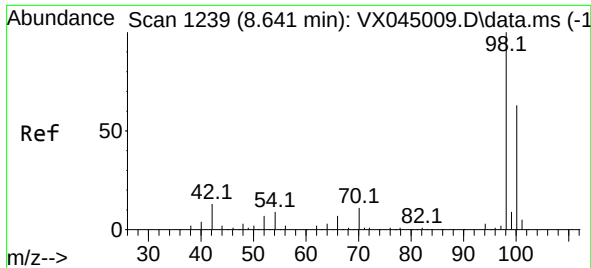


#62
Toluene
Concen: 5.071 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



Tgt Ion: 91 Resp: 33141
Ion Ratio Lower Upper
91 100
92 55.1 46.9 70.3





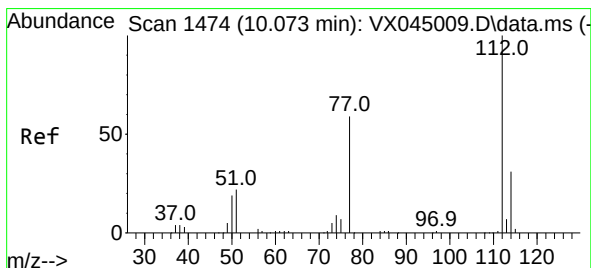
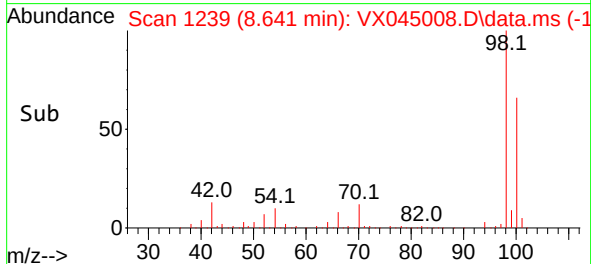
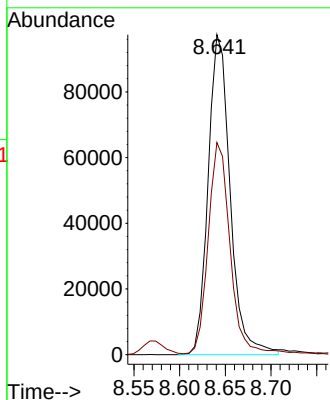
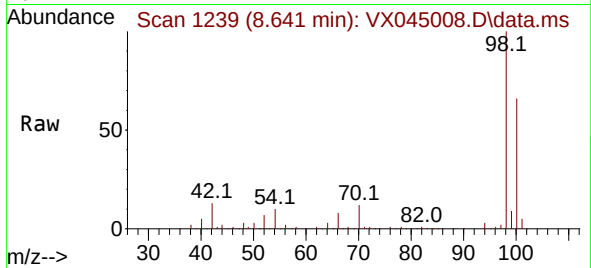
#63
Toluene-d8
Concen: 29.865 ug/l
RT: 8.641 min Scan# 1239
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 98 Resp: 163004
Ion Ratio Lower Upper
98 100
100 66.6 51.7 77.5

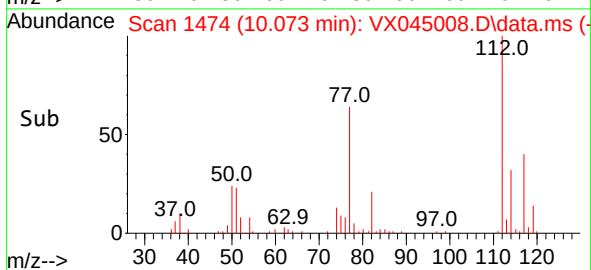
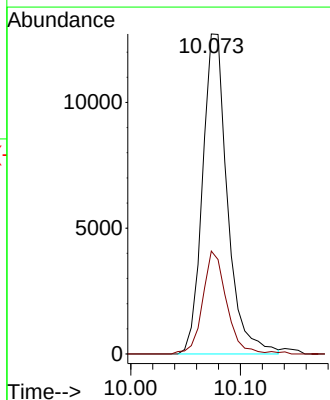
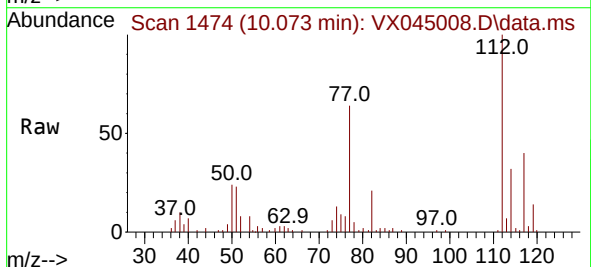
Manual Integrations
APPROVED

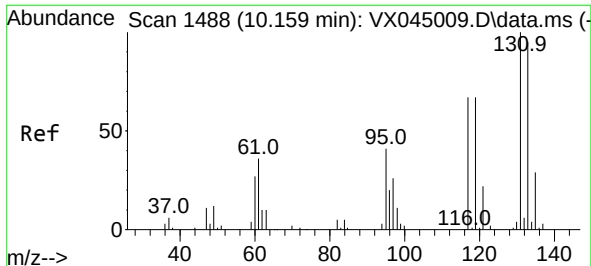
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#64
Chlorobenzene
Concen: 4.965 ug/l
RT: 10.073 min Scan# 1474
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

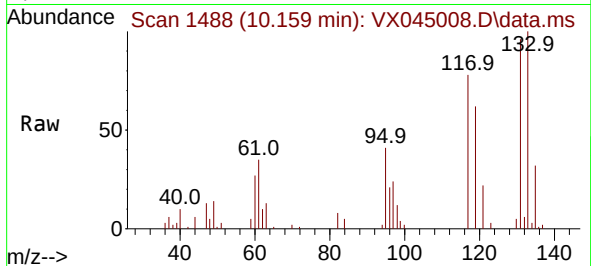
Tgt Ion:112 Resp: 20106
Ion Ratio Lower Upper
112 100
114 31.7 24.7 37.1





#65
1,1,1,2-Tetrachloroethane
Concen: 4.934 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

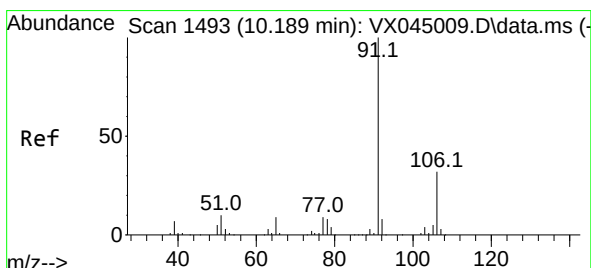
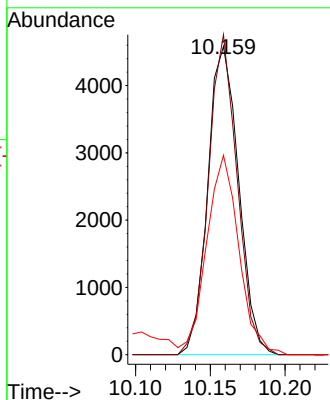
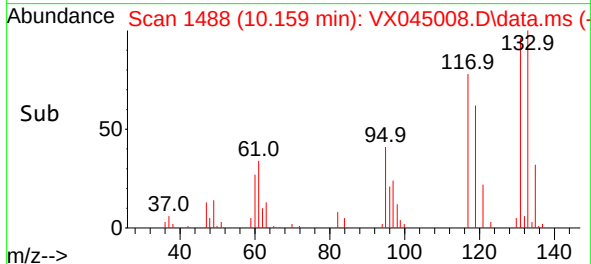
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



Tgt Ion:131 Resp: 659
Ion Ratio Lower Upper
131 100
133 96.7 0.0 187.8
119 67.3 0.0 133.0

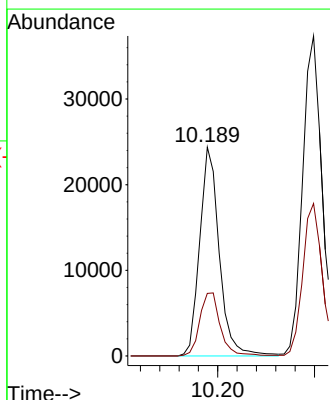
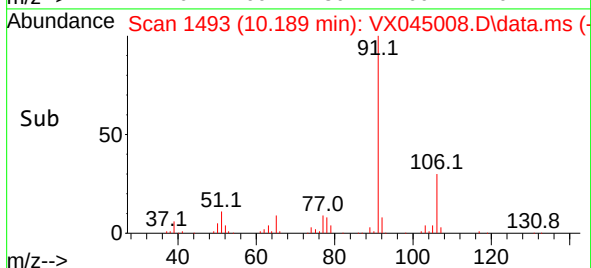
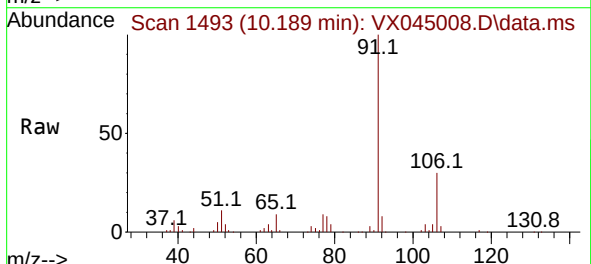
Manual Integrations
APPROVED

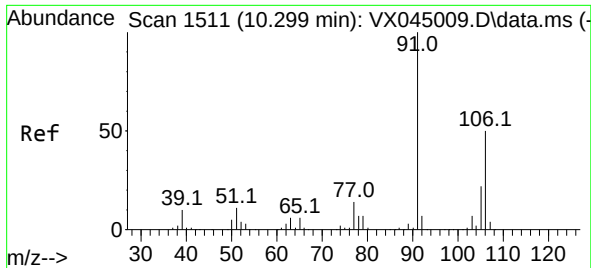
Reviewed By :John Carbone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#66
Ethyl Benzene
Concen: 4.813 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 91 Resp: 34439
Ion Ratio Lower Upper
91 100
106 29.9 25.4 38.2





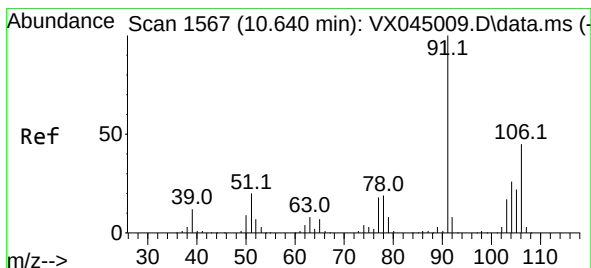
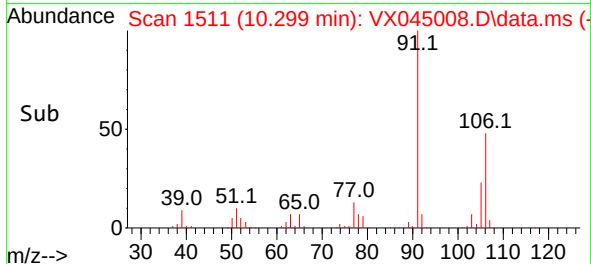
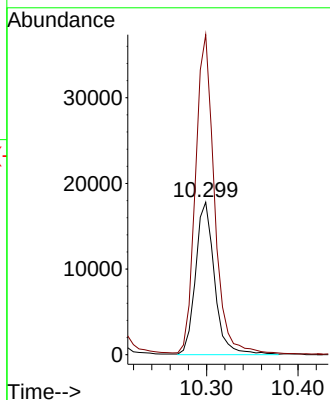
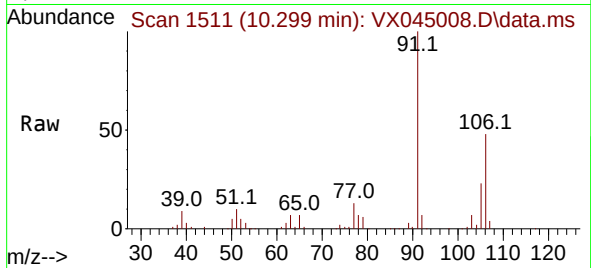
#67
m/p-Xylenes
Concen: 9.679 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion:106 Resp: 25804
Ion Ratio Lower Upper
106 100
91 208.2 163.7 245.5

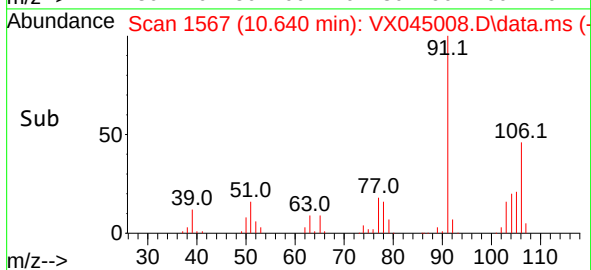
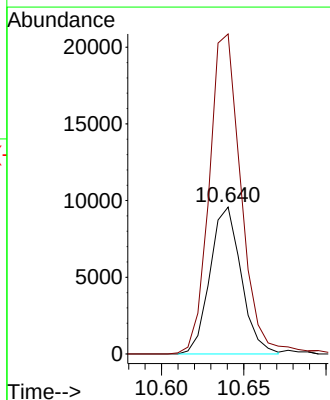
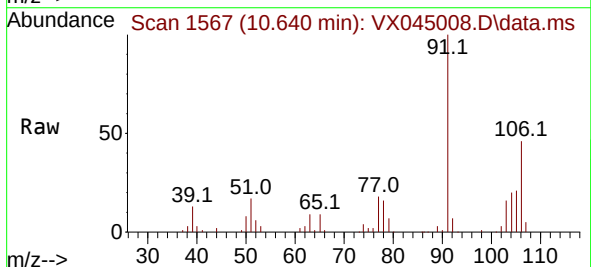
Manual Integrations
APPROVED

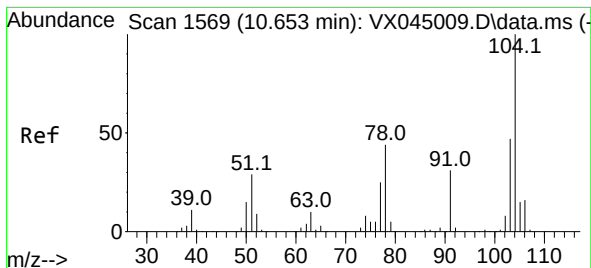
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#68
o-Xylene
Concen: 4.824 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion:106 Resp: 12618
Ion Ratio Lower Upper
106 100
91 223.5 109.7 329.1





#69

Styrene

Concen: 4.741 ug/l

RT: 10.653 min Scan# 1569

Delta R.T. -0.000 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Instrument :

MSVOA_X

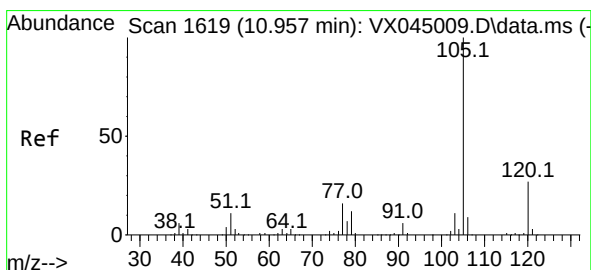
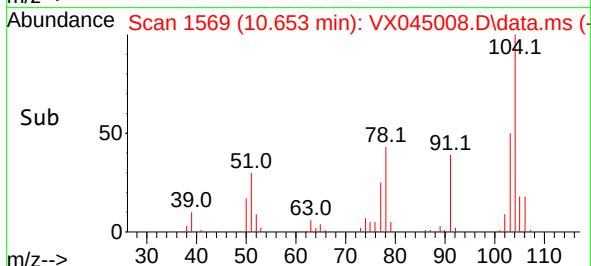
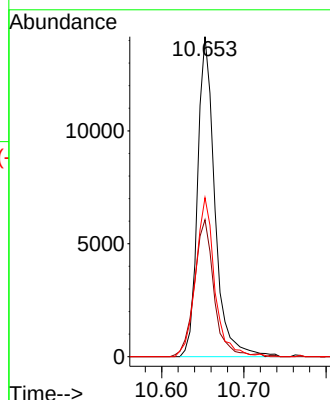
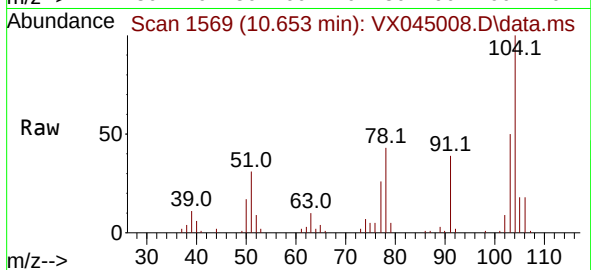
ClientSampleId :

VSTDIC005

Tgt Ion:104	Resp:	20710
Ion Ratio	Lower	Upper
104	100	
78	48.4	41.4 62.0
103	54.4	43.0 64.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#70

Isopropylbenzene

Concen: 4.826 ug/l

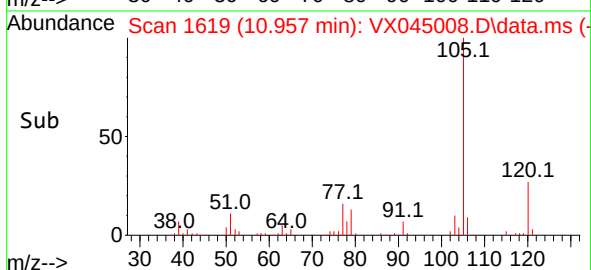
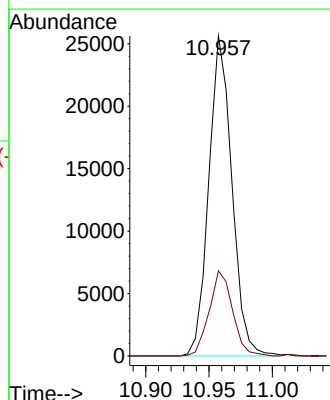
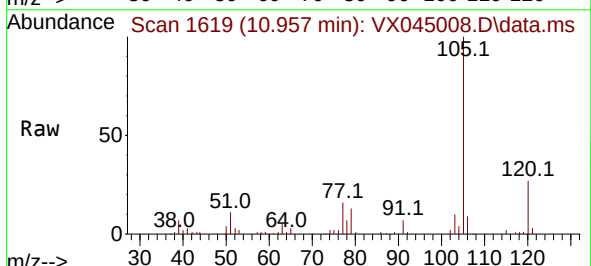
RT: 10.957 min Scan# 1619

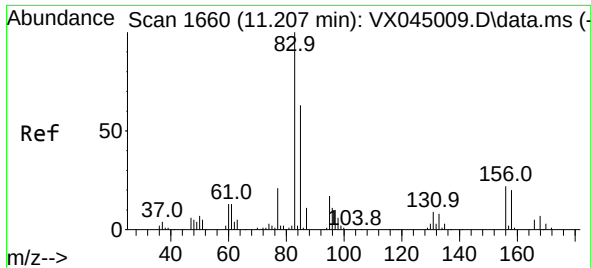
Delta R.T. -0.000 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Tgt Ion:105	Resp:	32576
Ion Ratio	Lower	Upper
105	100	
120	26.8	18.4 34.2





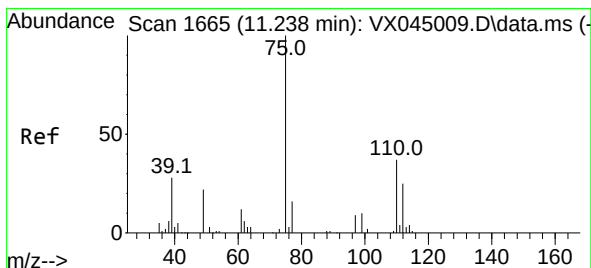
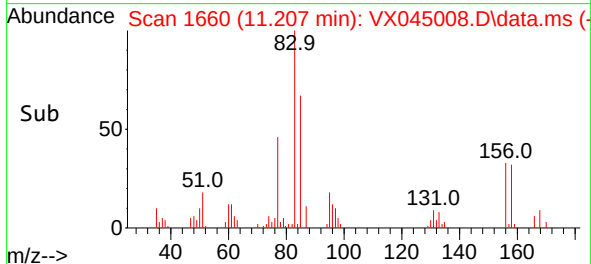
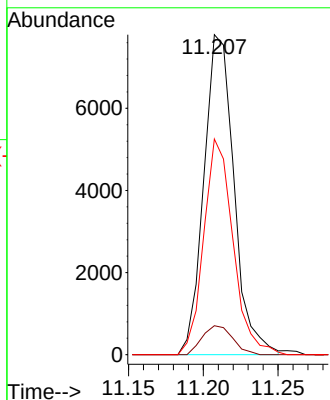
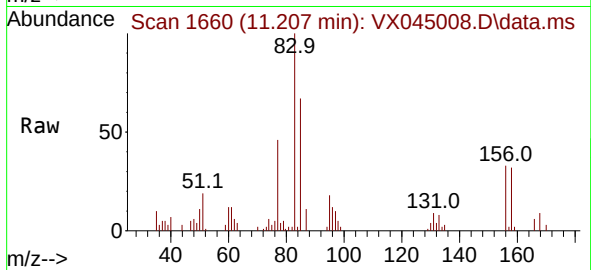
#71
1,1,2,2-Tetrachloroethane
Concen: 4.929 ug/l
RT: 11.207 min Scan# 1660
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 83 Resp: 10940
Ion Ratio Lower Upper
83 100
131 9.1 4.8 14.3
85 65.5 32.3 96.8

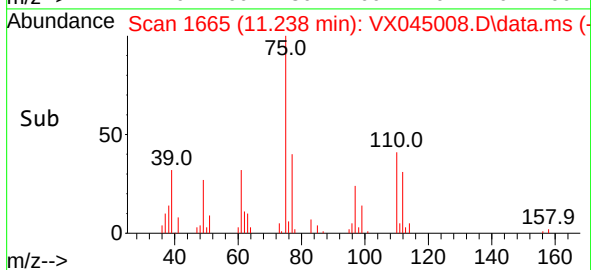
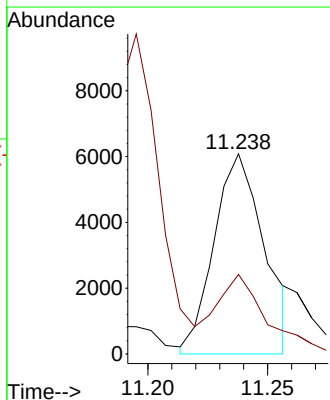
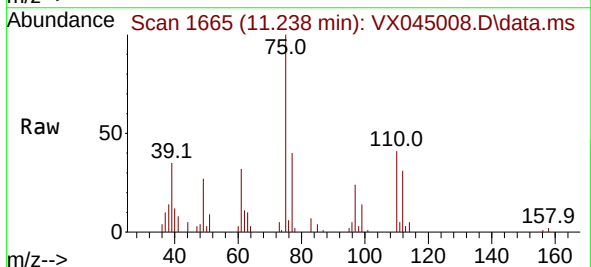
Manual Integrations
APPROVED

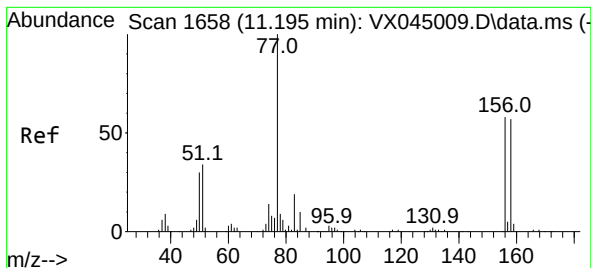
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#72
1,2,3-Trichloropropane
Concen: 4.851 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 75 Resp: 8856
Ion Ratio Lower Upper
75 100
77 40.4 0.0 84.0





#73

Bromobenzene

Concen: 4.886 ug/l

RT: 11.195 min Scan# 1658

Delta R.T. -0.000 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC005

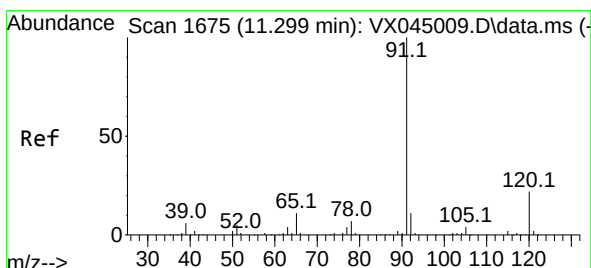
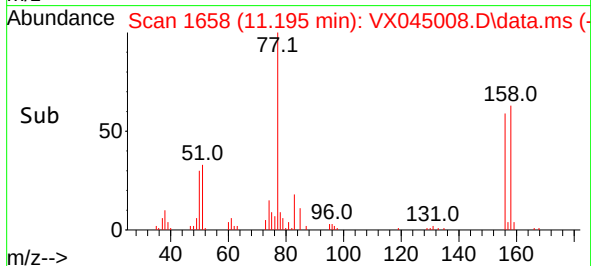
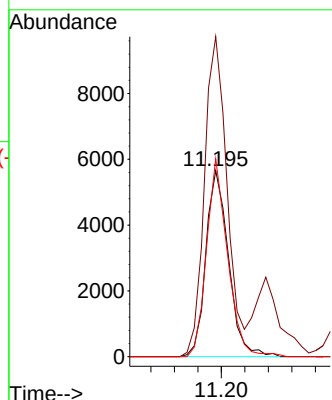
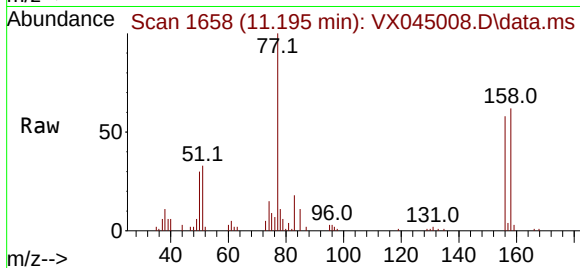
Tgt Ion:	156	Resp:	7592
Ion Ratio	Lower	Upper	
156	100		
77	170.9	0.0	347.2
158	98.2	0.0	197.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#74

n-propylbenzene

Concen: 4.669 ug/l

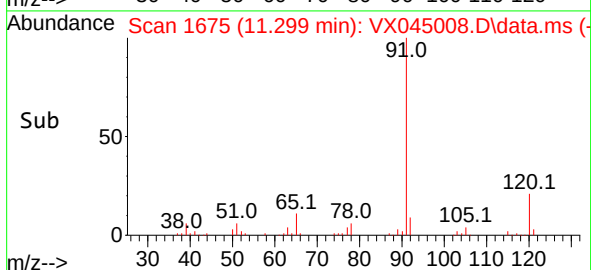
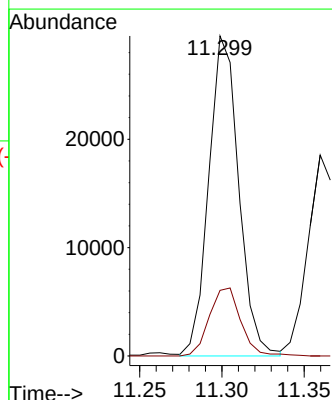
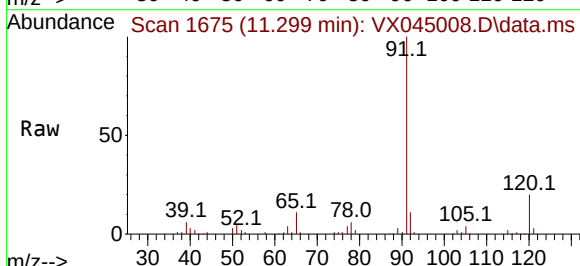
RT: 11.299 min Scan# 1675

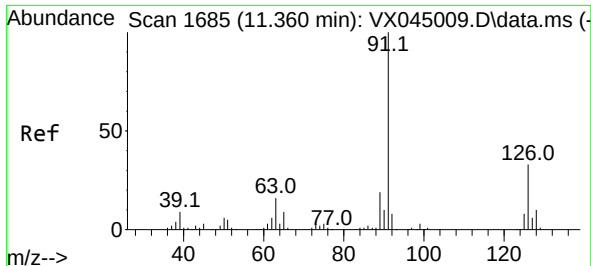
Delta R.T. -0.000 min

Lab File: VX045008.D

Acq: 21 Feb 2025 09:58

Tgt Ion:	91	Resp:	37507
Ion Ratio	Lower	Upper	
91	100		
120	22.3	0.0	44.2





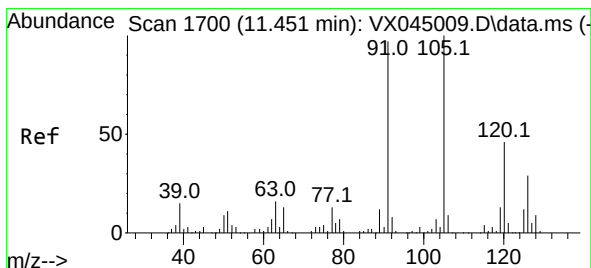
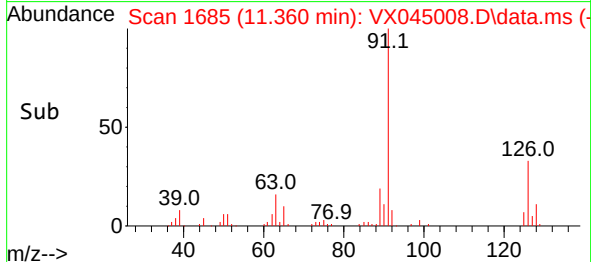
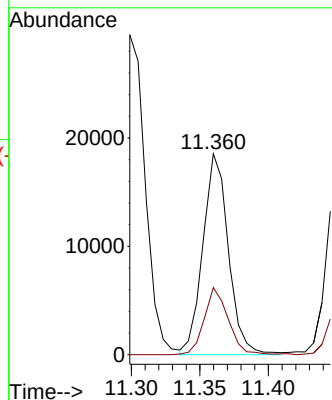
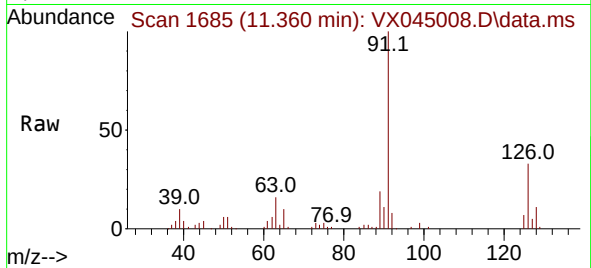
#75
2-Chlorotoluene
Concen: 4.961 ug/l
RT: 11.360 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion: 91 Resp: 2409
Ion Ratio Lower Upper
91 100
126 31.2 0.0 65.4

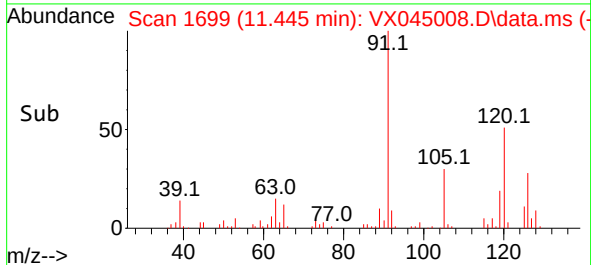
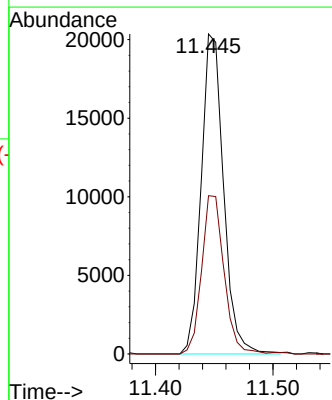
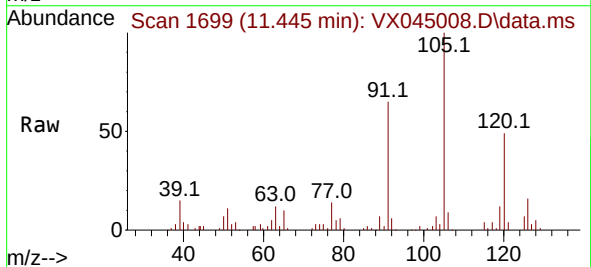
Manual Integrations
APPROVED

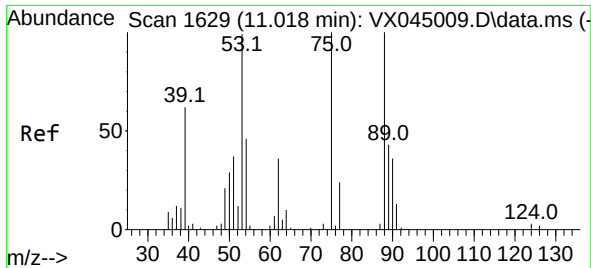
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#76
1,3,5-Trimethylbenzene
Concen: 4.837 ug/l
RT: 11.445 min Scan# 1699
Delta R.T. -0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

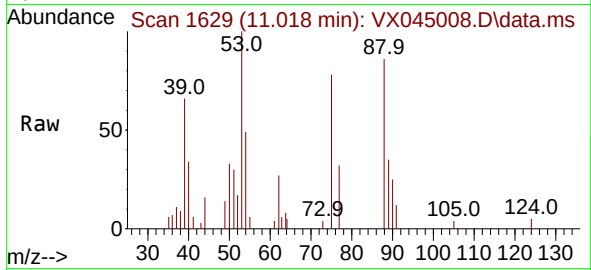
Tgt Ion:105 Resp: 26935
Ion Ratio Lower Upper
105 100
120 49.5 0.0 94.4





#77
t-1,4-Dichloro-2-butene
Concen: 3.552 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

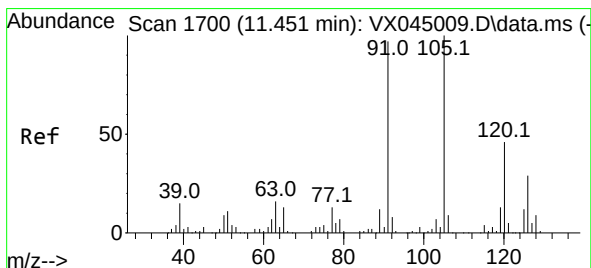
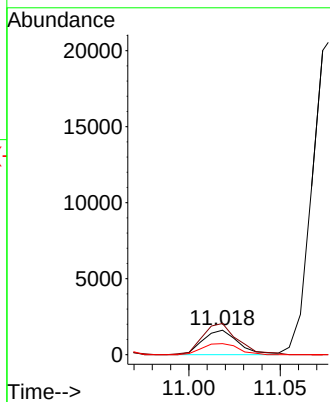
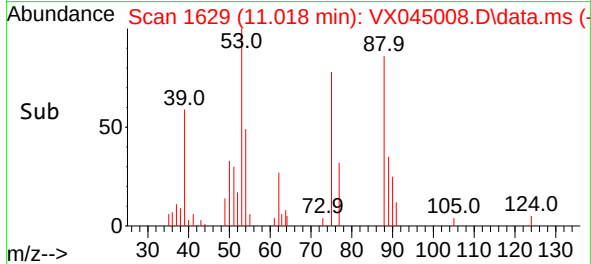
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



Tgt Ion: 75 Resp: 218
Ion Ratio Lower Upper
75 100
53 123.8 49.8 149.4
89 45.4 21.4 64.2

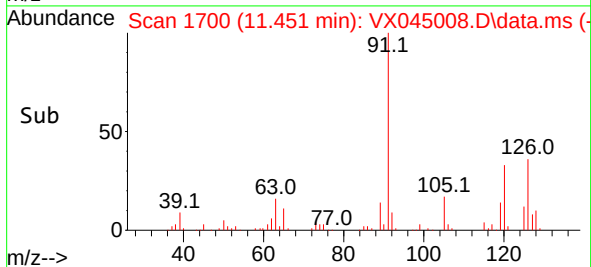
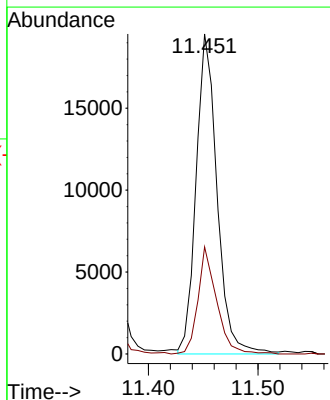
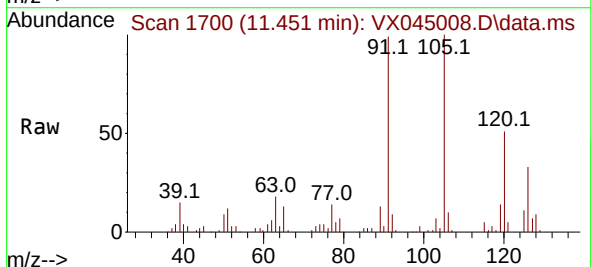
Manual Integrations
APPROVED

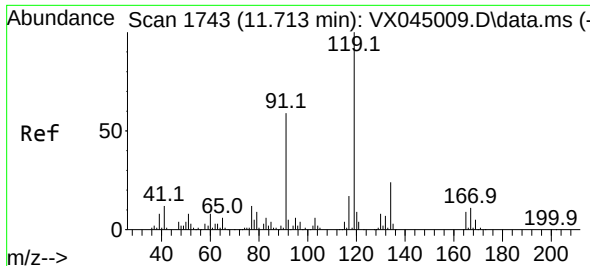
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#78
4-Chlorotoluene
Concen: 4.800 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Tgt Ion: 91 Resp: 25983
Ion Ratio Lower Upper
91 100
126 29.6 0.0 58.0





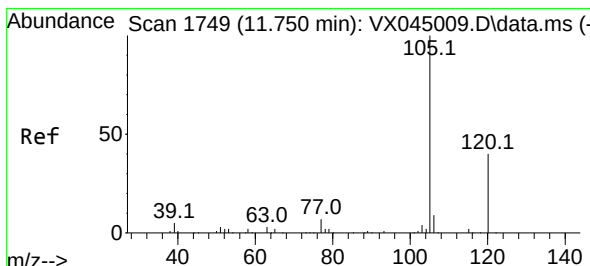
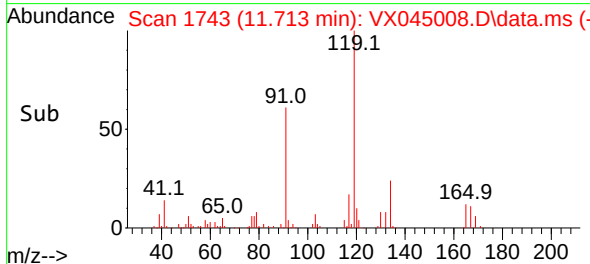
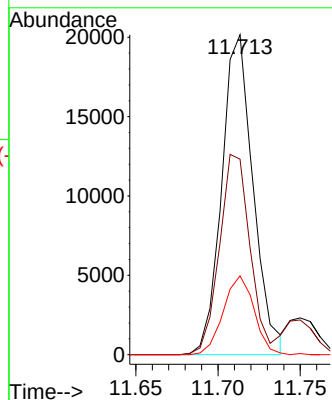
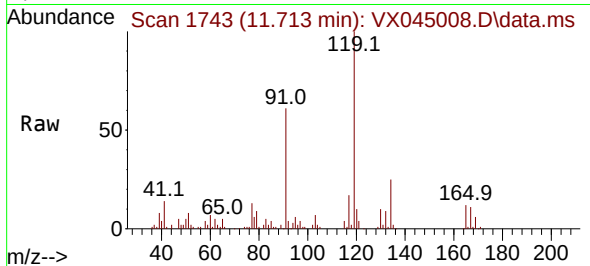
#79
tert-butylbenzene
Concen: 4.772 ug/l
RT: 11.713 min Scan# 1743
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Tgt Ion:119 Resp: 2677
Ion Ratio Lower Upper
119 100
91 60.8 0.0 120.6
134 24.1 0.0 48.2

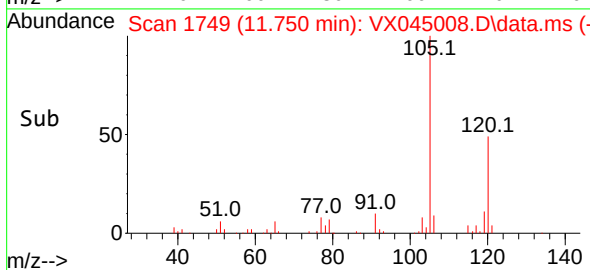
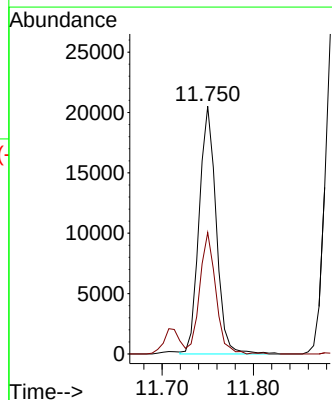
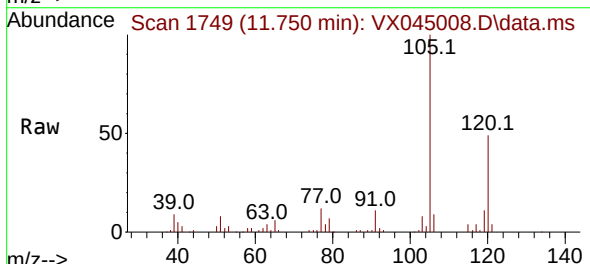
Manual Integrations
APPROVED

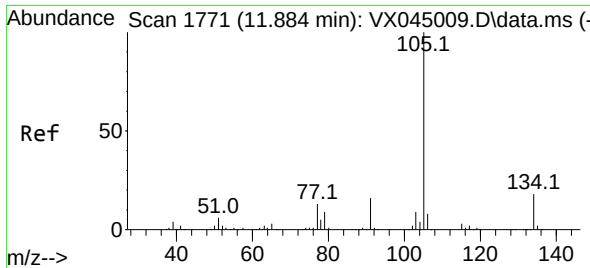
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#80
1,2,4-Trimethylbenzene
Concen: 4.763 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

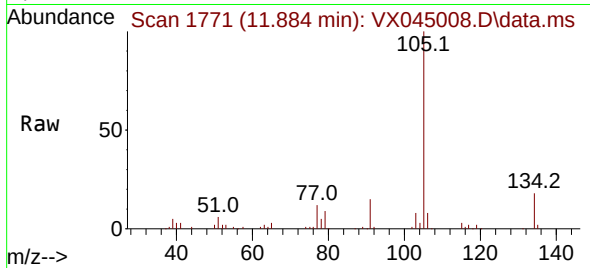
Tgt Ion:105 Resp: 26568
Ion Ratio Lower Upper
105 100
120 46.0 0.0 88.4





#81
 sec-Butylbenzene
 Concen: 4.801 ug/l
 RT: 11.884 min Scan# 1771
 Delta R.T. -0.000 min
 Lab File: VX045008.D
 Acq: 21 Feb 2025 09:58

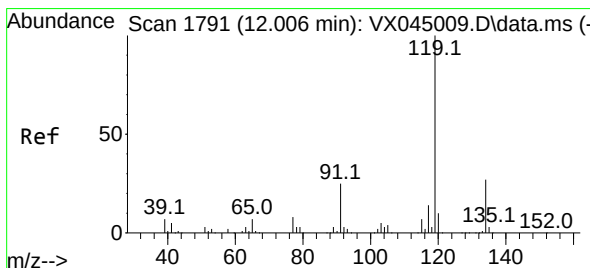
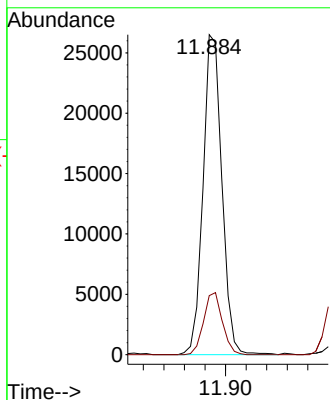
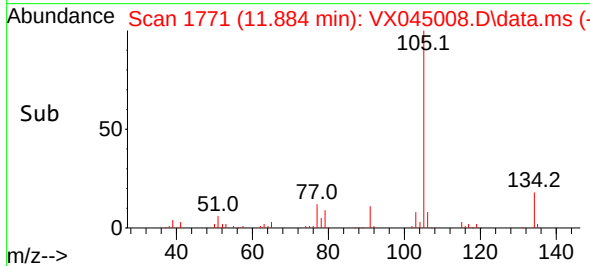
Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDIC005



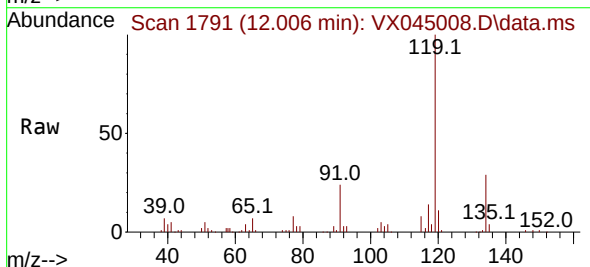
Tgt Ion:105 Resp: 3380
 Ion Ratio Lower Upper
 105 100
 134 19.2 0.0 39.0

Manual Integrations
 APPROVED

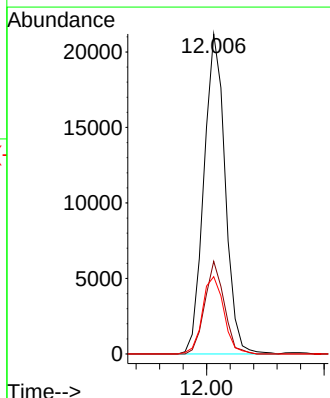
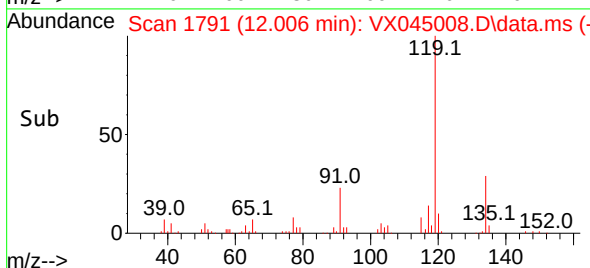
Reviewed By :John Carlone 02/24/2025
 Supervised By :Mahesh Dadoda 02/24/2025

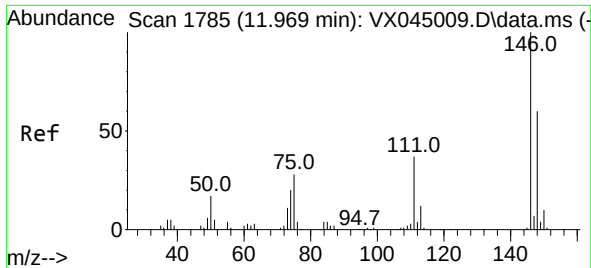


#82
 p-Isopropyltoluene
 Concen: 4.653 ug/l
 RT: 12.006 min Scan# 1791
 Delta R.T. -0.000 min
 Lab File: VX045008.D
 Acq: 21 Feb 2025 09:58



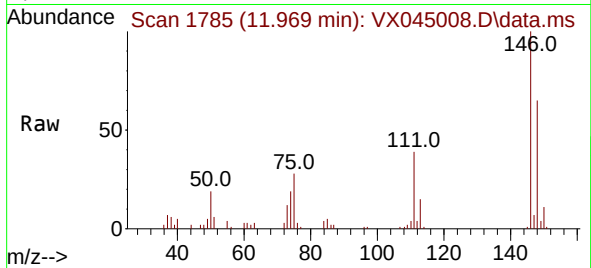
Tgt Ion:119 Resp: 26547
 Ion Ratio Lower Upper
 119 100
 134 26.5 0.0 52.6
 91 24.5 0.0 51.0





#83
1,3-Dichlorobenzene
Concen: 4.863 ug/l
RT: 11.969 min Scan# 1785
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

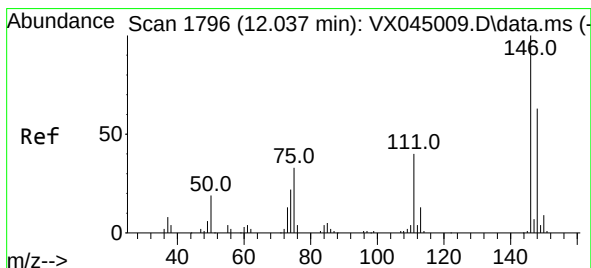
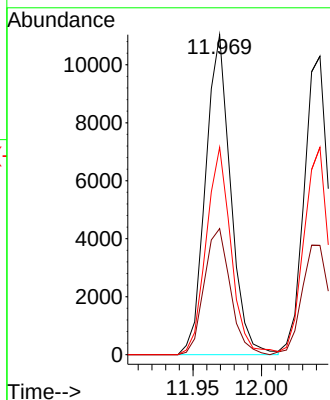
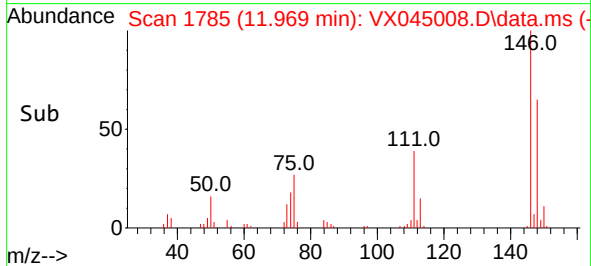
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



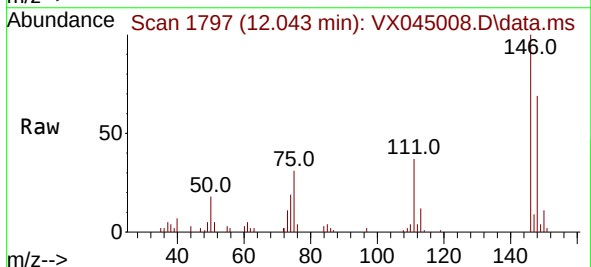
Tgt Ion:146 Resp: 14060
Ion Ratio Lower Upper
146 100
111 40.9 20.2 60.5
148 63.5 31.2 93.6

Manual Integrations
APPROVED

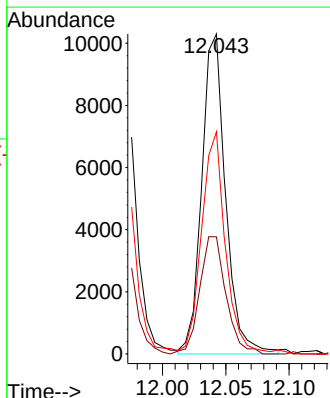
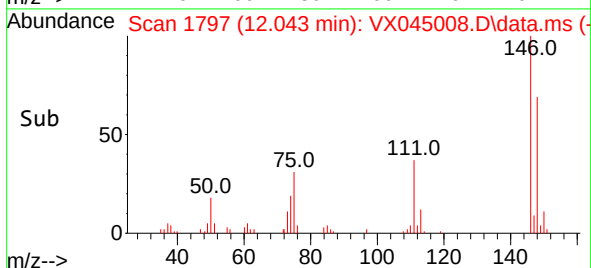
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

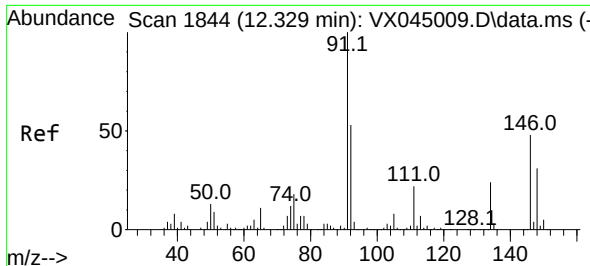


#84
1,4-Dichlorobenzene
Concen: 4.755 ug/l
RT: 12.043 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



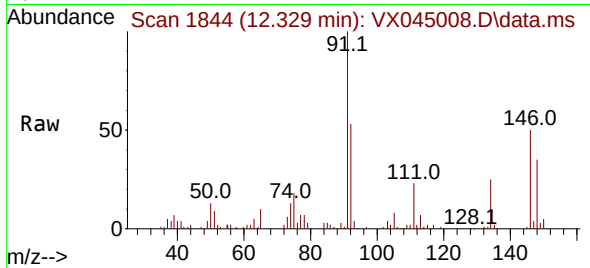
Tgt Ion:146 Resp: 13556
Ion Ratio Lower Upper
146 100
111 40.3 20.4 61.2
148 69.1 31.8 95.4





#85
n-Butylbenzene
Concen: 4.344 ug/l
RT: 12.329 min Scan# 1844
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

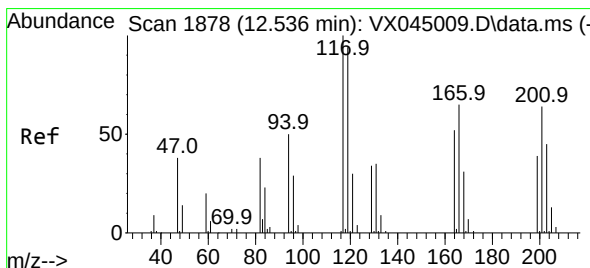
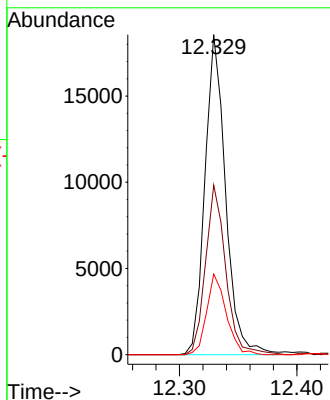
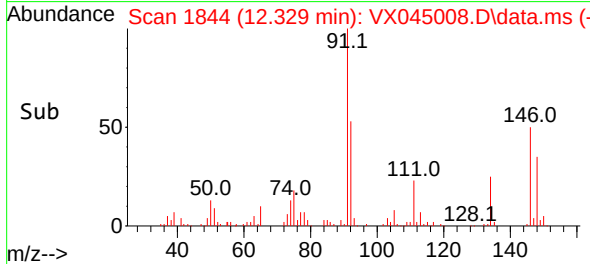
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



Tgt Ion: 91 Resp: 22634
Ion Ratio Lower Upper
91 100
92 52.0 0.0 105.2
134 23.5 0.0 49.4

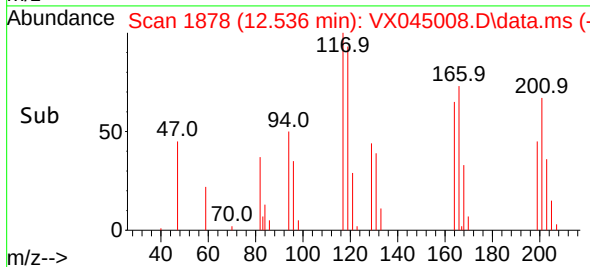
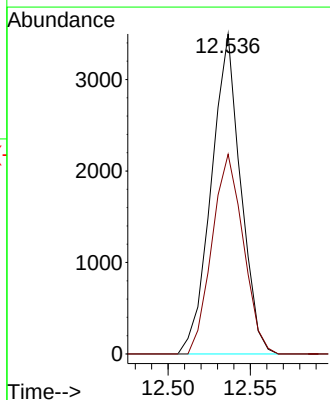
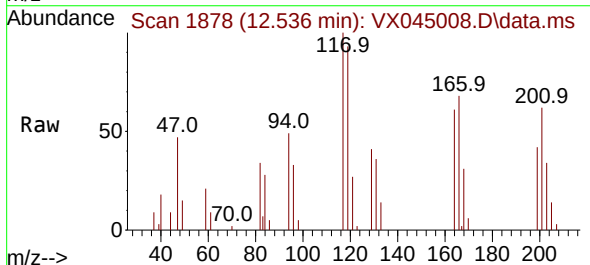
Manual Integrations
APPROVED

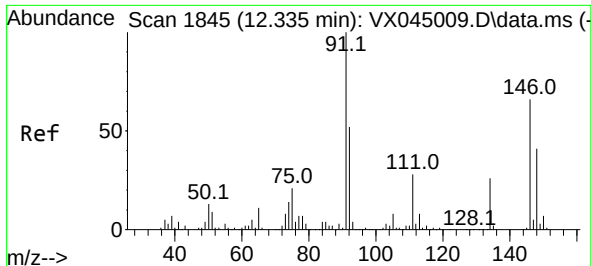
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#86
Hexachloroethane
Concen: 4.313 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

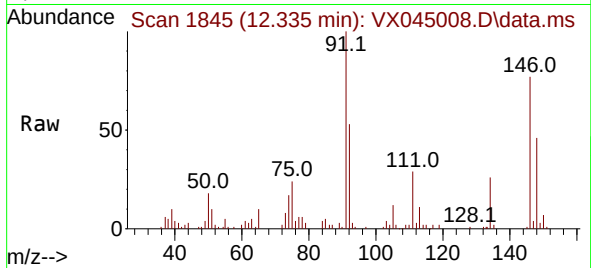
Tgt Ion:117 Resp: 4340
Ion Ratio Lower Upper
117 100
201 66.5 32.6 97.7





#87
1,2-Dichlorobenzene
Concen: 5.001 ug/l
RT: 12.335 min Scan# 1845
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

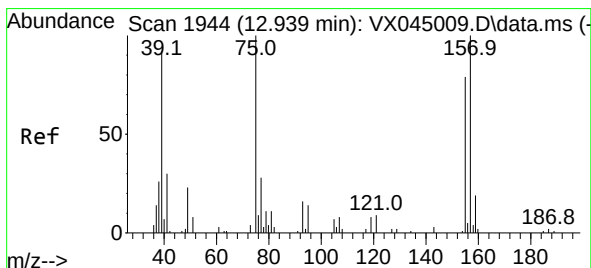
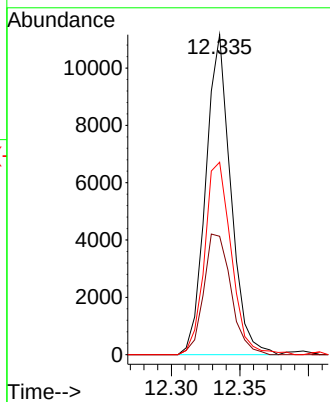
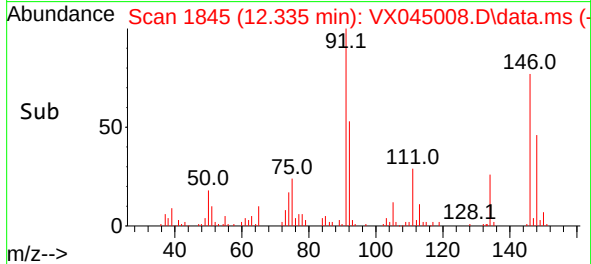
Instrument : MSVOA_X
ClientSampleId : VSTDIC005



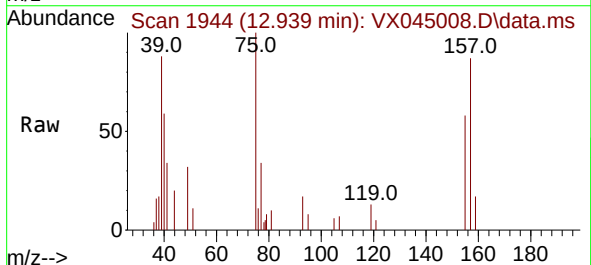
Tgt Ion:146 Resp: 1418
Ion Ratio Lower Upper
146 100
111 41.2 21.7 65.1
148 64.4 31.8 95.4

Manual Integrations
APPROVED

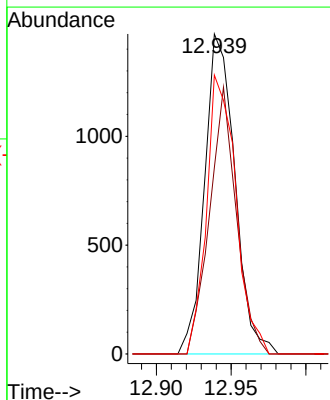
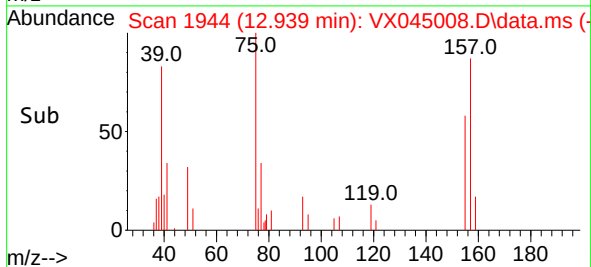
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

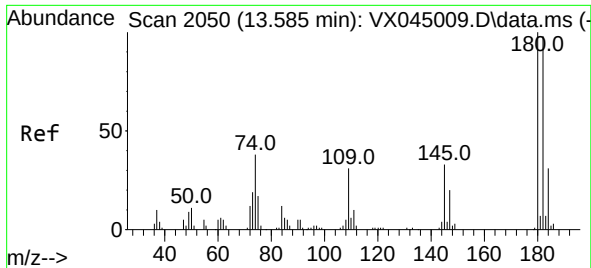


#88
1,2-Dibromo-3-Chloropropane
Concen: 4.810 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



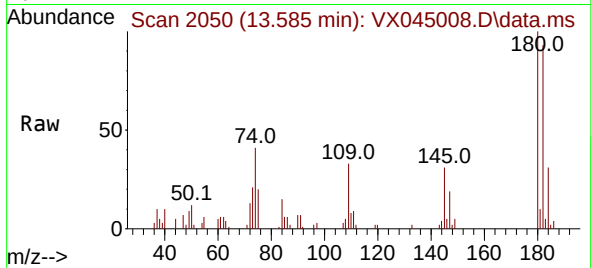
Tgt Ion: 75 Resp: 2067
Ion Ratio Lower Upper
75 100
155 74.0 66.2 99.4
157 84.6 81.4 122.2





#89
1,2,4-Trichlorobenzene
Concen: 4.412 ug/l
RT: 13.585 min Scan# 2050
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

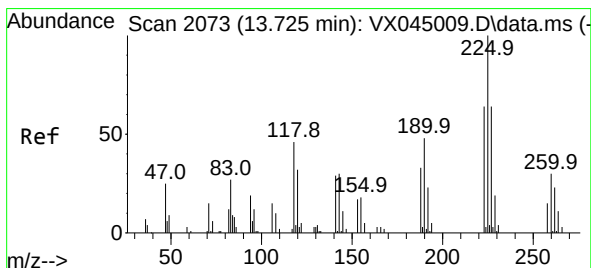
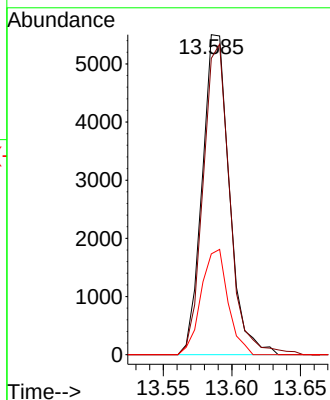
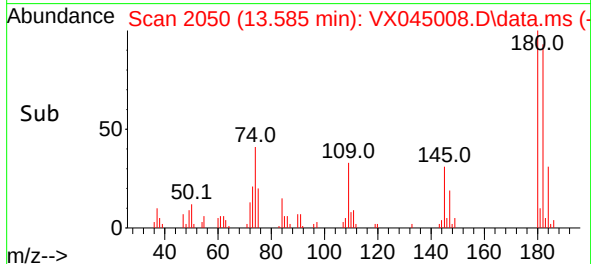
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



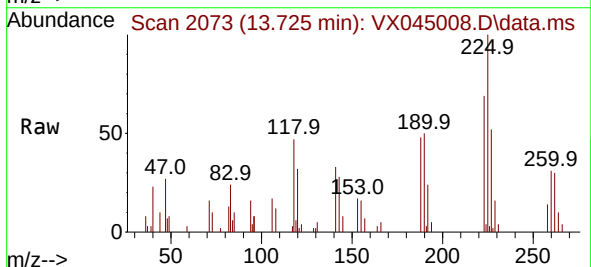
Tgt Ion:180 Resp: 7580
Ion Ratio Lower Upper
180 100
182 95.3 77.7 116.5
145 32.5 25.8 38.6

Manual Integrations
APPROVED

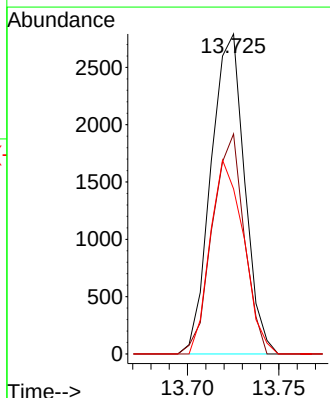
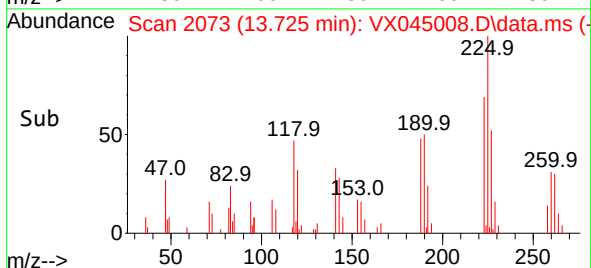
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

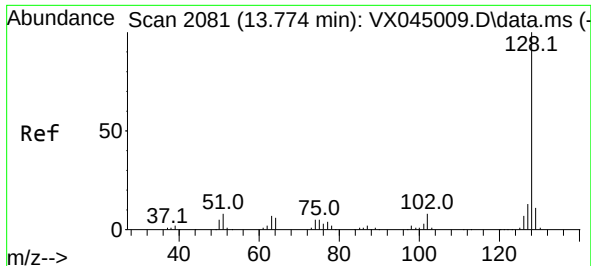


#90
Hexachlorobutadiene
Concen: 5.091 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



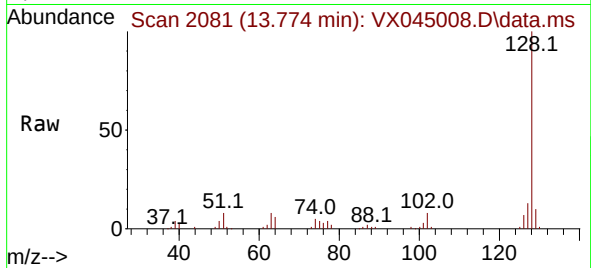
Tgt Ion:225 Resp: 3570
Ion Ratio Lower Upper
225 100
223 64.8 0.0 123.4
227 60.6 0.0 127.4





#91
Naphthalene
Concen: 4.356 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58

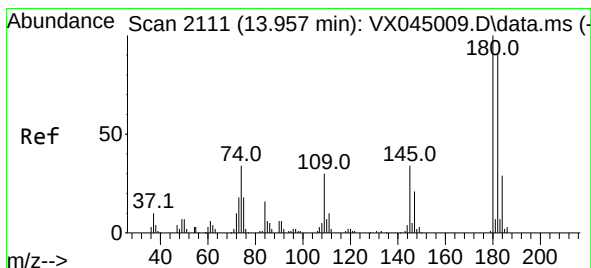
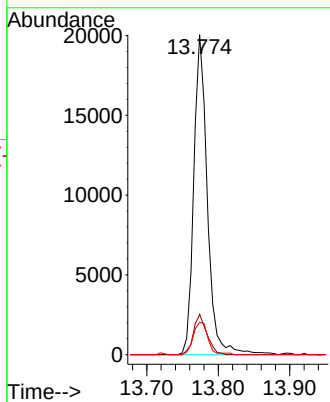
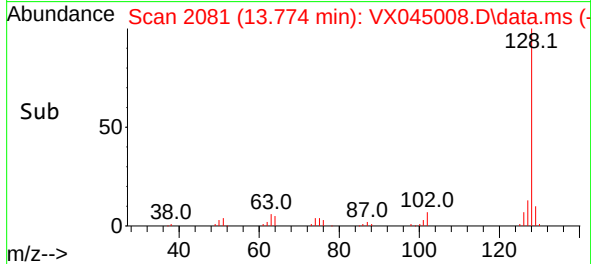
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005



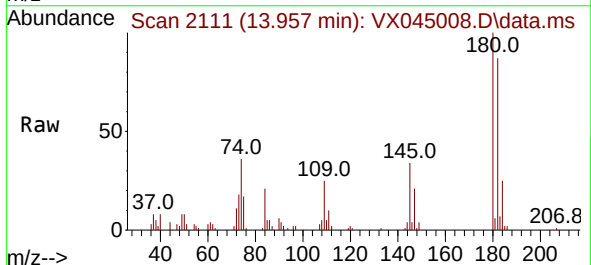
Tgt Ion:128 Resp: 26410
Ion Ratio Lower Upper
128 100
127 12.5 10.5 15.7
129 10.6 8.7 13.1

Manual Integrations
APPROVED

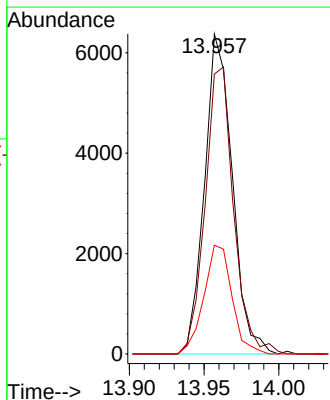
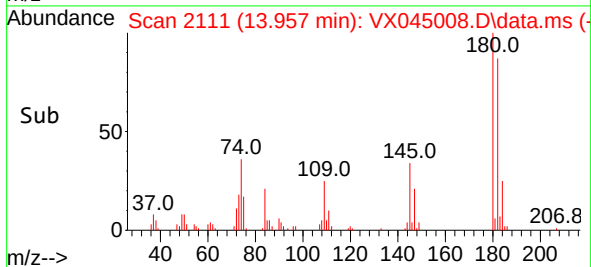
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#92
1,2,3-Trichlorobenzene
Concen: 4.655 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045008.D
Acq: 21 Feb 2025 09:58



Tgt Ion:180 Resp: 8240
Ion Ratio Lower Upper
180 100
182 91.9 0.0 186.6
145 34.4 0.0 68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045009.D
 Acq On : 21 Feb 2025 10:21
 Operator : JC/MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC020

Quant Time: Feb 22 00:47:11 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.885	128	18456	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	100876	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	91818	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	53173	29.663	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	98.867%		
60) 4-Bromofluorobenzene	11.079	95	51382	29.939	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	99.800%		
63) Toluene-d8	8.641	98	153274	30.175	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	100.567%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.167	85	30488	19.596	ug/l	100
3) Chloromethane	1.295	50	36739	19.715	ug/l	100
4) Vinyl Chloride	1.374	62	34827	19.369	ug/l	100
5) Bromomethane	1.593	94	12009	19.186	ug/l	100
6) Chloroethane	1.666	64	20465	21.014	ug/l	100
7) Trichlorofluoromethane	1.874	101	45678	18.901	ug/l	100
8) Diethyl Ether	2.130	74	17586	19.233	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.325	101	26971	18.790	ug/l	100
10) 1,1-Dichloroethene	2.313	96	26361	18.802	ug/l	100
11) Methyl Iodide	2.447	142	26786	16.880	ug/l	100
12) Methyl Acetate	2.697	43	30401	18.673	ug/l	100
13) Acrolein	2.233	56	29114	89.216	ug/l	100
14) Acrylonitrile	3.056	53	76500	96.198	ug/l	100
15) Acetone	2.380	58	21647	99.253	ug/l	100
16) Carbon Disulfide	2.502	76	73699	18.532	ug/l	100
17) Allyl chloride	2.660	41	48603	18.535	ug/l	100
18) Methylene Chloride	2.782	84	30537	19.365	ug/l	100
19) trans-1,2-Dichloroethene	3.081	96	26955	19.003	ug/l	100
20) Diisopropyl ether	3.751	45	95769	19.005	ug/l	100
21) 1,1-Dichloroethane	3.605	63	53432	19.066	ug/l	100
22) cis-1,2-Dichloroethene	4.483	96	32387	19.054	ug/l	100
23) tert-Butyl Alcohol	2.983	59	26136	94.028	ug/l #	100
24) Methyl tert-Butyl Ether	3.105	73	86386	18.878	ug/l	100
25) Chloroform	5.087	83	52389	19.354	ug/l	100
26) Cyclohexane	5.465	56	49670	19.201	ug/l #	100
29) 1,1-Dichloropropene	5.690	75	36104	19.456	ug/l	100
30) 2-Butanone	4.550	43	104263	97.278	ug/l	100
31) 2,2-Dichloropropane	4.465	77	39511	18.830	ug/l	100
32) 1,1,1-Trichloroethane	5.373	97	43317	19.266	ug/l	100
33) Carbon Tetrachloride	5.666	117	36851	19.421	ug/l	100
34) Benzene	6.032	78	114107	19.609	ug/l	100
35) Methacrylonitrile	4.910	41	22376	19.509	ug/l	100
36) 1,2-Dichloroethane	6.080	62	39058	19.604	ug/l	100
37) Trichloroethene	7.117	130	26892	19.753	ug/l	100
38) Methylcyclohexane	7.373	83	47088	18.899	ug/l	100
39) 1,2-Dichloropropane	7.428	63	28555	19.738	ug/l	100
40) Dibromomethane	7.580	93	20254	19.509	ug/l	100
41) Bromodichloromethane	7.818	83	39895	19.335	ug/l	100
42) Vinyl Acetate	3.715	43	400180	96.216	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045009.D
 Acq On : 21 Feb 2025 10:21
 Operator : JC/MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC020

Quant Time: Feb 22 00:47:11 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.709	43	38893	19.350	ug/l	100
44) Isopropyl Acetate	6.336	43	61693	18.649	ug/l	100
45) 1,4-Dioxane	7.659	88	14028	407.910	ug/l	100
46) Methyl methacrylate	7.690	41	30666	18.904	ug/l	100
47) n-amyl Acetate	10.842	43	54008	18.814	ug/l	100
48) t-1,3-Dichloropropene	8.976	75	35645	17.922	ug/l	100
49) cis-1,3-Dichloropropene	8.360	75	42718	18.974	ug/l	100
50) 1,1,2-Trichloroethane	9.147	97	27147	20.047	ug/l	100
51) Ethyl methacrylate	9.110	69	39389	18.495	ug/l	100
52) 1,3-Dichloropropane	9.305	76	47373	19.965	ug/l	100
53) Dibromochloromethane	9.519	129	29289	19.556	ug/l	100
54) 1,2-Dibromoethane	9.604	107	26948	19.597	ug/l	100
55) 2-Chloroethyl vinyl ether	8.238	63	105624	96.576	ug/l	100
56) Bromoform	10.799	173	17331	18.467	ug/l	100
58) 4-Methyl-2-Pentanone	8.568	43	208023	99.596	ug/l	100
59) 2-Hexanone	9.427	43	149308	98.899	ug/l	100
61) Tetrachloroethene	9.269	164	22529	19.926	ug/l	100
62) Toluene	8.714	91	119473	19.642	ug/l	100
64) Chlorobenzene	10.073	112	74287	19.710	ug/l	100
65) 1,1,1,2-Tetrachloroethane	10.159	131	24135	19.406	ug/l	100
66) Ethyl Benzene	10.189	91	128535	19.302	ug/l	100
67) m/p-Xylenes	10.299	106	99887	40.260	ug/l	100
68) o-Xylene	10.640	106	48859	20.071	ug/l	100
69) Styrene	10.653	104	80660	19.839	ug/l	100
70) Isopropylbenzene	10.957	105	124935	19.888	ug/l	100
71) 1,1,2,2-Tetrachloroethane	11.207	83	40659	19.683	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	33046m	19.450	ug/l	
73) Bromobenzene	11.195	156	28601	19.777	ug/l	100
74) n-propylbenzene	11.299	91	146105	19.544	ug/l	100
75) 2-Chlorotoluene	11.360	91	89859	19.883	ug/l	100
76) 1,3,5-Trimethylbenzene	11.451	105	103532	19.977	ug/l	100
77) t-1,4-Dichloro-2-butene	11.018	75	9794	17.133	ug/l	100
78) 4-Chlorotoluene	11.451	91	99015	19.654	ug/l	100
79) tert-butylbenzene	11.713	119	104250	19.965	ug/l	100
80) 1,2,4-Trimethylbenzene	11.750	105	104388	20.108	ug/l	100
81) sec-Butylbenzene	11.884	105	129645	19.783	ug/l	100
82) p-Isopropyltoluene	12.006	119	104594	19.698	ug/l	100
83) 1,3-Dichlorobenzene	11.969	146	53471	19.873	ug/l	100
84) 1,4-Dichlorobenzene	12.037	146	52302	19.714	ug/l	100
85) n-Butylbenzene	12.329	91	92551	19.087	ug/l	100
86) Hexachloroethane	12.536	117	17240	18.410	ug/l	100
87) 1,2-Dichlorobenzene	12.335	146	53134	20.126	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	12.939	75	7393	18.485	ug/l	100
89) 1,2,4-Trichlorobenzene	13.585	180	30018	18.760	ug/l	100
90) Hexachlorobutadiene	13.725	225	12822	19.649	ug/l	100
91) Naphthalene	13.774	128	108844	19.291	ug/l	100
92) 1,2,3-Trichlorobenzene	13.957	180	32019	19.437	ug/l	100

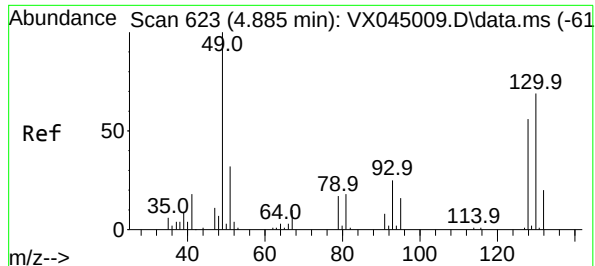
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.885 min Scan# 61

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

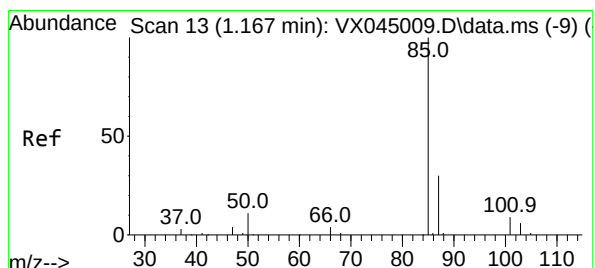
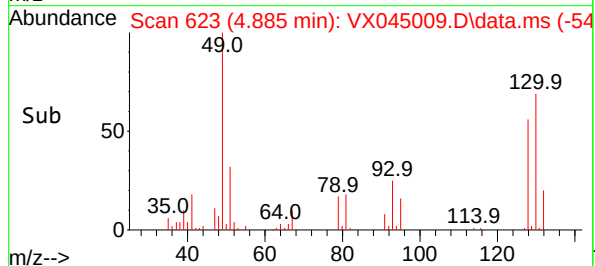
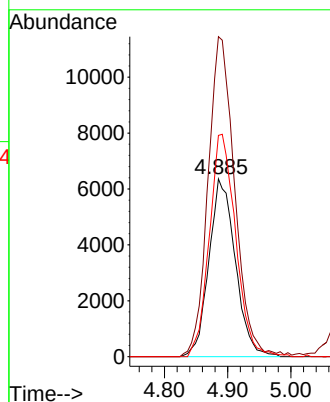
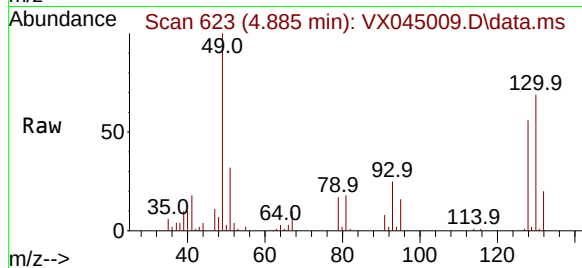
Tgt Ion:	128	Resp:	1845
Ion	Ratio	Lower	Upper
128	100		
49	179.9	0.0	449.7
130	125.1	0.0	312.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#2

Dichlorodifluoromethane

Concen: 19.596 ug/l

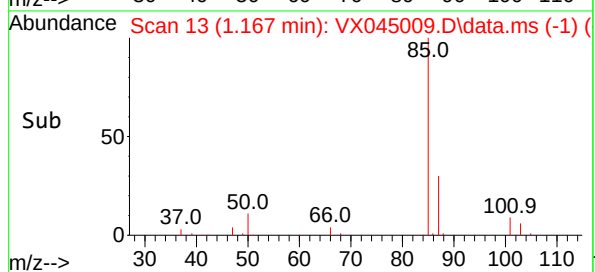
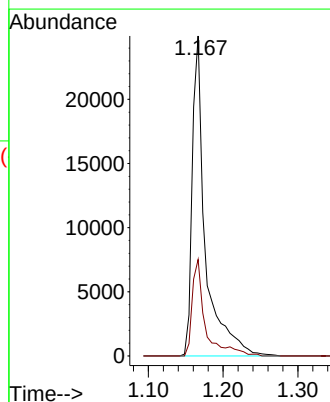
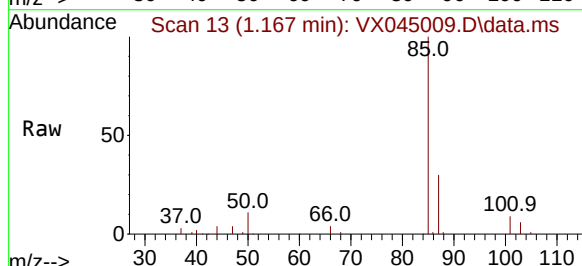
RT: 1.167 min Scan# 13

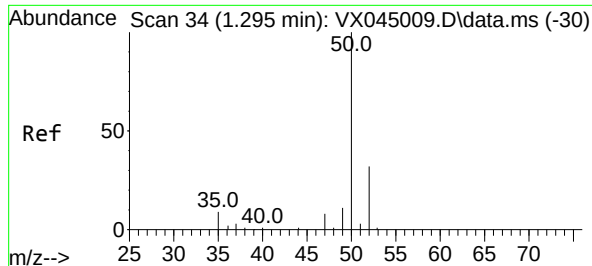
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:	85	Resp:	30488
Ion	Ratio	Lower	Upper
85	100		
87	30.2	15.1	45.3





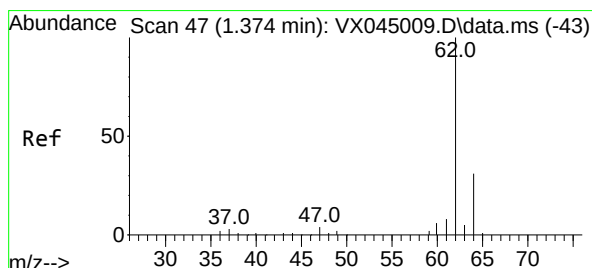
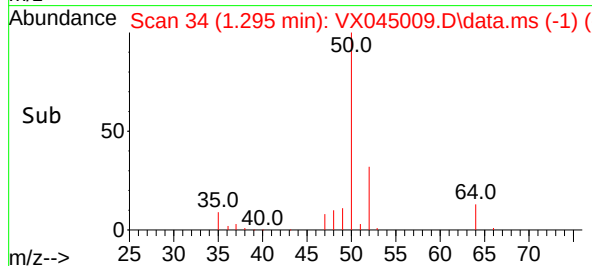
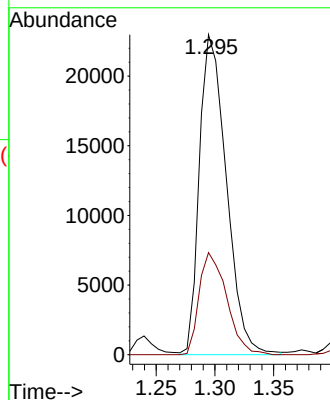
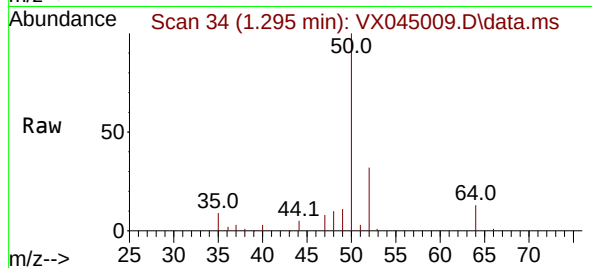
#3
Chloromethane
Concen: 19.715 ug/l
RT: 1.295 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion: 50 Resp: 36739
Ion Ratio Lower Upper
50 100
52 32.1 25.7 38.5

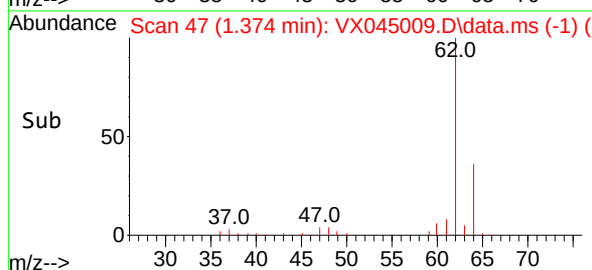
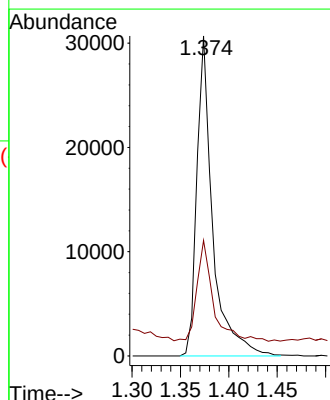
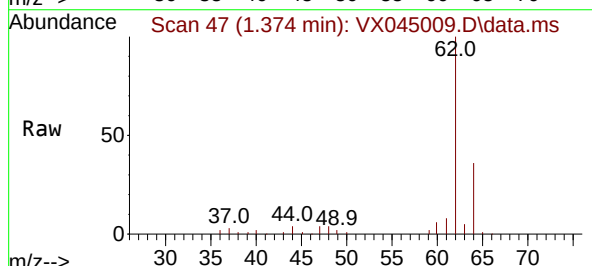
Manual Integrations
APPROVED

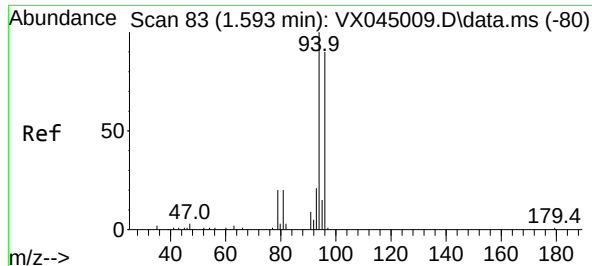
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#4
Vinyl Chloride
Concen: 19.369 ug/l
RT: 1.374 min Scan# 47
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 62 Resp: 34827
Ion Ratio Lower Upper
62 100
64 31.4 25.1 37.7





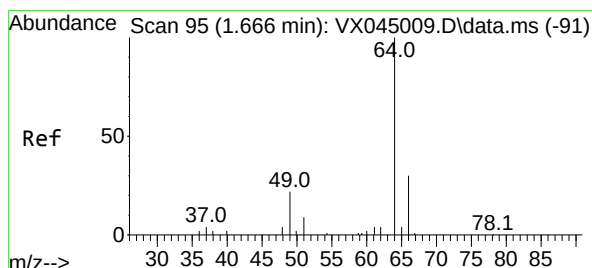
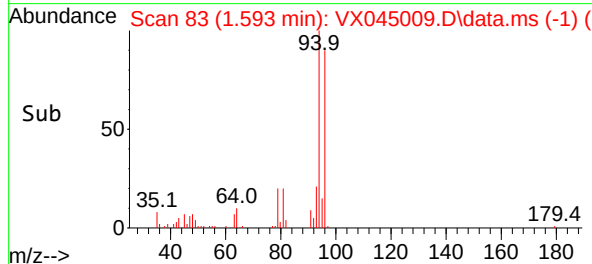
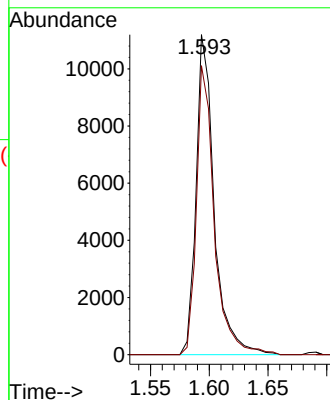
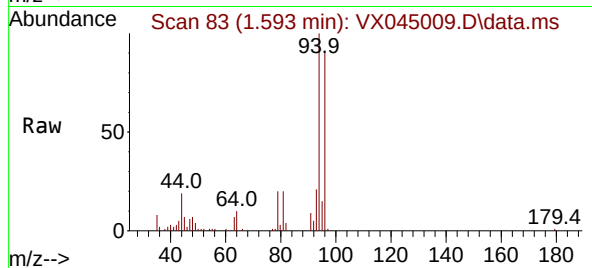
#5
Bromomethane
Concen: 19.186 ug/l
RT: 1.593 min Scan# 83
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion: 94 Resp: 12009
Ion Ratio Lower Upper
94 100
96 90.3 72.2 108.4

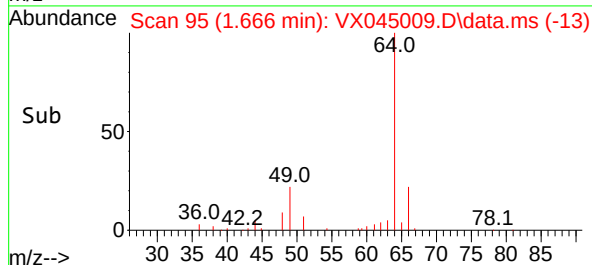
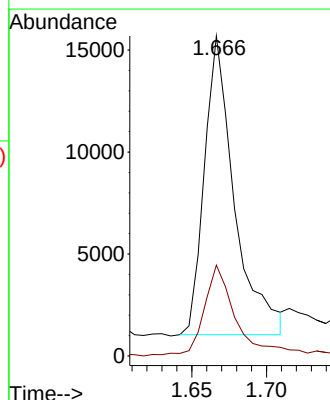
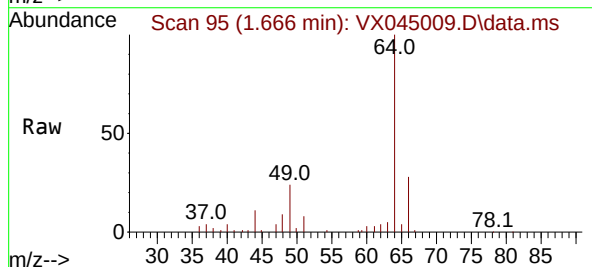
Manual Integrations
APPROVED

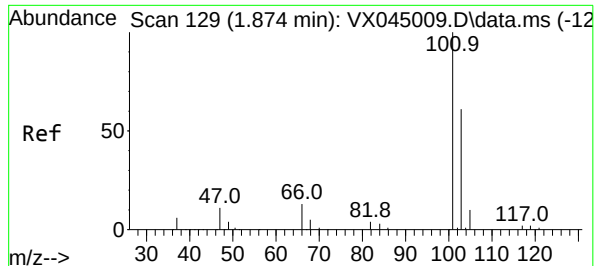
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#6
Chloroethane
Concen: 21.014 ug/l
RT: 1.666 min Scan# 95
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 64 Resp: 20465
Ion Ratio Lower Upper
64 100
66 29.6 23.7 35.5





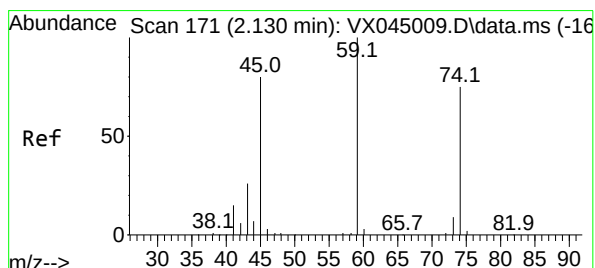
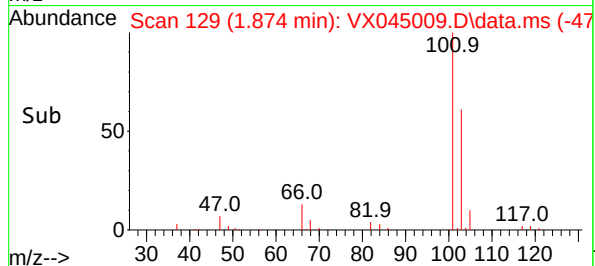
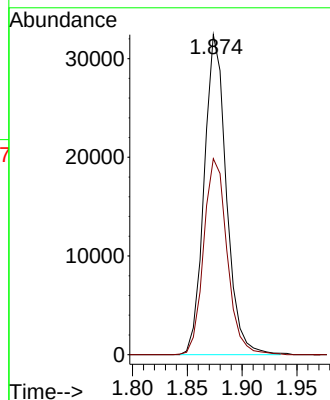
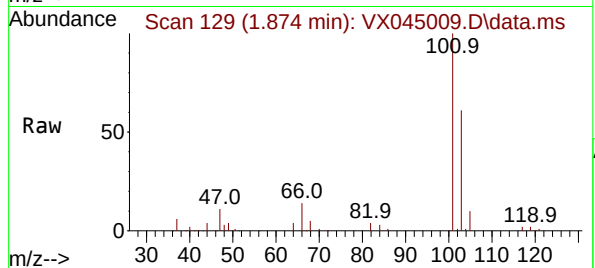
#7
Trichlorofluoromethane
Concen: 18.901 ug/l
RT: 1.874 min Scan# 129
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion:101 Resp: 45678
Ion Ratio Lower Upper
101 100
103 61.0 48.8 73.2

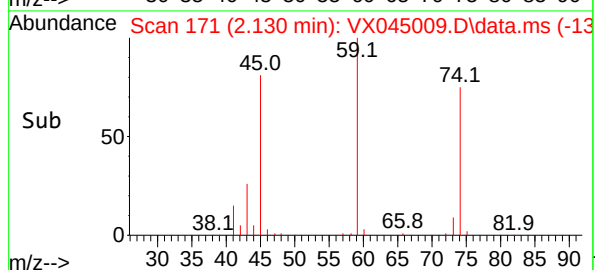
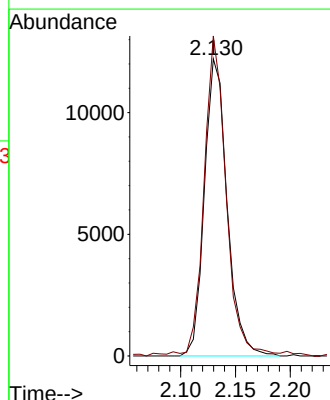
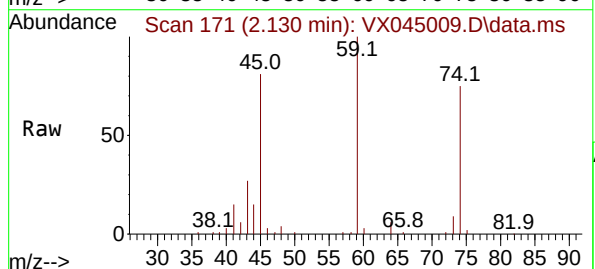
Manual Integrations
APPROVED

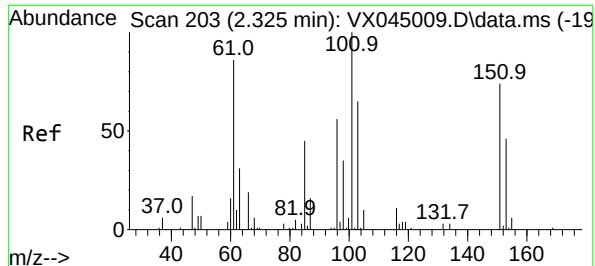
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#8
Diethyl Ether
Concen: 19.233 ug/l
RT: 2.130 min Scan# 171
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 74 Resp: 17586
Ion Ratio Lower Upper
74 100
45 103.8 20.8 186.8





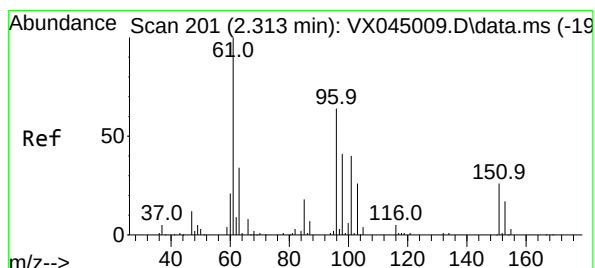
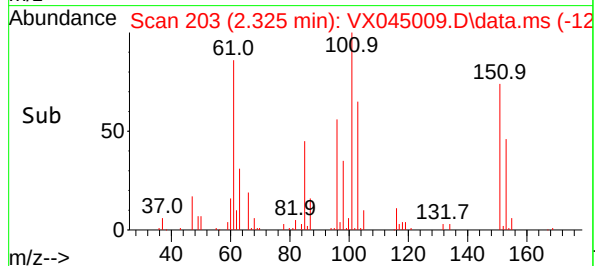
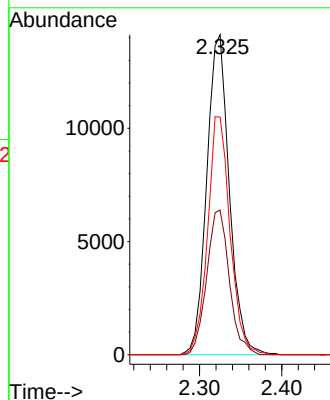
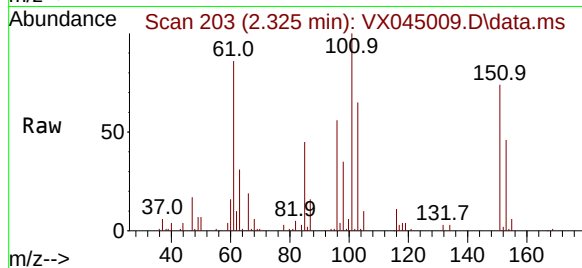
#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.790 ug/l
RT: 2.325 min Scan# 203
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion: 101 Resp: 2697
Ion Ratio Lower Upper
101 100
85 45.3 0.0 90.6
151 73.8 0.0 147.6

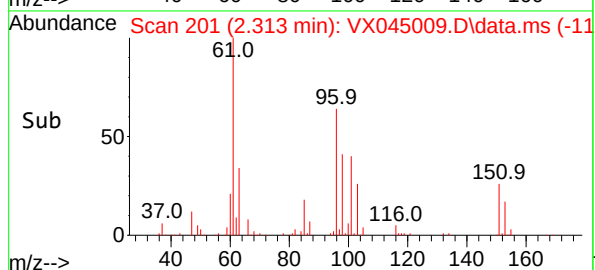
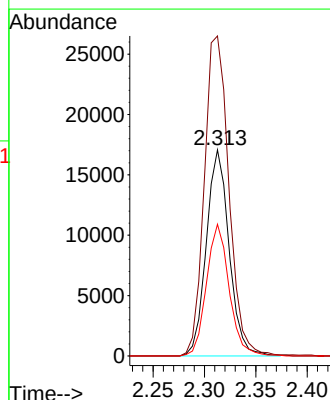
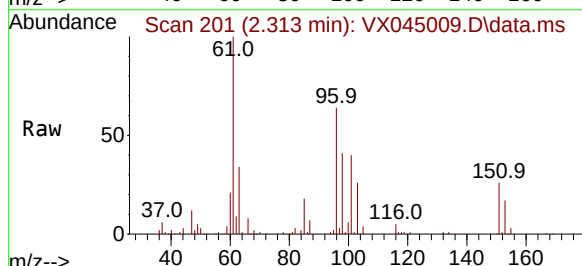
Manual Integrations
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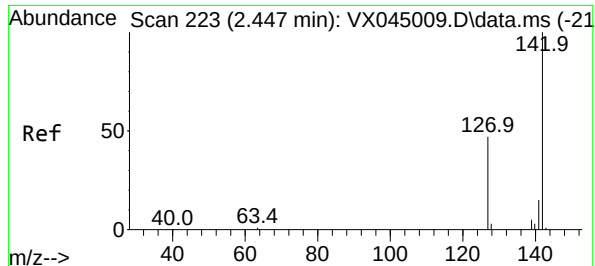
Reviewed By : John Carlone 02/24/2025
Supervised By : Mahesh Dadoda 02/24/2025



#10
1,1-Dichloroethene
Concen: 18.802 ug/l
RT: 2.313 min Scan# 201
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 96 Resp: 26361
Ion Ratio Lower Upper
96 100
61 155.2 124.2 186.2
98 63.9 51.1 76.7





#11

Methyl Iodide

Concen: 16.880 ug/l

RT: 2.447 min Scan# 21

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

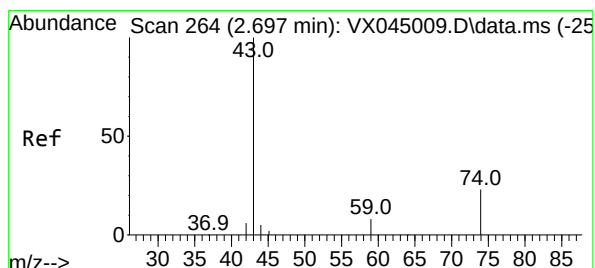
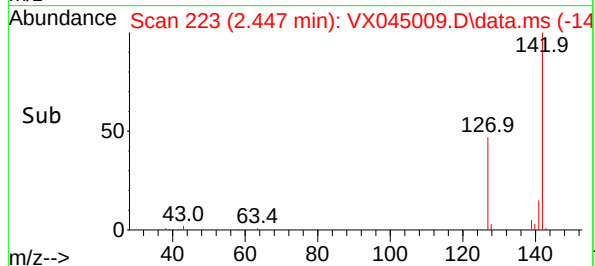
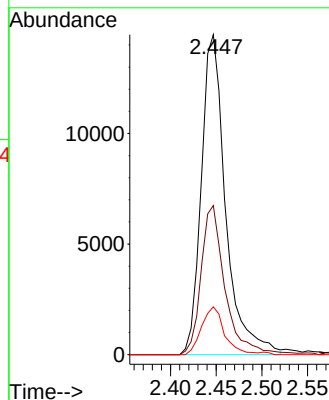
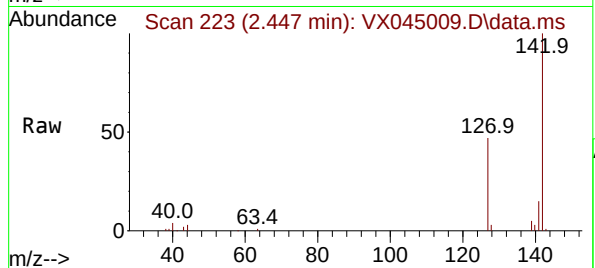
VSTDICCC020

Tgt Ion:	142	Resp:	26780
Ion	Ratio	Lower	Upper
142	100		
127	46.6	23.3	69.9
141	15.1	7.5	22.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#12

Methyl Acetate

Concen: 18.673 ug/l

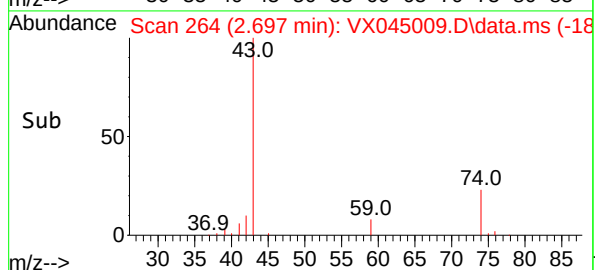
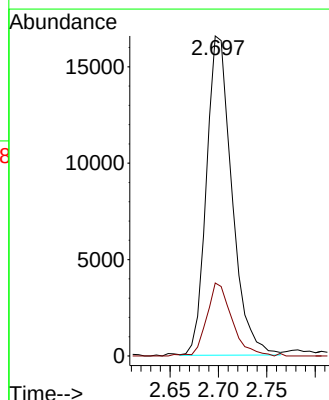
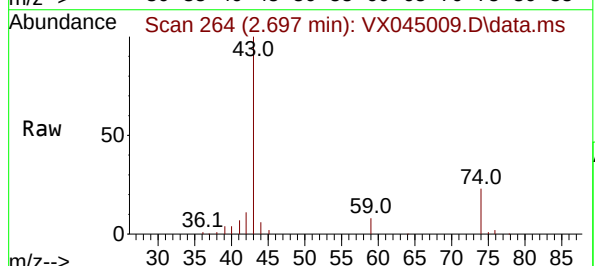
RT: 2.697 min Scan# 264

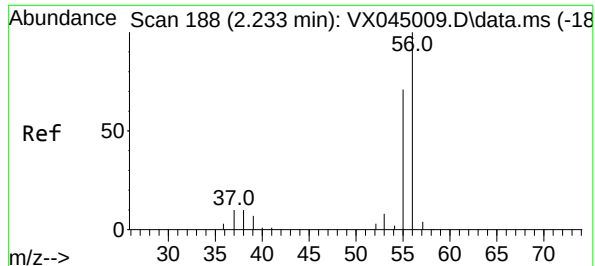
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:	43	Resp:	30401
Ion	Ratio	Lower	Upper
43	100		
74	22.4	17.9	26.9





#13

Acrolein

Concen: 89.216 ug/l

RT: 2.233 min Scan# 188

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 56 Resp: 29114

Ion Ratio Lower Upper

56 100

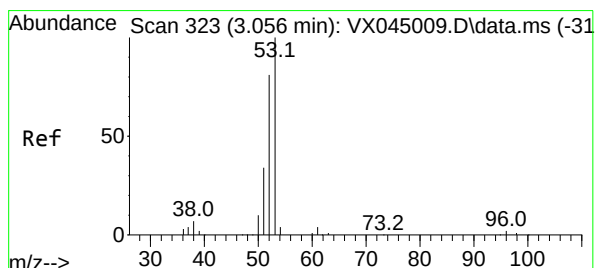
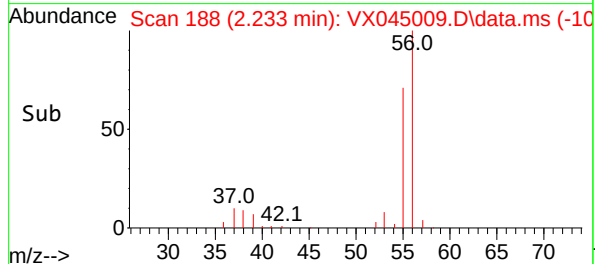
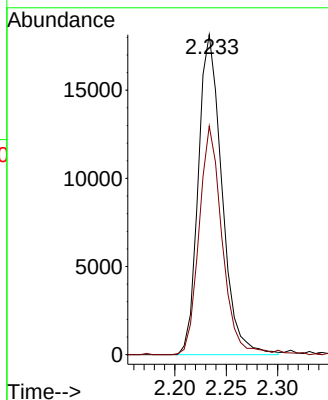
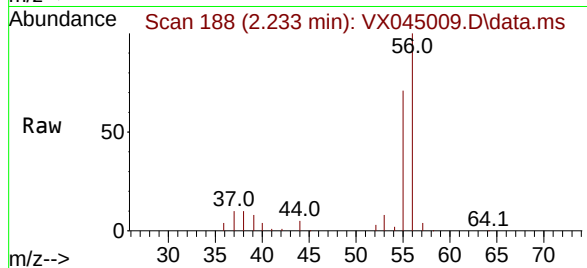
55 69.3 55.4 83.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#14

Acrylonitrile

Concen: 96.198 ug/l

RT: 3.056 min Scan# 323

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

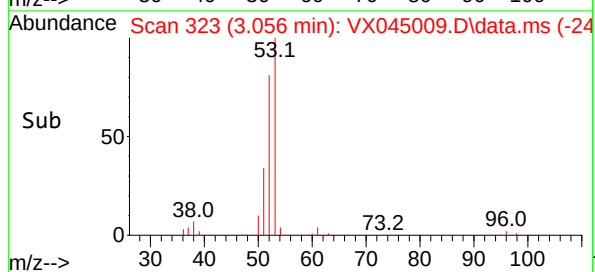
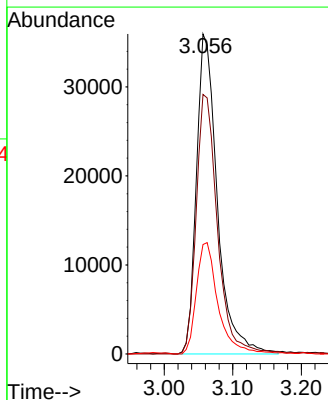
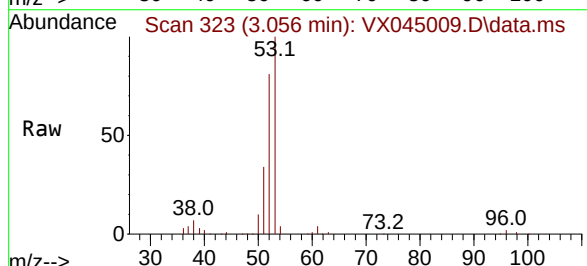
Tgt Ion: 53 Resp: 76500

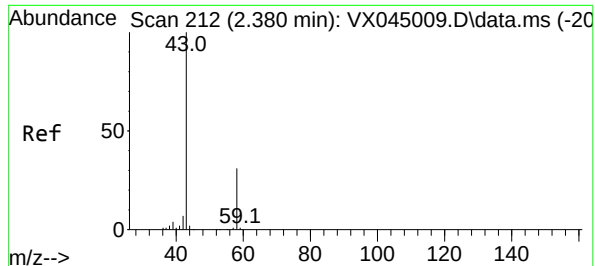
Ion Ratio Lower Upper

53 100

52 81.9 40.9 122.8

51 36.0 18.0 54.0





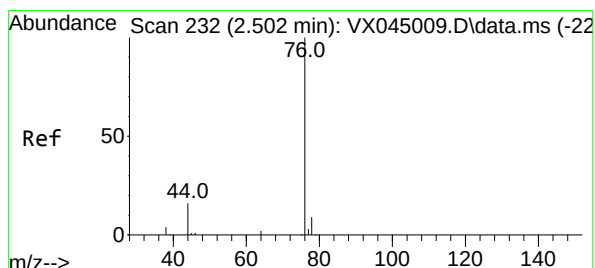
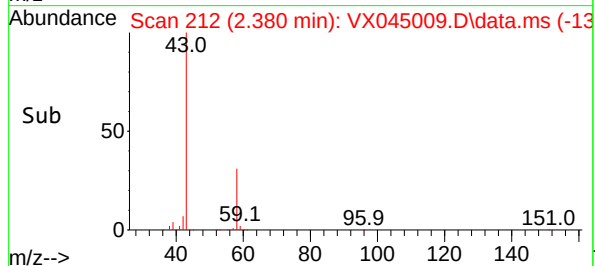
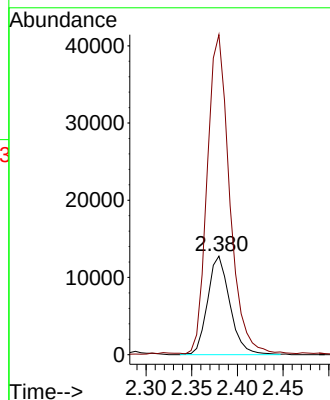
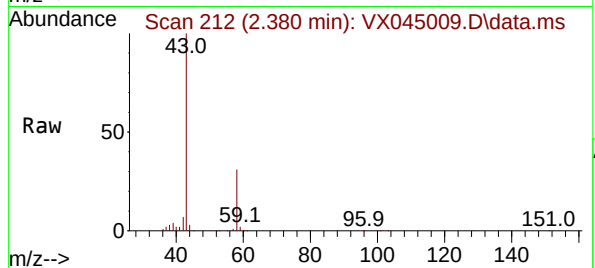
#15
Acetone
Concen: 99.253 ug/l
RT: 2.380 min Scan# 212
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion: 58 Resp: 2164
Ion Ratio Lower Upper
58 100
43 323.3 258.6 388.0

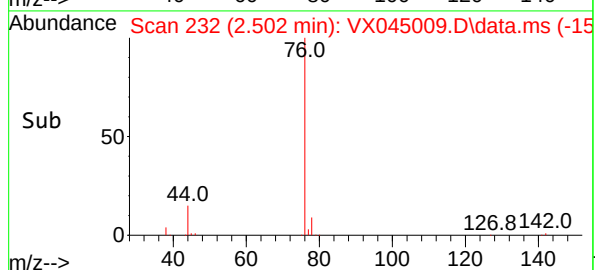
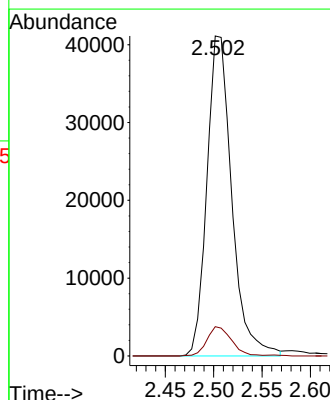
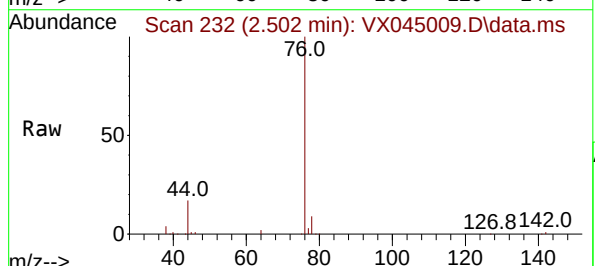
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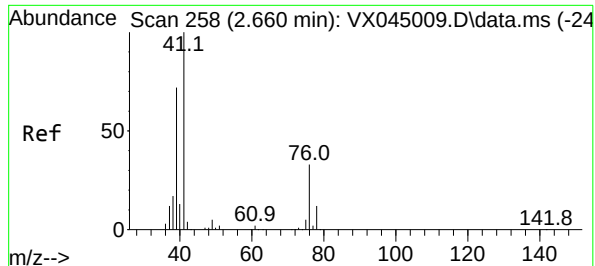
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#16
Carbon Disulfide
Concen: 18.532 ug/l
RT: 2.502 min Scan# 232
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 76 Resp: 73699
Ion Ratio Lower Upper
76 100
78 9.1 7.3 10.9





#17

Allyl chloride

Concen: 18.535 ug/l

RT: 2.660 min Scan# 258

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

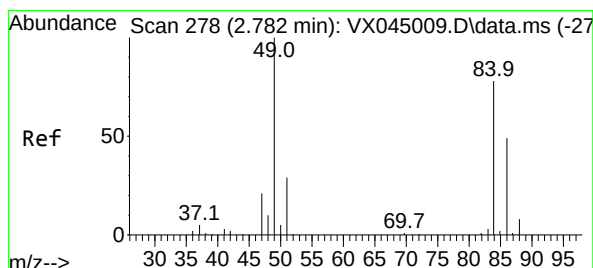
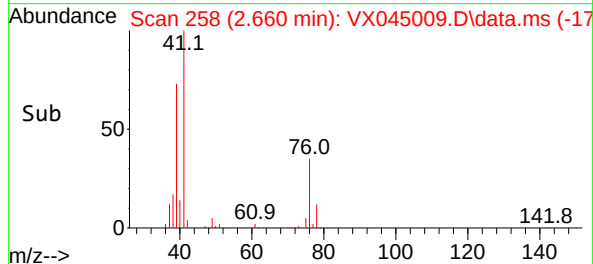
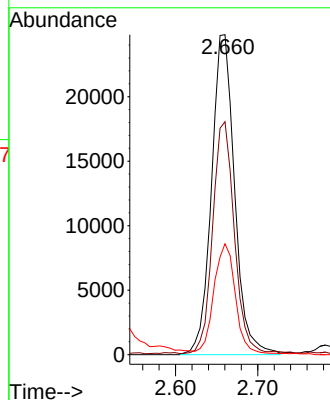
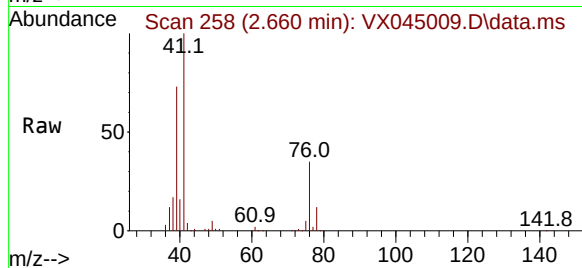
ClientSampleId :

VSTDICCC020

Tgt Ion:	41	Resp:	4860
Ion	Ratio	Lower	Upper
41	100		
39	72.4	36.2	108.6
76	34.3	17.2	51.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#18

Methylene Chloride

Concen: 19.365 ug/l

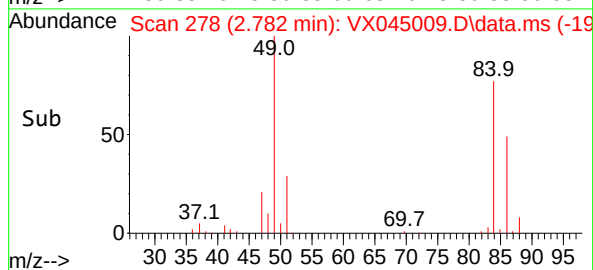
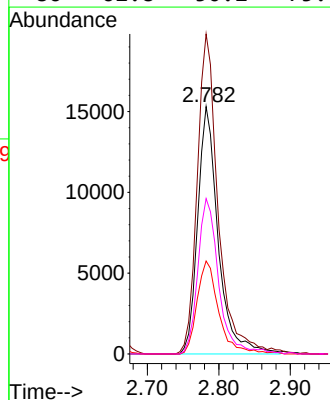
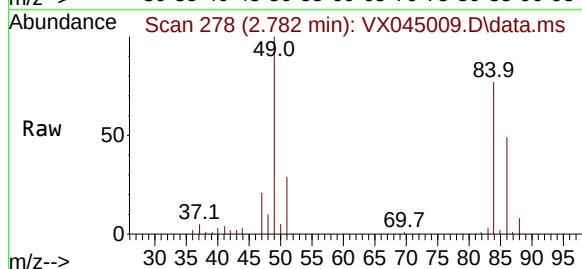
RT: 2.782 min Scan# 278

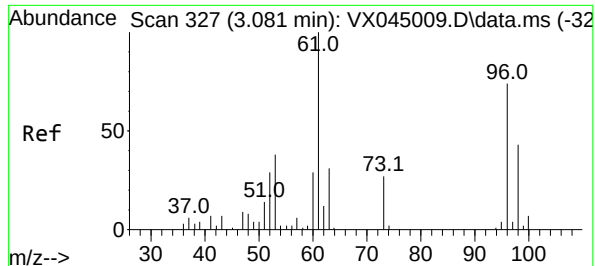
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:	84	Resp:	30537
Ion	Ratio	Lower	Upper
84	100		
49	128.5	102.8	154.2
51	37.6	30.1	45.1
86	62.8	50.2	75.4





#19

trans-1,2-Dichloroethene

Concen: 19.003 ug/l

RT: 3.081 min Scan# 31

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

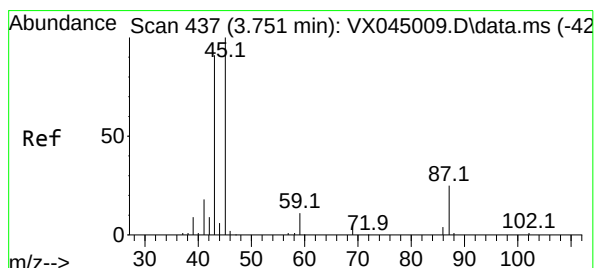
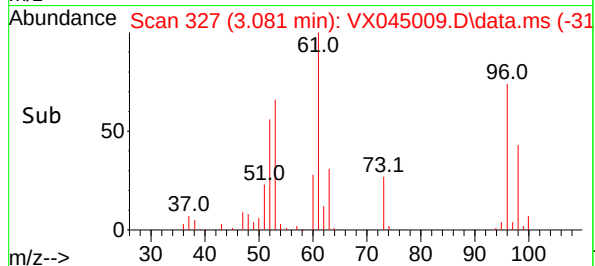
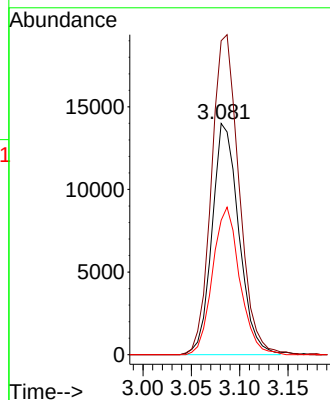
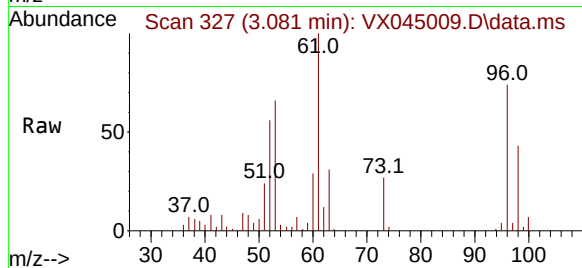
Tgt Ion:	96	Resp:	2695
Ion	Ratio	Lower	Upper
96	100		
61	135.8	108.6	163.0
98	58.1	46.5	69.7

Manual Integrations

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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#20

Diisopropyl ether

Concen: 19.005 ug/l

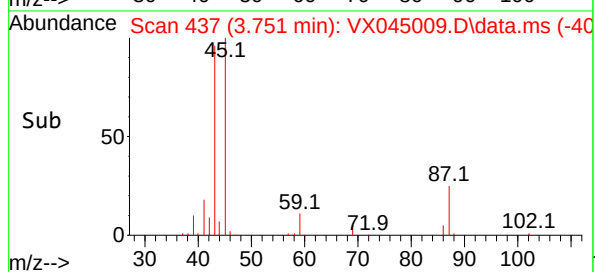
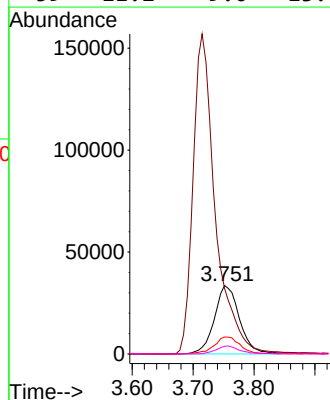
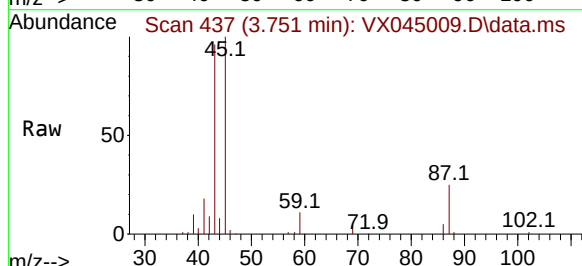
RT: 3.751 min Scan# 437

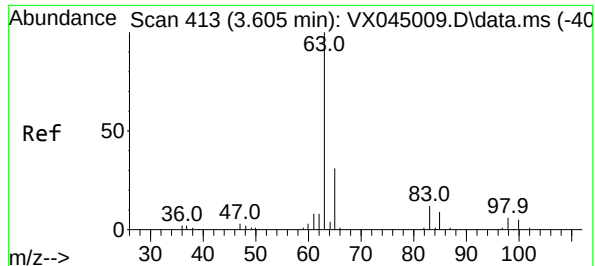
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:	45	Resp:	95769
Ion	Ratio	Lower	Upper
45	100		
43	93.0	74.4	111.6
87	24.8	19.8	29.8
59	11.2	9.0	13.4





#21

1,1-Dichloroethane

Concen: 19.066 ug/l

RT: 3.605 min Scan# 413

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

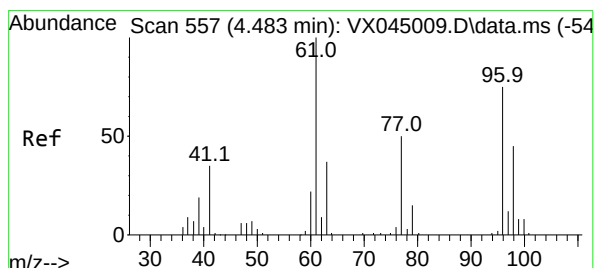
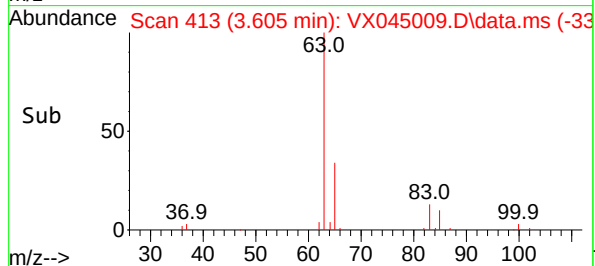
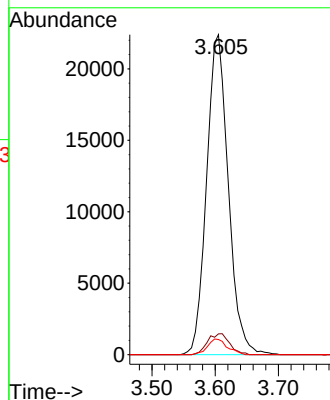
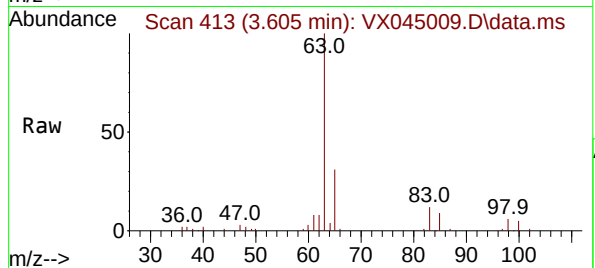
VSTDICCC020

Tgt Ion:	63	Resp:	5343
Ion Ratio	Lower	Upper	
63	100		
98	6.5	3.3	9.8
100	4.7	2.4	7.1

Manual Integrations
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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#22

cis-1,2-Dichloroethene

Concen: 19.054 ug/l

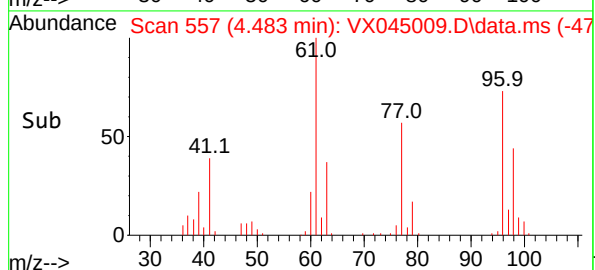
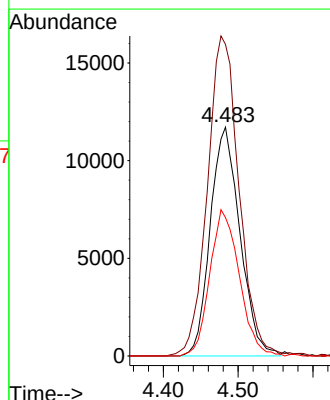
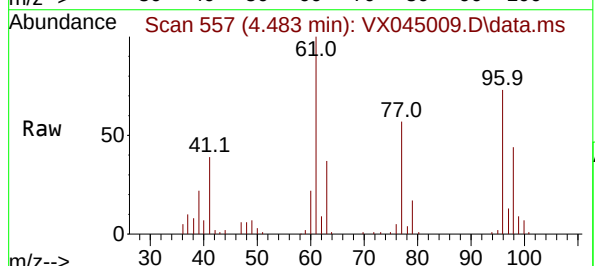
RT: 4.483 min Scan# 557

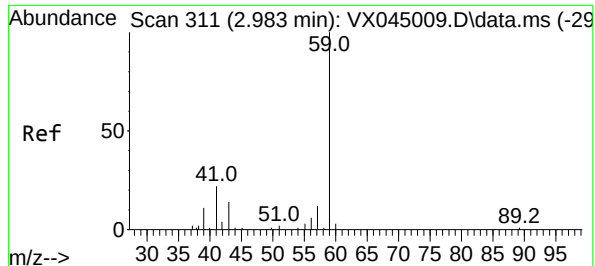
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:	96	Resp:	32387
Ion Ratio	Lower	Upper	
96	100		
61	148.6	118.9	178.3
98	63.4	50.7	76.1





#23

tert-Butyl Alcohol

Concen: 94.028 ug/l

RT: 2.983 min Scan# 311

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 59 Resp: 26130

Ion Ratio Lower Upper

59 100

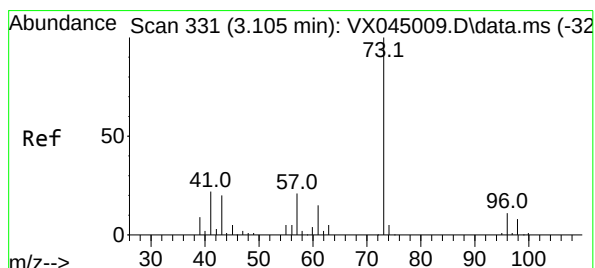
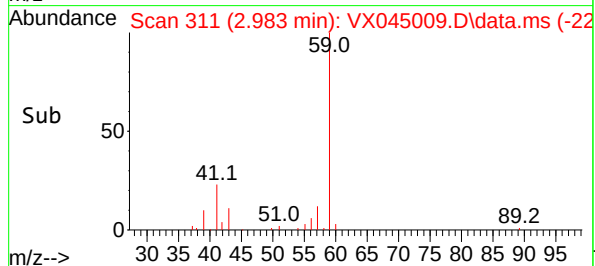
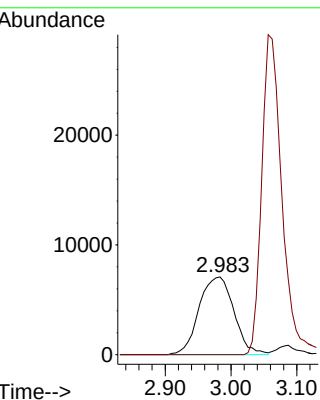
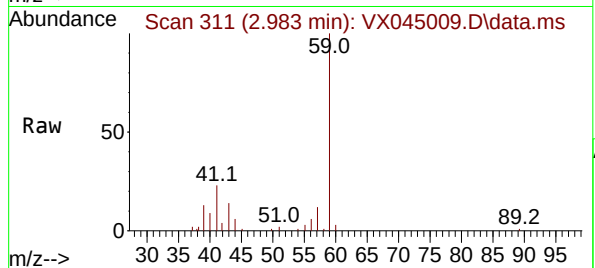
52 0.0 0.0 0.0

Manual Integrations

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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#24

Methyl tert-Butyl Ether

Concen: 18.878 ug/l

RT: 3.105 min Scan# 331

Delta R.T. 0.000 min

Lab File: VX045009.D

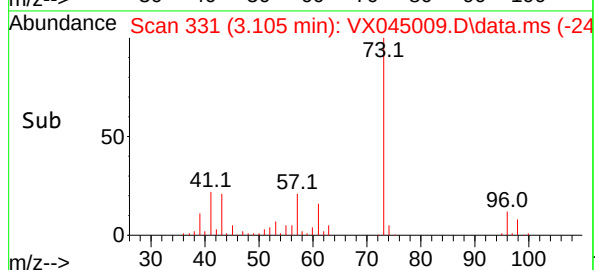
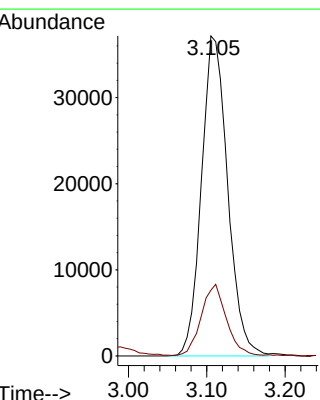
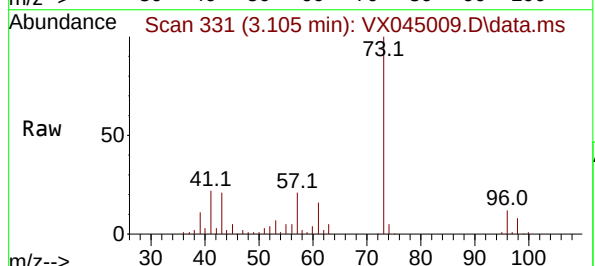
Acq: 21 Feb 2025 10:21

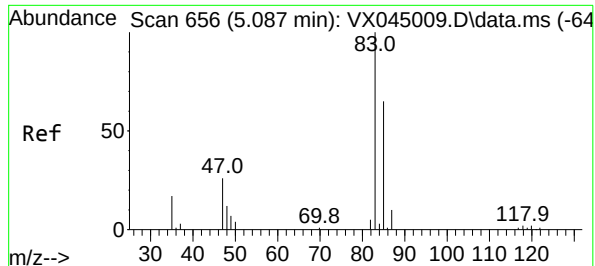
Tgt Ion: 73 Resp: 86386

Ion Ratio Lower Upper

73 100

43 21.7 17.4 26.0





#25

Chloroform

Concen: 19.354 ug/l

RT: 5.087 min Scan# 61

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 83 Resp: 52389

Ion Ratio Lower Upper

83 100

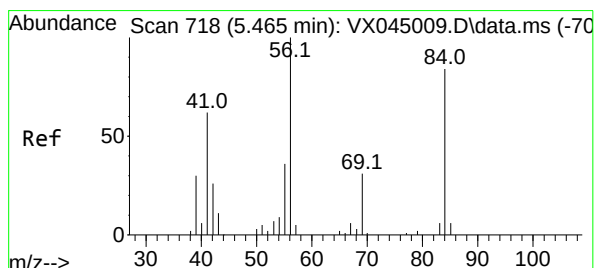
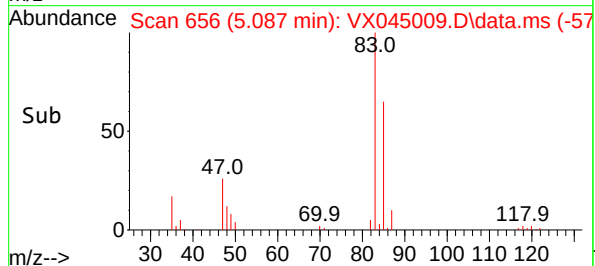
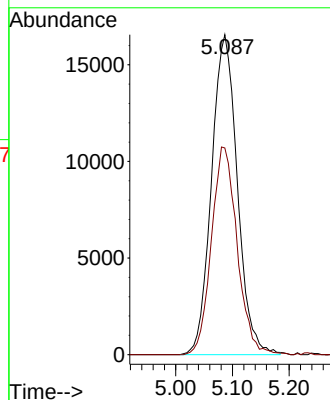
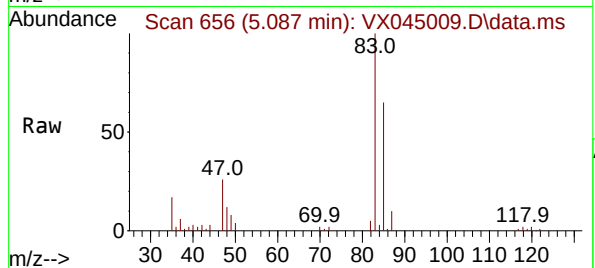
85 64.6 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#26

Cyclohexane

Concen: 19.201 ug/l

RT: 5.465 min Scan# 718

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

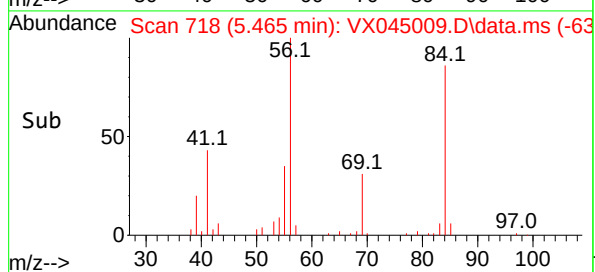
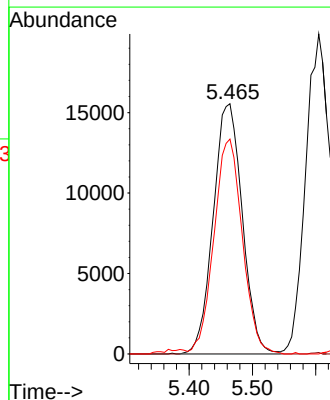
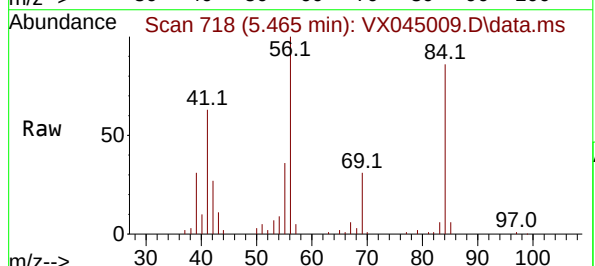
Tgt Ion: 56 Resp: 49670

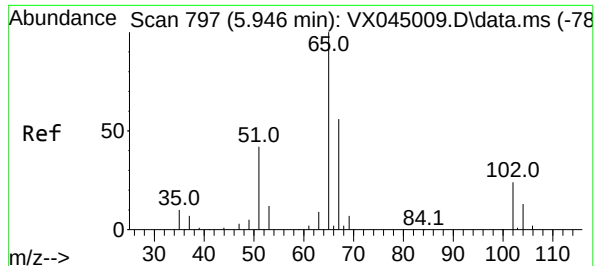
Ion Ratio Lower Upper

56 100

89 0.0 0.0 0.0

84 83.9 67.1 100.7





#27

1,2-Dichloroethane-d4

Concen: 29.663 ug/l

RT: 5.946 min Scan# 797

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 65 Resp: 5317

Ion Ratio Lower Upper

65 100

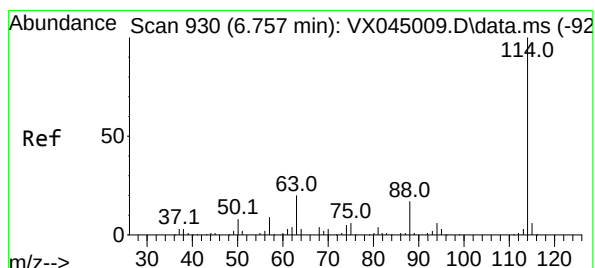
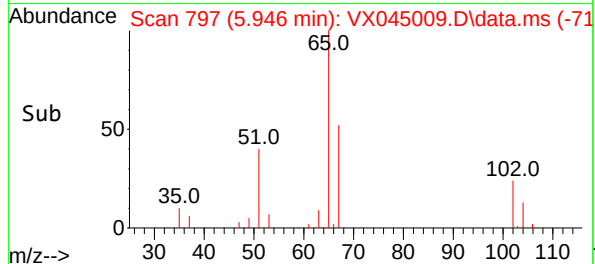
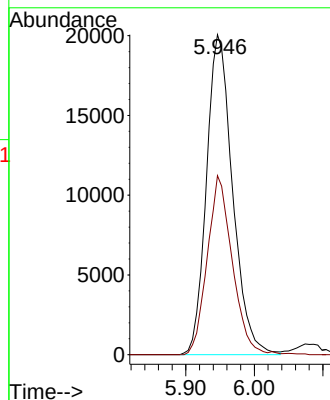
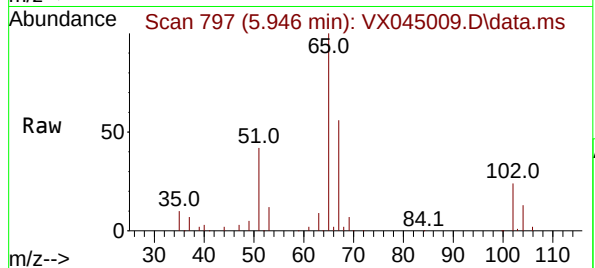
67 53.3 42.6 64.0

Manual Integrations

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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.757 min Scan# 930

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

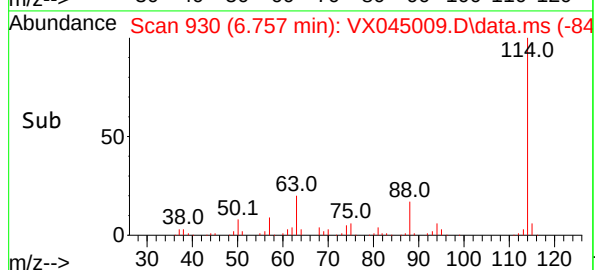
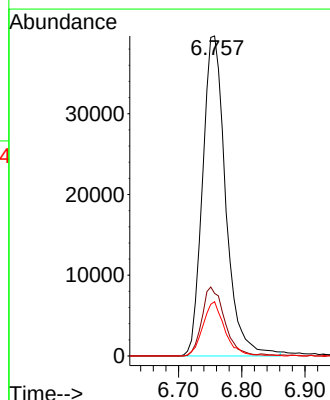
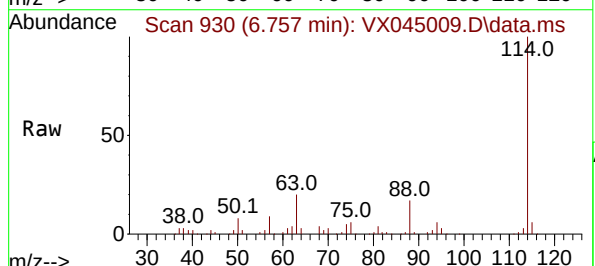
Tgt Ion:114 Resp: 100876

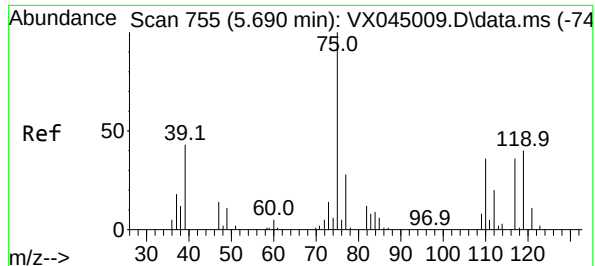
Ion Ratio Lower Upper

114 100

63 21.0 16.8 25.2

88 15.9 12.7 19.1





#29

1,1-Dichloropropene

Concen: 19.456 ug/l

RT: 5.690 min Scan# 755

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

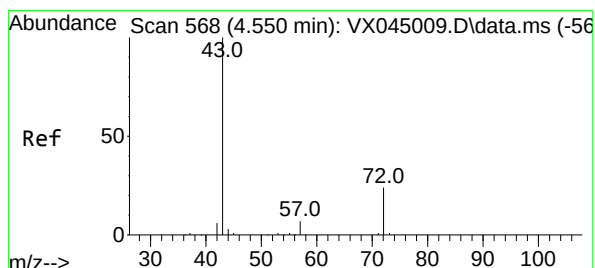
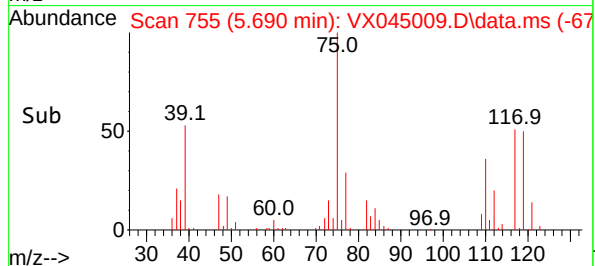
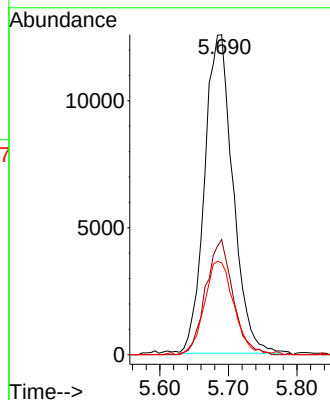
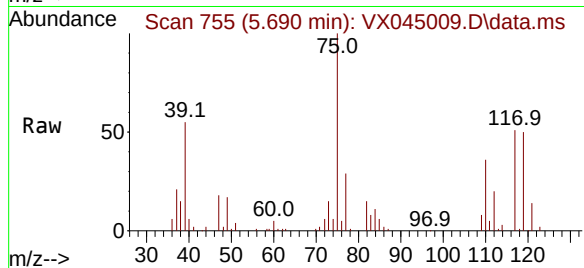
VSTDICCC020

Tgt Ion:	75	Resp:	36104
Ion	Ratio	Lower	Upper
75	100		
110	34.6	0.0	69.2
77	30.5	0.0	61.0

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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#30

2-Butanone

Concen: 97.278 ug/l

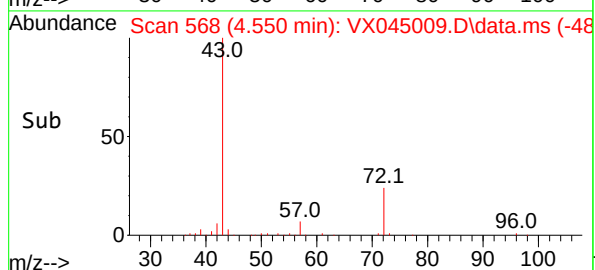
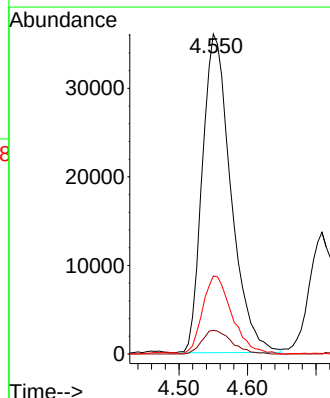
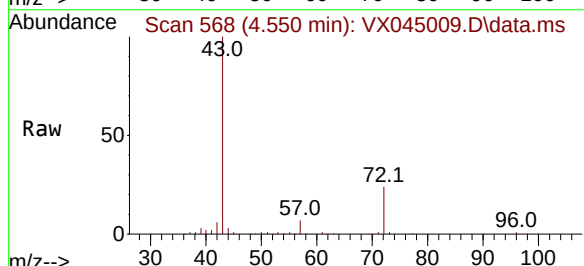
RT: 4.550 min Scan# 568

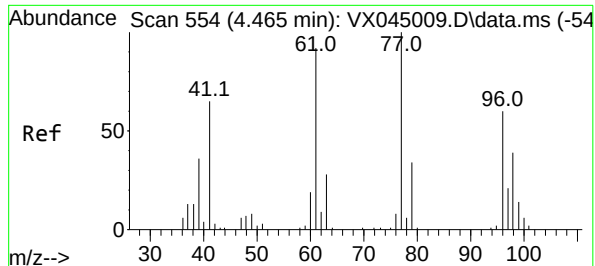
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:	43	Resp:	104263
Ion	Ratio	Lower	Upper
43	100		
57	7.7	6.2	9.2
72	25.2	20.2	30.2





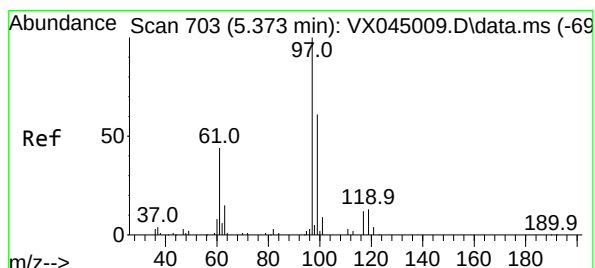
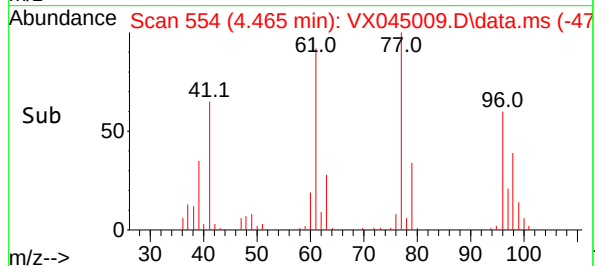
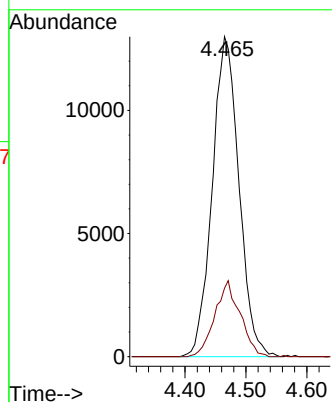
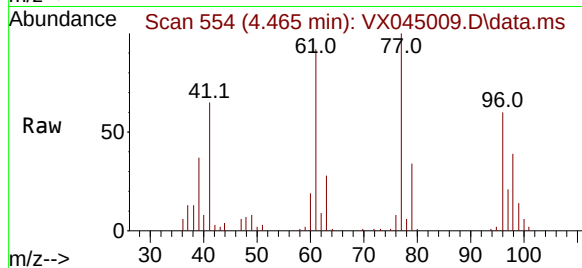
#31
2,2-Dichloropropane
Concen: 18.830 ug/l
RT: 4.465 min Scan# 554
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion: 77 Resp: 3951
Ion Ratio Lower Upper
77 100
97 22.5 18.0 27.0

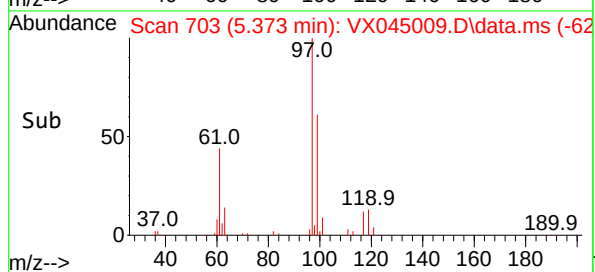
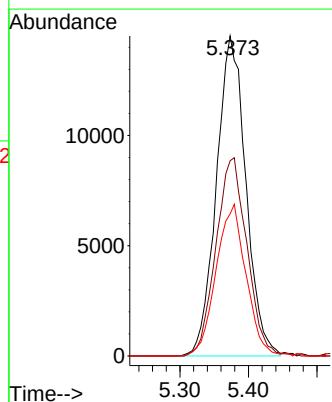
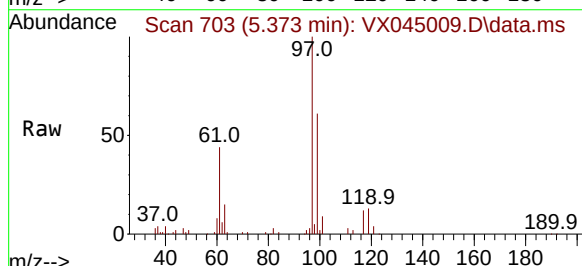
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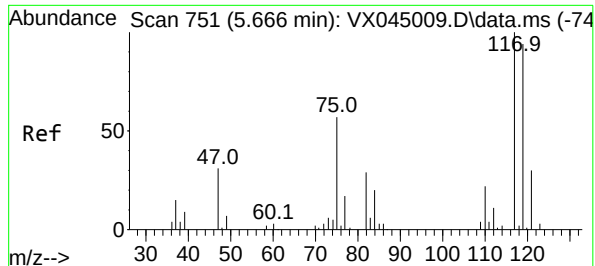
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#32
1,1,1-Trichloroethane
Concen: 19.266 ug/l
RT: 5.373 min Scan# 703
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 97 Resp: 43317
Ion Ratio Lower Upper
97 100
99 65.2 52.2 78.2
61 48.1 38.5 57.7





#33

Carbon Tetrachloride

Concen: 19.421 ug/l

RT: 5.666 min Scan# 751

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion:117 Resp: 3685

Ion Ratio Lower Upper

117 100

119 93.9 75.1 112.7

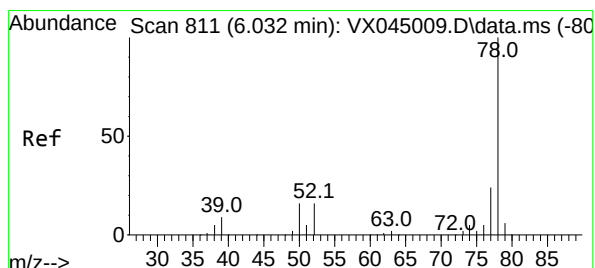
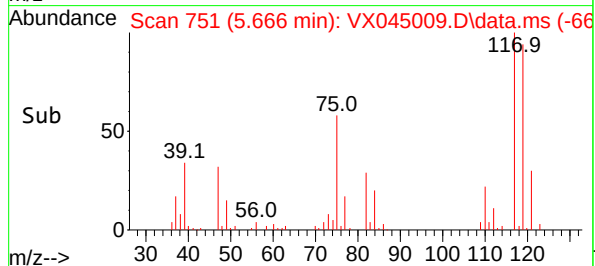
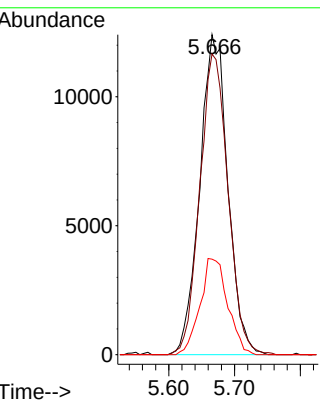
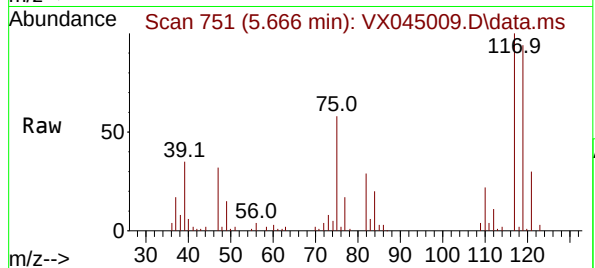
121 29.9 23.9 35.9

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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#34

Benzene

Concen: 19.609 ug/l

RT: 6.032 min Scan# 811

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

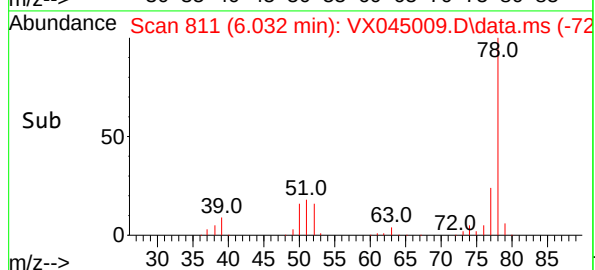
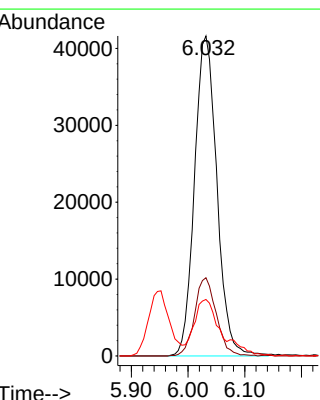
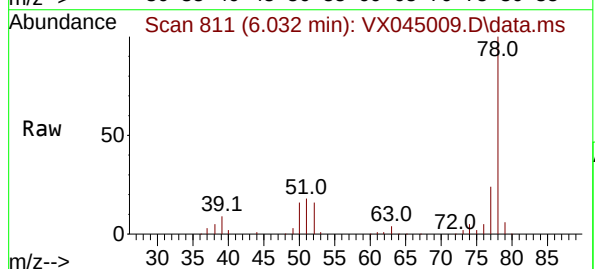
Tgt Ion: 78 Resp: 114107

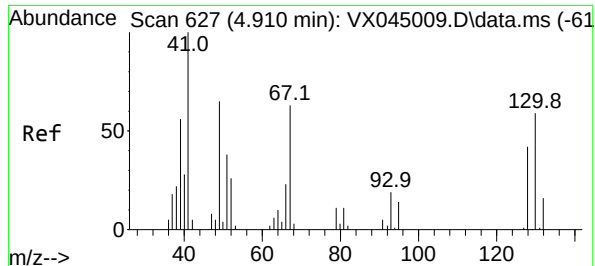
Ion Ratio Lower Upper

78 100

77 24.5 19.6 29.4

51 17.2 13.8 20.6





#35

Methacrylonitrile

Concen: 19.509 ug/l

RT: 4.910 min Scan# 61

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 41 Resp: 22370

Ion Ratio Lower Upper

41 100

39 55.6 27.8 83.4

67 63.0 31.5 94.5

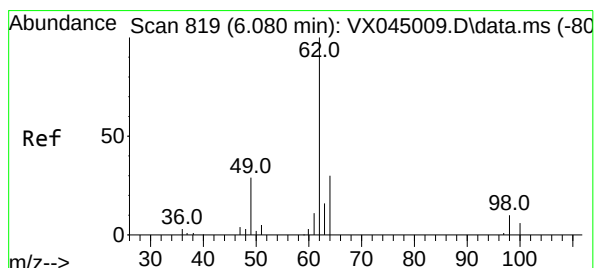
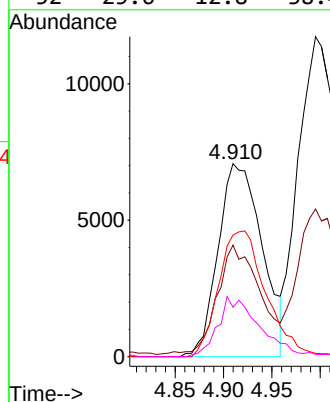
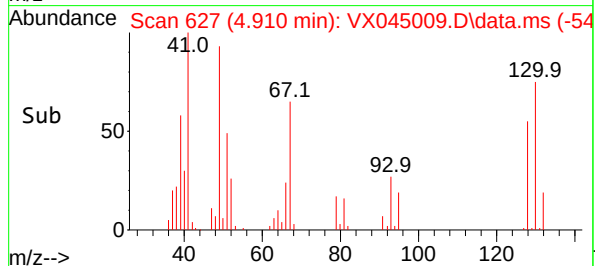
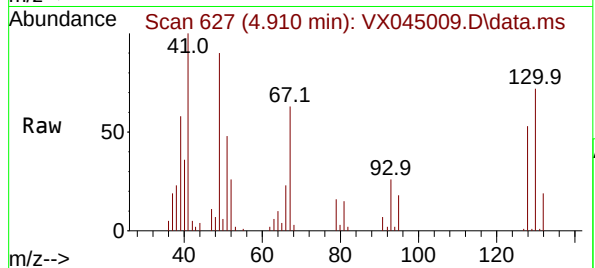
52 25.6 12.8 38.4

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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#36

1,2-Dichloroethane

Concen: 19.604 ug/l

RT: 6.080 min Scan# 819

Delta R.T. 0.000 min

Lab File: VX045009.D

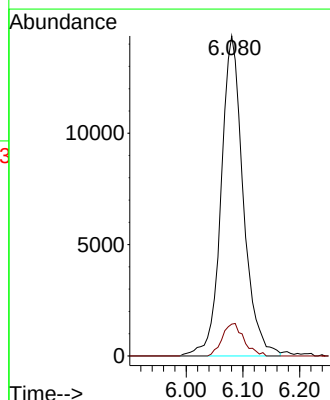
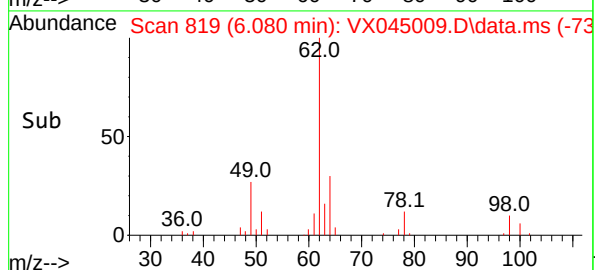
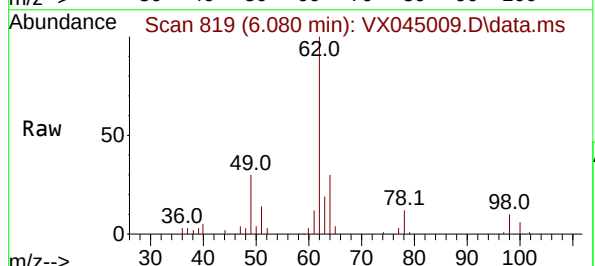
Acq: 21 Feb 2025 10:21

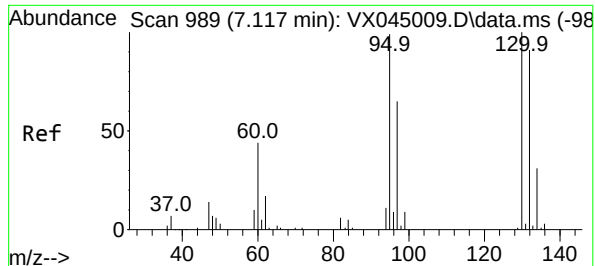
Tgt Ion: 62 Resp: 39058

Ion Ratio Lower Upper

62 100

98 9.9 7.9 11.9





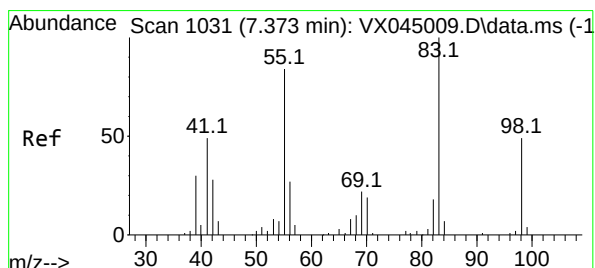
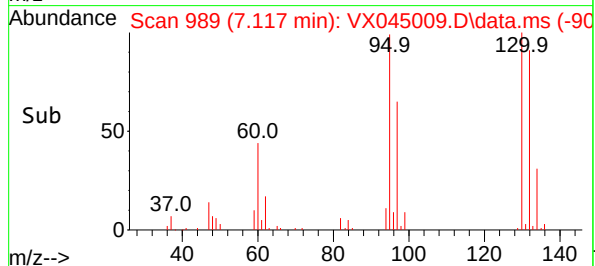
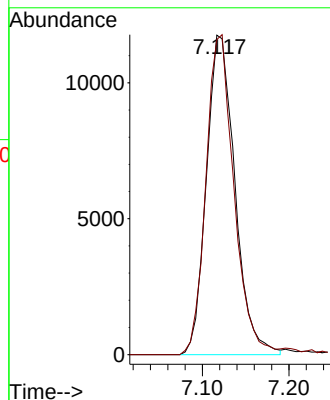
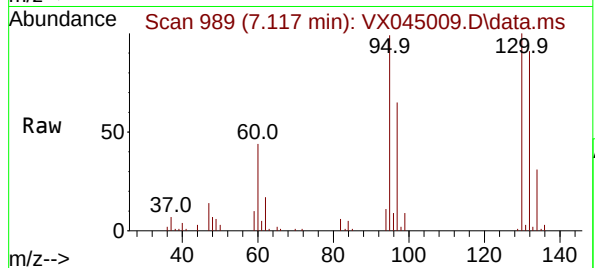
#37
Trichloroethene
Concen: 19.753 ug/l
RT: 7.117 min Scan# 989
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion:130 Resp: 26892
Ion Ratio Lower Upper
130 100
95 98.7 79.0 118.4

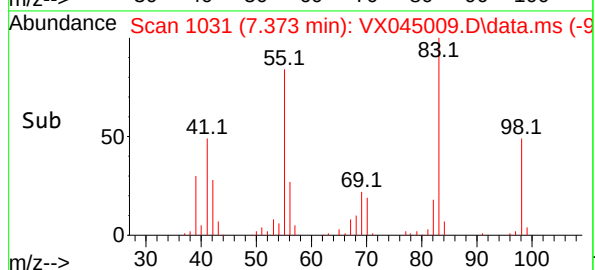
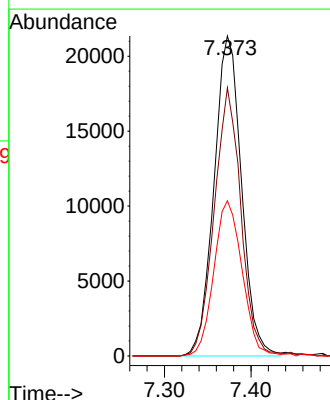
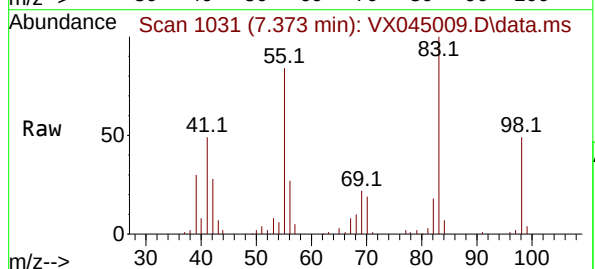
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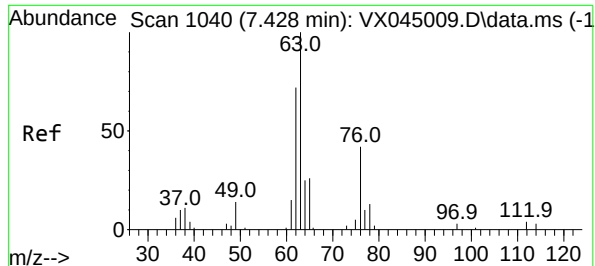
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#38
Methylcyclohexane
Concen: 18.899 ug/l
RT: 7.373 min Scan# 1031
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 83 Resp: 47088
Ion Ratio Lower Upper
83 100
55 81.3 40.6 122.0
98 49.7 24.9 74.6





#39

1,2-Dichloropropane

Concen: 19.738 ug/l

RT: 7.428 min Scan# 1040

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 63 Resp: 2855

Ion Ratio Lower Upper

63 100

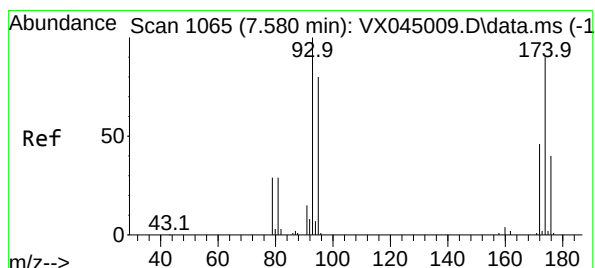
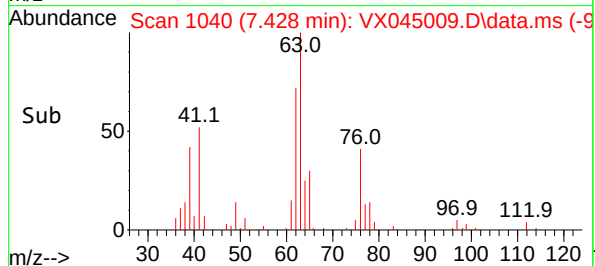
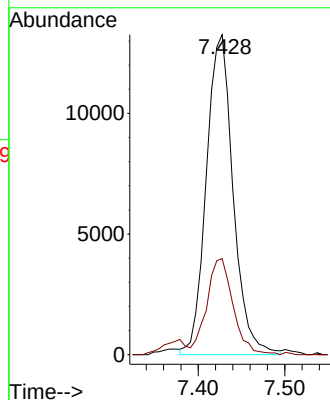
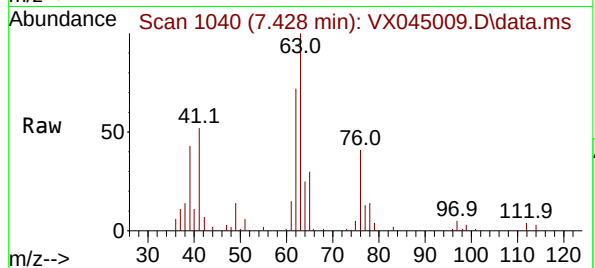
65 30.4 24.3 36.5

Manual Integrations

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Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#40

Dibromomethane

Concen: 19.509 ug/l

RT: 7.580 min Scan# 1065

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

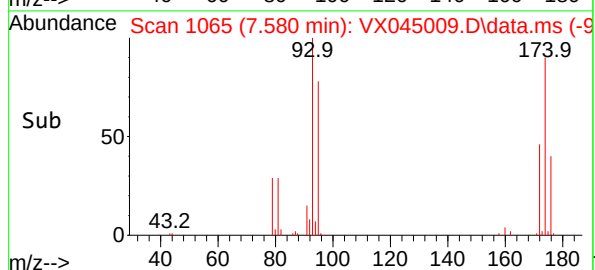
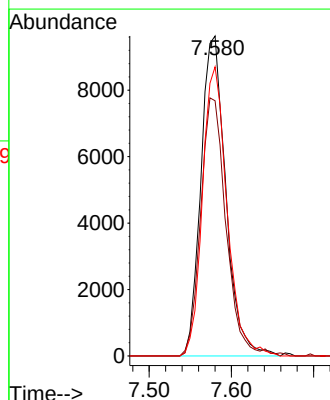
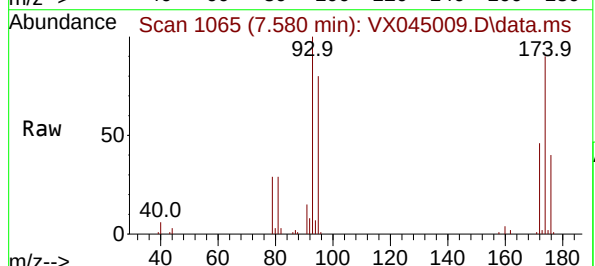
Tgt Ion: 93 Resp: 20254

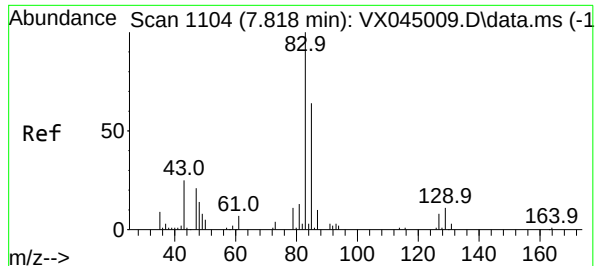
Ion Ratio Lower Upper

93 100

95 81.3 0.0 162.6

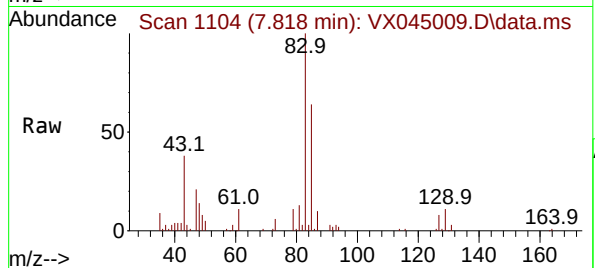
174 89.4 0.0 178.8





#41
Bromodichloromethane
Concen: 19.335 ug/l
RT: 7.818 min Scan# 1104
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

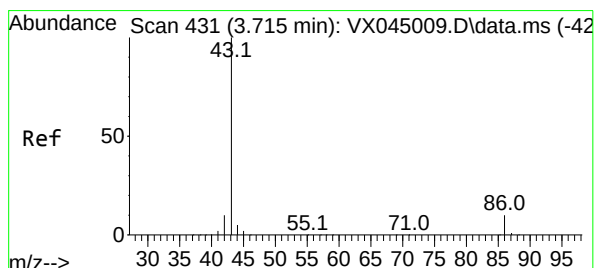
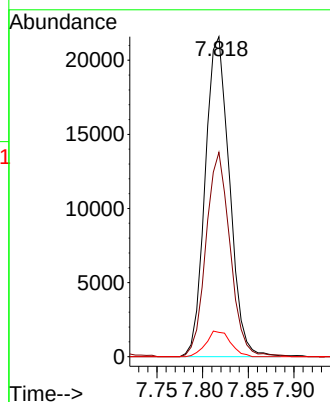
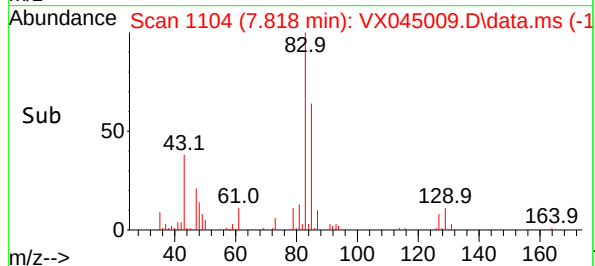
Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020



Tgt Ion: 83 Resp: 3989
Ion Ratio Lower Upper
83 100
85 63.8 51.0 76.6
127 7.6 6.1 9.1

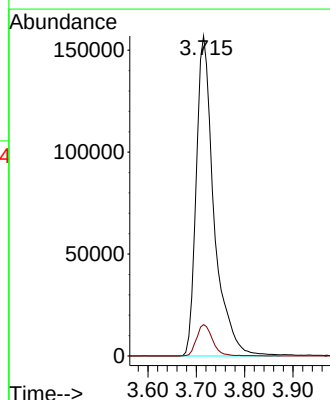
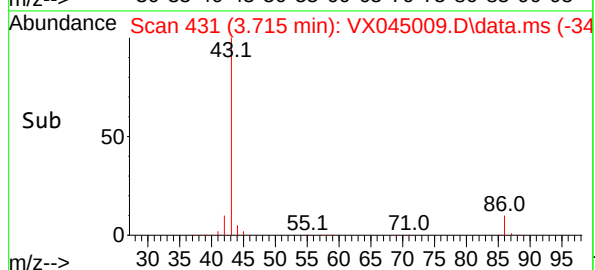
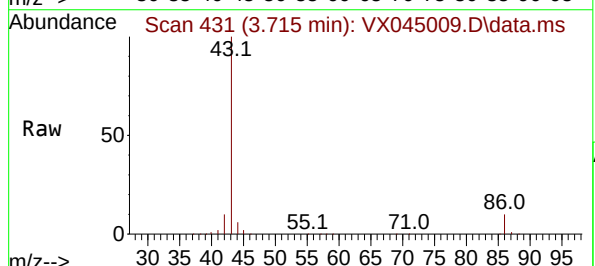
Manual Integrations
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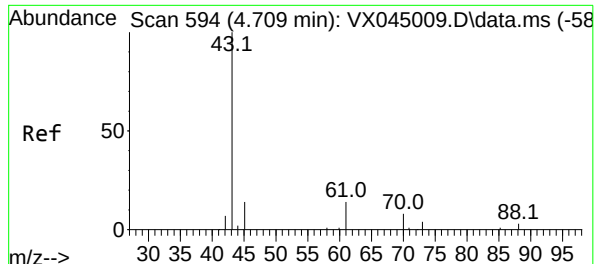
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#42
Vinyl Acetate
Concen: 96.216 ug/l
RT: 3.715 min Scan# 431
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 43 Resp: 400180
Ion Ratio Lower Upper
43 100
86 8.7 7.0 10.4





#43

Ethyl Acetate

Concen: 19.350 ug/l

RT: 4.709 min Scan# 594

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 43 Resp: 3889

Ion Ratio Lower Upper

43 100

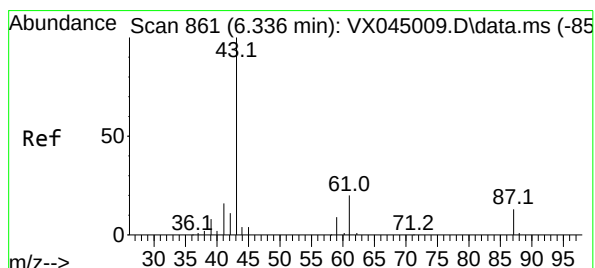
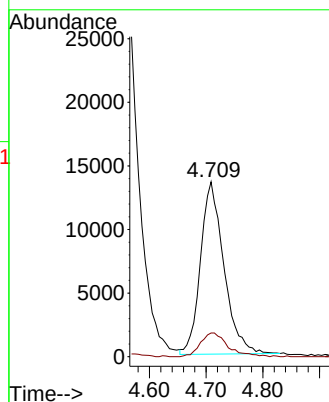
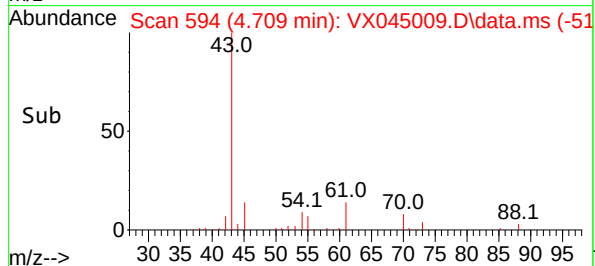
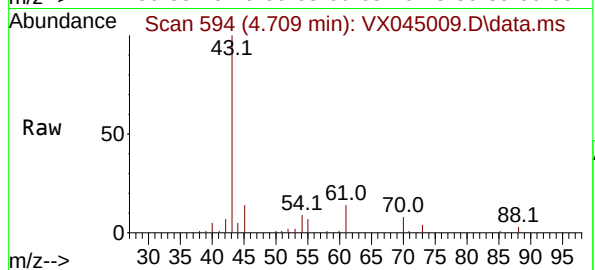
45 15.9 12.7 19.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#44

Isopropyl Acetate

Concen: 18.649 ug/l

RT: 6.336 min Scan# 861

Delta R.T. 0.000 min

Lab File: VX045009.D

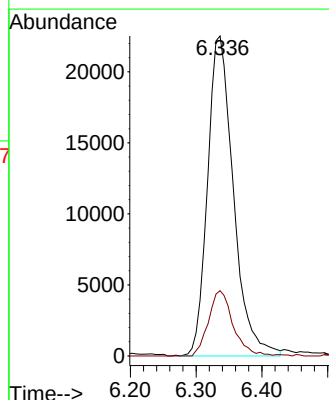
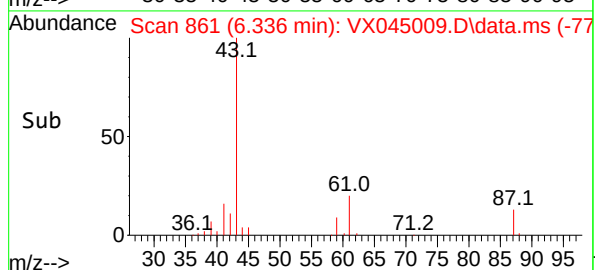
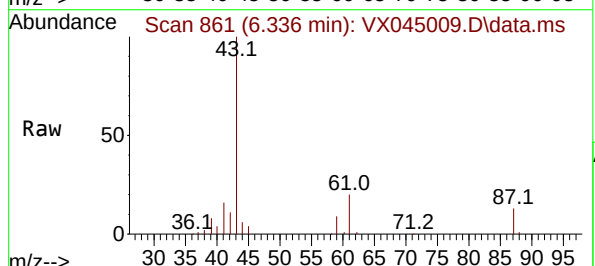
Acq: 21 Feb 2025 10:21

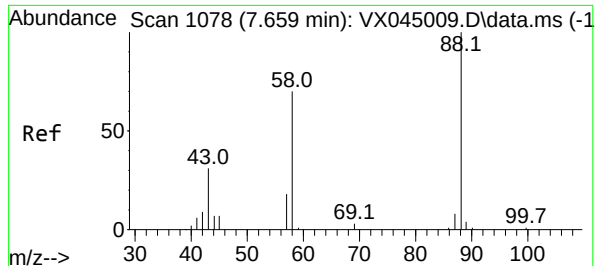
Tgt Ion: 43 Resp: 61693

Ion Ratio Lower Upper

43 100

61 19.4 15.5 23.3





#45

1,4-Dioxane

Concen: 407.910 ug/l

RT: 7.659 min Scan# 1078

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 88 Resp: 14028

Ion Ratio Lower Upper

88 100

43 37.0 29.6 44.4

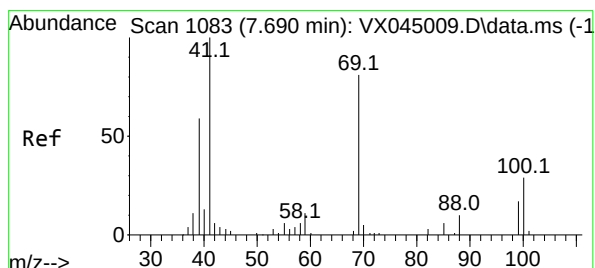
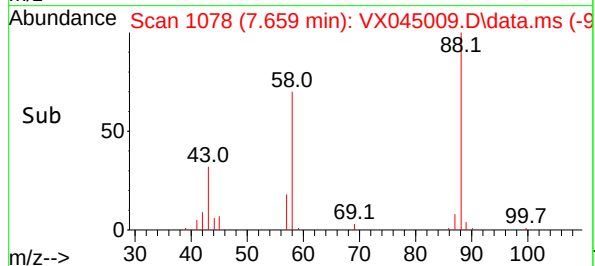
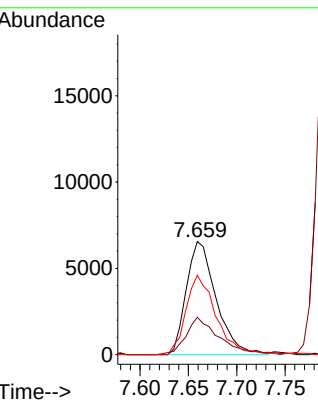
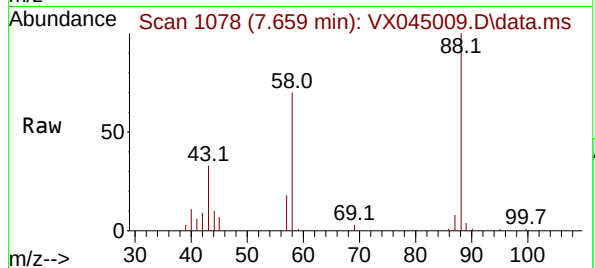
58 70.3 56.2 84.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#46

Methyl methacrylate

Concen: 18.904 ug/l

RT: 7.690 min Scan# 1083

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

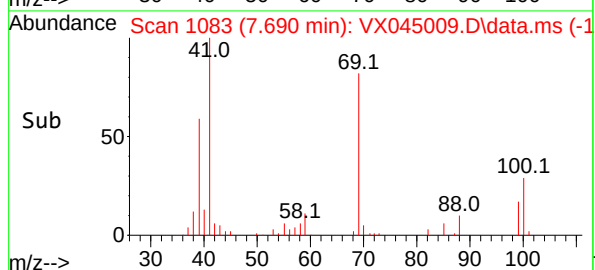
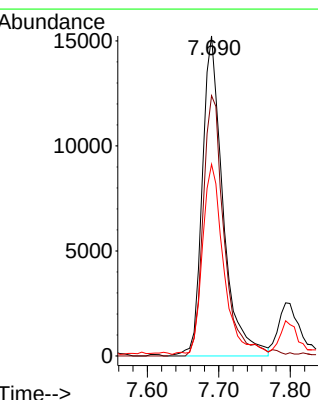
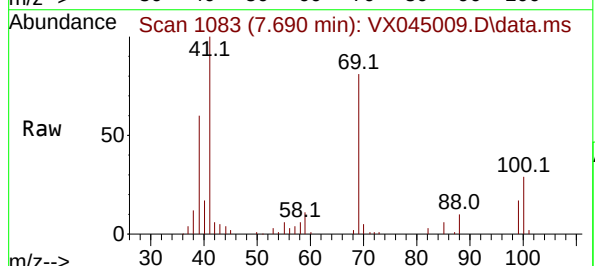
Tgt Ion: 41 Resp: 30666

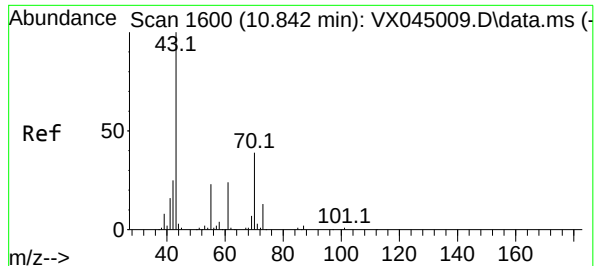
Ion Ratio Lower Upper

41 100

69 81.4 40.7 122.1

39 59.0 29.5 88.5





#47

n-amy1 Acetate

Concen: 18.814 ug/l

RT: 10.842 min Scan# 1600

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 43 Resp: 54008

Ion Ratio Lower Upper

43 100

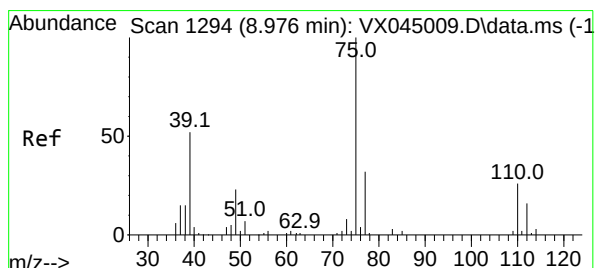
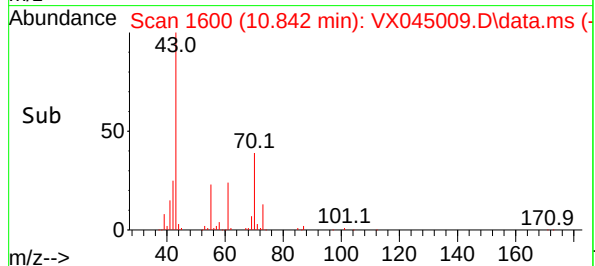
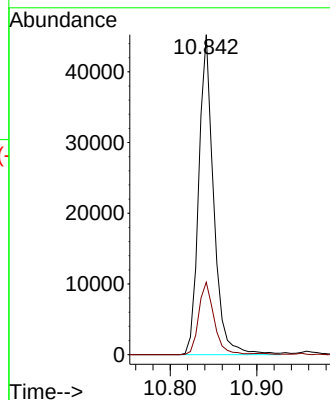
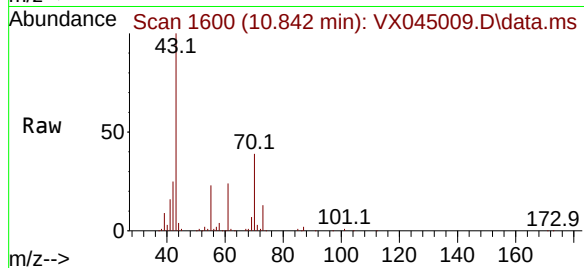
55 23.2 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#48

t-1,3-Dichloropropene

Concen: 17.922 ug/l

RT: 8.976 min Scan# 1294

Delta R.T. 0.000 min

Lab File: VX045009.D

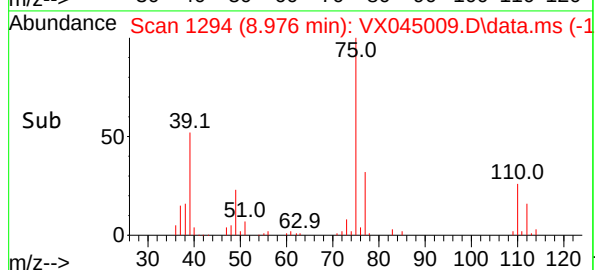
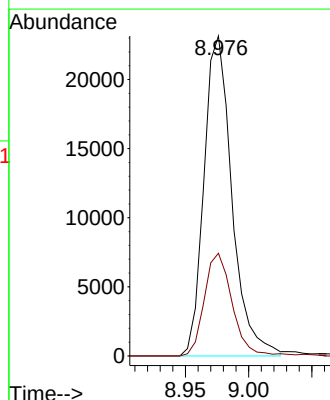
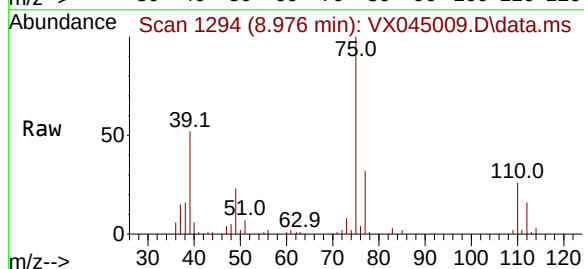
Acq: 21 Feb 2025 10:21

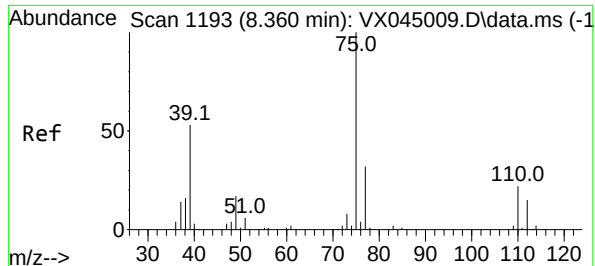
Tgt Ion: 75 Resp: 35645

Ion Ratio Lower Upper

75 100

77 32.1 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 18.974 ug/l

RT: 8.360 min Scan# 1193

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 75 Resp: 42718

Ion Ratio Lower Upper

75 100

77 32.4 25.9 38.9

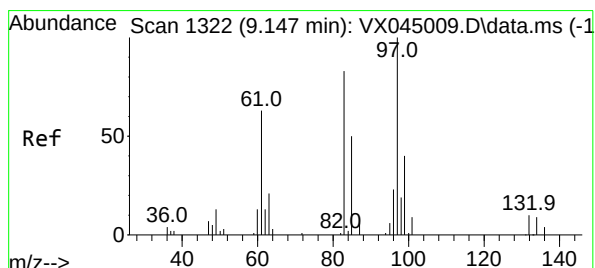
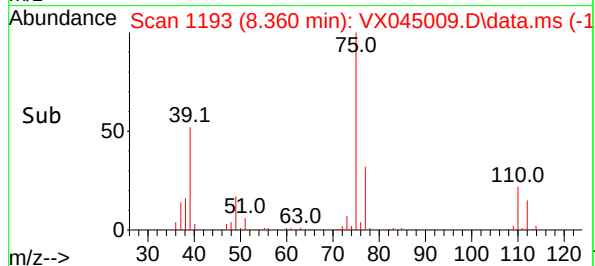
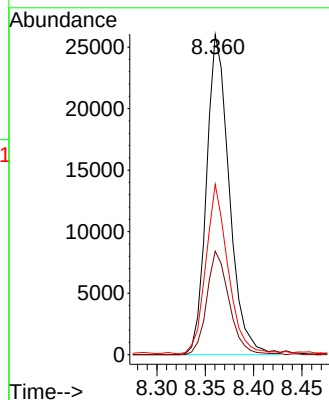
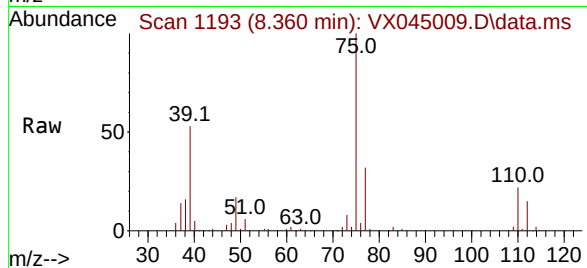
39 52.9 42.3 63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#50

1,1,2-Trichloroethane

Concen: 20.047 ug/l

RT: 9.147 min Scan# 1322

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion: 97 Resp: 27147

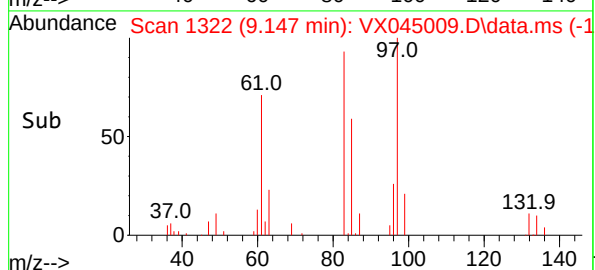
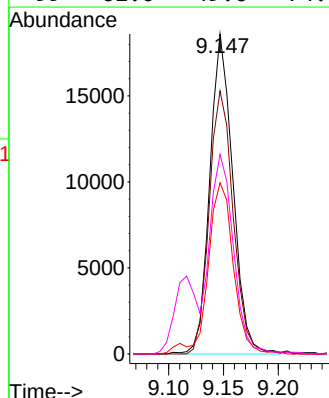
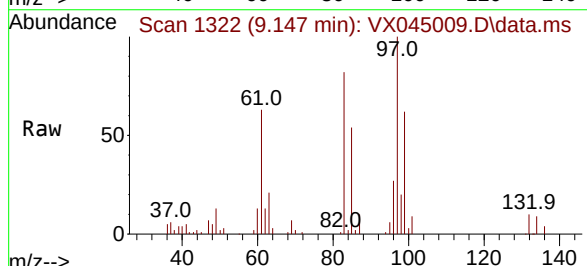
Ion Ratio Lower Upper

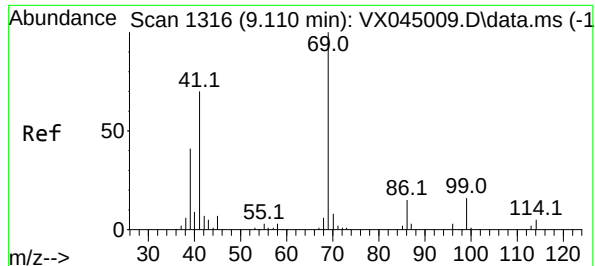
97 100

83 82.5 66.0 99.0

85 53.1 42.5 63.7

99 62.0 49.6 74.4





#51

Ethyl methacrylate

Concen: 18.495 ug/l

RT: 9.110 min Scan# 1316

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 69 Resp: 39389

Ion Ratio Lower Upper

69 100

41 70.2 35.1 105.3

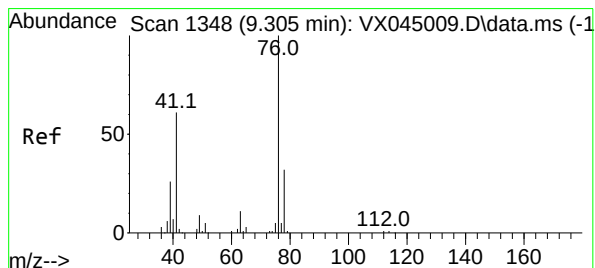
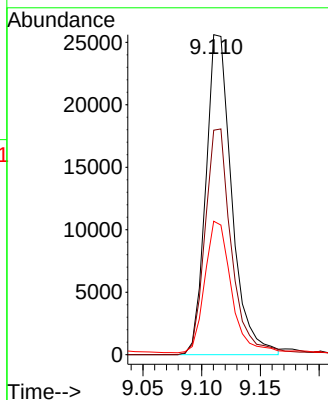
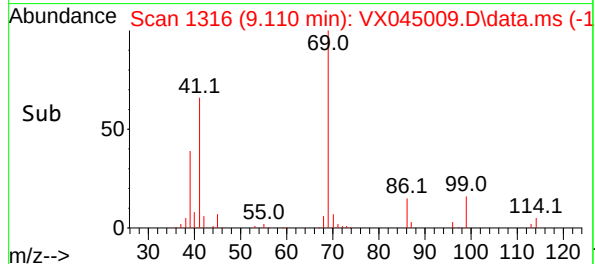
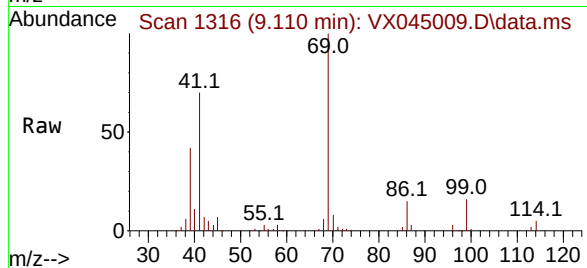
39 41.1 20.5 61.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#52

1,3-Dichloropropane

Concen: 19.965 ug/l

RT: 9.305 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VX045009.D

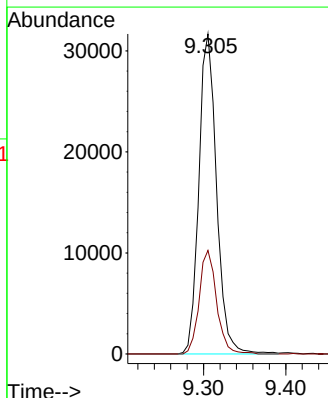
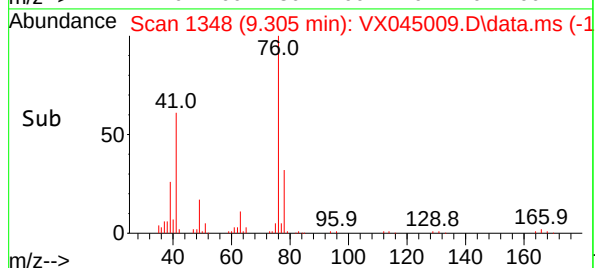
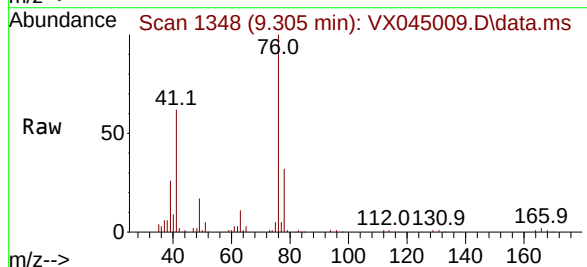
Acq: 21 Feb 2025 10:21

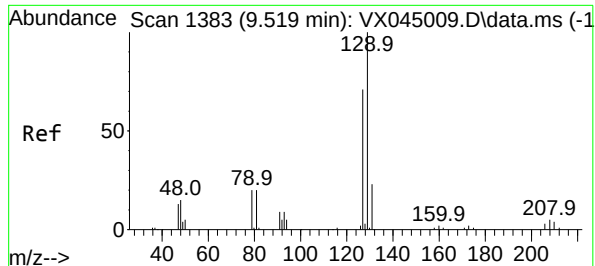
Tgt Ion: 76 Resp: 47373

Ion Ratio Lower Upper

76 100

78 31.8 0.0 63.6





#53

Dibromochloromethane

Concen: 19.556 ug/l

RT: 9.519 min Scan# 1383

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion:129 Resp: 29289

Ion Ratio Lower Upper

129 100

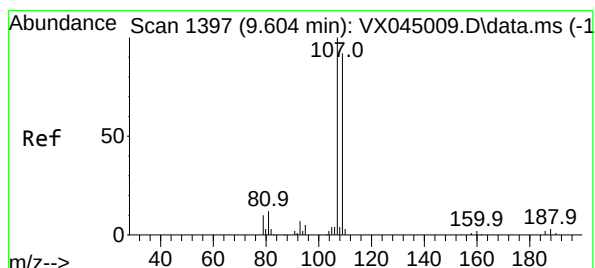
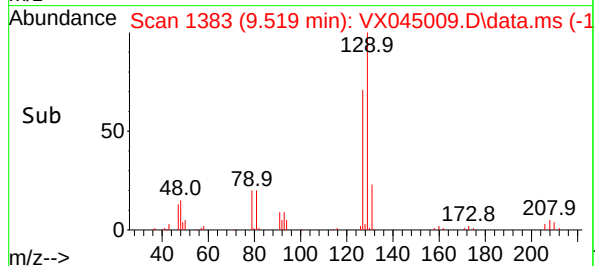
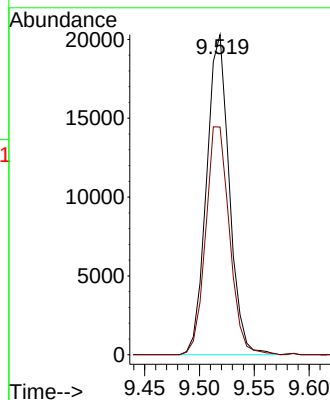
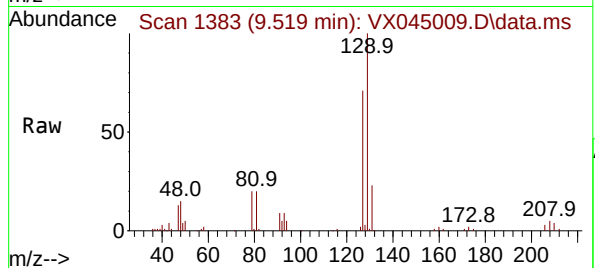
127 74.6 37.3 111.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#54

1,2-Dibromoethane

Concen: 19.597 ug/l

RT: 9.604 min Scan# 1397

Delta R.T. 0.000 min

Lab File: VX045009.D

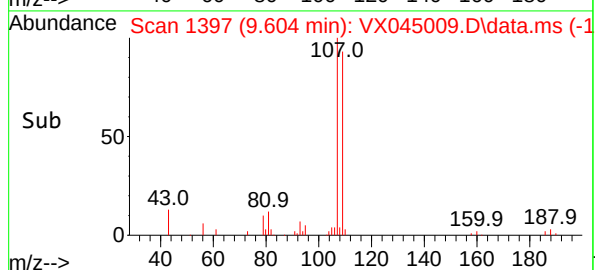
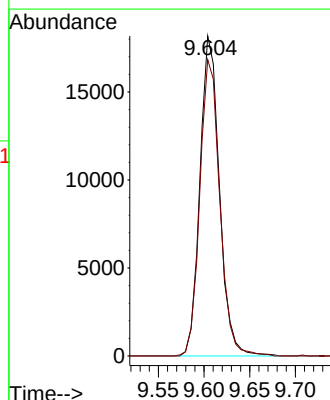
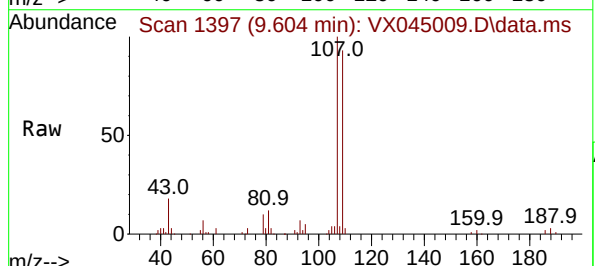
Acq: 21 Feb 2025 10:21

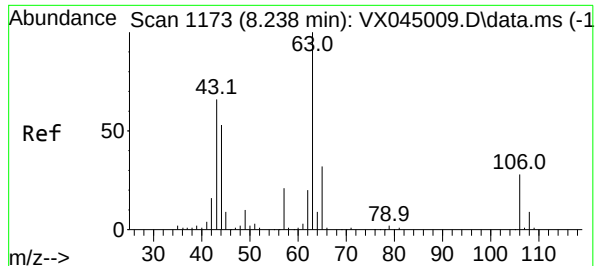
Tgt Ion:107 Resp: 26948

Ion Ratio Lower Upper

107 100

109 94.8 75.8 113.8





#55

2-Chloroethyl vinyl ether

Concen: 96.576 ug/l

RT: 8.238 min Scan# 1173

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

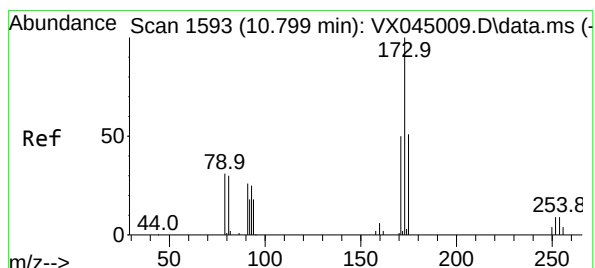
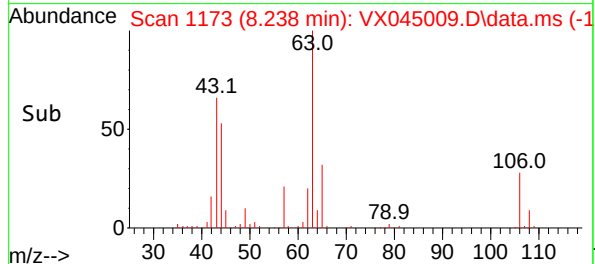
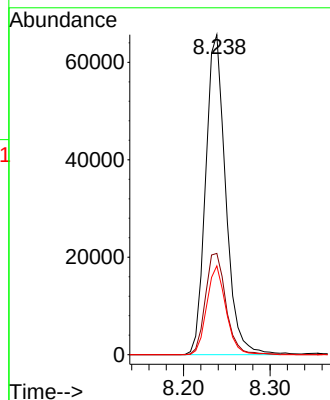
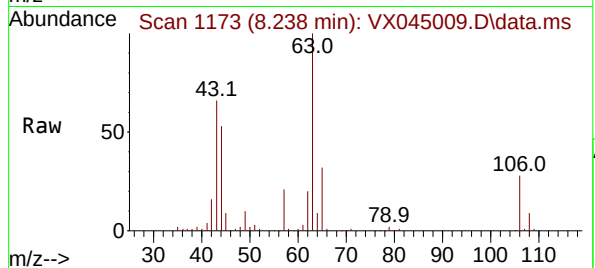
VSTDICCC020

Tgt Ion:	63	Resp:	105624
Ion	Ratio	Lower	Upper
63	100		
65	32.7	26.2	39.2
106	26.5	21.2	31.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#56

Bromoform

Concen: 18.467 ug/l

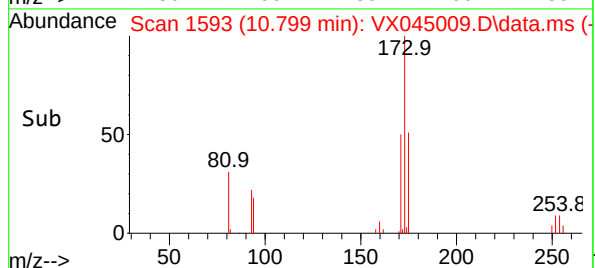
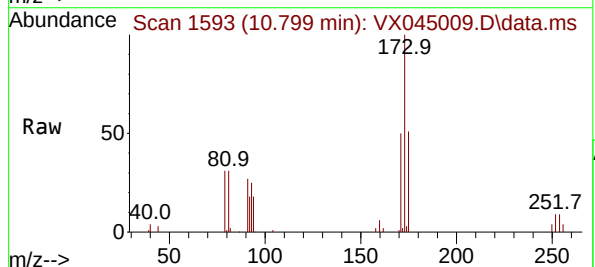
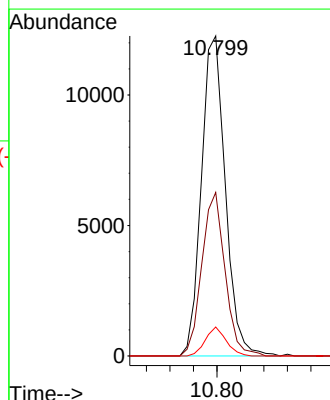
RT: 10.799 min Scan# 1593

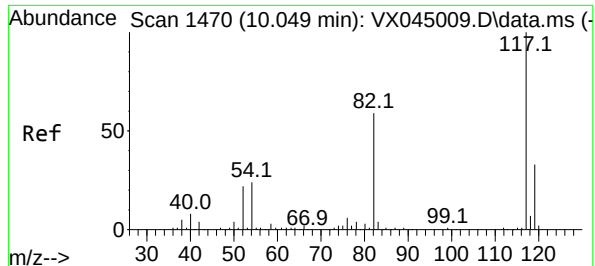
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:	173	Resp:	17331
Ion	Ratio	Lower	Upper
173	100		
175	49.5	39.6	59.4
254	7.9	6.3	9.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.049 min Scan# 1470

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

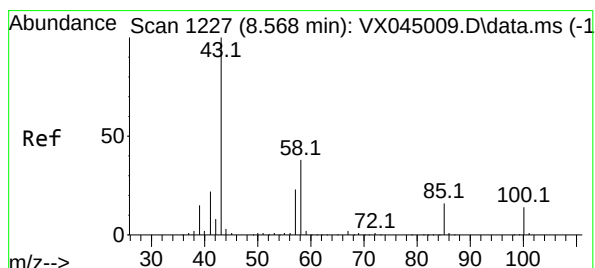
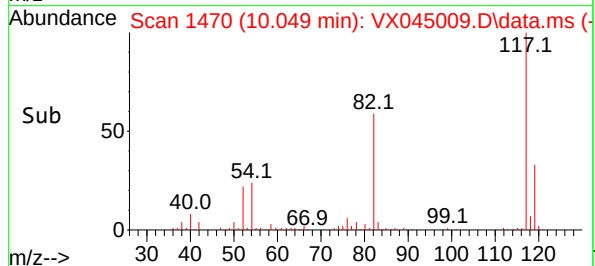
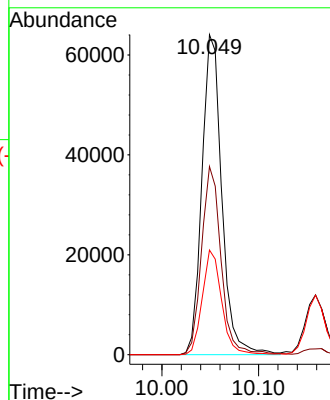
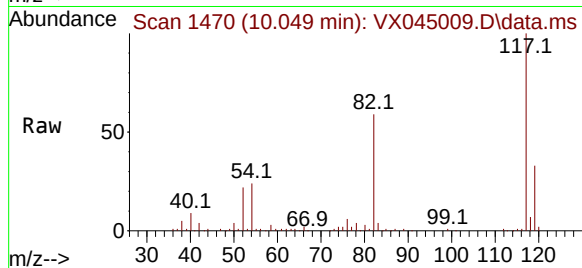
VSTDICCC020

Tgt Ion:	117	Resp:	91818
Ion	Ratio	Lower	Upper
117	100		
82	57.3	45.8	68.8
119	31.9	25.5	38.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#58

4-Methyl-2-Pentanone

Concen: 99.596 ug/l

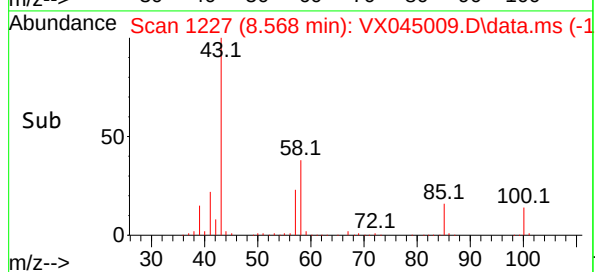
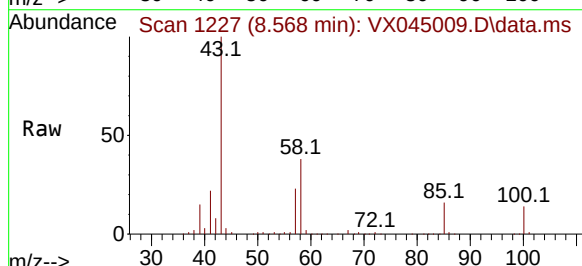
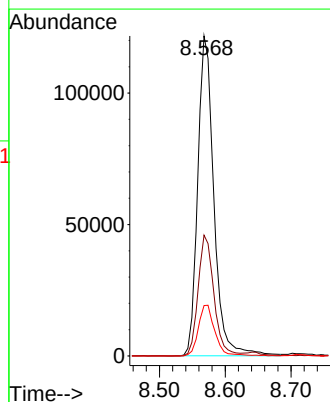
RT: 8.568 min Scan# 1227

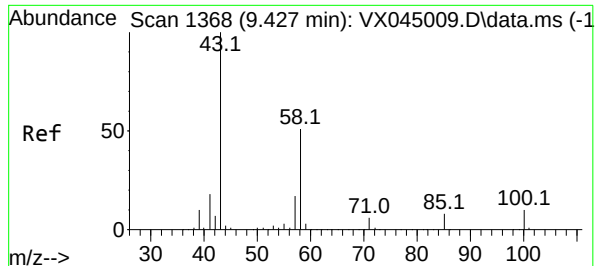
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:	43	Resp:	208023
Ion	Ratio	Lower	Upper
43	100		
58	36.9	29.5	44.3
85	16.1	12.9	19.3





#59

2-Hexanone

Concen: 98.899 ug/l

RT: 9.427 min Scan# 1368

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 43 Resp: 149308

Ion Ratio Lower Upper

43 100

58 52.0 41.6 62.4

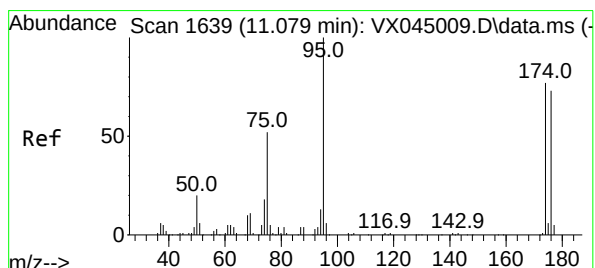
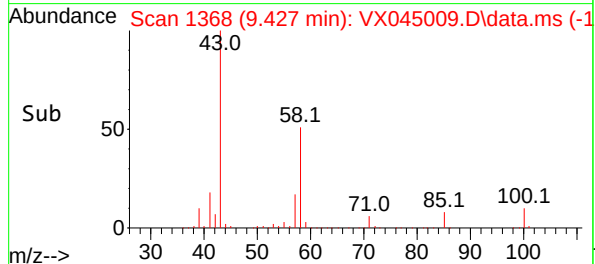
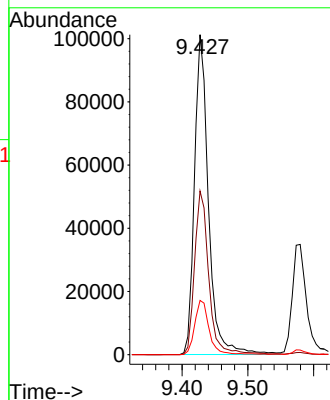
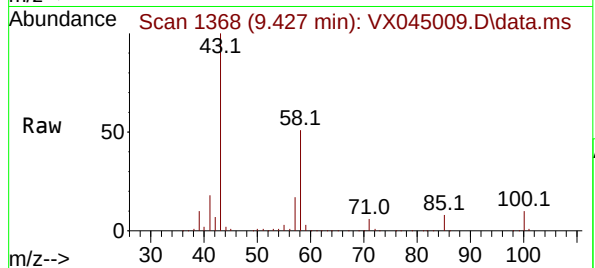
57 17.2 13.8 20.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#60

4-Bromofluorobenzene

Concen: 29.939 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

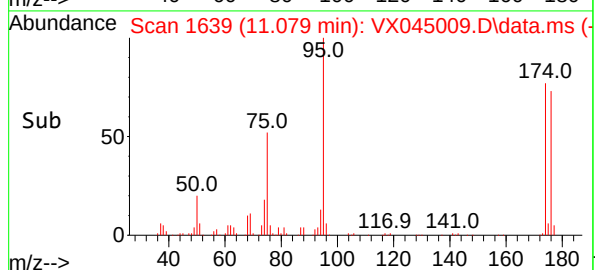
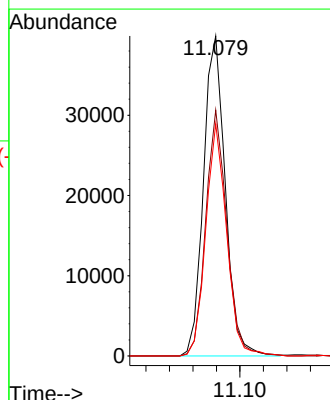
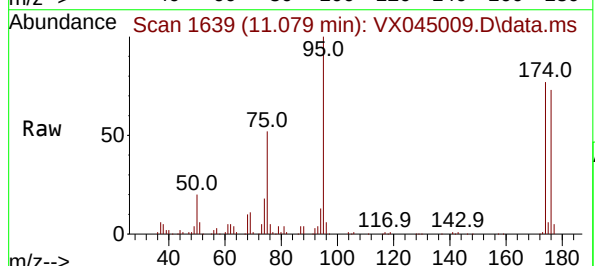
Tgt Ion: 95 Resp: 51382

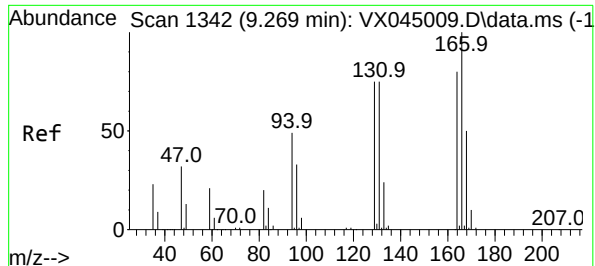
Ion Ratio Lower Upper

95 100

174 74.4 59.5 89.3

176 69.4 55.5 83.3





#61

Tetrachloroethene

Concen: 19.926 ug/l

RT: 9.269 min Scan# 11

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion:164 Resp: 22529

Ion Ratio Lower Upper

164 100

166 125.4 100.3 150.5

129 94.4 75.5 113.3

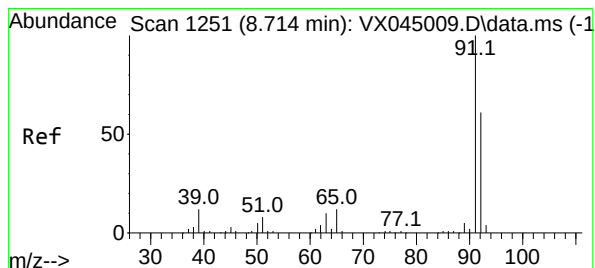
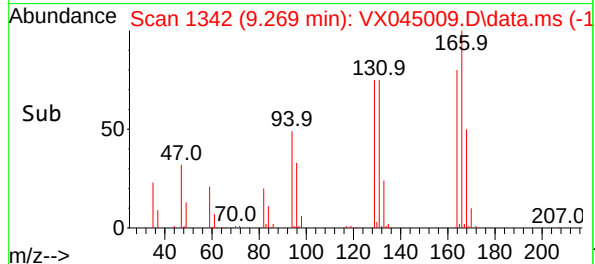
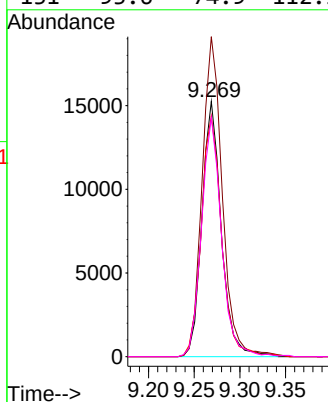
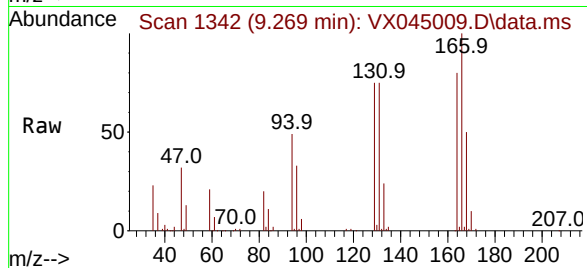
131 93.6 74.9 112.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#62

Toluene

Concen: 19.642 ug/l

RT: 8.714 min Scan# 1251

Delta R.T. 0.000 min

Lab File: VX045009.D

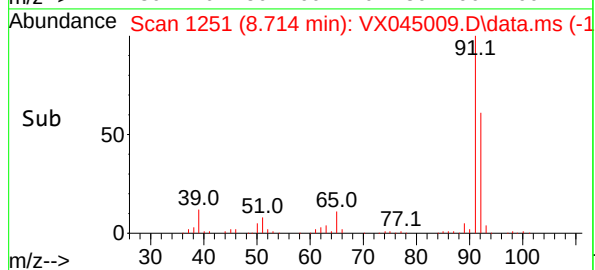
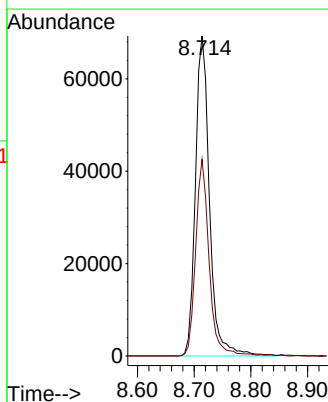
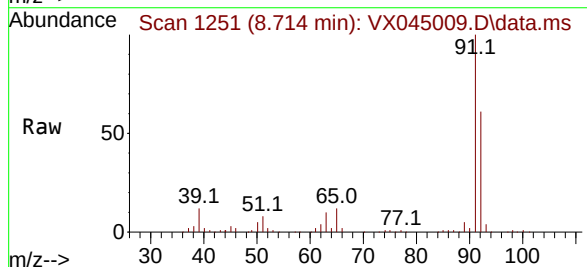
Acq: 21 Feb 2025 10:21

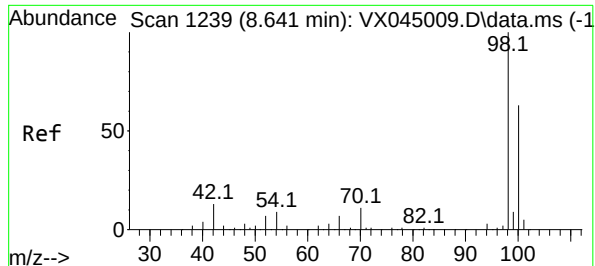
Tgt Ion: 91 Resp: 119473

Ion Ratio Lower Upper

91 100

92 58.6 46.9 70.3





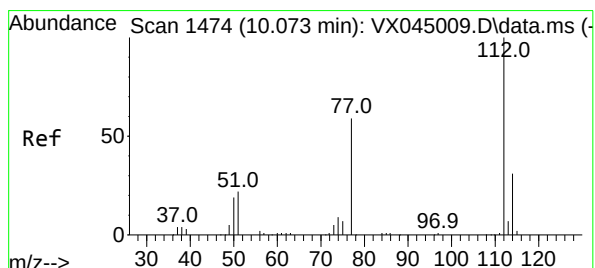
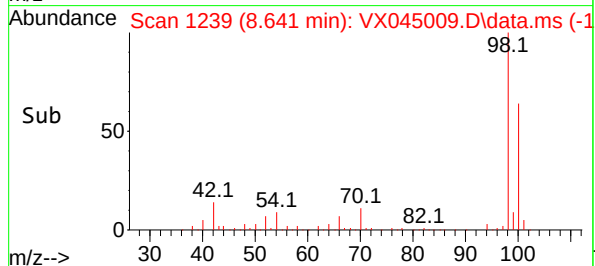
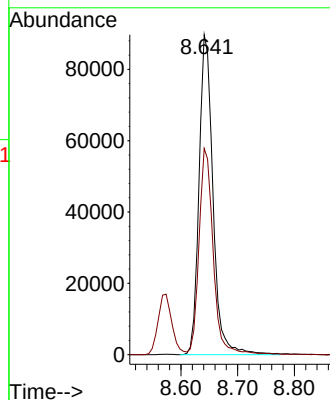
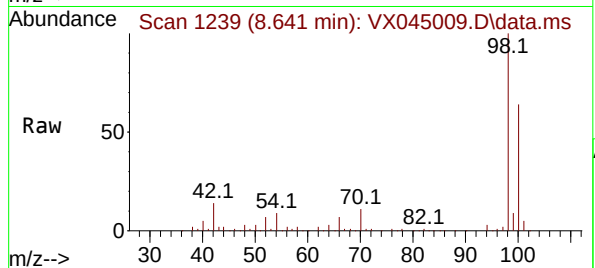
#63
Toluene-d8
Concen: 30.175 ug/l
RT: 8.641 min Scan# 1239
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion: 98 Resp: 153274
Ion Ratio Lower Upper
98 100
100 64.6 51.7 77.5

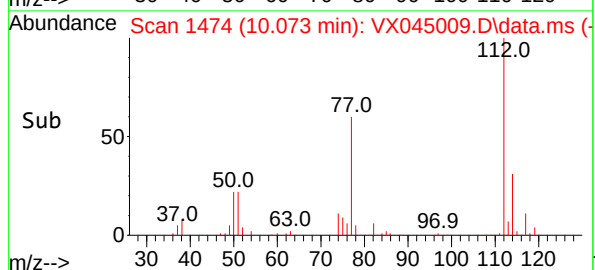
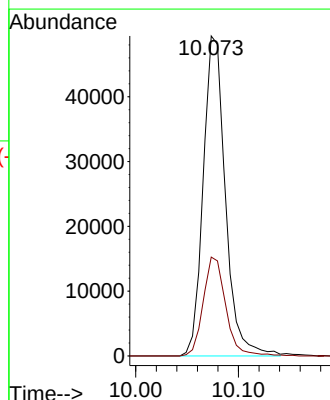
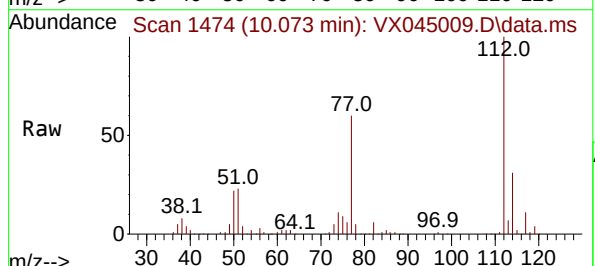
Manual Integrations
APPROVED

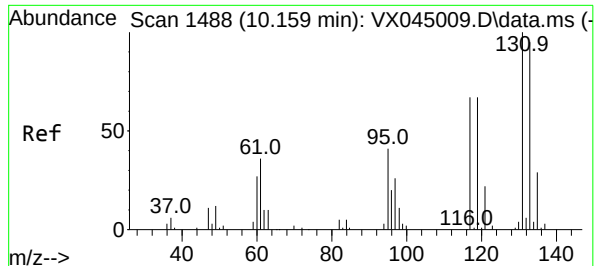
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#64
Chlorobenzene
Concen: 19.710 ug/l
RT: 10.073 min Scan# 1474
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion:112 Resp: 74287
Ion Ratio Lower Upper
112 100
114 30.9 24.7 37.1





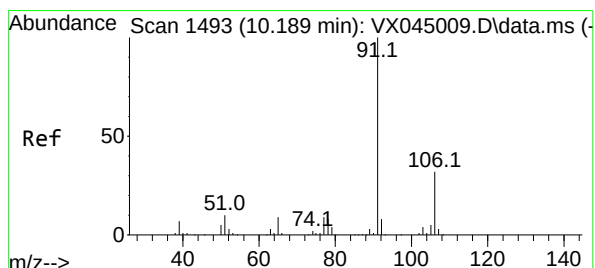
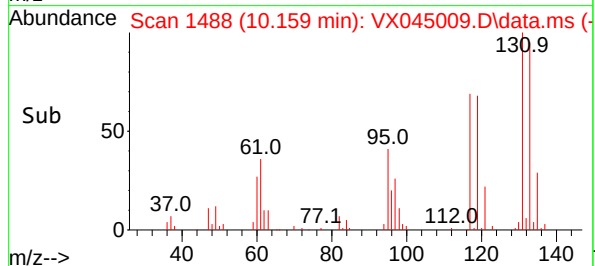
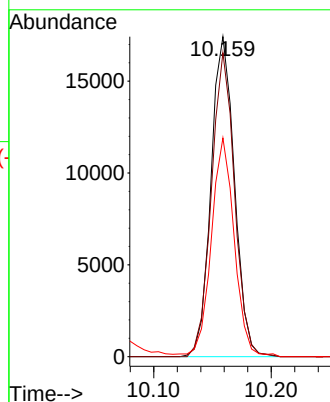
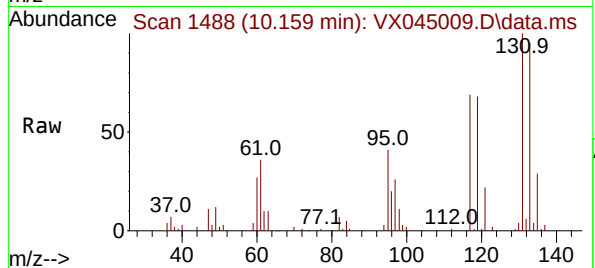
#65
1,1,1,2-Tetrachloroethane
Concen: 19.406 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion:131 Resp: 24135
Ion Ratio Lower Upper
131 100
133 93.9 0.0 187.8
119 66.5 0.0 133.0

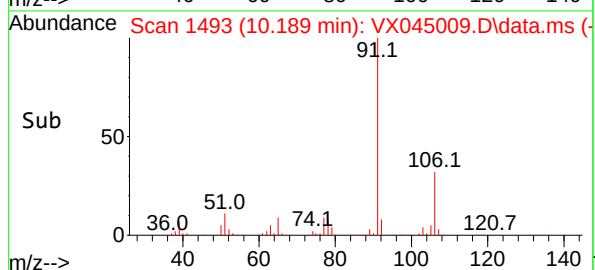
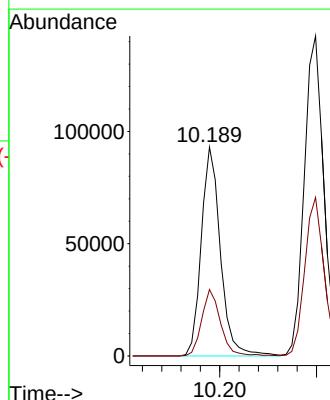
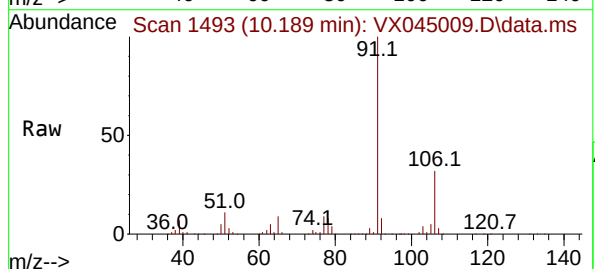
Manual Integrations
APPROVED

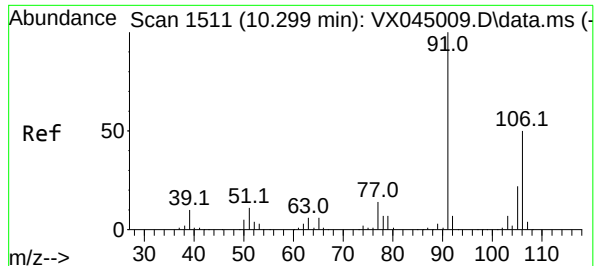
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#66
Ethyl Benzene
Concen: 19.302 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 91 Resp: 128535
Ion Ratio Lower Upper
91 100
106 31.8 25.4 38.2





#67

m/p-Xylenes

Concen: 40.260 ug/l

RT: 10.299 min Scan# 1511

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion:106 Resp: 9988

Ion Ratio Lower Upper

106 100

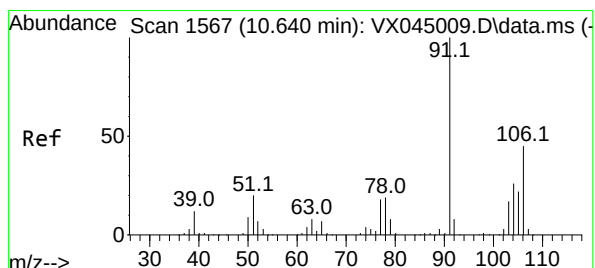
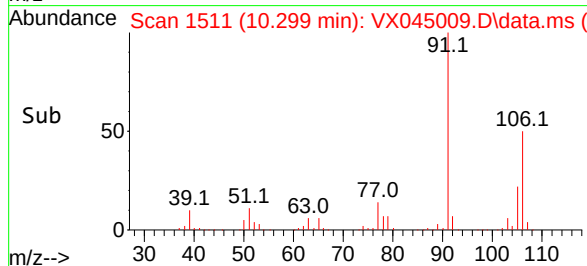
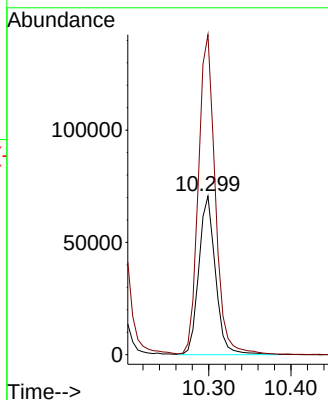
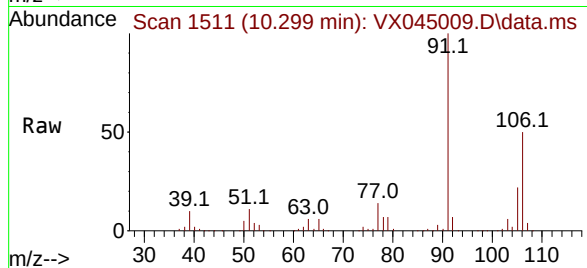
91 204.6 163.7 245.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#68

o-Xylene

Concen: 20.071 ug/l

RT: 10.640 min Scan# 1567

Delta R.T. 0.000 min

Lab File: VX045009.D

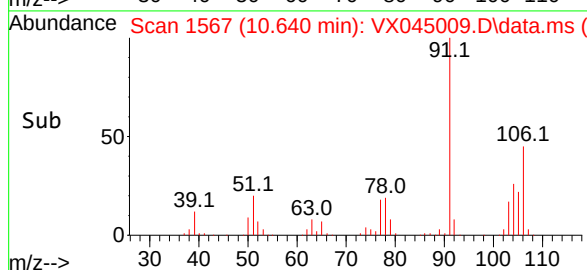
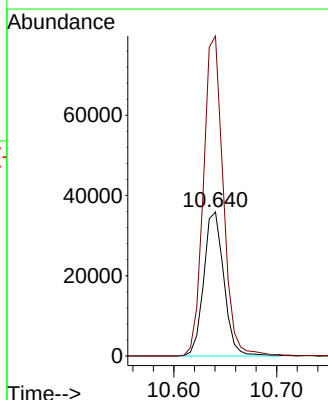
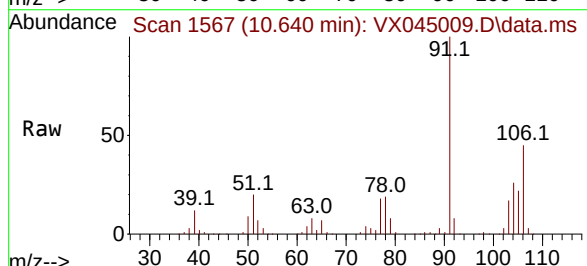
Acq: 21 Feb 2025 10:21

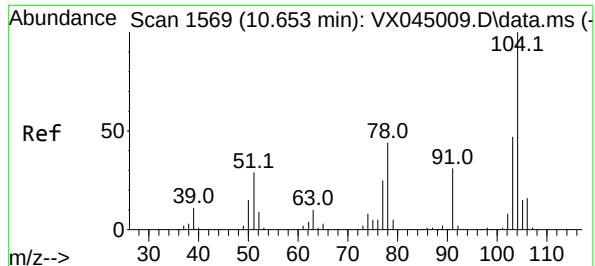
Tgt Ion:106 Resp: 48859

Ion Ratio Lower Upper

106 100

91 219.4 109.7 329.1





#69

Styrene

Concen: 19.839 ug/l

RT: 10.653 min Scan# 1569

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion:104 Resp: 80660

Ion Ratio Lower Upper

104 100

78 51.7 41.4 62.0

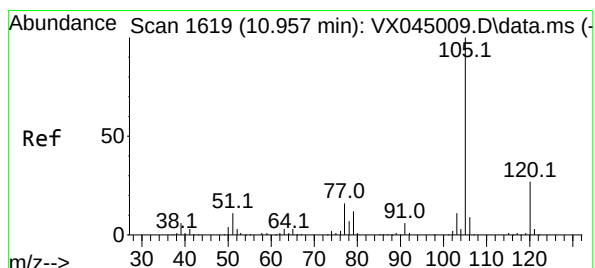
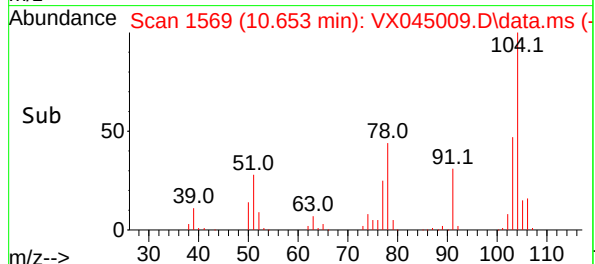
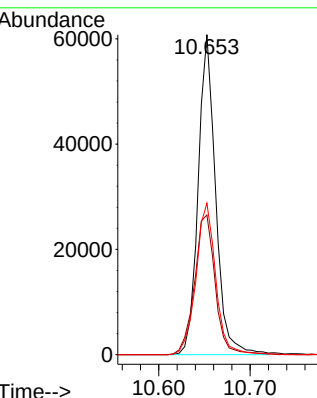
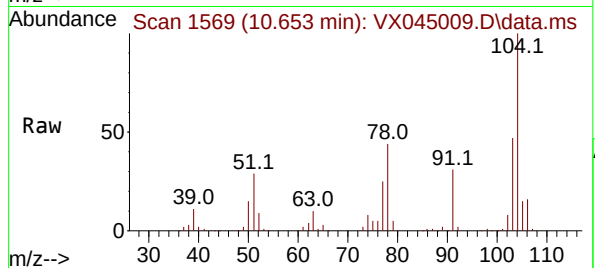
103 53.7 43.0 64.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#70

Isopropylbenzene

Concen: 19.888 ug/l

RT: 10.957 min Scan# 1619

Delta R.T. 0.000 min

Lab File: VX045009.D

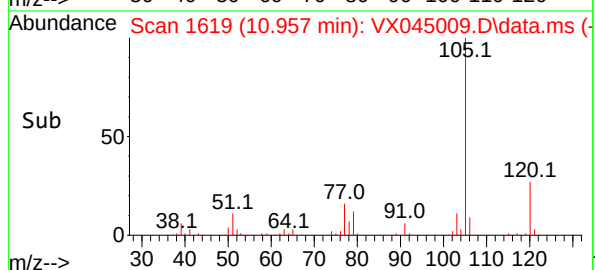
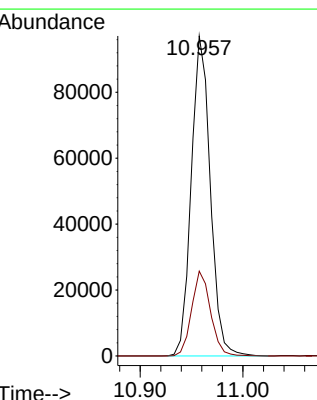
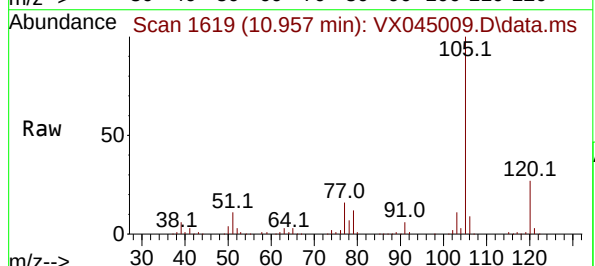
Acq: 21 Feb 2025 10:21

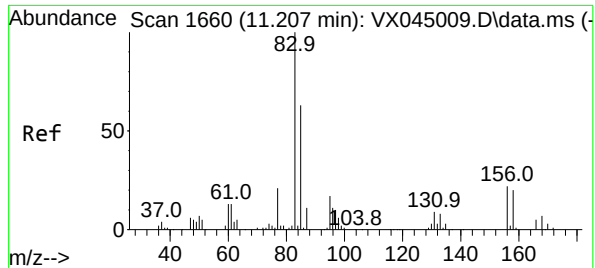
Tgt Ion:105 Resp: 124935

Ion Ratio Lower Upper

105 100

120 26.3 18.4 34.2





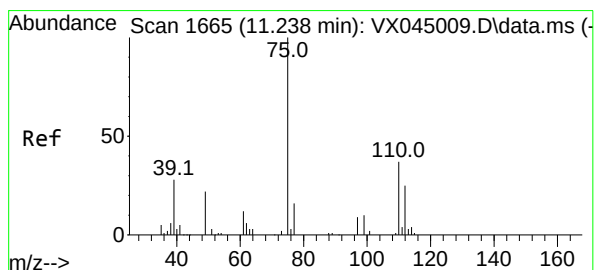
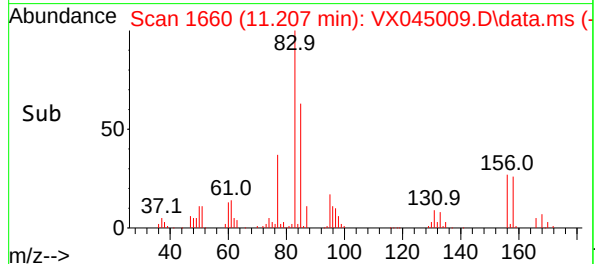
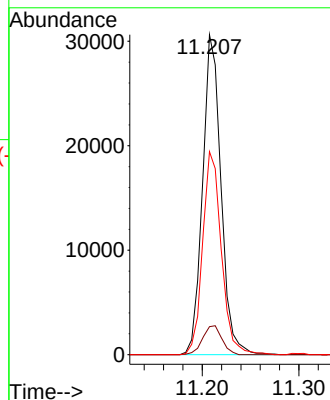
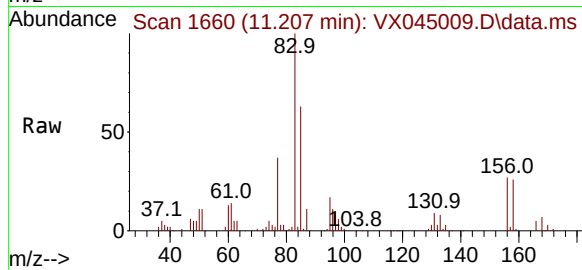
#71
1,1,2,2-Tetrachloroethane
Concen: 19.683 ug/l
RT: 11.207 min Scan# 1660
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion: 83 Resp: 40659
Ion Ratio Lower Upper
83 100
131 9.5 4.8 14.3
85 64.5 32.3 96.8

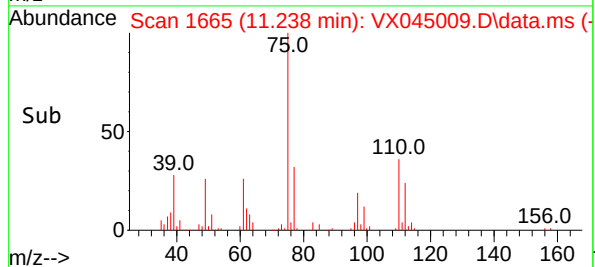
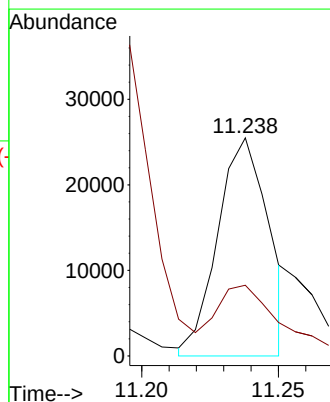
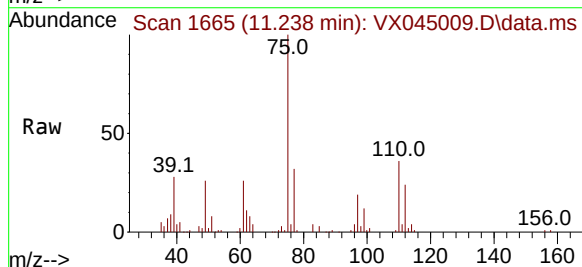
Manual Integrations
APPROVED

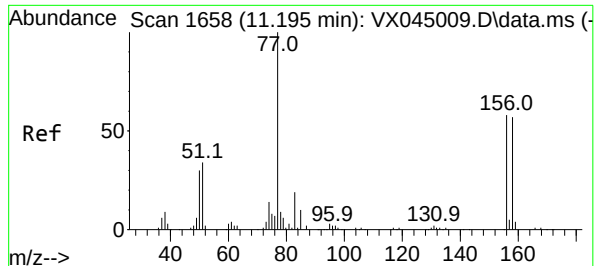
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#72
1,2,3-Trichloropropane
Concen: 19.450 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

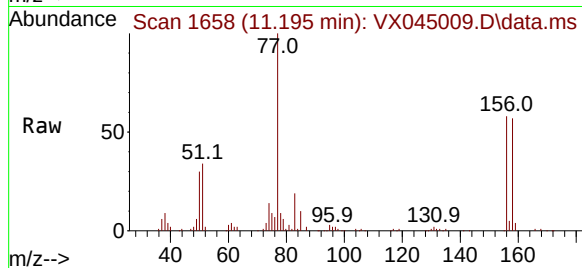
Tgt Ion: 75 Resp: 33046
Ion Ratio Lower Upper
75 100
77 42.0 0.0 84.0





#73
Bromobenzene
Concen: 19.777 ug/l
RT: 11.195 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

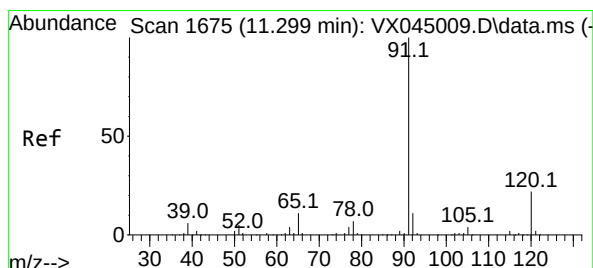
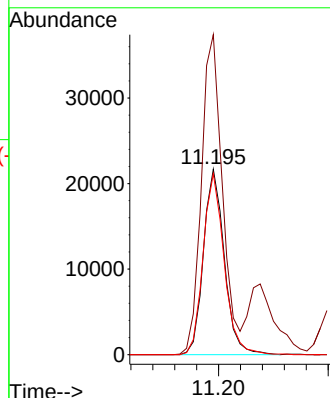
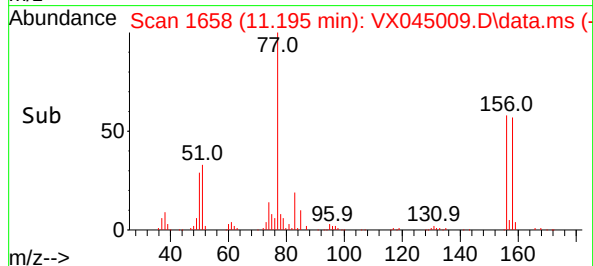
Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020



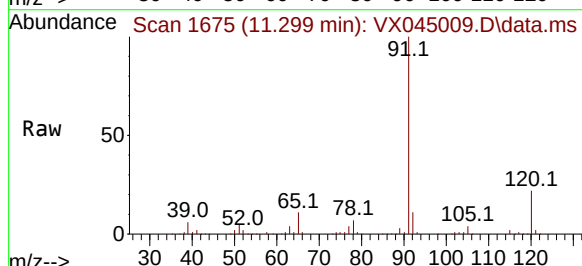
Tgt Ion:156 Resp: 2860
Ion Ratio Lower Upper
156 100
77 173.6 0.0 347.2
158 98.8 0.0 197.6

Manual Integrations
APPROVED

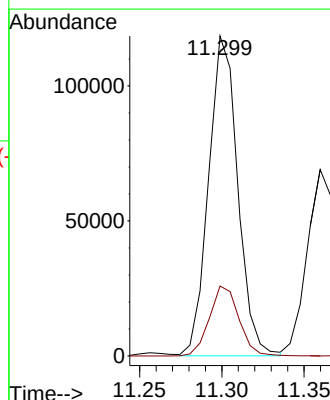
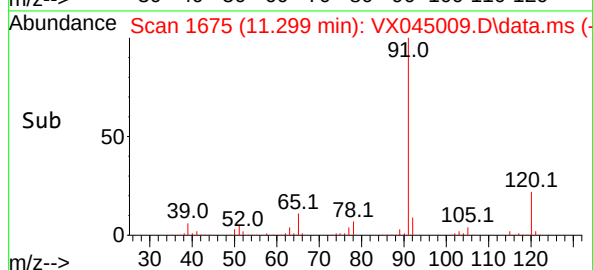
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

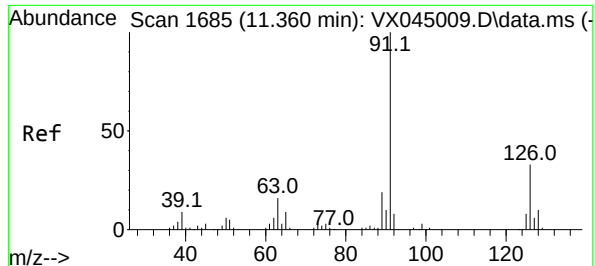


#74
n-propylbenzene
Concen: 19.544 ug/l
RT: 11.299 min Scan# 1675
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21



Tgt Ion: 91 Resp: 146105
Ion Ratio Lower Upper
91 100
120 22.1 0.0 44.2





#75

2-Chlorotoluene

Concen: 19.883 ug/l

RT: 11.360 min Scan# 1

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 91 Resp: 8985

Ion Ratio Lower Upper

91 100

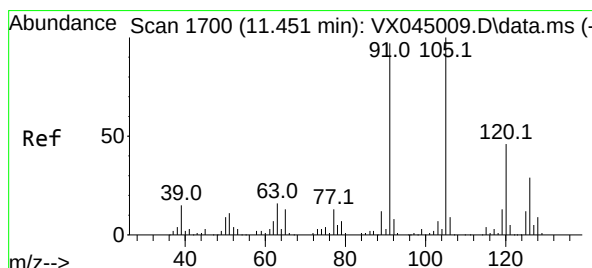
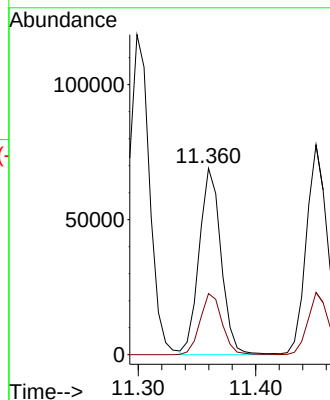
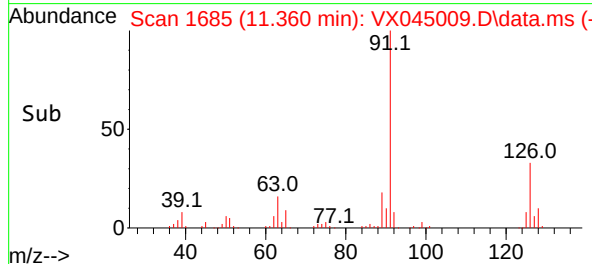
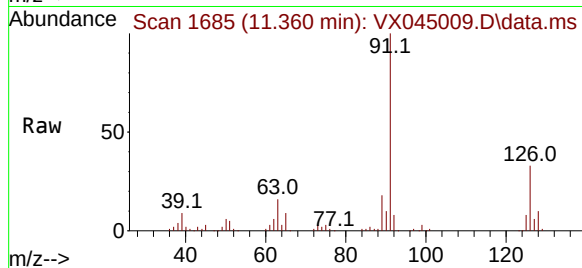
126 32.7 0.0 65.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#76

1,3,5-Trimethylbenzene

Concen: 19.977 ug/l

RT: 11.451 min Scan# 1700

Delta R.T. 0.000 min

Lab File: VX045009.D

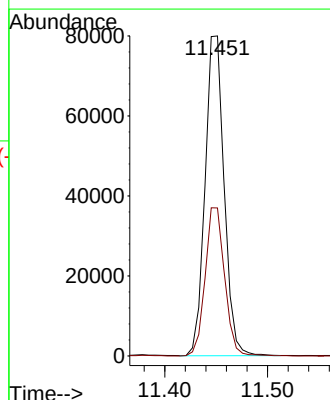
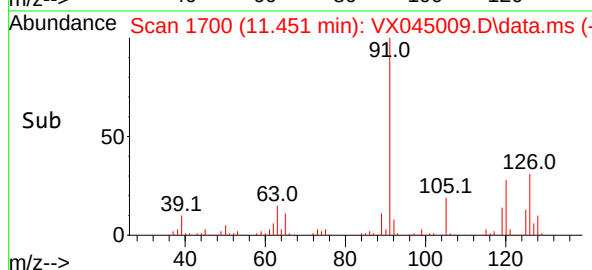
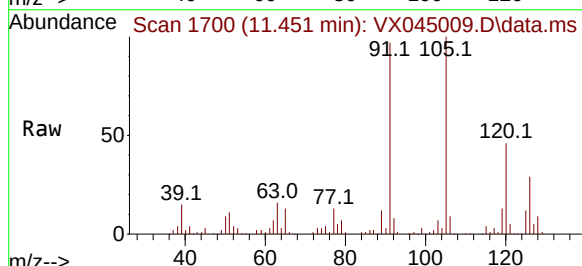
Acq: 21 Feb 2025 10:21

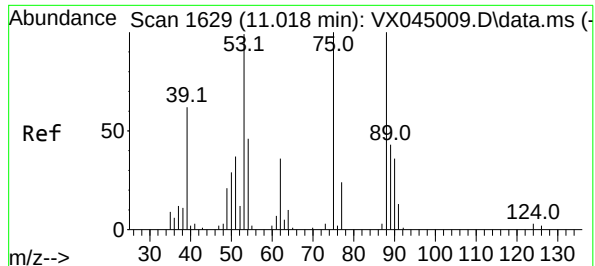
Tgt Ion:105 Resp: 103532

Ion Ratio Lower Upper

105 100

120 47.2 0.0 94.4





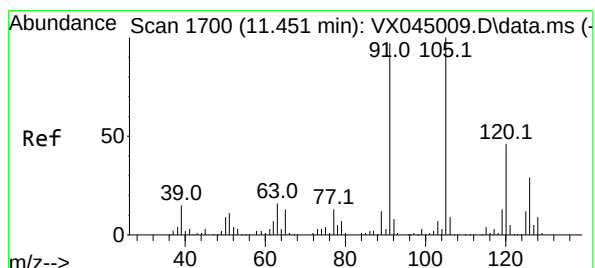
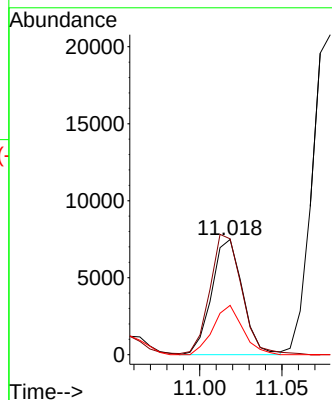
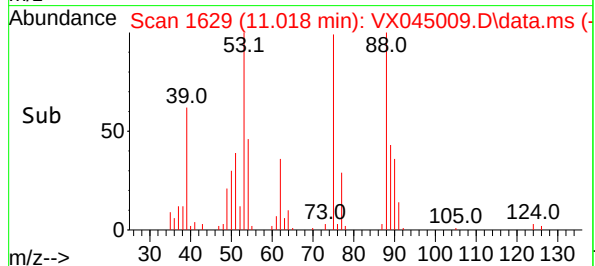
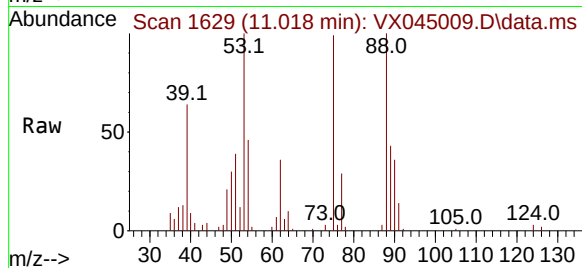
#77
t-1,4-Dichloro-2-butene
Concen: 17.133 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion: 75 Resp: 9794
Ion Ratio Lower Upper
75 100
53 99.6 49.8 149.4
89 42.8 21.4 64.2

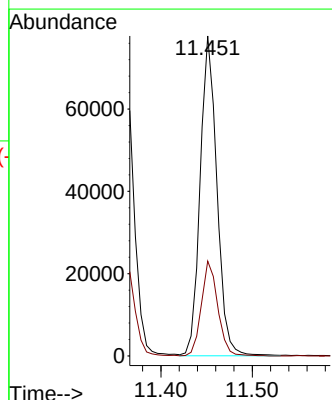
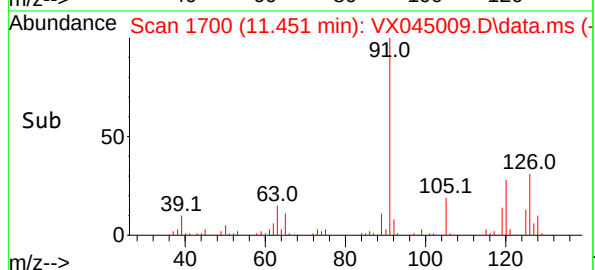
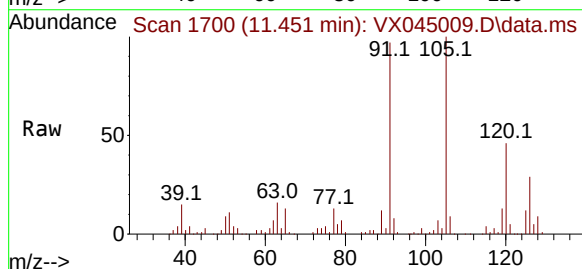
Manual Integrations
APPROVED

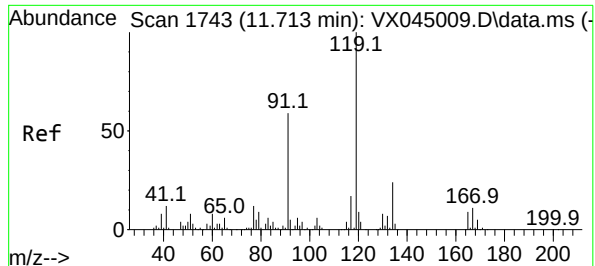
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#78
4-Chlorotoluene
Concen: 19.654 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 91 Resp: 99015
Ion Ratio Lower Upper
91 100
126 29.0 0.0 58.0





#79

tert-butylbenzene

Concen: 19.965 ug/l

RT: 11.713 min Scan# 1743

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion:119 Resp: 104250

Ion Ratio Lower Upper

119 100

91 60.3 0.0 120.6

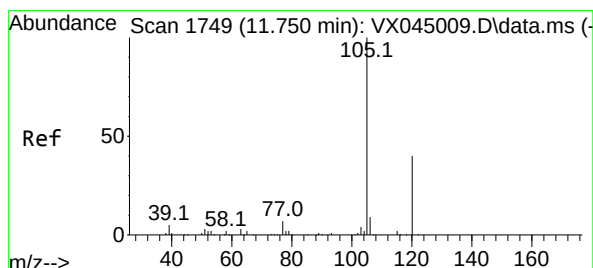
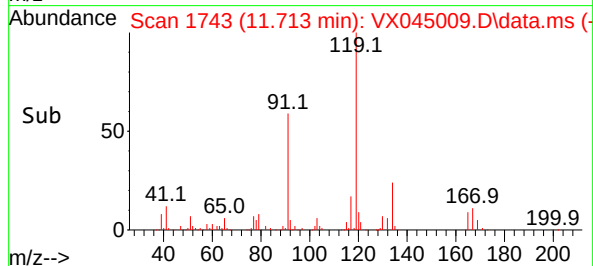
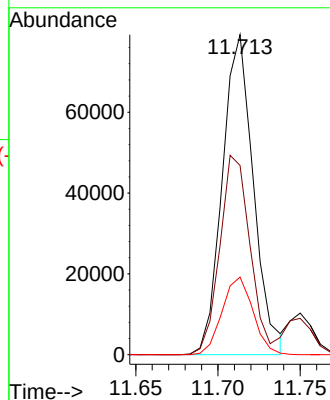
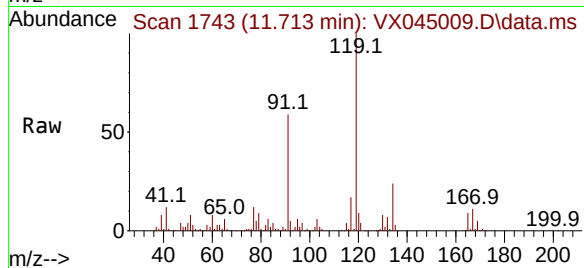
134 24.1 0.0 48.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#80

1,2,4-Trimethylbenzene

Concen: 20.108 ug/l

RT: 11.750 min Scan# 1749

Delta R.T. 0.000 min

Lab File: VX045009.D

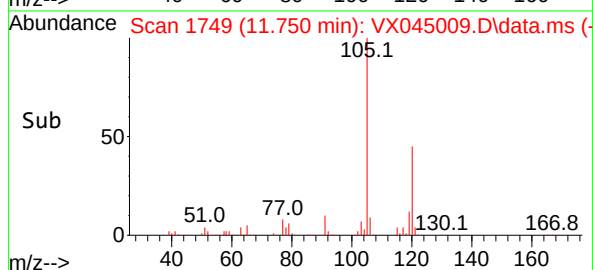
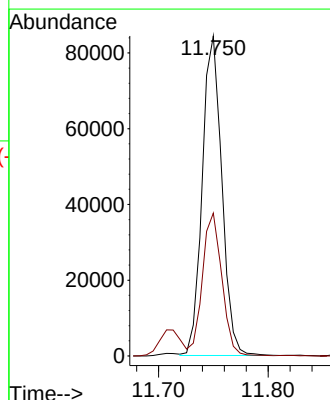
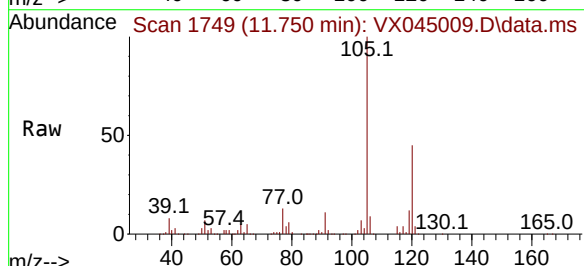
Acq: 21 Feb 2025 10:21

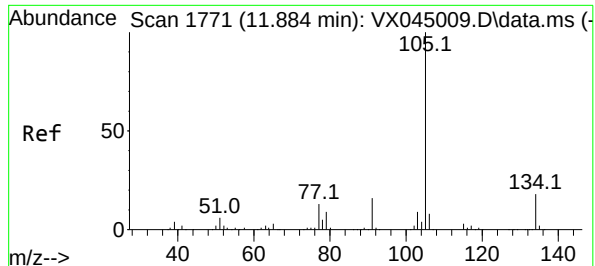
Tgt Ion:105 Resp: 104388

Ion Ratio Lower Upper

105 100

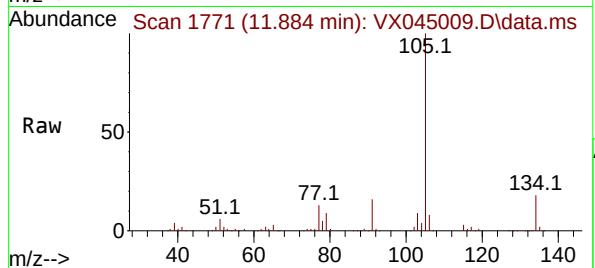
120 44.2 0.0 88.4





#81
sec-Butylbenzene
Concen: 19.783 ug/l
RT: 11.884 min Scan# 1771
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

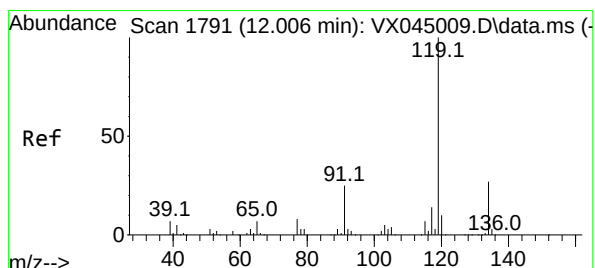
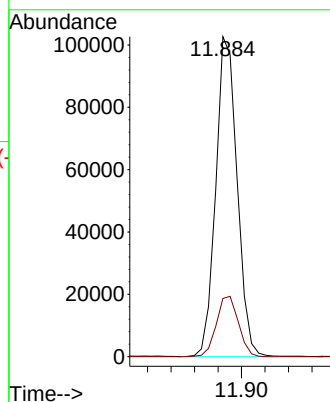
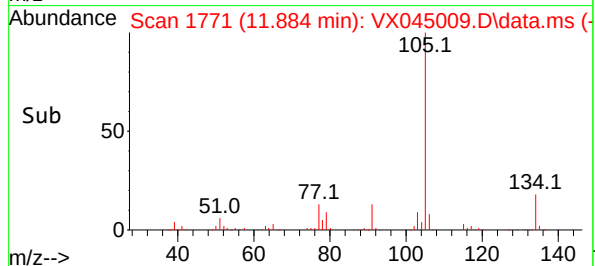
Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020



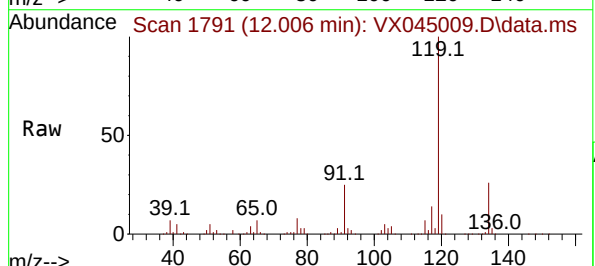
Tgt Ion:105 Resp: 12964
Ion Ratio Lower Upper
105 100
134 19.5 0.0 39.0

Manual Integrations
APPROVED

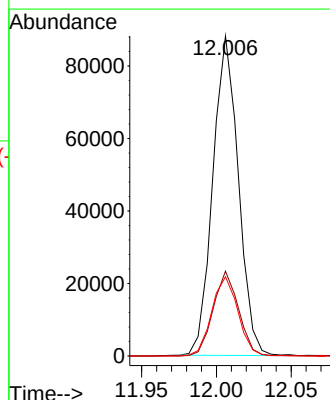
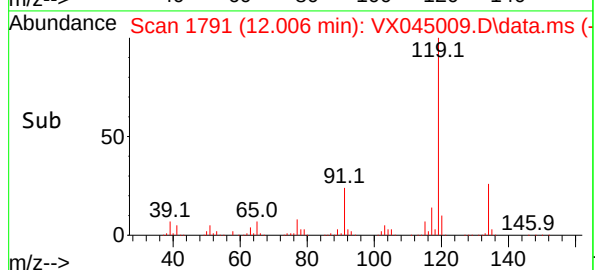
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

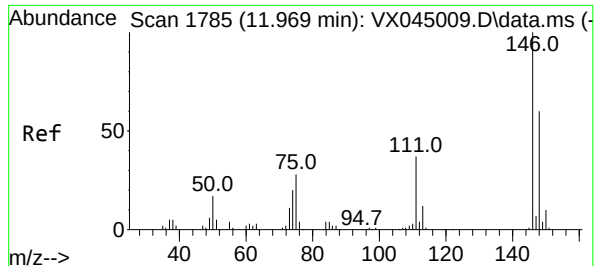


#82
p-Isopropyltoluene
Concen: 19.698 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21



Tgt Ion:119 Resp: 104594
Ion Ratio Lower Upper
119 100
134 26.3 0.0 52.6
91 25.5 0.0 51.0





#83

1,3-Dichlorobenzene

Concen: 19.873 ug/l

RT: 11.969 min Scan# 1785

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

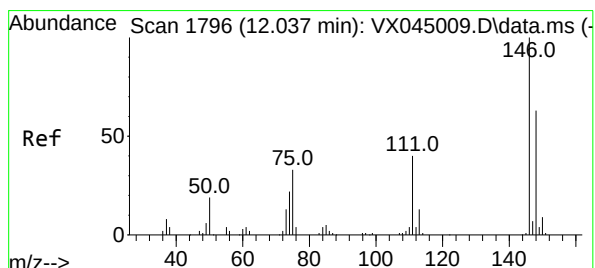
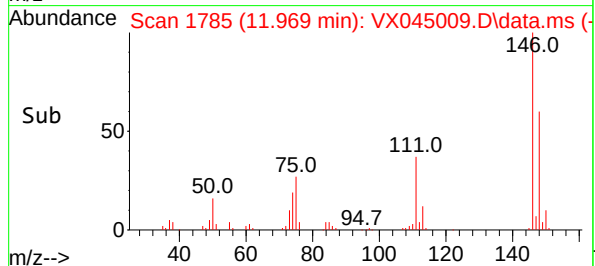
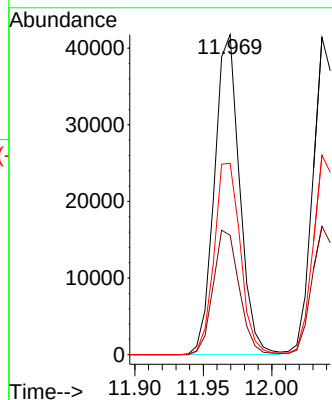
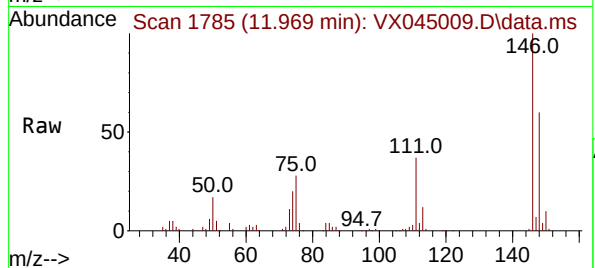
VSTDICCC020

Tgt Ion:146	Resp:	5347
Ion Ratio	Lower	Upper
146	100	
111	40.3	20.2 60.5
148	62.4	31.2 93.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#84

1,4-Dichlorobenzene

Concen: 19.714 ug/l

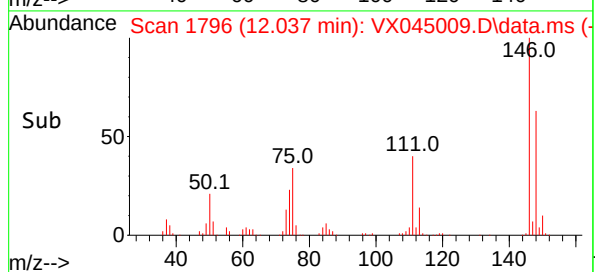
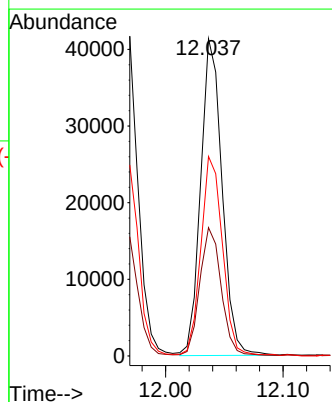
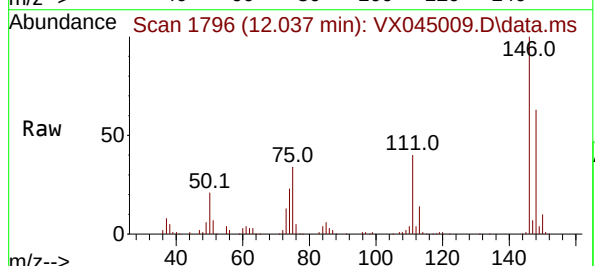
RT: 12.037 min Scan# 1796

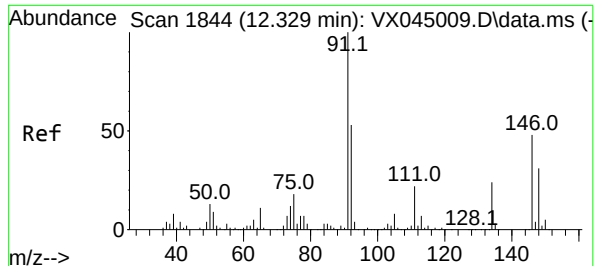
Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Tgt Ion:146	Resp:	52302
Ion Ratio	Lower	Upper
146	100	
111	40.8	20.4 61.2
148	63.6	31.8 95.4





#85

n-Butylbenzene

Concen: 19.087 ug/l

RT: 12.329 min Scan# 1844

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion: 91 Resp: 9255

Ion Ratio Lower Upper

91 100

92 52.6 0.0 105.2

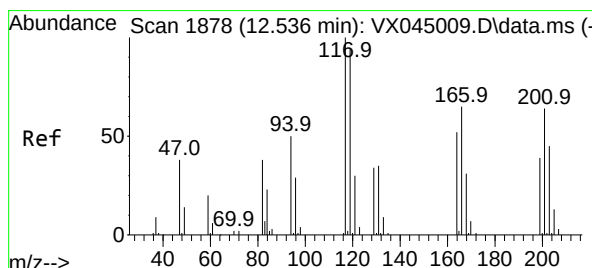
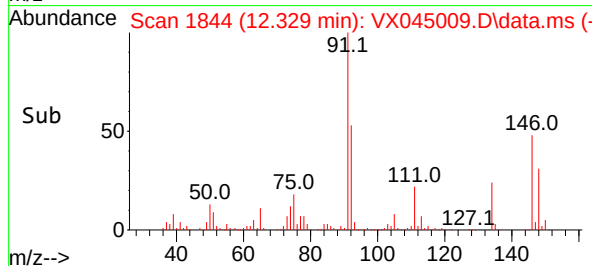
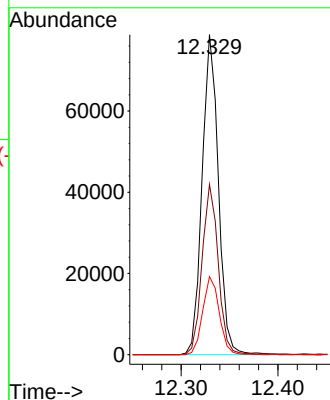
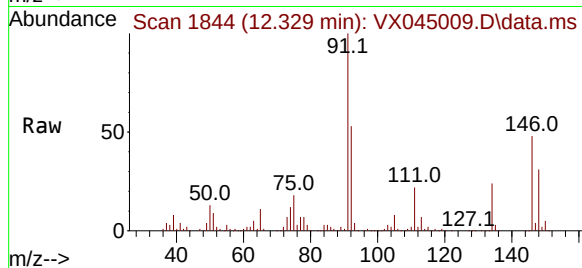
134 24.7 0.0 49.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#86

Hexachloroethane

Concen: 18.410 ug/l

RT: 12.536 min Scan# 1878

Delta R.T. 0.000 min

Lab File: VX045009.D

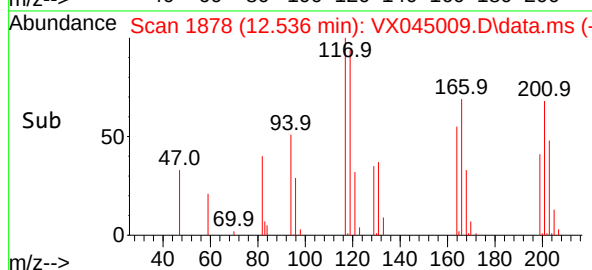
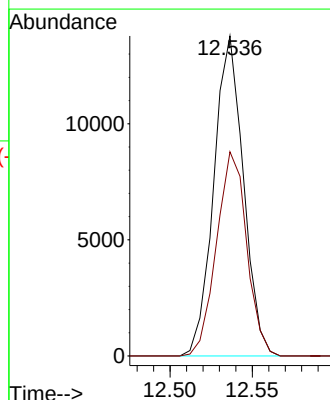
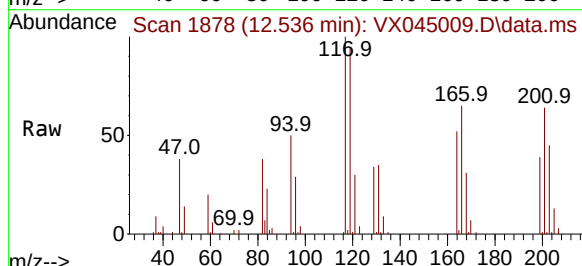
Acq: 21 Feb 2025 10:21

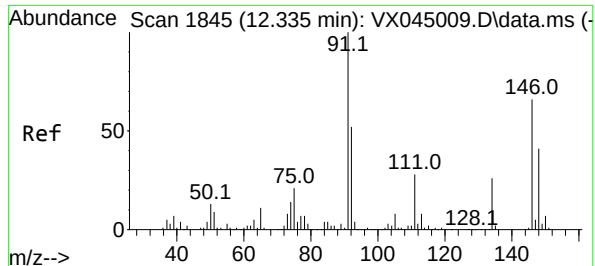
Tgt Ion:117 Resp: 17240

Ion Ratio Lower Upper

117 100

201 65.1 32.6 97.7





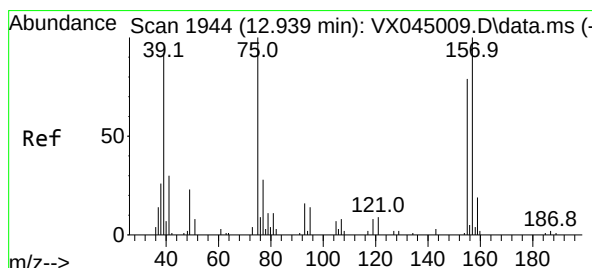
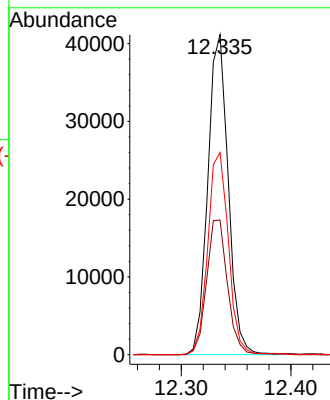
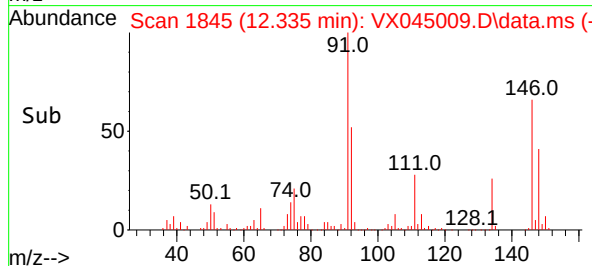
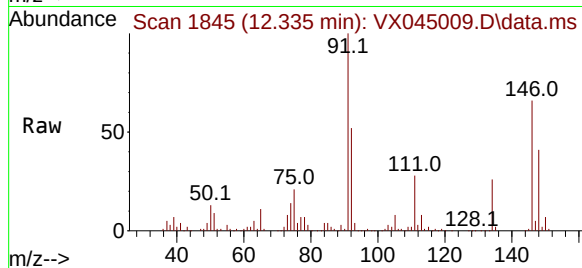
#87
1,2-Dichlorobenzene
Concen: 20.126 ug/l
RT: 12.335 min Scan# 1845
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Tgt Ion:146 Resp: 53134
Ion Ratio Lower Upper
146 100
111 43.4 21.7 65.1
148 63.6 31.8 95.4

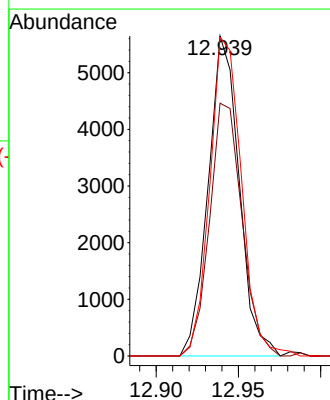
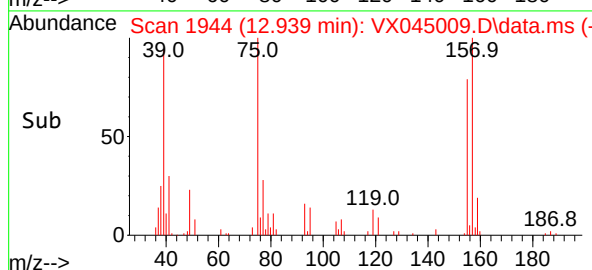
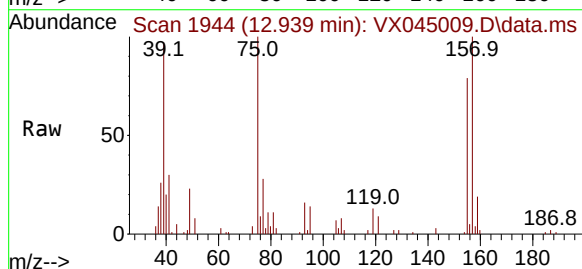
Manual Integrations
APPROVED

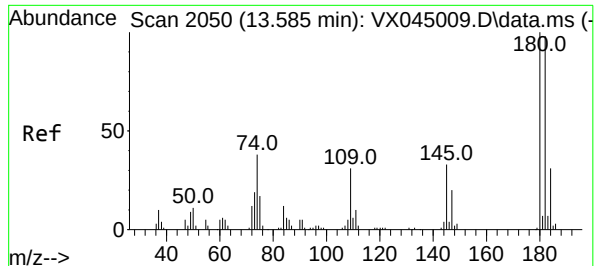
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#88
1,2-Dibromo-3-Chloropropane
Concen: 18.485 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion: 75 Resp: 7393
Ion Ratio Lower Upper
75 100
155 82.8 66.2 99.4
157 101.8 81.4 122.2





#89

1,2,4-Trichlorobenzene

Concen: 18.760 ug/l

RT: 13.585 min Scan# 2050

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

Instrument :

MSVOA_X

ClientSampleId :

VSTDICCC020

Tgt Ion:180 Resp: 30018

Ion Ratio Lower Upper

180 100

182 97.1 77.7 116.5

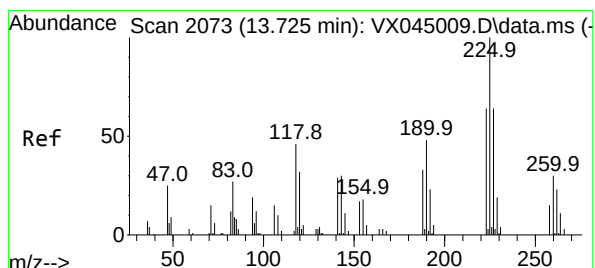
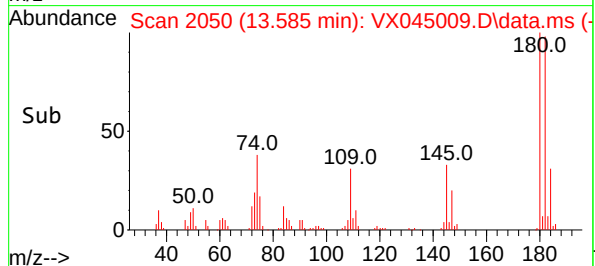
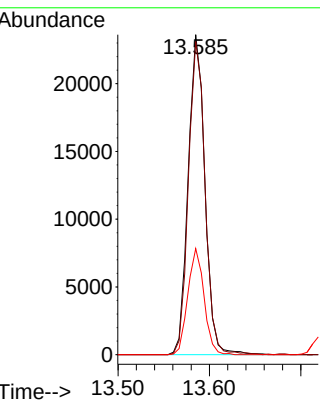
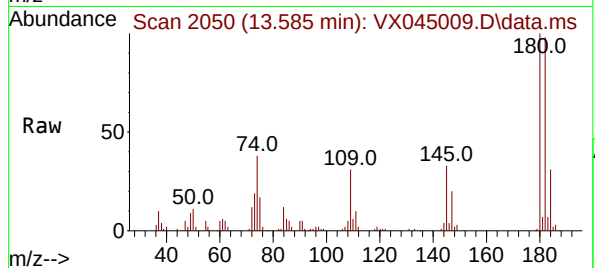
145 32.2 25.8 38.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#90

Hexachlorobutadiene

Concen: 19.649 ug/l

RT: 13.725 min Scan# 2073

Delta R.T. 0.000 min

Lab File: VX045009.D

Acq: 21 Feb 2025 10:21

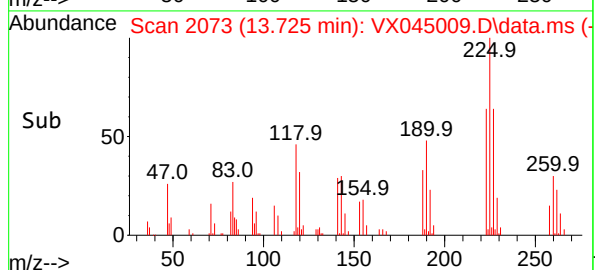
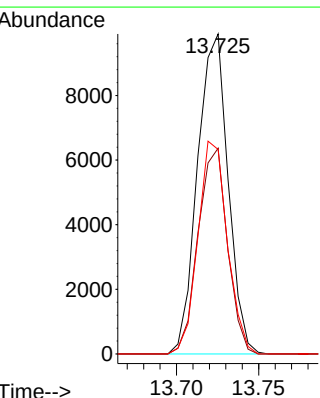
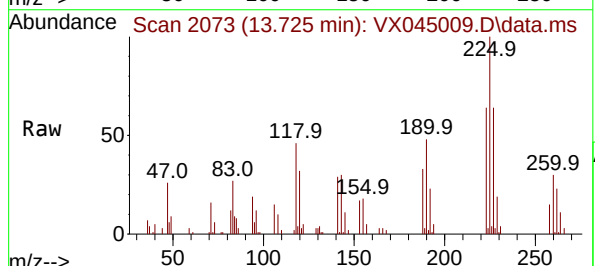
Tgt Ion:225 Resp: 12822

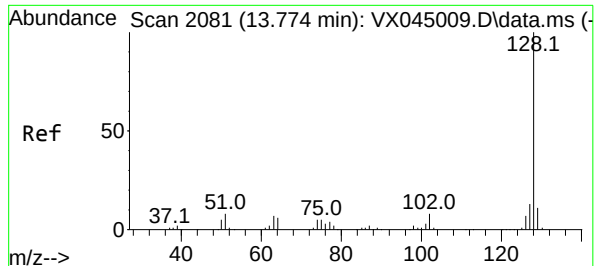
Ion Ratio Lower Upper

225 100

223 61.7 0.0 123.4

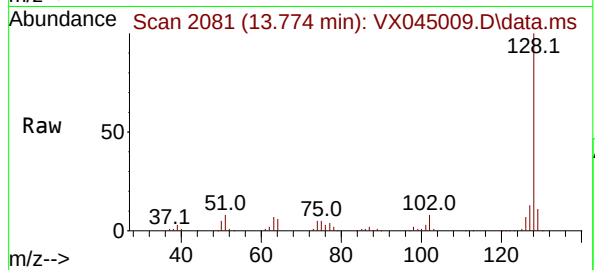
227 63.7 0.0 127.4





#91
Naphthalene
Concen: 19.291 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

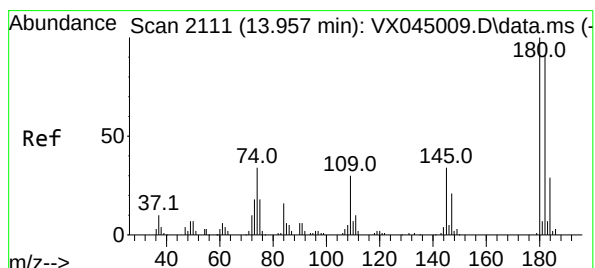
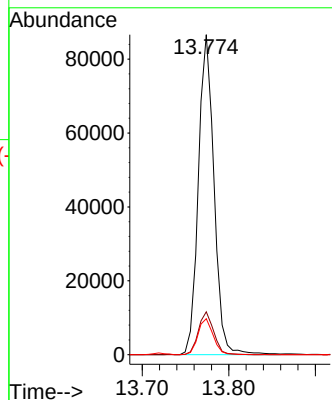
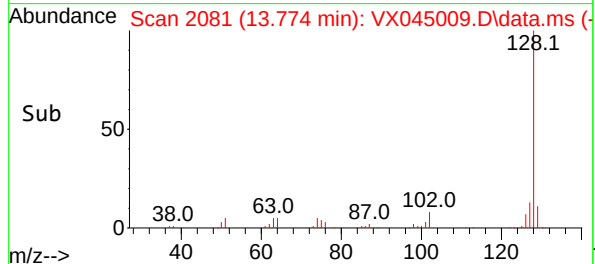
Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020



Tgt Ion:128 Resp: 10884
Ion Ratio Lower Upper
128 100
127 13.1 10.5 15.7
129 10.9 8.7 13.1

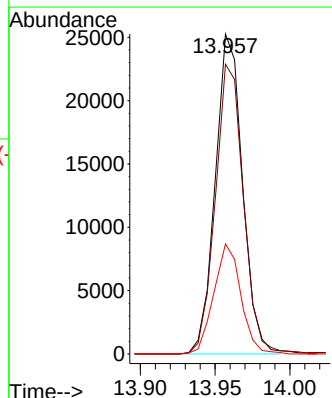
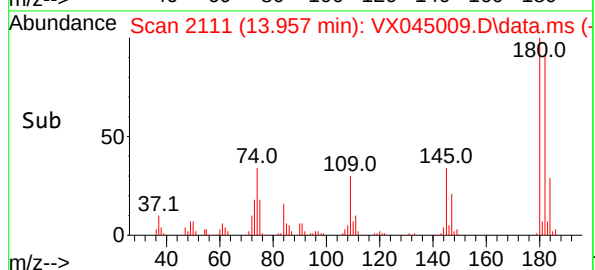
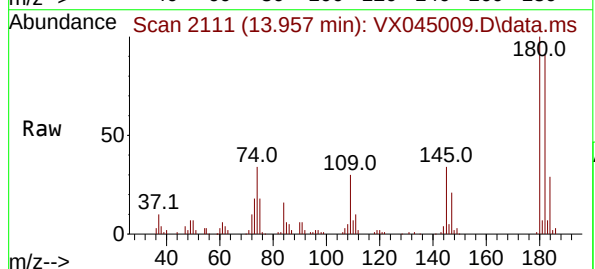
Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#92
1,2,3-Trichlorobenzene
Concen: 19.437 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. 0.000 min
Lab File: VX045009.D
Acq: 21 Feb 2025 10:21

Tgt Ion:180 Resp: 32019
Ion Ratio Lower Upper
180 100
182 93.3 0.0 186.6
145 34.2 0.0 68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045010.D
 Acq On : 21 Feb 2025 10:44
 Operator : JC/MD
 Sample : VSTDICC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC050

Quant Time: Feb 22 00:48:00 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.891	128	17467	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	96411	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	89300	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	49656	29.270	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	97.567%		
60) 4-Bromofluorobenzene	11.079	95	50413	30.203	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	100.667%		
63) Toluene-d8	8.647	98	147315	29.819	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	99.400%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.166	85	74849	50.833	ug/l	98
3) Chloromethane	1.294	50	90776	51.472	ug/l	98
4) Vinyl Chloride	1.374	62	84944	49.915	ug/l	100
5) Bromomethane	1.593	94	28963	48.894	ug/l	97
6) Chloroethane	1.672	64	51012	55.346	ug/l	92
7) Trichlorofluoromethane	1.880	101	115517	50.505	ug/l	95
8) Diethyl Ether	2.130	74	43032	49.726	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.325	101	68750	50.609	ug/l	97
10) 1,1-Dichloroethene	2.312	96	66962	50.466	ug/l	92
11) Methyl Iodide	2.447	142	81166	54.046	ug/l	97
12) Methyl Acetate	2.697	43	78286	50.808	ug/l	100
13) Acrolein	2.233	56	76736	248.462	ug/l	98
14) Acrylonitrile	3.056	53	196184	260.667	ug/l	99
15) Acetone	2.373	58	51483	249.418	ug/l	95
16) Carbon Disulfide	2.508	76	188973	50.210	ug/l	100
17) Allyl chloride	2.660	41	125778	50.682	ug/l	98
18) Methylene Chloride	2.782	84	76235	51.081	ug/l	98
19) trans-1,2-Dichloroethene	3.087	96	68253	50.843	ug/l	94
20) Diisopropyl ether	3.751	45	243734	51.107	ug/l	96
21) 1,1-Dichloroethane	3.599	63	131223	49.475	ug/l	100
22) cis-1,2-Dichloroethene	4.477	96	79440	49.382	ug/l	97
23) tert-Butyl Alcohol	2.959	59	69182	262.986	ug/l #	100
24) Methyl tert-Butyl Ether	3.111	73	218792	50.521	ug/l	99
25) Chloroform	5.086	83	128252	50.062	ug/l	99
26) Cyclohexane	5.458	56	124373	50.802	ug/l #	98
29) 1,1-Dichloropropene	5.684	75	90516	51.038	ug/l	99
30) 2-Butanone	4.544	43	267770	261.401	ug/l	99
31) 2,2-Dichloropropane	4.465	77	101966	50.846	ug/l	100
32) 1,1,1-Trichloroethane	5.373	97	110282	51.322	ug/l	99
33) Carbon Tetrachloride	5.672	117	92530	51.023	ug/l	99
34) Benzene	6.031	78	286826	51.573	ug/l	98
35) Methacrylonitrile	4.910	41	59021	53.843	ug/l	98
36) 1,2-Dichloroethane	6.080	62	96405	50.630	ug/l	98
37) Trichloroethene	7.116	130	66131	50.826	ug/l	95
38) Methylcyclohexane	7.373	83	122650	51.506	ug/l	98
39) 1,2-Dichloropropane	7.421	63	68553	49.579	ug/l	97
40) Dibromomethane	7.574	93	50034	50.426	ug/l	99
41) Bromodichloromethane	7.818	83	100442	50.932	ug/l	99
42) Vinyl Acetate	3.715	43	1047506	263.518	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045010.D
 Acq On : 21 Feb 2025 10:44
 Operator : JC/MD
 Sample : VSTDICC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Quant Time: Feb 22 00:48:00 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.708	43	97995	51.012	ug/l	98
44) Isopropyl Acetate	6.330	43	165983	52.497	ug/l	99
45) 1,4-Dioxane	7.653	88	36320	1105.035	ug/l	98
46) Methyl methacrylate	7.690	41	82008	52.896	ug/l	99
47) n-amyl Acetate	10.841	43	148104	53.981	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	98986	52.075	ug/l	100
49) cis-1,3-Dichloropropene	8.360	75	110953	51.564	ug/l	99
50) 1,1,2-Trichloroethane	9.147	97	66444	51.339	ug/l	97
51) Ethyl methacrylate	9.110	69	108669	53.387	ug/l	97
52) 1,3-Dichloropropane	9.305	76	116358	51.310	ug/l	99
53) Dibromochloromethane	9.518	129	73437	51.304	ug/l	96
54) 1,2-Dibromoethane	9.604	107	67926	51.685	ug/l	99
55) 2-Chloroethyl vinyl ether	8.238	63	272372	260.575	ug/l	100
56) Bromoform	10.799	173	47891	53.392	ug/l	99
58) 4-Methyl-2-Pentanone	8.567	43	543908	267.752	ug/l	100
59) 2-Hexanone	9.427	43	398198	271.195	ug/l	99
61) Tetrachloroethene	9.269	164	54607	49.659	ug/l	94
62) Toluene	8.714	91	296930	50.195	ug/l	100
64) Chlorobenzene	10.073	112	185159	50.511	ug/l	99
65) 1,1,1,2-Tetrachloroethane	10.159	131	60773	50.244	ug/l	99
66) Ethyl Benzene	10.189	91	330414	51.018	ug/l	98
67) m/p-Xylenes	10.299	106	244916	101.498	ug/l	97
68) o-Xylene	10.640	106	120934	51.080	ug/l	100
69) Styrene	10.652	104	202875	51.306	ug/l	99
70) Isopropylbenzene	10.957	105	310911	50.888	ug/l	100
71) 1,1,2,2-Tetrachloroethane	11.207	83	104665	52.096	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	86752m	52.499	ug/l	
73) Bromobenzene	11.195	156	72207	51.338	ug/l	99
74) n-propylbenzene	11.299	91	377855	51.970	ug/l	99
75) 2-Chlorotoluene	11.360	91	223666	50.885	ug/l	100
76) 1,3,5-Trimethylbenzene	11.445	105	260432	51.669	ug/l	99
77) t-1,4-Dichloro-2-butene	11.012	75	29634	53.302	ug/l	95
78) 4-Chlorotoluene	11.451	91	250953	51.217	ug/l	99
79) tert-butylbenzene	11.713	119	264815	52.144	ug/l	98
80) 1,2,4-Trimethylbenzene	11.750	105	263122	52.114	ug/l	100
81) sec-Butylbenzene	11.884	105	328940	51.608	ug/l	100
82) p-Isopropyltoluene	12.006	119	269490	52.183	ug/l	98
83) 1,3-Dichlorobenzene	11.963	146	134685	51.467	ug/l	98
84) 1,4-Dichlorobenzene	12.036	146	135436	52.490	ug/l	99
85) n-Butylbenzene	12.329	91	249242	52.851	ug/l	98
86) Hexachloroethane	12.536	117	47866	52.555	ug/l	98
87) 1,2-Dichlorobenzene	12.329	146	133123	51.846	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	19763	50.807	ug/l	97
89) 1,2,4-Trichlorobenzene	13.585	180	80472	51.710	ug/l	99
90) Hexachlorobutadiene	13.725	225	31734	50.003	ug/l	99
91) Naphthalene	13.774	128	288823	52.634	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	81734	51.015	ug/l	99

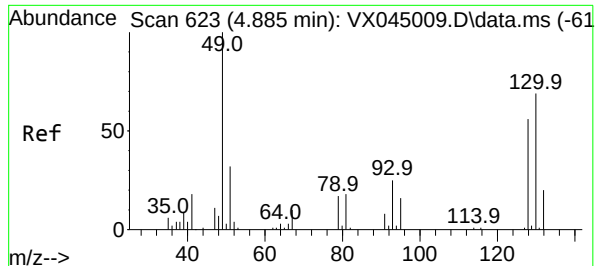
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Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025





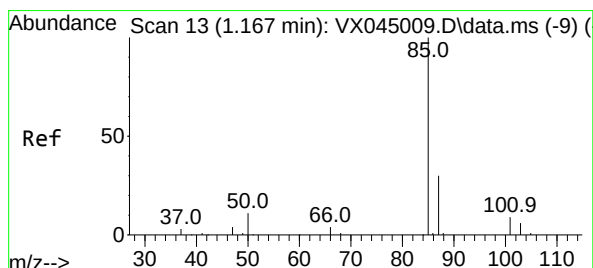
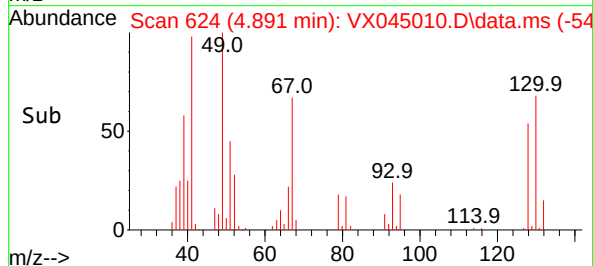
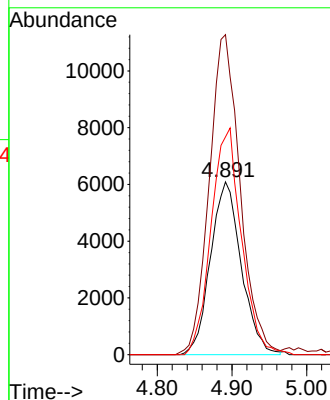
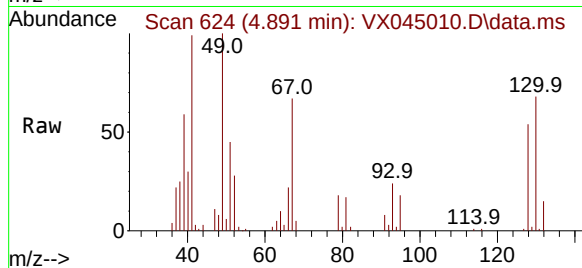
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.891 min Scan# 61
Delta R.T. 0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion:128 Resp: 1746
Ion Ratio Lower Upper
128 100
49 185.3 0.0 449.7
130 129.3 0.0 312.7

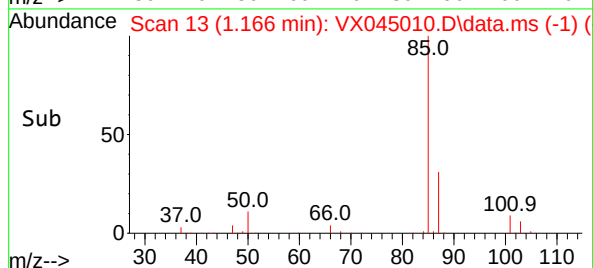
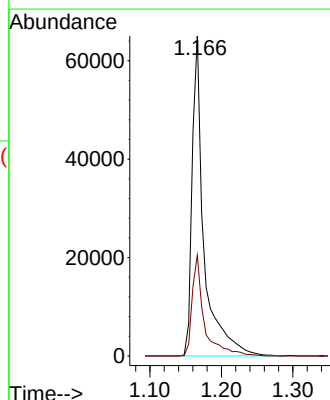
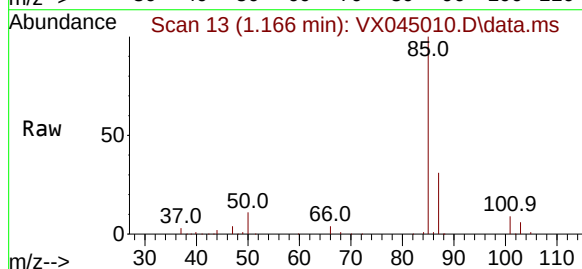
Manual Integrations
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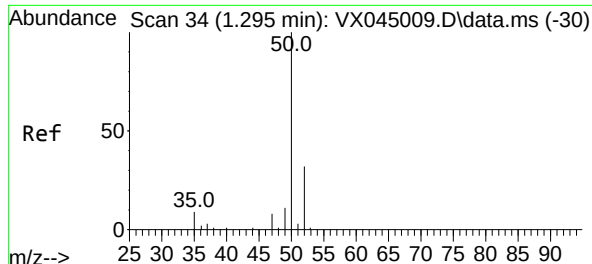
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#2
Dichlorodifluoromethane
Concen: 50.833 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 85 Resp: 74849
Ion Ratio Lower Upper
85 100
87 31.5 15.1 45.3





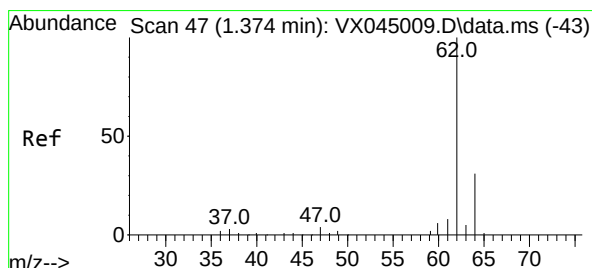
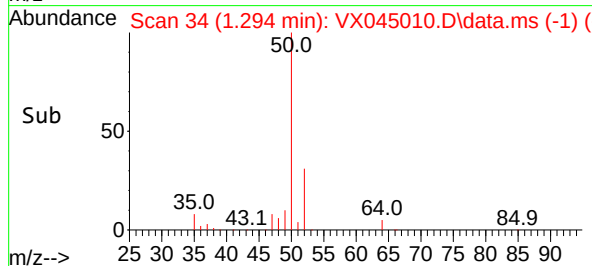
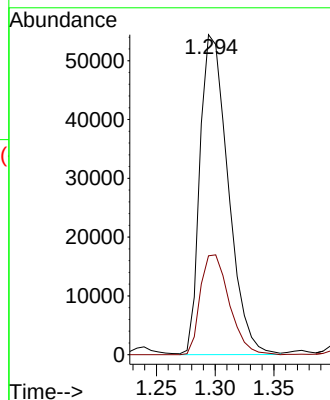
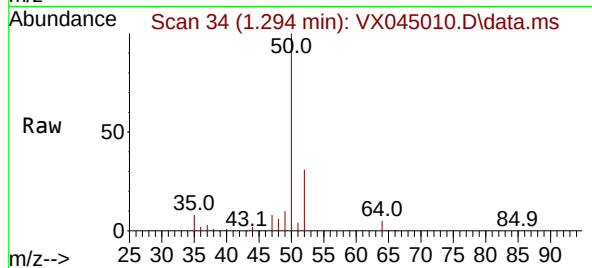
#3
Chloromethane
Concen: 51.472 ug/l
RT: 1.294 min Scan# 34
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion: 50 Resp: 90776
Ion Ratio Lower Upper
50 100
52 31.0 25.7 38.5

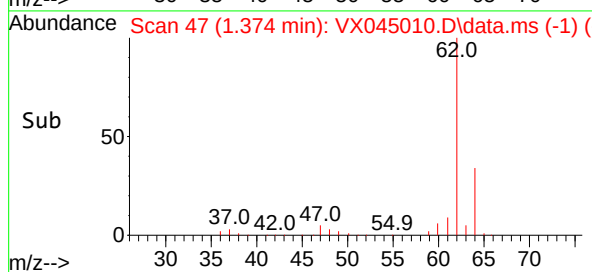
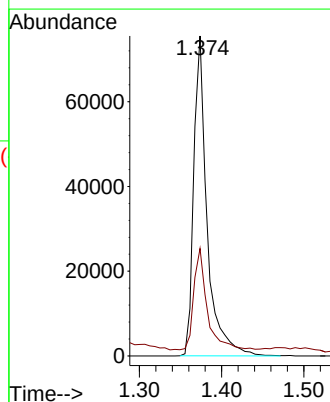
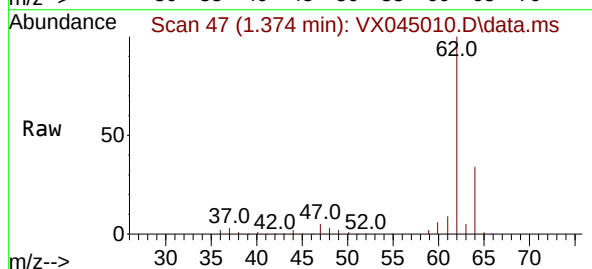
Manual Integrations
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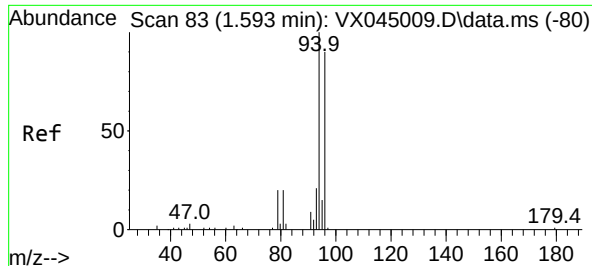
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#4
Vinyl Chloride
Concen: 49.915 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 62 Resp: 84944
Ion Ratio Lower Upper
62 100
64 31.7 25.1 37.7





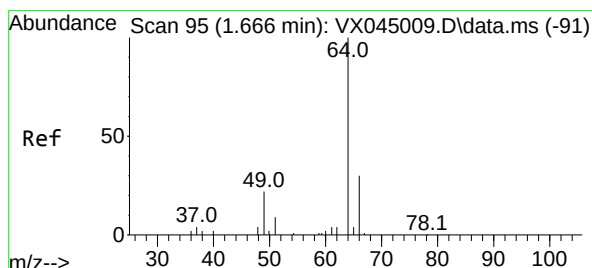
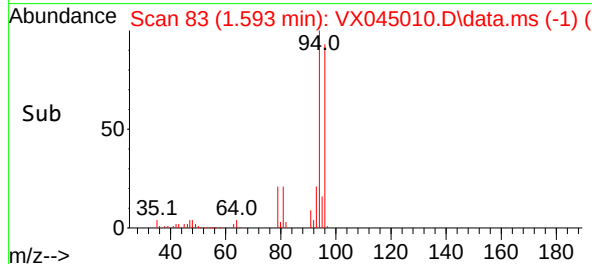
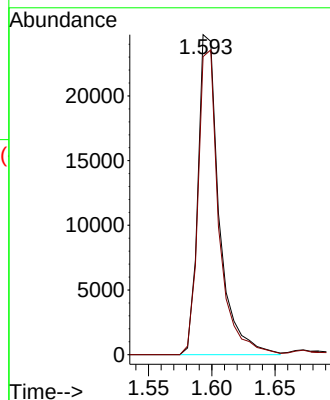
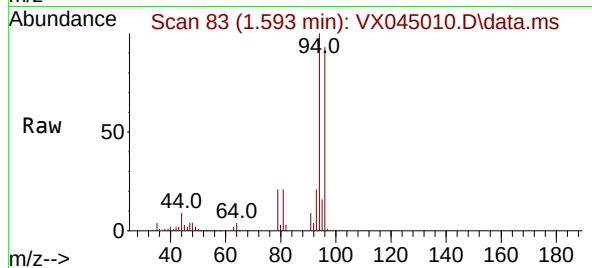
#5
Bromomethane
Concen: 48.894 ug/l
RT: 1.593 min Scan# 81
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion: 94 Resp: 2896
Ion Ratio Lower Upper
94 100
96 93.1 72.2 108.4

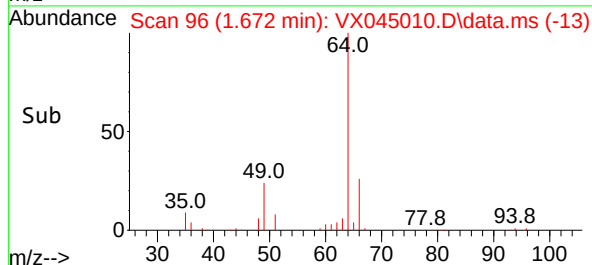
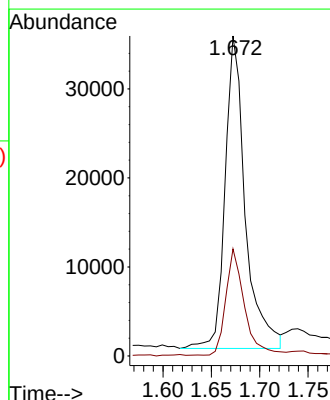
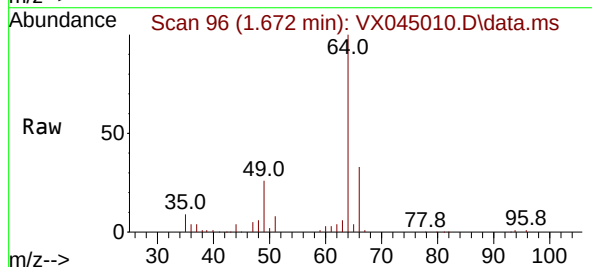
Manual Integrations
APPROVED

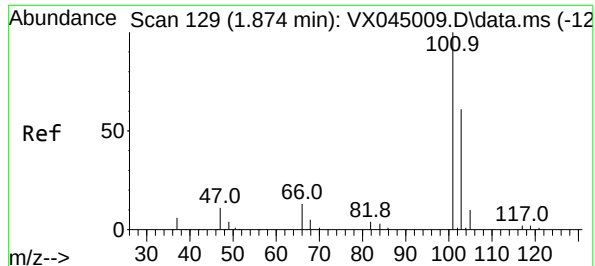
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#6
Chloroethane
Concen: 55.346 ug/l
RT: 1.672 min Scan# 96
Delta R.T. 0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 64 Resp: 51012
Ion Ratio Lower Upper
64 100
66 33.8 23.7 35.5





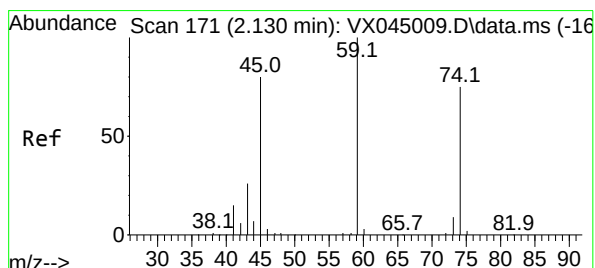
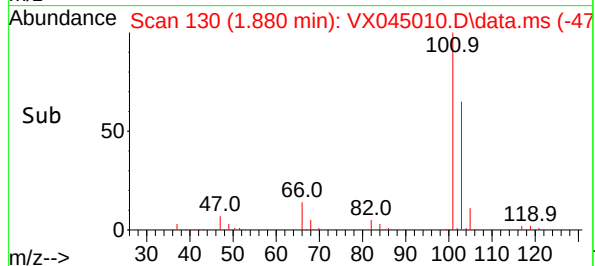
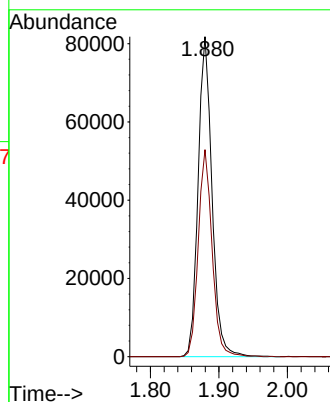
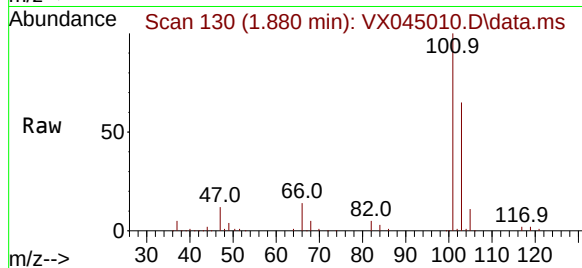
#7
Trichlorofluoromethane
Concen: 50.505 ug/l
RT: 1.880 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion:101 Resp: 11551
Ion Ratio Lower Upper
101 100
103 64.7 48.8 73.2

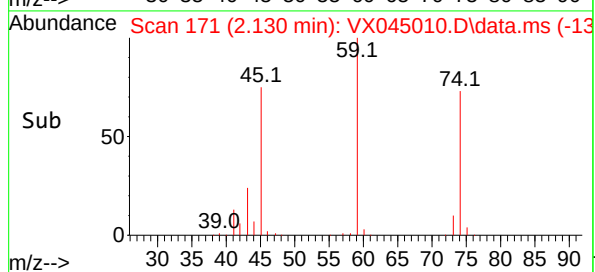
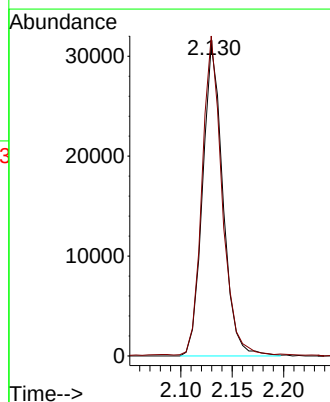
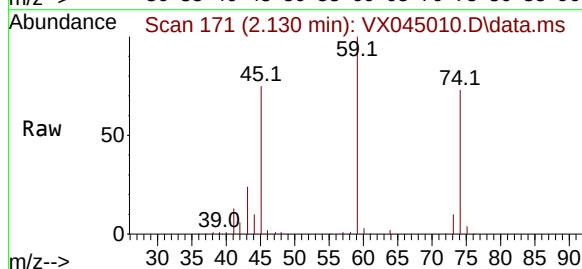
Manual Integrations
APPROVED

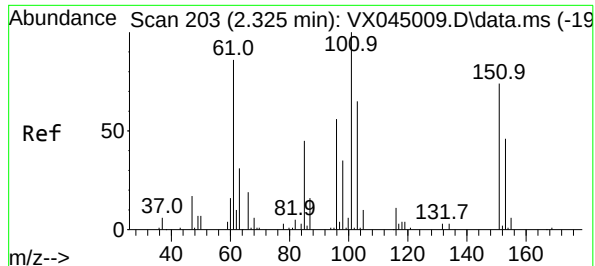
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#8
Diethyl Ether
Concen: 49.726 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 74 Resp: 43032
Ion Ratio Lower Upper
74 100
45 101.2 20.8 186.8





#9

1,1,2-Trichlorotrifluoroethane

Concen: 50.609 ug/l

RT: 2.325 min Scan# 203

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion:101 Resp: 68750

Ion Ratio Lower Upper

101 100

85 45.0 0.0 90.6

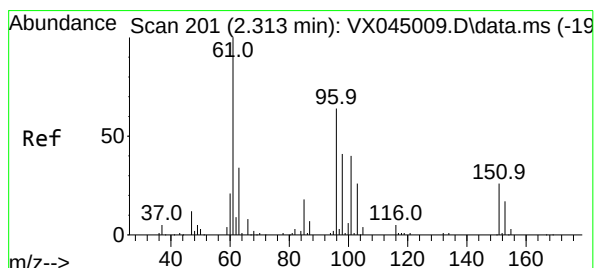
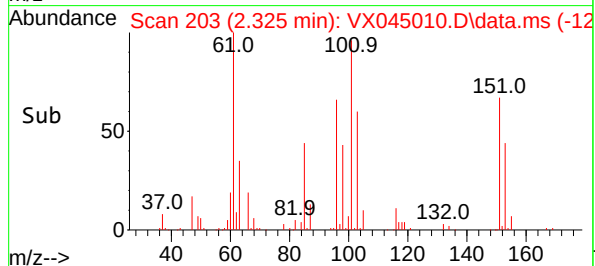
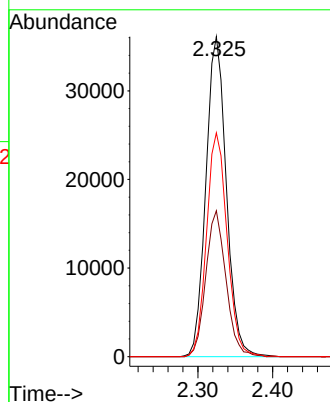
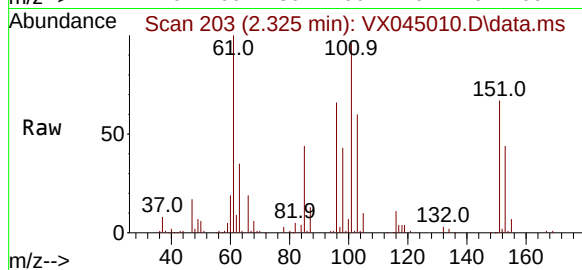
151 70.2 0.0 147.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#10

1,1-Dichloroethene

Concen: 50.466 ug/l

RT: 2.312 min Scan# 201

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

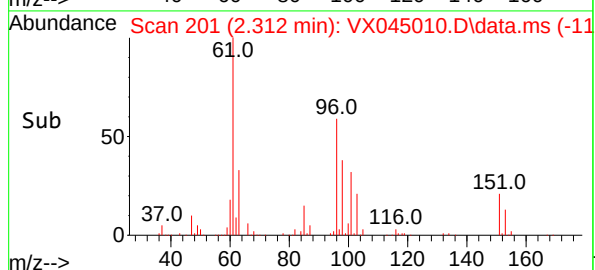
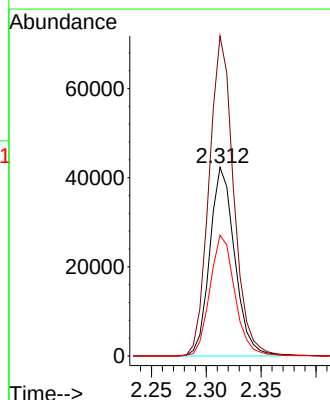
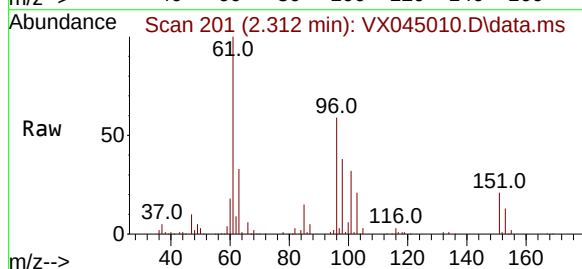
Tgt Ion: 96 Resp: 66962

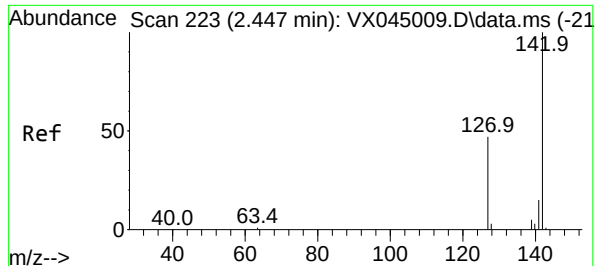
Ion Ratio Lower Upper

96 100

61 169.5 124.2 186.2

98 64.0 51.1 76.7





#11

Methyl Iodide

Concen: 54.046 ug/l

RT: 2.447 min Scan# 21

Delta R.T. -0.000 min

Lab File: VX045010.D

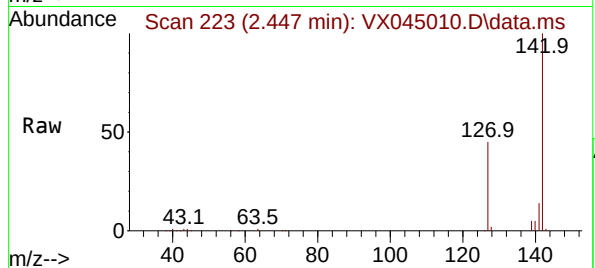
Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050



Tgt Ion:142 Resp: 8116

Ion Ratio Lower Upper

142 100

127 44.6 23.3 69.9

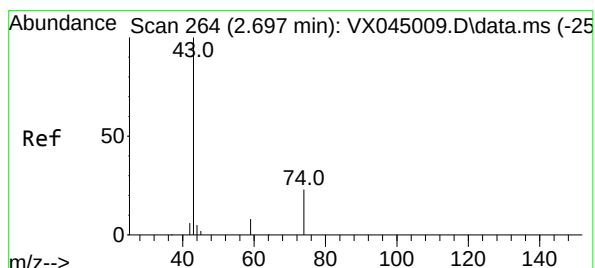
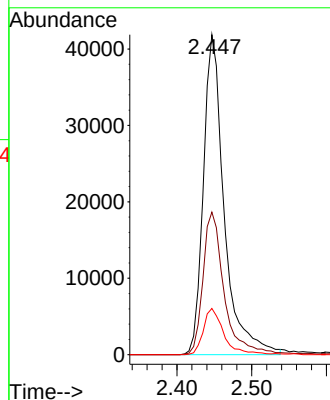
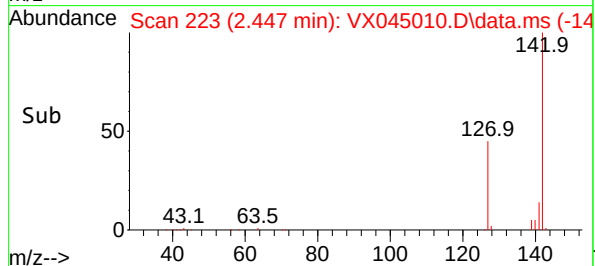
141 14.4 7.5 22.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#12

Methyl Acetate

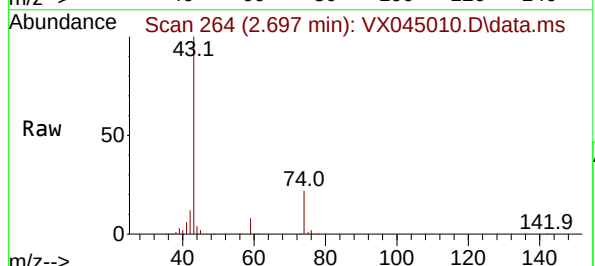
Concen: 50.808 ug/l

RT: 2.697 min Scan# 264

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

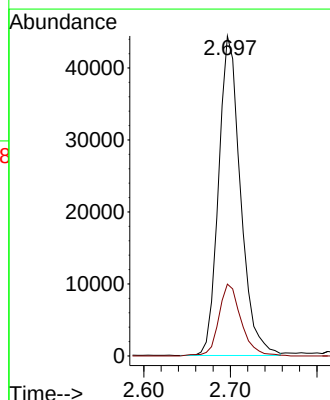
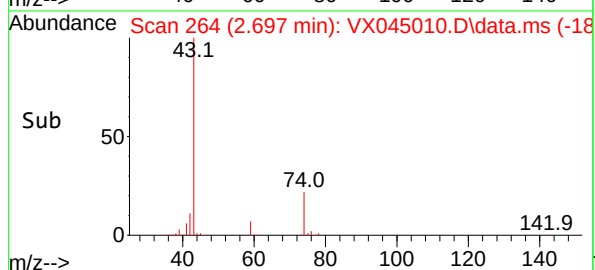


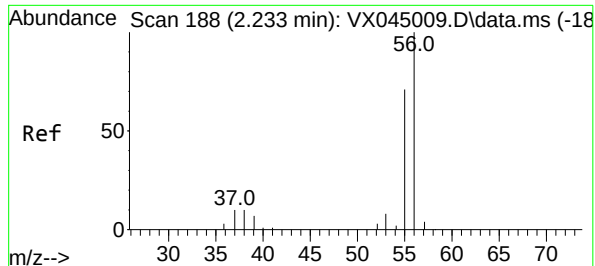
Tgt Ion: 43 Resp: 78286

Ion Ratio Lower Upper

43 100

74 22.4 17.9 26.9





#13

Acrolein

Concen: 248.462 ug/l

RT: 2.233 min Scan# 188

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 56 Resp: 76730

Ion Ratio Lower Upper

56 100

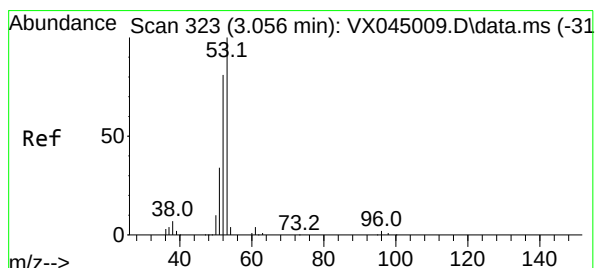
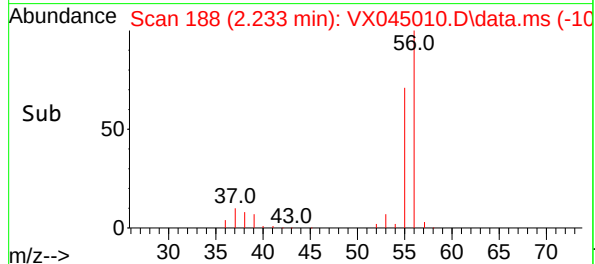
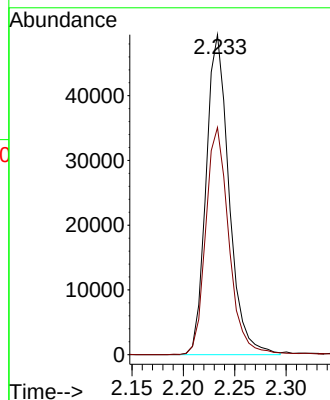
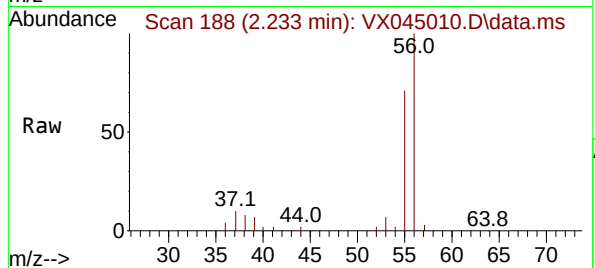
55 71.2 55.4 83.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#14

Acrylonitrile

Concen: 260.667 ug/l

RT: 3.056 min Scan# 323

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

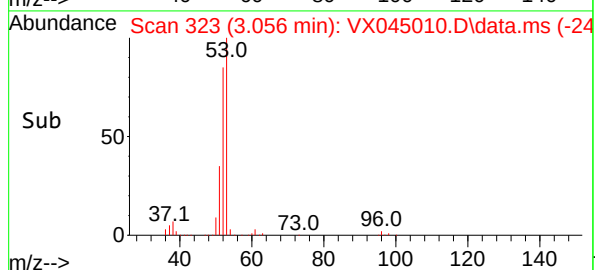
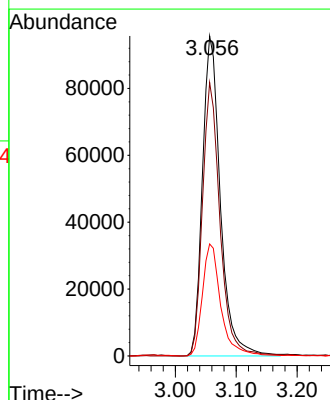
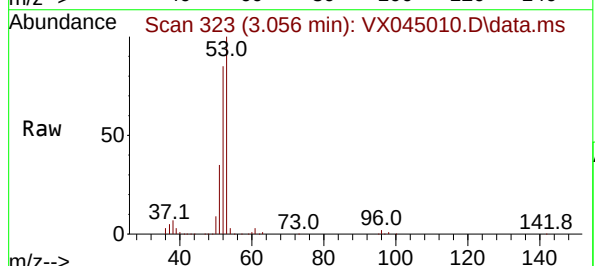
Tgt Ion: 53 Resp: 196184

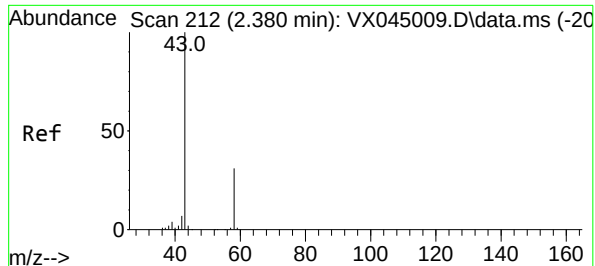
Ion Ratio Lower Upper

53 100

52 83.2 40.9 122.8

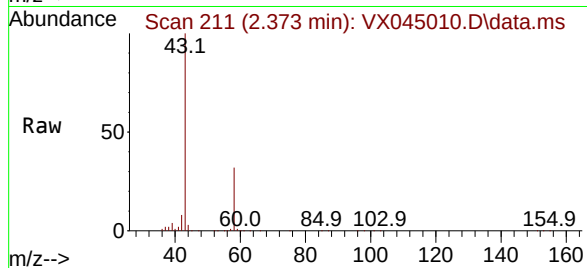
51 35.9 18.0 54.0





#15
Acetone
Concen: 249.418 ug/l
RT: 2.373 min Scan# 211
Delta R.T. -0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

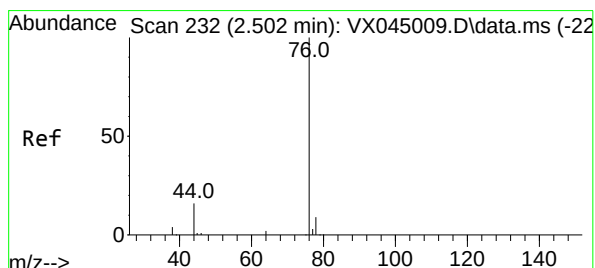
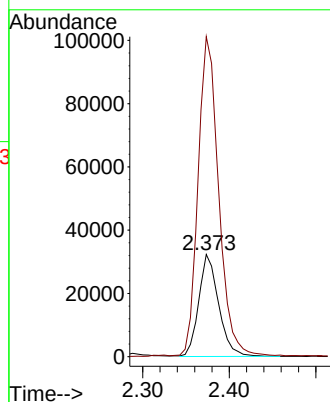
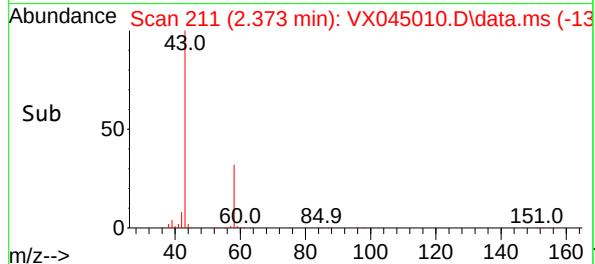
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050



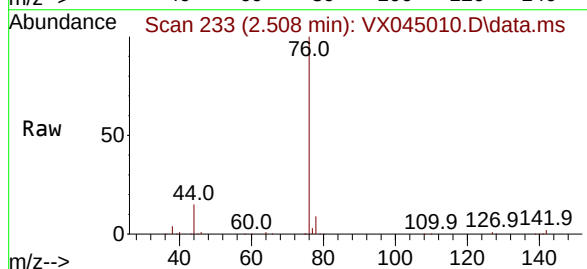
Tgt Ion: 58 Resp: 5148
Ion Ratio Lower Upper
58 100
43 312.5 258.6 388.0

Manual Integrations
APPROVED

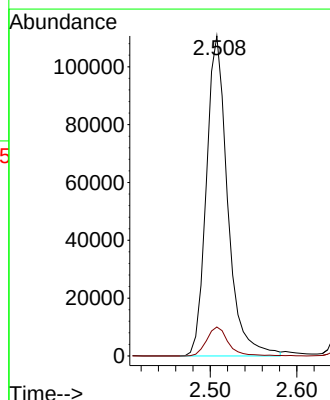
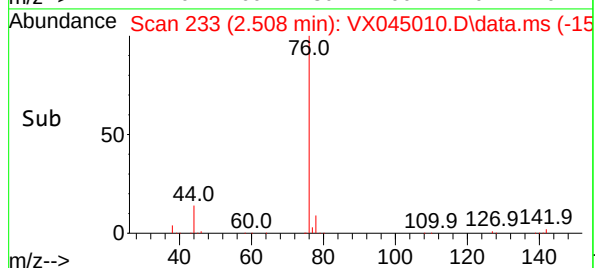
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

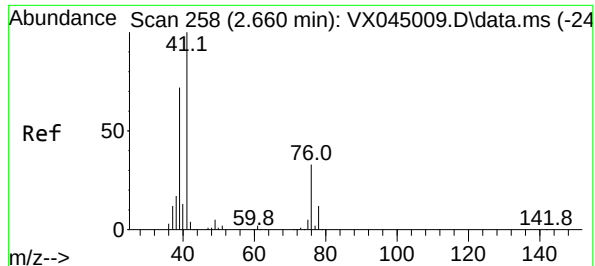


#16
Carbon Disulfide
Concen: 50.210 ug/l
RT: 2.508 min Scan# 233
Delta R.T. 0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44



Tgt Ion: 76 Resp: 188973
Ion Ratio Lower Upper
76 100
78 9.1 7.3 10.9





#17

Allyl chloride

Concen: 50.682 ug/l

RT: 2.660 min Scan# 258

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 41 Resp: 125778

Ion Ratio Lower Upper

41 100

39 72.0 36.2 108.6

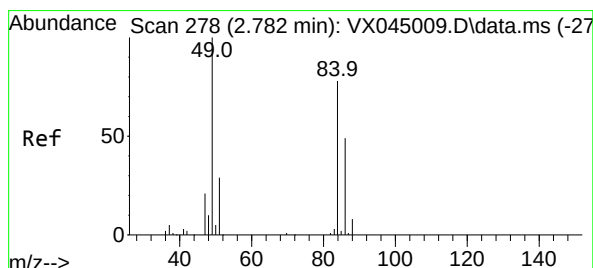
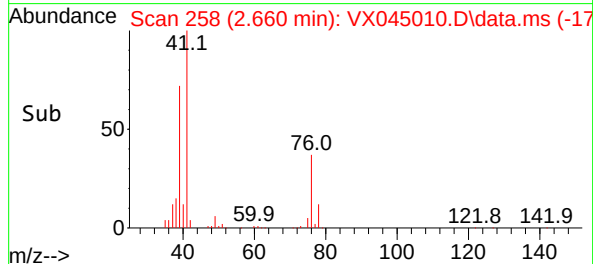
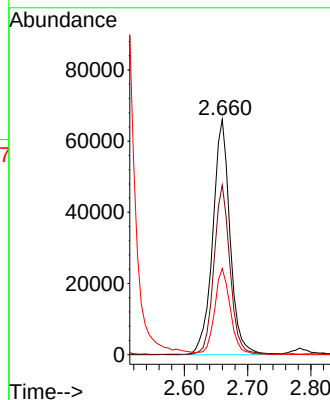
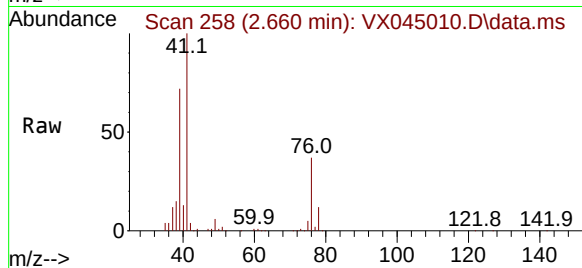
76 36.5 17.2 51.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#18

Methylene Chloride

Concen: 51.081 ug/l

RT: 2.782 min Scan# 278

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Tgt Ion: 84 Resp: 76235

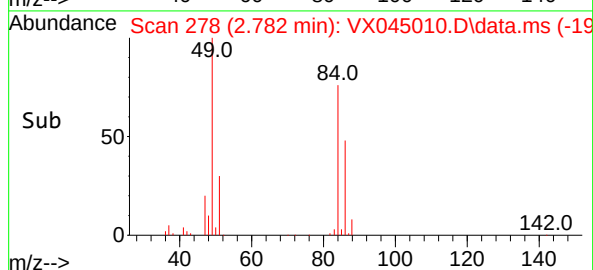
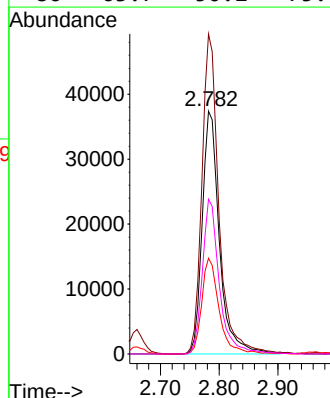
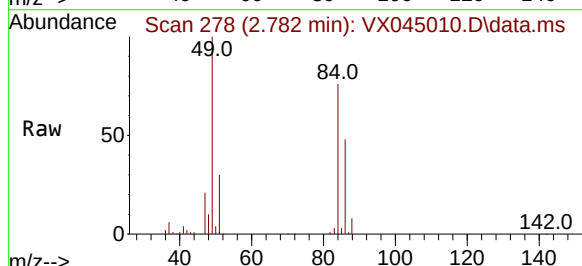
Ion Ratio Lower Upper

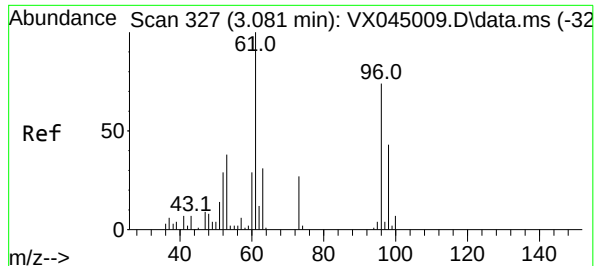
84 100

49 131.8 102.8 154.2

51 39.4 30.1 45.1

86 63.7 50.2 75.4





#19

trans-1,2-Dichloroethene

Concen: 50.843 ug/l

RT: 3.087 min Scan# 31

Delta R.T. 0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion: 96 Resp: 6825

Ion Ratio Lower Upper

96 100

61 141.9 108.6 163.0

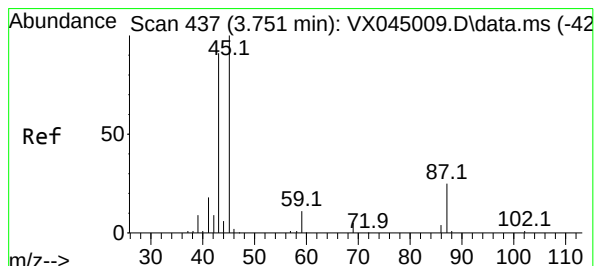
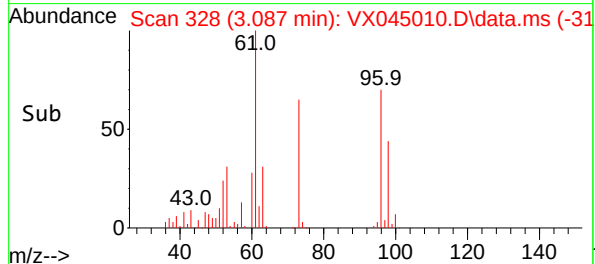
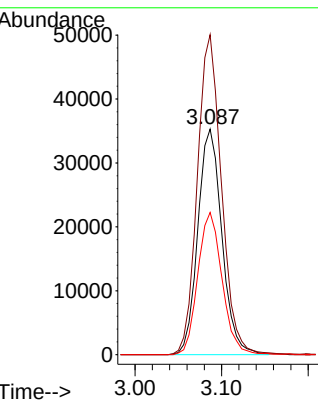
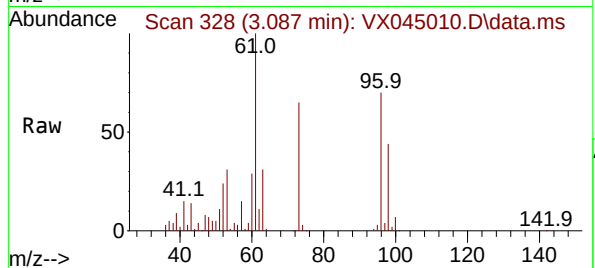
98 63.1 46.5 69.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#20

Diisopropyl ether

Concen: 51.107 ug/l

RT: 3.751 min Scan# 437

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Tgt Ion: 45 Resp: 243734

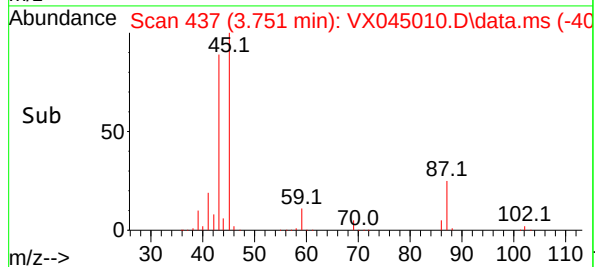
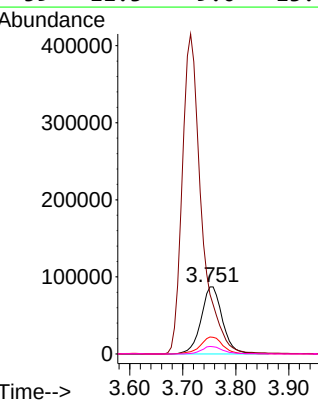
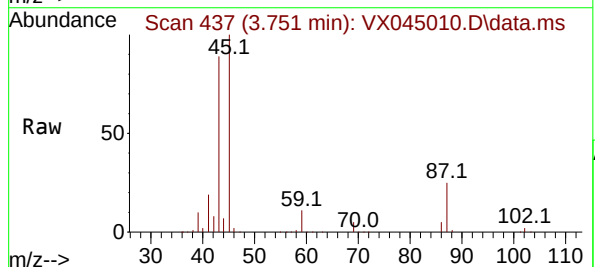
Ion Ratio Lower Upper

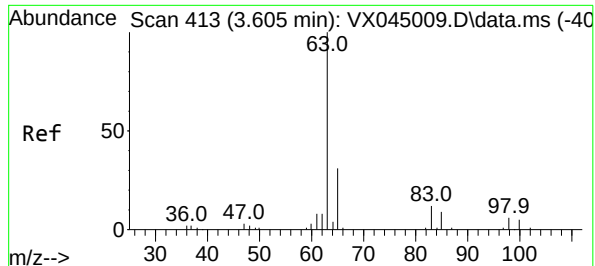
45 100

43 87.9 74.4 111.6

87 25.2 19.8 29.8

59 11.3 9.0 13.4





#21

1,1-Dichloroethane

Concen: 49.475 ug/l

RT: 3.599 min Scan# 413

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion: 63 Resp: 13122

Ion Ratio Lower Upper

63 100

98 6.5 3.3 9.8

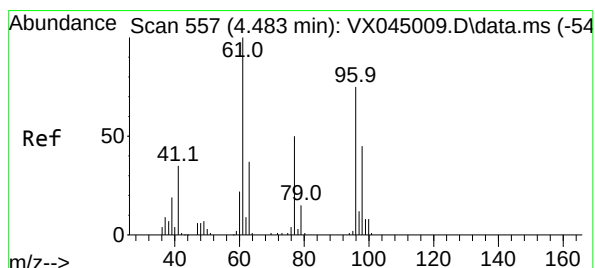
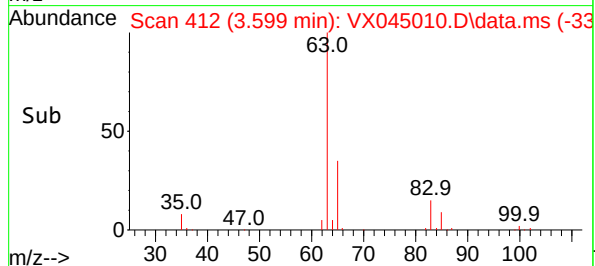
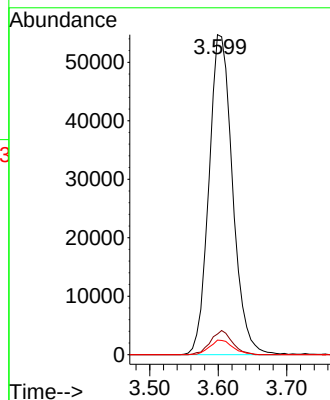
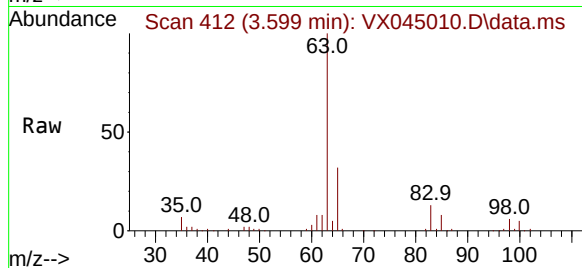
100 4.6 2.4 7.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#22

cis-1,2-Dichloroethene

Concen: 49.382 ug/l

RT: 4.477 min Scan# 556

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

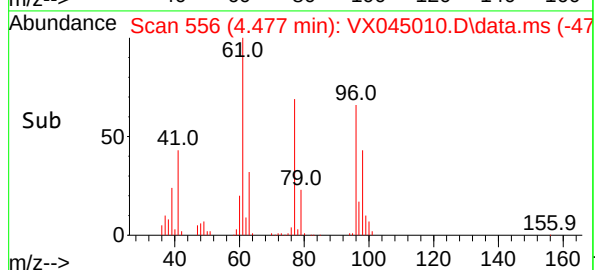
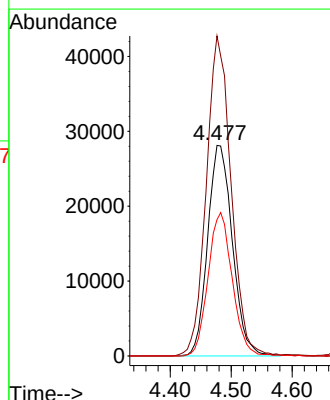
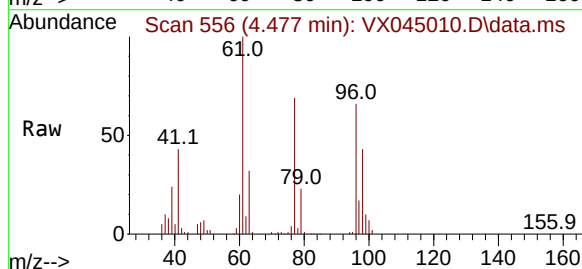
Tgt Ion: 96 Resp: 79440

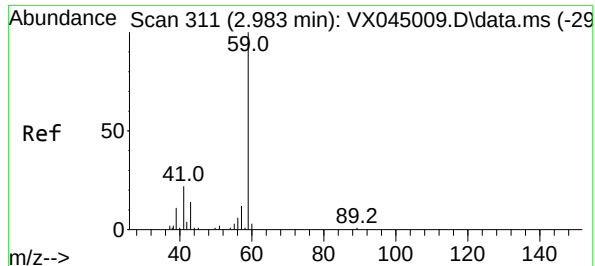
Ion Ratio Lower Upper

96 100

61 151.9 118.9 178.3

98 66.2 50.7 76.1





#23

tert-Butyl Alcohol

Concen: 262.986 ug/l

RT: 2.959 min Scan# 307

Delta R.T. -0.025 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 59 Resp: 6918

Ion Ratio Lower Upper

59 100

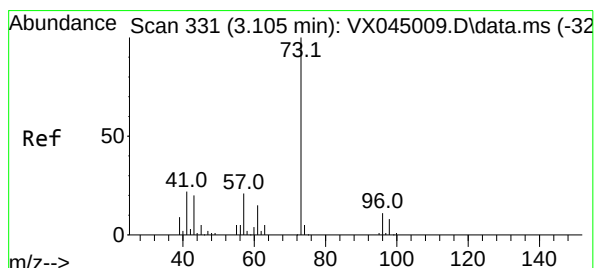
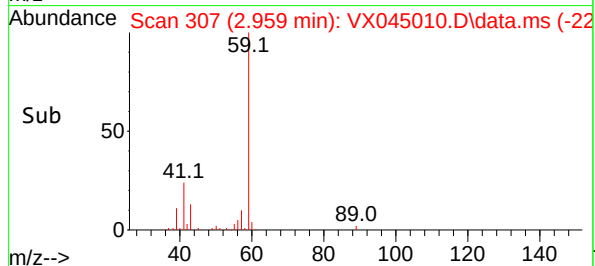
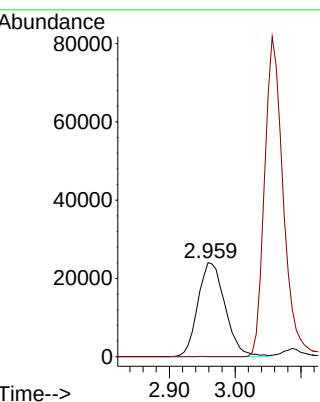
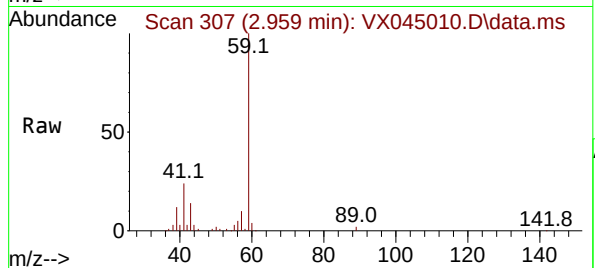
52 0.1 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#24

Methyl tert-Butyl Ether

Concen: 50.521 ug/l

RT: 3.111 min Scan# 332

Delta R.T. 0.006 min

Lab File: VX045010.D

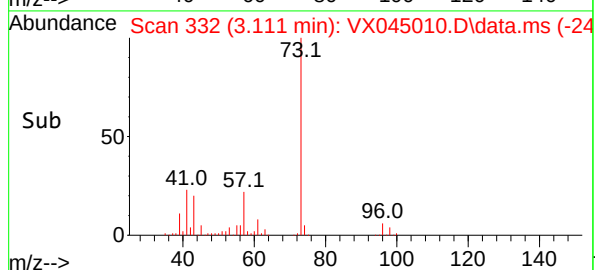
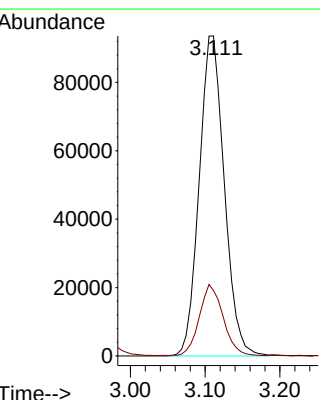
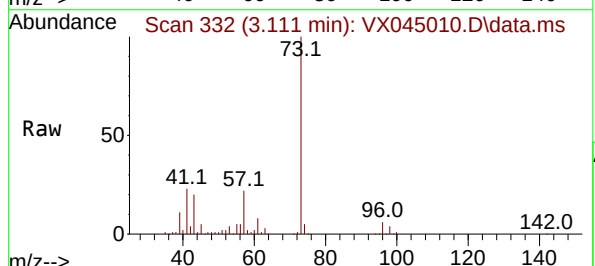
Acq: 21 Feb 2025 10:44

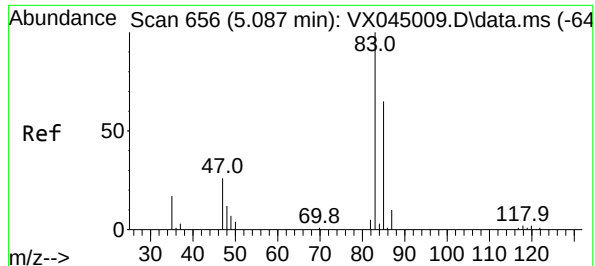
Tgt Ion: 73 Resp: 218792

Ion Ratio Lower Upper

73 100

43 21.3 17.4 26.0





#25

Chloroform

Concen: 50.062 ug/l

RT: 5.086 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 83 Resp: 12825

Ion Ratio Lower Upper

83 100

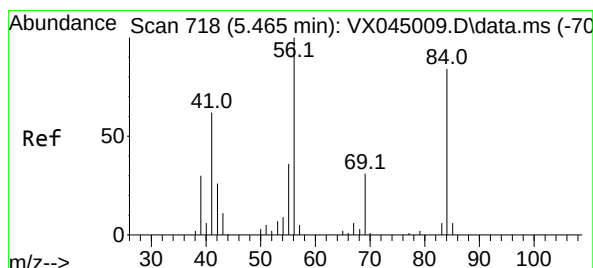
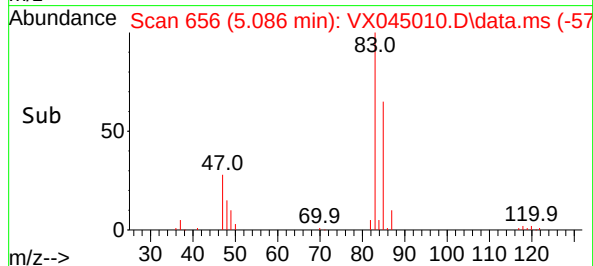
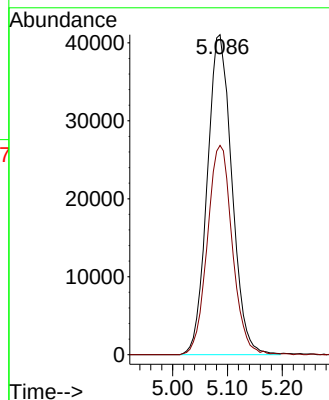
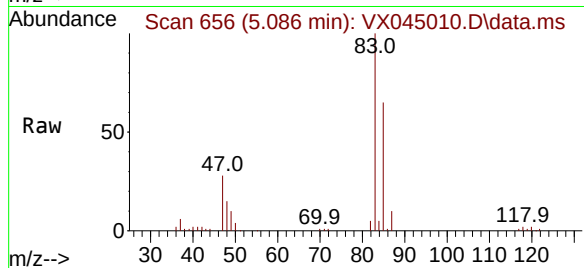
85 65.4 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#26

Cyclohexane

Concen: 50.802 ug/l

RT: 5.458 min Scan# 717

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

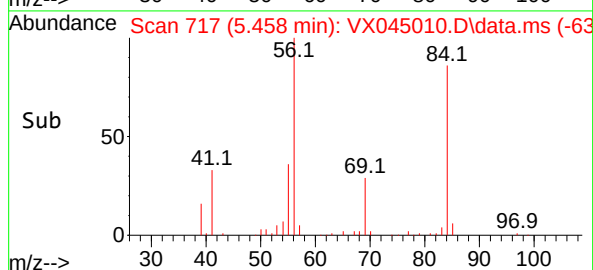
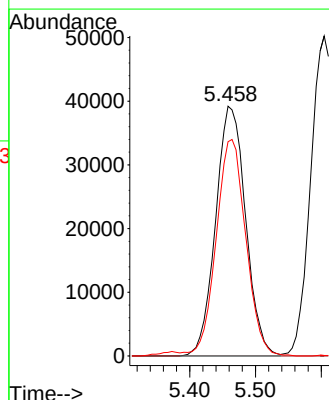
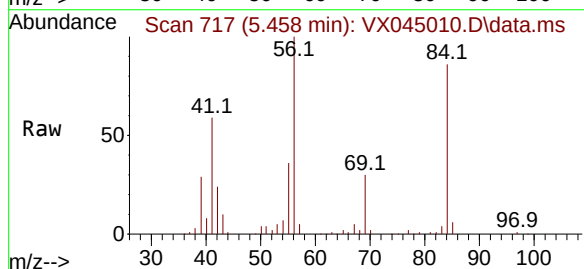
Tgt Ion: 56 Resp: 124373

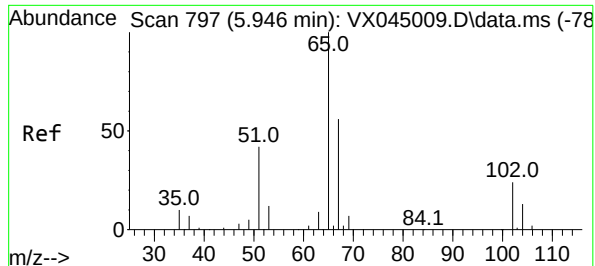
Ion Ratio Lower Upper

56 100

89 0.0 0.0 0.0

84 85.6 67.1 100.7





#27

1,2-Dichloroethane-d4

Concen: 29.270 ug/l

RT: 5.946 min Scan# 79

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 65 Resp: 49650

Ion Ratio Lower Upper

65 100

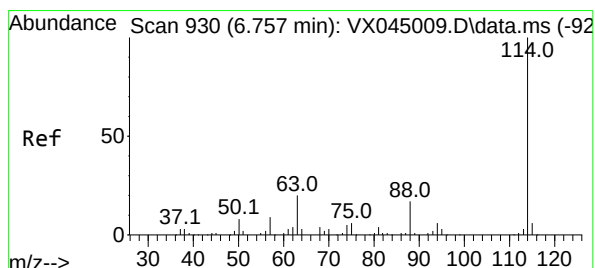
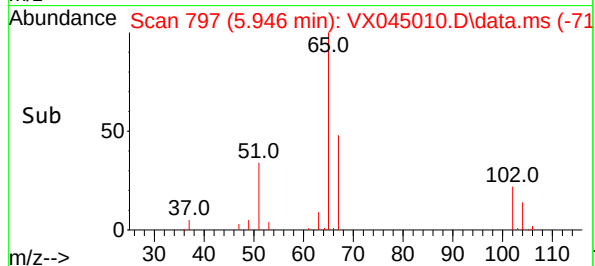
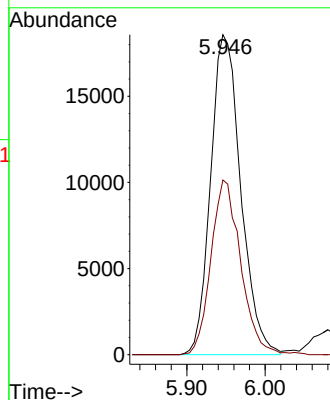
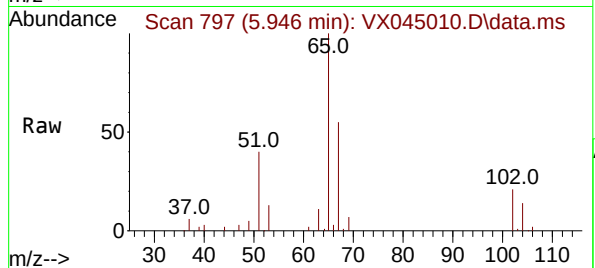
67 53.7 42.6 64.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.757 min Scan# 930

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

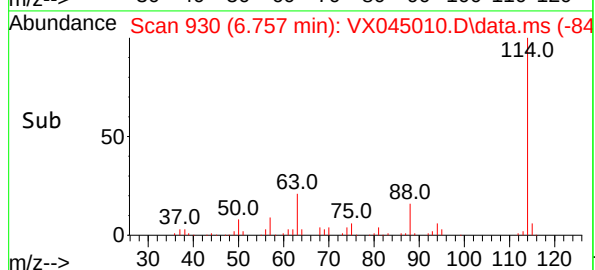
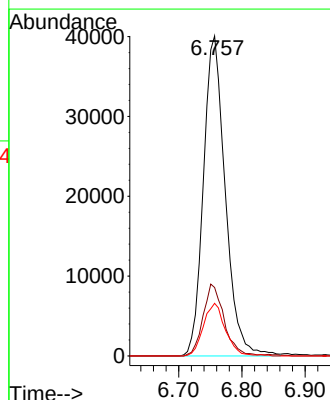
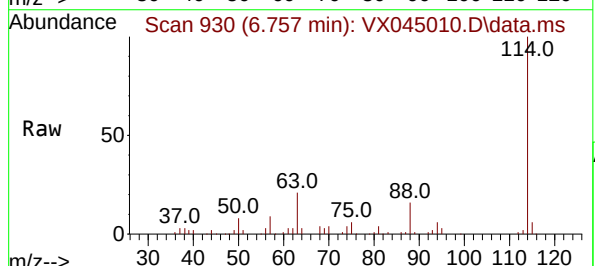
Tgt Ion:114 Resp: 96411

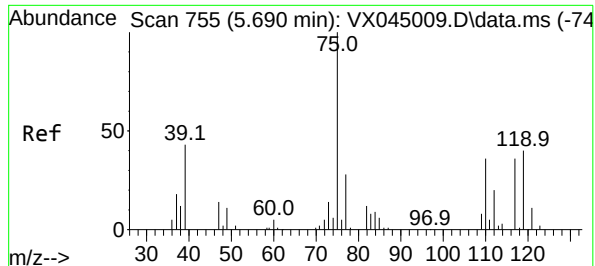
Ion Ratio Lower Upper

114 100

63 21.5 16.8 25.2

88 16.5 12.7 19.1





#29

1,1-Dichloropropene

Concen: 51.038 ug/l

RT: 5.684 min Scan# 70

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 75 Resp: 90510

Ion Ratio Lower Upper

75 100

110 35.3 0.0 69.2

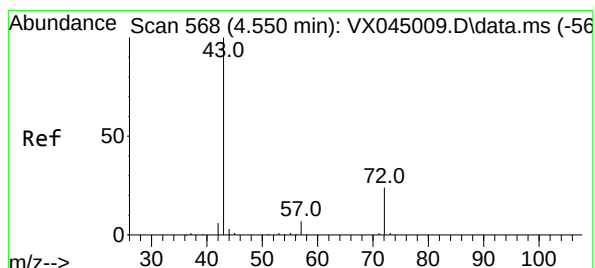
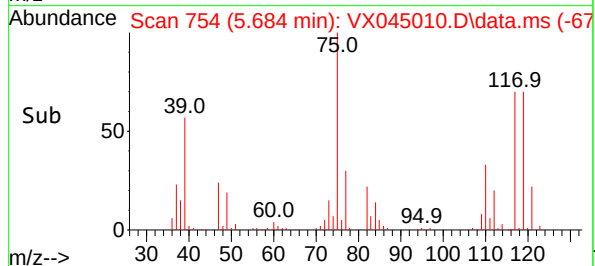
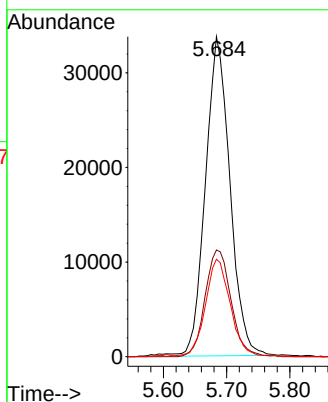
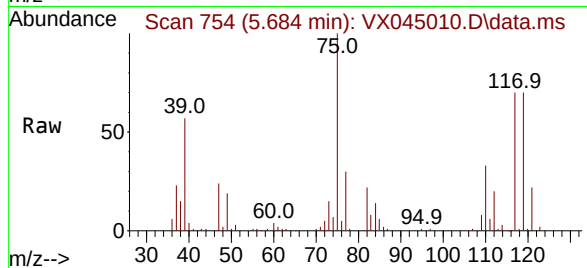
77 31.2 0.0 61.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#30

2-Butanone

Concen: 261.401 ug/l

RT: 4.544 min Scan# 567

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

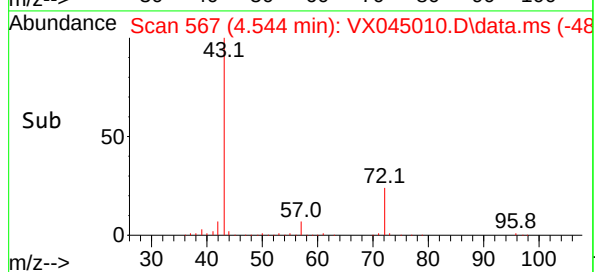
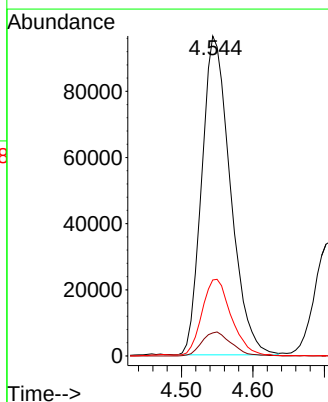
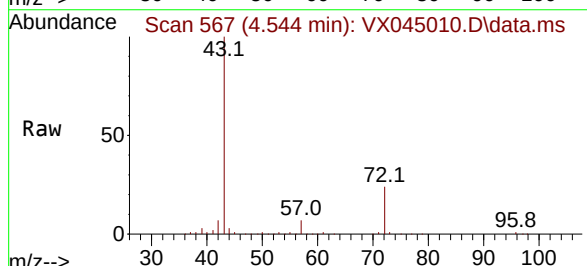
Tgt Ion: 43 Resp: 267770

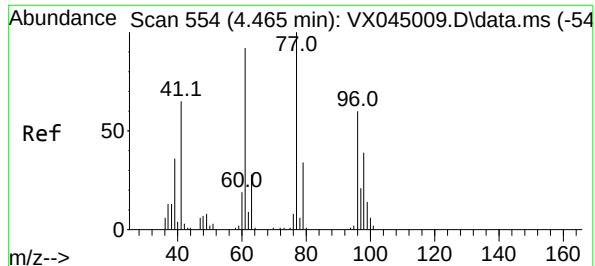
Ion Ratio Lower Upper

43 100

57 7.8 6.2 9.2

72 24.8 20.2 30.2





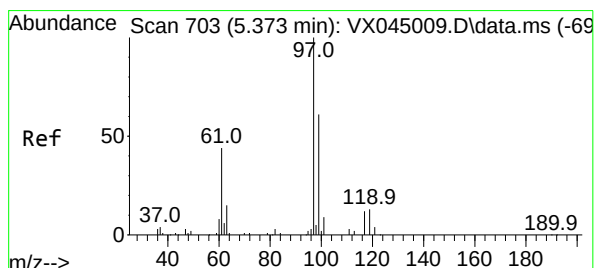
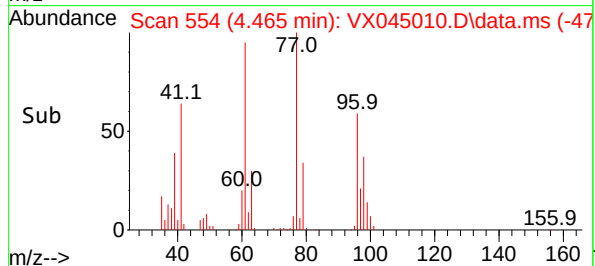
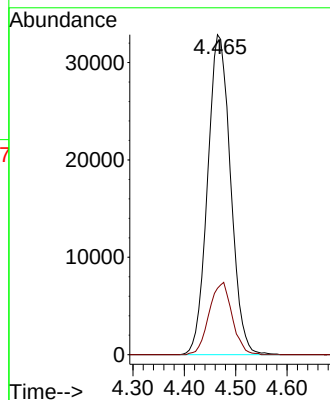
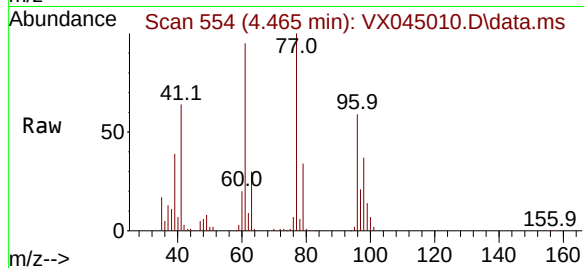
#31
2,2-Dichloropropane
Concen: 50.846 ug/l
RT: 4.465 min Scan# 51
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion: 77 Resp: 101960
Ion Ratio Lower Upper
77 100
97 22.5 18.0 27.0

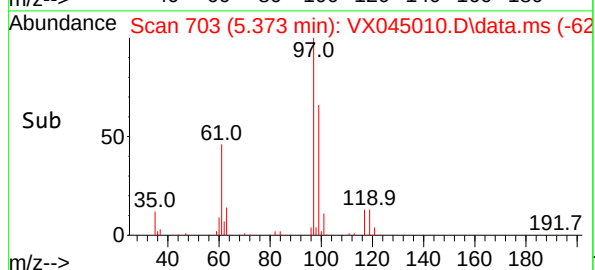
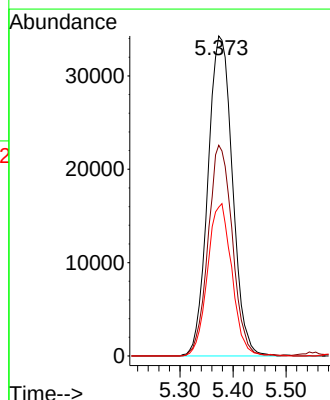
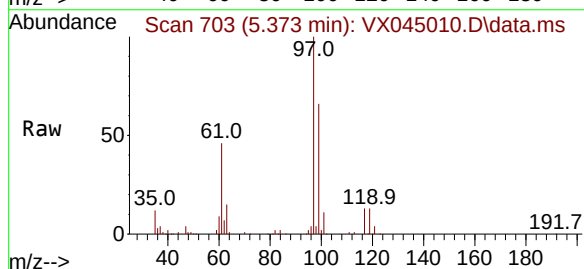
Manual Integrations
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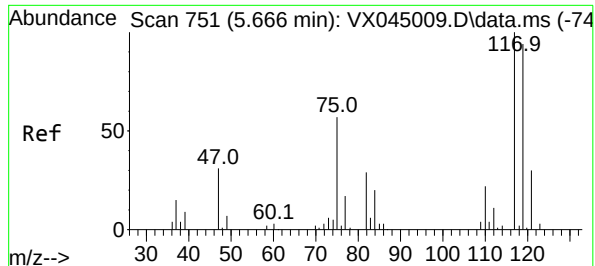
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#32
1,1,1-Trichloroethane
Concen: 51.322 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 97 Resp: 110282
Ion Ratio Lower Upper
97 100
99 65.0 52.2 78.2
61 46.9 38.5 57.7





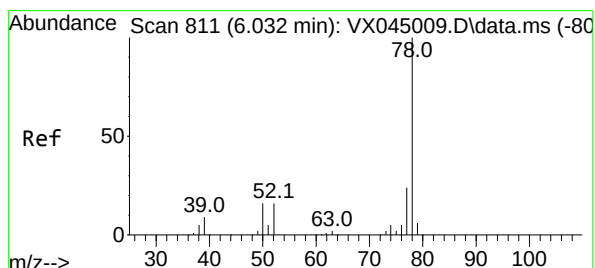
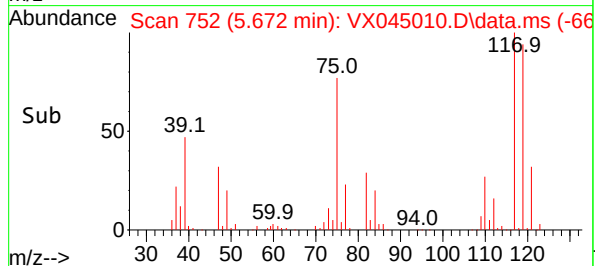
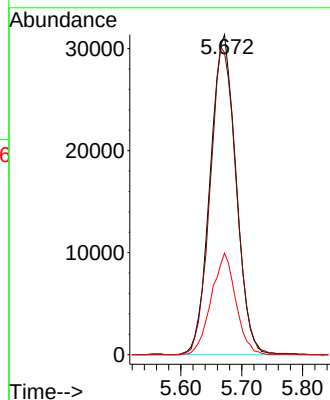
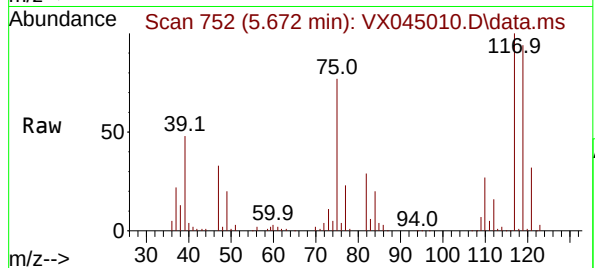
#33
Carbon Tetrachloride
Concen: 51.023 ug/l
RT: 5.672 min Scan# 751
Delta R.T. 0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion:117 Resp: 92530
Ion Ratio Lower Upper
117 100
119 94.1 75.1 112.7
121 31.7 23.9 35.9

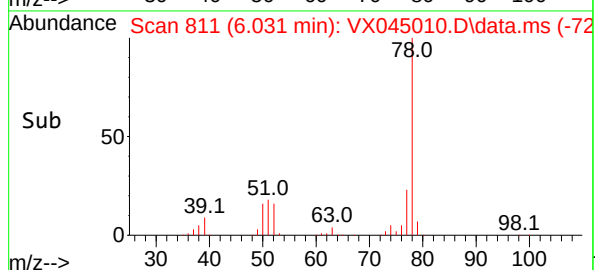
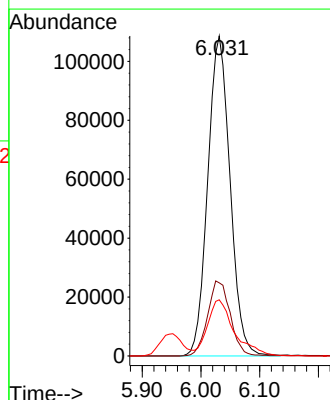
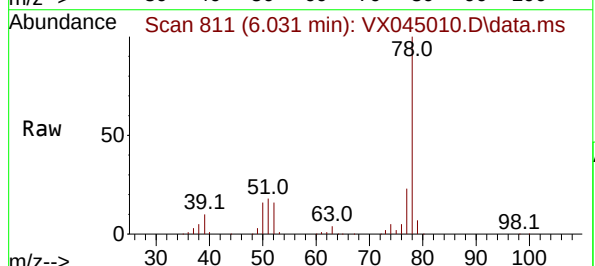
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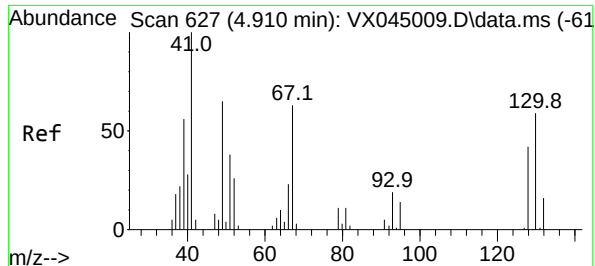
Reviewed By :John Carbone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#34
Benzene
Concen: 51.573 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 78 Resp: 286826
Ion Ratio Lower Upper
78 100
77 22.8 19.6 29.4
51 17.4 13.8 20.6





#35

Methacrylonitrile

Concen: 53.843 ug/l

RT: 4.910 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 41 Resp: 5902

Ion Ratio Lower Upper

41 100

39 53.7 27.8 83.4

67 64.4 31.5 94.5

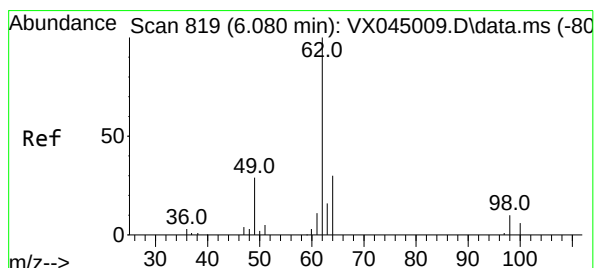
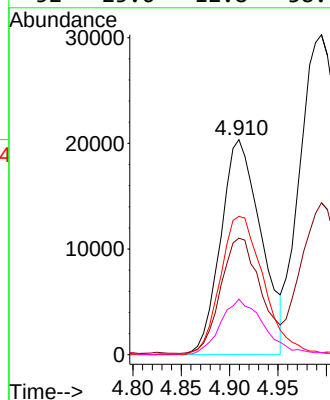
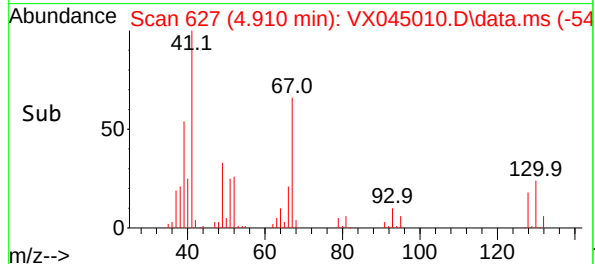
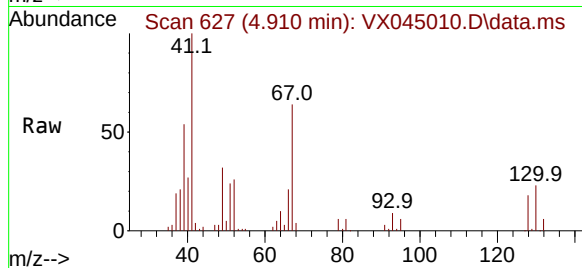
52 25.6 12.8 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#36

1,2-Dichloroethane

Concen: 50.630 ug/l

RT: 6.080 min Scan# 819

Delta R.T. -0.000 min

Lab File: VX045010.D

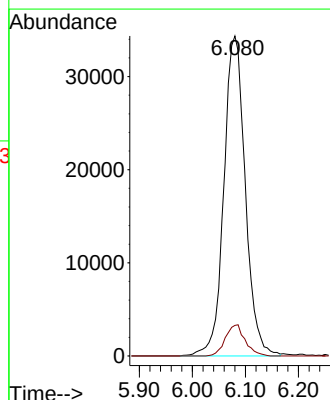
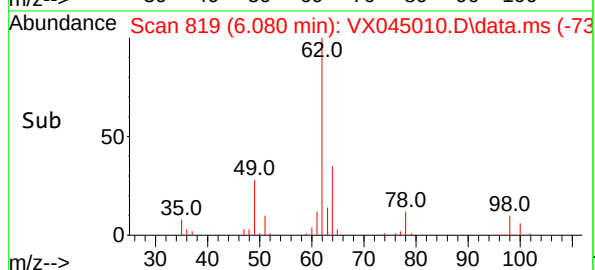
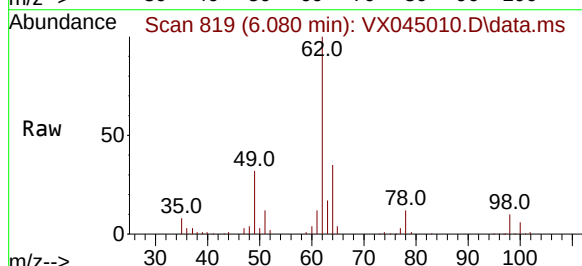
Acq: 21 Feb 2025 10:44

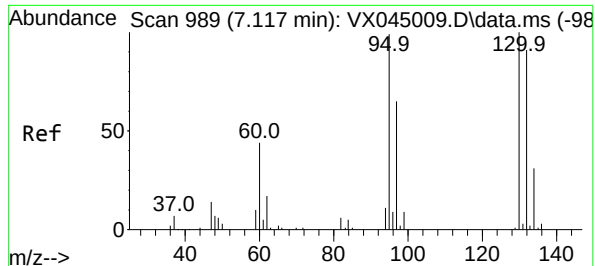
Tgt Ion: 62 Resp: 96405

Ion Ratio Lower Upper

62 100

98 9.0 7.9 11.9





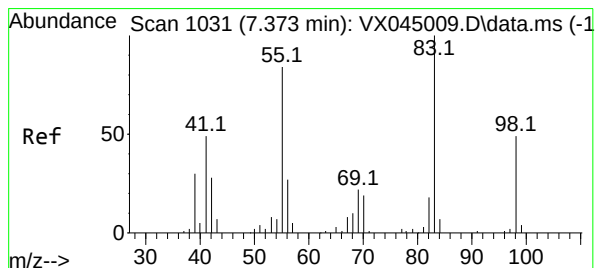
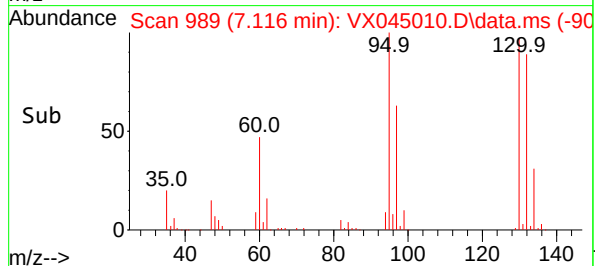
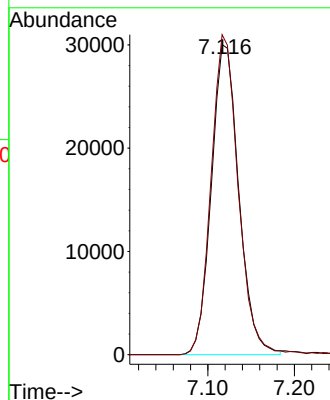
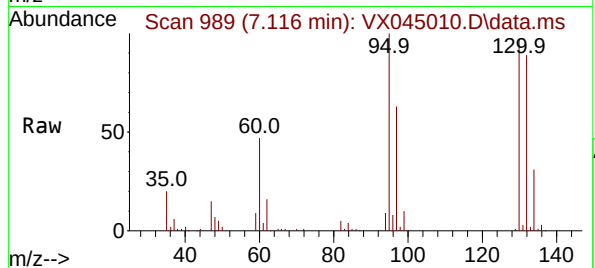
#37
Trichloroethene
Concen: 50.826 ug/l
RT: 7.116 min Scan# 989
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion:130 Resp: 6613
Ion Ratio Lower Upper
130 100
95 103.2 79.0 118.4

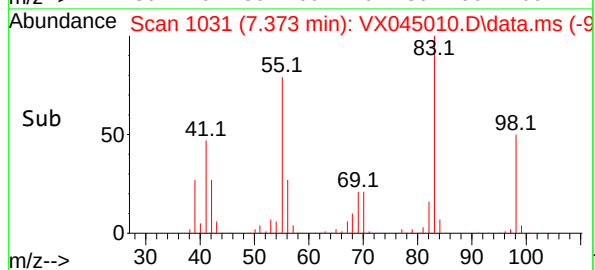
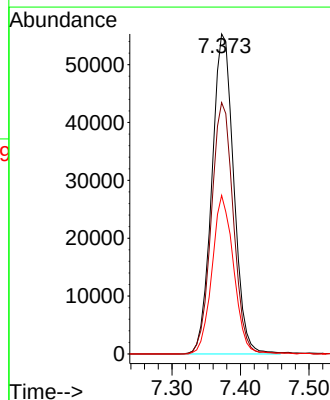
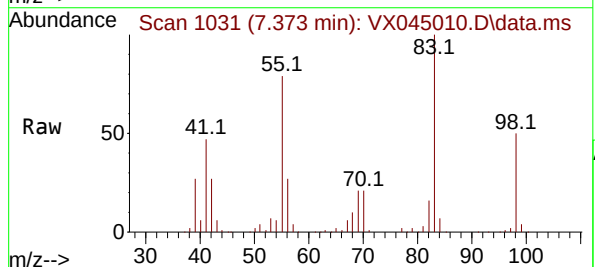
Manual Integrations
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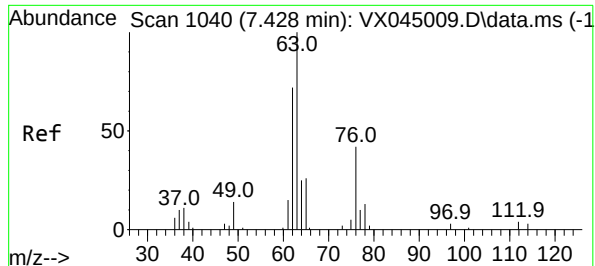
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#38
Methylcyclohexane
Concen: 51.506 ug/l
RT: 7.373 min Scan# 1031
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 83 Resp: 122650
Ion Ratio Lower Upper
83 100
55 78.5 40.6 122.0
98 48.7 24.9 74.6





#39

1,2-Dichloropropane

Concen: 49.579 ug/l

RT: 7.421 min Scan# 1039

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion: 63 Resp: 6855

Ion Ratio Lower Upper

63 100

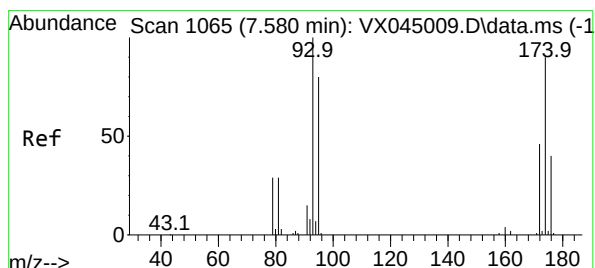
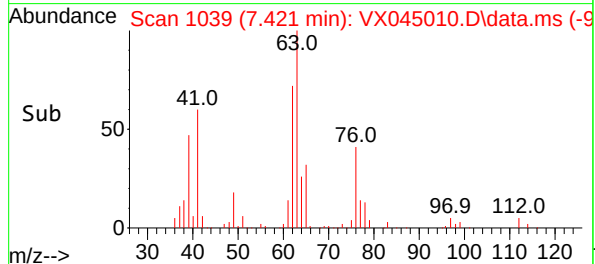
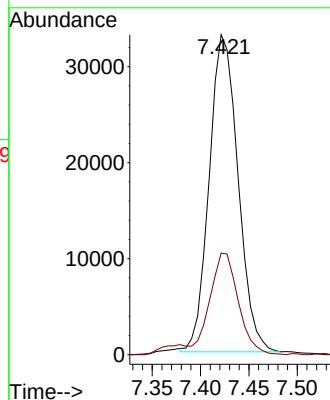
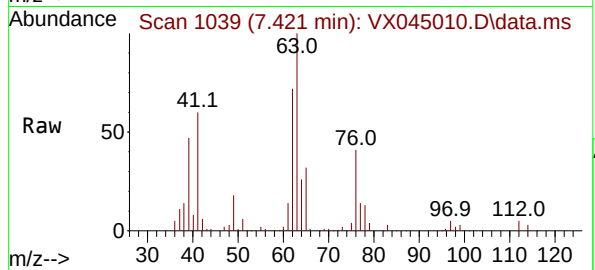
65 31.8 24.3 36.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#40

Dibromomethane

Concen: 50.426 ug/l

RT: 7.574 min Scan# 1064

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

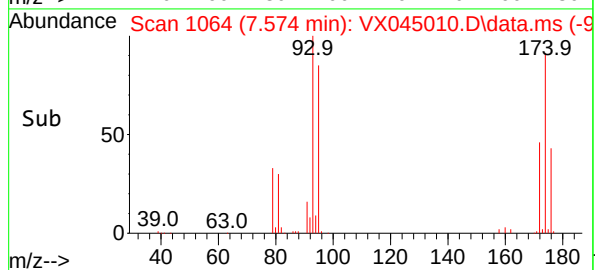
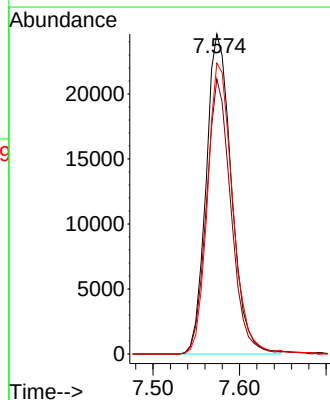
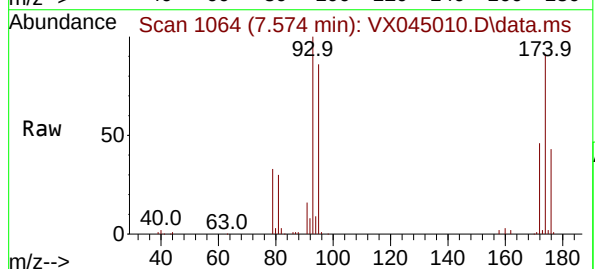
Tgt Ion: 93 Resp: 50034

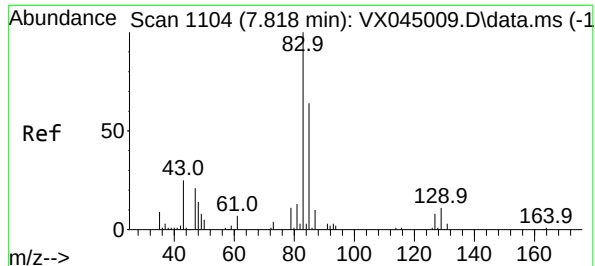
Ion Ratio Lower Upper

93 100

95 82.9 0.0 162.6

174 89.6 0.0 178.8





#41

Bromodichloromethane

Concen: 50.932 ug/l

RT: 7.818 min Scan# 1104

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 83 Resp: 10044

Ion Ratio Lower Upper

83 100

85 64.6 51.0 76.6

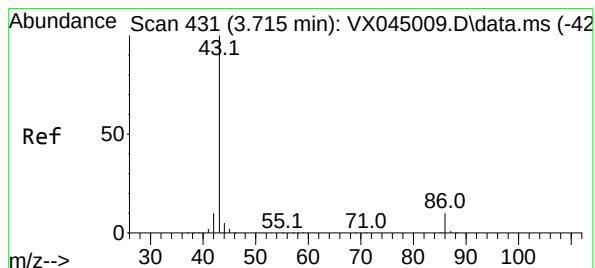
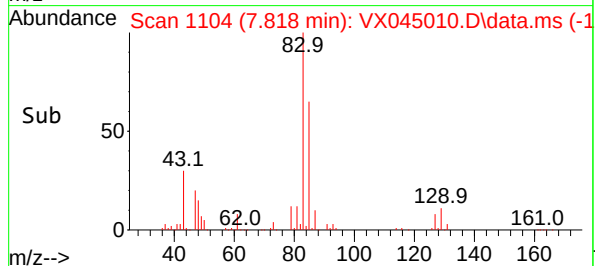
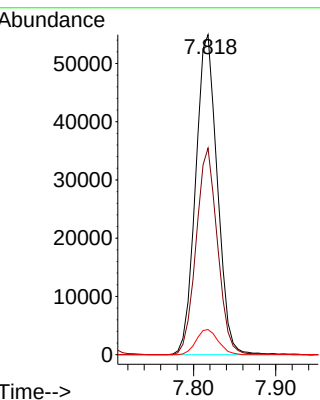
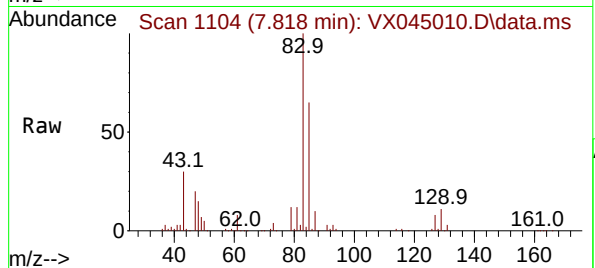
127 7.8 6.1 9.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#42

Vinyl Acetate

Concen: 263.518 ug/l

RT: 3.715 min Scan# 431

Delta R.T. -0.000 min

Lab File: VX045010.D

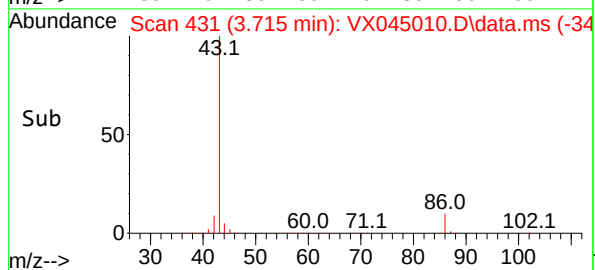
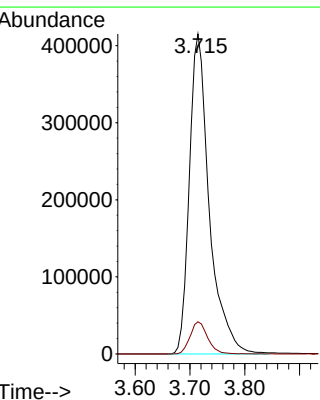
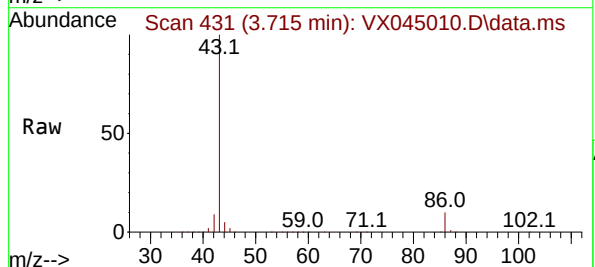
Acq: 21 Feb 2025 10:44

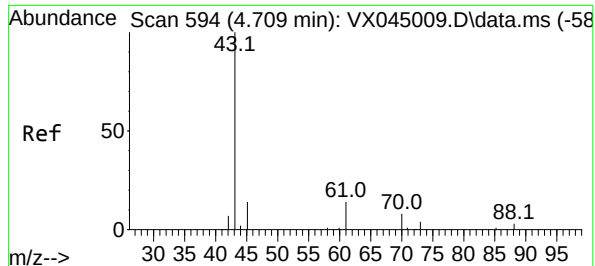
Tgt Ion: 43 Resp: 1047506

Ion Ratio Lower Upper

43 100

86 8.9 7.0 10.4





#43

Ethyl Acetate

Concen: 51.012 ug/l

RT: 4.708 min Scan# 594

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 43 Resp: 9799

Ion Ratio Lower Upper

43 100

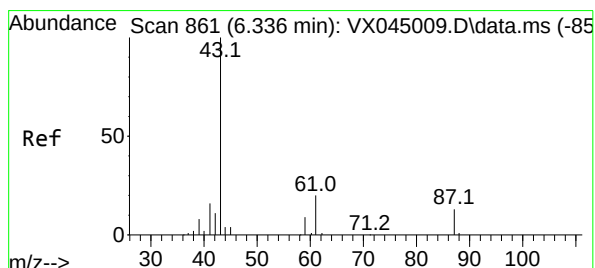
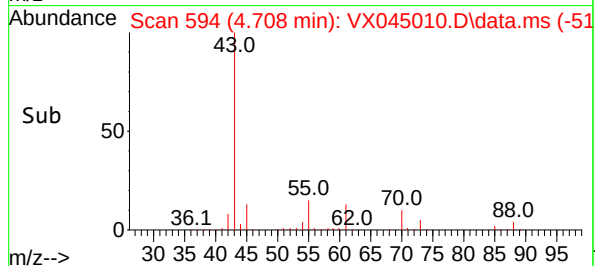
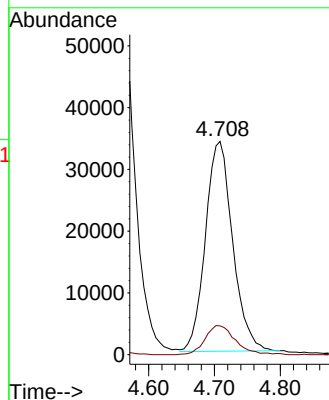
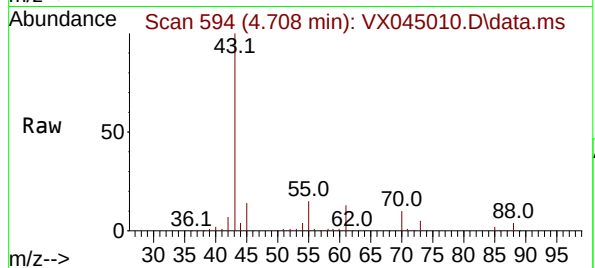
45 15.1 12.7 19.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#44

Isopropyl Acetate

Concen: 52.497 ug/l

RT: 6.330 min Scan# 860

Delta R.T. -0.006 min

Lab File: VX045010.D

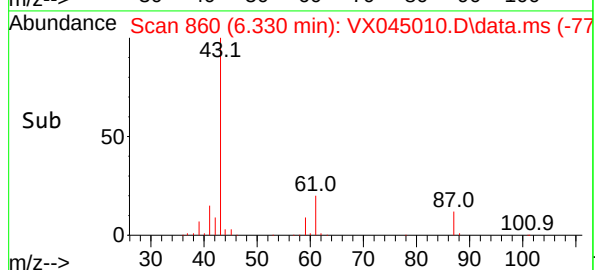
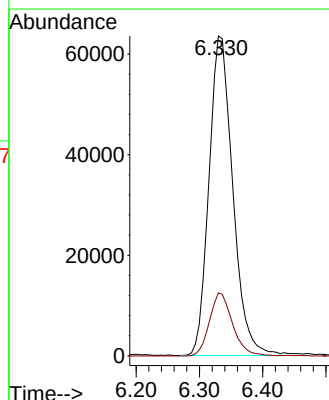
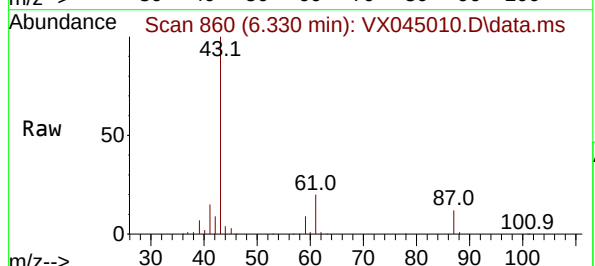
Acq: 21 Feb 2025 10:44

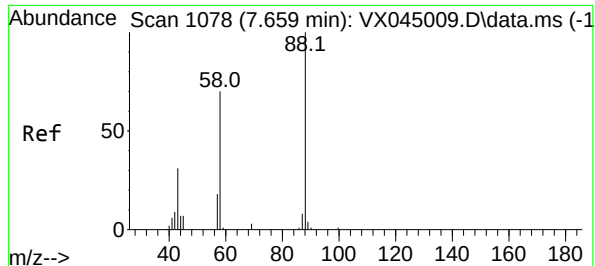
Tgt Ion: 43 Resp: 165983

Ion Ratio Lower Upper

43 100

61 19.1 15.5 23.3





#45

1,4-Dioxane

Concen: 1105.035 ug/l

RT: 7.653 min Scan# 1077

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

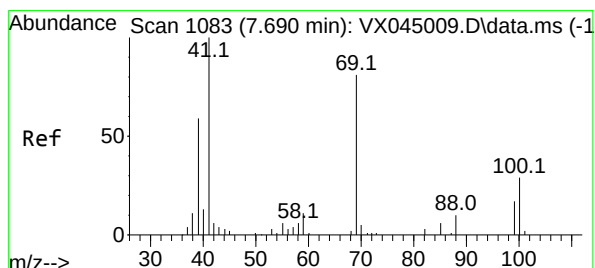
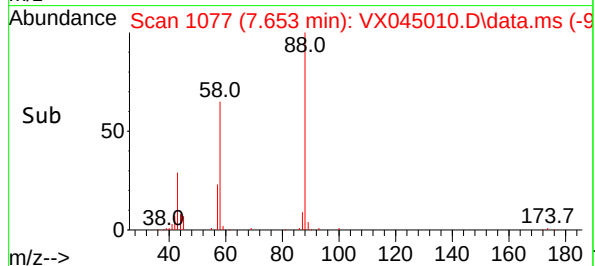
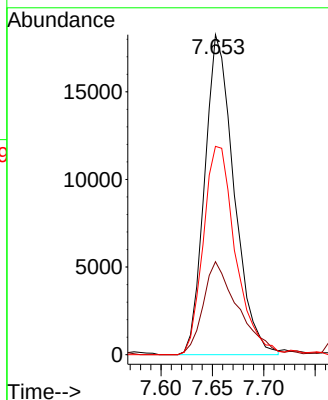
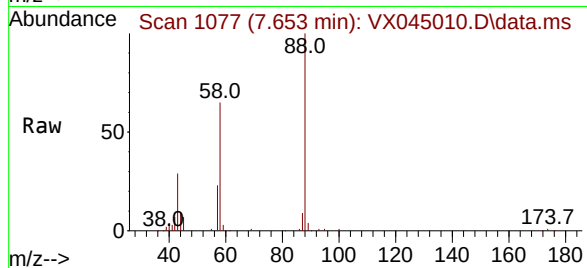
VSTDICC050

Tgt Ion:	88	Resp:	36320
Ion	Ratio	Lower	Upper
88	100		
43	34.6	29.6	44.4
58	71.3	56.2	84.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#46

Methyl methacrylate

Concen: 52.896 ug/l

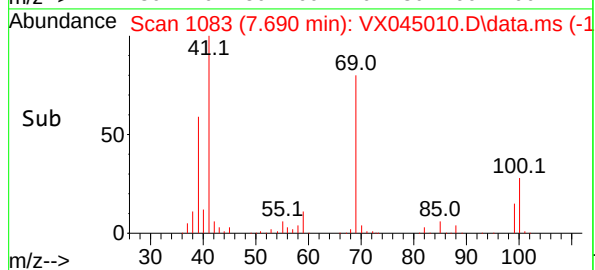
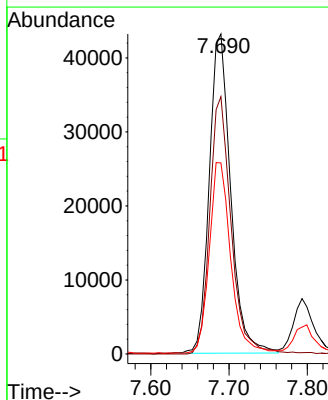
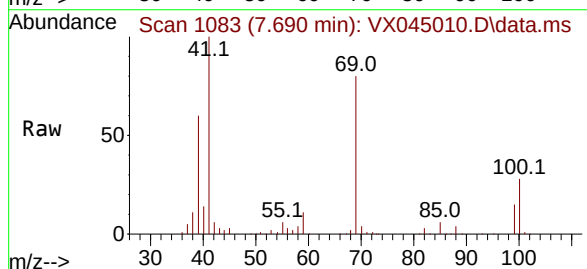
RT: 7.690 min Scan# 1083

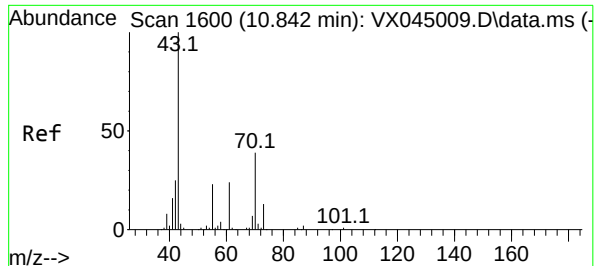
Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Tgt Ion:	41	Resp:	82008
Ion	Ratio	Lower	Upper
41	100		
69	80.7	40.7	122.1
39	59.6	29.5	88.5





#47

n-amy1 Acetate

Concen: 53.981 ug/l

RT: 10.841 min Scan# 1600

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion: 43 Resp: 148104

Ion Ratio Lower Upper

43 100

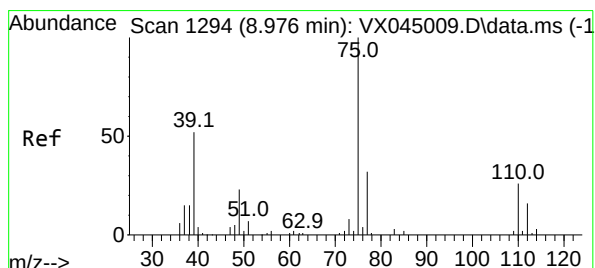
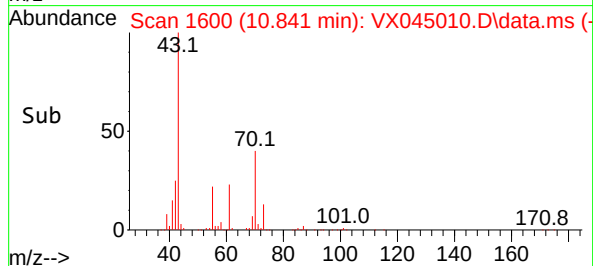
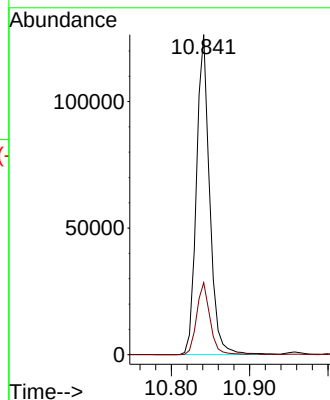
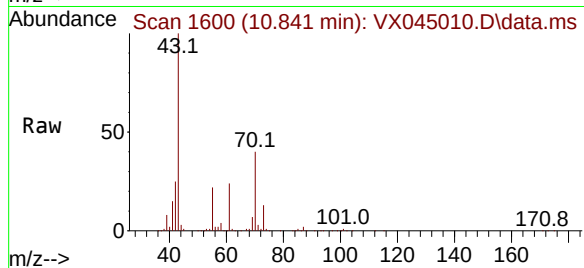
55 22.7 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#48

t-1,3-Dichloropropene

Concen: 52.075 ug/l

RT: 8.976 min Scan# 1294

Delta R.T. -0.000 min

Lab File: VX045010.D

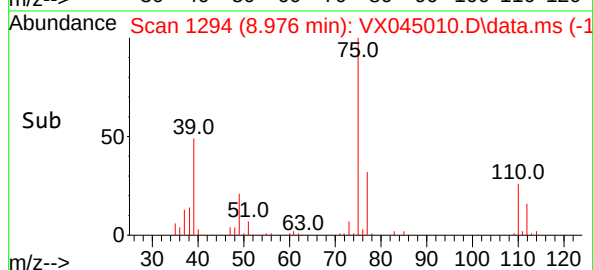
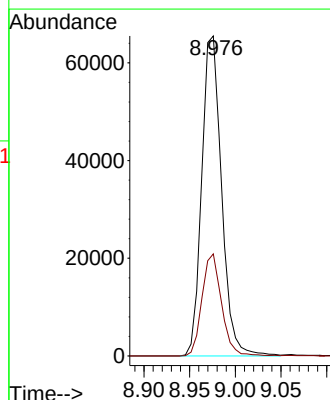
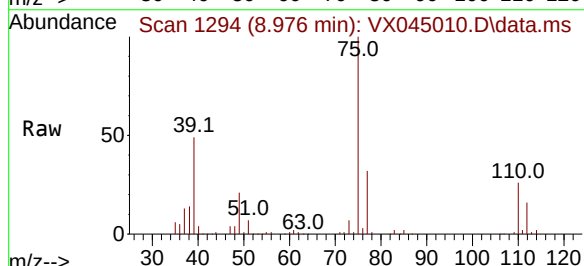
Acq: 21 Feb 2025 10:44

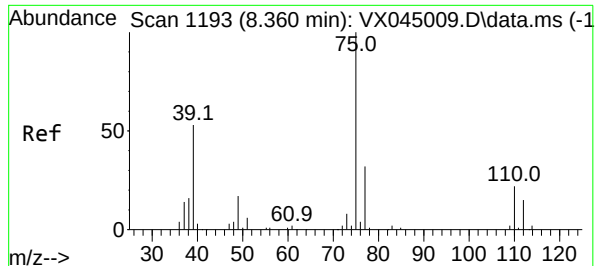
Tgt Ion: 75 Resp: 98986

Ion Ratio Lower Upper

75 100

77 31.9 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 51.564 ug/l

RT: 8.360 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 75 Resp: 11095

Ion Ratio Lower Upper

75 100

77 31.9 25.9 38.9

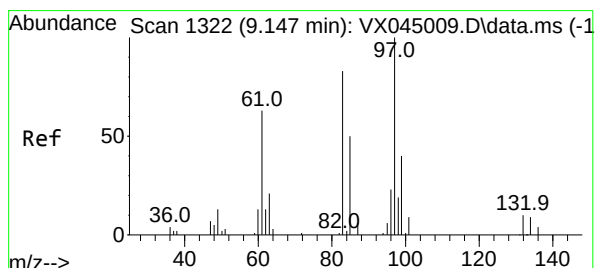
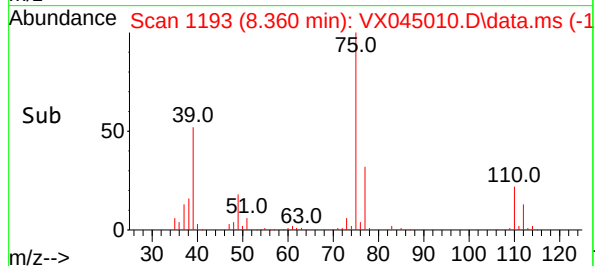
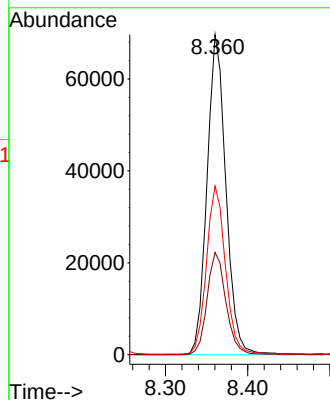
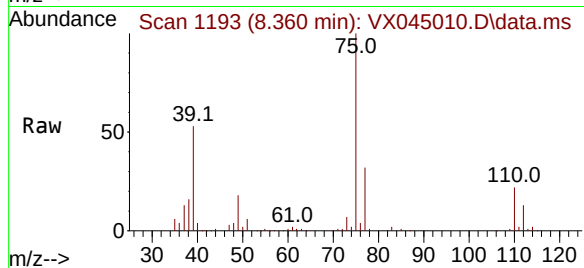
39 52.5 42.3 63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#50

1,1,2-Trichloroethane

Concen: 51.339 ug/l

RT: 9.147 min Scan# 1322

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Tgt Ion: 97 Resp: 66444

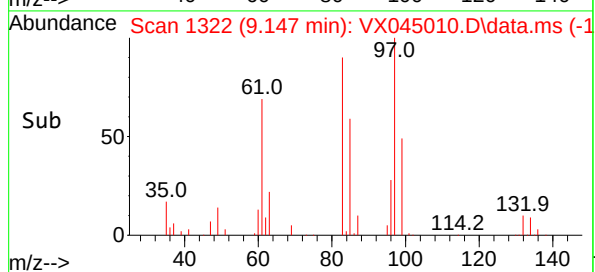
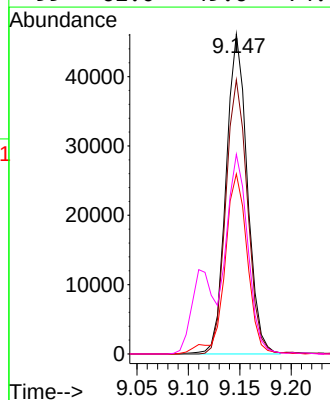
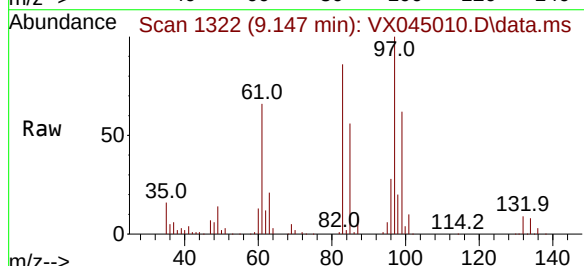
Ion Ratio Lower Upper

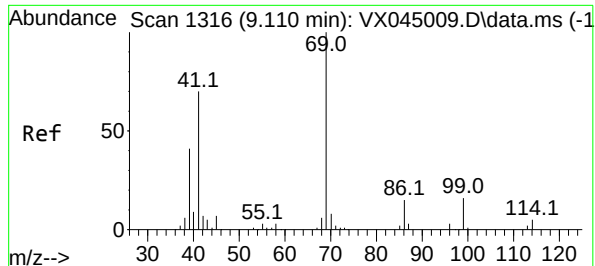
97 100

83 85.7 66.0 99.0

85 56.0 42.5 63.7

99 62.0 49.6 74.4





#51

Ethyl methacrylate

Concen: 53.387 ug/l

RT: 9.110 min Scan# 1316

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion: 69 Resp: 10866

Ion Ratio Lower Upper

69 100

41 72.3 35.1 105.3

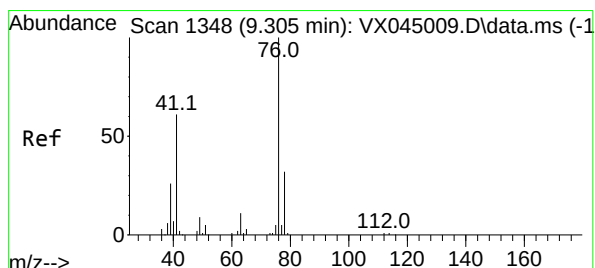
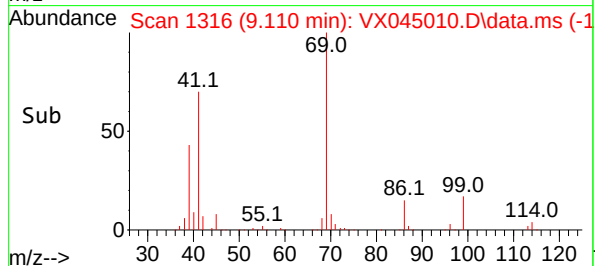
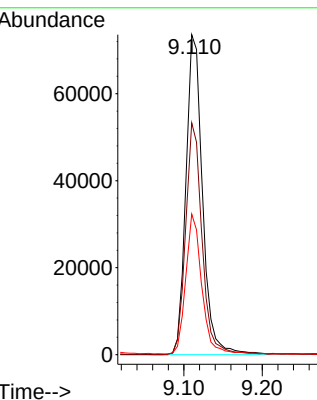
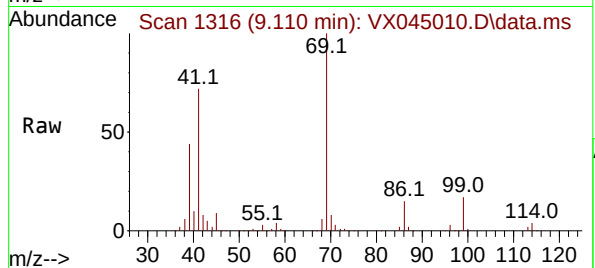
39 43.7 20.5 61.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#52

1,3-Dichloropropane

Concen: 51.310 ug/l

RT: 9.305 min Scan# 1348

Delta R.T. -0.000 min

Lab File: VX045010.D

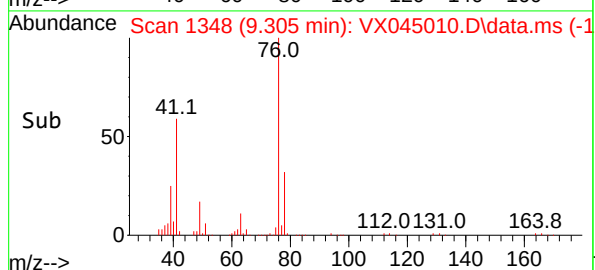
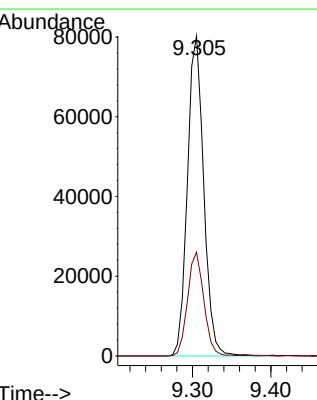
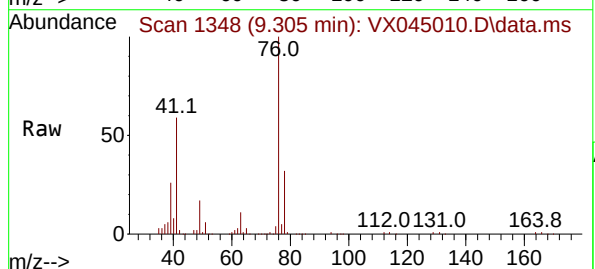
Acq: 21 Feb 2025 10:44

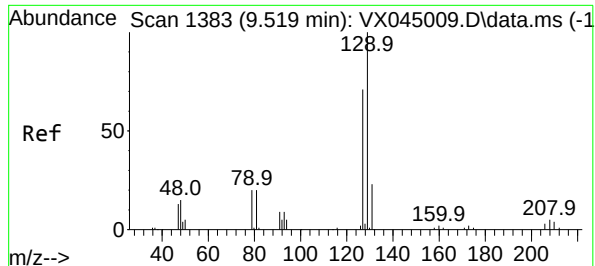
Tgt Ion: 76 Resp: 116358

Ion Ratio Lower Upper

76 100

78 32.2 0.0 63.6





#53

Dibromochloromethane

Concen: 51.304 ug/l

RT: 9.518 min Scan# 1383

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion:129 Resp: 7343

Ion Ratio Lower Upper

129 100

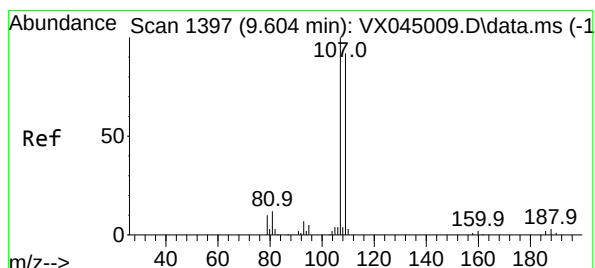
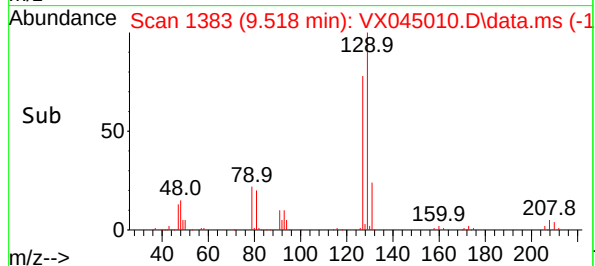
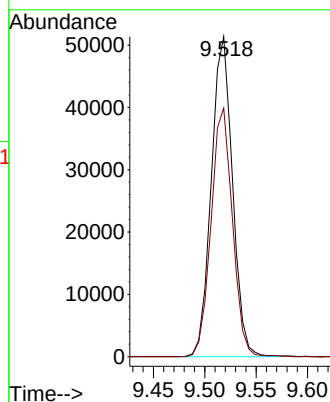
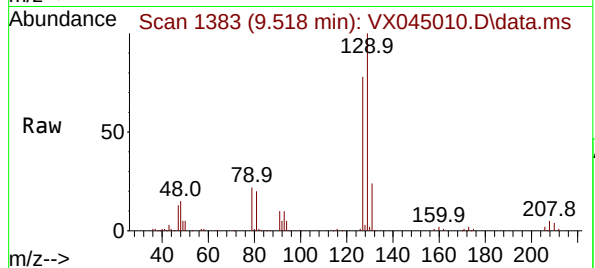
127 78.2 37.3 111.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#54

1,2-Dibromoethane

Concen: 51.685 ug/l

RT: 9.604 min Scan# 1397

Delta R.T. -0.000 min

Lab File: VX045010.D

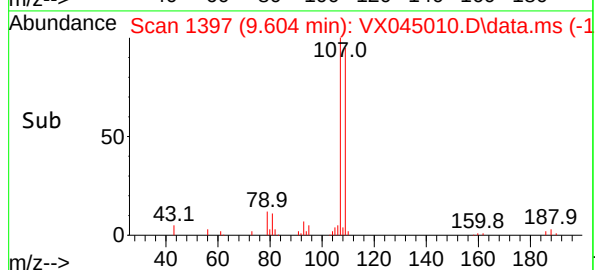
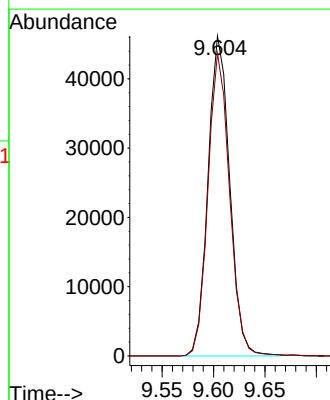
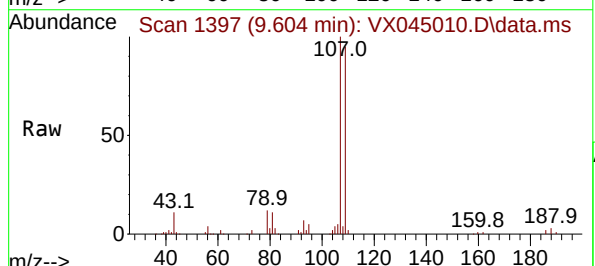
Acq: 21 Feb 2025 10:44

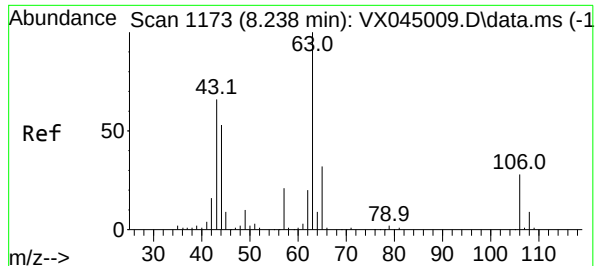
Tgt Ion:107 Resp: 67926

Ion Ratio Lower Upper

107 100

109 94.0 75.8 113.8





#55

2-Chloroethyl vinyl ether

Concen: 260.575 ug/l

RT: 8.238 min Scan# 1173

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion: 63 Resp: 27237

Ion Ratio Lower Upper

63 100

65 32.3 26.2 39.2

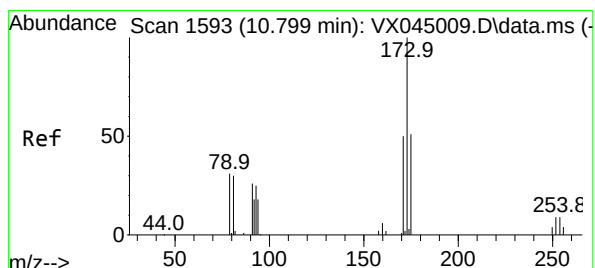
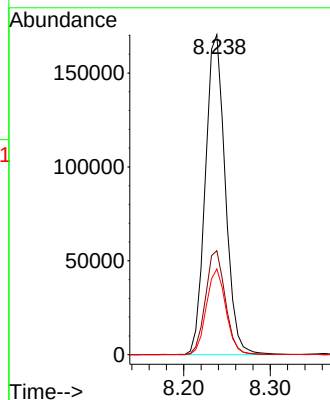
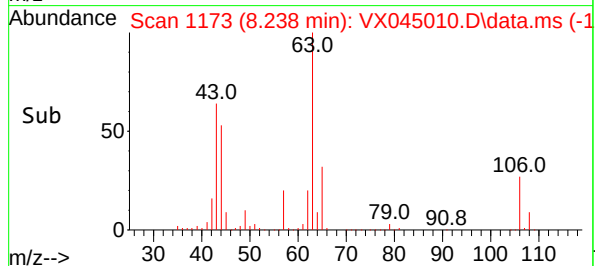
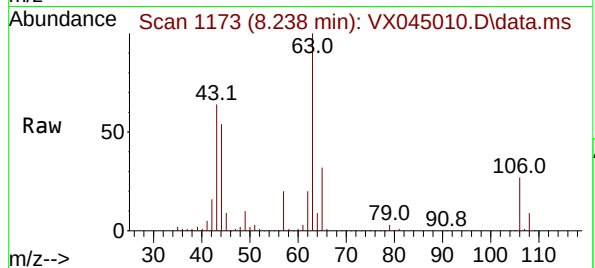
106 26.4 21.2 31.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#56

Bromoform

Concen: 53.392 ug/l

RT: 10.799 min Scan# 1593

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

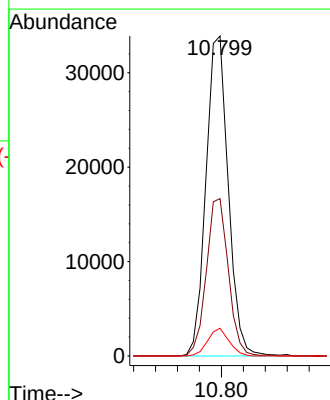
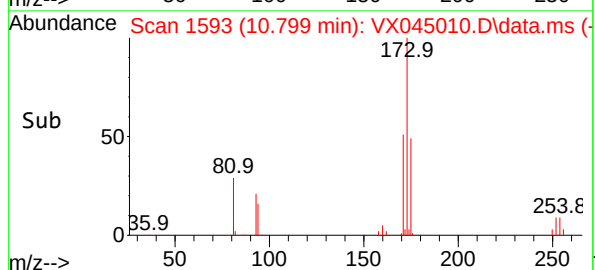
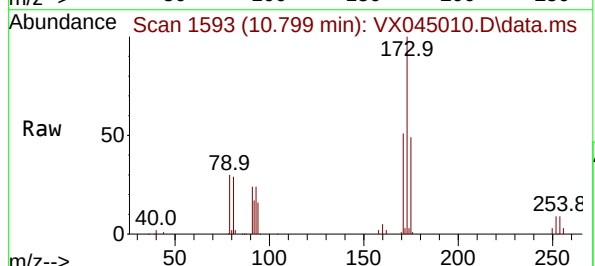
Tgt Ion:173 Resp: 47891

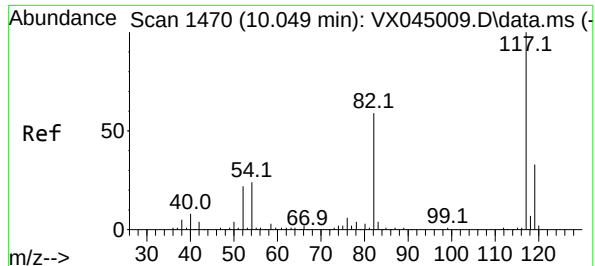
Ion Ratio Lower Upper

173 100

175 48.5 39.6 59.4

254 8.3 6.3 9.5





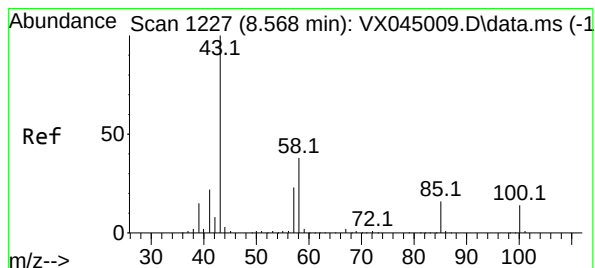
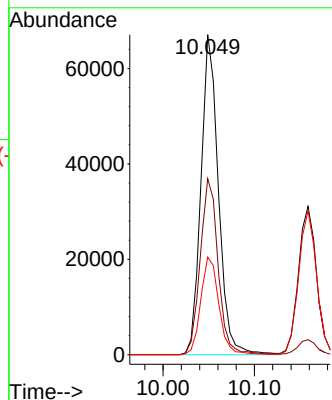
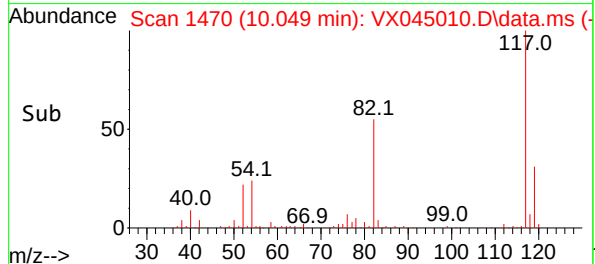
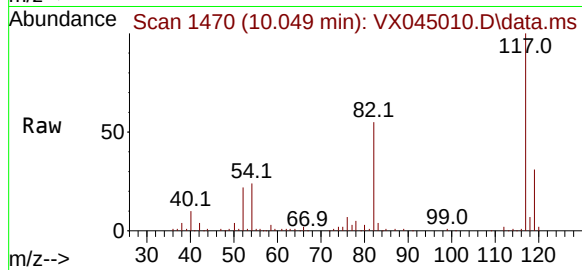
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.049 min Scan# 1470
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion: 117 Resp: 89300
Ion Ratio Lower Upper
117 100
82 56.5 45.8 68.8
119 31.7 25.5 38.3

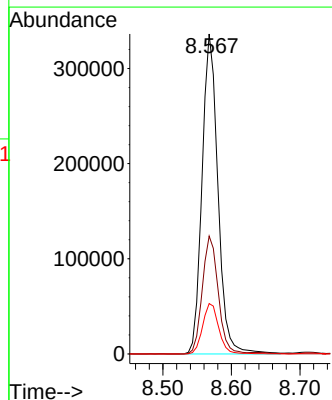
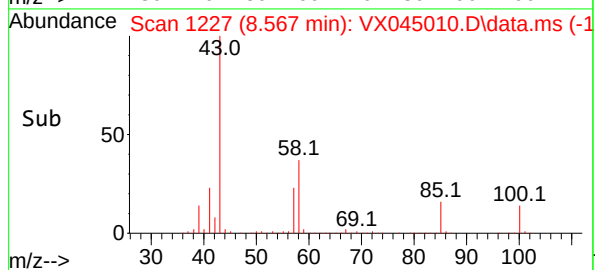
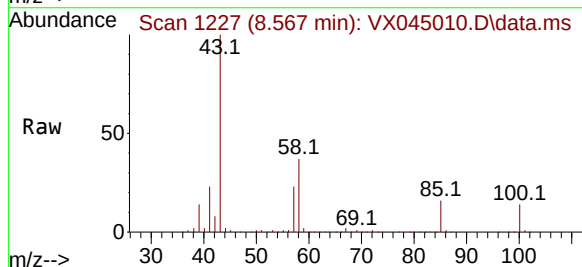
Manual Integrations
APPROVED

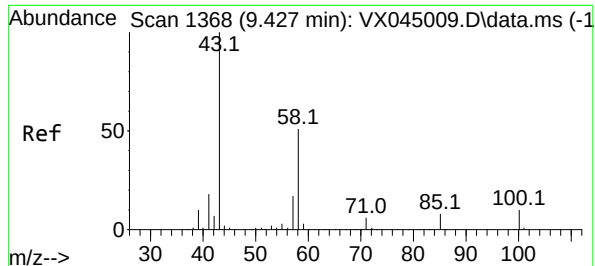
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#58
4-Methyl-2-Pentanone
Concen: 267.752 ug/l
RT: 8.567 min Scan# 1227
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 43 Resp: 543908
Ion Ratio Lower Upper
43 100
58 36.7 29.5 44.3
85 16.0 12.9 19.3





#59

2-Hexanone

Concen: 271.195 ug/l

RT: 9.427 min Scan# 1368

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion: 43 Resp: 398198

Ion Ratio Lower Upper

43 100

58 52.5 41.6 62.4

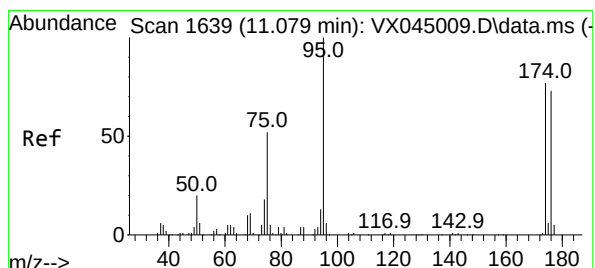
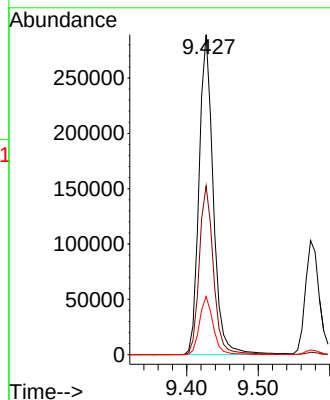
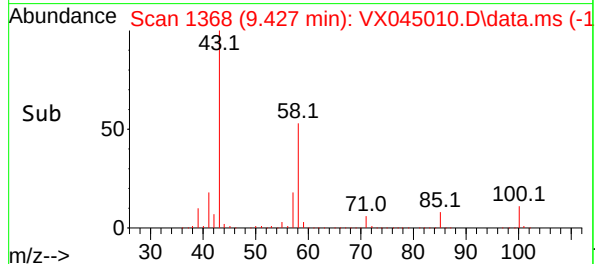
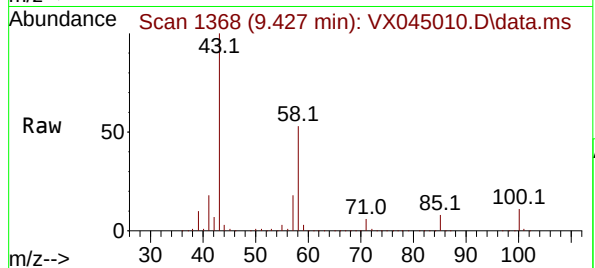
57 17.6 13.8 20.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#60

4-Bromofluorobenzene

Concen: 30.203 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

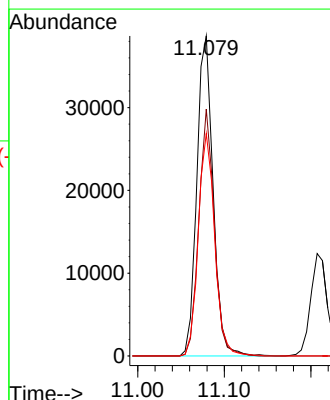
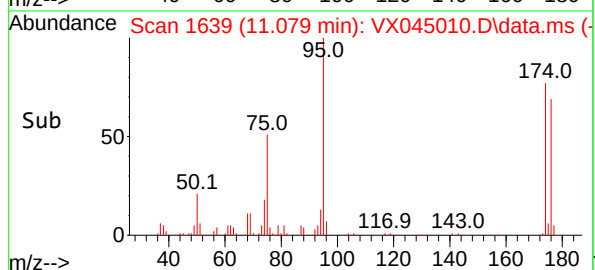
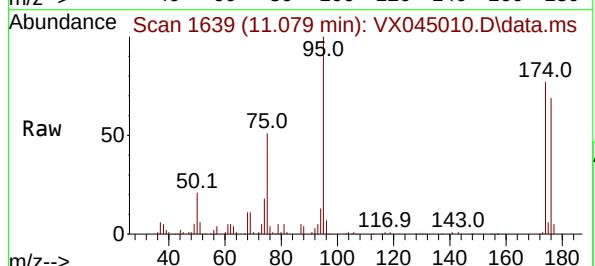
Tgt Ion: 95 Resp: 50413

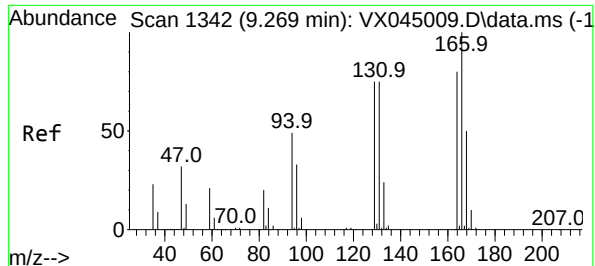
Ion Ratio Lower Upper

95 100

174 73.6 59.5 89.3

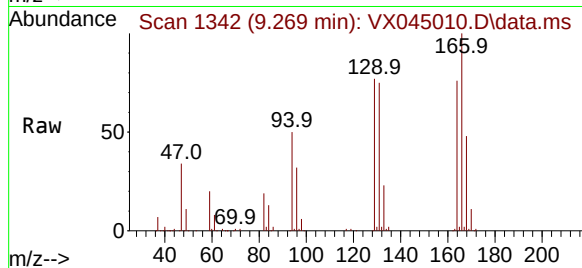
176 70.2 55.5 83.3





#61
Tetrachloroethene
Concen: 49.659 ug/l
RT: 9.269 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

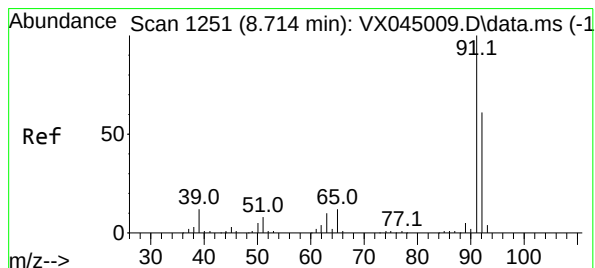
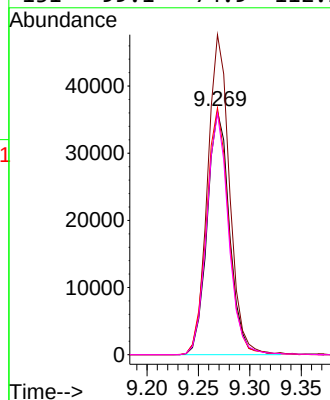
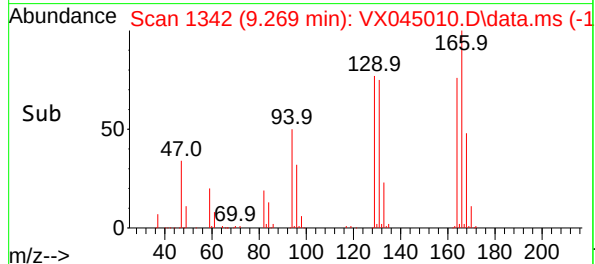
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050



Tgt Ion:164 Resp: 5460
Ion Ratio Lower Upper
164 100
166 131.4 100.3 150.5
129 101.2 75.5 113.3
131 99.1 74.9 112.3

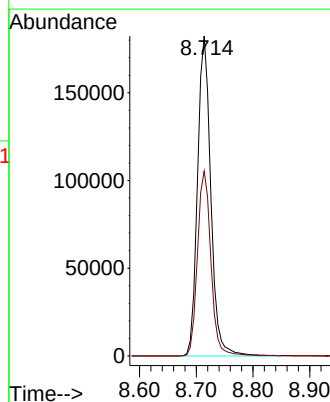
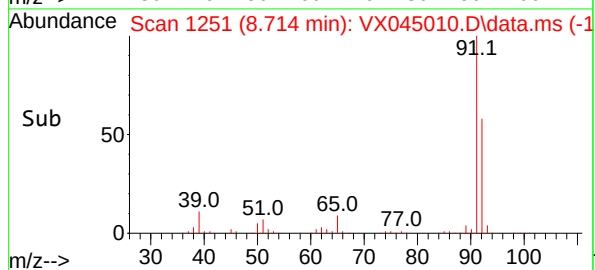
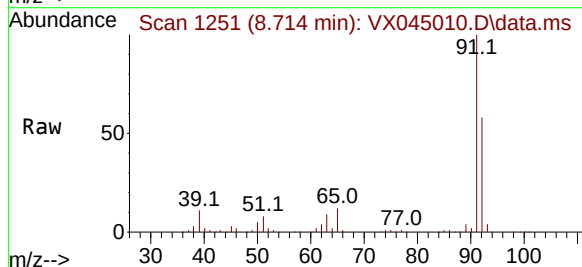
Manual Integrations
APPROVED

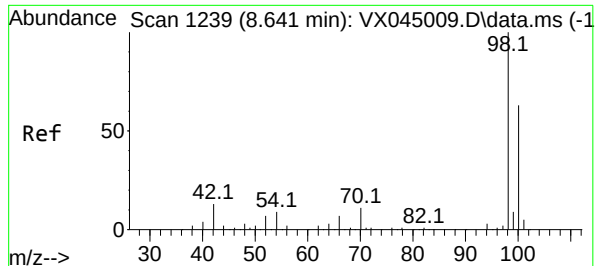
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#62
Toluene
Concen: 50.195 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 91 Resp: 296930
Ion Ratio Lower Upper
91 100
92 58.4 46.9 70.3





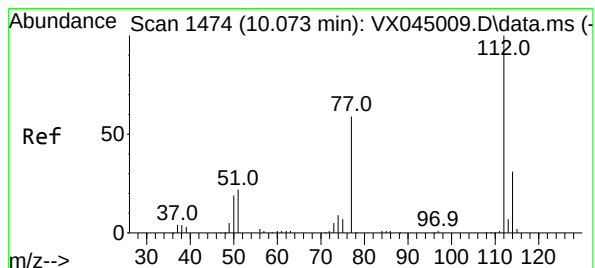
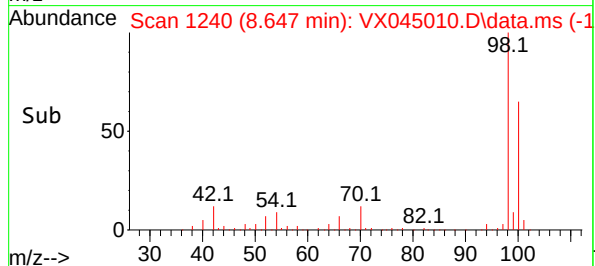
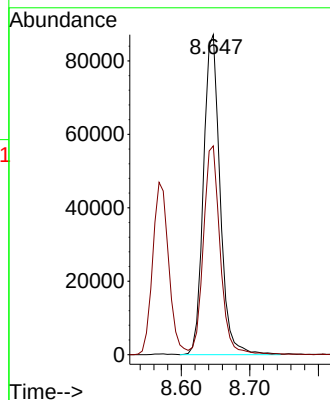
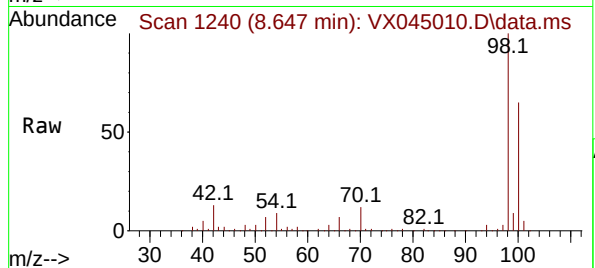
#63
Toluene-d8
Concen: 29.819 ug/l
RT: 8.647 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion: 98 Resp: 147315
Ion Ratio Lower Upper
98 100
100 65.2 51.7 77.5

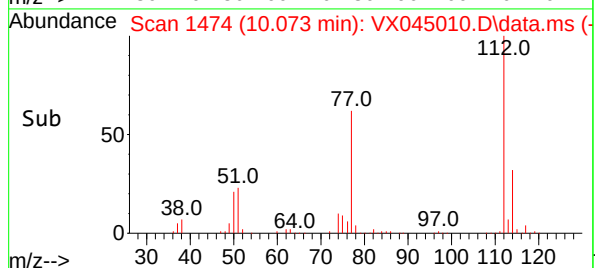
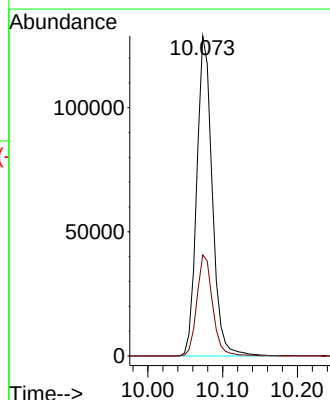
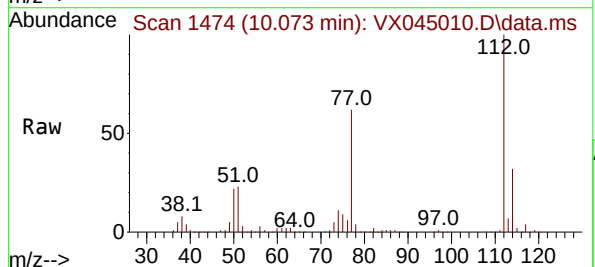
Manual Integrations
APPROVED

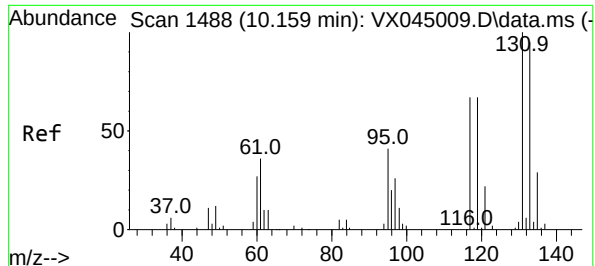
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#64
Chlorobenzene
Concen: 50.511 ug/l
RT: 10.073 min Scan# 1474
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

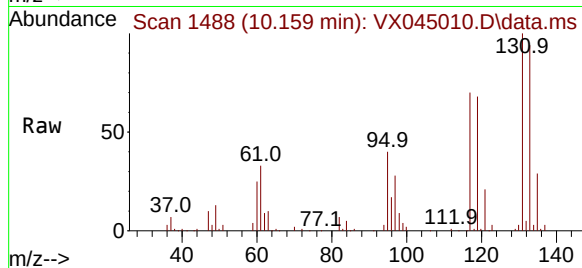
Tgt Ion:112 Resp: 185159
Ion Ratio Lower Upper
112 100
114 31.6 24.7 37.1





#65
1,1,1,2-Tetrachloroethane
Concen: 50.244 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

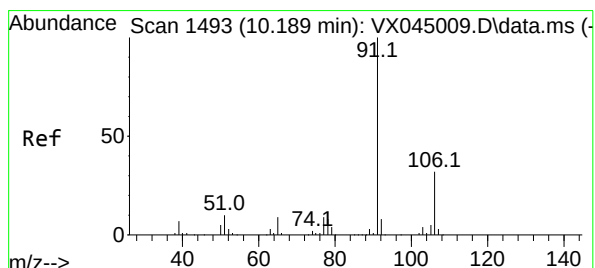
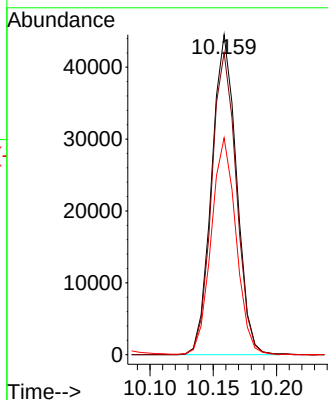
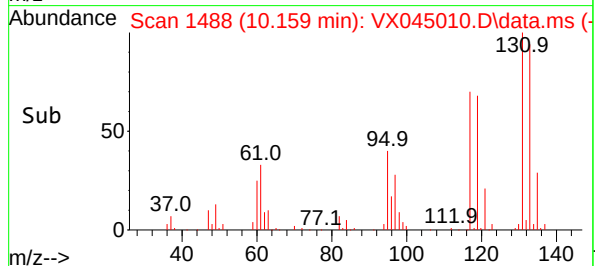
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050



Tgt Ion:131 Resp: 6077
Ion Ratio Lower Upper
131 100
133 94.0 0.0 187.8
119 67.5 0.0 133.0

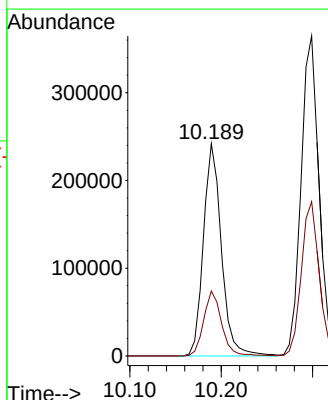
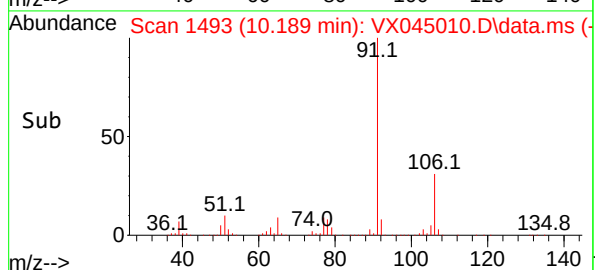
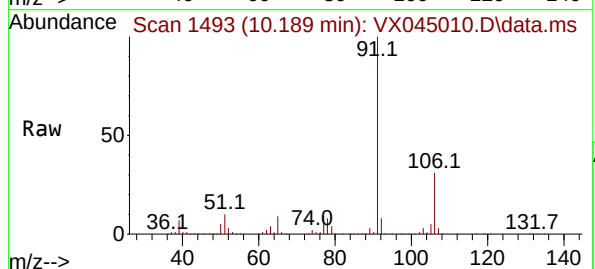
Manual Integrations
APPROVED

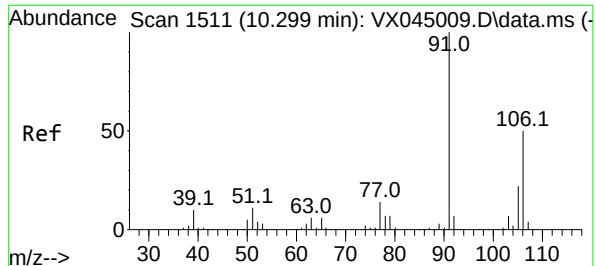
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#66
Ethyl Benzene
Concen: 51.018 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 91 Resp: 330414
Ion Ratio Lower Upper
91 100
106 30.6 25.4 38.2





#67

m/p-Xylenes

Concen: 101.498 ug/l

RT: 10.299 min Scan# 1511

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion:106 Resp: 244910

Ion Ratio Lower Upper

106 100

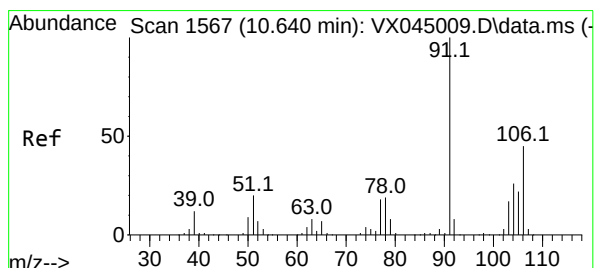
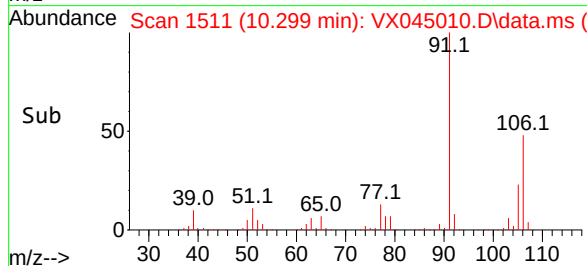
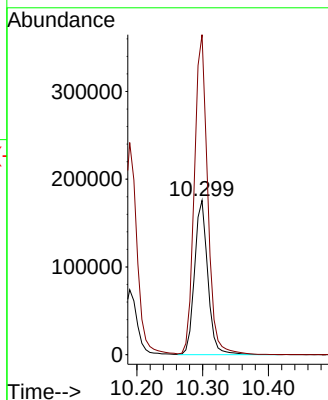
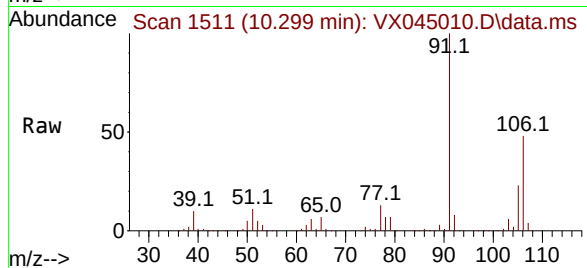
91 208.8 163.7 245.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#68

o-Xylene

Concen: 51.080 ug/l

RT: 10.640 min Scan# 1567

Delta R.T. -0.000 min

Lab File: VX045010.D

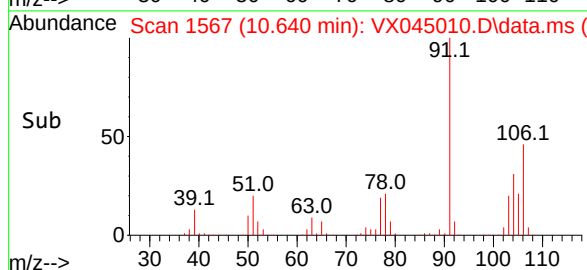
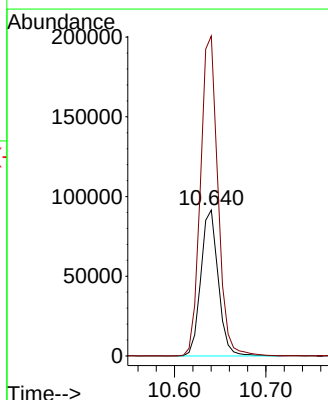
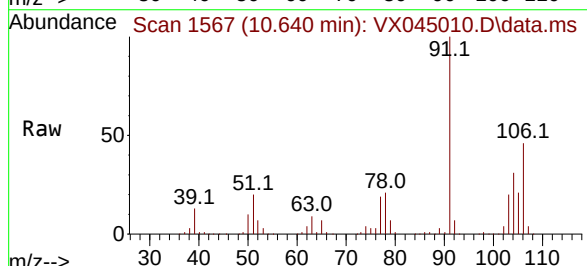
Acq: 21 Feb 2025 10:44

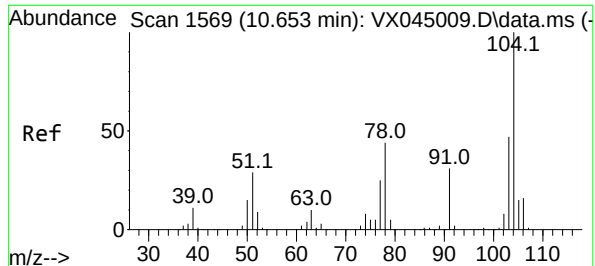
Tgt Ion:106 Resp: 120934

Ion Ratio Lower Upper

106 100

91 219.8 109.7 329.1





#69

Styrene

Concen: 51.306 ug/l

RT: 10.652 min Scan# 1569

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

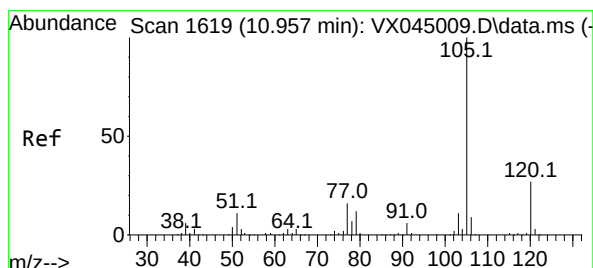
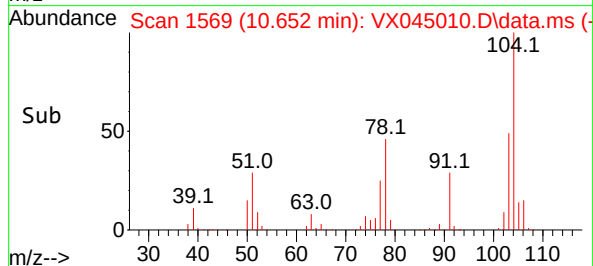
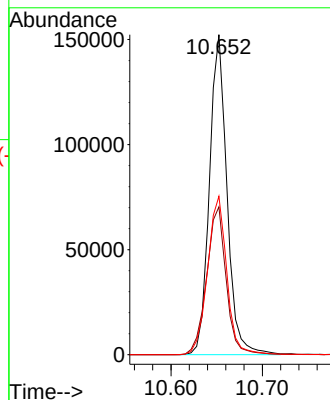
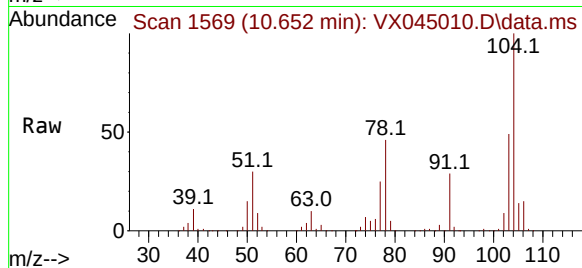
Tgt Ion:104	Resp: 20287
Ion Ratio	Lower Upper
104 100	
78 51.4	41.4 62.0
103 54.4	43.0 64.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#70

Isopropylbenzene

Concen: 50.888 ug/l

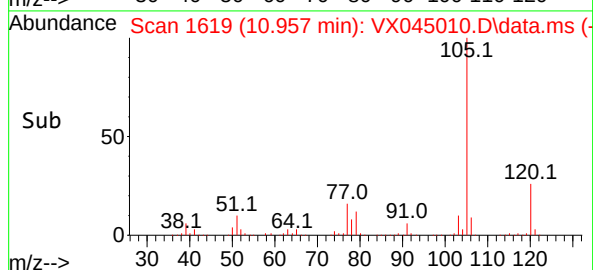
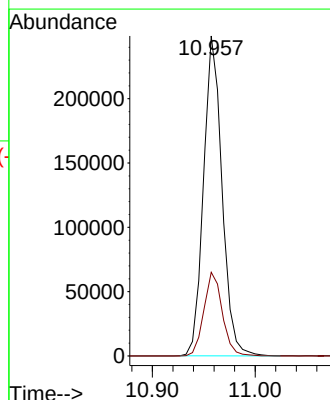
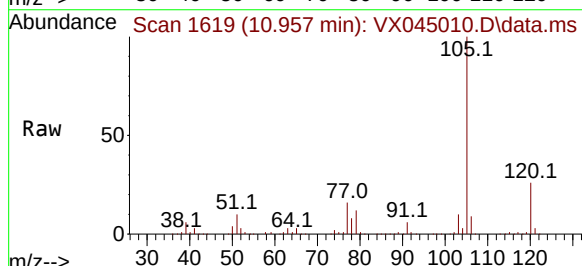
RT: 10.957 min Scan# 1619

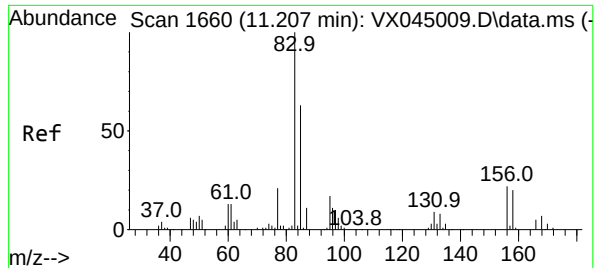
Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Tgt Ion:105	Resp: 310911
Ion Ratio	Lower Upper
105 100	
120 26.1	18.4 34.2





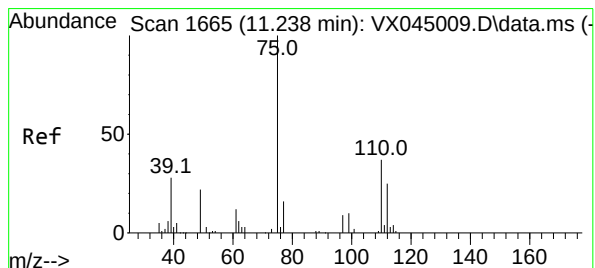
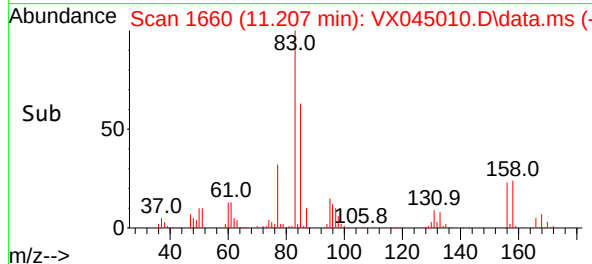
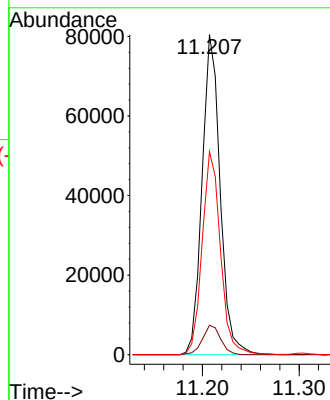
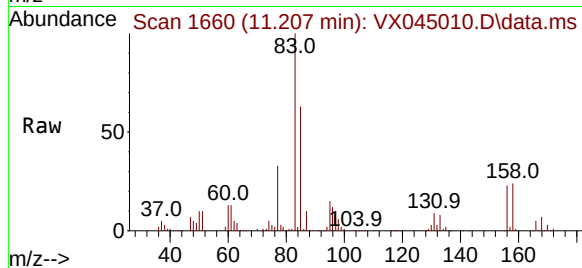
#71
1,1,2,2-Tetrachloroethane
Concen: 52.096 ug/l
RT: 11.207 min Scan# 1660
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion: 83 Resp: 10466
Ion Ratio Lower Upper
83 100
131 9.3 4.8 14.3
85 64.2 32.3 96.8

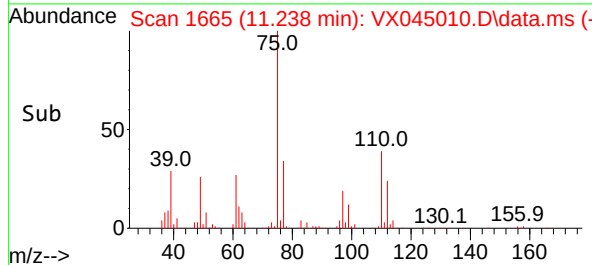
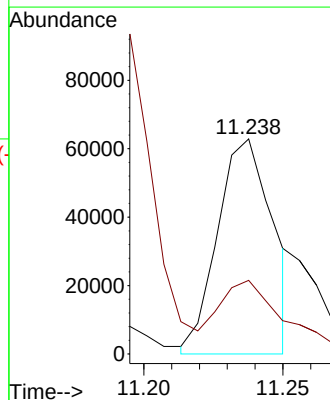
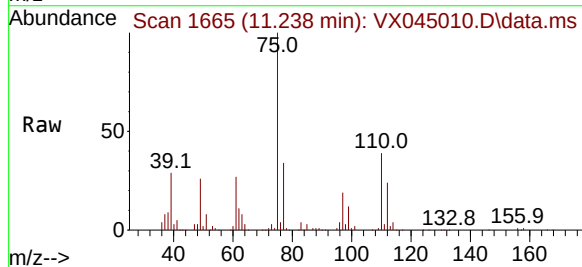
Manual Integrations
APPROVED

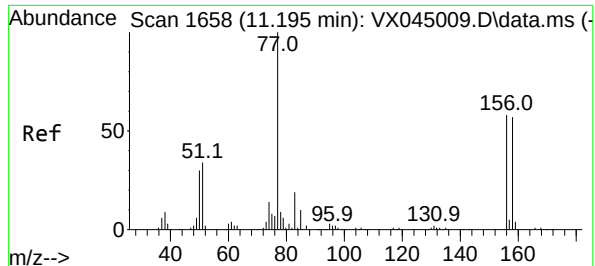
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#72
1,2,3-Trichloropropane
Concen: 52.499 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

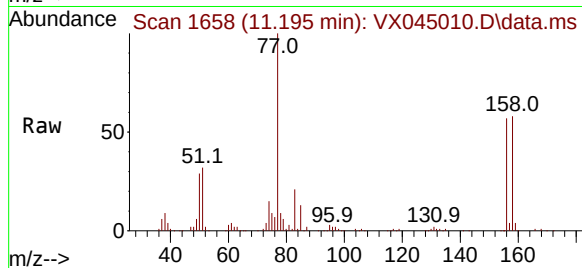
Tgt Ion: 75 Resp: 86752
Ion Ratio Lower Upper
75 100
77 41.5 0.0 84.0





#73
Bromobenzene
Concen: 51.338 ug/l
RT: 11.195 min Scan# 1658
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

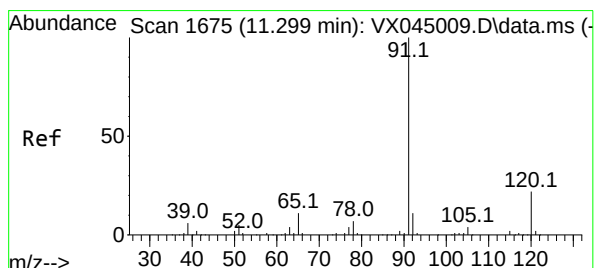
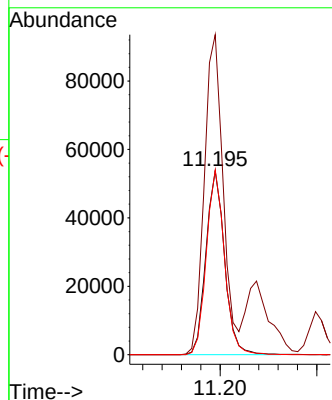
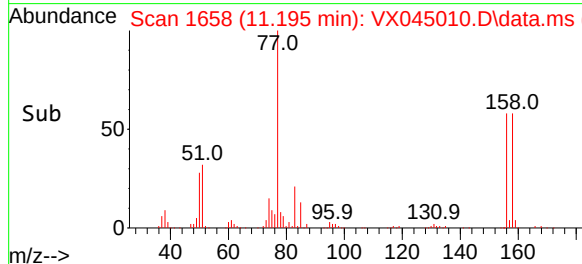
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC050



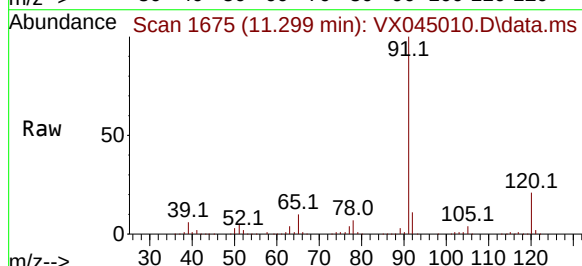
Tgt Ion:156 Resp: 7220
Ion Ratio Lower Upper
156 100
77 174.9 0.0 347.2
158 97.7 0.0 197.6

Manual Integrations
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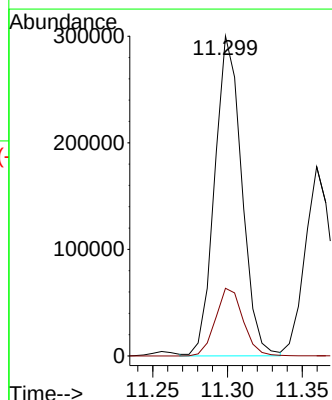
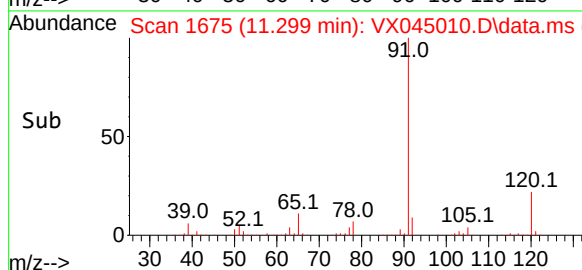
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

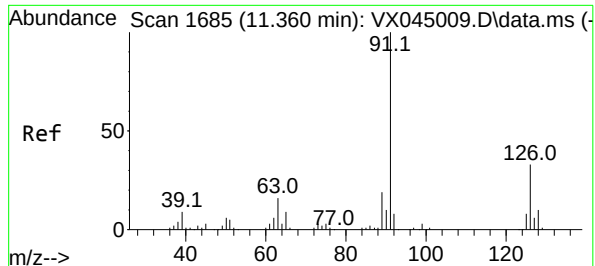


#74
n-propylbenzene
Concen: 51.970 ug/l
RT: 11.299 min Scan# 1675
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44



Tgt Ion: 91 Resp: 377855
Ion Ratio Lower Upper
91 100
120 21.6 0.0 44.2





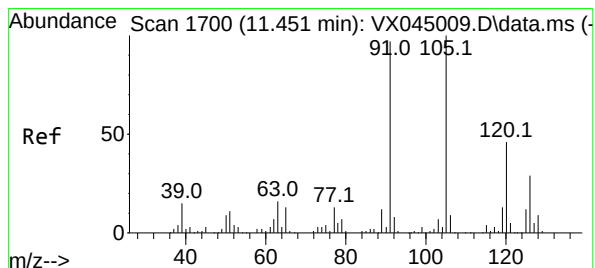
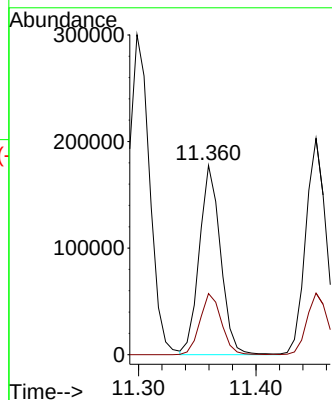
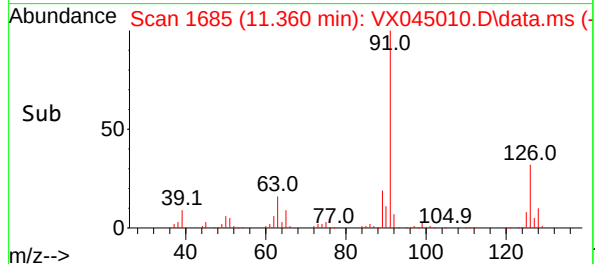
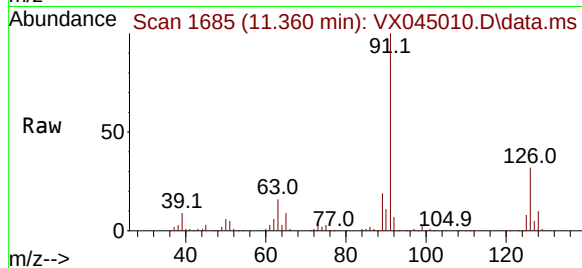
#75
2-Chlorotoluene
Concen: 50.885 ug/l
RT: 11.360 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion: 91 Resp: 223660
Ion Ratio Lower Upper
91 100
126 32.5 0.0 65.4

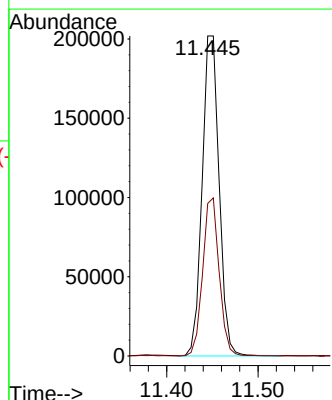
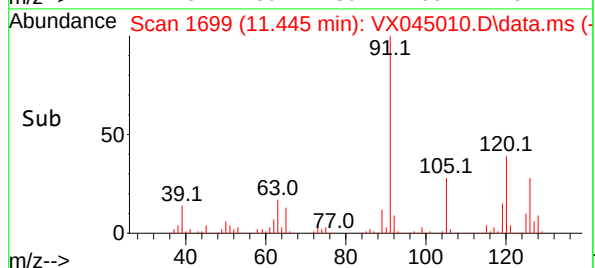
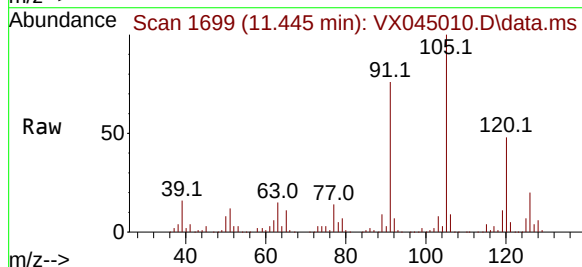
Manual Integrations
APPROVED

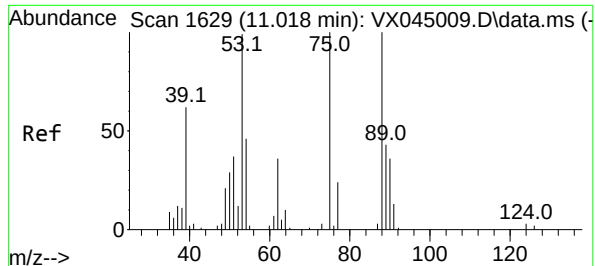
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#76
1,3,5-Trimethylbenzene
Concen: 51.669 ug/l
RT: 11.445 min Scan# 1699
Delta R.T. -0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion:105 Resp: 260432
Ion Ratio Lower Upper
105 100
120 48.0 0.0 94.4





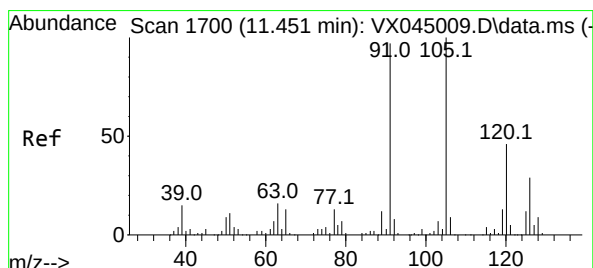
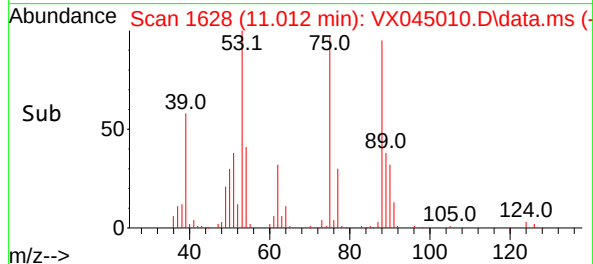
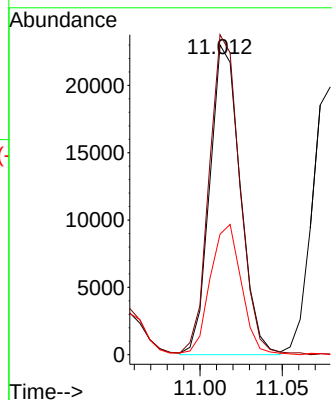
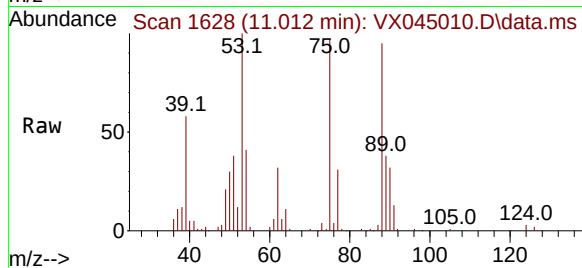
#77
t-1,4-Dichloro-2-butene
Concen: 53.302 ug/l
RT: 11.012 min Scan# 1628
Delta R.T. -0.006 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050

Tgt Ion: 75 Resp: 29634
Ion Ratio Lower Upper
75 100
53 103.4 49.8 149.4
89 38.7 21.4 64.2

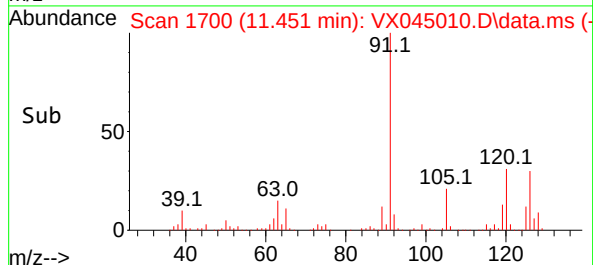
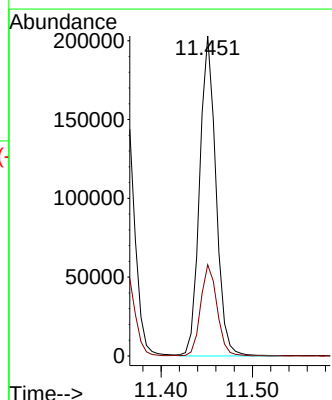
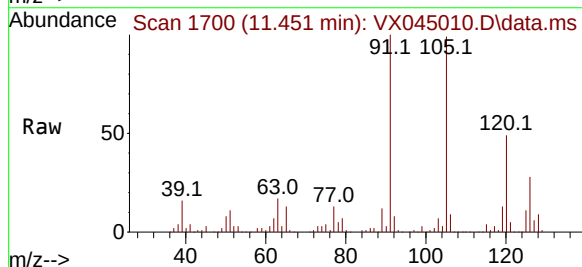
Manual Integrations
APPROVED

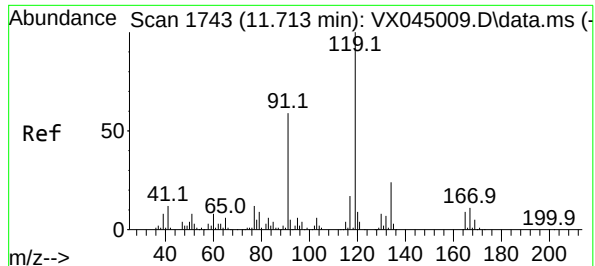
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#78
4-Chlorotoluene
Concen: 51.217 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion: 91 Resp: 250953
Ion Ratio Lower Upper
91 100
126 28.7 0.0 58.0





#79

tert-butylbenzene

Concen: 52.144 ug/l

RT: 11.713 min Scan# 1743

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC050

Tgt Ion:119 Resp: 26481

Ion Ratio Lower Upper

119 100

91 58.7 0.0 120.6

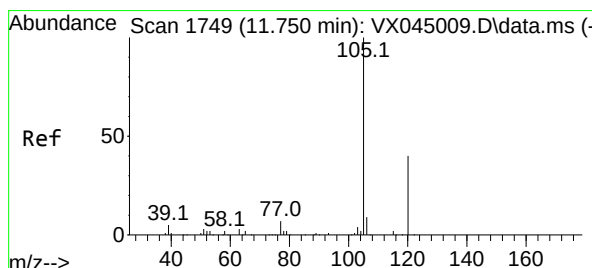
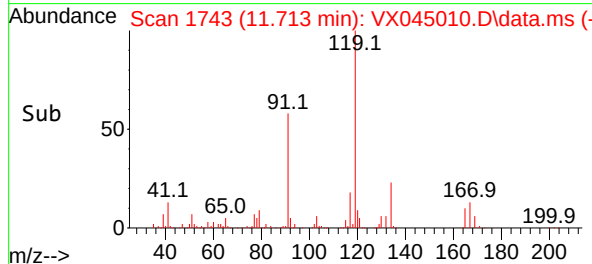
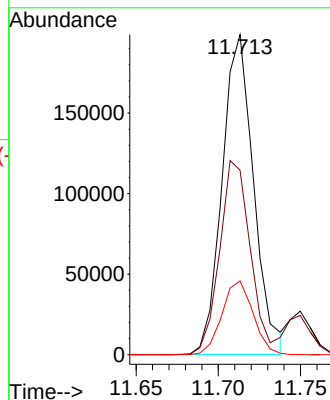
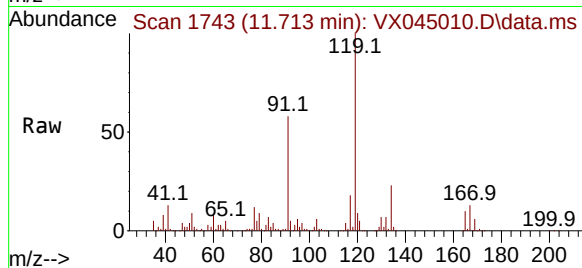
134 22.8 0.0 48.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#80

1,2,4-Trimethylbenzene

Concen: 52.114 ug/l

RT: 11.750 min Scan# 1749

Delta R.T. -0.000 min

Lab File: VX045010.D

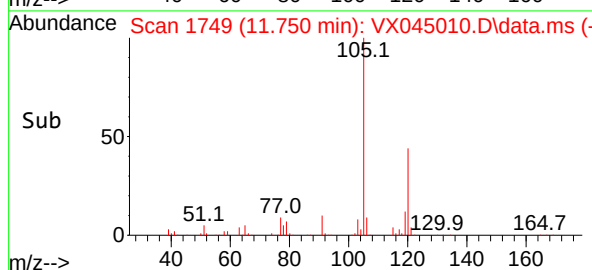
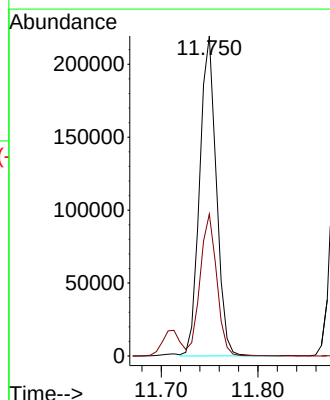
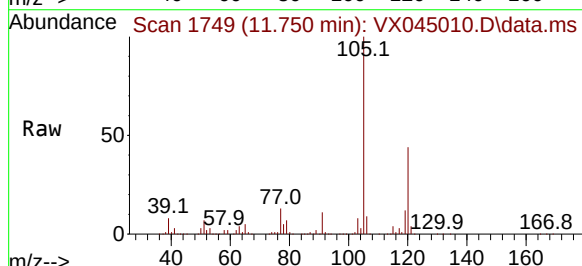
Acq: 21 Feb 2025 10:44

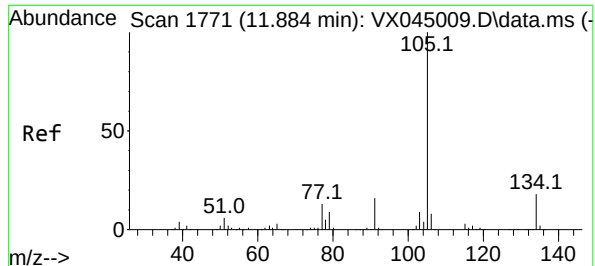
Tgt Ion:105 Resp: 263122

Ion Ratio Lower Upper

105 100

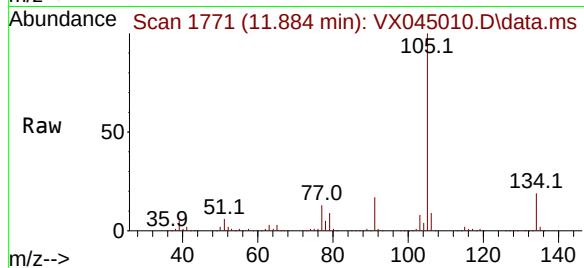
120 44.2 0.0 88.4





#81
sec-Butylbenzene
Concen: 51.608 ug/l
RT: 11.884 min Scan# 1771
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

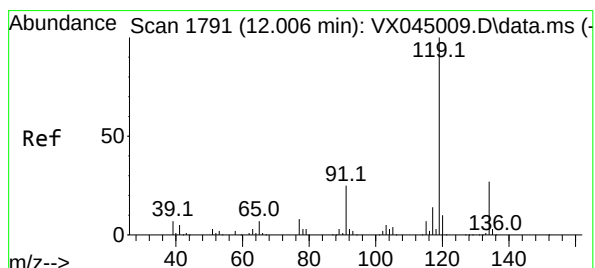
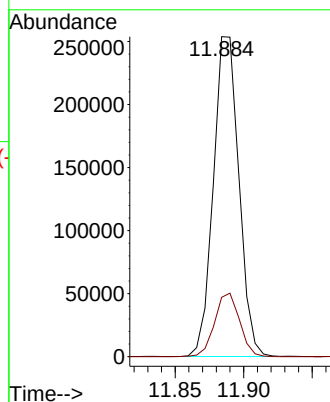
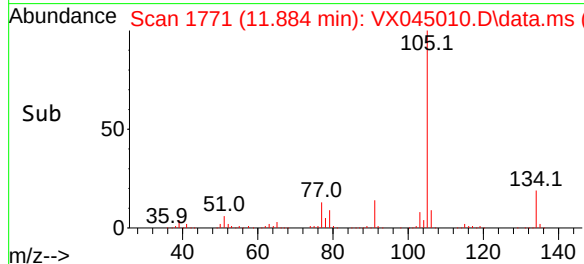
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC050



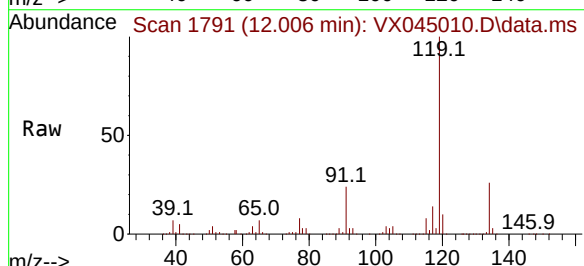
Tgt Ion:105 Resp: 328940
Ion Ratio Lower Upper
105 100
134 19.4 0.0 39.0

Manual Integrations
APPROVED

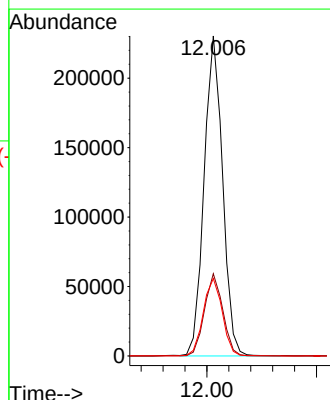
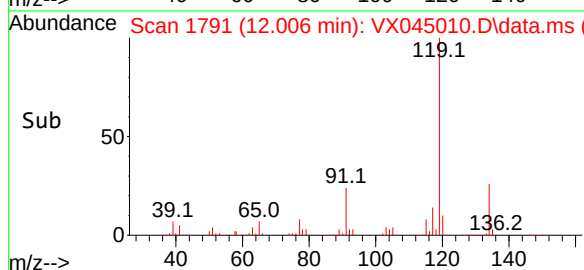
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

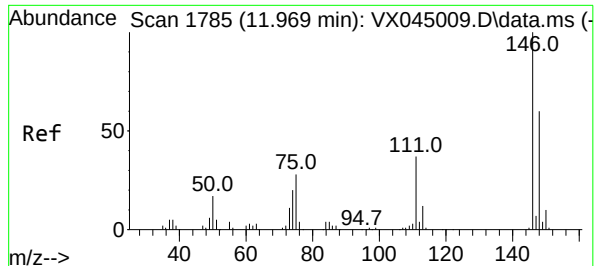


#82
p-Isopropyltoluene
Concen: 52.183 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44



Tgt Ion:119 Resp: 269490
Ion Ratio Lower Upper
119 100
134 25.5 0.0 52.6
91 24.7 0.0 51.0





#83

1,3-Dichlorobenzene

Concen: 51.467 ug/l

RT: 11.963 min Scan# 1784

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion:146 Resp: 13468

Ion Ratio Lower Upper

146 100

111 41.8 20.2 60.5

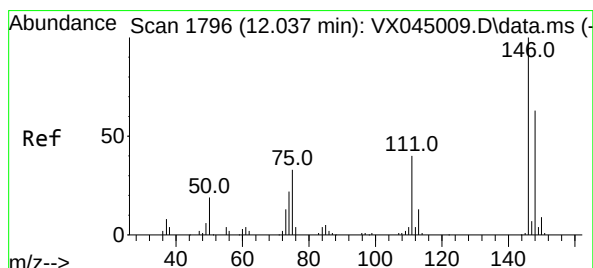
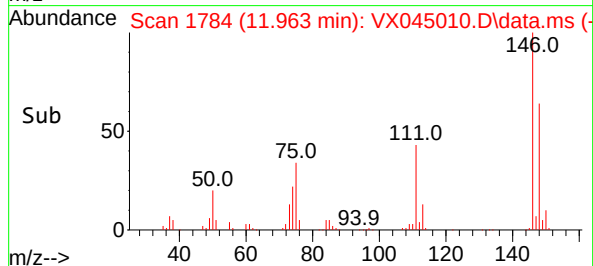
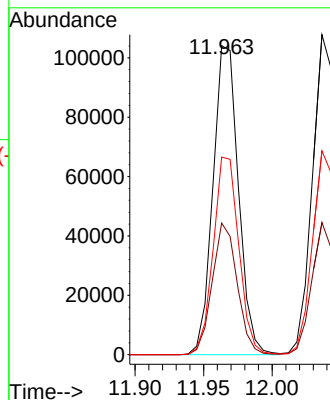
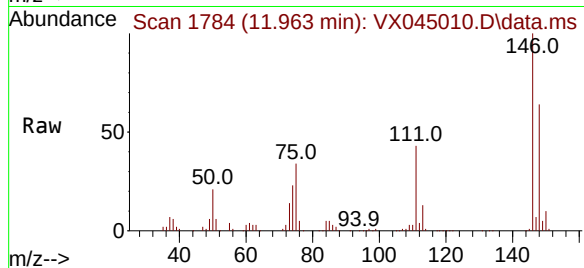
148 64.2 31.2 93.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#84

1,4-Dichlorobenzene

Concen: 52.490 ug/l

RT: 12.036 min Scan# 1796

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

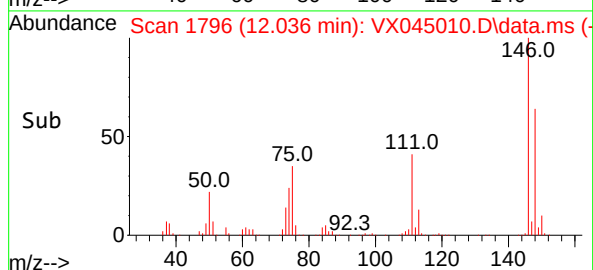
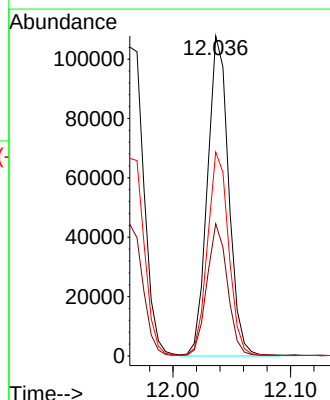
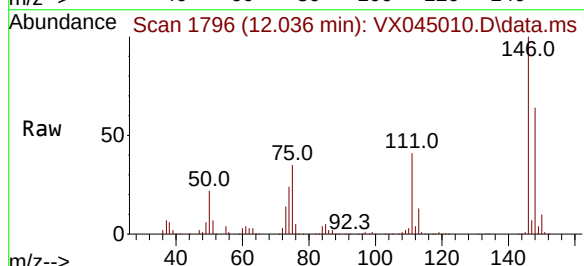
Tgt Ion:146 Resp: 135436

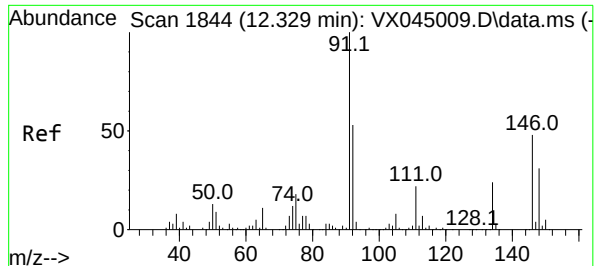
Ion Ratio Lower Upper

146 100

111 40.2 20.4 61.2

148 63.8 31.8 95.4





#85

n-Butylbenzene

Concen: 52.851 ug/l

RT: 12.329 min Scan# 1844

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion: 91 Resp: 24924

Ion Ratio Lower Upper

91 100

92 53.9 0.0 105.2

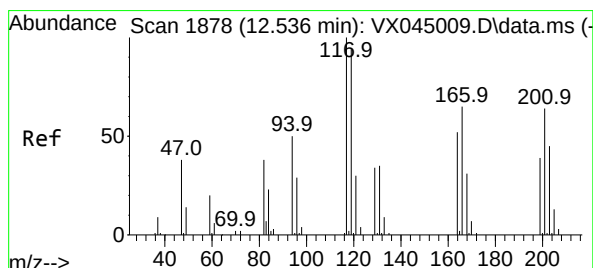
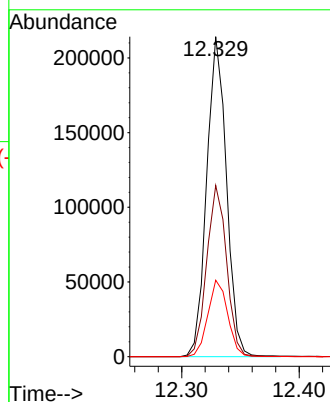
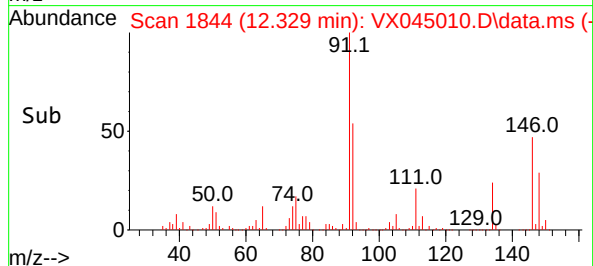
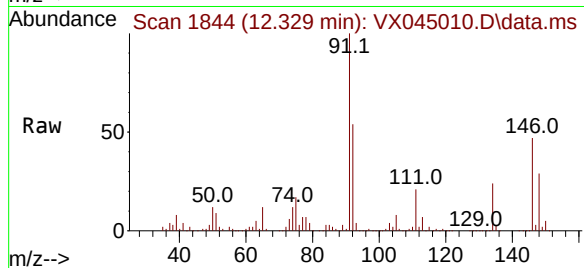
134 24.2 0.0 49.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#86

Hexachloroethane

Concen: 52.555 ug/l

RT: 12.536 min Scan# 1878

Delta R.T. -0.000 min

Lab File: VX045010.D

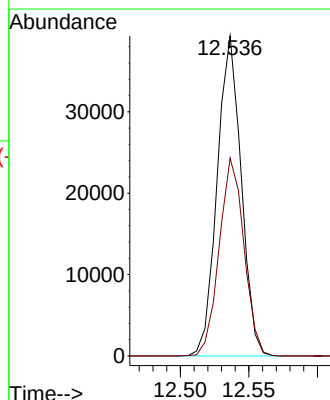
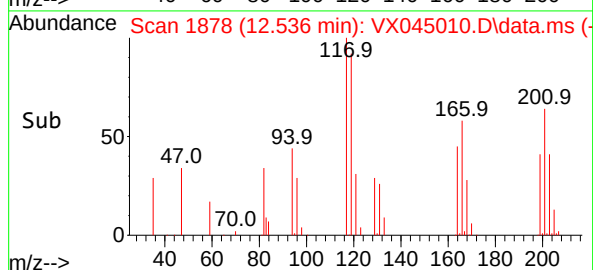
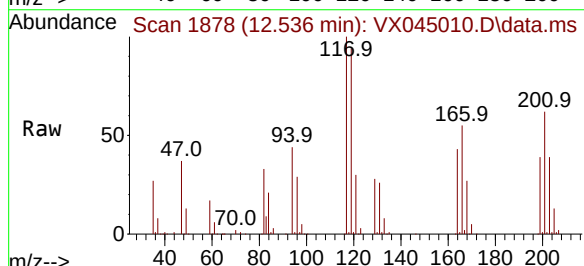
Acq: 21 Feb 2025 10:44

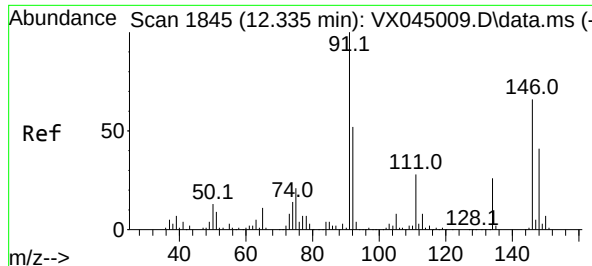
Tgt Ion:117 Resp: 47866

Ion Ratio Lower Upper

117 100

201 63.8 32.6 97.7





#87

1,2-Dichlorobenzene

Concen: 51.846 ug/l

RT: 12.329 min Scan# 1845

Delta R.T. -0.006 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC050

Tgt Ion:146 Resp: 13312

Ion Ratio Lower Upper

146 100

111 43.5 21.7 65.1

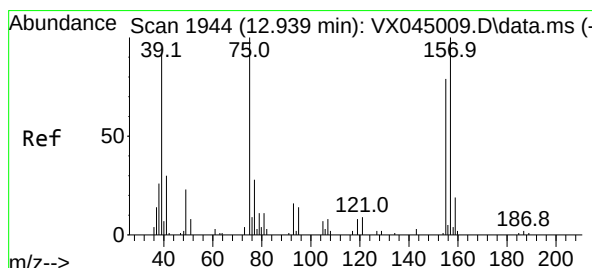
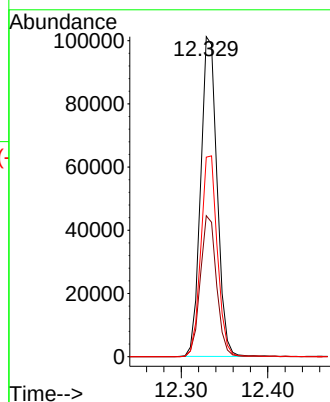
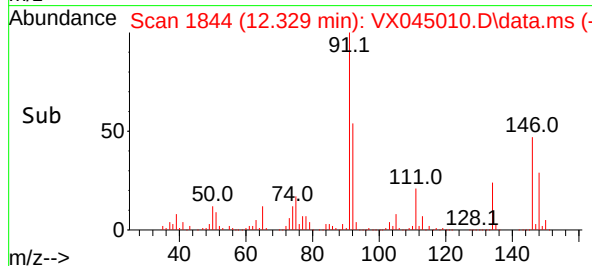
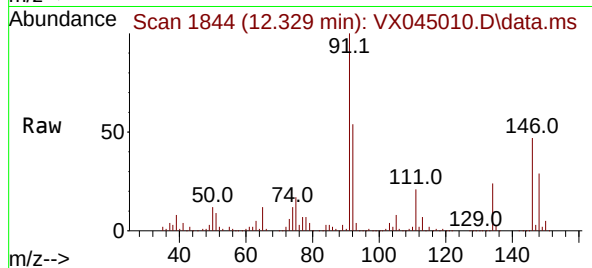
148 63.0 31.8 95.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#88

1,2-Dibromo-3-Chloropropane

Concen: 50.807 ug/l

RT: 12.939 min Scan# 1944

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

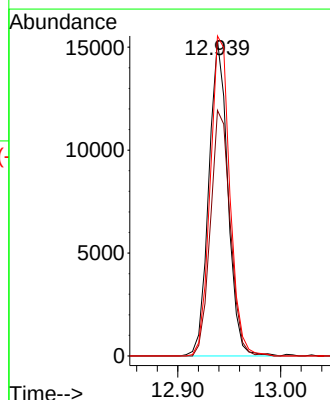
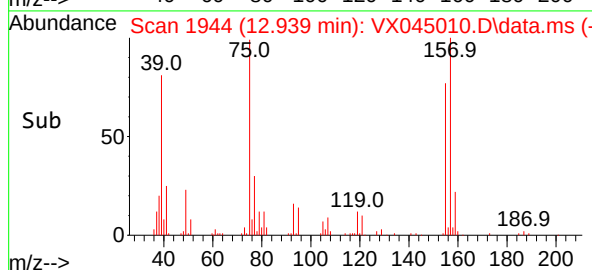
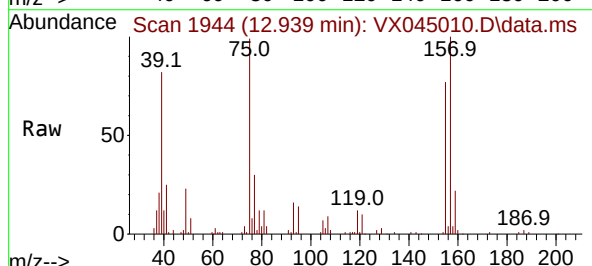
Tgt Ion: 75 Resp: 19763

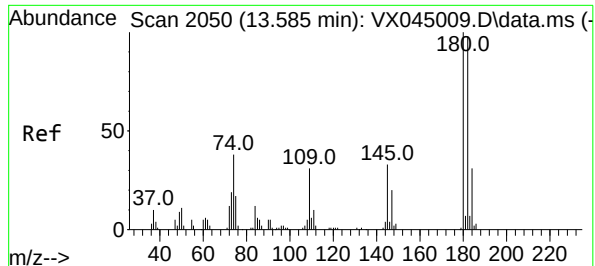
Ion Ratio Lower Upper

75 100

155 80.4 66.2 99.4

157 104.4 81.4 122.2





#89

1,2,4-Trichlorobenzene

Concen: 51.710 ug/l

RT: 13.585 min Scan# 2050

Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

Instrument :

MSVOA_X

ClientSampleId :

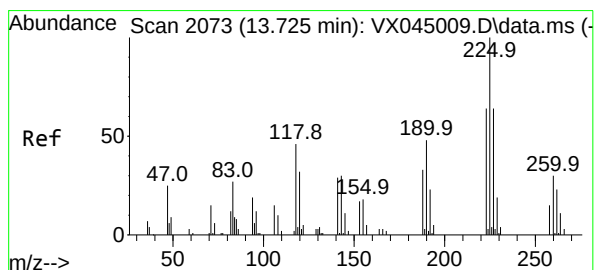
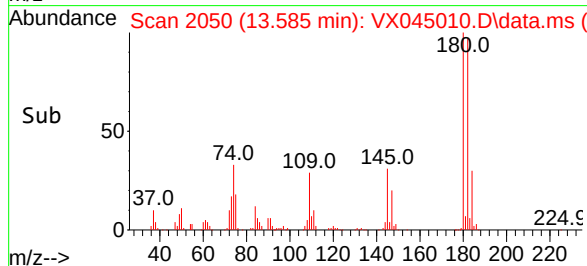
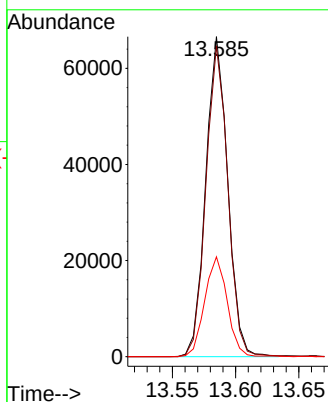
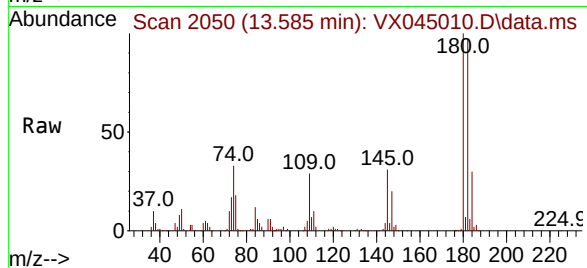
VSTDICC050

Tgt Ion:180	Resp:	80472
Ion Ratio	Lower	Upper
180	100	
182	96.1	77.7 116.5
145	31.9	25.8 38.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#90

Hexachlorobutadiene

Concen: 50.003 ug/l

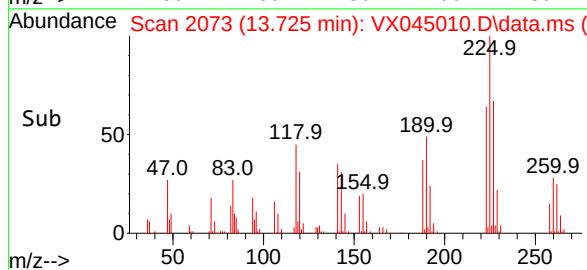
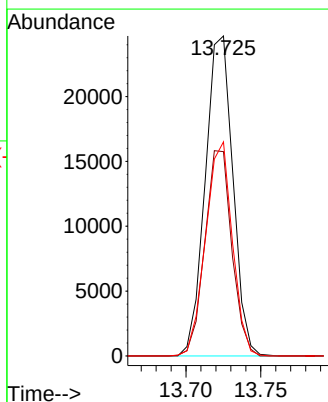
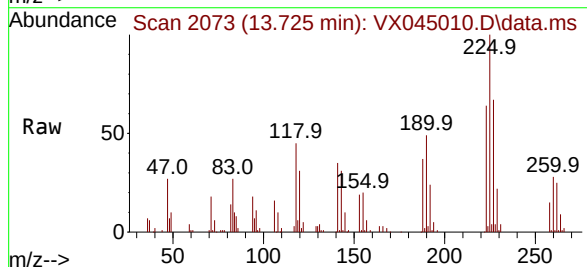
RT: 13.725 min Scan# 2073

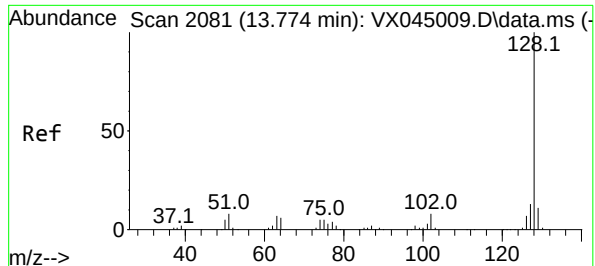
Delta R.T. -0.000 min

Lab File: VX045010.D

Acq: 21 Feb 2025 10:44

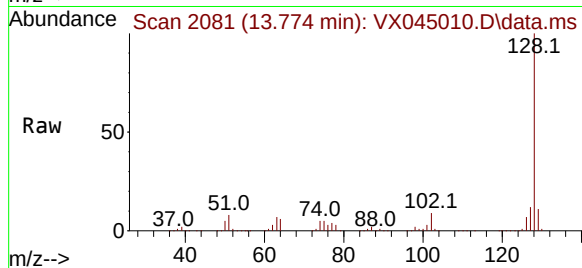
Tgt Ion:225	Resp:	31734
Ion Ratio	Lower	Upper
225	100	
223	62.7	0.0 123.4
227	64.6	0.0 127.4





#91
Naphthalene
Concen: 52.634 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

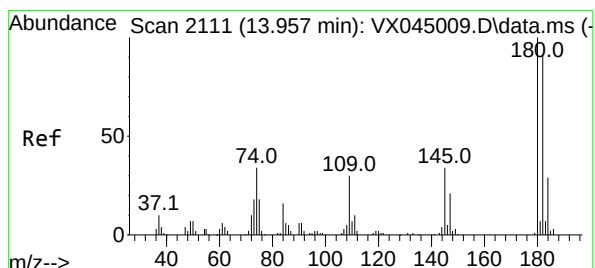
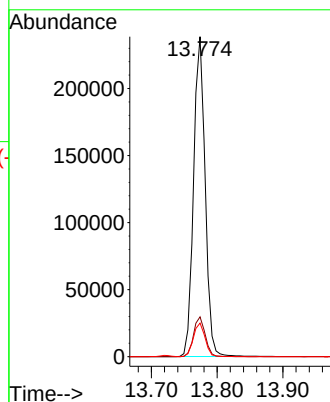
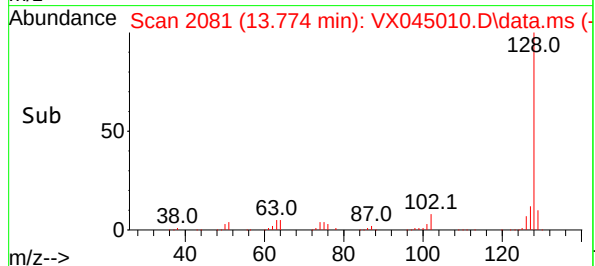
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC050



Tgt Ion:128 Resp: 28882
Ion Ratio Lower Upper
128 100
127 12.5 10.5 15.7
129 10.7 8.7 13.1

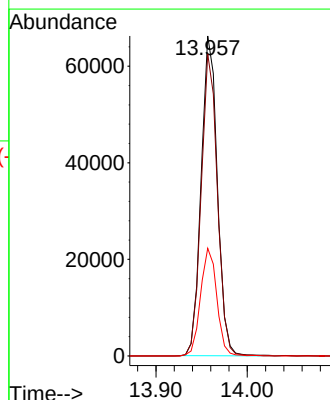
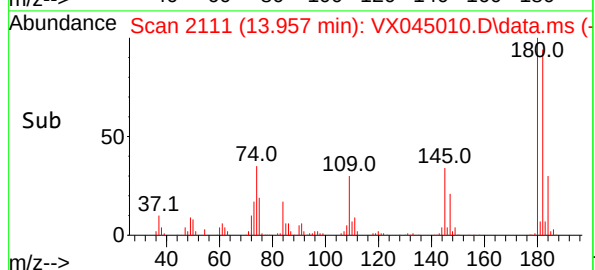
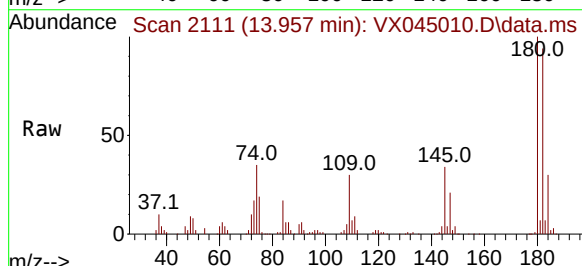
Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#92
1,2,3-Trichlorobenzene
Concen: 51.015 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045010.D
Acq: 21 Feb 2025 10:44

Tgt Ion:180 Resp: 81734
Ion Ratio Lower Upper
180 100
182 94.3 0.0 186.6
145 33.7 0.0 68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045011.D
 Acq On : 21 Feb 2025 11:07
 Operator : JC/MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC100

Quant Time: Feb 22 00:48:54 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.891	128	17332	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.751	114	98516	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	88321	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	50601	30.059	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.200%			
60) 4-Bromofluorobenzene	11.079	95	49683	30.096	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 100.333%			
63) Toluene-d8	8.647	98	148078	30.306	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 101.033%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.166	85	140259	95.997	ug/l	97
3) Chloromethane	1.294	50	166114	94.924	ug/l	99
4) Vinyl Chloride	1.374	62	163236	96.669	ug/l	99
5) Bromomethane	1.593	94	54558	92.819	ug/l	95
6) Chloroethane	1.666	64	84688	92.599	ug/l	97
7) Trichlorofluoromethane	1.874	101	220045	96.956	ug/l	96
8) Diethyl Ether	2.130	74	82964	96.616	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.319	101	129494	96.068	ug/l	98
10) 1,1-Dichloroethene	2.313	96	130666	99.244	ug/l	94
11) Methyl Iodide	2.447	142	161844	108.607	ug/l	98
12) Methyl Acetate	2.703	43	150865	98.675	ug/l	99
13) Acrolein	2.233	56	156104	509.382	ug/l	97
14) Acrylonitrile	3.062	53	370914	496.667	ug/l	99
15) Acetone	2.380	58	97560	476.326	ug/l	98
16) Carbon Disulfide	2.502	76	371874	99.576	ug/l	100
17) Allyl chloride	2.654	41	246065	99.923	ug/l	98
18) Methylene Chloride	2.782	84	144938	97.871	ug/l	96
19) trans-1,2-Dichloroethene	3.087	96	130562	98.015	ug/l	97
20) Diisopropyl ether	3.757	45	470167	99.355	ug/l #	82
21) 1,1-Dichloroethane	3.605	63	258430	98.196	ug/l	98
22) cis-1,2-Dichloroethene	4.477	96	156933	98.314	ug/l	99
23) tert-Butyl Alcohol	2.989	59	125570	481.055	ug/l #	100
24) Methyl tert-Butyl Ether	3.111	73	426471	99.244	ug/l	99
25) Chloroform	5.080	83	248045	97.577	ug/l	99
26) Cyclohexane	5.458	56	236876	97.509	ug/l #	98
29) 1,1-Dichloropropene	5.684	75	174620	96.357	ug/l	100
30) 2-Butanone	4.550	43	505036	482.489	ug/l	99
31) 2,2-Dichloropropane	4.465	77	202370	98.758	ug/l	100
32) 1,1,1-Trichloroethane	5.373	97	211623	96.379	ug/l	99
33) Carbon Tetrachloride	5.666	117	178685	96.425	ug/l	99
34) Benzene	6.031	78	548369	96.492	ug/l	99
35) Methacrylonitrile	4.910	41	111962	99.957	ug/l	97
36) 1,2-Dichloroethane	6.080	62	189437	97.362	ug/l	98
37) Trichloroethene	7.117	130	128134	96.375	ug/l	97
38) Methylcyclohexane	7.373	83	237839	97.744	ug/l	97
39) 1,2-Dichloropropane	7.421	63	140148	99.193	ug/l	98
40) Dibromomethane	7.574	93	97805	96.465	ug/l	99
41) Bromodichloromethane	7.818	83	197339	97.929	ug/l	99
42) Vinyl Acetate	3.715	43	2042535	502.855	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045011.D
 Acq On : 21 Feb 2025 11:07
 Operator : JC/MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC100

Quant Time: Feb 22 00:48:54 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.708	43	199092	101.424	ug/l	97
44) Isopropyl Acetate	6.336	43	329903	102.113	ug/l	99
45) 1,4-Dioxane	7.659	88	63728	1897.493	ug/l	98
46) Methyl methacrylate	7.690	41	162523	102.589	ug/l	100
47) n-amyl Acetate	10.842	43	282922	100.917	ug/l	98
48) t-1,3-Dichloropropene	8.976	75	202810	104.416	ug/l	98
49) cis-1,3-Dichloropropene	8.360	75	223833	101.800	ug/l	100
50) 1,1,2-Trichloroethane	9.147	97	127690	96.553	ug/l	95
51) Ethyl methacrylate	9.110	69	214475	103.117	ug/l	97
52) 1,3-Dichloropropane	9.305	76	222694	96.102	ug/l	99
53) Dibromochloromethane	9.519	129	144384	98.713	ug/l	97
54) 1,2-Dibromoethane	9.604	107	130524	97.194	ug/l	100
55) 2-Chloroethyl vinyl ether	8.238	63	535473	501.334	ug/l	99
56) Bromoform	10.799	173	92416	100.830	ug/l	98
58) 4-Methyl-2-Pentanone	8.574	43	983713	489.624	ug/l	99
59) 2-Hexanone	9.427	43	708849	488.118	ug/l	98
61) Tetrachloroethene	9.269	164	104854	96.410	ug/l	97
62) Toluene	8.714	91	575772	98.410	ug/l	99
64) Chlorobenzene	10.073	112	359123	99.055	ug/l	99
65) 1,1,1,2-Tetrachloroethane	10.159	131	117602	98.304	ug/l	98
66) Ethyl Benzene	10.189	91	641324	100.122	ug/l	97
67) m/p-Xylenes	10.299	106	470322	197.072	ug/l	98
68) o-Xylene	10.640	106	230392	98.392	ug/l	100
69) Styrene	10.653	104	387436	99.067	ug/l	98
70) Isopropylbenzene	10.957	105	596402	98.698	ug/l	100
71) 1,1,2,2-Tetrachloroethane	11.207	83	190591	95.916	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	158994m	97.283	ug/l	
73) Bromobenzene	11.195	156	136270	97.960	ug/l	98
74) n-propylbenzene	11.299	91	717361	99.759	ug/l	99
75) 2-Chlorotoluene	11.360	91	421424	96.938	ug/l	98
76) 1,3,5-Trimethylbenzene	11.451	105	487050	97.701	ug/l	99
77) t-1,4-Dichloro-2-butene	11.018	75	59873	108.886	ug/l	98
78) 4-Chlorotoluene	11.451	91	477861	98.607	ug/l	98
79) tert-butylbenzene	11.713	119	490816	97.716	ug/l	99
80) 1,2,4-Trimethylbenzene	11.750	105	486770	97.478	ug/l	100
81) sec-Butylbenzene	11.890	105	616448	97.788	ug/l	100
82) p-Isopropyltoluene	12.006	119	510223	99.893	ug/l	99
83) 1,3-Dichlorobenzene	11.963	146	250755	96.883	ug/l	98
84) 1,4-Dichlorobenzene	12.036	146	249668	97.834	ug/l	99
85) n-Butylbenzene	12.329	91	476457	102.150	ug/l	98
86) Hexachloroethane	12.536	117	92493	102.679	ug/l	100
87) 1,2-Dichlorobenzene	12.335	146	240056	94.528	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	37960	98.669	ug/l	98
89) 1,2,4-Trichlorobenzene	13.585	180	158594	103.039	ug/l	98
90) Hexachlorobutadiene	13.719	225	60565	96.489	ug/l	98
91) Naphthalene	13.774	128	548026	100.977	ug/l	100
92) 1,2,3-Trichlorobenzene	13.957	180	158881	100.267	ug/l	100

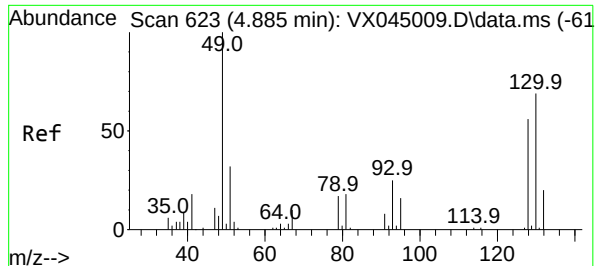
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations

Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.891 min Scan# 61

Delta R.T. 0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

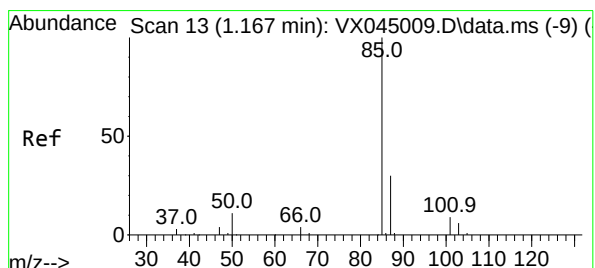
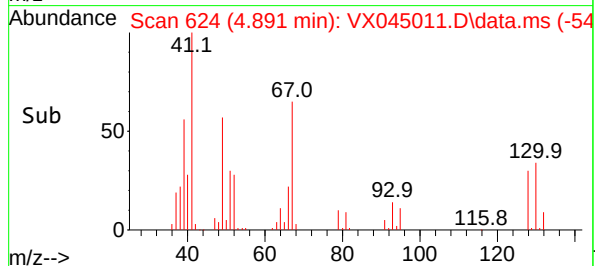
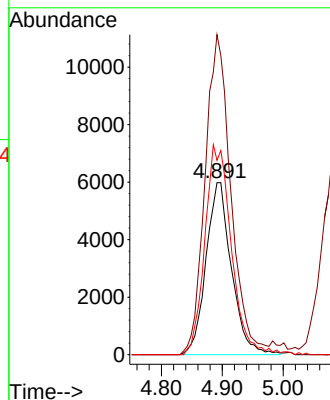
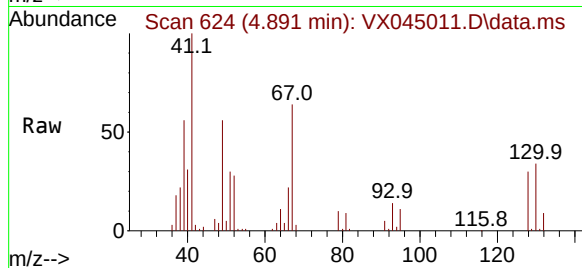
VSTDICC100

Tgt Ion:	128	Resp:	1733
Ion	Ratio	Lower	Upper
128	100		
49	189.4	0.0	449.7
130	126.9	0.0	312.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#2

Dichlorodifluoromethane

Concen: 95.997 ug/l

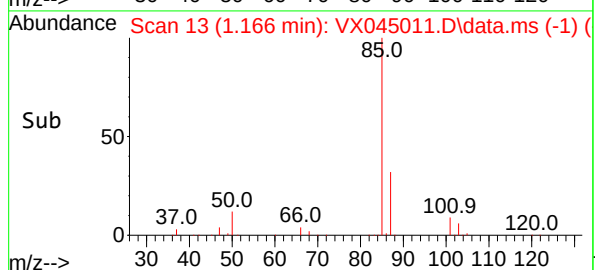
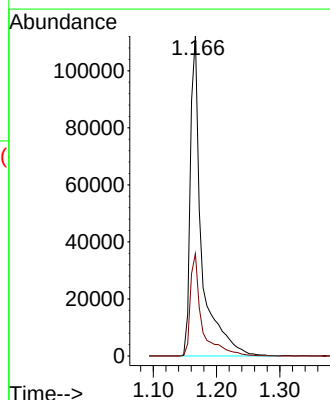
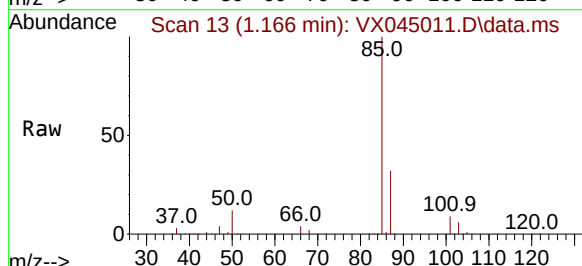
RT: 1.166 min Scan# 13

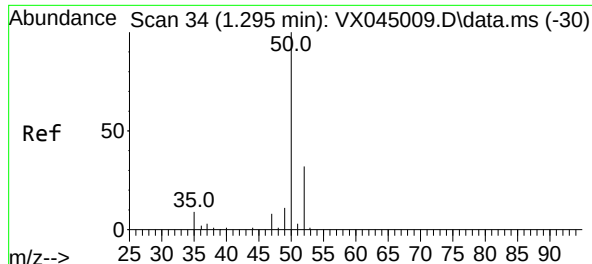
Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Tgt Ion:	85	Resp:	140259
Ion	Ratio	Lower	Upper
85	100		
87	32.0	15.1	45.3





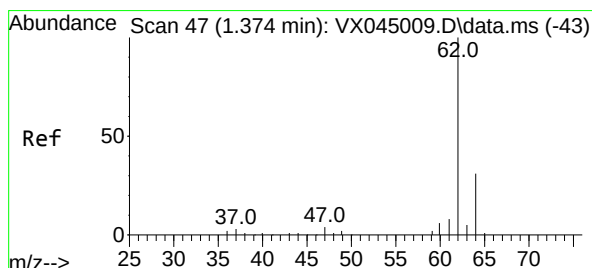
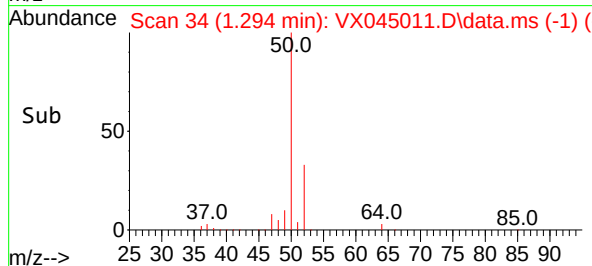
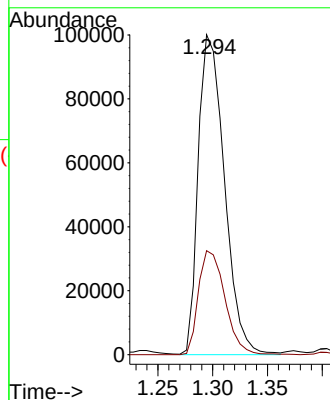
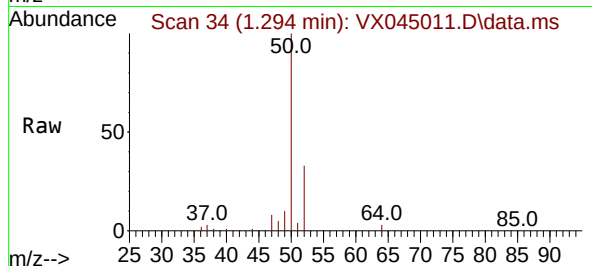
#3
Chloromethane
Concen: 94.924 ug/l
RT: 1.294 min Scan# 34
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC100

Tgt Ion: 50 Resp: 166114
Ion Ratio Lower Upper
50 100
52 32.6 25.7 38.5

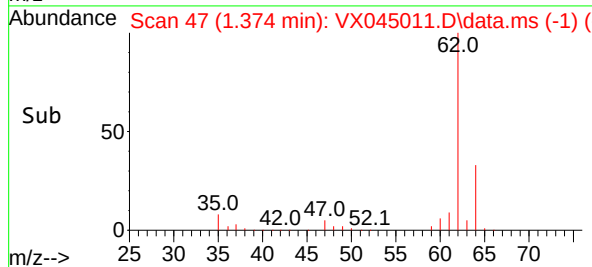
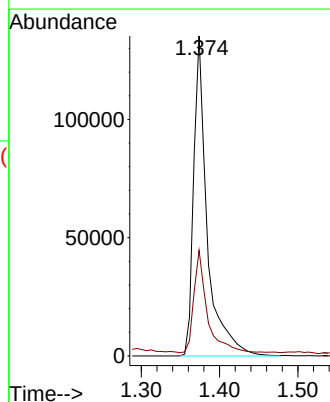
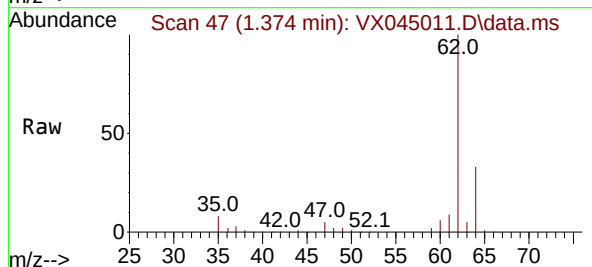
Manual Integrations
APPROVED

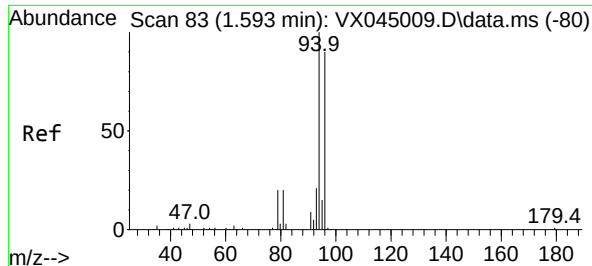
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#4
Vinyl Chloride
Concen: 96.669 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion: 62 Resp: 163236
Ion Ratio Lower Upper
62 100
64 31.9 25.1 37.7





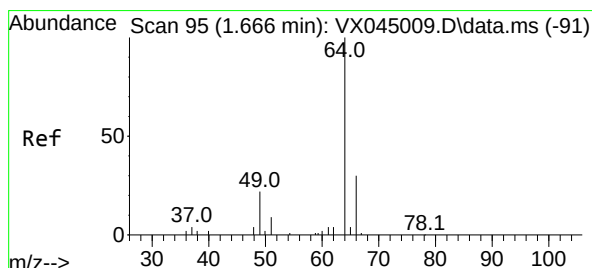
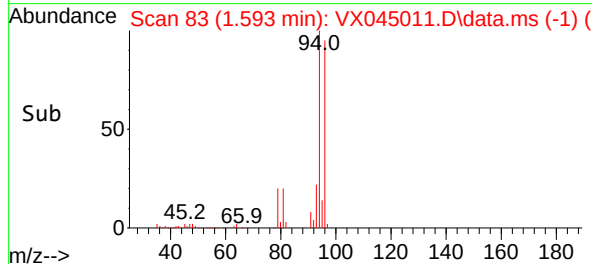
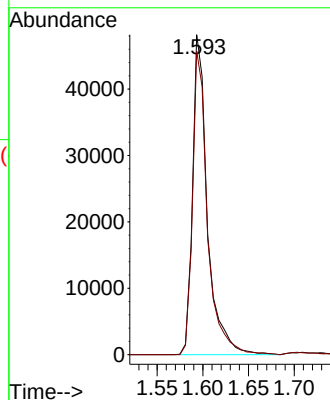
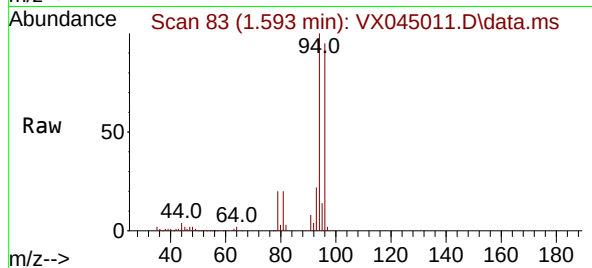
#5
Bromomethane
Concen: 92.819 ug/l
RT: 1.593 min Scan# 83
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Tgt Ion: 94 Resp: 5455
Ion Ratio Lower Upper
94 100
96 94.9 72.2 108.4

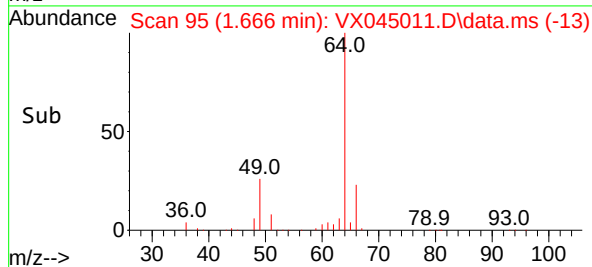
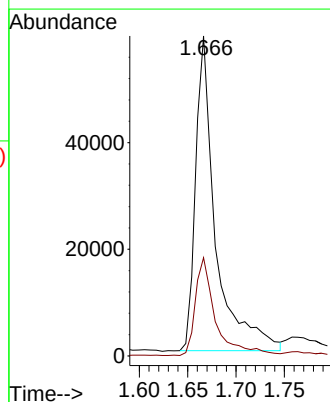
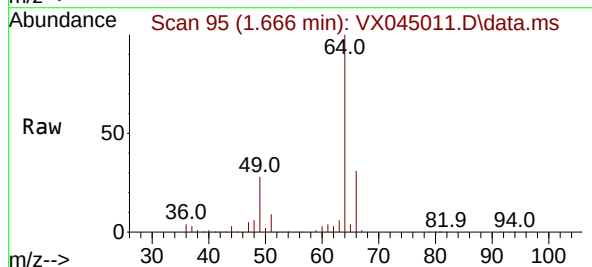
Manual Integrations
APPROVED

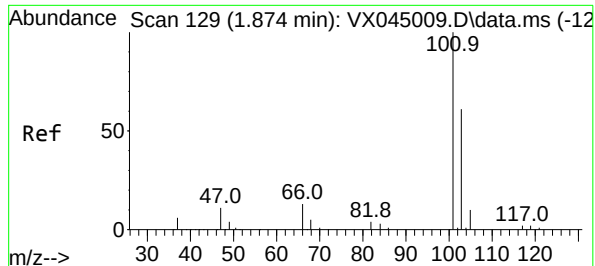
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#6
Chloroethane
Concen: 92.599 ug/l
RT: 1.666 min Scan# 95
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

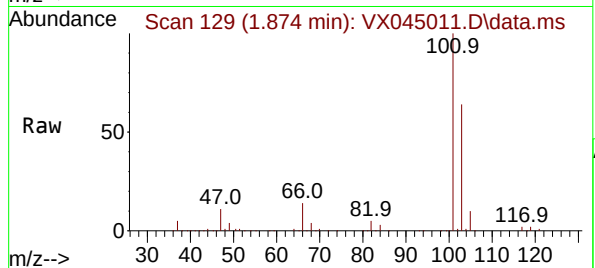
Tgt Ion: 64 Resp: 84688
Ion Ratio Lower Upper
64 100
66 31.1 23.7 35.5





#7
Trichlorofluoromethane
Concen: 96.956 ug/l
RT: 1.874 min Scan# 129
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

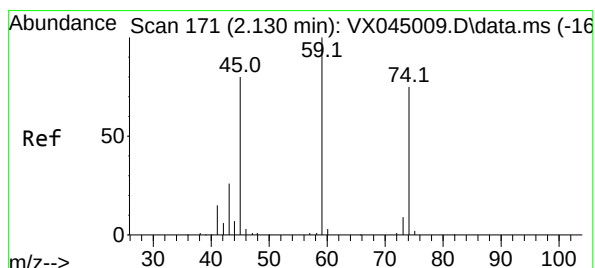
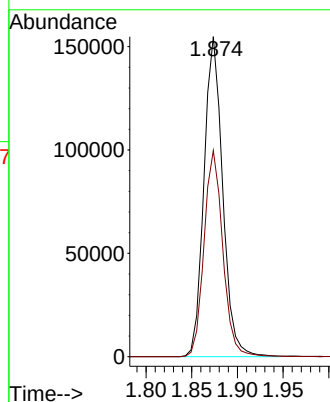
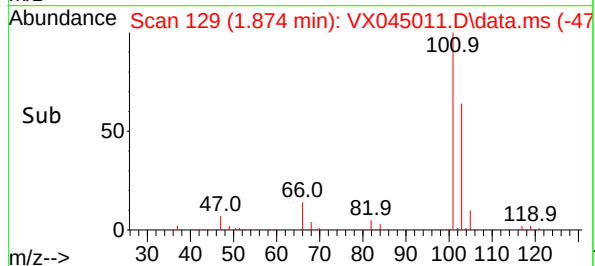
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



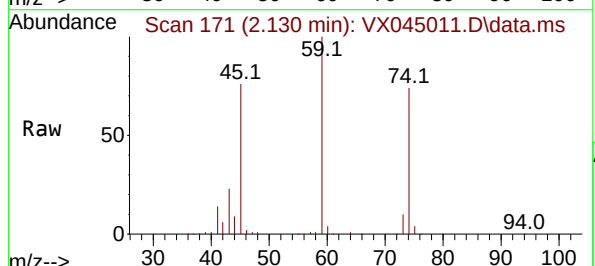
Tgt Ion:101 Resp: 220045
Ion Ratio Lower Upper
101 100
103 64.4 48.8 73.2

Manual Integrations
APPROVED

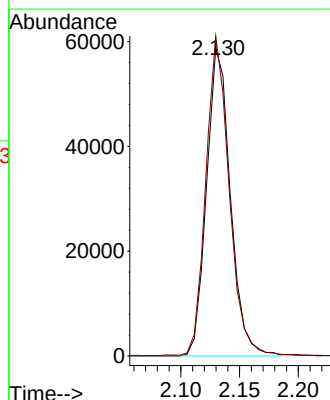
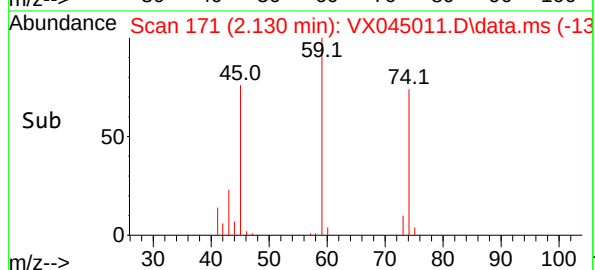
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

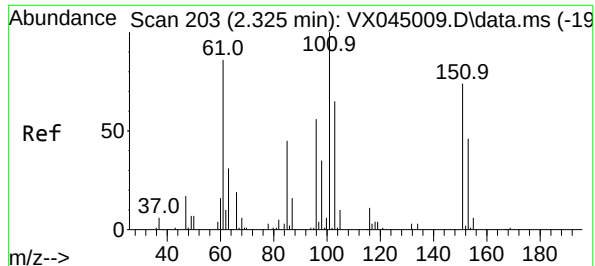


#8
Diethyl Ether
Concen: 96.616 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07



Tgt Ion: 74 Resp: 82964
Ion Ratio Lower Upper
74 100
45 100.7 20.8 186.8





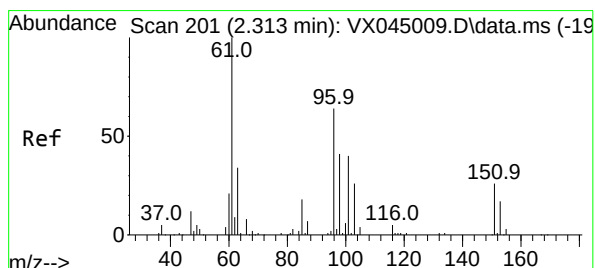
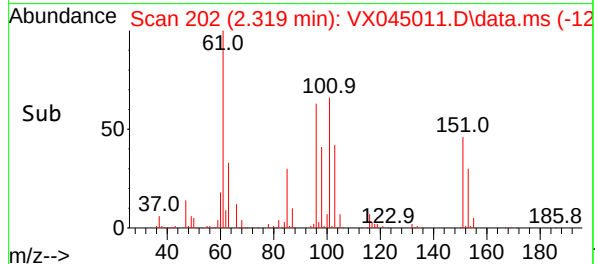
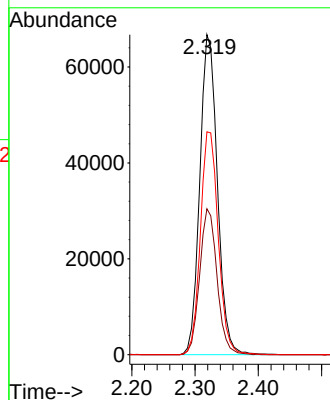
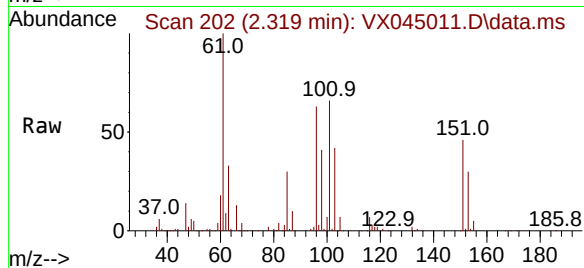
#9
1,1,2-Trichlorotrifluoroethane
Concen: 96.068 ug/l
RT: 2.319 min Scan# 203
Delta R.T. -0.006 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Tgt Ion:101 Resp: 129494
Ion Ratio Lower Upper
101 100
85 45.0 0.0 90.6
151 70.6 0.0 147.6

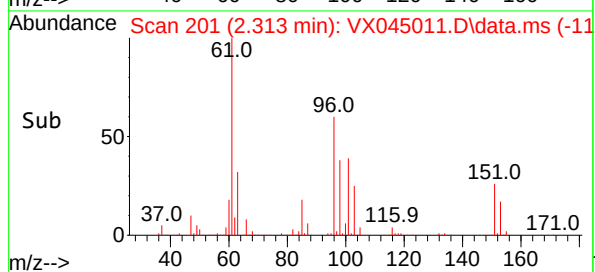
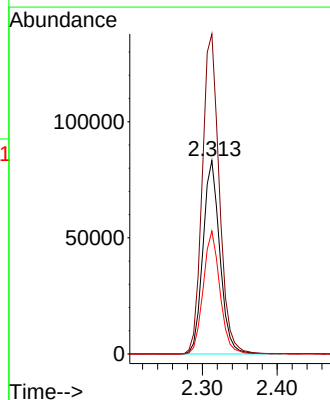
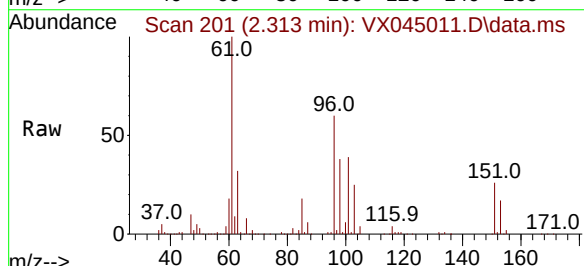
Manual Integrations
APPROVED

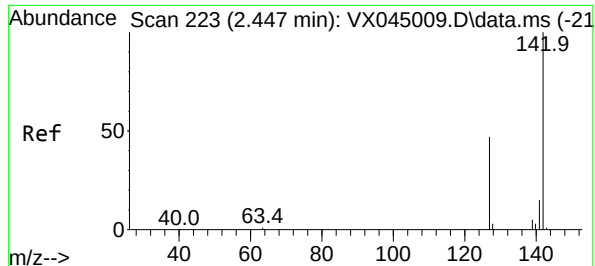
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#10
1,1-Dichloroethene
Concen: 99.244 ug/l
RT: 2.313 min Scan# 201
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion: 96 Resp: 130666
Ion Ratio Lower Upper
96 100
61 165.4 124.2 186.2
98 63.5 51.1 76.7





#11

Methyl Iodide

Concen: 108.607 ug/l

RT: 2.447 min Scan# 21

Delta R.T. -0.000 min

Lab File: VX045011.D

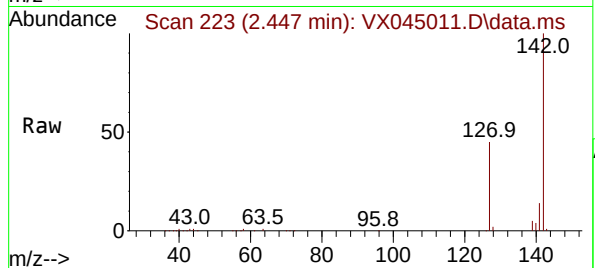
Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100



Tgt Ion:142 Resp: 161844

Ion Ratio Lower Upper

142 100

127 45.3 23.3 69.9

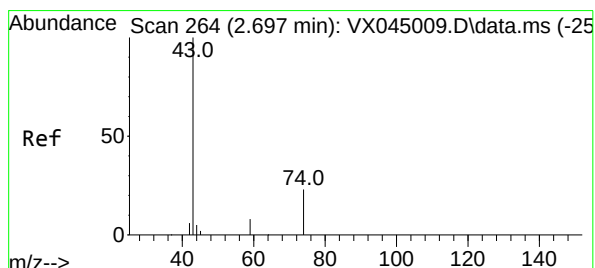
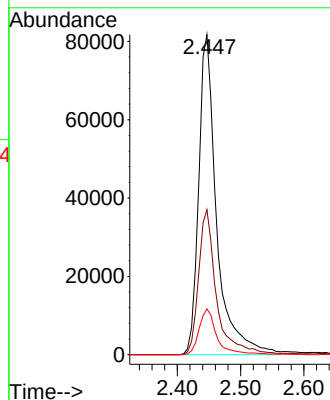
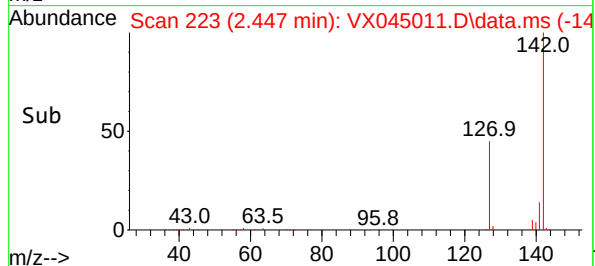
141 14.3 7.5 22.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#12

Methyl Acetate

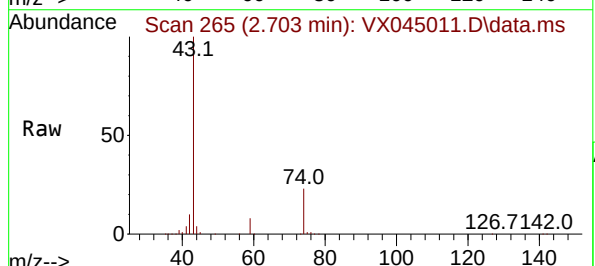
Concen: 98.675 ug/l

RT: 2.703 min Scan# 265

Delta R.T. 0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

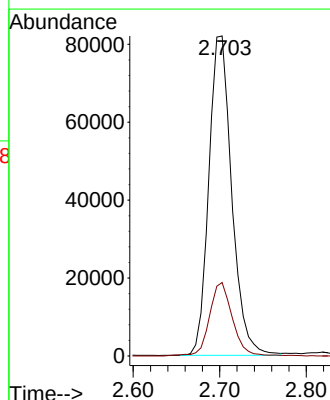
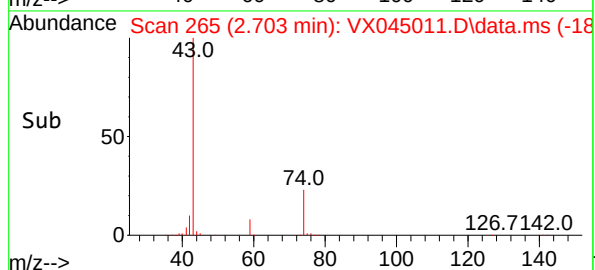


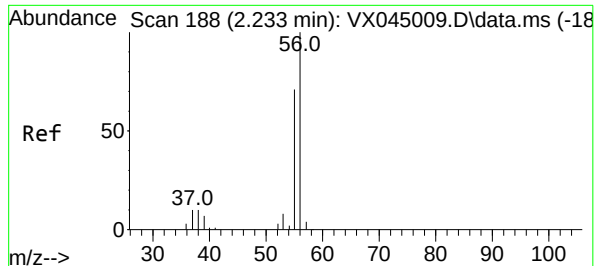
Tgt Ion: 43 Resp: 150865

Ion Ratio Lower Upper

43 100

74 22.8 17.9 26.9





#13

Acrolein

Concen: 509.382 ug/l

RT: 2.233 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 56 Resp: 156104

Ion Ratio Lower Upper

56 100

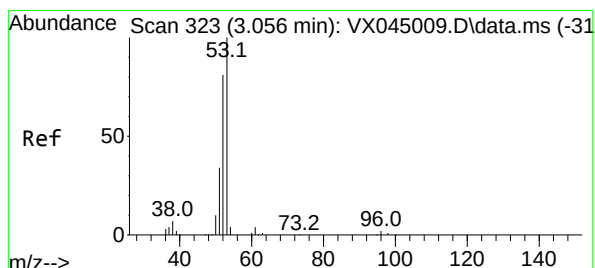
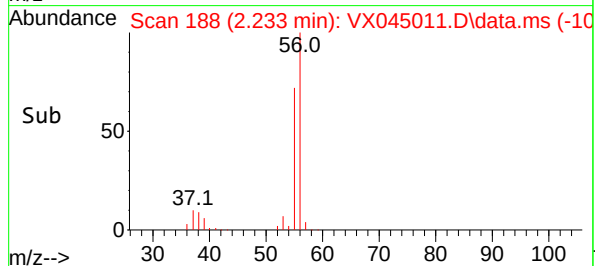
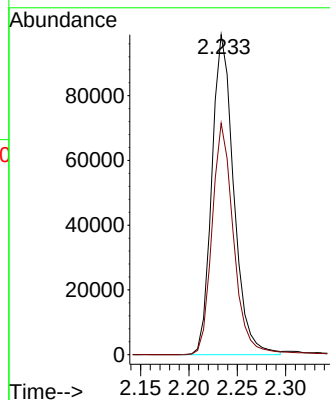
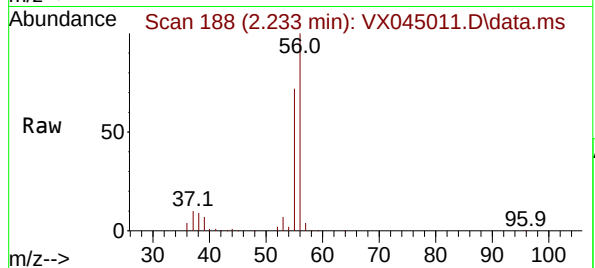
55 71.5 55.4 83.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#14

Acrylonitrile

Concen: 496.667 ug/l

RT: 3.062 min Scan# 324

Delta R.T. 0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

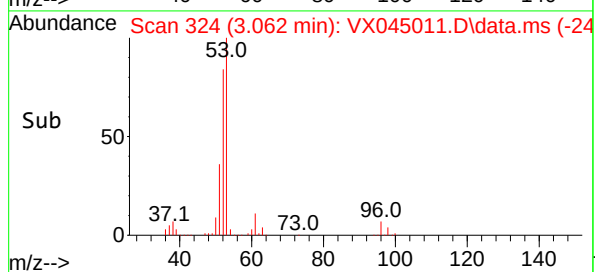
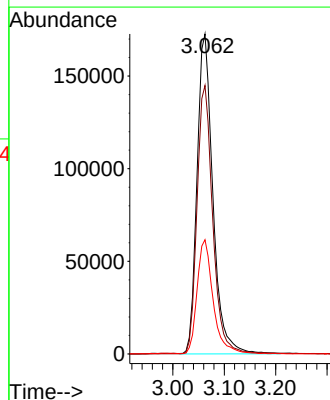
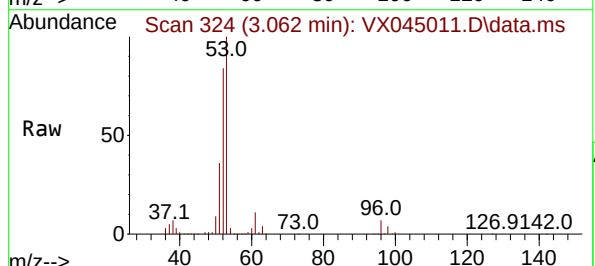
Tgt Ion: 53 Resp: 370914

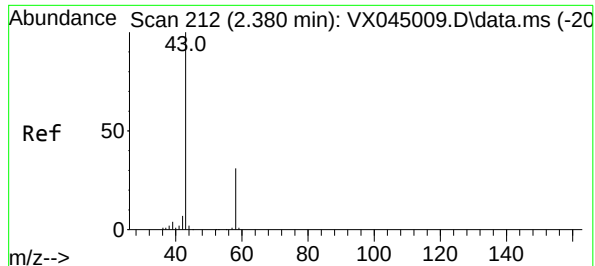
Ion Ratio Lower Upper

53 100

52 82.7 40.9 122.8

51 35.9 18.0 54.0





#15

Acetone

Concen: 476.326 ug/l

RT: 2.380 min Scan# 212

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 58 Resp: 97560

Ion Ratio Lower Upper

58 100

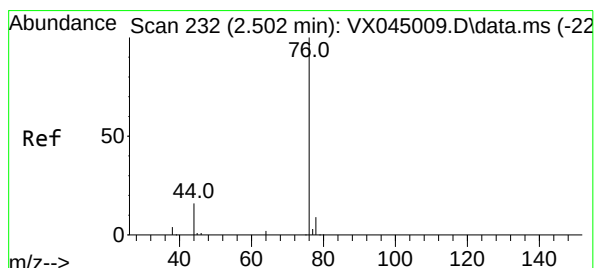
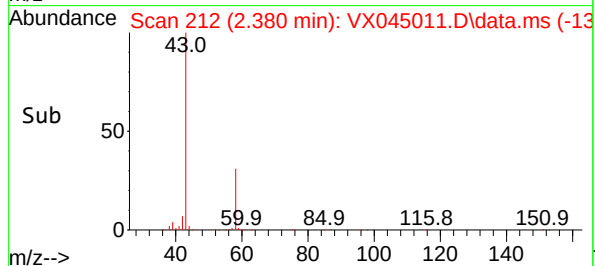
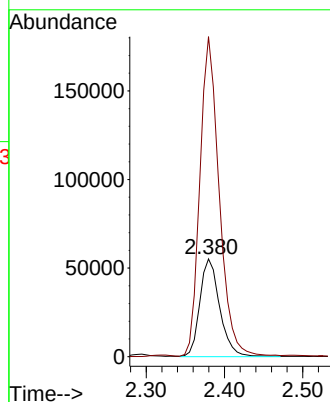
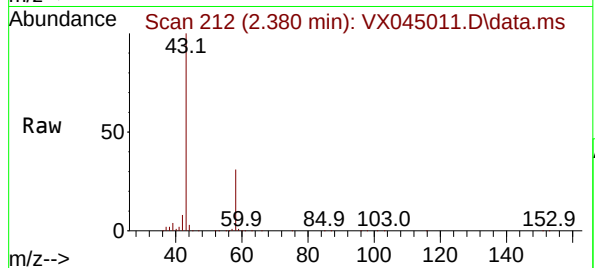
43 327.6 258.6 388.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#16

Carbon Disulfide

Concen: 99.576 ug/l

RT: 2.502 min Scan# 232

Delta R.T. -0.000 min

Lab File: VX045011.D

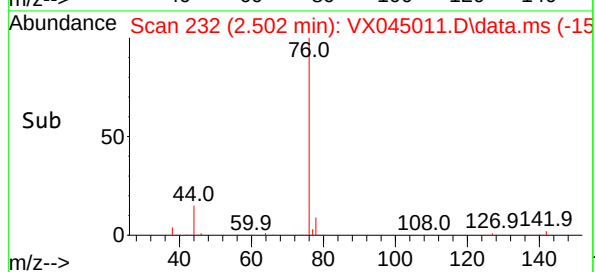
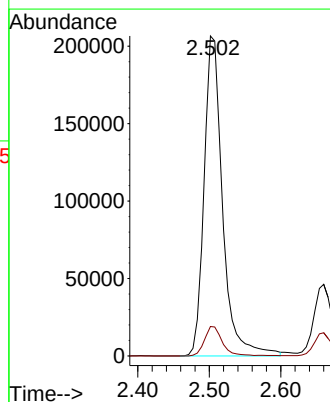
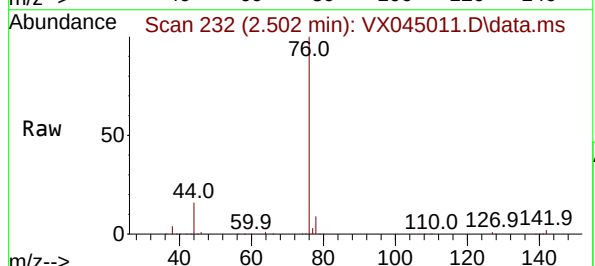
Acq: 21 Feb 2025 11:07

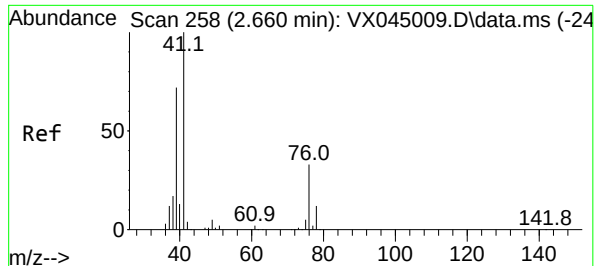
Tgt Ion: 76 Resp: 371874

Ion Ratio Lower Upper

76 100

78 9.2 7.3 10.9





#17

Allyl chloride

Concen: 99.923 ug/l

RT: 2.654 min Scan# 21

Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 41 Resp: 24606

Ion Ratio Lower Upper

41 100

39 70.4 36.2 108.6

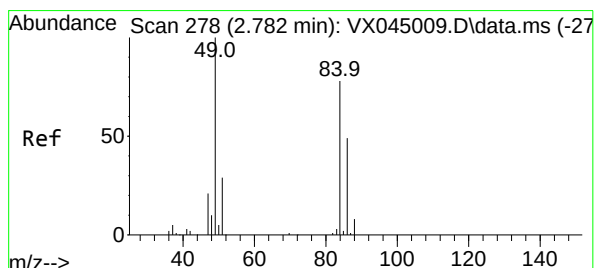
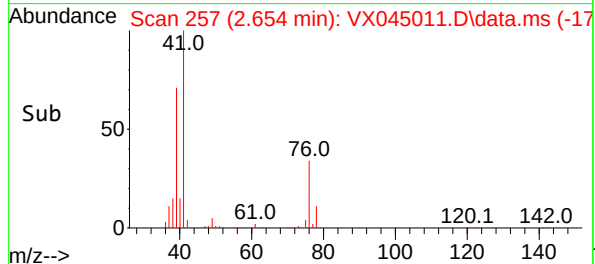
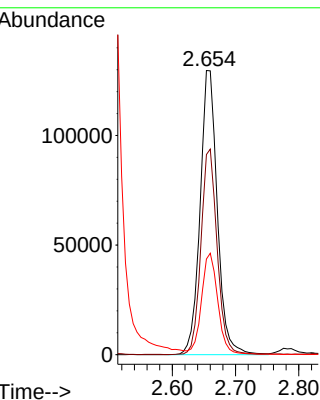
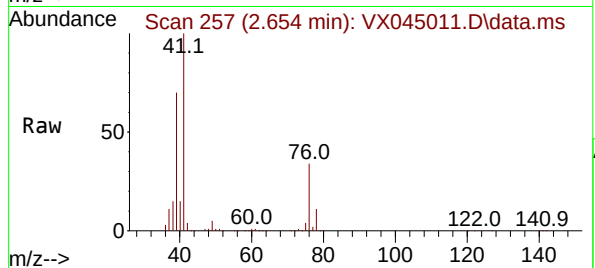
76 33.5 17.2 51.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#18

Methylene Chloride

Concen: 97.871 ug/l

RT: 2.782 min Scan# 278

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Tgt Ion: 84 Resp: 144938

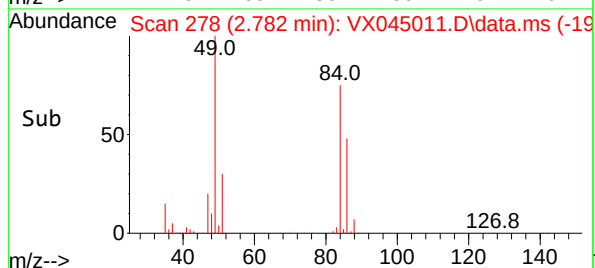
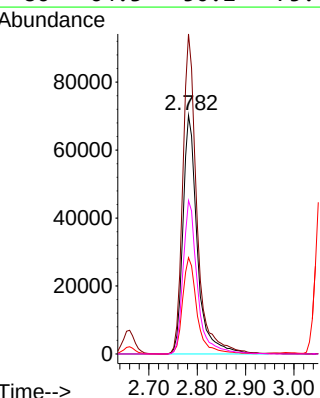
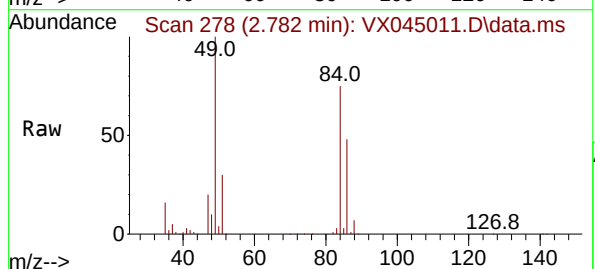
Ion Ratio Lower Upper

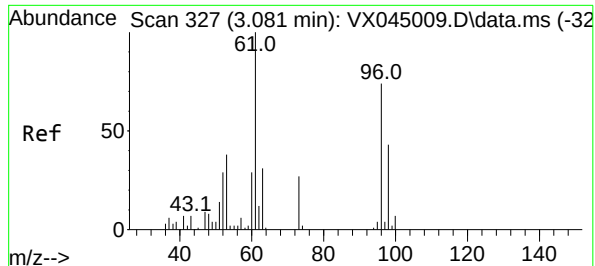
84 100

49 134.0 102.8 154.2

51 40.4 30.1 45.1

86 64.3 50.2 75.4





#19

trans-1,2-Dichloroethene

Concen: 98.015 ug/l

RT: 3.087 min Scan# 31

Delta R.T. 0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 96 Resp: 13056

Ion Ratio Lower Upper

96 100

61 138.3 108.6 163.0

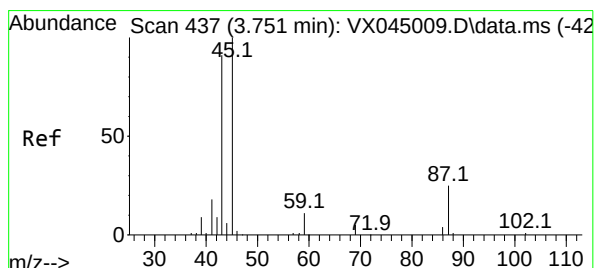
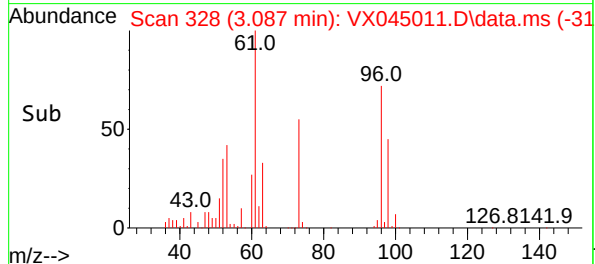
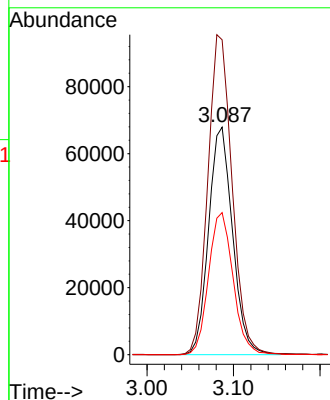
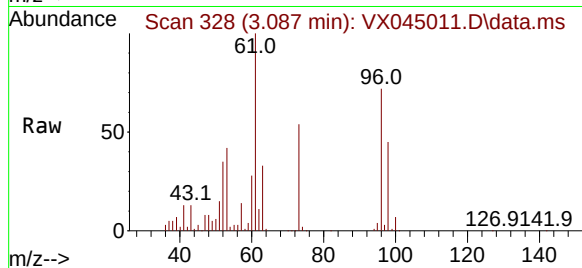
98 62.5 46.5 69.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#20

Diisopropyl ether

Concen: 99.355 ug/l

RT: 3.757 min Scan# 438

Delta R.T. 0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Tgt Ion: 45 Resp: 470167

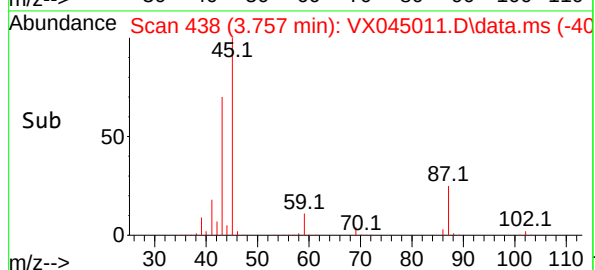
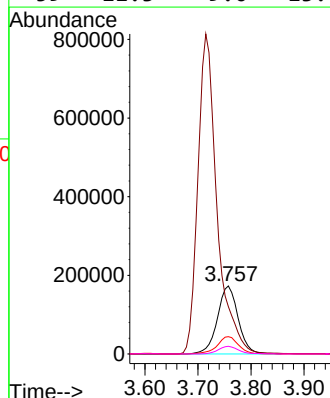
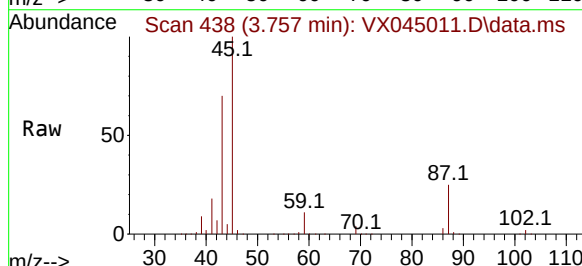
Ion Ratio Lower Upper

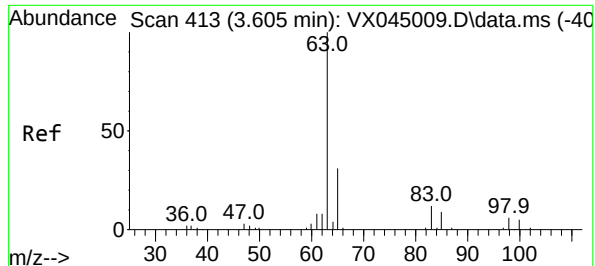
45 100

43 69.5 74.4 111.6#

87 25.4 19.8 29.8

59 11.3 9.0 13.4





#21

1,1-Dichloroethane

Concen: 98.196 ug/l

RT: 3.605 min Scan# 41

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100

Tgt Ion: 63 Resp: 258430

Ion Ratio Lower Upper

63 100

98 7.5 3.3 9.8

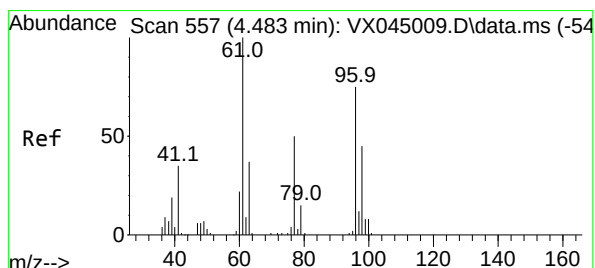
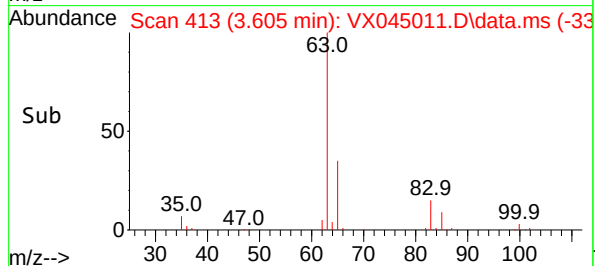
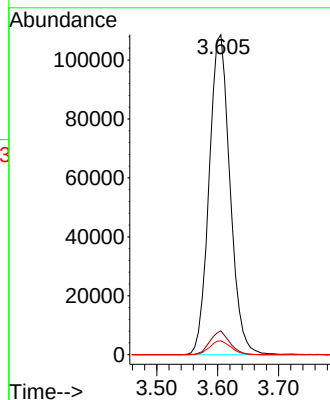
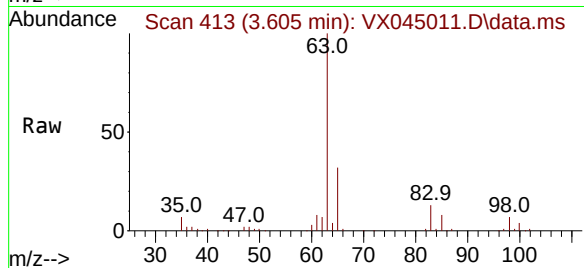
100 4.4 2.4 7.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#22

cis-1,2-Dichloroethene

Concen: 98.314 ug/l

RT: 4.477 min Scan# 556

Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

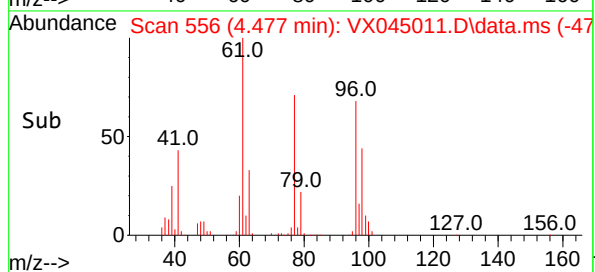
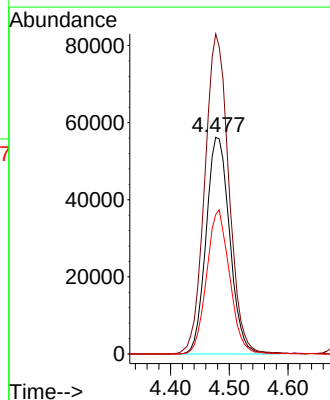
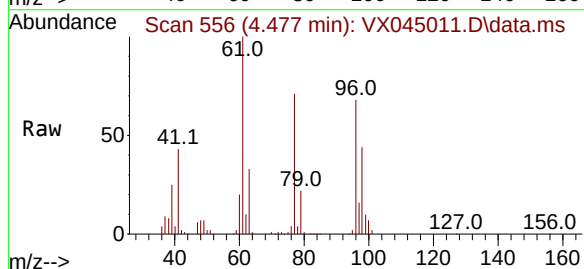
Tgt Ion: 96 Resp: 156933

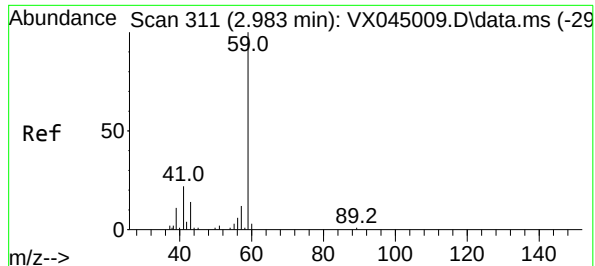
Ion Ratio Lower Upper

96 100

61 150.2 118.9 178.3

98 64.5 50.7 76.1





#23

tert-Butyl Alcohol

Concen: 481.055 ug/l

RT: 2.989 min Scan# 311

Delta R.T. 0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 59 Resp: 125570

Ion Ratio Lower Upper

59 100

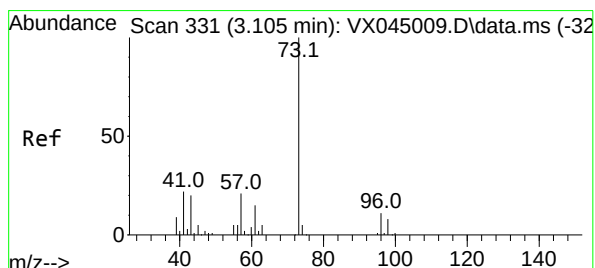
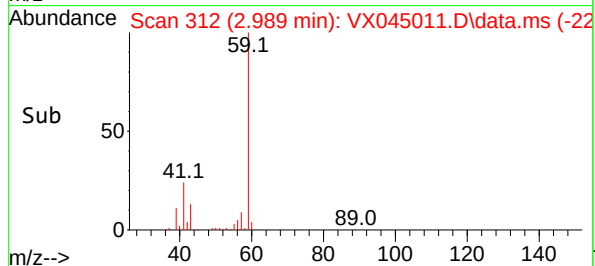
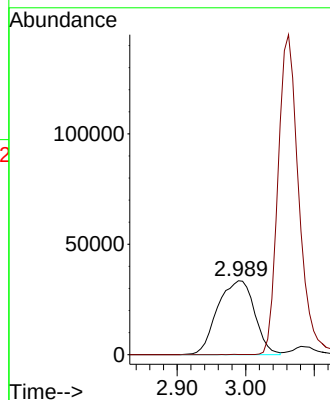
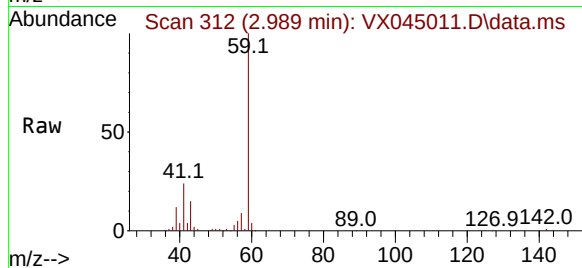
52 0.1 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#24

Methyl tert-Butyl Ether

Concen: 99.244 ug/l

RT: 3.111 min Scan# 332

Delta R.T. 0.006 min

Lab File: VX045011.D

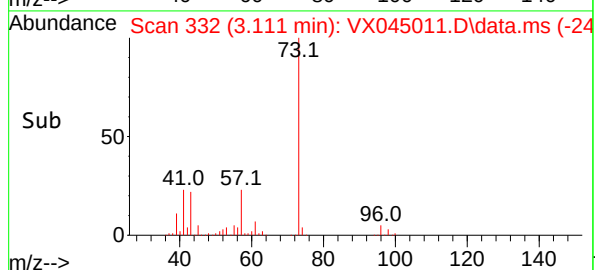
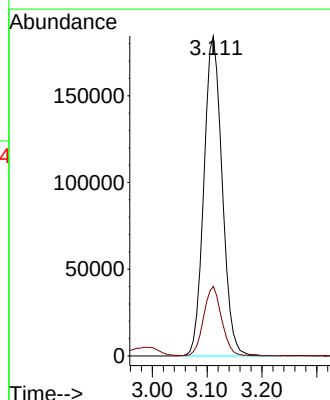
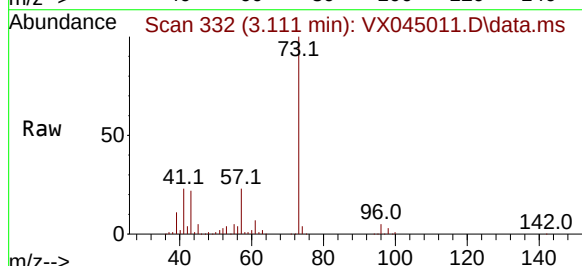
Acq: 21 Feb 2025 11:07

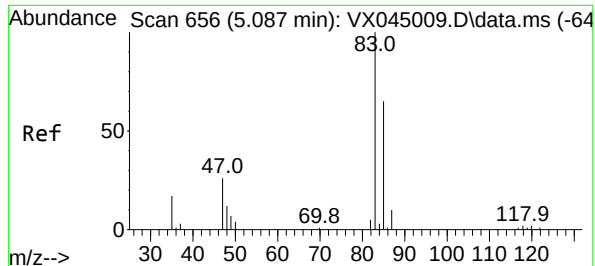
Tgt Ion: 73 Resp: 426471

Ion Ratio Lower Upper

73 100

43 21.3 17.4 26.0





#25

Chloroform

Concen: 97.577 ug/l

RT: 5.080 min Scan# 61

Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 83 Resp: 24804

Ion Ratio Lower Upper

83 100

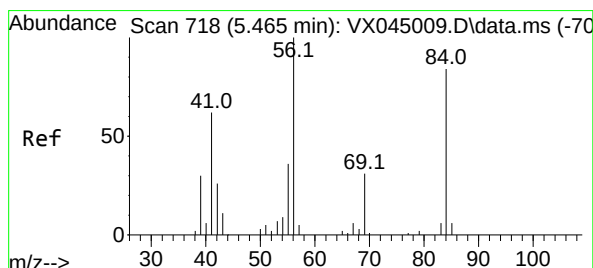
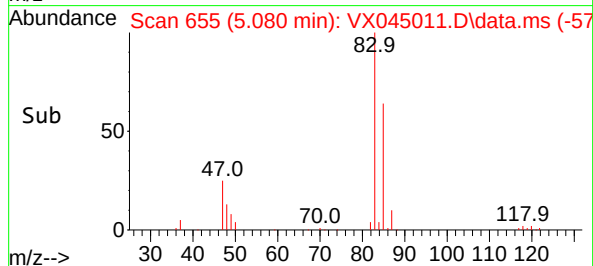
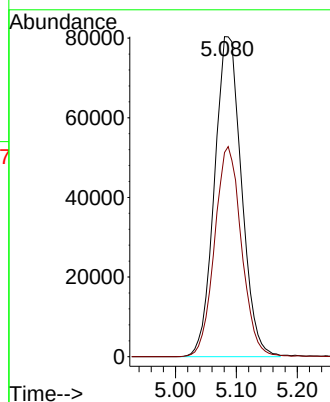
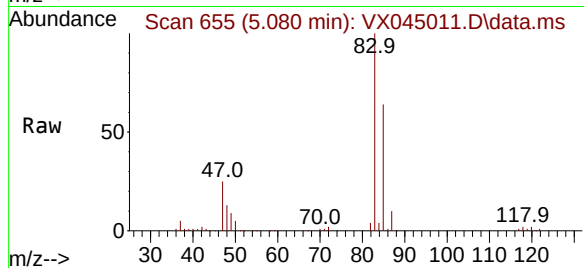
85 63.7 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#26

Cyclohexane

Concen: 97.509 ug/l

RT: 5.458 min Scan# 717

Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

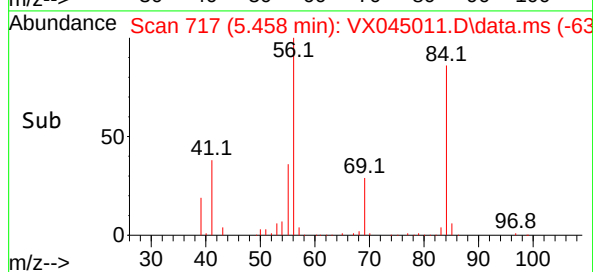
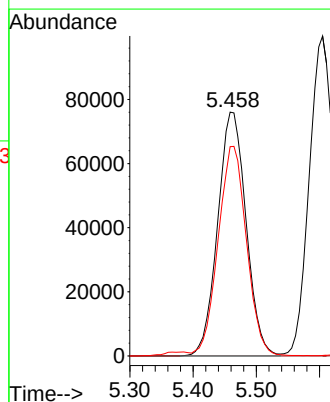
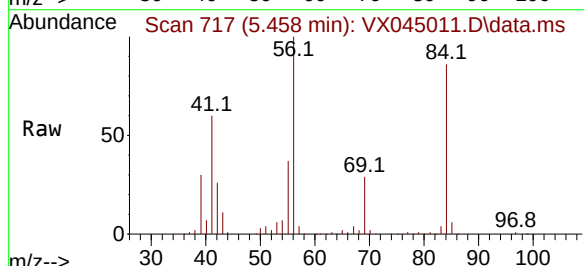
Tgt Ion: 56 Resp: 236876

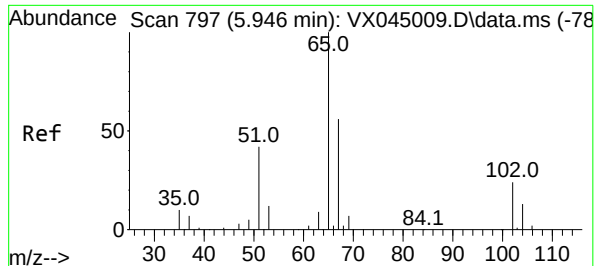
Ion Ratio Lower Upper

56 100

89 0.0 0.0 0.0

84 86.0 67.1 100.7





#27

1,2-Dichloroethane-d4

Concen: 30.059 ug/l

RT: 5.946 min Scan# 797

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 65 Resp: 5060

Ion Ratio Lower Upper

65 100

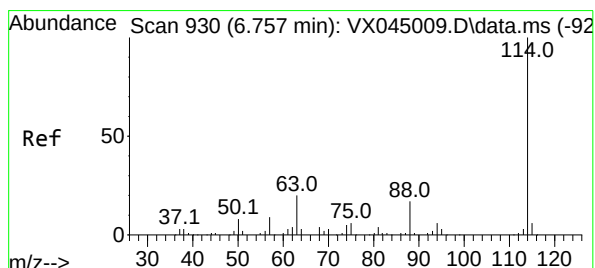
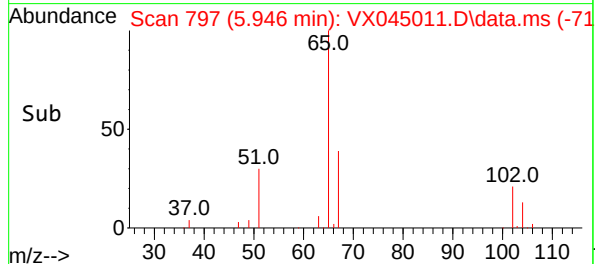
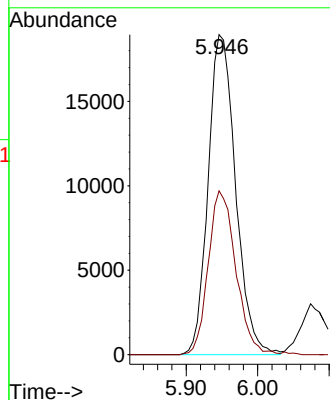
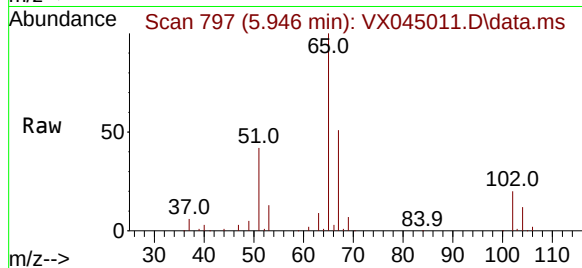
67 50.9 42.6 64.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.751 min Scan# 929

Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

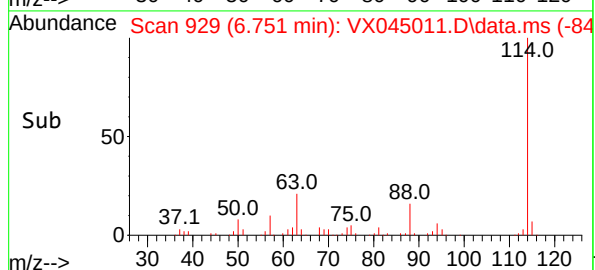
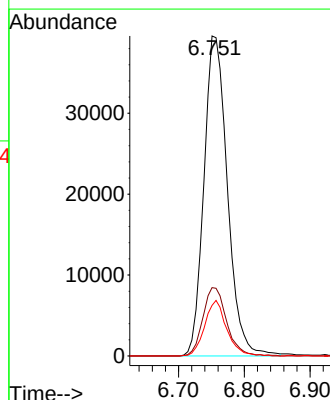
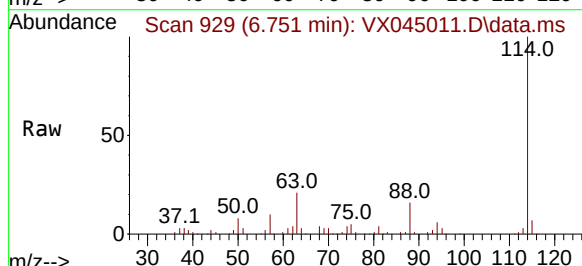
Tgt Ion:114 Resp: 98516

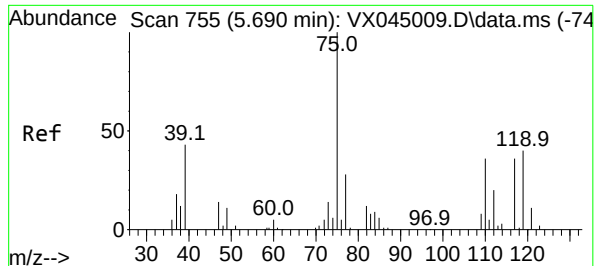
Ion Ratio Lower Upper

114 100

63 21.6 16.8 25.2

88 16.3 12.7 19.1





#29

1,1-Dichloropropene

Concen: 96.357 ug/l

RT: 5.684 min Scan# 755

Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100

Tgt Ion: 75 Resp: 174620

Ion Ratio Lower Upper

75 100

110 34.7 0.0 69.2

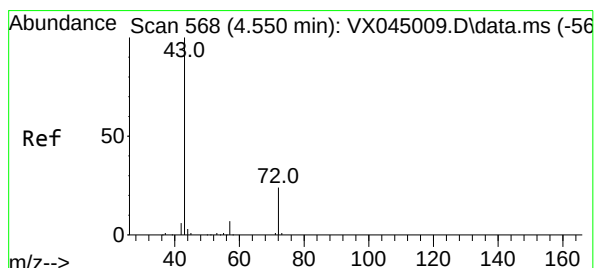
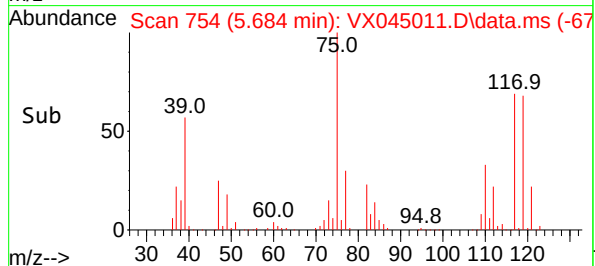
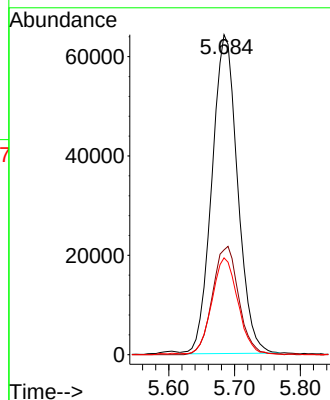
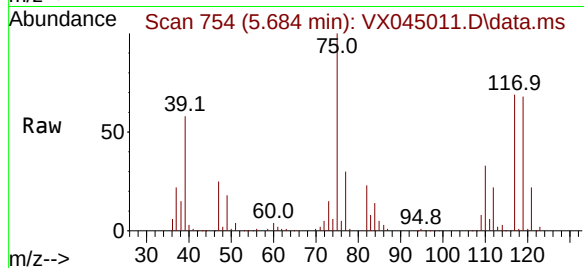
77 30.9 0.0 61.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#30

2-Butanone

Concen: 482.489 ug/l

RT: 4.550 min Scan# 568

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

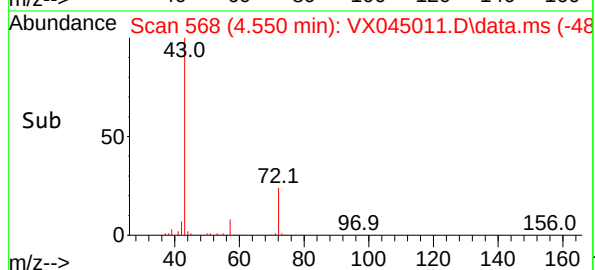
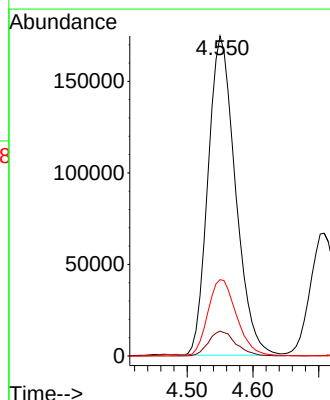
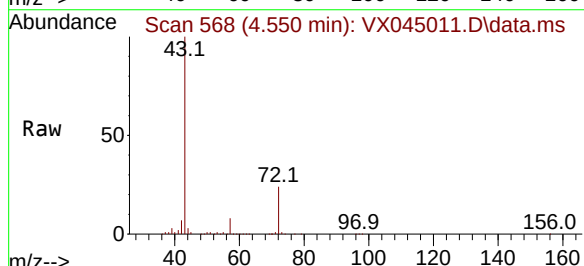
Tgt Ion: 43 Resp: 505036

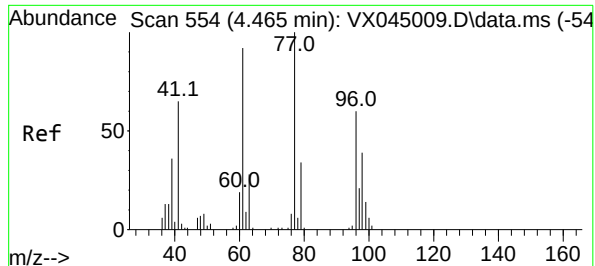
Ion Ratio Lower Upper

43 100

57 7.8 6.2 9.2

72 24.7 20.2 30.2





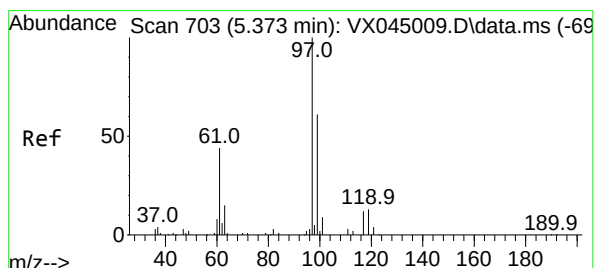
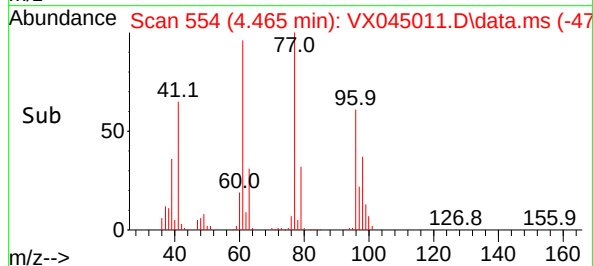
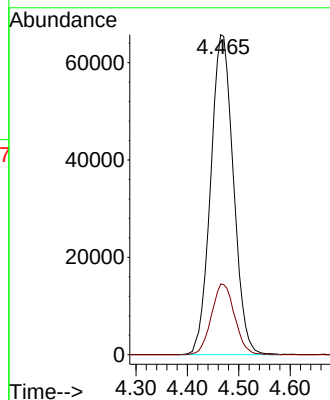
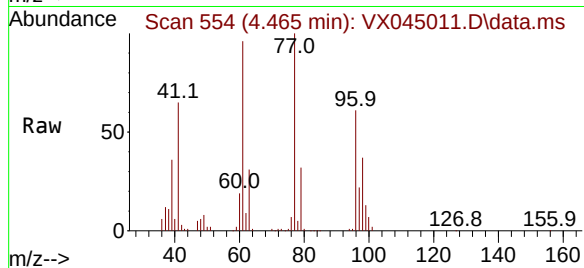
#31
2,2-Dichloropropane
Concen: 98.758 ug/l
RT: 4.465 min Scan# 554
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Tgt Ion: 77 Resp: 202370
Ion Ratio Lower Upper
77 100
97 22.5 18.0 27.0

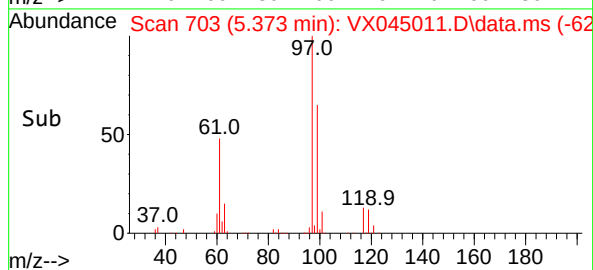
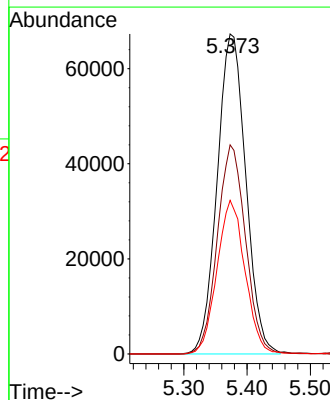
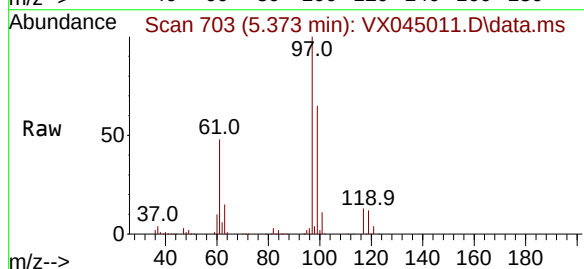
Manual Integrations
APPROVED

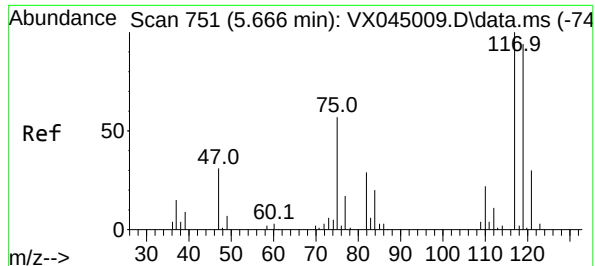
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#32
1,1,1-Trichloroethane
Concen: 96.379 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion: 97 Resp: 211623
Ion Ratio Lower Upper
97 100
99 64.4 52.2 78.2
61 46.9 38.5 57.7





#33

Carbon Tetrachloride

Concen: 96.425 ug/l

RT: 5.666 min Scan# 751

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100

Tgt Ion:117 Resp: 17868

Ion Ratio Lower Upper

117 100

119 94.3 75.1 112.7

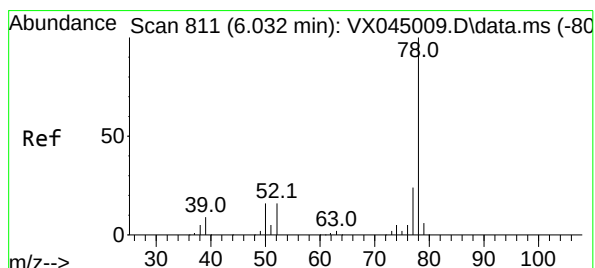
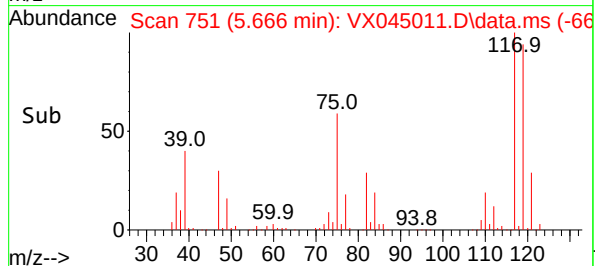
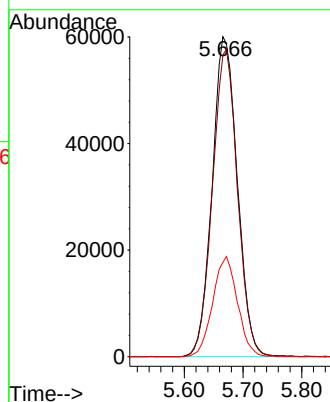
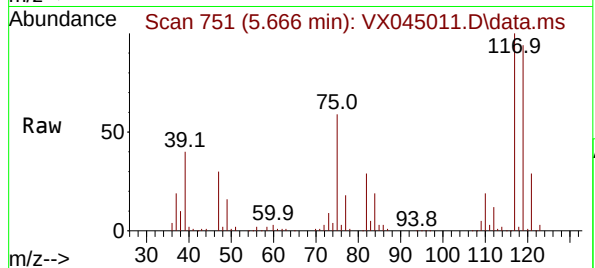
121 29.5 23.9 35.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#34

Benzene

Concen: 96.492 ug/l

RT: 6.031 min Scan# 811

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

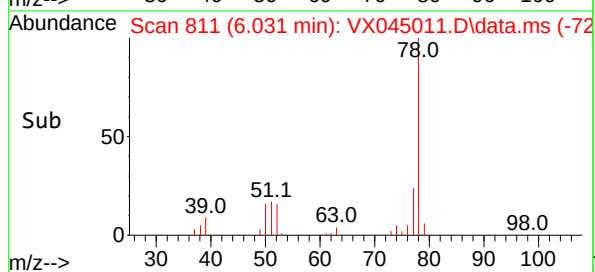
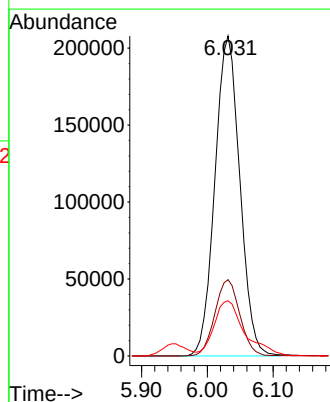
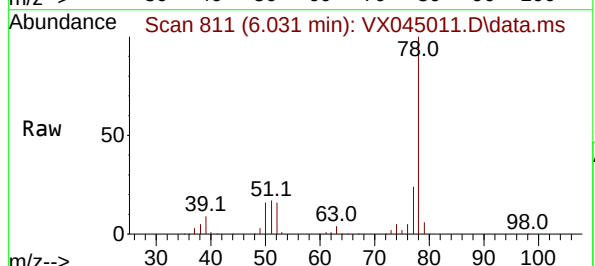
Tgt Ion: 78 Resp: 548369

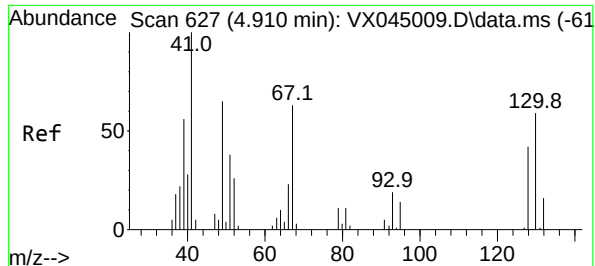
Ion Ratio Lower Upper

78 100

77 23.9 19.6 29.4

51 16.4 13.8 20.6





#35

Methacrylonitrile

Concen: 99.957 ug/l

RT: 4.910 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 41 Resp: 111962

Ion Ratio Lower Upper

41 100

39 53.8 27.8 83.4

67 66.4 31.5 94.5

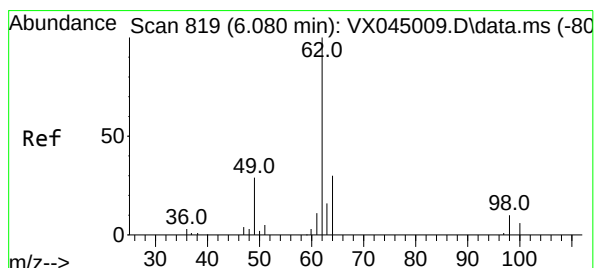
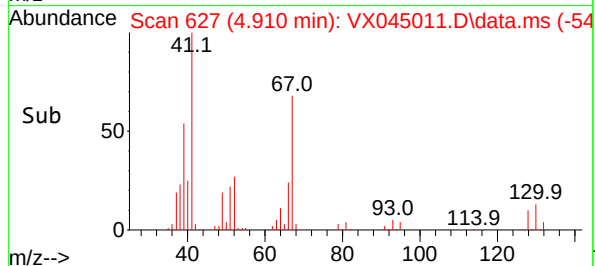
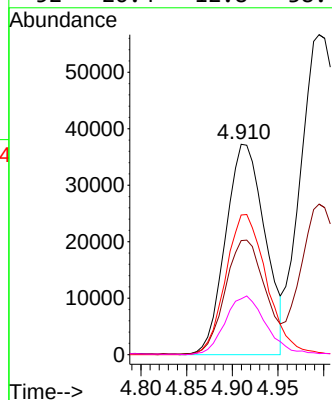
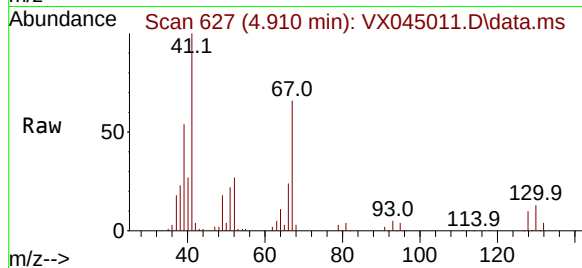
52 26.4 12.8 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#36

1,2-Dichloroethane

Concen: 97.362 ug/l

RT: 6.080 min Scan# 819

Delta R.T. -0.000 min

Lab File: VX045011.D

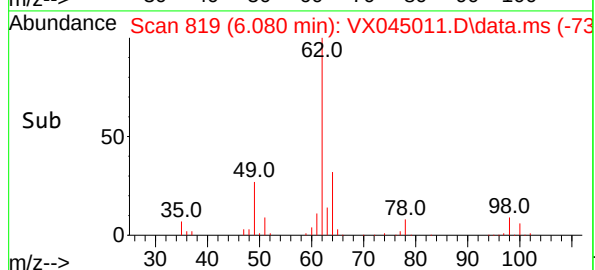
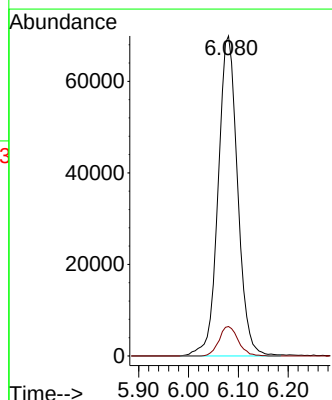
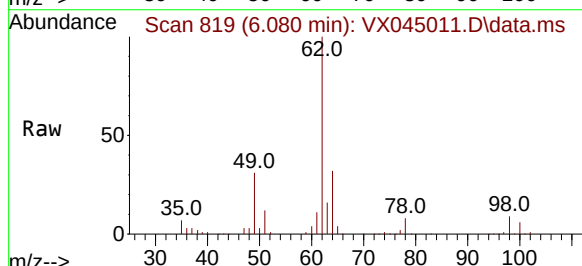
Acq: 21 Feb 2025 11:07

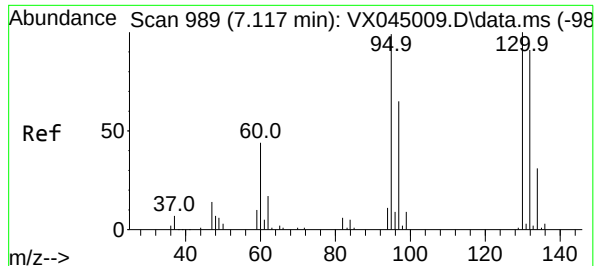
Tgt Ion: 62 Resp: 189437

Ion Ratio Lower Upper

62 100

98 9.1 7.9 11.9





#37

Trichloroethene

Concen: 96.375 ug/l

RT: 7.117 min Scan# 989

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100

Tgt Ion:130 Resp: 128134

Ion Ratio Lower Upper

130 100

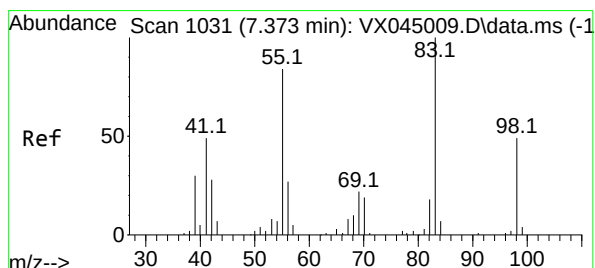
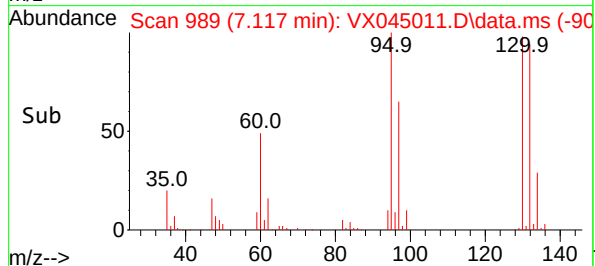
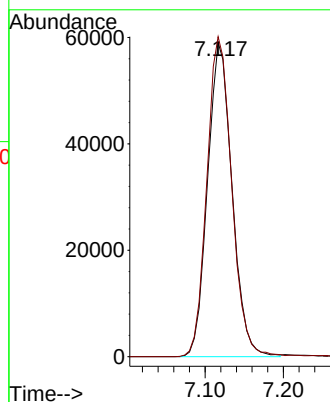
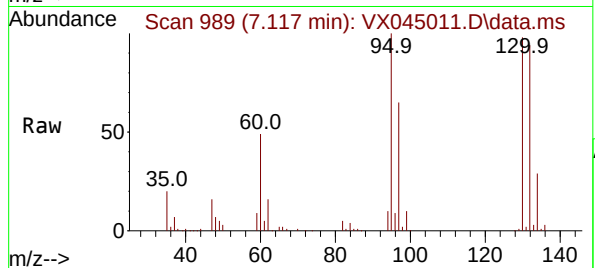
95 101.7 79.0 118.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#38

Methylcyclohexane

Concen: 97.744 ug/l

RT: 7.373 min Scan# 1031

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

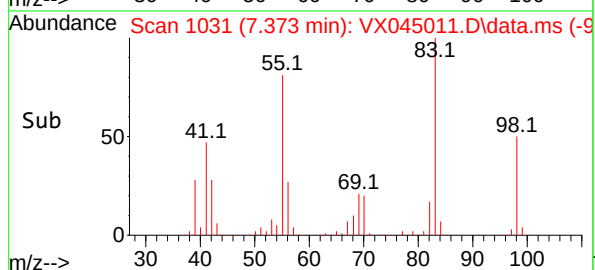
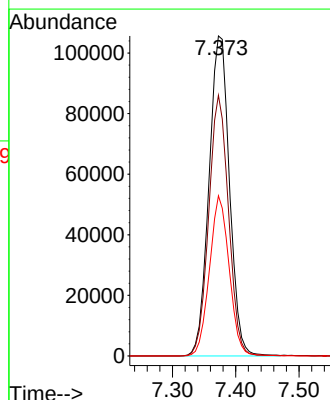
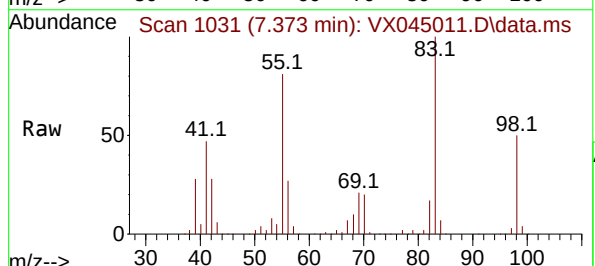
Tgt Ion: 83 Resp: 237839

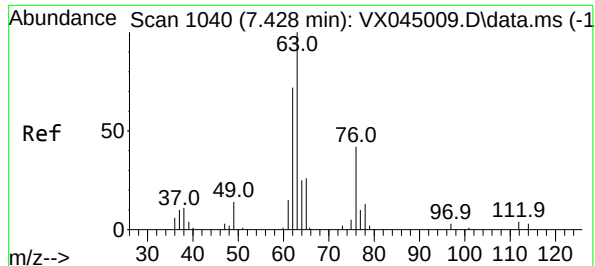
Ion Ratio Lower Upper

83 100

55 78.5 40.6 122.0

98 48.2 24.9 74.6





#39

1,2-Dichloropropane

Concen: 99.193 ug/l

RT: 7.421 min Scan# 1039

Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 63 Resp: 140148

Ion Ratio Lower Upper

63 100

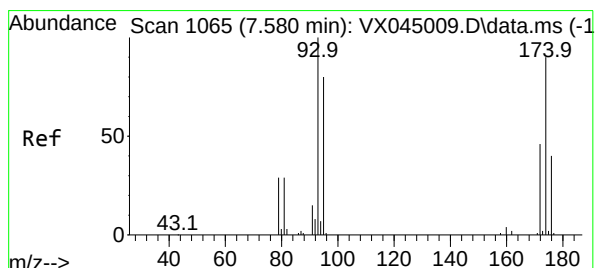
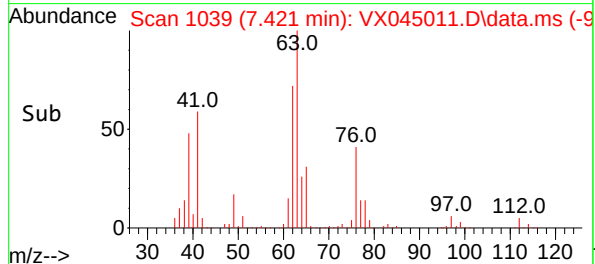
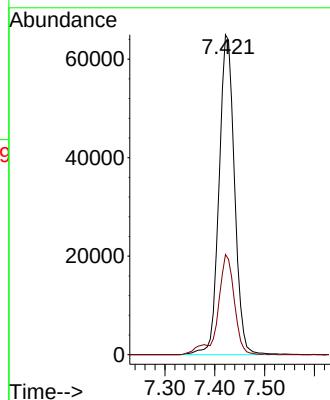
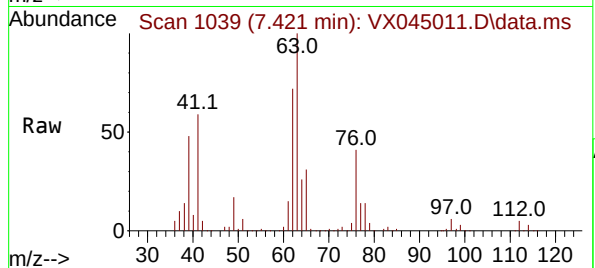
65 31.3 24.3 36.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#40

Dibromomethane

Concen: 96.465 ug/l

RT: 7.574 min Scan# 1064

Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

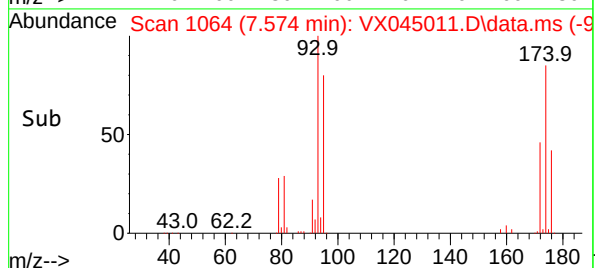
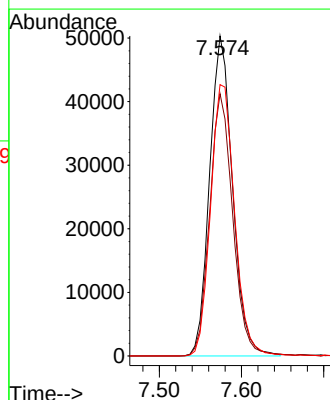
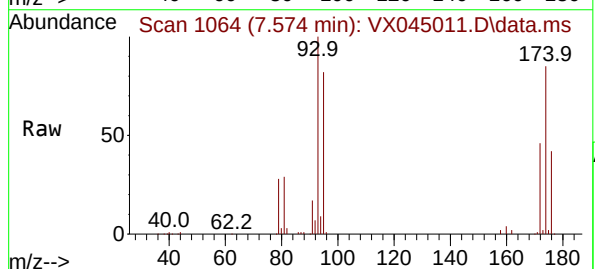
Tgt Ion: 93 Resp: 97805

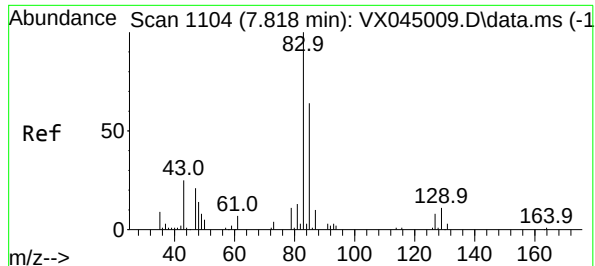
Ion Ratio Lower Upper

93 100

95 82.6 0.0 162.6

174 88.6 0.0 178.8





#41

Bromodichloromethane

Concen: 97.929 ug/l

RT: 7.818 min Scan# 1104

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 83 Resp: 197335

Ion Ratio Lower Upper

83 100

85 64.8 51.0 76.6

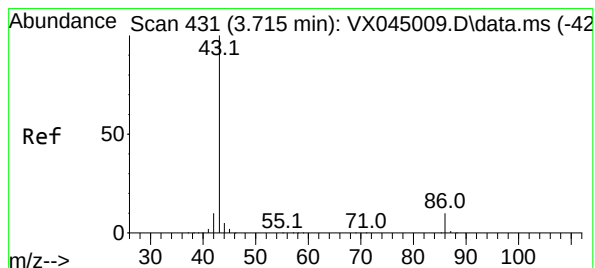
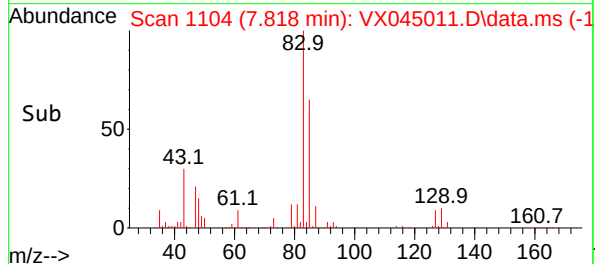
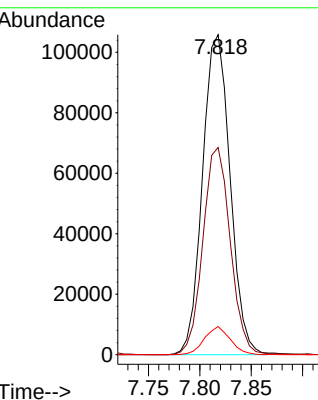
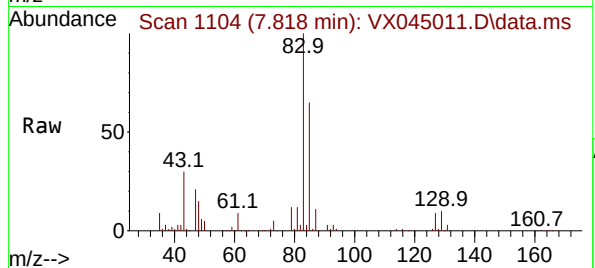
127 8.8 6.1 9.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#42

Vinyl Acetate

Concen: 502.855 ug/l

RT: 3.715 min Scan# 431

Delta R.T. -0.000 min

Lab File: VX045011.D

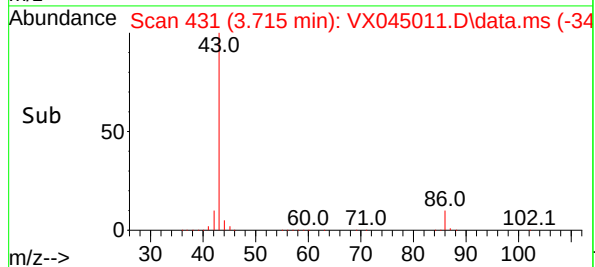
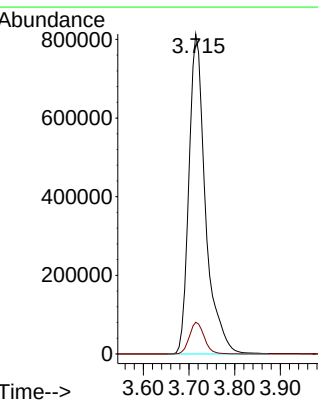
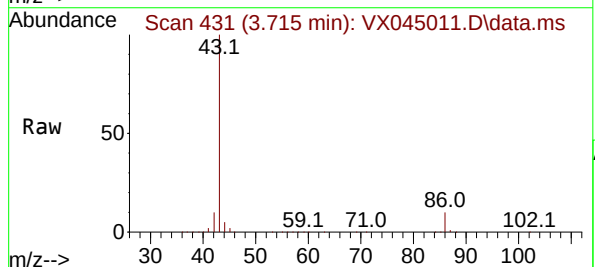
Acq: 21 Feb 2025 11:07

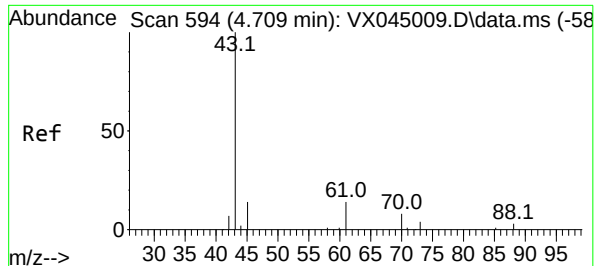
Tgt Ion: 43 Resp: 2042535

Ion Ratio Lower Upper

43 100

86 8.9 7.0 10.4





#43

Ethyl Acetate

Concen: 101.424 ug/l

RT: 4.708 min Scan# 594

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 199092

Ion Ratio Lower Upper

43 100

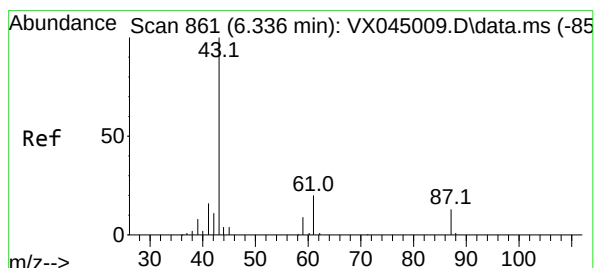
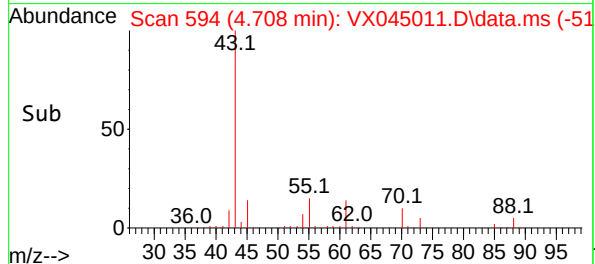
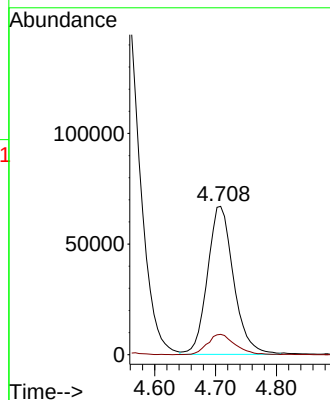
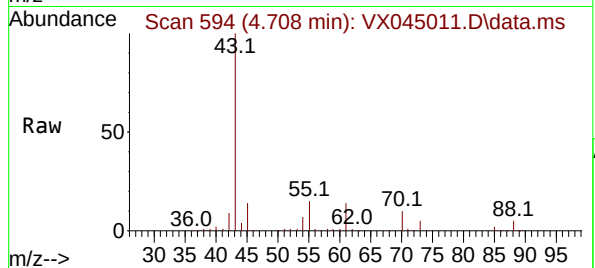
45 14.6 12.7 19.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#44

Isopropyl Acetate

Concen: 102.113 ug/l

RT: 6.336 min Scan# 861

Delta R.T. -0.000 min

Lab File: VX045011.D

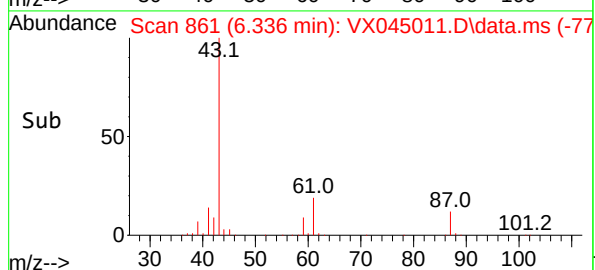
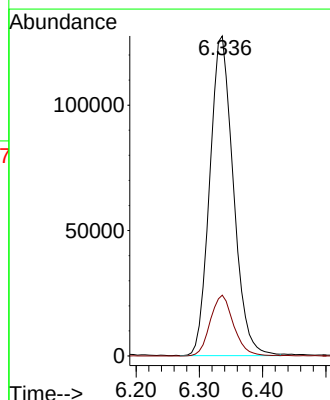
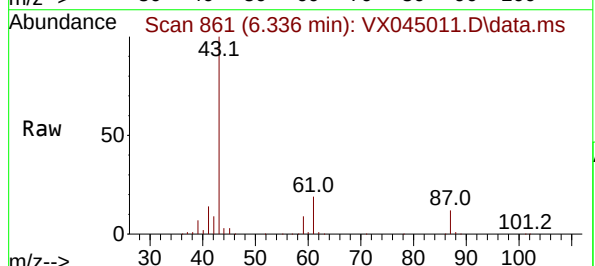
Acq: 21 Feb 2025 11:07

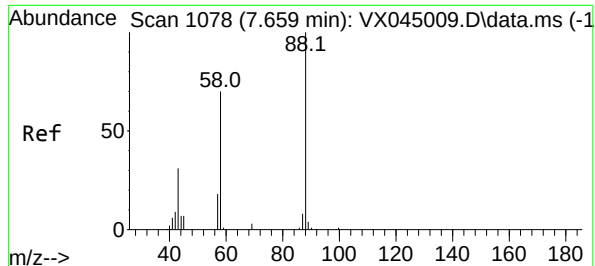
Tgt Ion: 43 Resp: 329903

Ion Ratio Lower Upper

43 100

61 18.9 15.5 23.3





#45

1,4-Dioxane

Concen: 1897.493 ug/l

RT: 7.659 min Scan# 1078

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 88 Resp: 63728

Ion Ratio Lower Upper

88 100

43 34.9 29.6 44.4

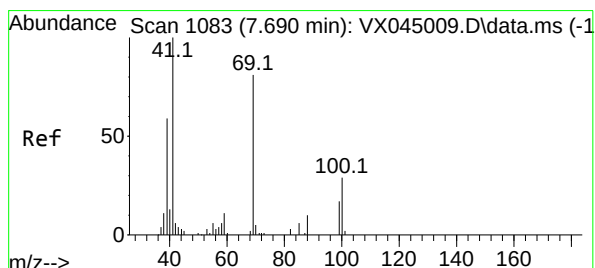
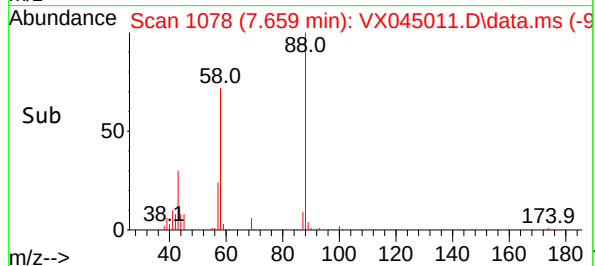
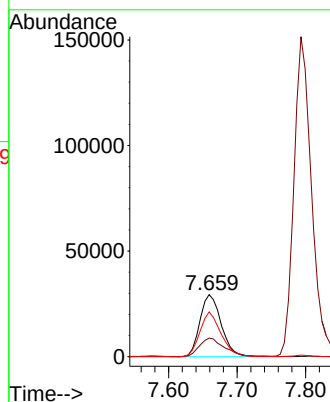
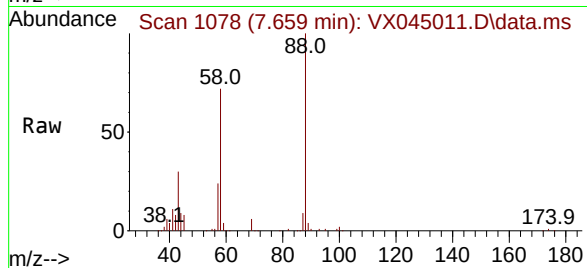
58 71.2 56.2 84.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#46

Methyl methacrylate

Concen: 102.589 ug/l

RT: 7.690 min Scan# 1083

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

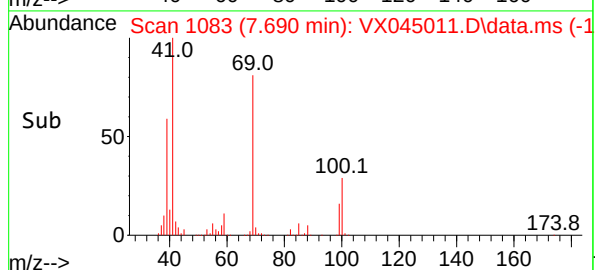
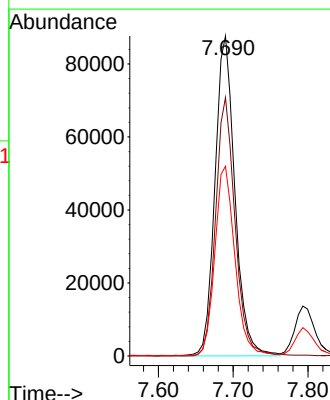
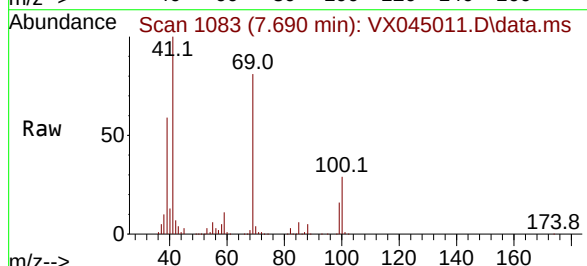
Tgt Ion: 41 Resp: 162523

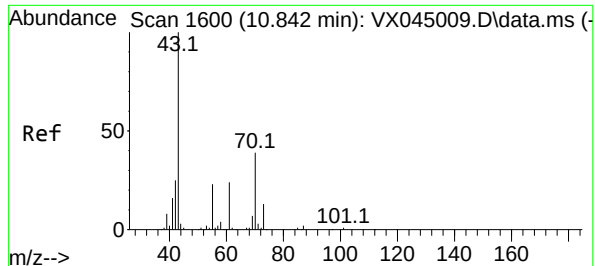
Ion Ratio Lower Upper

41 100

69 80.9 40.7 122.1

39 59.3 29.5 88.5





#47

n-amyl acetate

Concen: 100.917 ug/l

RT: 10.842 min Scan# 1600

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 28292

Ion Ratio Lower Upper

43 100

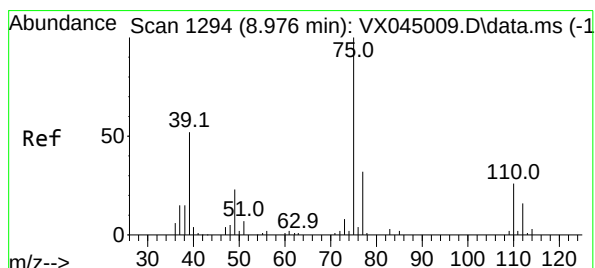
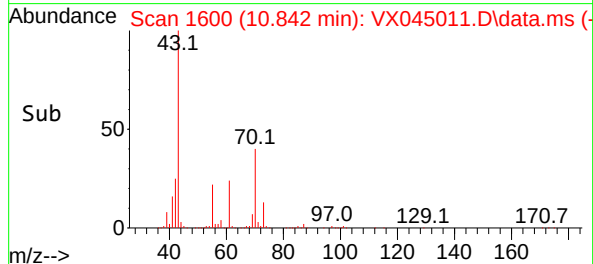
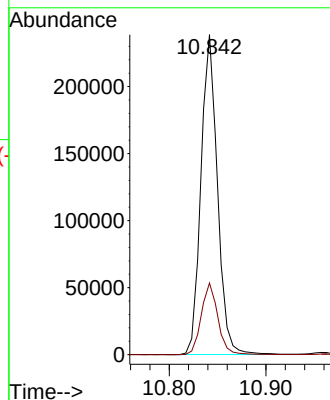
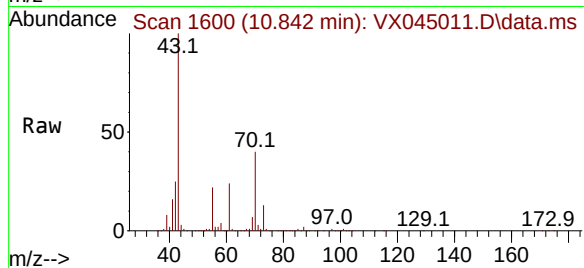
55 22.5 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#48

t-1,3-dichloropropene

Concen: 104.416 ug/l

RT: 8.976 min Scan# 1294

Delta R.T. -0.000 min

Lab File: VX045011.D

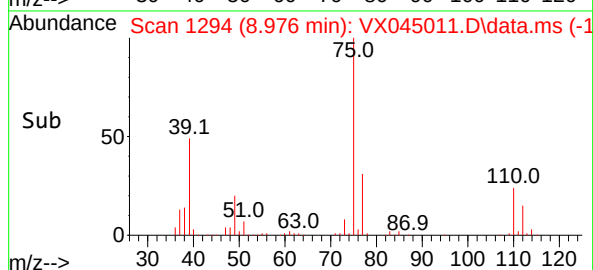
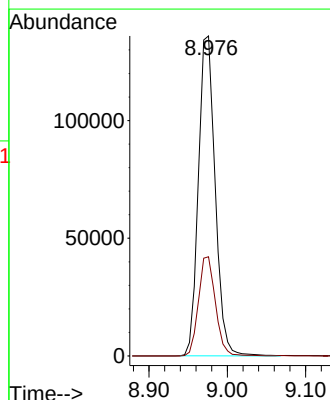
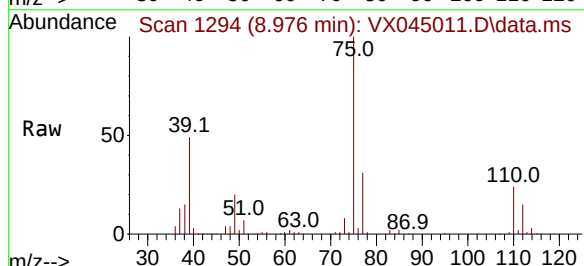
Acq: 21 Feb 2025 11:07

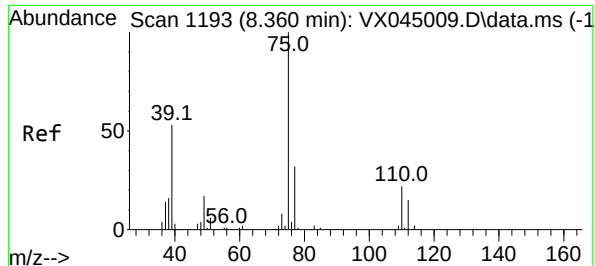
Tgt Ion: 75 Resp: 202810

Ion Ratio Lower Upper

75 100

77 31.0 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 101.800 ug/l

RT: 8.360 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100

Tgt Ion: 75 Resp: 22383

Ion Ratio Lower Upper

75 100

77 32.4 25.9 38.9

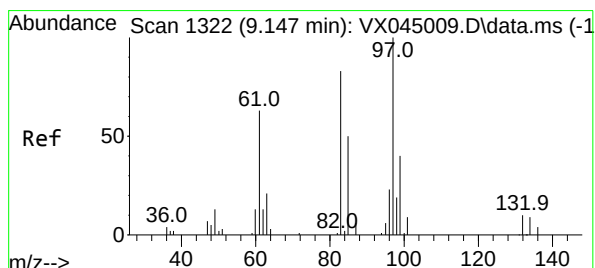
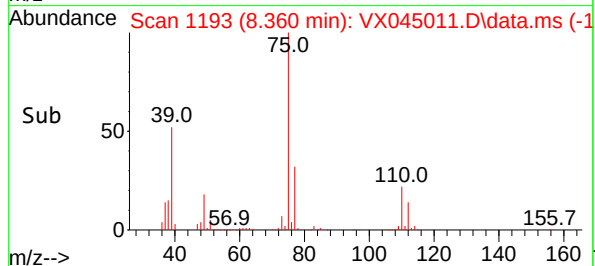
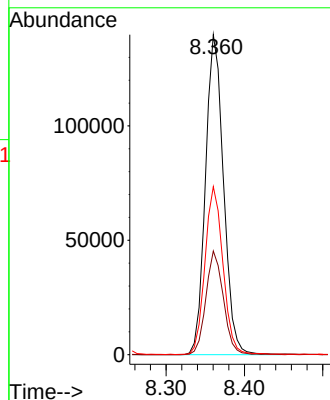
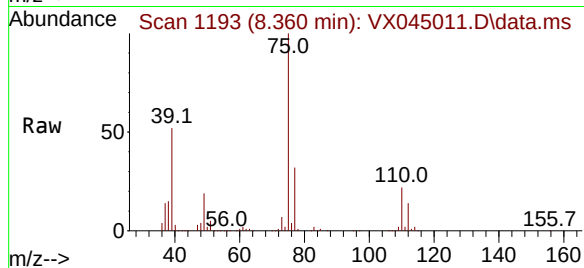
39 52.4 42.3 63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#50

1,1,2-Trichloroethane

Concen: 96.553 ug/l

RT: 9.147 min Scan# 1322

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Tgt Ion: 97 Resp: 127690

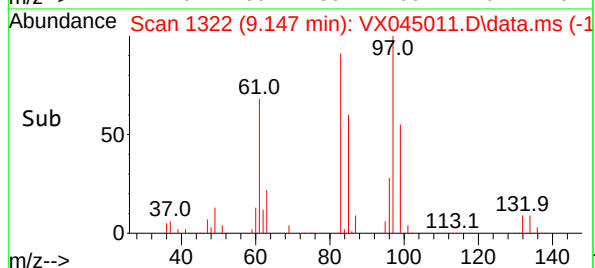
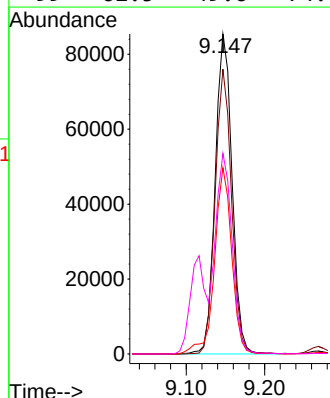
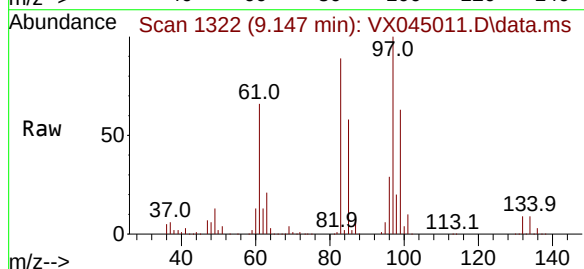
Ion Ratio Lower Upper

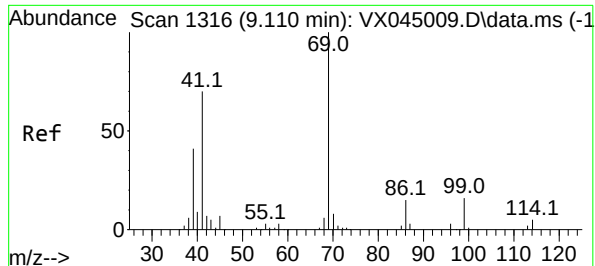
97 100

83 89.0 66.0 99.0

85 58.1 42.5 63.7

99 62.5 49.6 74.4





#51

Ethyl methacrylate

Concen: 103.117 ug/l

RT: 9.110 min Scan# 1316

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 69 Resp: 214475

Ion Ratio Lower Upper

69 100

41 72.5 35.1 105.3

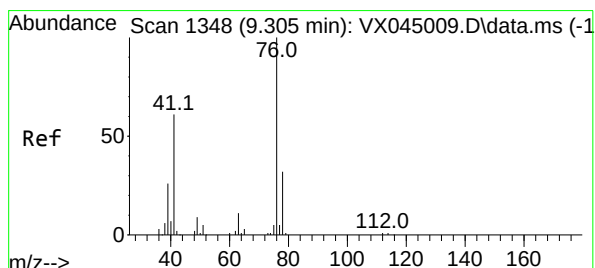
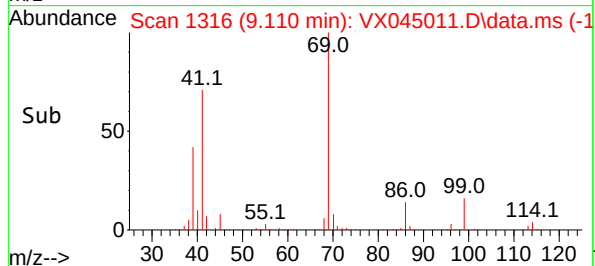
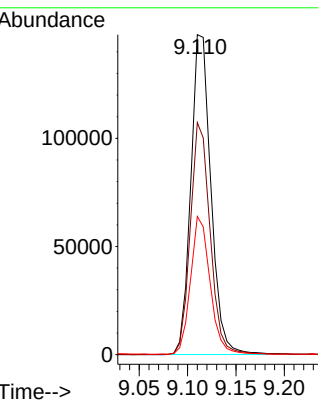
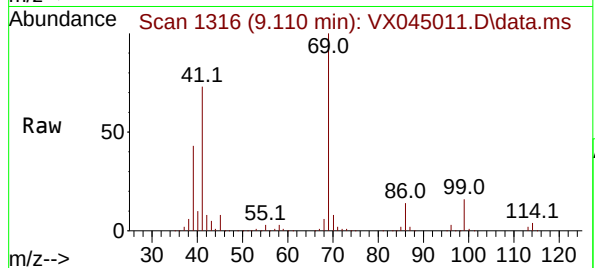
39 43.1 20.5 61.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#52

1,3-Dichloropropane

Concen: 96.102 ug/l

RT: 9.305 min Scan# 1348

Delta R.T. -0.000 min

Lab File: VX045011.D

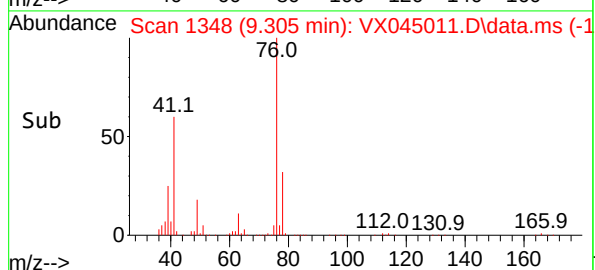
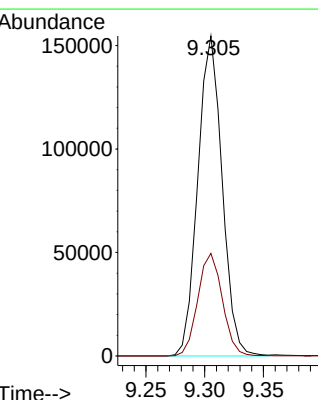
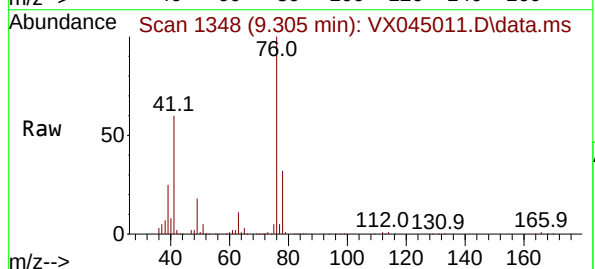
Acq: 21 Feb 2025 11:07

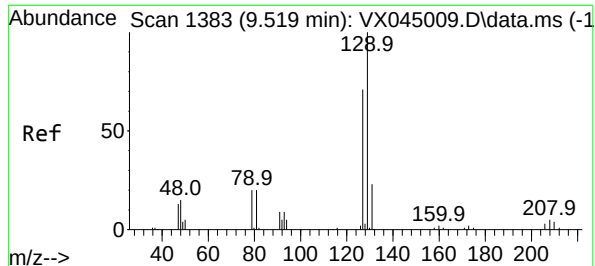
Tgt Ion: 76 Resp: 222694

Ion Ratio Lower Upper

76 100

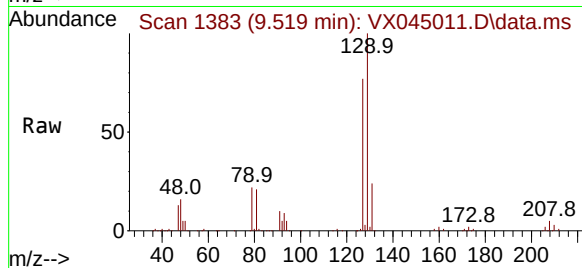
78 32.3 0.0 63.6





#53
Dibromochloromethane
Concen: 98.713 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

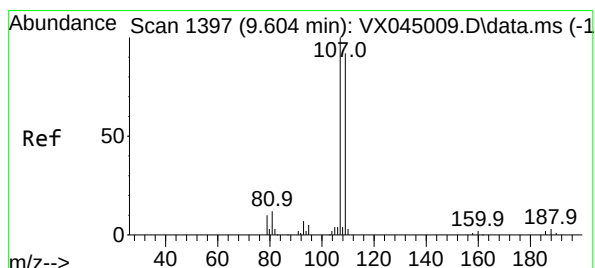
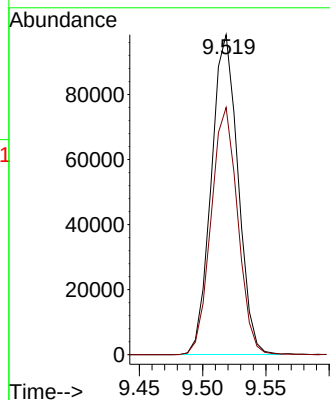
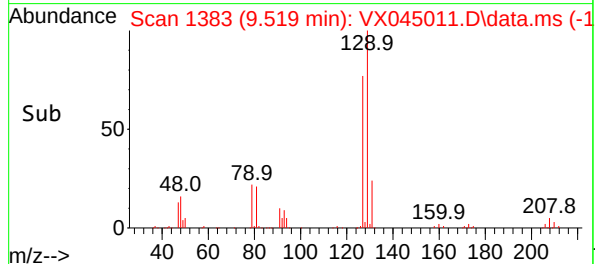
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



Tgt Ion:129 Resp: 144384
Ion Ratio Lower Upper
129 100
127 77.2 37.3 111.9

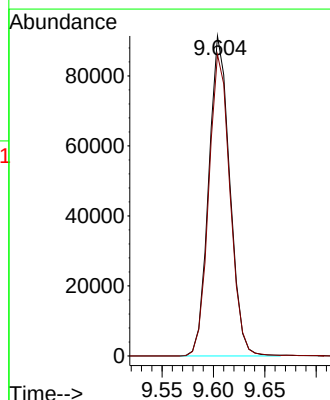
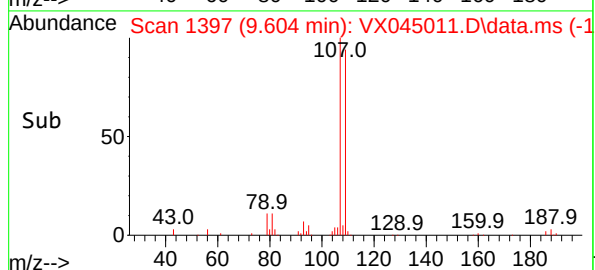
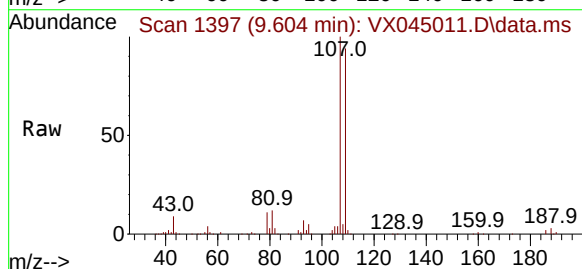
Manual Integrations
APPROVED

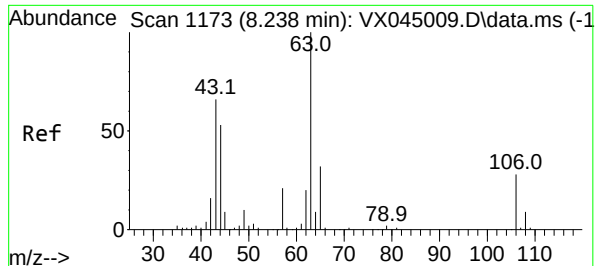
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#54
1,2-Dibromoethane
Concen: 97.194 ug/l
RT: 9.604 min Scan# 1397
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion:107 Resp: 130524
Ion Ratio Lower Upper
107 100
109 95.0 75.8 113.8





#55

2-Chloroethyl vinyl ether

Concen: 501.334 ug/l

RT: 8.238 min Scan# 1173

Delta R.T. -0.000 min

Lab File: VX045011.D

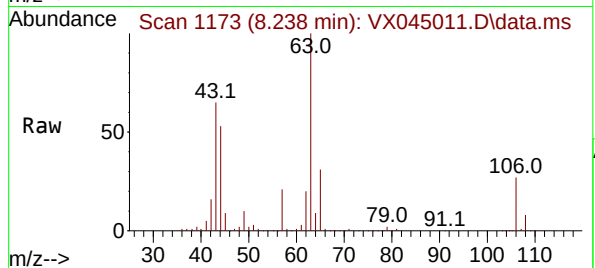
Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

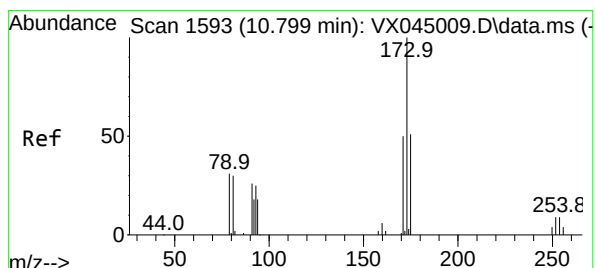
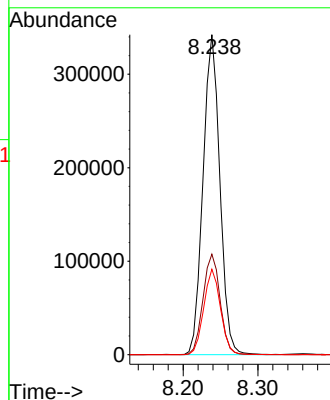
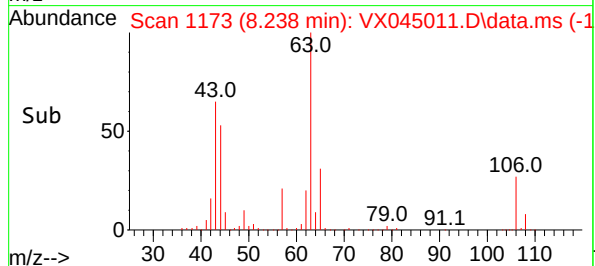


Tgt Ion:	63	Resp:	53547
Ion	Ratio	Lower	Upper
63	100		
65	31.9	26.2	39.2
106	26.6	21.2	31.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#56

Bromoform

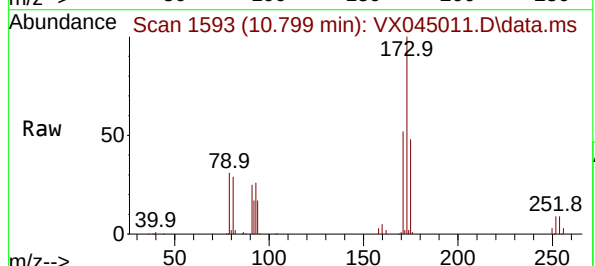
Concen: 100.830 ug/l

RT: 10.799 min Scan# 1593

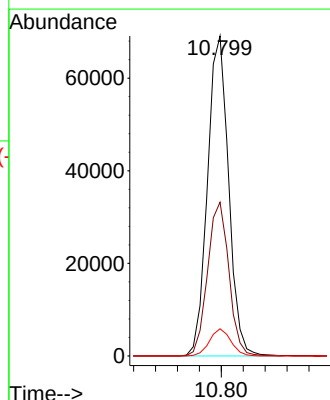
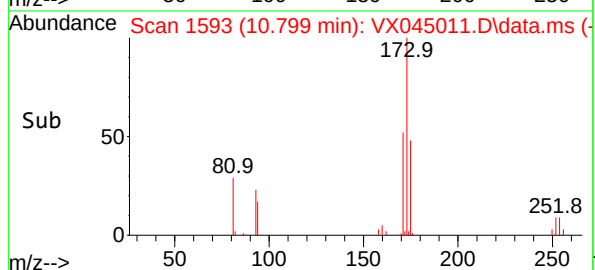
Delta R.T. -0.000 min

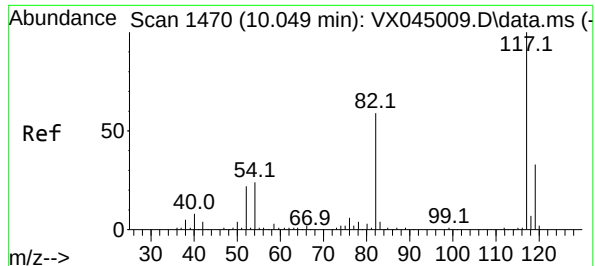
Lab File: VX045011.D

Acq: 21 Feb 2025 11:07



Tgt Ion:	173	Resp:	92416
Ion	Ratio	Lower	Upper
173	100		
175	48.5	39.6	59.4
254	8.6	6.3	9.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.049 min Scan# 1470

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

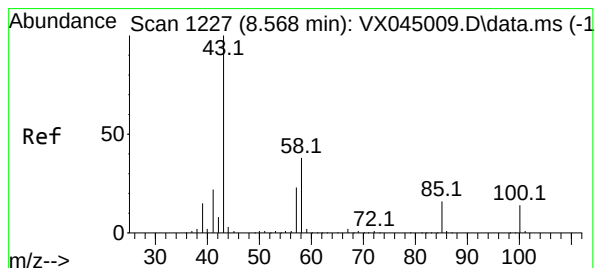
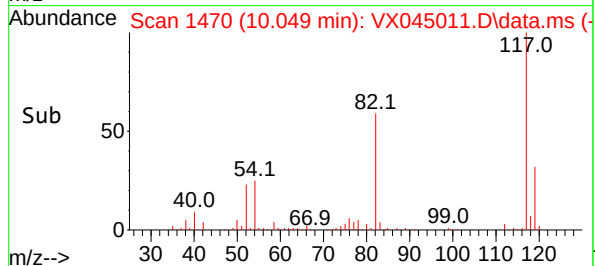
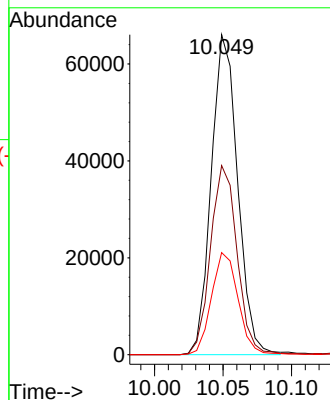
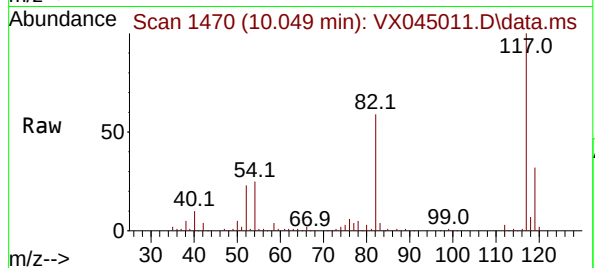
VSTDICC100

Tgt Ion:	117	Resp:	8832
Ion	Ratio	Lower	Upper
117	100		
82	60.0	45.8	68.8
119	32.4	25.5	38.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#58

4-Methyl-2-Pentanone

Concen: 489.624 ug/l

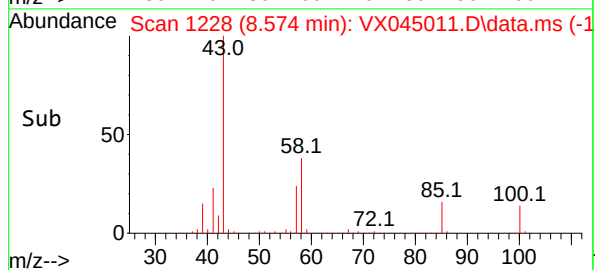
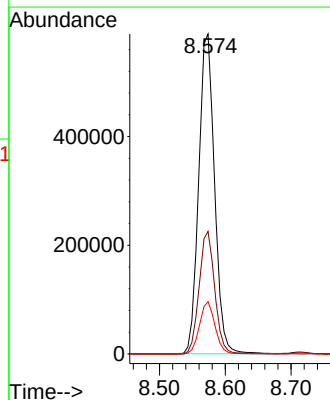
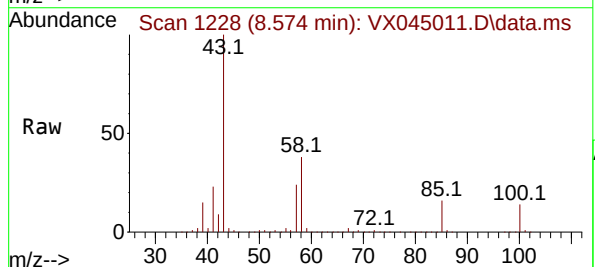
RT: 8.574 min Scan# 1228

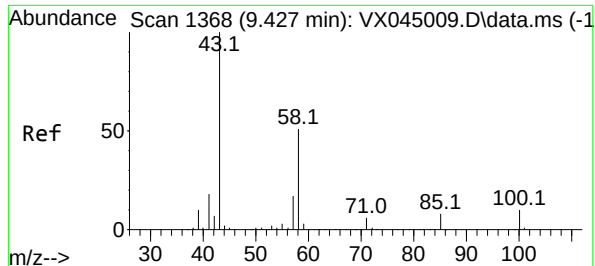
Delta R.T. 0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Tgt Ion:	43	Resp:	983713
Ion	Ratio	Lower	Upper
43	100		
58	37.6	29.5	44.3
85	16.1	12.9	19.3





#59

2-Hexanone

Concen: 488.118 ug/l

RT: 9.427 min Scan# 1368

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 708849

Ion Ratio Lower Upper

43 100

58 53.0 41.6 62.4

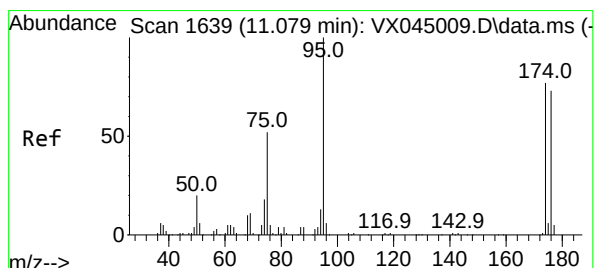
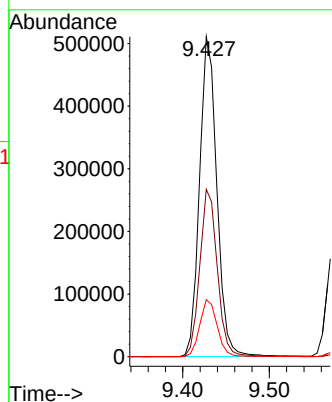
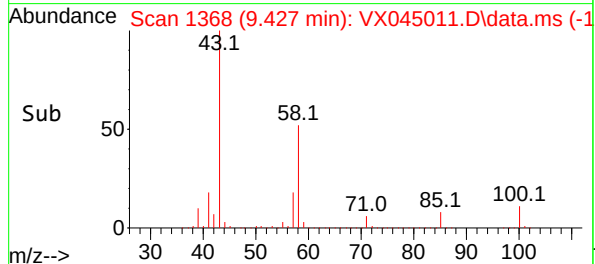
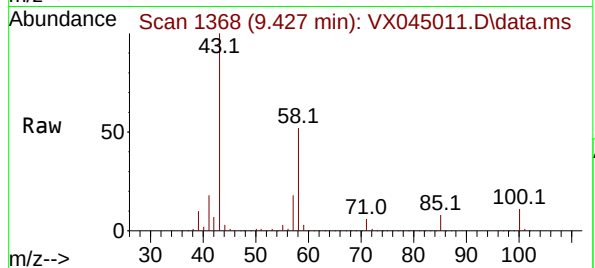
57 18.1 13.8 20.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#60

4-Bromofluorobenzene

Concen: 30.096 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

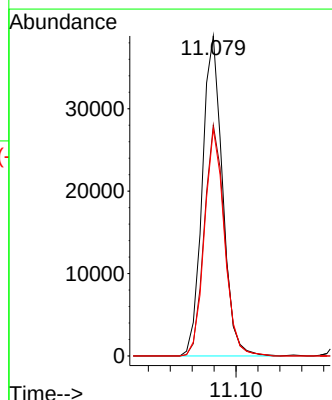
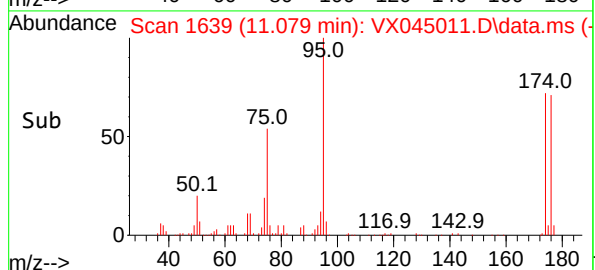
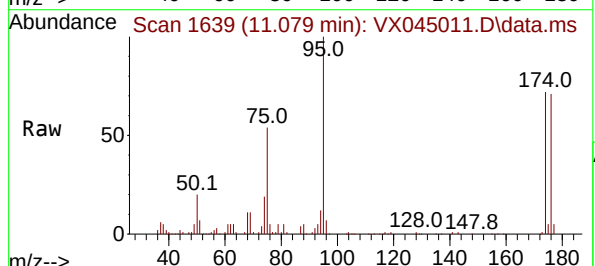
Tgt Ion: 95 Resp: 49683

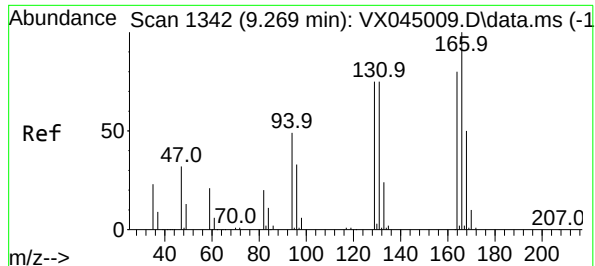
Ion Ratio Lower Upper

95 100

174 72.2 59.5 89.3

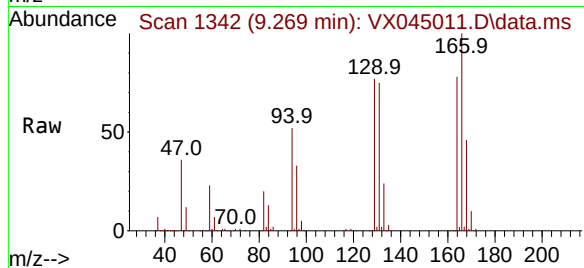
176 70.1 55.5 83.3





#61
Tetrachloroethene
Concen: 96.410 ug/l
RT: 9.269 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

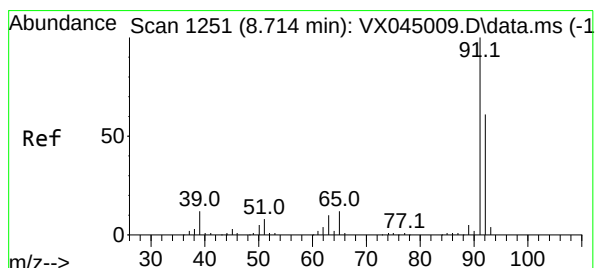
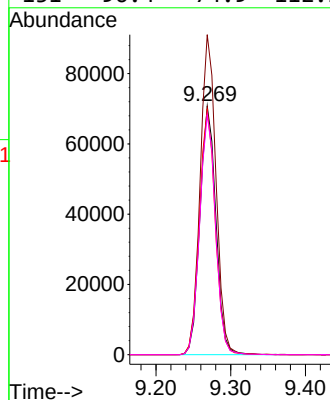
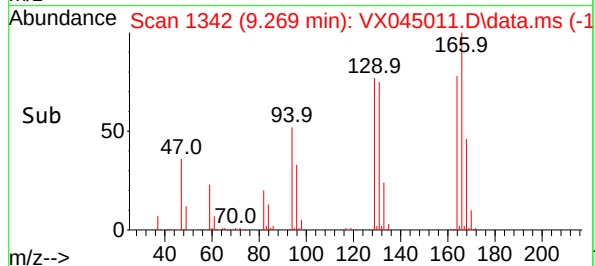
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



Tgt Ion:164 Resp: 104854
Ion Ratio Lower Upper
164 100
166 128.7 100.3 150.5
129 98.8 75.5 113.3
131 96.4 74.9 112.3

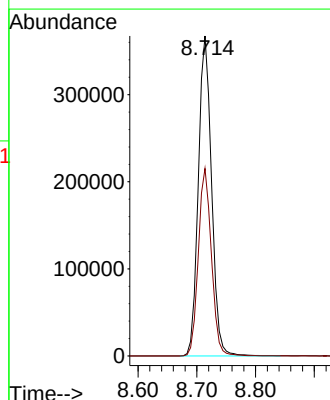
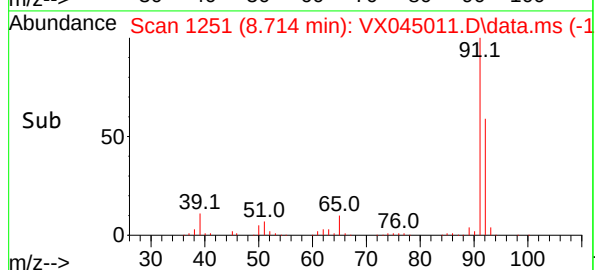
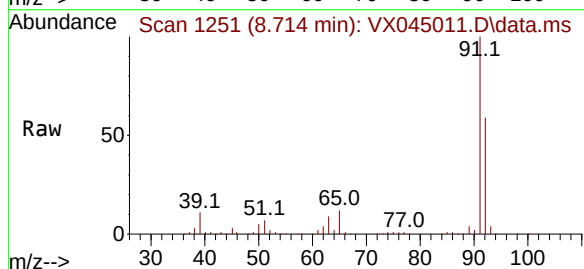
Manual Integrations
APPROVED

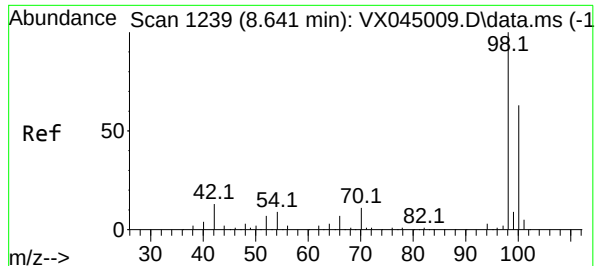
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#62
Toluene
Concen: 98.410 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion: 91 Resp: 575772
Ion Ratio Lower Upper
91 100
92 57.9 46.9 70.3





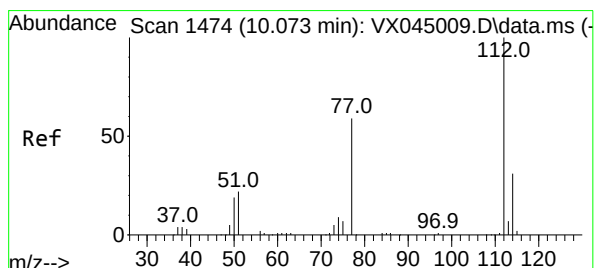
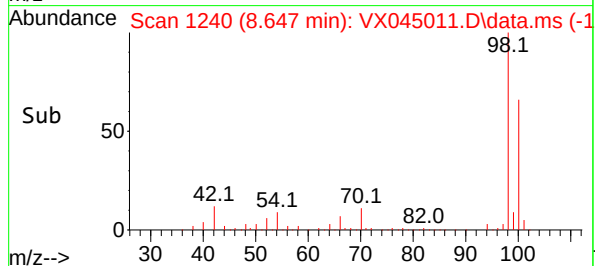
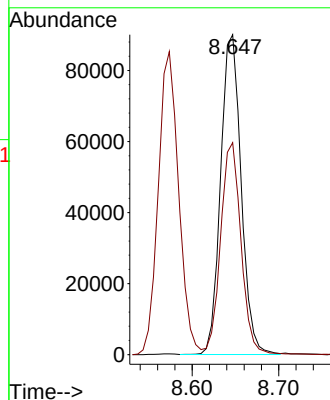
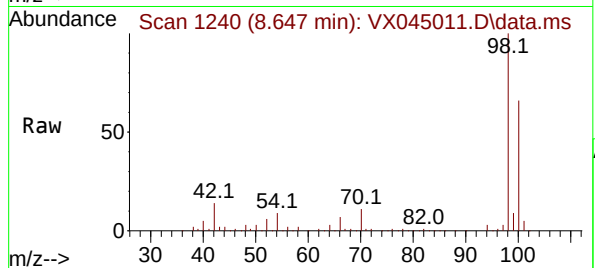
#63
Toluene-d8
Concen: 30.306 ug/l
RT: 8.647 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Tgt Ion: 98 Resp: 148078
Ion Ratio Lower Upper
98 100
100 65.9 51.7 77.5

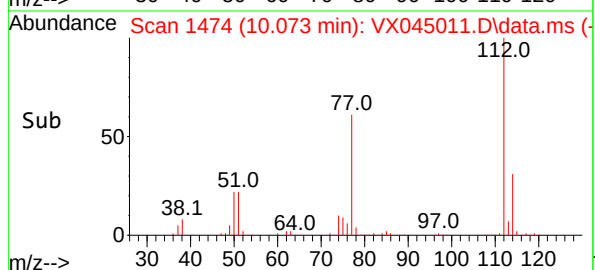
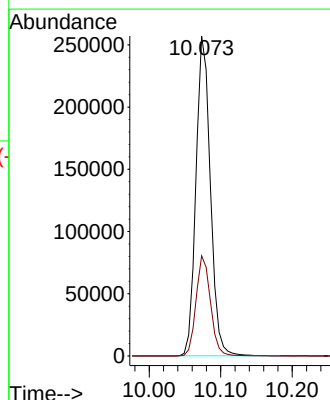
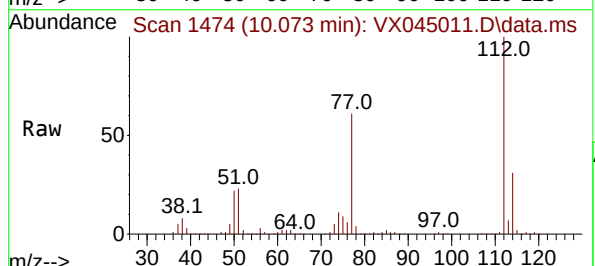
Manual Integrations
APPROVED

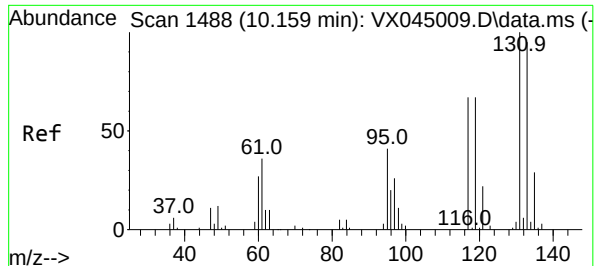
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#64
Chlorobenzene
Concen: 99.055 ug/l
RT: 10.073 min Scan# 1474
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

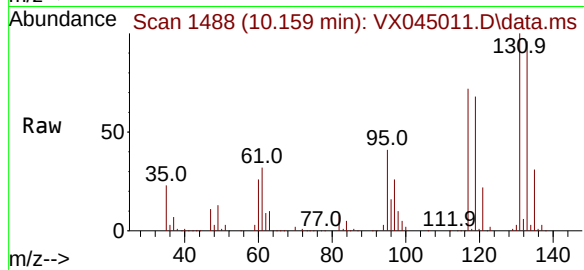
Tgt Ion:112 Resp: 359123
Ion Ratio Lower Upper
112 100
114 31.3 24.7 37.1





#65
1,1,1,2-Tetrachloroethane
Concen: 98.304 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

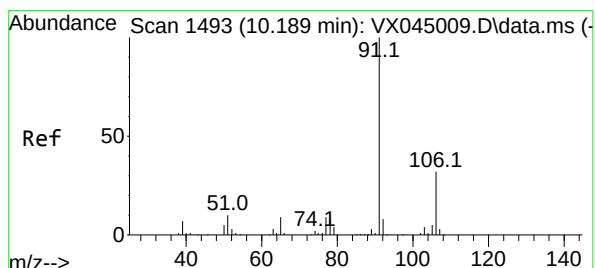
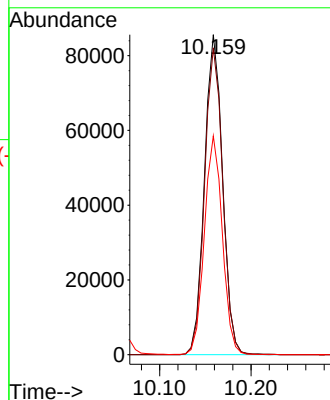
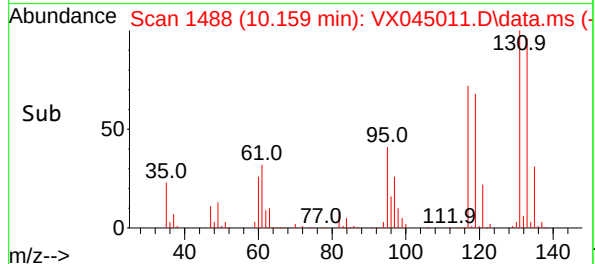
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



Tgt Ion:131 Resp: 117602
Ion Ratio Lower Upper
131 100
133 96.2 0.0 187.8
119 67.9 0.0 133.0

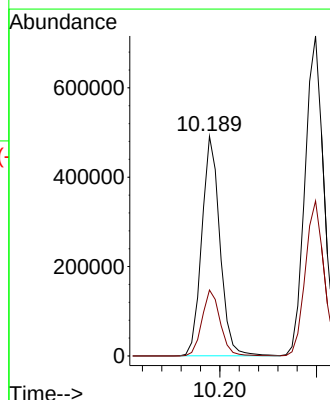
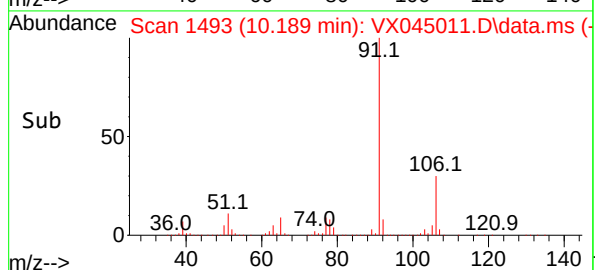
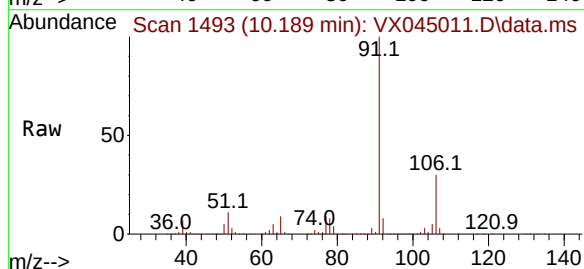
Manual Integrations
APPROVED

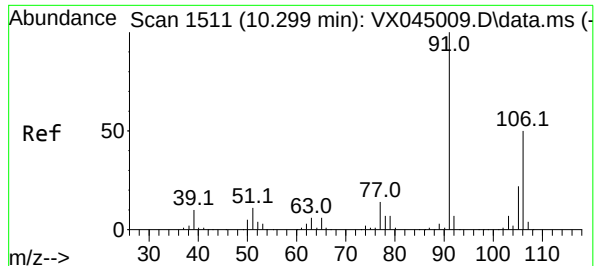
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#66
Ethyl Benzene
Concen: 100.122 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion: 91 Resp: 641324
Ion Ratio Lower Upper
91 100
106 30.0 25.4 38.2





#67

m/p-Xylenes

Concen: 197.072 ug/l

RT: 10.299 min Scan# 1511

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100

Tgt Ion:106 Resp: 47032

Ion Ratio Lower Upper

106 100

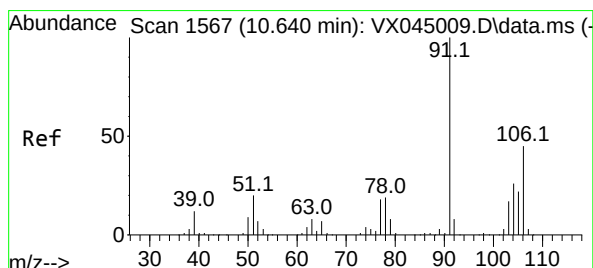
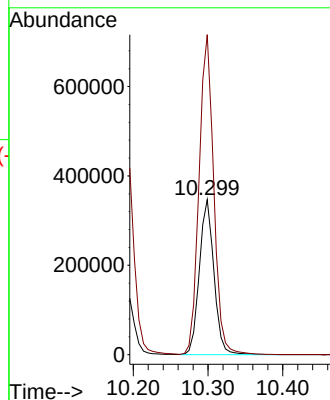
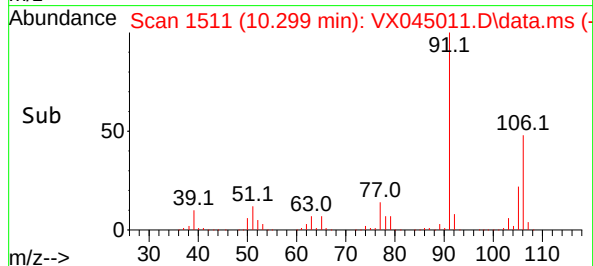
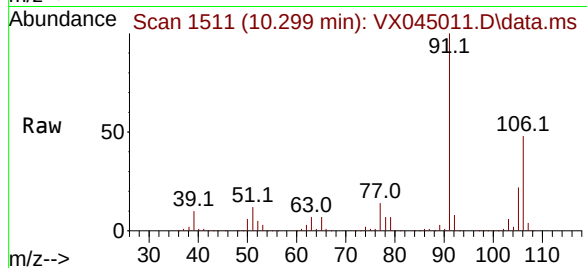
91 207.5 163.7 245.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#68

o-Xylene

Concen: 98.392 ug/l

RT: 10.640 min Scan# 1567

Delta R.T. -0.000 min

Lab File: VX045011.D

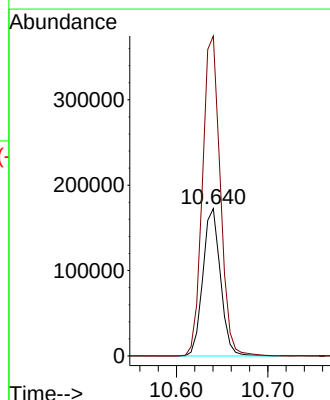
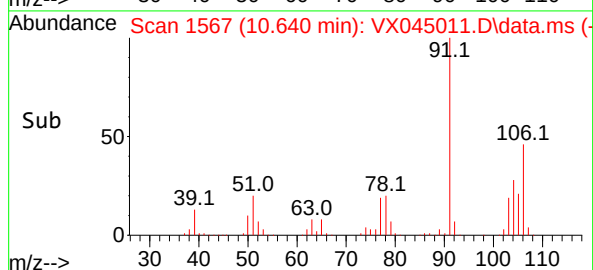
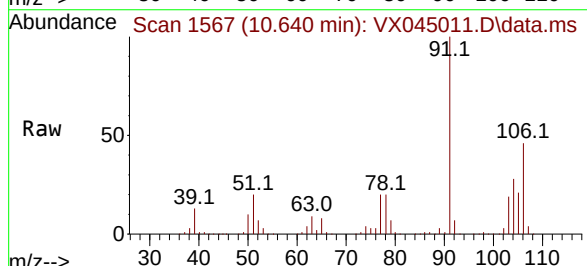
Acq: 21 Feb 2025 11:07

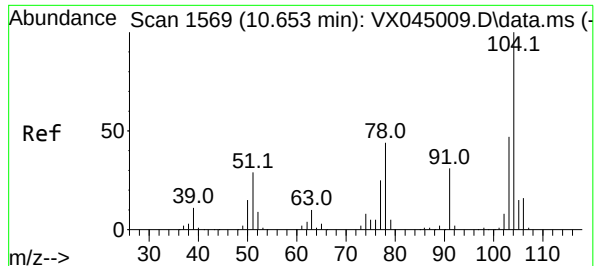
Tgt Ion:106 Resp: 230392

Ion Ratio Lower Upper

106 100

91 219.4 109.7 329.1





#69

Styrene

Concen: 99.067 ug/l

RT: 10.653 min Scan# 1569

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100

Tgt Ion:104 Resp: 387430

Ion Ratio Lower Upper

104 100

78 53.3 41.4 62.0

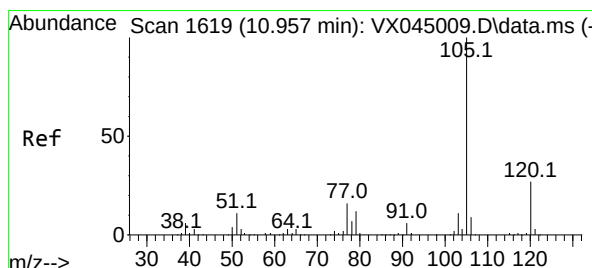
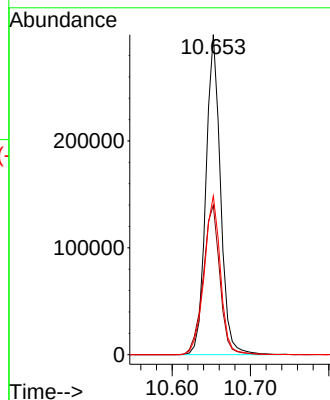
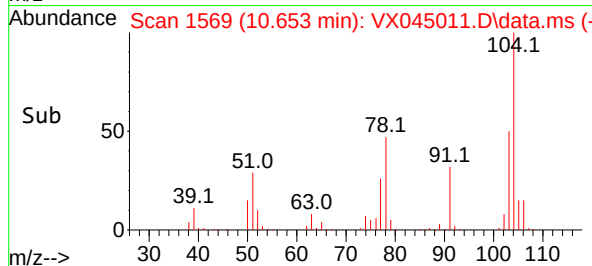
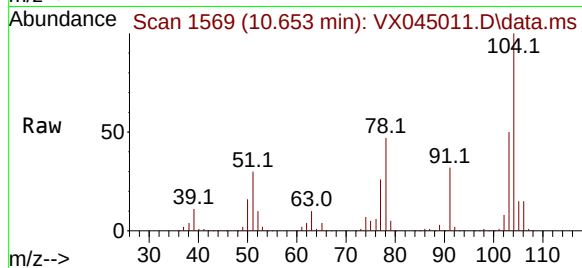
103 55.1 43.0 64.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#70

Isopropylbenzene

Concen: 98.698 ug/l

RT: 10.957 min Scan# 1619

Delta R.T. -0.000 min

Lab File: VX045011.D

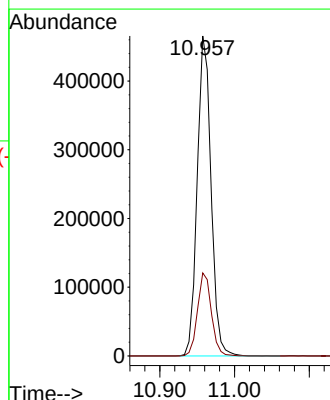
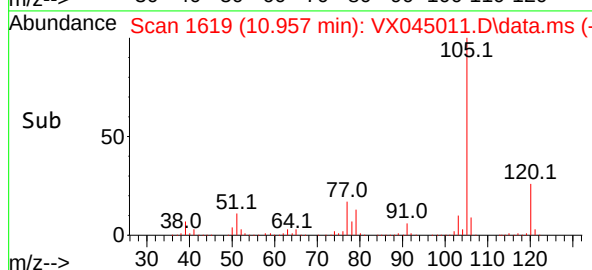
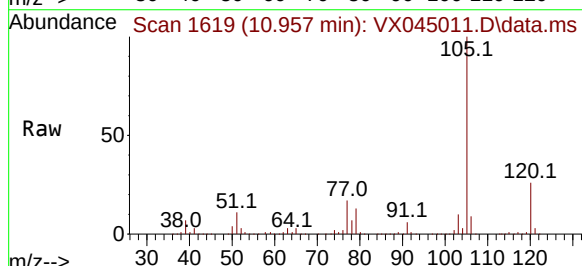
Acq: 21 Feb 2025 11:07

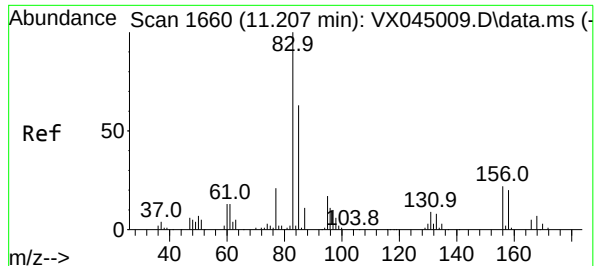
Tgt Ion:105 Resp: 596402

Ion Ratio Lower Upper

105 100

120 26.1 18.4 34.2





#71

1,1,2,2-Tetrachloroethane

Concen: 95.916 ug/l

RT: 11.207 min Scan# 1660

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC100

Tgt Ion: 83 Resp: 19059

Ion Ratio Lower Upper

83 100

131 9.2 4.8 14.3

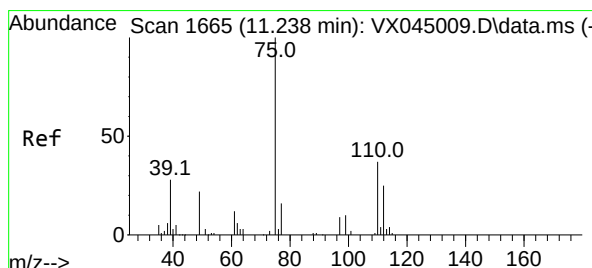
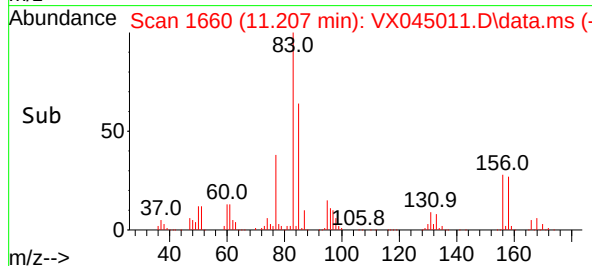
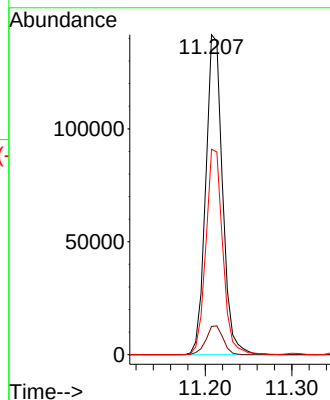
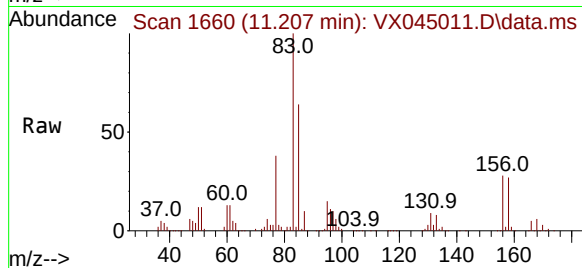
85 64.5 32.3 96.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#72

1,2,3-Trichloropropane

Concen: 97.283 ug/l m

RT: 11.238 min Scan# 1665

Delta R.T. -0.000 min

Lab File: VX045011.D

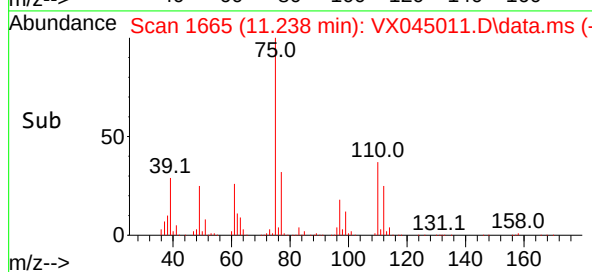
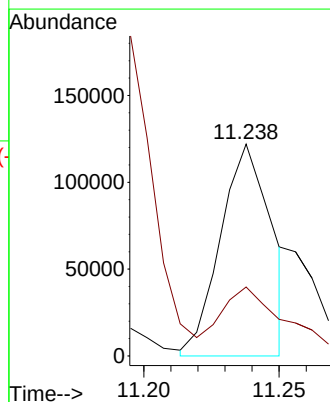
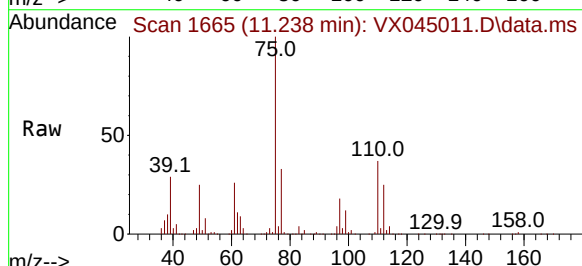
Acq: 21 Feb 2025 11:07

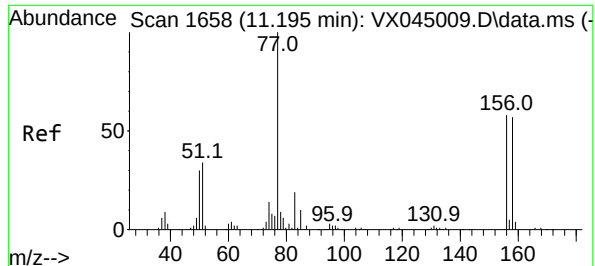
Tgt Ion: 75 Resp: 158994

Ion Ratio Lower Upper

75 100

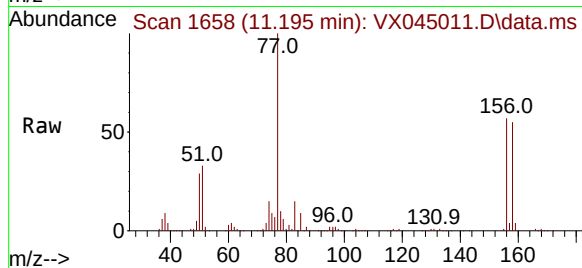
77 42.6 0.0 84.0





#73
Bromobenzene
Concen: 97.960 ug/l
RT: 11.195 min Scan# 1658
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

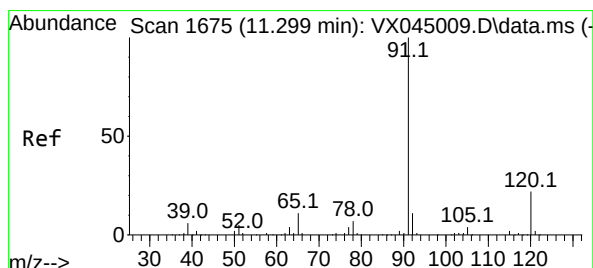
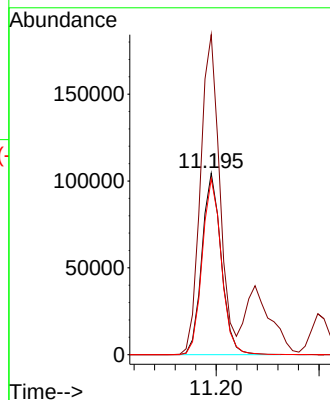
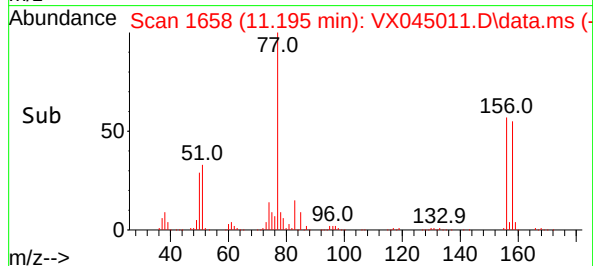
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



Tgt Ion:156 Resp: 136270
Ion Ratio Lower Upper
156 100
77 176.6 0.0 347.2
158 96.3 0.0 197.6

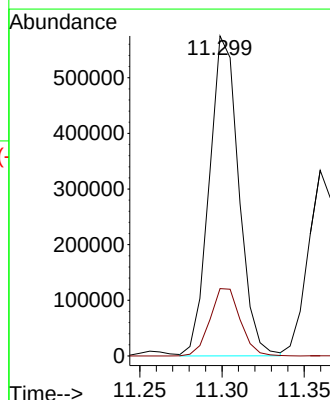
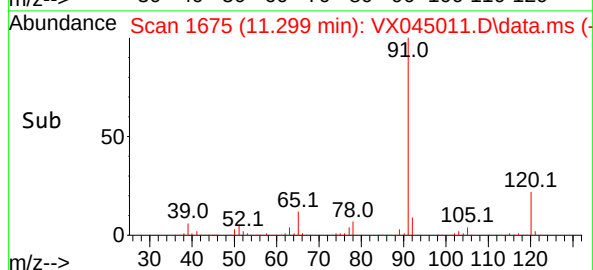
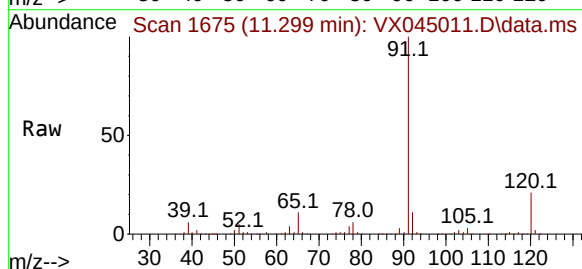
Manual Integrations
APPROVED

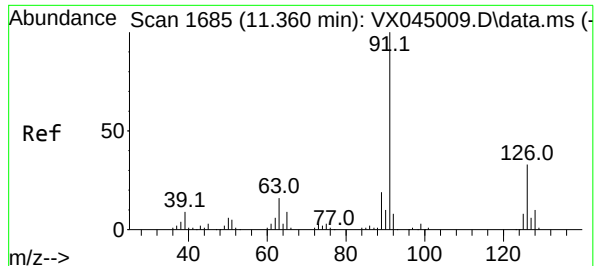
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#74
n-propylbenzene
Concen: 99.759 ug/l
RT: 11.299 min Scan# 1675
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion: 91 Resp: 717361
Ion Ratio Lower Upper
91 100
120 21.7 0.0 44.2





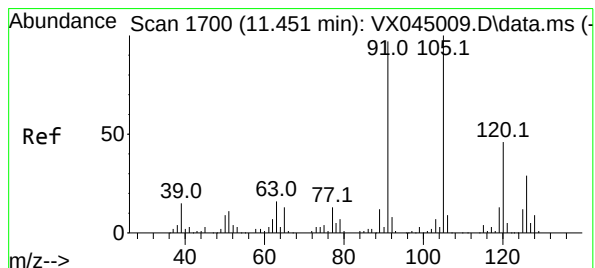
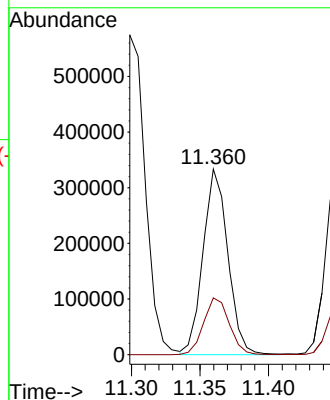
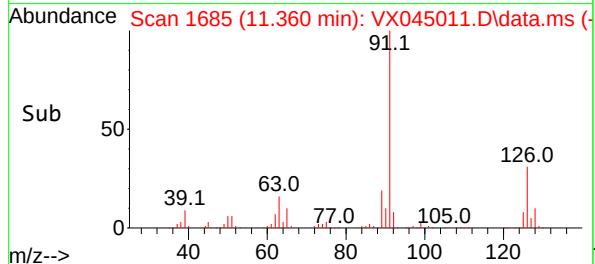
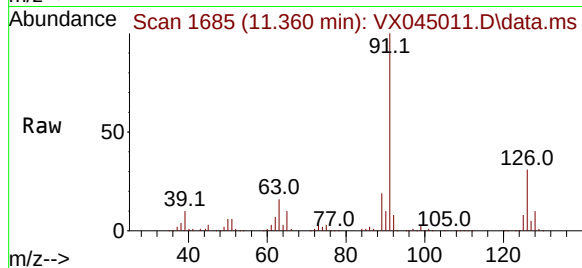
#75
2-Chlorotoluene
Concen: 96.938 ug/l
RT: 11.360 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Tgt Ion: 91 Resp: 421424
Ion Ratio Lower Upper
91 100
126 31.7 0.0 65.4

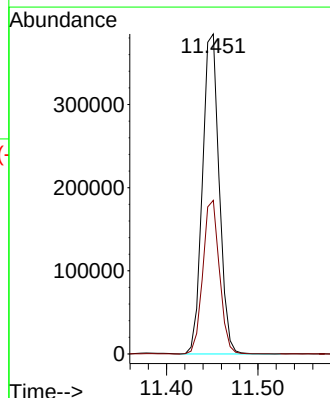
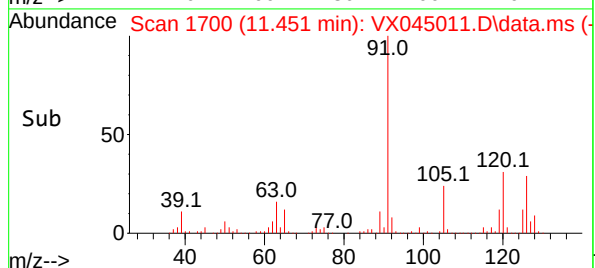
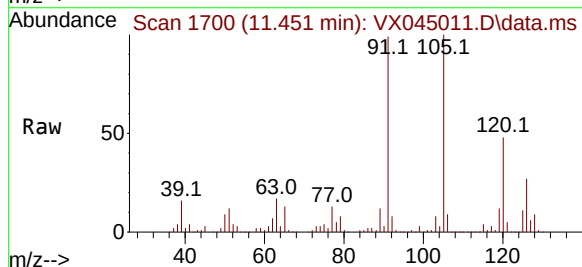
Manual Integrations
APPROVED

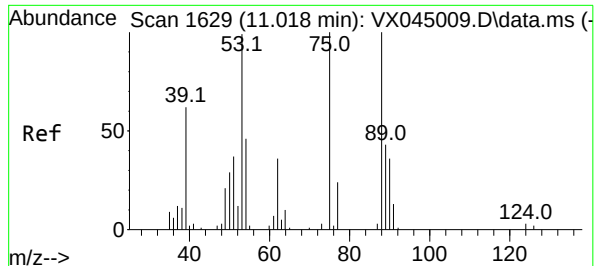
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#76
1,3,5-Trimethylbenzene
Concen: 97.701 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion:105 Resp: 487050
Ion Ratio Lower Upper
105 100
120 47.8 0.0 94.4





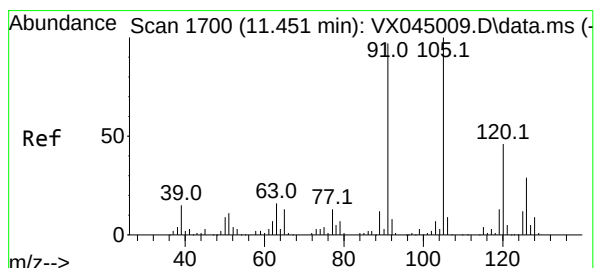
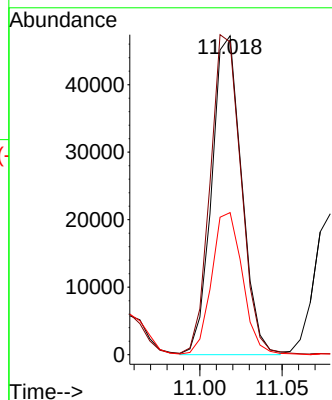
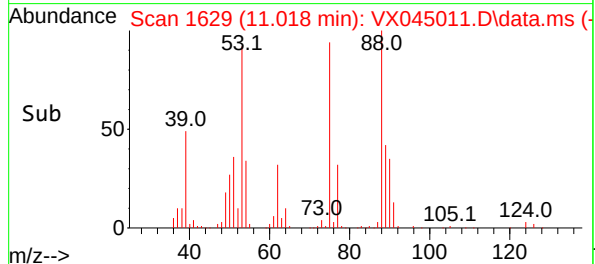
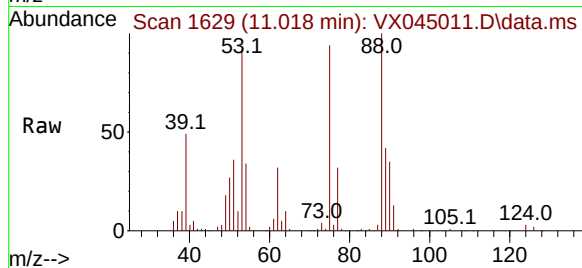
#77
t-1,4-Dichloro-2-butene
Concen: 108.886 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Tgt Ion	Ratio	Lower	Upper
75	100		
53	98.0	49.8	149.4
89	44.5	21.4	64.2

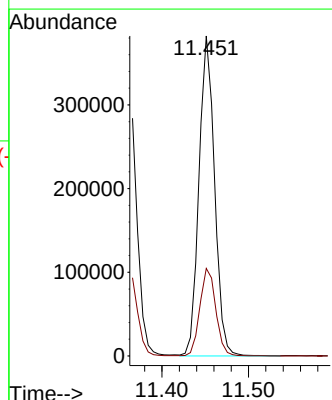
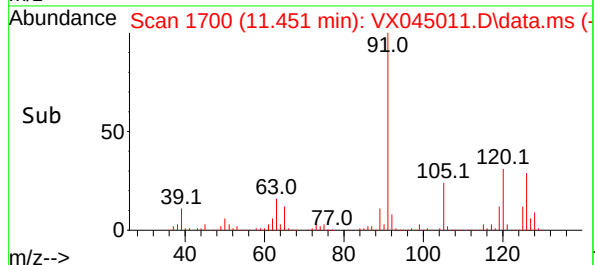
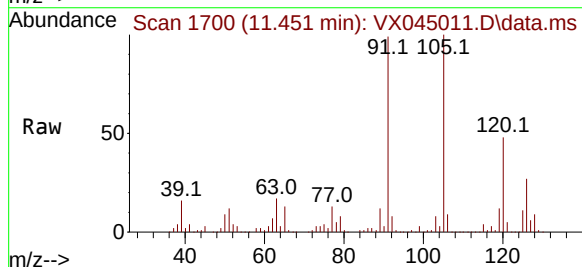
Manual Integrations
APPROVED

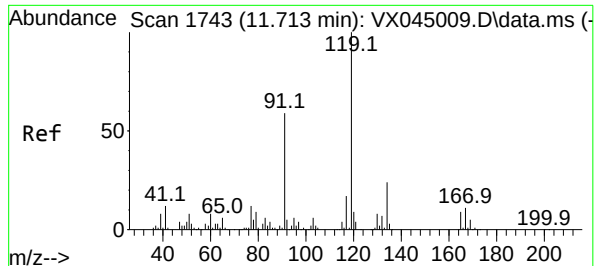
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#78
4-Chlorotoluene
Concen: 98.607 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion	Ratio	Lower	Upper
91	100		
126	27.9	0.0	58.0





#79

tert-butylbenzene

Concen: 97.716 ug/l

RT: 11.713 min Scan# 1743

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Tgt Ion:119 Resp: 490810

Ion Ratio Lower Upper

119 100

91 60.1 0.0 120.6

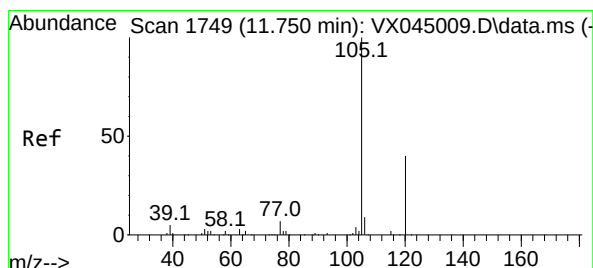
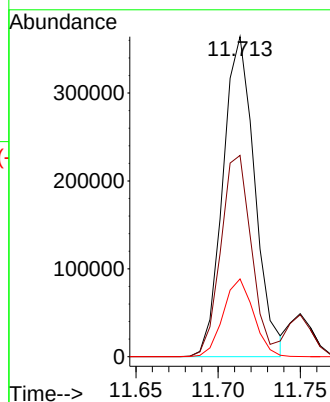
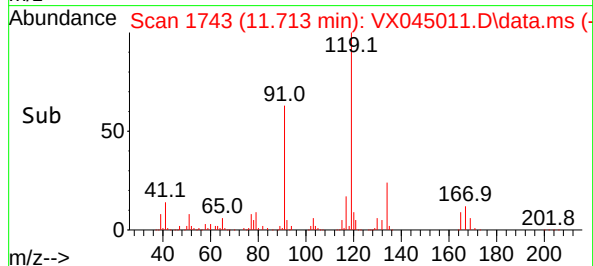
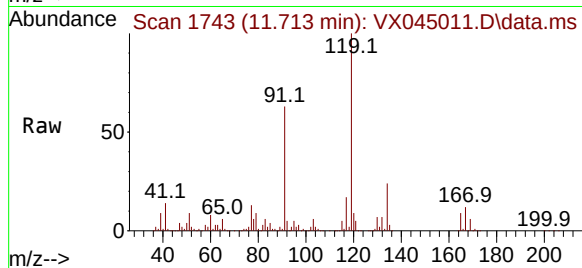
134 23.2 0.0 48.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#80

1,2,4-Trimethylbenzene

Concen: 97.478 ug/l

RT: 11.750 min Scan# 1749

Delta R.T. -0.000 min

Lab File: VX045011.D

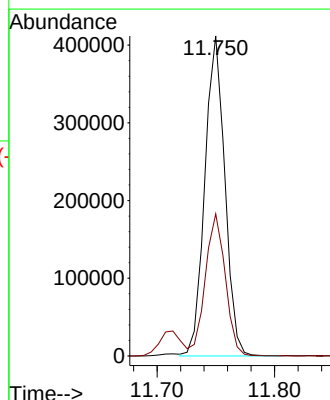
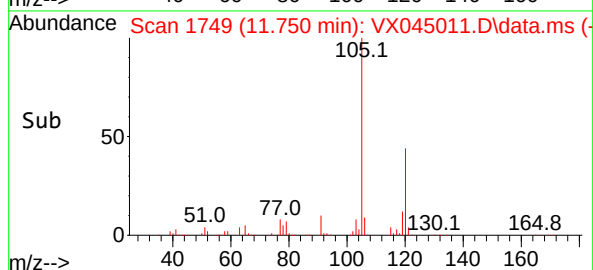
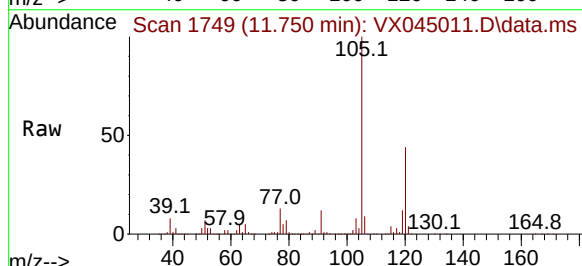
Acq: 21 Feb 2025 11:07

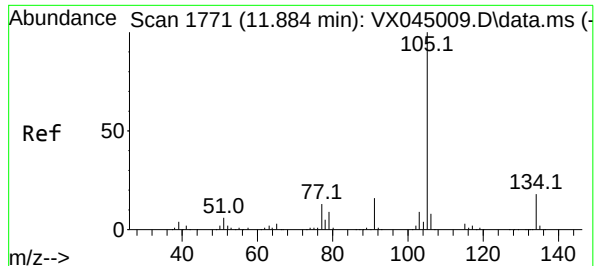
Tgt Ion:105 Resp: 486770

Ion Ratio Lower Upper

105 100

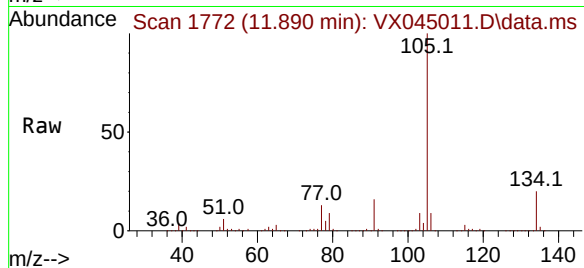
120 44.4 0.0 88.4





#81
sec-Butylbenzene
Concen: 97.788 ug/l
RT: 11.890 min Scan# 1772
Delta R.T. 0.006 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

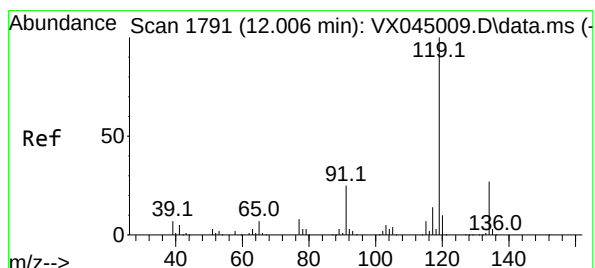
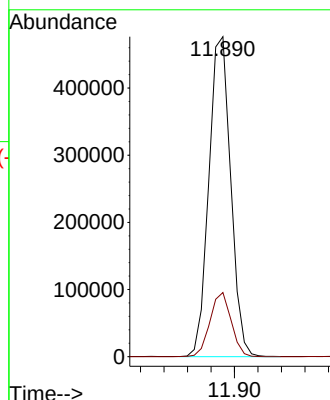
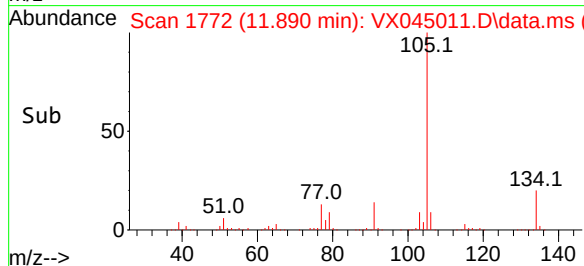
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



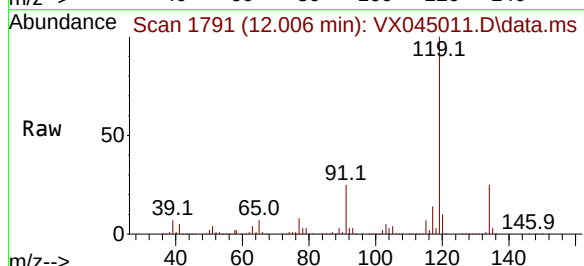
Tgt Ion:105 Resp: 61644
Ion Ratio Lower Upper
105 100
134 19.5 0.0 39.0

Manual Integrations
APPROVED

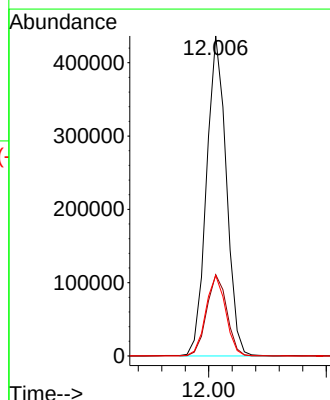
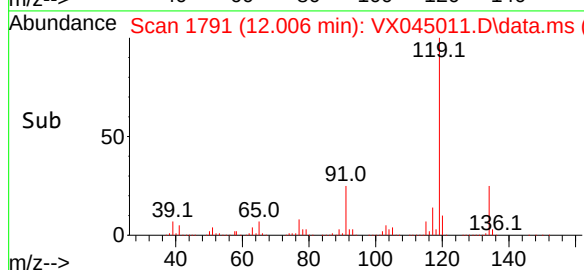
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

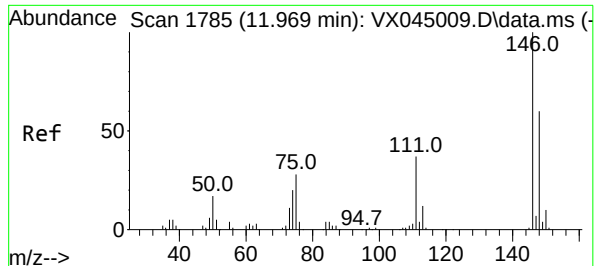


#82
p-Isopropyltoluene
Concen: 99.893 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07



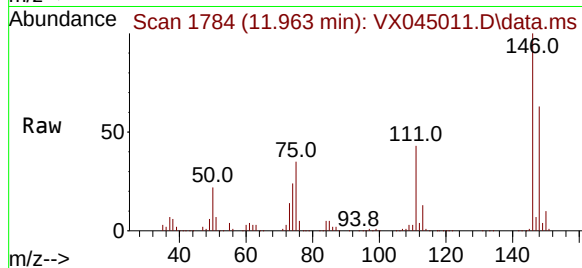
Tgt Ion:119 Resp: 510223
Ion Ratio Lower Upper
119 100
134 25.8 0.0 52.6
91 25.1 0.0 51.0





#83
1,3-Dichlorobenzene
Concen: 96.883 ug/l
RT: 11.963 min Scan# 1784
Delta R.T. -0.006 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

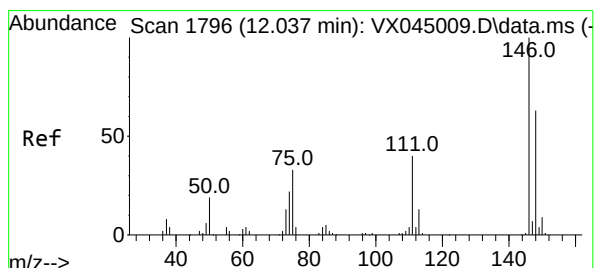
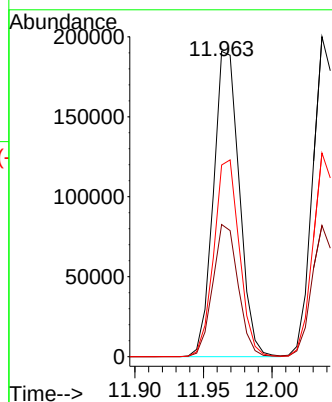
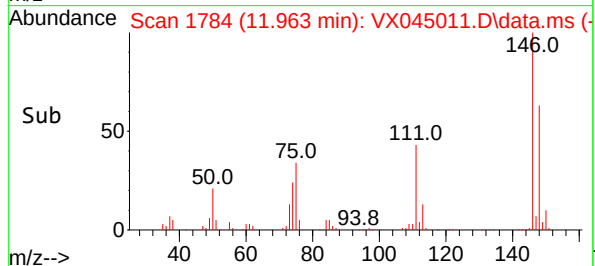
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



Tgt Ion:146 Resp: 25075
Ion Ratio Lower Upper
146 100
111 42.3 20.2 60.5
148 63.5 31.2 93.6

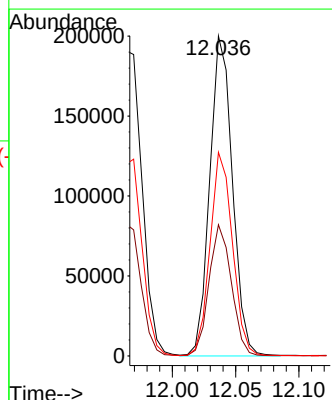
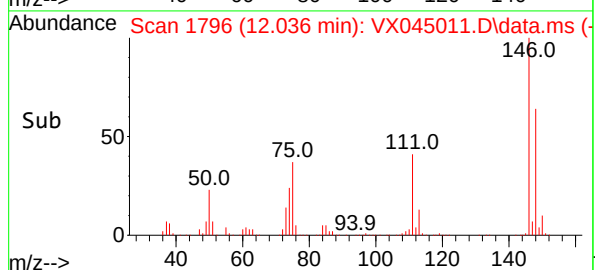
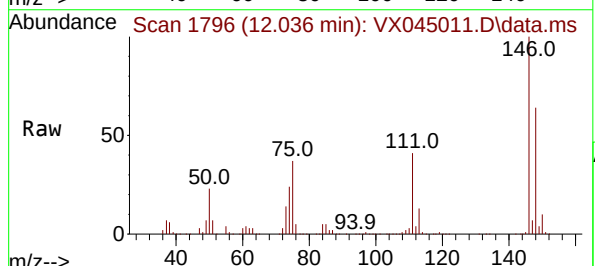
Manual Integrations
APPROVED

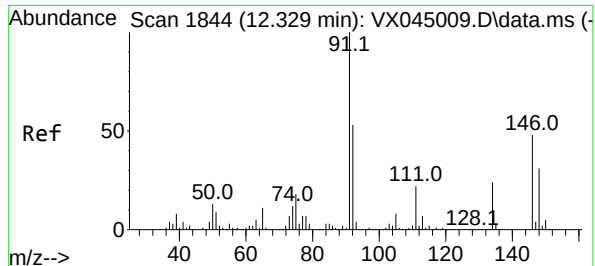
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#84
1,4-Dichlorobenzene
Concen: 97.834 ug/l
RT: 12.036 min Scan# 1796
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion:146 Resp: 249668
Ion Ratio Lower Upper
146 100
111 40.5 20.4 61.2
148 63.2 31.8 95.4





#85

n-Butylbenzene

Concen: 102.150 ug/l

RT: 12.329 min Scan# 1844

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

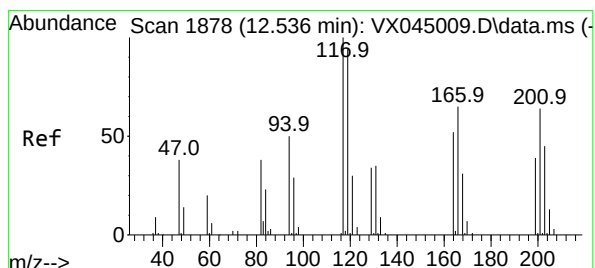
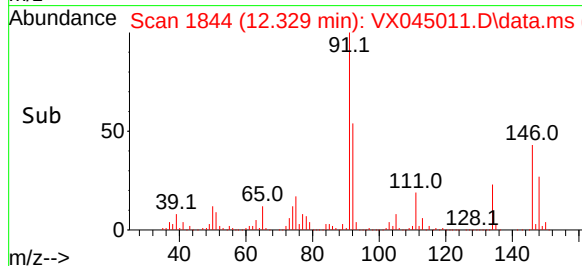
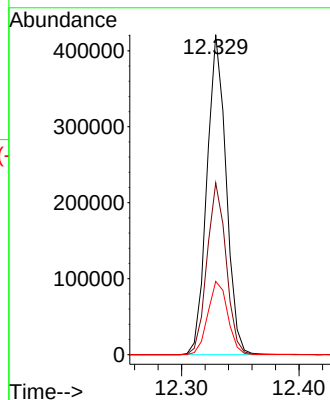
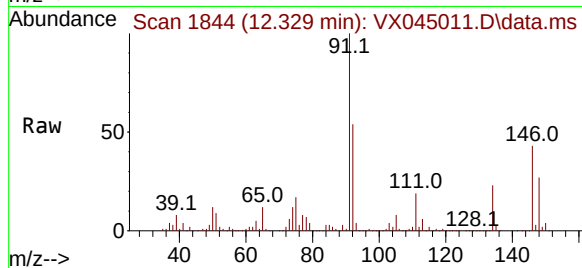
VSTDIC100

Tgt Ion:	91	Resp:	47645
Ion	Ratio	Lower	Upper
91	100		
92	53.7	0.0	105.2
134	23.8	0.0	49.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#86

Hexachloroethane

Concen: 102.679 ug/l

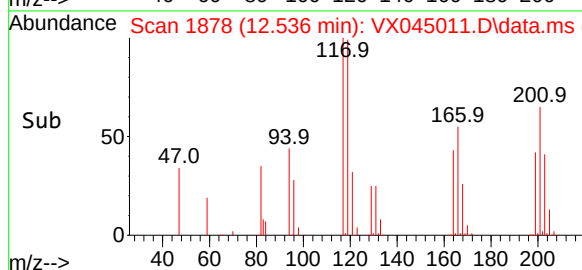
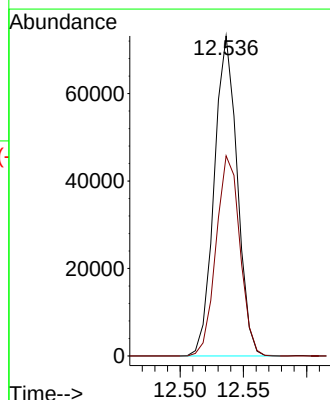
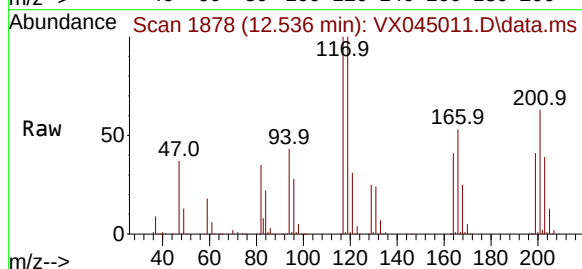
RT: 12.536 min Scan# 1878

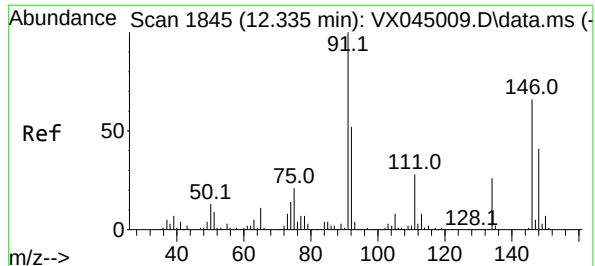
Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

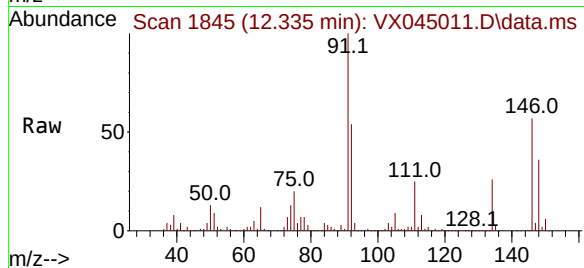
Tgt Ion:	117	Resp:	92493
Ion	Ratio	Lower	Upper
117	100		
201	64.8	32.6	97.7





#87
1,2-Dichlorobenzene
Concen: 94.528 ug/l
RT: 12.335 min Scan# 1845
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

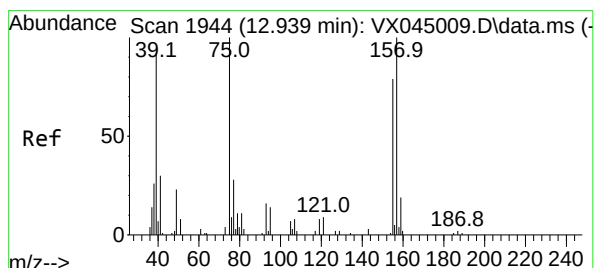
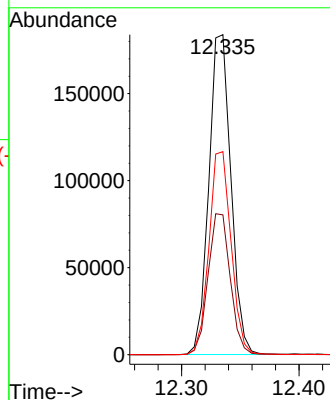
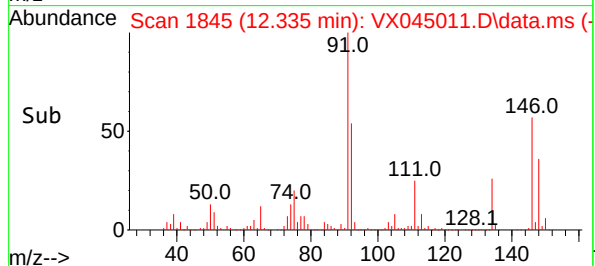
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



Tgt Ion:146 Resp: 240050
Ion Ratio Lower Upper
146 100
111 44.4 21.7 65.1
148 63.5 31.8 95.4

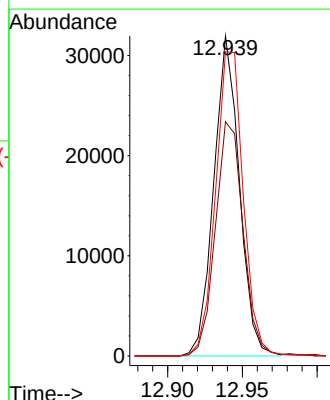
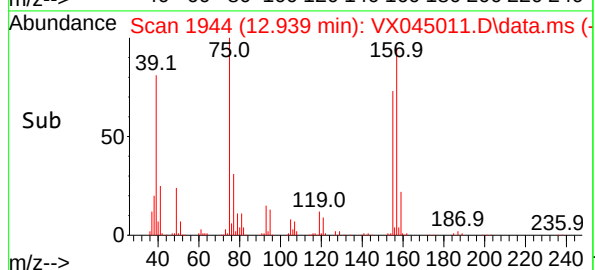
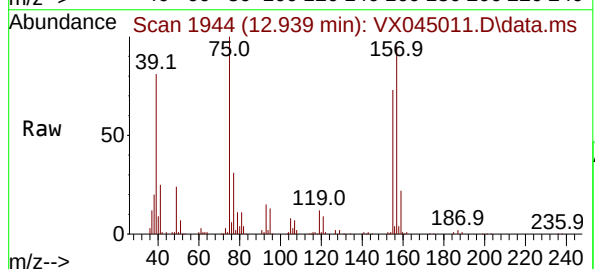
Manual Integrations
APPROVED

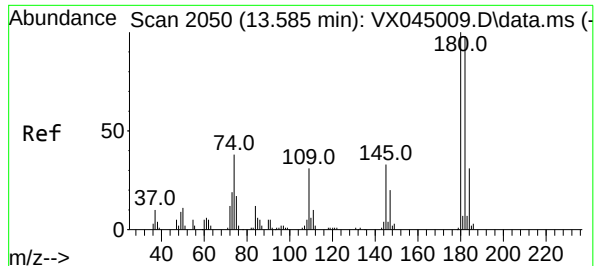
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#88
1,2-Dibromo-3-Chloropropane
Concen: 98.669 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

Tgt Ion: 75 Resp: 37960
Ion Ratio Lower Upper
75 100
155 79.6 66.2 99.4
157 103.3 81.4 122.2





#89

1,2,4-Trichlorobenzene

Concen: 103.039 ug/l

RT: 13.585 min Scan# 2050

Delta R.T. -0.000 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

Instrument :

MSVOA_X

ClientSampleId :

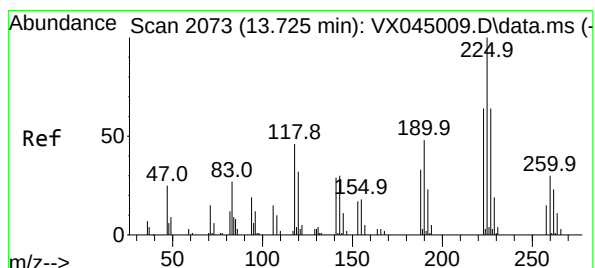
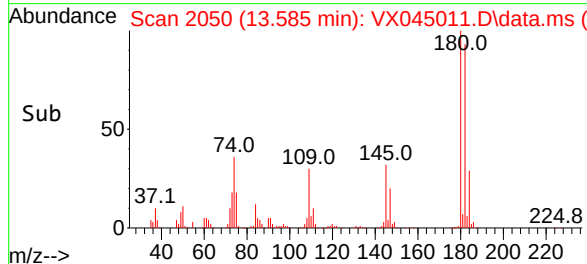
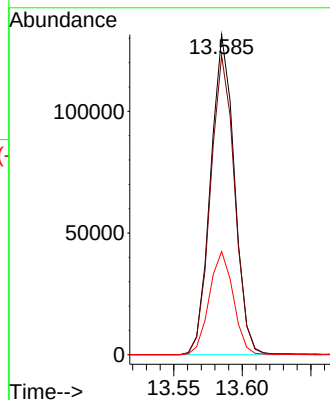
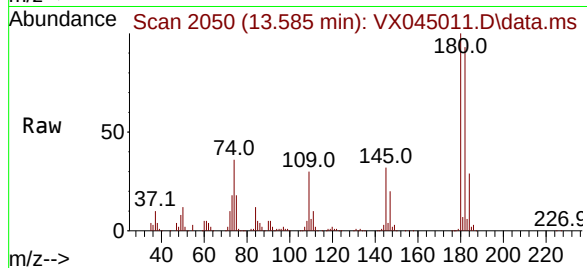
VSTDICC100

Tgt Ion:180	Resp: 158594
Ion Ratio	Lower Upper
180	100
182	94.7 77.7 116.5
145	32.6 25.8 38.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#90

Hexachlorobutadiene

Concen: 96.489 ug/l

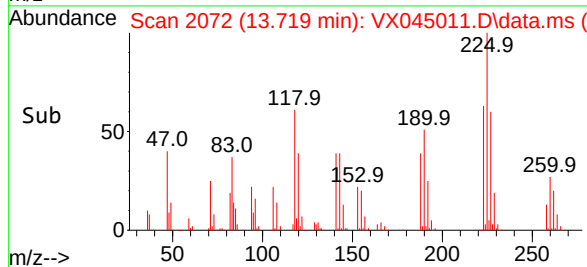
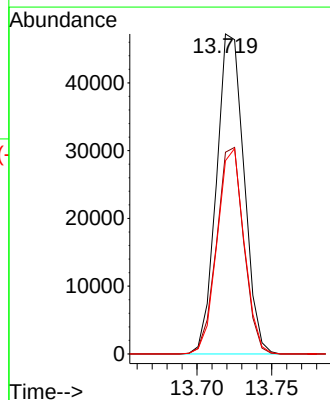
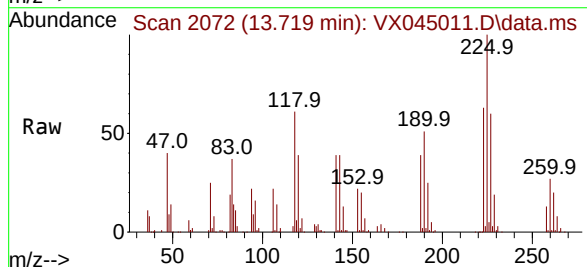
RT: 13.719 min Scan# 2072

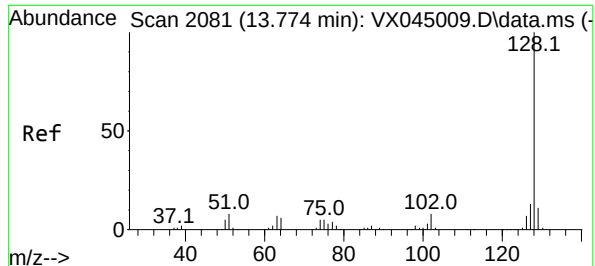
Delta R.T. -0.006 min

Lab File: VX045011.D

Acq: 21 Feb 2025 11:07

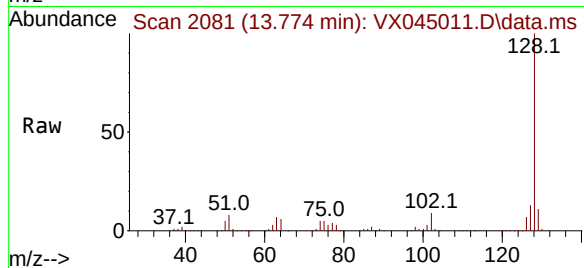
Tgt Ion:225	Resp: 60565
Ion Ratio	Lower Upper
225	100
223	63.5 0.0 123.4
227	62.6 0.0 127.4





#91
Naphthalene
Concen: 100.977 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07

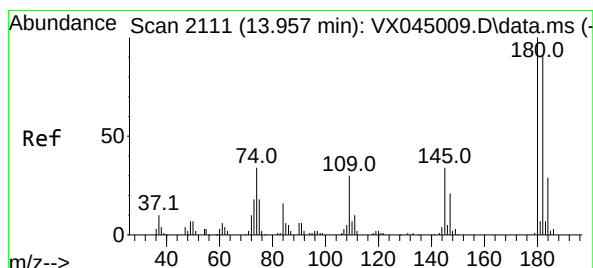
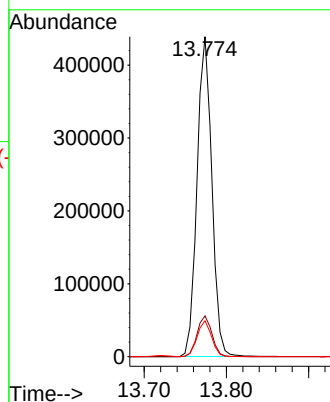
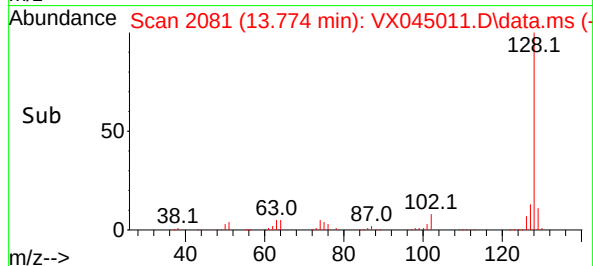
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100



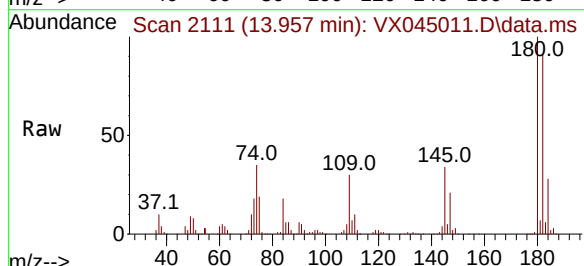
Tgt Ion:128 Resp: 548020
Ion Ratio Lower Upper
128 100
127 12.9 10.5 15.7
129 11.0 8.7 13.1

Manual Integrations
APPROVED

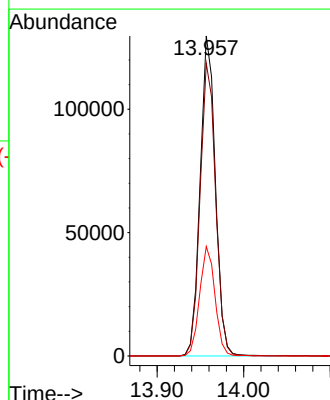
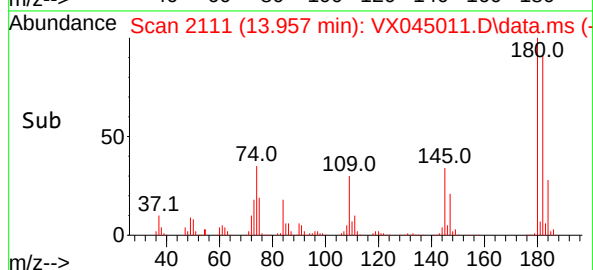
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#92
1,2,3-Trichlorobenzene
Concen: 100.267 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045011.D
Acq: 21 Feb 2025 11:07



Tgt Ion:180 Resp: 158881
Ion Ratio Lower Upper
180 100
182 92.9 0.0 186.6
145 34.3 0.0 68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045012.D
 Acq On : 21 Feb 2025 11:29
 Operator : JC/MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025

Quant Time: Feb 22 00:49:47 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Sat Feb 22 00:21:26 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	4.891	128	15390	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	91158	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	81702	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.952	65	46852	31.344	ug/l	0.00
Spiked Amount 30.000	Range	91 - 110	Recovery	= 104.467%		
60) 4-Bromofluorobenzene	11.079	95	47199	30.907	ug/l	0.00
Spiked Amount 30.000	Range	63 - 112	Recovery	= 103.033%		
63) Toluene-d8	8.647	98	134852	29.835	ug/l	0.00
Spiked Amount 30.000	Range	91 - 112	Recovery	= 99.467%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	205354	158.286	ug/l	96
3) Chloromethane	1.295	50	242022	155.752	ug/l	100
4) Vinyl Chloride	1.374	62	240390	160.323	ug/l	100
5) Bromomethane	1.593	94	81221	155.617	ug/l	97
6) Chloroethane	1.660	64	93284	114.868	ug/l	97
7) Trichlorofluoromethane	1.868	101	320914	159.243	ug/l	97
8) Diethyl Ether	2.130	74	121707	159.619	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.319	101	191867	160.302	ug/l	98
10) 1,1-Dichloroethene	2.307	96	191658	163.938	ug/l	90
11) Methyl Iodide	2.447	142	247014	186.677	ug/l	97
12) Methyl Acetate	2.703	43	226419	166.780	ug/l	99
13) Acrolein	2.233	56	233841	859.331	ug/l	99
14) Acrylonitrile	3.062	53	532462	802.955	ug/l	99
15) Acetone	2.386	58	137785	757.609	ug/l	98
16) Carbon Disulfide	2.502	76	548971	165.547	ug/l	99
17) Allyl chloride	2.654	41	362889	165.958	ug/l	100
18) Methylene Chloride	2.782	84	211221	160.628	ug/l	97
19) trans-1,2-Dichloroethene	3.087	96	192443	162.701	ug/l	97
20) Diisopropyl ether	3.757	45	684590	162.921	ug/l #	84
21) 1,1-Dichloroethane	3.599	63	379249	162.287	ug/l	99
22) cis-1,2-Dichloroethene	4.483	96	230636	162.719	ug/l	98
23) tert-Butyl Alcohol	3.014	59	185225m	799.131	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	628626	164.746	ug/l	100
25) Chloroform	5.087	83	367141	162.652	ug/l	100
26) Cyclohexane	5.464	56	351233	162.829	ug/l #	99
29) 1,1-Dichloropropene	5.684	75	260684	155.458	ug/l	99
30) 2-Butanone	4.550	43	735492	759.373	ug/l	100
31) 2,2-Dichloropropane	4.465	77	304225	160.447	ug/l	100
32) 1,1,1-Trichloroethane	5.373	97	316595	155.824	ug/l	99
33) Carbon Tetrachloride	5.672	117	264905	154.492	ug/l	98
34) Benzene	6.031	78	800159	152.163	ug/l	99
35) Methacrylonitrile	4.916	41	162761	157.037	ug/l	96
36) 1,2-Dichloroethane	6.080	62	276707	153.695	ug/l	97
37) Trichloroethene	7.117	130	189307	153.878	ug/l	96
38) Methylcyclohexane	7.373	83	350907	155.851	ug/l	98
39) 1,2-Dichloropropane	7.421	63	202146	154.621	ug/l	98
40) Dibromomethane	7.574	93	143641	153.109	ug/l	99
41) Bromodichloromethane	7.818	83	291108	156.122	ug/l	99
42) Vinyl Acetate	3.715	43	2988086	795.020	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045012.D
 Acq On : 21 Feb 2025 11:29
 Operator : JC/MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC150

Quant Time: Feb 22 00:49:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.709	43	292788	161.195	ug/l	97
44) Isopropyl Acetate	6.336	43	490033	163.920	ug/l	99
45) 1,4-Dioxane	7.665	88	91297	2937.775	ug/l	98
46) Methyl methacrylate	7.690	41	241575	164.798	ug/l	97
47) n-amyl Acetate	10.842	43	438261	168.943	ug/l	98
48) t-1,3-Dichloropropene	8.976	75	303740	169.001	ug/l	100
49) cis-1,3-Dichloropropene	8.360	75	331118	162.750	ug/l	98
50) 1,1,2-Trichloroethane	9.147	97	183455	149.917	ug/l	95
51) Ethyl methacrylate	9.116	69	323054	167.857	ug/l	100
52) 1,3-Dichloropropane	9.305	76	327551	152.762	ug/l	99
53) Dibromochloromethane	9.519	129	213326	157.620	ug/l	97
54) 1,2-Dibromoethane	9.604	107	194634	156.632	ug/l	99
55) 2-Chloroethyl vinyl ether	8.238	63	788934	798.256	ug/l	99
56) Bromoform	10.799	173	140224	165.340	ug/l	98
58) 4-Methyl-2-Pentanone	8.574	43	1431130	770.025	ug/l	99
59) 2-Hexanone	9.433	43	1054503	784.964	ug/l	99
61) Tetrachloroethene	9.269	164	149808	148.903	ug/l	95
62) Toluene	8.714	91	824606	152.359	ug/l	100
64) Chlorobenzene	10.073	112	513552	153.126	ug/l	99
65) 1,1,1,2-Tetrachloroethane	10.159	131	175139	158.260	ug/l	98
66) Ethyl Benzene	10.189	91	933862	157.604	ug/l	97
67) m/p-Xylenes	10.299	106	679028	307.573	ug/l	97
68) o-Xylene	10.640	106	333410	153.922	ug/l	98
69) Styrene	10.653	104	566072	156.470	ug/l	97
70) Isopropylbenzene	10.957	105	868382	155.350	ug/l	100
71) 1,1,2,2-Tetrachloroethane	11.207	83	283733	154.359	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	234613m	155.182	ug/l	
73) Bromobenzene	11.195	156	198360	154.147	ug/l	96
74) n-propylbenzene	11.299	91	1049645	157.793	ug/l	98
75) 2-Chlorotoluene	11.360	91	619308	153.997	ug/l	98
76) 1,3,5-Trimethylbenzene	11.451	105	707908	153.508	ug/l	100
77) t-1,4-Dichloro-2-butene	11.018	75	97507	191.694	ug/l	99
78) 4-Chlorotoluene	11.451	91	704032	157.047	ug/l	98
79) tert-butylbenzene	11.713	119	716064	154.110	ug/l	99
80) 1,2,4-Trimethylbenzene	11.750	105	710215	153.746	ug/l	100
81) sec-Butylbenzene	11.890	105	910294	156.100	ug/l	100
82) p-Isopropyltoluene	12.006	119	738494	156.297	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	371922	155.340	ug/l	98
84) 1,4-Dichlorobenzene	12.036	146	366532	155.264	ug/l	99
85) n-Butylbenzene	12.329	91	710846	164.749	ug/l	98
86) Hexachloroethane	12.536	117	142372	170.855	ug/l	98
87) 1,2-Dichlorobenzene	12.335	146	356347	151.688	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	59310	166.653	ug/l	98
89) 1,2,4-Trichlorobenzene	13.585	180	238129	167.248	ug/l	98
90) Hexachlorobutadiene	13.725	225	90085	155.145	ug/l	98
91) Naphthalene	13.774	128	829698	165.262	ug/l	100
92) 1,2,3-Trichlorobenzene	13.957	180	236181	161.124	ug/l	99

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

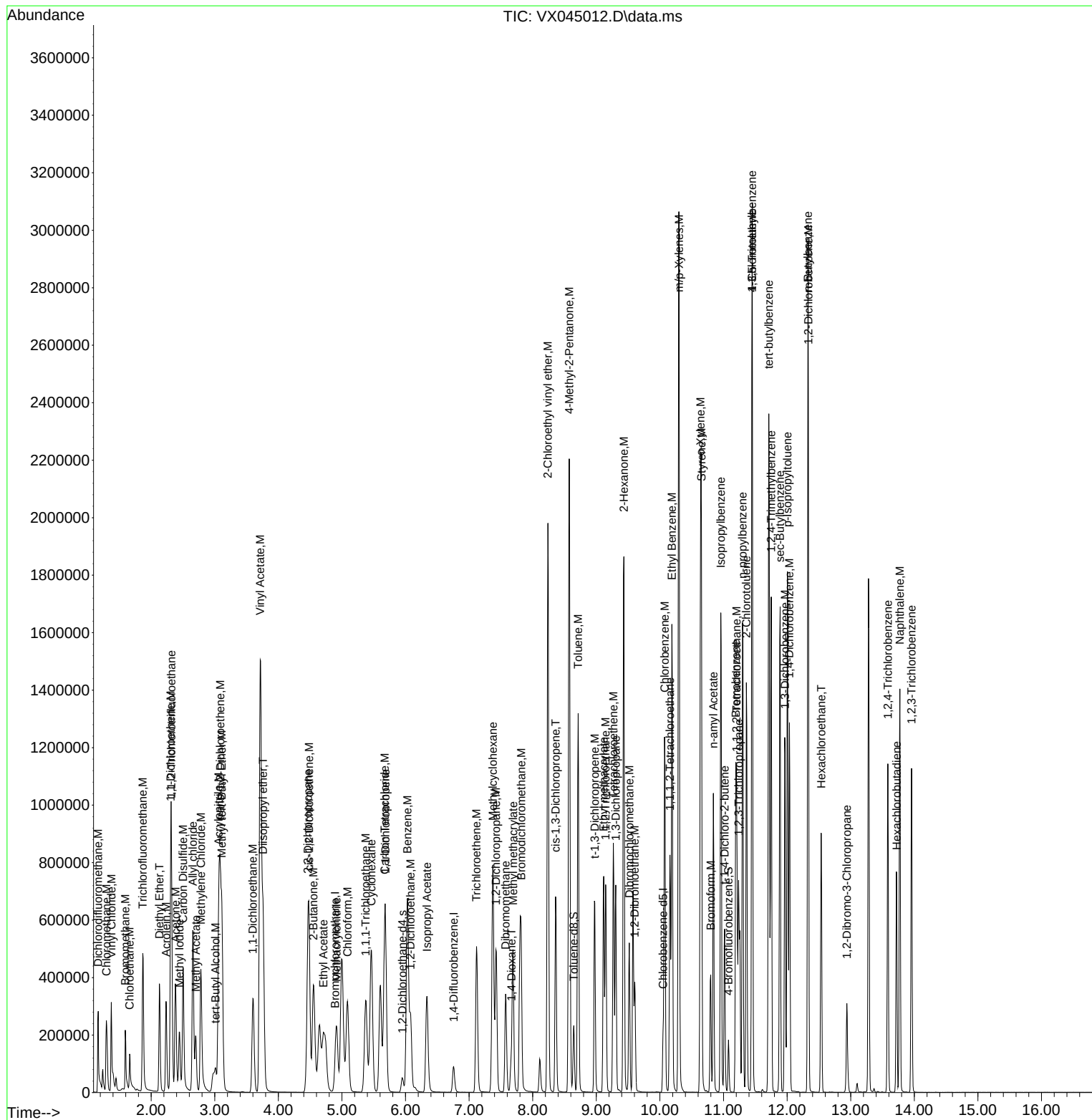
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045012.D
 Acq On : 21 Feb 2025 11:29
 Operator : JC/MD
 Sample : VSTDIC150
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 6 Sample Multiplier: 1

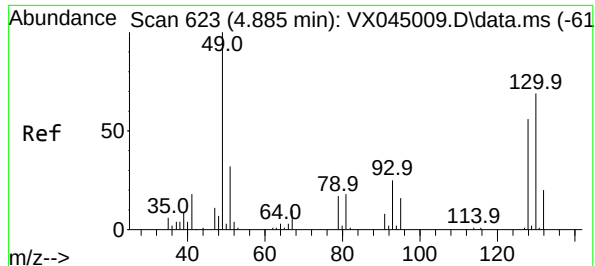
Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDIC150

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Quant Time: Feb 22 00:49:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 00:21:26 2025
 Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.891 min Scan# 61

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

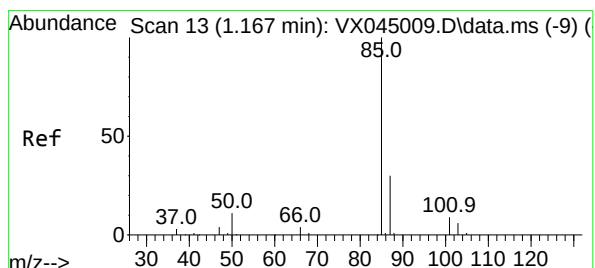
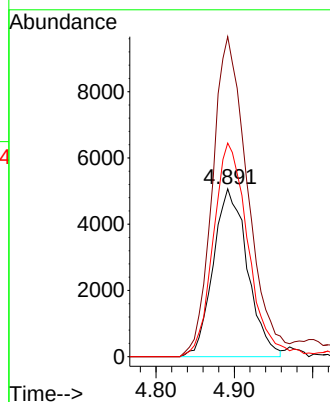
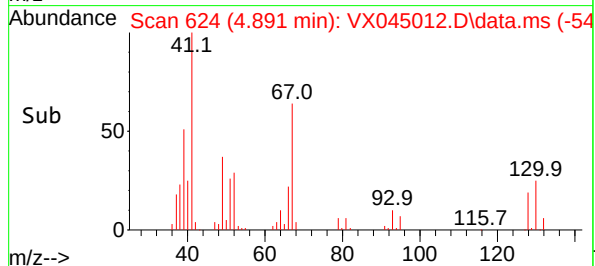
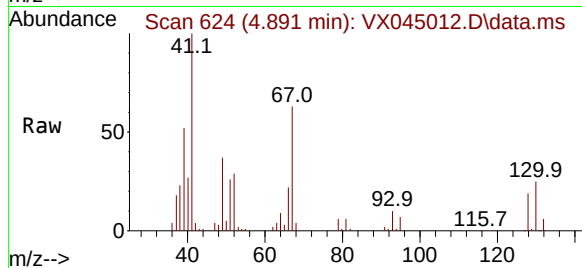
Tgt Ion:	128	Resp:	15390
Ion	Ratio	Lower	Upper
128	100		
49	196.5	0.0	449.7
130	128.8	0.0	312.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#2

Dichlorodifluoromethane

Concen: 158.286 ug/l

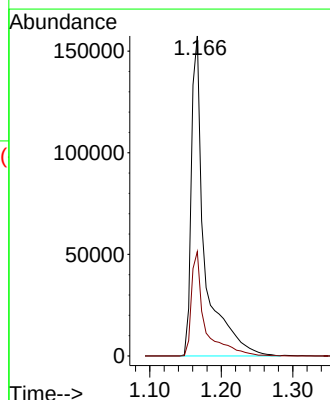
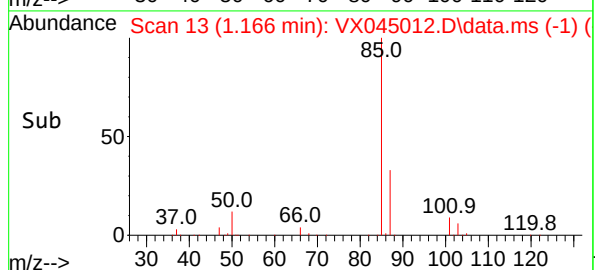
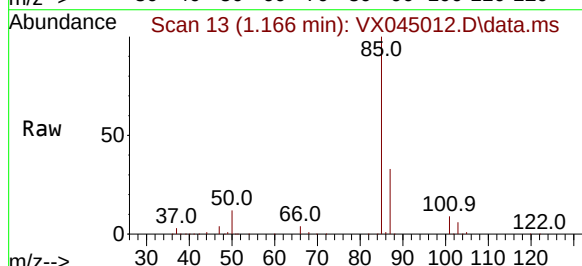
RT: 1.166 min Scan# 13

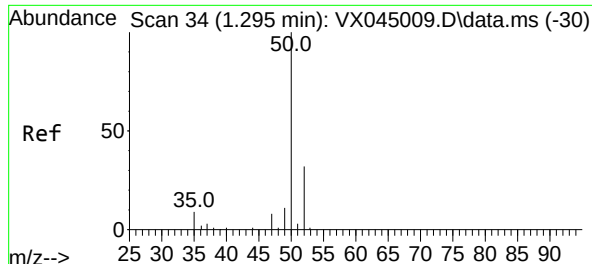
Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Tgt Ion:	85	Resp:	205354
Ion	Ratio	Lower	Upper
85	100		
87	32.6	15.1	45.3





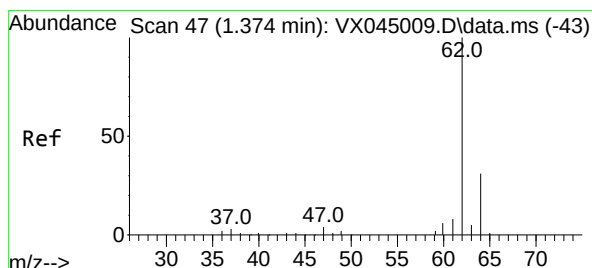
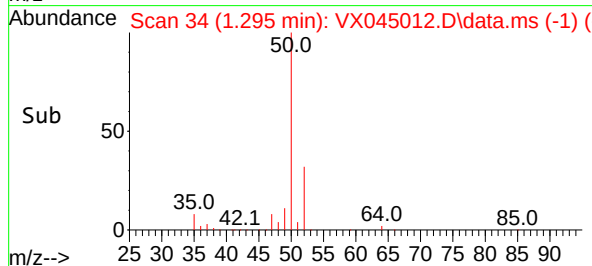
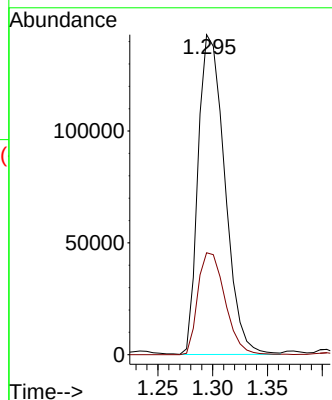
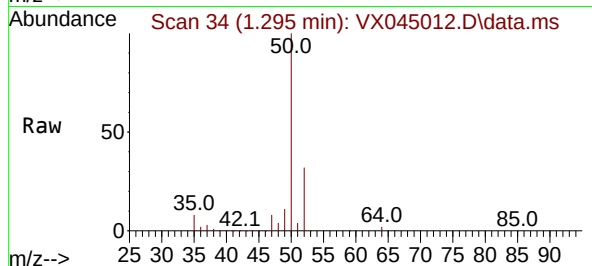
#3
Chloromethane
Concen: 155.752 ug/l
RT: 1.295 min Scan# 34
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Tgt Ion: 50 Resp: 24202
Ion Ratio Lower Upper
50 100
52 31.9 25.7 38.5

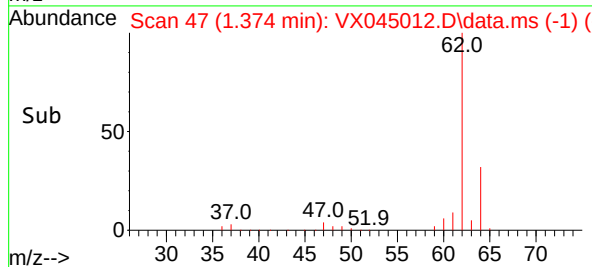
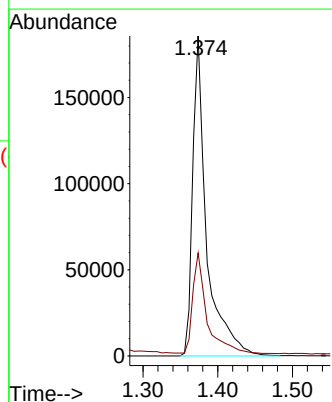
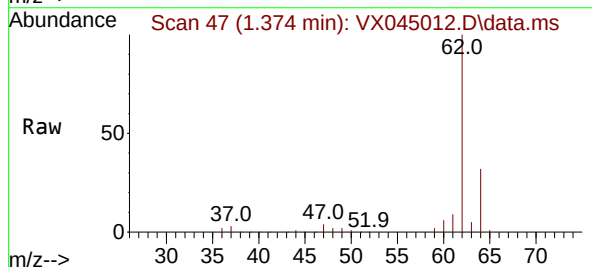
Manual Integrations
APPROVED

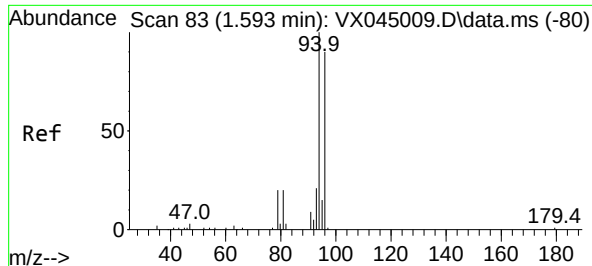
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#4
Vinyl Chloride
Concen: 160.323 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion: 62 Resp: 240390
Ion Ratio Lower Upper
62 100
64 31.4 25.1 37.7





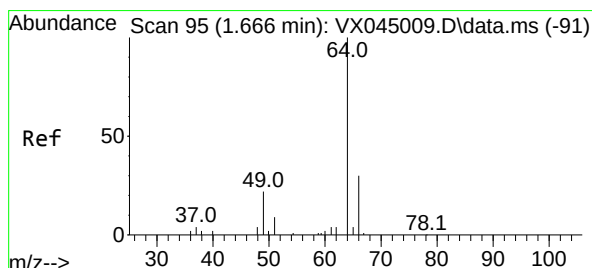
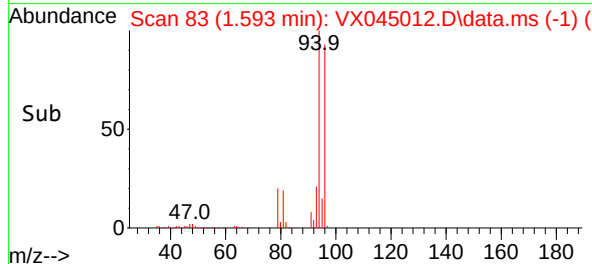
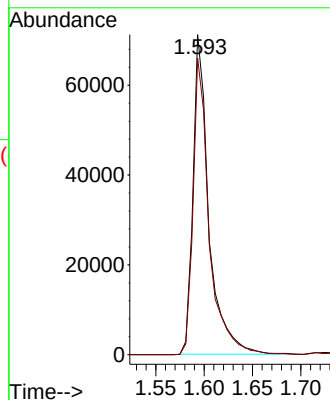
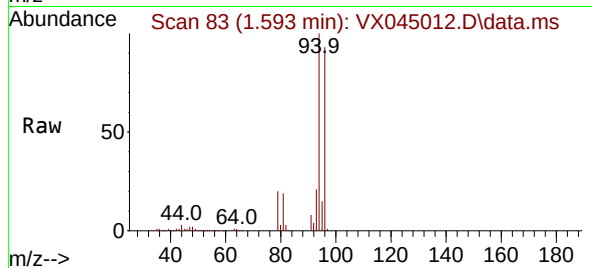
#5
Bromomethane
Concen: 155.617 ug/l
RT: 1.593 min Scan# 81
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Tgt Ion: 94 Resp: 8122
Ion Ratio Lower Upper
94 100
96 92.7 72.2 108.4

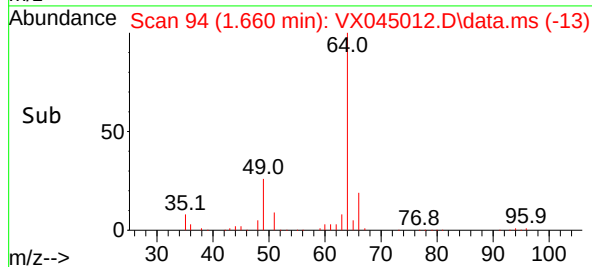
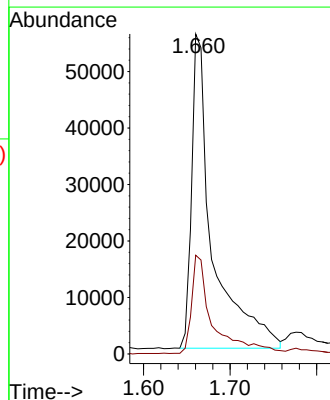
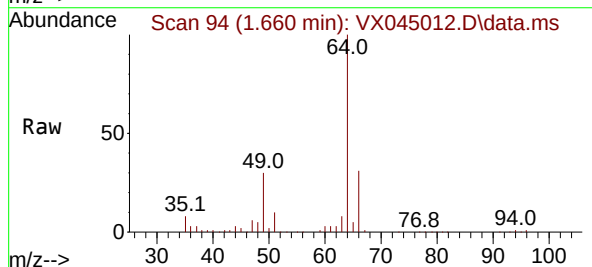
Manual Integrations
APPROVED

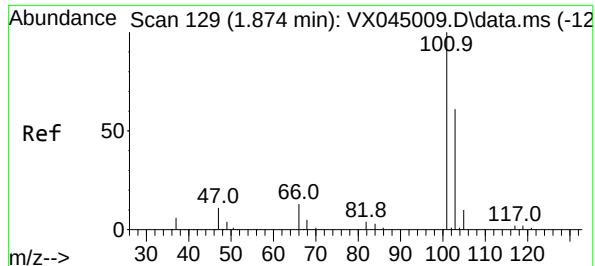
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#6
Chloroethane
Concen: 114.868 ug/l
RT: 1.660 min Scan# 94
Delta R.T. -0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion: 64 Resp: 93284
Ion Ratio Lower Upper
64 100
66 31.3 23.7 35.5





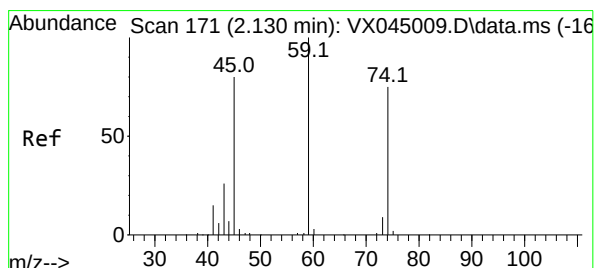
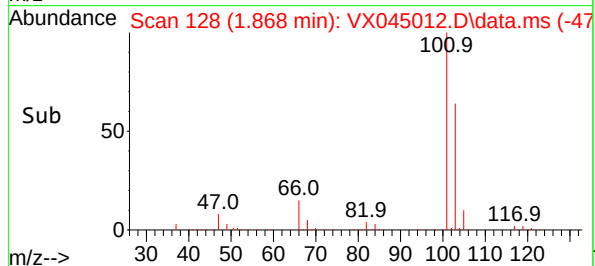
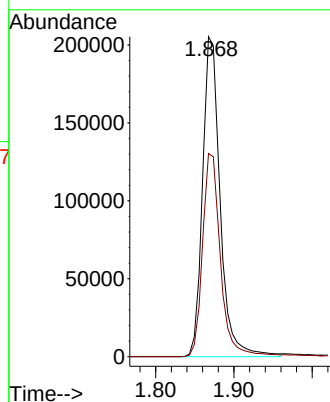
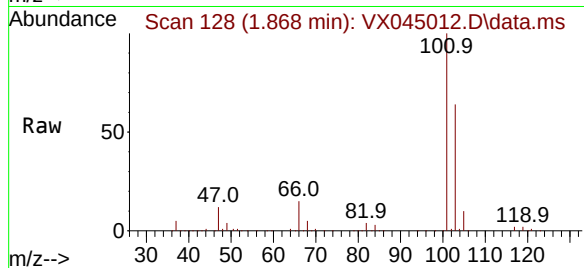
#7
Trichlorofluoromethane
Concen: 159.243 ug/l
RT: 1.868 min Scan# 11
Delta R.T. -0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Tgt Ion:101 Resp: 320914
Ion Ratio Lower Upper
101 100
103 63.5 48.8 73.2

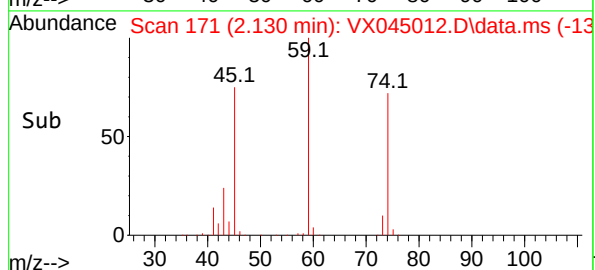
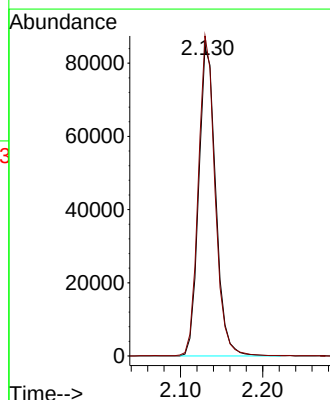
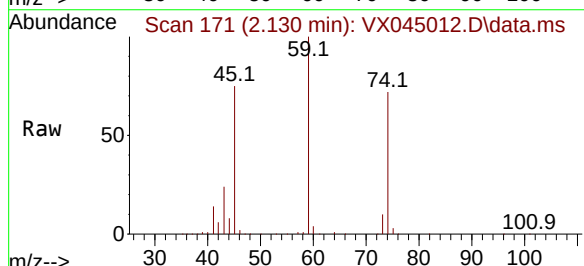
Manual Integrations
APPROVED

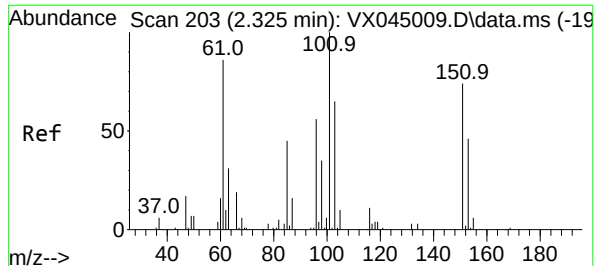
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#8
Diethyl Ether
Concen: 159.619 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion: 74 Resp: 121707
Ion Ratio Lower Upper
74 100
45 101.0 20.8 186.8





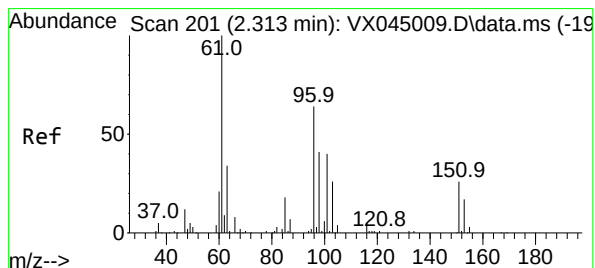
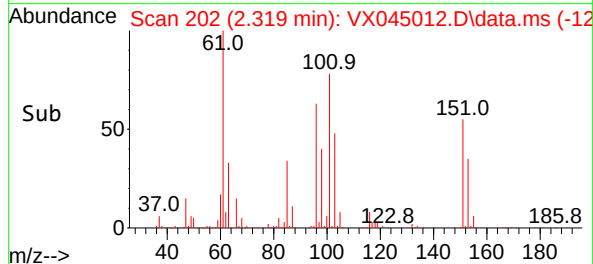
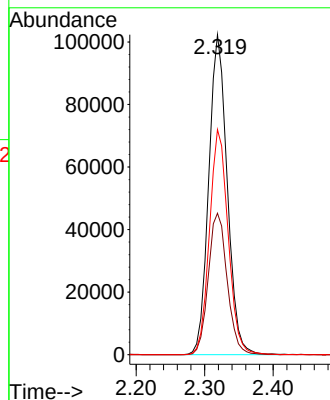
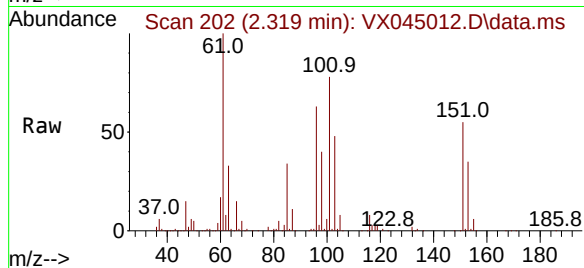
#9
1,1,2-Trichlorotrifluoroethane
Concen: 160.302 ug/l
RT: 2.319 min Scan# 20
Delta R.T. -0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC150

Tgt Ion:101 Resp: 19186
Ion Ratio Lower Upper
101 100
85 45.2 0.0 90.6
151 71.0 0.0 147.6

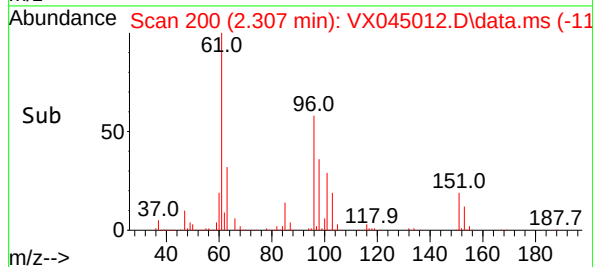
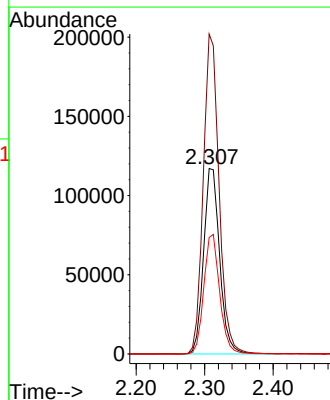
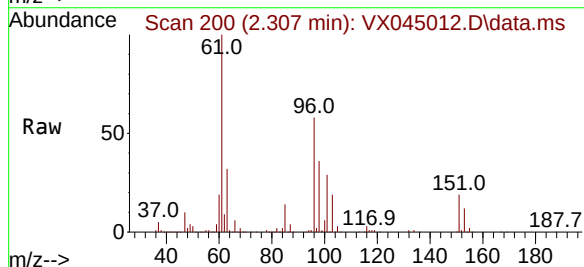
Manual Integrations
APPROVED

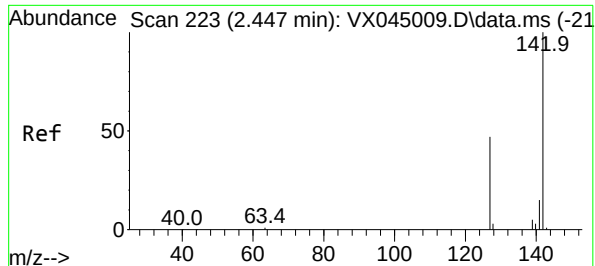
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#10
1,1-Dichloroethene
Concen: 163.938 ug/l
RT: 2.307 min Scan# 200
Delta R.T. -0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion: 96 Resp: 191658
Ion Ratio Lower Upper
96 100
61 172.6 124.2 186.2
98 62.8 51.1 76.7





#11

Methyl Iodide

Concen: 186.677 ug/l

RT: 2.447 min Scan# 21

Delta R.T. -0.000 min

Lab File: VX045012.D

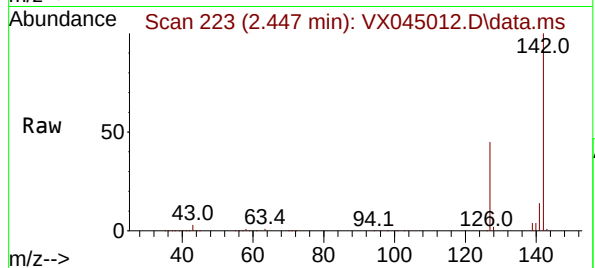
Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150



Tgt Ion:142 Resp: 247014

Ion Ratio Lower Upper

142 100

127 44.7 23.3 69.9

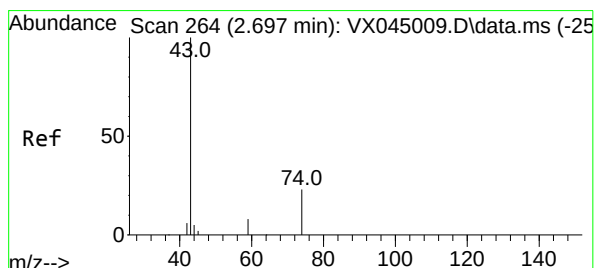
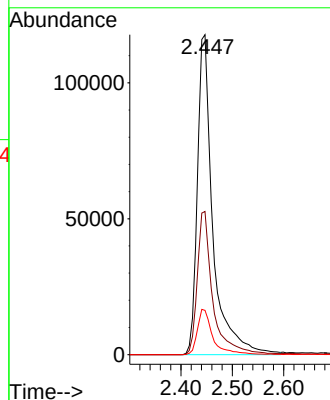
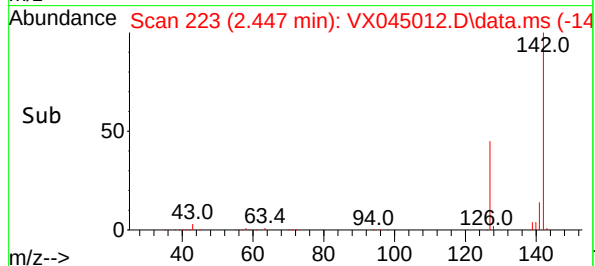
141 13.9 7.5 22.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#12

Methyl Acetate

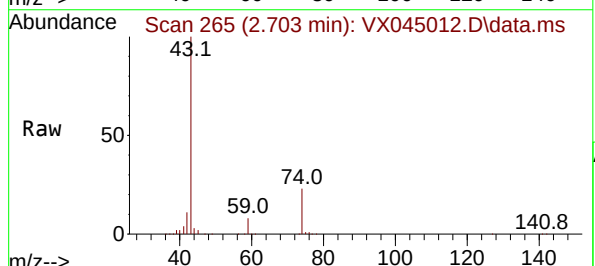
Concen: 166.780 ug/l

RT: 2.703 min Scan# 265

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

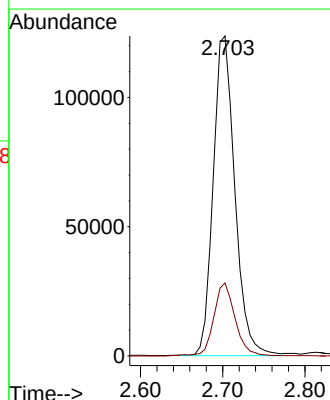
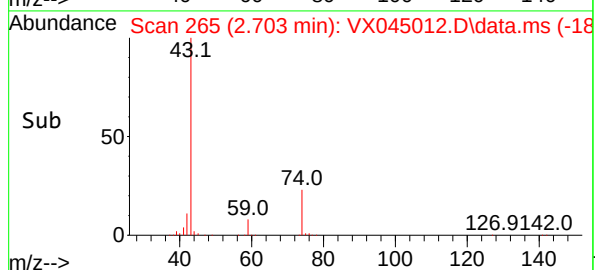


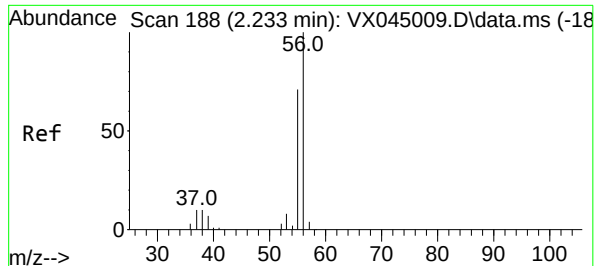
Tgt Ion: 43 Resp: 226419

Ion Ratio Lower Upper

43 100

74 22.7 17.9 26.9





#13

Acrolein

Concen: 859.331 ug/l

RT: 2.233 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 56 Resp: 23384

Ion Ratio Lower Upper

56 100

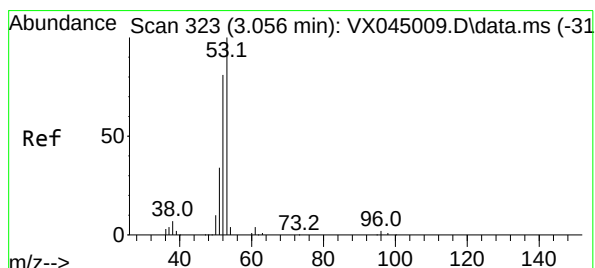
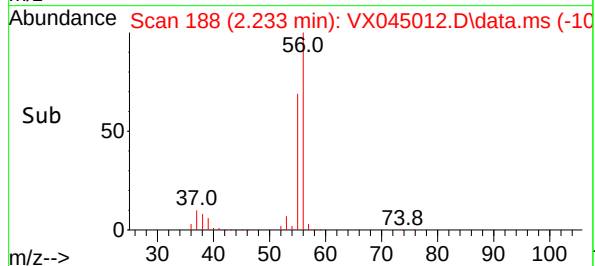
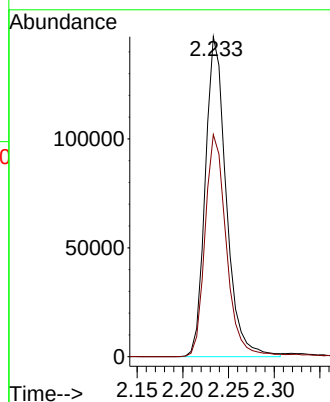
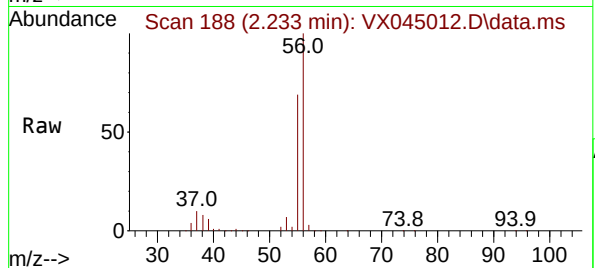
55 70.5 55.4 83.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#14

Acrylonitrile

Concen: 802.955 ug/l

RT: 3.062 min Scan# 324

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

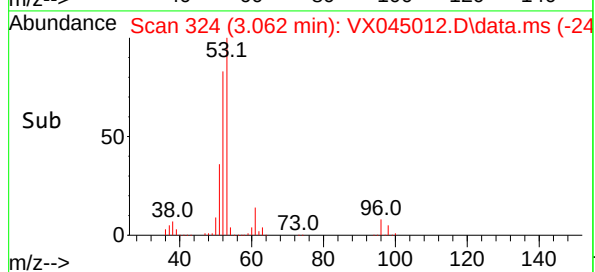
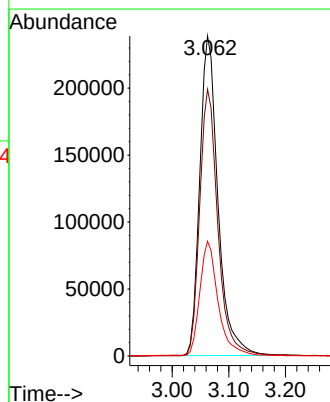
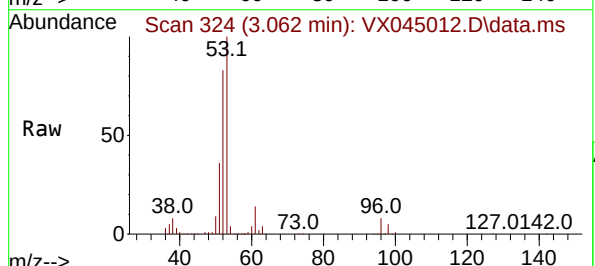
Tgt Ion: 53 Resp: 532462

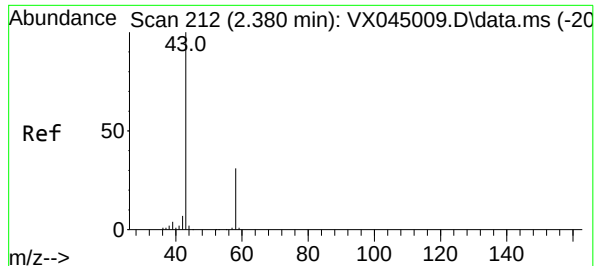
Ion Ratio Lower Upper

53 100

52 83.0 40.9 122.8

51 36.2 18.0 54.0





#15

Acetone

Concen: 757.609 ug/l

RT: 2.386 min Scan# 212

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 58 Resp: 13778

Ion Ratio Lower Upper

58 100

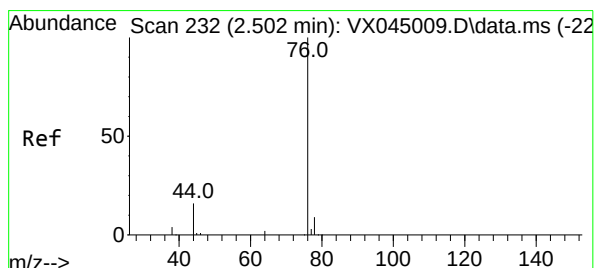
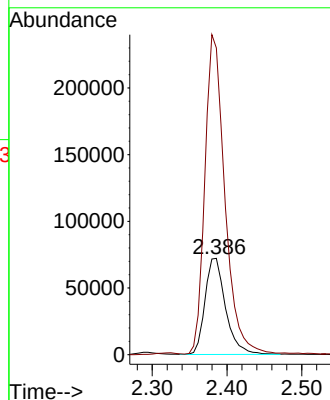
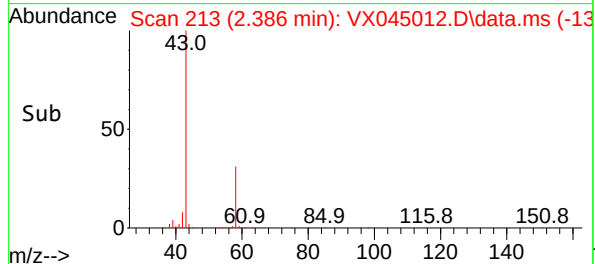
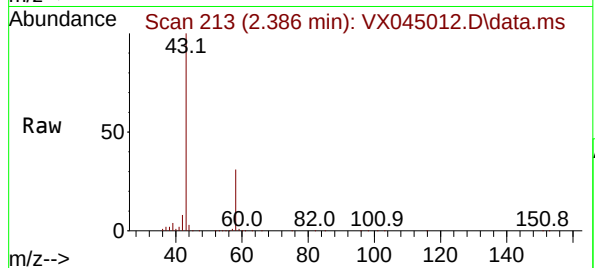
43 318.9 258.6 388.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#16

Carbon Disulfide

Concen: 165.547 ug/l

RT: 2.502 min Scan# 232

Delta R.T. -0.000 min

Lab File: VX045012.D

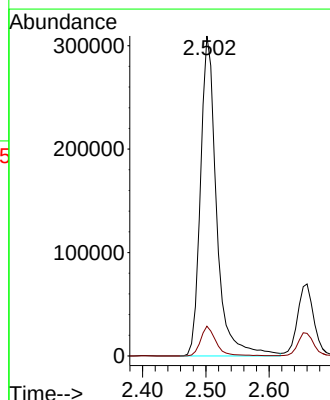
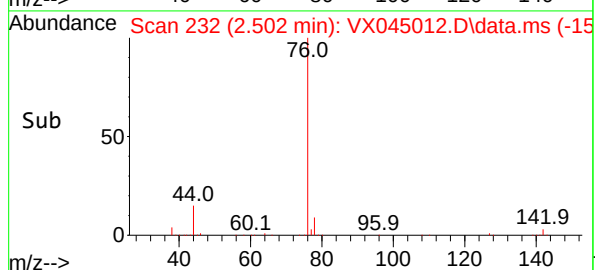
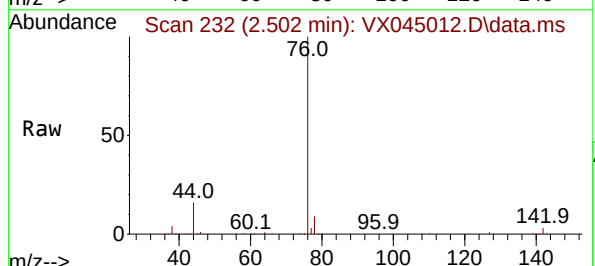
Acq: 21 Feb 2025 11:29

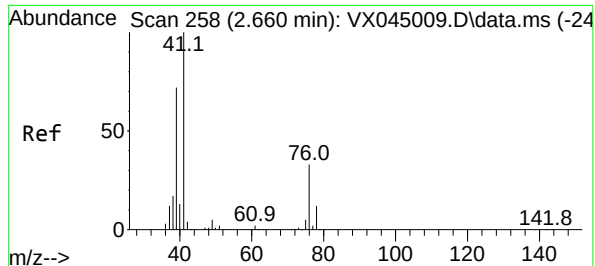
Tgt Ion: 76 Resp: 548971

Ion Ratio Lower Upper

76 100

78 9.3 7.3 10.9





#17

Allyl chloride

Concen: 165.958 ug/l

RT: 2.654 min Scan# 257

Delta R.T. -0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Tgt Ion: 41 Resp: 362889

Ion Ratio Lower Upper

41 100

39 73.0 36.2 108.6

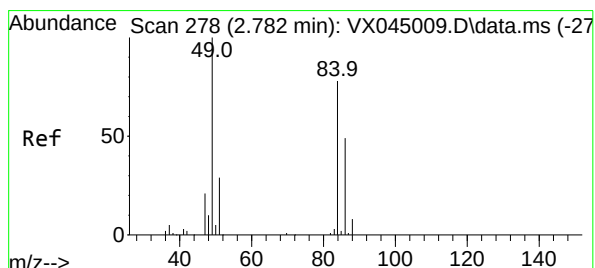
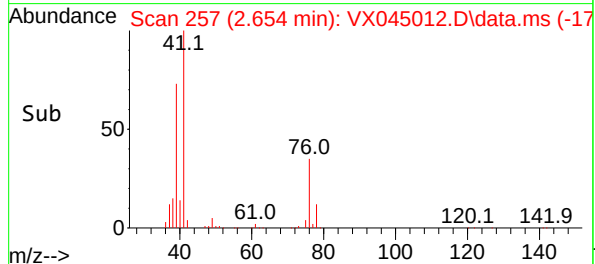
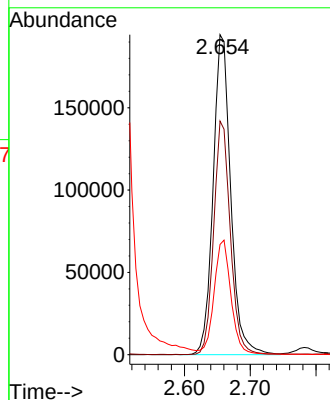
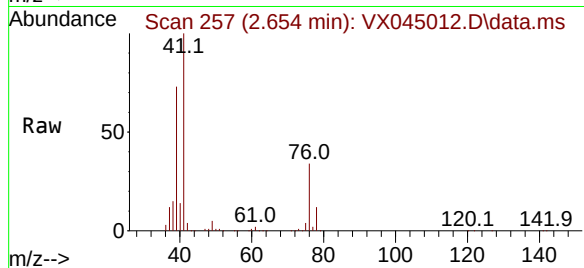
76 34.3 17.2 51.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#18

Methylene Chloride

Concen: 160.628 ug/l

RT: 2.782 min Scan# 278

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Tgt Ion: 84 Resp: 211221

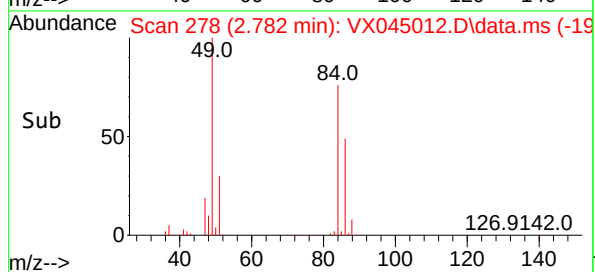
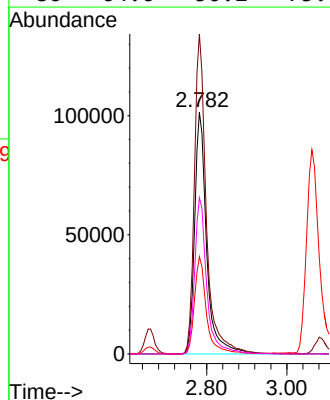
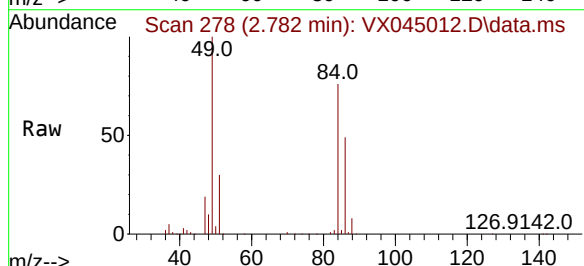
Ion Ratio Lower Upper

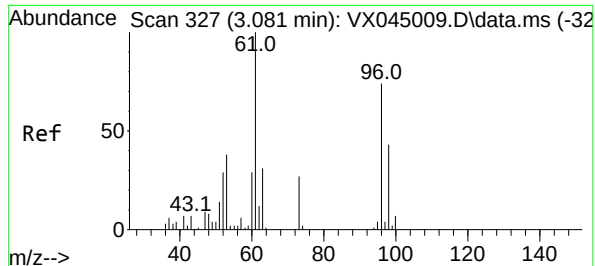
84 100

49 132.4 102.8 154.2

51 40.3 30.1 45.1

86 64.6 50.2 75.4





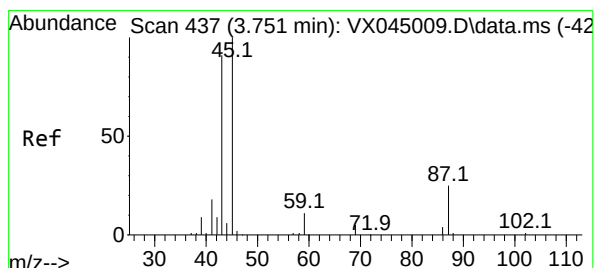
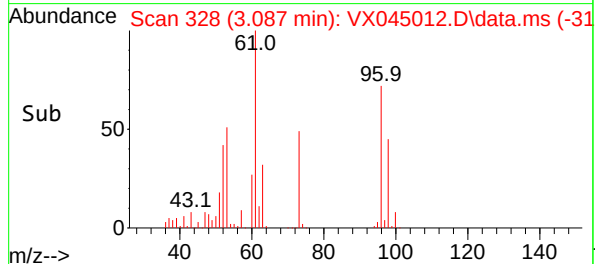
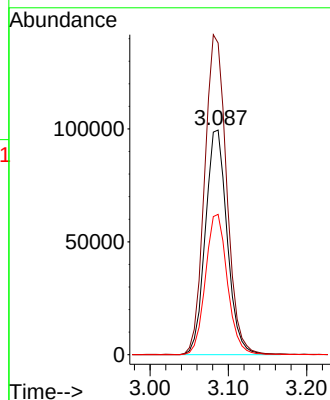
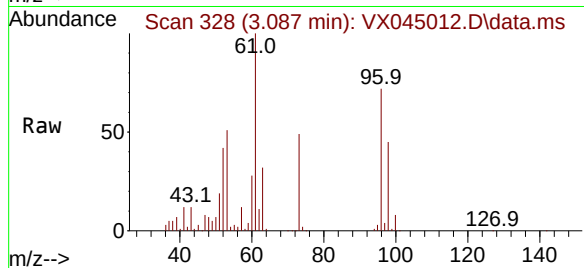
#19
trans-1,2-Dichloroethene
Concen: 162.701 ug/l
RT: 3.087 min Scan# 31
Delta R.T. 0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Tgt Ion: 96 Resp: 19244
Ion Ratio Lower Upper
96 100
61 138.6 108.6 163.0
98 62.5 46.5 69.7

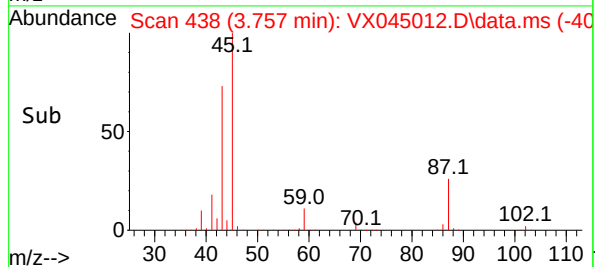
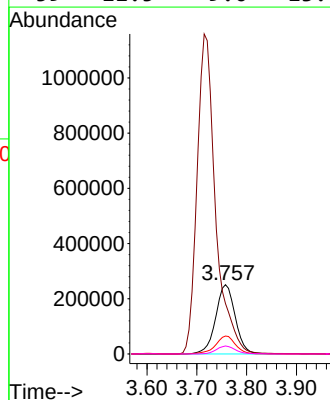
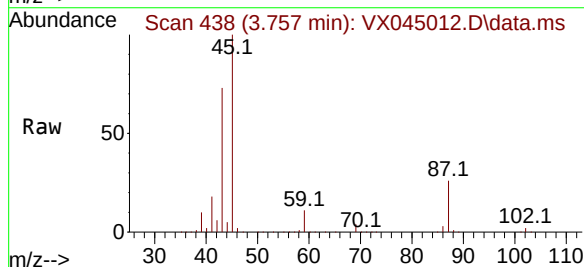
Manual Integrations
APPROVED

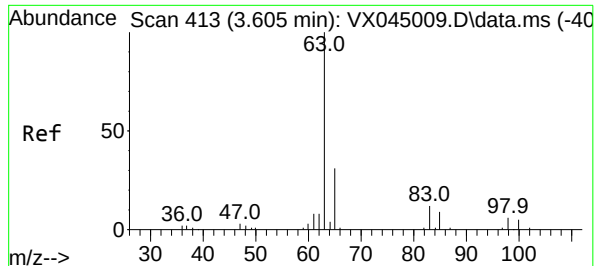
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#20
Diisopropyl ether
Concen: 162.921 ug/l
RT: 3.757 min Scan# 438
Delta R.T. 0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion: 45 Resp: 684590
Ion Ratio Lower Upper
45 100
43 72.4 74.4 111.6#
87 26.0 19.8 29.8
59 11.5 9.0 13.4





#21

1,1-Dichloroethane

Concen: 162.287 ug/l

RT: 3.599 min Scan# 413

Delta R.T. -0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 63 Resp: 379249

Ion Ratio Lower Upper

63 100

98 6.7 3.3 9.8

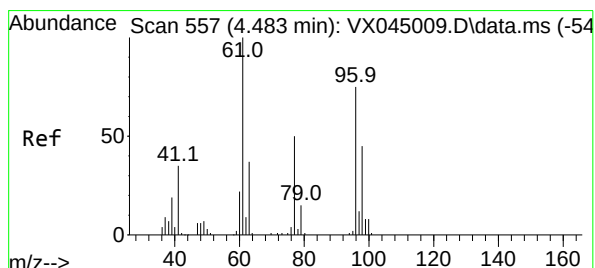
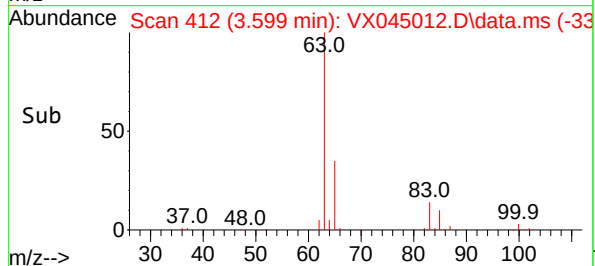
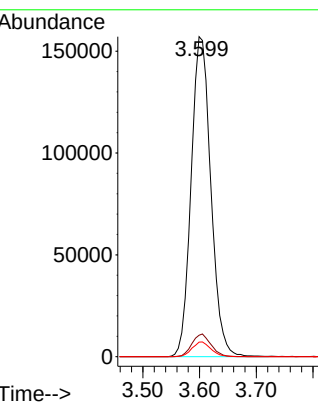
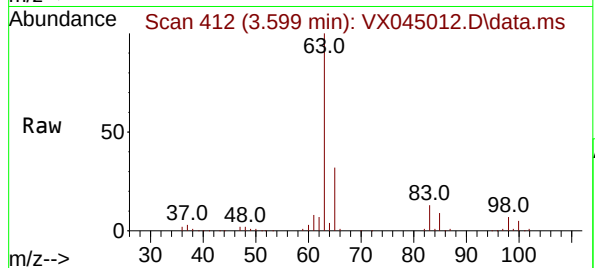
100 4.6 2.4 7.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#22

cis-1,2-Dichloroethene

Concen: 162.719 ug/l

RT: 4.483 min Scan# 557

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

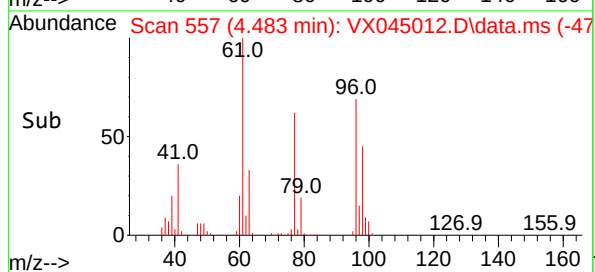
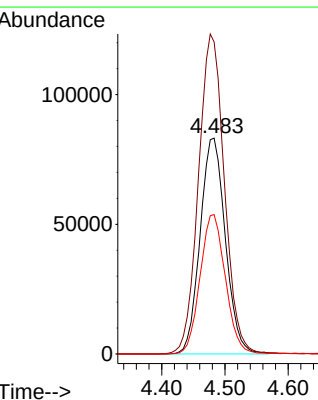
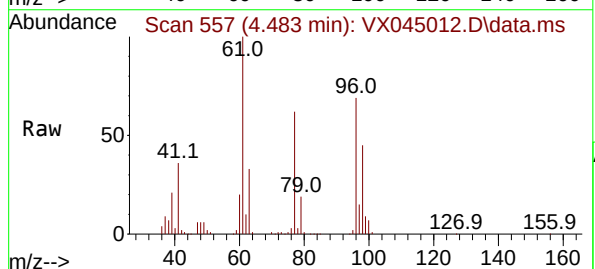
Tgt Ion: 96 Resp: 230636

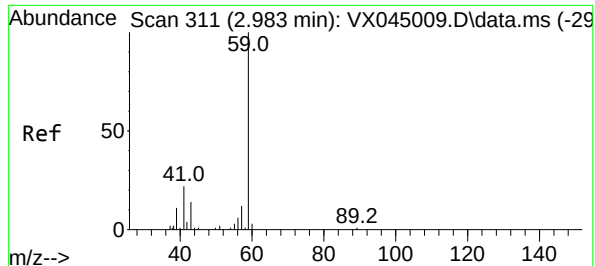
Ion Ratio Lower Upper

96 100

61 152.0 118.9 178.3

98 64.6 50.7 76.1





#23

tert-Butyl Alcohol

Concen: 799.131 ug/l m

RT: 3.014 min Scan# 311

Delta R.T. 0.030 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 59 Resp: 185225

Ion Ratio Lower Upper

59 100

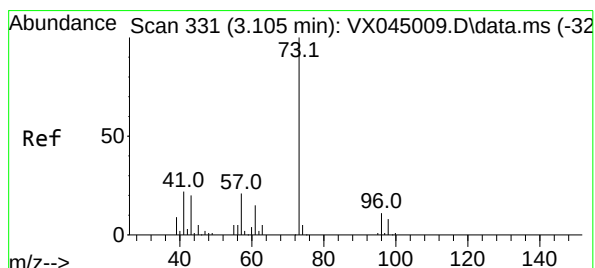
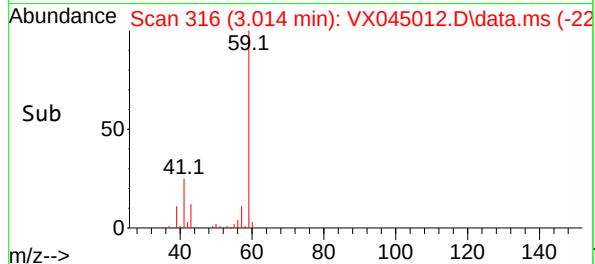
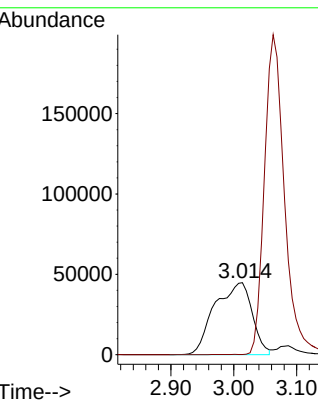
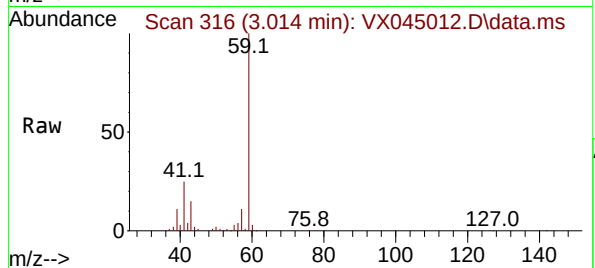
52 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#24

Methyl tert-Butyl Ether

Concen: 164.746 ug/l

RT: 3.111 min Scan# 332

Delta R.T. 0.006 min

Lab File: VX045012.D

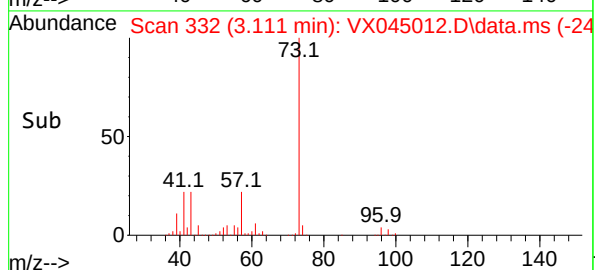
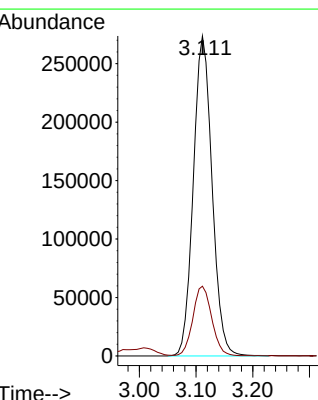
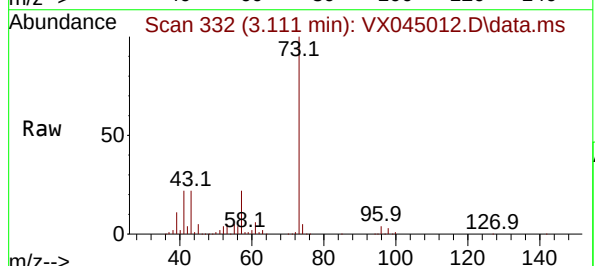
Acq: 21 Feb 2025 11:29

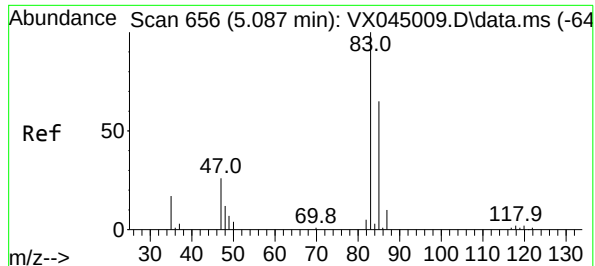
Tgt Ion: 73 Resp: 628626

Ion Ratio Lower Upper

73 100

43 21.7 17.4 26.0





#25

Chloroform

Concen: 162.652 ug/l

RT: 5.087 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Tgt Ion: 83 Resp: 36714

Ion Ratio Lower Upper

83 100

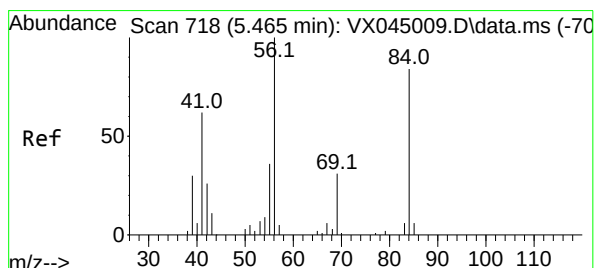
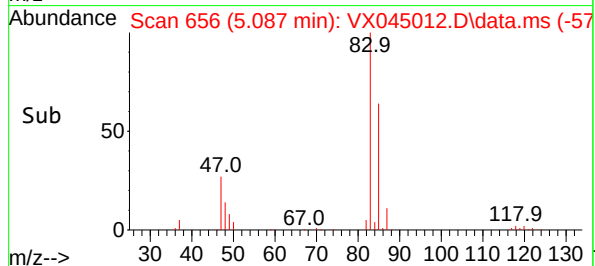
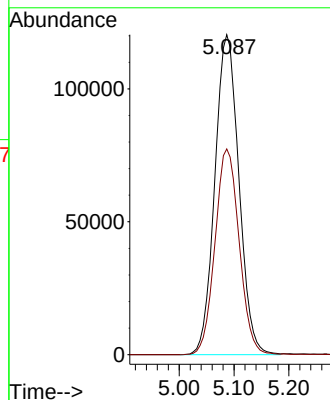
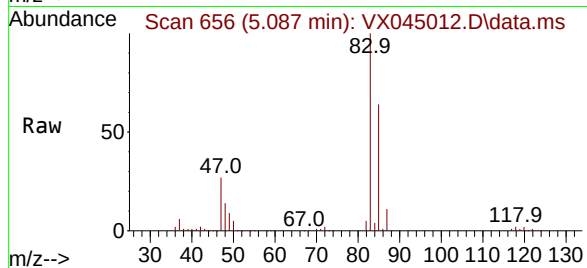
85 64.3 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#26

Cyclohexane

Concen: 162.829 ug/l

RT: 5.464 min Scan# 718

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

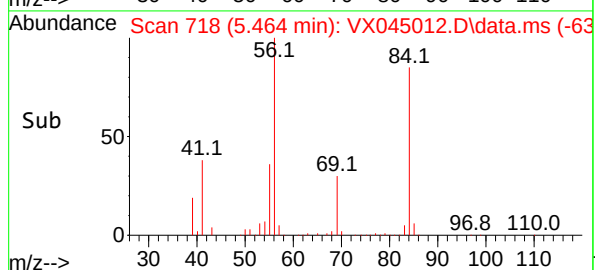
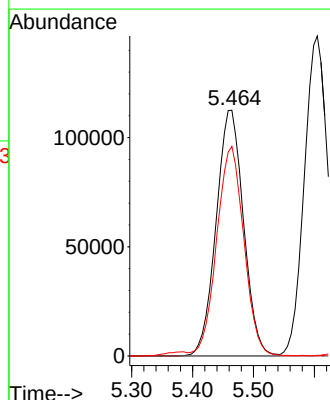
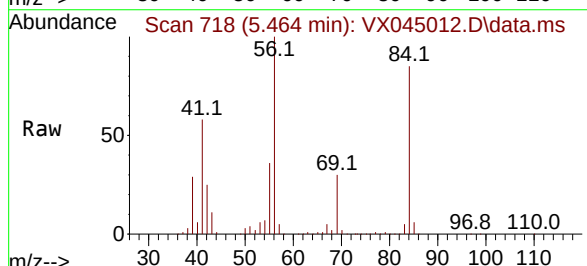
Tgt Ion: 56 Resp: 351233

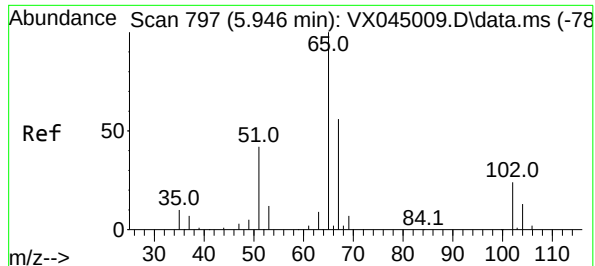
Ion Ratio Lower Upper

56 100

89 0.0 0.0 0.0

84 84.8 67.1 100.7





#27

1,2-Dichloroethane-d4

Concen: 31.344 ug/l

RT: 5.952 min Scan# 79

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 65 Resp: 4685

Ion Ratio Lower Upper

65 100

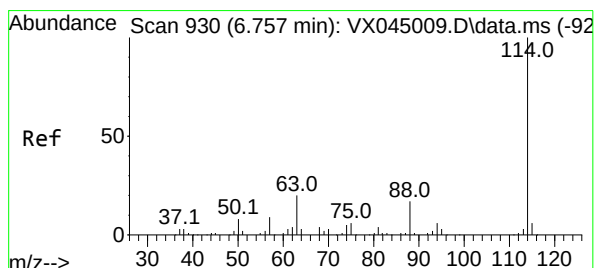
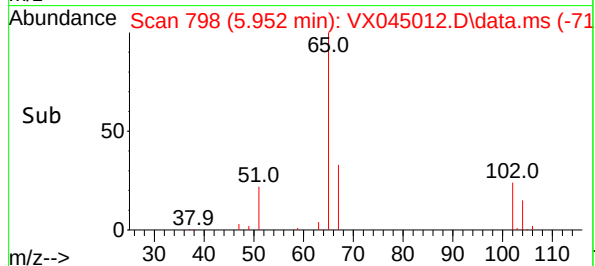
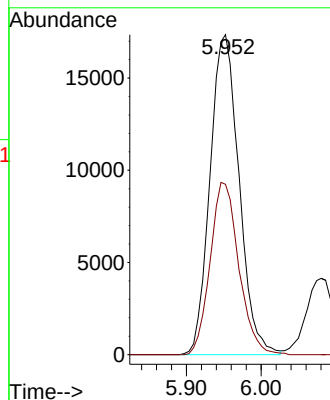
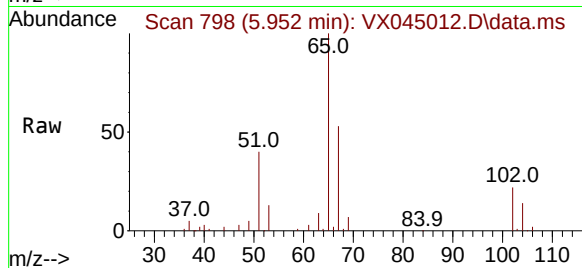
67 53.1 42.6 64.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.757 min Scan# 930

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

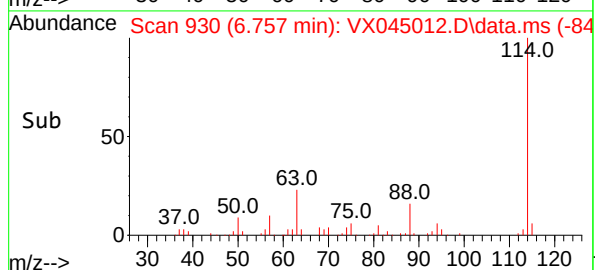
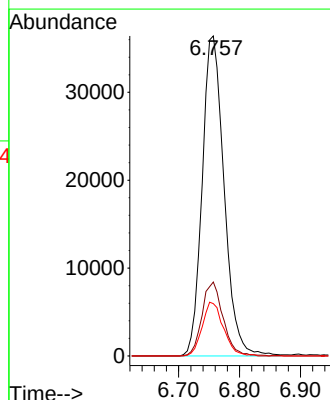
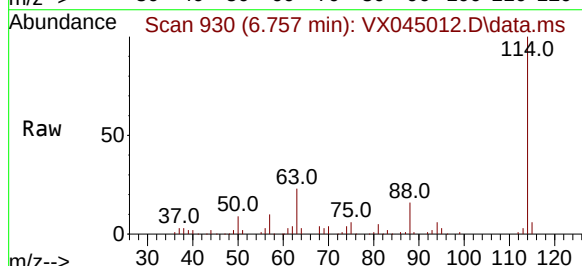
Tgt Ion:114 Resp: 91158

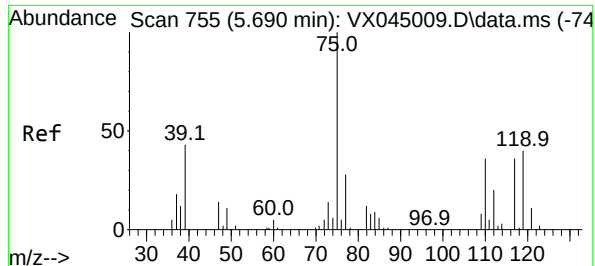
Ion Ratio Lower Upper

114 100

63 22.0 16.8 25.2

88 16.1 12.7 19.1





#29

1,1-Dichloropropene

Concen: 155.458 ug/l

RT: 5.684 min Scan# 755

Delta R.T. -0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 75 Resp: 260684

Ion Ratio Lower Upper

75 100

110 33.9 0.0 69.2

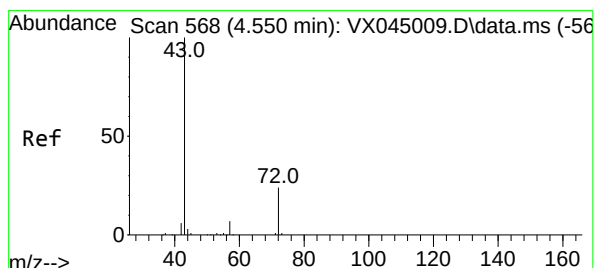
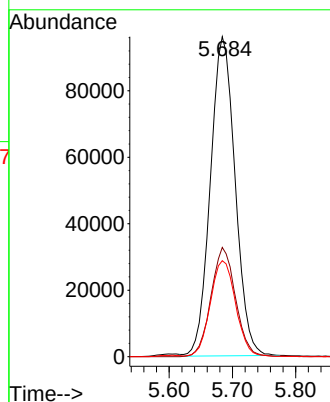
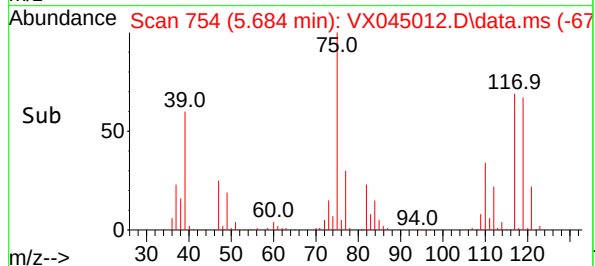
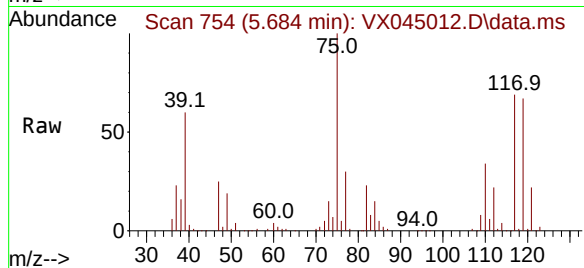
77 30.9 0.0 61.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#30

2-Butanone

Concen: 759.373 ug/l

RT: 4.550 min Scan# 568

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

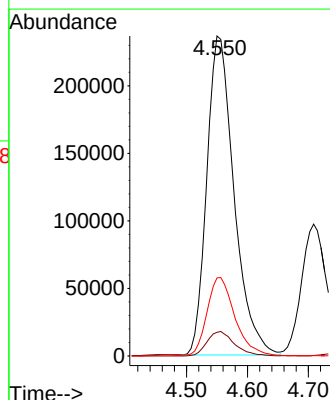
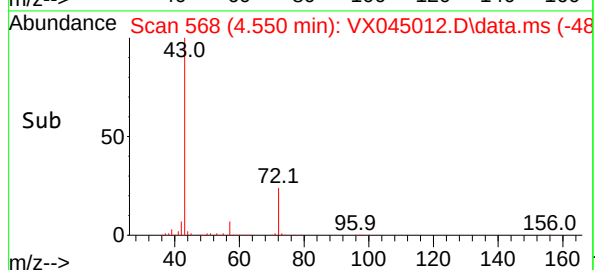
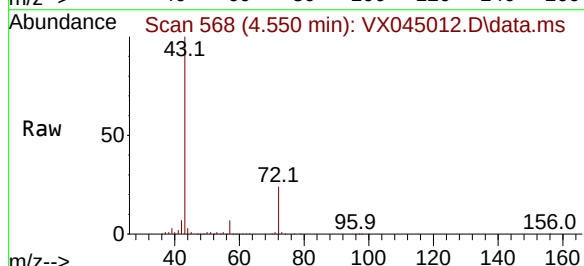
Tgt Ion: 43 Resp: 735492

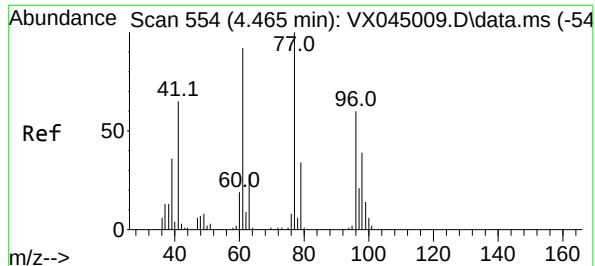
Ion Ratio Lower Upper

43 100

57 7.7 6.2 9.2

72 25.0 20.2 30.2





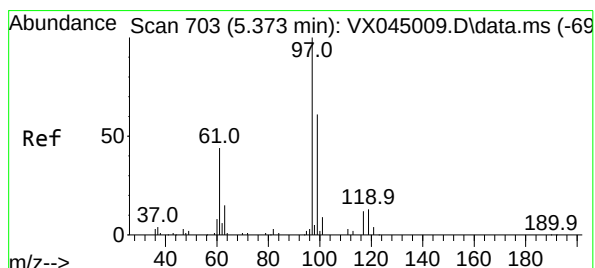
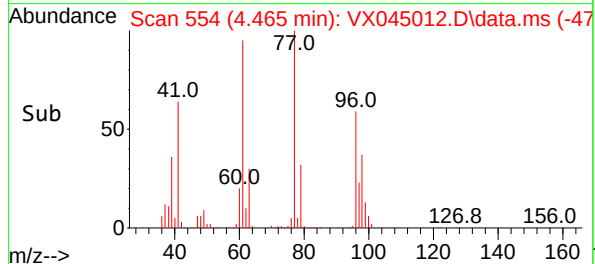
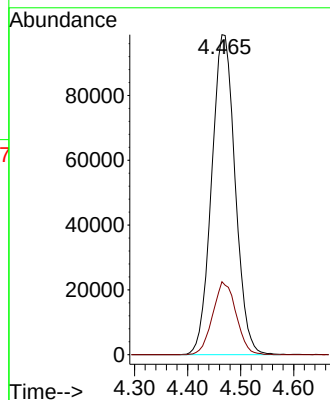
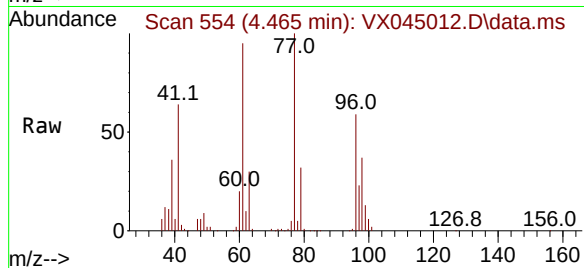
#31
2,2-Dichloropropane
Concen: 160.447 ug/l
RT: 4.465 min Scan# 554
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Tgt Ion: 77 Resp: 304225
Ion Ratio Lower Upper
77 100
97 22.7 18.0 27.0

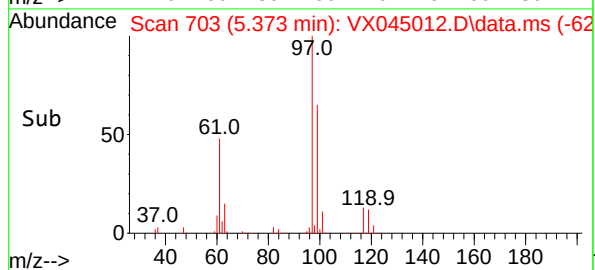
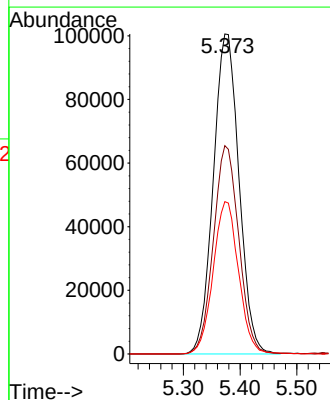
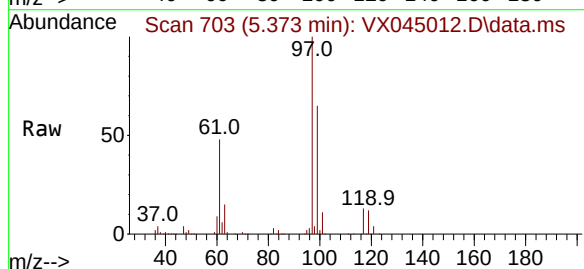
Manual Integrations
APPROVED

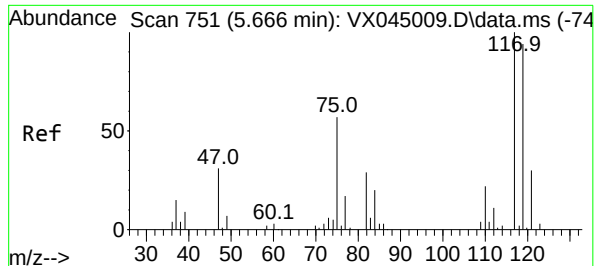
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#32
1,1,1-Trichloroethane
Concen: 155.824 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

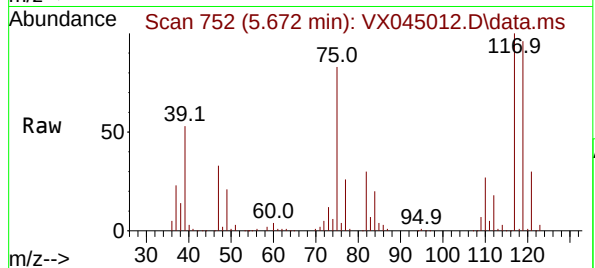
Tgt Ion: 97 Resp: 316595
Ion Ratio Lower Upper
97 100
99 64.3 52.2 78.2
61 47.2 38.5 57.7





#33
Carbon Tetrachloride
Concen: 154.492 ug/l
RT: 5.672 min Scan# 751
Delta R.T. 0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

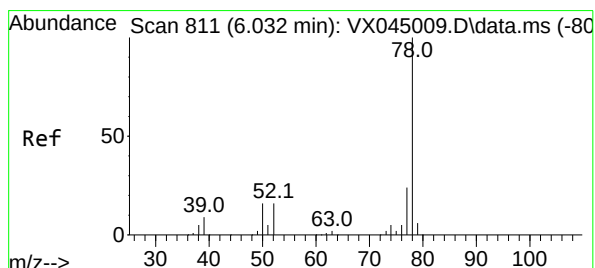
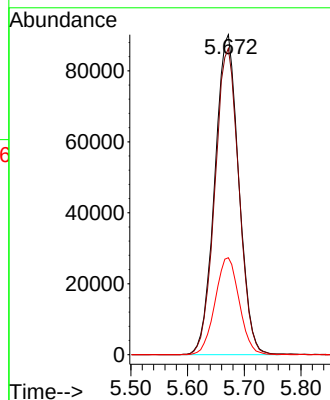
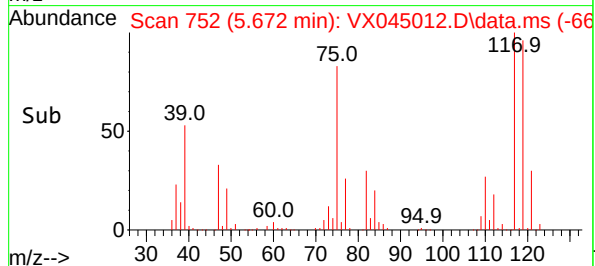
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC150



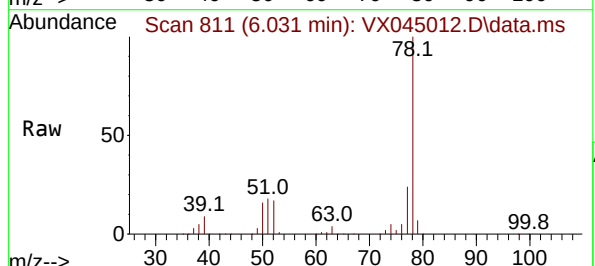
Tgt Ion: 117 Resp: 26490
Ion Ratio Lower Upper
117 100
119 95.7 75.1 112.7
121 30.3 23.9 35.9

Manual Integrations
APPROVED

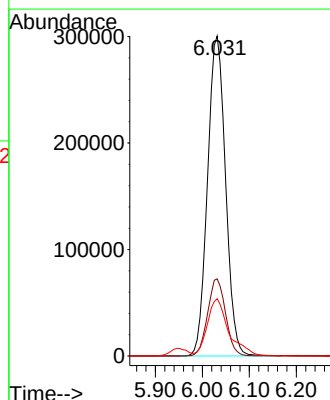
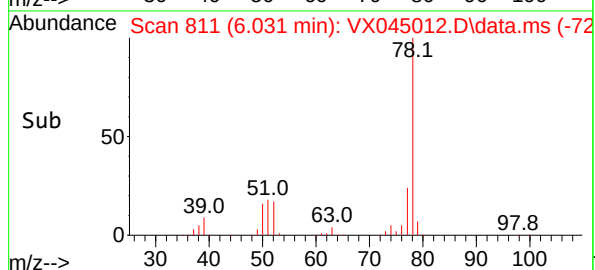
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

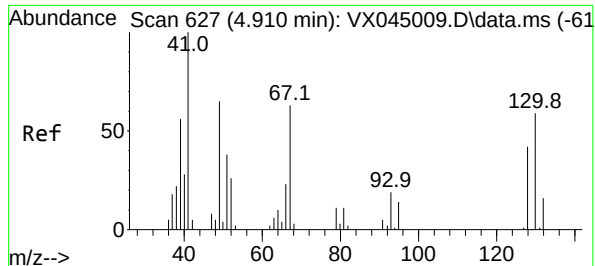


#34
Benzene
Concen: 152.163 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29



Tgt Ion: 78 Resp: 800159
Ion Ratio Lower Upper
78 100
77 24.1 19.6 29.4
51 17.8 13.8 20.6





#35

Methacrylonitrile

Concen: 157.037 ug/l

RT: 4.916 min Scan# 61

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 41 Resp: 16276

Ion Ratio Lower Upper

41 100

39 53.3 27.8 83.4

67 66.4 31.5 94.5

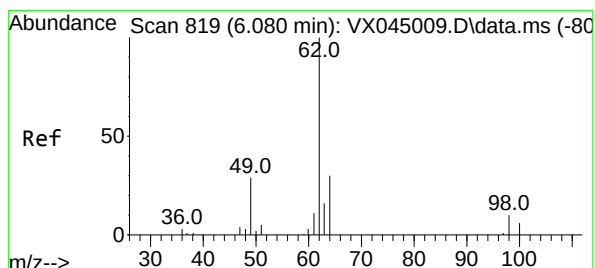
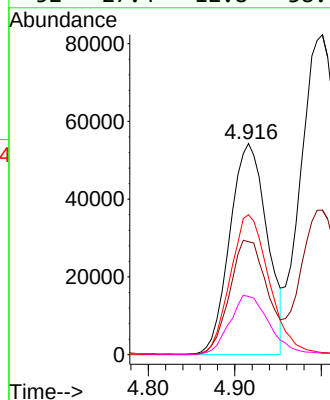
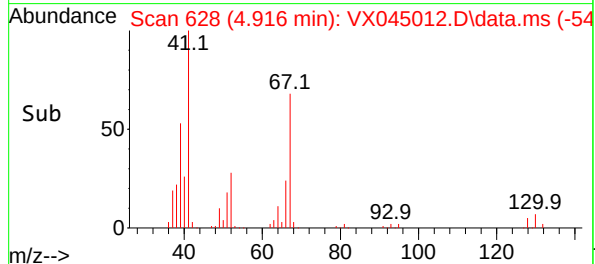
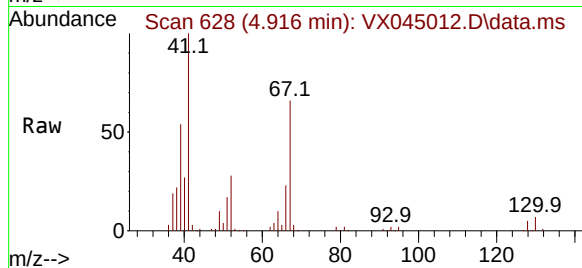
52 27.4 12.8 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#36

1,2-Dichloroethane

Concen: 153.695 ug/l

RT: 6.080 min Scan# 819

Delta R.T. -0.000 min

Lab File: VX045012.D

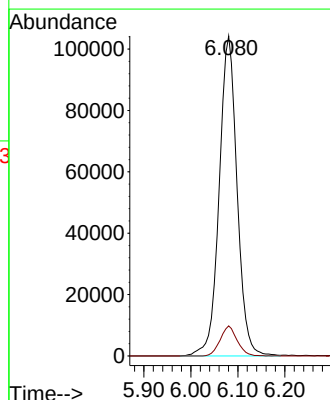
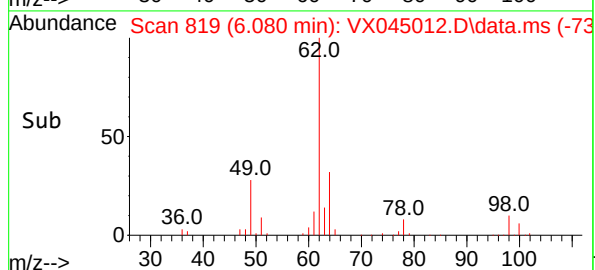
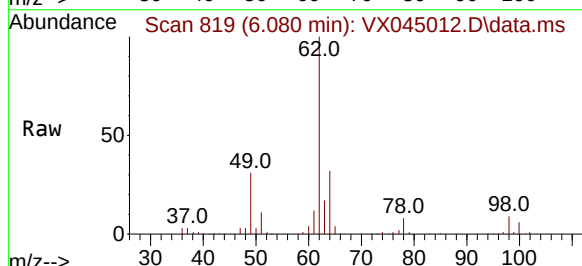
Acq: 21 Feb 2025 11:29

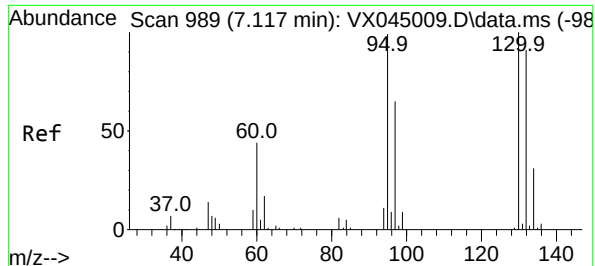
Tgt Ion: 62 Resp: 276707

Ion Ratio Lower Upper

62 100

98 8.9 7.9 11.9





#37

Trichloroethene

Concen: 153.878 ug/l

RT: 7.117 min Scan# 989

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion:130 Resp: 18930

Ion Ratio Lower Upper

130 100

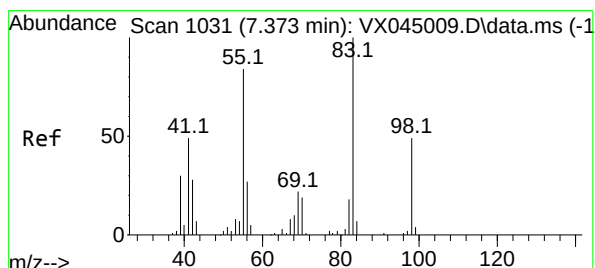
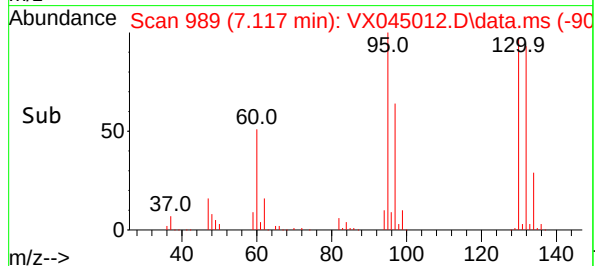
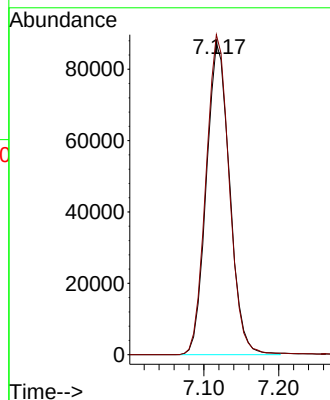
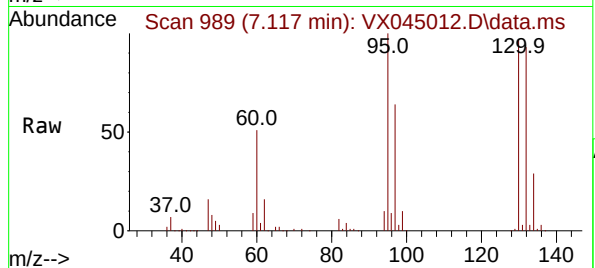
95 102.6 79.0 118.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#38

Methylcyclohexane

Concen: 155.851 ug/l

RT: 7.373 min Scan# 1031

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

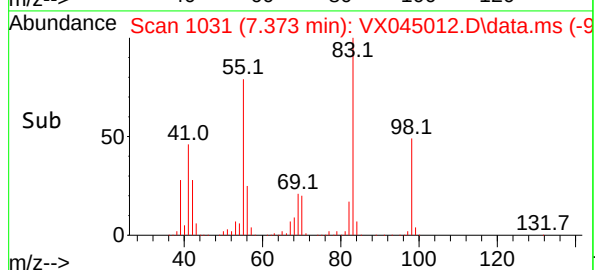
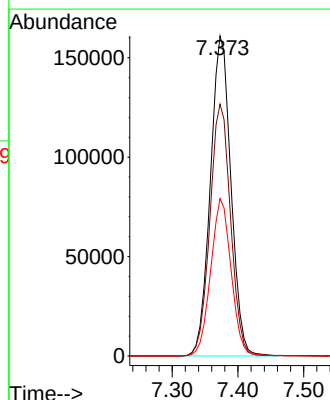
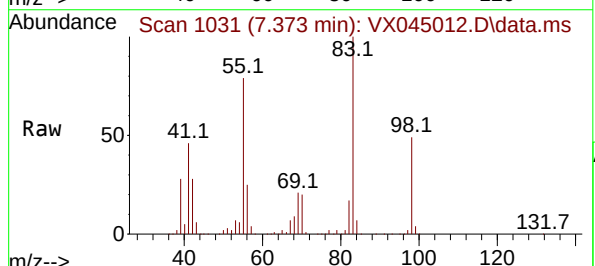
Tgt Ion: 83 Resp: 350907

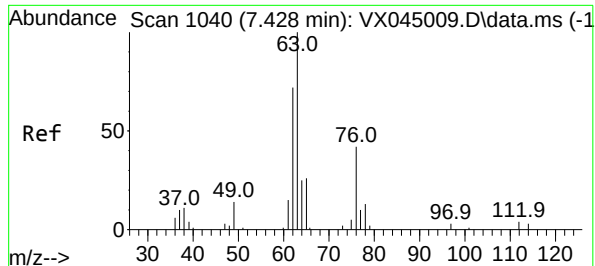
Ion Ratio Lower Upper

83 100

55 79.0 40.6 122.0

98 48.7 24.9 74.6





#39

1,2-Dichloropropane

Concen: 154.621 ug/l

RT: 7.421 min Scan# 1039

Delta R.T. -0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Tgt Ion: 63 Resp: 202140

Ion Ratio Lower Upper

63 100

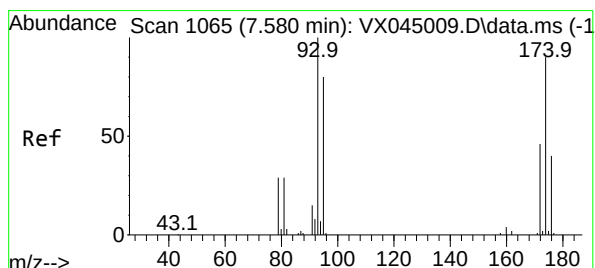
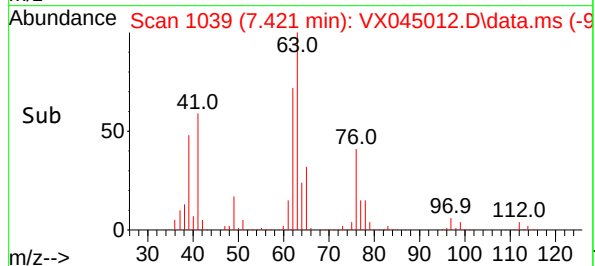
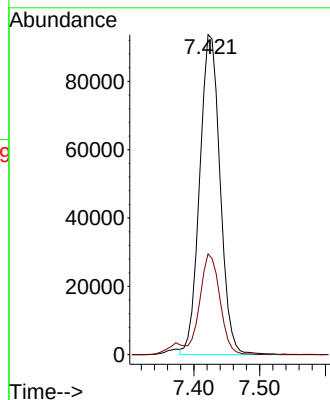
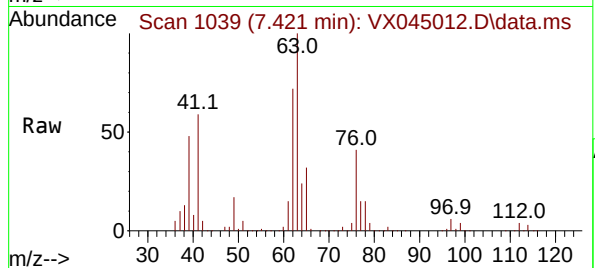
65 31.6 24.3 36.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#40

Dibromomethane

Concen: 153.109 ug/l

RT: 7.574 min Scan# 1064

Delta R.T. -0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

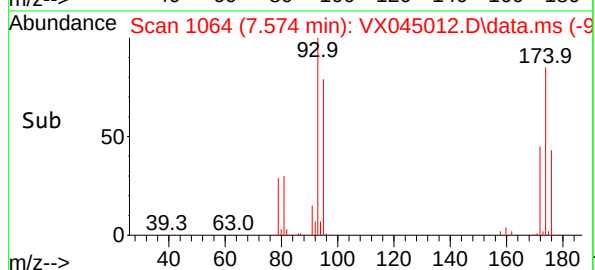
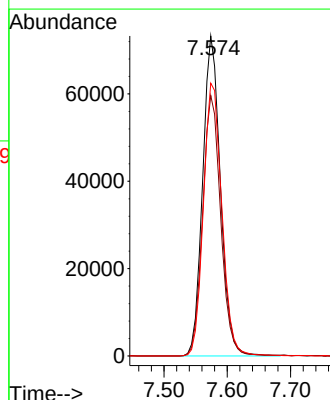
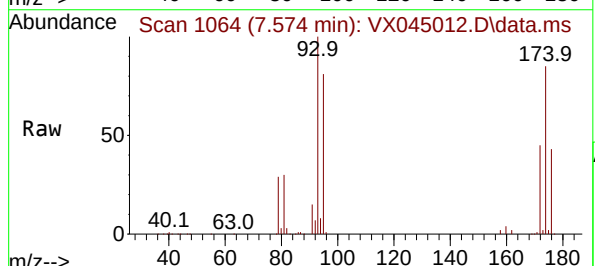
Tgt Ion: 93 Resp: 143641

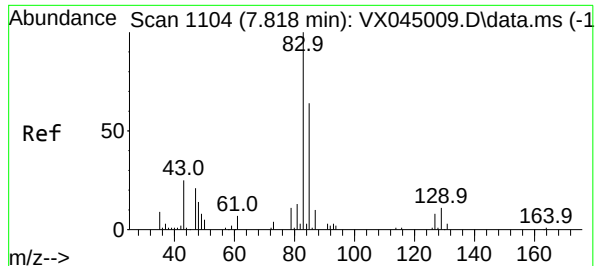
Ion Ratio Lower Upper

93 100

95 82.5 0.0 162.6

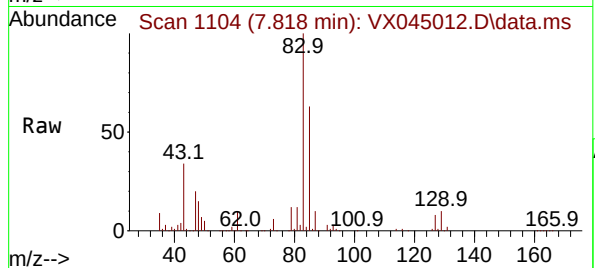
174 88.4 0.0 178.8





#41
Bromodichloromethane
Concen: 156.122 ug/l
RT: 7.818 min Scan# 1104
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

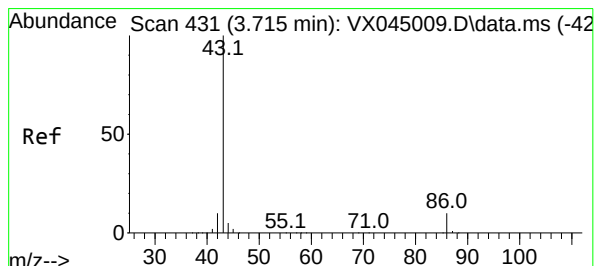
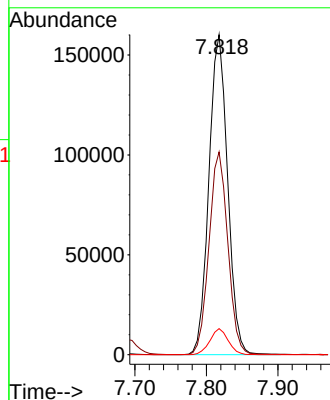
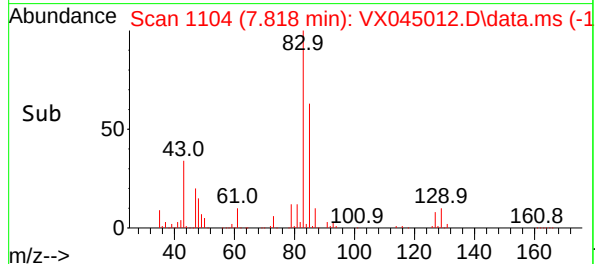
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150



Tgt Ion: 83 Resp: 291108
Ion Ratio Lower Upper
83 100
85 63.3 51.0 76.6
127 8.2 6.1 9.1

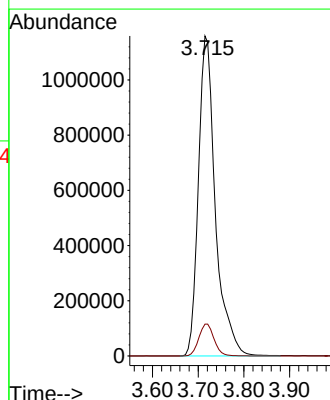
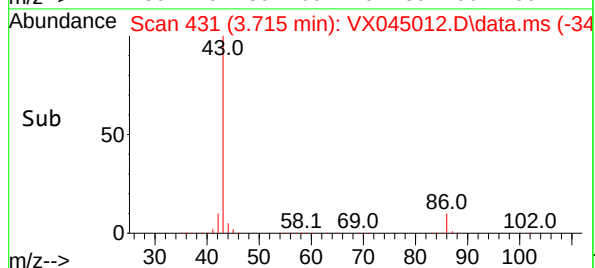
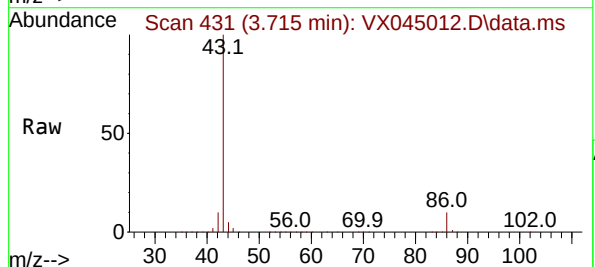
Manual Integrations
APPROVED

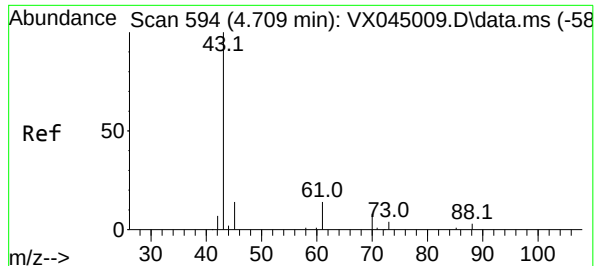
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#42
Vinyl Acetate
Concen: 795.020 ug/l
RT: 3.715 min Scan# 431
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion: 43 Resp: 2988086
Ion Ratio Lower Upper
43 100
86 9.0 7.0 10.4





#43

Ethyl Acetate

Concen: 161.195 ug/l

RT: 4.709 min Scan# 594

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 43 Resp: 29278

Ion Ratio Lower Upper

43 100

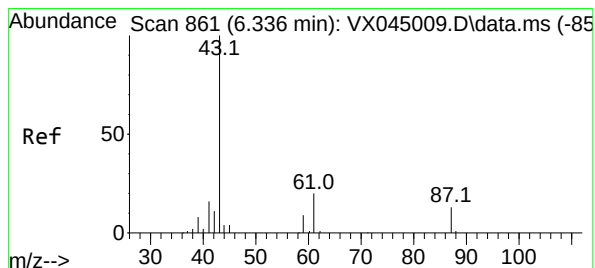
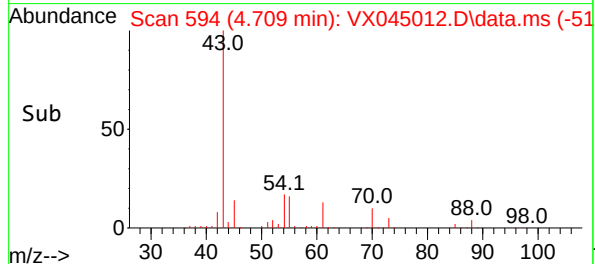
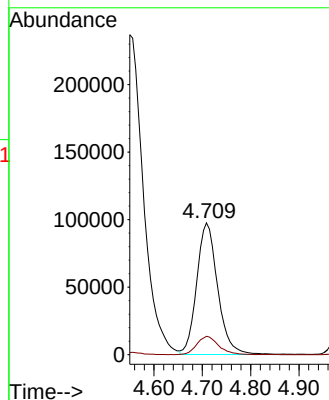
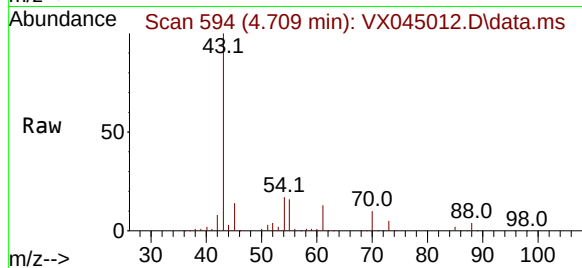
45 14.6 12.7 19.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#44

Isopropyl Acetate

Concen: 163.920 ug/l

RT: 6.336 min Scan# 861

Delta R.T. -0.000 min

Lab File: VX045012.D

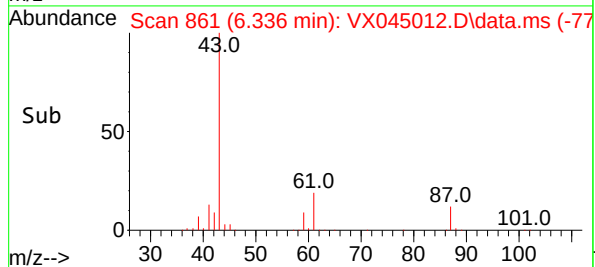
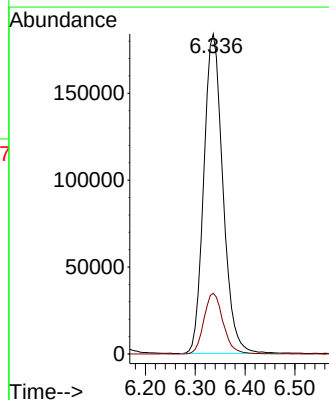
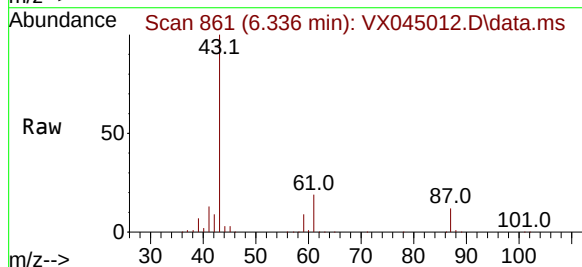
Acq: 21 Feb 2025 11:29

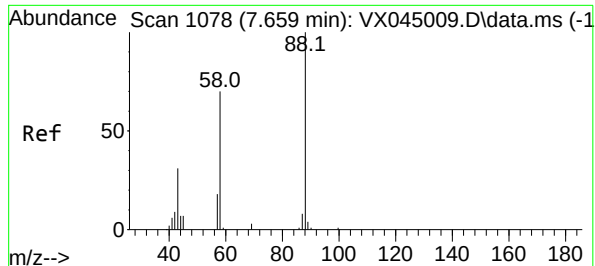
Tgt Ion: 43 Resp: 490033

Ion Ratio Lower Upper

43 100

61 19.1 15.5 23.3





#45

1,4-Dioxane

Concen: 2937.775 ug/l

RT: 7.665 min Scan# 1078

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

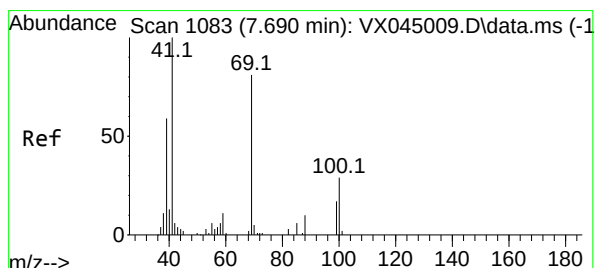
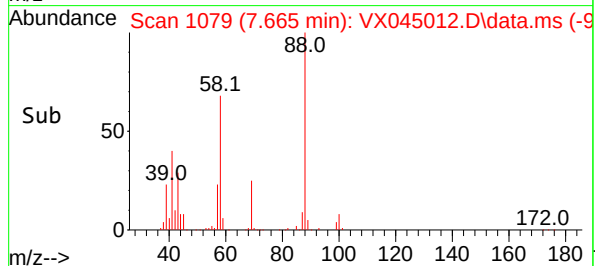
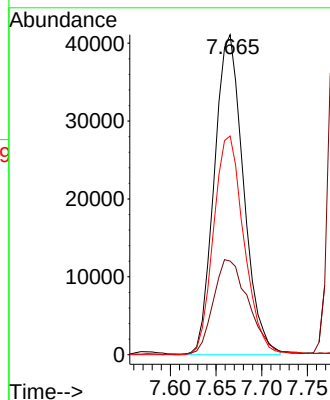
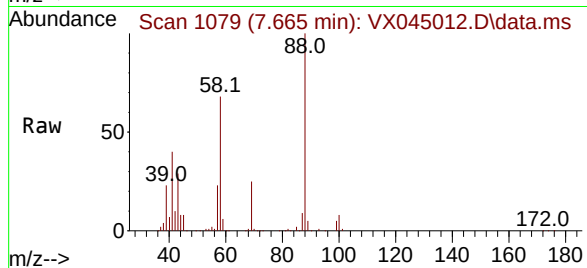
VSTDIC150

Tgt Ion:	88	Resp:	9129
Ion	Ratio	Lower	Upper
88	100		
43	35.3	29.6	44.4
58	71.1	56.2	84.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#46

Methyl methacrylate

Concen: 164.798 ug/l

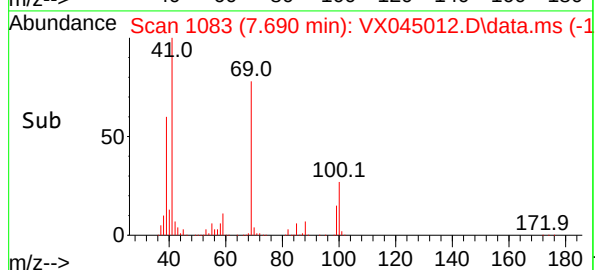
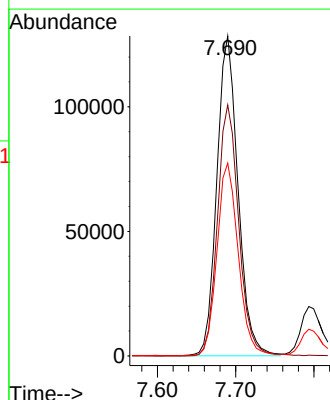
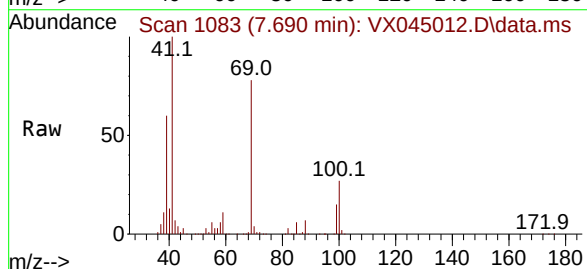
RT: 7.690 min Scan# 1083

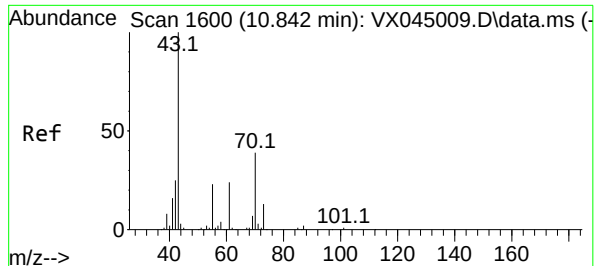
Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Tgt Ion:	41	Resp:	241575
Ion	Ratio	Lower	Upper
41	100		
69	78.5	40.7	122.1
39	60.2	29.5	88.5





#47

n-amy1 Acetate

Concen: 168.943 ug/l

RT: 10.842 min Scan# 1600

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 43 Resp: 43826

Ion Ratio Lower Upper

43 100

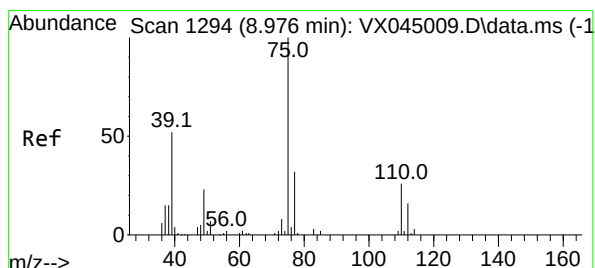
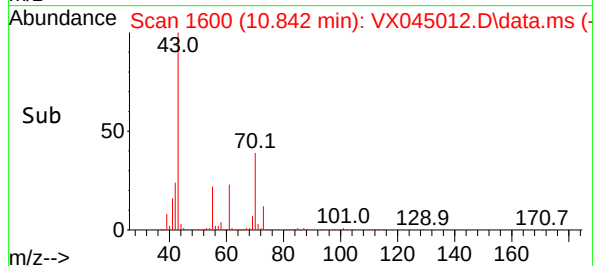
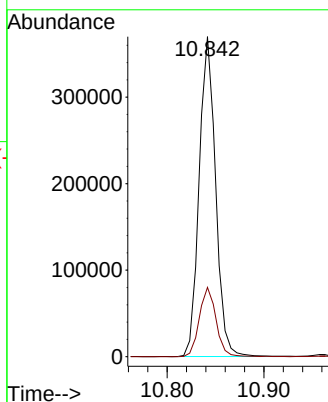
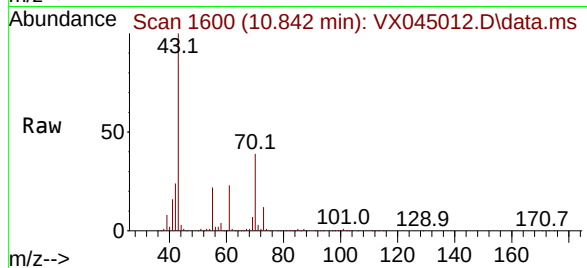
55 22.0 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#48

t-1,3-Dichloropropene

Concen: 169.001 ug/l

RT: 8.976 min Scan# 1294

Delta R.T. -0.000 min

Lab File: VX045012.D

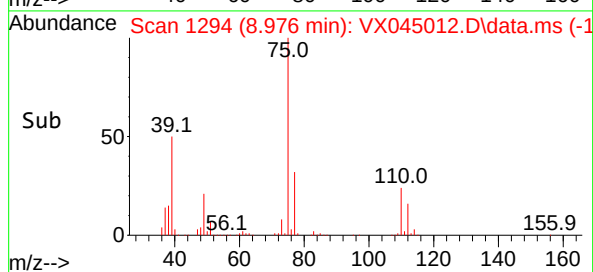
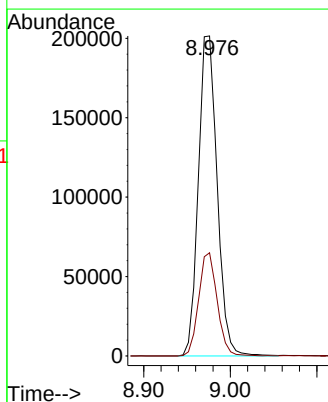
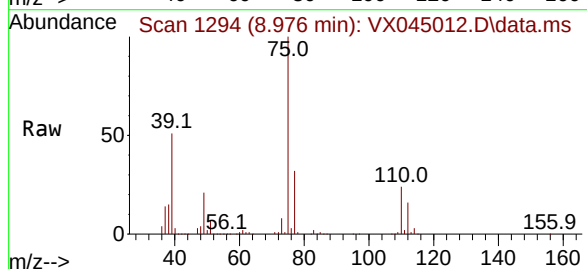
Acq: 21 Feb 2025 11:29

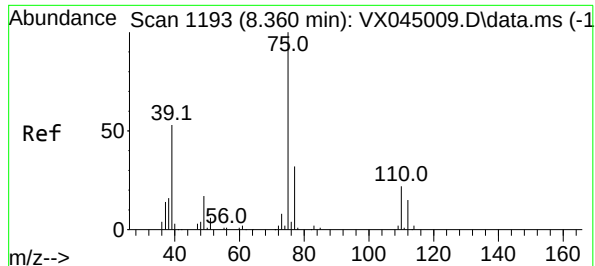
Tgt Ion: 75 Resp: 303740

Ion Ratio Lower Upper

75 100

77 32.3 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 162.750 ug/l

RT: 8.360 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 75 Resp: 331118

Ion Ratio Lower Upper

75 100

77 31.3 25.9 38.9

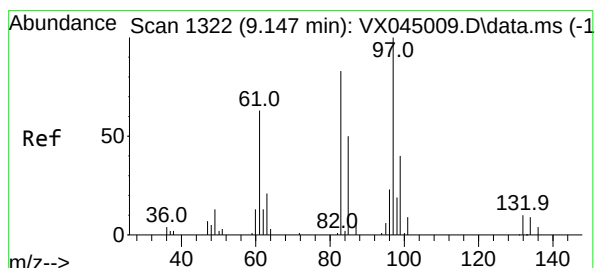
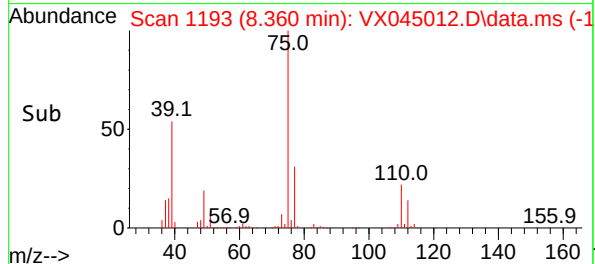
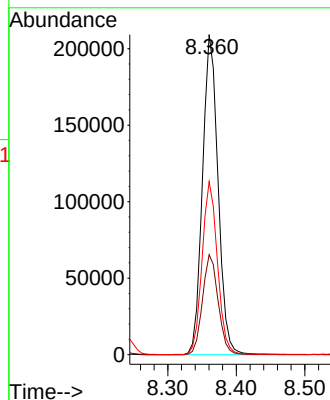
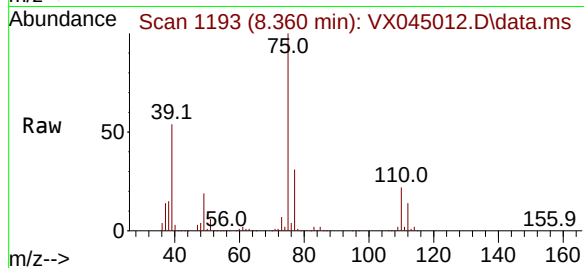
39 54.0 42.3 63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#50

1,1,2-Trichloroethane

Concen: 149.917 ug/l

RT: 9.147 min Scan# 1322

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Tgt Ion: 97 Resp: 183455

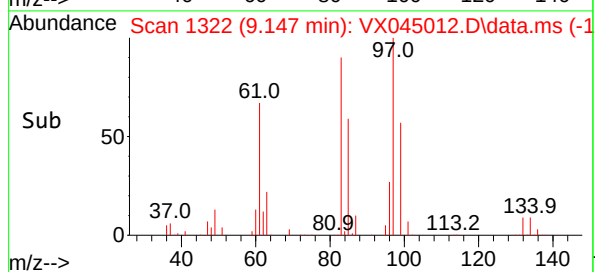
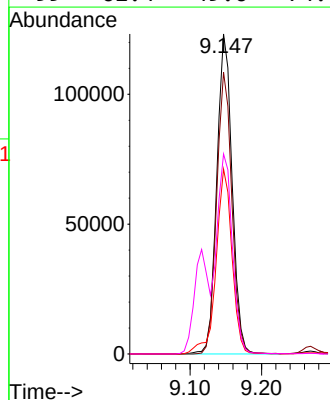
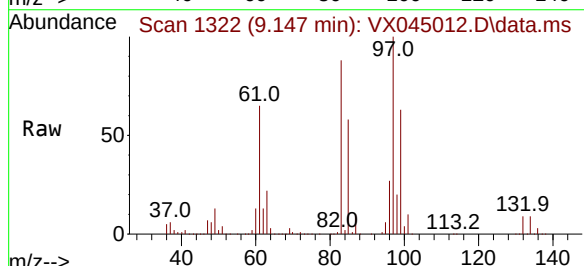
Ion Ratio Lower Upper

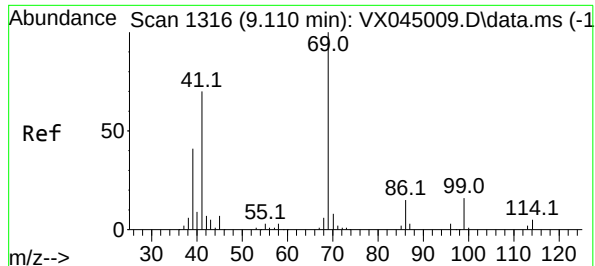
97 100

83 88.1 66.0 99.0

85 57.8 42.5 63.7

99 62.4 49.6 74.4





#51

Ethyl methacrylate

Concen: 167.857 ug/l

RT: 9.116 min Scan# 1316

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 69 Resp: 323054

Ion Ratio Lower Upper

69 100

41 70.2 35.1 105.3

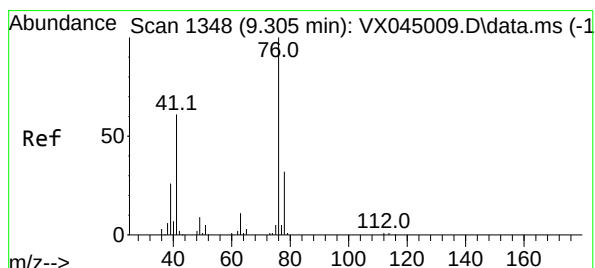
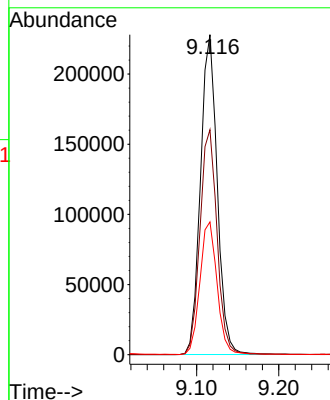
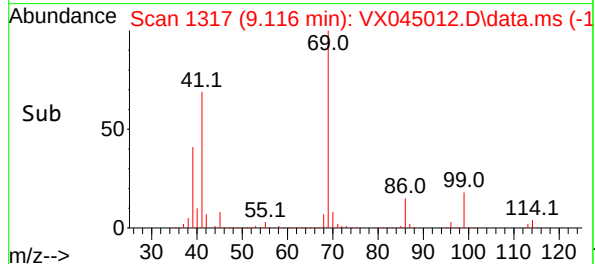
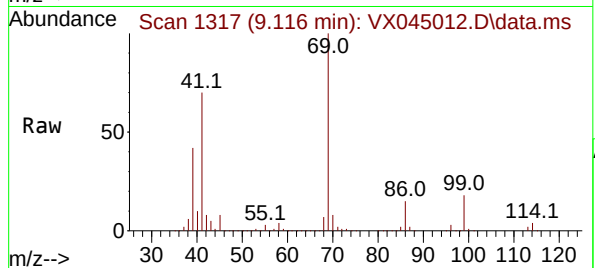
39 41.5 20.5 61.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#52

1,3-Dichloropropane

Concen: 152.762 ug/l

RT: 9.305 min Scan# 1348

Delta R.T. -0.000 min

Lab File: VX045012.D

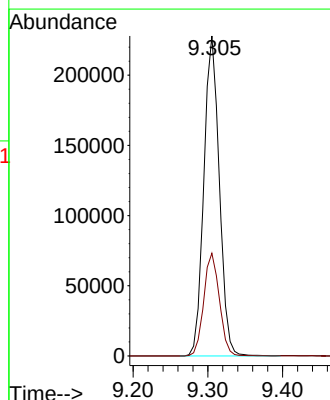
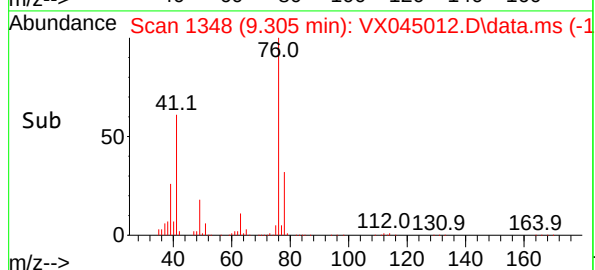
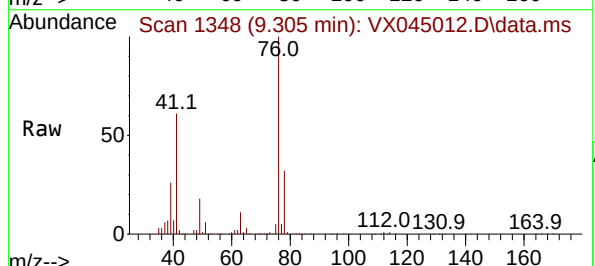
Acq: 21 Feb 2025 11:29

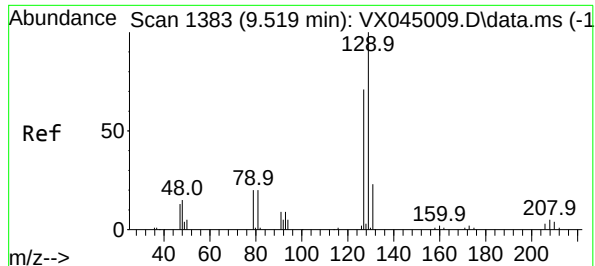
Tgt Ion: 76 Resp: 327551

Ion Ratio Lower Upper

76 100

78 32.4 0.0 63.6





#53

Dibromochloromethane

Concen: 157.620 ug/l

RT: 9.519 min Scan# 1383

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Tgt Ion:129 Resp: 213320

Ion Ratio Lower Upper

129 100

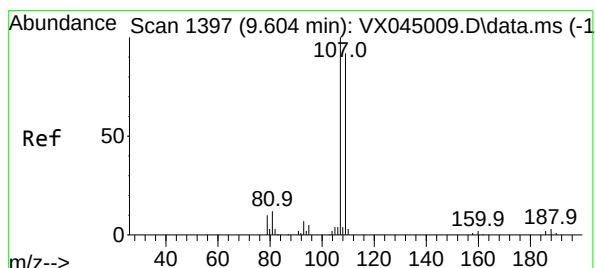
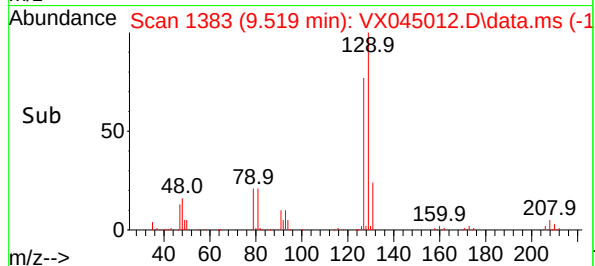
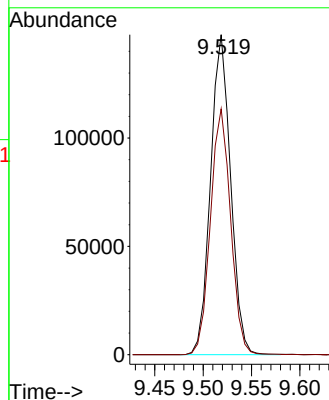
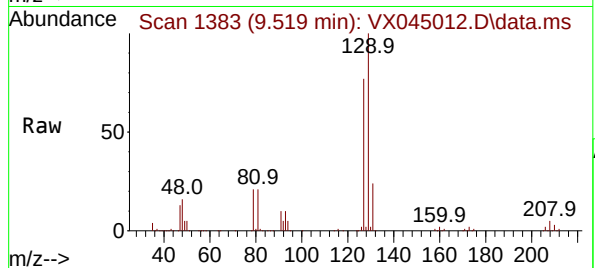
127 77.2 37.3 111.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#54

1,2-Dibromoethane

Concen: 156.632 ug/l

RT: 9.604 min Scan# 1397

Delta R.T. -0.000 min

Lab File: VX045012.D

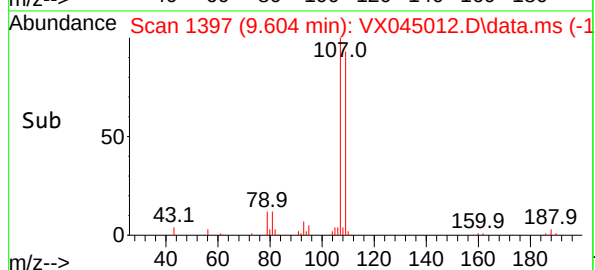
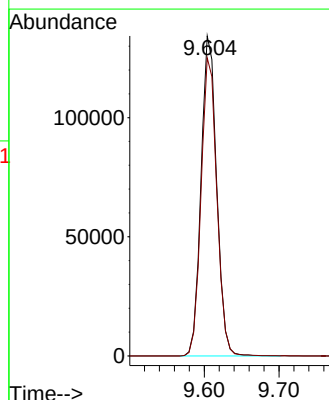
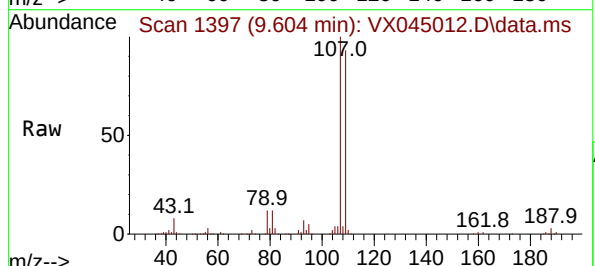
Acq: 21 Feb 2025 11:29

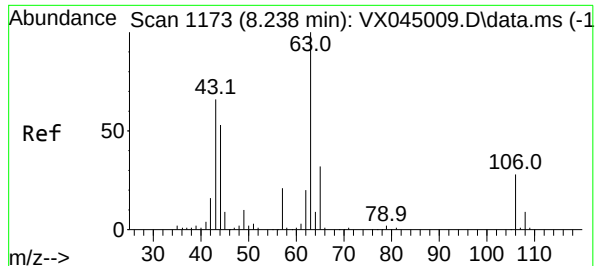
Tgt Ion:107 Resp: 194634

Ion Ratio Lower Upper

107 100

109 94.0 75.8 113.8





#55

2-Chloroethyl vinyl ether

Concen: 798.256 ug/l

RT: 8.238 min Scan# 1173

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 63 Resp: 788934

Ion Ratio Lower Upper

63 100

65 32.1 26.2 39.2

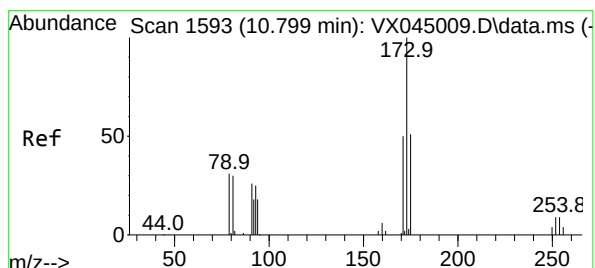
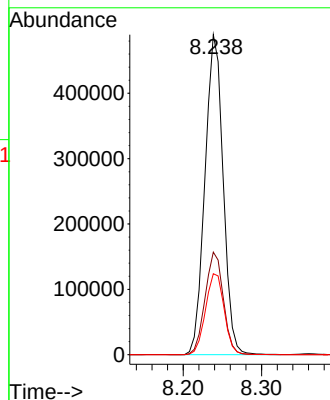
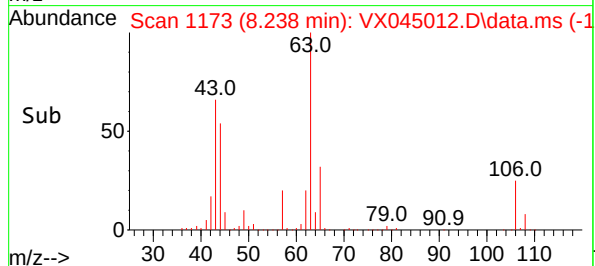
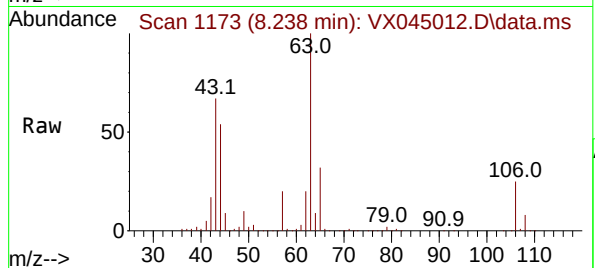
106 26.0 21.2 31.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#56

Bromoform

Concen: 165.340 ug/l

RT: 10.799 min Scan# 1593

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

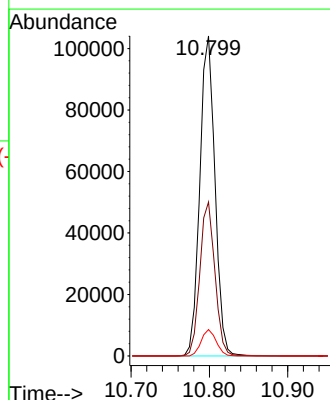
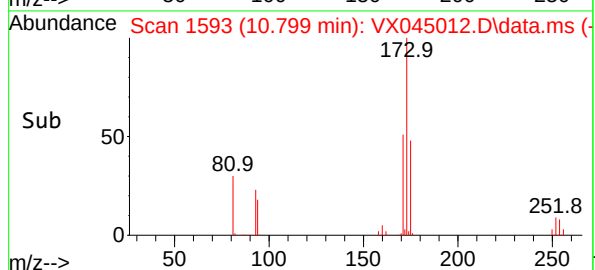
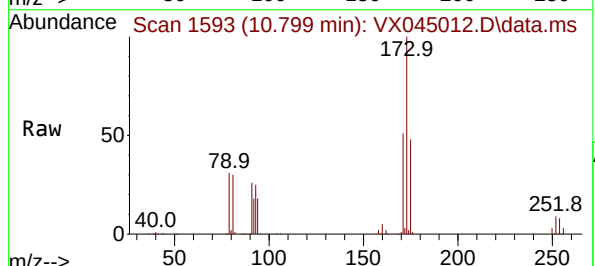
Tgt Ion:173 Resp: 140224

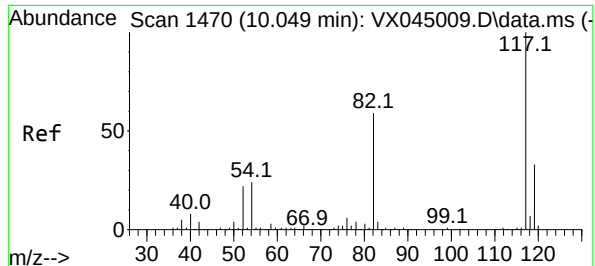
Ion Ratio Lower Upper

173 100

175 47.7 39.6 59.4

254 8.2 6.3 9.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.049 min Scan# 1470

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

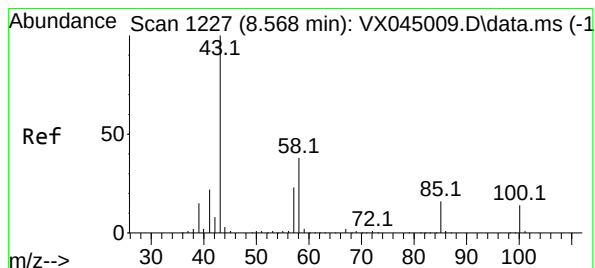
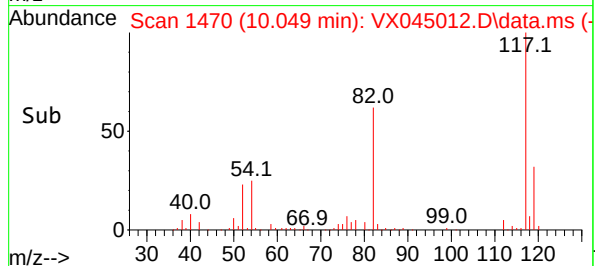
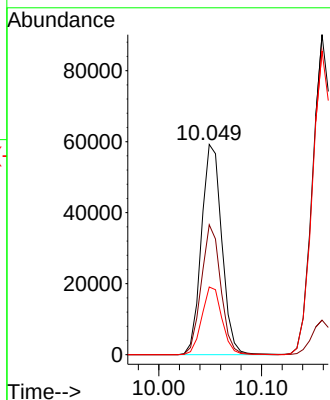
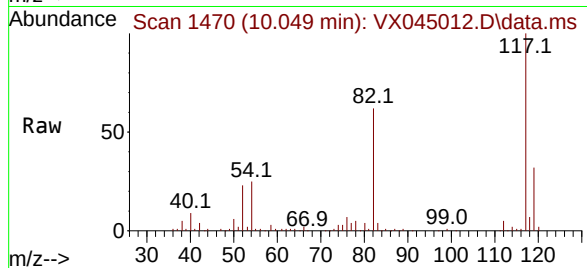
VSTDIC150

Tgt Ion:	117	Resp:	8170
Ion	Ratio	Lower	Upper
117	100		
82	59.0	45.8	68.8
119	31.7	25.5	38.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#58

4-Methyl-2-Pentanone

Concen: 770.025 ug/l

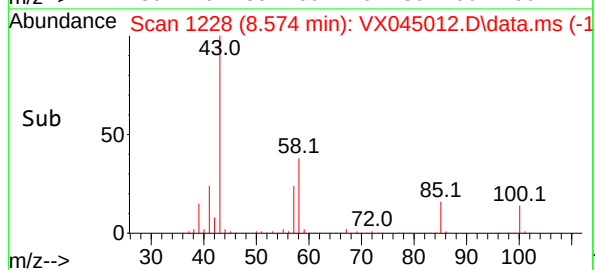
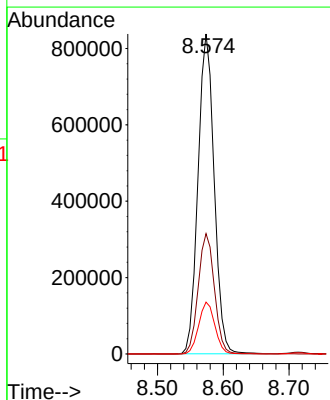
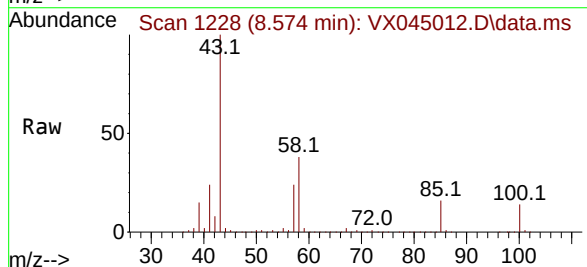
RT: 8.574 min Scan# 1228

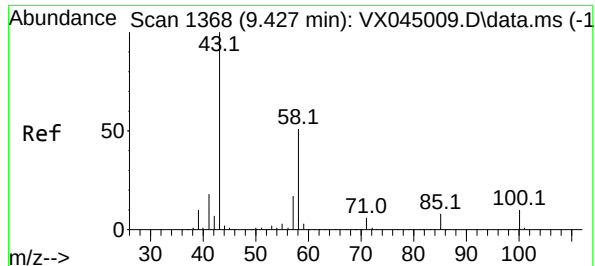
Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Tgt Ion:	43	Resp:	1431130
Ion	Ratio	Lower	Upper
43	100		
58	37.6	29.5	44.3
85	16.3	12.9	19.3





#59

2-Hexanone

Concen: 784.964 ug/l

RT: 9.433 min Scan# 1369

Delta R.T. 0.006 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Tgt Ion: 43 Resp: 105450

Ion Ratio Lower Upper

43

100

58

57

100

52.4

18.0

13.8

41.6

62.4

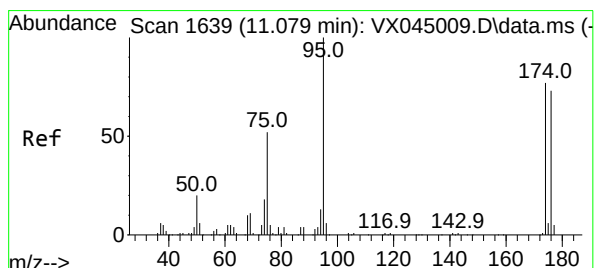
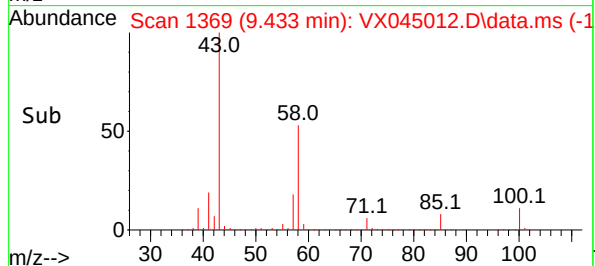
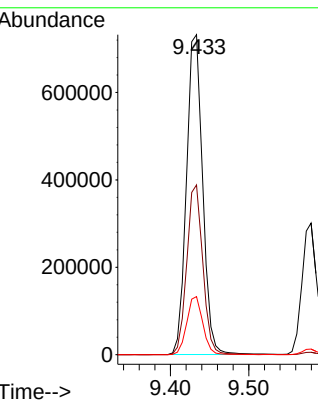
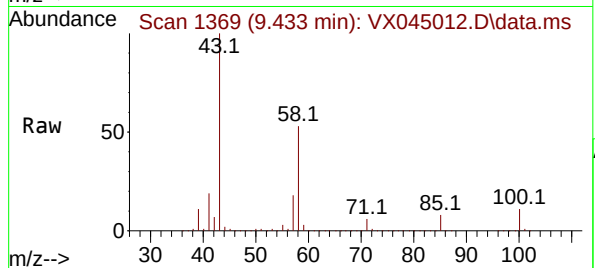
20.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#60

4-Bromofluorobenzene

Concen: 30.907 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Tgt Ion: 95 Resp: 47199

Ion Ratio Lower Upper

95

100

174

176

73.3

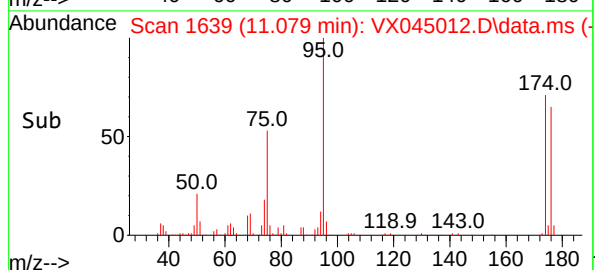
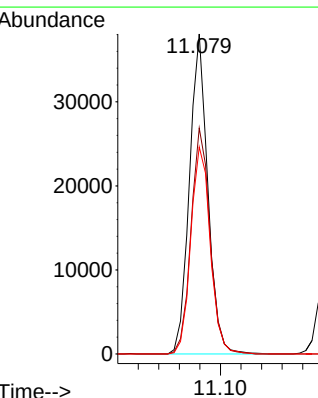
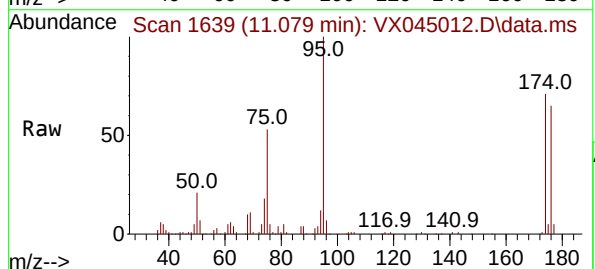
68.6

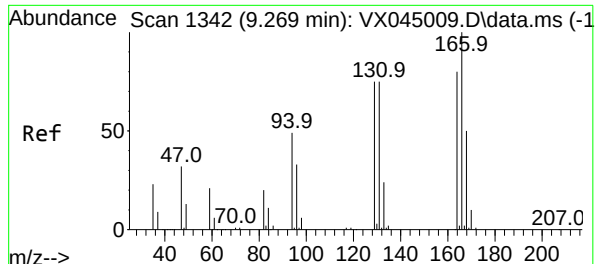
59.5

55.5

89.3

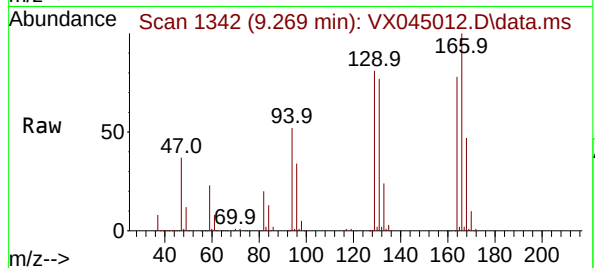
83.3





#61
Tetrachloroethene
Concen: 148.903 ug/l
RT: 9.269 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

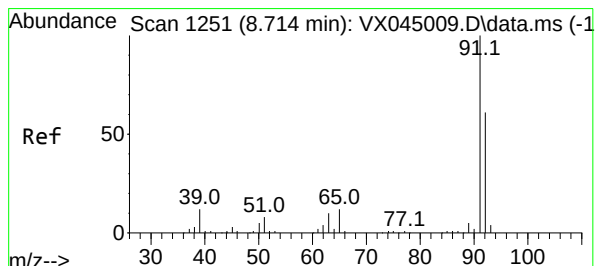
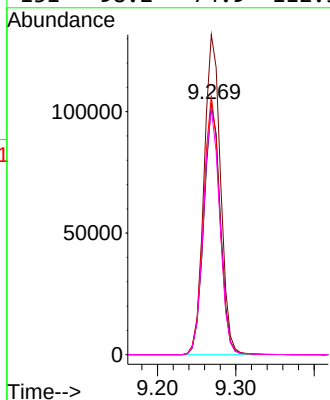
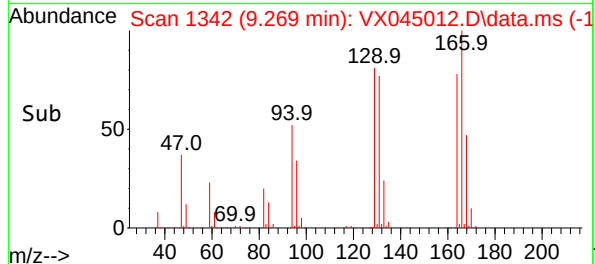
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150



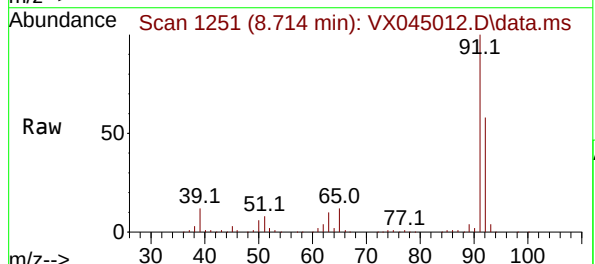
Tgt Ion:164 Resp: 149808
Ion Ratio Lower Upper
164 100
166 127.7 100.3 150.5
129 103.4 75.5 113.3
131 98.2 74.9 112.3

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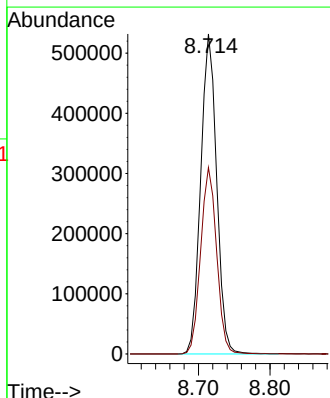
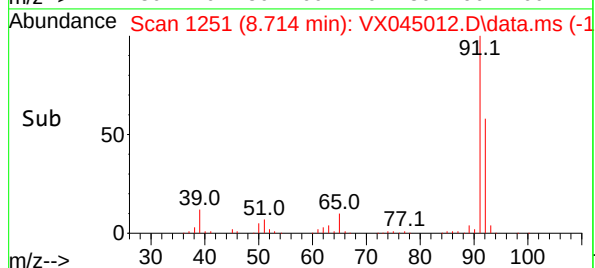
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

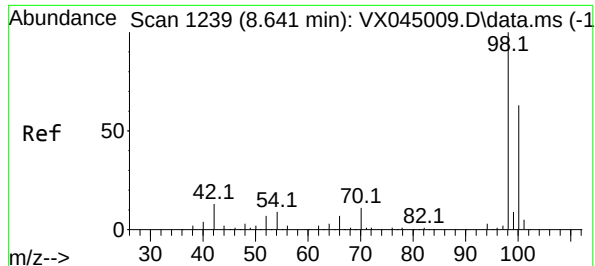


#62
Toluene
Concen: 152.359 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29



Tgt Ion: 91 Resp: 824606
Ion Ratio Lower Upper
91 100
92 58.3 46.9 70.3





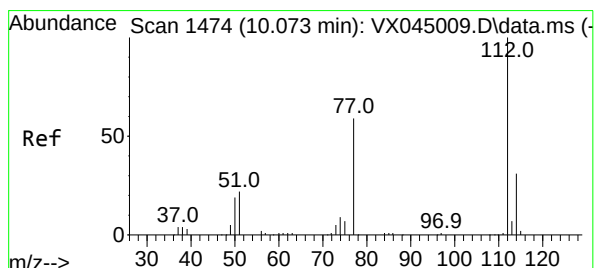
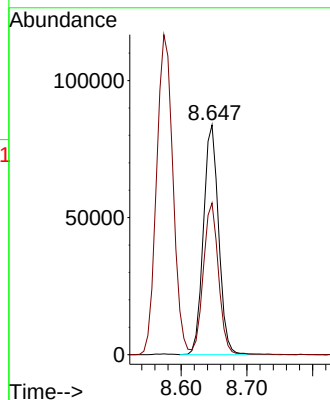
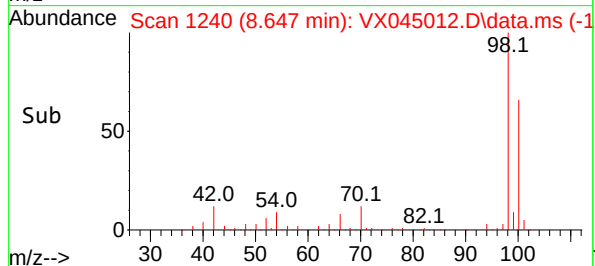
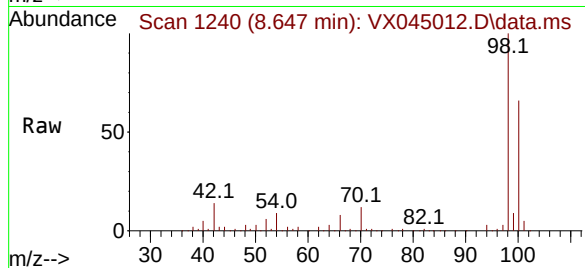
#63
Toluene-d8
Concen: 29.835 ug/l
RT: 8.647 min Scan# 1239
Delta R.T. 0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC150

Tgt Ion: 98 Resp: 134852
Ion Ratio Lower Upper
98 100
100 65.2 51.7 77.5

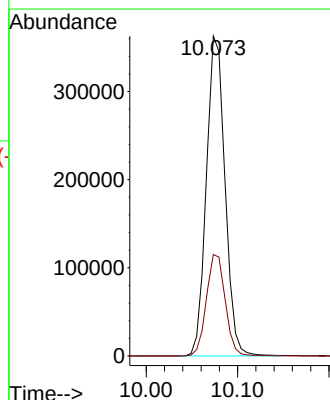
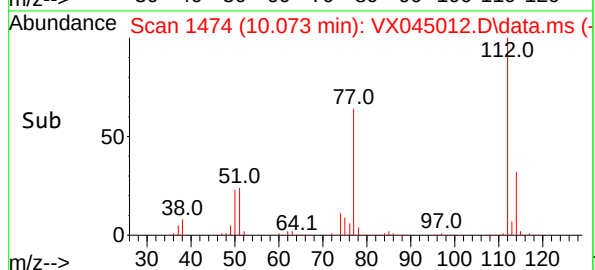
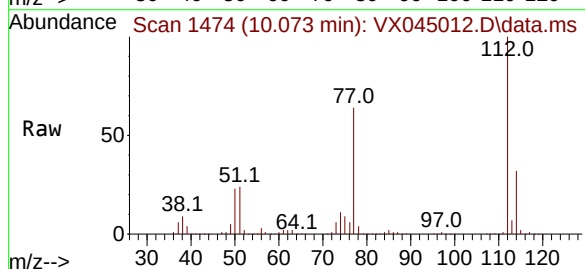
Manual Integrations
APPROVED

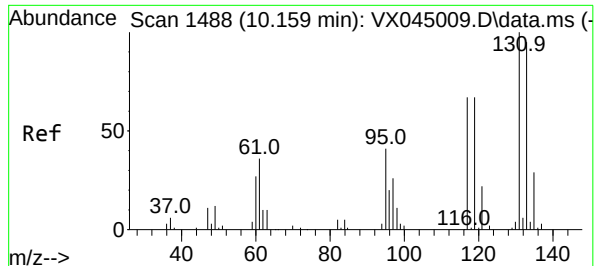
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#64
Chlorobenzene
Concen: 153.126 ug/l
RT: 10.073 min Scan# 1474
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion:112 Resp: 513552
Ion Ratio Lower Upper
112 100
114 31.7 24.7 37.1





#65

1,1,1,2-Tetrachloroethane

Concen: 158.260 ug/l

RT: 10.159 min Scan# 1488

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Tgt Ion:131 Resp: 175139

Ion Ratio Lower Upper

131 100

133 95.6 0.0 187.8

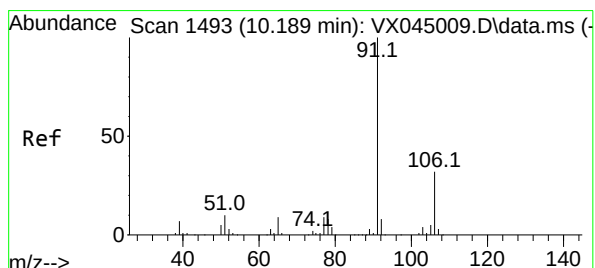
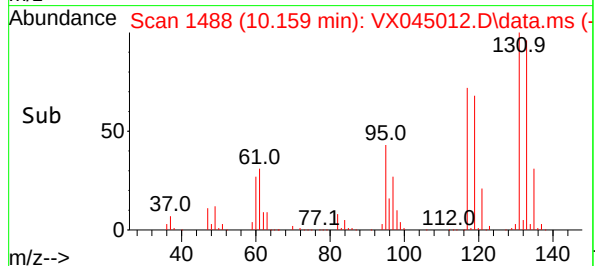
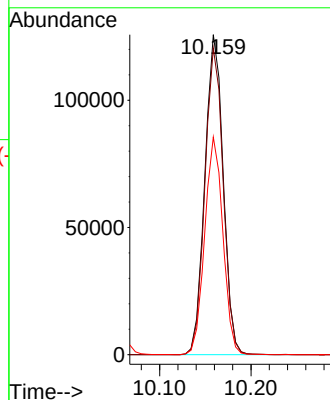
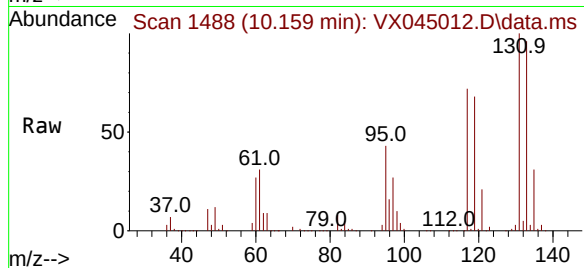
119 67.4 0.0 133.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#66

Ethyl Benzene

Concen: 157.604 ug/l

RT: 10.189 min Scan# 1493

Delta R.T. -0.000 min

Lab File: VX045012.D

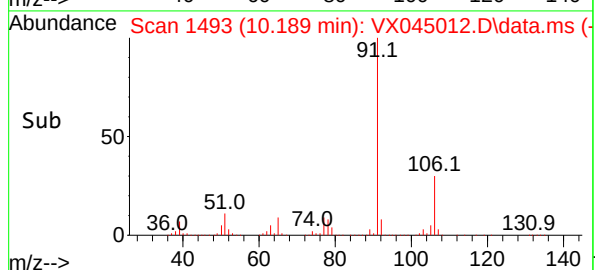
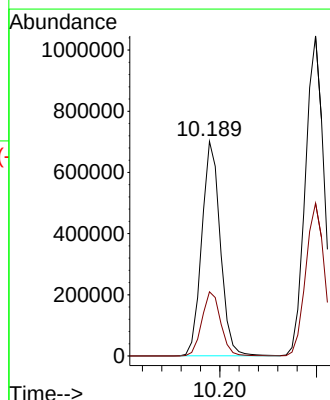
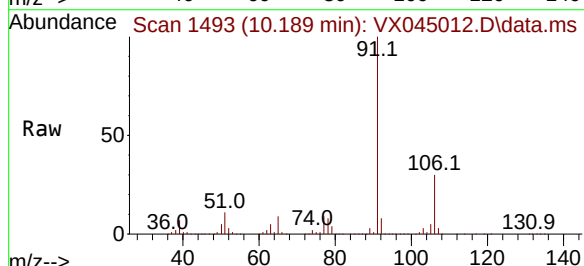
Acq: 21 Feb 2025 11:29

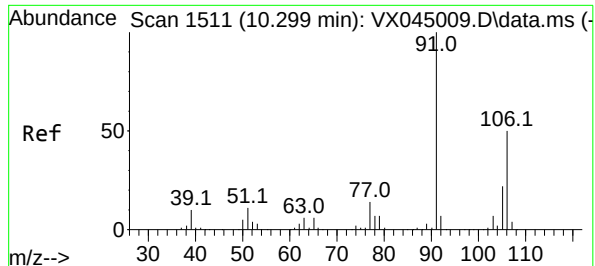
Tgt Ion: 91 Resp: 933862

Ion Ratio Lower Upper

91 100

106 29.9 25.4 38.2





#67

m/p-Xylenes

Concen: 307.573 ug/l

RT: 10.299 min Scan# 1511

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion:106 Resp: 679028

Ion Ratio Lower Upper

106 100

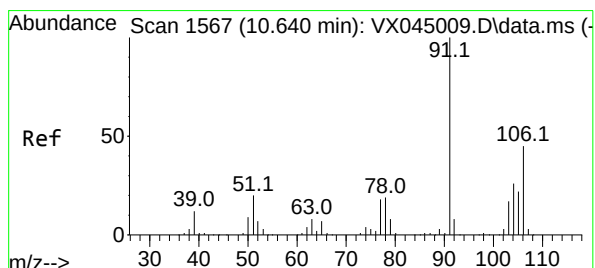
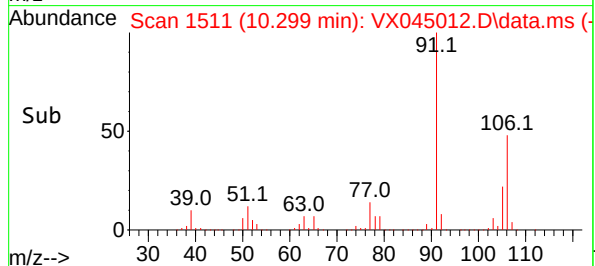
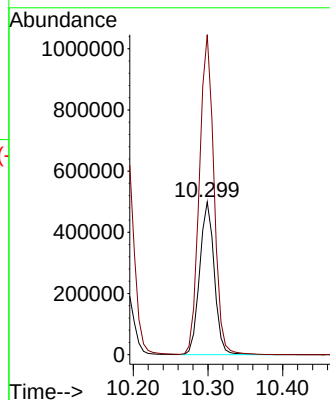
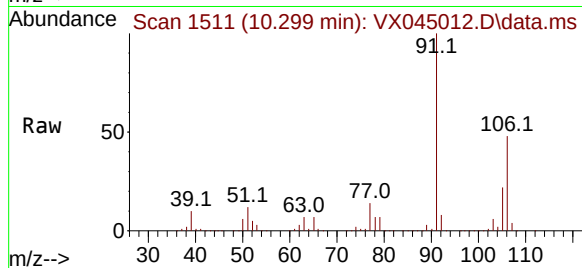
91 208.5 163.7 245.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#68

o-Xylene

Concen: 153.922 ug/l

RT: 10.640 min Scan# 1567

Delta R.T. -0.000 min

Lab File: VX045012.D

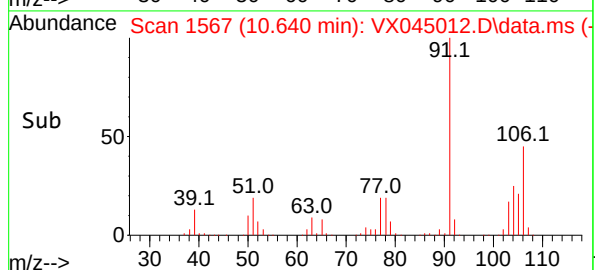
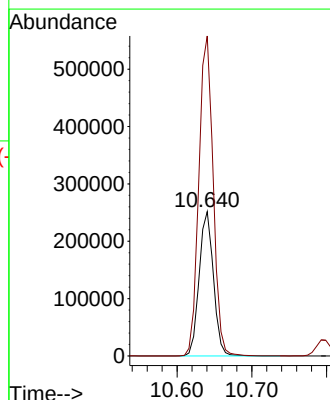
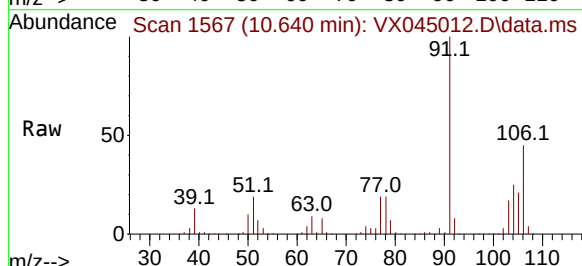
Acq: 21 Feb 2025 11:29

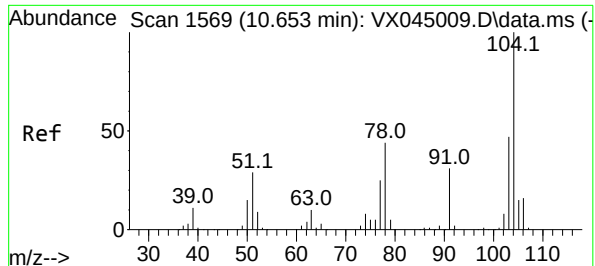
Tgt Ion:106 Resp: 333410

Ion Ratio Lower Upper

106 100

91 222.3 109.7 329.1





#69

Styrene

Concen: 156.470 ug/l

RT: 10.653 min Scan# 1569

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion:104 Resp: 566072

Ion Ratio Lower Upper

104 100

78 54.2 41.4 62.0

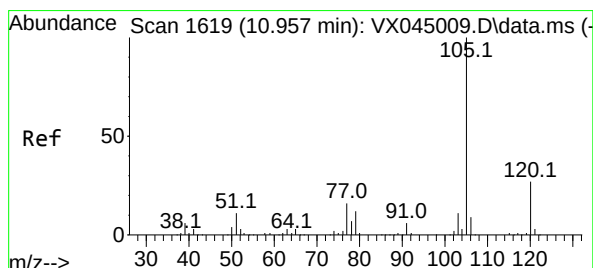
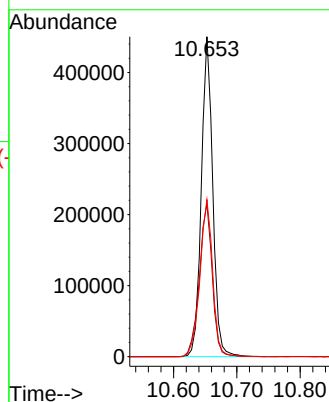
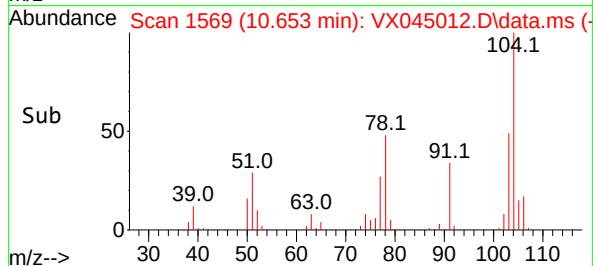
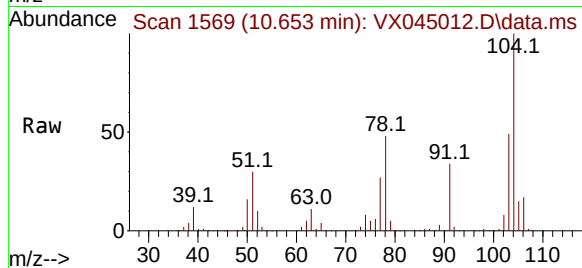
103 54.8 43.0 64.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#70

Isopropylbenzene

Concen: 155.350 ug/l

RT: 10.957 min Scan# 1619

Delta R.T. -0.000 min

Lab File: VX045012.D

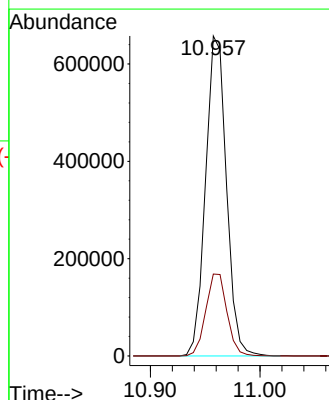
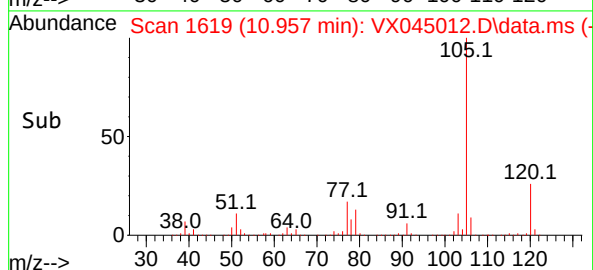
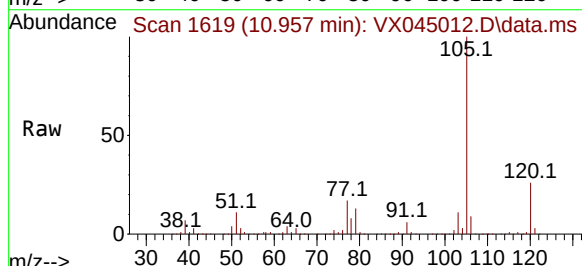
Acq: 21 Feb 2025 11:29

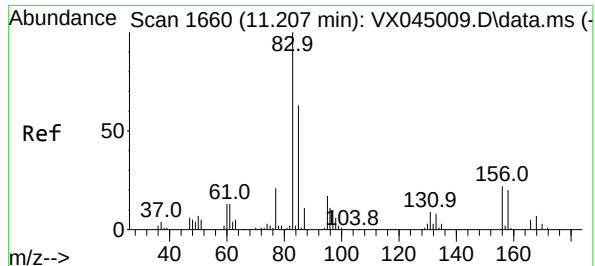
Tgt Ion:105 Resp: 868382

Ion Ratio Lower Upper

105 100

120 26.1 18.4 34.2





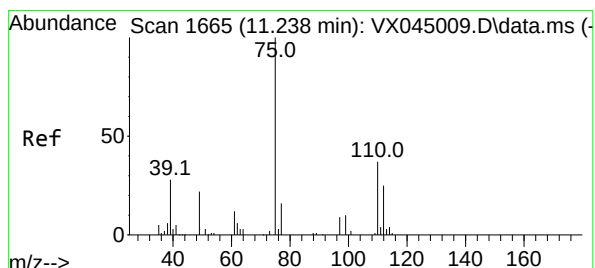
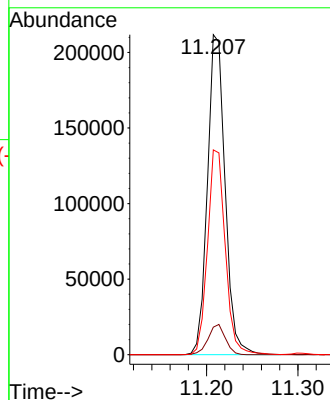
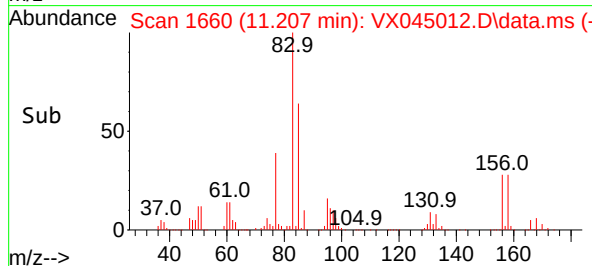
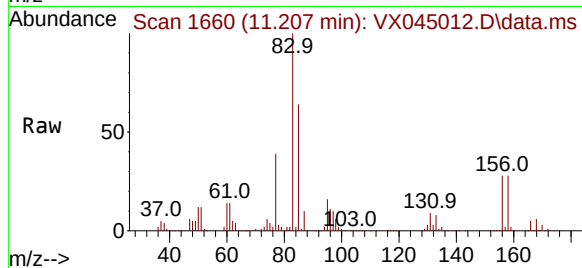
#71
1,1,2,2-Tetrachloroethane
Concen: 154.359 ug/l
RT: 11.207 min Scan# 1660
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC150

Tgt Ion: 83 Resp: 28373
Ion Ratio Lower Upper
83 100
131 9.2 4.8 14.3
85 64.2 32.3 96.8

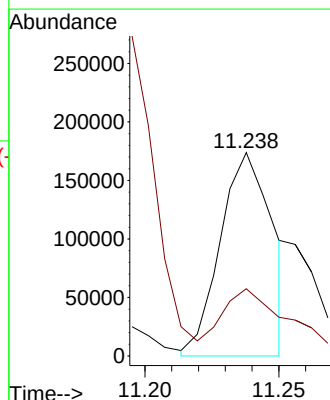
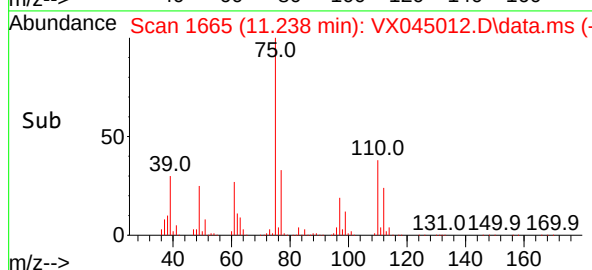
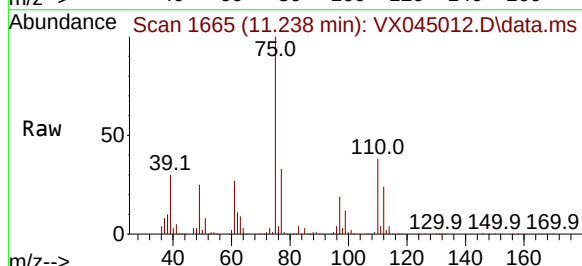
Manual Integrations
APPROVED

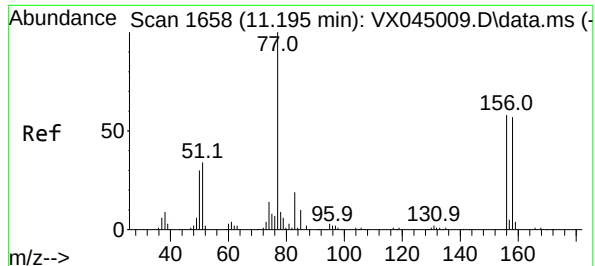
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#72
1,2,3-Trichloropropane
Concen: 155.182 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

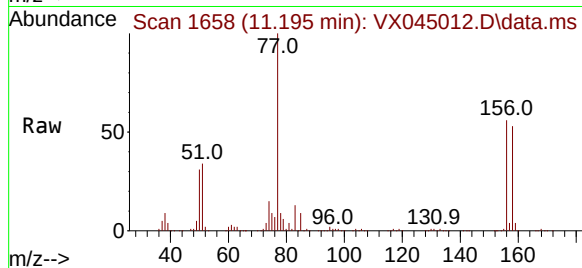
Tgt Ion: 75 Resp: 234613
Ion Ratio Lower Upper
75 100
77 43.4 0.0 84.0





#73
Bromobenzene
Concen: 154.147 ug/l
RT: 11.195 min Scan# 1658
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

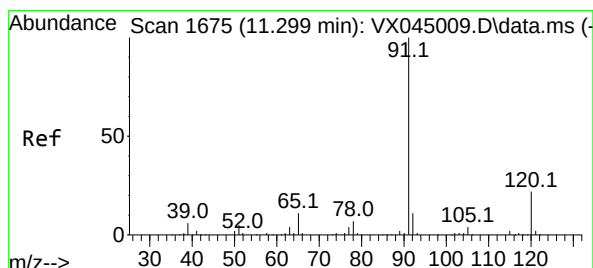
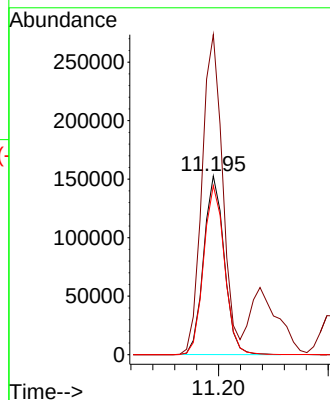
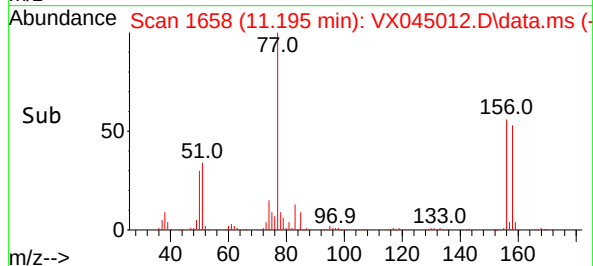
Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150



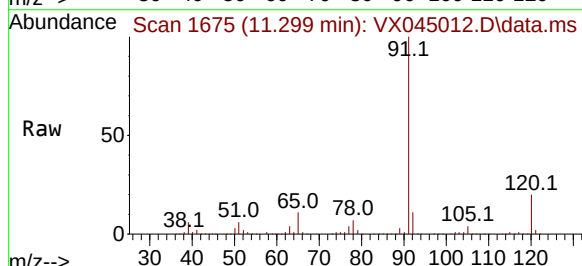
Tgt Ion:156 Resp: 198360
Ion Ratio Lower Upper
156 100
77 180.7 0.0 347.2
158 96.4 0.0 197.6

Manual Integrations
APPROVED

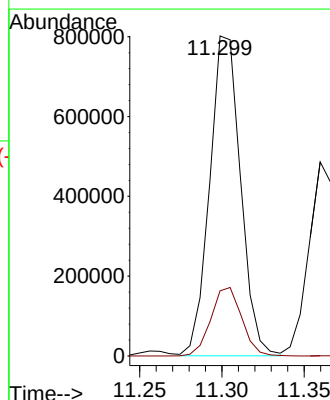
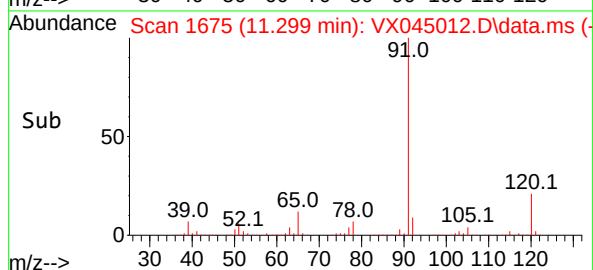
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

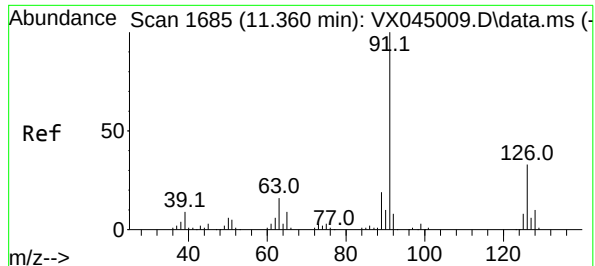


#74
n-propylbenzene
Concen: 157.793 ug/l
RT: 11.299 min Scan# 1675
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29



Tgt Ion: 91 Resp: 1049645
Ion Ratio Lower Upper
91 100
120 21.4 0.0 44.2





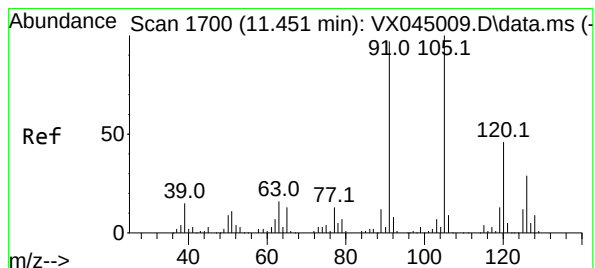
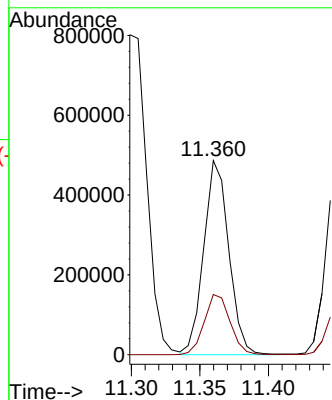
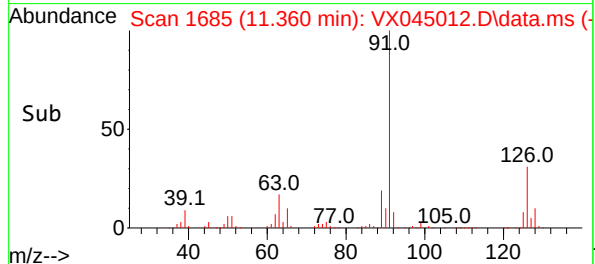
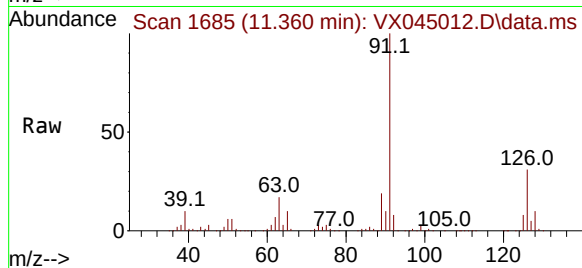
#75
2-Chlorotoluene
Concen: 153.997 ug/l
RT: 11.360 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Tgt Ion: 91 Resp: 619308
Ion Ratio Lower Upper
91 100
126 31.8 0.0 65.4

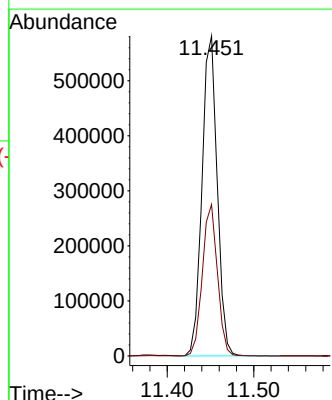
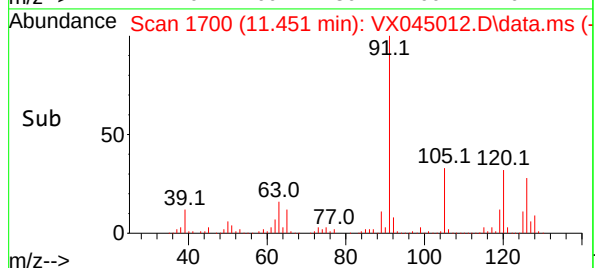
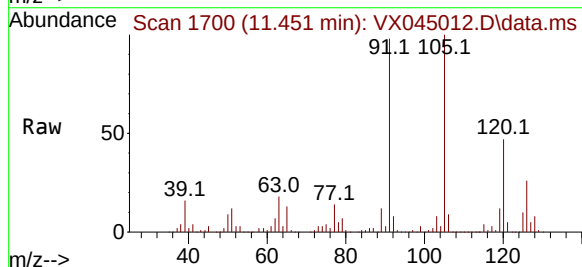
Manual Integrations
APPROVED

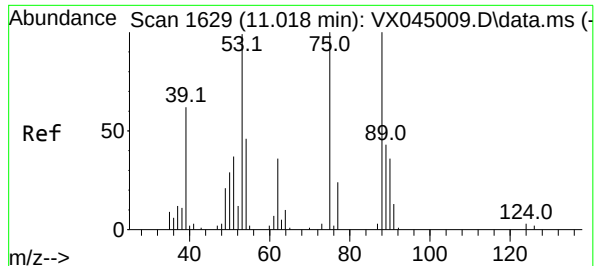
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#76
1,3,5-Trimethylbenzene
Concen: 153.508 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion:105 Resp: 707908
Ion Ratio Lower Upper
105 100
120 47.0 0.0 94.4





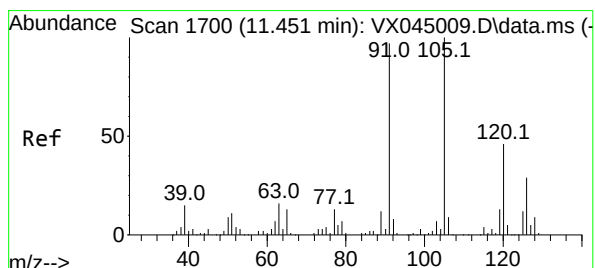
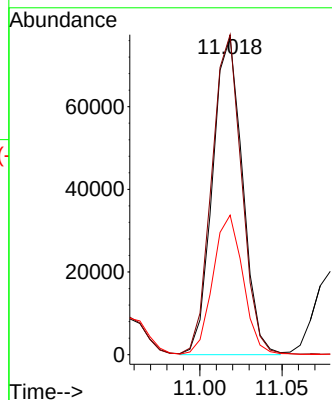
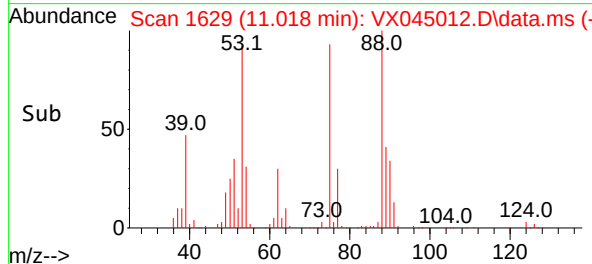
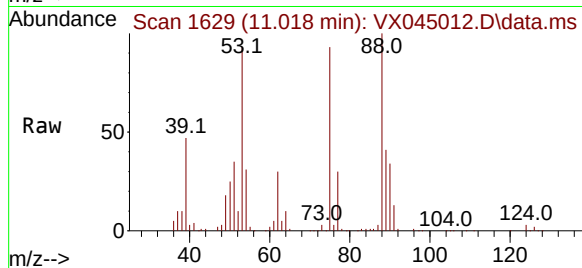
#77
t-1,4-Dichloro-2-butene
Concen: 191.694 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC150

Tgt Ion:	75	Resp:	9750
Ion	Ratio	Lower	Upper
75	100		
53	100.7	49.8	149.4
89	43.9	21.4	64.2

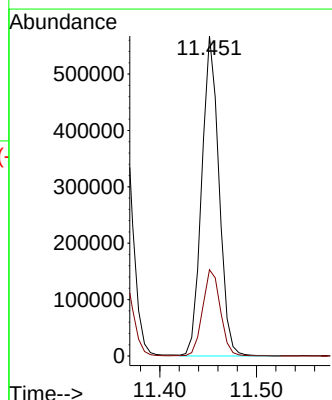
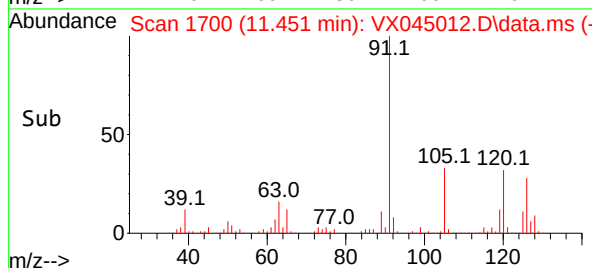
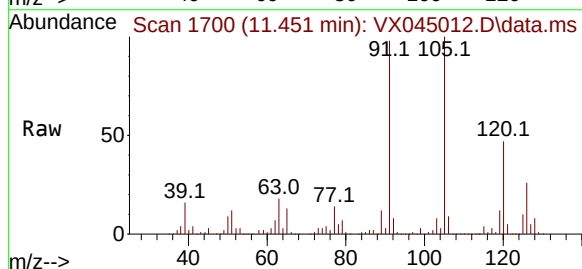
Manual Integrations
APPROVED

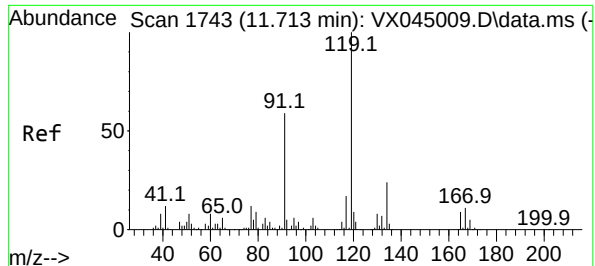
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#78
4-Chlorotoluene
Concen: 157.047 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion:	91	Resp:	704032
Ion	Ratio	Lower	Upper
91	100		
126	27.7	0.0	58.0





#79

tert-butylbenzene

Concen: 154.110 ug/l

RT: 11.713 min Scan# 1743

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

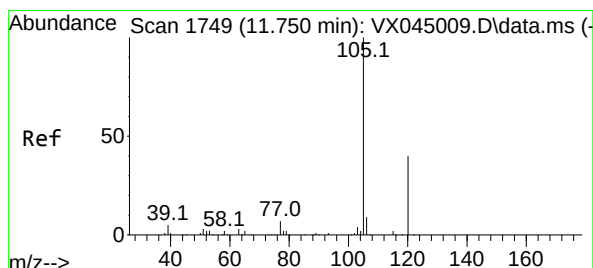
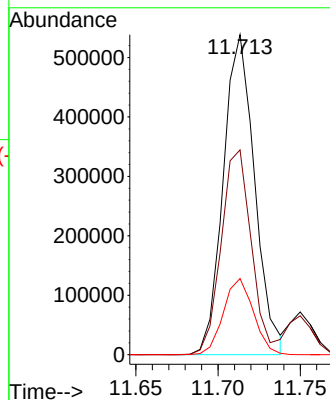
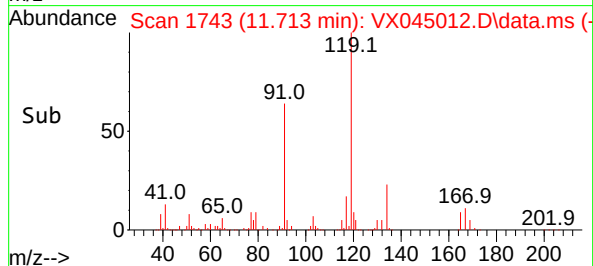
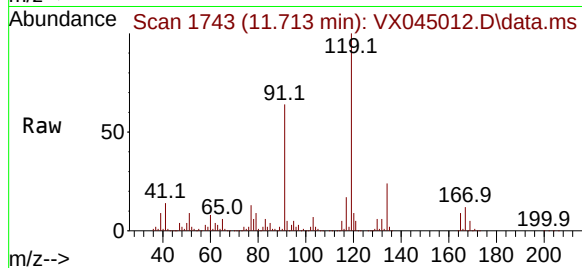
VSTDIC150

Tgt Ion:	119	Resp:	716064
Ion	Ratio	Lower	Upper
119	100		
91	61.0	0.0	120.6
134	22.8	0.0	48.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#80

1,2,4-Trimethylbenzene

Concen: 153.746 ug/l

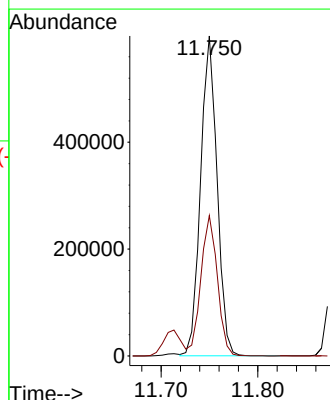
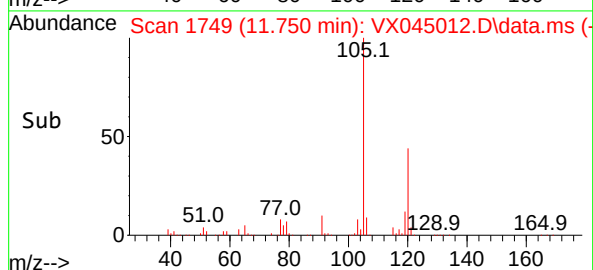
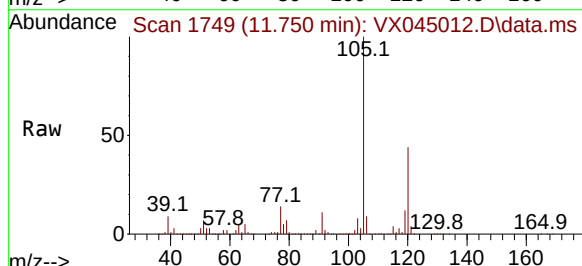
RT: 11.750 min Scan# 1749

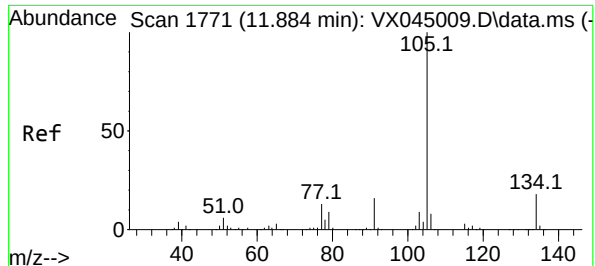
Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Tgt Ion:	105	Resp:	710215
Ion	Ratio	Lower	Upper
105	100		
120	44.1	0.0	88.4





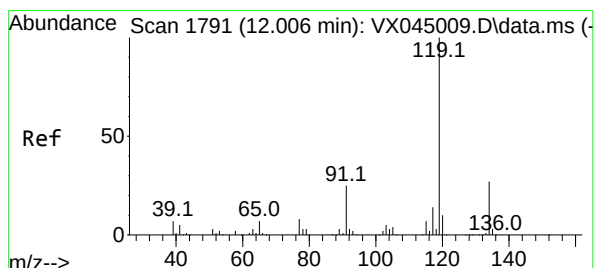
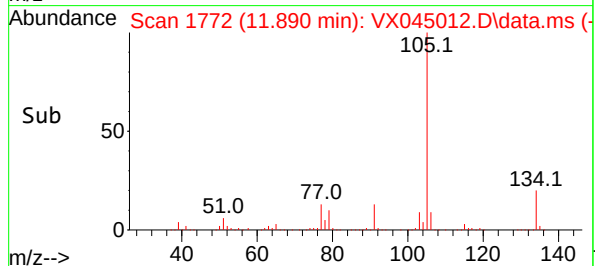
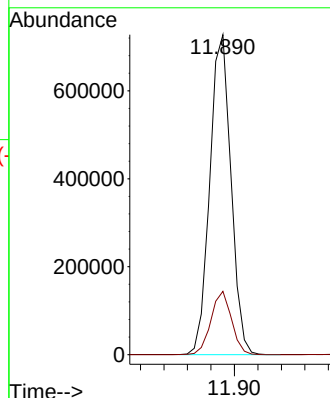
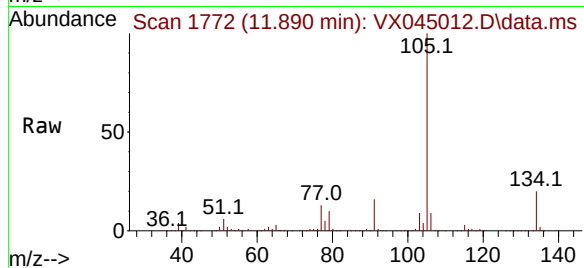
#81
sec-Butylbenzene
Concen: 156.100 ug/l
RT: 11.890 min Scan# 1772
Delta R.T. 0.006 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Tgt Ion:105 Resp: 910294
Ion Ratio Lower Upper
105 100
134 19.3 0.0 39.0

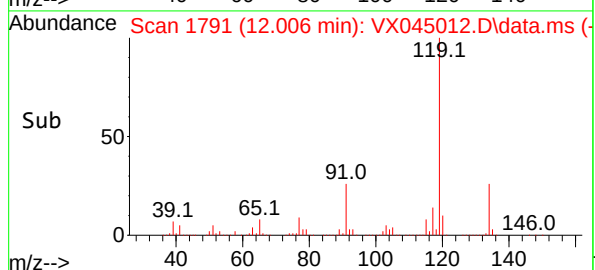
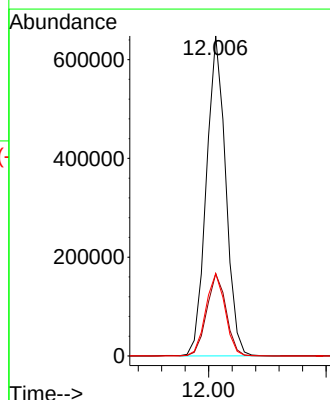
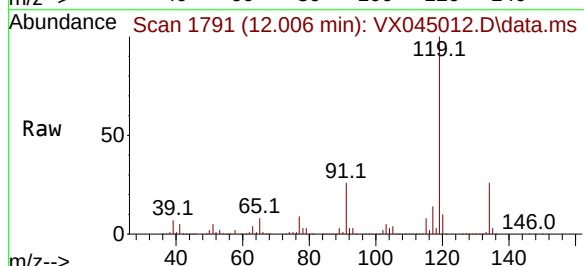
Manual Integrations
APPROVED

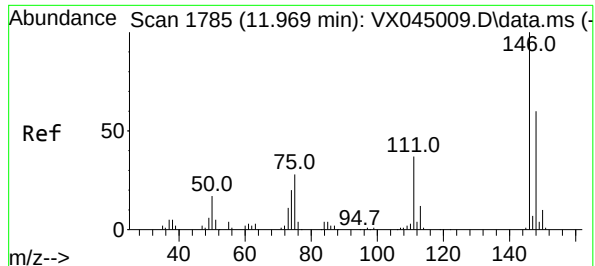
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#82
p-Isopropyltoluene
Concen: 156.297 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

Tgt Ion:119 Resp: 738494
Ion Ratio Lower Upper
119 100
134 25.8 0.0 52.6
91 25.9 0.0 51.0





#83

1,3-Dichlorobenzene

Concen: 155.340 ug/l

RT: 11.969 min Scan# 1785

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Tgt Ion:146 Resp: 37192

Ion Ratio Lower Upper

146 100

111 42.5 20.2 60.5

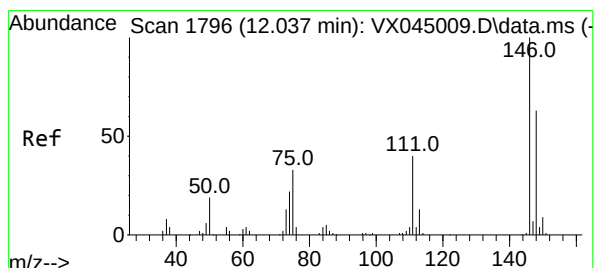
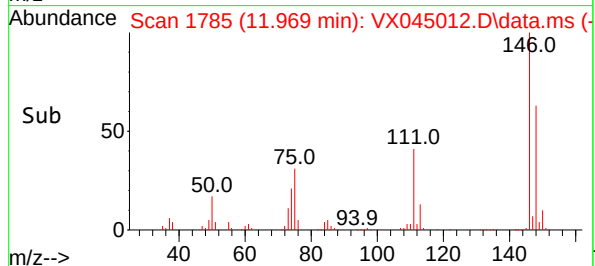
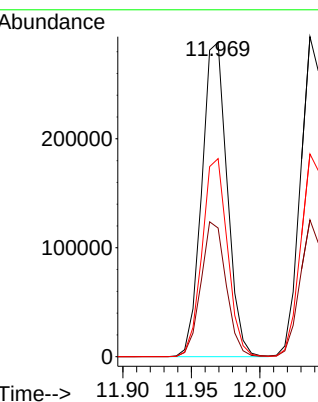
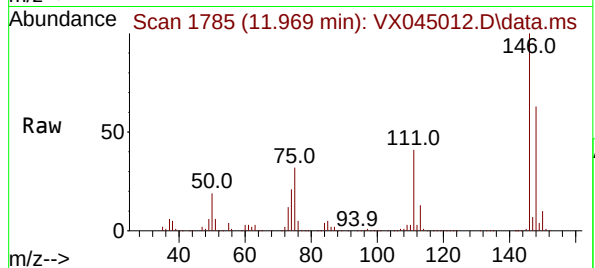
148 63.0 31.2 93.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#84

1,4-Dichlorobenzene

Concen: 155.264 ug/l

RT: 12.036 min Scan# 1796

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

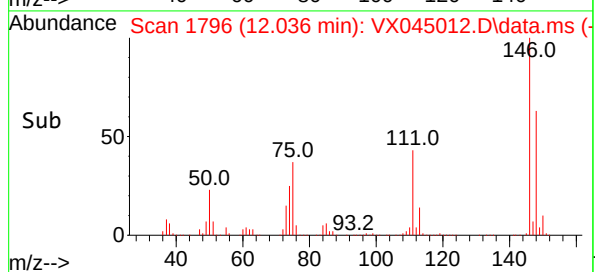
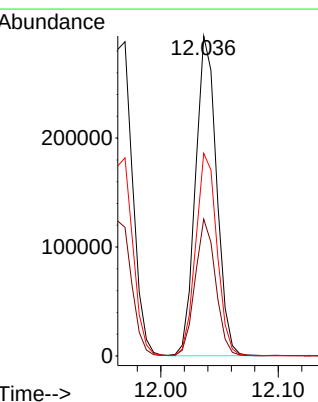
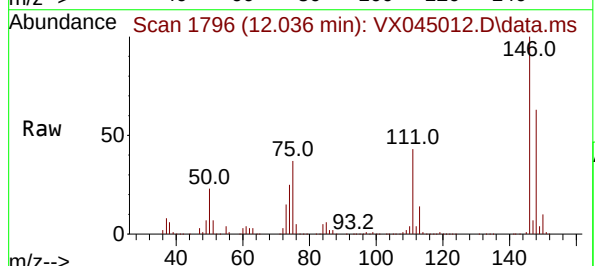
Tgt Ion:146 Resp: 366532

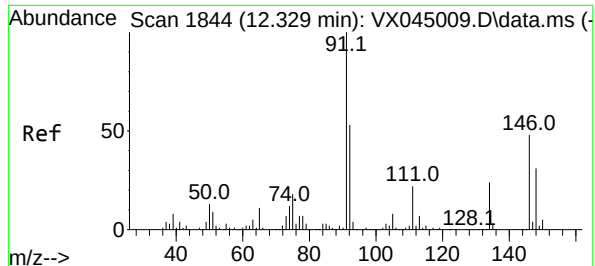
Ion Ratio Lower Upper

146 100

111 41.7 20.4 61.2

148 63.6 31.8 95.4





#85

n-Butylbenzene

Concen: 164.749 ug/l

RT: 12.329 min Scan# 1844

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion: 91 Resp: 710840

Ion Ratio Lower Upper

91 100

92 53.7 0.0 105.2

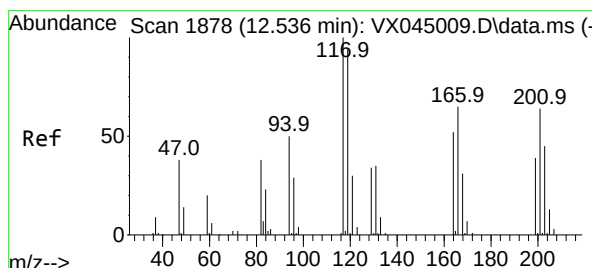
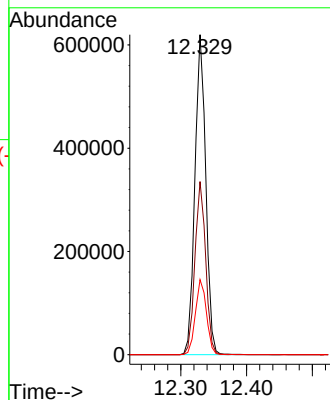
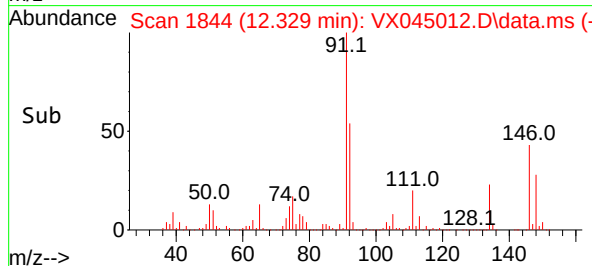
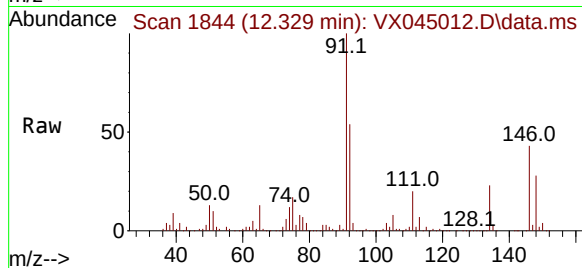
134 23.9 0.0 49.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#86

Hexachloroethane

Concen: 170.855 ug/l

RT: 12.536 min Scan# 1878

Delta R.T. -0.000 min

Lab File: VX045012.D

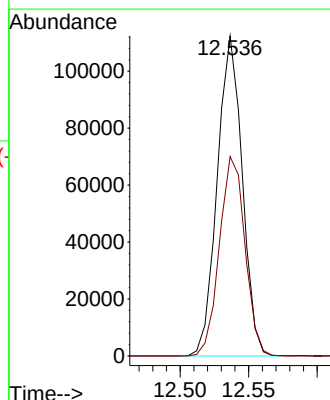
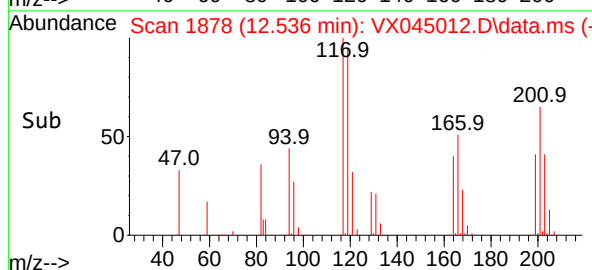
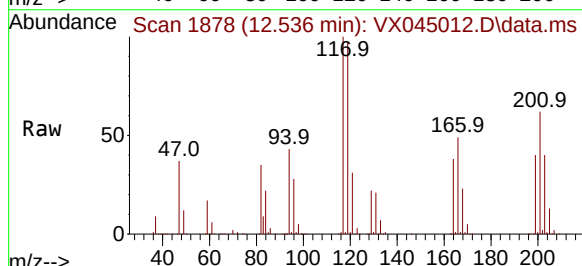
Acq: 21 Feb 2025 11:29

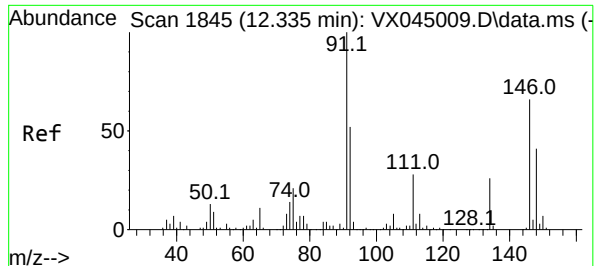
Tgt Ion:117 Resp: 142372

Ion Ratio Lower Upper

117 100

201 63.8 32.6 97.7





#87

1,2-Dichlorobenzene

Concen: 151.688 ug/l

RT: 12.335 min Scan# 1845

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion:146 Resp: 35634

Ion Ratio Lower Upper

146 100

111 44.2 21.7 65.1

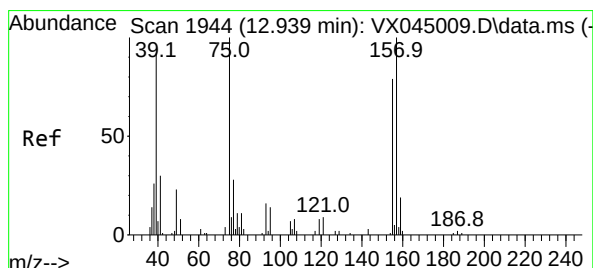
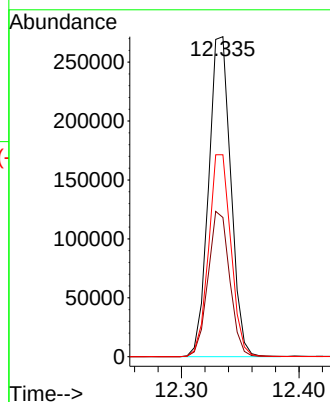
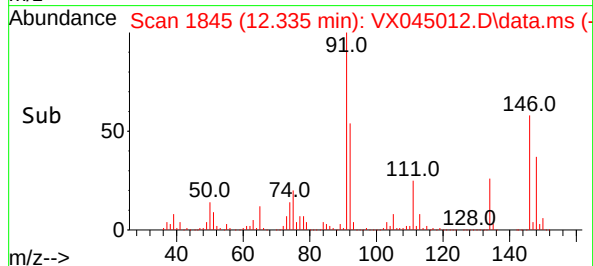
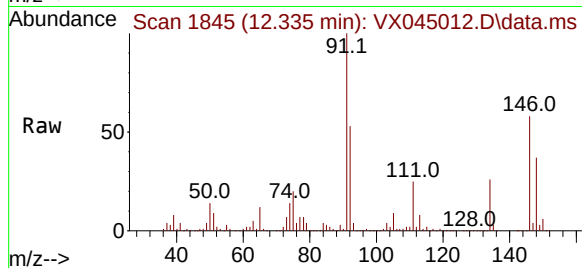
148 63.4 31.8 95.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#88

1,2-Dibromo-3-Chloropropane

Concen: 166.653 ug/l

RT: 12.939 min Scan# 1944

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

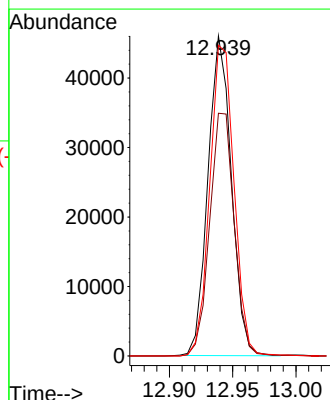
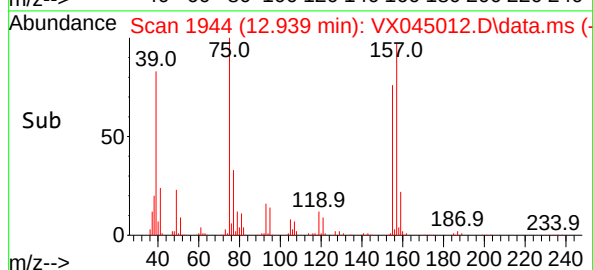
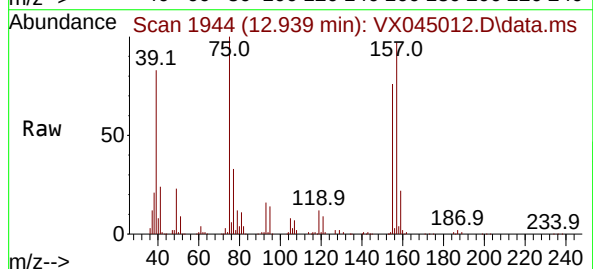
Tgt Ion: 75 Resp: 59310

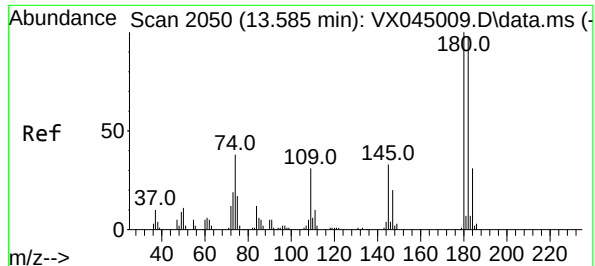
Ion Ratio Lower Upper

75 100

155 79.4 66.2 99.4

157 100.8 81.4 122.2





#89

1,2,4-Trichlorobenzene

Concen: 167.248 ug/l

RT: 13.585 min Scan# 2050

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

Instrument :

MSVOA_X

ClientSampleId :

VSTDIC150

Tgt Ion:180 Resp: 238129

Ion Ratio Lower Upper

180 100

182 95.0 77.7 116.5

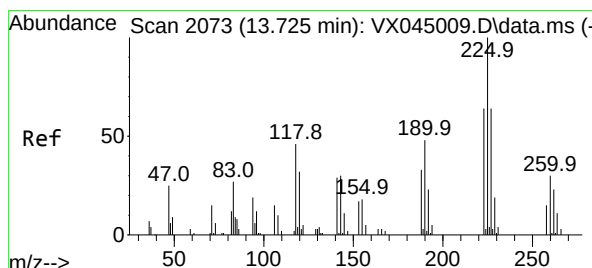
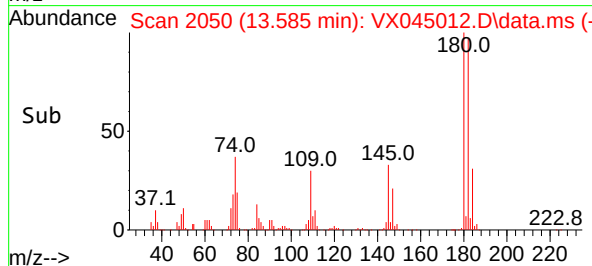
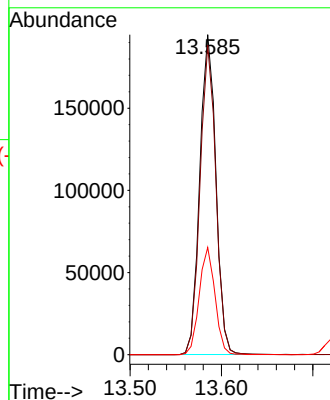
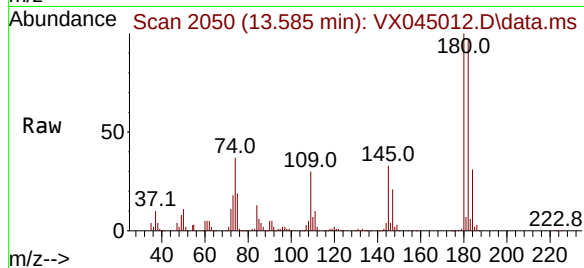
145 32.8 25.8 38.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#90

Hexachlorobutadiene

Concen: 155.145 ug/l

RT: 13.725 min Scan# 2073

Delta R.T. -0.000 min

Lab File: VX045012.D

Acq: 21 Feb 2025 11:29

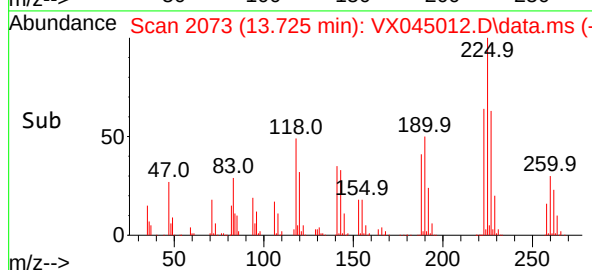
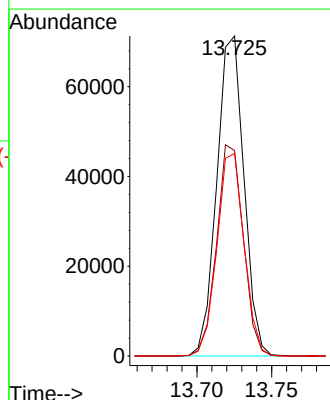
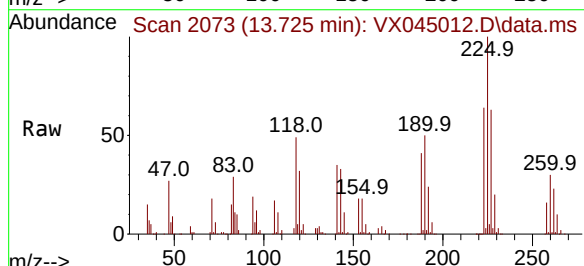
Tgt Ion:225 Resp: 90085

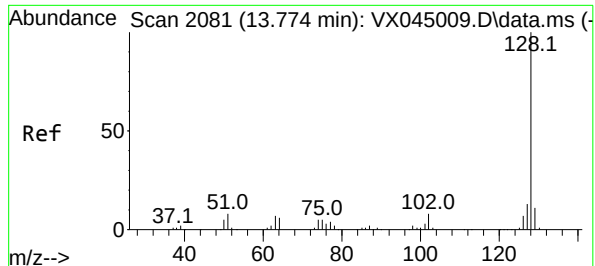
Ion Ratio Lower Upper

225 100

223 64.8 0.0 123.4

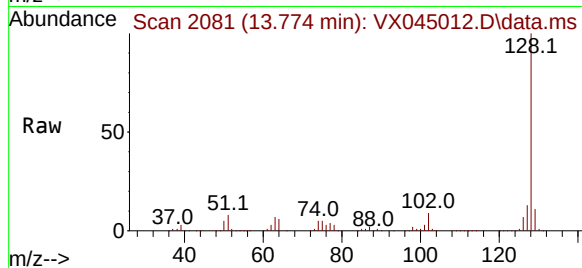
227 63.2 0.0 127.4





#91
Naphthalene
Concen: 165.262 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29

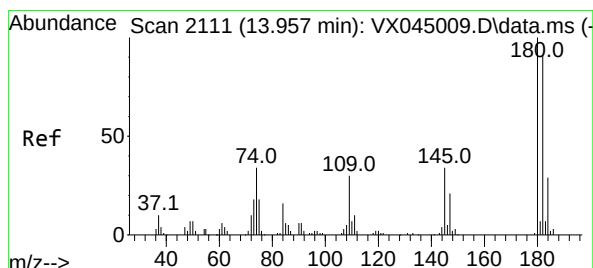
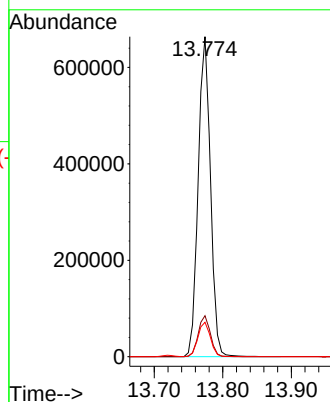
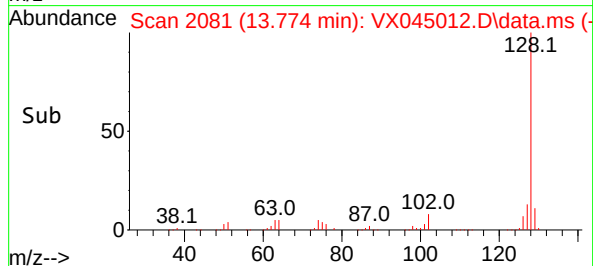
Instrument :
MSVOA_X
ClientSampleId :
VSTDIC150



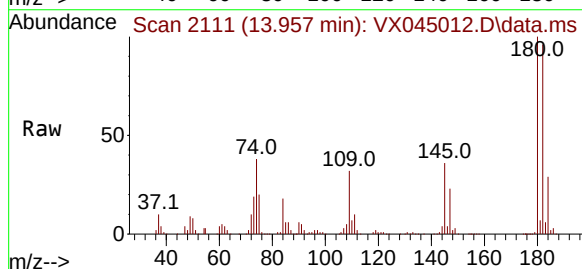
Tgt Ion:128 Resp: 829698
Ion Ratio Lower Upper
128 100
127 12.7 10.5 15.7
129 10.9 8.7 13.1

Manual Integrations
APPROVED

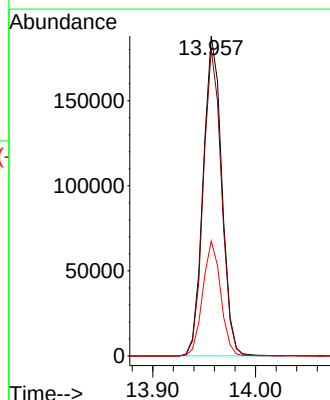
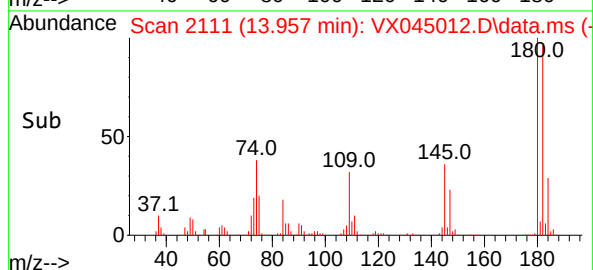
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#92
1,2,3-Trichlorobenzene
Concen: 161.124 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045012.D
Acq: 21 Feb 2025 11:29



Tgt Ion:180 Resp: 236181
Ion Ratio Lower Upper
180 100
182 94.5 0.0 186.6
145 34.8 0.0 68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045014.D
 Acq On : 21 Feb 2025 13:09
 Operator : JC/MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX022125

Quant Time: Feb 22 01:12:33 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.885	128	17826	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.751	114	98652	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	90634	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	51483	29.736	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	99.133%		
60) 4-Bromofluorobenzene	11.079	95	50982	30.094	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	100.300%		
63) Toluene-d8	8.641	98	148516	29.620	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	98.733%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.166	85	27388	18.226	ug/l	95
3) Chloromethane	1.294	50	32169	17.873	ug/l	99
4) Vinyl Chloride	1.374	62	30221	17.401	ug/l	99
5) Bromomethane	1.593	94	11792	19.506	ug/l	97
6) Chloroethane	1.666	64	19435	20.662	ug/l	96
7) Trichlorofluoromethane	1.874	101	41534	17.793	ug/l	96
8) Diethyl Ether	2.130	74	15203	17.214	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.319	101	25031	18.055	ug/l	97
10) 1,1-Dichloroethene	2.313	96	24494	18.088	ug/l	95
11) Methyl Iodide	2.441	142	24257	15.827	ug/l	95
12) Methyl Acetate	2.697	43	28582	18.176	ug/l	99
13) Acrolein	2.233	56	30003	95.190	ug/l	100
14) Acrylonitrile	3.056	53	68921	89.730	ug/l	99
15) Acetone	2.374	58	22947	108.932	ug/l	97
16) Carbon Disulfide	2.502	76	68739	17.896	ug/l	100
17) Allyl chloride	2.654	41	45112	17.812	ug/l	99
18) Methylene Chloride	2.782	84	26839	17.621	ug/l	92
19) trans-1,2-Dichloroethene	3.081	96	24421	17.825	ug/l	92
20) Diisopropyl ether	3.751	45	86878	17.850	ug/l	90
21) 1,1-Dichloroethane	3.599	63	47892	17.693	ug/l	99
22) cis-1,2-Dichloroethene	4.471	96	29051	17.695	ug/l	99
23) tert-Butyl Alcohol	2.965	59	24746	92.286	ug/l #	100
24) Methyl tert-Butyl Ether	3.105	73	78186	17.690	ug/l	100
25) Chloroform	5.074	83	46912	17.943	ug/l	98
26) Cyclohexane	5.458	56	44699	17.890	ug/l #	98
29) 1,1-Dichloropropene	5.678	75	32608	17.969	ug/l	99
30) 2-Butanone	4.544	43	100841	96.206	ug/l	99
31) 2,2-Dichloropropane	4.465	77	37149	18.104	ug/l	99
32) 1,1,1-Trichloroethane	5.373	97	39458	17.945	ug/l	99
33) Carbon Tetrachloride	5.666	117	33551	18.080	ug/l	98
34) Benzene	6.025	78	102508	18.013	ug/l	98
35) Methacrylonitrile	4.910	41	20575	18.343	ug/l	97
36) 1,2-Dichloroethane	6.074	62	35686	18.316	ug/l	99
37) Trichloroethene	7.117	130	23875	17.933	ug/l	97
38) Methylcyclohexane	7.373	83	44760	18.370	ug/l	98
39) 1,2-Dichloropropane	7.421	63	24627	17.406	ug/l	98
40) Dibromomethane	7.574	93	18285	18.010	ug/l	99
41) Bromodichloromethane	7.812	83	35606	17.645	ug/l	98
42) Vinyl Acetate	3.709	43	365963	89.973	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
 Data File : VX045014.D
 Acq On : 21 Feb 2025 13:09
 Operator : JC/MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX022125

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/24/2025
 Supervised By : Mahesh Dadoda 02/24/2025

Quant Time: Feb 22 01:12:33 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.702	43	33559	17.072	ug/l	100
44) Isopropyl Acetate	6.330	43	58216	17.994	ug/l	98
45) 1,4-Dioxane	7.659	88	12655	376.282	ug/l	99
46) Methyl methacrylate	7.684	41	29063	18.320	ug/l	98
47) n-amyl Acetate	10.842	43	50309	17.920	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	33010	16.972	ug/l	98
49) cis-1,3-Dichloropropene	8.360	75	38512	17.491	ug/l	99
50) 1,1,2-Trichloroethane	9.147	97	24435	18.451	ug/l	96
51) Ethyl methacrylate	9.110	69	37245	17.882	ug/l	97
52) 1,3-Dichloropropane	9.305	76	41224	17.765	ug/l	97
53) Dibromochloromethane	9.519	129	25807	17.620	ug/l	96
54) 1,2-Dibromoethane	9.604	107	23689	17.616	ug/l	96
55) 2-Chloroethyl vinyl ether	8.232	63	91907	85.929	ug/l	100
56) Bromoform	10.799	173	15981	17.412	ug/l	99
58) 4-Methyl-2-Pentanone	8.568	43	192103	93.175	ug/l	99
59) 2-Hexanone	9.427	43	142320	95.501	ug/l	99
61) Tetrachloroethene	9.269	164	19987	17.908	ug/l	95
62) Toluene	8.714	91	107324	17.876	ug/l	98
64) Chlorobenzene	10.073	112	66754	17.942	ug/l	98
65) 1,1,1,2-Tetrachloroethane	10.159	131	21314	17.362	ug/l	98
66) Ethyl Benzene	10.189	91	119085	18.117	ug/l	95
67) m/p-Xylenes	10.299	106	88668	36.205	ug/l	98
68) o-Xylene	10.634	106	44070	18.340	ug/l	97
69) Styrene	10.653	104	71782	17.886	ug/l	98
70) Isopropylbenzene	10.957	105	112344	18.117	ug/l	100
71) 1,1,2,2-Tetrachloroethane	11.207	83	37415	18.349	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	30477m	18.172	ug/l	
73) Bromobenzene	11.195	156	26006	18.218	ug/l	99
74) n-propylbenzene	11.299	91	134814	18.269	ug/l	100
75) 2-Chlorotoluene	11.360	91	80948	18.145	ug/l	100
76) 1,3,5-Trimethylbenzene	11.445	105	95320	18.633	ug/l	99
77) t-1,4-Dichloro-2-butene	11.018	75	9008	15.964	ug/l	92
78) 4-Chlorotoluene	11.451	91	90166	18.131	ug/l	99
79) tert-butylbenzene	11.713	119	94943	18.420	ug/l	100
80) 1,2,4-Trimethylbenzene	11.750	105	94408	18.423	ug/l	99
81) sec-Butylbenzene	11.884	105	119426	18.461	ug/l	99
82) p-Isopropyltoluene	12.006	119	97575	18.616	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	48430	18.234	ug/l	99
84) 1,4-Dichlorobenzene	12.036	146	48160	18.390	ug/l	99
85) n-Butylbenzene	12.329	91	87176	18.213	ug/l	99
86) Hexachloroethane	12.536	117	16000	17.309	ug/l	100
87) 1,2-Dichlorobenzene	12.329	146	48245	18.513	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	7064	17.893	ug/l	97
89) 1,2,4-Trichlorobenzene	13.585	180	28630	18.126	ug/l	98
90) Hexachlorobutadiene	13.719	225	12062	18.726	ug/l	99
91) Naphthalene	13.774	128	101756	18.271	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	28151	17.312	ug/l	97

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

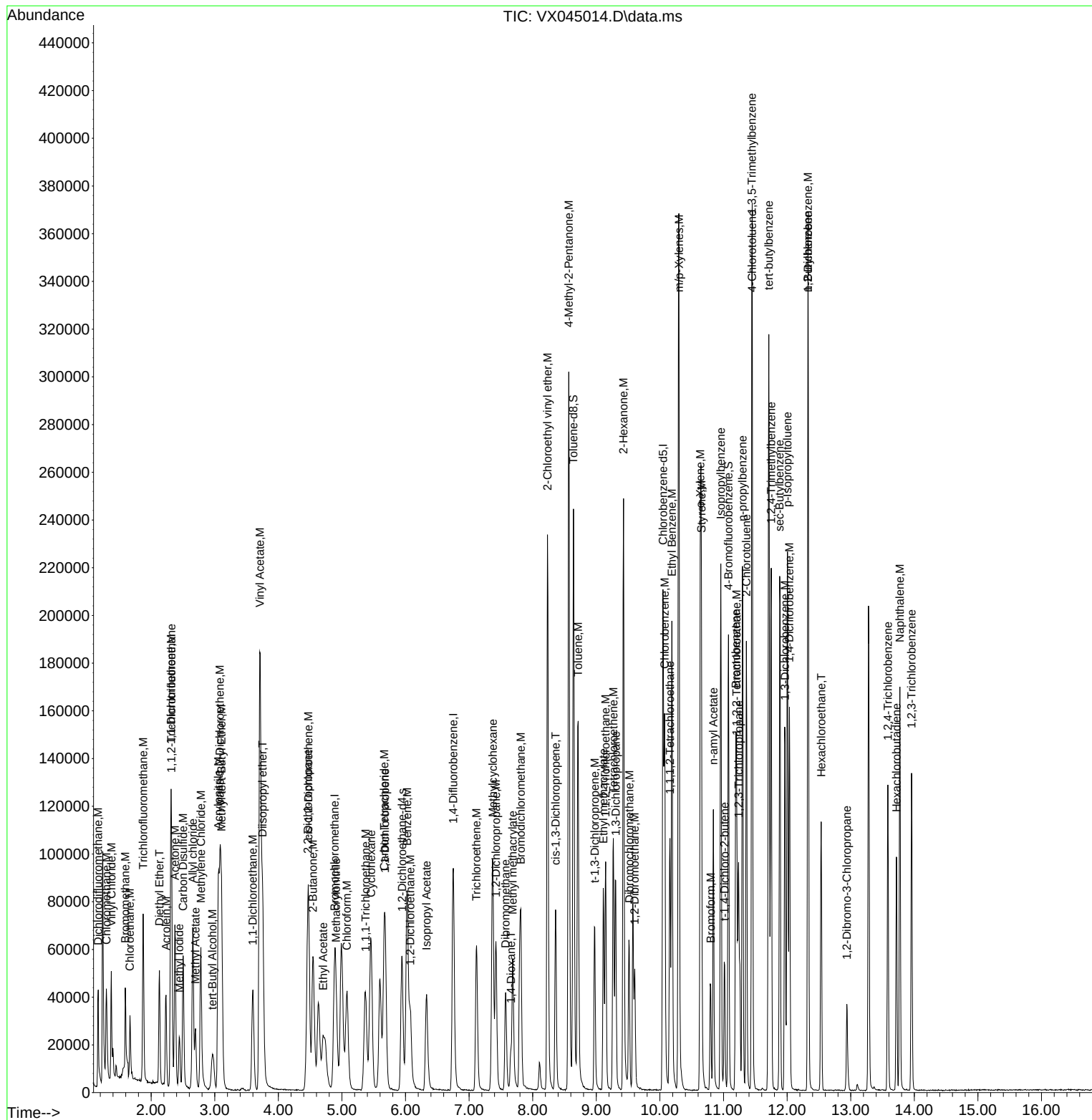
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
Data File : VX045014.D
Acq On : 21 Feb 2025 13:09
Operator : JC/MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

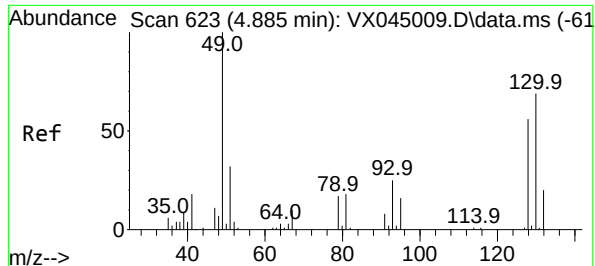
Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025

Quant Time: Feb 22 01:12:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration





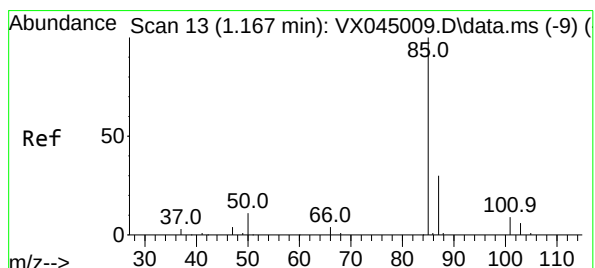
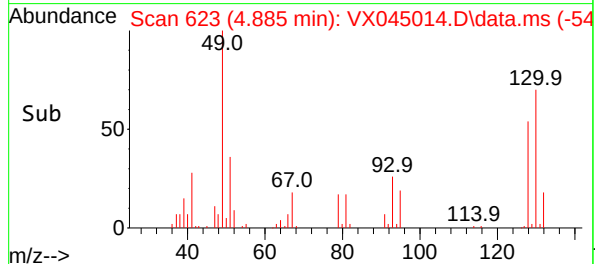
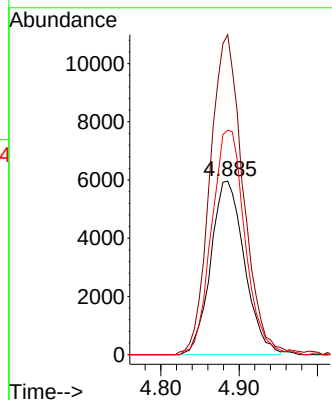
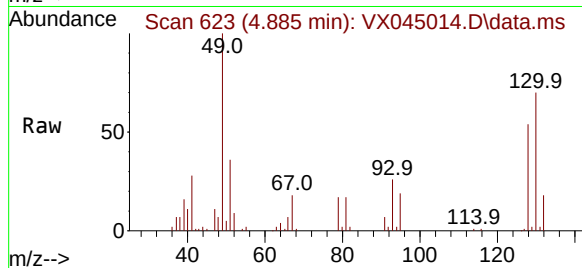
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.885 min Scan# 61
Delta R.T. 0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125

Tgt Ion:128 Resp: 17820
Ion Ratio Lower Upper
128 100
49 181.1 0.0 449.7
130 128.1 0.0 312.7

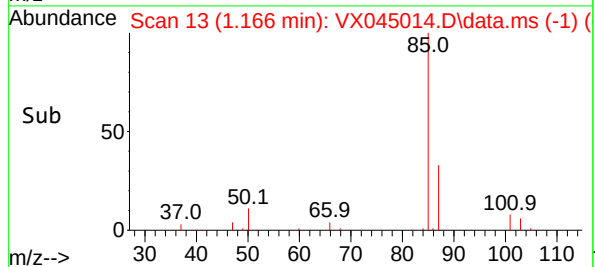
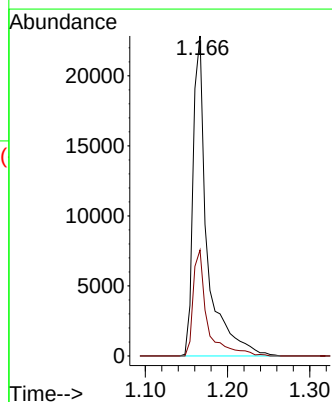
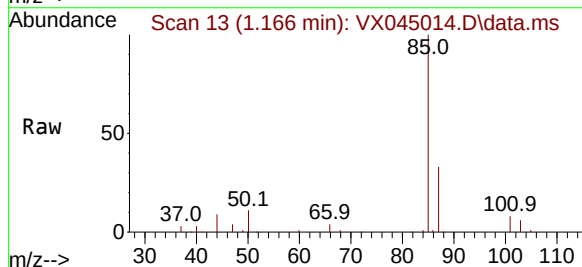
Manual Integrations
APPROVED

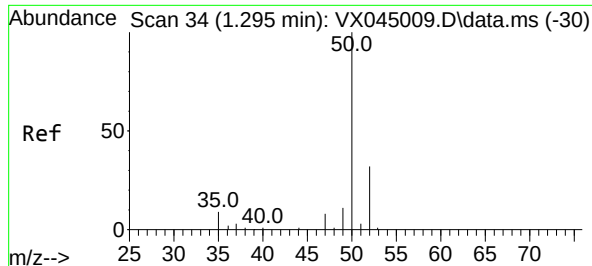
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#2
Dichlorodifluoromethane
Concen: 18.226 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 85 Resp: 27388
Ion Ratio Lower Upper
85 100
87 33.1 15.1 45.3





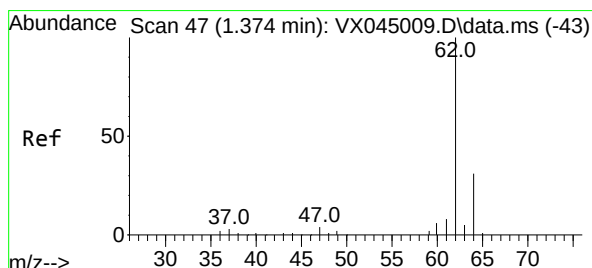
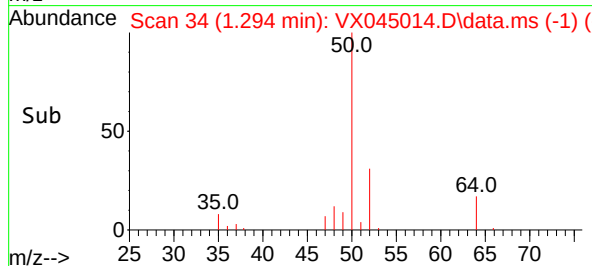
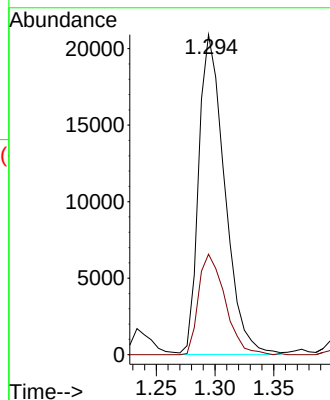
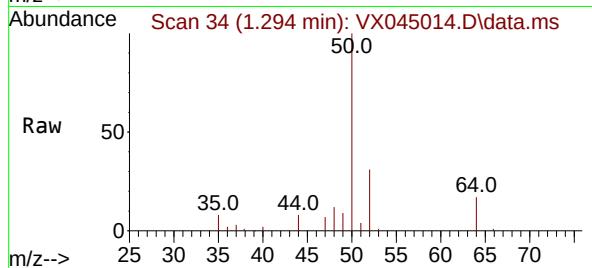
#3
Chloromethane
Concen: 17.873 ug/l
RT: 1.294 min Scan# 34
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVX022125

Tgt Ion: 50 Resp: 32169
Ion Ratio Lower Upper
50 100
52 31.6 25.7 38.5

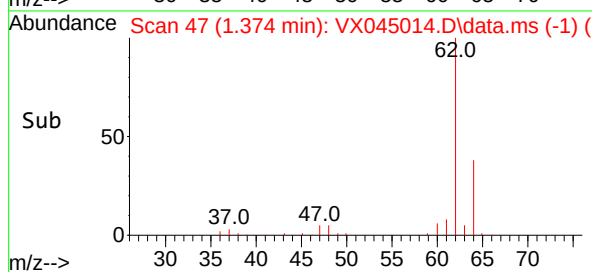
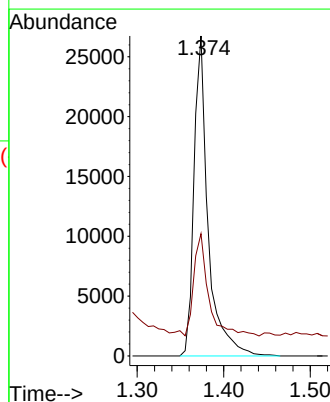
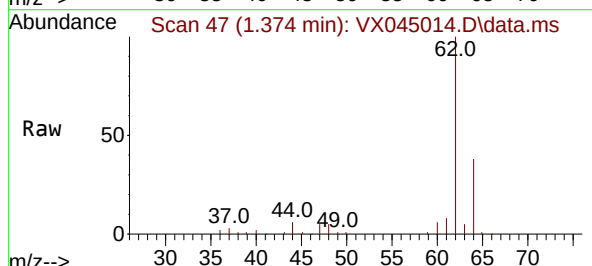
Manual Integrations
APPROVED

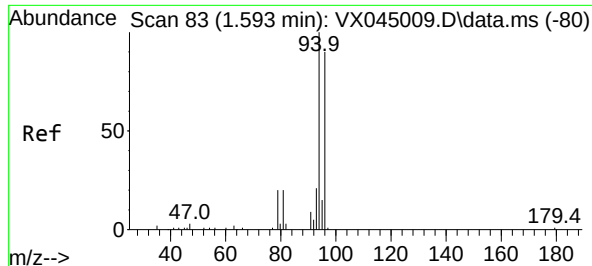
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#4
Vinyl Chloride
Concen: 17.401 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 62 Resp: 30221
Ion Ratio Lower Upper
62 100
64 31.7 25.1 37.7





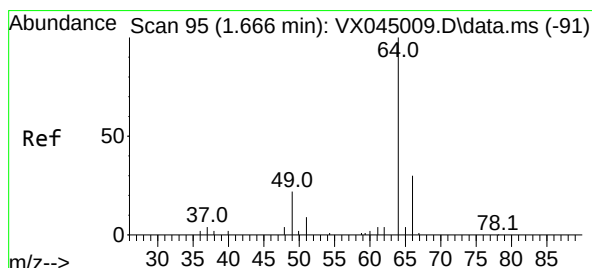
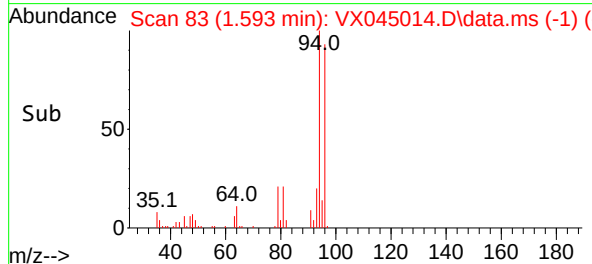
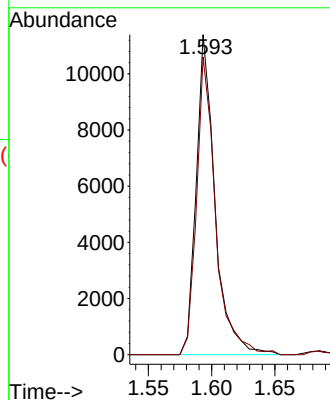
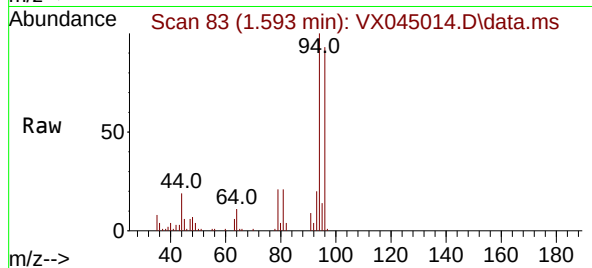
#5
Bromomethane
Concen: 19.506 ug/l
RT: 1.593 min Scan# 83
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125

Tgt Ion: 94 Resp: 11792
Ion Ratio Lower Upper
94 100
96 93.1 72.2 108.4

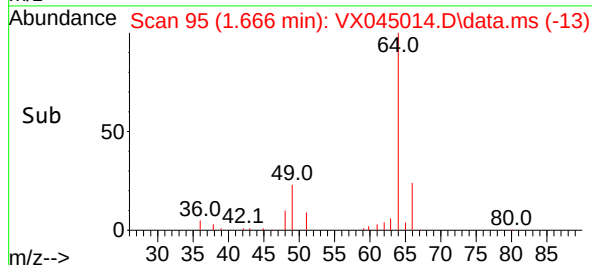
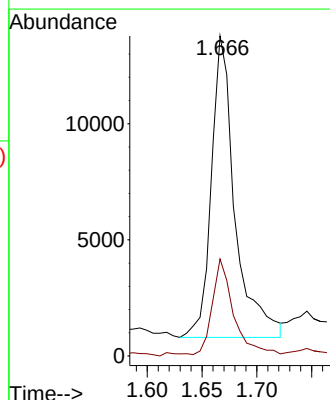
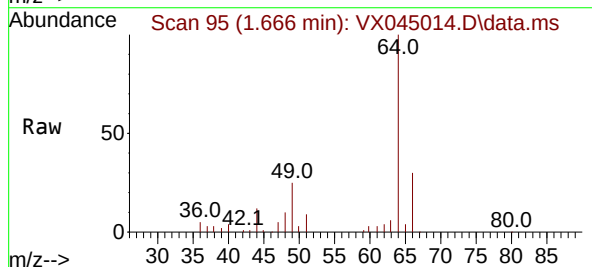
Manual Integrations
APPROVED

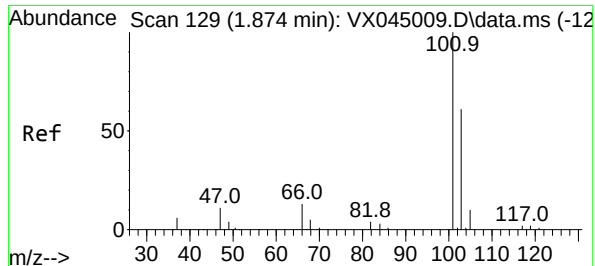
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#6
Chloroethane
Concen: 20.662 ug/l
RT: 1.666 min Scan# 95
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 64 Resp: 19435
Ion Ratio Lower Upper
64 100
66 31.5 23.7 35.5





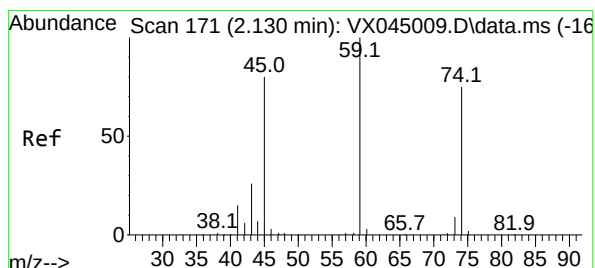
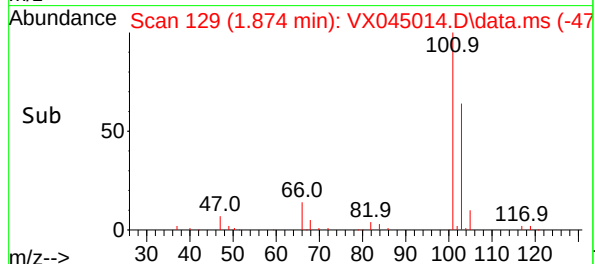
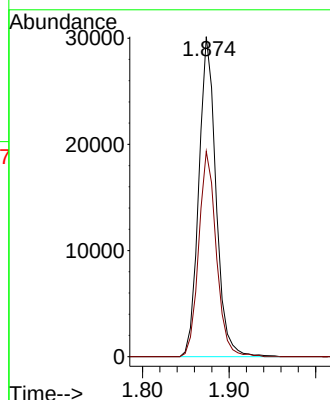
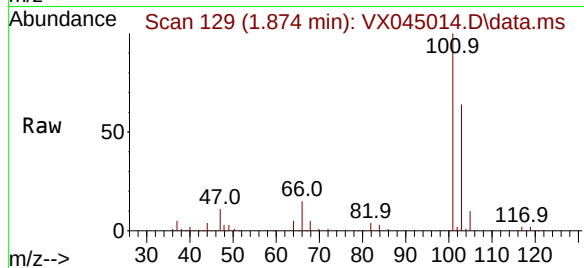
#7
Trichlorofluoromethane
Concen: 17.793 ug/l
RT: 1.874 min Scan# 129
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVX022125

Tgt Ion:101 Resp: 41534
Ion Ratio Lower Upper
101 100
103 64.2 48.8 73.2

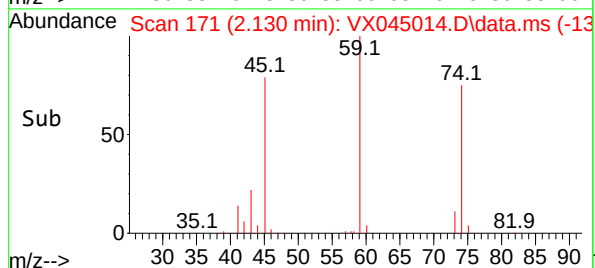
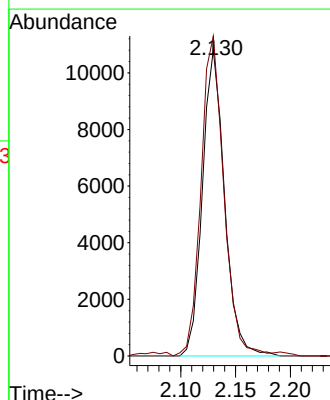
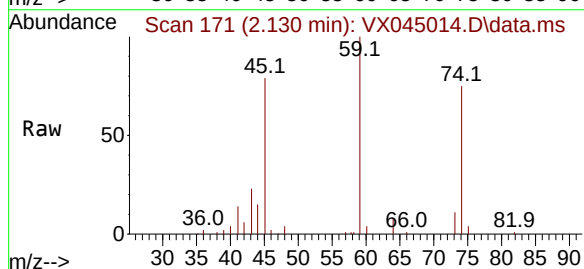
Manual Integrations
APPROVED

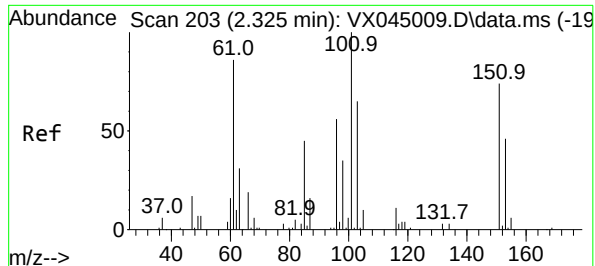
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#8
Diethyl Ether
Concen: 17.214 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 74 Resp: 15203
Ion Ratio Lower Upper
74 100
45 107.4 20.8 186.8





#9

1,1,2-Trichlorotrifluoroethane

Concen: 18.055 ug/l

RT: 2.319 min Scan# 203

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

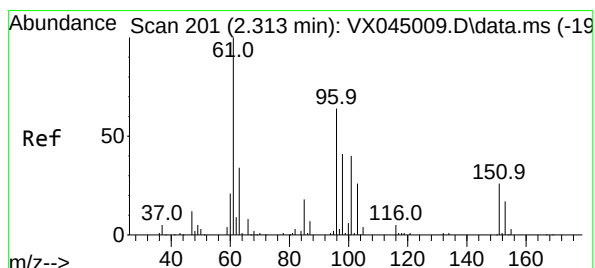
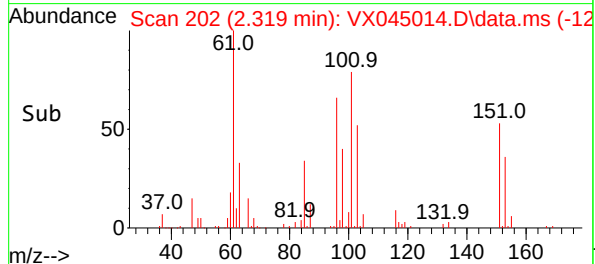
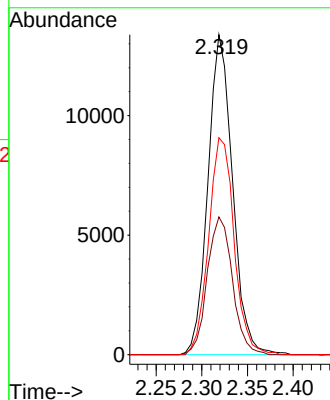
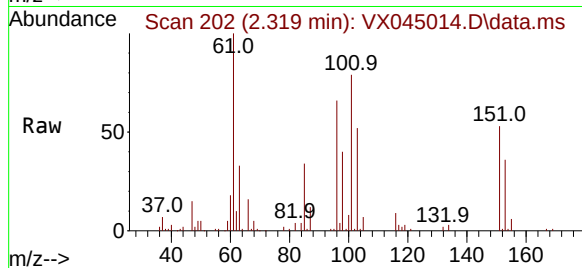
Tgt Ion:	101	Resp:	2503
Ion	Ratio	Lower	Upper
101	100		
85	44.1	0.0	90.6
151	70.2	0.0	147.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#10

1,1-Dichloroethene

Concen: 18.088 ug/l

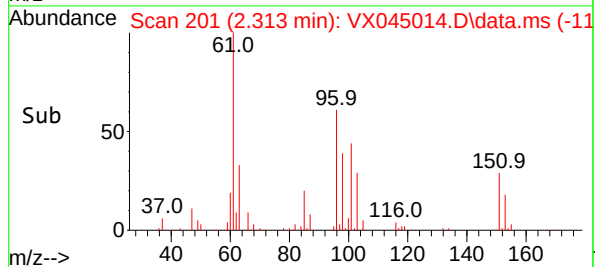
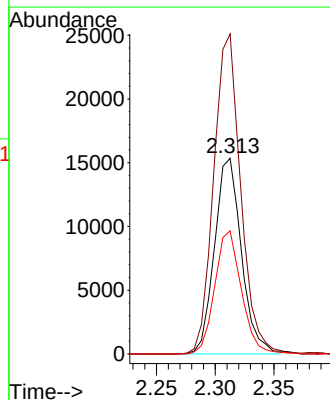
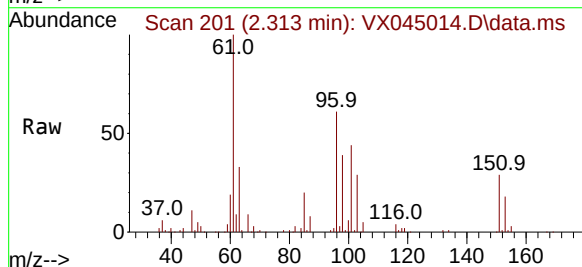
RT: 2.313 min Scan# 201

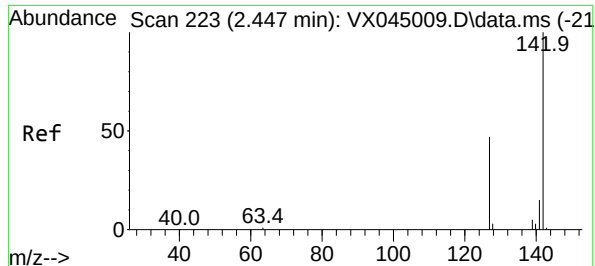
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	96	Resp:	24494
Ion	Ratio	Lower	Upper
96	100		
61	163.5	124.2	186.2
98	63.0	51.1	76.7





#11

Methyl Iodide

Concen: 15.827 ug/l

RT: 2.441 min Scan# 21

Delta R.T. -0.006 min

Lab File: VX045014.D

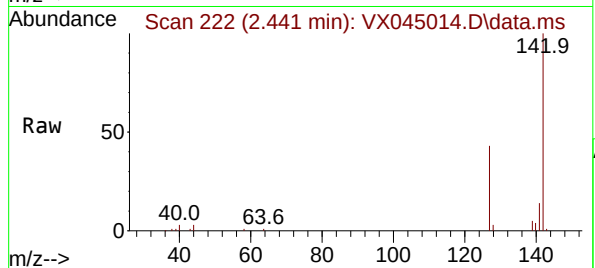
Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

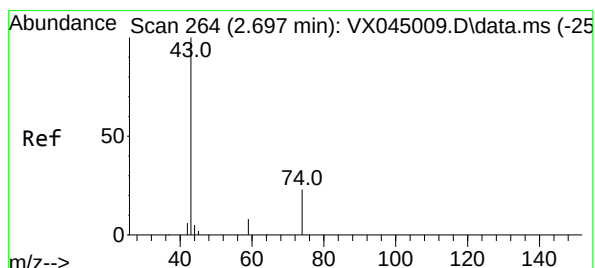
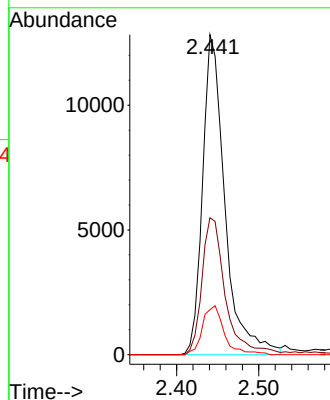
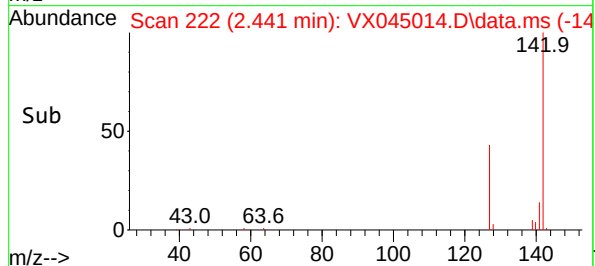


Tgt Ion:	142	Resp:	2425
Ion	Ratio	Lower	Upper
142	100		
127	42.9	23.3	69.9
141	14.2	7.5	22.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#12

Methyl Acetate

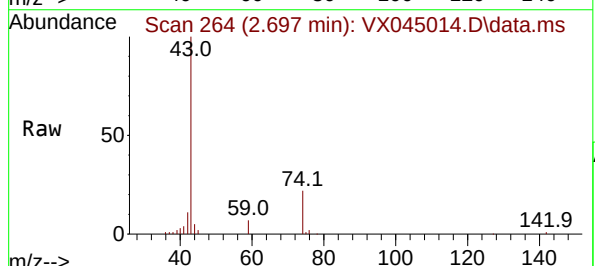
Concen: 18.176 ug/l

RT: 2.697 min Scan# 264

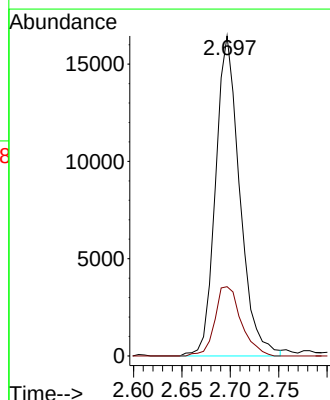
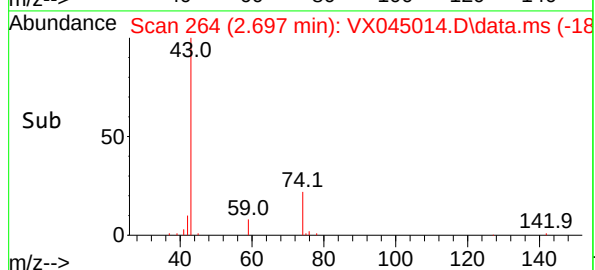
Delta R.T. -0.000 min

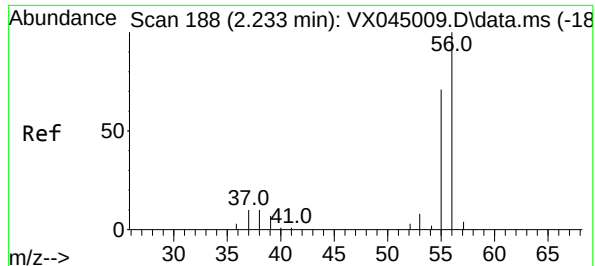
Lab File: VX045014.D

Acq: 21 Feb 2025 13:09



Tgt Ion:	43	Resp:	28582
Ion	Ratio	Lower	Upper
43	100		
74	21.9	17.9	26.9





#13

Acrolein

Concen: 95.190 ug/l

RT: 2.233 min Scan# 188

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 56 Resp: 3000

Ion Ratio Lower Upper

56 100

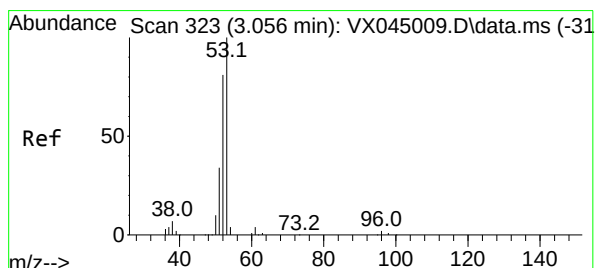
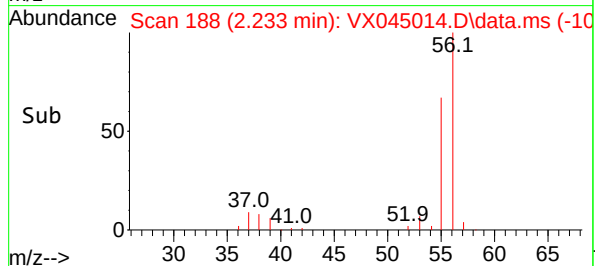
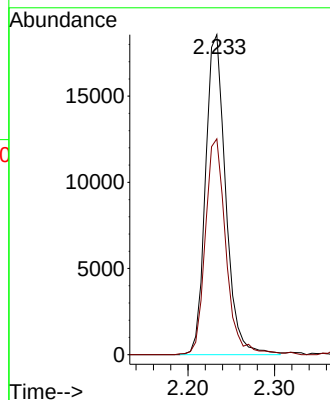
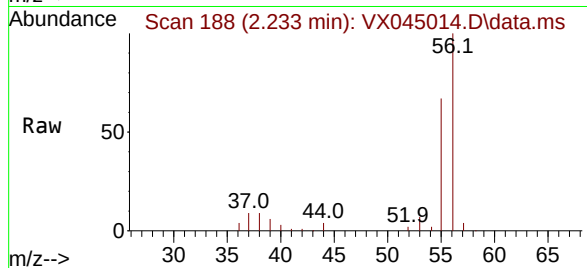
55 69.0 55.4 83.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#14

Acrylonitrile

Concen: 89.730 ug/l

RT: 3.056 min Scan# 323

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

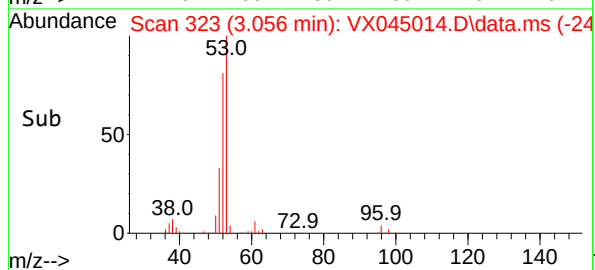
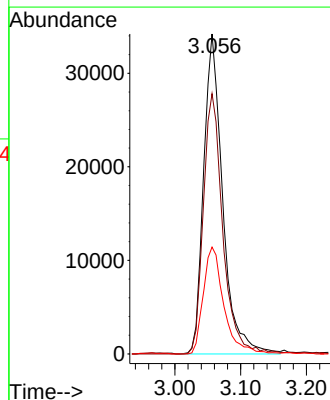
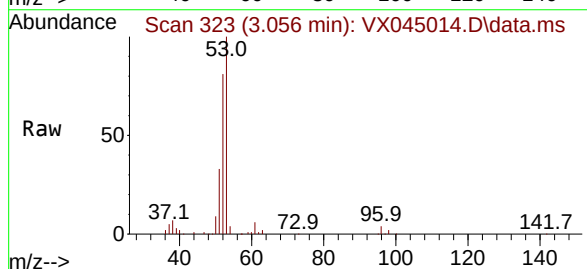
Tgt Ion: 53 Resp: 68921

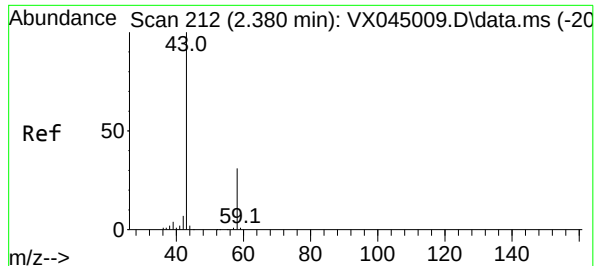
Ion Ratio Lower Upper

53 100

52 82.6 40.9 122.8

51 35.7 18.0 54.0





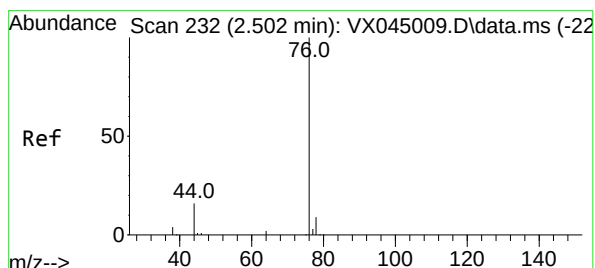
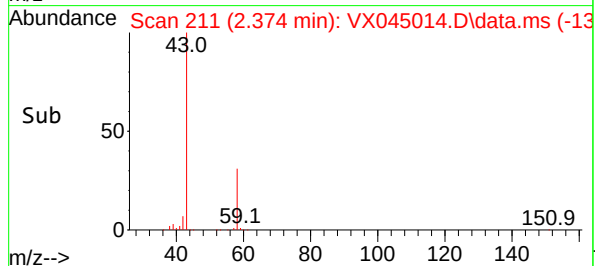
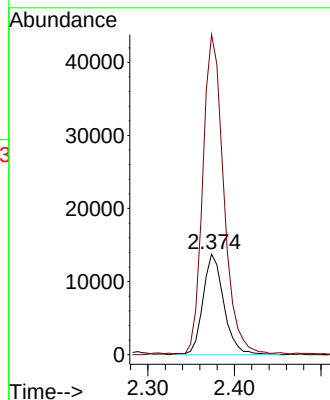
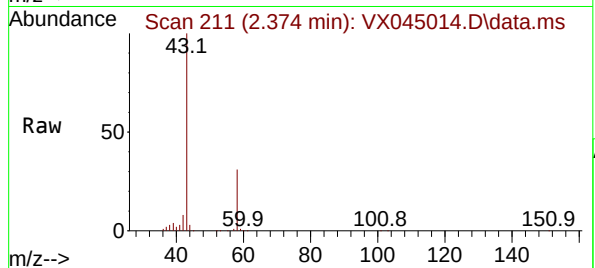
#15
Acetone
Concen: 108.932 ug/l
RT: 2.374 min Scan# 211
Delta R.T. -0.006 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVX022125

Tgt Ion: 58 Resp: 2294
Ion Ratio Lower Upper
58 100
43 317.3 258.6 388.0

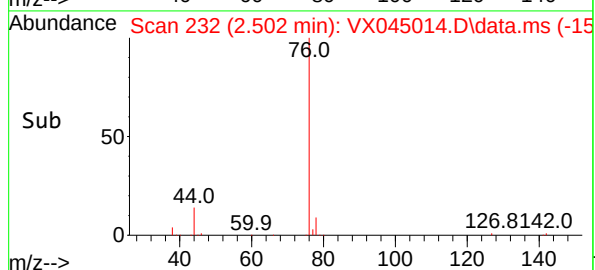
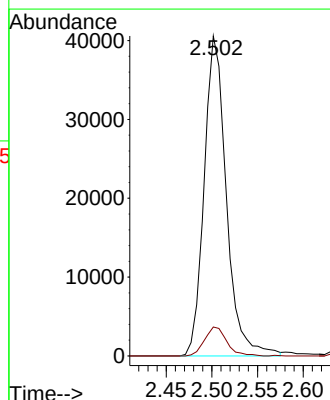
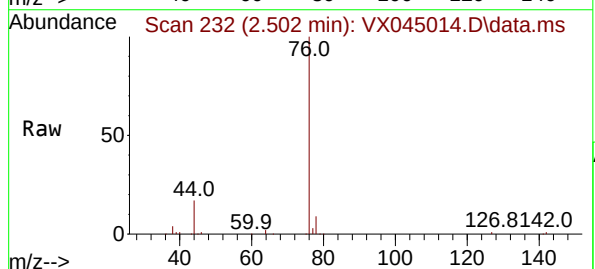
Manual Integrations
APPROVED

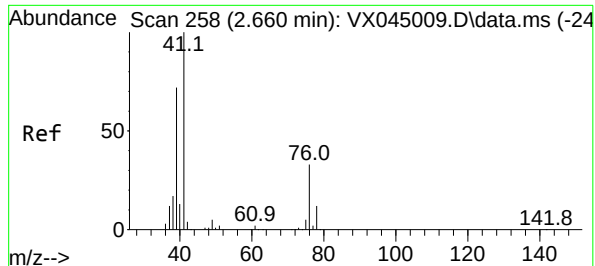
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#16
Carbon Disulfide
Concen: 17.896 ug/l
RT: 2.502 min Scan# 232
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 76 Resp: 68739
Ion Ratio Lower Upper
76 100
78 9.0 7.3 10.9





#17

Allyl chloride

Concen: 17.812 ug/l

RT: 2.654 min Scan# 257

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

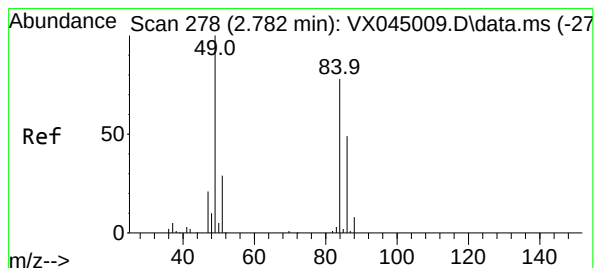
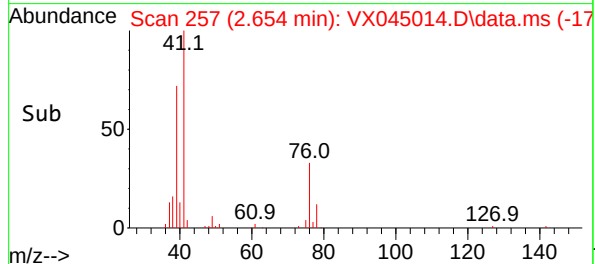
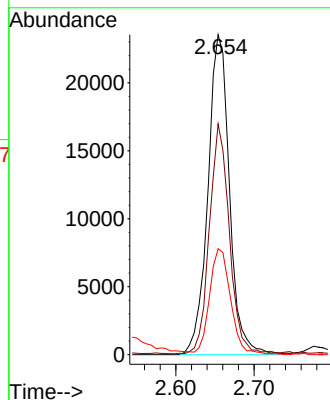
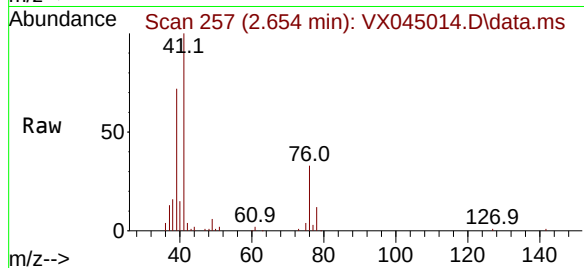
ICVX022125

Tgt Ion:	41	Resp:	4511
Ion	Ratio	Lower	Upper
41	100		
39	71.7	36.2	108.6
76	32.9	17.2	51.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#18

Methylene Chloride

Concen: 17.621 ug/l

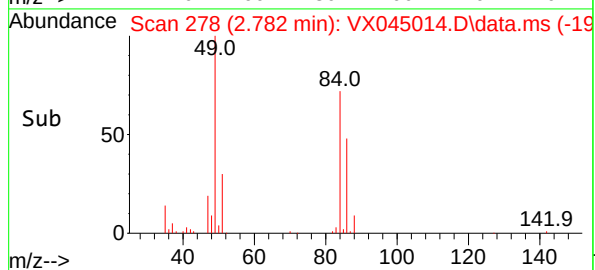
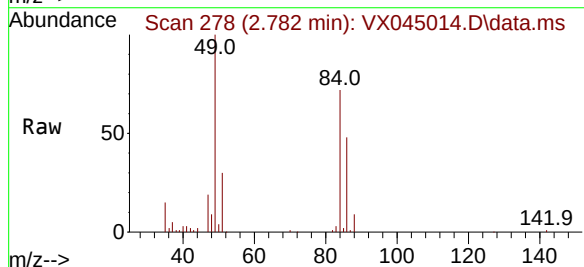
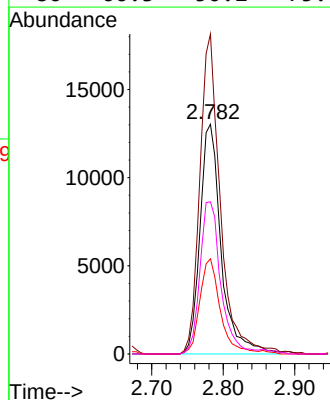
RT: 2.782 min Scan# 278

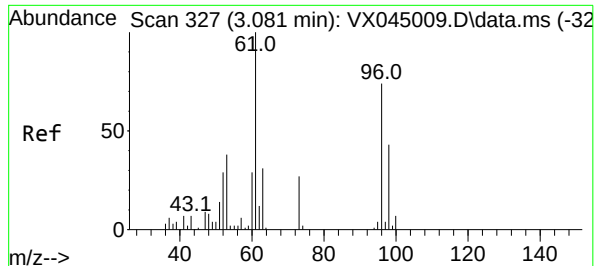
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	84	Resp:	26839
Ion	Ratio	Lower	Upper
84	100		
49	139.3	102.8	154.2
51	41.4	30.1	45.1
86	66.3	50.2	75.4





#19

trans-1,2-Dichloroethene

Concen: 17.825 ug/l

RT: 3.081 min Scan# 31

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

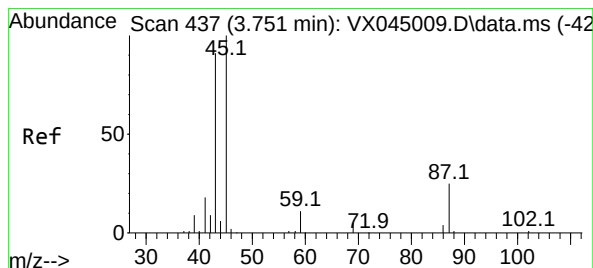
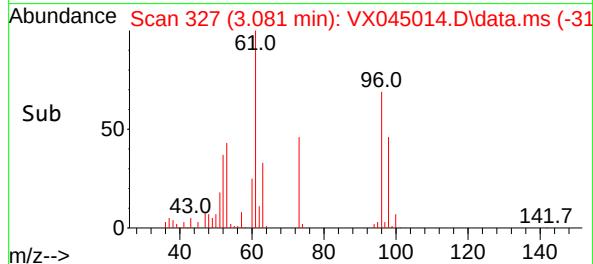
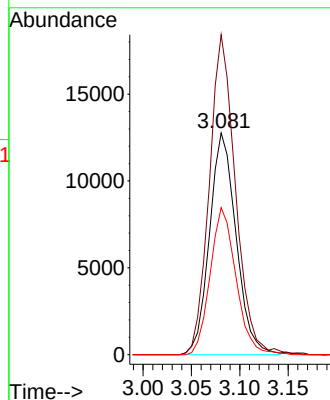
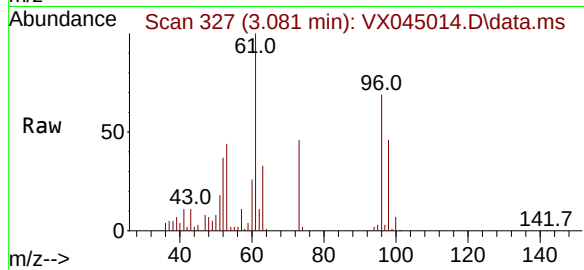
ICVX022125

Tgt Ion:	96	Resp:	2442
Ion	Ratio	Lower	Upper
96	100		
61	144.3	108.6	163.0
98	66.3	46.5	69.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#20

Diisopropyl ether

Concen: 17.850 ug/l

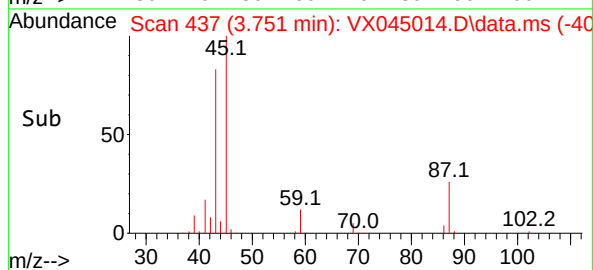
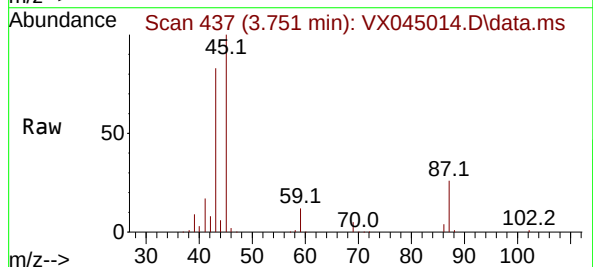
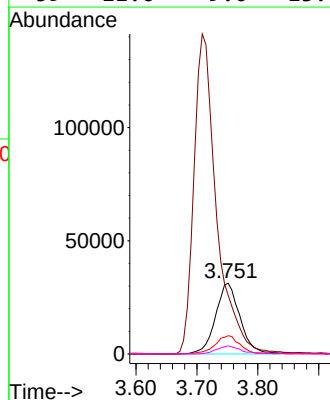
RT: 3.751 min Scan# 437

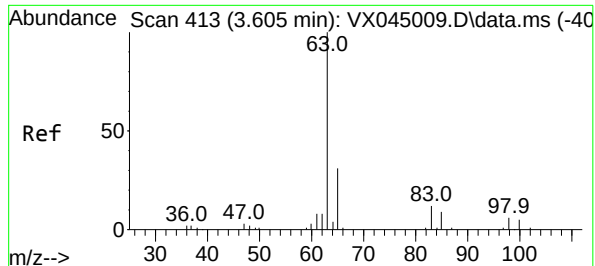
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	45	Resp:	86878
Ion	Ratio	Lower	Upper
45	100		
43	79.8	74.4	111.6
87	25.8	19.8	29.8
59	11.6	9.0	13.4





#21

1,1-Dichloroethane

Concen: 17.693 ug/l

RT: 3.599 min Scan# 413

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

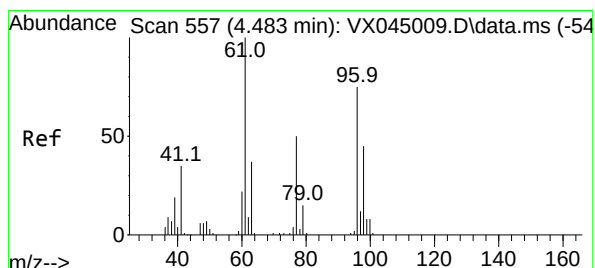
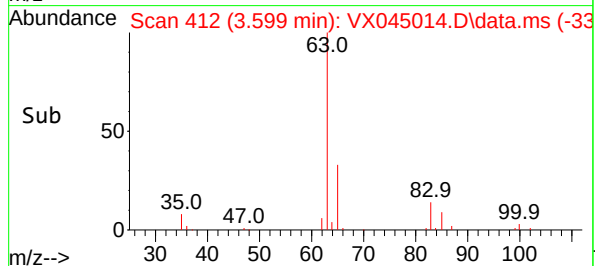
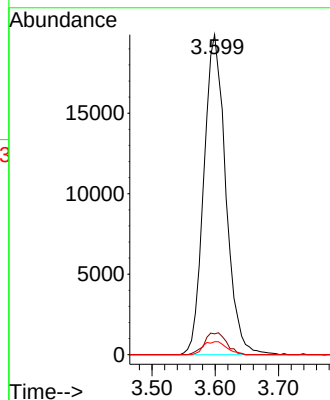
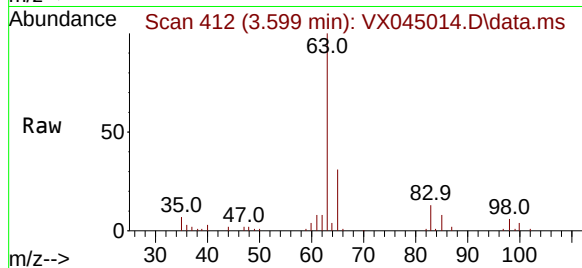
ICVX022125

Tgt Ion:	63	Resp:	4789
Ion Ratio	Lower	Upper	
63	100		
98	6.5	3.3	9.8
100	4.0	2.4	7.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#22

cis-1,2-Dichloroethene

Concen: 17.695 ug/l

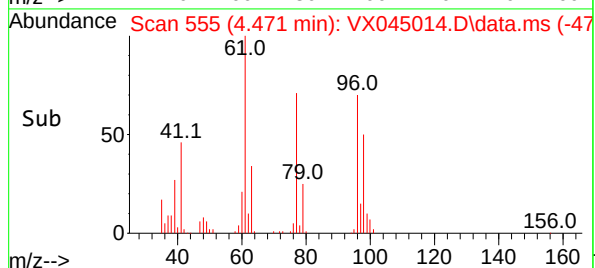
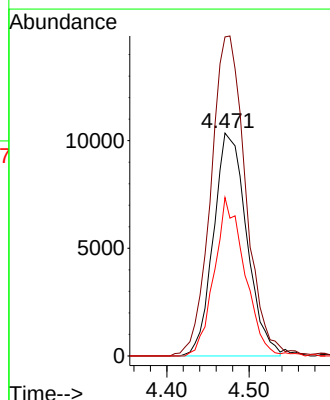
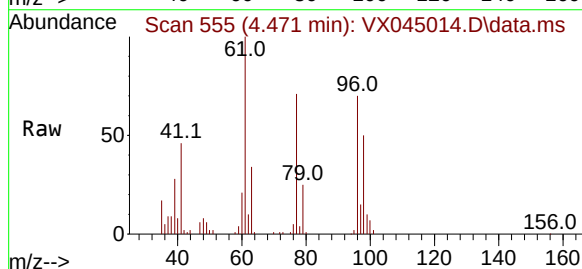
RT: 4.471 min Scan# 555

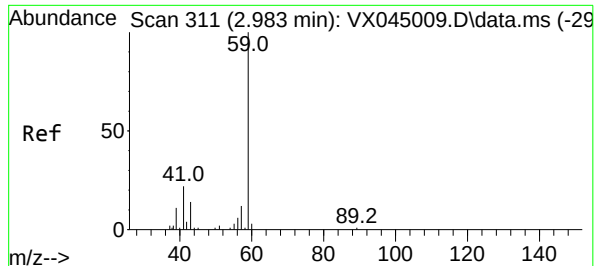
Delta R.T. -0.012 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	96	Resp:	29051
Ion Ratio	Lower	Upper	
96	100		
61	149.8	118.9	178.3
98	64.7	50.7	76.1





#23

tert-Butyl Alcohol

Concen: 92.286 ug/l

RT: 2.965 min Scan# 308

Delta R.T. -0.018 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 59 Resp: 24740

Ion Ratio Lower Upper

59 100

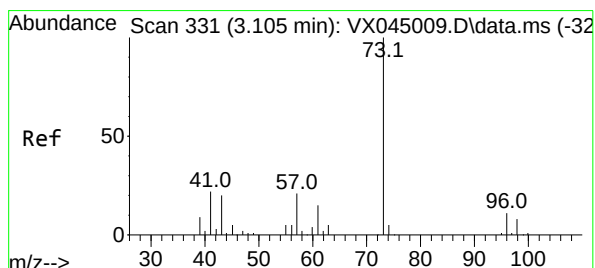
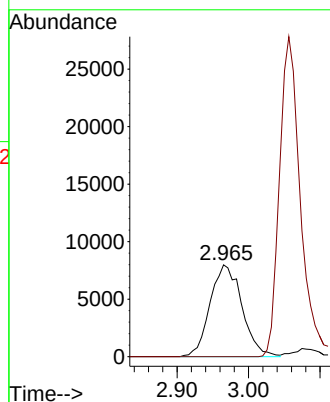
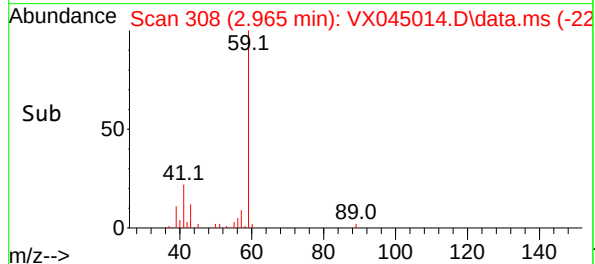
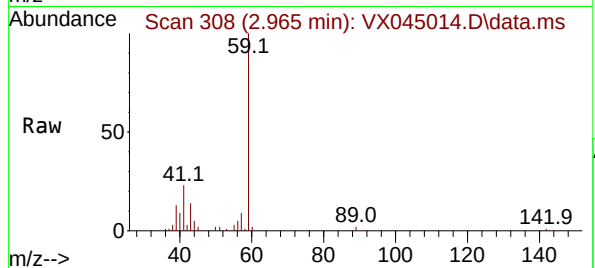
52 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#24

Methyl tert-Butyl Ether

Concen: 17.690 ug/l

RT: 3.105 min Scan# 331

Delta R.T. -0.000 min

Lab File: VX045014.D

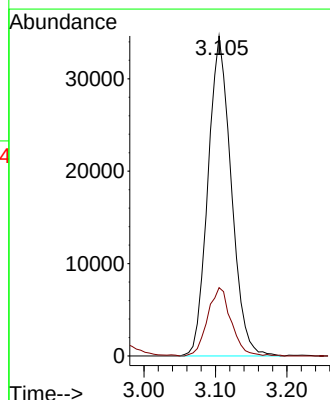
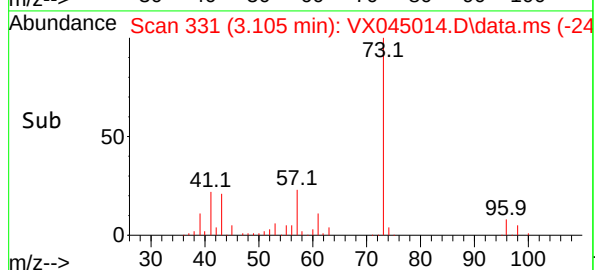
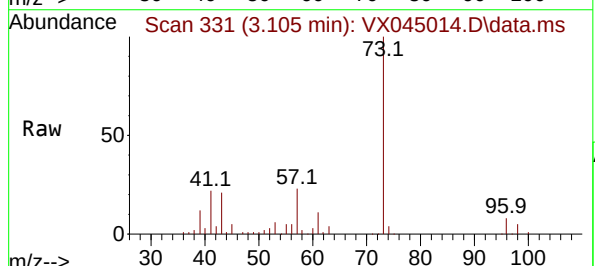
Acq: 21 Feb 2025 13:09

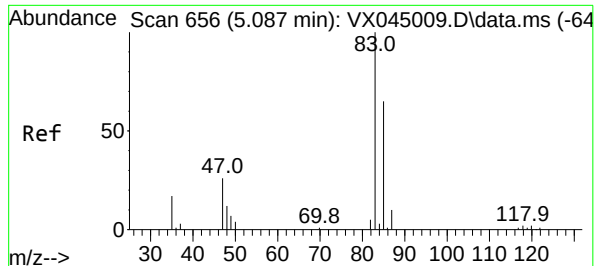
Tgt Ion: 73 Resp: 78186

Ion Ratio Lower Upper

73 100

43 21.5 17.4 26.0





#25

Chloroform

Concen: 17.943 ug/l

RT: 5.074 min Scan# 61

Delta R.T. -0.012 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 83 Resp: 4691

Ion Ratio Lower Upper

83 100

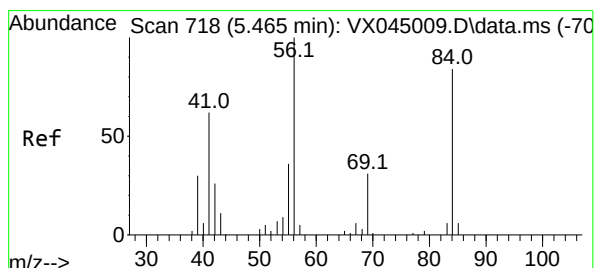
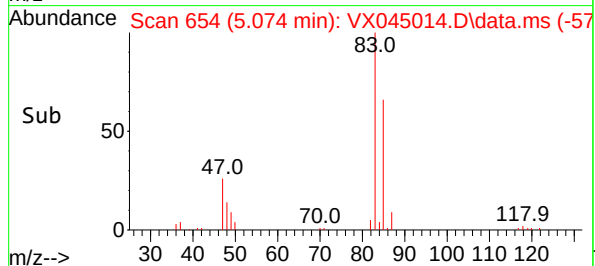
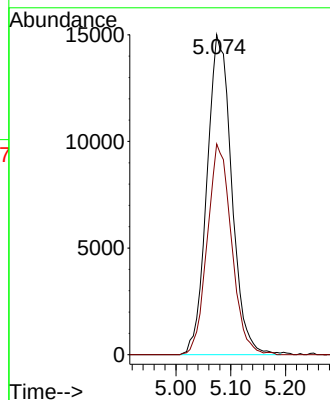
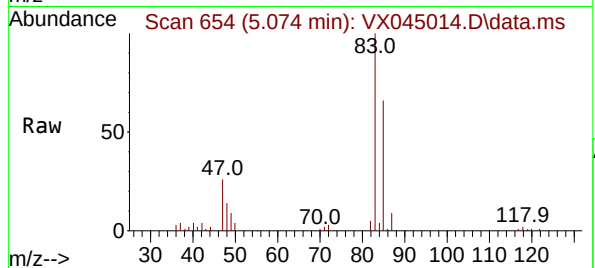
85 65.8 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#26

Cyclohexane

Concen: 17.890 ug/l

RT: 5.458 min Scan# 717

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

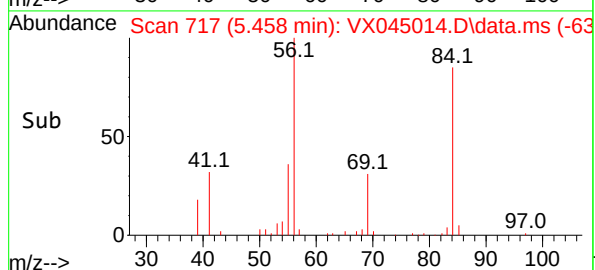
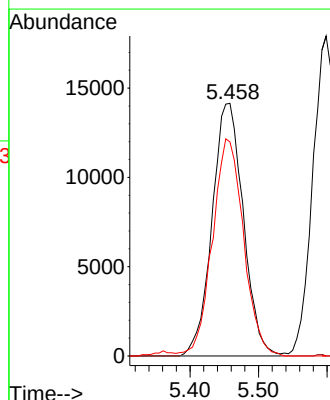
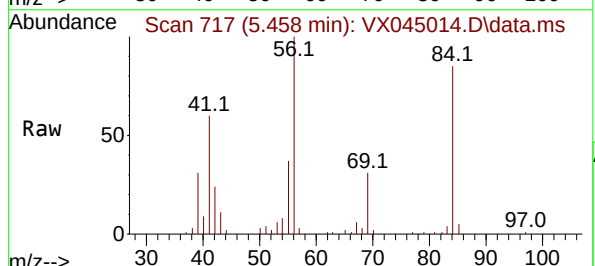
Tgt Ion: 56 Resp: 44699

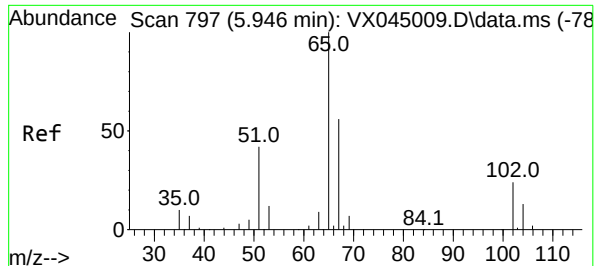
Ion Ratio Lower Upper

56 100

89 0.0 0.0 0.0

84 85.8 67.1 100.7





#27

1,2-Dichloroethane-d4

Concen: 29.736 ug/l

RT: 5.946 min Scan# 797

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 65 Resp: 5148

Ion Ratio Lower Upper

65 100

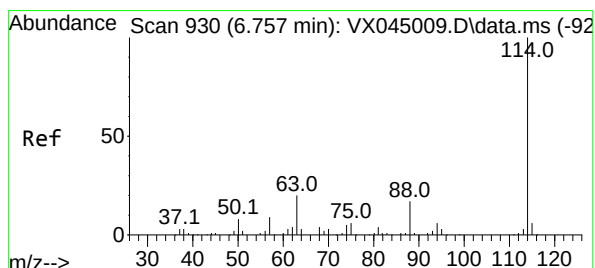
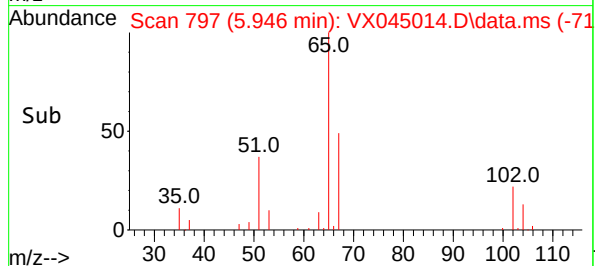
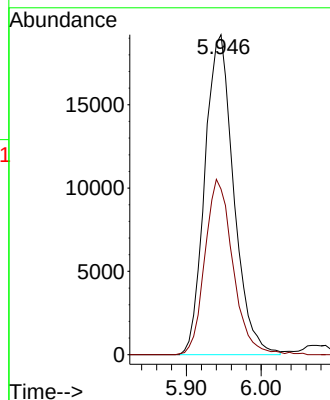
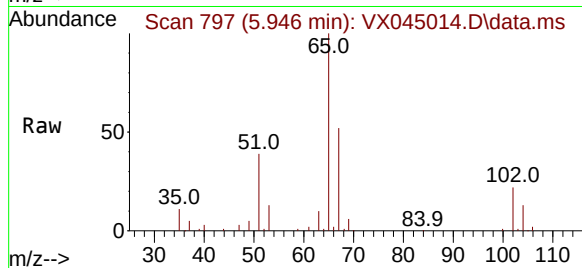
67 53.2 42.6 64.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.751 min Scan# 929

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

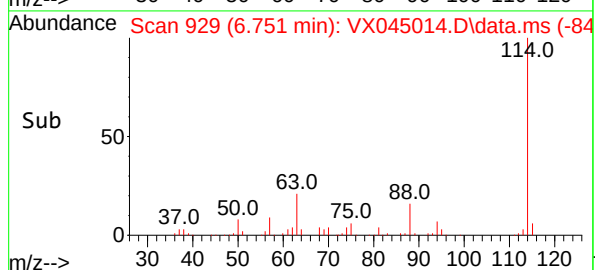
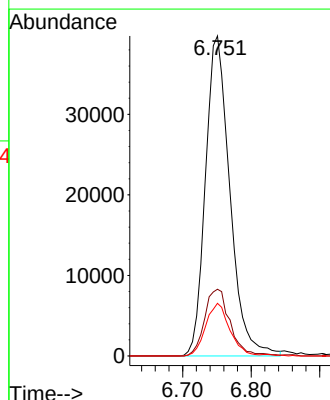
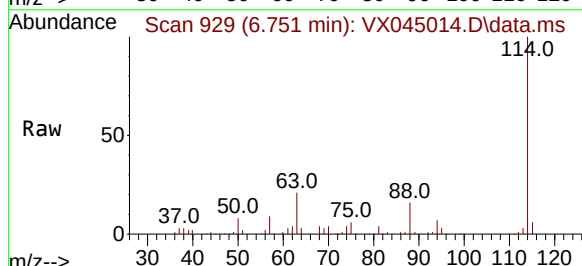
Tgt Ion:114 Resp: 98652

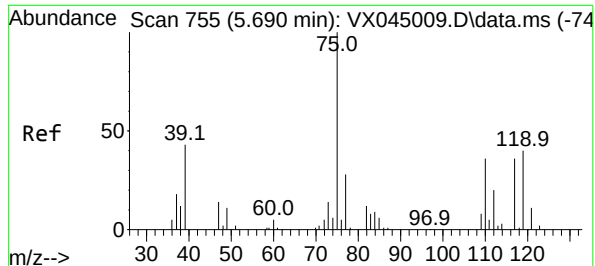
Ion Ratio Lower Upper

114 100

63 21.3 16.8 25.2

88 16.1 12.7 19.1





#29

1,1-Dichloropropene

Concen: 17.969 ug/l

RT: 5.678 min Scan# 755

Delta R.T. -0.012 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

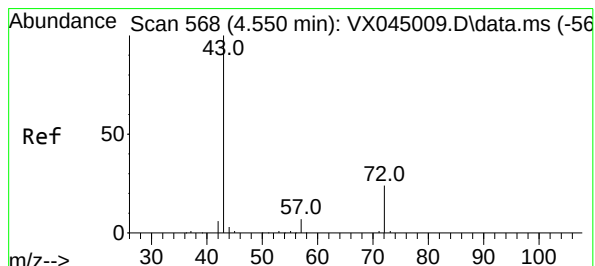
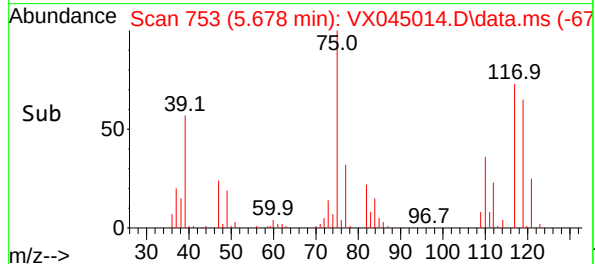
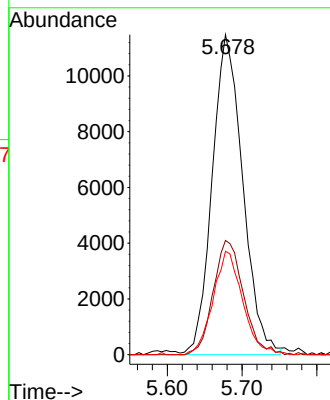
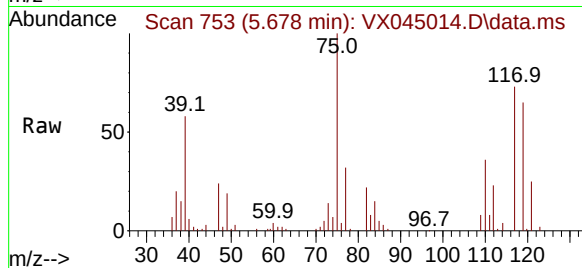
ICVX022125

Tgt Ion:	75	Resp:	32608
Ion	Ratio	Lower	Upper
75	100		
110	35.2	0.0	69.2
77	31.1	0.0	61.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#30

2-Butanone

Concen: 96.206 ug/l

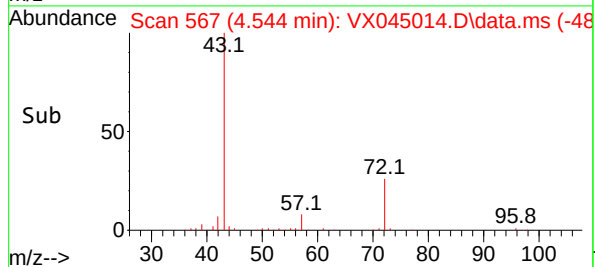
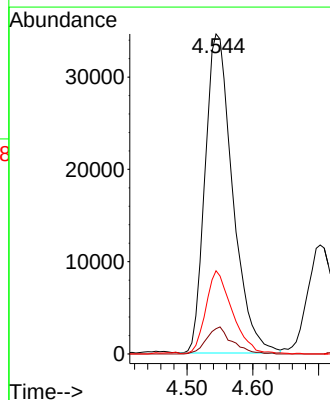
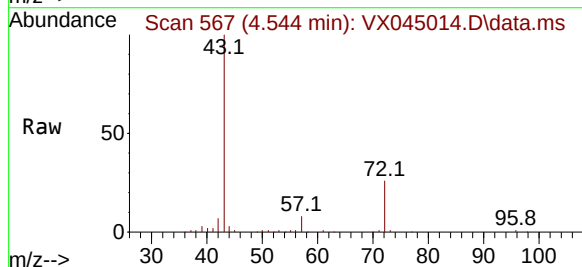
RT: 4.544 min Scan# 567

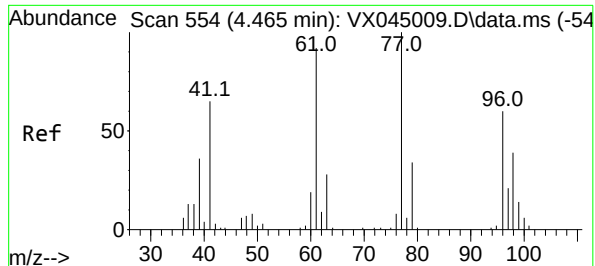
Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	43	Resp:	100841
Ion	Ratio	Lower	Upper
43	100		
57	7.8	6.2	9.2
72	24.4	20.2	30.2





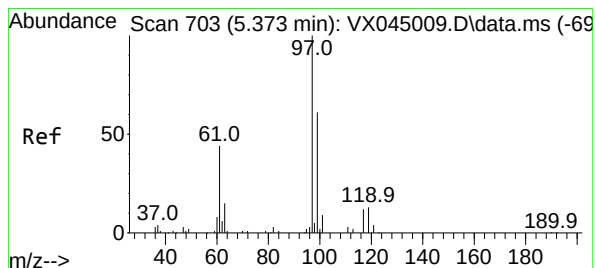
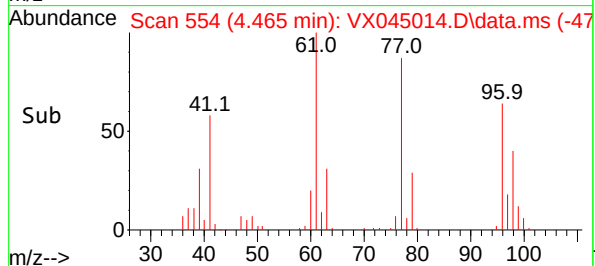
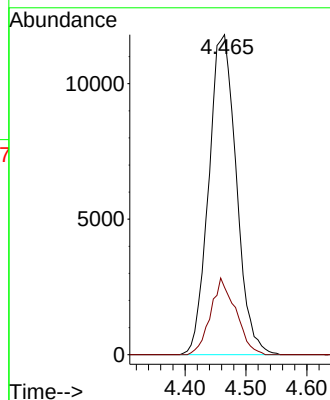
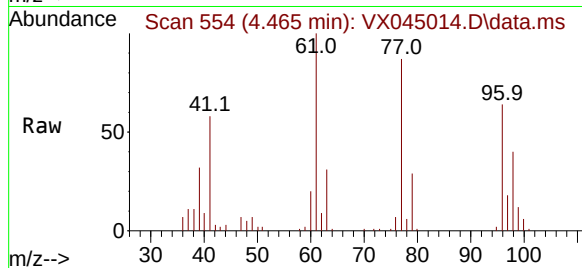
#31
2,2-Dichloropropane
Concen: 18.104 ug/l
RT: 4.465 min Scan# 554
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125

Tgt Ion: 77 Resp: 37149
Ion Ratio Lower Upper
77 100
97 21.9 18.0 27.0

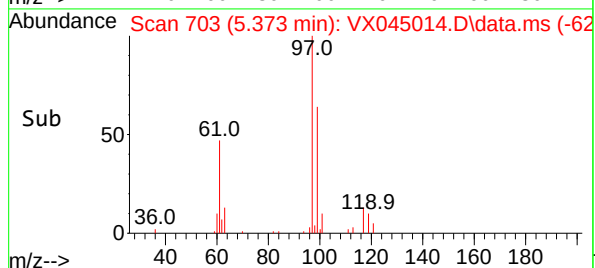
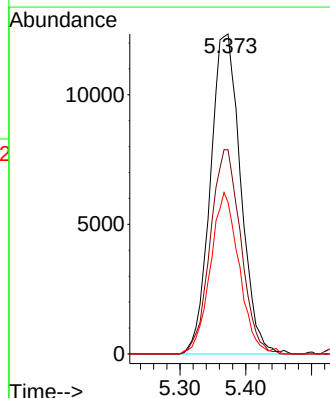
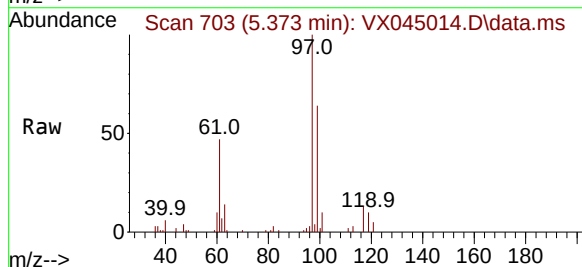
Manual Integrations
APPROVED

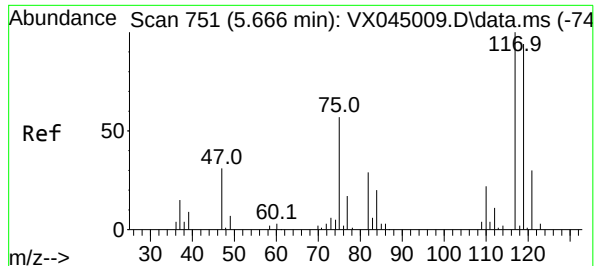
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#32
1,1,1-Trichloroethane
Concen: 17.945 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 97 Resp: 39458
Ion Ratio Lower Upper
97 100
99 64.4 52.2 78.2
61 47.7 38.5 57.7





#33

Carbon Tetrachloride

Concen: 18.080 ug/l

RT: 5.666 min Scan# 71

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion:117 Resp: 3355

Ion Ratio Lower Upper

117 100

119 92.8 75.1 112.7

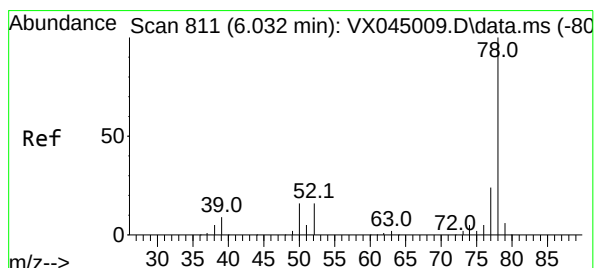
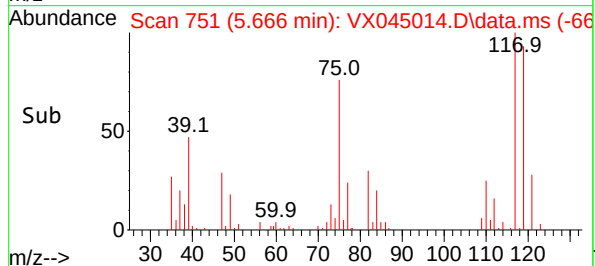
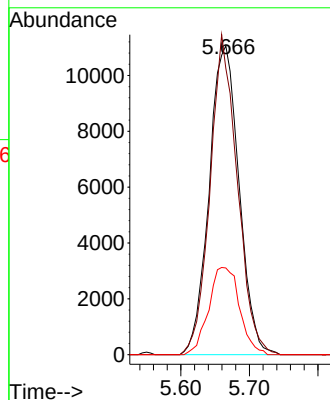
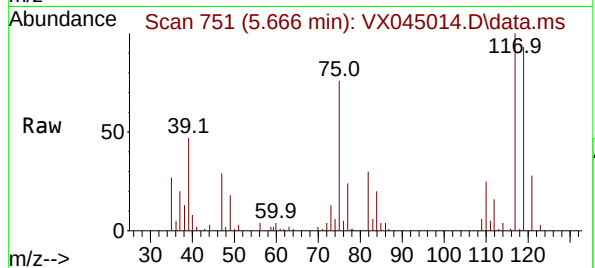
121 28.1 23.9 35.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#34

Benzene

Concen: 18.013 ug/l

RT: 6.025 min Scan# 810

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

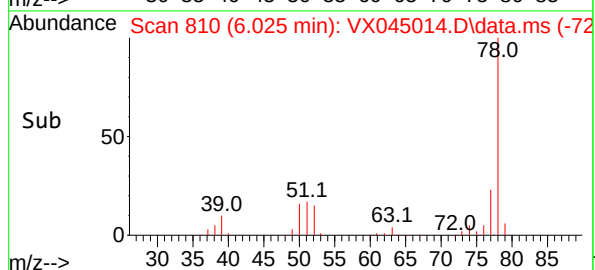
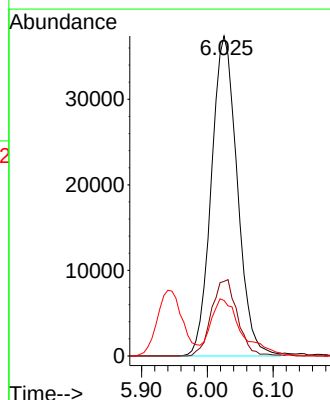
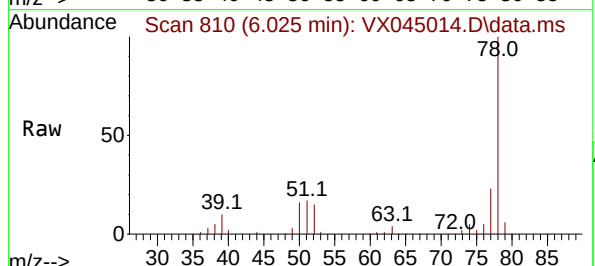
Tgt Ion: 78 Resp: 102508

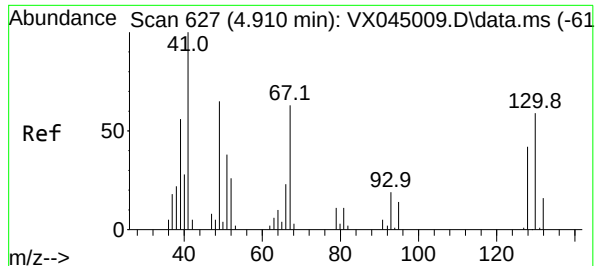
Ion Ratio Lower Upper

78 100

77 23.3 19.6 29.4

51 16.4 13.8 20.6





#35

Methacrylonitrile

Concen: 18.343 ug/l

RT: 4.910 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVVX022125

Tgt Ion: 41 Resp: 2057

Ion Ratio Lower Upper

41 100

39 54.4 27.8 83.4

67 60.2 31.5 94.5

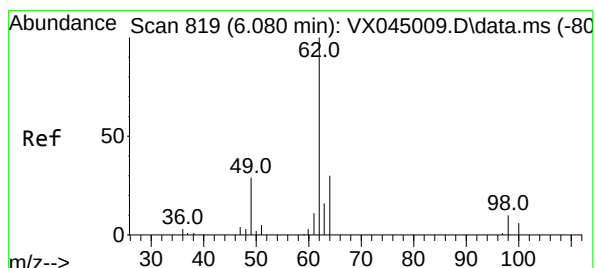
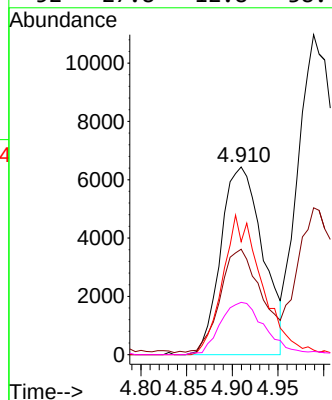
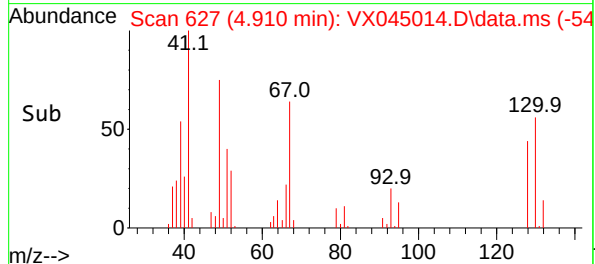
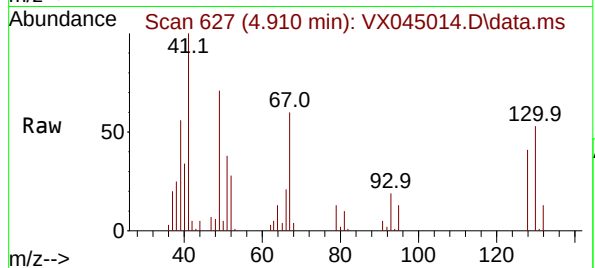
52 27.8 12.8 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#36

1,2-Dichloroethane

Concen: 18.316 ug/l

RT: 6.074 min Scan# 818

Delta R.T. -0.006 min

Lab File: VX045014.D

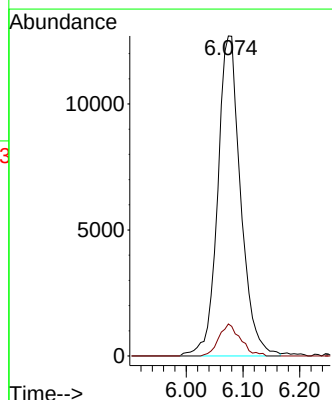
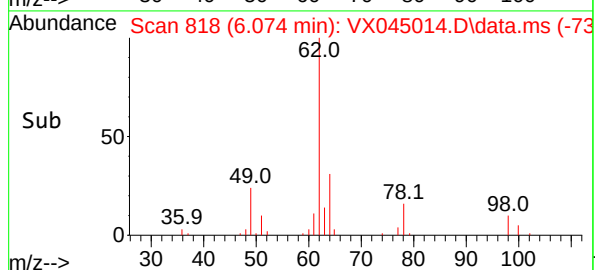
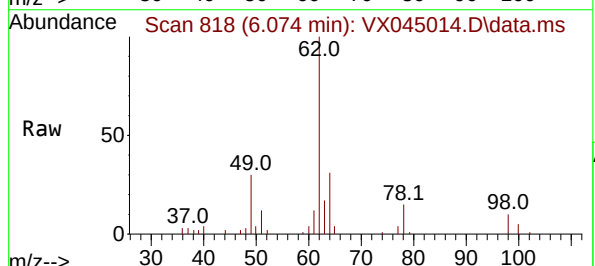
Acq: 21 Feb 2025 13:09

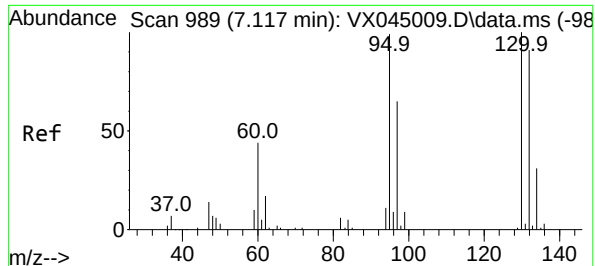
Tgt Ion: 62 Resp: 35686

Ion Ratio Lower Upper

62 100

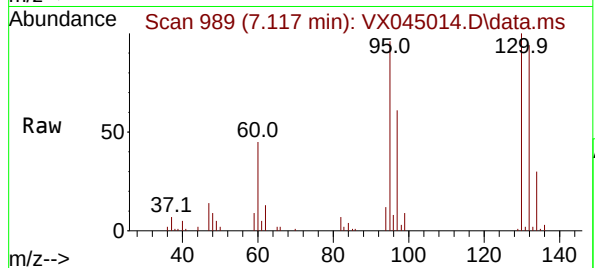
98 9.4 7.9 11.9





#37
Trichloroethene
Concen: 17.933 ug/l
RT: 7.117 min Scan# 989
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

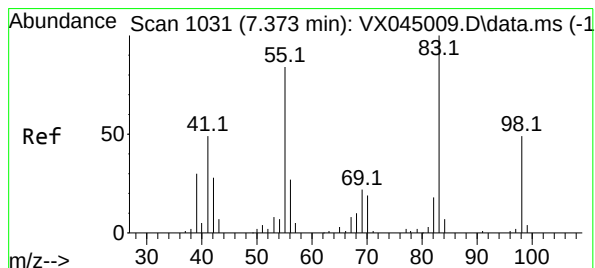
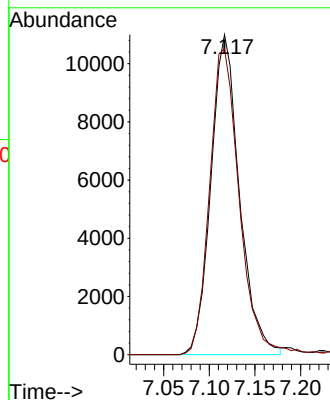
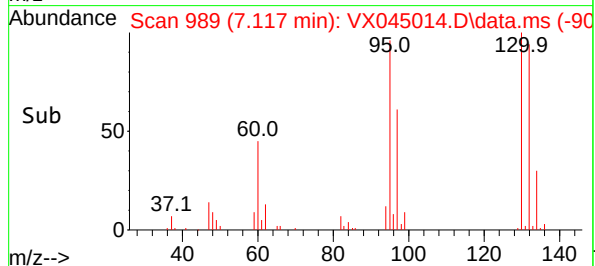
Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125



Tgt Ion:130 Resp: 23875
Ion Ratio Lower Upper
130 100
95 95.6 79.0 118.4

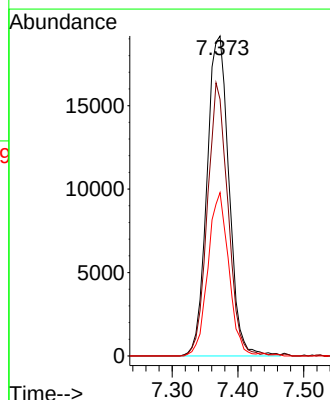
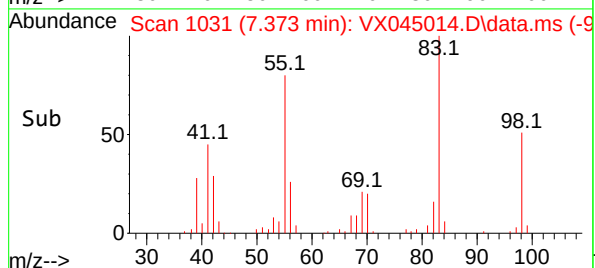
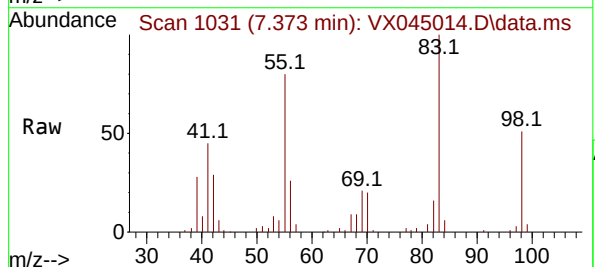
Manual Integrations
APPROVED

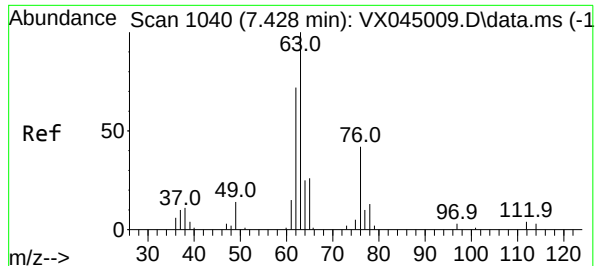
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#38
Methylcyclohexane
Concen: 18.370 ug/l
RT: 7.373 min Scan# 1031
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 83 Resp: 44760
Ion Ratio Lower Upper
83 100
55 79.4 40.6 122.0
98 48.2 24.9 74.6





#39

1,2-Dichloropropane

Concen: 17.406 ug/l

RT: 7.421 min Scan# 1039

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 63 Resp: 2462

Ion Ratio Lower Upper

63 100

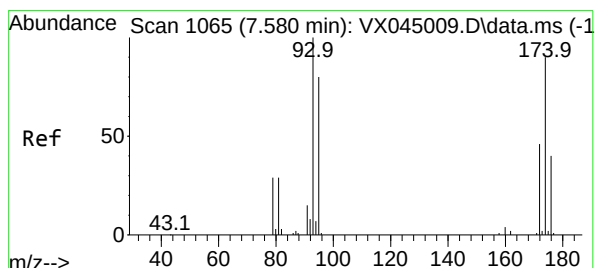
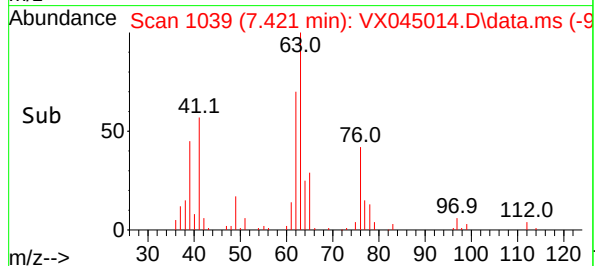
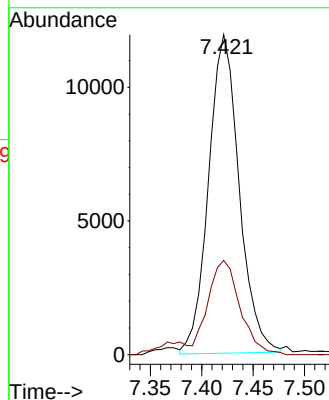
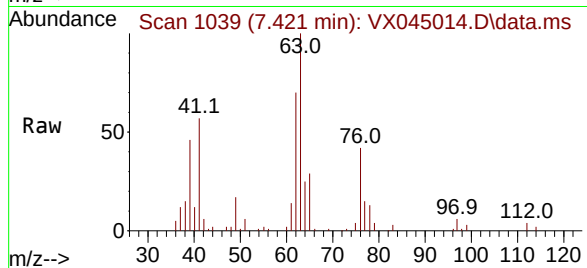
65 29.2 24.3 36.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#40

Dibromomethane

Concen: 18.010 ug/l

RT: 7.574 min Scan# 1064

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

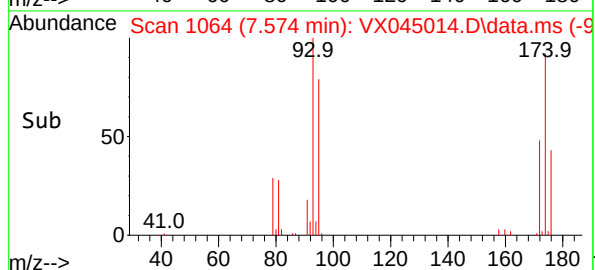
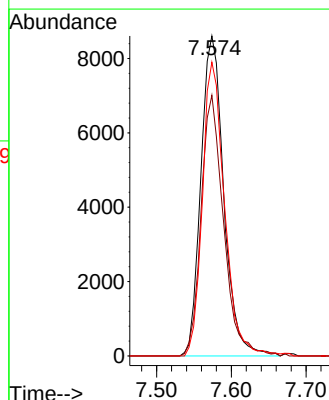
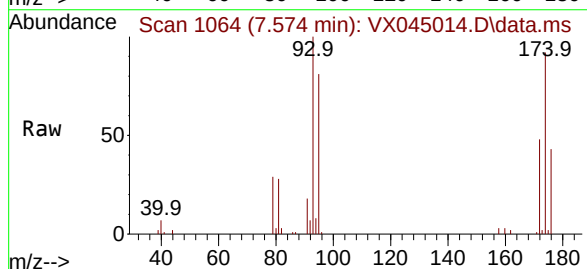
Tgt Ion: 93 Resp: 18285

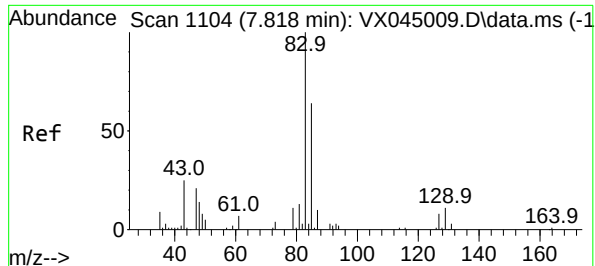
Ion Ratio Lower Upper

93 100

95 79.9 0.0 162.6

174 88.9 0.0 178.8





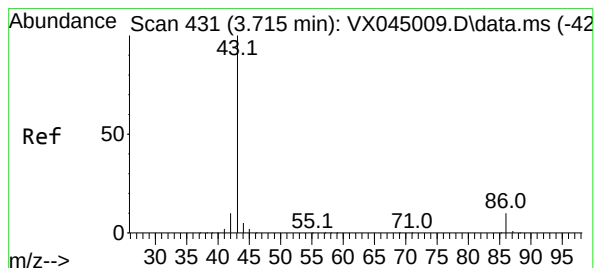
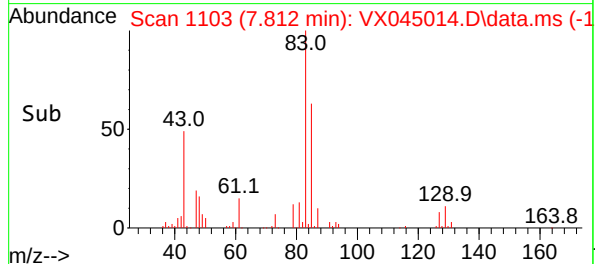
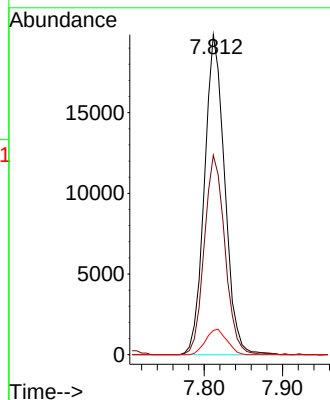
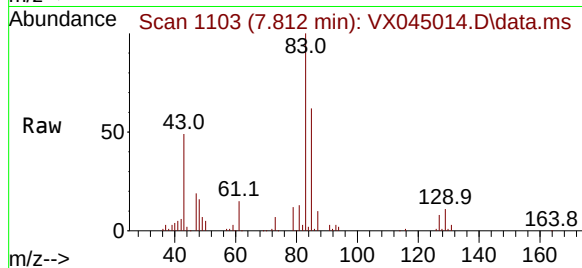
#41
Bromodichloromethane
Concen: 17.645 ug/l
RT: 7.812 min Scan# 1104
Delta R.T. -0.006 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVX022125

Tgt Ion: 83 Resp: 35600
Ion Ratio Lower Upper
83 100
85 62.3 51.0 76.6
127 7.6 6.1 9.1

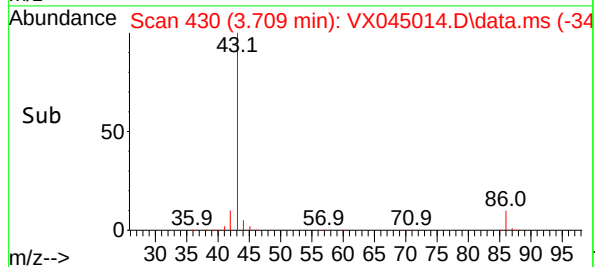
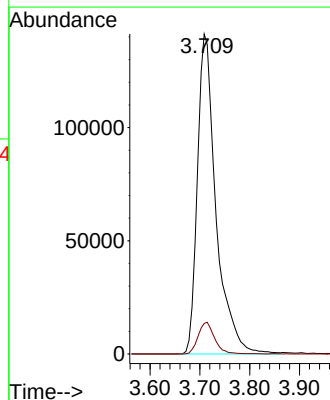
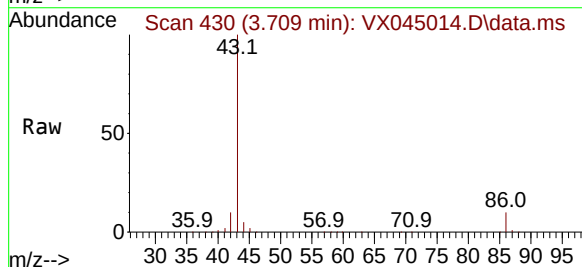
Manual Integrations
APPROVED

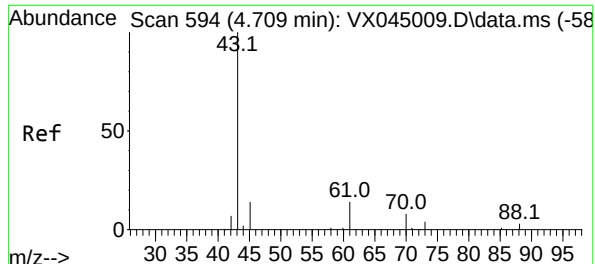
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#42
Vinyl Acetate
Concen: 89.973 ug/l
RT: 3.709 min Scan# 430
Delta R.T. -0.006 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 43 Resp: 365963
Ion Ratio Lower Upper
43 100
86 8.7 7.0 10.4





#43

Ethyl Acetate

Concen: 17.072 ug/l

RT: 4.702 min Scan# 594

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 43 Resp: 3355

Ion Ratio Lower Upper

43 100

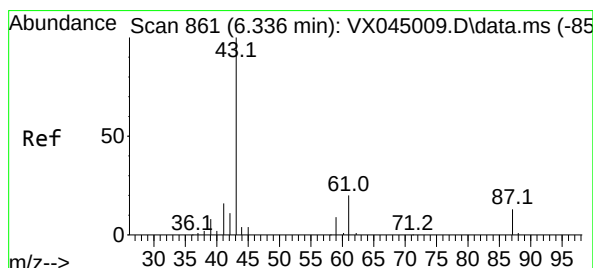
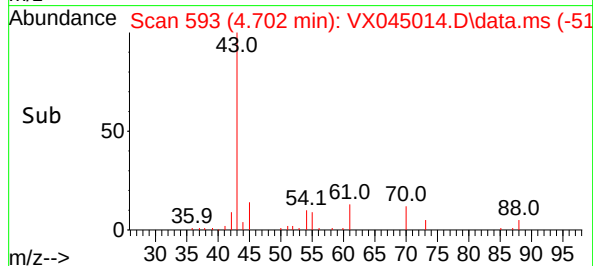
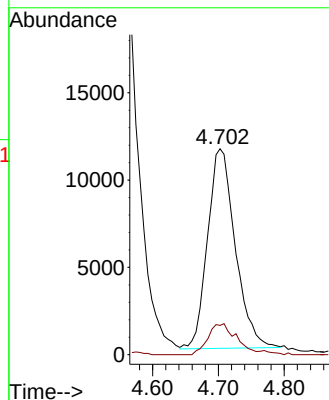
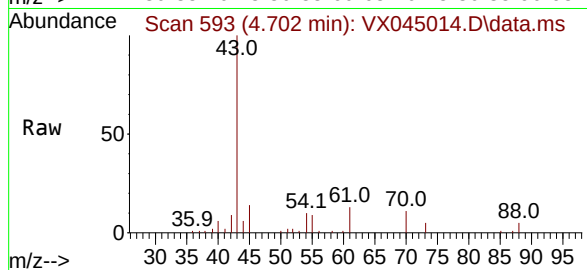
45 15.7 12.7 19.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#44

Isopropyl Acetate

Concen: 17.994 ug/l

RT: 6.330 min Scan# 860

Delta R.T. -0.006 min

Lab File: VX045014.D

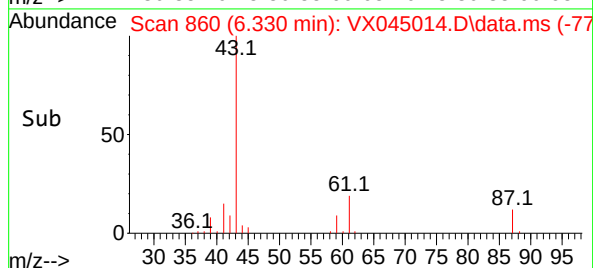
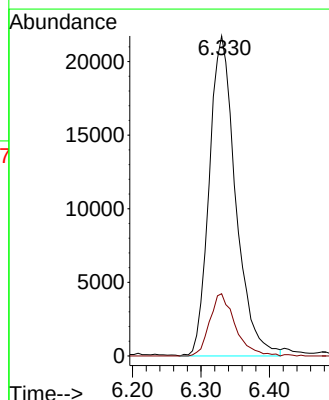
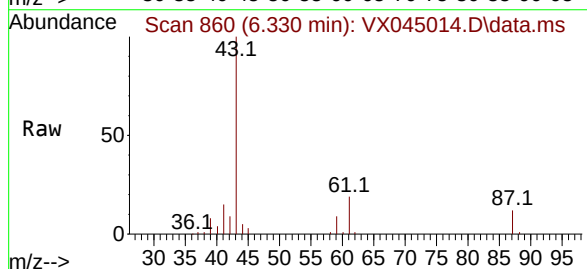
Acq: 21 Feb 2025 13:09

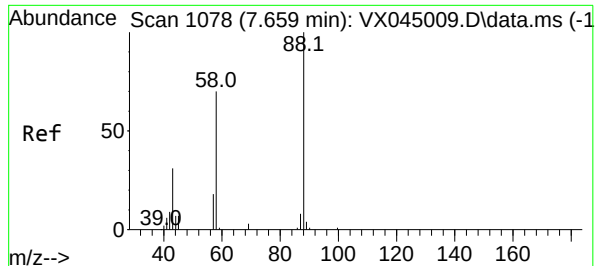
Tgt Ion: 43 Resp: 58216

Ion Ratio Lower Upper

43 100

61 18.7 15.5 23.3





#45

1,4-Dioxane

Concen: 376.282 ug/l

RT: 7.659 min Scan# 1078

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

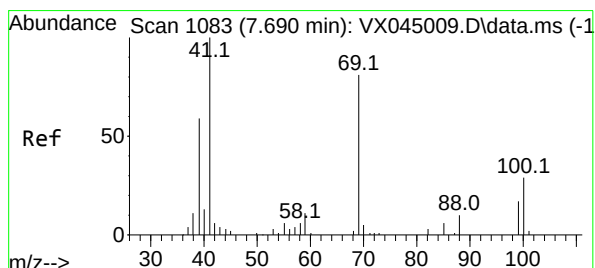
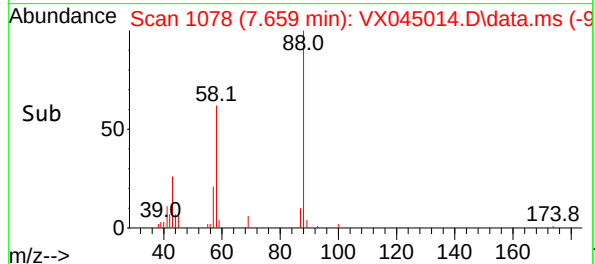
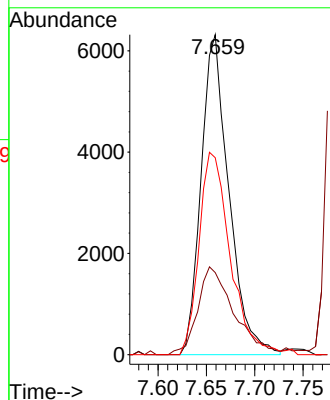
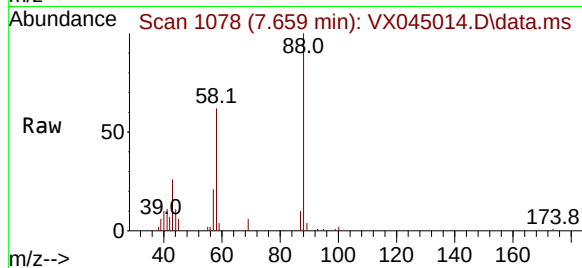
ICVX022125

Tgt Ion:	88	Resp:	1265
Ion	Ratio	Lower	Upper
88	100		
43	35.5	29.6	44.4
58	70.6	56.2	84.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#46

Methyl methacrylate

Concen: 18.320 ug/l

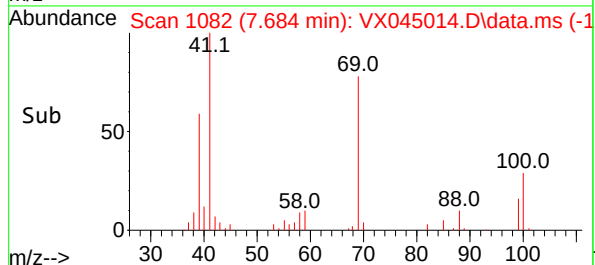
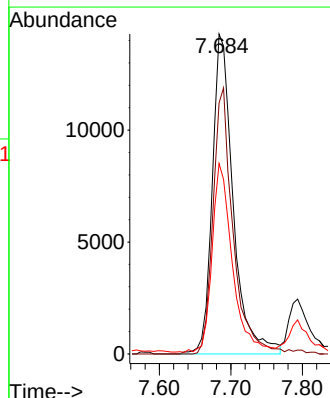
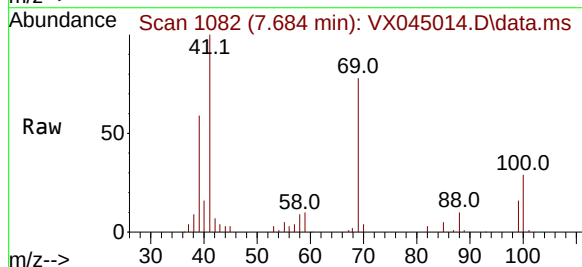
RT: 7.684 min Scan# 1082

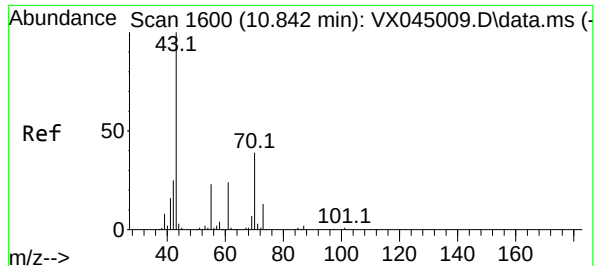
Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	41	Resp:	29063
Ion	Ratio	Lower	Upper
41	100		
69	78.5	40.7	122.1
39	58.8	29.5	88.5





#47

n-amy1 Acetate

Concen: 17.920 ug/l

RT: 10.842 min Scan# 1600

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 43 Resp: 50309

Ion Ratio Lower Upper

43 100

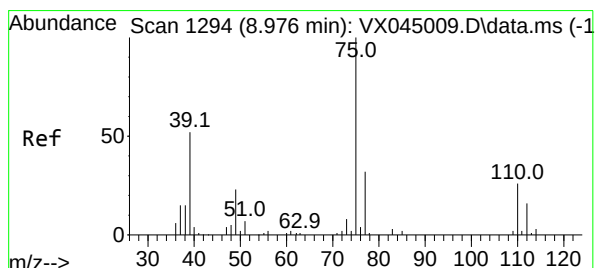
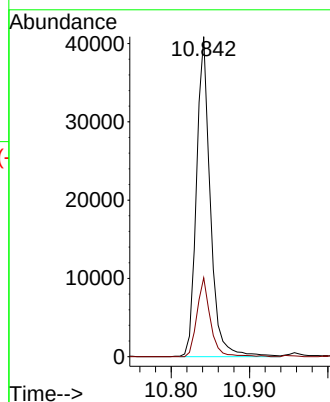
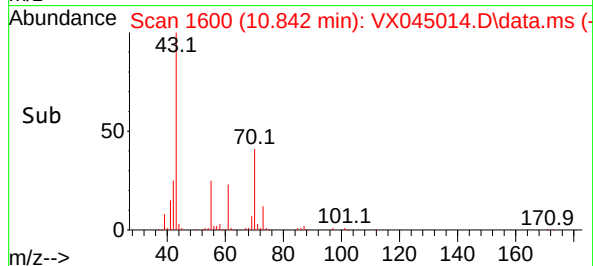
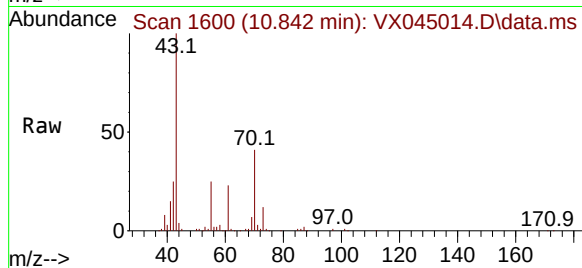
55 23.8 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#48

t-1,3-Dichloropropene

Concen: 16.972 ug/l

RT: 8.976 min Scan# 1294

Delta R.T. -0.000 min

Lab File: VX045014.D

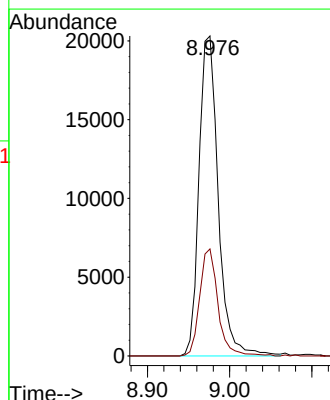
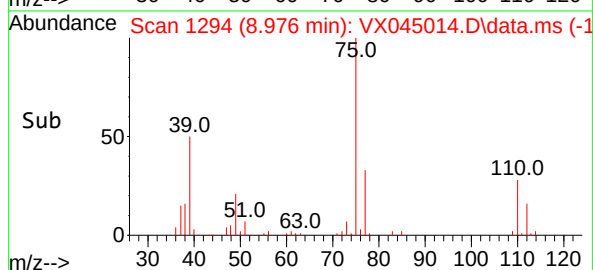
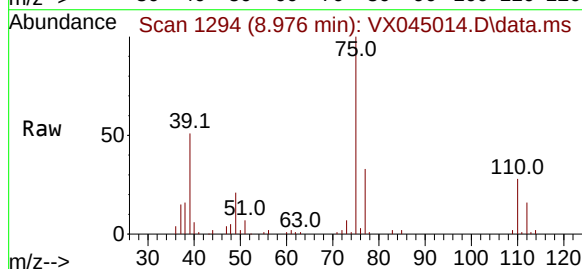
Acq: 21 Feb 2025 13:09

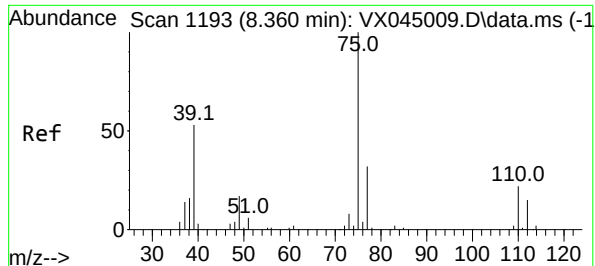
Tgt Ion: 75 Resp: 33010

Ion Ratio Lower Upper

75 100

77 33.5 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 17.491 ug/l

RT: 8.360 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 75 Resp: 3851

Ion Ratio Lower Upper

75 100

77 31.9 25.9 38.9

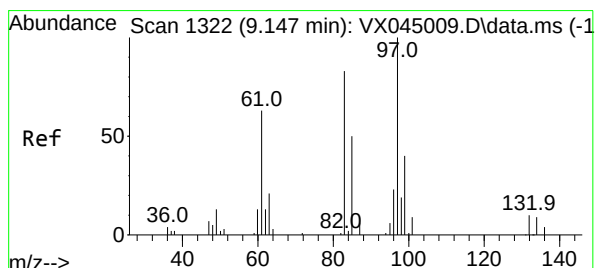
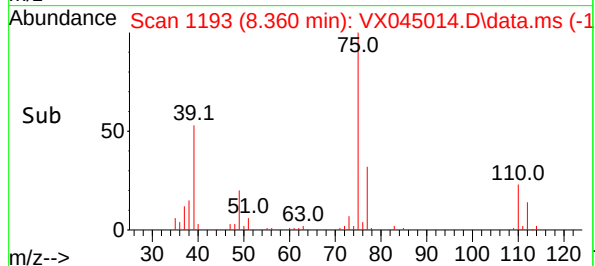
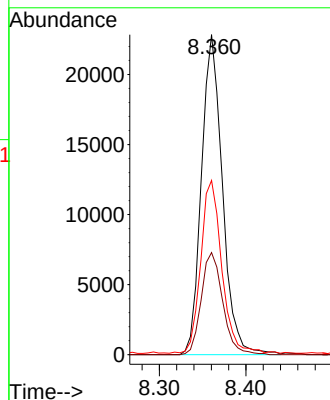
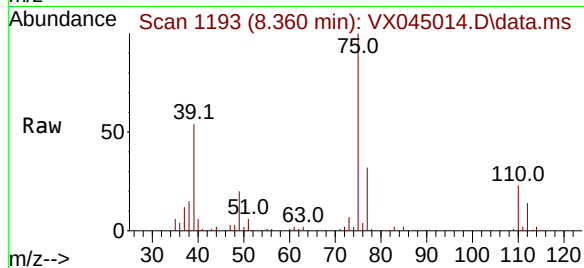
39 54.0 42.3 63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#50

1,1,2-Trichloroethane

Concen: 18.451 ug/l

RT: 9.147 min Scan# 1322

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion: 97 Resp: 24435

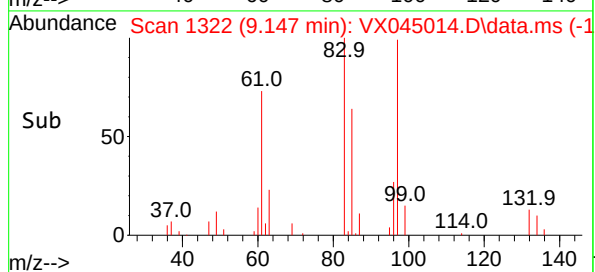
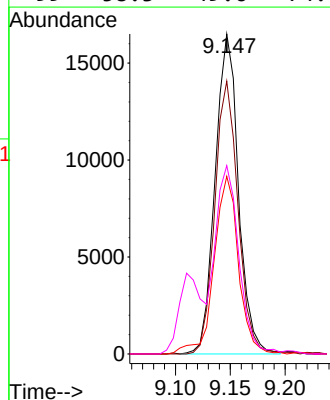
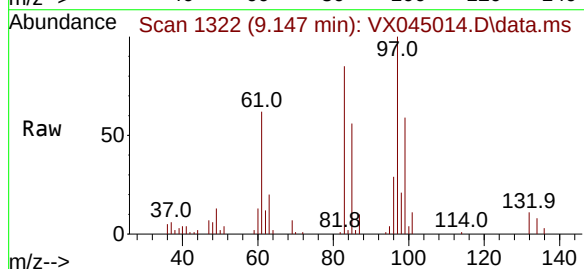
Ion Ratio Lower Upper

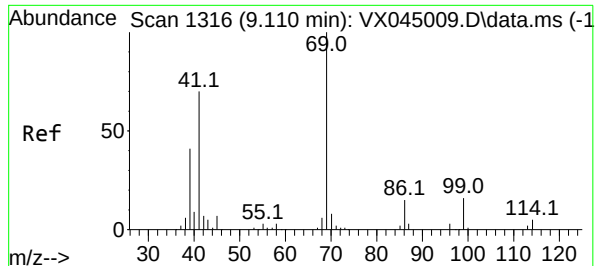
97 100

83 85.2 66.0 99.0

85 55.1 42.5 63.7

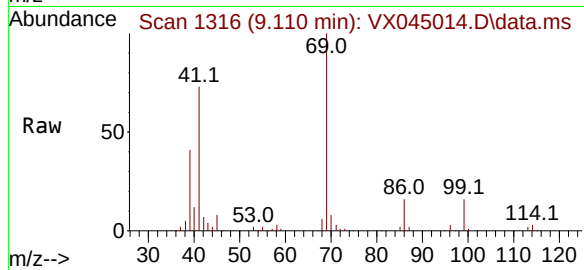
99 58.3 49.6 74.4





#51
Ethyl methacrylate
Concen: 17.882 ug/l
RT: 9.110 min Scan# 1316
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

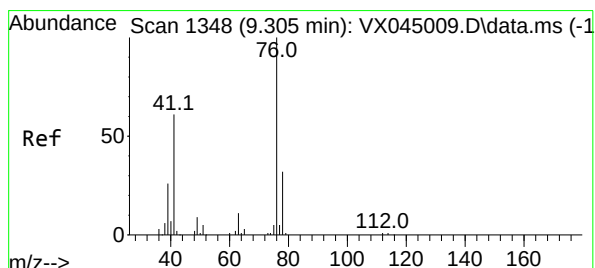
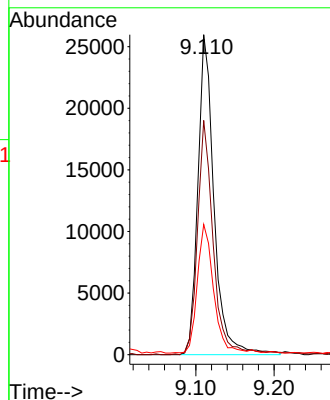
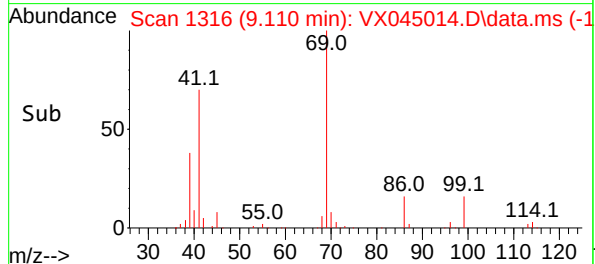
Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125



Tgt Ion: 69 Resp: 3724
Ion Ratio Lower Upper
69 100
41 73.2 35.1 105.3
39 40.1 20.5 61.6

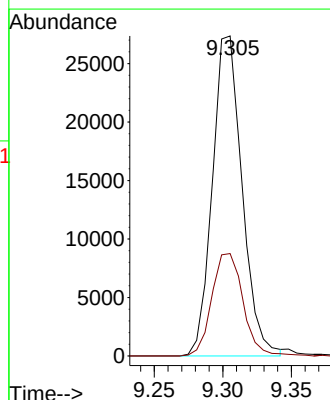
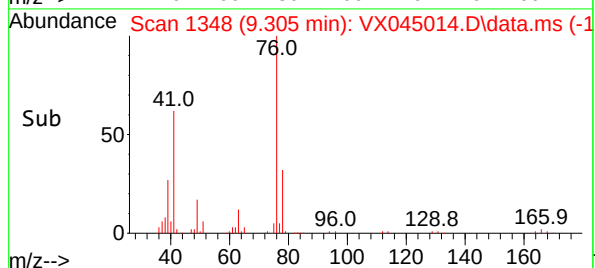
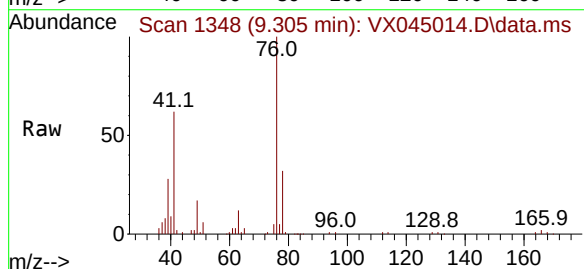
Manual Integrations
APPROVED

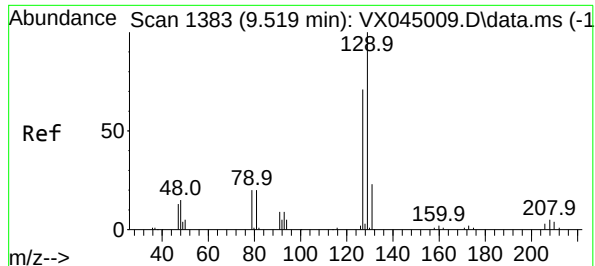
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#52
1,3-Dichloropropane
Concen: 17.765 ug/l
RT: 9.305 min Scan# 1348
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 76 Resp: 41224
Ion Ratio Lower Upper
76 100
78 33.7 0.0 63.6





#53

Dibromochloromethane

Concen: 17.620 ug/l

RT: 9.519 min Scan# 1383

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion:129 Resp: 2580

Ion Ratio Lower Upper

129 100

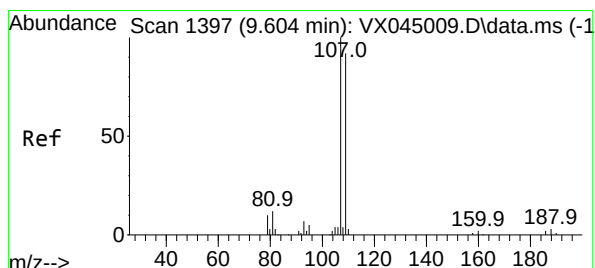
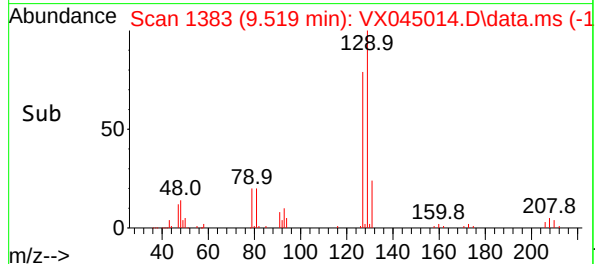
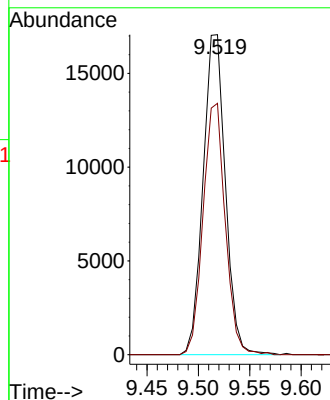
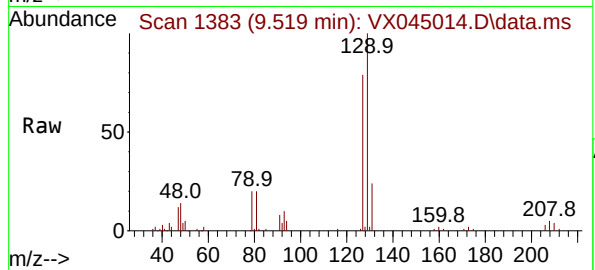
127 78.1 37.3 111.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#54

1,2-Dibromoethane

Concen: 17.616 ug/l

RT: 9.604 min Scan# 1397

Delta R.T. -0.000 min

Lab File: VX045014.D

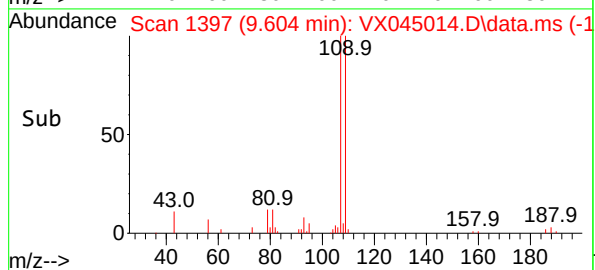
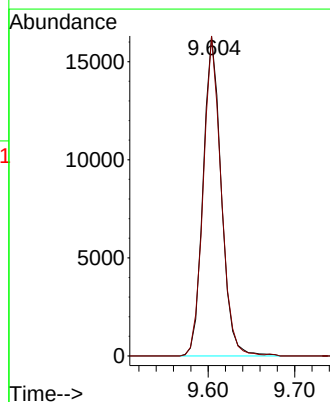
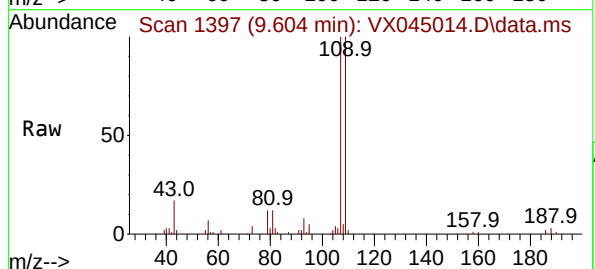
Acq: 21 Feb 2025 13:09

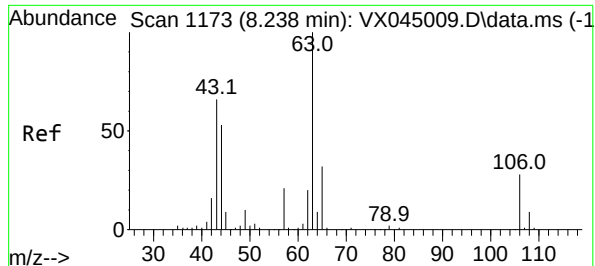
Tgt Ion:107 Resp: 23689

Ion Ratio Lower Upper

107 100

109 98.5 75.8 113.8





#55

2-Chloroethyl vinyl ether

Concen: 85.929 ug/l

RT: 8.232 min Scan# 1172

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

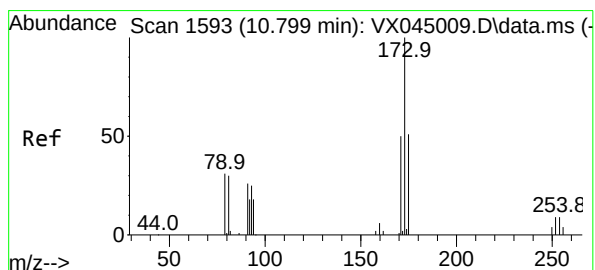
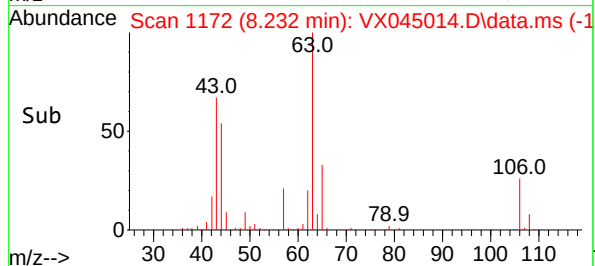
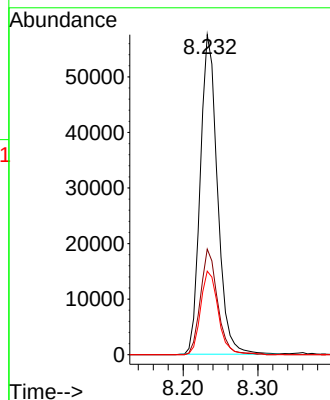
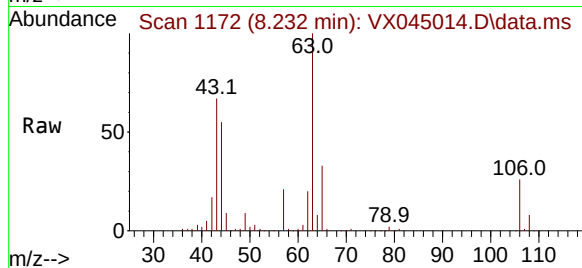
ICVX022125

Tgt Ion:	63	Resp:	9190
Ion	Ratio	Lower	Upper
63	100		
65	32.6	26.2	39.2
106	26.5	21.2	31.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#56

Bromoform

Concen: 17.412 ug/l

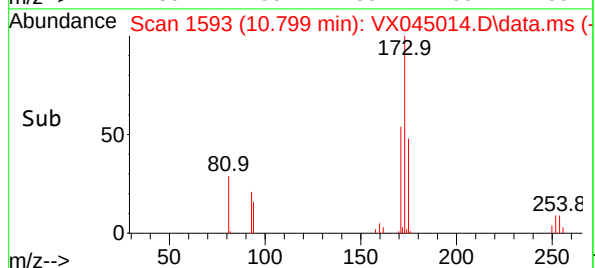
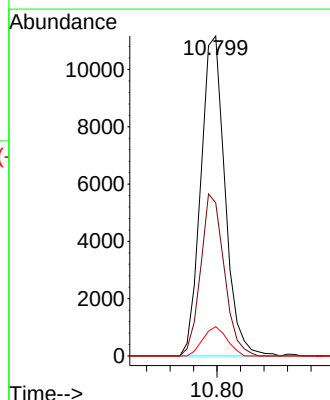
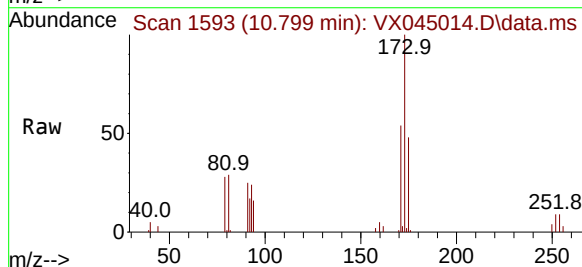
RT: 10.799 min Scan# 1593

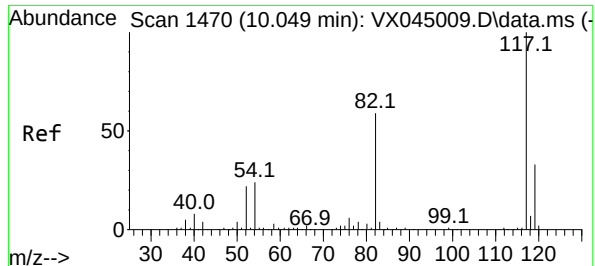
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	173	Resp:	15981
Ion	Ratio	Lower	Upper
173	100		
175	49.3	39.6	59.4
254	9.1	6.3	9.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.049 min Scan# 1470

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

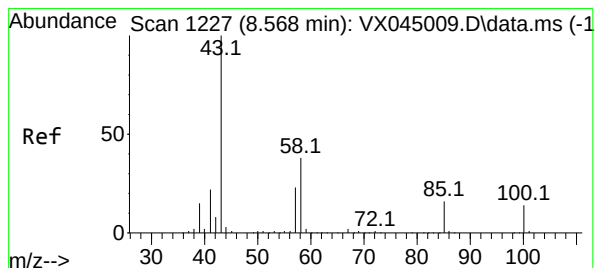
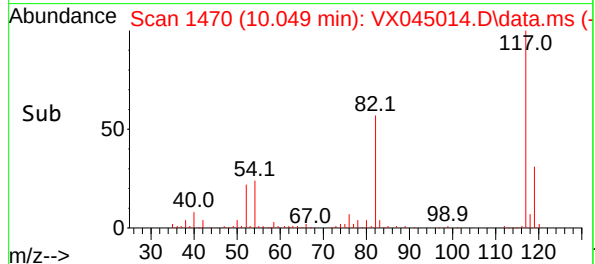
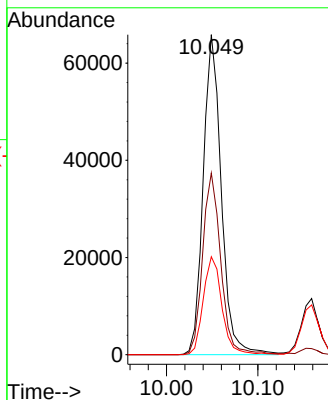
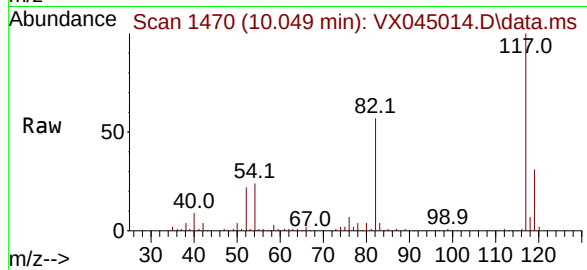
Tgt Ion:	117	Resp:	90634
Ion	Ratio	Lower	Upper
117	100		
82	57.1	45.8	68.8
119	31.7	25.5	38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#58

4-Methyl-2-Pentanone

Concen: 93.175 ug/l

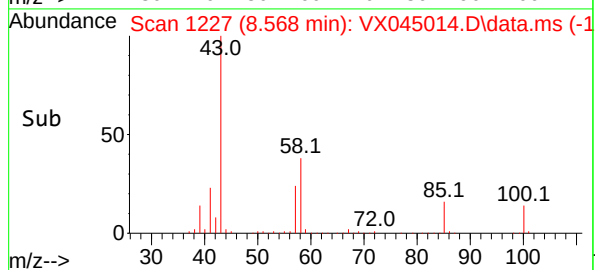
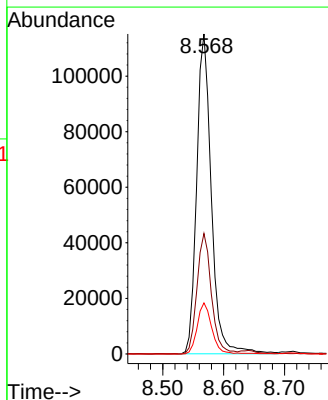
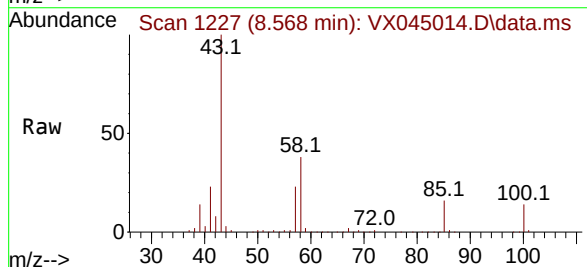
RT: 8.568 min Scan# 1227

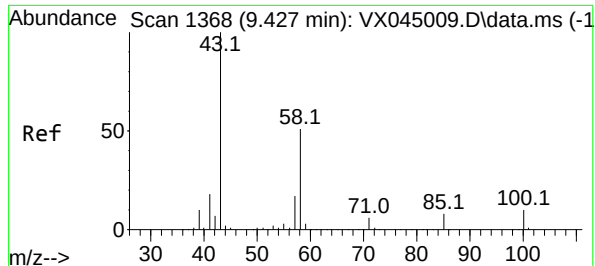
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	43	Resp:	192103
Ion	Ratio	Lower	Upper
43	100		
58	37.1	29.5	44.3
85	15.6	12.9	19.3





#59

2-Hexanone

Concen: 95.501 ug/l

RT: 9.427 min Scan# 1368

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 43 Resp: 142320

Ion Ratio Lower Upper

43 100

58 51.3 41.6 62.4

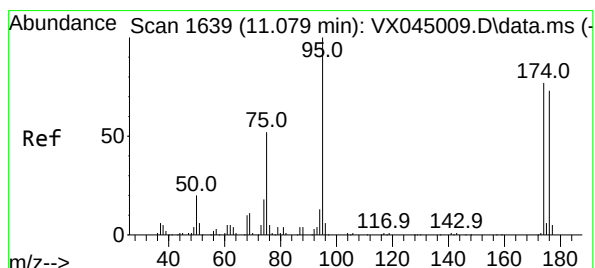
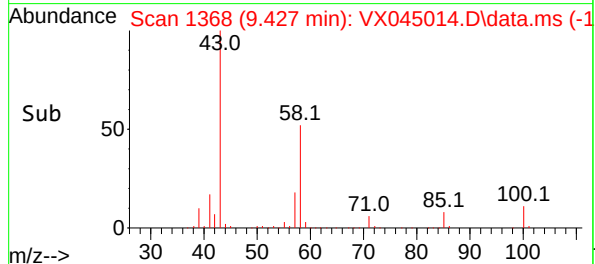
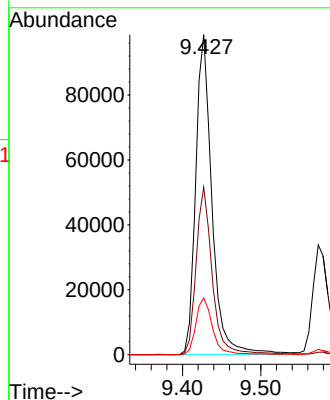
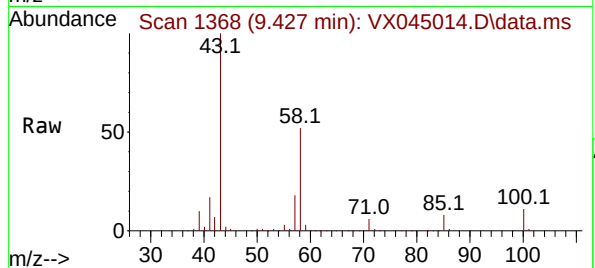
57 17.7 13.8 20.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#60

4-Bromofluorobenzene

Concen: 30.094 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

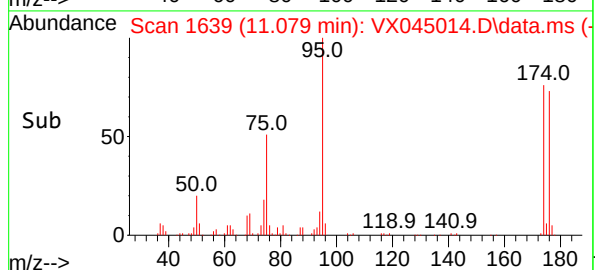
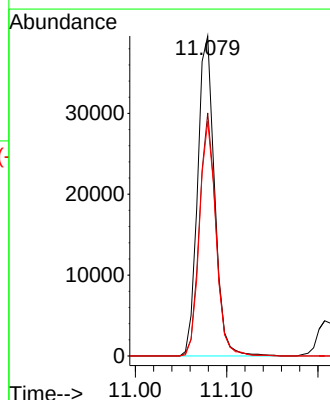
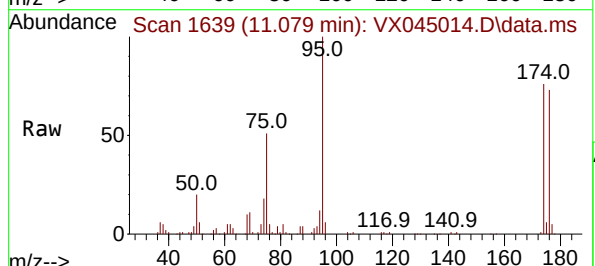
Tgt Ion: 95 Resp: 50982

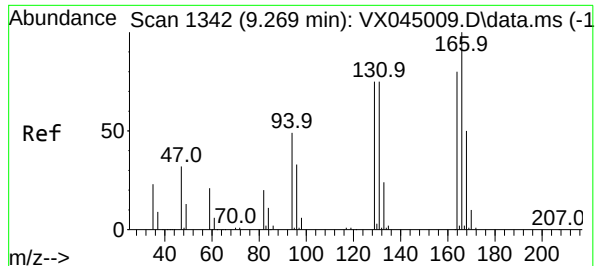
Ion Ratio Lower Upper

95 100

174 73.6 59.5 89.3

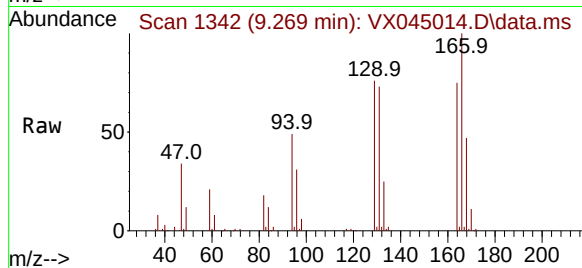
176 70.9 55.5 83.3





#61
Tetrachloroethene
Concen: 17.908 ug/l
RT: 9.269 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

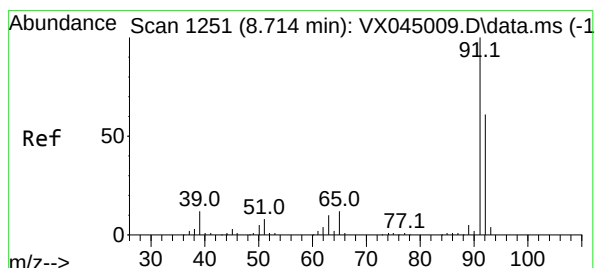
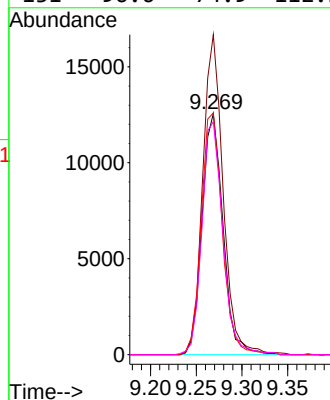
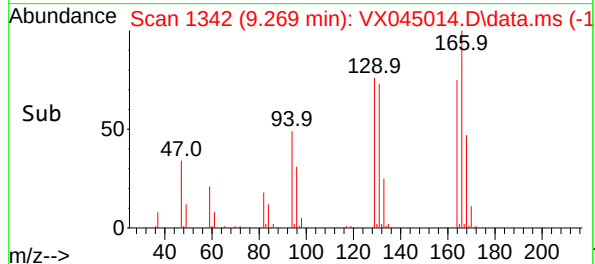
Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125



Tgt Ion:164 Resp: 1998
Ion Ratio Lower Upper
164 100
166 132.7 100.3 150.5
129 100.3 75.5 113.3
131 96.6 74.9 112.3

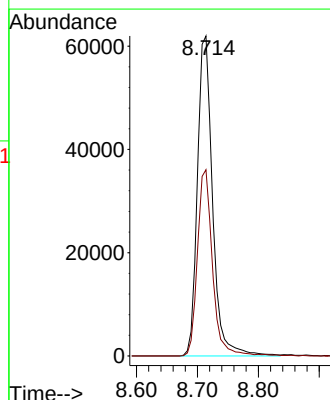
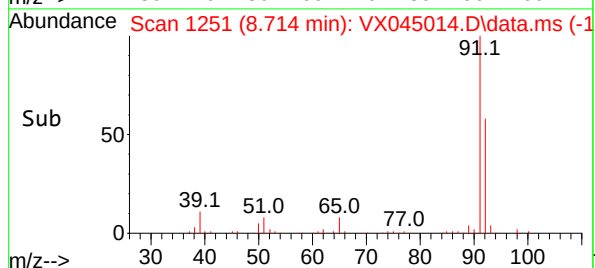
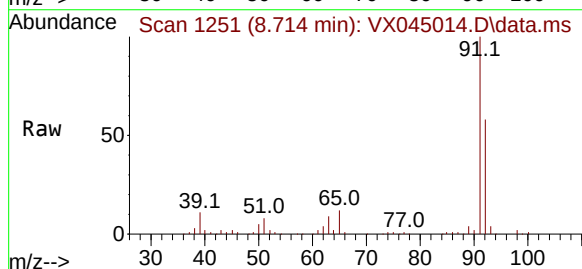
Manual Integrations
APPROVED

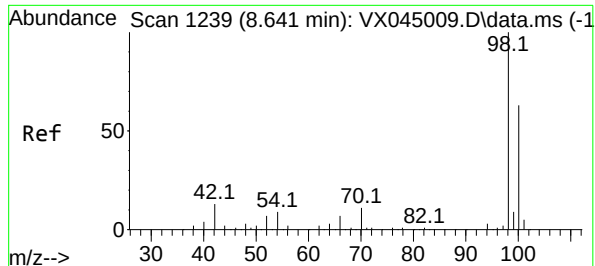
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#62
Toluene
Concen: 17.876 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 91 Resp: 107324
Ion Ratio Lower Upper
91 100
92 57.4 46.9 70.3





#63

Toluene-d8

Concen: 29.620 ug/l

RT: 8.641 min Scan# 1239

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 98 Resp: 148510

Ion Ratio Lower Upper

98 100

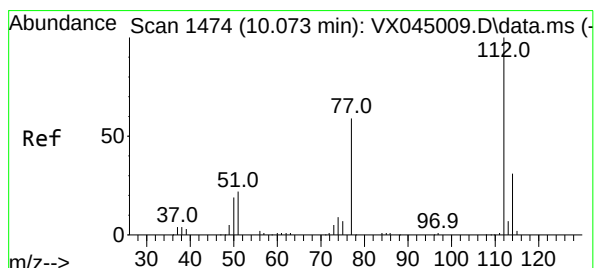
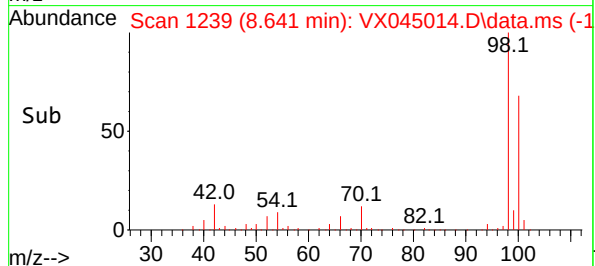
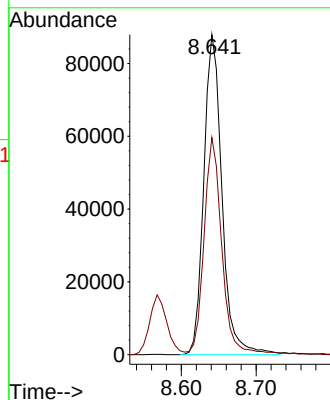
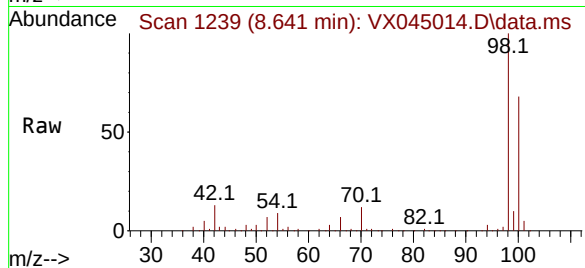
100 63.8 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#64

Chlorobenzene

Concen: 17.942 ug/l

RT: 10.073 min Scan# 1474

Delta R.T. -0.000 min

Lab File: VX045014.D

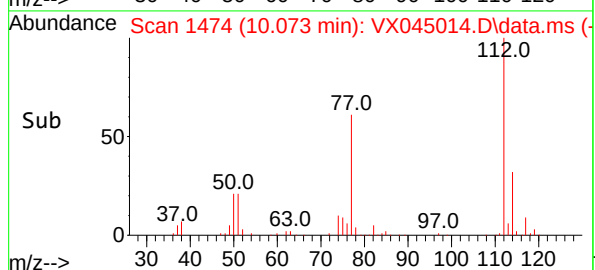
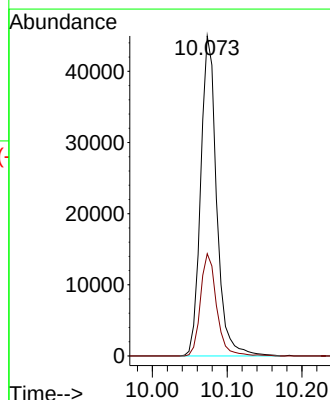
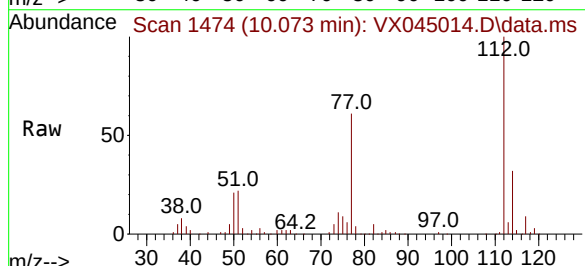
Acq: 21 Feb 2025 13:09

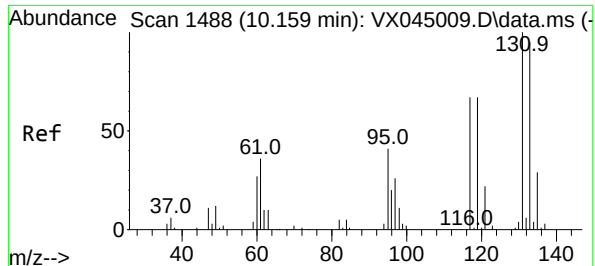
Tgt Ion:112 Resp: 66754

Ion Ratio Lower Upper

112 100

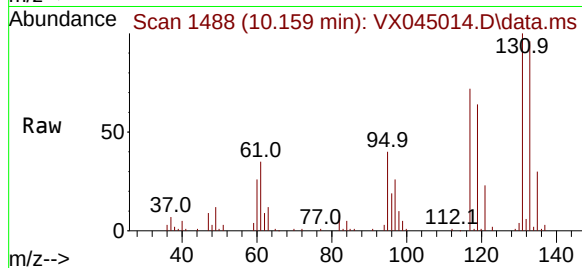
114 32.0 24.7 37.1





#65
1,1,1,2-Tetrachloroethane
Concen: 17.362 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

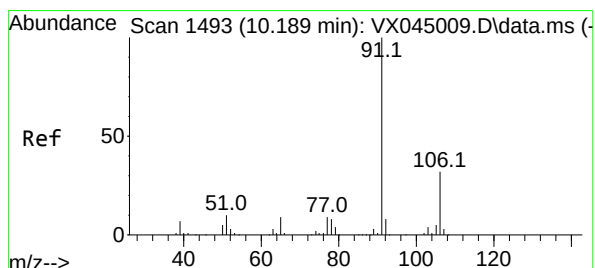
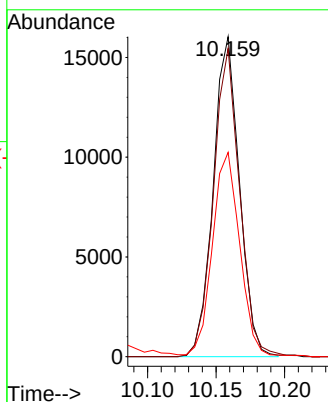
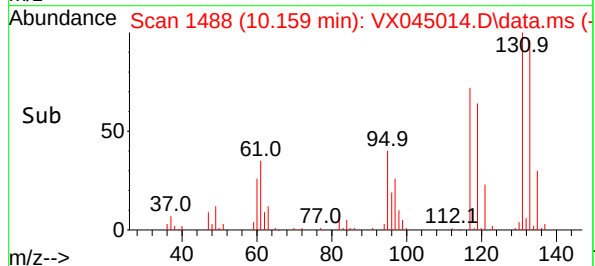
Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125



Tgt Ion:131 Resp: 21314
Ion Ratio Lower Upper
131 100
133 96.5 0.0 187.8
119 65.3 0.0 133.0

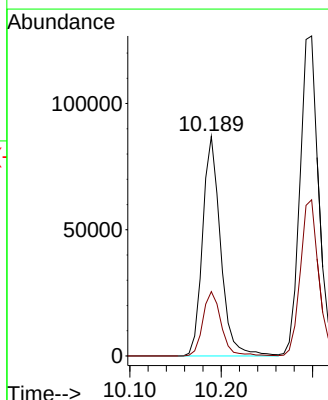
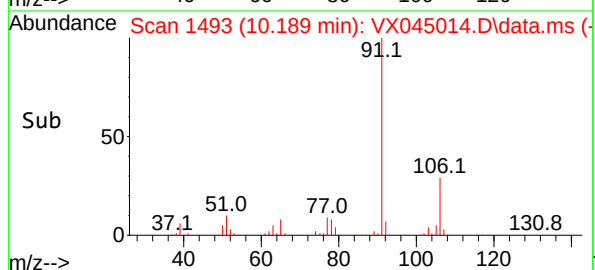
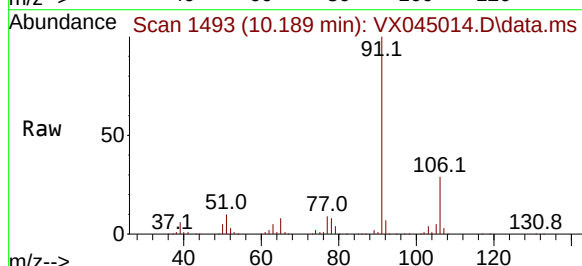
Manual Integrations
APPROVED

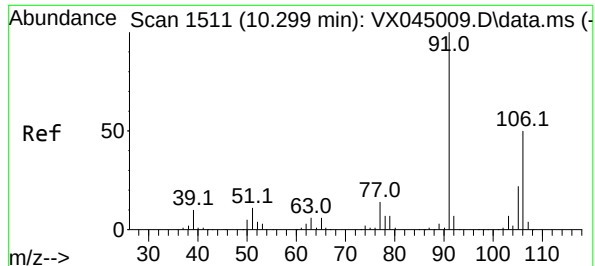
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#66
Ethyl Benzene
Concen: 18.117 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 91 Resp: 119085
Ion Ratio Lower Upper
91 100
106 29.3 25.4 38.2





#67

m/p-Xylenes

Concen: 36.205 ug/l

RT: 10.299 min Scan# 1511

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion:106 Resp: 8866

Ion Ratio Lower Upper

106 100

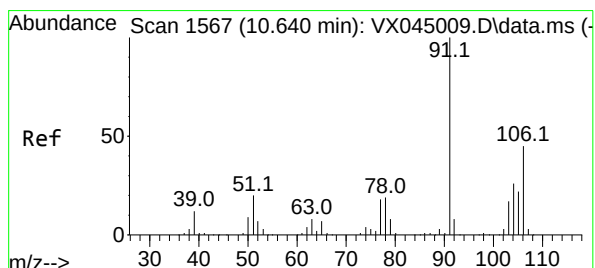
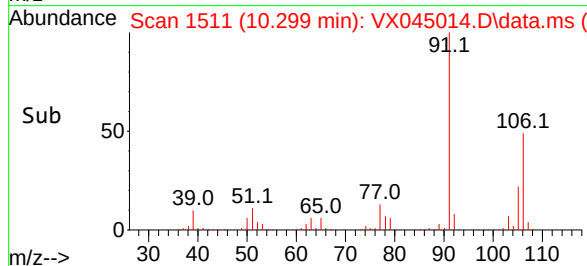
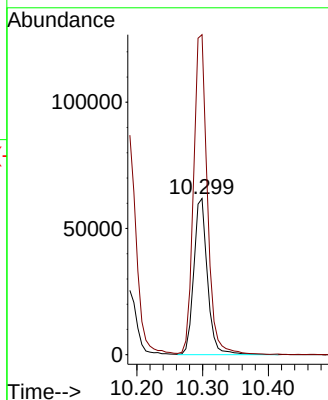
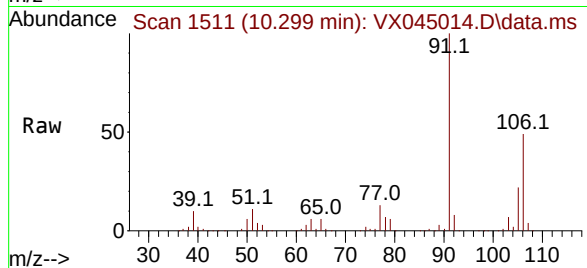
91 207.8 163.7 245.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#68

o-Xylene

Concen: 18.340 ug/l

RT: 10.634 min Scan# 1566

Delta R.T. -0.006 min

Lab File: VX045014.D

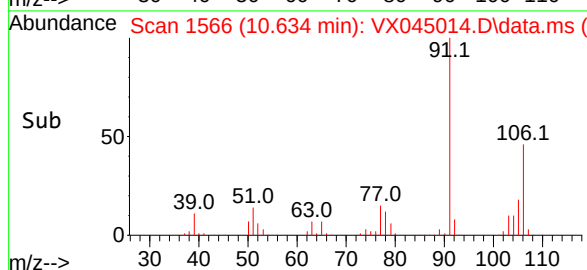
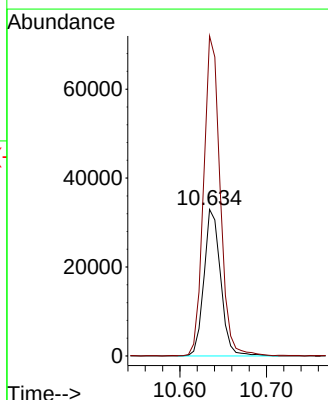
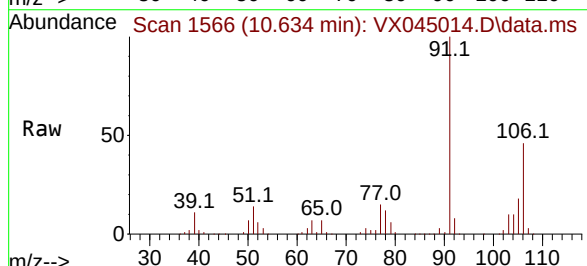
Acq: 21 Feb 2025 13:09

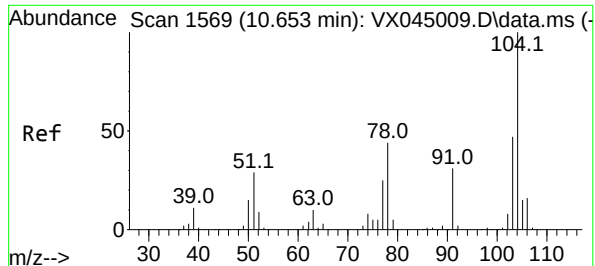
Tgt Ion:106 Resp: 44070

Ion Ratio Lower Upper

106 100

91 215.2 109.7 329.1





#69

Styrene

Concen: 17.886 ug/l

RT: 10.653 min Scan# 1569

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

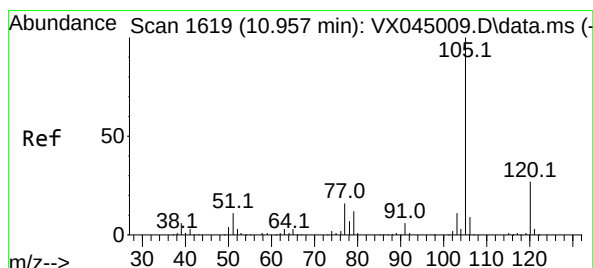
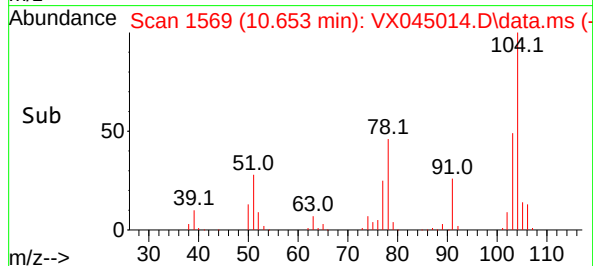
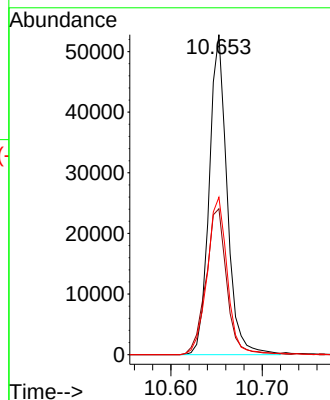
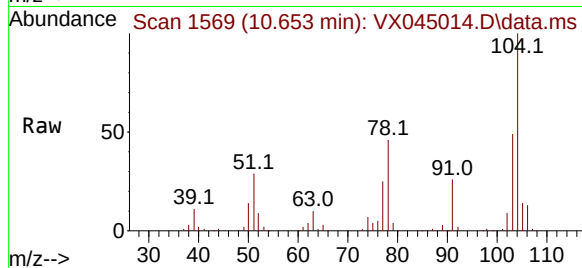
ICVX022125

Tgt Ion:104	Resp:	7178
Ion Ratio	Lower	Upper
104	100	
78	52.9	41.4 62.0
103	55.2	43.0 64.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#70

Isopropylbenzene

Concen: 18.117 ug/l

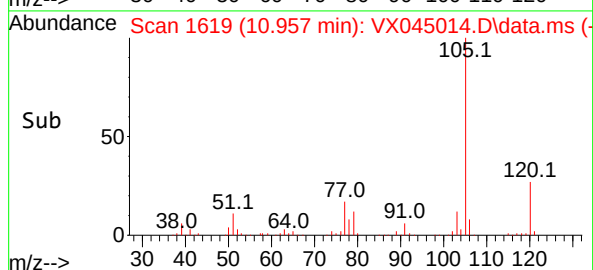
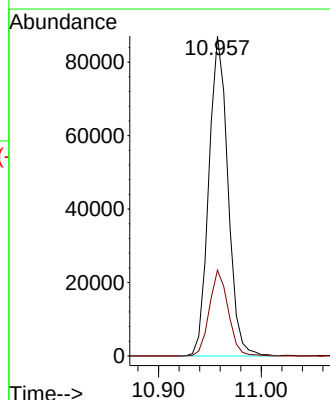
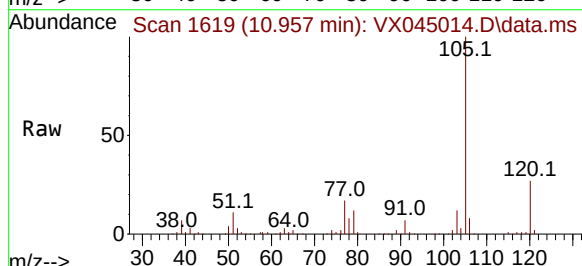
RT: 10.957 min Scan# 1619

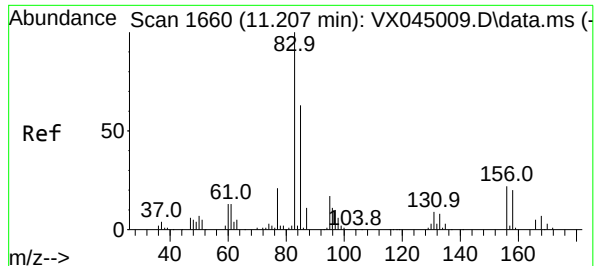
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:105	Resp:	112344
Ion Ratio	Lower	Upper
105	100	
120	26.4	18.4 34.2





#71

1,1,2,2-Tetrachloroethane

Concen: 18.349 ug/l

RT: 11.207 min Scan# 1660

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

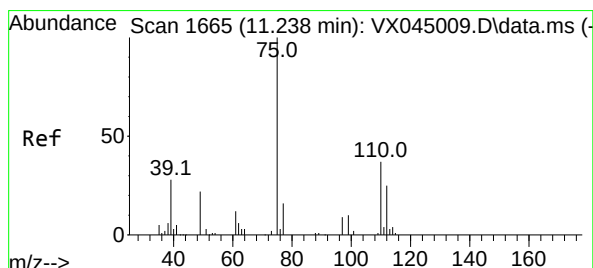
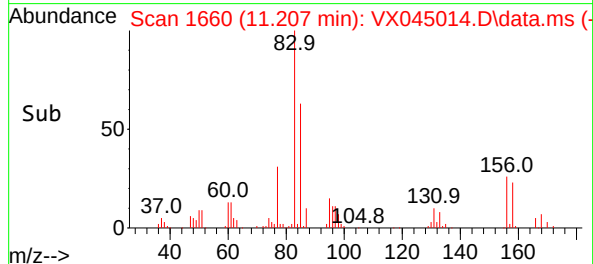
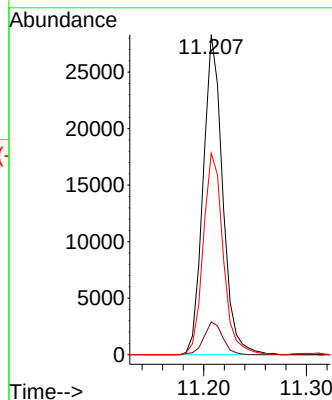
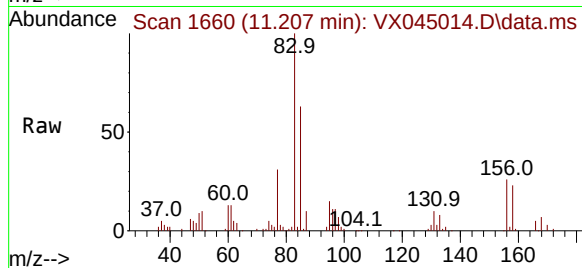
Tgt Ion:	83	Resp:	3741
Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.8	14.3
85	64.2	32.3	96.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#72

1,2,3-Trichloropropane

Concen: 18.172 ug/l m

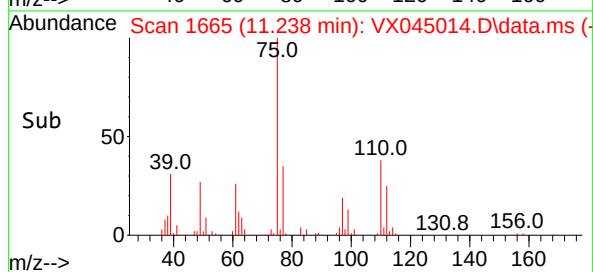
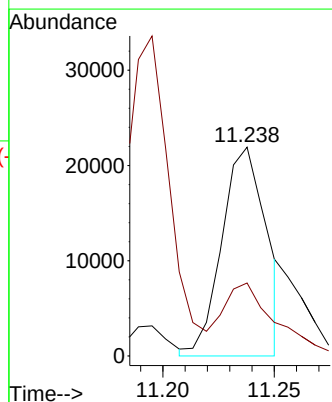
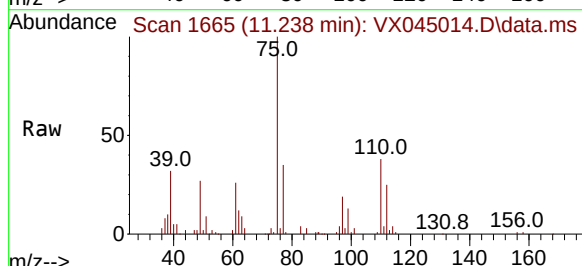
RT: 11.238 min Scan# 1665

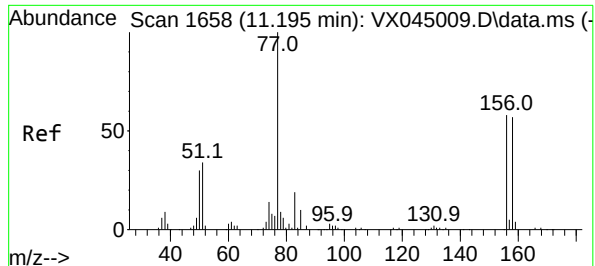
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

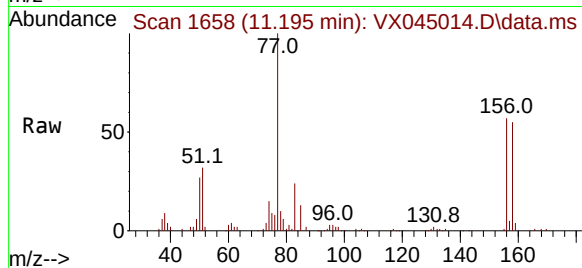
Tgt Ion:	75	Resp:	30477
Ion	Ratio	Lower	Upper
75	100		
77	41.7	0.0	84.0





#73
Bromobenzene
Concen: 18.218 ug/l
RT: 11.195 min Scan# 1658
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

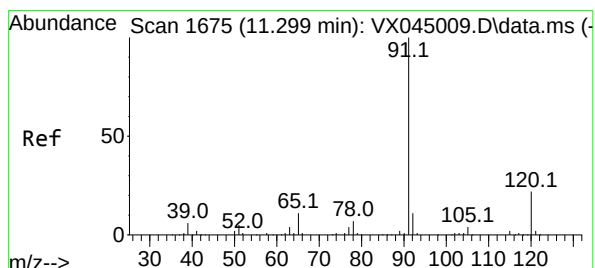
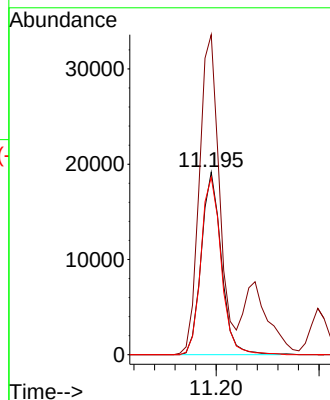
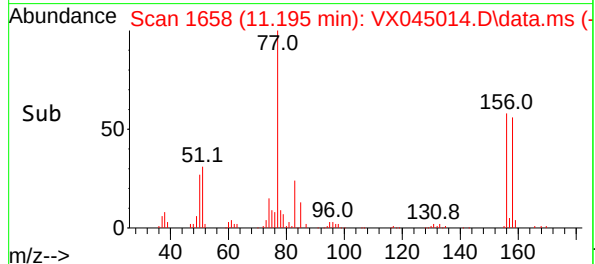
Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125



Tgt Ion: 156 Resp: 26000
Ion Ratio Lower Upper
156 100
77 175.6 0.0 347.2
158 98.5 0.0 197.6

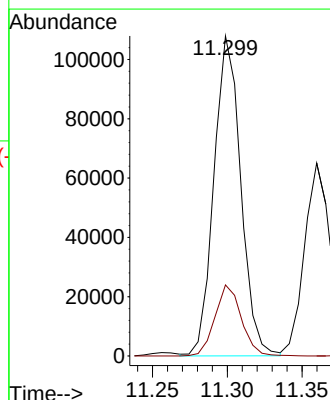
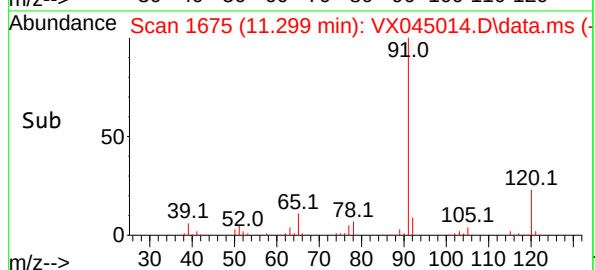
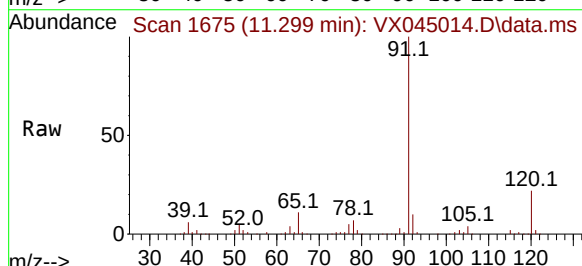
Manual Integrations
APPROVED

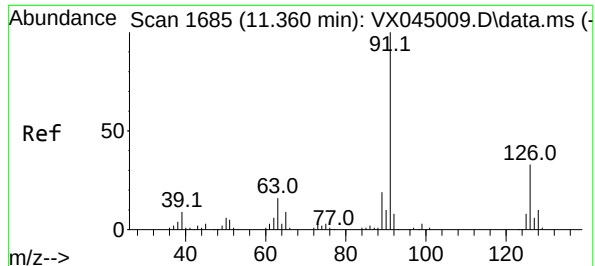
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#74
n-propylbenzene
Concen: 18.269 ug/l
RT: 11.299 min Scan# 1675
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 91 Resp: 134814
Ion Ratio Lower Upper
91 100
120 21.9 0.0 44.2





#75

2-Chlorotoluene

Concen: 18.145 ug/l

RT: 11.360 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

Tgt Ion: 91 Resp: 8094

Ion Ratio Lower Upper

91 100

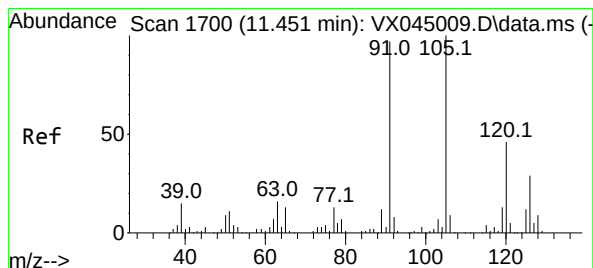
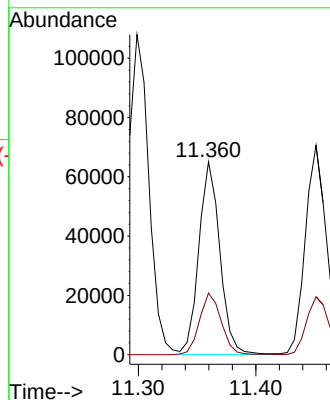
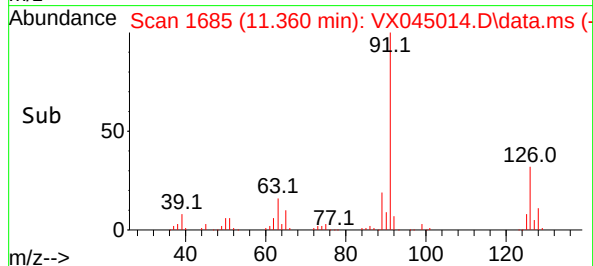
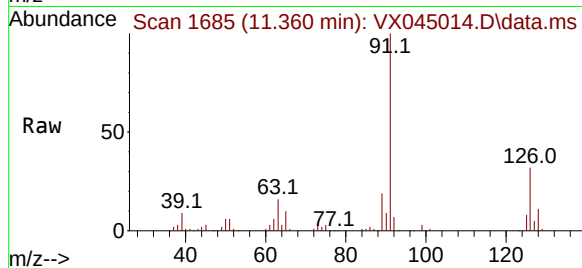
126 32.9 0.0 65.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#76

1,3,5-Trimethylbenzene

Concen: 18.633 ug/l

RT: 11.445 min Scan# 1699

Delta R.T. -0.006 min

Lab File: VX045014.D

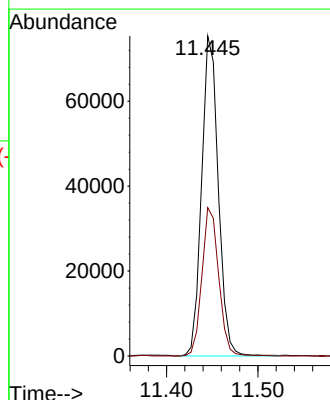
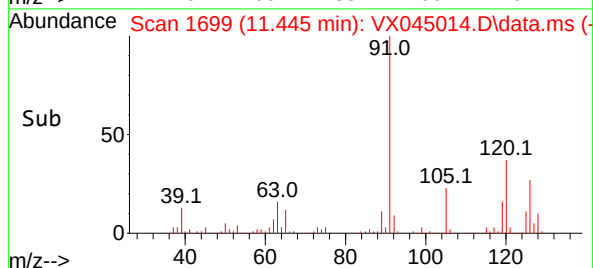
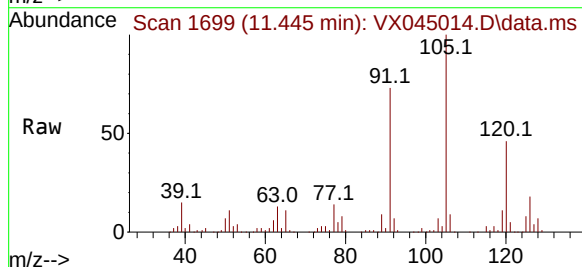
Acq: 21 Feb 2025 13:09

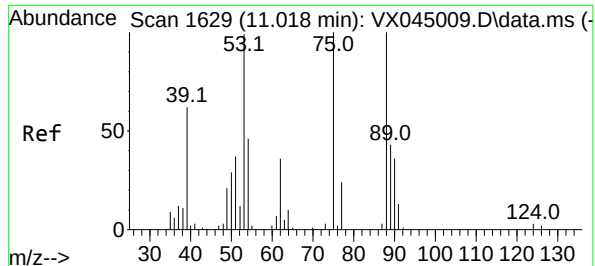
Tgt Ion:105 Resp: 95320

Ion Ratio Lower Upper

105 100

120 46.6 0.0 94.4





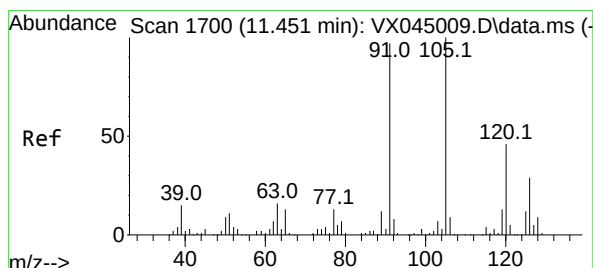
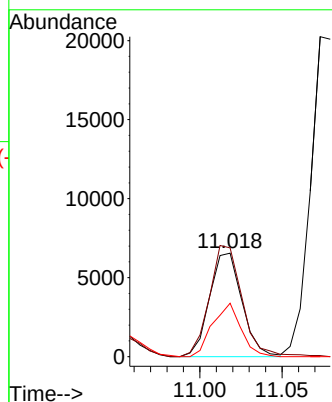
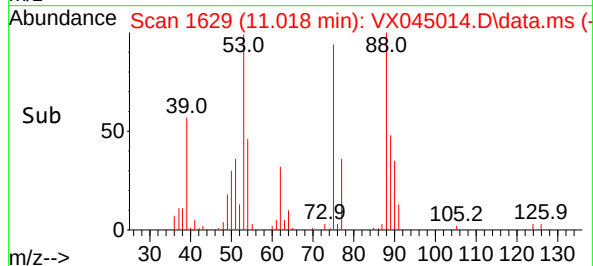
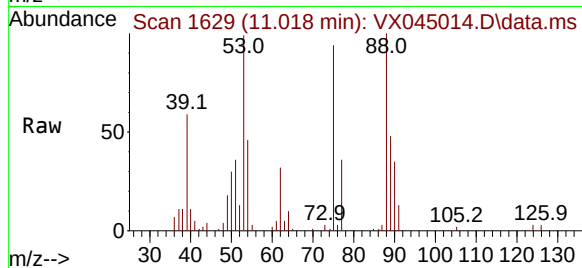
#77
t-1,4-Dichloro-2-butene
Concen: 15.964 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVX022125

Tgt Ion: 75 Resp: 9000
Ion Ratio Lower Upper
75 100
53 105.0 49.8 149.4
89 51.6 21.4 64.2

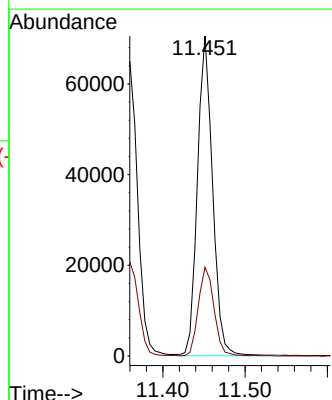
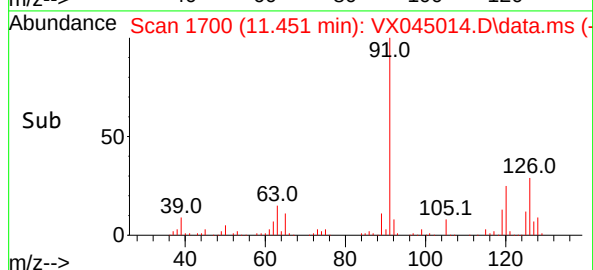
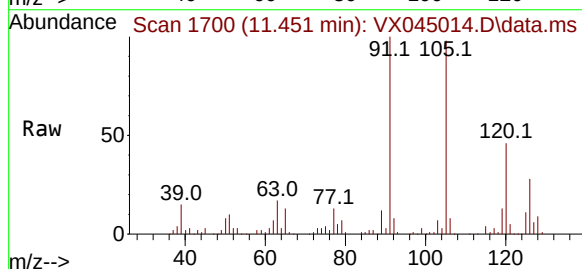
Manual Integrations
APPROVED

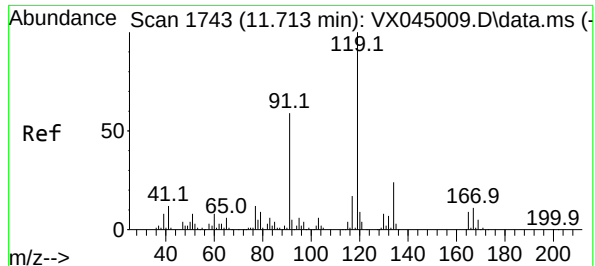
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#78
4-Chlorotoluene
Concen: 18.131 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 91 Resp: 90166
Ion Ratio Lower Upper
91 100
126 28.7 0.0 58.0





#79

tert-butylbenzene

Concen: 18.420 ug/l

RT: 11.713 min Scan# 1743

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

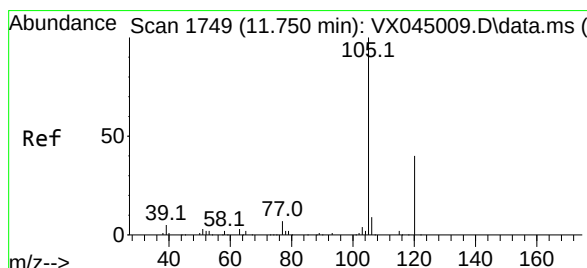
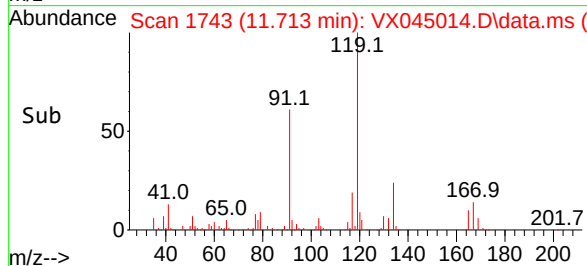
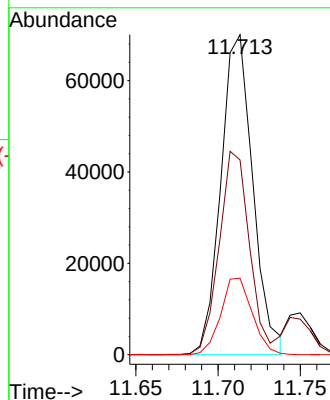
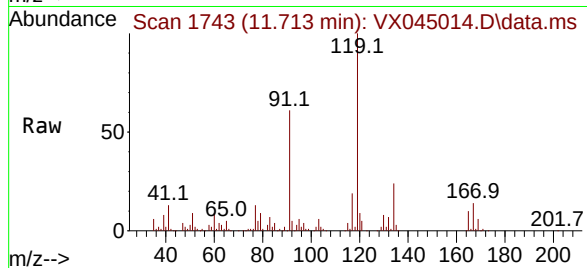
ICVVX022125

Tgt Ion:	119	Resp:	9494
Ion	Ratio	Lower	Upper
119	100		
91	60.2	0.0	120.6
134	23.6	0.0	48.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#80

1,2,4-Trimethylbenzene

Concen: 18.423 ug/l

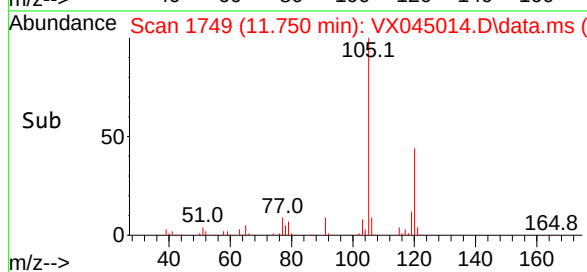
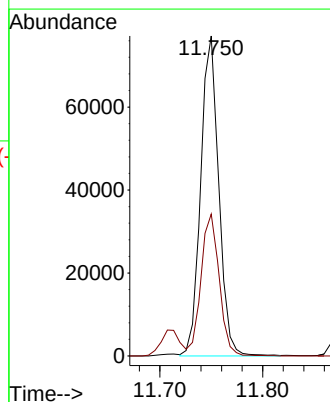
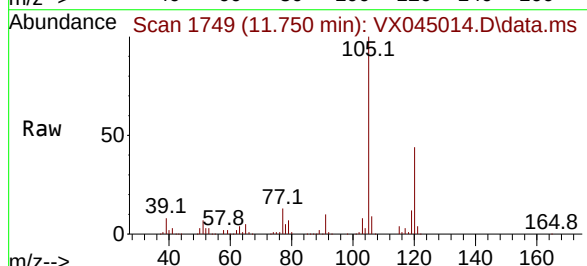
RT: 11.750 min Scan# 1749

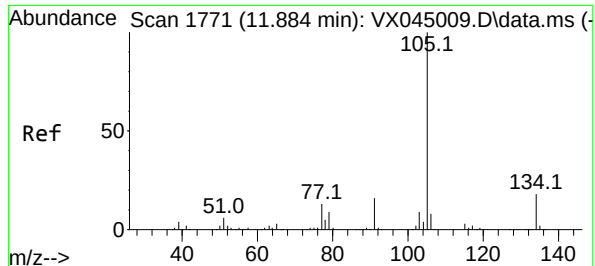
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

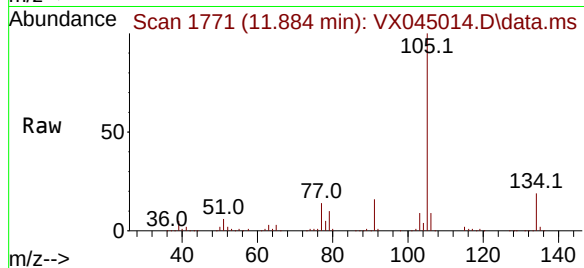
Tgt Ion:	105	Resp:	94408
Ion	Ratio	Lower	Upper
105	100		
120	44.7	0.0	88.4





#81
sec-Butylbenzene
Concen: 18.461 ug/l
RT: 11.884 min Scan# 1771
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

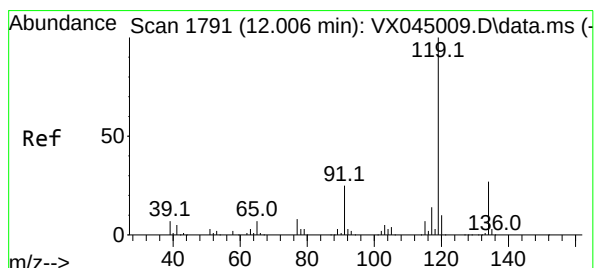
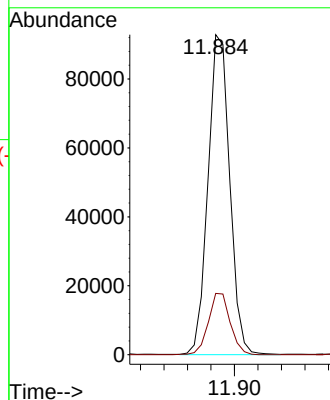
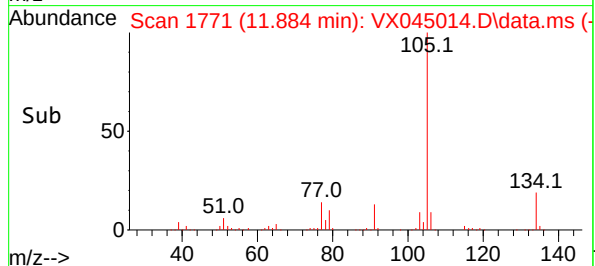
Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125



Tgt Ion:105 Resp: 119420
Ion Ratio Lower Upper
105 100
134 19.2 0.0 39.0

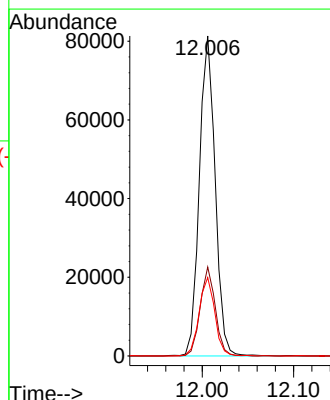
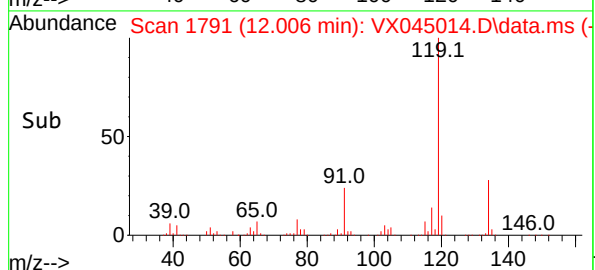
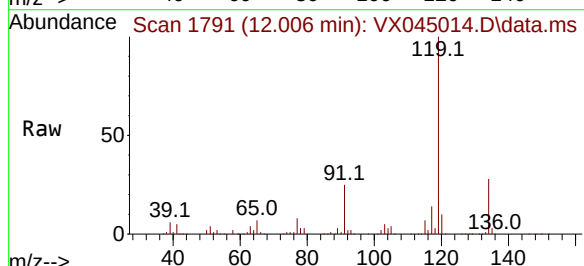
Manual Integrations
APPROVED

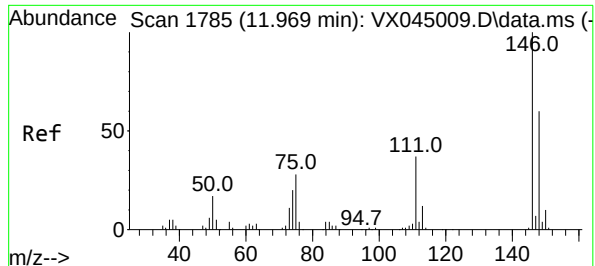
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#82
p-Isopropyltoluene
Concen: 18.616 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion:119 Resp: 97575
Ion Ratio Lower Upper
119 100
134 26.5 0.0 52.6
91 24.4 0.0 51.0





#83

1,3-Dichlorobenzene

Concen: 18.234 ug/l

RT: 11.969 min Scan# 1785

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVX022125

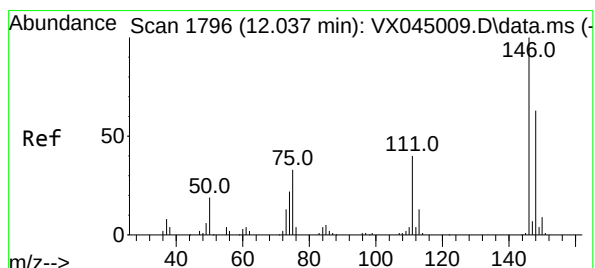
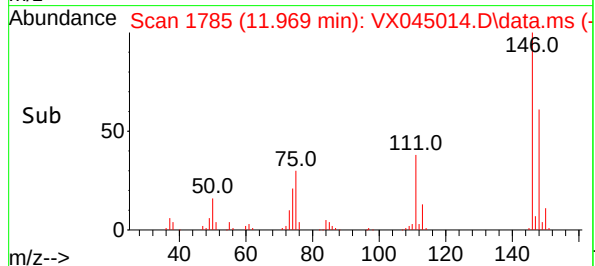
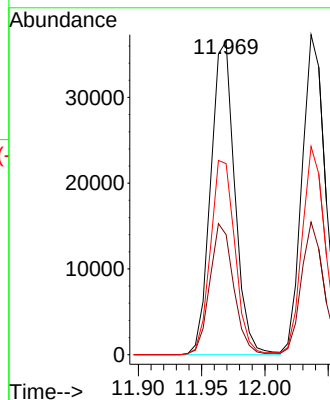
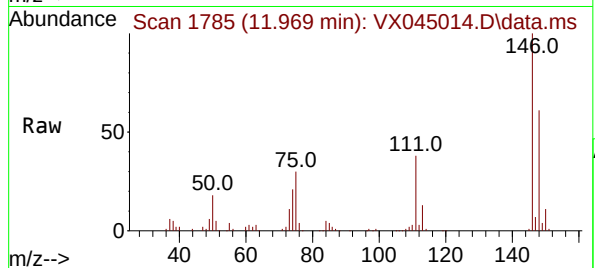
Tgt Ion:146	Resp:	48430
Ion Ratio	Lower	Upper
146	100	
111	41.5	20.2 60.5
148	63.3	31.2 93.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#84

1,4-Dichlorobenzene

Concen: 18.390 ug/l

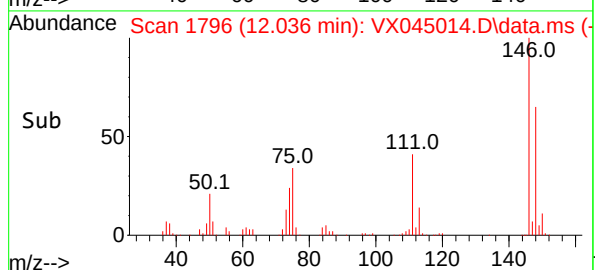
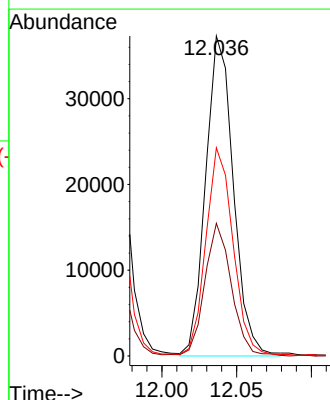
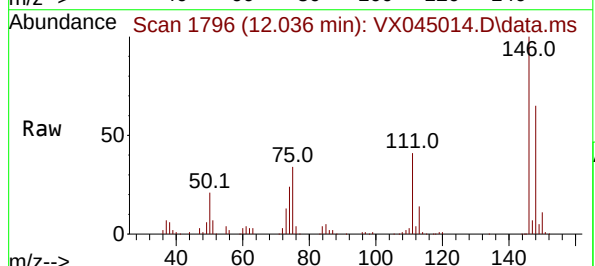
RT: 12.036 min Scan# 1796

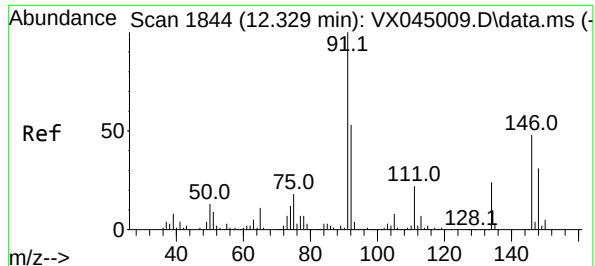
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:146	Resp:	48160
Ion Ratio	Lower	Upper
146	100	
111	39.6	20.4 61.2
148	64.2	31.8 95.4





#85

n-Butylbenzene

Concen: 18.213 ug/l

RT: 12.329 min Scan# 1844

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

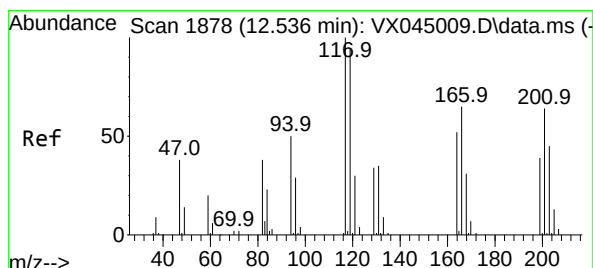
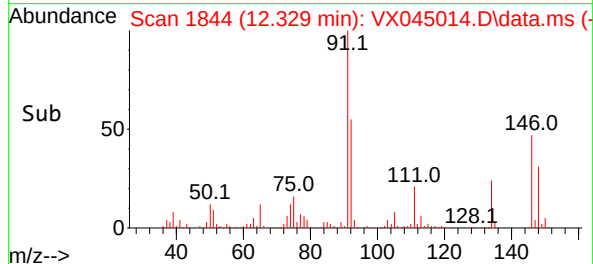
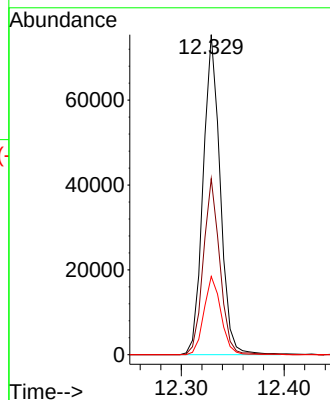
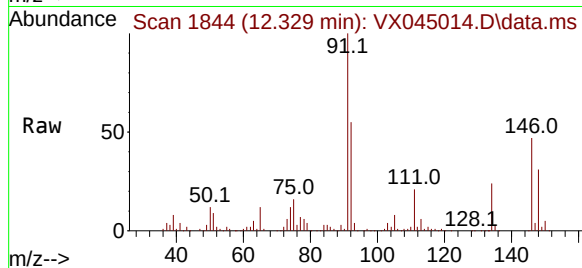
ICVX022125

Tgt Ion:	91	Resp:	87170
Ion	Ratio	Lower	Upper
91	100		
92	53.3	0.0	105.2
134	24.4	0.0	49.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#86

Hexachloroethane

Concen: 17.309 ug/l

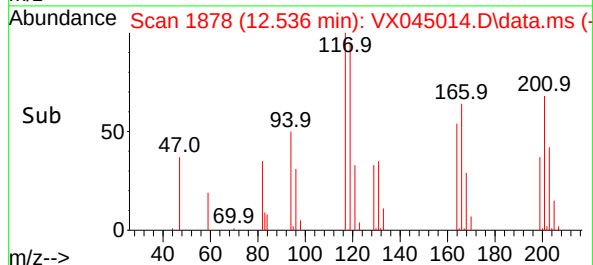
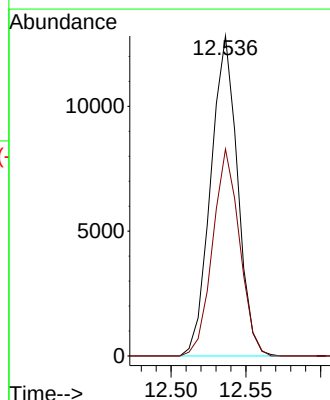
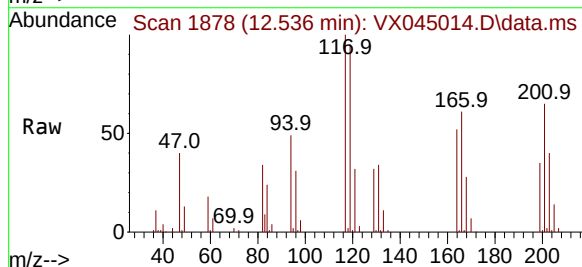
RT: 12.536 min Scan# 1878

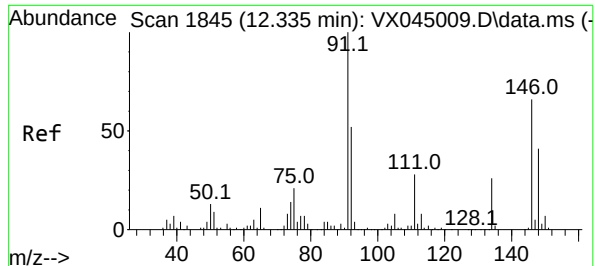
Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Tgt Ion:	117	Resp:	16000
Ion	Ratio	Lower	Upper
117	100		
201	64.8	32.6	97.7





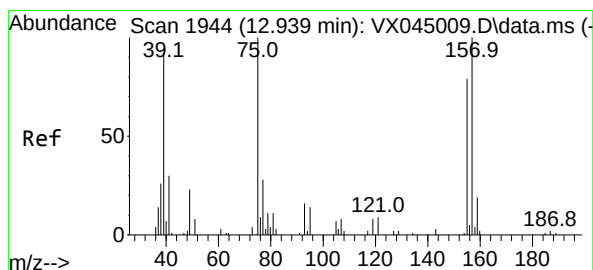
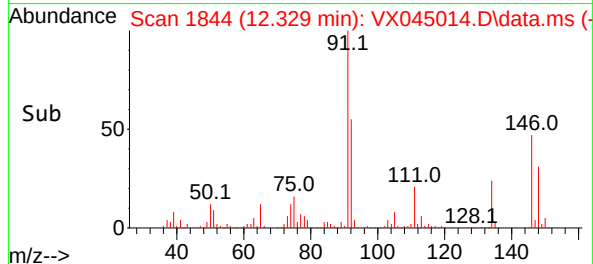
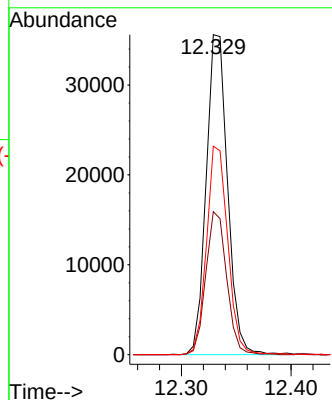
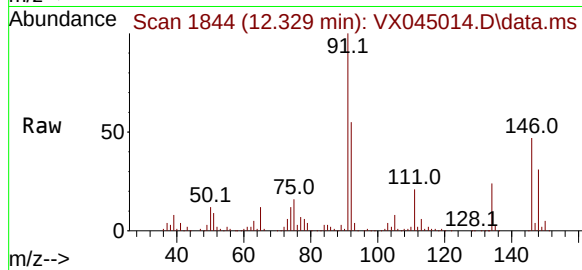
#87
1,2-Dichlorobenzene
Concen: 18.513 ug/l
RT: 12.329 min Scan# 1845
Delta R.T. -0.006 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125

Tgt Ion:146 Resp: 4824
Ion Ratio Lower Upper
146 100
111 43.6 21.7 65.1
148 64.6 31.8 95.4

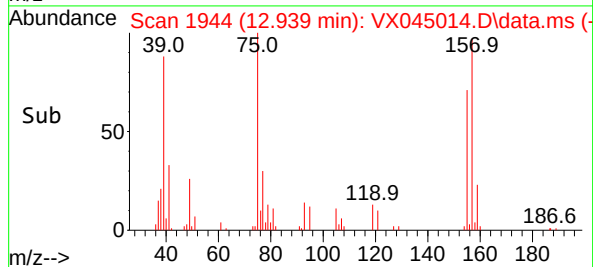
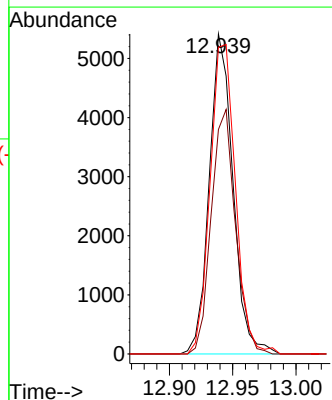
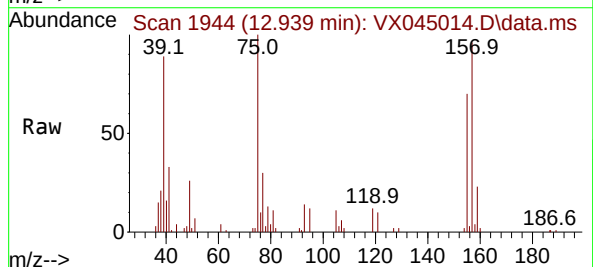
Manual Integrations
APPROVED

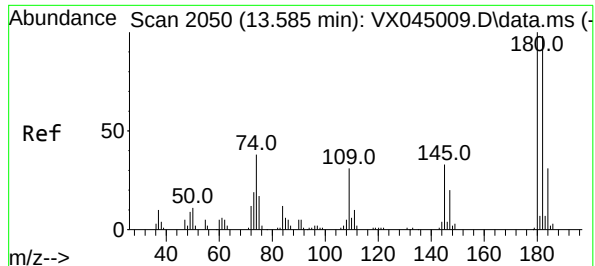
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#88
1,2-Dibromo-3-Chloropropane
Concen: 17.893 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

Tgt Ion: 75 Resp: 7064
Ion Ratio Lower Upper
75 100
155 78.1 66.2 99.4
157 102.8 81.4 122.2





#89

1,2,4-Trichlorobenzene

Concen: 18.126 ug/l

RT: 13.585 min Scan# 2050

Delta R.T. -0.000 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

Instrument :

MSVOA_X

ClientSampleId :

ICVVX022125

Tgt Ion:180 Resp: 28630

Ion Ratio Lower Upper

180 100

182 95.0 77.7 116.5

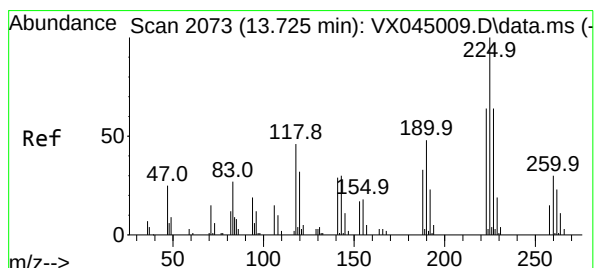
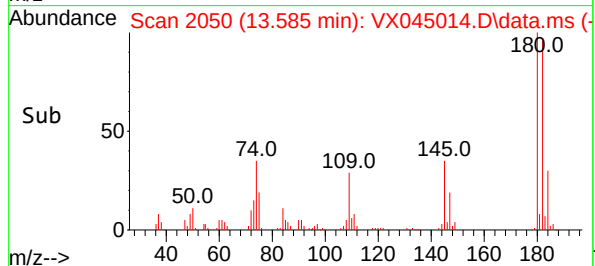
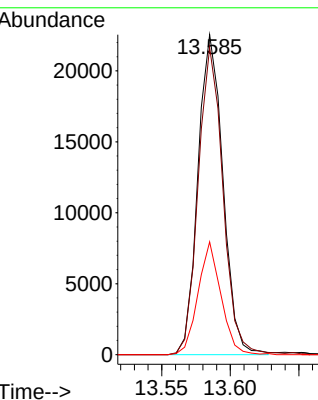
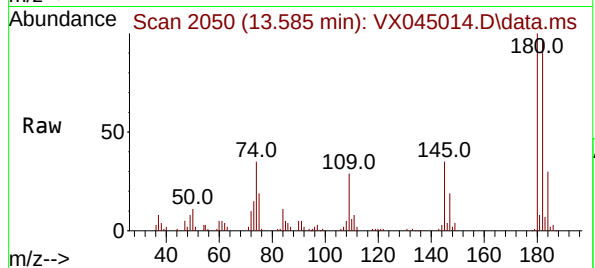
145 32.4 25.8 38.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/24/2025

Supervised By :Mahesh Dadoda 02/24/2025



#90

Hexachlorobutadiene

Concen: 18.726 ug/l

RT: 13.719 min Scan# 2072

Delta R.T. -0.006 min

Lab File: VX045014.D

Acq: 21 Feb 2025 13:09

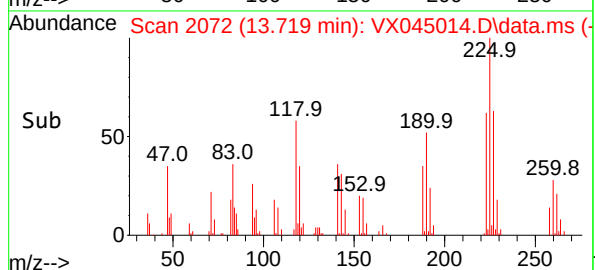
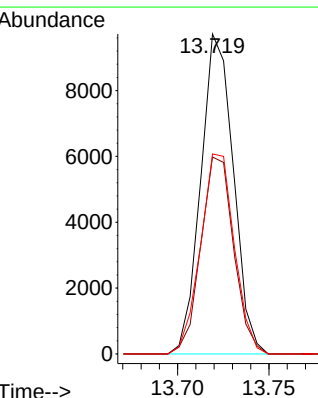
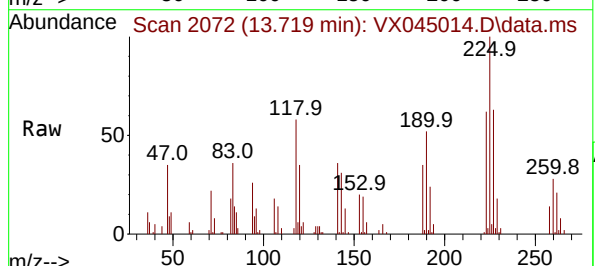
Tgt Ion:225 Resp: 12062

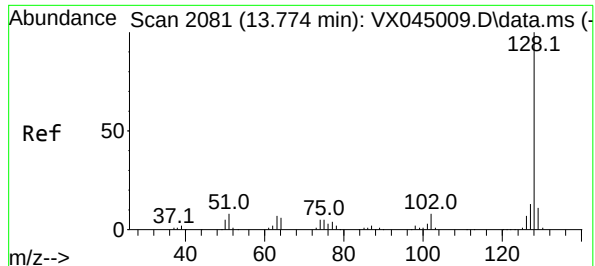
Ion Ratio Lower Upper

225 100

223 62.1 0.0 123.4

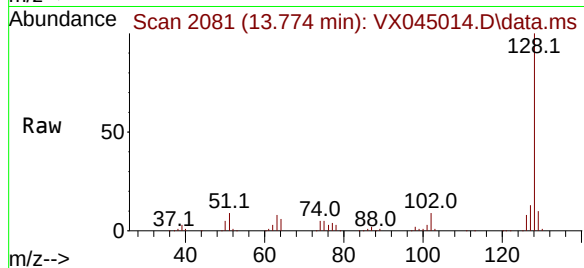
227 64.9 0.0 127.4





#91
Naphthalene
Concen: 18.271 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09

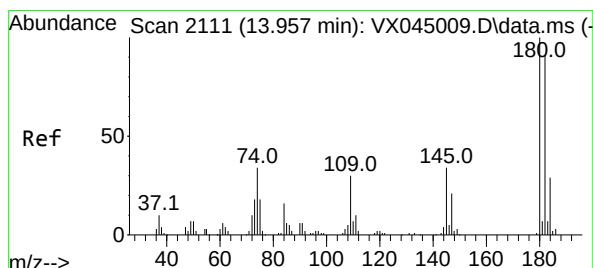
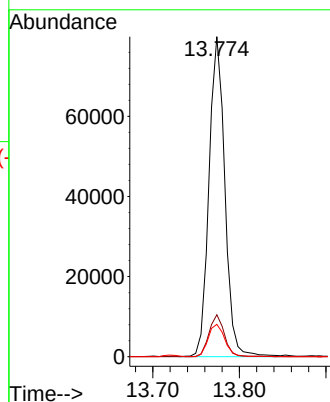
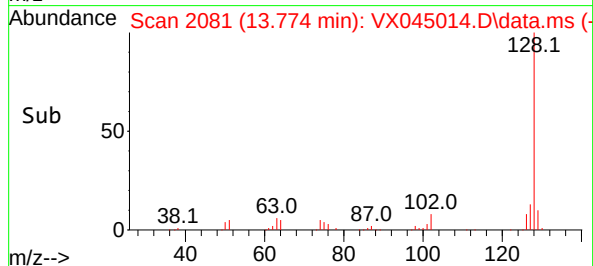
Instrument :
MSVOA_X
ClientSampleId :
ICVX022125



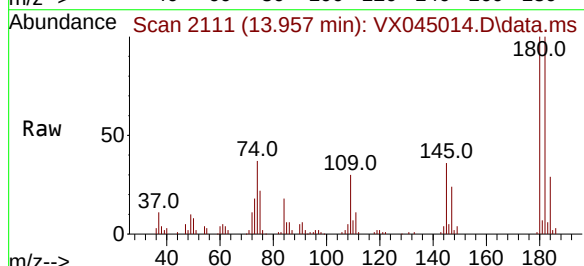
Tgt Ion:128 Resp: 101750
Ion Ratio Lower Upper
128 100
127 12.7 10.5 15.7
129 10.5 8.7 13.1

Manual Integrations
APPROVED

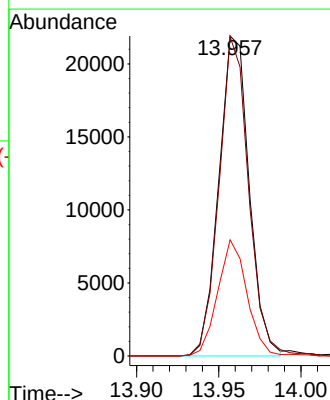
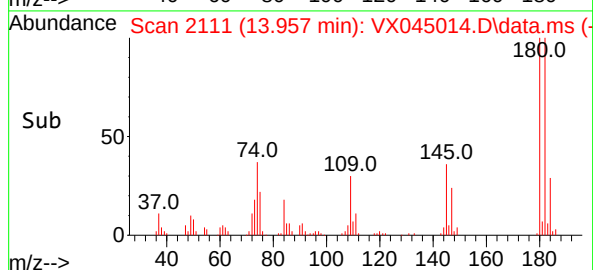
Reviewed By :John Carlone 02/24/2025
Supervised By :Mahesh Dadoda 02/24/2025



#92
1,2,3-Trichlorobenzene
Concen: 17.312 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045014.D
Acq: 21 Feb 2025 13:09



Tgt Ion:180 Resp: 28151
Ion Ratio Lower Upper
180 100
182 97.1 0.0 186.6
145 34.9 0.0 68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
Data File : VX045014.D
Acq On : 21 Feb 2025 13:09
Operator : JC/MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125

Quant Time: Feb 22 01:12:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	97	0.00
2 M	Dichlorodifluoromethane	2.529	2.305	8.9	90	0.00
3 M	Chloromethane	3.029	2.707	10.6	88	0.00
4 M	Vinyl Chloride	2.923	2.543	13.0	87	0.00
5 M	Bromomethane	1.017	0.992	2.5	98	0.00
6 M	Chloroethane	1.583	1.635	-3.3	95	0.00
7 M	Trichlorofluoromethane	3.928	3.495	11.0	91	0.00
8 T	Diethyl Ether	1.486	1.279	13.9	86	0.00
9	1,1,2-Trichlorotrifluoroeth	2.333	2.106	9.7	93	0.00
10 M	1,1-Dichloroethene	2.279	2.061	9.6	93	0.00
11	Methyl Iodide	2.579	2.041	20.9	91	0.00
12	Methyl Acetate	2.646	2.405	9.1	94	0.00
13 M	Acrolein	0.530	0.505	4.7	103	0.00
14 M	Acrylonitrile	1.293	1.160	10.3	90	0.00
15 M	Acetone	0.355	0.386	-8.7	106	0.00
16 M	Carbon Disulfide	6.464	5.784	10.5	93	0.00
17	Allyl chloride	4.262	3.796	10.9	93	0.00
18 M	Methylene Chloride	2.563	2.258	11.9	88	0.00
19 M	trans-1,2-Dichloroethene	2.306	2.055	10.9	91	0.00
20 T	Diisopropyl ether	8.191	7.311	10.7	91	0.00
21 M	1,1-Dichloroethane	4.555	4.030	11.5	90	0.00
22 M	cis-1,2-Dichloroethene	2.763	2.445	11.5	90	-0.01
23 M	tert-Butyl Alcohol	0.451	0.416	7.8	95	-0.02
24 M	Methyl tert-Butyl Ether	7.438	6.579	11.5	91	0.00
25 M	Chloroform	4.400	3.947	10.3	90	-0.01
26	Cyclohexane	4.205	3.761	10.6	90	0.00
27 s	1,2-Dichloroethane-d4	2.914	2.888	0.9	97	0.00
28 I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
29	1,1-Dichloropropene	0.552	0.496	10.1	90	-0.01
30 M	2-Butanone	0.319	0.307	3.8	97	0.00
31	2,2-Dichloropropane	0.624	0.565	9.5	94	0.00
32 M	1,1,1-Trichloroethane	0.669	0.600	10.3	91	0.00
33 M	Carbon Tetrachloride	0.564	0.510	9.6	91	0.00
34 M	Benzene	1.731	1.559	9.9	90	0.00
35	Methacrylonitrile	0.341	0.313	8.2	92	0.00
36 M	1,2-Dichloroethane	0.592	0.543	8.3	91	0.00
37 M	Trichloroethene	0.405	0.363	10.4	89	0.00
38	Methylcyclohexane	0.741	0.681	8.1	95	0.00
39 M	1,2-Dichloropropane	0.430	0.374	13.0	86	0.00
40	Dibromomethane	0.309	0.278	10.0	90	0.00
41 M	Bromodichloromethane	0.614	0.541	11.9	89	0.00
42 M	Vinyl Acetate	1.237	1.113	10.0	91	0.00
43	Ethyl Acetate	0.598	0.510	14.7	86	0.00
44	Isopropyl Acetate	0.984	0.885	10.1	94	0.00
45 T	1,4-Dioxane	0.010	0.010	0.0	90	0.00
46	Methyl methacrylate	0.482	0.442	8.3	95	0.00
47	n-amyl Acetate	0.854	0.765	10.4	93	0.00
48 M	t-1,3-Dichloropropene	0.591	0.502	15.1	93	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\WX022125\
 Data File : VX045014.D
 Acq On : 21 Feb 2025 13:09
 Operator : JC/MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX022125

Quant Time: Feb 22 01:12:33 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	0.670	0.586	12.5	90	0.00
50 M	1,1,2-Trichloroethane	0.403	0.372	7.7	90	0.00
51	Ethyl methacrylate	0.633	0.566	10.6	95	0.00
52	1,3-Dichloropropane	0.706	0.627	11.2	87	0.00
53 M	Dibromochloromethane	0.445	0.392	11.9	88	0.00
54 M	1,2-Dibromoethane	0.409	0.360	12.0	88	0.00
55 M	2-Chloroethyl vinyl ether	0.325	0.279	14.2	87	0.00
56 M	Bromoform	0.279	0.243	12.9	92	0.00
57 I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
58 M	4-Methyl-2-Pentanone	0.682	0.636	6.7	92	0.00
59 M	2-Hexanone	0.493	0.471	4.5	95	0.00
60 S	4-Bromofluorobenzene	0.561	0.563	-0.4	99	0.00
61 M	Tetrachloroethene	0.369	0.331	10.3	89	0.00
62 M	Toluene	1.987	1.776	10.6	90	0.00
63 S	Toluene-d8	1.660	1.639	1.3	97	0.00
64 M	Chlorobenzene	1.231	1.105	10.2	90	0.00
65	1,1,1,2-Tetrachloroethane	0.406	0.353	13.1	88	0.00
66 M	Ethyl Benzene	2.176	1.971	9.4	93	0.00
67 M	m/p-Xylenes	0.811	0.734	9.5	89	0.00
68 M	o-Xylene	0.795	0.729	8.3	90	0.00
69 M	Styrene	1.328	1.188	10.5	89	0.00
70	Isopropylbenzene	2.053	1.859	9.4	90	0.00
71 M	1,1,2,2-Tetrachloroethane	0.675	0.619	8.3	92	0.00
72	1,2,3-Trichloropropane	0.555	0.504	9.2	92	0.00
73	Bromobenzene	0.473	0.430	9.1	91	0.00
74	n-propylbenzene	2.443	2.231	8.7	92	0.00
75	2-Chlorotoluene	1.477	1.340	9.3	90	0.00
76	1,3,5-Trimethylbenzene	1.693	1.578	6.8	92	0.00
77	t-1,4-Dichloro-2-butene	0.187	0.149	20.3	92	0.00
78	4-Chlorotoluene	1.646	1.492	9.4	91	0.00
79	tert-butylbenzene	1.706	1.571	7.9	91	0.00
80	1,2,4-Trimethylbenzene	1.696	1.562	7.9	90	0.00
81	sec-Butylbenzene	2.141	1.977	7.7	92	0.00
82	p-Isopropyltoluene	1.735	1.615	6.9	93	0.00
83 M	1,3-Dichlorobenzene	0.879	0.802	8.8	91	0.00
84 M	1,4-Dichlorobenzene	0.867	0.797	8.1	92	0.00
85	n-Butylbenzene	1.584	1.443	8.9	94	0.00
86 T	Hexachloroethane	0.306	0.265	13.4	93	0.00
87 M	1,2-Dichlorobenzene	0.863	0.798	7.5	91	0.00
88	1,2-Dibromo-3-Chloropropane	0.131	0.117	10.7	96	0.00
89	1,2,4-Trichlorobenzene	0.523	0.474	9.4	95	0.00
90	Hexachlorobutadiene	0.213	0.200	6.1	94	0.00
91 M	Naphthalene	1.843	1.684	8.6	93	0.00
92	1,2,3-Trichlorobenzene	0.538	0.466	13.4	88	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
Data File : VX045014.D
Acq On : 21 Feb 2025 13:09
Operator : JC/MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125

Quant Time: Feb 22 01:12:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	30.000	30.000	0.0	97	0.00
2 M	Dichlorodifluoromethane	20.000	18.226	8.9	90	0.00
3 M	Chloromethane	20.000	17.873	10.6	88	0.00
4 M	Vinyl Chloride	20.000	17.401	13.0	87	0.00
5 M	Bromomethane	20.000	19.506	2.5	98	0.00
6 M	Chloroethane	20.000	20.662	-3.3	95	0.00
7 M	Trichlorofluoromethane	20.000	17.793	11.0	91	0.00
8 T	Diethyl Ether	20.000	17.214	13.9	86	0.00
9	1,1,2-Trichlorotrifluoroeth	20.000	18.055	9.7	93	0.00
10 M	1,1-Dichloroethene	20.000	18.088	9.6	93	0.00
11	Methyl Iodide	20.000	15.827	20.9	91	0.00
12	Methyl Acetate	20.000	18.176	9.1	94	0.00
13 M	Acrolein	100.000	95.190	4.8	103	0.00
14 M	Acrylonitrile	100.000	89.730	10.3	90	0.00
15 M	Acetone	100.000	108.932	-8.9	106	0.00
16 M	Carbon Disulfide	20.000	17.896	10.5	93	0.00
17	Allyl chloride	20.000	17.812	10.9	93	0.00
18 M	Methylene Chloride	20.000	17.621	11.9	88	0.00
19 M	trans-1,2-Dichloroethene	20.000	17.825	10.9	91	0.00
20 T	Diisopropyl ether	20.000	17.850	10.7	91	0.00
21 M	1,1-Dichloroethane	20.000	17.693	11.5	90	0.00
22 M	cis-1,2-Dichloroethene	20.000	17.695	11.5	90	-0.01
23 M	tert-Butyl Alcohol	100.000	92.286	7.7	95	-0.02
24 M	Methyl tert-Butyl Ether	20.000	17.690	11.5	91	0.00
25 M	Chloroform	20.000	17.943	10.3	90	-0.01
26	Cyclohexane	20.000	17.890	10.5	90	0.00
27 s	1,2-Dichloroethane-d4	30.000	29.736	0.9	97	0.00
28 I	1,4-Difluorobenzene	30.000	30.000	0.0	98	0.00
29	1,1-Dichloropropene	20.000	17.969	10.2	90	-0.01
30 M	2-Butanone	100.000	96.206	3.8	97	0.00
31	2,2-Dichloropropane	20.000	18.104	9.5	94	0.00
32 M	1,1,1-Trichloroethane	20.000	17.945	10.3	91	0.00
33 M	Carbon Tetrachloride	20.000	18.080	9.6	91	0.00
34 M	Benzene	20.000	18.013	9.9	90	0.00
35	Methacrylonitrile	20.000	18.343	8.3	92	0.00
36 M	1,2-Dichloroethane	20.000	18.316	8.4	91	0.00
37 M	Trichloroethene	20.000	17.933	10.3	89	0.00
38	Methylcyclohexane	20.000	18.370	8.1	95	0.00
39 M	1,2-Dichloropropane	20.000	17.406	13.0	86	0.00
40	Dibromomethane	20.000	18.010	9.9	90	0.00
41 M	Bromodichloromethane	20.000	17.645	11.8	89	0.00
42 M	Vinyl Acetate	100.000	89.973	10.0	91	0.00
43	Ethyl Acetate	20.000	17.072	14.6	86	0.00
44	Isopropyl Acetate	20.000	17.994	10.0	94	0.00
45 T	1,4-Dioxane	400.000	376.282	5.9	90	0.00
46	Methyl methacrylate	20.000	18.320	8.4	95	0.00
47	n-amyl Acetate	20.000	17.920	10.4	93	0.00
48 M	t-1,3-Dichloropropene	20.000	16.972	15.1	93	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
Data File : VX045014.D
Acq On : 21 Feb 2025 13:09
Operator : JC/MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022125

Quant Time: Feb 22 01:12:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	20.000	17.491	12.5	90	0.00
50 M	1,1,2-Trichloroethane	20.000	18.451	7.7	90	0.00
51	Ethyl methacrylate	20.000	17.882	10.6	95	0.00
52	1,3-Dichloropropane	20.000	17.765	11.2	87	0.00
53 M	Dibromochloromethane	20.000	17.620	11.9	88	0.00
54 M	1,2-Dibromoethane	20.000	17.616	11.9	88	0.00
55 M	2-Chloroethyl vinyl ether	100.000	85.929	14.1	87	0.00
56 M	Bromoform	20.000	17.412	12.9	92	0.00
57 I	Chlorobenzene-d5	30.000	30.000	0.0	99	0.00
58 M	4-Methyl-2-Pentanone	100.000	93.175	6.8	92	0.00
59 M	2-Hexanone	100.000	95.501	4.5	95	0.00
60 S	4-Bromofluorobenzene	30.000	30.094	-0.3	99	0.00
61 M	Tetrachloroethene	20.000	17.908	10.5	89	0.00
62 M	Toluene	20.000	17.876	10.6	90	0.00
63 S	Toluene-d8	30.000	29.620	1.3	97	0.00
64 M	Chlorobenzene	20.000	17.942	10.3	90	0.00
65	1,1,1,2-Tetrachloroethane	20.000	17.362	13.2	88	0.00
66 M	Ethyl Benzene	20.000	18.117	9.4	93	0.00
67 M	m/p-Xylenes	40.000	36.205	9.5	89	0.00
68 M	o-Xylene	20.000	18.340	8.3	90	0.00
69 M	Styrene	20.000	17.886	10.6	89	0.00
70	Isopropylbenzene	20.000	18.117	9.4	90	0.00
71 M	1,1,2,2-Tetrachloroethane	20.000	18.349	8.3	92	0.00
72	1,2,3-Trichloropropane	20.000	18.172	9.1	92	0.00
73	Bromobenzene	20.000	18.218	8.9	91	0.00
74	n-propylbenzene	20.000	18.269	8.7	92	0.00
75	2-Chlorotoluene	20.000	18.145	9.3	90	0.00
76	1,3,5-Trimethylbenzene	20.000	18.633	6.8	92	0.00
77	t-1,4-Dichloro-2-butene	20.000	15.964	20.2	92	0.00
78	4-Chlorotoluene	20.000	18.131	9.3	91	0.00
79	tert-butylbenzene	20.000	18.420	7.9	91	0.00
80	1,2,4-Trimethylbenzene	20.000	18.423	7.9	90	0.00
81	sec-Butylbenzene	20.000	18.461	7.7	92	0.00
82	p-Isopropyltoluene	20.000	18.616	6.9	93	0.00
83 M	1,3-Dichlorobenzene	20.000	18.234	8.8	91	0.00
84 M	1,4-Dichlorobenzene	20.000	18.390	8.0	92	0.00
85	n-Butylbenzene	20.000	18.213	8.9	94	0.00
86 T	Hexachloroethane	20.000	17.309	13.5	93	0.00
87 M	1,2-Dichlorobenzene	20.000	18.513	7.4	91	0.00
88	1,2-Dibromo-3-Chloropropane	20.000	17.893	10.5	96	0.00
89	1,2,4-Trichlorobenzene	20.000	18.126	9.4	95	0.00
90	Hexachlorobutadiene	20.000	18.726	6.4	94	0.00
91 M	Naphthalene	20.000	18.271	8.6	93	0.00
92	1,2,3-Trichlorobenzene	20.000	17.312	13.4	88	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: ALLI03

Lab Code: CHEM Case No.: Q1502 SAS No.: Q1502 SDG No.: Q1502

Instrument ID: MSVOA_X Calibration Date/Time: 03/19/2025 10:41

Lab File ID: VX045340.D Init. Calib. Date(s): 02/21/2025 02/21/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:58 11:29

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

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	2.529	2.632		4.07	
Chloromethane	3.029	2.718		-10.27	
Vinyl Chloride	2.923	2.544	0.1	-12.97	
Ethyl Acetate	0.598	0.716		19.73	
Bromomethane	1.017	1.128	0.1	10.91	
Chloroethane	1.583	1.341		-15.29	
Trichlorofluoromethane	3.928	3.690		-6.06	
1,1,2-Trichlorotrifluoroethane	2.333	2.471		5.91	
1,1-Dichloroethene	2.279	2.299	0.1	0.88	
Acrolein	0.530	0.631		19.06	
Acrylonitrile	1.293	1.467		13.46	
Acetone	0.355	0.395		11.27	
Carbon Disulfide	6.464	5.226		-19.15	
Methyl tert-Butyl Ether	7.438	7.562		1.67	
Methylene Chloride	2.563	2.580		0.66	
trans-1,2-Dichloroethene	2.306	2.205		-4.38	
Vinyl Acetate	1.237	1.256		1.54	
1,1-Dichloroethane	4.555	4.617	0.2	1.36	
2-Butanone	0.319	0.396		24.14	
Carbon Tetrachloride	0.564	0.602	0.1	6.74	
2,2-Dichloropropane	0.624	0.597		-4.33	
cis-1,2-Dichloroethene	2.763	2.788		0.9	
Chloroform	4.400	4.726	0.2	7.41	
1,1,1-Trichloroethane	0.669	0.727	0.1	8.67	
1,1-Dichloropropene	0.552	0.569		3.08	
Benzene	1.731	1.833	0.5	5.89	
1,2-Dichloroethane	0.592	0.694	0.1	17.23	
Trichloroethene	0.405	0.424	0.3	4.69	
1,2-Dichloropropane	0.430	0.448		4.19	
Dibromomethane	0.309	0.346		11.97	
Bromodichloromethane	0.614	0.683	0.2	11.24	
4-Methyl-2-Pentanone	0.682	0.832		21.99	
Toluene	1.987	2.063	0.4	3.83	
t-1,3-Dichloropropene	0.591	0.563	0.1	-4.74	
cis-1,3-Dichloropropene	0.670	0.674	0.2	0.6	
1,1,2-Trichloroethane	0.403	0.444	0.1	10.17	
1,3-Dichloropropane	0.706	0.796		12.75	
2-Chloroethyl vinyl ether	0.325	0.336		3.38	

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: ALLI03
 Lab Code: CHEM Case No.: Q1502 SAS No.: Q1502 SDG No.: Q1502
 Instrument ID: MSVOA_X Calibration Date/Time: 03/19/2025 10:41
 Lab File ID: VX045340.D Init. Calib. Date(s): 02/21/2025 02/21/2025
 Heated Purge: (Y/N) N Init. Calib. Time(s): 09:58 11:29
 GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
2-Hexanone	0.493	0.608		23.33	
Dibromochloromethane	0.445	0.483	0.1	8.54	
1,2-Dibromoethane	0.409	0.450		10.02	
Tetrachloroethene	0.369	0.402	0.2	8.94	
Chlorobenzene	1.231	1.280	0.5	3.98	
1,1,1,2-Tetrachloroethane	0.406	0.428		5.42	
Ethyl Benzene	2.176	2.264	0.1	4.04	
m/p-Xylenes	0.811	0.854	0.3	5.3	
o-Xylene	0.795	0.811	0.3	2.01	
Styrene	1.328	1.394	0.3	4.97	
Bromoform	0.279	0.296	0.1	6.09	
Isopropylbenzene	2.053	2.224		8.33	
1,1,2,2-Tetrachloroethane	0.675	0.777	0.3	15.11	
1,2,3-Trichloropropane	0.555	0.644		16.04	
Bromobenzene	0.473	0.488		3.17	
n-propylbenzene	2.443	2.564		4.95	
2-Chlorotoluene	1.477	1.596		8.06	
1,3,5-Trimethylbenzene	1.693	1.806		6.68	
4-Chlorotoluene	1.646	1.755		6.62	
1,2,4-Trimethylbenzene	1.696	1.802		6.25	
sec-Butylbenzene	2.141	2.320		8.36	
p-Isopropyltoluene	1.735	1.845		6.34	
1,3-Dichlorobenzene	0.879	0.891	0.2	1.37	
1,4-Dichlorobenzene	0.867	0.904	0.2	4.27	
n-Butylbenzene	1.584	1.603		1.2	
1,2-Dichlorobenzene	0.863	0.898	0.2	4.06	
1,2-Dibromo-3-Chloropropane	0.131	0.150		14.5	
1,2,4-Trichlorobenzene	0.523	0.502	0.2	-4.01	
Hexachlorobutadiene	0.213	0.218		2.35	
Naphthalene	1.843	1.848		0.27	
1,2,3-Trichlorobenzene	0.538	0.529		-1.67	
1,2-Dichloroethane-d4	2.914	3.187	0.01	9.37	
Toluene-d8	1.660	1.665	0.01	0.3	
4-Bromofluorobenzene	0.561	0.584	0.2	4.1	

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_X\Data\VX031925\
 Data File : VX045340.D
 Acq On : 19 Mar 2025 10:41
 Operator : JC/MD
 Sample : VSTDC0020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDC0020

Quant Time: Mar 20 01:30:50 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 03/20/2025
 Supervised By : Mahesh Dadoda 03/20/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.897	128	16449	30.000	ug/l	0.01
28) 1,4-Difluorobenzene	6.757	114	86152	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	80895	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	52421	32.812	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 109.367%			
60) 4-Bromofluorobenzene	11.079	95	47245	31.246	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 104.167%			
63) Toluene-d8	8.647	98	134720	30.103	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 100.333%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.166	85	28861	20.814	ug/l	95
3) Chloromethane	1.307	50	29803	17.945	ug/l	99
4) Vinyl Chloride	1.374	62	27895	17.406	ug/l	93
5) Bromomethane	1.593	94	12365	22.166	ug/l	99
6) Chloroethane	1.666	64	14707	16.944	ug/l	95
7) Trichlorofluoromethane	1.874	101	40466	18.787	ug/l	98
8) Diethyl Ether	2.130	74	13892	17.046	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.319	101	27092	21.178	ug/l	98
10) 1,1-Dichloroethene	2.313	96	25210	20.176	ug/l	93
11) Methyl Iodide	2.441	142	29634	20.954	ug/l	97
12) Methyl Acetate	2.703	43	48377	33.340	ug/l	96
13) Acrolein	2.233	56	34607	118.988	ug/l	99
14) Acrylonitrile	3.062	53	80413	113.456	ug/l	97
15) Acetone	2.380	58	21649	111.373	ug/l	93
16) Carbon Disulfide	2.502	76	57310	16.170	ug/l	100
17) Allyl chloride	2.654	41	45792	19.594	ug/l	96
18) Methylene Chloride	2.782	84	28292	20.130	ug/l	94
19) trans-1,2-Dichloroethene	3.081	96	24177	19.124	ug/l	90
20) Diisopropyl ether	3.757	45	89800	19.995	ug/l	91
21) 1,1-Dichloroethane	3.605	63	50635	20.273	ug/l	98
22) cis-1,2-Dichloroethene	4.477	96	30571	20.180	ug/l	100
23) tert-Butyl Alcohol	2.977	59	23432	94.701	ug/l #	100
24) Methyl tert-Butyl Ether	3.111	73	82928	20.334	ug/l	94
25) Chloroform	5.080	83	51829	21.483	ug/l	99
26) Cyclohexane	5.458	56	44003	19.086	ug/l #	99
29) 1,1-Dichloropropene	5.684	75	32662	20.610	ug/l	99
30) 2-Butanone	4.556	43	113838	124.364	ug/l	98
31) 2,2-Dichloropropane	4.465	77	34312	19.147	ug/l	99
32) 1,1,1-Trichloroethane	5.373	97	41753	21.744	ug/l	97
33) Carbon Tetrachloride	5.666	117	34574	21.335	ug/l	96
34) Benzene	6.031	78	105267	21.181	ug/l	98
35) Methacrylonitrile	4.916	41	23610	24.103	ug/l	97
36) 1,2-Dichloroethane	6.080	62	39838	23.413	ug/l	97
37) Trichloroethene	7.123	130	24342	20.936	ug/l	99
38) Methylcyclohexane	7.373	83	42471	19.959	ug/l	99
39) 1,2-Dichloropropane	7.428	63	25728	20.823	ug/l	98
40) Dibromomethane	7.580	93	19891	22.434	ug/l	95
41) Bromodichloromethane	7.818	83	39228	22.261	ug/l	99
42) Vinyl Acetate	3.715	43	360651	101.532	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
 Data File : VX045340.D
 Acq On : 19 Mar 2025 10:41
 Operator : JC/MD
 Sample : VSTDCCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDCCC020

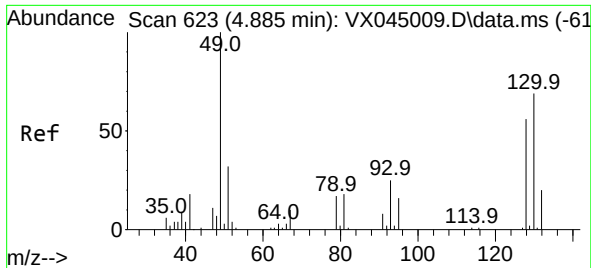
Quant Time: Mar 20 01:30:50 2025
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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 03/20/2025
 Supervised By : Mahesh Dadoda 03/20/2025

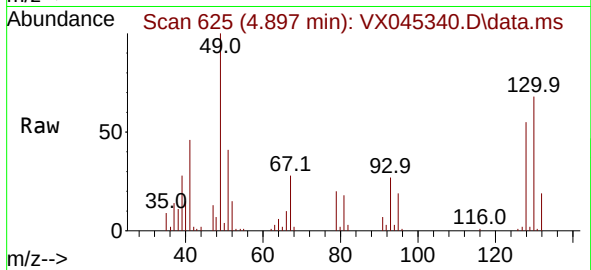
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.708	43	41125	23.957	ug/l	97
44) Isopropyl Acetate	6.342	43	62292	22.048	ug/l	98
45) 1,4-Dioxane	7.659	88	11574	394.071	ug/l	99
46) Methyl methacrylate	7.690	41	33143	23.923	ug/l	91
47) n-amyl Acetate	10.842	43	50805	20.723	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	32357	19.050	ug/l	98
49) cis-1,3-Dichloropropene	8.360	75	38687	20.120	ug/l	94
50) 1,1,2-Trichloroethane	9.147	97	25507	22.055	ug/l	96
51) Ethyl methacrylate	9.116	69	38805	21.334	ug/l	95
52) 1,3-Dichloropropane	9.305	76	45730	22.567	ug/l	98
53) Dibromochloromethane	9.519	129	27768	21.709	ug/l	96
54) 1,2-Dibromoethane	9.610	107	25822	21.988	ug/l	98
55) 2-Chloroethyl vinyl ether	8.238	63	96601	103.422	ug/l	99
56) Bromoform	10.799	173	16989	21.196	ug/l	99
58) 4-Methyl-2-Pentanone	8.568	43	224283	121.880	ug/l	100
59) 2-Hexanone	9.427	43	163850	123.186	ug/l	98
61) Tetrachloroethene	9.269	164	21660	21.744	ug/l	95
62) Toluene	8.714	91	111284	20.767	ug/l	99
64) Chlorobenzene	10.079	112	69016	20.784	ug/l	98
65) 1,1,1,2-Tetrachloroethane	10.159	131	23101	21.083	ug/l	99
66) Ethyl Benzene	10.189	91	122105	20.813	ug/l	98
67) m/p-Xylenes	10.299	106	92122	42.144	ug/l	97
68) o-Xylene	10.640	106	43730	20.390	ug/l	93
69) Styrene	10.653	104	75199	20.993	ug/l	98
70) Isopropylbenzene	10.957	105	119932	21.669	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.207	83	41882	23.012	ug/l	98
72) 1,2,3-Trichloropropane	11.238	75	34753m	23.216	ug/l	
73) Bromobenzene	11.195	156	26330	20.665	ug/l	97
74) n-propylbenzene	11.299	91	138300	20.998	ug/l	98
75) 2-Chlorotoluene	11.360	91	86063	21.614	ug/l	98
76) 1,3,5-Trimethylbenzene	11.451	105	97415	21.335	ug/l	100
77) t-1,4-Dichloro-2-butene	11.018	75	9701	19.262	ug/l	81
78) 4-Chlorotoluene	11.451	91	94621	21.317	ug/l	97
79) tert-butylbenzene	11.713	119	96957	21.075	ug/l	97
80) 1,2,4-Trimethylbenzene	11.750	105	97205	21.253	ug/l	99
81) sec-Butylbenzene	11.890	105	125123	21.671	ug/l	99
82) p-Isopropyltoluene	12.006	119	99482	21.265	ug/l	98
83) 1,3-Dichlorobenzene	11.969	146	48062	20.274	ug/l	98
84) 1,4-Dichlorobenzene	12.036	146	48764	20.863	ug/l	99
85) n-Butylbenzene	12.329	91	86472	20.241	ug/l	99
86) Hexachloroethane	12.536	117	16565	20.077	ug/l	98
87) 1,2-Dichlorobenzene	12.335	146	48429	20.821	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	8082	22.936	ug/l	95
89) 1,2,4-Trichlorobenzene	13.585	180	27076	19.206	ug/l	97
90) Hexachlorobutadiene	13.725	225	11744	20.427	ug/l	94
91) Naphthalene	13.774	128	99680	20.053	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	28538	19.663	ug/l	98

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



#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.897 min Scan# 61
Delta R.T. 0.012 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

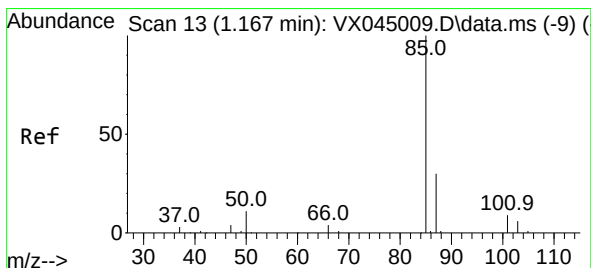
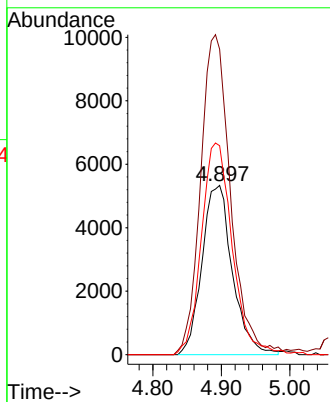
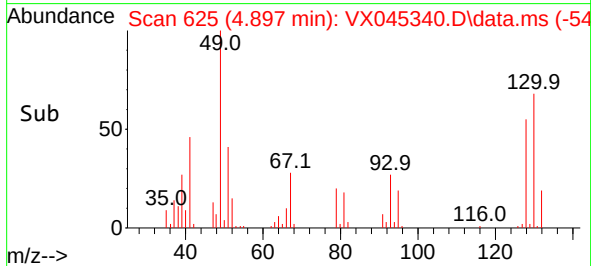
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



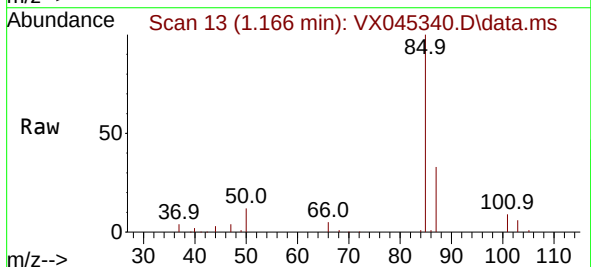
Tgt Ion:128 Resp: 16449
Ion Ratio Lower Upper
128 100
49 184.3 0.0 449.7
130 126.2 0.0 312.7

Manual Integrations
APPROVED

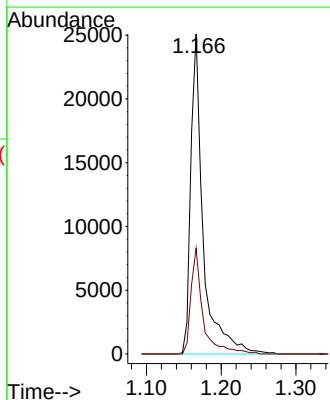
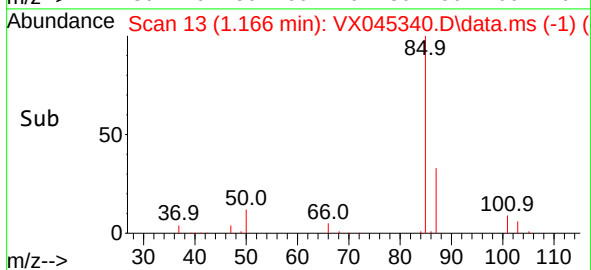
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

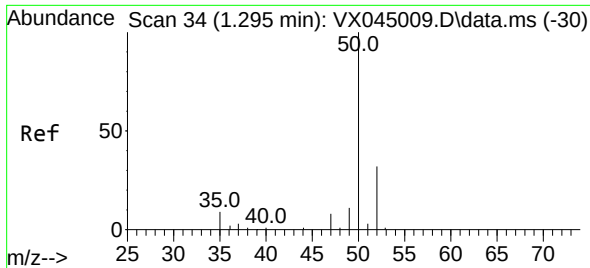


#2
Dichlorodifluoromethane
Concen: 20.814 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion: 85 Resp: 28861
Ion Ratio Lower Upper
85 100
87 33.0 15.1 45.3





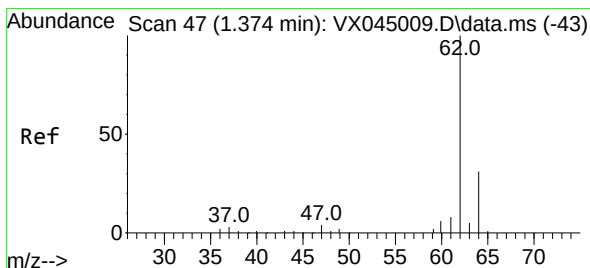
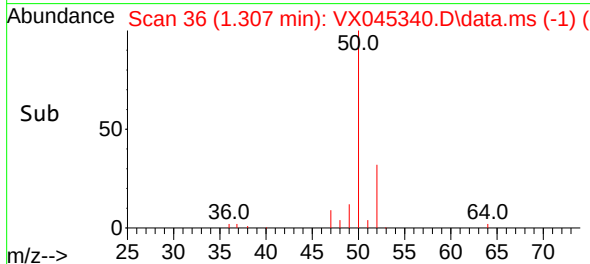
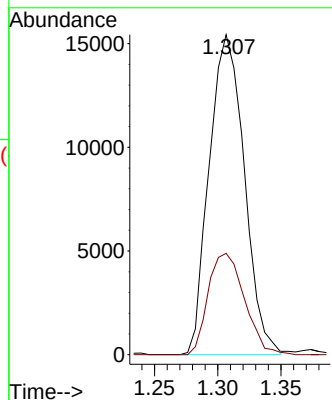
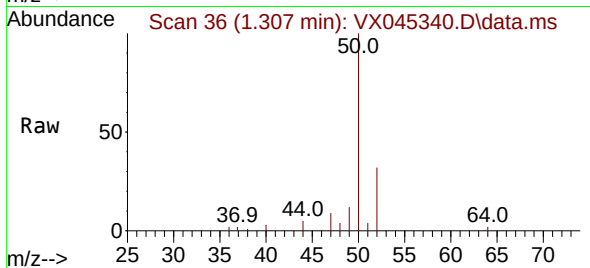
#3
Chloromethane
Concen: 17.945 ug/l
RT: 1.307 min Scan# 30
Delta R.T. 0.012 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 50 Resp: 2980
Ion Ratio Lower Upper
50 100
52 31.7 25.7 38.5

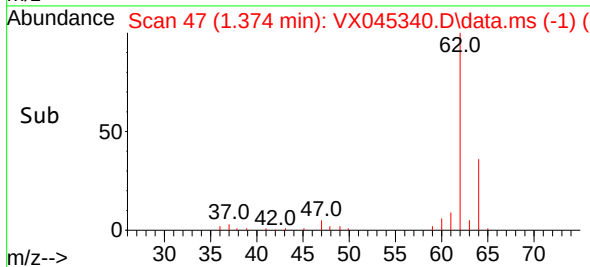
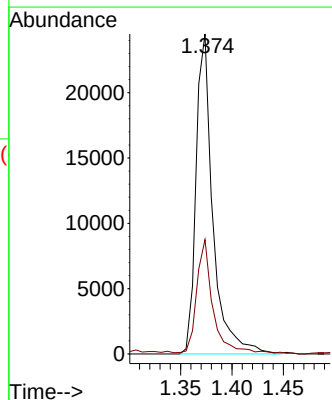
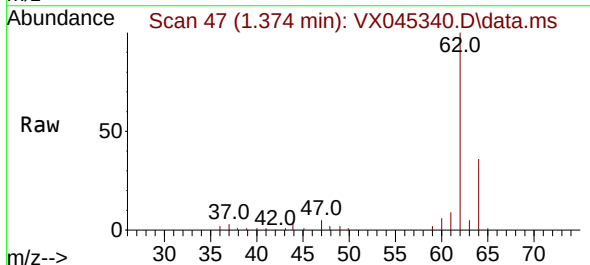
Manual Integrations
APPROVED

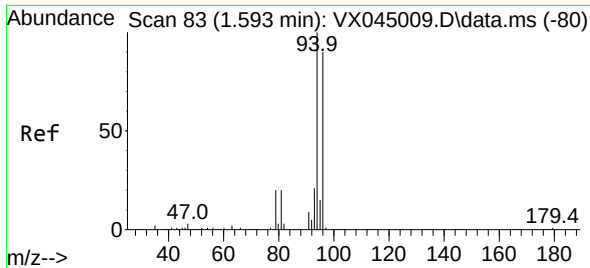
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#4
Vinyl Chloride
Concen: 17.406 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

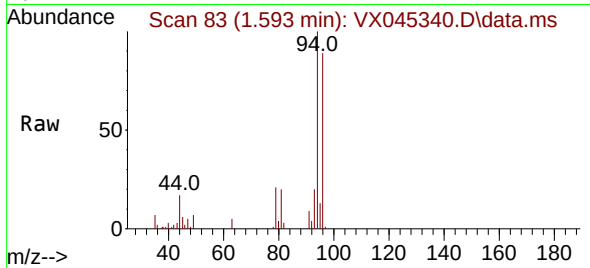
Tgt Ion: 62 Resp: 27895
Ion Ratio Lower Upper
62 100
64 35.3 25.1 37.7





#5
Bromomethane
Concen: 22.166 ug/l
RT: 1.593 min Scan# 83
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

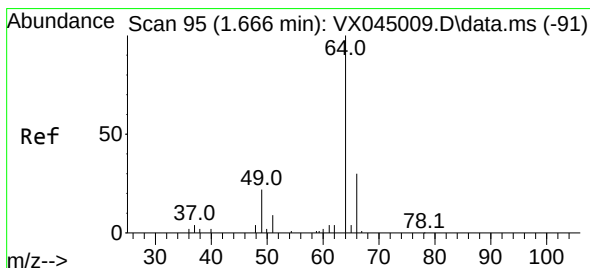
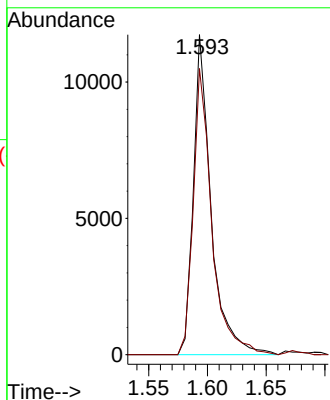
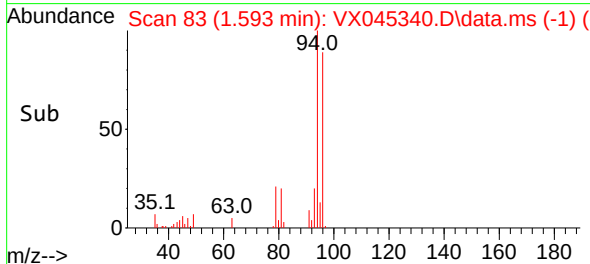
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



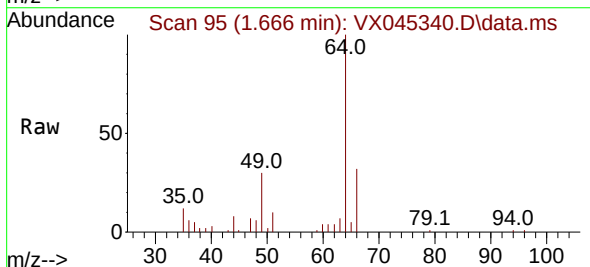
Tgt Ion: 94 Resp: 1236
Ion Ratio Lower Upper
94 100
96 89.4 72.2 108.4

Manual Integrations
APPROVED

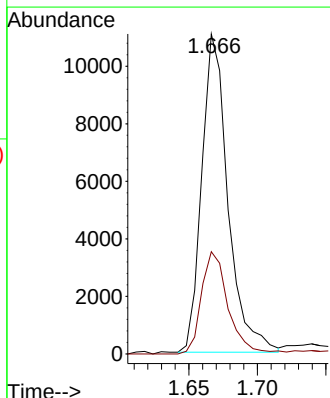
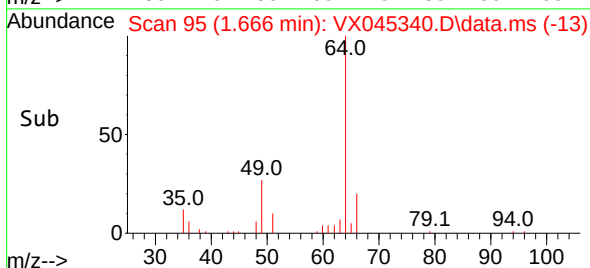
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

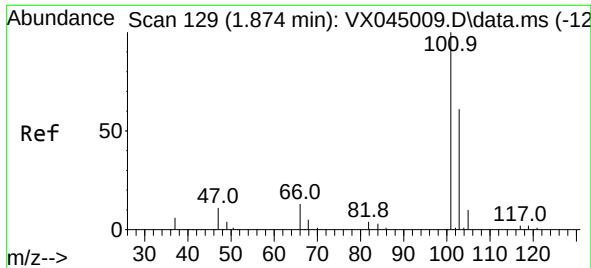


#6
Chloroethane
Concen: 16.944 ug/l
RT: 1.666 min Scan# 95
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion: 64 Resp: 14707
Ion Ratio Lower Upper
64 100
66 32.2 23.7 35.5





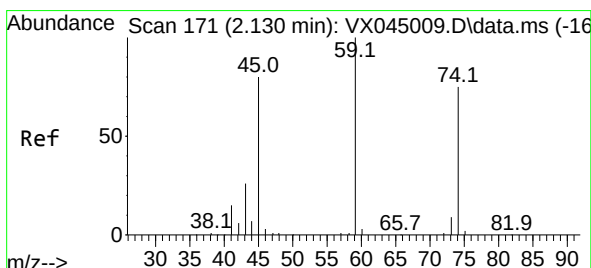
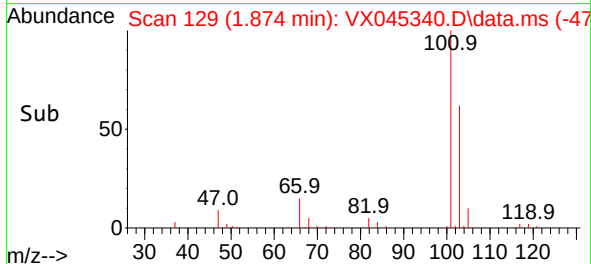
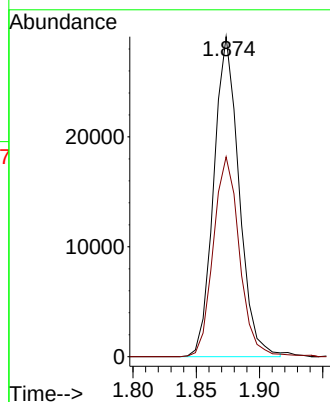
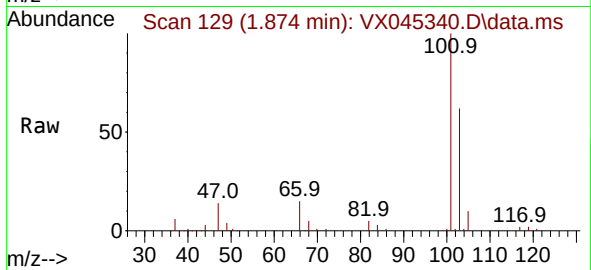
#7
Trichlorofluoromethane
Concen: 18.787 ug/l
RT: 1.874 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:101 Resp: 4046
Ion Ratio Lower Upper
101 100
103 62.4 48.8 73.2

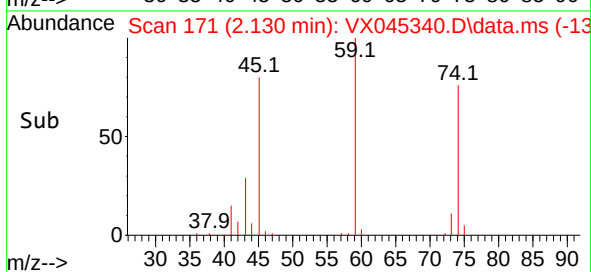
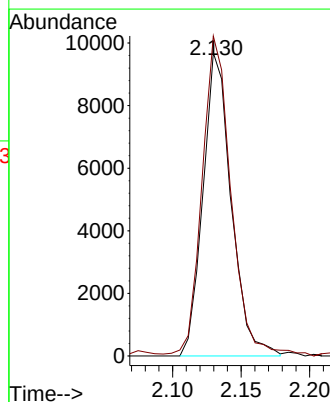
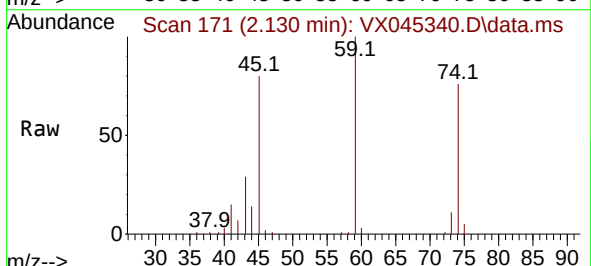
Manual Integrations
APPROVED

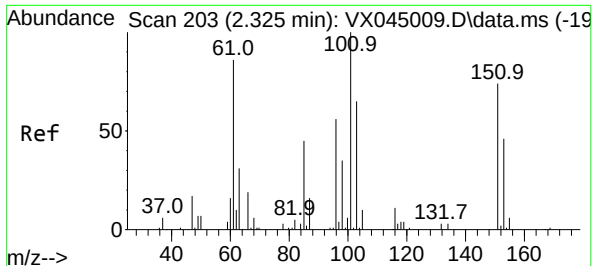
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#8
Diethyl Ether
Concen: 17.046 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 74 Resp: 13892
Ion Ratio Lower Upper
74 100
45 106.3 20.8 186.8





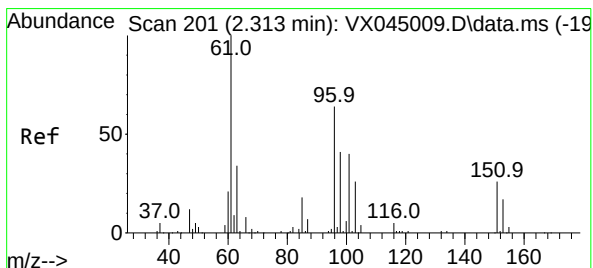
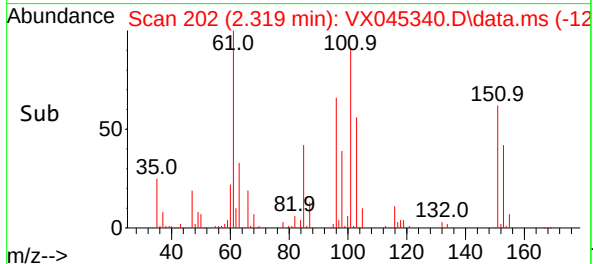
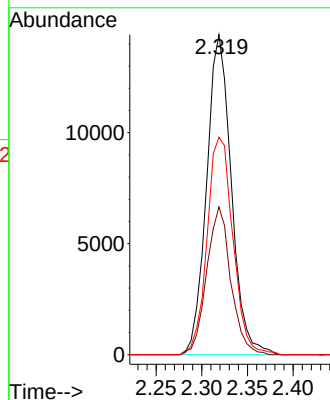
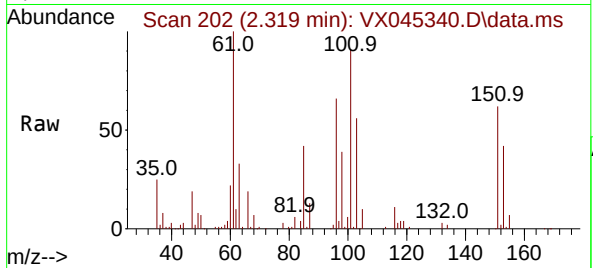
#9
1,1,2-Trichlorotrifluoroethane
Concen: 21.178 ug/l
RT: 2.319 min Scan# 20
Delta R.T. -0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:101 Resp: 2709
Ion Ratio Lower Upper
101 100
85 45.1 0.0 90.6
151 71.1 0.0 147.6

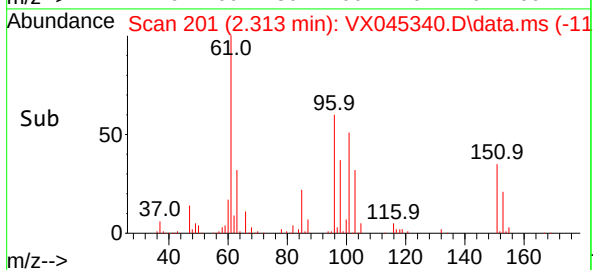
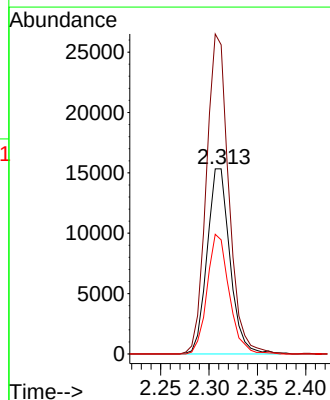
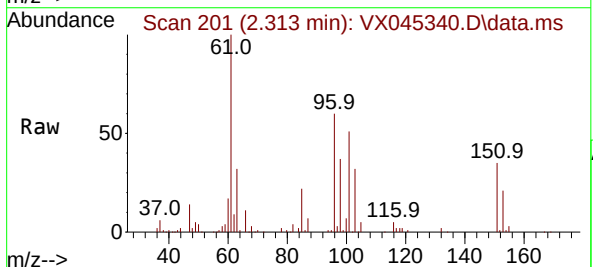
Manual Integrations
APPROVED

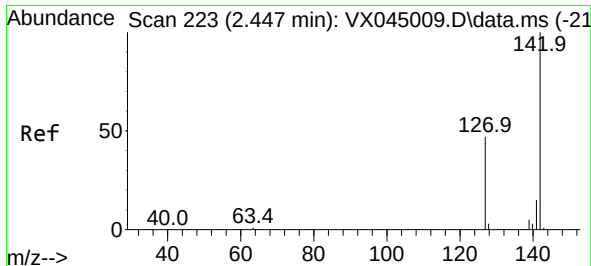
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#10
1,1-Dichloroethene
Concen: 20.176 ug/l
RT: 2.313 min Scan# 201
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

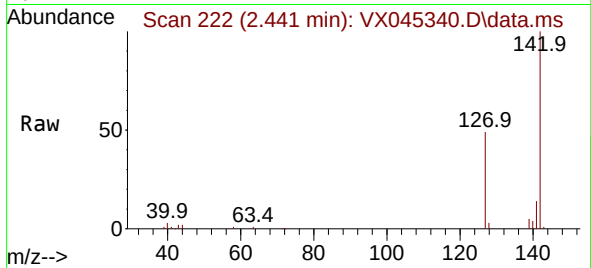
Tgt Ion: 96 Resp: 25210
Ion Ratio Lower Upper
96 100
61 167.0 124.2 186.2
98 61.7 51.1 76.7





#11
Methyl Iodide
Concen: 20.954 ug/l
RT: 2.441 min Scan# 21
Delta R.T. -0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

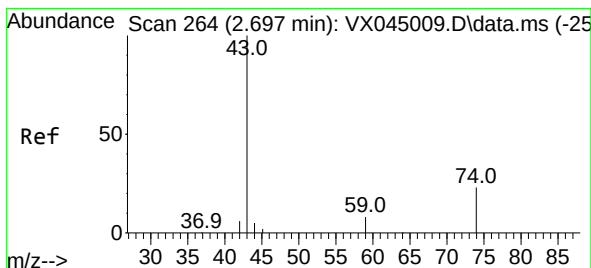
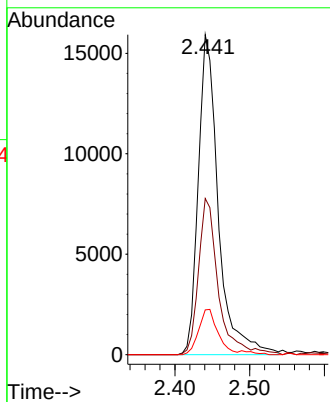
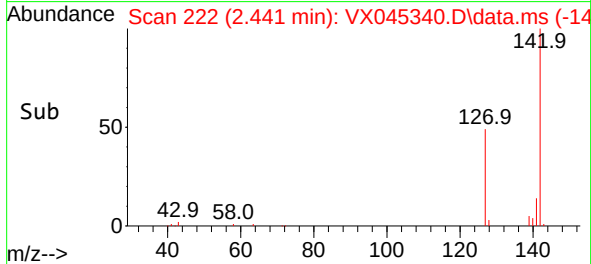
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



Tgt Ion:142 Resp: 29634
Ion Ratio Lower Upper
142 100
127 48.7 23.3 69.9
141 14.0 7.5 22.6

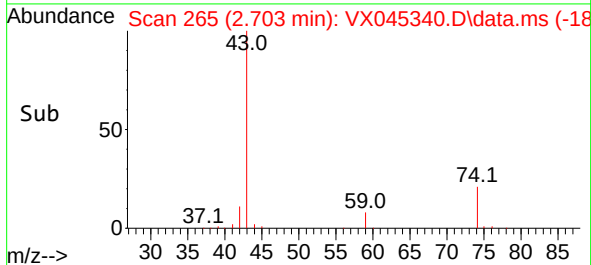
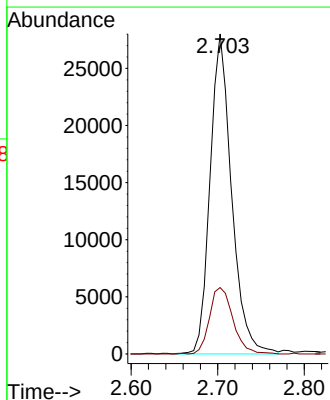
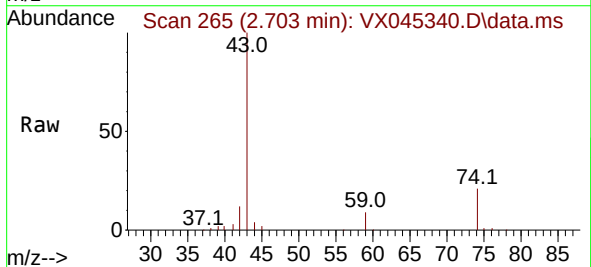
Manual Integrations
APPROVED

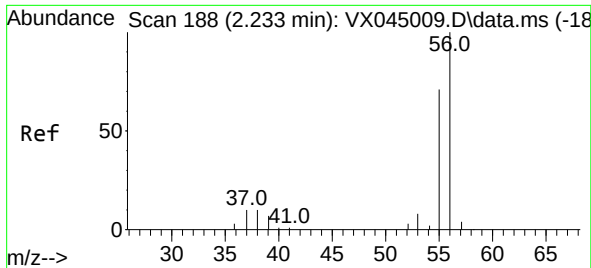
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#12
Methyl Acetate
Concen: 33.340 ug/l
RT: 2.703 min Scan# 265
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

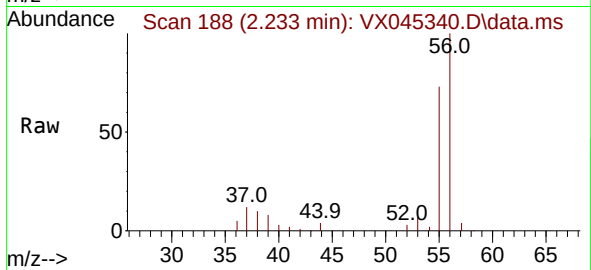
Tgt Ion: 43 Resp: 48377
Ion Ratio Lower Upper
43 100
74 20.7 17.9 26.9





#13
Acrolein
Concen: 118.988 ug/l
RT: 2.233 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

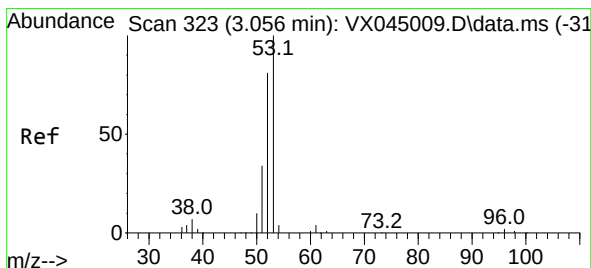
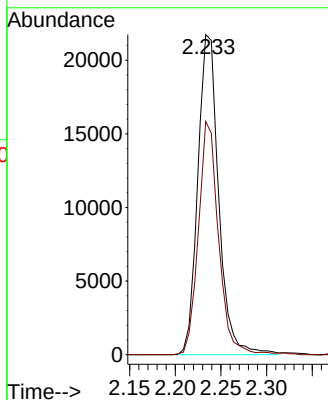
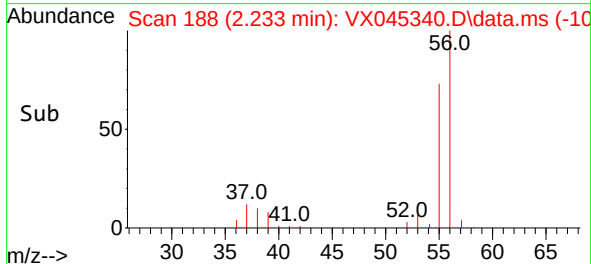
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



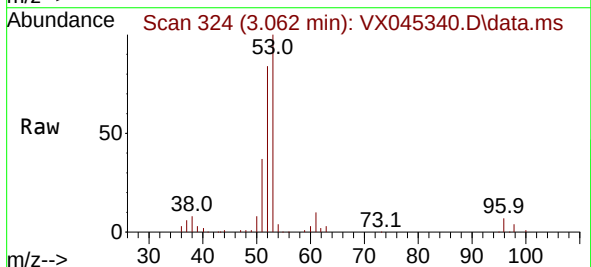
Tgt Ion: 56 Resp: 3460
Ion Ratio Lower Upper
56 100
55 68.9 55.4 83.2

Manual Integrations
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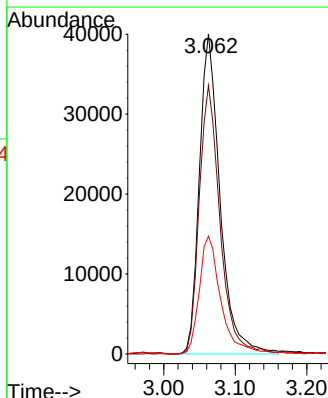
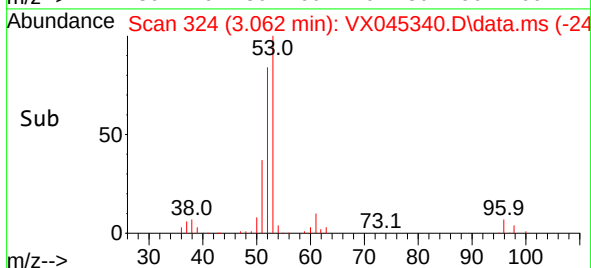
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

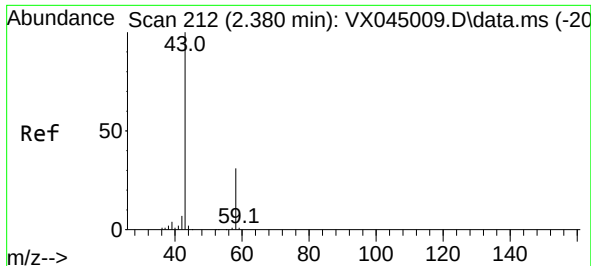


#14
Acrylonitrile
Concen: 113.456 ug/l
RT: 3.062 min Scan# 324
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



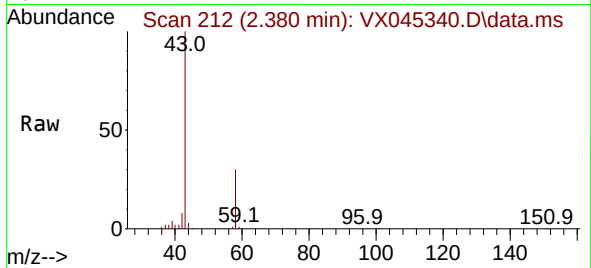
Tgt Ion: 53 Resp: 80413
Ion Ratio Lower Upper
53 100
52 84.1 40.9 122.8
51 38.4 18.0 54.0





#15
Acetone
Concen: 111.373 ug/l
RT: 2.380 min Scan# 212
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

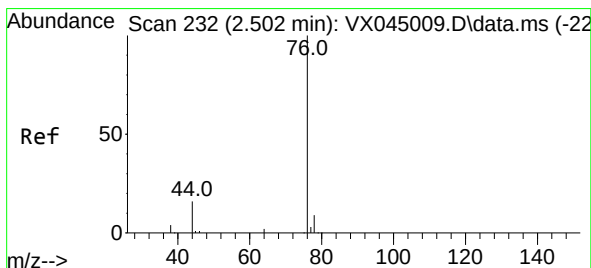
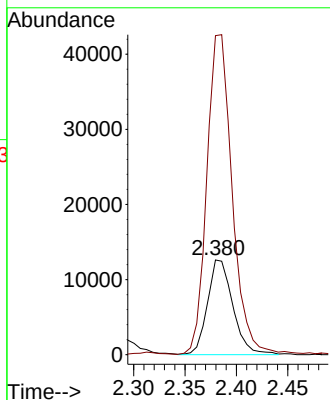
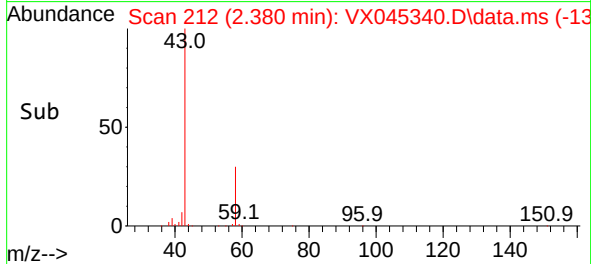
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



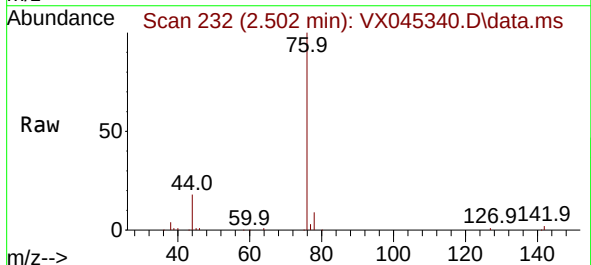
Tgt Ion: 58 Resp: 21649
Ion Ratio Lower Upper
58 100
43 337.7 258.6 388.0

Manual Integrations
APPROVED

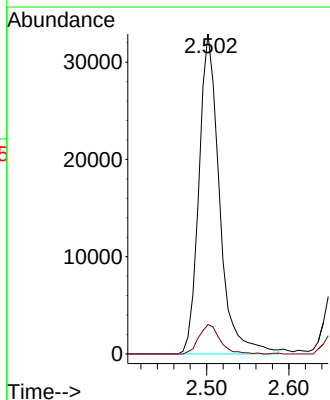
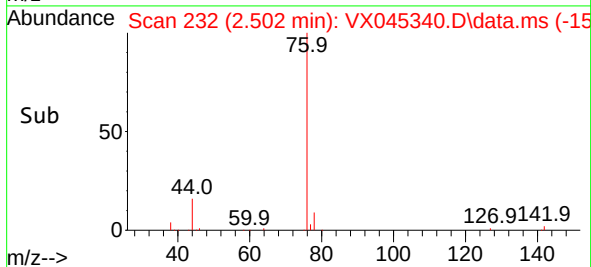
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

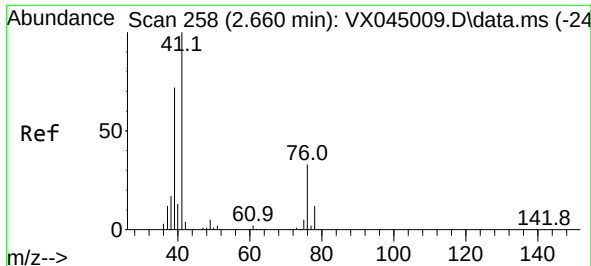


#16
Carbon Disulfide
Concen: 16.170 ug/l
RT: 2.502 min Scan# 232
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



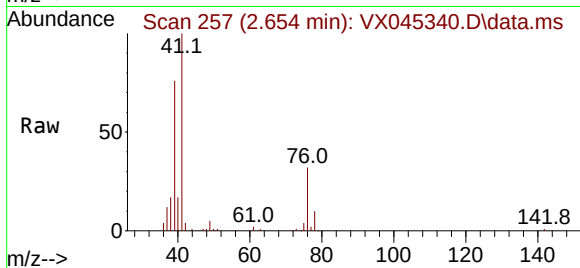
Tgt Ion: 76 Resp: 57310
Ion Ratio Lower Upper
76 100
78 9.2 7.3 10.9





#17
 Allyl chloride
 Concen: 19.594 ug/l
 RT: 2.654 min Scan# 257
 Delta R.T. -0.006 min
 Lab File: VX045340.D
 Acq: 19 Mar 2025 10:41

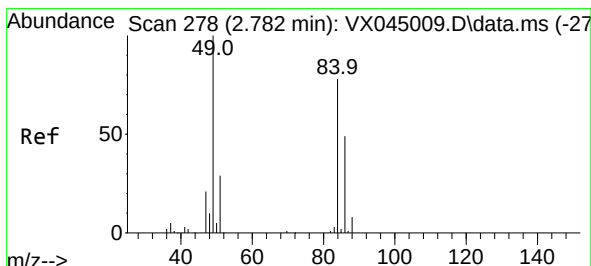
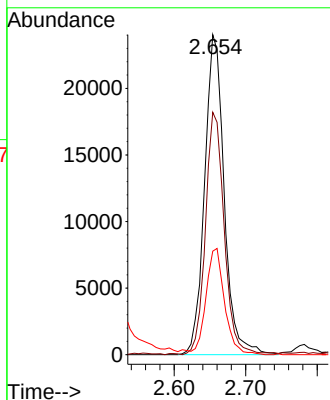
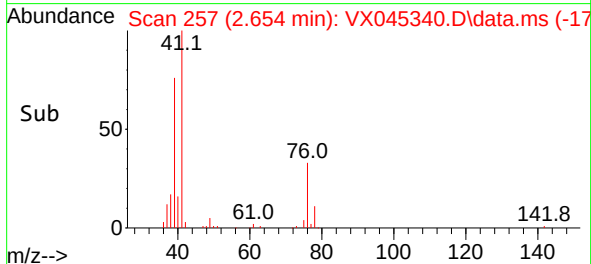
Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDCCC020



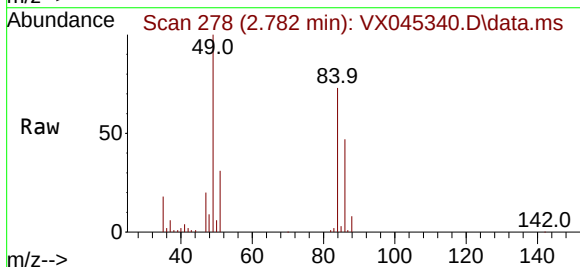
Tgt Ion: 41 Resp: 45792
 Ion Ratio Lower Upper
 41 100
 39 75.5 36.2 108.6
 76 32.1 17.2 51.5

Manual Integrations
 APPROVED

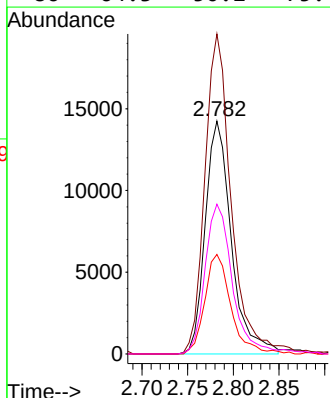
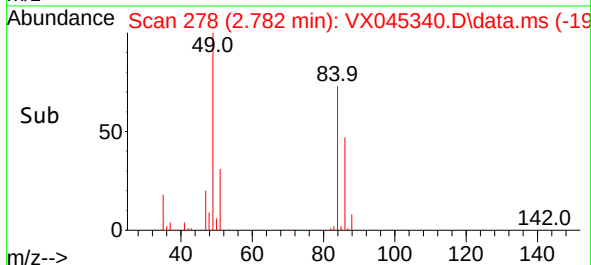
Reviewed By :John Carlone 03/20/2025
 Supervised By :Mahesh Dadoda 03/20/2025

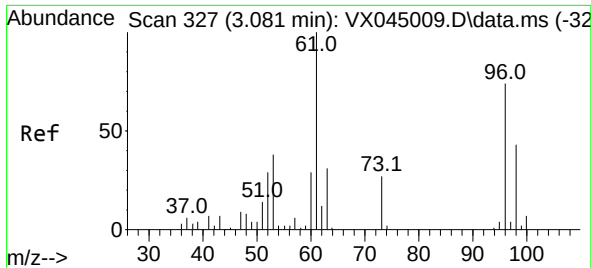


#18
 Methylene Chloride
 Concen: 20.130 ug/l
 RT: 2.782 min Scan# 278
 Delta R.T. -0.000 min
 Lab File: VX045340.D
 Acq: 19 Mar 2025 10:41



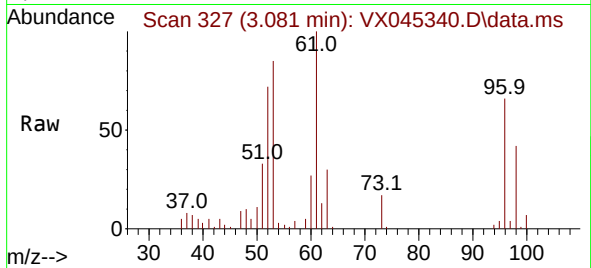
Tgt Ion: 84 Resp: 28292
 Ion Ratio Lower Upper
 84 100
 49 137.5 102.8 154.2
 51 42.8 30.1 45.1
 86 64.3 50.2 75.4





#19
trans-1,2-Dichloroethene
Concen: 19.124 ug/l
RT: 3.081 min Scan# 31
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

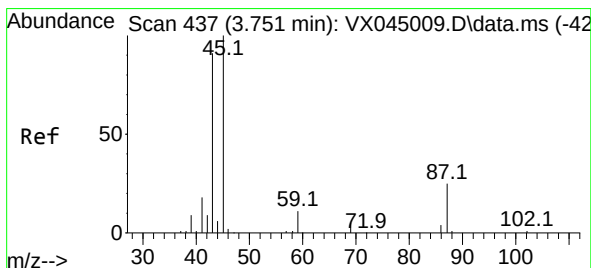
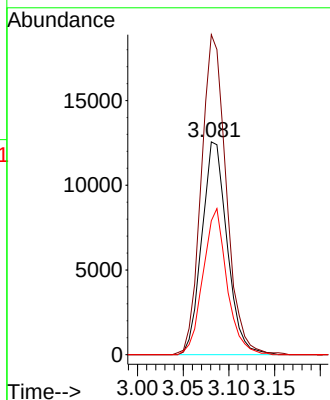
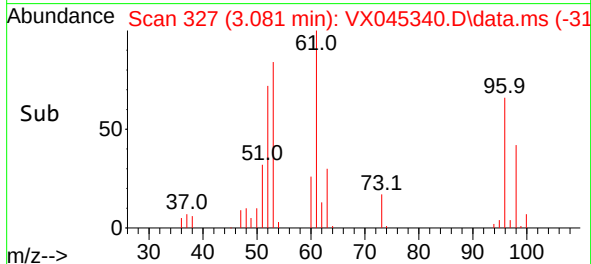
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



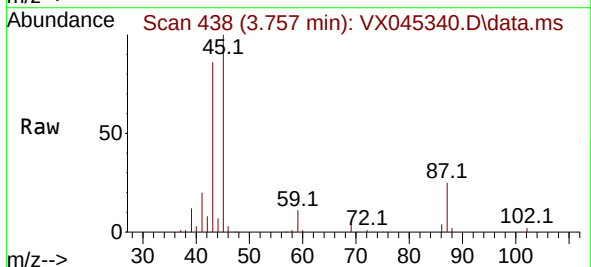
Tgt Ion: 96 Resp: 2417
Ion Ratio Lower Upper
96 100
61 149.5 108.6 163.0
98 63.0 46.5 69.7

Manual Integrations
APPROVED

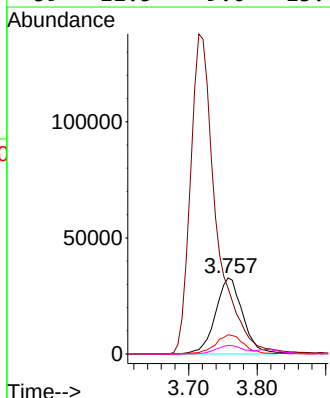
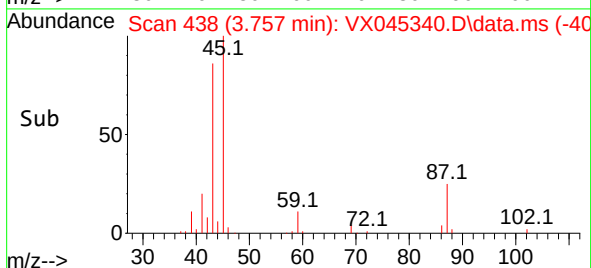
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

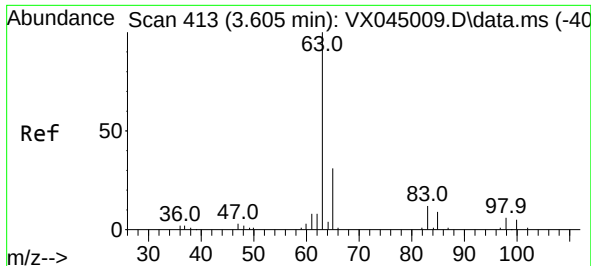


#20
Diisopropyl ether
Concen: 19.995 ug/l
RT: 3.757 min Scan# 438
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion: 45 Resp: 89800
Ion Ratio Lower Upper
45 100
43 81.6 74.4 111.6
87 25.2 19.8 29.8
59 11.5 9.0 13.4





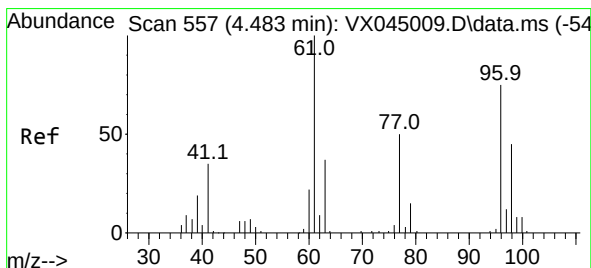
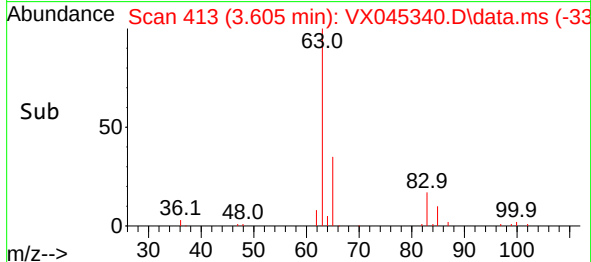
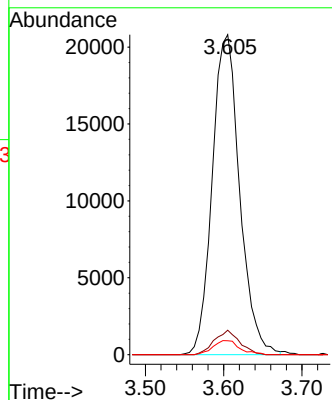
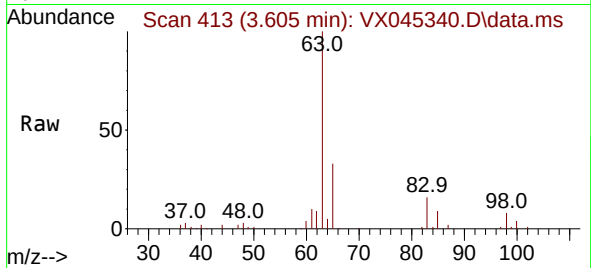
#21
1,1-Dichloroethane
Concen: 20.273 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 63 Resp: 5063
Ion Ratio Lower Upper
63 100
98 7.6 3.3 9.8
100 4.3 2.4 7.1

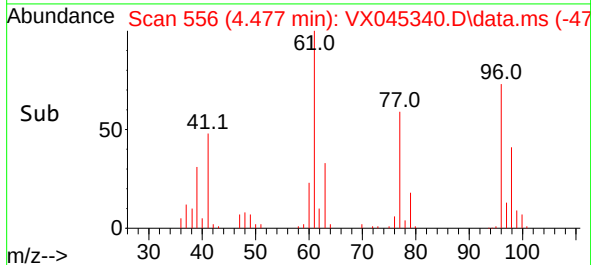
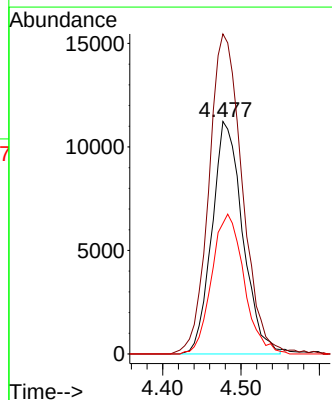
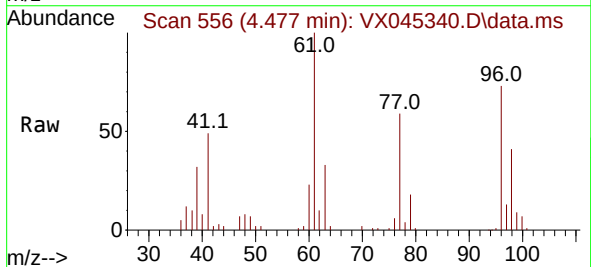
Manual Integrations
APPROVED

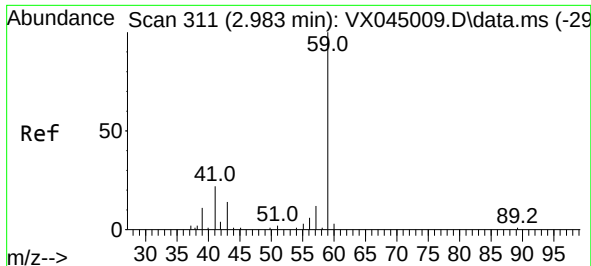
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#22
cis-1,2-Dichloroethene
Concen: 20.180 ug/l
RT: 4.477 min Scan# 556
Delta R.T. -0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 96 Resp: 30571
Ion Ratio Lower Upper
96 100
61 148.9 118.9 178.3
98 63.2 50.7 76.1





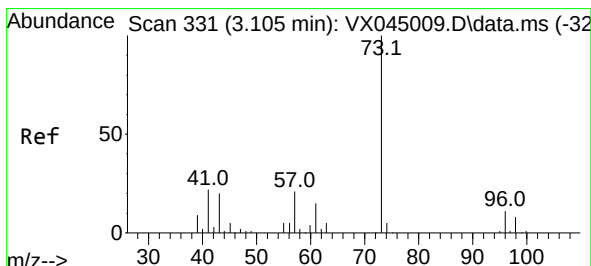
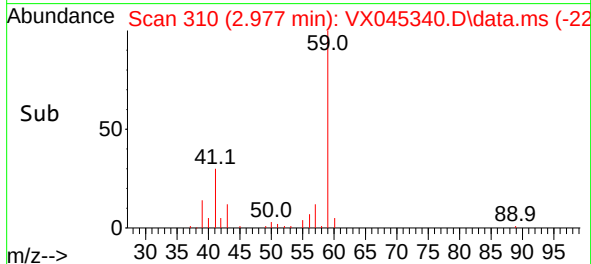
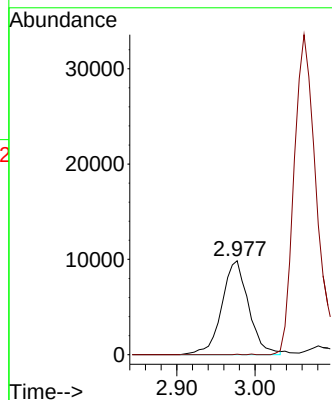
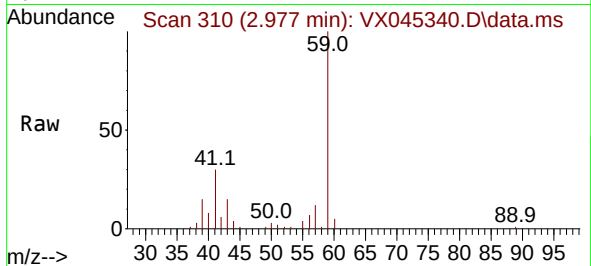
#23
tert-Butyl Alcohol
Concen: 94.701 ug/l
RT: 2.977 min Scan# 311
Delta R.T. -0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 59 Resp: 2343
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0

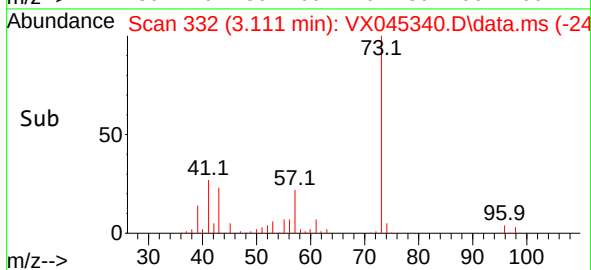
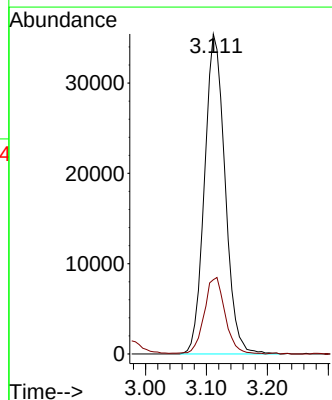
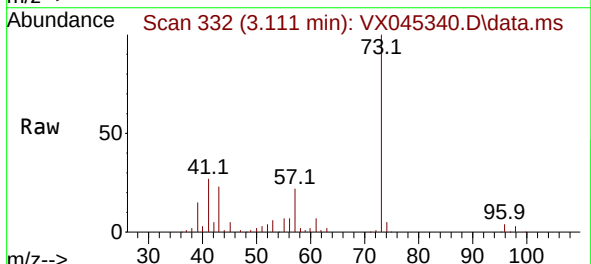
Manual Integrations
APPROVED

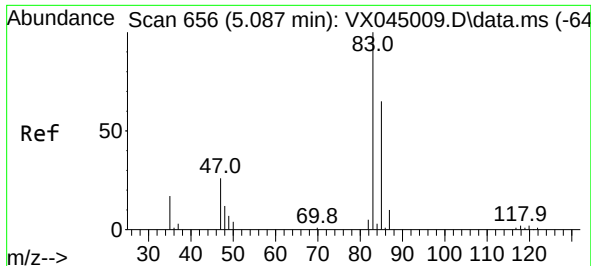
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#24
Methyl tert-Butyl Ether
Concen: 20.334 ug/l
RT: 3.111 min Scan# 332
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 73 Resp: 82928
Ion Ratio Lower Upper
73 100
43 24.4 17.4 26.0





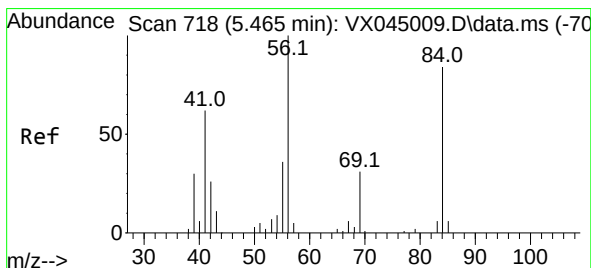
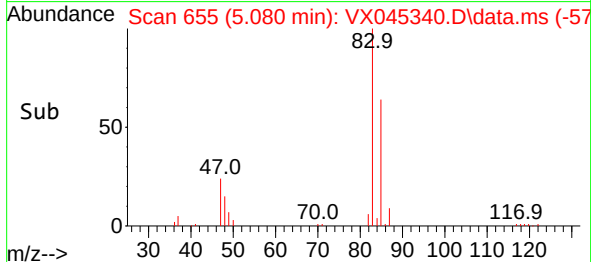
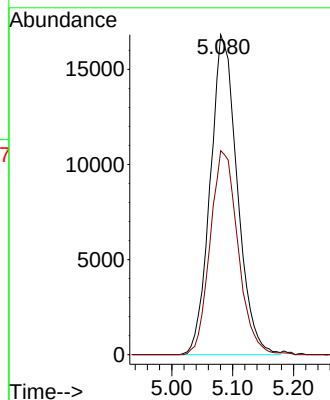
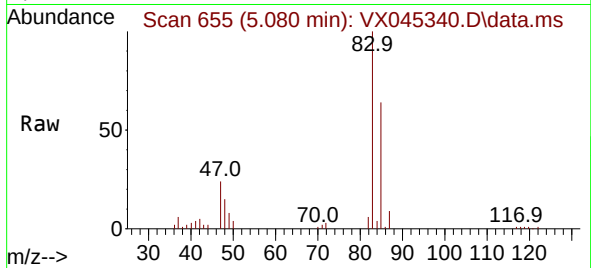
#25
Chloroform
Concen: 21.483 ug/l
RT: 5.080 min Scan# 612
Delta R.T. -0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 83 Resp: 51829
Ion Ratio Lower Upper
83 100
85 63.8 51.7 77.5

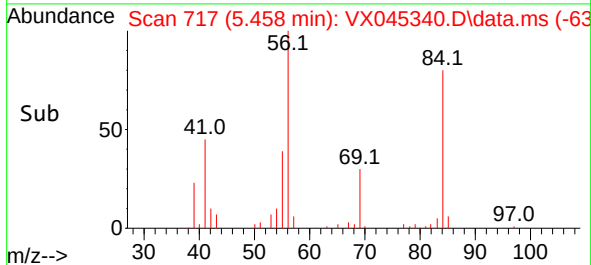
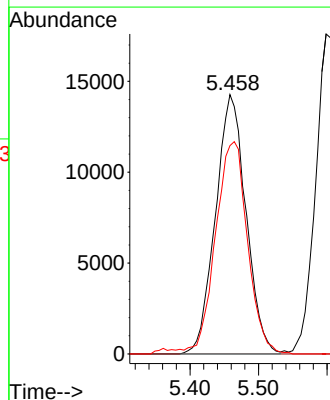
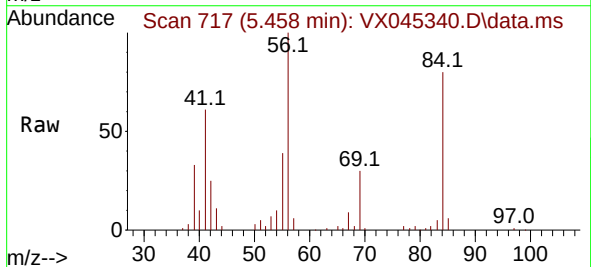
Manual Integrations
APPROVED

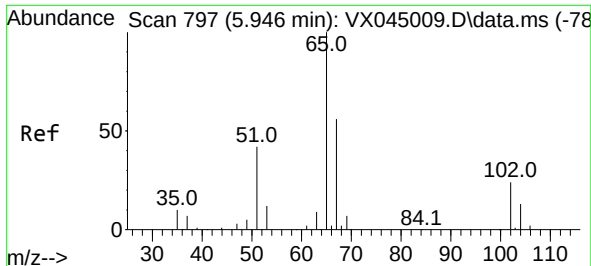
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#26
Cyclohexane
Concen: 19.086 ug/l
RT: 5.458 min Scan# 717
Delta R.T. -0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 56 Resp: 44003
Ion Ratio Lower Upper
56 100
89 0.0 0.0 0.0
84 84.7 67.1 100.7





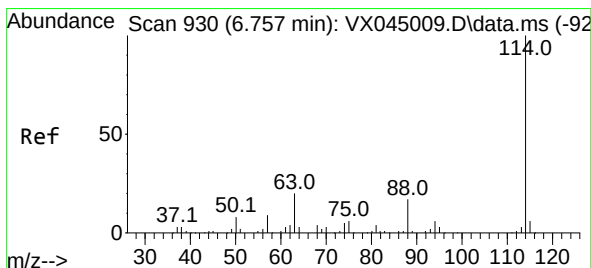
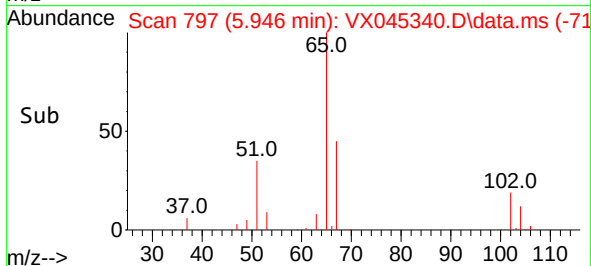
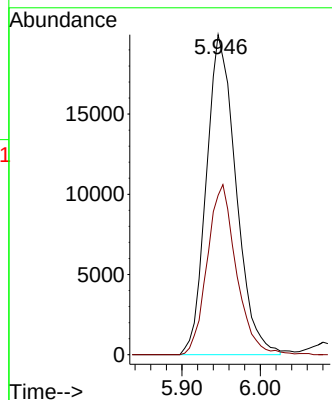
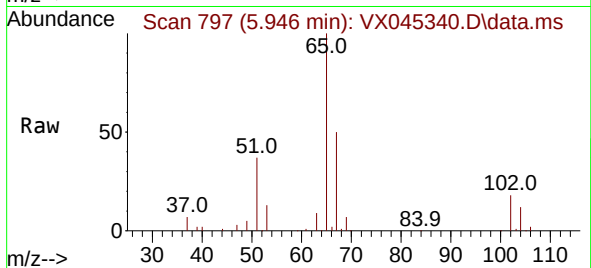
#27
1,2-Dichloroethane-d4
Concen: 32.812 ug/l
RT: 5.946 min Scan# 797
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 65 Resp: 5242
Ion Ratio Lower Upper
65 100
67 52.0 42.6 64.0

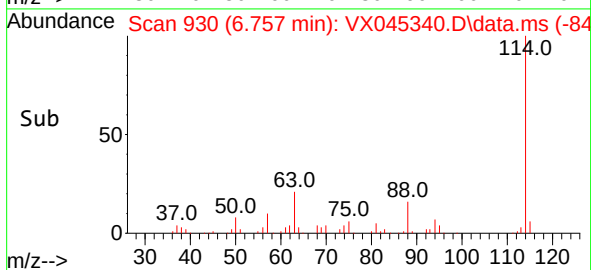
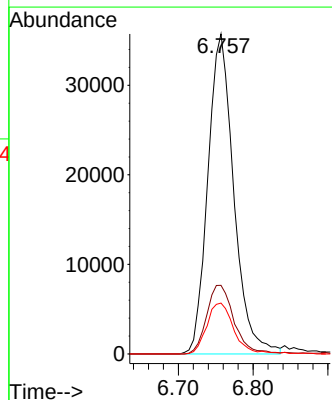
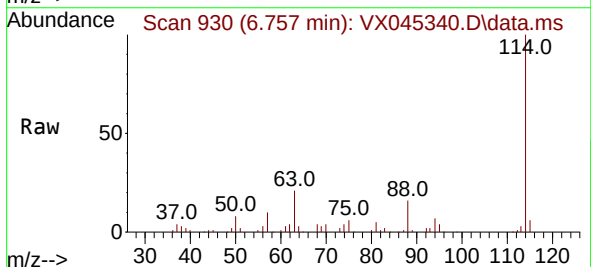
Manual Integrations
APPROVED

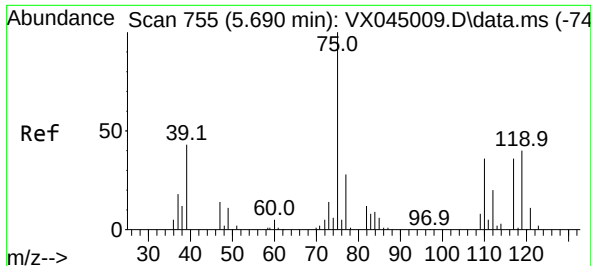
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion:114 Resp: 86152
Ion Ratio Lower Upper
114 100
63 22.5 16.8 25.2
88 16.1 12.7 19.1





#29

1,1-Dichloropropene

Concen: 20.610 ug/l

RT: 5.684 min Scan# 754

Delta R.T. -0.006 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Instrument :

MSVOA_X

ClientSampleId :

VSTDCCC020

Tgt Ion: 75 Resp: 3266

Ion Ratio Lower Upper

75 100

110 34.4 0.0 69.2

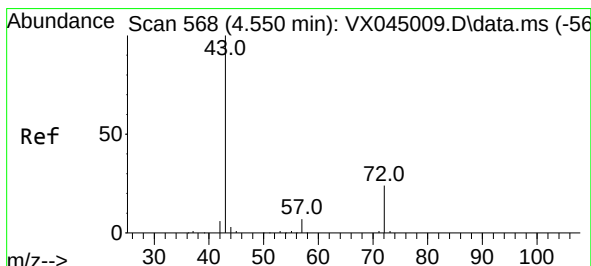
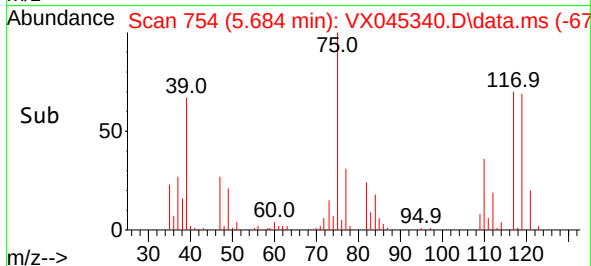
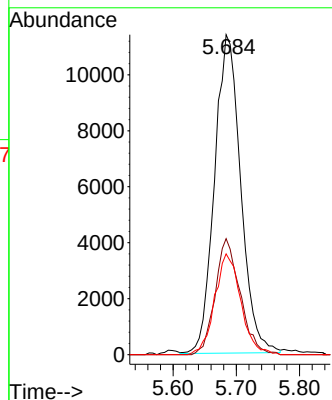
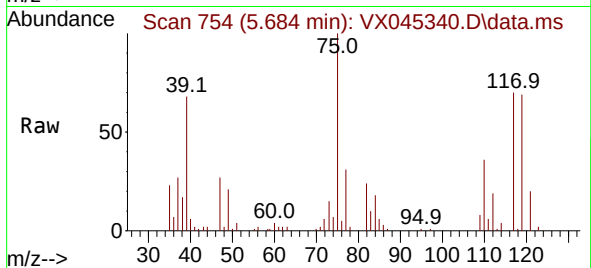
77 31.5 0.0 61.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#30

2-Butanone

Concen: 124.364 ug/l

RT: 4.556 min Scan# 569

Delta R.T. 0.006 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

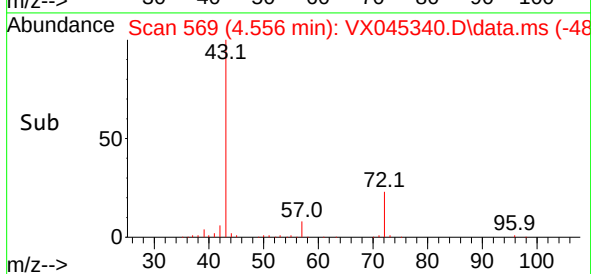
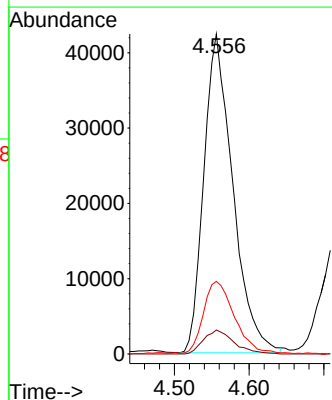
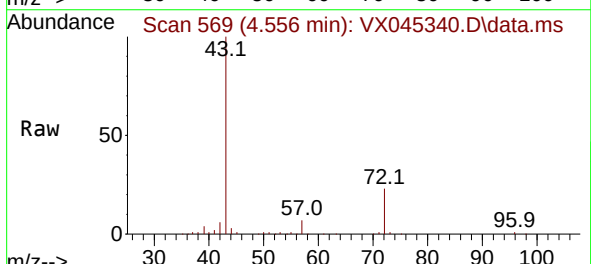
Tgt Ion: 43 Resp: 113838

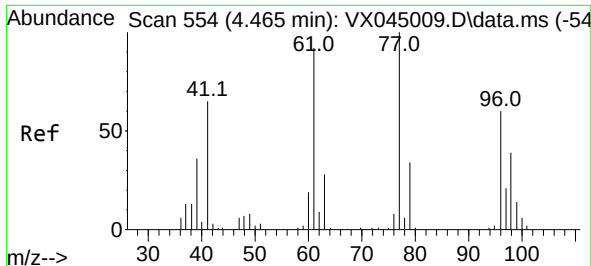
Ion Ratio Lower Upper

43 100

57 7.9 6.2 9.2

72 24.2 20.2 30.2





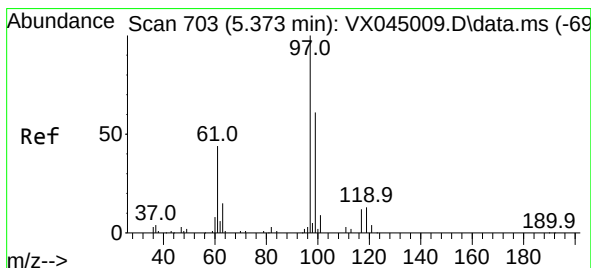
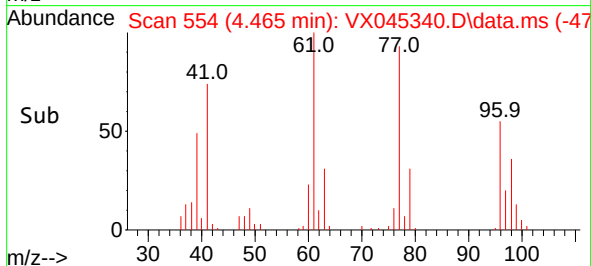
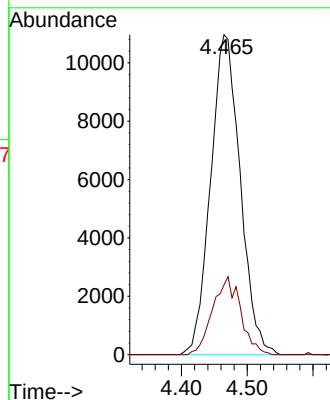
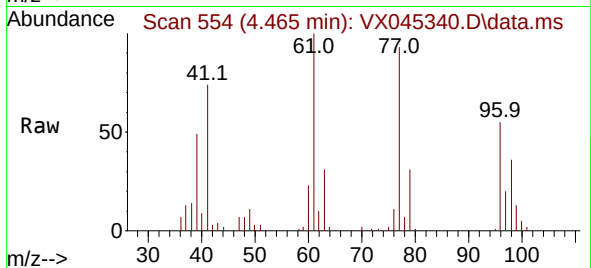
#31
2,2-Dichloropropane
Concen: 19.147 ug/l
RT: 4.465 min Scan# 511
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 77 Resp: 3431
Ion Ratio Lower Upper
77 100
97 23.0 18.0 27.0

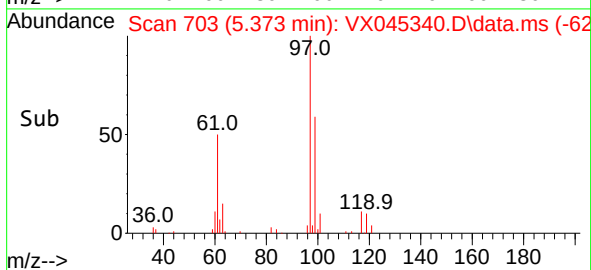
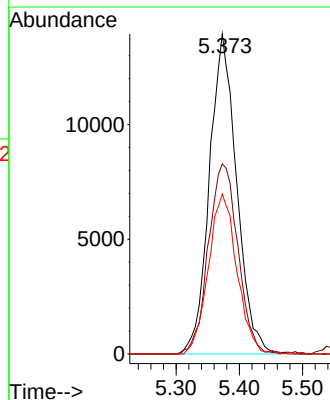
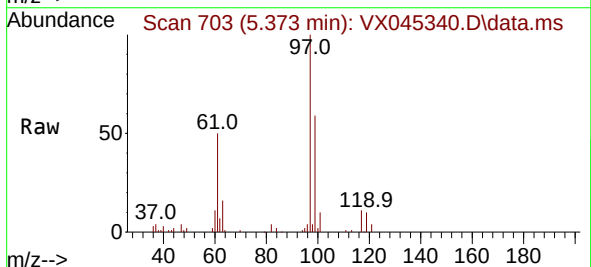
Manual Integrations
APPROVED

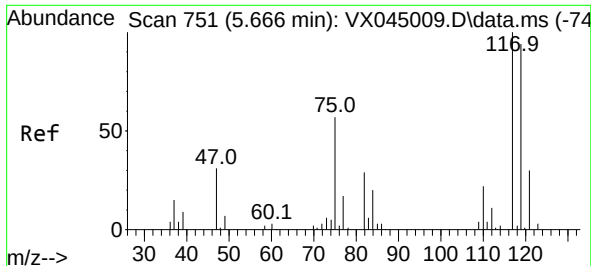
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#32
1,1,1-Trichloroethane
Concen: 21.744 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

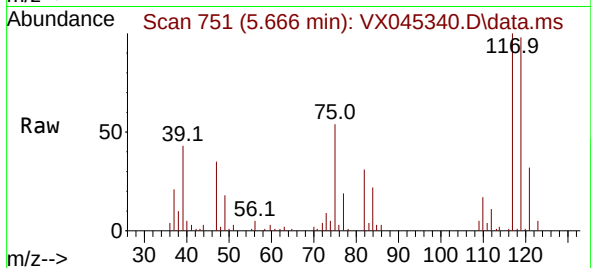
Tgt Ion: 97 Resp: 41753
Ion Ratio Lower Upper
97 100
99 64.0 52.2 78.2
61 52.0 38.5 57.7





#33
Carbon Tetrachloride
Concen: 21.335 ug/l
RT: 5.666 min Scan# 751
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

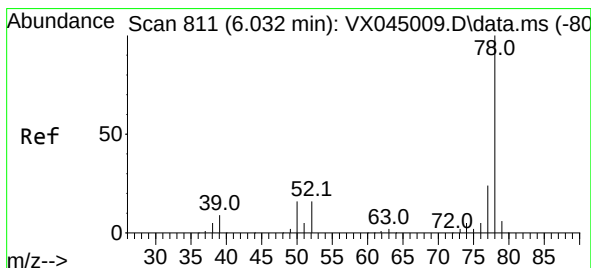
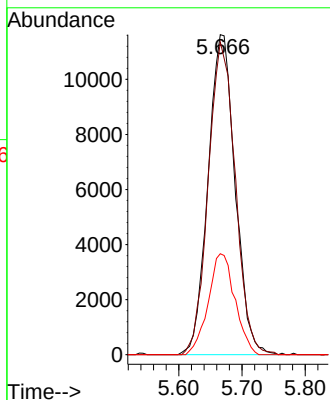
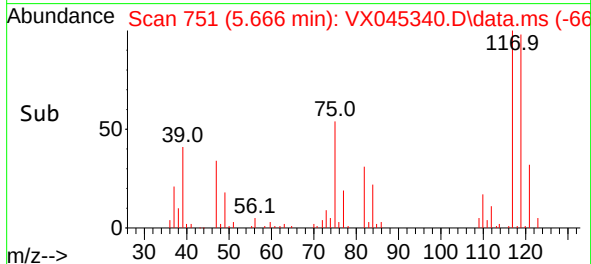
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



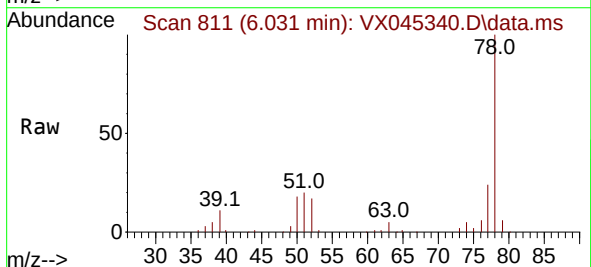
Tgt Ion:117 Resp: 34574
Ion Ratio Lower Upper
117 100
119 97.7 75.1 112.7
121 31.5 23.9 35.9

Manual Integrations
APPROVED

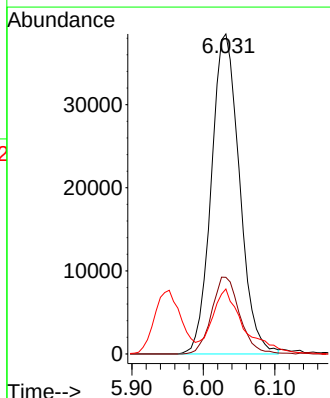
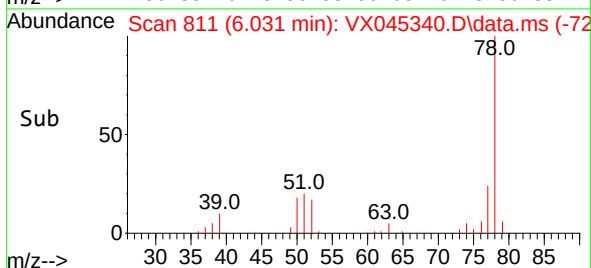
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

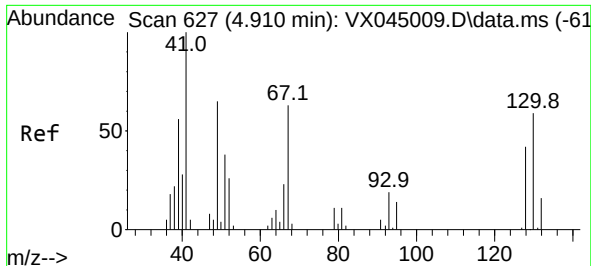


#34
Benzene
Concen: 21.181 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



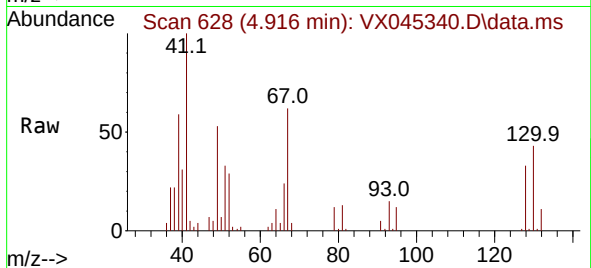
Tgt Ion: 78 Resp: 105267
Ion Ratio Lower Upper
78 100
77 24.0 19.6 29.4
51 18.5 13.8 20.6





#35
Methacrylonitrile
Concen: 24.103 ug/l
RT: 4.916 min Scan# 61
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

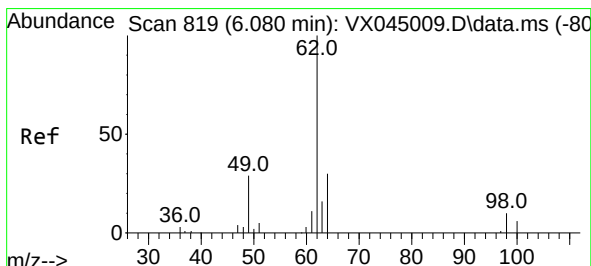
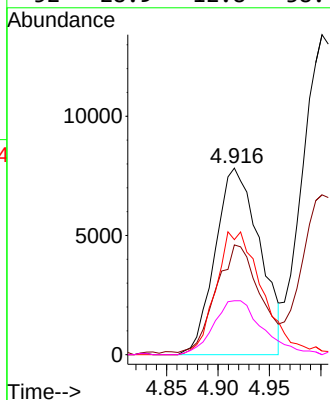
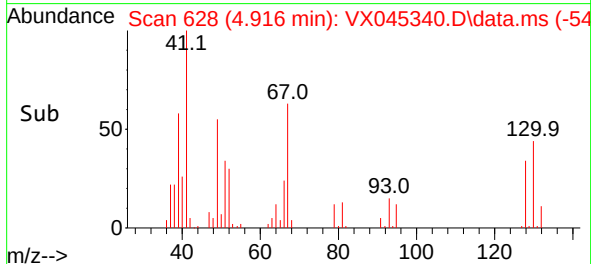
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



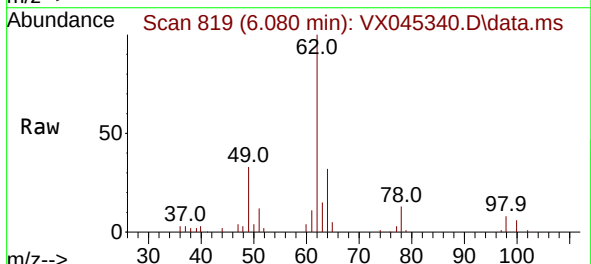
Tgt Ion: 41	Resp: 23610
Ion Ratio	Lower Upper
41 100	
39 57.6	27.8 83.4
67 61.6	31.5 94.5
52 28.9	12.8 38.4

Manual Integrations
APPROVED

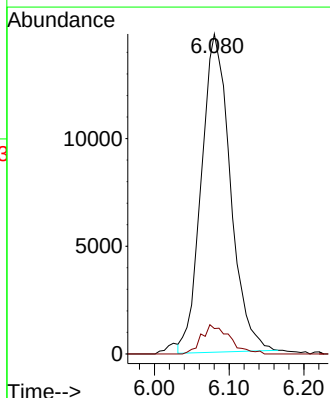
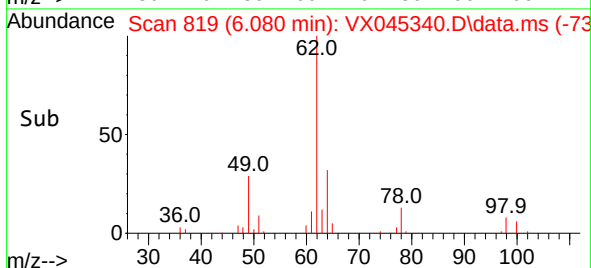
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

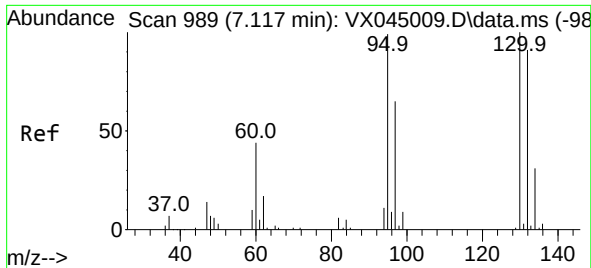


#36
1,2-Dichloroethane
Concen: 23.413 ug/l
RT: 6.080 min Scan# 819
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion: 62	Resp: 39838
Ion Ratio	Lower Upper
62 100	
98 8.8	7.9 11.9





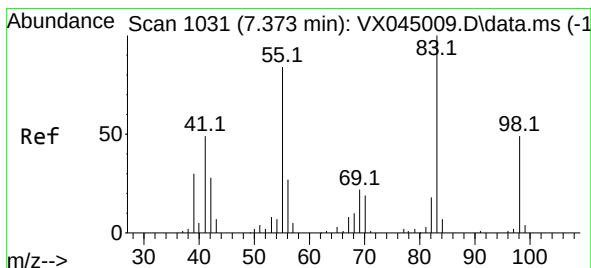
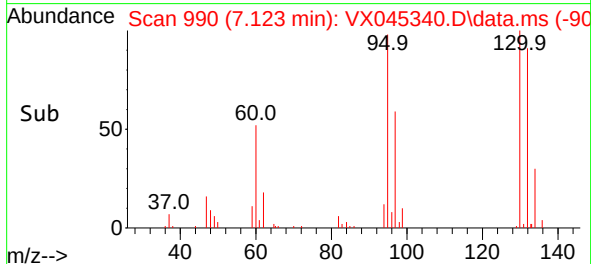
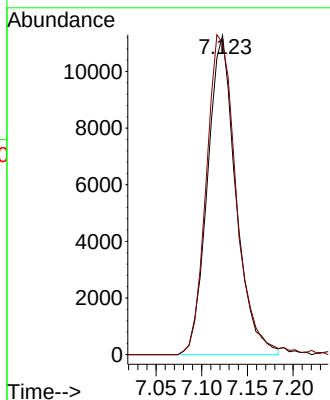
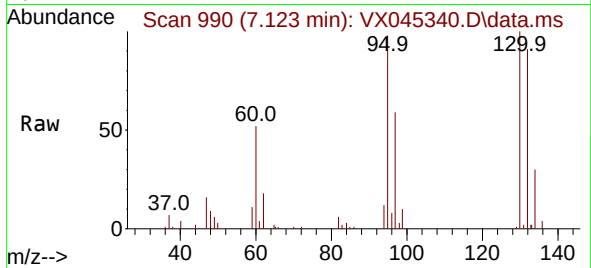
#37
Trichloroethene
Concen: 20.936 ug/l
RT: 7.123 min Scan# 989
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:130 Resp: 2434
Ion Ratio Lower Upper
130 100
95 97.6 79.0 118.4

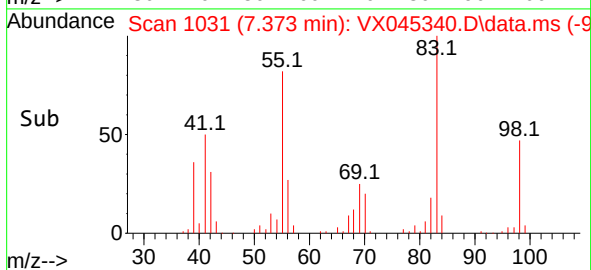
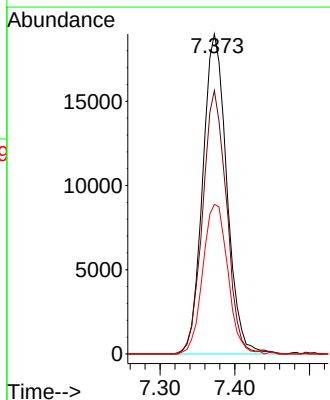
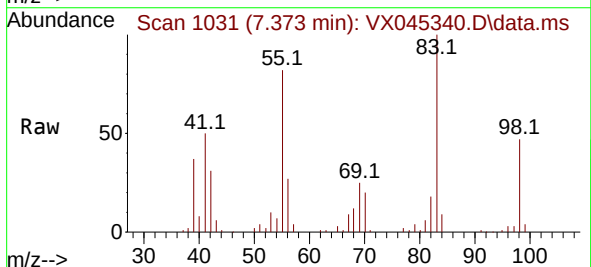
Manual Integrations
APPROVED

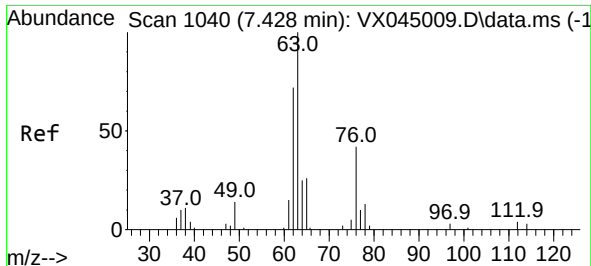
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#38
Methylcyclohexane
Concen: 19.959 ug/l
RT: 7.373 min Scan# 1031
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 83 Resp: 42471
Ion Ratio Lower Upper
83 100
55 81.6 40.6 122.0
98 48.5 24.9 74.6





#39

1,2-Dichloropropane

Concen: 20.823 ug/l

RT: 7.428 min Scan# 1040

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Instrument :

MSVOA_X

ClientSampleId :

VSTDC020

Tgt Ion: 63 Resp: 25728

Ion Ratio Lower Upper

63 100

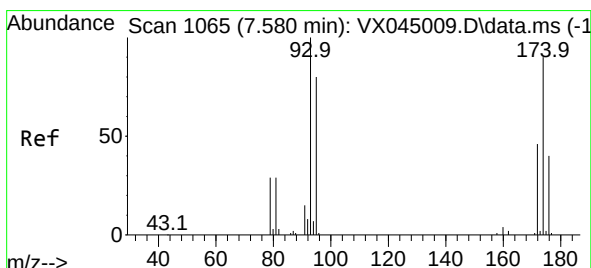
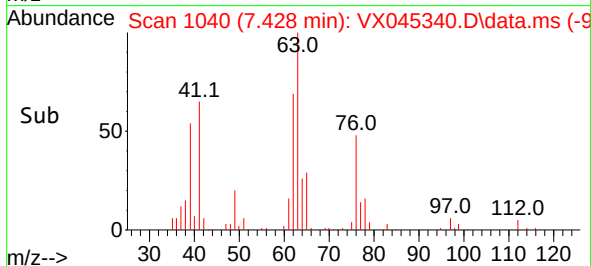
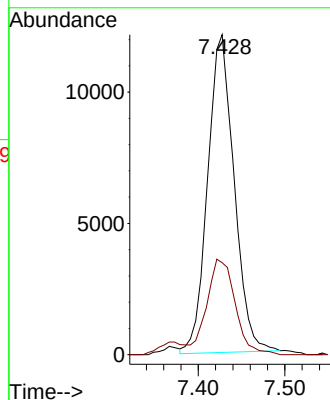
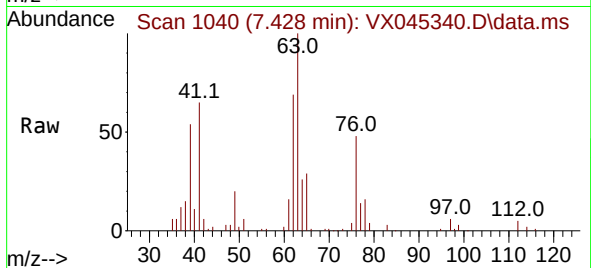
65 29.1 24.3 36.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#40

Dibromomethane

Concen: 22.434 ug/l

RT: 7.580 min Scan# 1065

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

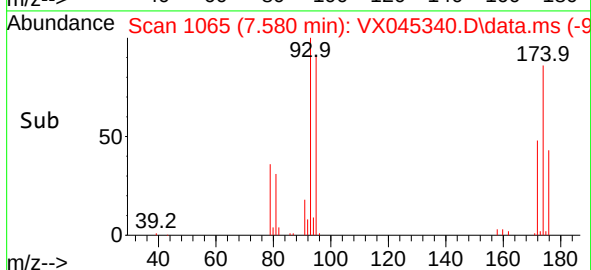
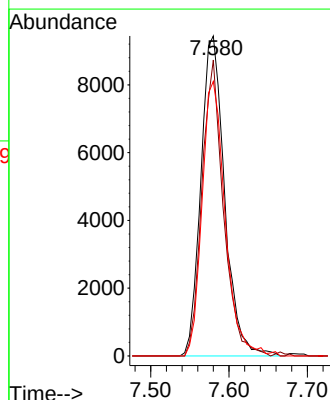
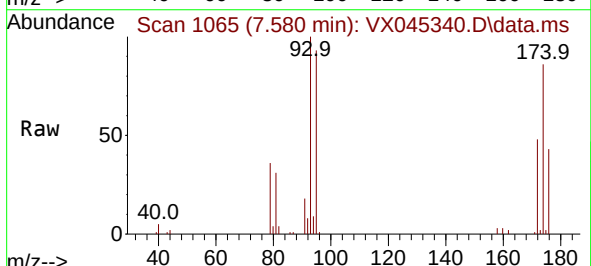
Tgt Ion: 93 Resp: 19891

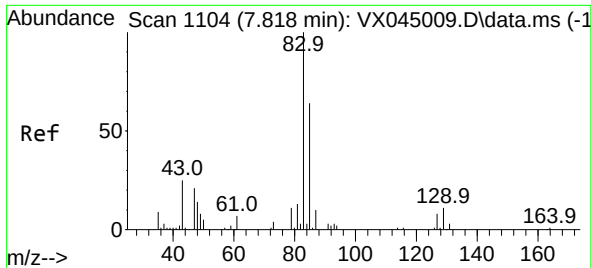
Ion Ratio Lower Upper

93 100

95 83.8 0.0 162.6

174 82.9 0.0 178.8





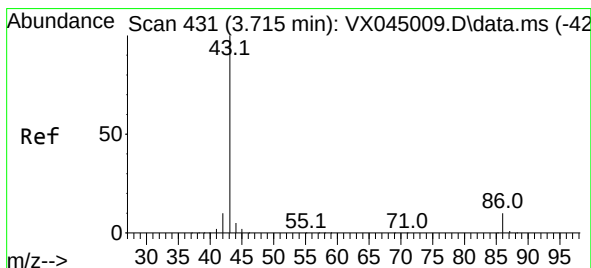
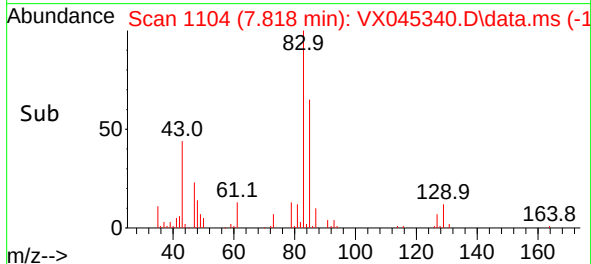
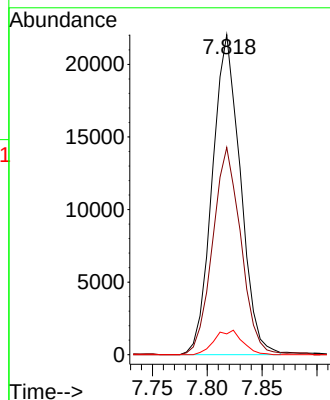
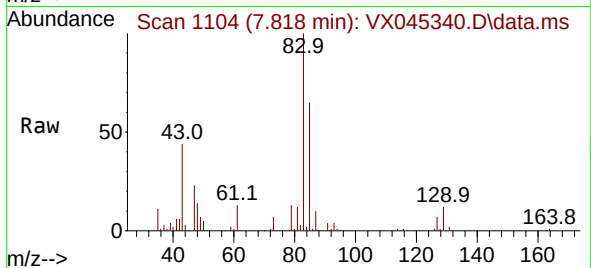
#41
Bromodichloromethane
Concen: 22.261 ug/l
RT: 7.818 min Scan# 1104
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 83 Resp: 39228
Ion Ratio Lower Upper
83 100
85 64.7 51.0 76.6
127 6.5 6.1 9.1

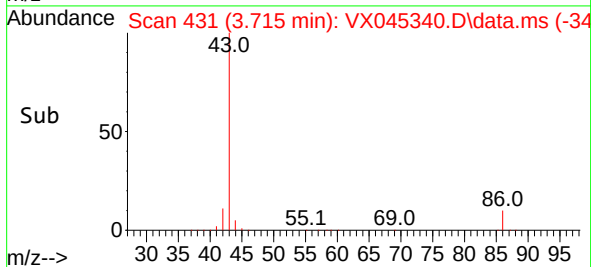
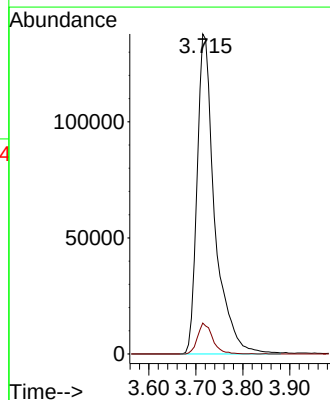
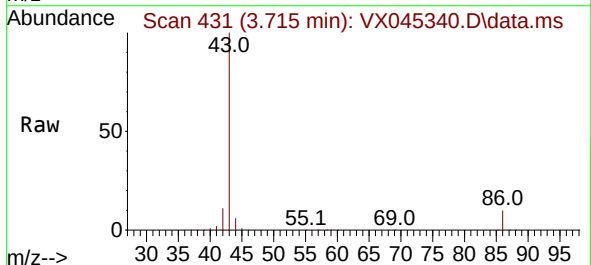
Manual Integrations
APPROVED

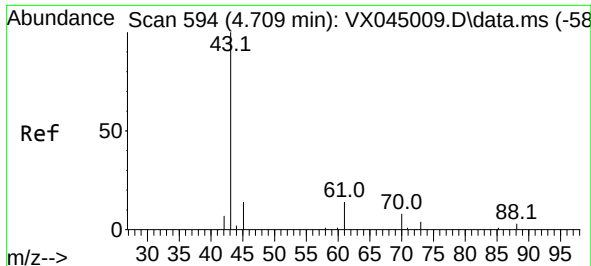
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#42
Vinyl Acetate
Concen: 101.532 ug/l
RT: 3.715 min Scan# 431
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

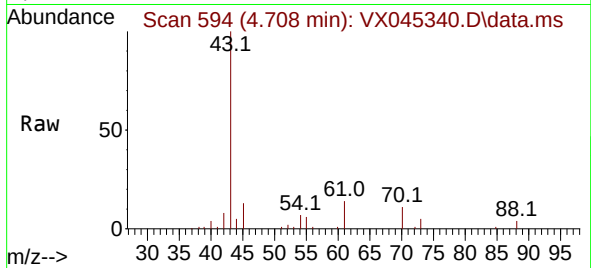
Tgt Ion: 43 Resp: 360651
Ion Ratio Lower Upper
43 100
86 8.2 7.0 10.4





#43
Ethyl Acetate
Concen: 23.957 ug/l
RT: 4.708 min Scan# 594
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

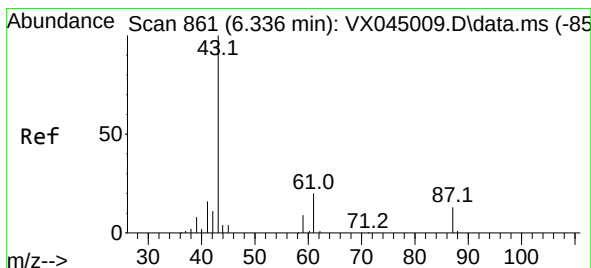
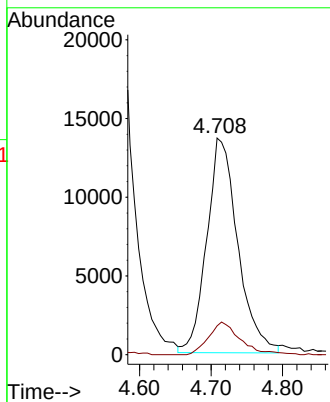
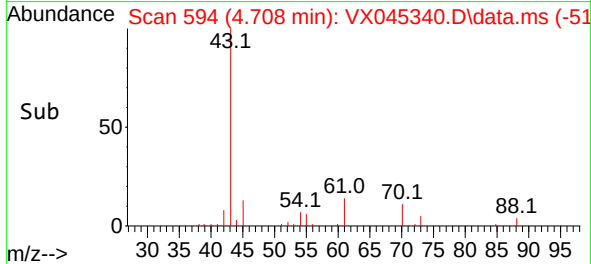
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



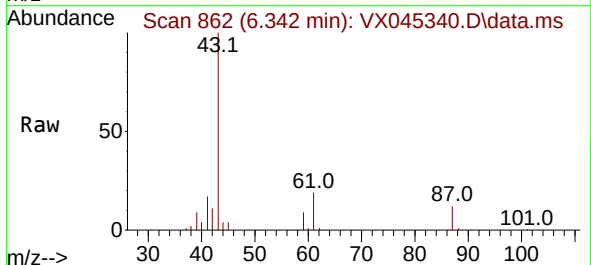
Tgt Ion: 43 Resp: 41129
Ion Ratio Lower Upper
43 100
45 14.8 12.7 19.1

Manual Integrations
APPROVED

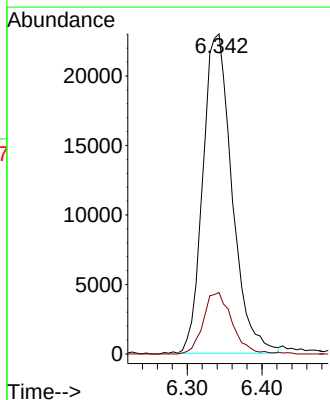
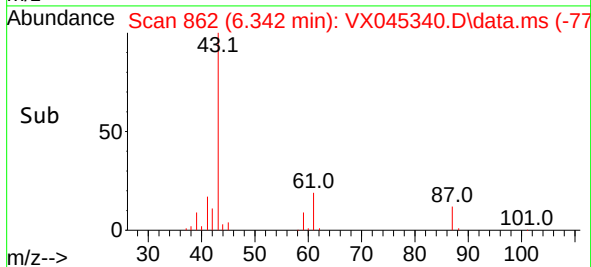
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

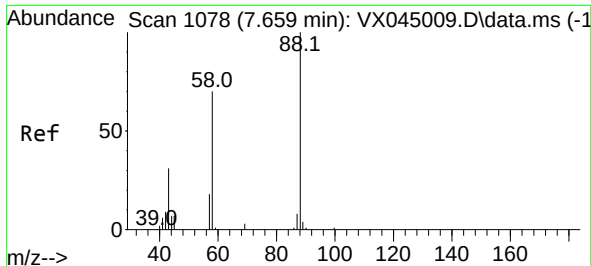


#44
Isopropyl Acetate
Concen: 22.048 ug/l
RT: 6.342 min Scan# 862
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



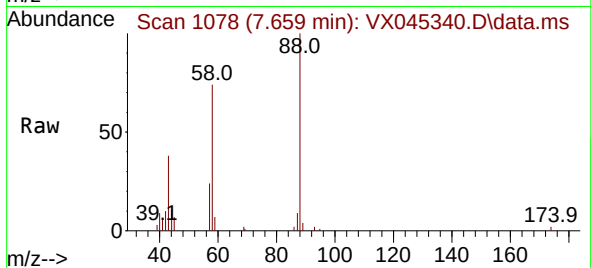
Tgt Ion: 43 Resp: 62292
Ion Ratio Lower Upper
43 100
61 18.7 15.5 23.3





#45
1,4-Dioxane
Concen: 394.071 ug/l
RT: 7.659 min Scan# 1078
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

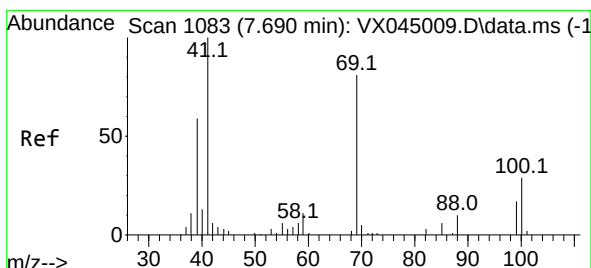
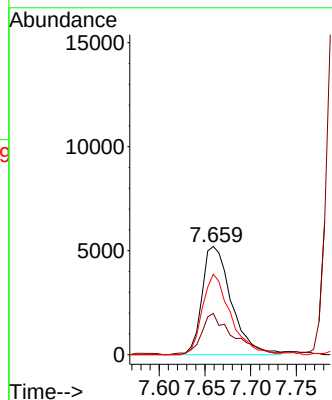
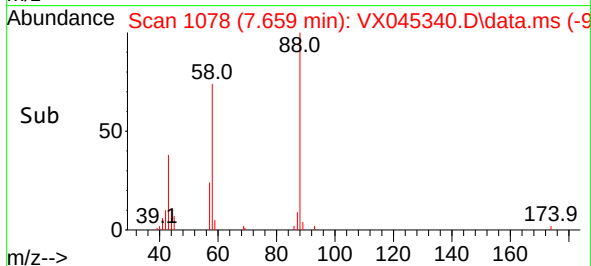
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



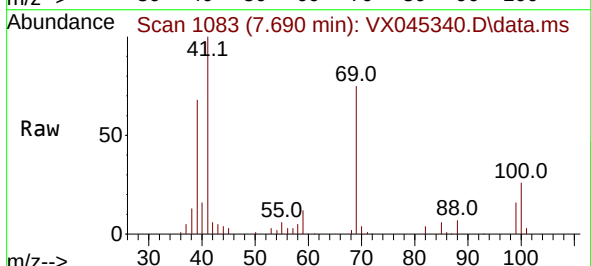
Tgt Ion: 88 Resp: 11574
Ion Ratio Lower Upper
88 100
43 36.6 29.6 44.4
58 71.3 56.2 84.4

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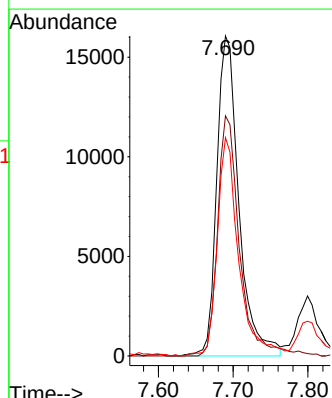
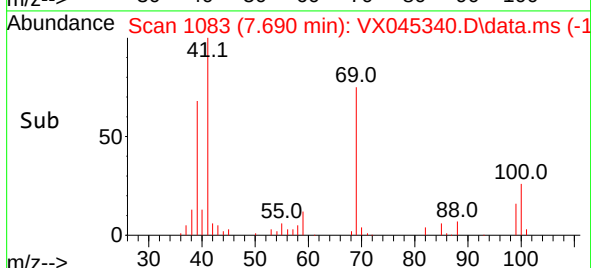
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

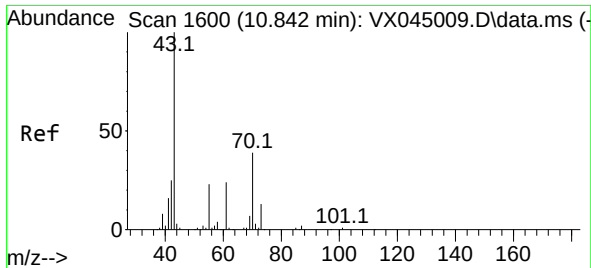


#46
Methyl methacrylate
Concen: 23.923 ug/l
RT: 7.690 min Scan# 1083
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion: 41 Resp: 33143
Ion Ratio Lower Upper
41 100
69 75.0 40.7 122.1
39 68.2 29.5 88.5





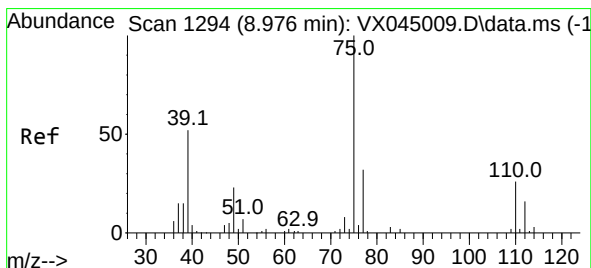
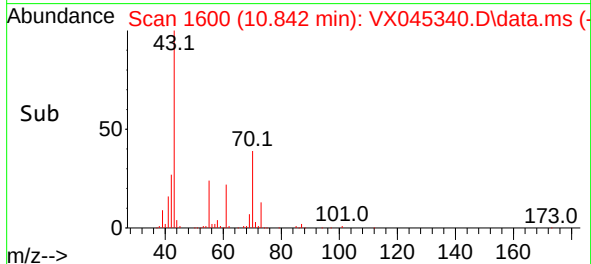
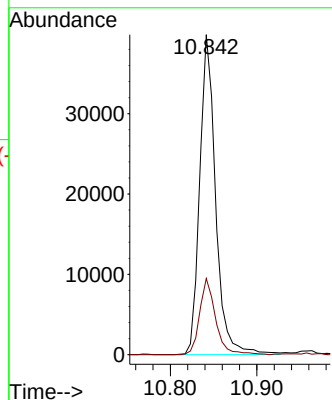
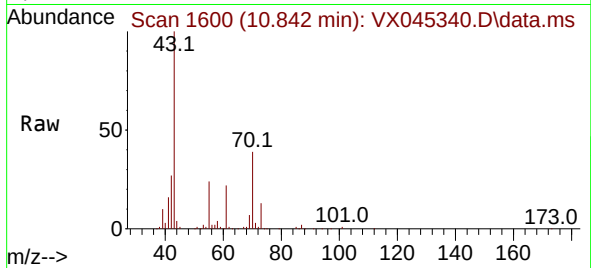
#47
n-amyl acetate
Concen: 20.723 ug/l
RT: 10.842 min Scan# 1600
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 43 Resp: 5080
Ion Ratio Lower Upper
43 100
55 23.9 18.6 27.8

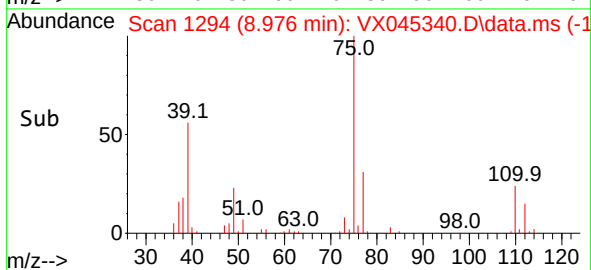
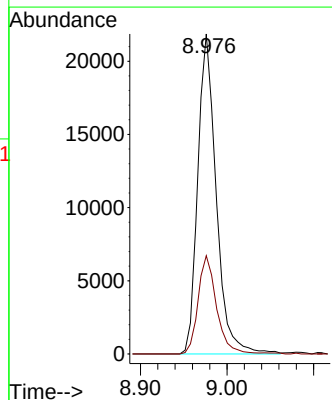
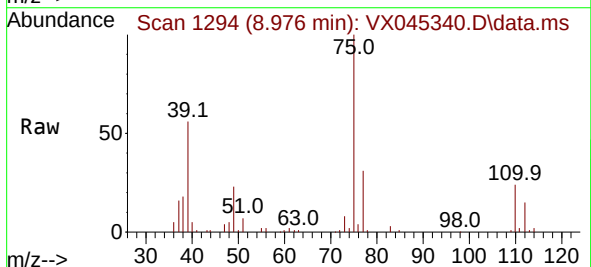
Manual Integrations
APPROVED

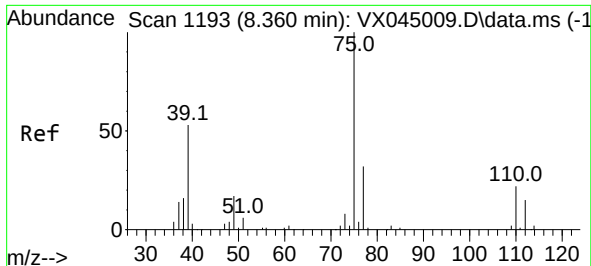
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#48
t-1,3-dichloropropene
Concen: 19.050 ug/l
RT: 8.976 min Scan# 1294
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 75 Resp: 32357
Ion Ratio Lower Upper
75 100
77 30.7 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 20.120 ug/l

RT: 8.360 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Instrument :

MSVOA_X

ClientSampleId :

VSTDCCC020

Tgt Ion: 75 Resp: 3868

Ion Ratio Lower Upper

75 100

77 31.6 25.9 38.9

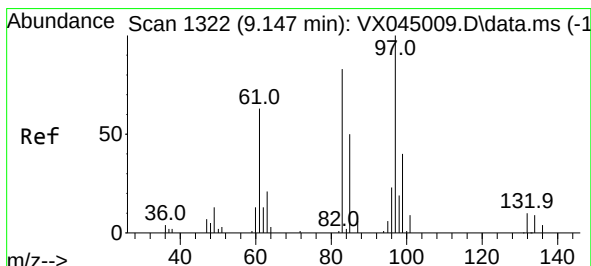
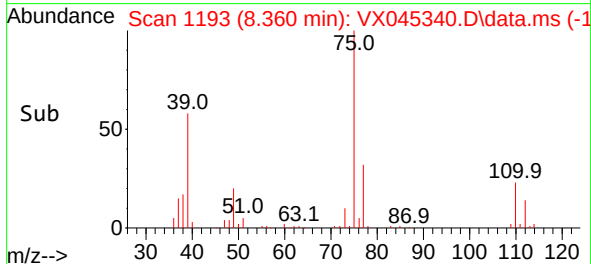
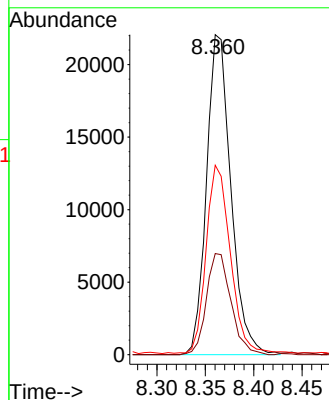
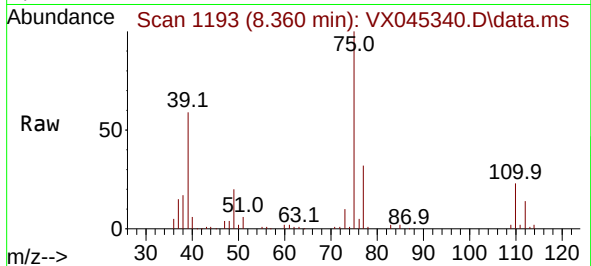
39 58.6 42.3 63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#50

1,1,2-Trichloroethane

Concen: 22.055 ug/l

RT: 9.147 min Scan# 1322

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Tgt Ion: 97 Resp: 25507

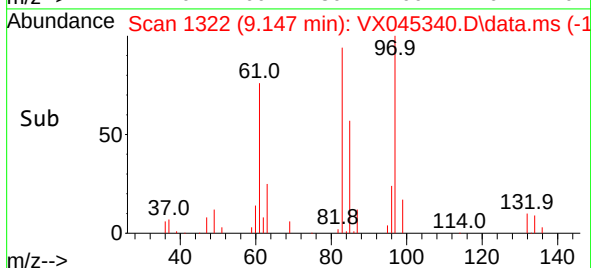
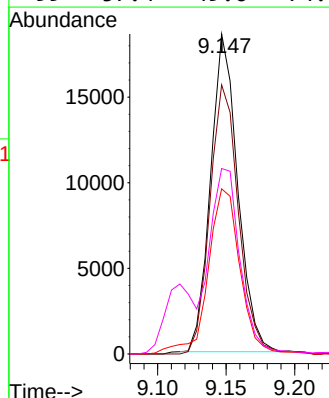
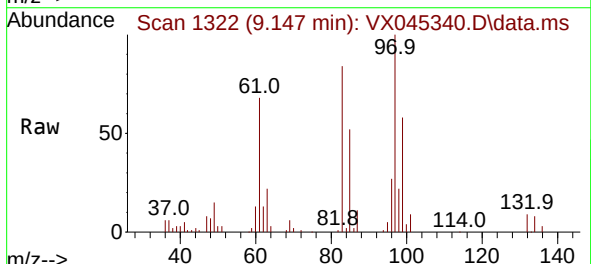
Ion Ratio Lower Upper

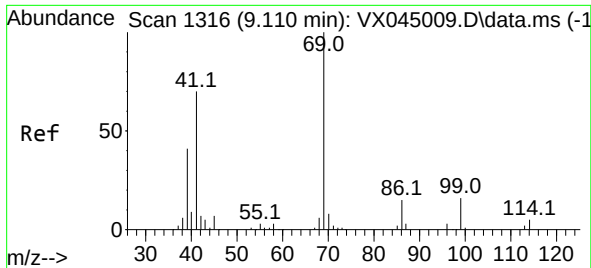
97 100

83 84.7 66.0 99.0

85 51.3 42.5 63.7

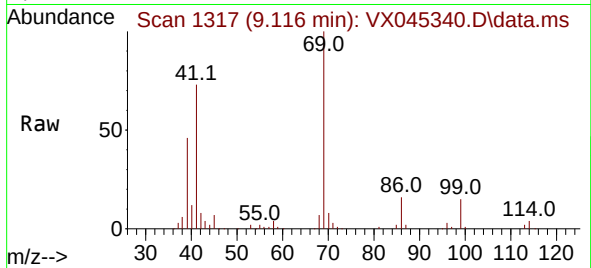
99 57.4 49.6 74.4





#51
Ethyl methacrylate
Concen: 21.334 ug/l
RT: 9.116 min Scan# 1316
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

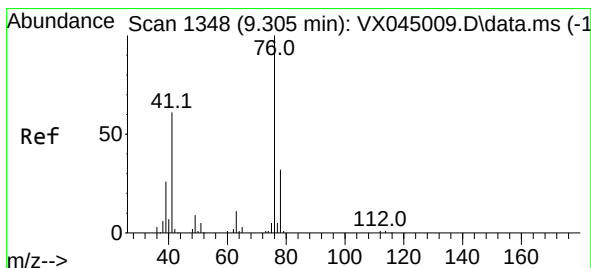
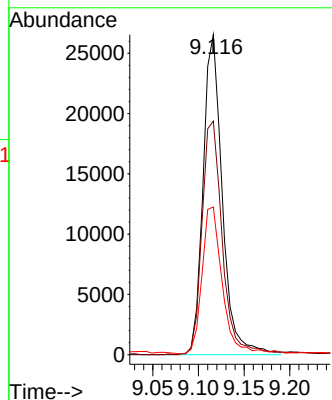
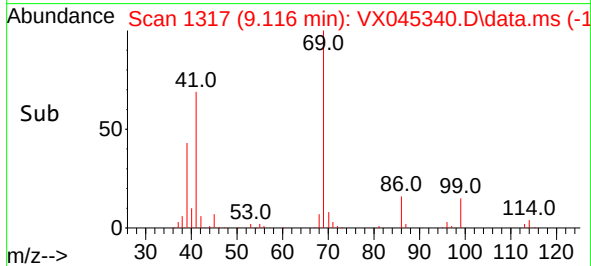
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



Tgt Ion: 69 Resp: 3880
Ion Ratio Lower Upper
69 100
41 72.7 35.1 105.3
39 46.0 20.5 61.6

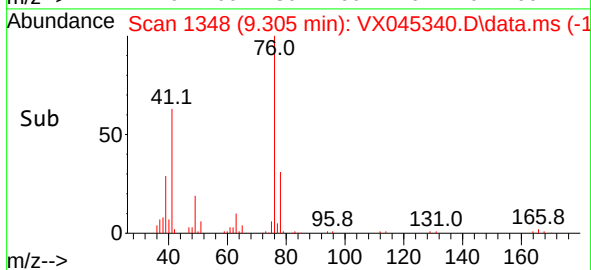
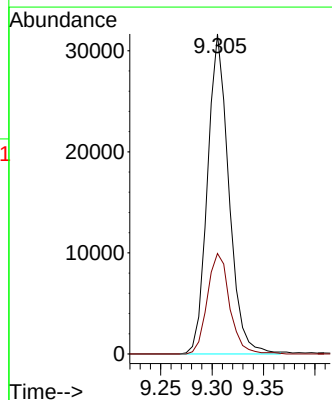
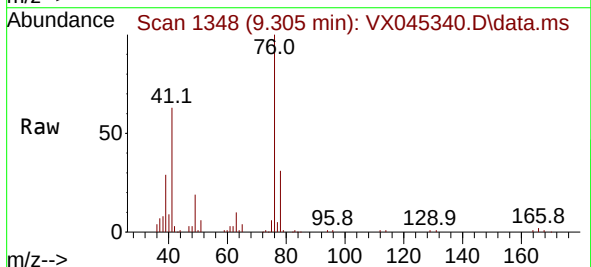
Manual Integrations
APPROVED

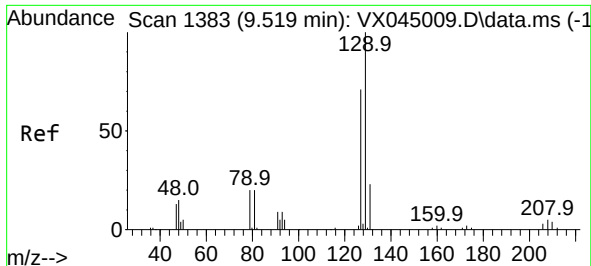
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#52
1,3-Dichloropropane
Concen: 22.567 ug/l
RT: 9.305 min Scan# 1348
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 76 Resp: 45730
Ion Ratio Lower Upper
76 100
78 32.7 0.0 63.6





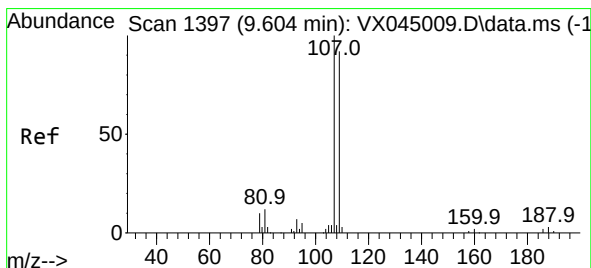
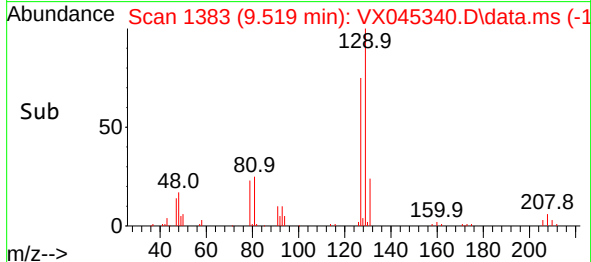
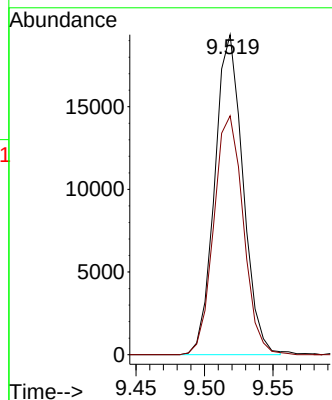
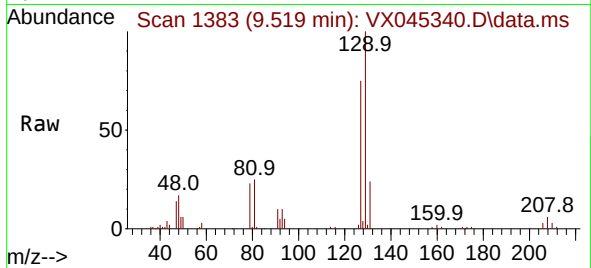
#53
Dibromochloromethane
Concen: 21.709 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:129 Resp: 27768
Ion Ratio Lower Upper
129 100
127 77.9 37.3 111.9

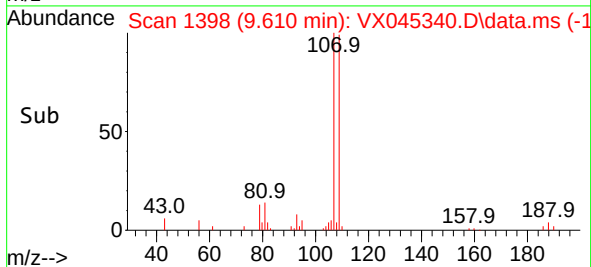
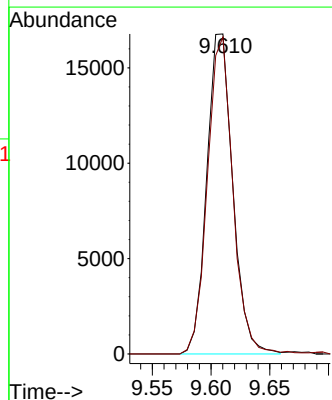
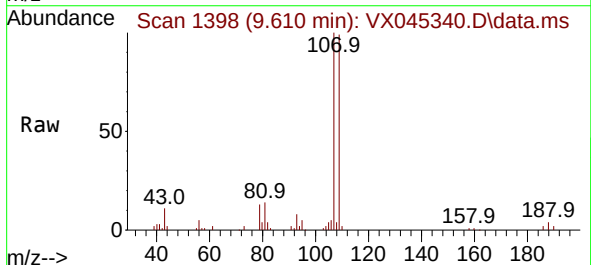
Manual Integrations
APPROVED

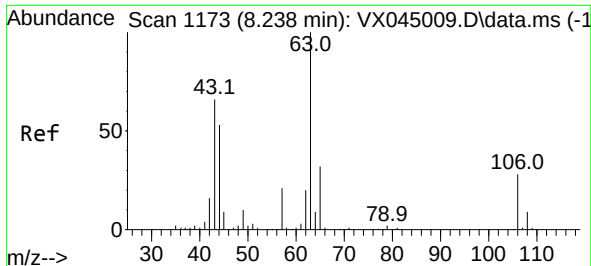
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#54
1,2-Dibromoethane
Concen: 21.988 ug/l
RT: 9.610 min Scan# 1398
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion:107 Resp: 25822
Ion Ratio Lower Upper
107 100
109 96.9 75.8 113.8





#55

2-Chloroethyl vinyl ether

Concen: 103.422 ug/l

RT: 8.238 min Scan# 1173

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Instrument :

MSVOA_X

ClientSampleId :

VSTDCCC020

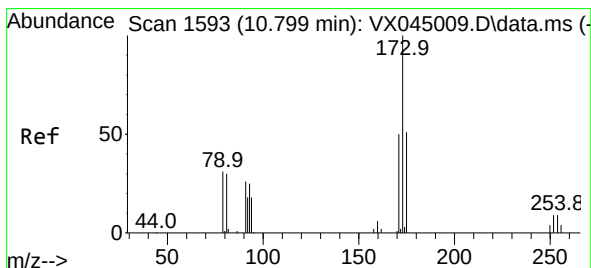
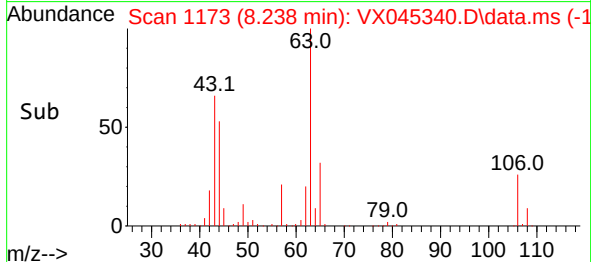
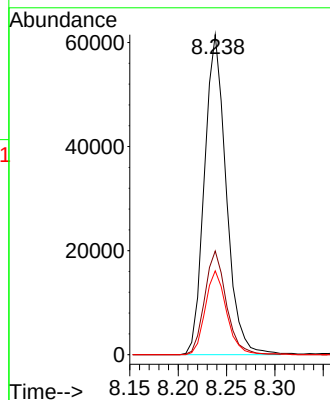
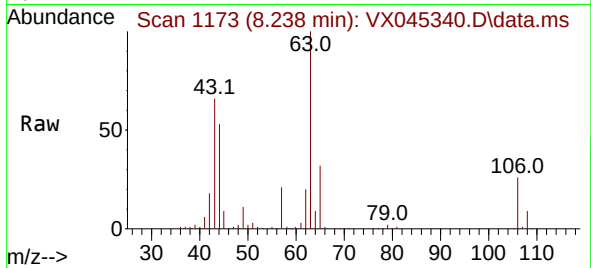
Tgt Ion: 63	Resp: 9660
Ion Ratio	Lower Upper
63 100	
65 32.2	26.2 39.2
106 25.5	21.2 31.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#56

Bromoform

Concen: 21.196 ug/l

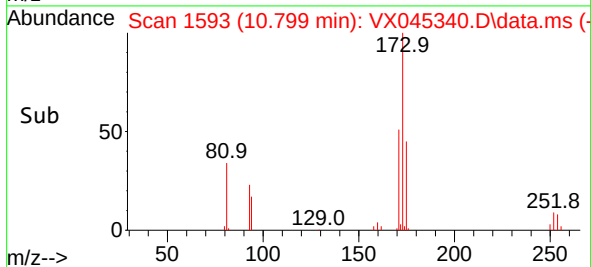
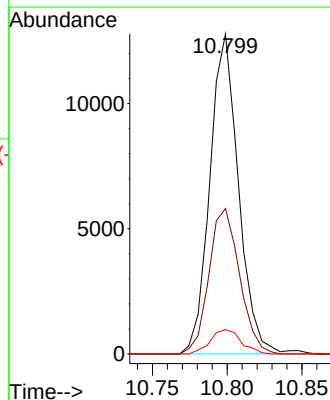
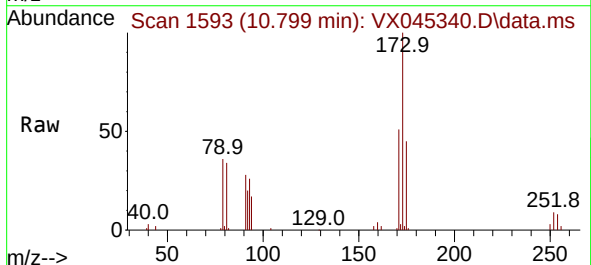
RT: 10.799 min Scan# 1593

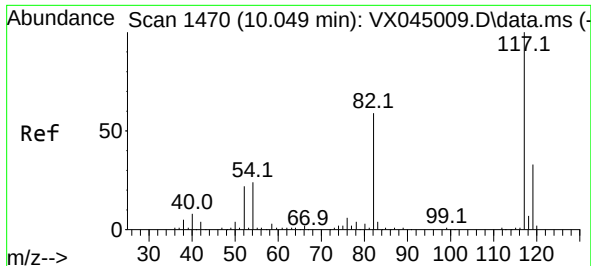
Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Tgt Ion: 173	Resp: 16989
Ion Ratio	Lower Upper
173 100	
175 48.6	39.6 59.4
254 8.2	6.3 9.5





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.049 min Scan# 1470

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Instrument :

MSVOA_X

ClientSampleId :

VSTDCCC020

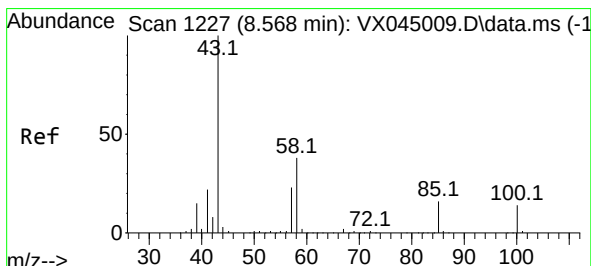
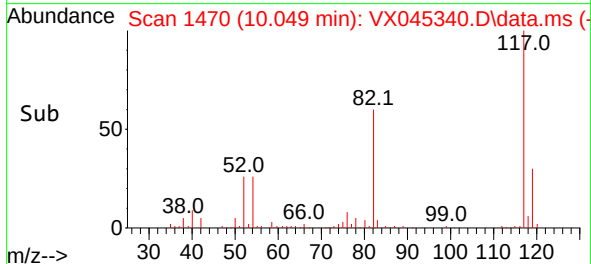
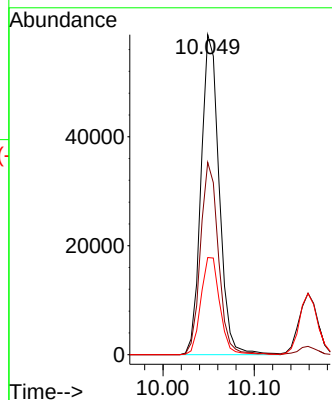
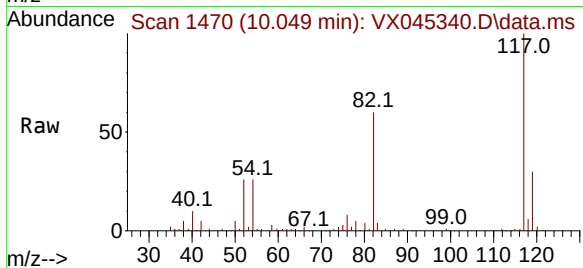
Tgt Ion: 117 Resp: 8089

Ion	Ratio	Lower	Upper
117	100		
82	58.9	45.8	68.8
119	31.6	25.5	38.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#58

4-Methyl-2-Pentanone

Concen: 121.880 ug/l

RT: 8.568 min Scan# 1227

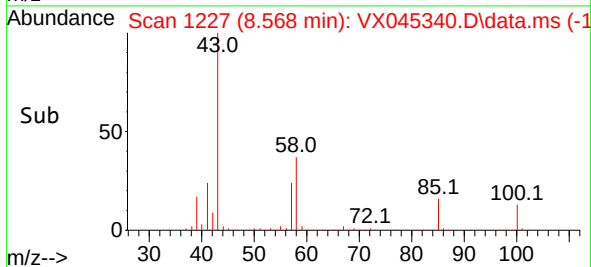
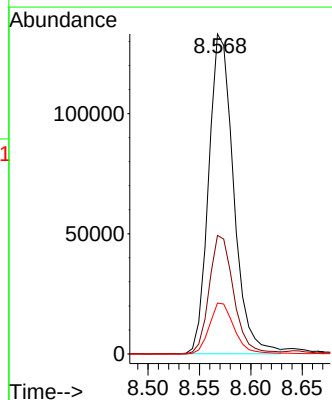
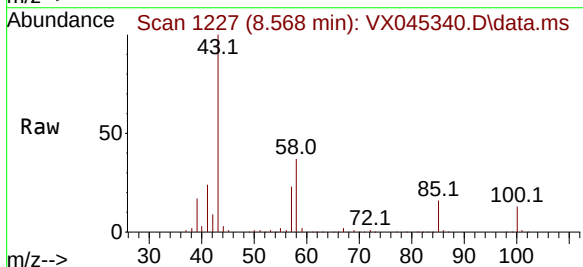
Delta R.T. -0.000 min

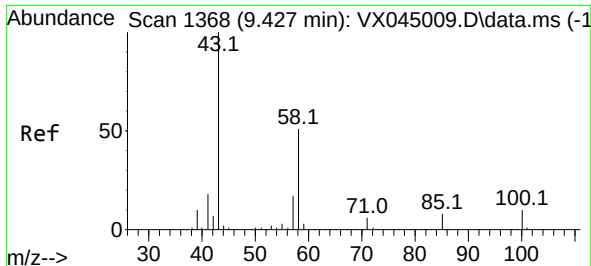
Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Tgt Ion: 43 Resp: 224283

Ion	Ratio	Lower	Upper
43	100		
58	36.6	29.5	44.3
85	16.0	12.9	19.3





#59

2-Hexanone

Concen: 123.186 ug/l

RT: 9.427 min Scan# 1

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Instrument :

MSVOA_X

ClientSampleId :

VSTDCCC020

Tgt Ion: 43 Resp: 163850

Ion Ratio Lower Upper

43 100

58 50.4 41.6 62.4

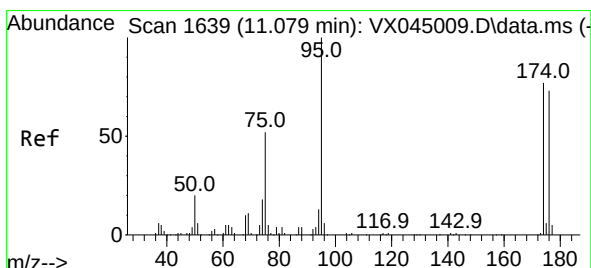
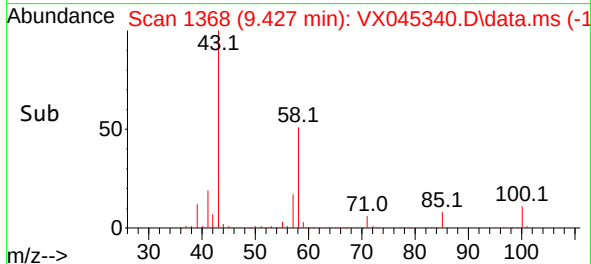
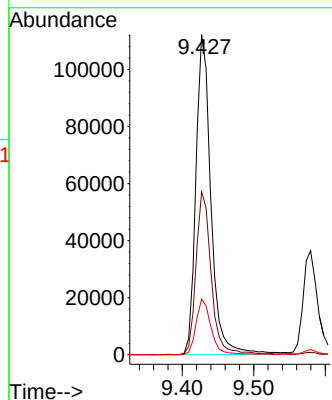
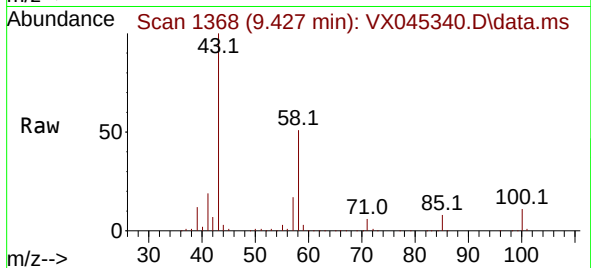
57 17.3 13.8 20.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#60

4-Bromofluorobenzene

Concen: 31.246 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

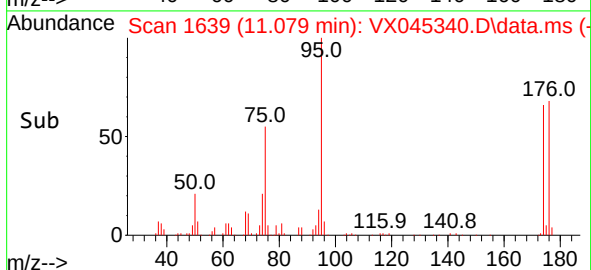
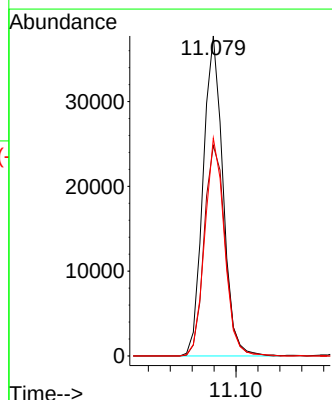
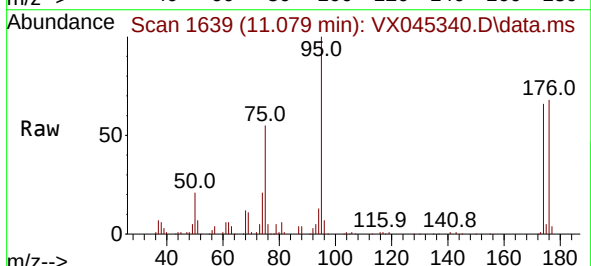
Tgt Ion: 95 Resp: 47245

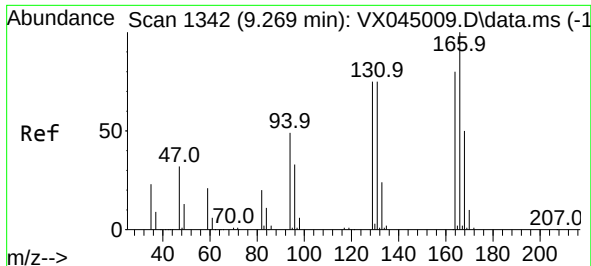
Ion Ratio Lower Upper

95 100

174 69.4 59.5 89.3

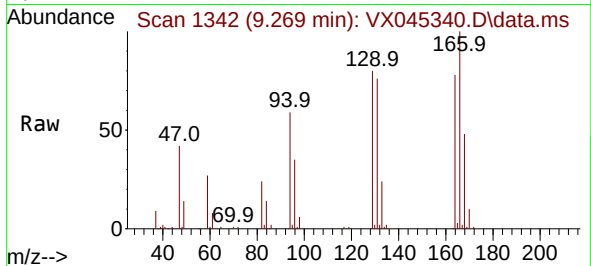
176 67.6 55.5 83.3





#61
Tetrachloroethene
Concen: 21.744 ug/l
RT: 9.269 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

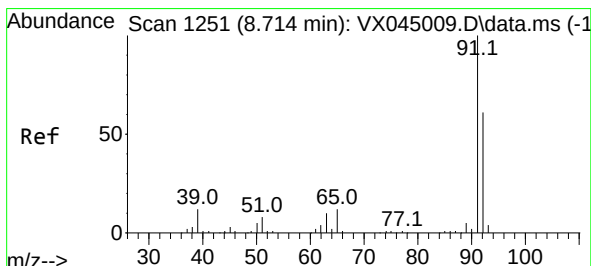
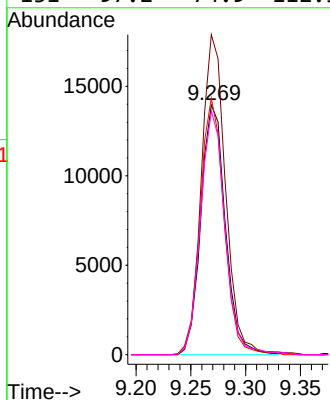
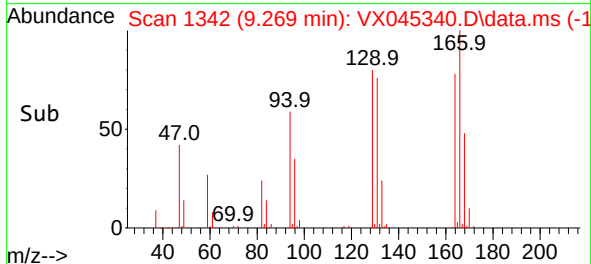
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



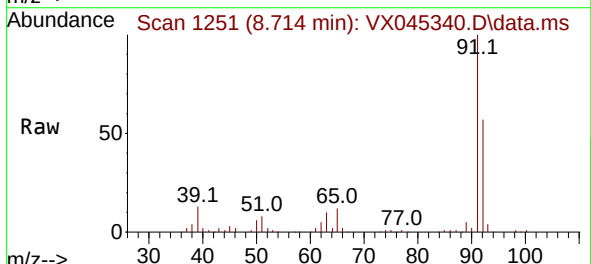
Tgt Ion:164 Resp: 21660
Ion Ratio Lower Upper
164 100
166 127.8 100.3 150.5
129 102.7 75.5 113.3
131 97.2 74.9 112.3

Manual Integrations
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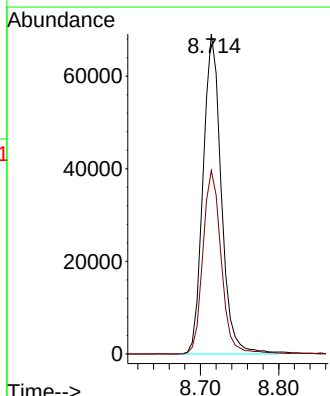
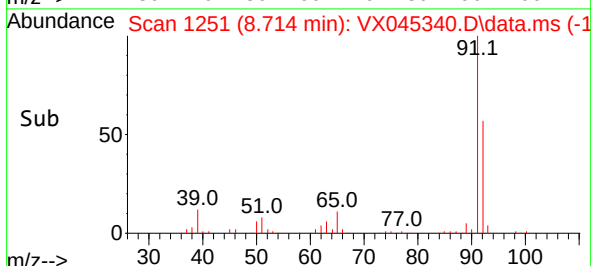
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

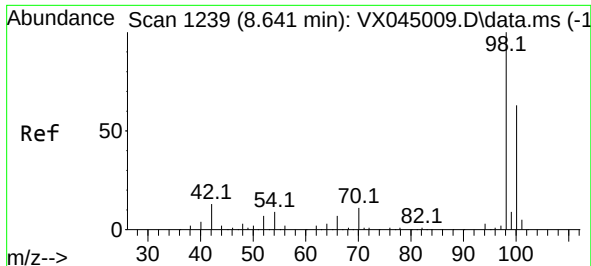


#62
Toluene
Concen: 20.767 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



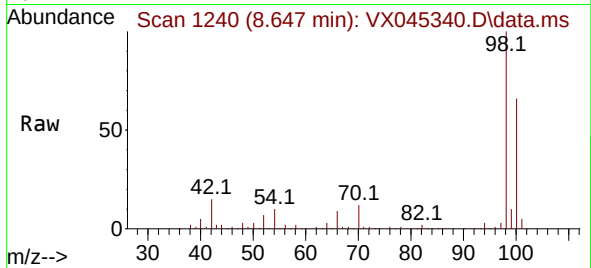
Tgt Ion: 91 Resp: 111284
Ion Ratio Lower Upper
91 100
92 57.7 46.9 70.3





#63
Toluene-d8
Concen: 30.103 ug/l
RT: 8.647 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

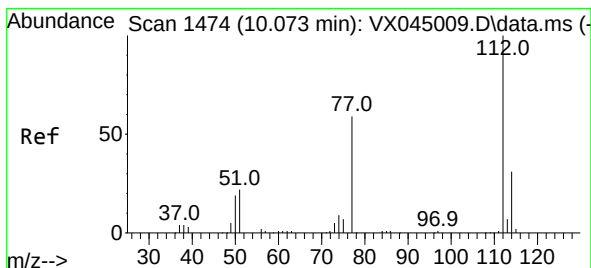
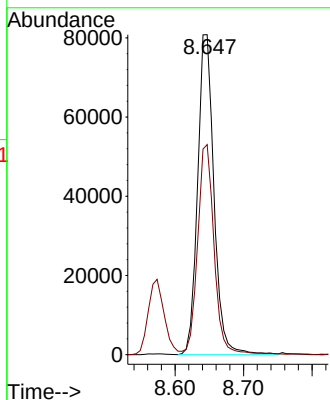
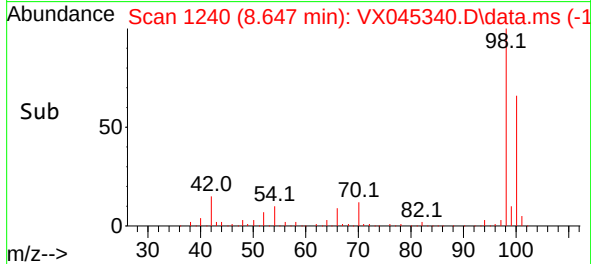
Instrument :
MSVOA_X
ClientSampleId :
VSTDC0020



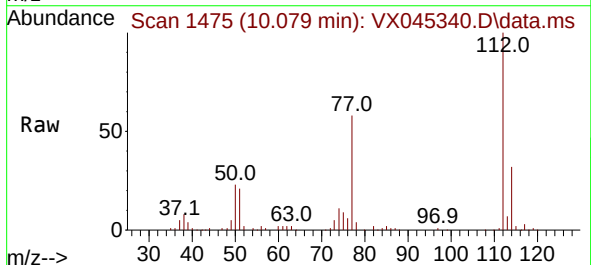
Tgt Ion: 98 Resp: 134720
Ion Ratio Lower Upper
98 100
100 65.8 51.7 77.5

Manual Integrations
APPROVED

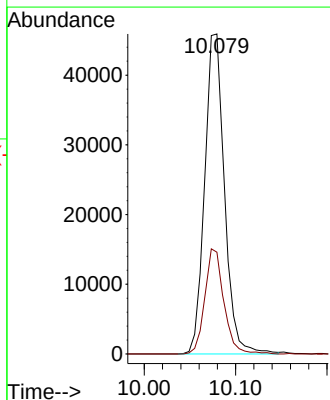
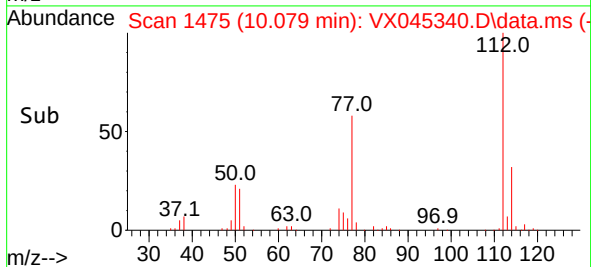
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

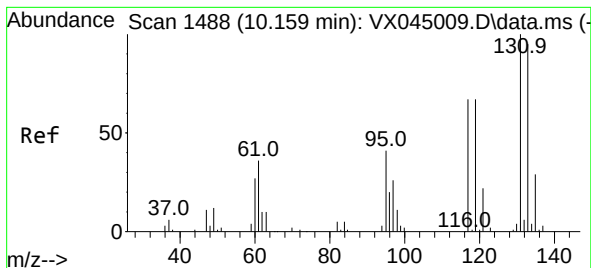


#64
Chlorobenzene
Concen: 20.784 ug/l
RT: 10.079 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion:112 Resp: 69016
Ion Ratio Lower Upper
112 100
114 31.8 24.7 37.1





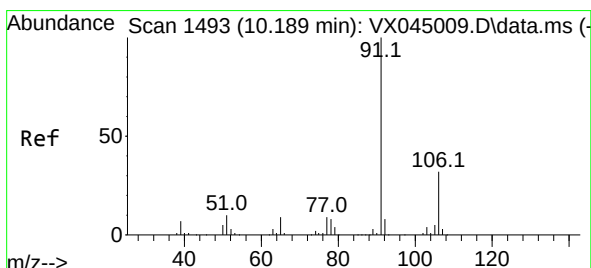
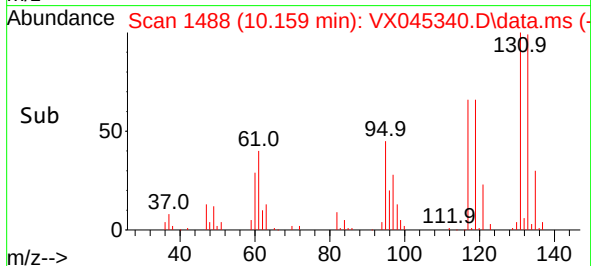
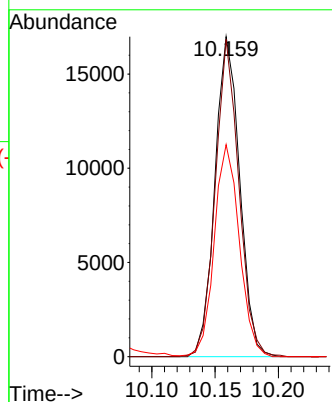
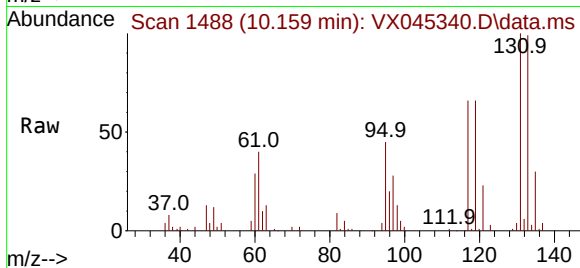
#65
1,1,1,2-Tetrachloroethane
Concen: 21.083 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:131 Resp: 2310
Ion Ratio Lower Upper
131 100
133 94.5 0.0 187.8
119 67.1 0.0 133.0

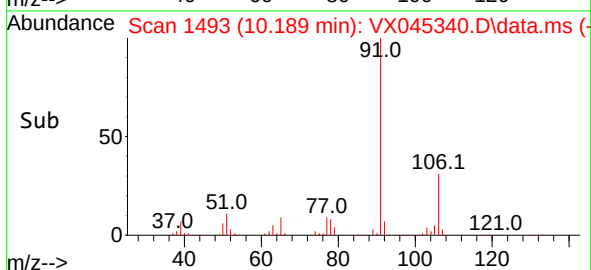
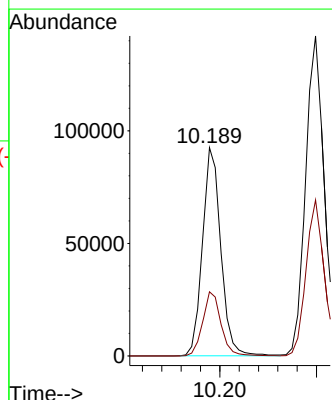
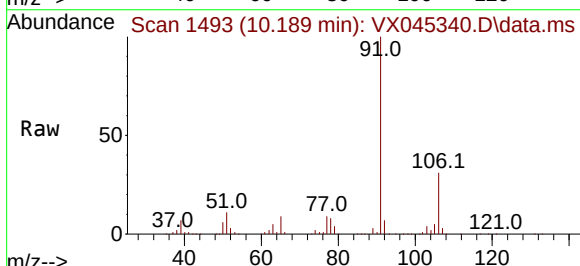
Manual Integrations
APPROVED

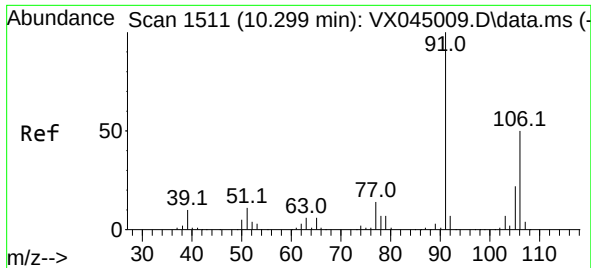
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#66
Ethyl Benzene
Concen: 20.813 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 91 Resp: 122105
Ion Ratio Lower Upper
91 100
106 30.8 25.4 38.2





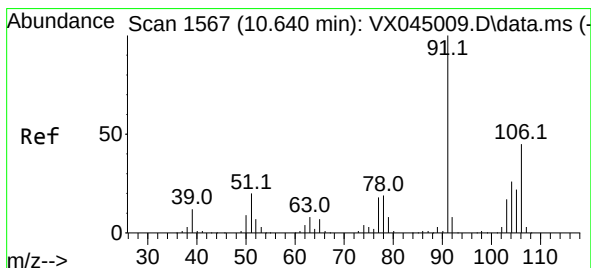
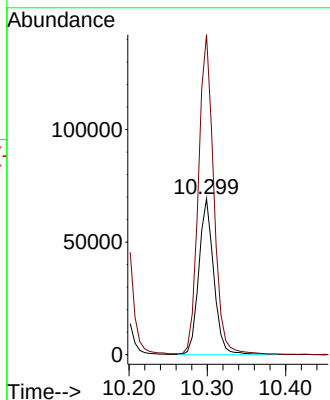
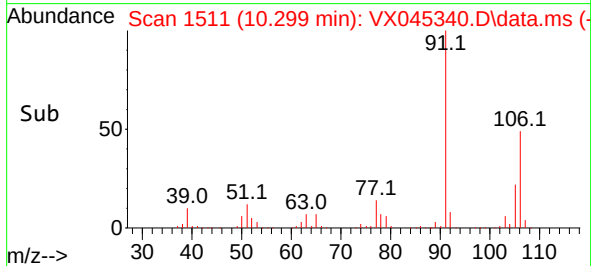
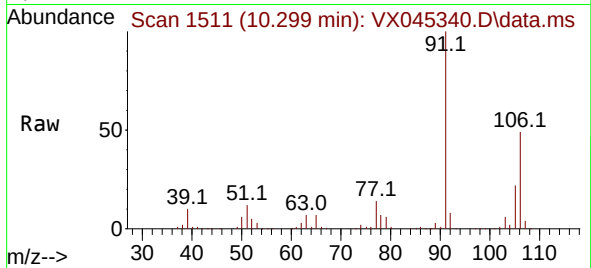
#67
m/p-Xylenes
Concen: 42.144 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:106 Resp: 9212
Ion Ratio Lower Upper
106 100
91 209.3 163.7 245.5

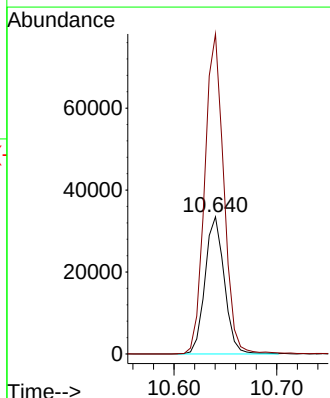
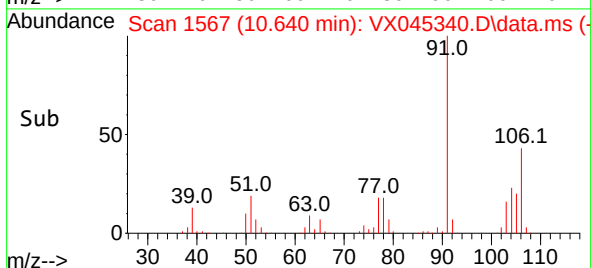
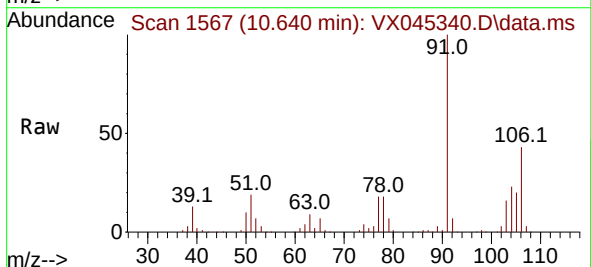
Manual Integrations
APPROVED

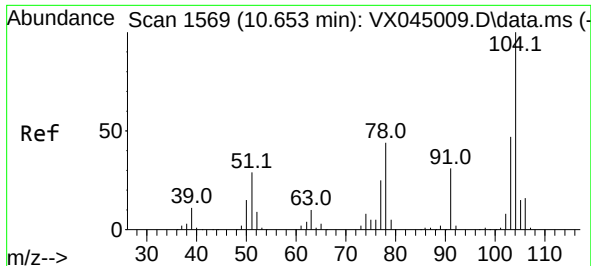
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#68
o-Xylene
Concen: 20.390 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion:106 Resp: 43730
Ion Ratio Lower Upper
106 100
91 229.9 109.7 329.1





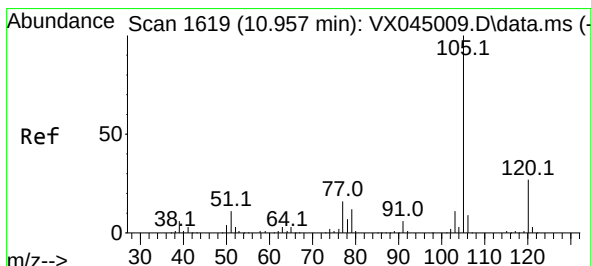
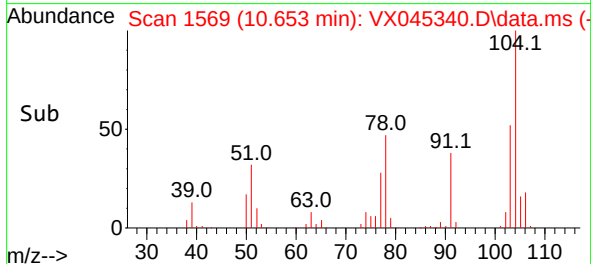
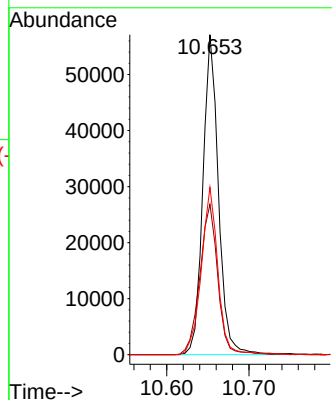
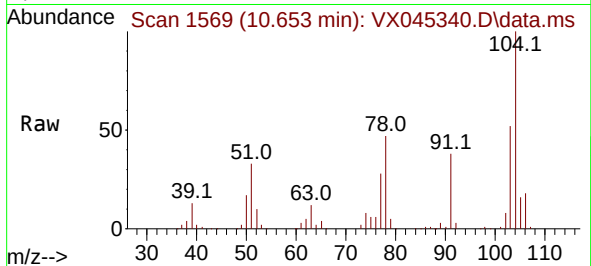
#69
Styrene
Concen: 20.993 ug/l
RT: 10.653 min Scan# 1569
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:104 Resp: 75199
Ion Ratio Lower Upper
104 100
78 53.3 41.4 62.0
103 55.5 43.0 64.4

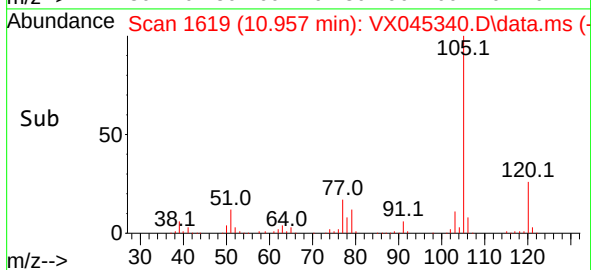
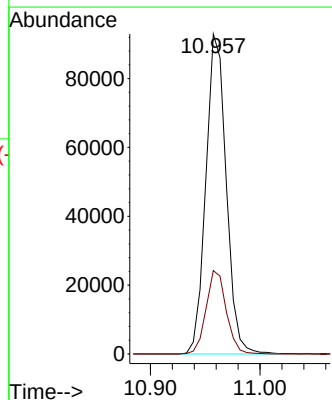
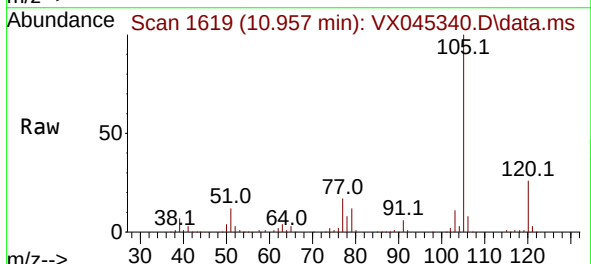
Manual Integrations
APPROVED

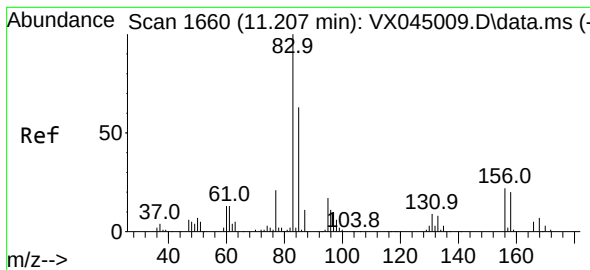
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#70
Isopropylbenzene
Concen: 21.669 ug/l
RT: 10.957 min Scan# 1619
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion:105 Resp: 119932
Ion Ratio Lower Upper
105 100
120 25.8 18.4 34.2





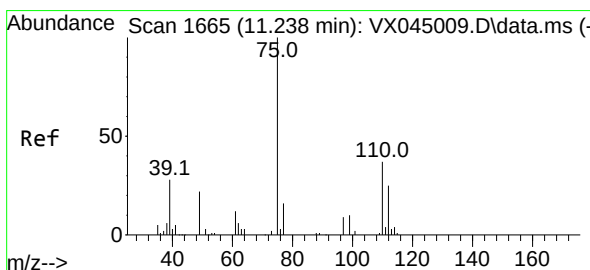
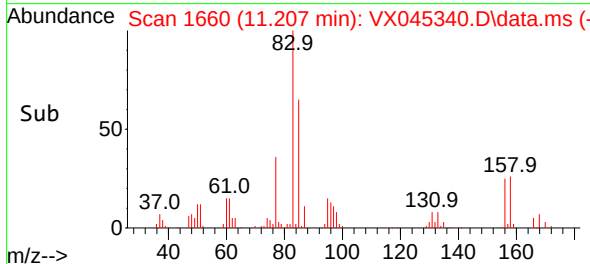
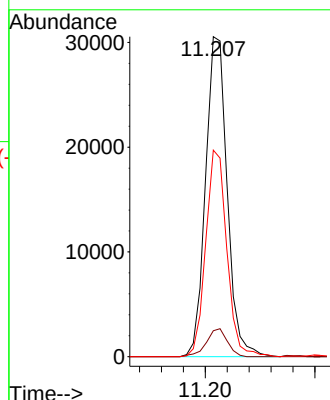
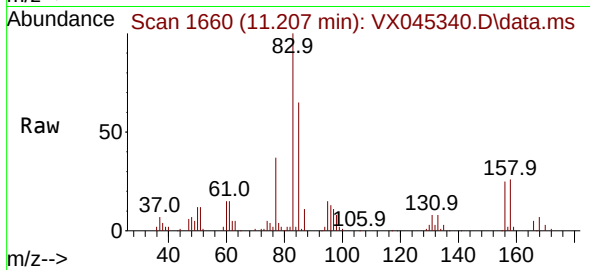
#71
1,1,2,2-Tetrachloroethane
Concen: 23.012 ug/l
RT: 11.207 min Scan# 1660
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 83 Resp: 4188
Ion Ratio Lower Upper
83 100
131 8.5 4.8 14.3
85 62.9 32.3 96.8

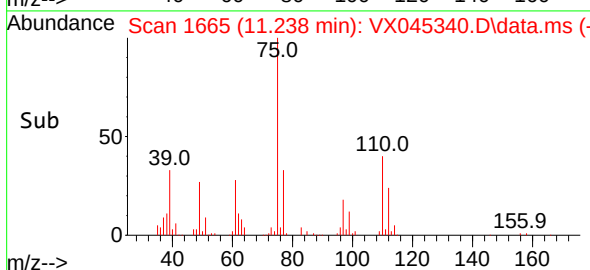
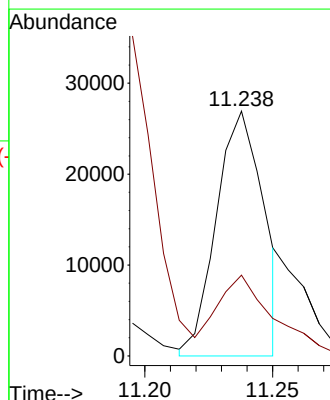
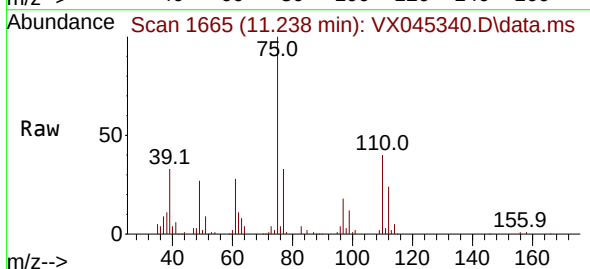
Manual Integrations
APPROVED

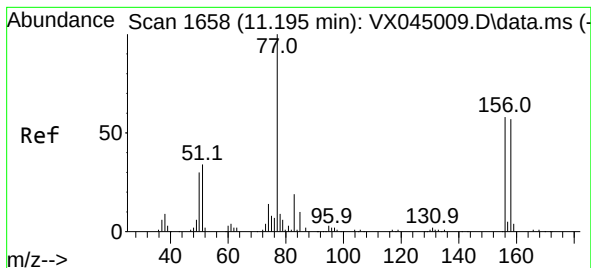
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#72
1,2,3-Trichloropropane
Concen: 23.216 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion: 75 Resp: 34753
Ion Ratio Lower Upper
75 100
77 39.1 0.0 84.0





#73

Bromobenzene

Concen: 20.665 ug/l

RT: 11.195 min Scan# 1

Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Instrument :

MSVOA_X

ClientSampleId :

VSTDCCC020

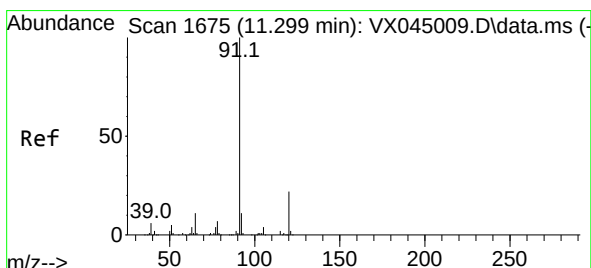
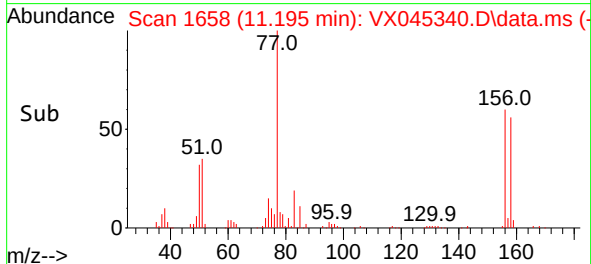
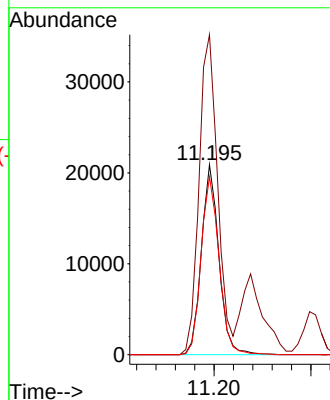
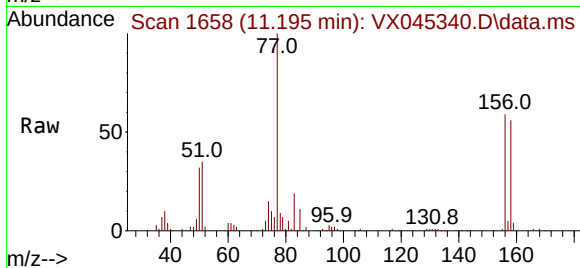
Tgt Ion:	156	Resp:	26330
Ion Ratio	Lower	Upper	
156	100		
77	178.4	0.0	347.2
158	96.4	0.0	197.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#74

n-propylbenzene

Concen: 20.998 ug/l

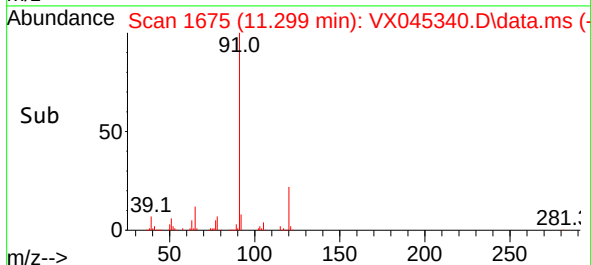
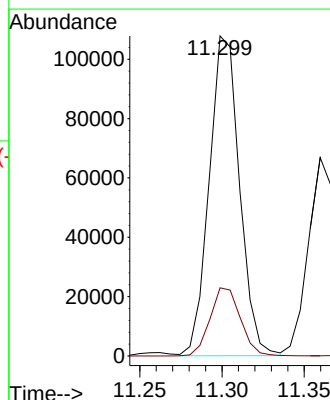
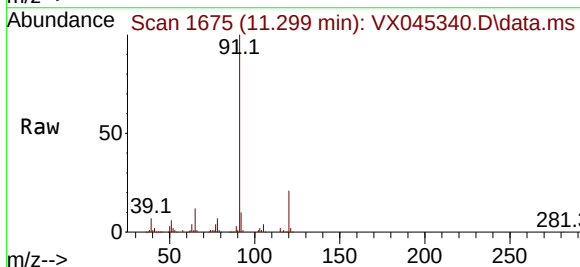
RT: 11.299 min Scan# 1675

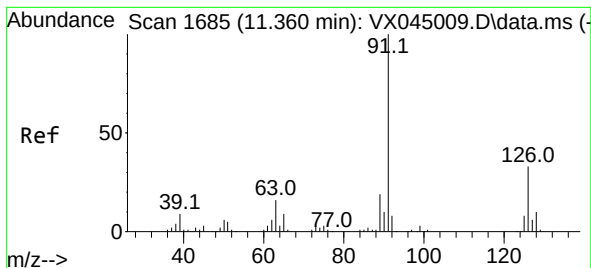
Delta R.T. -0.000 min

Lab File: VX045340.D

Acq: 19 Mar 2025 10:41

Tgt Ion:	91	Resp:	138300
Ion Ratio	Lower	Upper	
91	100		
120	21.2	0.0	44.2





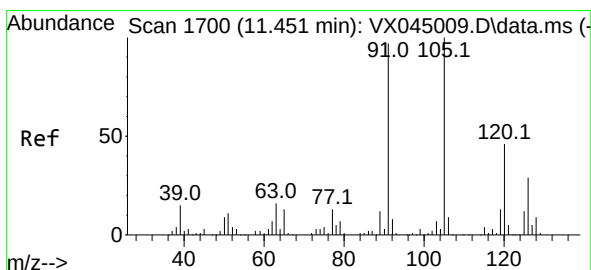
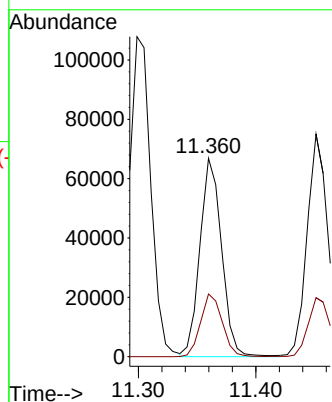
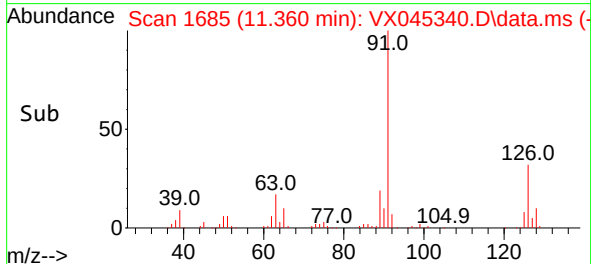
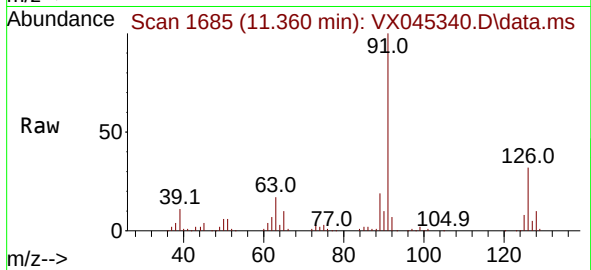
#75
2-Chlorotoluene
Concen: 21.614 ug/l
RT: 11.360 min Scan# 1100
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion: 91 Resp: 8606
Ion Ratio Lower Upper
91 100
126 31.5 0.0 65.4

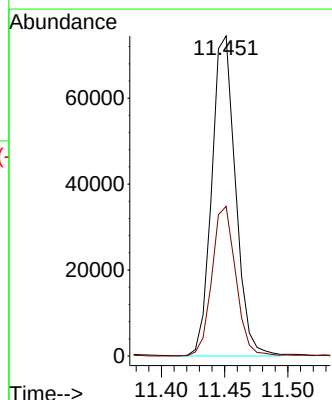
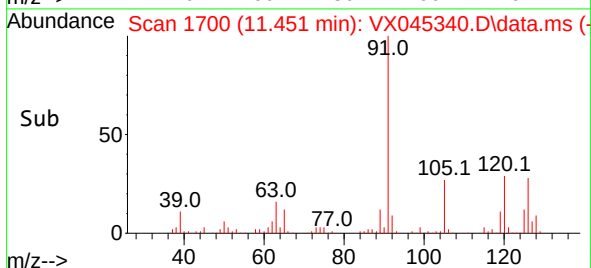
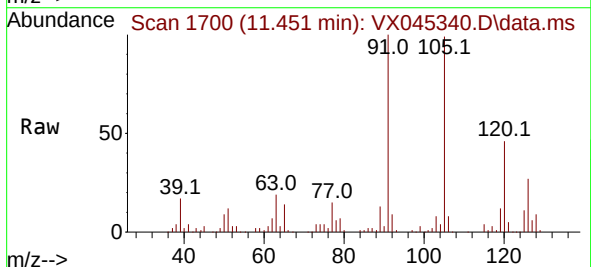
Manual Integrations
APPROVED

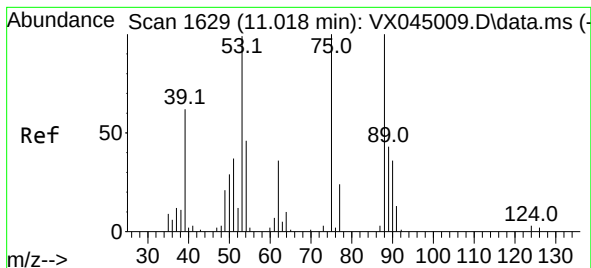
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#76
1,3,5-Trimethylbenzene
Concen: 21.335 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

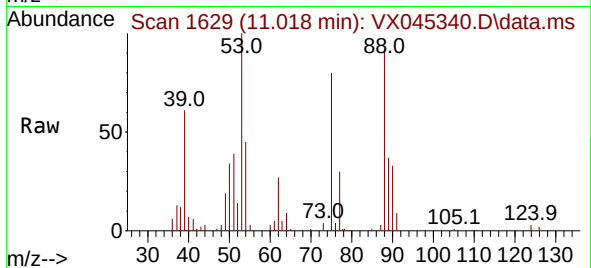
Tgt Ion:105 Resp: 97415
Ion Ratio Lower Upper
105 100
120 47.0 0.0 94.4





#77
t-1,4-Dichloro-2-butene
Concen: 19.262 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

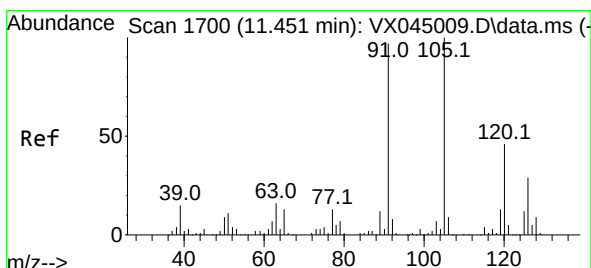
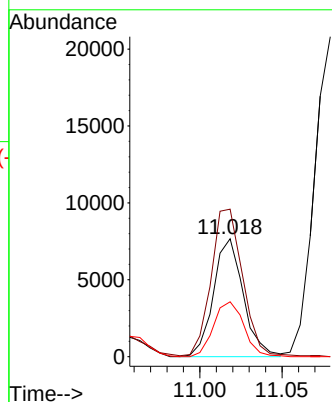
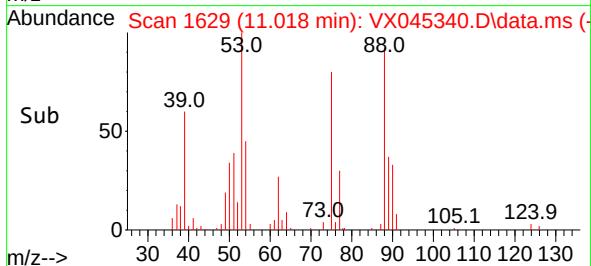
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



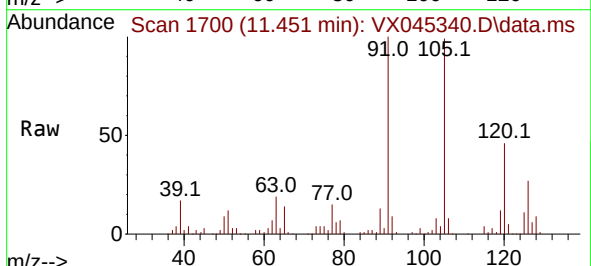
Tgt Ion: 75 Resp: 970
Ion Ratio Lower Upper
75 100
53 124.2 49.8 149.4
89 46.5 21.4 64.2

Manual Integrations
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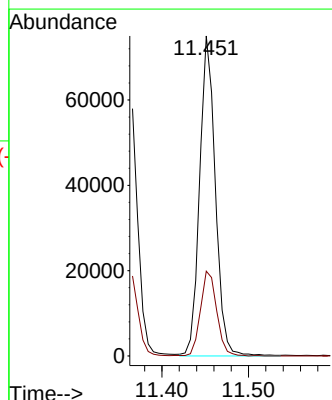
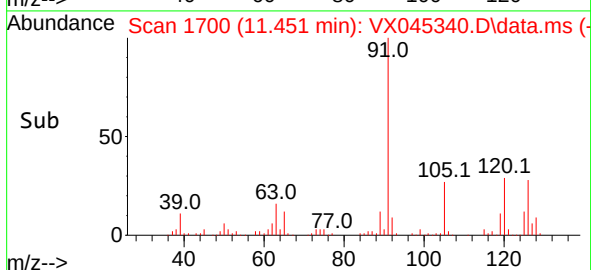
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

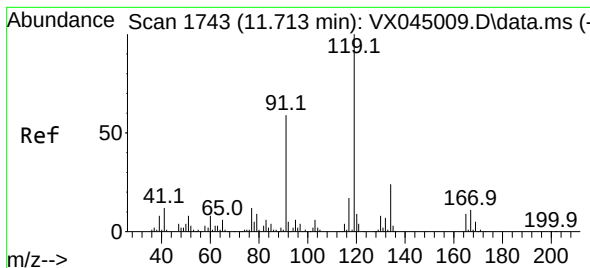


#78
4-Chlorotoluene
Concen: 21.317 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion: 91 Resp: 94621
Ion Ratio Lower Upper
91 100
126 27.2 0.0 58.0





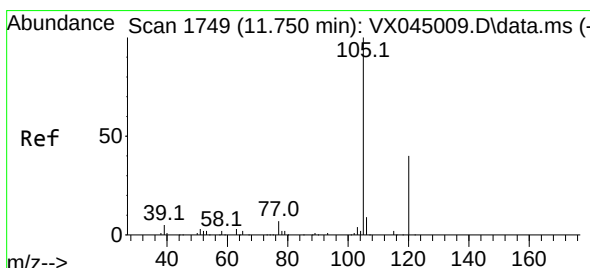
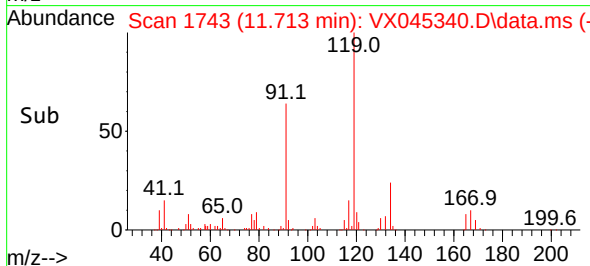
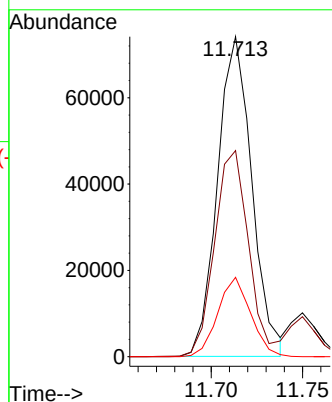
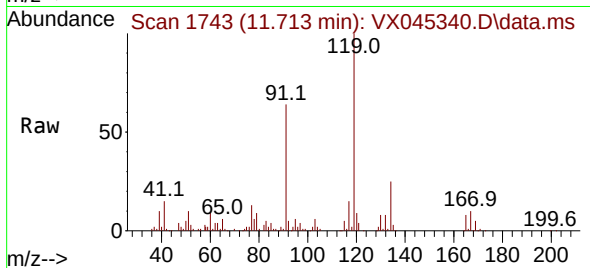
#79
tert-butylbenzene
Concen: 21.075 ug/l
RT: 11.713 min Scan# 1174
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:119 Resp: 9695
Ion Ratio Lower Upper
119 100
91 63.0 0.0 120.6
134 23.8 0.0 48.2

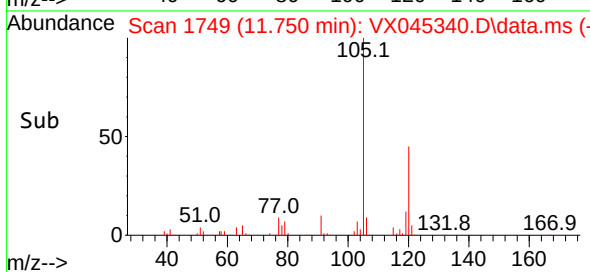
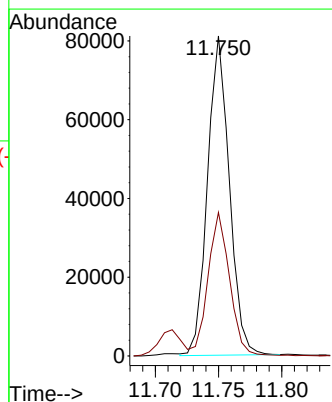
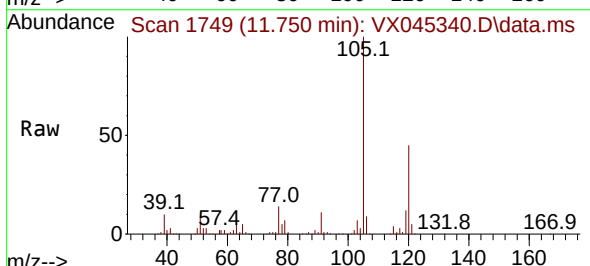
Manual Integrations
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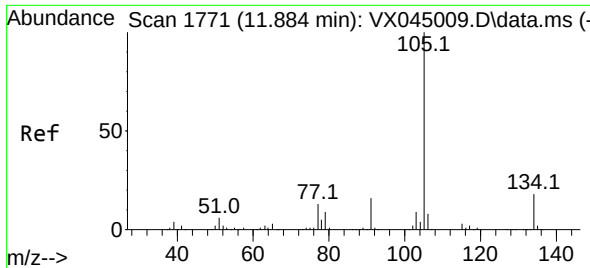
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#80
1,2,4-Trimethylbenzene
Concen: 21.253 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Tgt Ion:105 Resp: 97205
Ion Ratio Lower Upper
105 100
120 44.7 0.0 88.4





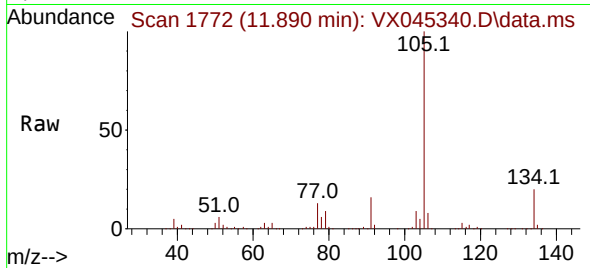
#81
 sec-Butylbenzene
 Concen: 21.671 ug/l
 RT: 11.890 min Scan# 1771
 Delta R.T. 0.006 min
 Lab File: VX045340.D
 Acq: 19 Mar 2025 10:41

Instrument :

MSVOA_X

ClientSampleId :

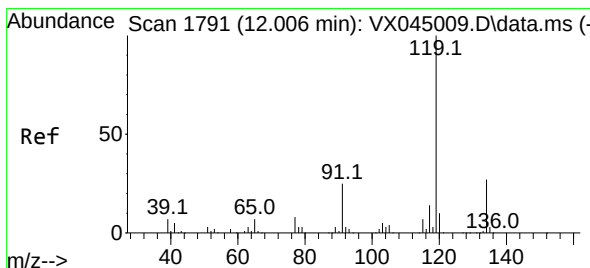
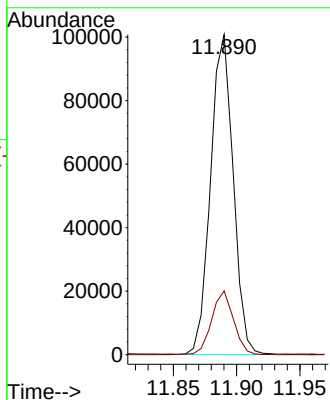
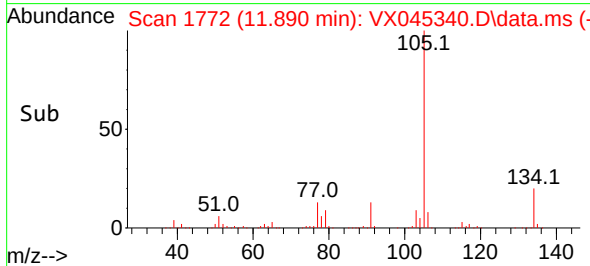
VSTDCCC020



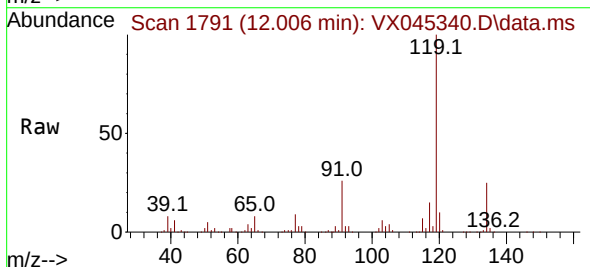
Tgt Ion:105 Resp: 12512
 Ion Ratio Lower Upper
 105 100
 134 19.2 0.0 39.0

Manual Integrations
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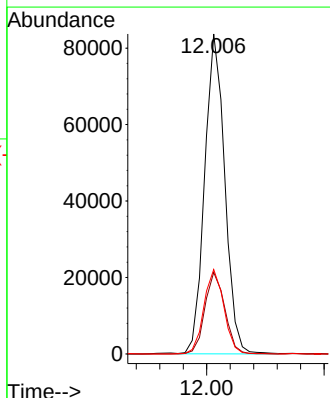
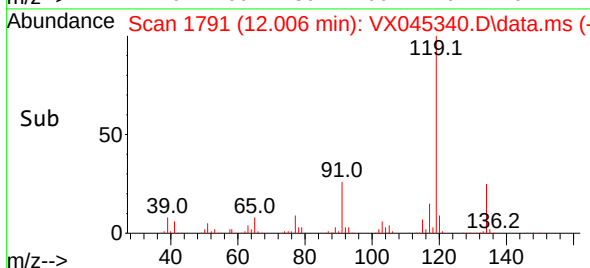
Reviewed By :John Carlone 03/20/2025
 Supervised By :Mahesh Dadoda 03/20/2025

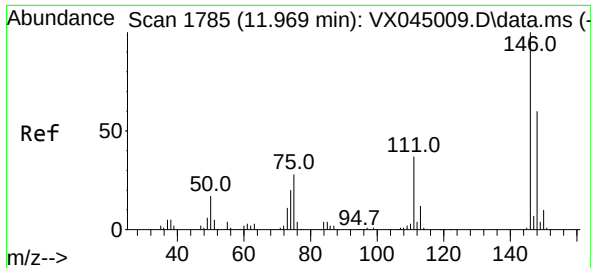


#82
 p-Isopropyltoluene
 Concen: 21.265 ug/l
 RT: 12.006 min Scan# 1791
 Delta R.T. -0.000 min
 Lab File: VX045340.D
 Acq: 19 Mar 2025 10:41



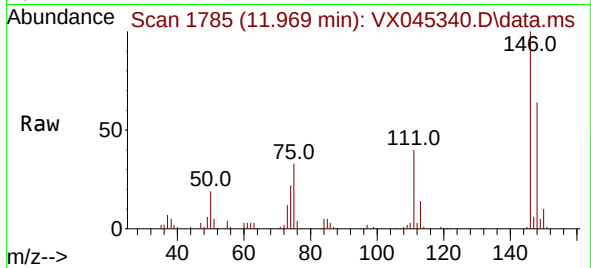
Tgt Ion:119 Resp: 99482
 Ion Ratio Lower Upper
 119 100
 134 25.2 0.0 52.6
 91 26.2 0.0 51.0





#83
1,3-Dichlorobenzene
Concen: 20.274 ug/l
RT: 11.969 min Scan# 1785
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

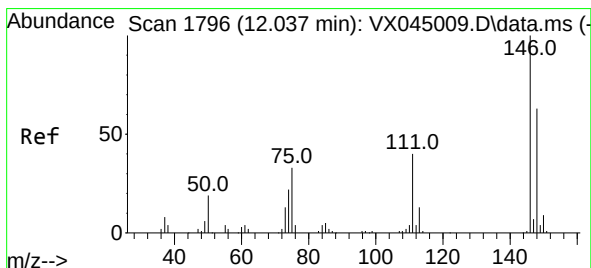
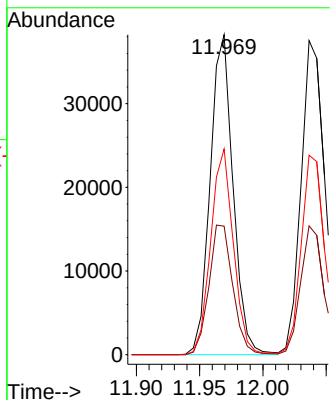
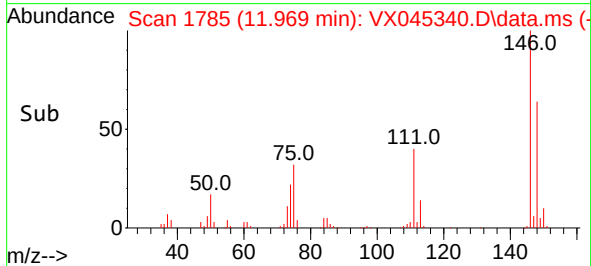
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



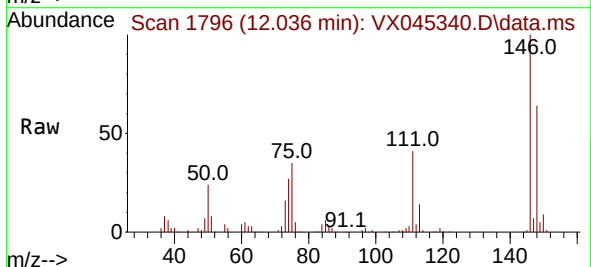
Tgt Ion:146 Resp: 48062
Ion Ratio Lower Upper
146 100
111 42.4 20.2 60.5
148 63.7 31.2 93.6

Manual Integrations
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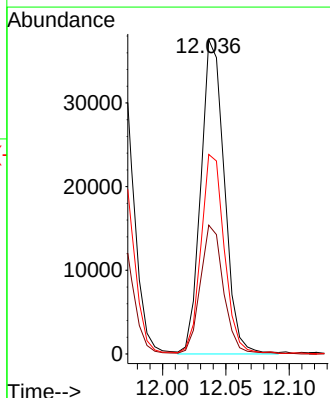
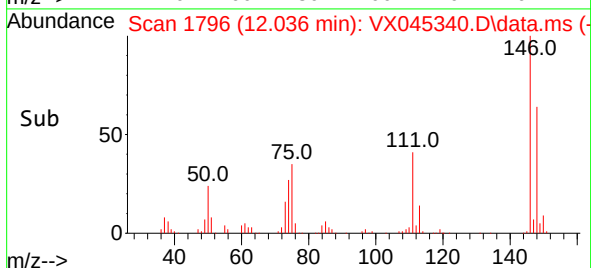
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

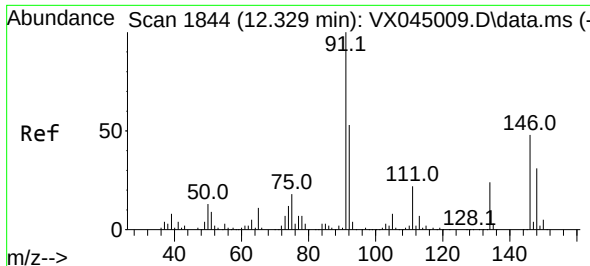


#84
1,4-Dichlorobenzene
Concen: 20.863 ug/l
RT: 12.036 min Scan# 1796
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



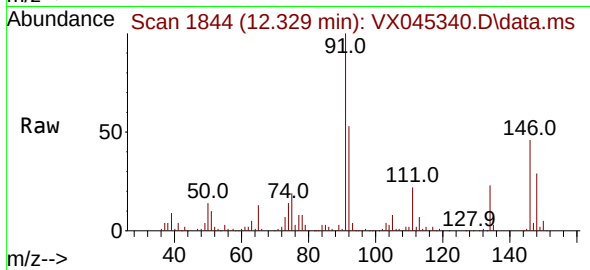
Tgt Ion:146 Resp: 48764
Ion Ratio Lower Upper
146 100
111 39.9 20.4 61.2
148 63.3 31.8 95.4





#85
n-Butylbenzene
Concen: 20.241 ug/l
RT: 12.329 min Scan# 1844
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

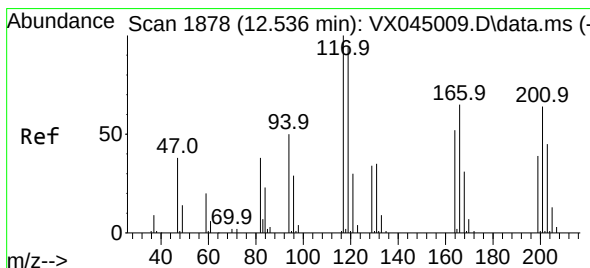
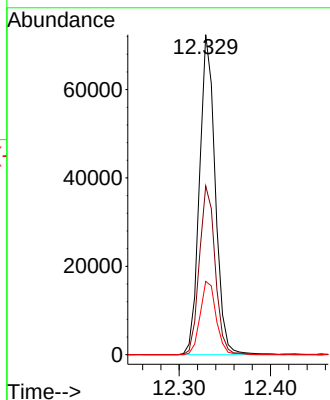
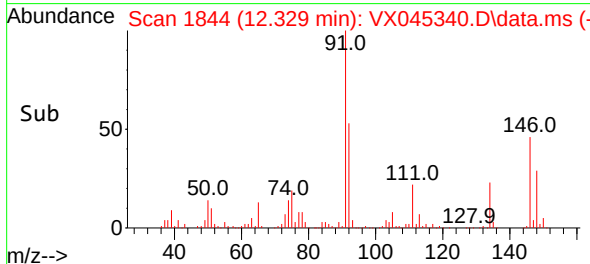
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



Tgt Ion: 91 Resp: 86472
Ion Ratio Lower Upper
91 100
92 52.3 0.0 105.2
134 23.1 0.0 49.4

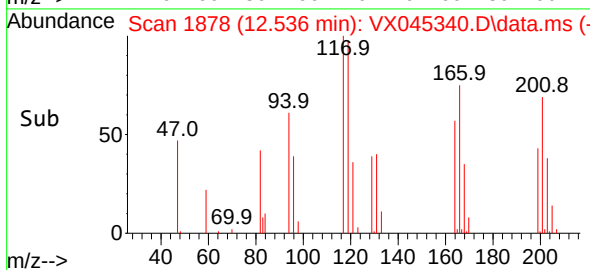
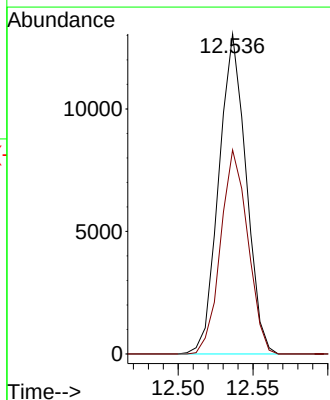
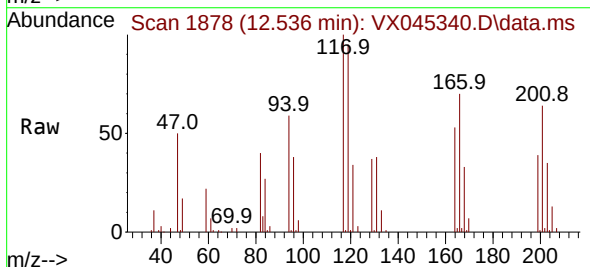
Manual Integrations
APPROVED

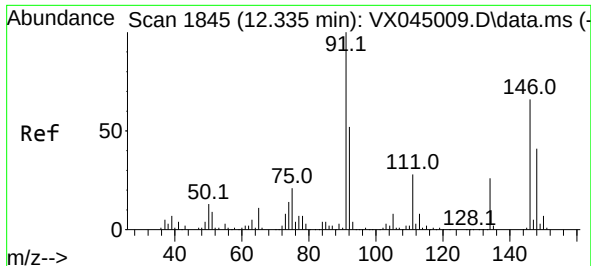
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#86
Hexachloroethane
Concen: 20.077 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

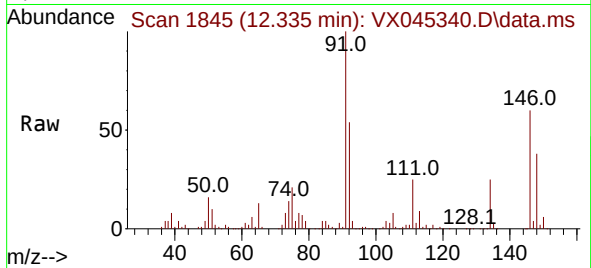
Tgt Ion:117 Resp: 16565
Ion Ratio Lower Upper
117 100
201 63.6 32.6 97.7





#87
1,2-Dichlorobenzene
Concen: 20.821 ug/l
RT: 12.335 min Scan# 1845
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

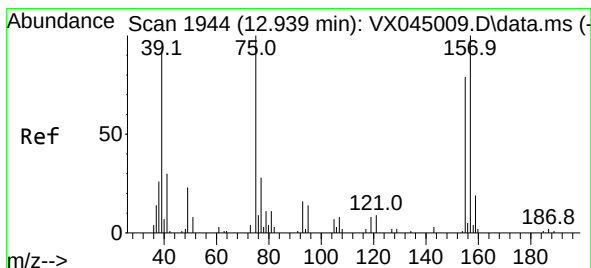
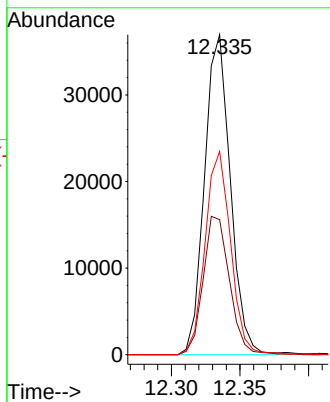
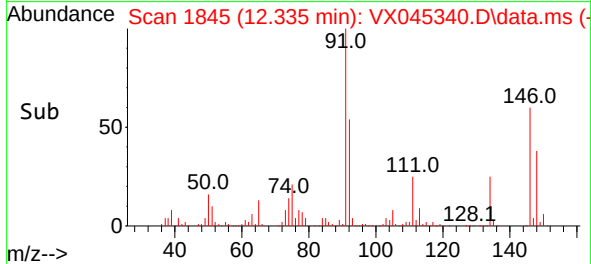
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



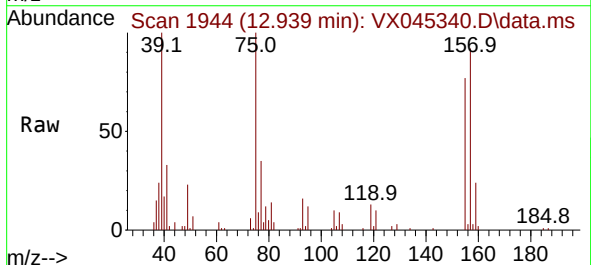
Tgt Ion:146 Resp: 48429
Ion Ratio Lower Upper
146 100
111 44.1 21.7 65.1
148 62.9 31.8 95.4

Manual Integrations
APPROVED

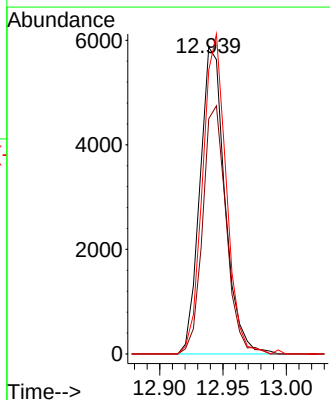
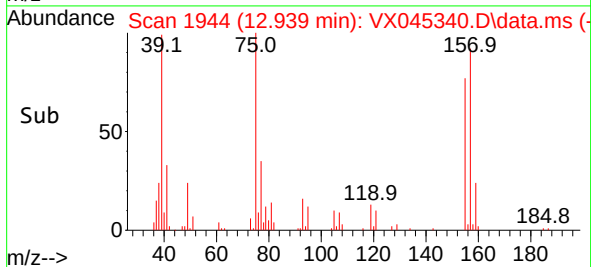
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

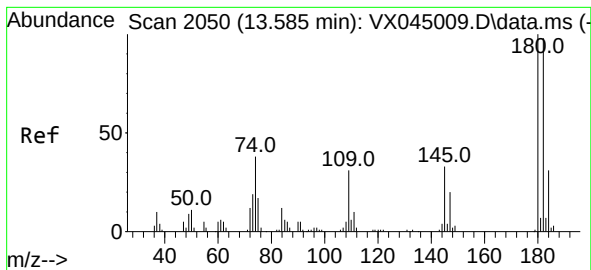


#88
1,2-Dibromo-3-Chloropropane
Concen: 22.936 ug/l
RT: 12.939 min Scan# 1944
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion: 75 Resp: 8082
Ion Ratio Lower Upper
75 100
155 76.1 66.2 99.4
157 98.1 81.4 122.2





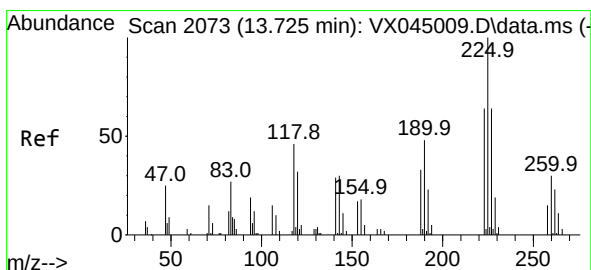
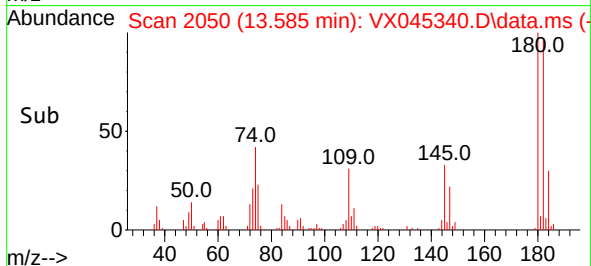
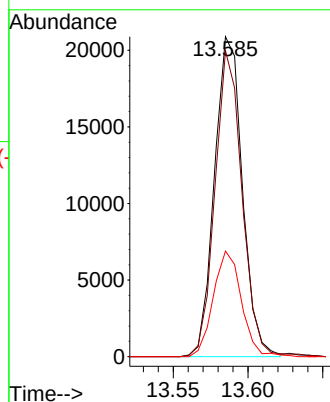
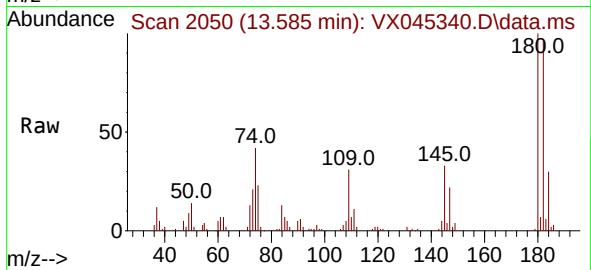
#89
1,2,4-Trichlorobenzene
Concen: 19.206 ug/l
RT: 13.585 min Scan# 2050
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020

Tgt Ion:180 Resp: 27070
Ion Ratio Lower Upper
180 100
182 92.9 77.7 116.5
145 32.7 25.8 38.6

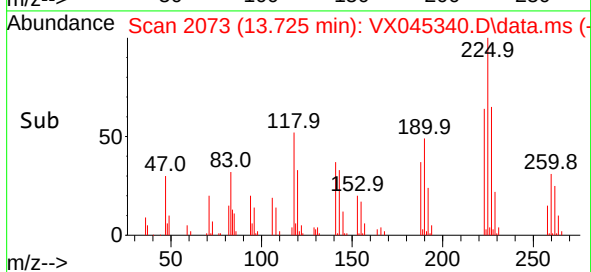
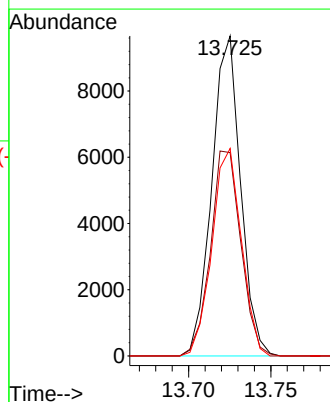
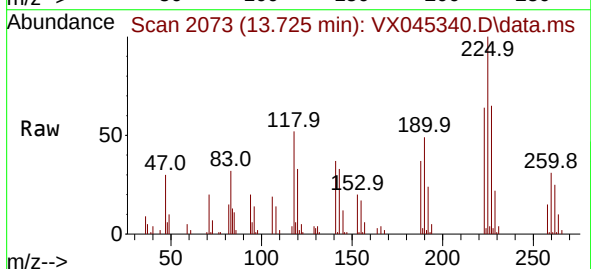
Manual Integrations
APPROVED

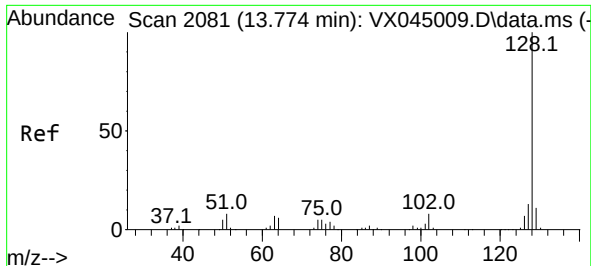
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#90
Hexachlorobutadiene
Concen: 20.427 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

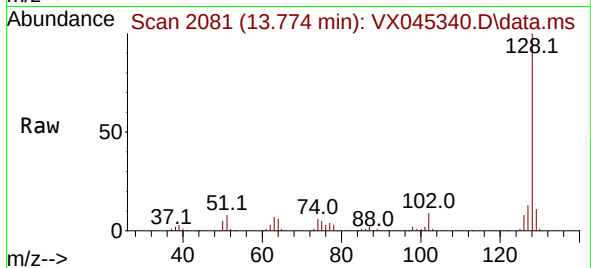
Tgt Ion:225 Resp: 11744
Ion Ratio Lower Upper
225 100
223 67.9 0.0 123.4
227 66.3 0.0 127.4





#91
Naphthalene
Concen: 20.053 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41

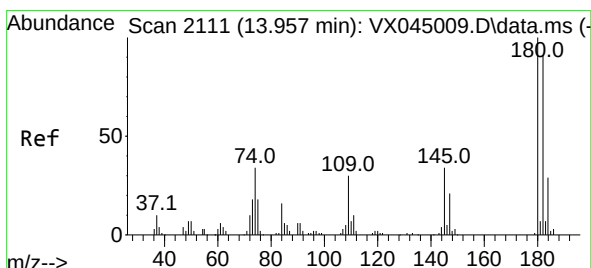
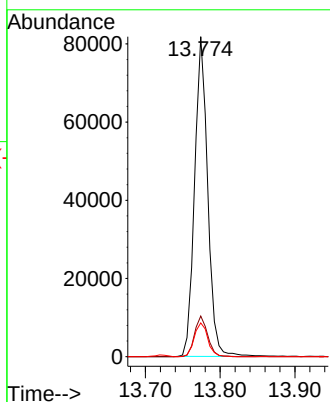
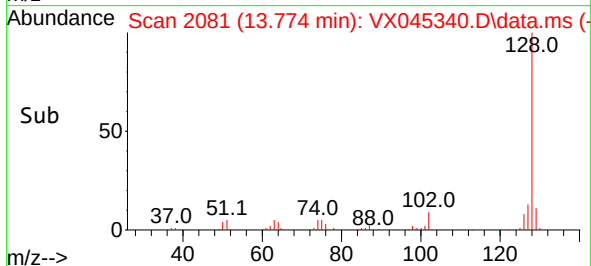
Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC020



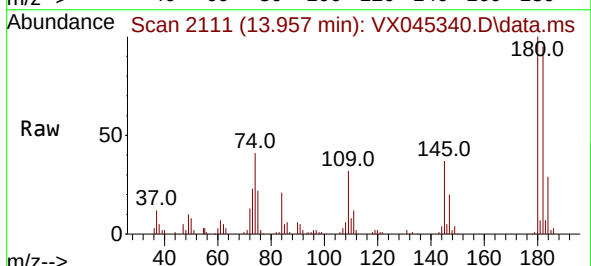
Tgt Ion:128 Resp: 99680
Ion Ratio Lower Upper
128 100
127 12.6 10.5 15.7
129 10.9 8.7 13.1

Manual Integrations
APPROVED

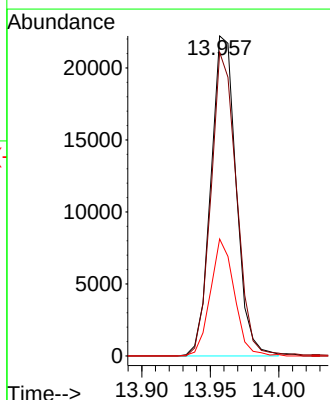
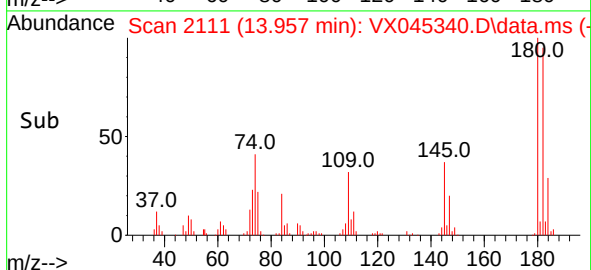
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#92
1,2,3-Trichlorobenzene
Concen: 19.663 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045340.D
Acq: 19 Mar 2025 10:41



Tgt Ion:180 Resp: 28538
Ion Ratio Lower Upper
180 100
182 95.3 0.0 186.6
145 34.7 0.0 68.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
Data File : VX045340.D
Acq On : 19 Mar 2025 10:41
Operator : JC/MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC020

Quant Time: Mar 20 01:30:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	89	0.01
2 M	Dichlorodifluoromethane	2.529	2.632	-4.1	95	0.00
3 M	Chloromethane	3.029	2.718	10.3	81	0.01
4 M	Vinyl Chloride	2.923	2.544	13.0	80	0.00
5 M	Bromomethane	1.017	1.128	-10.9	103	0.00
6 M	Chloroethane	1.583	1.341	15.3	72	0.00
7 M	Trichlorofluoromethane	3.928	3.690	6.1	89	0.00
8 T	Diethyl Ether	1.486	1.267	14.7	79	0.00
9	1,1,2-Trichlorotrifluoroeth	2.333	2.471	-5.9	100	0.00
10 M	1,1-Dichloroethene	2.279	2.299	-0.9	96	0.00
11	Methyl Iodide	2.579	2.702	-4.8	111	0.00
12	Methyl Acetate	2.646	4.412	-66.7#	159#	0.00
13 M	Acrolein	0.530	0.631	-19.1	119	0.00
14 M	Acrylonitrile	1.293	1.467	-13.5	105	0.00
15 M	Acetone	0.355	0.395	-11.3	100	0.00
16 M	Carbon Disulfide	6.464	5.226	19.2	78	0.00
17	Allyl chloride	4.262	4.176	2.0	94	0.00
18 M	Methylene Chloride	2.563	2.580	-0.7	93	0.00
19 M	trans-1,2-Dichloroethene	2.306	2.205	4.4	90	0.00
20 T	Diisopropyl ether	8.191	8.189	0.0	94	0.00
21 M	1,1-Dichloroethane	4.555	4.617	-1.4	95	0.00
22 M	cis-1,2-Dichloroethene	2.763	2.788	-0.9	94	0.00
23 M	tert-Butyl Alcohol	0.451	0.427	5.3	90	0.00
24 M	Methyl tert-Butyl Ether	7.438	7.562	-1.7	96	0.00
25 M	Chloroform	4.400	4.726	-7.4	99	0.00
26	Cyclohexane	4.205	4.013	4.6	89	0.00
27 s	1,2-Dichloroethane-d4	2.914	3.187	-9.4	99	0.00
28 I	1,4-Difluorobenzene	1.000	1.000	0.0	85	0.00
29	1,1-Dichloropropene	0.552	0.569	-3.1	90	0.00
30 M	2-Butanone	0.319	0.396	-24.1	109	0.00
31	2,2-Dichloropropane	0.624	0.597	4.3	87	0.00
32 M	1,1,1-Trichloroethane	0.669	0.727	-8.7	96	0.00
33 M	Carbon Tetrachloride	0.564	0.602	-6.7	94	0.00
34 M	Benzene	1.731	1.833	-5.9	92	0.00
35	Methacrylonitrile	0.341	0.411	-20.5	106	0.00
36 M	1,2-Dichloroethane	0.592	0.694	-17.2	102	0.00
37 M	Trichloroethene	0.405	0.424	-4.7	91	0.00
38	Methylcyclohexane	0.741	0.739	0.3	90	0.00
39 M	1,2-Dichloropropane	0.430	0.448	-4.2	90	0.00
40	Dibromomethane	0.309	0.346	-12.0	98	0.00
41 M	Bromodichloromethane	0.614	0.683	-11.2	98	0.00
42 M	Vinyl Acetate	1.237	1.256	-1.5	90	0.00
43	Ethyl Acetate	0.598	0.716	-19.7	106	0.00
44	Isopropyl Acetate	0.984	1.085	-10.3	101	0.00
45 T	1,4-Dioxane	0.010	0.010	0.0	83	0.00
46	Methyl methacrylate	0.482	0.577	-19.7	108	0.00
47	n-amyl Acetate	0.854	0.885	-3.6	94	0.00
48 M	t-1,3-Dichloropropene	0.591	0.563	4.7	91	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
 Data File : VX045340.D
 Acq On : 19 Mar 2025 10:41
 Operator : JC/MD
 Sample : VSTDCCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 LabSampleId :
 VSTDCCC020

Quant Time: Mar 20 01:30:50 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	0.670	0.674	-0.6	91	0.00
50 M	1,1,2-Trichloroethane	0.403	0.444	-10.2	94	0.00
51	Ethyl methacrylate	0.633	0.676	-6.8	99	0.00
52	1,3-Dichloropropane	0.706	0.796	-12.7	97	0.00
53 M	Dibromochloromethane	0.445	0.483	-8.5	95	0.00
54 M	1,2-Dibromoethane	0.409	0.450	-10.0	96	0.00
55 M	2-Chloroethyl vinyl ether	0.325	0.336	-3.4	91	0.00
56 M	Bromoform	0.279	0.296	-6.1	98	0.00
57 I	Chlorobenzene-d5	1.000	1.000	0.0	88	0.00
58 M	4-Methyl-2-Pentanone	0.682	0.832	-22.0	108	0.00
59 M	2-Hexanone	0.493	0.608	-23.3	110	0.00
60 S	4-Bromofluorobenzene	0.561	0.584	-4.1	92	0.00
61 M	Tetrachloroethene	0.369	0.402	-8.9	96	0.00
62 M	Toluene	1.987	2.063	-3.8	93	0.00
63 S	Toluene-d8	1.660	1.665	-0.3	88	0.00
64 M	Chlorobenzene	1.231	1.280	-4.0	93	0.00
65	1,1,1,2-Tetrachloroethane	0.406	0.428	-5.4	96	0.00
66 M	Ethyl Benzene	2.176	2.264	-4.0	95	0.00
67 M	m/p-Xylenes	0.811	0.854	-5.3	92	0.00
68 M	o-Xylene	0.795	0.811	-2.0	90	0.00
69 M	Styrene	1.328	1.394	-5.0	93	0.00
70	Isopropylbenzene	2.053	2.224	-8.3	96	0.00
71 M	1,1,2,2-Tetrachloroethane	0.675	0.777	-15.1	103	0.00
72	1,2,3-Trichloropropane	0.555	0.644	-16.0	105	0.00
73	Bromobenzene	0.473	0.488	-3.2	92	0.00
74	n-propylbenzene	2.443	2.564	-5.0	95	0.00
75	2-Chlorotoluene	1.477	1.596	-8.1	96	0.00
76	1,3,5-Trimethylbenzene	1.693	1.806	-6.7	94	0.00
77	t-1,4-Dichloro-2-butene	0.187	0.180	3.7	99	0.00
78	4-Chlorotoluene	1.646	1.755	-6.6	96	0.00
79	tert-butylbenzene	1.706	1.798	-5.4	93	0.00
80	1,2,4-Trimethylbenzene	1.696	1.802	-6.3	93	0.00
81	sec-Butylbenzene	2.141	2.320	-8.4	97	0.00
82	p-Isopropyltoluene	1.735	1.845	-6.3	95	0.00
83 M	1,3-Dichlorobenzene	0.879	0.891	-1.4	90	0.00
84 M	1,4-Dichlorobenzene	0.867	0.904	-4.3	93	0.00
85	n-Butylbenzene	1.584	1.603	-1.2	93	0.00
86 T	Hexachloroethane	0.306	0.307	-0.3	96	0.00
87 M	1,2-Dichlorobenzene	0.863	0.898	-4.1	91	0.00
88	1,2-Dibromo-3-Chloropropane	0.131	0.150	-14.5	109	0.00
89	1,2,4-Trichlorobenzene	0.523	0.502	4.0	90	0.00
90	Hexachlorobutadiene	0.213	0.218	-2.3	92	0.00
91 M	Naphthalene	1.843	1.848	-0.3	92	0.00
92	1,2,3-Trichlorobenzene	0.538	0.529	1.7	89	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
Data File : VX045340.D
Acq On : 19 Mar 2025 10:41
Operator : JC/MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC020

Quant Time: Mar 20 01:30:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	30.000	30.000	0.0	89	0.01
2 M	Dichlorodifluoromethane	20.000	20.814	-4.1	95	0.00
3 M	Chloromethane	20.000	17.945	10.3	81	0.01
4 M	Vinyl Chloride	20.000	17.406	13.0	80	0.00
5 M	Bromomethane	20.000	22.166	-10.8	103	0.00
6 M	Chloroethane	20.000	16.944	15.3	72	0.00
7 M	Trichlorofluoromethane	20.000	18.787	6.1	89	0.00
8 T	Diethyl Ether	20.000	17.046	14.8	79	0.00
9	1,1,2-Trichlorotrifluoroeth	20.000	21.178	-5.9	100	0.00
10 M	1,1-Dichloroethene	20.000	20.176	-0.9	96	0.00
11	Methyl Iodide	20.000	20.954	-4.8	111	0.00
12	Methyl Acetate	20.000	33.340	-66.7#	159	0.00
13 M	Acrolein	100.000	118.988	-19.0	119	0.00
14 M	Acrylonitrile	100.000	113.456	-13.5	105	0.00
15 M	Acetone	100.000	111.373	-11.4	100	0.00
16 M	Carbon Disulfide	20.000	16.170	19.1	78	0.00
17	Allyl chloride	20.000	19.594	2.0	94	0.00
18 M	Methylene Chloride	20.000	20.130	-0.6	93	0.00
19 M	trans-1,2-Dichloroethene	20.000	19.124	4.4	90	0.00
20 T	Diisopropyl ether	20.000	19.995	0.0	94	0.00
21 M	1,1-Dichloroethane	20.000	20.273	-1.4	95	0.00
22 M	cis-1,2-Dichloroethene	20.000	20.180	-0.9	94	0.00
23 M	tert-Butyl Alcohol	100.000	94.701	5.3	90	0.00
24 M	Methyl tert-Butyl Ether	20.000	20.334	-1.7	96	0.00
25 M	Chloroform	20.000	21.483	-7.4	99	0.00
26	Cyclohexane	20.000	19.086	4.6	89	0.00
27 s	1,2-Dichloroethane-d4	30.000	32.812	-9.4	99	0.00
28 I	1,4-Difluorobenzene	30.000	30.000	0.0	85	0.00
29	1,1-Dichloropropene	20.000	20.610	-3.0	90	0.00
30 M	2-Butanone	100.000	124.364	-24.4	109	0.00
31	2,2-Dichloropropane	20.000	19.147	4.3	87	0.00
32 M	1,1,1-Trichloroethane	20.000	21.744	-8.7	96	0.00
33 M	Carbon Tetrachloride	20.000	21.335	-6.7	94	0.00
34 M	Benzene	20.000	21.181	-5.9	92	0.00
35	Methacrylonitrile	20.000	24.103	-20.5	106	0.00
36 M	1,2-Dichloroethane	20.000	23.413	-17.1	102	0.00
37 M	Trichloroethene	20.000	20.936	-4.7	91	0.00
38	Methylcyclohexane	20.000	19.959	0.2	90	0.00
39 M	1,2-Dichloropropane	20.000	20.823	-4.1	90	0.00
40	Dibromomethane	20.000	22.434	-12.2	98	0.00
41 M	Bromodichloromethane	20.000	22.261	-11.3	98	0.00
42 M	Vinyl Acetate	100.000	101.532	-1.5	90	0.00
43	Ethyl Acetate	20.000	23.957	-19.8	106	0.00
44	Isopropyl Acetate	20.000	22.048	-10.2	101	0.00
45 T	1,4-Dioxane	400.000	394.071	1.5	83	0.00
46	Methyl methacrylate	20.000	23.923	-19.6	108	0.00
47	n-amyl Acetate	20.000	20.723	-3.6	94	0.00
48 M	t-1,3-Dichloropropene	20.000	19.050	4.7	91	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
 Data File : VX045340.D
 Acq On : 19 Mar 2025 10:41
 Operator : JC/MD
 Sample : VSTDCCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 LabSampleId :
 VSTDCCC020

Quant Time: Mar 20 01:30:50 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	20.000	20.120	-0.6	91	0.00
50 M	1,1,2-Trichloroethane	20.000	22.055	-10.3	94	0.00
51	Ethyl methacrylate	20.000	21.334	-6.7	99	0.00
52	1,3-Dichloropropane	20.000	22.567	-12.8	97	0.00
53 M	Dibromochloromethane	20.000	21.709	-8.5	95	0.00
54 M	1,2-Dibromoethane	20.000	21.988	-9.9	96	0.00
55 M	2-Chloroethyl vinyl ether	100.000	103.422	-3.4	91	0.00
56 M	Bromoform	20.000	21.196	-6.0	98	0.00
57 I	Chlorobenzene-d5	30.000	30.000	0.0	88	0.00
58 M	4-Methyl-2-Pentanone	100.000	121.880	-21.9	108	0.00
59 M	2-Hexanone	100.000	123.186	-23.2	110	0.00
60 S	4-Bromofluorobenzene	30.000	31.246	-4.2	92	0.00
61 M	Tetrachloroethene	20.000	21.744	-8.7	96	0.00
62 M	Toluene	20.000	20.767	-3.8	93	0.00
63 S	Toluene-d8	30.000	30.103	-0.3	88	0.00
64 M	Chlorobenzene	20.000	20.784	-3.9	93	0.00
65	1,1,1,2-Tetrachloroethane	20.000	21.083	-5.4	96	0.00
66 M	Ethyl Benzene	20.000	20.813	-4.1	95	0.00
67 M	m/p-Xylenes	40.000	42.144	-5.4	92	0.00
68 M	o-Xylene	20.000	20.390	-2.0	90	0.00
69 M	Styrene	20.000	20.993	-5.0	93	0.00
70	Isopropylbenzene	20.000	21.669	-8.3	96	0.00
71 M	1,1,2,2-Tetrachloroethane	20.000	23.012	-15.1	103	0.00
72	1,2,3-Trichloropropane	20.000	23.216	-16.1	105	0.00
73	Bromobenzene	20.000	20.665	-3.3	92	0.00
74	n-propylbenzene	20.000	20.998	-5.0	95	0.00
75	2-Chlorotoluene	20.000	21.614	-8.1	96	0.00
76	1,3,5-Trimethylbenzene	20.000	21.335	-6.7	94	0.00
77	t-1,4-Dichloro-2-butene	20.000	19.262	3.7	99	0.00
78	4-Chlorotoluene	20.000	21.317	-6.6	96	0.00
79	tert-butylbenzene	20.000	21.075	-5.4	93	0.00
80	1,2,4-Trimethylbenzene	20.000	21.253	-6.3	93	0.00
81	sec-Butylbenzene	20.000	21.671	-8.4	97	0.00
82	p-Isopropyltoluene	20.000	21.265	-6.3	95	0.00
83 M	1,3-Dichlorobenzene	20.000	20.274	-1.4	90	0.00
84 M	1,4-Dichlorobenzene	20.000	20.863	-4.3	93	0.00
85	n-Butylbenzene	20.000	20.241	-1.2	93	0.00
86 T	Hexachloroethane	20.000	20.077	-0.4	96	0.00
87 M	1,2-Dichlorobenzene	20.000	20.821	-4.1	91	0.00
88	1,2-Dibromo-3-Chloropropane	20.000	22.936	-14.7	109	0.00
89	1,2,4-Trichlorobenzene	20.000	19.206	4.0	90	0.00
90	Hexachlorobutadiene	20.000	20.427	-2.1	92	0.00
91 M	Naphthalene	20.000	20.053	-0.3	92	0.00
92	1,2,3-Trichlorobenzene	20.000	19.663	1.7	89	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



QC SAMPLE DATA

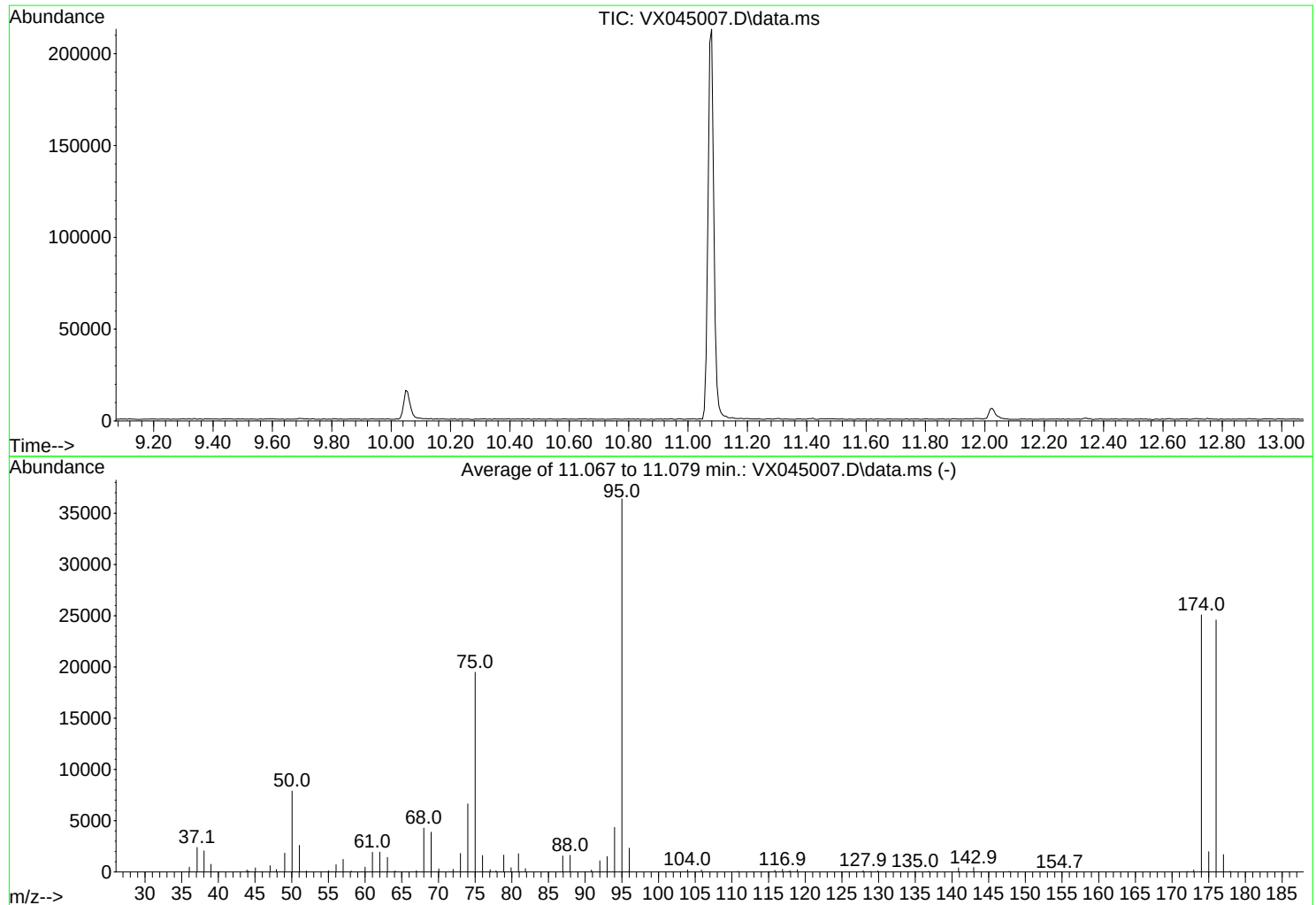
- 1
- 2
- 3
- 4
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- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022125\
Data File : VX045007.D
Acq On : 21 Feb 2025 09:31
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT3.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Sat Feb 22 01:06:36 2025



AutoFind: Scans 1637, 1638, 1639; Background Corrected with Scan 1632

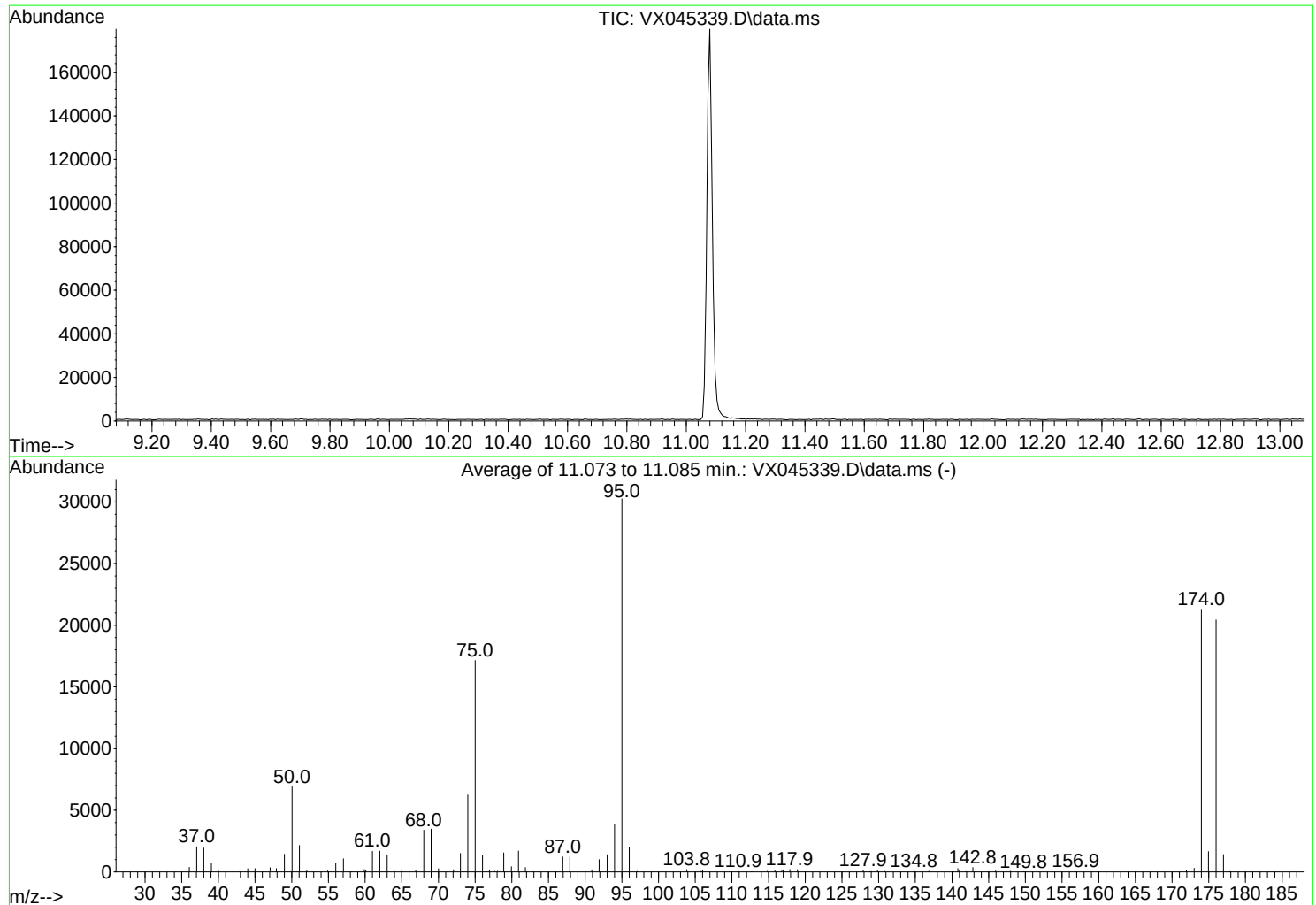
Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	21.7	7903	PASS
75	95	30	60	53.5	19493	PASS
95	95	100	100	100.0	36408	PASS
96	95	5	9	6.4	2318	PASS
173	174	0.00	2	0.8	213	PASS
174	95	50	100	68.9	25081	PASS
175	174	5	9	7.9	1979	PASS
176	174	95	101	98.0	24589	PASS
177	176	5	9	6.9	1695	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
Data File : VX045339.D
Acq On : 19 Mar 2025 10:11
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT3.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Sat Feb 22 01:06:36 2025



AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1633

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	22.8	6907	PASS
75	95	30	60	56.7	17149	PASS
95	95	100	100	100.0	30251	PASS
96	95	5	9	6.6	2004	PASS
173	174	0.00	2	1.4	297	PASS
174	95	50	100	70.4	21304	PASS
175	174	5	9	7.8	1655	PASS
176	174	95	101	95.9	20440	PASS
177	176	5	9	6.9	1413	PASS

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	VX0319WBL01	SDG No.:	Q1502
Lab Sample ID:	VX0319WBL01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045343.D	1		03/19/25 12:50	VX031925

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VX0319WBL01		SDG No.:	Q1502
Lab Sample ID:	VX0319WBL01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045343.D	1		03/19/25 12:50	VX031925

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

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VX0319WBL01		SDG No.:	Q1502
Lab Sample ID:	VX0319WBL01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045343.D	1		03/19/25 12:50	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
541-73-1	1,3-Dichlorobenzene	0.67	U	0.67	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.81	U	0.81	5.00	ug/L
104-51-8	n-Butylbenzene	0.82	U	0.82	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.67	U	0.67	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.86	U	0.86	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	1.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	0.68	U	0.68	5.00	ug/L
91-20-3	Naphthalene	1.00	U	1.00	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	31.2		91 - 110	104%	SPK: 30
2037-26-5	Toluene-d8	29.5		91 - 112	98%	SPK: 30
460-00-4	4-Bromofluorobenzene	28.4		63 - 112	95%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	17100	4.885			
540-36-3	1,4-Difluorobenzene	85700	6.757			
3114-55-4	Chlorobenzene-d5	77100	10.049			
74-97-5	Bromochloromethane	17100	4.885			

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_X\Data\VX031925\
Data File : VX045343.D
Acq On : 19 Mar 2025 12:50
Operator : JC/MD
Sample : VX0319WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBL01

Quant Time: Mar 20 01:34:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	4.885	128	17082	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	85703	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	77105	30.000	ug/l	0.00

System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.952	65	51831	31.240	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	104.133%
60) 4-Bromofluorobenzene	11.079	95	40882	28.367	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	94.567%
63) Toluene-d8	8.647	98	125682	29.464	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	98.200%

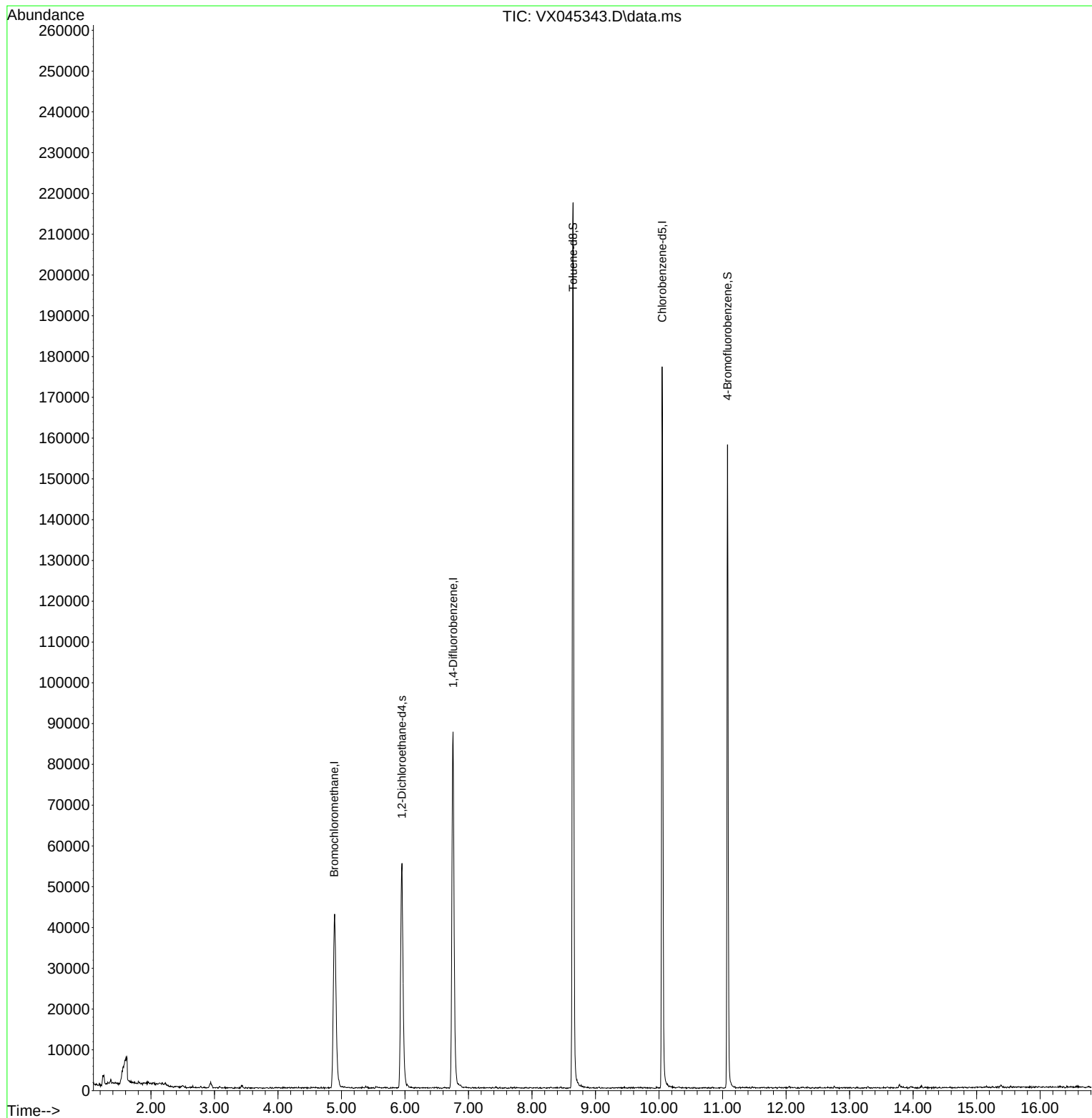
Target Compounds	Qvalue

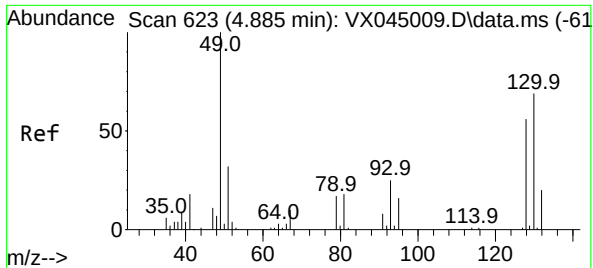
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
Data File : VX045343.D
Acq On : 19 Mar 2025 12:50
Operator : JC/MD
Sample : VX0319WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBL01

Quant Time: Mar 20 01:34:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Feb 22 01:06:36 2025
Response via : Initial Calibration

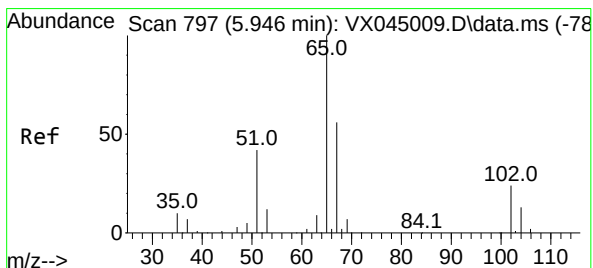
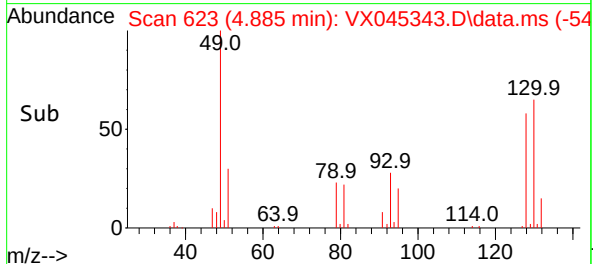
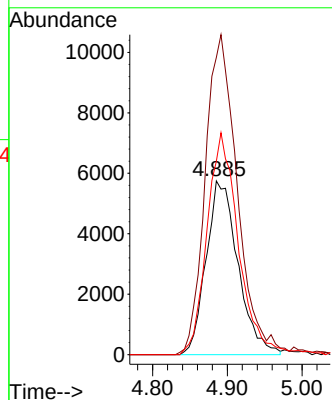
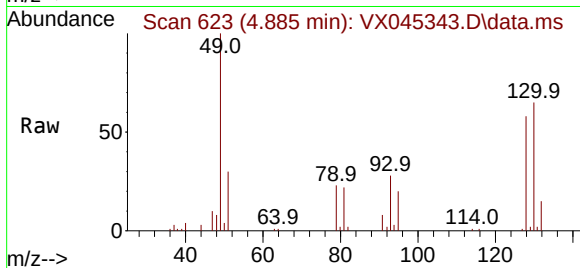




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.885 min Scan# 61
Delta R.T. 0.000 min
Lab File: VX045343.D
Acq: 19 Mar 2025 12:50

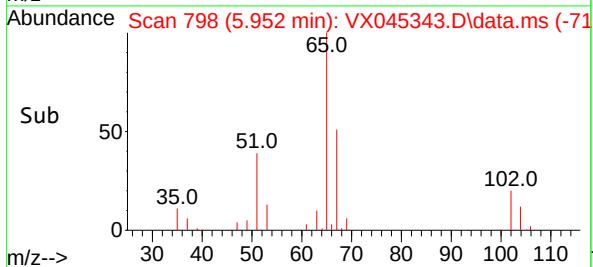
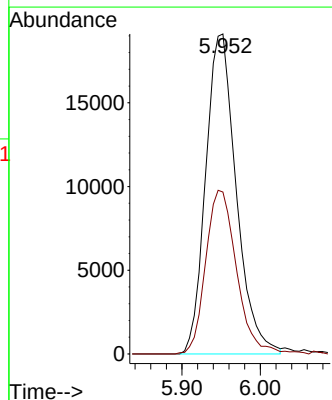
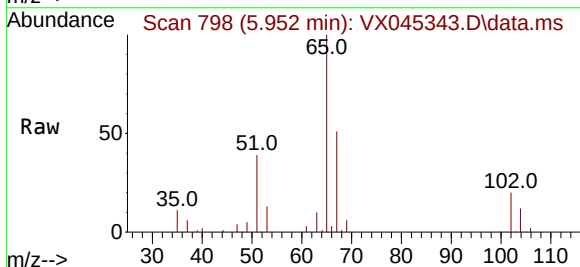
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBL01

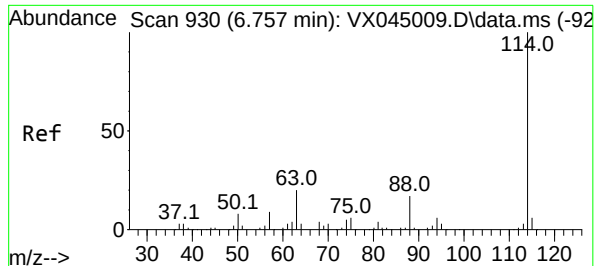
Tgt Ion:	128	Resp:	17082
Ion	Ratio	Lower	Upper
128	100		
49	184.8	0.0	449.7
130	124.8	0.0	312.7



#27
1,2-Dichloroethane-d4
Concen: 31.240 ug/l
RT: 5.952 min Scan# 798
Delta R.T. 0.006 min
Lab File: VX045343.D
Acq: 19 Mar 2025 12:50

Tgt Ion:	65	Resp:	51831
Ion	Ratio	Lower	Upper
65	100		
67	50.7	42.6	64.0





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.757 min Scan# 91

Delta R.T. -0.000 min

Lab File: VX045343.D

Acq: 19 Mar 2025 12:50

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBL01

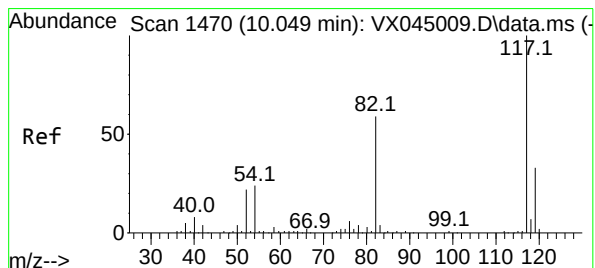
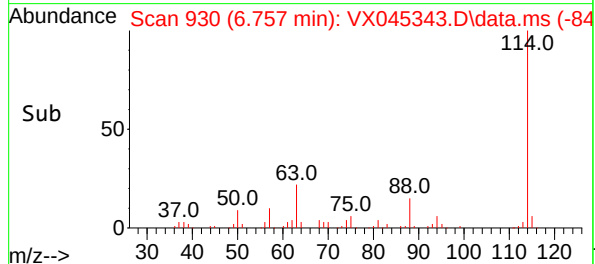
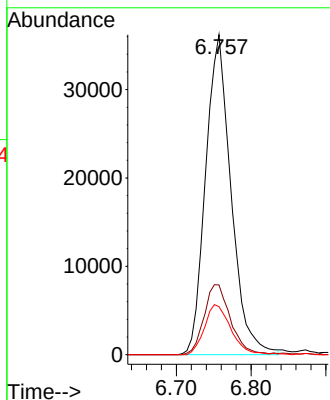
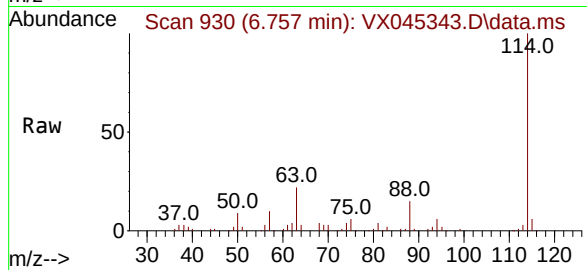
Tgt Ion:114 Resp: 85703

Ion Ratio Lower Upper

114 100

63 22.6 16.8 25.2

88 16.1 12.7 19.1



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.049 min Scan# 1470

Delta R.T. -0.000 min

Lab File: VX045343.D

Acq: 19 Mar 2025 12:50

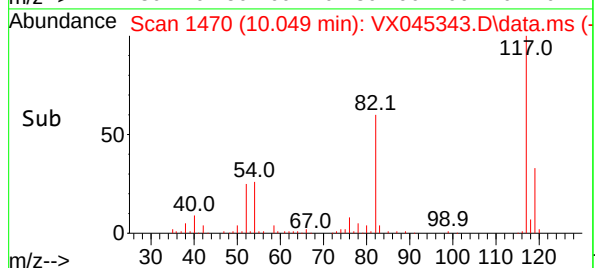
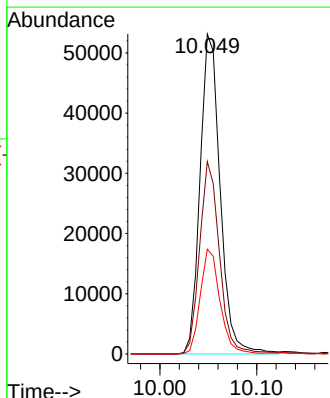
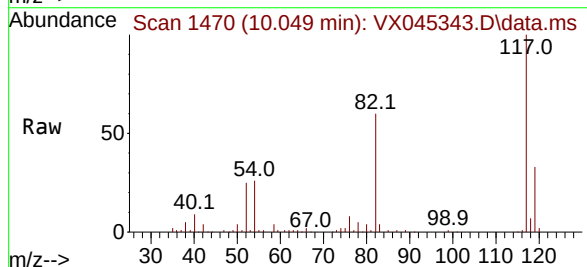
Tgt Ion:117 Resp: 77105

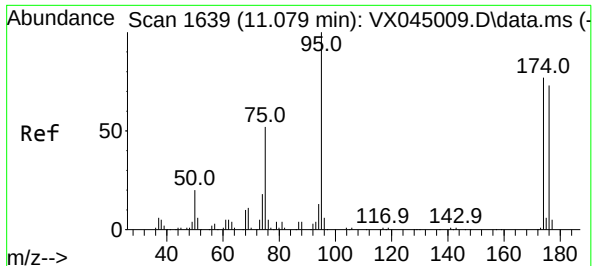
Ion Ratio Lower Upper

117 100

82 59.4 45.8 68.8

119 31.9 25.5 38.3





#60

4-Bromofluorobenzene

Concen: 28.367 ug/l

RT: 11.079 min Scan# 1

Delta R.T. -0.000 min

Lab File: VX045343.D

Acq: 19 Mar 2025 12:50

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBL01

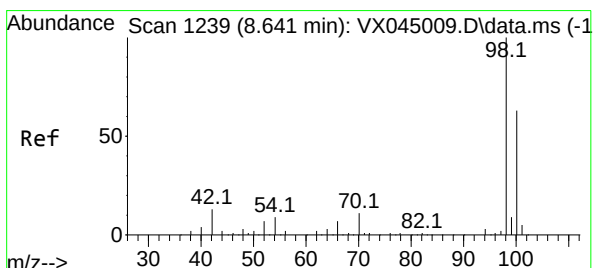
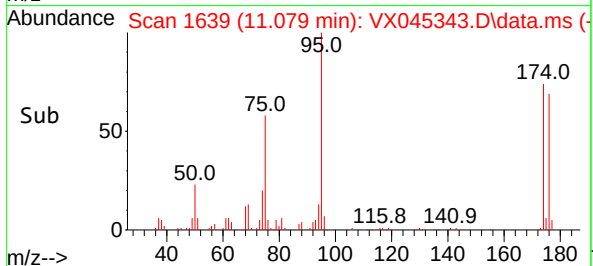
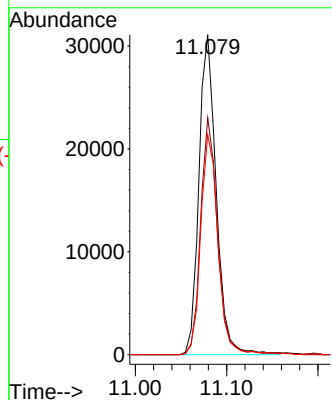
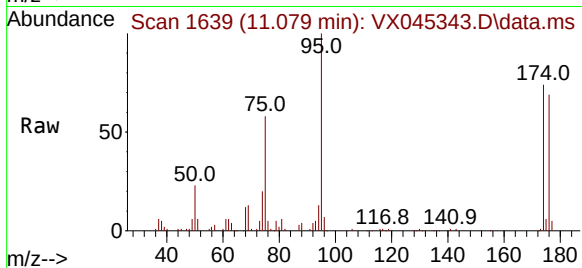
Tgt Ion: 95 Resp: 40882

Ion Ratio Lower Upper

95 100

174 71.4 59.5 89.3

176 67.7 55.5 83.3



#63

Toluene-d8

Concen: 29.464 ug/l

RT: 8.647 min Scan# 1240

Delta R.T. 0.006 min

Lab File: VX045343.D

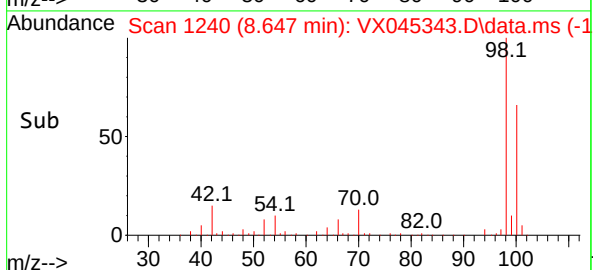
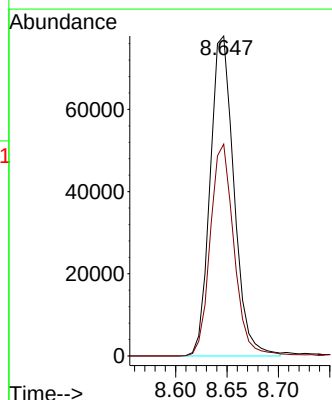
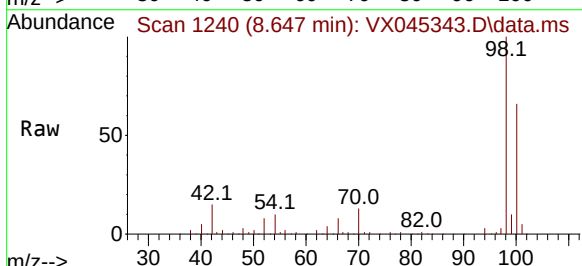
Acq: 19 Mar 2025 12:50

Tgt Ion: 98 Resp: 125682

Ion Ratio Lower Upper

98 100

100 66.0 51.7 77.5



Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VX0319WBS01		SDG No.:	Q1502
Lab Sample ID:	VX0319WBS01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045341.D	1		03/19/25 11:41	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	17.5		0.77	5.00	ug/L
74-87-3	Chloromethane	15.2		0.64	5.00	ug/L
75-01-4	Vinyl Chloride	15.7		0.83	5.00	ug/L
74-83-9	Bromomethane	20.1		0.80	5.00	ug/L
75-00-3	Chloroethane	16.5		2.30	5.00	ug/L
75-69-4	Trichlorofluoromethane	17.5		0.80	5.00	ug/L
75-35-4	1,1-Dichloroethene	17.9		0.76	5.00	ug/L
107-02-8	Acrolein	100		6.60	25.0	ug/L
107-13-1	Acrylonitrile	110		2.80	25.0	ug/L
67-64-1	Acetone	120		4.60	25.0	ug/L
75-15-0	Carbon Disulfide	14.6		0.82	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	19.1		0.77	5.00	ug/L
75-09-2	Methylene Chloride	18.4		0.86	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	17.5		0.82	5.00	ug/L
108-05-4	Vinyl Acetate	96.0		3.20	25.0	ug/L
75-34-3	1,1-Dichloroethane	18.8		0.68	5.00	ug/L
78-93-3	2-Butanone	120		2.00	25.0	ug/L
56-23-5	Carbon Tetrachloride	20.4		0.74	5.00	ug/L
594-20-7	2,2-Dichloropropane	18.8		0.66	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.3		0.80	5.00	ug/L
67-66-3	Chloroform	19.6		0.55	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.8		0.63	5.00	ug/L
563-58-6	1,1-Dichloropropene	19.8		0.63	5.00	ug/L
71-43-2	Benzene	19.8		0.45	5.00	ug/L
107-06-2	1,2-Dichloroethane	22.5		0.50	5.00	ug/L
79-01-6	Trichloroethene	19.3		0.49	5.00	ug/L
78-87-5	1,2-Dichloropropane	19.3		0.46	5.00	ug/L
74-95-3	Dibromomethane	21.0		0.59	5.00	ug/L
75-27-4	Bromodichloromethane	20.8		0.64	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	120		3.00	25.0	ug/L

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VX0319WBS01	SDG No.:	Q1502	
Lab Sample ID:	VX0319WBS01	Matrix:	Water	
Analytical Method:	E624.1	% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	
Soil Aliquot Vol:			uL	
GC Column:	DB-624UI	ID :	0.18	
Prep Method :		Level :	LOW	
		Final Vol:	5000	uL
		Test:	VOCMS Group1	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045341.D	1		03/19/25 11:41	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-88-3	Toluene	20.3		0.46	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.3		0.72	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.8		0.67	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.1		0.45	5.00	ug/L
142-28-9	1,3-Dichloropropane	20.7		0.44	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	130		4.60	25.0	ug/L
591-78-6	2-Hexanone	120		3.20	25.0	ug/L
124-48-1	Dibromochloromethane	19.9		0.66	5.00	ug/L
106-93-4	1,2-Dibromoethane	20.9		0.56	5.00	ug/L
127-18-4	Tetrachloroethene	21.1		0.84	5.00	ug/L
108-90-7	Chlorobenzene	19.7		0.47	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	19.9		0.62	5.00	ug/L
67-72-1	Hexachloroethane	18.7		0.98	5.00	ug/L
100-41-4	Ethyl Benzene	20.3		0.56	5.00	ug/L
179601-23-1	m/p-Xylenes	40.4		1.30	10.0	ug/L
1330-20-7	Total Xylenes	60.6		1.97	15.0	ug/L
95-47-6	o-Xylene	20.2		0.67	5.00	ug/L
100-42-5	Styrene	19.5		0.72	5.00	ug/L
75-25-2	Bromoform	19.4		0.94	5.00	ug/L
98-82-8	Isopropylbenzene	20.5		0.78	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	21.3		0.44	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	21.6		0.62	5.00	ug/L
108-86-1	Bromobenzene	19.0		0.59	5.00	ug/L
103-65-1	n-propylbenzene	20.3		0.67	5.00	ug/L
95-49-8	2-Chlorotoluene	20.3		0.64	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	20.5		0.59	5.00	ug/L
106-43-4	4-Chlorotoluene	19.8		0.62	5.00	ug/L
98-06-6	tert-butylbenzene	20.2		0.71	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	19.8		0.77	5.00	ug/L
135-98-8	sec-Butylbenzene	20.2		0.64	5.00	ug/L
99-87-6	p-Isopropyltoluene	20.0		0.70	5.00	ug/L

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VX0319WBS01		SDG No.:	Q1502
Lab Sample ID:	VX0319WBS01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045341.D	1		03/19/25 11:41	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
541-73-1	1,3-Dichlorobenzene	19.4		0.67	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.0		0.81	5.00	ug/L
104-51-8	n-Butylbenzene	19.4		0.82	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.6		0.67	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	21.9		0.86	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	18.5		1.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	19.9		0.68	5.00	ug/L
91-20-3	Naphthalene	19.3		1.00	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	18.6		1.10	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	32.0		91 - 110	107%	SPK: 30
2037-26-5	Toluene-d8	31.1		91 - 112	104%	SPK: 30
460-00-4	4-Bromofluorobenzene	31.1		63 - 112	104%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	18700	4.891			
540-36-3	1,4-Difluorobenzene	97300	6.757			
3114-55-4	Chlorobenzene-d5	87300	10.049			
74-97-5	Bromochloromethane	18700	4.891			

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_X\Data\VX031925\
 Data File : VX045341.D
 Acq On : 19 Mar 2025 11:41
 Operator : JC/MD
 Sample : VX0319WBS01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0319WBS01

Quant Time: Mar 20 01:31:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 03/20/2025
 Supervised By : Mahesh Dadoda 03/20/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.891	128	18710	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	97348	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	87335	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.952	65	58087	31.965	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 106.533%			
60) 4-Bromofluorobenzene	11.079	95	50712	31.066	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 103.567%			
63) Toluene-d8	8.647	98	150287	31.105	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 103.700%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.166	85	27543	17.463	ug/l	97
3) Chloromethane	1.306	50	28787	15.238	ug/l	98
4) Vinyl Chloride	1.373	62	28568	15.672	ug/l	99
5) Bromomethane	1.593	94	12784	20.147	ug/l	97
6) Chloroethane	1.666	64	16301	16.511	ug/l	94
7) Trichlorofluoromethane	1.873	101	42772	17.458	ug/l	99
8) Diethyl Ether	2.129	74	14742	15.903	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.318	101	27937	19.199	ug/l	99
10) 1,1-Dichloroethene	2.312	96	25457	17.911	ug/l	91
11) Methyl Iodide	2.446	142	31061	19.309	ug/l	99
12) Methyl Acetate	2.702	43	51249	31.051	ug/l	100
13) Acrolein	2.233	56	34448	104.128	ug/l	99
14) Acrylonitrile	3.062	53	85508	106.065	ug/l	99
15) Acetone	2.379	58	27200	123.020	ug/l	93
16) Carbon Disulfide	2.501	76	59047	14.646	ug/l	99
17) Allyl chloride	2.660	41	48978	18.424	ug/l	100
18) Methylene Chloride	2.782	84	29343	18.355	ug/l	93
19) trans-1,2-Dichloroethene	3.080	96	25174	17.507	ug/l	89
20) Diisopropyl ether	3.757	45	95879	18.769	ug/l	94
21) 1,1-Dichloroethane	3.605	63	53526	18.840	ug/l	99
22) cis-1,2-Dichloroethene	4.483	96	31543	18.305	ug/l	96
23) tert-Butyl Alcohol	2.971	59	24683	87.702	ug/l #	100
24) Methyl tert-Butyl Ether	3.111	73	88622	19.104	ug/l	96
25) Chloroform	5.086	83	53809	19.609	ug/l	94
26) Cyclohexane	5.458	56	47478	18.105	ug/l #	96
29) 1,1-Dichloropropene	5.684	75	35508	19.829	ug/l	99
30) 2-Butanone	4.556	43	124731	120.592	ug/l #	96
31) 2,2-Dichloropropane	4.464	77	38109	18.821	ug/l	100
32) 1,1,1-Trichloroethane	5.379	97	45029	20.753	ug/l	96
33) Carbon Tetrachloride	5.671	117	37350	20.397	ug/l	98
34) Benzene	6.031	78	111274	19.815	ug/l	99
35) Methacrylonitrile	4.915	41	24698	22.314	ug/l	93
36) 1,2-Dichloroethane	6.080	62	43307	22.525	ug/l	96
37) Trichloroethene	7.116	130	25366	19.308	ug/l	99
38) Methylcyclohexane	7.372	83	46548	19.359	ug/l	99
39) 1,2-Dichloropropane	7.427	63	27000	19.339	ug/l	97
40) Dibromomethane	7.580	93	21007	20.968	ug/l	99
41) Bromodichloromethane	7.817	83	41380	20.781	ug/l	97
42) Vinyl Acetate	3.714	43	385398	96.020	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
 Data File : VX045341.D
 Acq On : 19 Mar 2025 11:41
 Operator : JC/MD
 Sample : VX0319WBS01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0319WBS01

Manual Integrations APPROVED

Reviewed By : John Carlone 03/20/2025
 Supervised By : Mahesh Dadoda 03/20/2025

Quant Time: Mar 20 01:31:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.714	43	42770	22.050	ug/l	96
44) Isopropyl Acetate	6.336	43	68513	21.461	ug/l	96
45) 1,4-Dioxane	7.659	88	11324	341.216	ug/l	95
46) Methyl methacrylate	7.689	41	34428	21.993	ug/l	95
47) n-amyl Acetate	10.841	43	52245	18.859	ug/l	98
48) t-1,3-Dichloropropene	8.976	75	35099	18.287	ug/l	96
49) cis-1,3-Dichloropropene	8.366	75	40766	18.763	ug/l	96
50) 1,1,2-Trichloroethane	9.146	97	26276	20.107	ug/l	91
51) Ethyl methacrylate	9.116	69	40819	19.861	ug/l	97
52) 1,3-Dichloropropane	9.305	76	47347	20.677	ug/l	99
53) Dibromochloromethane	9.518	129	28807	19.931	ug/l	95
54) 1,2-Dibromoethane	9.610	107	27720	20.889	ug/l	98
55) 2-Chloroethyl vinyl ether	8.238	63	134939	127.852	ug/l	99
56) Bromoform	10.799	173	17591	19.423	ug/l	98
58) 4-Methyl-2-Pentanone	8.567	43	232649	117.104	ug/l	98
59) 2-Hexanone	9.427	43	168179	117.117	ug/l	98
61) Tetrachloroethene	9.268	164	22715	21.122	ug/l	92
62) Toluene	8.714	91	117162	20.251	ug/l	97
64) Chlorobenzene	10.079	112	70773	19.741	ug/l	96
65) 1,1,1,2-Tetrachloroethane	10.158	131	23503	19.868	ug/l	97
66) Ethyl Benzene	10.189	91	128869	20.346	ug/l	94
67) m/p-Xylenes	10.299	106	95456	40.449	ug/l	97
68) o-Xylene	10.640	106	46776	20.202	ug/l	99
69) Styrene	10.652	104	75588	19.546	ug/l	95
70) Isopropylbenzene	10.957	105	122673	20.530	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.207	83	41766	21.256	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	34845m	21.561	ug/l	
73) Bromobenzene	11.195	156	26203	19.049	ug/l	91
74) n-propylbenzene	11.298	91	144108	20.266	ug/l	98
75) 2-Chlorotoluene	11.359	91	87403	20.332	ug/l	98
76) 1,3,5-Trimethylbenzene	11.451	105	101121	20.514	ug/l	99
77) t-1,4-Dichloro-2-butene	11.018	75	10179	18.721	ug/l	80
78) 4-Chlorotoluene	11.451	91	94815	19.786	ug/l	98
79) tert-butylbenzene	11.713	119	100381	20.210	ug/l	97
80) 1,2,4-Trimethylbenzene	11.750	105	97734	19.793	ug/l	99
81) sec-Butylbenzene	11.890	105	125693	20.164	ug/l	99
82) p-Isopropyltoluene	12.006	119	100832	19.964	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	49719	19.427	ug/l	98
84) 1,4-Dichlorobenzene	12.042	146	48044	19.039	ug/l	99
85) n-Butylbenzene	12.329	91	89565	19.419	ug/l	99
86) Hexachloroethane	12.536	117	16666	18.710	ug/l	98
87) 1,2-Dichlorobenzene	12.335	146	49194	19.590	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.938	75	8326	21.886	ug/l	88
89) 1,2,4-Trichlorobenzene	13.585	180	28116	18.473	ug/l	98
90) Hexachlorobutadiene	13.725	225	12380	19.946	ug/l	99
91) Naphthalene	13.774	128	103348	19.257	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	29175	18.620	ug/l	99

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

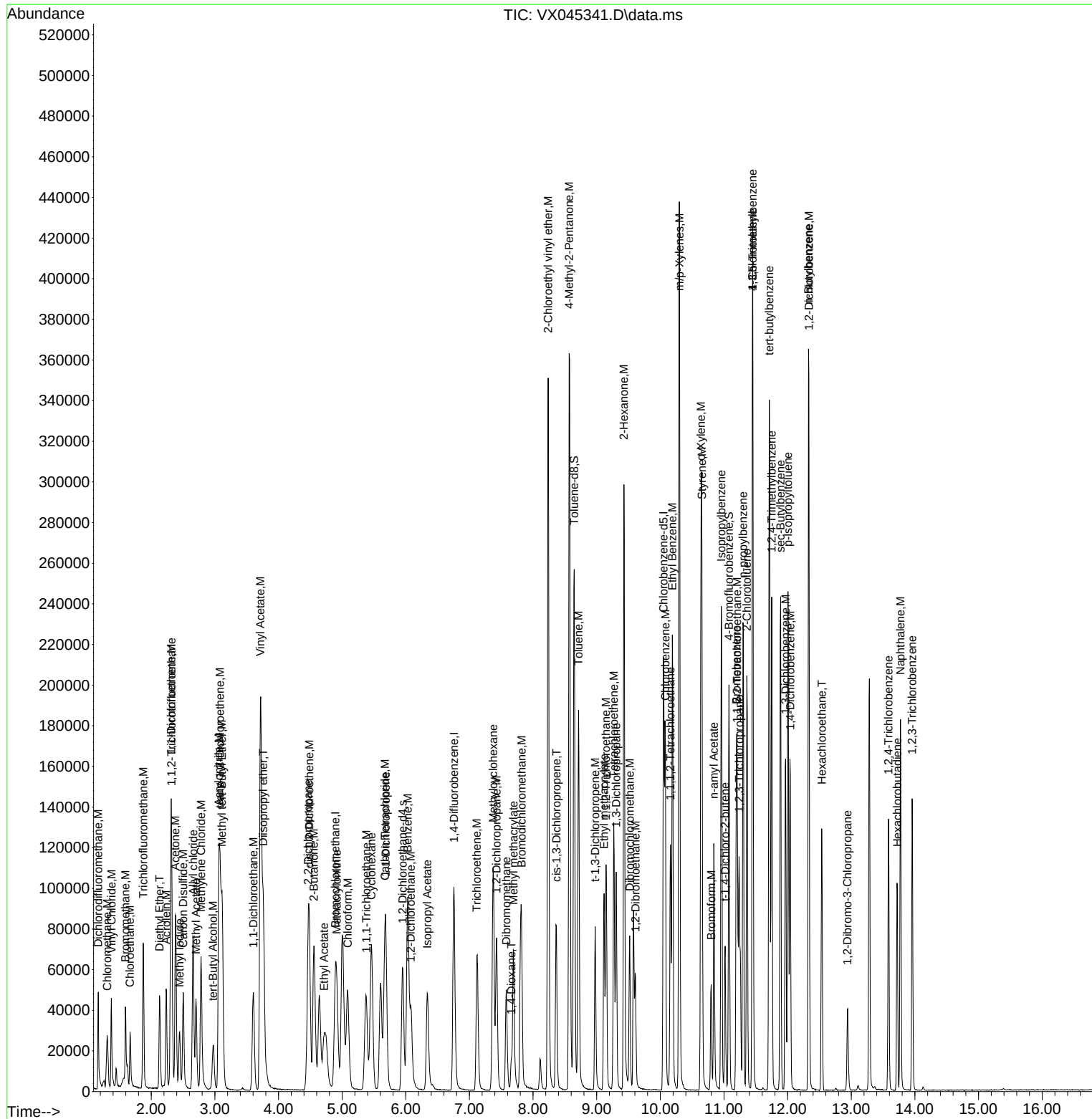
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
 Data File : VX045341.D
 Acq On : 19 Mar 2025 11:41
 Operator : JC/MD
 Sample : VX0319WBS01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

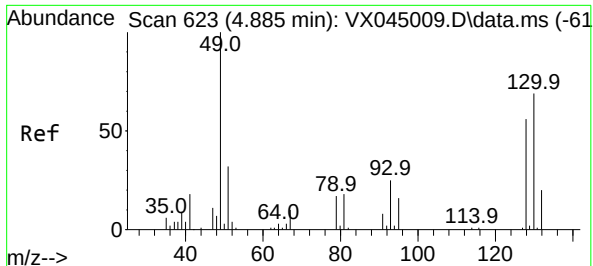
Instrument :
 MSVOA_X
 ClientSampleId :
 VX0319WBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/20/2025
 Supervised By : Mahesh Dadoda 03/20/2025

Quant Time: Mar 20 01:31:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration





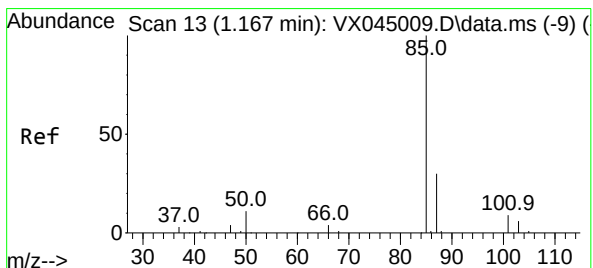
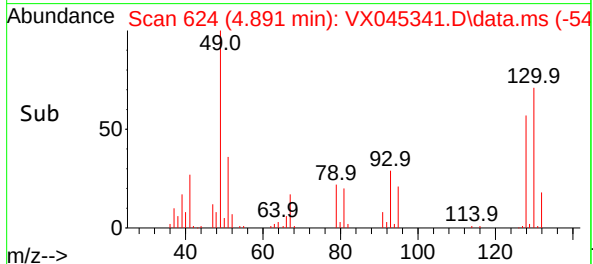
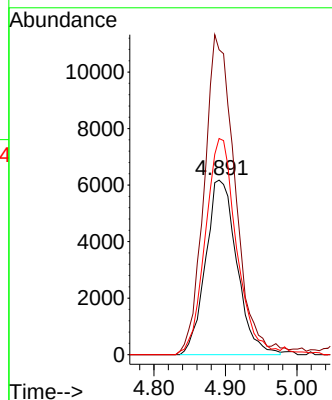
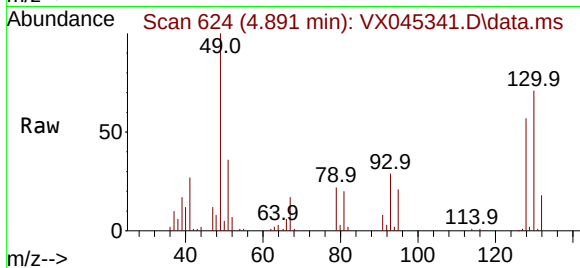
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.891 min Scan# 61
Delta R.T. 0.006 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion:128 Resp: 18710
Ion Ratio Lower Upper
128 100
49 178.7 0.0 449.7
130 124.0 0.0 312.7

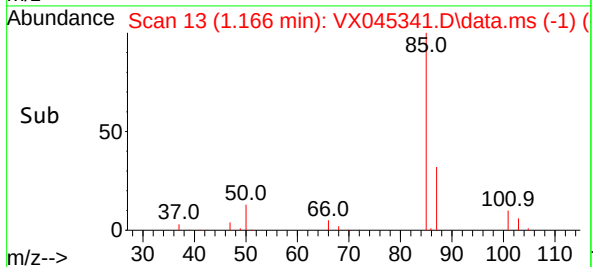
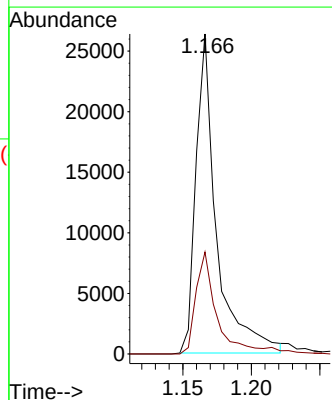
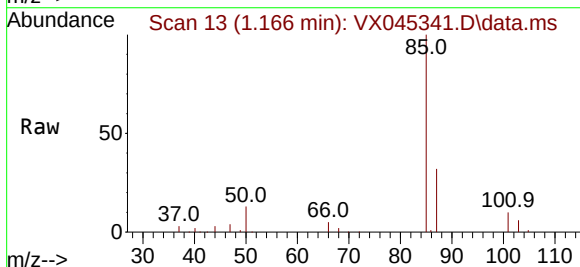
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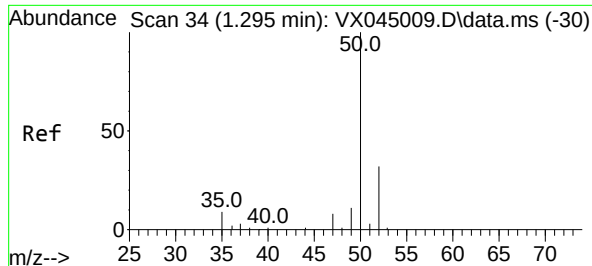
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#2
Dichlorodifluoromethane
Concen: 17.463 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 85 Resp: 27543
Ion Ratio Lower Upper
85 100
87 32.0 15.1 45.3





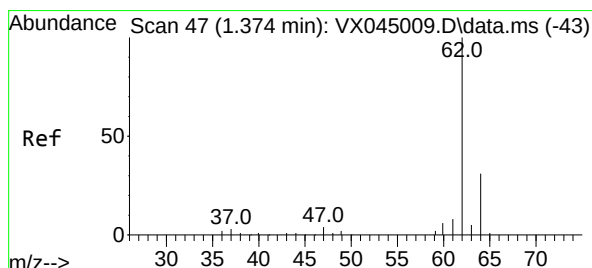
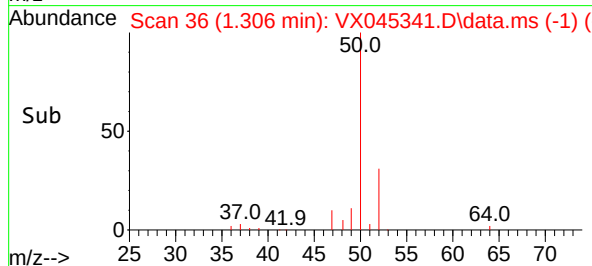
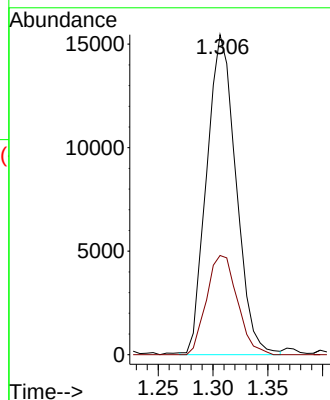
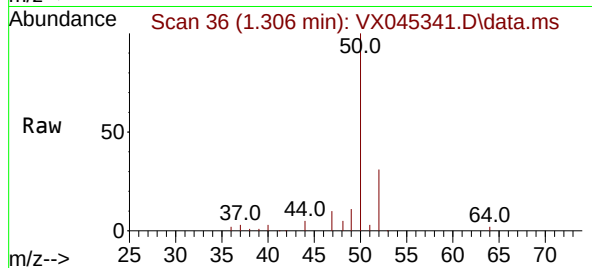
#3
Chloromethane
Concen: 15.238 ug/l
RT: 1.306 min Scan# 30
Delta R.T. 0.012 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion: 50 Resp: 2878
Ion Ratio Lower Upper
50 100
52 31.2 25.7 38.5

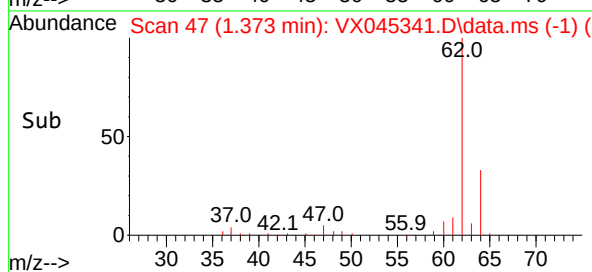
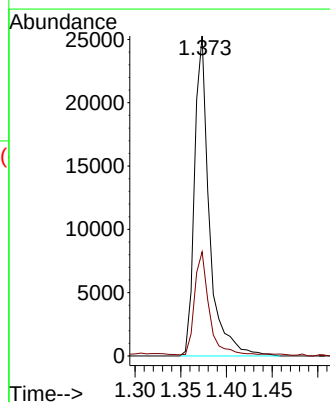
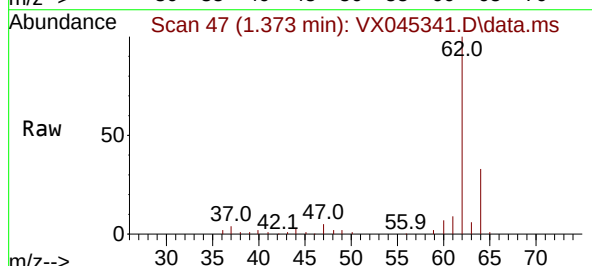
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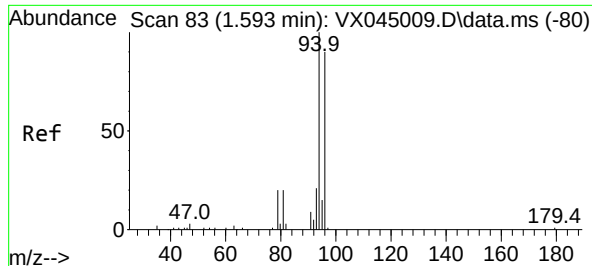
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#4
Vinyl Chloride
Concen: 15.672 ug/l
RT: 1.373 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 62 Resp: 28568
Ion Ratio Lower Upper
62 100
64 32.2 25.1 37.7





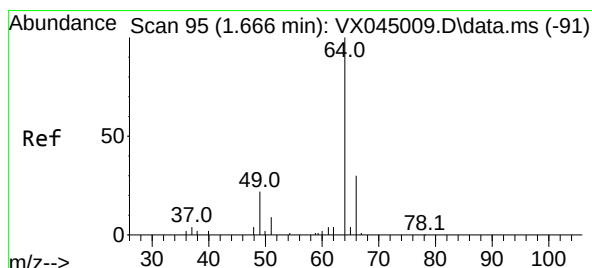
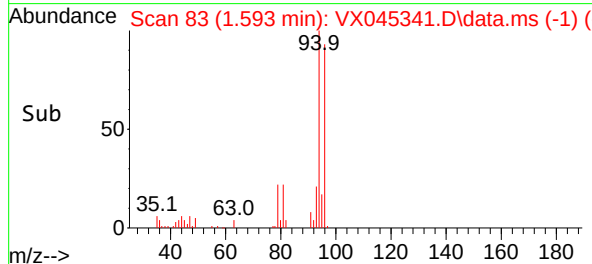
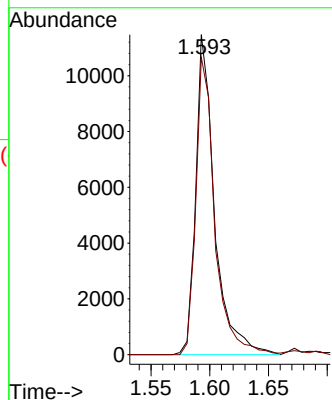
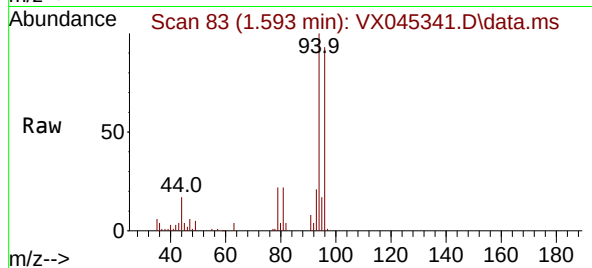
#5
Bromomethane
Concen: 20.147 ug/l
RT: 1.593 min Scan# 81
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion: 94 Resp: 12784
Ion Ratio Lower Upper
94 100
96 92.9 72.2 108.4

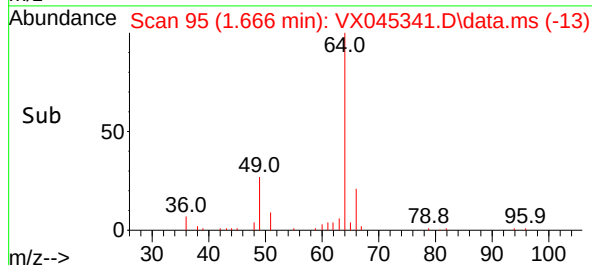
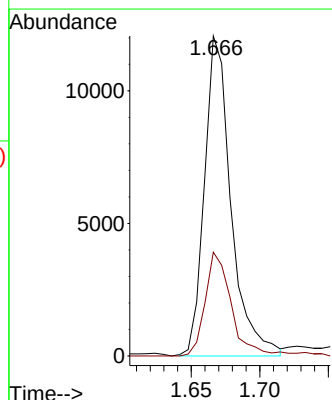
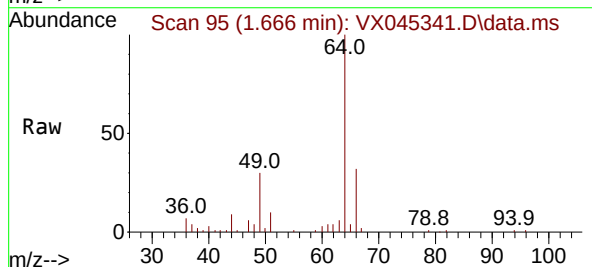
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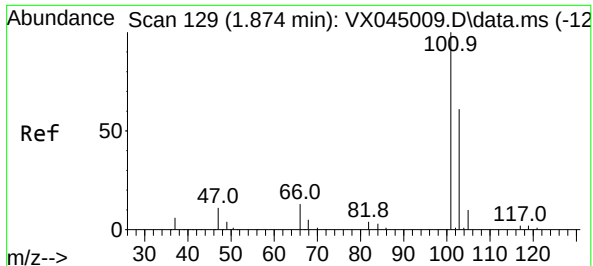
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#6
Chloroethane
Concen: 16.511 ug/l
RT: 1.666 min Scan# 95
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 64 Resp: 16301
Ion Ratio Lower Upper
64 100
66 32.6 23.7 35.5





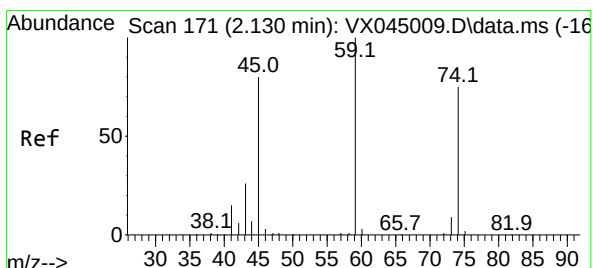
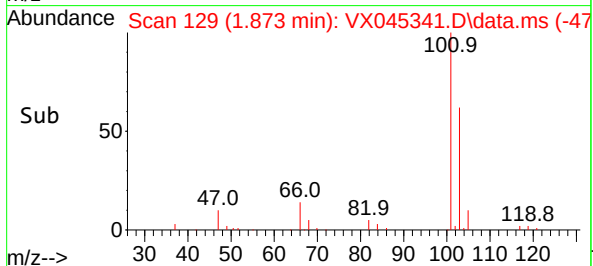
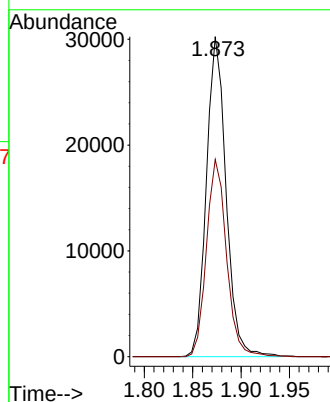
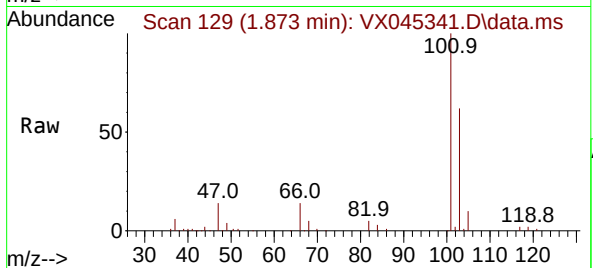
#7
Trichlorofluoromethane
Concen: 17.458 ug/l
RT: 1.873 min Scan# 101
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion:101 Resp: 42772
Ion Ratio Lower Upper
101 100
103 61.6 48.8 73.2

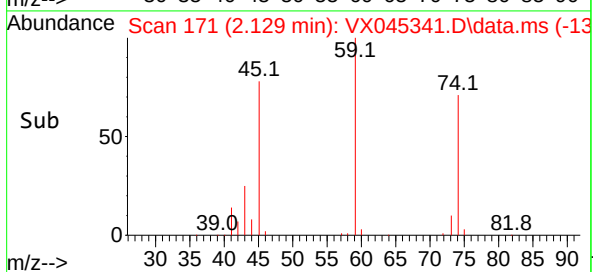
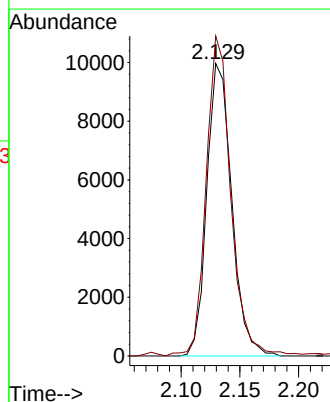
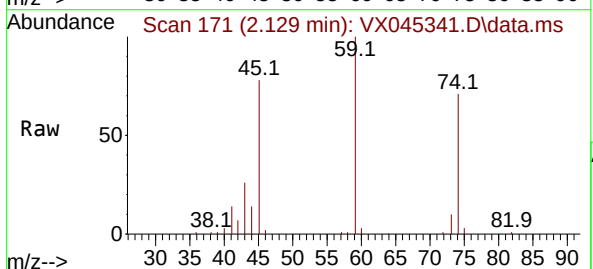
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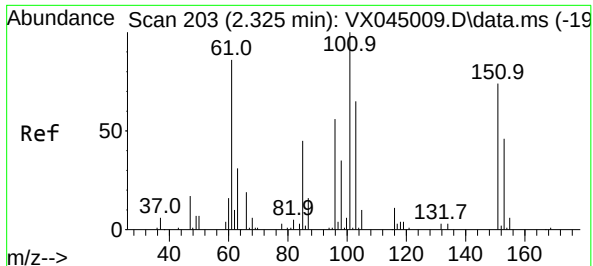
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#8
Diethyl Ether
Concen: 15.903 ug/l
RT: 2.129 min Scan# 171
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 74 Resp: 14742
Ion Ratio Lower Upper
74 100
45 105.7 20.8 186.8





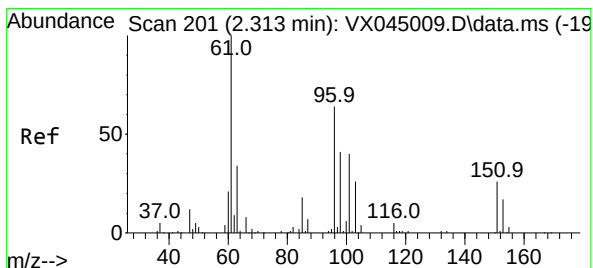
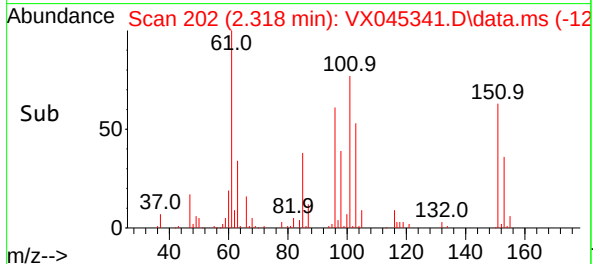
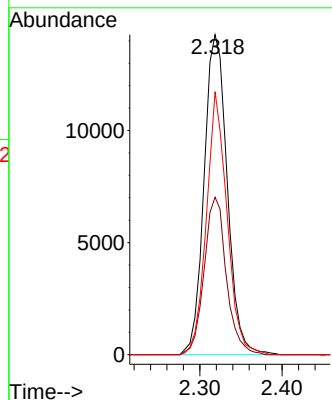
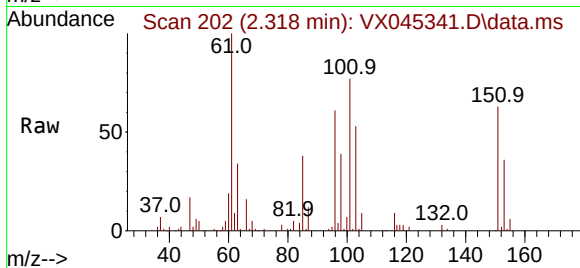
#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.199 ug/l
RT: 2.318 min Scan# 203
Delta R.T. -0.006 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion:101 Resp: 2793
Ion Ratio Lower Upper
101 100
85 47.3 0.0 90.6
151 73.5 0.0 147.6

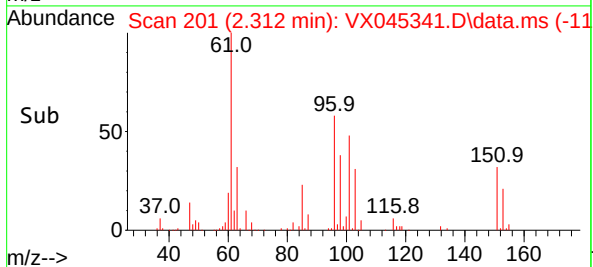
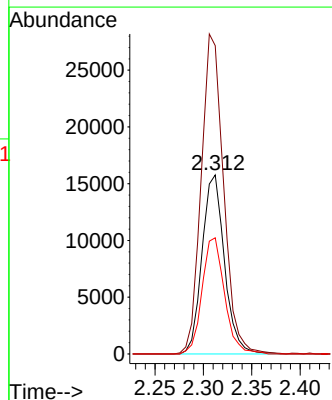
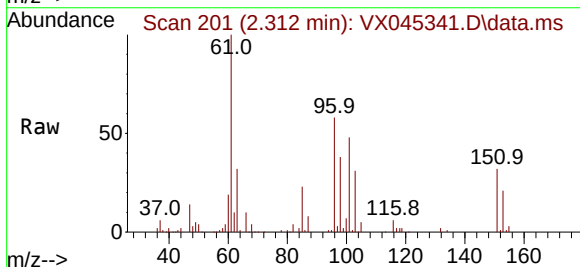
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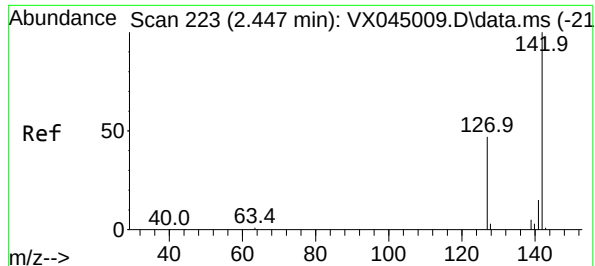
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#10
1,1-Dichloroethene
Concen: 17.911 ug/l
RT: 2.312 min Scan# 201
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 96 Resp: 25457
Ion Ratio Lower Upper
96 100
61 171.8 124.2 186.2
98 64.9 51.1 76.7





#11

Methyl Iodide

Concen: 19.309 ug/l

RT: 2.446 min Scan# 21

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion:142 Resp: 3106

Ion Ratio Lower Upper

142 100

127 46.8 23.3 69.9

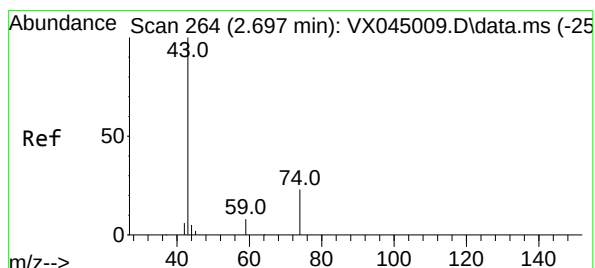
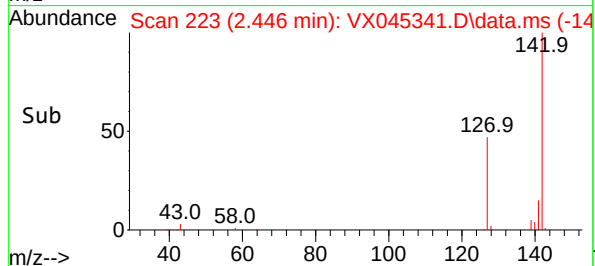
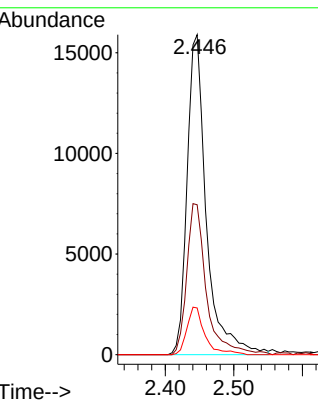
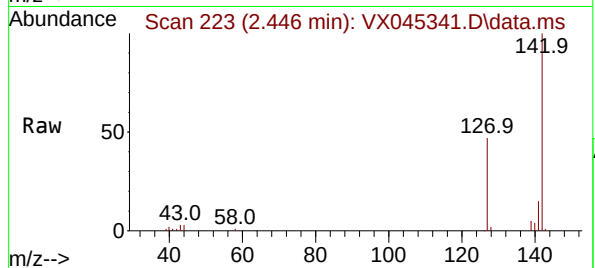
141 14.7 7.5 22.6

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Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#12

Methyl Acetate

Concen: 31.051 ug/l

RT: 2.702 min Scan# 265

Delta R.T. 0.006 min

Lab File: VX045341.D

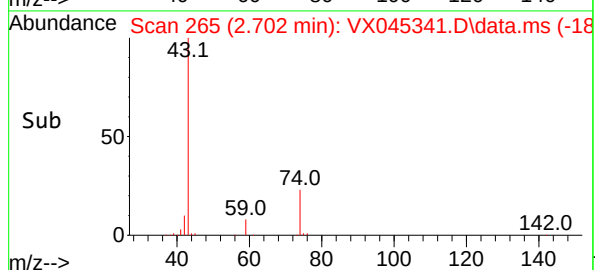
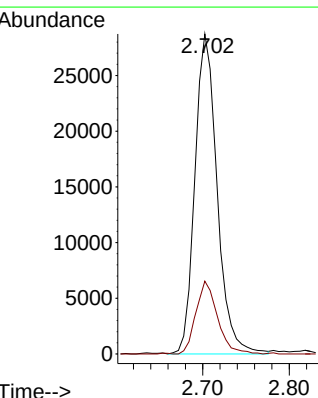
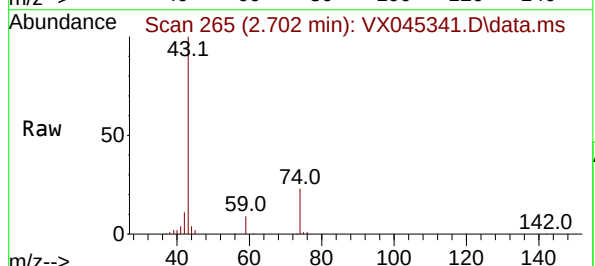
Acq: 19 Mar 2025 11:41

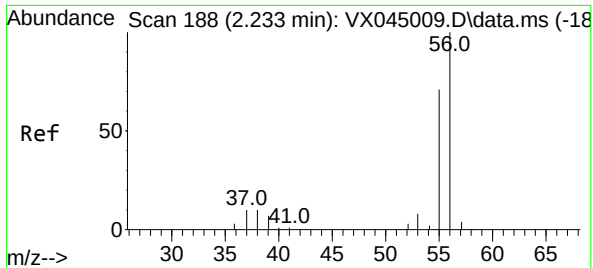
Tgt Ion: 43 Resp: 51249

Ion Ratio Lower Upper

43 100

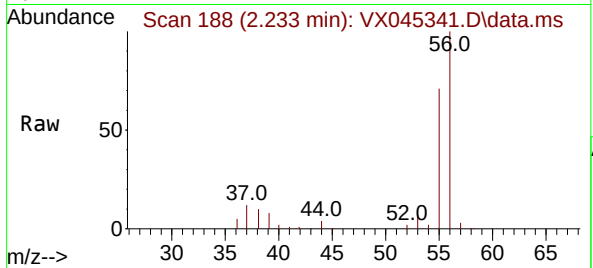
74 22.6 17.9 26.9





#13
Acrolein
Concen: 104.128 ug/l
RT: 2.233 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

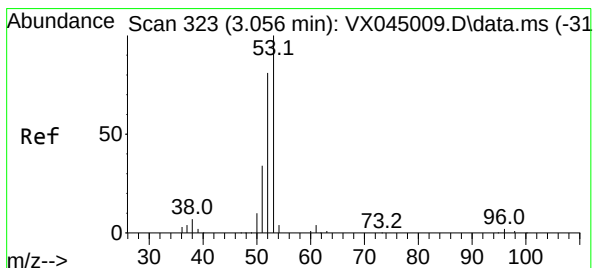
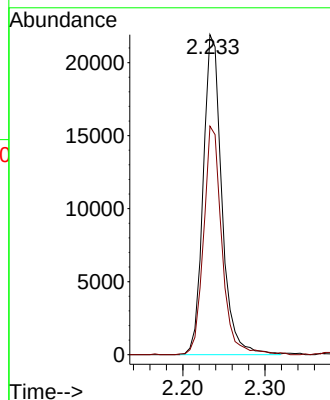
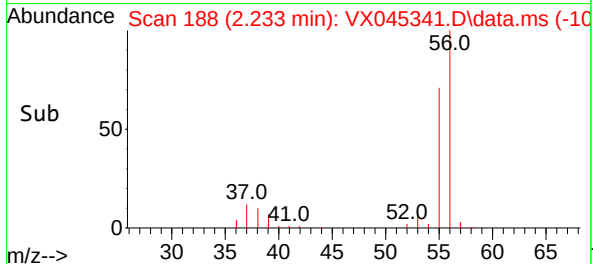
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01



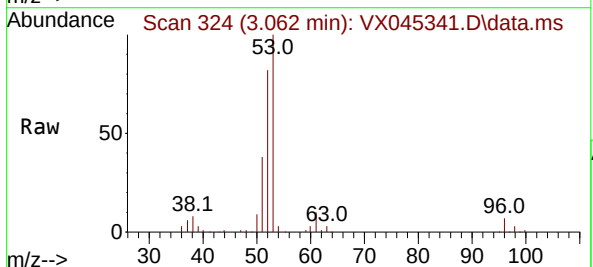
Tgt Ion: 56 Resp: 3444
Ion Ratio Lower Upper
56 100
55 70.0 55.4 83.2

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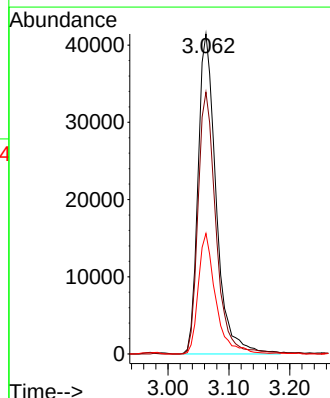
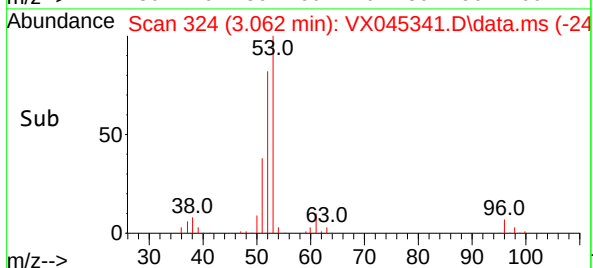
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

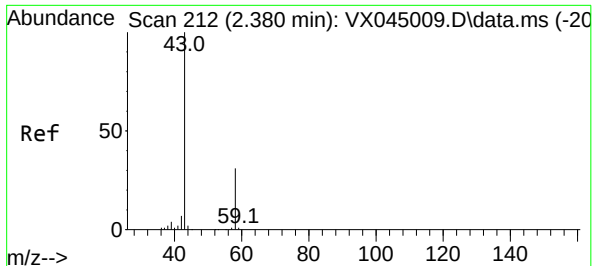


#14
Acrylonitrile
Concen: 106.065 ug/l
RT: 3.062 min Scan# 324
Delta R.T. 0.006 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41



Tgt Ion: 53 Resp: 85508
Ion Ratio Lower Upper
53 100
52 80.7 40.9 122.8
51 36.4 18.0 54.0





#15

Acetone

Concen: 123.020 ug/l

RT: 2.379 min Scan# 212

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 58 Resp: 27200

Ion Ratio Lower Upper

58 100

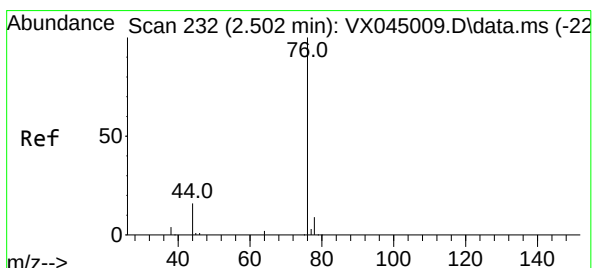
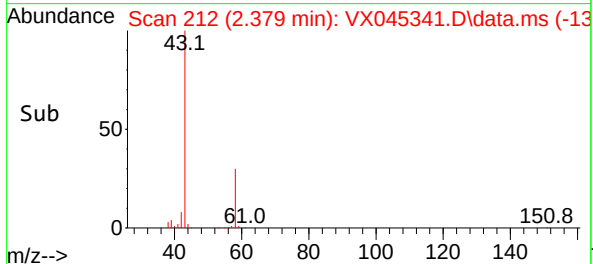
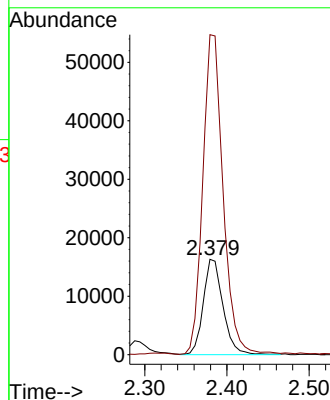
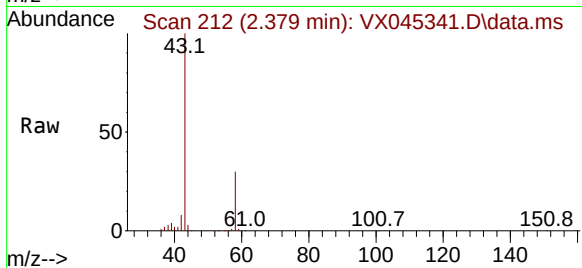
43 336.7 258.6 388.0

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Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#16

Carbon Disulfide

Concen: 14.646 ug/l

RT: 2.501 min Scan# 232

Delta R.T. -0.000 min

Lab File: VX045341.D

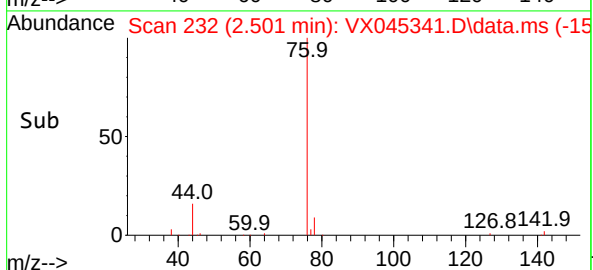
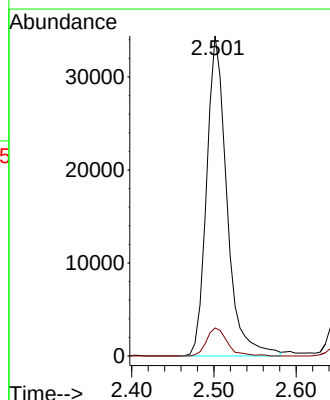
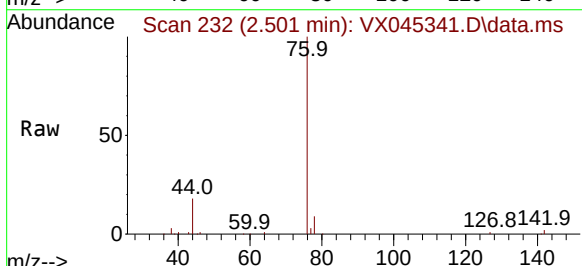
Acq: 19 Mar 2025 11:41

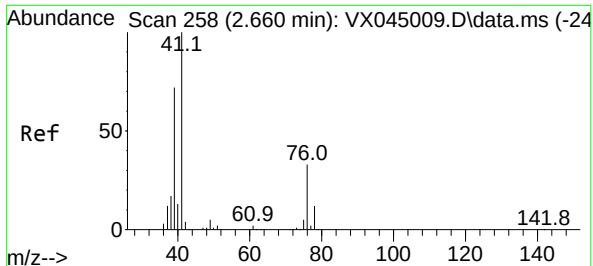
Tgt Ion: 76 Resp: 59047

Ion Ratio Lower Upper

76 100

78 8.8 7.3 10.9





#17

Allyl chloride

Concen: 18.424 ug/l

RT: 2.660 min Scan# 258

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

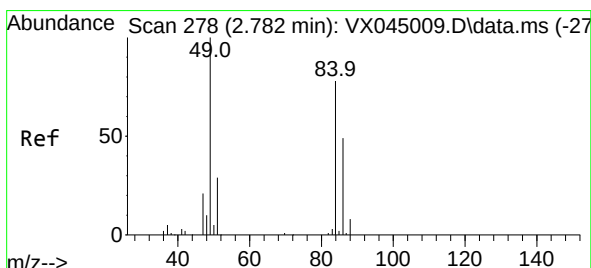
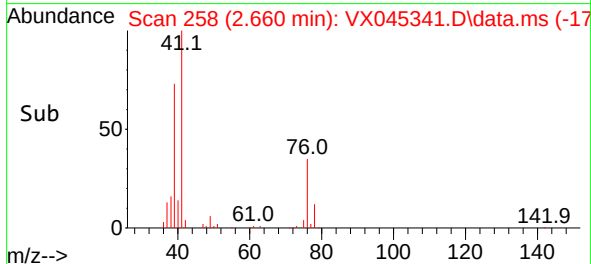
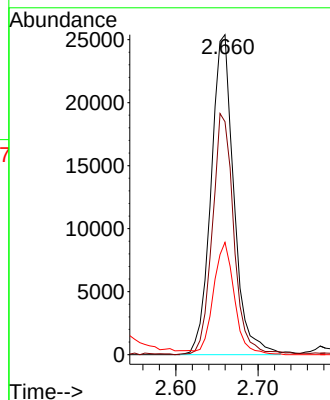
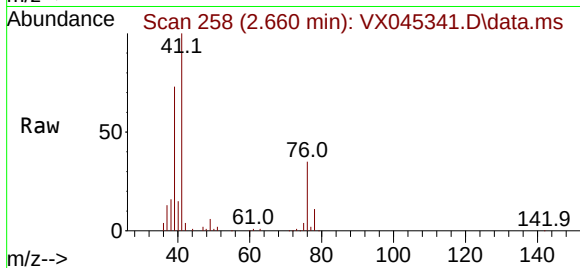
VX0319WBS01

Tgt Ion: 41	Resp: 48978
Ion Ratio	Lower Upper
41	100
39	72.6 36.2 108.6
76	34.8 17.2 51.5

Manual Integrations
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#18

Methylene Chloride

Concen: 18.355 ug/l

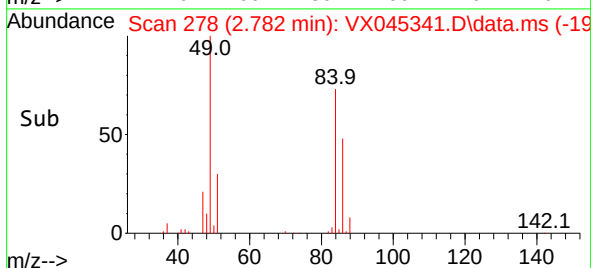
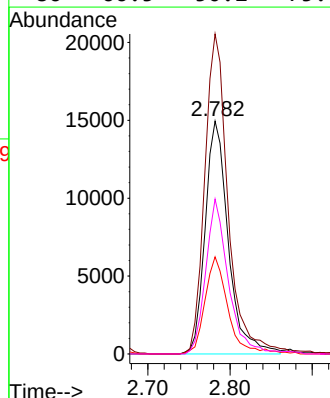
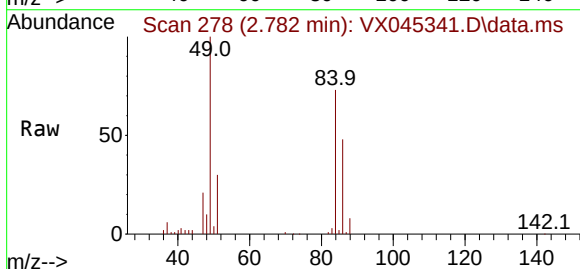
RT: 2.782 min Scan# 278

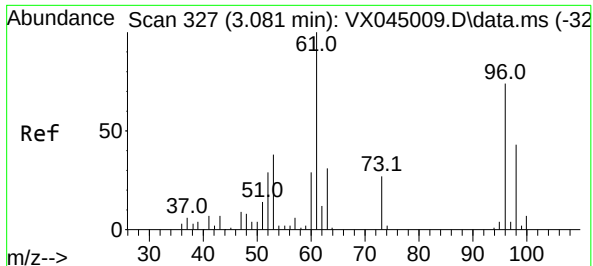
Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion: 84	Resp: 29343
Ion Ratio	Lower Upper
84	100
49	137.4 102.8 154.2
51	41.7 30.1 45.1
86	66.5 50.2 75.4





#19

trans-1,2-Dichloroethene

Concen: 17.507 ug/l

RT: 3.080 min Scan# 31

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 96 Resp: 25174

Ion Ratio Lower Upper

96 100

61 150.9 108.6 163.0

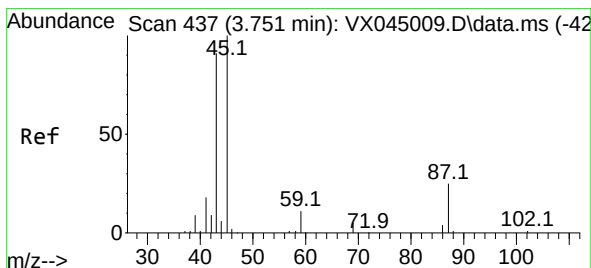
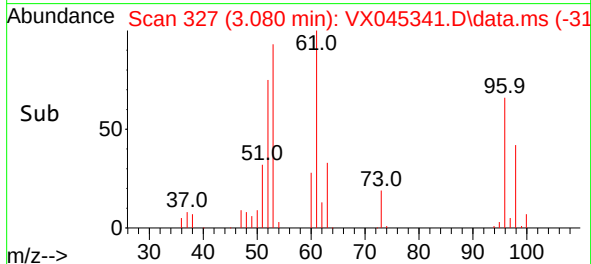
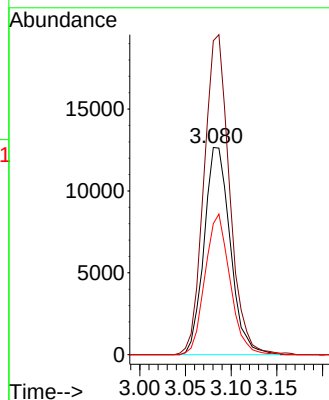
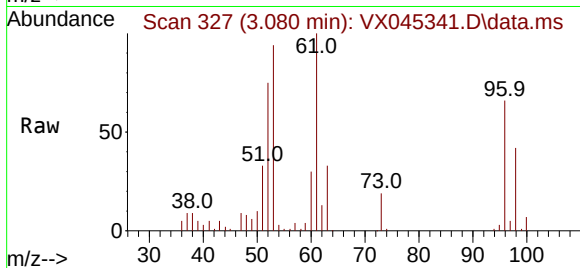
98 63.3 46.5 69.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#20

Diisopropyl ether

Concen: 18.769 ug/l

RT: 3.757 min Scan# 438

Delta R.T. 0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion: 45 Resp: 95879

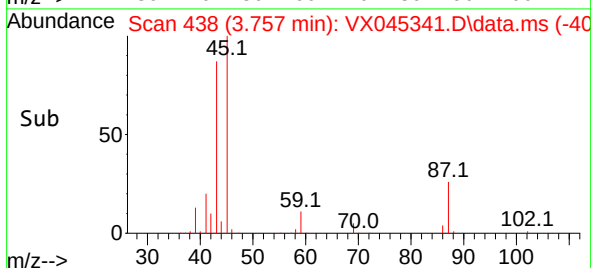
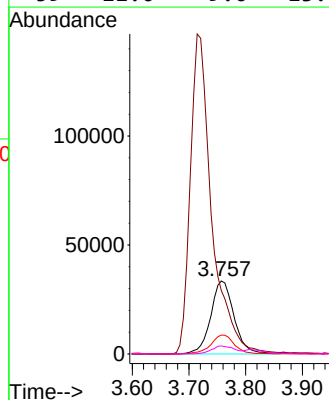
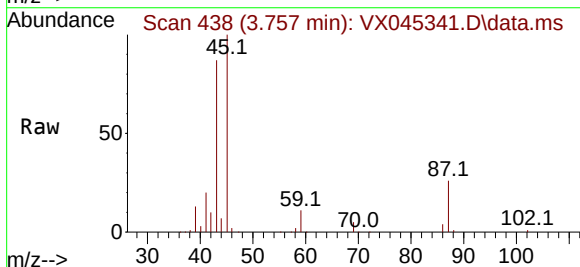
Ion Ratio Lower Upper

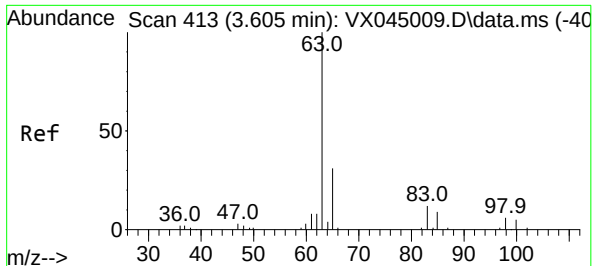
45 100

43 85.1 74.4 111.6

87 25.8 19.8 29.8

59 11.0 9.0 13.4





#21

1,1-Dichloroethane

Concen: 18.840 ug/l

RT: 3.605 min Scan# 41

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion: 63 Resp: 53520

Ion Ratio Lower Upper

63 100

98 6.2 3.3 9.8

100 4.2 2.4 7.1

Instrument :

MSVOA_X

ClientSampleId :

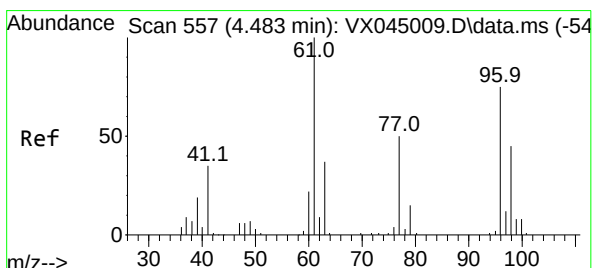
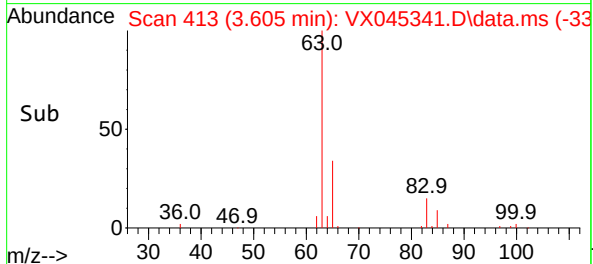
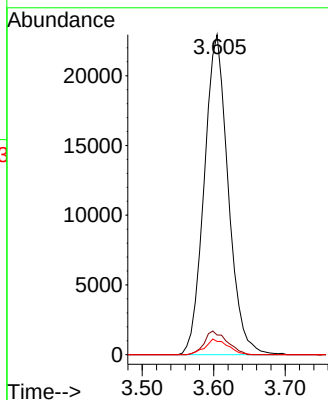
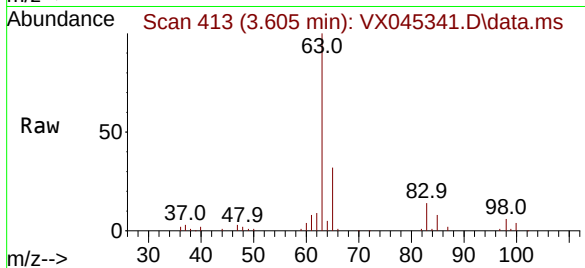
VX0319WBS01

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#22

cis-1,2-Dichloroethene

Concen: 18.305 ug/l

RT: 4.483 min Scan# 557

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

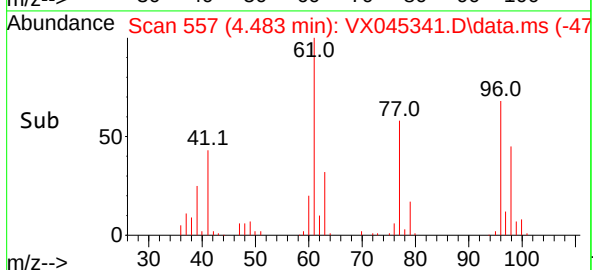
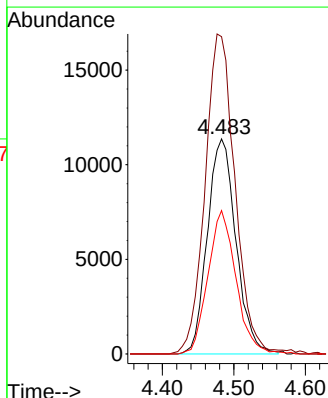
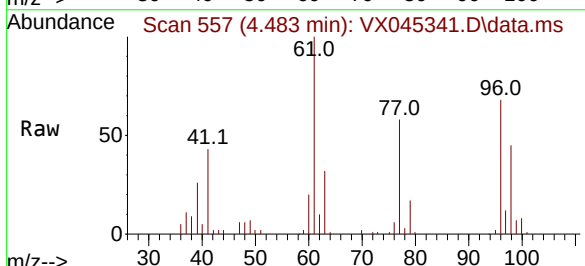
Tgt Ion: 96 Resp: 31543

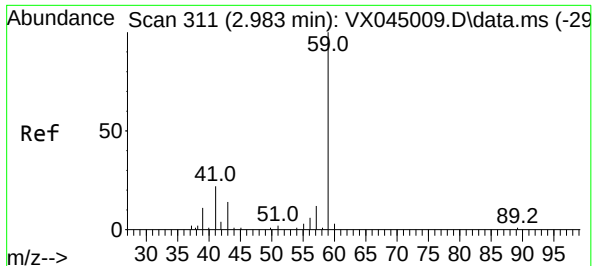
Ion Ratio Lower Upper

96 100

61 154.9 118.9 178.3

98 64.9 50.7 76.1





#23

tert-Butyl Alcohol

Concen: 87.702 ug/l

RT: 2.971 min Scan# 309

Delta R.T. -0.013 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 59 Resp: 2468

Ion Ratio Lower Upper

59 100

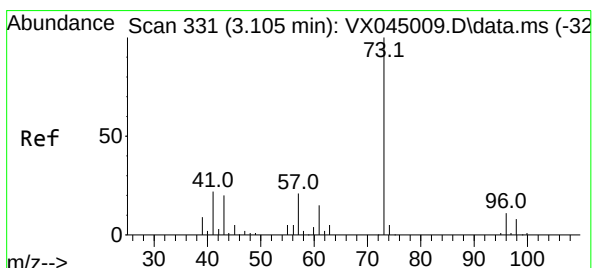
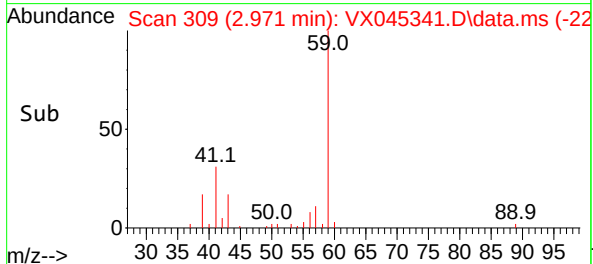
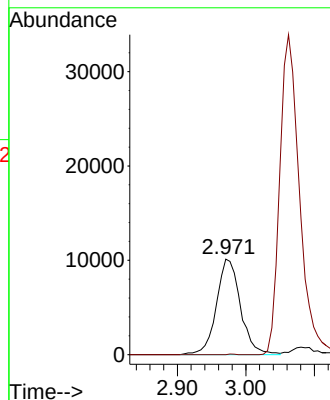
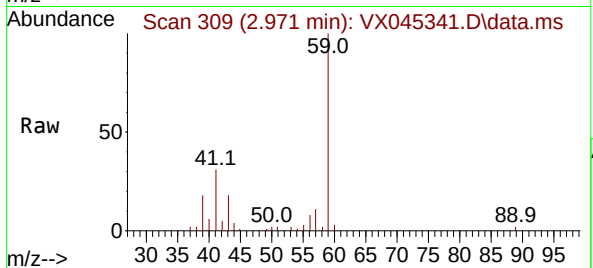
52 0.2 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#24

Methyl tert-Butyl Ether

Concen: 19.104 ug/l

RT: 3.111 min Scan# 332

Delta R.T. 0.006 min

Lab File: VX045341.D

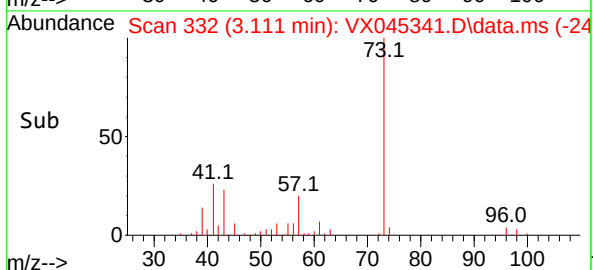
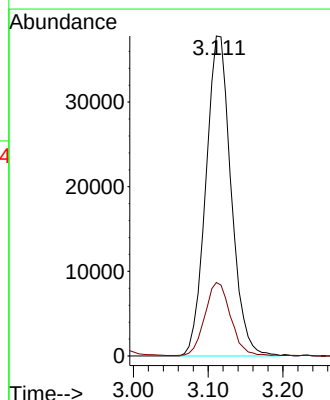
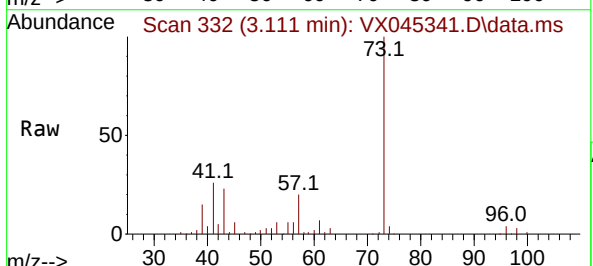
Acq: 19 Mar 2025 11:41

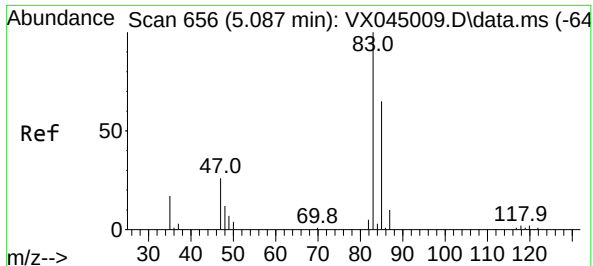
Tgt Ion: 73 Resp: 88622

Ion Ratio Lower Upper

73 100

43 23.7 17.4 26.0





#25

Chloroform

Concen: 19.609 ug/l

RT: 5.086 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 83 Resp: 53809

Ion Ratio Lower Upper

83 100

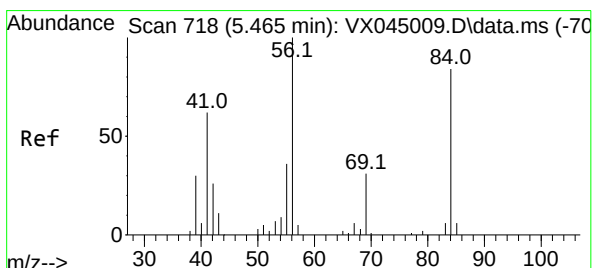
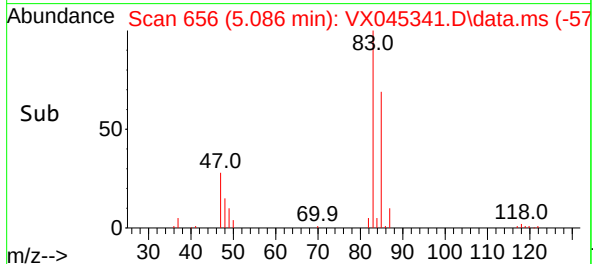
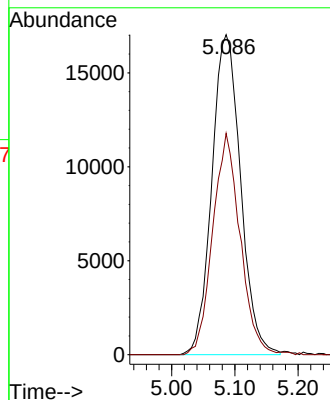
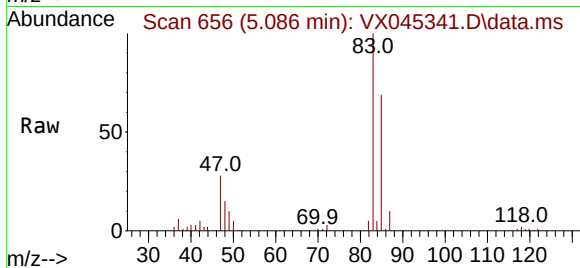
85 69.1 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#26

Cyclohexane

Concen: 18.105 ug/l

RT: 5.458 min Scan# 717

Delta R.T. -0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

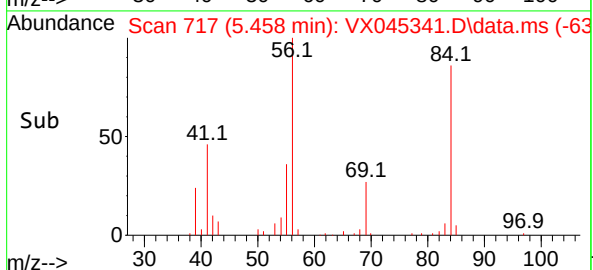
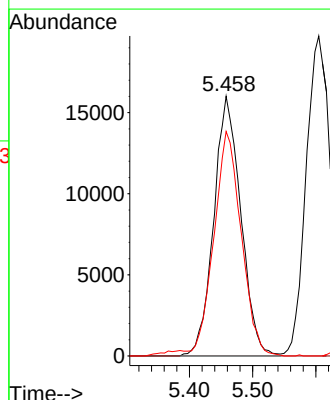
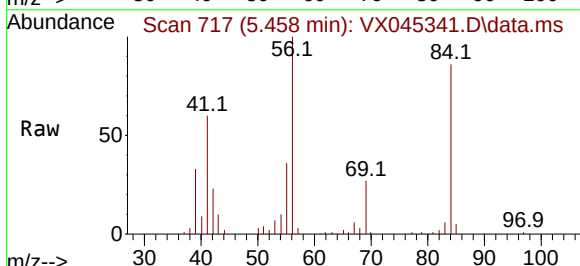
Tgt Ion: 56 Resp: 47478

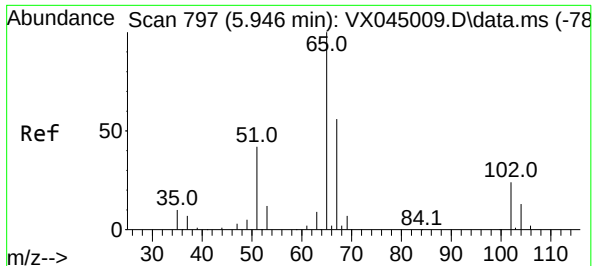
Ion Ratio Lower Upper

56 100

89 0.0 0.0 0.0

84 87.3 67.1 100.7





#27

1,2-Dichloroethane-d4

Concen: 31.965 ug/l

RT: 5.952 min Scan# 79

Delta R.T. 0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 65 Resp: 5808

Ion Ratio Lower Upper

65 100

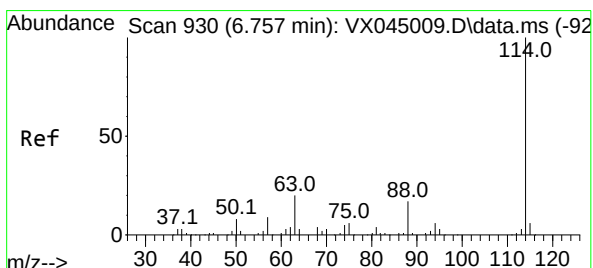
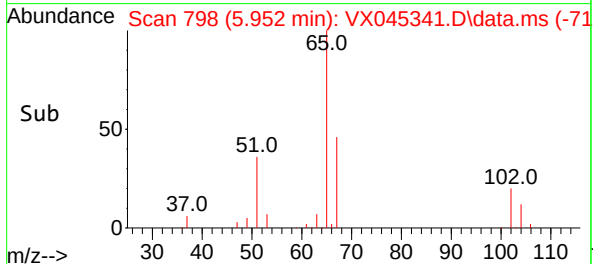
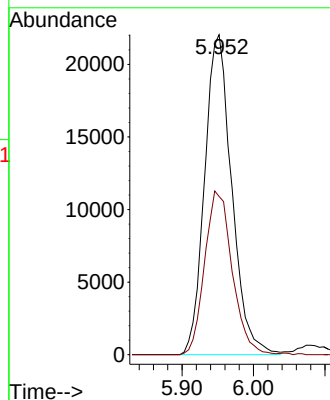
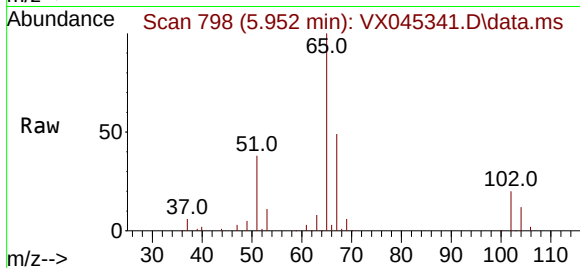
67 51.9 42.6 64.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.757 min Scan# 930

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

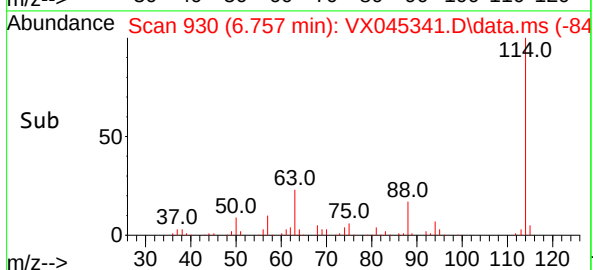
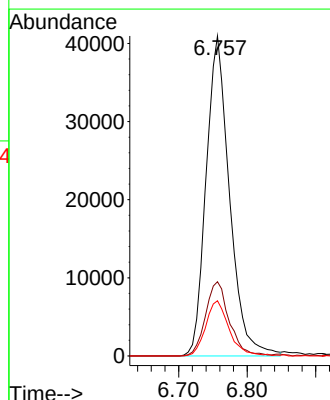
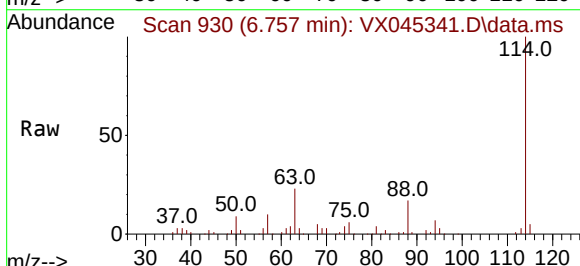
Tgt Ion:114 Resp: 97348

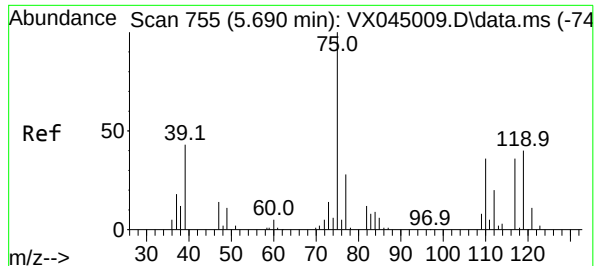
Ion Ratio Lower Upper

114 100

63 23.1 16.8 25.2

88 17.1 12.7 19.1





#29

1,1-Dichloropropene

Concen: 19.829 ug/l

RT: 5.684 min Scan# 754

Delta R.T. -0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 75 Resp: 35508

Ion Ratio Lower Upper

75 100

110 33.4 0.0 69.2

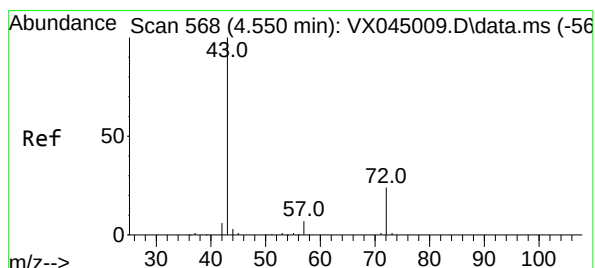
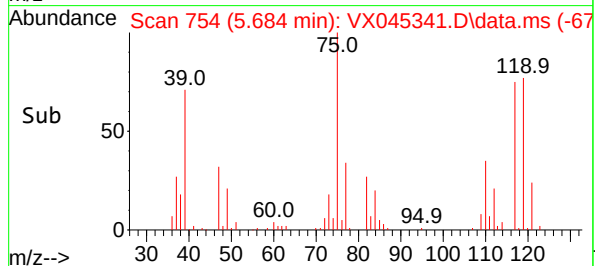
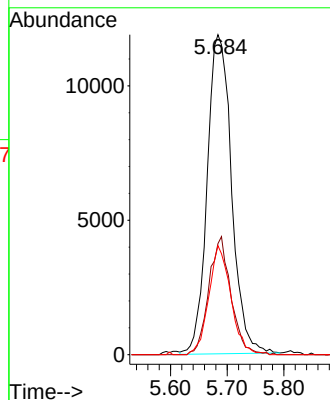
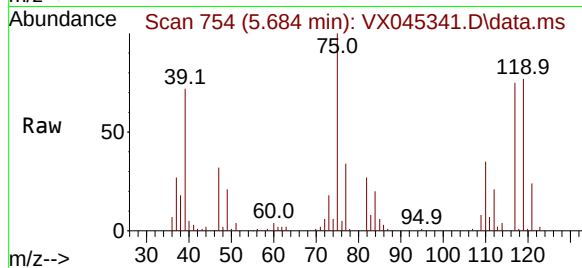
77 30.8 0.0 61.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#30

2-Butanone

Concen: 120.592 ug/l

RT: 4.556 min Scan# 569

Delta R.T. 0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

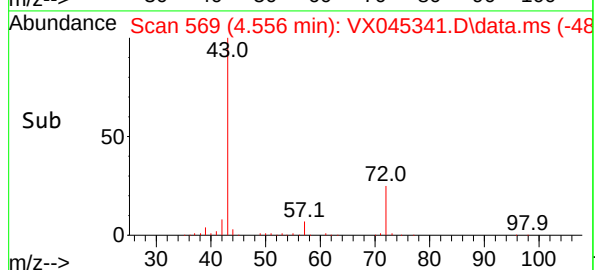
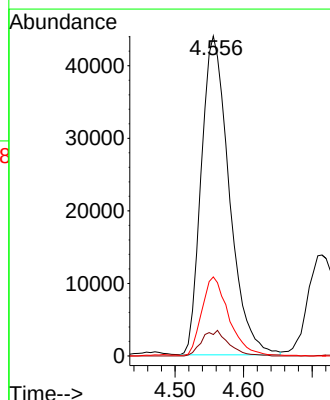
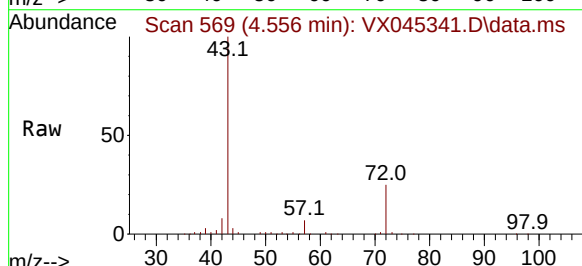
Tgt Ion: 43 Resp: 124731

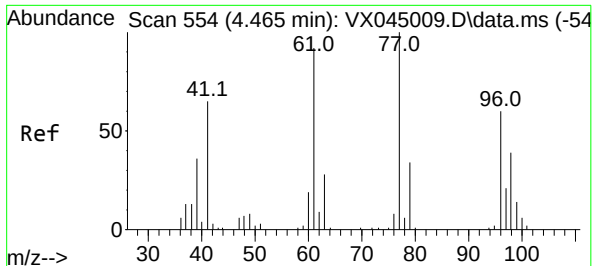
Ion Ratio Lower Upper

43 100

57 3.7 6.2 9.2#

72 24.1 20.2 30.2





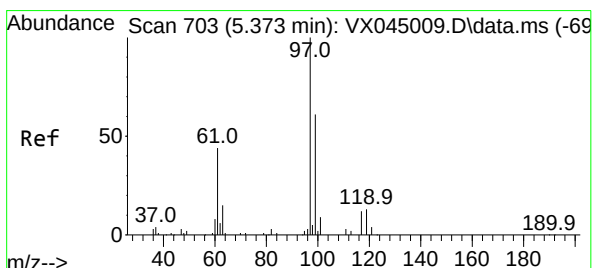
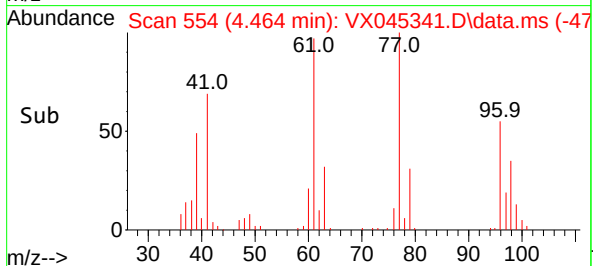
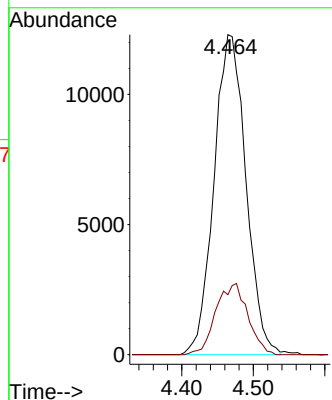
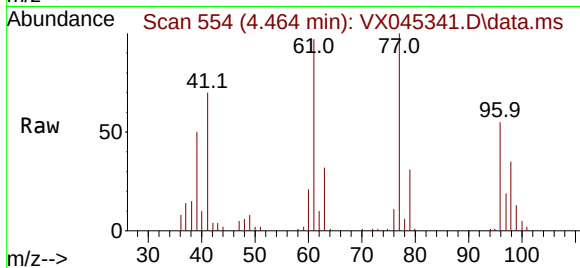
#31
2,2-Dichloropropane
Concen: 18.821 ug/l
RT: 4.464 min Scan# 51
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion: 77 Resp: 38109
Ion Ratio Lower Upper
77 100
97 22.3 18.0 27.0

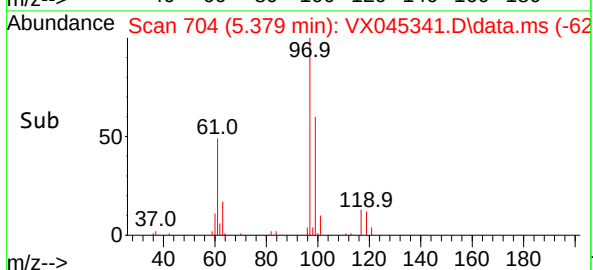
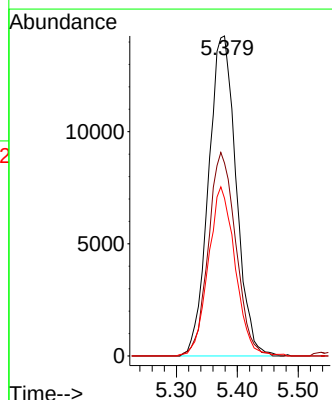
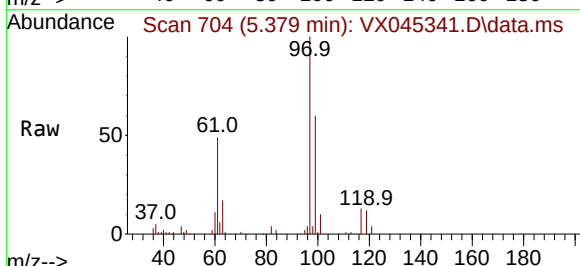
Manual Integrations
APPROVED

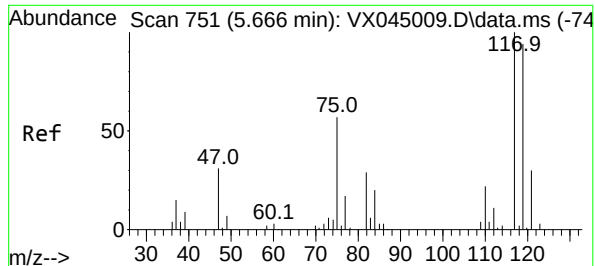
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#32
1,1,1-Trichloroethane
Concen: 20.753 ug/l
RT: 5.379 min Scan# 704
Delta R.T. 0.006 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 97 Resp: 45029
Ion Ratio Lower Upper
97 100
99 63.0 52.2 78.2
61 51.4 38.5 57.7





#33

Carbon Tetrachloride

Concen: 20.397 ug/l

RT: 5.671 min Scan# 751

Delta R.T. 0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion:117 Resp: 37350

Ion Ratio Lower Upper

117 100

119 94.1 75.1 112.7

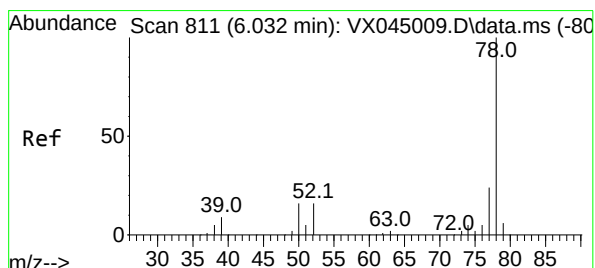
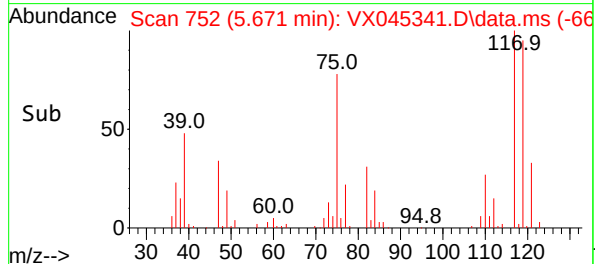
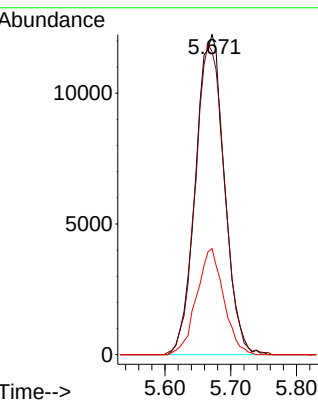
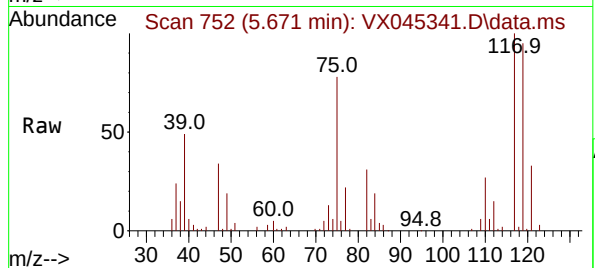
121 33.1 23.9 35.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#34

Benzene

Concen: 19.815 ug/l

RT: 6.031 min Scan# 811

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

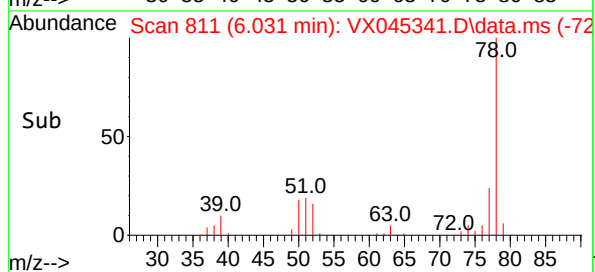
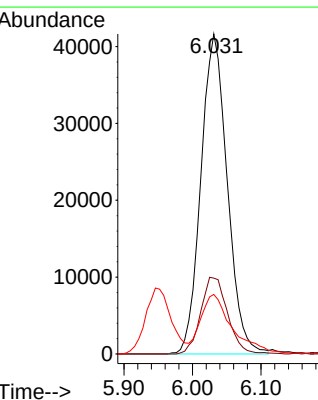
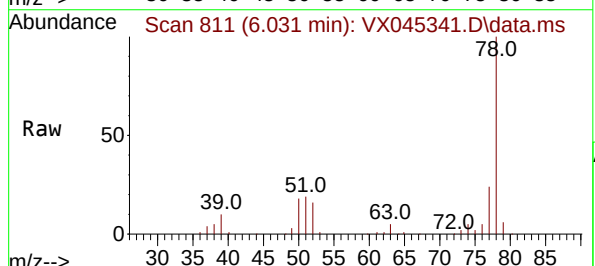
Tgt Ion: 78 Resp: 111274

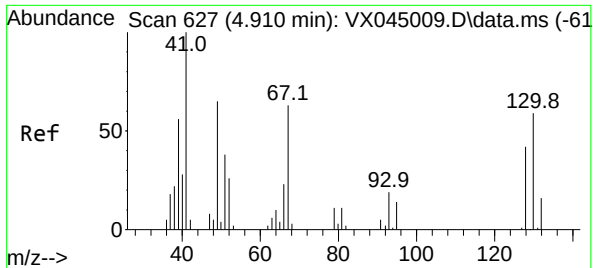
Ion Ratio Lower Upper

78 100

77 23.7 19.6 29.4

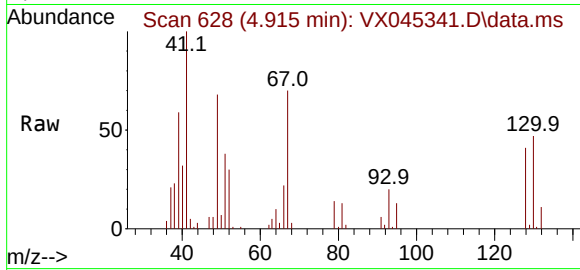
51 17.4 13.8 20.6





#35
Methacrylonitrile
Concen: 22.314 ug/l
RT: 4.915 min Scan# 61
Delta R.T. 0.006 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

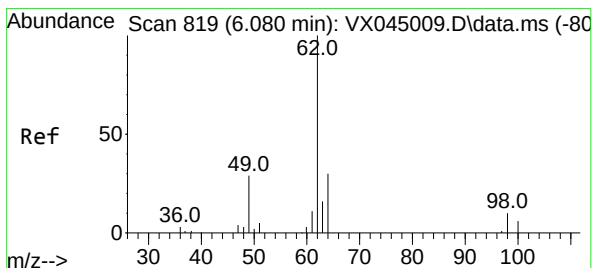
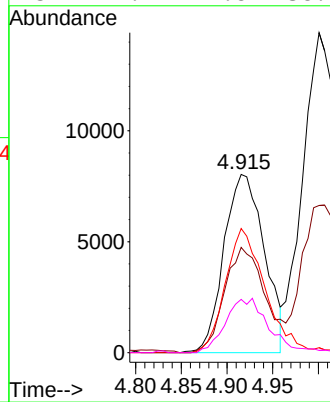
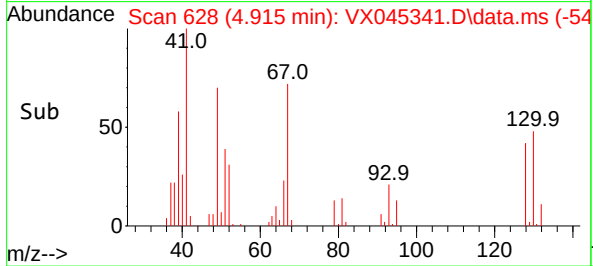
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01



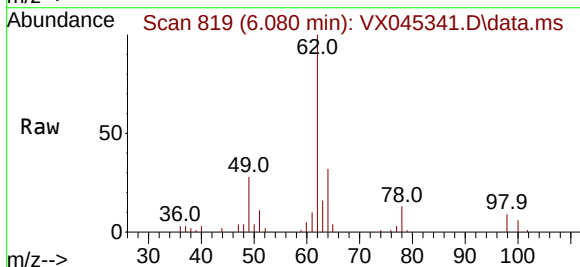
Tgt Ion: 41 Resp: 24698
Ion Ratio Lower Upper
41 100
39 59.0 27.8 83.4
67 69.6 31.5 94.5
52 29.9 12.8 38.4

Manual Integrations
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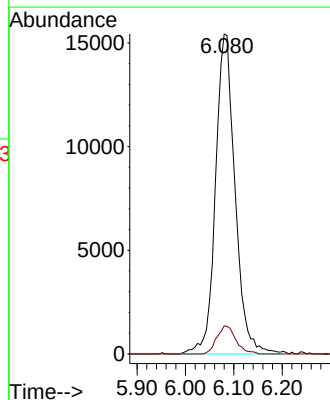
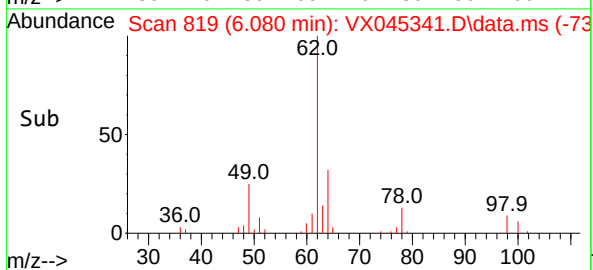
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

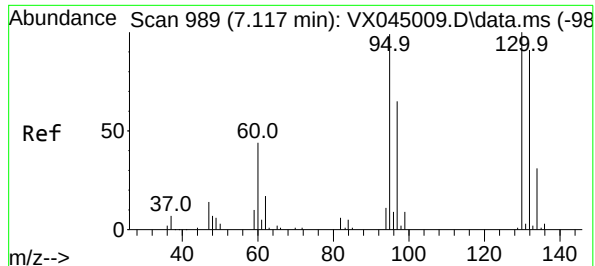


#36
1,2-Dichloroethane
Concen: 22.525 ug/l
RT: 6.080 min Scan# 819
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41



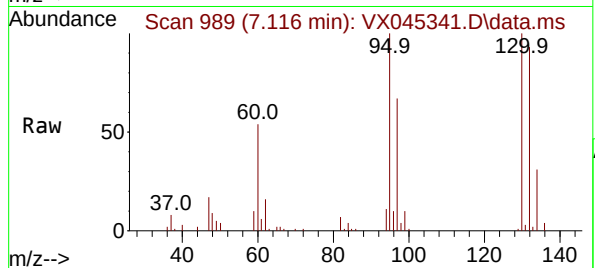
Tgt Ion: 62 Resp: 43307
Ion Ratio Lower Upper
62 100
98 8.6 7.9 11.9





#37
Trichloroethene
Concen: 19.308 ug/l
RT: 7.116 min Scan# 989
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

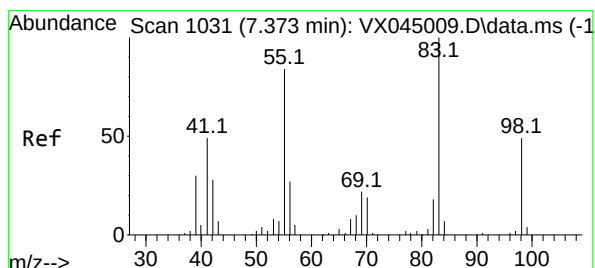
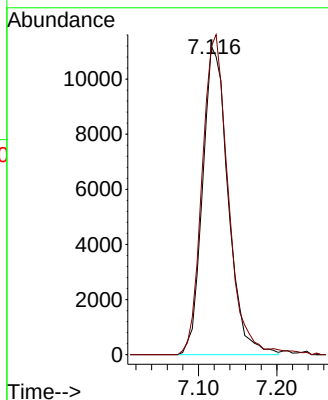
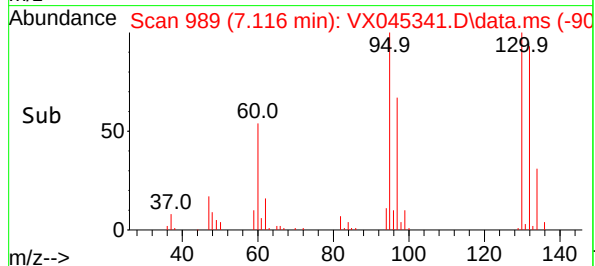
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01



Tgt Ion:130 Resp: 2536
Ion Ratio Lower Upper
130 100
95 99.8 79.0 118.4

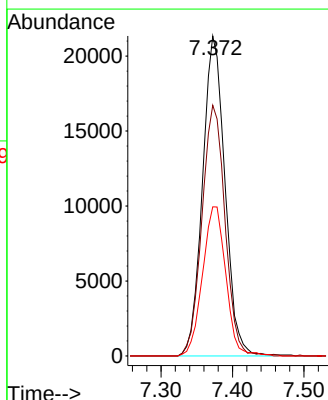
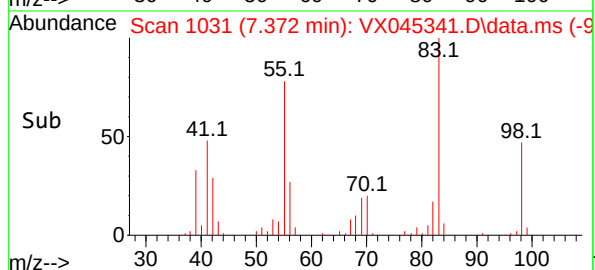
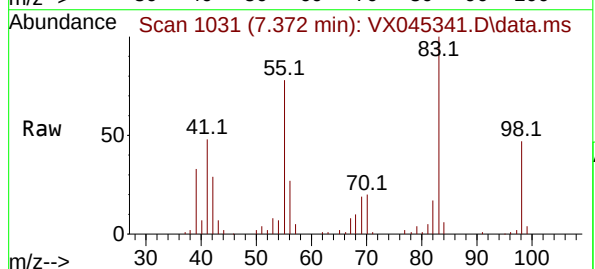
Manual Integrations
APPROVED

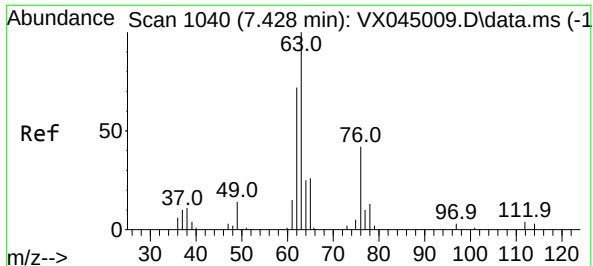
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#38
Methylcyclohexane
Concen: 19.359 ug/l
RT: 7.372 min Scan# 1031
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 83 Resp: 46548
Ion Ratio Lower Upper
83 100
55 80.5 40.6 122.0
98 48.0 24.9 74.6





#39

1,2-Dichloropropane

Concen: 19.339 ug/l

RT: 7.427 min Scan# 1040

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 63 Resp: 27000

Ion Ratio Lower Upper

63 100

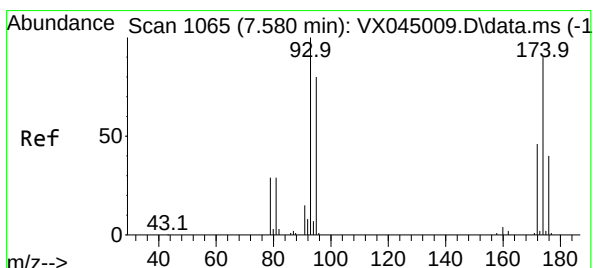
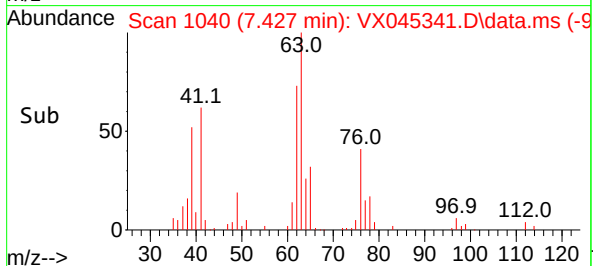
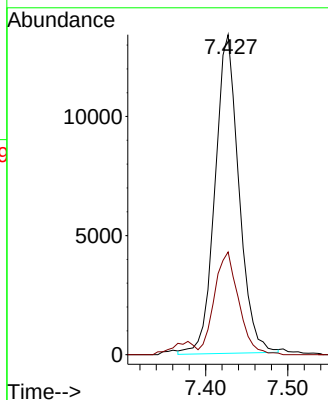
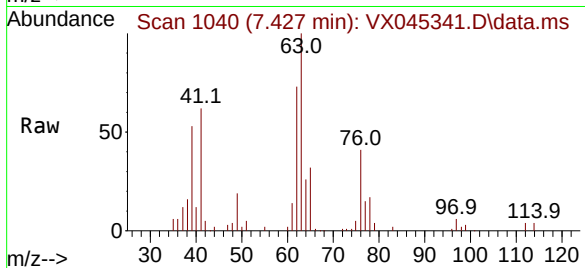
65 32.0 24.3 36.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#40

Dibromomethane

Concen: 20.968 ug/l

RT: 7.580 min Scan# 1065

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

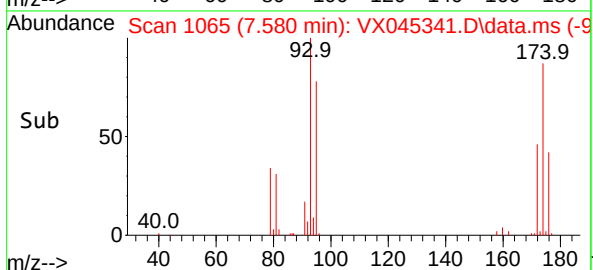
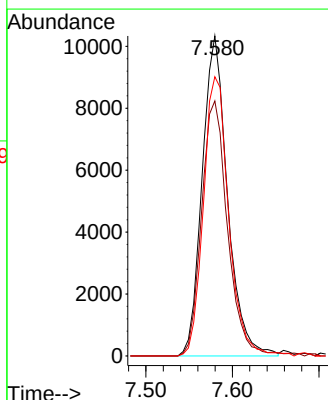
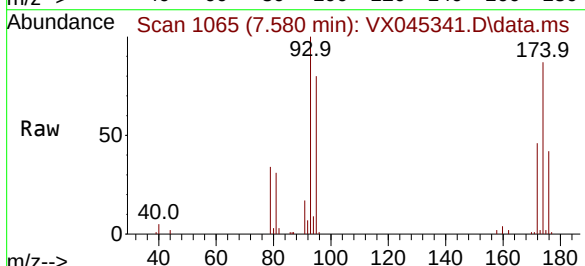
Tgt Ion: 93 Resp: 21007

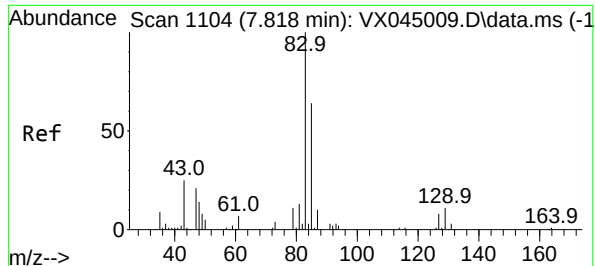
Ion Ratio Lower Upper

93 100

95 81.1 0.0 162.6

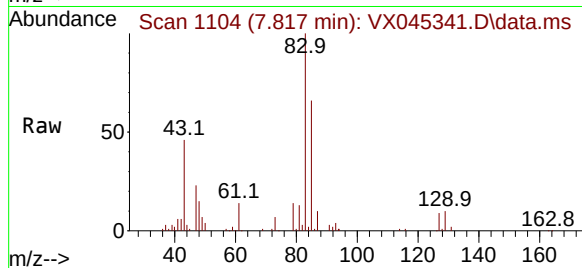
174 86.9 0.0 178.8





#41
Bromodichloromethane
Concen: 20.781 ug/l
RT: 7.817 min Scan# 1104
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

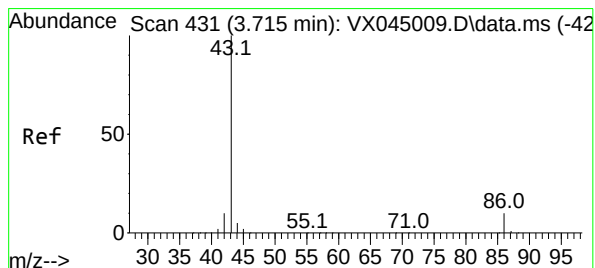
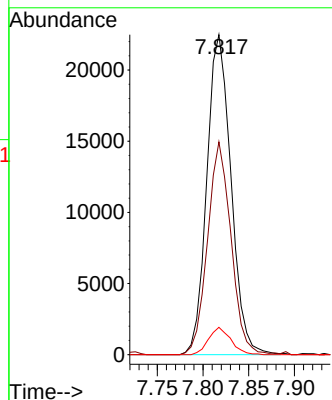
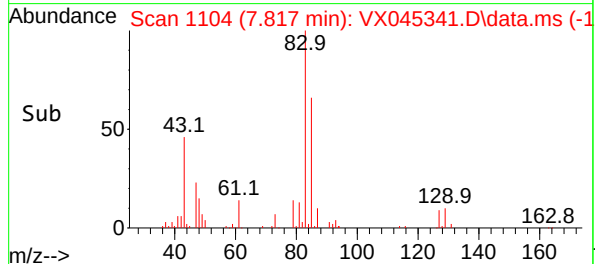
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01



Tgt Ion: 83 Resp: 41380
Ion Ratio Lower Upper
83 100
85 66.5 51.0 76.6
127 8.6 6.1 9.1

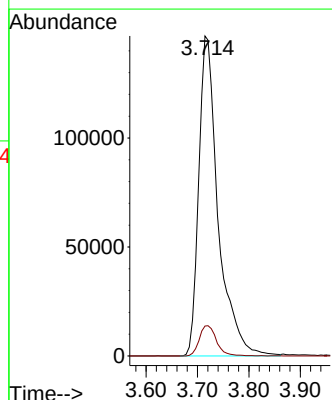
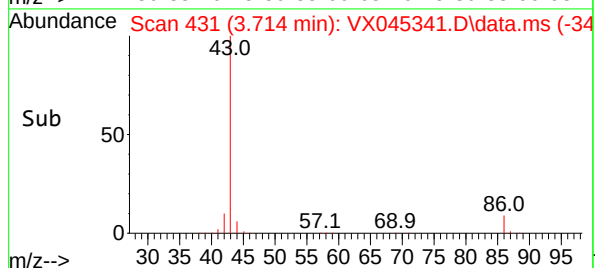
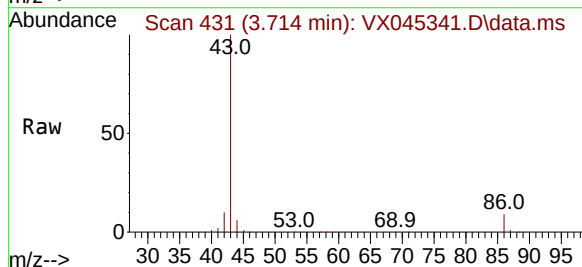
Manual Integrations
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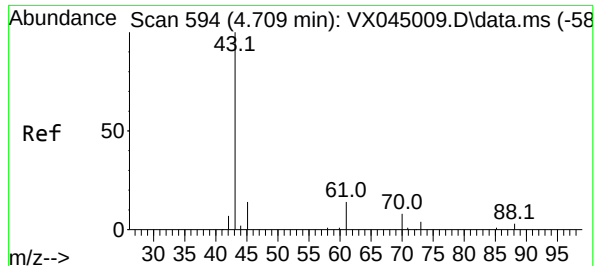
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#42
Vinyl Acetate
Concen: 96.020 ug/l
RT: 3.714 min Scan# 431
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 43 Resp: 385398
Ion Ratio Lower Upper
43 100
86 8.3 7.0 10.4





#43

Ethyl Acetate

Concen: 22.050 ug/l

RT: 4.714 min Scan# 594

Delta R.T. 0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 43 Resp: 42770

Ion Ratio Lower Upper

43

100

45

14.3

12.7

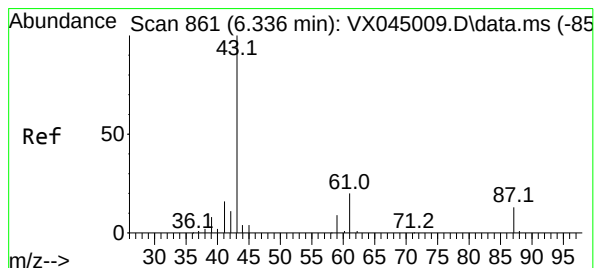
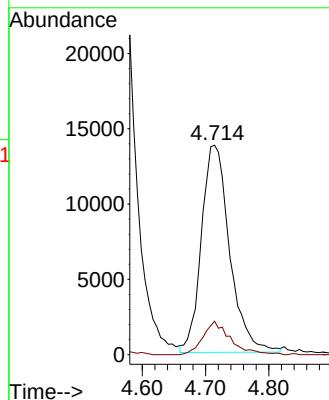
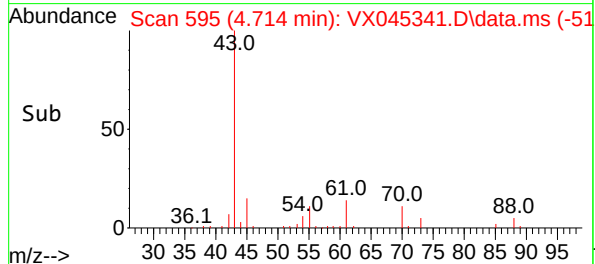
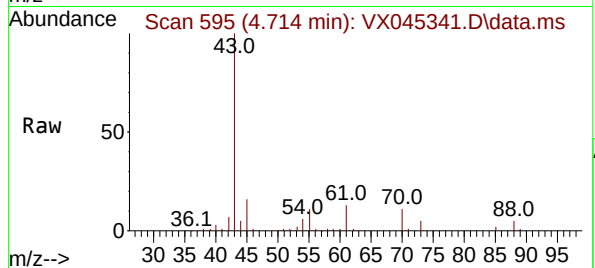
19.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#44

Isopropyl Acetate

Concen: 21.461 ug/l

RT: 6.336 min Scan# 861

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion: 43 Resp: 68513

Ion Ratio Lower Upper

43

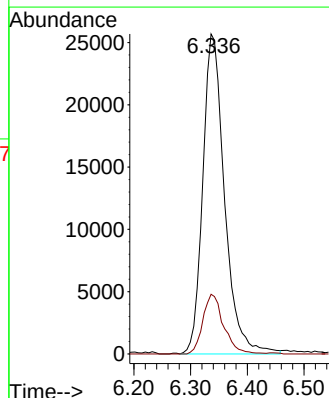
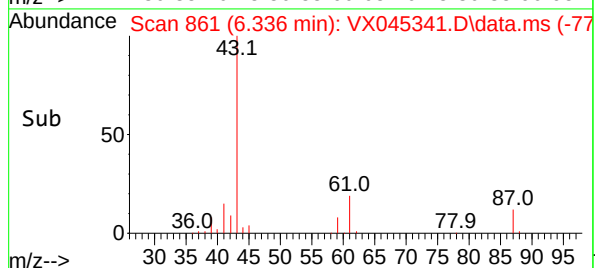
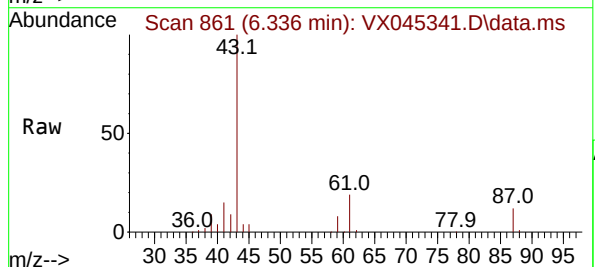
100

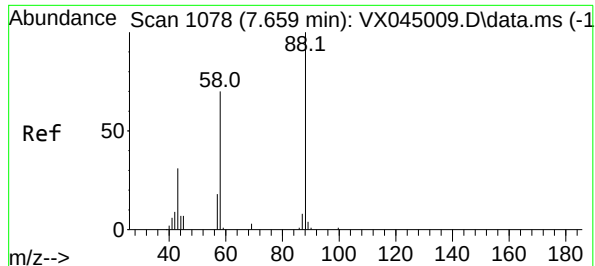
61

17.8

15.5

23.3





#45

1,4-Dioxane

Concen: 341.216 ug/l

RT: 7.659 min Scan# 1078

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

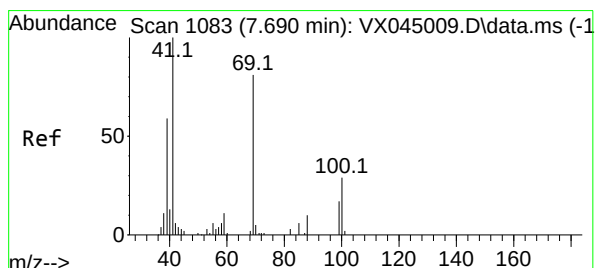
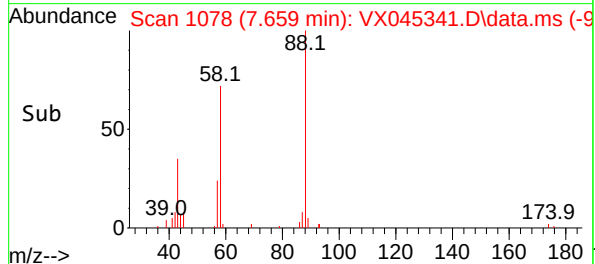
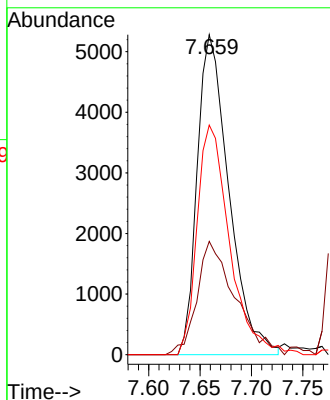
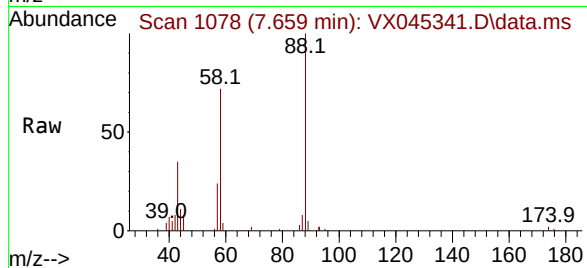
VX0319WBS01

Tgt Ion:	88	Resp:	11324
Ion	Ratio	Lower	Upper
88	100		
43	42.3	29.6	44.4
58	73.2	56.2	84.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#46

Methyl methacrylate

Concen: 21.993 ug/l

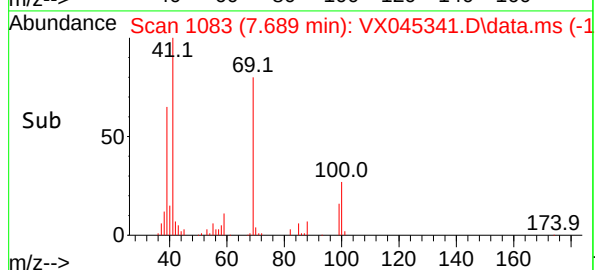
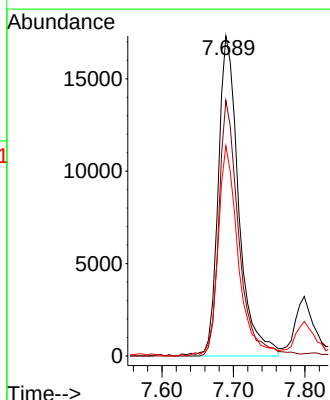
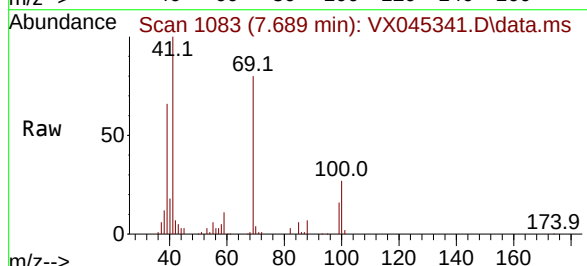
RT: 7.689 min Scan# 1083

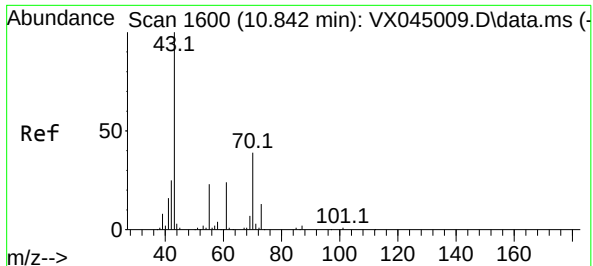
Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion:	41	Resp:	34428
Ion	Ratio	Lower	Upper
41	100		
69	79.9	40.7	122.1
39	65.6	29.5	88.5





#47

n-amy1 Acetate

Concen: 18.859 ug/l

RT: 10.841 min Scan# 1600

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 43 Resp: 5224

Ion Ratio Lower Upper

43 100

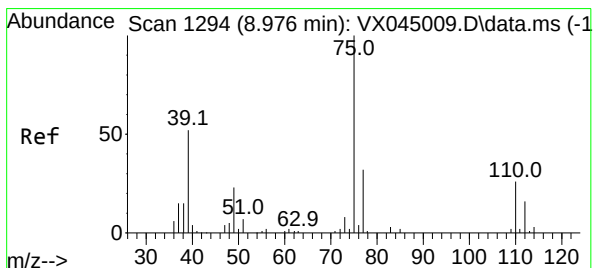
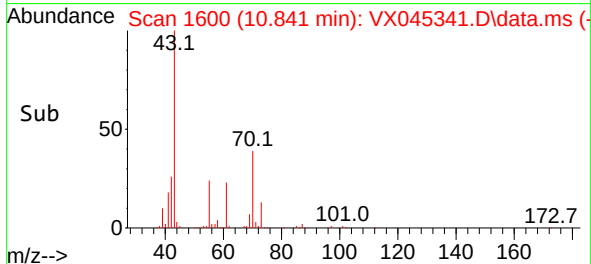
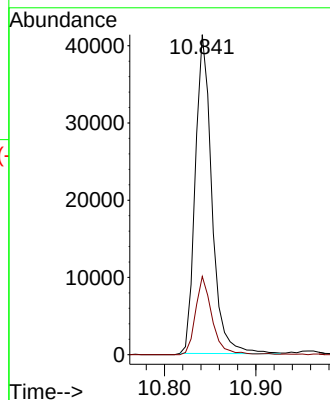
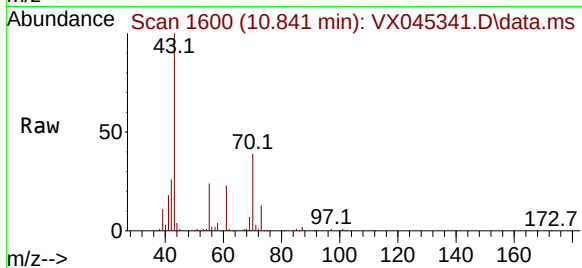
55 24.3 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#48

t-1,3-Dichloropropene

Concen: 18.287 ug/l

RT: 8.976 min Scan# 1294

Delta R.T. -0.000 min

Lab File: VX045341.D

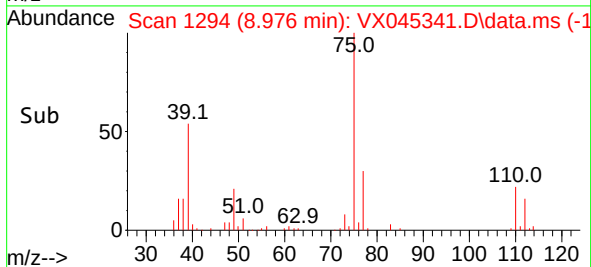
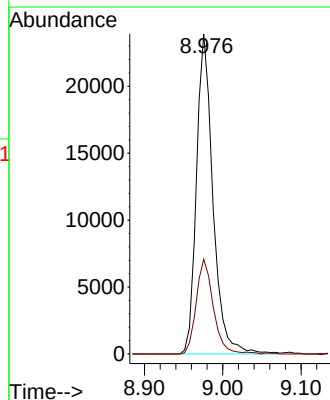
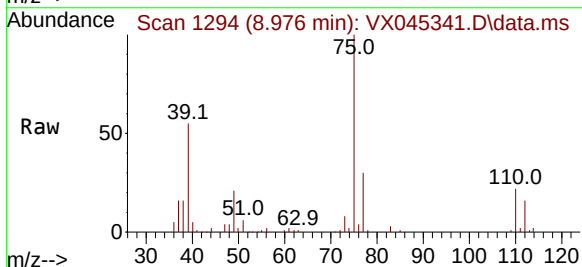
Acq: 19 Mar 2025 11:41

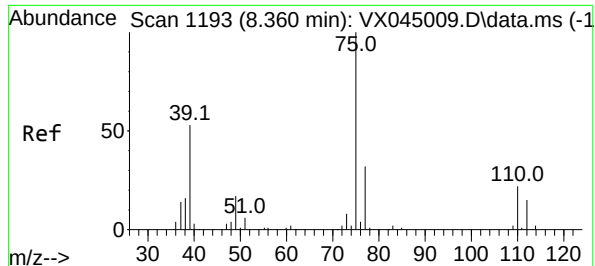
Tgt Ion: 75 Resp: 35099

Ion Ratio Lower Upper

75 100

77 29.6 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 18.763 ug/l

RT: 8.366 min Scan# 1193

Delta R.T. 0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 75 Resp: 4076

Ion Ratio Lower Upper

75 100

77 29.8 25.9 38.9

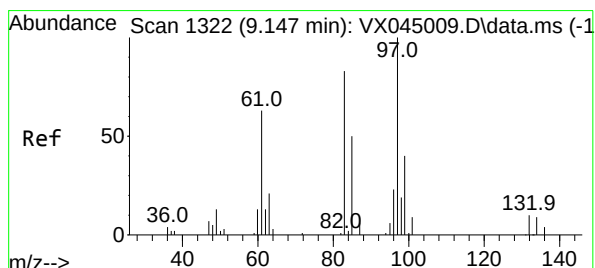
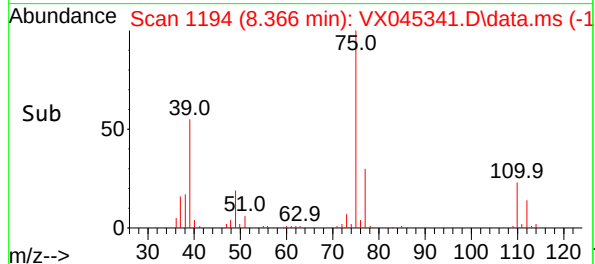
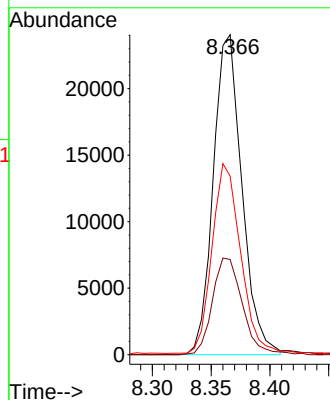
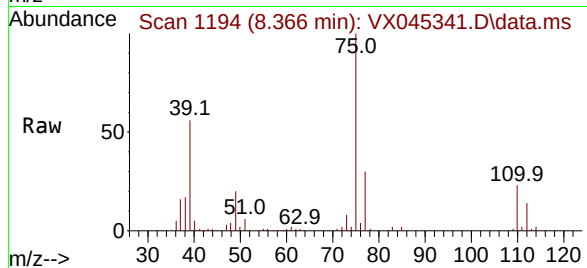
39 55.3 42.3 63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#50

1,1,2-Trichloroethane

Concen: 20.107 ug/l

RT: 9.146 min Scan# 1322

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion: 97 Resp: 26276

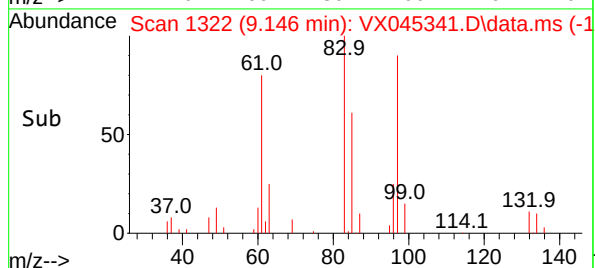
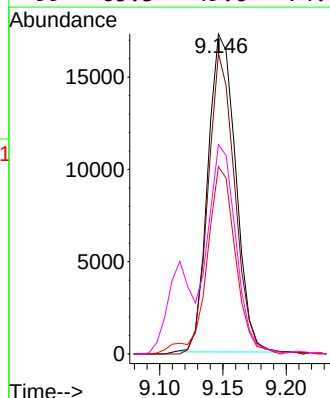
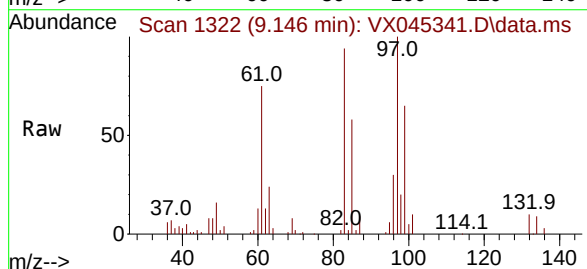
Ion Ratio Lower Upper

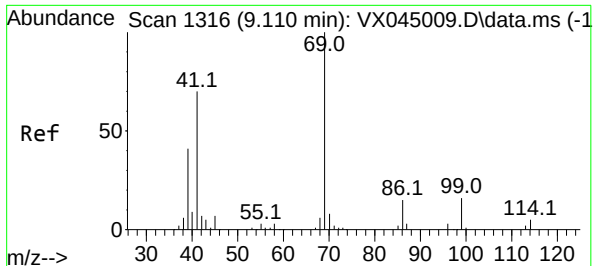
97 100

83 94.6 66.0 99.0

85 58.9 42.5 63.7

99 65.3 49.6 74.4





#51

Ethyl methacrylate

Concen: 19.861 ug/l

RT: 9.116 min Scan# 1316

Delta R.T. 0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 69 Resp: 40819

Ion Ratio Lower Upper

69 100

41 71.0 35.1 105.3

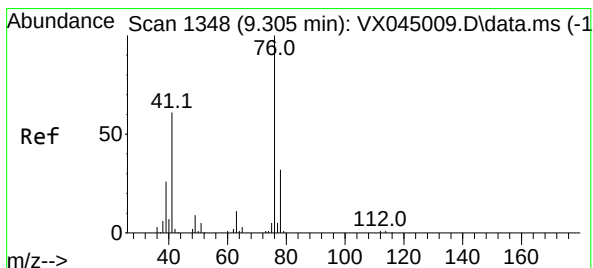
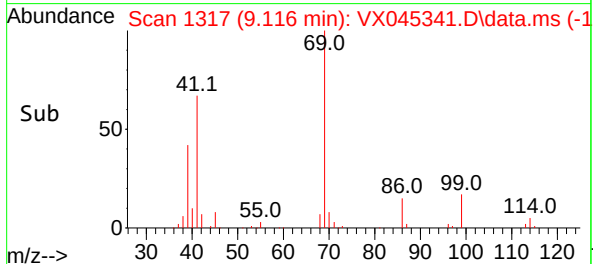
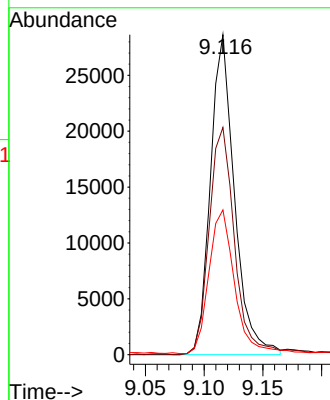
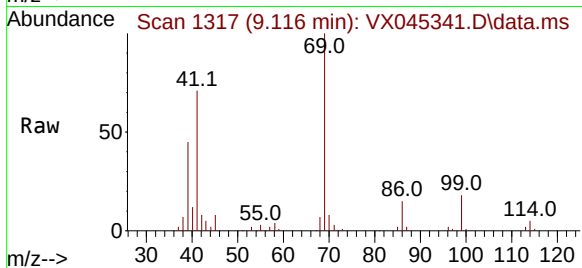
39 44.9 20.5 61.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#52

1,3-Dichloropropane

Concen: 20.677 ug/l

RT: 9.305 min Scan# 1348

Delta R.T. -0.000 min

Lab File: VX045341.D

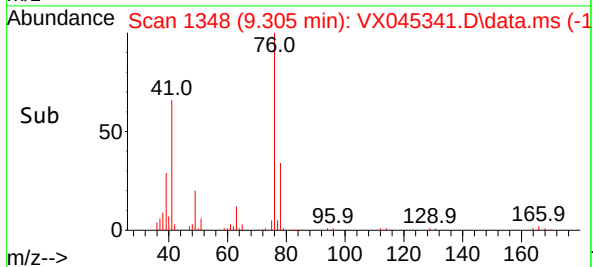
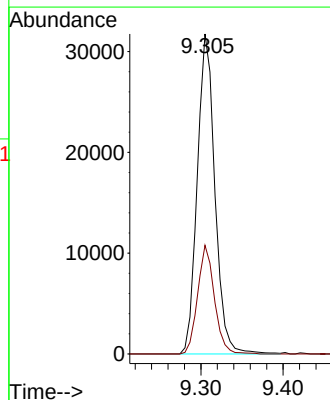
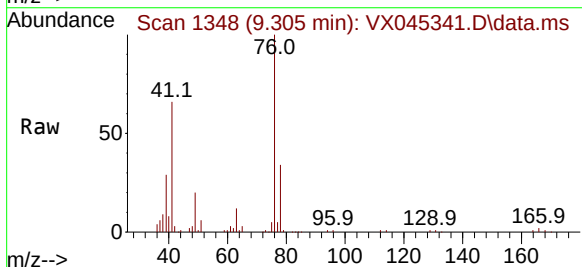
Acq: 19 Mar 2025 11:41

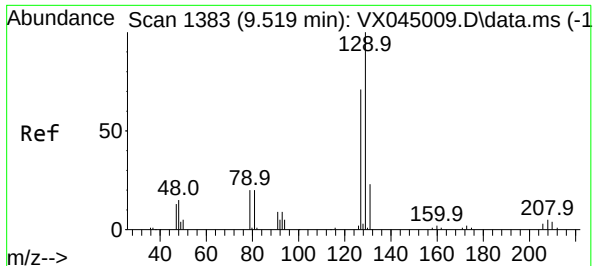
Tgt Ion: 76 Resp: 47347

Ion Ratio Lower Upper

76 100

78 32.3 0.0 63.6





#53

Dibromochloromethane

Concen: 19.931 ug/l

RT: 9.518 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion:129 Resp: 2880

Ion Ratio Lower Upper

129 100

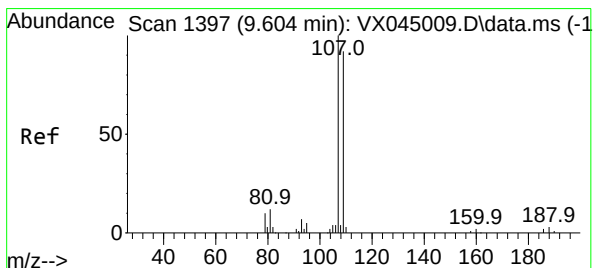
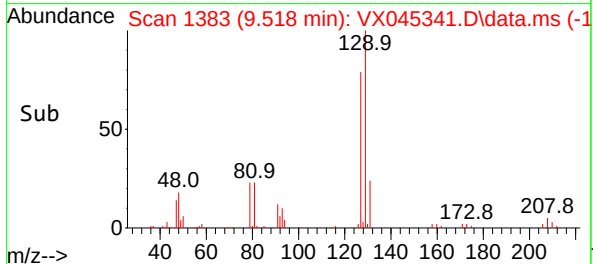
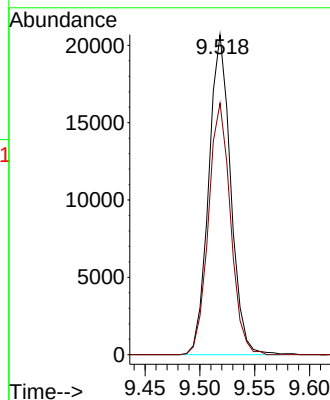
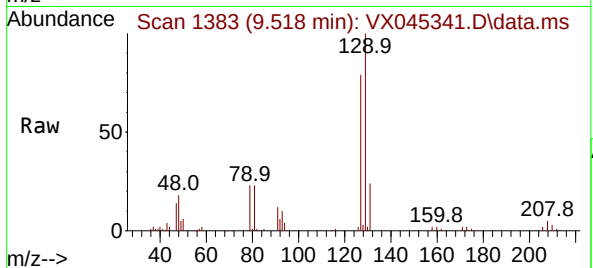
127 78.9 37.3 111.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#54

1,2-Dibromoethane

Concen: 20.889 ug/l

RT: 9.610 min Scan# 1398

Delta R.T. 0.006 min

Lab File: VX045341.D

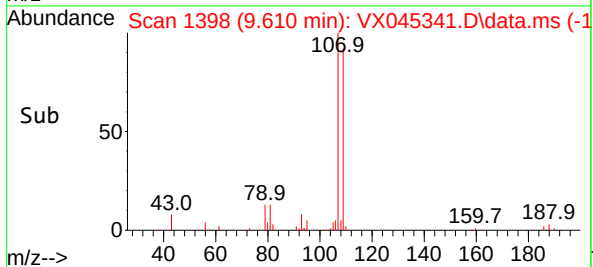
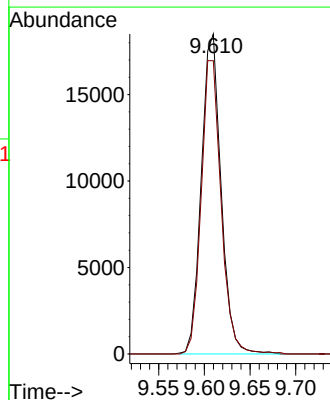
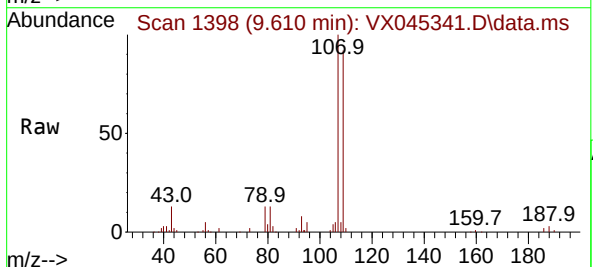
Acq: 19 Mar 2025 11:41

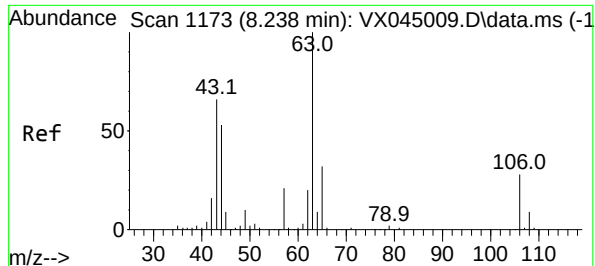
Tgt Ion:107 Resp: 27720

Ion Ratio Lower Upper

107 100

109 92.7 75.8 113.8





#55

2-Chloroethyl vinyl ether

Concen: 127.852 ug/l

RT: 8.238 min Scan# 1173

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 63 Resp: 134939

Ion Ratio Lower Upper

63 100

65 31.7 26.2 39.2

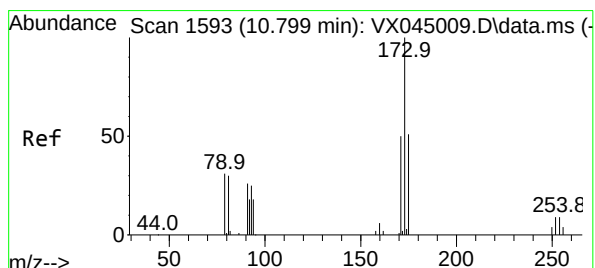
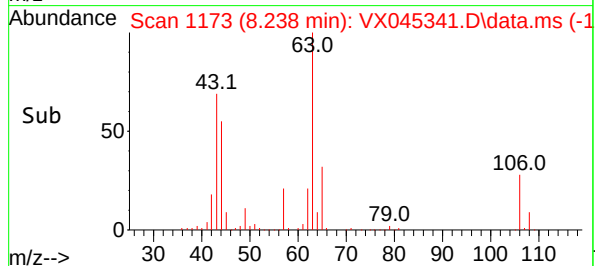
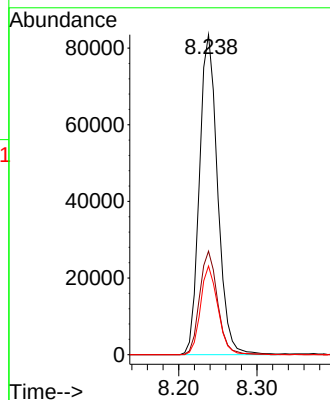
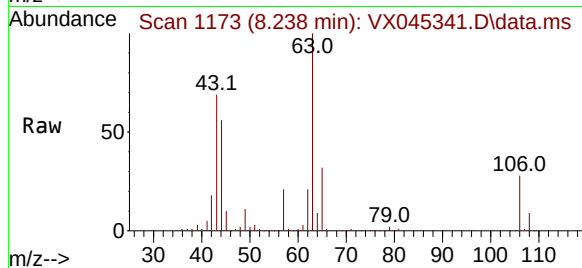
106 26.4 21.2 31.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#56

Bromoform

Concen: 19.423 ug/l

RT: 10.799 min Scan# 1593

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

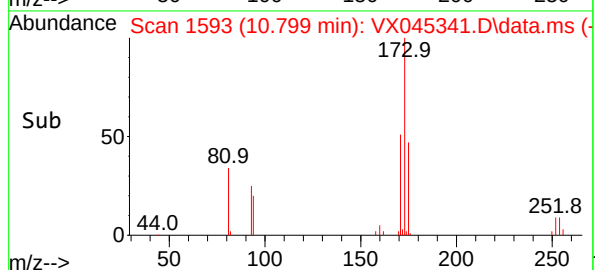
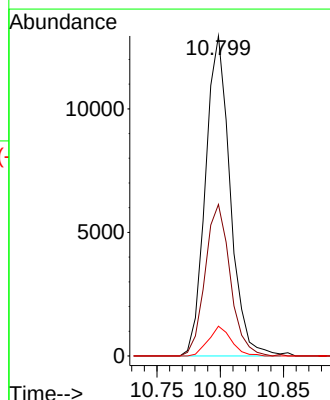
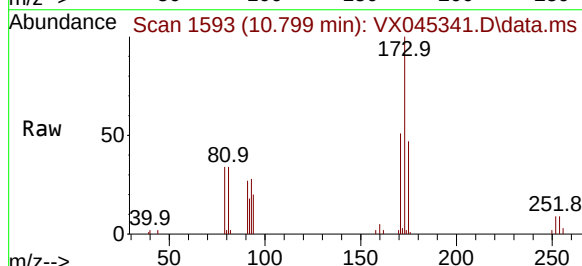
Tgt Ion:173 Resp: 17591

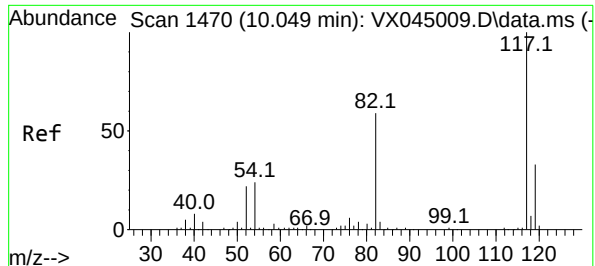
Ion Ratio Lower Upper

173 100

175 48.1 39.6 59.4

254 8.6 6.3 9.5





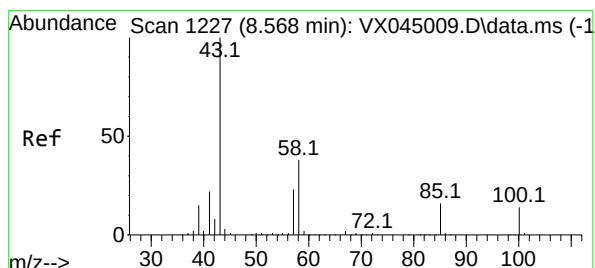
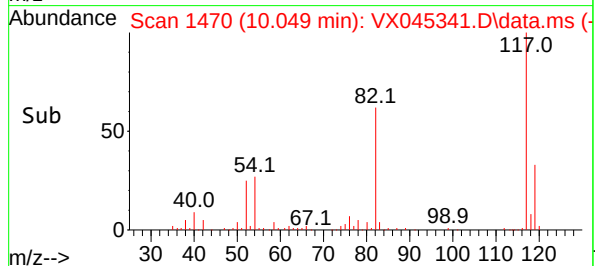
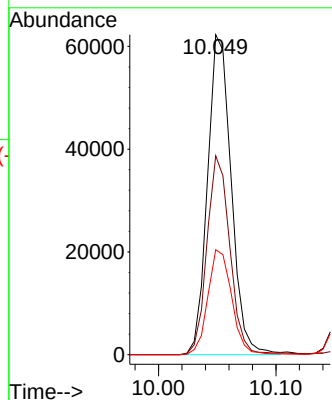
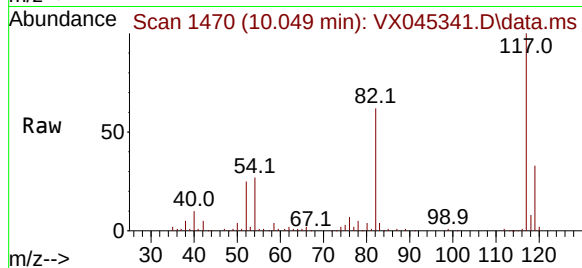
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.049 min Scan# 1470
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion: 117 Resp: 87335
Ion Ratio Lower Upper
117 100
82 60.0 45.8 68.8
119 33.1 25.5 38.3

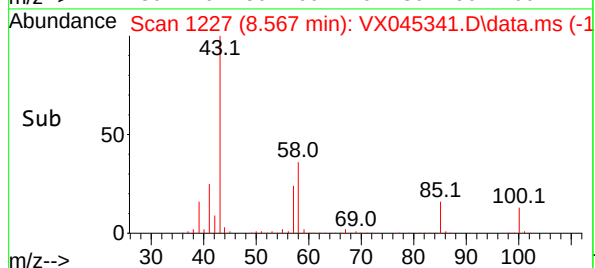
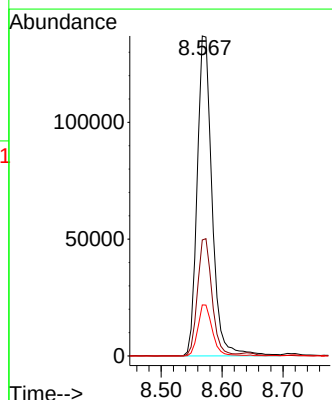
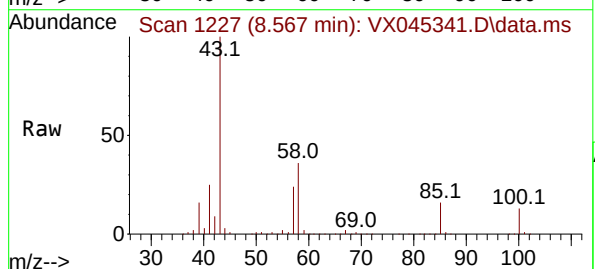
Manual Integrations
APPROVED

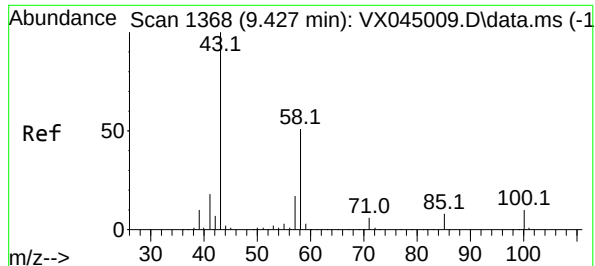
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#58
4-Methyl-2-Pentanone
Concen: 117.104 ug/l
RT: 8.567 min Scan# 1227
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 43 Resp: 232649
Ion Ratio Lower Upper
43 100
58 35.8 29.5 44.3
85 15.5 12.9 19.3





#59

2-Hexanone

Concen: 117.117 ug/l

RT: 9.427 min Scan# 1368

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 43 Resp: 168179

Ion Ratio Lower Upper

43

100

58

50.9

57

18.1

13.8

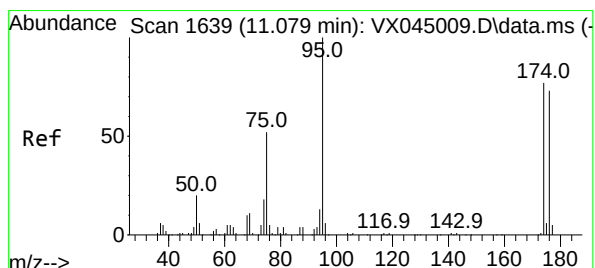
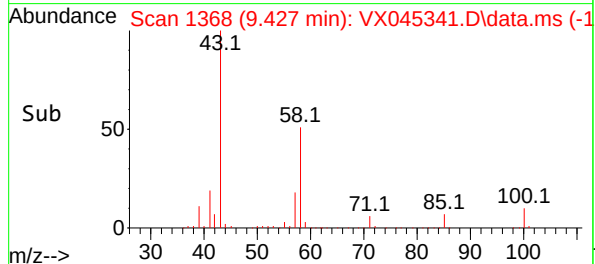
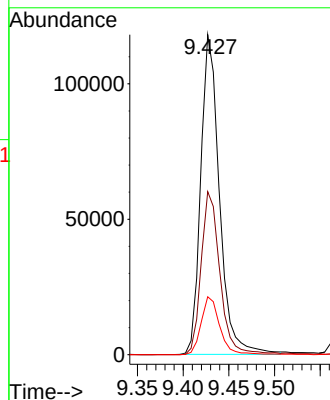
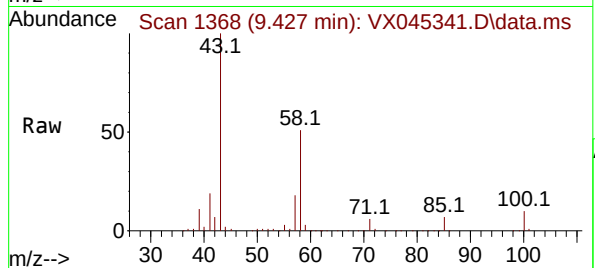
20.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#60

4-Bromofluorobenzene

Concen: 31.066 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion: 95 Resp: 50712

Ion Ratio Lower Upper

95

100

174

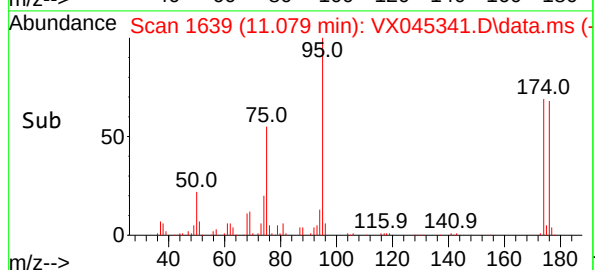
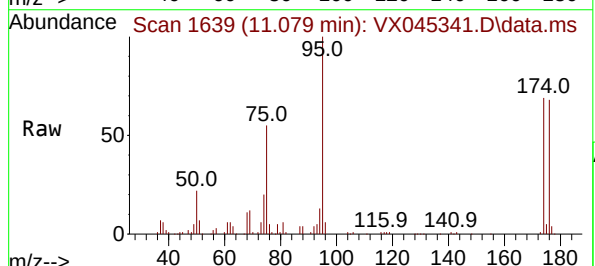
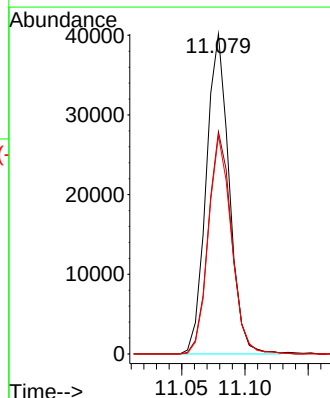
70.5

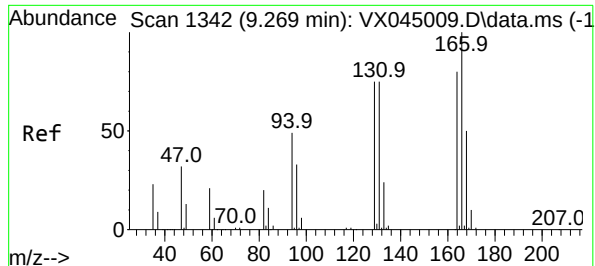
176

68.4

55.5

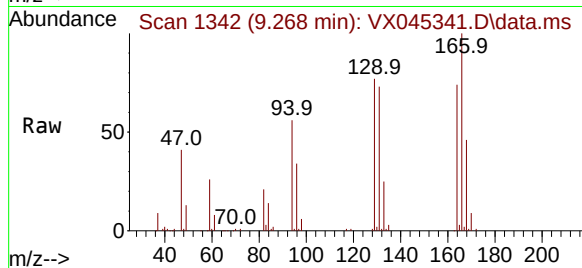
83.3





#61
Tetrachloroethene
Concen: 21.122 ug/l
RT: 9.268 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

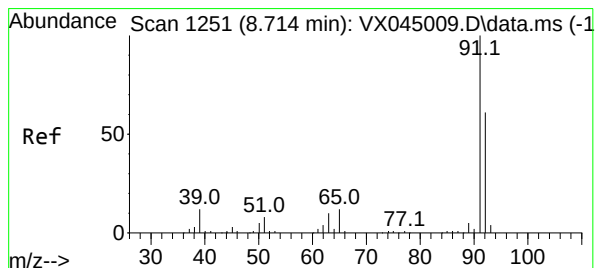
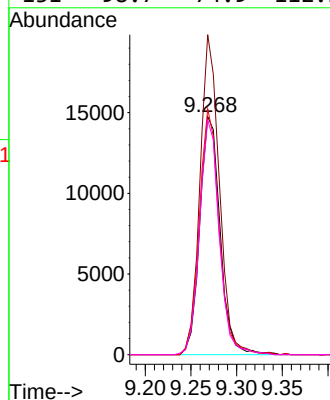
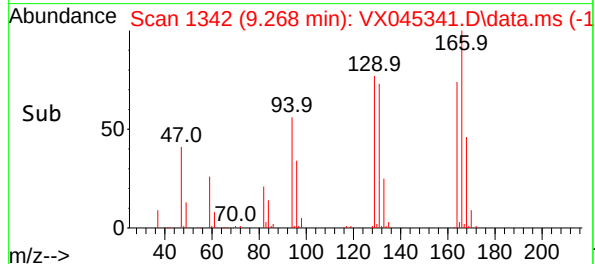
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01



Tgt Ion:164 Resp: 2271
Ion Ratio Lower Upper
164 100
166 134.5 100.3 150.5
129 103.3 75.5 113.3
131 98.7 74.9 112.3

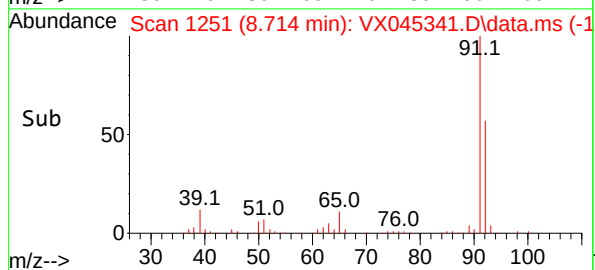
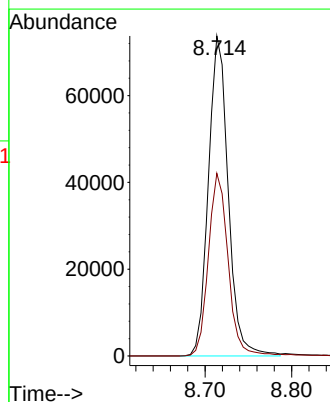
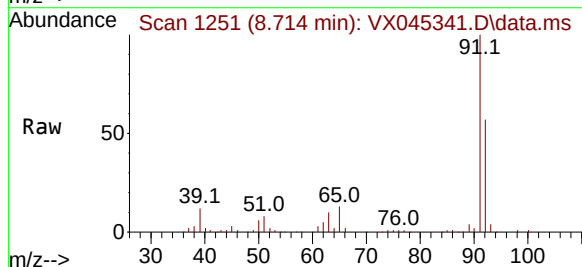
Manual Integrations
APPROVED

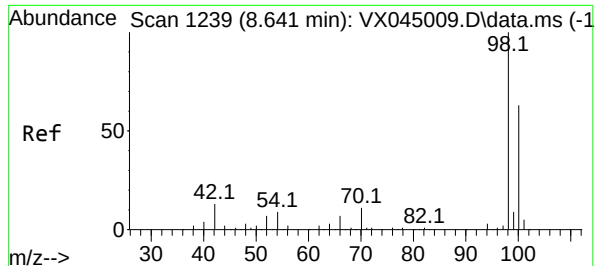
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#62
Toluene
Concen: 20.251 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 91 Resp: 117162
Ion Ratio Lower Upper
91 100
92 56.6 46.9 70.3





#63

Toluene-d8

Concen: 31.105 ug/l

RT: 8.647 min Scan# 11

Delta R.T. 0.006 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 98 Resp: 15028

Ion Ratio Lower Upper

98 100

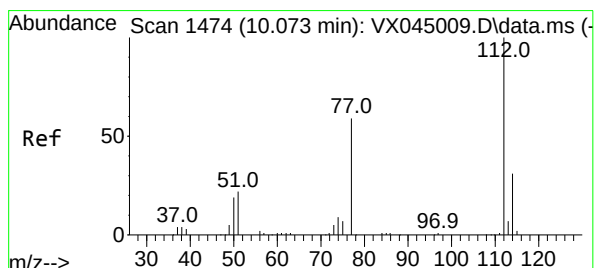
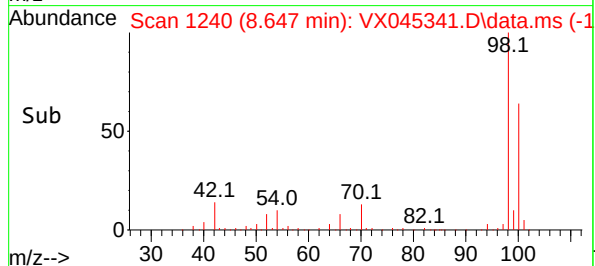
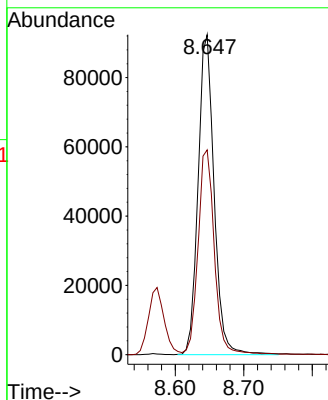
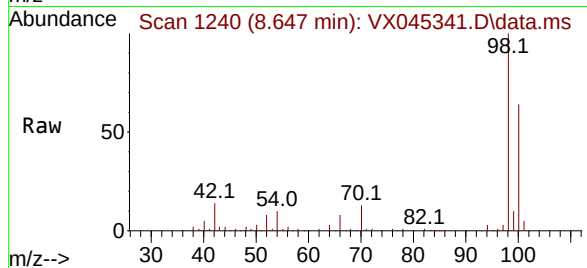
100 64.9 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#64

Chlorobenzene

Concen: 19.741 ug/l

RT: 10.079 min Scan# 1475

Delta R.T. 0.006 min

Lab File: VX045341.D

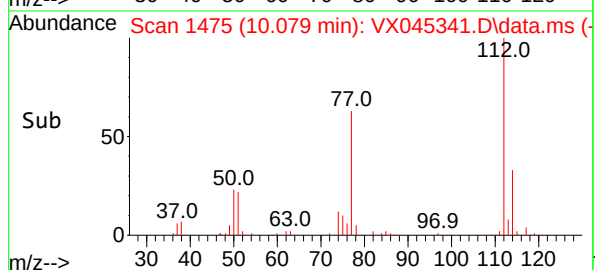
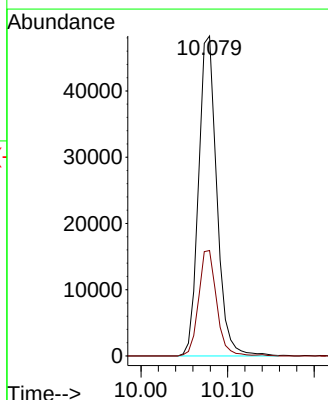
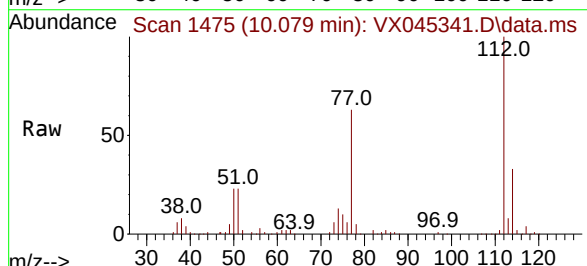
Acq: 19 Mar 2025 11:41

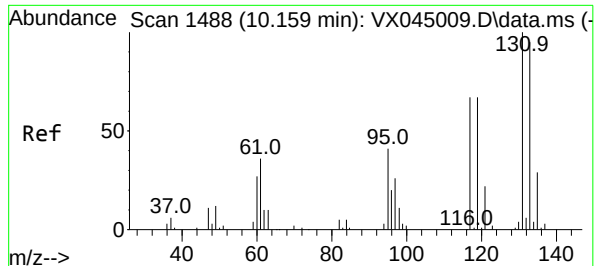
Tgt Ion:112 Resp: 70773

Ion Ratio Lower Upper

112 100

114 32.9 24.7 37.1





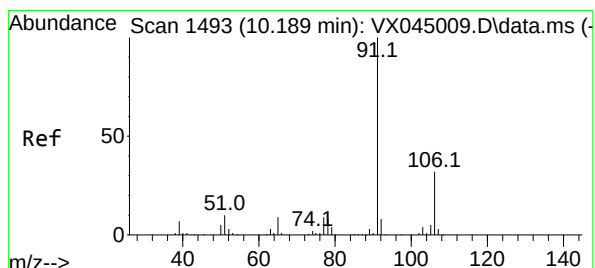
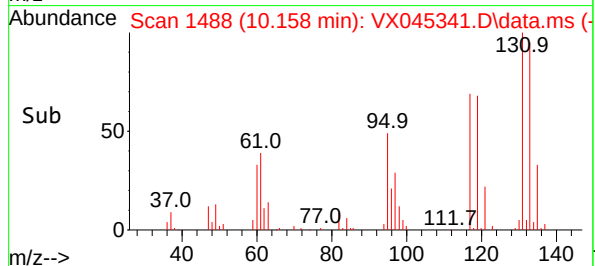
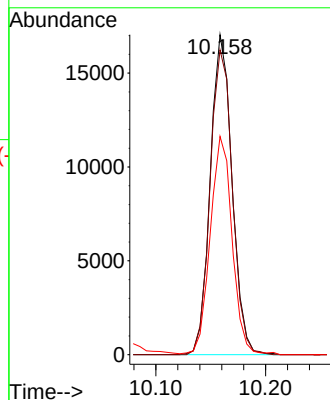
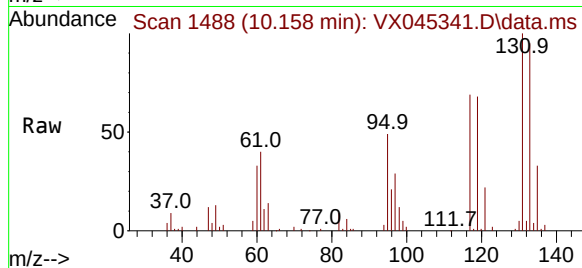
#65
1,1,1,2-Tetrachloroethane
Concen: 19.868 ug/l
RT: 10.158 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion:131 Resp: 2350
Ion Ratio Lower Upper
131 100
133 97.6 0.0 187.8
119 68.6 0.0 133.0

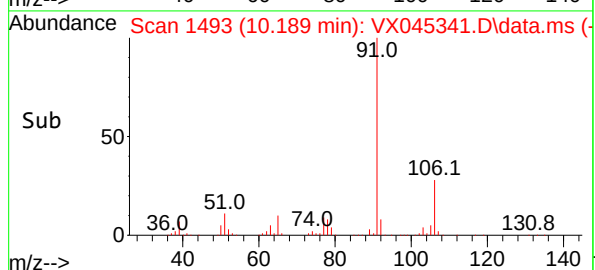
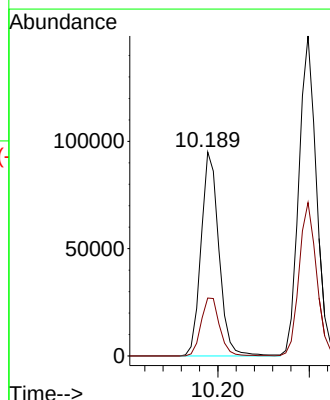
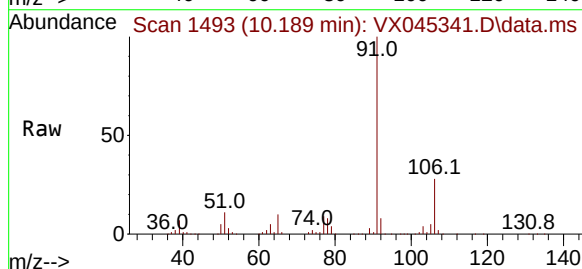
Manual Integrations
APPROVED

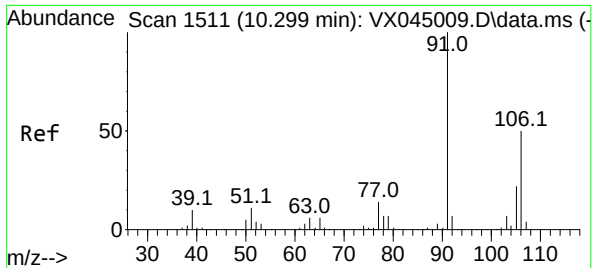
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#66
Ethyl Benzene
Concen: 20.346 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 91 Resp: 128869
Ion Ratio Lower Upper
91 100
106 28.4 25.4 38.2





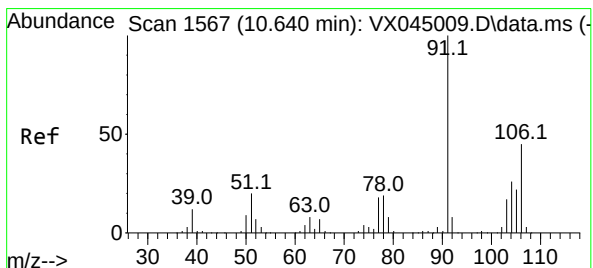
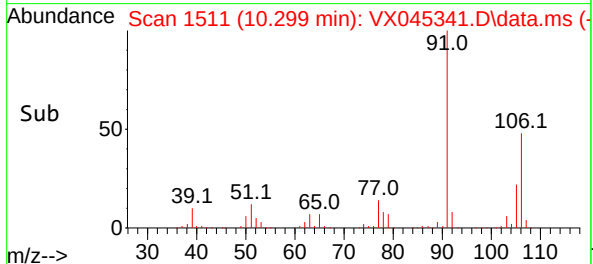
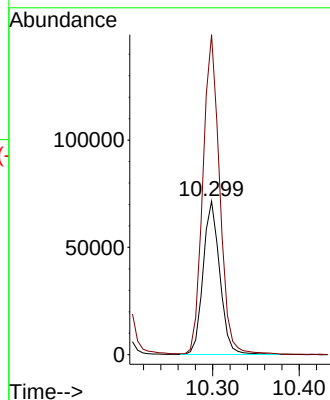
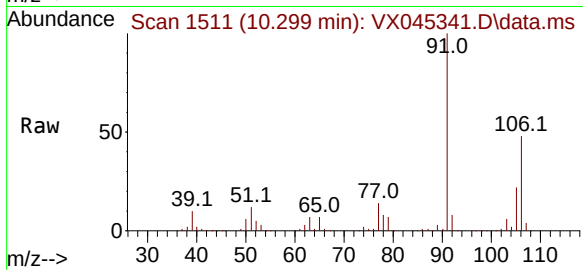
#67
m/p-Xylenes
Concen: 40.449 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion:106 Resp: 95450
Ion Ratio Lower Upper
106 100
91 210.0 163.7 245.5

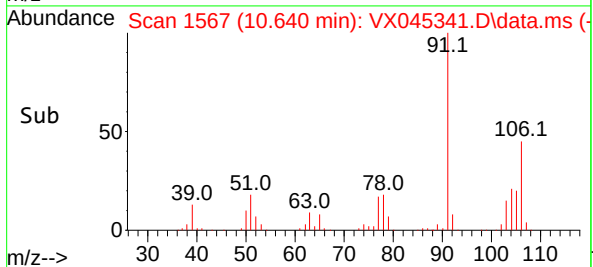
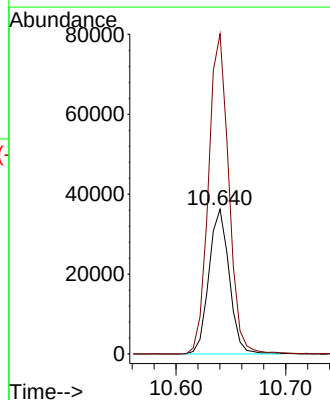
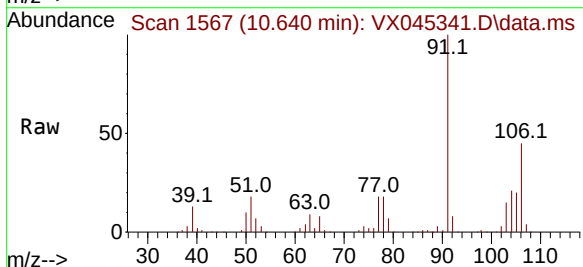
Manual Integrations
APPROVED

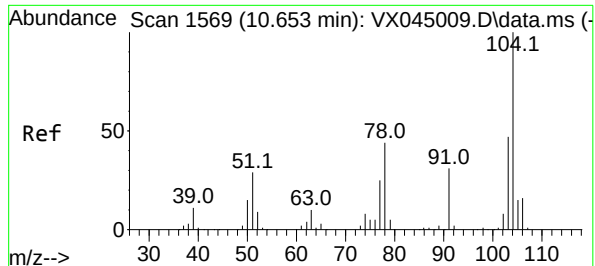
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#68
o-Xylene
Concen: 20.202 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion:106 Resp: 46776
Ion Ratio Lower Upper
106 100
91 220.3 109.7 329.1





#69

Styrene

Concen: 19.546 ug/l

RT: 10.652 min Scan# 1569

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

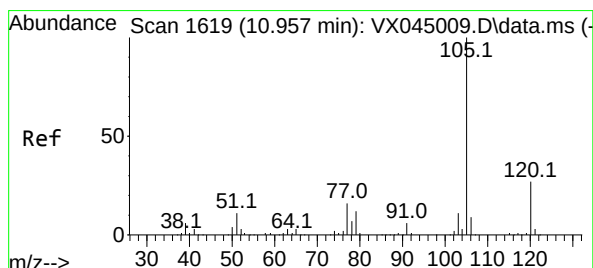
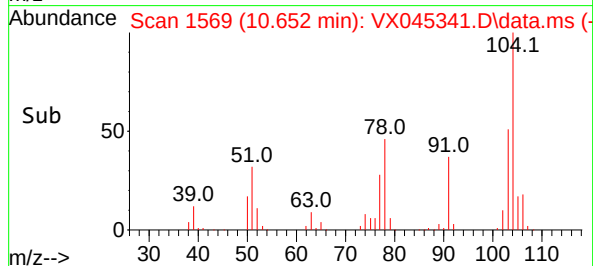
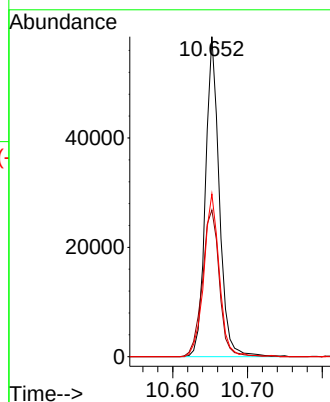
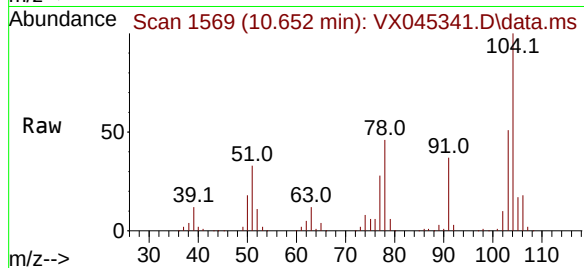
ClientSampleId :

VX0319WBS01

Tgt Ion:104	Resp:	7558
Ion Ratio	Lower	Upper
104	100	
78	55.7	41.4 62.0
103	56.3	43.0 64.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#70

Isopropylbenzene

Concen: 20.530 ug/l

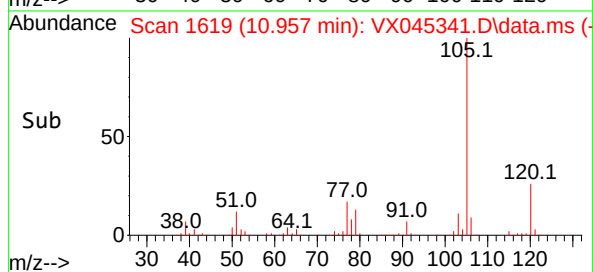
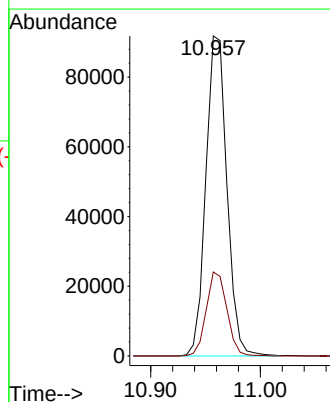
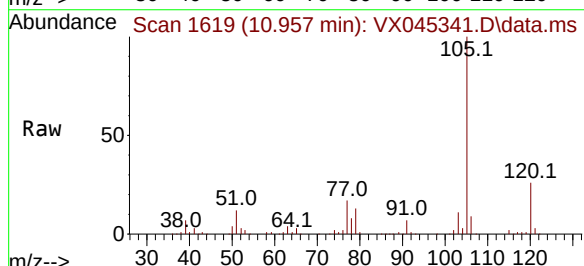
RT: 10.957 min Scan# 1619

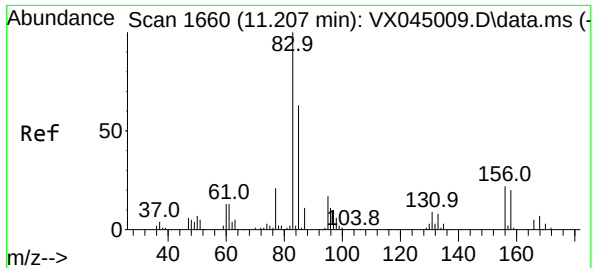
Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion:105	Resp:	122673
Ion Ratio	Lower	Upper
105	100	
120	25.7	18.4 34.2





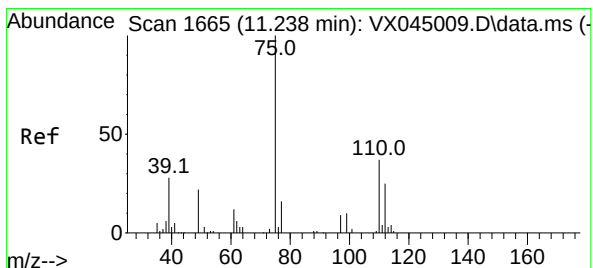
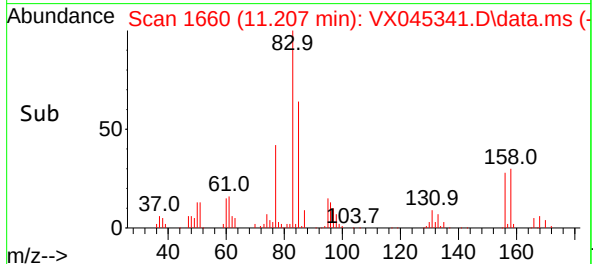
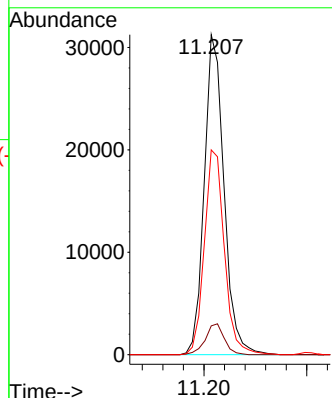
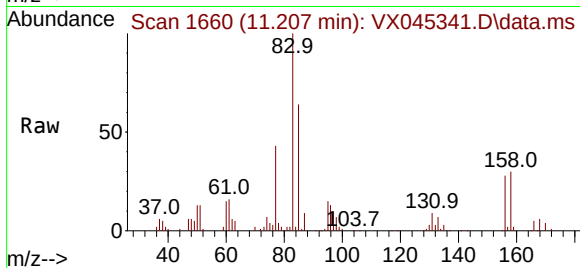
#71
1,1,2,2-Tetrachloroethane
Concen: 21.256 ug/l
RT: 11.207 min Scan# 1660
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion: 83 Resp: 41760
Ion Ratio Lower Upper
83 100
131 9.3 4.8 14.3
85 64.9 32.3 96.8

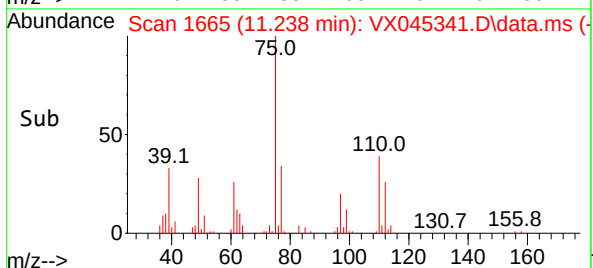
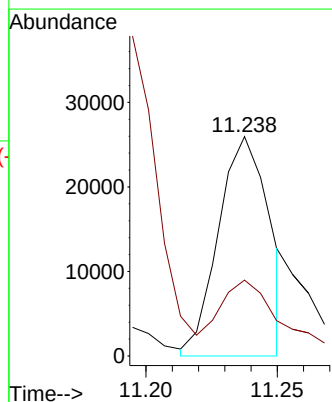
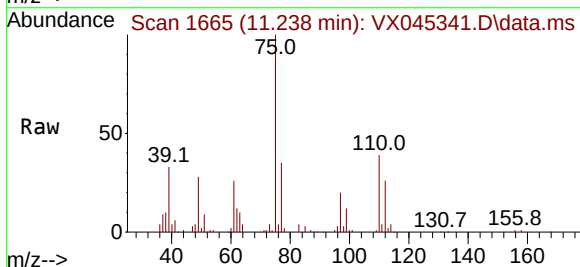
Manual Integrations
APPROVED

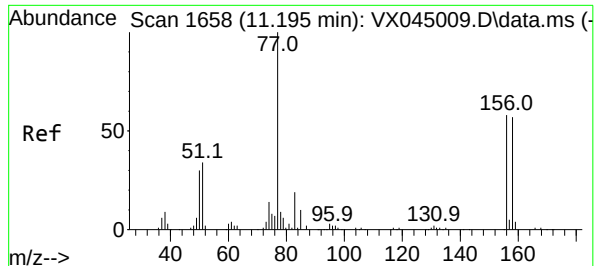
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#72
1,2,3-Trichloropropane
Concen: 21.561 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 75 Resp: 34845
Ion Ratio Lower Upper
75 100
77 42.2 0.0 84.0





#73

Bromobenzene

Concen: 19.049 ug/l

RT: 11.195 min Scan# 1658

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

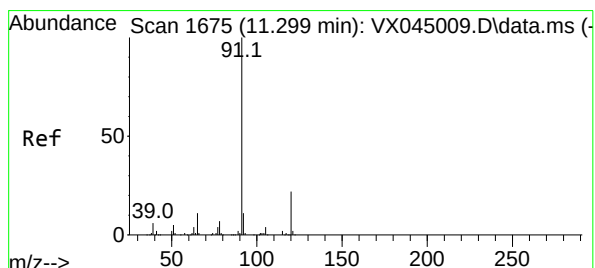
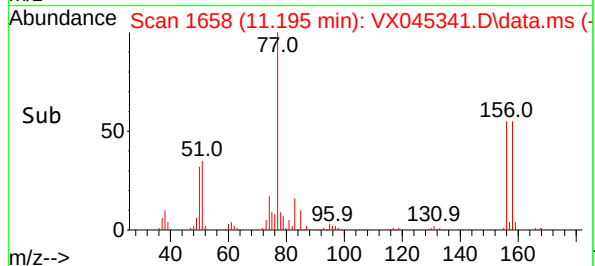
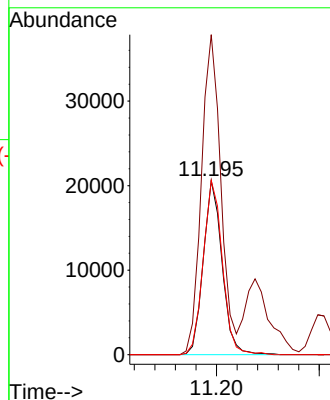
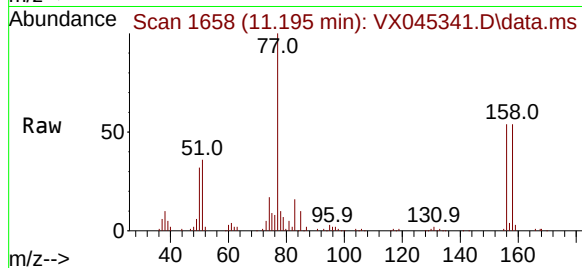
Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion:	156	Resp:	2620
Ion Ratio	Lower	Upper	
156	100		
77	189.9	0.0	347.2
158	101.8	0.0	197.6

Manual Integrations
APPROVEDReviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

#74

n-propylbenzene

Concen: 20.266 ug/l

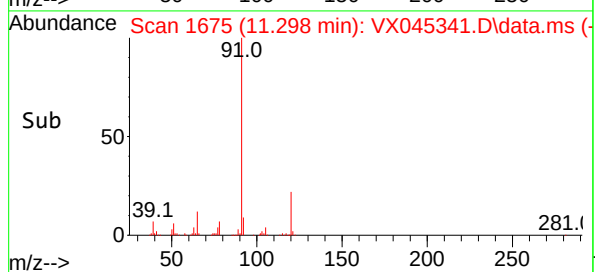
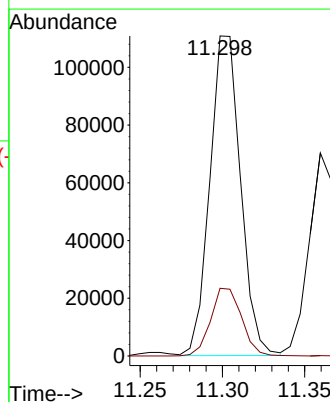
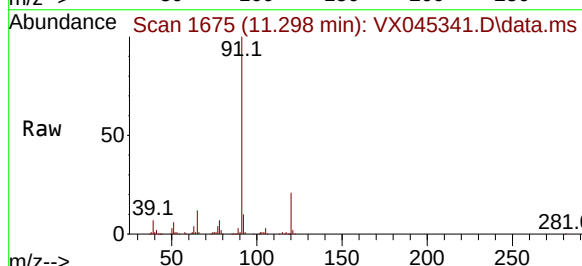
RT: 11.298 min Scan# 1675

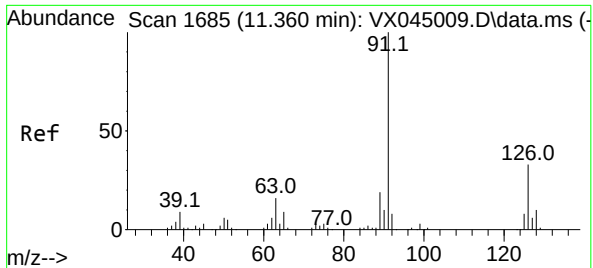
Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion:	91	Resp:	144108
Ion Ratio	Lower	Upper	
91	100		
120	21.3	0.0	44.2





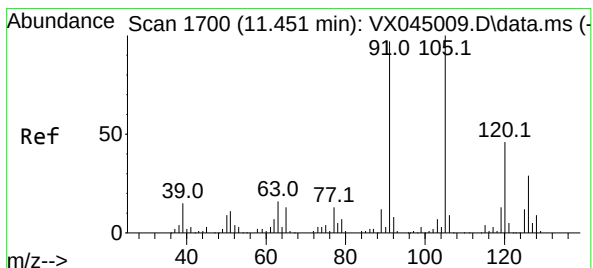
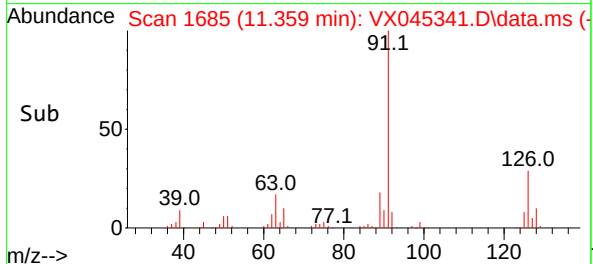
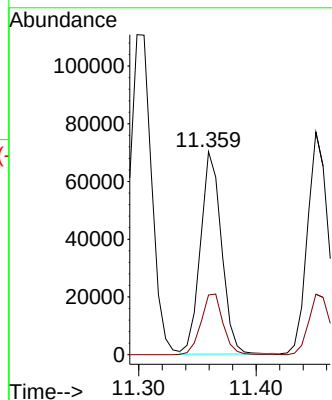
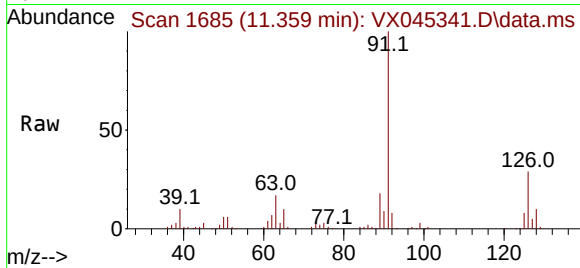
#75
2-Chlorotoluene
Concen: 20.332 ug/l
RT: 11.359 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion: 91 Resp: 8740
Ion Ratio Lower Upper
91 100
126 31.3 0.0 65.4

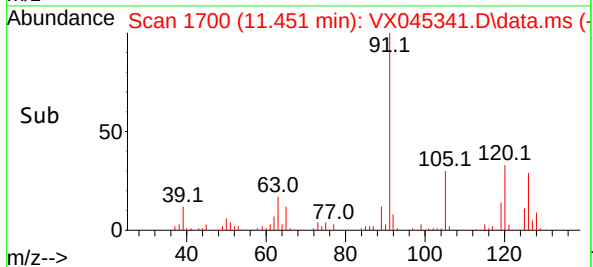
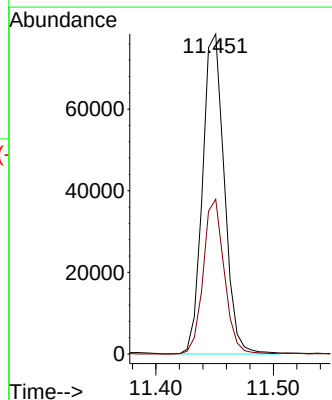
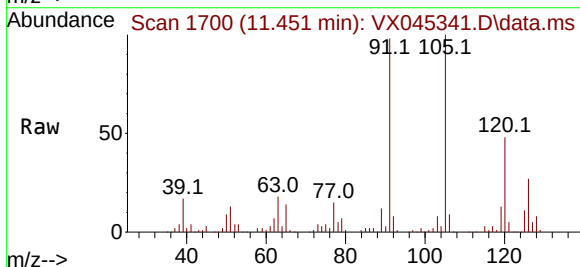
Manual Integrations
APPROVED

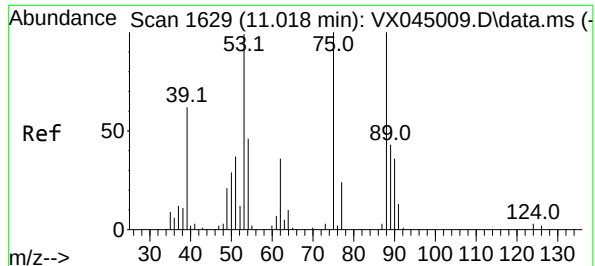
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#76
1,3,5-Trimethylbenzene
Concen: 20.514 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

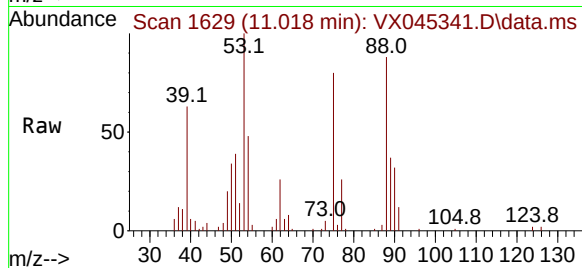
Tgt Ion:105 Resp: 101121
Ion Ratio Lower Upper
105 100
120 46.7 0.0 94.4





#77
t-1,4-Dichloro-2-butene
Concen: 18.721 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

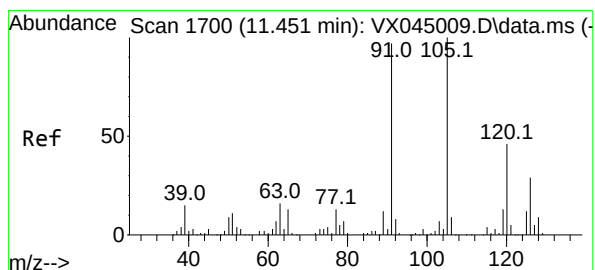
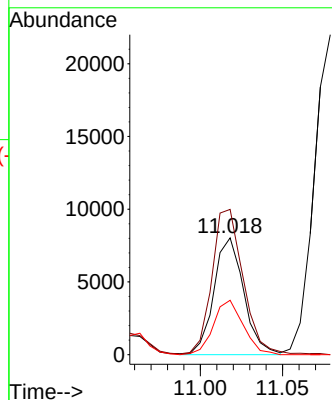
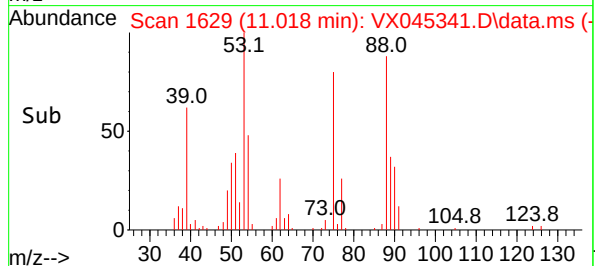
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01



Tgt Ion: 75 Resp: 10179
Ion Ratio Lower Upper
75 100
53 124.8 49.8 149.4
89 47.0 21.4 64.2

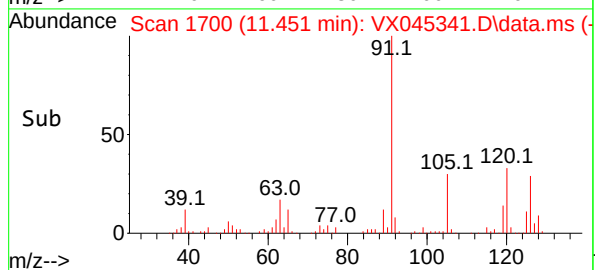
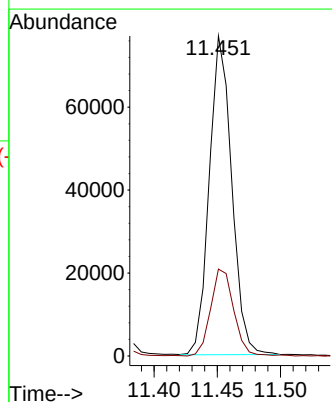
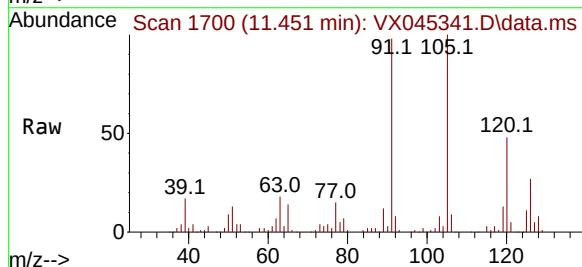
Manual Integrations
APPROVED

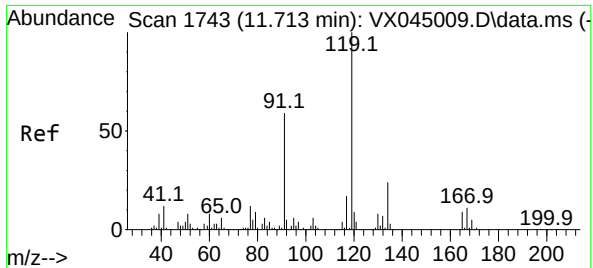
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#78
4-Chlorotoluene
Concen: 19.786 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion: 91 Resp: 94815
Ion Ratio Lower Upper
91 100
126 28.0 0.0 58.0





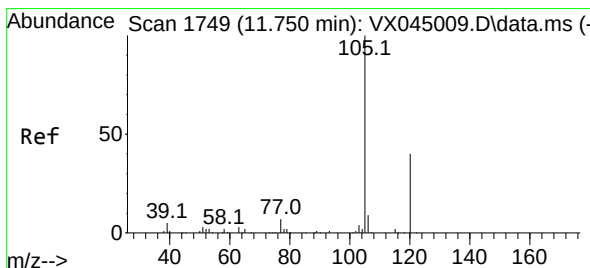
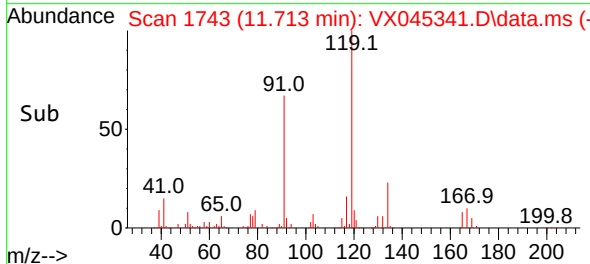
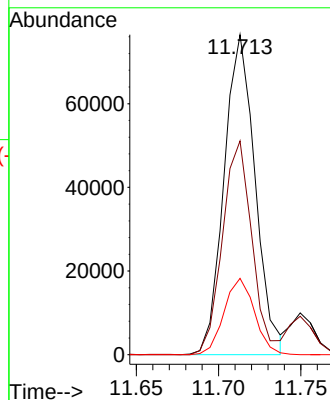
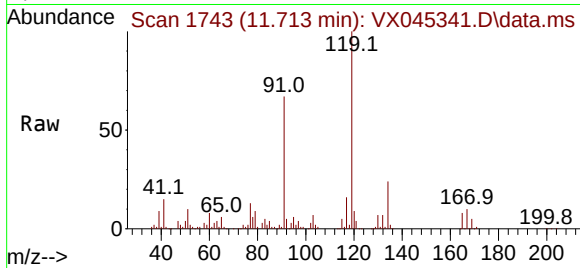
#79
tert-butylbenzene
Concen: 20.210 ug/l
RT: 11.713 min Scan# 1743
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion:119 Resp: 10038
Ion Ratio Lower Upper
119 100
91 62.7 0.0 120.6
134 23.4 0.0 48.2

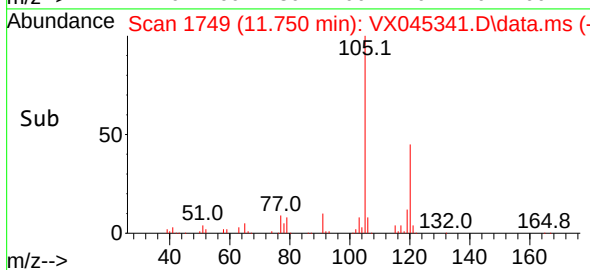
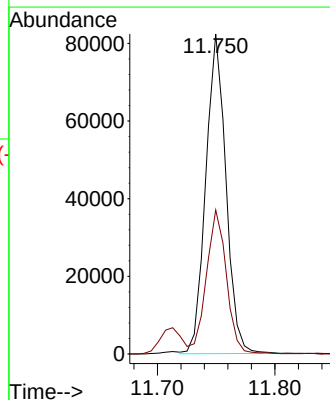
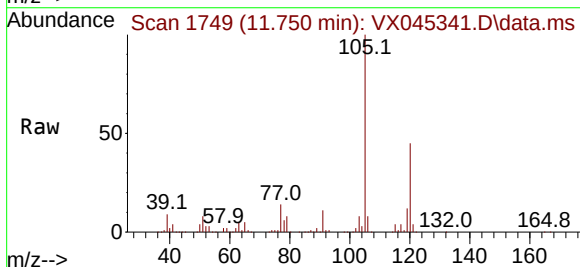
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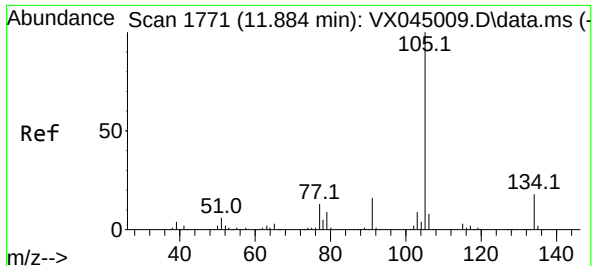
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#80
1,2,4-Trimethylbenzene
Concen: 19.793 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion:105 Resp: 97734
Ion Ratio Lower Upper
105 100
120 45.1 0.0 88.4





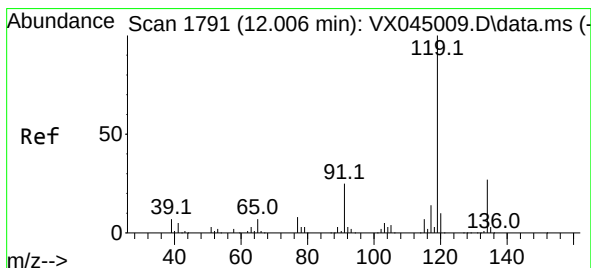
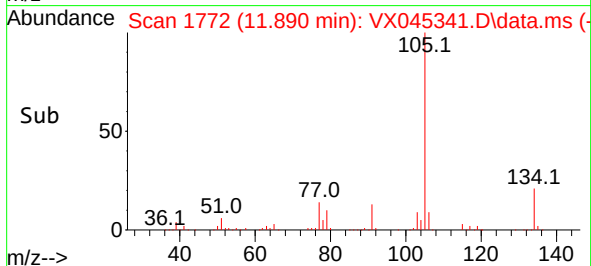
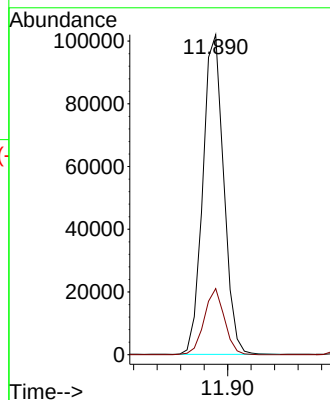
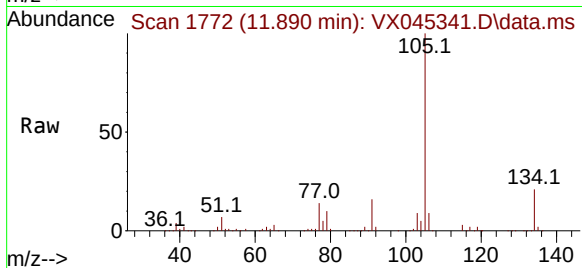
#81
sec-Butylbenzene
Concen: 20.164 ug/l
RT: 11.890 min Scan# 1771
Delta R.T. 0.006 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01

Tgt Ion:105 Resp: 12569
Ion Ratio Lower Upper
105 100
134 20.0 0.0 39.0

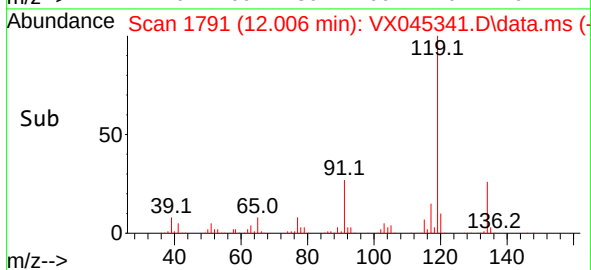
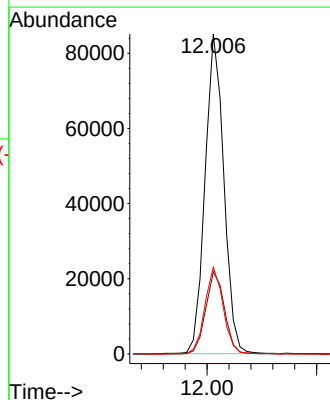
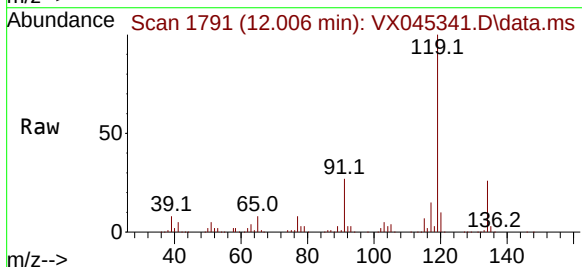
Manual Integrations
APPROVED

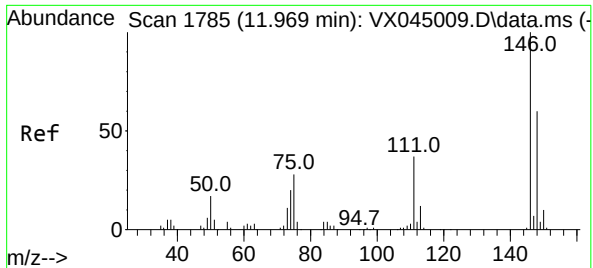
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#82
p-Isopropyltoluene
Concen: 19.964 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

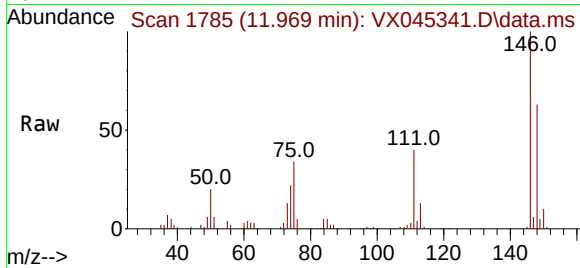
Tgt Ion:119 Resp: 100832
Ion Ratio Lower Upper
119 100
134 25.8 0.0 52.6
91 26.5 0.0 51.0





#83
1,3-Dichlorobenzene
Concen: 19.427 ug/l
RT: 11.969 min Scan# 1785
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

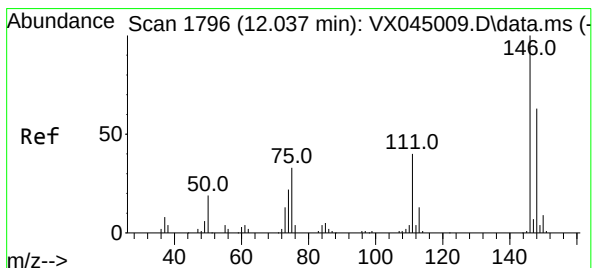
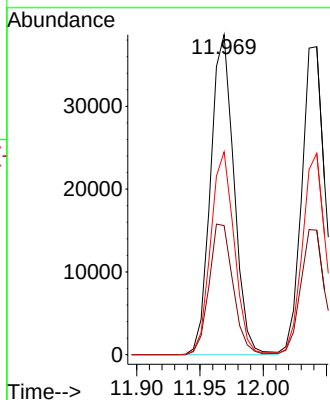
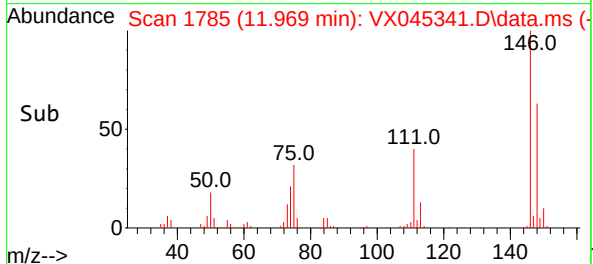
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01



Tgt Ion:146 Resp: 49719
Ion Ratio Lower Upper
146 100
111 41.7 20.2 60.5
148 63.9 31.2 93.6

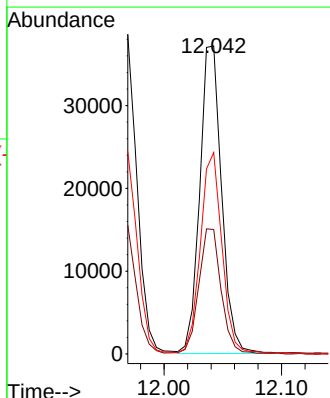
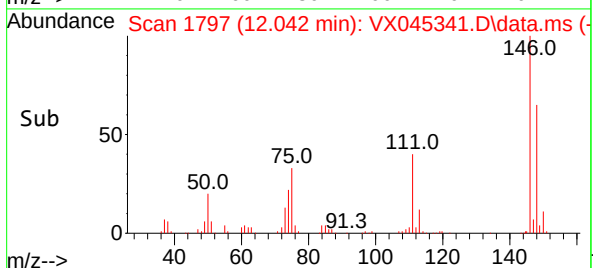
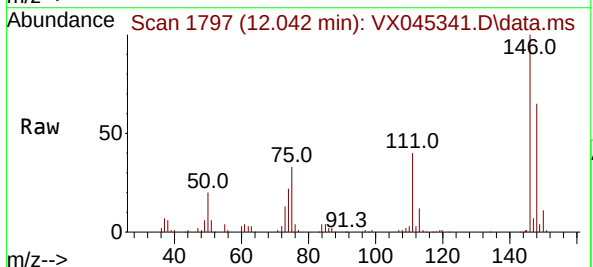
Manual Integrations
APPROVED

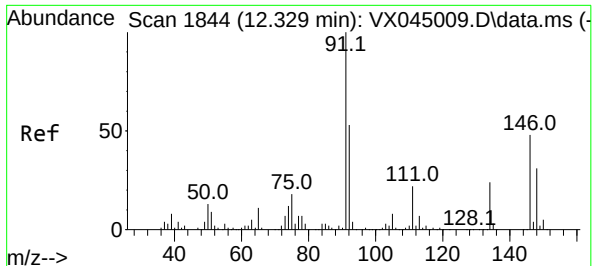
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#84
1,4-Dichlorobenzene
Concen: 19.039 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion:146 Resp: 48044
Ion Ratio Lower Upper
146 100
111 41.7 20.4 61.2
148 64.8 31.8 95.4





#85

n-Butylbenzene

Concen: 19.419 ug/l

RT: 12.329 min Scan# 1844

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

Tgt Ion: 91 Resp: 8956

Ion Ratio Lower Upper

91 100

92 53.2 0.0 105.2

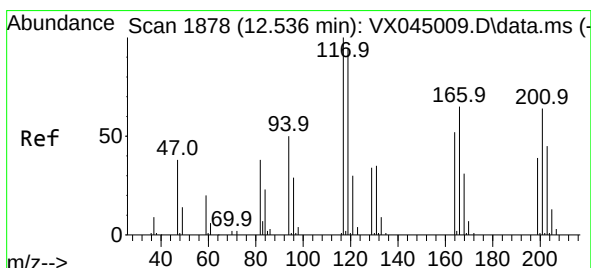
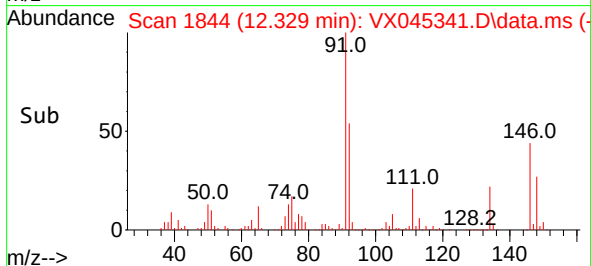
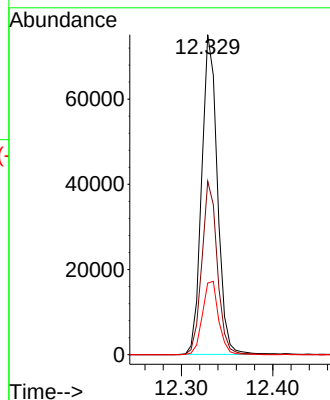
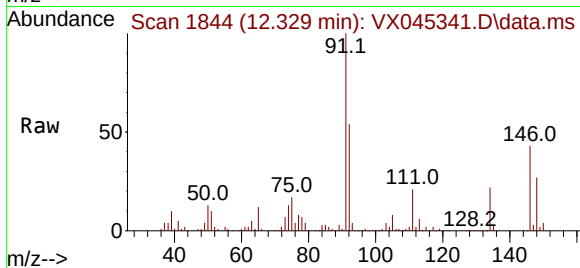
134 23.6 0.0 49.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#86

Hexachloroethane

Concen: 18.710 ug/l

RT: 12.536 min Scan# 1878

Delta R.T. -0.000 min

Lab File: VX045341.D

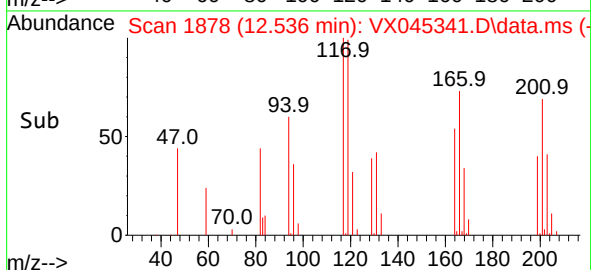
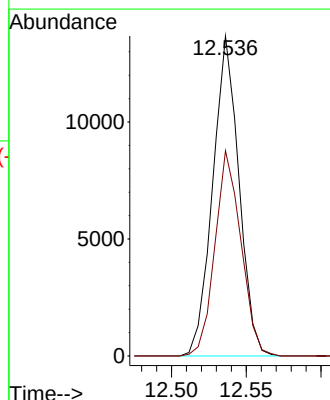
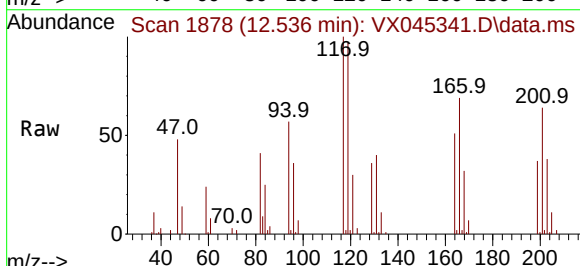
Acq: 19 Mar 2025 11:41

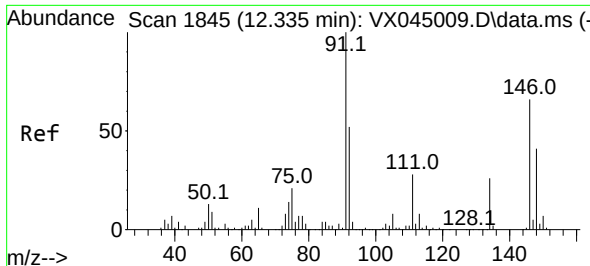
Tgt Ion:117 Resp: 16666

Ion Ratio Lower Upper

117 100

201 63.7 32.6 97.7





#87

1,2-Dichlorobenzene

Concen: 19.590 ug/l

RT: 12.335 min Scan# 1845

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

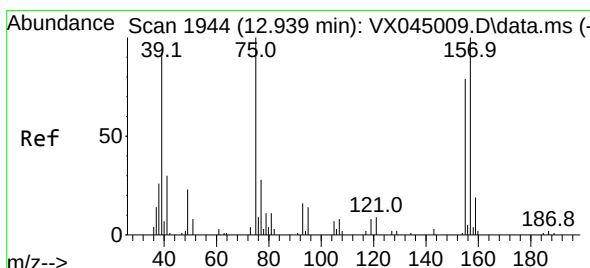
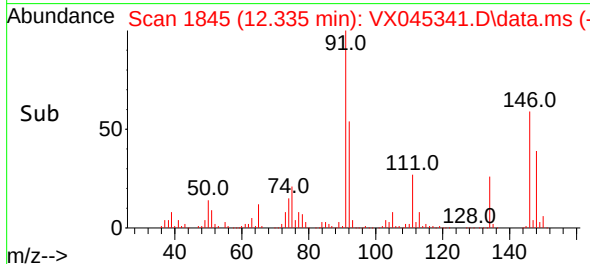
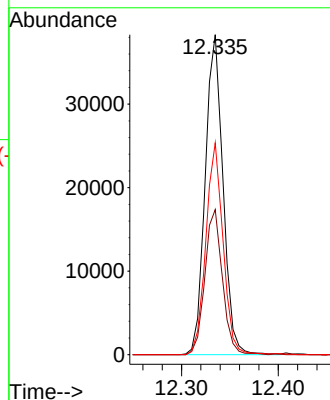
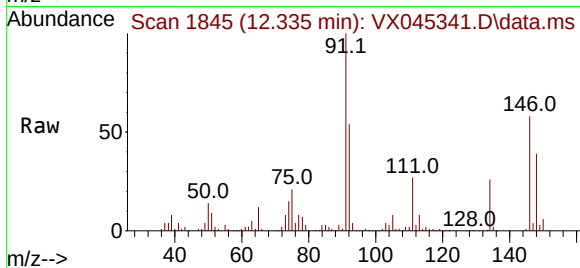
Tgt Ion:	146	Resp:	49194
Ion Ratio	Lower	Upper	
146	100		
111	44.6	21.7	65.1
148	63.9	31.8	95.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#88

1,2-Dibromo-3-Chloropropane

Concen: 21.886 ug/l

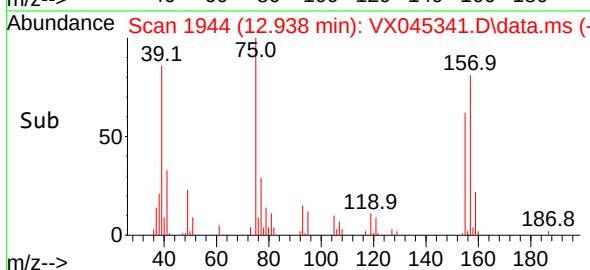
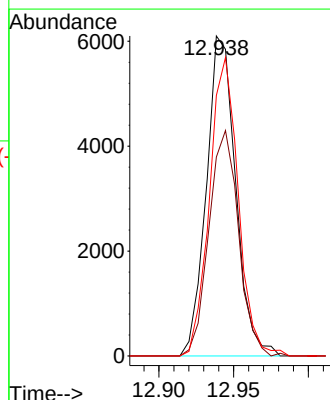
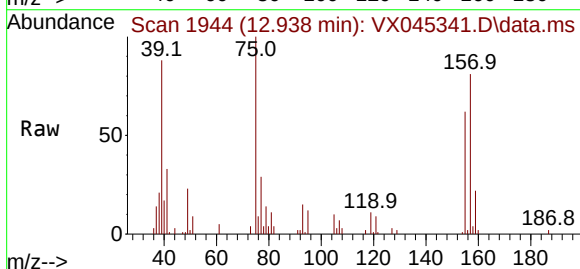
RT: 12.938 min Scan# 1944

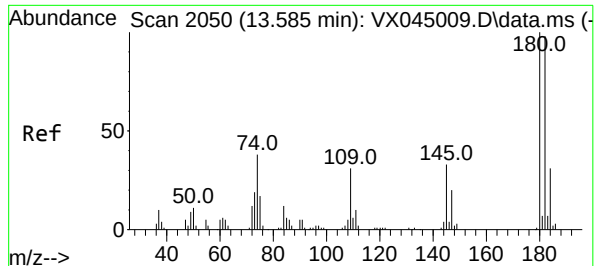
Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Tgt Ion:	75	Resp:	8326
Ion Ratio	Lower	Upper	
75	100		
155	70.9	66.2	99.4
157	90.7	81.4	122.2





#89

1,2,4-Trichlorobenzene

Concen: 18.473 ug/l

RT: 13.585 min Scan# 2050

Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBS01

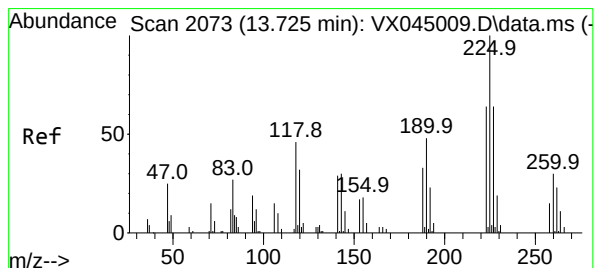
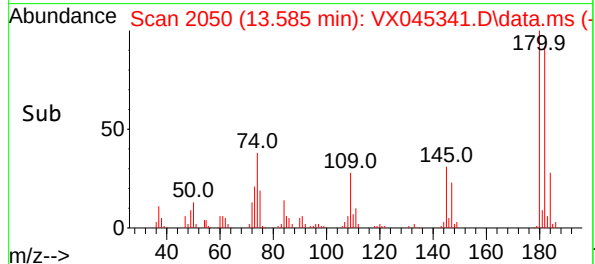
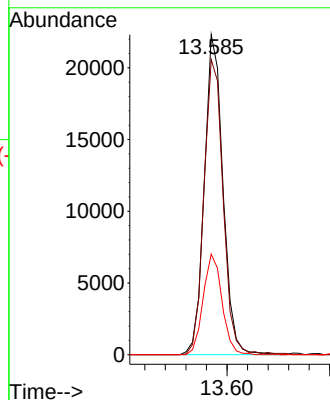
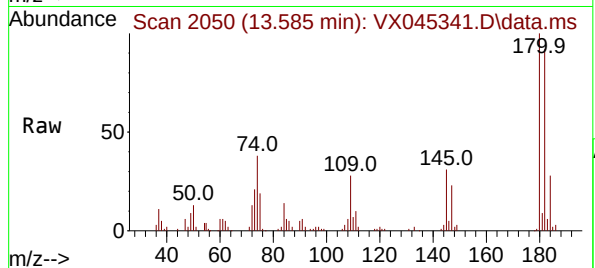
Tgt Ion:	180	Resp:	28110
Ion Ratio	Lower	Upper	
180	100		
182	94.4	77.7	116.5
145	31.7	25.8	38.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#90

Hexachlorobutadiene

Concen: 19.946 ug/l

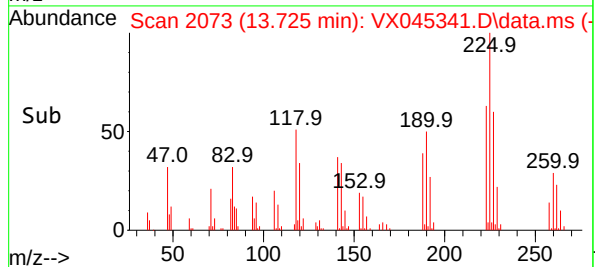
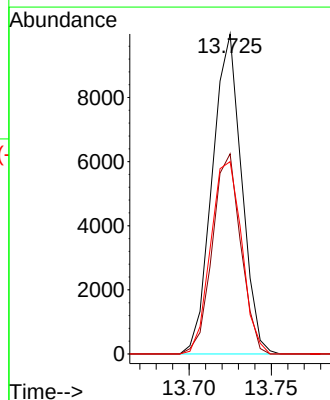
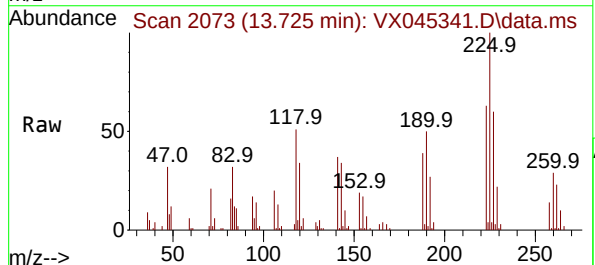
RT: 13.725 min Scan# 2073

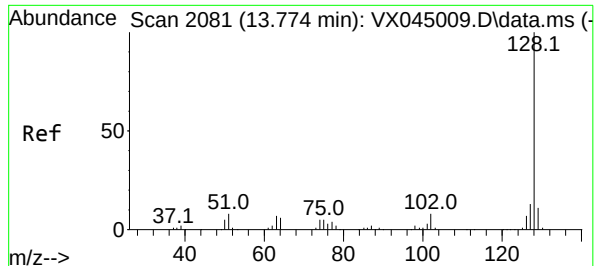
Delta R.T. -0.000 min

Lab File: VX045341.D

Acq: 19 Mar 2025 11:41

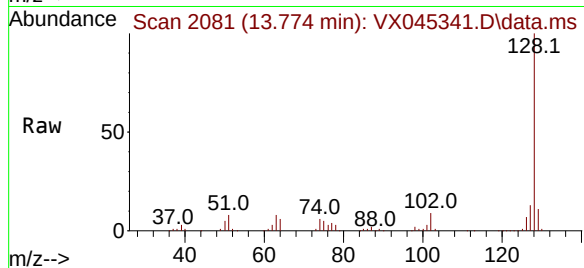
Tgt Ion:	225	Resp:	12380
Ion Ratio	Lower	Upper	
225	100		
223	60.6	0.0	123.4
227	63.6	0.0	127.4





#91
Naphthalene
Concen: 19.257 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

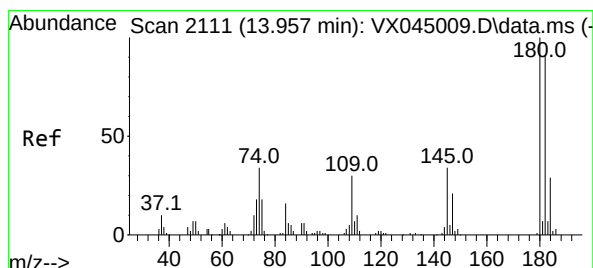
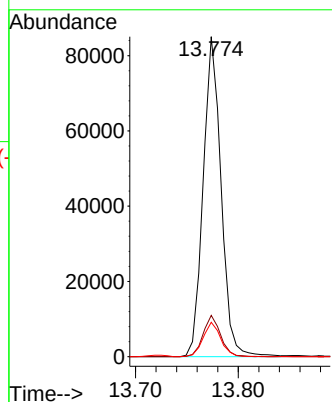
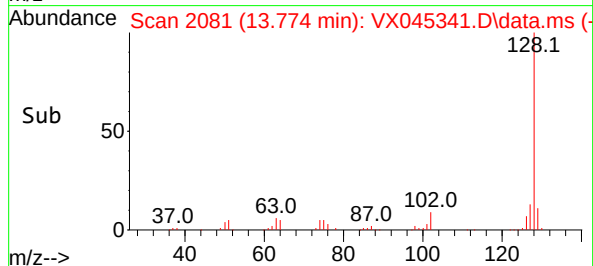
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBS01



Tgt Ion:128 Resp: 103348
Ion Ratio Lower Upper
128 100
127 12.5 10.5 15.7
129 10.6 8.7 13.1

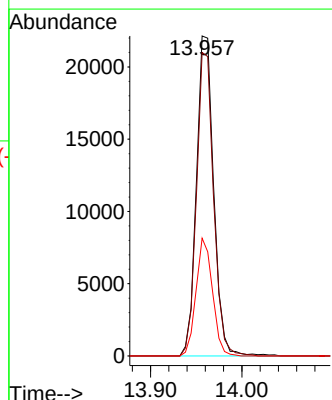
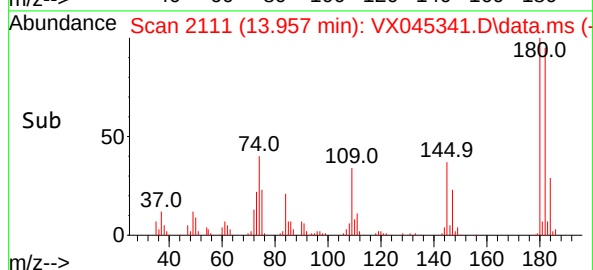
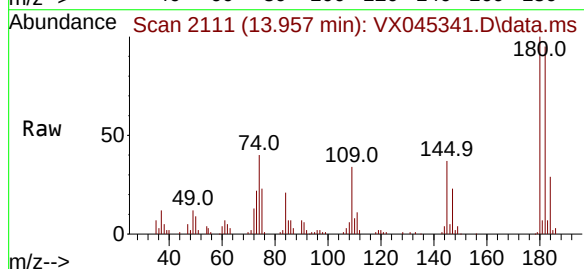
Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#92
1,2,3-Trichlorobenzene
Concen: 18.620 ug/l
RT: 13.957 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VX045341.D
Acq: 19 Mar 2025 11:41

Tgt Ion:180 Resp: 29175
Ion Ratio Lower Upper
180 100
182 93.7 0.0 186.6
145 34.9 0.0 68.4



Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VX0319WBSD01		SDG No.:	Q1502
Lab Sample ID:	VX0319WBSD01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045342.D	1		03/19/25 12:15	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	15.1		0.77	5.00	ug/L
74-87-3	Chloromethane	15.4		0.64	5.00	ug/L
75-01-4	Vinyl Chloride	14.4		0.83	5.00	ug/L
74-83-9	Bromomethane	19.4		0.80	5.00	ug/L
75-00-3	Chloroethane	15.0		2.30	5.00	ug/L
75-69-4	Trichlorofluoromethane	16.0		0.80	5.00	ug/L
75-35-4	1,1-Dichloroethene	16.3		0.76	5.00	ug/L
107-02-8	Acrolein	88.7		6.60	25.0	ug/L
107-13-1	Acrylonitrile	110		2.80	25.0	ug/L
67-64-1	Acetone	100		4.60	25.0	ug/L
75-15-0	Carbon Disulfide	13.5		0.82	5.00	ug/L
1634-04-4	Methyl tert-Butyl Ether	18.6		0.77	5.00	ug/L
75-09-2	Methylene Chloride	17.8		0.86	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	16.7		0.82	5.00	ug/L
108-05-4	Vinyl Acetate	98.5		3.20	25.0	ug/L
75-34-3	1,1-Dichloroethane	17.9		0.68	5.00	ug/L
78-93-3	2-Butanone	120		2.00	25.0	ug/L
56-23-5	Carbon Tetrachloride	19.8		0.74	5.00	ug/L
594-20-7	2,2-Dichloropropane	18.0		0.66	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	17.3		0.80	5.00	ug/L
67-66-3	Chloroform	19.1		0.55	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.0		0.63	5.00	ug/L
563-58-6	1,1-Dichloropropene	19.0		0.63	5.00	ug/L
71-43-2	Benzene	19.3		0.45	5.00	ug/L
107-06-2	1,2-Dichloroethane	22.7		0.50	5.00	ug/L
79-01-6	Trichloroethene	18.6		0.49	5.00	ug/L
78-87-5	1,2-Dichloropropane	19.4		0.46	5.00	ug/L
74-95-3	Dibromomethane	21.4		0.59	5.00	ug/L
75-27-4	Bromodichloromethane	20.7		0.64	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	120		3.00	25.0	ug/L

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VX0319WBSD01		SDG No.:	Q1502
Lab Sample ID:	VX0319WBSD01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045342.D	1		03/19/25 12:15	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-88-3	Toluene	18.4		0.46	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	18.4		0.72	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.4		0.67	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.8		0.45	5.00	ug/L
142-28-9	1,3-Dichloropropane	21.4		0.44	5.00	ug/L
110-75-8	2-Chloroethyl vinyl ether	120		4.60	25.0	ug/L
591-78-6	2-Hexanone	120		3.20	25.0	ug/L
124-48-1	Dibromochloromethane	20.3		0.66	5.00	ug/L
106-93-4	1,2-Dibromoethane	21.8		0.56	5.00	ug/L
127-18-4	Tetrachloroethene	18.9		0.84	5.00	ug/L
108-90-7	Chlorobenzene	19.0		0.47	5.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	18.9		0.62	5.00	ug/L
67-72-1	Hexachloroethane	17.9		0.98	5.00	ug/L
100-41-4	Ethyl Benzene	18.7		0.56	5.00	ug/L
179601-23-1	m/p-Xylenes	37.7		1.30	10.0	ug/L
1330-20-7	Total Xylenes	56.6		1.97	15.0	ug/L
95-47-6	o-Xylene	18.9		0.67	5.00	ug/L
100-42-5	Styrene	19.1		0.72	5.00	ug/L
75-25-2	Bromoform	20.7		0.94	5.00	ug/L
98-82-8	Isopropylbenzene	19.3		0.78	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	21.4		0.44	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	21.2		0.62	5.00	ug/L
108-86-1	Bromobenzene	19.4		0.59	5.00	ug/L
103-65-1	n-propylbenzene	18.9		0.67	5.00	ug/L
95-49-8	2-Chlorotoluene	19.3		0.64	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	19.3		0.59	5.00	ug/L
106-43-4	4-Chlorotoluene	19.0		0.62	5.00	ug/L
98-06-6	tert-butylbenzene	19.2		0.71	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	19.3		0.77	5.00	ug/L
135-98-8	sec-Butylbenzene	19.5		0.64	5.00	ug/L
99-87-6	p-Isopropyltoluene	19.1		0.70	5.00	ug/L

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark		Date Collected:	
Project:	NJ Waste Water PT		Date Received:	
Client Sample ID:	VX0319WBSD01		SDG No.:	Q1502
Lab Sample ID:	VX0319WBSD01		Matrix:	Water
Analytical Method:	E624.1		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045342.D	1		03/19/25 12:15	VX031925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
541-73-1	1,3-Dichlorobenzene	18.9		0.67	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.0		0.81	5.00	ug/L
104-51-8	n-Butylbenzene	18.2		0.82	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	18.9		0.67	5.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	21.6		0.86	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	17.7		1.00	5.00	ug/L
87-68-3	Hexachlorobutadiene	19.3		0.68	5.00	ug/L
91-20-3	Naphthalene	19.1		1.00	5.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	17.7		1.10	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	31.9		91 - 110	106%	SPK: 30
2037-26-5	Toluene-d8	29.6		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.5		63 - 112	102%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	15400	4.885			
540-36-3	1,4-Difluorobenzene	77100	6.757			
3114-55-4	Chlorobenzene-d5	74500	10.049			
74-97-5	Bromochloromethane	15400	4.885			

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_X\Data\VX031925\
 Data File : VX045342.D
 Acq On : 19 Mar 2025 12:15
 Operator : JC/MD
 Sample : VX0319WBSD01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0319WBSD01

Manual Integrations APPROVED

Reviewed By : John Carlone 03/20/2025
 Supervised By : Mahesh Dadoda 03/20/2025

Quant Time: Mar 20 01:32:59 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	4.885	128	15405	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	77122	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	74535	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	47760	31.920	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	106.400%
60) 4-Bromofluorobenzene	11.079	95	42472	30.486	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	101.633%
63) Toluene-d8	8.647	98	121913	29.566	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	98.567%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	19620	15.108	ug/l	90
3) Chloromethane	1.307	50	23956	15.402	ug/l	96
4) Vinyl Chloride	1.374	62	21621	14.406	ug/l	99
5) Bromomethane	1.593	94	10158	19.443	ug/l	98
6) Chloroethane	1.666	64	12210	15.021	ug/l	96
7) Trichlorofluoromethane	1.873	101	32316	16.020	ug/l	94
8) Diethyl Ether	2.130	74	11747	15.391	ug/l	93
9) 1,1,2-Trichlorotrifluo...	2.312	101	21264	17.748	ug/l	96
10) 1,1-Dichloroethene	2.306	96	19053	16.281	ug/l #	82
11) Methyl Iodide	2.440	142	24157	18.239	ug/l	100
12) Methyl Acetate	2.703	43	42810	31.503	ug/l	99
13) Acrolein	2.233	56	24161	88.702	ug/l	97
14) Acrylonitrile	3.062	53	71203	107.270	ug/l	99
15) Acetone	2.386	58	18620	102.282	ug/l	91
16) Carbon Disulfide	2.501	76	44896	13.526	ug/l	98
17) Allyl chloride	2.654	41	37581	17.170	ug/l	97
18) Methylene Chloride	2.782	84	23434	17.804	ug/l	97
19) trans-1,2-Dichloroethene	3.081	96	19804	16.727	ug/l	87
20) Diisopropyl ether	3.757	45	75506	17.952	ug/l	91
21) 1,1-Dichloroethane	3.599	63	41777	17.860	ug/l	99
22) cis-1,2-Dichloroethene	4.477	96	24514	17.278	ug/l	95
23) tert-Butyl Alcohol	2.977	59	21261	91.751	ug/l #	100
24) Methyl tert-Butyl Ether	3.111	73	71024	18.595	ug/l	95
25) Chloroform	5.086	83	43100	19.076	ug/l	99
26) Cyclohexane	5.452	56	35407	16.398	ug/l #	99
29) 1,1-Dichloropropene	5.684	75	26888	18.953	ug/l	99
30) 2-Butanone	4.556	43	97680	119.206	ug/l	98
31) 2,2-Dichloropropane	4.464	77	28902	18.017	ug/l	99
32) 1,1,1-Trichloroethane	5.373	97	34301	19.955	ug/l	97
33) Carbon Tetrachloride	5.665	117	28765	19.829	ug/l	98
34) Benzene	6.031	78	86029	19.337	ug/l	99
35) Methacrylonitrile	4.916	41	20551	23.437	ug/l	99
36) 1,2-Dichloroethane	6.080	62	34623	22.731	ug/l	97
37) Trichloroethene	7.116	130	19370	18.610	ug/l	85
38) Methylcyclohexane	7.372	83	34492	18.107	ug/l	99
39) 1,2-Dichloropropane	7.427	63	21512	19.449	ug/l	97
40) Dibromomethane	7.574	93	16975	21.387	ug/l	98
41) Bromodichloromethane	7.818	83	32598	20.664	ug/l	98
42) Vinyl Acetate	3.715	43	313074	98.457	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX031925\
 Data File : VX045342.D
 Acq On : 19 Mar 2025 12:15
 Operator : JC/MD
 Sample : VX0319WBSD01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0319WBSD01

Manual Integrations APPROVED

Reviewed By : John Carlone 03/20/2025
 Supervised By : Mahesh Dadoda 03/20/2025

Quant Time: Mar 20 01:32:59 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X022125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 22 01:06:36 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.714	43	33656	21.902	ug/l	99
44) Isopropyl Acetate	6.336	43	54315	21.475	ug/l	98
45) 1,4-Dioxane	7.659	88	10325	392.707	ug/l	98
46) Methyl methacrylate	7.690	41	27912	22.506	ug/l	96
47) n-amyl Acetate	10.841	43	45053	20.528	ug/l	100
48) t-1,3-Dichloropropene	8.976	75	27952	18.383	ug/l	98
49) cis-1,3-Dichloropropene	8.360	75	33368	19.386	ug/l	95
50) 1,1,2-Trichloroethane	9.147	97	21519	20.785	ug/l	96
51) Ethyl methacrylate	9.116	69	35521	21.816	ug/l	97
52) 1,3-Dichloropropane	9.305	76	38794	21.385	ug/l	99
53) Dibromochloromethane	9.518	129	23254	20.309	ug/l	95
54) 1,2-Dibromoethane	9.610	107	22899	21.782	ug/l	98
55) 2-Chloroethyl vinyl ether	8.238	63	97308	116.377	ug/l	100
56) Bromoform	10.799	173	14853	20.701	ug/l	96
58) 4-Methyl-2-Pentanone	8.567	43	197562	116.520	ug/l	98
59) 2-Hexanone	9.427	43	143492	117.085	ug/l	98
61) Tetrachloroethene	9.268	164	17338	18.890	ug/l	100
62) Toluene	8.714	91	90934	18.417	ug/l	99
64) Chlorobenzene	10.079	112	58036	18.969	ug/l	99
65) 1,1,1,2-Tetrachloroethane	10.159	131	19074	18.893	ug/l	98
66) Ethyl Benzene	10.189	91	100826	18.652	ug/l	97
67) m/p-Xylenes	10.299	106	76026	37.748	ug/l	98
68) o-Xylene	10.640	106	37375	18.914	ug/l	97
69) Styrene	10.652	104	63021	19.095	ug/l	98
70) Isopropylbenzene	10.957	105	98479	19.312	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.207	83	35961	21.445	ug/l	99
72) 1,2,3-Trichloropropane	11.238	75	29280m	21.229	ug/l	
73) Bromobenzene	11.195	156	22829	19.446	ug/l	98
74) n-propylbenzene	11.299	91	114810	18.919	ug/l	99
75) 2-Chlorotoluene	11.360	91	70623	19.250	ug/l	99
76) 1,3,5-Trimethylbenzene	11.451	105	81283	19.321	ug/l	100
77) t-1,4-Dichloro-2-butene	11.018	75	8305	17.897	ug/l	73
78) 4-Chlorotoluene	11.451	91	77762	19.014	ug/l	98
79) tert-butylbenzene	11.713	119	81369	19.196	ug/l	98
80) 1,2,4-Trimethylbenzene	11.750	105	81476	19.334	ug/l	99
81) sec-Butylbenzene	11.890	105	103882	19.527	ug/l	98
82) p-Isopropyltoluene	12.006	119	82311	19.096	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	41173	18.850	ug/l	99
84) 1,4-Dichlorobenzene	12.042	146	40932	19.006	ug/l	99
85) n-Butylbenzene	12.329	91	71547	18.177	ug/l	99
86) Hexachloroethane	12.536	117	13631	17.931	ug/l	96
87) 1,2-Dichlorobenzene	12.335	146	40418	18.859	ug/l	97
88) 1,2-Dibromo-3-Chloropr...	12.939	75	7027	21.644	ug/l	94
89) 1,2,4-Trichlorobenzene	13.585	180	23006	17.712	ug/l	97
90) Hexachlorobutadiene	13.725	225	10215	19.284	ug/l	99
91) Naphthalene	13.774	128	87558	19.117	ug/l	100
92) 1,2,3-Trichlorobenzene	13.963	180	23693	17.718	ug/l	98

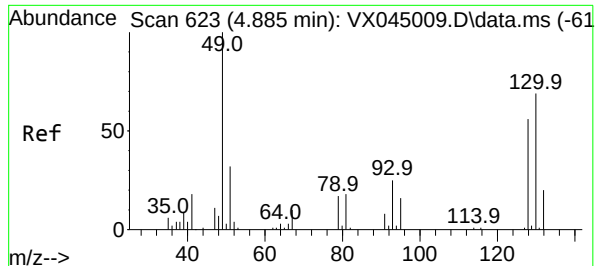
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Manual Integrations

Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025





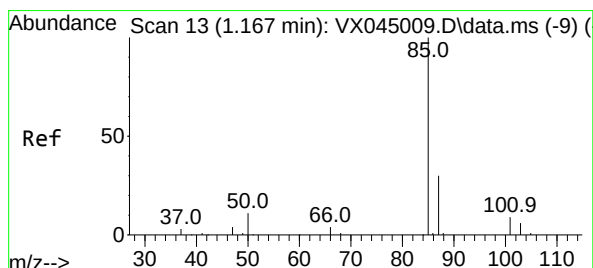
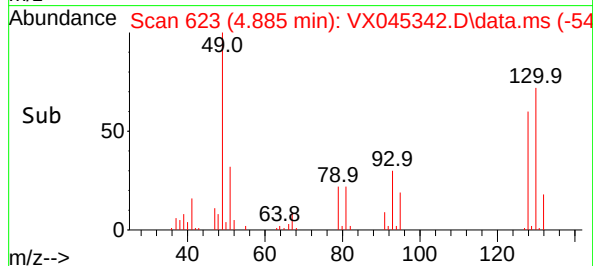
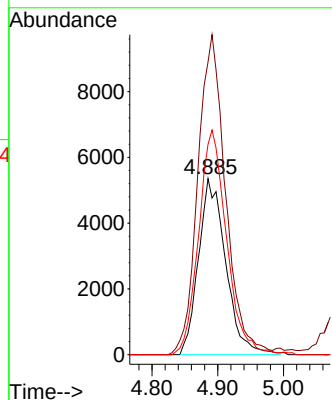
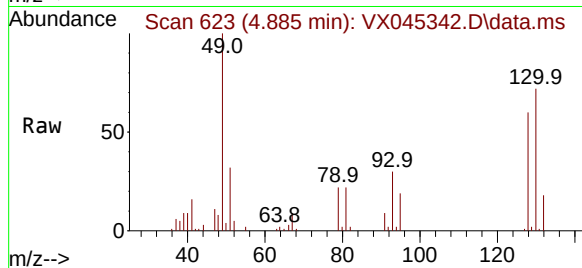
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.885 min Scan# 61
Delta R.T. 0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion:128 Resp: 1540
Ion Ratio Lower Upper
128 100
49 185.0 0.0 449.7
130 130.1 0.0 312.7

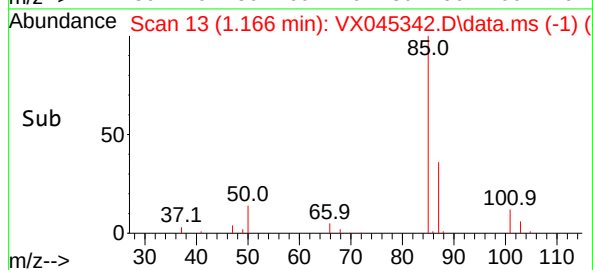
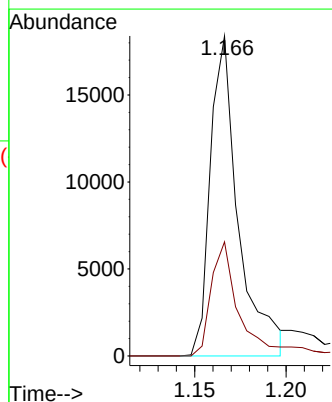
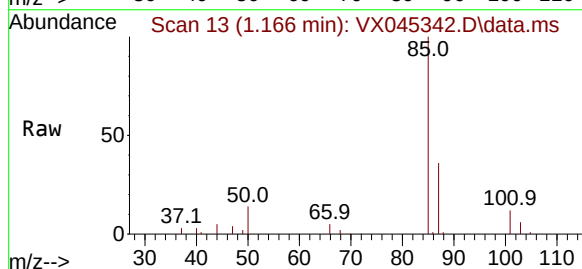
Manual Integrations
APPROVED

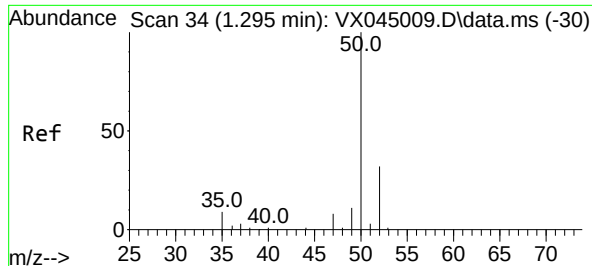
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#2
Dichlorodifluoromethane
Concen: 15.108 ug/l
RT: 1.166 min Scan# 13
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 85 Resp: 19620
Ion Ratio Lower Upper
85 100
87 35.6 15.1 45.3





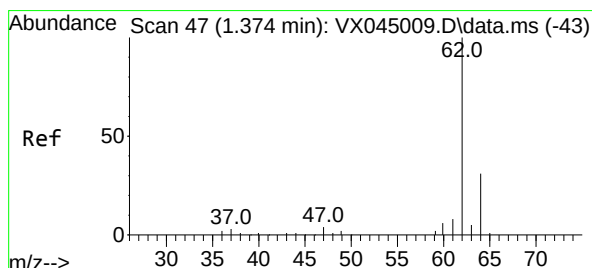
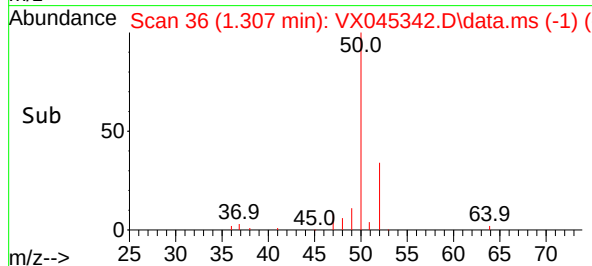
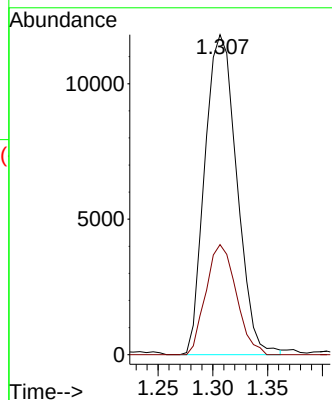
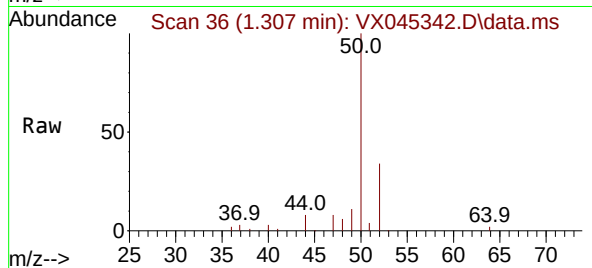
#3
Chloromethane
Concen: 15.402 ug/l
RT: 1.307 min Scan# 30
Delta R.T. 0.012 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 50 Resp: 23950
Ion Ratio Lower Upper
50 100
52 34.4 25.7 38.5

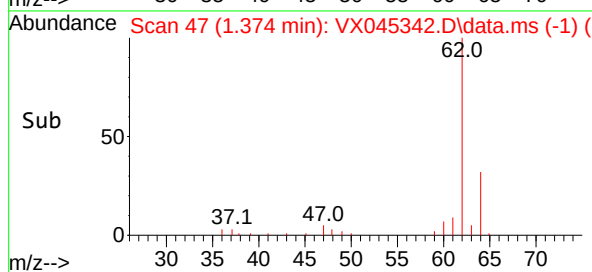
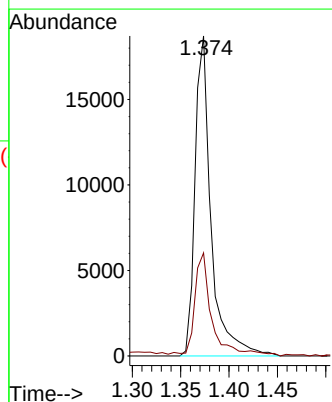
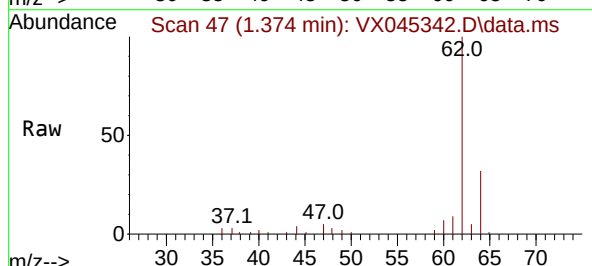
Manual Integrations
APPROVED

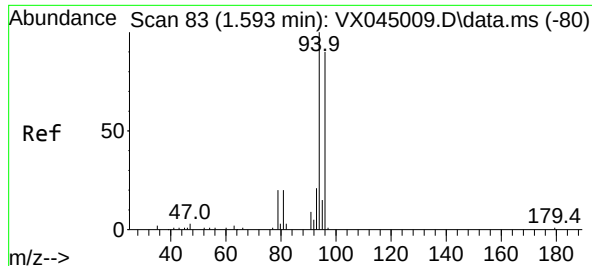
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#4
Vinyl Chloride
Concen: 14.406 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

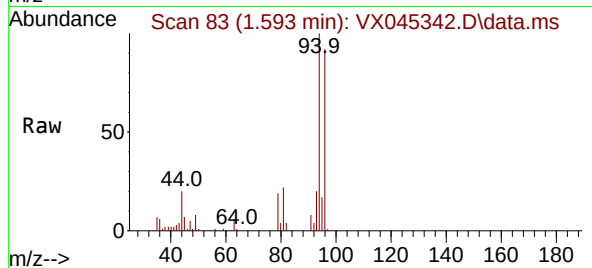
Tgt Ion: 62 Resp: 21621
Ion Ratio Lower Upper
62 100
64 32.2 25.1 37.7





#5
Bromomethane
Concen: 19.443 ug/l
RT: 1.593 min Scan# 83
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

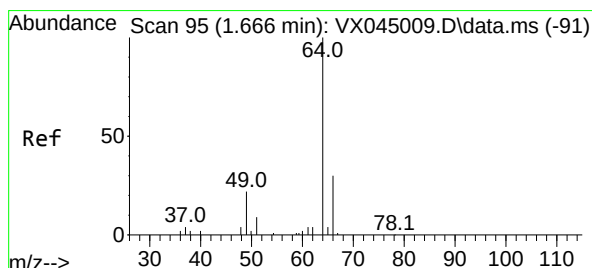
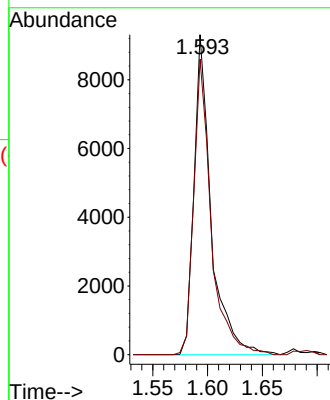
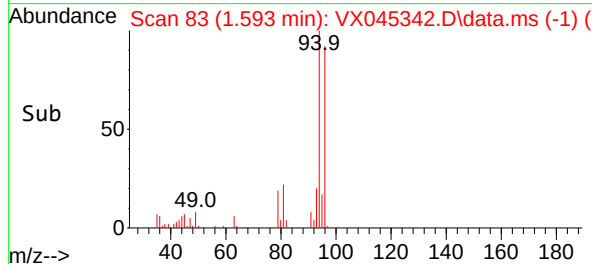
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01



Tgt Ion: 94 Resp: 10158
Ion Ratio Lower Upper
94 100
96 92.4 72.2 108.4

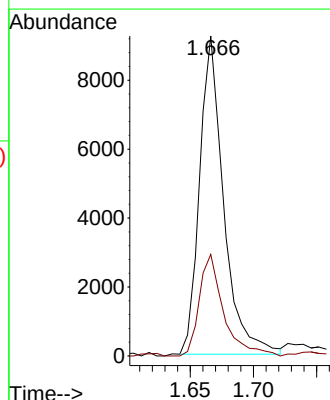
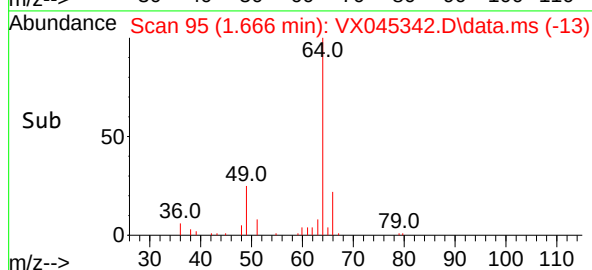
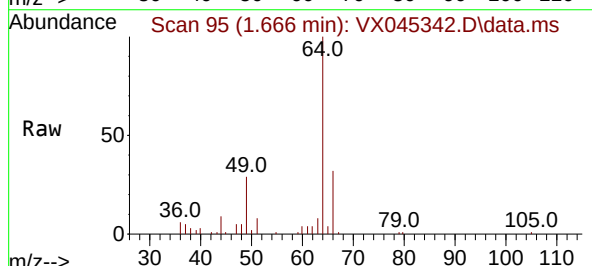
Manual Integrations
APPROVED

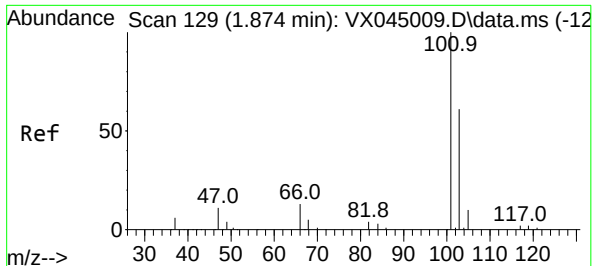
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#6
Chloroethane
Concen: 15.021 ug/l
RT: 1.666 min Scan# 95
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 64 Resp: 12210
Ion Ratio Lower Upper
64 100
66 31.9 23.7 35.5





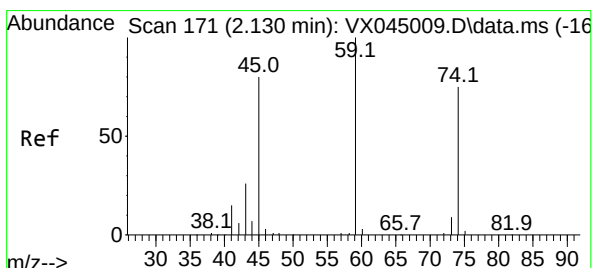
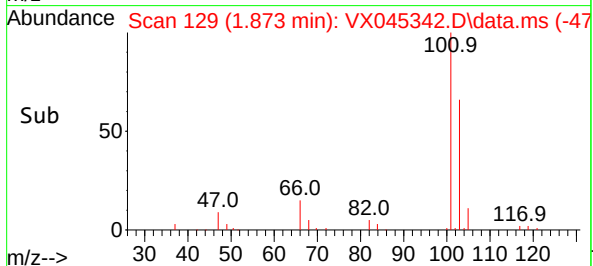
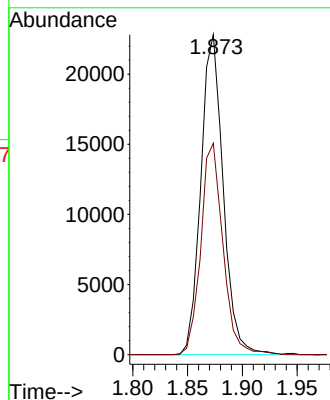
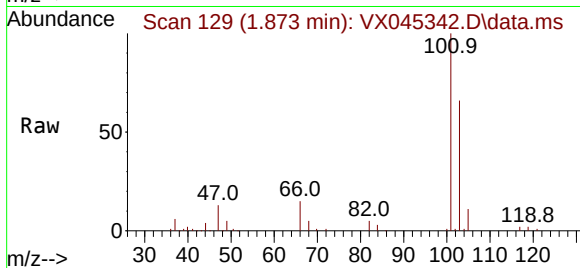
#7
Trichlorofluoromethane
Concen: 16.020 ug/l
RT: 1.873 min Scan# 129
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 101 Resp: 32310
Ion Ratio Lower Upper
101 100
103 65.8 48.8 73.2

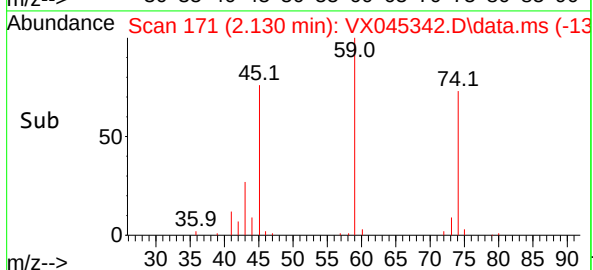
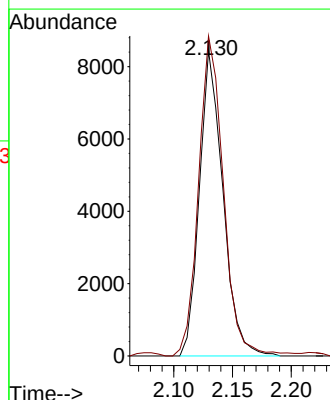
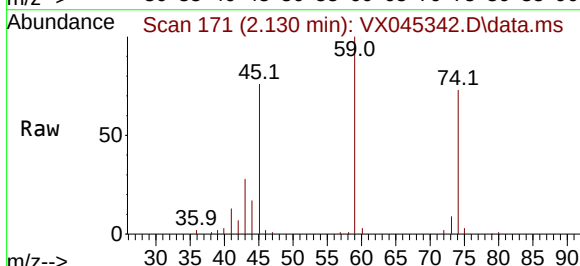
Manual Integrations
APPROVED

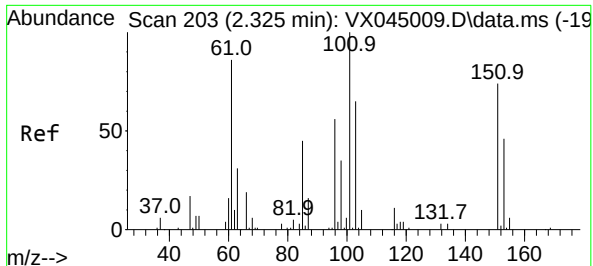
Reviewed By : John Carlone 03/20/2025
Supervised By : Mahesh Dadoda 03/20/2025



#8
Diethyl Ether
Concen: 15.391 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 74 Resp: 11747
Ion Ratio Lower Upper
74 100
45 110.8 20.8 186.8





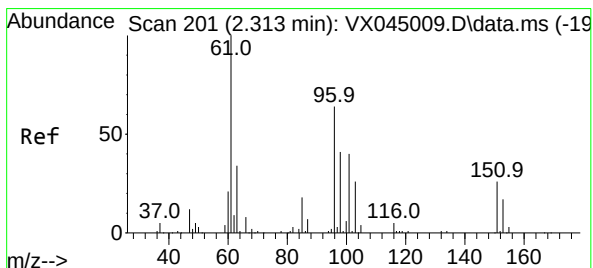
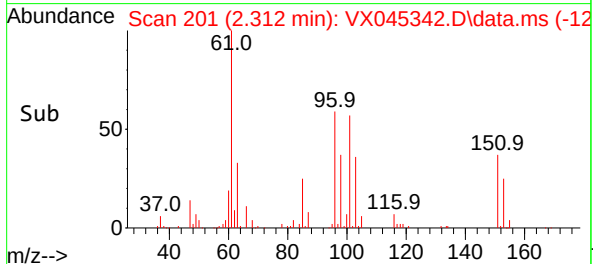
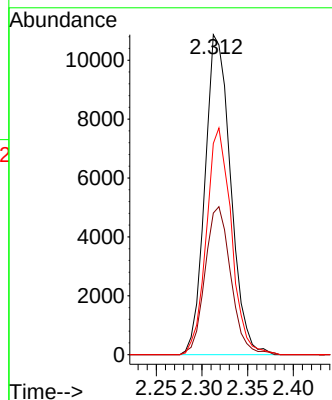
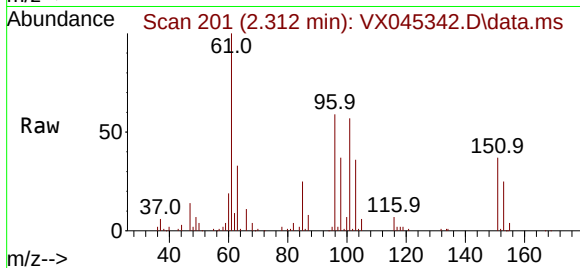
#9
1,1,2-Trichlorotrifluoroethane
Concen: 17.748 ug/l
RT: 2.312 min Scan# 201
Delta R.T. -0.012 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 101 Resp: 21264
Ion Ratio Lower Upper
101 100
85 46.0 0.0 90.6
151 68.9 0.0 147.6

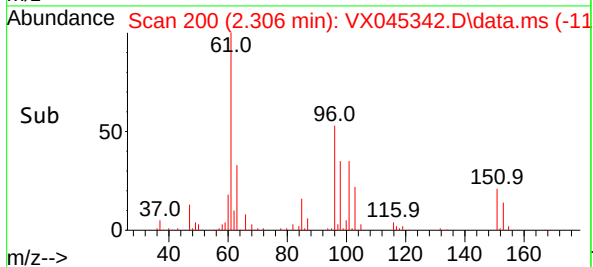
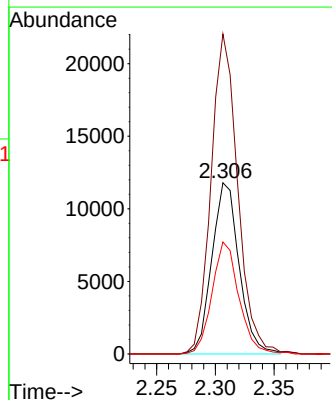
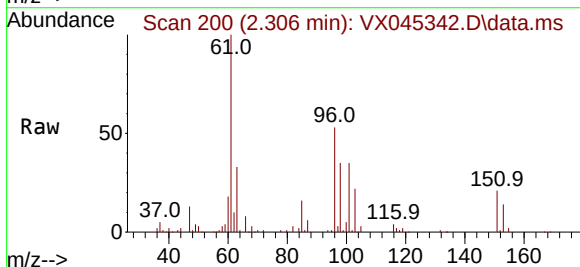
Manual Integrations
APPROVED

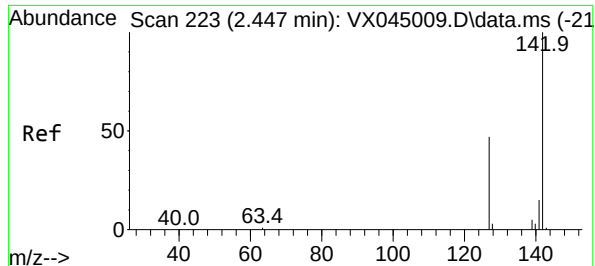
Reviewed By : John Carlone 03/20/2025
Supervised By : Mahesh Dadoda 03/20/2025



#10
1,1-Dichloroethene
Concen: 16.281 ug/l
RT: 2.306 min Scan# 200
Delta R.T. -0.006 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 96 Resp: 19053
Ion Ratio Lower Upper
96 100
61 187.0 124.2 186.2#
98 65.5 51.1 76.7





#11

Methyl Iodide

Concen: 18.239 ug/l

RT: 2.440 min Scan# 21

Delta R.T. -0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

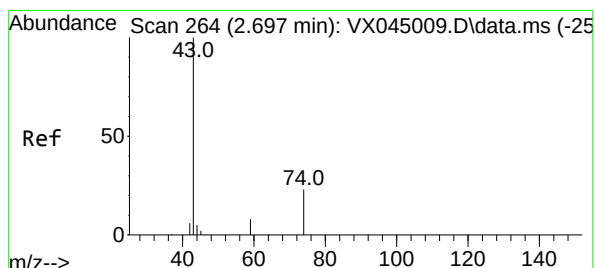
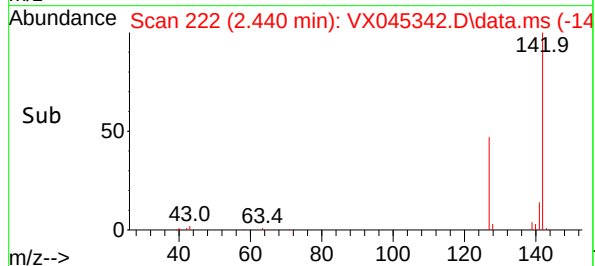
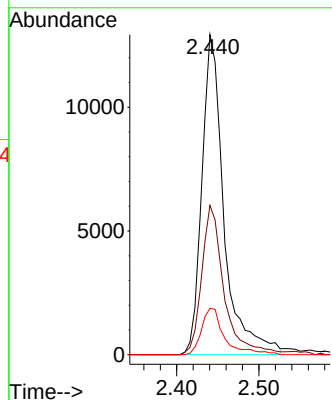
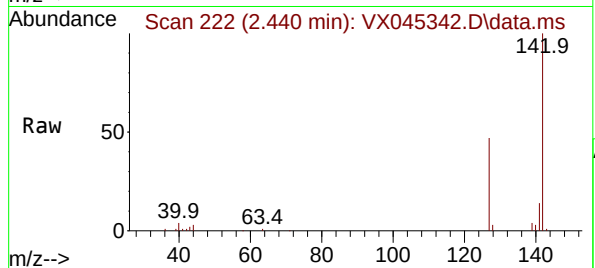
ClientSampleId :

VX0319WBSD01

Tgt Ion:	142	Resp:	2415
Ion	Ratio	Lower	Upper
142	100		
127	46.6	23.3	69.9
141	14.6	7.5	22.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#12

Methyl Acetate

Concen: 31.503 ug/l

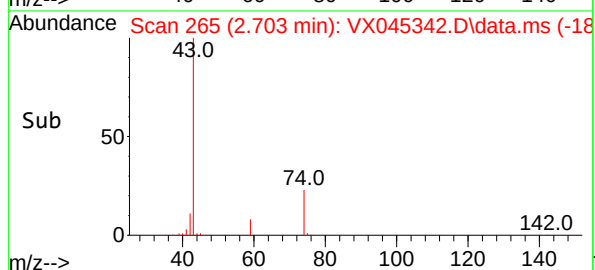
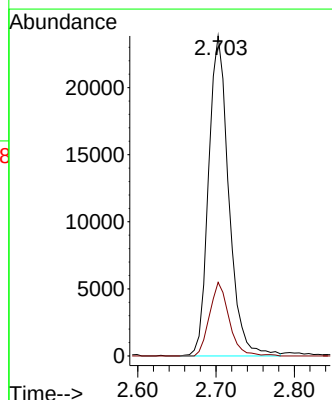
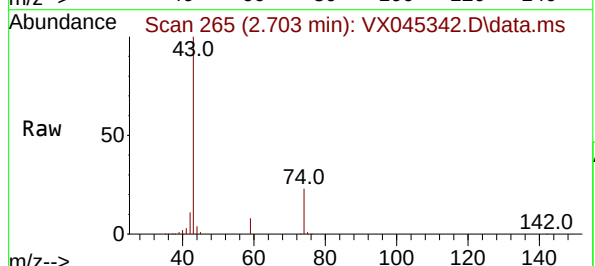
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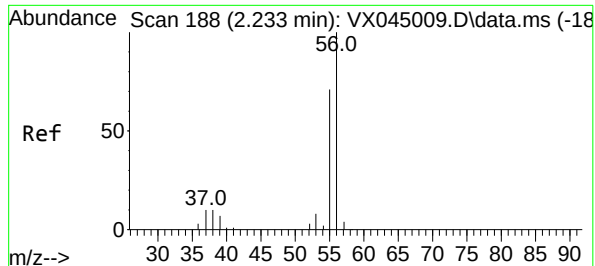
Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion:	43	Resp:	42810
Ion	Ratio	Lower	Upper
43	100		
74	23.1	17.9	26.9





#13

Acrolein

Concen: 88.702 ug/l

RT: 2.233 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 56 Resp: 2416

Ion Ratio Lower Upper

56 100

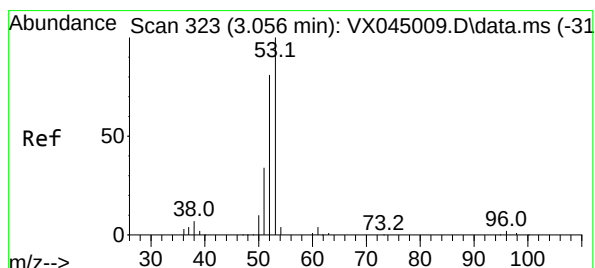
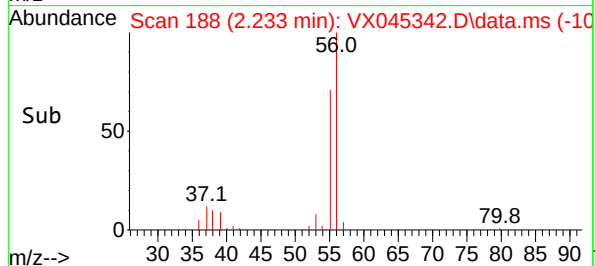
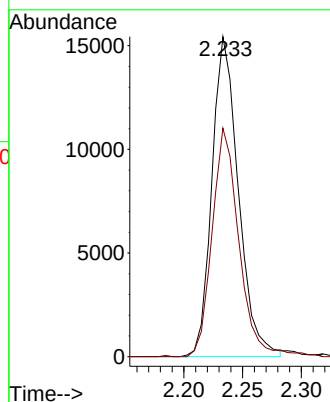
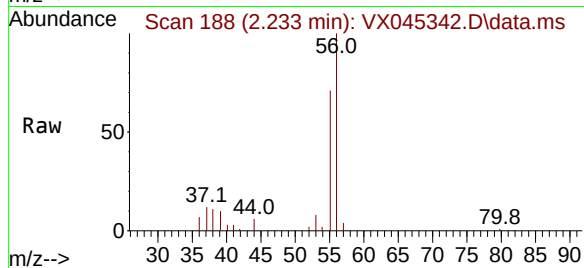
55 72.1 55.4 83.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#14

Acrylonitrile

Concen: 107.270 ug/l

RT: 3.062 min Scan# 324

Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

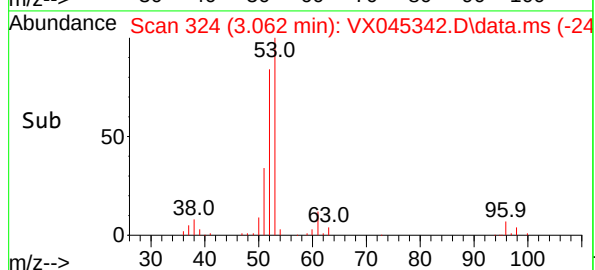
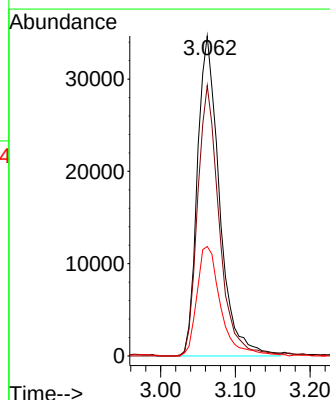
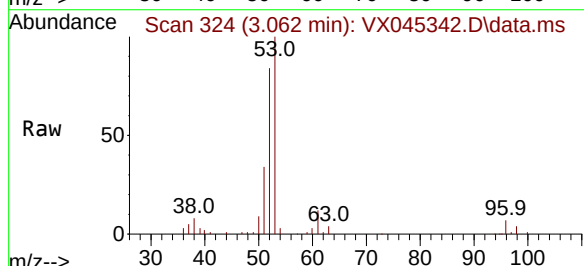
Tgt Ion: 53 Resp: 71203

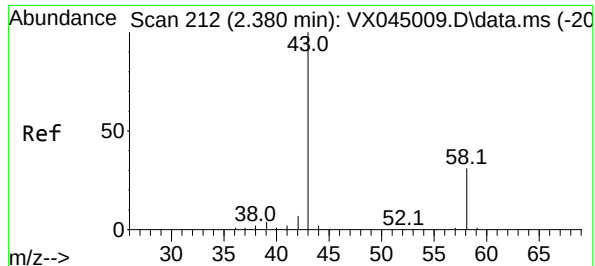
Ion Ratio Lower Upper

53 100

52 82.5 40.9 122.8

51 36.8 18.0 54.0





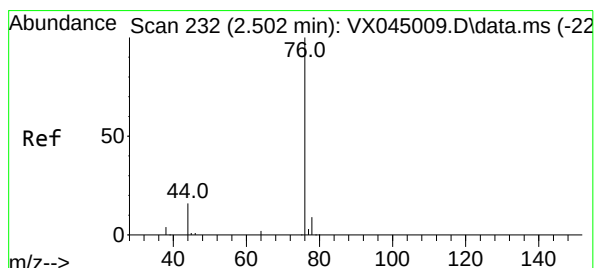
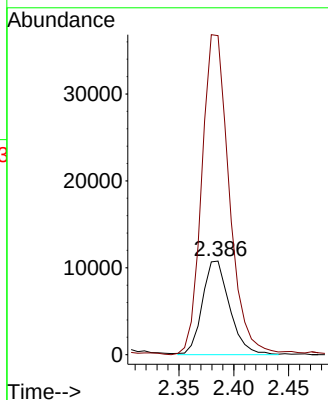
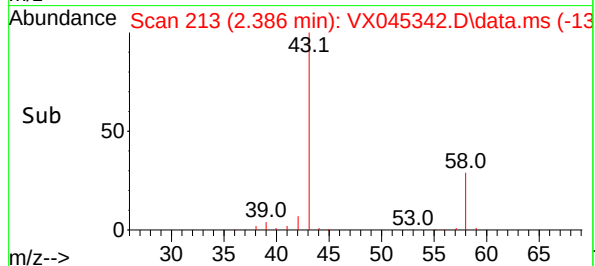
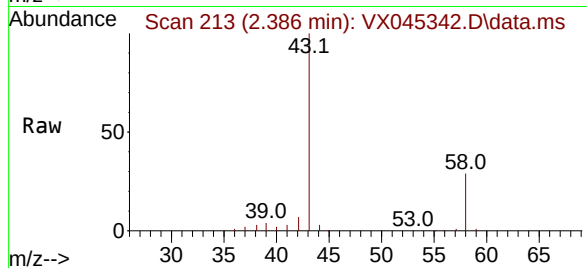
#15
Acetone
Concen: 102.282 ug/l
RT: 2.386 min Scan# 212
Delta R.T. 0.006 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 58 Resp: 18620
Ion Ratio Lower Upper
58 100
43 341.0 258.6 388.0

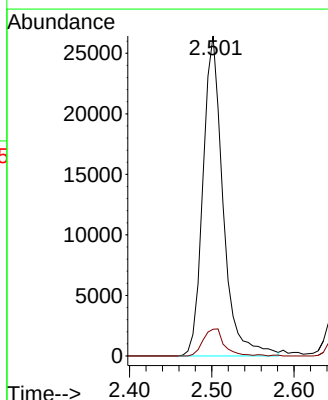
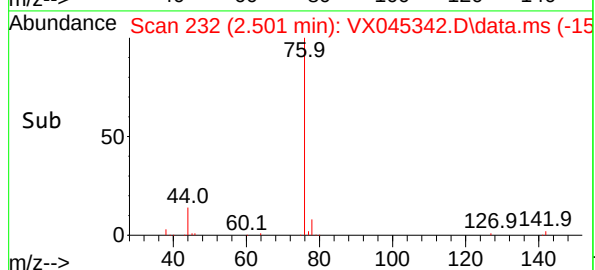
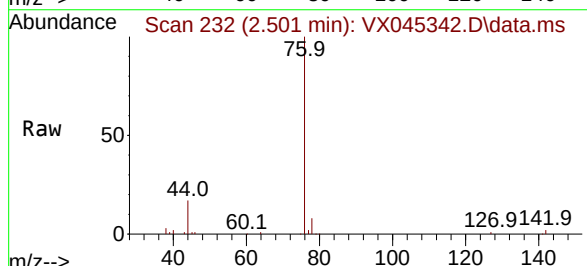
Manual Integrations
APPROVED

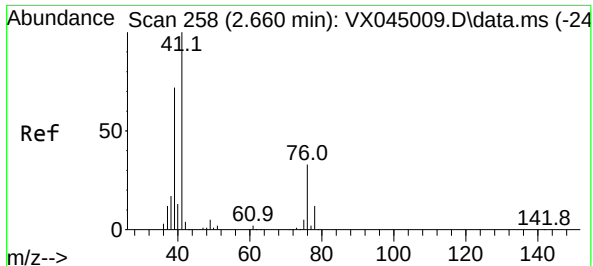
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#16
Carbon Disulfide
Concen: 13.526 ug/l
RT: 2.501 min Scan# 232
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 76 Resp: 44896
Ion Ratio Lower Upper
76 100
78 8.3 7.3 10.9





#17

Allyl chloride

Concen: 17.170 ug/l

RT: 2.654 min Scan# 21

Delta R.T. -0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

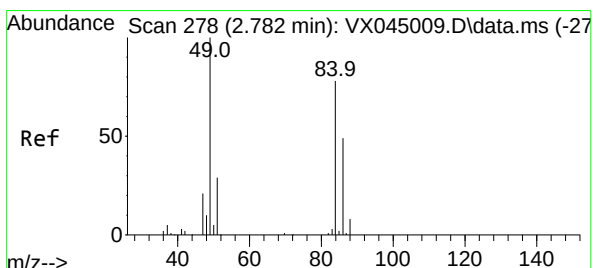
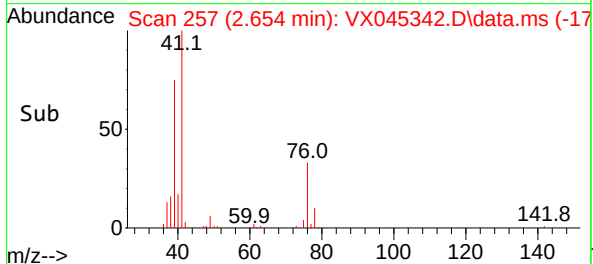
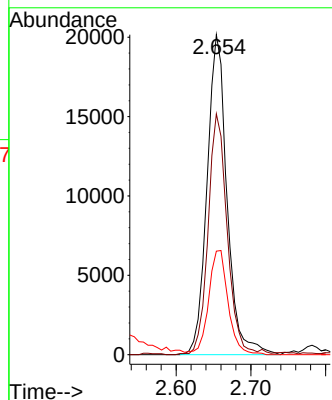
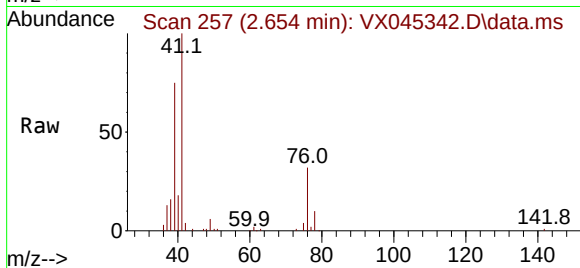
VX0319WBSD01

Tgt Ion:	41	Resp:	3758
Ion Ratio	Lower	Upper	
41	100		
39	74.9	36.2	108.6
76	32.3	17.2	51.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#18

Methylene Chloride

Concen: 17.804 ug/l

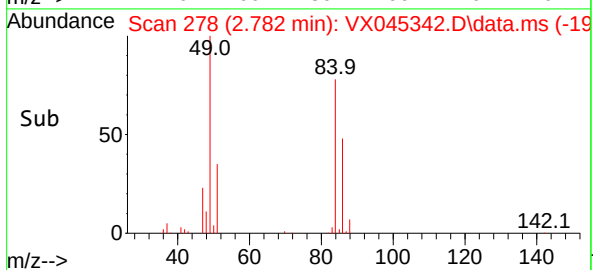
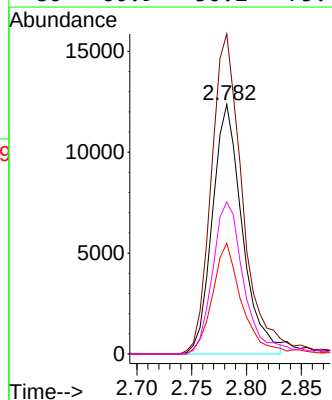
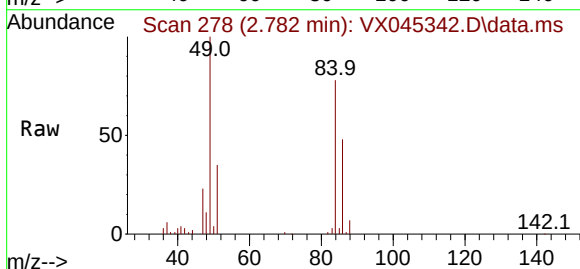
RT: 2.782 min Scan# 278

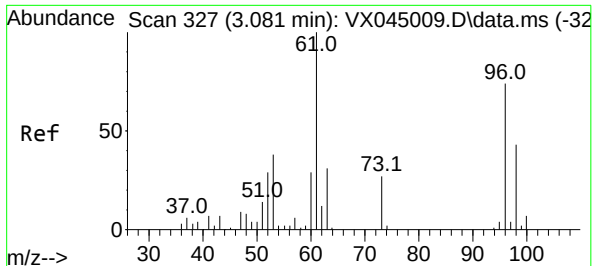
Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion:	84	Resp:	23434
Ion Ratio	Lower	Upper	
84	100		
49	128.3	102.8	154.2
51	44.4	30.1	45.1
86	60.9	50.2	75.4





#19

trans-1,2-Dichloroethene

Concen: 16.727 ug/l

RT: 3.081 min Scan# 31

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 96 Resp: 19804

Ion Ratio Lower Upper

96 100

61 150.5 108.6 163.0

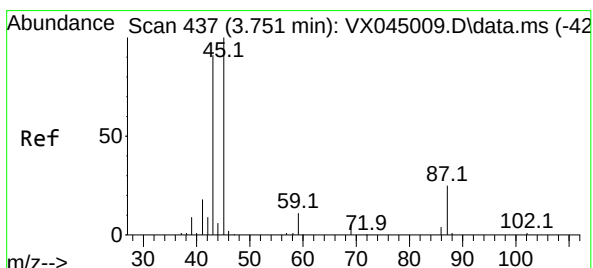
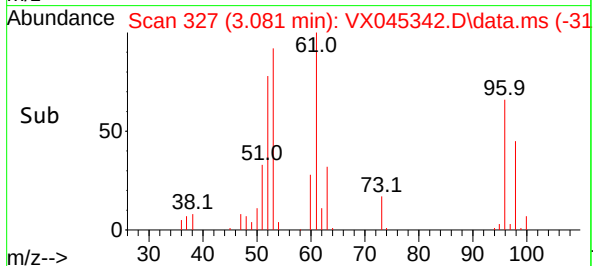
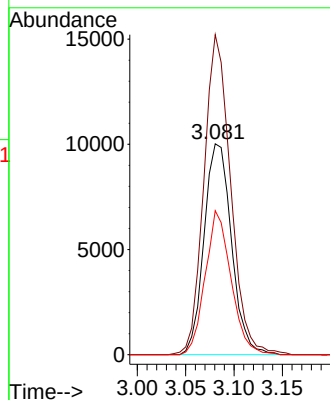
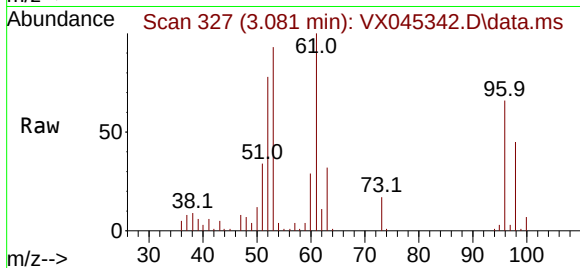
98 68.3 46.5 69.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#20

Diisopropyl ether

Concen: 17.952 ug/l

RT: 3.757 min Scan# 438

Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion: 45 Resp: 75506

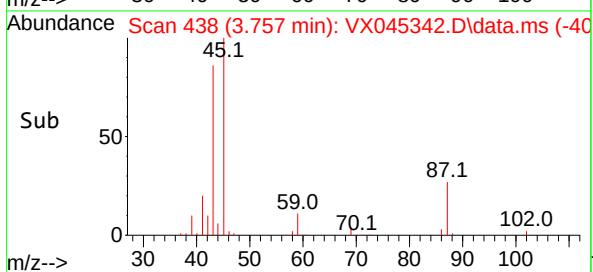
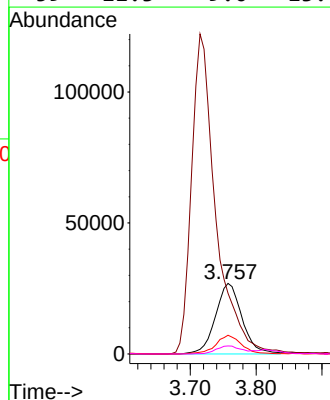
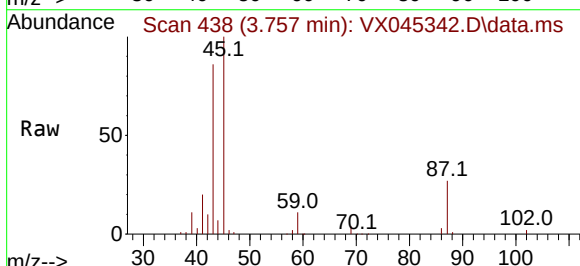
Ion Ratio Lower Upper

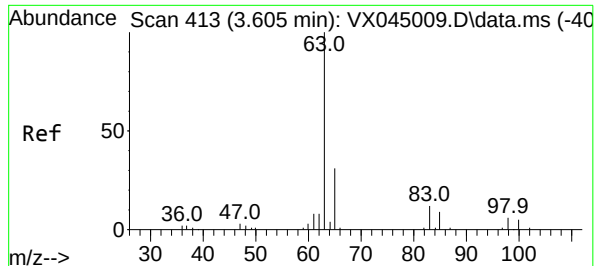
45 100

43 81.5 74.4 111.6

87 26.6 19.8 29.8

59 11.3 9.0 13.4





#21

1,1-Dichloroethane

Concen: 17.860 ug/l

RT: 3.599 min Scan# 41

Delta R.T. -0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

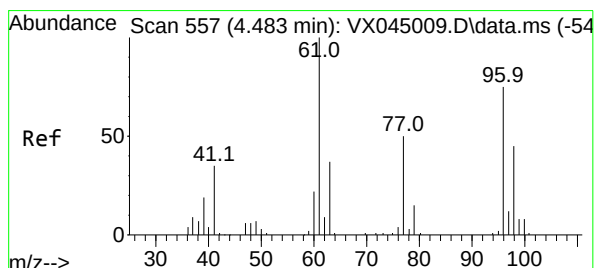
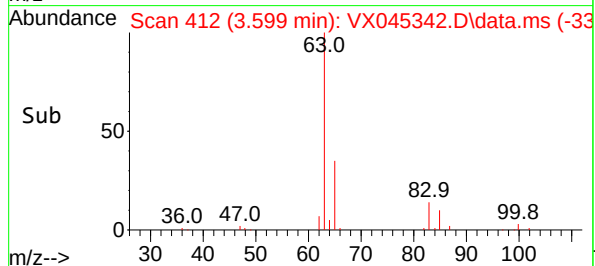
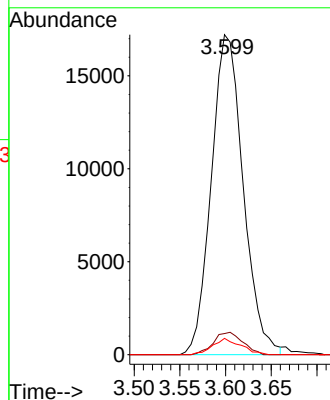
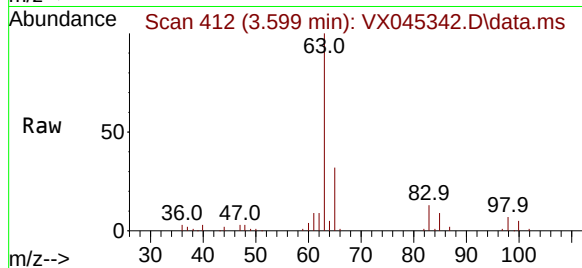
Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion:	63	Resp:	4177
Ion Ratio	Lower	Upper	
63	100		
98	6.6	3.3	9.8
100	5.1	2.4	7.1

Manual Integrations
APPROVEDReviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

#22

cis-1,2-Dichloroethene

Concen: 17.278 ug/l

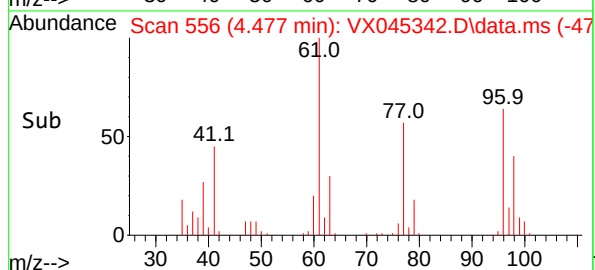
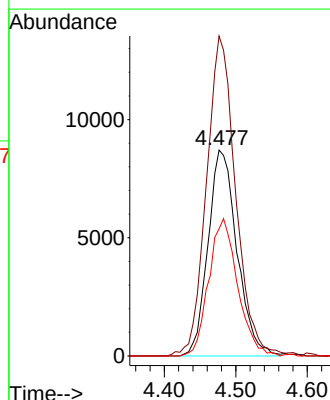
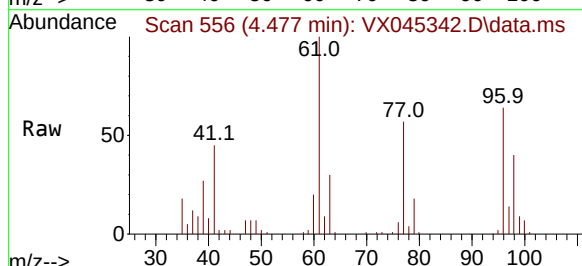
RT: 4.477 min Scan# 556

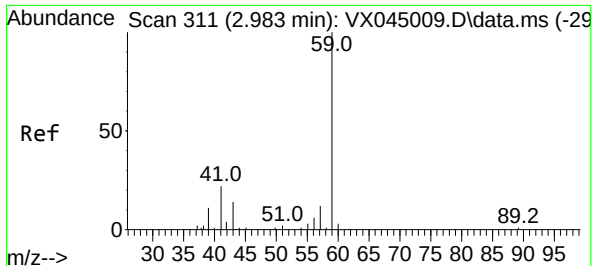
Delta R.T. -0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion:	96	Resp:	24514
Ion Ratio	Lower	Upper	
96	100		
61	156.1	118.9	178.3
98	66.0	50.7	76.1





#23

tert-Butyl Alcohol

Concen: 91.751 ug/l

RT: 2.977 min Scan# 311

Delta R.T. -0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 59 Resp: 2126

Ion Ratio Lower Upper

59 100

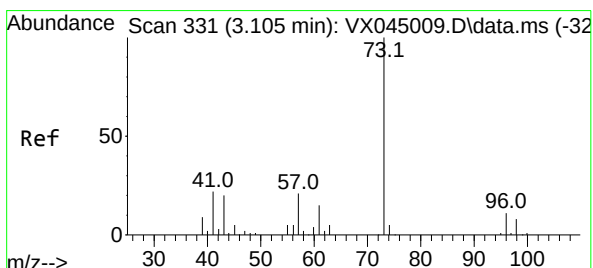
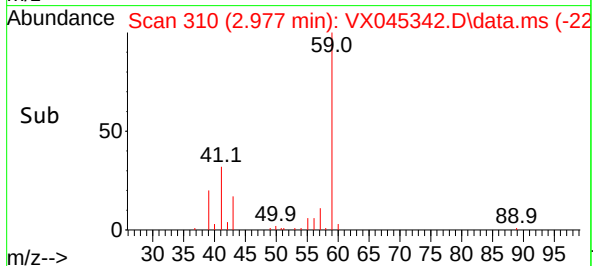
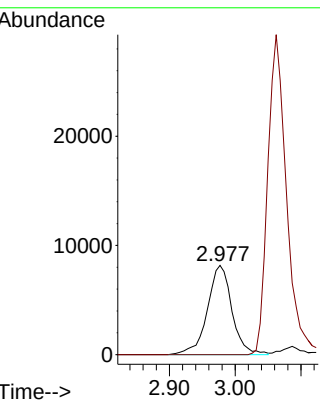
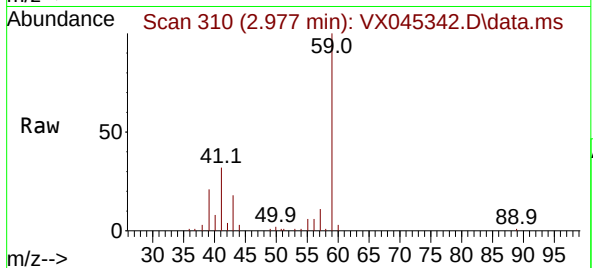
52 0.0 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#24

Methyl tert-Butyl Ether

Concen: 18.595 ug/l

RT: 3.111 min Scan# 332

Delta R.T. 0.006 min

Lab File: VX045342.D

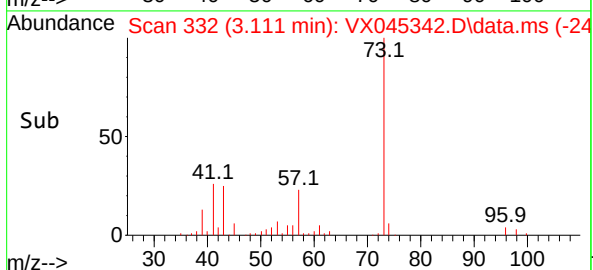
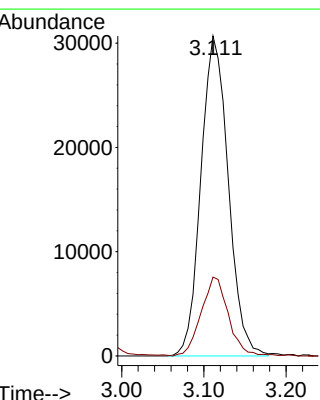
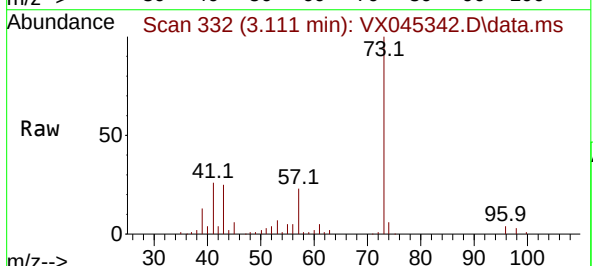
Acq: 19 Mar 2025 12:15

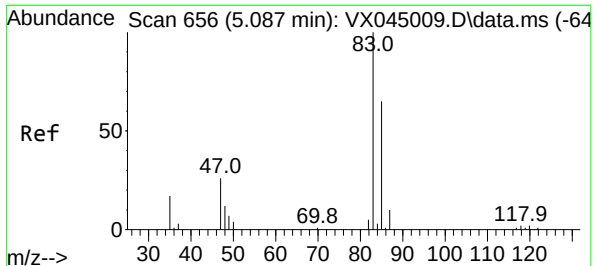
Tgt Ion: 73 Resp: 71024

Ion Ratio Lower Upper

73 100

43 24.2 17.4 26.0





#25

Chloroform

Concen: 19.076 ug/l

RT: 5.086 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 83 Resp: 43100

Ion Ratio Lower Upper

83 100

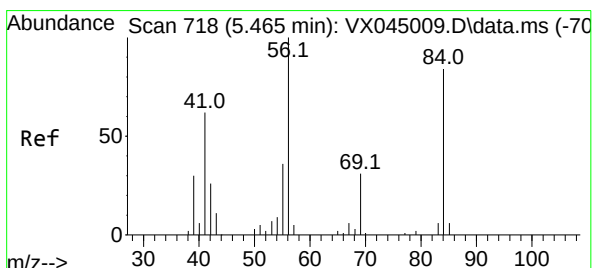
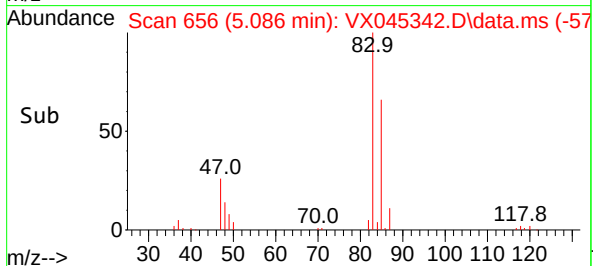
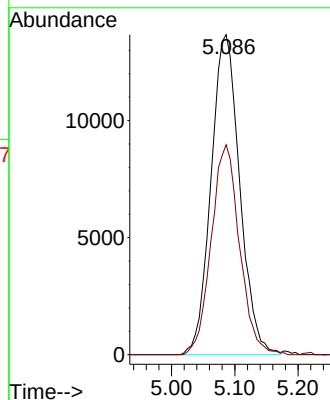
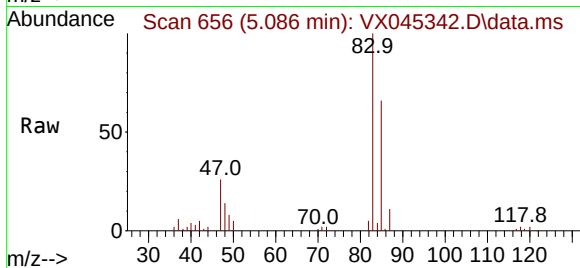
85 65.6 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#26

Cyclohexane

Concen: 16.398 ug/l

RT: 5.452 min Scan# 716

Delta R.T. -0.012 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

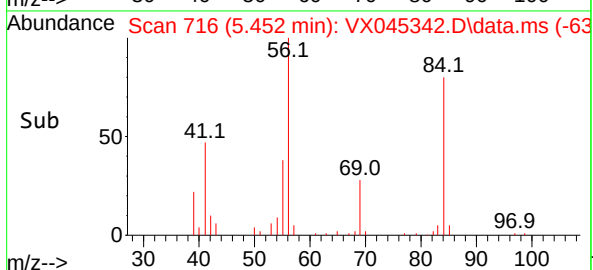
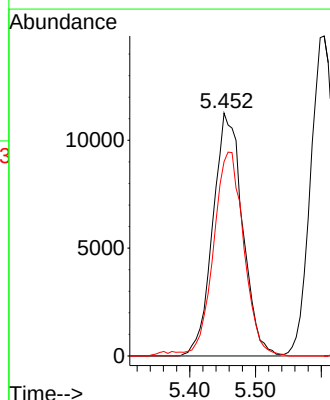
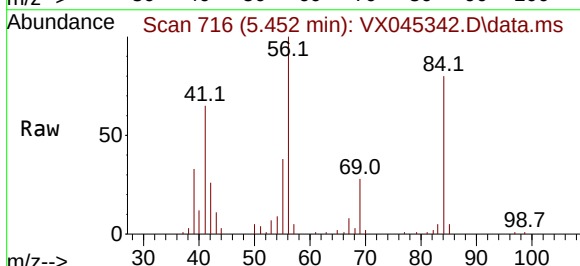
Tgt Ion: 56 Resp: 35407

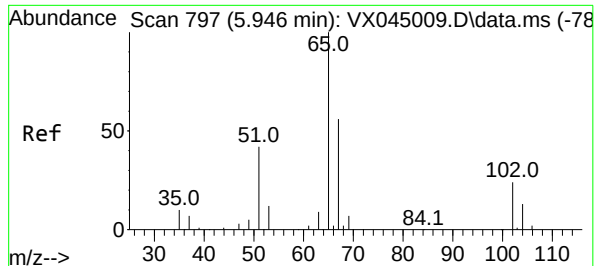
Ion Ratio Lower Upper

56 100

89 0.0 0.0 0.0

84 84.9 67.1 100.7





#27

1,2-Dichloroethane-d4

Concen: 31.920 ug/l

RT: 5.946 min Scan# 797

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 65 Resp: 47760

Ion Ratio Lower Upper

65 100

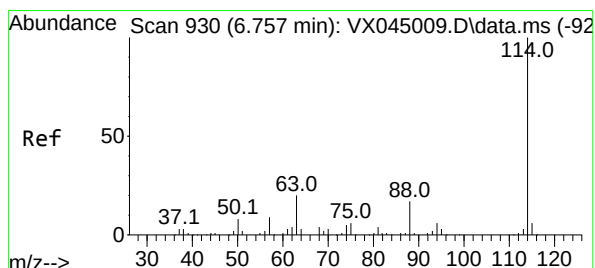
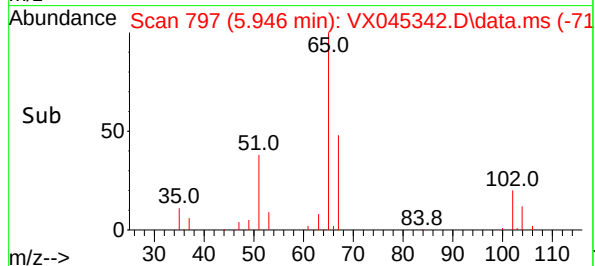
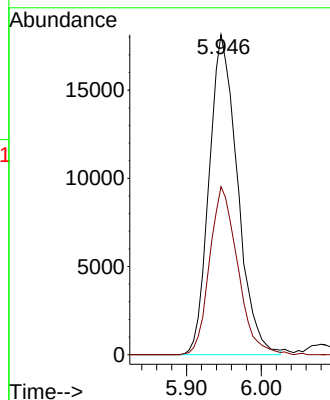
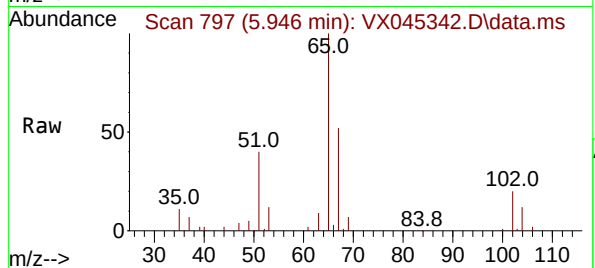
67 52.0 42.6 64.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.757 min Scan# 930

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

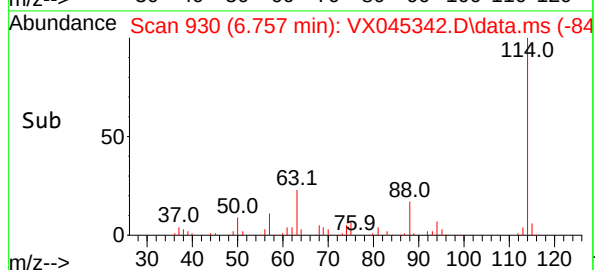
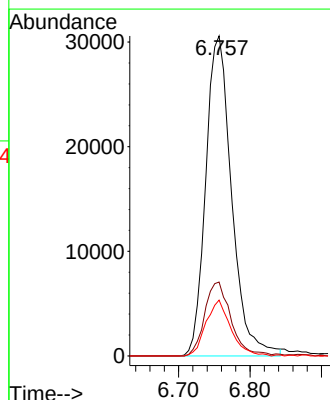
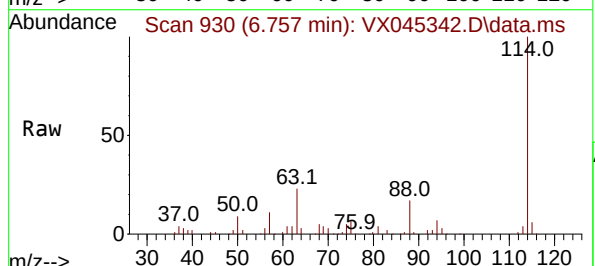
Tgt Ion:114 Resp: 77122

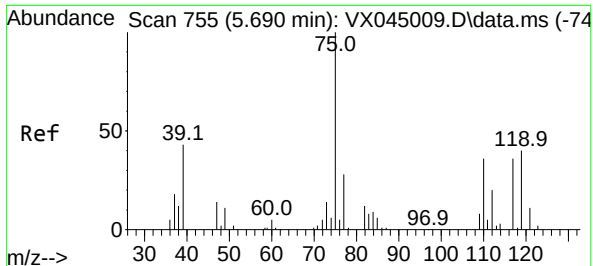
Ion Ratio Lower Upper

114 100

63 23.3 16.8 25.2

88 16.7 12.7 19.1





#29

1,1-Dichloropropene

Concen: 18.953 ug/l

RT: 5.684 min Scan# 71

Delta R.T. -0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 75 Resp: 2688

Ion Ratio Lower Upper

75 100

110 34.4 0.0 69.2

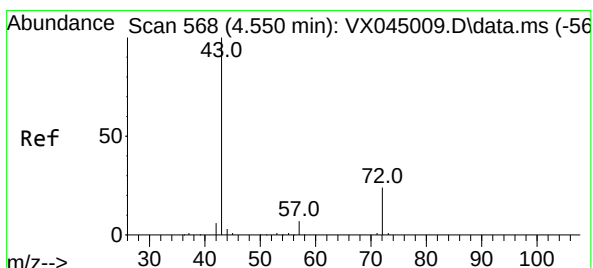
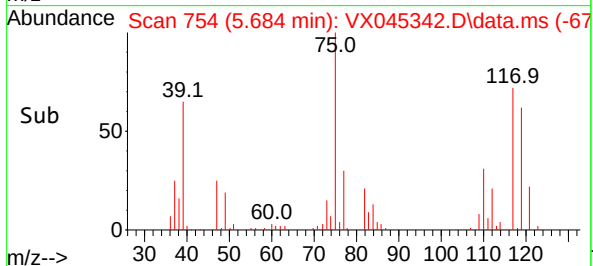
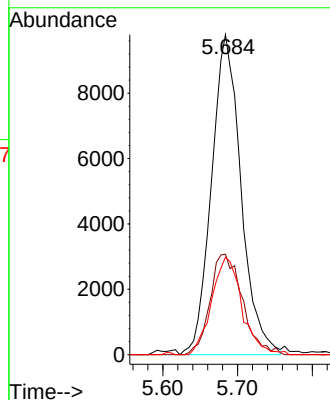
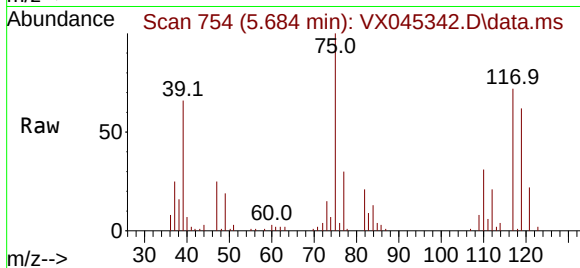
77 31.2 0.0 61.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#30

2-Butanone

Concen: 119.206 ug/l

RT: 4.556 min Scan# 569

Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

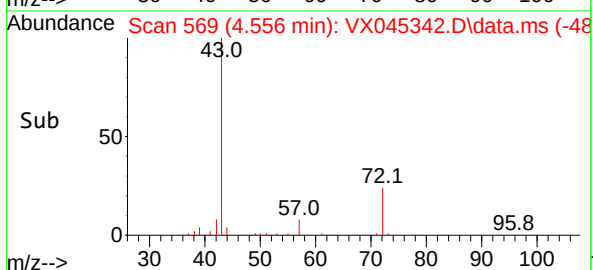
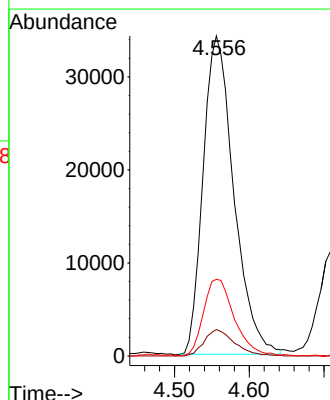
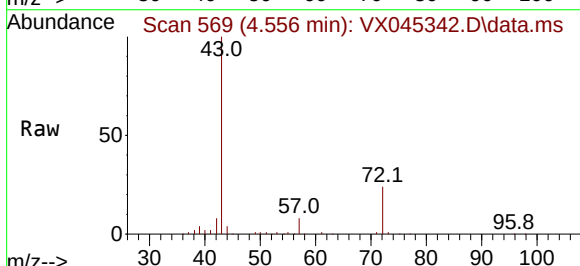
Tgt Ion: 43 Resp: 97680

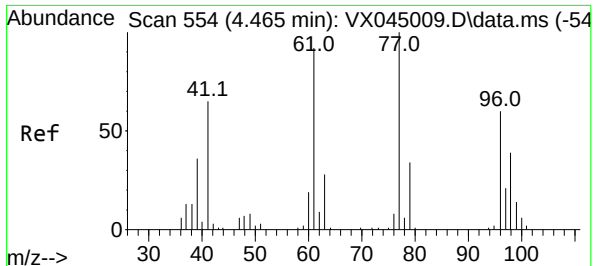
Ion Ratio Lower Upper

43 100

57 8.1 6.2 9.2

72 24.1 20.2 30.2





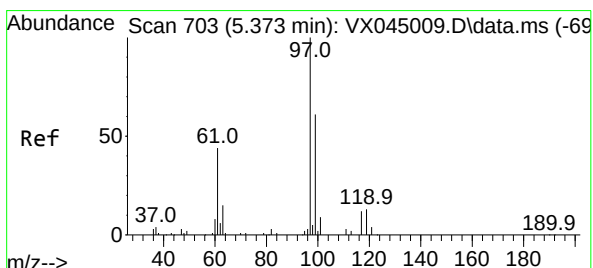
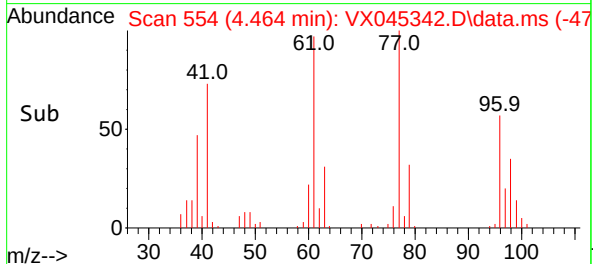
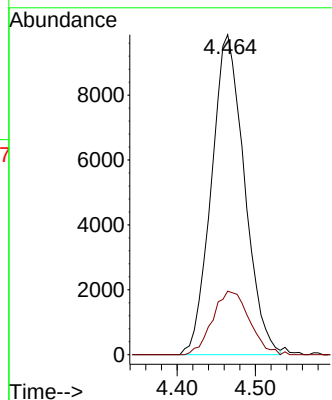
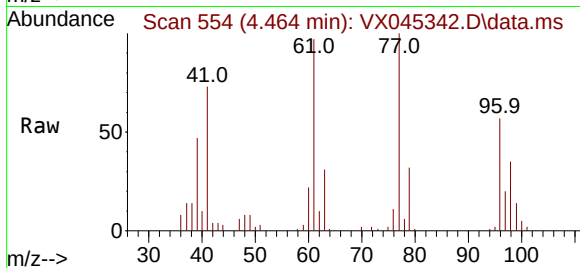
#31
2,2-Dichloropropane
Concen: 18.017 ug/l
RT: 4.464 min Scan# 51
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 77 Resp: 2890
Ion Ratio Lower Upper
77 100
97 21.8 18.0 27.0

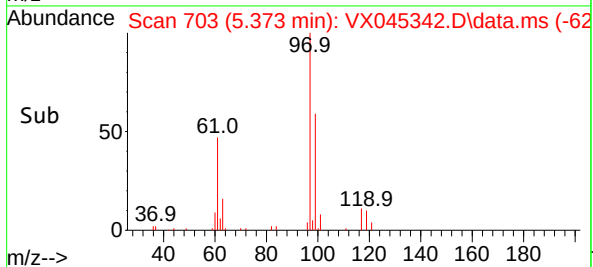
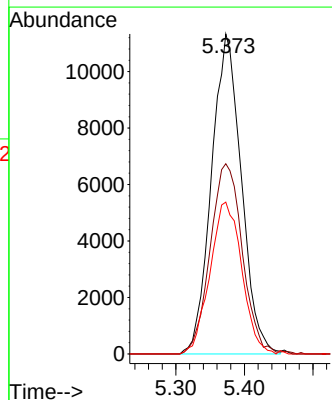
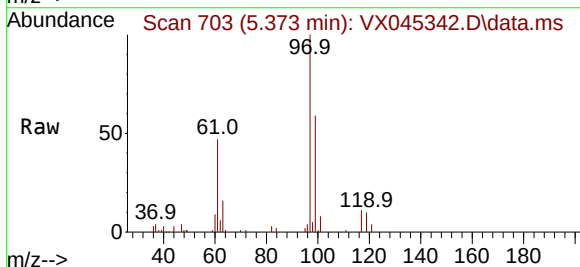
Manual Integrations
APPROVED

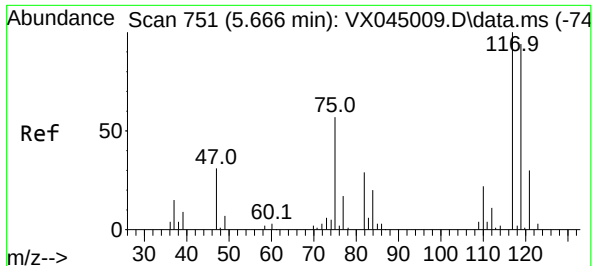
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#32
1,1,1-Trichloroethane
Concen: 19.955 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 97 Resp: 34301
Ion Ratio Lower Upper
97 100
99 63.3 52.2 78.2
61 50.5 38.5 57.7





#33

Carbon Tetrachloride

Concen: 19.829 ug/l

RT: 5.665 min Scan# 751

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion:117 Resp: 2876

Ion Ratio Lower Upper

117 100

119 92.3 75.1 112.7

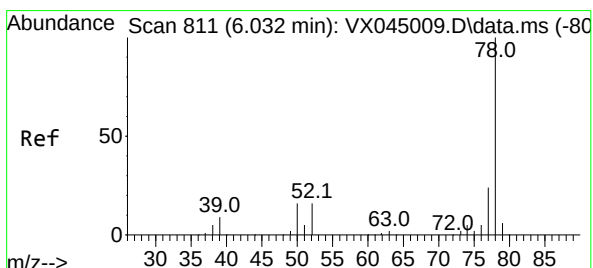
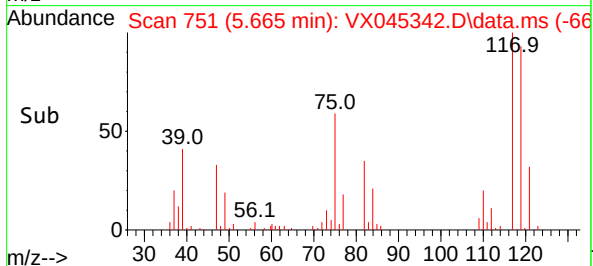
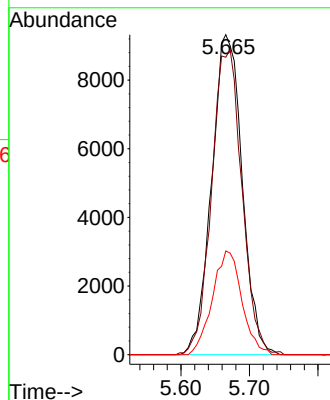
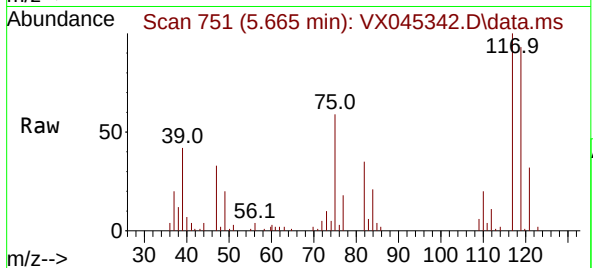
121 32.4 23.9 35.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#34

Benzene

Concen: 19.337 ug/l

RT: 6.031 min Scan# 811

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

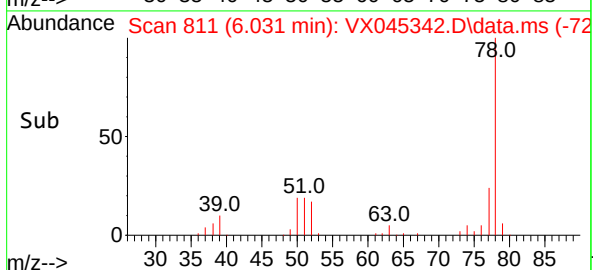
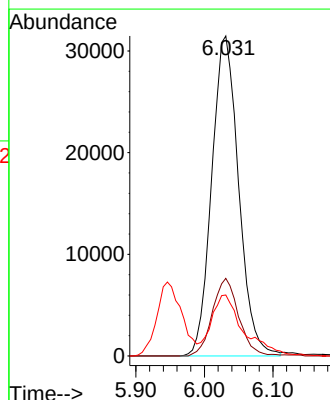
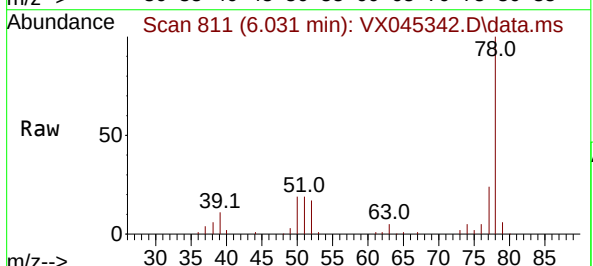
Tgt Ion: 78 Resp: 86029

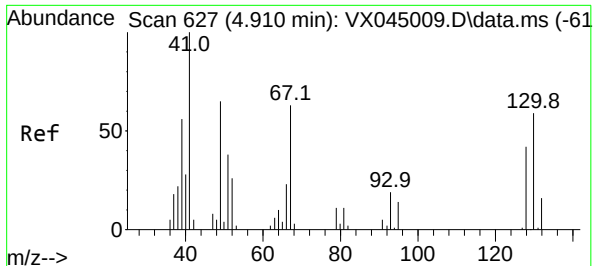
Ion Ratio Lower Upper

78 100

77 24.3 19.6 29.4

51 17.5 13.8 20.6





#35

Methacrylonitrile

Concen: 23.437 ug/l

RT: 4.916 min Scan# 61

Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 41 Resp: 2055

Ion Ratio Lower Upper

41 100

39 55.3 27.8 83.4

67 62.5 31.5 94.5

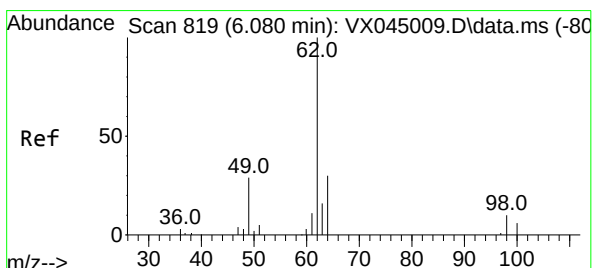
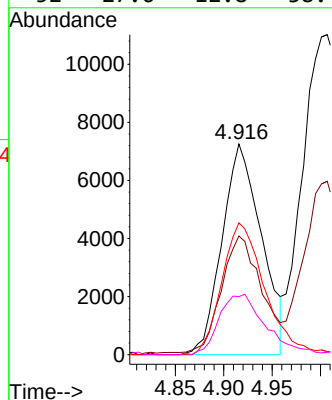
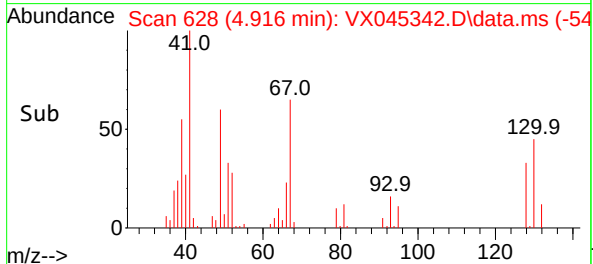
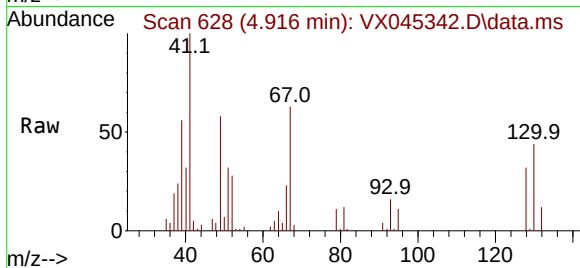
52 27.6 12.8 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#36

1,2-Dichloroethane

Concen: 22.731 ug/l

RT: 6.080 min Scan# 819

Delta R.T. -0.000 min

Lab File: VX045342.D

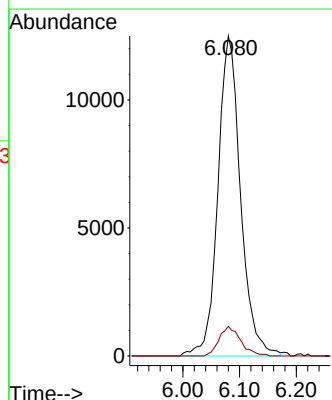
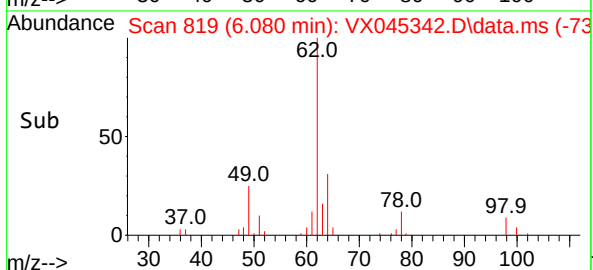
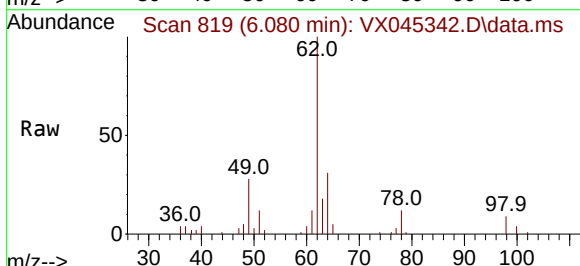
Acq: 19 Mar 2025 12:15

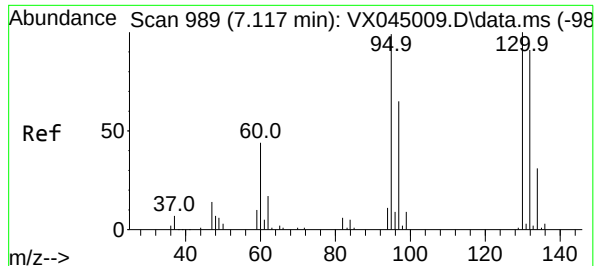
Tgt Ion: 62 Resp: 34623

Ion Ratio Lower Upper

62 100

98 8.7 7.9 11.9





#37

Trichloroethene

Concen: 18.610 ug/l

RT: 7.116 min Scan# 989

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion:130 Resp: 19370

Ion Ratio Lower Upper

130 100

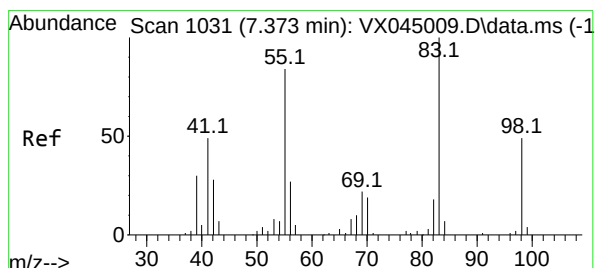
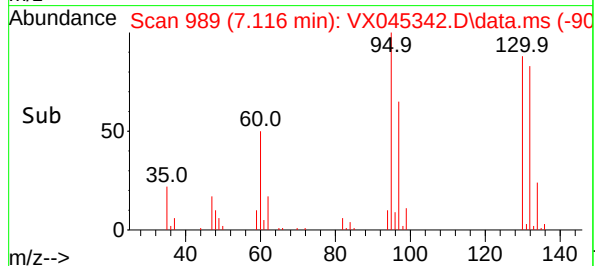
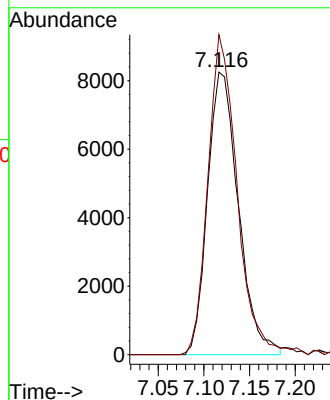
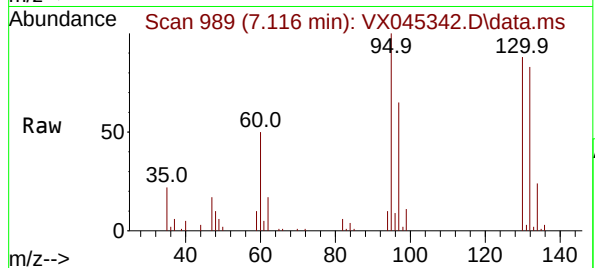
95 113.2 79.0 118.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#38

Methylcyclohexane

Concen: 18.107 ug/l

RT: 7.372 min Scan# 1031

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

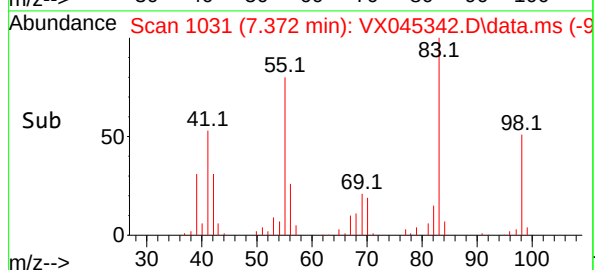
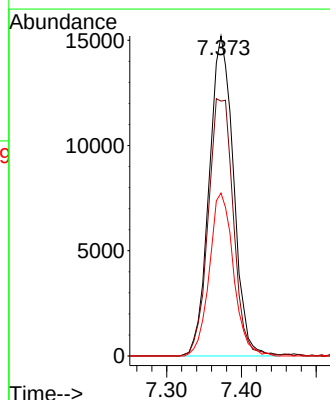
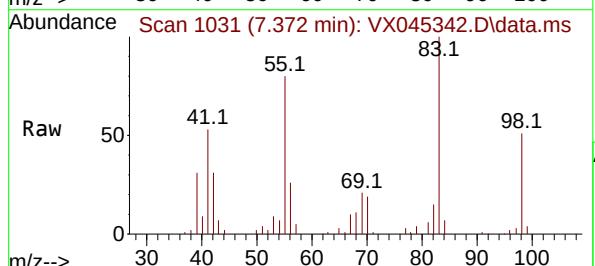
Tgt Ion: 83 Resp: 34492

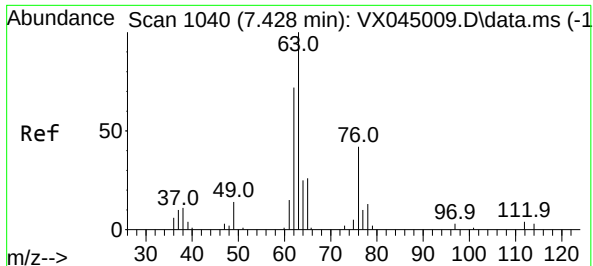
Ion Ratio Lower Upper

83 100

55 82.9 40.6 122.0

98 50.2 24.9 74.6





#39

1,2-Dichloropropane

Concen: 19.449 ug/l

RT: 7.427 min Scan# 1040

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 63 Resp: 2151

Ion Ratio Lower Upper

63 100

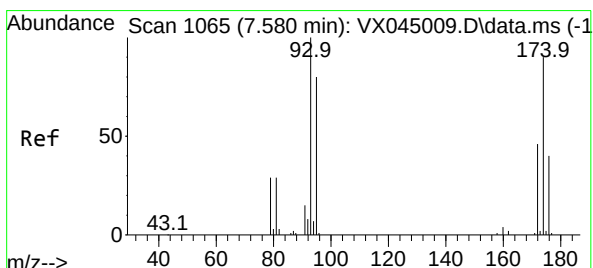
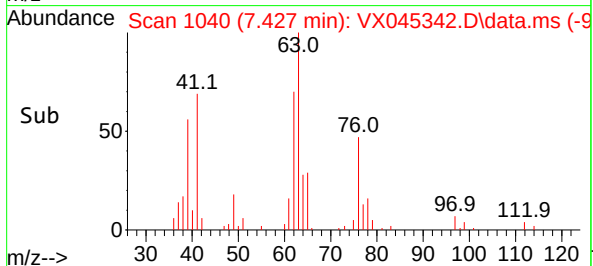
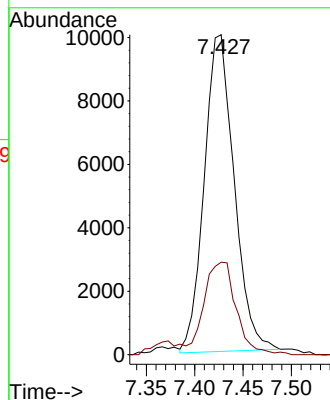
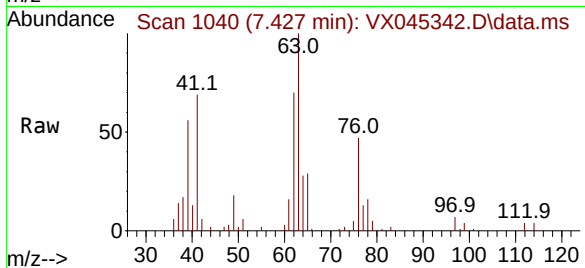
65 28.6 24.3 36.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#40

Dibromomethane

Concen: 21.387 ug/l

RT: 7.574 min Scan# 1064

Delta R.T. -0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

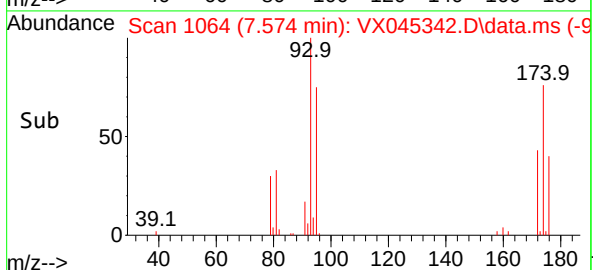
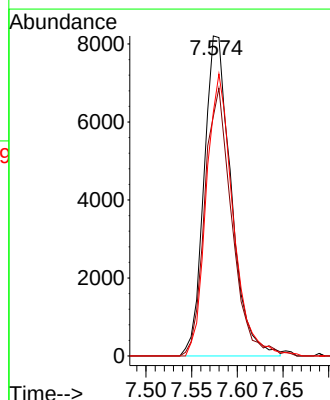
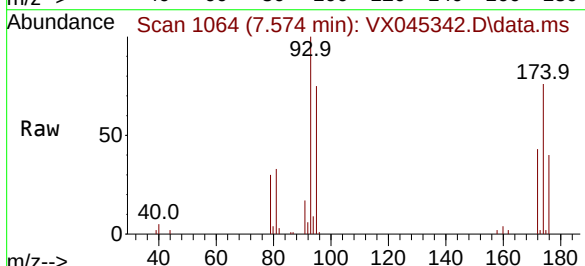
Tgt Ion: 93 Resp: 16975

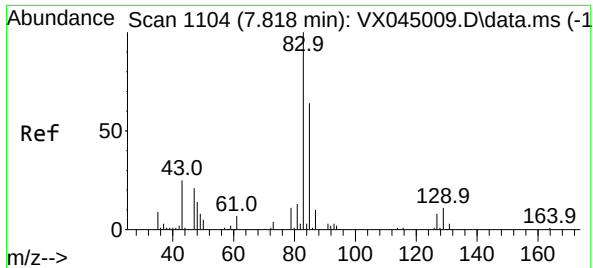
Ion Ratio Lower Upper

93 100

95 81.9 0.0 162.6

174 86.7 0.0 178.8





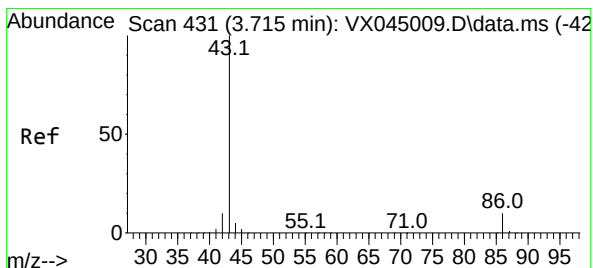
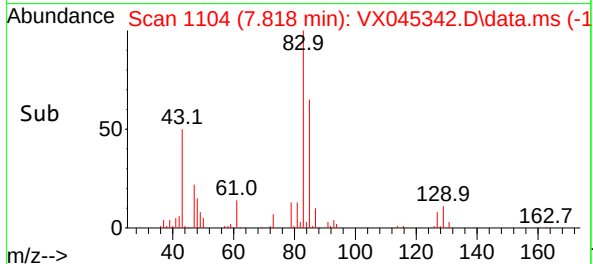
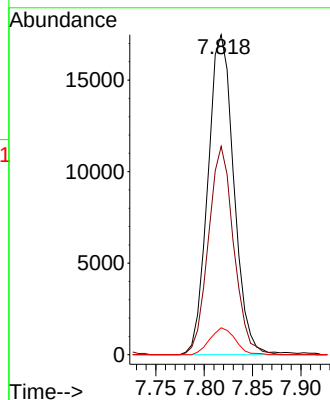
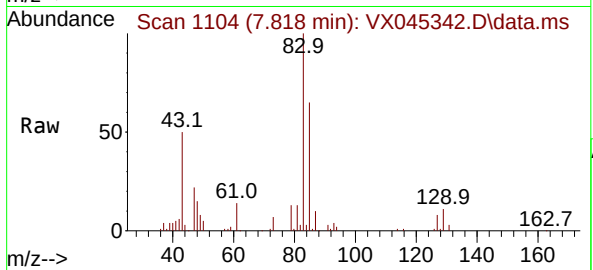
#41
Bromodichloromethane
Concen: 20.664 ug/l
RT: 7.818 min Scan# 1104
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 83 Resp: 32598
Ion Ratio Lower Upper
83 100
85 65.1 51.0 76.6
127 8.4 6.1 9.1

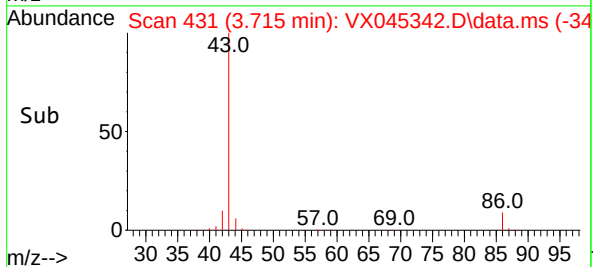
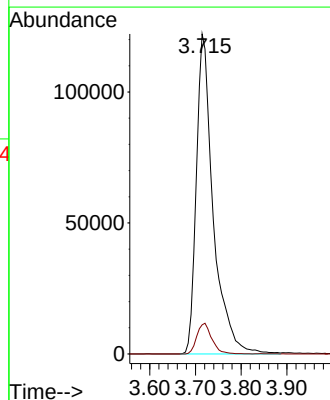
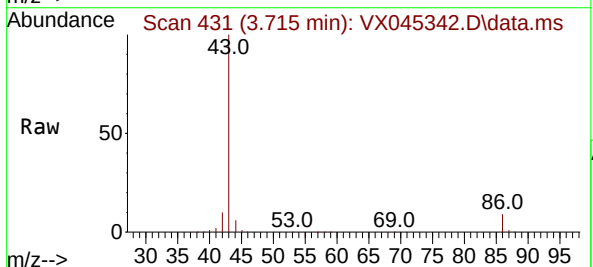
Manual Integrations
APPROVED

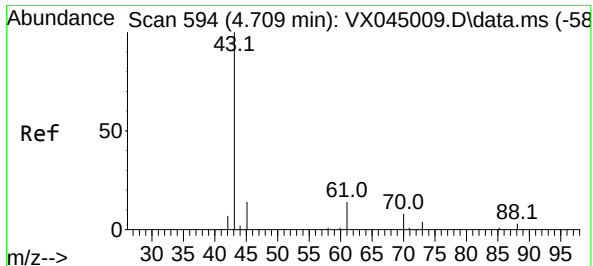
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#42
Vinyl Acetate
Concen: 98.457 ug/l
RT: 3.715 min Scan# 431
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 43 Resp: 313074
Ion Ratio Lower Upper
43 100
86 8.5 7.0 10.4





#43

Ethyl Acetate

Concen: 21.902 ug/l

RT: 4.714 min Scan# 594

Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 43 Resp: 33650

Ion Ratio Lower Upper

43

100

45

16.3

12.7

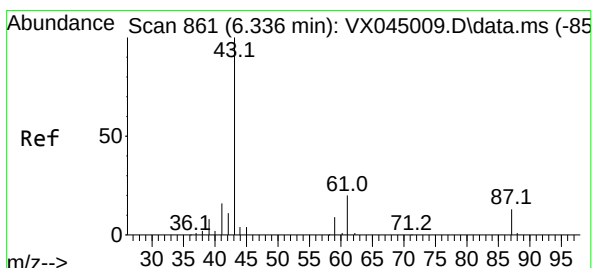
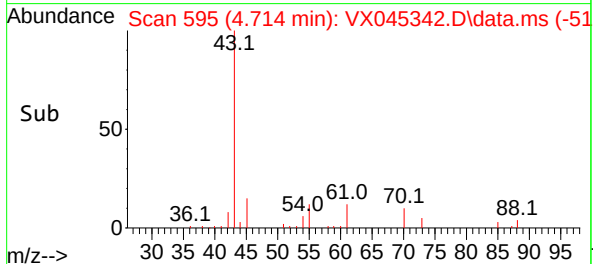
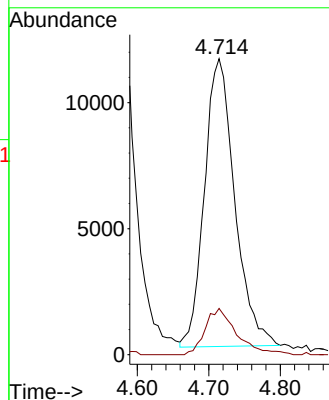
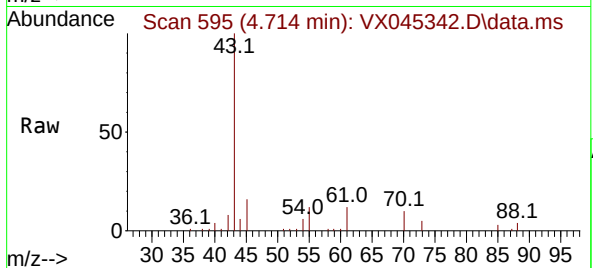
19.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#44

Isopropyl Acetate

Concen: 21.475 ug/l

RT: 6.336 min Scan# 861

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion: 43 Resp: 54315

Ion Ratio Lower Upper

43

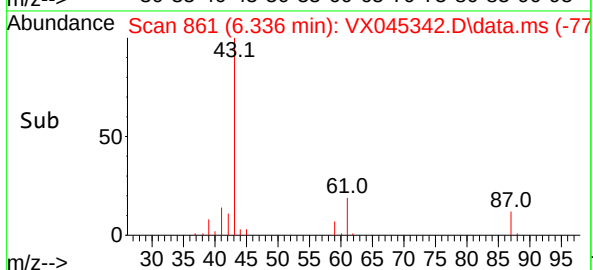
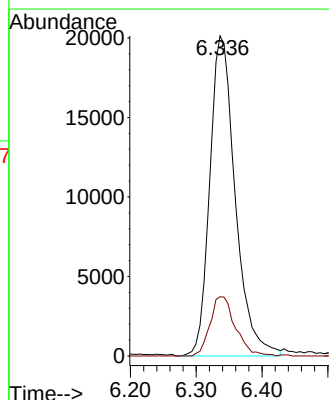
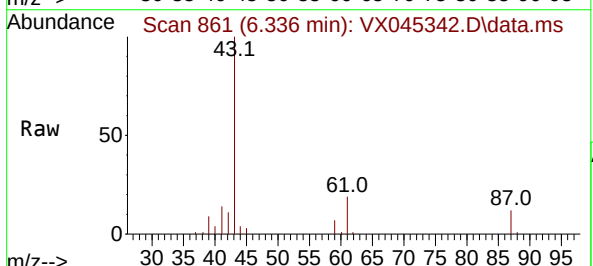
100

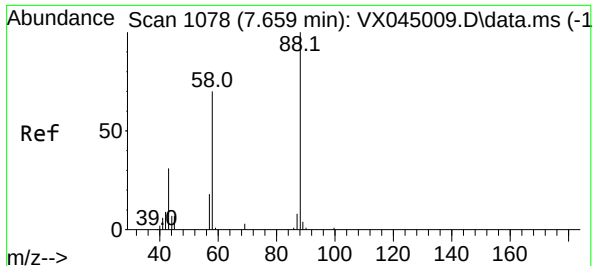
61

18.3

15.5

23.3





#45

1,4-Dioxane

Concen: 392.707 ug/l

RT: 7.659 min Scan# 1078

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

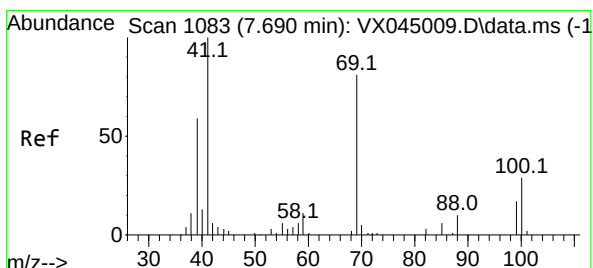
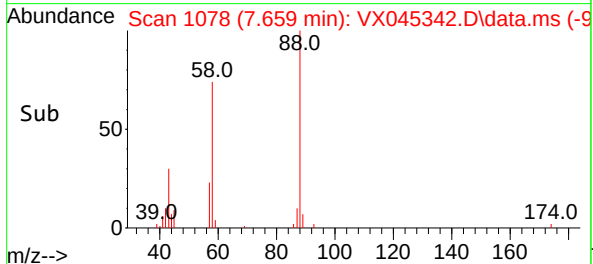
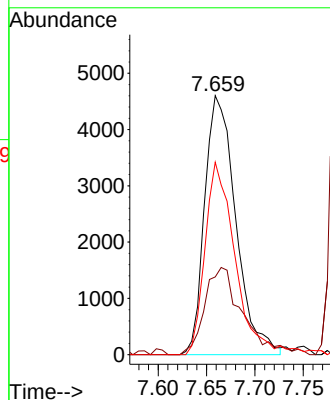
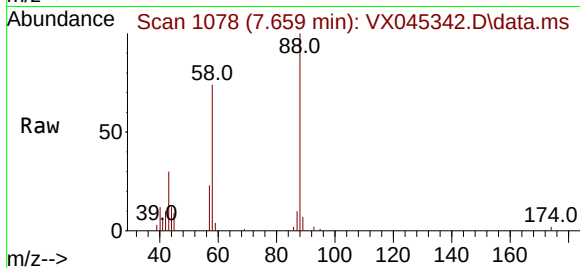
VX0319WBSD01

Tgt Ion:	88	Resp:	1032
Ion	Ratio	Lower	Upper
88	100		
43	40.4	29.6	44.4
58	70.1	56.2	84.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#46

Methyl methacrylate

Concen: 22.506 ug/l

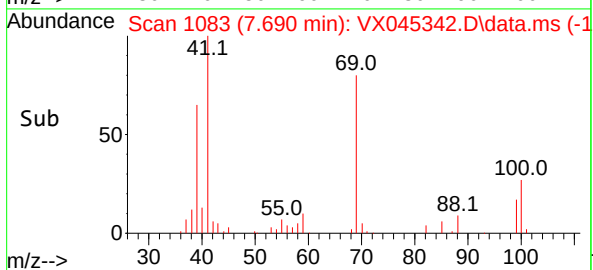
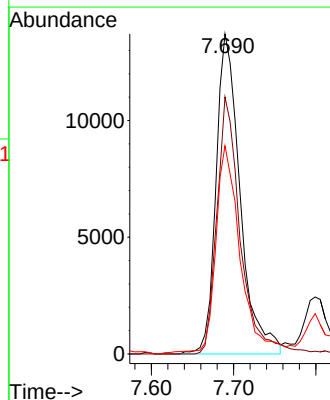
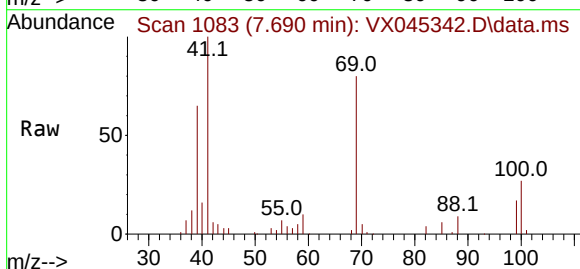
RT: 7.690 min Scan# 1083

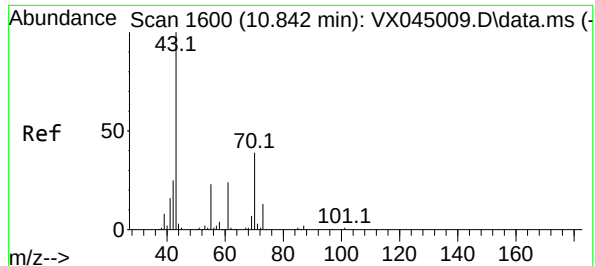
Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion:	41	Resp:	27912
Ion	Ratio	Lower	Upper
41	100		
69	80.3	40.7	122.1
39	64.3	29.5	88.5





#47

n-amy1 Acetate

Concen: 20.528 ug/l

RT: 10.841 min Scan# 1600

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 43 Resp: 4505

Ion Ratio Lower Upper

43 100

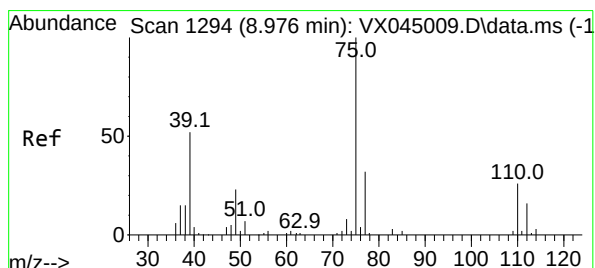
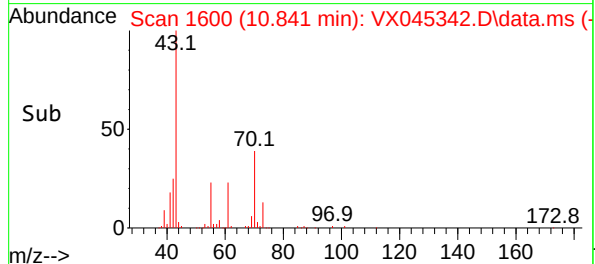
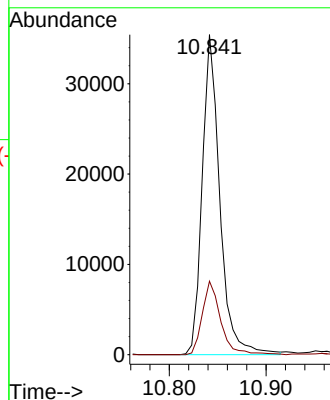
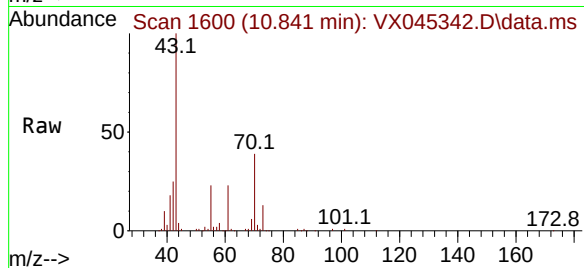
55 23.4 18.6 27.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#48

t-1,3-Dichloropropene

Concen: 18.383 ug/l

RT: 8.976 min Scan# 1294

Delta R.T. -0.000 min

Lab File: VX045342.D

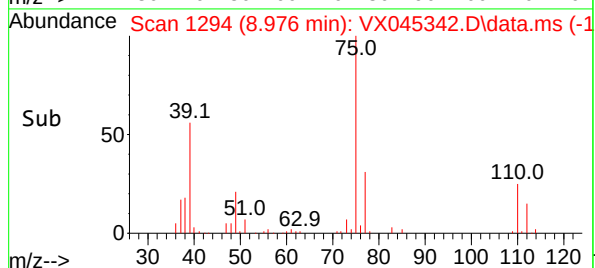
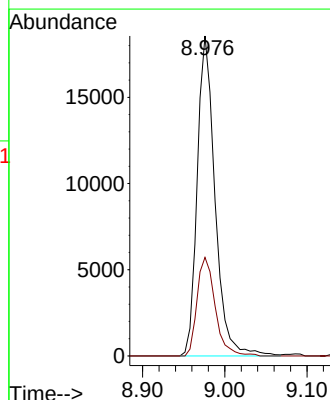
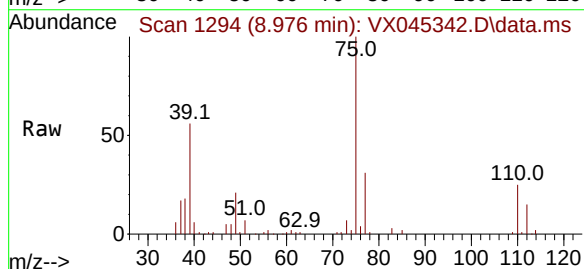
Acq: 19 Mar 2025 12:15

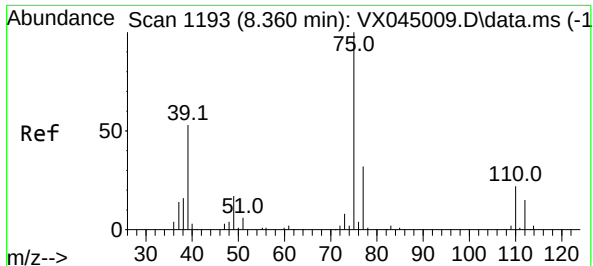
Tgt Ion: 75 Resp: 27952

Ion Ratio Lower Upper

75 100

77 30.8 25.7 38.5





#49

cis-1,3-Dichloropropene

Concen: 19.386 ug/l

RT: 8.360 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 75 Resp: 3336

Ion Ratio Lower Upper

75 100

77 30.6 25.9 38.9

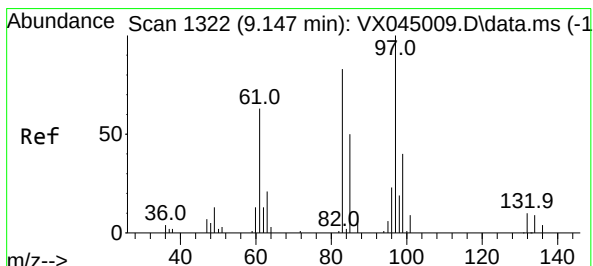
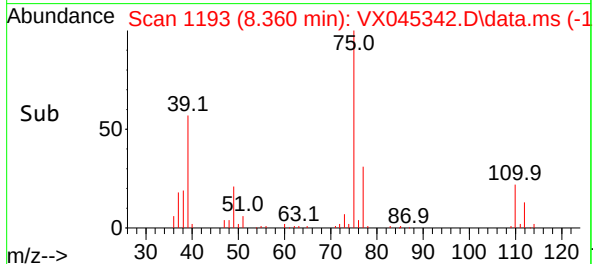
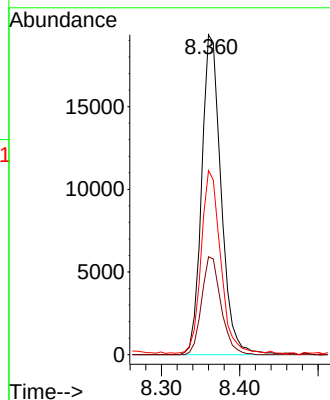
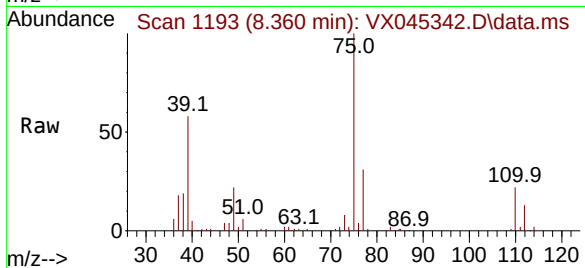
39 57.1 42.3 63.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#50

1,1,2-Trichloroethane

Concen: 20.785 ug/l

RT: 9.147 min Scan# 1322

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion: 97 Resp: 21519

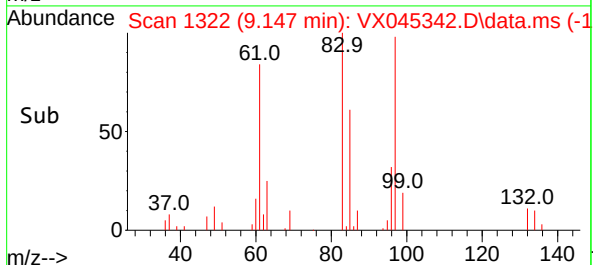
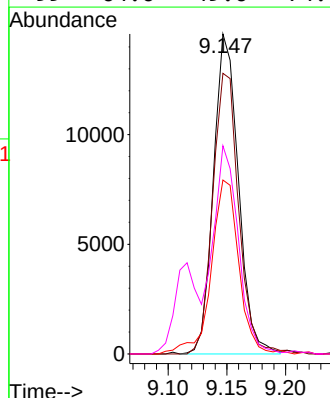
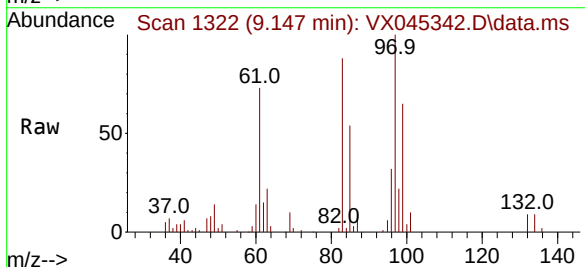
Ion Ratio Lower Upper

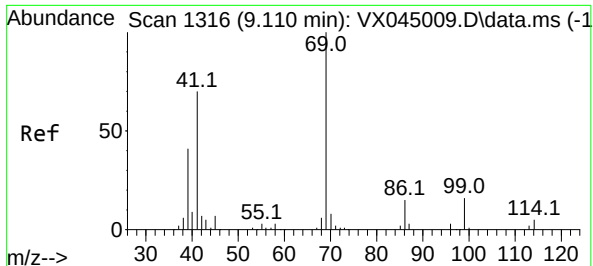
97 100

83 87.7 66.0 99.0

85 53.3 42.5 63.7

99 64.6 49.6 74.4





#51

Ethyl methacrylate

Concen: 21.816 ug/l

RT: 9.116 min Scan# 1316

Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 69 Resp: 3552

Ion Ratio Lower Upper

69 100

41 71.8 35.1 105.3

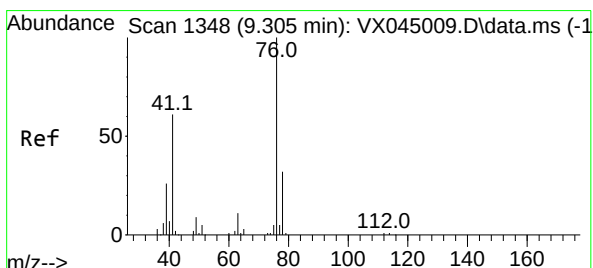
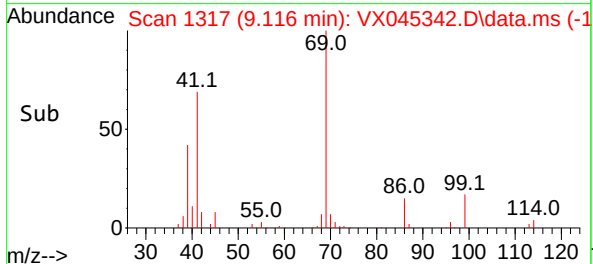
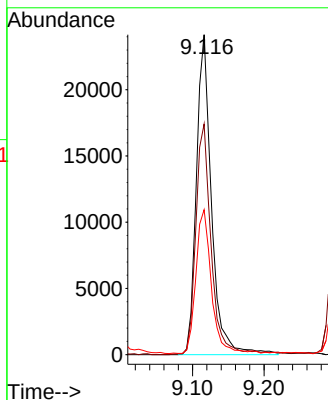
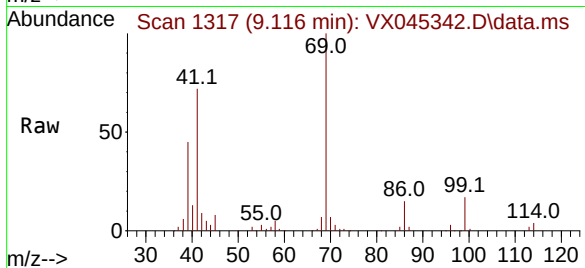
39 44.9 20.5 61.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#52

1,3-Dichloropropane

Concen: 21.385 ug/l

RT: 9.305 min Scan# 1348

Delta R.T. -0.000 min

Lab File: VX045342.D

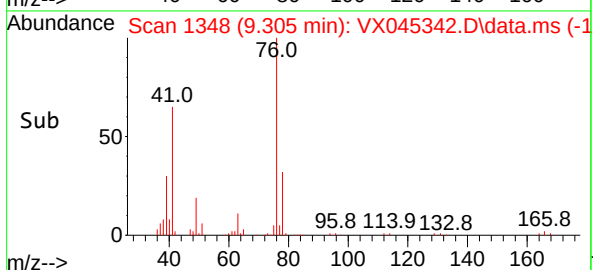
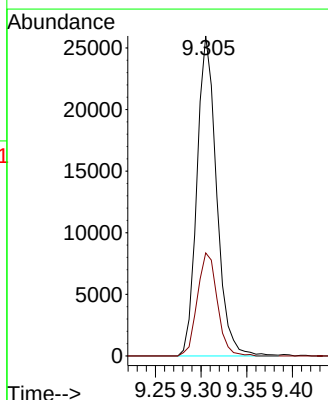
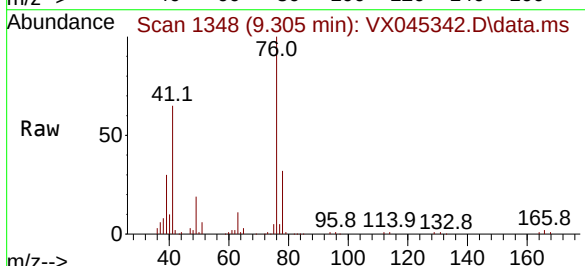
Acq: 19 Mar 2025 12:15

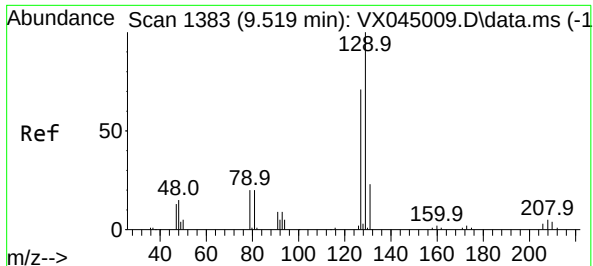
Tgt Ion: 76 Resp: 38794

Ion Ratio Lower Upper

76 100

78 32.6 0.0 63.6





#53

Dibromochloromethane

Concen: 20.309 ug/l

RT: 9.518 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion:129 Resp: 23254

Ion Ratio Lower Upper

129 100

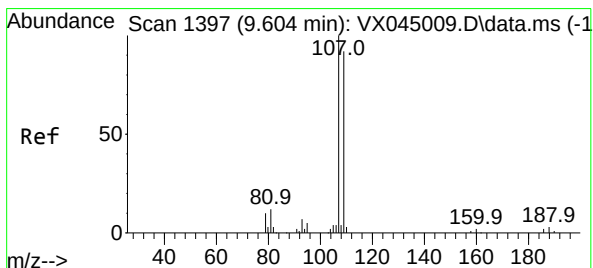
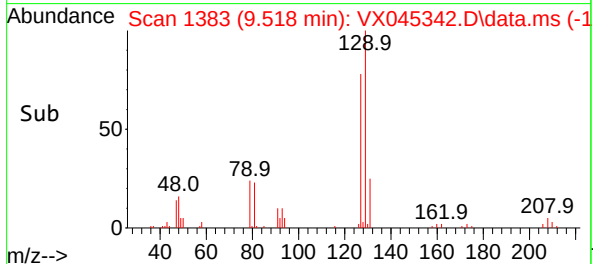
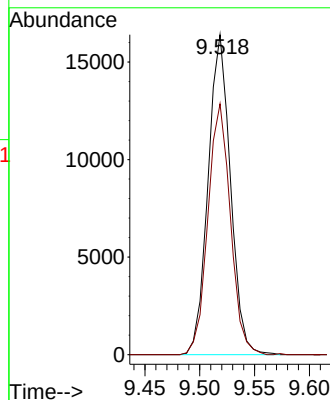
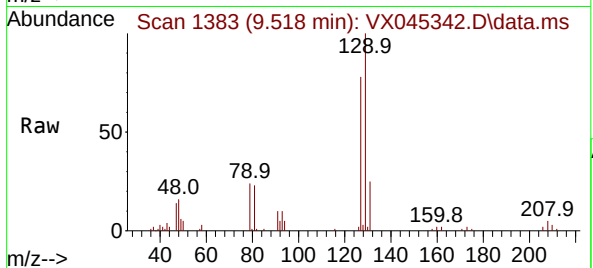
127 79.0 37.3 111.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#54

1,2-Dibromoethane

Concen: 21.782 ug/l

RT: 9.610 min Scan# 1398

Delta R.T. 0.006 min

Lab File: VX045342.D

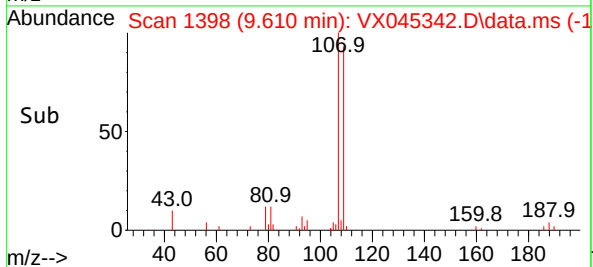
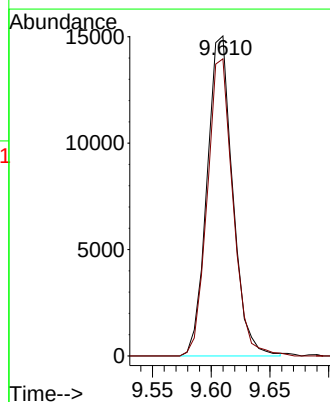
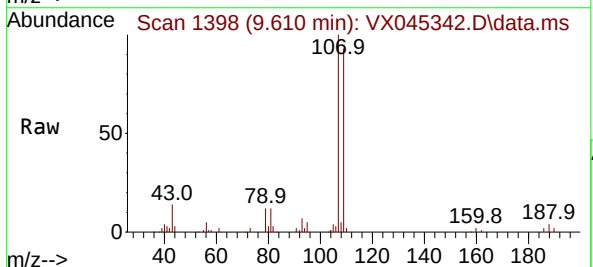
Acq: 19 Mar 2025 12:15

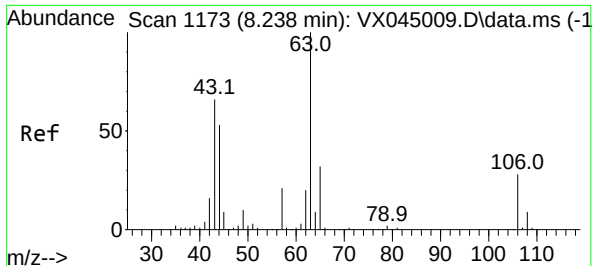
Tgt Ion:107 Resp: 22899

Ion Ratio Lower Upper

107 100

109 93.0 75.8 113.8





#55

2-Chloroethyl vinyl ether

Concen: 116.377 ug/l

RT: 8.238 min Scan# 1173

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

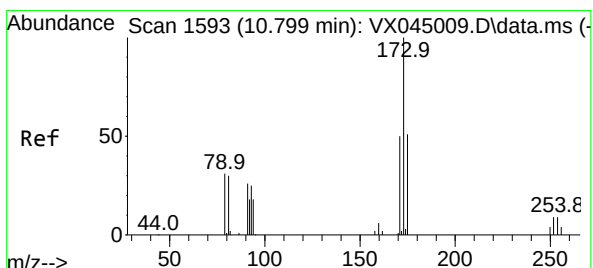
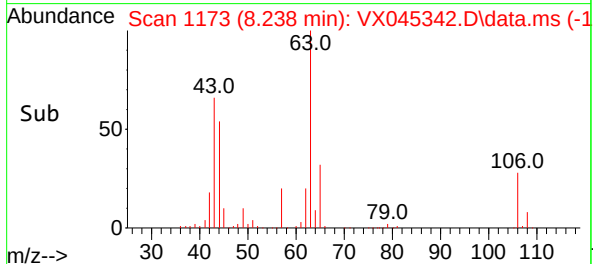
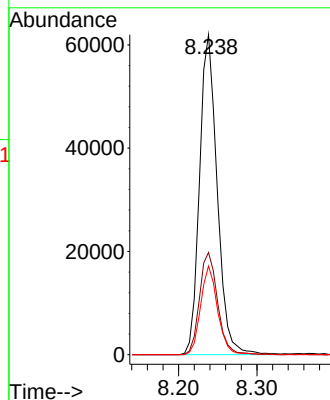
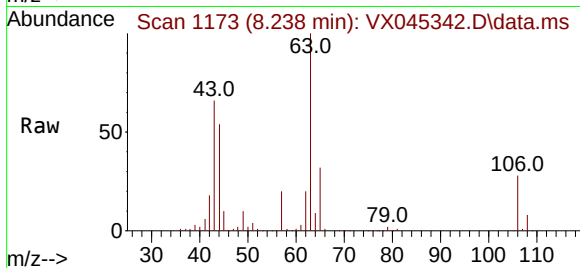
Tgt Ion:	63	Resp:	97308
Ion Ratio	Lower	Upper	
63	100		
65	32.6	26.2	39.2
106	26.5	21.2	31.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#56

Bromoform

Concen: 20.701 ug/l

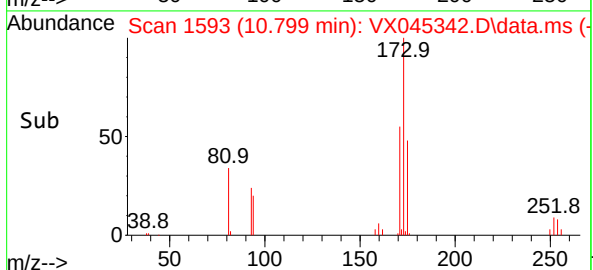
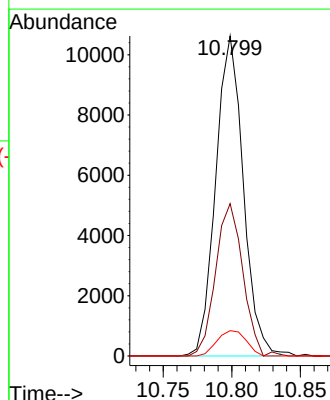
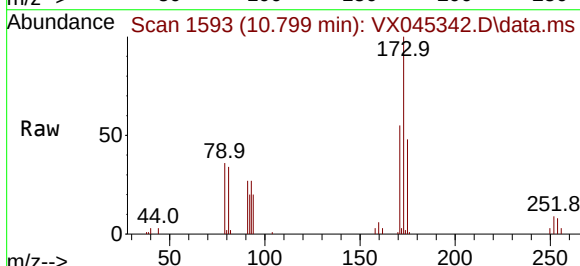
RT: 10.799 min Scan# 1593

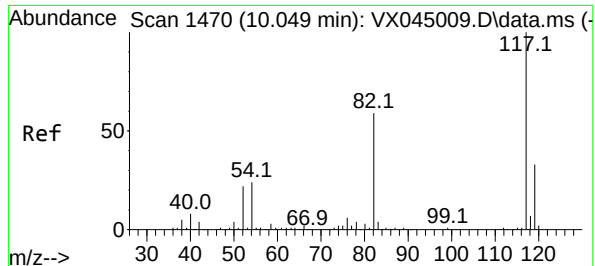
Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion:	173	Resp:	14853
Ion Ratio	Lower	Upper	
173	100		
175	46.5	39.6	59.4
254	8.4	6.3	9.5





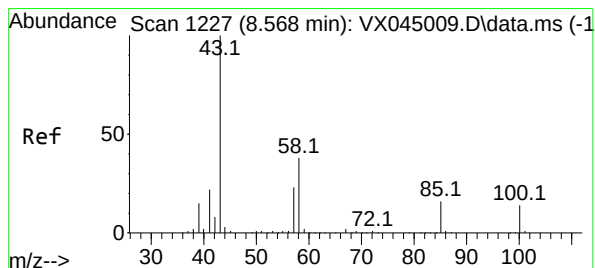
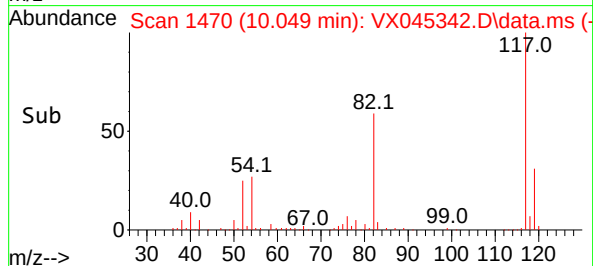
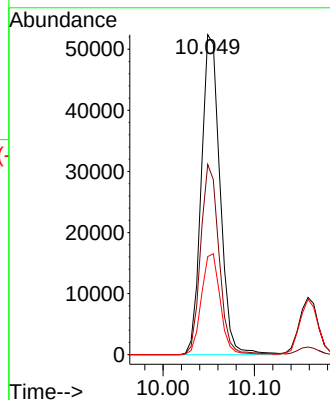
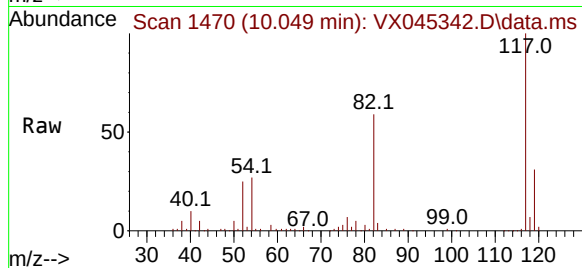
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.049 min Scan# 1470
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 117 Resp: 7453
Ion Ratio Lower Upper
117 100
82 57.9 45.8 68.8
119 31.7 25.5 38.3

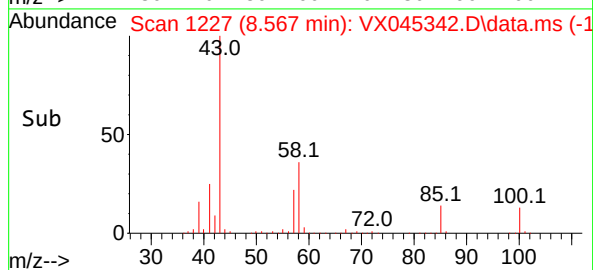
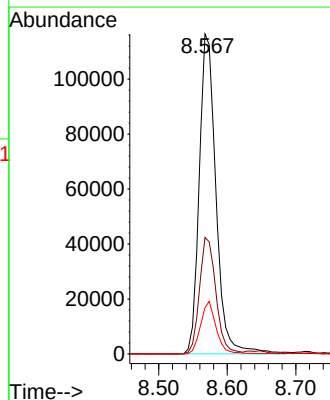
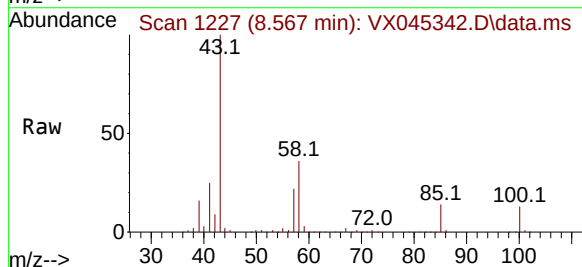
Manual Integrations
APPROVED

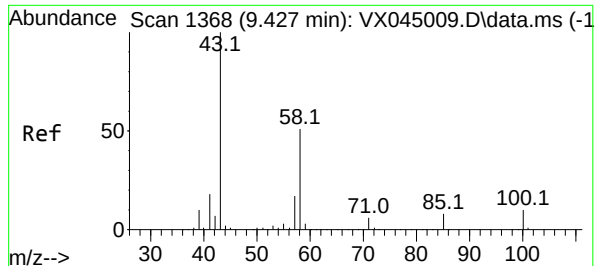
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#58
4-Methyl-2-Pentanone
Concen: 116.520 ug/l
RT: 8.567 min Scan# 1227
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 43 Resp: 197562
Ion Ratio Lower Upper
43 100
58 35.9 29.5 44.3
85 15.4 12.9 19.3





#59

2-Hexanone

Concen: 117.085 ug/l

RT: 9.427 min Scan# 1368

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 43 Resp: 143492

Ion Ratio Lower Upper

43 100

58 50.4 41.6 62.4

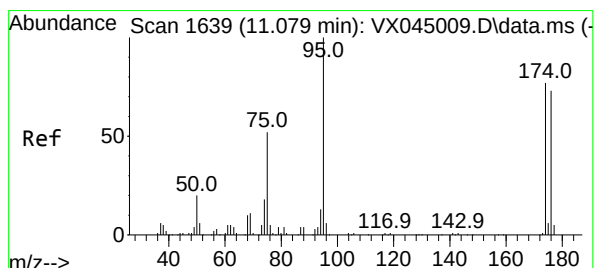
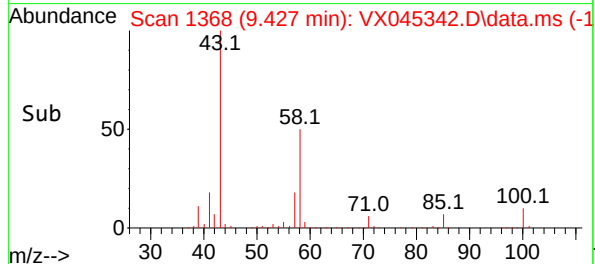
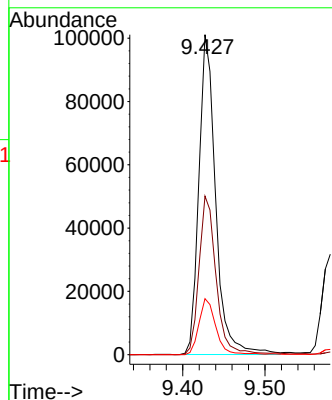
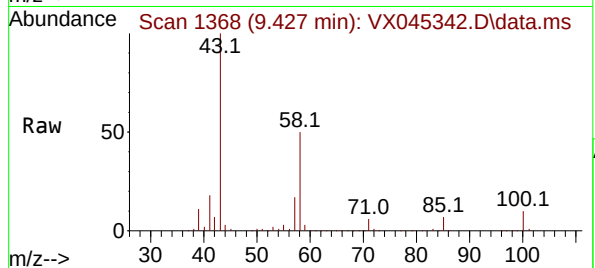
57 17.3 13.8 20.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#60

4-Bromofluorobenzene

Concen: 30.486 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

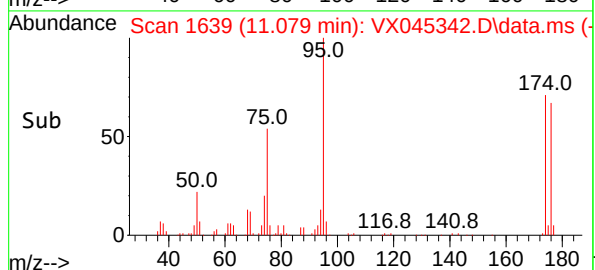
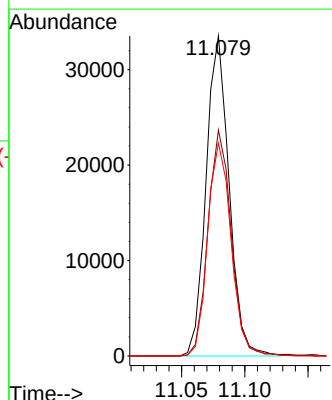
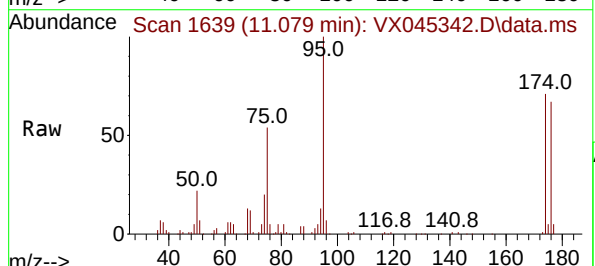
Tgt Ion: 95 Resp: 42472

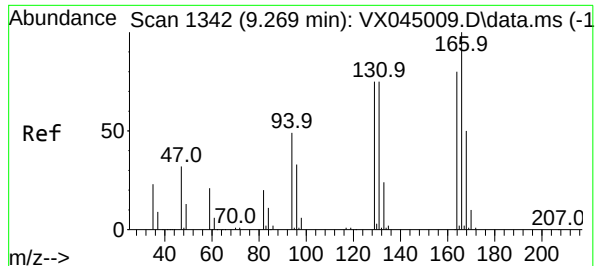
Ion Ratio Lower Upper

95 100

174 71.3 59.5 89.3

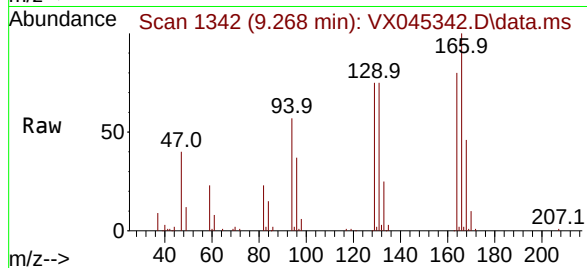
176 67.8 55.5 83.3





#61
Tetrachloroethene
Concen: 18.890 ug/l
RT: 9.268 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

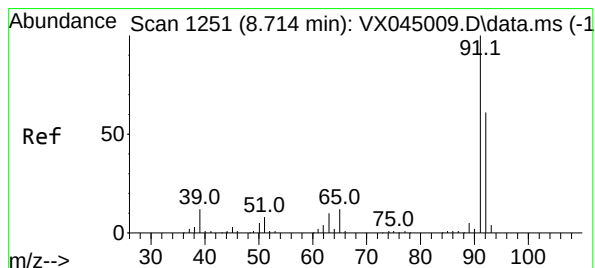
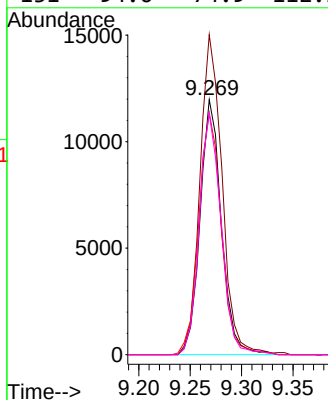
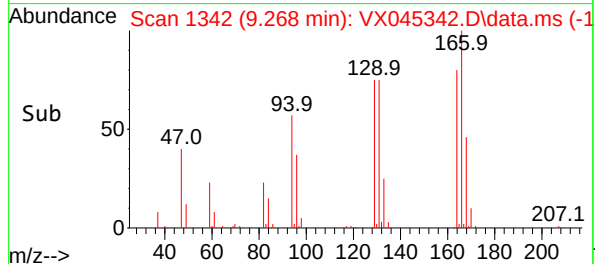
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01



Tgt Ion: 164 Resp: 17338
Ion Ratio Lower Upper
164 100
166 125.5 100.3 150.5
129 94.7 75.5 113.3
131 94.6 74.9 112.3

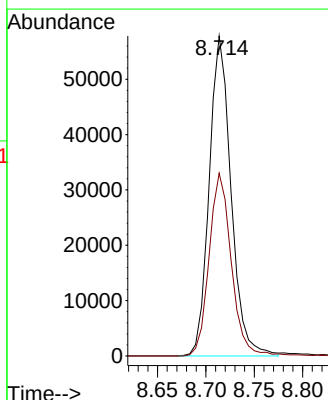
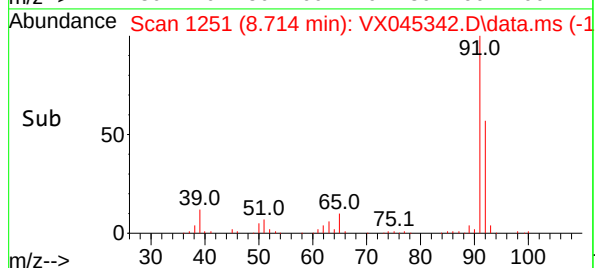
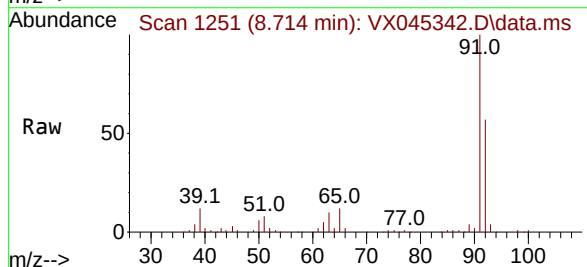
Manual Integrations
APPROVED

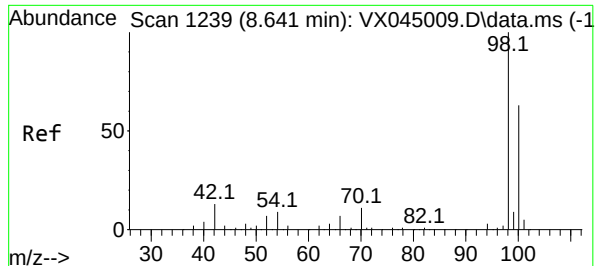
Reviewed By : John Carlone 03/20/2025
Supervised By : Mahesh Dadoda 03/20/2025



#62
Toluene
Concen: 18.417 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 91 Resp: 90934
Ion Ratio Lower Upper
91 100
92 57.6 46.9 70.3





#63

Toluene-d8

Concen: 29.566 ug/l

RT: 8.647 min Scan# 12191

Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion: 98 Resp: 12191

Ion Ratio Lower Upper

98 100

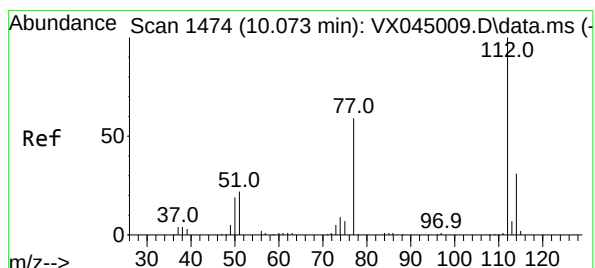
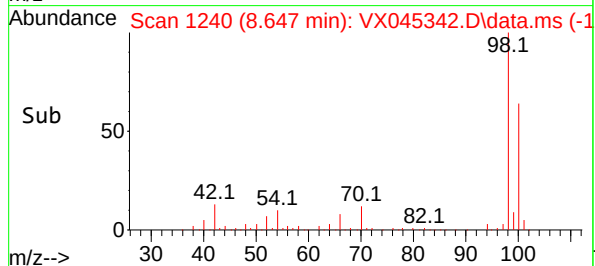
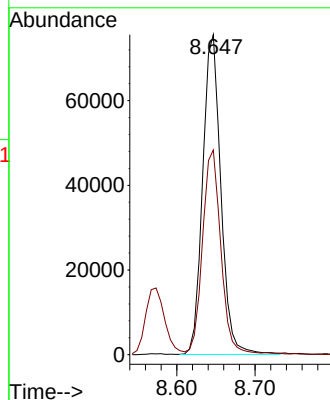
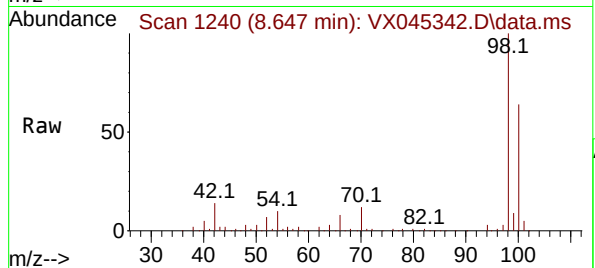
100 63.3 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#64

Chlorobenzene

Concen: 18.969 ug/l

RT: 10.079 min Scan# 1475

Delta R.T. 0.006 min

Lab File: VX045342.D

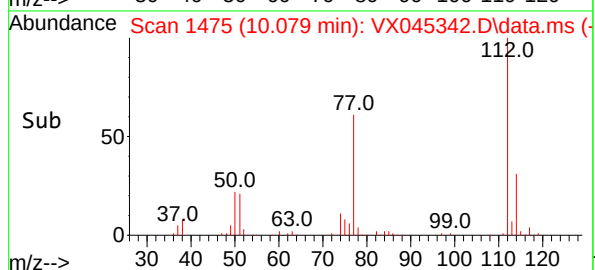
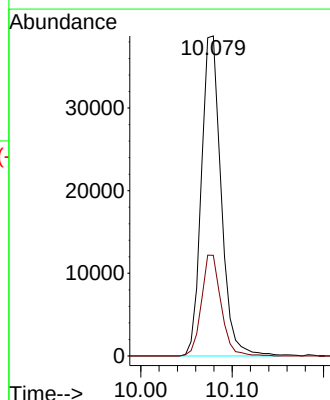
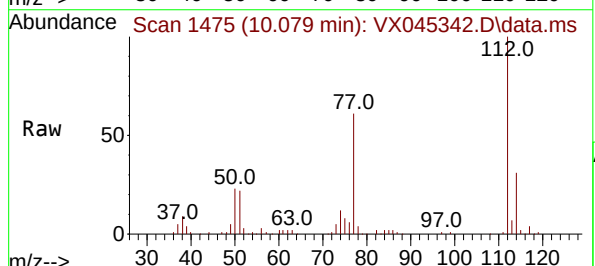
Acq: 19 Mar 2025 12:15

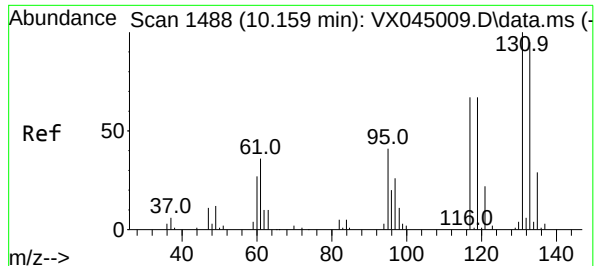
Tgt Ion:112 Resp: 58036

Ion Ratio Lower Upper

112 100

114 31.4 24.7 37.1





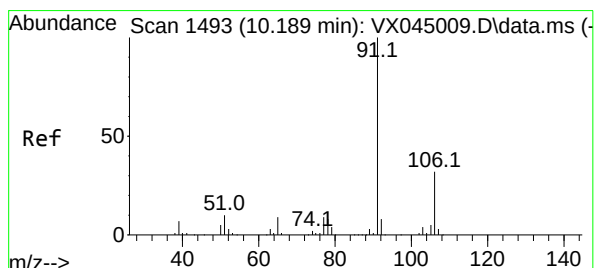
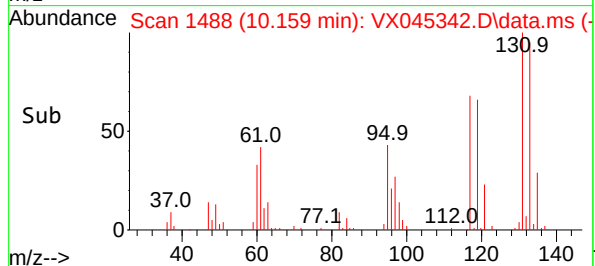
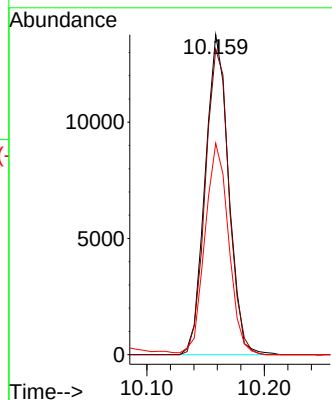
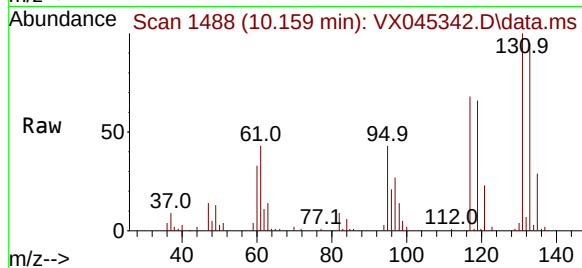
#65
1,1,1,2-Tetrachloroethane
Concen: 18.893 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion:131 Resp: 19074
Ion Ratio Lower Upper
131 100
133 96.4 0.0 187.8
119 66.5 0.0 133.0

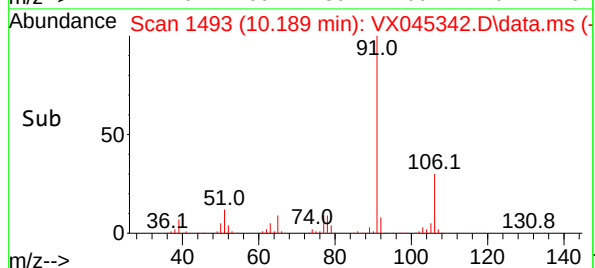
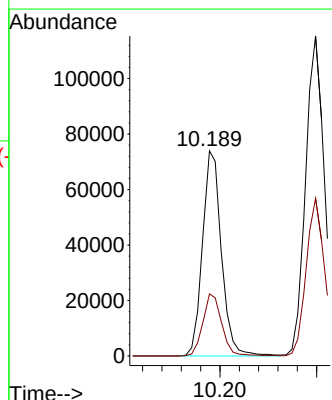
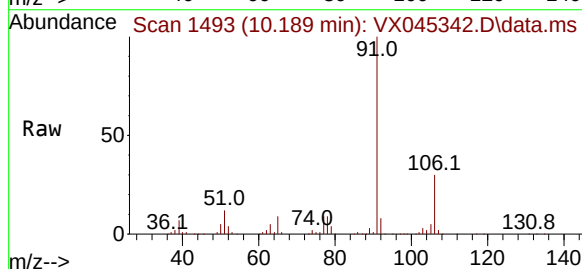
Manual Integrations
APPROVED

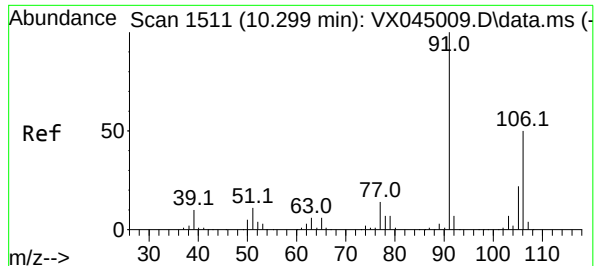
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#66
Ethyl Benzene
Concen: 18.652 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 91 Resp: 100826
Ion Ratio Lower Upper
91 100
106 30.3 25.4 38.2





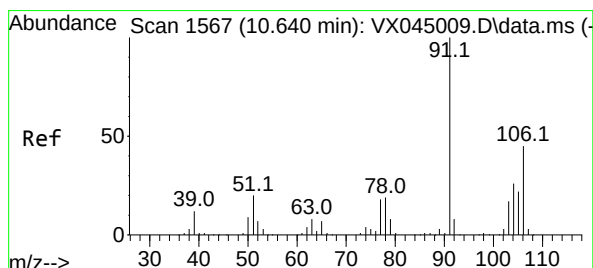
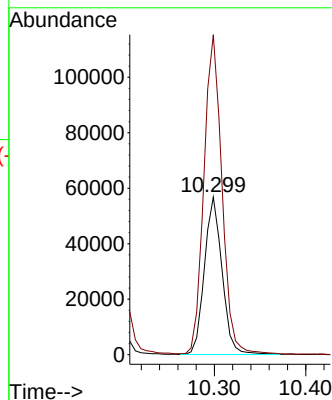
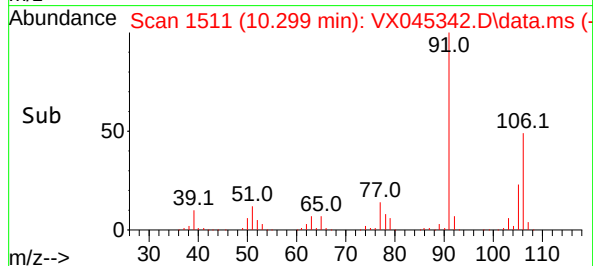
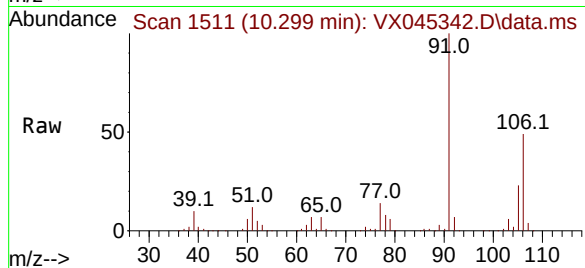
#67
m/p-Xylenes
Concen: 37.748 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion:106 Resp: 76020
Ion Ratio Lower Upper
106 100
91 208.2 163.7 245.5

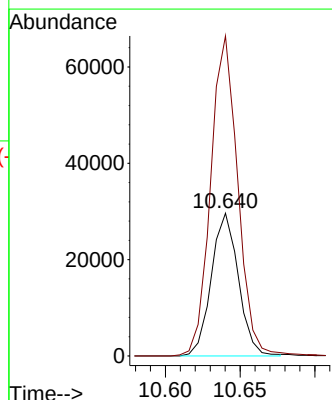
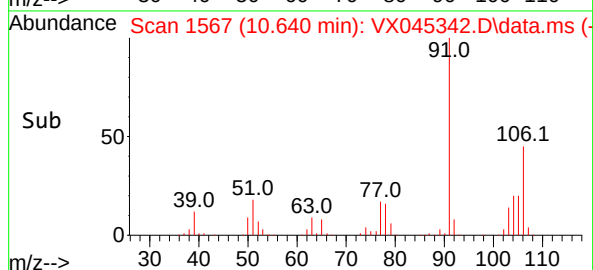
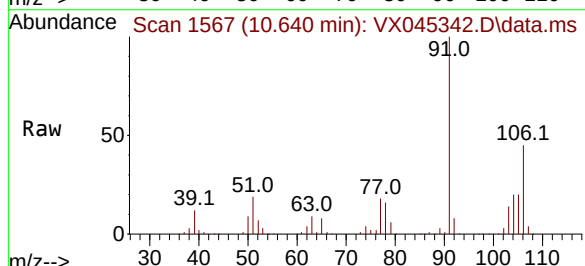
Manual Integrations
APPROVED

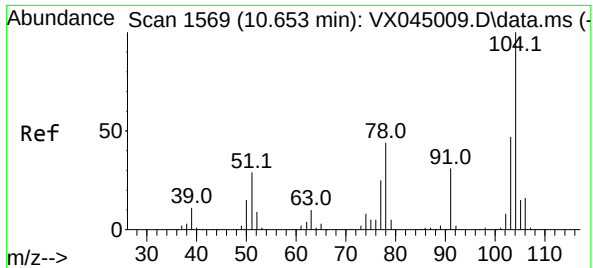
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#68
o-Xylene
Concen: 18.914 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion:106 Resp: 37375
Ion Ratio Lower Upper
106 100
91 225.0 109.7 329.1





#69

Styrene

Concen: 19.095 ug/l

RT: 10.652 min Scan# 1569

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

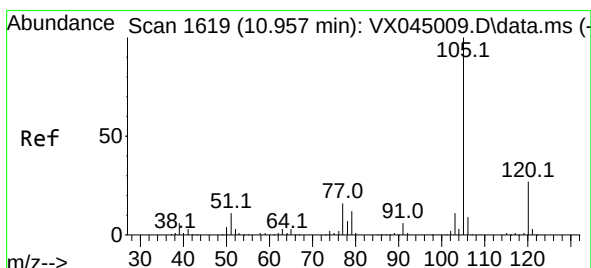
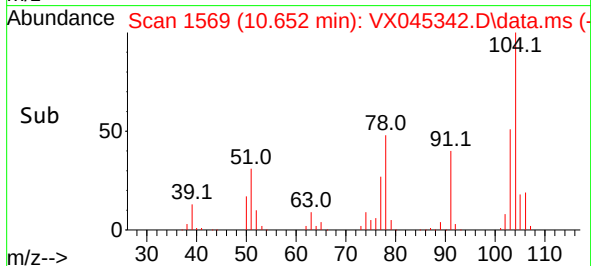
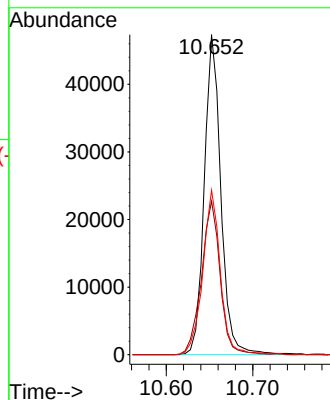
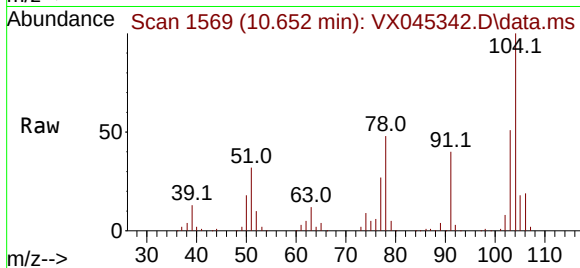
VX0319WBSD01

Tgt Ion:104	Resp:	6302
Ion Ratio	Lower	Upper
104	100	
78	53.9	41.4 62.0
103	54.4	43.0 64.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#70

Isopropylbenzene

Concen: 19.312 ug/l

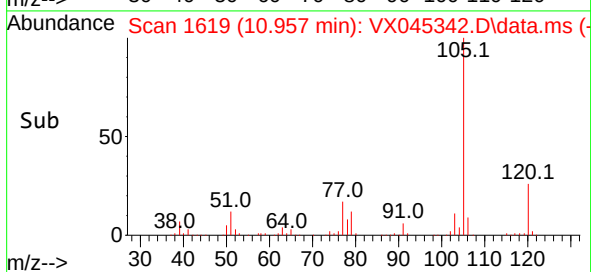
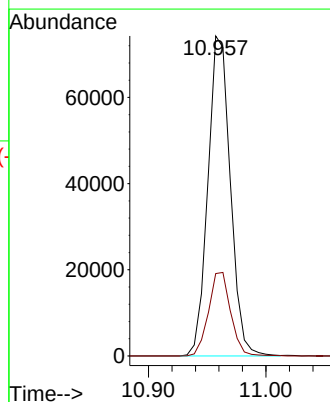
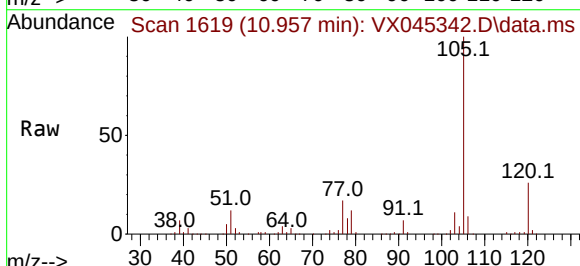
RT: 10.957 min Scan# 1619

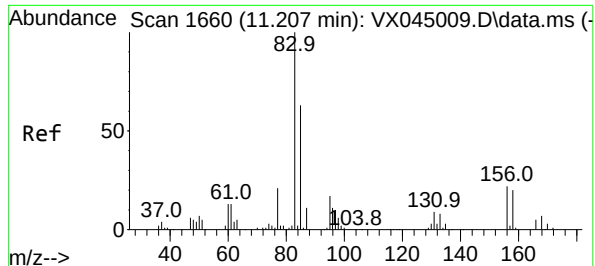
Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion:105	Resp:	98479
Ion Ratio	Lower	Upper
105	100	
120	25.8	18.4 34.2





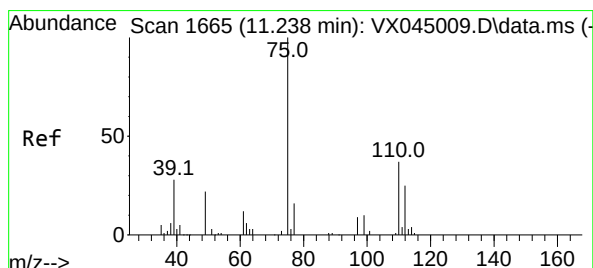
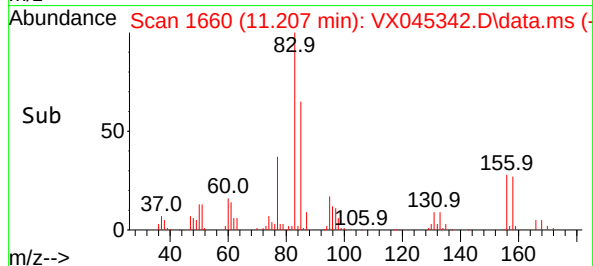
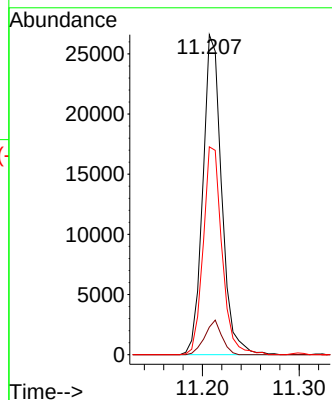
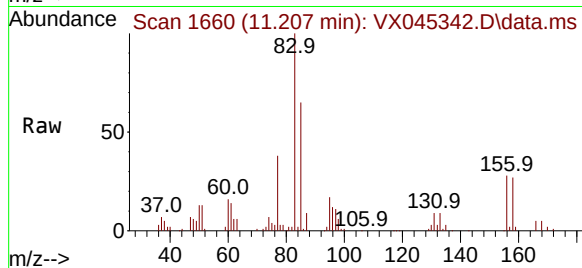
#71
1,1,2,2-Tetrachloroethane
Concen: 21.445 ug/l
RT: 11.207 min Scan# 1660
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 83 Resp: 3596
Ion Ratio Lower Upper
83 100
131 9.8 4.8 14.3
85 64.9 32.3 96.8

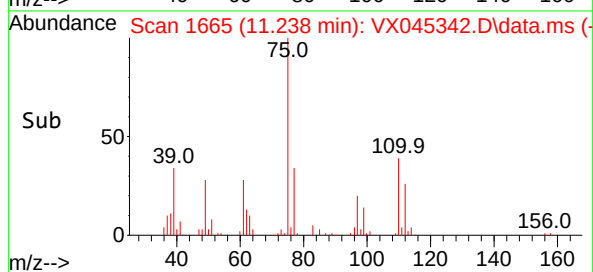
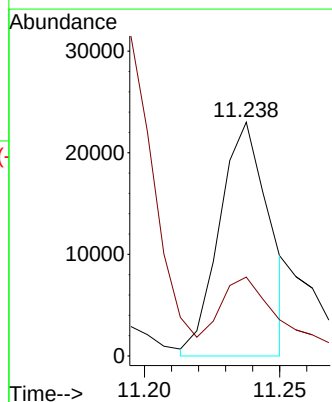
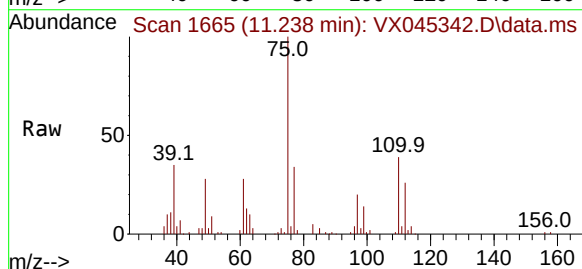
Manual Integrations
APPROVED

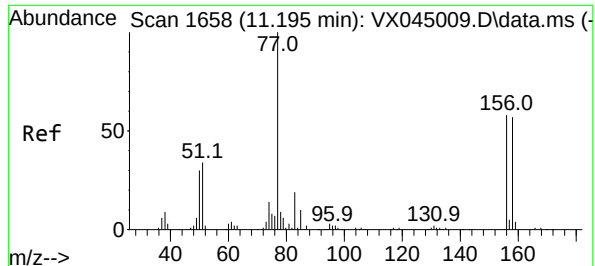
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#72
1,2,3-Trichloropropane
Concen: 21.229 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

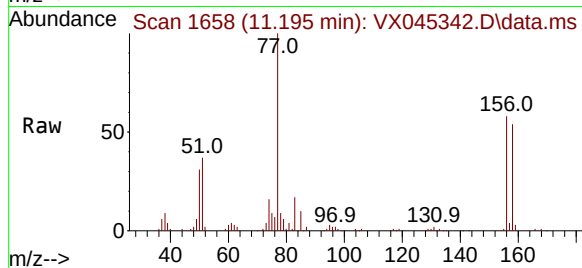
Tgt Ion: 75 Resp: 29280
Ion Ratio Lower Upper
75 100
77 42.7 0.0 84.0





#73
Bromobenzene
Concen: 19.446 ug/l
RT: 11.195 min Scan# 1658
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

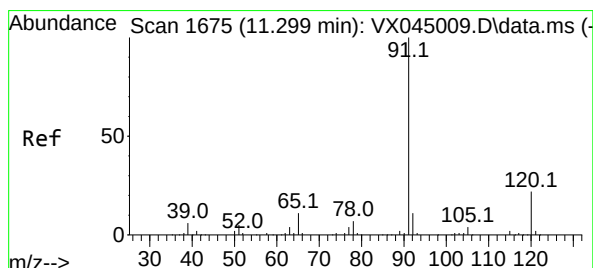
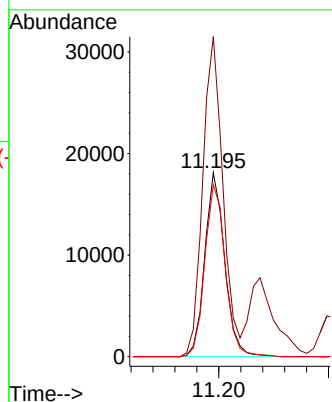
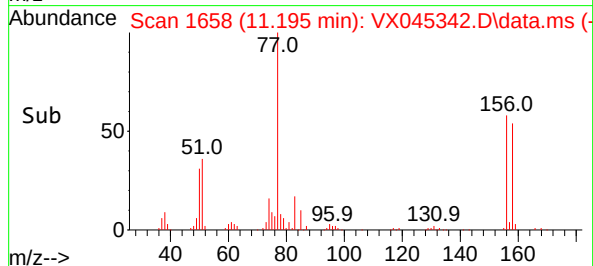
Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01



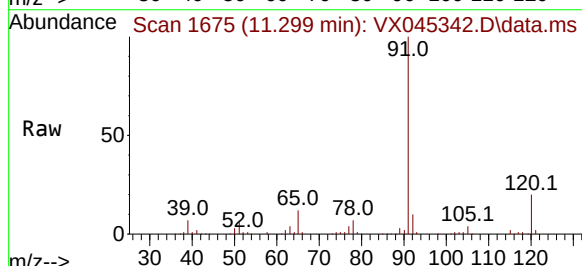
Tgt Ion:156 Resp: 22829
Ion Ratio Lower Upper
156 100
77 175.7 0.0 347.2
158 95.9 0.0 197.6

Manual Integrations
APPROVED

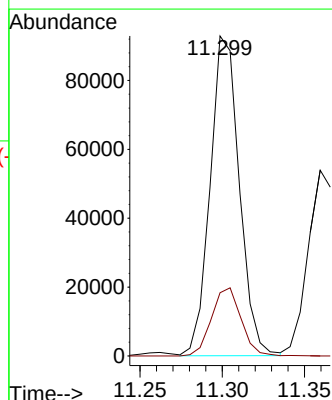
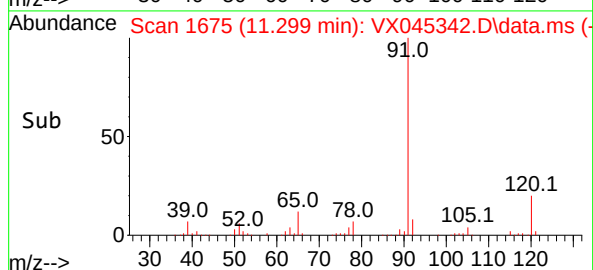
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025

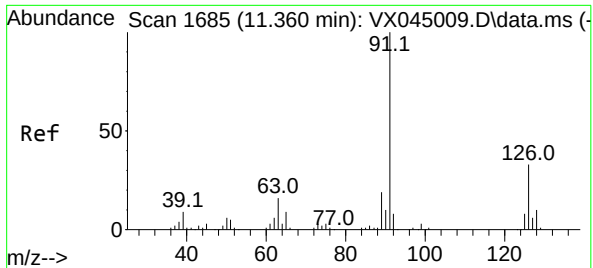


#74
n-propylbenzene
Concen: 18.919 ug/l
RT: 11.299 min Scan# 1675
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15



Tgt Ion: 91 Resp: 114810
Ion Ratio Lower Upper
91 100
120 21.5 0.0 44.2





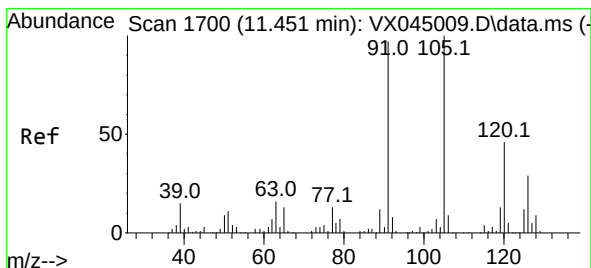
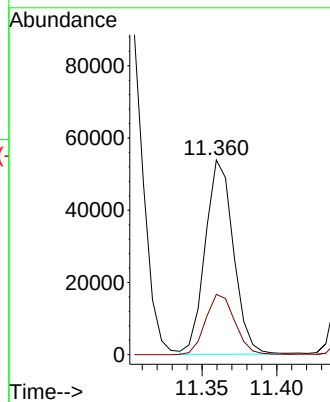
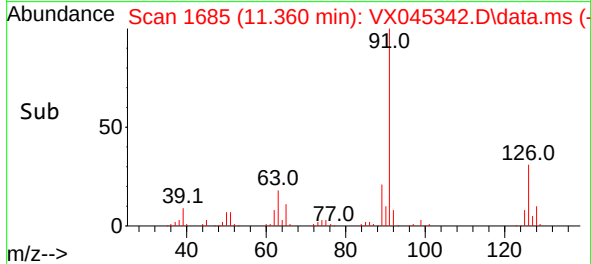
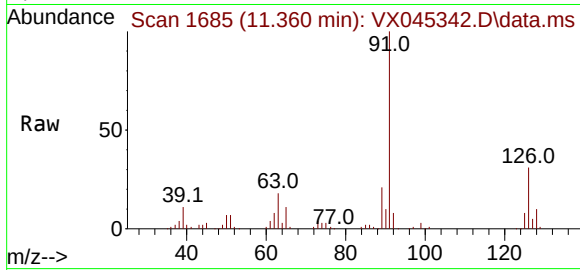
#75
2-Chlorotoluene
Concen: 19.250 ug/l
RT: 11.360 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 91 Resp: 7062
Ion Ratio Lower Upper
91 100
126 32.3 0.0 65.4

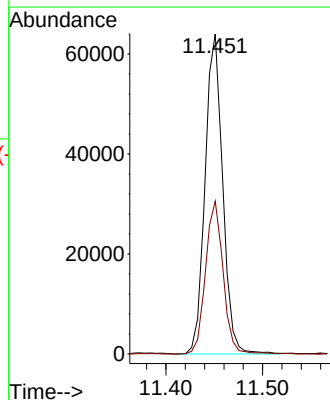
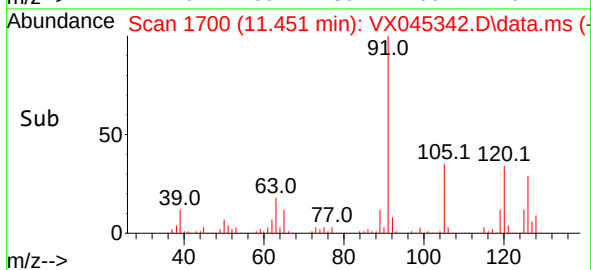
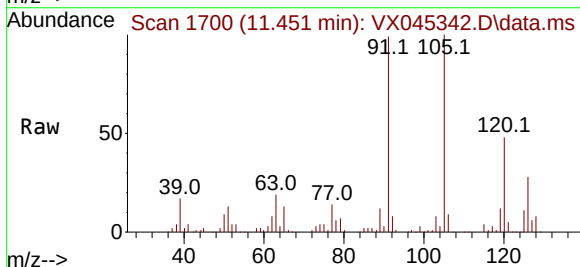
Manual Integrations
APPROVED

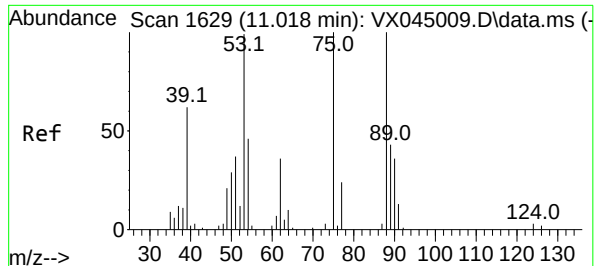
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#76
1,3,5-Trimethylbenzene
Concen: 19.321 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion:105 Resp: 81283
Ion Ratio Lower Upper
105 100
120 47.3 0.0 94.4





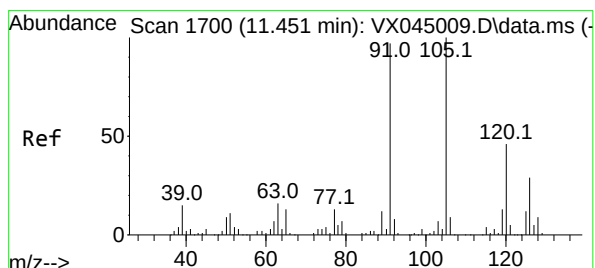
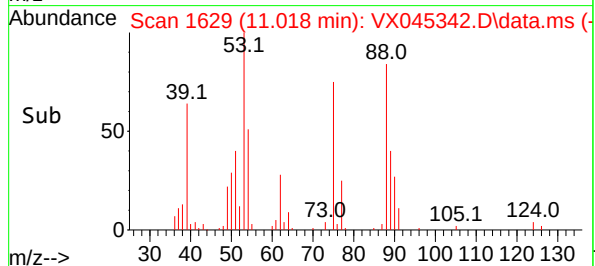
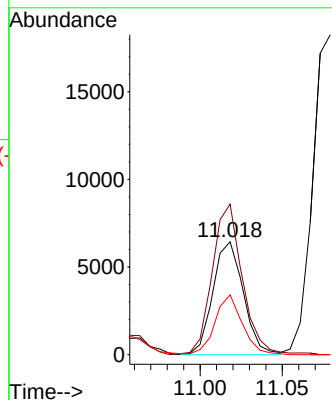
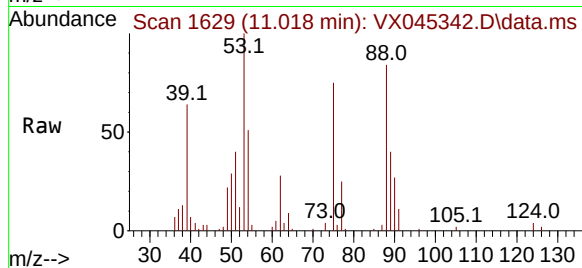
#77
t-1,4-Dichloro-2-butene
Concen: 17.897 ug/l
RT: 11.018 min Scan# 1629
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion: 75 Resp: 830
Ion Ratio Lower Upper
75 100
53 132.4 49.8 149.4
89 52.1 21.4 64.2

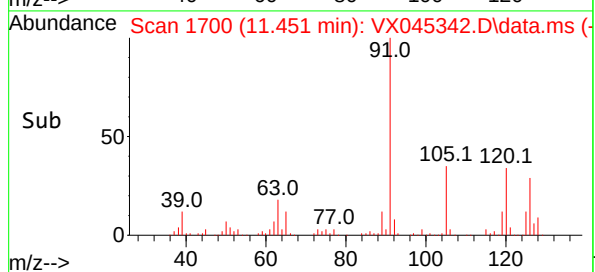
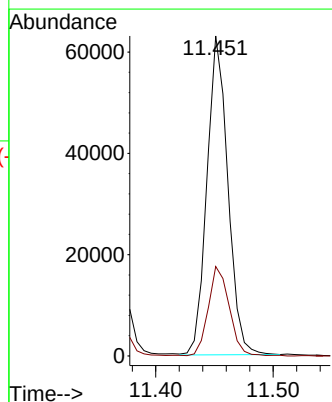
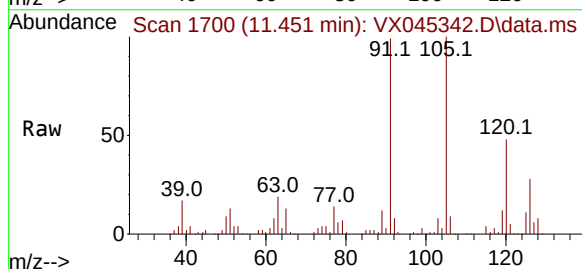
Manual Integrations
APPROVED

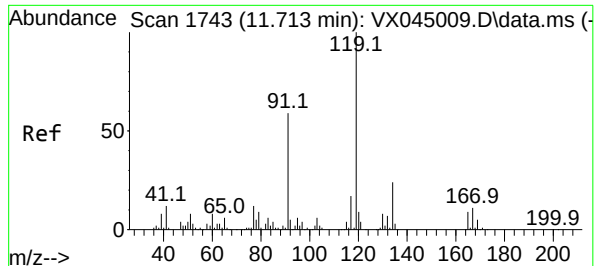
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#78
4-Chlorotoluene
Concen: 19.014 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion: 91 Resp: 77762
Ion Ratio Lower Upper
91 100
126 28.1 0.0 58.0





#79

tert-butylbenzene

Concen: 19.196 ug/l

RT: 11.713 min Scan# 1743

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion:119 Resp: 81369

Ion Ratio Lower Upper

119 100

91 61.7 0.0 120.6

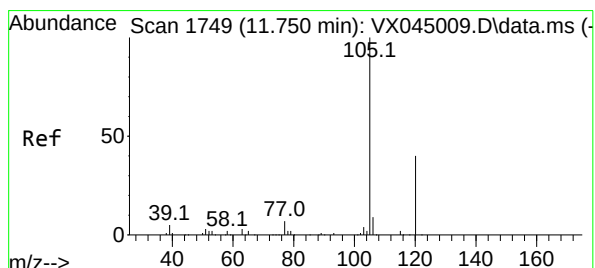
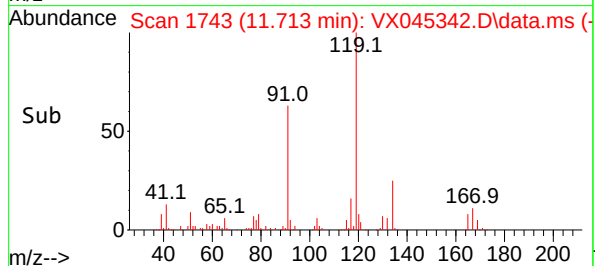
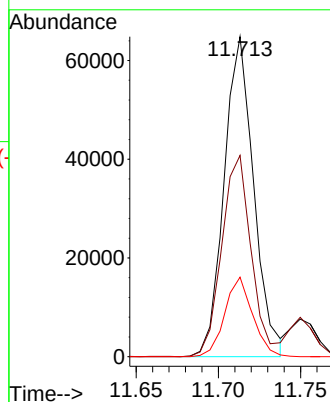
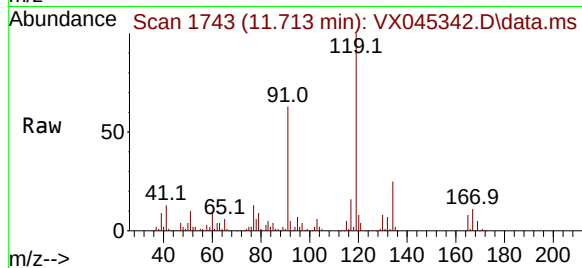
134 23.4 0.0 48.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#80

1,2,4-Trimethylbenzene

Concen: 19.334 ug/l

RT: 11.750 min Scan# 1749

Delta R.T. -0.000 min

Lab File: VX045342.D

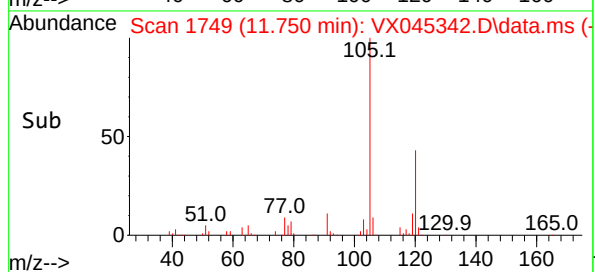
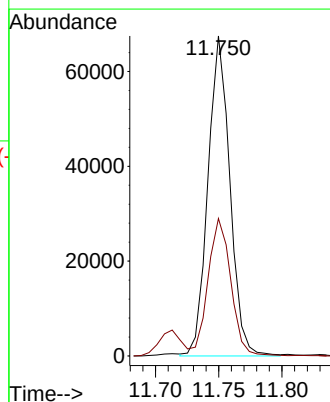
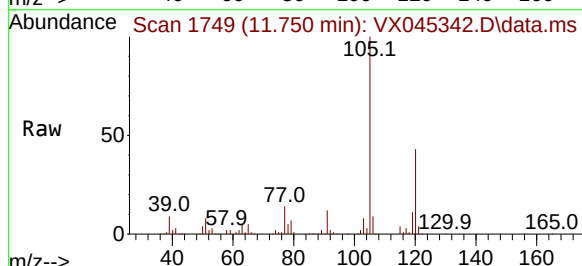
Acq: 19 Mar 2025 12:15

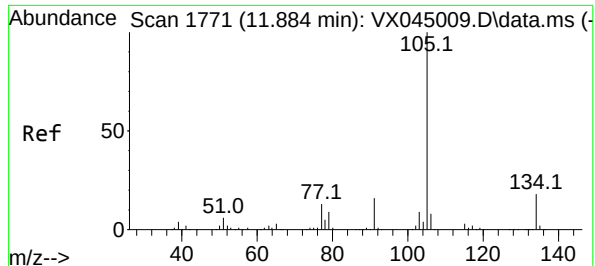
Tgt Ion:105 Resp: 81476

Ion Ratio Lower Upper

105 100

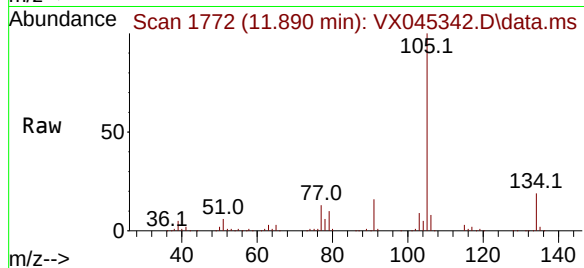
120 44.7 0.0 88.4





#81
 sec-Butylbenzene
 Concen: 19.527 ug/l
 RT: 11.890 min Scan# 1772
 Delta R.T. 0.006 min
 Lab File: VX045342.D
 Acq: 19 Mar 2025 12:15

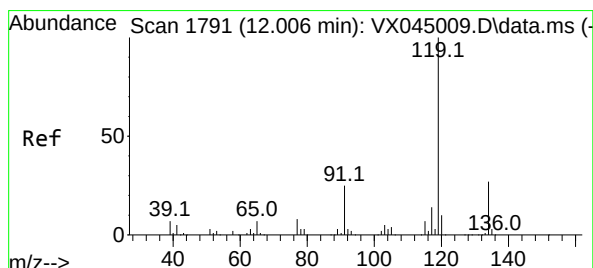
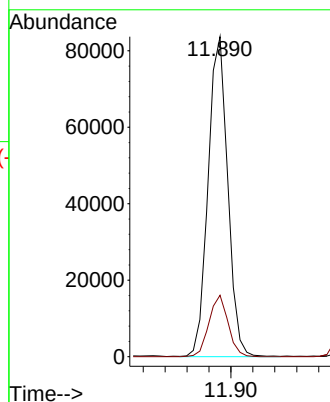
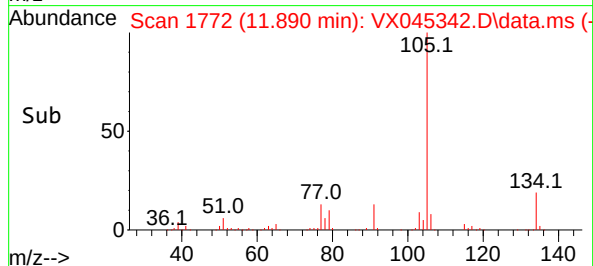
Instrument :
 MSVOA_X
 ClientSampleId :
 VX0319WBSD01



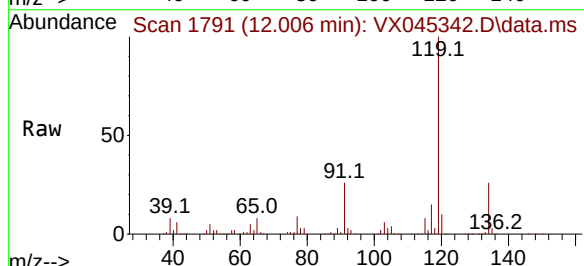
Tgt Ion:105 Resp: 10388
 Ion Ratio Lower Upper
 105 100
 134 18.8 0.0 39.0

Manual Integrations
 APPROVED

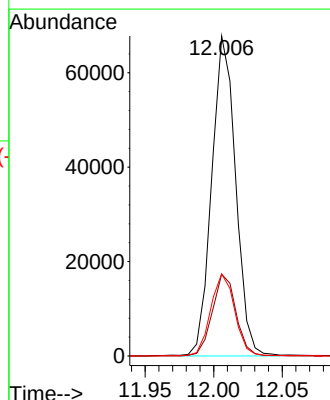
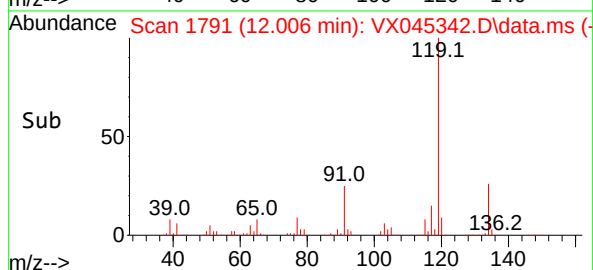
Reviewed By :John Carlone 03/20/2025
 Supervised By :Mahesh Dadoda 03/20/2025

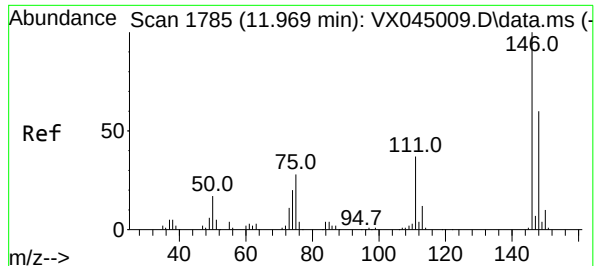


#82
 p-Isopropyltoluene
 Concen: 19.096 ug/l
 RT: 12.006 min Scan# 1791
 Delta R.T. -0.000 min
 Lab File: VX045342.D
 Acq: 19 Mar 2025 12:15



Tgt Ion:119 Resp: 82311
 Ion Ratio Lower Upper
 119 100
 134 25.2 0.0 52.6
 91 25.6 0.0 51.0





#83

1,3-Dichlorobenzene

Concen: 18.850 ug/l

RT: 11.969 min Scan# 1785

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

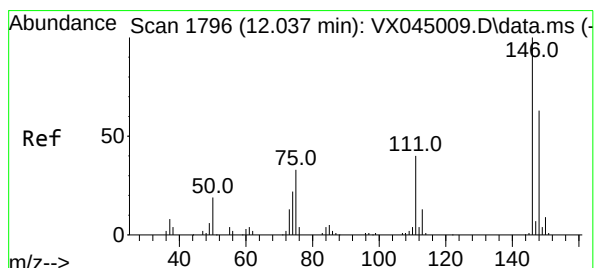
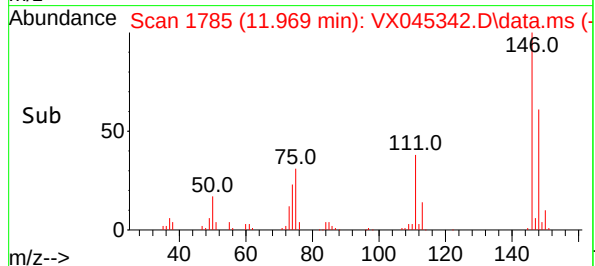
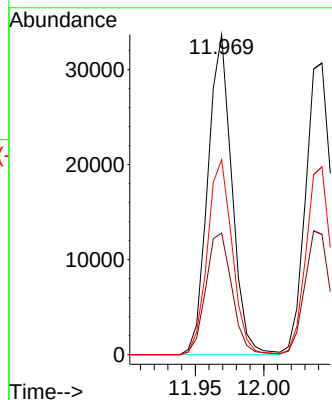
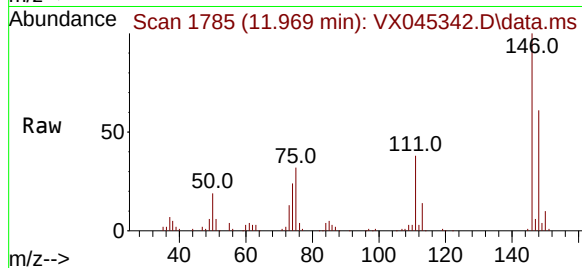
VX0319WBSD01

Tgt Ion:146	Resp:	4117
Ion Ratio	Lower	Upper
146	100	
111	41.4	20.2 60.5
148	63.0	31.2 93.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#84

1,4-Dichlorobenzene

Concen: 19.006 ug/l

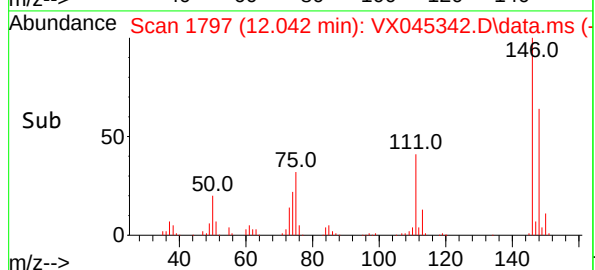
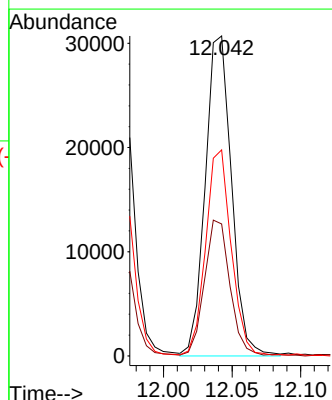
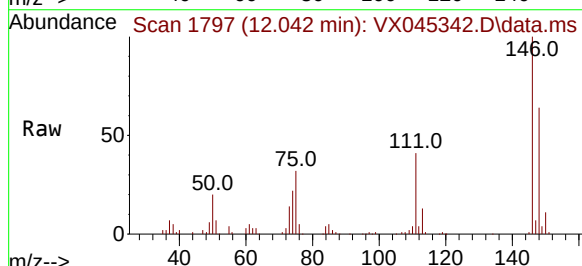
RT: 12.042 min Scan# 1797

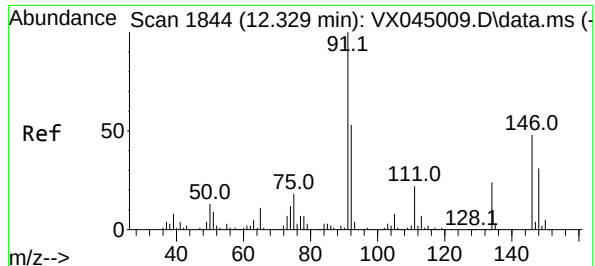
Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion:146	Resp:	40932
Ion Ratio	Lower	Upper
146	100	
111	41.2	20.4 61.2
148	63.0	31.8 95.4





#85

n-Butylbenzene

Concen: 18.177 ug/l

RT: 12.329 min Scan# 1844

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

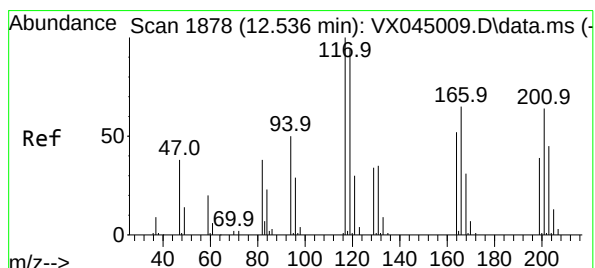
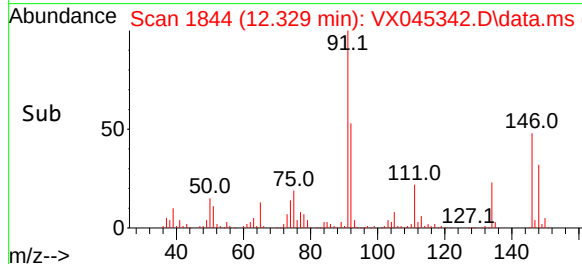
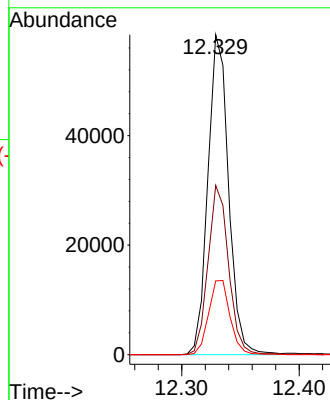
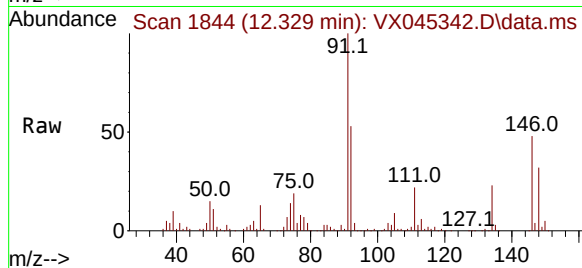
VX0319WBSD01

Tgt Ion: 91	Resp: 7154
Ion Ratio	Lower Upper
91 100	
92 52.2	0.0 105.2
134 24.1	0.0 49.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#86

Hexachloroethane

Concen: 17.931 ug/l

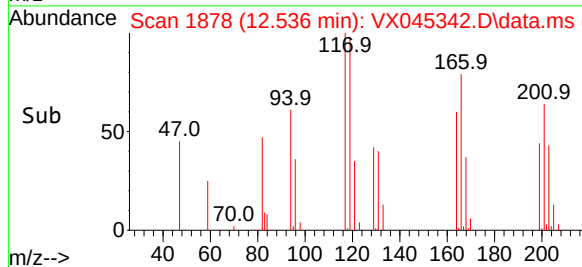
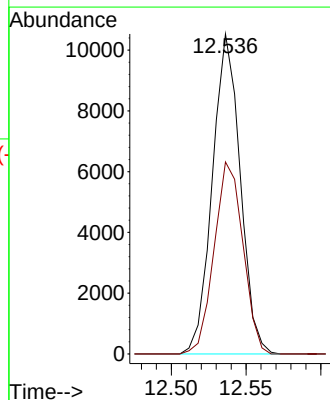
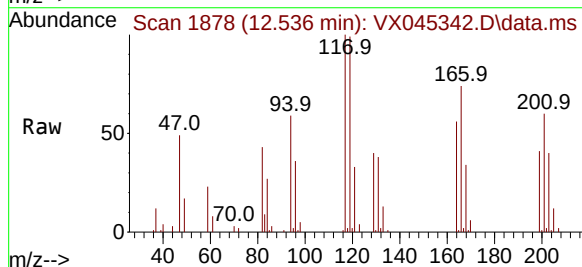
RT: 12.536 min Scan# 1878

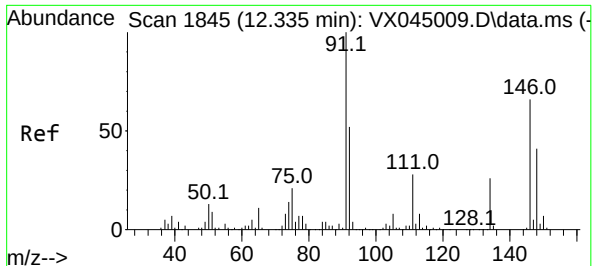
Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion: 117	Resp: 13631
Ion Ratio	Lower Upper
117 100	
201 62.0	32.6 97.7





#87

1,2-Dichlorobenzene

Concen: 18.859 ug/l

RT: 12.335 min Scan# 1845

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

Tgt Ion:146 Resp: 40418

Ion Ratio Lower Upper

146 100

111 44.9 21.7 65.1

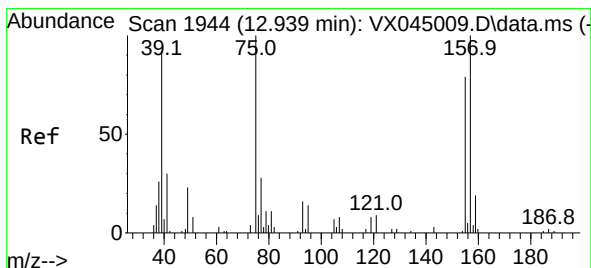
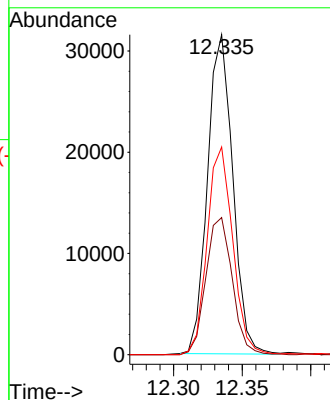
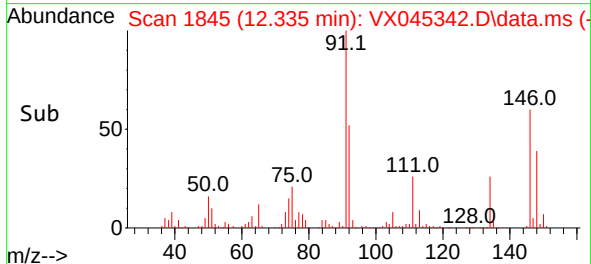
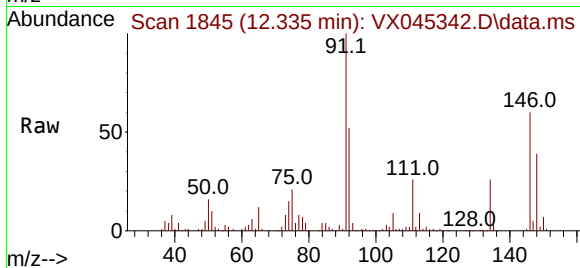
148 66.0 31.8 95.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#88

1,2-Dibromo-3-Chloropropane

Concen: 21.644 ug/l

RT: 12.939 min Scan# 1944

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

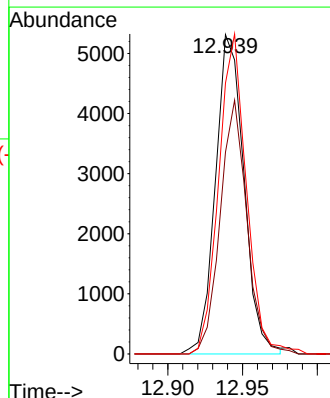
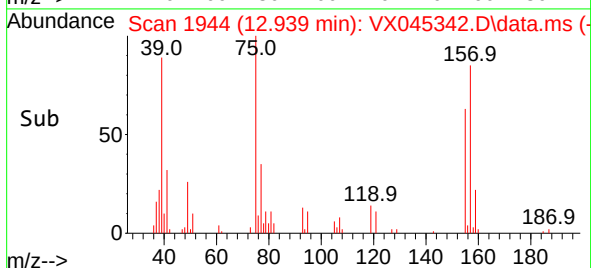
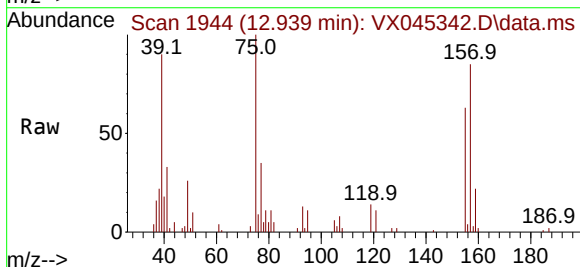
Tgt Ion: 75 Resp: 7027

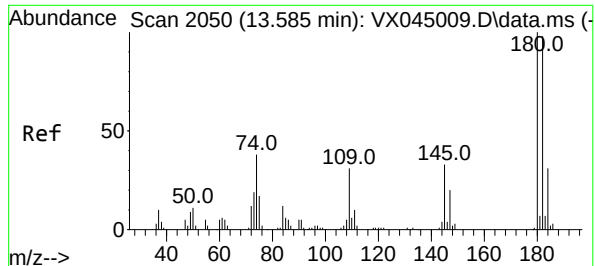
Ion Ratio Lower Upper

75 100

155 74.7 66.2 99.4

157 97.6 81.4 122.2





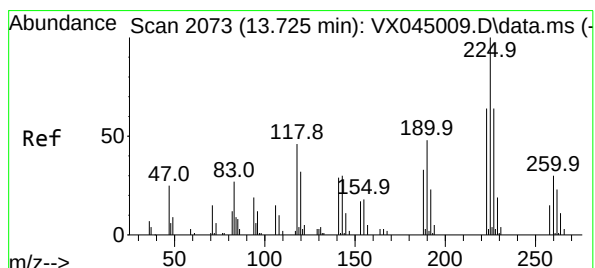
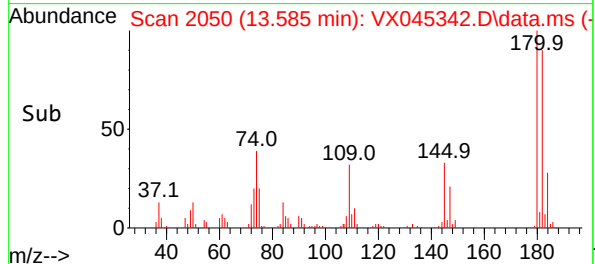
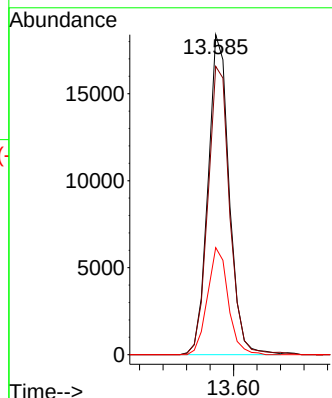
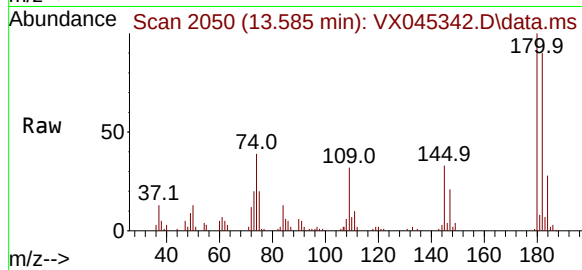
#89
1,2,4-Trichlorobenzene
Concen: 17.712 ug/l
RT: 13.585 min Scan# 2050
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Instrument :
MSVOA_X
ClientSampleId :
VX0319WBSD01

Tgt Ion:180 Resp: 23000
Ion Ratio Lower Upper
180 100
182 92.9 77.7 116.5
145 32.7 25.8 38.6

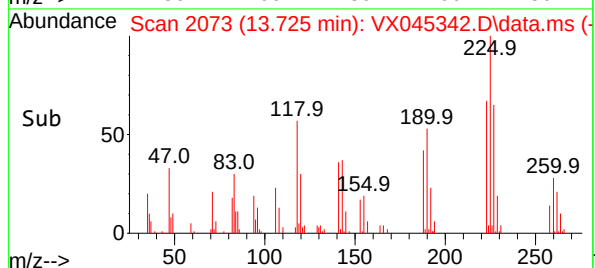
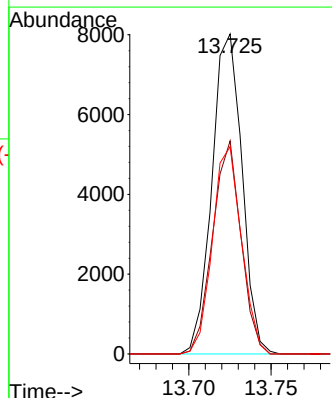
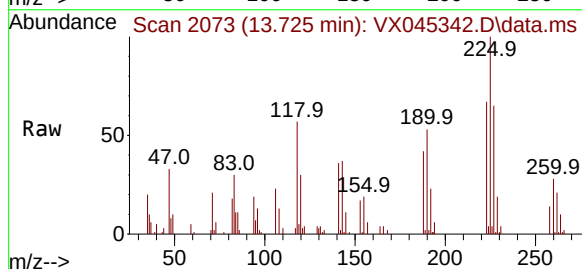
Manual Integrations
APPROVED

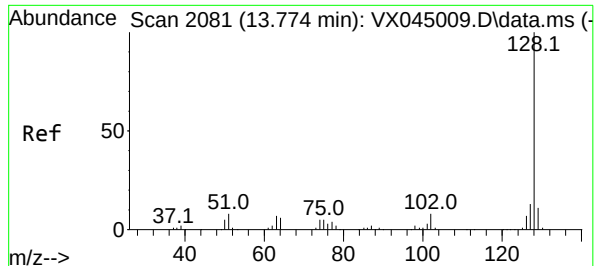
Reviewed By :John Carlone 03/20/2025
Supervised By :Mahesh Dadoda 03/20/2025



#90
Hexachlorobutadiene
Concen: 19.284 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX045342.D
Acq: 19 Mar 2025 12:15

Tgt Ion:225 Resp: 10215
Ion Ratio Lower Upper
225 100
223 62.7 0.0 123.4
227 62.5 0.0 127.4





#91

Naphthalene

Concen: 19.117 ug/l

RT: 13.774 min Scan# 2081

Delta R.T. -0.000 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Instrument :

MSVOA_X

ClientSampleId :

VX0319WBSD01

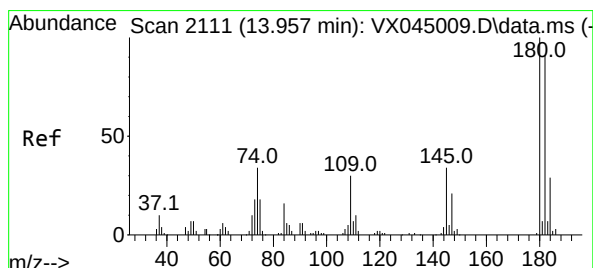
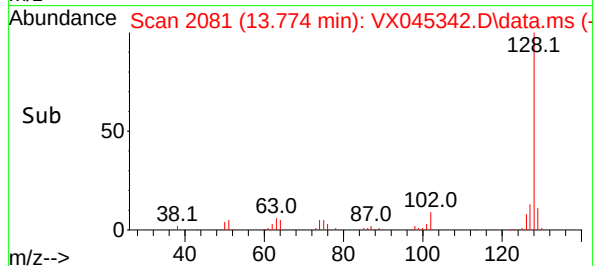
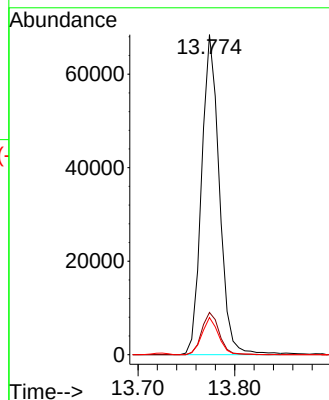
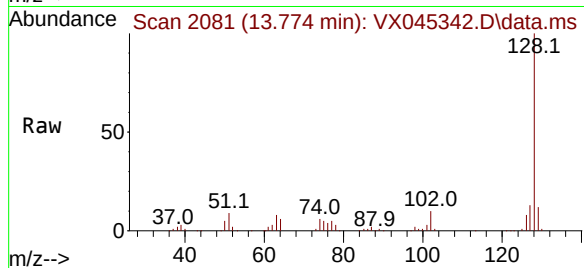
Tgt Ion:128	Resp:	87558
Ion Ratio	Lower	Upper
128	100	
127	13.0	10.5 15.7
129	11.0	8.7 13.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/20/2025

Supervised By :Mahesh Dadoda 03/20/2025



#92

1,2,3-Trichlorobenzene

Concen: 17.718 ug/l

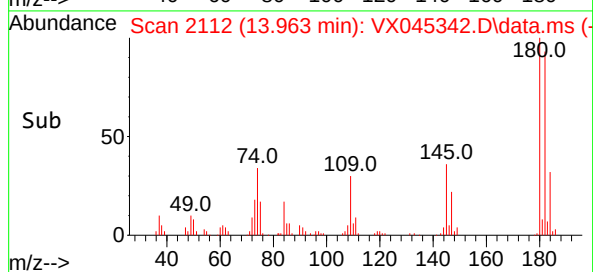
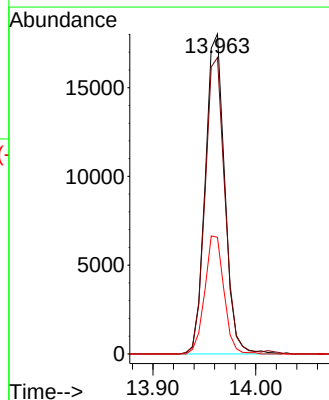
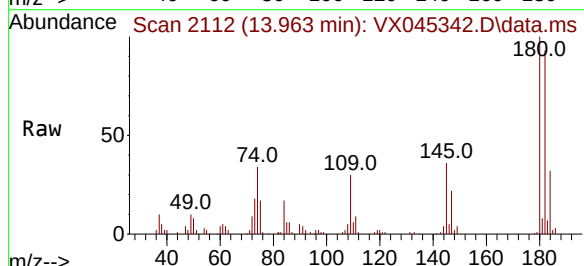
RT: 13.963 min Scan# 2112

Delta R.T. 0.006 min

Lab File: VX045342.D

Acq: 19 Mar 2025 12:15

Tgt Ion:180	Resp:	23693
Ion Ratio	Lower	Upper
180	100	
182	94.3	0.0 186.6
145	36.3	0.0 68.4



Manual Integration Report

Sequence:	VX022125	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDIC005	VX045008.D	1,2,3-Trichloropropane	JOHN	2/24/2025 9:45:07 AM	MMDadoda	2/24/2025 1:32:23 PM	Peak Integrated by Software
VSTDIC005	VX045008.D	Methacrylonitrile	JOHN	2/24/2025 9:45:07 AM	MMDadoda	2/24/2025 1:32:23 PM	Peak Integrated by Software
VSTDIC005	VX045008.D	tert-Butyl Alcohol	JOHN	2/24/2025 9:45:07 AM	MMDadoda	2/24/2025 1:32:23 PM	Peak Integrated by Software
VSTDICCC020	VX045009.D	1,2,3-Trichloropropane	JOHN	2/24/2025 9:45:15 AM	MMDadoda	2/24/2025 1:32:25 PM	Peak Integrated by Software
VSTDIC050	VX045010.D	1,2,3-Trichloropropane	JOHN	2/24/2025 9:45:26 AM	MMDadoda	2/24/2025 1:32:38 PM	Peak Integrated by Software
VSTDIC100	VX045011.D	1,2,3-Trichloropropane	JOHN	2/24/2025 9:45:31 AM	MMDadoda	2/24/2025 1:32:41 PM	Peak Integrated by Software
VSTDIC150	VX045012.D	1,2,3-Trichloropropane	JOHN	2/24/2025 9:45:36 AM	MMDadoda	2/24/2025 1:32:41 PM	Peak Integrated by Software
VSTDIC150	VX045012.D	tert-Butyl Alcohol	JOHN	2/24/2025 9:45:36 AM	MMDadoda	2/24/2025 1:32:41 PM	Peak Integrated by Software
VSTDICV020	VX045014.D	1,2,3-Trichloropropane	JOHN	2/24/2025 9:45:41 AM	MMDadoda	2/24/2025 1:32:43 PM	Peak Integrated by Software
VSTDCCC020	VX045020.D	1,2,3-Trichloropropane	JOHN	2/24/2025 9:46:10 AM	MMDadoda	2/24/2025 1:32:55 PM	Peak Integrated by Software

Manual Integration Report

Sequence:

vx031925

Instrument

MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC020	VX045340.D	1,2,3-Trichloropropane	JOHN	3/20/2025 9:20:45 AM	MMDadoda	3/20/2025 1:12:32 PM	Peak Integrated by Software
VX0319WBS01	VX045341.D	1,2,3-Trichloropropane	JOHN	3/20/2025 9:20:50 AM	MMDadoda	3/20/2025 1:12:32 PM	Peak Integrated by Software
VX0319WBSD0 1	VX045342.D	1,2,3-Trichloropropane	JOHN	3/20/2025 9:20:55 AM	MMDadoda	3/20/2025 1:12:34 PM	Peak Integrated by Software
VSTDCCC020	VX045345.D	1,2,3-Trichloropropane	JOHN	3/20/2025 9:20:59 AM	MMDadoda	3/20/2025 1:12:35 PM	Peak Integrated by Software

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX022125

Review By	John Carlone	Review On	2/24/2025 9:46:31 AM
Supervise By	Maresh Dadoda	Supervise On	2/24/2025 1:33:06 PM
SubDirectory	VX022125	HP Acquire Method	HP Processing Method 624X022125W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP133095		
Initial Calibration Stds	VP133103,VP133104,VP133105,VP133106,VP133107		
CCC	VP133096,VP133109,VP133110		
Internal Standard/PEM			
ICV/I.BLK	VP133108		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX045007.D	21 Feb 2025 09:31	JC/MD	Ok
2	VSTDIC005	VX045008.D	21 Feb 2025 09:58	JC/MD	Ok,M
3	VSTDICCC020	VX045009.D	21 Feb 2025 10:21	JC/MD	Ok,M
4	VSTDIC050	VX045010.D	21 Feb 2025 10:44	JC/MD	Ok,M
5	VSTDIC100	VX045011.D	21 Feb 2025 11:07	JC/MD	Ok,M
6	VSTDIC150	VX045012.D	21 Feb 2025 11:29	JC/MD	Ok,M
7	IBLK	VX045013.D	21 Feb 2025 11:52	JC/MD	Ok
8	VSTDICV020	VX045014.D	21 Feb 2025 13:09	JC/MD	Ok,M
9	VX0221WBS01	VX045015.D	21 Feb 2025 13:41	JC/MD	Ok,M
10	VX0221WBSD01	VX045016.D	21 Feb 2025 14:03	JC/MD	Ok,M
11	VX0221WBL01	VX045017.D	21 Feb 2025 14:39	JC/MD	Ok
12	Q1168-07 2.5PPB	VX045018.D	21 Feb 2025 15:12	JC/MD	Ok,M
13	Q1168-08 5.0PPB	VX045019.D	21 Feb 2025 15:38	JC/MD	Ok,M
14	VSTDCCC020	VX045020.D	21 Feb 2025 16:05	JC/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_X**

Daily Analysis Runlog For Sequence/QC Batch ID # VX031925

Review By	John Carlone	Review On	3/20/2025 9:21:12 AM
Supervise By	Mahesh Dadoda	Supervise On	3/20/2025 1:12:47 PM
SubDirectory	VX031925	HP Acquire Method	HP Processing Method 624X022125W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133390		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133391,VP133392		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX045339.D	19 Mar 2025 10:11	JC/MD	Ok
2	VSTDCCC020	VX045340.D	19 Mar 2025 10:41	JC/MD	Ok,M
3	VX0319WBS01	VX045341.D	19 Mar 2025 11:41	JC/MD	Ok,M
4	VX0319WBSD01	VX045342.D	19 Mar 2025 12:15	JC/MD	Ok,M
5	VX0319WBL01	VX045343.D	19 Mar 2025 12:50	JC/MD	Ok
6	Q1502-02	VX045344.D	19 Mar 2025 13:18	JC/MD	Ok
7	VSTDCCC020	VX045345.D	19 Mar 2025 14:56	JC/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX022125

Review By	John Carlone	Review On	2/24/2025 9:46:31 AM
Supervise By	Mahesh Dadoda	Supervise On	2/24/2025 1:33:06 PM
SubDirectory	VX022125	HP Acquire Method	HP Processing Method 624X022125W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP133095		
Initial Calibration Stds	VP133103,VP133104,VP133105,VP133106,VP133107		
CCC	VP133096,VP133109,VP133110		
Internal Standard/PEM			
ICV/I.BLK	VP133108		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX045007.D	21 Feb 2025 09:31		JC/MD	Ok
2	VSTDIC005	VSTDIC005	VX045008.D	21 Feb 2025 09:58		JC/MD	Ok,M
3	VSTDICCC020	VSTDICCC020	VX045009.D	21 Feb 2025 10:21		JC/MD	Ok,M
4	VSTDIC050	VSTDIC050	VX045010.D	21 Feb 2025 10:44		JC/MD	Ok,M
5	VSTDIC100	VSTDIC100	VX045011.D	21 Feb 2025 11:07		JC/MD	Ok,M
6	VSTDIC150	VSTDIC150	VX045012.D	21 Feb 2025 11:29		JC/MD	Ok,M
7	IBLK	IBLK	VX045013.D	21 Feb 2025 11:52		JC/MD	Ok
8	VSTDICV020	ICVVX022125	VX045014.D	21 Feb 2025 13:09		JC/MD	Ok,M
9	VX0221WBS01	VX0221WBS01	VX045015.D	21 Feb 2025 13:41		JC/MD	Ok,M
10	VX0221WBSD01	VX0221WBSD01	VX045016.D	21 Feb 2025 14:03		JC/MD	Ok,M
11	VX0221WBL01	VX0221WBL01	VX045017.D	21 Feb 2025 14:39		JC/MD	Ok
12	Q1168-07 2.5PPB	LOD-MDL-WATER-01-0	VX045018.D	21 Feb 2025 15:12		JC/MD	Ok,M
13	Q1168-08 5.0PPB	LOQ-WATER-02-QT1-2	VX045019.D	21 Feb 2025 15:38		JC/MD	Ok,M
14	VSTDCCC020	VSTDCCC020EC	VX045020.D	21 Feb 2025 16:05		JC/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX031925

Review By	John Carlone	Review On	3/20/2025 9:21:12 AM
Supervise By	Mahesh Dadoda	Supervise On	3/20/2025 1:12:47 PM
SubDirectory	VX031925	HP Acquire Method	HP Processing Method 624X022125W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP133390
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133391,VP133392

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX045339.D	19 Mar 2025 10:11		JC/MD	Ok
2	VSTDCCC020	VSTDCCC020	VX045340.D	19 Mar 2025 10:41		JC/MD	Ok,M
3	VX0319WBS01	VX0319WBS01	VX045341.D	19 Mar 2025 11:41		JC/MD	Ok,M
4	VX0319WBSD01	VX0319WBSD01	VX045342.D	19 Mar 2025 12:15		JC/MD	Ok,M
5	VX0319WBL01	VX0319WBL01	VX045343.D	19 Mar 2025 12:50		JC/MD	Ok
6	Q1502-02	PT-VOA-WP	VX045344.D	19 Mar 2025 13:18		JC/MD	Ok
7	VSTDCCC020	VSTDCCC020EC	VX045345.D	19 Mar 2025 14:56		JC/MD	Ok,M

M : Manual Integration

Prep Standard - Chemical Standard Summary

Order ID : Q1502

Test : VOCMS Group1

Prepbatch ID :

Sequence ID/Qc Batch ID: vx031925,

Standard ID :

VP131746,VP131767,VP132035,VP132096,VP133036,VP133174,VP133178,VP133244,VP133245,VP133246,VP133251,VP133342,VP133390,VP133391,VP133392,

Chemical ID :

V13391,V13457,V13460,V13465,V13466,V13706,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14580,V14613,V14614,V14624,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14744,V14754,V14809,V14814,V14842,V14872,V14873,V14874,V14875,V14883,V14885,V14896,V14897,V14898,V14899,W3112,

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
247	8260 Internal Standard, 250PPM	VP131746	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
11/23/2024								

FROM 0.50000ml of V14289 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
218	BFB, 25PPM	VP131767	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
11/27/2024								

FROM 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1810	8260 Working Std(2-CVE)-800ppm	VP132035	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								12/12/2024

FROM 1.00000ml of V14630 + 1.00000ml of V14631 + 1.00000ml of V14632 + 1.00000ml of V14633 + 46.00000ml of V14614 = Final
Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
719	8260 Working STD (BCM)-First source, 400PPM	VP132096	12/12/2024	06/10/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								12/19/2024

FROM 1.00000ml of V13465 + 1.00000ml of V13466 + 1.50000ml of V13457 + 1.50000ml of V13460 + 20.00000ml of V14614 = Final
Quantity: 25.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
51	8260 Working STD (Acrolein) -first source, 800PPM	VP133036	02/14/2025	03/13/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								02/18/2025

FROM 1.00000ml of V14872 + 1.00000ml of V14873 + 1.00000ml of V14874 + 1.00000ml of V14875 + 21.00000ml of V14624 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
617	8260 Surrogate, 400PPM	VP133174	02/27/2025	08/27/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								03/04/2025

FROM 0.40000ml of V13706 + 24.60000ml of V14613 = Final Quantity: 25.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
257	8260 Calibration Working STD Mix-First source, 160PPM	VP133178	02/27/2025	03/31/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda 03/04/2025

FROM 0.40000ml of V14842 + 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 V14724 + 1.00000ml of V14744 + 1.00000ml of V14754 + 1.00000ml of V14809 + 1.00000ml of V14814 + 1.50000ml of V14722 + 1.50000ml of V14723 + 10.60000ml of V14613 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
589	BFB TUNE CHECK	VP133244	03/11/2025	03/12/2025	John Carlone	None	None	Romaben Patel 03/11/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
620	50 PPB CCC, 8260-Water	VP133245	03/11/2025	03/12/2025	John Carlone	None	None	Romaben Patel
FROM 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133036 + 0.01250ml of VP133178 = Final Quantity: 40.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
620	50 PPB CCC, 8260-Water	VP133246	03/11/2025	03/12/2025	John Carlone	None	None	Romaben Patel
FROM 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133036 + 0.01250ml of VP133178 = Final Quantity: 40.000 ml								

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
466	624 Internal Standard and Surrogate Mix, 150PPM	VP133251	03/12/2025	07/02/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								03/21/2025

FROM 0.15000ml of V14580 + 0.15000ml of V14885 + 24.75000ml of V14624 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
51	8260 Working STD (Acrolein) -first source, 800PPM	VP133342	03/18/2025	04/17/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								03/20/2025

FROM 1.00000ml of V14896 + 1.00000ml of V14897 + 1.00000ml of V14898 + 1.00000ml of V14899 + 21.00000ml of V14883 = Final Quantity: 25.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
589	BFB TUNE CHECK	VP133390	03/19/2025	03/20/2025	John Carlone	None	None	Maresh Dadoda
03/21/2025								

FROM 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
645	20 PPB CCC, 624	VP133391	03/19/2025	03/20/2025	John Carlone	None	None	Maresh Dadoda
03/21/2025								

FROM 39.97000ml of W3112 + 0.00500ml of VP132035 + 0.00500ml of VP133178 + 0.00500ml of VP133342 + 0.00800ml of VP133251 = Final Quantity: 40.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
645	20 PPB CCC, 624	VP133392	03/19/2025	03/20/2025	John Carlone	None	None	Maresh Dadoda
FROM 39.97000ml of W3112 + 0.00500ml of VP132035 + 0.00500ml of VP133178 + 0.00500ml of VP133342 + 0.00800ml of VP133251 = Final Quantity: 40.000 ml								

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	11/22/2025	11/22/2024 / SAM	01/13/2023 / SAM	V13391

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13457

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13460

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13466

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0196865	02/27/2026	02/27/2025 / SAM	04/12/2023 / SAM	V13706

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	05/18/2025	11/18/2024 / pedro	02/06/2024 / SAM	V14154

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	11/22/2025	11/22/2024 / SAM	04/15/2024 / SAM	V14289

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	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

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	V14521

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 #
Restek	555584 / Custom Standard, CLP VOA SurrogateStd [CS 5179-4]	A0219012	01/02/2026	01/02/2025 / SAM	11/18/2024 / SAM	V14580

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	08/27/2025	02/27/2025 / SAM	11/26/2024 / SAM	V14613

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	06/10/2025	12/10/2024 / SAM	11/26/2024 / SAM	V14614

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	07/13/2025	01/13/2025 / SAM	11/26/2024 / SAM	V14624

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14630

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14631

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14632

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14633

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	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

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix, 500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	08/27/2025	02/27/2025 / SAM	12/17/2024 / SAM	V14744

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix, 500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	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	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE	A0220471	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14809

LOTS

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	A0220471	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14814

LOTS

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0217535	08/27/2025	02/27/2025 / SAM	01/21/2025 / SAM	V14842

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14872

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14873

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14874

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14875

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	10/25/2025	02/19/2025 / Jaswal	04/22/2024 / Jaswal	V14883

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555583 / Custom Standard, CLP VOA Internal Std [CS 5179-3]	A0223136	03/12/2026	03/12/2025 / SAM	03/12/2025 / SAM	V14885

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14896

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14897

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14898

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14899

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / lwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 23I0762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

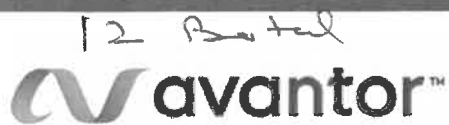
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	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



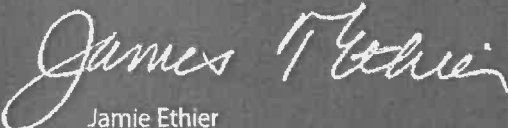
Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

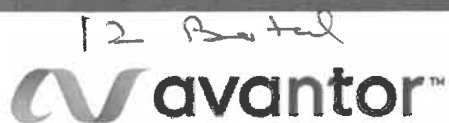
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	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


Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



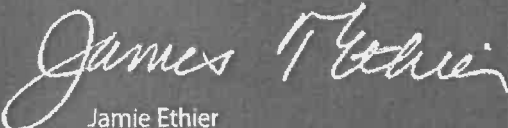
Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration 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


Jamie Ethier
Vice President Global Quality



Certified Reference Material CRM

5 114

Dec 02/14/25



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Solvent(s):
Water

Lot#
072324Q

Expiration Date: 031325

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 5000

NIST Test ID#: 6UTB

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

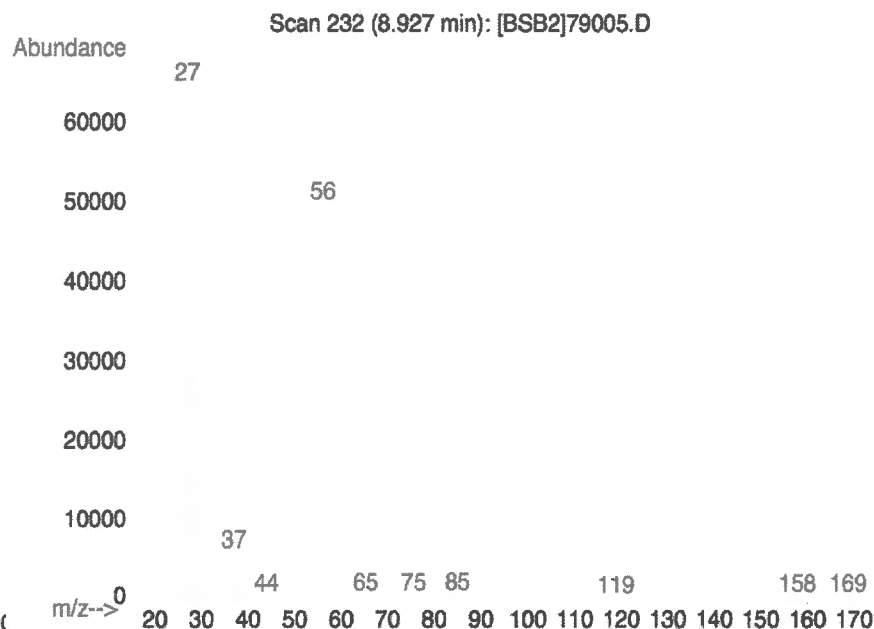
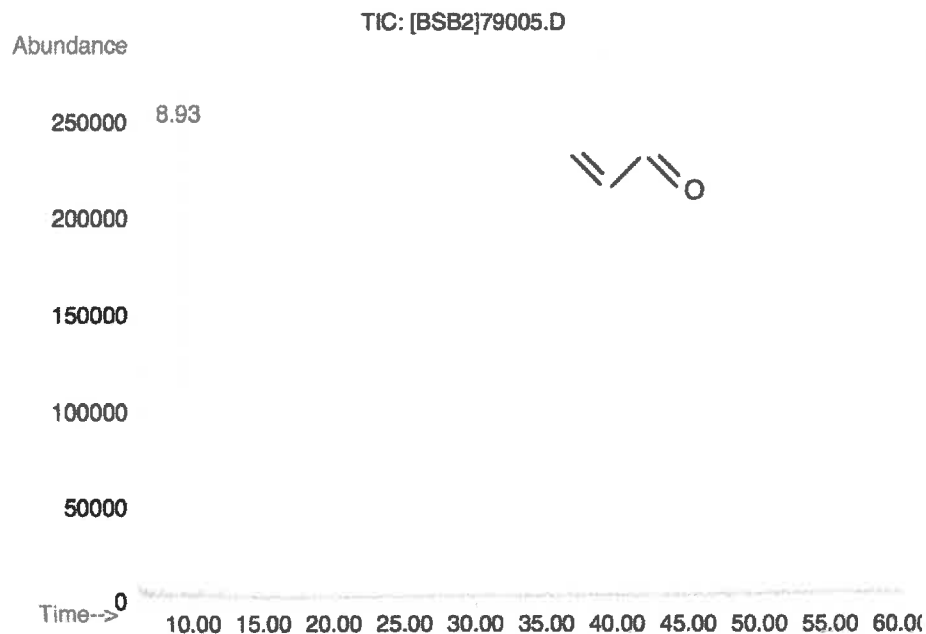
0.001 Flask Uncertainty

		021325
Formulated By:	Anthony Mahoney	DATE
		021325
Reviewed By:	Pedro L. Rentas	DATE

✓ 14872 to
✓ 14876

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	0.05178	5011.8	52.6	107-02-8	0.1 ppm	ori-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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	Use in ventilated area	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water	P280	Use gloves, eye protection/face shield
		P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))	CAS#: 7732-18-5	% (optional)
Water		> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water	CAS#: 7732-18-5	TWA: 500 ppm
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.		

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water	Completely miscible	NA	NA
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	NA
Conditions to avoid	NA
Materials to avoid	NA
Hazardous decomposition products -	No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat	NA
LC50 Inhalation - Rat	NA
LD50 Dermal - Guinea pig	NA
Causes skin irritation.	
Eye irritation	

Section XII. ECOLOGICAL INFORMATION

LC50	NA
EC50	NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
Not dangerous goods	Not dangerous goods
Proper shipping name: Water	Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

5 114

Dec 02/14/25



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Solvent(s):
Water

Lot#
072324Q

Expiration Date: 031325

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 5000

NIST Test ID#: 6UTB

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

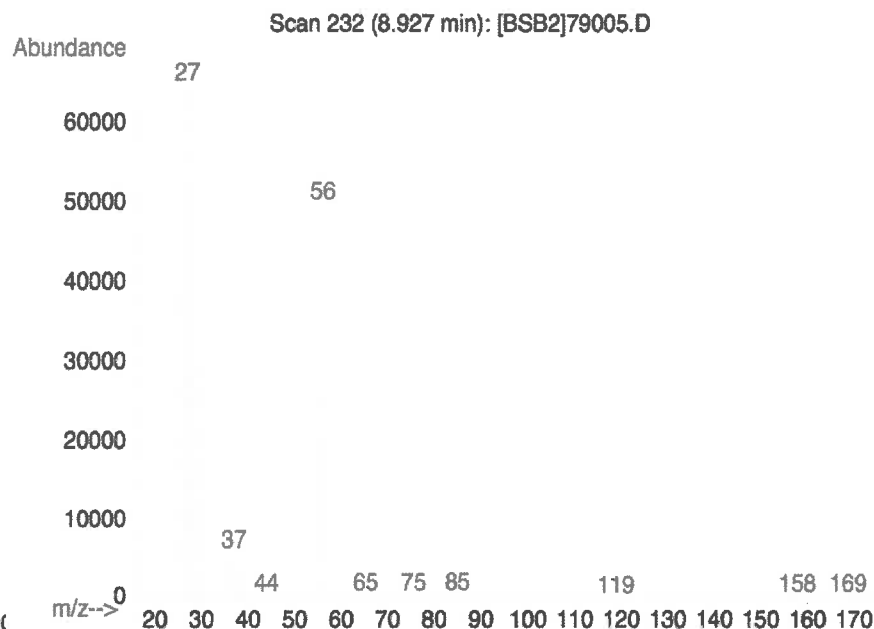
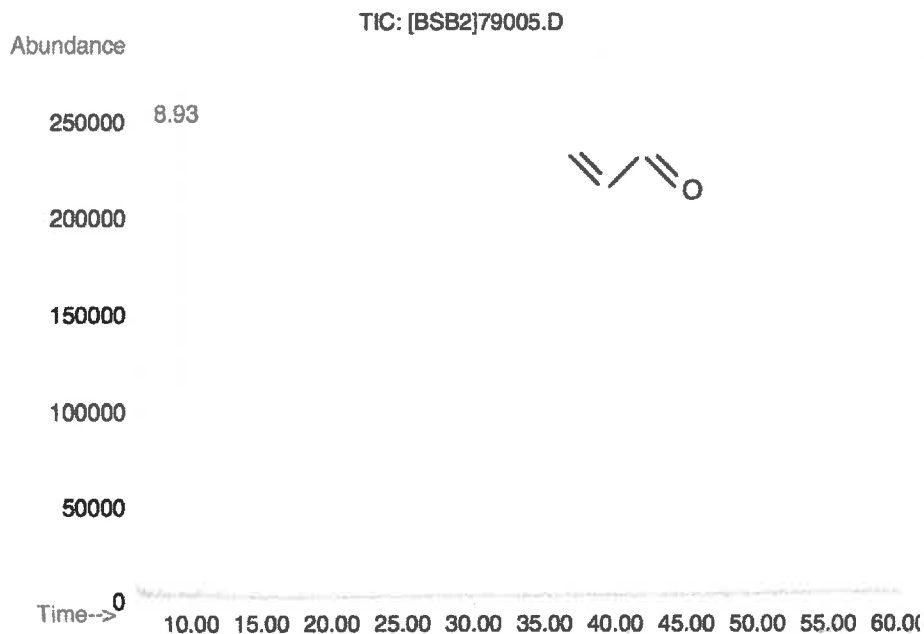
0.001 Flask Uncertainty

		021325
Formulated By:	Anthony Mahoney	DATE
		021325
Reviewed By:	Pedro L. Rentas	DATE

✓ 14872 to
✓ 14876

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	0.05178	5011.8	52.6	107-02-8	0.1 ppm	ori-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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	Use in ventilated area	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water	P280	Use gloves, eye protection/face shield
		P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))	CAS#: 7732-18-5	% (optional)
Water		> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water	CAS#: 7732-18-5	TWA: 500 ppm
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.		

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water	Completely miscible	NA	NA
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	NA
Conditions to avoid	NA
Materials to avoid	NA
Hazardous decomposition products -	No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat	NA
LC50 Inhalation - Rat	NA
LD50 Dermal - Guinea pig	NA
Causes skin irritation.	
Eye irritation	

Section XII. ECOLOGICAL INFORMATION

LC50	NA
EC50	NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
Not dangerous goods	Not dangerous goods
Proper shipping name: Water	Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

5 114

Dec 02/14/25



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Solvent(s):
Water

Lot#
072324Q

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL): 10.0

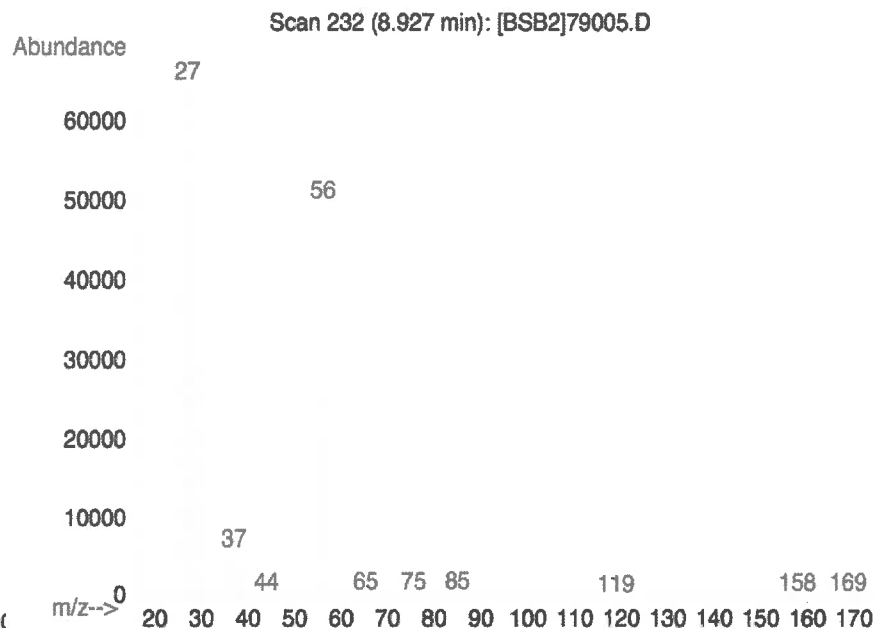
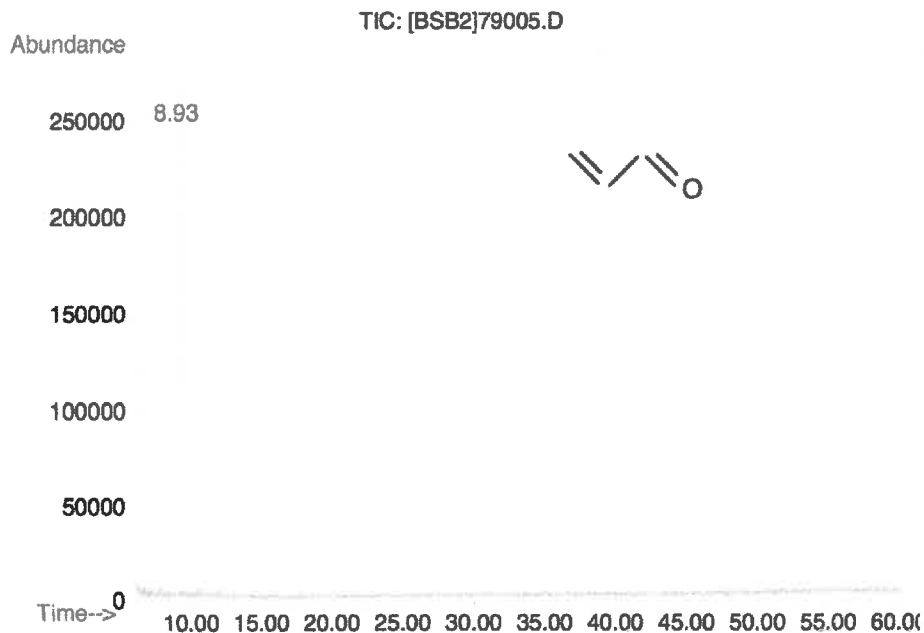
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

		021325
Formulated By:	Anthony Mahoney	DATE
		021325
Reviewed By:	Pedro L. Rentas	DATE

✓ 14872 to
✓ 14876

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	0.05178	5011.8	52.6	107-02-8	0.1 ppm	ori-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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	Use in ventilated area	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water	P280	Use gloves, eye protection/face shield
		P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))	CAS#: 7732-18-5	% (optional)
Water		> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water	CAS#: 7732-18-5	TWA: 500 ppm
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.		

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water	Completely miscible	NA	NA
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	NA
Conditions to avoid	NA
Materials to avoid	NA
Hazardous decomposition products -	No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat	NA
LC50 Inhalation - Rat	NA
LD50 Dermal - Guinea pig	NA
Causes skin irritation.	
Eye irritation	

Section XII. ECOLOGICAL INFORMATION

LC50	NA
EC50	NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
Not dangerous goods	Not dangerous goods
Proper shipping name: Water	Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

5 114

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: AcroleinSolvent(s):
Water Lot# 072324QDec 02/14/25
✓ 14872 to
✓ 14876

021325	
Formulated By: Anthony Mahoney	DATE
021325	
Reviewed By: Pedro L. Rentas	DATE

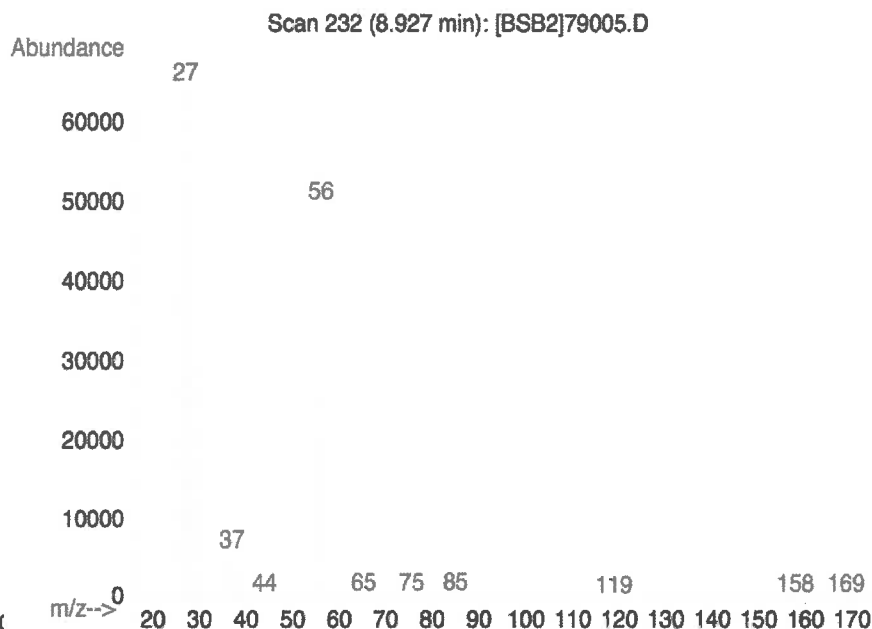
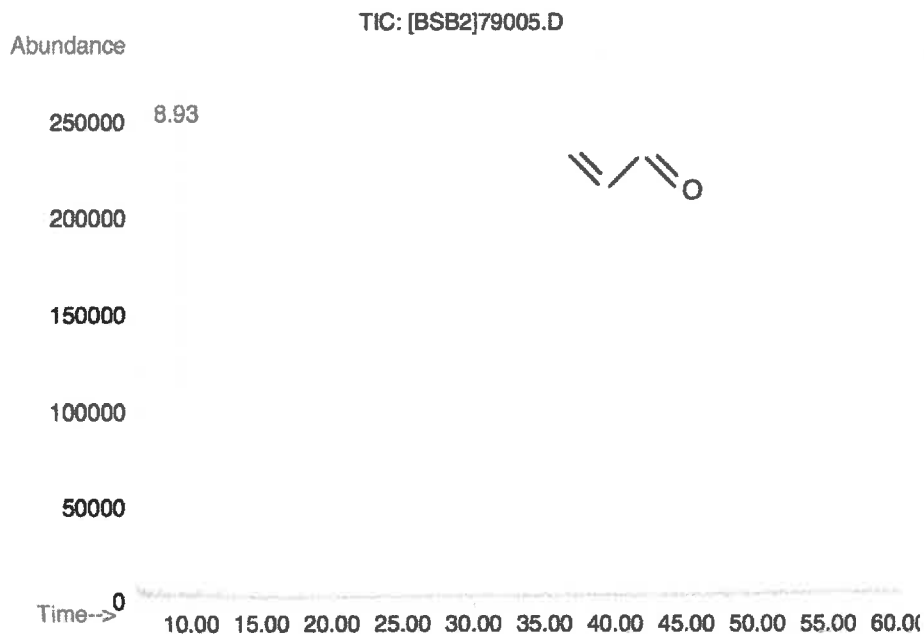
Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

Expanded
SDS information
(Solvent Safety Info. On Attached pg.)
CAS# OSHA PEL (TWA) LD50

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)	CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05178	5011.8	52.6	107-02-8	0.1 ppm	ori-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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	Use in ventilated area	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water	P280	Use gloves, eye protection/face shield
		P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))	CAS#: 7732-18-5	% (optional)
Water		> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water	CAS#: 7732-18-5	TWA: 500 ppm
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.		

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water	Completely miscible	NA	NA
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	NA
Conditions to avoid	NA
Materials to avoid	NA
Hazardous decomposition products -	No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat	NA
LC50 Inhalation - Rat	NA
LD50 Dermal - Guinea pig	NA
Causes skin irritation.	
Eye irritation	

Section XII. ECOLOGICAL INFORMATION

LC50	NA
EC50	NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
Not dangerous goods	Not dangerous goods
Proper shipping name: Water	Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

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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#: 8UTB

Solvent(s): **Methanol**
Lot#: **EG359-USQ12**

Formulated By: <i>Prashant Chauhan</i>		021624
		DATE
Reviewed By: <i>Pedro L. Rentes</i>		021624
		DATE

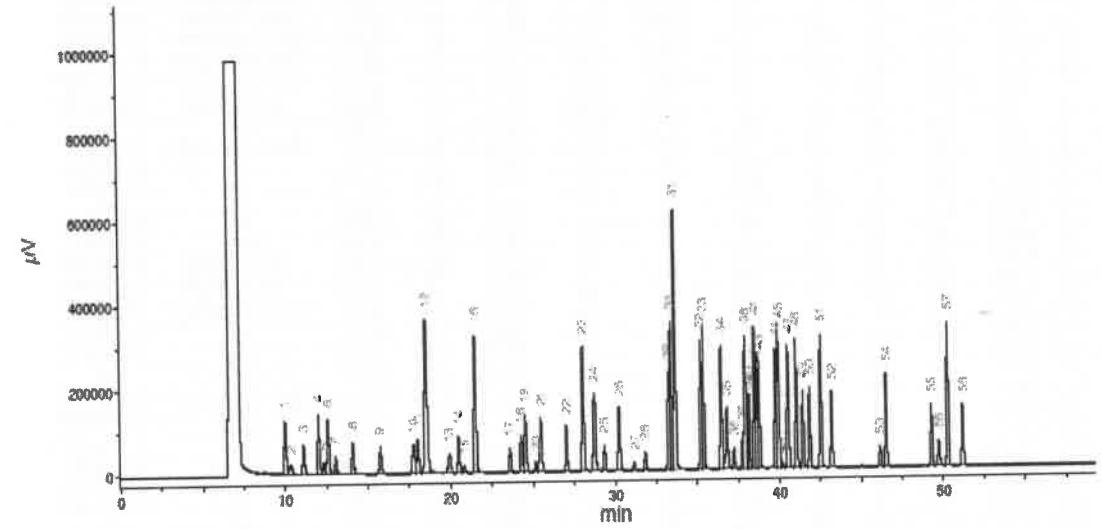
Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty
Flask Uncertainty

Compound	(RM#)	Lot	Di.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information		
	Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc (µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Conc (µg/mL)	(+/-) (µg/mL)	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)	or-rat 2400mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102395	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	or-rat 700mg/kg
3. Carbon disulfide	(0060)	MKCR8581	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)	or-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)	IK18CAS000K	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)	06126PK	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	or-rat 14800mg/kg
8. Iodomethane	(0489)	5HBF6718V	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)	or-rat 70mg/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)	or-rat 2400mg/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)	or-rat 1200mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-30-3	10 ppm (35mg/m3/8H) (skin)	or-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)	or-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)	or-rat 780mg/kg
14. 2-Nitropropane	(0481)	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)	or-rat 720mg/kg
15. Perfluorooctane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.8	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 (7800mg/m3/8H)	or-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	or-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	or-rat 840mg/kg
19. cis-1,2-Dichloroethane	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-Dichloroethane	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	or-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	or-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.8	20.4	75-35-4	1 ppm (4mg/m3/8H)	or-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)	or-rat 930mg/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)	or-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)	or-rat 900mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-85-3	N/A	or-rat 100mg/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	N/A	or-rat 100mg/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	100 ppm	or-rat 725mg/kg
29. Tetrachloroethane	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	2019.6	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-rat 2629mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	or-rat 10300mg/kg
32. 1,2-Dibromomethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-6	0.001 ppm	or-rat 170mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-08-2	20 ppm (8H)	or-rat 100mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	107-06-2	50 ppm (8H)	or-rat 870mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	78-57-5	75 ppm (350mg/m3/8H)	or-rat 1947mg/kg
36. 1,1-Dichloropropane	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	un-rat 3600mg/kg
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-56-6	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	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)	or-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	or-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)	or-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)	or-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)	or-rat 2400mg/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 (50mg/m3/8H)	or-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	or-rat 4694mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	or-rat >2000mg/kg
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	99-87-8	N/A	or-rat 4750mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	or-rat 4900mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	or-rat 5000mg/kg
51. Styrene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-98-3	200 ppm	or-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-98-3	200 ppm	or-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	or-rat 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	23.0	95-63-6	5 ppm (CL) (40mg/m3)	or-rat 750mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-67-8	N/A	or-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	106-67-8	N/A	or-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)	or-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	99-06-6	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	or-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)	or-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	or-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	or-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
64. 1,																

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., Hydrogen(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-Dichloroethane	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-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.24
11	cis-1,2-Dichloroethane	18.00
12	Methacrylonitrile/methyl acrylate/Chloroform	18.46
13	Isobutane/1,1,1-Trichloroethane	19.01
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethane	23.58
18	1,2-Dichloropropane	24.38
19	Methyl methacrylate	24.52
20	Bromochloromethane	25.13
21	Dibromomethane/2-Helopropene	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-Dichloropropene	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromomethane	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	35.39
34	Isopropylbenzene/Bromoforn	36.18
35	cis-1,4-Dichloro-3-butene	36.48
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropene	37.77
38	n-Propylbenzene	37.99
39	trans-1,4-Dichloro-3-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	39.74
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	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

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 shield
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.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1 TWA 200 ppm
Skin notation	TWA 200 ppm
Potential for skin absorption, ingestion and inhalation.	
Personal protective equipment	Respiratory protection. Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.	

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	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#: 8UTB

Solvent(s): **Methanol**
Lot#: **EG359-USQ12**

Formulated By: <i>Prashant Chauhan</i>		021624
		DATE
Reviewed By: <i>Pedro L. Rentes</i>		021624
		DATE

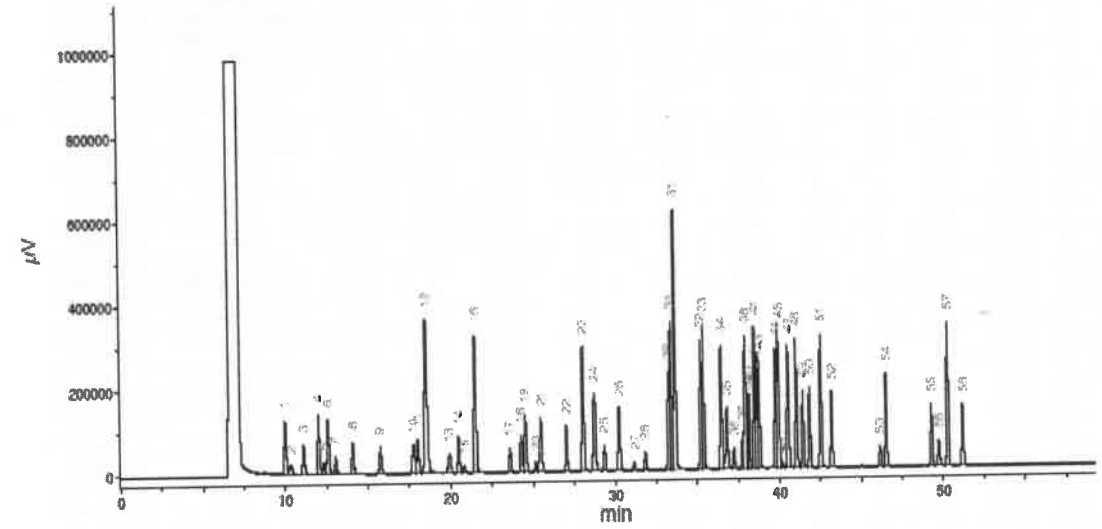
Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty
Flask Uncertainty

Compound	(RM#)	Lot Number	Di. 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)	or-rat 2400mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102395	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	or-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8581	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)	or-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)	IK18CA5000K	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)	06126PK	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	N/A
8. Iodomethane	(0489)	5HBF8718V	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)	or-rat 14800mg/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)	or-rat 76mg/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)	or-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)	or-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)	or-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)	or-rat 780mg/kg
14. 2-Nitropropane	(0481)	14002JK	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)	or-rat 720mg/kg
15. Perfluorooctane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.8	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 (7800mg/m3/8H)	or-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	or-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	or-rat 848mg/kg
19. cis-1,2-Dichloroethane	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	158-59-2	N/A	N/A
20. trans-1,2-Dichloroethane	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	158-59-2	N/A	N/A
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	or-rat 1235mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.6	22.9	75-25-2	1 ppm (4mg/m3/8H)	or-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)	or-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)	or-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-68-3	50 ppm (240mg/m3) (CL)	or-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	or-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	or-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. Tetrachloroethane	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-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)	or-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	96-12-6	0.001 ppm	or-rat 170mg/kg
32. 1,2-Dibromomethane	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)	or-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	107-08-2	50 ppm (8H)	or-rat 870mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-57-5	75 ppm (350mg/m3/8H)	or-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	un-rat 3600mg/kg
36. 1,1-Dichloropropane	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	22.9	563-56-6	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	22.9	87-68-3	0.02 ppm (0.24mg/m3/8H)	or-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	or-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)	or-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)	or-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)	or-rat 2400mg/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 (50mg/m3/8H)	or-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	or-rat 4694mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	or-rat >2000mg/kg
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	99-87-8	N/A	or-rat 4750mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	or-rat 5000mg/kg
51. Styrene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-98-3	200 ppm	or-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	87-61-6	N/A	or-rat 1390mg/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	120-82-1	5 ppm (CL) (40mg/m3)	or-rat 750mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	23.0	95-63-6	N/A	or-rat 5g/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-67-8	N/A	or-rat 5000mg/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	108-38-3	100 ppm (435mg/m3/8H)	or-rat 5g/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	or-rat 2240mg/kg
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	or-rat 2290mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	or-rat 3900mg/kg
61. 2-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	or-rat 2100mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	541-73-1	N/A	or-rat 1063mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	96-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.				

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., Hydrogen(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-Dichloroethane	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-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.24
11	cis-1,2-Dichloroethane	18.00
12	Methacrylonitrile/methyl acrylate/Chloroform	18.48
13	Isobutane/1,1,1-Trichloroethane	19.01
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethane	23.58
18	1,2-Dichloropropane	24.38
19	Methyl methacrylate	24.52
20	Bromochloromethane	25.13
21	Dibromomethane/2-Hydropropane	25.48
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-Dichloropropene	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromomethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.86
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoforn	36.18
35	cis-1,4-Dichloro-3-butene	36.48
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropene	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-3-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	39.74
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

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 shield
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.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1 TWA 200 ppm
Skin notation	TWA 200 ppm
Potential for skin absorption, ingestion and inhalation.	
Personal protective equipment	Respiratory protection. Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.	

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC. DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



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CERTIFIED WEIGHT REPORT

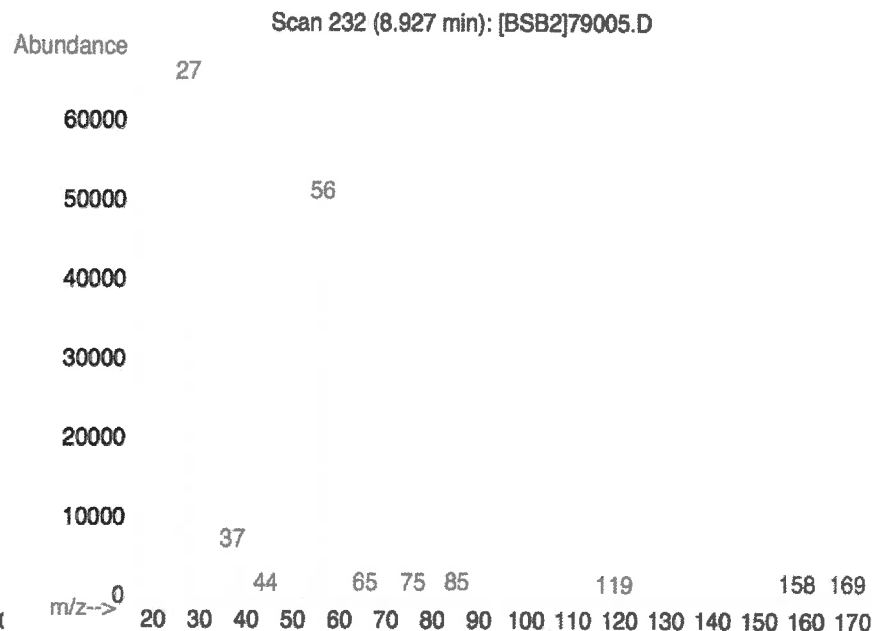
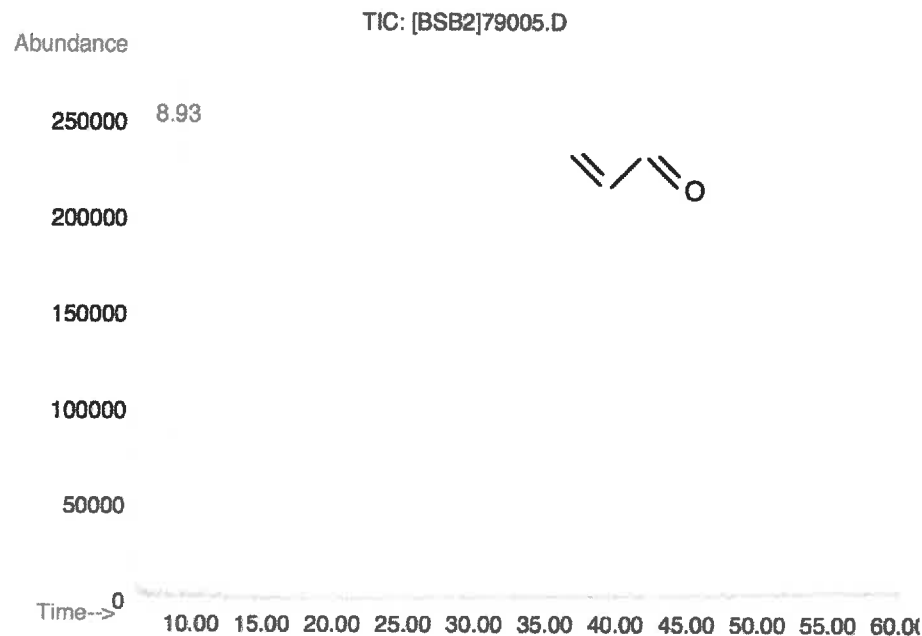
Part Number: 91980
Lot Number: 031725
Description: AcroleinSolvent(s): Water
Lot#: 072324QV14895 to
V14899Expiration Date: 041725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

		031725
Formulated By:	Lawrence Barry	DATE
		031725
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	SDS Information		
									Uncertainty (+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05170	5004.1	52.5	107-02-8	0.1 ppm	ori-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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	1-352-323-3500
		Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	Use in ventilated area	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water	P280	Use gloves, eye protection/face shield
		P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water	CAS#: 7732-18-5	TWA: 500 ppm	
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use.	Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.			

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water	Completely miscible	NA	NA
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	NA
Conditions to avoid	NA
Materials to avoid	NA
Hazardous decomposition products - No data available	

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat	NA
LC50 Inhalation - Rat	NA
LD50 Dermal - Guinea pig	NA
Causes skin irritation.	
Eye irritation	

Section XII. ECOLOGICAL INFORMATION

LC50	NA
EC50	NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
Not dangerous goods	Not dangerous goods
Proper shipping name: Water	Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



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CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 031725
Description: AcroleinSolvent(s): Water
Lot#: 072324QV14895 to
V14899

		031725
Formulated By:	Lawrence Barry	DATE
		031725
Reviewed By:	Pedro L. Rentas	DATE

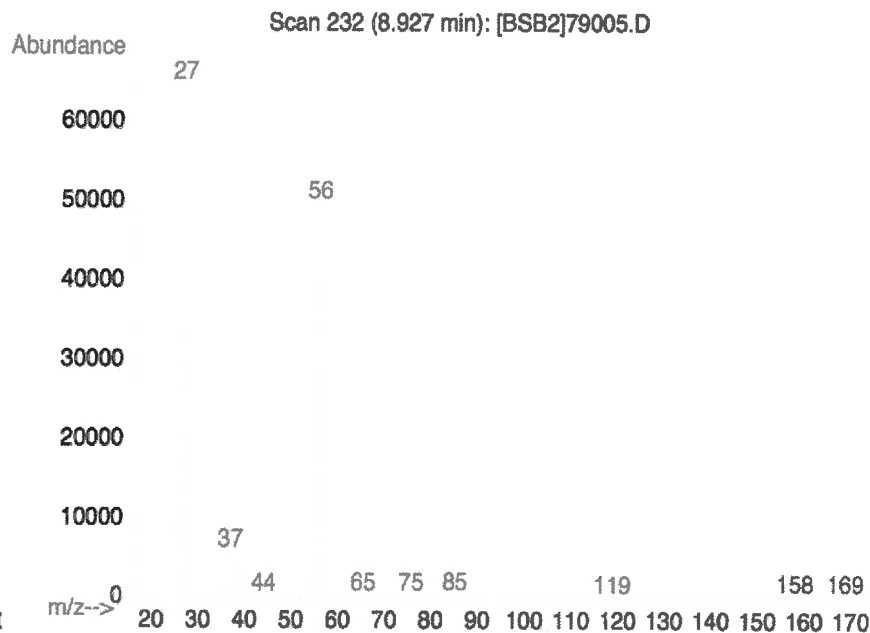
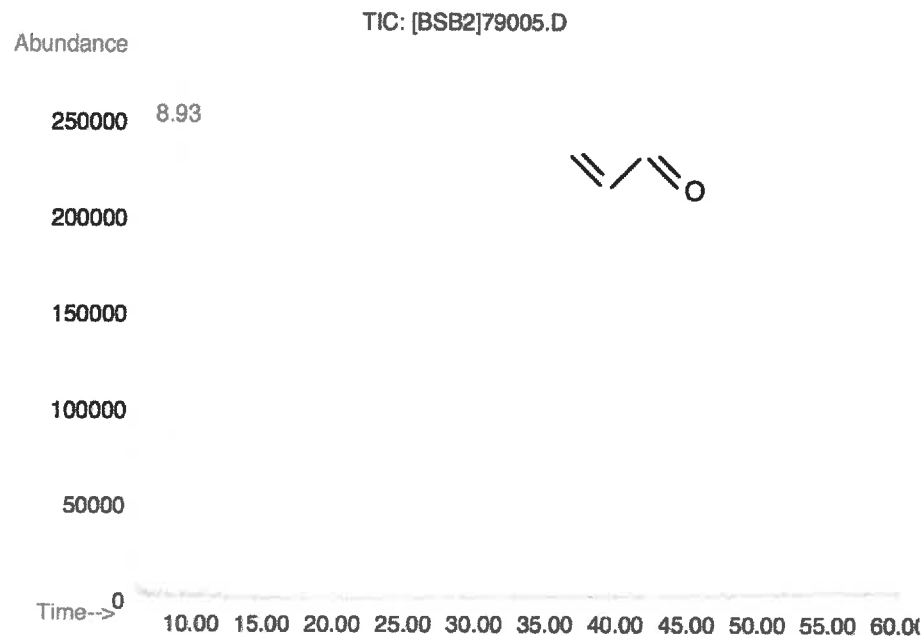
Expiration Date: 041725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

Expanded
SDS Information
(Solvent Safety Info. On Attached pg.)
CAS# OSHA PEL (TWA) LD50

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)	CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05170	5004.1	52.5	107-02-8	0.1 ppm	ori-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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	1-352-323-3500
		Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	Use in ventilated area	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water	P280	Use gloves, eye protection/face shield
		P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water	CAS#: 7732-18-5	TWA: 500 ppm
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.		Eye protection.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water	Completely miscible	NA	NA
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	NA
Conditions to avoid	NA
Materials to avoid	NA
Hazardous decomposition products - No data available	

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat	NA
LC50 Inhalation - Rat	NA
LD50 Dermal - Guinea pig	NA
Causes skin irritation.	
Eye irritation	

Section XII. ECOLOGICAL INFORMATION

LC50	NA
EC50	NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
Not dangerous goods	Not dangerous goods
Proper shipping name: Water	Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



222 03/18/24



CERTIFIED WEIGHT REPORT

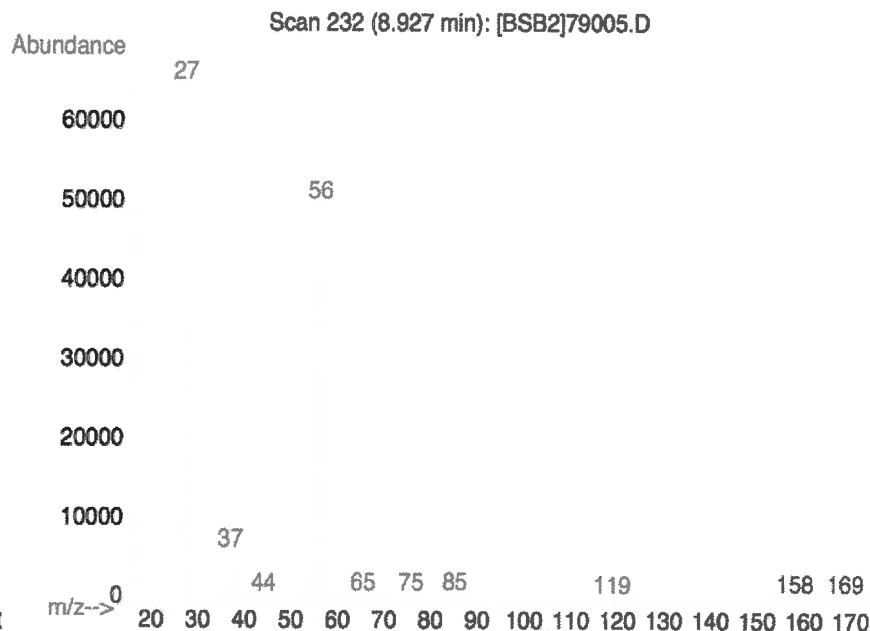
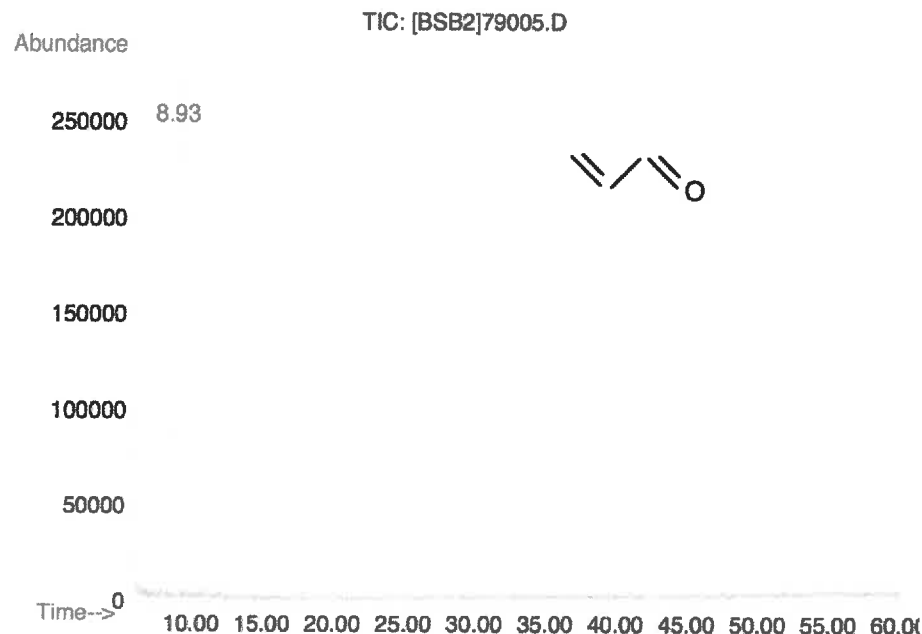
Part Number: 91980
Lot Number: 031725
Description: AcroleinSolvent(s): Water
Lot#: 072324QV14895 to
V14899Expiration Date: 041725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

		031725
Formulated By:	Lawrence Barry	DATE
		031725
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	0.05170	5004.1	52.5	107-02-8	0.1 ppm	ori-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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	1-352-323-3500
		Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	Use in ventilated area	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water	P280	Use gloves, eye protection/face shield
		P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water	CAS#: 7732-18-5	TWA: 500 ppm	
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use.	Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.			

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water	Completely miscible	NA	NA
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	NA
Conditions to avoid	NA
Materials to avoid	NA
Hazardous decomposition products - No data available	

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat	NA
LC50 Inhalation - Rat	NA
LD50 Dermal - Guinea pig	NA
Causes skin irritation.	
Eye irritation	

Section XII. ECOLOGICAL INFORMATION

LC50	NA
EC50	NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
Not dangerous goods	Not dangerous goods
Proper shipping name: Water	Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



222 03/18/24



CERTIFIED WEIGHT REPORT

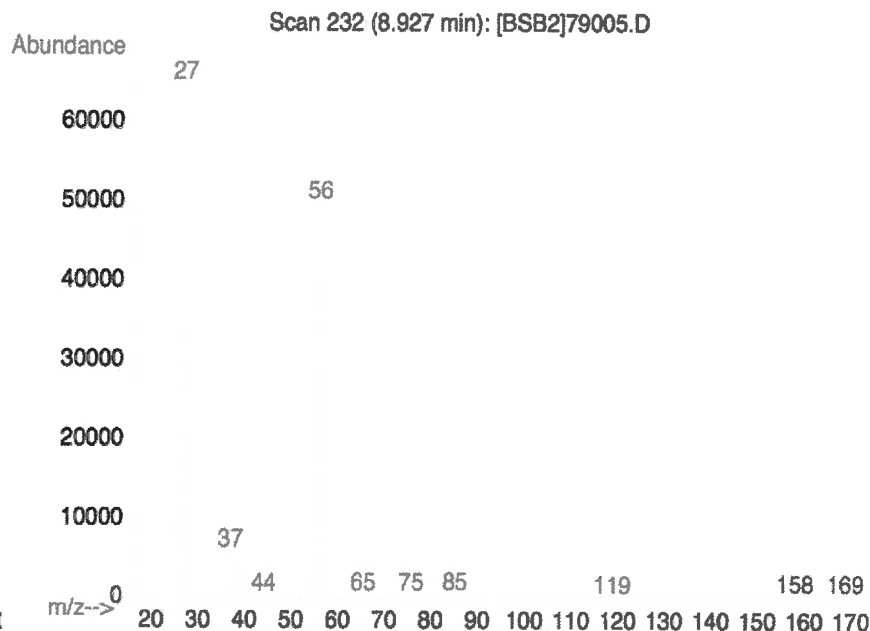
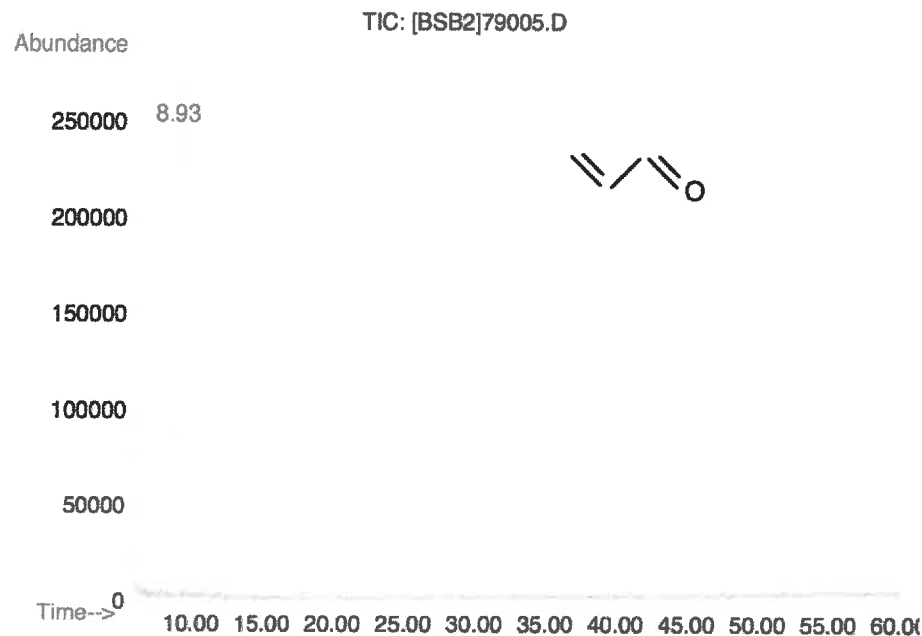
Part Number: 91980
Lot Number: 031725
Description: AcroleinSolvent(s): Water
Lot#: 072324QV14895 to
V14899Expiration Date: 041725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

		031725
Formulated By:	Lawrence Barry	DATE
		031725
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	0.05170	5004.1	52.5	107-02-8	0.1 ppm	ori-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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	1-352-323-3500
		Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	Use in ventilated area	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water	P280	Use gloves, eye protection/face shield
		P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water	CAS#: 7732-18-5	TWA: 500 ppm	
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use.	Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.			

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		Completely miscible		NA
Appearance and Odor		CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	NA
Conditions to avoid	NA
Materials to avoid	NA
Hazardous decomposition products - No data available	

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat	NA
LC50 Inhalation - Rat	NA
LD50 Dermal - Guinea pig	NA
Causes skin irritation.	
Eye irritation	

Section XII. ECOLOGICAL INFORMATION

LC50	NA
EC50	NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
Not dangerous goods	Not dangerous goods
Proper shipping name: Water	Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

Dec 09/17/24

2 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: **91980**
Lot Number: **091424**
Description: **Acrolein**Solvent(s):
Water Lot#
072324Q

Formulated By: Justin Dippold	091424 DATE
Reviewed By: Pedro L. Rentas	091424 DATE

Expiration Date: 101424

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 5000

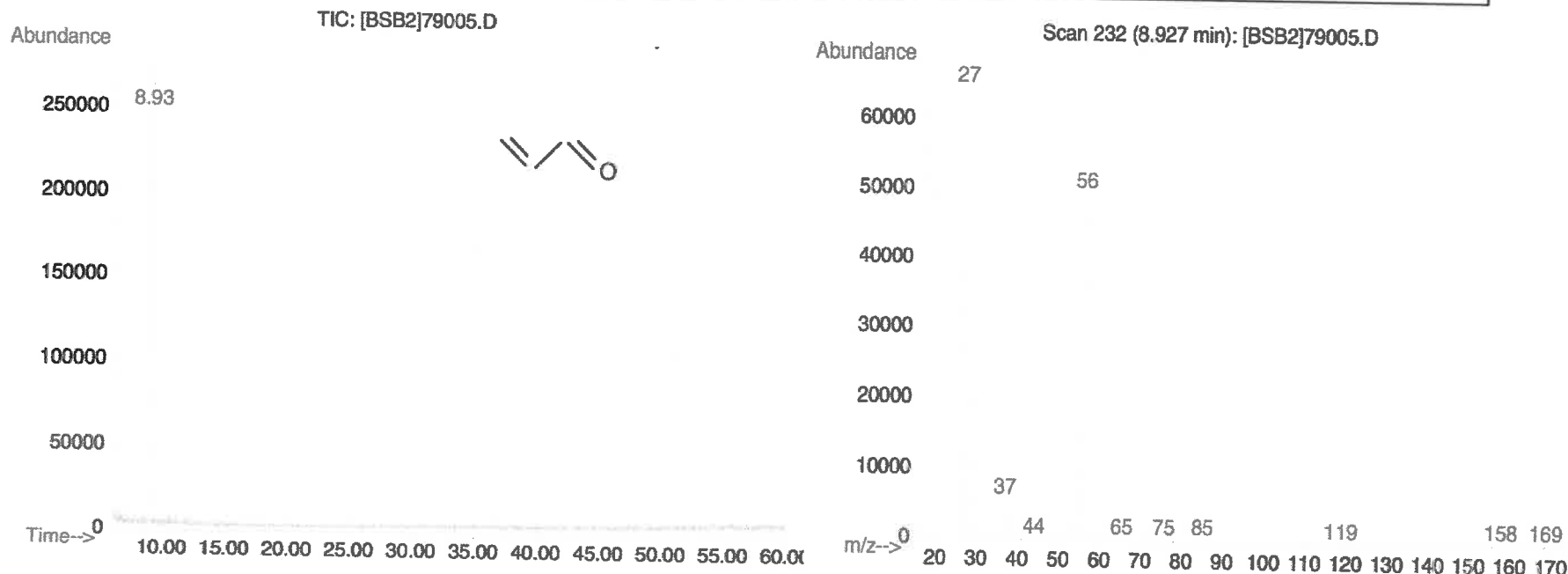
NIST Test ID#: 6UTB

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

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	ori-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).



Certified Reference Material CRM

Dec 09/17/24

2 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: **91980**
Lot Number: **091424**
Description: **Acrolein**Solvent(s): **Water**
Lot#: **072324Q**

Formulated By:	Justin Dippold
DATE: 091424	
Reviewed By:	Pedro L. Rentas
DATE: 091424	

Expiration Date: 101424

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 5000

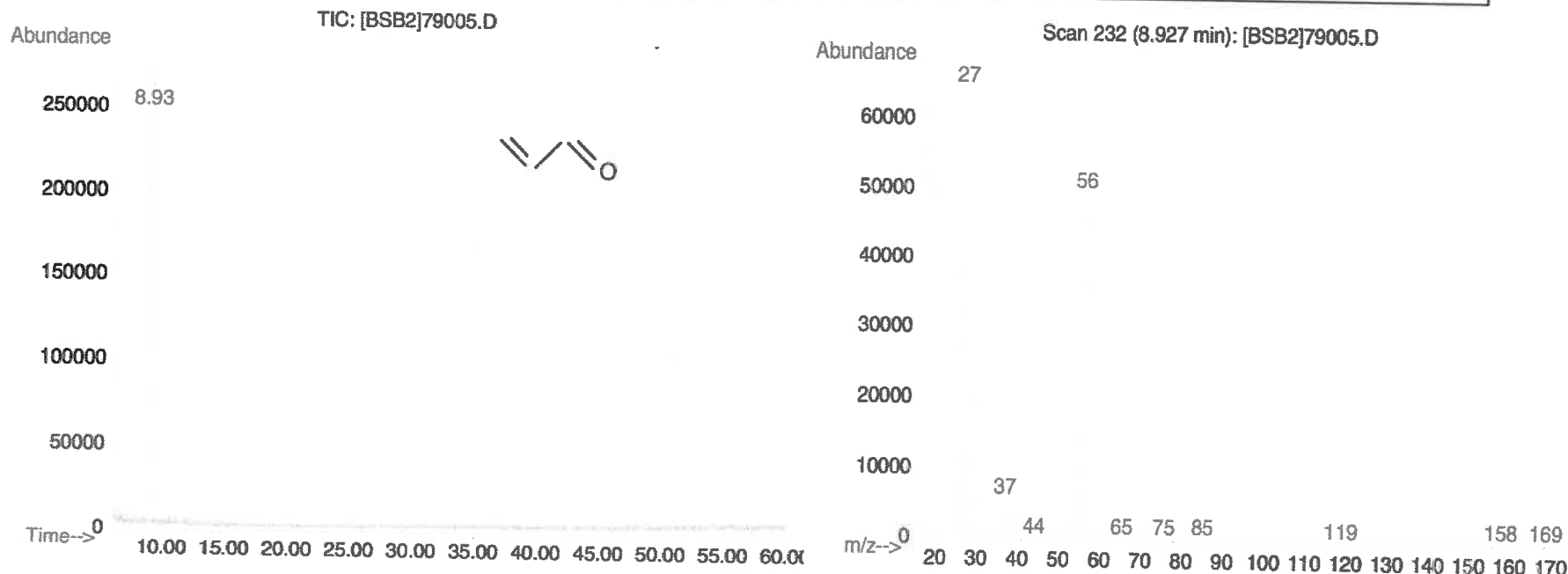
NIST Test ID#: 6UTB

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

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	ori-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).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: **95318**
Lot Number: **120524**
Description: **2-Chloroethyl vinyl ether**

Solvent(s):
Methanol

Lot#
EJ143-US

Expiration Date: **120527**
Recommended Storage: **Refrigerate (4 °C)**
Nominal Concentration (µg/mL): **10000**
NIST Test ID#: **6UTB**

Weight(s) shown below were combined and diluted to (mL): **50.0**

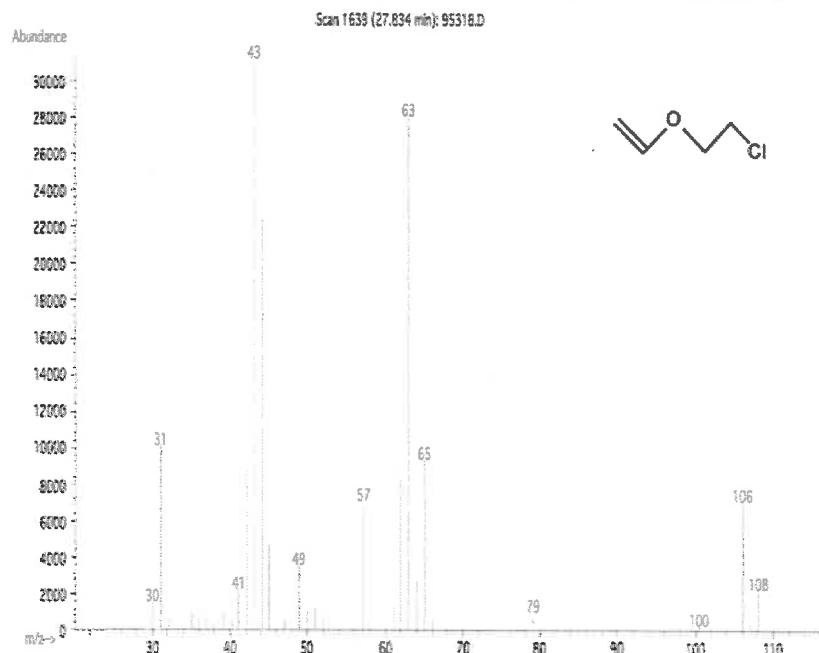
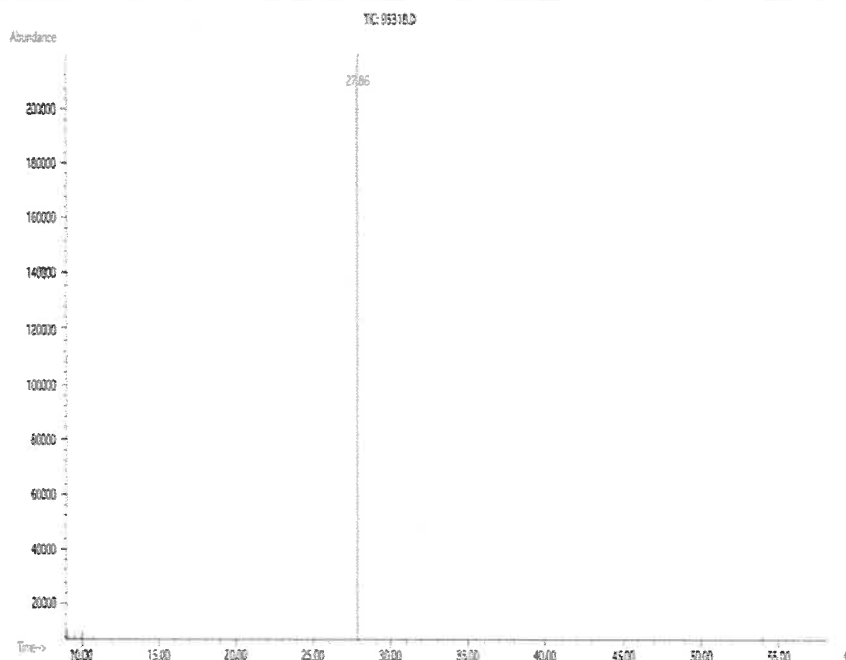
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Prashant Chauhan 120524
Formulated By: Prashant Chauhan DATE
Pedro L. Rentas 120524
Reviewed By: Pedro L. Rentas DATE

✓ 14630 to
✓ 14649

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
										CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp. = 200°C, Detector B Temp. = 220°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are 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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Highly Flammable Liquid and Vapor	H301, 311, 331	Toxic if swallowed, skin contact, inhaled
H370	Cause damage to organs	H351	Suspected of causing cancer
P271	Use in ventilated area	P280	Use gloves, eye protection/face shield
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	> 97
	CAS#: 67-56-1	

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 (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	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 Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: **95318**
Lot Number: **120524**
Description: **2-Chloroethyl vinyl ether**

Solvent(s):
Methanol

Lot#
EJ143-US

Expiration Date: **120527**
Recommended Storage: **Refrigerate (4 °C)**
Nominal Concentration (µg/mL): **10000**
NIST Test ID#: **6UTB**

Weight(s) shown below were combined and diluted to (mL): **50.0**

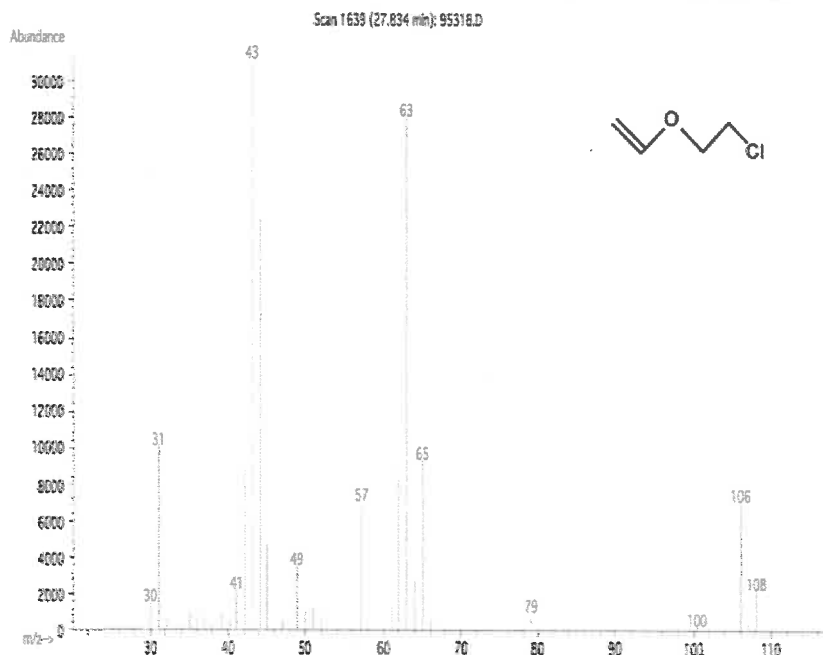
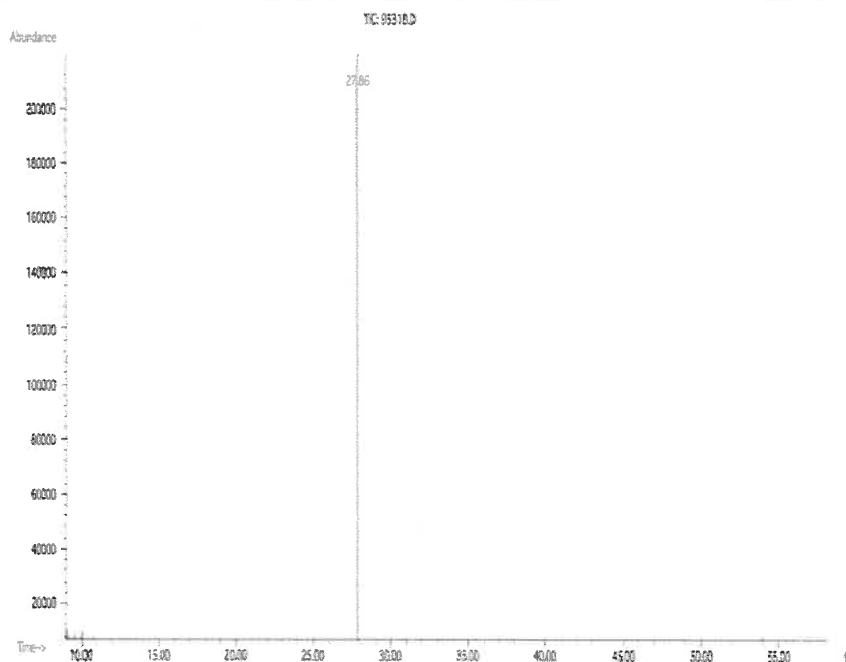
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Prashant Chauhan 120524
Formulated By: Prashant Chauhan DATE
Pedro L. Rentas 120524
Reviewed By: Pedro L. Rentas DATE

✓ 14630 to
✓ 14649

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
										CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min.,
Injector B Temp. = 200°C, Detector B Temp. = 220°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are 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).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Highly Flammable Liquid and Vapor	H301, 311, 331	Toxic if swallowed, skin contact, inhaled
H370	Cause damage to organs	H351	Suspected of causing cancer
P271	Use in ventilated area	P280	Use gloves, eye protection/face shield
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	> 97
	CAS#: 67-56-1	

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 (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	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 Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: **95318**
Lot Number: **120524**
Description: **2-Chloroethyl vinyl ether**

Solvent(s):
Methanol

Lot#
EJ143-US

Expiration Date: **120527**
Recommended Storage: **Refrigerate (4 °C)**
Nominal Concentration (µg/mL): **10000**
NIST Test ID#: **6UTB**

Weight(s) shown below were combined and diluted to (mL): **50.0**

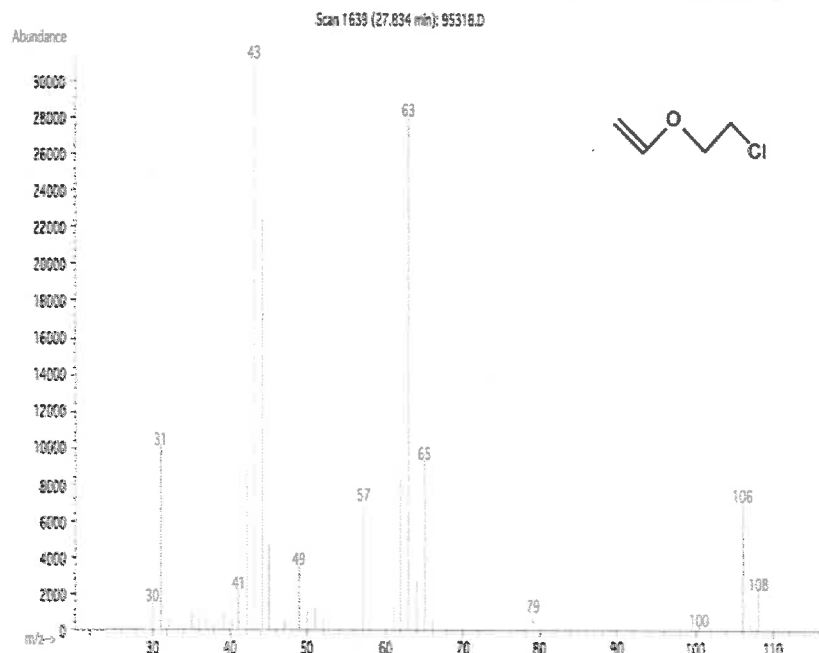
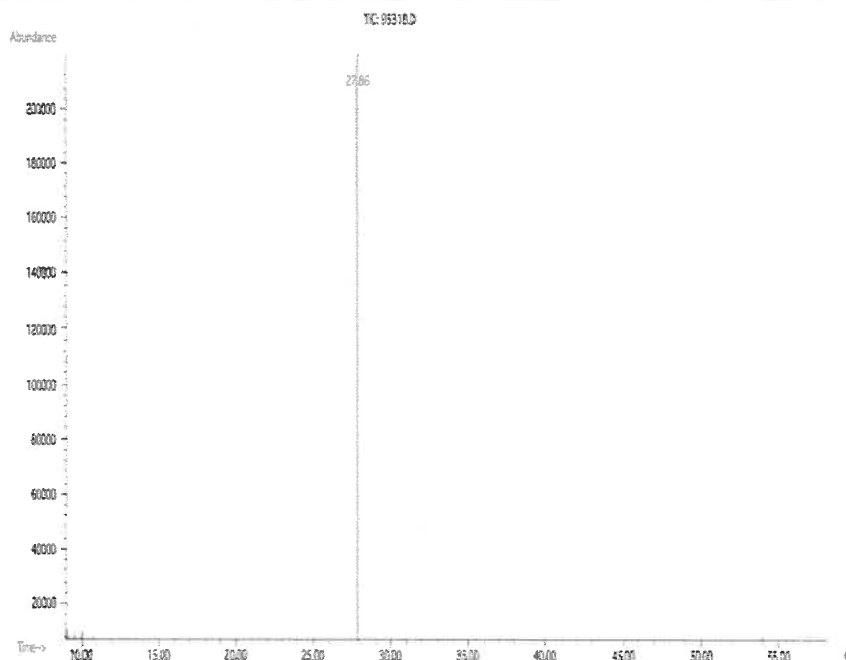
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Prashant Chauhan 120524
Formulated By: Prashant Chauhan DATE
Pedro L. Rentas 120524
Reviewed By: Pedro L. Rentas DATE

✓ 14630 to
✓ 14649

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
										CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min.,
Injector B Temp. = 200°C, Detector B Temp. = 220°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are 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.
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Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

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Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Highly Flammable Liquid and Vapor	H301, 311, 331	Toxic if swallowed, skin contact, inhaled
H370	Cause damage to organs	H351	Suspected of causing cancer
P271	Use in ventilated area	P280	Use gloves, eye protection/face shield
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	> 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 (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

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Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: **95318**
Lot Number: **120524**
Description: **2-Chloroethyl vinyl ether**

Solvent(s):
Methanol

Lot#
EJ143-US

Expiration Date: **120527**
Recommended Storage: **Refrigerate (4 °C)**
Nominal Concentration (µg/mL): **10000**
NIST Test ID#: **6UTB**

Weight(s) shown below were combined and diluted to (mL): **50.0**

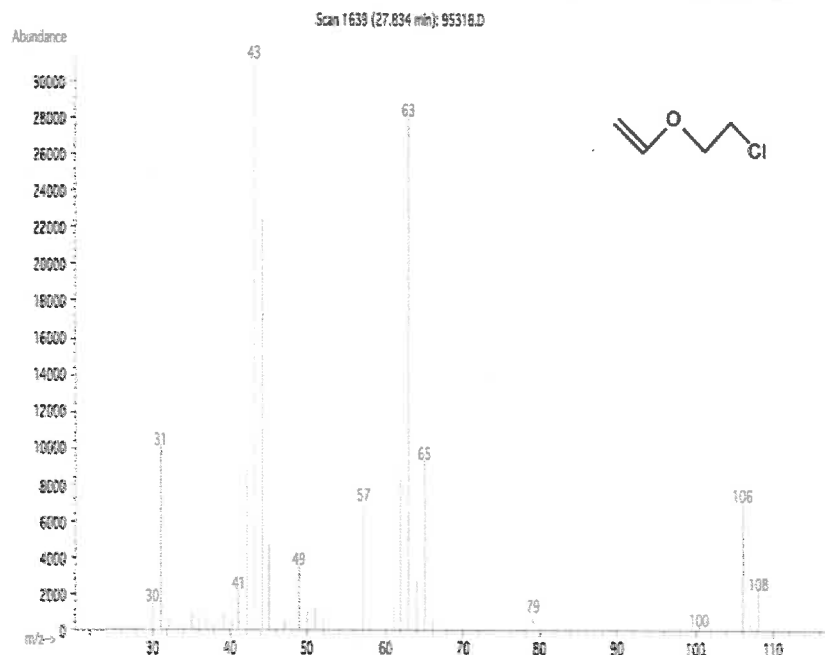
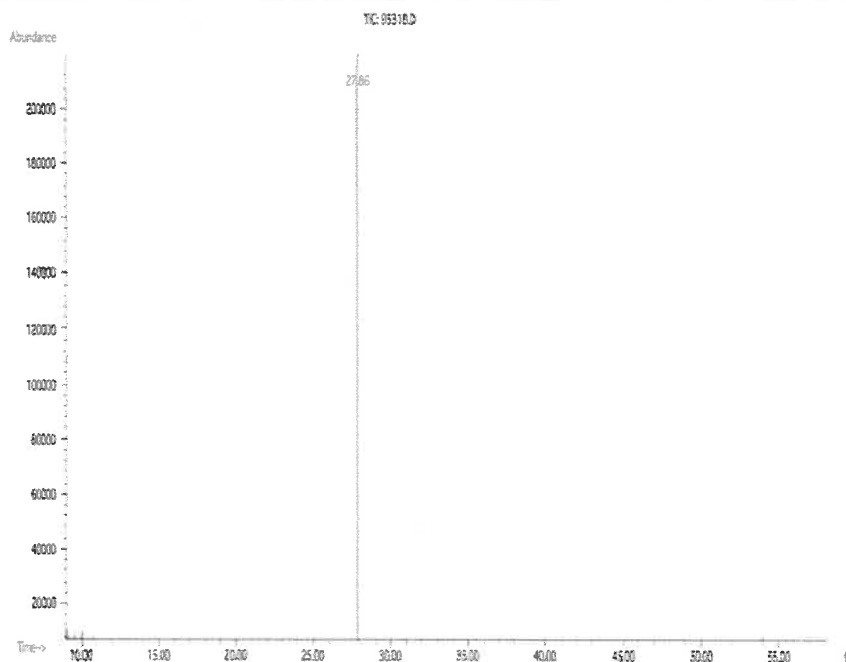
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Prashant Chauhan 120524
Formulated By: Prashant Chauhan DATE
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✓ 14630 to
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Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
										CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min.,
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Safety Data Sheet (SDS)

GHS/OSHA Compliant

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Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Methanol	METHYL ALCOHOL	> 97
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Skin notation		TWA 200 ppm
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Chemical stability	Stable under recommended storage conditions.
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LC50 15,400 mg/l - 96 h
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EC100 10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

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. : 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:

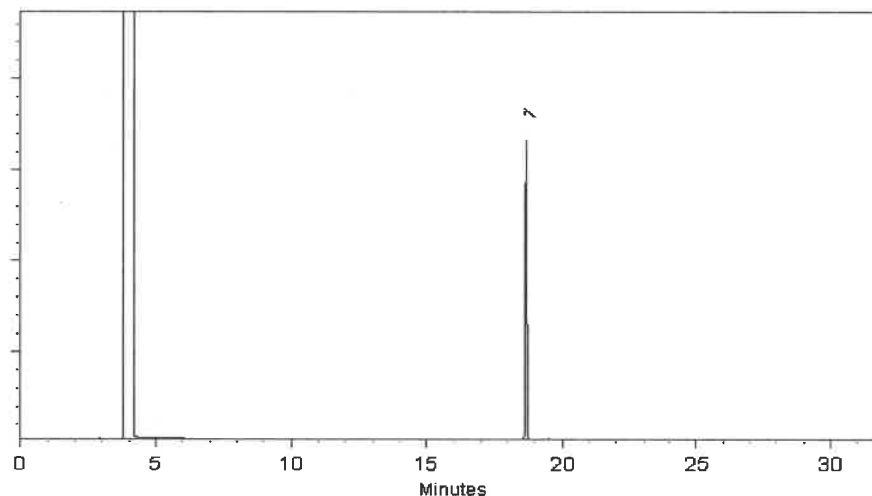
FID

Split Vent:

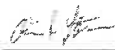
40 ml/min

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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

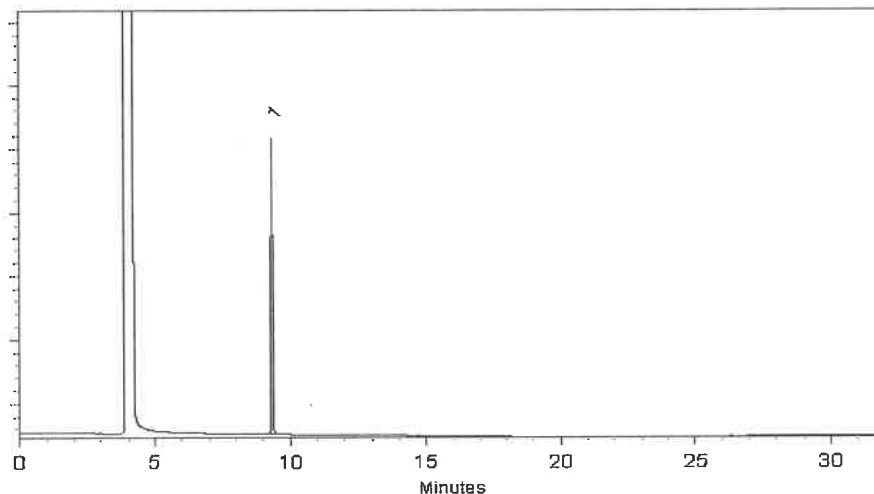
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022

Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

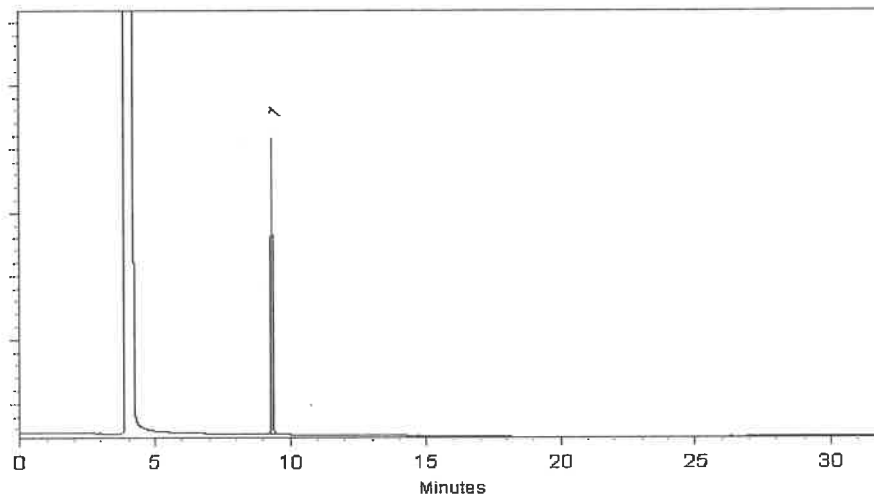
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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- Purity values are rounded to the nearest whole number.

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

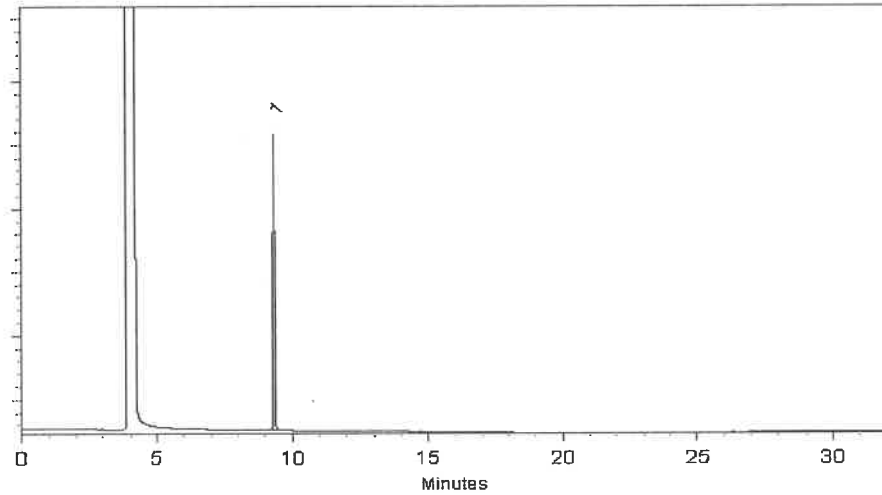
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022

Balance Serial # B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- 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 values are rounded to the nearest whole number.

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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Certificate of Analysis

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Catalog No. : 30225 **Lot No.:** A0193071
Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

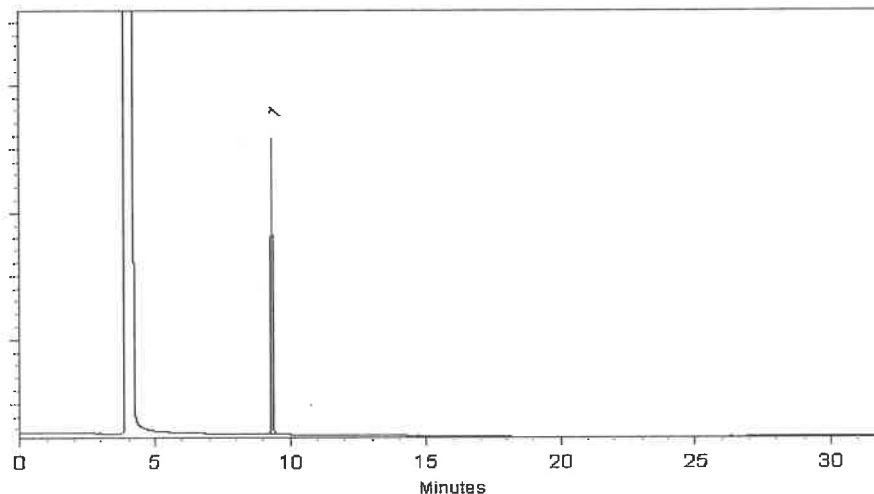
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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- Purity values are rounded to the nearest whole number.

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Manufacturing Notes:

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Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A0196865

Description : Custom 8260A/B Surrogate Mix
Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol,
1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023

Balance: 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- 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



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty* (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
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.)

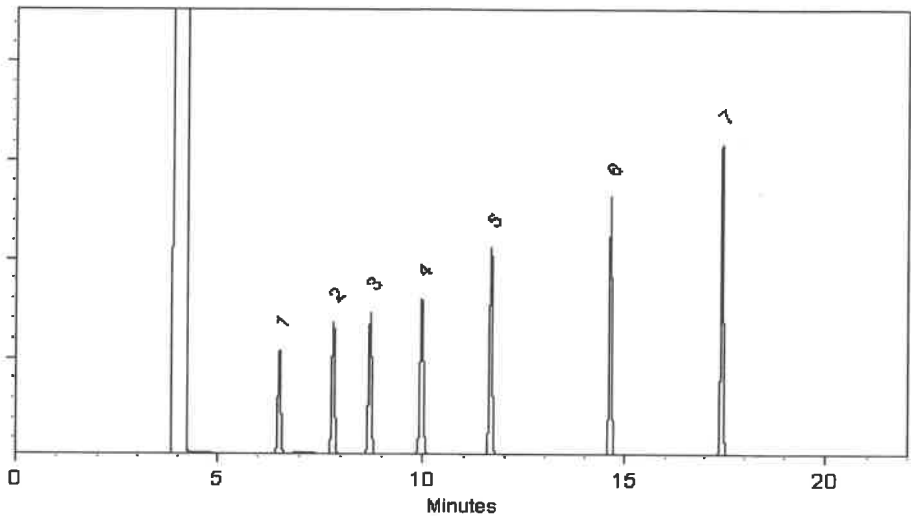
Inj. Temp:
200°C

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
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 Balance Serial # B707717271

Dillon Murphy
Dillon 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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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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.)

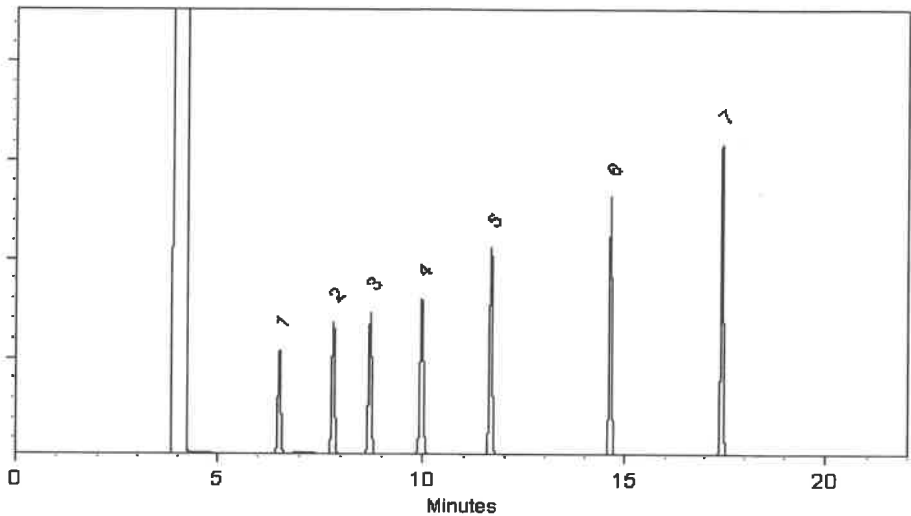
Inj. Temp:
200°C

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
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024 Balance Serial # B707717271

Dylan Murphy
Dylan 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555581 **Lot No.:** A0210184

Description : Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

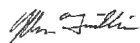
Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	25,212.0 µg/mL	+/- 1,427.8857
2	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,220.0 µg/mL	+/- 1,428.3388
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,116.0 µg/mL	+/- 1,422.4487
4	Pentafluorobenzene	363-72-4	MKCR9383	99%	25,180.0 µg/mL	+/- 1,426.0734

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%


John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024

Balance: 1127510105

REVISED
By: [Signature] Date: 11-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/ μ ECD, 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618
Description : VOA Calibration Mix #1
VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

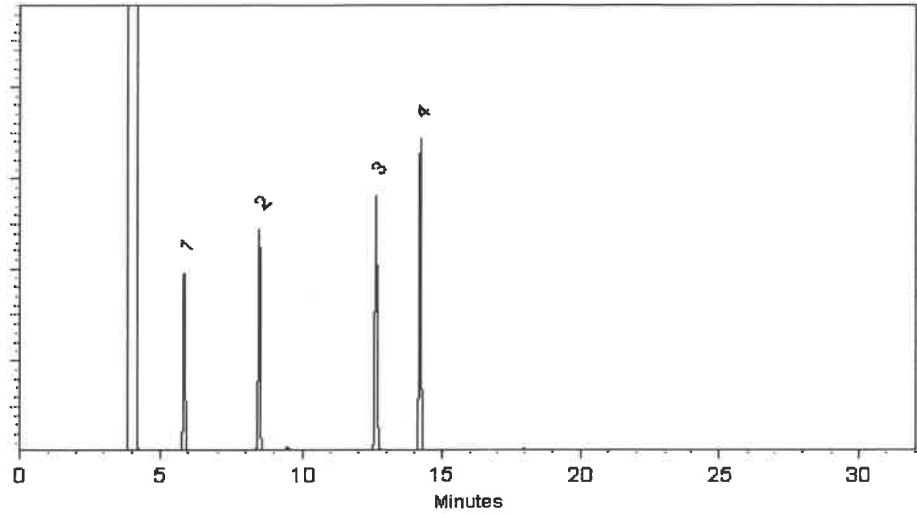
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

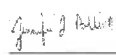


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** 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:

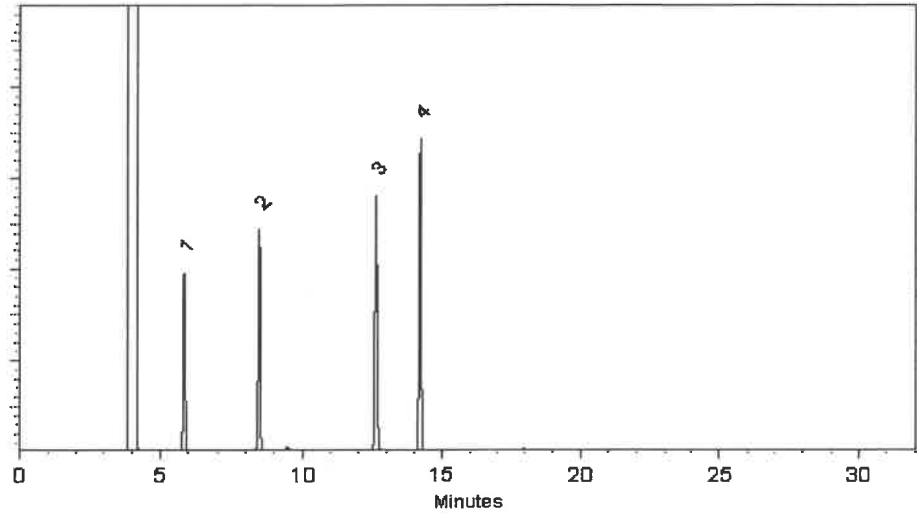
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

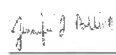


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** 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:

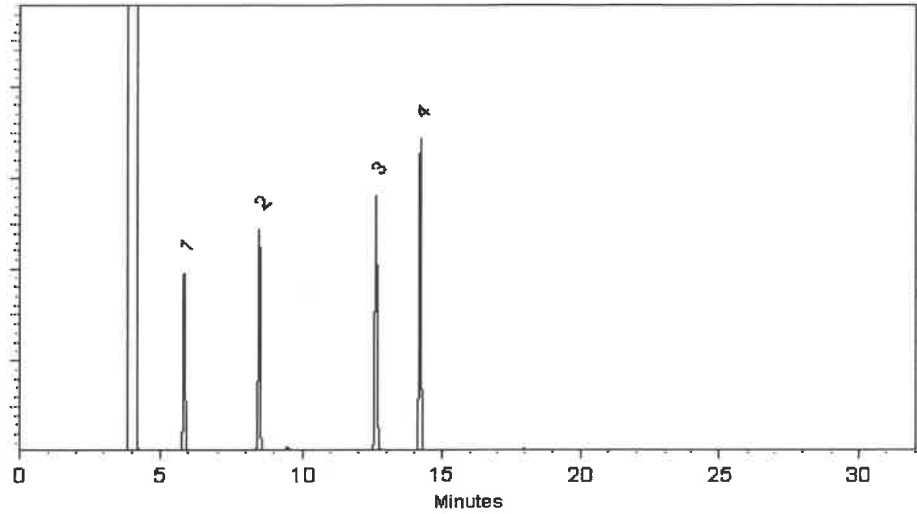
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

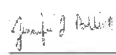


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826
Description : 502.2 Calibration Mix #1
502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : May 31, 2031 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

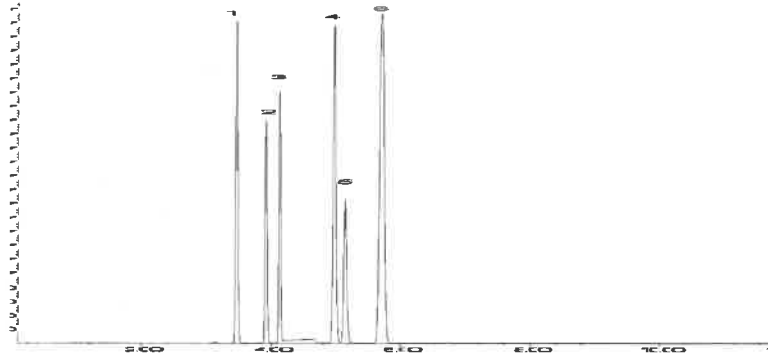
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckal - 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.
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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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826
Description : 502.2 Calibration Mix #1
502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : May 31, 2031 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

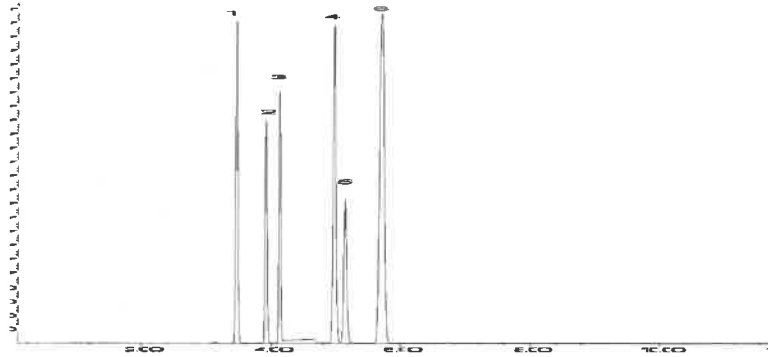
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckal - 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

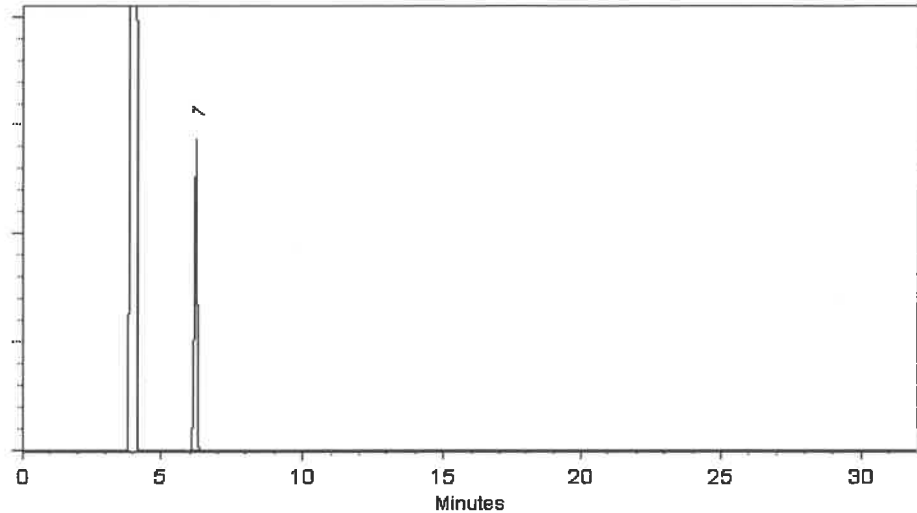
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

A. O. E.
Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024

Balance Serial # B251644995

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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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gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555584 **Lot No.:** A0219012

Description : Custom CLP VOA Surrogate Standard Mix

Custom CLP VOA Surrogate Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

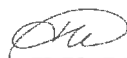
Expiration Date : November 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	25,228.0 µg/mL	+/- 1,428.7919
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	25,196.0 µg/mL	+/- 1,426.9795
3	Toluene-d8	2037-26-5	PR-34141	99%	25,228.0 µg/mL	+/- 1,428.7919

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%


Jess Hoy - Operations Tech I

Date Mixed: 12-Nov-2024 **Balance:** 1127510105



Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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2014 Dec 01/08/21
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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:

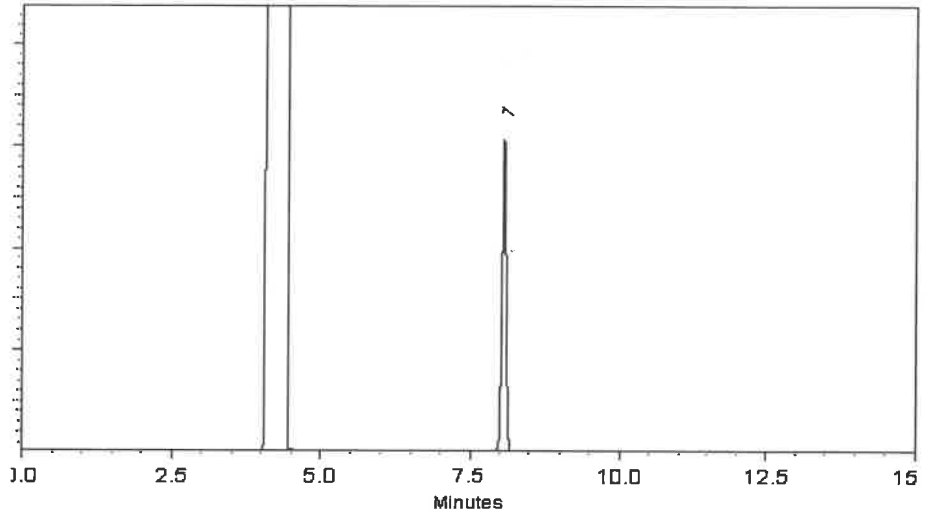
FID

Split Vent:

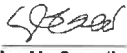
40 ml/min

Inj. Vol

1µl

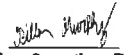


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105


Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pollock at 7:12 am, Jan 05, 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.
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Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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Manufacturing Notes:

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Handling Notes:

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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:

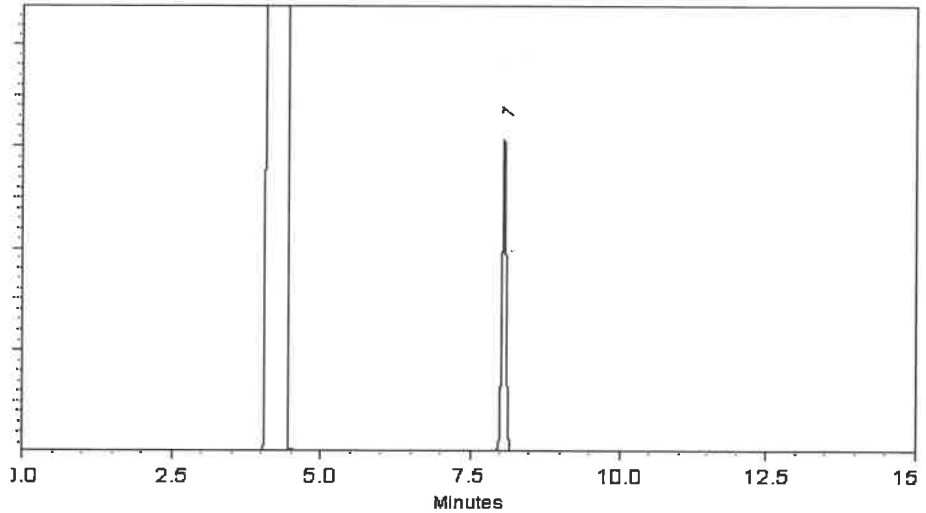
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

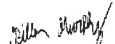


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105


Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pollock at 7:12 am, Jan 05, 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

REC 03/12/25
10 vials
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis
gravimetric

V14885-to-V14894



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 555583 Lot No.: A0223136
Description: Custom CLP VOA Internal Standard Mix
Custom CLP VOA Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: March 31, 2028 Storage: 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,024.0 µg/mL	+/- 1,417.2383
2	Bromochloromethane	74-97-5	S241017RSR	99%	25,060.0 µg/mL	+/- 1,419.2772
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,048.4 µg/mL	+/- 1,418.6202

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Penelope Riglin - Operations Tech I

Date Mixed: 10-Mar-2025

Balance: 1128342314

REVIEWED
By: [Signature]

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



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 ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration 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

Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



V14883
V14884

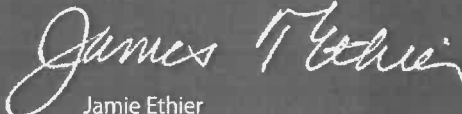
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500 Series for Drinking Water
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846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700
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SHIPPING DOCUMENTS

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Packing List

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www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Date	Order #
03/03/2025	333289



Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ

3/5/2025

14:30

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-1517	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0325	8264-04
1	1	0	PT-HG-WP	WP Mercury	WP0325	8264-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0325	8264-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0325	8264-06
1	1	0	PT-DEM-WP	WP Demand	WP0325	8264-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0325	8264-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0325	8264-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0325	8264-72
1	1	0	PT-SOL-WP	WP Solids	WP0325	8264-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0325	8264-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0325	8264-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0325	8264-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0325	8264-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0325	8264-13
1	1	0	PT-PH-WP	WP pH	WP0325	8264-15
1	1	0	PT-CN-WP	WP Cyanide	WP0325	8264-14
1	1	0	PT-PHEN-WP	WP Phenolics	WP0325	8264-16



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03/03/2025	333289



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USA

Received by: SJ

3/5/2025 14:30

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PO2-1517	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-S2-WP	WP Sulfide	WP0325	8264-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0325	8264-17
1	1	0	PT-TURB-WP	WP Turbidity	WP0325	8264-20
1	1	0	PT-VOA-WP	WP Volatiles	WP0325	8264-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0325	8264-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0325	8264-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0325	8264-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0325	8264-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0325	8264-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0325	8264-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0325	8264-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R40367	R40367-104
1	1	0	RR-VSOL-WP	WP Volatile Solids	R40367	R40367-18
1	1	0	RR-SIO2-WP	WP Silica	R40367	R40367-21
1	1	0	RR-COL-WP	WP Color	R40367	R40367-51
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R40367	R40367-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R40367	R40367-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R40367	R40367-98
1	1	0	RR-PAH-WP	WP PAH-Low Level	R40433	R40433-37

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Packing List

Date	Order #
03/07/2025	335989



Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ
3/11/2025 9:55

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
Email: Sohil Jodhani	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R40480	R40480-108

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