

DATA PACKAGE VOLATILE ORGANICS

PROJECT NAME : NYCDDC SANTWOBR BROOKLYN BRIDGE BBMCR

**RU2 ENGINEERING, LLC
2 Melinda Drive**

**Monroe Township, NJ - 08831
Phone No: 732-261-2236**

**ORDER ID : Q1207
ATTENTION : Rutu Manani**



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q1207

Project ID : NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Client : RU2 Engineering, LLC

Lab Sample Number

Q1207-01
Q1207-02
Q1207-03
Q1207-04
Q1207-05
Q1207-06
Q1207-07
Q1207-08
Q1207-09
Q1207-10
Q1207-11
Q1207-12
Q1207-13
Q1207-14
Q1207-15
Q1207-16
Q1207-17
Q1207-18
Q1207-19
Q1207-20

Client Sample Number

JPP-2.1-012725
JPP-2.1-012725
JPP-2.1-012725
JPP-2.1-012725
JPP-5.1-012725
JPP-5.1-012725
JPP-5.1-012725
JPP-5.1-012725
JPP-4.5-012725
JPP-4.5-012725
JPP-4.5-012725
JPP-4.5-012725
JPP-16.2-012725
JPP-16.2-012725
JPP-16.2-012725
JPP-16.2-012725
JPP-20.2-012725
JPP-20.2-012725
JPP-20.2-012725
JPP-20.2-012725

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: 2/6/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

RU2 Engineering, LLC

Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Project # N/A

Chemtech Project # Q1207

Test Name: TCLP VOA

A. Number of Samples and Date of Receipt:

20 Solid samples were received on 01/28/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for TCLP VOA.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868. The analysis of TCLP VOA was based on method 8260D and TCLP extraction method was 1311.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

E. Additional Comments:

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

Trip Blank was not provided with this set of samples.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial



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Phone: 908 789 8900 Fax: 908 789 8922

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

F. Manual Integration Comments:

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

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

Signature_____

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DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This 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: Q1207

MATRIX: TCLP

METHOD: 8260D/1311

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

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

NA NO YES

ADDITIONAL COMMENTS:

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

Trip Blank was not provided with this set of samples.

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

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1207

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 Custody

✓

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: 02/06/2025

LAB CHRONICLE

OrderID:	Q1207	OrderDate:	1/28/2025 11:40:00 AM
Client:	RU2 Engineering, LLC	Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	Location:	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1207-02	JPP-2.1-012725	TCLP	TCLP VOA	8260D	01/27/25		01/29/25	01/28/25
Q1207-06	JPP-5.1-012725	TCLP	TCLP VOA	8260D	01/27/25		01/29/25	01/28/25
Q1207-10	JPP-4.5-012725	TCLP	TCLP VOA	8260D	01/27/25		01/29/25	01/28/25
Q1207-14	JPP-16.2-012725	TCLP	TCLP VOA	8260D	01/27/25		01/29/25	01/28/25
Q1207-18	JPP-20.2-012725	TCLP	TCLP VOA	8260D	01/27/25		01/29/25	01/28/25

Hit Summary Sheet
SW-846

SDG No.: Q1207
Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID: Q1207-02	JPP-2.1-012725 JPP-2.1-012725	TCLP	2-Butanone	5.60	J	1.30	25.0	ug/L
			Total Voc :	5.60				
			Total Concentration:	5.60				
Client ID: Q1207-06	JPP-5.1-012725 JPP-5.1-012725	TCLP	2-Butanone	5.90	J	1.30	25.0	ug/L
			Total Voc :	5.90				
			Total Concentration:	5.90				
Client ID: Q1207-10	JPP-4.5-012725 JPP-4.5-012725	TCLP	2-Butanone	7.50	J	1.30	25.0	ug/L
			Total Voc :	7.50				
			Total Concentration:	7.50				
Client ID: Q1207-14	JPP-16.2-012725 JPP-16.2-012725	TCLP	2-Butanone	6.00	J	1.30	25.0	ug/L
			Total Voc :	6.00				
			Total Concentration:	6.00				
Client ID: Q1207-18	JPP-20.2-012725 JPP-20.2-012725	TCLP	2-Butanone	5.50	J	1.30	25.0	ug/L
			Total Voc :	5.50				
			Total Concentration:	5.50				



QC SUMMARY

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Surrogate Summary

SDG No.: Q1207

Client: RU2 Engineering, LLC

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1207-02	JPP-2.1-012725	1,2-Dichloroethane-d4	50	57.3	115	74	125
		Dibromofluoromethane	50	51.0	102	75	124
		Toluene-d8	50	52.5	105	86	113
		4-Bromofluorobenzene	50	44.6	89	77	121
Q1207-06	JPP-5.1-012725	1,2-Dichloroethane-d4	50	57.0	114	74	125
		Dibromofluoromethane	50	52.2	104	75	124
		Toluene-d8	50	52.8	106	86	113
		4-Bromofluorobenzene	50	44.3	89	77	121
Q1207-10	JPP-4.5-012725	1,2-Dichloroethane-d4	50	57.3	115	74	125
		Dibromofluoromethane	50	52.9	106	75	124
		Toluene-d8	50	53.1	106	86	113
		4-Bromofluorobenzene	50	46.6	93	77	121
Q1207-14	JPP-16.2-012725	1,2-Dichloroethane-d4	50	57.5	115	74	125
		Dibromofluoromethane	50	52.5	105	75	124
		Toluene-d8	50	53.3	107	86	113
		4-Bromofluorobenzene	50	44.0	88	77	121
Q1207-18	JPP-20.2-012725	1,2-Dichloroethane-d4	50	58.3	117	74	125
		Dibromofluoromethane	50	51.7	103	75	124
		Toluene-d8	50	53.5	107	86	113
		4-Bromofluorobenzene	50	44.3	89	77	121
VN0129WBL01	VN0129WBL01	1,2-Dichloroethane-d4	50	57.3	115	74	125
		Dibromofluoromethane	50	53.7	107	75	124
		Toluene-d8	50	50.2	100	86	113
		4-Bromofluorobenzene	50	48.3	97	77	121
VN0129WBS01	VN0129WBS01	1,2-Dichloroethane-d4	50	50.8	102	74	125
		Dibromofluoromethane	50	52.1	104	75	124
		Toluene-d8	50	53.0	106	86	113
		4-Bromofluorobenzene	50	55.3	111	77	121
VN0129WBSD0	VN0129WBSD01	1,2-Dichloroethane-d4	50	52.0	104	74	125
		Dibromofluoromethane	50	52.8	106	75	124
		Toluene-d8	50	53.1	106	86	113
		4-Bromofluorobenzene	50	54.8	110	77	121

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1207

Client: RU2 Engineering, LLC

Analytical Method: SW8260D

Datafile : VN085551.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0129WBS01	Vinyl chloride	20	16.6	ug/L	83			65	117	
	1,1-Dichloroethene	20	18.0	ug/L	90			74	110	
	2-Butanone	100	100	ug/L	100			65	122	
	Carbon Tetrachloride	20	19.5	ug/L	98			77	113	
	Chloroform	20	19.2	ug/L	96			79	113	
	Benzene	20	19.4	ug/L	97			82	109	
	1,2-Dichloroethane	20	20.0	ug/L	100			80	115	
	Trichloroethene	20	18.9	ug/L	95			77	113	
	Tetrachloroethene	20	19.4	ug/L	97			67	123	
	Chlorobenzene	20	19.3	ug/L	97			82	109	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1207

Client: RU2 Engineering, LLC

Analytical Method: SW8260D

Datafile : VN085552.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0129WBSD01	Vinyl chloride	20	16.3	ug/L	81	2		65	117	20
	1,1-Dichloroethene	20	17.9	ug/L	90	0		74	110	20
	2-Butanone	100	110	ug/L	110	10		65	122	20
	Carbon Tetrachloride	20	18.8	ug/L	94	4		77	113	20
	Chloroform	20	19.4	ug/L	97	1		79	113	20
	Benzene	20	19.3	ug/L	97	0		82	109	20
	1,2-Dichloroethane	20	20.6	ug/L	103	3		80	115	20
	Trichloroethene	20	18.3	ug/L	92	3		77	113	20
	Tetrachloroethene	20	19.1	ug/L	96	1		67	123	20
	Chlorobenzene	20	19.2	ug/L	96	1		82	109	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0129WBL01

Lab Name: CHEMTECH

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207

SAS No.: Q1207 SDG NO.: Q1207

Lab File ID: VN085550.D

Lab Sample ID: VN0129WBL01

Date Analyzed: 01/29/2025

Time Analyzed: 12:06

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0129WBS01	VN0129WBS01	VN085551.D	01/29/2025
VN0129WBSD01	VN0129WBSD01	VN085552.D	01/29/2025
JPP-2.1-012725	Q1207-02	VN085557.D	01/29/2025
JPP-5.1-012725	Q1207-06	VN085558.D	01/29/2025
JPP-4.5-012725	Q1207-10	VN085559.D	01/29/2025
JPP-16.2-012725	Q1207-14	VN085560.D	01/29/2025
JPP-20.2-012725	Q1207-18	VN085561.D	01/29/2025

COMMENTS: _____



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: RUTW01
Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207
Lab File ID: VN085437.D BFB Injection Date: 01/14/2025
Instrument ID: MSVOA_N BFB Injection Time: 14:22
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.3
75	30.0 - 60.0% of mass 95	58
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	1.4 (1.8) 1
174	50.0 - 100.0% of mass 95	76
175	5.0 - 9.0% of mass 174	5.4 (7.1) 1
176	95.0 - 101.0% of mass 174	74.1 (97.4) 1
177	5.0 - 9.0% of mass 176	4.9 (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
VSTDIC100	VSTDIC100	VN085438.D	01/14/2025	14:56
VSTDICCC050	VSTDICCC050	VN085439.D	01/14/2025	15:19
VSTDIC020	VSTDIC020	VN085440.D	01/14/2025	15:43
VSTDIC010	VSTDIC010	VN085441.D	01/14/2025	16:07
VSTDIC005	VSTDIC005	VN085442.D	01/14/2025	16:31
VSTDIC001	VSTDIC001	VN085443.D	01/14/2025	17:19



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: RUTW01
Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207
Lab File ID: VN085547.D BFB Injection Date: 01/29/2025
Instrument ID: MSVOA_N BFB Injection Time: 10:35
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	54
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	1.5 (2) 1
174	50.0 - 100.0% of mass 95	73.6
175	5.0 - 9.0% of mass 174	5 (6.8) 1
176	95.0 - 101.0% of mass 174	70.7 (96) 1
177	5.0 - 9.0% of mass 176	5.2 (7.3) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN085548.D	01/29/2025	11:08
VN0129WBL01	VN0129WBL01	VN085550.D	01/29/2025	12:06
VN0129WBS01	VN0129WBS01	VN085551.D	01/29/2025	12:30
VN0129WBSD01	VN0129WBSD01	VN085552.D	01/29/2025	13:04
JPP-2.1-012725	Q1207-02	VN085557.D	01/29/2025	15:04
JPP-5.1-012725	Q1207-06	VN085558.D	01/29/2025	15:29
JPP-4.5-012725	Q1207-10	VN085559.D	01/29/2025	15:53
JPP-16.2-012725	Q1207-14	VN085560.D	01/29/2025	16:17
JPP-20.2-012725	Q1207-18	VN085561.D	01/29/2025	16:41

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01
Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207
Lab File ID: VN085548.D Date Analyzed: 01/29/2025
Instrument ID: MSVOA_N Time Analyzed: 11:08
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	190920	8.22	314840	9.10	285899	11.87
UPPER LIMIT	381840	8.724	629680	9.6	571798	12.365
LOWER LIMIT	95460	7.724	157420	8.6	142950	11.365
EPA SAMPLE NO.						
JPP-2.1-012725	163592	8.22	317371	9.10	301389	11.87
JPP-5.1-012725	164603	8.22	316400	9.10	299930	11.87
JPP-4.5-012725	160119	8.22	302819	9.10	292646	11.87
JPP-16.2-012725	161120	8.22	308507	9.10	293568	11.87
JPP-20.2-012725	159671	8.22	312230	9.10	298965	11.87
VN0129WBL01	180587	8.22	341456	9.10	305749	11.87
VN0129WBS01	209601	8.22	351459	9.10	313028	11.87
VN0129WBSD01	199890	8.22	334279	9.10	300606	11.87

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: RUTW01
Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207
Lab File ID: VN085548.D Date Analyzed: 01/29/2025
Instrument ID: MSVOA_N Time Analyzed: 11:08
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	149148	13.788				
UPPER LIMIT	298296	14.288				
LOWER LIMIT	74574	13.288				
EPA SAMPLE NO.						
JPP-2.1-012725	108730	13.79				
JPP-5.1-012725	105803	13.79				
JPP-4.5-012725	106369	13.79				
JPP-16.2-012725	107567	13.79				
JPP-20.2-012725	104378	13.79				
VN0129WBL01	123478	13.79				
VN0129WBS01	156507	13.79				
VN0129WBSD01	149604	13.79				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



SAMPLE DATA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17

Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/27/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/28/25	
Client Sample ID:	JPP-2.1-012725			SDG No.:	Q1207	
Lab Sample ID:	Q1207-02			Matrix:	TCLP	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	TCLP VOA	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :	SW5035					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085557.D	1		01/29/25 15:04	VN012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	5.60	J	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.3		74 - 125	115%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		75 - 124	102%	SPK: 50
2037-26-5	Toluene-d8	52.5		86 - 113	105%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.6		77 - 121	89%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	164000	8.224			
540-36-3	1,4-Difluorobenzene	317000	9.1			
3114-55-4	Chlorobenzene-d5	301000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	109000	13.788			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085557.D
Acq On : 29 Jan 2025 15:04
Operator : JC\MD
Sample : Q1207-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-2.1-012725

Quant Time: Jan 30 00:36:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

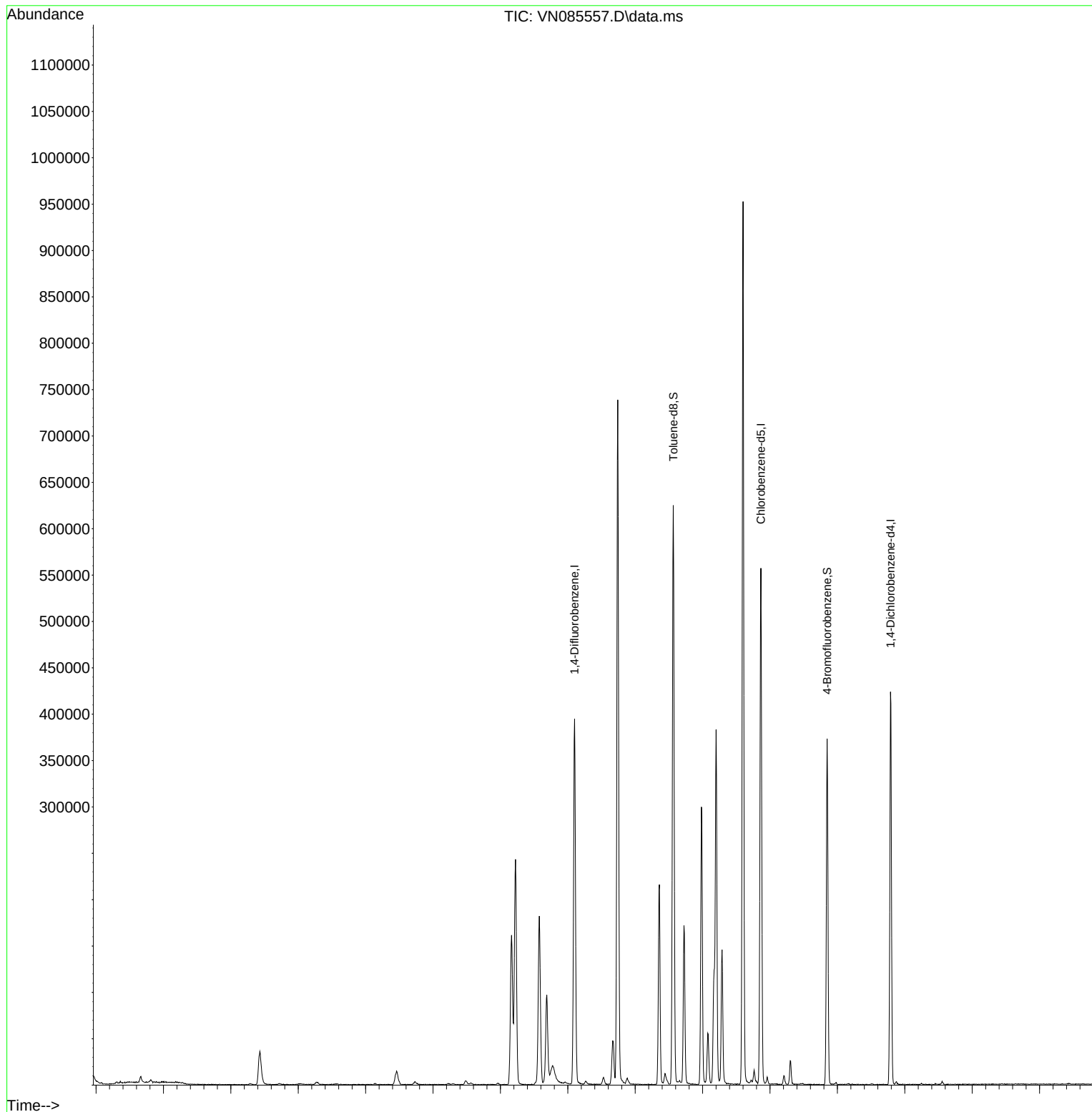
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	163592	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	317371	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	301389	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	108730	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	151357	57.317	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	=	114.640%	
35) Dibromofluoromethane	8.165	113	112222	50.969	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	=	101.940%	
50) Toluene-d8	10.565	98	410833	52.517	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	=	105.040%	
62) 4-Bromofluorobenzene	12.847	95	119370	44.608	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	=	89.220%	
Target Compounds						
						Qvalue
16) Acetone	4.430	43	68391	80.155	ug/l	98
25) 2-Butanone	7.483	43	7005	5.579	ug/l	96
43) Isopropyl Acetate	8.689	43	107795	21.568	ug/l #	87

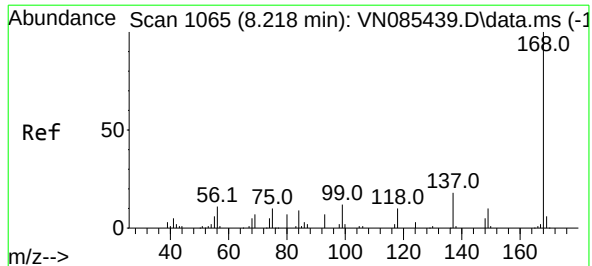
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085557.D
Acq On : 29 Jan 2025 15:04
Operator : JC\MD
Sample : Q1207-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-2.1-012725

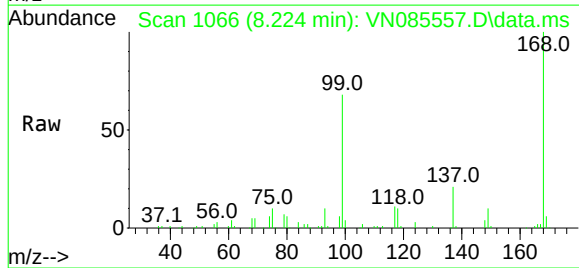
Quant Time: Jan 30 00:36:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



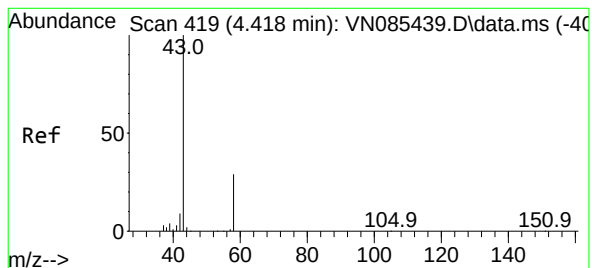
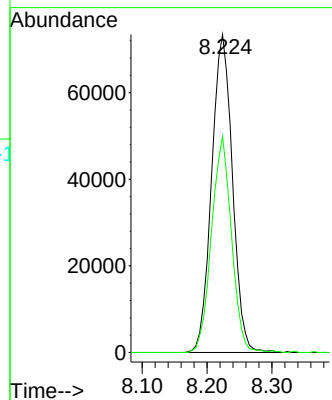
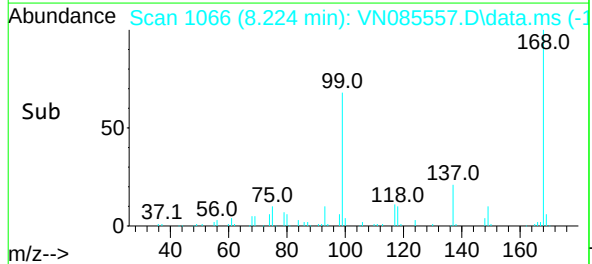


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085557.D
Acq: 29 Jan 2025 15:04

Instrument :
MSVOA_N
ClientSampleId :
JPP-2.1-012725

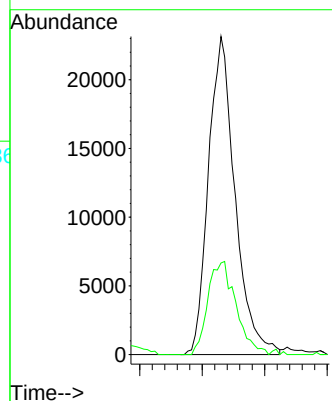
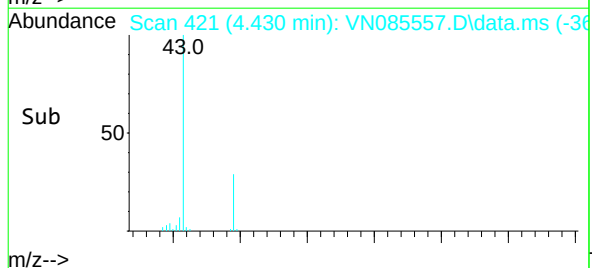
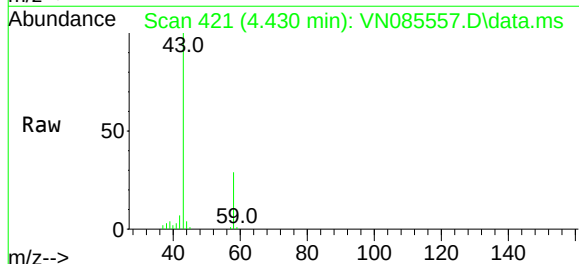


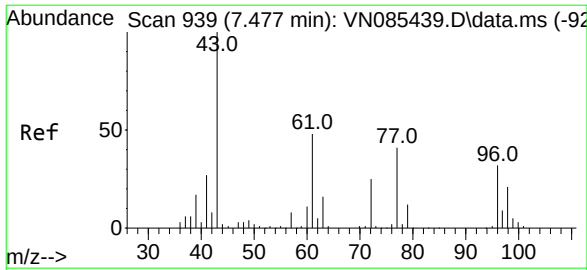
Tgt Ion: 168 Resp: 163592
Ion Ratio Lower Upper
168 100
99 68.0 53.6 80.4



#16
Acetone
Concen: 80.155 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085557.D
Acq: 29 Jan 2025 15:04

Tgt Ion: 43 Resp: 68391
Ion Ratio Lower Upper
43 100
58 28.8 23.8 35.6





#25

2-Butanone

Concen: 5.579 ug/l

RT: 7.483 min Scan# 94

Delta R.T. 0.006 min

Lab File: VN085557.D

Acq: 29 Jan 2025 15:04

Instrument :

MSVOA_N

ClientSampleId :

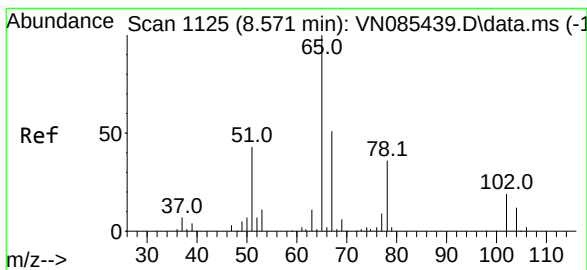
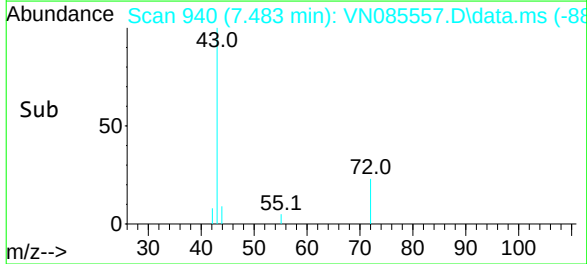
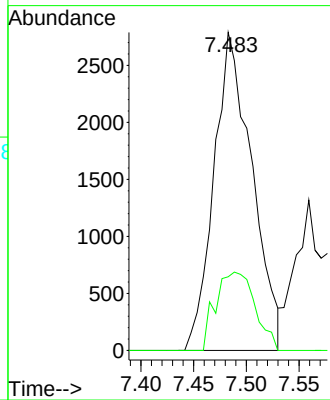
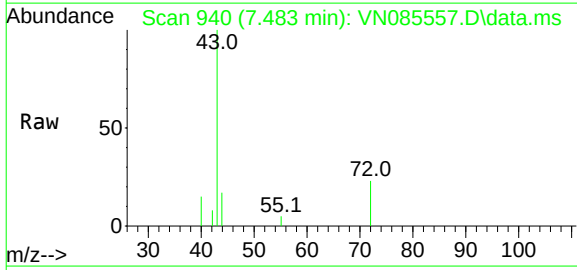
JPP-2.1-012725

Tgt Ion: 43 Resp: 7005

Ion Ratio Lower Upper

43 100

72 23.2 20.2 30.4



#33

1,2-Dichloroethane-d4

Concen: 57.317 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.006 min

Lab File: VN085557.D

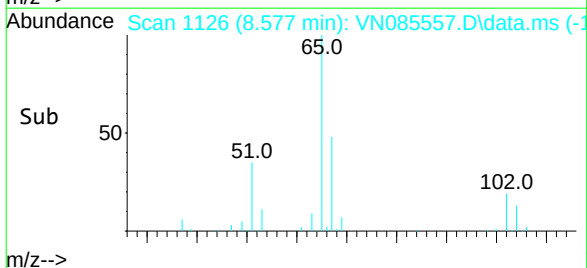
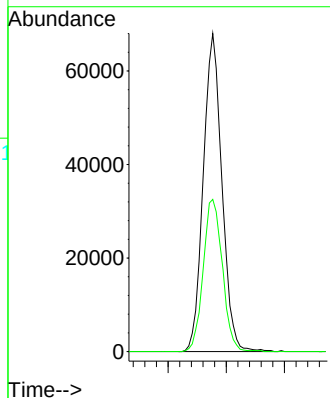
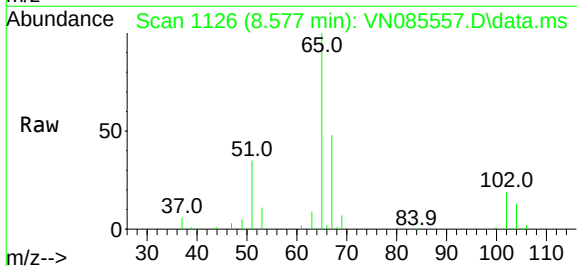
Acq: 29 Jan 2025 15:04

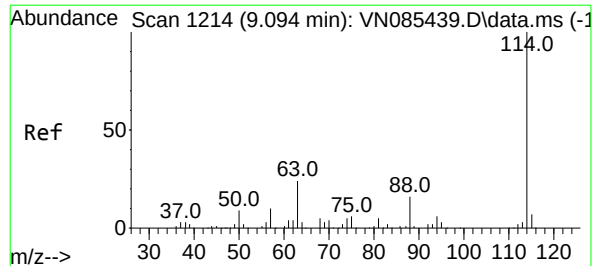
Tgt Ion: 65 Resp: 151357

Ion Ratio Lower Upper

65 100

67 49.2 0.0 101.6

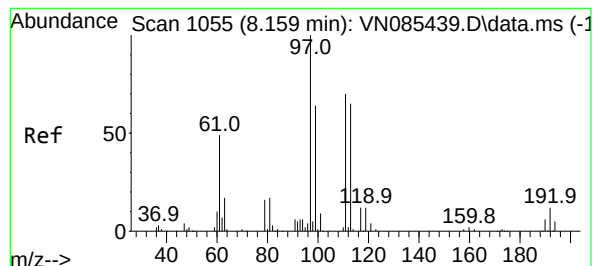
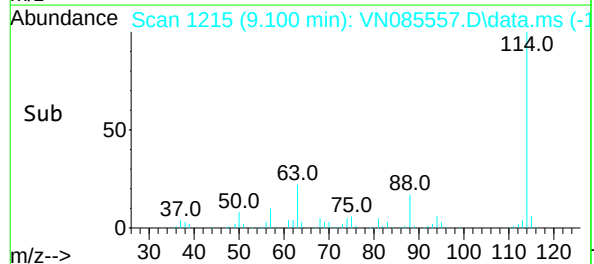
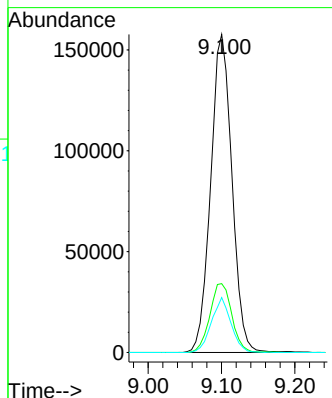
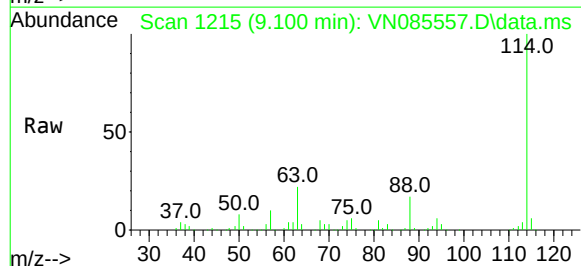




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1214
Delta R.T. 0.006 min
Lab File: VN085557.D
Acq: 29 Jan 2025 15:04

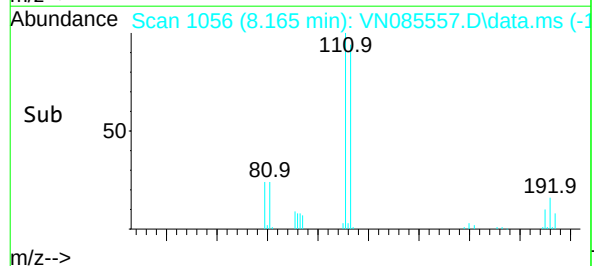
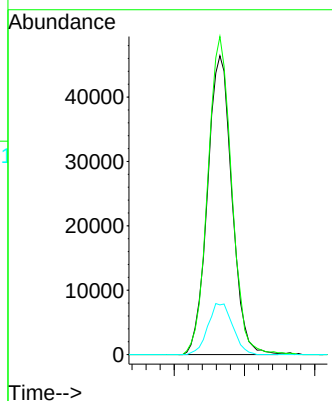
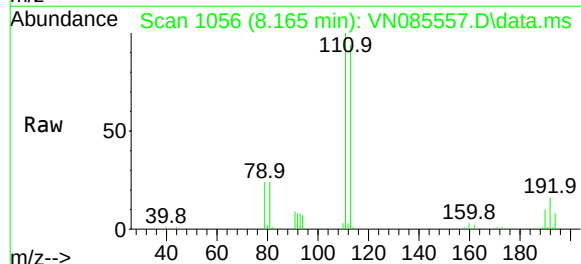
Instrument :
MSVOA_N
ClientSampleId :
JPP-2.1-012725

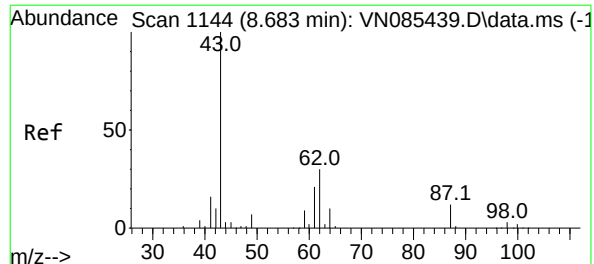
Tgt Ion	Ratio	Lower	Upper
114	100		
63	21.7	0.0	47.6
88	17.3	0.0	32.6



#35
Dibromofluoromethane
Concen: 50.969 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085557.D
Acq: 29 Jan 2025 15:04

Tgt Ion	Ratio	Lower	Upper
113	100		
111	104.0	82.7	124.1
192	17.3	14.3	21.5





#43

Isopropyl Acetate

Concen: 21.568 ug/l

RT: 8.689 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085557.D

Acq: 29 Jan 2025 15:04

Instrument :

MSVOA_N

ClientSampleId :

JPP-2.1-012725

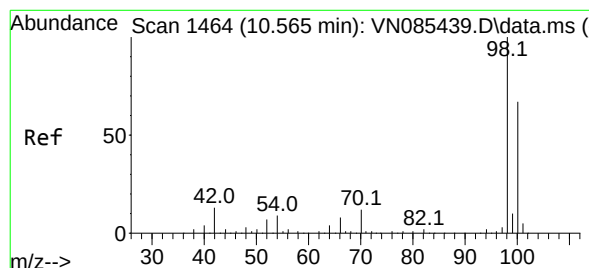
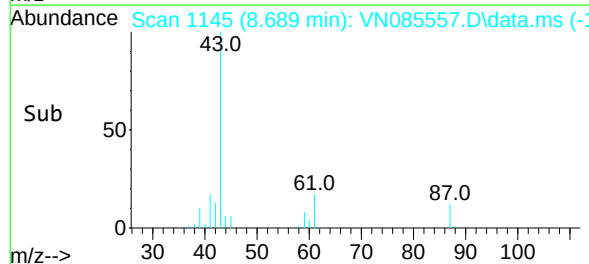
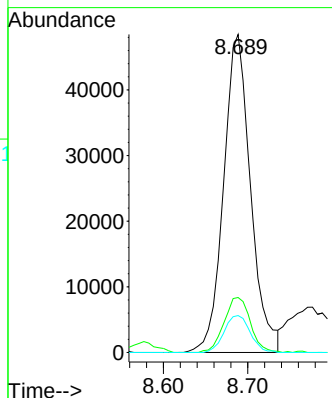
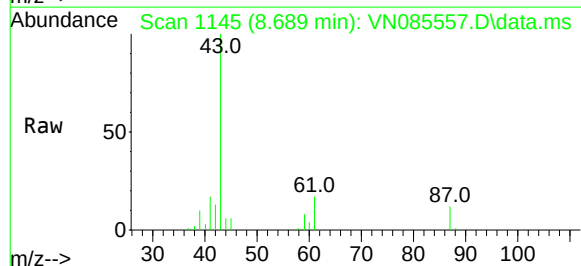
Tgt Ion: 43 Resp: 107795

Ion Ratio Lower Upper

43 100

61 16.8 20.7 31.1#

87 11.2 9.8 14.8



#50

Toluene-d8

Concen: 52.517 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085557.D

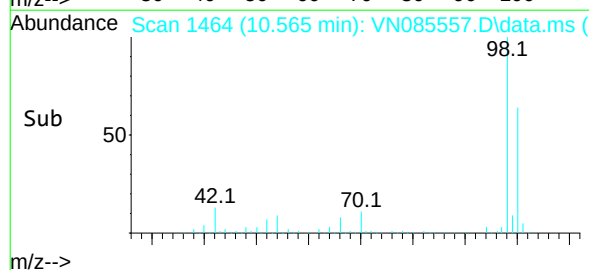
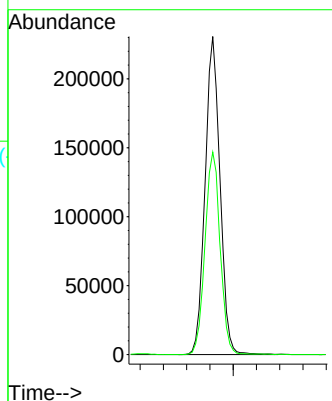
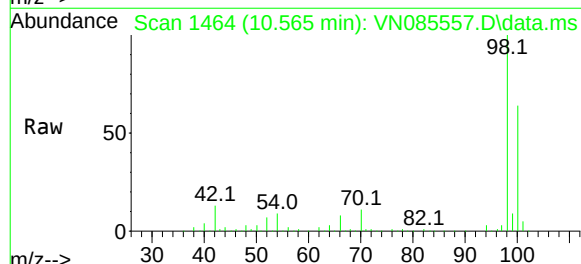
Acq: 29 Jan 2025 15:04

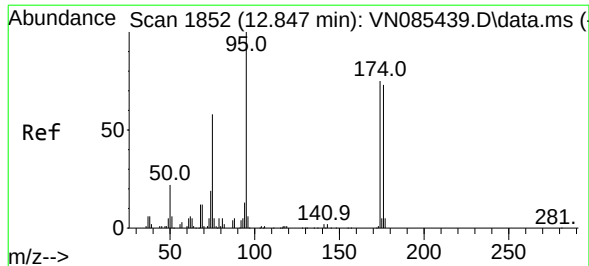
Tgt Ion: 98 Resp: 410833

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4





#62

4-Bromofluorobenzene

Concen: 44.608 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085557.D

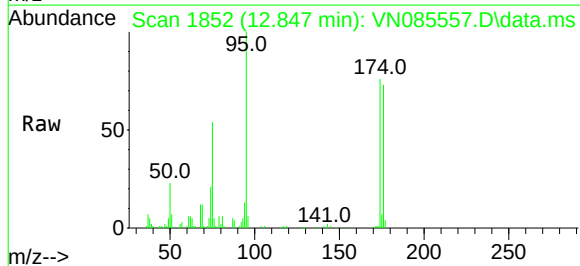
Acq: 29 Jan 2025 15:04

Instrument :

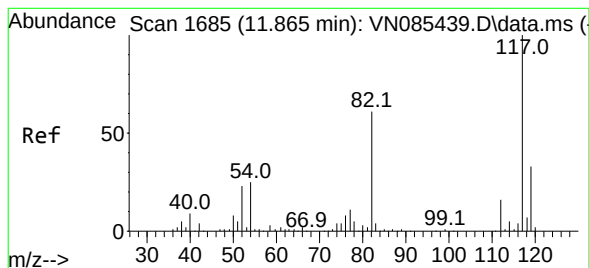
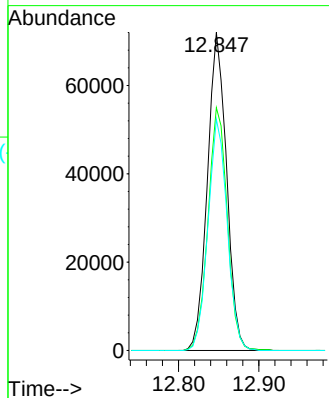
MSVOA_N

ClientSampleId :

JPP-2.1-012725



Tgt Ion:	95	Resp:	119370
Ion	Ratio	Lower	Upper
95	100		
174	77.0	0.0	145.0
176	72.7	0.0	142.4



#63

Chlorobenzene-d5

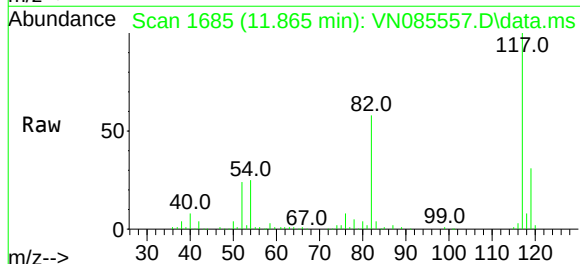
Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

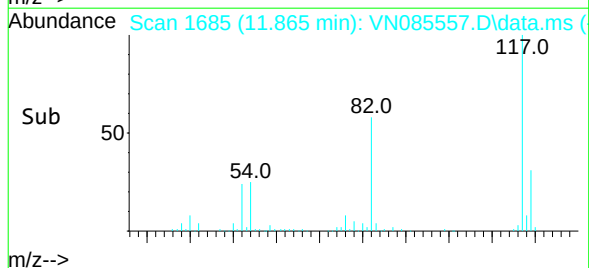
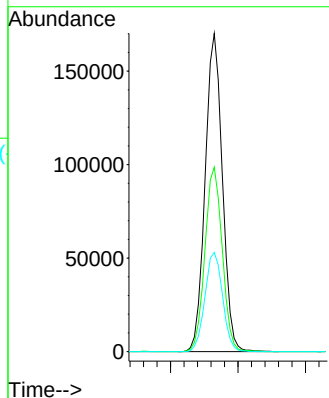
Delta R.T. 0.000 min

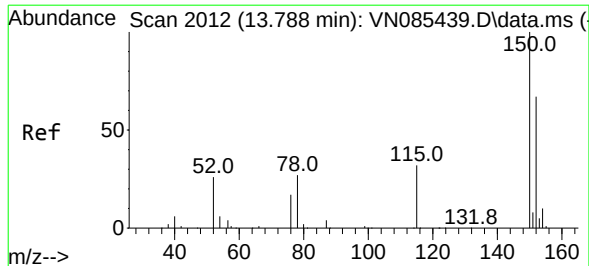
Lab File: VN085557.D

Acq: 29 Jan 2025 15:04



Tgt Ion:	117	Resp:	301389
Ion	Ratio	Lower	Upper
117	100		
82	58.0	48.6	72.8
119	31.2	26.6	39.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 20

Delta R.T. 0.000 min

Lab File: VN085557.D

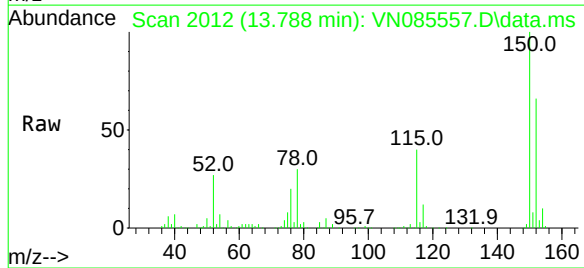
Acq: 29 Jan 2025 15:04

Instrument :

MSVOA_N

ClientSampleId :

JPP-2.1-012725



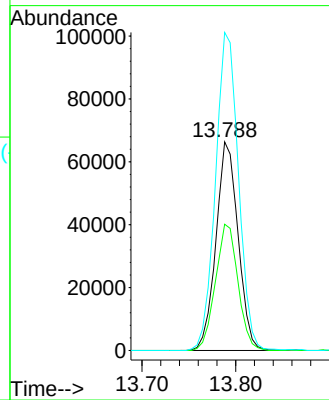
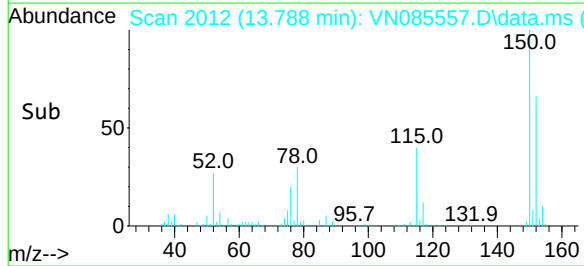
Tgt Ion:152 Resp: 108730

Ion Ratio Lower Upper

152 100

115 61.6 31.1 93.3

150 158.4 0.0 343.6



Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/27/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/28/25	
Client Sample ID:	JPP-5.1-012725			SDG No.:	Q1207	
Lab Sample ID:	Q1207-06			Matrix:	TCLP	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	TCLP VOA	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :	SW5035					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085558.D	1		01/29/25 15:29	VN012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	5.90	J	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.0		74 - 125	114%	SPK: 50
1868-53-7	Dibromofluoromethane	52.2		75 - 124	104%	SPK: 50
2037-26-5	Toluene-d8	52.8		86 - 113	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.3		77 - 121	89%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	165000	8.224			
540-36-3	1,4-Difluorobenzene	316000	9.1			
3114-55-4	Chlorobenzene-d5	300000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	106000	13.788			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085558.D
Acq On : 29 Jan 2025 15:29
Operator : JC\MD
Sample : Q1207-06
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.1-012725

Quant Time: Jan 30 00:36:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

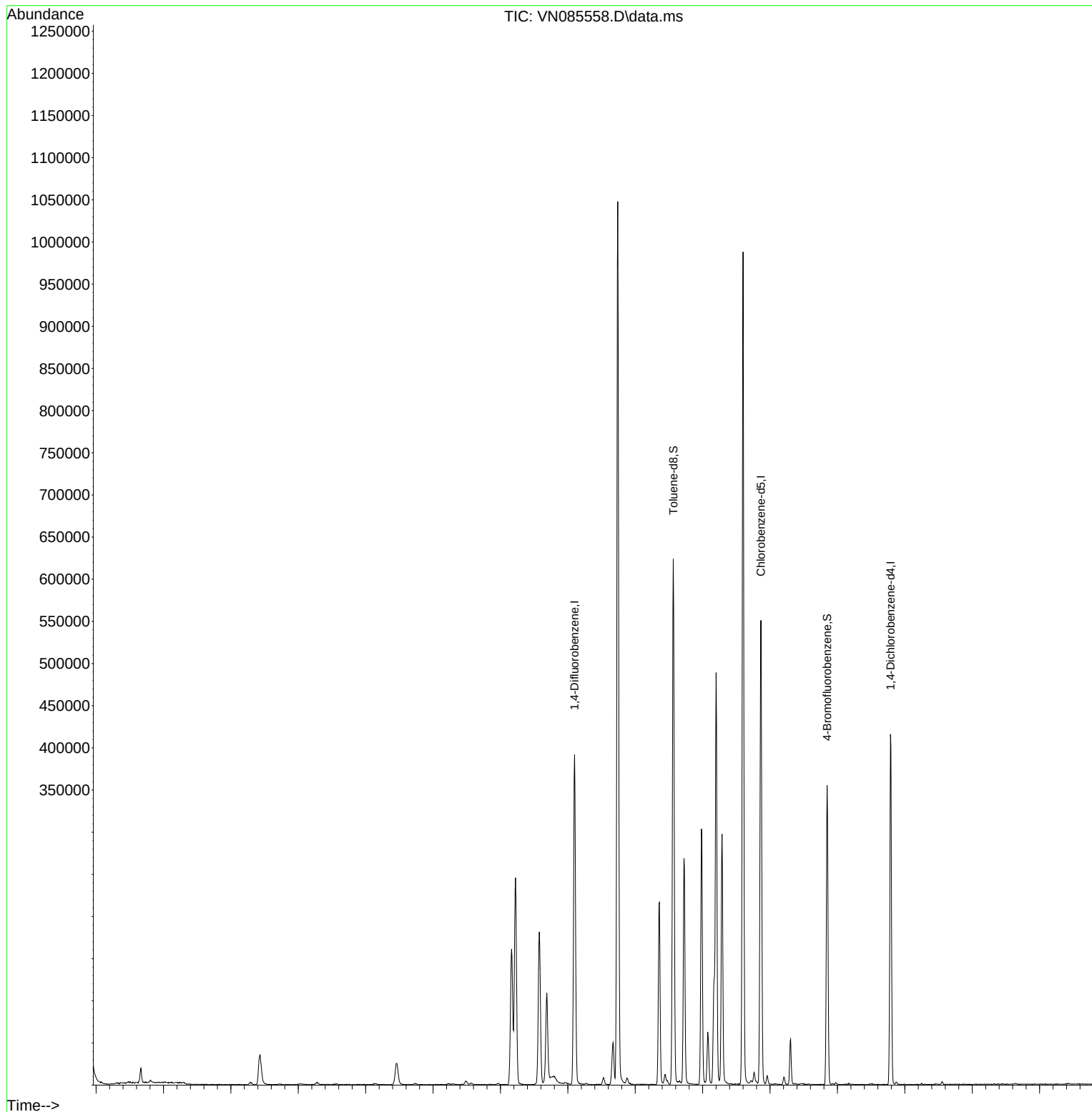
Internal Standards						
1) Pentafluorobenzene	8.224	168	164603	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	316400	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	299930	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	105803	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	151380	56.973	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	= 113.940%		
35) Dibromofluoromethane	8.165	113	114601	52.209	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	= 104.420%		
50) Toluene-d8	10.565	98	411811	52.804	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	= 105.600%		
62) 4-Bromofluorobenzene	12.847	95	118183	44.300	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	= 88.600%		
Target Compounds						
						Qvalue
16) Acetone	4.430	43	70236	81.811	ug/l	98
25) 2-Butanone	7.483	43	7406	5.862	ug/l	97
43) Isopropyl Acetate	8.688	43	122030	24.492	ug/l #	86

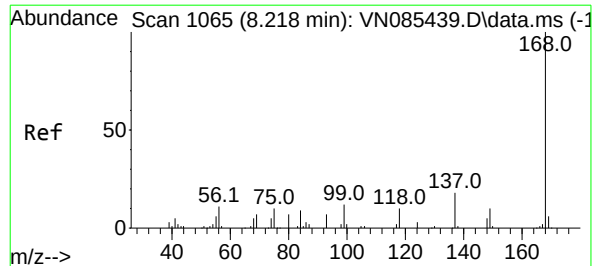
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085558.D
Acq On : 29 Jan 2025 15:29
Operator : JC\MD
Sample : Q1207-06
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.1-012725

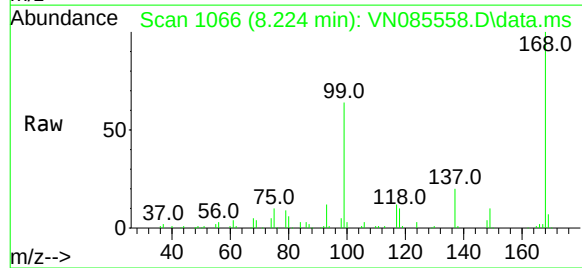
Quant Time: Jan 30 00:36:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



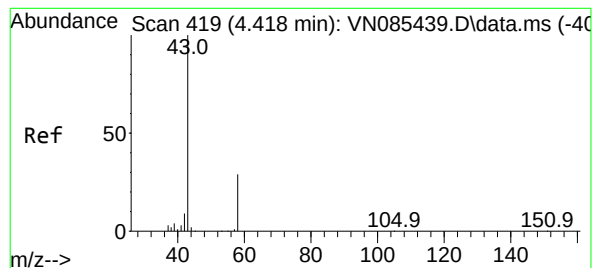
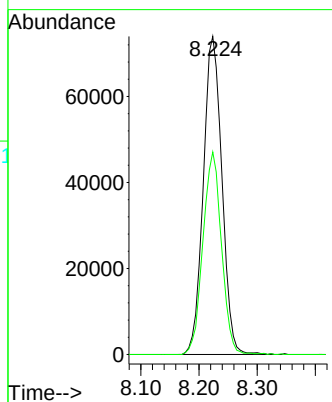
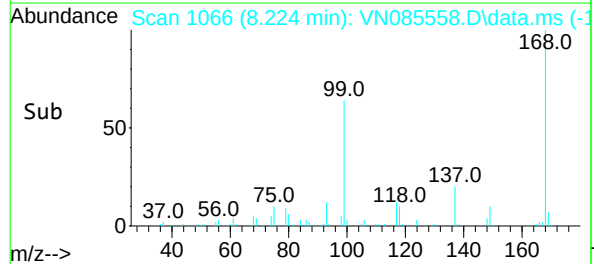


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085558.D
Acq: 29 Jan 2025 15:29

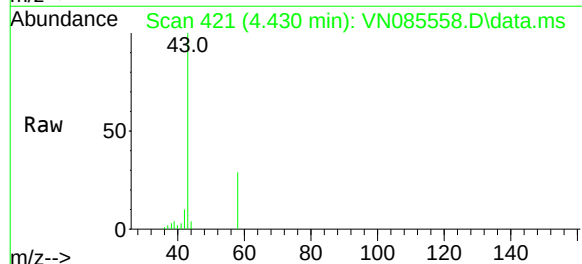
Instrument :
MSVOA_N
ClientSampleId :
JPP-5.1-012725



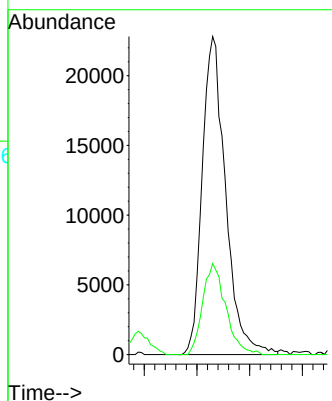
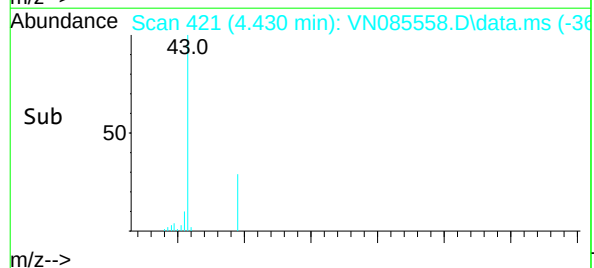
Tgt Ion: 168 Resp: 164603
Ion Ratio Lower Upper
168 100
99 63.7 53.6 80.4

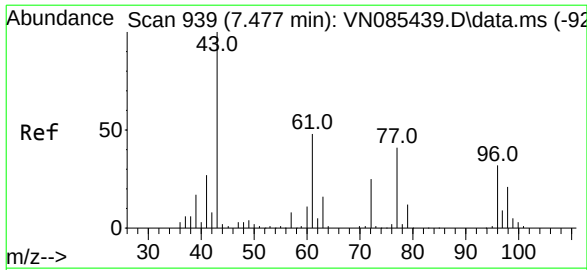


#16
Acetone
Concen: 81.811 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085558.D
Acq: 29 Jan 2025 15:29



Tgt Ion: 43 Resp: 70236
Ion Ratio Lower Upper
43 100
58 28.6 23.8 35.6





#25

2-Butanone

Concen: 5.862 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085558.D

Acq: 29 Jan 2025 15:29

Instrument :

MSVOA_N

ClientSampleId :

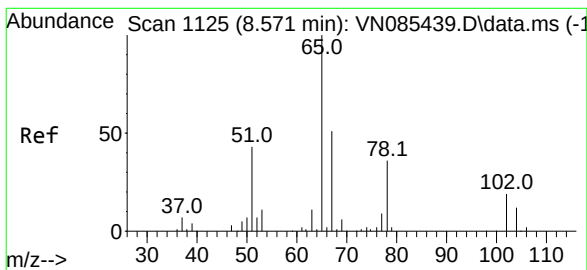
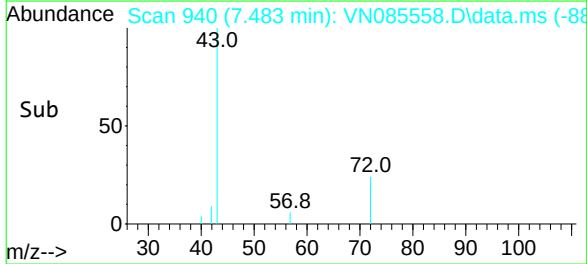
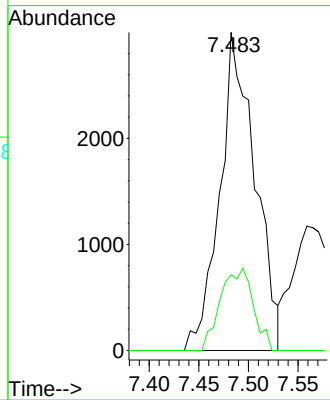
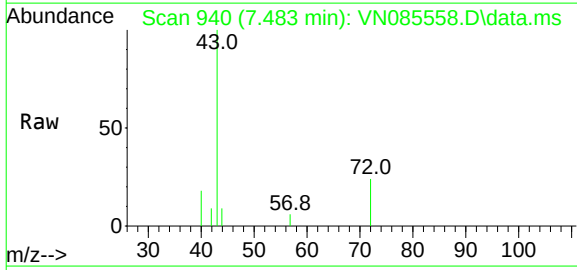
JPP-5.1-012725

Tgt Ion: 43 Resp: 7406

Ion Ratio Lower Upper

43 100

72 23.8 20.2 30.4



#33

1,2-Dichloroethane-d4

Concen: 56.973 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.006 min

Lab File: VN085558.D

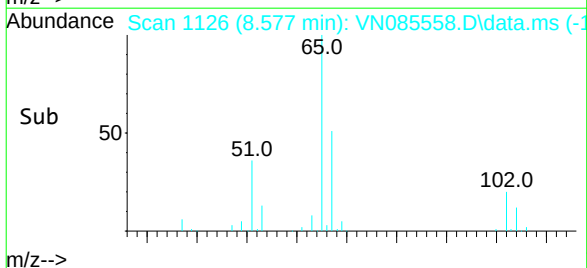
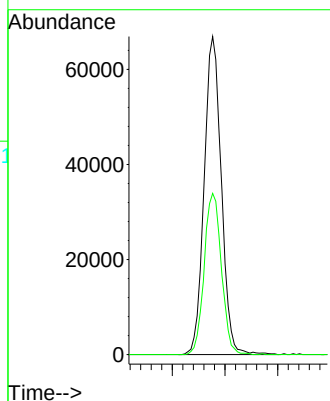
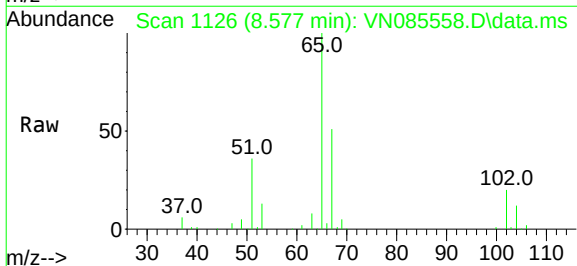
Acq: 29 Jan 2025 15:29

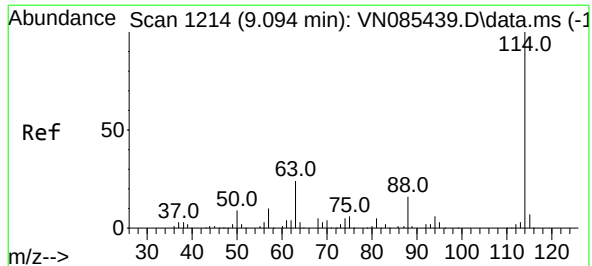
Tgt Ion: 65 Resp: 151380

Ion Ratio Lower Upper

65 100

67 50.8 0.0 101.6

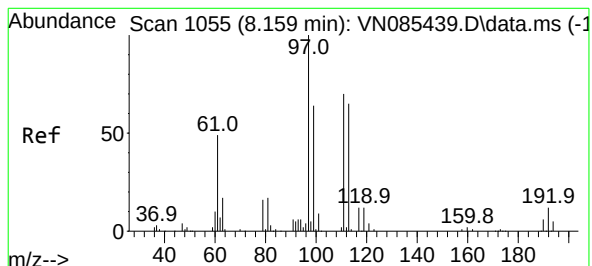
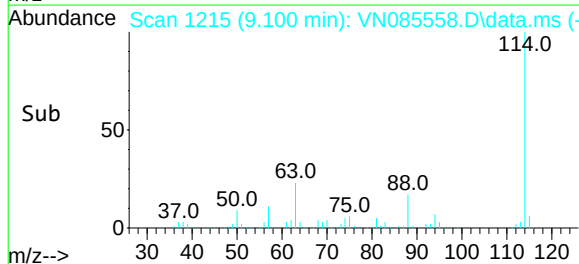
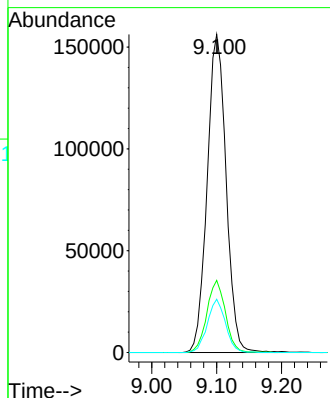
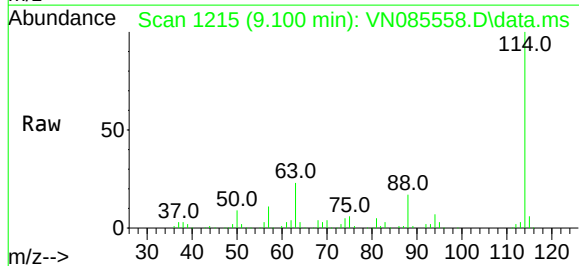




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1214
Delta R.T. 0.006 min
Lab File: VN085558.D
Acq: 29 Jan 2025 15:29

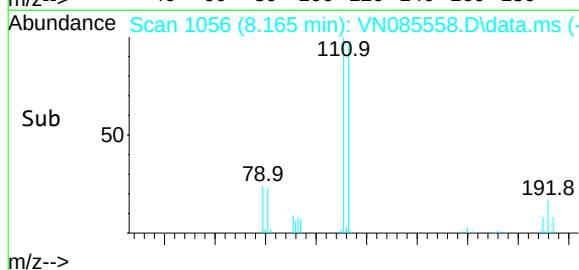
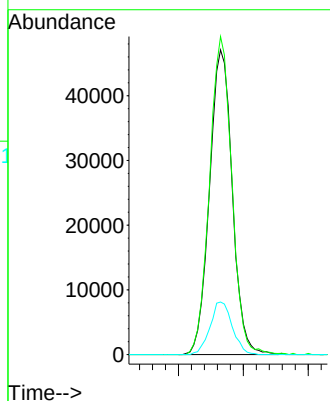
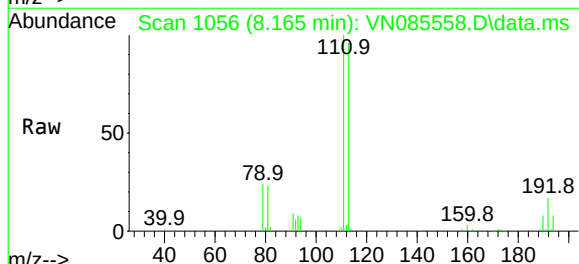
Instrument :
MSVOA_N
ClientSampleId :
JPP-5.1-012725

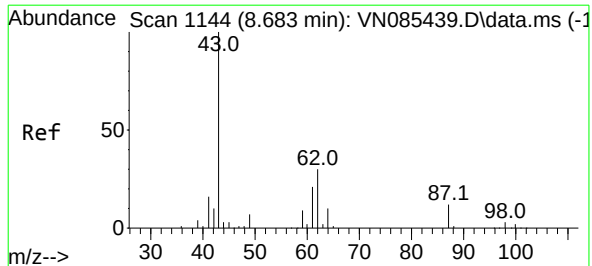
Tgt Ion	Ratio	Lower	Upper
114	100		
63	22.7	0.0	47.6
88	16.7	0.0	32.6



#35
Dibromofluoromethane
Concen: 52.209 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085558.D
Acq: 29 Jan 2025 15:29

Tgt Ion	Ratio	Lower	Upper
113	100		
111	102.4	82.7	124.1
192	16.9	14.3	21.5





#43

Isopropyl Acetate

Concen: 24.492 ug/l

RT: 8.688 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085558.D

Acq: 29 Jan 2025 15:29

Instrument :

MSVOA_N

ClientSampleId :

JPP-5.1-012725

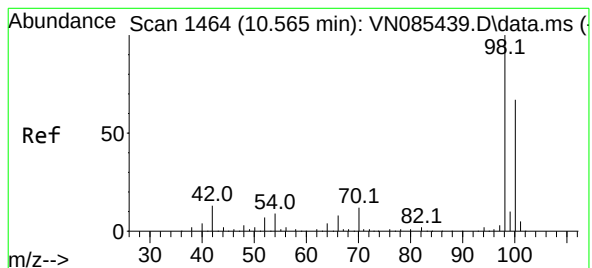
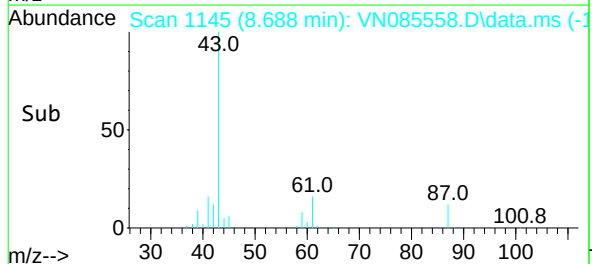
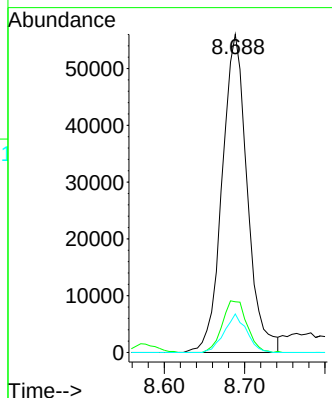
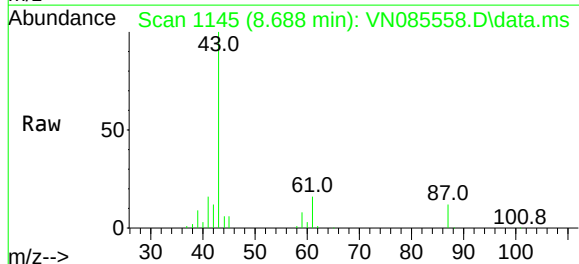
Tgt Ion: 43 Resp: 122030

Ion Ratio Lower Upper

43 100

61 16.0 20.7 31.1#

87 10.7 9.8 14.8



#50

Toluene-d8

Concen: 52.804 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085558.D

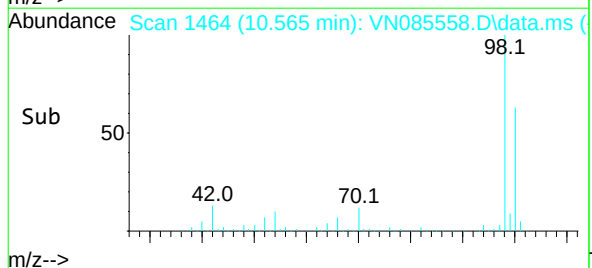
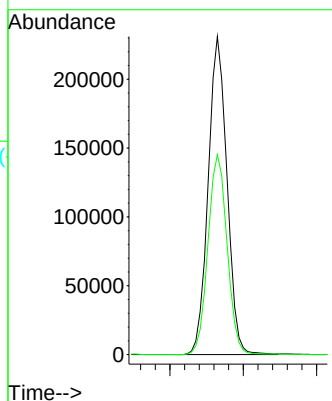
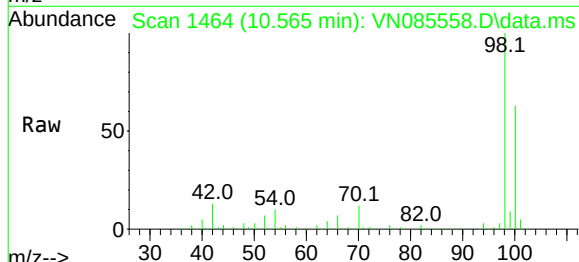
Acq: 29 Jan 2025 15:29

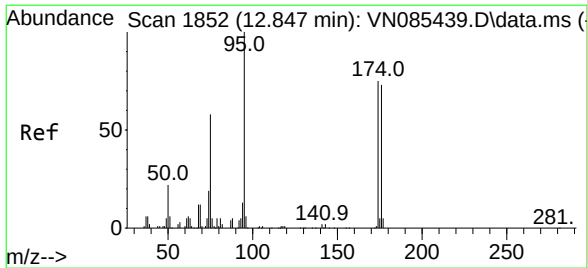
Tgt Ion: 98 Resp: 411811

Ion Ratio Lower Upper

98 100

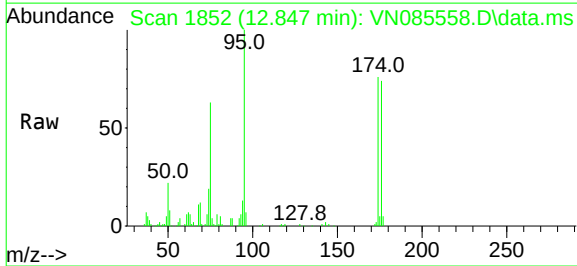
100 64.1 52.2 78.4



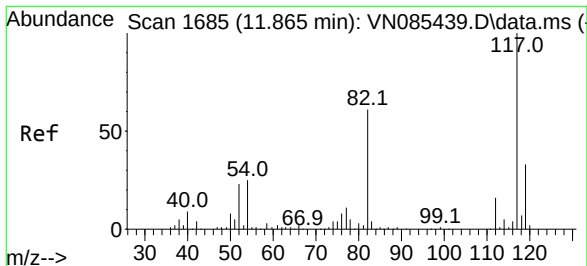
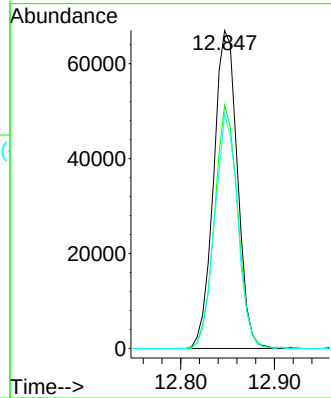
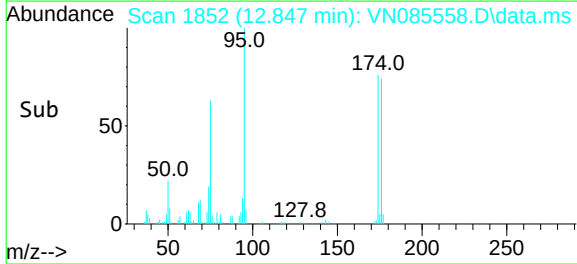


#62
4-Bromofluorobenzene
Concen: 44.300 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085558.D
Acq: 29 Jan 2025 15:29

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.1-012725

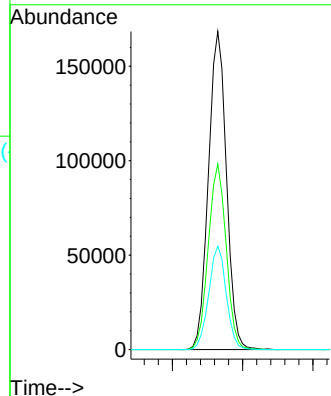
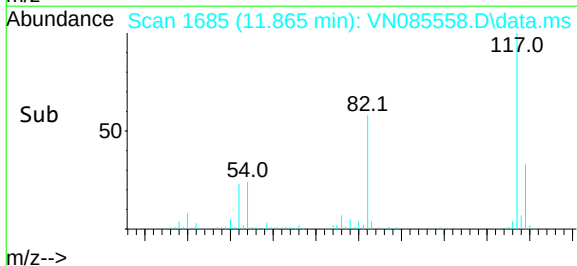
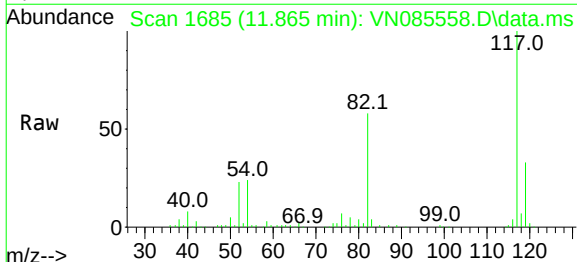


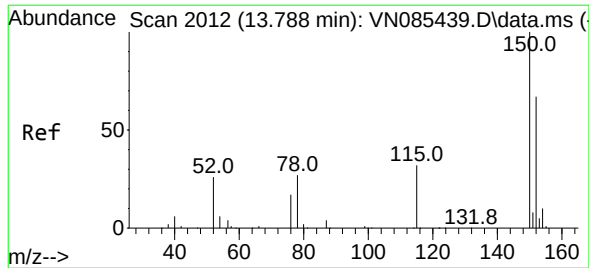
Tgt Ion: 95 Resp: 118183
Ion Ratio Lower Upper
95 100
174 75.1 0.0 145.0
176 71.6 0.0 142.4



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085558.D
Acq: 29 Jan 2025 15:29

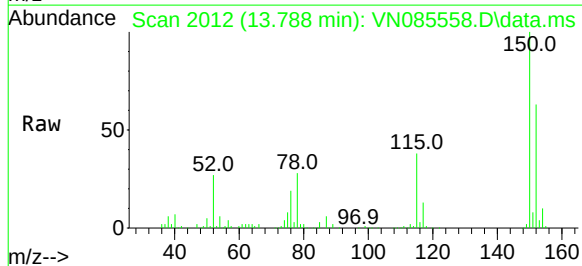
Tgt Ion: 117 Resp: 299930
Ion Ratio Lower Upper
117 100
82 58.3 48.6 72.8
119 32.5 26.6 39.8



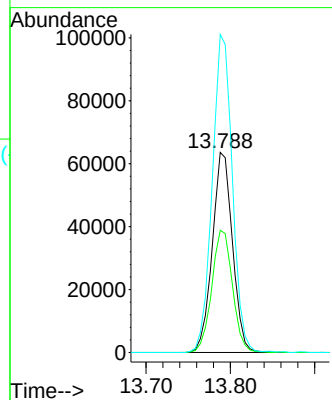
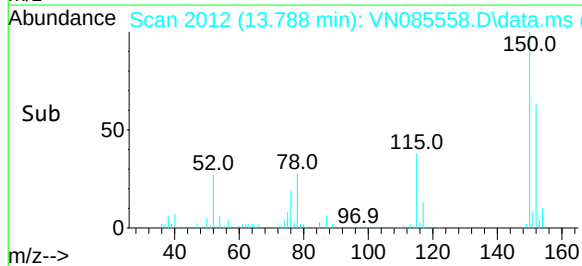


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085558.D
Acq: 29 Jan 2025 15:29

Instrument :
MSVOA_N
ClientSampleId :
JPP-5.1-012725



Tgt Ion:152 Resp: 105803
Ion Ratio Lower Upper
152 100
115 62.6 31.1 93.3
150 158.1 0.0 343.6



Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/27/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/28/25	
Client Sample ID:	JPP-4.5-012725			SDG No.:	Q1207	
Lab Sample ID:	Q1207-10			Matrix:	TCLP	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	TCLP VOA	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :	SW5035					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085559.D	1		01/29/25 15:53	VN012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	7.50	J	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.3		74 - 125	115%	SPK: 50
1868-53-7	Dibromofluoromethane	52.8		75 - 124	106%	SPK: 50
2037-26-5	Toluene-d8	53.1		86 - 113	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.6		77 - 121	93%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	160000	8.224			
540-36-3	1,4-Difluorobenzene	303000	9.1			
3114-55-4	Chlorobenzene-d5	293000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	106000	13.794			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
 Data File : VN085559.D
 Acq On : 29 Jan 2025 15:53
 Operator : JC\MD
 Sample : Q1207-10
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 JPP-4.5-012725

Quant Time: Jan 30 00:37:10 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

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

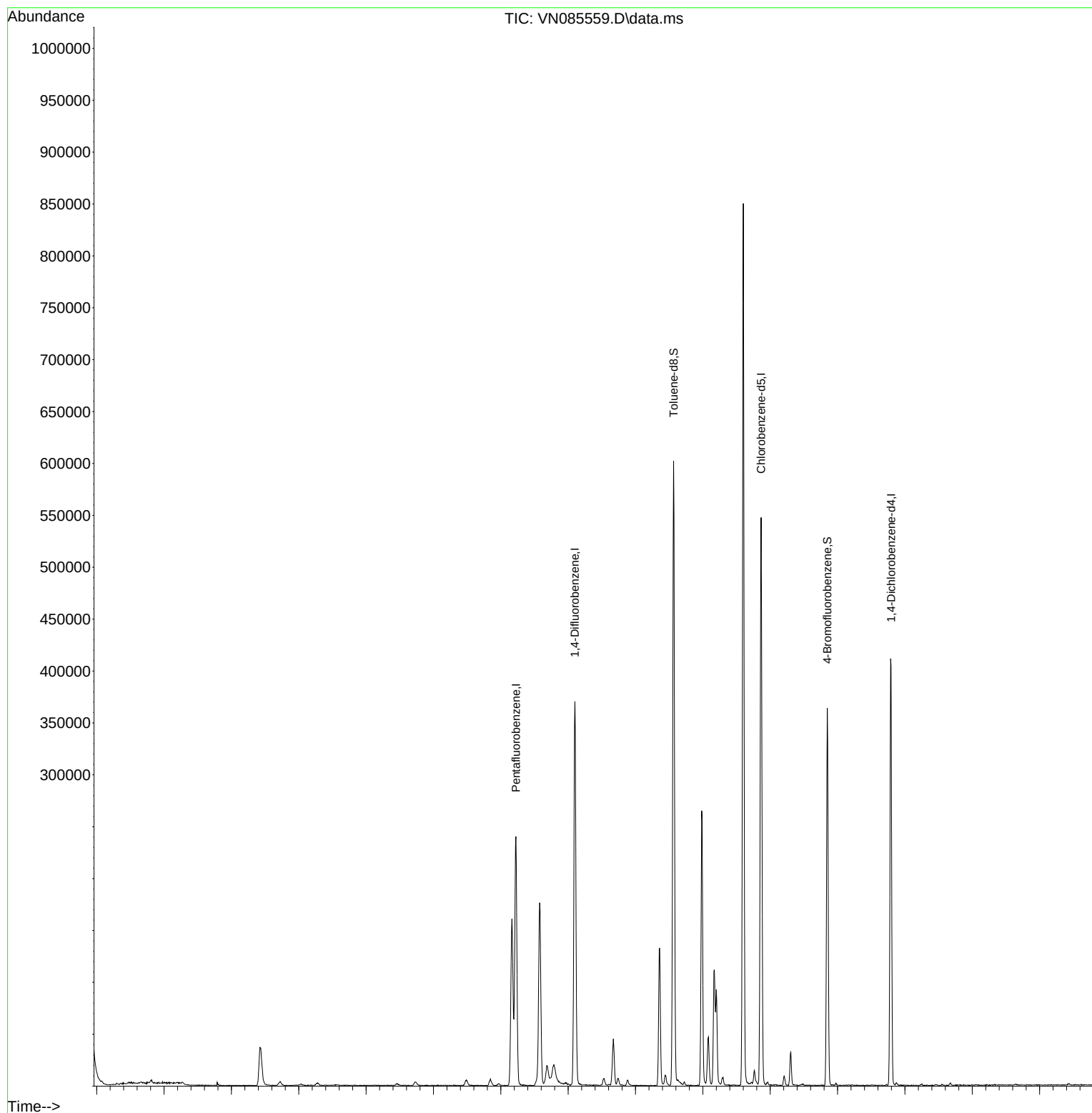
Internal Standards						
1) Pentafluorobenzene	8.224	168	160119	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	302819	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	292646	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	106369	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	148132	57.312	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	=	114.620%	
35) Dibromofluoromethane	8.165	113	111026	52.849	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	=	105.700%	
50) Toluene-d8	10.565	98	396088	53.065	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	=	106.140%	
62) 4-Bromofluorobenzene	12.847	95	119098	46.645	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	=	93.280%	
Target Compounds						
					Qvalue	
16) Acetone	4.430	43	73891	88.479	ug/l	99
25) 2-Butanone	7.489	43	9272	7.545	ug/l #	86
29) Tetrahydrofuran	7.847	42	3958	5.080	ug/l	95
43) Isopropyl Acetate	8.688	43	23346	4.896	ug/l #	80

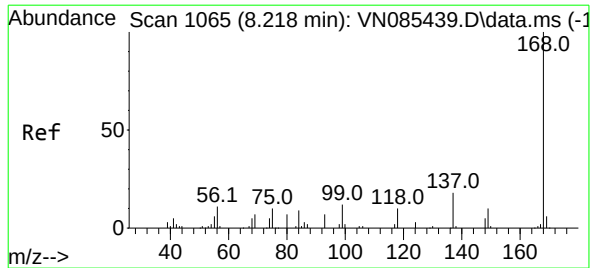
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085559.D
Acq On : 29 Jan 2025 15:53
Operator : JC\MD
Sample : Q1207-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-4.5-012725

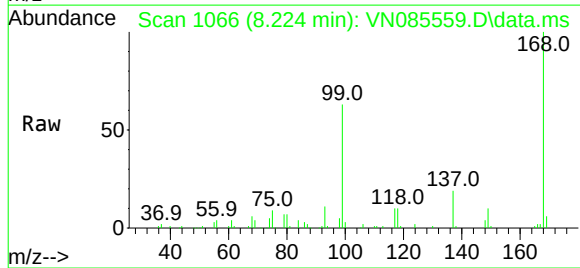
Quant Time: Jan 30 00:37:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



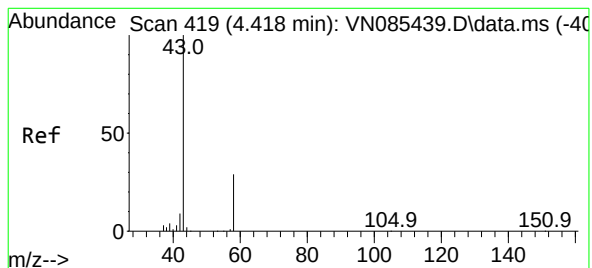
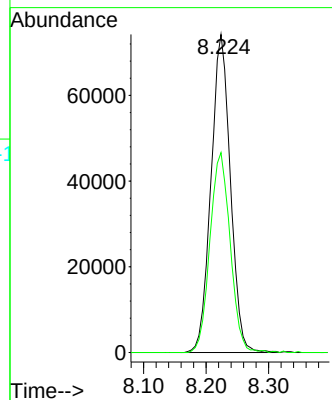
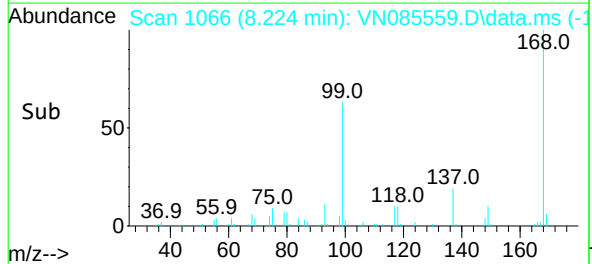


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085559.D
Acq: 29 Jan 2025 15:53

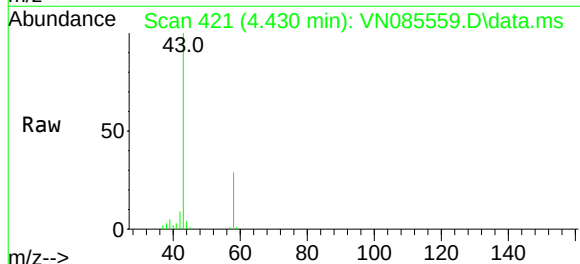
Instrument :
MSVOA_N
ClientSampleId :
JPP-4.5-012725



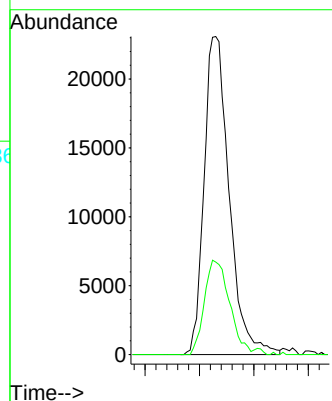
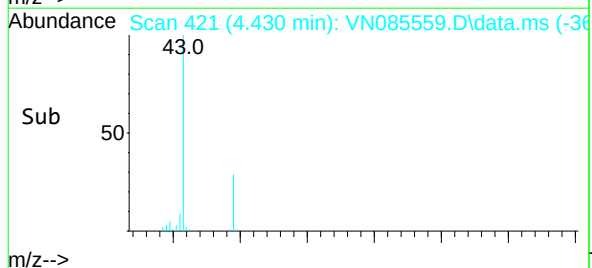
Tgt Ion: 168 Resp: 160119
Ion Ratio Lower Upper
168 100
99 62.8 53.6 80.4

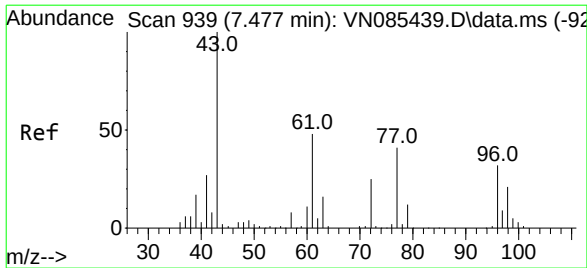


#16
Acetone
Concen: 88.479 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085559.D
Acq: 29 Jan 2025 15:53



Tgt Ion: 43 Resp: 73891
Ion Ratio Lower Upper
43 100
58 29.1 23.8 35.6





#25

2-Butanone

Concen: 7.545 ug/l

RT: 7.489 min Scan# 941

Delta R.T. 0.012 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

Instrument :

MSVOA_N

ClientSampleId :

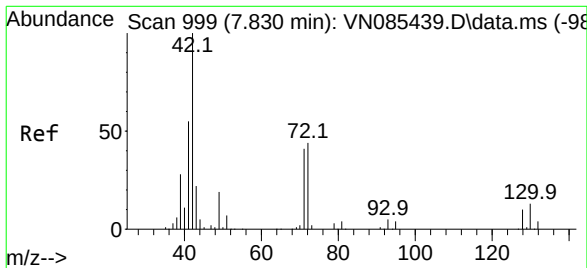
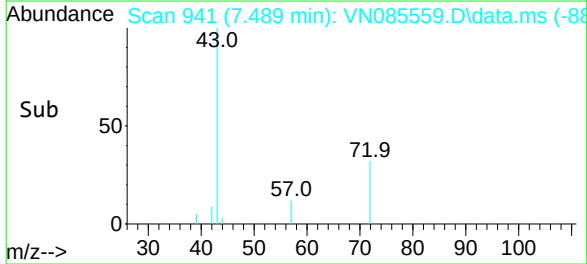
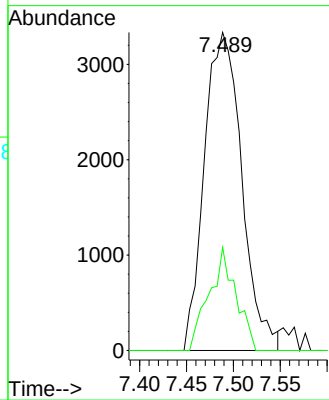
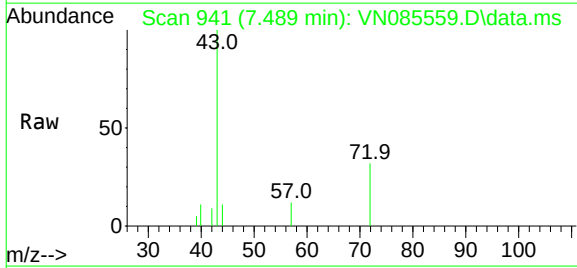
JPP-4.5-012725

Tgt Ion: 43 Resp: 9272

Ion Ratio Lower Upper

43 100

72 32.4 20.2 30.4#



#29

Tetrahydrofuran

Concen: 5.080 ug/l

RT: 7.847 min Scan# 1002

Delta R.T. 0.018 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

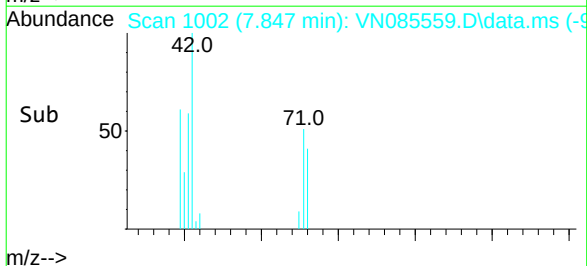
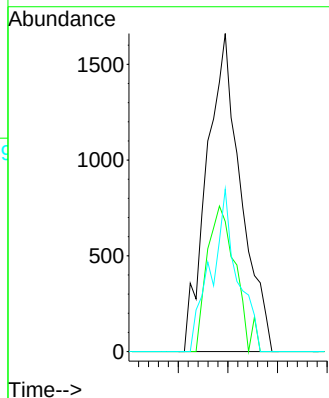
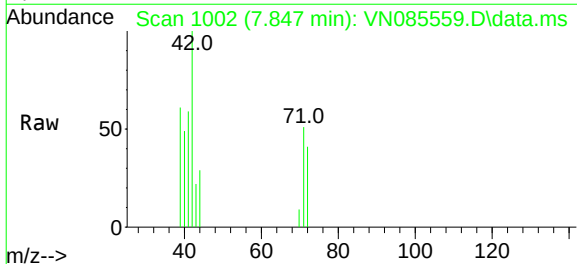
Tgt Ion: 42 Resp: 3958

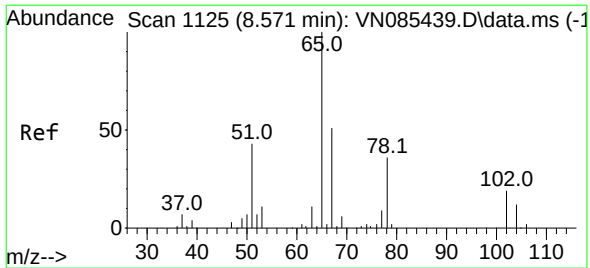
Ion Ratio Lower Upper

42 100

72 38.2 34.2 51.2

71 39.4 32.5 48.7





#33

1,2-Dichloroethane-d4

Concen: 57.312 ug/l

RT: 8.577 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

Instrument :

MSVOA_N

ClientSampleId :

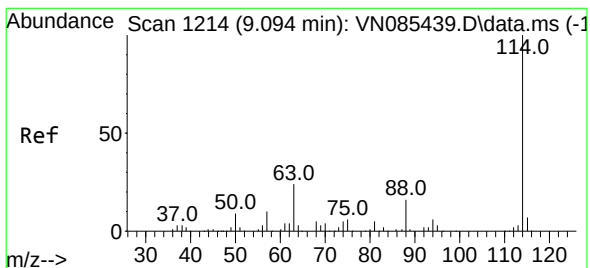
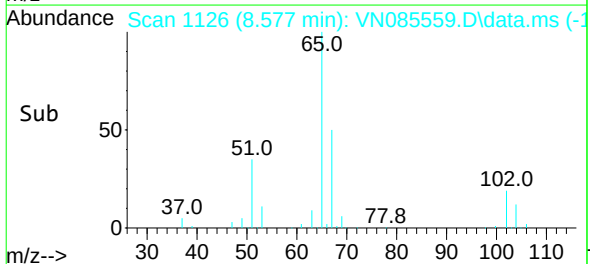
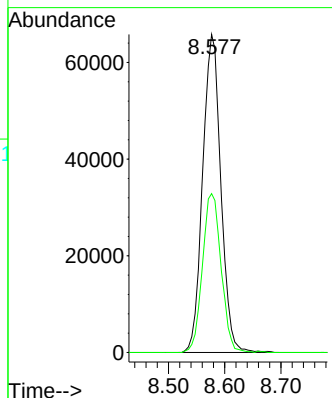
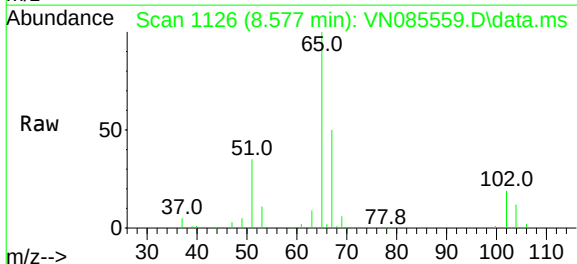
JPP-4.5-012725

Tgt Ion: 65 Resp: 148132

Ion Ratio Lower Upper

65 100

67 51.2 0.0 101.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

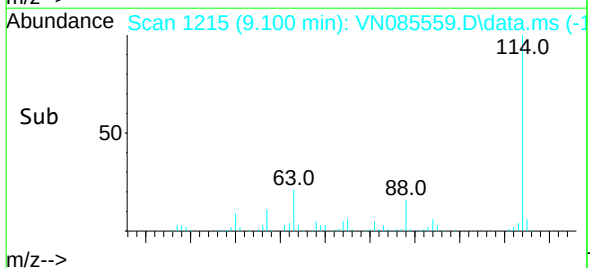
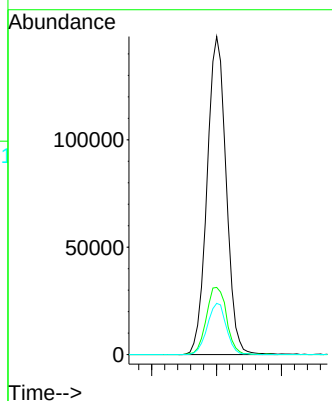
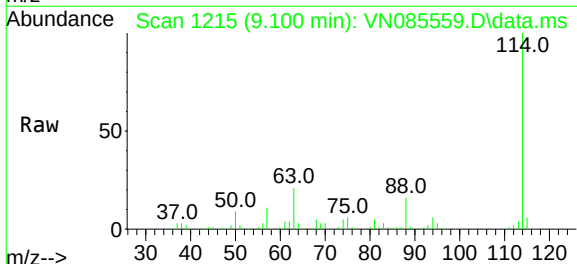
Tgt Ion: 114 Resp: 302819

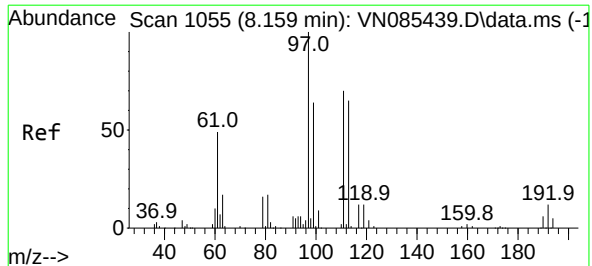
Ion Ratio Lower Upper

114 100

63 21.1 0.0 47.6

88 16.1 0.0 32.6





#35

Dibromofluoromethane

Concen: 52.849 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085559.D

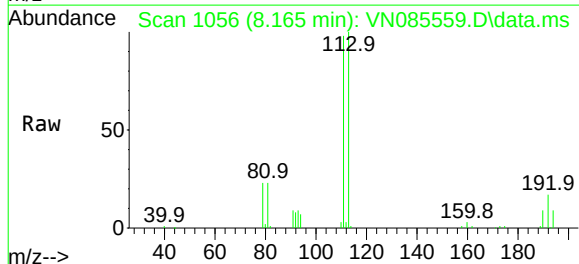
Acq: 29 Jan 2025 15:53

Instrument :

MSVOA_N

ClientSampleId :

JPP-4.5-012725



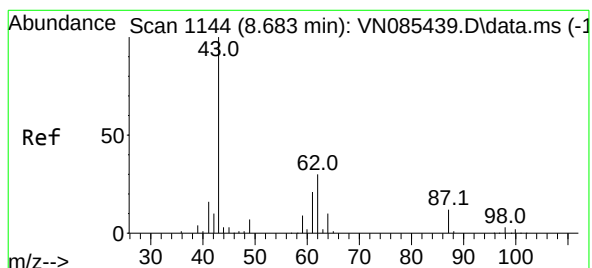
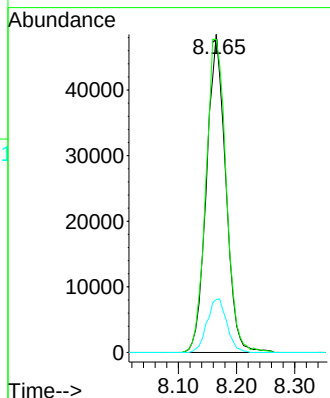
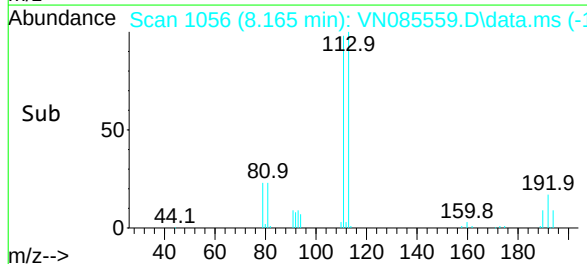
Tgt Ion: 113 Resp: 111026

Ion Ratio Lower Upper

113 100

111 104.7 82.7 124.1

192 17.4 14.3 21.5



#43

Isopropyl Acetate

Concen: 4.896 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.006 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

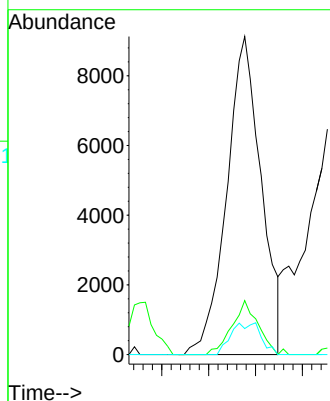
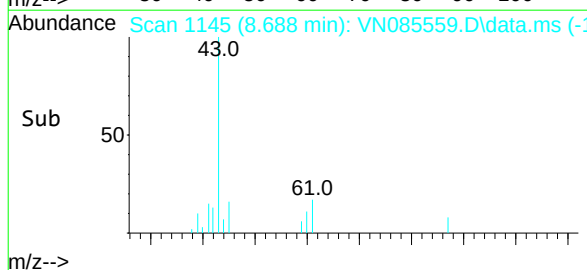
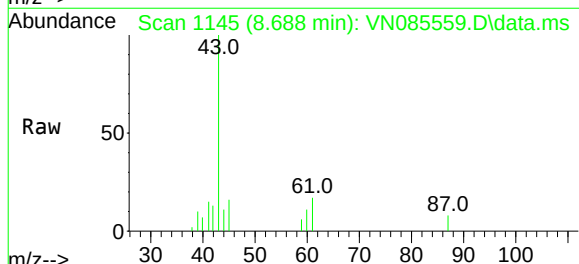
Tgt Ion: 43 Resp: 23346

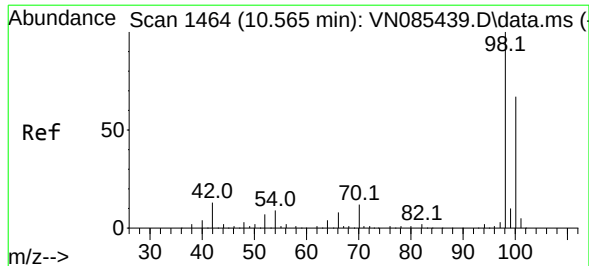
Ion Ratio Lower Upper

43 100

61 13.0 20.7 31.1#

87 8.7 9.8 14.8#





#50

Toluene-d8

Concen: 53.065 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

Instrument :

MSVOA_N

ClientSampleId :

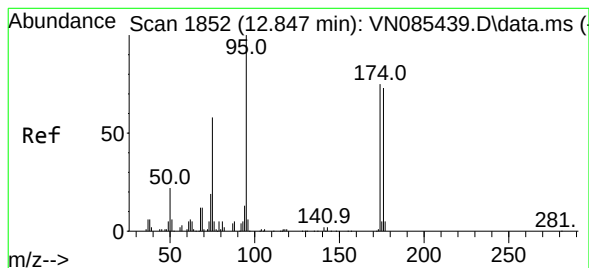
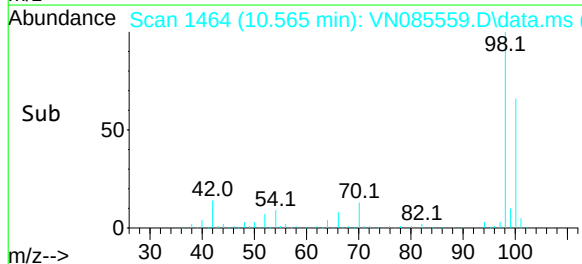
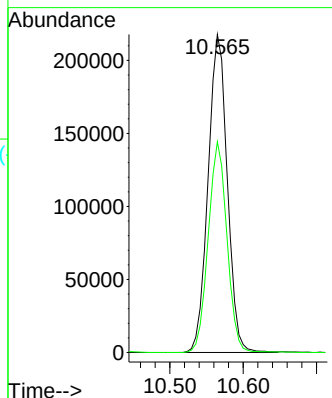
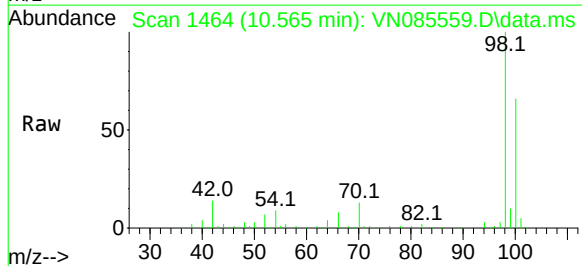
JPP-4.5-012725

Tgt Ion: 98 Resp: 396088

Ion Ratio Lower Upper

98 100

100 64.7 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 46.645 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

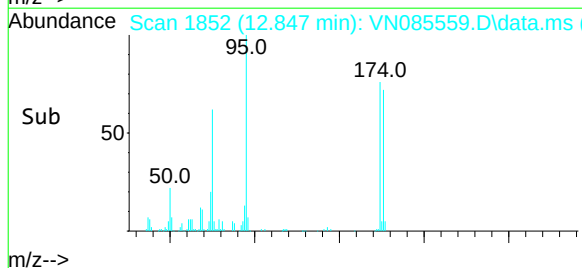
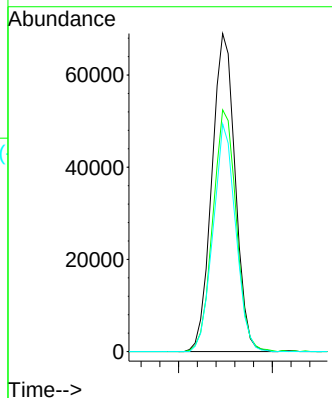
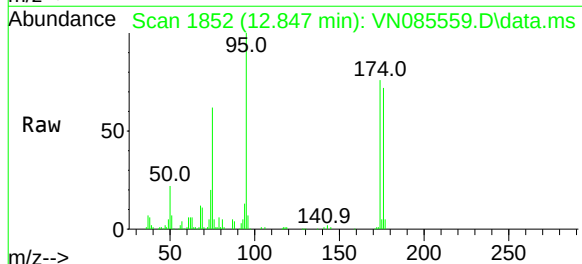
Tgt Ion: 95 Resp: 119098

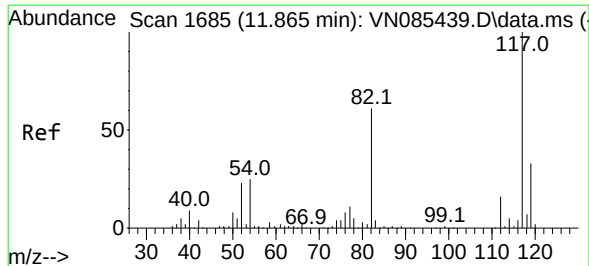
Ion Ratio Lower Upper

95 100

174 76.3 0.0 145.0

176 69.2 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. 0.000 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

Instrument :

MSVOA_N

ClientSampleId :

JPP-4.5-012725

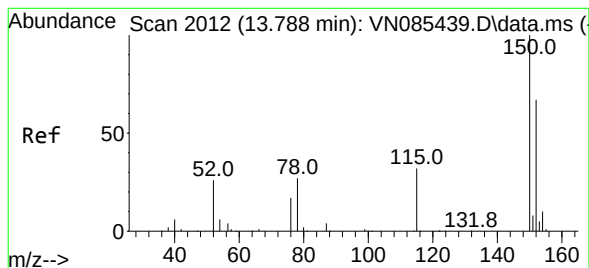
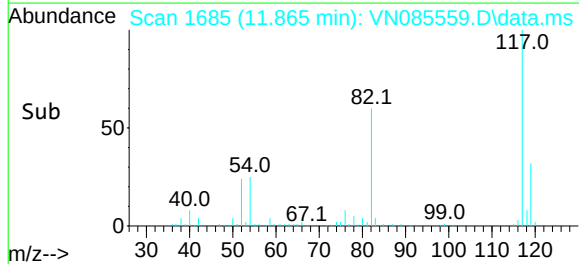
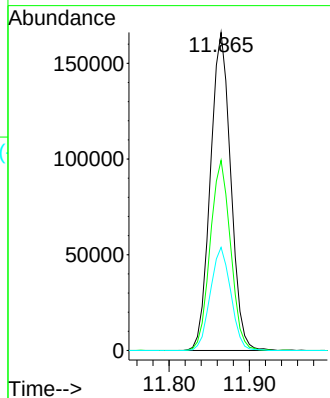
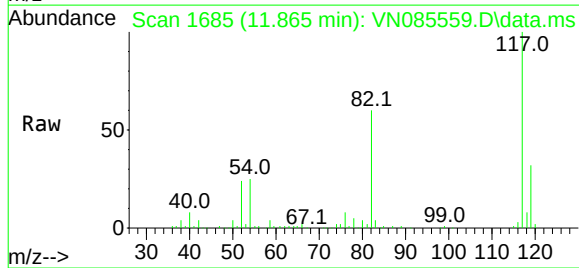
Tgt Ion:117 Resp: 292646

Ion Ratio Lower Upper

117 100

82 59.8 48.6 72.8

119 32.4 26.6 39.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.794 min Scan# 2013

Delta R.T. 0.006 min

Lab File: VN085559.D

Acq: 29 Jan 2025 15:53

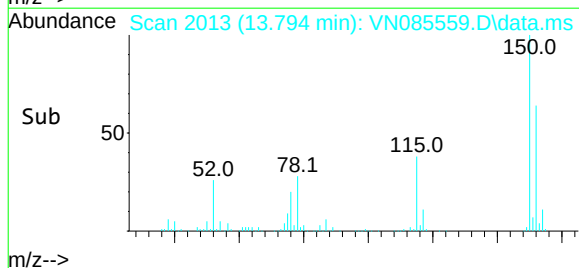
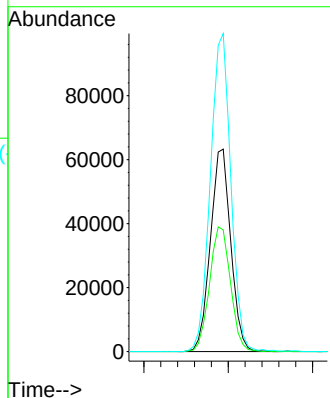
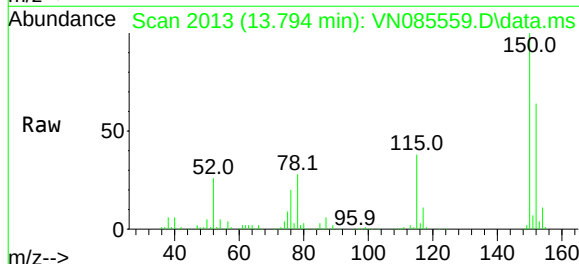
Tgt Ion:152 Resp: 106369

Ion Ratio Lower Upper

152 100

115 63.2 31.1 93.3

150 157.6 0.0 343.6



Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/27/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/28/25	
Client Sample ID:	JPP-16.2-012725			SDG No.:	Q1207	
Lab Sample ID:	Q1207-14			Matrix:	TCLP	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	TCLP VOA	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :	SW5035					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085560.D	1		01/29/25 16:17	VN012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	6.00	J	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.5		74 - 125	115%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		75 - 124	105%	SPK: 50
2037-26-5	Toluene-d8	53.3		86 - 113	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.0		77 - 121	88%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	161000	8.224			
540-36-3	1,4-Difluorobenzene	309000	9.1			
3114-55-4	Chlorobenzene-d5	294000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	108000	13.788			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085560.D
Acq On : 29 Jan 2025 16:17
Operator : JC\MD
Sample : Q1207-14
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-16.2-012725

Quant Time: Jan 30 00:37:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

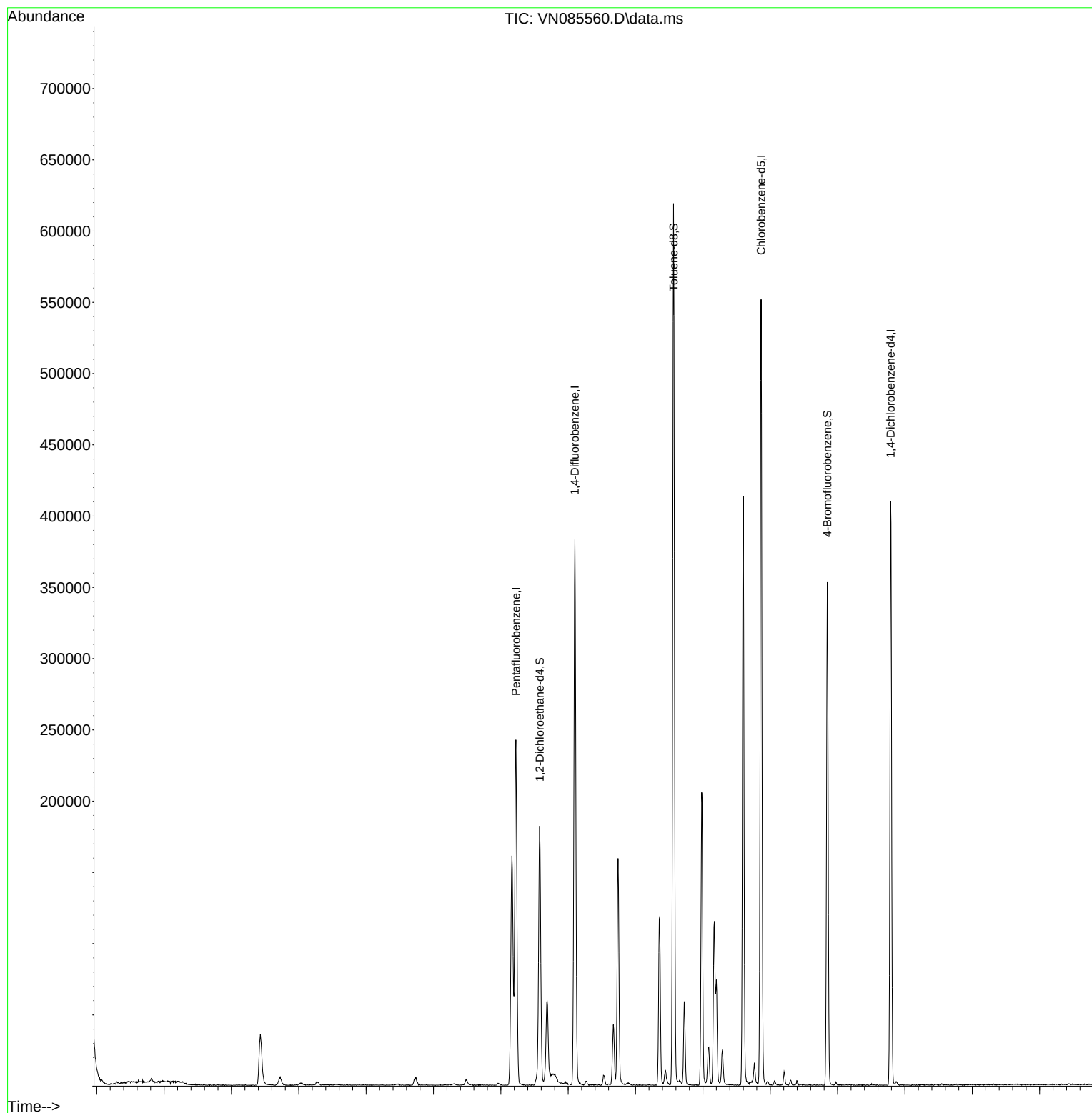
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	161120	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	308507	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	293568	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	107567	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	149611	57.525	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	=	115.040%	
35) Dibromofluoromethane	8.165	113	112460	52.545	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	=	105.080%	
50) Toluene-d8	10.565	98	405412	53.313	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	=	106.620%	
62) 4-Bromofluorobenzene	12.847	95	114545	44.034	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	=	88.060%	
Target Compounds						
16) Acetone	4.430	43	70089	83.405	ug/l	98
25) 2-Butanone	7.494	43	7426	6.005	ug/l	96
43) Isopropyl Acetate	8.688	43	72365	14.895	ug/l #	84

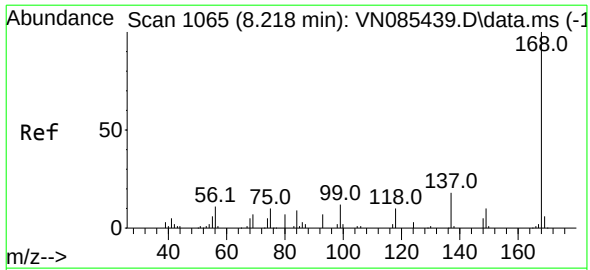
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085560.D
Acq On : 29 Jan 2025 16:17
Operator : JC\MD
Sample : Q1207-14
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-16.2-012725

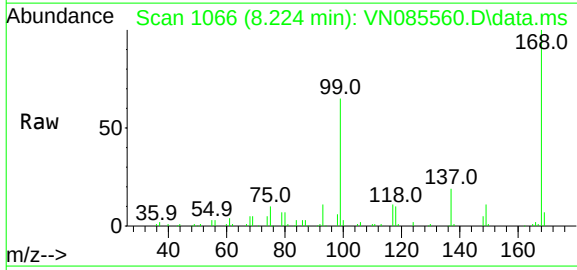
Quant Time: Jan 30 00:37:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



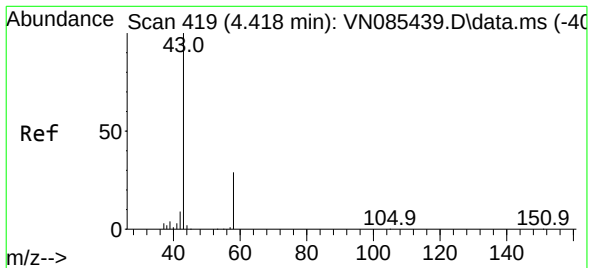
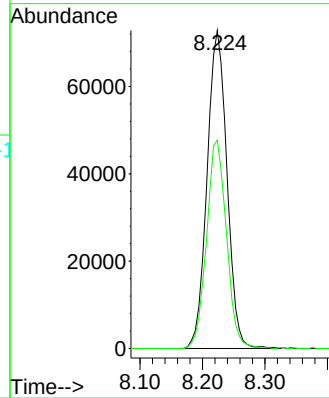
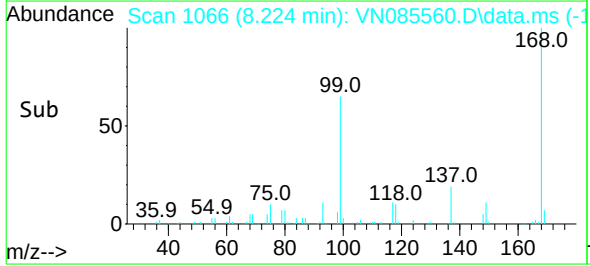


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085560.D
Acq: 29 Jan 2025 16:17

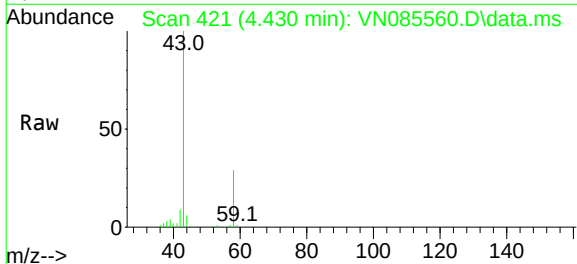
Instrument :
MSVOA_N
ClientSampleId :
JPP-16.2-012725



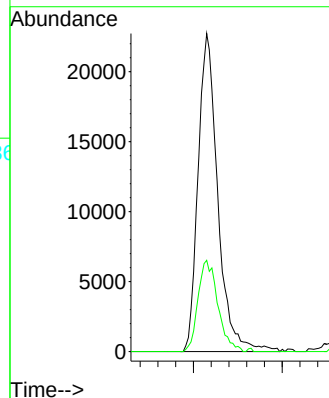
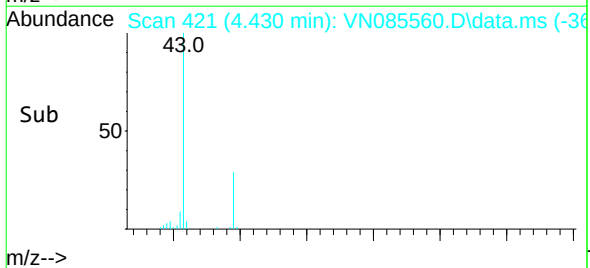
Tgt Ion:168 Resp: 161120
Ion Ratio Lower Upper
168 100
99 65.5 53.6 80.4

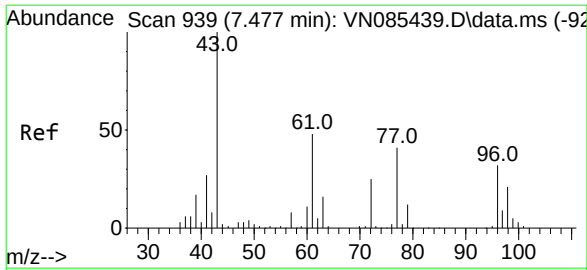


#16
Acetone
Concen: 83.405 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085560.D
Acq: 29 Jan 2025 16:17



Tgt Ion: 43 Resp: 70089
Ion Ratio Lower Upper
43 100
58 28.7 23.8 35.6





#25

2-Butanone

Concen: 6.005 ug/l

RT: 7.494 min Scan# 94

Delta R.T. 0.018 min

Lab File: VN085560.D

Acq: 29 Jan 2025 16:17

Instrument :

MSVOA_N

ClientSampleId :

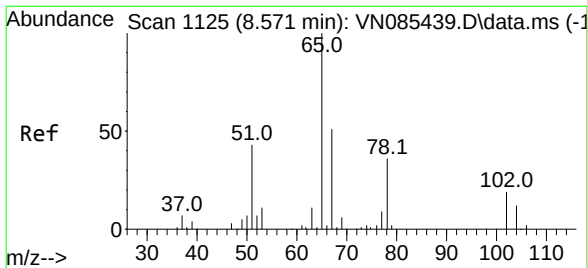
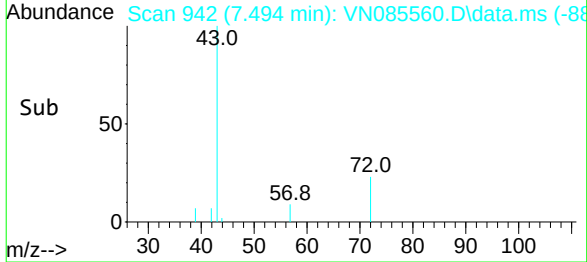
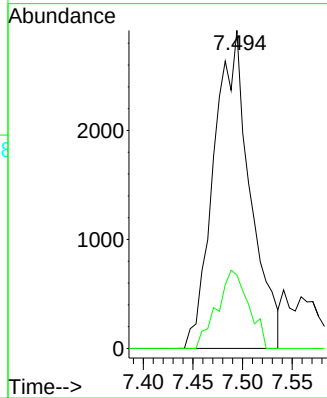
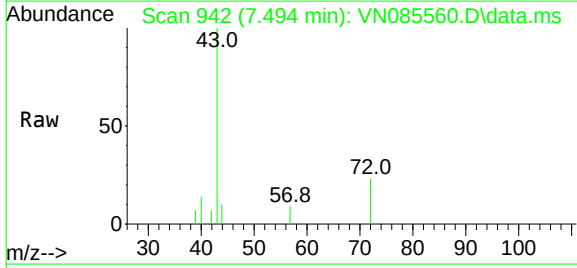
JPP-16.2-012725

Tgt Ion: 43 Resp: 7426

Ion Ratio Lower Upper

43 100

72 23.1 20.2 30.4



#33

1,2-Dichloroethane-d4

Concen: 57.525 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.006 min

Lab File: VN085560.D

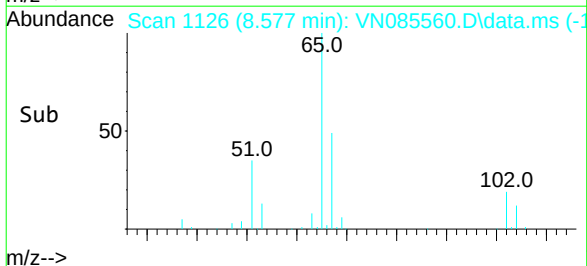
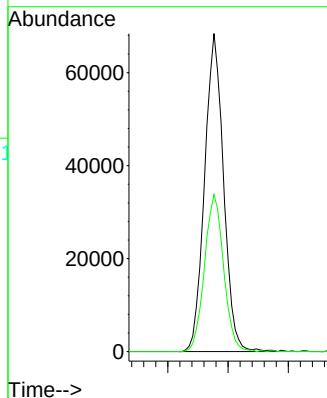
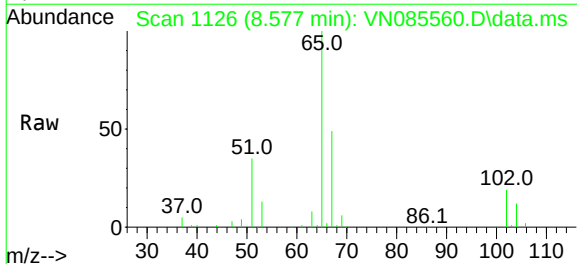
Acq: 29 Jan 2025 16:17

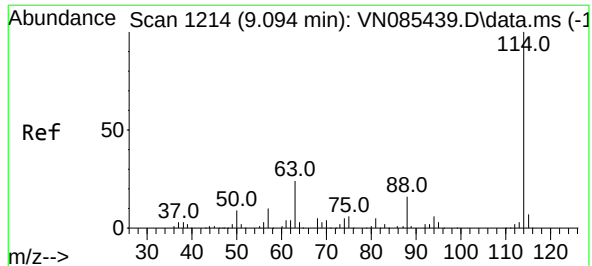
Tgt Ion: 65 Resp: 149611

Ion Ratio Lower Upper

65 100

67 49.8 0.0 101.6

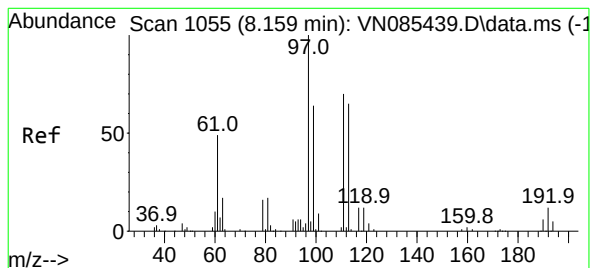
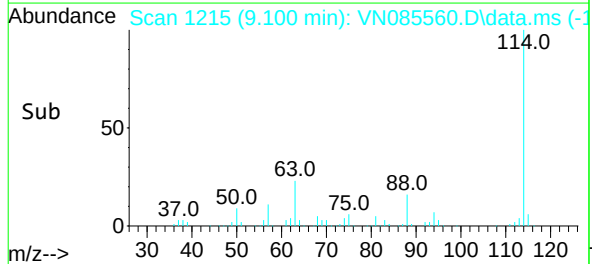
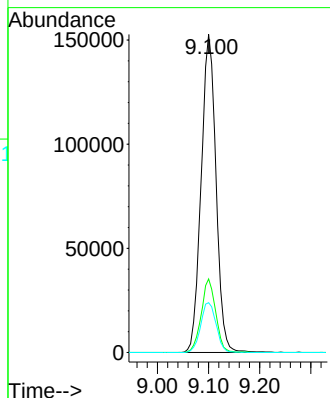
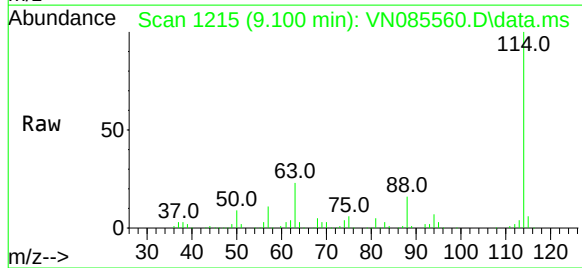




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1214
Delta R.T. 0.006 min
Lab File: VN085560.D
Acq: 29 Jan 2025 16:17

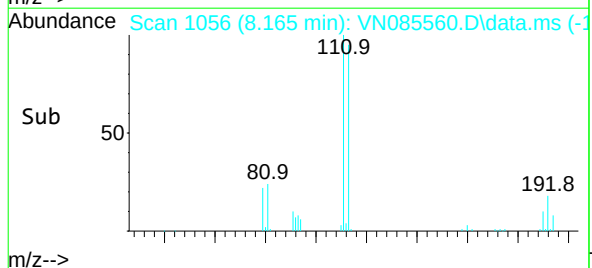
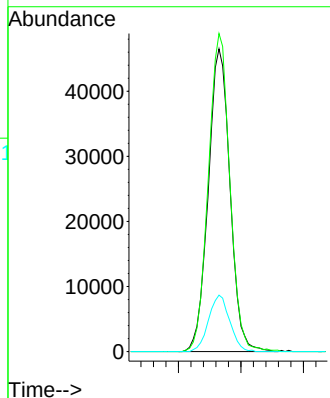
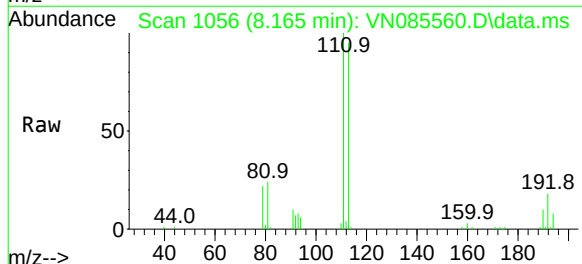
Instrument :
MSVOA_N
ClientSampleId :
JPP-16.2-012725

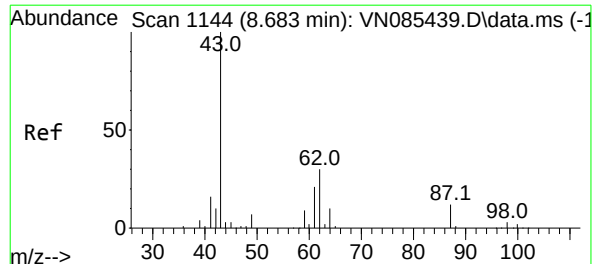
Tgt Ion	Ratio	Lower	Upper
114	100		
63	23.1	0.0	47.6
88	15.7	0.0	32.6



#35
Dibromofluoromethane
Concen: 52.545 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085560.D
Acq: 29 Jan 2025 16:17

Tgt Ion	Ratio	Lower	Upper
113	100		
111	103.7	82.7	124.1
192	18.1	14.3	21.5





#43

Isopropyl Acetate

Concen: 14.895 ug/l

RT: 8.688 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085560.D

Acq: 29 Jan 2025 16:17

Instrument :

MSVOA_N

ClientSampleId :

JPP-16.2-012725

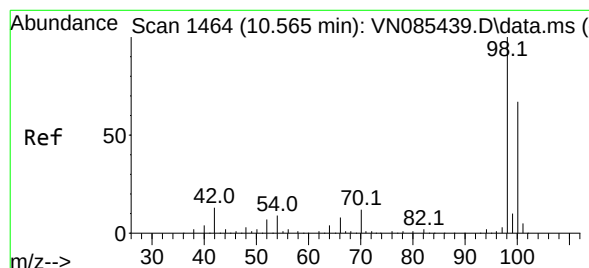
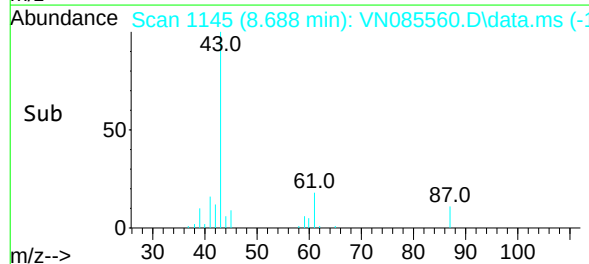
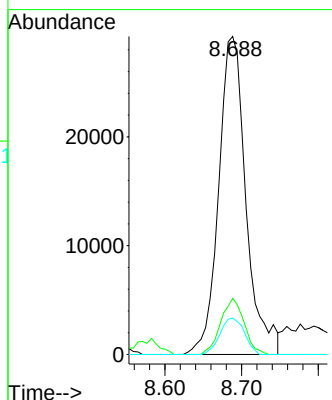
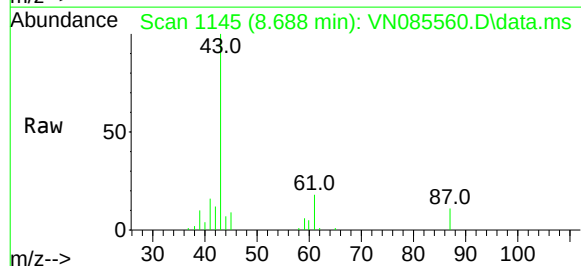
Tgt Ion: 43 Resp: 72365

Ion Ratio Lower Upper

43 100

61 15.1 20.7 31.1#

87 10.2 9.8 14.8



#50

Toluene-d8

Concen: 53.313 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085560.D

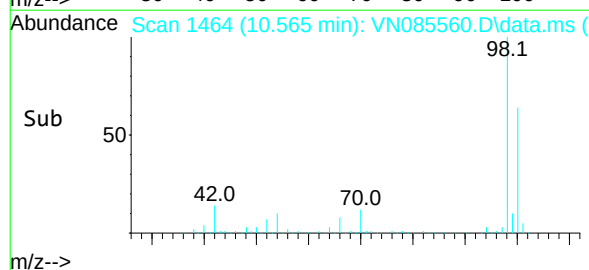
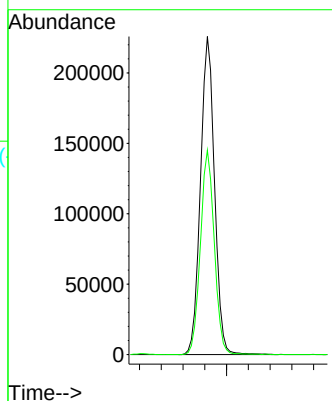
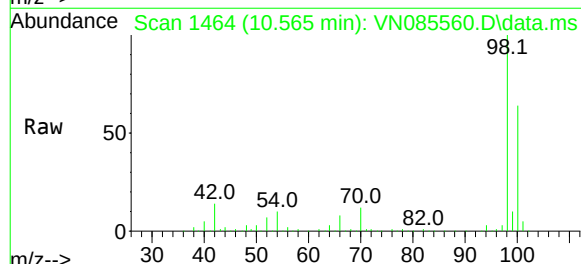
Acq: 29 Jan 2025 16:17

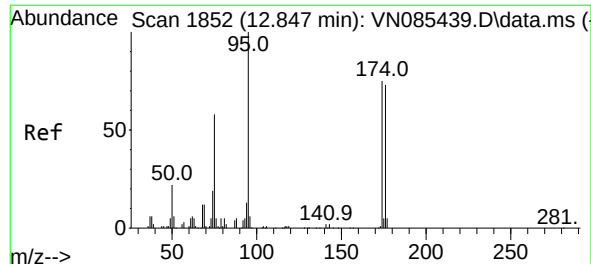
Tgt Ion: 98 Resp: 405412

Ion Ratio Lower Upper

98 100

100 63.4 52.2 78.4





#62

4-Bromofluorobenzene

Concen: 44.034 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085560.D

Acq: 29 Jan 2025 16:17

Instrument :

MSVOA_N

ClientSampleId :

JPP-16.2-012725

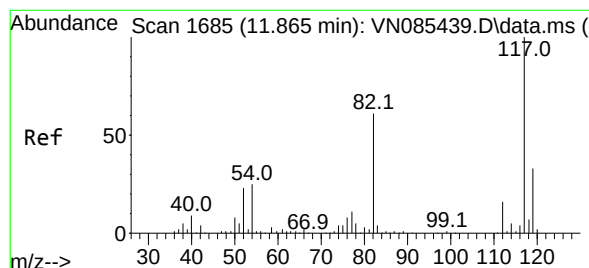
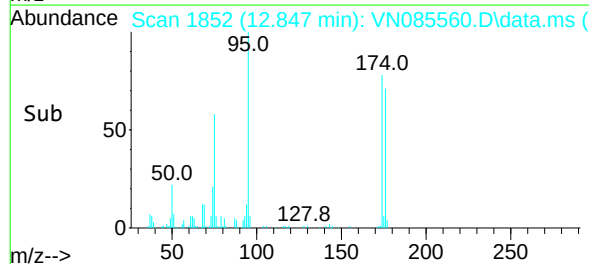
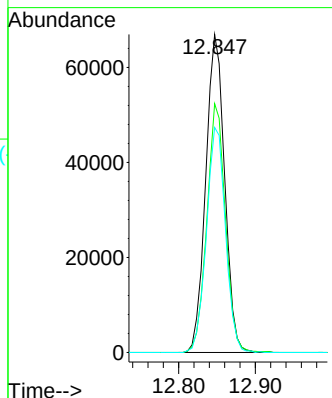
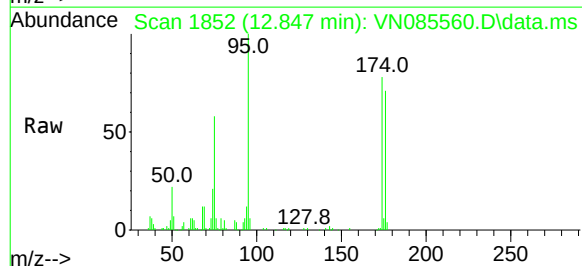
Tgt Ion: 95 Resp: 114545

Ion Ratio Lower Upper

95 100

174 77.0 0.0 145.0

176 71.2 0.0 142.4



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN085560.D

Acq: 29 Jan 2025 16:17

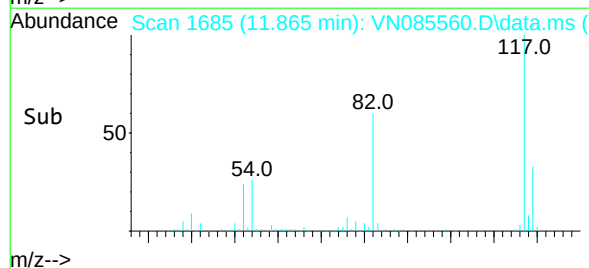
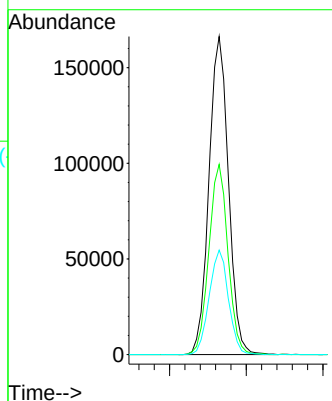
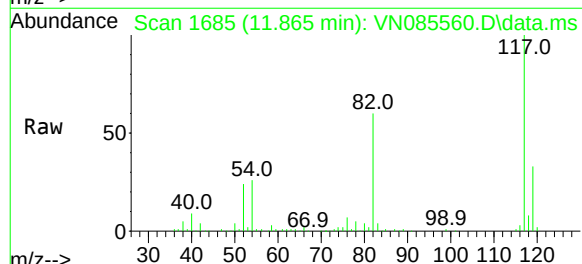
Tgt Ion: 117 Resp: 293568

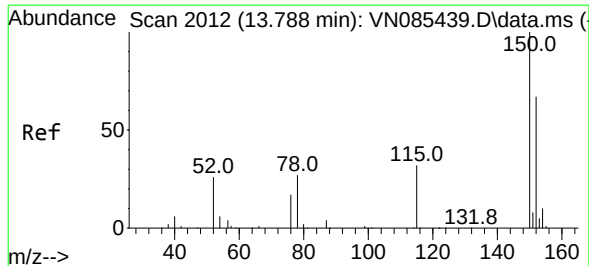
Ion Ratio Lower Upper

117 100

82 59.8 48.6 72.8

119 32.8 26.6 39.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 20

Delta R.T. -0.000 min

Lab File: VN085560.D

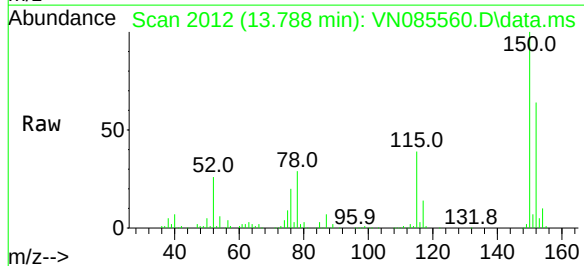
Acq: 29 Jan 2025 16:17

Instrument :

MSVOA_N

ClientSampleId :

JPP-16.2-012725



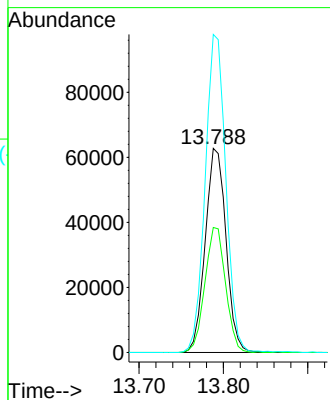
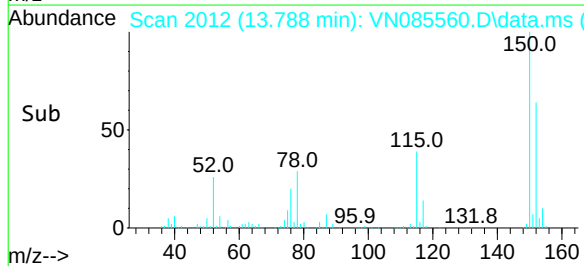
Tgt Ion:152 Resp: 107567

Ion Ratio Lower Upper

152 100

115 61.0 31.1 93.3

150 154.7 0.0 343.6



Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/27/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/28/25	
Client Sample ID:	JPP-20.2-012725			SDG No.:	Q1207	
Lab Sample ID:	Q1207-18			Matrix:	TCLP	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	TCLP VOA	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :	SW5035					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085561.D	1		01/29/25 16:41	VN012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	5.50	J	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	58.3		74 - 125	117%	SPK: 50
1868-53-7	Dibromofluoromethane	51.7		75 - 124	103%	SPK: 50
2037-26-5	Toluene-d8	53.5		86 - 113	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.3		77 - 121	89%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	160000	8.224			
540-36-3	1,4-Difluorobenzene	312000	9.1			
3114-55-4	Chlorobenzene-d5	299000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	104000	13.788			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085561.D
Acq On : 29 Jan 2025 16:41
Operator : JC\MD
Sample : Q1207-18
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-20.2-012725

Quant Time: Jan 30 00:38:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

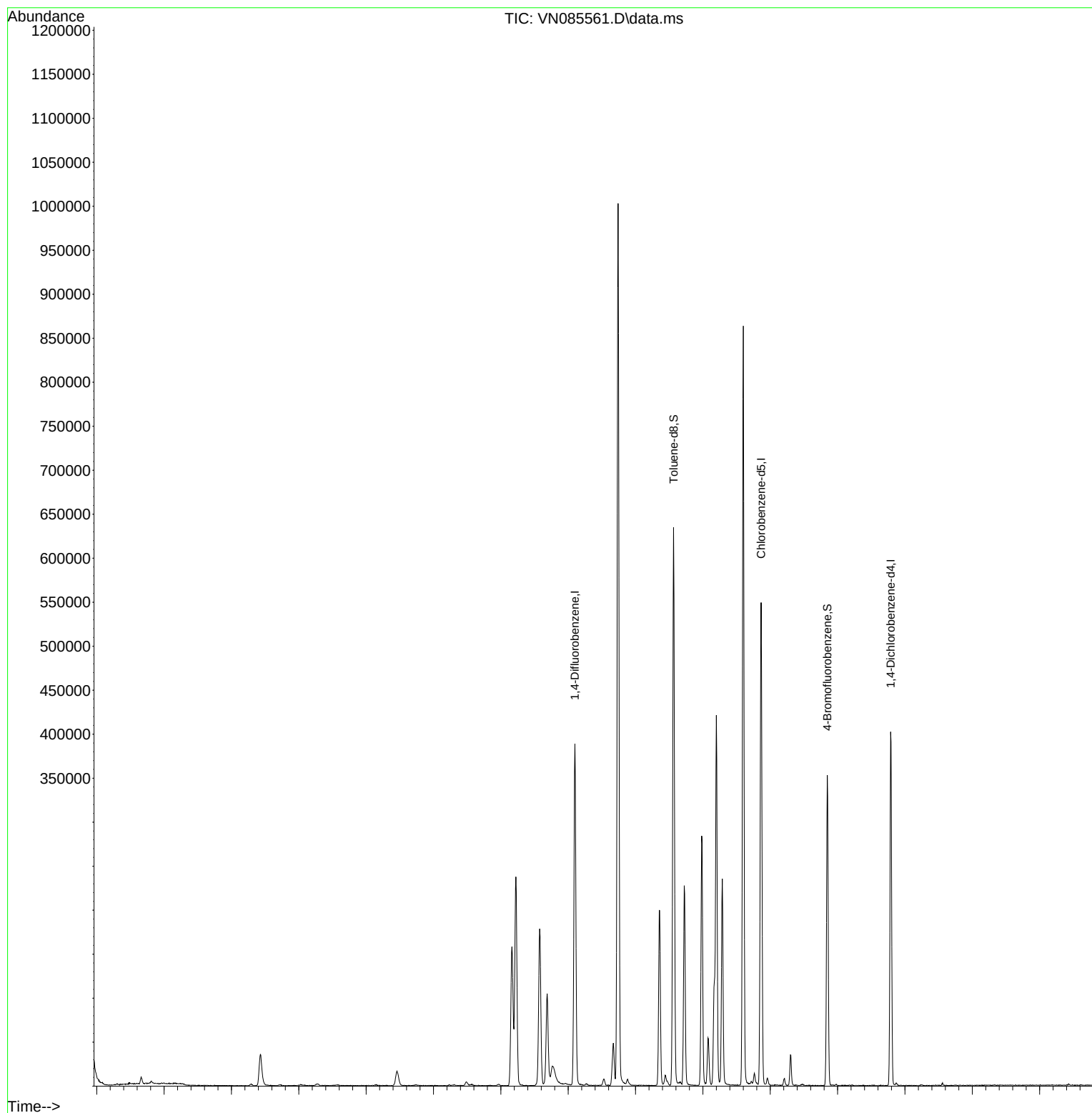
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	159671	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	312230	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	298965	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	104378	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	150154	58.257	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	=	116.520%	
35) Dibromofluoromethane	8.165	113	111970	51.692	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	=	103.380%	
50) Toluene-d8	10.565	98	411896	53.520	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	=	107.040%	
62) 4-Bromofluorobenzene	12.847	95	116737	44.342	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	=	88.680%	
Target Compounds						
16) Acetone	4.430	43	67993	81.645	ug/l	98
25) 2-Butanone	7.488	43	6742	5.501	ug/l	92
43) Isopropyl Acetate	8.688	43	115617	23.514	ug/l #	87

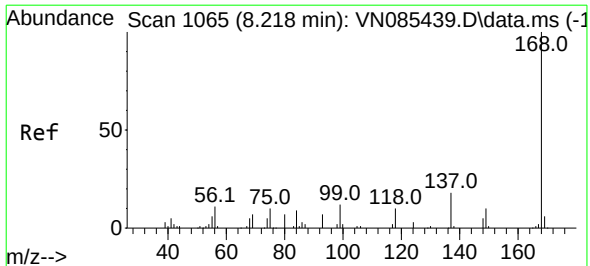
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085561.D
Acq On : 29 Jan 2025 16:41
Operator : JC\MD
Sample : Q1207-18
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
JPP-20.2-012725

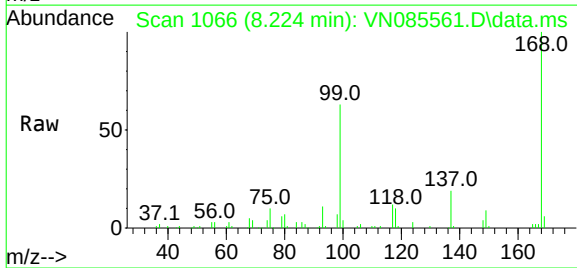
Quant Time: Jan 30 00:38:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



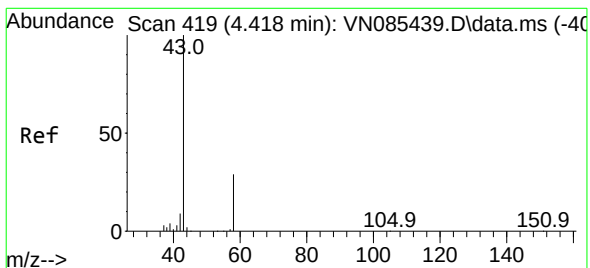
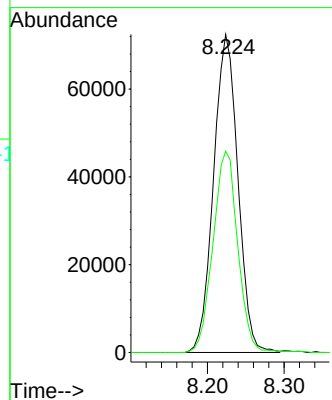
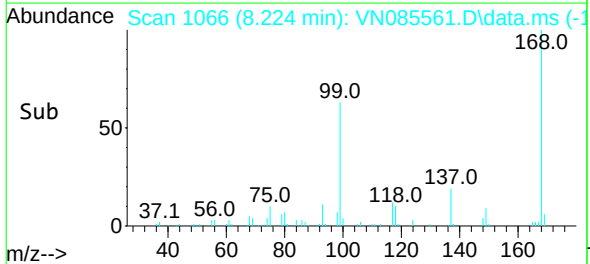


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085561.D
Acq: 29 Jan 2025 16:41

Instrument :
MSVOA_N
ClientSampleId :
JPP-20.2-012725

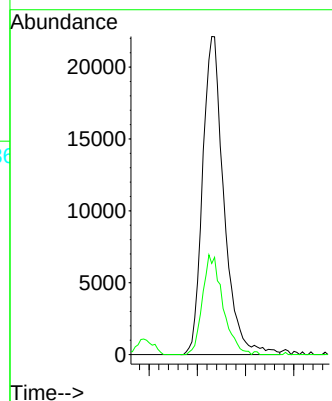
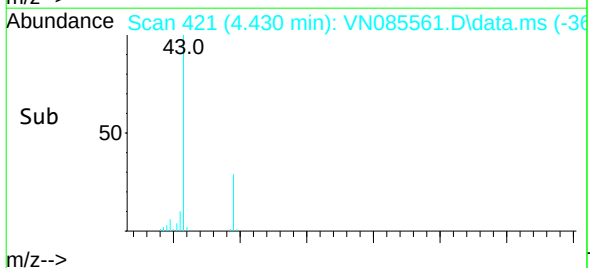
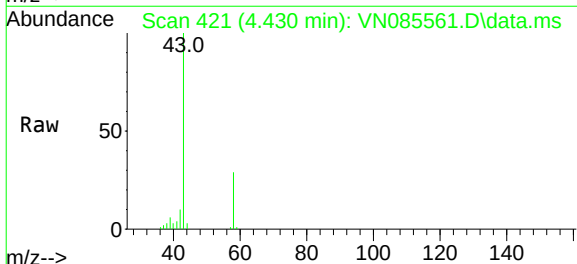


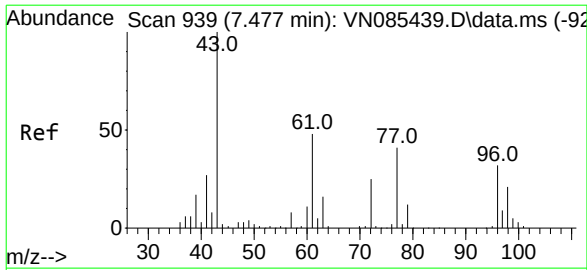
Tgt Ion:168 Resp: 159671
Ion Ratio Lower Upper
168 100
99 63.3 53.6 80.4



#16
Acetone
Concen: 81.645 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085561.D
Acq: 29 Jan 2025 16:41

Tgt Ion: 43 Resp: 67993
Ion Ratio Lower Upper
43 100
58 28.7 23.8 35.6





#25

2-Butanone

Concen: 5.501 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.012 min

Lab File: VN085561.D

Acq: 29 Jan 2025 16:41

Instrument :

MSVOA_N

ClientSampleId :

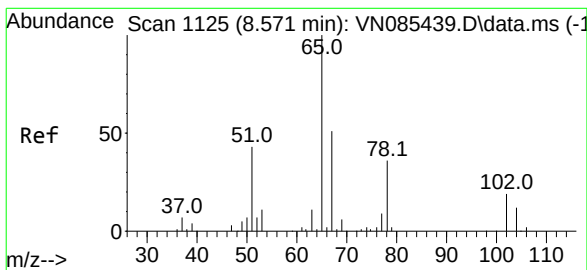
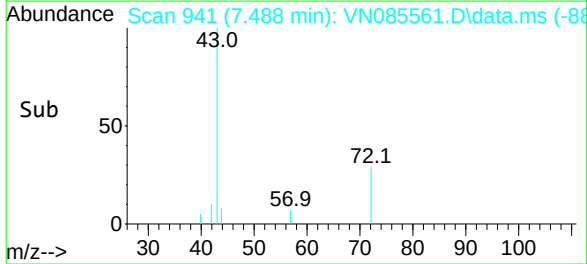
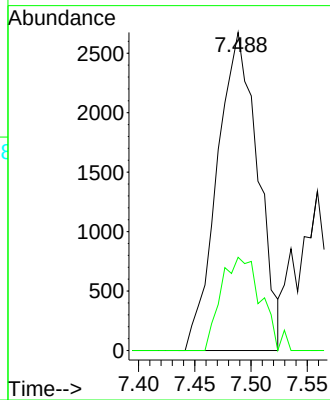
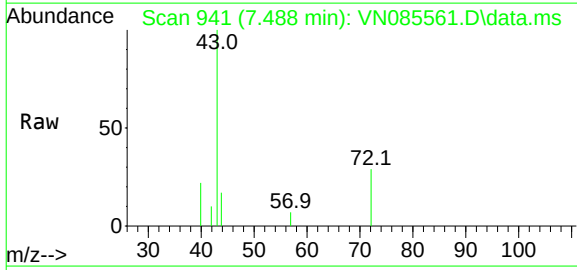
JPP-20.2-012725

Tgt Ion: 43 Resp: 6742

Ion Ratio Lower Upper

43 100

72 29.3 20.2 30.4



#33

1,2-Dichloroethane-d4

Concen: 58.257 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.006 min

Lab File: VN085561.D

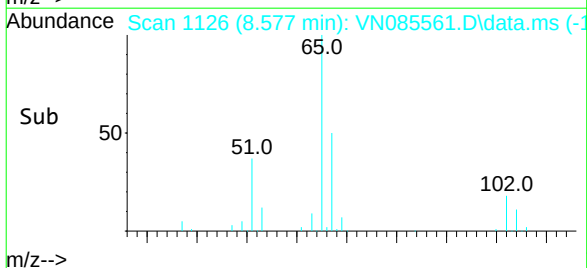
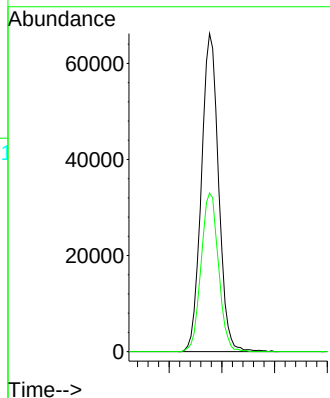
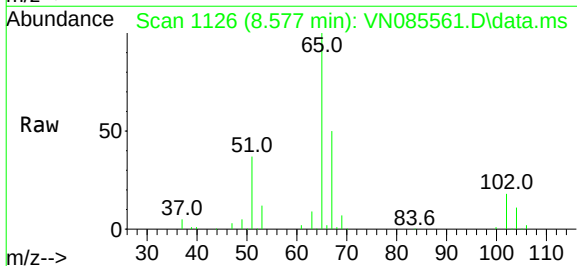
Acq: 29 Jan 2025 16:41

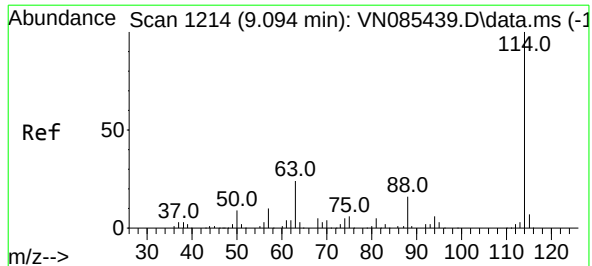
Tgt Ion: 65 Resp: 150154

Ion Ratio Lower Upper

65 100

67 50.3 0.0 101.6

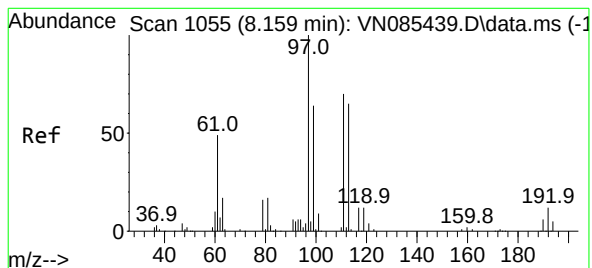
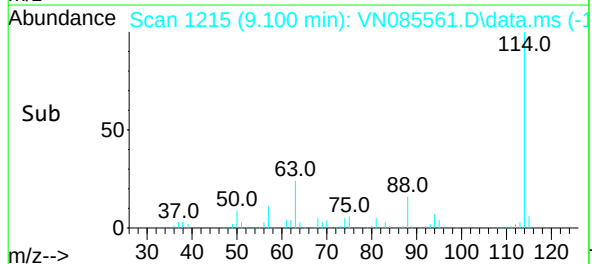
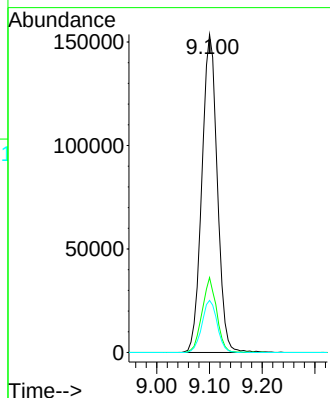
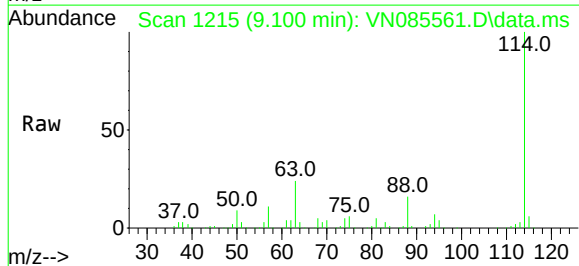




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1214
Delta R.T. 0.006 min
Lab File: VN085561.D
Acq: 29 Jan 2025 16:41

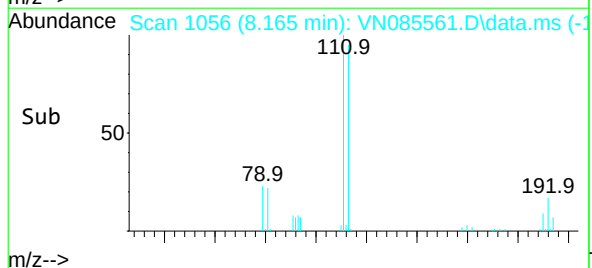
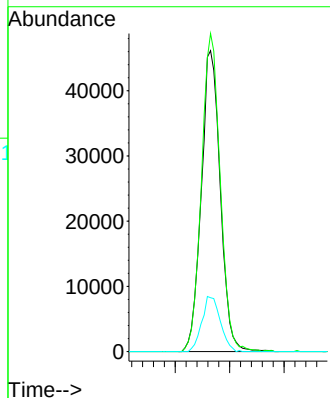
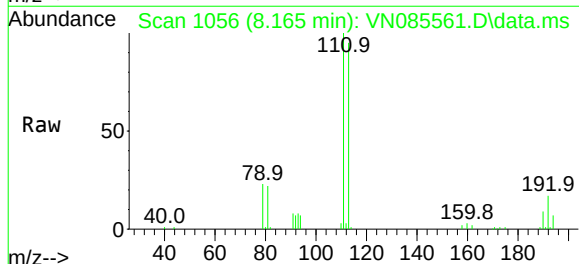
Instrument :
MSVOA_N
ClientSampleId :
JPP-20.2-012725

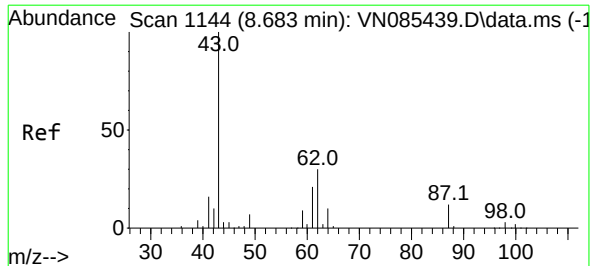
Tgt Ion	Ratio	Lower	Upper
114	100		
63	23.5	0.0	47.6
88	16.4	0.0	32.6



#35
Dibromofluoromethane
Concen: 51.692 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085561.D
Acq: 29 Jan 2025 16:41

Tgt Ion	Ratio	Lower	Upper
113	100		
111	104.1	82.7	124.1
192	17.8	14.3	21.5





#43

Isopropyl Acetate

Concen: 23.514 ug/l

RT: 8.688 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085561.D

Acq: 29 Jan 2025 16:41

Instrument :

MSVOA_N

ClientSampleId :

JPP-20.2-012725

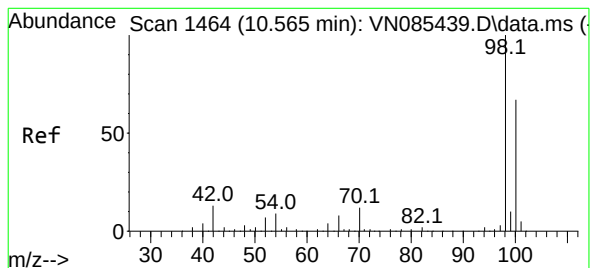
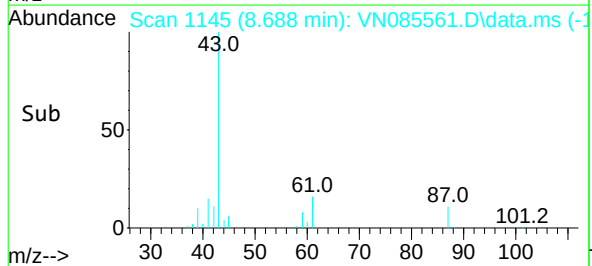
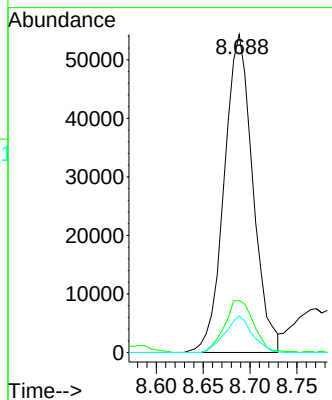
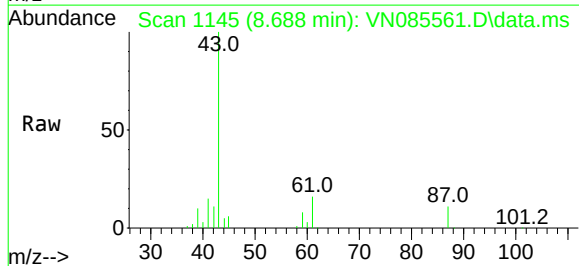
Tgt Ion: 43 Resp: 115617

Ion Ratio Lower Upper

43 100

61 16.7 20.7 31.1#

87 10.8 9.8 14.8



#50

Toluene-d8

Concen: 53.520 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085561.D

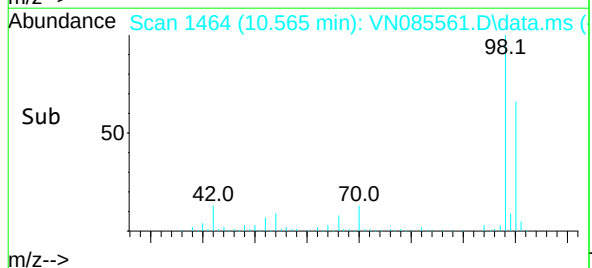
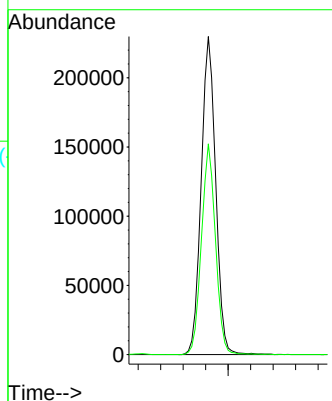
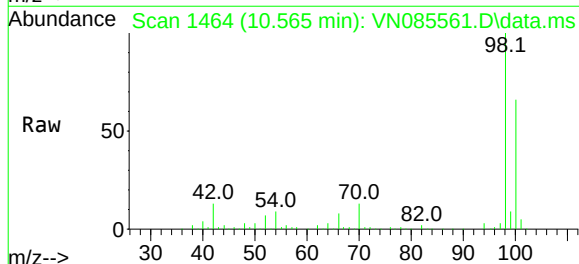
Acq: 29 Jan 2025 16:41

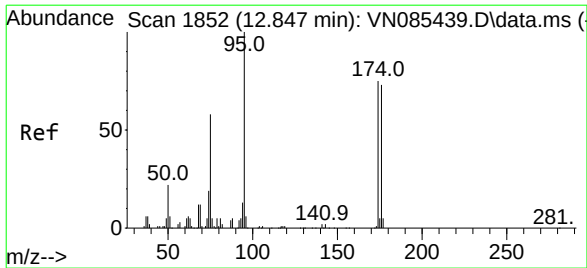
Tgt Ion: 98 Resp: 411896

Ion Ratio Lower Upper

98 100

100 64.2 52.2 78.4

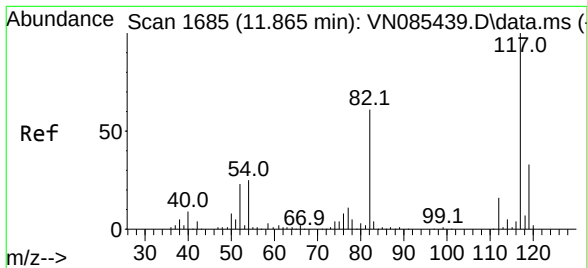
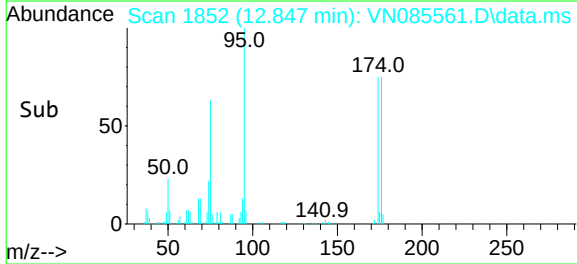
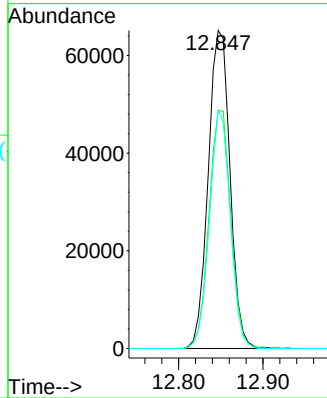
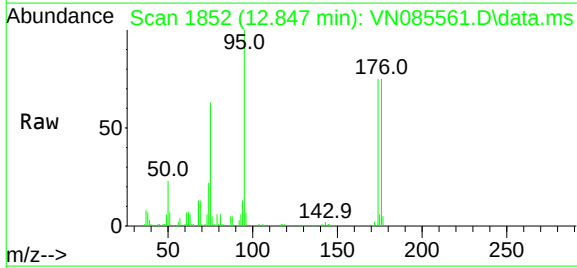




#62
4-Bromofluorobenzene
Concen: 44.342 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085561.D
Acq: 29 Jan 2025 16:41

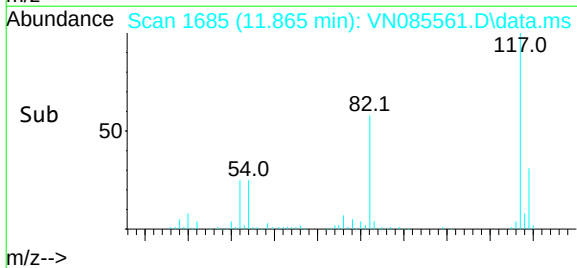
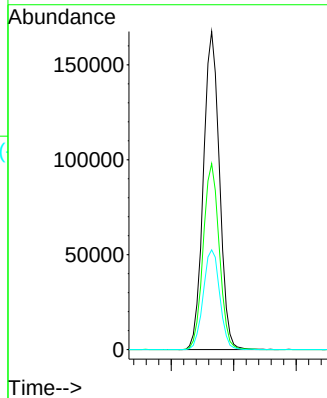
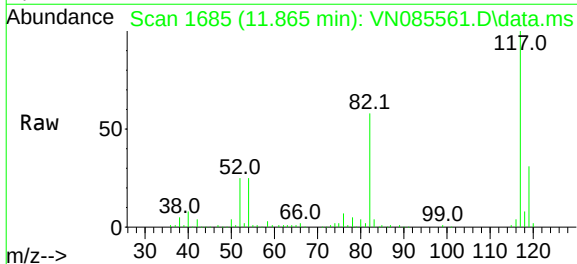
Instrument :
MSVOA_N
ClientSampleId :
JPP-20.2-012725

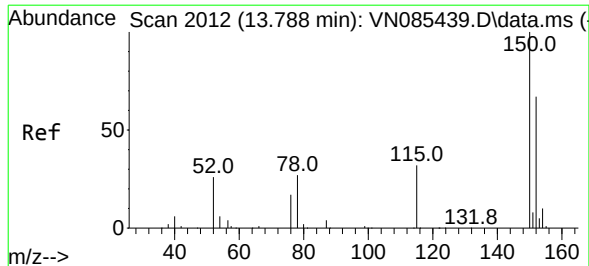
Tgt Ion	Ratio	Lower	Upper
95	100		
174	75.3	0.0	145.0
176	71.3	0.0	142.4



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085561.D
Acq: 29 Jan 2025 16:41

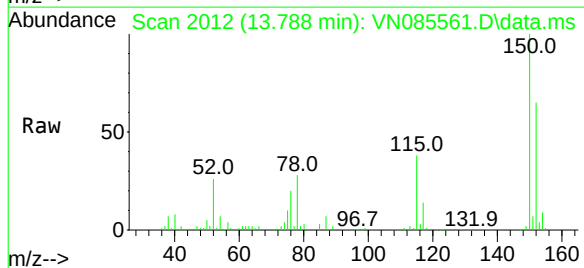
Tgt Ion	Ratio	Lower	Upper
117	100		
82	58.5	48.6	72.8
119	31.4	26.6	39.8



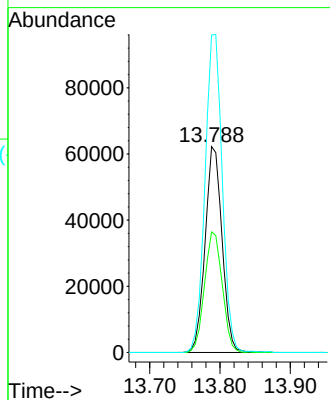
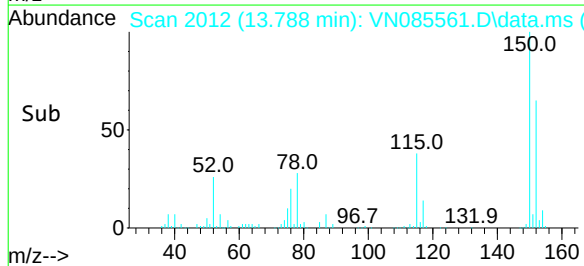


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085561.D
Acq: 29 Jan 2025 16:41

Instrument :
MSVOA_N
ClientSampleId :
JPP-20.2-012725



Tgt Ion:	152	Resp:	104378
Ion Ratio	Lower	Upper	
152	100		
115	61.0	31.1	93.3
150	157.0	0.0	343.6





CALIBRATION SUMMARY

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: RUTW01
 Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG No.: Q1207
 Instrument ID: MSVOA_N Calibration Date(s): 01/14/2025 01/14/2025
 Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN085438.D		RRF050 = VN085439.D		RRF020 = VN085440.D			
		RRF010 = VN085441.D		RRF005 = VN085442.D		RRF001 = VN085443.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
Vinyl Chloride	0.697	0.686	0.727	0.711	0.781	0.819	0.737	7.1	
1,1-Dichloroethene	0.548	0.533	0.556	0.526	0.559	0.497	0.537	4.3	
2-Butanone	0.378	0.390	0.398	0.363	0.387	0.386	0.384	3.1	
Carbon Tetrachloride	0.574	0.530	0.579	0.529	0.565	0.567	0.557	4	
Chloroform	1.197	1.175	1.241	1.169	1.253	1.273	1.218	3.6	
Benzene	1.551	1.449	1.527	1.376	1.474	1.400	1.463	4.7	
1,2-Dichloroethane	0.569	0.547	0.575	0.522	0.574	0.517	0.551	4.8	
Trichloroethene	0.362	0.324	0.352	0.310	0.343	0.352	0.341	5.8	
Tetrachloroethene	0.351	0.322	0.365	0.338	0.346	0.323	0.341	4.9	
Chlorobenzene	1.133	1.076	1.154	1.047	1.110	1.051	1.095	4	
1,2-Dichloroethane-d4	0.774	0.831	0.754	0.762	0.914		0.807	8.3	
Dibromofluoromethane	0.359	0.358	0.335	0.310	0.373		0.347	7.1	
Toluene-d8	1.339	1.267	1.207	1.076	1.274		1.232	8.1	
4-Bromofluorobenzene	0.475	0.449	0.410	0.357	0.417		0.422	10.6	

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

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
 Method File : 82N011425W.M
 Title : SW846 8260
 Last Update : Wed Jan 15 02:16:08 2025
 Response Via : Initial Calibration

Calibration Files

1 =VN085443.D 5 =VN085442.D 10 =VN085441.D 20 =VN085440.D 50 =VN085439.D 100 =VN085438.D

D

	Compound	1	5	10	20	50	100	Avg	%RSD
1) I	Pentafluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.714	0.708	0.667	0.681	0.629	0.664	0.677	4.59
3) P	Chloromethane	0.839	0.779	0.693	0.727	0.680	0.680	0.733	8.77
4) C	Vinyl Chloride	0.819	0.781	0.711	0.727	0.686	0.697	0.737	7.06#
5) T	Bromomethane	0.525	0.437	0.454	0.417	0.392	0.445		11.26
6) T	Chloroethane	0.542	0.505	0.429	0.468	0.424	0.435	0.467	10.27
7) T	Trichlorofluor...	1.157	1.077	1.040	1.097	0.997	1.046	1.069	5.14
8) T	Diethyl Ether	0.457	0.357	0.317	0.363	0.360	0.362	0.369	12.59
9) T	1,1,2-Trichlor...	0.646	0.639	0.587	0.609	0.542	0.590	0.602	6.35
10) T	Methyl Iodide	0.661	0.640	0.704	0.719	0.723	0.690		5.35
11) T	Tert butyl alc...	0.097	0.092	0.095	0.093	0.085	0.092		4.80
12) CM	1,1-Dichloroet...	0.497	0.559	0.526	0.556	0.533	0.548	0.537	4.31#
13) T	Acrolein	0.101	0.131	0.124	0.140	0.136	0.126		12.09
14) T	Allyl chloride	0.952	0.897	0.823	0.843	0.846	0.863	0.871	5.42
15) T	Acrylonitrile	0.298	0.299	0.275	0.303	0.298	0.289	0.294	3.39
16) T	Acetone	0.306	0.269	0.247	0.252	0.252	0.238	0.261	9.28
17) T	Carbon Disulfide	1.978	1.719	1.537	1.647	1.477	1.555	1.652	10.95
18) T	Methyl Acetate	0.871	0.810	0.779	0.758	0.790	0.751	0.793	5.54
19) T	Methyl tert-bu...	1.545	1.685	1.664	1.853	1.873	1.834	1.742	7.53
20) T	Methylene Chlo...	0.656	0.696	0.606	0.658	0.629	0.629	0.646	4.86
21) T	trans-1,2-Dich...	0.632	0.569	0.539	0.574	0.555	0.571	0.573	5.50
22) T	Diisopropyl ether	1.705	1.918	1.834	2.076	2.037	2.026	1.933	7.38
23) T	Vinyl Acetate	1.110	1.270	1.279	1.466	1.495	1.495	1.353	11.67
24) P	1,1-Dichloroet...	1.204	1.226	1.100	1.206	1.170	1.164	1.178	3.81
25) T	2-Butanone	0.386	0.387	0.363	0.398	0.390	0.378	0.384	3.12
26) T	2,2-Dichloropr...	0.930	0.986	0.922	0.985	0.936	0.958	0.953	2.96
27) T	cis-1,2-Dichlo...	0.655	0.669	0.639	0.715	0.683	0.691	0.675	4.02
28) T	Bromochloromet...	0.624	0.595	0.486	0.513	0.542	0.530	0.548	9.44
29) T	Tetrahydrofuran	0.221	0.236	0.233	0.261	0.260	0.248	0.243	6.58
30) C	Chloroform	1.273	1.253	1.169	1.241	1.175	1.197	1.218	3.59#
31) T	Cyclohexane	1.198	1.026	1.033	0.881	0.984	1.024		11.18
32) T	1,1,1-Trichlor...	1.102	1.148	1.000	1.091	1.016	1.053	1.068	5.24
33) S	1,2-Dichloroet...	0.914	0.762	0.754	0.831	0.774	0.807		8.28
34) I	1,4-Difluorobenzene	-----ISTD-----							
35) S	Dibromofluorom...	0.373	0.310	0.335	0.358	0.359	0.347		7.10
36) T	1,1-Dichloropr...	0.509	0.490	0.441	0.499	0.462	0.521	0.487	6.17
37) T	Ethyl Acetate	0.504	0.520	0.452	0.488	0.488	0.496	0.491	4.66
38) T	Carbon Tetrach...	0.567	0.565	0.529	0.579	0.530	0.574	0.557	3.96
39) T	Methylcyclohexane	0.397	0.437	0.407	0.477	0.463	0.564	0.457	13.29
40) TM	Benzene	1.400	1.474	1.376	1.527	1.449	1.551	1.463	4.70
41) T	Methacrylonitrile	0.241	0.227	0.248	0.268	0.270	0.280	0.256	7.89
42) TM	1,2-Dichloroet...	0.517	0.574	0.522	0.575	0.547	0.569	0.551	4.78
43) T	Isopropyl Acetate	0.793	0.764	0.719	0.801	0.813	0.835	0.787	5.20
44) TM	Trichloroethene	0.352	0.343	0.310	0.352	0.324	0.362	0.341	5.79
45) C	1,2-Dichloropr...	0.371	0.388	0.334	0.388	0.371	0.390	0.374	5.69#
46) T	Dibromomethane	0.292	0.254	0.254	0.277	0.267	0.275	0.270	5.50
47) T	Bromodichlorom...	0.484	0.569	0.514	0.579	0.559	0.590	0.549	7.48
48) T	Methyl methacr...	0.311	0.326	0.321	0.369	0.392	0.406	0.354	11.37
49) T	1,4-Dioxane	0.006	0.006	0.006	0.006	0.006	0.006	0.006	6.72
50) S	Toluene-d8	1.274	1.076	1.207	1.267	1.339	1.232		8.07
51) T	4-Methyl-2-Pen...	0.380	0.443	0.432	0.495	0.492	0.499	0.457	10.33
52) CM	Toluene	0.690	0.835	0.808	0.919	0.870	0.964	0.848	11.27#
53) T	t-1,3-Dichloro...	0.416	0.527	0.481	0.544	0.551	0.594	0.519	11.98
54) T	cis-1,3-Dichlo...	0.450	0.538	0.527	0.601	0.588	0.623	0.554	11.40
55) T	1,1,2-Trichlor...	0.314	0.349	0.309	0.353	0.340	0.348	0.335	5.67

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\

Method File : 82N011425W.M

56)	T	Ethyl methacry...	0.317	0.434	0.418	0.521	0.544	0.582	0.469	20.85
57)	T	1,3-Dichloropr...	0.514	0.584	0.555	0.618	0.602	0.627	0.583	7.31
58)	T	2-Chloroethyl ...	0.163	0.205	0.185	0.226	0.241	0.258	0.213	16.67
59)	T	2-Hexanone	0.261	0.302	0.298	0.353	0.357	0.358	0.321	12.60
60)	T	Dibromochlorom...	0.386	0.420	0.368	0.412	0.414	0.430	0.405	5.79
61)	T	1,2-Dibromoethane	0.334	0.321	0.309	0.356	0.334	0.349	0.334	5.16
62)	S	4-Bromofluorob...	0.417	0.357	0.410	0.449	0.475	0.422		10.57
63)	I	Chlorobenzene-d5	-----ISTD-----							
64)	T	Tetrachloroethene	0.323	0.346	0.338	0.365	0.322	0.351	0.341	4.87
65)	PM	Chlorobenzene	1.051	1.110	1.047	1.154	1.076	1.133	1.095	4.03
66)	T	1,1,1,2-Tetrac...	0.425	0.412	0.371	0.408	0.392	0.404	0.402	4.65
67)	C	Ethyl Benzene	1.430	1.709	1.685	1.940	1.867	2.072	1.784	12.67#
68)	T	m/p-Xylenes	0.492	0.616	0.615	0.750	0.707	0.775	0.659	16.01
69)	T	o-Xylene	0.482	0.582	0.584	0.713	0.681	0.738	0.630	15.47
70)	T	Styrene	0.742	0.929	0.956	1.186	1.173	1.271	1.043	19.21
71)	P	Bromoform	0.235	0.284	0.273	0.312	0.311	0.311	0.288	10.61
72)	I	1,4-Dichlorobenzen...	-----ISTD-----							
73)	T	Isopropylbenzene	2.766	3.157	3.272	3.681	3.448	3.922	3.375	12.06
74)	T	N-amyl acetate	1.364	1.394	1.405	1.642	1.622	1.673	1.517	9.43
75)	P	1,1,2,2-Tetrac...	1.314	1.228	1.157	1.187	1.145	1.121	1.192	5.89
76)	T	1,2,3-Trichlor...	1.104	0.965	0.957	1.118	0.893	1.061	1.016	8.96
77)	T	Bromobenzene	0.871	0.880	0.857	0.906	0.858	0.919	0.882	2.90
78)	T	n-propylbenzene	3.227	3.605	3.846	4.400	4.154	4.738	3.995	13.74
79)	T	2-Chlorotoluene	2.252	2.533	2.571	2.761	2.585	2.812	2.586	7.67
80)	T	1,3,5-Trimethy...	2.160	2.529	2.695	3.140	2.940	3.260	2.787	14.69
81)	T	trans-1,4-Dich...	0.335	0.347	0.386	0.390	0.419	0.376		9.04
82)	T	4-Chlorotoluene	2.144	2.536	2.512	2.820	2.588	2.847	2.574	9.91
83)	T	tert-Butylbenzene	1.885	2.189	2.236	2.570	2.439	2.726	2.341	12.85
84)	T	1,2,4-Trimethy...	1.888	2.542	2.710	3.190	3.016	3.323	2.778	18.89
85)	T	sec-Butylbenzene	2.318	3.026	3.147	3.643	3.421	3.912	3.244	17.17
86)	T	p-Isopropyltol...	1.777	2.368	2.541	2.942	2.872	3.286	2.631	20.04
87)	T	1,3-Dichlorobe...	1.526	1.656	1.574	1.701	1.565	1.720	1.624	4.91
88)	T	1,4-Dichlorobe...	1.767	1.743	1.607	1.713	1.562	1.706	1.683	4.78
89)	T	n-Butylbenzene	1.772	2.176	2.168	2.485	2.483	2.881	2.327	16.22
90)	T	Hexachloroethane	0.681	0.616	0.574	0.613	0.577	0.645	0.618	6.59
91)	T	1,2-Dichlorobe...	1.766	1.600	1.532	1.654	1.555	1.611	1.620	5.15
92)	T	1,2-Dibromo-3-...	0.202	0.228	0.212	0.224	0.222	0.218	0.218	4.31
93)	T	1,2,4-Trichlor...	0.658	0.717	0.704	0.799	0.781	0.858	0.753	9.69
94)	T	Hexachlorobuta...	0.413	0.441	0.395	0.396	0.367	0.386	0.400	6.31
95)	T	Naphthalene	2.115	1.987	1.958	2.348	2.482	2.588	2.246	11.79
96)	T	1,2,3-Trichlor...	0.750	0.693	0.732	0.792	0.786	0.817	0.762	5.96

(#)= Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085438.D
 Acq On : 14 Jan 2025 14:56
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Quant Time: Jan 15 01:41:17 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 01/15/2025
 Supervised By : Mahesh Dadoda 01/15/2025

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	202613	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	329363	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	298938	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	146196	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.571	65	313645	95.899	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	= 191.800%#		
35) Dibromofluoromethane	8.159	113	236159	103.353	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	= 206.700%#		
50) Toluene-d8	10.565	98	881956	108.636	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	= 217.280%#		
62) 4-Bromofluorobenzene	12.847	95	313161	112.765	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	= 225.520%#		

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	269023	98.065	ug/l	99
3) Chloromethane	2.359	50	275415	92.724	ug/l	98
4) Vinyl Chloride	2.512	62	282361	94.576	ug/l	99
5) Bromomethane	2.942	94	158888	88.105	ug/l	98
6) Chloroethane	3.112	64	176111	93.043	ug/l	99
7) Trichlorofluoromethane	3.494	101	423967	97.870	ug/l	100
8) Diethyl Ether	3.953	74	146889	98.154	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	239104	97.997	ug/l	99
10) Methyl Iodide	4.589	142	292983	104.856	ug/l	95
11) Tert butyl alcohol	5.512	59	173044	462.061	ug/l	99
12) 1,1-Dichloroethene	4.336	96	222117	102.146	ug/l	99
13) Acrolein	4.171	56	275350	538.600	ug/l	99
14) Allyl chloride	5.018	41	349717	99.111	ug/l	98
15) Acrylonitrile	5.712	53	585370	492.095	ug/l	99
16) Acetone	4.418	43	483221	457.268	ug/l	96
17) Carbon Disulfide	4.712	76	630294	94.140	ug/l	100
18) Methyl Acetate	5.012	43	304226	94.674	ug/l	99
19) Methyl tert-butyl Ether	5.788	73	743008	105.230	ug/l	100
20) Methylene Chloride	5.271	84	254912	97.440	ug/l	98
21) trans-1,2-Dichloroethene	5.783	96	231503	99.618	ug/l	97
22) Diisopropyl ether	6.665	45	820871	104.812	ug/l	99
23) Vinyl Acetate	6.594	43	3029568	550.850	ug/l	99
24) 1,1-Dichloroethane	6.565	63	471831	98.803	ug/l	99
25) 2-Butanone	7.477	43	764979	491.912	ug/l	98
26) 2,2-Dichloropropane	7.482	77	388140	100.530	ug/l	100
27) cis-1,2-Dichloroethene	7.482	96	280197	102.367	ug/l	99
28) Bromochloromethane	7.806	49	214796	96.679	ug/l	100
29) Tetrahydrofuran	7.830	42	503459	510.635	ug/l	99
30) Chloroform	7.959	83	484941	98.253	ug/l	100
31) Cyclohexane	8.253	56	398641	96.041	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	426782	98.578	ug/l	98
36) 1,1-Dichloropropene	8.365	75	342961	106.945	ug/l	100
37) Ethyl Acetate	7.553	43	326802	100.961	ug/l	97
38) Carbon Tetrachloride	8.359	117	378390	103.065	ug/l	97
39) Methylcyclohexane	9.594	83	371734	123.354	ug/l	99
40) Benzene	8.600	78	1021393	106.001	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085438.D
 Acq On : 14 Jan 2025 14:56
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Quant Time: Jan 15 01:41:17 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John Carlone 01/15/2025
 Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	184326	109.454	ug/l	96
42) 1,2-Dichloroethane	8.665	62	374938	103.314	ug/l	100
43) Isopropyl Acetate	8.682	43	549969	106.035	ug/l	100
44) Trichloroethene	9.347	130	238296	106.242	ug/l	96
45) 1,2-Dichloropropane	9.618	63	256964	104.405	ug/l	97
46) Dibromomethane	9.706	93	180990	101.913	ug/l	99
47) Bromodichloromethane	9.882	83	388499	107.377	ug/l	98
48) Methyl methacrylate	9.676	41	267689	114.685	ug/l	99
49) 1,4-Dioxane	9.688	88	83879	2133.992	ug/l	97
51) 4-Methyl-2-Pentanone	10.441	43	1643800	546.159	ug/l	100
52) Toluene	10.623	92	634743	113.689	ug/l	99
53) t-1,3-Dichloropropene	10.829	75	391238	114.424	ug/l	97
54) cis-1,3-Dichloropropene	10.306	75	410403	112.369	ug/l	99
55) 1,1,2-Trichloroethane	11.012	97	229522	103.879	ug/l	98
56) Ethyl methacrylate	10.870	69	383663	101.029	ug/l	99
57) 1,3-Dichloropropane	11.159	76	412886	107.469	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.153	63	848636	605.243	ug/l	100
59) 2-Hexanone	11.194	43	1178831	556.643	ug/l	99
60) Dibromochloromethane	11.353	129	283361	106.227	ug/l	99
61) 1,2-Dibromoethane	11.465	107	230104	104.623	ug/l	98
64) Tetrachloroethene	11.100	164	209870	102.980	ug/l	98
65) Chlorobenzene	11.888	112	677679	103.482	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	241593	100.517	ug/l	99
67) Ethyl Benzene	11.959	91	1239080	116.169	ug/l	99
68) m/p-Xylenes	12.070	106	927244	235.219	ug/l	99
69) o-Xylene	12.394	106	441279	117.135	ug/l	100
70) Styrene	12.406	104	760136	121.919	ug/l	99
71) Bromoform	12.576	173	186124	108.227	ug/l #	99
73) Isopropylbenzene	12.694	105	1146752	116.221	ug/l	100
74) N-amyl acetate	12.488	43	489217	110.308	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	327767	94.039	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	310115m	104.530	ug/l	
77) Bromobenzene	12.976	156	268616	104.200	ug/l	97
78) n-propylbenzene	13.029	91	1385353	118.600	ug/l	100
79) 2-Chlorotoluene	13.123	91	822258	108.767	ug/l	99
80) 1,3,5-Trimethylbenzene	13.170	105	953066	116.938	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	122508	111.544	ug/l	87
82) 4-Chlorotoluene	13.217	91	832317	110.574	ug/l	99
83) tert-Butylbenzene	13.435	119	797069	116.457	ug/l	98
84) 1,2,4-Trimethylbenzene	13.476	105	971729	119.625	ug/l	100
85) sec-Butylbenzene	13.611	105	1143885	120.587	ug/l	100
86) p-Isopropyltoluene	13.723	119	960747	100.111	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	502960	105.943	ug/l	99
88) 1,4-Dichlorobenzene	13.811	146	498709	101.341	ug/l	97
89) n-Butylbenzene	14.053	91	842368	123.781	ug/l	98
90) Hexachloroethane	14.329	117	188541	104.405	ug/l	100
91) 1,2-Dichlorobenzene	14.100	146	470919	99.445	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	63846	100.313	ug/l	98
93) 1,2,4-Trichlorobenzene	15.388	180	250787	113.946	ug/l	99
94) Hexachlorobutadiene	15.500	225	112899	96.619	ug/l	99
95) Naphthalene	15.635	128	756816	115.234	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	238860	107.256	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085438.D
Acq On : 14 Jan 2025 14:56
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Quant Time: Jan 15 01:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

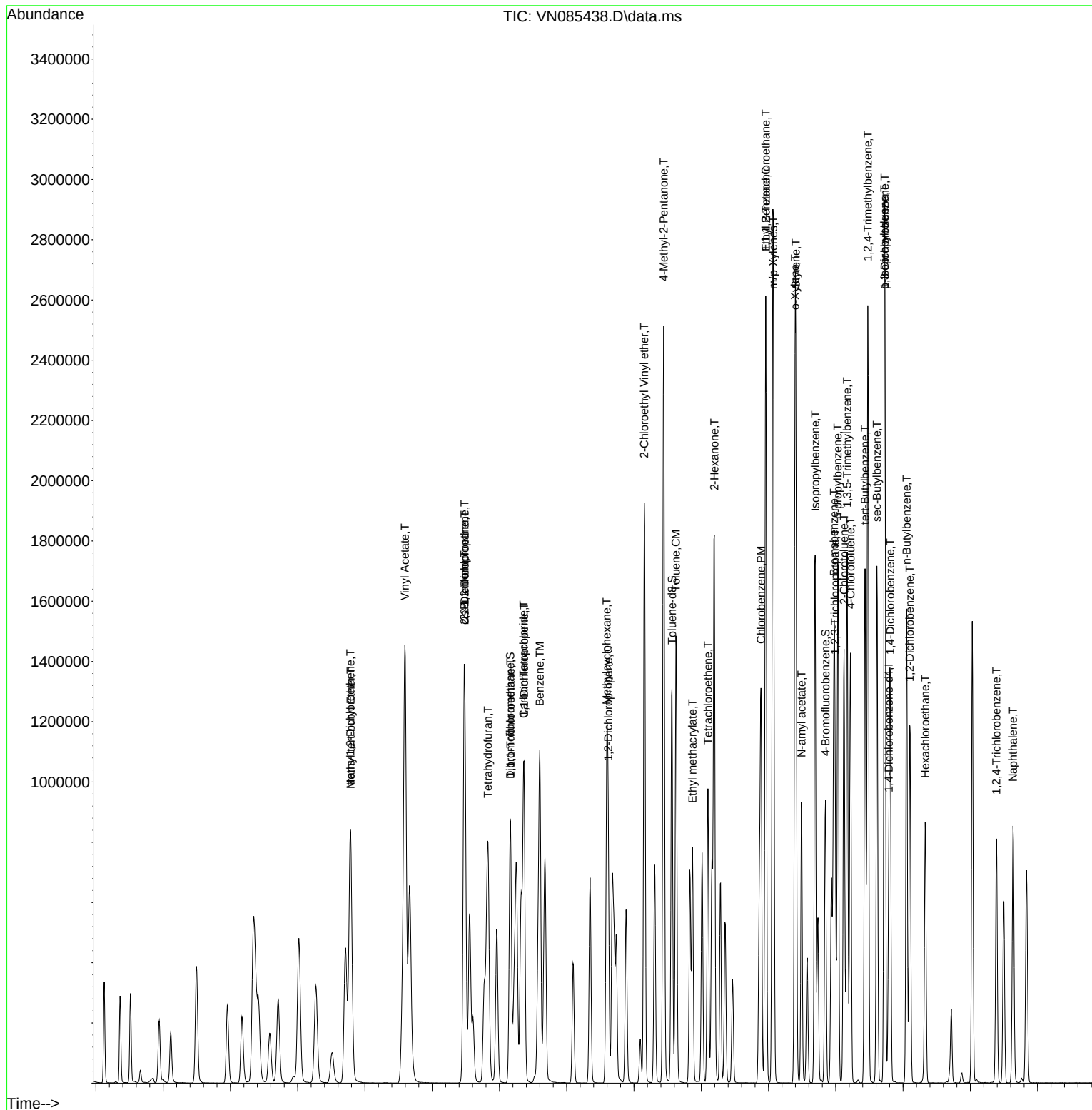
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\  
Data File : VN085438.D  
Acq On    : 14 Jan 2025   14:56  
Operator  : JC\MD  
Sample    : VSTDICC100  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 4   Sample Multiplier: 1
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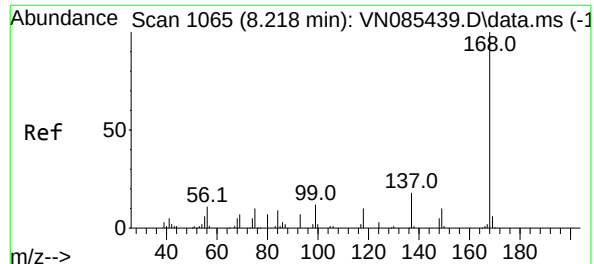
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\M\$VOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration





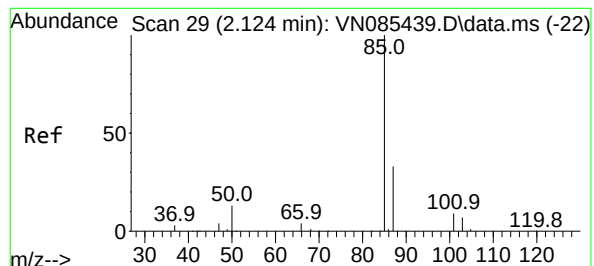
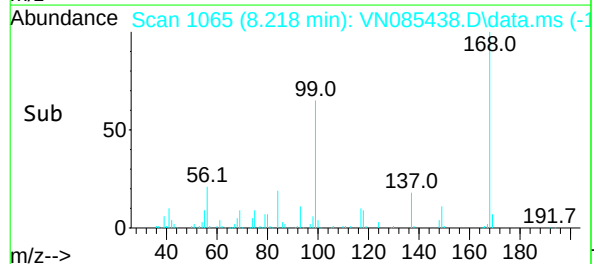
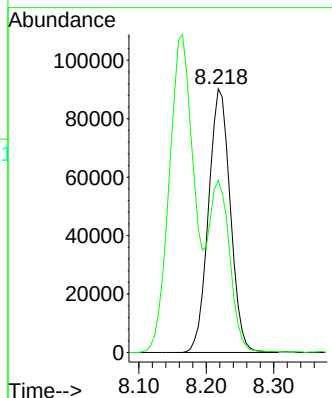
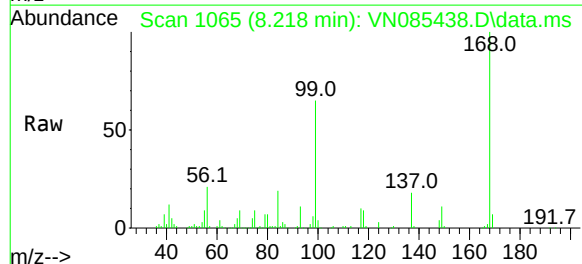
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 168 Resp: 202613
Ion Ratio Lower Upper
168 100
99 64.9 53.6 80.4

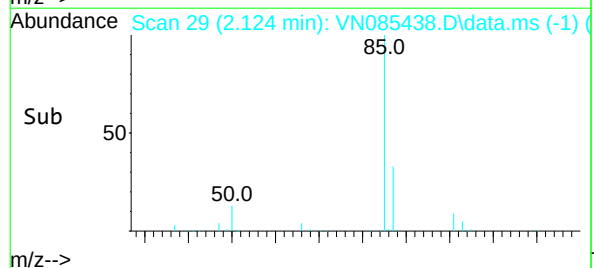
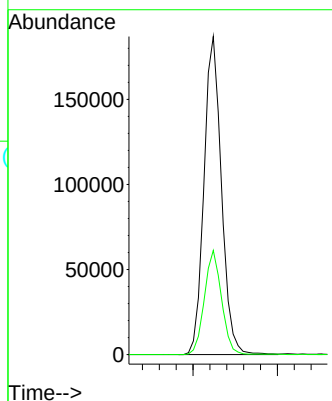
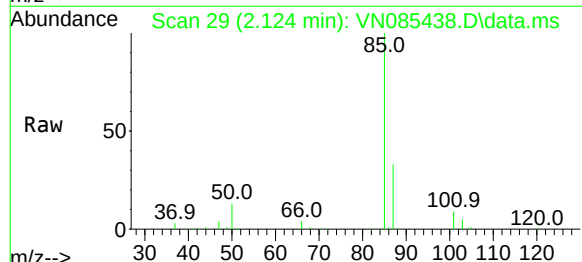
Manual Integrations
APPROVED

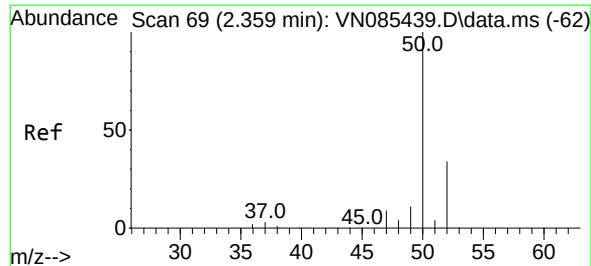
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#2
Dichlorodifluoromethane
Concen: 98.065 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 85 Resp: 269023
Ion Ratio Lower Upper
85 100
87 32.7 16.7 50.1





#3

Chloromethane

Concen: 92.724 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 50 Resp: 275415

Ion Ratio Lower Upper

50 100

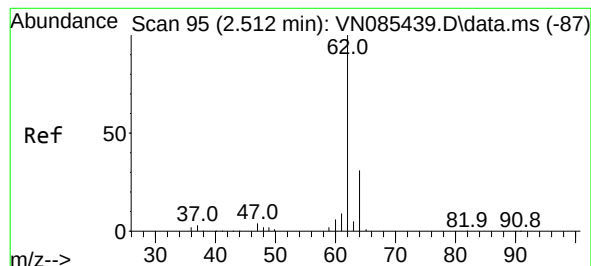
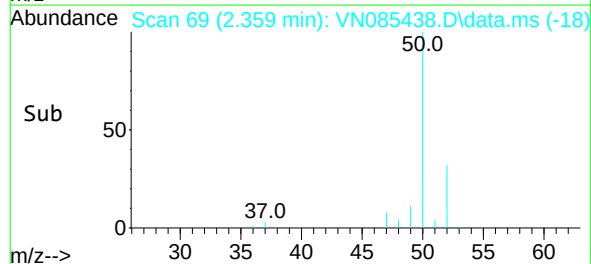
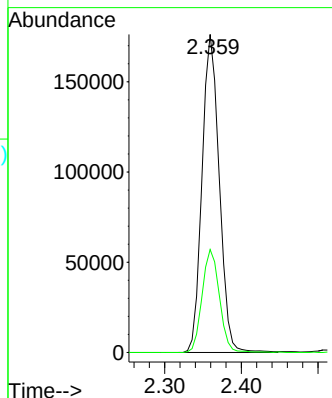
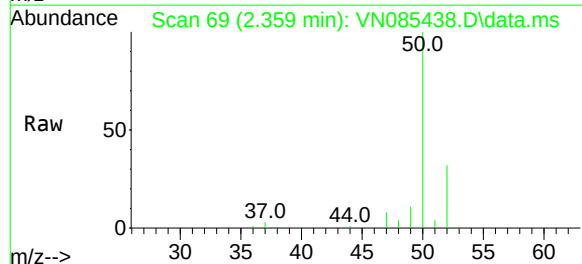
52 32.4 27.0 40.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#4

Vinyl Chloride

Concen: 94.576 ug/l

RT: 2.512 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085438.D

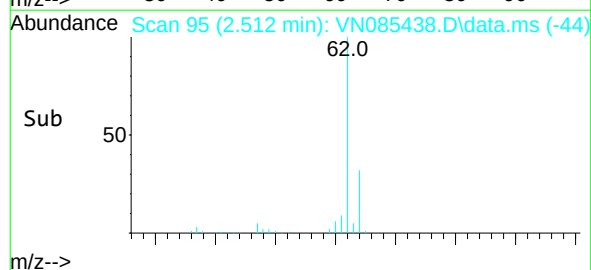
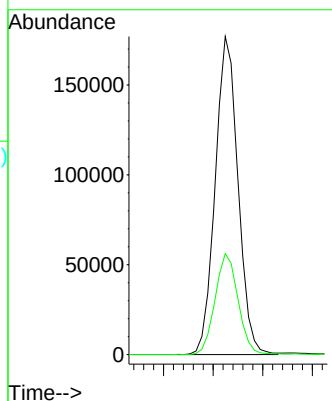
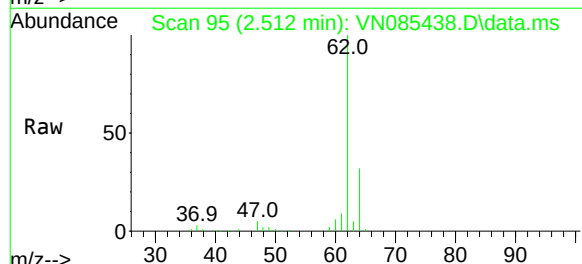
Acq: 14 Jan 2025 14:56

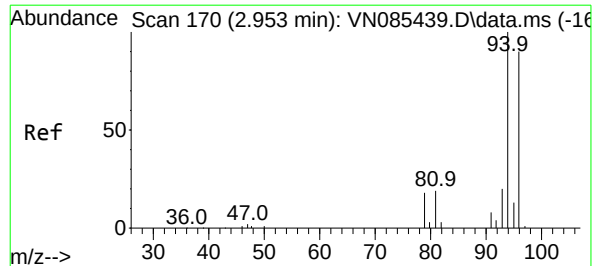
Tgt Ion: 62 Resp: 282361

Ion Ratio Lower Upper

62 100

64 31.6 24.8 37.2





#5

Bromomethane

Concen: 88.105 ug/l

RT: 2.942 min Scan# 16

Delta R.T. -0.012 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 94 Resp: 158888

Ion Ratio Lower Upper

94 100

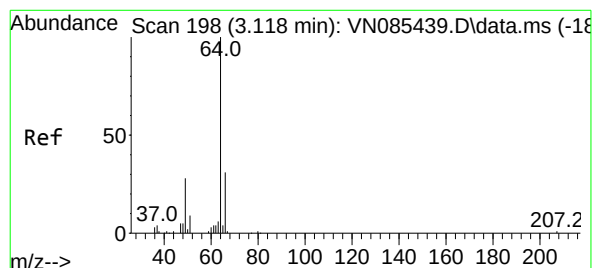
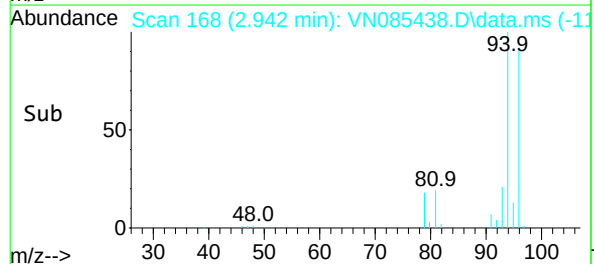
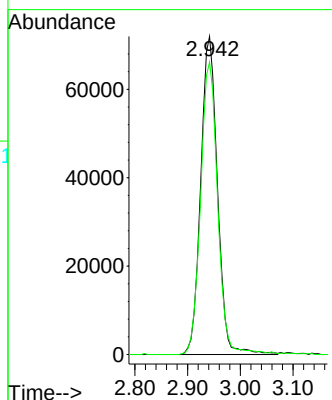
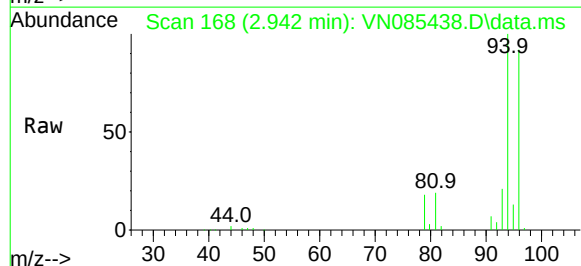
96 91.9 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 93.043 ug/l

RT: 3.112 min Scan# 197

Delta R.T. -0.006 min

Lab File: VN085438.D

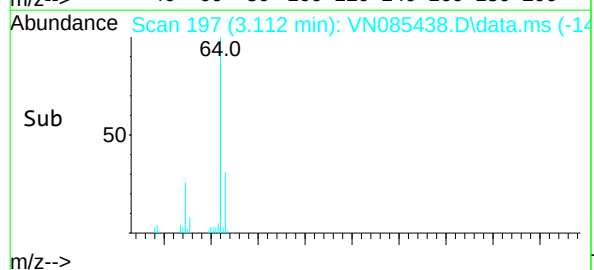
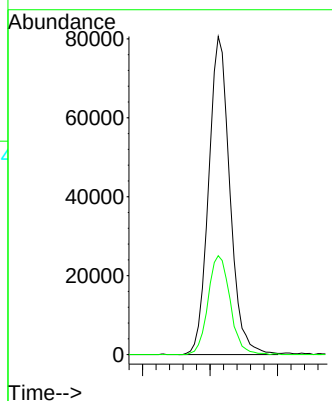
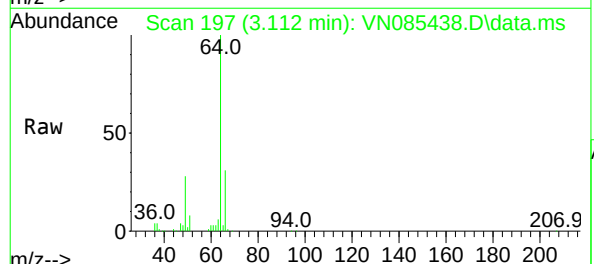
Acq: 14 Jan 2025 14:56

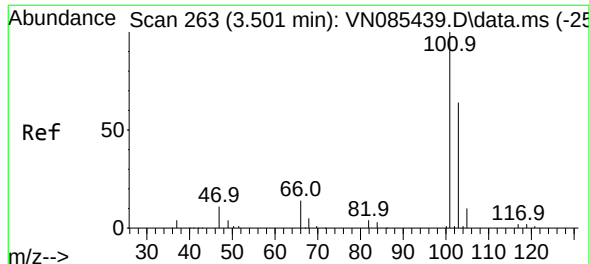
Tgt Ion: 64 Resp: 176111

Ion Ratio Lower Upper

64 100

66 31.1 24.6 36.8





#7

Trichlorofluoromethane

Concen: 97.870 ug/l

RT: 3.494 min Scan# 26

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion:101 Resp: 423967

Ion Ratio Lower Upper

101 100

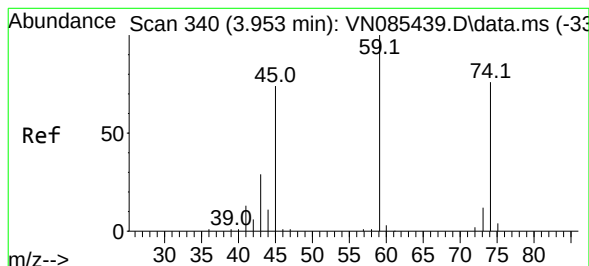
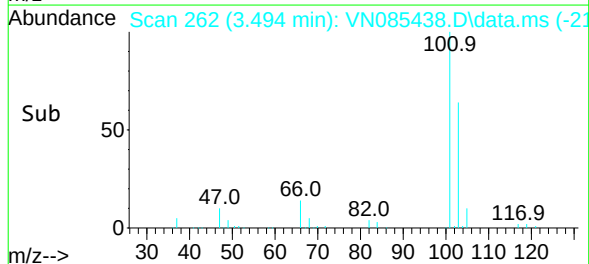
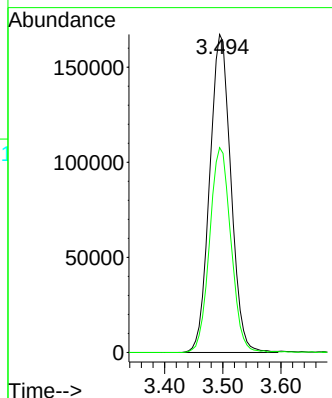
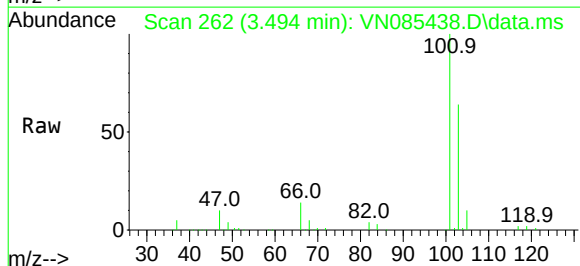
103 64.4 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 98.154 ug/l

RT: 3.953 min Scan# 340

Delta R.T. -0.000 min

Lab File: VN085438.D

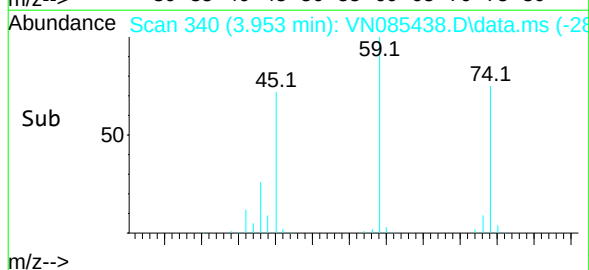
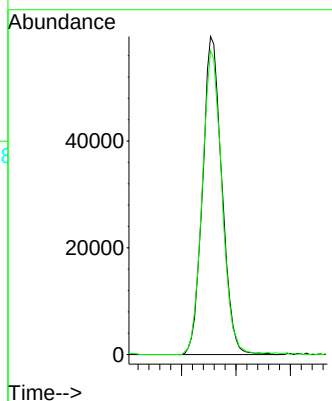
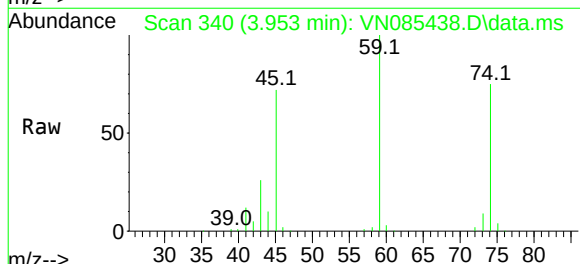
Acq: 14 Jan 2025 14:56

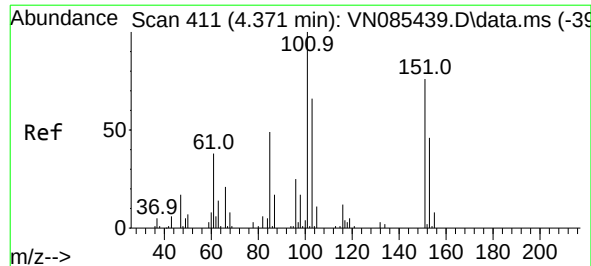
Tgt Ion: 74 Resp: 146889

Ion Ratio Lower Upper

74 100

45 97.4 49.7 149.1





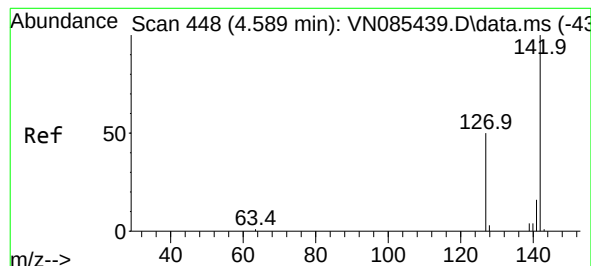
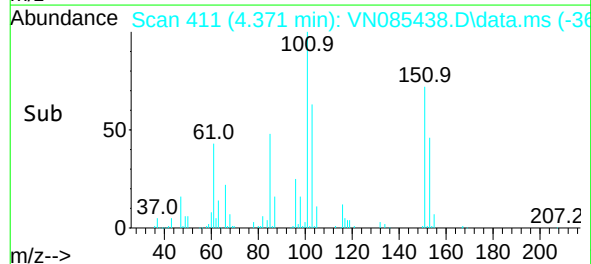
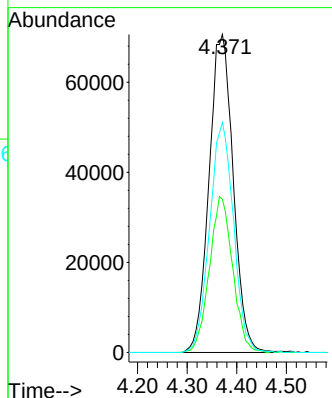
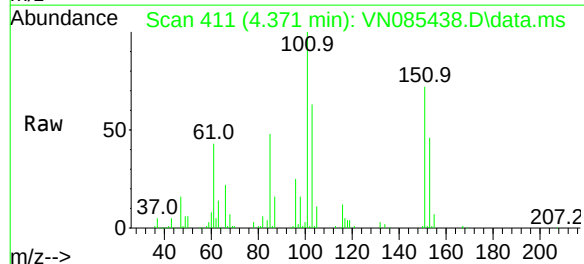
#9
1,1,2-Trichlorotrifluoroethane
Concen: 97.997 ug/l
RT: 4.371 min Scan# 411
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion:101 Resp: 239104
Ion Ratio Lower Upper
101 100
85 47.1 37.8 56.8
151 71.8 58.8 88.2

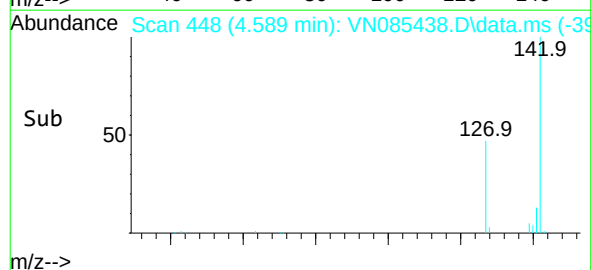
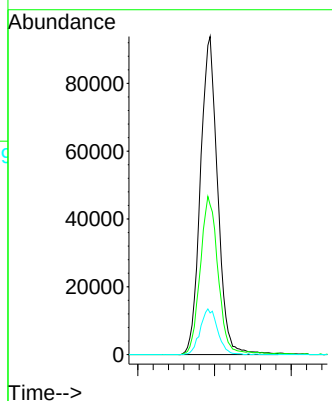
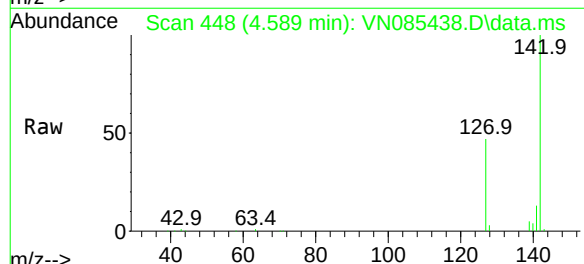
Manual Integrations
APPROVED

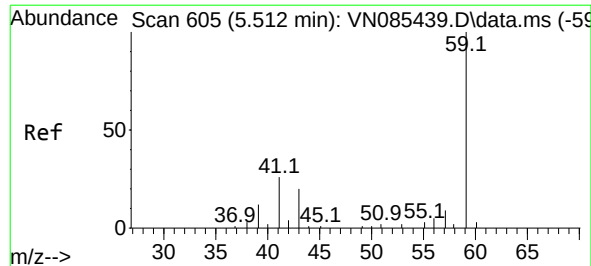
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#10
Methyl Iodide
Concen: 104.856 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion:142 Resp: 292983
Ion Ratio Lower Upper
142 100
127 47.1 40.3 60.5
141 13.1 12.8 19.2





#11

Tert butyl alcohol

Concen: 462.061 ug/l

RT: 5.512 min Scan# 605

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion: 59 Resp: 173044

Ion Ratio Lower Upper

59 100

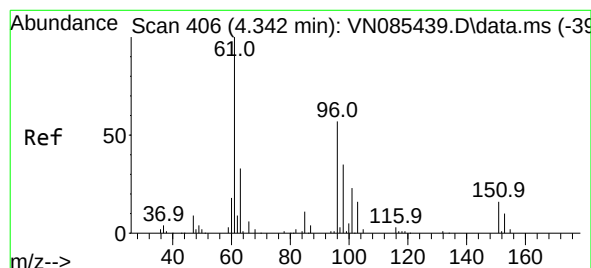
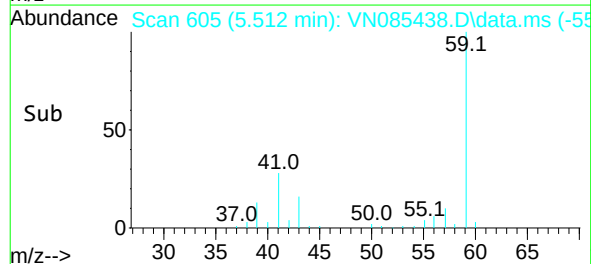
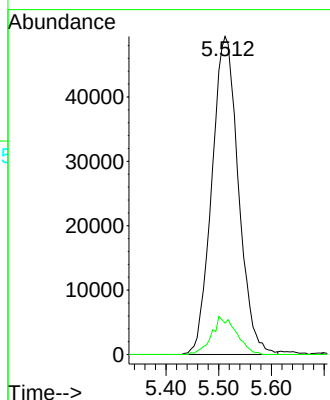
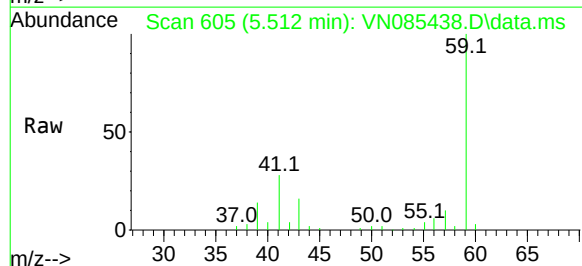
57 11.1 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 102.146 ug/l

RT: 4.336 min Scan# 405

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

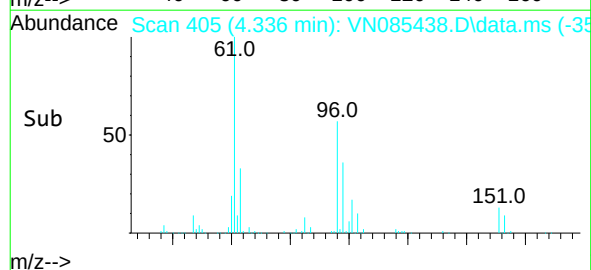
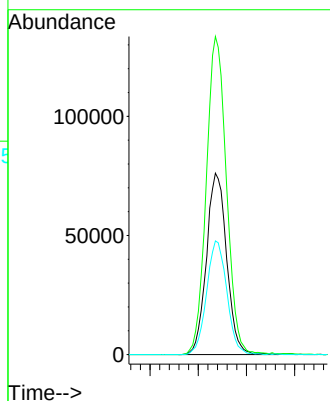
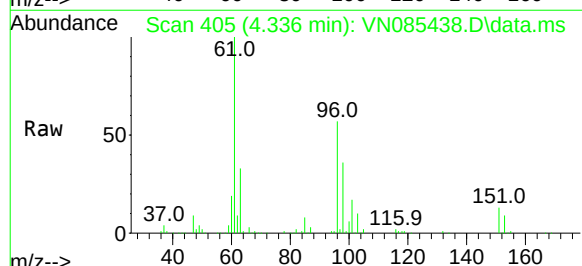
Tgt Ion: 96 Resp: 222117

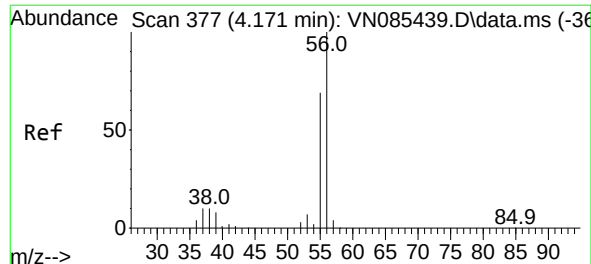
Ion Ratio Lower Upper

96 100

61 175.3 141.0 211.4

98 62.7 49.0 73.6





#13

Acrolein

Concen: 538.600 ug/l

RT: 4.171 min Scan# 377

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 56 Resp: 275350

Ion Ratio Lower Upper

56 100

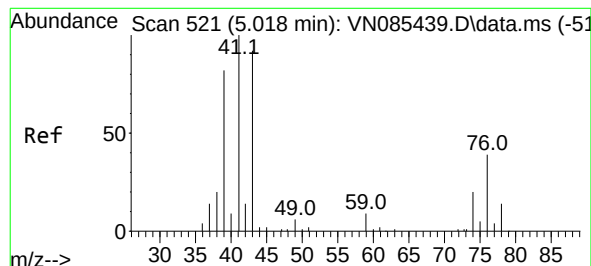
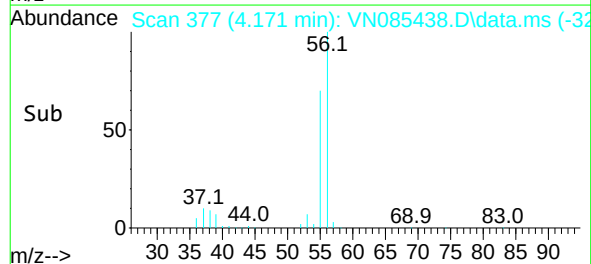
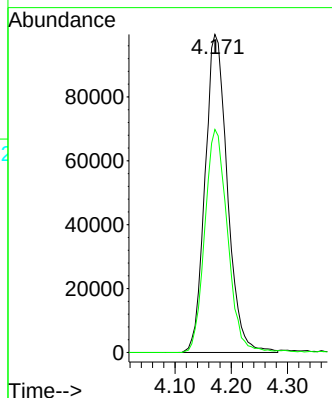
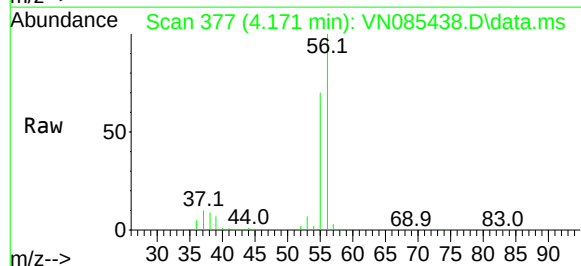
55 71.1 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 99.111 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

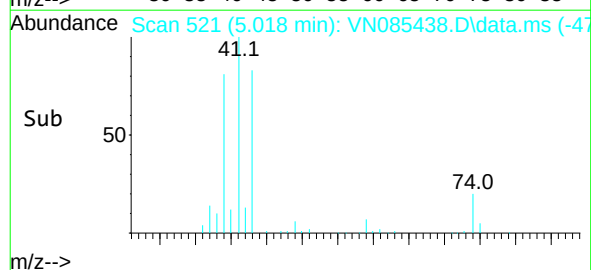
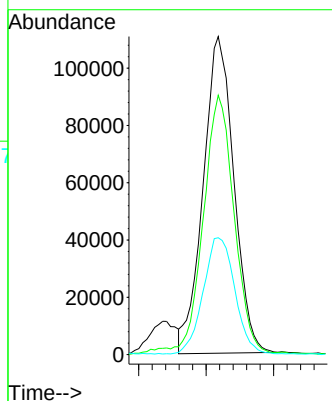
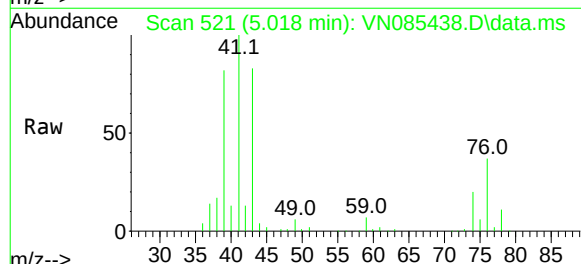
Tgt Ion: 41 Resp: 349717

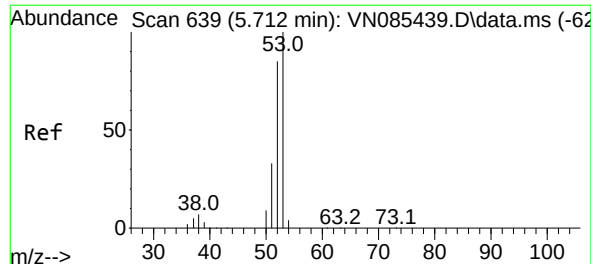
Ion Ratio Lower Upper

41 100

39 83.3 64.4 96.6

76 37.9 30.5 45.7





#15

Acrylonitrile

Concen: 492.095 ug/l

RT: 5.712 min Scan# 639

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

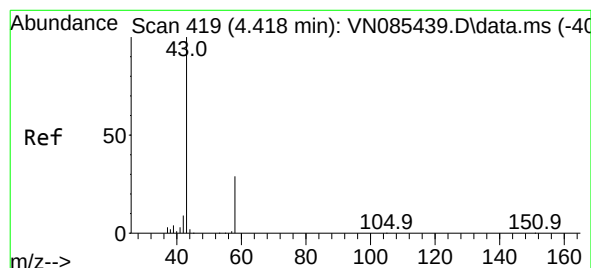
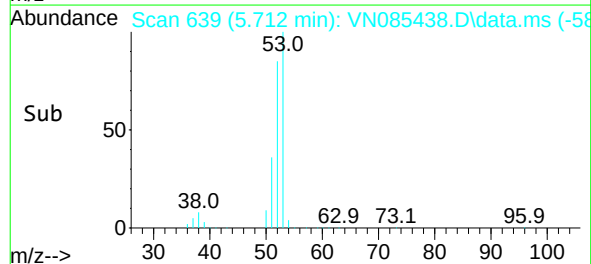
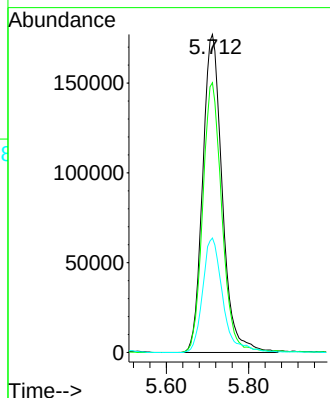
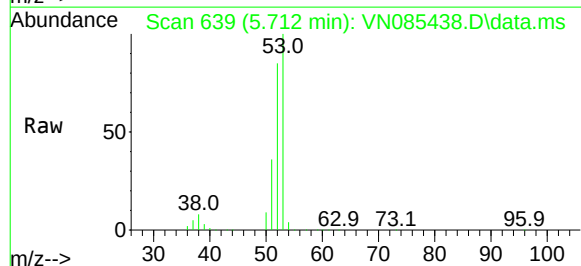
ClientSampleId :

VSTDICC100

Tgt Ion:	53	Resp:	585370
Ion	Ratio	Lower	Upper
53	100		
52	83.0	65.5	98.3
51	37.1	29.8	44.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 457.268 ug/l

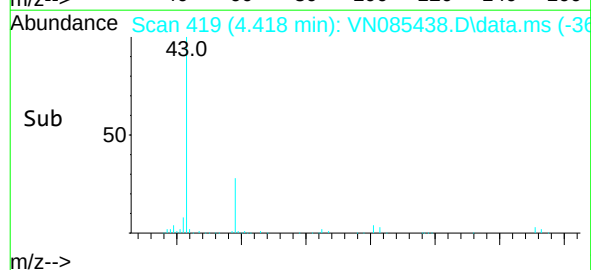
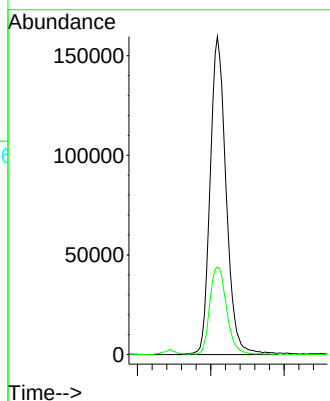
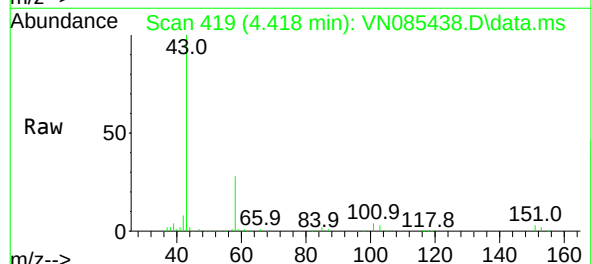
RT: 4.418 min Scan# 419

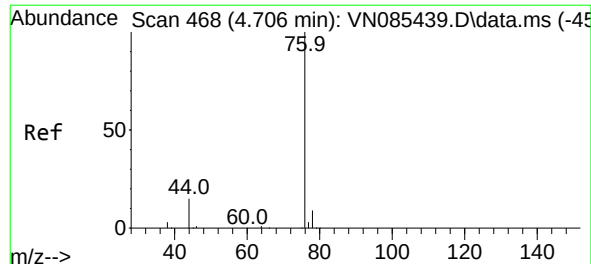
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion:	43	Resp:	483221
Ion	Ratio	Lower	Upper
43	100		
58	27.3	23.8	35.6





#17

Carbon Disulfide

Concen: 94.140 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 76 Resp: 630294

Ion Ratio Lower Upper

76 100

78 8.7 6.9 10.3

Instrument :

MSVOA_N

ClientSampleId :

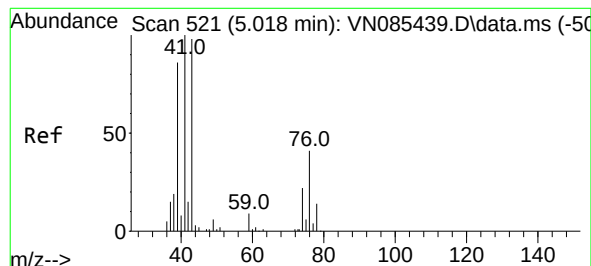
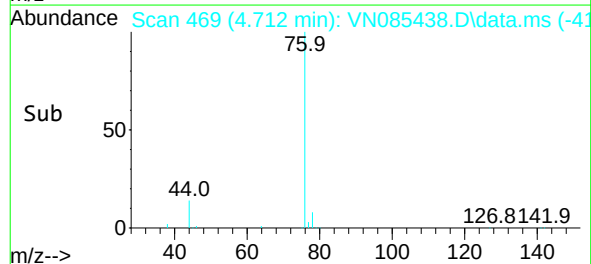
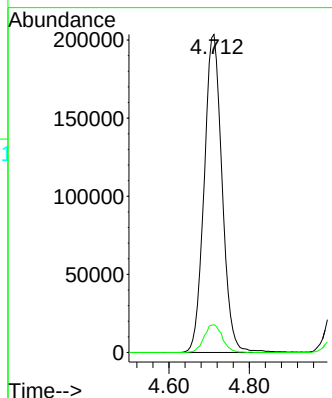
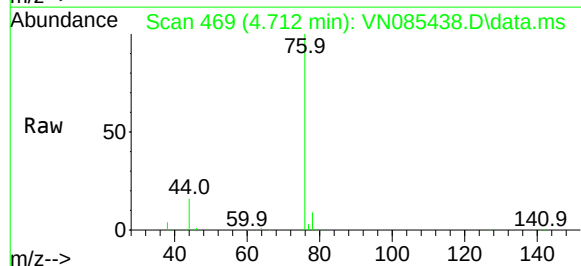
VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 94.674 ug/l

RT: 5.012 min Scan# 520

Delta R.T. -0.006 min

Lab File: VN085438.D

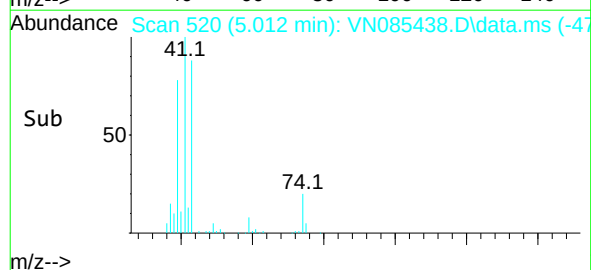
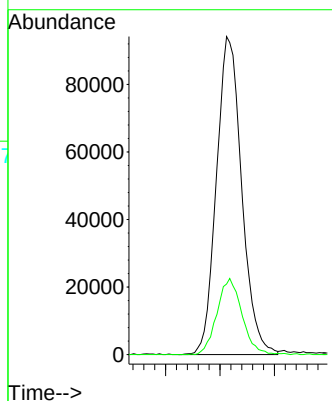
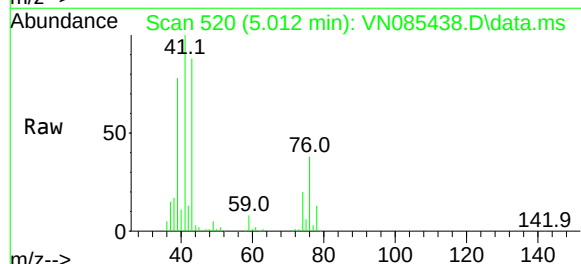
Acq: 14 Jan 2025 14:56

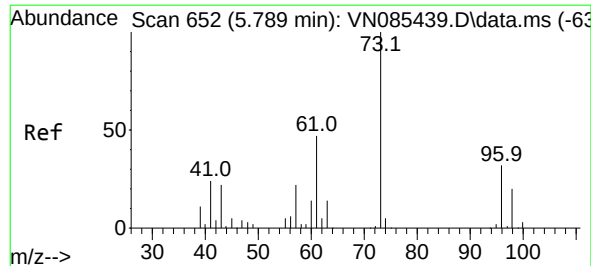
Tgt Ion: 43 Resp: 304226

Ion Ratio Lower Upper

43 100

74 23.6 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 105.230 ug/l

RT: 5.788 min Scan# 65

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion: 73 Resp: 743008

Ion Ratio Lower Upper

73 100

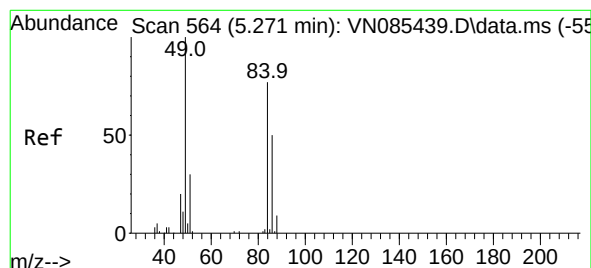
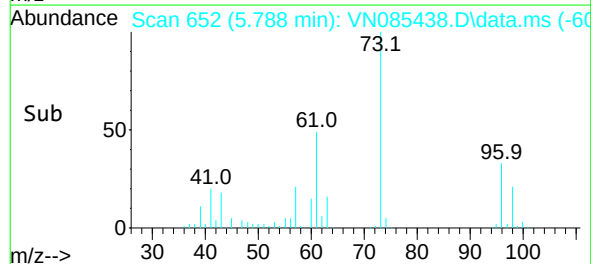
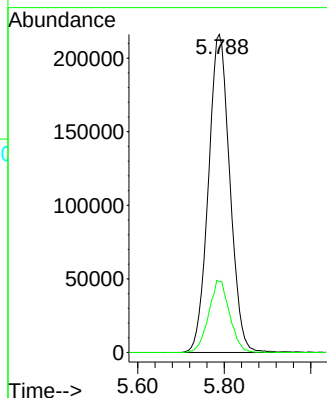
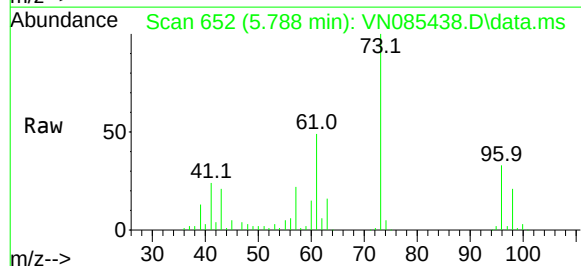
57 22.3 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 97.440 ug/l

RT: 5.271 min Scan# 564

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 84 Resp: 254912

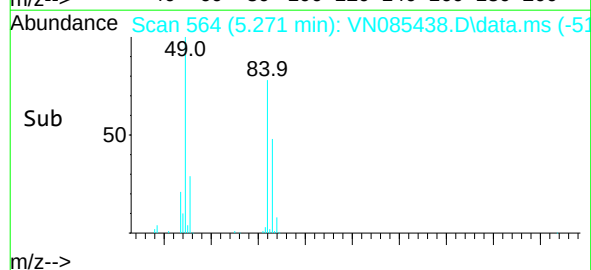
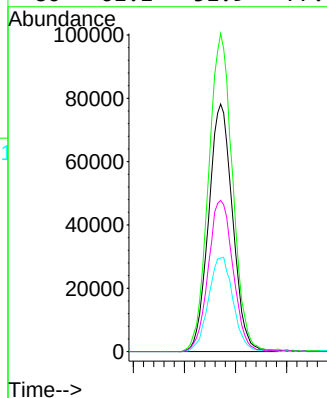
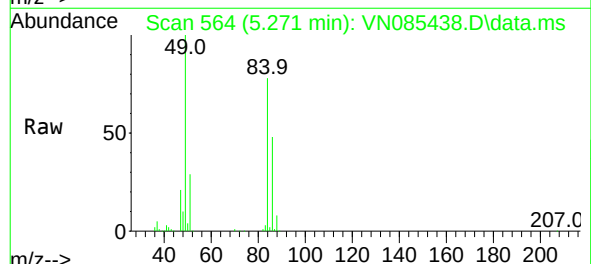
Ion Ratio Lower Upper

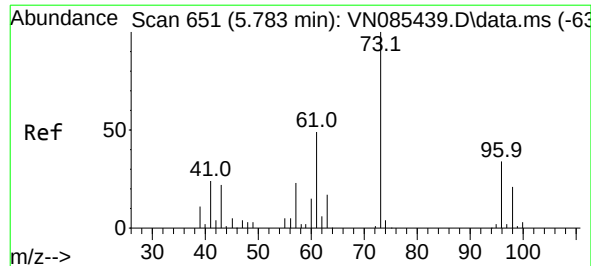
84 100

49 128.5 104.1 156.1

51 37.8 31.0 46.4

86 61.1 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 99.618 ug/l

RT: 5.783 min Scan# 651

Delta R.T. -0.000 min

Lab File: VN085438.D

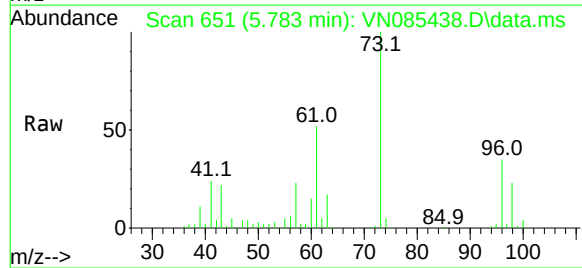
Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

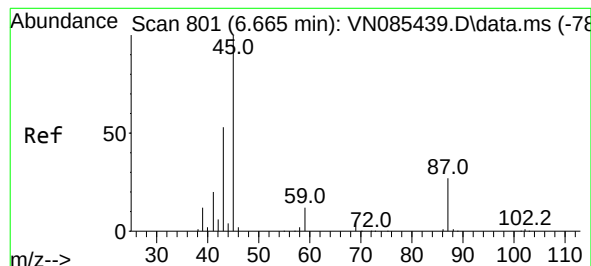
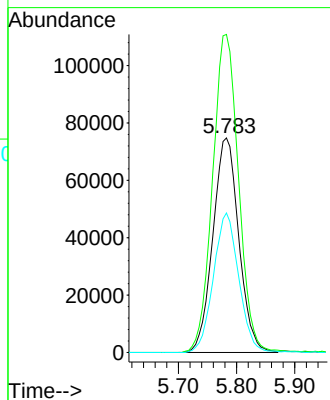
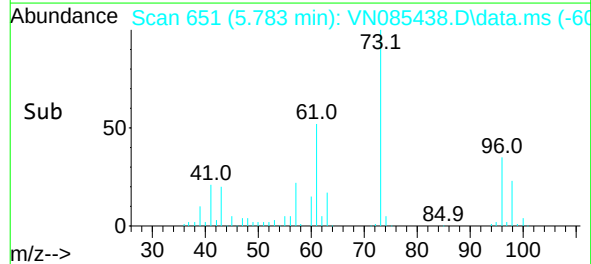
VSTDICC100



Tgt Ion:	96	Resp:	231503
Ion	Ratio	Lower	Upper
96	100		
61	148.3	115.7	173.5
98	65.0	49.8	74.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

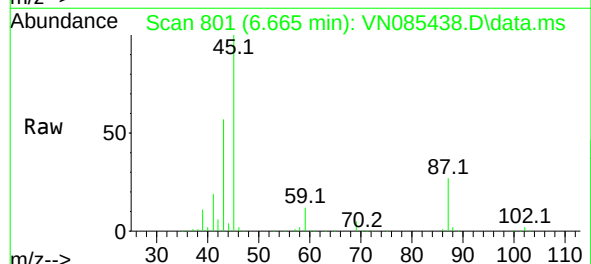
Concen: 104.812 ug/l

RT: 6.665 min Scan# 801

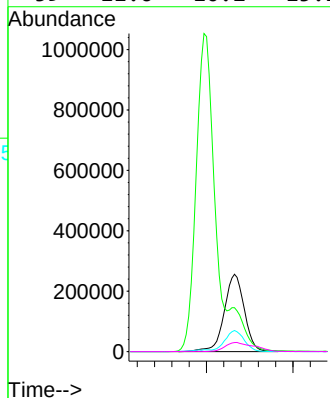
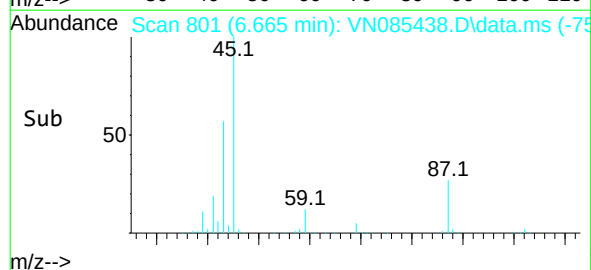
Delta R.T. -0.000 min

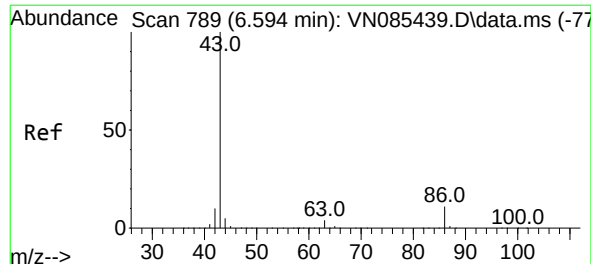
Lab File: VN085438.D

Acq: 14 Jan 2025 14:56



Tgt Ion:	45	Resp:	820871
Ion	Ratio	Lower	Upper
45	100		
43	55.7	45.0	67.6
87	27.2	21.8	32.8
59	11.6	10.2	15.2





#23

Vinyl Acetate

Concen: 550.850 ug/l

RT: 6.594 min Scan# 789

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 3029568

Ion Ratio Lower Upper

43 100

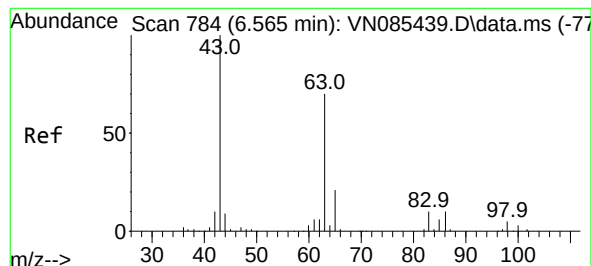
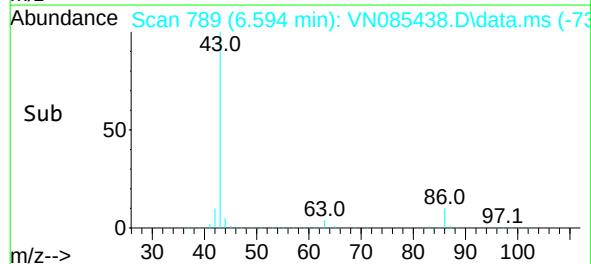
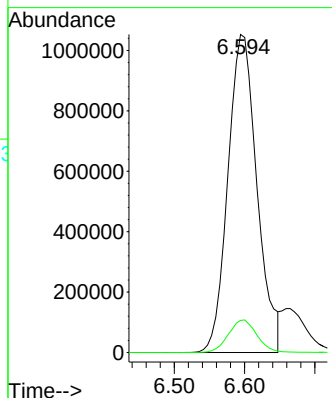
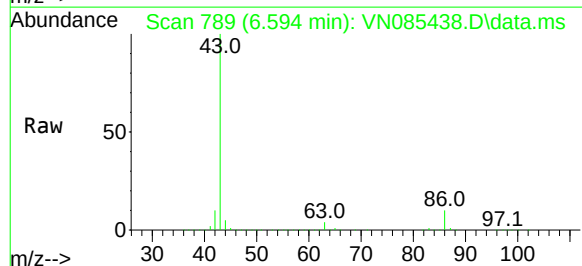
86 10.1 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 98.803 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

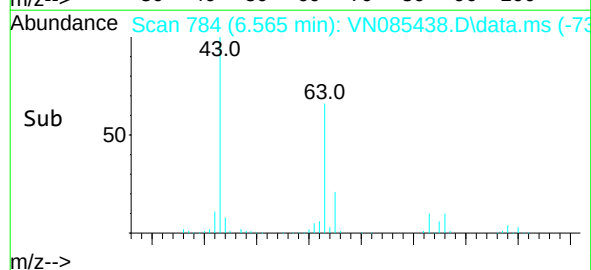
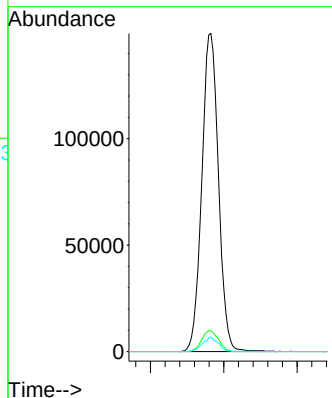
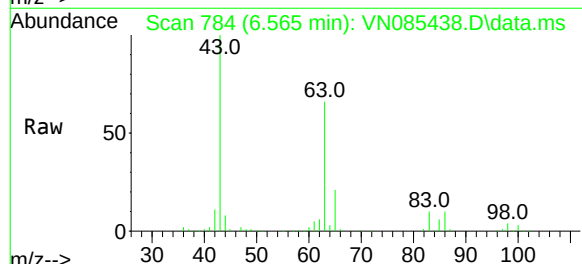
Tgt Ion: 63 Resp: 471831

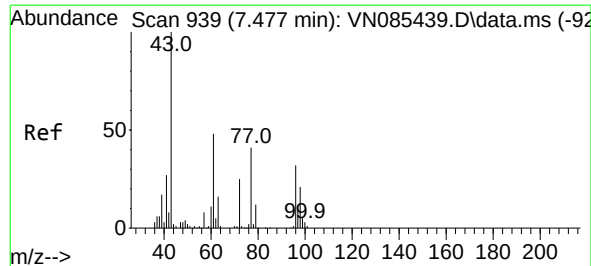
Ion Ratio Lower Upper

63 100

98 6.4 3.3 9.8

100 4.6 2.0 6.0





#25

2-Butanone

Concen: 491.912 ug/l

RT: 7.477 min Scan# 939

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 764979

Ion Ratio Lower Upper

43 100

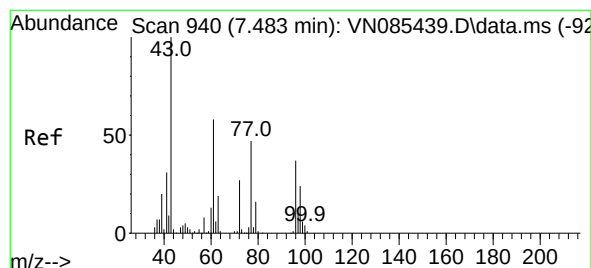
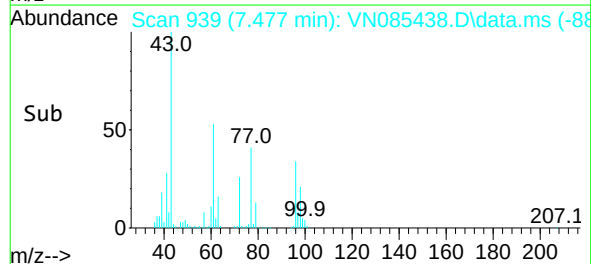
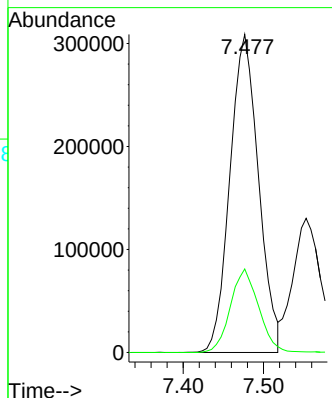
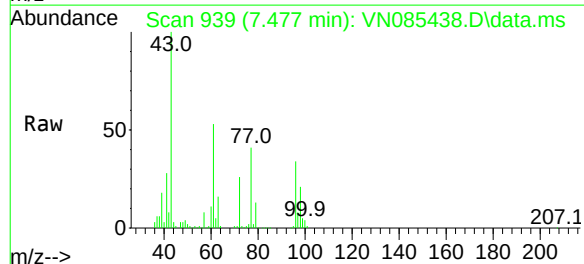
72 26.3 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 100.530 ug/l

RT: 7.482 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN085438.D

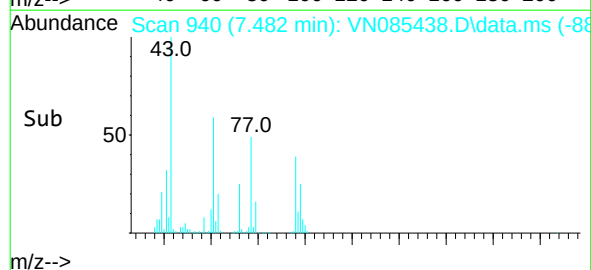
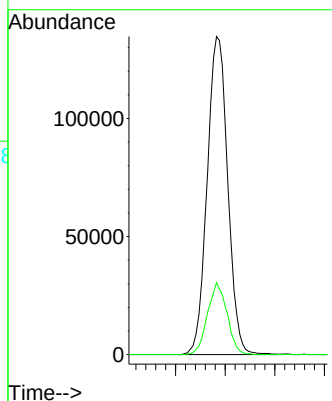
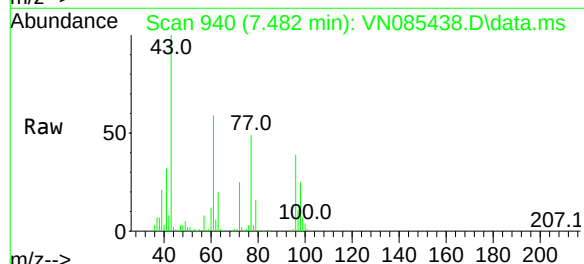
Acq: 14 Jan 2025 14:56

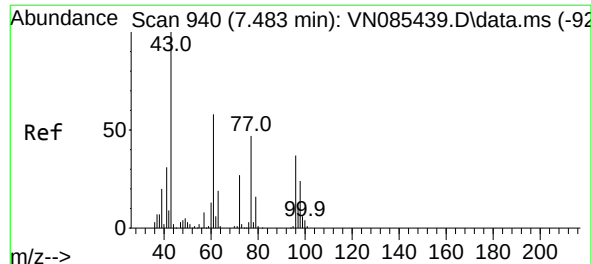
Tgt Ion: 77 Resp: 388140

Ion Ratio Lower Upper

77 100

97 21.4 10.7 32.1





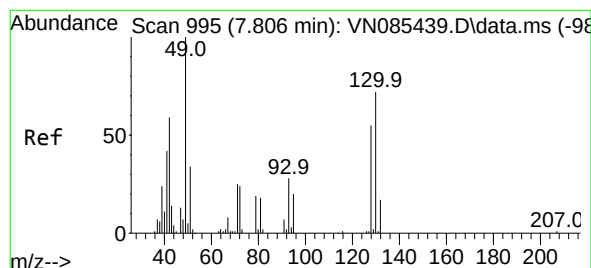
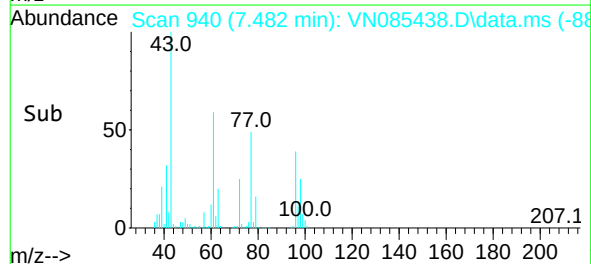
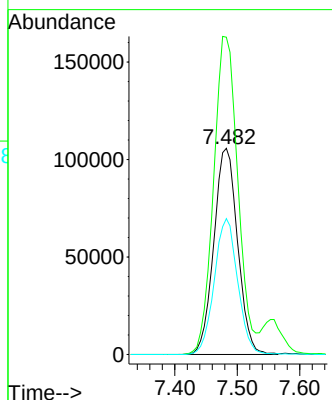
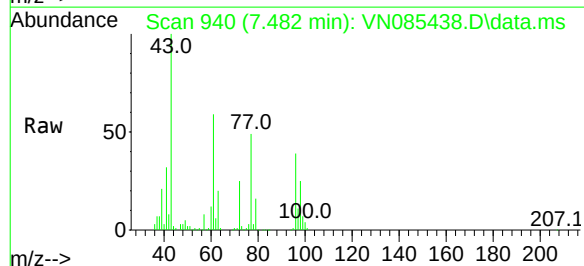
#27
cis-1,2-Dichloroethene
Concen: 102.367 ug/l
RT: 7.482 min Scan# 940
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 96 Resp: 280197
Ion Ratio Lower Upper
96 100
61 156.8 0.0 311.8
98 65.0 0.0 126.0

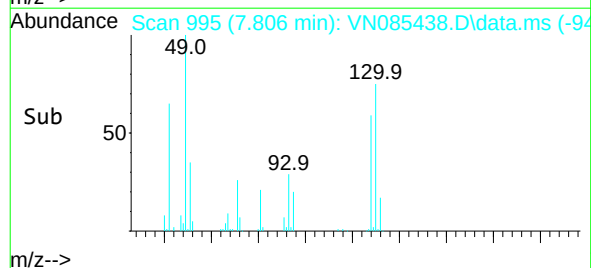
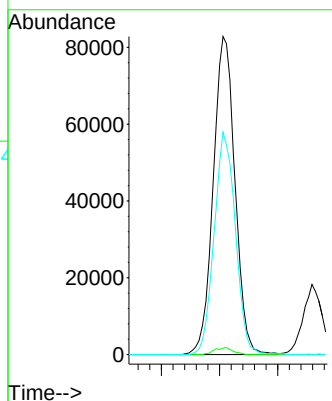
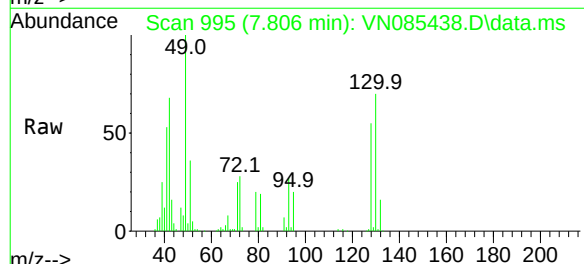
Manual Integrations
APPROVED

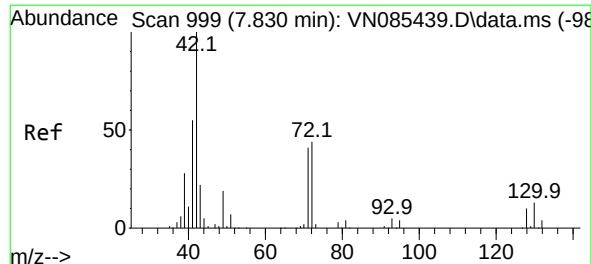
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#28
Bromochloromethane
Concen: 96.679 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 49 Resp: 214796
Ion Ratio Lower Upper
49 100
129 1.9 0.0 4.4
130 68.4 55.0 82.4





#29

Tetrahydrofuran

Concen: 510.635 ug/l

RT: 7.830 min Scan# 999

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 42 Resp: 503459

Ion Ratio Lower Upper

42 100

72 43.1 34.2 51.2

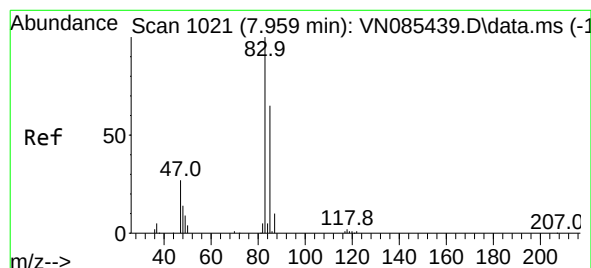
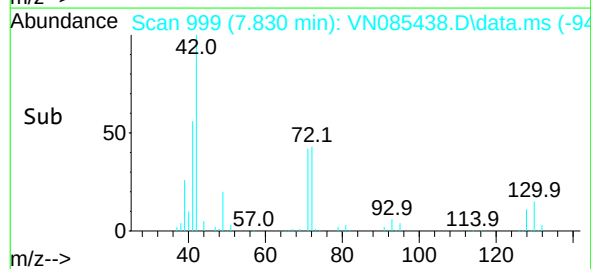
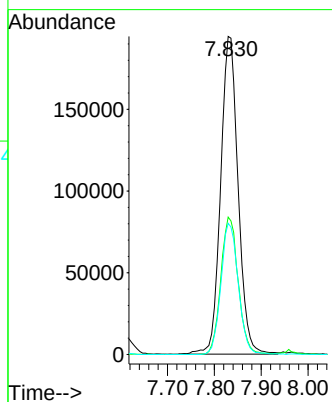
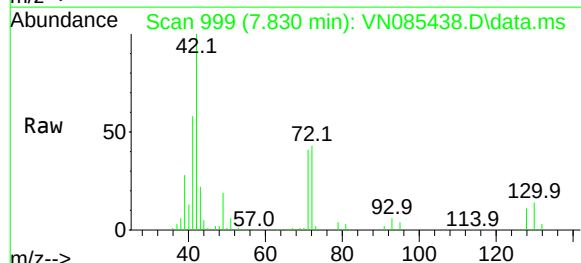
71 40.9 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 98.253 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. -0.000 min

Lab File: VN085438.D

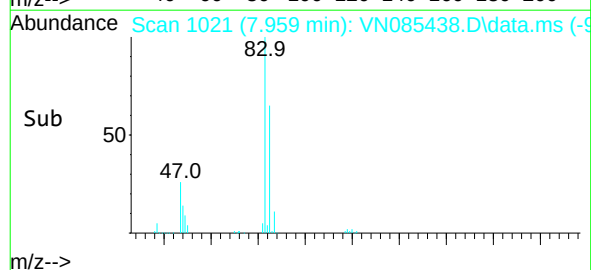
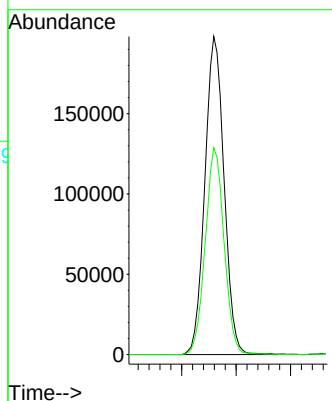
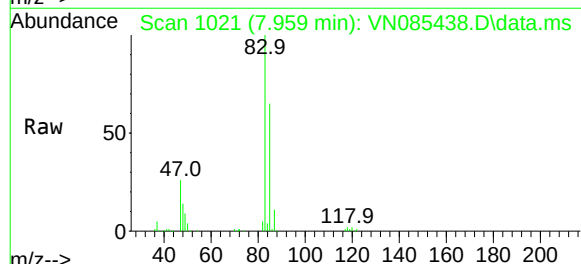
Acq: 14 Jan 2025 14:56

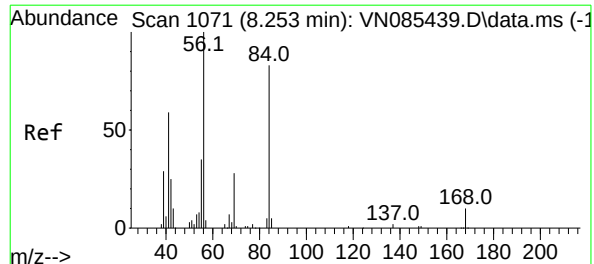
Tgt Ion: 83 Resp: 484941

Ion Ratio Lower Upper

83 100

85 65.0 51.8 77.6





#31

Cyclohexane

Concen: 96.041 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 56 Resp: 398641

Ion Ratio Lower Upper

56 100

69 29.2 22.2 33.4

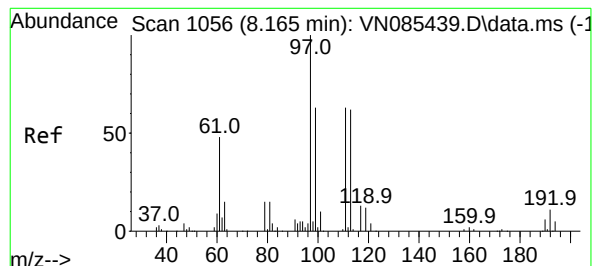
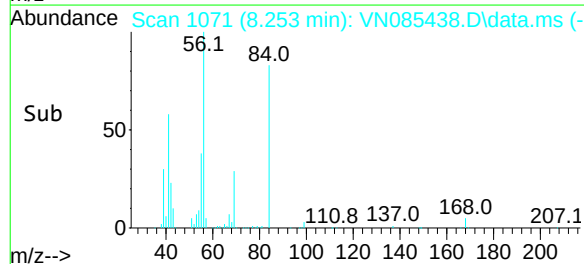
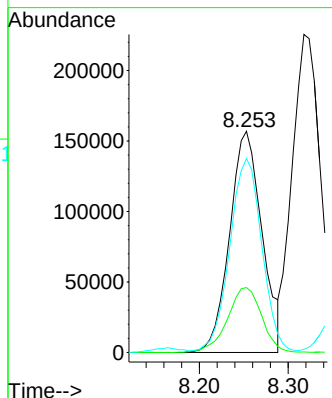
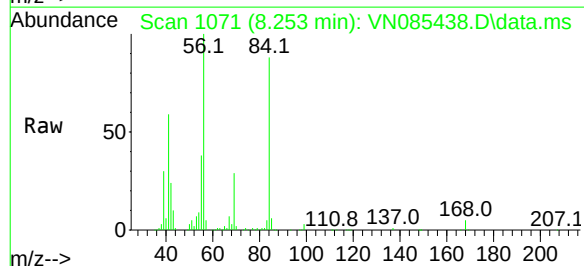
84 86.4 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 98.578 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

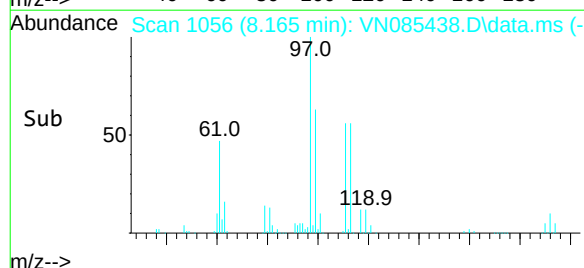
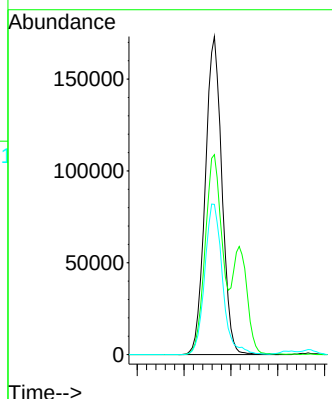
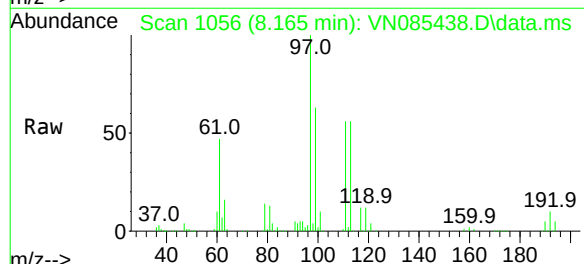
Tgt Ion: 97 Resp: 426782

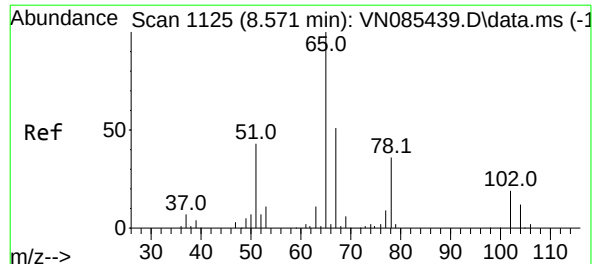
Ion Ratio Lower Upper

97 100

99 64.2 49.8 74.6

61 50.6 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 95.899 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 65 Resp: 313645

Ion Ratio Lower Upper

65 100

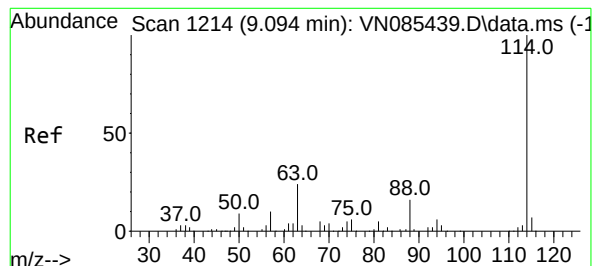
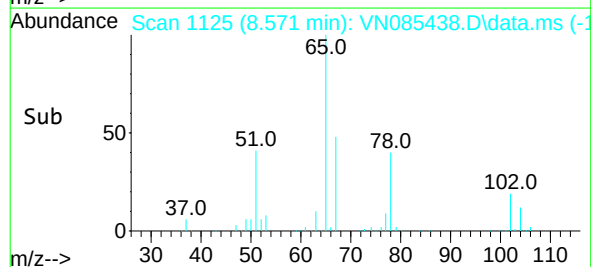
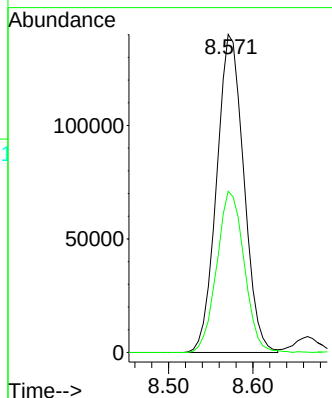
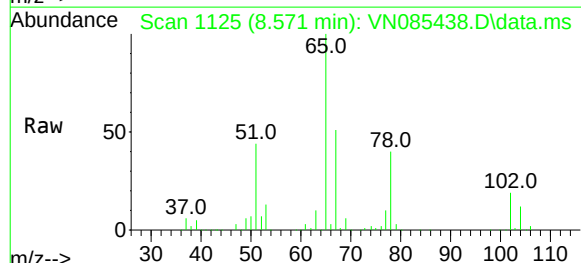
67 51.1 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

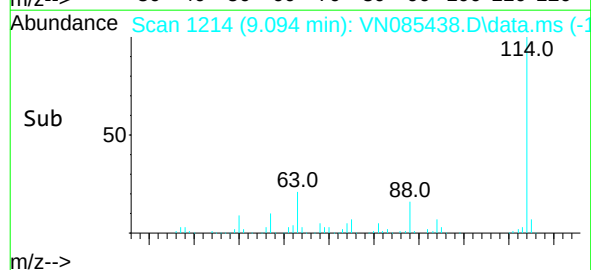
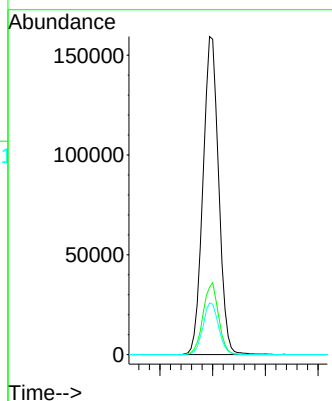
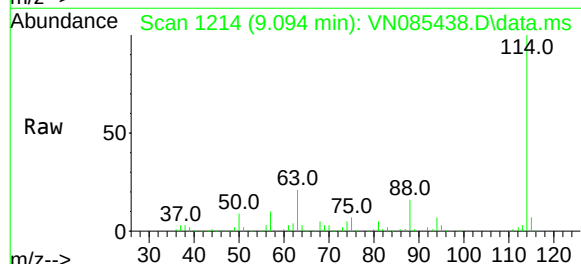
Tgt Ion:114 Resp: 329363

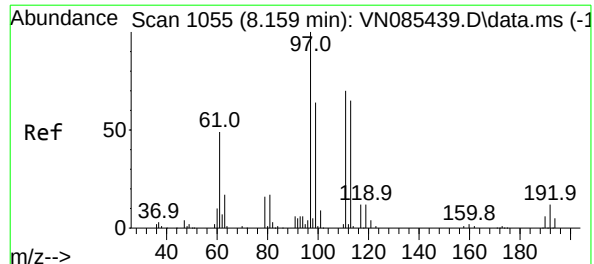
Ion Ratio Lower Upper

114 100

63 21.2 0.0 47.6

88 16.2 0.0 32.6





#35

Dibromofluoromethane

Concen: 103.353 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion:113 Resp: 236159

Ion Ratio Lower Upper

113 100

111 102.3 82.7 124.1

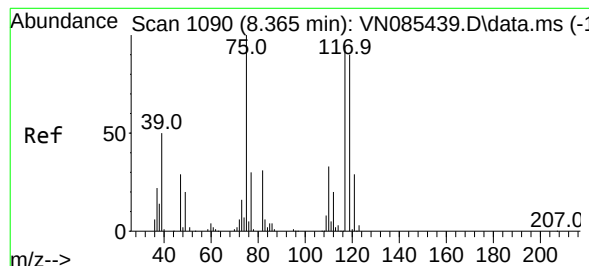
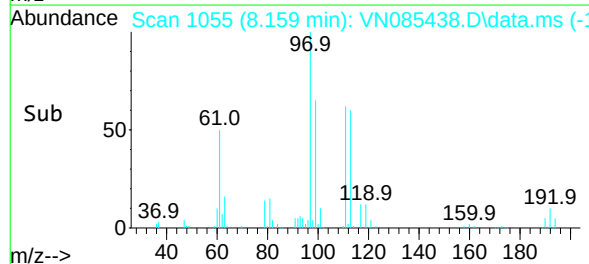
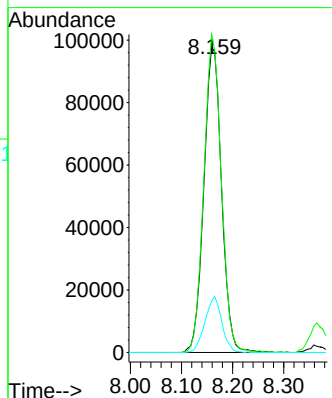
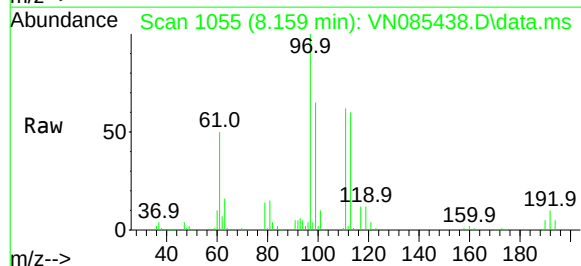
192 17.4 14.3 21.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 106.945 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

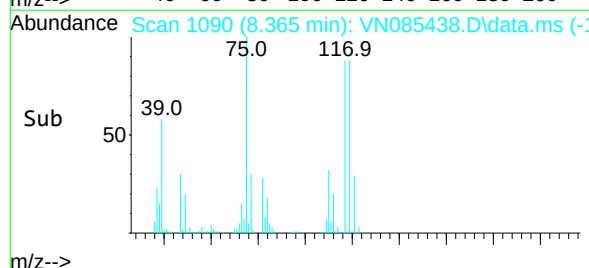
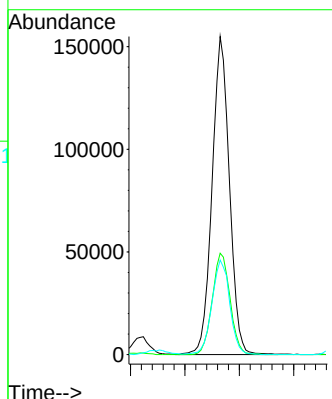
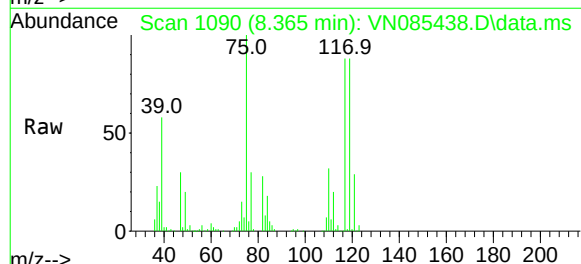
Tgt Ion: 75 Resp: 342961

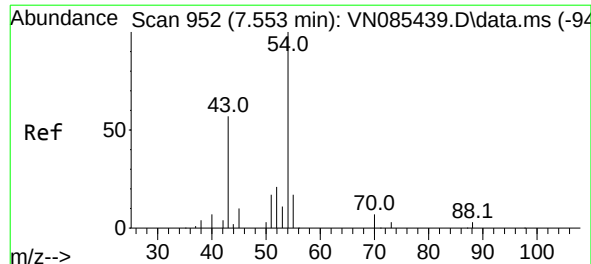
Ion Ratio Lower Upper

75 100

110 32.6 16.5 49.5

77 30.6 24.4 36.6





#37

Ethyl Acetate

Concen: 100.961 ug/l

RT: 7.553 min Scan# 952

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion: 43 Resp: 326802

Ion Ratio Lower Upper

43 100

61 12.0 10.9 16.3

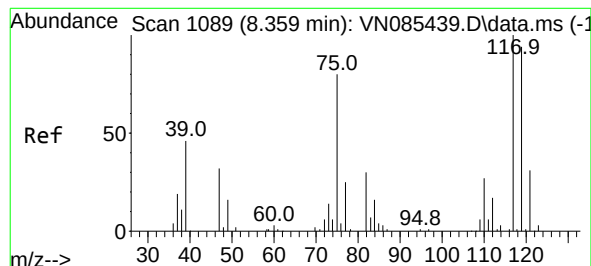
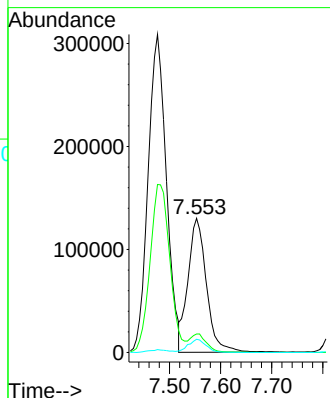
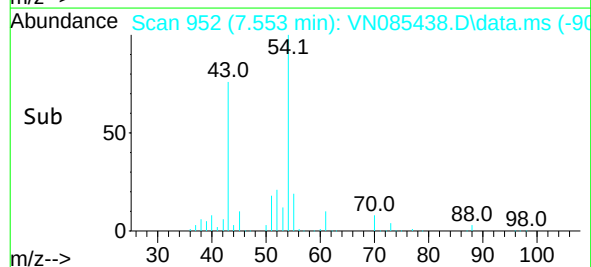
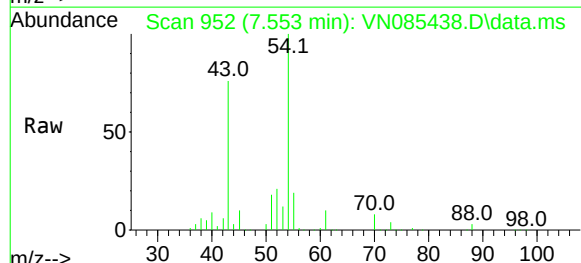
70 9.6 7.5 11.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#38

Carbon Tetrachloride

Concen: 103.065 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

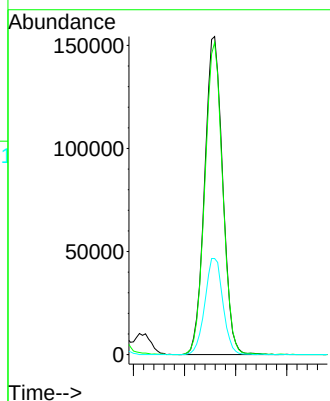
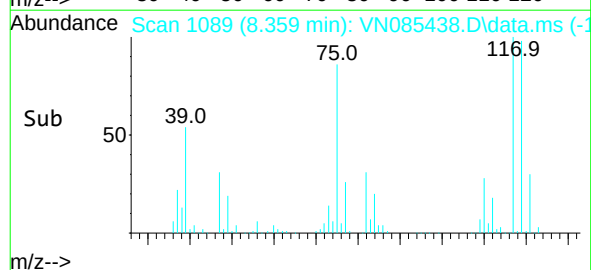
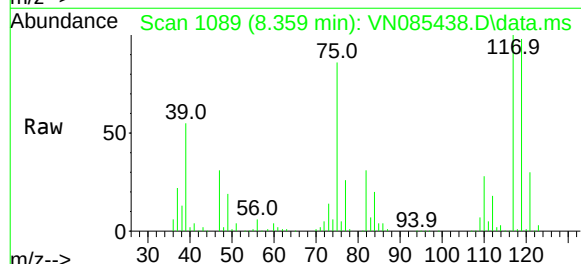
Tgt Ion:117 Resp: 378390

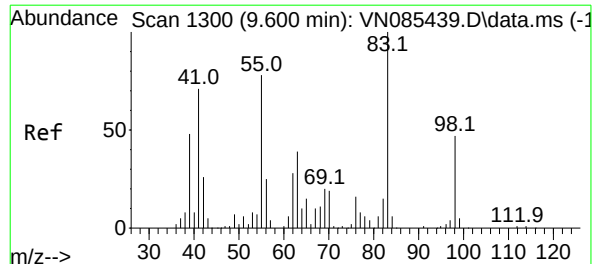
Ion Ratio Lower Upper

117 100

119 98.1 75.4 113.2

121 30.2 24.6 37.0





#39

Methylcyclohexane

Concen: 123.354 ug/l

RT: 9.594 min Scan# 12

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 83 Resp: 371734

Ion Ratio Lower Upper

83 100

55 79.3 62.6 94.0

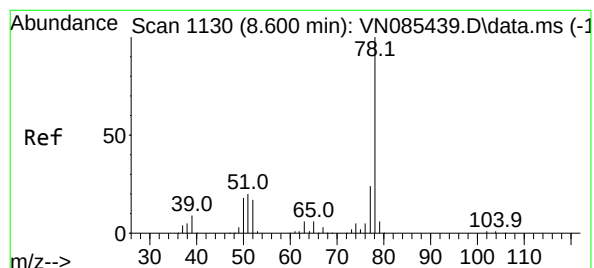
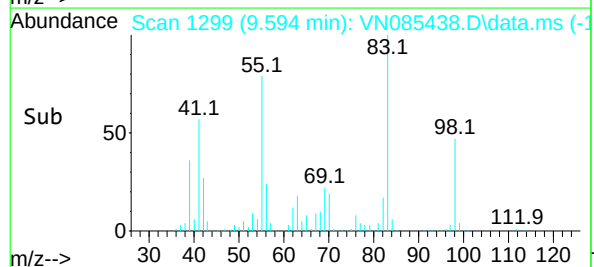
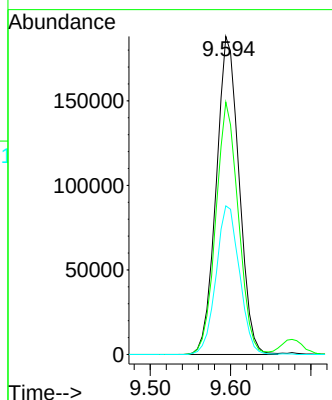
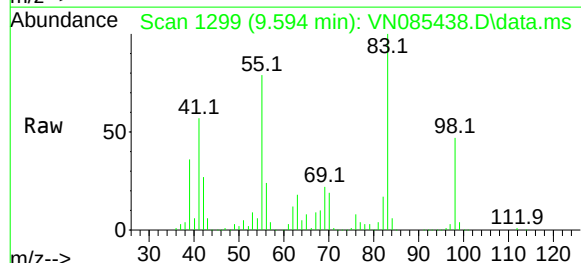
98 46.7 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#40

Benzene

Concen: 106.001 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN085438.D

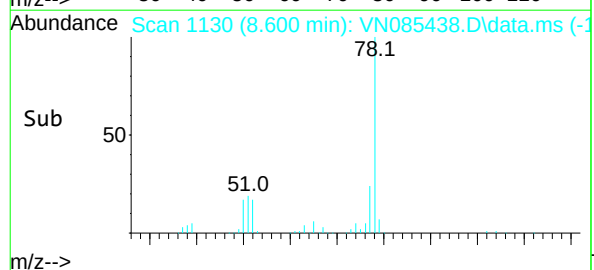
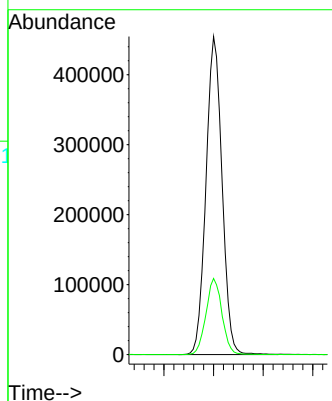
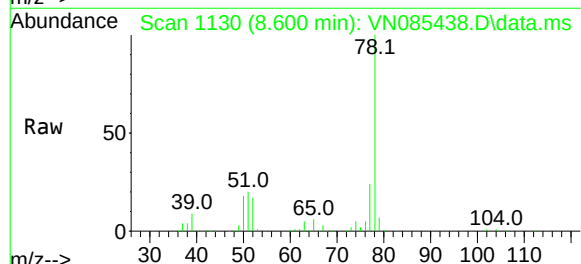
Acq: 14 Jan 2025 14:56

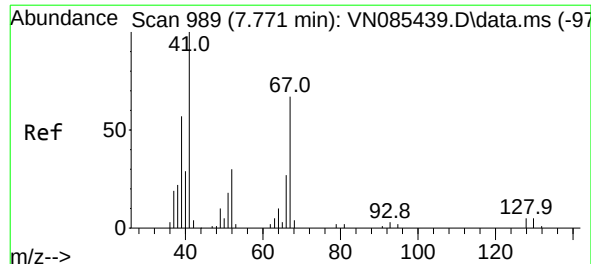
Tgt Ion: 78 Resp: 1021393

Ion Ratio Lower Upper

78 100

77 23.9 19.0 28.6





#41

Methacrylonitrile

Concen: 109.454 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 41 Resp: 184326

Ion Ratio Lower Upper

41 100

39 52.8 46.0 69.0

67 68.8 57.4 86.2

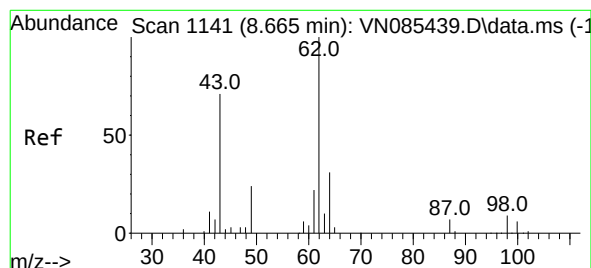
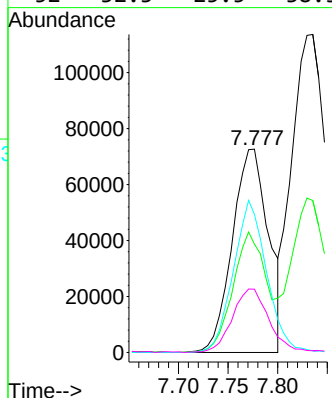
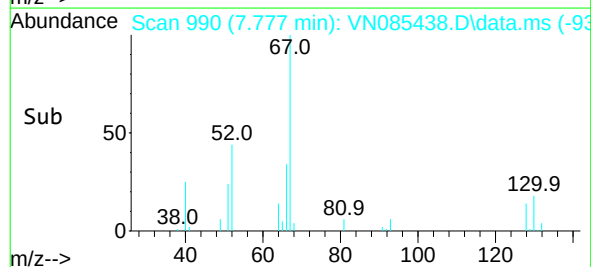
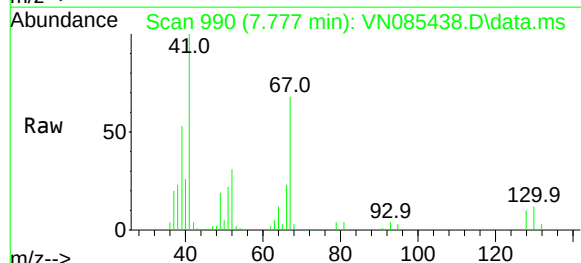
52 32.3 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 103.314 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085438.D

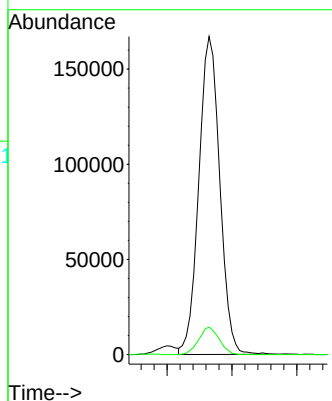
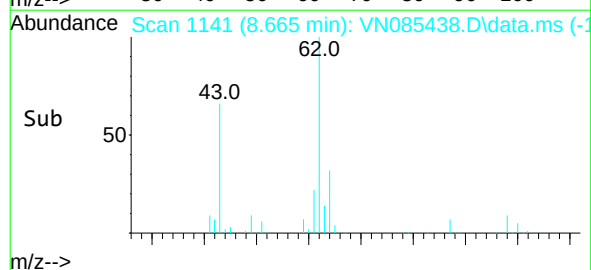
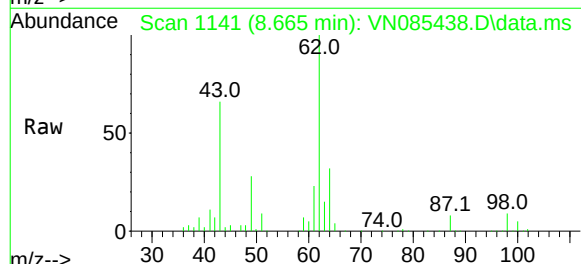
Acq: 14 Jan 2025 14:56

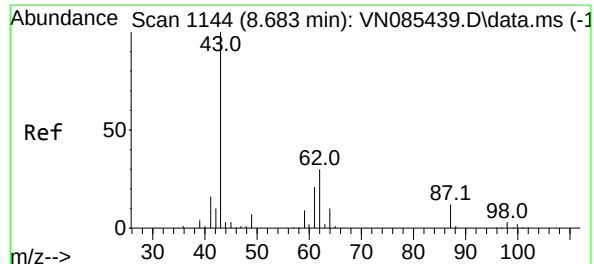
Tgt Ion: 62 Resp: 374938

Ion Ratio Lower Upper

62 100

98 8.4 0.0 17.0





#43

Isopropyl Acetate

Concen: 106.035 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

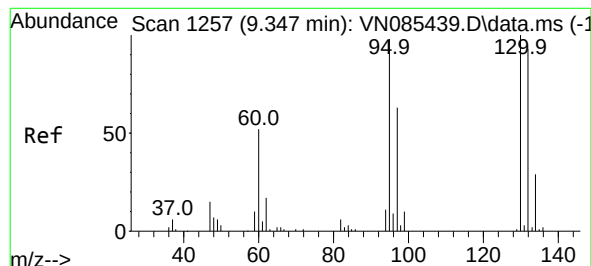
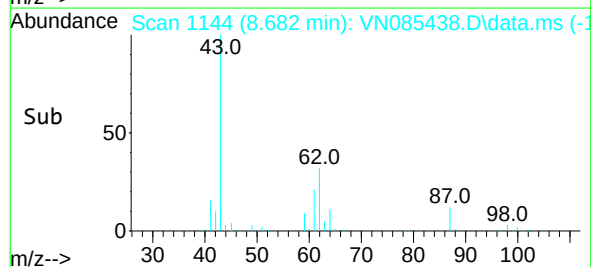
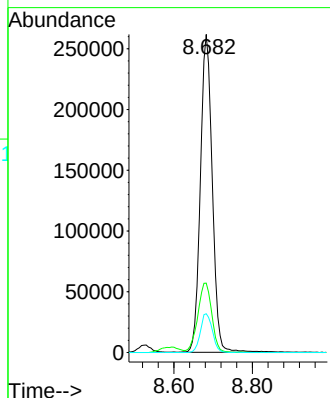
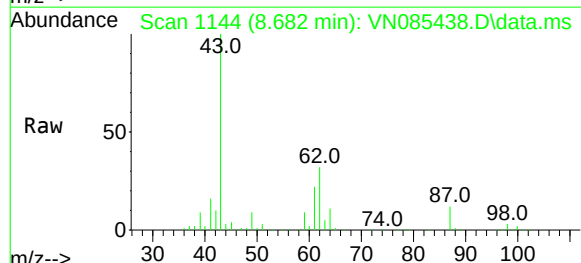
VSTDICC100

Tgt Ion:	43	Resp:	549969
Ion	Ratio	Lower	Upper
43	100		
61	25.7	20.7	31.1
87	12.2	9.8	14.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#44

Trichloroethene

Concen: 106.242 ug/l

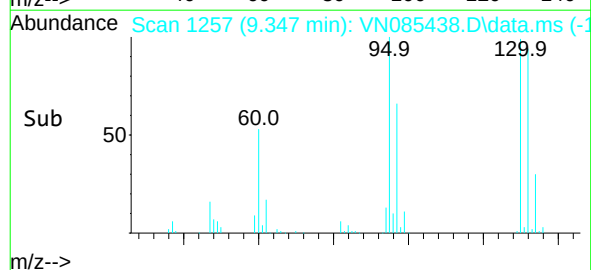
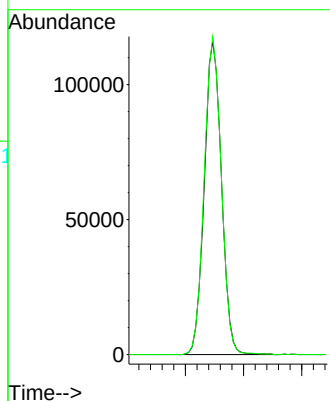
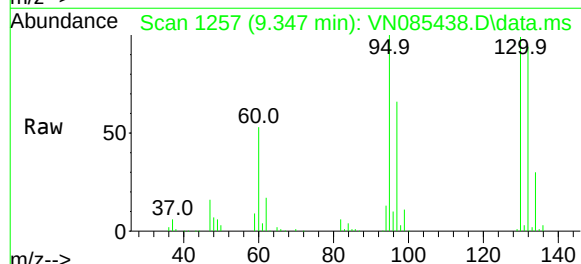
RT: 9.347 min Scan# 1257

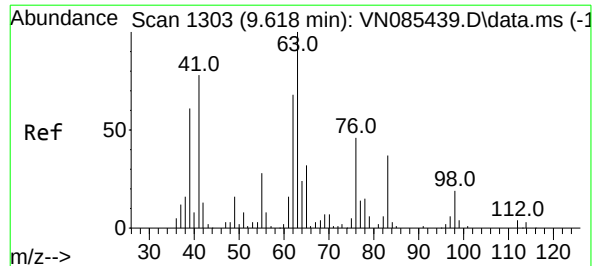
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion:	130	Resp:	238296
Ion	Ratio	Lower	Upper
130	100		
95	101.5	0.0	195.8





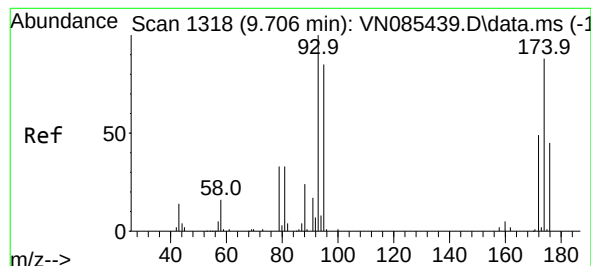
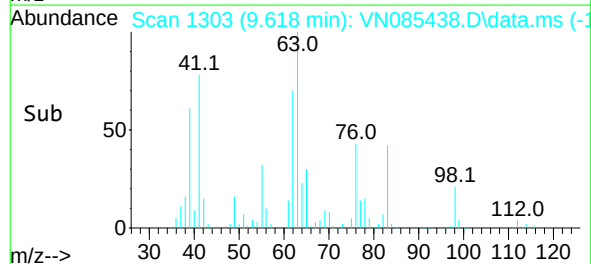
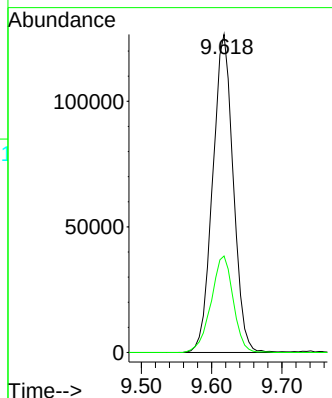
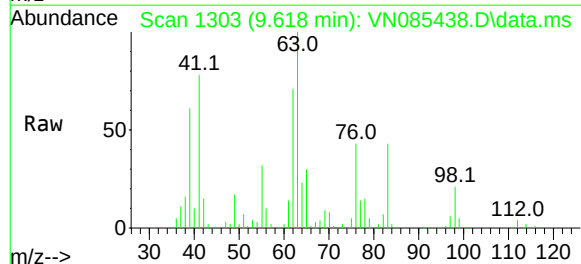
#45
1,2-Dichloropropane
Concen: 104.405 ug/l
RT: 9.618 min Scan# 1303
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 63 Resp: 256964
Ion Ratio Lower Upper
63 100
65 30.3 25.6 38.4

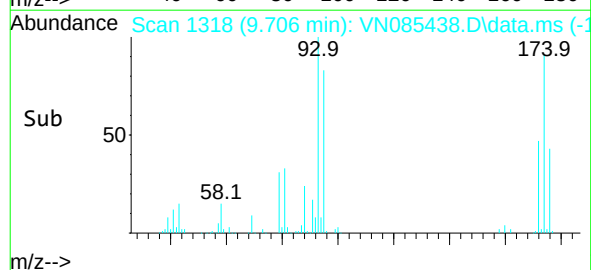
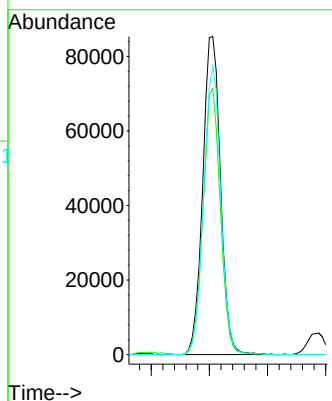
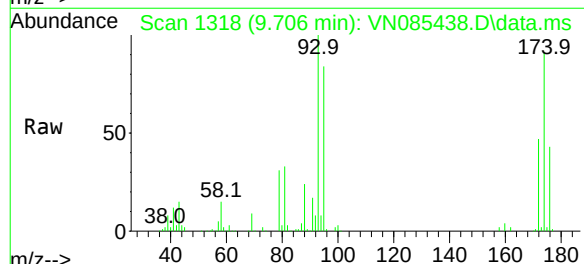
Manual Integrations
APPROVED

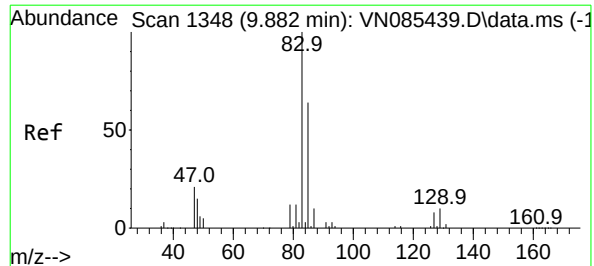
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#46
Dibromomethane
Concen: 101.913 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 93 Resp: 180990
Ion Ratio Lower Upper
93 100
95 81.6 64.7 97.1
174 87.5 69.0 103.4





#47

Bromodichloromethane

Concen: 107.377 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

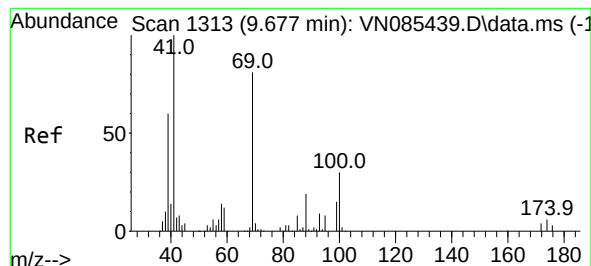
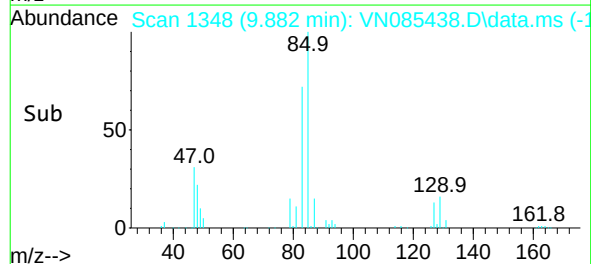
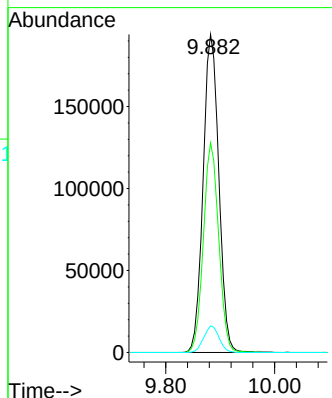
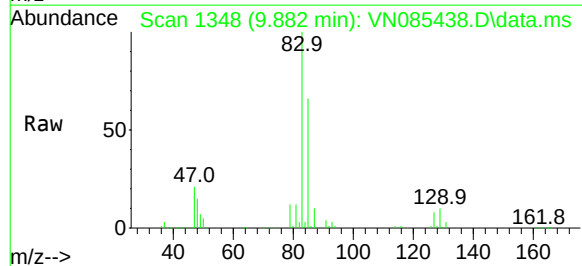
ClientSampleId :

VSTDIC100

Tgt Ion:	83	Resp:	388499
Ion	Ratio	Lower	Upper
83	100		
85	65.9	51.2	76.8
127	8.4	6.5	9.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 114.685 ug/l

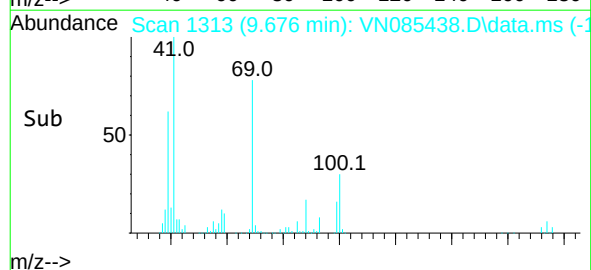
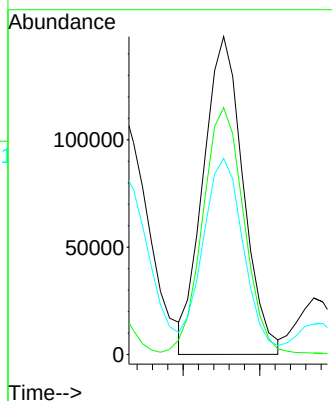
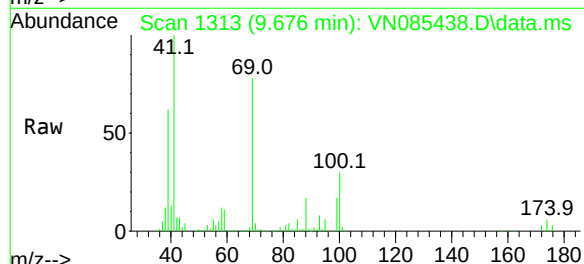
RT: 9.676 min Scan# 1313

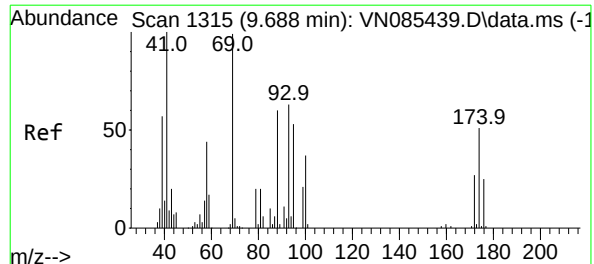
Delta R.T. -0.001 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion:	41	Resp:	267689
Ion	Ratio	Lower	Upper
41	100		
69	80.9	64.7	97.1
39	63.1	49.0	73.6





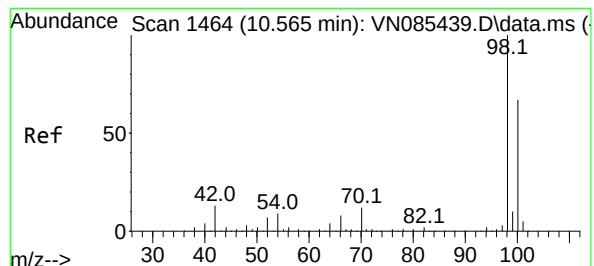
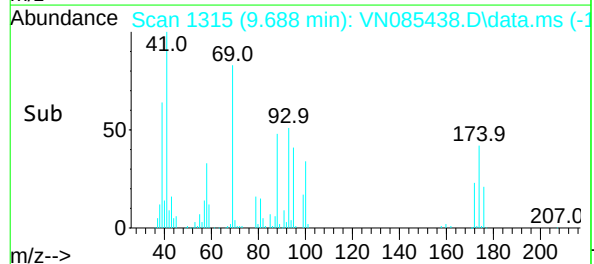
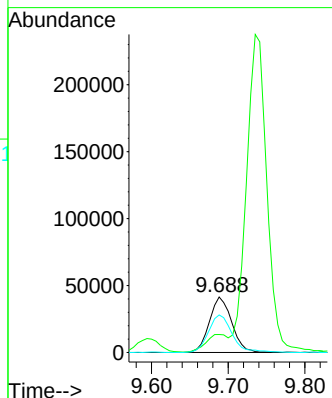
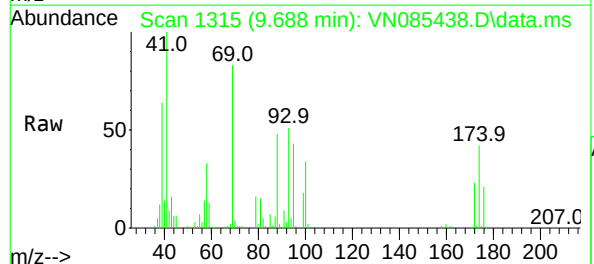
#49
1,4-Dioxane
Concen: 2133.992 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 88 Resp: 83879
Ion Ratio Lower Upper
88 100
43 31.3 26.6 39.8
58 72.1 59.5 89.3

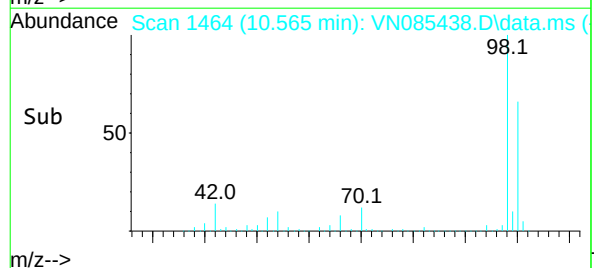
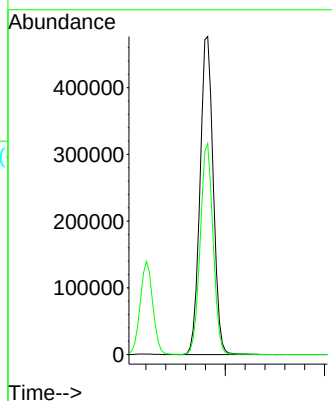
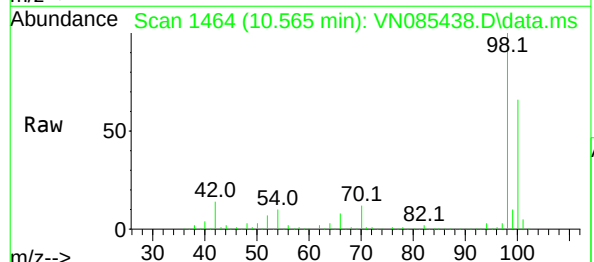
Manual Integrations
APPROVED

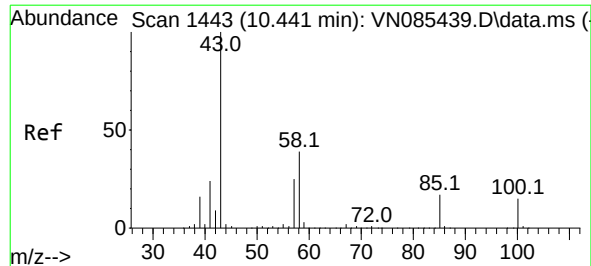
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#50
Toluene-d8
Concen: 108.636 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 98 Resp: 881956
Ion Ratio Lower Upper
98 100
100 64.5 52.2 78.4





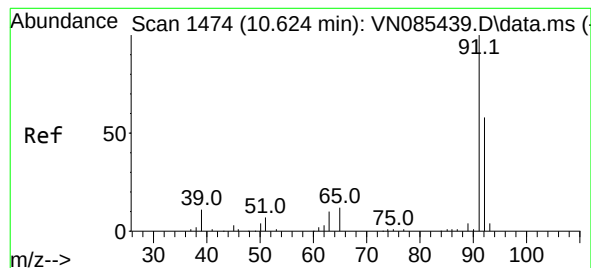
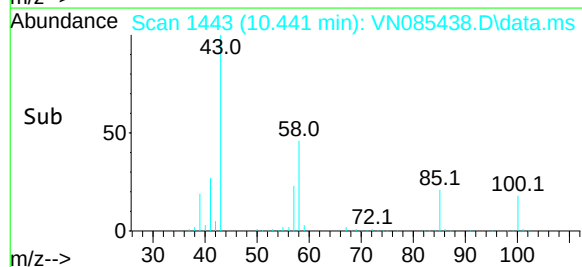
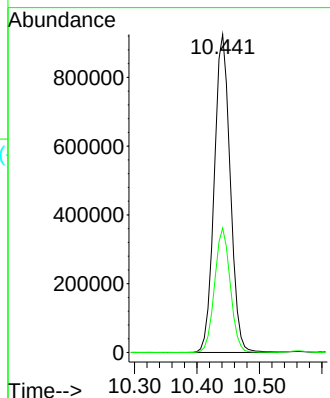
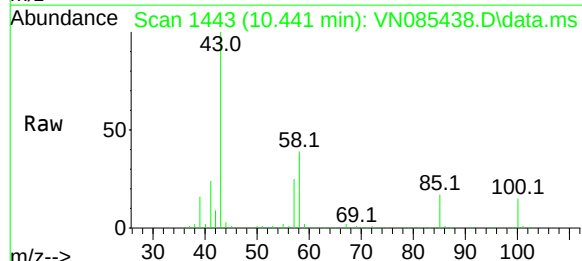
#51
4-Methyl-2-Pentanone
Concen: 546.159 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 43 Resp: 1643800
Ion Ratio Lower Upper
43 100
58 38.4 30.5 45.7

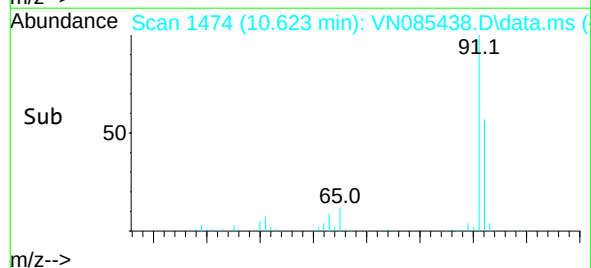
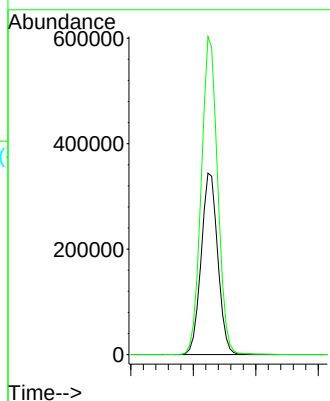
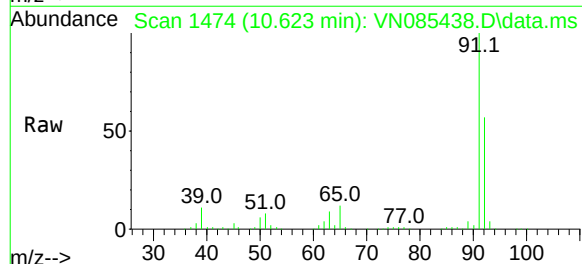
Manual Integrations
APPROVED

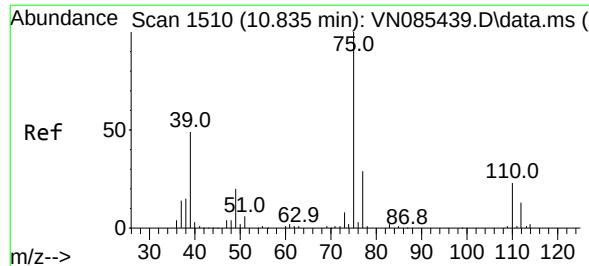
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#52
Toluene
Concen: 113.689 ug/l
RT: 10.623 min Scan# 1474
Delta R.T. -0.001 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 92 Resp: 634743
Ion Ratio Lower Upper
92 100
91 173.1 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 114.424 ug/l

RT: 10.829 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 75 Resp: 391238

Ion Ratio Lower Upper

75 100

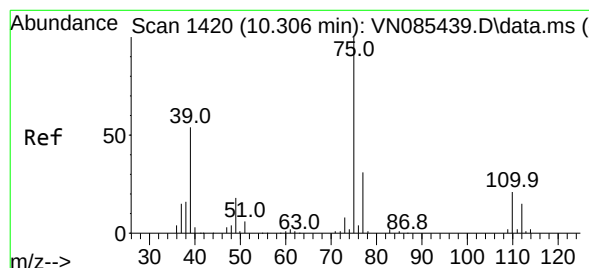
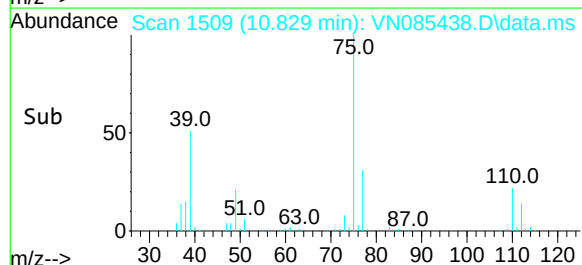
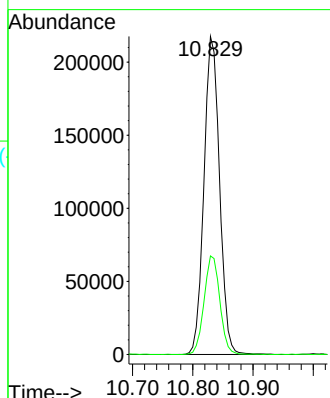
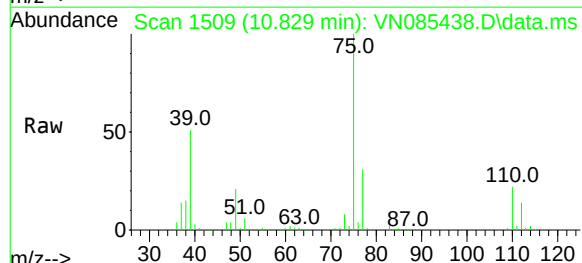
77 31.0 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 112.369 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

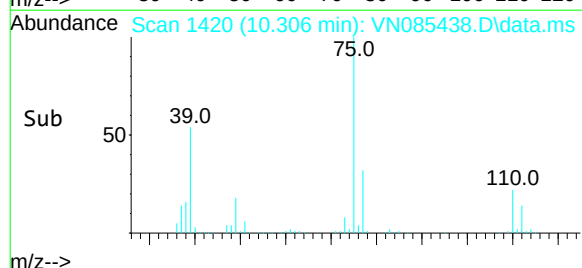
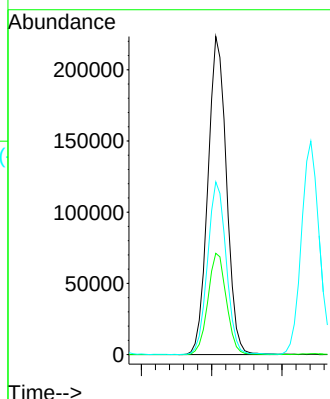
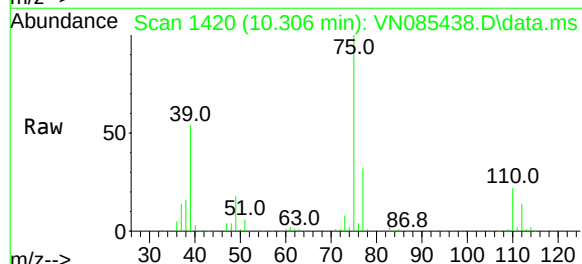
Tgt Ion: 75 Resp: 410403

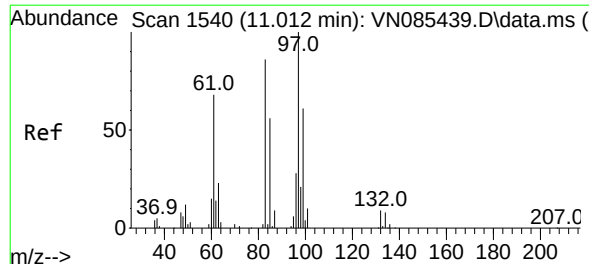
Ion Ratio Lower Upper

75 100

77 31.9 25.0 37.4

39 54.3 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 103.879 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion: 97 Resp: 229522

Ion Ratio Lower Upper

97 100

83 88.4 69.0 103.6

85 56.3 44.6 66.8

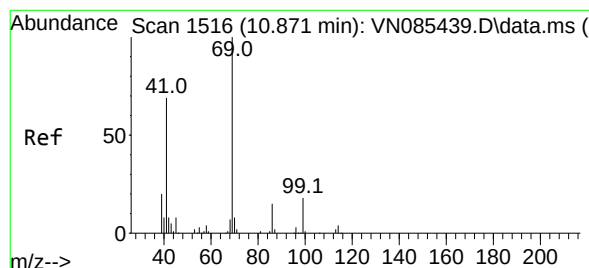
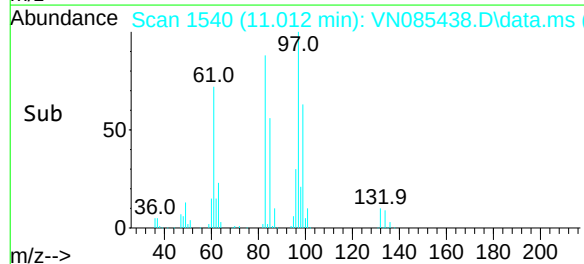
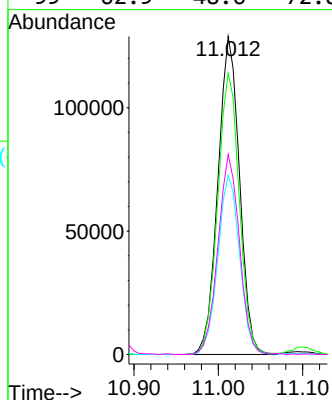
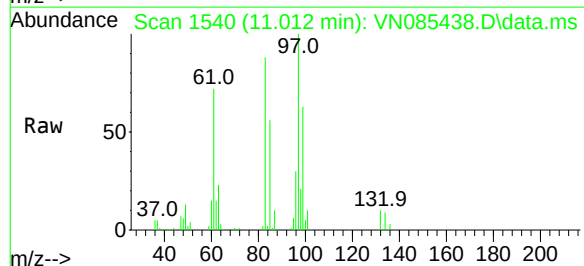
99 62.9 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 101.029 ug/l

RT: 10.870 min Scan# 1516

Delta R.T. -0.001 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

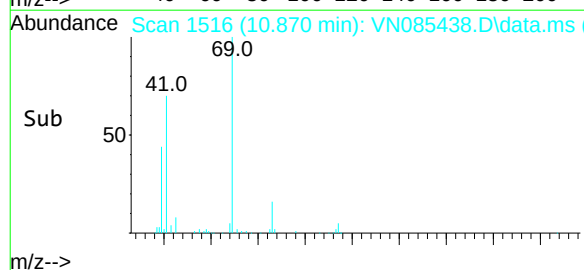
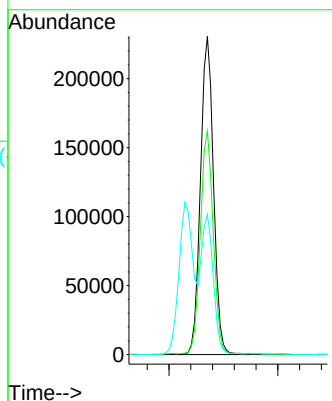
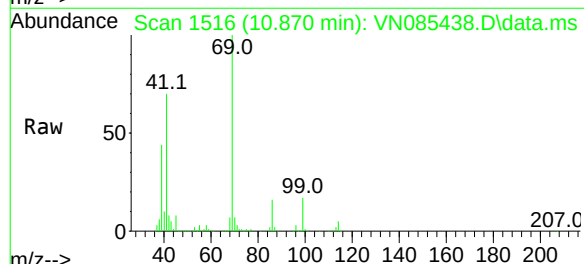
Tgt Ion: 69 Resp: 383663

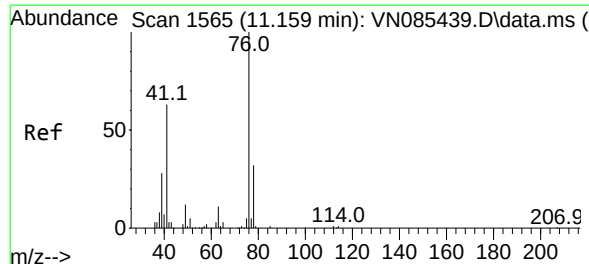
Ion Ratio Lower Upper

69 100

41 69.1 54.6 82.0

39 40.1 32.4 48.6





#57

1,3-Dichloropropane

Concen: 107.469 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 76 Resp: 412886

Ion Ratio Lower Upper

76 100

78 32.2 25.6 38.4

Instrument :

MSVOA_N

ClientSampleId :

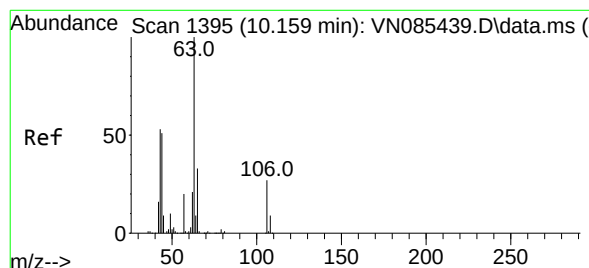
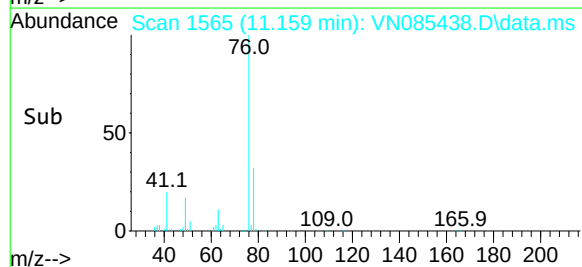
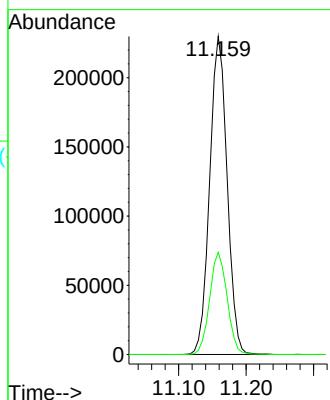
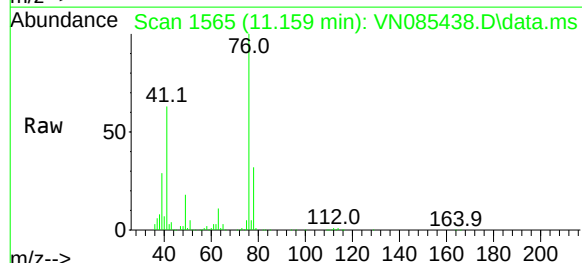
VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 605.243 ug/l

RT: 10.153 min Scan# 1394

Delta R.T. -0.006 min

Lab File: VN085438.D

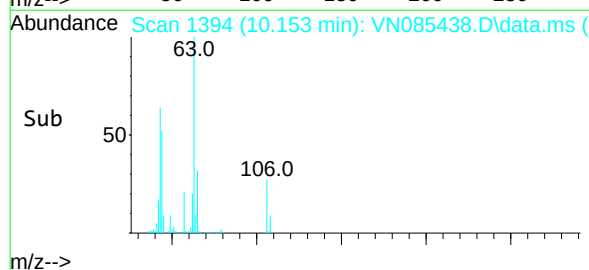
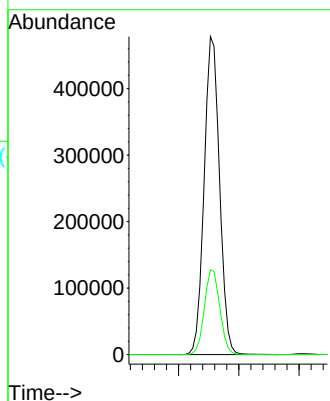
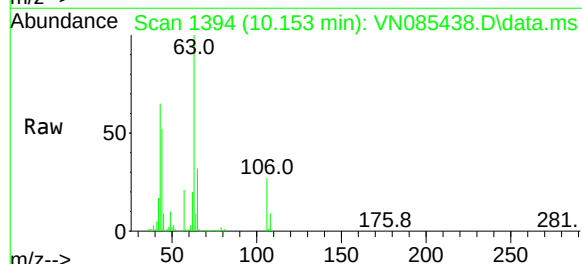
Acq: 14 Jan 2025 14:56

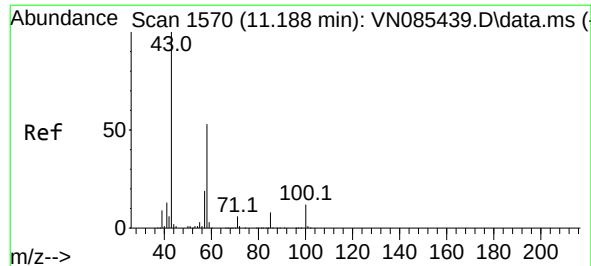
Tgt Ion: 63 Resp: 848636

Ion Ratio Lower Upper

63 100

106 26.8 21.6 32.4





#59

2-Hexanone

Concen: 556.643 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 43 Resp: 1178831

Ion Ratio Lower Upper

43 100

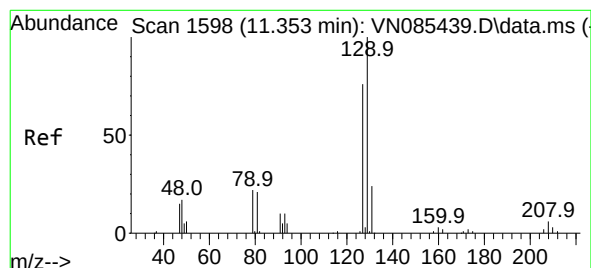
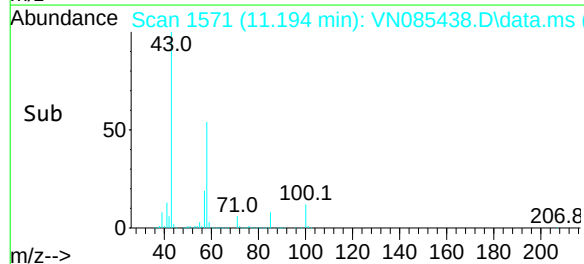
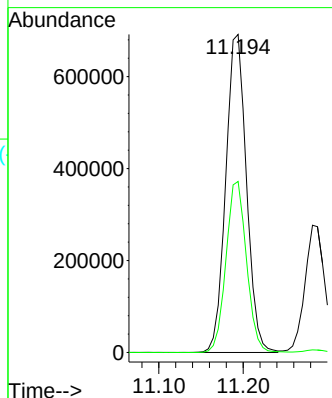
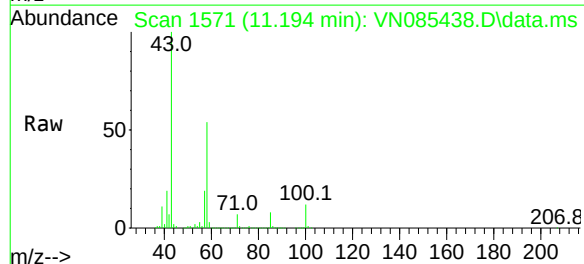
58 53.2 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 106.227 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. -0.000 min

Lab File: VN085438.D

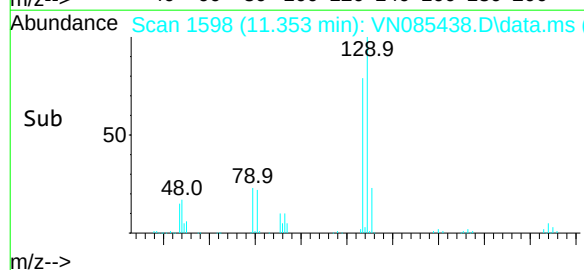
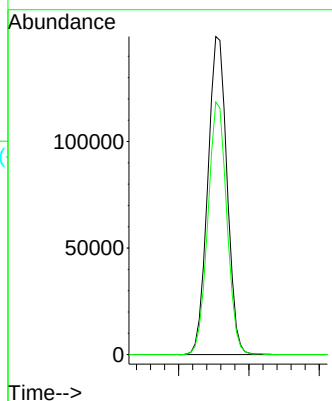
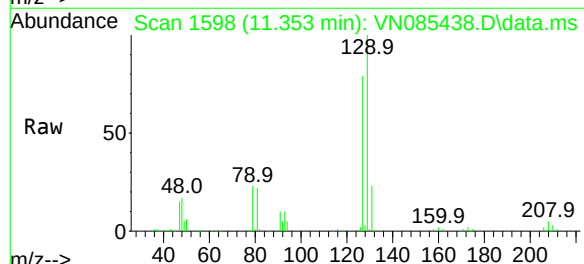
Acq: 14 Jan 2025 14:56

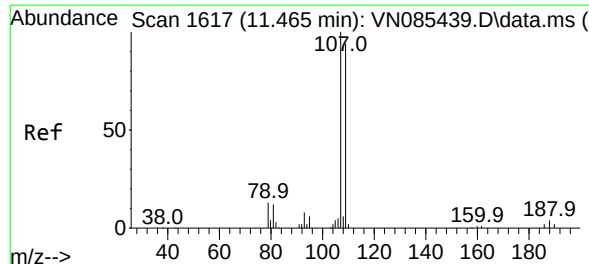
Tgt Ion:129 Resp: 283361

Ion Ratio Lower Upper

129 100

127 78.1 38.6 115.8





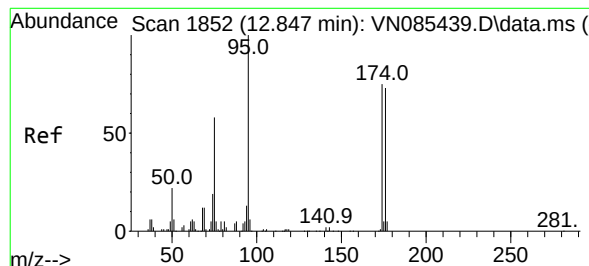
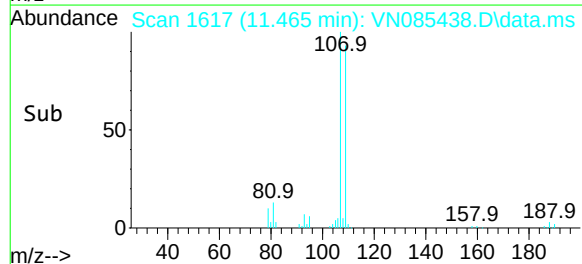
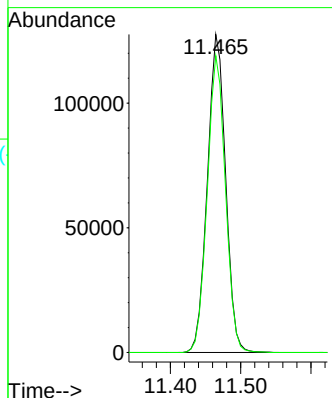
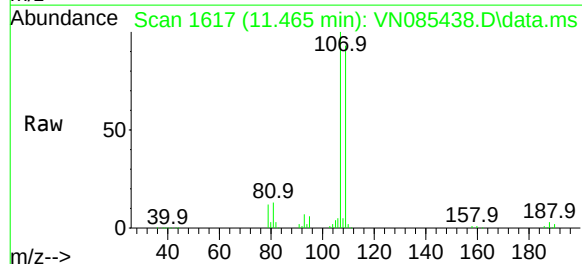
#61
1,2-Dibromoethane
Concen: 104.623 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Tgt Ion: 107 Resp: 230104
Ion Ratio Lower Upper
107 100
109 93.1 75.9 113.9

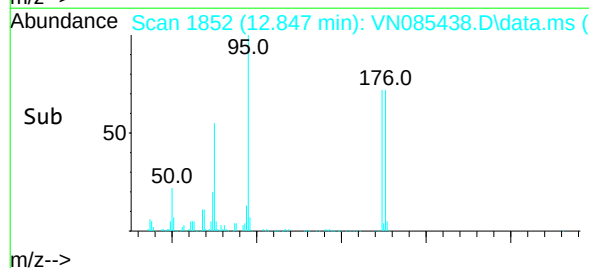
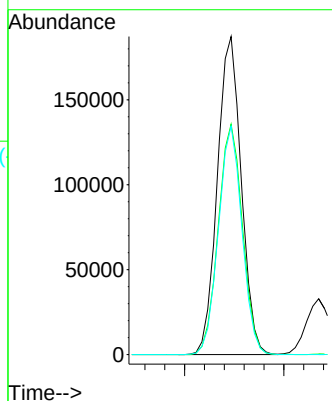
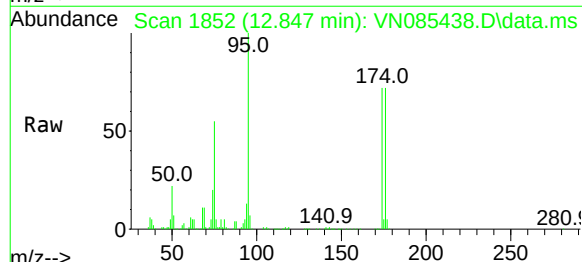
Manual Integrations
APPROVED

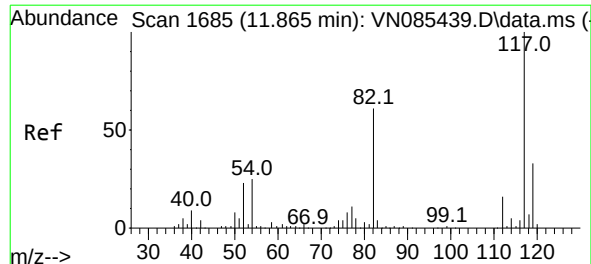
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#62
4-Bromofluorobenzene
Concen: 112.765 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085438.D
Acq: 14 Jan 2025 14:56

Tgt Ion: 95 Resp: 313161
Ion Ratio Lower Upper
95 100
174 73.4 0.0 145.0
176 70.5 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:117 Resp: 298938

Ion Ratio Lower Upper

117 100

82 59.3 48.6 72.8

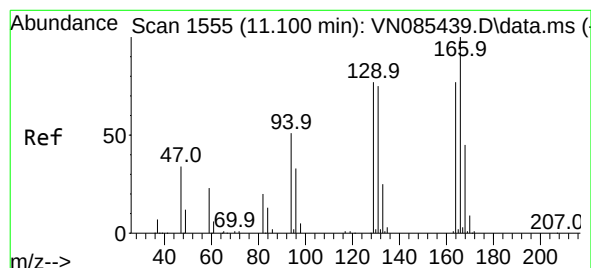
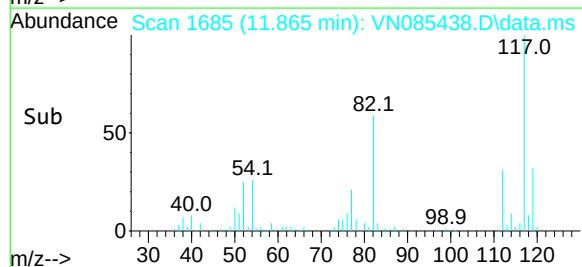
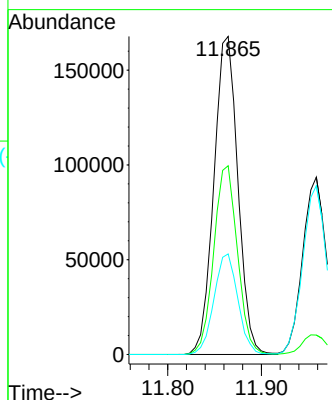
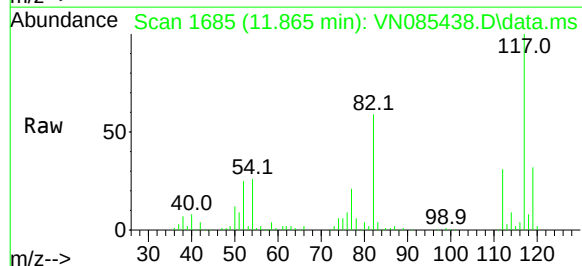
119 31.6 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 102.980 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion:164 Resp: 209870

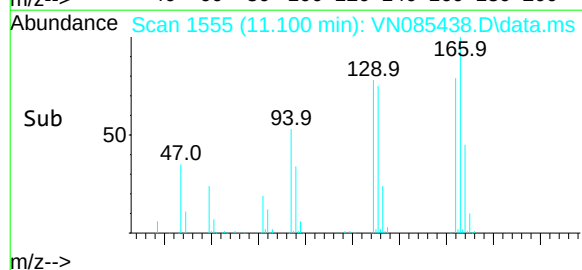
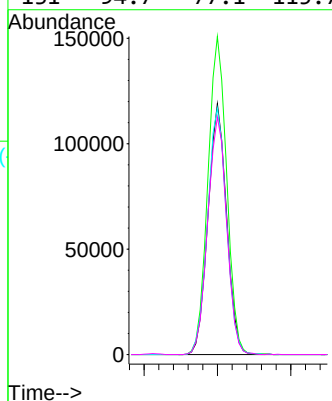
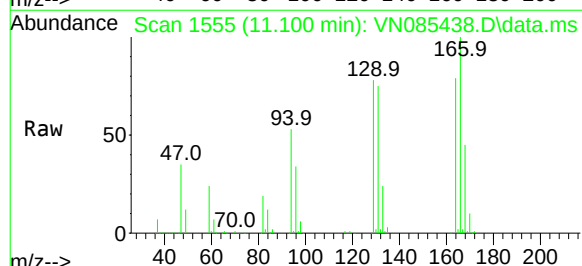
Ion Ratio Lower Upper

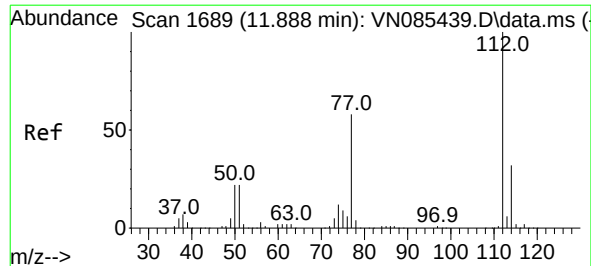
164 100

166 126.8 103.4 155.2

129 98.3 79.2 118.8

131 94.7 77.1 115.7





#65

Chlorobenzene

Concen: 103.482 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion:112 Resp: 677679

Ion Ratio Lower Upper

112 100

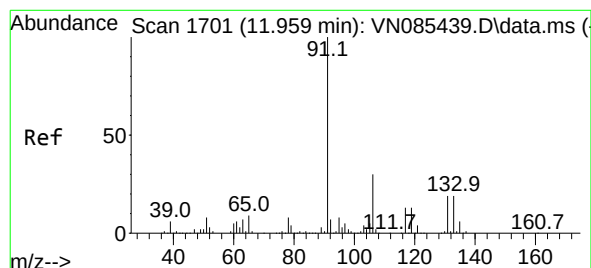
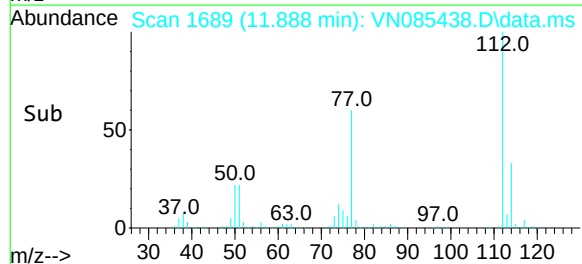
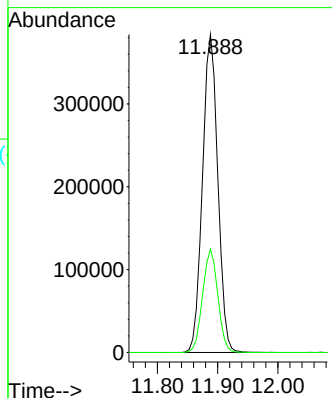
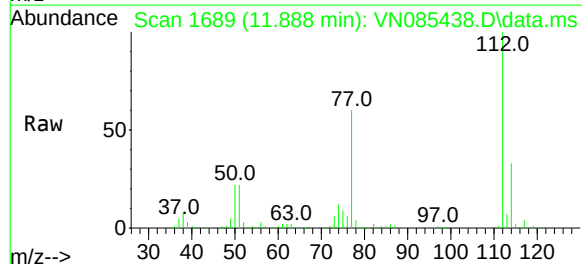
114 32.5 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 100.517 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

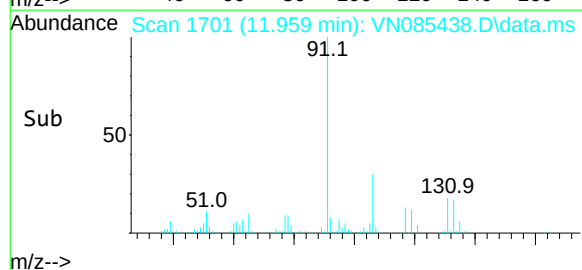
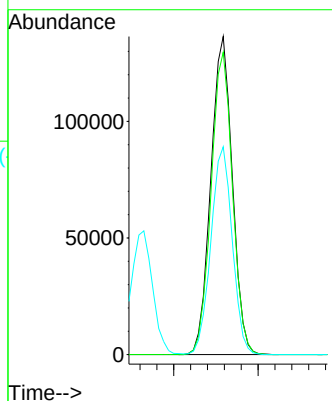
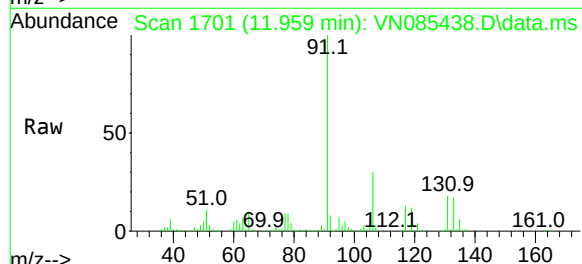
Tgt Ion:131 Resp: 241593

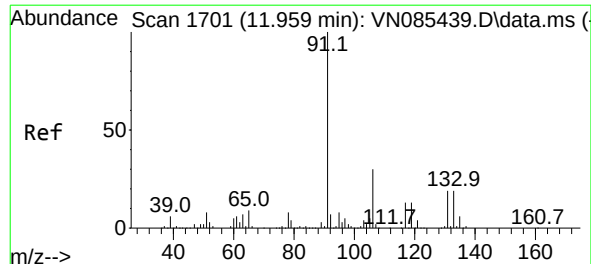
Ion Ratio Lower Upper

131 100

133 94.3 47.4 142.3

119 64.9 33.1 99.5





#67

Ethyl Benzene

Concen: 116.169 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion: 91 Resp: 1239080

Ion Ratio Lower Upper

91 100

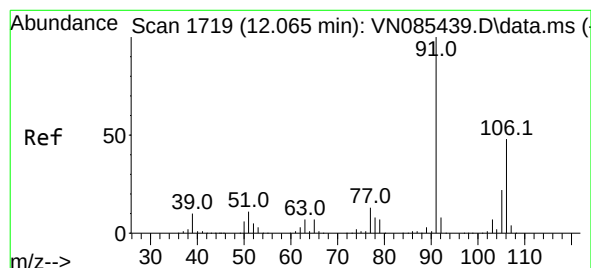
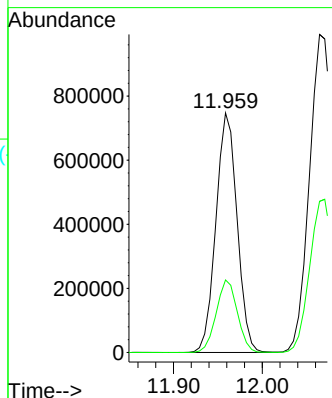
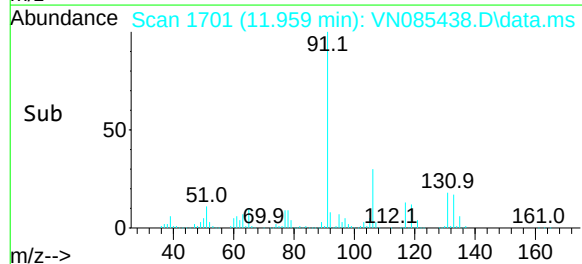
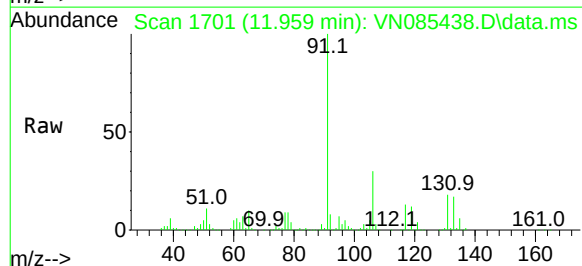
106 30.3 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 235.219 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085438.D

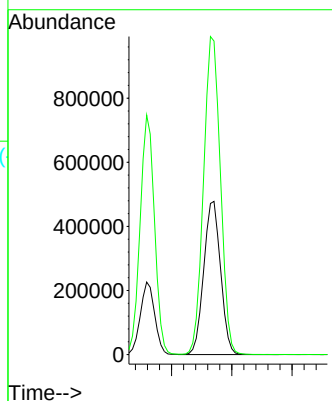
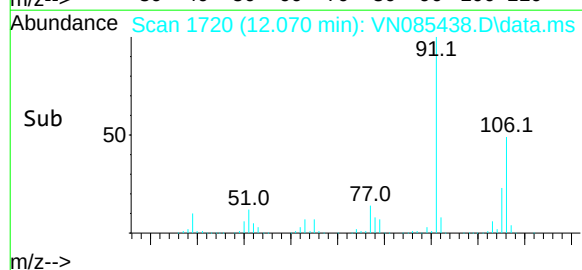
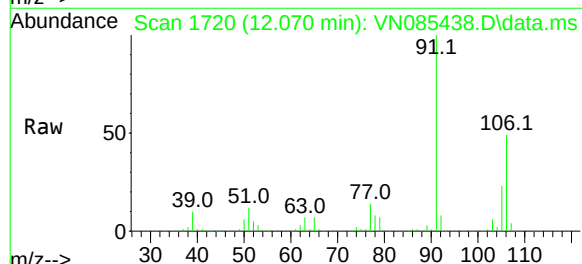
Acq: 14 Jan 2025 14:56

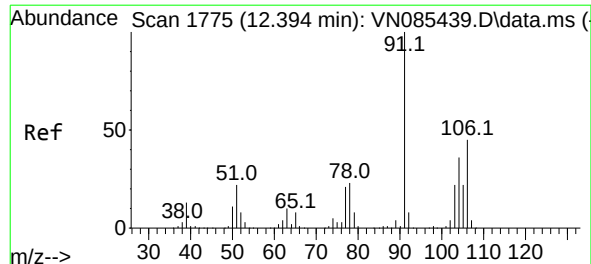
Tgt Ion:106 Resp: 927244

Ion Ratio Lower Upper

106 100

91 208.0 167.7 251.5





#69

o-Xylene

Concen: 117.135 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:106 Resp: 441279

Ion Ratio Lower Upper

106 100

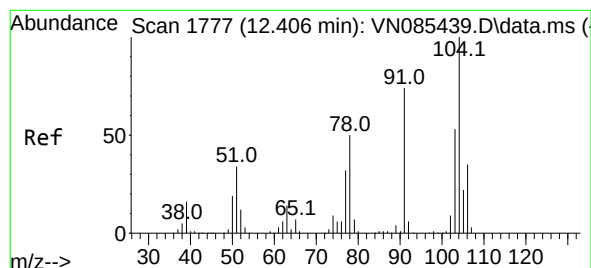
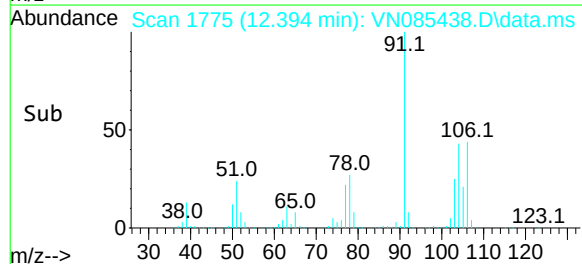
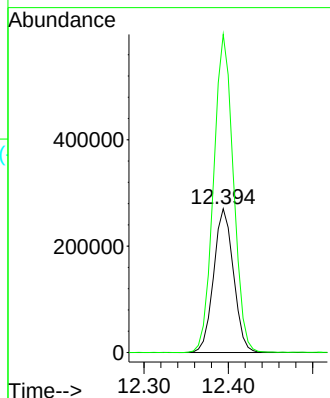
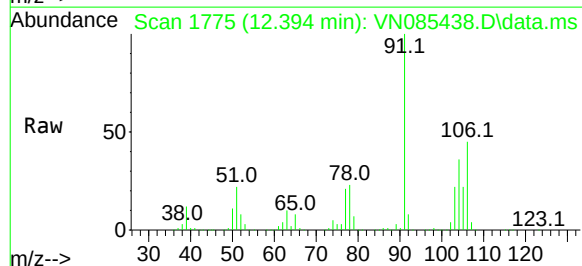
91 221.3 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 121.919 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

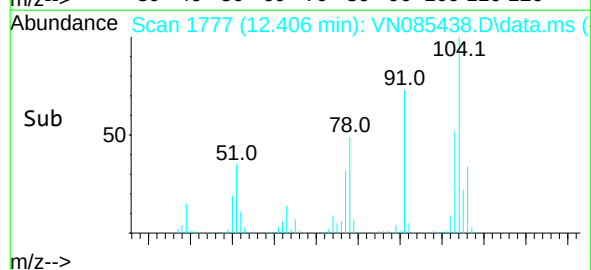
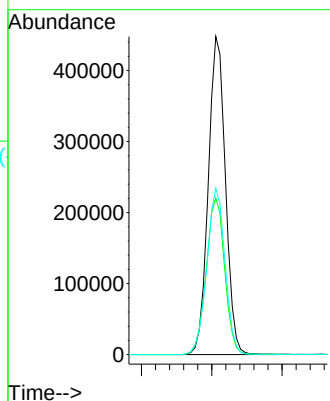
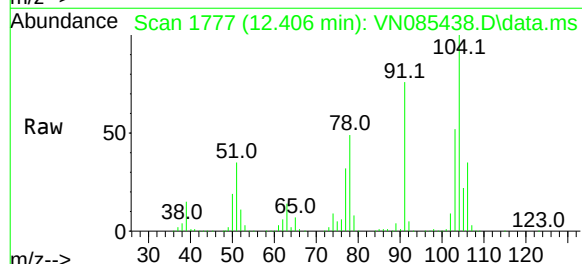
Tgt Ion:104 Resp: 760136

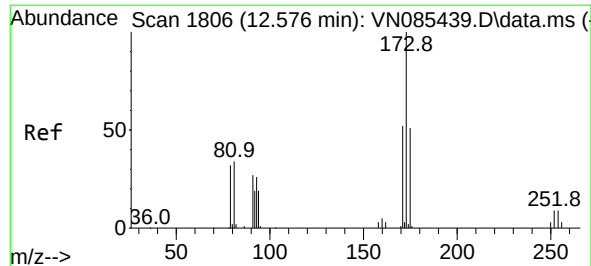
Ion Ratio Lower Upper

104 100

78 52.8 42.5 63.7

103 55.3 43.8 65.8





#71

Bromoform

Concen: 108.227 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

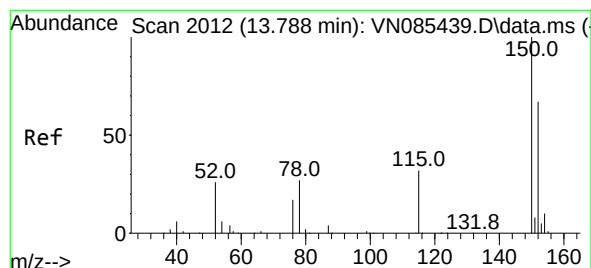
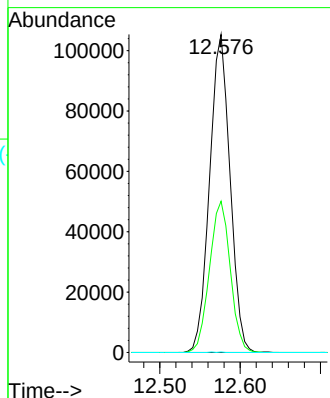
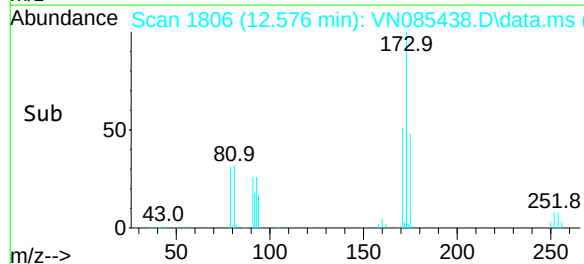
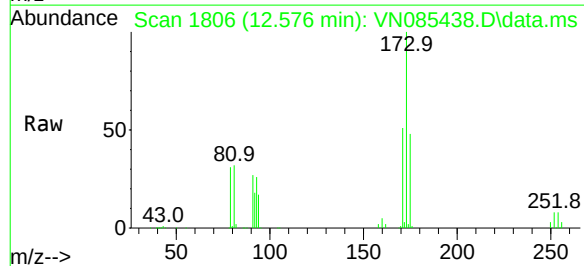
ClientSampleId :

VSTDICC100

Tgt Ion:	173	Resp:	186124
Ion Ratio	Lower	Upper	
173	100		
175	48.4	24.4	73.2
254	0.1	0.0	0.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

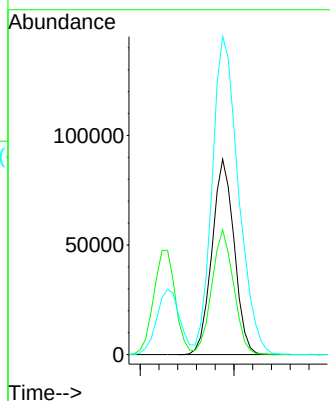
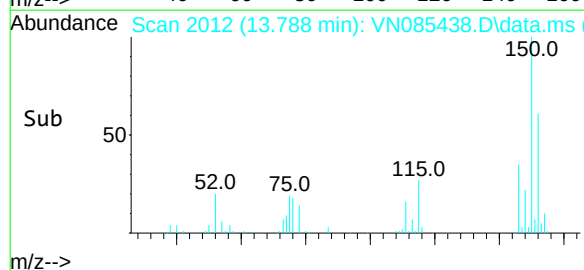
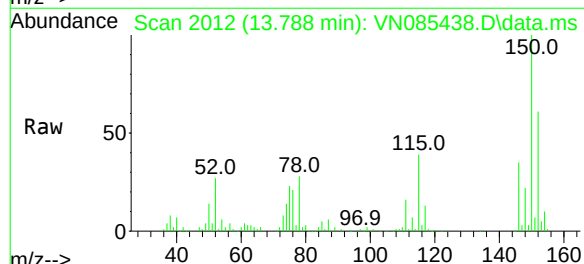
RT: 13.788 min Scan# 2012

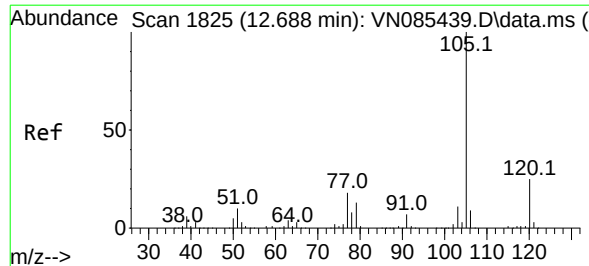
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion:	152	Resp:	146196
Ion Ratio	Lower	Upper	
152	100		
115	62.7	31.1	93.3
150	193.1	0.0	343.6





#73

Isopropylbenzene

Concen: 116.221 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:105 Resp: 1146752

Ion Ratio Lower Upper

105 100

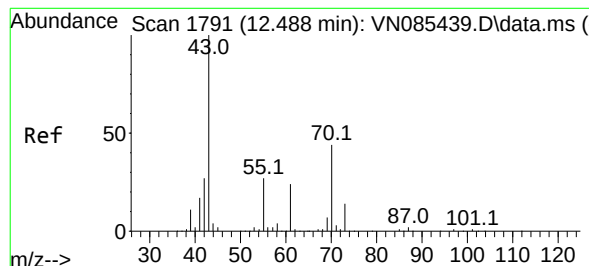
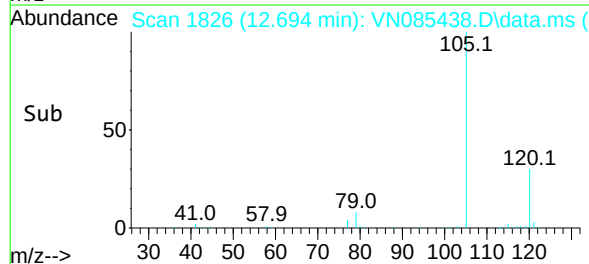
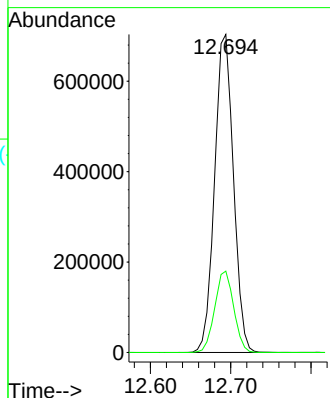
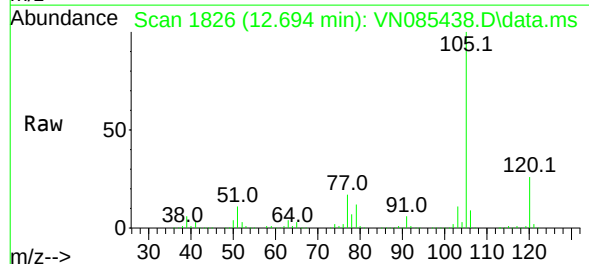
120 25.7 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 110.308 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion: 43 Resp: 489217

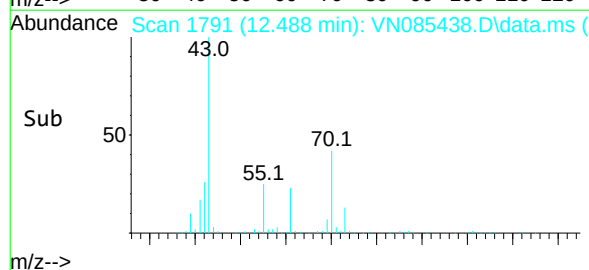
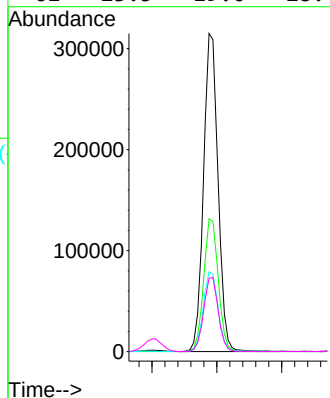
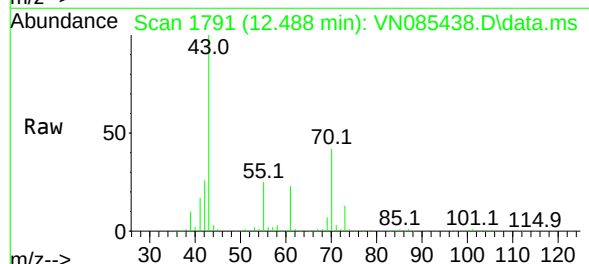
Ion Ratio Lower Upper

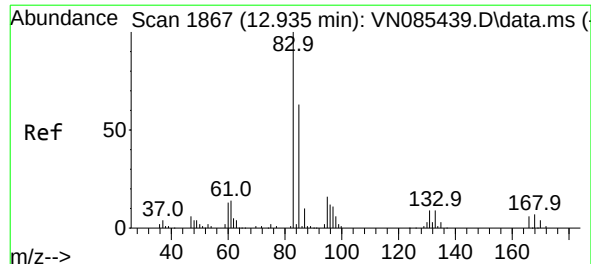
43 100

70 41.9 34.0 51.0

55 25.7 21.4 32.2

61 23.5 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 94.039 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

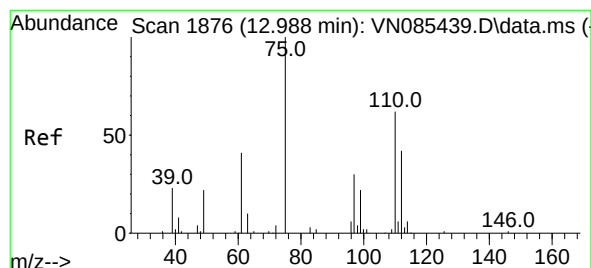
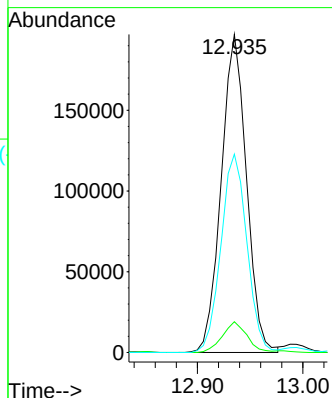
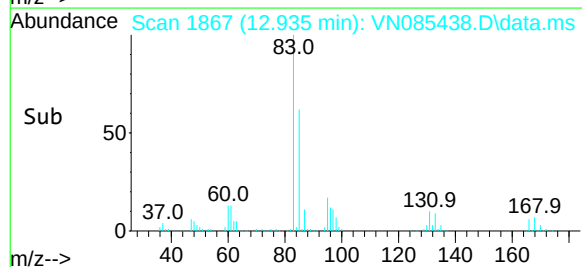
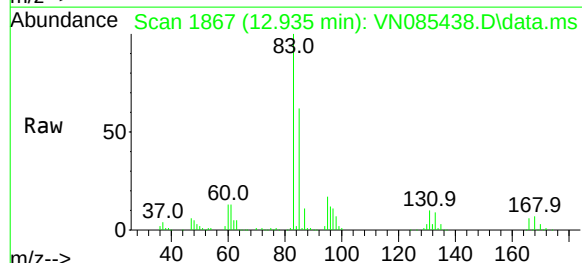
ClientSampleId :

VSTDIC100

Tgt Ion:	83	Resp:	327767
Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.8	14.4
85	64.1	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#76

1,2,3-Trichloropropane

Concen: 104.530 ug/l m

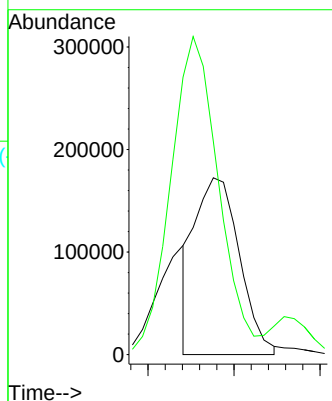
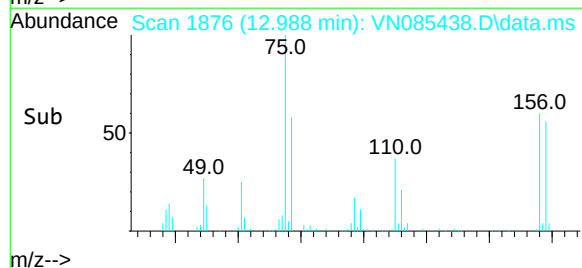
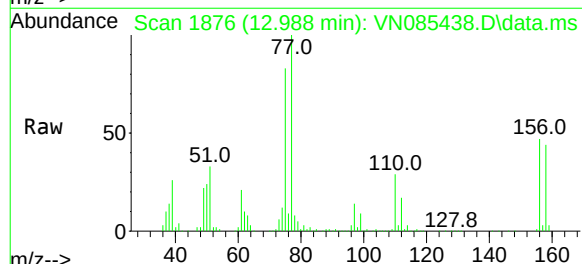
RT: 12.988 min Scan# 1876

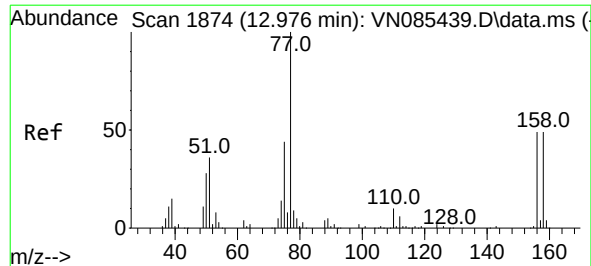
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion:	75	Resp:	310115
Ion	Ratio	Lower	Upper
75	100		
77	192.6	109.7	329.2





#77

Bromobenzene

Concen: 104.200 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:156 Resp: 268616

Ion Ratio Lower Upper

156 100

77 222.4 114.1 342.4

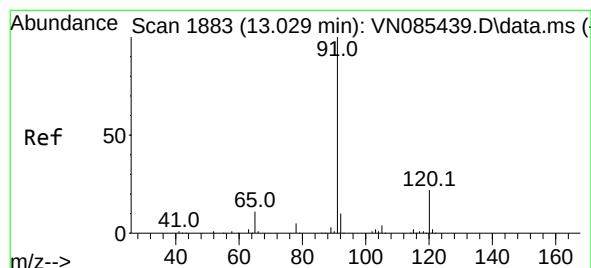
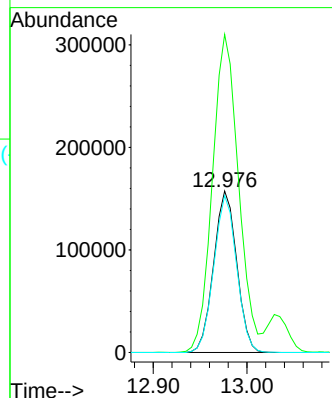
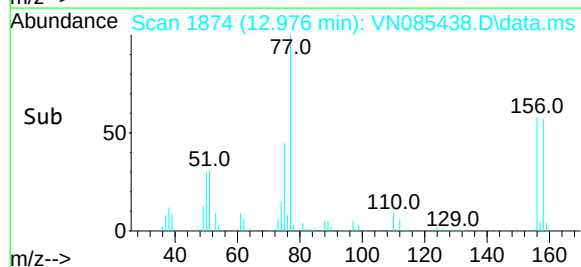
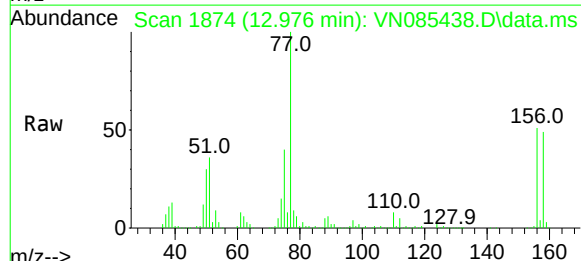
158 96.3 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

Concen: 118.600 ug/l

RT: 13.029 min Scan# 1883

Delta R.T. -0.000 min

Lab File: VN085438.D

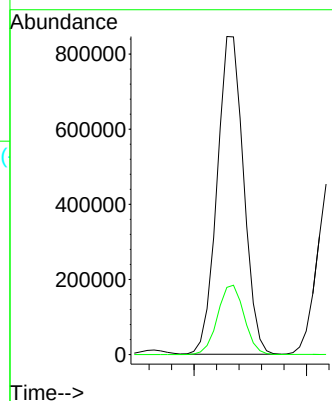
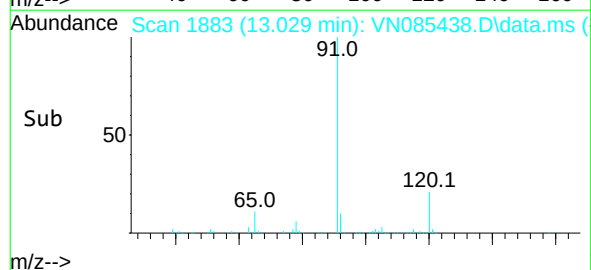
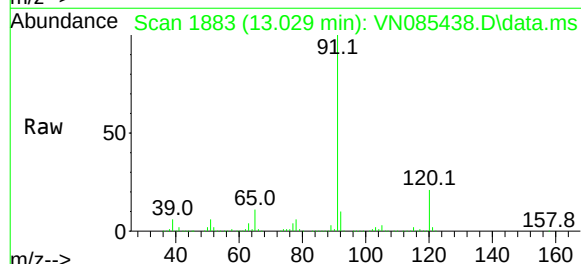
Acq: 14 Jan 2025 14:56

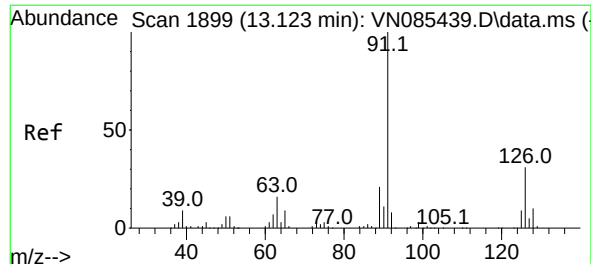
Tgt Ion: 91 Resp: 1385353

Ion Ratio Lower Upper

91 100

120 21.8 10.9 32.6





#79

2-Chlorotoluene

Concen: 108.767 ug/l

RT: 13.123 min Scan# 18

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion: 91 Resp: 822258

Ion Ratio Lower Upper

91 100

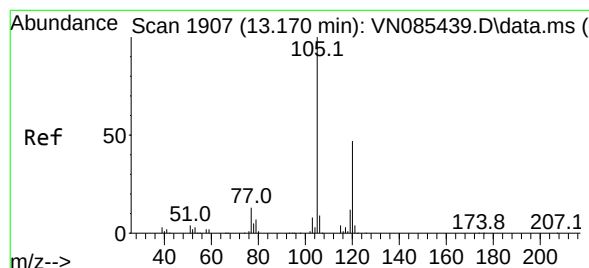
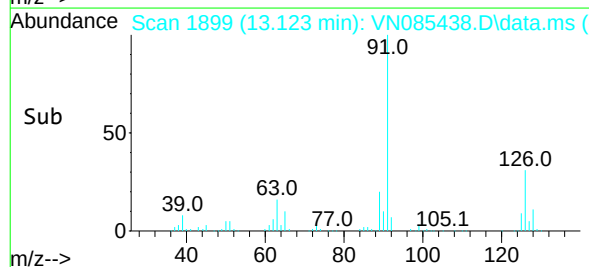
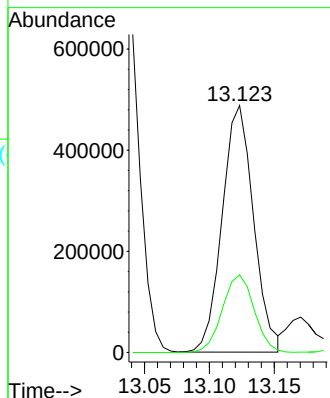
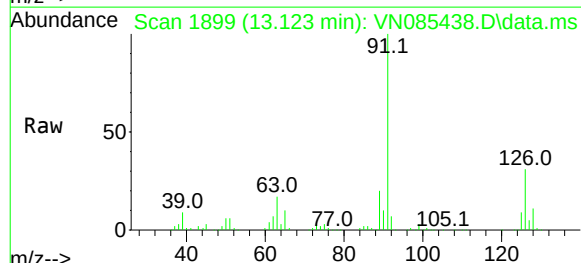
126 31.8 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 116.938 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085438.D

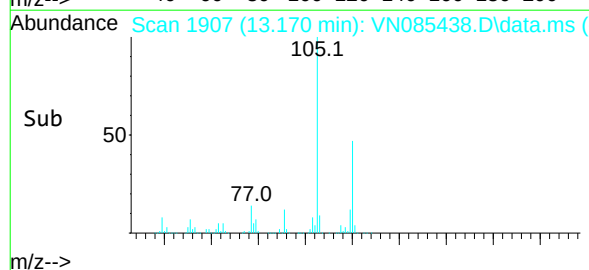
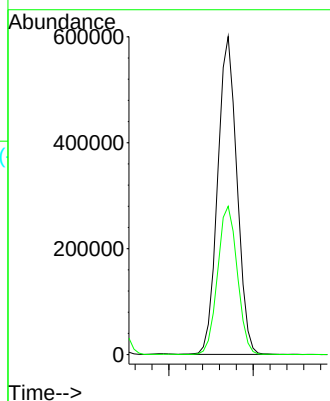
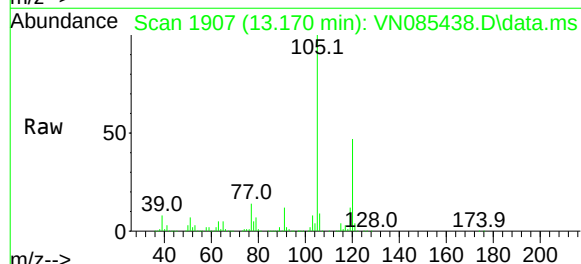
Acq: 14 Jan 2025 14:56

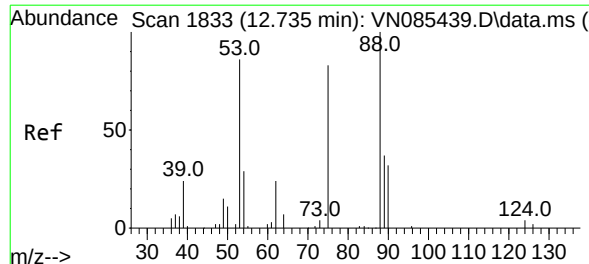
Tgt Ion:105 Resp: 953066

Ion Ratio Lower Upper

105 100

120 47.8 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 111.544 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. -0.000 min

Lab File: VN085438.D

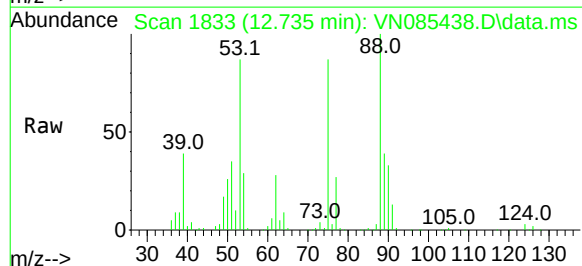
Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

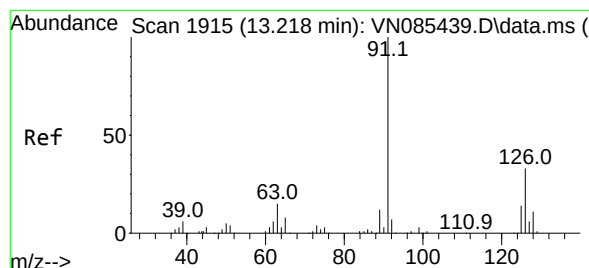
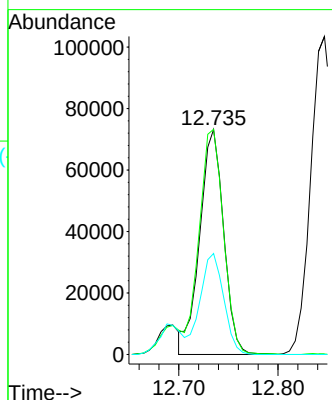
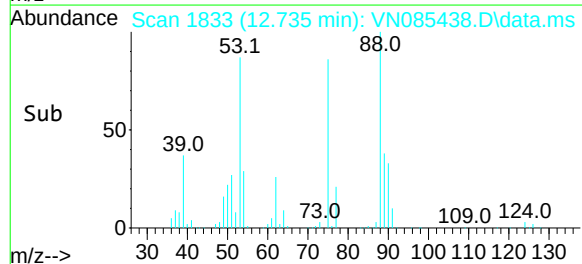
VSTDIC100



Tgt Ion:	75	Resp:	122508
Ion	Ratio	Lower	Upper
75	100		
53	100.9	95.6	143.4
89	44.4	37.0	55.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#82

4-Chlorotoluene

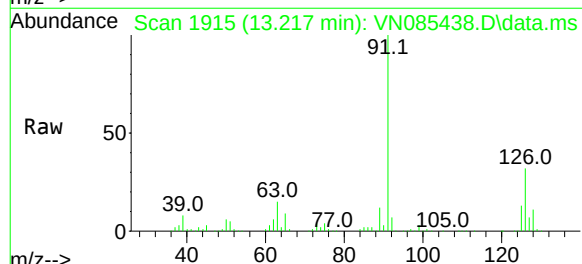
Concen: 110.574 ug/l

RT: 13.217 min Scan# 1915

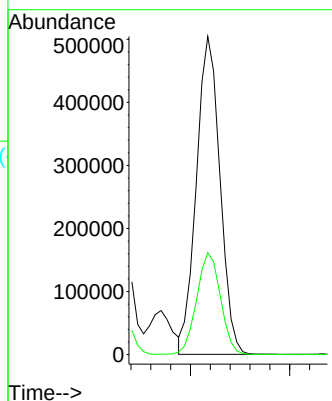
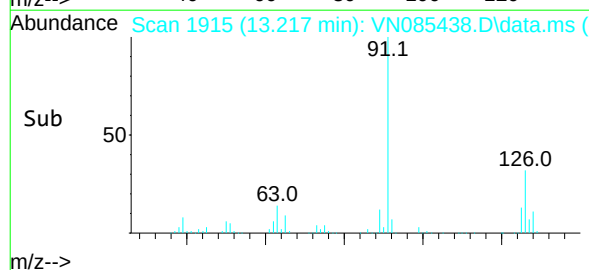
Delta R.T. -0.000 min

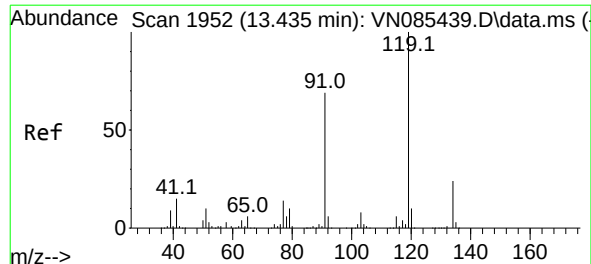
Lab File: VN085438.D

Acq: 14 Jan 2025 14:56



Tgt Ion:	91	Resp:	832317
Ion	Ratio	Lower	Upper
91	100		
126	32.5	15.9	47.7





#83

tert-Butylbenzene

Concen: 116.457 ug/l

RT: 13.435 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion:119 Resp: 797069

Ion Ratio Lower Upper

119 100

91 70.7 35.1 105.3

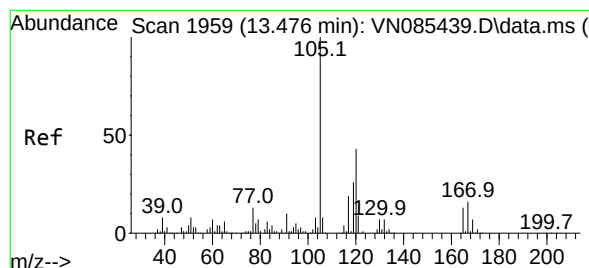
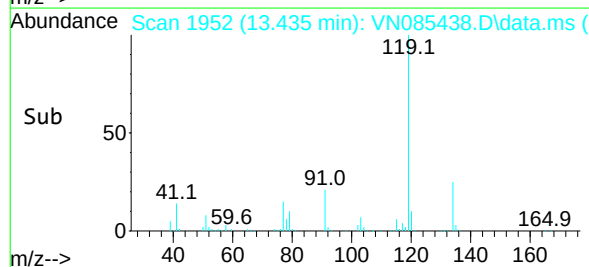
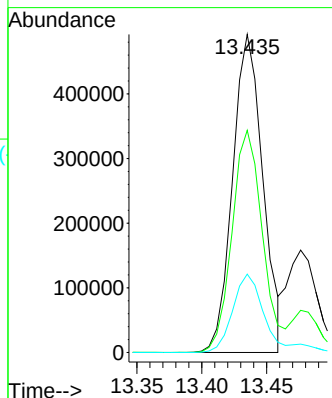
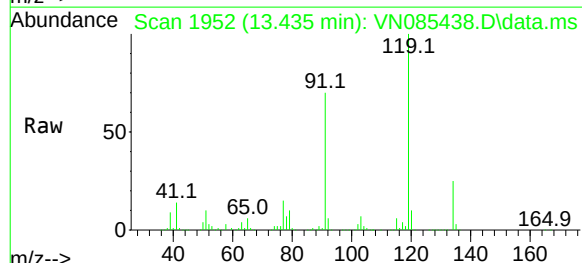
134 26.6 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 119.625 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. -0.000 min

Lab File: VN085438.D

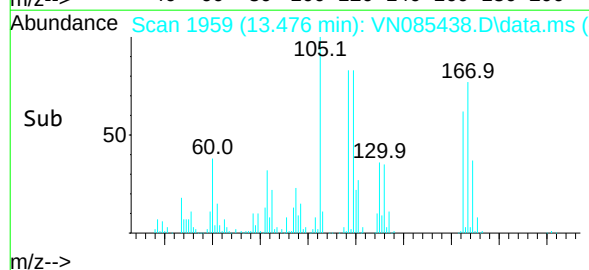
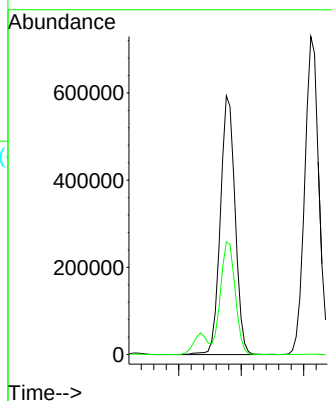
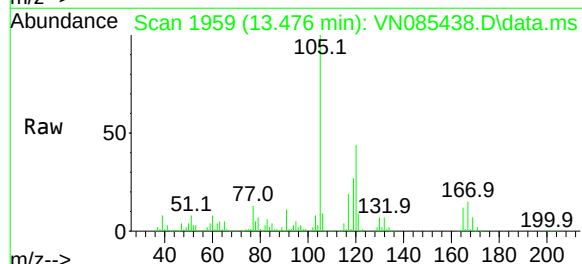
Acq: 14 Jan 2025 14:56

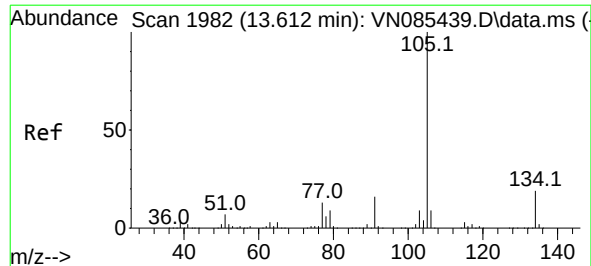
Tgt Ion:105 Resp: 971729

Ion Ratio Lower Upper

105 100

120 43.4 21.6 65.0





#85

sec-Butylbenzene

Concen: 120.587 ug/l

RT: 13.611 min Scan# 19

Delta R.T. -0.001 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:105 Resp: 1143885

Ion Ratio Lower Upper

105 100

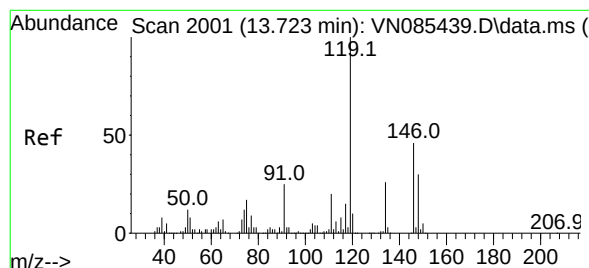
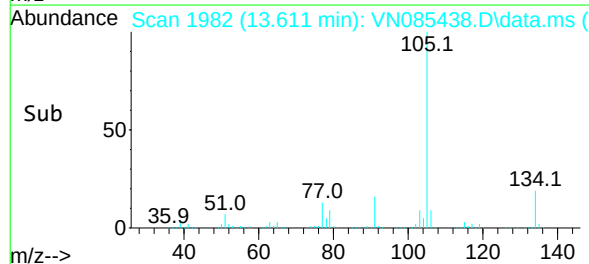
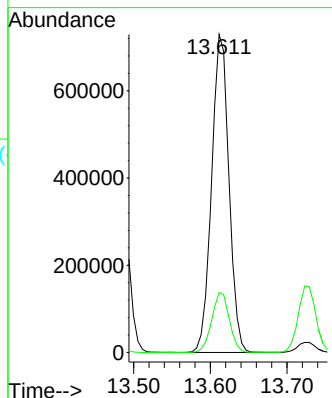
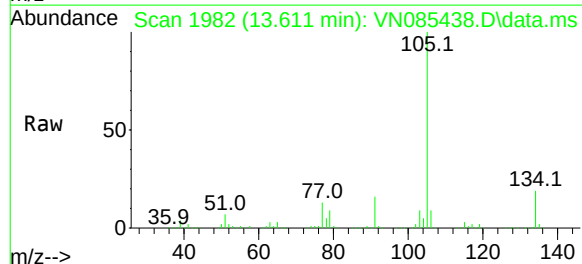
134 19.2 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 100.111 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

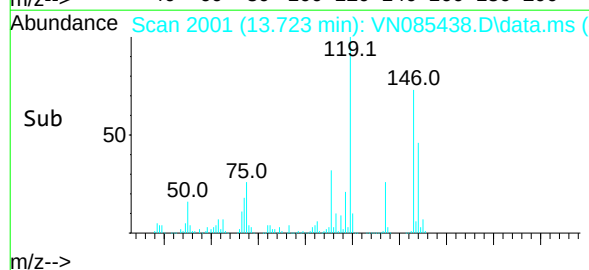
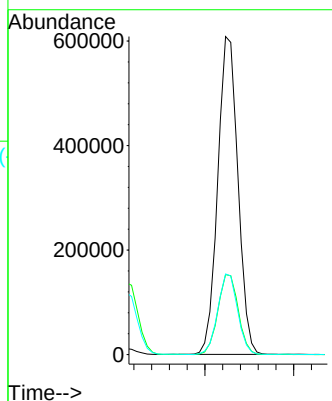
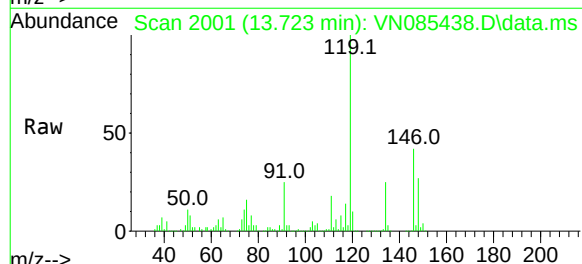
Tgt Ion:119 Resp: 960747

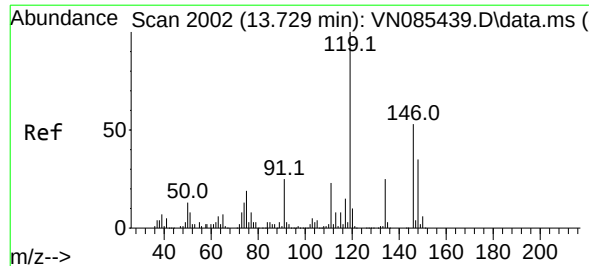
Ion Ratio Lower Upper

119 100

134 25.3 12.7 38.0

91 25.0 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 105.943 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:146 Resp: 502960

Ion Ratio Lower Upper

146 100

111 42.8 21.4 64.3

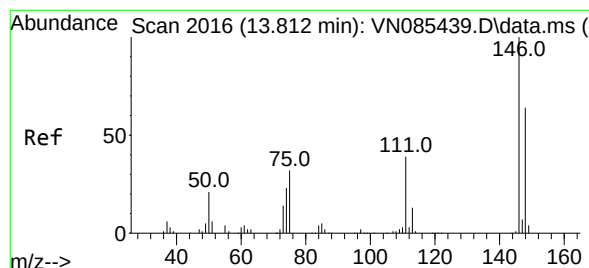
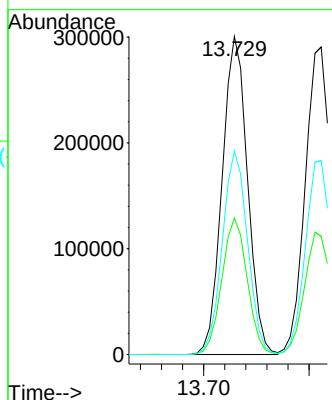
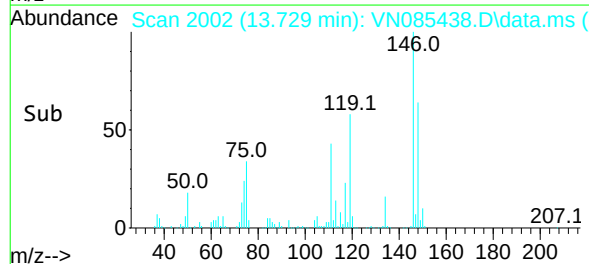
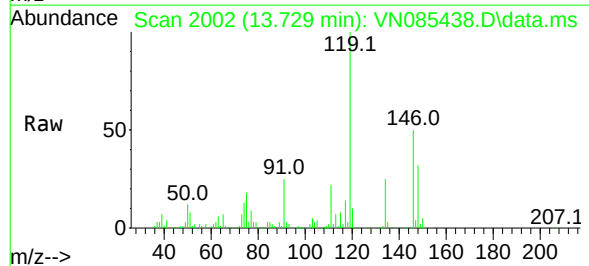
148 63.6 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#88

1,4-Dichlorobenzene

Concen: 101.341 ug/l

RT: 13.811 min Scan# 2016

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

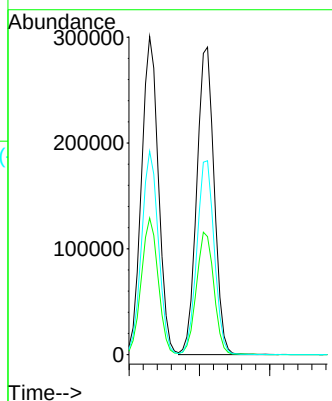
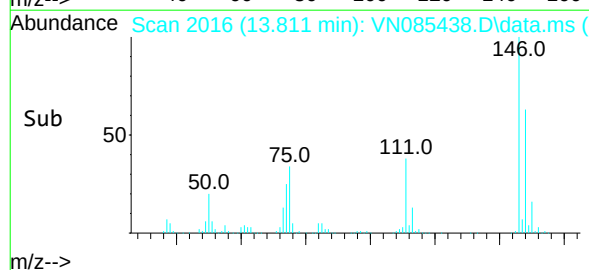
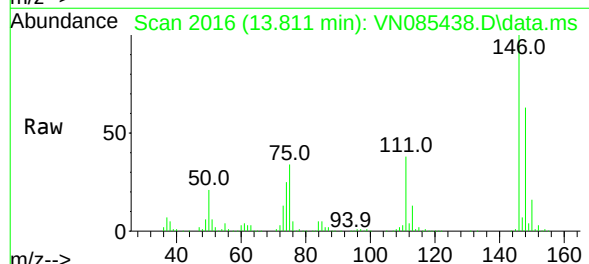
Tgt Ion:146 Resp: 498709

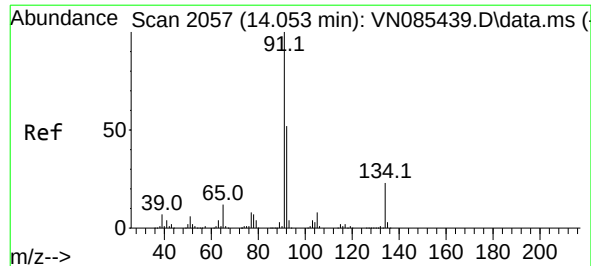
Ion Ratio Lower Upper

146 100

111 40.1 21.3 63.7

148 63.1 32.4 97.0





#89

n-Butylbenzene

Concen: 123.781 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

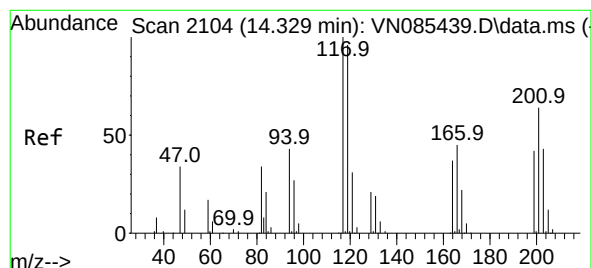
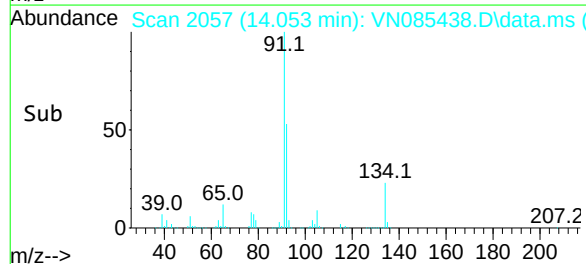
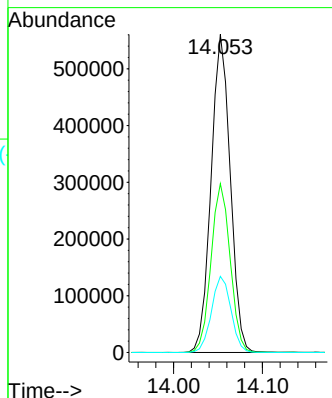
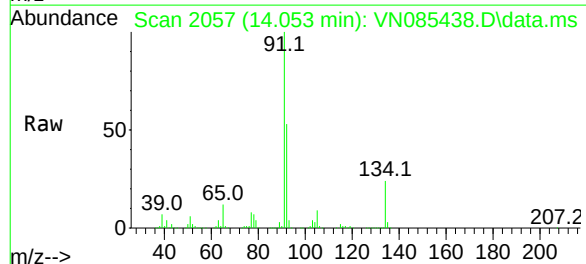
ClientSampleId :

VSTDICC100

Tgt Ion:	91	Resp:	842368
Ion	Ratio	Lower	Upper
91	100		
92	52.8	25.8	77.3
134	24.3	11.7	35.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#90

Hexachloroethane

Concen: 104.405 ug/l

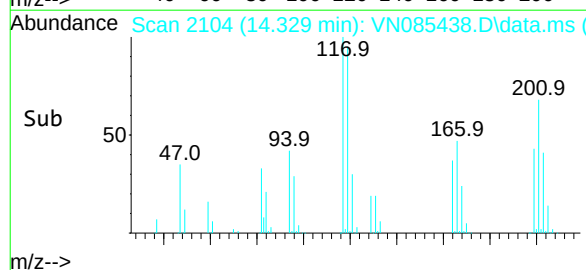
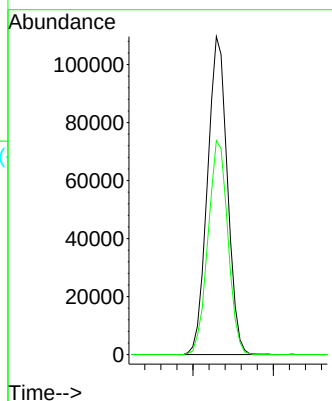
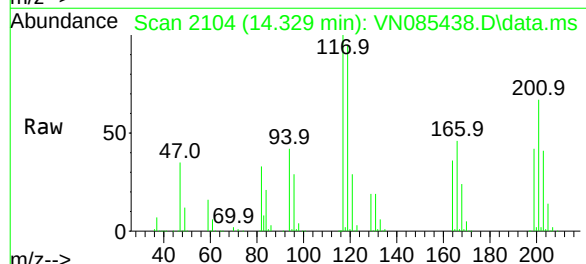
RT: 14.329 min Scan# 2104

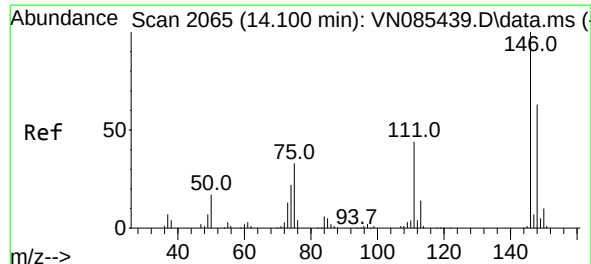
Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Tgt Ion:	117	Resp:	188541
Ion	Ratio	Lower	Upper
117	100		
201	67.2	33.7	101.0





#91

1,2-Dichlorobenzene

Concen: 99.445 ug/l

RT: 14.100 min Scan# 2065

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC100

Tgt Ion: 146 Resp: 470919

Ion Ratio Lower Upper

146 100

111 43.9 21.7 65.1

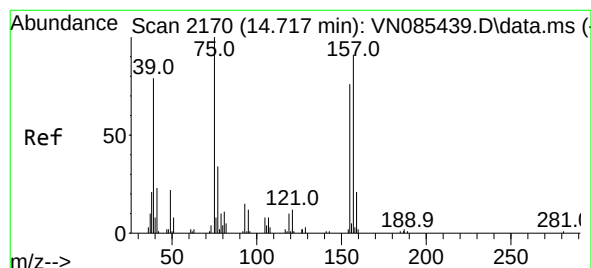
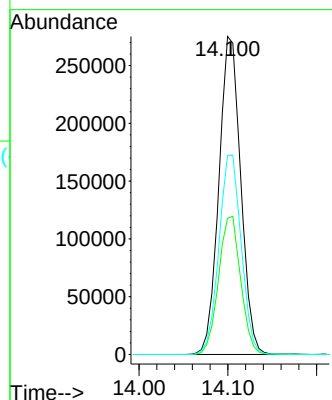
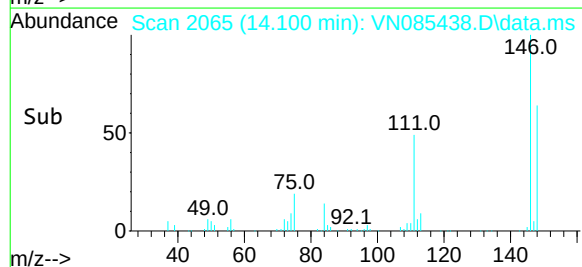
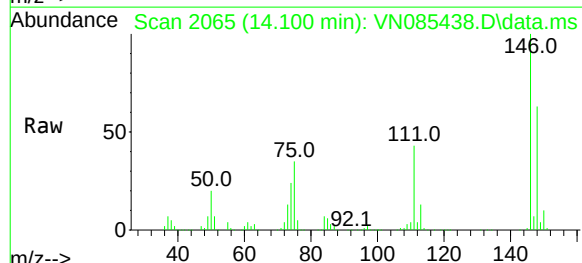
148 64.0 31.4 94.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 100.313 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

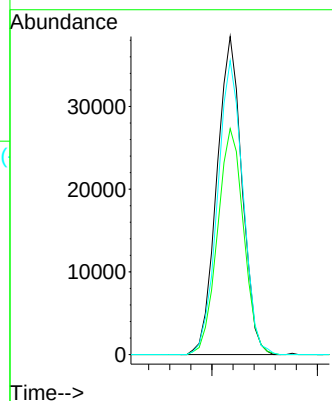
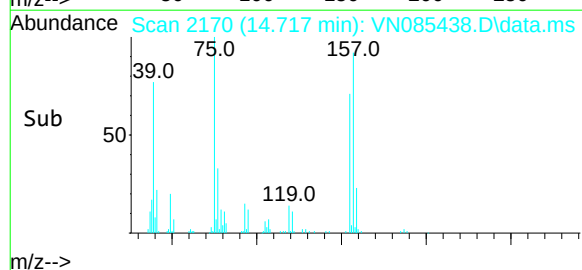
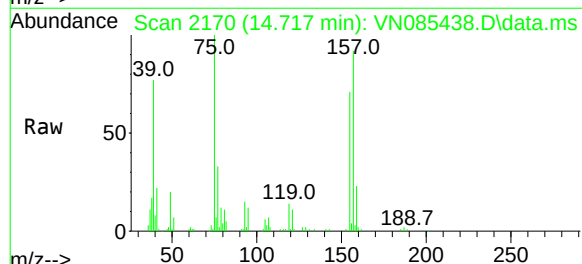
Tgt Ion: 75 Resp: 63846

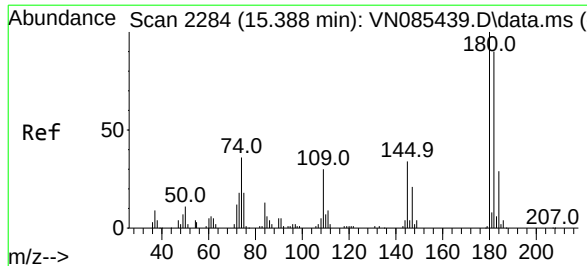
Ion Ratio Lower Upper

75 100

155 73.5 36.4 109.2

157 93.0 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 113.946 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. -0.000 min

Lab File: VN085438.D

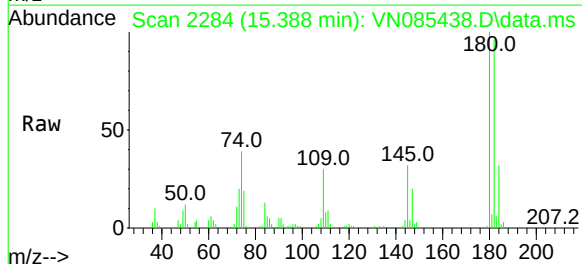
Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

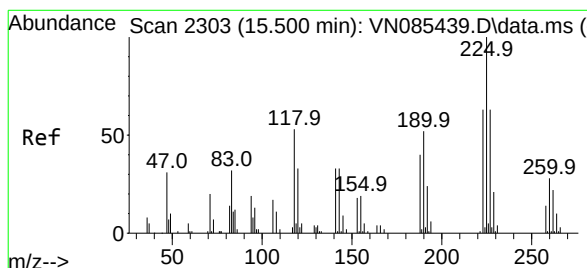
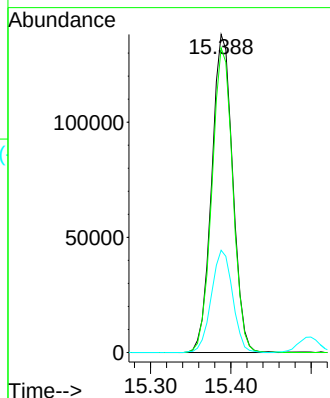
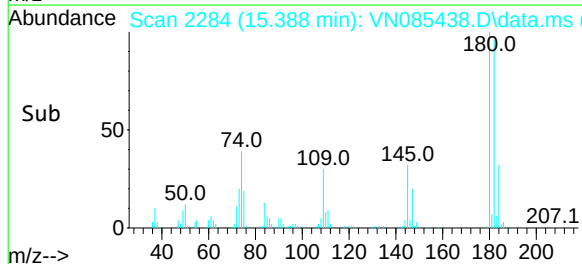
VSTDICC100



Tgt Ion:	180	Resp:	250787
Ion	Ratio	Lower	Upper
180	100		
182	94.9	46.8	140.3
145	32.6	16.0	48.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

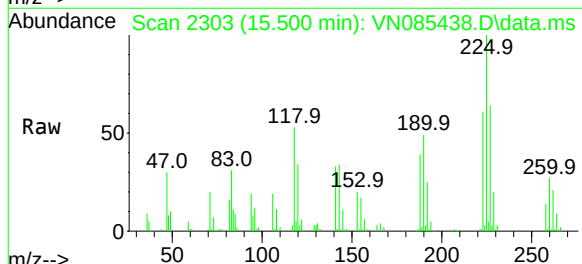
Concen: 96.619 ug/l

RT: 15.500 min Scan# 2303

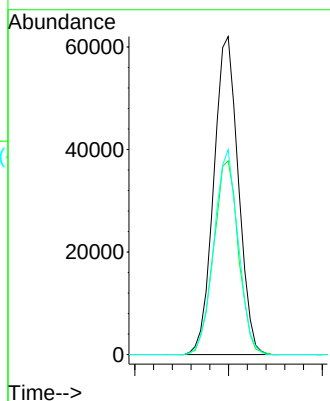
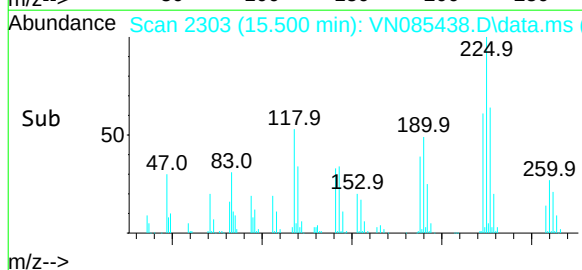
Delta R.T. -0.000 min

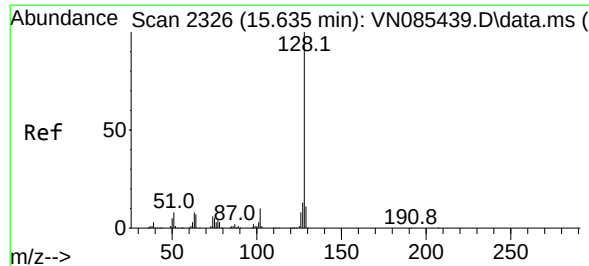
Lab File: VN085438.D

Acq: 14 Jan 2025 14:56



Tgt Ion:	225	Resp:	112899
Ion	Ratio	Lower	Upper
225	100		
223	61.8	30.7	92.1
227	63.6	30.9	92.5





#95

Naphthalene

Concen: 115.234 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Tgt Ion:128 Resp: 756816

Ion Ratio Lower Upper

128 100

127 13.1 10.6 16.0

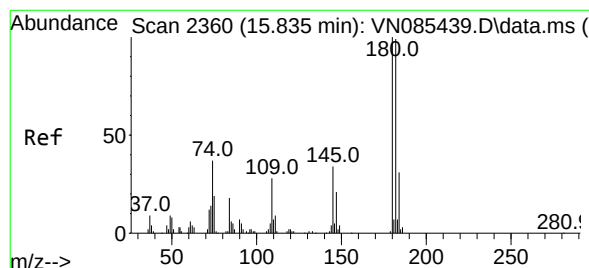
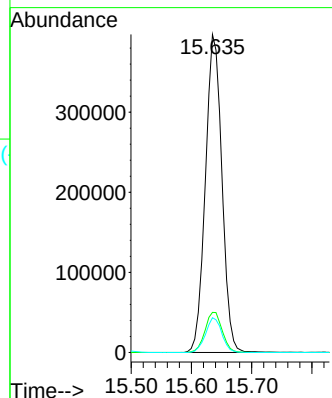
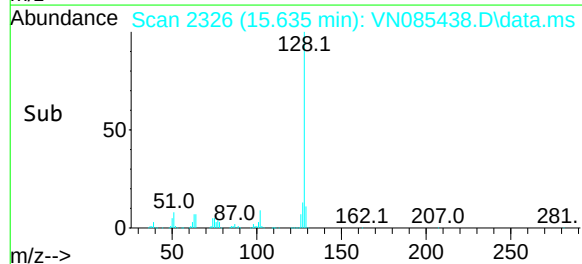
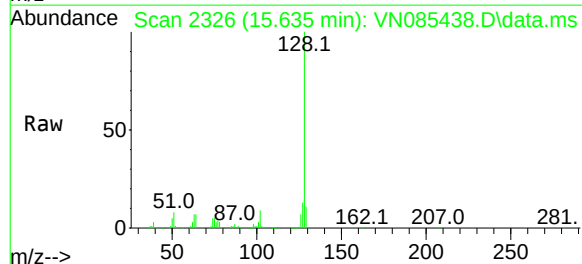
129 10.8 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 107.256 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085438.D

Acq: 14 Jan 2025 14:56

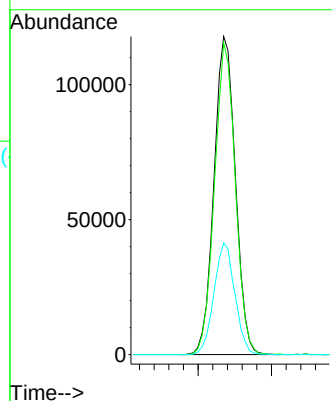
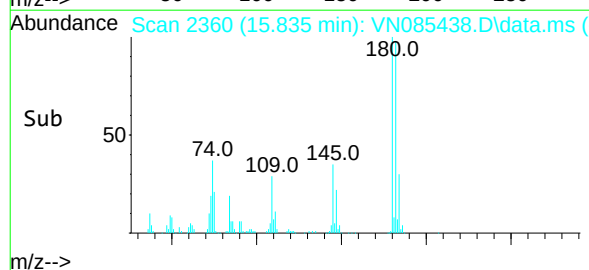
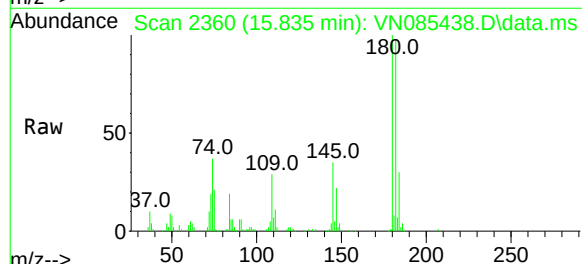
Tgt Ion:180 Resp: 238860

Ion Ratio Lower Upper

180 100

182 95.0 47.4 142.2

145 34.3 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085439.D
 Acq On : 14 Jan 2025 15:19
 Operator : JC\MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC050

Quant Time: Jan 15 01:42:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 01/15/2025
 Supervised By : Mahesh Dadoda 01/15/2025

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	199403	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	339872	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	297366	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	146624	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.571	65	165768	51.500	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	103.000%
35) Dibromofluoromethane	8.159	113	121554	51.552	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	103.100%
50) Toluene-d8	10.565	98	430698	51.411	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	102.820%
62) 4-Bromofluorobenzene	12.847	95	152568	53.239	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	106.480%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	125504	46.486	ug/l	100
3) Chloromethane	2.359	50	135631	46.398	ug/l	100
4) Vinyl Chloride	2.512	62	136831	46.569	ug/l	100
5) Bromomethane	2.953	94	83199	46.877	ug/l	100
6) Chloroethane	3.118	64	84517	45.371	ug/l	100
7) Trichlorofluoromethane	3.501	101	198726	46.613	ug/l	100
8) Diethyl Ether	3.953	74	71764	48.726	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	108081	45.010	ug/l	100
10) Methyl Iodide	4.589	142	143383	52.142	ug/l	100
11) Tert butyl alcohol	5.512	59	92841	251.894	ug/l	100
12) 1,1-Dichloroethene	4.342	96	106247	49.647	ug/l	100
13) Acrolein	4.171	56	139234	276.734	ug/l	100
14) Allyl chloride	5.018	41	168654	48.567	ug/l	100
15) Acrylonitrile	5.712	53	296781	253.507	ug/l	100
16) Acetone	4.418	43	251271	241.603	ug/l	100
17) Carbon Disulfide	4.706	76	294604	44.710	ug/l	100
18) Methyl Acetate	5.018	43	157485	49.798	ug/l	100
19) Methyl tert-butyl Ether	5.789	73	373561	53.758	ug/l	100
20) Methylene Chloride	5.271	84	125508	48.748	ug/l	100
21) trans-1,2-Dichloroethene	5.783	96	110684	48.395	ug/l	100
22) Diisopropyl ether	6.665	45	406253	52.707	ug/l	100
23) Vinyl Acetate	6.594	43	1491031	275.471	ug/l	100
24) 1,1-Dichloroethane	6.565	63	233336	49.648	ug/l	100
25) 2-Butanone	7.477	43	388457	253.815	ug/l	100
26) 2,2-Dichloropropane	7.483	77	186591	49.106	ug/l	100
27) cis-1,2-Dichloroethene	7.483	96	136229	50.571	ug/l	100
28) Bromochloromethane	7.806	49	108148	49.461	ug/l	100
29) Tetrahydrofuran	7.830	42	259683	267.624	ug/l	100
30) Chloroform	7.959	83	234271	48.229	ug/l	100
31) Cyclohexane	8.253	56	175588	42.984	ug/l	100
32) 1,1,1-Trichloroethane	8.165	97	202590	47.547	ug/l	100
36) 1,1-Dichloropropene	8.365	75	157031	47.453	ug/l	100
37) Ethyl Acetate	7.553	43	165866	49.658	ug/l	100
38) Carbon Tetrachloride	8.359	117	180199	47.564	ug/l	100
39) Methylcyclohexane	9.600	83	157234	50.562	ug/l	100
40) Benzene	8.600	78	492606	49.542	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085439.D
 Acq On : 14 Jan 2025 15:19
 Operator : JC\MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC050

Quant Time: Jan 15 01:42:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John Carlone 01/15/2025
 Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.771	41	91711	52.775	ug/l	100
42) 1,2-Dichloroethane	8.665	62	186065	49.685	ug/l	100
43) Isopropyl Acetate	8.683	43	276228	51.611	ug/l	100
44) Trichloroethene	9.347	130	109953	47.506	ug/l	100
45) 1,2-Dichloropropane	9.618	63	126084	49.644	ug/l	100
46) Dibromomethane	9.706	93	90670	49.476	ug/l	100
47) Bromodichloromethane	9.882	83	189915	50.867	ug/l	100
48) Methyl methacrylate	9.677	41	133399	55.385	ug/l	100
49) 1,4-Dioxane	9.688	88	43048	1061.334	ug/l	100
51) 4-Methyl-2-Pentanone	10.441	43	836707	269.403	ug/l	100
52) Toluene	10.624	92	295792	51.341	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	187439	53.125	ug/l	100
54) cis-1,3-Dichloropropene	10.306	75	199771	53.006	ug/l	100
55) 1,1,2-Trichloroethane	11.012	97	115462	50.641	ug/l	100
56) Ethyl methacrylate	10.871	69	184775	48.182	ug/l	100
57) 1,3-Dichloropropane	11.159	76	204590	51.606	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	409594	283.088	ug/l	100
59) 2-Hexanone	11.188	43	606740	277.643	ug/l	100
60) Dibromochloromethane	11.353	129	140704	51.116	ug/l	100
61) 1,2-Dibromoethane	11.465	107	113541	50.028	ug/l	100
64) Tetrachloroethene	11.100	164	95879	47.295	ug/l	100
65) Chlorobenzene	11.888	112	319992	49.121	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.959	131	116488	48.722	ug/l	100
67) Ethyl Benzene	11.959	91	555322	52.339	ug/l	100
68) m/p-Xylenes	12.065	106	420702	107.286	ug/l	100
69) o-Xylene	12.394	106	202597	54.062	ug/l	100
70) Styrene	12.406	104	348720	56.227	ug/l	100
71) Bromoform	12.576	173	92366	53.993	ug/l #	100
73) Isopropylbenzene	12.688	105	505619	51.094	ug/l	100
74) N-ethyl acetate	12.488	43	237870	53.478	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.935	83	167856	48.019	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	130866m	43.982	ug/l	
77) Bromobenzene	12.976	156	125800	48.657	ug/l	100
78) n-propylbenzene	13.029	91	609022	51.986	ug/l	100
79) 2-Chlorotoluene	13.123	91	378981	49.985	ug/l	100
80) 1,3,5-Trimethylbenzene	13.170	105	431021	52.730	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	57184	51.914	ug/l	100
82) 4-Chlorotoluene	13.218	91	379524	50.273	ug/l	100
83) tert-Butylbenzene	13.435	119	357563	52.090	ug/l	100
84) 1,2,4-Trimethylbenzene	13.476	105	442175	54.275	ug/l	100
85) sec-Butylbenzene	13.612	105	501561	52.719	ug/l	100
86) p-Isopropyltoluene	13.723	119	421052	49.240	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	229518	48.204	ug/l	100
88) 1,4-Dichlorobenzene	13.812	146	229084	46.416	ug/l	100
89) n-Butylbenzene	14.053	91	364111	53.348	ug/l	100
90) Hexachloroethane	14.329	117	84602	46.712	ug/l	100
91) 1,2-Dichlorobenzene	14.100	146	228024	48.012	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	32536	50.971	ug/l	100
93) 1,2,4-Trichlorobenzene	15.388	180	114468	51.857	ug/l	100
94) Hexachlorobutadiene	15.500	225	53846	45.947	ug/l	100
95) Naphthalene	15.635	128	363882	55.243	ug/l	100
96) 1,2,3-Trichlorobenzene	15.835	180	115251	51.601	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085439.D
Acq On : 14 Jan 2025 15:19
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Quant Time: Jan 15 01:42:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

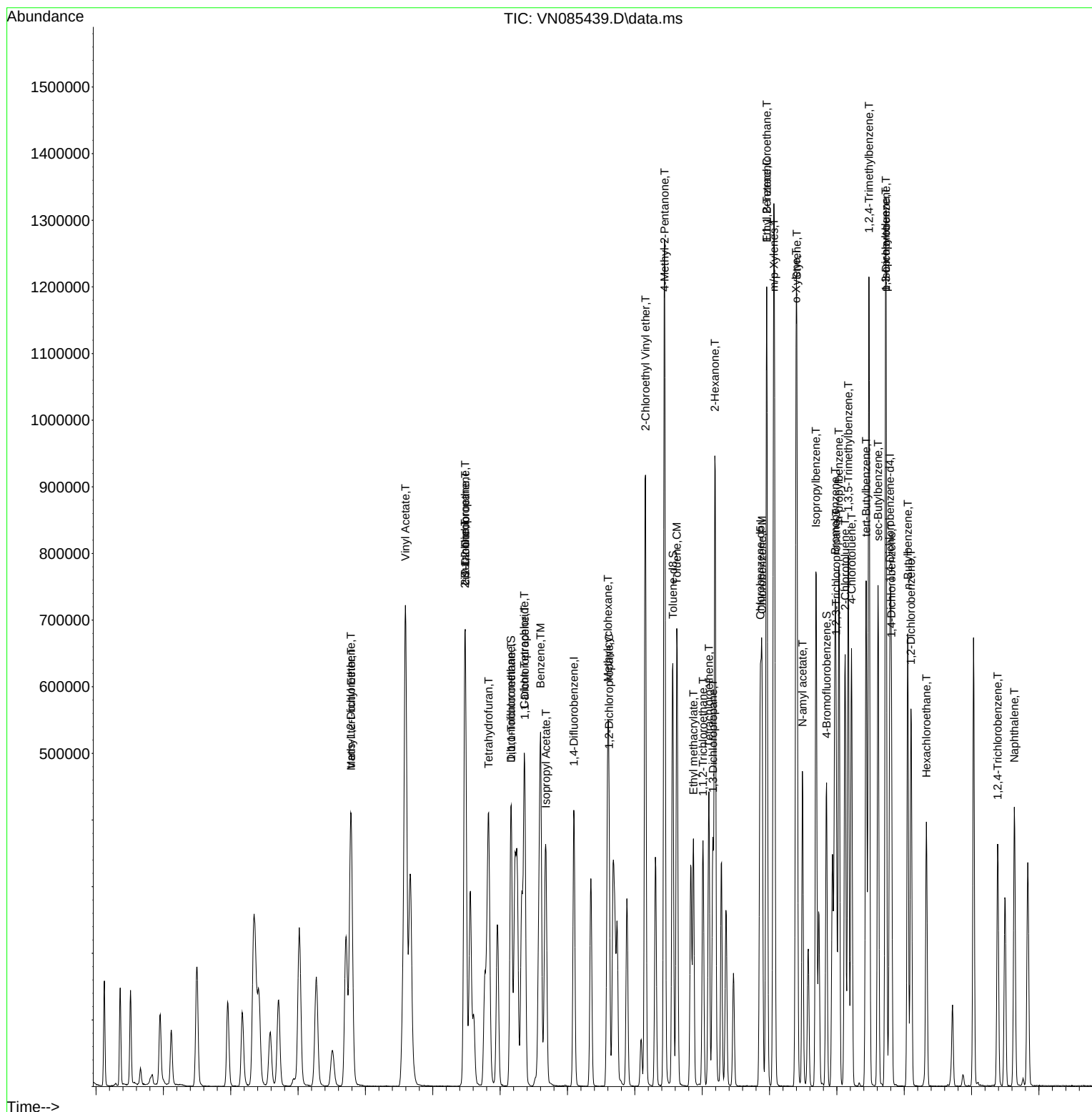
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Data File : VN085439.D
Acq On : 14 Jan 2025 15:19
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

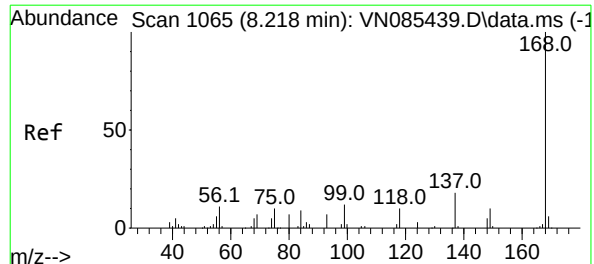
Quant Time: Jan 15 01:42:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025





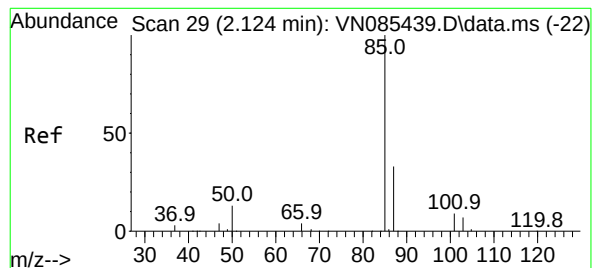
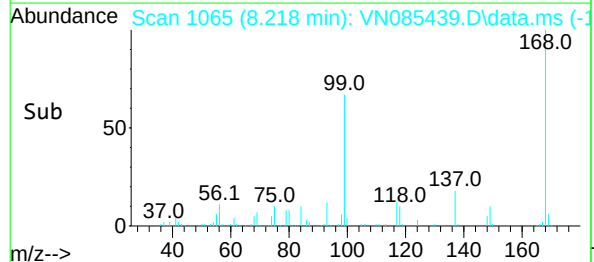
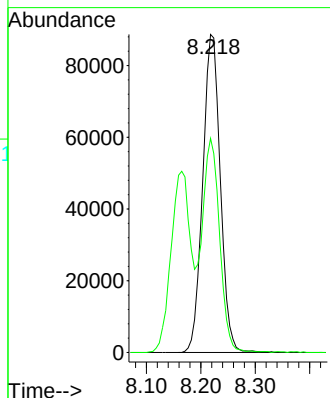
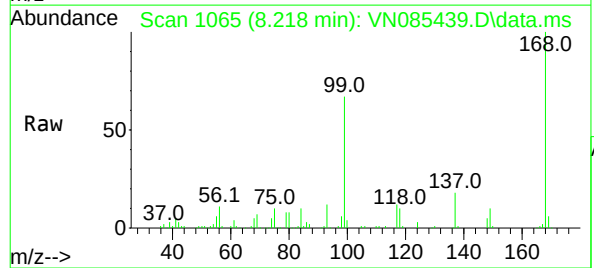
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion: 168 Resp: 199403
Ion Ratio Lower Upper
168 100
99 67.0 53.6 80.4

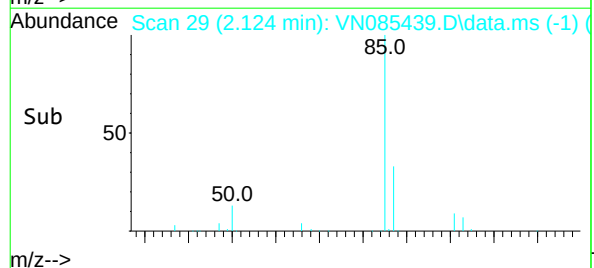
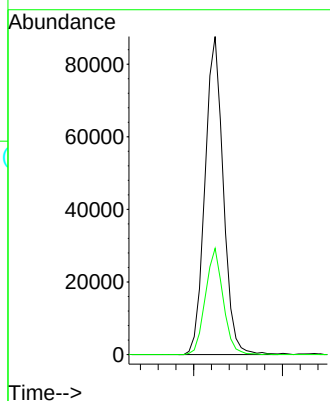
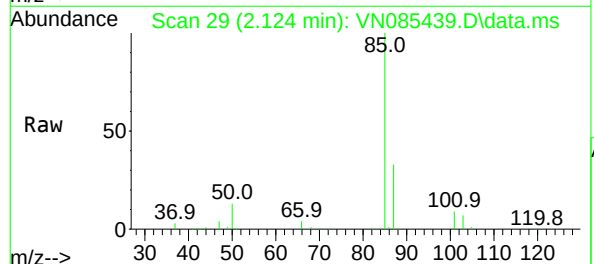
Manual Integrations
APPROVED

Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025

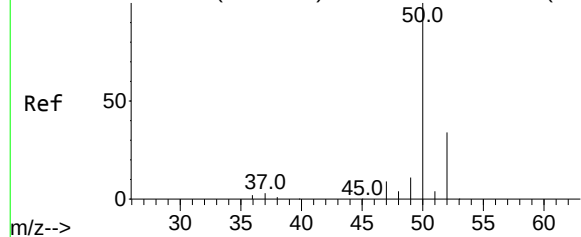


#2
Dichlorodifluoromethane
Concen: 46.486 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 85 Resp: 125504
Ion Ratio Lower Upper
85 100
87 33.4 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 46.398 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 50 Resp: 135631

Ion Ratio Lower Upper

50 100

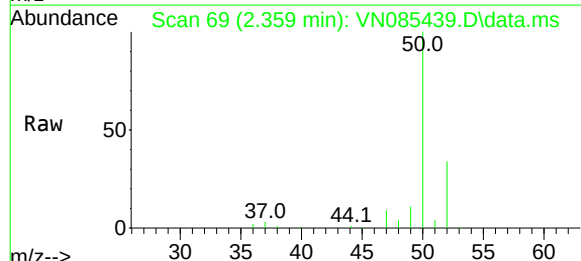
52 33.8 27.0 40.6

Manual Integrations

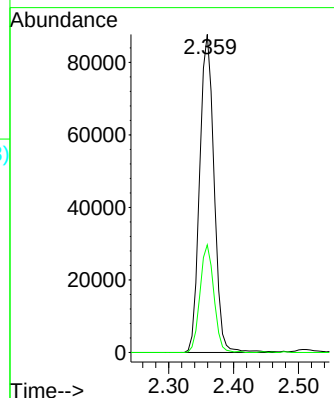
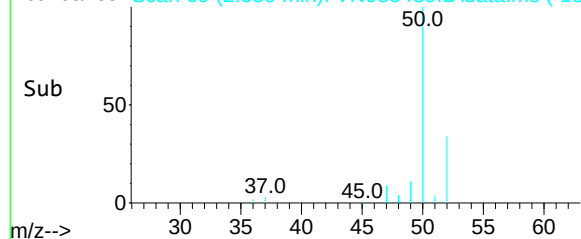
APPROVED

Reviewed By :John Carlone 01/15/2025

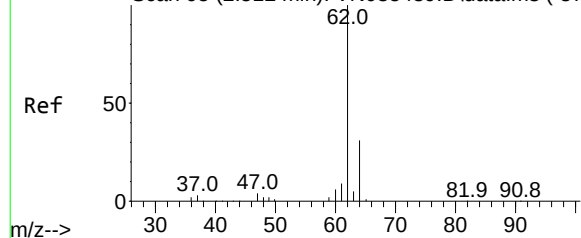
Supervised By :Mahesh Dadoda 01/15/2025



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-18)



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 46.569 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085439.D

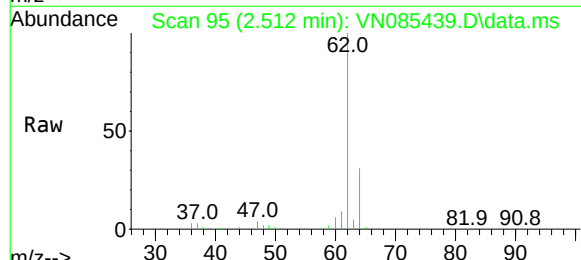
Acq: 14 Jan 2025 15:19

Tgt Ion: 62 Resp: 136831

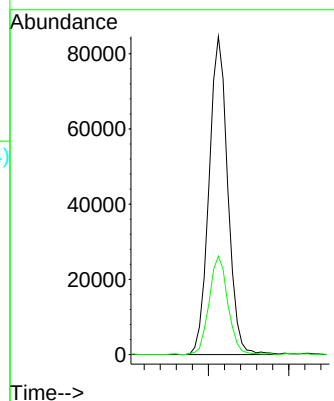
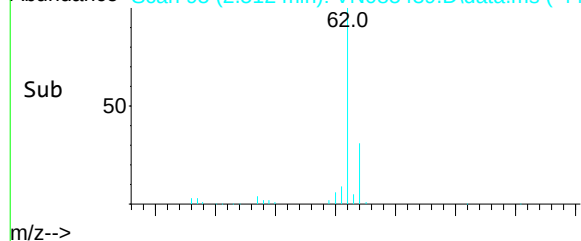
Ion Ratio Lower Upper

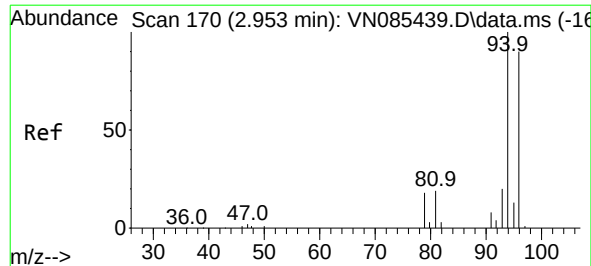
62 100

64 31.0 24.8 37.2



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-44)





#5

Bromomethane

Concen: 46.877 ug/l

RT: 2.953 min Scan# 170

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 94 Resp: 83199

Ion Ratio Lower Upper

94 100

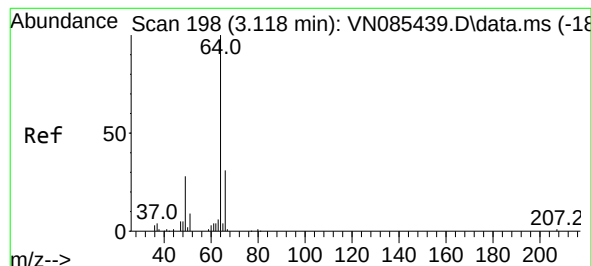
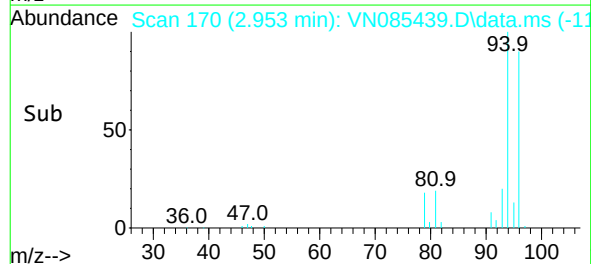
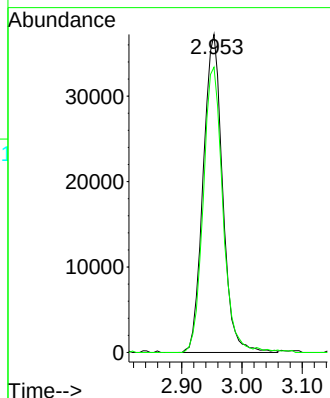
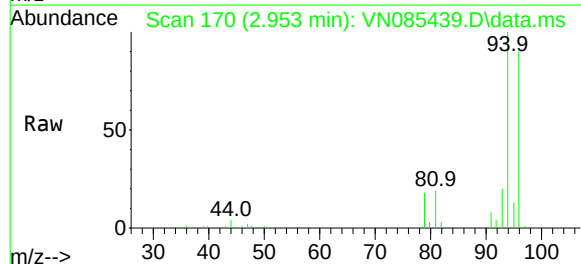
96 89.7 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 45.371 ug/l

RT: 3.118 min Scan# 198

Delta R.T. 0.000 min

Lab File: VN085439.D

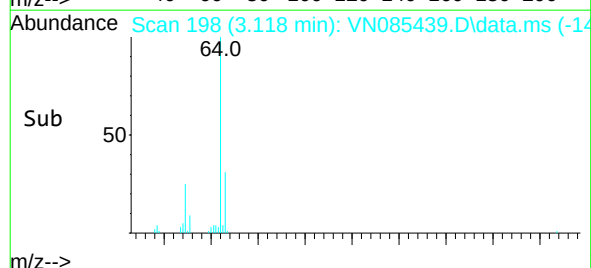
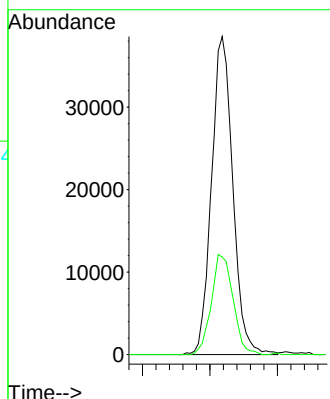
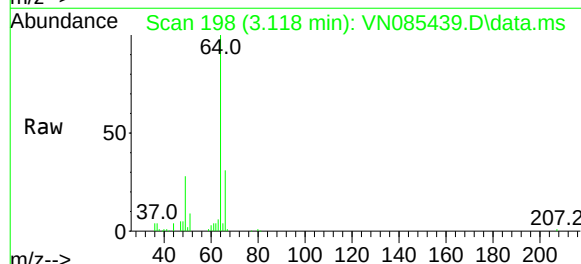
Acq: 14 Jan 2025 15:19

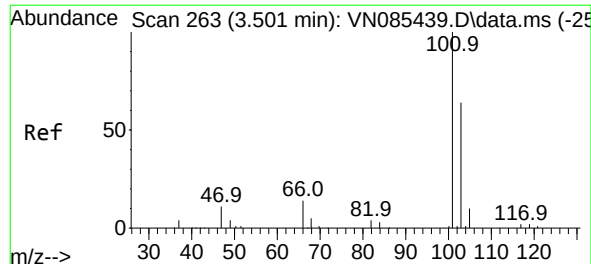
Tgt Ion: 64 Resp: 84517

Ion Ratio Lower Upper

64 100

66 30.7 24.6 36.8





#7

Trichlorofluoromethane

Concen: 46.613 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion:101 Resp: 198726

Ion Ratio Lower Upper

101 100

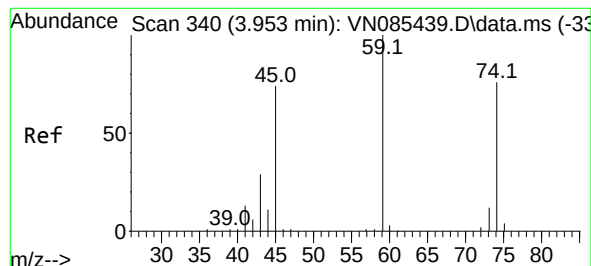
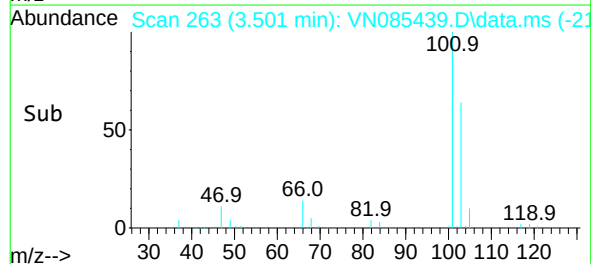
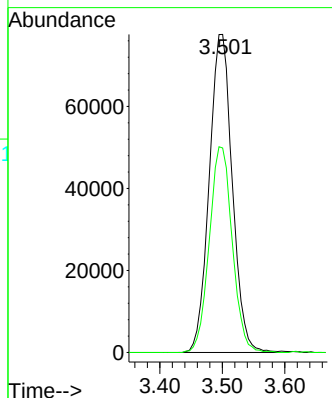
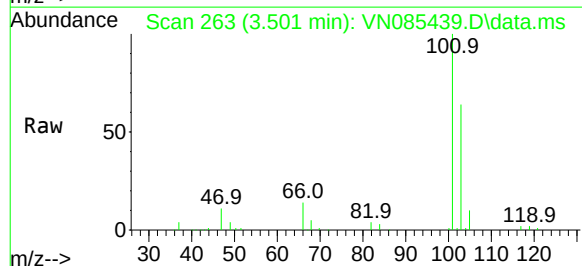
103 64.3 51.4 77.2

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 48.726 ug/l

RT: 3.953 min Scan# 340

Delta R.T. 0.000 min

Lab File: VN085439.D

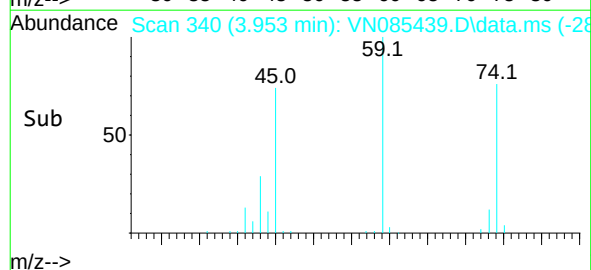
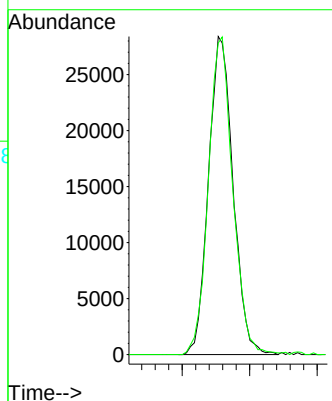
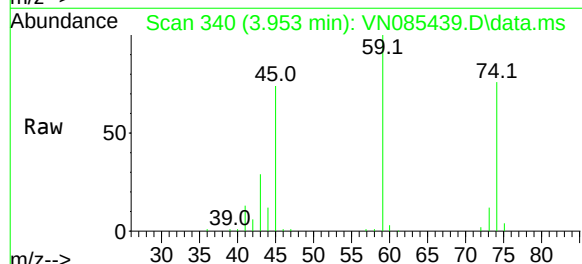
Acq: 14 Jan 2025 15:19

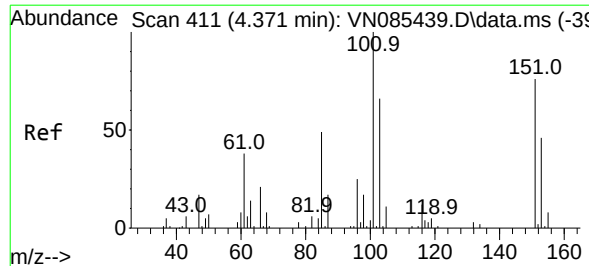
Tgt Ion: 74 Resp: 71764

Ion Ratio Lower Upper

74 100

45 99.4 49.7 149.1





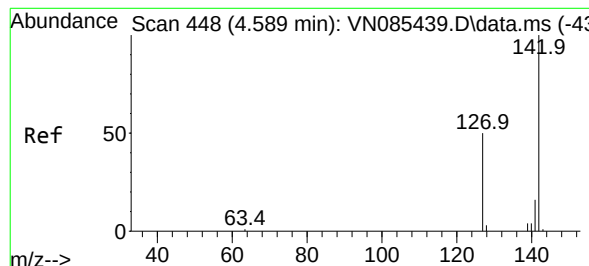
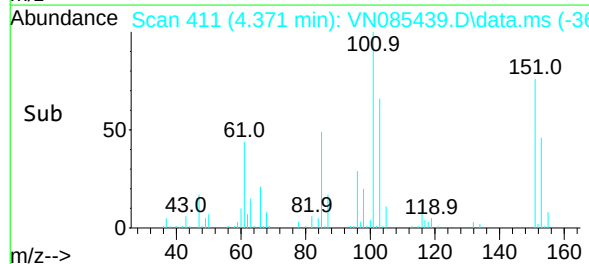
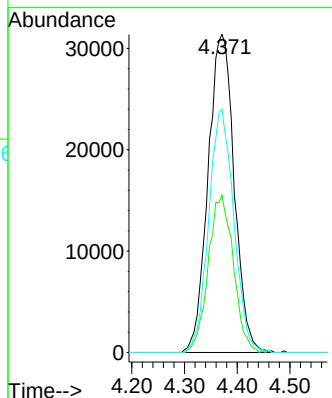
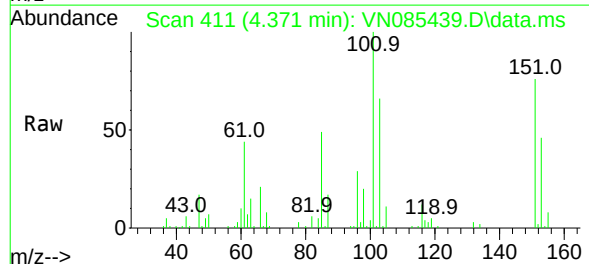
#9
1,1,2-Trichlorotrifluoroethane
Concen: 45.010 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion:101 Resp: 108081
Ion Ratio Lower Upper
101 100
85 47.3 37.8 56.8
151 73.5 58.8 88.2

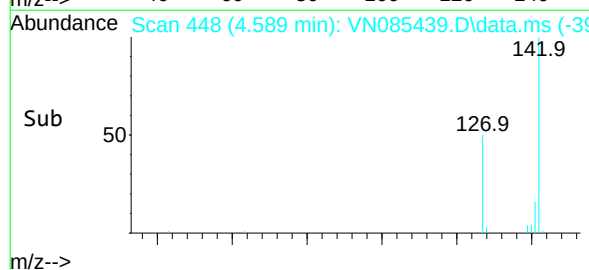
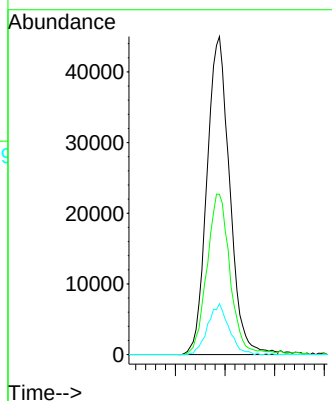
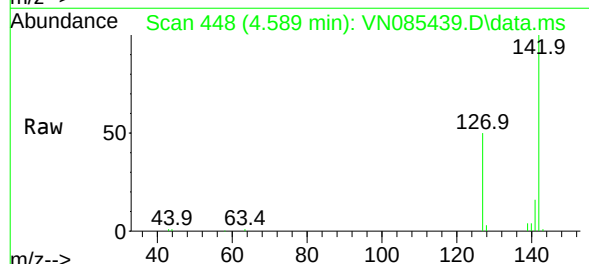
Manual Integrations
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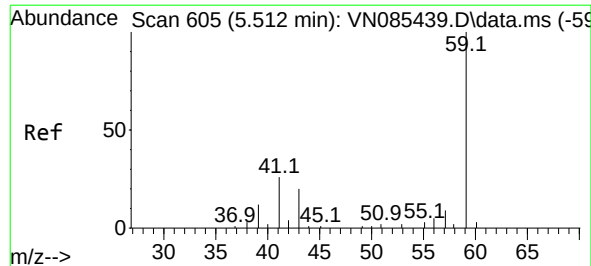
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#10
Methyl Iodide
Concen: 52.142 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion:142 Resp: 143383
Ion Ratio Lower Upper
142 100
127 50.4 40.3 60.5
141 16.0 12.8 19.2





#11

Tert butyl alcohol

Concen: 251.894 ug/l

RT: 5.512 min Scan# 605

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 59 Resp: 92841

Ion Ratio Lower Upper

59 100

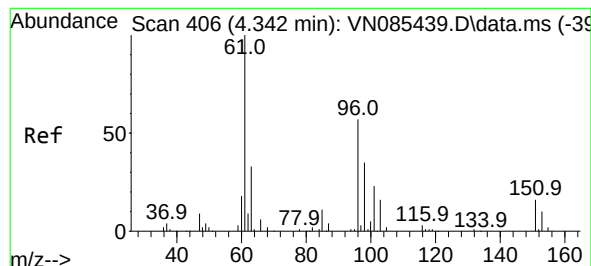
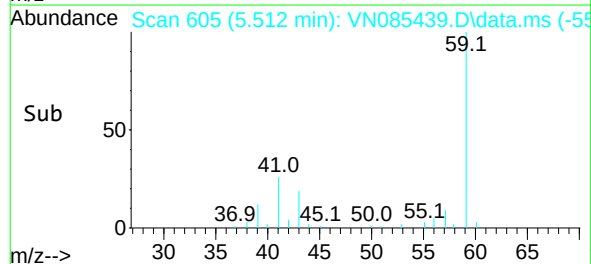
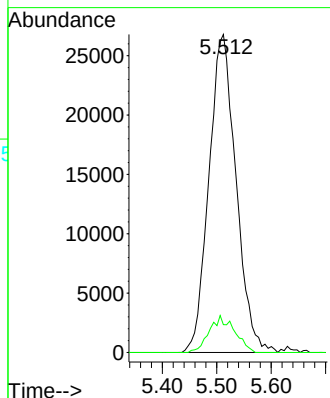
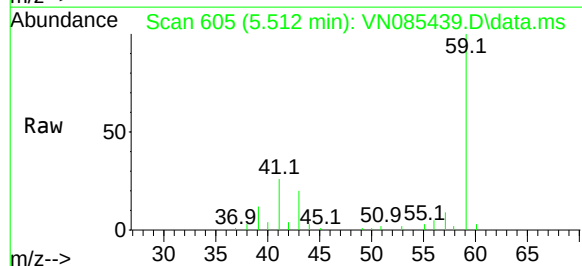
57 10.8 8.6 13.0

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 49.647 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

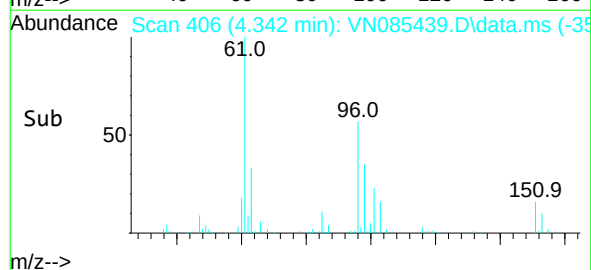
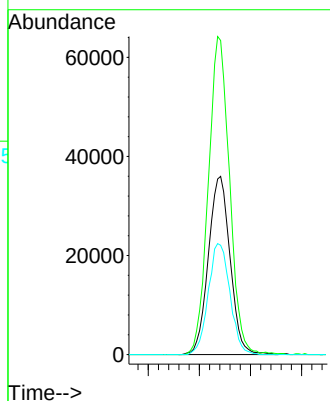
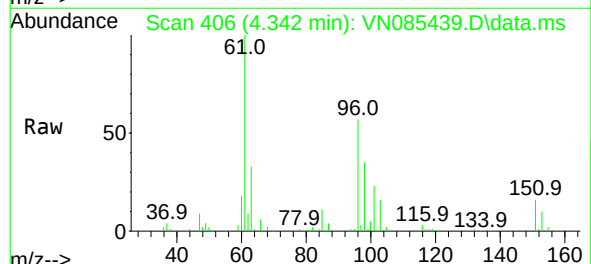
Tgt Ion: 96 Resp: 106247

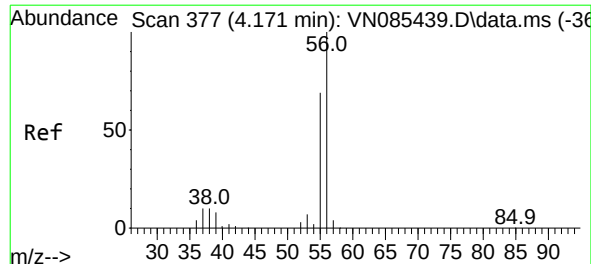
Ion Ratio Lower Upper

96 100

61 176.2 141.0 211.4

98 61.3 49.0 73.6





#13

Acrolein

Concen: 276.734 ug/l

RT: 4.171 min Scan# 377

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 56 Resp: 139234

Ion Ratio Lower Upper

56 100

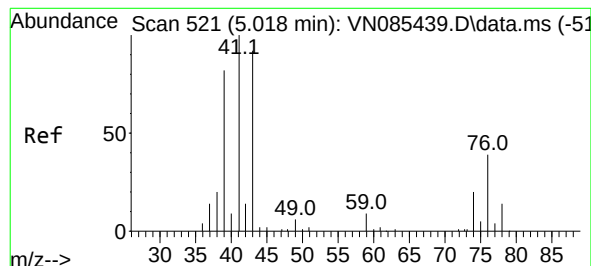
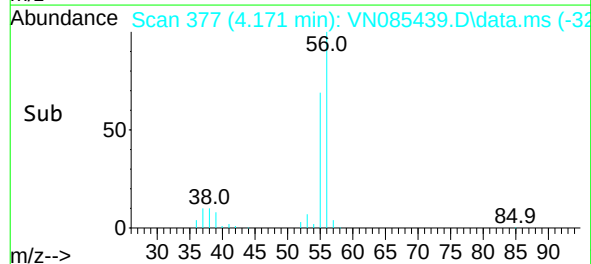
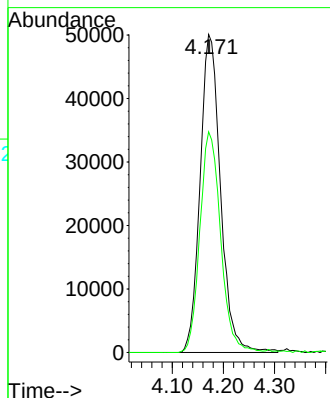
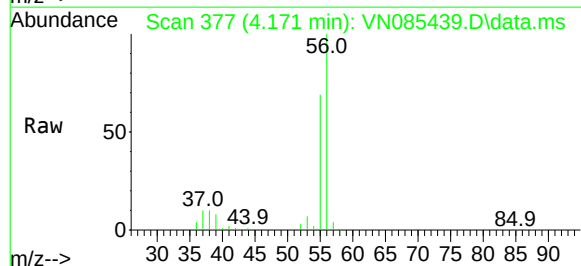
55 70.4 56.3 84.5

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 48.567 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

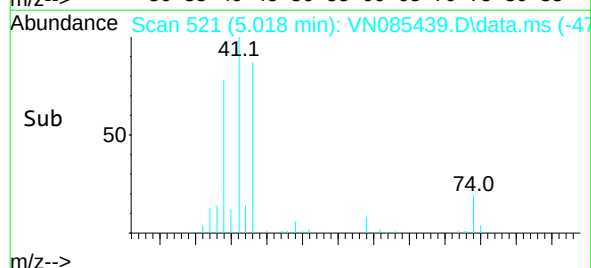
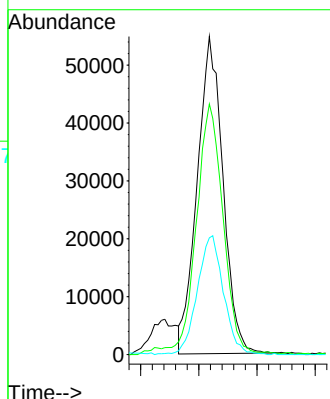
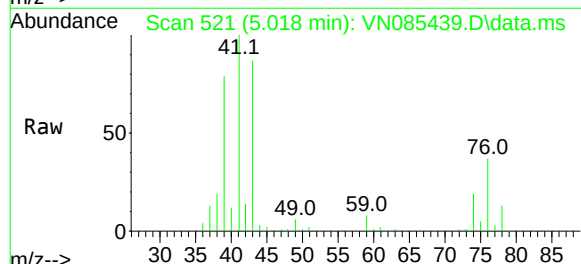
Tgt Ion: 41 Resp: 168654

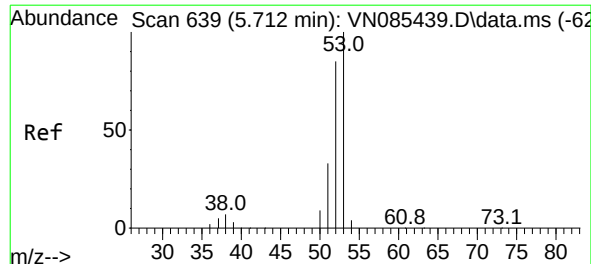
Ion Ratio Lower Upper

41 100

39 80.5 64.4 96.6

76 38.1 30.5 45.7





#15

Acrylonitrile

Concen: 253.507 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

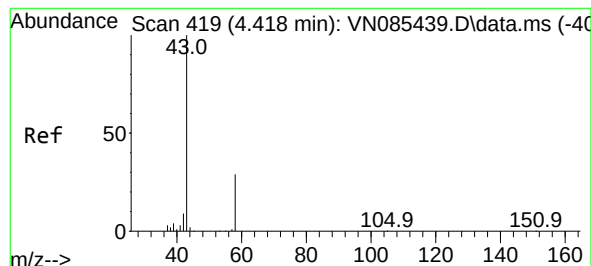
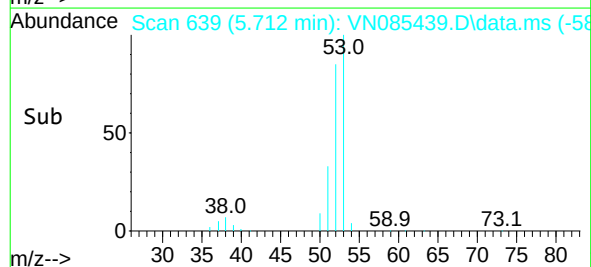
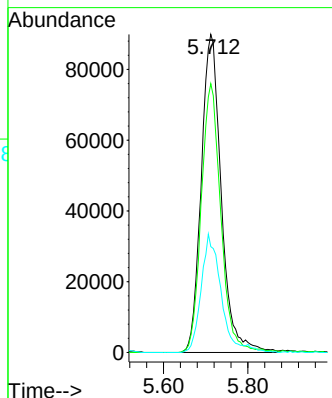
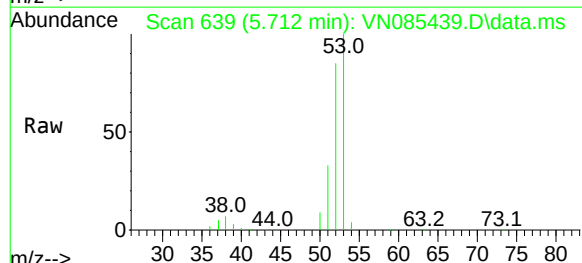
ClientSampleId :

VSTDICCC050

Tgt Ion:	53	Resp:	296781
Ion	Ratio	Lower	Upper
53	100		
52	81.9	65.5	98.3
51	37.3	29.8	44.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 241.603 ug/l

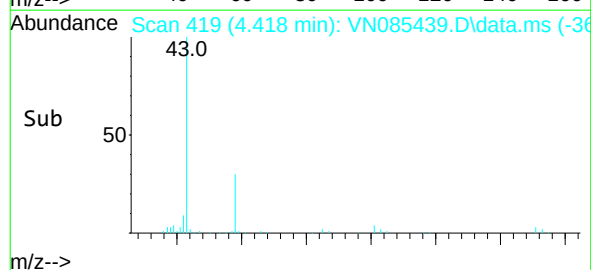
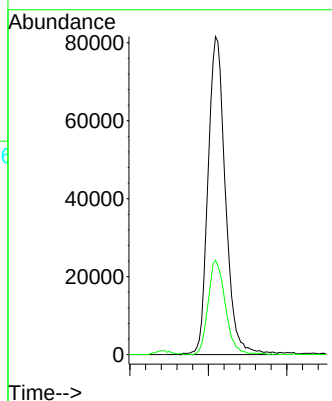
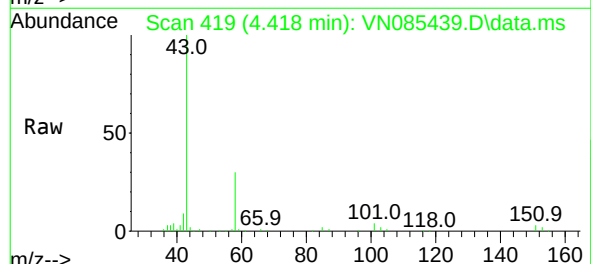
RT: 4.418 min Scan# 419

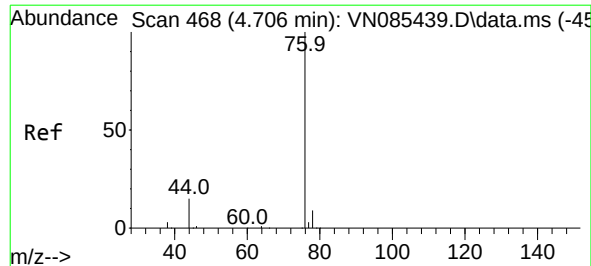
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	43	Resp:	251271
Ion	Ratio	Lower	Upper
43	100		
58	29.7	23.8	35.6





#17

Carbon Disulfide

Concen: 44.710 ug/l

RT: 4.706 min Scan# 468

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 76 Resp: 294604

Ion Ratio Lower Upper

76 100

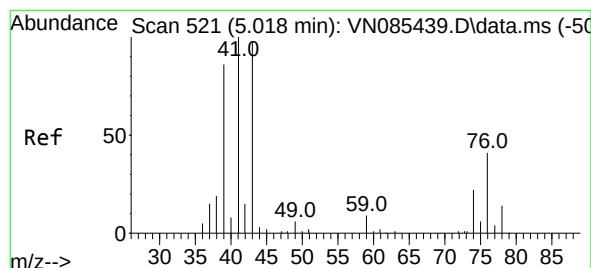
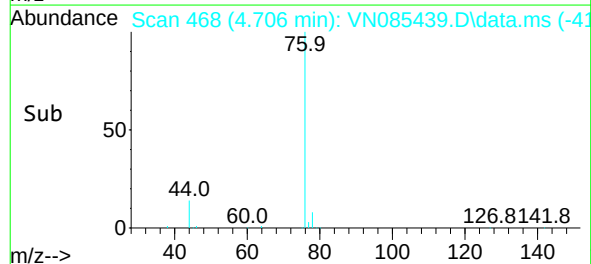
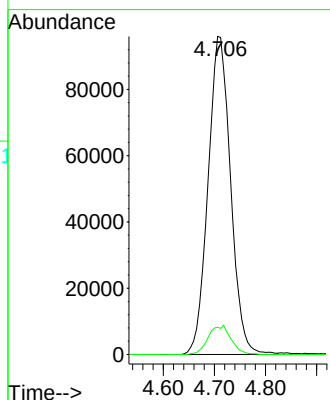
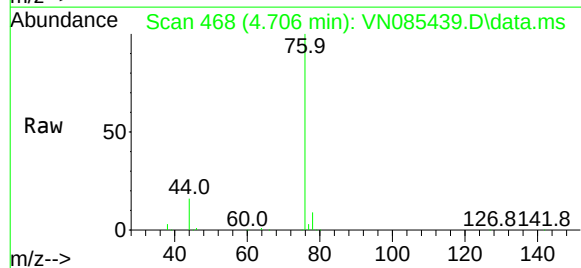
78 8.6 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 49.798 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085439.D

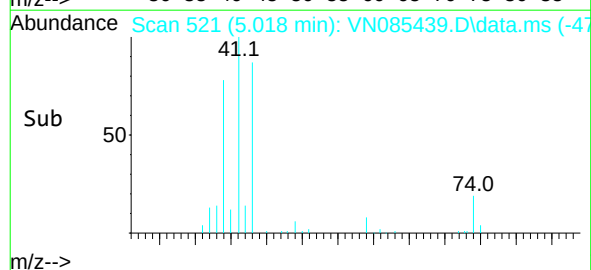
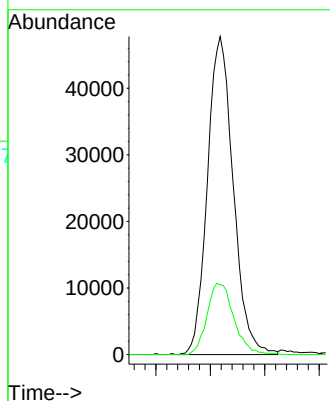
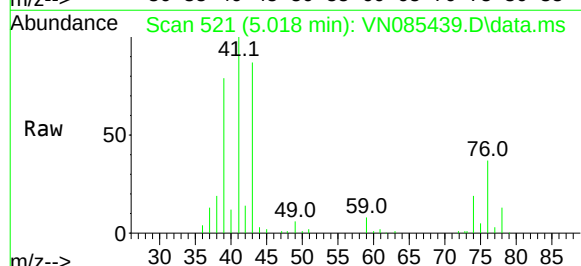
Acq: 14 Jan 2025 15:19

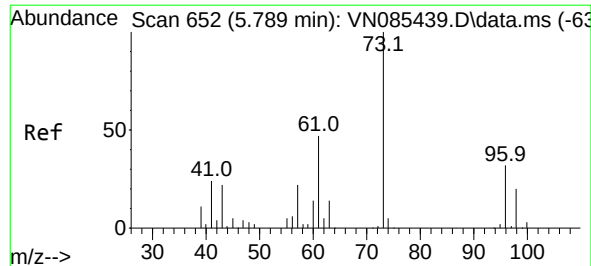
Tgt Ion: 43 Resp: 157485

Ion Ratio Lower Upper

43 100

74 23.3 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 53.758 ug/l

RT: 5.789 min Scan# 65

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 73 Resp: 373561

Ion Ratio Lower Upper

73 100

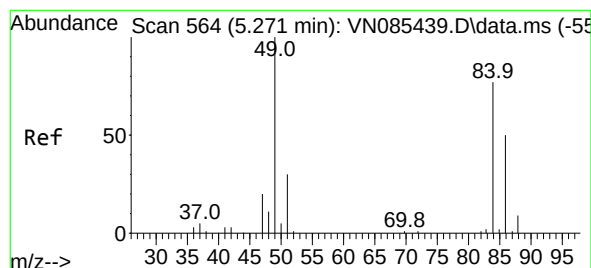
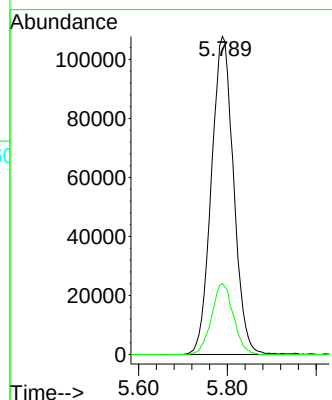
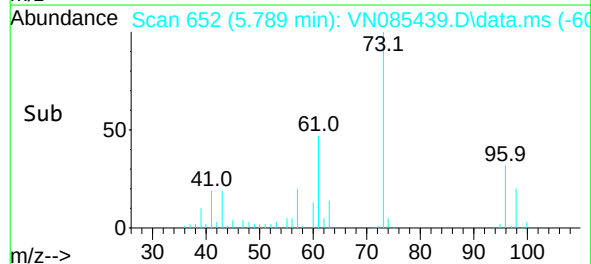
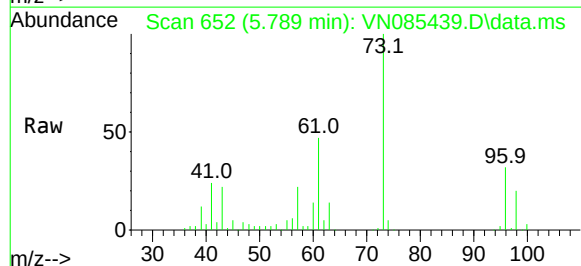
57 22.3 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 48.748 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion: 84 Resp: 125508

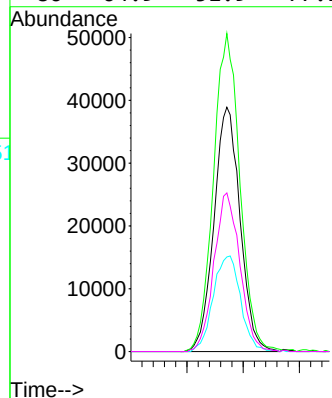
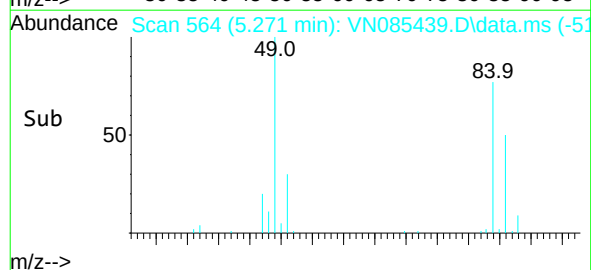
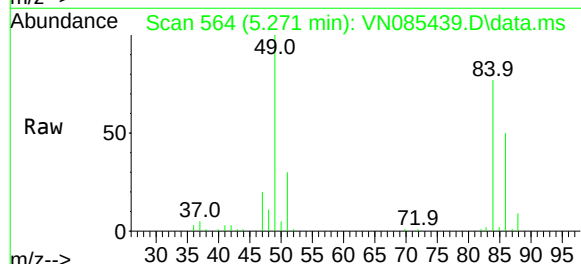
Ion Ratio Lower Upper

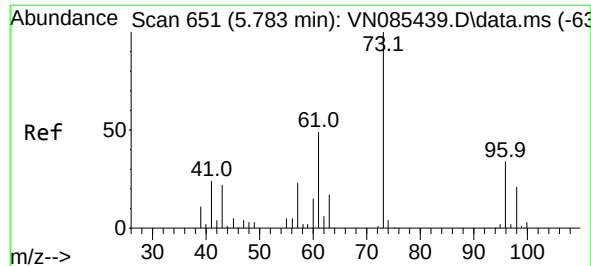
84 100

49 130.1 104.1 156.1

51 38.7 31.0 46.4

86 64.9 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 48.395 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

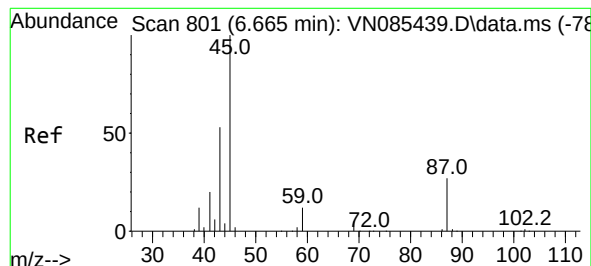
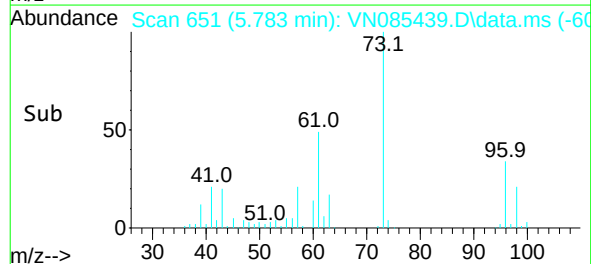
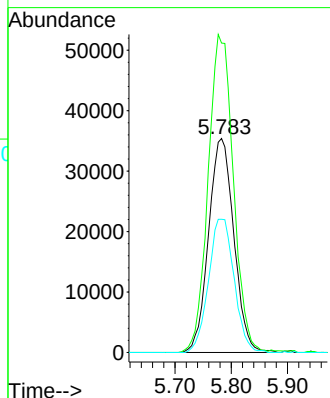
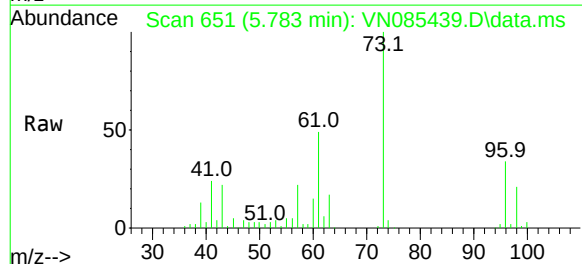
ClientSampleId :

VSTDICCC050

Tgt Ion:	96	Resp:	110684
Ion	Ratio	Lower	Upper
96	100		
61	144.6	115.7	173.5
98	62.3	49.8	74.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

Concen: 52.707 ug/l

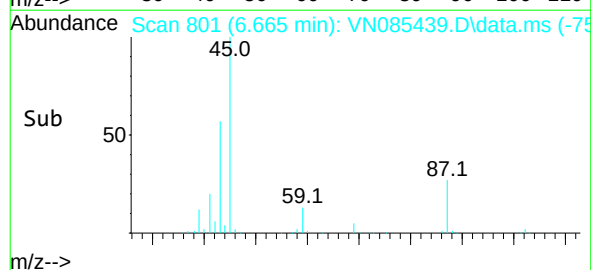
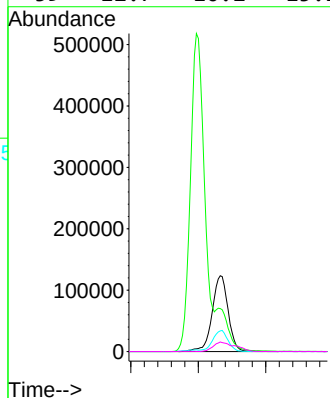
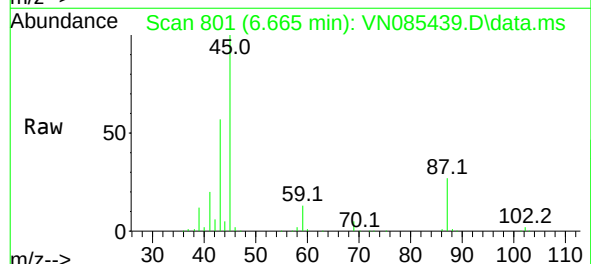
RT: 6.665 min Scan# 801

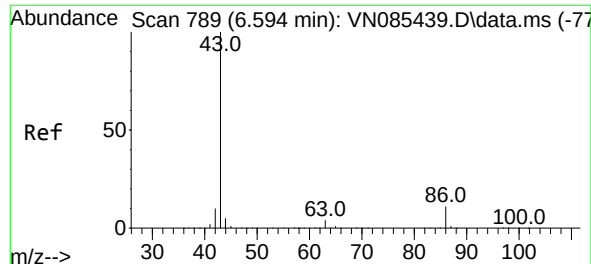
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	45	Resp:	406253
Ion	Ratio	Lower	Upper
45	100		
43	56.3	45.0	67.6
87	27.3	21.8	32.8
59	12.7	10.2	15.2





#23

Vinyl Acetate

Concen: 275.471 ug/l

RT: 6.594 min Scan# 789

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 43 Resp: 1491031

Ion Ratio Lower Upper

43 100

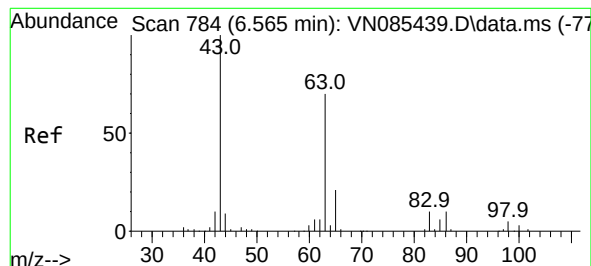
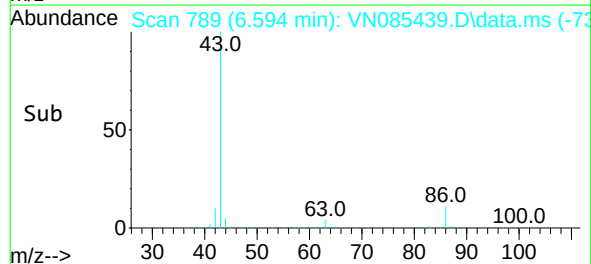
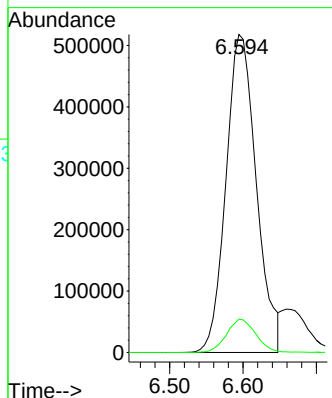
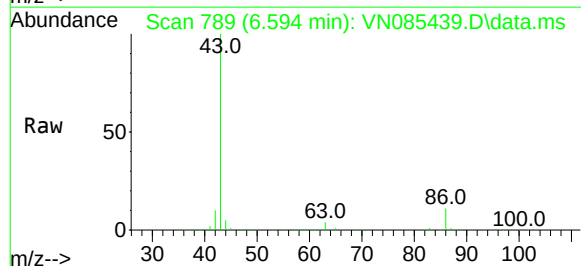
86 10.5 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 49.648 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

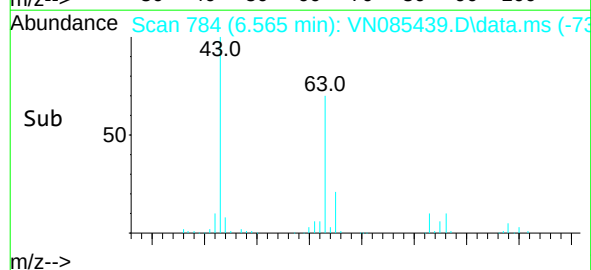
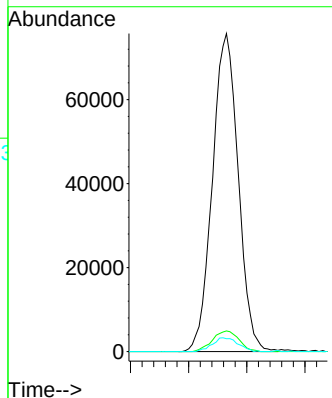
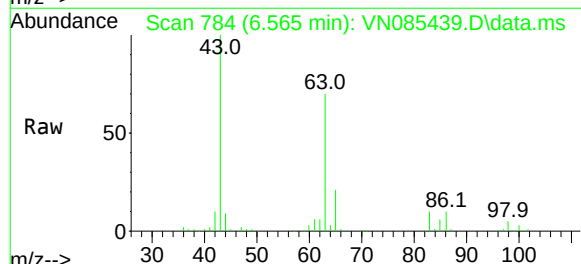
Tgt Ion: 63 Resp: 233336

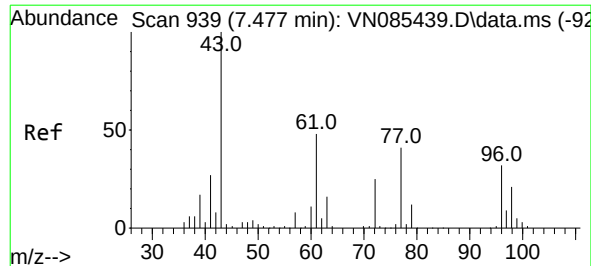
Ion Ratio Lower Upper

63 100

98 6.5 3.3 9.8

100 4.0 2.0 6.0





#25

2-Butanone

Concen: 253.815 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 43 Resp: 388457

Ion Ratio Lower Upper

43 100

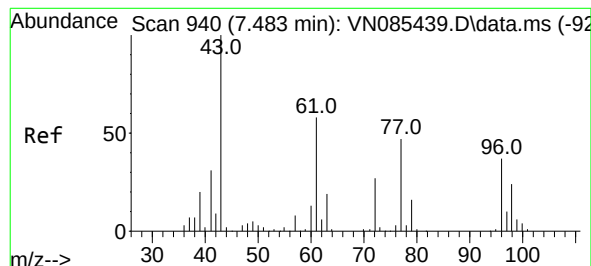
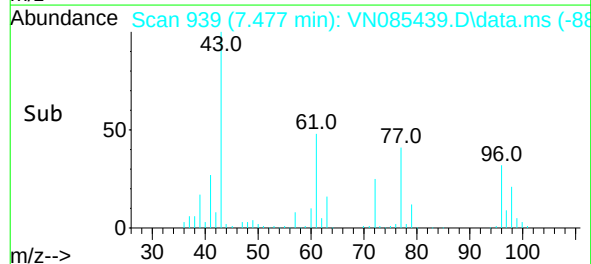
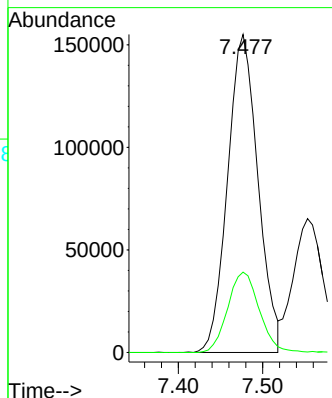
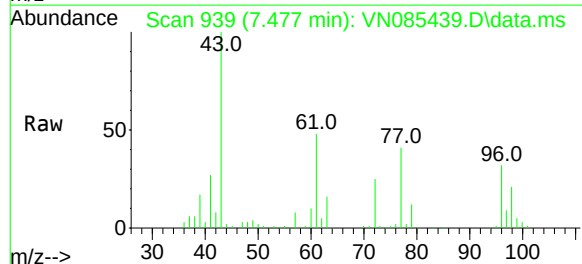
72 25.3 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 49.106 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085439.D

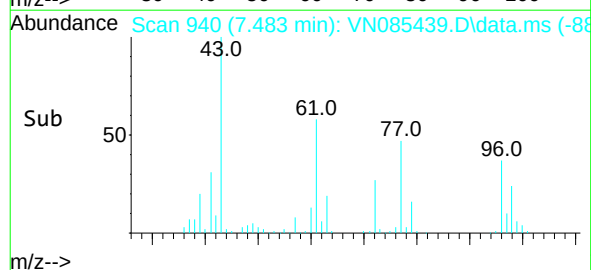
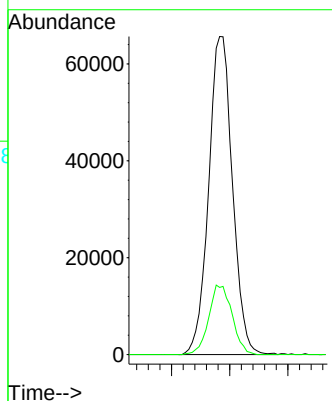
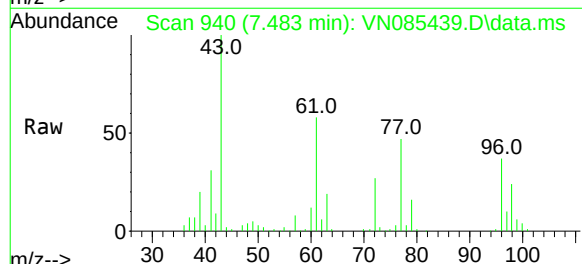
Acq: 14 Jan 2025 15:19

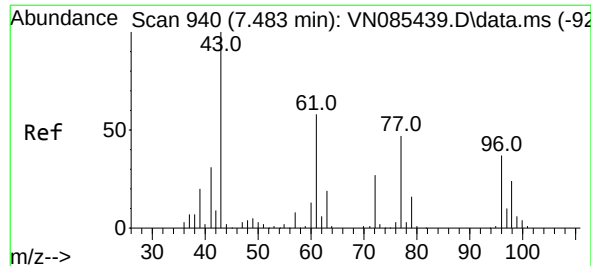
Tgt Ion: 77 Resp: 186591

Ion Ratio Lower Upper

77 100

97 21.4 10.7 32.1





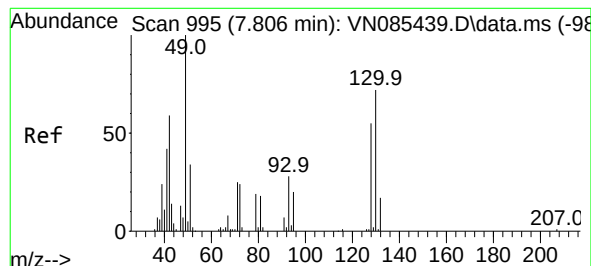
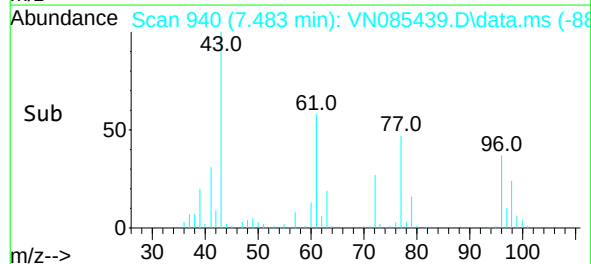
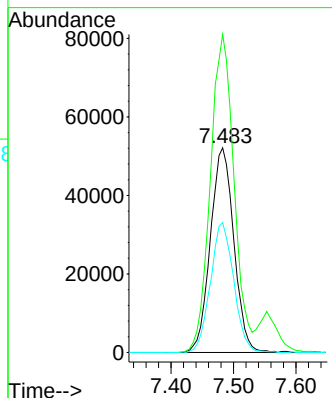
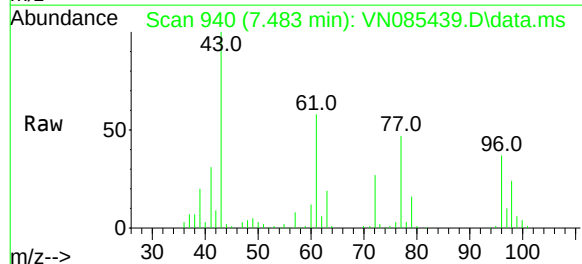
#27
cis-1,2-Dichloroethene
Concen: 50.571 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion	Ratio	Lower	Upper
96	100		
61	155.9	0.0	311.8
98	63.0	0.0	126.0

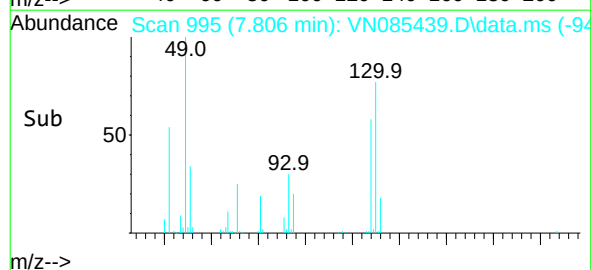
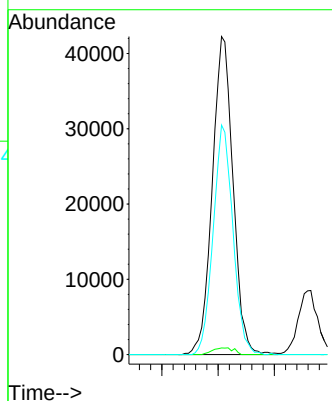
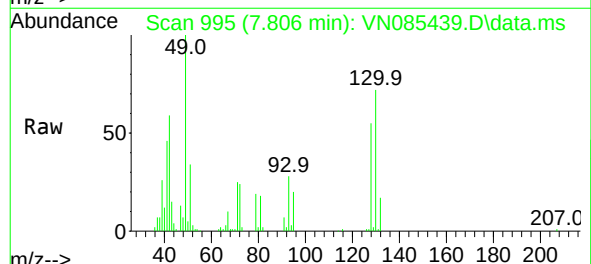
Manual Integrations
APPROVED

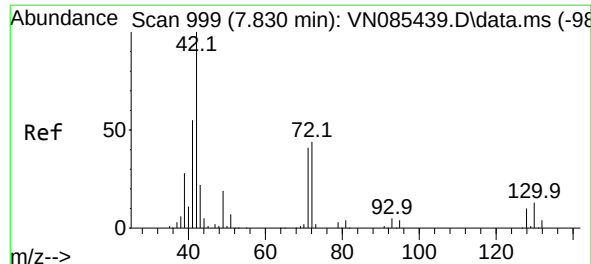
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#28
Bromochloromethane
Concen: 49.461 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion	Ratio	Lower	Upper
49	100		
129	2.2	0.0	4.4
130	68.7	55.0	82.4





#29

Tetrahydrofuran

Concen: 267.624 ug/l

RT: 7.830 min Scan# 999

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

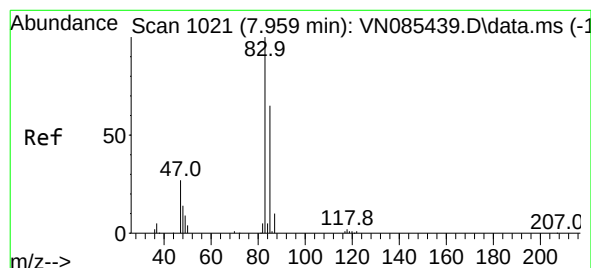
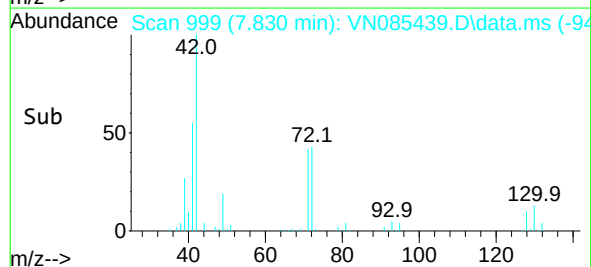
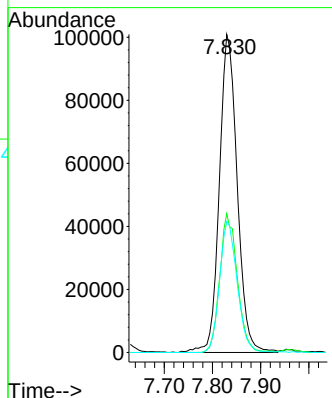
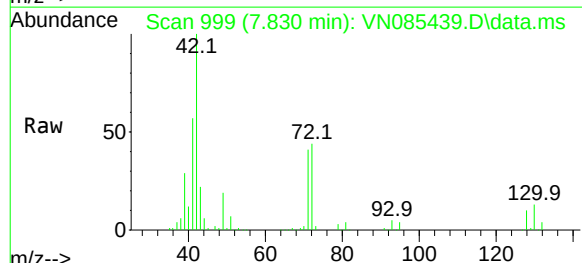
ClientSampleId :

VSTDICCC050

Tgt Ion:	42	Resp:	259683
Ion	Ratio	Lower	Upper
42	100		
72	42.7	34.2	51.2
71	40.6	32.5	48.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 48.229 ug/l

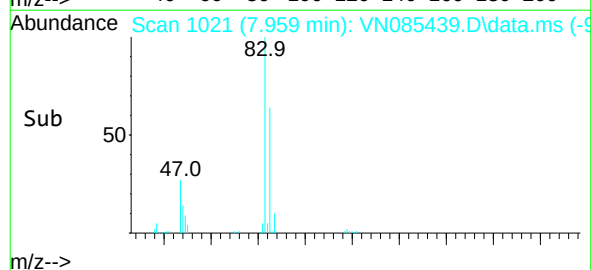
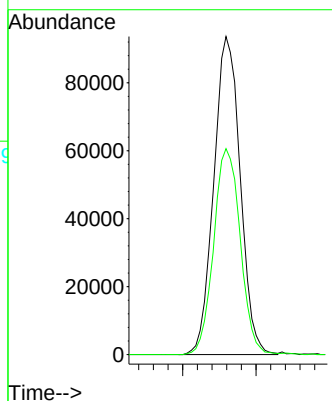
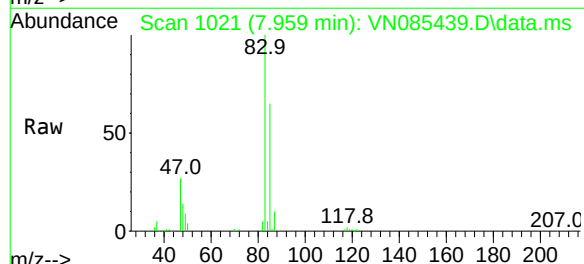
RT: 7.959 min Scan# 1021

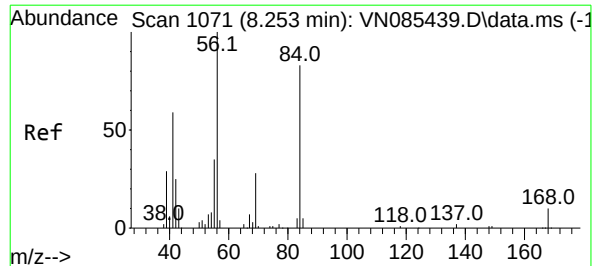
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	83	Resp:	234271
Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.8	77.6





#31

Cyclohexane

Concen: 42.984 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 56 Resp: 175588

Ion Ratio Lower Upper

56 100

69 27.8 22.2 33.4

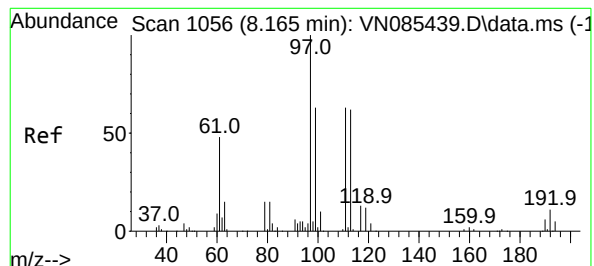
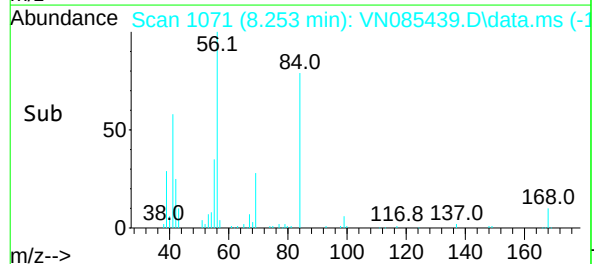
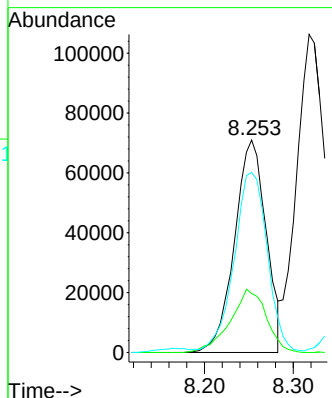
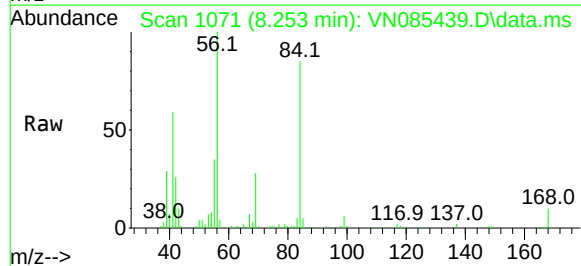
84 83.0 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 47.547 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

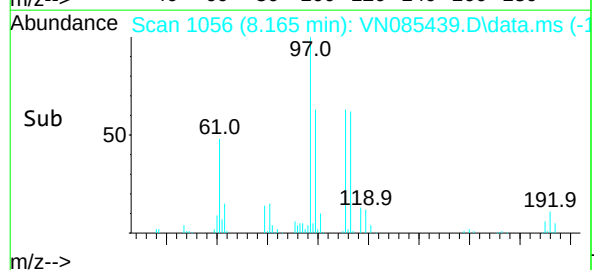
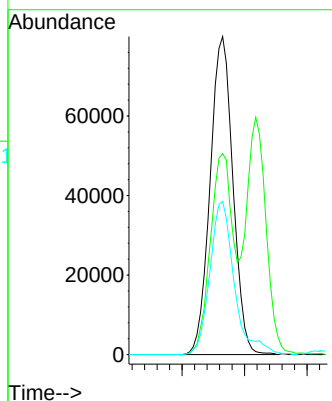
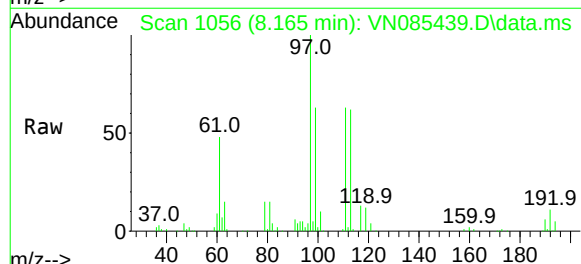
Tgt Ion: 97 Resp: 202590

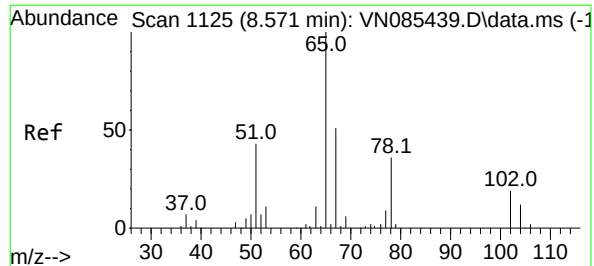
Ion Ratio Lower Upper

97 100

99 62.2 49.8 74.6

61 51.8 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 51.500 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 65 Resp: 165768

Ion Ratio Lower Upper

65 100

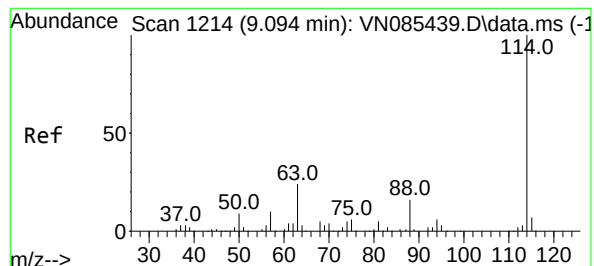
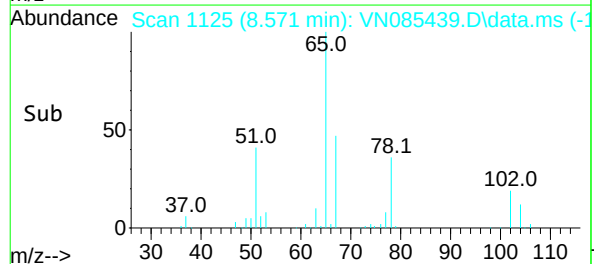
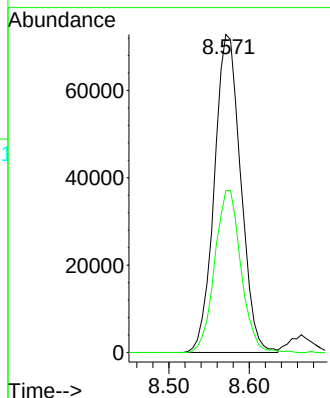
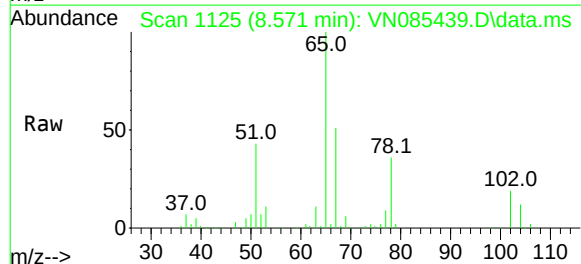
67 50.8 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

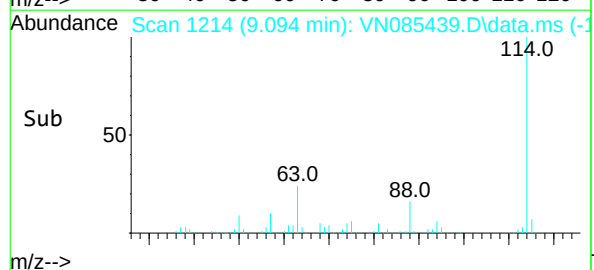
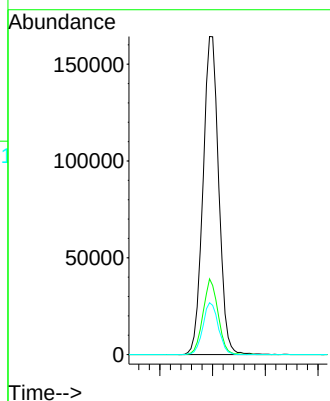
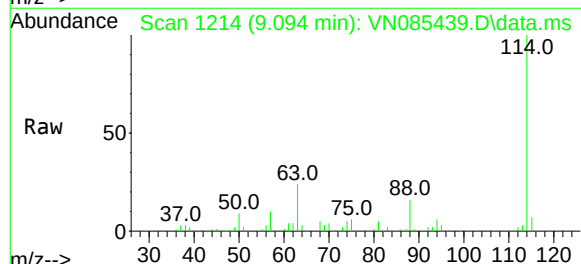
Tgt Ion:114 Resp: 339872

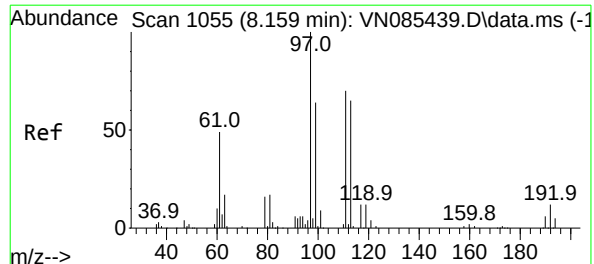
Ion Ratio Lower Upper

114 100

63 23.8 0.0 47.6

88 16.3 0.0 32.6





#35

Dibromofluoromethane

Concen: 51.552 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 113 Resp: 121554

Ion Ratio Lower Upper

113 100

111 103.4 82.7 124.1

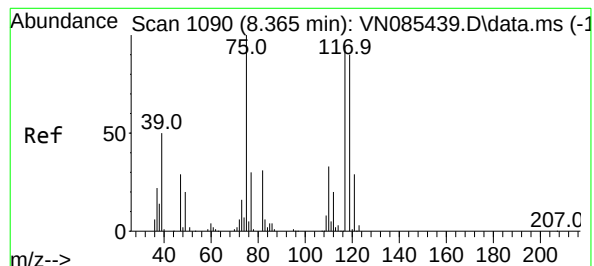
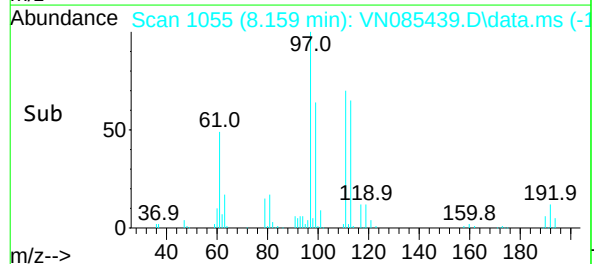
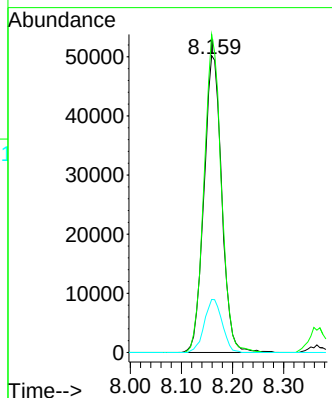
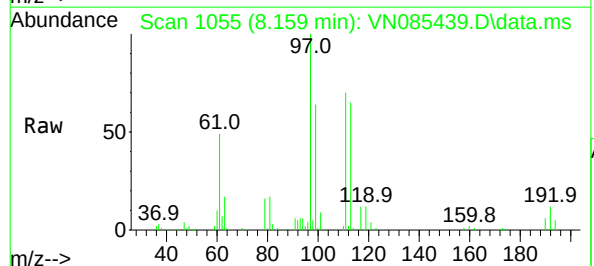
192 17.9 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 47.453 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

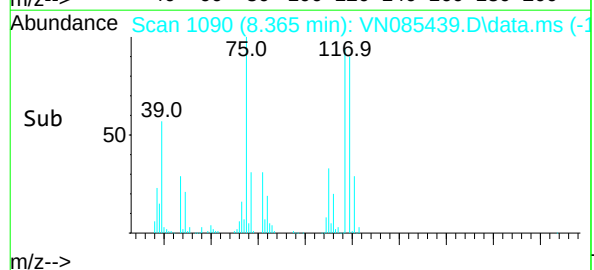
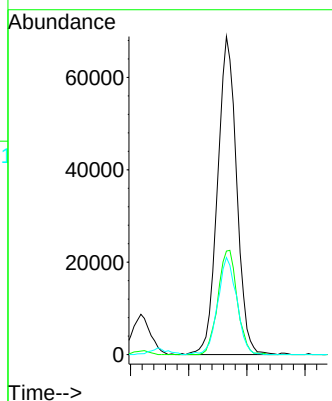
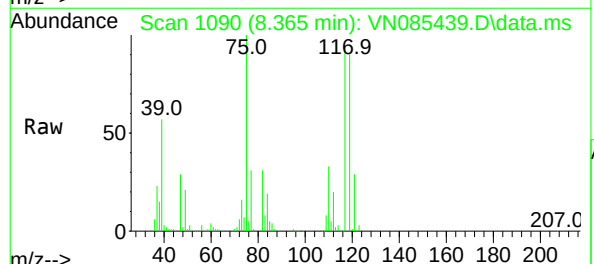
Tgt Ion: 75 Resp: 157031

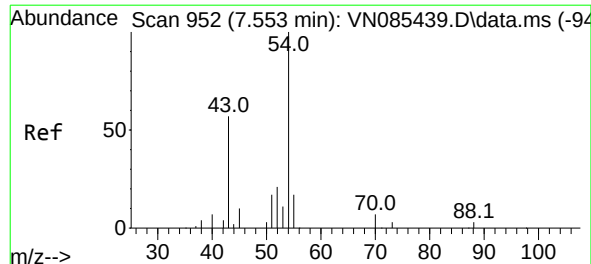
Ion Ratio Lower Upper

75 100

110 33.0 16.5 49.5

77 30.5 24.4 36.6





#37

Ethyl Acetate

Concen: 49.658 ug/l

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 43 Resp: 165866

Ion Ratio Lower Upper

43 100

61 13.6 10.9 16.3

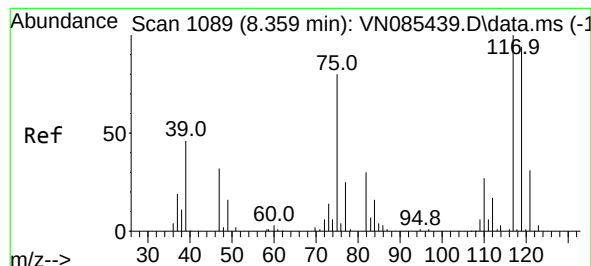
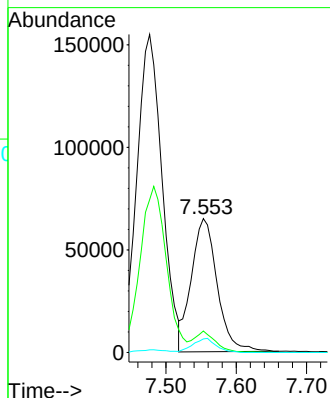
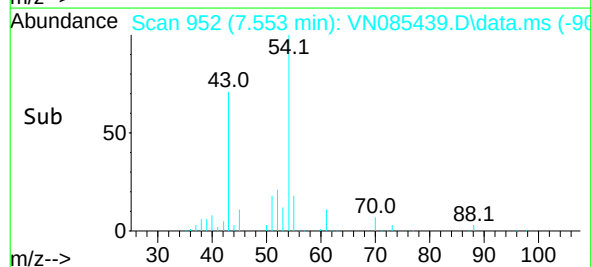
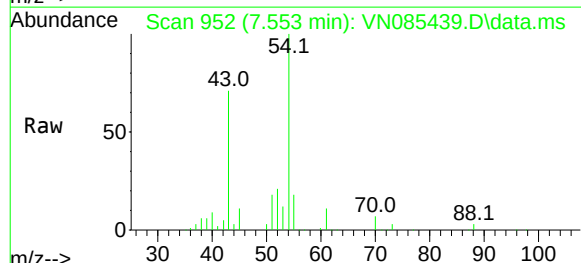
70 9.4 7.5 11.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#38

Carbon Tetrachloride

Concen: 47.564 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

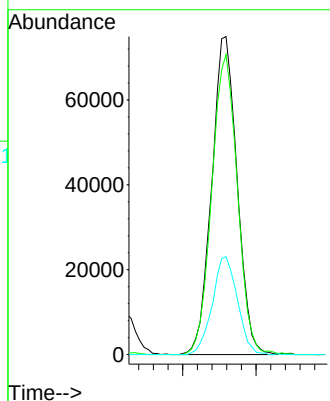
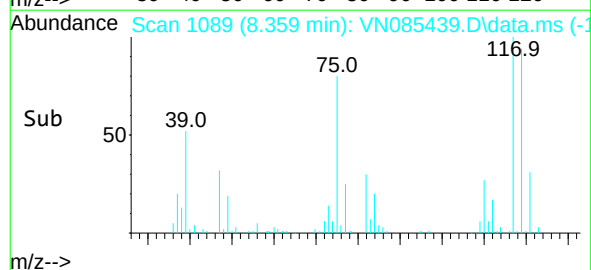
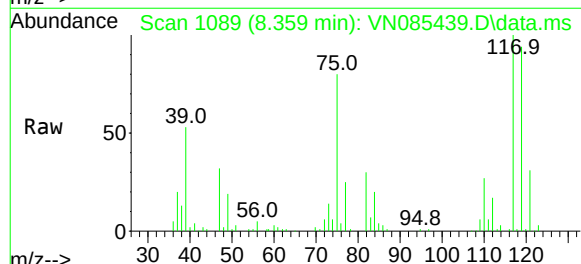
Tgt Ion:117 Resp: 180199

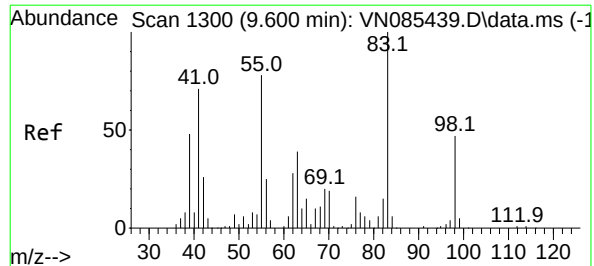
Ion Ratio Lower Upper

117 100

119 94.3 75.4 113.2

121 30.8 24.6 37.0





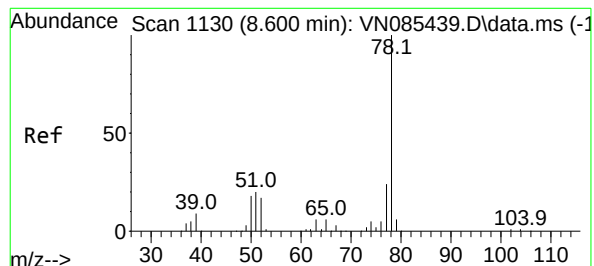
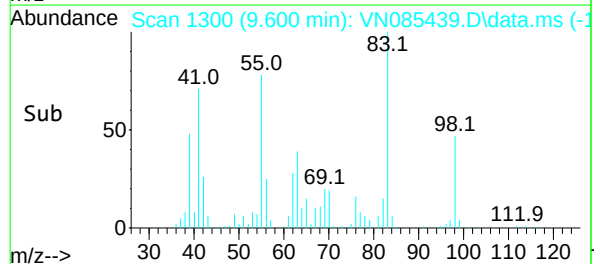
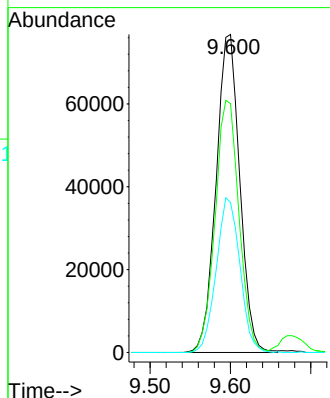
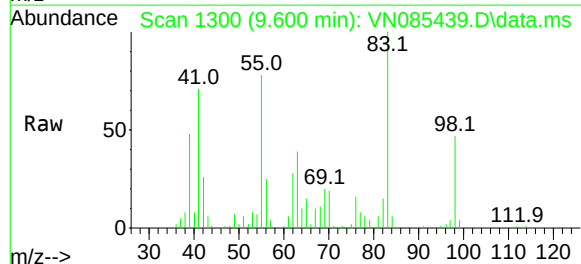
#39
Methylcyclohexane
Concen: 50.562 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion: 83 Resp: 157234
Ion Ratio Lower Upper
83 100
55 78.3 62.6 94.0
98 47.1 37.7 56.5

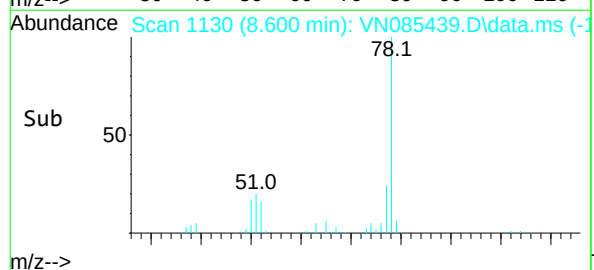
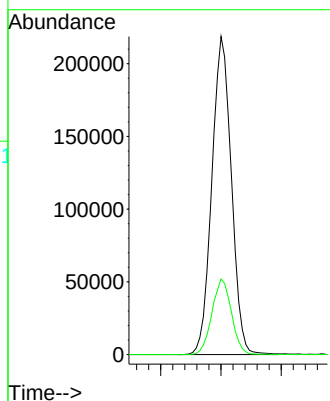
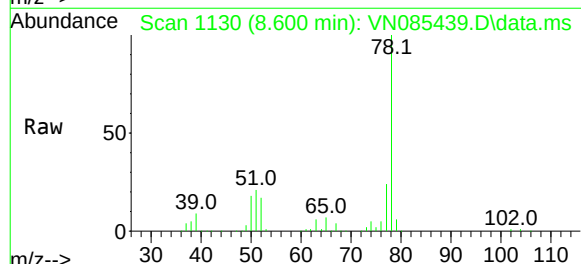
Manual Integrations
APPROVED

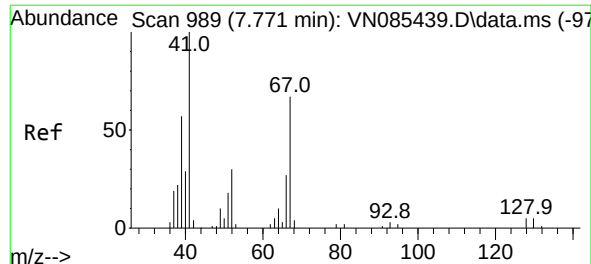
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#40
Benzene
Concen: 49.542 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 78 Resp: 492606
Ion Ratio Lower Upper
78 100
77 23.8 19.0 28.6





#41

Methacrylonitrile

Concen: 52.775 ug/l

RT: 7.771 min Scan# 989

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 41 Resp: 91711

Ion Ratio Lower Upper

41 100

39 57.5 46.0 69.0

67 71.8 57.4 86.2

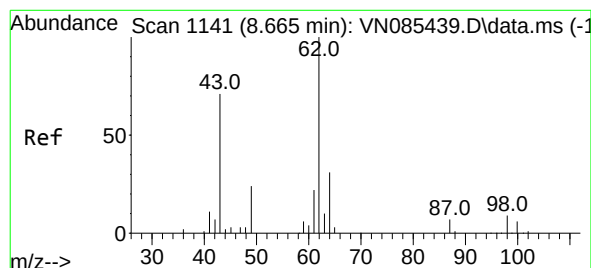
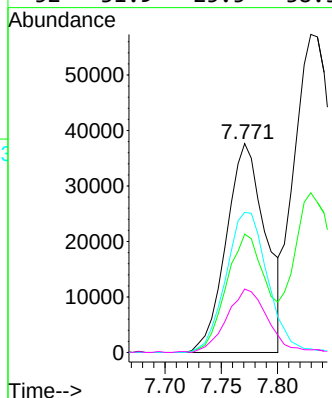
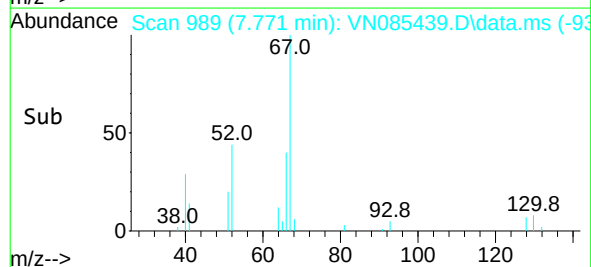
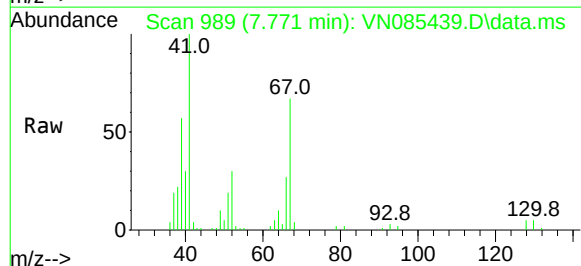
52 31.9 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 49.685 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. 0.000 min

Lab File: VN085439.D

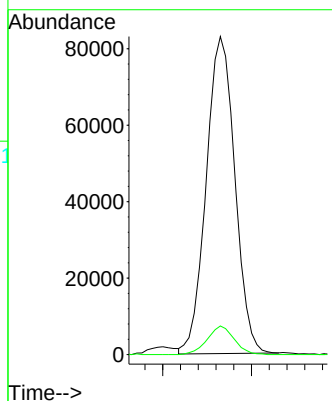
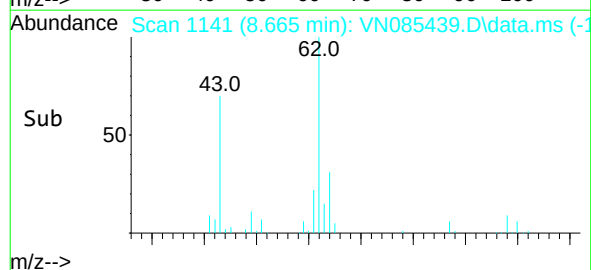
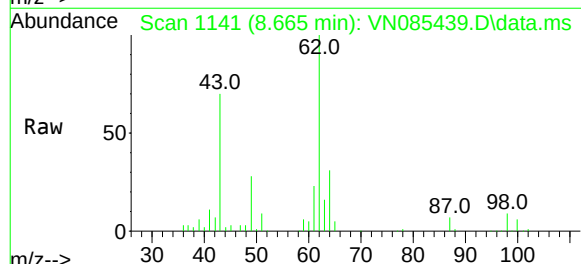
Acq: 14 Jan 2025 15:19

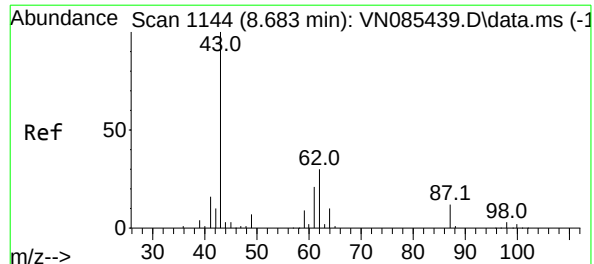
Tgt Ion: 62 Resp: 186065

Ion Ratio Lower Upper

62 100

98 8.5 0.0 17.0





#43

Isopropyl Acetate

Concen: 51.611 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

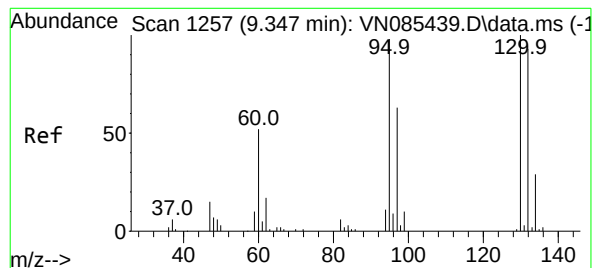
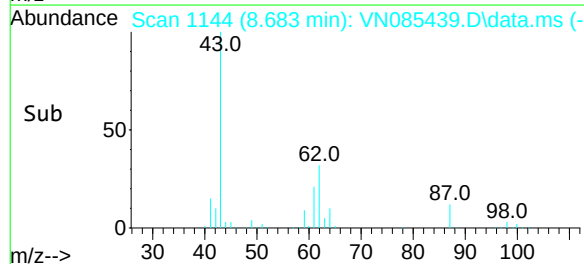
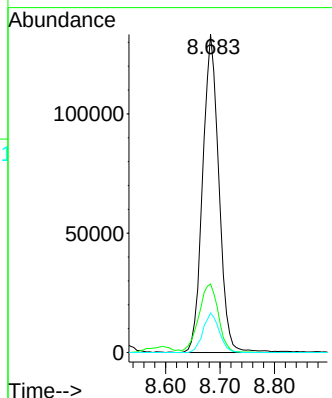
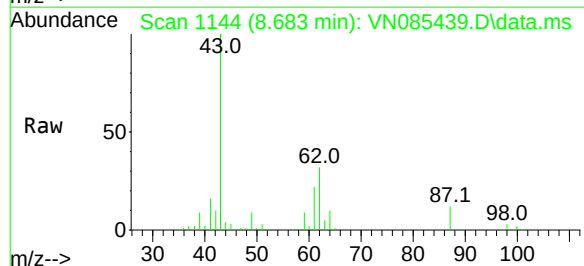
VSTDICCC050

Tgt Ion:	43	Resp:	276228
Ion	Ratio	Lower	Upper
43	100		
61	25.9	20.7	31.1
87	12.3	9.8	14.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#44

Trichloroethene

Concen: 47.506 ug/l

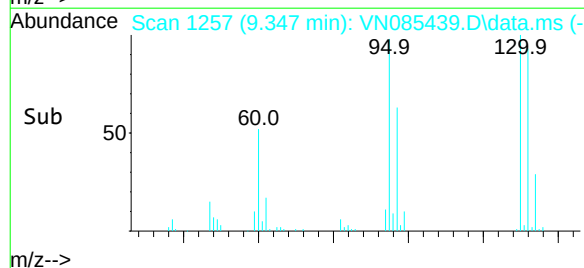
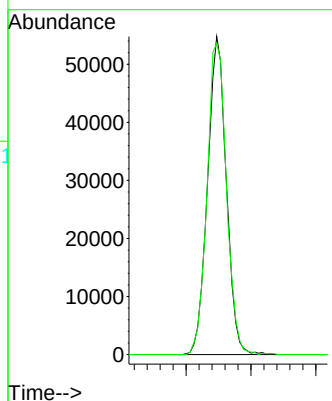
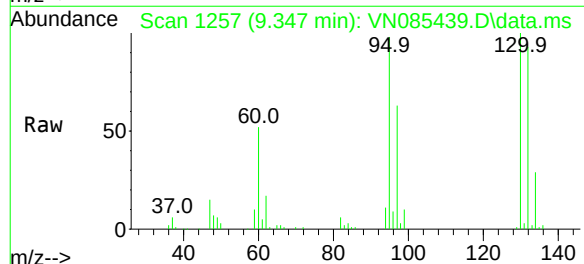
RT: 9.347 min Scan# 1257

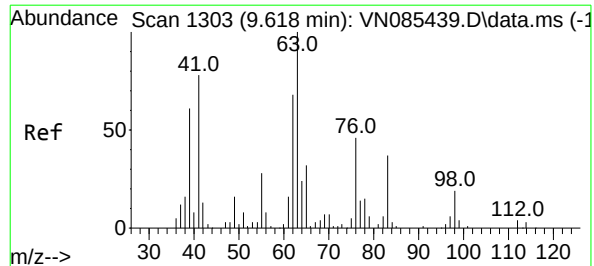
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	130	Resp:	109953
Ion	Ratio	Lower	Upper
130	100		
95	97.9	0.0	195.8





#45

1,2-Dichloropropane

Concen: 49.644 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 63 Resp: 126084

Ion Ratio Lower Upper

63 100

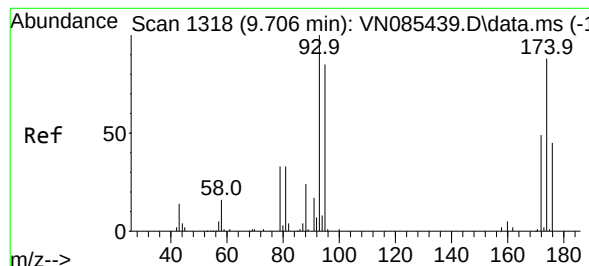
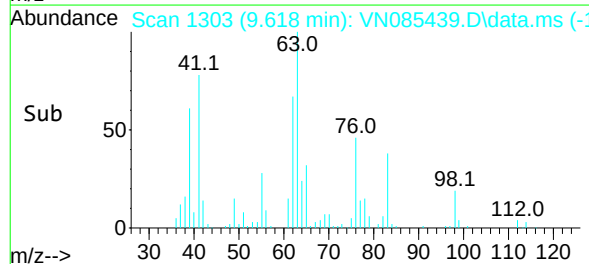
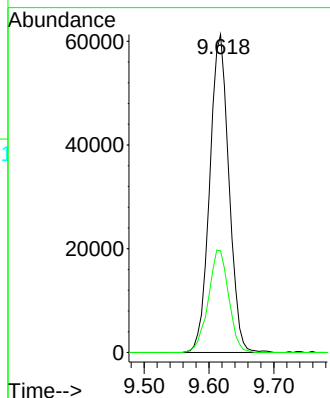
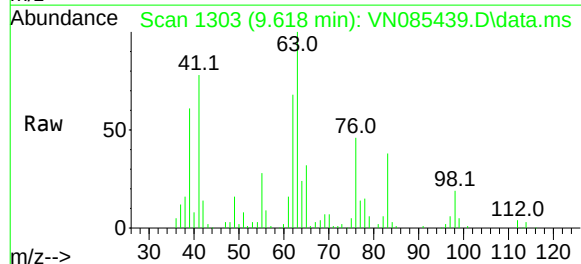
65 32.0 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 49.476 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

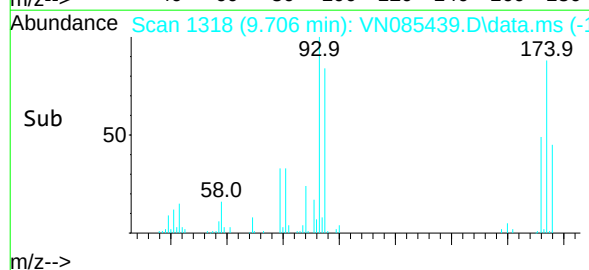
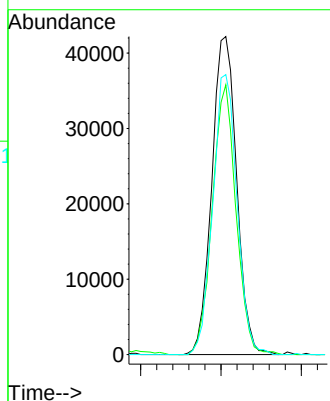
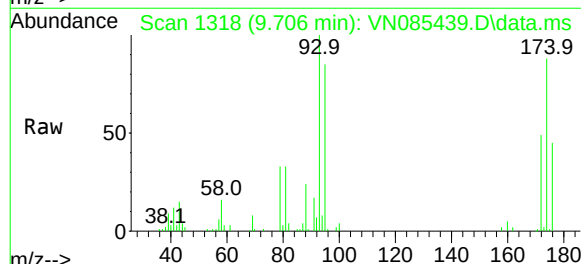
Tgt Ion: 93 Resp: 90670

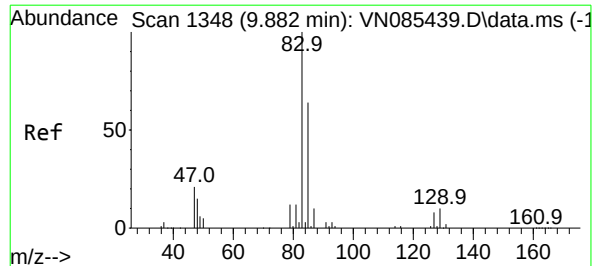
Ion Ratio Lower Upper

93 100

95 80.9 64.7 97.1

174 86.2 69.0 103.4





#47

Bromodichloromethane

Concen: 50.867 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

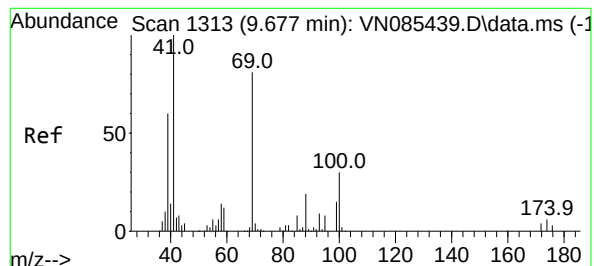
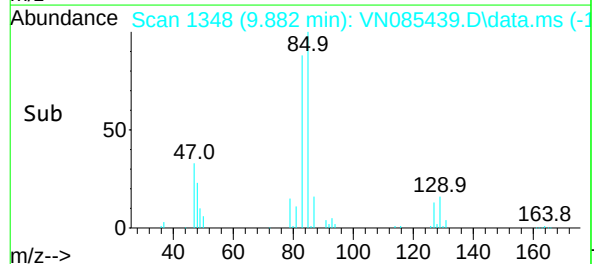
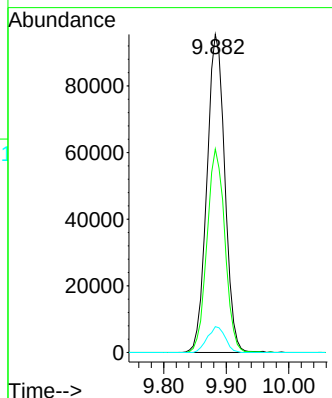
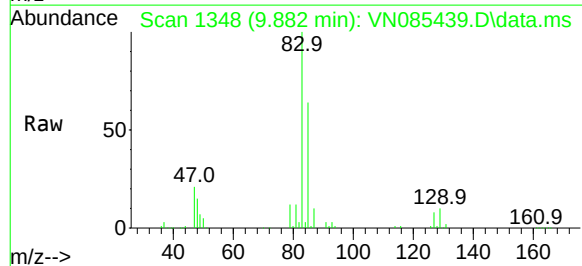
ClientSampleId :

VSTDICCC050

Tgt Ion:	83	Resp:	189915
Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.2	76.8
127	8.1	6.5	9.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 55.385 ug/l

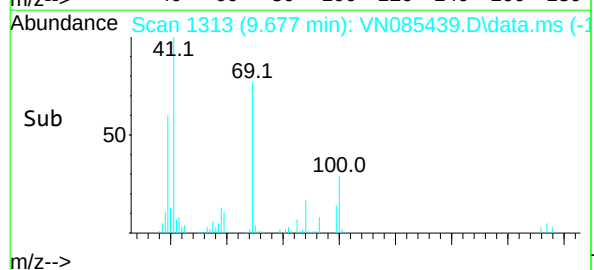
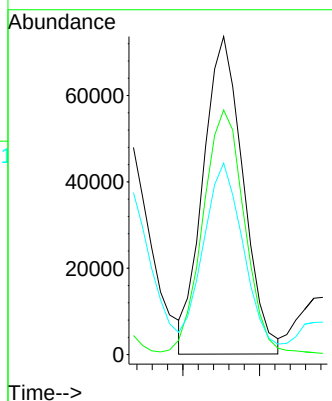
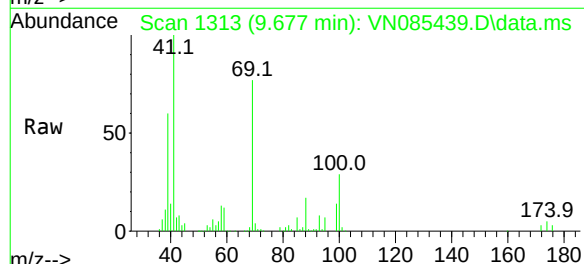
RT: 9.677 min Scan# 1313

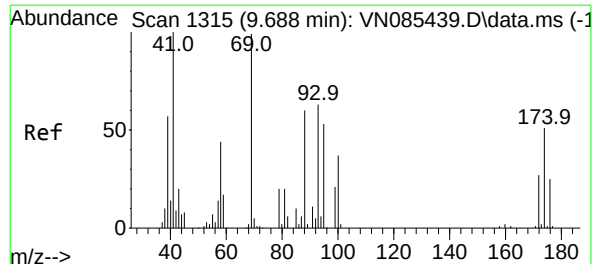
Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	41	Resp:	133399
Ion	Ratio	Lower	Upper
41	100		
69	80.9	64.7	97.1
39	61.3	49.0	73.6





#49

1,4-Dioxane

Concen: 1061.334 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 88 Resp: 43048

Ion Ratio Lower Upper

88 100

43 33.2 26.6 39.8

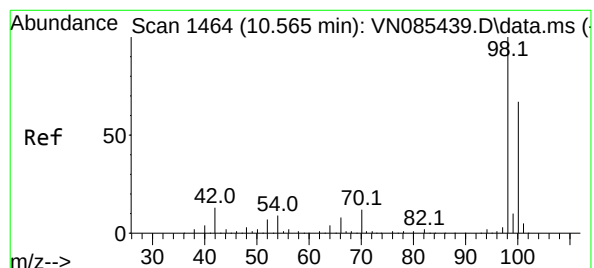
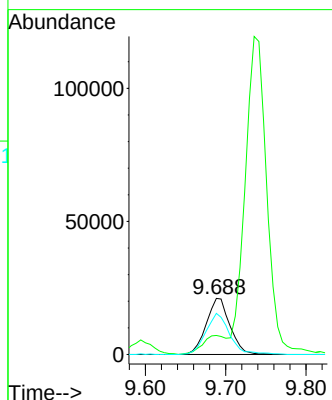
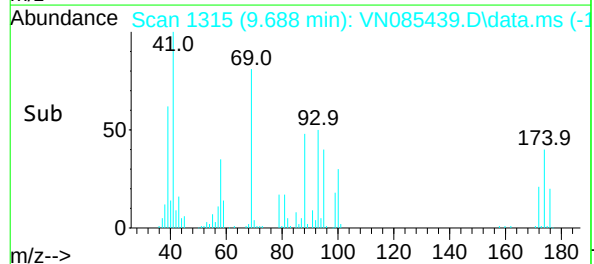
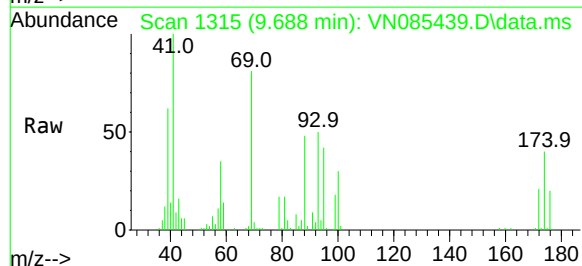
58 74.4 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 51.411 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085439.D

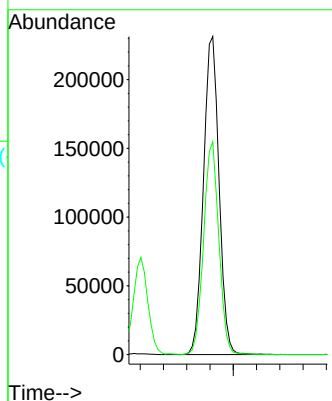
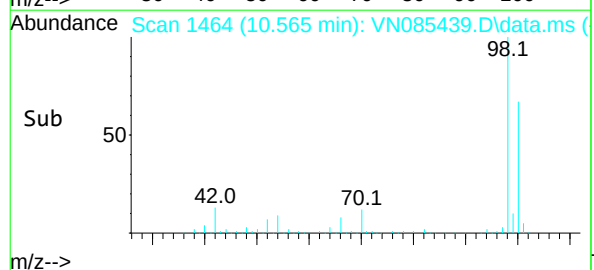
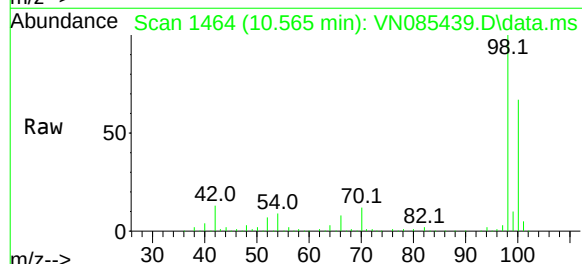
Acq: 14 Jan 2025 15:19

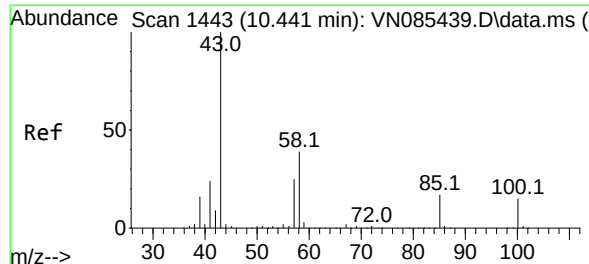
Tgt Ion: 98 Resp: 430698

Ion Ratio Lower Upper

98 100

100 65.3 52.2 78.4





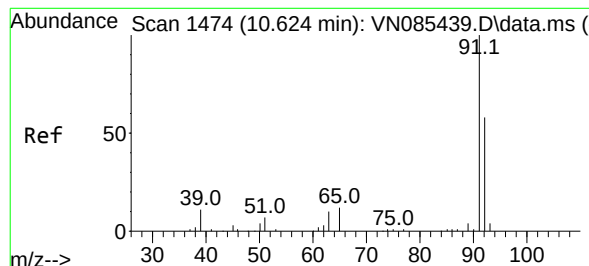
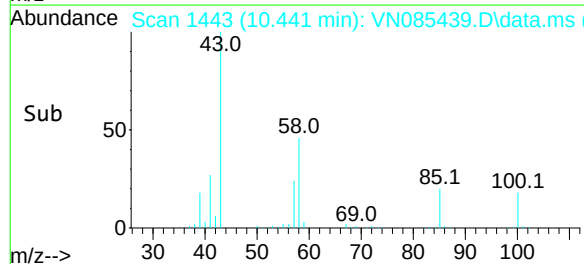
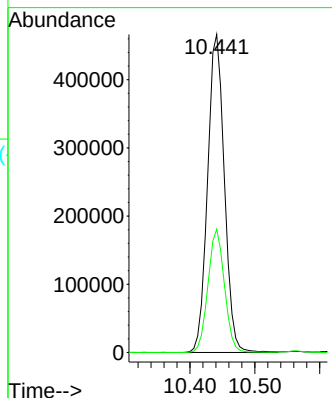
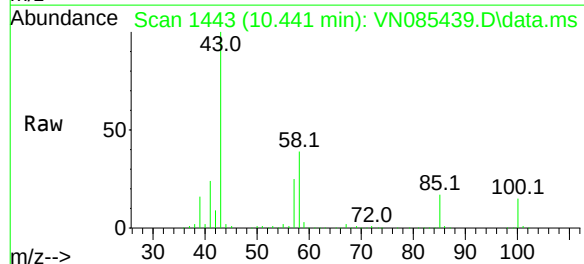
#51
4-Methyl-2-Pentanone
Concen: 269.403 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion: 43 Resp: 836707
Ion Ratio Lower Upper
43 100
58 38.1 30.5 45.7

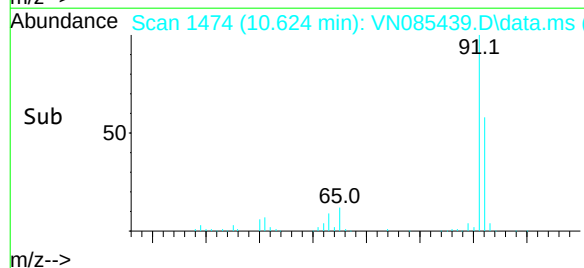
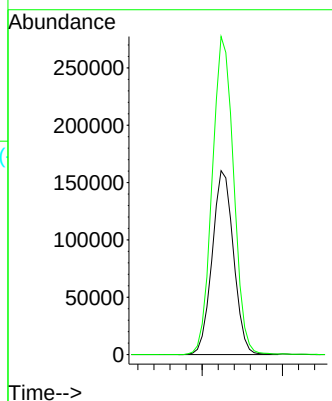
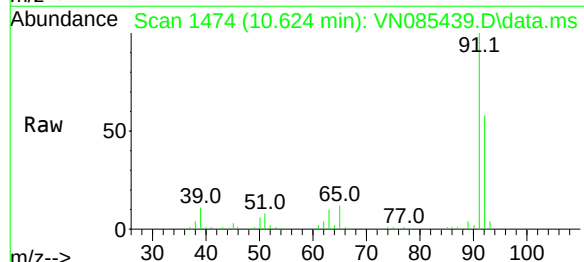
Manual Integrations
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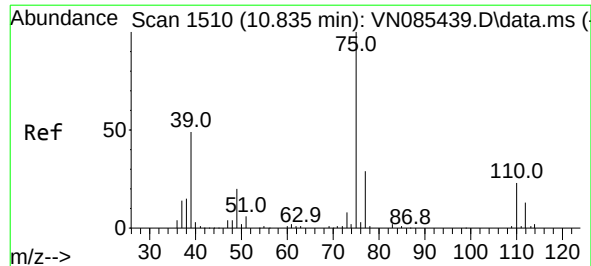
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#52
Toluene
Concen: 51.341 ug/l
RT: 10.624 min Scan# 1474
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 92 Resp: 295792
Ion Ratio Lower Upper
92 100
91 174.0 139.2 208.8





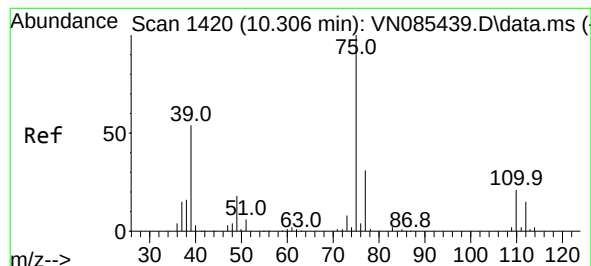
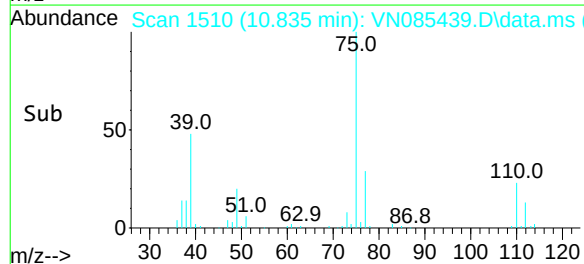
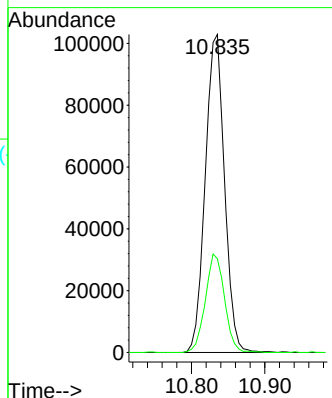
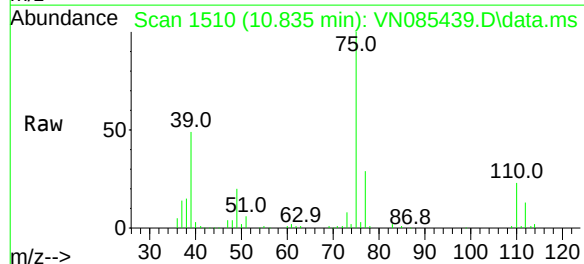
#53
t-1,3-Dichloropropene
Concen: 53.125 ug/l
RT: 10.835 min Scan# 1510
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion: 75 Resp: 187439
Ion Ratio Lower Upper
75 100
77 29.4 23.5 35.3

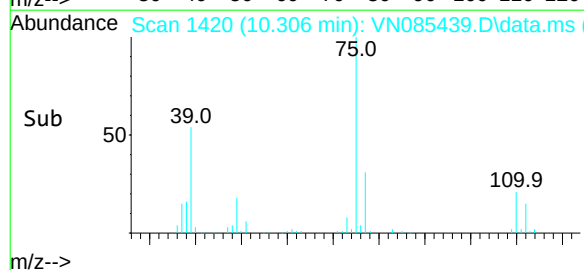
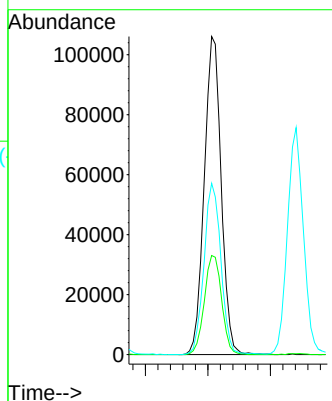
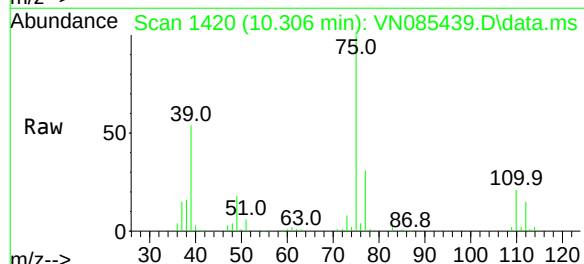
Manual Integrations
APPROVED

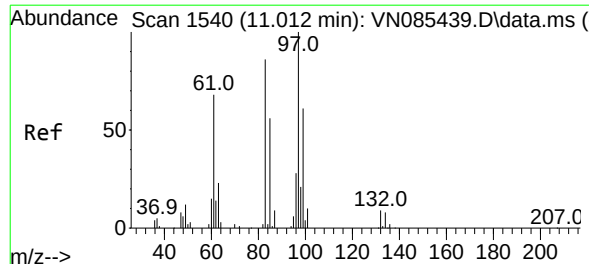
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#54
cis-1,3-Dichloropropene
Concen: 53.006 ug/l
RT: 10.306 min Scan# 1420
Delta R.T. -0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 75 Resp: 199771
Ion Ratio Lower Upper
75 100
77 31.2 25.0 37.4
39 53.9 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 50.641 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 97 Resp: 115462

Ion Ratio Lower Upper

97 100

83 86.3 69.0 103.6

85 55.7 44.6 66.8

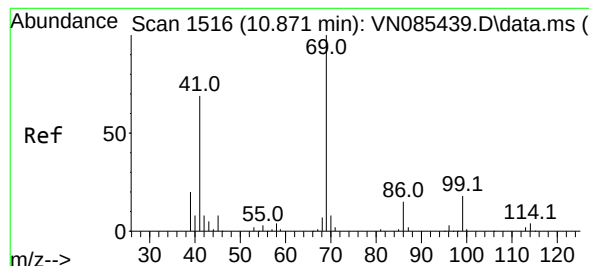
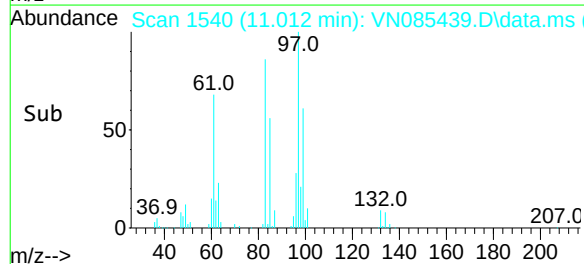
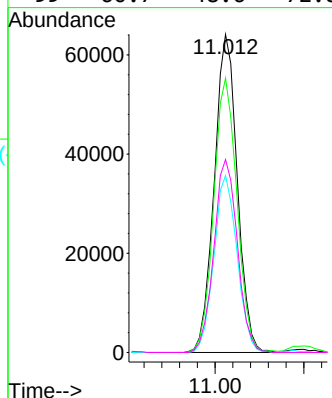
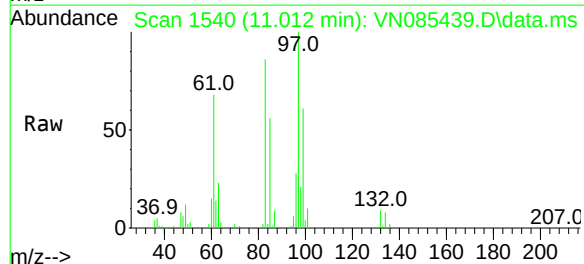
99 60.7 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 48.182 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

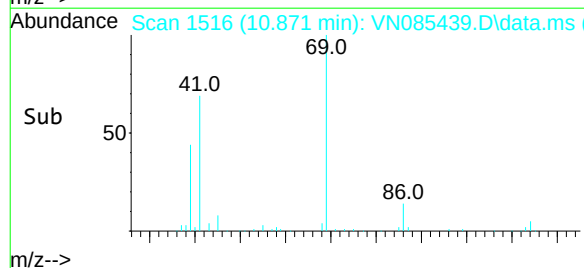
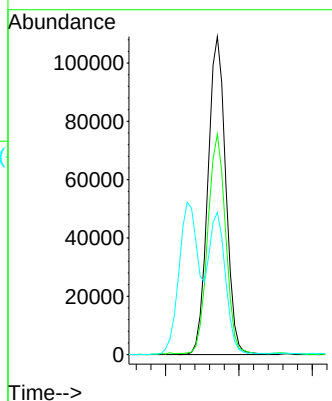
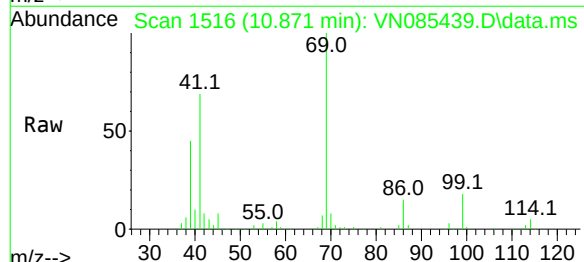
Tgt Ion: 69 Resp: 184775

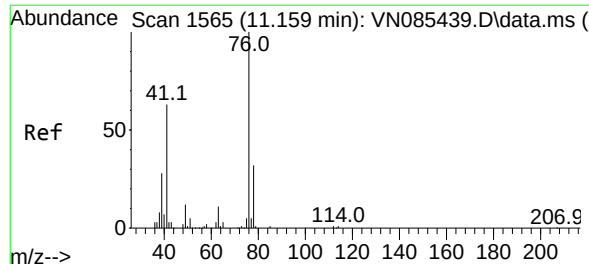
Ion Ratio Lower Upper

69 100

41 68.3 54.6 82.0

39 40.5 32.4 48.6





#57

1,3-Dichloropropane

Concen: 51.606 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 76 Resp: 204596

Ion Ratio Lower Upper

76 100

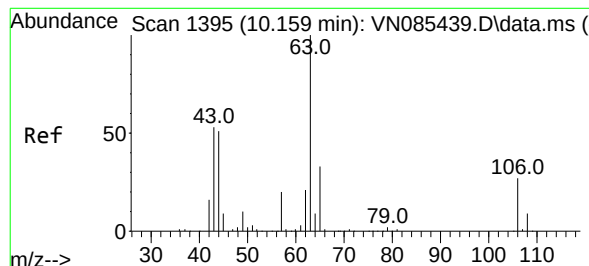
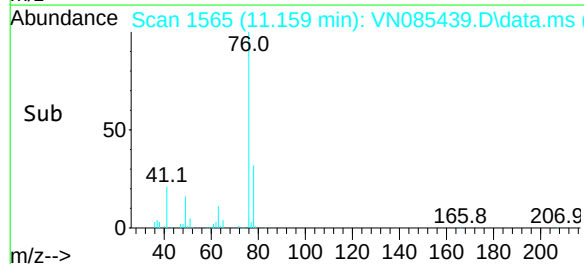
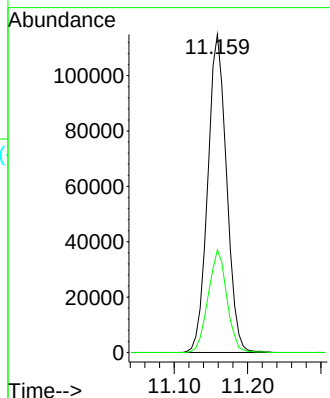
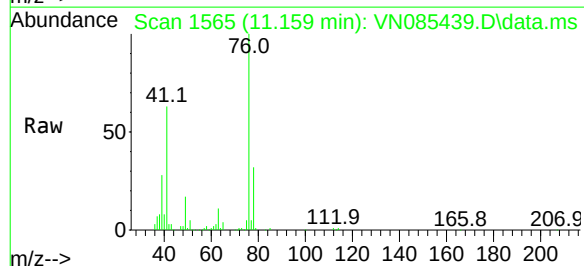
78 32.0 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 283.088 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085439.D

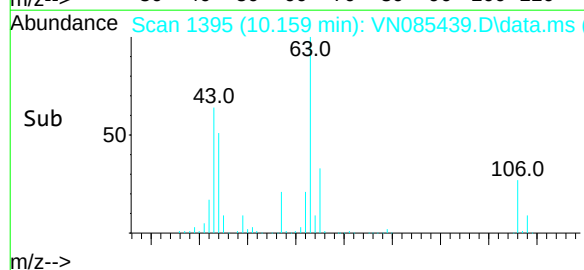
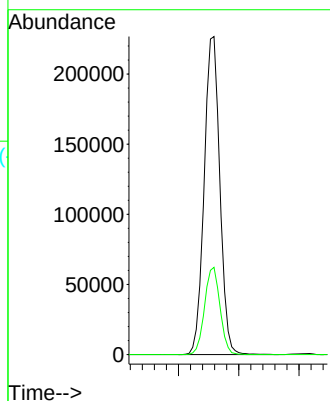
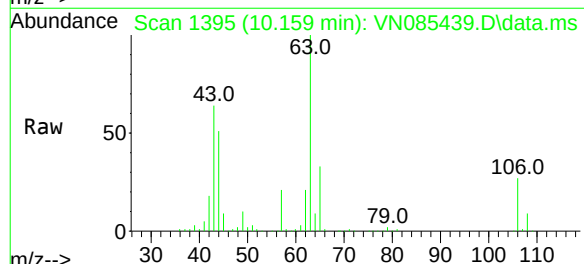
Acq: 14 Jan 2025 15:19

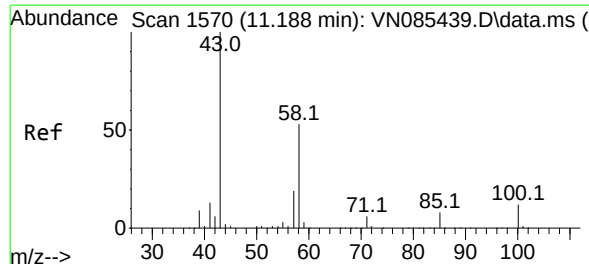
Tgt Ion: 63 Resp: 409594

Ion Ratio Lower Upper

63 100

106 27.0 21.6 32.4





#59

2-Hexanone

Concen: 277.643 ug/l

RT: 11.188 min Scan# 1570

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 43 Resp: 606740

Ion Ratio Lower Upper

43 100

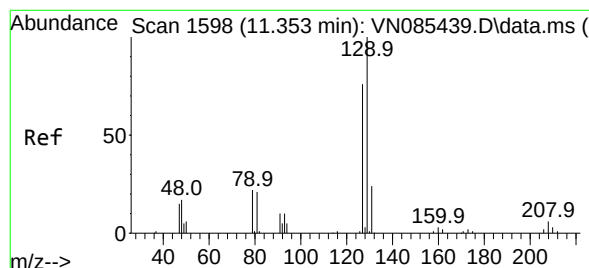
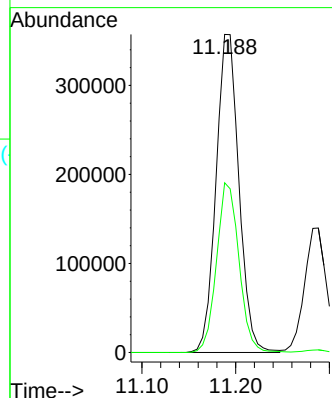
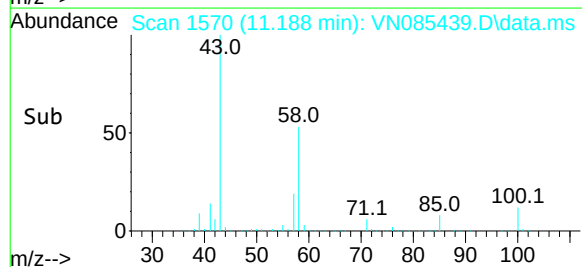
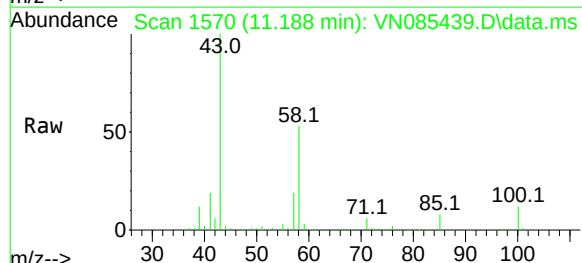
58 52.4 26.2 78.6

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 51.116 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085439.D

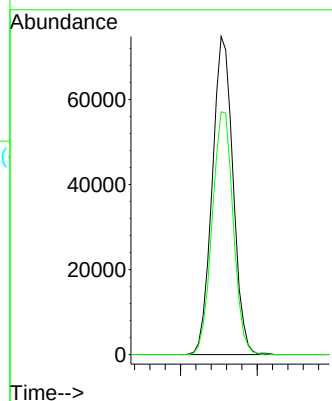
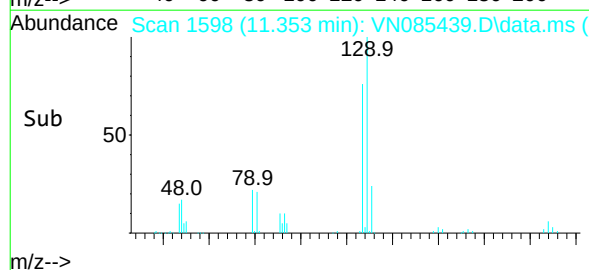
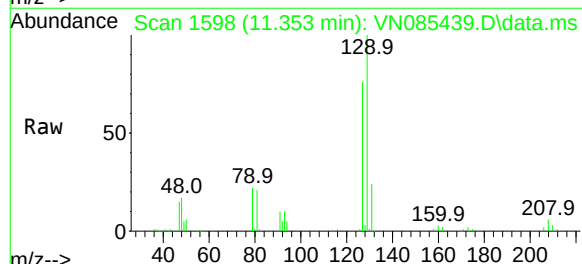
Acq: 14 Jan 2025 15:19

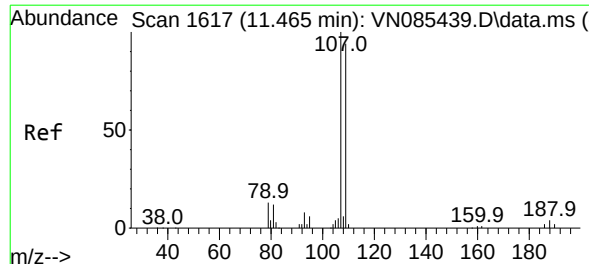
Tgt Ion:129 Resp: 140704

Ion Ratio Lower Upper

129 100

127 77.2 38.6 115.8





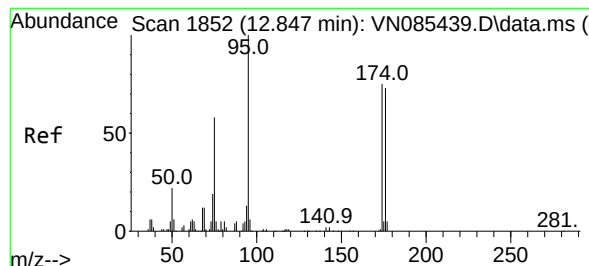
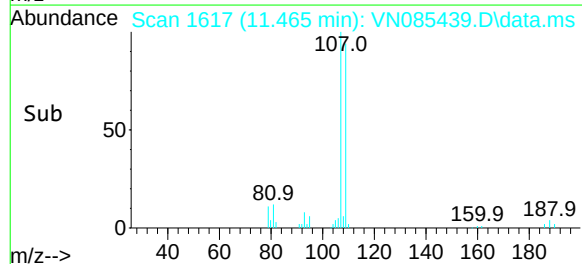
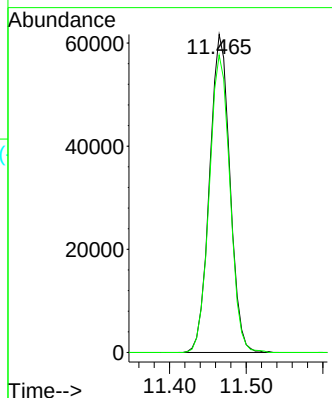
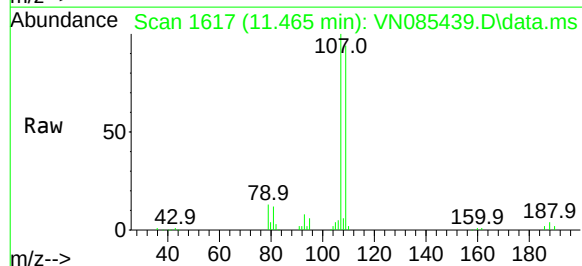
#61
1,2-Dibromoethane
Concen: 50.028 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Tgt Ion: 107 Resp: 113541
Ion Ratio Lower Upper
107 100
109 94.9 75.9 113.9

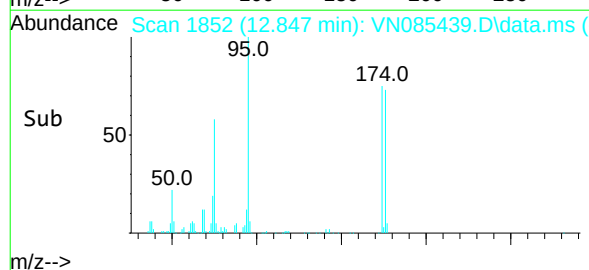
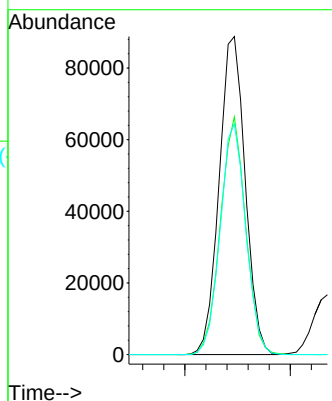
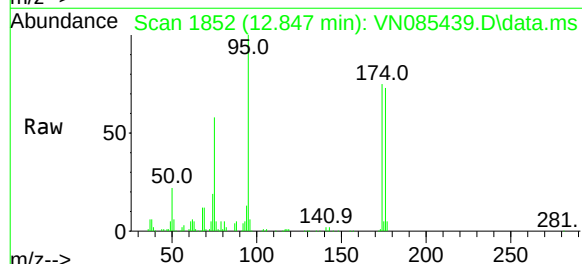
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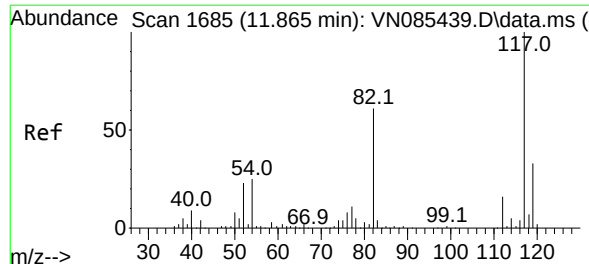
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#62
4-Bromofluorobenzene
Concen: 53.239 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085439.D
Acq: 14 Jan 2025 15:19

Tgt Ion: 95 Resp: 152568
Ion Ratio Lower Upper
95 100
174 72.5 0.0 145.0
176 71.2 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion:117 Resp: 297366

Ion Ratio Lower Upper

117 100

82 60.7 48.6 72.8

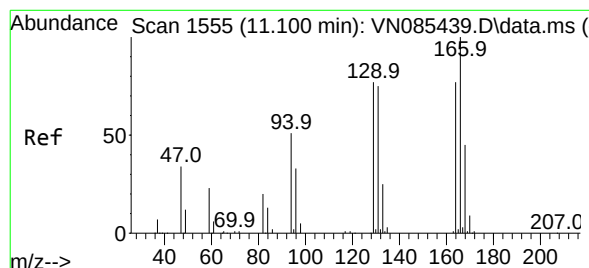
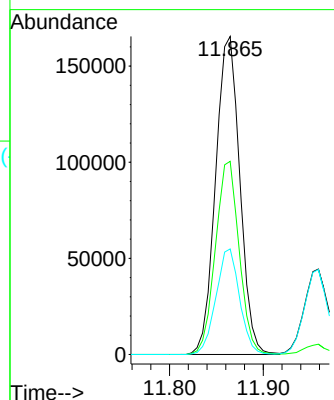
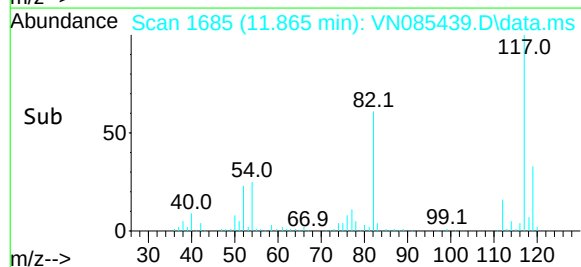
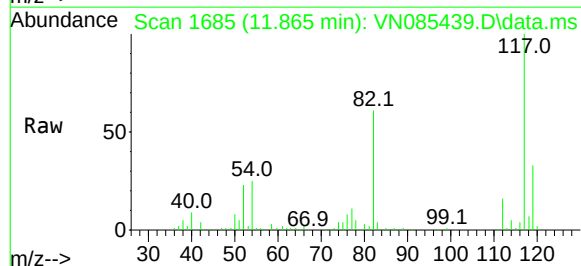
119 33.2 26.6 39.8

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 47.295 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:164 Resp: 95879

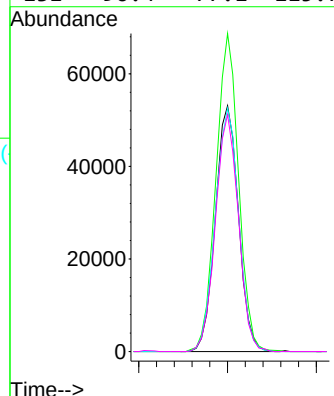
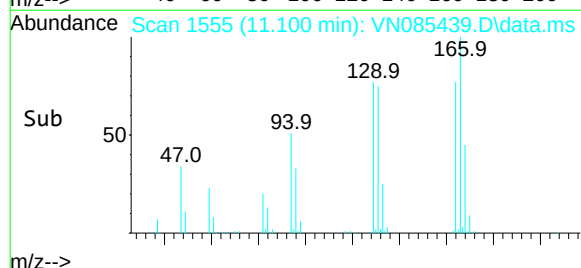
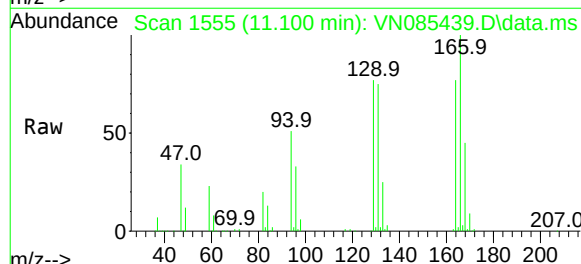
Ion Ratio Lower Upper

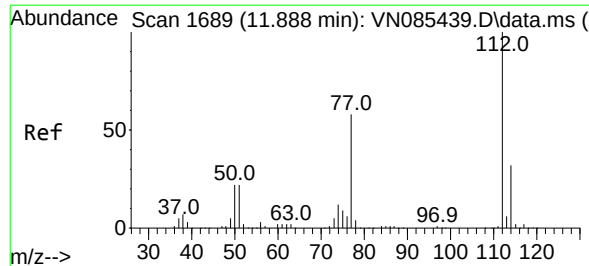
164 100

166 129.3 103.4 155.2

129 99.0 79.2 118.8

131 96.4 77.1 115.7





#65

Chlorobenzene

Concen: 49.121 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion:112 Resp: 319992

Ion Ratio Lower Upper

112 100

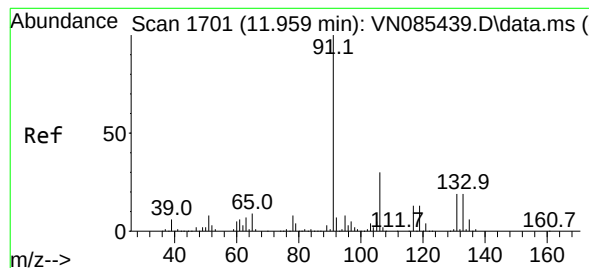
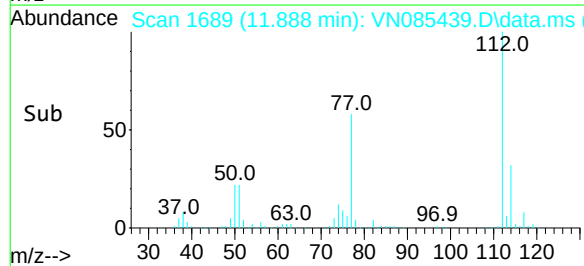
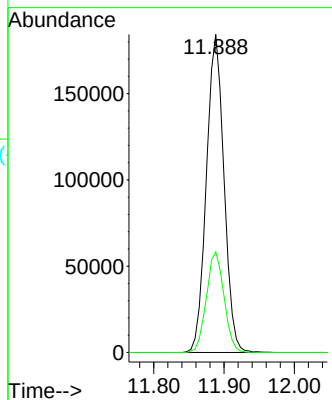
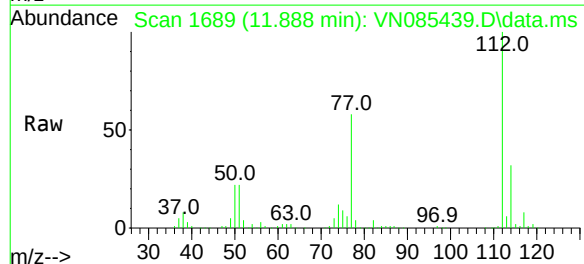
114 31.6 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 48.722 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

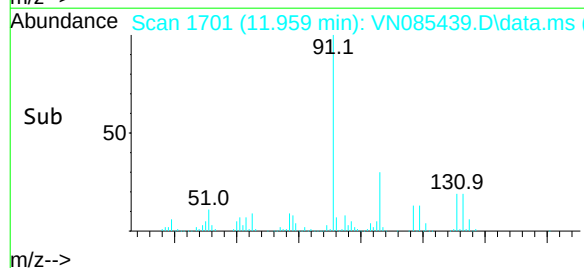
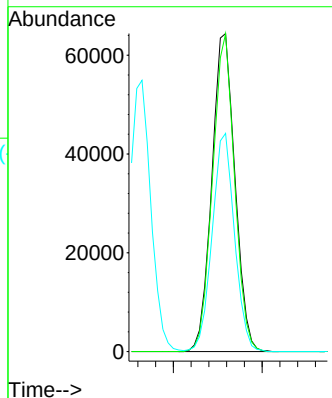
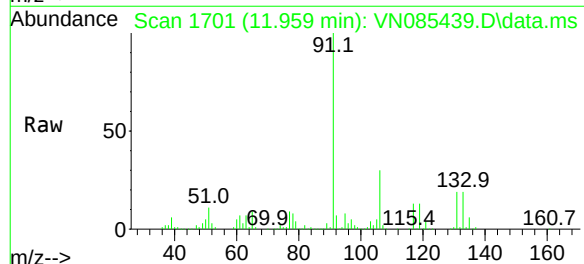
Tgt Ion:131 Resp: 116488

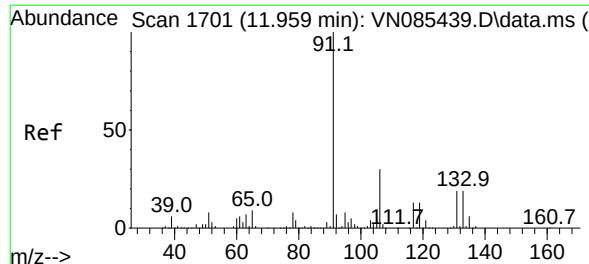
Ion Ratio Lower Upper

131 100

133 94.9 47.4 142.3

119 66.3 33.1 99.5





#67

Ethyl Benzene

Concen: 52.339 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 91 Resp: 555322

Ion Ratio Lower Upper

91 100

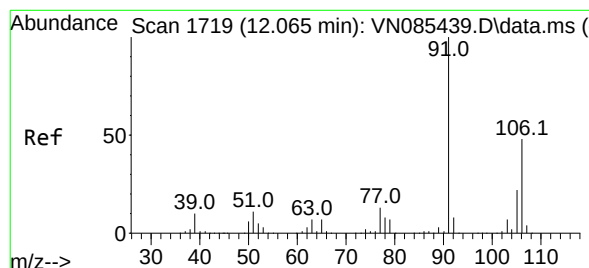
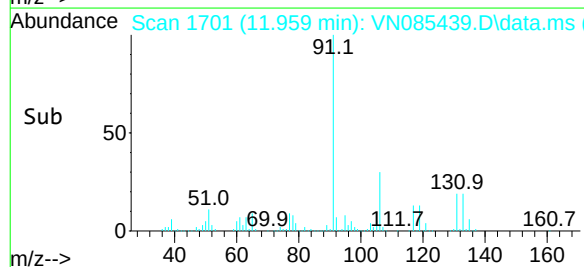
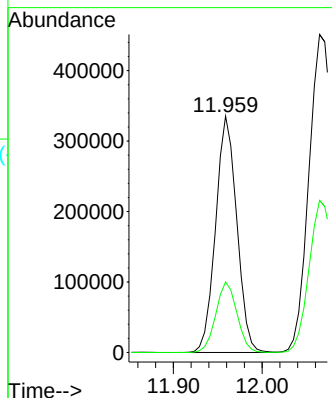
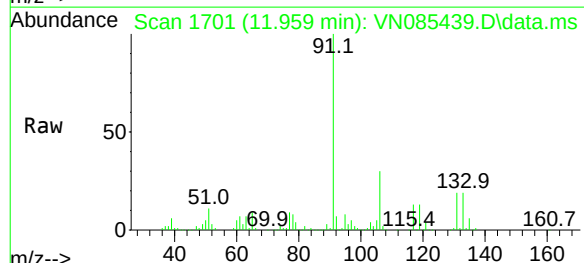
106 29.8 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 107.286 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. 0.000 min

Lab File: VN085439.D

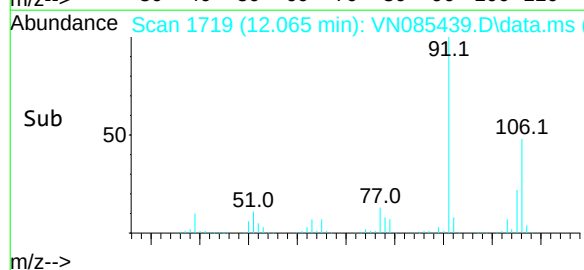
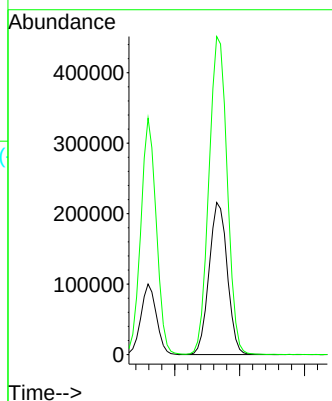
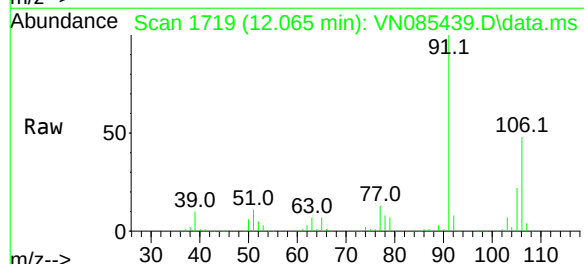
Acq: 14 Jan 2025 15:19

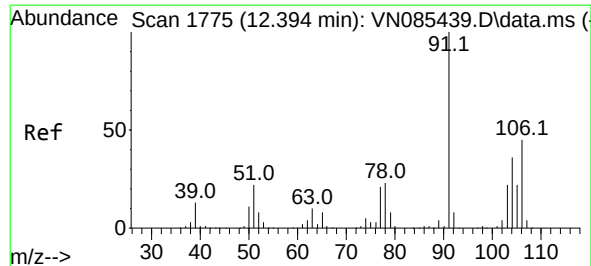
Tgt Ion:106 Resp: 420702

Ion Ratio Lower Upper

106 100

91 209.6 167.7 251.5





#69

o-Xylene

Concen: 54.062 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion:106 Resp: 202597

Ion Ratio Lower Upper

106 100

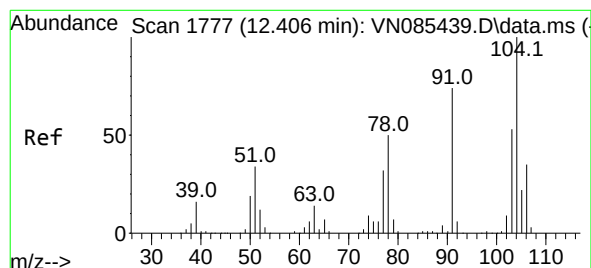
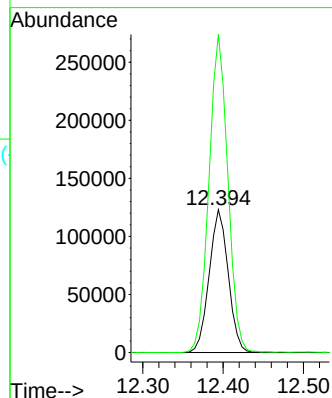
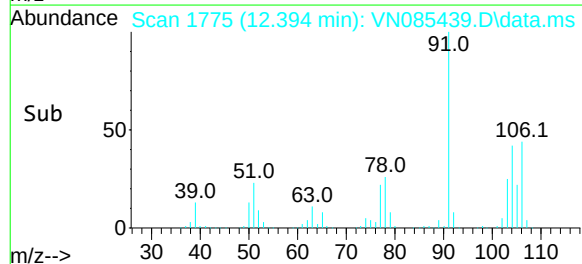
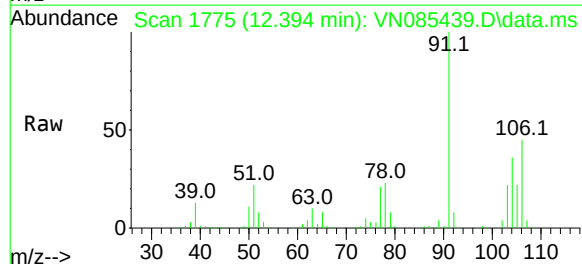
91 220.8 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 56.227 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

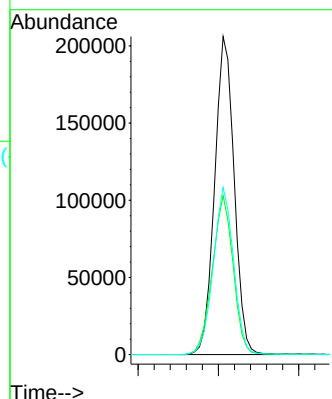
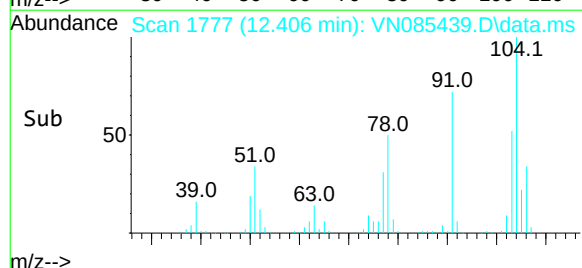
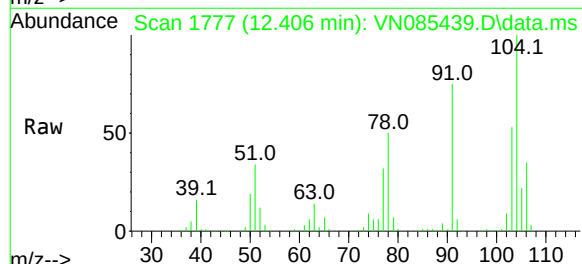
Tgt Ion:104 Resp: 348720

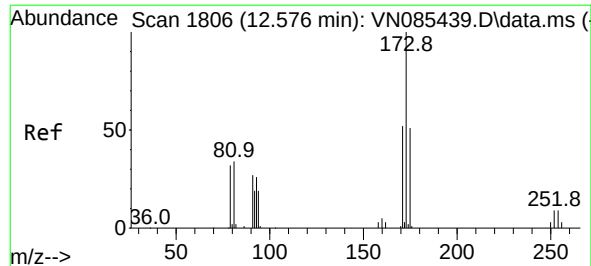
Ion Ratio Lower Upper

104 100

78 53.1 42.5 63.7

103 54.8 43.8 65.8





#71

Bromoform

Concen: 53.993 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

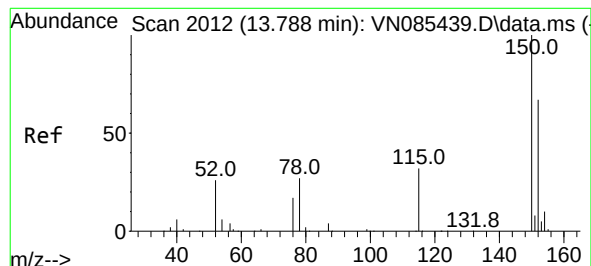
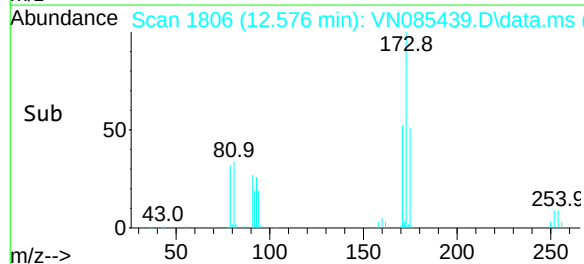
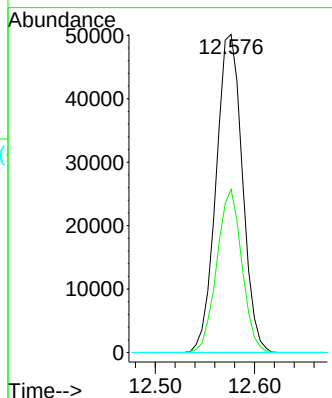
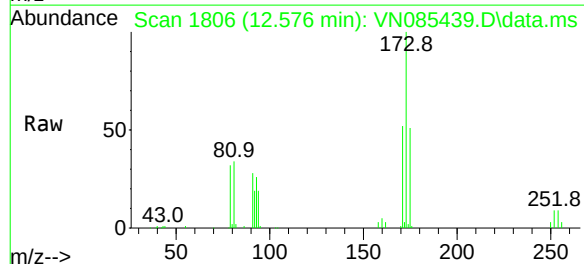
ClientSampleId :

VSTDICCC050

Tgt Ion:	173	Resp:	92366
Ion Ratio	Lower	Upper	
173	100		
175	48.8	24.4	73.2
254	0.0	0.0	0.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

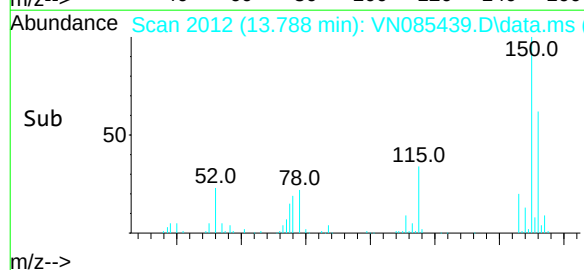
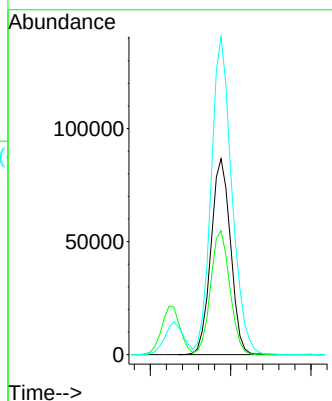
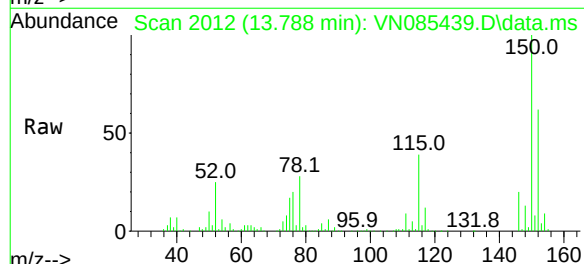
RT: 13.788 min Scan# 2012

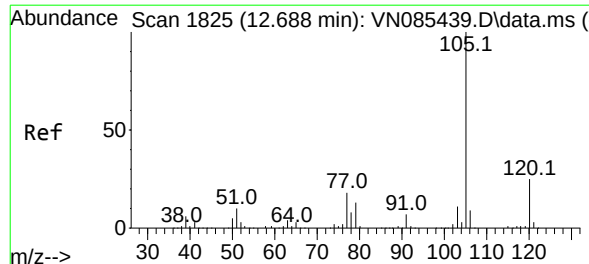
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	152	Resp:	146624
Ion Ratio	Lower	Upper	
152	100		
115	62.2	31.1	93.3
150	171.8	0.0	343.6





#73

Isopropylbenzene

Concen: 51.094 ug/l

RT: 12.688 min Scan# 1825

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion: 105 Resp: 505619

Ion Ratio Lower Upper

105 100

120 25.5 12.8 38.3

Instrument :

MSVOA_N

ClientSampleId :

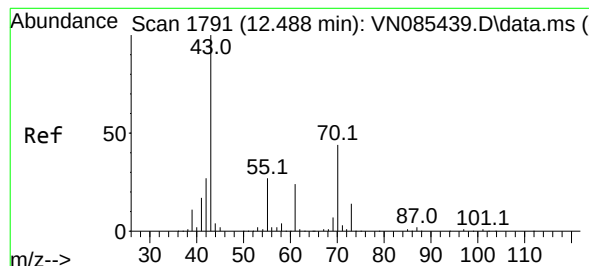
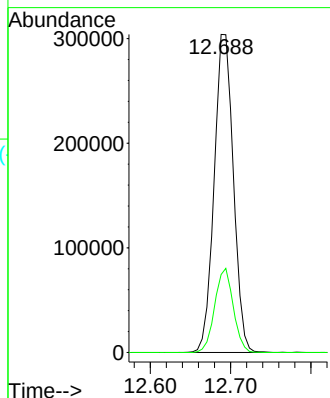
VSTDICCC050

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 53.478 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion: 43 Resp: 237870

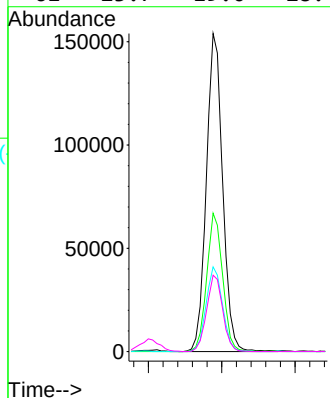
Ion Ratio Lower Upper

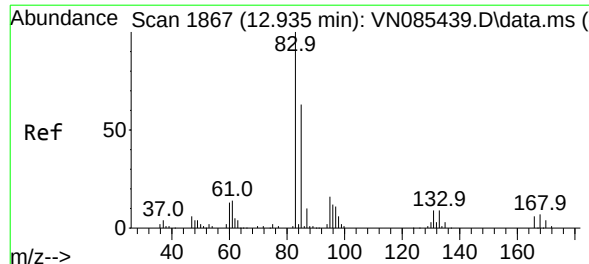
43 100

70 42.5 34.0 51.0

55 26.8 21.4 32.2

61 23.7 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 48.019 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

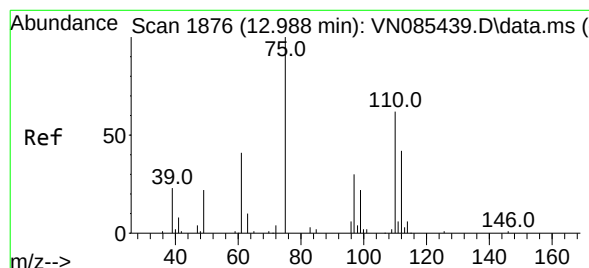
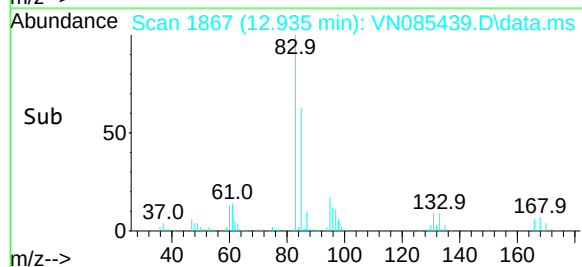
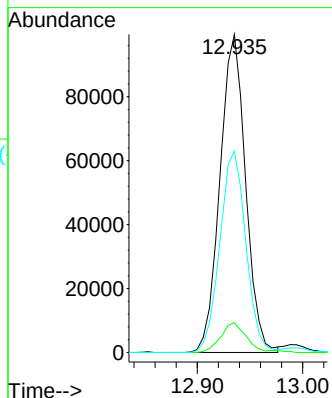
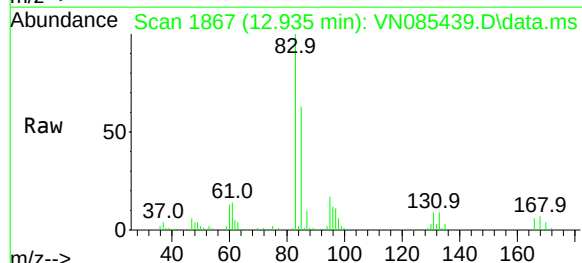
ClientSampleId :

VSTDICCC050

Tgt Ion:	83	Resp:	167856
Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.4	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#76

1,2,3-Trichloropropane

Concen: 43.982 ug/l m

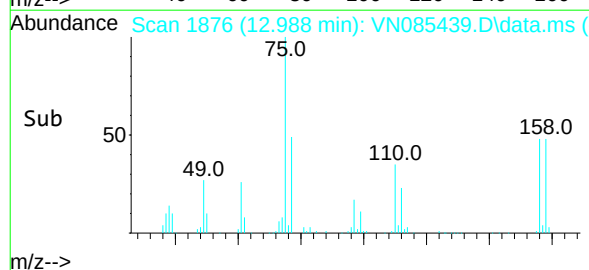
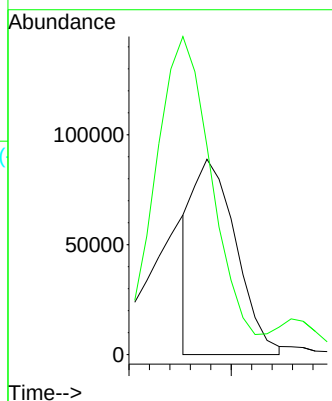
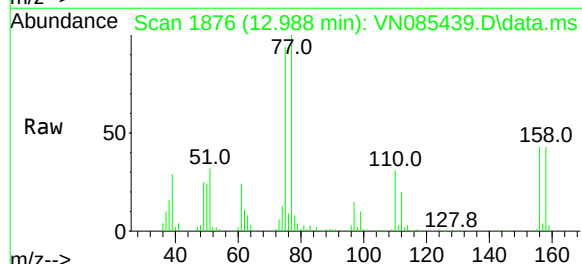
RT: 12.988 min Scan# 1876

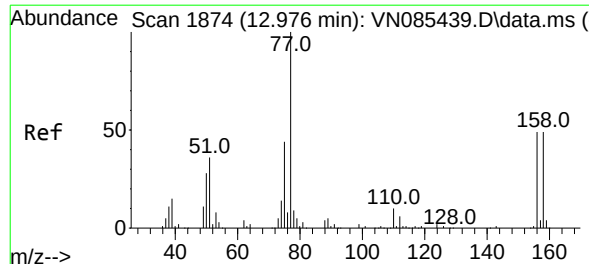
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	75	Resp:	130866
Ion	Ratio	Lower	Upper
75	100		
77	219.5	109.7	329.2





#77

Bromobenzene

Concen: 48.657 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion:156 Resp: 125800

Ion Ratio Lower Upper

156 100

77 228.3 114.1 342.4

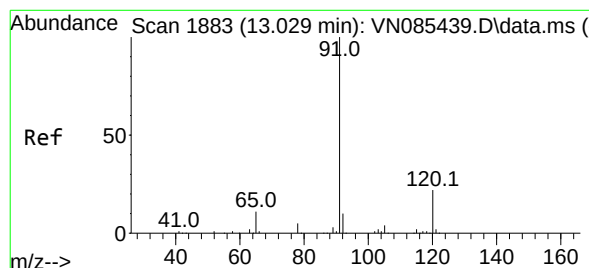
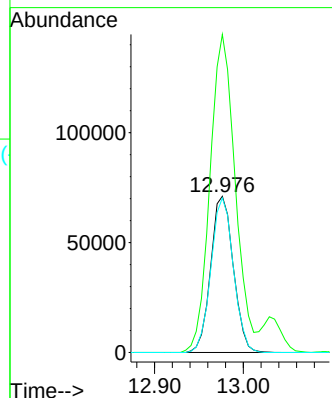
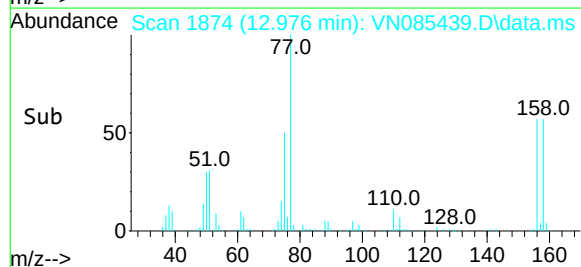
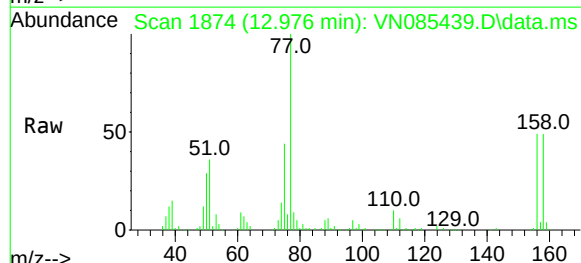
158 97.9 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

Concen: 51.986 ug/l

RT: 13.029 min Scan# 1883

Delta R.T. 0.000 min

Lab File: VN085439.D

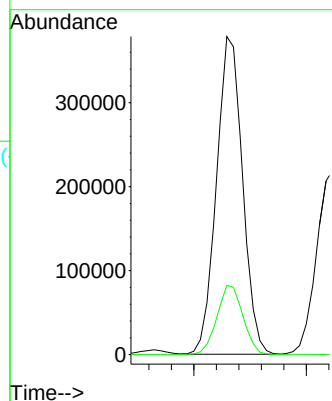
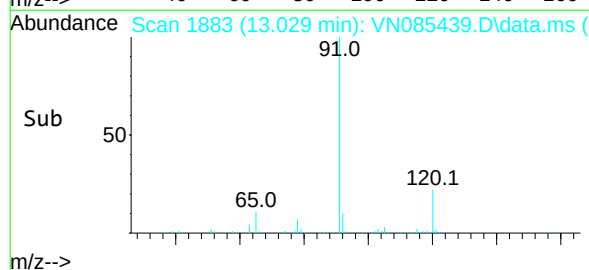
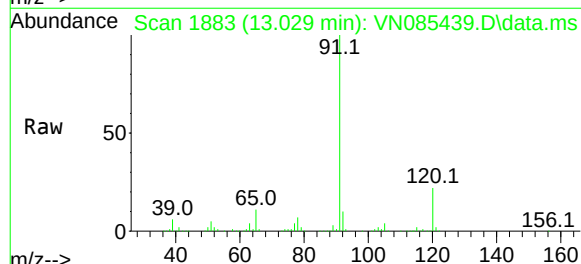
Acq: 14 Jan 2025 15:19

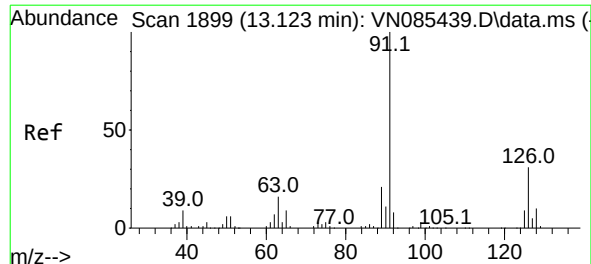
Tgt Ion: 91 Resp: 609022

Ion Ratio Lower Upper

91 100

120 21.7 10.9 32.6





#79

2-Chlorotoluene

Concen: 49.985 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion: 91 Resp: 378981

Ion Ratio Lower Upper

91 100

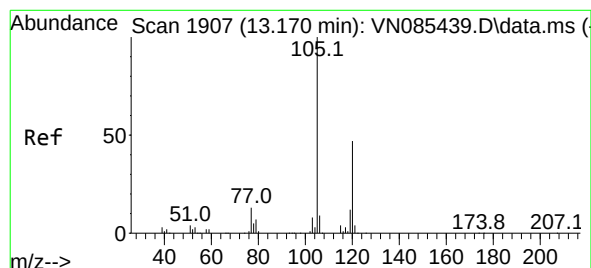
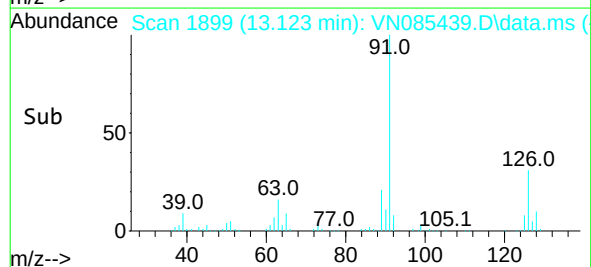
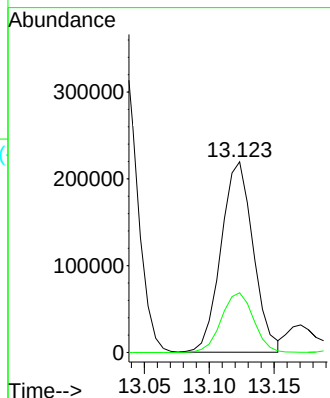
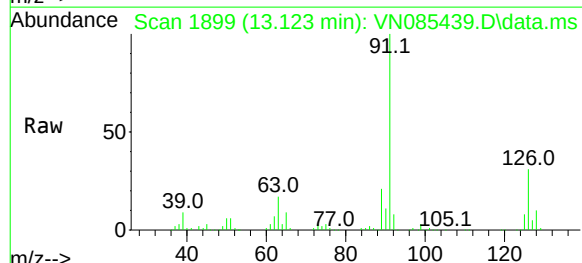
126 31.4 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 52.730 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085439.D

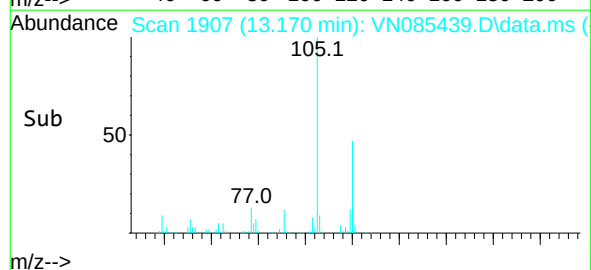
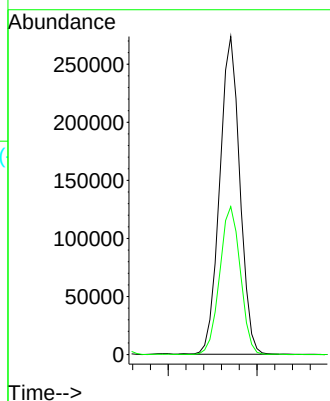
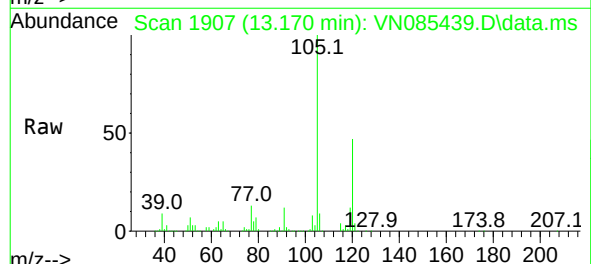
Acq: 14 Jan 2025 15:19

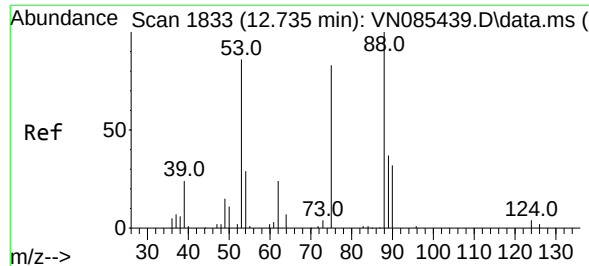
Tgt Ion:105 Resp: 431021

Ion Ratio Lower Upper

105 100

120 47.8 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 51.914 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

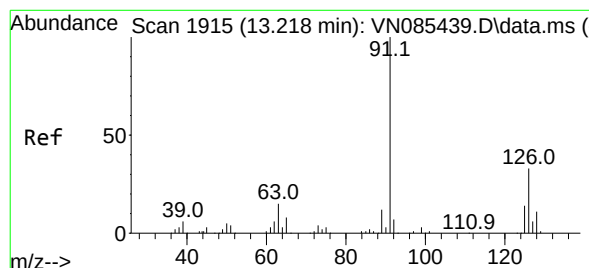
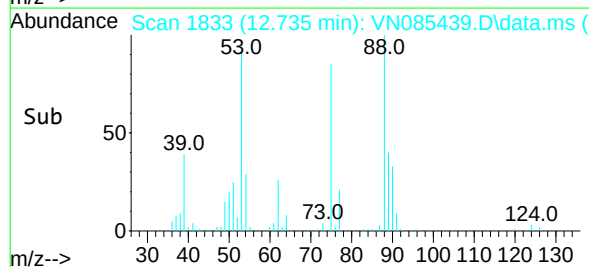
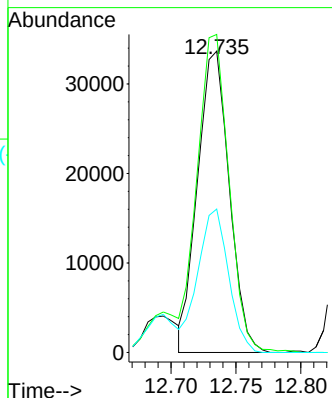
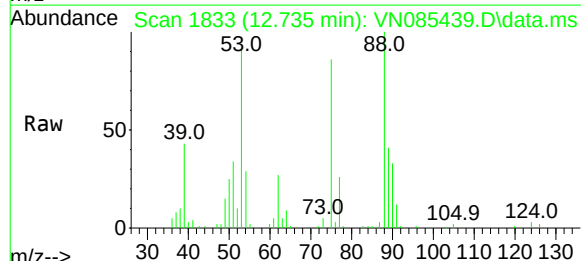
ClientSampleId :

VSTDICCC050

Tgt Ion:	75	Resp:	57184
Ion	Ratio	Lower	Upper
75	100		
53	119.5	95.6	143.4
89	46.3	37.0	55.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#82

4-Chlorotoluene

Concen: 50.273 ug/l

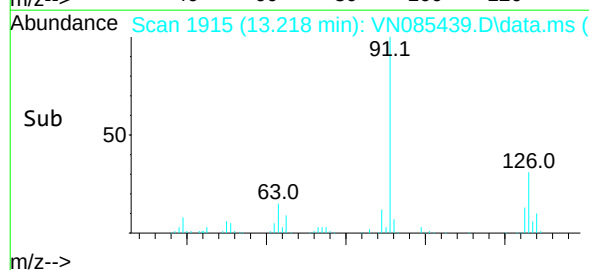
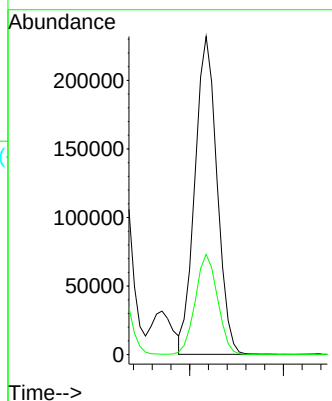
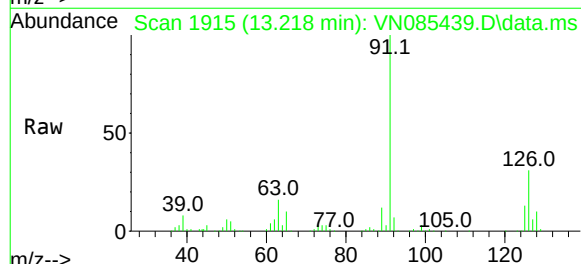
RT: 13.218 min Scan# 1915

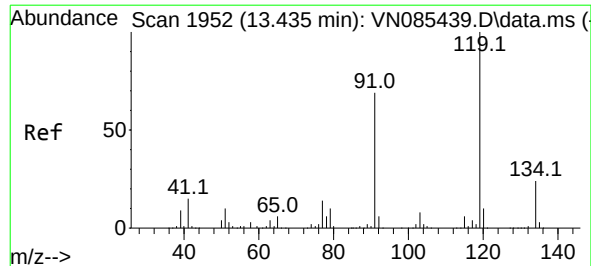
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	91	Resp:	379524
Ion	Ratio	Lower	Upper
91	100		
126	31.8	15.9	47.7





#83

tert-Butylbenzene

Concen: 52.090 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion:119 Resp: 357563

Ion Ratio Lower Upper

119 100

91 70.2 35.1 105.3

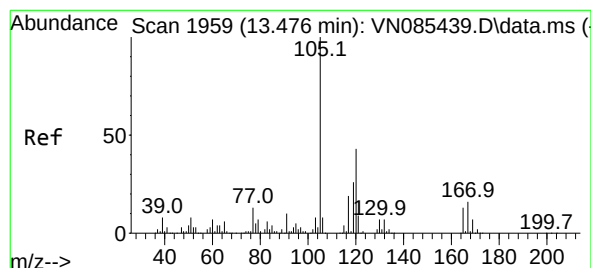
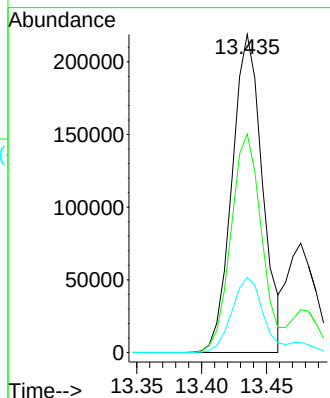
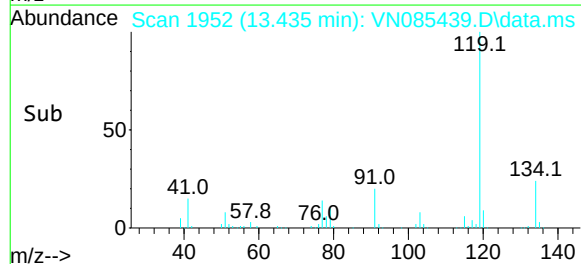
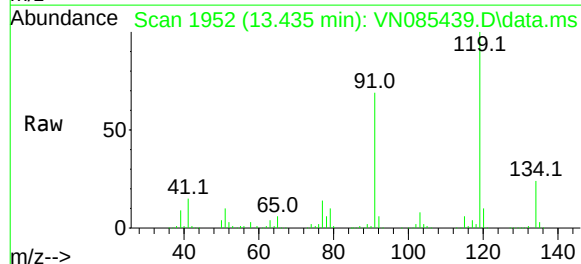
134 24.1 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 54.275 ug/l

RT: 13.476 min Scan# 1959

Delta R.T. 0.000 min

Lab File: VN085439.D

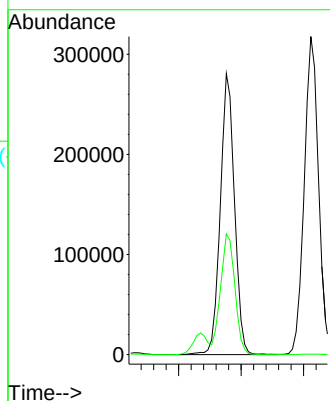
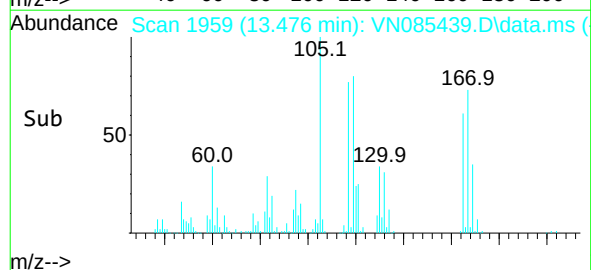
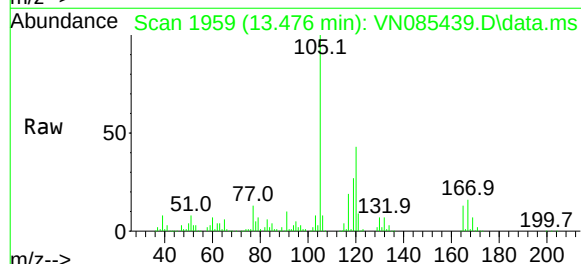
Acq: 14 Jan 2025 15:19

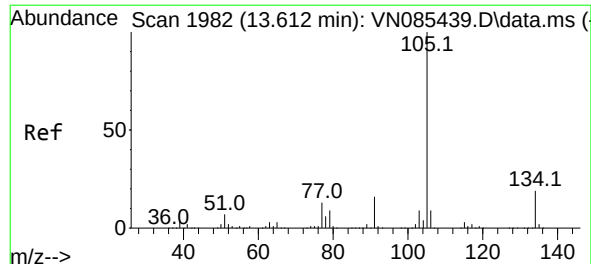
Tgt Ion:105 Resp: 442175

Ion Ratio Lower Upper

105 100

120 43.3 21.6 65.0





#85

sec-Butylbenzene

Concen: 52.719 ug/l

RT: 13.612 min Scan# 1982

Delta R.T. -0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion:105 Resp: 501561

Ion Ratio Lower Upper

105 100

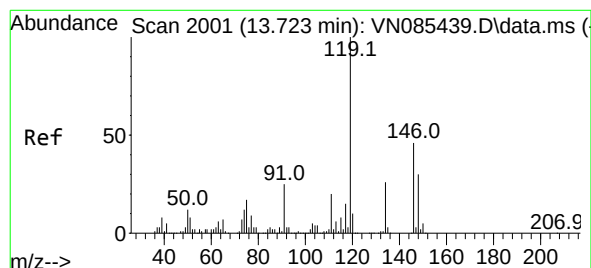
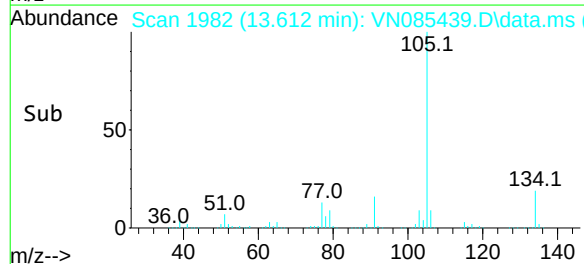
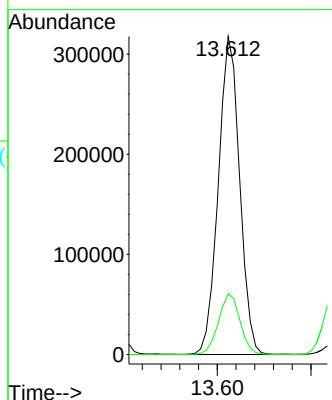
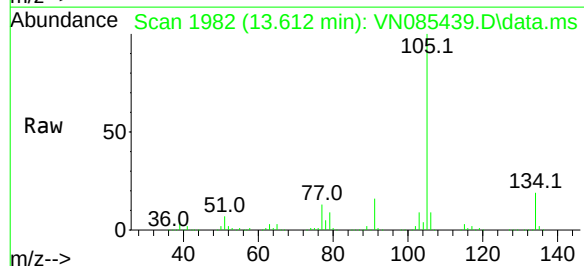
134 19.3 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 49.240 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

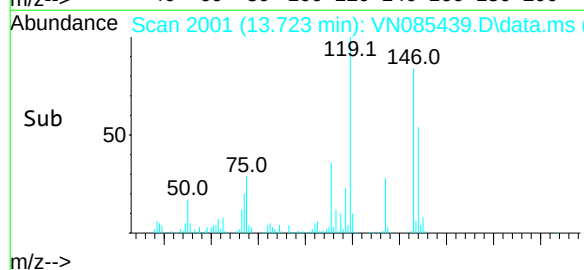
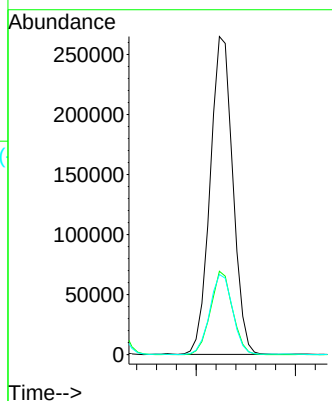
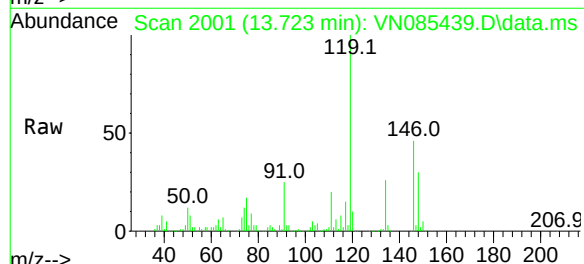
Tgt Ion:119 Resp: 421052

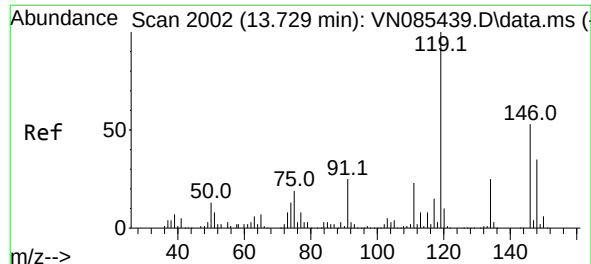
Ion Ratio Lower Upper

119 100

134 25.3 12.7 38.0

91 25.4 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 48.204 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

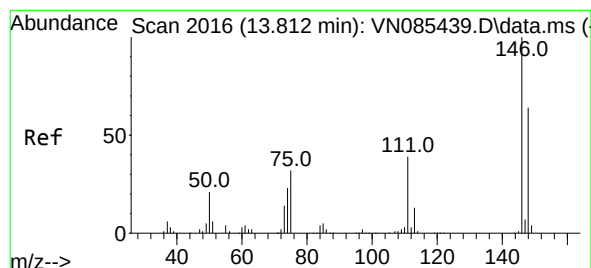
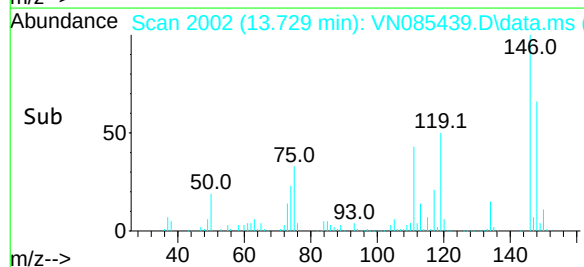
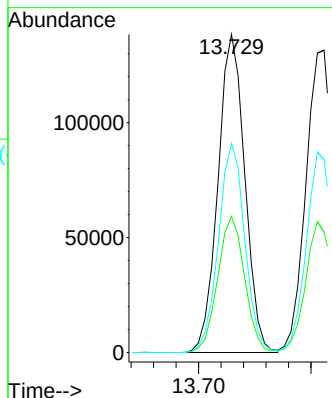
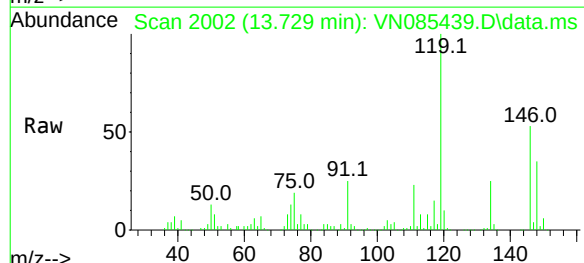
VSTDICCC050

Tgt Ion:	146	Resp:	229518
Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.4	64.3
148	64.6	32.3	96.9

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#88

1,4-Dichlorobenzene

Concen: 46.416 ug/l

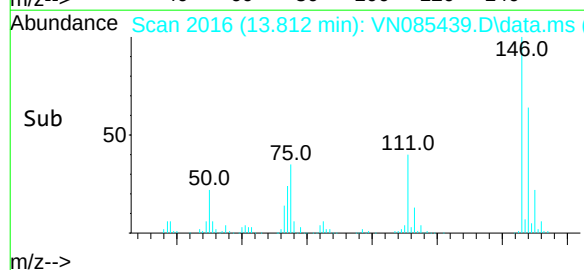
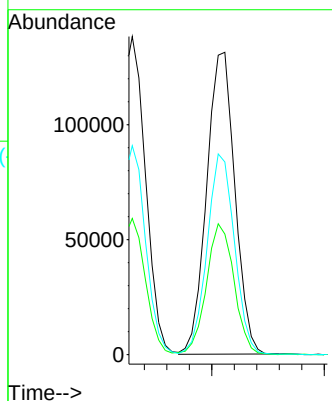
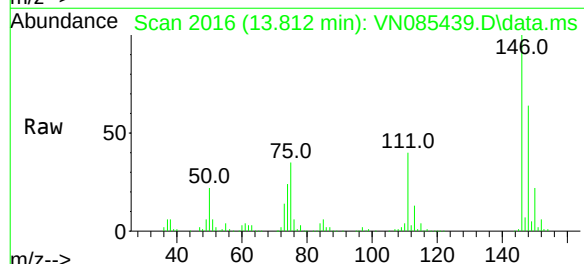
RT: 13.812 min Scan# 2016

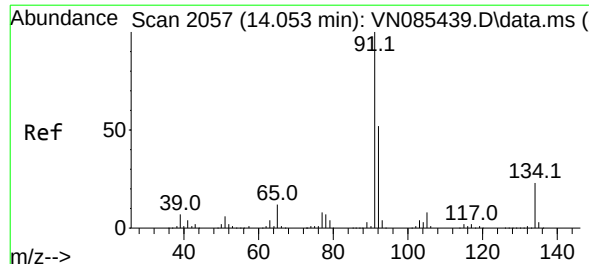
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	146	Resp:	229084
Ion	Ratio	Lower	Upper
146	100		
111	42.5	21.3	63.7
148	64.7	32.4	97.0





#89

n-Butylbenzene

Concen: 53.348 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

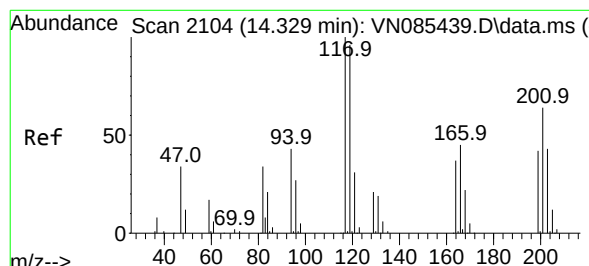
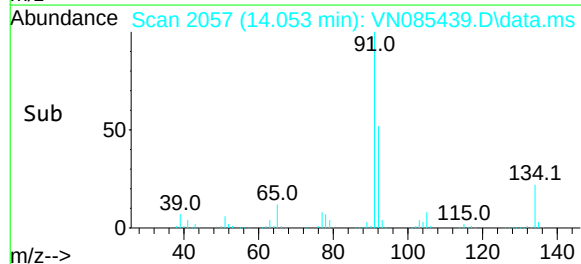
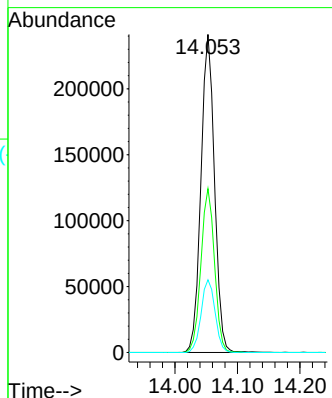
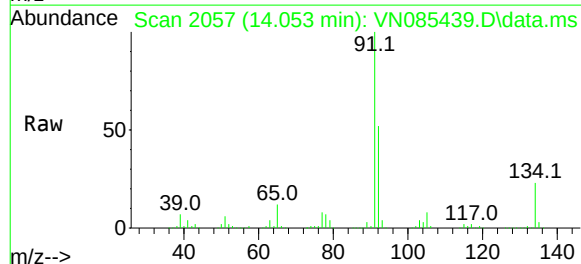
ClientSampleId :

VSTDICCC050

Tgt Ion:	91	Resp:	364111
Ion Ratio	Lower	Upper	
91	100		
92	51.5	25.8	77.3
134	23.4	11.7	35.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#90

Hexachloroethane

Concen: 46.712 ug/l

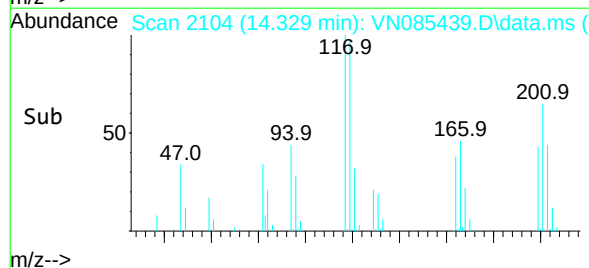
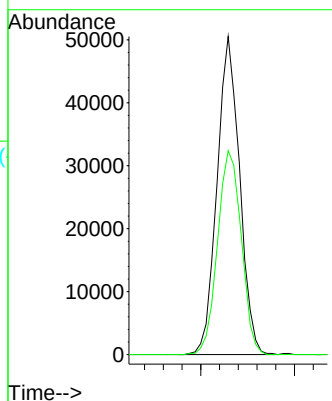
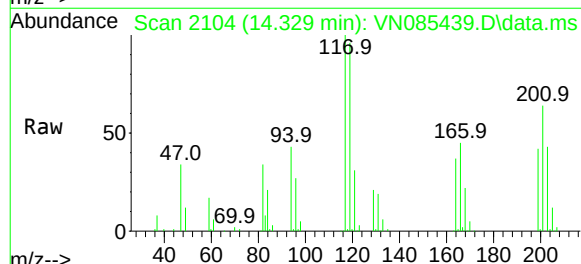
RT: 14.329 min Scan# 2104

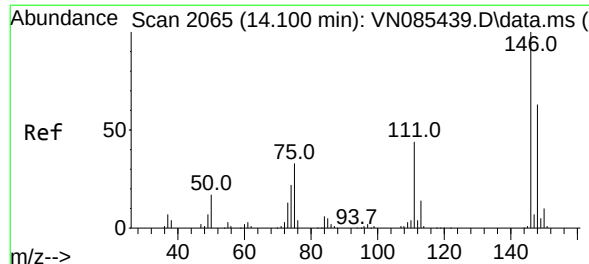
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	117	Resp:	84602
Ion Ratio	Lower	Upper	
117	100		
201	67.3	33.7	101.0





#91

1,2-Dichlorobenzene

Concen: 48.012 ug/l

RT: 14.100 min Scan# 2065

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

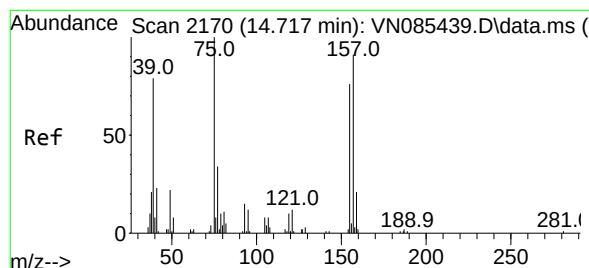
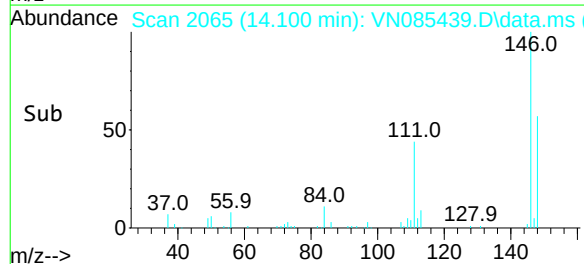
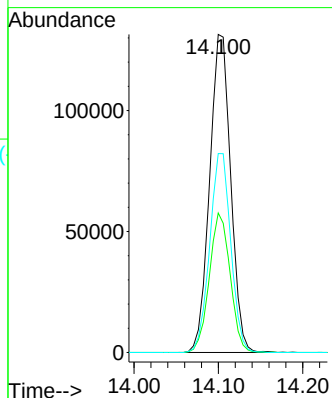
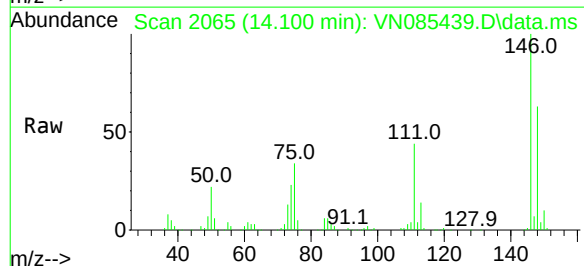
VSTDICCC050

Tgt Ion:	146	Resp:	228024
Ion	Ratio	Lower	Upper
146	100		
111	43.4	21.7	65.1
148	62.8	31.4	94.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 50.971 ug/l

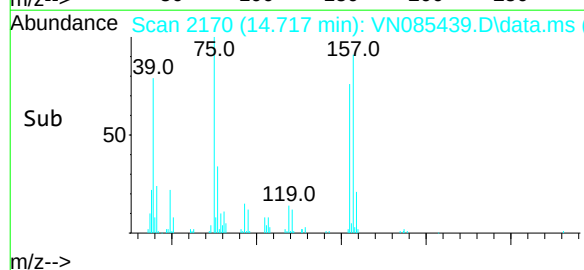
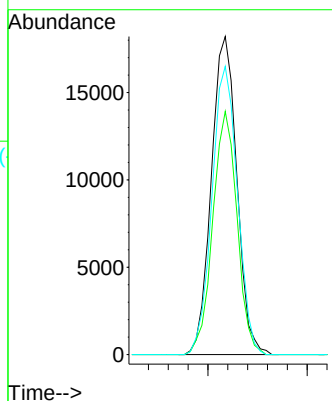
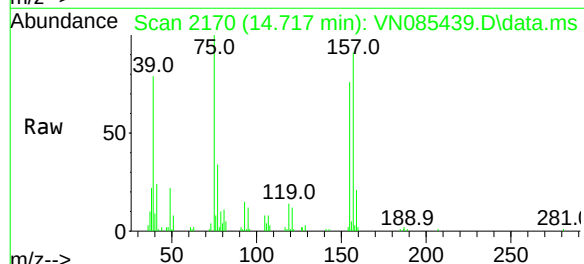
RT: 14.717 min Scan# 2170

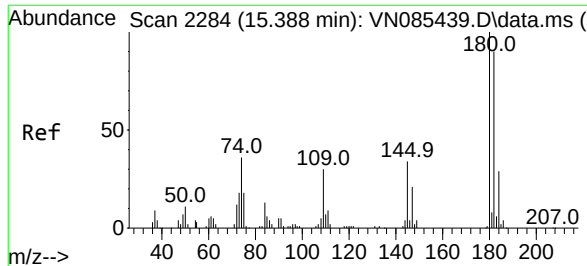
Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	75	Resp:	32536
Ion	Ratio	Lower	Upper
75	100		
155	72.8	36.4	109.2
157	90.7	45.4	136.1





#93

1,2,4-Trichlorobenzene

Concen: 51.857 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICCC050

Tgt Ion:180 Resp: 114468

Ion Ratio Lower Upper

180 100

182 93.5 46.8 140.3

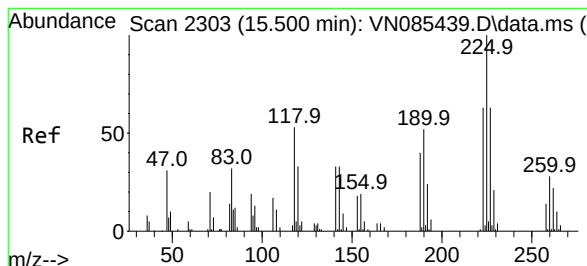
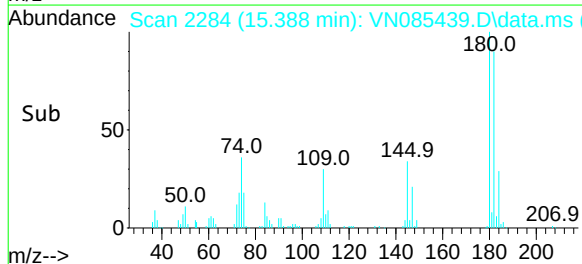
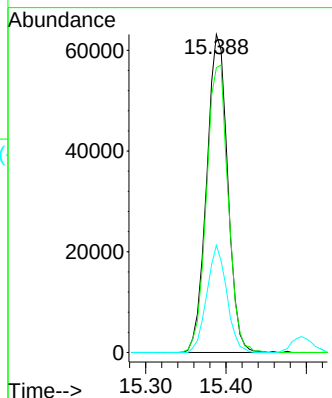
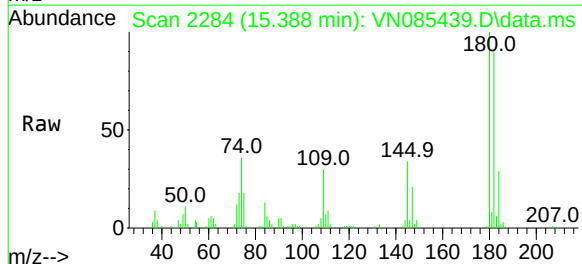
145 32.0 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

Concen: 45.947 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

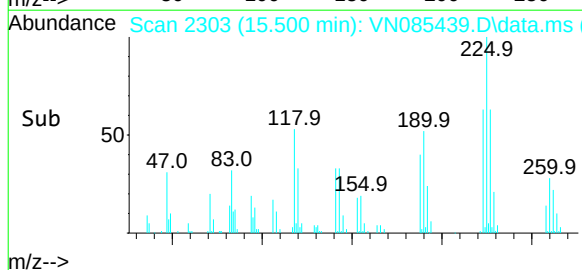
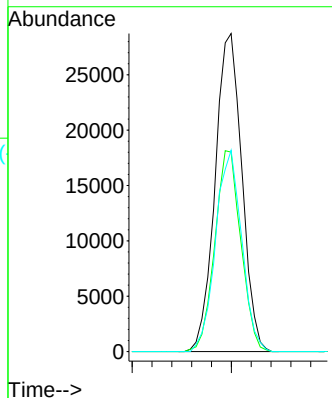
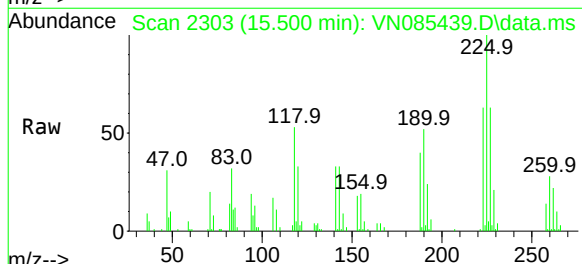
Tgt Ion:225 Resp: 53846

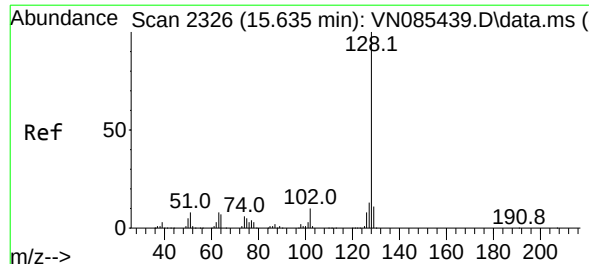
Ion Ratio Lower Upper

225 100

223 61.4 30.7 92.1

227 61.7 30.9 92.5





#95

Naphthalene

Concen: 55.243 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Instrument :

MSVOA_N

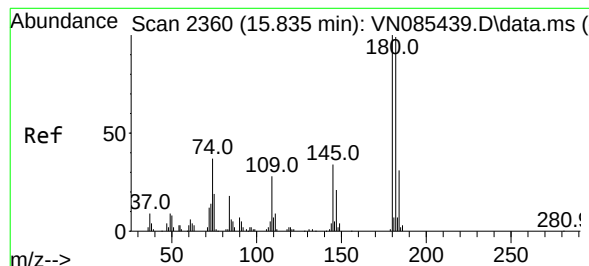
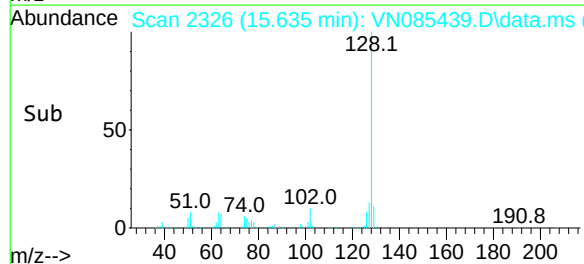
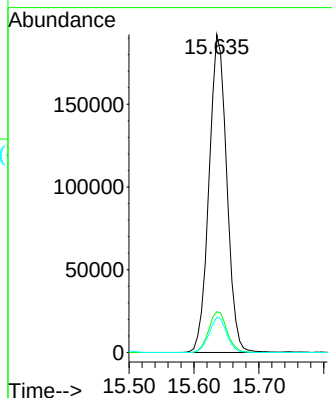
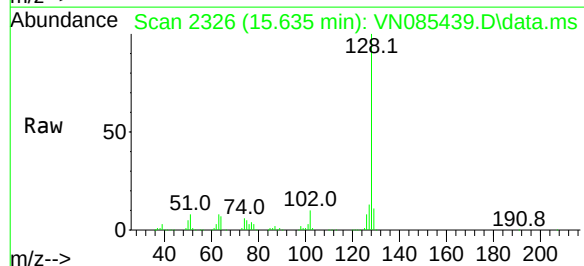
ClientSampleId :

VSTDICCC050

Tgt Ion:	128	Resp:	363882
Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.6	16.0
129	11.0	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 51.601 ug/l

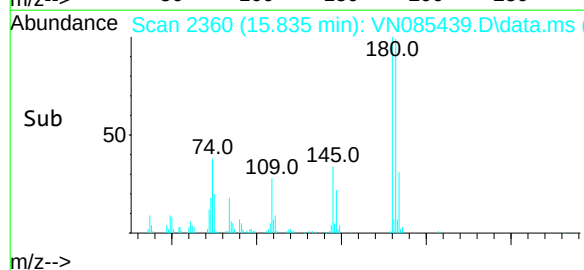
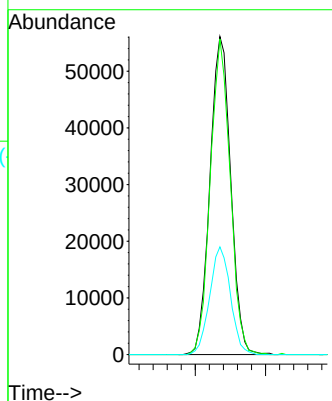
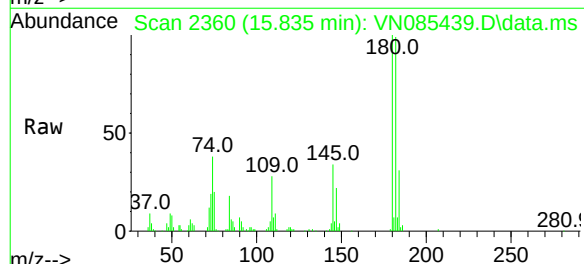
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085439.D

Acq: 14 Jan 2025 15:19

Tgt Ion:	180	Resp:	115251
Ion	Ratio	Lower	Upper
180	100		
182	94.8	47.4	142.2
145	33.8	16.9	50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085440.D
 Acq On : 14 Jan 2025 15:43
 Operator : JC\MD
 Sample : VSTDICC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC020

Quant Time: Jan 15 01:43:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 01/15/2025
 Supervised By : Mahesh Dadoda 01/15/2025

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	200796	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	340593	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	296298	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	143526	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.571	65	60593	18.694	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	37.380%#
35) Dibromofluoromethane	8.165	113	45655	19.322	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	38.640%#
50) Toluene-d8	10.559	98	164391	19.581	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	39.160%#
62) 4-Bromofluorobenzene	12.847	95	55798	19.430	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	38.860%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	54666	20.107	ug/l	98
3) Chloromethane	2.359	50	58426	19.848	ug/l	100
4) Vinyl Chloride	2.512	62	58403	19.739	ug/l	99
5) Bromomethane	2.954	94	36440	20.389	ug/l	94
6) Chloroethane	3.118	64	37594	20.041	ug/l	93
7) Trichlorofluoromethane	3.501	101	88121	20.526	ug/l	99
8) Diethyl Ether	3.965	74	29138	19.647	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	48933	20.237	ug/l	99
10) Methyl Iodide	4.589	142	56567	20.428	ug/l	93
11) Tert butyl alcohol	5.506	59	37984	102.342	ug/l	100
12) 1,1-Dichloroethene	4.342	96	44670	20.728	ug/l	95
13) Acrolein	4.171	56	49649	97.995	ug/l	99
14) Allyl chloride	5.024	41	67705	19.362	ug/l	96
15) Acrylonitrile	5.712	53	121626	103.171	ug/l	99
16) Acetone	4.424	43	101065	96.502	ug/l	96
17) Carbon Disulfide	4.712	76	132300	19.939	ug/l	98
18) Methyl Acetate	5.018	43	60873	19.115	ug/l	99
19) Methyl tert-butyl Ether	5.795	73	148847	21.272	ug/l	100
20) Methylene Chloride	5.271	84	52813	20.370	ug/l	97
21) trans-1,2-Dichloroethene	5.789	96	46115	20.023	ug/l	98
22) Diisopropyl ether	6.671	45	166719	21.480	ug/l	97
23) Vinyl Acetate	6.594	43	588567m	107.984	ug/l	
24) 1,1-Dichloroethane	6.565	63	96875	20.469	ug/l #	96
25) 2-Butanone	7.477	43	159952	103.786	ug/l	98
26) 2,2-Dichloropropane	7.483	77	79145	20.684	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	57454	21.180	ug/l	98
28) Bromochloromethane	7.812	49	41181	18.703	ug/l	99
29) Tetrahydrofuran	7.836	42	104792	107.247	ug/l	99
30) Chloroform	7.959	83	99655	20.374	ug/l	99
31) Cyclohexane	8.253	56	82980	20.173	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	87659	20.431	ug/l	98
36) 1,1-Dichloropropene	8.371	75	67949	20.490	ug/l	98
37) Ethyl Acetate	7.553	43	66443	19.850	ug/l	96
38) Carbon Tetrachloride	8.359	117	78842	20.767	ug/l	96
39) Methylcyclohexane	9.594	83	65012	20.862	ug/l	96
40) Benzene	8.600	78	207985	20.873	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085440.D
 Acq On : 14 Jan 2025 15:43
 Operator : JC\MD
 Sample : VSTDICC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:43:07 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M

Quant Title : SW846 8260

QLast Update : Wed Jan 15 01:28:51 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.771	41	36578	21.004	ug/l	99
42) 1,2-Dichloroethane	8.665	62	78402	20.891	ug/l	99
43) Isopropyl Acetate	8.683	43	109131	20.347	ug/l	98
44) Trichloroethene	9.347	130	48009	20.699	ug/l	96
45) 1,2-Dichloropropane	9.618	63	52833	20.758	ug/l	93
46) Dibromomethane	9.700	93	37721	20.540	ug/l	98
47) Bromodichloromethane	9.882	83	78918	21.093	ug/l	96
48) Methyl methacrylate	9.677	41	50224	20.808	ug/l	96
49) 1,4-Dioxane	9.688	88	17140	421.686	ug/l	95
51) 4-Methyl-2-Pentanone	10.441	43	336911	108.249	ug/l	100
52) Toluene	10.630	92	125172	21.680	ug/l	99
53) t-1,3-Dichloropropene	10.835	75	74129	20.965	ug/l	96
54) cis-1,3-Dichloropropene	10.306	75	81897	21.684	ug/l	99
55) 1,1,2-Trichloroethane	11.012	97	48039	21.025	ug/l	97
56) Ethyl methacrylate	10.871	69	70934	19.649	ug/l	99
57) 1,3-Dichloropropane	11.159	76	84210	21.196	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	153681	105.991	ug/l	100
59) 2-Hexanone	11.194	43	240595	109.863	ug/l	98
60) Dibromochloromethane	11.353	129	56069	20.326	ug/l	96
61) 1,2-Dibromoethane	11.465	107	48465	21.309	ug/l	96
64) Tetrachloroethene	11.100	164	43243	21.408	ug/l	96
65) Chlorobenzene	11.888	112	136809	21.077	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	48370	20.304	ug/l	98
67) Ethyl Benzene	11.959	91	229978	21.753	ug/l	98
68) m/p-Xylenes	12.071	106	177755	45.494	ug/l	100
69) o-Xylene	12.394	106	84548	22.643	ug/l	98
70) Styrene	12.412	104	140581	22.749	ug/l	99
71) Bromoform	12.576	173	36961	21.683	ug/l #	96
73) Isopropylbenzene	12.694	105	211354	21.819	ug/l	100
74) N-amyl acetate	12.494	43	94292	21.656	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.935	83	68151	19.917	ug/l	99
76) 1,2,3-Trichloropropane	12.988	75	64180m	22.036	ug/l	
77) Bromobenzene	12.976	156	52022	20.556	ug/l	99
78) n-propylbenzene	13.035	91	252610	22.028	ug/l	100
79) 2-Chlorotoluene	13.123	91	158511	21.358	ug/l	100
80) 1,3,5-Trimethylbenzene	13.171	105	180294	22.533	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	22178m	20.569	ug/l	
82) 4-Chlorotoluene	13.218	91	161880	21.906	ug/l	100
83) tert-Butylbenzene	13.435	119	147541	21.958	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	183144	22.965	ug/l	99
85) sec-Butylbenzene	13.612	105	209133	22.457	ug/l	100
86) p-Isopropyltoluene	13.729	119	168888	21.661	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	97652	20.952	ug/l	100
88) 1,4-Dichlorobenzene	13.806	146	98321	20.351	ug/l	99
89) n-Butylbenzene	14.053	91	142673	21.355	ug/l	99
90) Hexachloroethane	14.329	117	35205	19.858	ug/l	98
91) 1,2-Dichlorobenzene	14.100	146	94954	20.425	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	12859	20.580	ug/l	100
93) 1,2,4-Trichlorobenzene	15.388	180	45878	21.233	ug/l	99
94) Hexachlorobutadiene	15.500	225	22719	19.805	ug/l	95
95) Naphthalene	15.635	128	134793	20.906	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	45468	20.797	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085440.D
Acq On : 14 Jan 2025 15:43
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:43:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

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

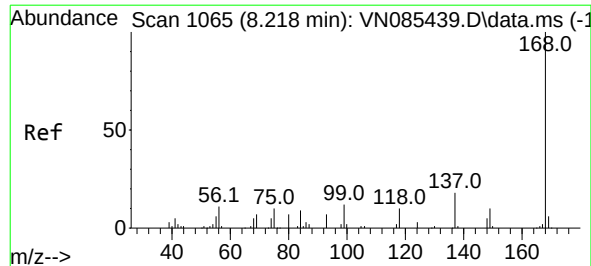
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025





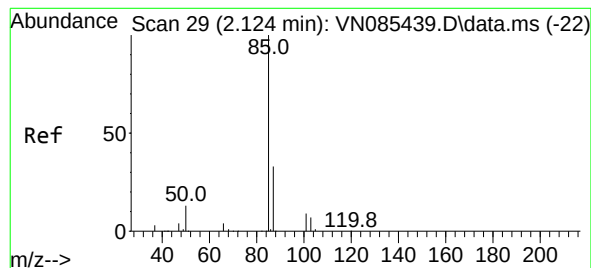
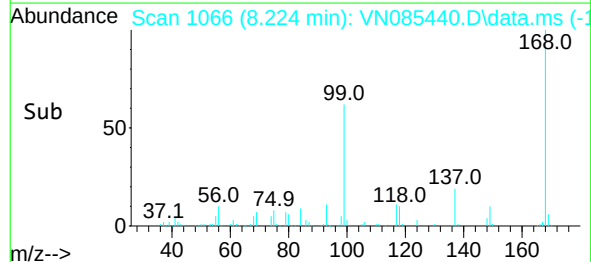
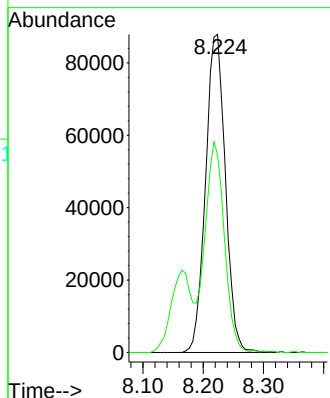
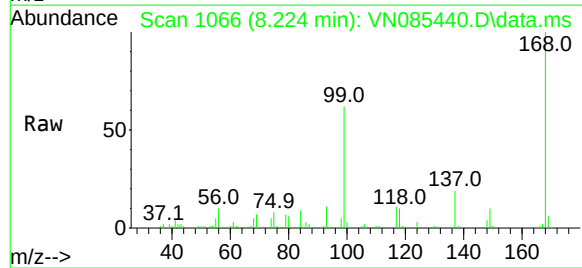
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion: 168 Resp: 200796
Ion Ratio Lower Upper
168 100
99 62.2 53.6 80.4

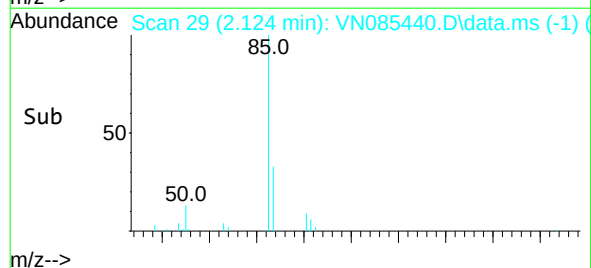
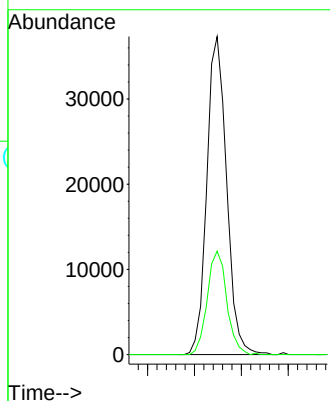
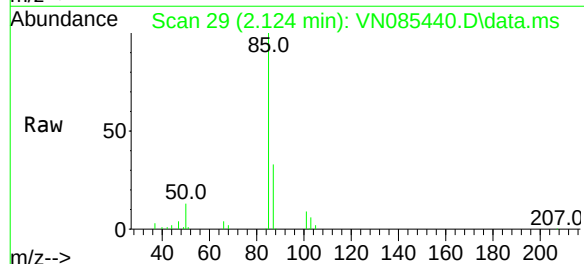
Manual Integrations
APPROVED

Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025

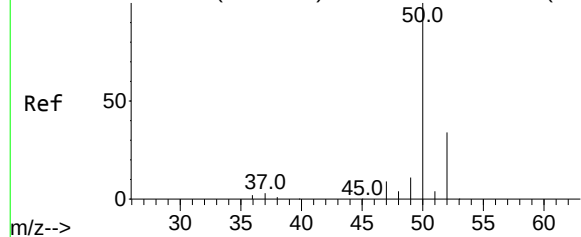


#2
Dichlorodifluoromethane
Concen: 20.107 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 85 Resp: 54666
Ion Ratio Lower Upper
85 100
87 32.5 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 19.848 ug/l

RT: 2.359 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

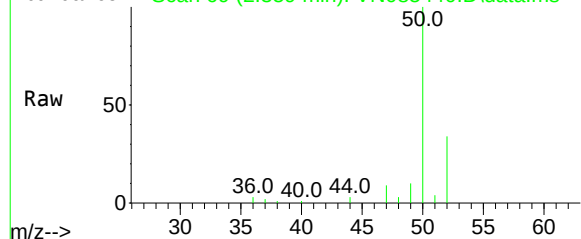
Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Abundance Scan 69 (2.359 min): VN085440.D\data.ms



Tgt Ion: 50 Resp: 58426

Ion Ratio Lower Upper

50 100

52 34.0 27.0 40.6

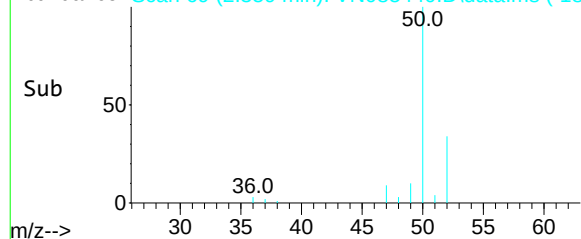
Manual Integrations

APPROVED

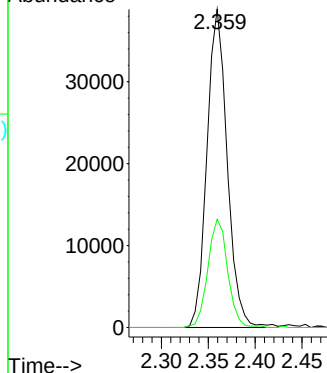
Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025

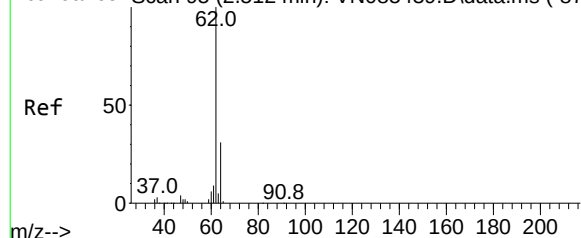
Abundance Scan 69 (2.359 min): VN085440.D\data.ms (-18)



Abundance



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 19.739 ug/l

RT: 2.512 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

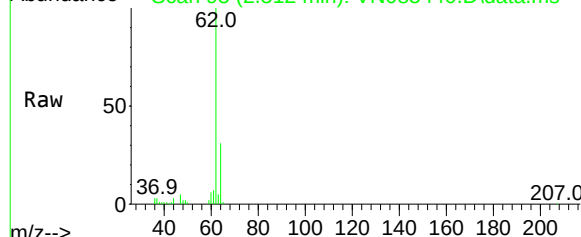
Tgt Ion: 62 Resp: 58403

Ion Ratio Lower Upper

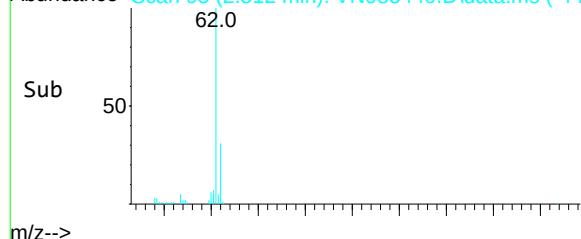
62 100

64 30.7 24.8 37.2

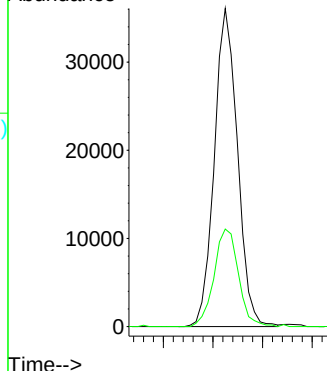
Abundance Scan 95 (2.512 min): VN085440.D\data.ms

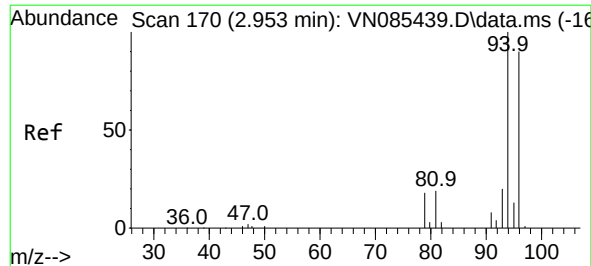


Abundance Scan 95 (2.512 min): VN085440.D\data.ms (-44)



Abundance





#5

Bromomethane

Concen: 20.389 ug/l

RT: 2.954 min Scan# 170

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 94 Resp: 36440

Ion Ratio Lower Upper

94 100

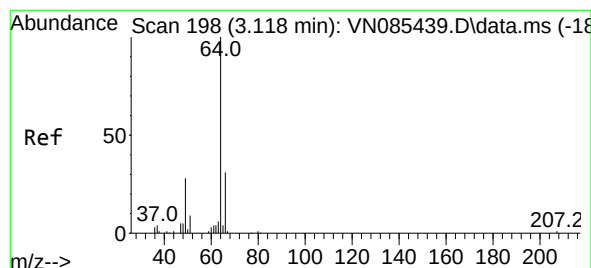
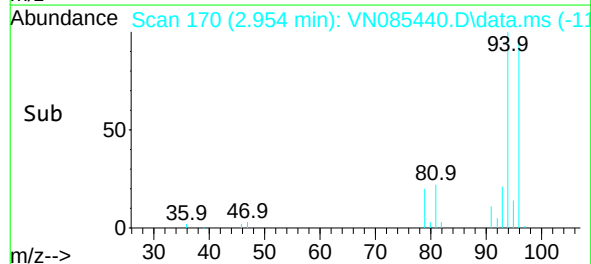
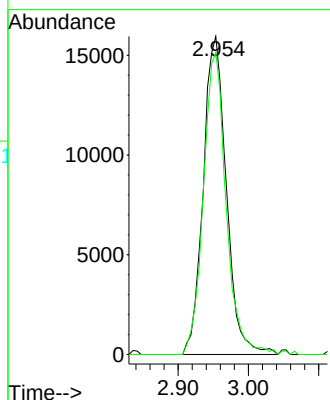
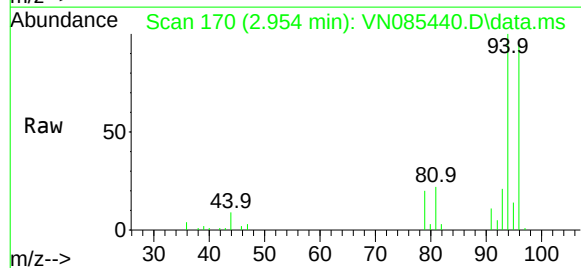
96 94.9 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 20.041 ug/l

RT: 3.118 min Scan# 198

Delta R.T. 0.000 min

Lab File: VN085440.D

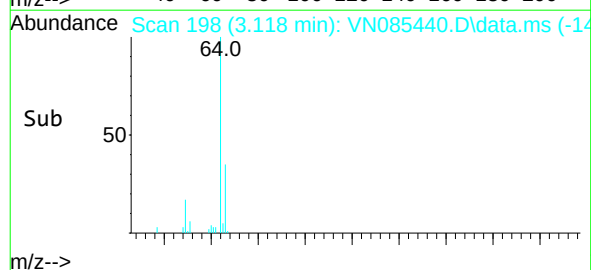
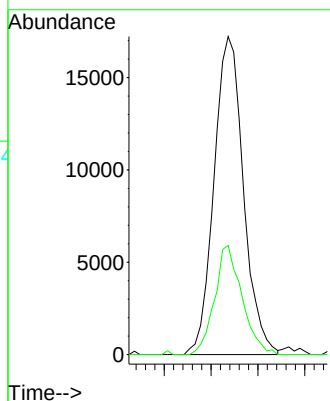
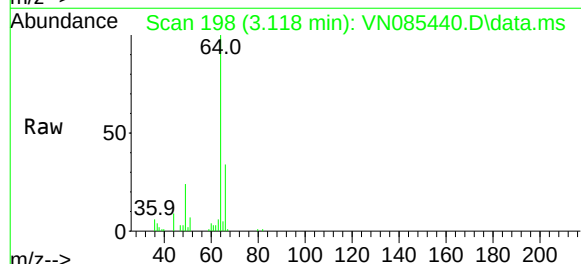
Acq: 14 Jan 2025 15:43

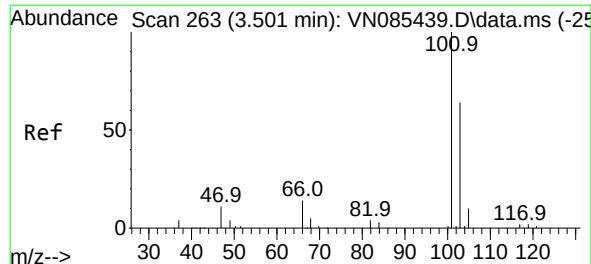
Tgt Ion: 64 Resp: 37594

Ion Ratio Lower Upper

64 100

66 34.3 24.6 36.8





#7

Trichlorofluoromethane

Concen: 20.526 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 101 Resp: 88121

Ion Ratio Lower Upper

101 100

103 65.3 51.4 77.2

Instrument :

MSVOA_N

ClientSampleId :

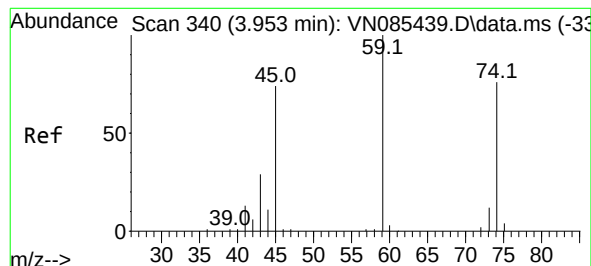
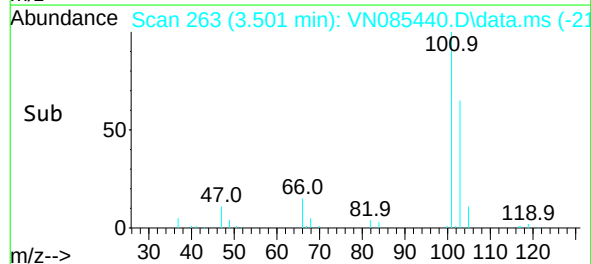
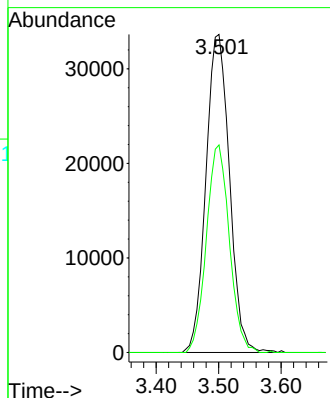
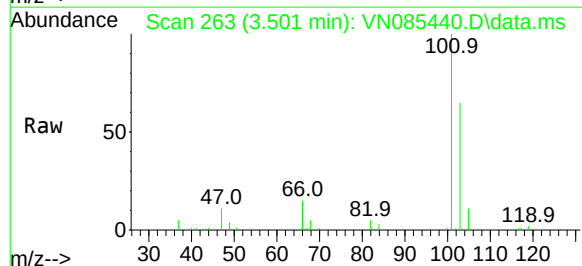
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 19.647 ug/l

RT: 3.965 min Scan# 342

Delta R.T. 0.012 min

Lab File: VN085440.D

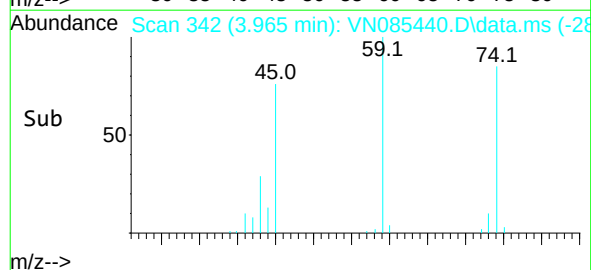
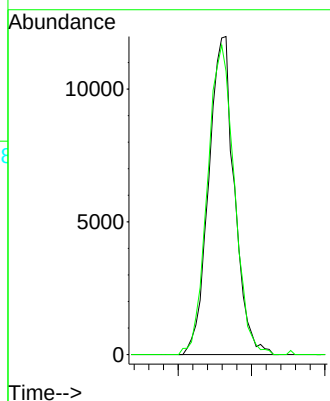
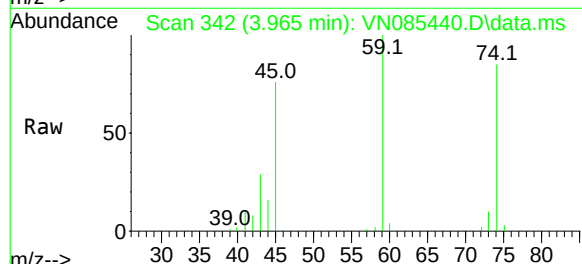
Acq: 14 Jan 2025 15:43

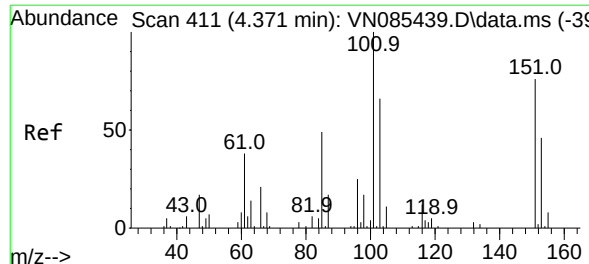
Tgt Ion: 74 Resp: 29138

Ion Ratio Lower Upper

74 100

45 101.8 49.7 149.1





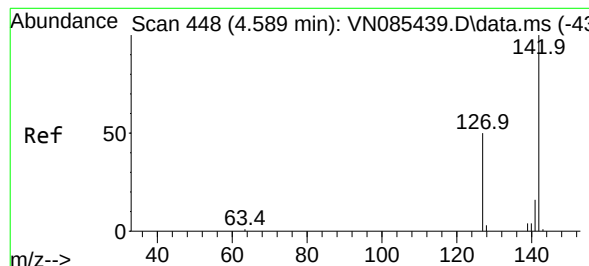
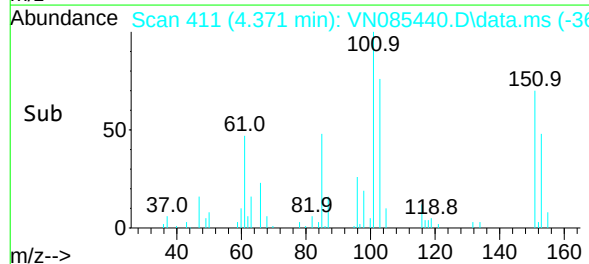
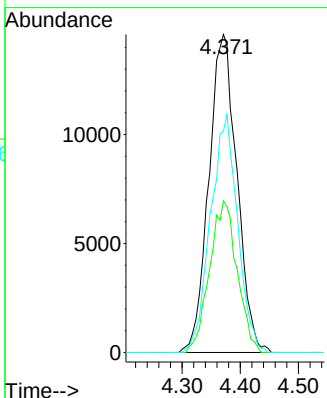
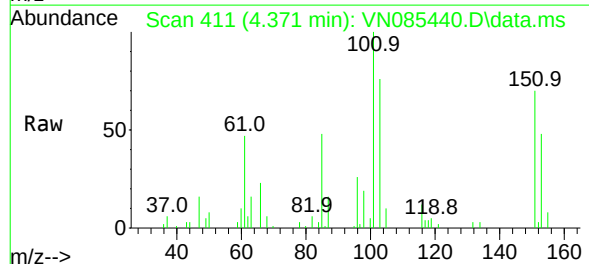
#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.237 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion	Ratio	Lower	Upper
101	100		
85	46.6	37.8	56.8
151	72.1	58.8	88.2

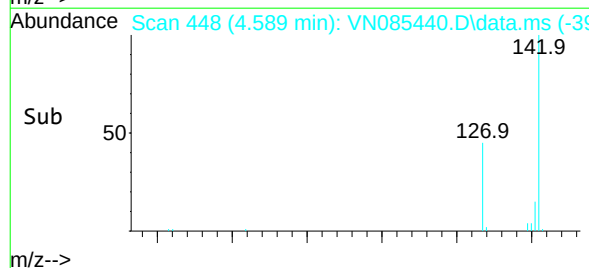
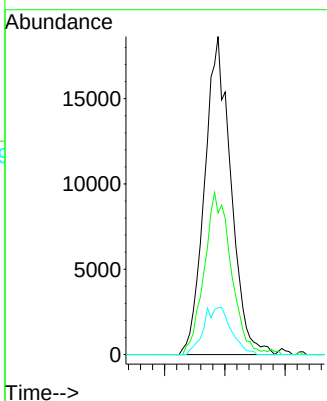
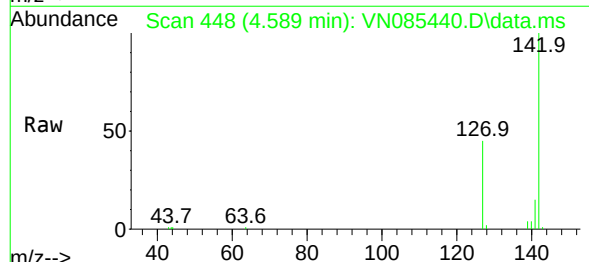
Manual Integrations
APPROVED

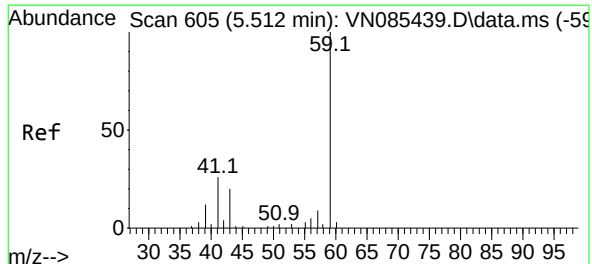
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#10
Methyl Iodide
Concen: 20.428 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion	Ratio	Lower	Upper
142	100		
127	44.6	40.3	60.5
141	14.8	12.8	19.2





#11

Tert butyl alcohol

Concen: 102.342 ug/l

RT: 5.506 min Scan# 605

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion: 59 Resp: 37984

Ion Ratio Lower Upper

59 100

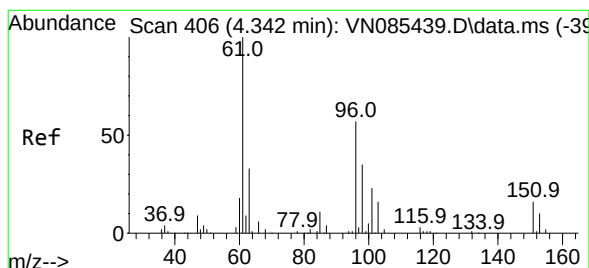
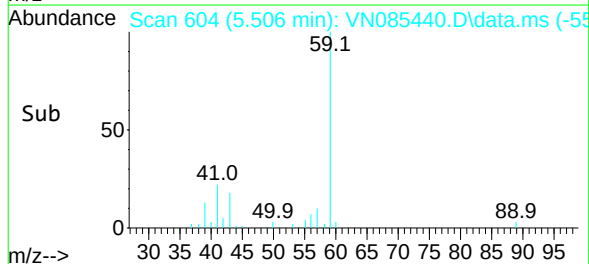
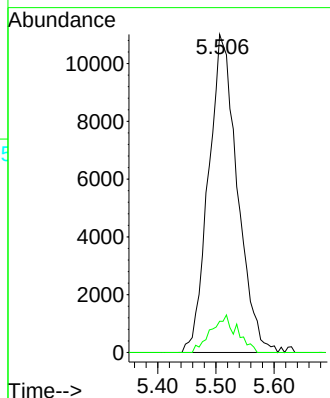
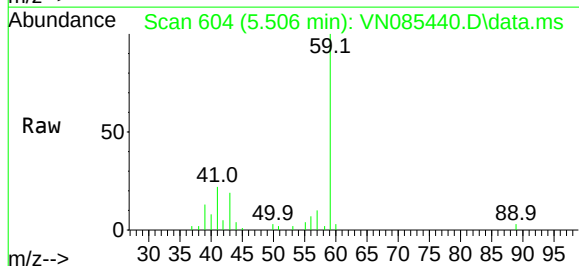
57 10.7 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 20.728 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

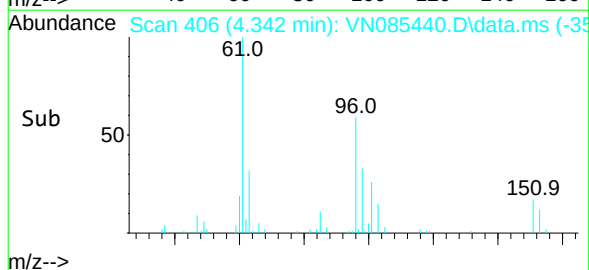
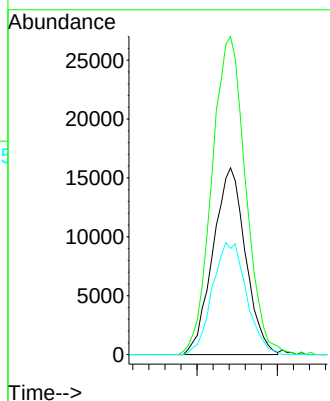
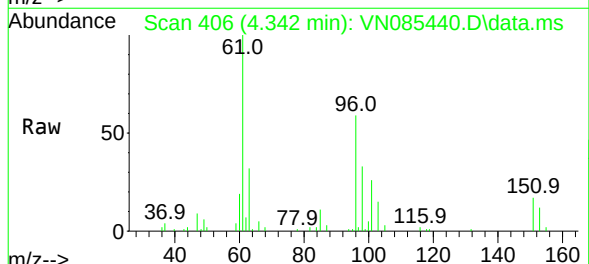
Tgt Ion: 96 Resp: 44670

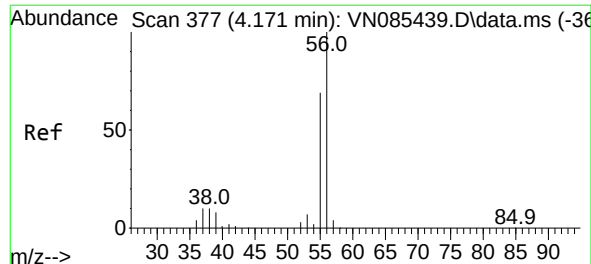
Ion Ratio Lower Upper

96 100

61 170.3 141.0 211.4

98 56.8 49.0 73.6





#13

Acrolein

Concen: 97.995 ug/l

RT: 4.171 min Scan# 377

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 56 Resp: 49649

Ion Ratio Lower Upper

56 100

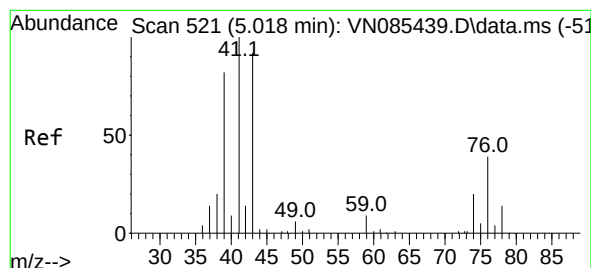
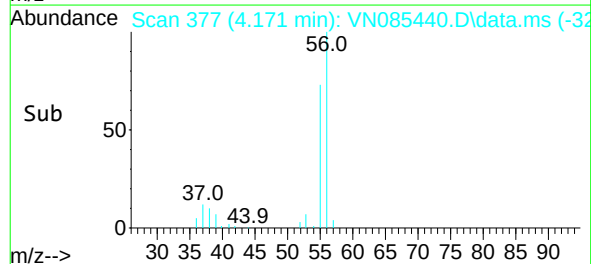
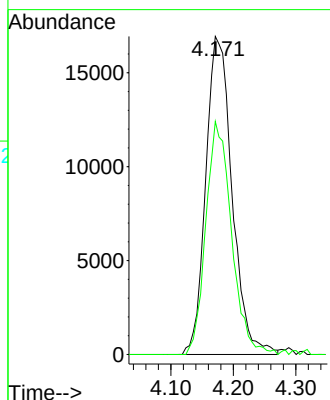
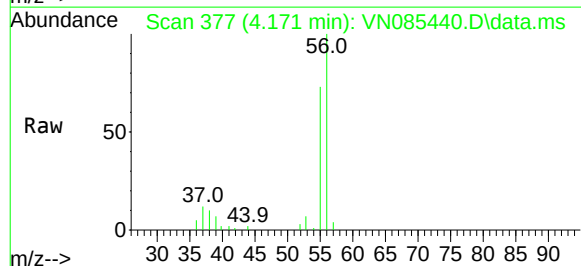
55 71.4 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 19.362 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

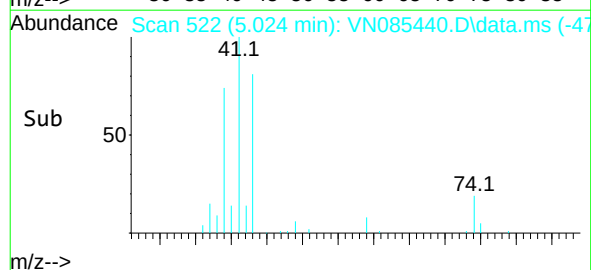
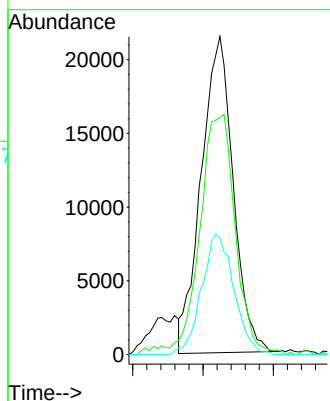
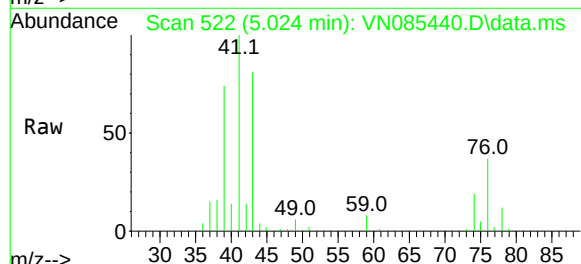
Tgt Ion: 41 Resp: 67705

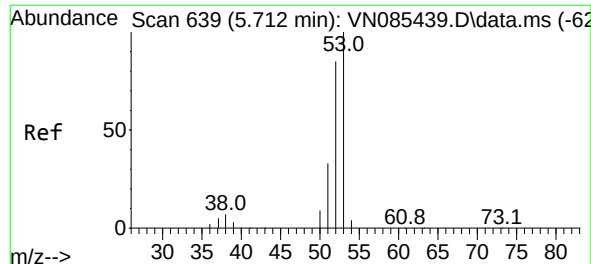
Ion Ratio Lower Upper

41 100

39 85.0 64.4 96.6

76 38.6 30.5 45.7





#15

Acrylonitrile

Concen: 103.171 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 53 Resp: 121626

Ion Ratio Lower Upper

53 100

52 81.1 65.5 98.3

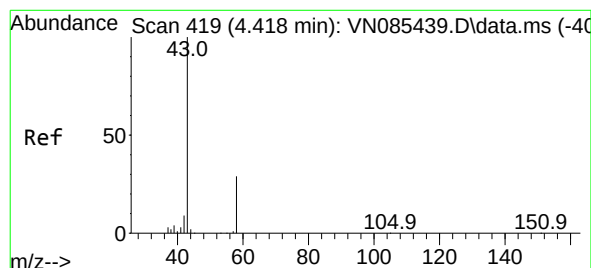
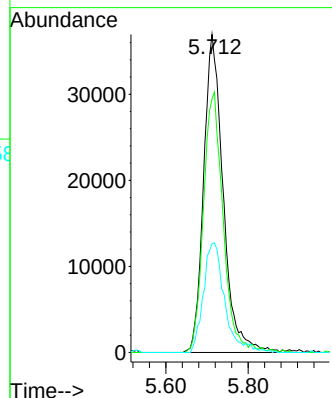
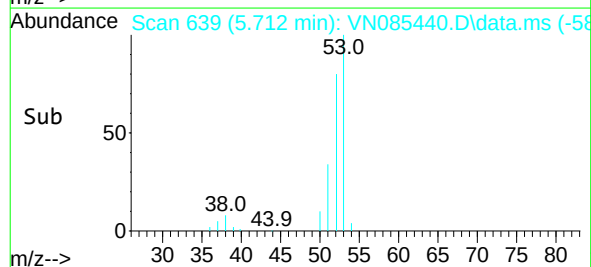
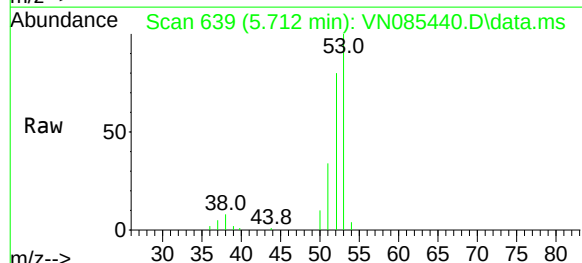
51 36.1 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 96.502 ug/l

RT: 4.424 min Scan# 420

Delta R.T. 0.006 min

Lab File: VN085440.D

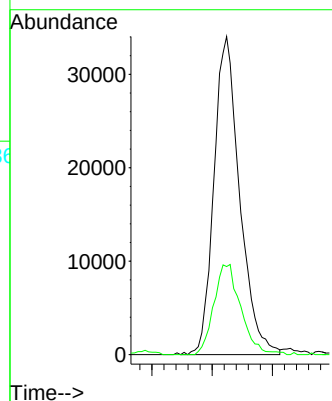
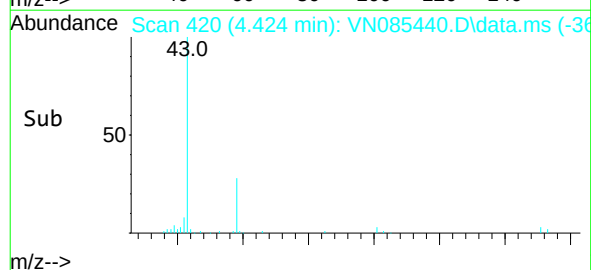
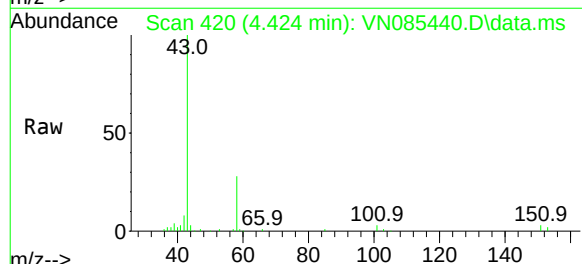
Acq: 14 Jan 2025 15:43

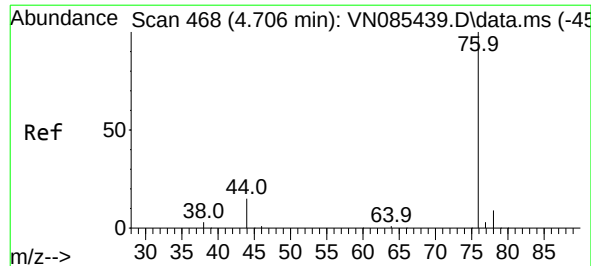
Tgt Ion: 43 Resp: 101065

Ion Ratio Lower Upper

43 100

58 27.7 23.8 35.6





#17

Carbon Disulfide

Concen: 19.939 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 76 Resp: 132300

Ion Ratio Lower Upper

76 100

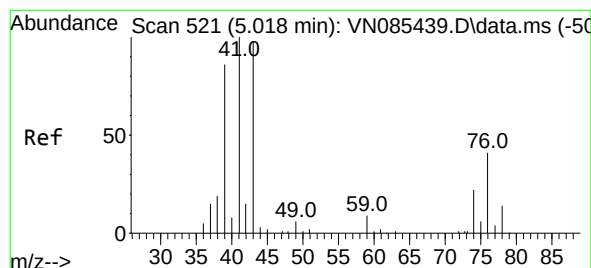
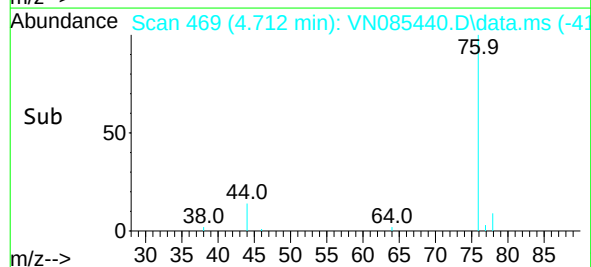
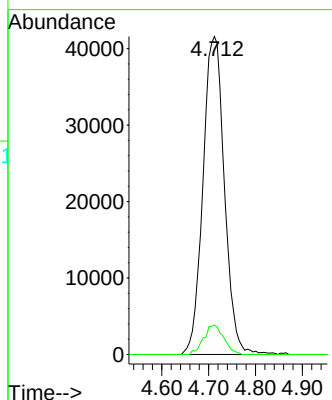
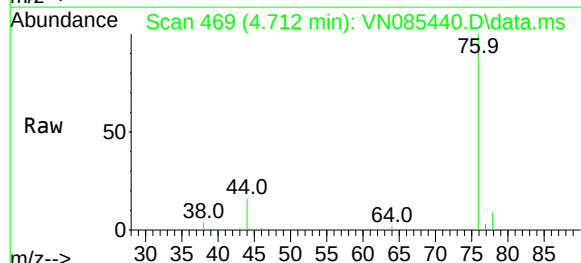
78 9.3 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 19.115 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085440.D

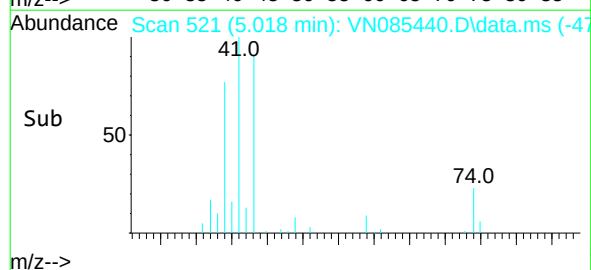
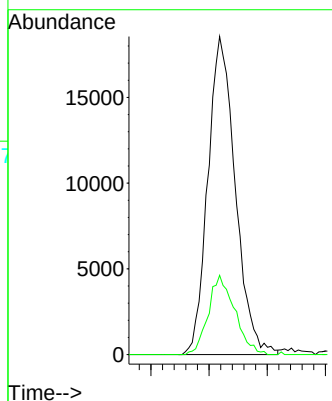
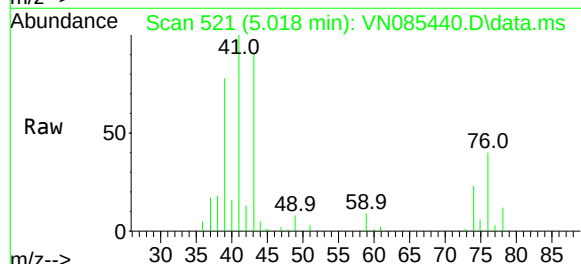
Acq: 14 Jan 2025 15:43

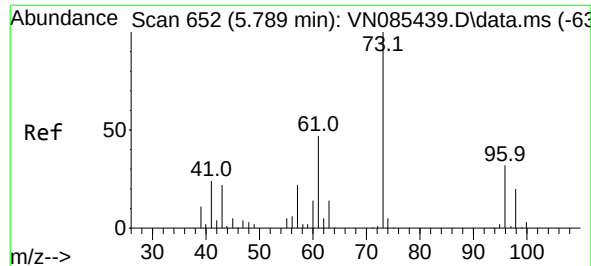
Tgt Ion: 43 Resp: 60873

Ion Ratio Lower Upper

43 100

74 24.0 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 21.272 ug/l

RT: 5.795 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 73 Resp: 148847

Ion Ratio Lower Upper

73 100

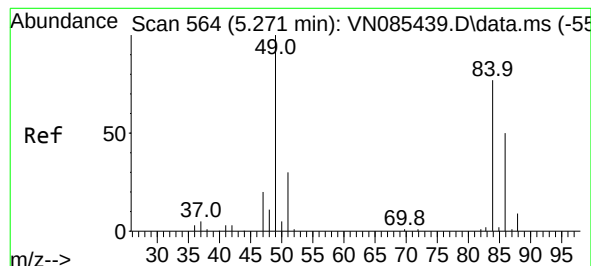
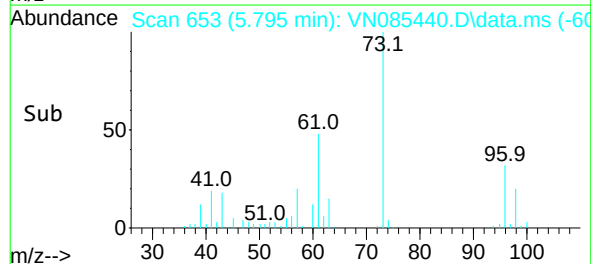
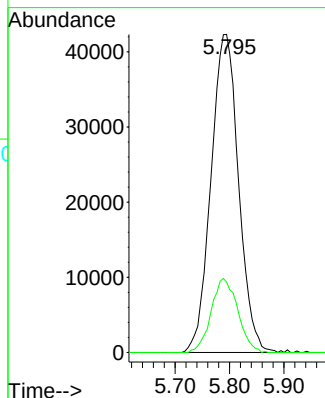
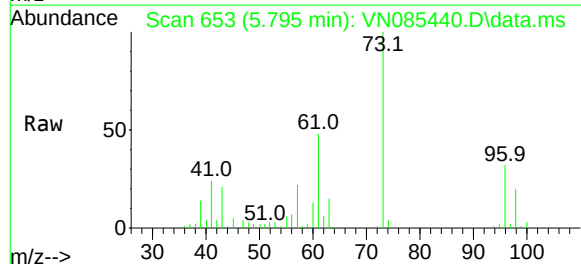
57 22.1 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 20.370 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 84 Resp: 52813

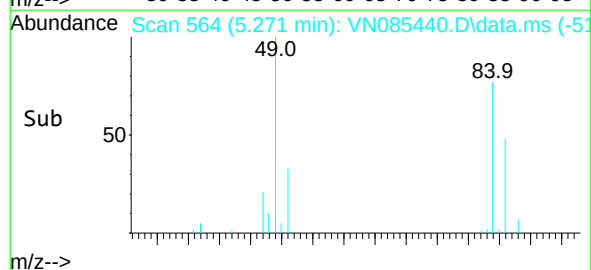
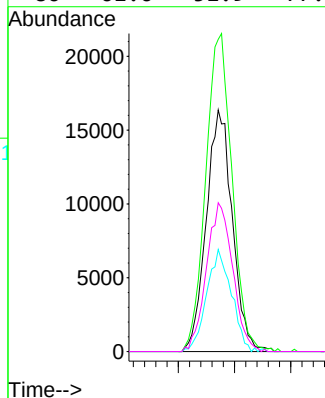
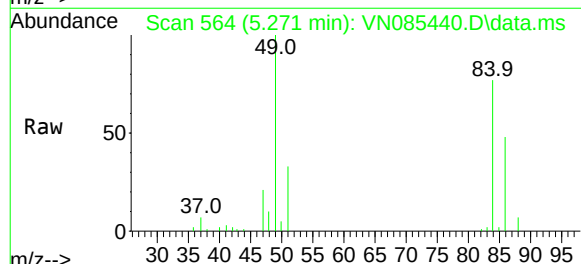
Ion Ratio Lower Upper

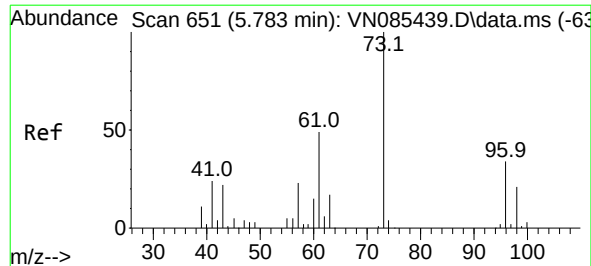
84 100

49 129.2 104.1 156.1

51 42.2 31.0 46.4

86 61.6 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 20.023 ug/l

RT: 5.789 min Scan# 651

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion: 96 Resp: 46115

Ion Ratio Lower Upper

96 100

61 146.1 115.7 173.5

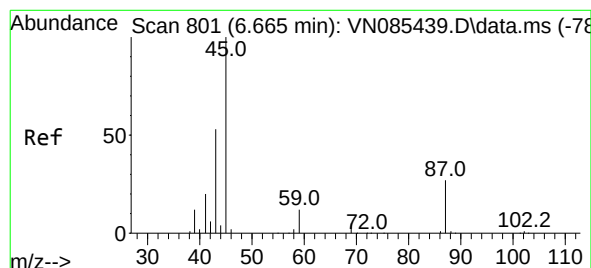
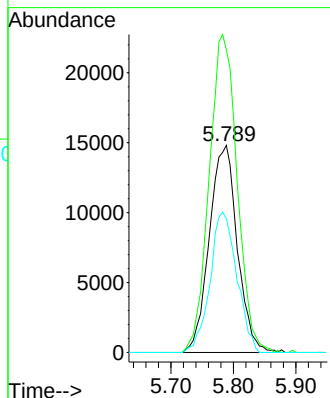
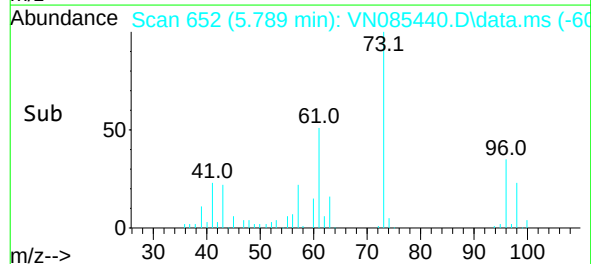
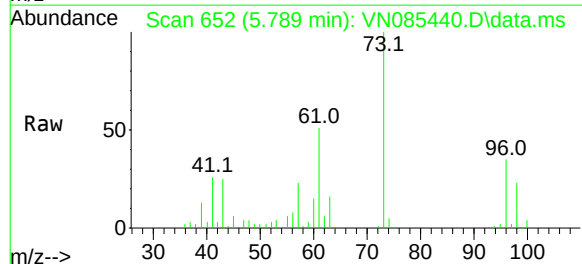
98 64.5 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

Concen: 21.480 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 45 Resp: 166719

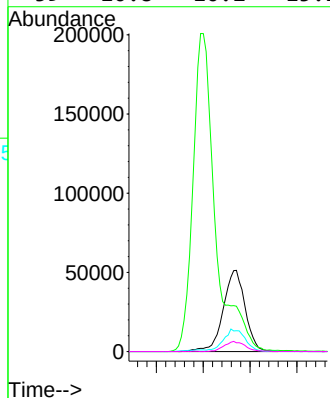
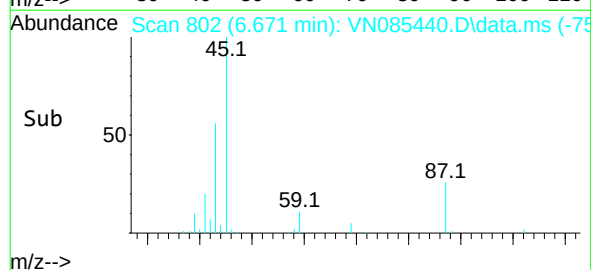
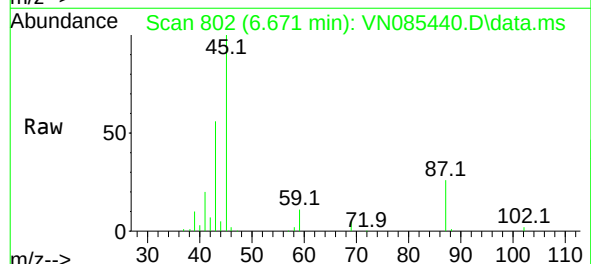
Ion Ratio Lower Upper

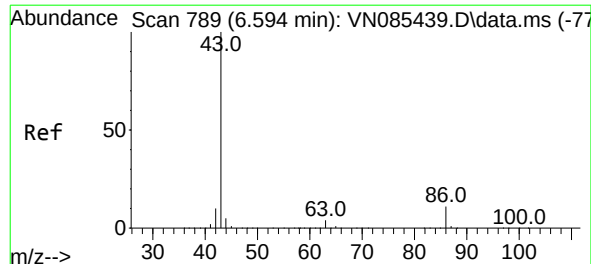
45 100

43 54.3 45.0 67.6

87 25.3 21.8 32.8

59 10.8 10.2 15.2





#23

Vinyl Acetate

Concen: 107.984 ug/l m

RT: 6.594 min Scan# 789

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 43 Resp: 588567

Ion Ratio Lower Upper

43 100

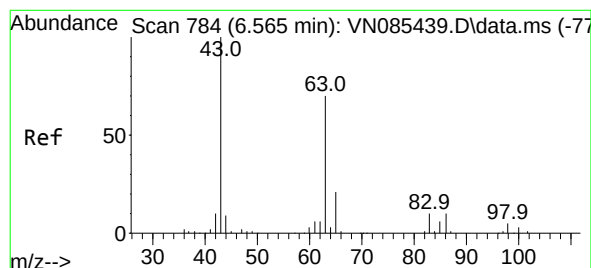
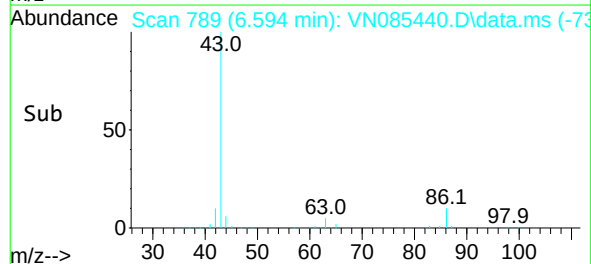
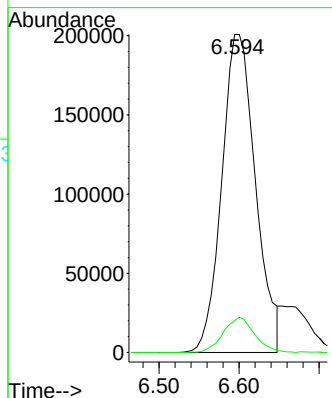
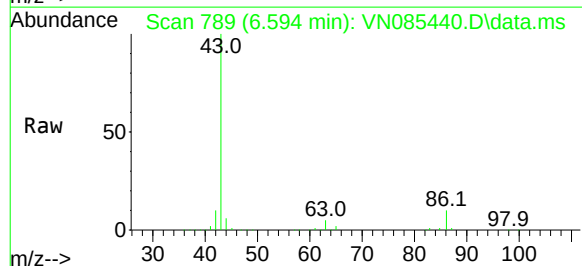
86 10.1 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 20.469 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

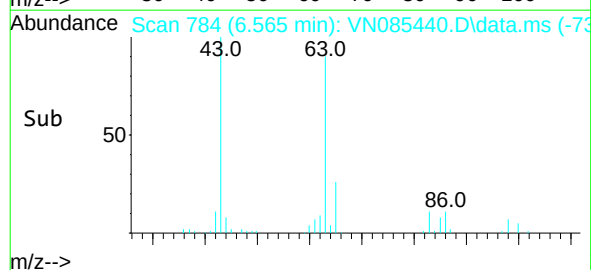
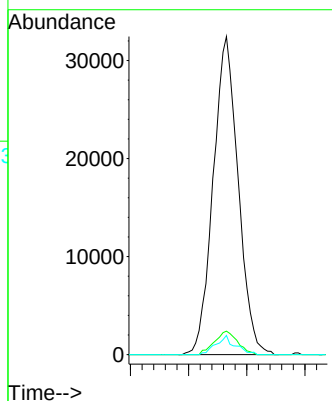
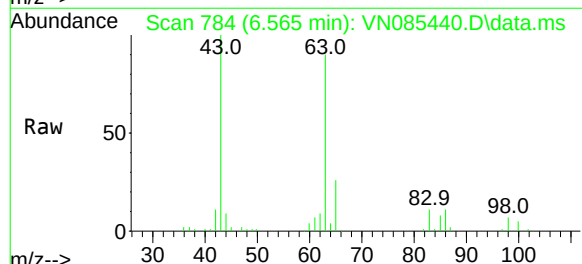
Tgt Ion: 63 Resp: 96875

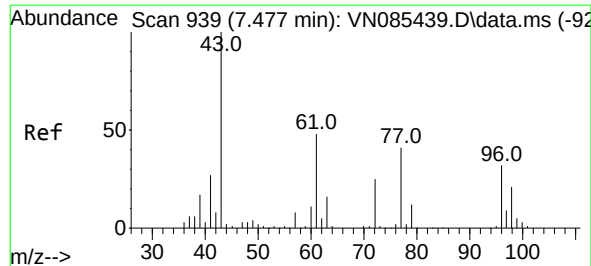
Ion Ratio Lower Upper

63 100

98 7.4 3.3 9.8

100 6.0 2.0 6.0#





#25

2-Butanone

Concen: 103.786 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 159952

Ion Ratio Lower Upper

43 100

72 24.1 20.2 30.4

Instrument :

MSVOA_N

ClientSampleId :

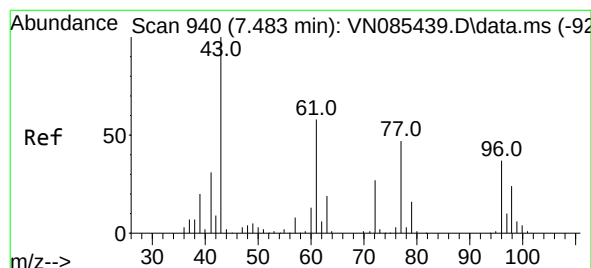
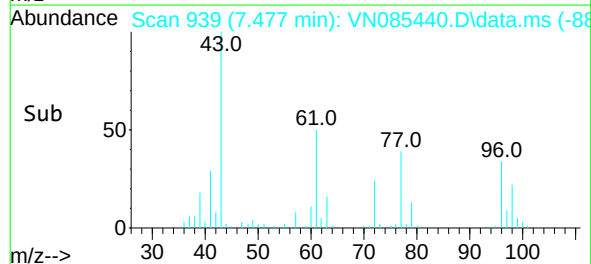
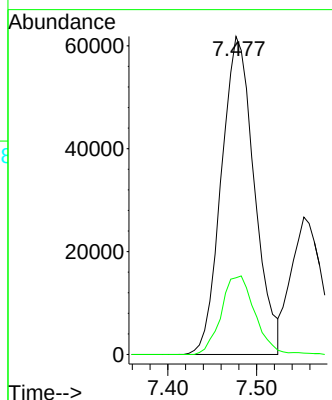
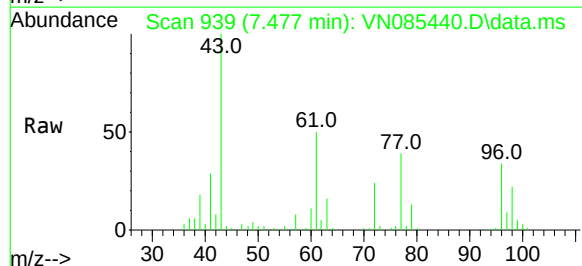
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 20.684 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085440.D

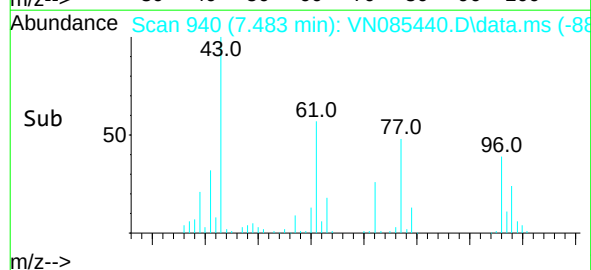
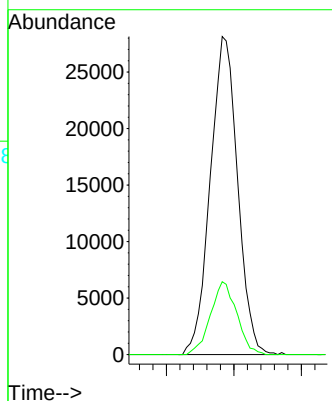
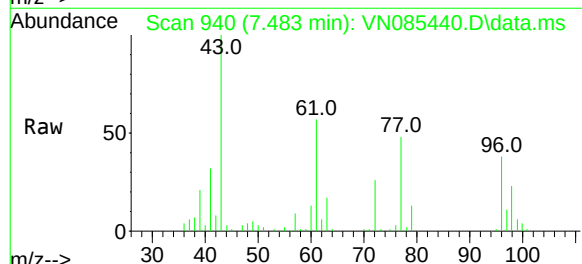
Acq: 14 Jan 2025 15:43

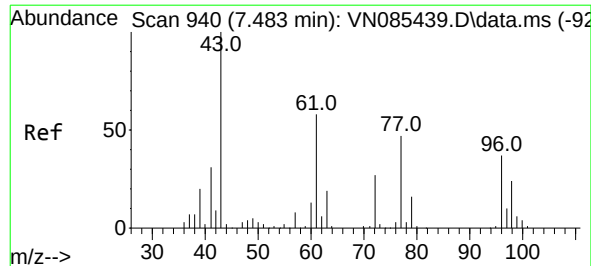
Tgt Ion: 77 Resp: 79145

Ion Ratio Lower Upper

77 100

97 22.0 10.7 32.1





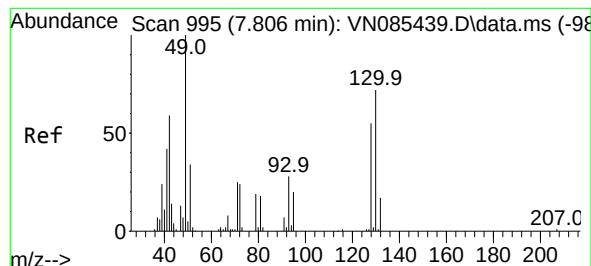
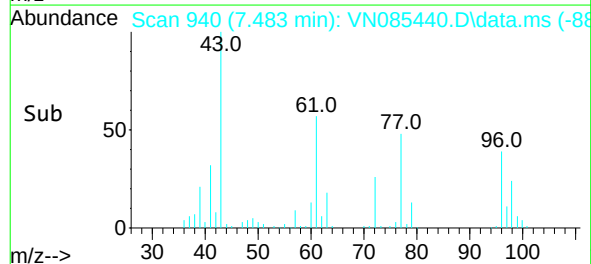
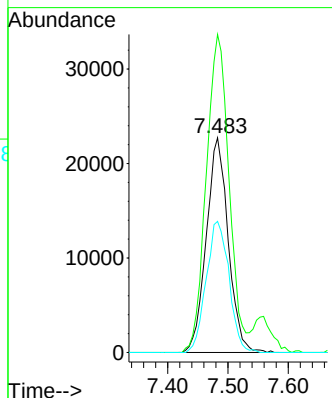
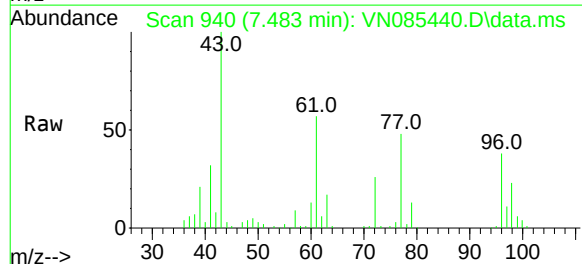
#27
cis-1,2-Dichloroethene
Concen: 21.180 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion: 96 Resp: 57454
Ion Ratio Lower Upper
96 100
61 153.0 0.0 311.8
98 63.7 0.0 126.0

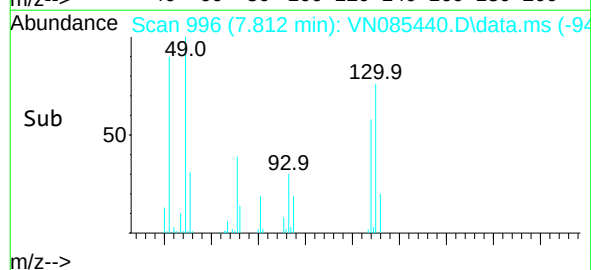
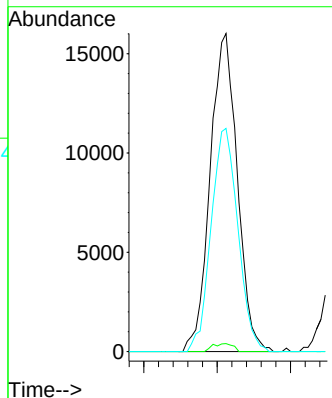
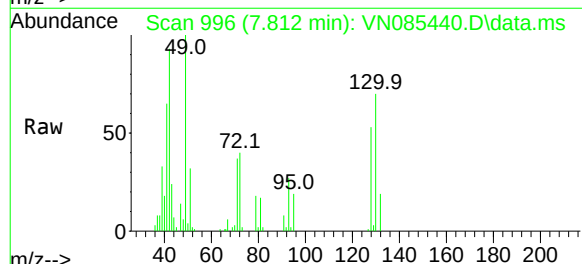
Manual Integrations
APPROVED

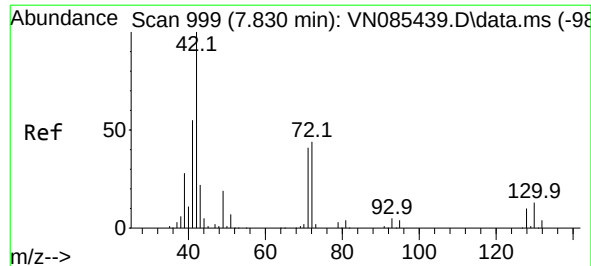
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#28
Bromochloromethane
Concen: 18.703 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 49 Resp: 41181
Ion Ratio Lower Upper
49 100
129 1.9 0.0 4.4
130 69.3 55.0 82.4





#29

Tetrahydrofuran

Concen: 107.247 ug/l

RT: 7.836 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 42 Resp: 104792

Ion Ratio Lower Upper

42 100

72 42.6 34.2 51.2

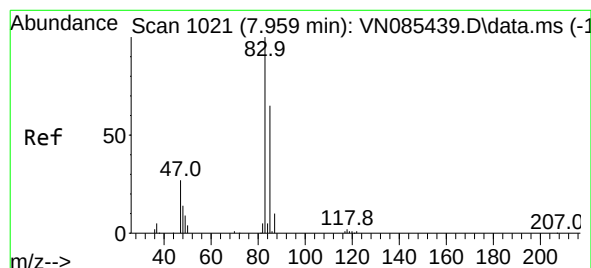
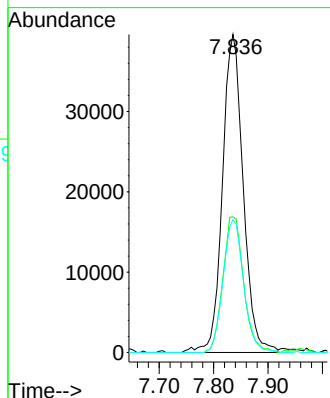
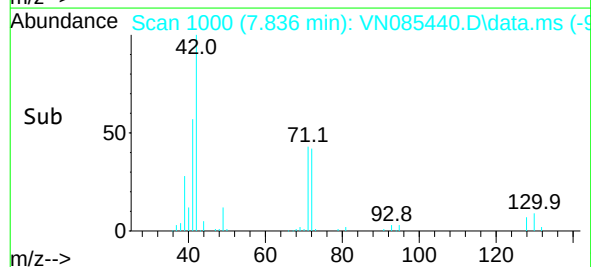
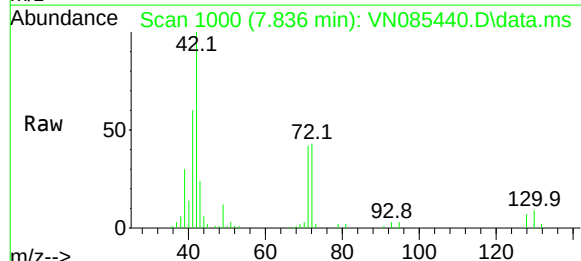
71 41.4 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 20.374 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. 0.000 min

Lab File: VN085440.D

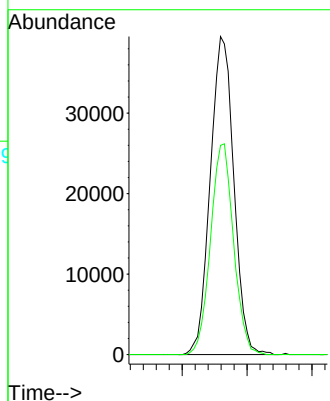
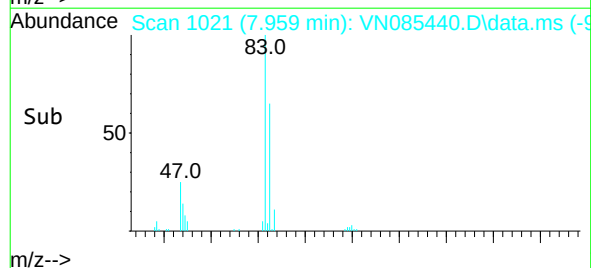
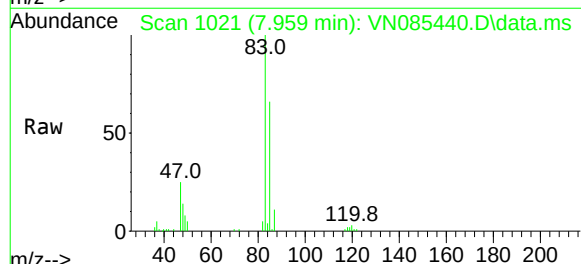
Acq: 14 Jan 2025 15:43

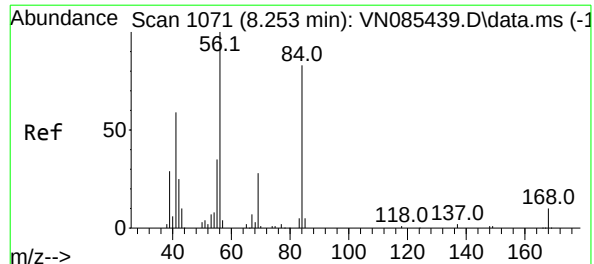
Tgt Ion: 83 Resp: 99655

Ion Ratio Lower Upper

83 100

85 65.8 51.8 77.6





#31

Cyclohexane

Concen: 20.173 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion: 56 Resp: 82980

Ion Ratio Lower Upper

56 100

69 31.2 22.2 33.4

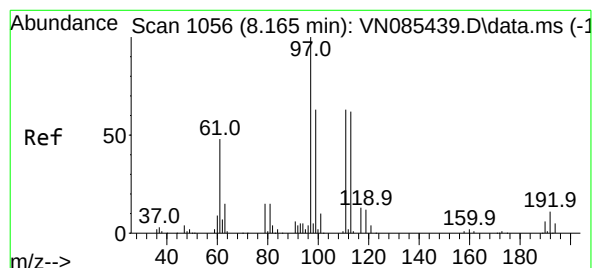
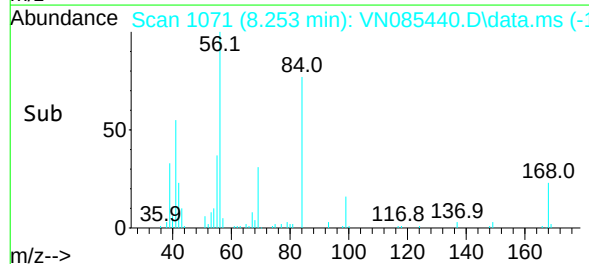
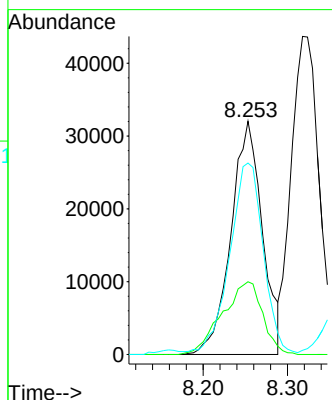
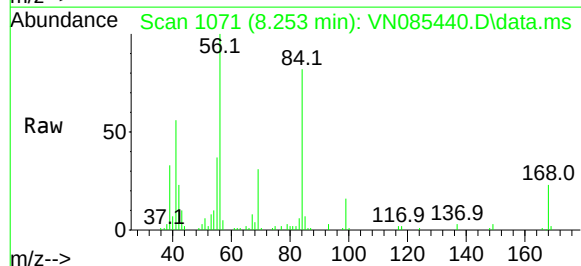
84 80.8 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 20.431 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

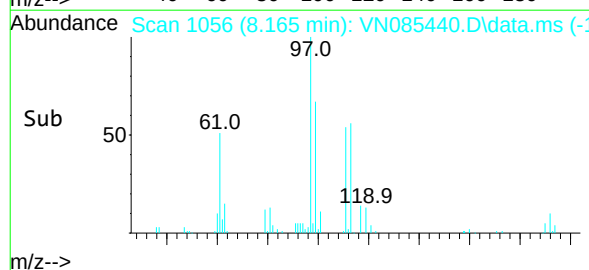
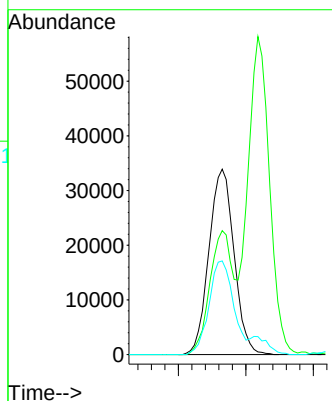
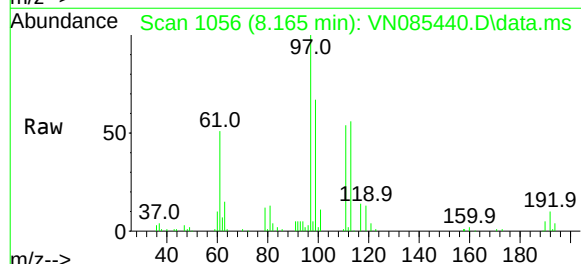
Tgt Ion: 97 Resp: 87659

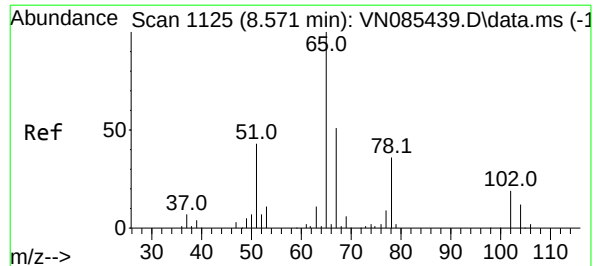
Ion Ratio Lower Upper

97 100

99 64.2 49.8 74.6

61 50.3 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 18.694 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 65 Resp: 60593

Ion Ratio Lower Upper

65 100

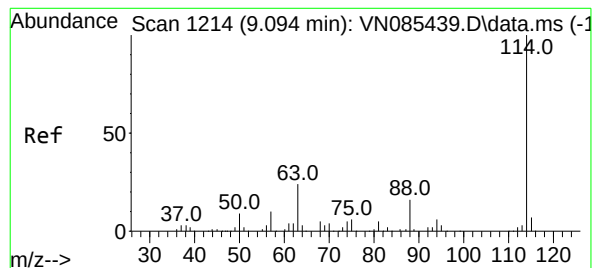
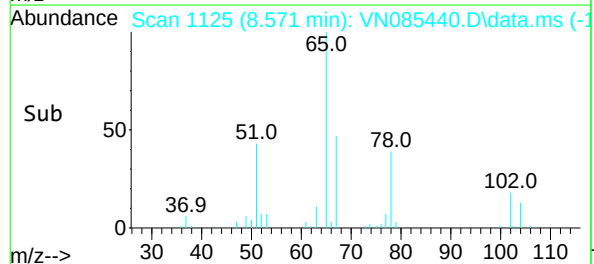
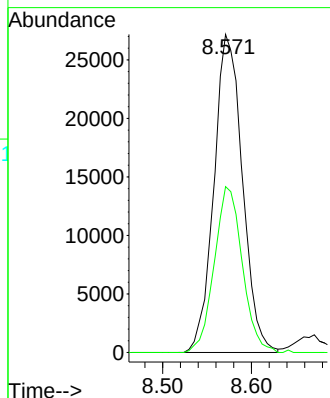
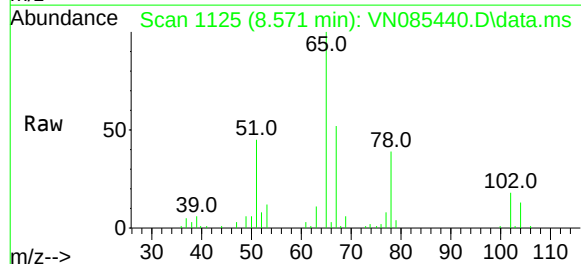
67 51.2 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

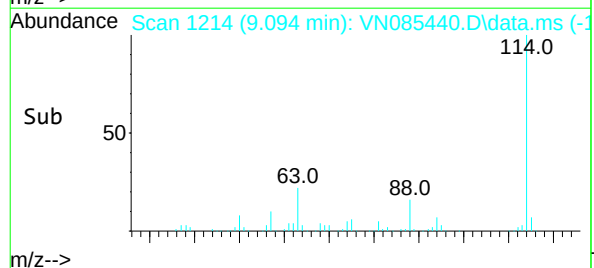
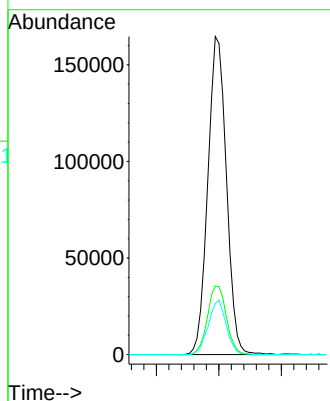
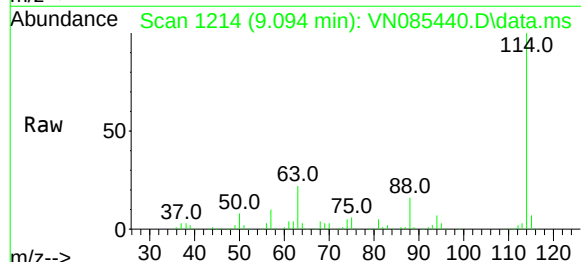
Tgt Ion:114 Resp: 340593

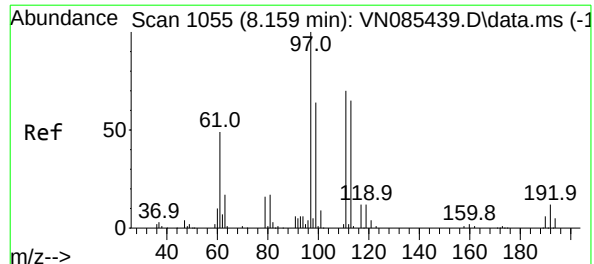
Ion Ratio Lower Upper

114 100

63 21.6 0.0 47.6

88 16.0 0.0 32.6





#35

Dibromofluoromethane

Concen: 19.322 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 113 Resp: 45655

Ion Ratio Lower Upper

113 100

111 100.6 82.7 124.1

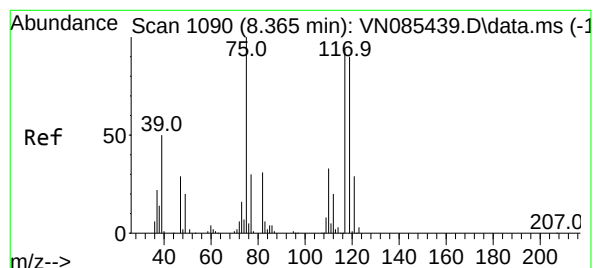
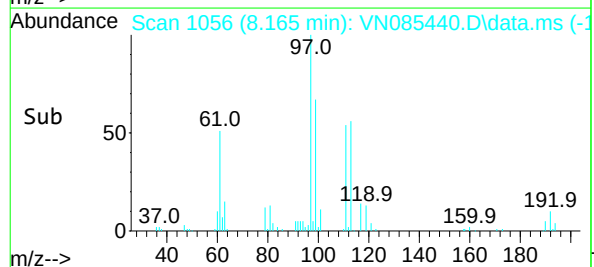
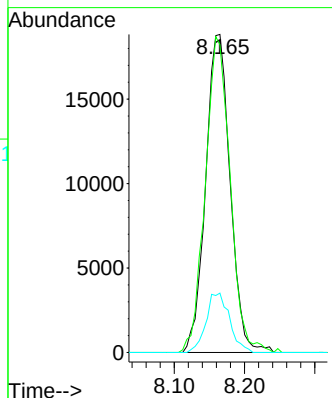
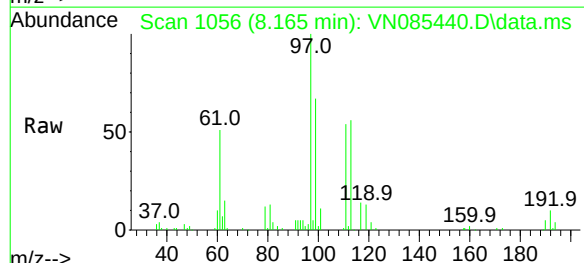
192 17.9 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 20.490 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

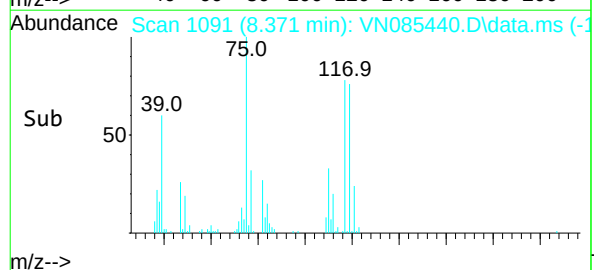
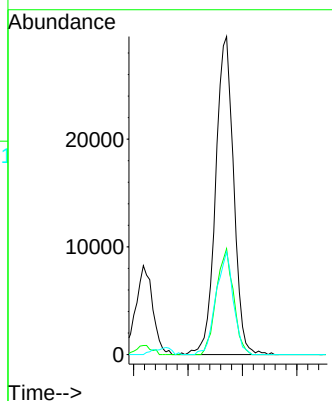
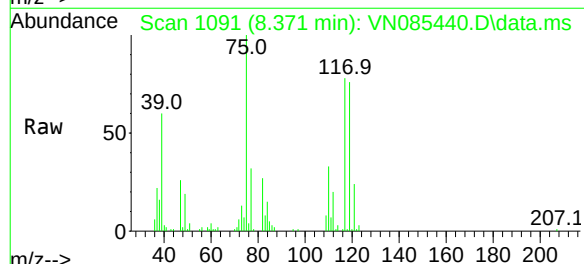
Tgt Ion: 75 Resp: 67949

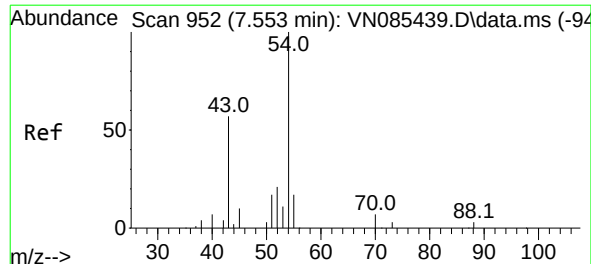
Ion Ratio Lower Upper

75 100

110 31.8 16.5 49.5

77 31.1 24.4 36.6





#37

Ethyl Acetate

Concen: 19.850 ug/l

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

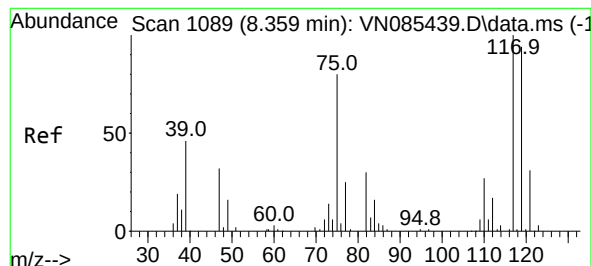
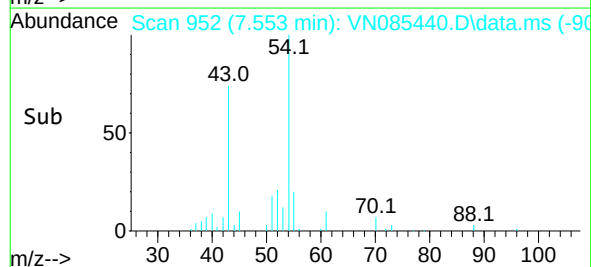
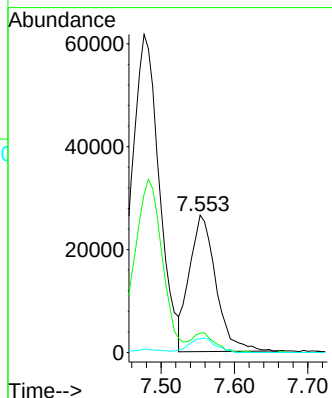
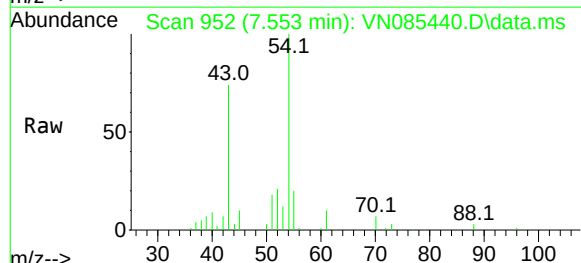
ClientSampleId :

VSTDIC020

Tgt Ion:	43	Resp:	66443
Ion	Ratio	Lower	Upper
43	100		
61	11.9	10.9	16.3
70	10.6	7.5	11.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#38

Carbon Tetrachloride

Concen: 20.767 ug/l

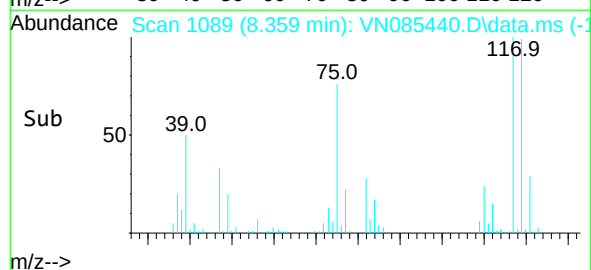
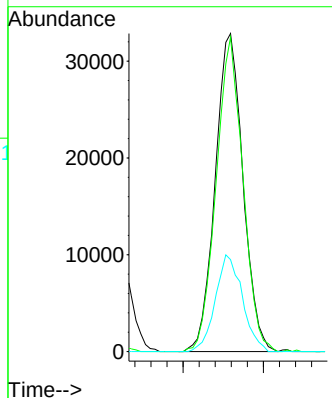
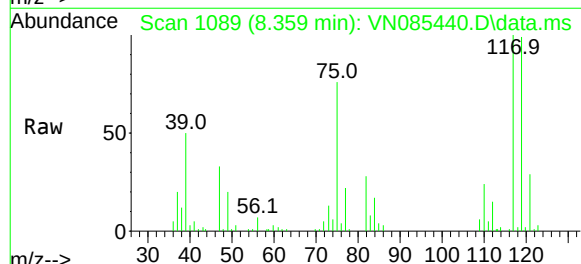
RT: 8.359 min Scan# 1089

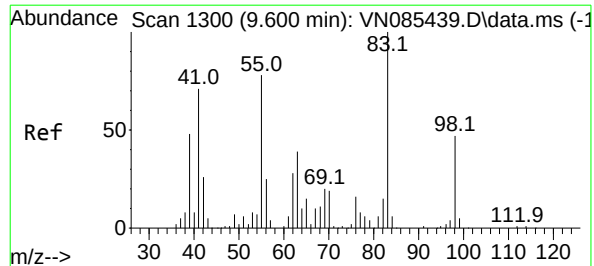
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:	117	Resp:	78842
Ion	Ratio	Lower	Upper
117	100		
119	98.9	75.4	113.2
121	28.9	24.6	37.0





#39

Methylcyclohexane

Concen: 20.862 ug/l

RT: 9.594 min Scan# 12

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 83 Resp: 65012

Ion Ratio Lower Upper

83 100

55 83.4 62.6 94.0

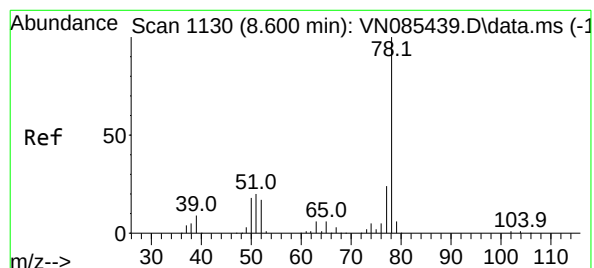
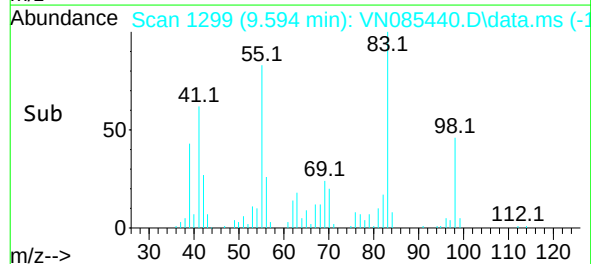
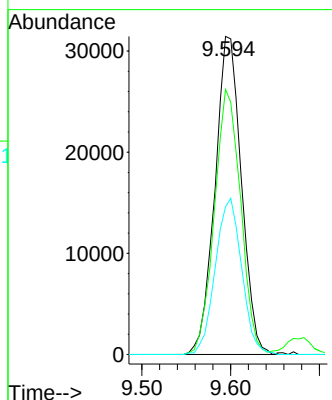
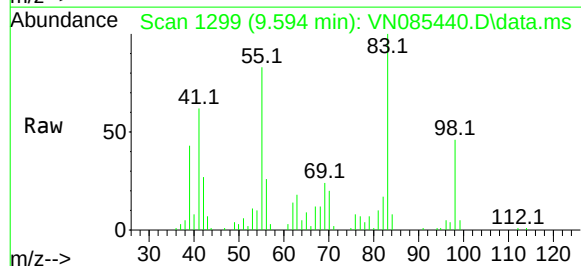
98 46.4 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#40

Benzene

Concen: 20.873 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085440.D

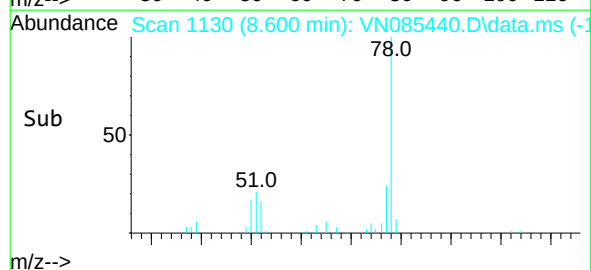
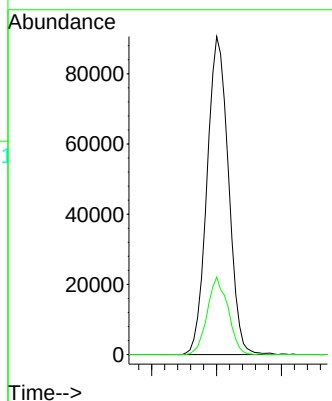
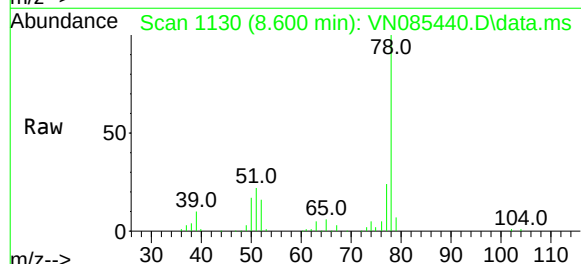
Acq: 14 Jan 2025 15:43

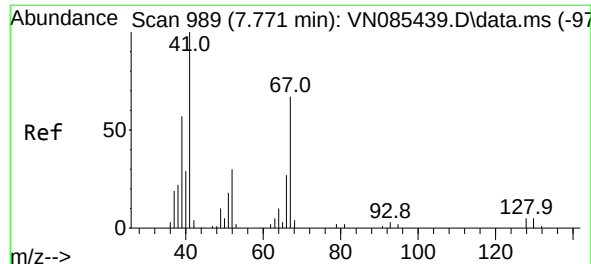
Tgt Ion: 78 Resp: 207985

Ion Ratio Lower Upper

78 100

77 24.4 19.0 28.6





#41

Methacrylonitrile

Concen: 21.004 ug/l

RT: 7.771 min Scan# 989

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 41 Resp: 36578

Ion Ratio Lower Upper

41 100

39 56.6 46.0 69.0

67 70.3 57.4 86.2

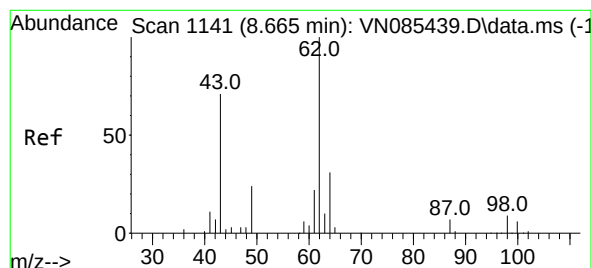
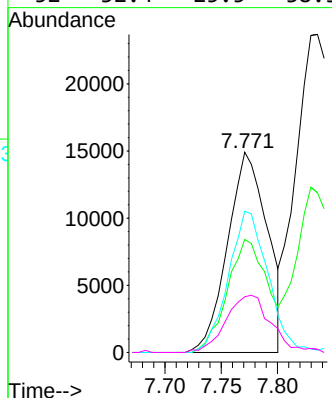
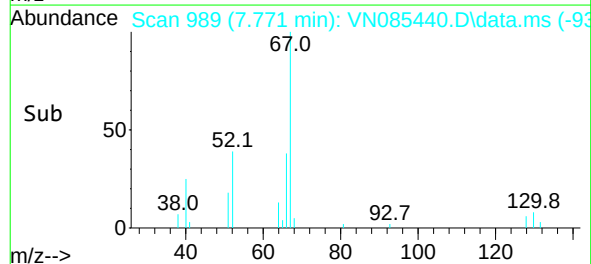
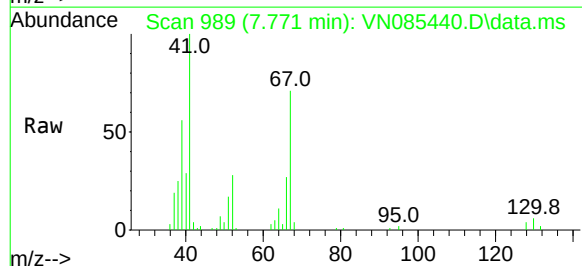
52 32.4 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 20.891 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. 0.000 min

Lab File: VN085440.D

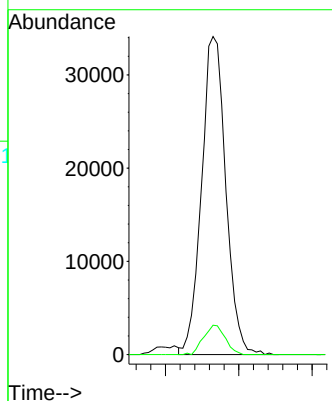
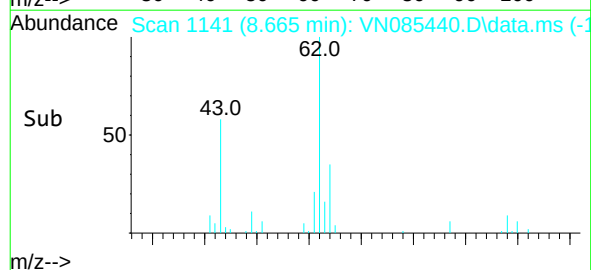
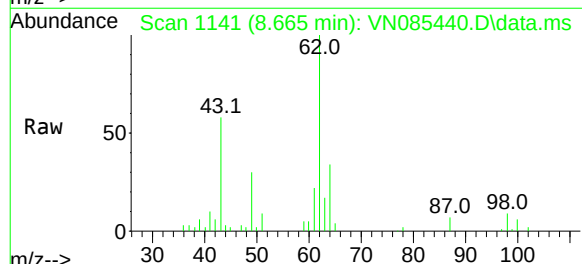
Acq: 14 Jan 2025 15:43

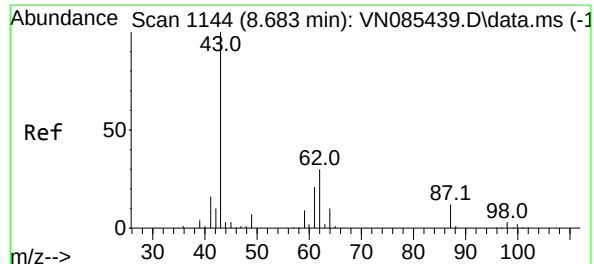
Tgt Ion: 62 Resp: 78402

Ion Ratio Lower Upper

62 100

98 8.3 0.0 17.0





#43

Isopropyl Acetate

Concen: 20.347 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

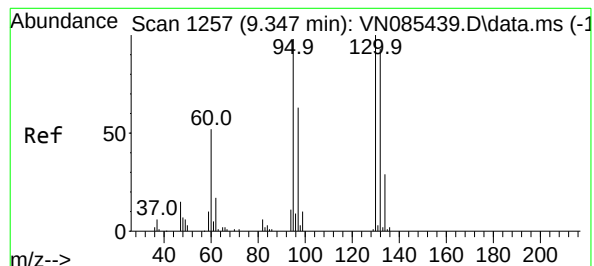
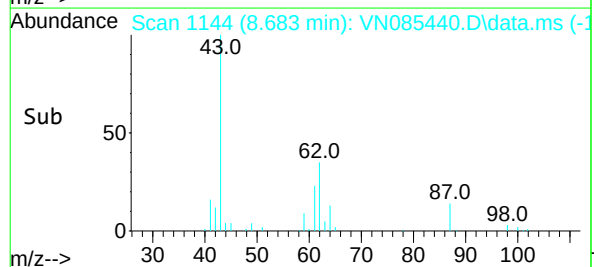
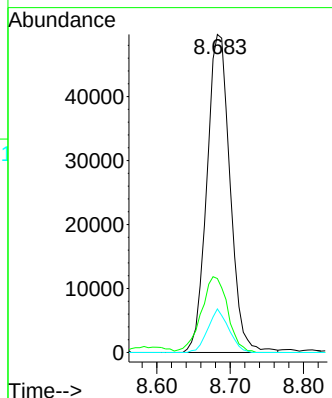
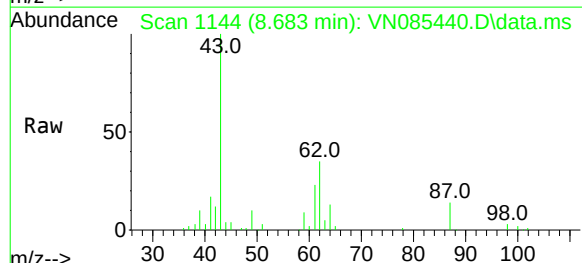
ClientSampleId :

VSTDIC020

Tgt Ion:	43	Resp:	109131
Ion	Ratio	Lower	Upper
43	100		
61	27.2	20.7	31.1
87	12.3	9.8	14.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#44

Trichloroethene

Concen: 20.699 ug/l

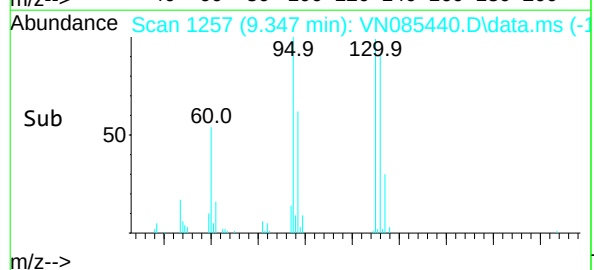
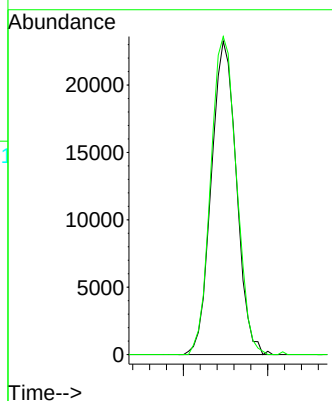
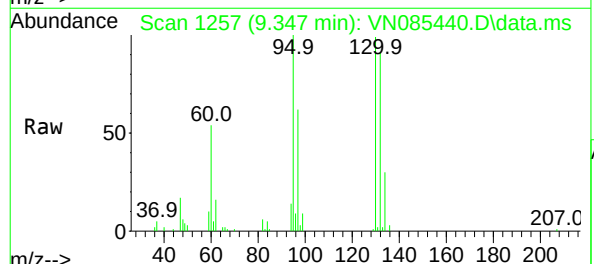
RT: 9.347 min Scan# 1257

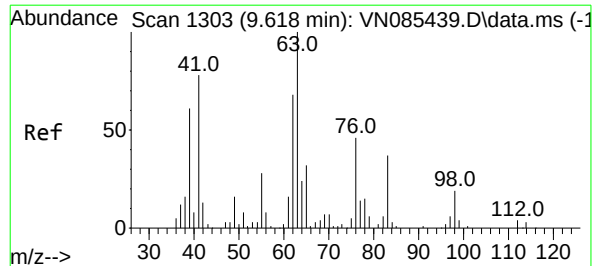
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:	130	Resp:	48009
Ion	Ratio	Lower	Upper
130	100		
95	101.5	0.0	195.8





#45

1,2-Dichloropropane

Concen: 20.758 ug/l

RT: 9.618 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 63 Resp: 52833

Ion Ratio Lower Upper

63 100

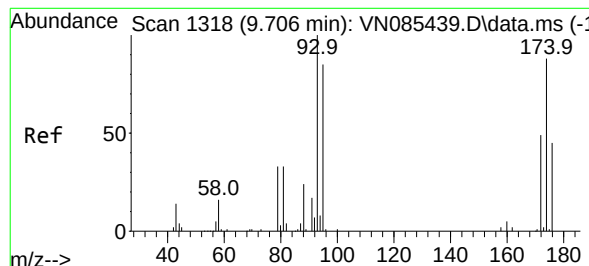
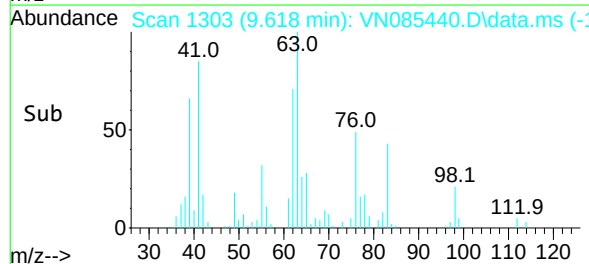
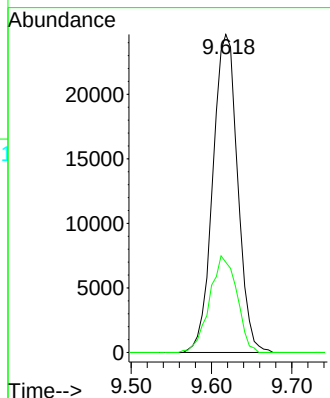
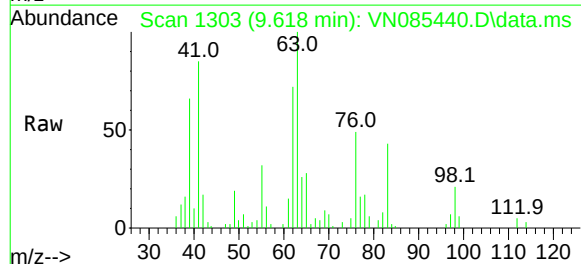
65 28.3 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 20.540 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. -0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

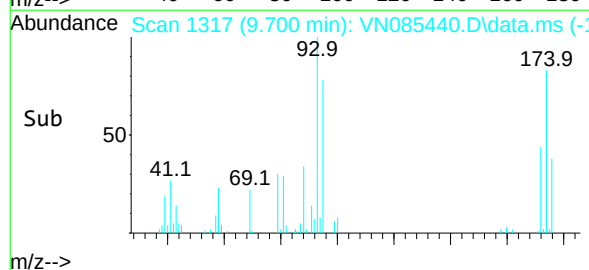
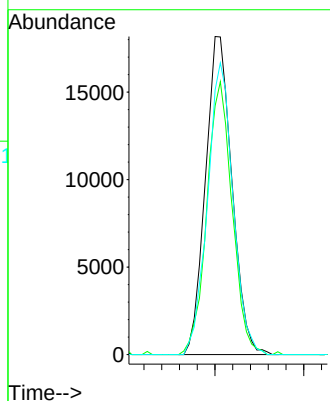
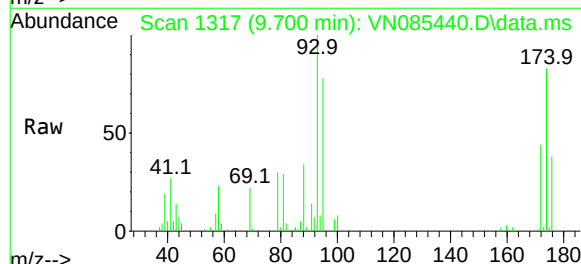
Tgt Ion: 93 Resp: 37721

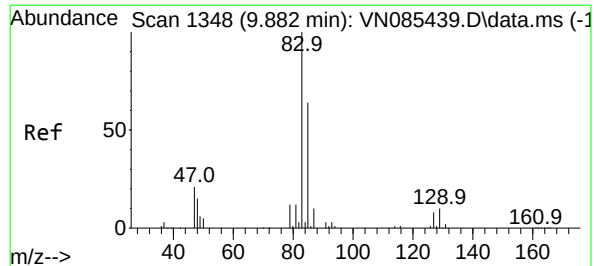
Ion Ratio Lower Upper

93 100

95 82.0 64.7 97.1

174 88.4 69.0 103.4





#47

Bromodichloromethane

Concen: 21.093 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

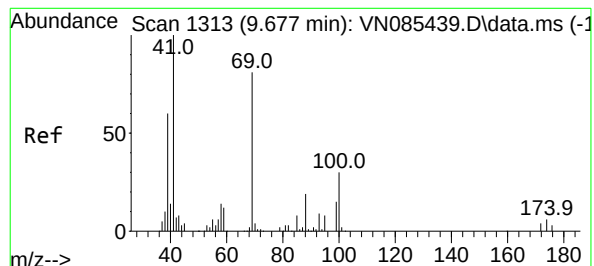
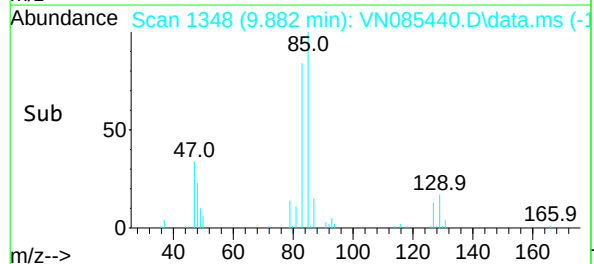
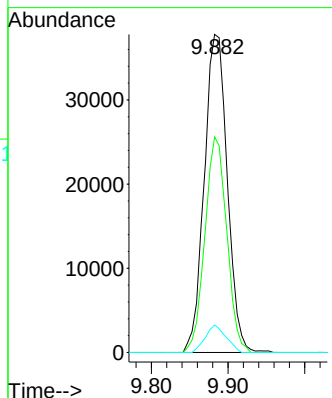
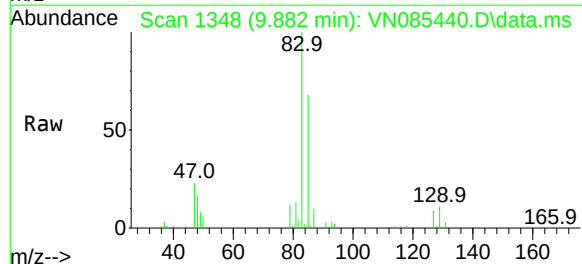
VSTDIC020

Tgt Ion:	83	Resp:	78918
Ion	Ratio	Lower	Upper
83	100		
85	67.8	51.2	76.8
127	8.6	6.5	9.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 20.808 ug/l

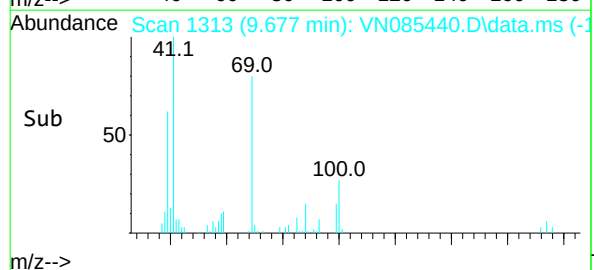
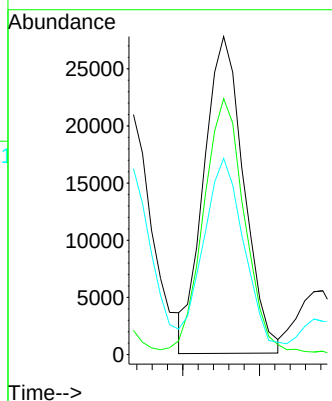
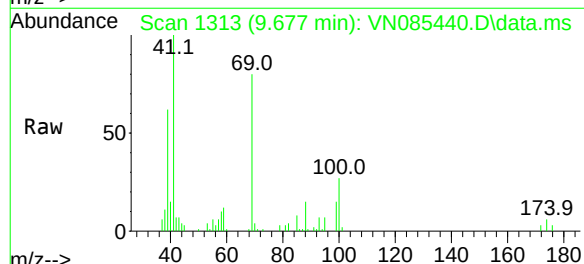
RT: 9.677 min Scan# 1313

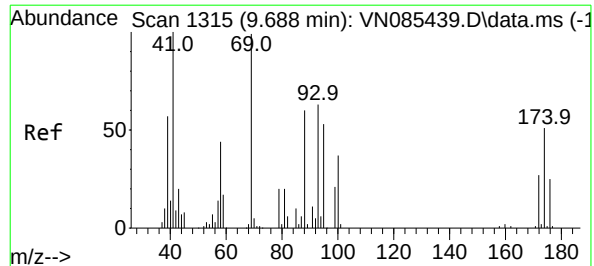
Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:	41	Resp:	50224
Ion	Ratio	Lower	Upper
41	100		
69	84.3	64.7	97.1
39	64.2	49.0	73.6





#49

1,4-Dioxane

Concen: 421.686 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 88 Resp: 17140

Ion Ratio Lower Upper

88 100

43 34.9 26.6 39.8

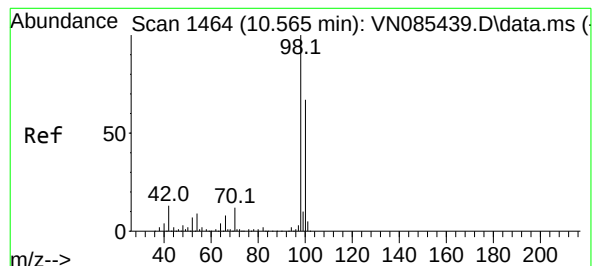
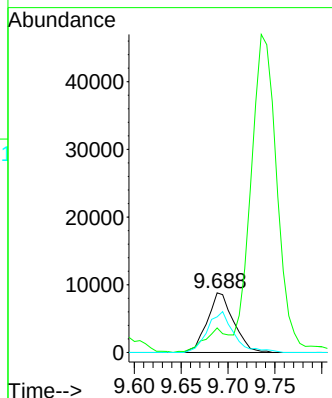
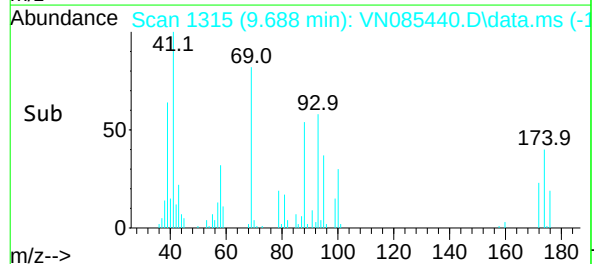
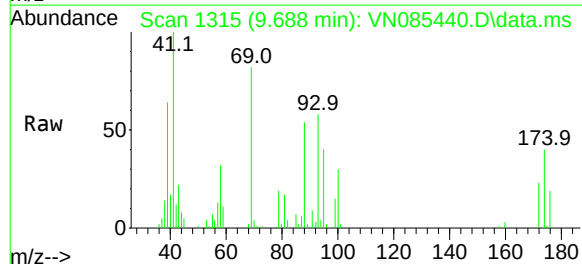
58 69.0 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 19.581 ug/l

RT: 10.559 min Scan# 1463

Delta R.T. -0.006 min

Lab File: VN085440.D

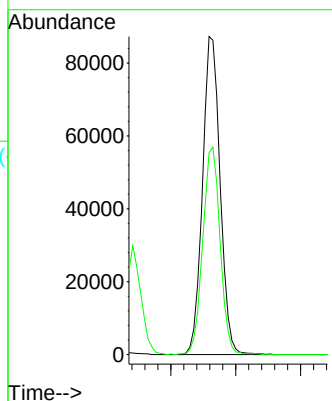
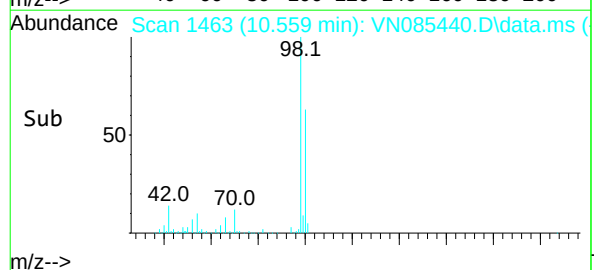
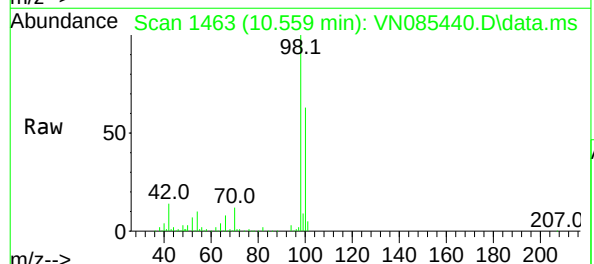
Acq: 14 Jan 2025 15:43

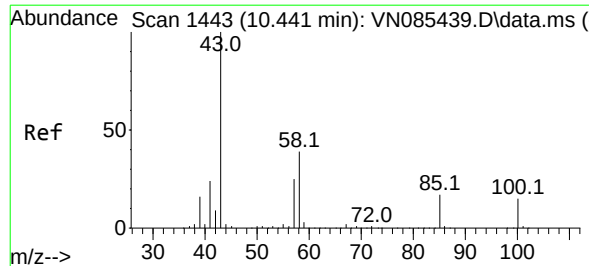
Tgt Ion: 98 Resp: 164391

Ion Ratio Lower Upper

98 100

100 64.4 52.2 78.4





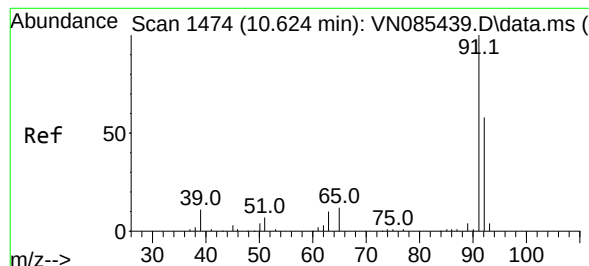
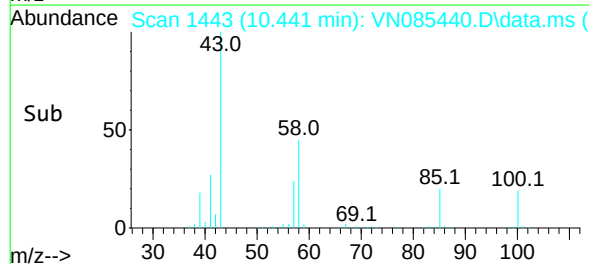
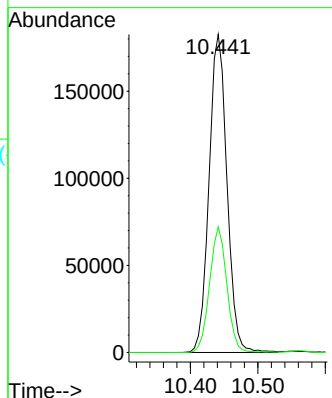
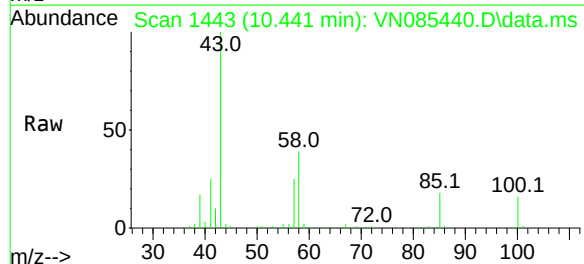
#51
4-Methyl-2-Pentanone
Concen: 108.249 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion: 43 Resp: 336911
Ion Ratio Lower Upper
43 100
58 38.1 30.5 45.7

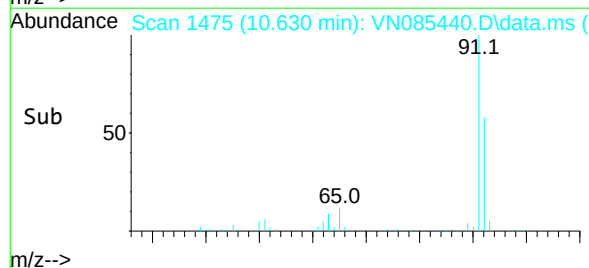
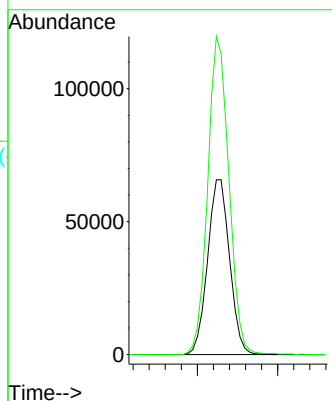
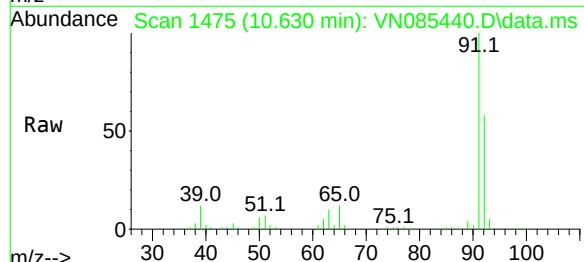
Manual Integrations
APPROVED

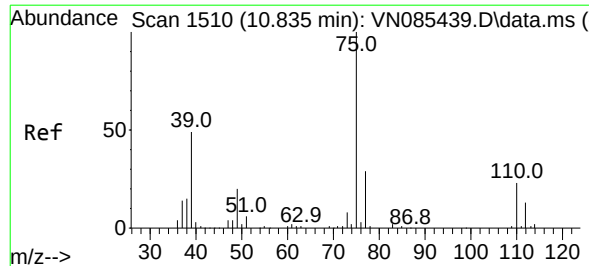
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#52
Toluene
Concen: 21.680 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 92 Resp: 125172
Ion Ratio Lower Upper
92 100
91 175.1 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 20.965 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 75 Resp: 74129

Ion Ratio Lower Upper

75 100

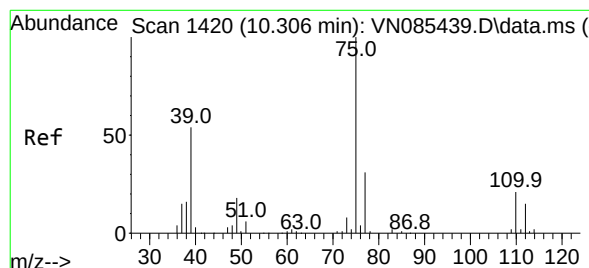
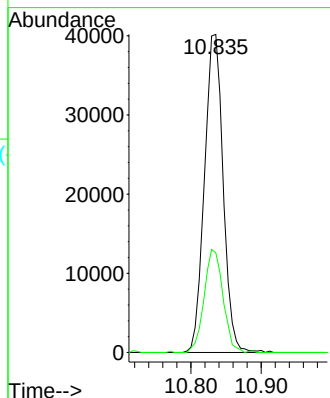
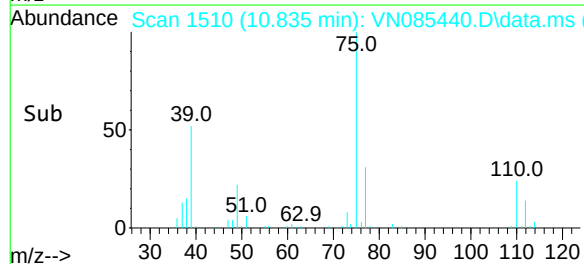
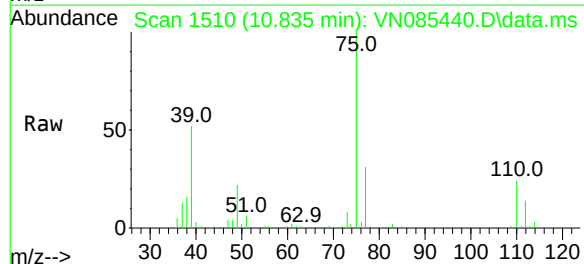
77 31.4 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 21.684 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

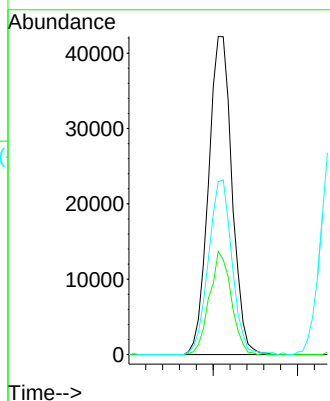
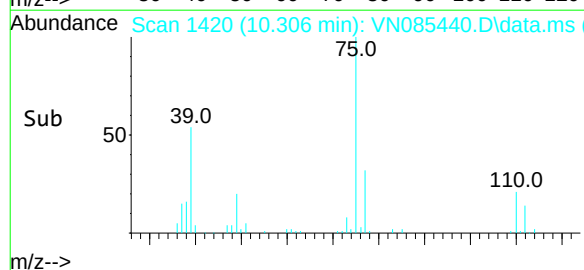
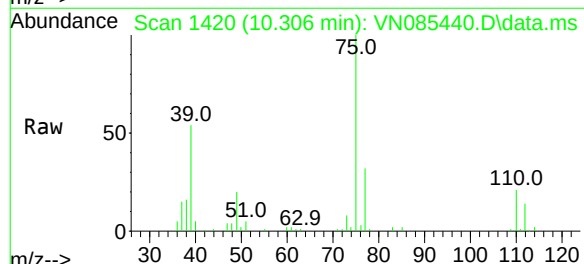
Tgt Ion: 75 Resp: 81897

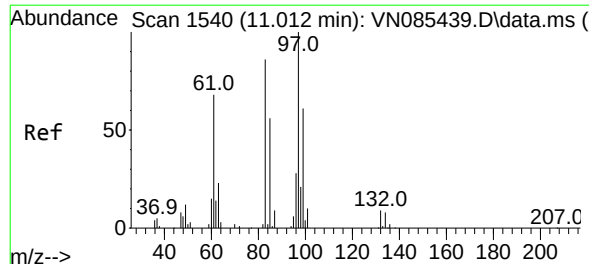
Ion Ratio Lower Upper

75 100

77 32.4 25.0 37.4

39 54.4 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 21.025 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion: 97 Resp: 48039

Ion Ratio Lower Upper

97 100

83 84.1 69.0 103.6

85 54.6 44.6 66.8

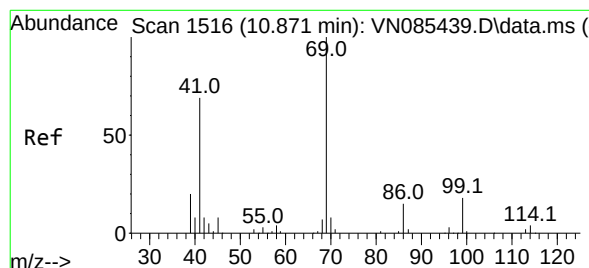
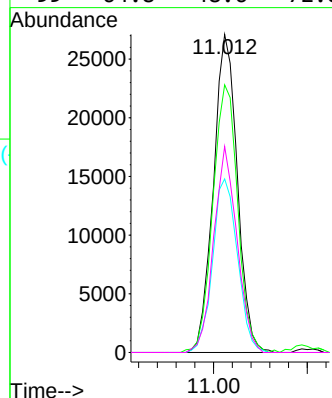
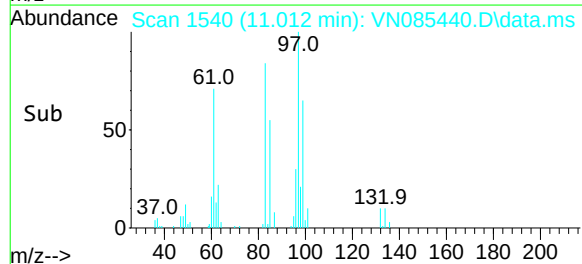
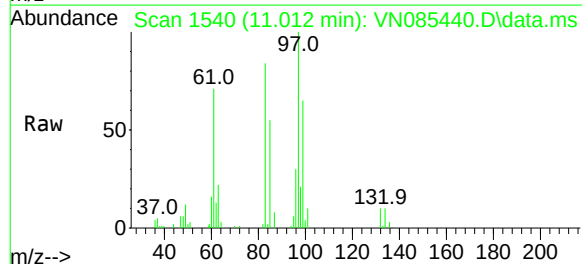
99 64.8 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 19.649 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

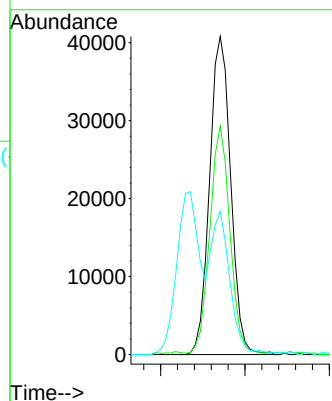
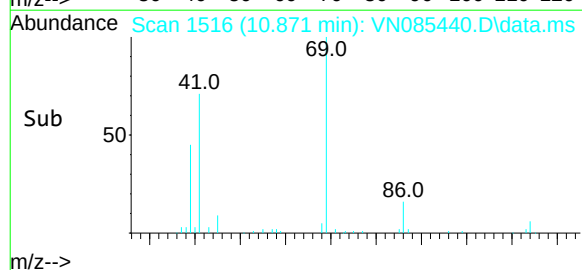
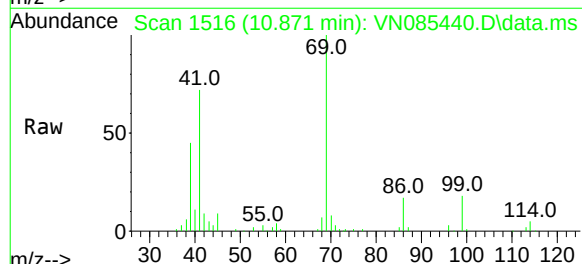
Tgt Ion: 69 Resp: 70934

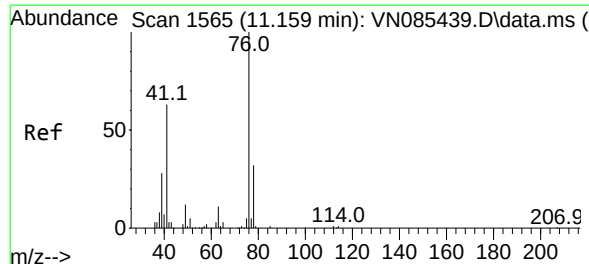
Ion Ratio Lower Upper

69 100

41 67.6 54.6 82.0

39 41.7 32.4 48.6





#57

1,3-Dichloropropane

Concen: 21.196 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion: 76 Resp: 84210

Ion Ratio Lower Upper

76 100

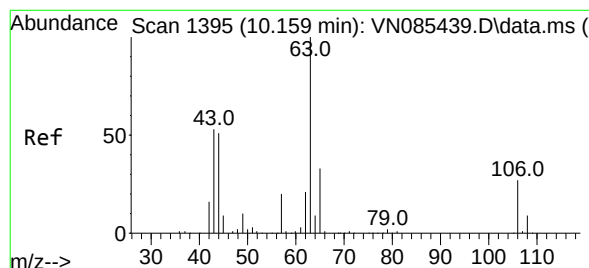
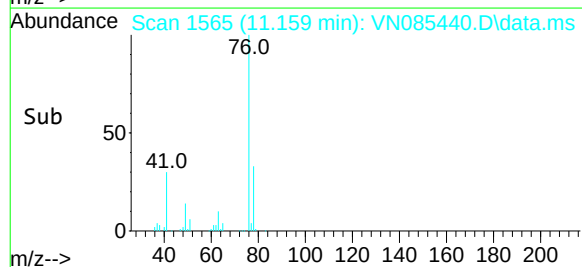
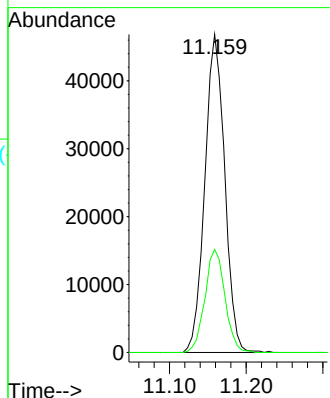
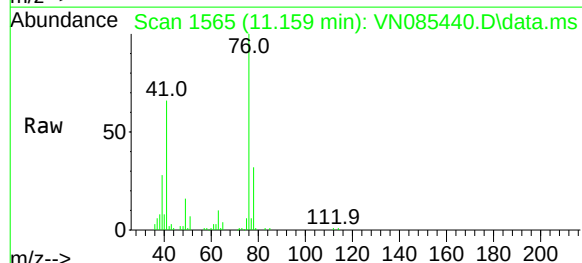
78 32.7 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 105.991 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085440.D

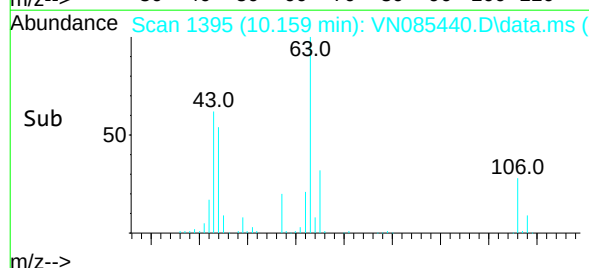
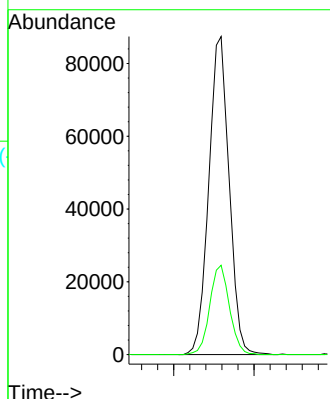
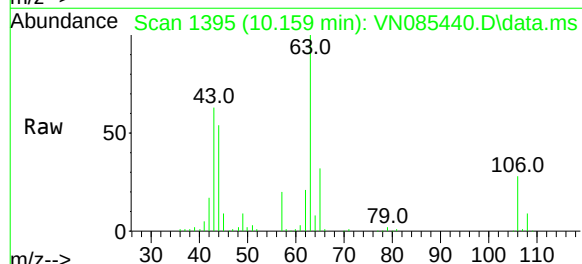
Acq: 14 Jan 2025 15:43

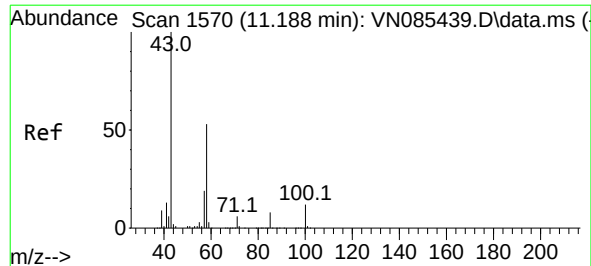
Tgt Ion: 63 Resp: 153681

Ion Ratio Lower Upper

63 100

106 27.2 21.6 32.4





#59

2-Hexanone

Concen: 109.863 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion: 43 Resp: 240595

Ion Ratio Lower Upper

43 100

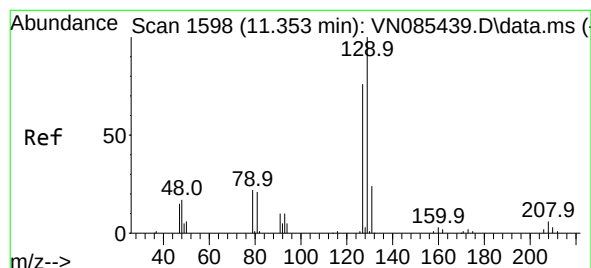
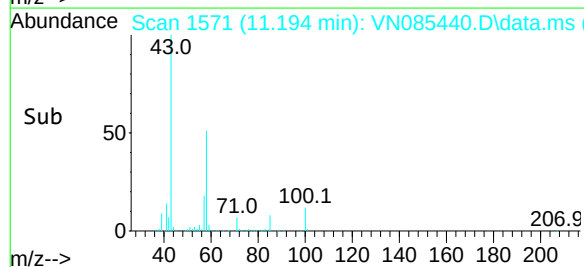
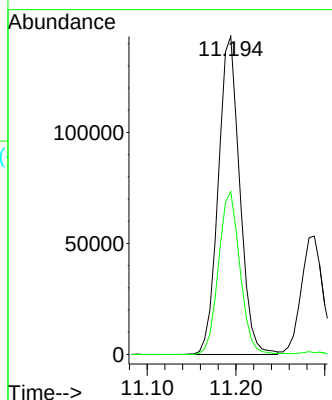
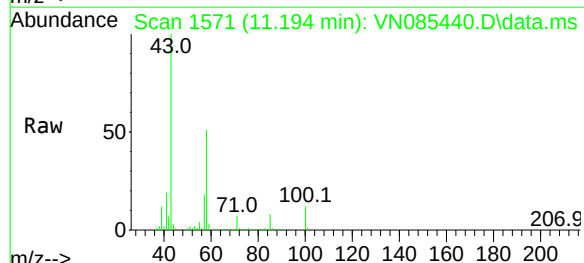
58 51.1 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 20.326 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085440.D

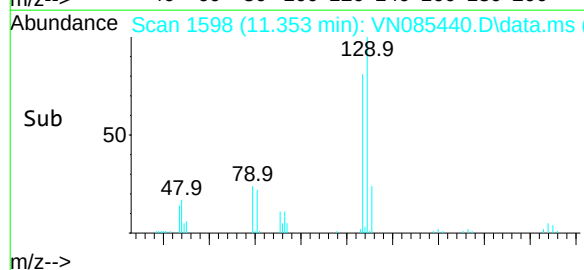
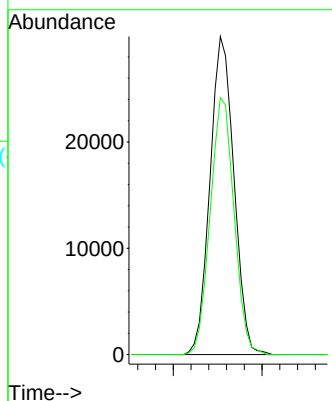
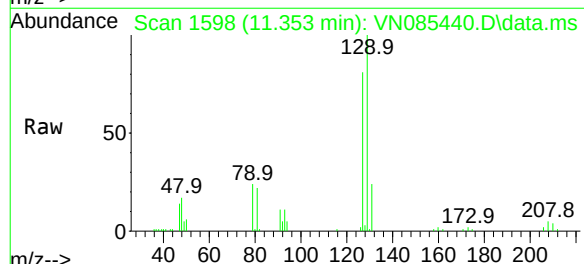
Acq: 14 Jan 2025 15:43

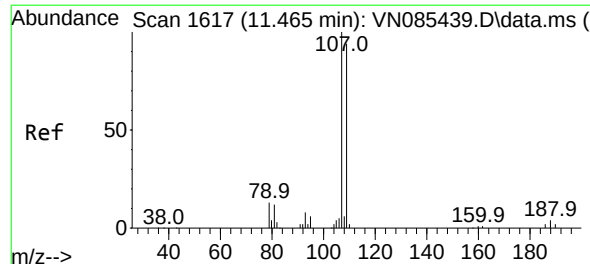
Tgt Ion:129 Resp: 56069

Ion Ratio Lower Upper

129 100

127 80.4 38.6 115.8





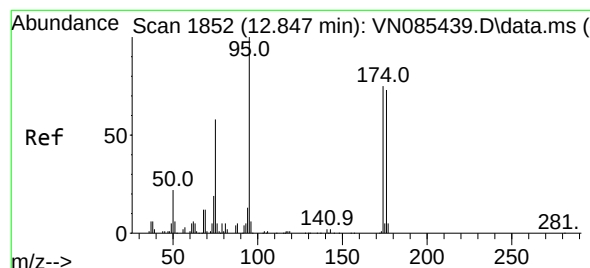
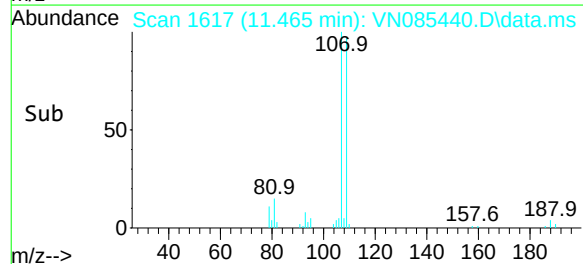
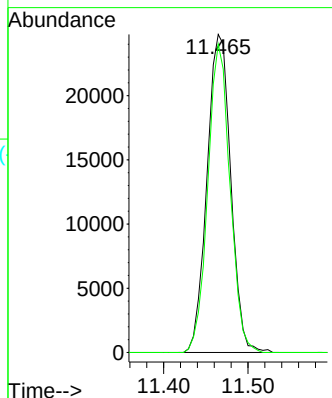
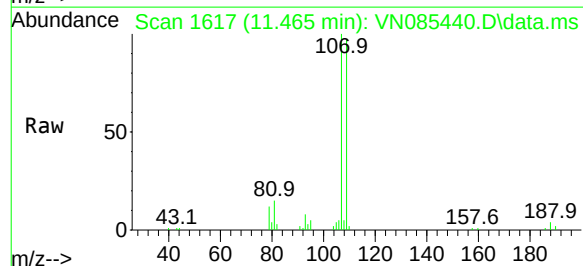
#61
1,2-Dibromoethane
Concen: 21.309 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion: 107 Resp: 48465
Ion Ratio Lower Upper
107 100
109 90.6 75.9 113.9

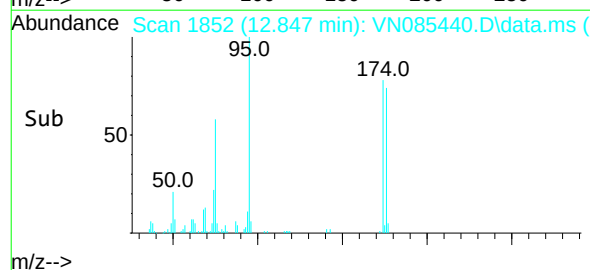
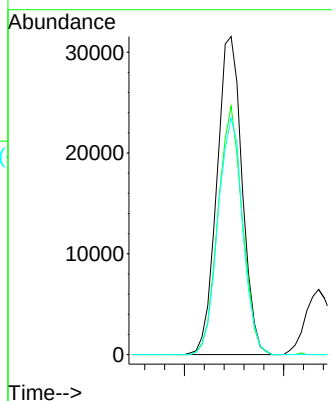
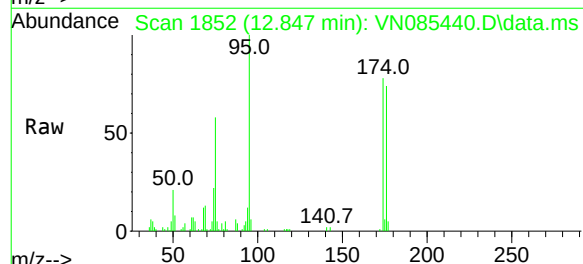
Manual Integrations
APPROVED

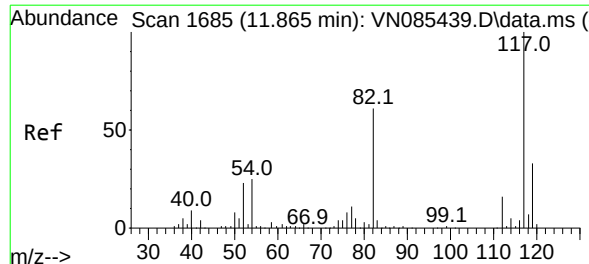
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#62
4-Bromofluorobenzene
Concen: 19.430 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion: 95 Resp: 55798
Ion Ratio Lower Upper
95 100
174 75.2 0.0 145.0
176 73.2 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion:117 Resp: 296298

Ion Ratio Lower Upper

117 100

82 59.3 48.6 72.8

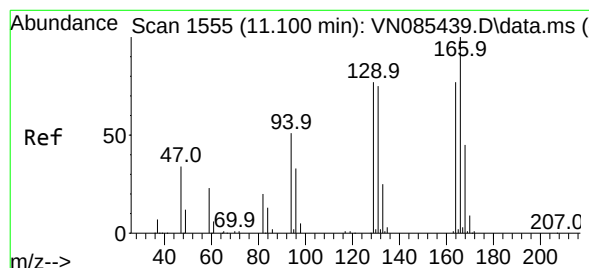
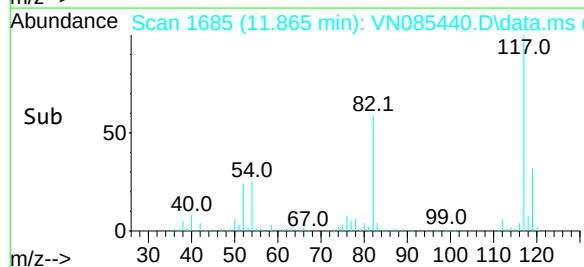
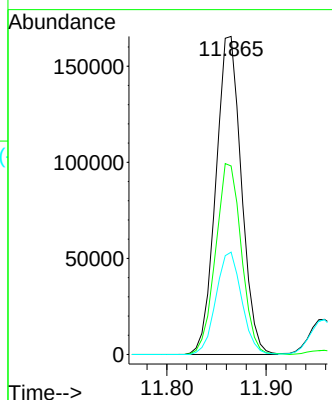
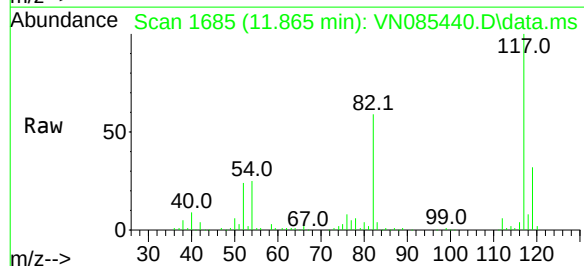
119 32.2 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 21.408 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:164 Resp: 43243

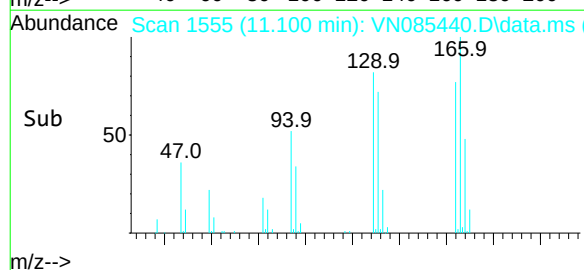
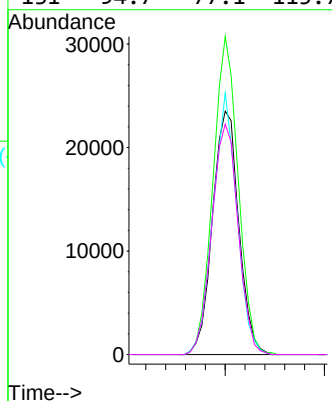
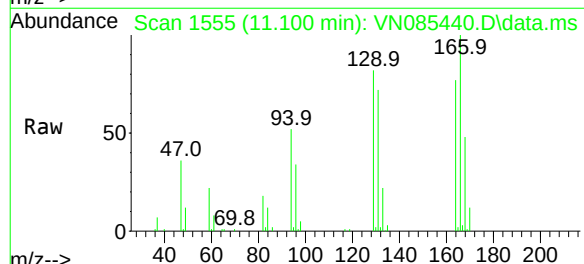
Ion Ratio Lower Upper

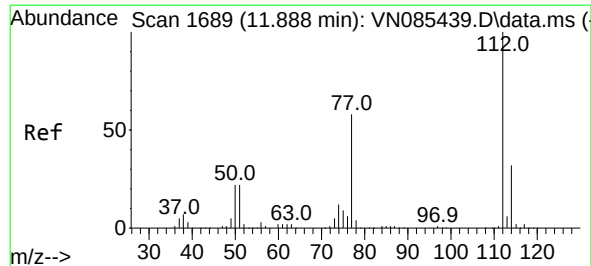
164 100

166 130.6 103.4 155.2

129 107.4 79.2 118.8

131 94.7 77.1 115.7





#65

Chlorobenzene

Concen: 21.077 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion:112 Resp: 136809

Ion Ratio Lower Upper

112 100

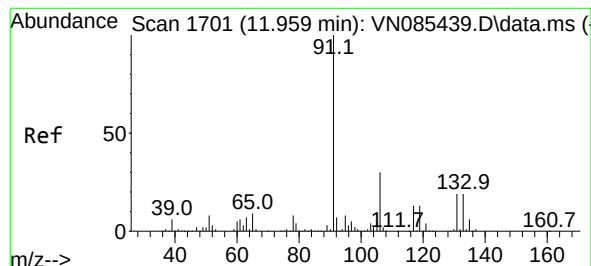
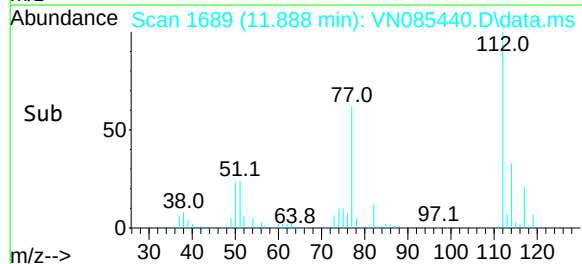
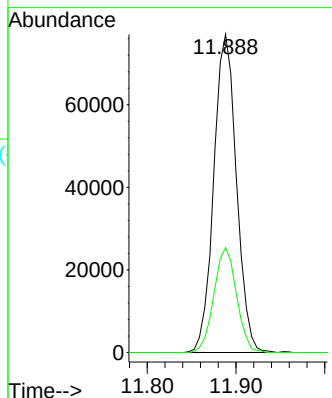
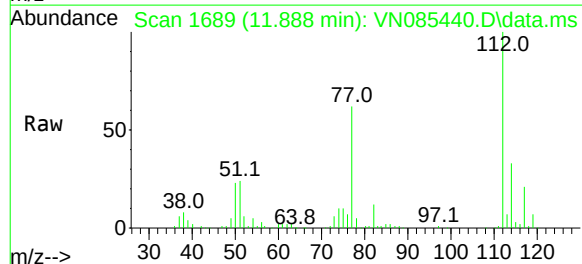
114 32.9 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 20.304 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

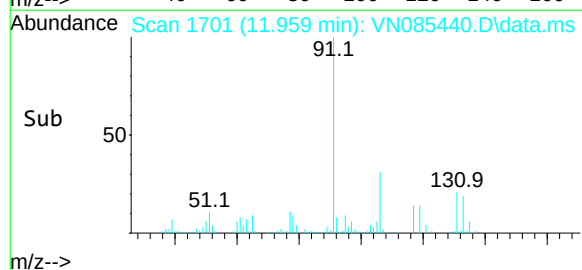
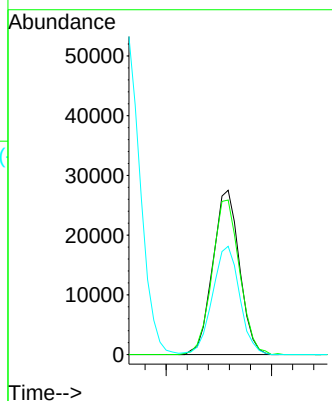
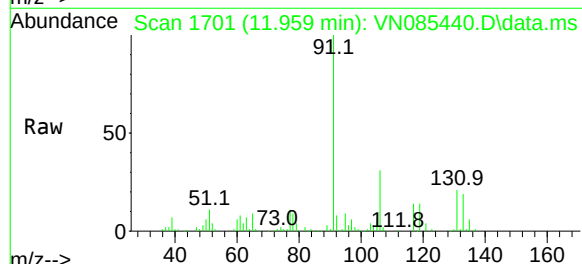
Tgt Ion:131 Resp: 48370

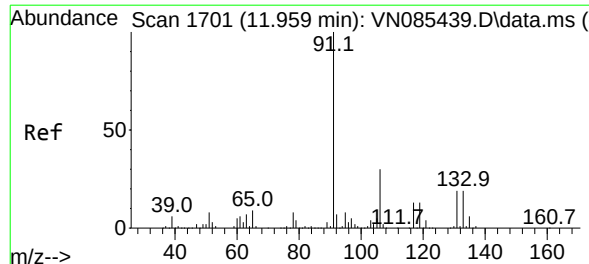
Ion Ratio Lower Upper

131 100

133 96.9 47.4 142.3

119 67.2 33.1 99.5





#67

Ethyl Benzene

Concen: 21.753 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion: 91 Resp: 229978

Ion Ratio Lower Upper

91 100

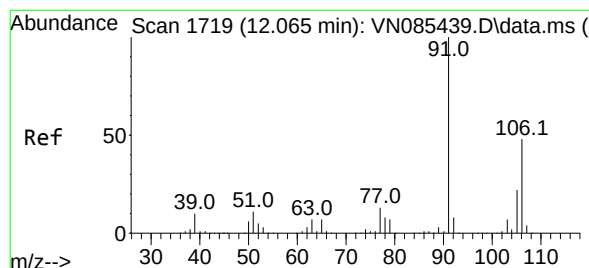
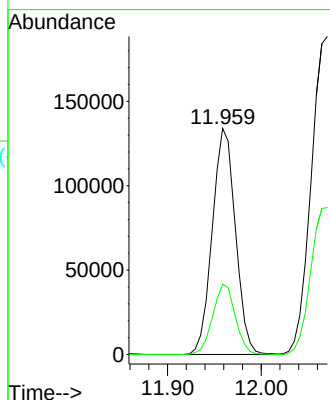
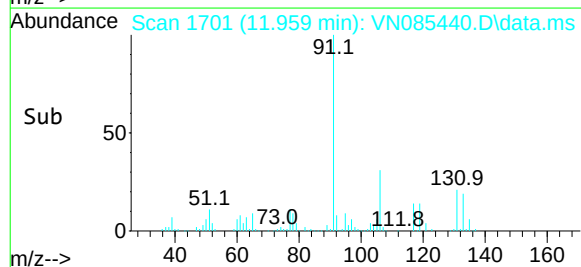
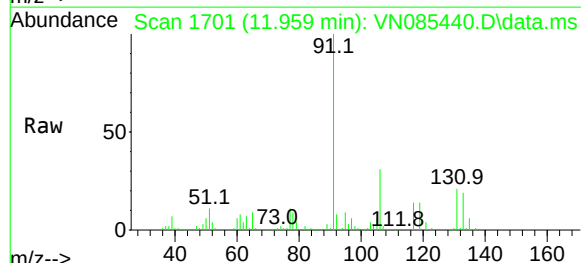
106 31.1 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 45.494 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085440.D

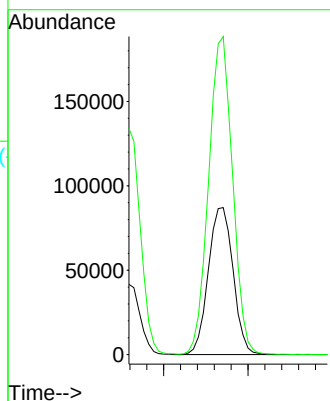
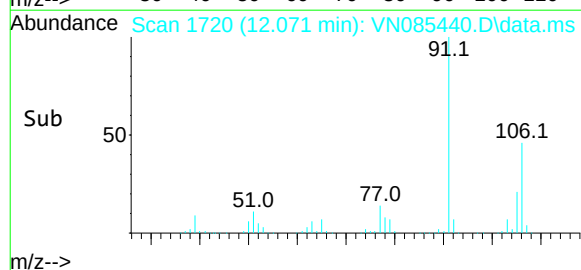
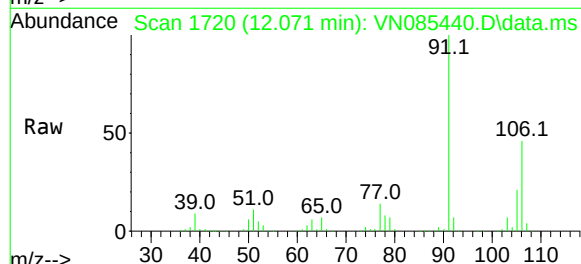
Acq: 14 Jan 2025 15:43

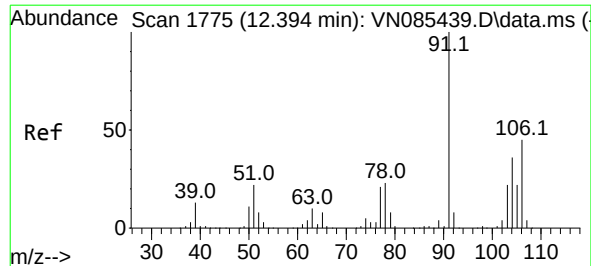
Tgt Ion:106 Resp: 177755

Ion Ratio Lower Upper

106 100

91 209.3 167.7 251.5





#69

o-Xylene

Concen: 22.643 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:106 Resp: 84548

Ion Ratio Lower Upper

106 100

91 217.0 110.4 331.2

Instrument :

MSVOA_N

ClientSampleId :

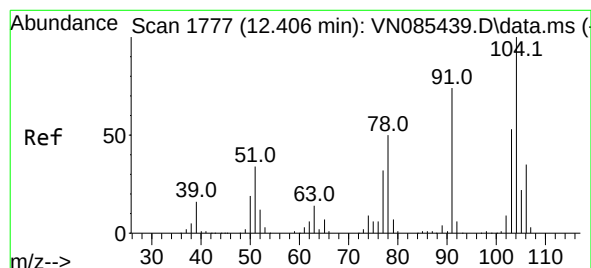
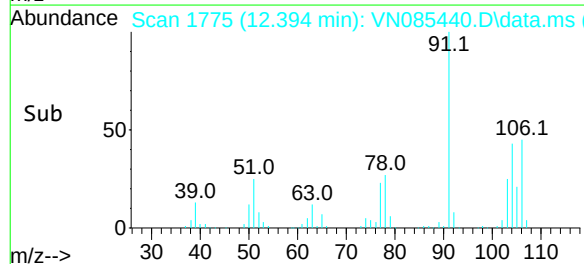
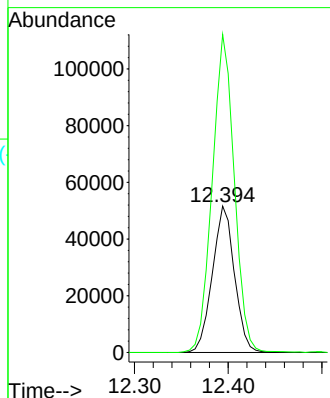
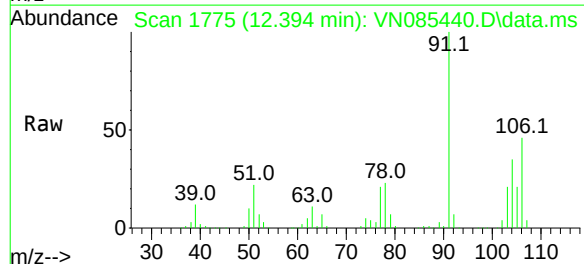
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 22.749 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

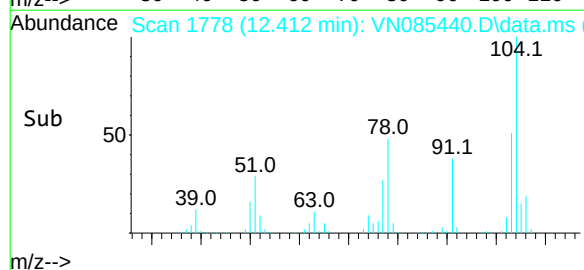
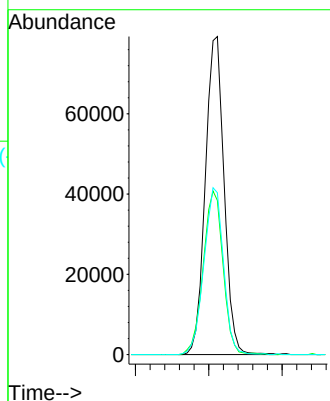
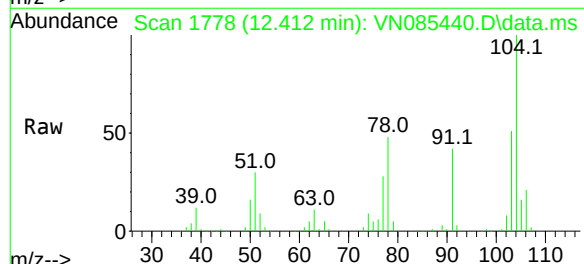
Tgt Ion:104 Resp: 140581

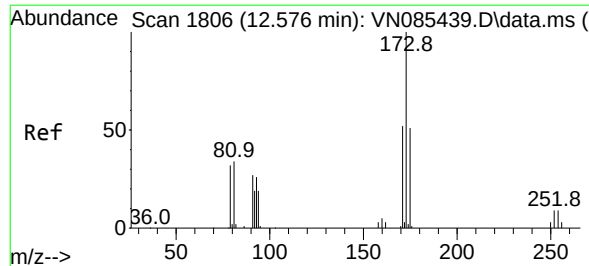
Ion Ratio Lower Upper

104 100

78 54.4 42.5 63.7

103 54.8 43.8 65.8





#71

Bromoform

Concen: 21.683 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

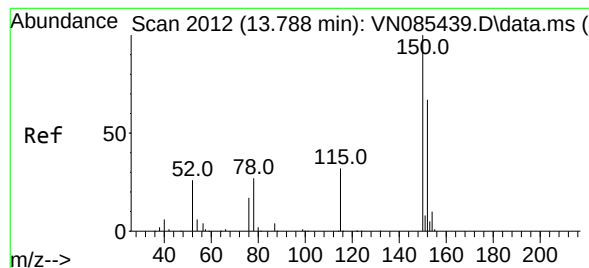
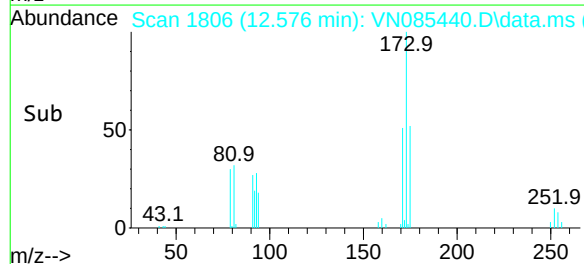
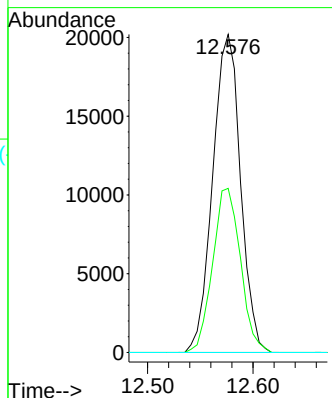
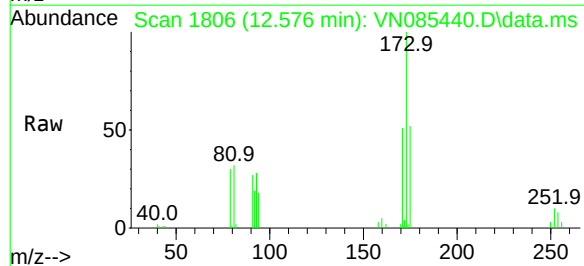
ClientSampleId :

VSTDICC020

Tgt Ion:	173	Resp:	36961
Ion Ratio	Lower	Upper	
173	100		
175	51.7	24.4	73.2
254	0.0	0.0	0.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

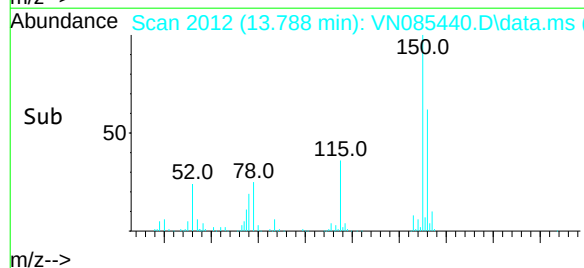
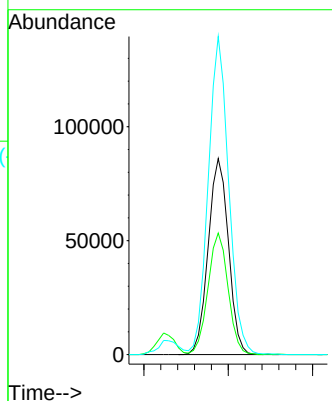
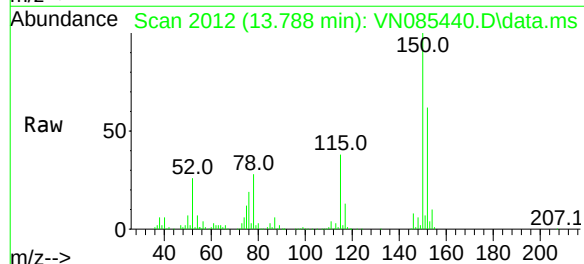
RT: 13.788 min Scan# 2012

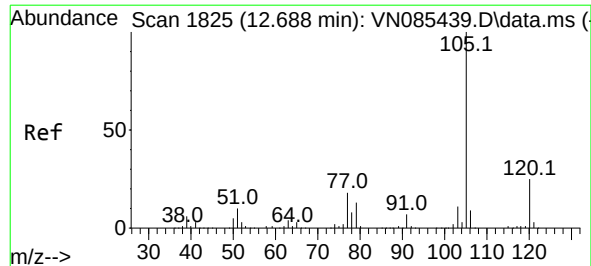
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:	152	Resp:	143526
Ion Ratio	Lower	Upper	
152	100		
115	61.4	31.1	93.3
150	163.9	0.0	343.6





#73

Isopropylbenzene

Concen: 21.819 ug/l

RT: 12.694 min Scan# 18

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 105 Resp: 211354

Ion Ratio Lower Upper

105 100

120 25.5 12.8 38.3

Instrument :

MSVOA_N

ClientSampleId :

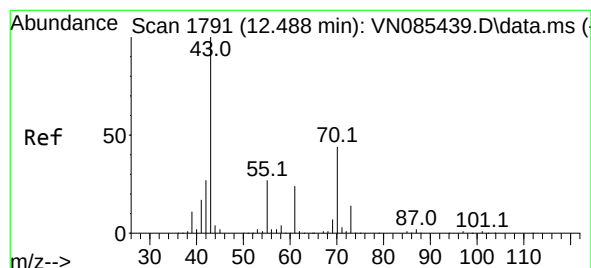
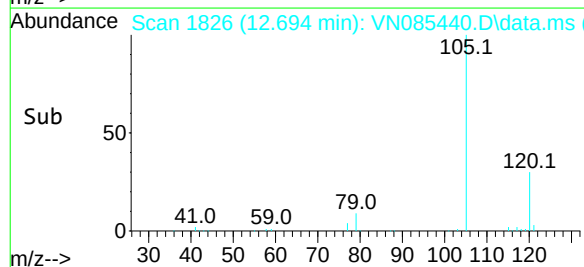
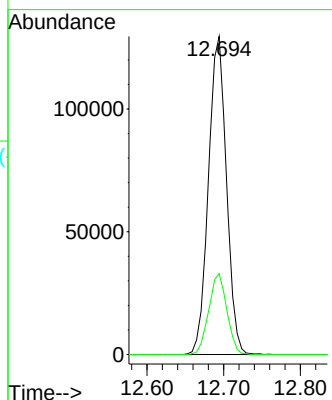
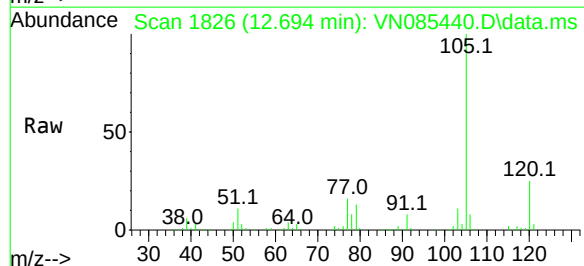
VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 21.656 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion: 43 Resp: 94292

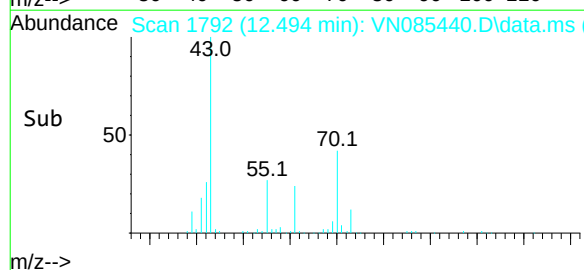
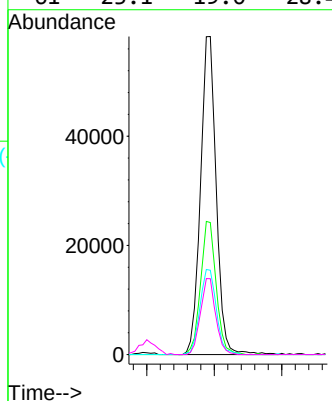
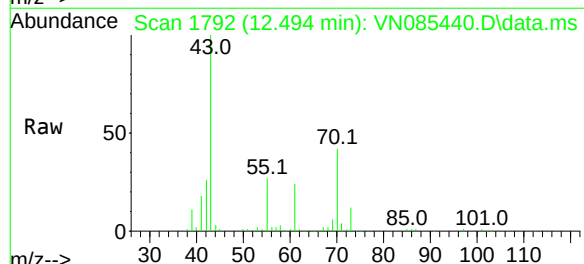
Ion Ratio Lower Upper

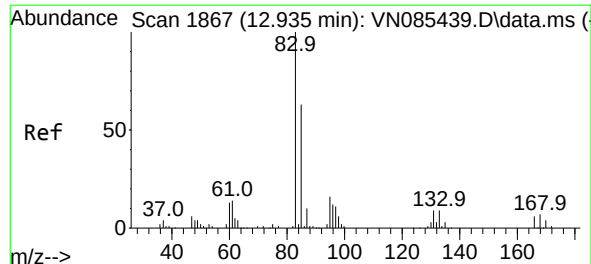
43 100

70 41.4 34.0 51.0

55 27.9 21.4 32.2

61 23.1 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 19.917 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

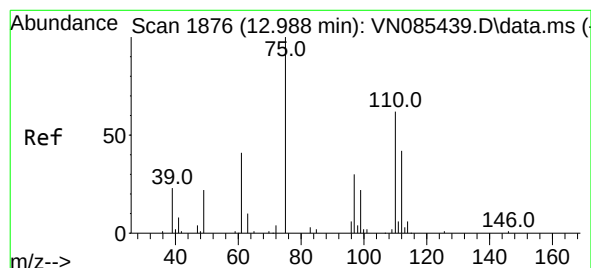
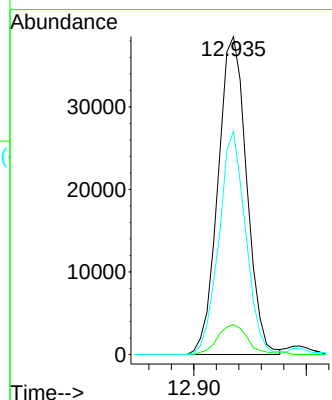
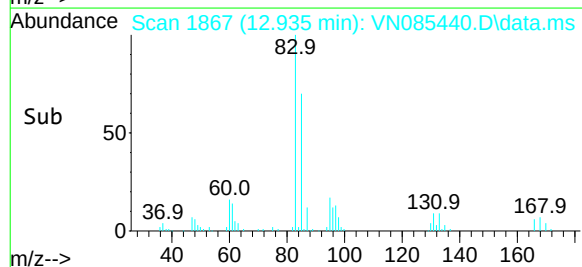
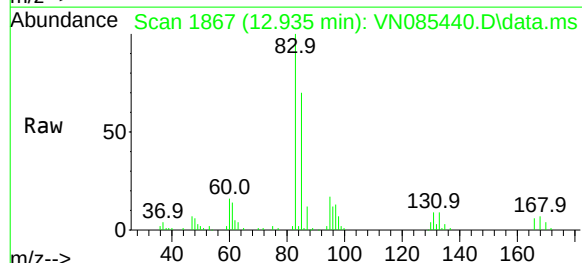
ClientSampleId :

VSTDIC020

Tgt Ion:	83	Resp:	68151
Ion Ratio	Lower	Upper	
83	100		
131	9.9	4.8	14.4
85	65.5	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#76

1,2,3-Trichloropropane

Concen: 22.036 ug/l m

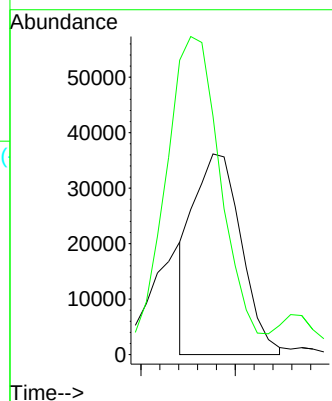
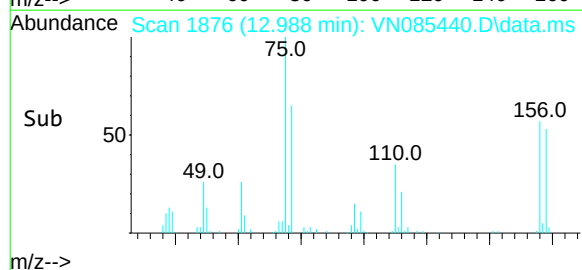
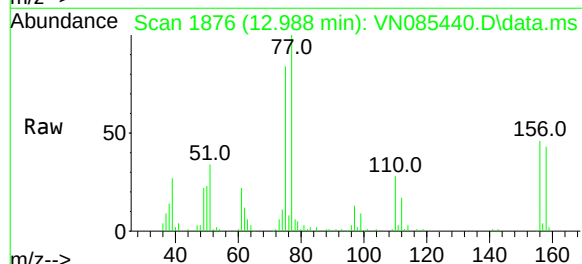
RT: 12.988 min Scan# 1876

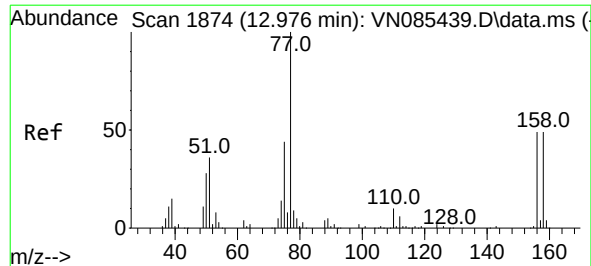
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:	75	Resp:	64180
Ion Ratio	Lower	Upper	
75	100		
77	186.8	109.7	329.2





#77

Bromobenzene

Concen: 20.556 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Tgt Ion:156 Resp: 52022

Ion Ratio Lower Upper

156 100

77 230.4 114.1 342.4

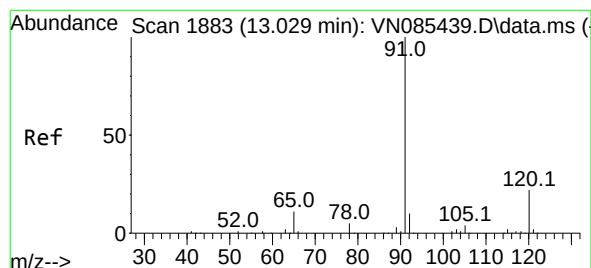
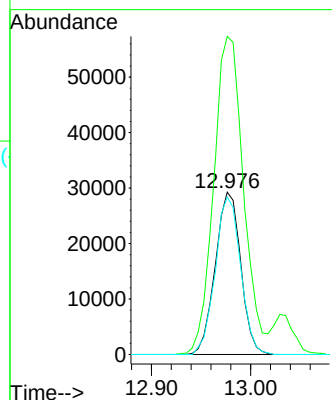
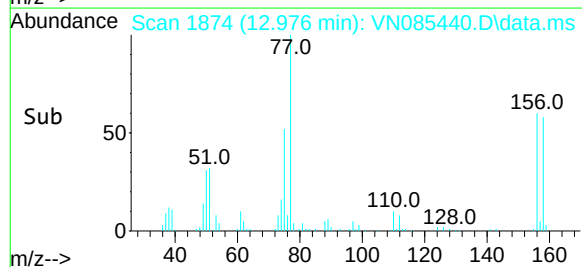
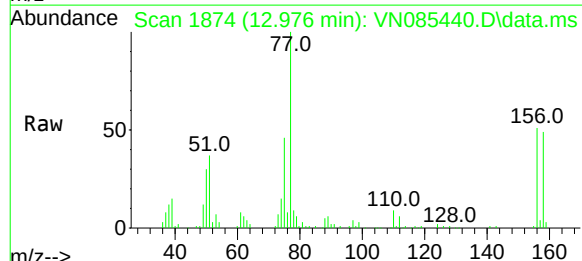
158 97.0 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

Concen: 22.028 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085440.D

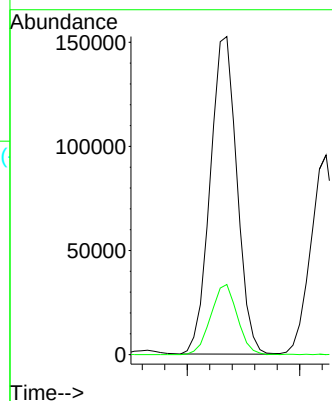
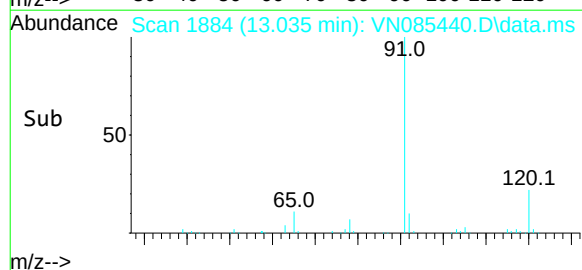
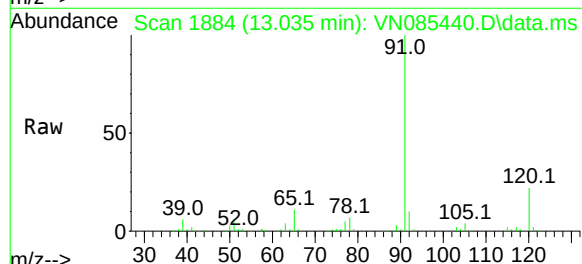
Acq: 14 Jan 2025 15:43

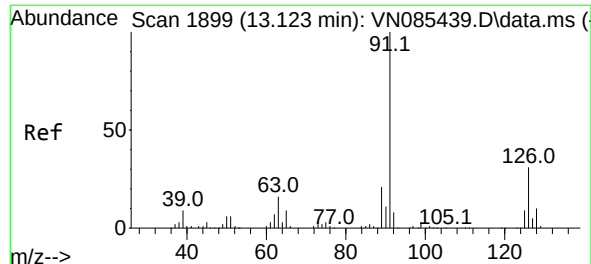
Tgt Ion: 91 Resp: 252610

Ion Ratio Lower Upper

91 100

120 21.8 10.9 32.6





#79

2-Chlorotoluene

Concen: 21.358 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion: 91 Resp: 158511

Ion Ratio Lower Upper

91 100

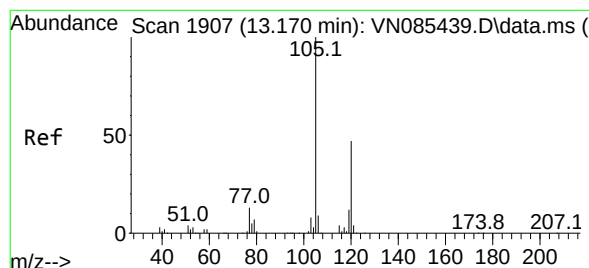
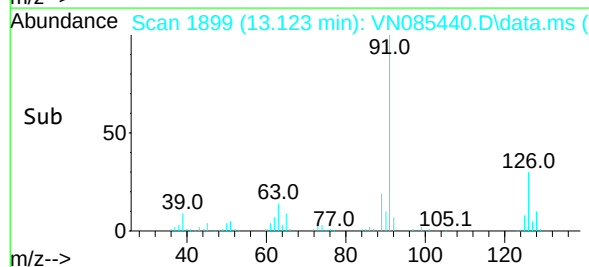
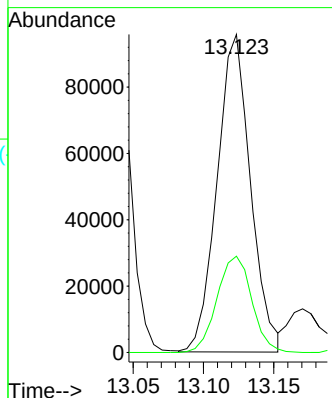
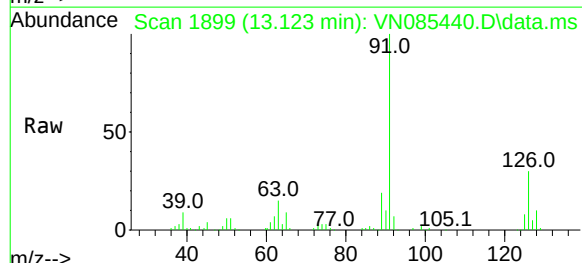
126 31.5 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 22.533 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085440.D

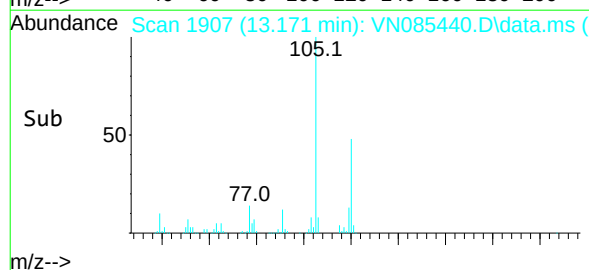
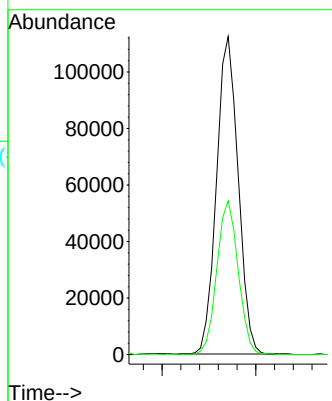
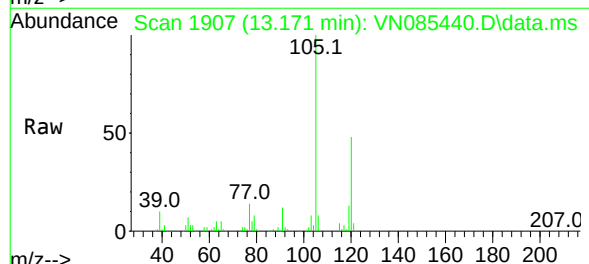
Acq: 14 Jan 2025 15:43

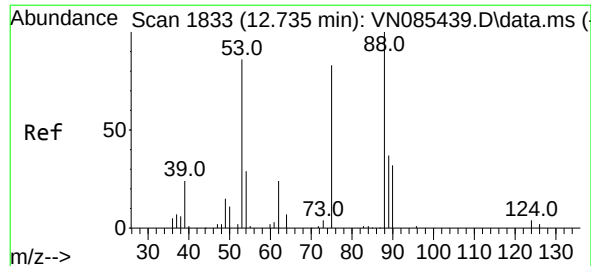
Tgt Ion:105 Resp: 180294

Ion Ratio Lower Upper

105 100

120 47.9 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 20.569 ug/l m

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion: 75 Resp: 22178

Ion Ratio Lower Upper

75 100

53 107.2 95.6 143.4

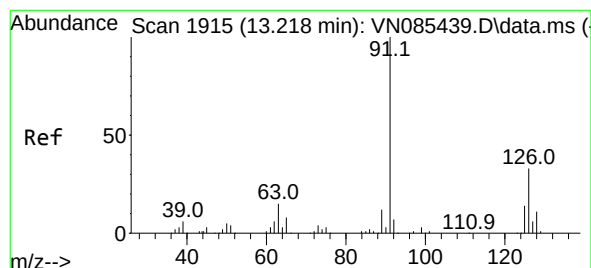
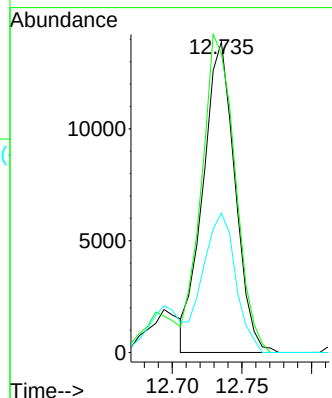
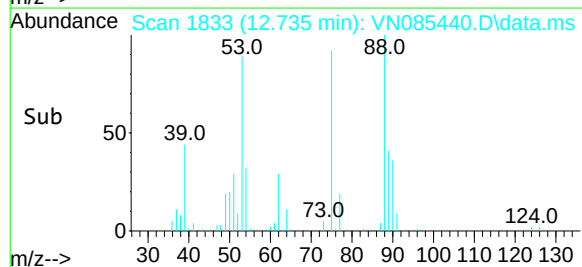
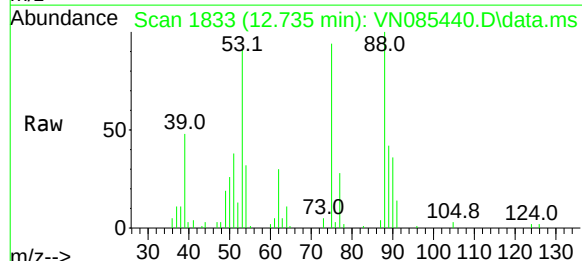
89 46.9 37.0 55.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#82

4-Chlorotoluene

Concen: 21.906 ug/l

RT: 13.218 min Scan# 1915

Delta R.T. 0.000 min

Lab File: VN085440.D

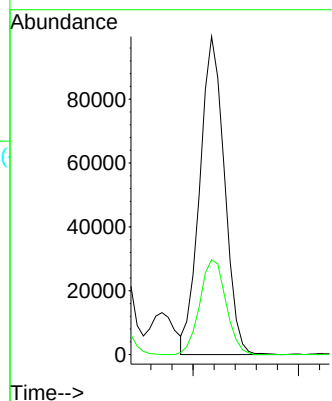
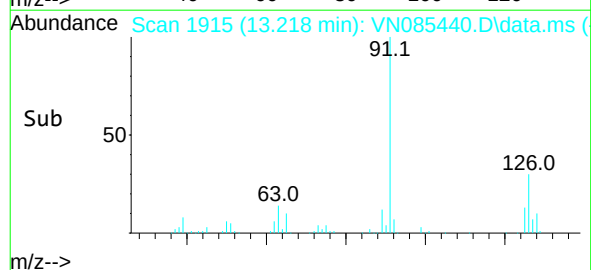
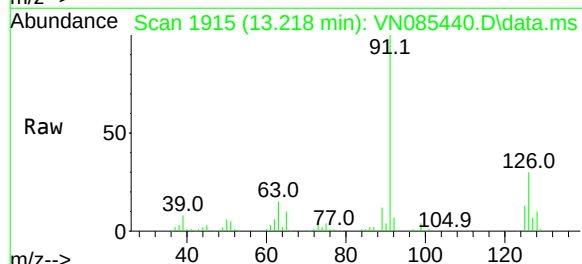
Acq: 14 Jan 2025 15:43

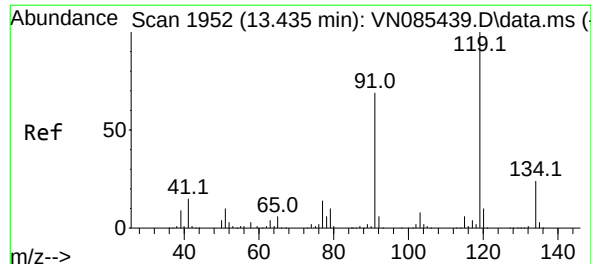
Tgt Ion: 91 Resp: 161880

Ion Ratio Lower Upper

91 100

126 31.6 15.9 47.7





#83

tert-Butylbenzene

Concen: 21.958 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion:119 Resp: 147541

Ion Ratio Lower Upper

119 100

91 69.5 35.1 105.3

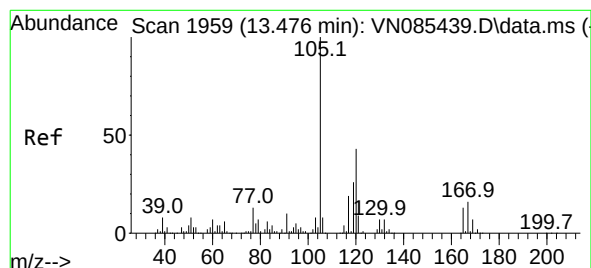
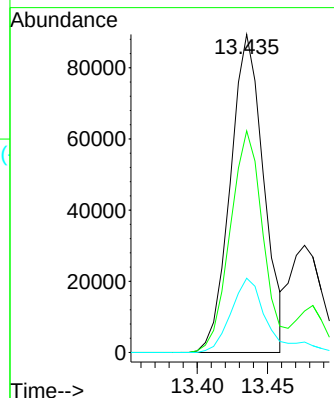
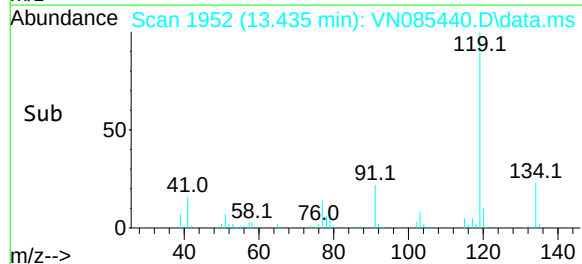
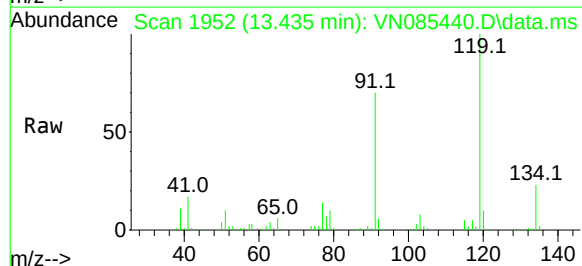
134 25.5 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 22.965 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085440.D

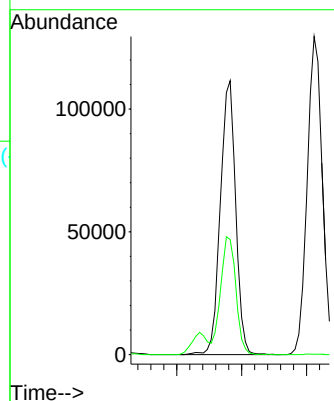
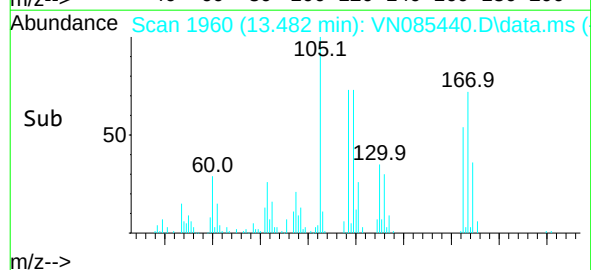
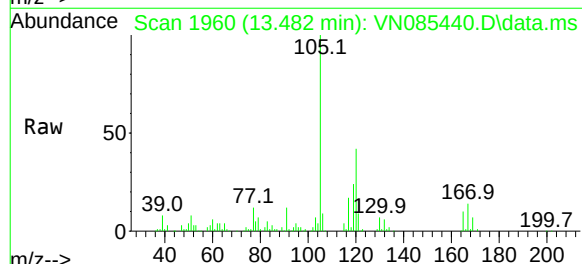
Acq: 14 Jan 2025 15:43

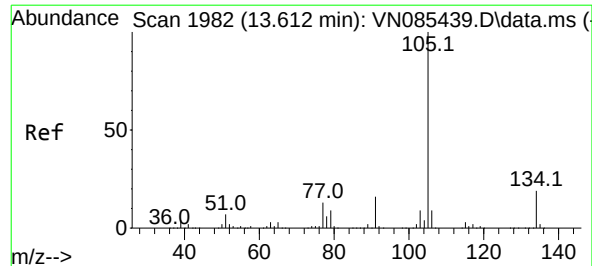
Tgt Ion:105 Resp: 183144

Ion Ratio Lower Upper

105 100

120 42.8 21.6 65.0





#85

sec-Butylbenzene

Concen: 22.457 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC020

Tgt Ion:105 Resp: 209133

Ion Ratio Lower Upper

105 100

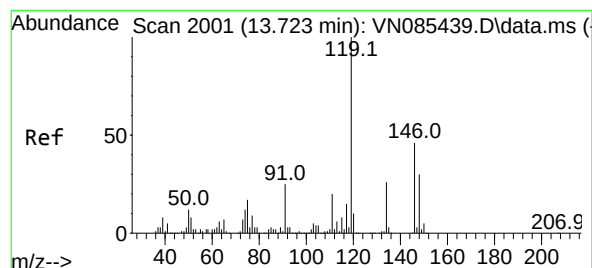
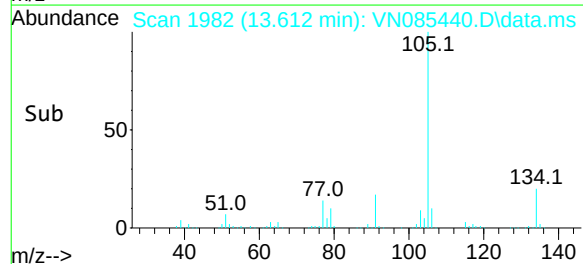
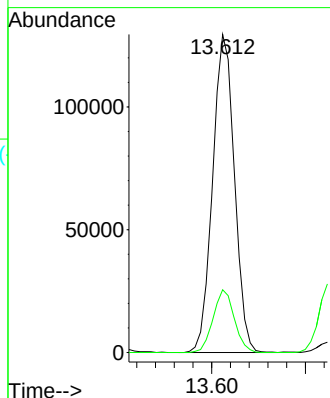
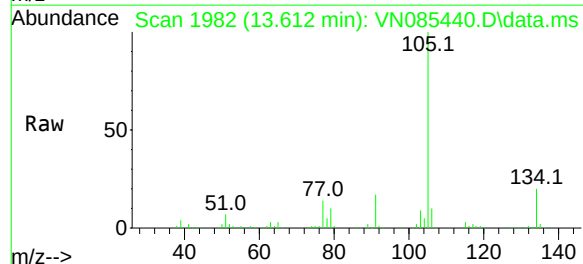
134 19.2 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 21.661 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

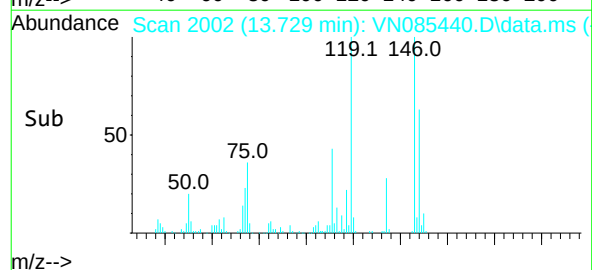
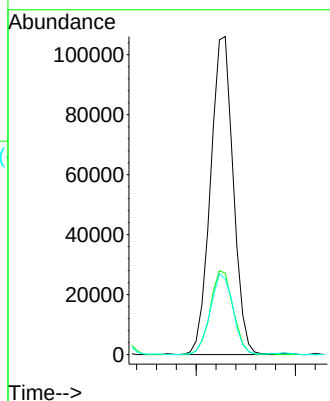
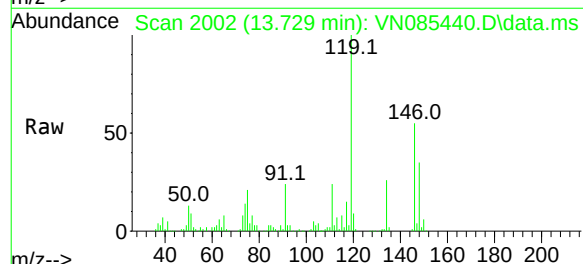
Tgt Ion:119 Resp: 168888

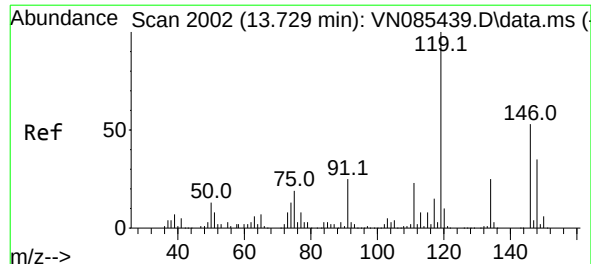
Ion Ratio Lower Upper

119 100

134 26.4 12.7 38.0

91 25.5 12.7 38.1





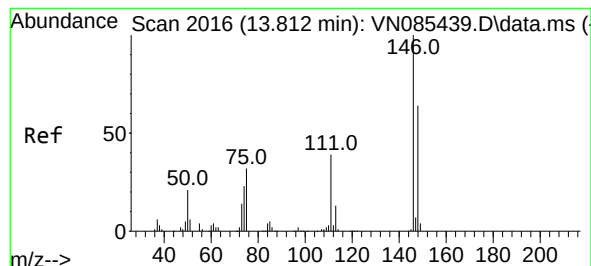
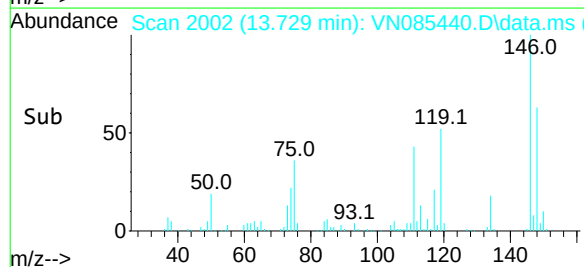
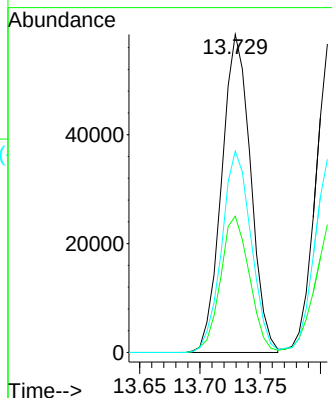
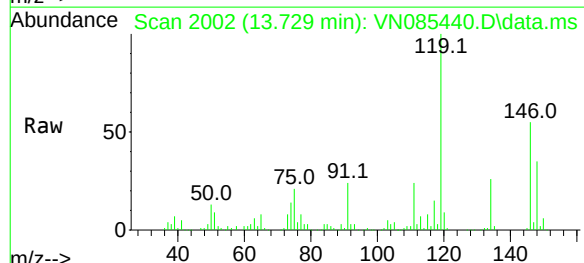
1,3-Dichlorobenzene
Concen: 20.952 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion:	146	Resp:	97652
Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.4	64.3
148	64.3	32.3	96.9

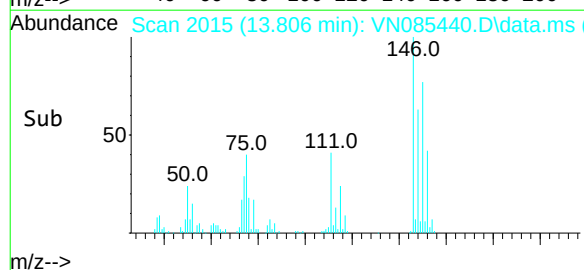
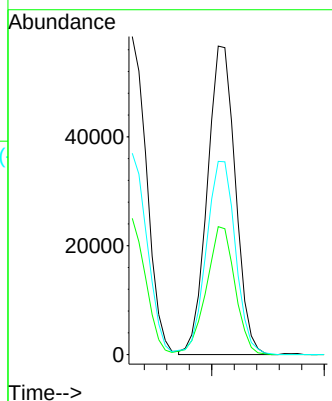
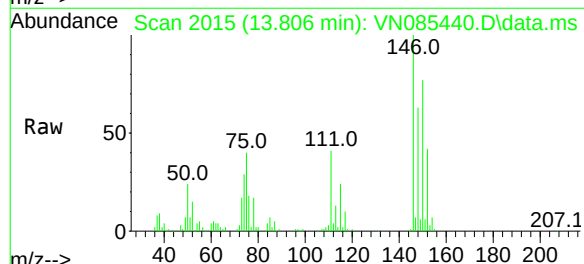
Manual Integrations
APPROVED

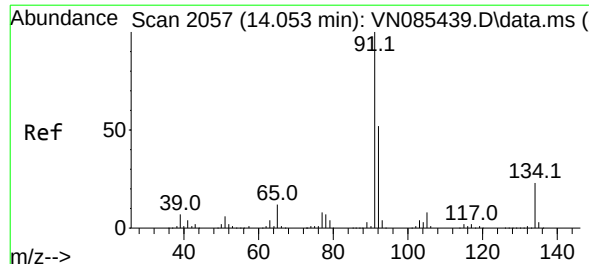
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



1,4-Dichlorobenzene
Concen: 20.351 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:	146	Resp:	98321
Ion	Ratio	Lower	Upper
146	100		
111	42.2	21.3	63.7
148	65.1	32.4	97.0





#89

n-Butylbenzene

Concen: 21.355 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

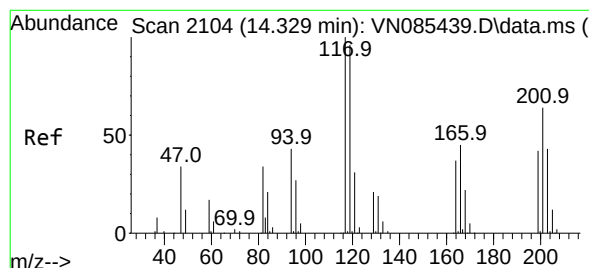
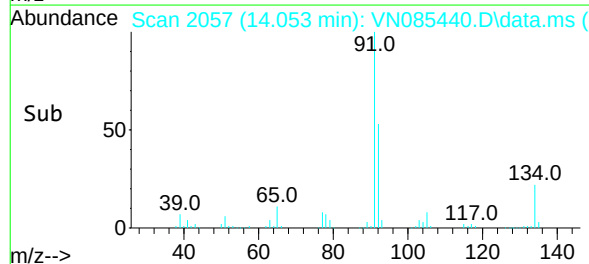
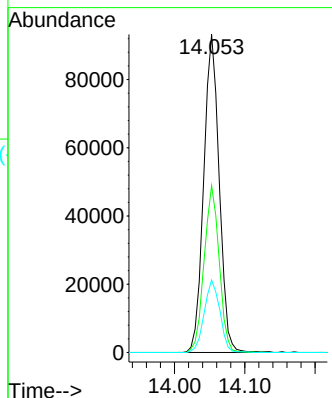
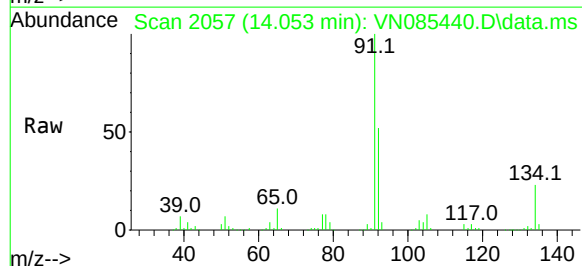
ClientSampleId :

VSTDIC020

Tgt Ion:	91	Resp:	142673
Ion Ratio	Lower	Upper	
91	100		
92	51.0	25.8	77.3
134	23.0	11.7	35.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#90

Hexachloroethane

Concen: 19.858 ug/l

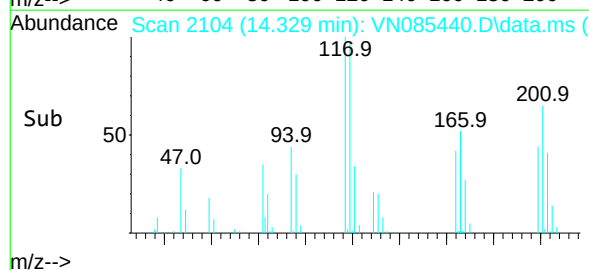
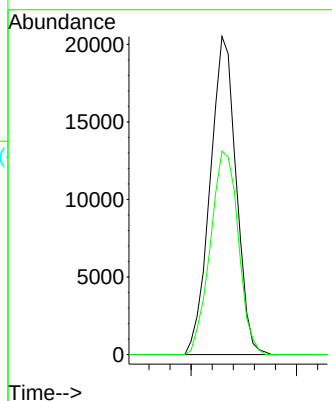
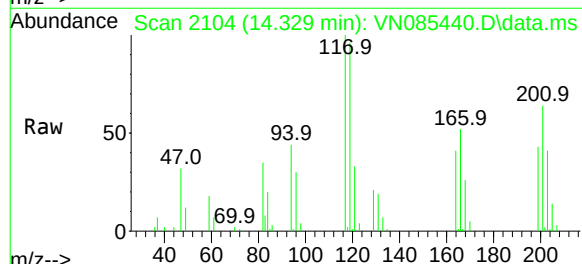
RT: 14.329 min Scan# 2104

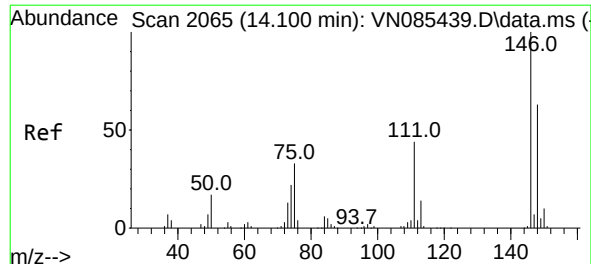
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:	117	Resp:	35205
Ion Ratio	Lower	Upper	
117	100		
201	68.8	33.7	101.0





#91

1,2-Dichlorobenzene

Concen: 20.425 ug/l

RT: 14.100 min Scan# 2065

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

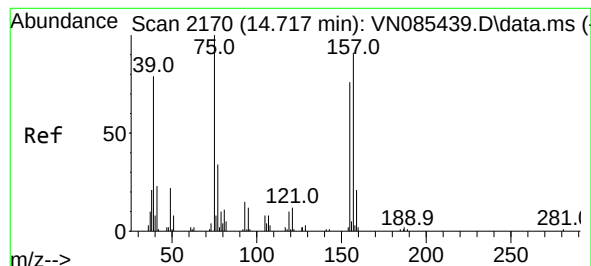
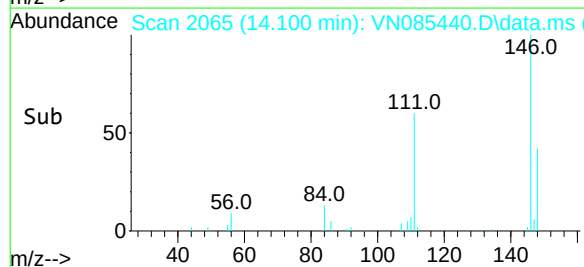
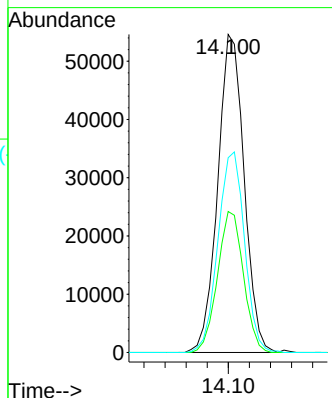
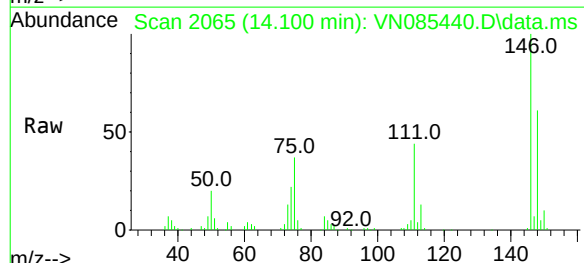
ClientSampleId :

VSTDIC020

Tgt Ion:	146	Resp:	94954
Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.7	65.1
148	63.5	31.4	94.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 20.580 ug/l

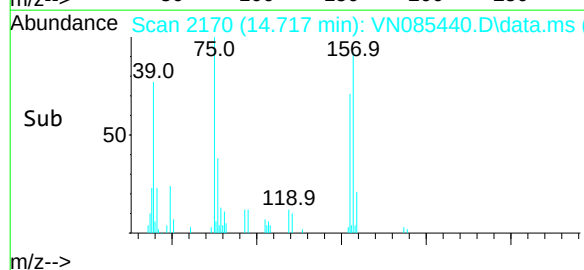
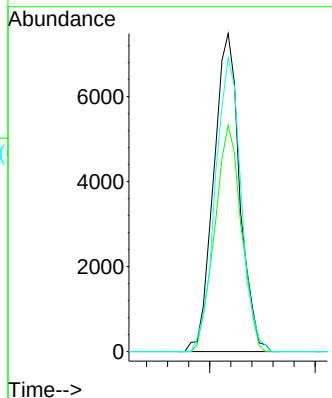
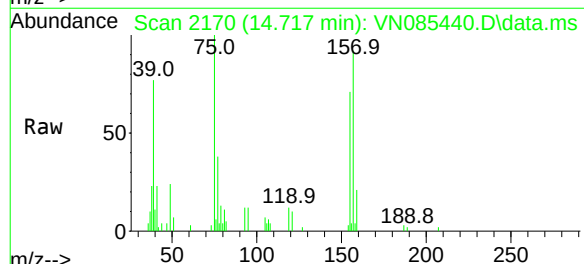
RT: 14.717 min Scan# 2170

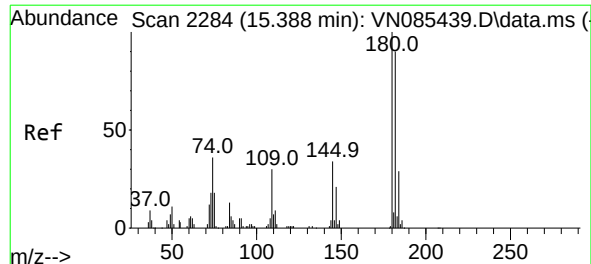
Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:	75	Resp:	12859
Ion	Ratio	Lower	Upper
75	100		
155	72.7	36.4	109.2
157	90.9	45.4	136.1





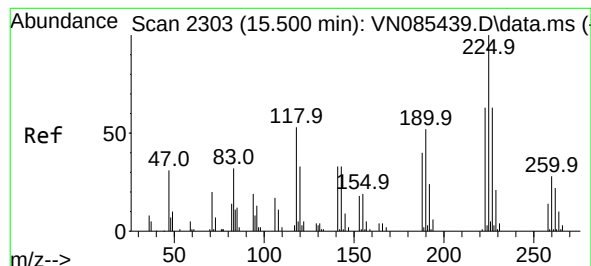
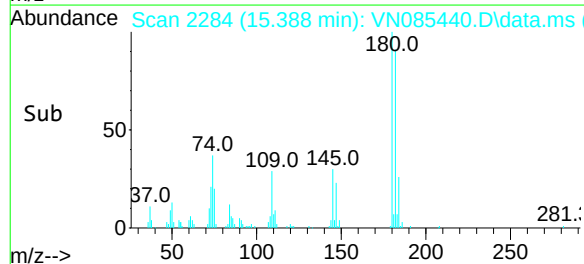
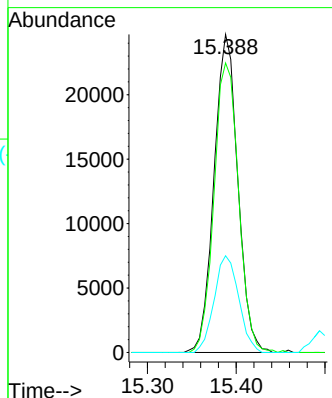
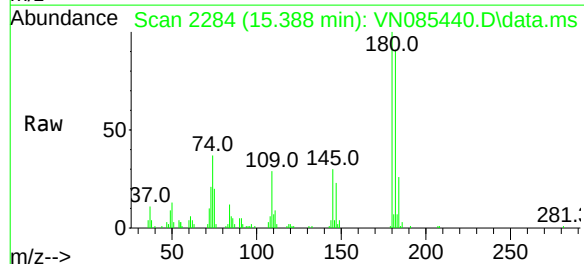
1,2,4-Trichlorobenzene
Concen: 21.233 ug/l
RT: 15.388 min Scan# 2284
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Tgt Ion:180 Resp: 45878
Ion Ratio Lower Upper
180 100
182 94.2 46.8 140.3
145 31.4 16.0 48.0

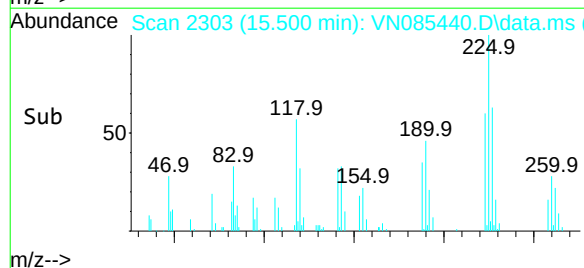
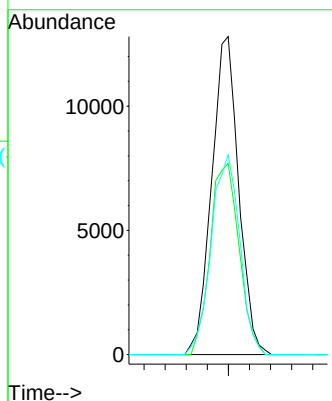
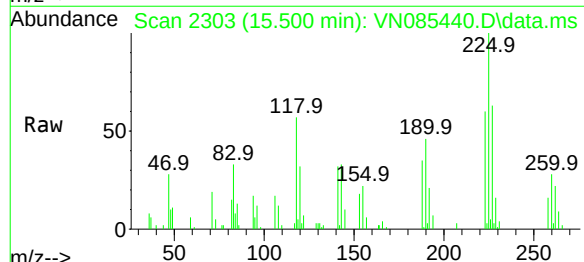
Manual Integrations
APPROVED

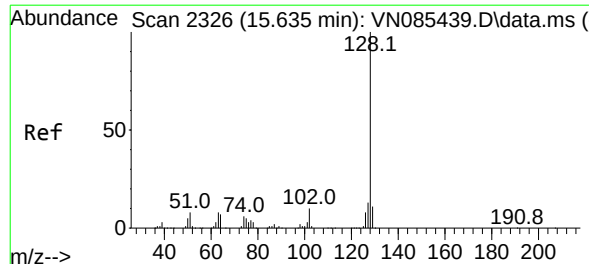
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Hexachlorobutadiene
Concen: 19.805 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN085440.D
Acq: 14 Jan 2025 15:43

Tgt Ion:225 Resp: 22719
Ion Ratio Lower Upper
225 100
223 64.3 30.7 92.1
227 66.3 30.9 92.5





#95

Naphthalene

Concen: 20.906 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Instrument :

MSVOA_N

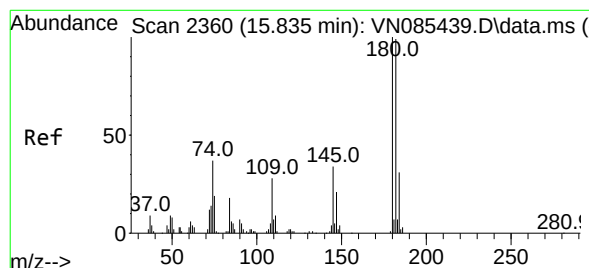
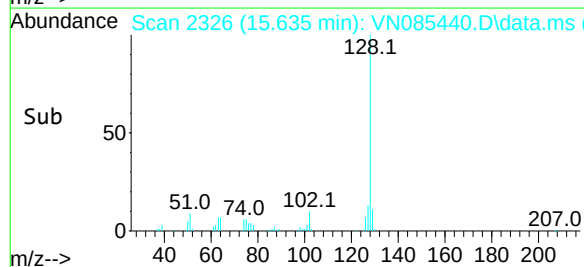
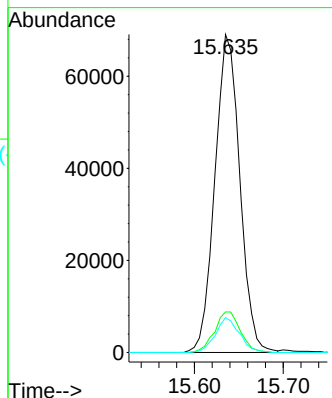
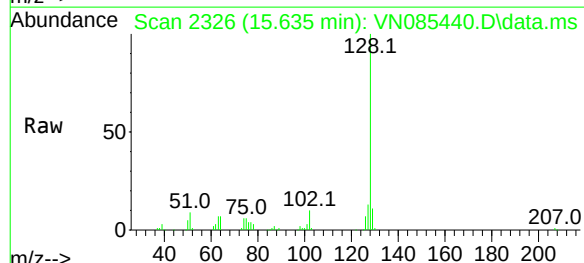
ClientSampleId :

VSTDIC020

Tgt Ion:	128	Resp:	134793
Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.6	16.0
129	10.6	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 20.797 ug/l

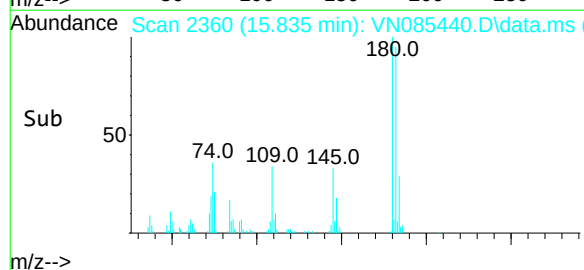
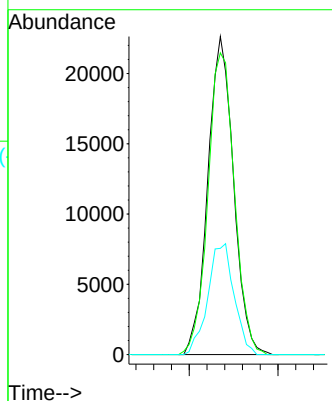
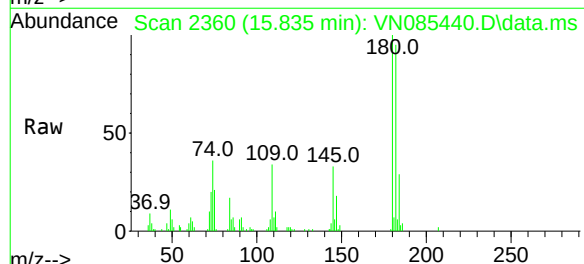
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085440.D

Acq: 14 Jan 2025 15:43

Tgt Ion:	180	Resp:	45468
Ion	Ratio	Lower	Upper
180	100		
182	97.9	47.4	142.2
145	35.7	16.9	50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085441.D
 Acq On : 14 Jan 2025 16:07
 Operator : JC\MD
 Sample : VSTDICC010
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC010

Quant Time: Jan 15 01:44:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John Carlone 01/15/2025
 Supervised By :Mahesh Dadoda 01/15/2025

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	195889	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	340403	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	294508	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	132934	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.571	65	29856	9.442	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	18.880%#
35) Dibromofluoromethane	8.165	113	21110	8.939	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	17.880%#
50) Toluene-d8	10.565	98	73223	8.727	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	17.460%#
62) 4-Bromofluorobenzene	12.847	95	24327	8.476	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	16.960%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	26124	9.850	ug/l	96
3) Chloromethane	2.359	50	27143	9.452	ug/l	99
4) Vinyl Chloride	2.512	62	27862	9.653	ug/l	100
5) Bromomethane	2.965	94	17139	9.830	ug/l	87
6) Chloroethane	3.130	64	16791	9.175	ug/l	96
7) Trichlorofluoromethane	3.501	101	40755	9.731	ug/l	98
8) Diethyl Ether	3.953	74	12415	8.581	ug/l	94
9) 1,1,2-Trichlorotrifluo...	4.371	101	22982	9.742	ug/l	98
10) Methyl Iodide	4.589	142	25085	9.286	ug/l	99
11) Tert butyl alcohol	5.512	59	17962	49.608	ug/l	97
12) 1,1-Dichloroethene	4.342	96	20615	9.806	ug/l	99
13) Acrolein	4.177	56	25568	51.729	ug/l	99
14) Allyl chloride	5.018	41	32240	9.451	ug/l	97
15) Acrylonitrile	5.712	53	53959	46.918	ug/l	98
16) Acetone	4.424	43	48475	47.446	ug/l	98
17) Carbon Disulfide	4.712	76	60201	9.300	ug/l #	94
18) Methyl Acetate	5.030	43	30500	9.817	ug/l	98
19) Methyl tert-butyl Ether	5.789	73	65207	9.552	ug/l	91
20) Methylene Chloride	5.277	84	23723	9.379	ug/l	96
21) trans-1,2-Dichloroethene	5.783	96	21127	9.403	ug/l	97
22) Diisopropyl ether	6.671	45	71857	9.490	ug/l	97
23) Vinyl Acetate	6.600	43	250575	47.125	ug/l	98
24) 1,1-Dichloroethane	6.565	63	43099	9.335	ug/l	95
25) 2-Butanone	7.477	43	71191	47.350	ug/l	99
26) 2,2-Dichloropropane	7.483	77	36105	9.672	ug/l	99
27) cis-1,2-Dichloroethene	7.489	96	25049	9.466	ug/l	97
28) Bromochloromethane	7.806	49	19037	8.863	ug/l	97
29) Tetrahydrofuran	7.836	42	45641	47.881	ug/l	98
30) Chloroform	7.965	83	45792	9.596	ug/l	100
31) Cyclohexane	8.253	56	40211	10.020	ug/l #	93
32) 1,1,1-Trichloroethane	8.165	97	39170	9.358	ug/l	99
36) 1,1-Dichloropropene	8.371	75	30015	9.056	ug/l	97
37) Ethyl Acetate	7.559	43	30760	9.195	ug/l	97
38) Carbon Tetrachloride	8.359	117	36015	9.492	ug/l	94
39) Methylcyclohexane	9.594	83	27721	8.900	ug/l	95
40) Benzene	8.600	78	93680	9.407	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085441.D
 Acq On : 14 Jan 2025 16:07
 Operator : JC\MD
 Sample : VSTDIC010
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC010

Quant Time: Jan 15 01:44:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John Carlone 01/15/2025
 Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	16859	9.686	ug/l	96
42) 1,2-Dichloroethane	8.665	62	35569	9.483	ug/l	99
43) Isopropyl Acetate	8.683	43	48926	9.127	ug/l	99
44) Trichloroethene	9.347	130	21113	9.108	ug/l	95
45) 1,2-Dichloropropane	9.618	63	22747	8.942	ug/l	97
46) Dibromomethane	9.706	93	17260	9.404	ug/l	99
47) Bromodichloromethane	9.883	83	35020	9.365	ug/l	98
48) Methyl methacrylate	9.677	41	21873	9.067	ug/l	97
49) 1,4-Dioxane	9.694	88	7734	190.382	ug/l	98
51) 4-Methyl-2-Pentanone	10.441	43	146990	47.254	ug/l	98
52) Toluene	10.630	92	54976	9.527	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	32780	9.276	ug/l	96
54) cis-1,3-Dichloropropene	10.312	75	35904	9.512	ug/l	98
55) 1,1,2-Trichloroethane	11.012	97	21060	9.222	ug/l	98
56) Ethyl methacrylate	10.871	69	28454	9.042	ug/l	95
57) 1,3-Dichloropropane	11.159	76	37768	9.512	ug/l	98
58) 2-Chloroethyl Vinyl ether	10.159	63	63110	43.550	ug/l	98
59) 2-Hexanone	11.194	43	101318	46.291	ug/l	98
60) Dibromochloromethane	11.353	129	25029	9.079	ug/l	98
61) 1,2-Dibromoethane	11.465	107	21055	9.263	ug/l	100
64) Tetrachloroethene	11.100	164	19934	9.928	ug/l	97
65) Chlorobenzene	11.888	112	61680	9.560	ug/l	93
66) 1,1,1,2-Tetrachloroethane	11.959	131	21853	9.229	ug/l	98
67) Ethyl Benzene	11.959	91	99248	9.445	ug/l	97
68) m/p-Xylenes	12.065	106	72431	18.650	ug/l	99
69) o-Xylene	12.394	106	34382	9.264	ug/l	99
70) Styrene	12.406	104	56285	9.163	ug/l	98
71) Bromoform	12.576	173	16071	9.485	ug/l #	98
73) Isopropylbenzene	12.694	105	87003	9.697	ug/l	99
74) N-ethyl acetate	12.494	43	37343	9.260	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.935	83	30770	9.709	ug/l	99
76) 1,2,3-Trichloropropane	12.994	75	25443m	9.432	ug/l	
77) Bromobenzene	12.976	156	22784	9.720	ug/l	97
78) n-propylbenzene	13.035	91	102262	9.628	ug/l	98
79) 2-Chlorotoluene	13.123	91	68346	9.943	ug/l	100
80) 1,3,5-Trimethylbenzene	13.171	105	71656	9.669	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	9236	9.248	ug/l	100
82) 4-Chlorotoluene	13.218	91	66773	9.756	ug/l	97
83) tert-Butylbenzene	13.435	119	59455	9.553	ug/l	98
84) 1,2,4-Trimethylbenzene	13.476	105	72046	9.754	ug/l	99
85) sec-Butylbenzene	13.612	105	83662	9.699	ug/l	99
86) p-Isopropyltoluene	13.729	119	67556	9.674	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	41843	9.693	ug/l	99
88) 1,4-Dichlorobenzene	13.812	146	42728	9.549	ug/l	99
89) n-Butylbenzene	14.053	91	57632	9.314	ug/l	97
90) Hexachloroethane	14.329	117	15261	9.294	ug/l	97
91) 1,2-Dichlorobenzene	14.106	146	40726	9.458	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	5639	9.744	ug/l	95
93) 1,2,4-Trichlorobenzene	15.388	180	18720	9.354	ug/l	99
94) Hexachlorobutadiene	15.500	225	10491	9.874	ug/l	98
95) Naphthalene	15.635	128	52054	8.717	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	19450	9.605	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085441.D
Acq On : 14 Jan 2025 16:07
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:44:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

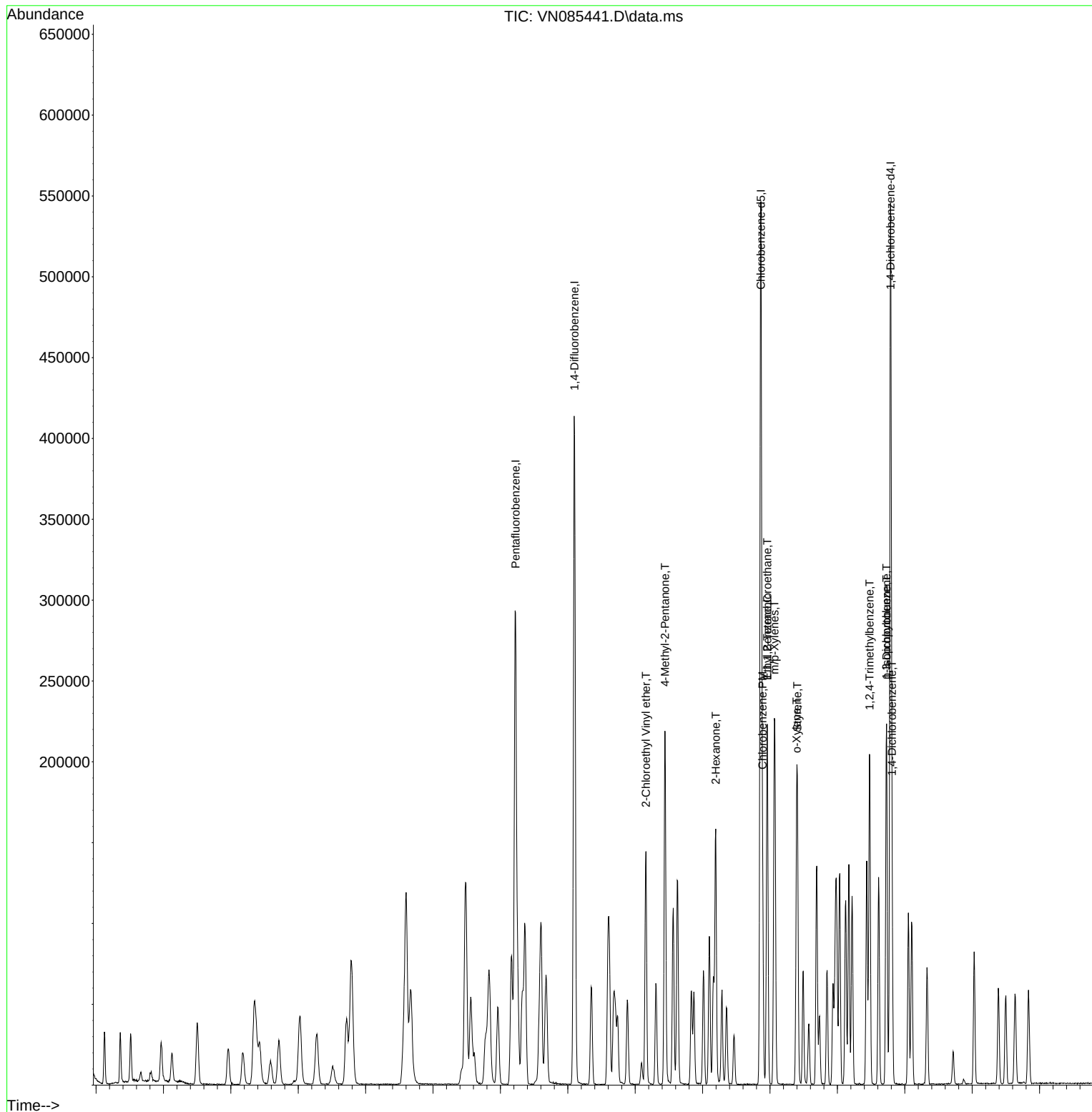
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Acq On : 14 Jan 2025 16:07
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

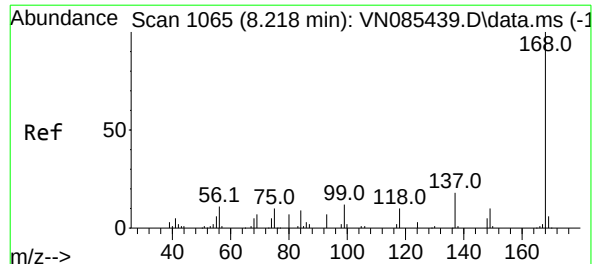
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Quant Time: Jan 15 01:44:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025





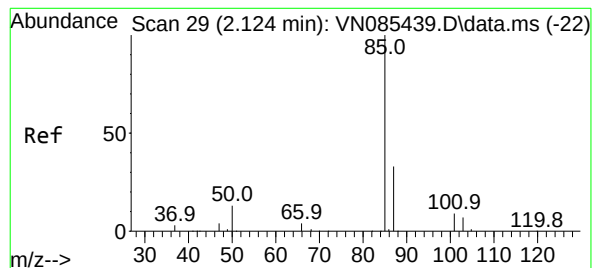
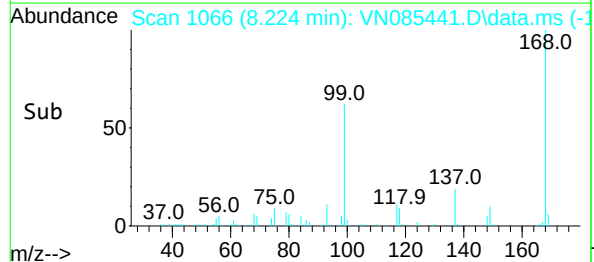
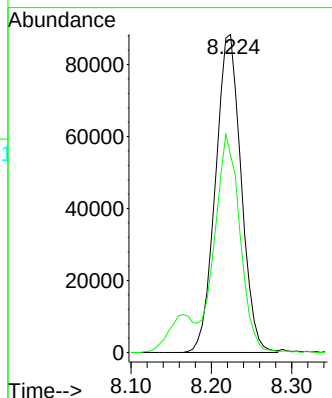
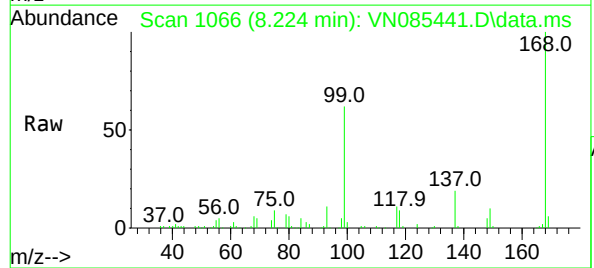
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Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC010

Tgt Ion: 168 Resp: 195889
Ion Ratio Lower Upper
168 100
99 61.7 53.6 80.4

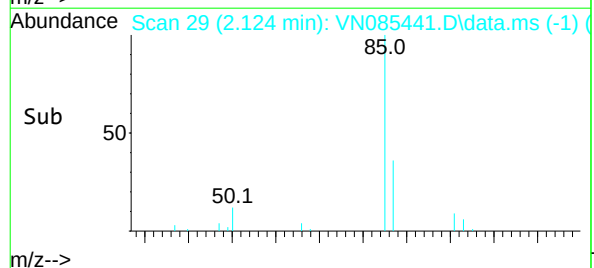
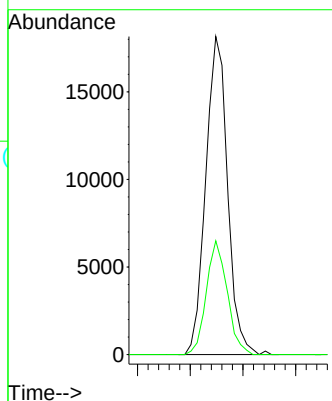
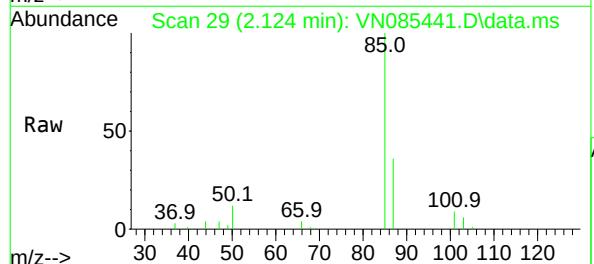
Manual Integrations
APPROVED

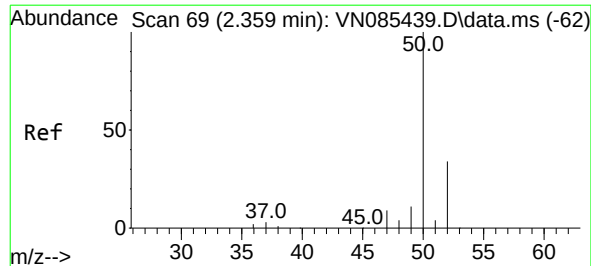
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#2
Dichlorodifluoromethane
Concen: 9.850 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 85 Resp: 26124
Ion Ratio Lower Upper
85 100
87 35.8 16.7 50.1





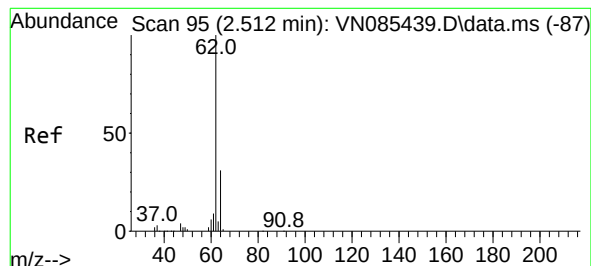
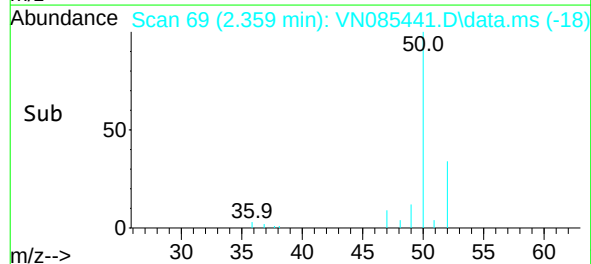
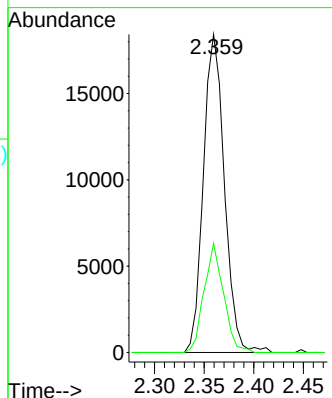
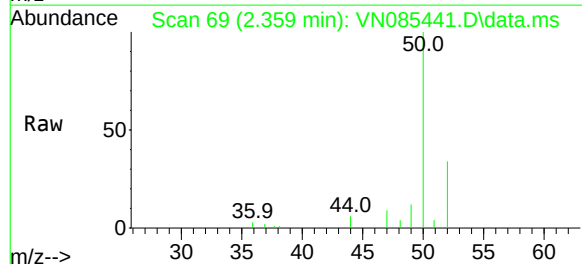
#3
Chloromethane
Concen: 9.452 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Tgt Ion: 50 Resp: 27143
Ion Ratio Lower Upper
50 100
52 34.3 27.0 40.6

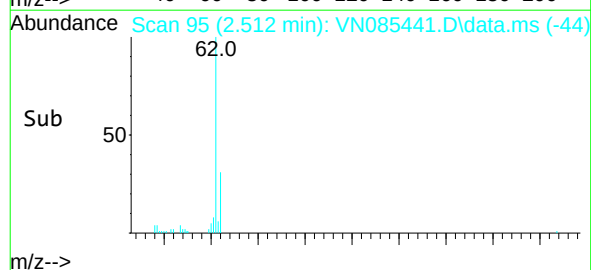
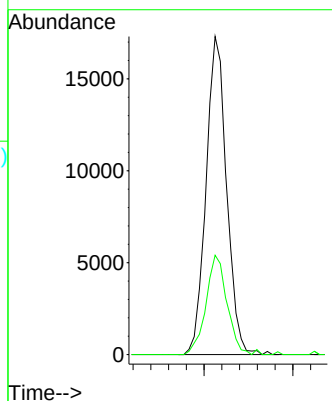
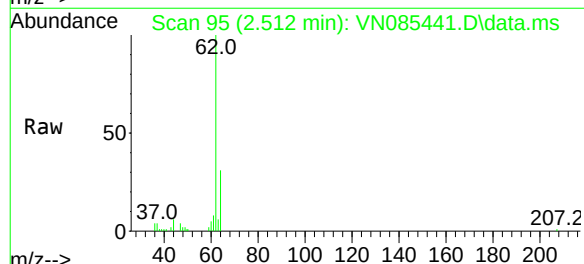
Manual Integrations
APPROVED

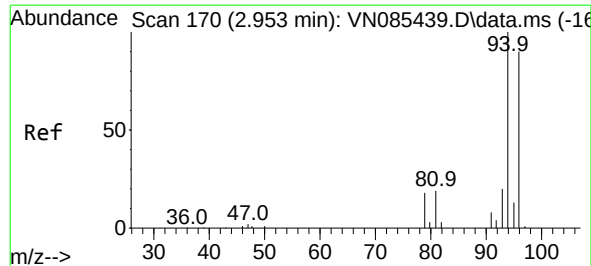
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#4
Vinyl Chloride
Concen: 9.653 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 62 Resp: 27862
Ion Ratio Lower Upper
62 100
64 31.2 24.8 37.2





#5

Bromomethane

Concen: 9.830 ug/l

RT: 2.965 min Scan# 171

Delta R.T. 0.012 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 94 Resp: 17139

Ion Ratio Lower Upper

94 100

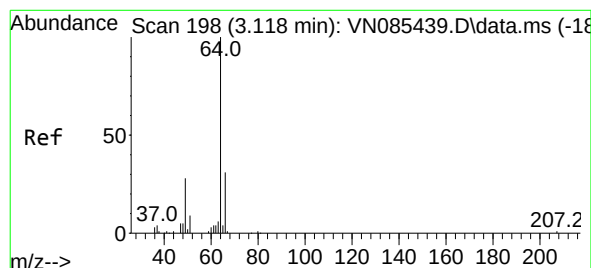
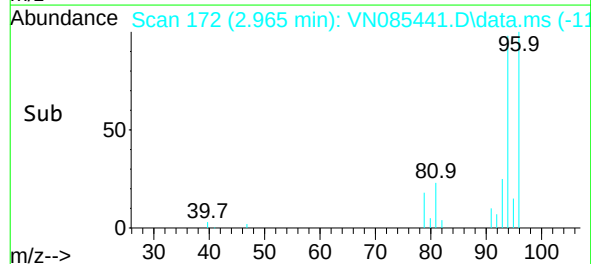
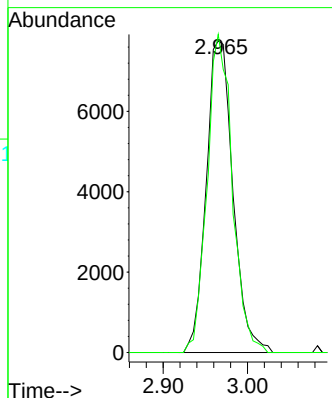
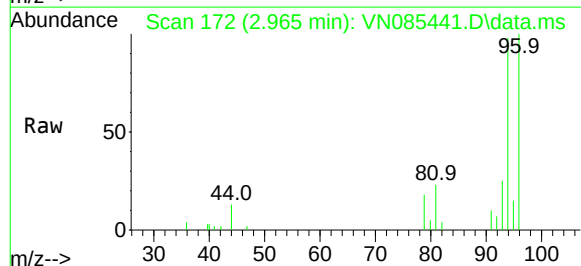
96 102.1 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 9.175 ug/l

RT: 3.130 min Scan# 200

Delta R.T. 0.012 min

Lab File: VN085441.D

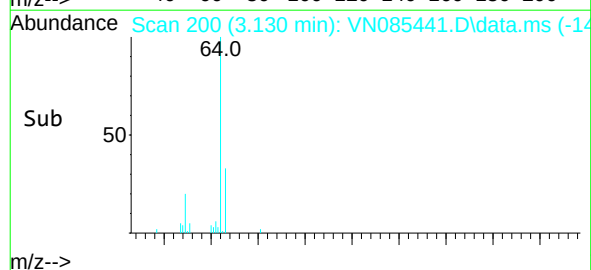
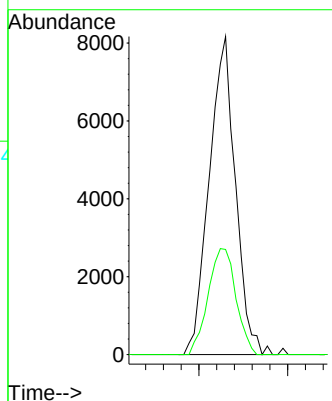
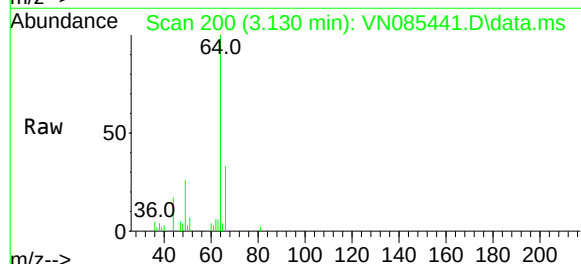
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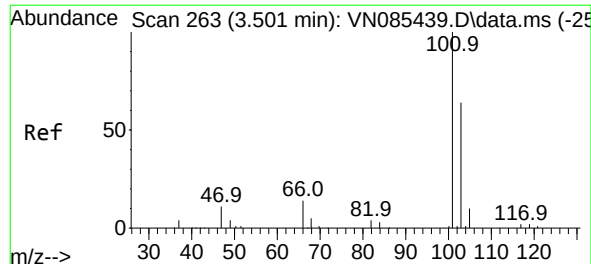
Tgt Ion: 64 Resp: 16791

Ion Ratio Lower Upper

64 100

66 33.1 24.6 36.8





#7

Trichlorofluoromethane

Concen: 9.731 ug/l

RT: 3.501 min Scan# 263

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion:101 Resp: 40755

Ion Ratio Lower Upper

101 100

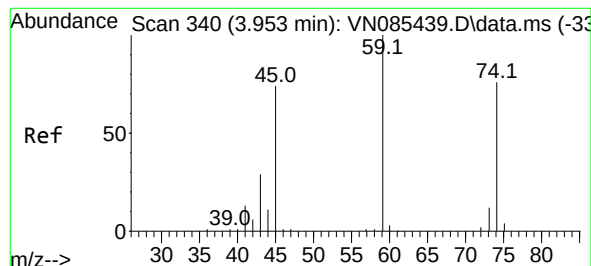
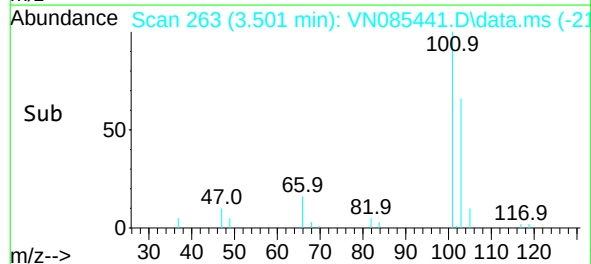
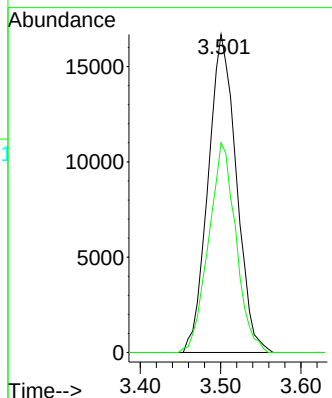
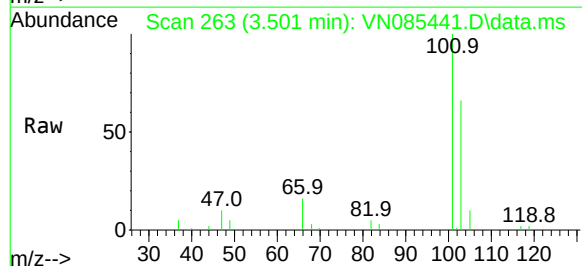
103 65.9 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 8.581 ug/l

RT: 3.953 min Scan# 340

Delta R.T. 0.000 min

Lab File: VN085441.D

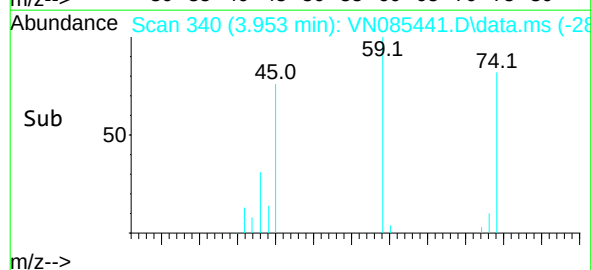
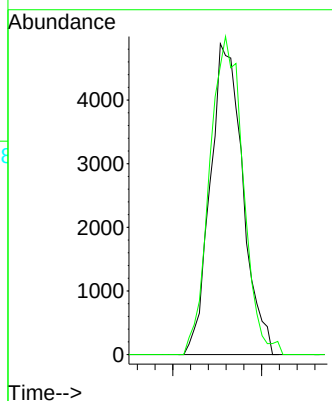
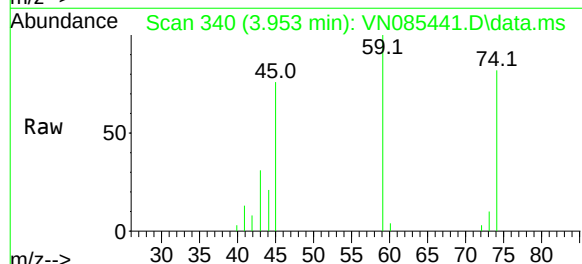
Acq: 14 Jan 2025 16:07

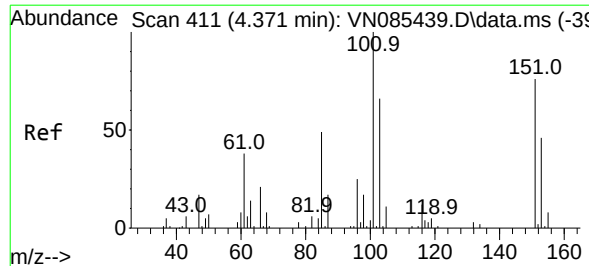
Tgt Ion: 74 Resp: 12415

Ion Ratio Lower Upper

74 100

45 105.3 49.7 149.1





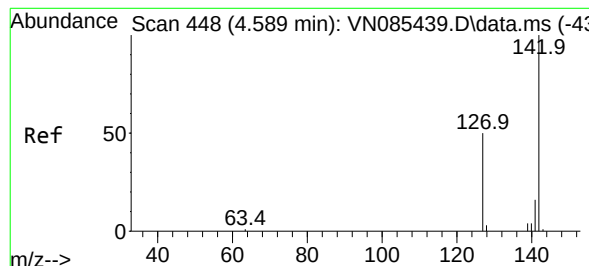
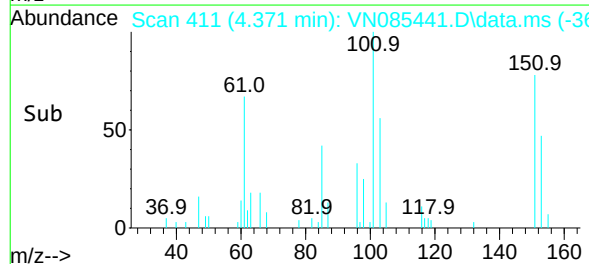
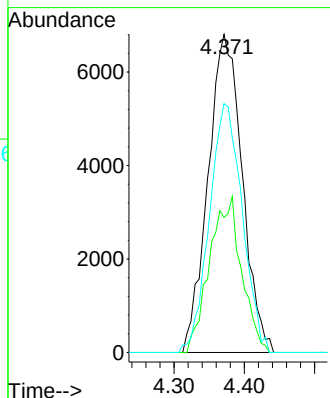
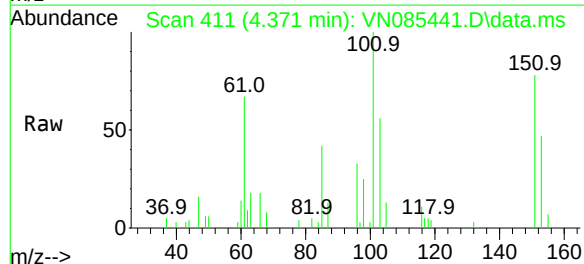
#9
1,1,2-Trichlorotrifluoroethane
Concen: 9.742 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC010

Tgt Ion:101 Resp: 22982
Ion Ratio Lower Upper
101 100
85 45.8 37.8 56.8
151 75.2 58.8 88.2

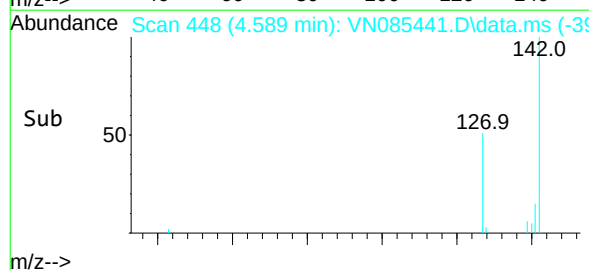
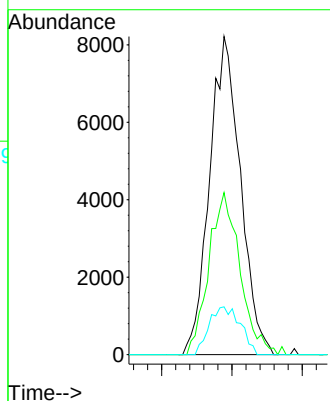
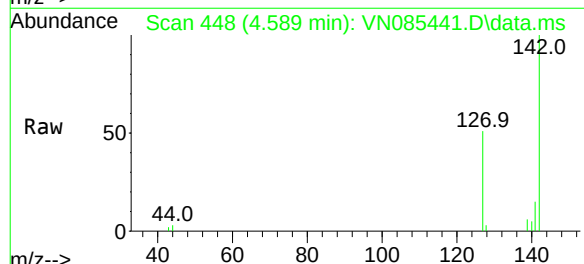
Manual Integrations
APPROVED

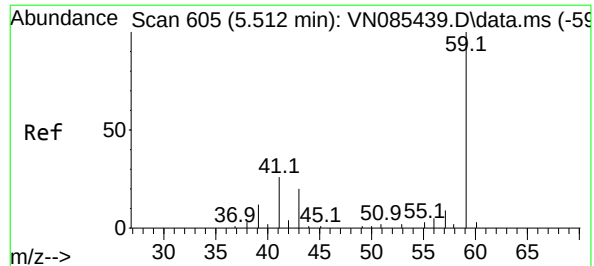
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#10
Methyl Iodide
Concen: 9.286 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:142 Resp: 25085
Ion Ratio Lower Upper
142 100
127 50.9 40.3 60.5
141 15.0 12.8 19.2





#11

Tert butyl alcohol

Concen: 49.608 ug/l

RT: 5.512 min Scan# 605

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 59 Resp: 17962

Ion Ratio Lower Upper

59 100

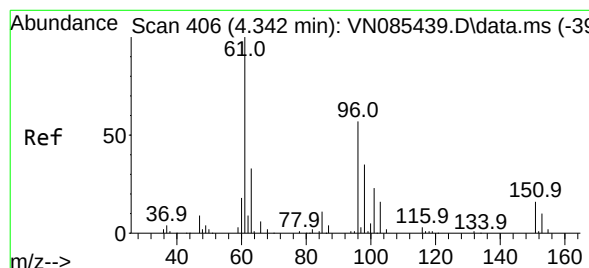
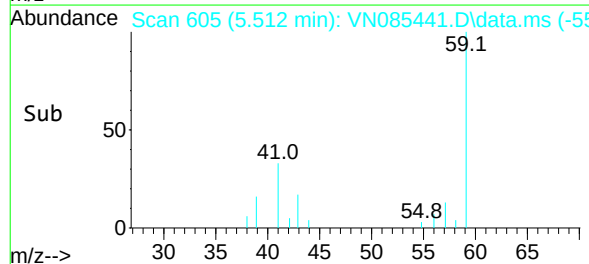
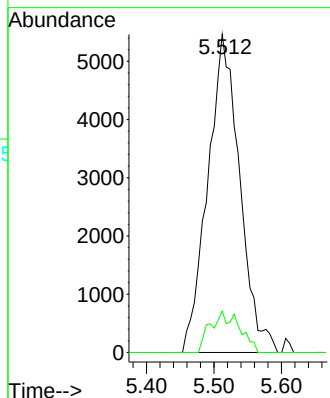
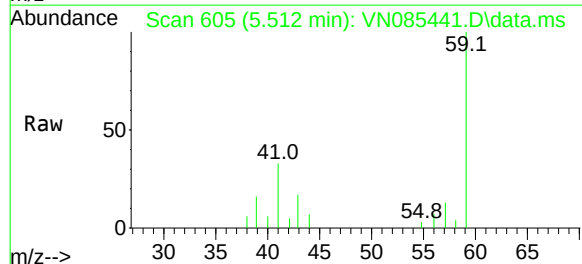
57 11.9 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 9.806 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

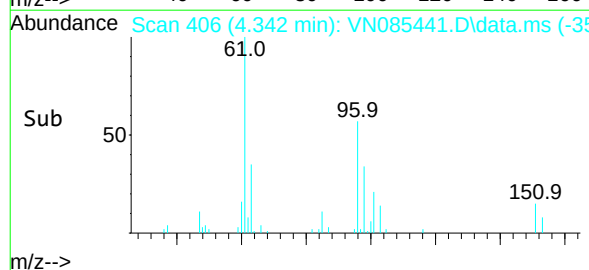
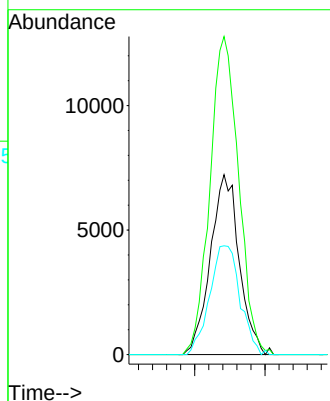
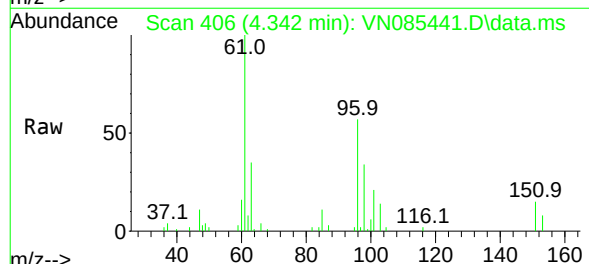
Tgt Ion: 96 Resp: 20615

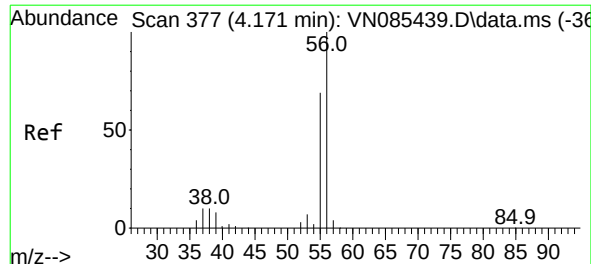
Ion Ratio Lower Upper

96 100

61 176.8 141.0 211.4

98 60.5 49.0 73.6





#13

Acrolein

Concen: 51.729 ug/l

RT: 4.177 min Scan# 37

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 56 Resp: 25568

Ion Ratio Lower Upper

56 100

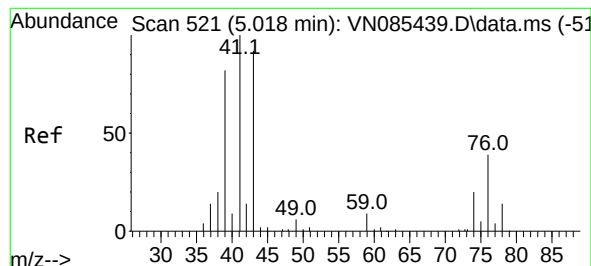
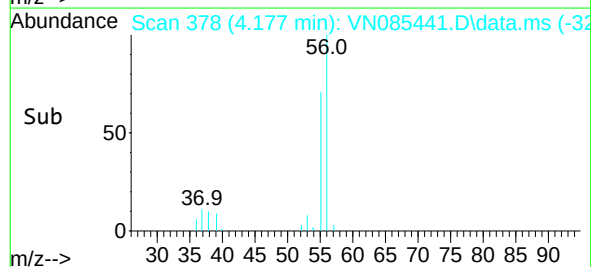
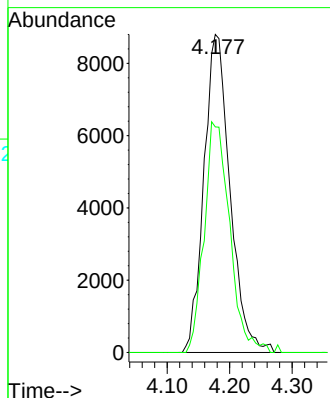
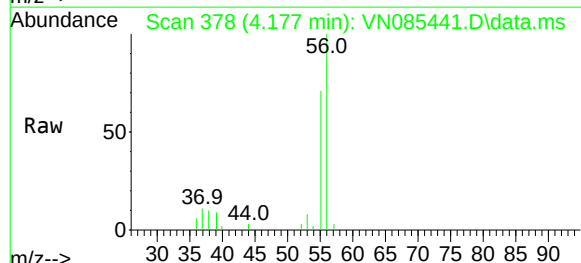
55 70.9 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 9.451 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

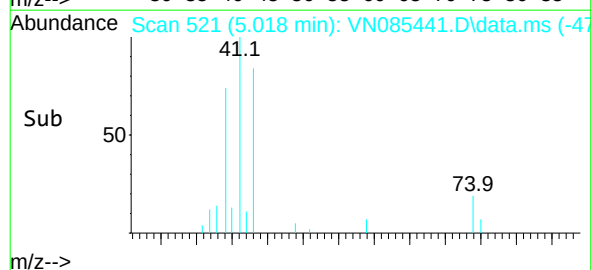
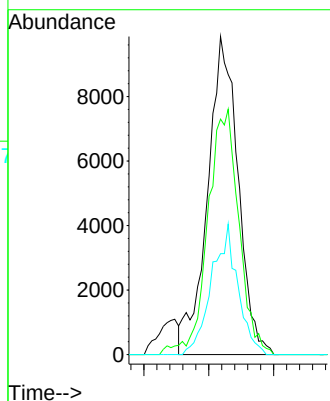
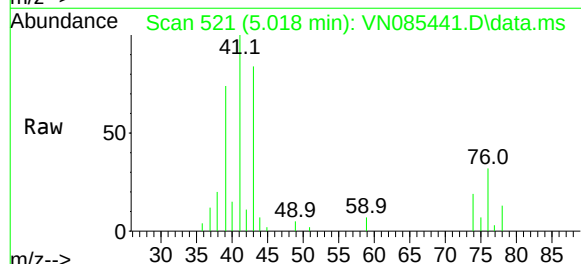
Tgt Ion: 41 Resp: 32240

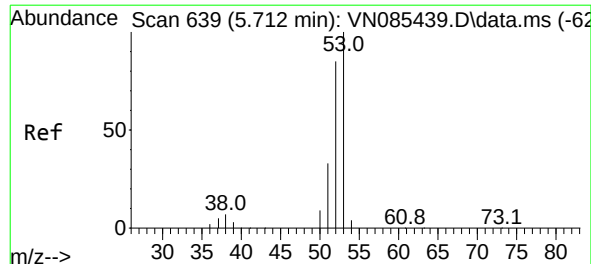
Ion Ratio Lower Upper

41 100

39 78.3 64.4 96.6

76 35.1 30.5 45.7





#15

Acrylonitrile

Concen: 46.918 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

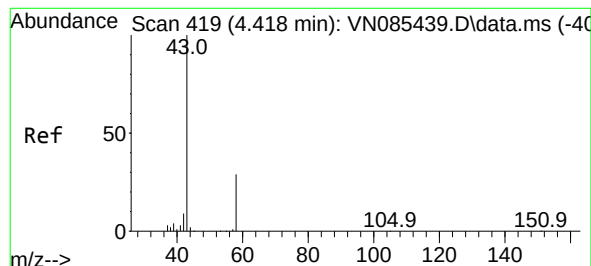
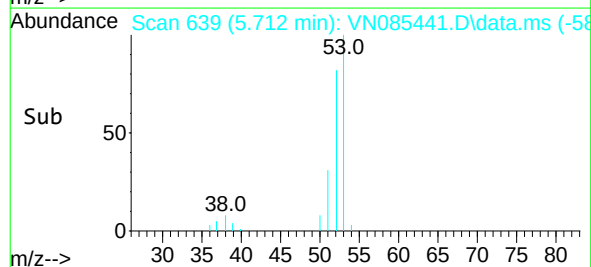
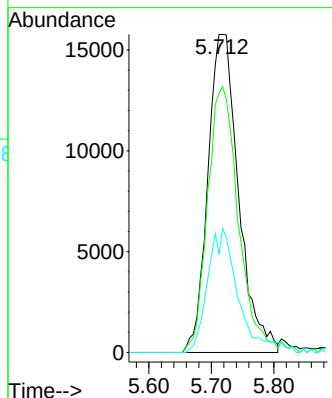
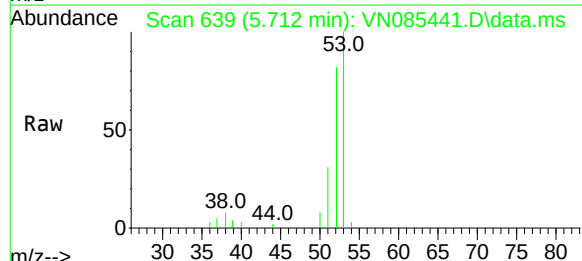
ClientSampleId :

VSTDIC010

Tgt Ion:	53	Resp:	53959
Ion	Ratio	Lower	Upper
53	100		
52	83.3	65.5	98.3
51	38.8	29.8	44.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 47.446 ug/l

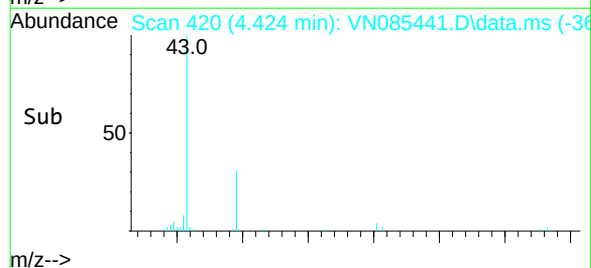
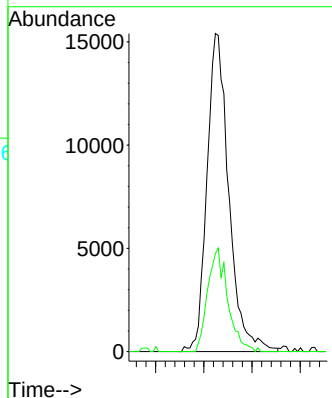
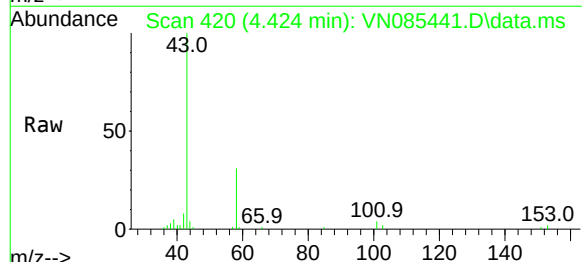
RT: 4.424 min Scan# 420

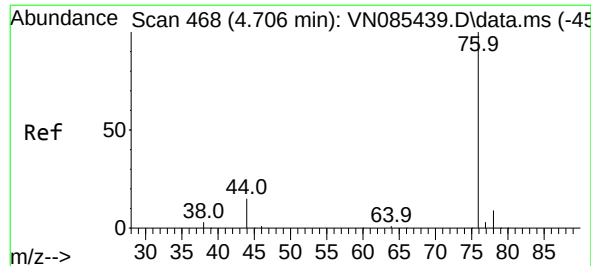
Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	43	Resp:	48475
Ion	Ratio	Lower	Upper
43	100		
58	30.8	23.8	35.6





#17

Carbon Disulfide

Concen: 9.300 ug/l

RT: 4.712 min Scan# 46

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 76 Resp: 60201

Ion Ratio Lower Upper

76 100

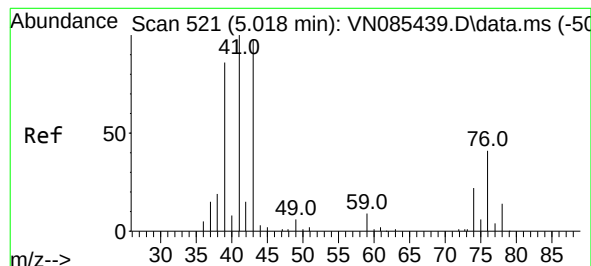
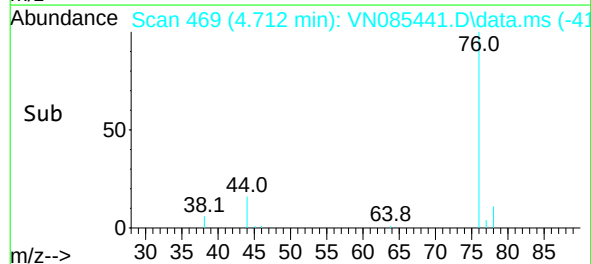
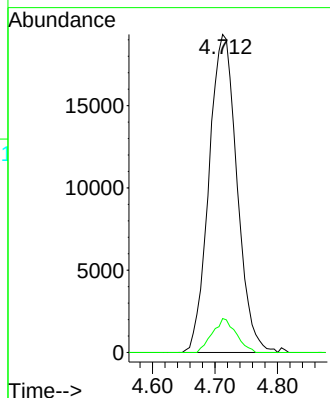
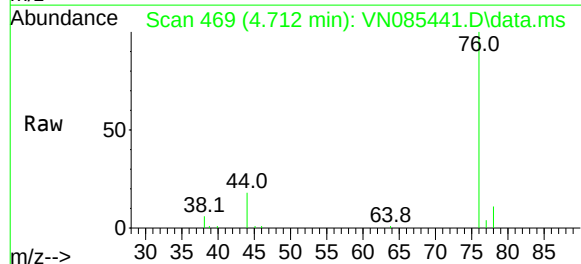
78 10.7 6.9 10.3#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 9.817 ug/l

RT: 5.030 min Scan# 523

Delta R.T. 0.012 min

Lab File: VN085441.D

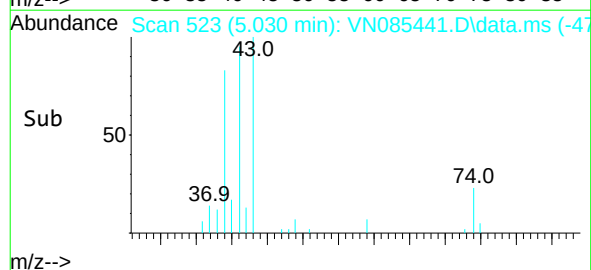
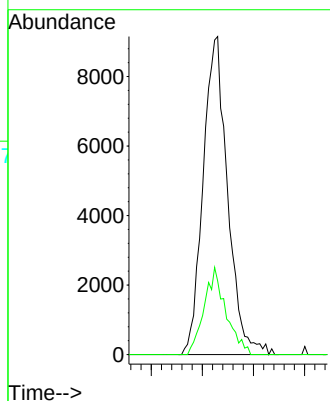
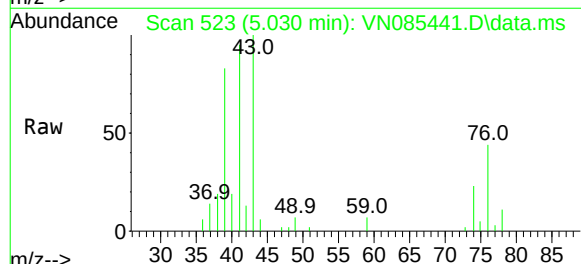
Acq: 14 Jan 2025 16:07

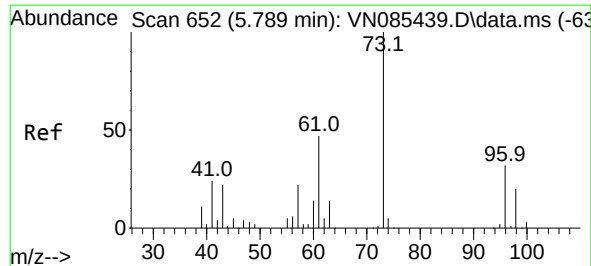
Tgt Ion: 43 Resp: 30500

Ion Ratio Lower Upper

43 100

74 24.3 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 9.552 ug/l

RT: 5.789 min Scan# 65

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 73 Resp: 65207

Ion Ratio Lower Upper

73 100

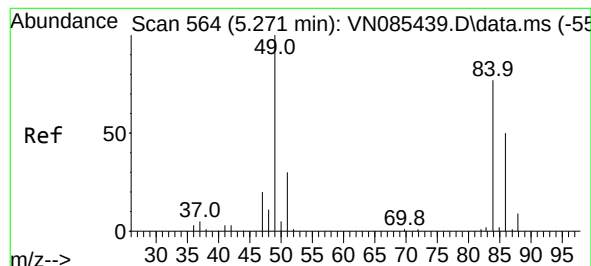
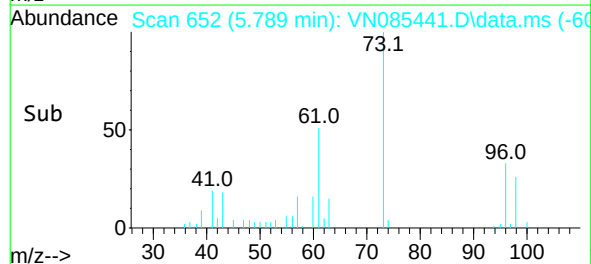
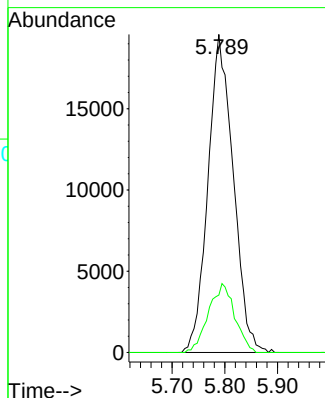
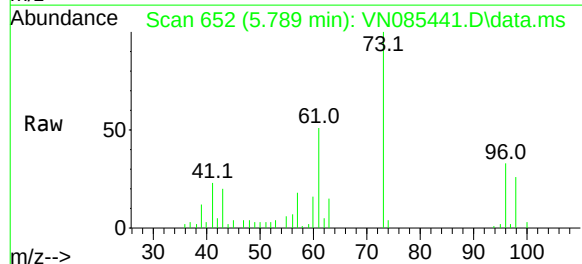
57 18.1 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 9.379 ug/l

RT: 5.277 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion: 84 Resp: 23723

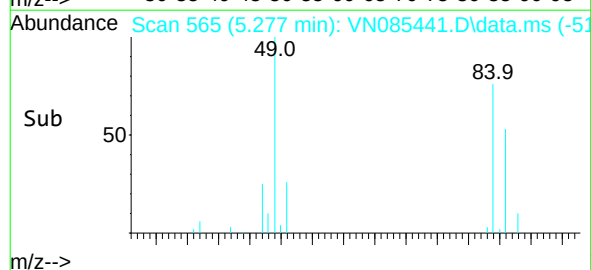
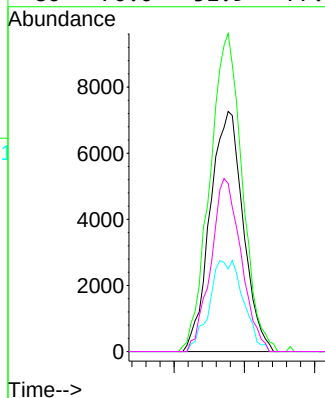
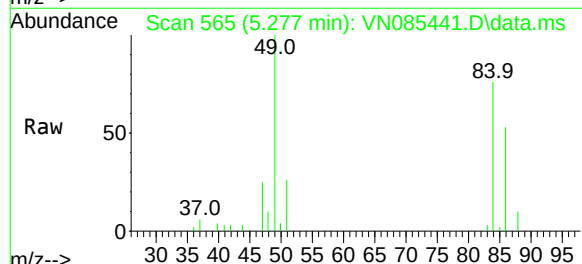
Ion Ratio Lower Upper

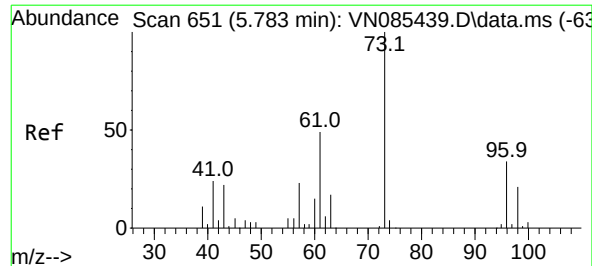
84 100

49 132.4 104.1 156.1

51 34.4 31.0 46.4

86 70.0 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 9.403 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085441.D

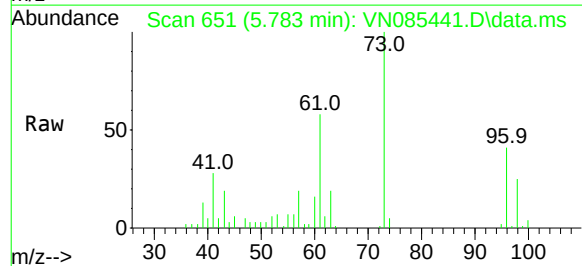
Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

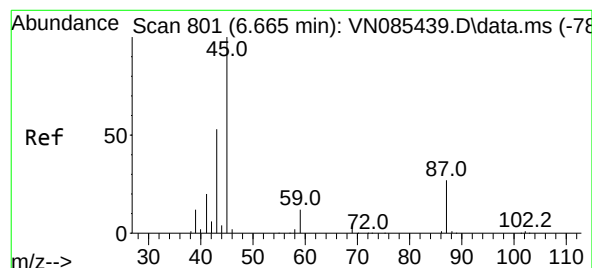
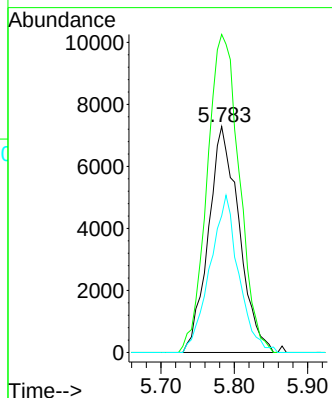
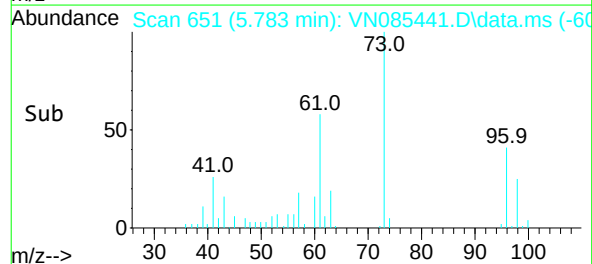
VSTDIC010



Tgt Ion:	96	Resp:	21127
Ion	Ratio	Lower	Upper
96	100		
61	140.8	115.7	173.5
98	60.5	49.8	74.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

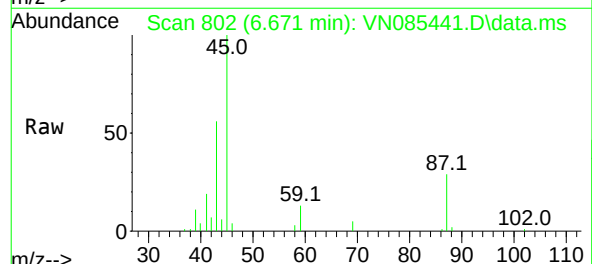
Concen: 9.490 ug/l

RT: 6.671 min Scan# 802

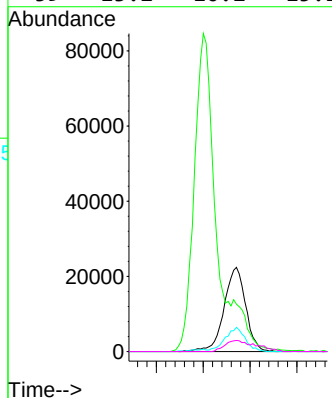
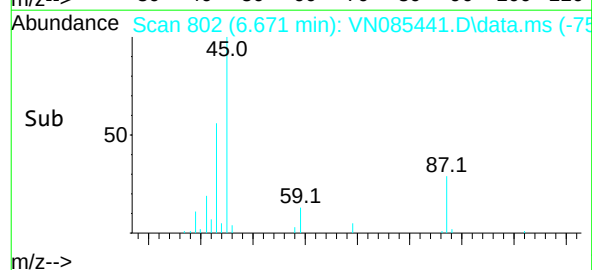
Delta R.T. 0.006 min

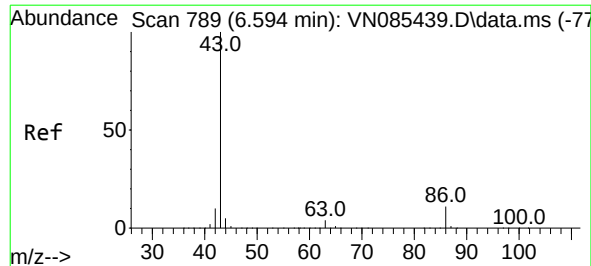
Lab File: VN085441.D

Acq: 14 Jan 2025 16:07



Tgt Ion:	45	Resp:	71857
Ion	Ratio	Lower	Upper
45	100		
43	53.2	45.0	67.6
87	28.8	21.8	32.8
59	13.2	10.2	15.2





#23

Vinyl Acetate

Concen: 47.125 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 43 Resp: 250575

Ion Ratio Lower Upper

43 100

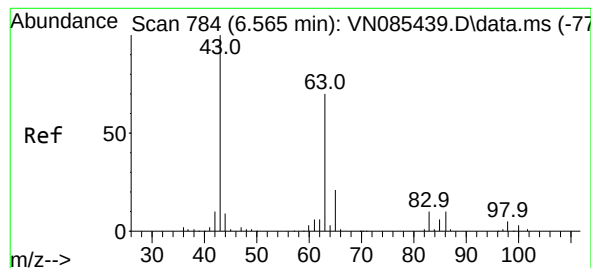
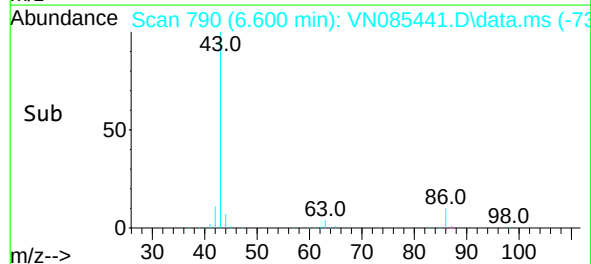
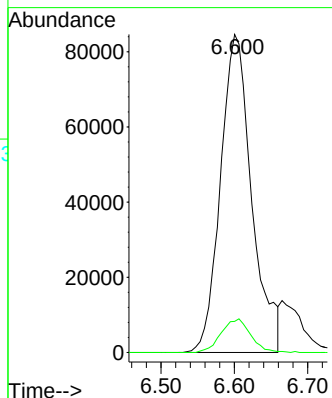
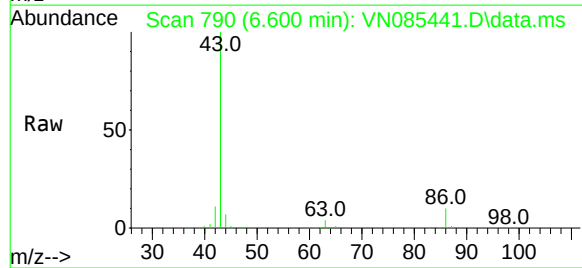
86 9.8 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 9.335 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

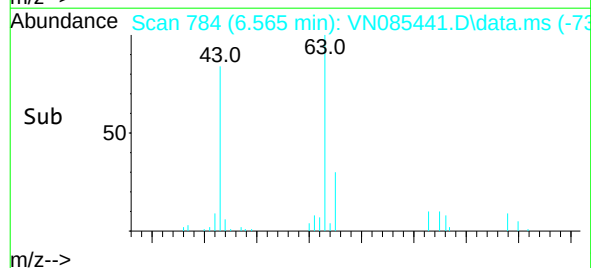
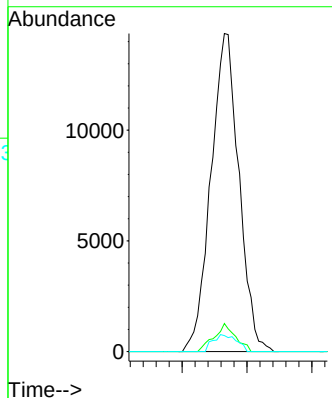
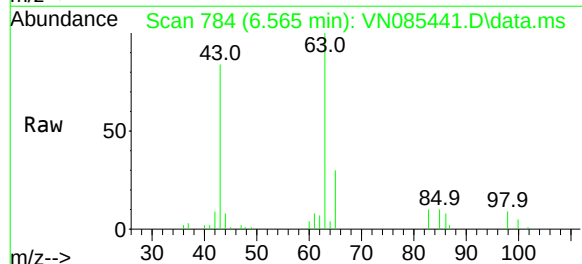
Tgt Ion: 63 Resp: 43099

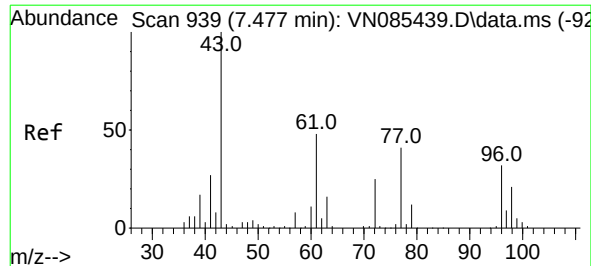
Ion Ratio Lower Upper

63 100

98 8.8 3.3 9.8

100 5.0 2.0 6.0





#25

2-Butanone

Concen: 47.350 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 43 Resp: 71191

Ion Ratio Lower Upper

43 100

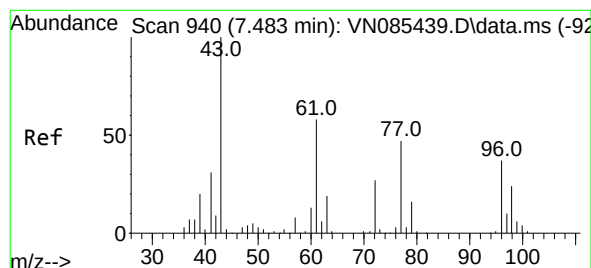
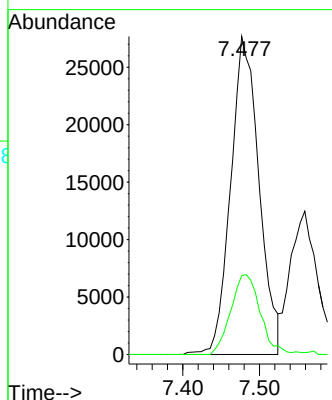
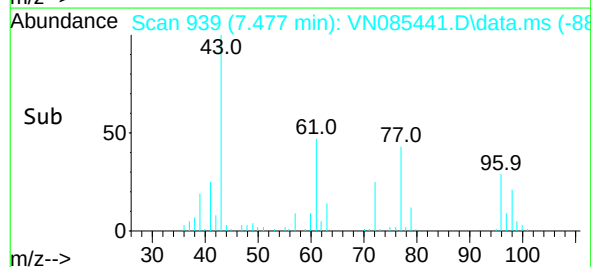
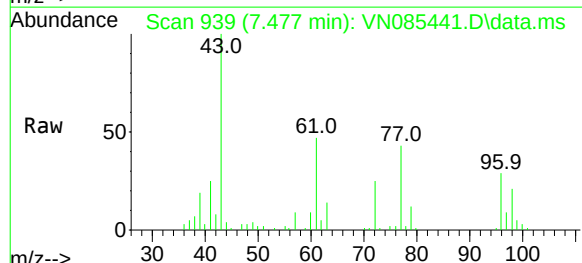
72 24.8 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 9.672 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085441.D

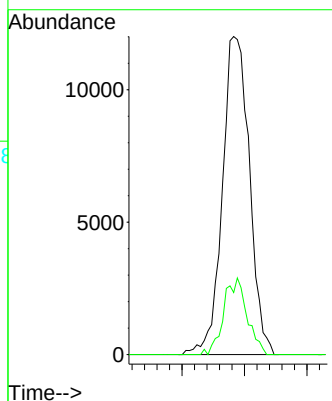
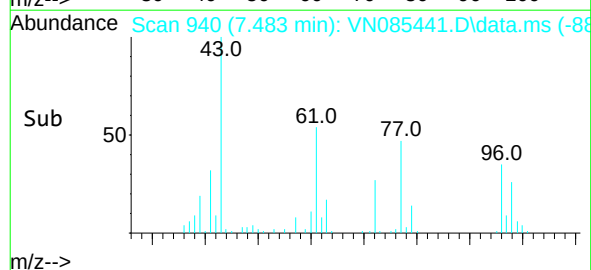
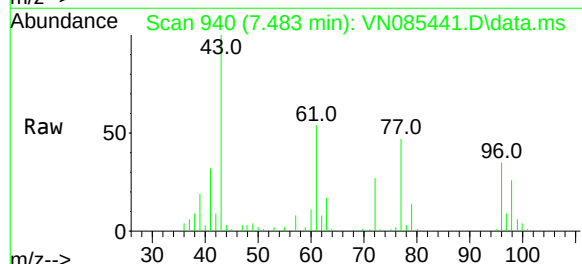
Acq: 14 Jan 2025 16:07

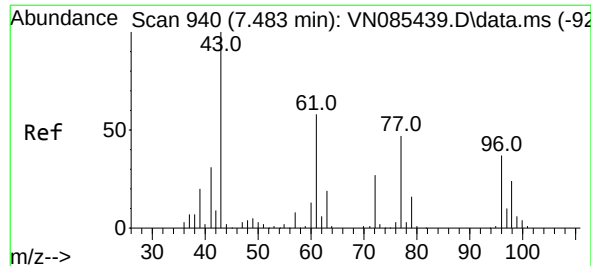
Tgt Ion: 77 Resp: 36105

Ion Ratio Lower Upper

77 100

97 20.8 10.7 32.1





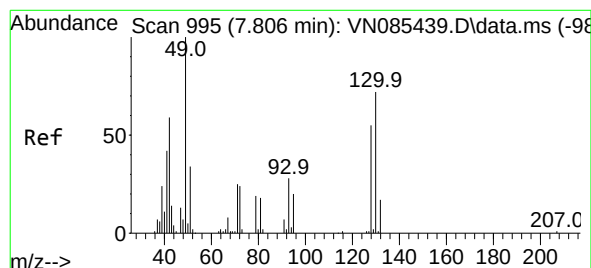
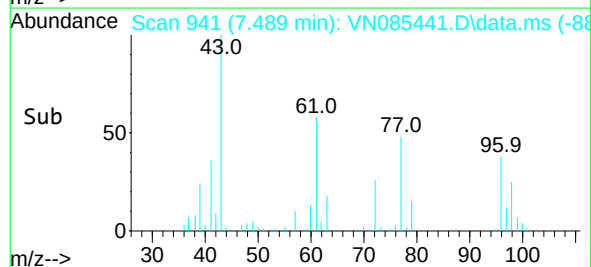
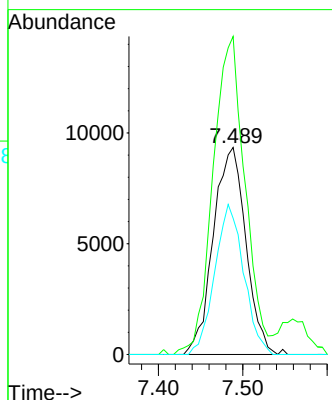
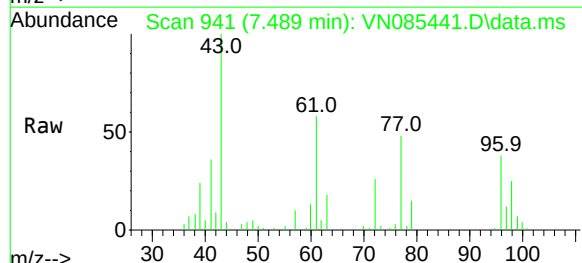
#27
cis-1,2-Dichloroethene
Concen: 9.466 ug/l
RT: 7.489 min Scan# 940
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Tgt Ion:	96	Resp:	25049
Ion	Ratio	Lower	Upper
96	100		
61	151.8	0.0	311.8
98	64.7	0.0	126.0

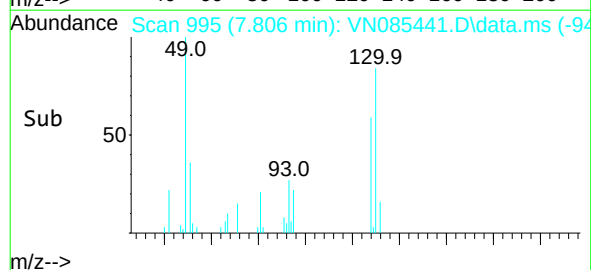
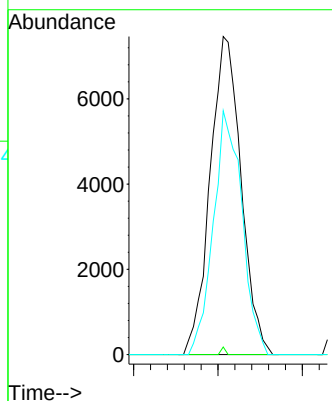
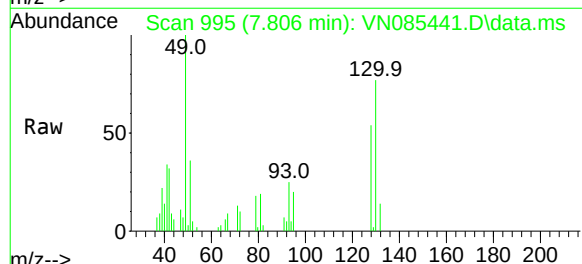
Manual Integrations
APPROVED

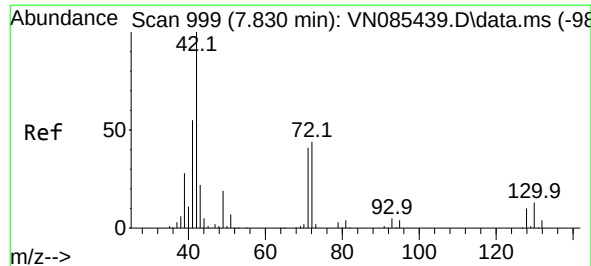
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#28
Bromochloromethane
Concen: 8.863 ug/l
RT: 7.806 min Scan# 995
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:	49	Resp:	19037
Ion	Ratio	Lower	Upper
49	100		
129	0.3	0.0	4.4
130	70.8	55.0	82.4





#29

Tetrahydrofuran

Concen: 47.881 ug/l

RT: 7.836 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

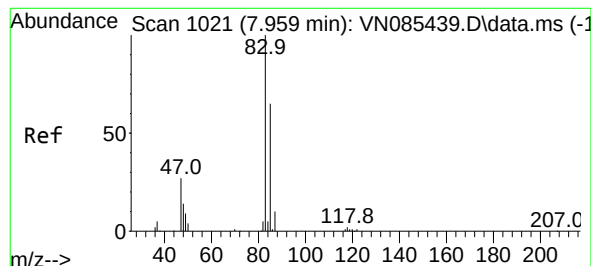
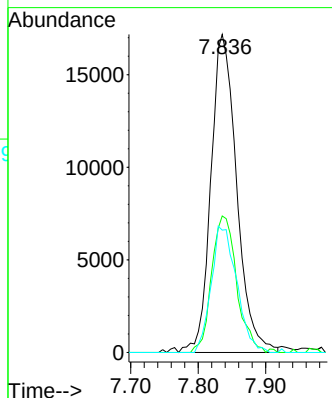
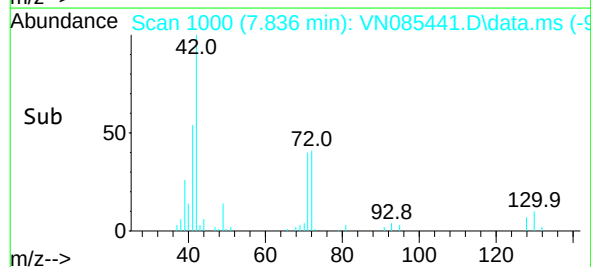
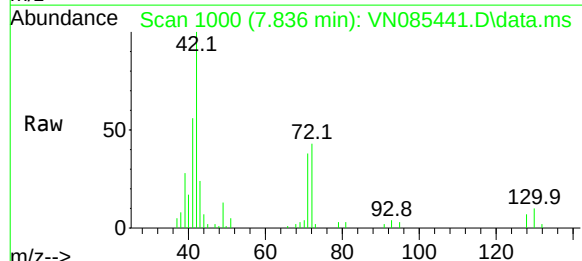
ClientSampleId :

VSTDICC010

Tgt Ion:	42	Resp:	45641
Ion	Ratio	Lower	Upper
42	100		
72	41.6	34.2	51.2
71	39.2	32.5	48.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 9.596 ug/l

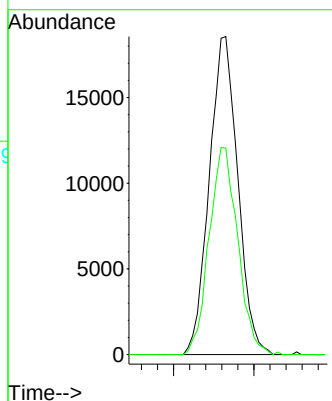
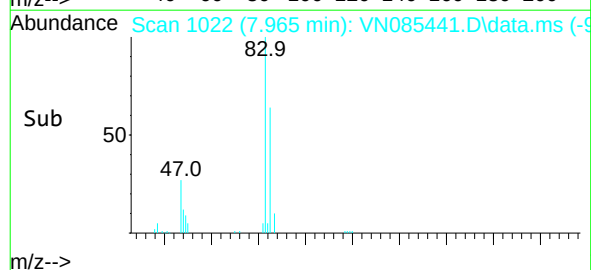
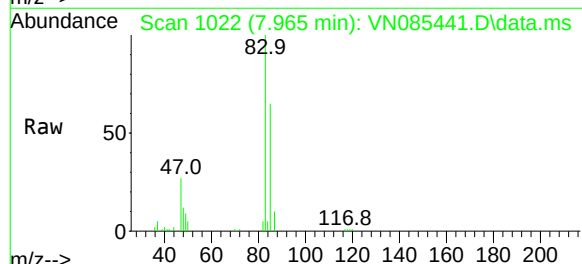
RT: 7.965 min Scan# 1022

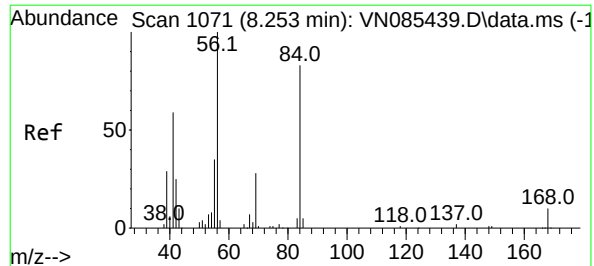
Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	83	Resp:	45792
Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.8	77.6





#31

Cyclohexane

Concen: 10.020 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 56 Resp: 40211

Ion Ratio Lower Upper

56 100

69 34.2 22.2 33.4

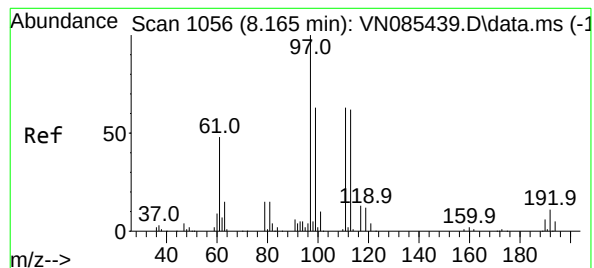
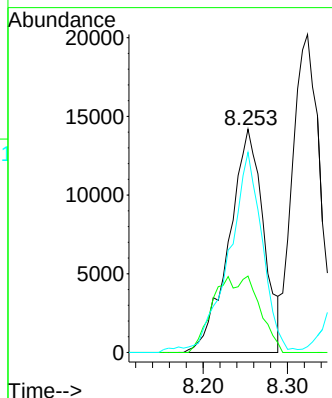
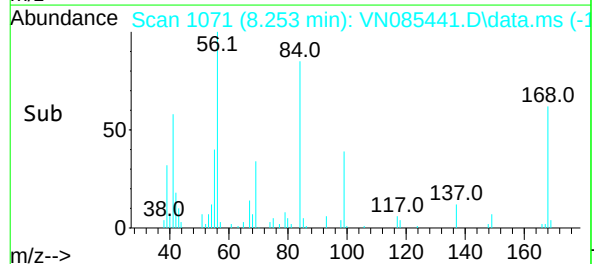
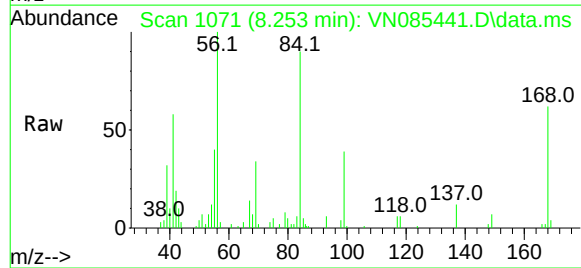
84 87.2 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 9.358 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

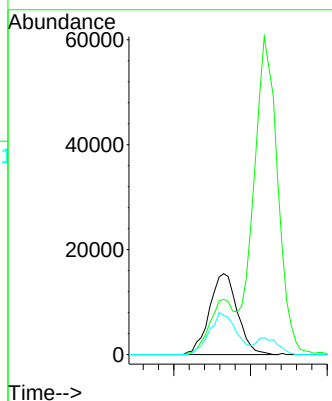
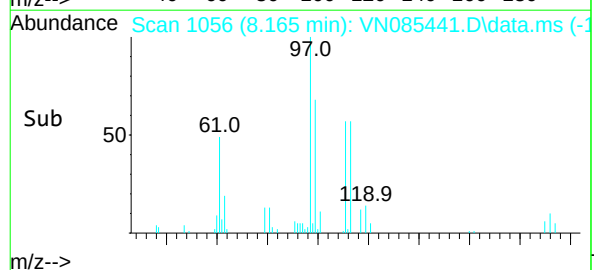
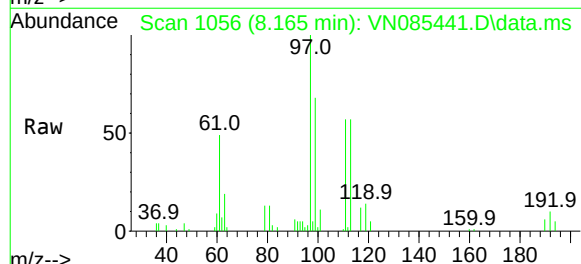
Tgt Ion: 97 Resp: 39170

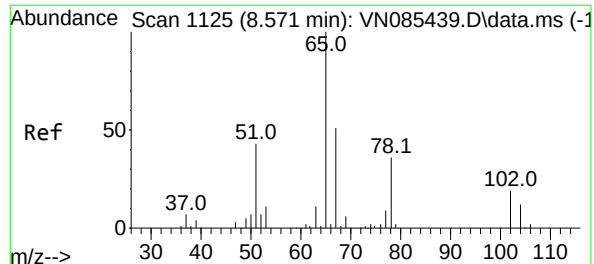
Ion Ratio Lower Upper

97 100

99 62.6 49.8 74.6

61 50.2 41.4 62.2





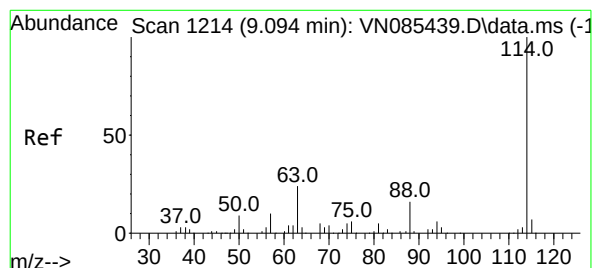
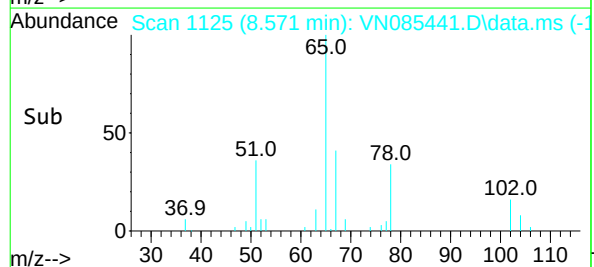
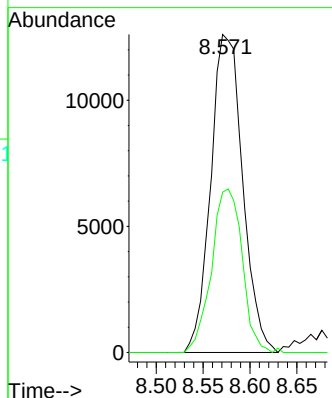
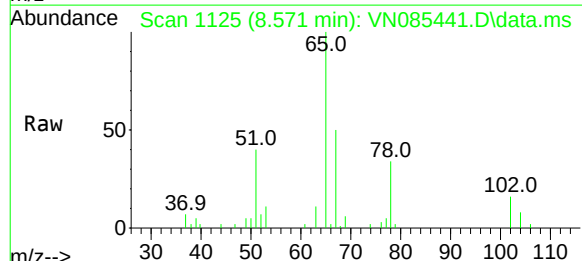
#33
1,2-Dichloroethane-d4
Concen: 9.442 ug/l
RT: 8.571 min Scan# 1125
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Tgt Ion: 65 Resp: 29856
Ion Ratio Lower Upper
65 100
67 49.5 0.0 101.6

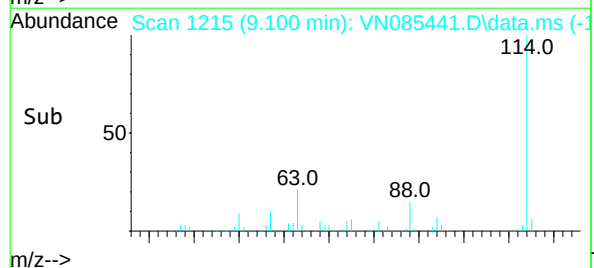
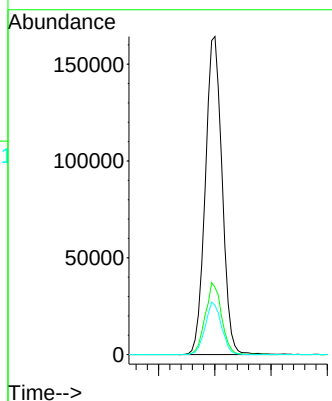
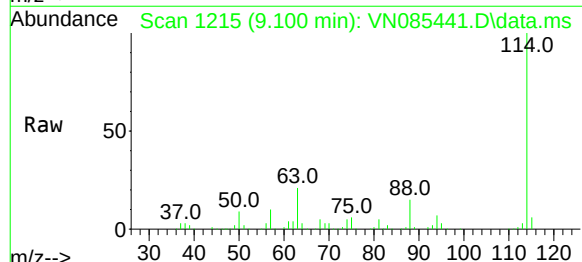
Manual Integrations
APPROVED

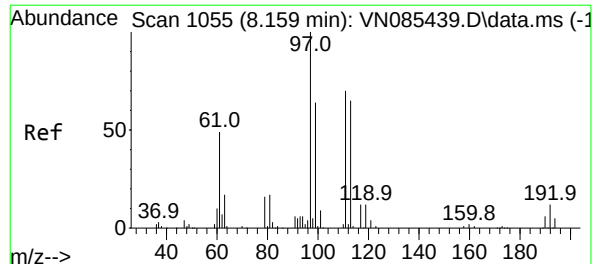
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:114 Resp: 340403
Ion Ratio Lower Upper
114 100
63 21.1 0.0 47.6
88 15.5 0.0 32.6





#35

Dibromofluoromethane

Concen: 8.939 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 113 Resp: 21110

Ion Ratio Lower Upper

113 100

111 103.4 82.7 124.1

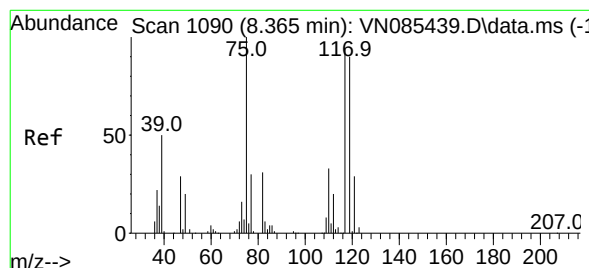
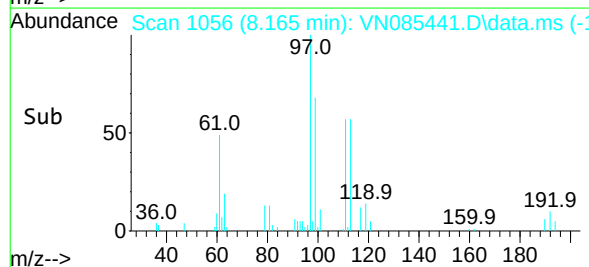
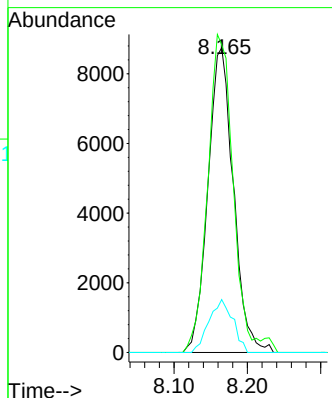
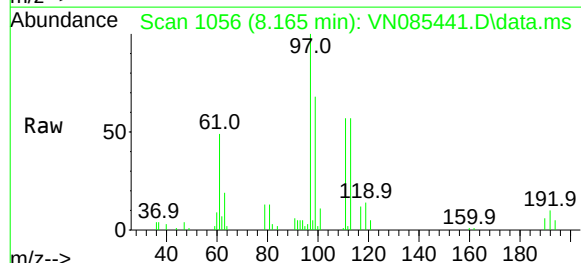
192 16.4 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 9.056 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

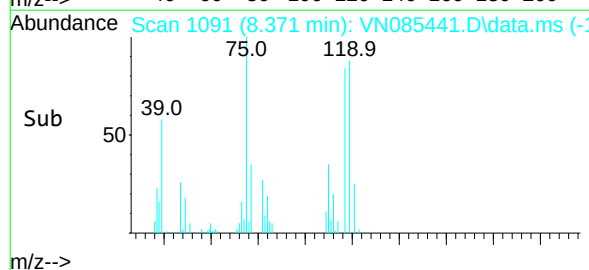
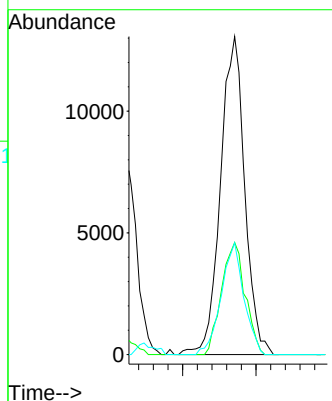
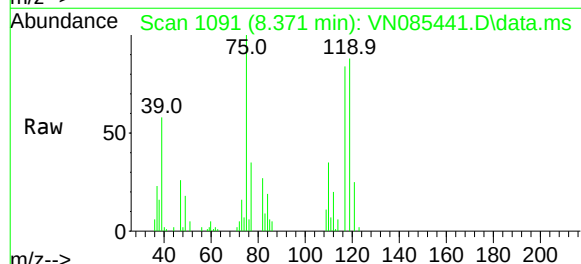
Tgt Ion: 75 Resp: 30015

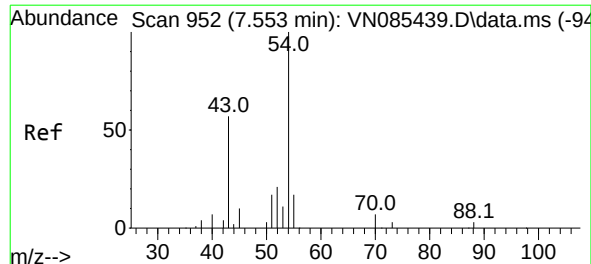
Ion Ratio Lower Upper

75 100

110 34.3 16.5 49.5

77 32.9 24.4 36.6





#37

Ethyl Acetate

Concen: 9.195 ug/l

RT: 7.559 min Scan# 952

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

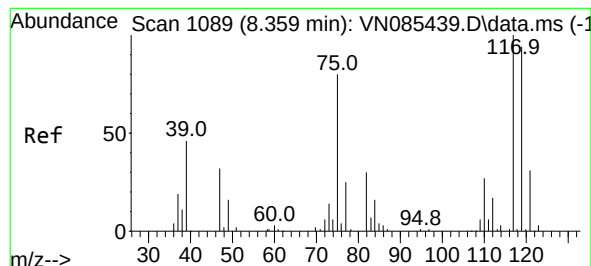
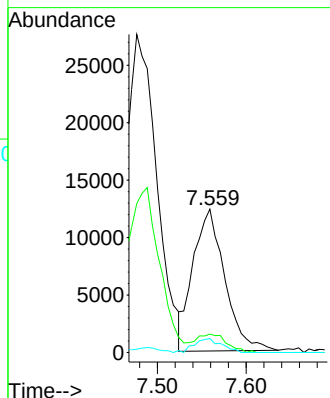
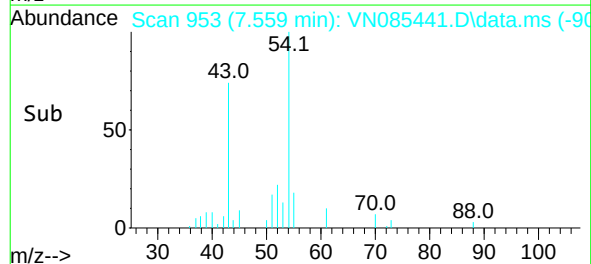
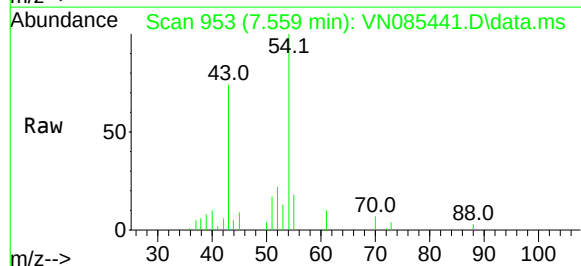
ClientSampleId :

VSTDIC010

Tgt Ion:	43	Resp:	30760
Ion	Ratio	Lower	Upper
43	100		
61	12.2	10.9	16.3
70	8.4	7.5	11.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#38

Carbon Tetrachloride

Concen: 9.492 ug/l

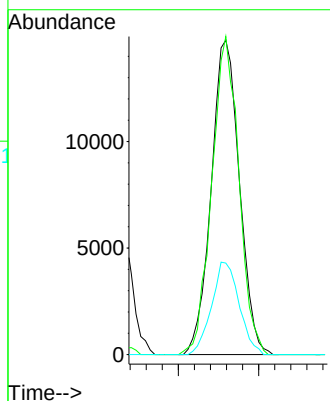
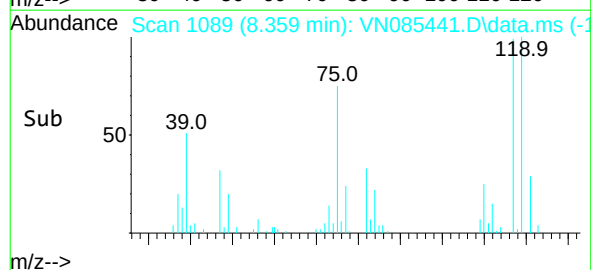
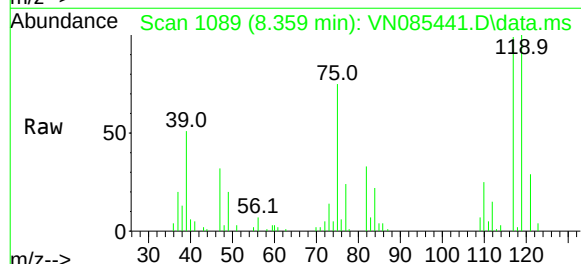
RT: 8.359 min Scan# 1089

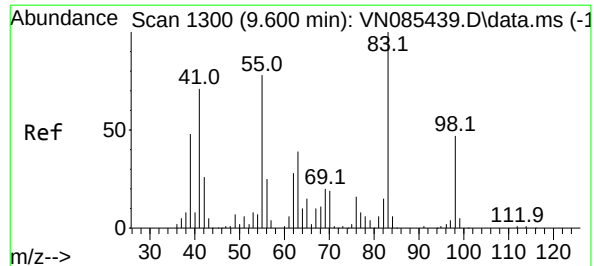
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	117	Resp:	36015
Ion	Ratio	Lower	Upper
117	100		
119	101.2	75.4	113.2
121	29.1	24.6	37.0





#39

Methylcyclohexane

Concen: 8.900 ug/l

RT: 9.594 min Scan# 1299

Delta R.T. -0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 83 Resp: 27721

Ion Ratio Lower Upper

83 100

55 83.8 62.6 94.0

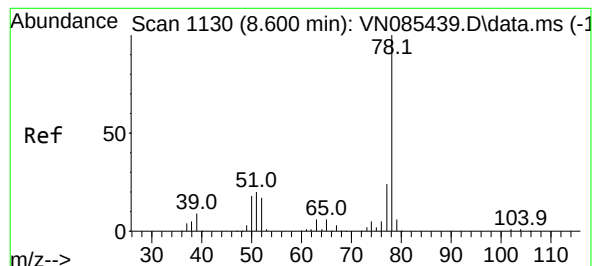
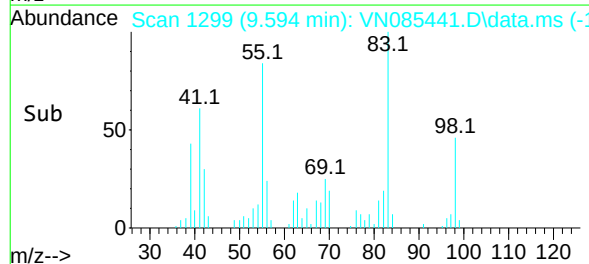
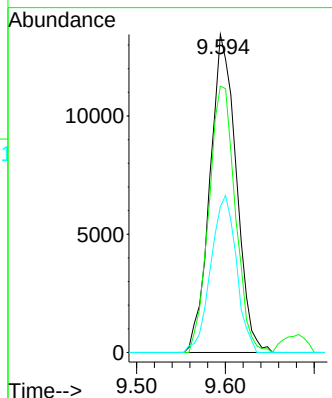
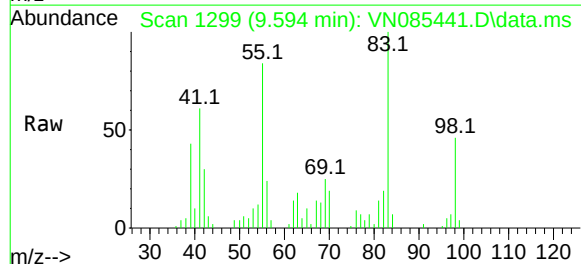
98 45.8 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#40

Benzene

Concen: 9.407 ug/l

RT: 8.600 min Scan# 1130

Delta R.T. 0.000 min

Lab File: VN085441.D

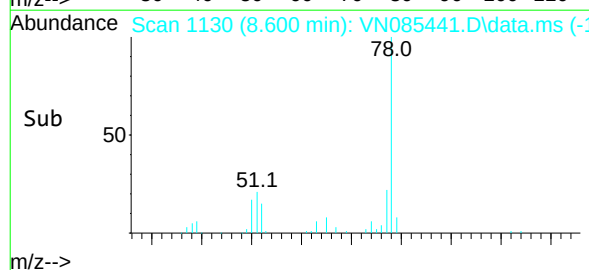
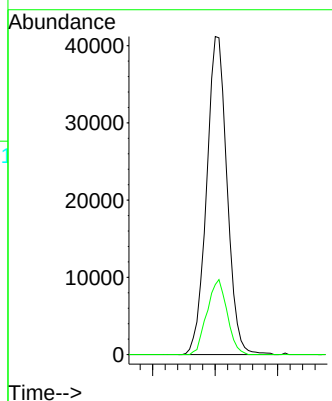
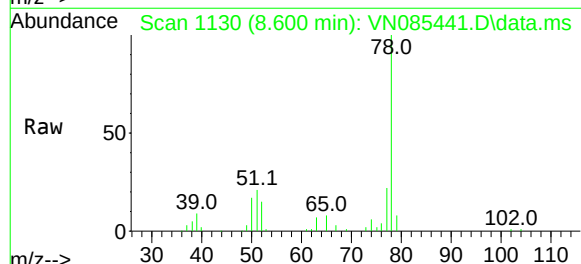
Acq: 14 Jan 2025 16:07

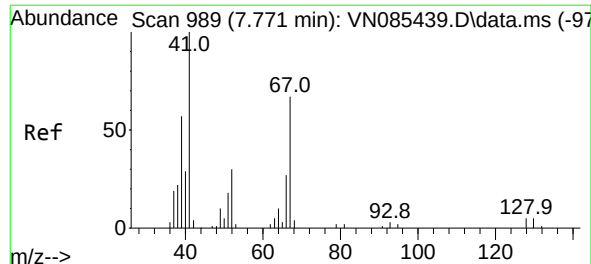
Tgt Ion: 78 Resp: 93680

Ion Ratio Lower Upper

78 100

77 22.0 19.0 28.6





#41

Methacrylonitrile

Concen: 9.686 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

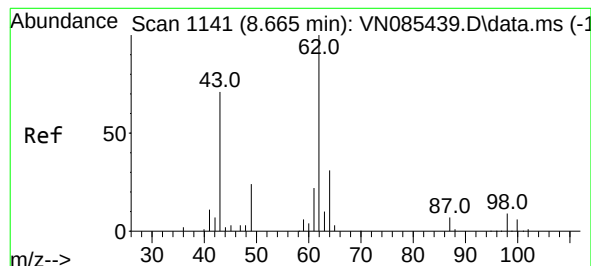
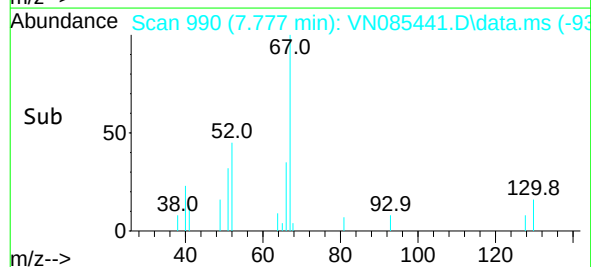
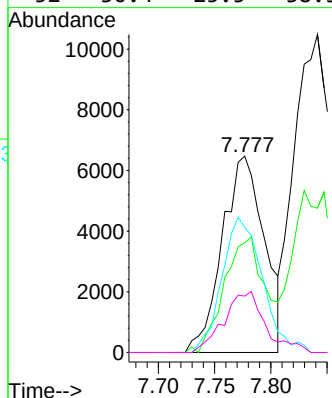
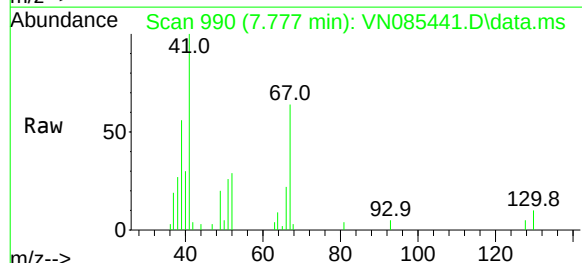
VSTDIC010

Tgt Ion:	41	Resp:	16859
Ion	Ratio	Lower	Upper
41	100		
39	57.3	46.0	69.0
67	66.2	57.4	86.2
52	30.4	25.5	38.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 9.483 ug/l

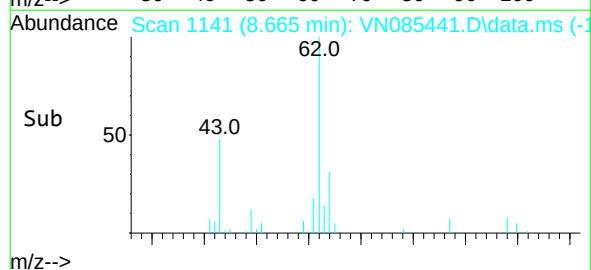
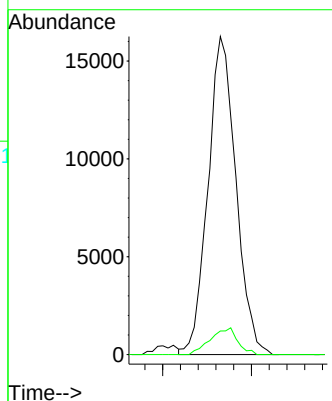
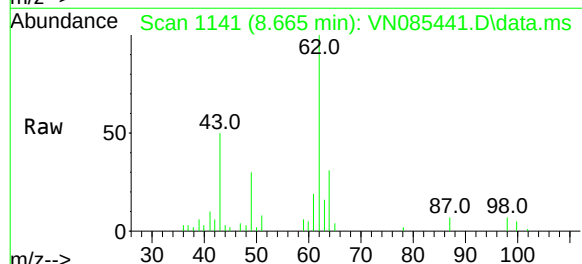
RT: 8.665 min Scan# 1141

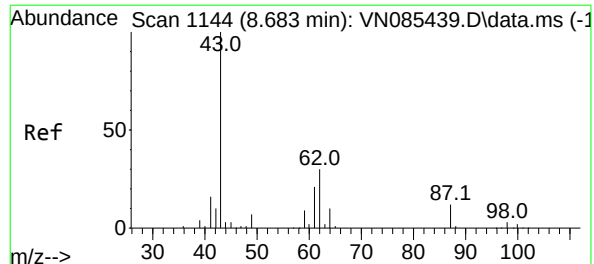
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	62	Resp:	35569
Ion	Ratio	Lower	Upper
62	100		
98	8.2	0.0	17.0





#43

Isopropyl Acetate

Concen: 9.127 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

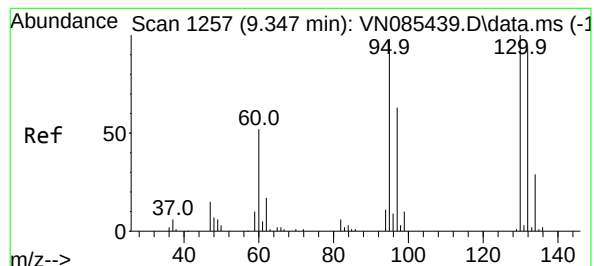
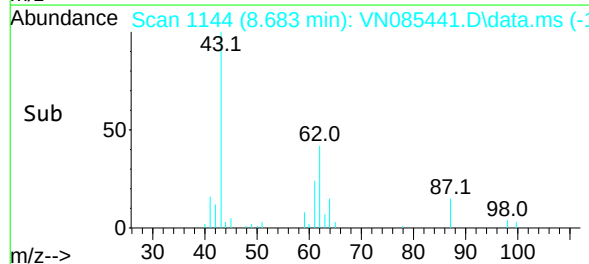
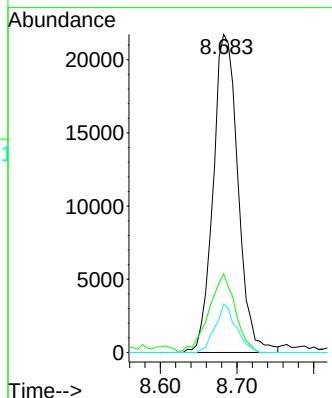
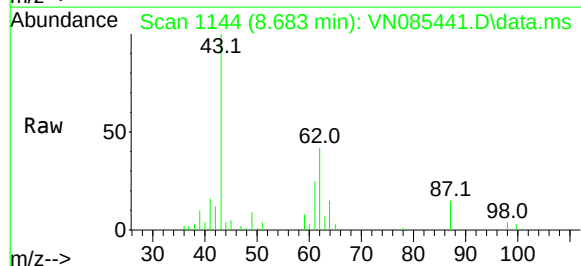
ClientSampleId :

VSTDIC010

Tgt Ion:	43	Resp:	48926
Ion	Ratio	Lower	Upper
43	100		
61	26.2	20.7	31.1
87	12.8	9.8	14.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#44

Trichloroethene

Concen: 9.108 ug/l

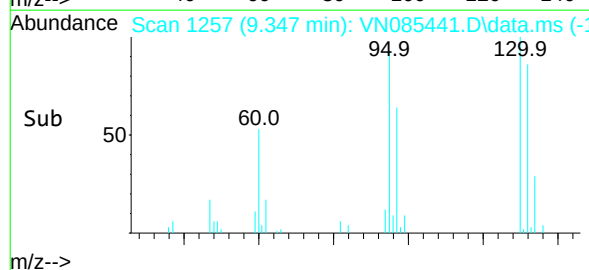
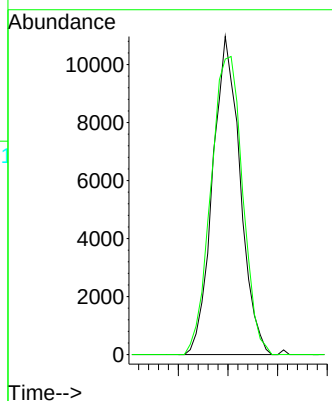
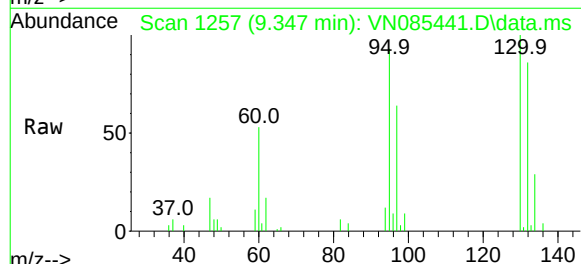
RT: 9.347 min Scan# 1257

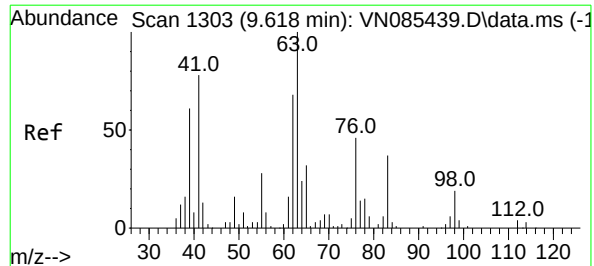
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	130	Resp:	21113
Ion	Ratio	Lower	Upper
130	100		
95	92.9	0.0	195.8





#45

1,2-Dichloropropane

Concen: 8.942 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 63 Resp: 22747

Ion Ratio Lower Upper

63 100

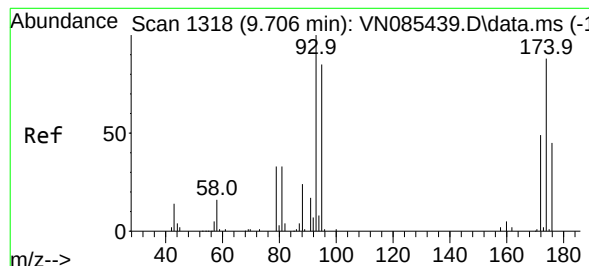
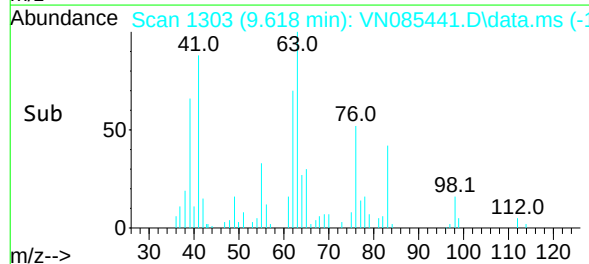
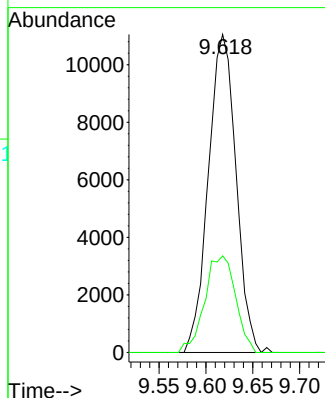
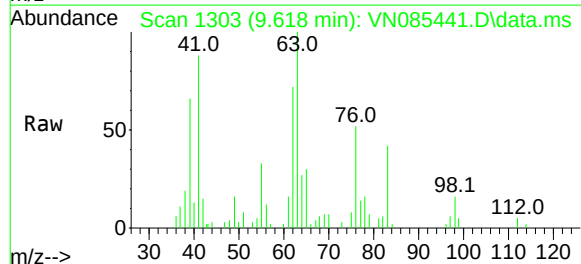
65 30.4 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 9.404 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

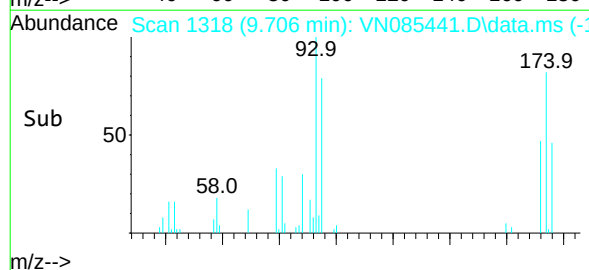
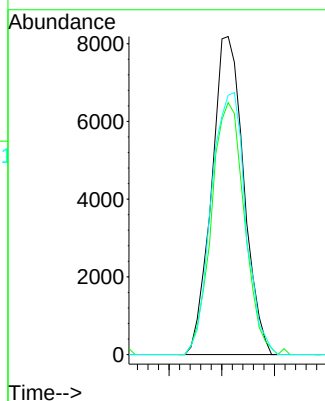
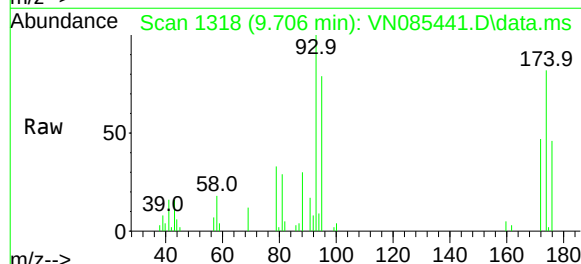
Tgt Ion: 93 Resp: 17260

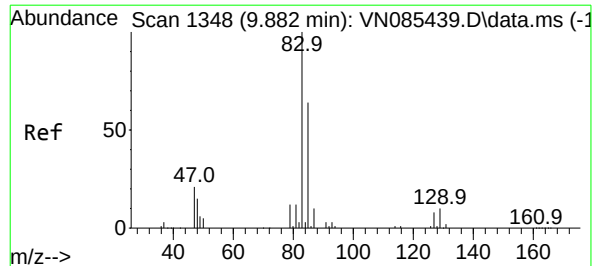
Ion Ratio Lower Upper

93 100

95 81.5 64.7 97.1

174 87.8 69.0 103.4





#47

Bromodichloromethane

Concen: 9.365 ug/l

RT: 9.883 min Scan# 1313

Delta R.T. 0.001 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

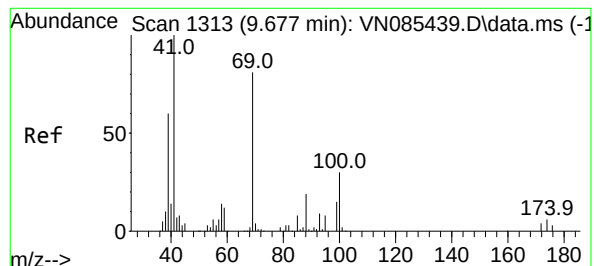
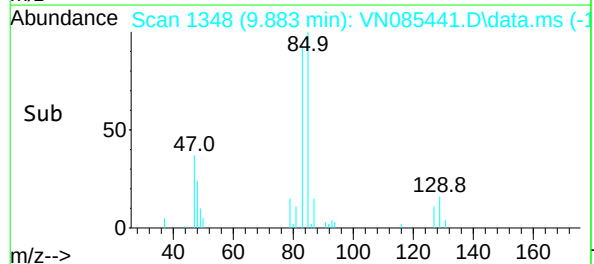
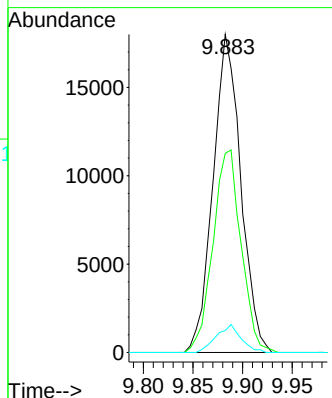
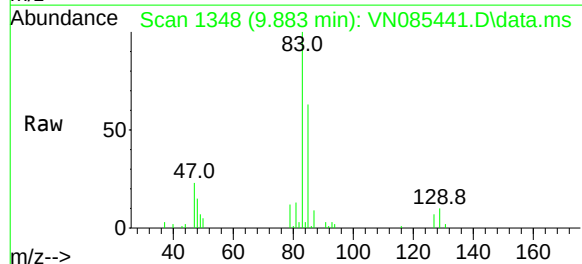
ClientSampleId :

VSTDICC010

Tgt Ion:	83	Resp:	35020
Ion	Ratio	Lower	Upper
83	100		
85	62.6	51.2	76.8
127	6.9	6.5	9.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 9.067 ug/l

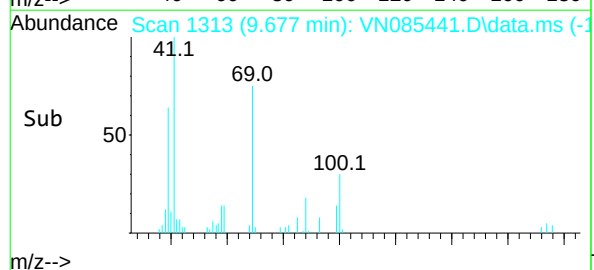
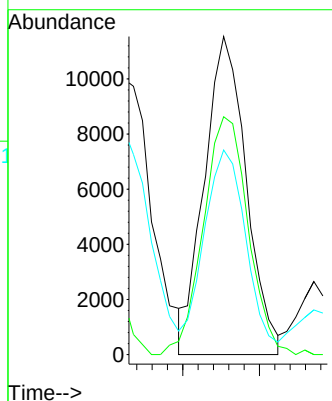
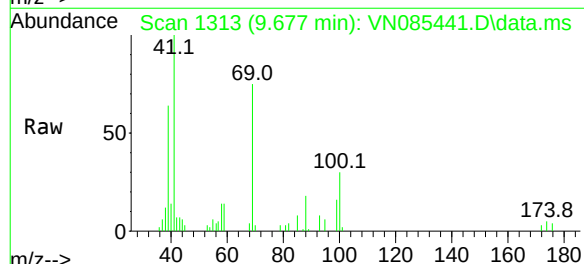
RT: 9.677 min Scan# 1313

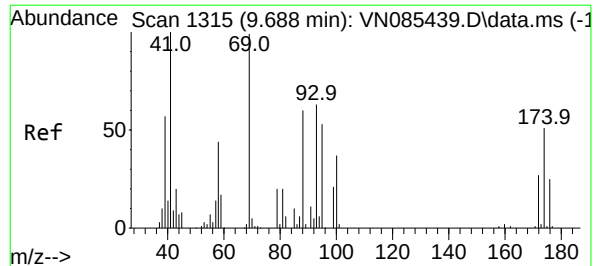
Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	41	Resp:	21873
Ion	Ratio	Lower	Upper
41	100		
69	80.0	64.7	97.1
39	65.2	49.0	73.6





#49

1,4-Dioxane

Concen: 190.382 ug/l

RT: 9.694 min Scan# 1315

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 88 Resp: 7734

Ion Ratio Lower Upper

88 100

43 35.2 26.6 39.8

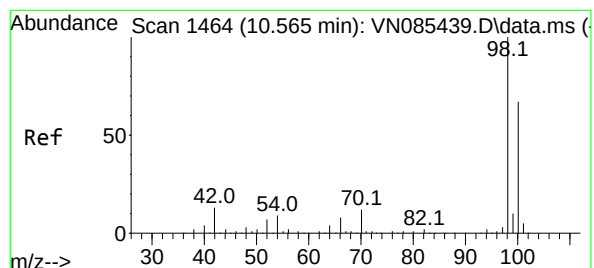
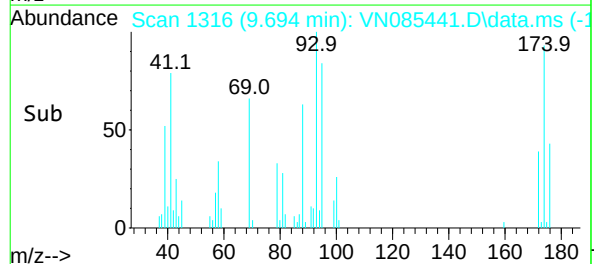
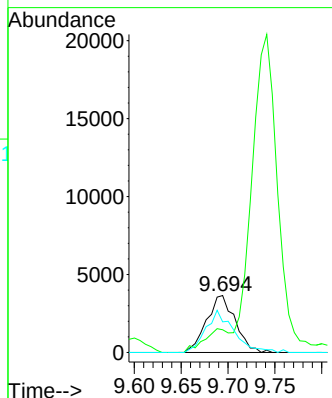
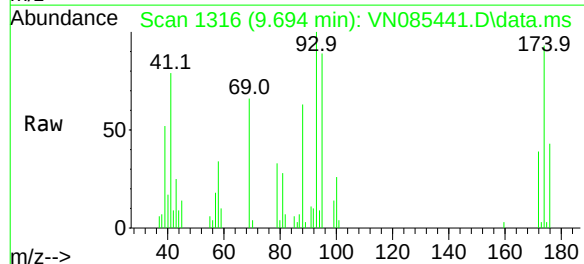
58 73.3 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 8.727 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085441.D

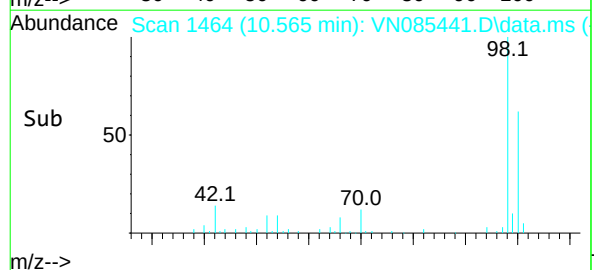
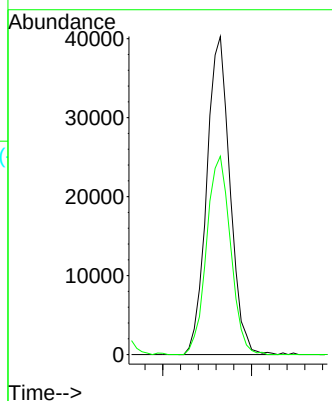
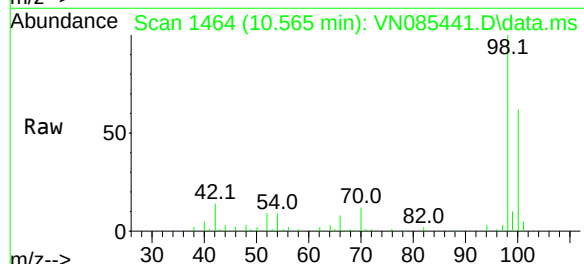
Acq: 14 Jan 2025 16:07

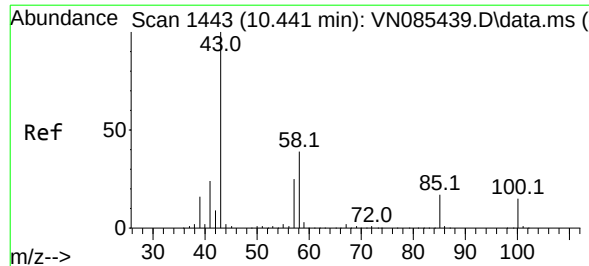
Tgt Ion: 98 Resp: 73223

Ion Ratio Lower Upper

98 100

100 64.5 52.2 78.4





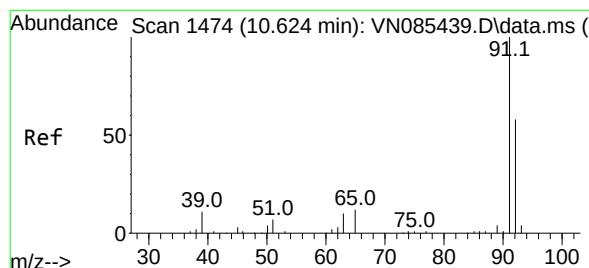
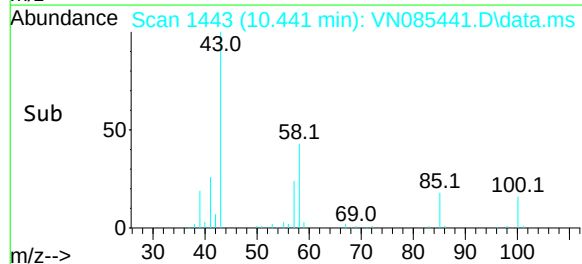
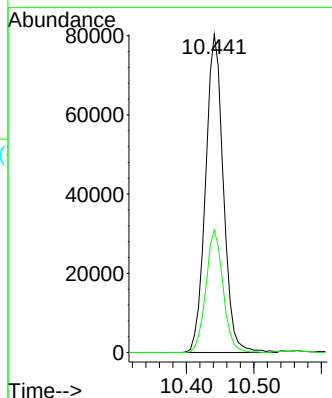
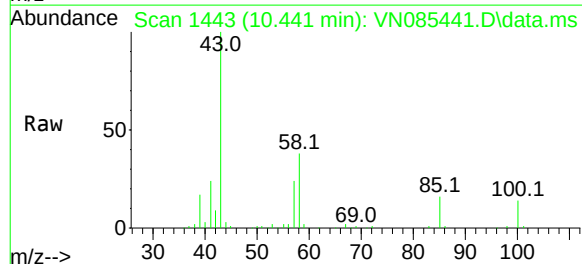
#51
4-Methyl-2-Pentanone
Concen: 47.254 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Tgt Ion: 43 Resp: 146990
Ion Ratio Lower Upper
43 100
58 37.1 30.5 45.7

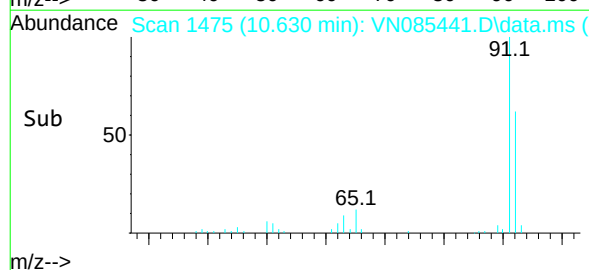
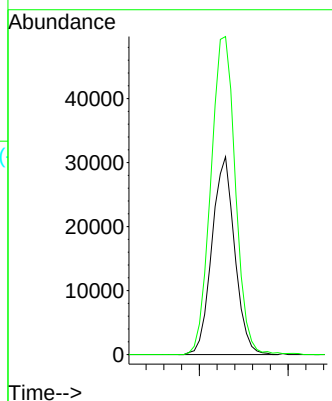
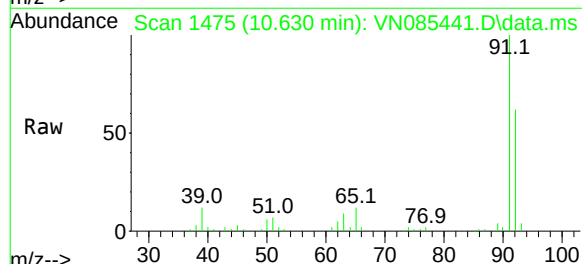
Manual Integrations
APPROVED

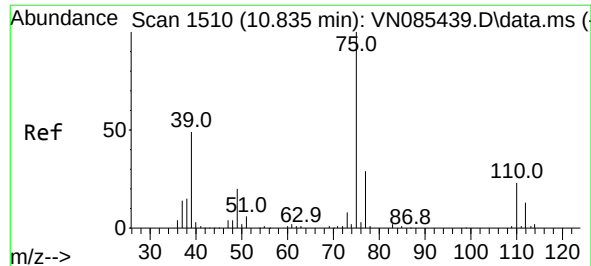
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#52
Toluene
Concen: 9.527 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 92 Resp: 54976
Ion Ratio Lower Upper
92 100
91 173.7 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 9.276 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 75 Resp: 32780

Ion Ratio Lower Upper

75 100

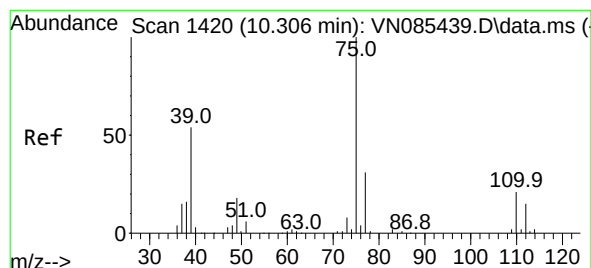
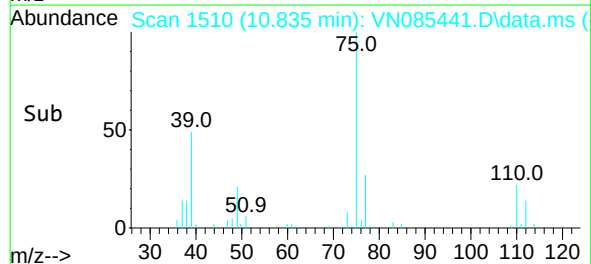
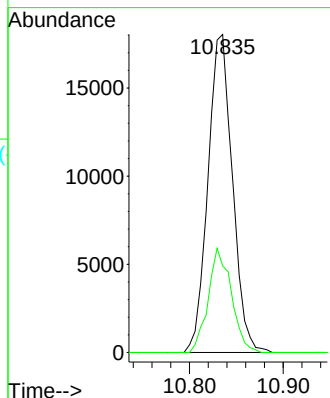
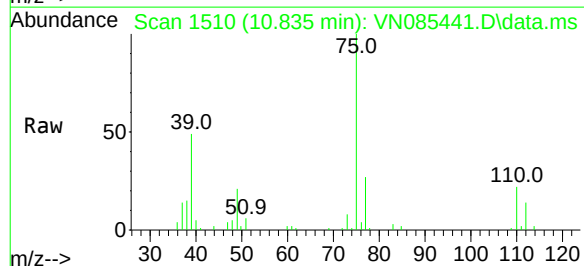
77 27.2 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 9.512 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

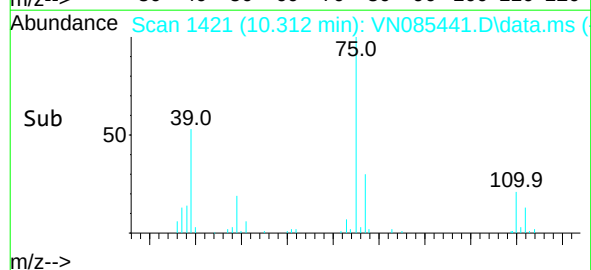
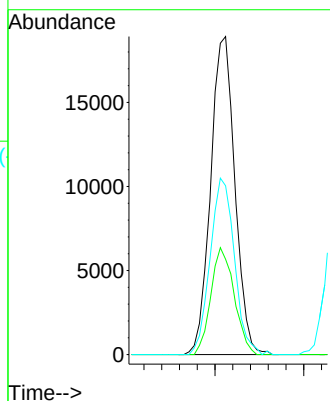
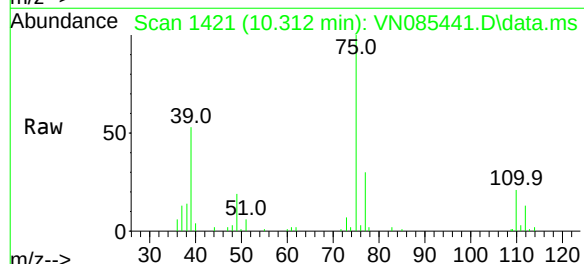
Tgt Ion: 75 Resp: 35904

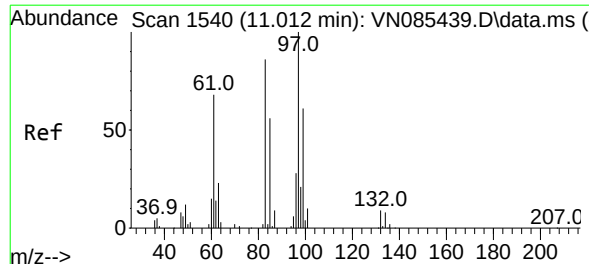
Ion Ratio Lower Upper

75 100

77 30.0 25.0 37.4

39 53.1 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 9.222 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 97 Resp: 21060

Ion Ratio Lower Upper

97 100

83 88.3 69.0 103.6

85 57.3 44.6 66.8

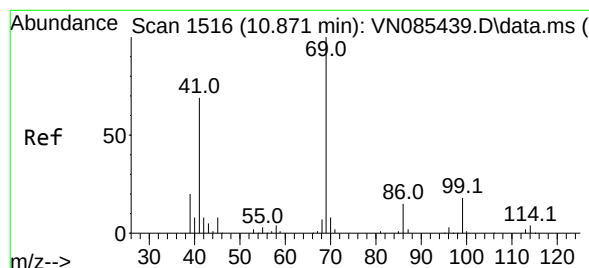
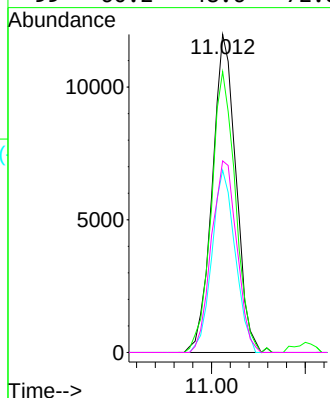
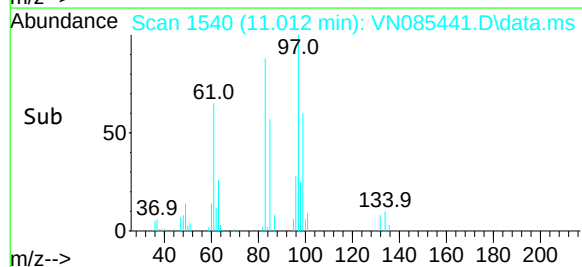
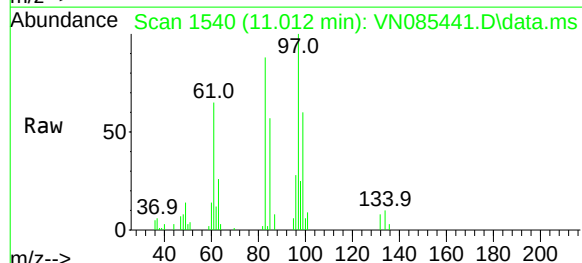
99 60.2 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 9.042 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

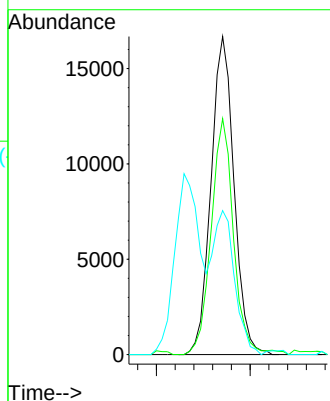
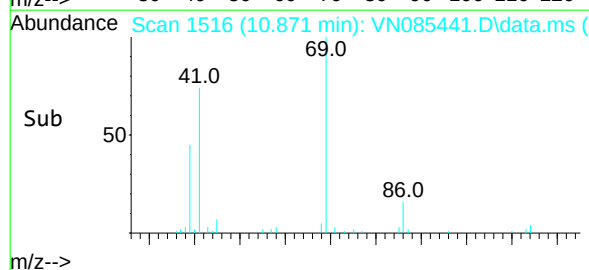
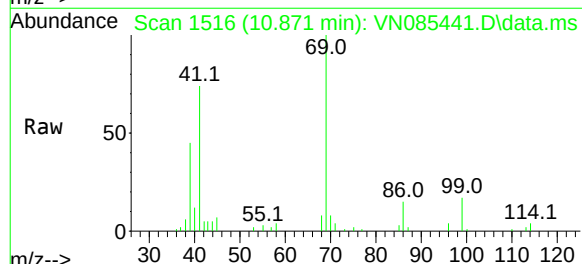
Tgt Ion: 69 Resp: 28454

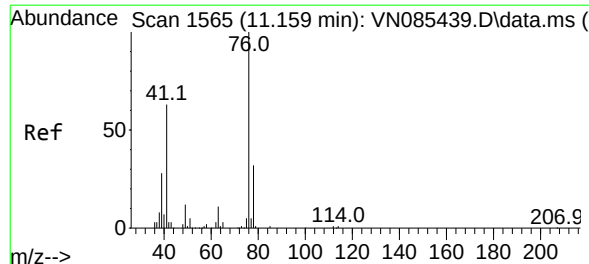
Ion Ratio Lower Upper

69 100

41 72.1 54.6 82.0

39 43.4 32.4 48.6





#57

1,3-Dichloropropane

Concen: 9.512 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 76 Resp: 37768

Ion Ratio Lower Upper

76 100

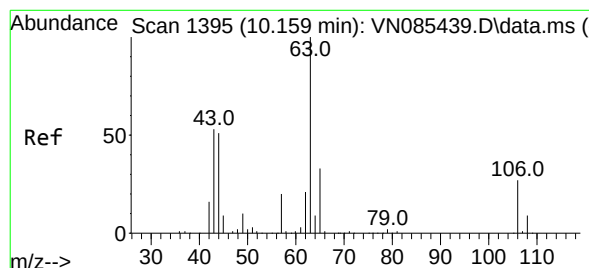
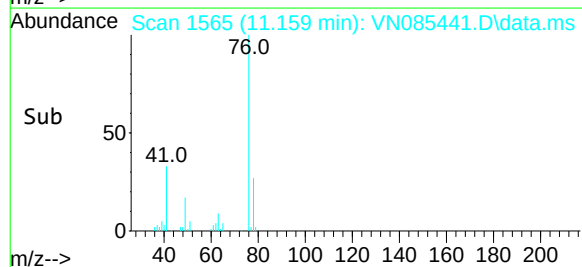
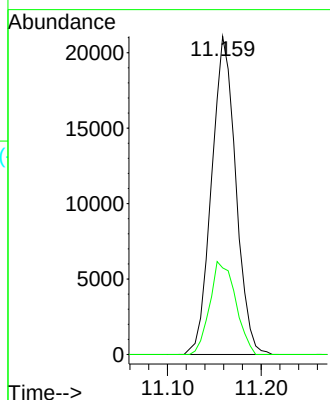
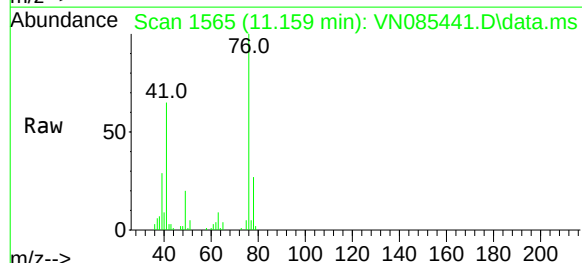
78 31.1 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 43.550 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085441.D

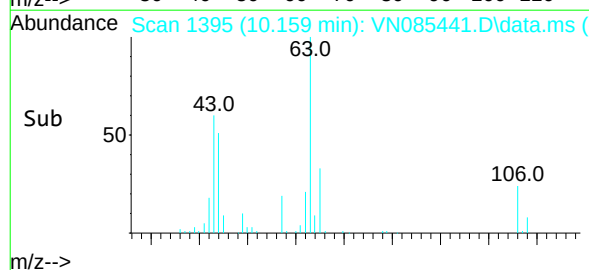
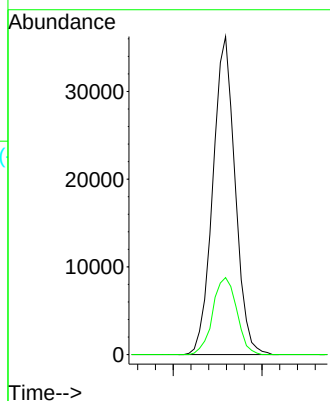
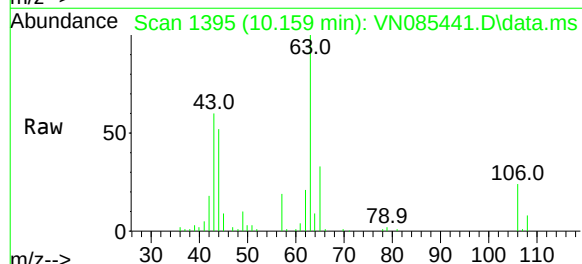
Acq: 14 Jan 2025 16:07

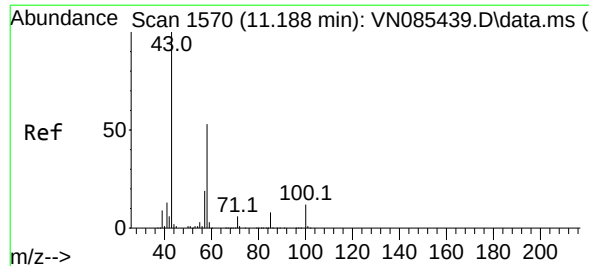
Tgt Ion: 63 Resp: 63110

Ion Ratio Lower Upper

63 100

106 26.1 21.6 32.4





#59

2-Hexanone

Concen: 46.291 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion: 43 Resp: 101318

Ion Ratio Lower Upper

43 100

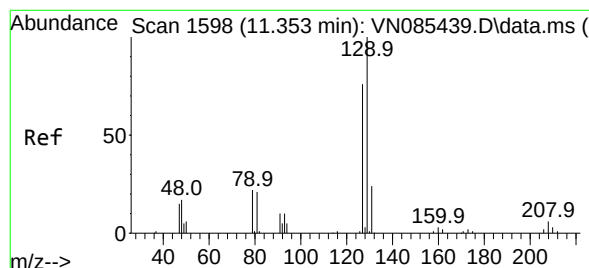
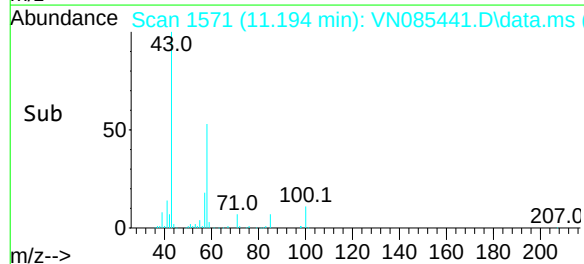
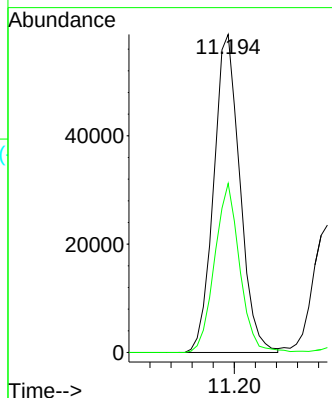
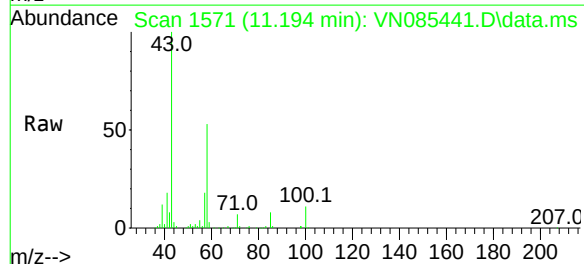
58 50.9 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 9.079 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085441.D

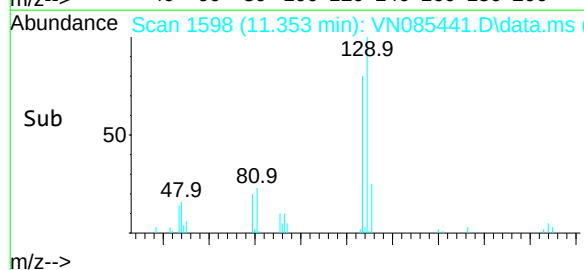
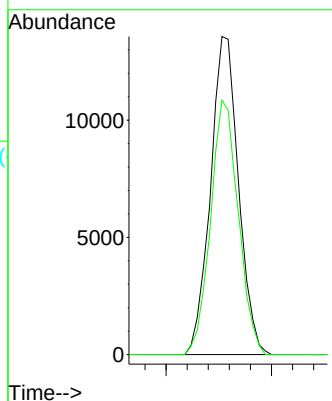
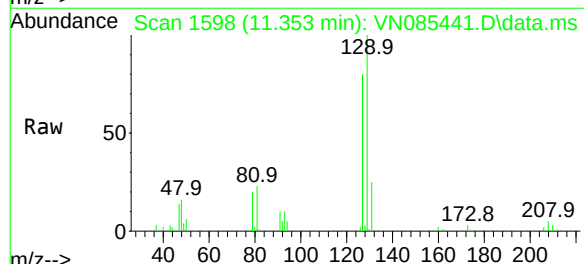
Acq: 14 Jan 2025 16:07

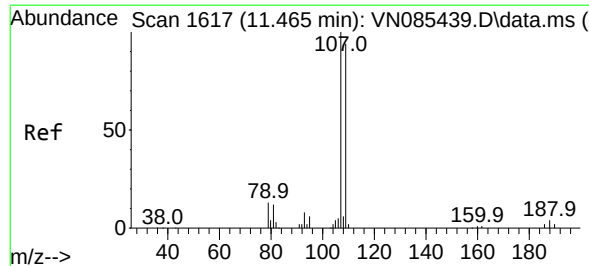
Tgt Ion:129 Resp: 25029

Ion Ratio Lower Upper

129 100

127 79.1 38.6 115.8





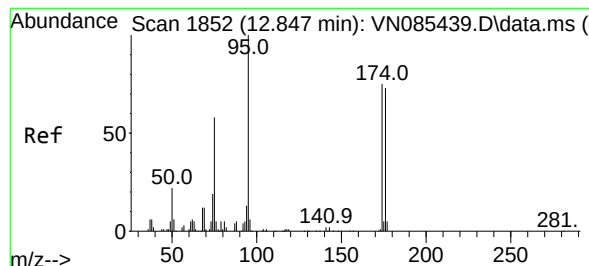
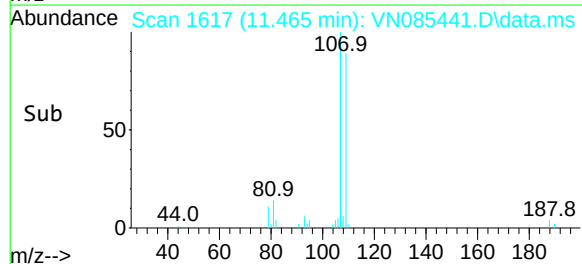
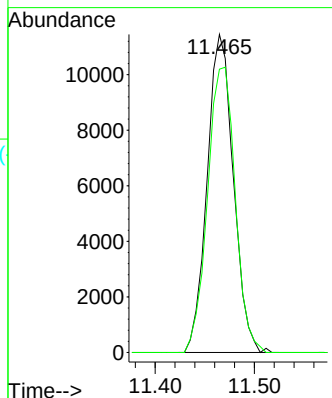
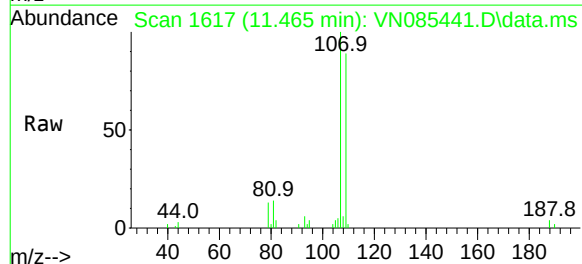
#61
1,2-Dibromoethane
Concen: 9.263 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Tgt Ion: 107 Resp: 21055
Ion Ratio Lower Upper
107 100
109 94.6 75.9 113.9

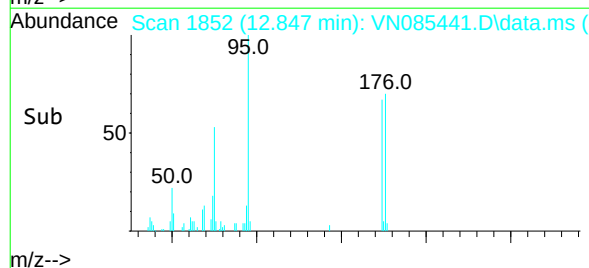
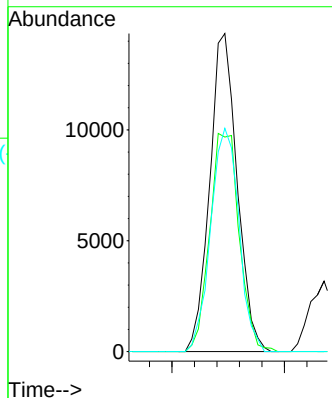
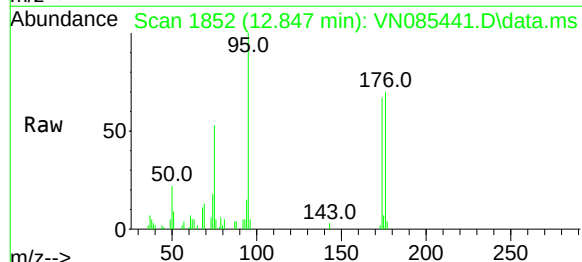
Manual Integrations
APPROVED

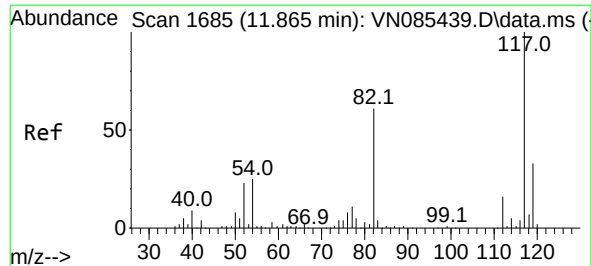
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#62
4-Bromofluorobenzene
Concen: 8.476 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion: 95 Resp: 24327
Ion Ratio Lower Upper
95 100
174 73.9 0.0 145.0
176 72.1 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion:117 Resp: 294508

Ion Ratio Lower Upper

117 100

82 58.7 48.6 72.8

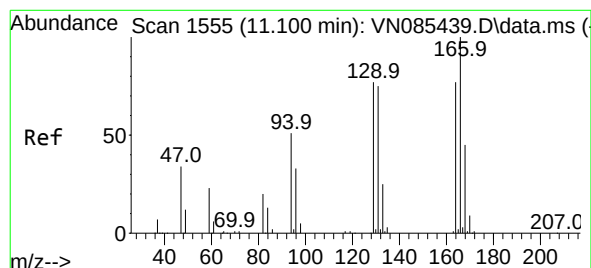
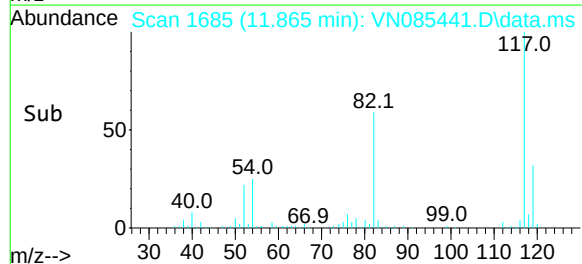
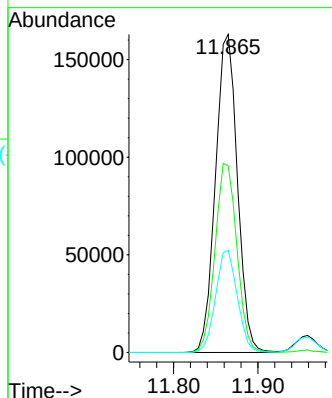
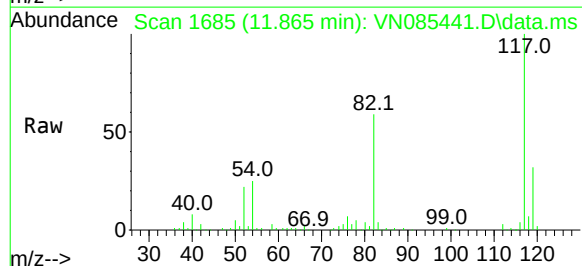
119 32.2 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 9.928 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:164 Resp: 19934

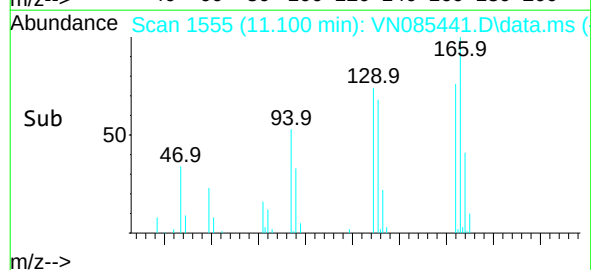
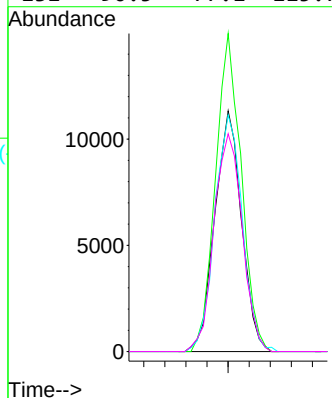
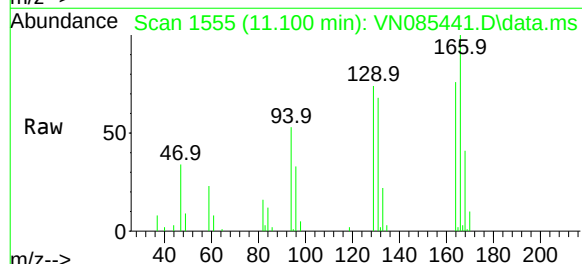
Ion Ratio Lower Upper

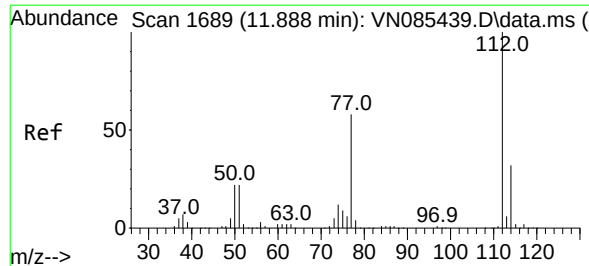
164 100

166 132.2 103.4 155.2

129 98.3 79.2 118.8

131 90.5 77.1 115.7





#65

Chlorobenzene

Concen: 9.560 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Tgt Ion:112 Resp: 61680

Ion Ratio Lower Upper

112 100

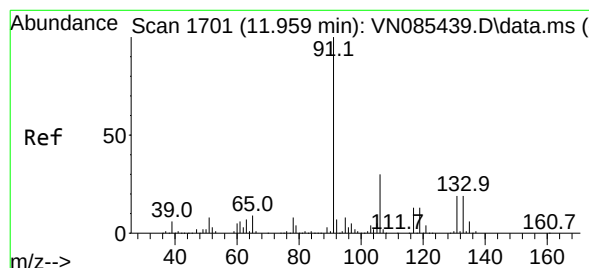
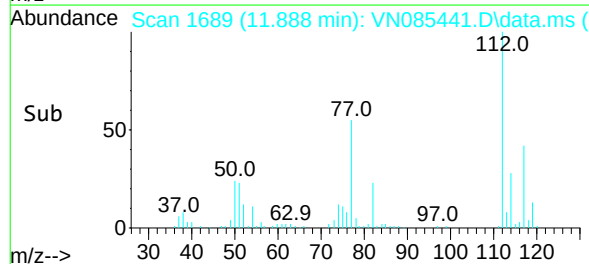
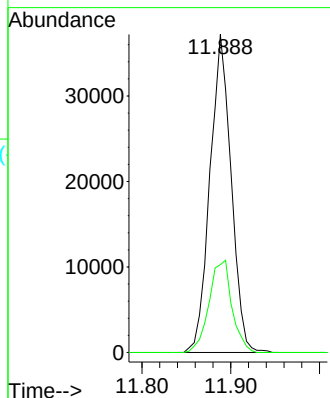
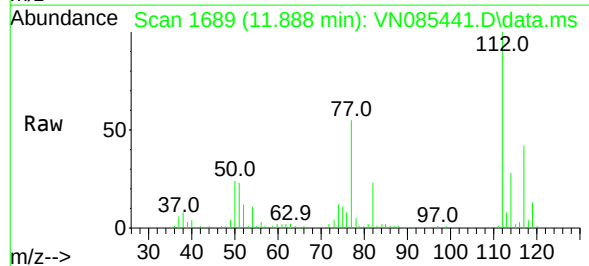
114 27.6 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 9.229 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

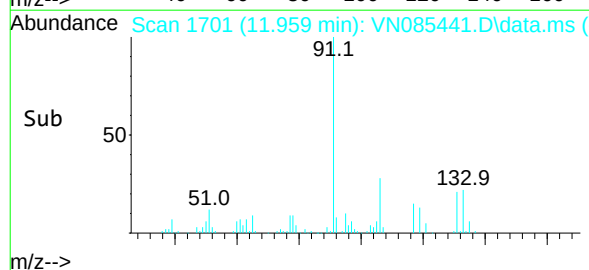
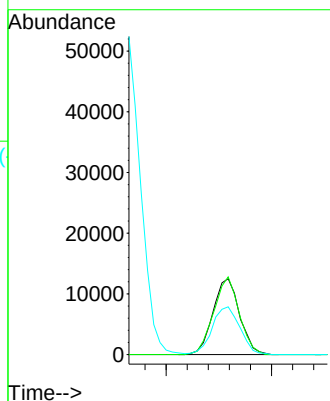
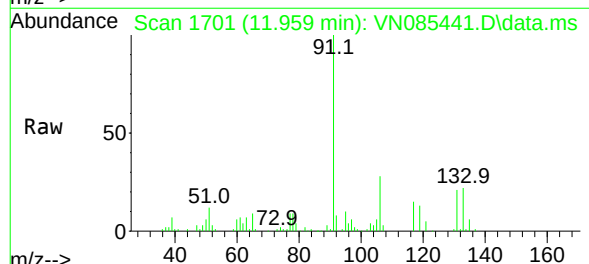
Tgt Ion:131 Resp: 21853

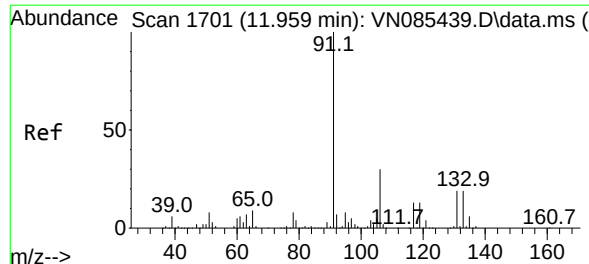
Ion Ratio Lower Upper

131 100

133 98.5 47.4 142.3

119 66.0 33.1 99.5





#67

Ethyl Benzene

Concen: 9.445 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 91 Resp: 99248

Ion Ratio Lower Upper

91 100

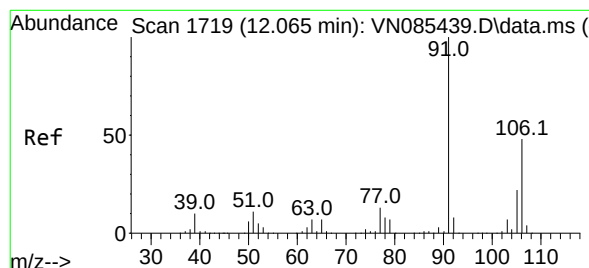
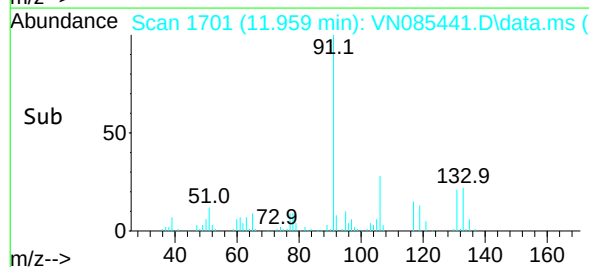
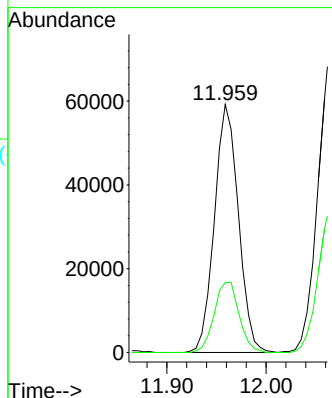
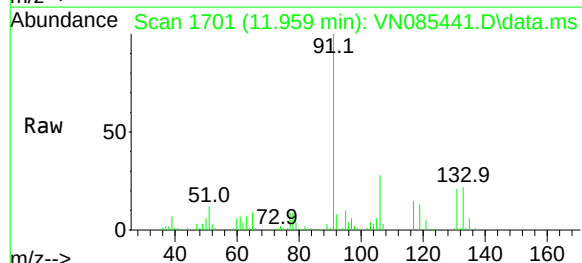
106 28.2 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 18.650 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. 0.000 min

Lab File: VN085441.D

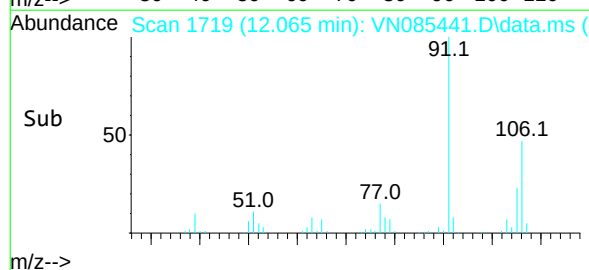
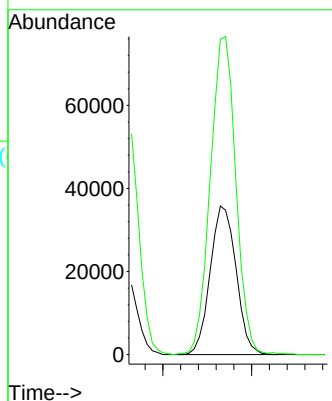
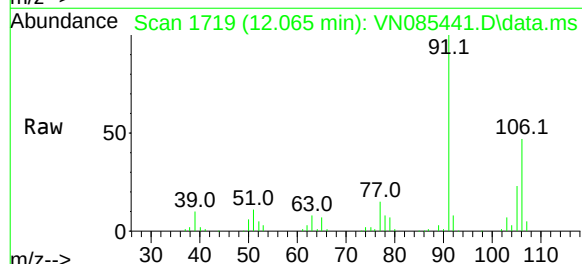
Acq: 14 Jan 2025 16:07

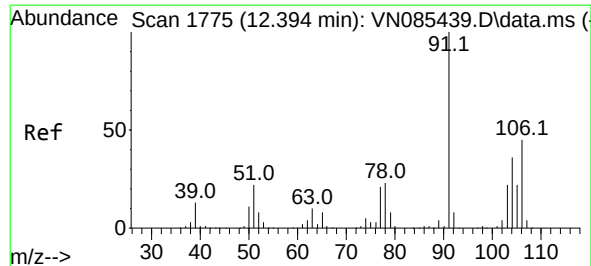
Tgt Ion:106 Resp: 72431

Ion Ratio Lower Upper

106 100

91 211.7 167.7 251.5





#69

o-Xylene

Concen: 9.264 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion:106 Resp: 34382

Ion Ratio Lower Upper

106 100

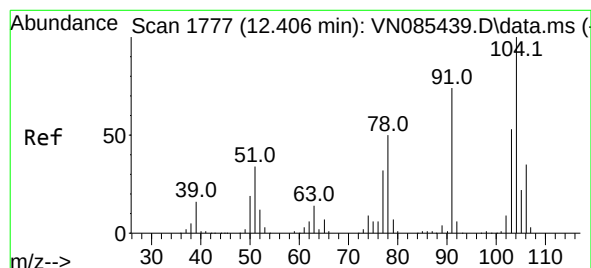
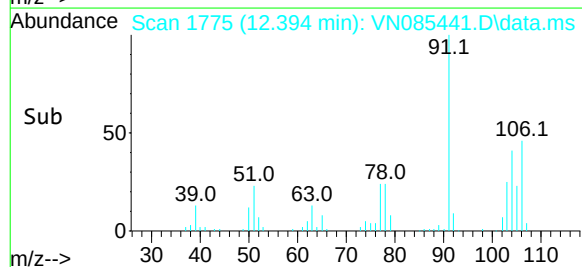
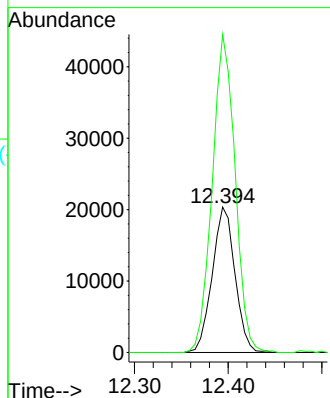
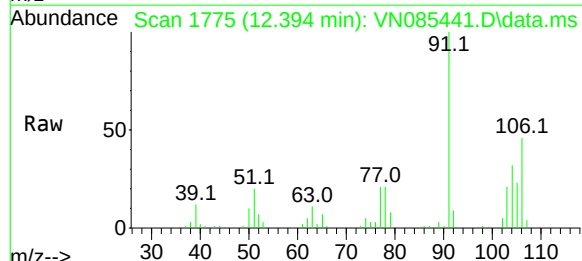
91 219.5 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 9.163 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

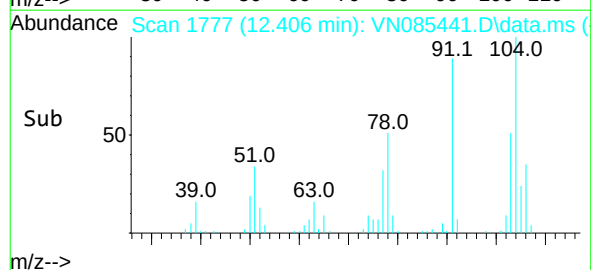
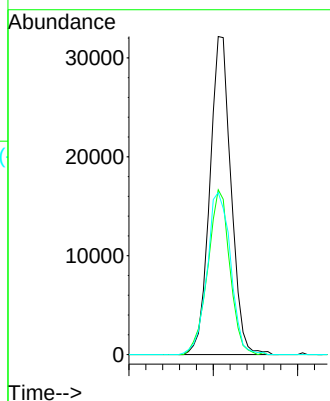
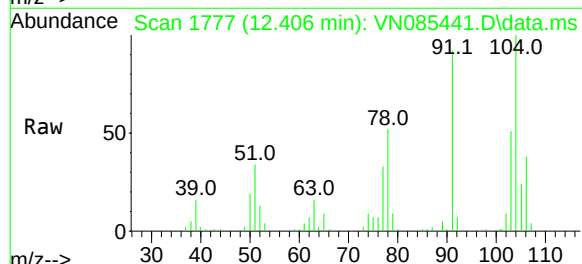
Tgt Ion:104 Resp: 56285

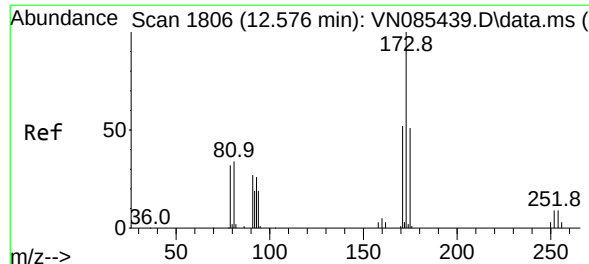
Ion Ratio Lower Upper

104 100

78 53.8 42.5 63.7

103 56.8 43.8 65.8





#71

Bromoform

Concen: 9.485 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

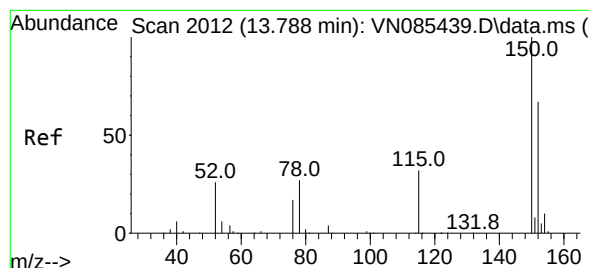
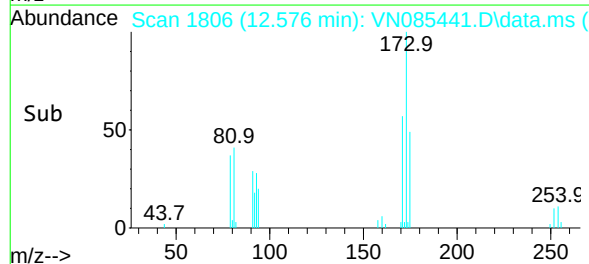
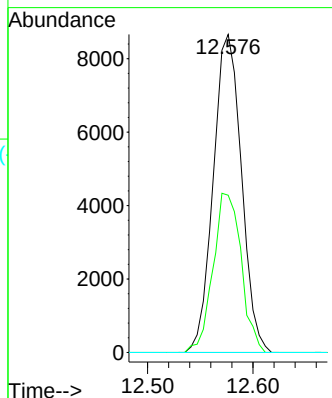
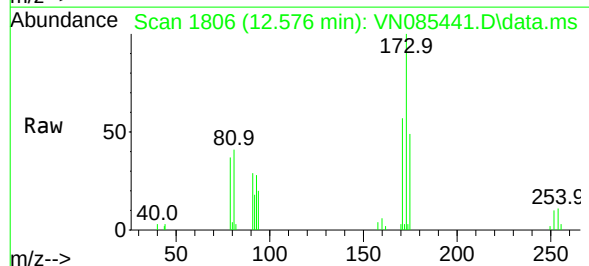
ClientSampleId :

VSTDICC010

Tgt	Ion:173	Resp:	16071
Ion	Ratio	Lower	Upper
173	100		
175	50.0	24.4	73.2
254	0.0	0.0	0.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

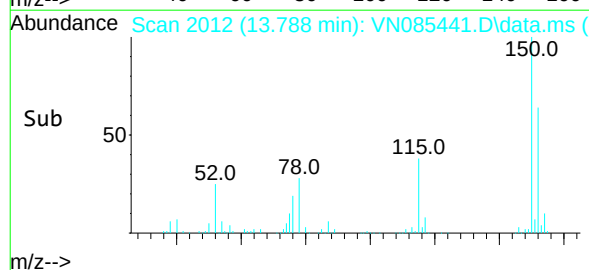
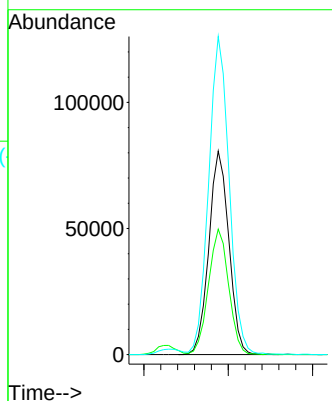
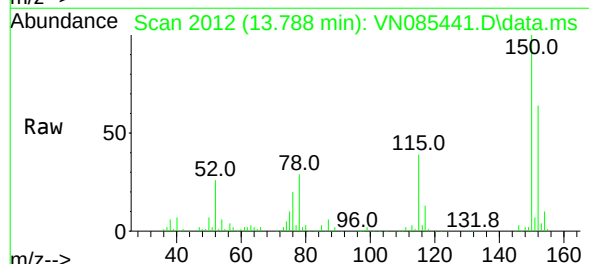
RT: 13.788 min Scan# 2012

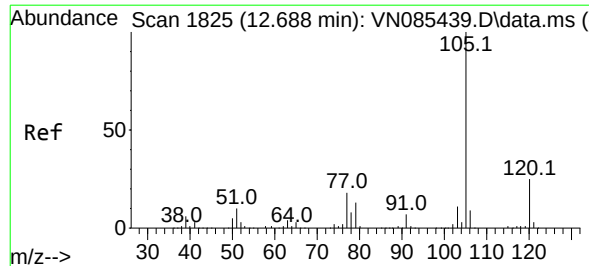
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt	Ion:152	Resp:	132934
Ion	Ratio	Lower	Upper
152	100		
115	62.3	31.1	93.3
150	159.8	0.0	343.6





#73

Isopropylbenzene

Concen: 9.697 ug/l

RT: 12.694 min Scan# 18

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 105 Resp: 87003

Ion Ratio Lower Upper

105 100

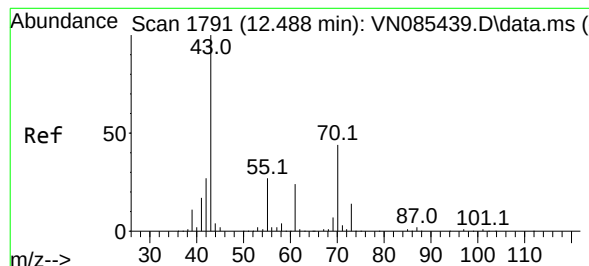
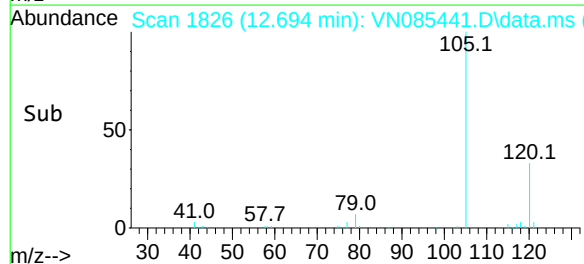
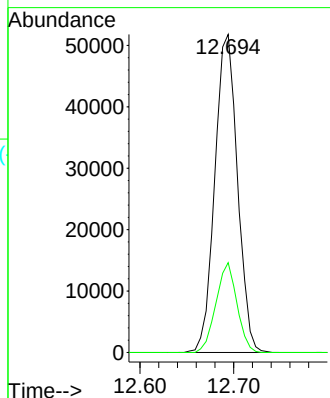
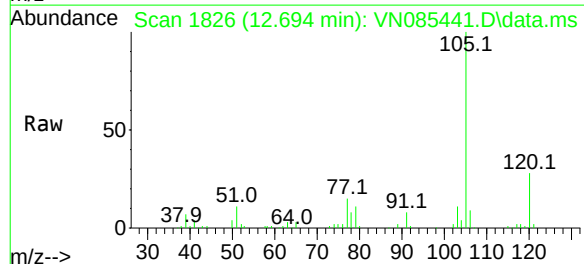
120 26.1 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 9.260 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion: 43 Resp: 37343

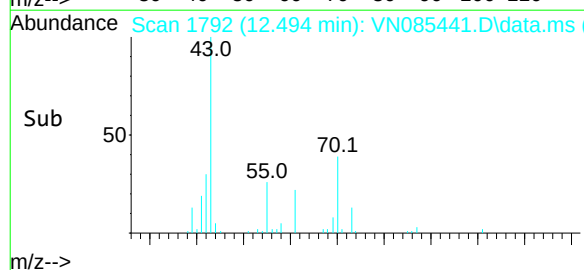
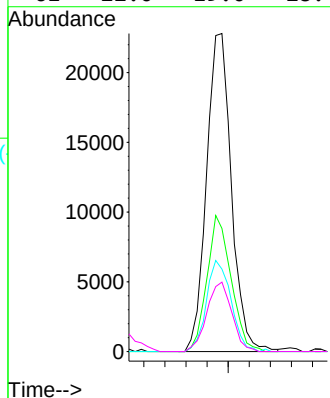
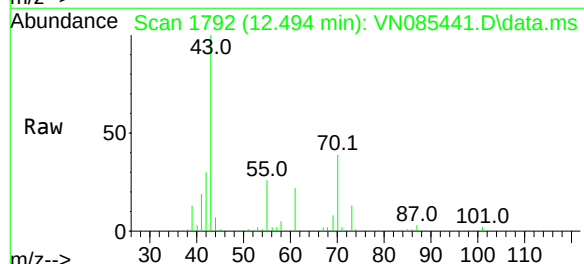
Ion Ratio Lower Upper

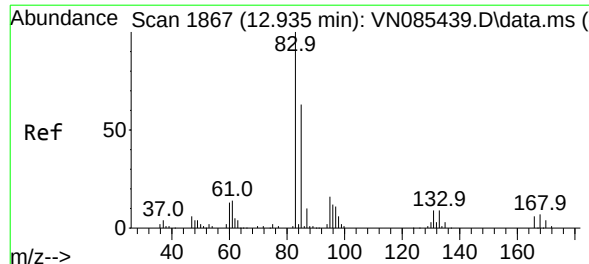
43 100

70 41.4 34.0 51.0

55 28.5 21.4 32.2

61 22.0 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 9.709 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

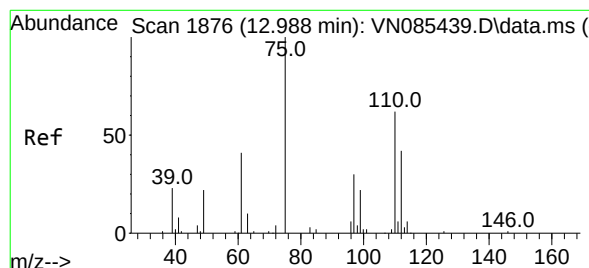
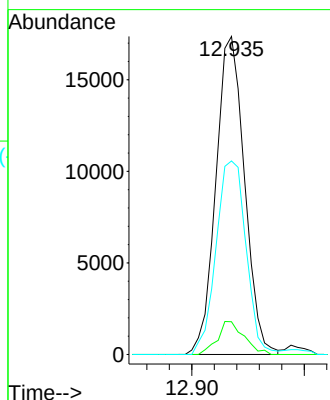
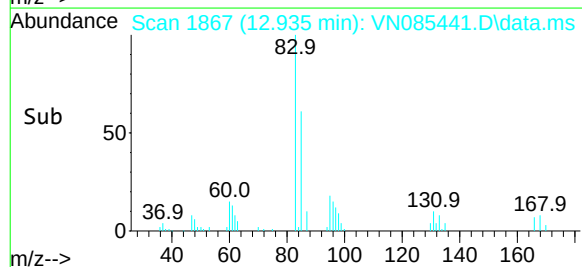
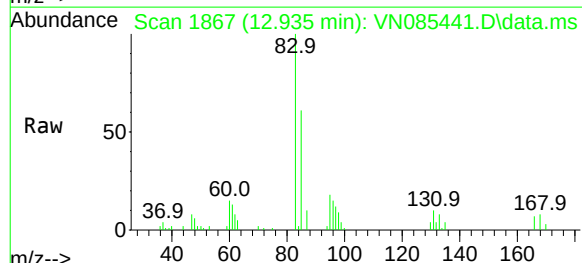
ClientSampleId :

VSTDIC010

Tgt Ion:	83	Resp:	30770
Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	63.6	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#76

1,2,3-Trichloropropane

Concen: 9.432 ug/l m

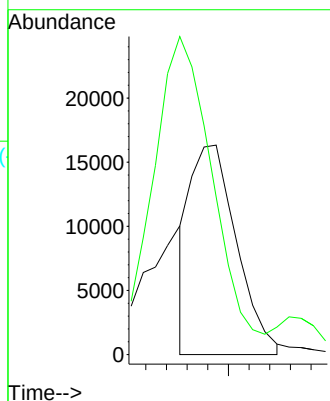
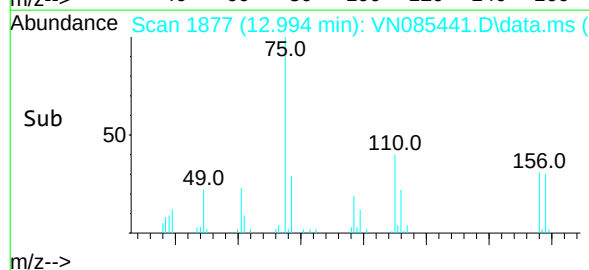
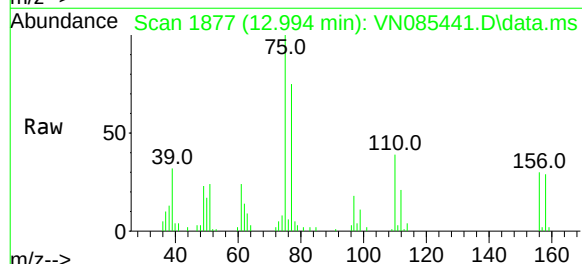
RT: 12.994 min Scan# 1877

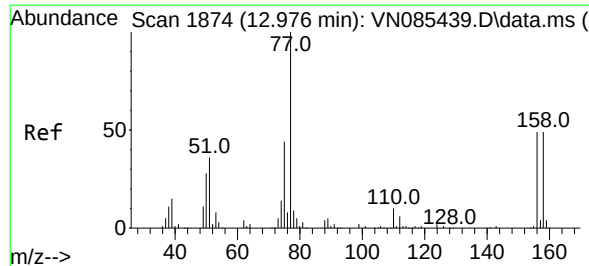
Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	75	Resp:	25443
Ion	Ratio	Lower	Upper
75	100		
77	198.5	109.7	329.2





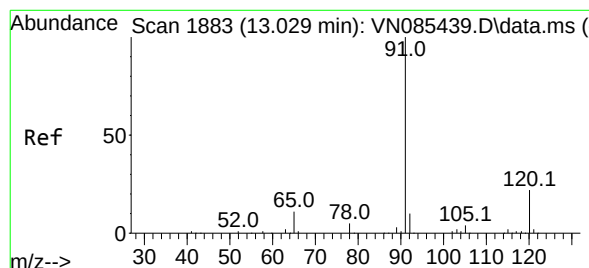
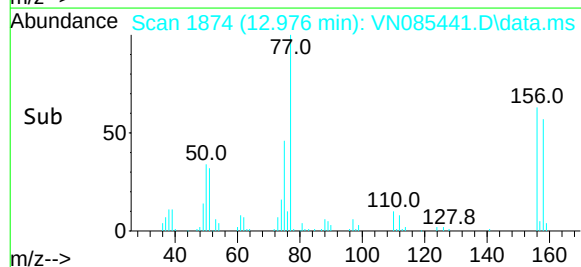
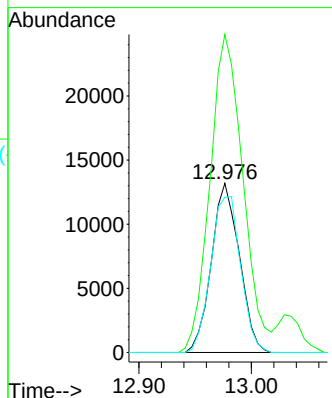
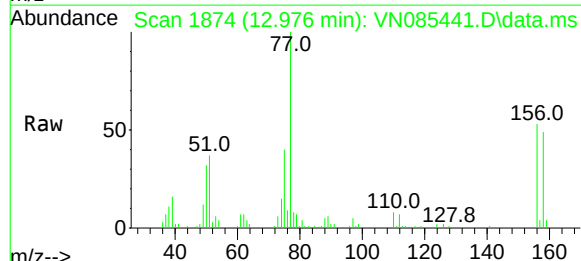
Bromobenzene
Concen: 9.720 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. 0.000 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Tgt Ion:	156	Resp:	22784
Ion	Ratio	Lower	Upper
156	100		
77	221.6	114.1	342.4
158	98.7	48.9	146.8

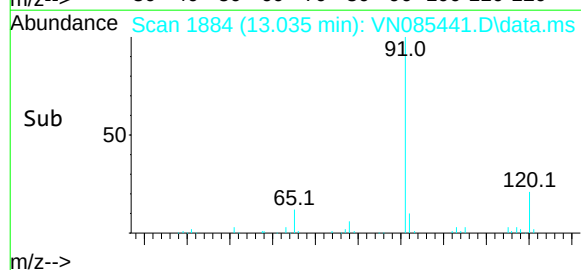
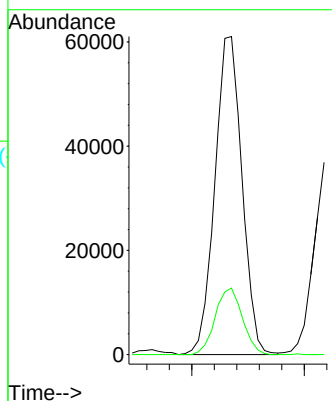
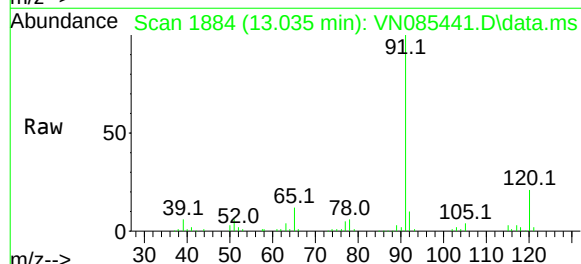
Manual Integrations
APPROVED

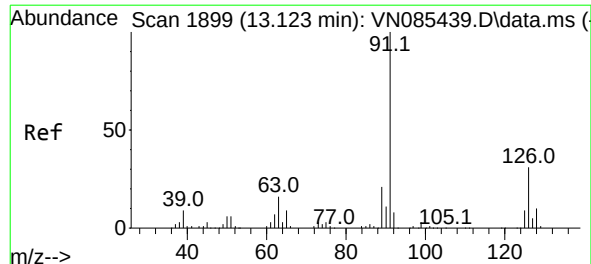
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



n-propylbenzene
Concen: 9.628 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085441.D
Acq: 14 Jan 2025 16:07

Tgt Ion:	91	Resp:	102262
Ion	Ratio	Lower	Upper
91	100		
120	20.9	10.9	32.6





#79

2-Chlorotoluene

Concen: 9.943 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion: 91 Resp: 68346

Ion Ratio Lower Upper

91 100

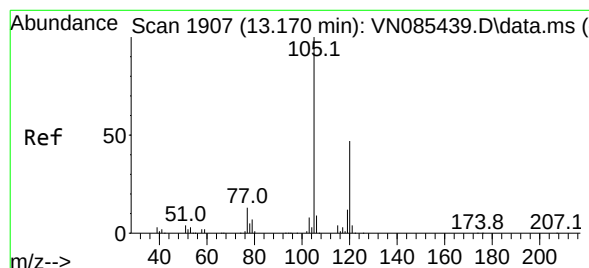
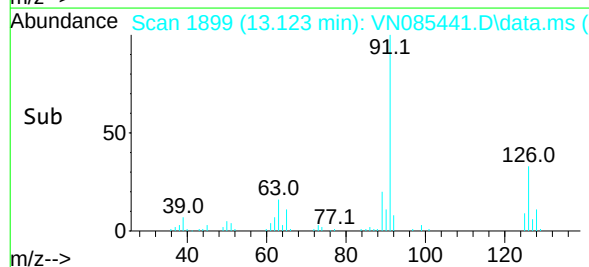
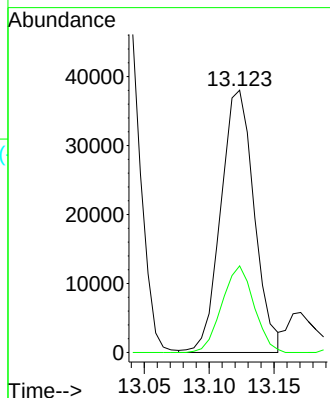
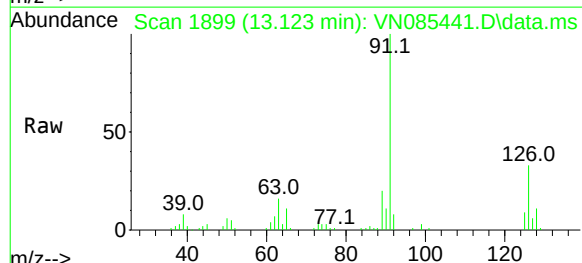
126 31.5 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 9.669 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085441.D

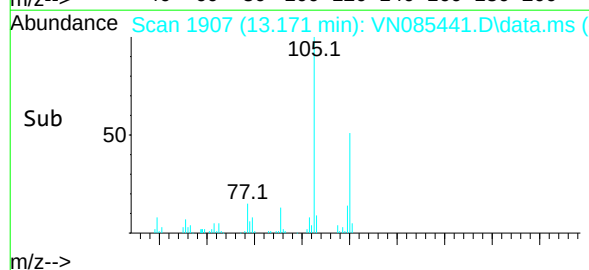
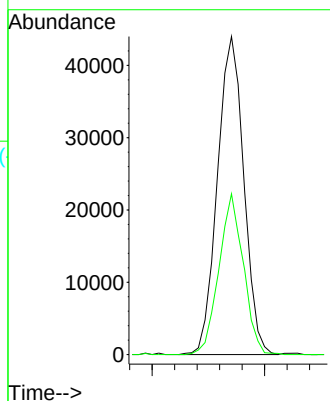
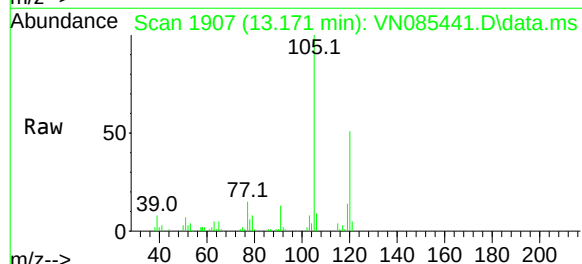
Acq: 14 Jan 2025 16:07

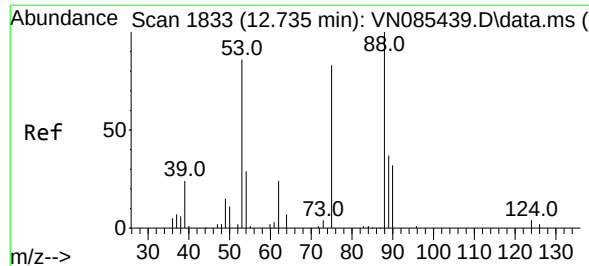
Tgt Ion:105 Resp: 71656

Ion Ratio Lower Upper

105 100

120 46.8 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 9.248 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

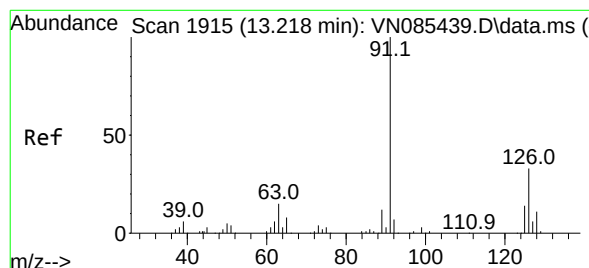
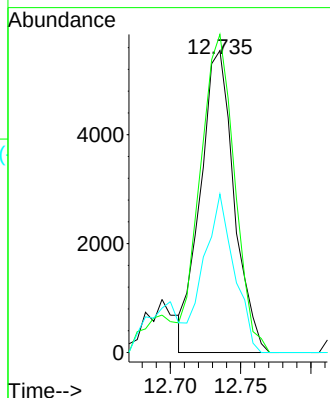
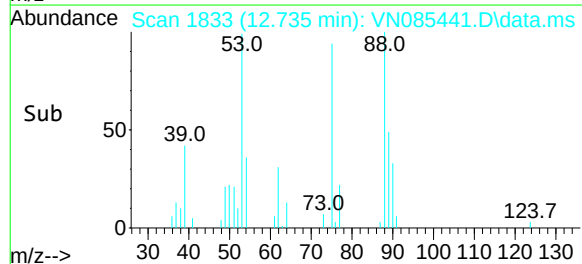
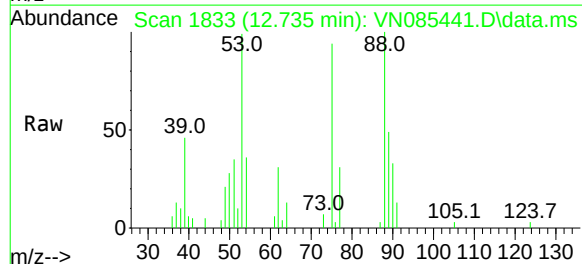
ClientSampleId :

VSTDIC010

Tgt Ion:	75	Resp:	9236
Ion	Ratio	Lower	Upper
75	100		
53	119.6	95.6	143.4
89	46.6	37.0	55.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#82

4-Chlorotoluene

Concen: 9.756 ug/l

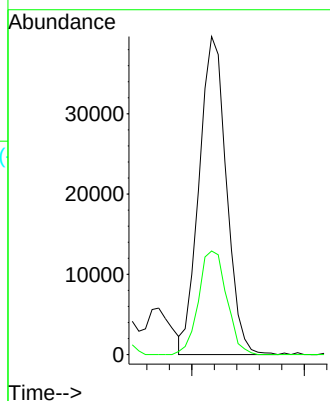
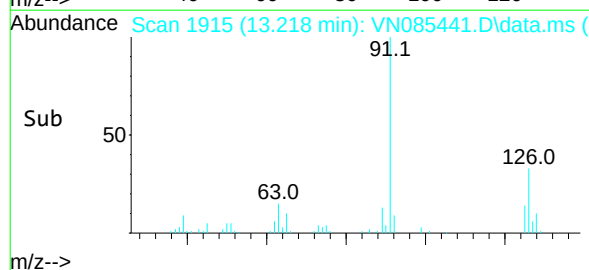
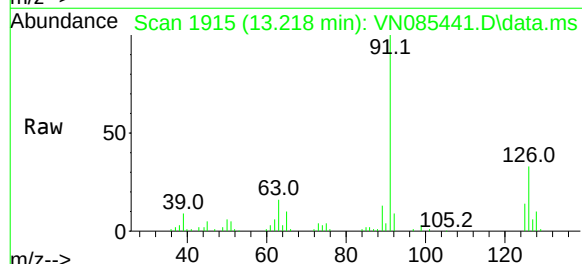
RT: 13.218 min Scan# 1915

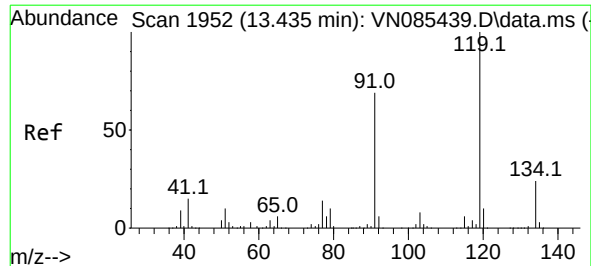
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	91	Resp:	66773
Ion	Ratio	Lower	Upper
91	100		
126	33.6	15.9	47.7





#83

tert-Butylbenzene

Concen: 9.553 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

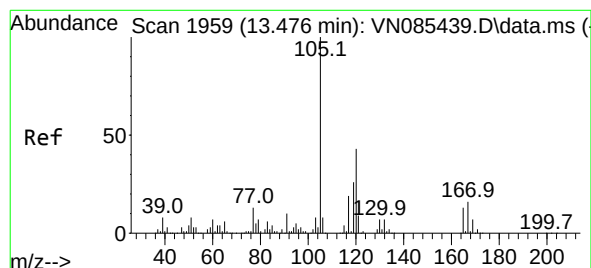
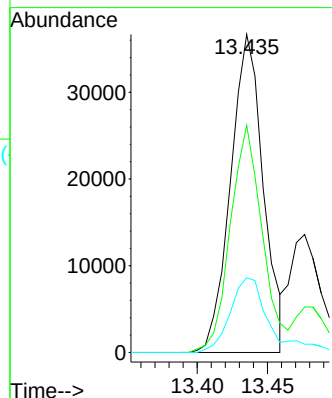
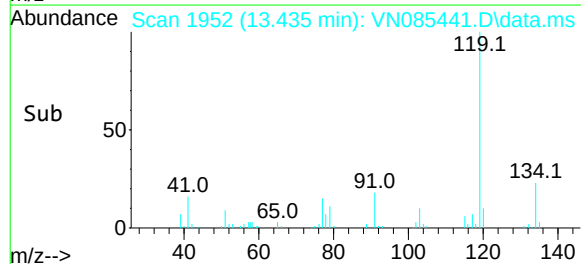
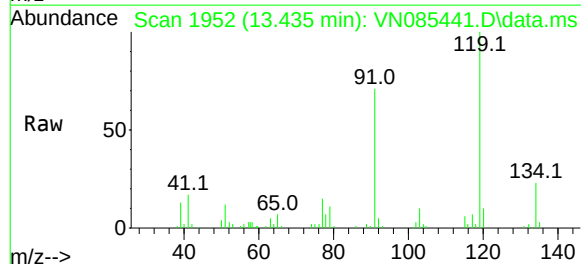
ClientSampleId :

VSTDIC010

Tgt Ion:	119	Resp:	59455
Ion Ratio	Lower	Upper	
119	100		
91	70.0	35.1	105.3
134	27.8	12.0	36.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 9.754 ug/l

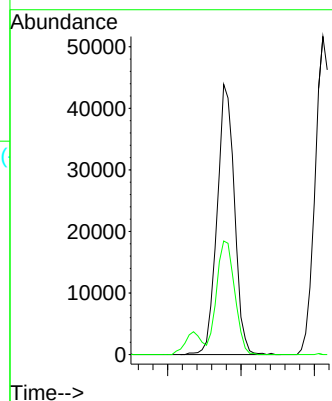
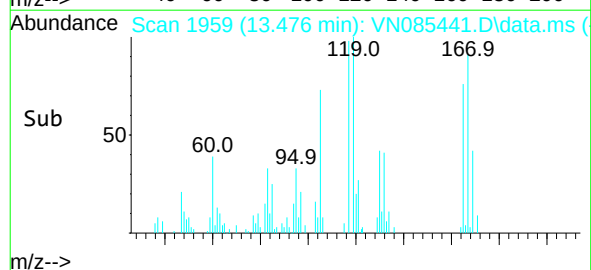
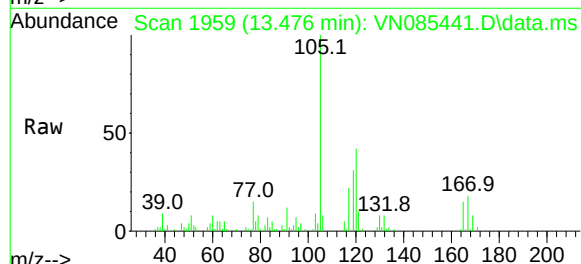
RT: 13.476 min Scan# 1959

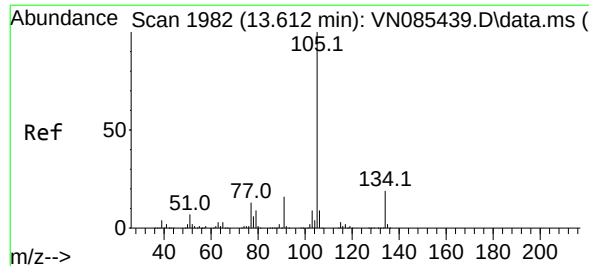
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	105	Resp:	72046
Ion Ratio	Lower	Upper	
105	100		
120	43.8	21.6	65.0





#85

sec-Butylbenzene

Concen: 9.699 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion:105 Resp: 83662

Ion Ratio Lower Upper

105 100

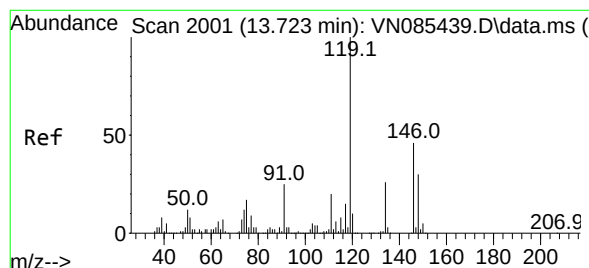
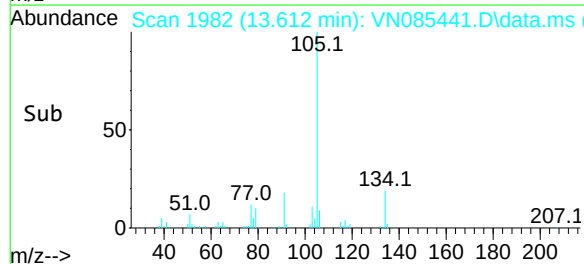
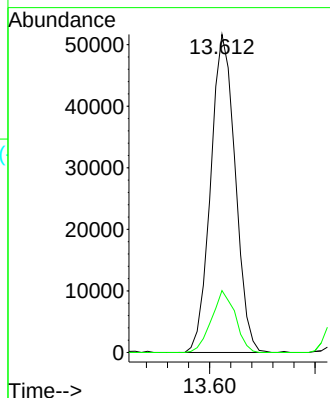
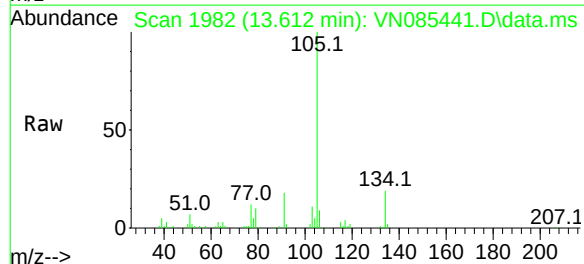
134 18.9 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 9.674 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

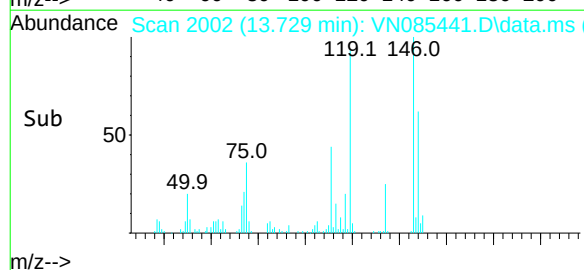
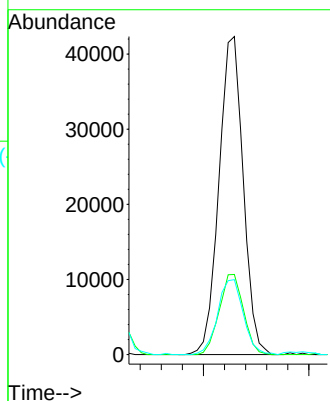
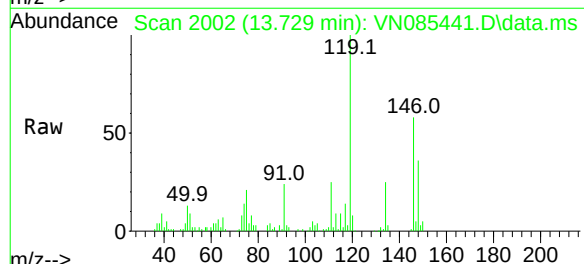
Tgt Ion:119 Resp: 67556

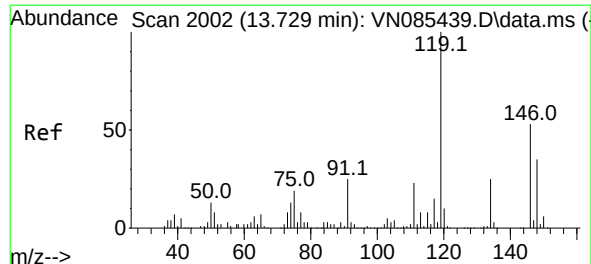
Ion Ratio Lower Upper

119 100

134 25.2 12.7 38.0

91 25.0 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 9.693 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

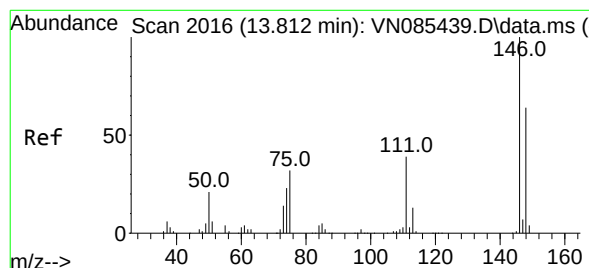
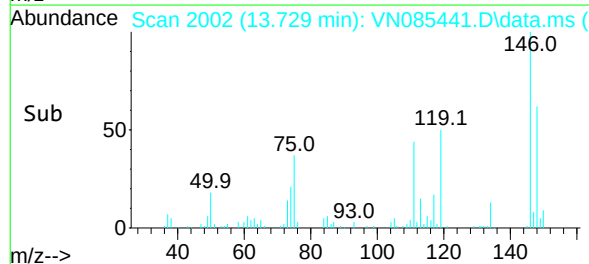
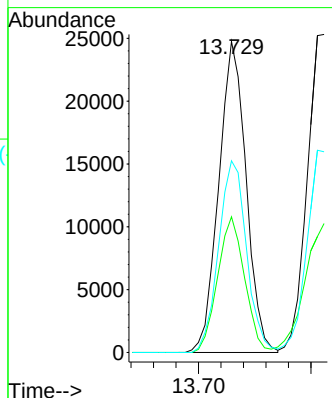
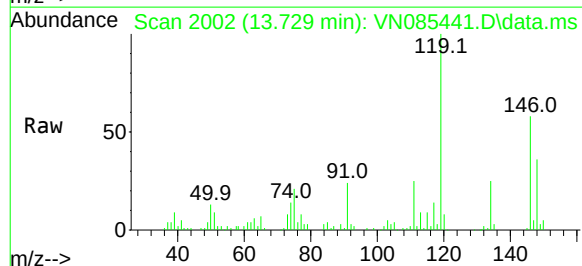
VSTDIC010

Tgt Ion:	146	Resp:	41843
Ion	Ratio	Lower	Upper
146	100		
111	43.1	21.4	64.3
148	63.0	32.3	96.9

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#88

1,4-Dichlorobenzene

Concen: 9.549 ug/l

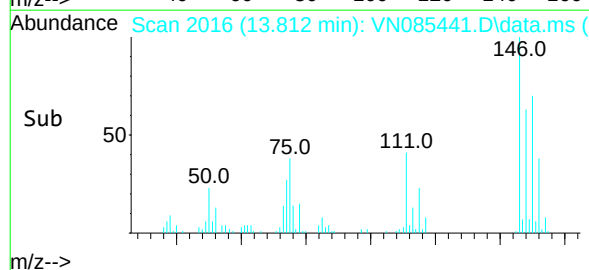
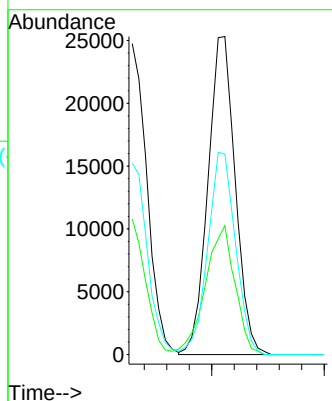
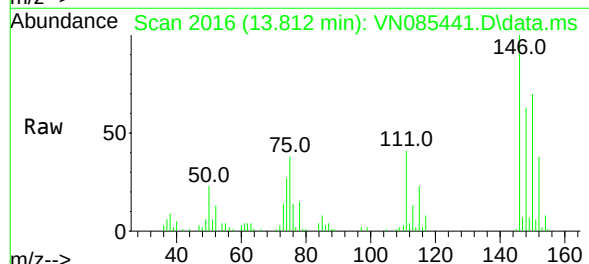
RT: 13.812 min Scan# 2016

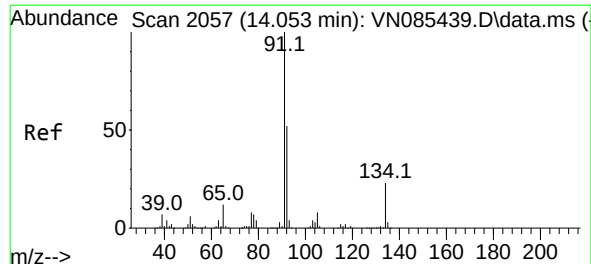
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	146	Resp:	42728
Ion	Ratio	Lower	Upper
146	100		
111	44.0	21.3	63.7
148	64.6	32.4	97.0





#89

n-Butylbenzene

Concen: 9.314 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

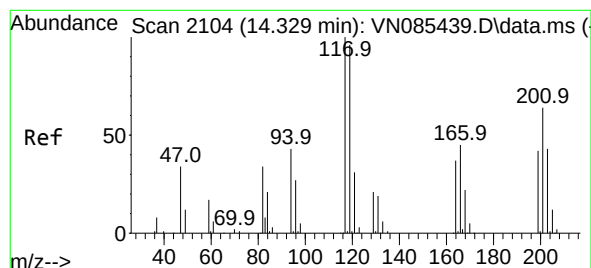
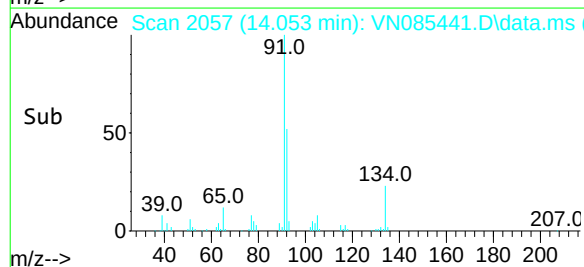
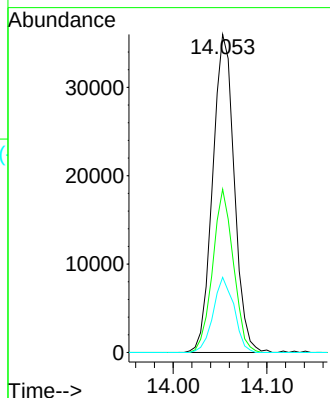
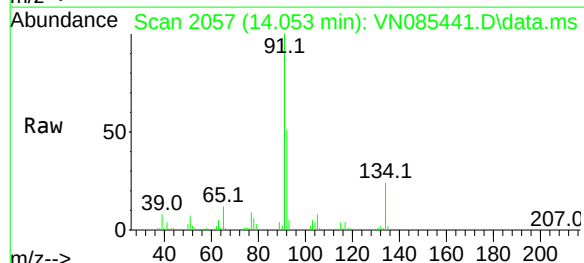
ClientSampleId :

VSTDICC010

Tgt Ion:	91	Resp:	57632
Ion	Ratio	Lower	Upper
91	100		
92	49.2	25.8	77.3
134	22.8	11.7	35.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#90

Hexachloroethane

Concen: 9.294 ug/l

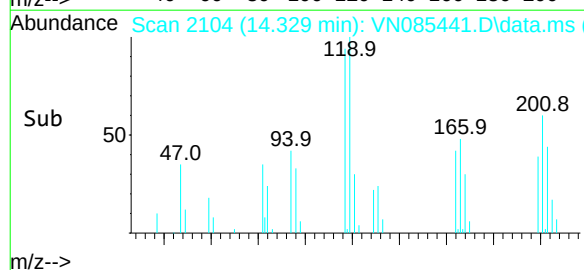
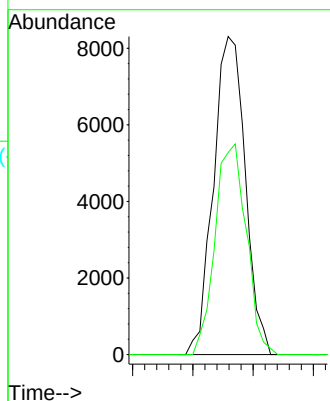
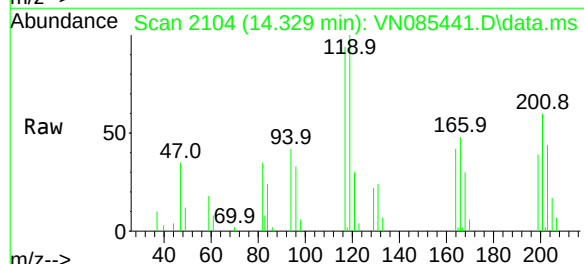
RT: 14.329 min Scan# 2104

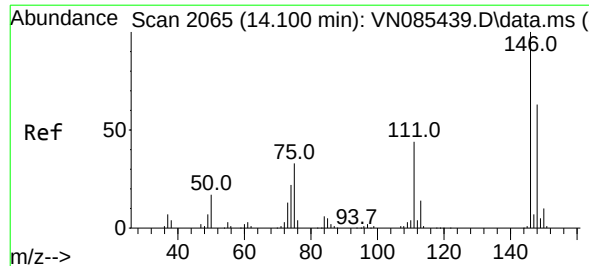
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	117	Resp:	15261
Ion	Ratio	Lower	Upper
117	100		
201	65.0	33.7	101.0





#91

1,2-Dichlorobenzene

Concen: 9.458 ug/l

RT: 14.106 min Scan# 2065

Delta R.T. 0.006 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC010

Tgt Ion:146 Resp: 40726

Ion Ratio Lower Upper

146 100

111 42.9 21.7 65.1

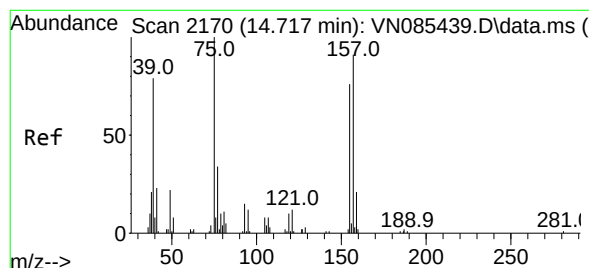
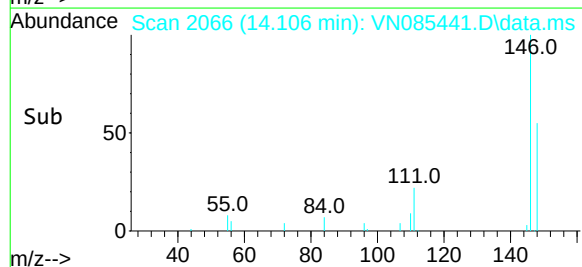
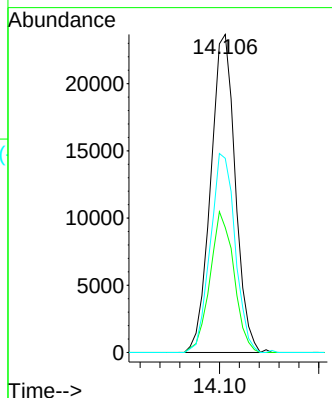
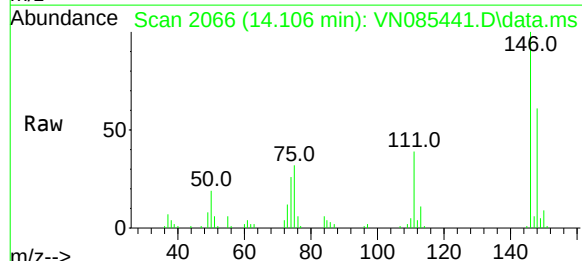
148 62.9 31.4 94.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 9.744 ug/l

RT: 14.717 min Scan# 2170

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

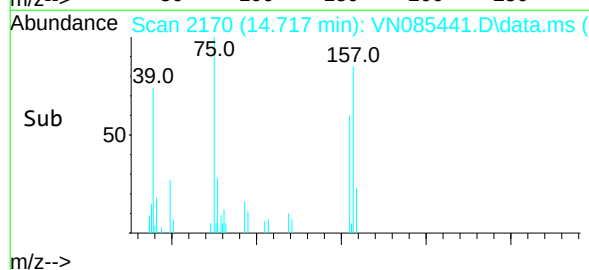
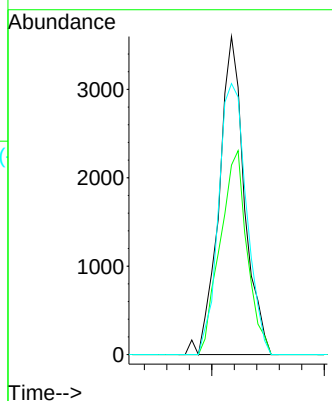
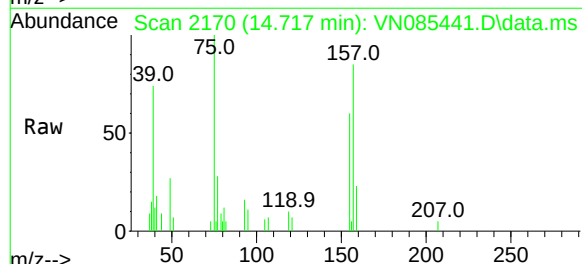
Tgt Ion: 75 Resp: 5639

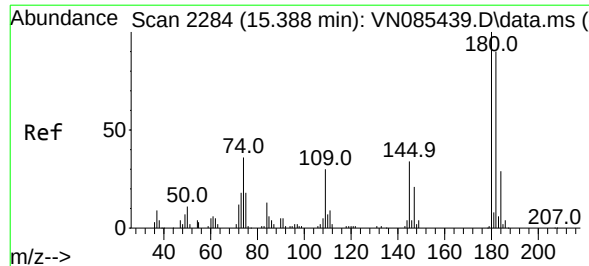
Ion Ratio Lower Upper

75 100

155 67.9 36.4 109.2

157 94.1 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 9.354 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

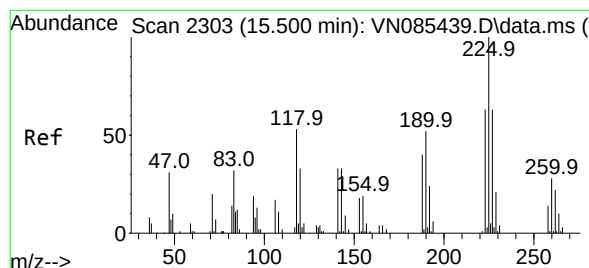
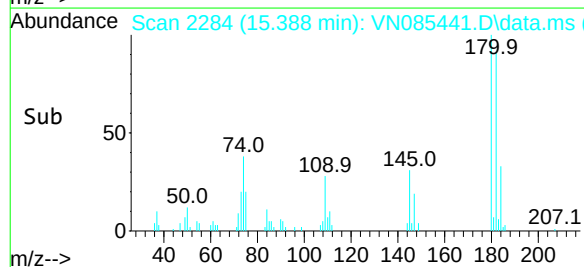
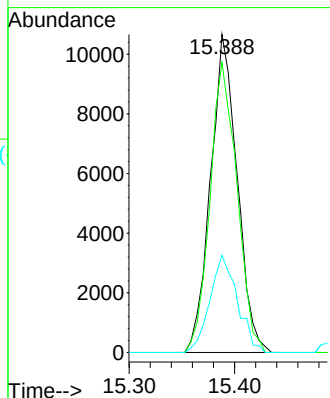
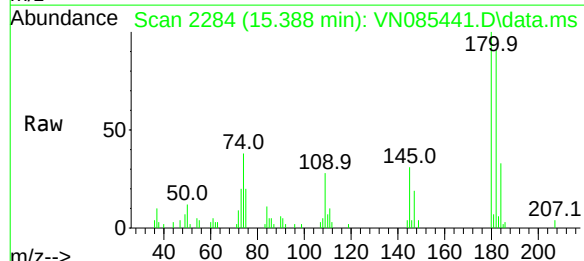
ClientSampleId :

VSTDIC010

Tgt Ion:	180	Resp:	18720
Ion Ratio	Lower	Upper	
180	100		
182	92.4	46.8	140.3
145	31.7	16.0	48.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

Concen: 9.874 ug/l

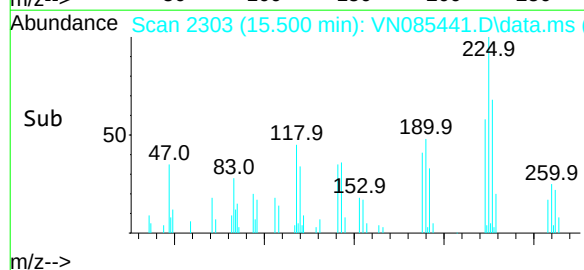
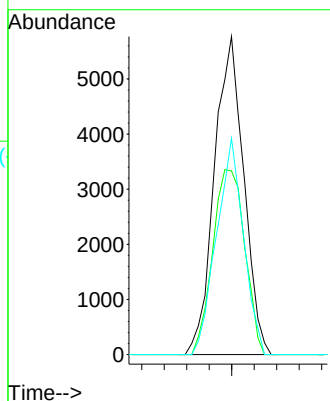
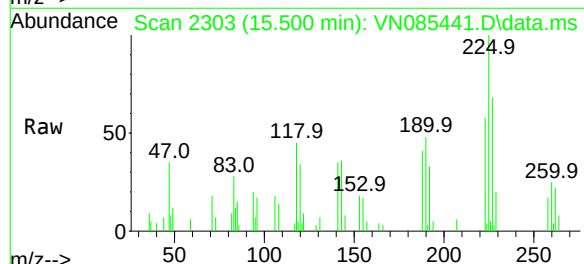
RT: 15.500 min Scan# 2303

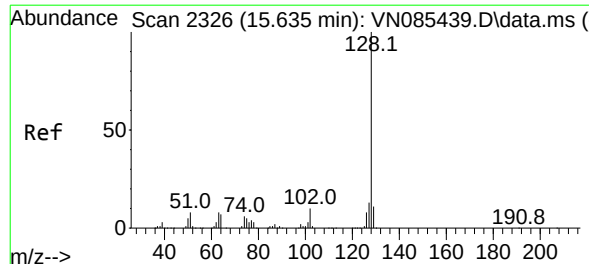
Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	225	Resp:	10491
Ion Ratio	Lower	Upper	
225	100		
223	63.3	30.7	92.1
227	62.1	30.9	92.5





#95

Naphthalene

Concen: 8.717 ug/l

RT: 15.635 min Scan# 2326

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Instrument :

MSVOA_N

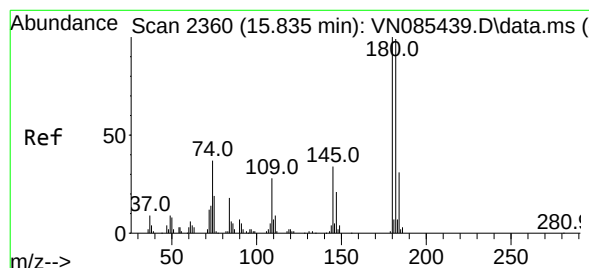
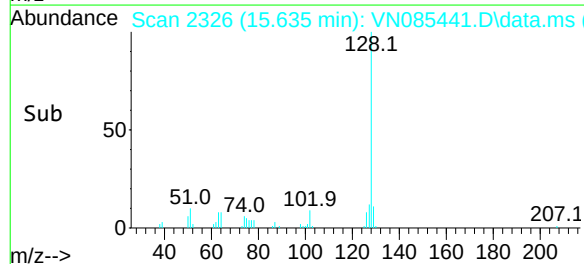
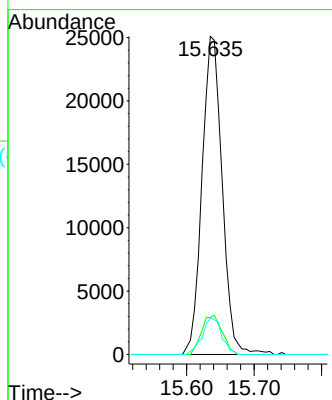
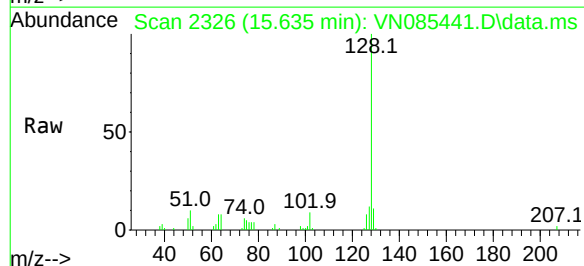
ClientSampleId :

VSTDIC010

Tgt Ion:	128	Resp:	52054
Ion	Ratio	Lower	Upper
128	100		
127	12.6	10.6	16.0
129	11.2	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 9.605 ug/l

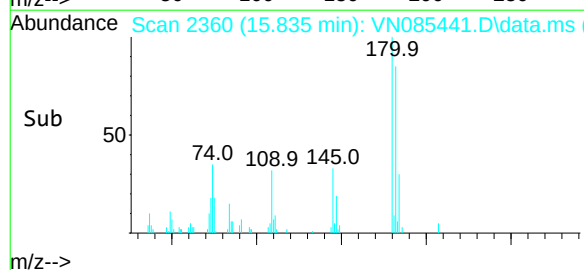
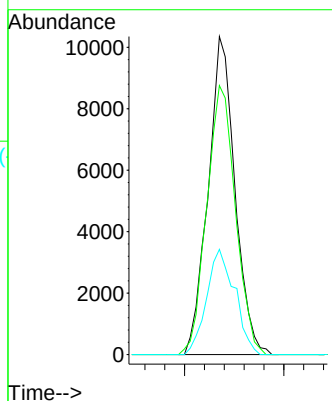
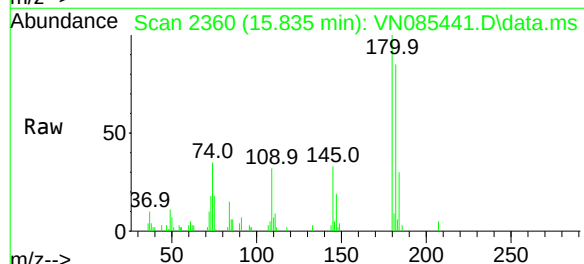
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085441.D

Acq: 14 Jan 2025 16:07

Tgt Ion:	180	Resp:	19450
Ion	Ratio	Lower	Upper
180	100		
182	90.3	47.4	142.2
145	34.7	16.9	50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085442.D
 Acq On : 14 Jan 2025 16:31
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC005

Quant Time: Jan 15 01:45:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 01/15/2025
 Supervised By : Mahesh Dadoda 01/15/2025

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	186556	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	324413	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	282203	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	126086	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.577	65	17046	5.660	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	11.320%#
35) Dibromofluoromethane	8.165	113	12102	5.377	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	10.760%#
50) Toluene-d8	10.565	98	41328	5.168	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	10.340%#
62) 4-Bromofluorobenzene	12.847	95	13520	4.943	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	9.880%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	13199	5.225	ug/l	97
3) Chloromethane	2.359	50	14526	5.311	ug/l	96
4) Vinyl Chloride	2.512	62	14564	5.298	ug/l	98
5) Bromomethane	2.953	94	9788	5.895	ug/l	98
6) Chloroethane	3.124	64	9430	5.411	ug/l	99
7) Trichlorofluoromethane	3.501	101	20098	5.039	ug/l	92
8) Diethyl Ether	3.959	74	6652	4.828	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.365	101	11917	5.305	ug/l	97
10) Methyl Iodide	4.583	142	12331	4.793	ug/l	99
11) Tert butyl alcohol	5.518	59	9075	26.318	ug/l #	94
12) 1,1-Dichloroethene	4.342	96	10429	5.209	ug/l	96
13) Acrolein	4.171	56	9430	20.033	ug/l	97
14) Allyl chloride	5.030	41	16741	5.153	ug/l	97
15) Acrylonitrile	5.718	53	27869	25.445	ug/l	97
16) Acetone	4.430	43	25122	25.819	ug/l	97
17) Carbon Disulfide	4.706	76	32068	5.202	ug/l	96
18) Methyl Acetate	5.024	43	15106	5.106	ug/l	97
19) Methyl tert-butyl Ether	5.800	73	31439	4.836	ug/l	94
20) Methylene Chloride	5.271	84	12981	5.389	ug/l #	83
21) trans-1,2-Dichloroethene	5.783	96	10614	4.960	ug/l #	78
22) Diisopropyl ether	6.665	45	35785	4.962	ug/l #	96
23) Vinyl Acetate	6.600	43	118439m	23.389	ug/l	
24) 1,1-Dichloroethane	6.565	63	22865	5.200	ug/l	99
25) 2-Butanone	7.483	43	36127	25.231	ug/l	99
26) 2,2-Dichloropropane	7.488	77	18398	5.175	ug/l	100
27) cis-1,2-Dichloroethene	7.488	96	12477	4.951	ug/l	99
28) Bromochloromethane	7.806	49	11096	5.424	ug/l	99
29) Tetrahydrofuran	7.841	42	21983	24.215	ug/l	99
30) Chloroform	7.959	83	23384	5.146	ug/l	98
31) Cyclohexane	8.247	56	22343	5.846	ug/l #	92
32) 1,1,1-Trichloroethane	8.159	97	21416	5.372	ug/l	91
36) 1,1-Dichloropropene	8.371	75	15886	5.029	ug/l	96
37) Ethyl Acetate	7.553	43	16879m	5.294	ug/l	
38) Carbon Tetrachloride	8.359	117	18317	5.065	ug/l	96
39) Methylcyclohexane	9.600	83	14175	4.776	ug/l	98
40) Benzene	8.600	78	47833	5.040	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085442.D
 Acq On : 14 Jan 2025 16:31
 Operator : JC\MD
 Sample : VSTDIC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC005

Manual Integrations
 APPROVED

Reviewed By : John Carlone 01/15/2025
 Supervised By : Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:45:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	7380	4.449	ug/l	96
42) 1,2-Dichloroethane	8.671	62	18628	5.211	ug/l	98
43) Isopropyl Acetate	8.688	43	24792	4.853	ug/l	98
44) Trichloroethene	9.347	130	11133	5.039	ug/l	86
45) 1,2-Dichloropropane	9.618	63	12591	5.194	ug/l	92
46) Dibromomethane	9.700	93	8230	4.705	ug/l	91
47) Bromodichloromethane	9.888	83	18456	5.179	ug/l #	96
48) Methyl methacrylate	9.677	41	10574	4.599	ug/l	95
49) 1,4-Dioxane	9.694	88	3619	93.477	ug/l	97
51) 4-Methyl-2-Pentanone	10.441	43	71889	24.250	ug/l	98
52) Toluene	10.629	92	27098	4.928	ug/l	98
53) t-1,3-Dichloropropene	10.829	75	17099	5.077	ug/l	95
54) cis-1,3-Dichloropropene	10.306	75	17440	4.848	ug/l	97
55) 1,1,2-Trichloroethane	11.012	97	11311	5.197	ug/l	96
56) Ethyl methacrylate	10.871	69	14094	5.627	ug/l	94
57) 1,3-Dichloropropane	11.159	76	18945	5.006	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	33210	24.047	ug/l	97
59) 2-Hexanone	11.194	43	49021	23.501	ug/l	94
60) Dibromochloromethane	11.353	129	13635	5.190	ug/l	96
61) 1,2-Dibromoethane	11.471	107	10419	4.810	ug/l	98
64) Tetrachloroethene	11.100	164	9756	5.071	ug/l	91
65) Chlorobenzene	11.888	112	31312	5.065	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	11620	5.121	ug/l	98
67) Ethyl Benzene	11.965	91	48216	4.789	ug/l	98
68) m/p-Xylenes	12.065	106	34771	9.344	ug/l	99
69) o-Xylene	12.394	106	16419	4.617	ug/l	98
70) Styrene	12.412	104	26218	4.454	ug/l	99
71) Bromoform	12.576	173	8017	4.938	ug/l #	99
73) Isopropylbenzene	12.694	105	39811	4.678	ug/l	99
74) N-amyl acetate	12.488	43	17577	4.595	ug/l	95
75) 1,1,2,2-Tetrachloroethane	12.935	83	15483	5.151	ug/l	97
76) 1,2,3-Trichloropropane	12.994	75	12173m	4.758	ug/l	
77) Bromobenzene	12.982	156	11091	4.989	ug/l	99
78) n-propylbenzene	13.035	91	45450	4.512	ug/l	99
79) 2-Chlorotoluene	13.123	91	31932	4.898	ug/l	98
80) 1,3,5-Trimethylbenzene	13.170	105	31891	4.537	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.729	75	4229	4.465	ug/l	90
82) 4-Chlorotoluene	13.218	91	31976	4.926	ug/l	100
83) tert-Butylbenzene	13.435	119	27597	4.675	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	32054	4.575	ug/l	98
85) sec-Butylbenzene	13.612	105	38148	4.663	ug/l	98
86) p-Isopropyltoluene	13.723	119	29856	4.584	ug/l	98
87) 1,3-Dichlorobenzene	13.729	146	20876	5.099	ug/l	98
88) 1,4-Dichlorobenzene	13.812	146	21982	5.179	ug/l	97
89) n-Butylbenzene	14.053	91	27437	4.675	ug/l	96
90) Hexachloroethane	14.329	117	7767	4.987	ug/l	100
91) 1,2-Dichlorobenzene	14.106	146	20177	4.940	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.729	75	2872	5.232	ug/l	90
93) 1,2,4-Trichlorobenzene	15.388	180	9037	4.761	ug/l	94
94) Hexachlorobutadiene	15.500	225	5563	5.520	ug/l	98
95) Naphthalene	15.641	128	25047	4.422	ug/l	96
96) 1,2,3-Trichlorobenzene	15.841	180	8737	4.549	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085442.D
Acq On : 14 Jan 2025 16:31
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:45:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

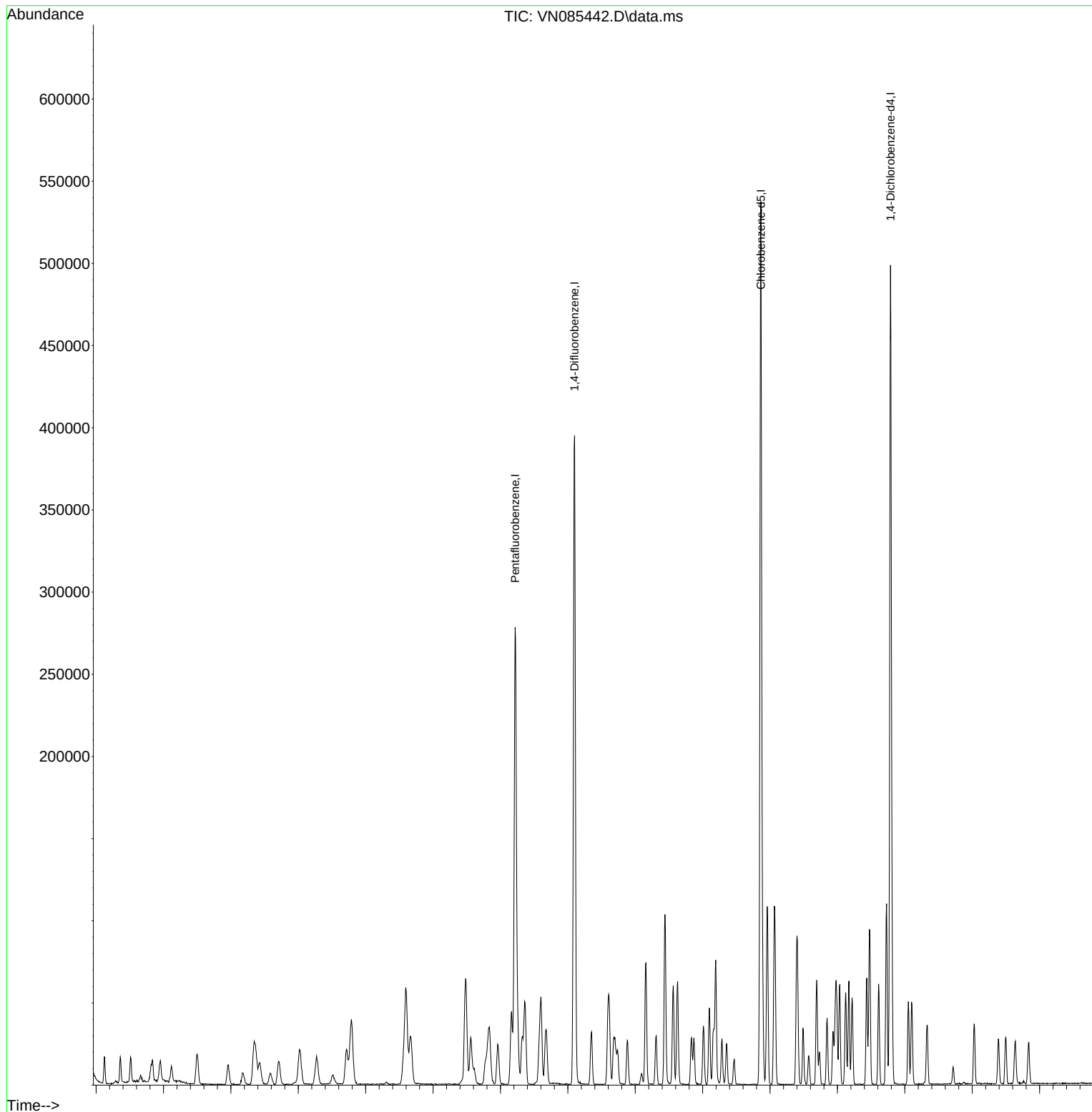
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Data File : VN085442.D
Acq On : 14 Jan 2025 16:31
Operator : JC\MD
Sample : VSTDIC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

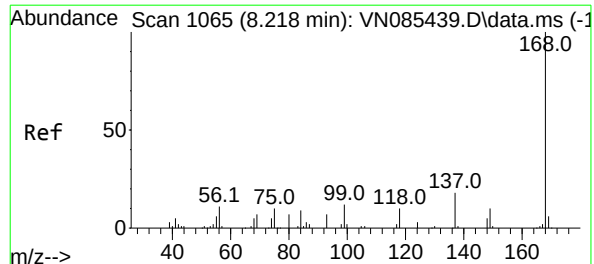
Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

Manual Integrations
APPROVED

Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:45:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration





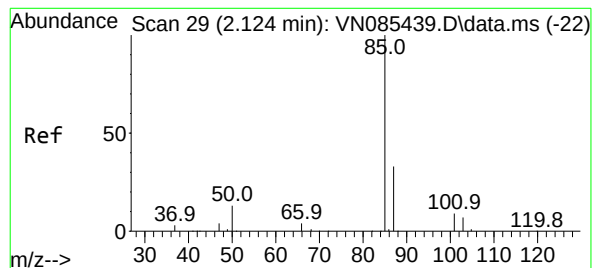
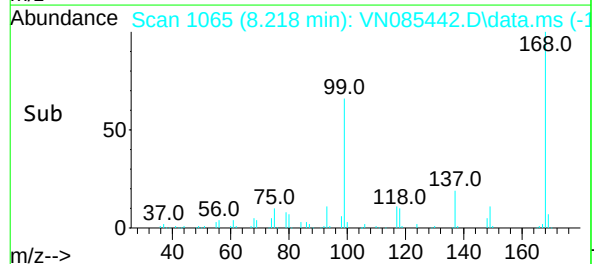
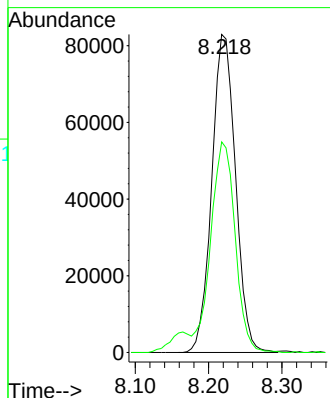
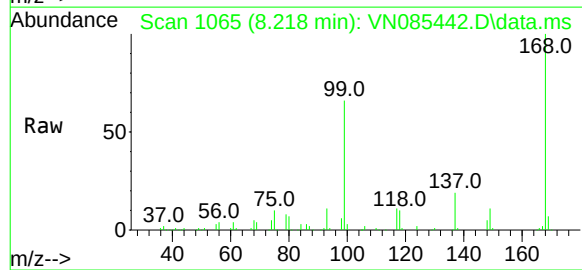
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

Tgt Ion: 168 Resp: 186556
Ion Ratio Lower Upper
168 100
99 65.9 53.6 80.4

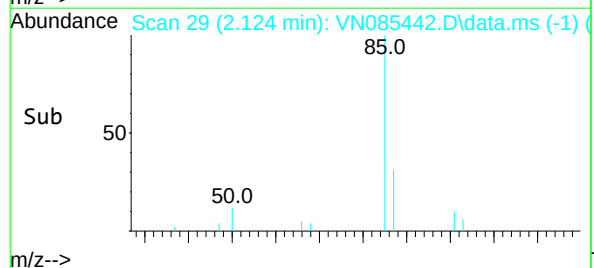
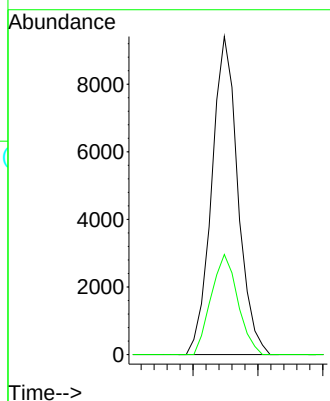
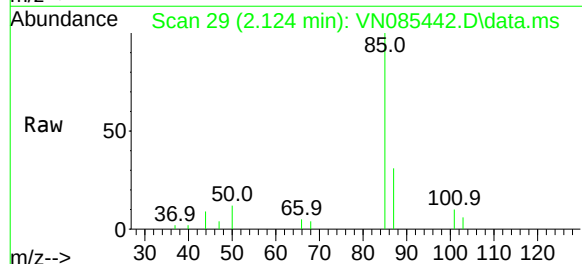
Manual Integrations
APPROVED

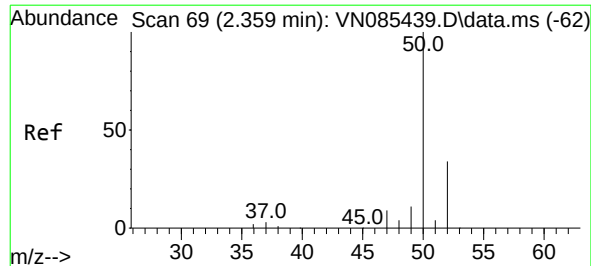
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#2
Dichlorodifluoromethane
Concen: 5.225 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 85 Resp: 13199
Ion Ratio Lower Upper
85 100
87 31.5 16.7 50.1





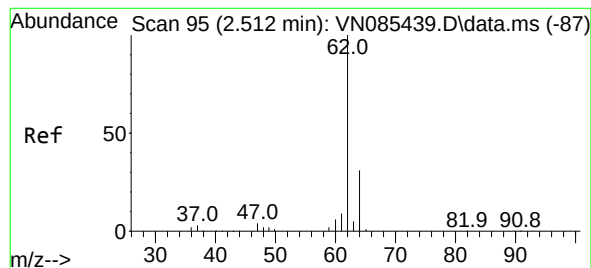
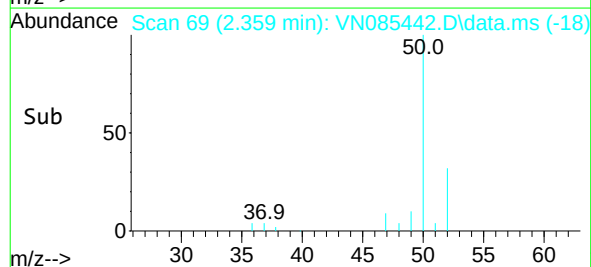
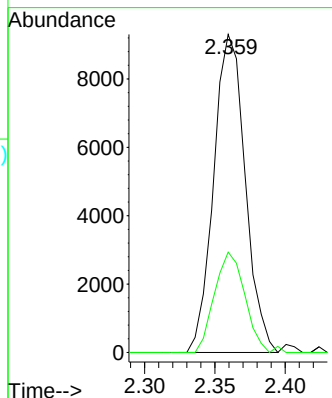
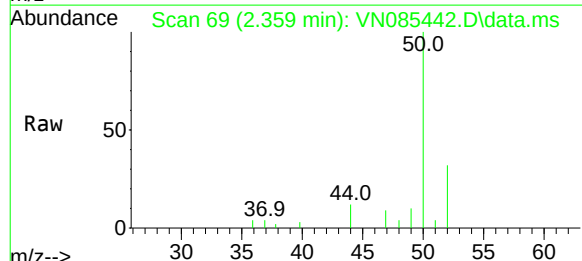
#3
Chloromethane
Concen: 5.311 ug/l
RT: 2.359 min Scan# 69
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion: 50 Resp: 14526
Ion Ratio Lower Upper
50 100
52 31.6 27.0 40.6

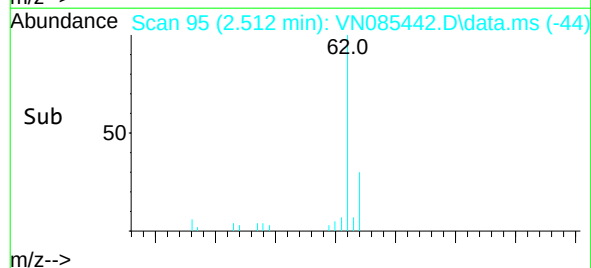
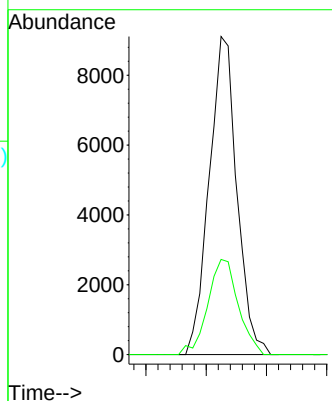
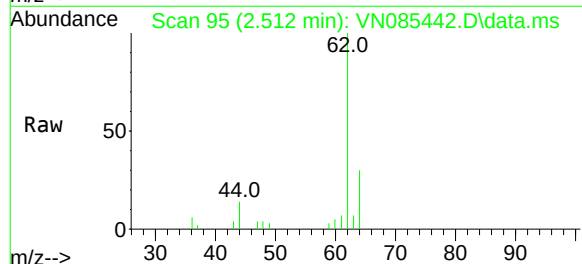
Manual Integrations
APPROVED

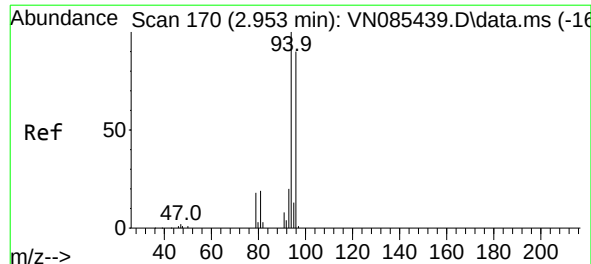
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#4
Vinyl Chloride
Concen: 5.298 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 62 Resp: 14564
Ion Ratio Lower Upper
62 100
64 29.9 24.8 37.2





#5

Bromomethane

Concen: 5.895 ug/l

RT: 2.953 min Scan# 170

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Tgt Ion: 94 Resp: 9788

Ion Ratio Lower Upper

94 100

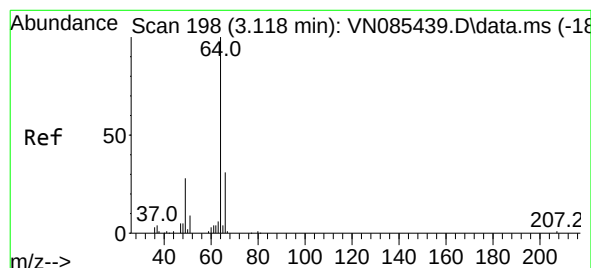
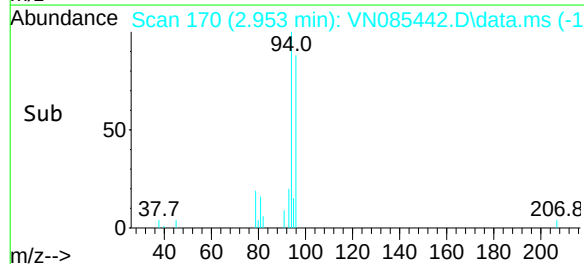
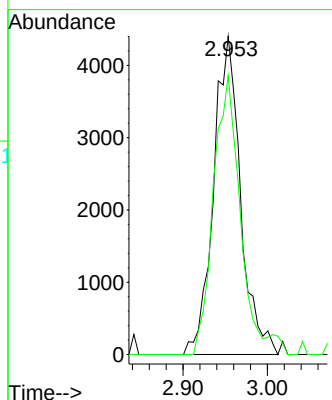
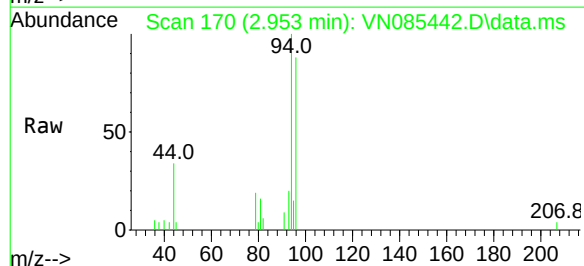
96 87.7 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 5.411 ug/l

RT: 3.124 min Scan# 199

Delta R.T. 0.006 min

Lab File: VN085442.D

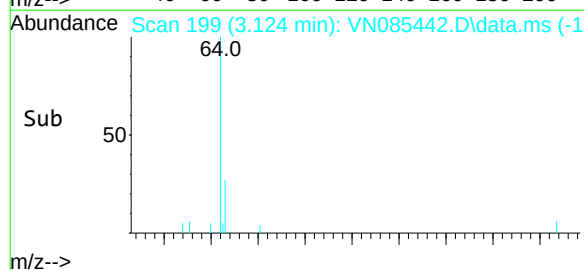
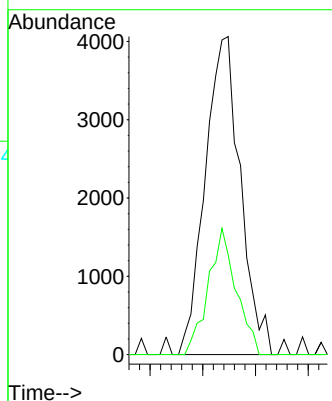
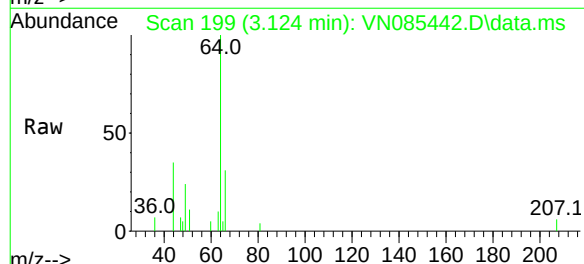
Acq: 14 Jan 2025 16:31

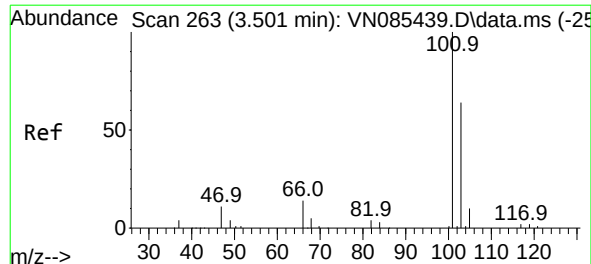
Tgt Ion: 64 Resp: 9430

Ion Ratio Lower Upper

64 100

66 31.4 24.6 36.8





#7

Trichlorofluoromethane

Concen: 5.039 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Tgt Ion:101 Resp: 20098

Ion Ratio Lower Upper

101 100

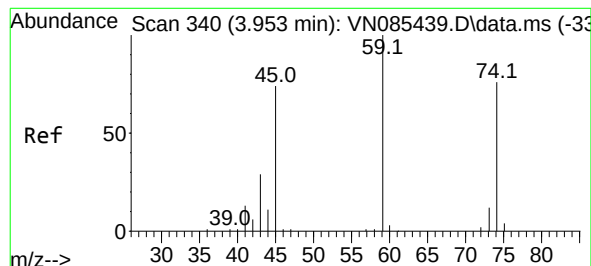
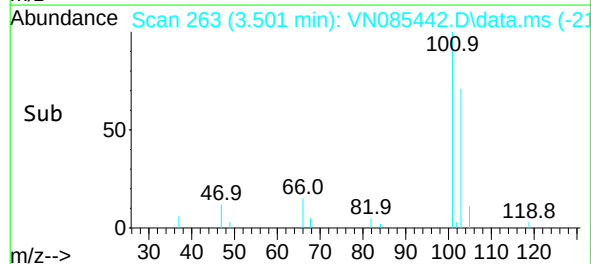
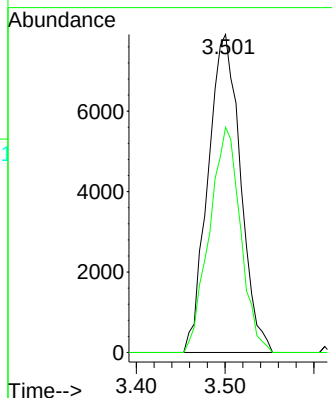
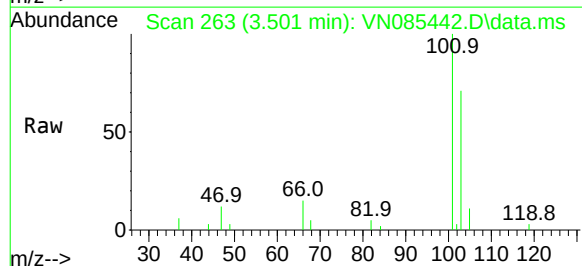
103 70.8 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 4.828 ug/l

RT: 3.959 min Scan# 341

Delta R.T. 0.006 min

Lab File: VN085442.D

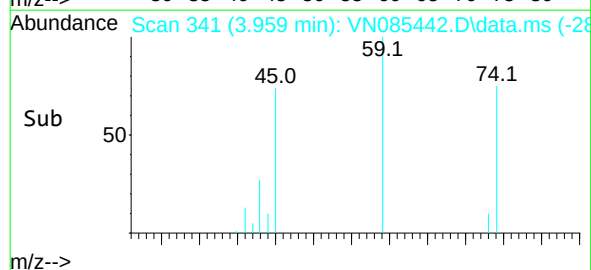
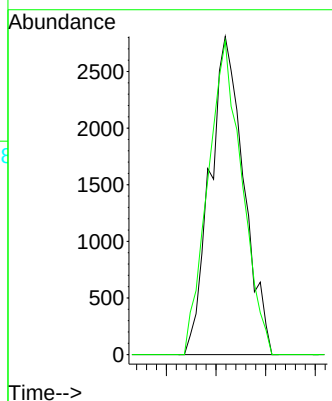
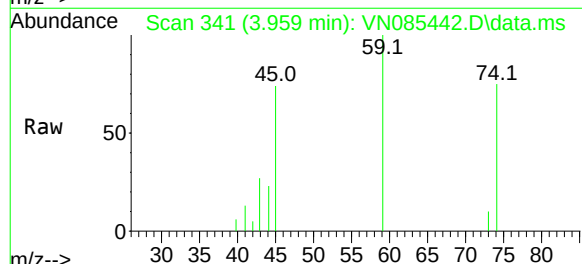
Acq: 14 Jan 2025 16:31

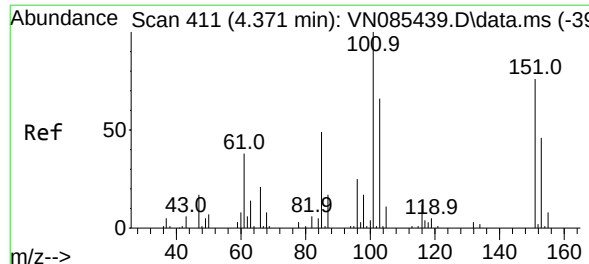
Tgt Ion: 74 Resp: 6652

Ion Ratio Lower Upper

74 100

45 99.5 49.7 149.1





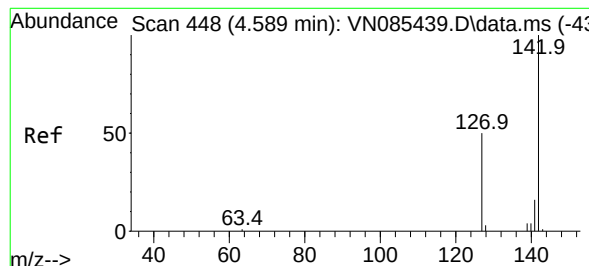
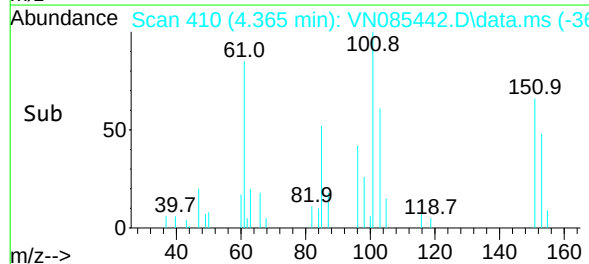
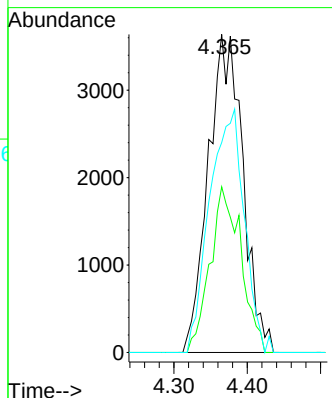
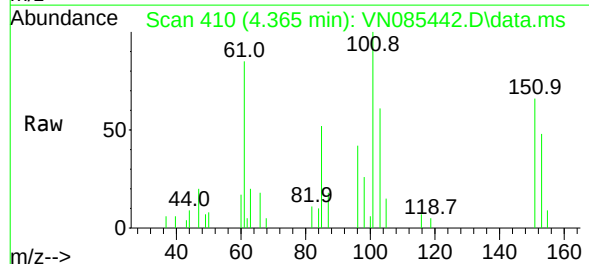
#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.305 ug/l
RT: 4.365 min Scan# 411
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

Tgt Ion:101 Resp: 11917
Ion Ratio Lower Upper
101 100
85 46.5 37.8 56.8
151 76.7 58.8 88.2

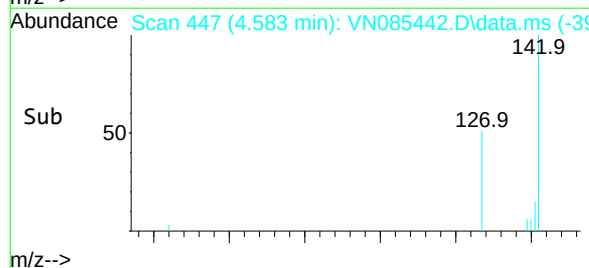
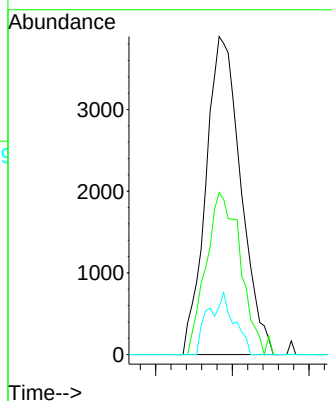
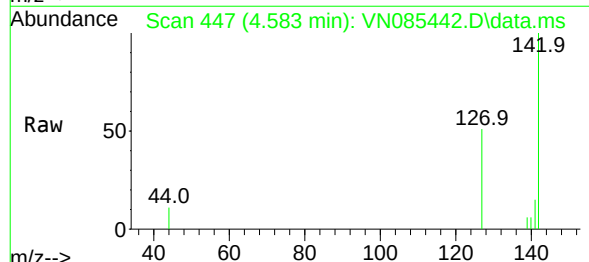
Manual Integrations
APPROVED

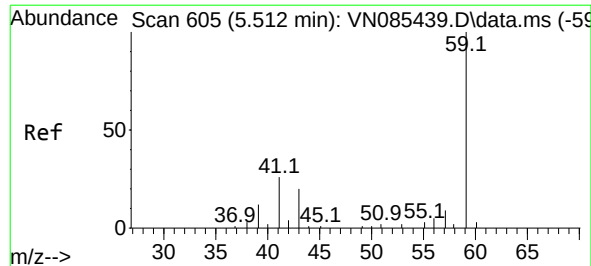
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#10
Methyl Iodide
Concen: 4.793 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:142 Resp: 12331
Ion Ratio Lower Upper
142 100
127 50.9 40.3 60.5
141 15.0 12.8 19.2





#11

Tert butyl alcohol

Concen: 26.318 ug/l

RT: 5.518 min Scan# 605

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 59 Resp: 9075

Ion Ratio Lower Upper

59 100

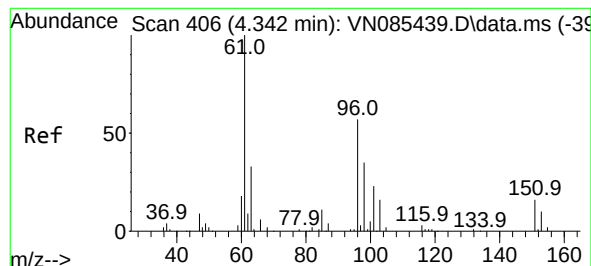
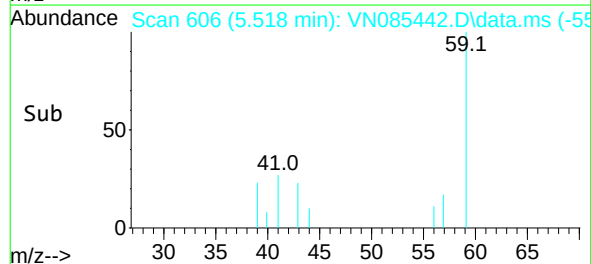
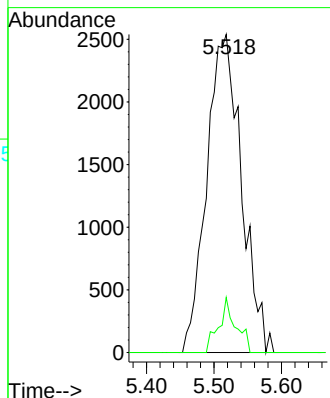
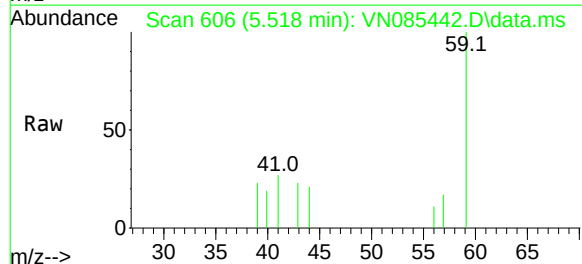
57 8.5 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 5.209 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

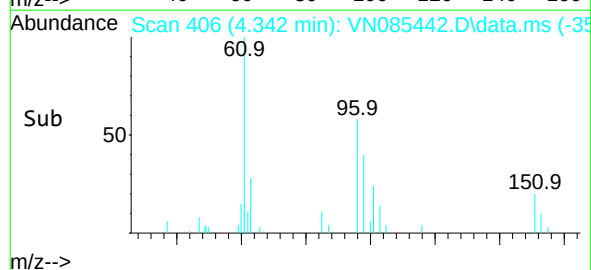
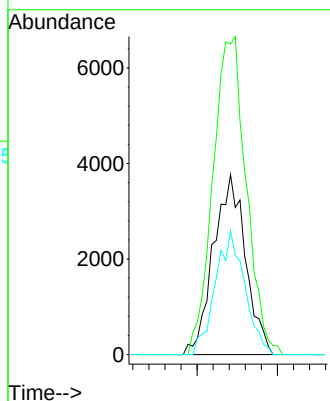
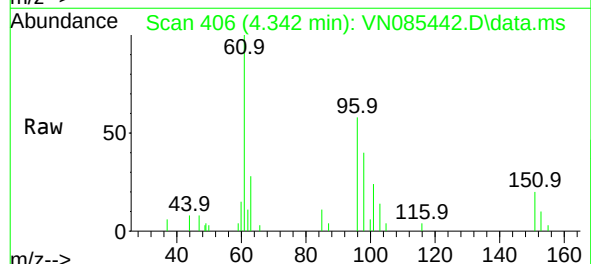
Tgt Ion: 96 Resp: 10429

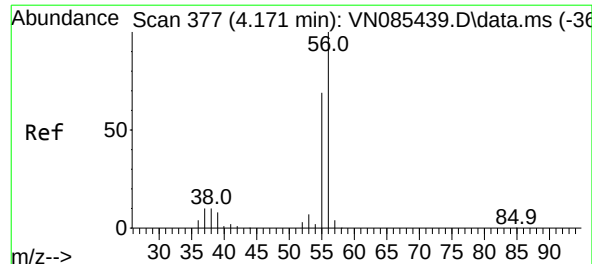
Ion Ratio Lower Upper

96 100

61 172.7 141.0 211.4

98 69.0 49.0 73.6





#13

Acrolein

Concen: 20.033 ug/l

RT: 4.171 min Scan# 377

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 56 Resp: 9430

Ion Ratio Lower Upper

56 100

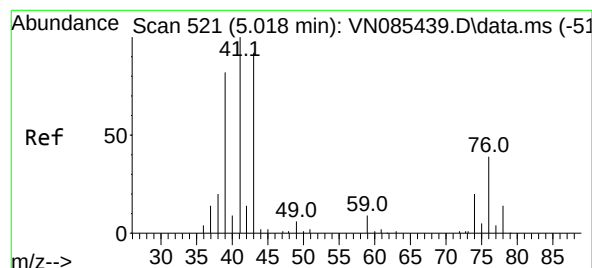
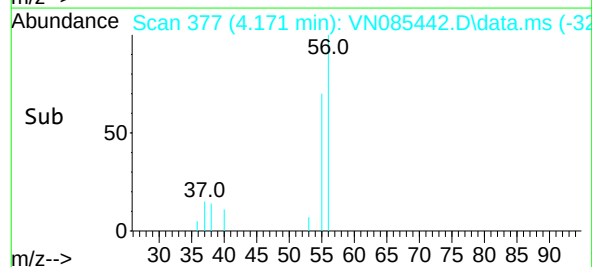
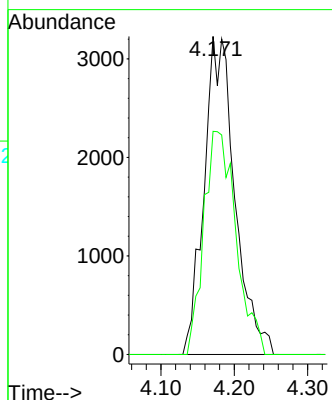
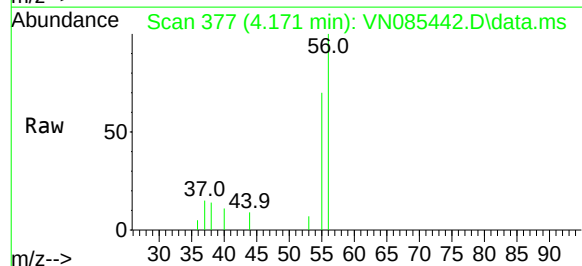
55 73.2 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 5.153 ug/l

RT: 5.030 min Scan# 523

Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

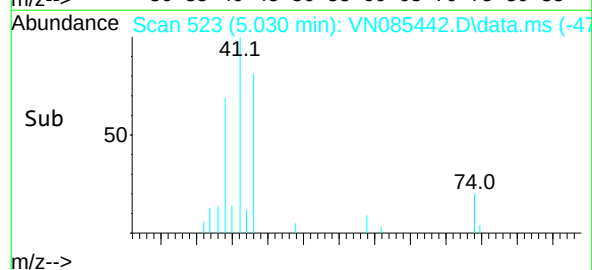
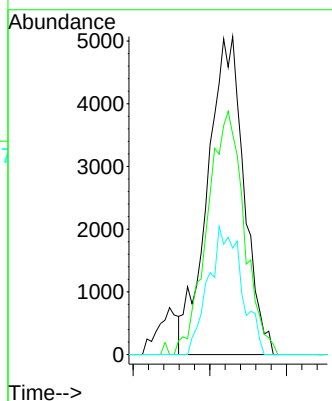
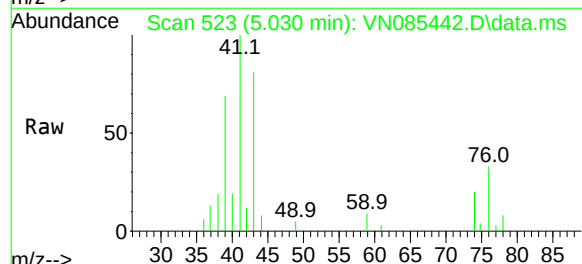
Tgt Ion: 41 Resp: 16741

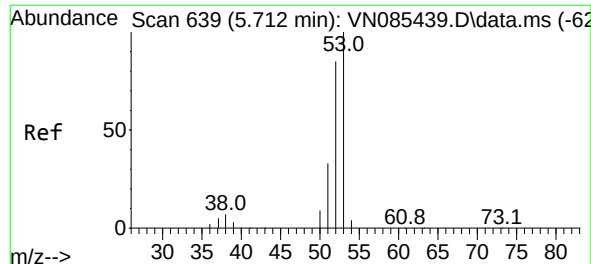
Ion Ratio Lower Upper

41 100

39 77.4 64.4 96.6

76 36.6 30.5 45.7





#15

Acrylonitrile

Concen: 25.445 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

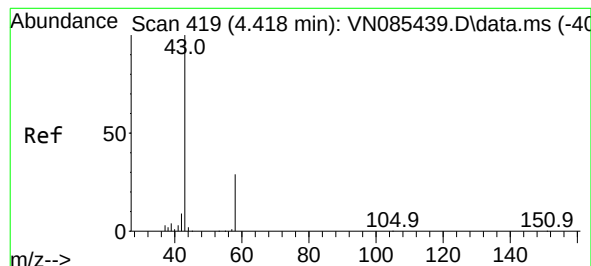
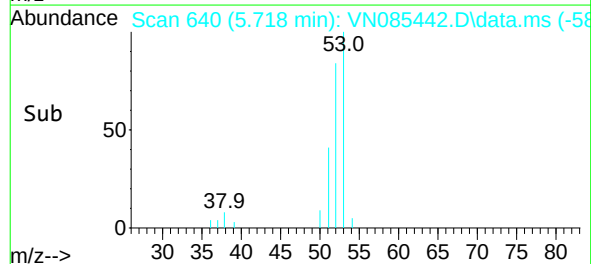
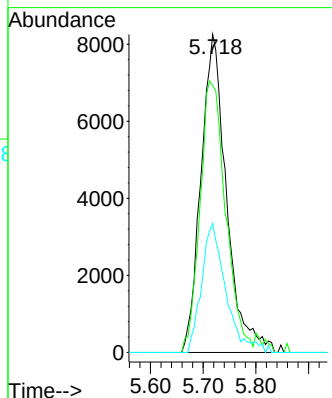
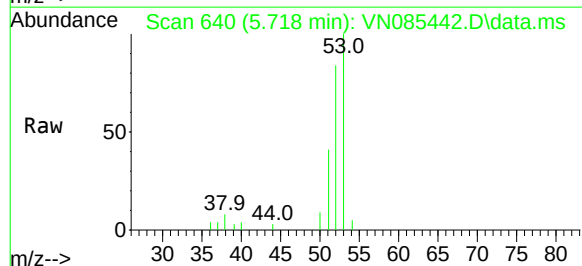
ClientSampleId :

VSTDICC005

Tgt Ion:	53	Resp:	27869
Ion	Ratio	Lower	Upper
53	100		
52	85.5	65.5	98.3
51	38.5	29.8	44.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 25.819 ug/l

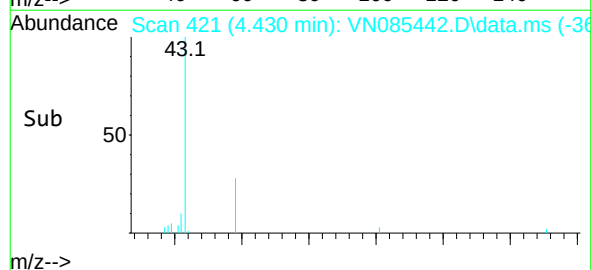
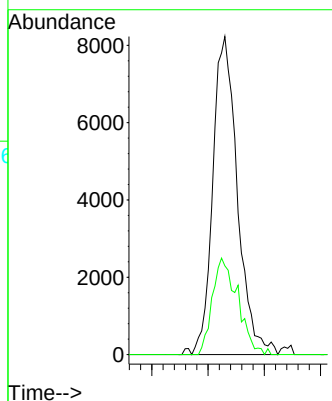
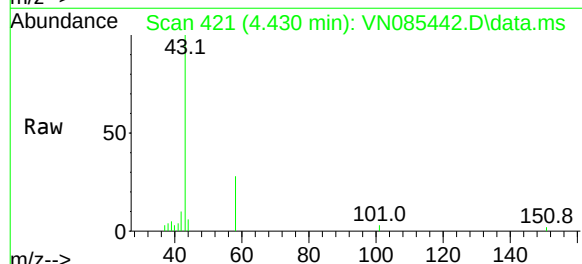
RT: 4.430 min Scan# 421

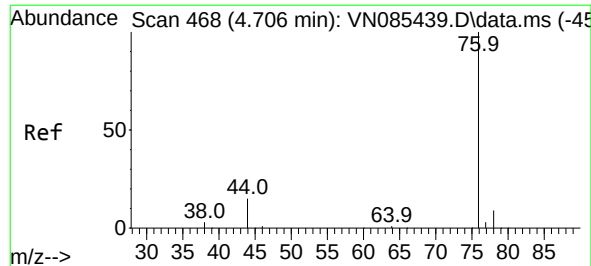
Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	43	Resp:	25122
Ion	Ratio	Lower	Upper
43	100		
58	27.9	23.8	35.6





#17

Carbon Disulfide

Concen: 5.202 ug/l

RT: 4.706 min Scan# 468

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 76 Resp: 32068

Ion Ratio Lower Upper

76 100

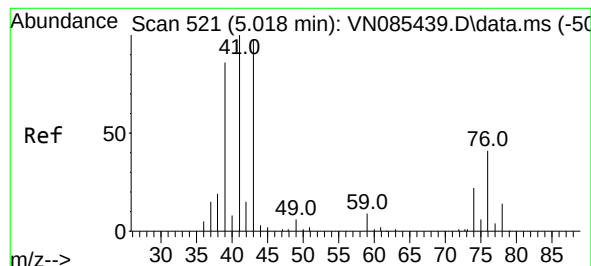
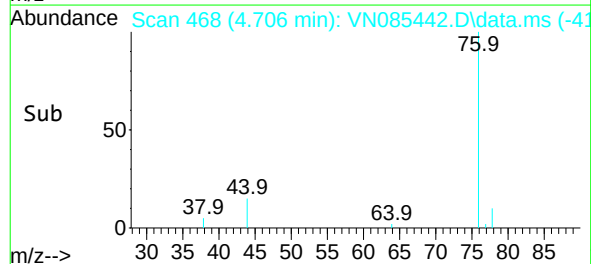
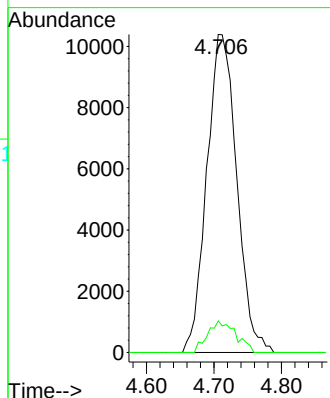
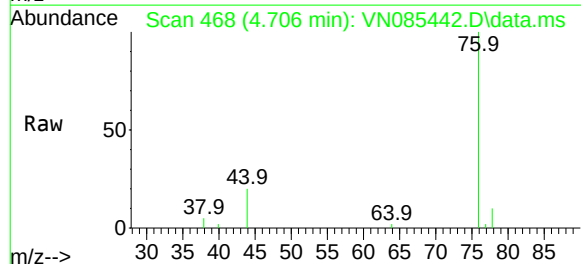
78 9.9 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 5.106 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085442.D

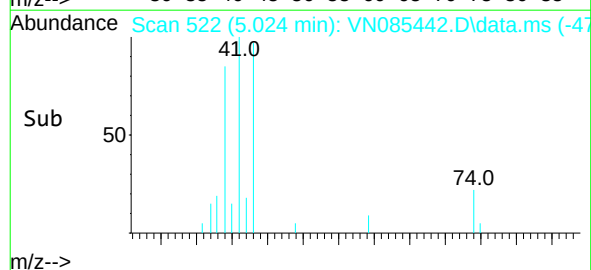
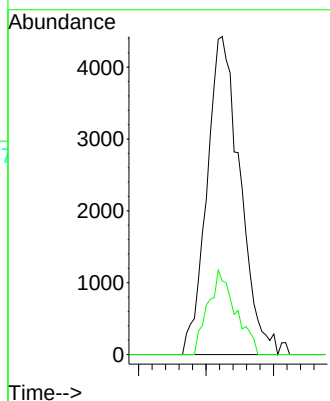
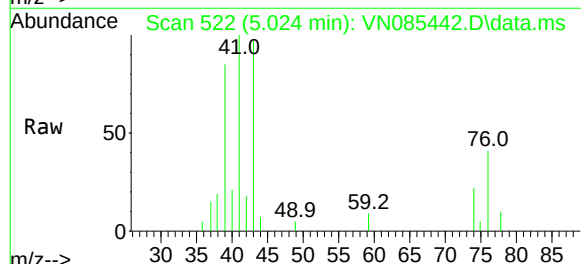
Acq: 14 Jan 2025 16:31

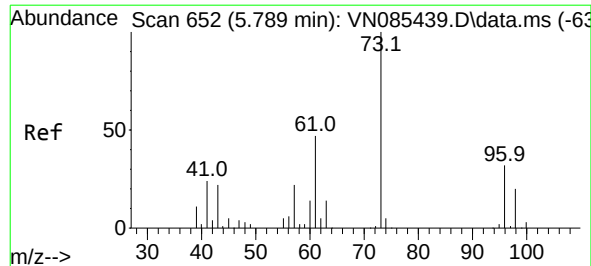
Tgt Ion: 43 Resp: 15106

Ion Ratio Lower Upper

43 100

74 22.0 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 4.836 ug/l

RT: 5.800 min Scan# 65

Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 73 Resp: 31439

Ion Ratio Lower Upper

73 100

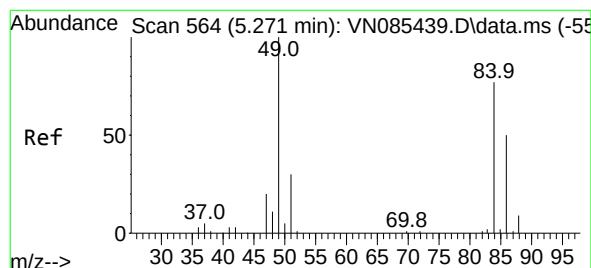
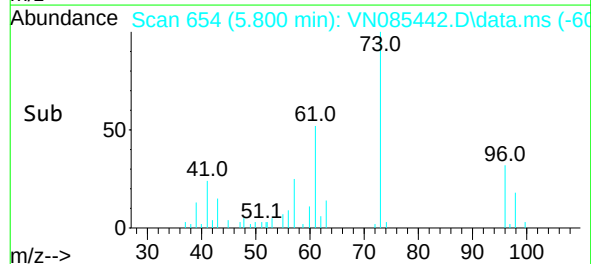
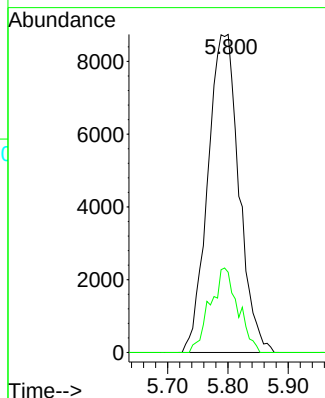
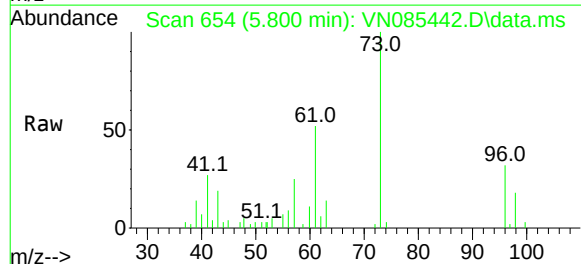
57 25.2 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 5.389 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion: 84 Resp: 12981

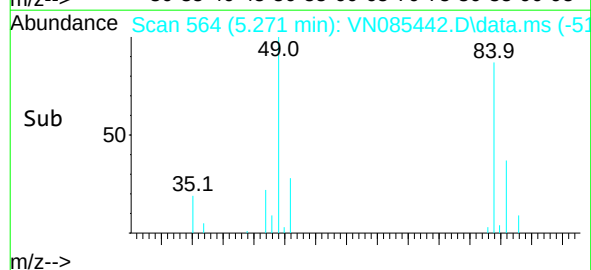
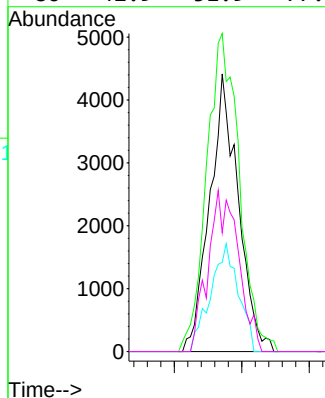
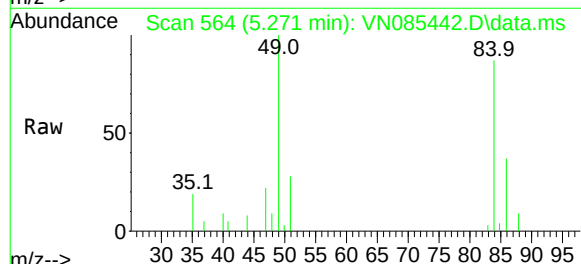
Ion Ratio Lower Upper

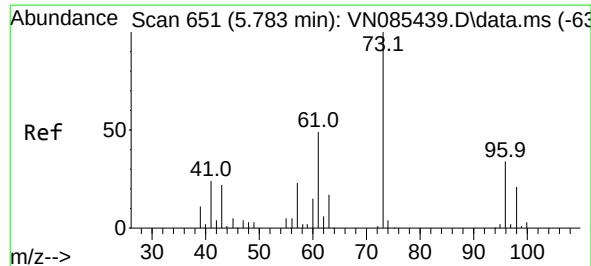
84 100

49 114.5 104.1 156.1

51 32.1 31.0 46.4

86 42.9 51.9 77.9#





#21

trans-1,2-Dichloroethene

Concen: 4.960 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085442.D

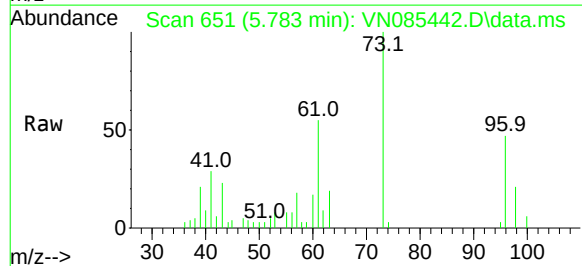
Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005



Tgt Ion: 96 Resp: 10614

Ion Ratio Lower Upper

96 100

61 118.1 115.7 173.5

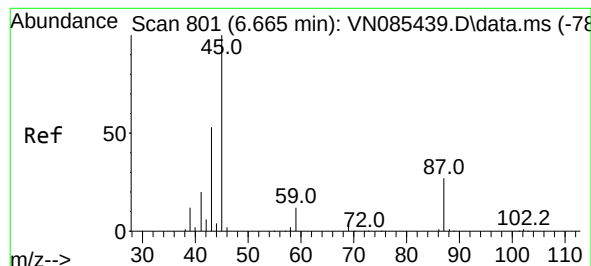
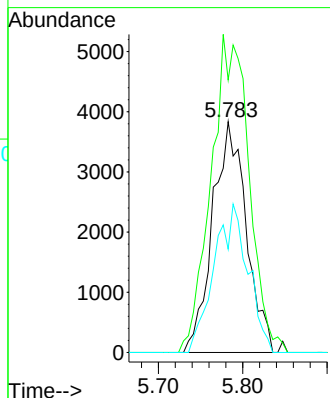
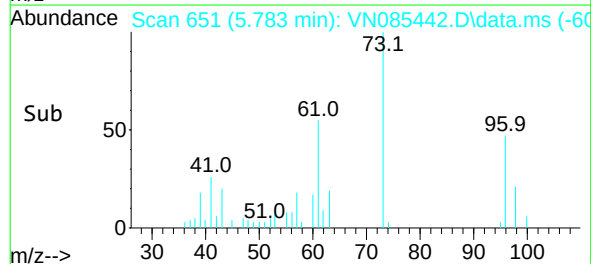
98 44.7 49.8 74.8#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

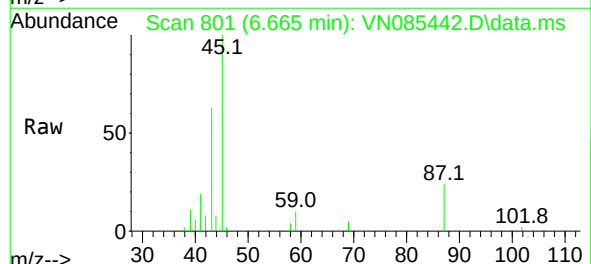
Concen: 4.962 ug/l

RT: 6.665 min Scan# 801

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31



Tgt Ion: 45 Resp: 35785

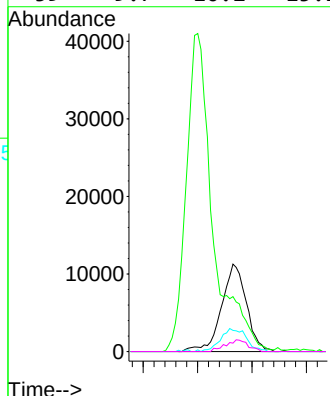
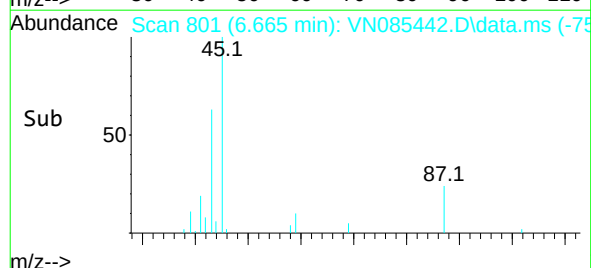
Ion Ratio Lower Upper

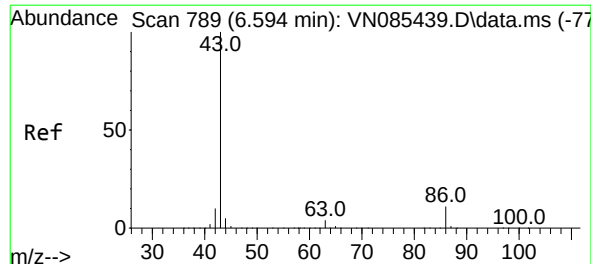
45 100

43 58.3 45.0 67.6

87 24.2 21.8 32.8

59 9.7 10.2 15.2#





#23

Vinyl Acetate

Concen: 23.389 ug/l m

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 43 Resp: 118439

Ion Ratio Lower Upper

43 100

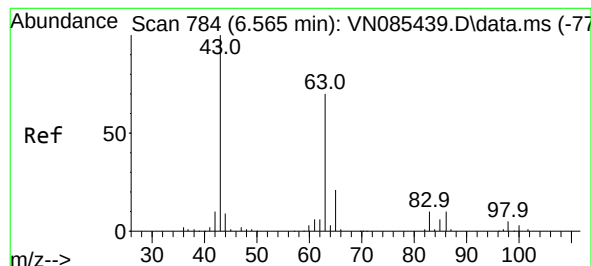
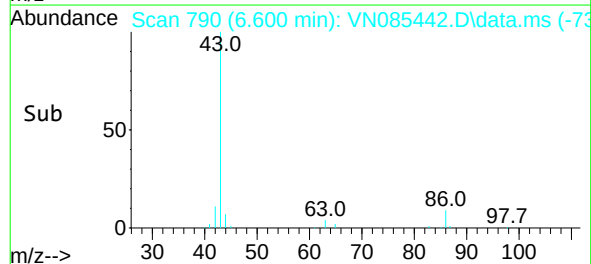
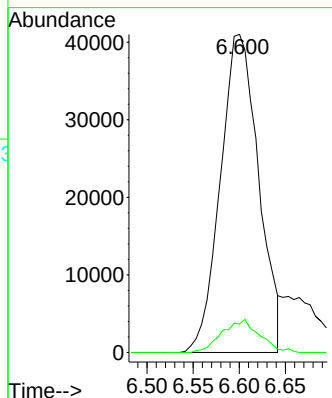
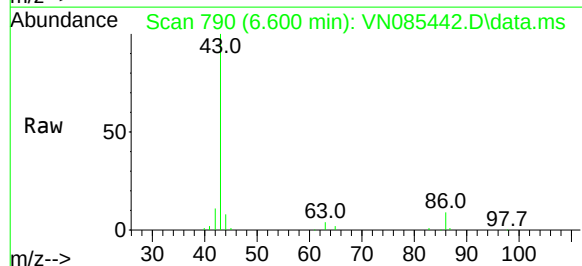
86 9.0 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 5.200 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

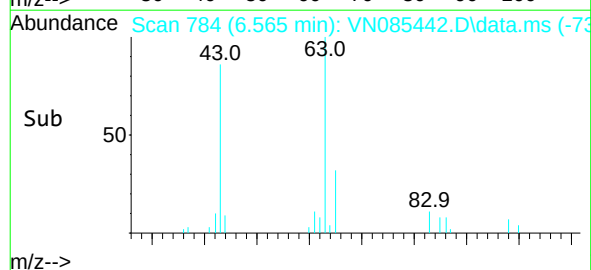
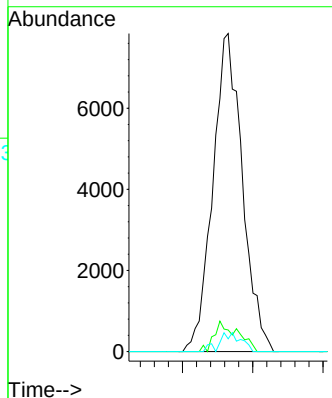
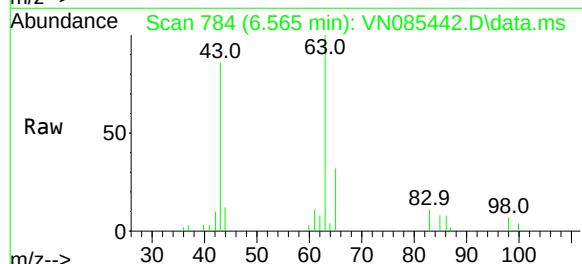
Tgt Ion: 63 Resp: 22865

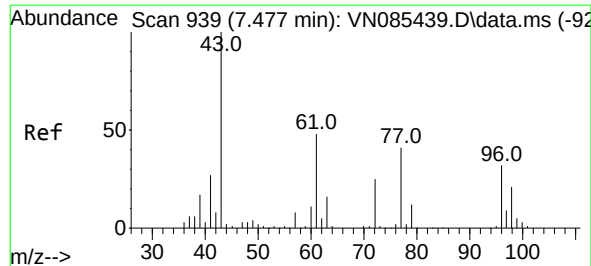
Ion Ratio Lower Upper

63 100

98 6.8 3.3 9.8

100 4.0 2.0 6.0





#25

2-Butanone

Concen: 25.231 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 43 Resp: 36127

Ion Ratio Lower Upper

43 100

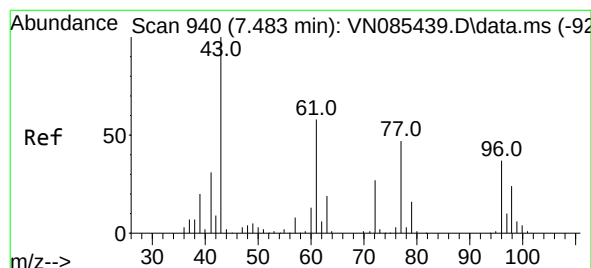
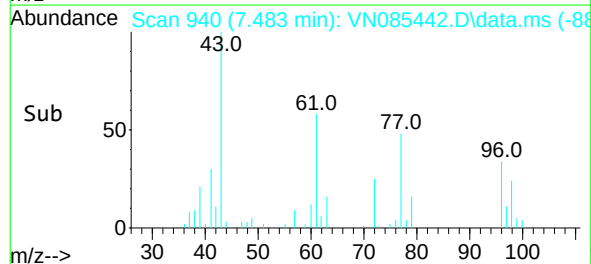
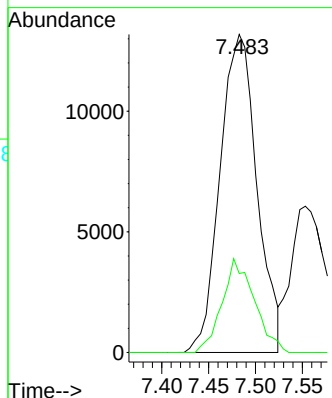
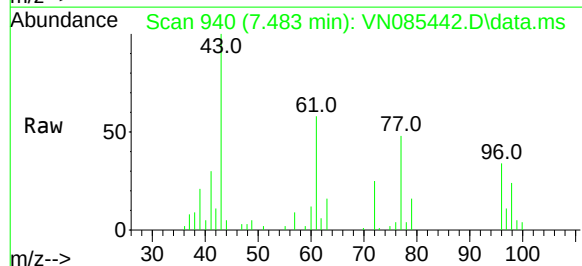
72 24.9 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 5.175 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085442.D

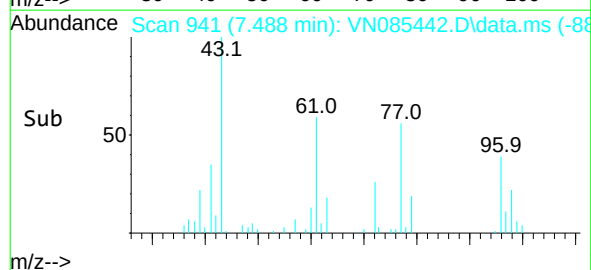
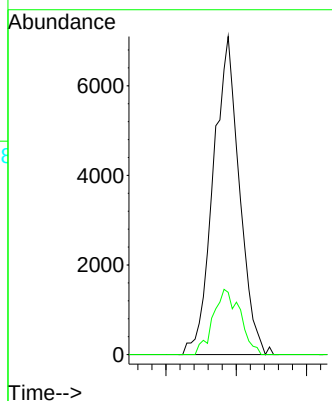
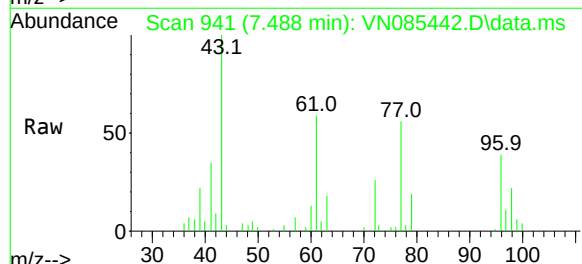
Acq: 14 Jan 2025 16:31

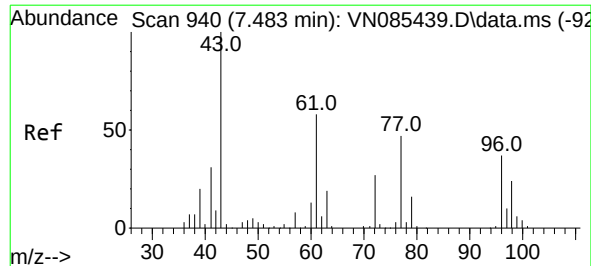
Tgt Ion: 77 Resp: 18398

Ion Ratio Lower Upper

77 100

97 21.2 10.7 32.1





#27

cis-1,2-Dichloroethene

Concen: 4.951 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 96 Resp: 12477

Ion Ratio Lower Upper

96 100

61 154.5 0.0 311.8

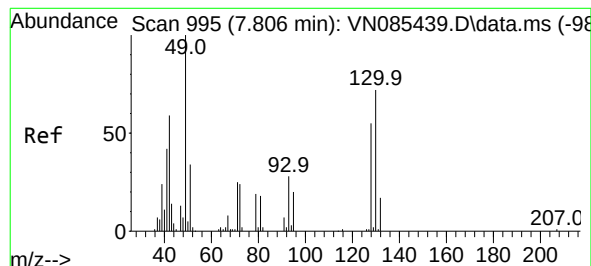
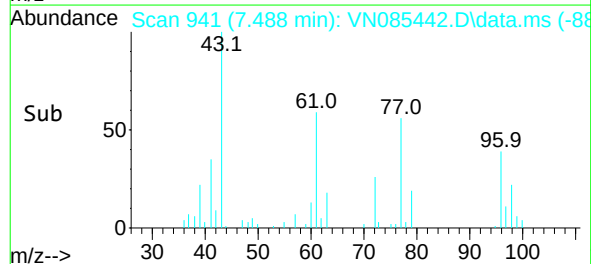
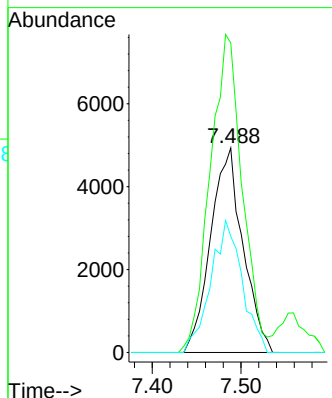
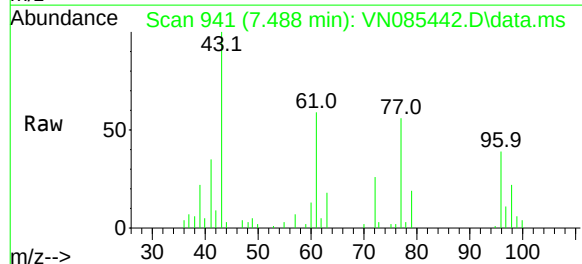
98 62.8 0.0 126.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#28

Bromochloromethane

Concen: 5.424 ug/l

RT: 7.806 min Scan# 995

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

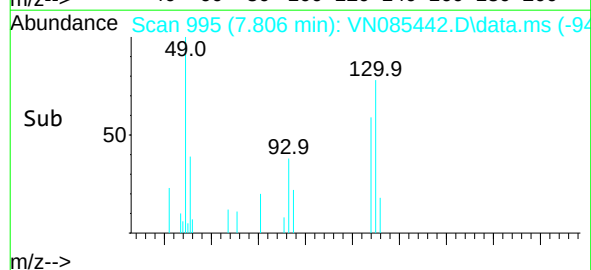
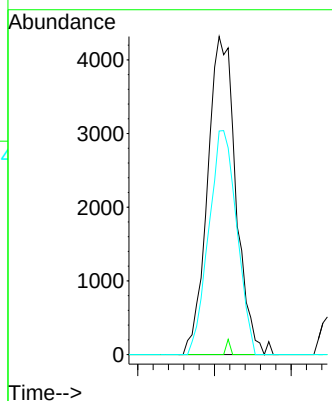
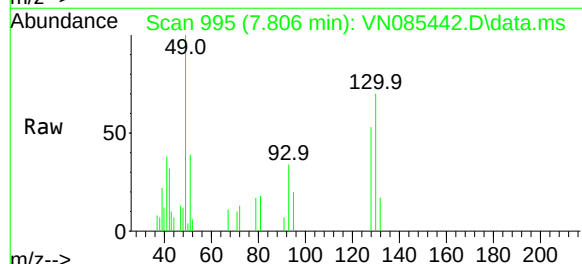
Tgt Ion: 49 Resp: 11096

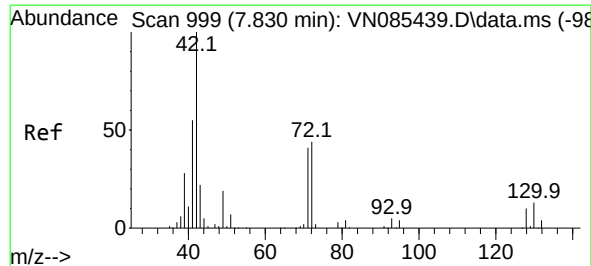
Ion Ratio Lower Upper

49 100

129 0.7 0.0 4.4

130 69.5 55.0 82.4





#29

Tetrahydrofuran

Concen: 24.215 ug/l

RT: 7.841 min Scan# 10

Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

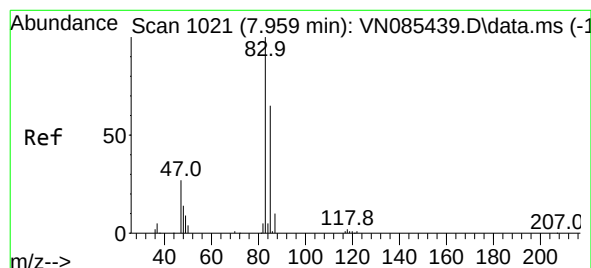
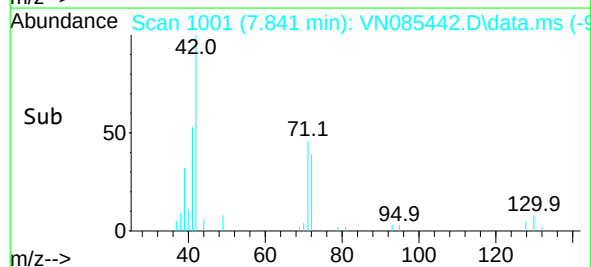
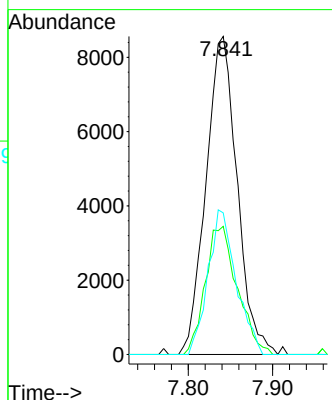
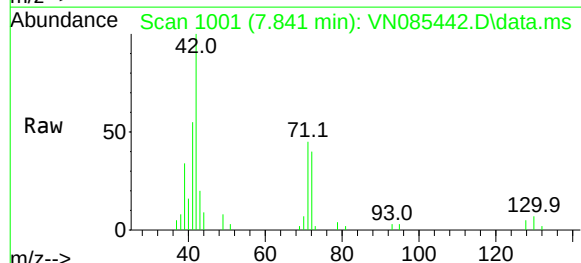
ClientSampleId :

VSTDIC005

Tgt Ion:	42	Resp:	21983
Ion	Ratio	Lower	Upper
42	100		
72	41.5	34.2	51.2
71	41.0	32.5	48.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 5.146 ug/l

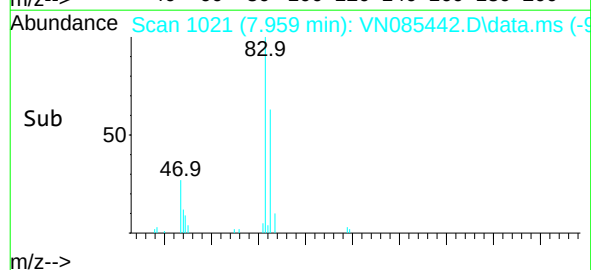
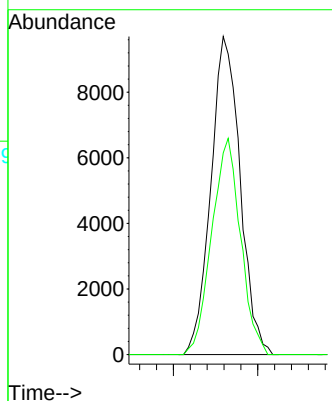
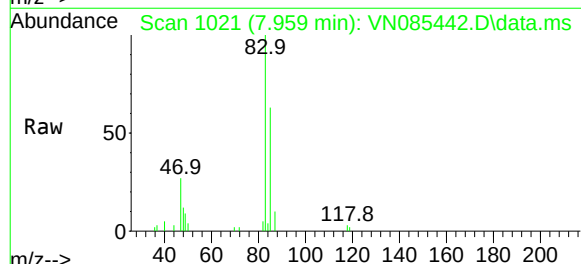
RT: 7.959 min Scan# 1021

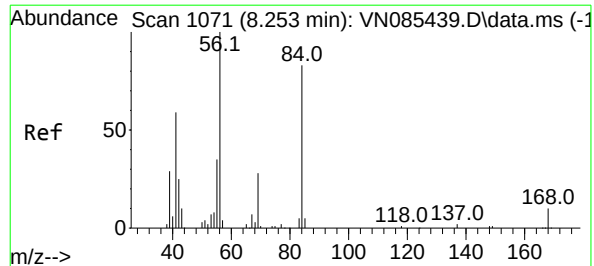
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	83	Resp:	23384
Ion	Ratio	Lower	Upper
83	100		
85	63.4	51.8	77.6





#31

Cyclohexane

Concen: 5.846 ug/l

RT: 8.247 min Scan# 1071

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 56 Resp: 22343

Ion Ratio Lower Upper

56 100

69 42.3 22.2 33.4

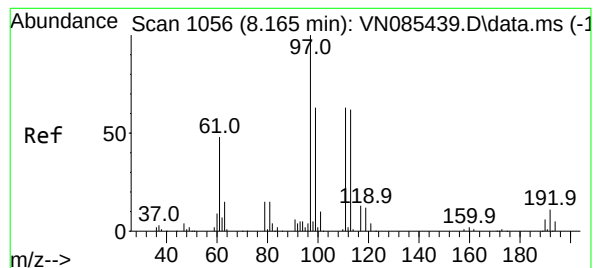
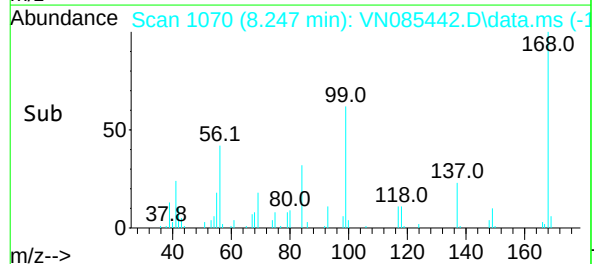
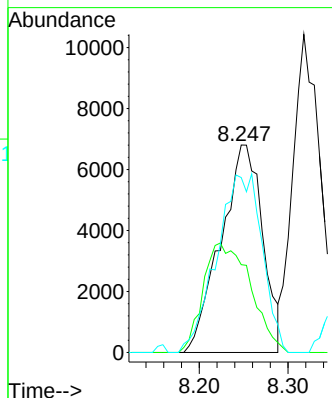
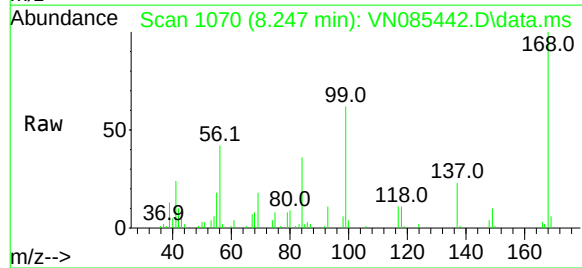
84 84.3 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 5.372 ug/l

RT: 8.159 min Scan# 1055

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

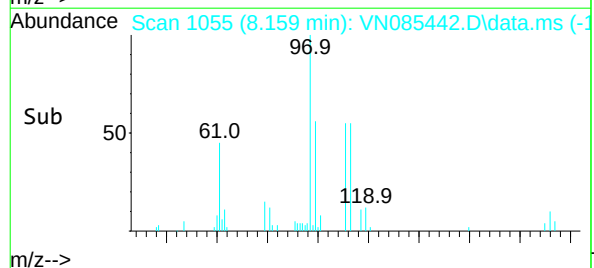
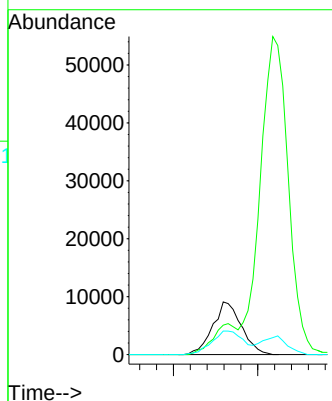
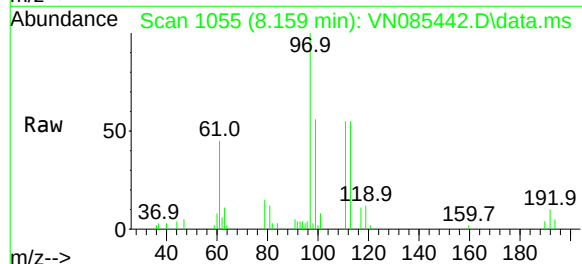
Tgt Ion: 97 Resp: 21416

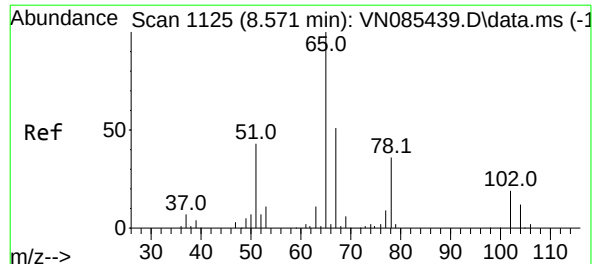
Ion Ratio Lower Upper

97 100

99 50.5 49.8 74.6

61 50.1 41.4 62.2





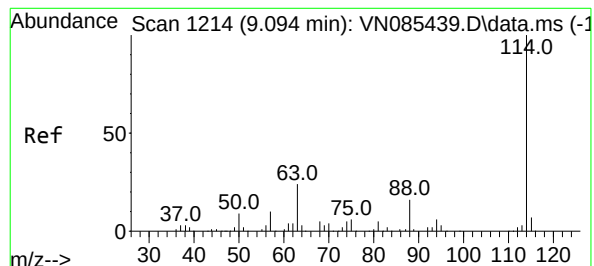
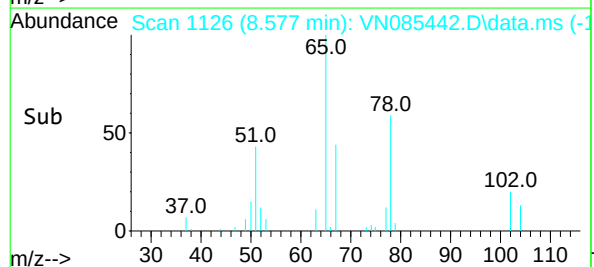
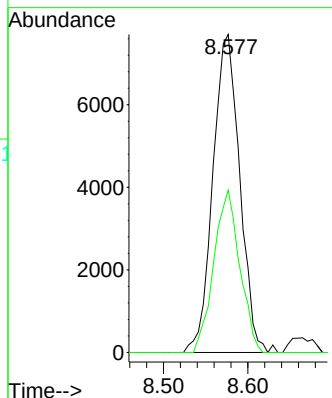
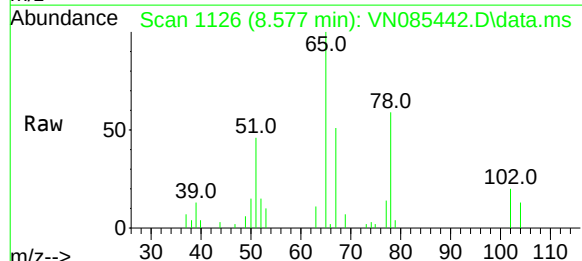
#33
1,2-Dichloroethane-d4
Concen: 5.660 ug/l
RT: 8.577 min Scan# 1125
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion: 65 Resp: 17046
Ion Ratio Lower Upper
65 100
67 49.2 0.0 101.6

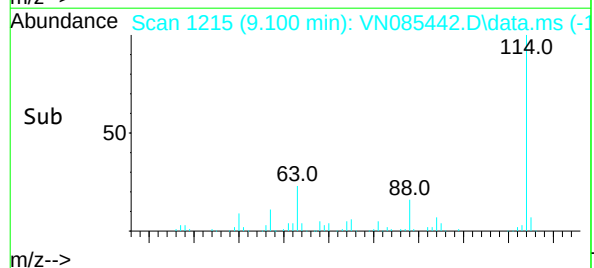
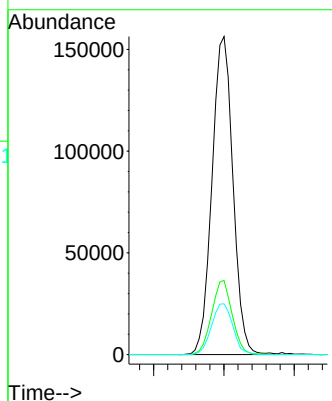
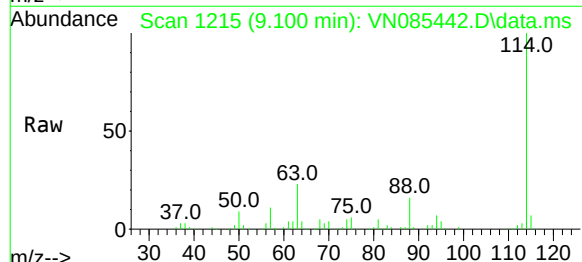
Manual Integrations
APPROVED

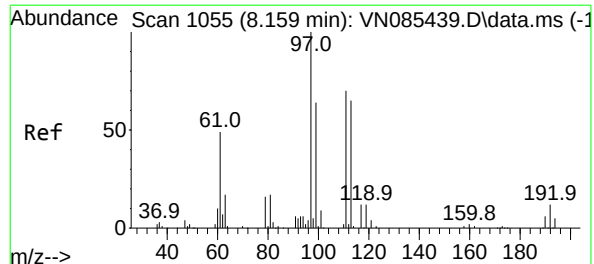
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:114 Resp: 324413
Ion Ratio Lower Upper
114 100
63 23.3 0.0 47.6
88 16.0 0.0 32.6





#35

Dibromofluoromethane

Concen: 5.377 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Tgt Ion:113 Resp: 12102

Ion Ratio Lower Upper

113 100

111 107.4 82.7 124.1

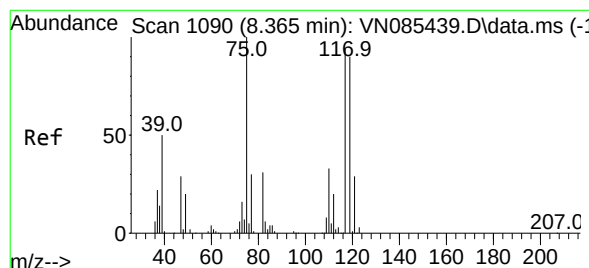
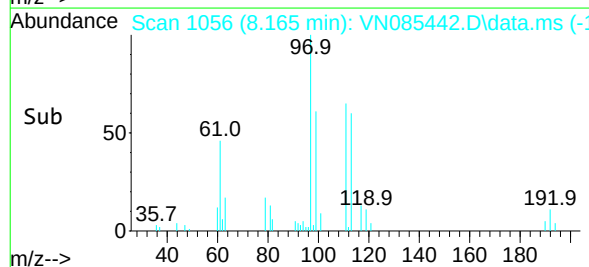
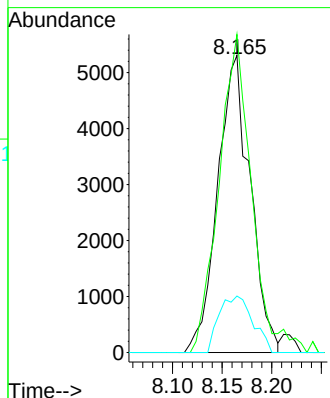
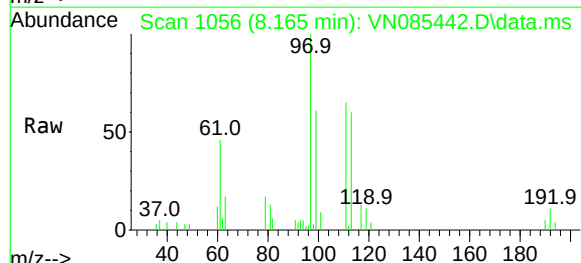
192 19.7 14.3 21.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 5.029 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

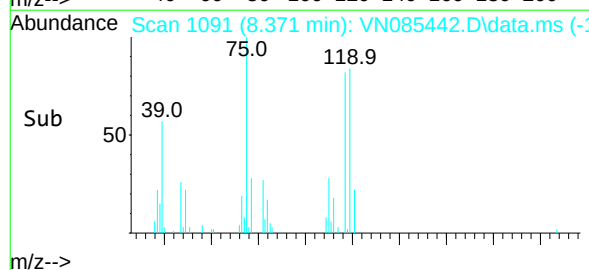
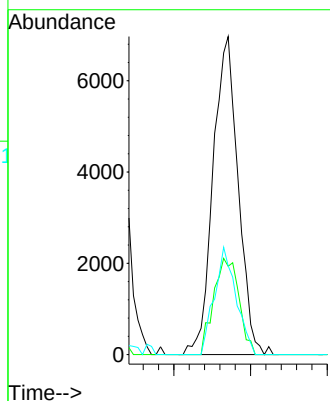
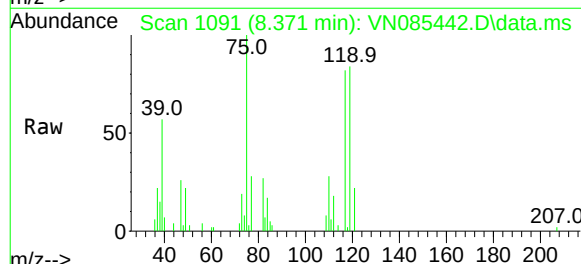
Tgt Ion: 75 Resp: 15886

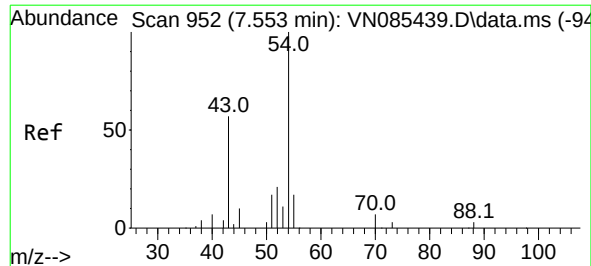
Ion Ratio Lower Upper

75 100

110 30.3 16.5 49.5

77 29.2 24.4 36.6





#37

Ethyl Acetate

Concen: 5.294 ug/l m

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

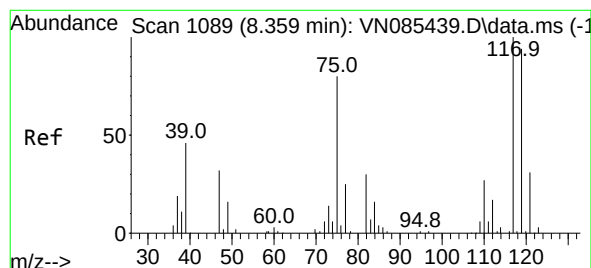
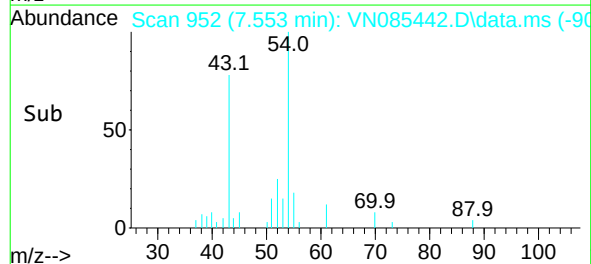
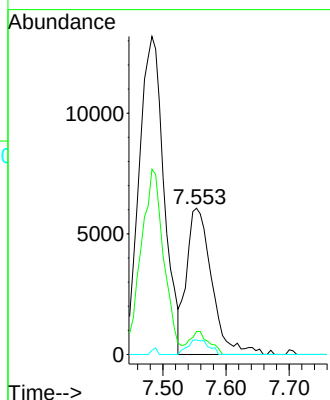
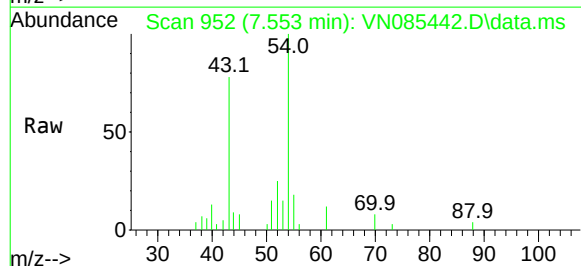
ClientSampleId :

VSTDIC005

Tgt Ion:	43	Resp:	16879
Ion	Ratio	Lower	Upper
43	100		
61	12.3	10.9	16.3
70	8.4	7.5	11.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#38

Carbon Tetrachloride

Concen: 5.065 ug/l

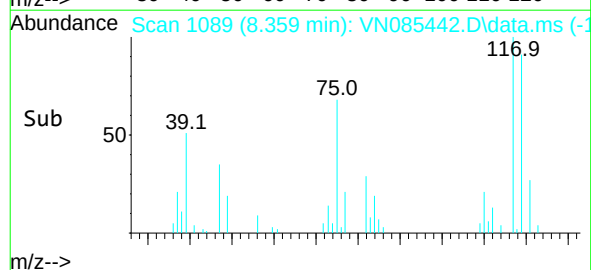
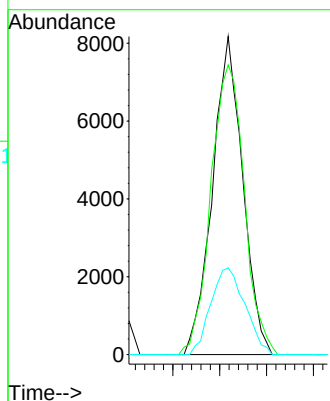
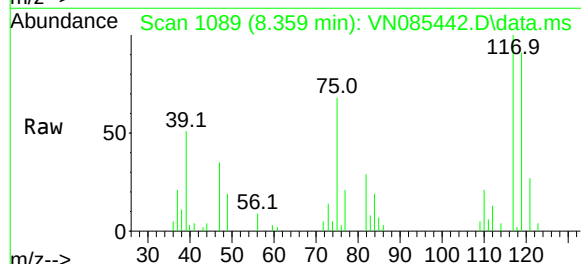
RT: 8.359 min Scan# 1089

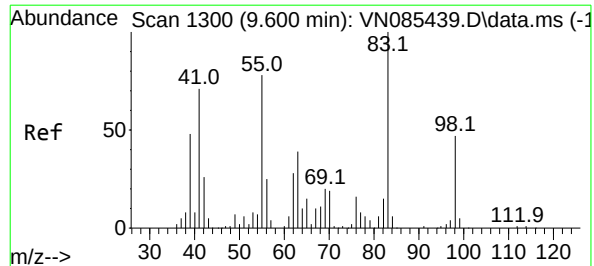
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	117	Resp:	18317
Ion	Ratio	Lower	Upper
117	100		
119	91.1	75.4	113.2
121	27.3	24.6	37.0





#39

Methylcyclohexane

Concen: 4.776 ug/l

RT: 9.600 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

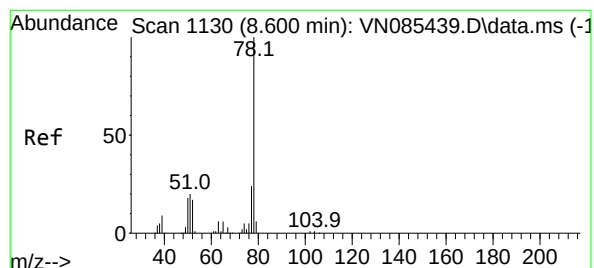
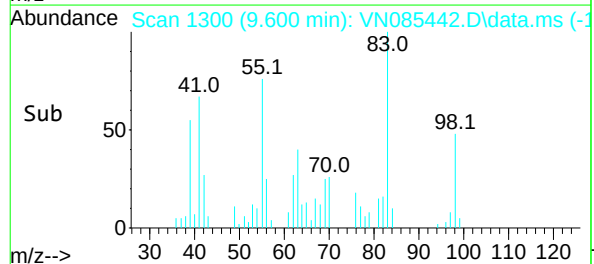
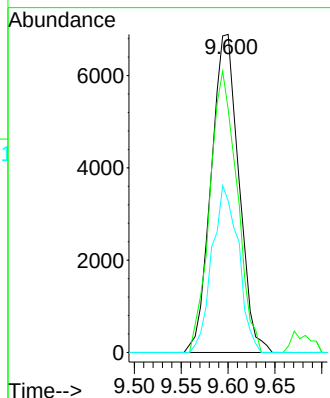
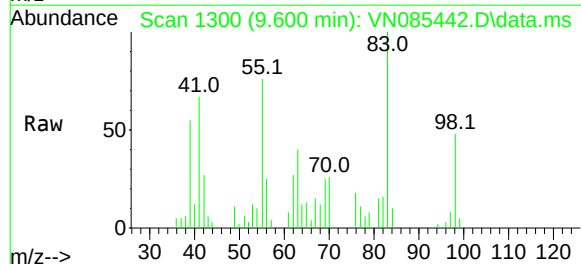
ClientSampleId :

VSTDIC005

Tgt Ion:	83	Resp:	14175
Ion	Ratio	Lower	Upper
83	100		
55	76.5	62.6	94.0
98	47.7	37.7	56.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#40

Benzene

Concen: 5.040 ug/l

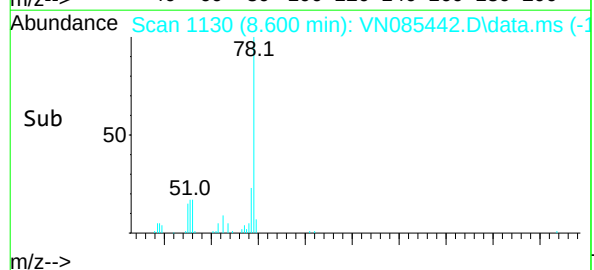
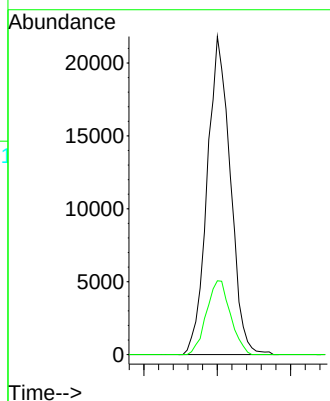
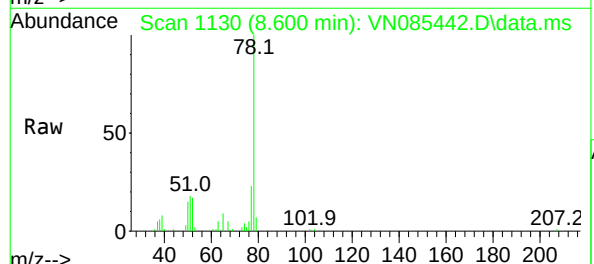
RT: 8.600 min Scan# 1130

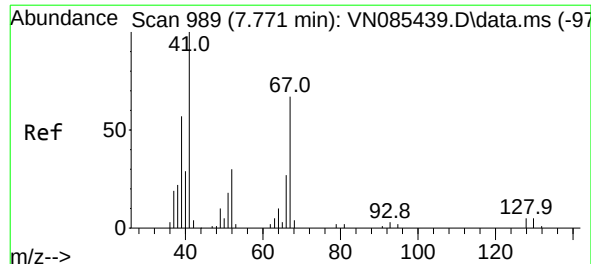
Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	78	Resp:	47833
Ion	Ratio	Lower	Upper
78	100		
77	23.2	19.0	28.6





#41

Methacrylonitrile

Concen: 4.449 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

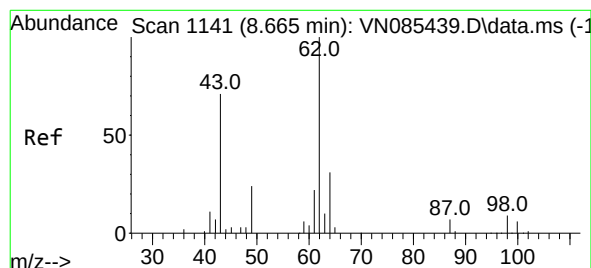
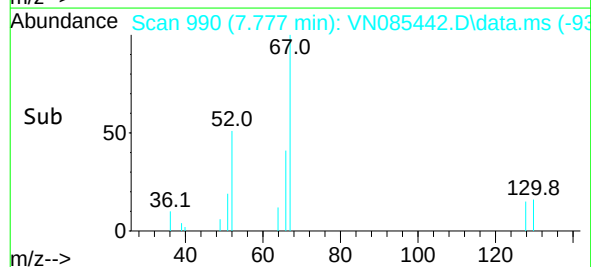
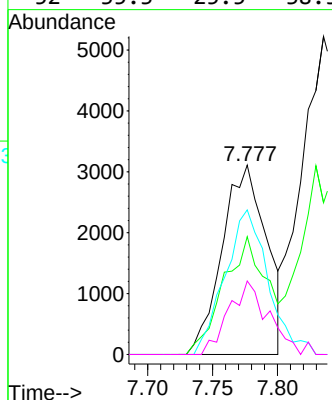
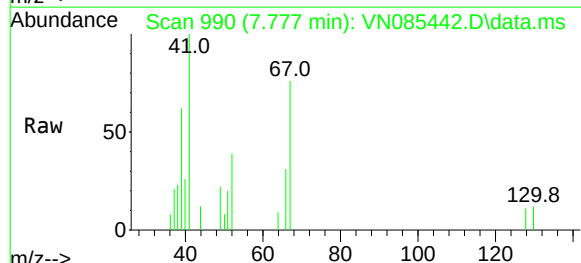
ClientSampleId :

VSTDIC005

Tgt Ion:	41	Resp:	7380
Ion	Ratio	Lower	Upper
41	100		
39	60.5	46.0	69.0
67	74.6	57.4	86.2
52	35.3	25.5	38.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 5.211 ug/l

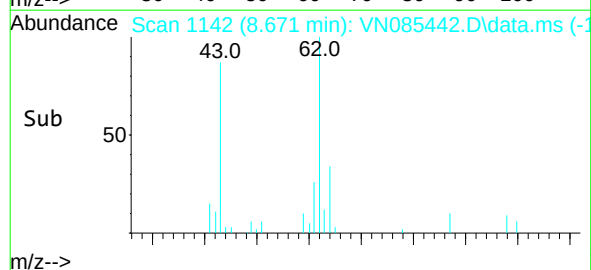
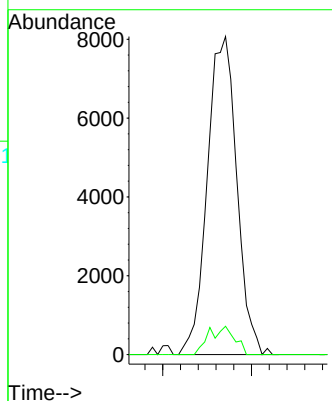
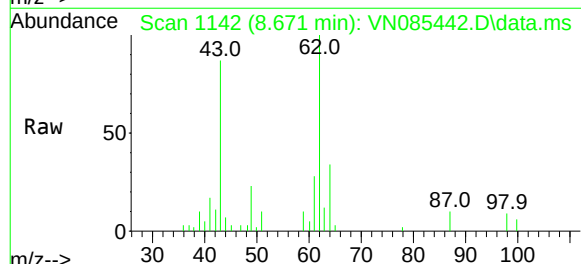
RT: 8.671 min Scan# 1142

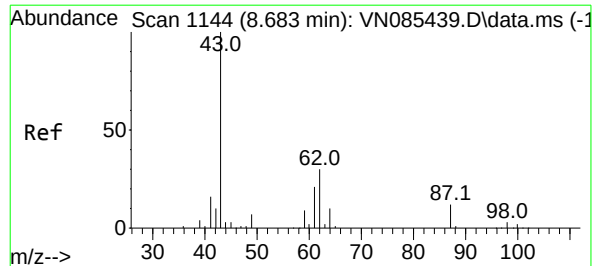
Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	62	Resp:	18628
Ion	Ratio	Lower	Upper
62	100		
98	7.8	0.0	17.0





#43

Isopropyl Acetate

Concen: 4.853 ug/l

RT: 8.688 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

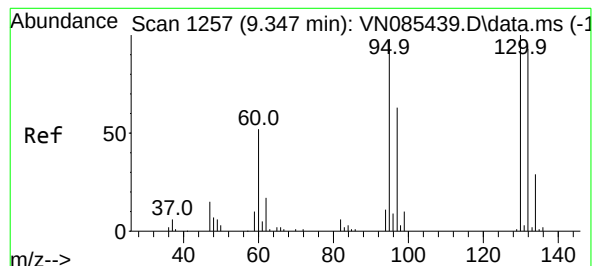
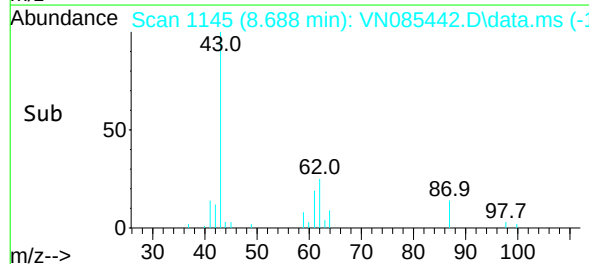
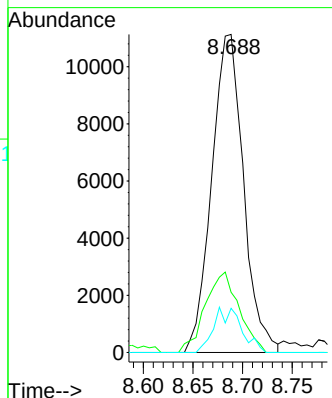
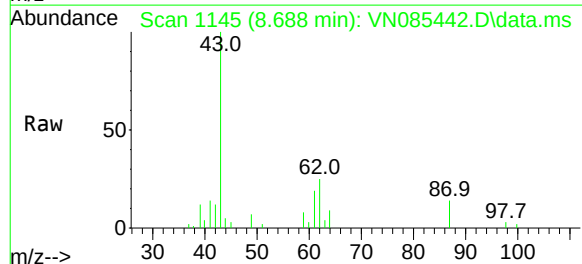
ClientSampleId :

VSTDIC005

Tgt Ion:	43	Resp:	24792
Ion	Ratio	Lower	Upper
43	100		
61	27.0	20.7	31.1
87	12.3	9.8	14.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#44

Trichloroethene

Concen: 5.039 ug/l

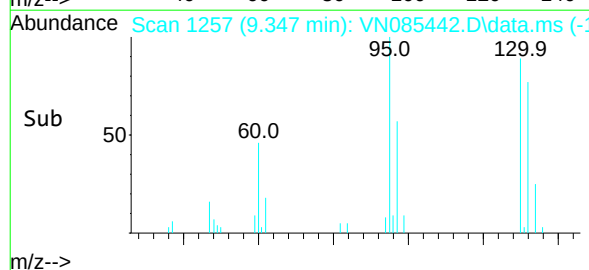
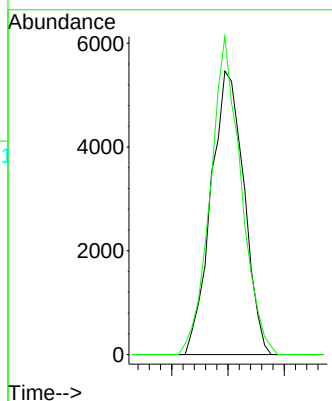
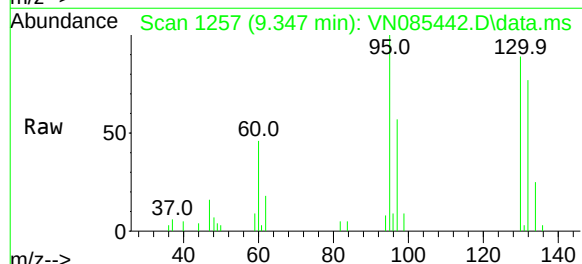
RT: 9.347 min Scan# 1257

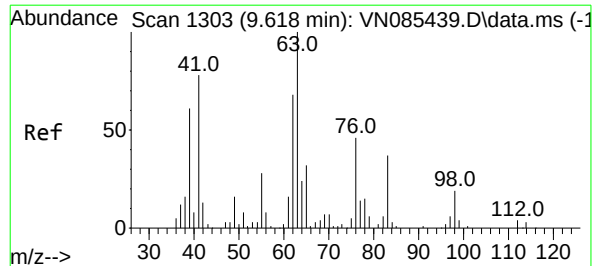
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	130	Resp:	11133
Ion	Ratio	Lower	Upper
130	100		
95	112.2	0.0	195.8





#45

1,2-Dichloropropane

Concen: 5.194 ug/l

RT: 9.618 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Tgt Ion: 63 Resp: 12591

Ion Ratio Lower Upper

63 100

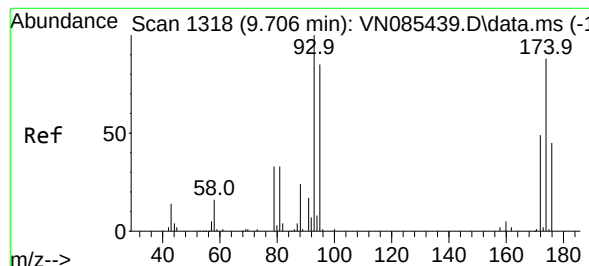
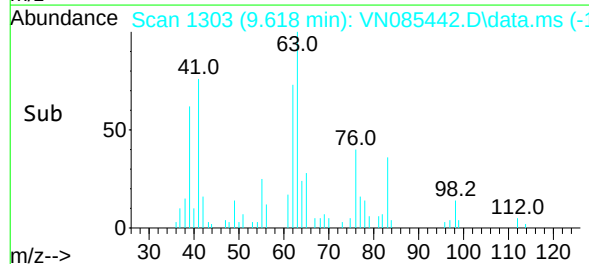
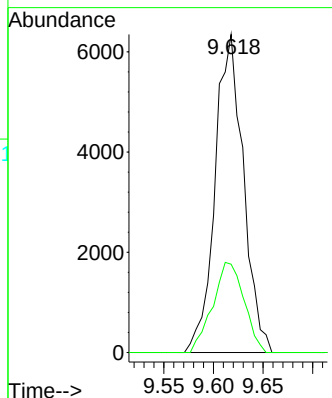
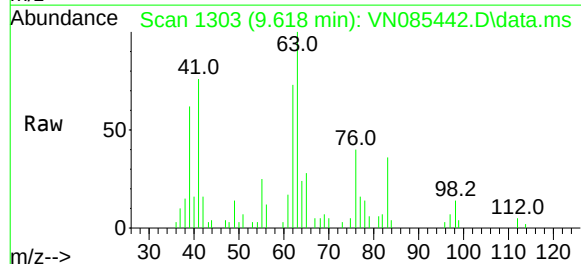
65 27.8 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#46

Dibromomethane

Concen: 4.705 ug/l

RT: 9.700 min Scan# 1317

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

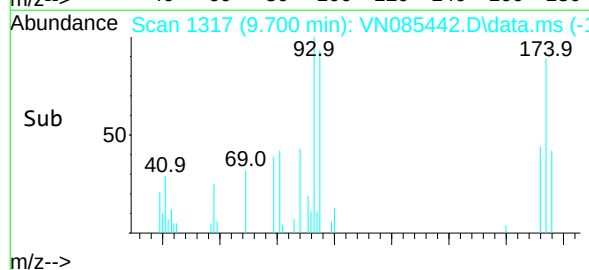
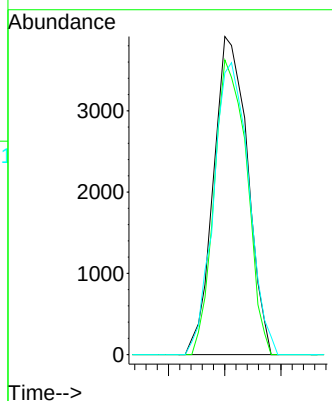
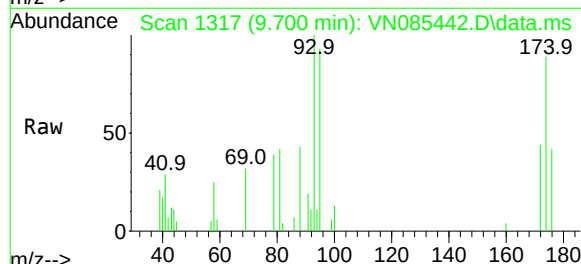
Tgt Ion: 93 Resp: 8230

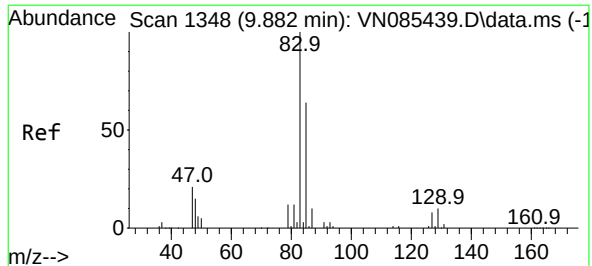
Ion Ratio Lower Upper

93 100

95 88.7 64.7 97.1

174 95.0 69.0 103.4





#47

Bromodichloromethane

Concen: 5.179 ug/l

RT: 9.888 min Scan# 1348

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

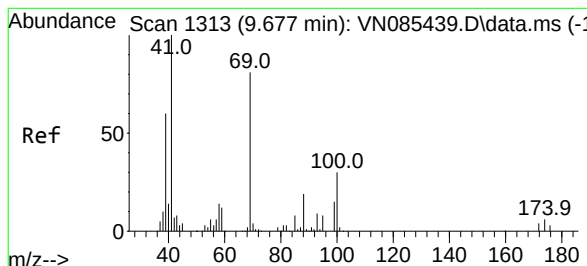
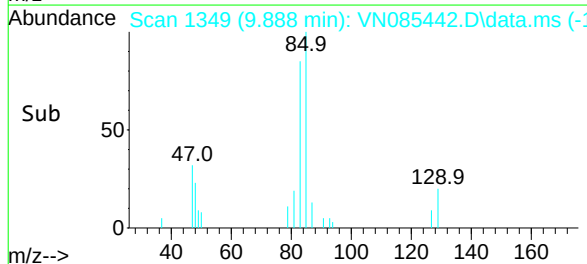
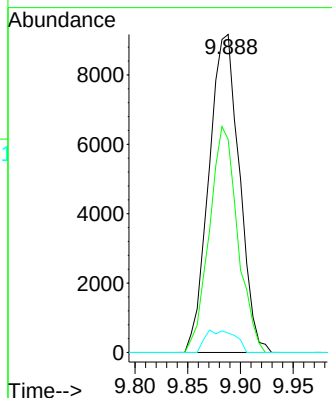
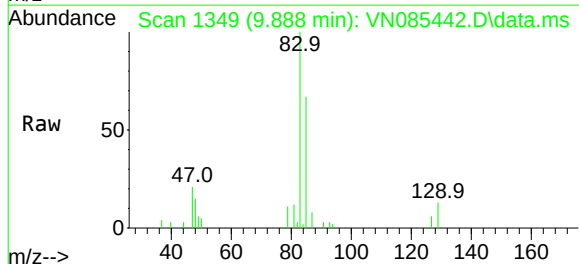
ClientSampleId :

VSTDIC005

Tgt Ion:	83	Resp:	18456
Ion Ratio	Lower	Upper	
83	100		
85	67.0	51.2	76.8
127	6.1	6.5	9.7#

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 4.599 ug/l

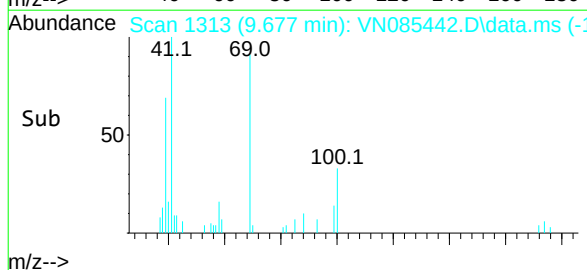
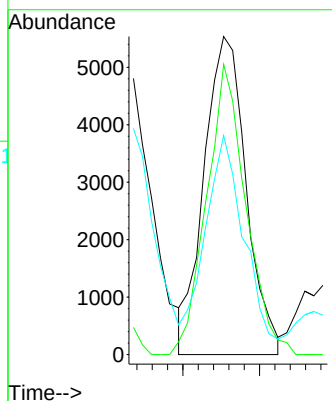
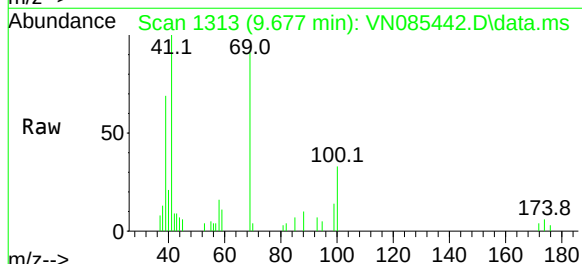
RT: 9.677 min Scan# 1313

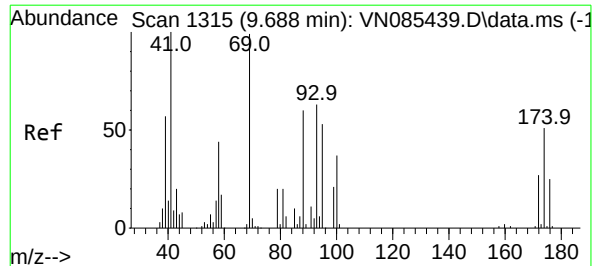
Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	41	Resp:	10574
Ion Ratio	Lower	Upper	
41	100		
69	84.9	64.7	97.1
39	65.3	49.0	73.6





#49

1,4-Dioxane

Concen: 93.477 ug/l

RT: 9.694 min Scan# 1315

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Tgt Ion: 88 Resp: 3619

Ion Ratio Lower Upper

88 100

43 32.3 26.6 39.8

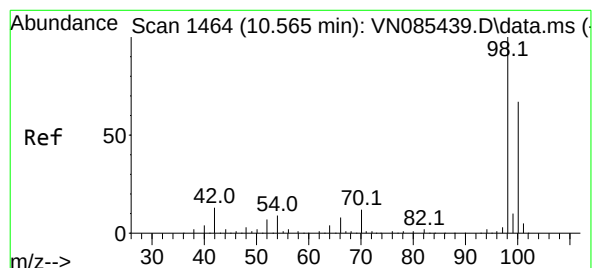
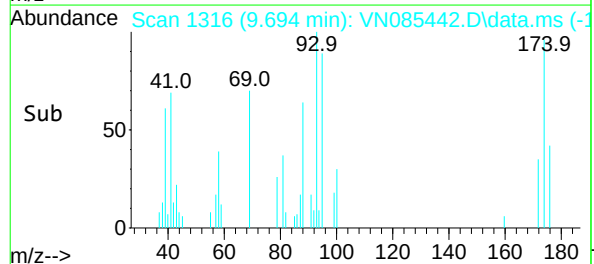
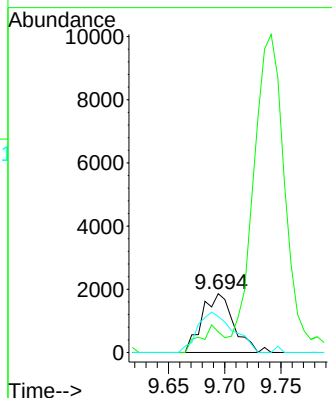
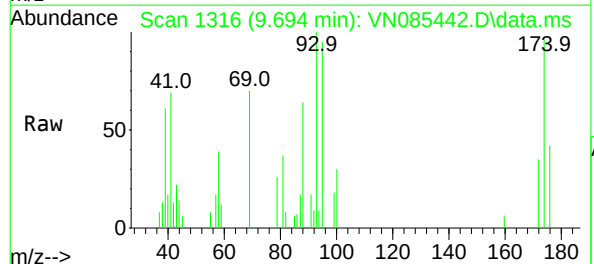
58 77.9 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 5.168 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085442.D

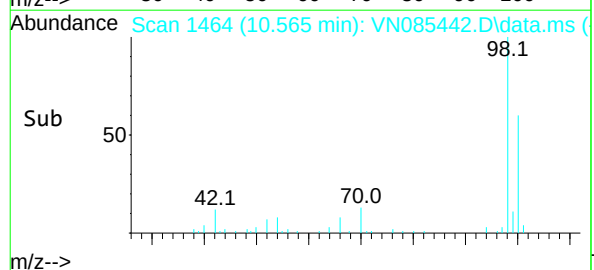
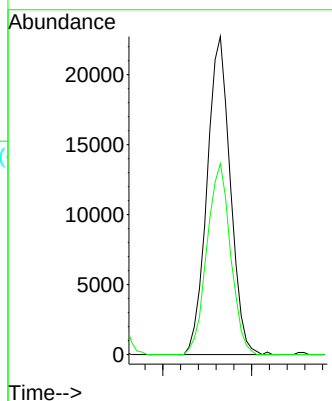
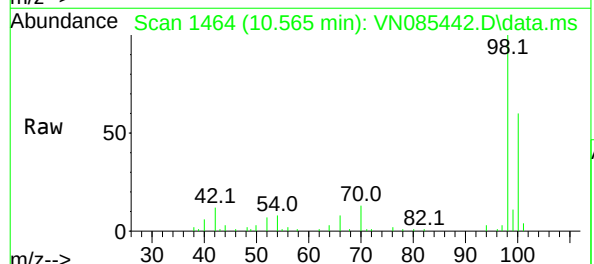
Acq: 14 Jan 2025 16:31

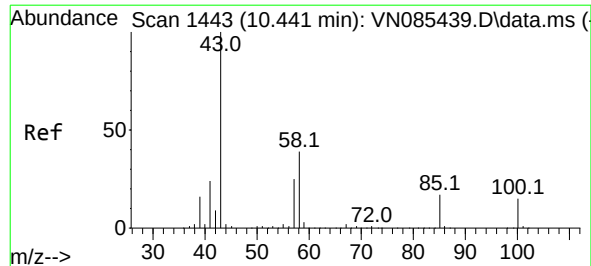
Tgt Ion: 98 Resp: 41328

Ion Ratio Lower Upper

98 100

100 60.9 52.2 78.4





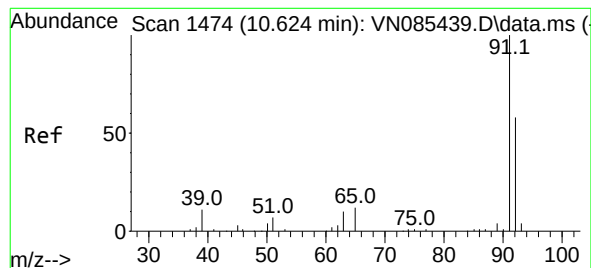
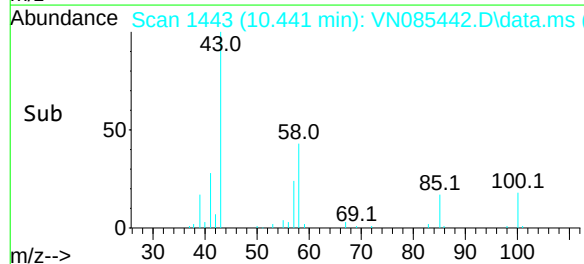
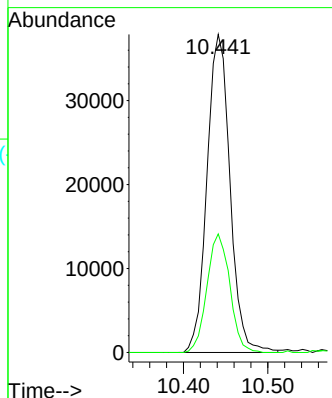
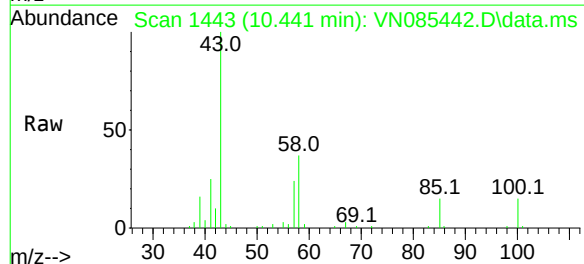
#51
4-Methyl-2-Pentanone
Concen: 24.250 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion: 43 Resp: 71889
Ion Ratio Lower Upper
43 100
58 36.9 30.5 45.7

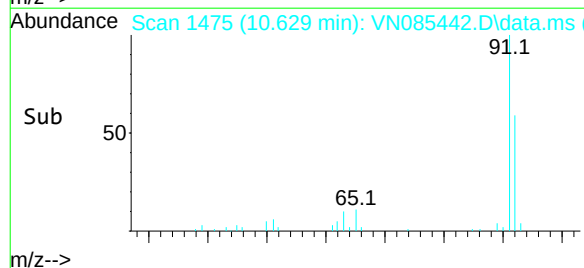
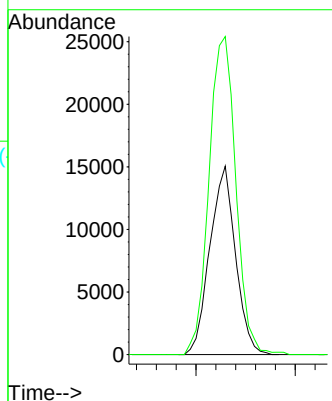
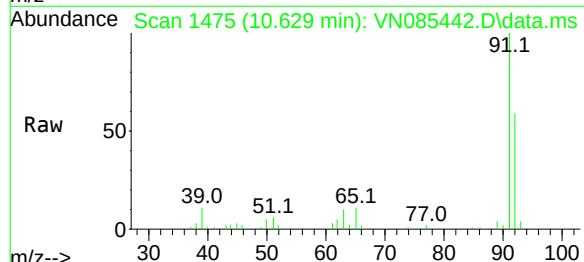
Manual Integrations
APPROVED

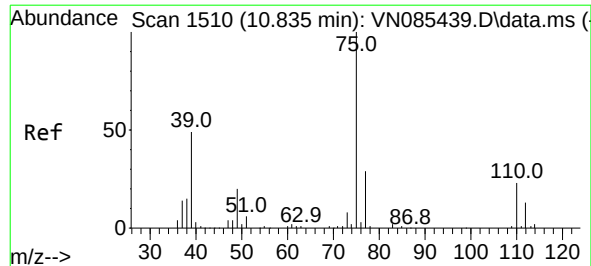
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#52
Toluene
Concen: 4.928 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 92 Resp: 27098
Ion Ratio Lower Upper
92 100
91 176.4 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 5.077 ug/l

RT: 10.829 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 75 Resp: 17099

Ion Ratio Lower Upper

75 100

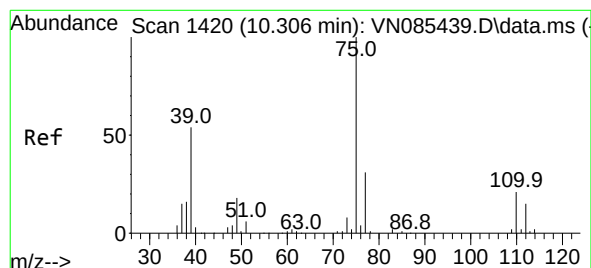
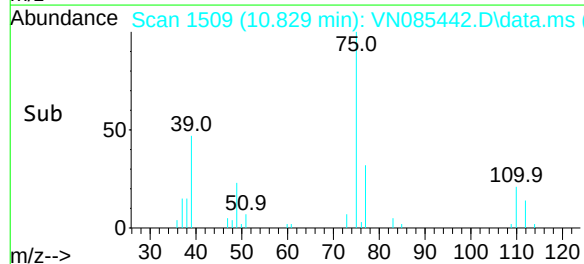
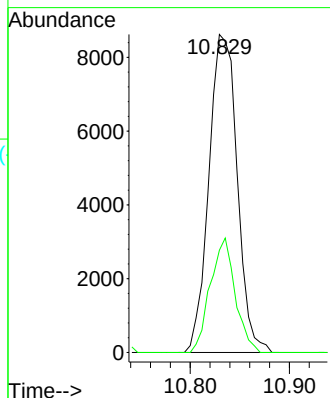
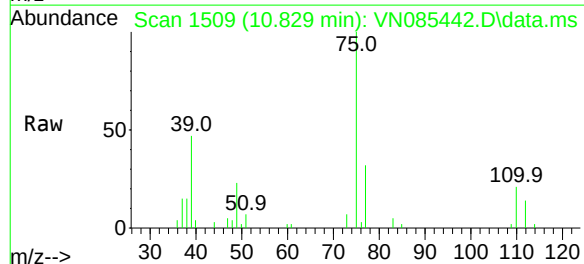
77 32.2 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#54

cis-1,3-Dichloropropene

Concen: 4.848 ug/l

RT: 10.306 min Scan# 1420

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

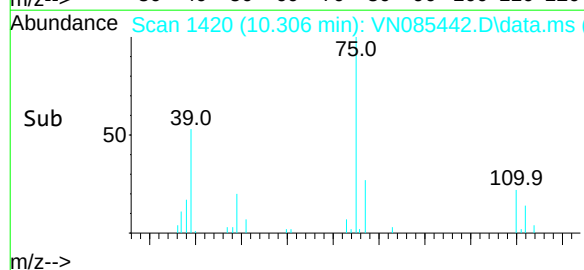
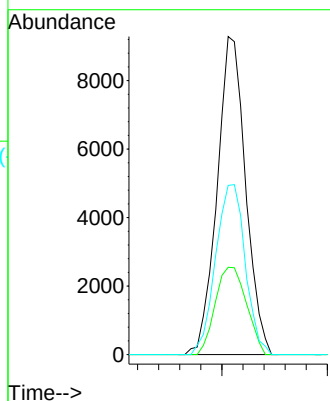
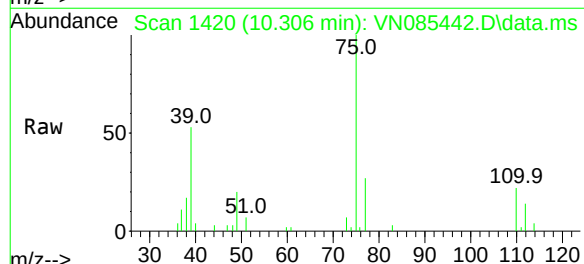
Tgt Ion: 75 Resp: 17440

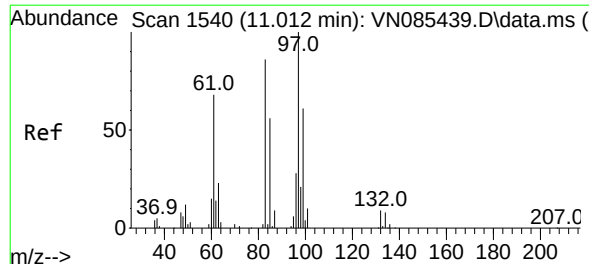
Ion Ratio Lower Upper

75 100

77 27.5 25.0 37.4

39 53.2 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 5.197 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 97 Resp: 11311

Ion Ratio Lower Upper

97 100

83 82.7 69.0 103.6

85 51.3 44.6 66.8

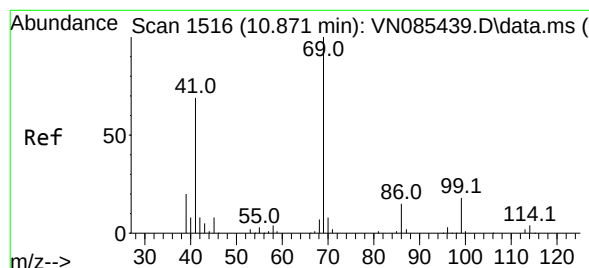
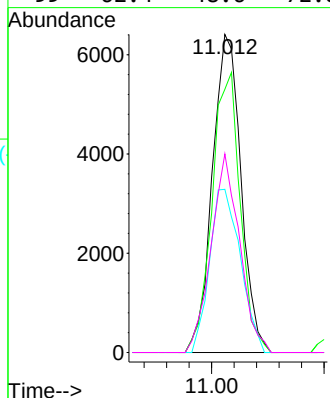
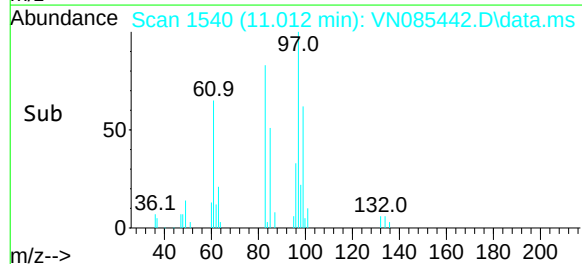
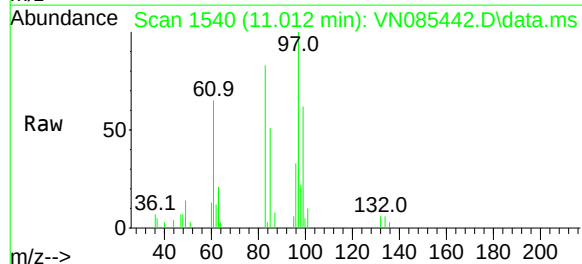
99 62.4 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#56

Ethyl methacrylate

Concen: 5.627 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

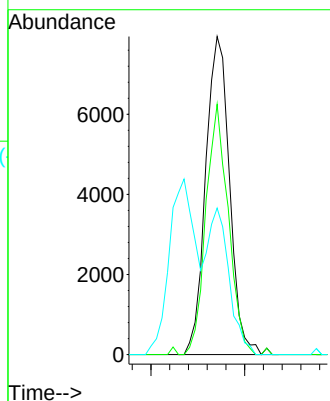
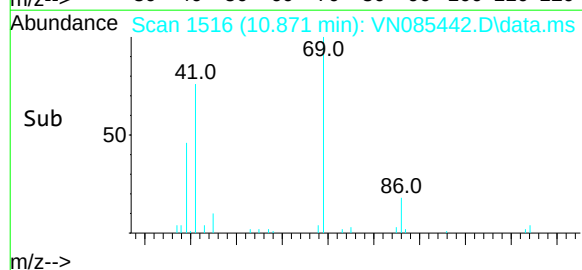
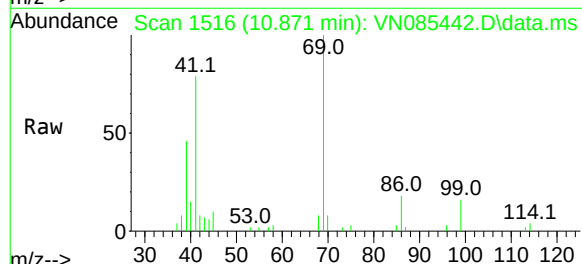
Tgt Ion: 69 Resp: 14094

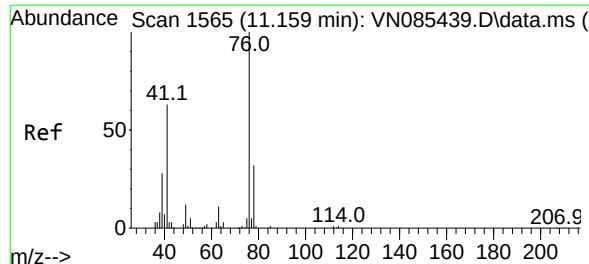
Ion Ratio Lower Upper

69 100

41 73.8 54.6 82.0

39 42.6 32.4 48.6





#57

1,3-Dichloropropane

Concen: 5.006 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion: 76 Resp: 18945

Ion Ratio Lower Upper

76 100

78 32.2 25.6 38.4

Instrument :

MSVOA_N

ClientSampleId :

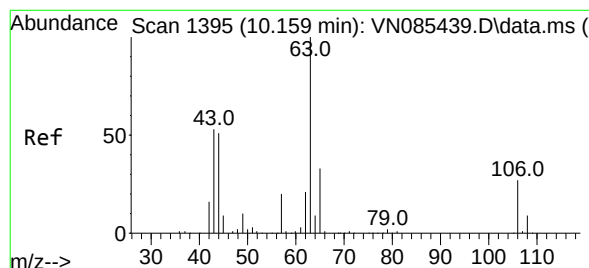
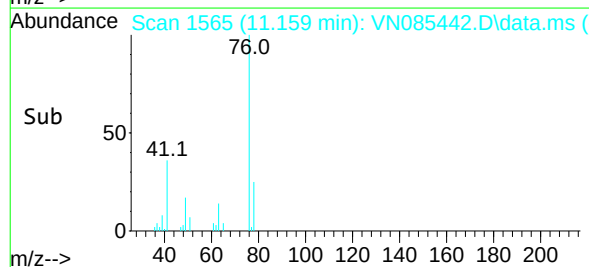
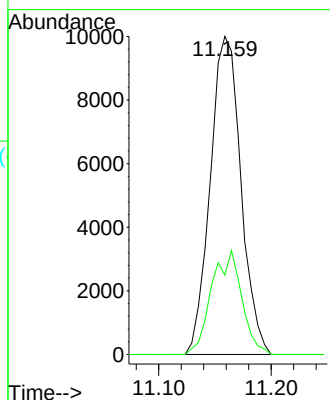
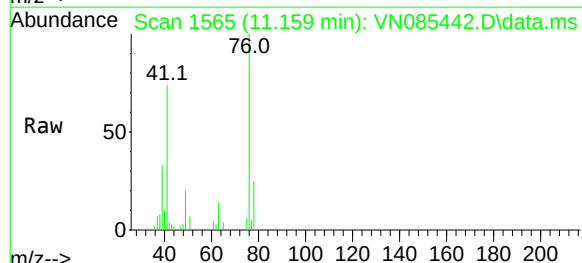
VSTDIC005

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 24.047 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085442.D

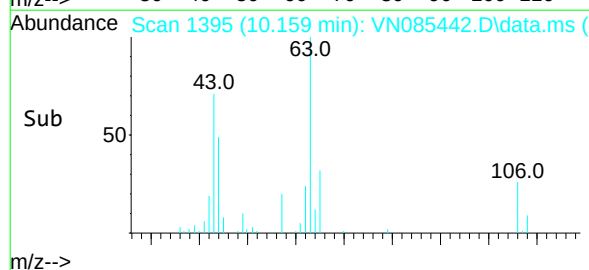
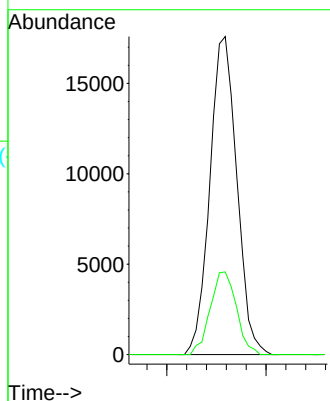
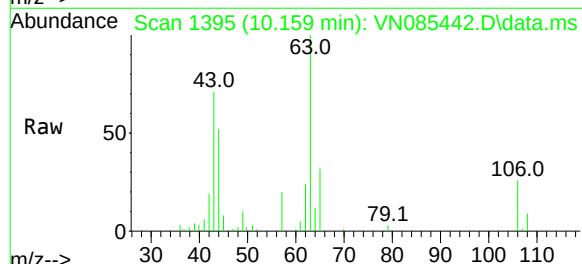
Acq: 14 Jan 2025 16:31

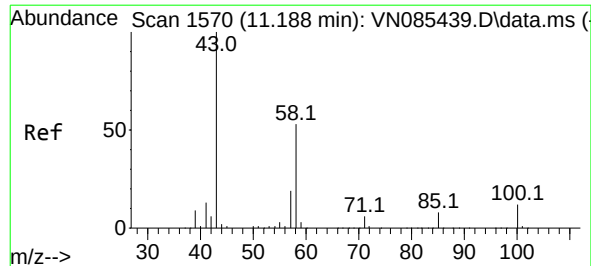
Tgt Ion: 63 Resp: 33210

Ion Ratio Lower Upper

63 100

106 25.2 21.6 32.4





#59

2-Hexanone

Concen: 23.501 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 43 Resp: 49021

Ion Ratio Lower Upper

43 100

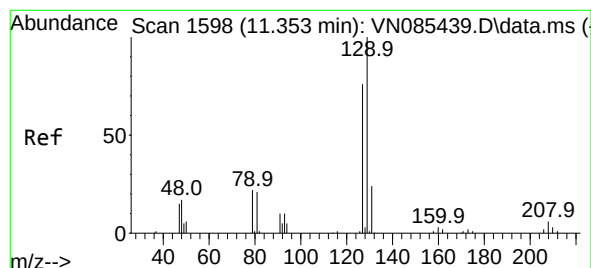
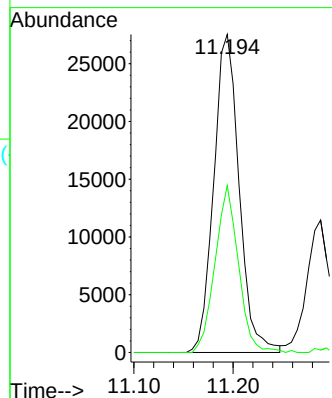
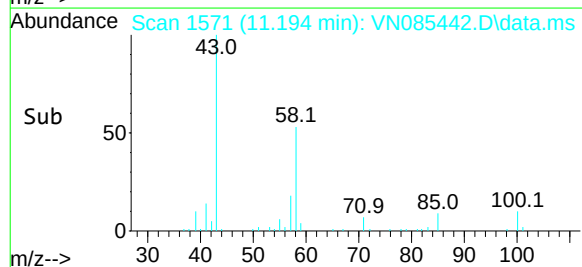
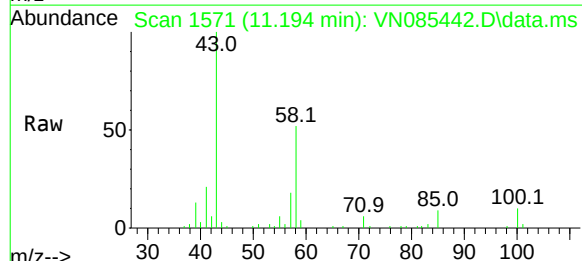
58 48.3 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 5.190 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085442.D

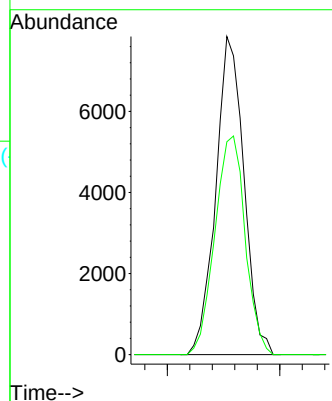
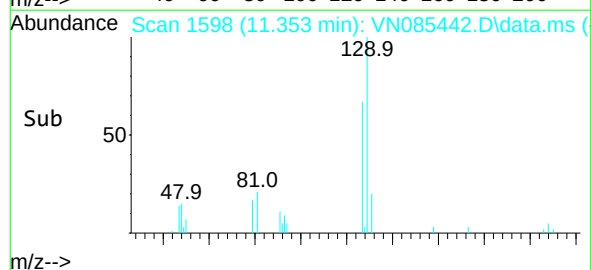
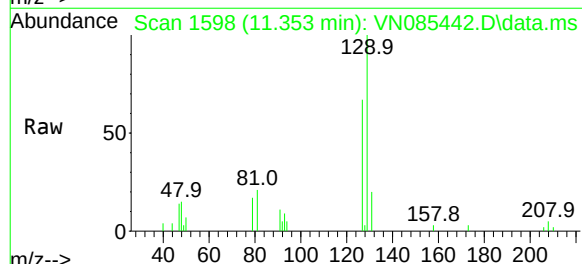
Acq: 14 Jan 2025 16:31

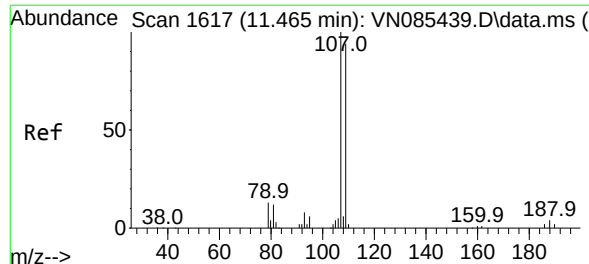
Tgt Ion:129 Resp: 13635

Ion Ratio Lower Upper

129 100

127 73.9 38.6 115.8





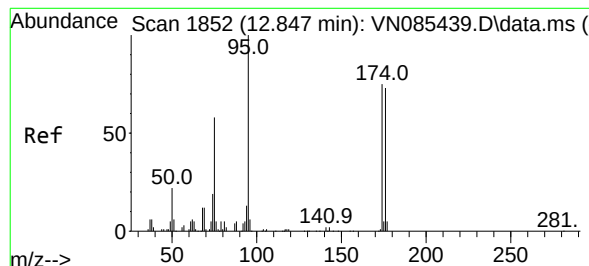
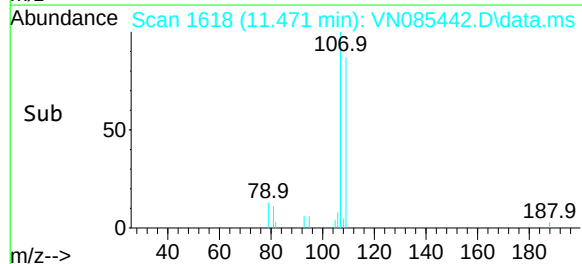
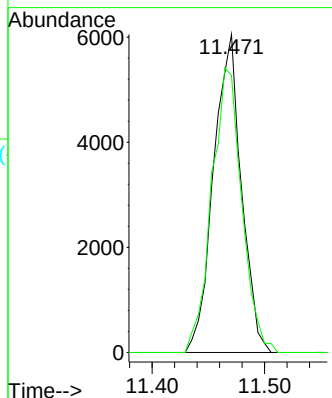
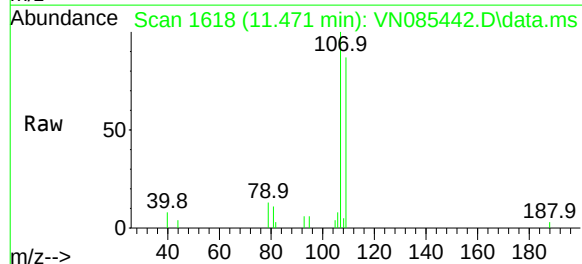
#61
1,2-Dibromoethane
Concen: 4.810 ug/l
RT: 11.471 min Scan# 1617
Delta R.T. 0.006 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

Tgt Ion: 107 Resp: 10419
Ion Ratio Lower Upper
107 100
109 96.8 75.9 113.9

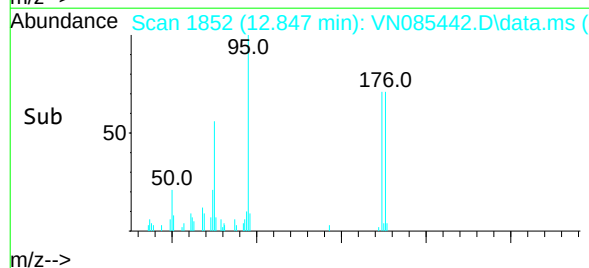
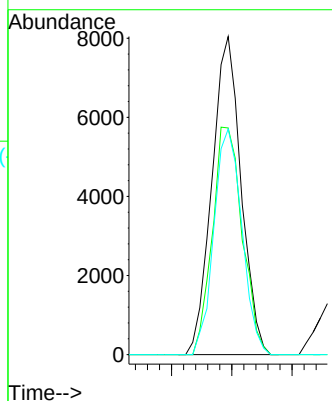
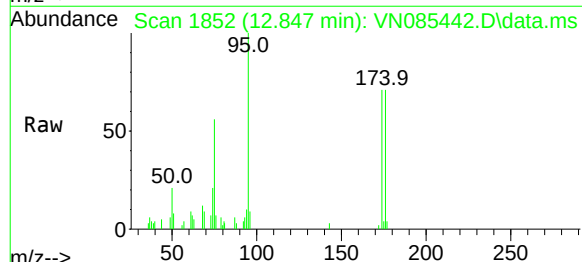
Manual Integrations
APPROVED

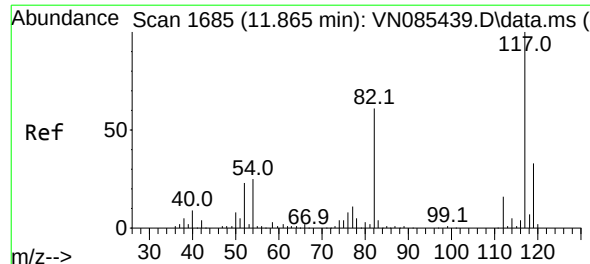
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#62
4-Bromofluorobenzene
Concen: 4.943 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion: 95 Resp: 13520
Ion Ratio Lower Upper
95 100
174 73.2 0.0 145.0
176 68.0 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:117 Resp: 282203

Ion Ratio Lower Upper

117 100

82 58.3 48.6 72.8

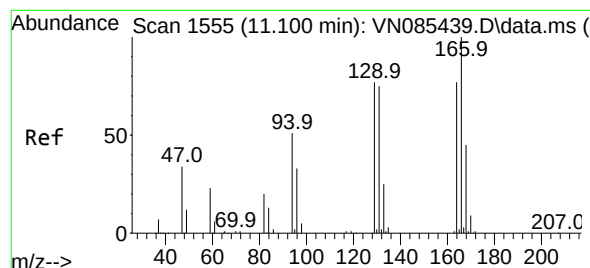
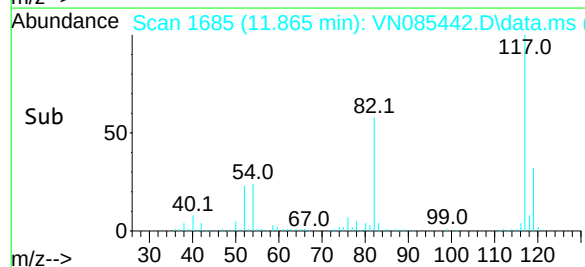
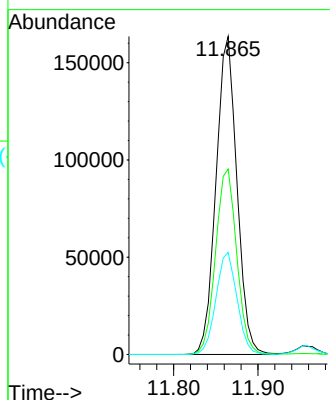
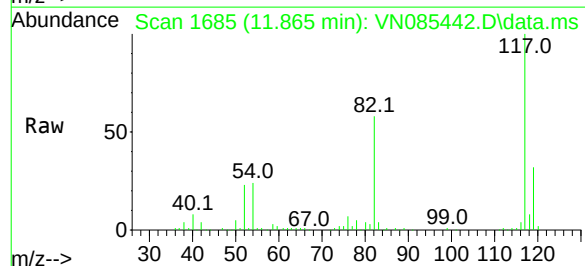
119 32.1 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 5.071 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:164 Resp: 9756

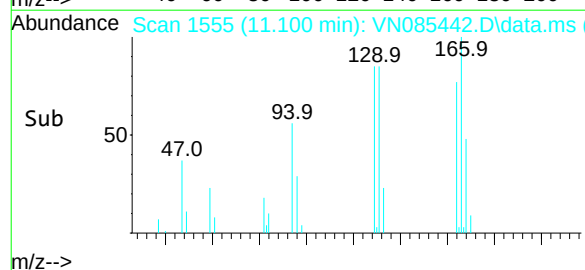
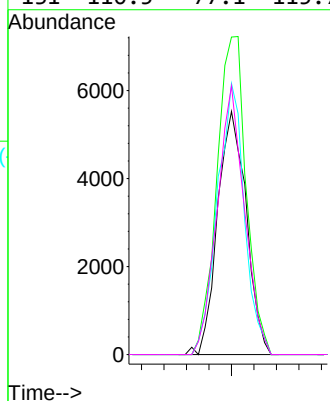
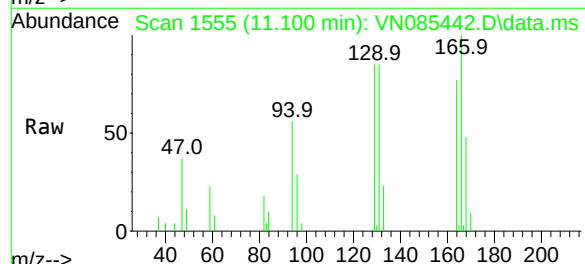
Ion Ratio Lower Upper

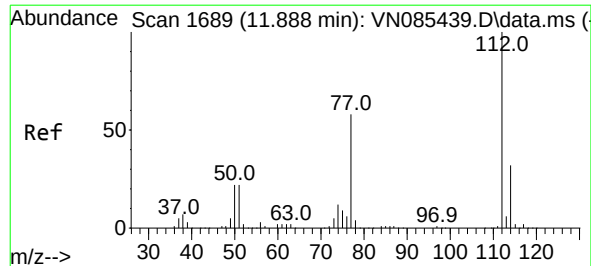
164 100

166 130.6 103.4 155.2

129 111.5 79.2 118.8

131 110.5 77.1 115.7





#65

Chlorobenzene

Concen: 5.065 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:112 Resp: 31312

Ion Ratio Lower Upper

112 100

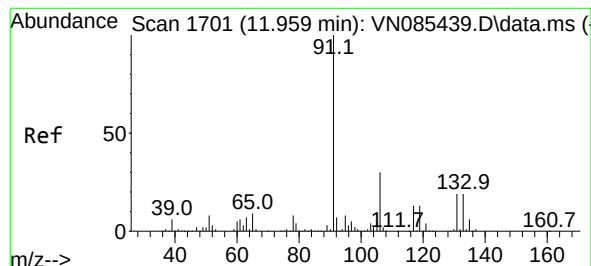
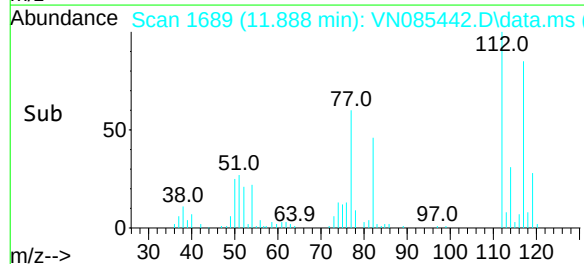
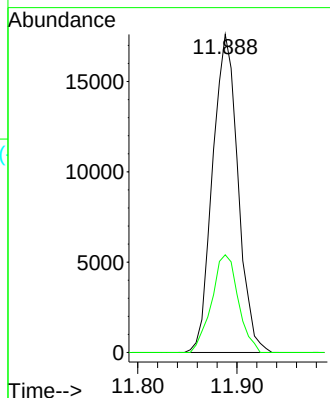
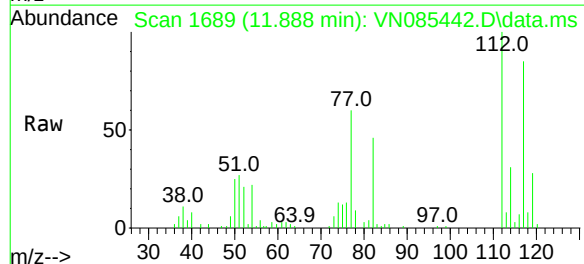
114 30.7 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 5.121 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

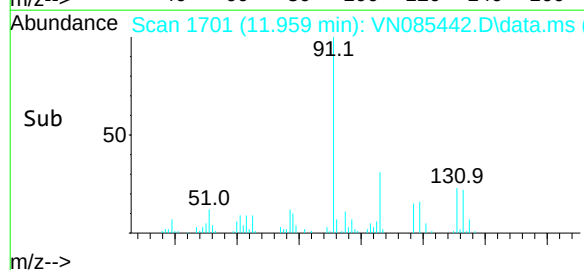
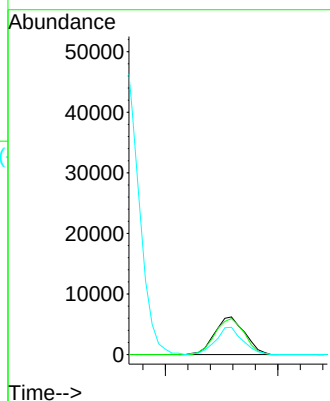
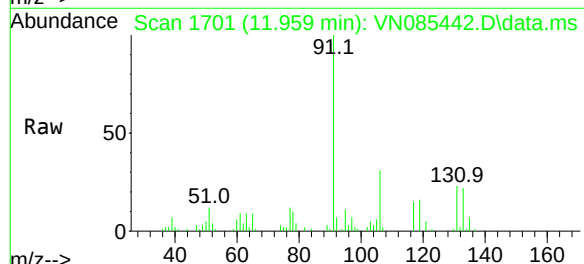
Tgt Ion:131 Resp: 11620

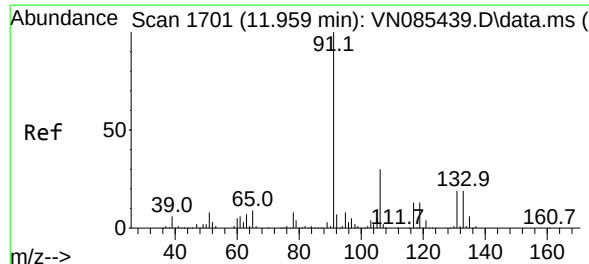
Ion Ratio Lower Upper

131 100

133 92.7 47.4 142.3

119 65.0 33.1 99.5





#67

Ethyl Benzene

Concen: 4.789 ug/l

RT: 11.965 min Scan# 1701

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 91 Resp: 48216

Ion Ratio Lower Upper

91 100

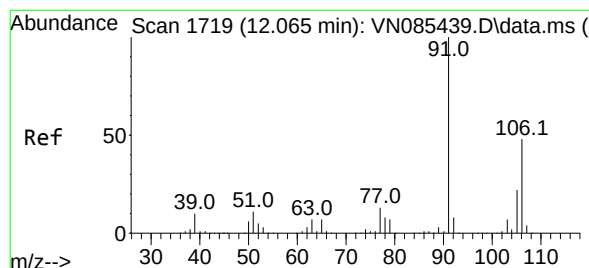
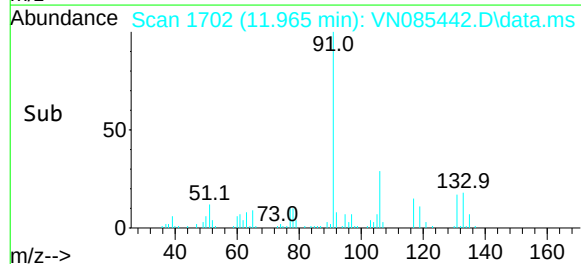
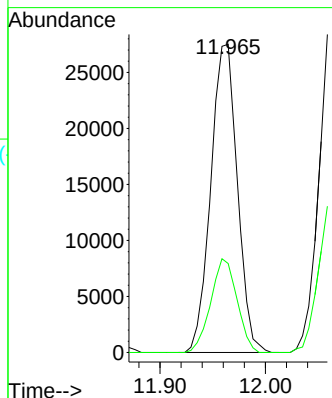
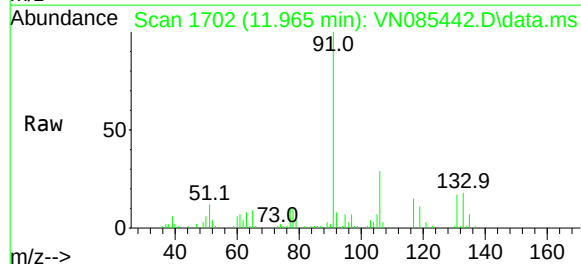
106 28.9 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 9.344 ug/l

RT: 12.065 min Scan# 1719

Delta R.T. 0.000 min

Lab File: VN085442.D

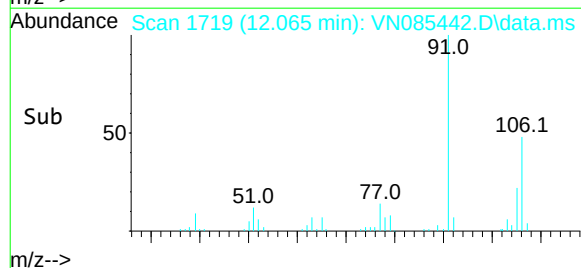
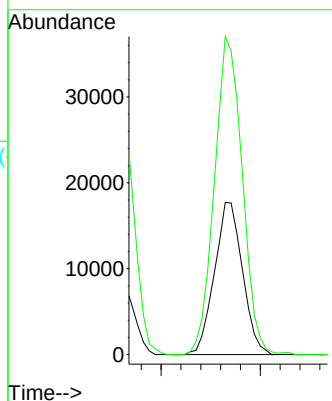
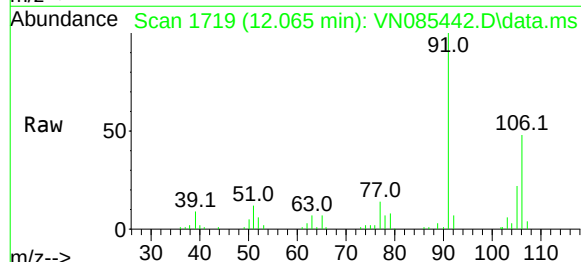
Acq: 14 Jan 2025 16:31

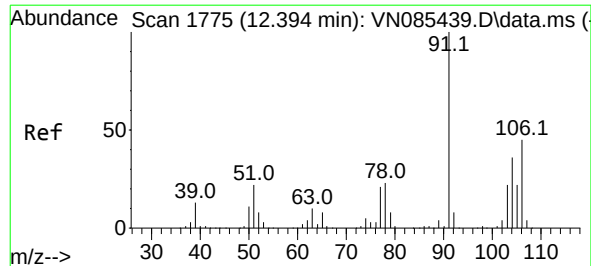
Tgt Ion:106 Resp: 34771

Ion Ratio Lower Upper

106 100

91 207.9 167.7 251.5





#69

o-Xylene

Concen: 4.617 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:106 Resp: 16419

Ion Ratio Lower Upper

106 100

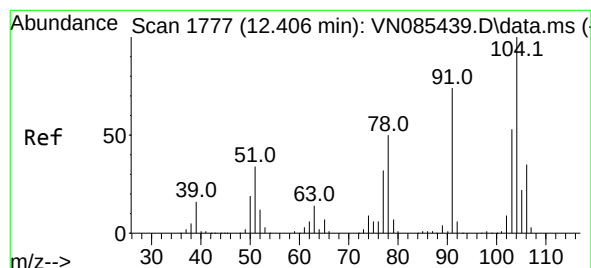
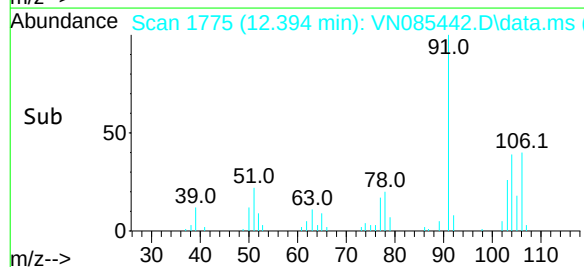
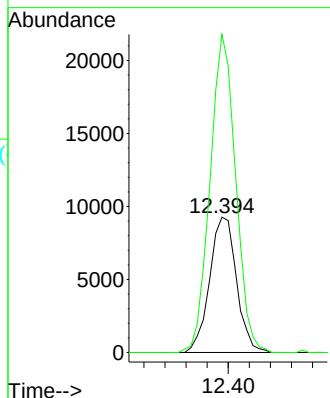
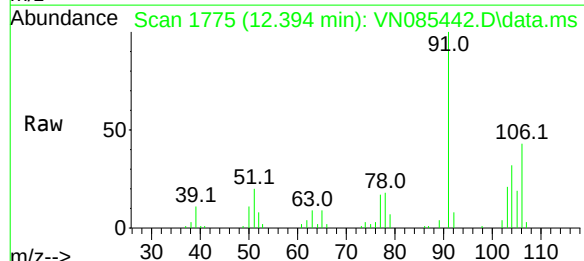
91 224.0 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 4.454 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

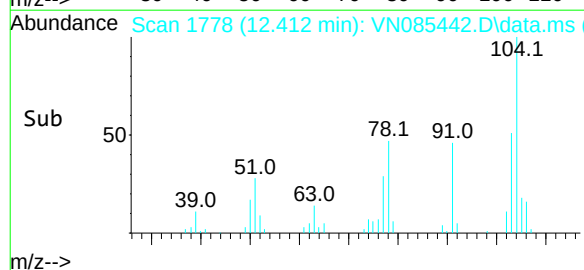
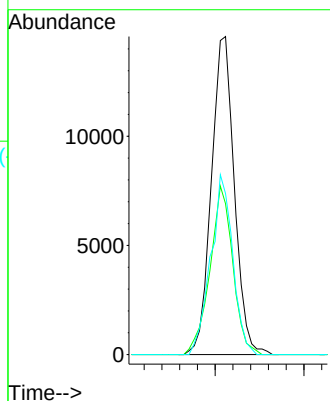
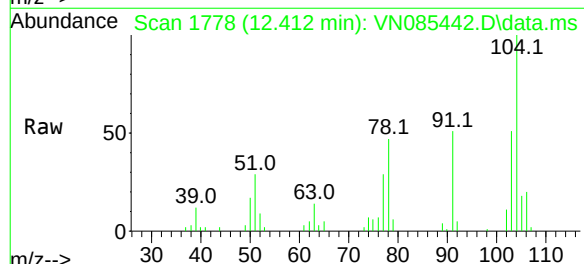
Tgt Ion:104 Resp: 26218

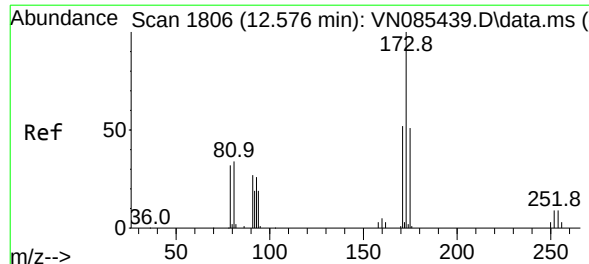
Ion Ratio Lower Upper

104 100

78 52.6 42.5 63.7

103 54.2 43.8 65.8





#71

Bromoform

Concen: 4.938 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

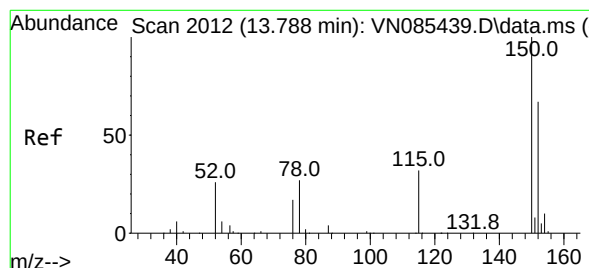
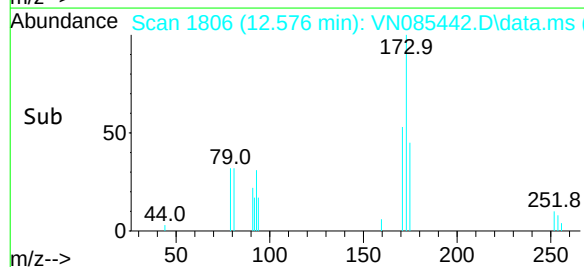
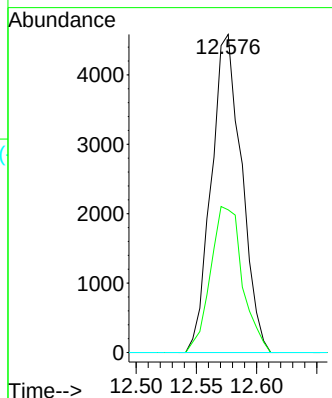
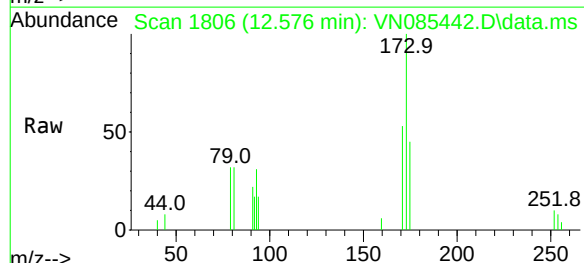
ClientSampleId :

VSTDIC005

Tgt Ion:	173	Resp:	8017
Ion Ratio	Lower	Upper	
173	100		
175	48.3	24.4	73.2
254	0.0	0.0	0.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

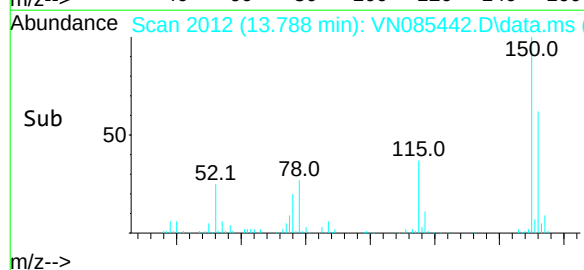
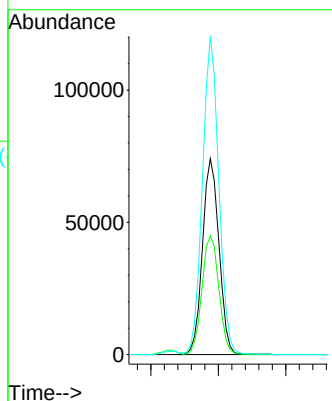
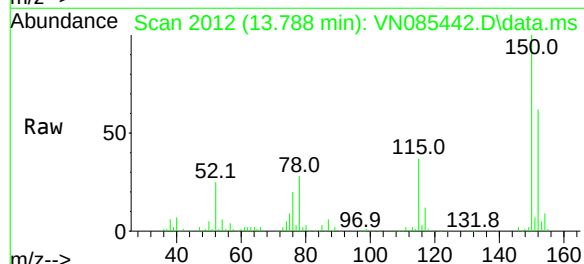
RT: 13.788 min Scan# 2012

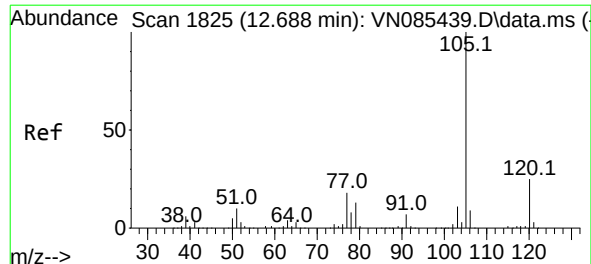
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	152	Resp:	126086
Ion Ratio	Lower	Upper	
152	100		
115	62.0	31.1	93.3
150	160.7	0.0	343.6





#73

Isopropylbenzene

Concen: 4.678 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion: 105 Resp: 39811

Ion Ratio Lower Upper

105 100

120 26.1 12.8 38.3

Instrument :

MSVOA_N

ClientSampleId :

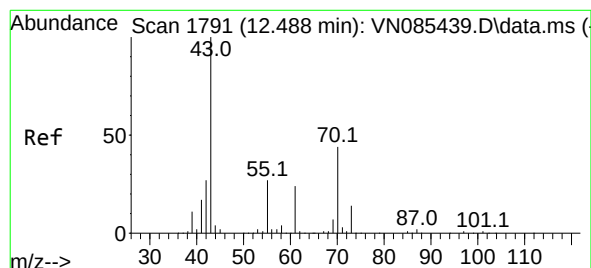
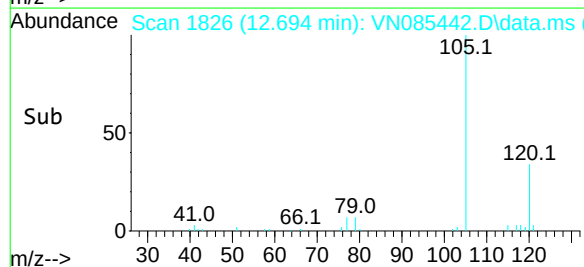
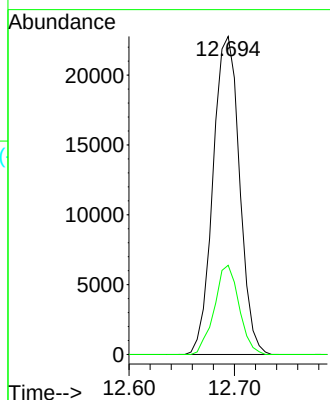
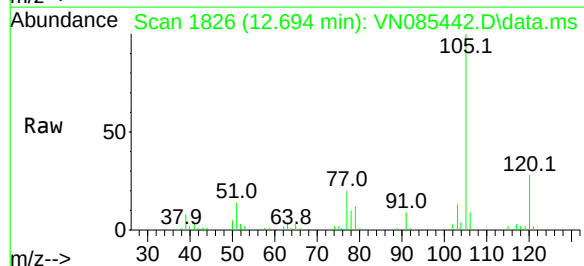
VSTDIC005

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 4.595 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion: 43 Resp: 17577

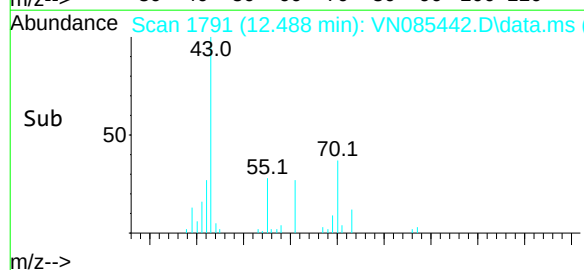
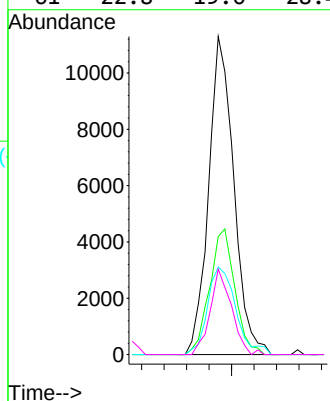
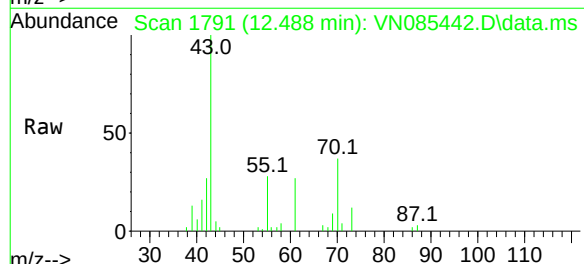
Ion Ratio Lower Upper

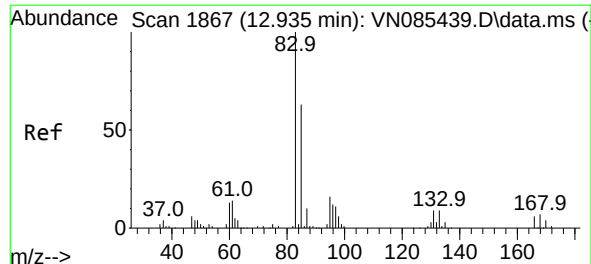
43 100

70 39.5 34.0 51.0

55 30.8 21.4 32.2

61 22.8 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 5.151 ug/l

RT: 12.935 min Scan# 18

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

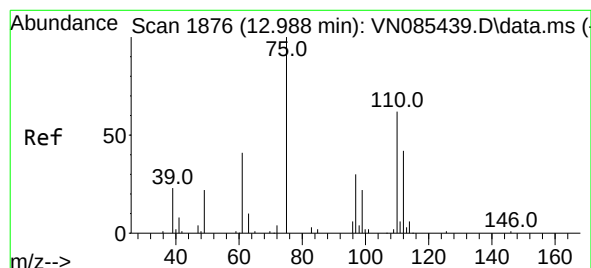
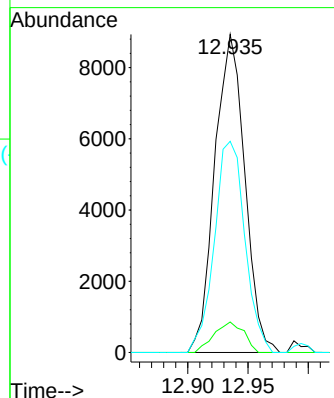
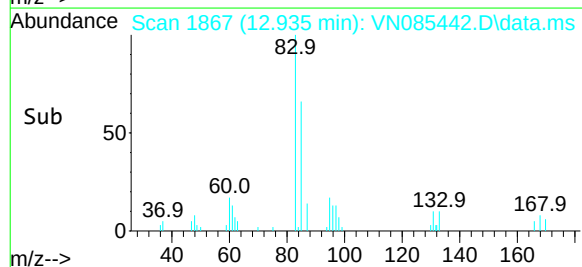
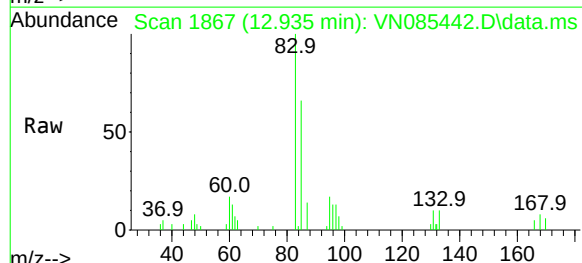
ClientSampleId :

VSTDIC005

Tgt Ion:	83	Resp:	15483
Ion Ratio	Lower	Upper	
83	100		
131	9.5	4.8	14.4
85	67.5	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#76

1,2,3-Trichloropropane

Concen: 4.758 ug/l m

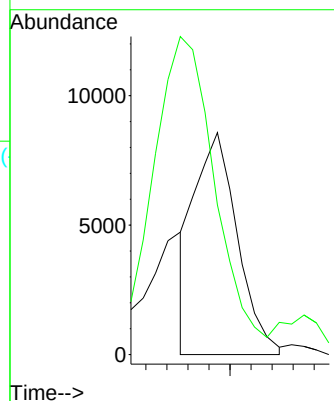
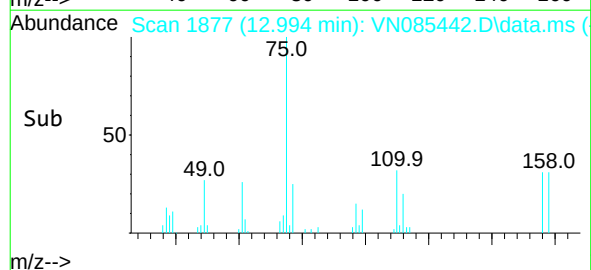
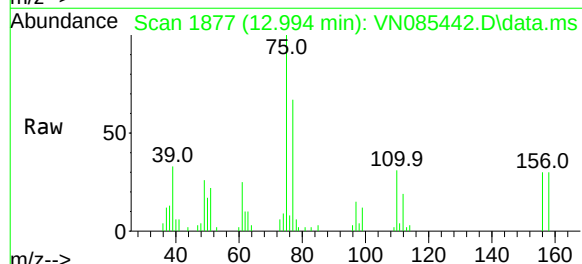
RT: 12.994 min Scan# 1877

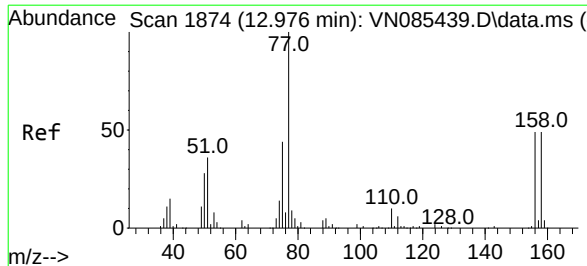
Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	75	Resp:	12173
Ion Ratio	Lower	Upper	
75	100		
77	209.1	109.7	329.2





#77

Bromobenzene

Concen: 4.989 ug/l

RT: 12.982 min Scan# 1875

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 156 Resp: 11091

Ion Ratio Lower Upper

156 100

77 229.5 114.1 342.4

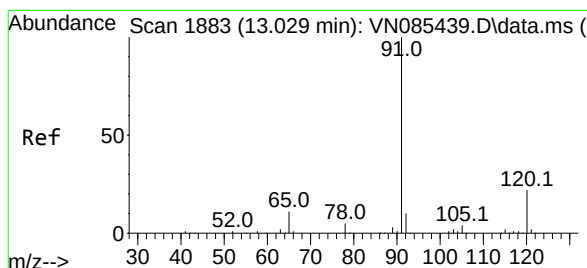
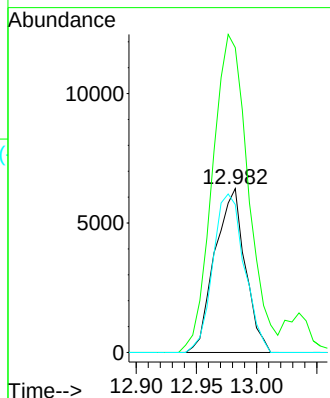
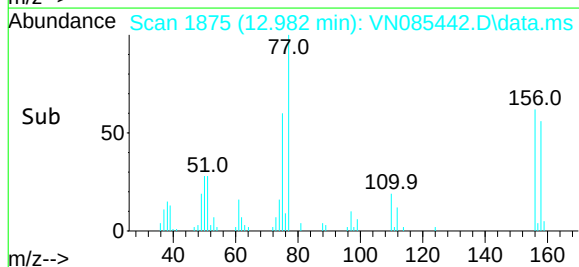
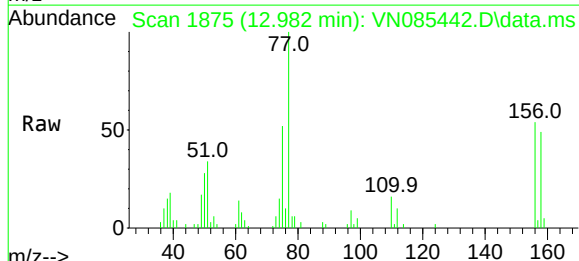
158 100.8 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#78

n-propylbenzene

Concen: 4.512 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085442.D

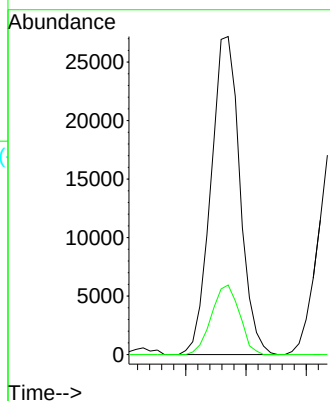
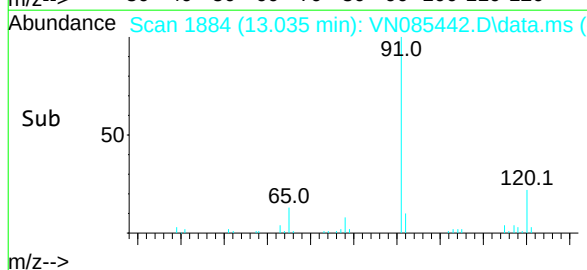
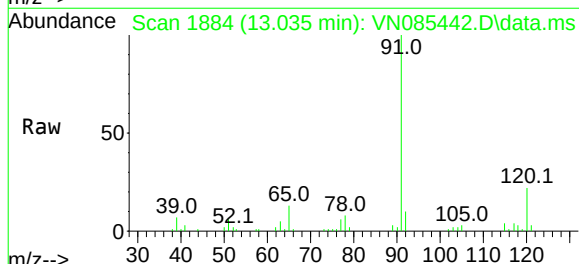
Acq: 14 Jan 2025 16:31

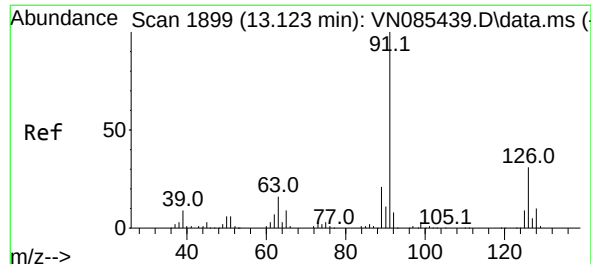
Tgt Ion: 91 Resp: 45450

Ion Ratio Lower Upper

91 100

120 21.1 10.9 32.6





#79

2-Chlorotoluene

Concen: 4.898 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 91 Resp: 31932

Ion Ratio Lower Upper

91 100

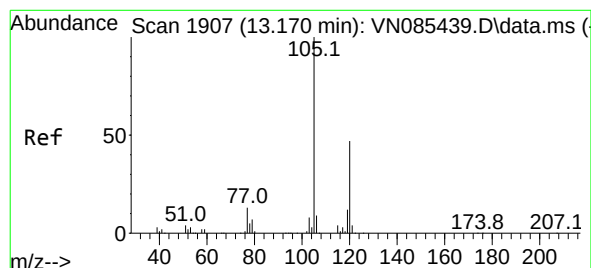
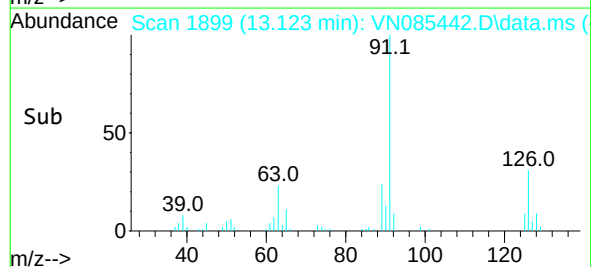
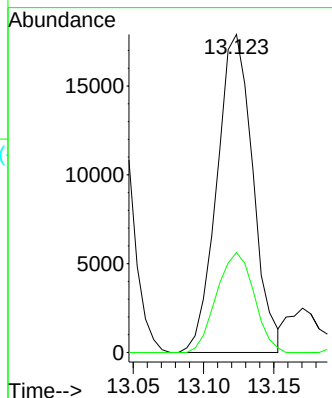
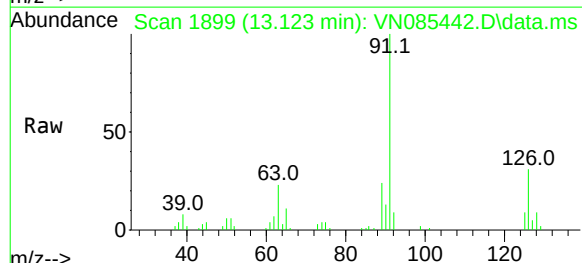
126 32.6 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 4.537 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085442.D

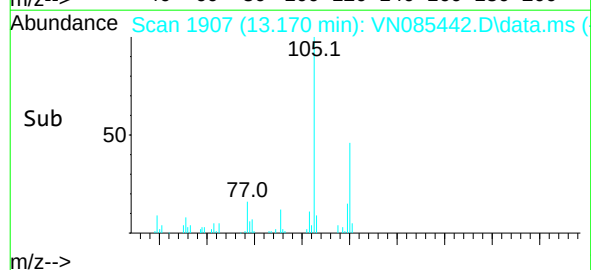
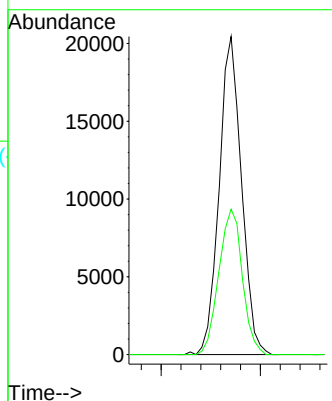
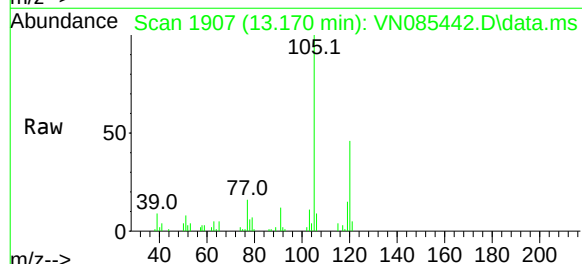
Acq: 14 Jan 2025 16:31

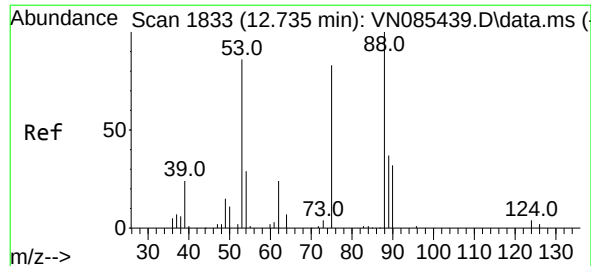
Tgt Ion:105 Resp: 31891

Ion Ratio Lower Upper

105 100

120 48.1 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 4.465 ug/l

RT: 12.729 min Scan# 18

Delta R.T. -0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion: 75 Resp: 4229

Ion Ratio Lower Upper

75 100

53 132.6 95.6 143.4

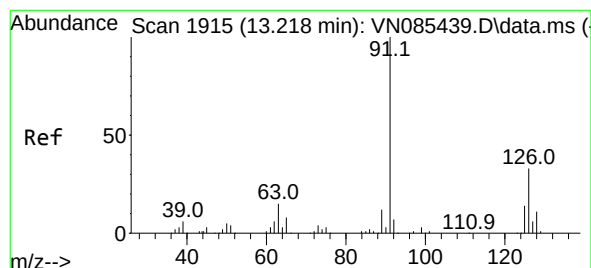
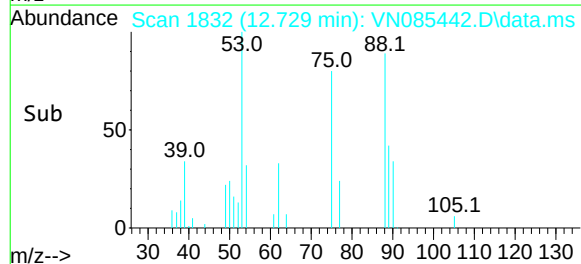
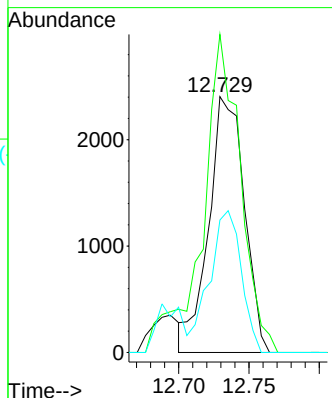
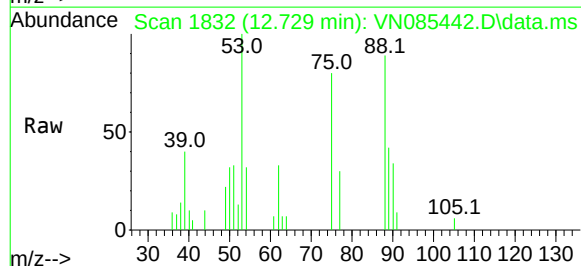
89 49.7 37.0 55.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#82

4-Chlorotoluene

Concen: 4.926 ug/l

RT: 13.218 min Scan# 1915

Delta R.T. 0.000 min

Lab File: VN085442.D

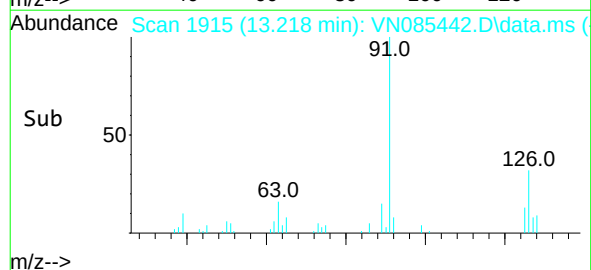
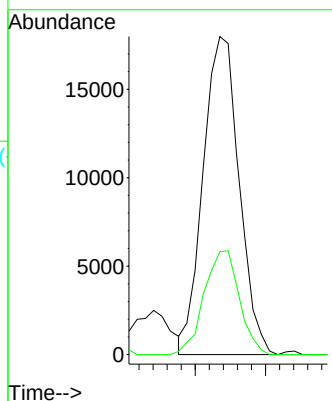
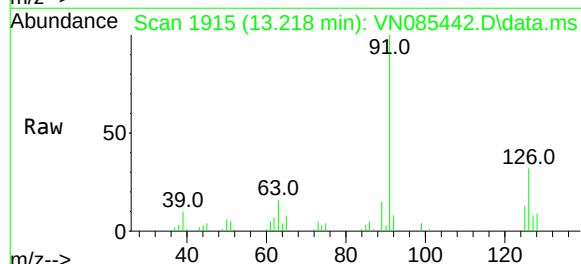
Acq: 14 Jan 2025 16:31

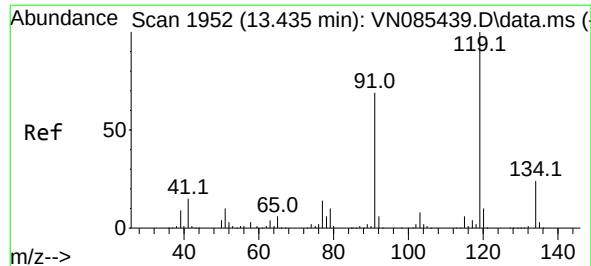
Tgt Ion: 91 Resp: 31976

Ion Ratio Lower Upper

91 100

126 31.9 15.9 47.7





#83

tert-Butylbenzene

Concen: 4.675 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

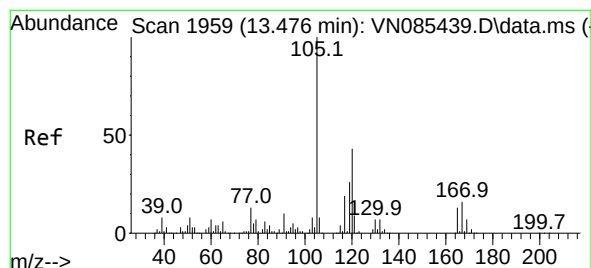
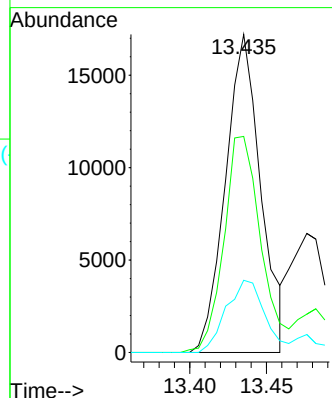
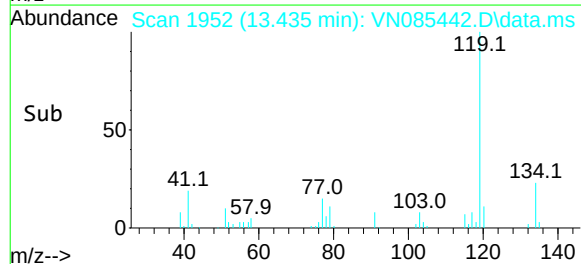
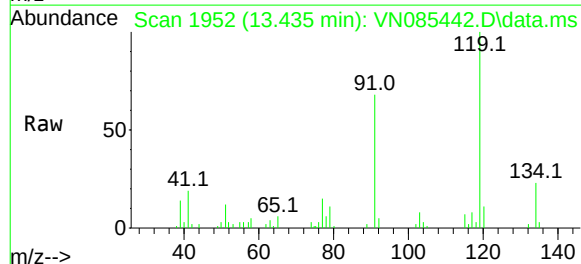
ClientSampleId :

VSTDIC005

Tgt Ion:	119	Resp:	27597
Ion	Ratio	Lower	Upper
119	100		
91	71.1	35.1	105.3
134	24.8	12.0	36.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 4.575 ug/l

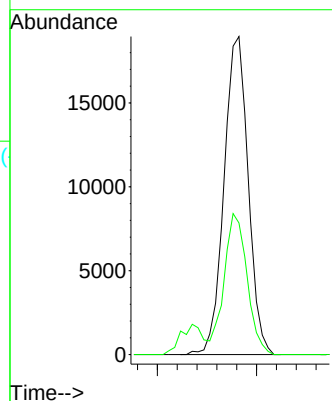
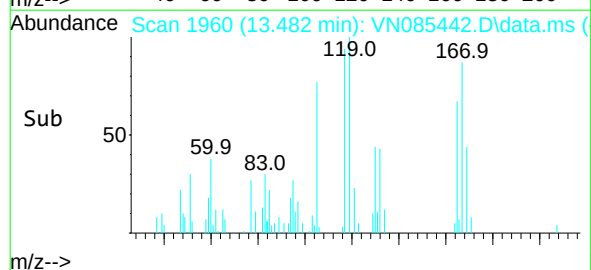
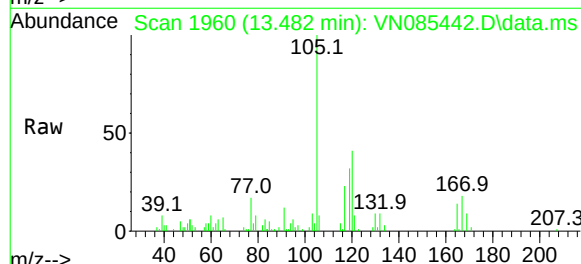
RT: 13.482 min Scan# 1960

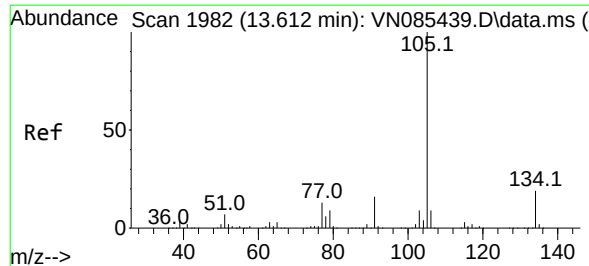
Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	105	Resp:	32054
Ion	Ratio	Lower	Upper
105	100		
120	42.0	21.6	65.0





#85

sec-Butylbenzene

Concen: 4.663 ug/l

RT: 13.612 min Scan# 1982

Delta R.T. -0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC005

Tgt Ion:105 Resp: 38148

Ion Ratio Lower Upper

105 100

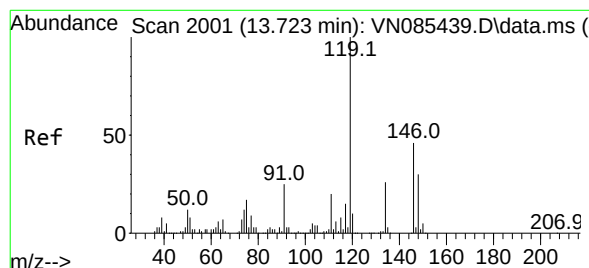
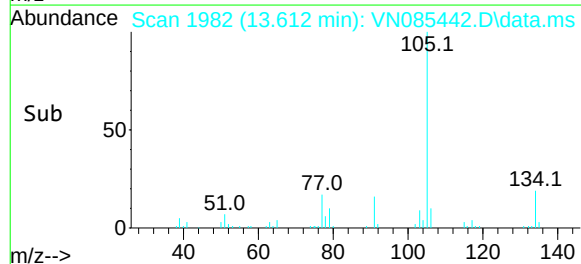
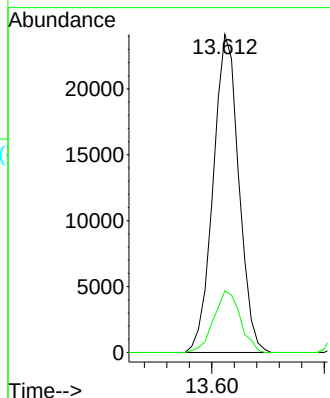
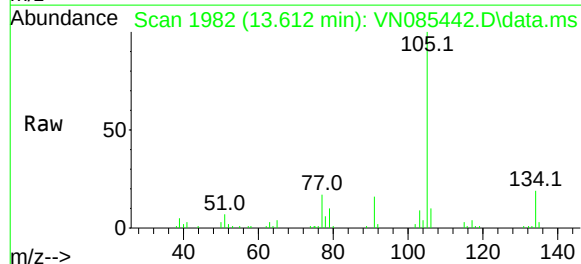
134 20.1 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 4.584 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

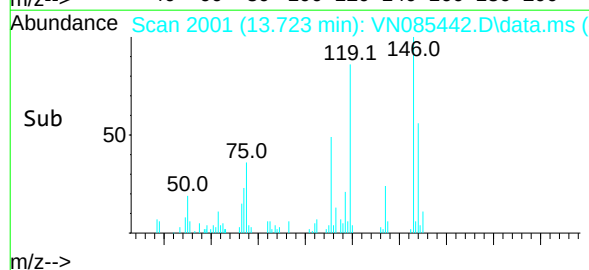
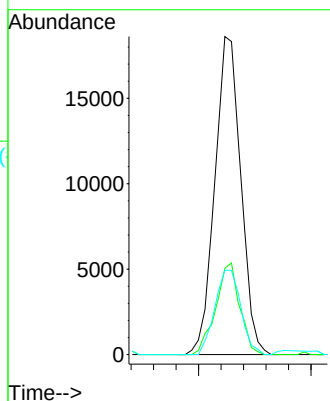
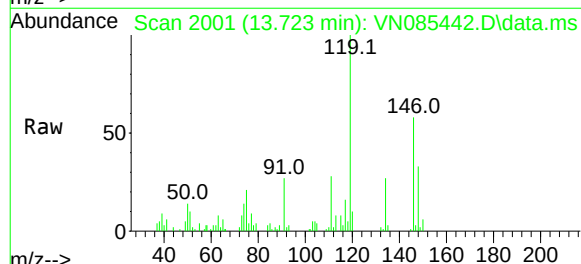
Tgt Ion:119 Resp: 29856

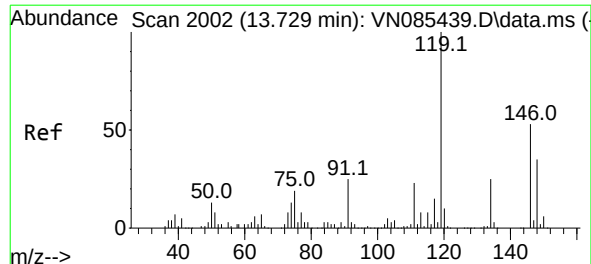
Ion Ratio Lower Upper

119 100

134 26.5 12.7 38.0

91 26.5 12.7 38.1





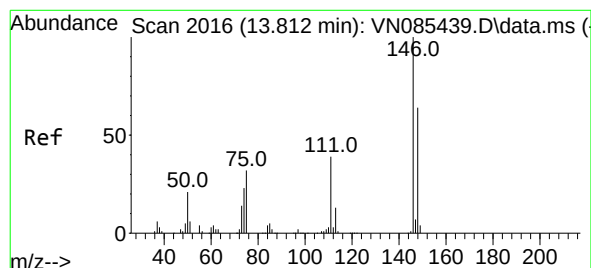
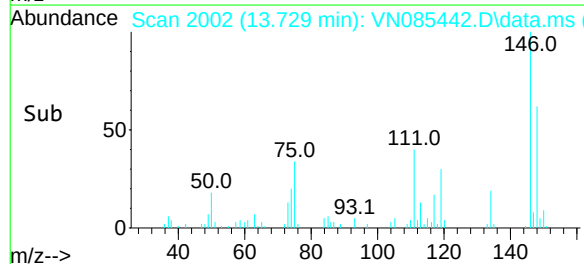
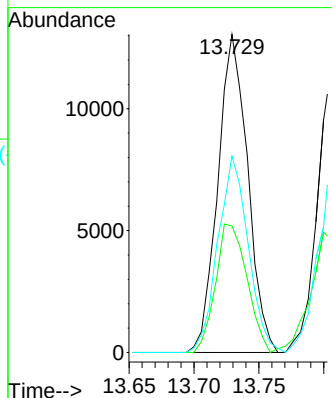
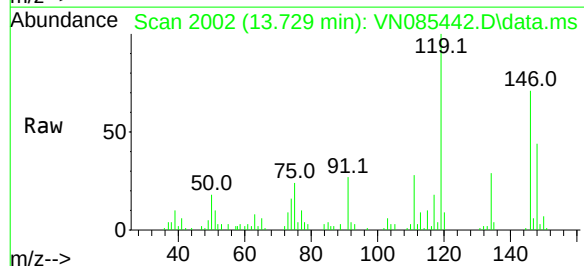
1,3-Dichlorobenzene
Concen: 5.099 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

Tgt Ion:	146	Resp:	20876
Ion	Ratio	Lower	Upper
146	100		
111	42.3	21.4	64.3
148	62.7	32.3	96.9

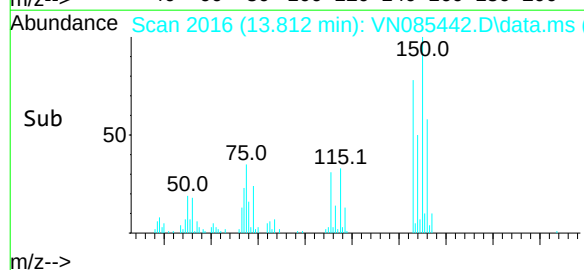
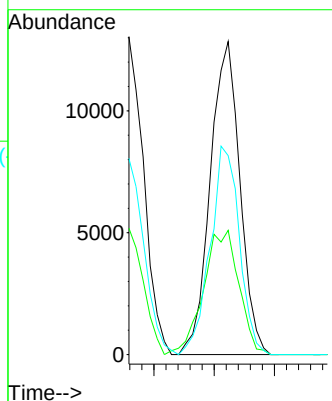
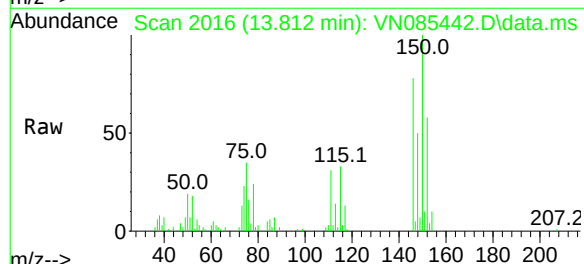
Manual Integrations
APPROVED

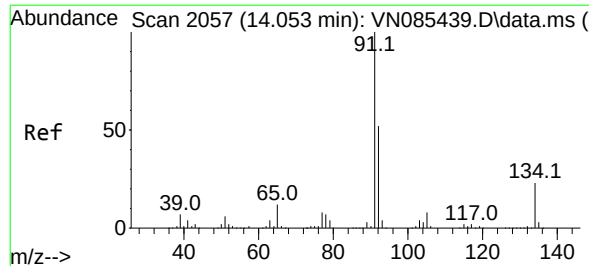
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



1,4-Dichlorobenzene
Concen: 5.179 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN085442.D
Acq: 14 Jan 2025 16:31

Tgt Ion:	146	Resp:	21982
Ion	Ratio	Lower	Upper
146	100		
111	47.1	21.3	63.7
148	65.5	32.4	97.0





#89

n-Butylbenzene

Concen: 4.675 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

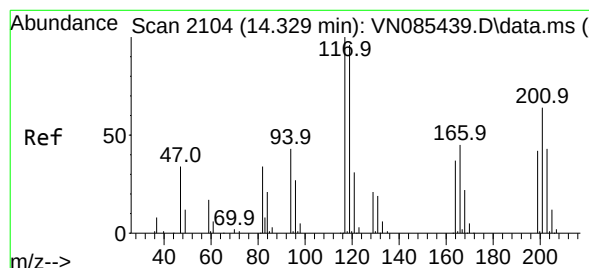
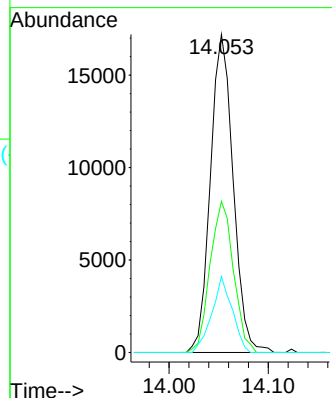
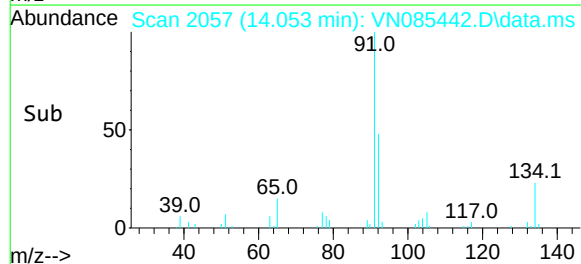
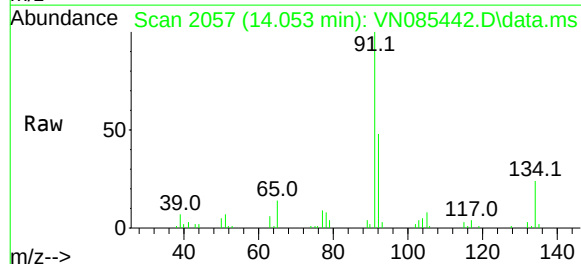
ClientSampleId :

VSTDIC005

Tgt Ion:	91	Resp:	27437
Ion Ratio	Lower	Upper	
91	100		
92	48.7	25.8	77.3
134	21.4	11.7	35.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#90

Hexachloroethane

Concen: 4.987 ug/l

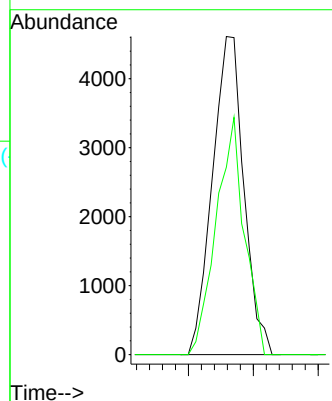
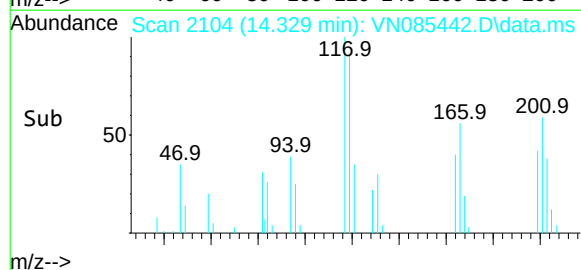
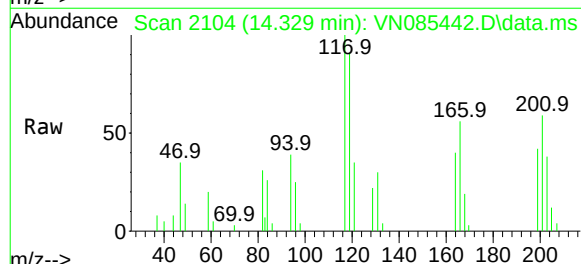
RT: 14.329 min Scan# 2104

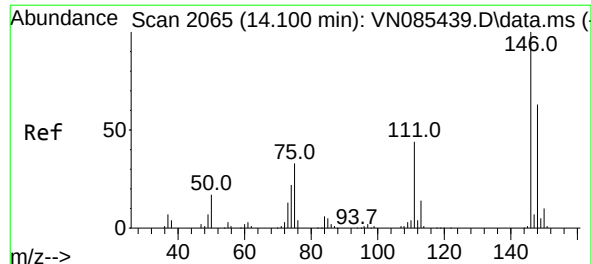
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	117	Resp:	7767
Ion Ratio	Lower	Upper	
117	100		
201	66.9	33.7	101.0





#91

1,2-Dichlorobenzene

Concen: 4.940 ug/l

RT: 14.106 min Scan# 2065

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

ClientSampleId :

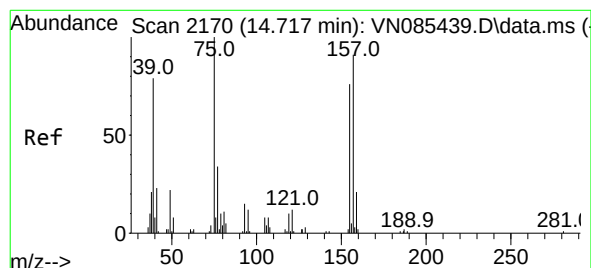
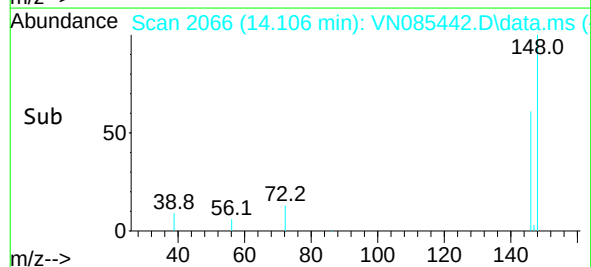
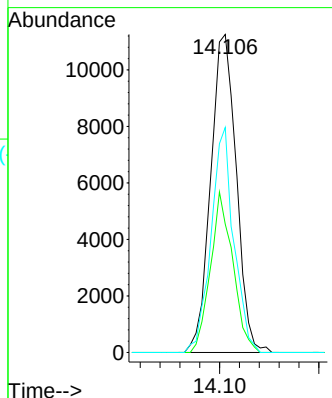
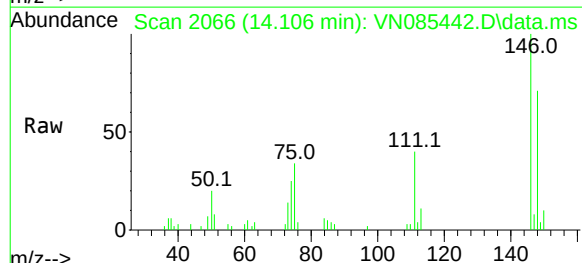
VSTDIC005

Tgt Ion:	146	Resp:	20177
Ion	Ratio	Lower	Upper
146	100		
111	44.0	21.7	65.1
148	62.8	31.4	94.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 5.232 ug/l

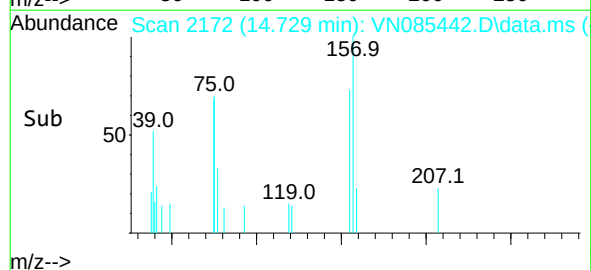
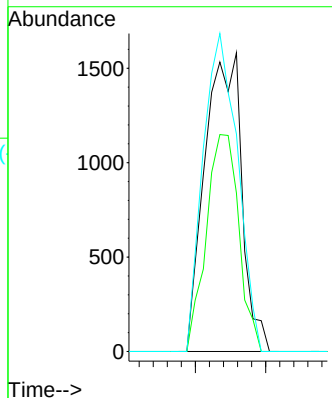
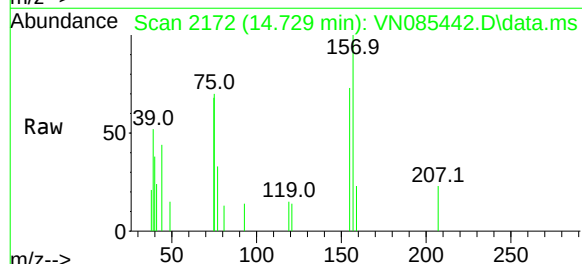
RT: 14.729 min Scan# 2172

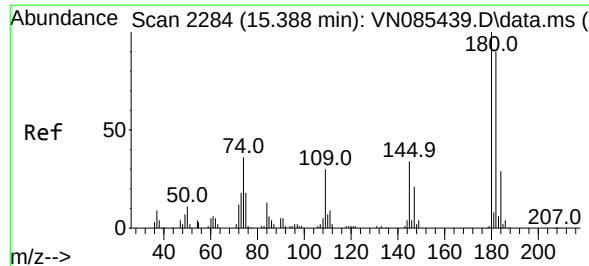
Delta R.T. 0.012 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	75	Resp:	2872
Ion	Ratio	Lower	Upper
75	100		
155	64.2	36.4	109.2
157	99.8	45.4	136.1





#93

1,2,4-Trichlorobenzene

Concen: 4.761 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

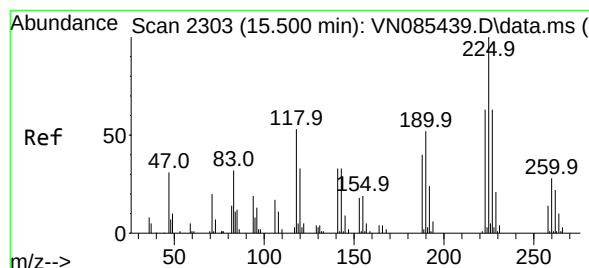
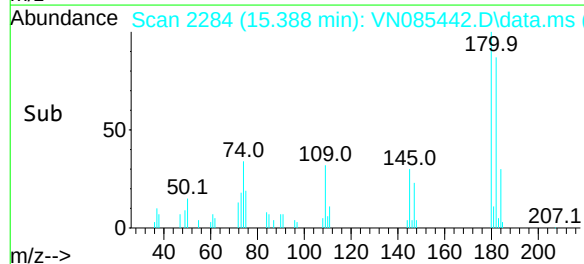
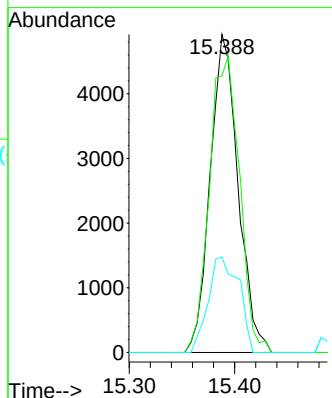
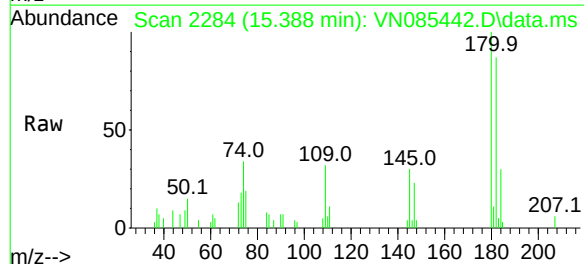
ClientSampleId :

VSTDIC005

Tgt	Ion:180	Resp:	9037
Ion	Ratio	Lower	Upper
180	100		
182	100.5	46.8	140.3
145	33.0	16.0	48.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

Concen: 5.520 ug/l

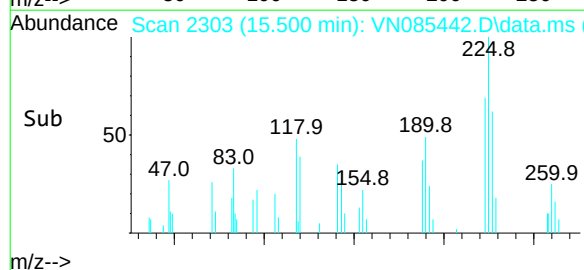
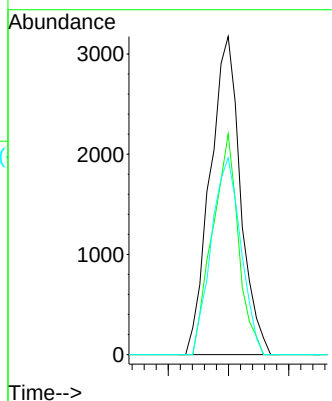
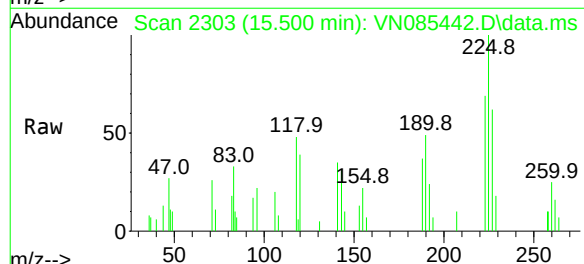
RT: 15.500 min Scan# 2303

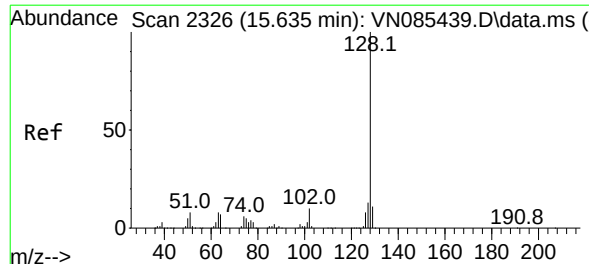
Delta R.T. 0.000 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt	Ion:225	Resp:	5563
Ion	Ratio	Lower	Upper
225	100		
223	59.2	30.7	92.1
227	60.1	30.9	92.5





#95

Naphthalene

Concen: 4.422 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Instrument :

MSVOA_N

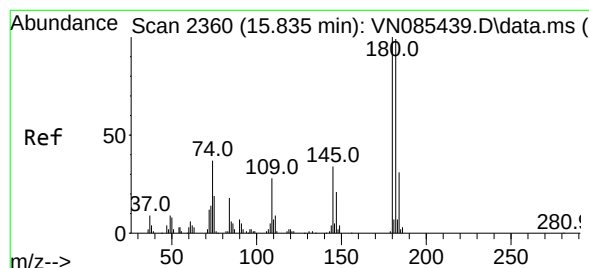
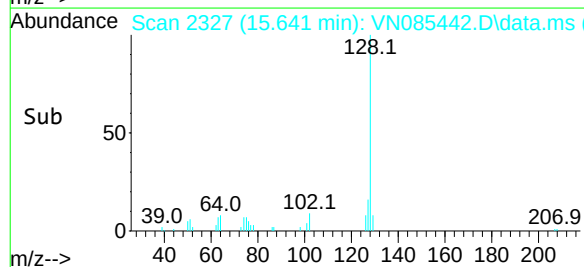
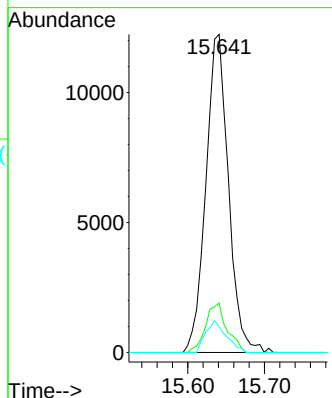
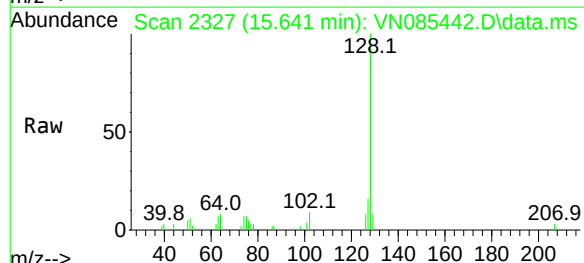
ClientSampleId :

VSTDIC005

Tgt Ion:	128	Resp:	25047
Ion	Ratio	Lower	Upper
128	100		
127	14.7	10.6	16.0
129	9.1	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 4.549 ug/l

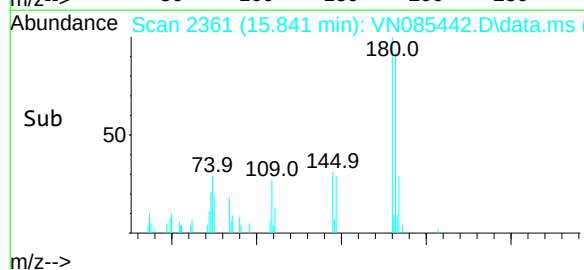
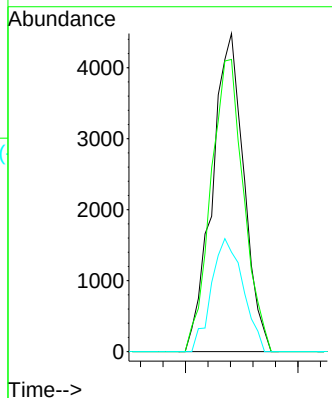
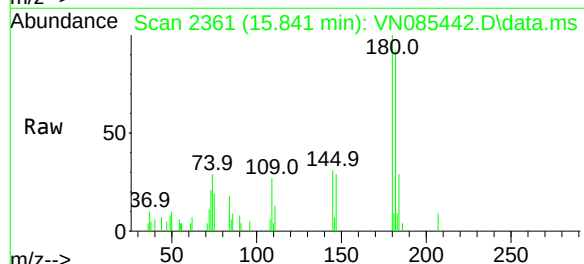
RT: 15.841 min Scan# 2361

Delta R.T. 0.006 min

Lab File: VN085442.D

Acq: 14 Jan 2025 16:31

Tgt Ion:	180	Resp:	8737
Ion	Ratio	Lower	Upper
180	100		
182	95.6	47.4	142.2
145	35.5	16.9	50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085443.D
 Acq On : 14 Jan 2025 17:19
 Operator : JC\MD
 Sample : VSTDICC001
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC001

Quant Time: Jan 15 01:46:03 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 01:28:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 01/15/2025
 Supervised By : Mahesh Dadoda 01/15/2025

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	166880	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	302938	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	256851	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	99539	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	0.000	65	0d	0.000	ug/l	
Spiked Amount	50.000	Range	74 - 125	Recovery	=	0.000%#
35) Dibromofluoromethane	0.000	113	0d	0.000	ug/l	
Spiked Amount	50.000	Range	75 - 124	Recovery	=	0.000%#
50) Toluene-d8	0.000	98	0d	0.000	ug/l	
Spiked Amount	50.000	Range	86 - 113	Recovery	=	0.000%#
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l	
Spiked Amount	50.000	Range	77 - 121	Recovery	=	0.000%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	2382	1.054	ug/l	91
3) Chloromethane	2.359	50	2801	1.145	ug/l	93
4) Vinyl Chloride	2.512	62	2732	1.111	ug/l #	81
6) Chloroethane	3.124	64	1809	1.160	ug/l	94
7) Trichlorofluoromethane	3.512	101	3860	1.082	ug/l	88
8) Diethyl Ether	3.953	74	1526	1.238	ug/l	81
9) 1,1,2-Trichlorotrifluo...	4.359	101	2156m	1.073	ug/l	
12) 1,1-Dichloroethene	4.330	96	1660	0.927	ug/l #	67
14) Allyl chloride	5.024	41	3179	1.094	ug/l #	85
15) Acrylonitrile	5.718	53	4967	5.070	ug/l #	70
16) Acetone	4.436	43	5102	5.862	ug/l	92
17) Carbon Disulfide	4.706	76	6601	1.197	ug/l #	87
18) Methyl Acetate	5.030	43	2908	1.099	ug/l #	80
19) Methyl tert-butyl Ether	5.789	73	5156	0.887	ug/l #	87
20) Methylene Chloride	5.265	84	2190	1.016	ug/l #	87
21) trans-1,2-Dichloroethene	5.794	96	2110	1.102	ug/l #	66
22) Diisopropyl ether	6.677	45	5691	0.882	ug/l #	88
23) Vinyl Acetate	6.606	43	18526m	4.090	ug/l	
24) 1,1-Dichloroethane	6.583	63	4020m	1.022	ug/l	
25) 2-Butanone	7.483	43	6448m	5.034	ug/l	
26) 2,2-Dichloropropane	7.488	77	3104	0.976	ug/l	92
27) cis-1,2-Dichloroethene	7.477	96	2185	0.969	ug/l	92
28) Bromochloromethane	7.812	49	2082	1.138	ug/l #	89
29) Tetrahydrofuran	7.835	42	3693	4.548	ug/l	98
30) Chloroform	7.965	83	4250	1.045	ug/l #	80
32) 1,1,1-Trichloroethane	8.165	97	3678	1.031	ug/l #	56
36) 1,1-Dichloropropene	8.371	75	3084	1.046	ug/l #	84
37) Ethyl Acetate	7.577	43	3056m	1.026	ug/l	
38) Carbon Tetrachloride	8.359	117	3436	1.018	ug/l	90
39) Methylcyclohexane	9.600	83	2403	0.867	ug/l #	87
40) Benzene	8.606	78	8480	0.957	ug/l	91
41) Methacrylonitrile	7.771	41	1458	0.941	ug/l #	76
42) 1,2-Dichloroethane	8.665	62	3131	0.938	ug/l	91
43) Isopropyl Acetate	8.682	43	4803	1.007	ug/l #	87
44) Trichloroethene	9.347	130	2133	1.034	ug/l	71
45) 1,2-Dichloropropane	9.618	63	2246	0.992	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085443.D
 Acq On : 14 Jan 2025 17:19
 Operator : JC\MD
 Sample : VSTDIC001
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:46:03 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M

Quant Title : SW846 8260

QLast Update : Wed Jan 15 01:28:51 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Dibromomethane	9.706	93	1769	1.083	ug/l	92
47) Bromodichloromethane	9.882	83	2935	0.882	ug/l	90
48) Methyl methacrylate	9.677	41	1886	0.878	ug/l	96
49) 1,4-Dioxane	9.688	88	673	18.616	ug/l #	47
51) 4-Methyl-2-Pentanone	10.441	43	11523	4.163	ug/l	93
52) Toluene	10.618	92	4180	0.814	ug/l	93
53) t-1,3-Dichloropropene	10.835	75	2522	0.802	ug/l	92
54) cis-1,3-Dichloropropene	10.312	75	2725	0.811	ug/l #	83
55) 1,1,2-Trichloroethane	11.018	97	1901	0.935	ug/l	91
56) Ethyl methacrylate	10.871	69	1923	2.471	ug/l #	88
57) 1,3-Dichloropropane	11.165	76	3113	0.881	ug/l	95
58) 2-Chloroethyl Vinyl ether	10.153	63	4929	3.822	ug/l	91
59) 2-Hexanone	11.194	43	7905	4.058	ug/l	87
60) Dibromochloromethane	11.359	129	2339	0.953	ug/l	98
61) 1,2-Dibromoethane	11.465	107	2022	1.000	ug/l	90
64) Tetrachloroethene	11.106	164	1658	0.947	ug/l #	83
65) Chlorobenzene	11.888	112	5401	0.960	ug/l	93
66) 1,1,1,2-Tetrachloroethane	11.959	131	2185	1.058	ug/l #	64
67) Ethyl Benzene	11.959	91	7347	0.802	ug/l	94
68) m/p-Xylenes	12.070	106	5059	1.494	ug/l	100
69) o-Xylene	12.394	106	2478	0.766	ug/l	97
70) Styrene	12.406	104	3812	0.712	ug/l	99
71) Bromoform	12.582	173	1208	0.818	ug/l #	88
73) Isopropylbenzene	12.688	105	5506	0.820	ug/l	98
74) N-amyl acetate	12.494	43	2716	0.899	ug/l #	87
75) 1,1,2,2-Tetrachloroethane	12.935	83	2616	1.102	ug/l #	96
76) 1,2,3-Trichloropropane	12.982	75	2198m	1.088	ug/l	
77) Bromobenzene	12.976	156	1733	0.987	ug/l	97
78) n-propylbenzene	13.029	91	6424	0.808	ug/l	93
79) 2-Chlorotoluene	13.117	91	4483	0.871	ug/l	97
80) 1,3,5-Trimethylbenzene	13.165	105	4301	0.775	ug/l	90
82) 4-Chlorotoluene	13.223	91	4268	0.833	ug/l	99
83) tert-Butylbenzene	13.435	119	3753	0.805	ug/l	96
84) 1,2,4-Trimethylbenzene	13.482	105	3758	0.679	ug/l	93
85) sec-Butylbenzene	13.612	105	4614	0.714	ug/l	99
86) p-Isopropyltoluene	13.723	119	3538	0.716	ug/l	98
87) 1,3-Dichlorobenzene	13.723	146	3038	0.940	ug/l	95
88) 1,4-Dichlorobenzene	13.806	146	3517m	1.050	ug/l	
89) n-Butylbenzene	14.053	91	3527	0.761	ug/l	93
90) Hexachloroethane	14.341	117	1355	1.102	ug/l	99
91) 1,2-Dichlorobenzene	14.106	146	3515	1.090	ug/l	96
92) 1,2-Dibromo-3-Chloropr...	14.711	75	402	0.928	ug/l	74
93) 1,2,4-Trichlorobenzene	15.394	180	1310	0.874	ug/l #	80
94) Hexachlorobutadiene	15.500	225	822	1.033	ug/l	89
95) Naphthalene	15.641	128	4210	0.941	ug/l #	90
96) 1,2,3-Trichlorobenzene	15.835	180	1494	0.985	ug/l #	86

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

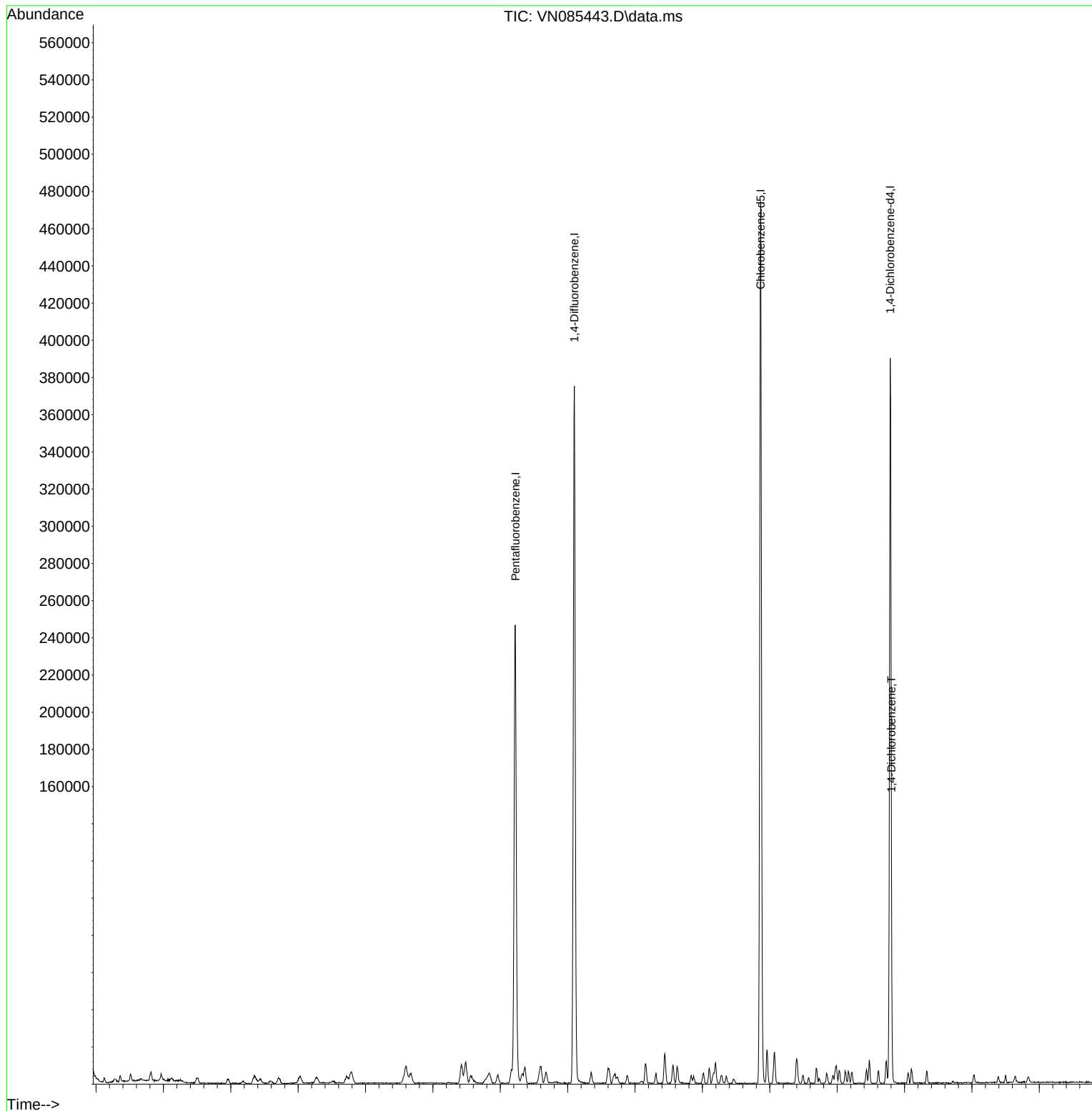
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Data File : VN085443.D
Acq On : 14 Jan 2025 17:19
Operator : JC\MD
Sample : VSTDIC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

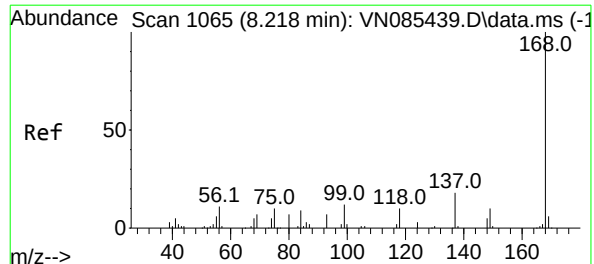
Instrument :
MSVOA_N
ClientSampleId :
VSTDIC001

Manual Integrations
APPROVED

Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 01:46:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 01:28:51 2025
Response via : Initial Calibration





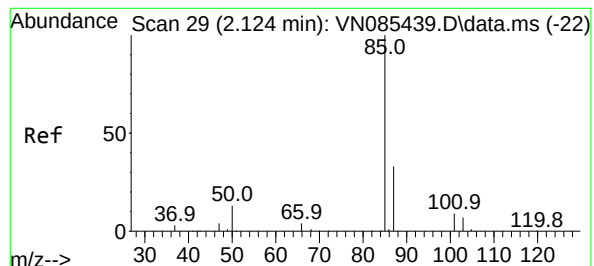
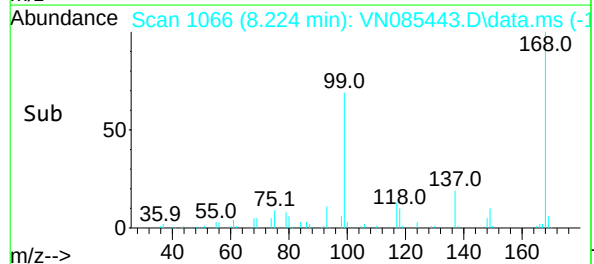
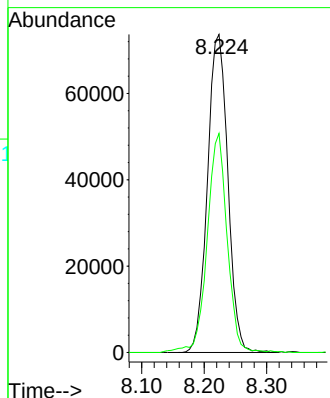
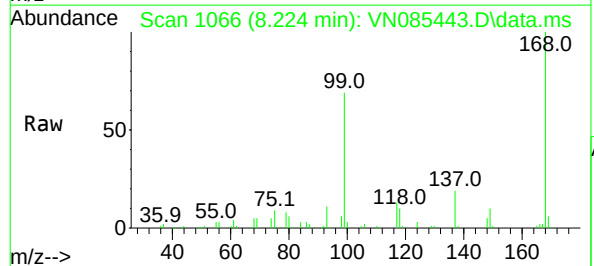
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Tgt Ion: 168 Resp: 166880
Ion Ratio Lower Upper
168 100
99 68.6 53.6 80.4

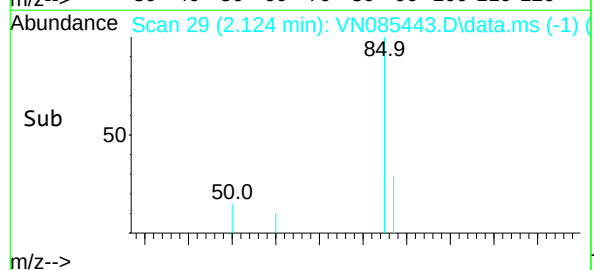
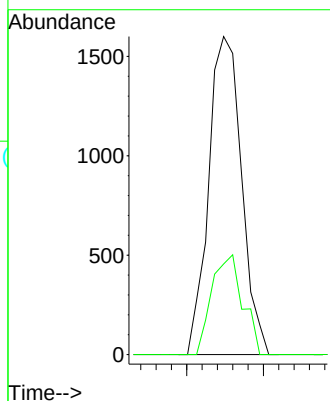
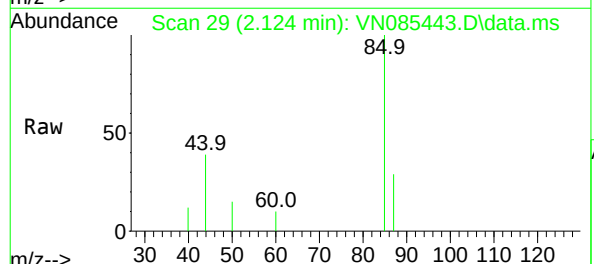
Manual Integrations
APPROVED

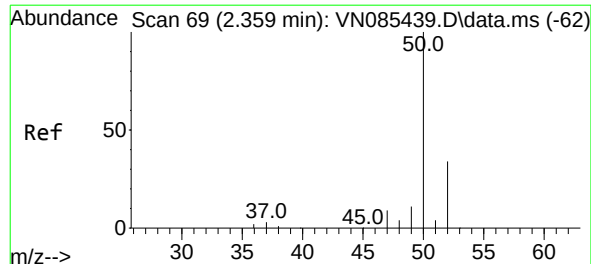
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#2
Dichlorodifluoromethane
Concen: 1.054 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 85 Resp: 2382
Ion Ratio Lower Upper
85 100
87 28.5 16.7 50.1





#3

Chloromethane

Concen: 1.145 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 50 Resp: 2801

Ion Ratio Lower Upper

50 100

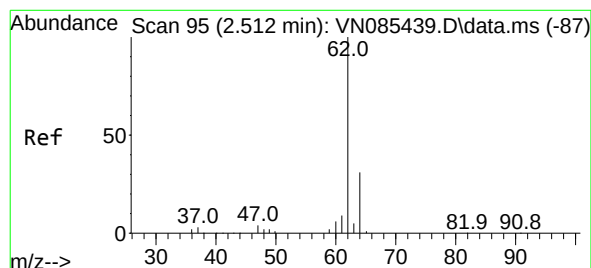
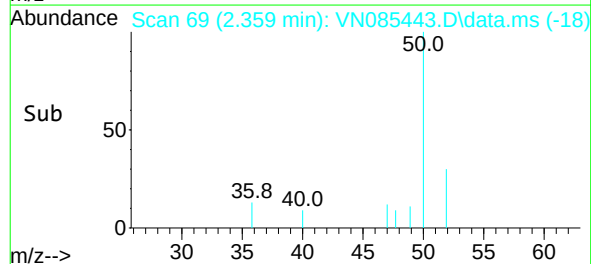
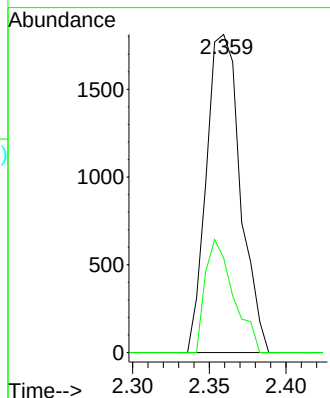
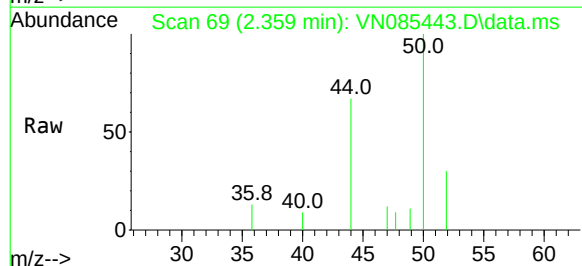
52 29.7 27.0 40.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#4

Vinyl Chloride

Concen: 1.111 ug/l

RT: 2.512 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085443.D

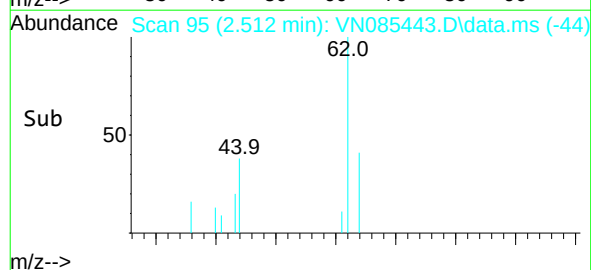
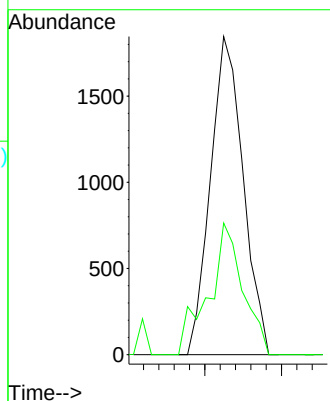
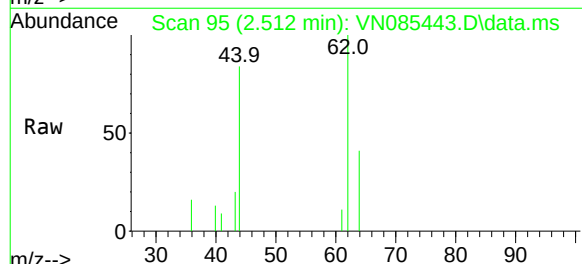
Acq: 14 Jan 2025 17:19

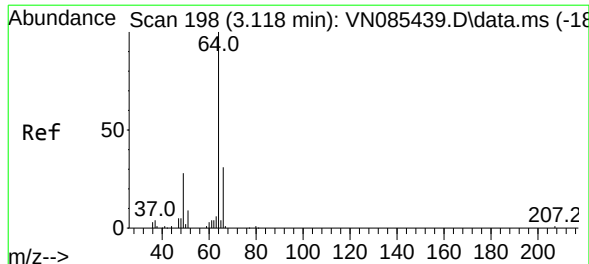
Tgt Ion: 62 Resp: 2732

Ion Ratio Lower Upper

62 100

64 41.4 24.8 37.2#





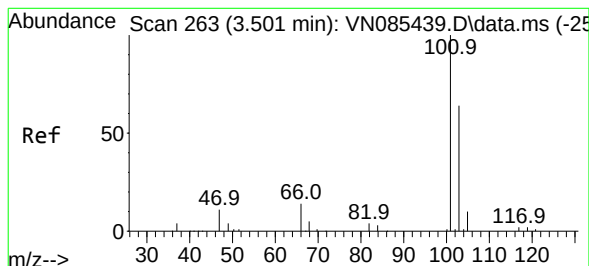
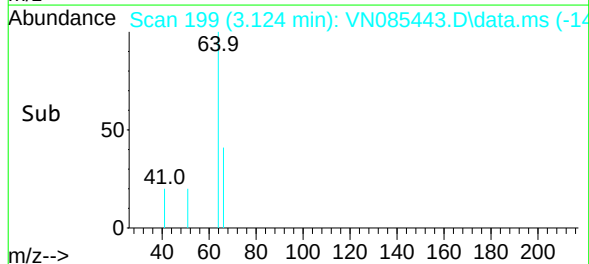
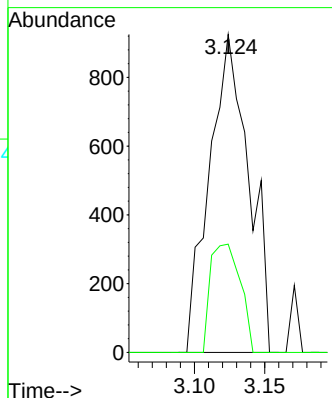
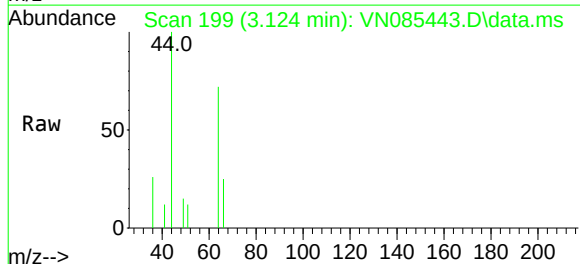
#6
Chloroethane
Concen: 1.160 ug/l
RT: 3.124 min Scan# 198
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Tgt Ion: 64 Resp: 1809
Ion Ratio Lower Upper
64 100
66 34.1 24.6 36.8

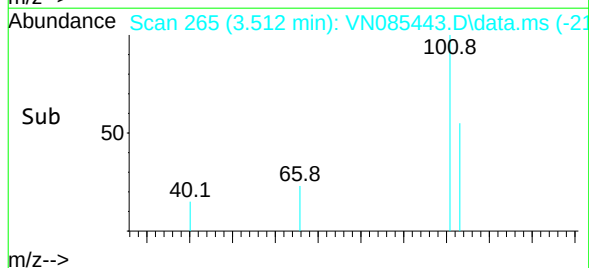
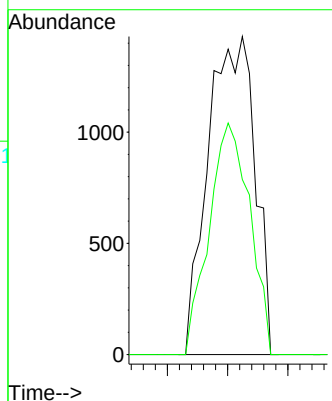
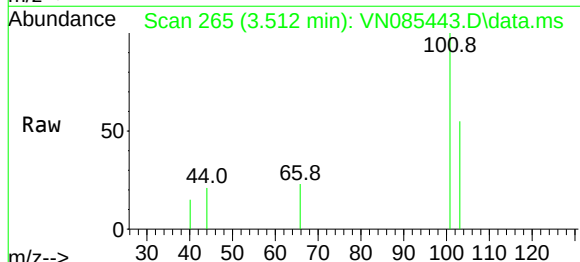
Manual Integrations
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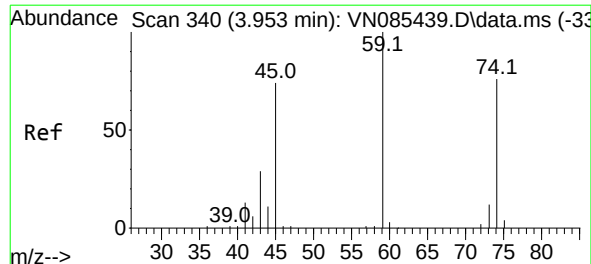
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#7
Trichlorofluoromethane
Concen: 1.082 ug/l
RT: 3.512 min Scan# 265
Delta R.T. 0.012 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:101 Resp: 3860
Ion Ratio Lower Upper
101 100
103 55.0 51.4 77.2





#8

Diethyl Ether

Concen: 1.238 ug/l

RT: 3.953 min Scan# 340

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC001

Tgt Ion: 74 Resp: 1526

Ion Ratio Lower Upper

74 100

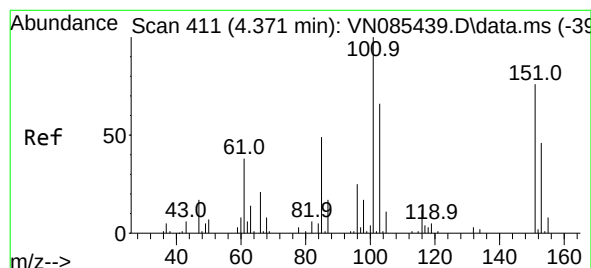
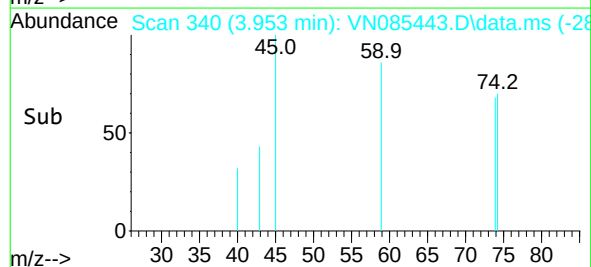
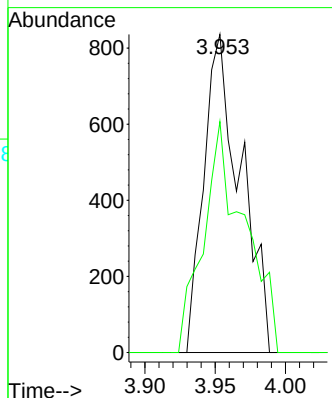
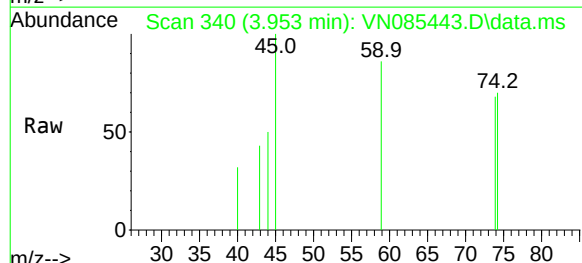
45 80.9 49.7 149.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#9

1,1,2-Trichlorotrifluoroethane

Concen: 1.073 ug/l m

RT: 4.359 min Scan# 409

Delta R.T. -0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

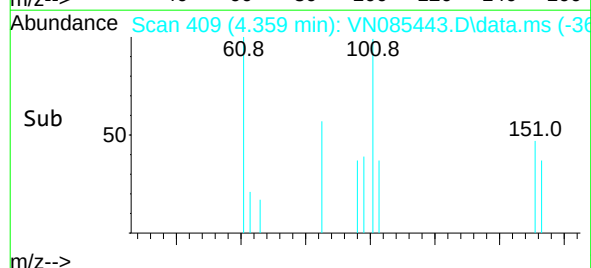
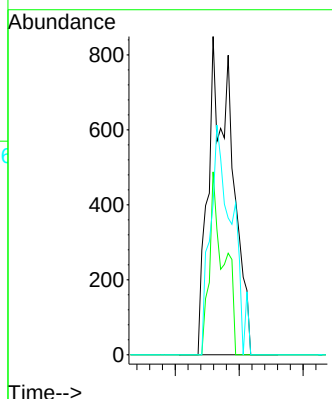
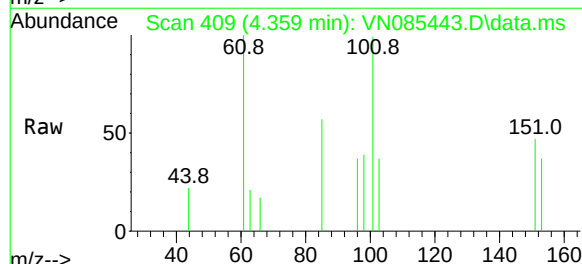
Tgt Ion:101 Resp: 2156

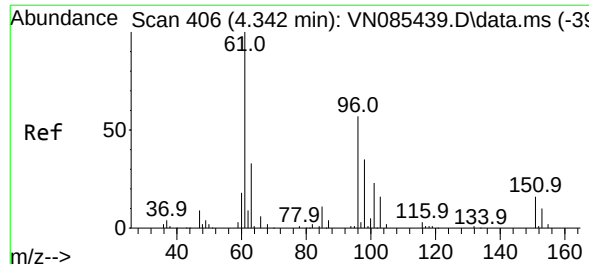
Ion Ratio Lower Upper

101 100

85 35.3 37.8 56.8#

151 66.4 58.8 88.2





#12

1,1-Dichloroethene

Concen: 0.927 ug/l

RT: 4.330 min Scan# 406

Delta R.T. -0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC001

Tgt Ion: 96 Resp: 1660

Ion Ratio Lower Upper

96 100

61 122.1 141.0 211.4#

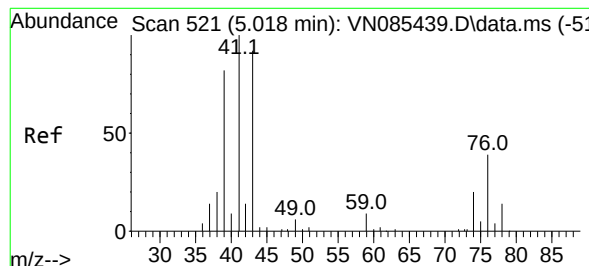
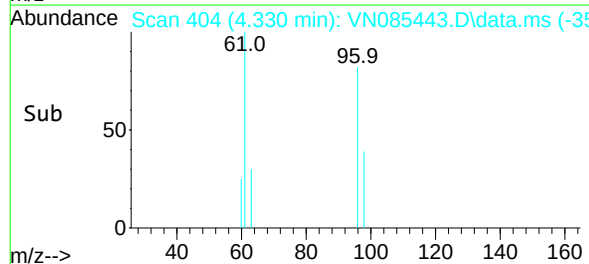
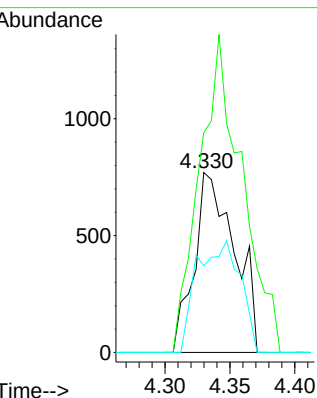
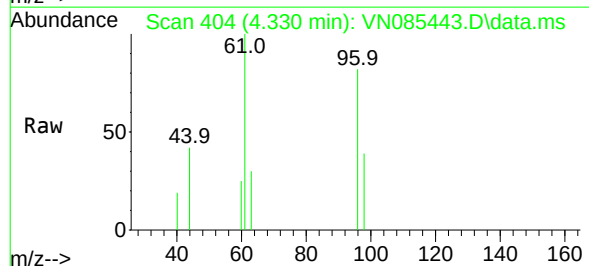
98 48.1 49.0 73.6#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 1.094 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

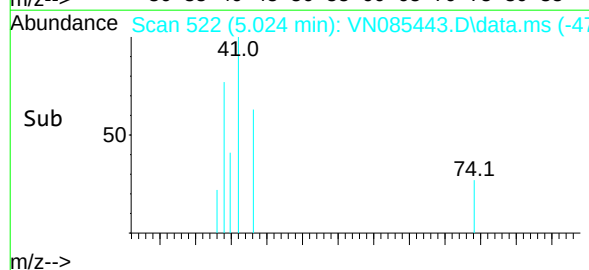
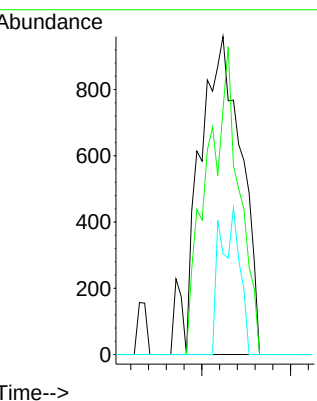
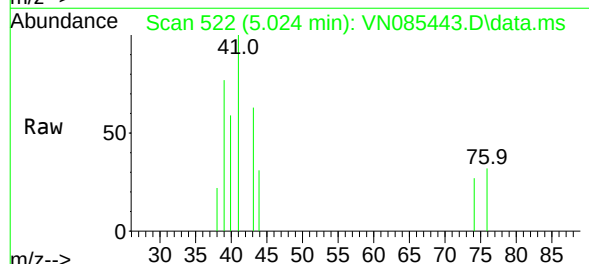
Tgt Ion: 41 Resp: 3179

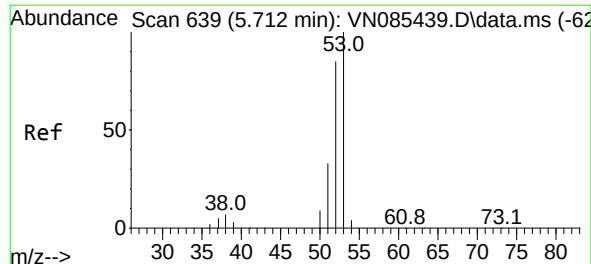
Ion Ratio Lower Upper

41 100

39 73.1 64.4 96.6

76 21.4 30.5 45.7#





#15

Acrylonitrile

Concen: 5.070 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

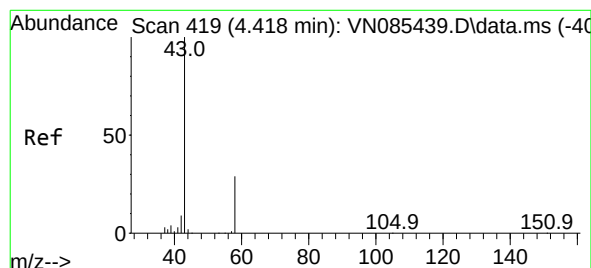
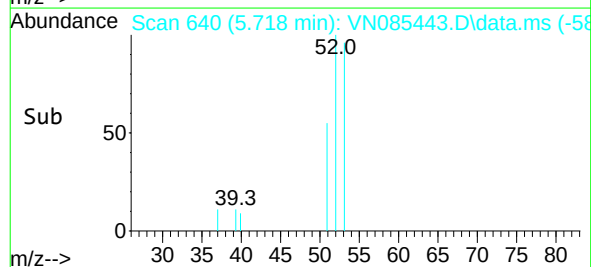
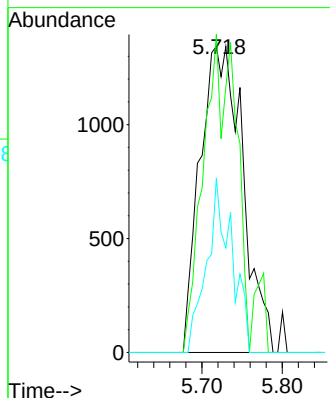
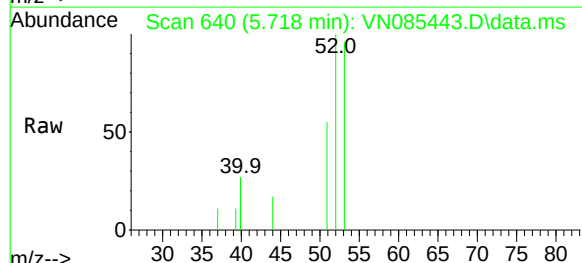
ClientSampleId :

VSTDICC001

Tgt Ion:	53	Resp:	4967
Ion	Ratio	Lower	Upper
53	100		
52	45.1	65.5	98.3
51	33.3	29.8	44.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 5.862 ug/l

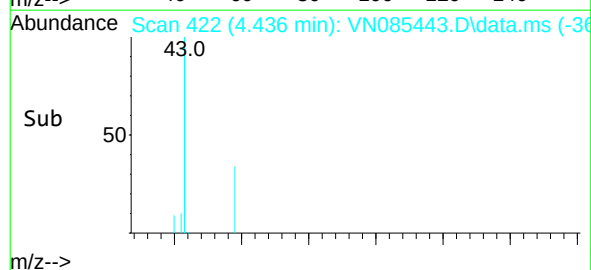
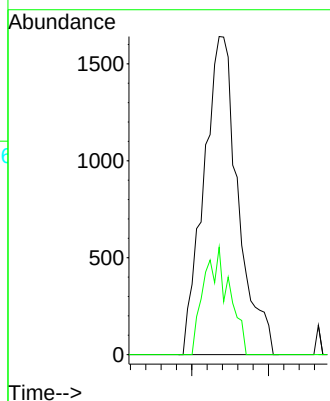
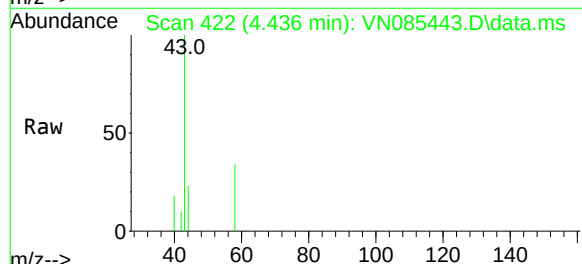
RT: 4.436 min Scan# 422

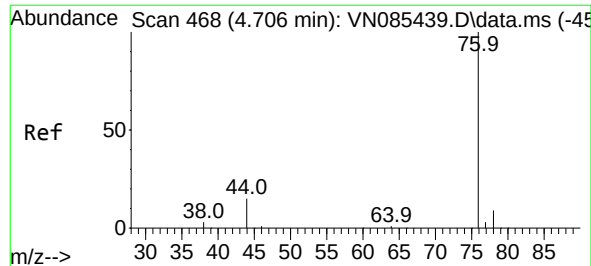
Delta R.T. 0.018 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:	43	Resp:	5102
Ion	Ratio	Lower	Upper
43	100		
58	33.8	23.8	35.6





#17

Carbon Disulfide

Concen: 1.197 ug/l

RT: 4.706 min Scan# 468

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC001

Tgt Ion: 76 Resp: 6601

Ion Ratio Lower Upper

76 100

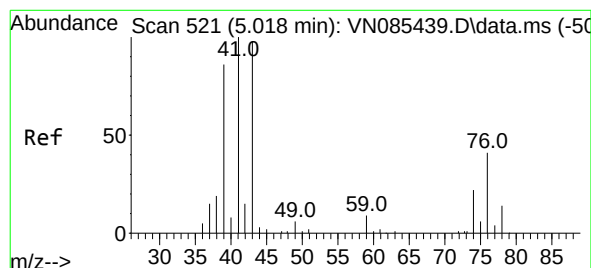
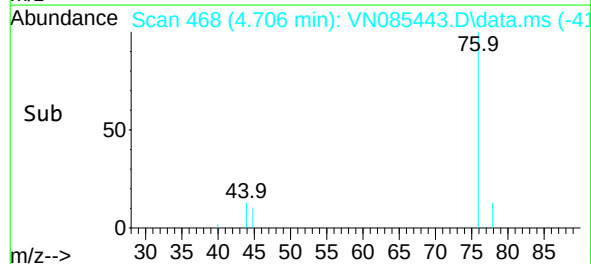
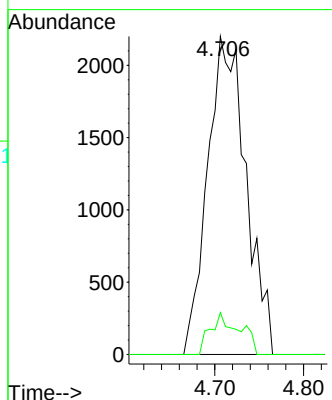
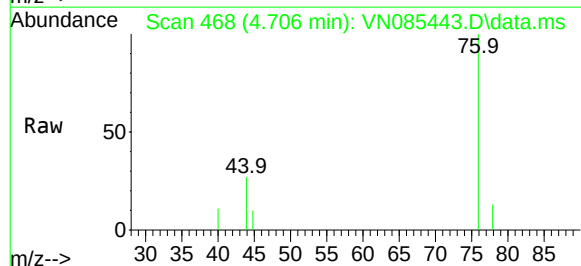
78 13.2 6.9 10.3#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 1.099 ug/l

RT: 5.030 min Scan# 523

Delta R.T. 0.012 min

Lab File: VN085443.D

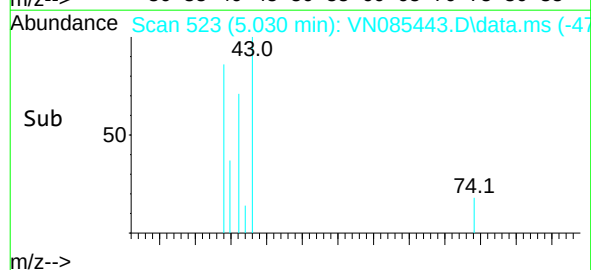
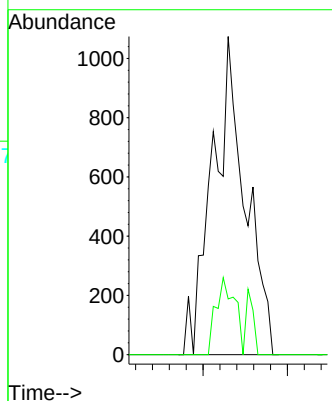
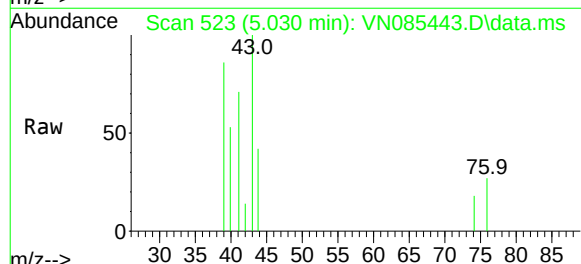
Acq: 14 Jan 2025 17:19

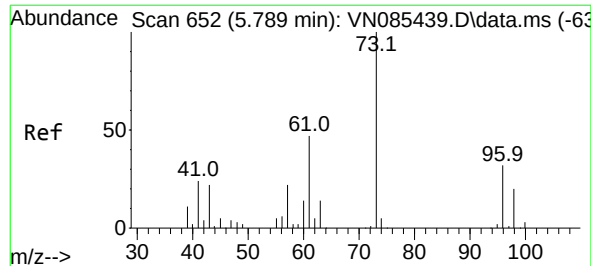
Tgt Ion: 43 Resp: 2908

Ion Ratio Lower Upper

43 100

74 13.8 18.6 28.0#





#19

Methyl tert-butyl Ether

Concen: 0.887 ug/l

RT: 5.789 min Scan# 651

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 73 Resp: 5156

Ion Ratio Lower Upper

73 100

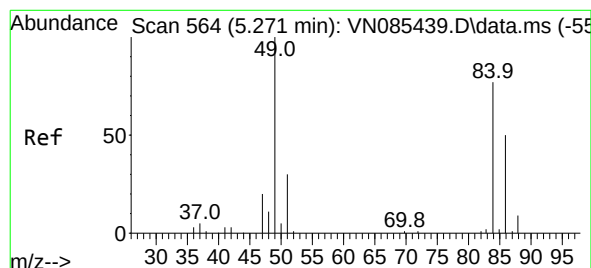
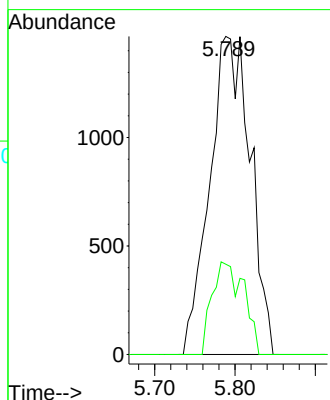
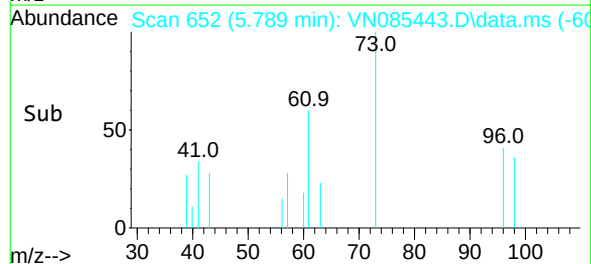
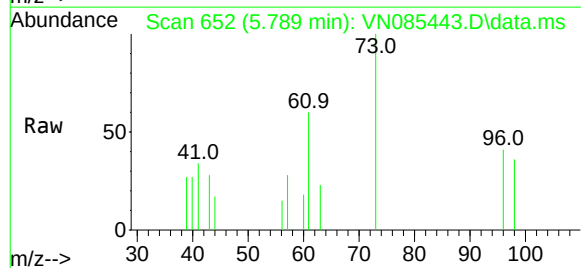
57 28.4 17.8 26.8#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 1.016 ug/l

RT: 5.265 min Scan# 563

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 84 Resp: 2190

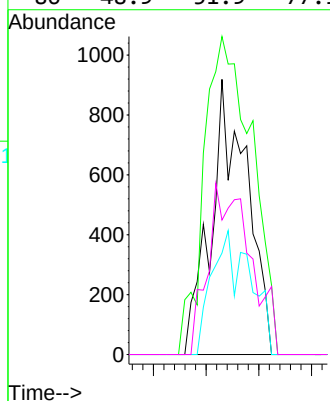
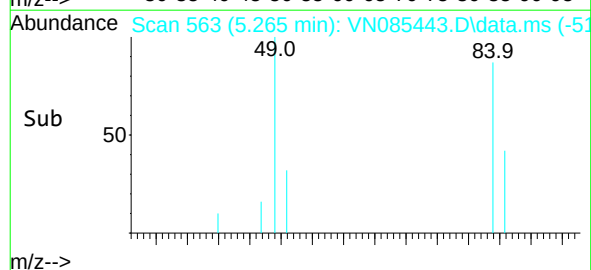
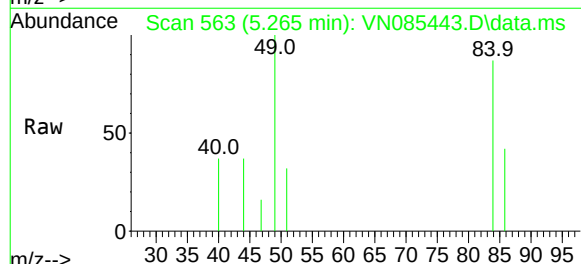
Ion Ratio Lower Upper

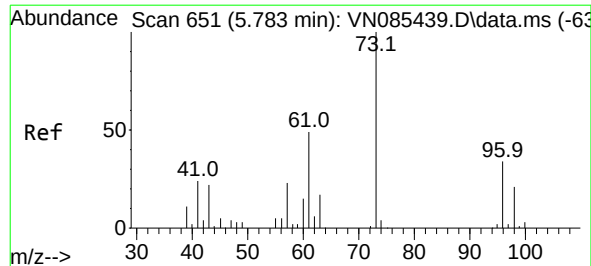
84 100

49 115.6 104.1 156.1

51 36.9 31.0 46.4

86 48.9 51.9 77.9#





#21

trans-1,2-Dichloroethene

Concen: 1.102 ug/l

RT: 5.794 min Scan# 651

Delta R.T. 0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 96 Resp: 2110

Ion Ratio Lower Upper

96 100

61 98.7 115.7 173.5#

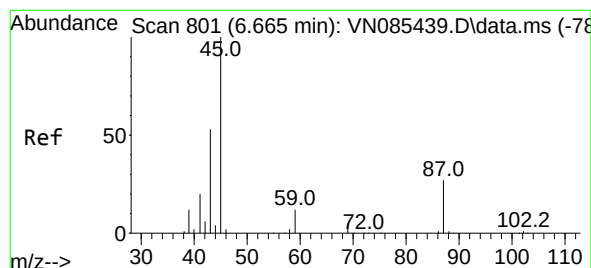
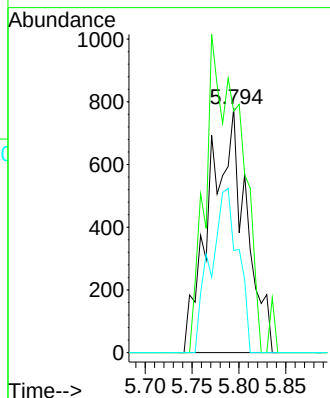
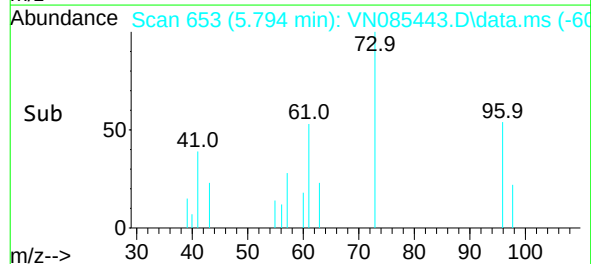
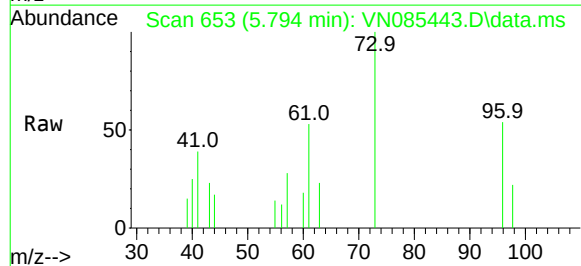
98 41.8 49.8 74.8#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

Concen: 0.882 ug/l

RT: 6.677 min Scan# 803

Delta R.T. 0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 45 Resp: 5691

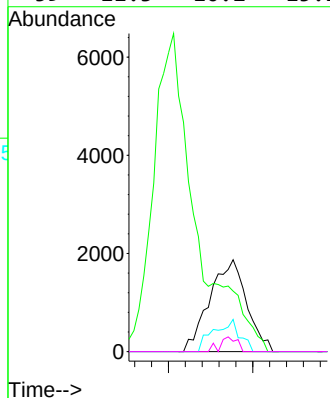
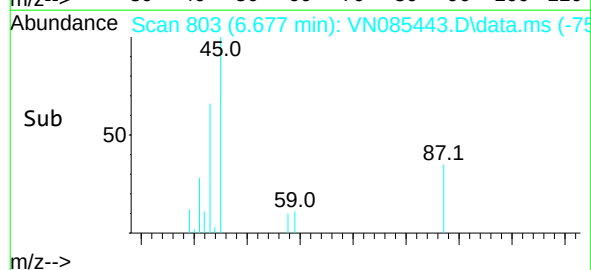
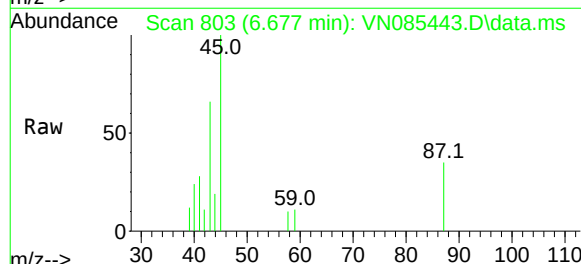
Ion Ratio Lower Upper

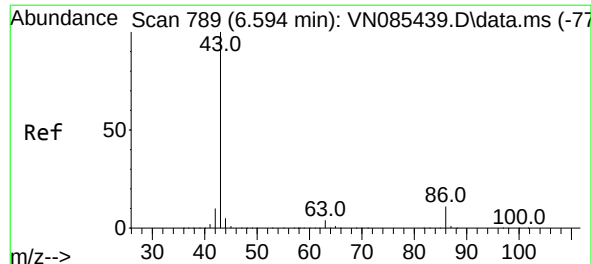
45 100

43 65.9 45.0 67.6

87 35.0 21.8 32.8#

59 11.3 10.2 15.2





#23

Vinyl Acetate

Concen: 4.090 ug/l m

RT: 6.606 min Scan# 791

Delta R.T. 0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 43 Resp: 18526

Ion Ratio Lower Upper

43 100

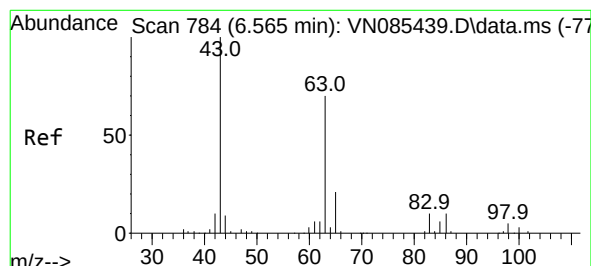
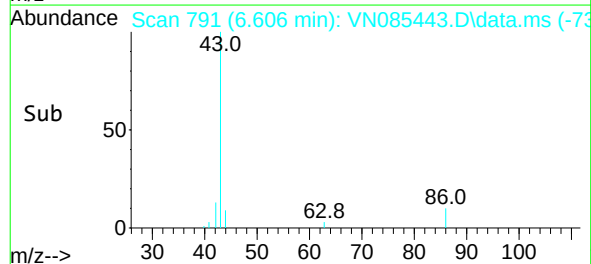
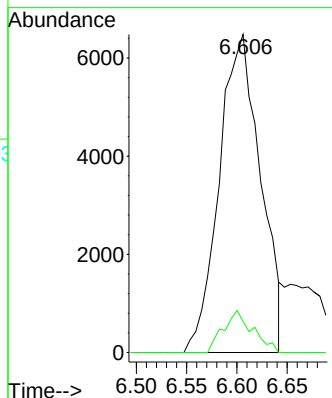
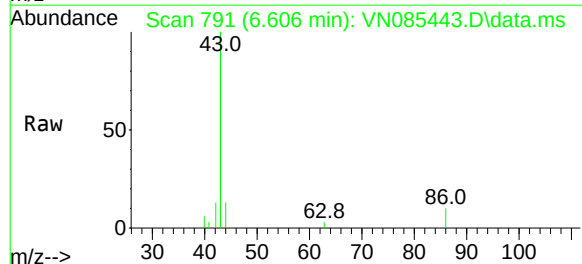
86 9.8 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 1.022 ug/l m

RT: 6.583 min Scan# 787

Delta R.T. 0.018 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

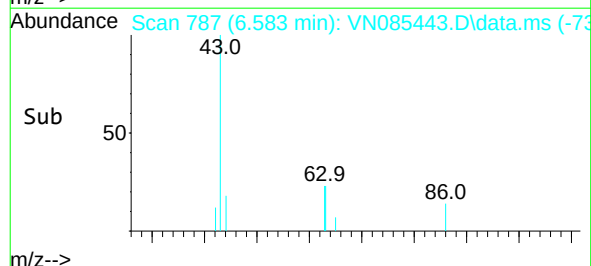
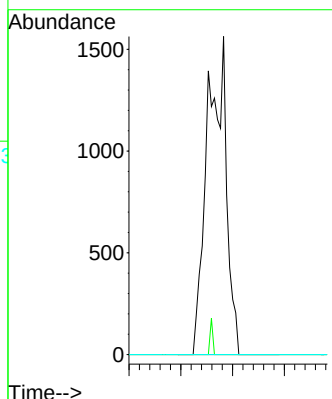
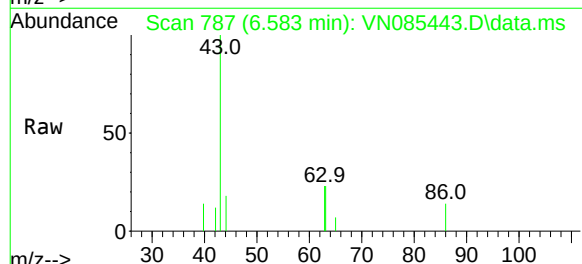
Tgt Ion: 63 Resp: 4020

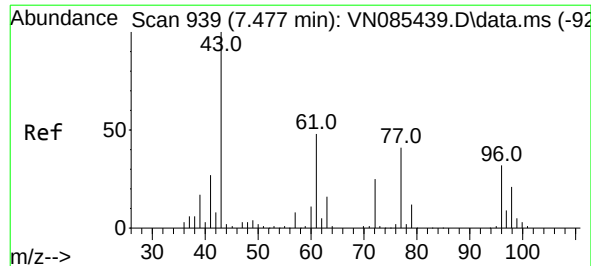
Ion Ratio Lower Upper

63 100

98 0.0 3.3 9.8#

100 0.0 2.0 6.0#





#25

2-Butanone

Concen: 5.034 ug/l m

RT: 7.483 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 6448

Ion Ratio Lower Upper

43 100

72 18.0 20.2 30.4#

Instrument :

MSVOA_N

ClientSampleId :

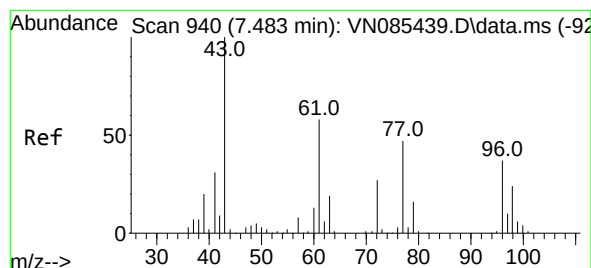
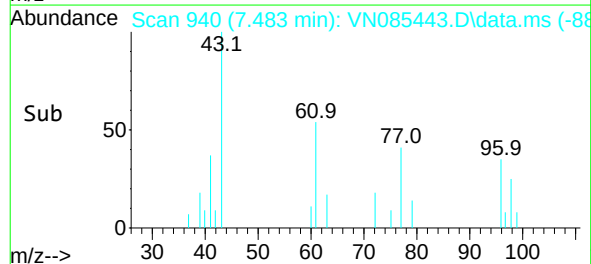
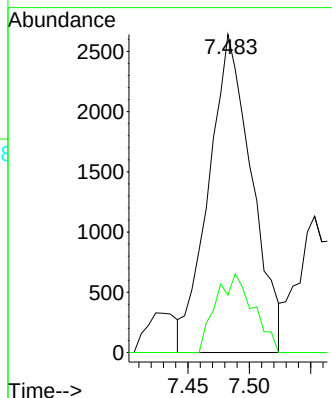
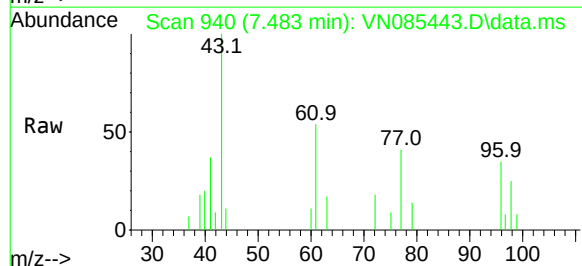
VSTDICC001

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 0.976 ug/l

RT: 7.488 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085443.D

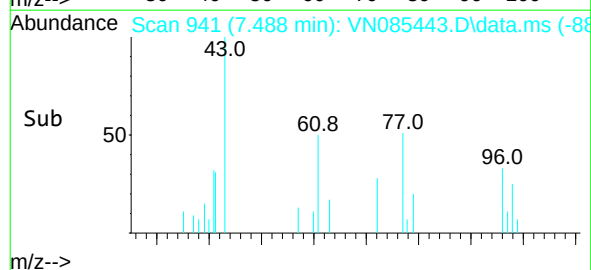
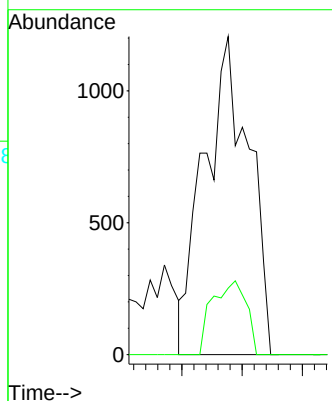
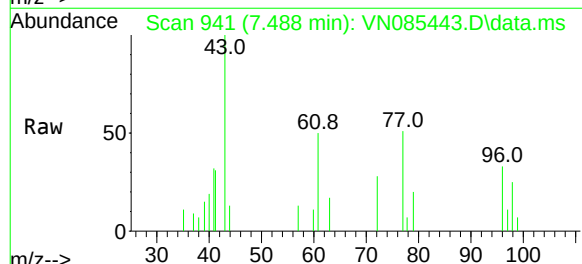
Acq: 14 Jan 2025 17:19

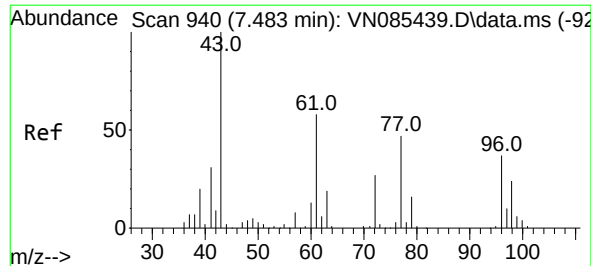
Tgt Ion: 77 Resp: 3104

Ion Ratio Lower Upper

77 100

97 17.7 10.7 32.1





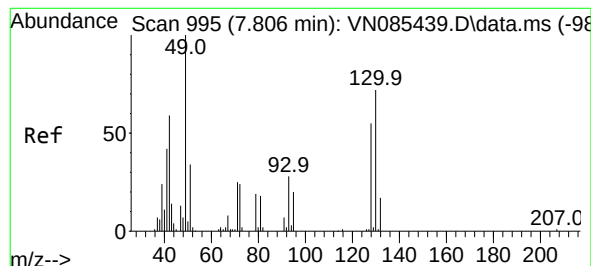
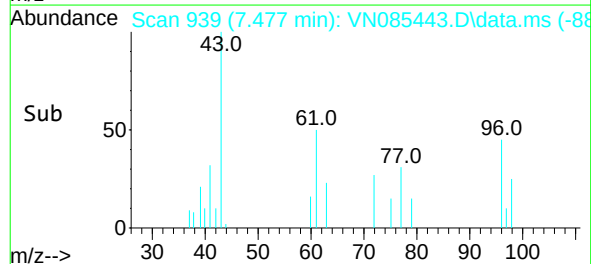
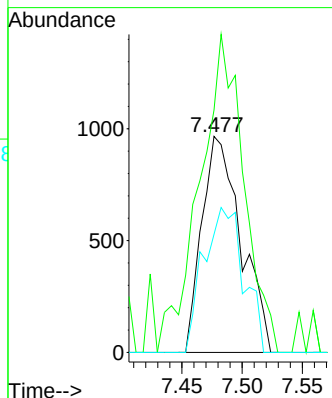
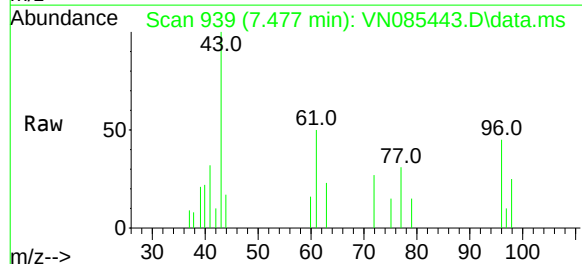
#27
cis-1,2-Dichloroethene
Concen: 0.969 ug/l
RT: 7.477 min Scan# 935
Delta R.T. -0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Tgt Ion:	96	Resp:	2185
Ion	Ratio	Lower	Upper
96	100		
61	166.1	0.0	311.8
98	68.7	0.0	126.0

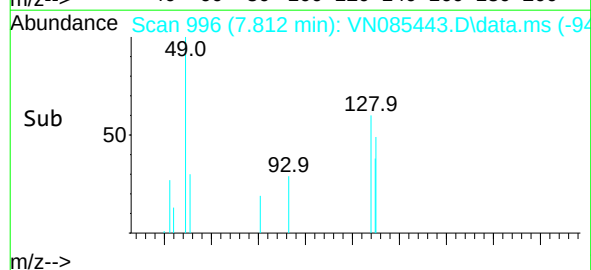
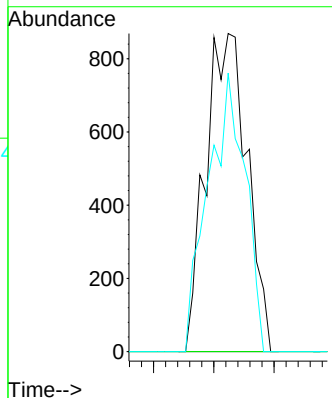
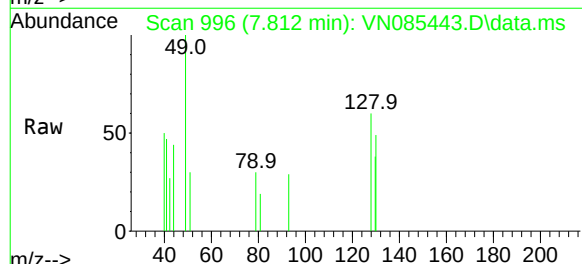
Manual Integrations
APPROVED

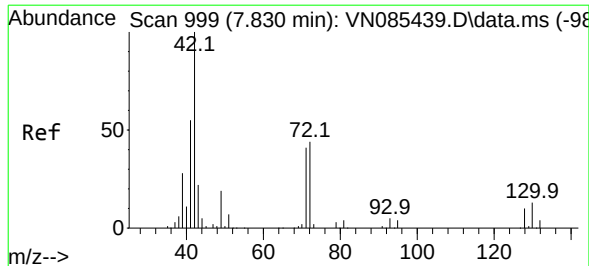
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#28
Bromochloromethane
Concen: 1.138 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:	49	Resp:	2082
Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.4
130	78.0	55.0	82.4





#29

Tetrahydrofuran

Concen: 4.548 ug/l

RT: 7.835 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

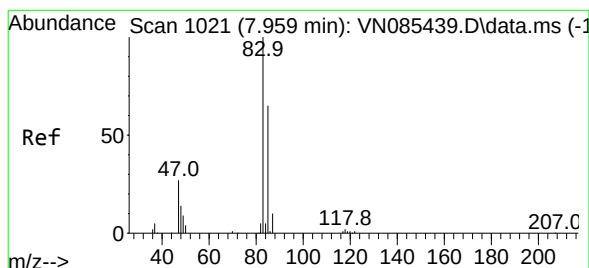
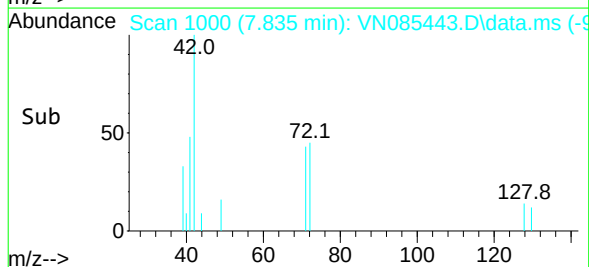
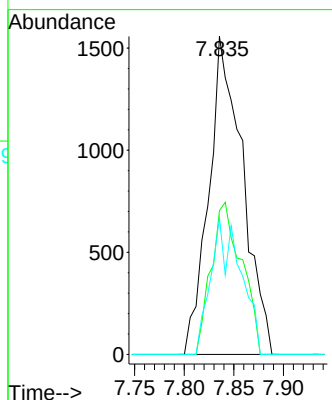
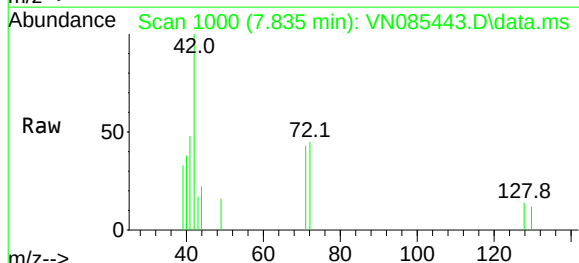
ClientSampleId :

VSTDICC001

Tgt Ion:	42	Resp:	3693
Ion	Ratio	Lower	Upper
42	100		
72	43.1	34.2	51.2
71	37.9	32.5	48.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#30

Chloroform

Concen: 1.045 ug/l

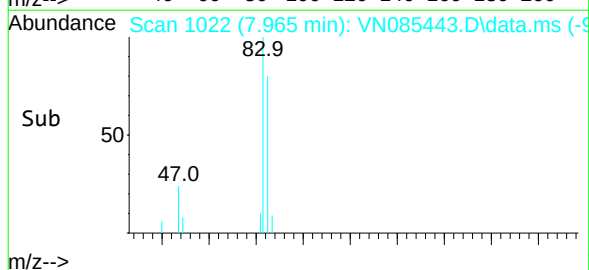
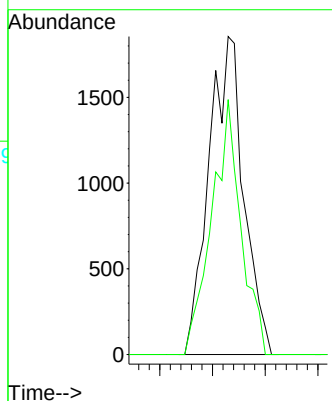
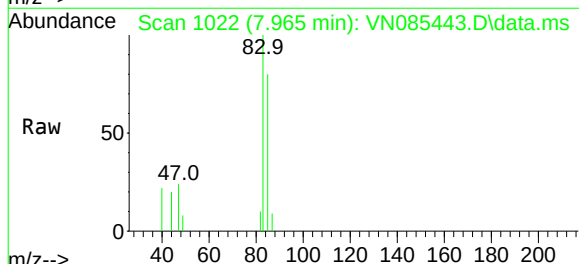
RT: 7.965 min Scan# 1022

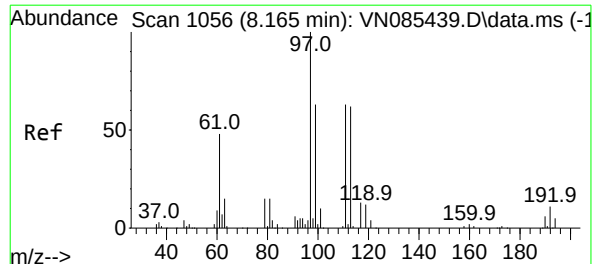
Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:	83	Resp:	4250
Ion	Ratio	Lower	Upper
83	100		
85	80.2	51.8	77.6





#32

1,1,1-Trichloroethane

Concen: 1.031 ug/l

RT: 8.165 min Scan# 10

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 97 Resp: 3678

Ion Ratio Lower Upper

97 100

99 0.0 49.8 74.6

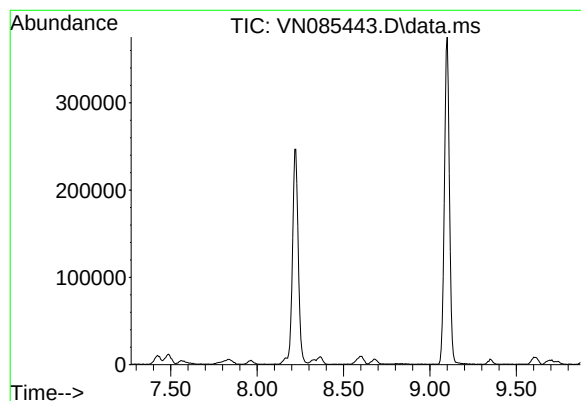
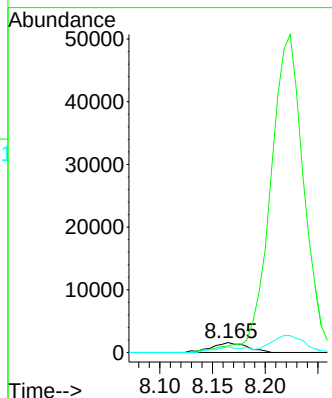
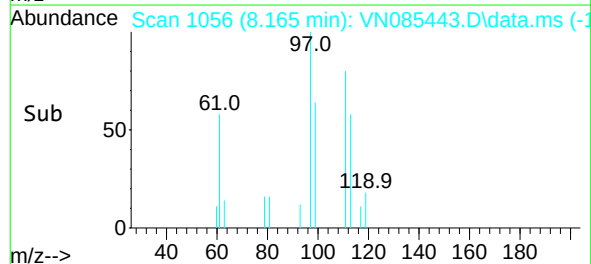
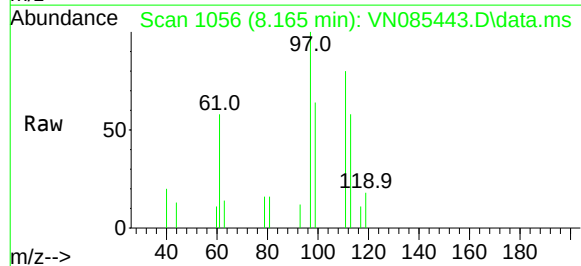
61 52.2 41.4 62.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#33

1,2-Dichloroethane-d4

Concen: 0.000 ug/l

Expected RT: 8.57 min

Lab File: VN085443.D

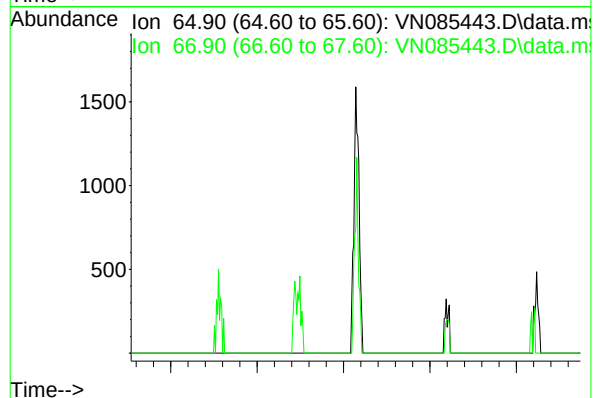
Acq: 14 Jan 2025 17:19

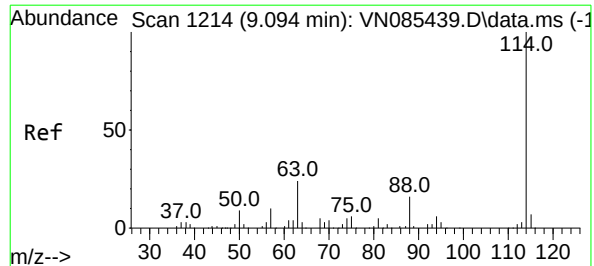
Tgt Ion: 65

Sig Exp Ratio

65 100

67 50.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 12

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion:114 Resp: 302938

Ion Ratio Lower Upper

114 100

63 22.3 0.0 47.6

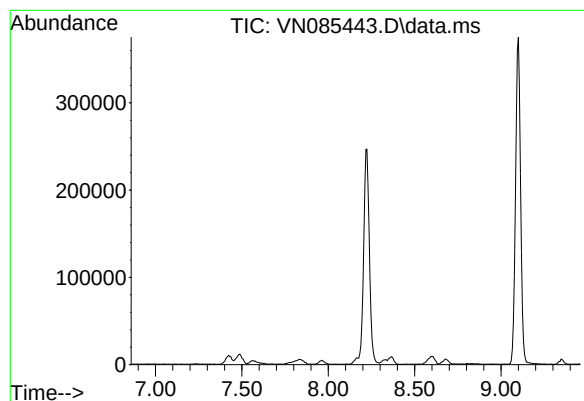
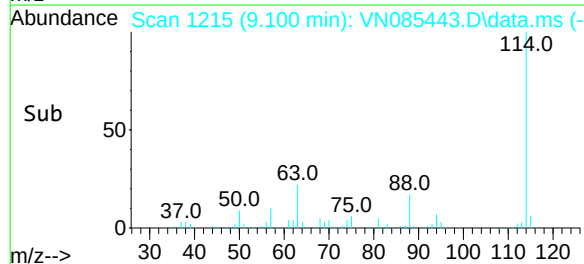
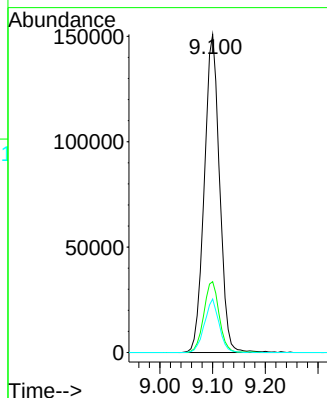
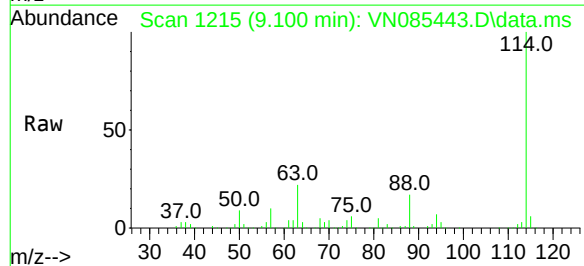
88 16.8 0.0 32.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#35

Dibromofluoromethane

Concen: 0.000 ug/l

Expected RT: 8.16 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

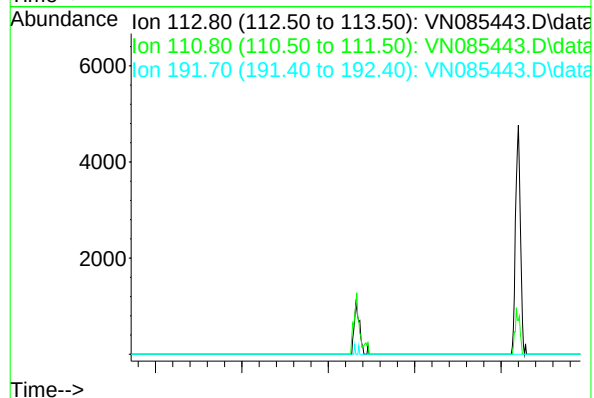
Tgt Ion: 113

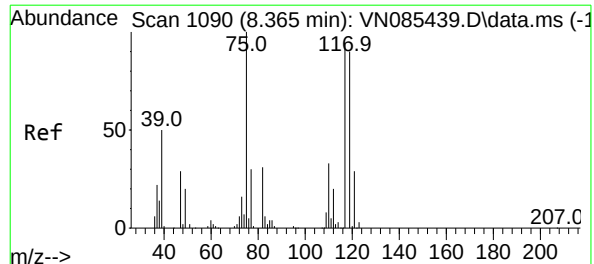
Sig Exp Ratio

113 100

111 103.4

192 17.9





#36

1,1-Dichloropropene

Concen: 1.046 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC001

Tgt Ion: 75 Resp: 3084

Ion Ratio Lower Upper

75 100

110 30.1 16.5 49.5

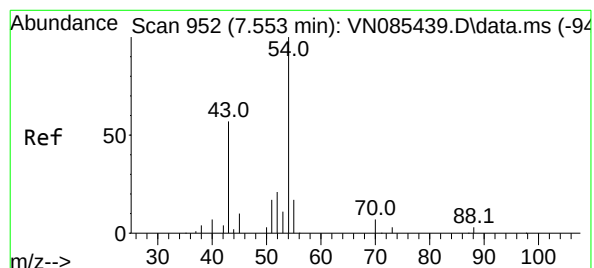
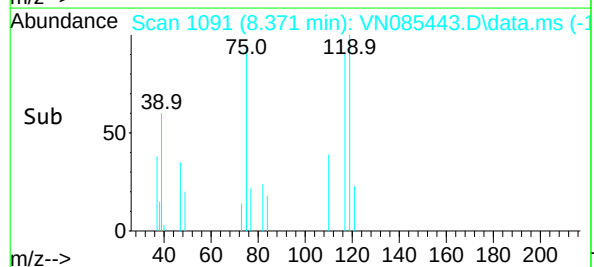
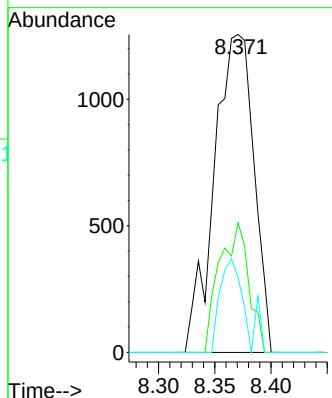
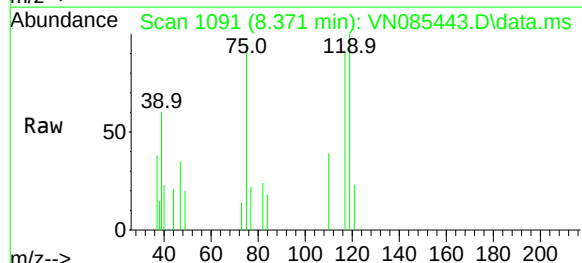
77 15.9 24.4 36.6#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#37

Ethyl Acetate

Concen: 1.026 ug/l m

RT: 7.577 min Scan# 956

Delta R.T. 0.023 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

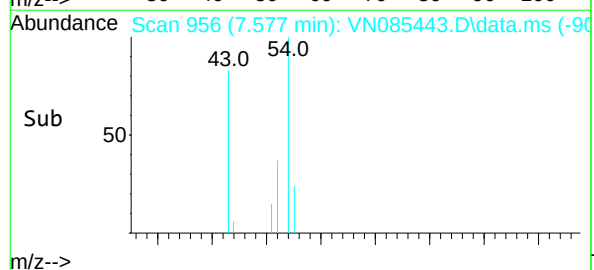
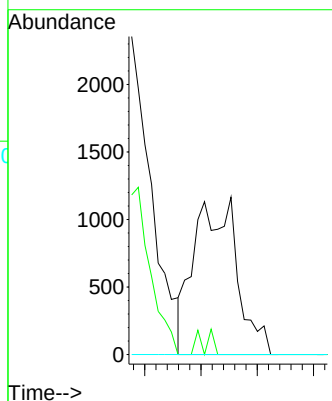
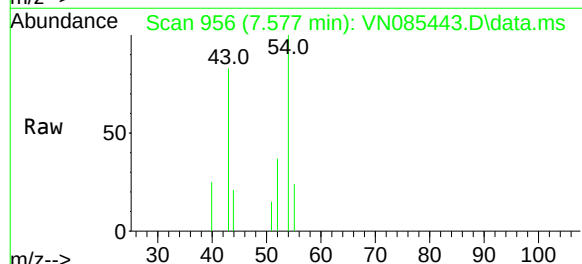
Tgt Ion: 43 Resp: 3056

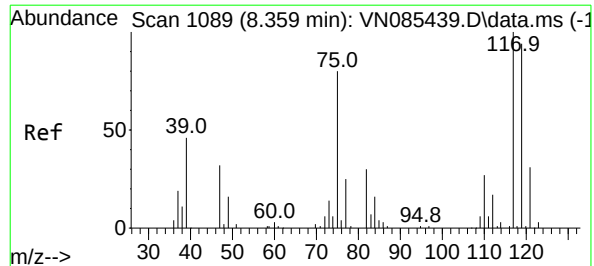
Ion Ratio Lower Upper

43 100

61 4.3 10.9 16.3#

70 0.0 7.5 11.3#





#38

Carbon Tetrachloride

Concen: 1.018 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085443.D

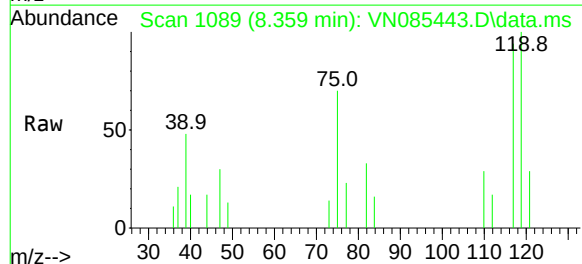
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001



Tgt Ion: 117 Resp: 3436

Ion Ratio Lower Upper

117 100

119 106.6 75.4 113.2

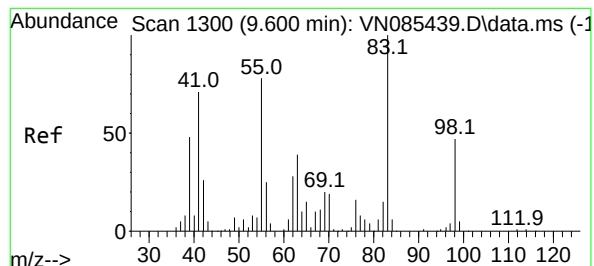
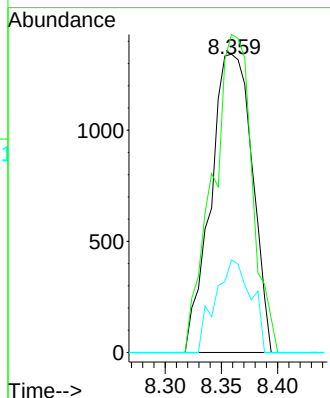
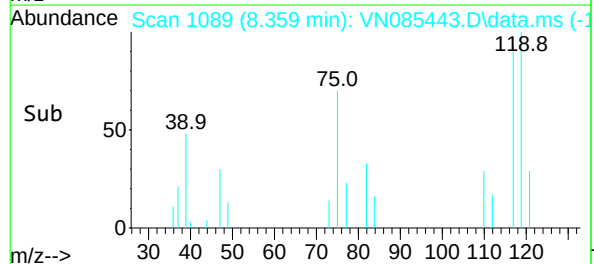
121 31.0 24.6 37.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#39

Methylcyclohexane

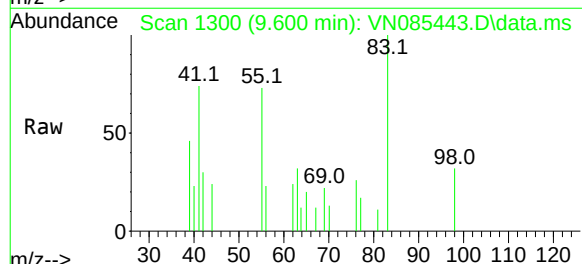
Concen: 0.867 ug/l

RT: 9.600 min Scan# 1300

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19



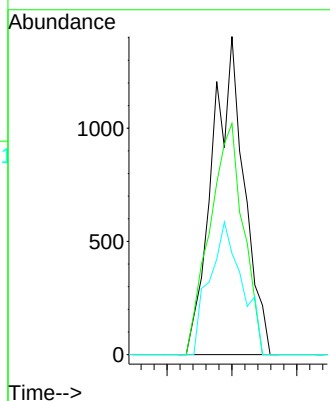
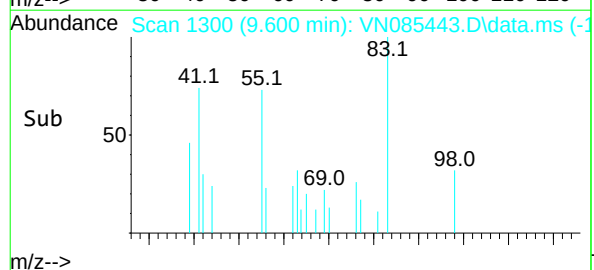
Tgt Ion: 83 Resp: 2403

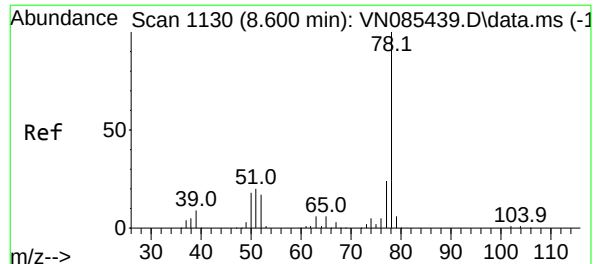
Ion Ratio Lower Upper

83 100

55 72.7 62.6 94.0

98 31.8 37.7 56.5#





#40

Benzene

Concen: 0.957 ug/l

RT: 8.606 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 78 Resp: 8480

Ion Ratio Lower Upper

78 100

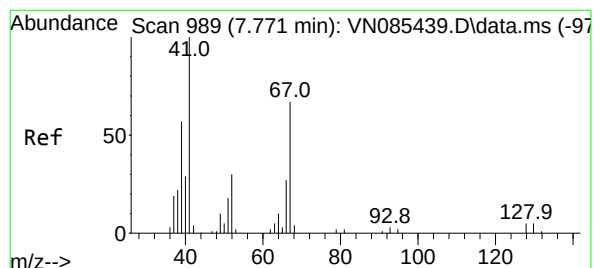
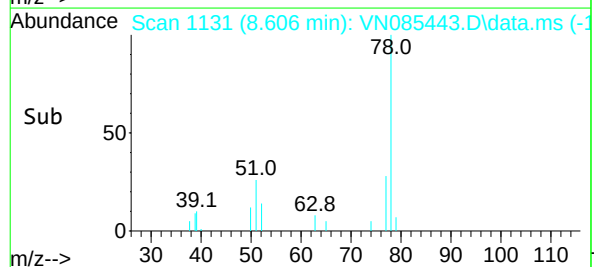
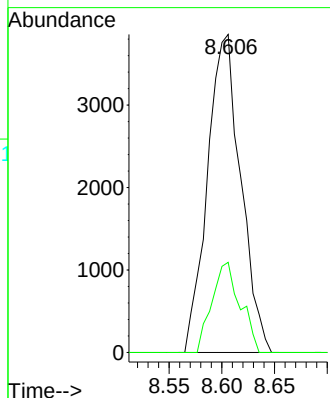
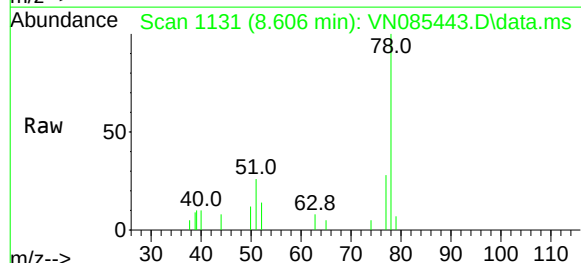
77 28.3 19.0 28.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#41

Methacrylonitrile

Concen: 0.941 ug/l

RT: 7.771 min Scan# 989

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 41 Resp: 1458

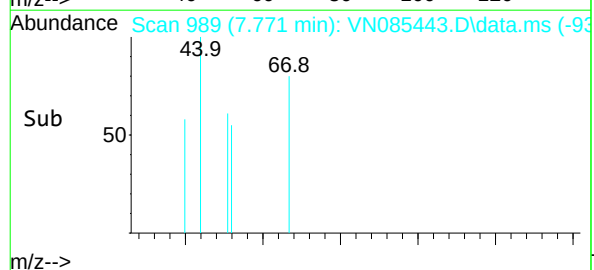
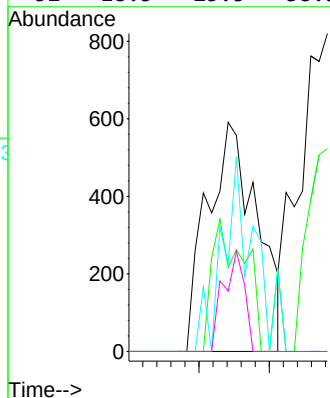
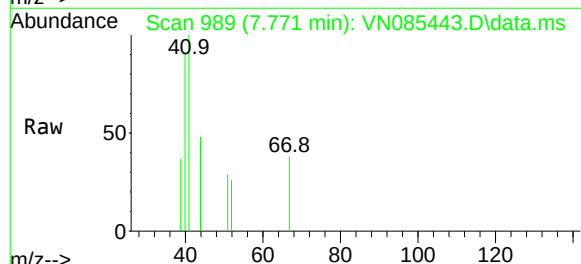
Ion Ratio Lower Upper

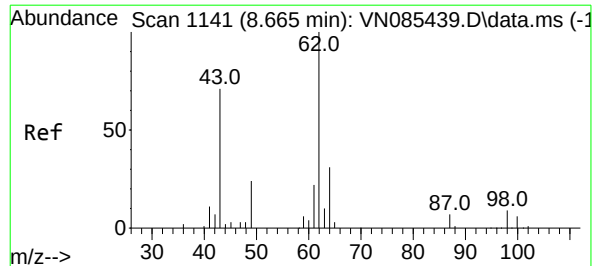
41 100

39 37.6 46.0 69.0#

67 53.8 57.4 86.2#

52 18.5 25.5 38.3#





#42

1,2-Dichloroethane

Concen: 0.938 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 62 Resp: 3131

Ion Ratio Lower Upper

62 100

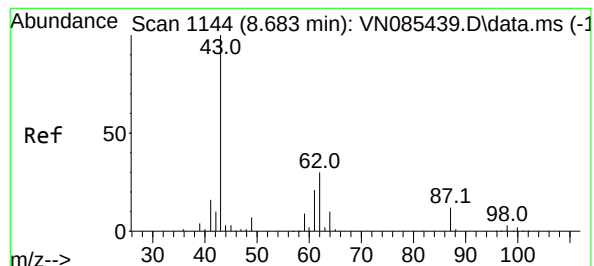
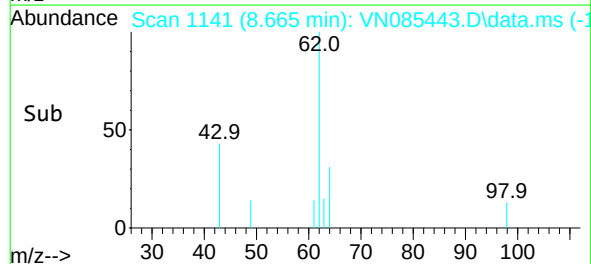
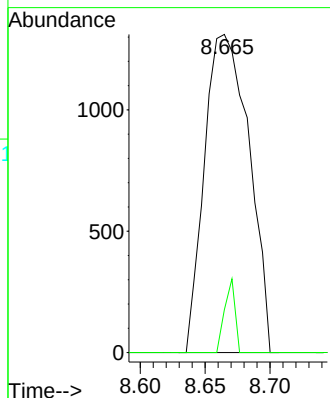
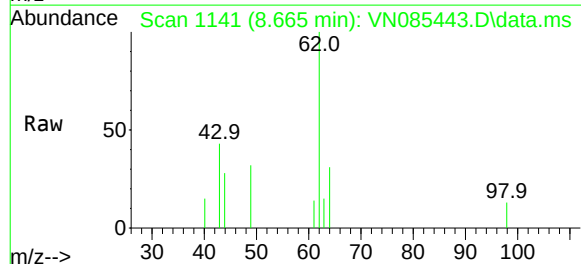
98 5.4 0.0 17.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#43

Isopropyl Acetate

Concen: 1.007 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

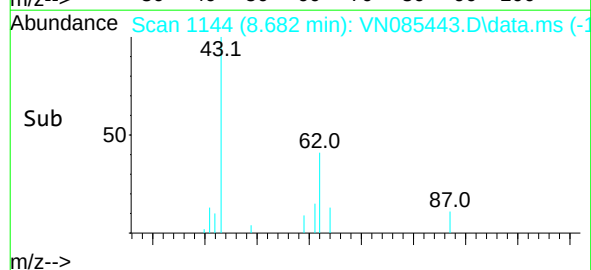
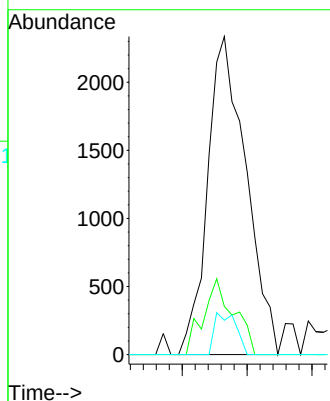
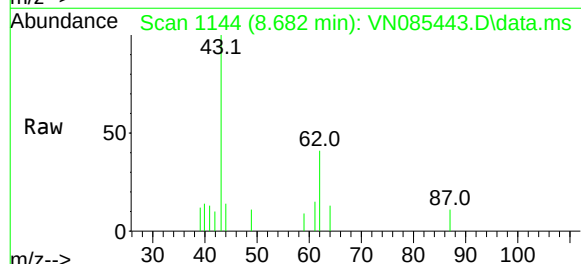
Tgt Ion: 43 Resp: 4803

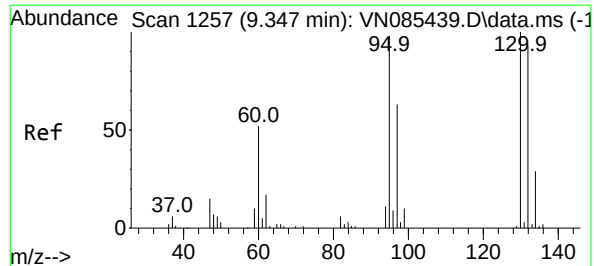
Ion Ratio Lower Upper

43 100

61 18.9 20.7 31.1#

87 7.3 9.8 14.8#





#44

Trichloroethene

Concen: 1.034 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion:130 Resp: 2133

Ion Ratio Lower Upper

130 100

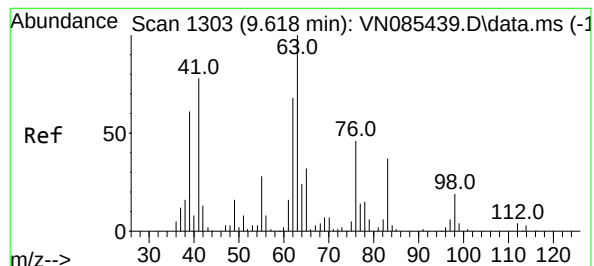
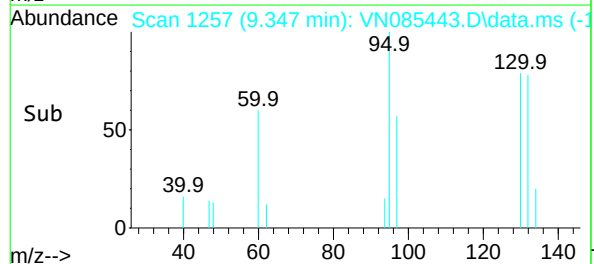
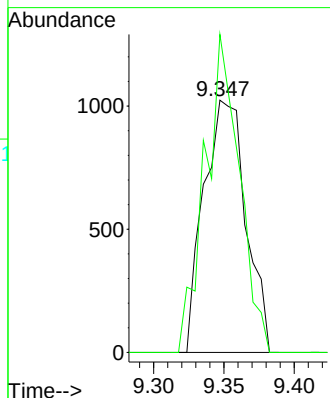
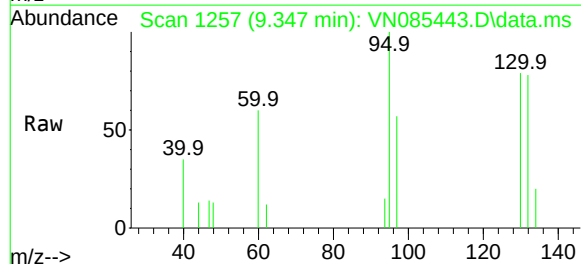
95 126.1 0.0 195.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#45

1,2-Dichloropropane

Concen: 0.992 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085443.D

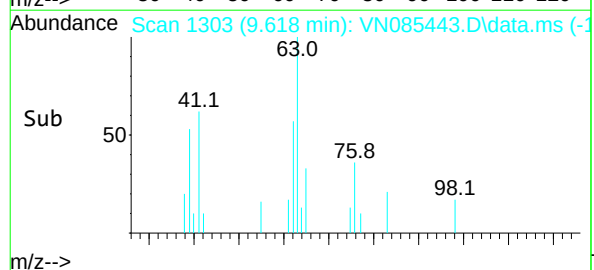
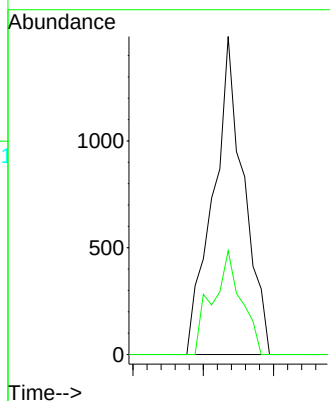
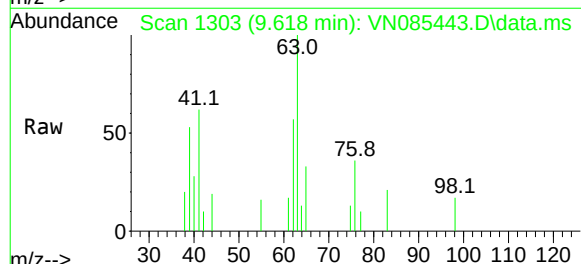
Acq: 14 Jan 2025 17:19

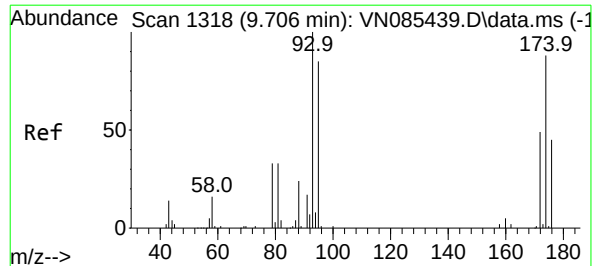
Tgt Ion: 63 Resp: 2246

Ion Ratio Lower Upper

63 100

65 32.6 25.6 38.4





#46

Dibromomethane

Concen: 1.083 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085443.D

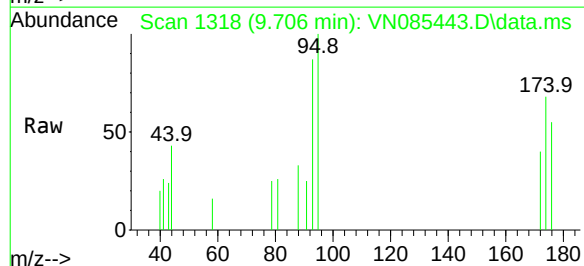
Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

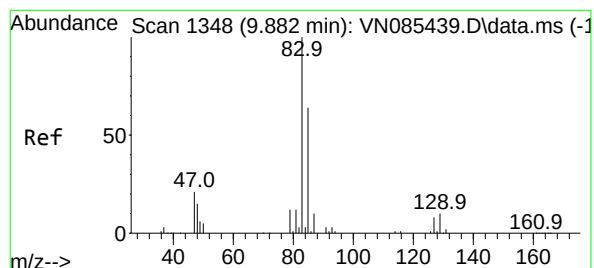
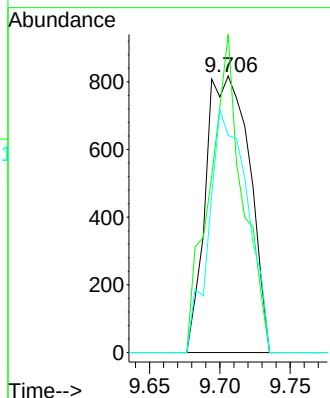
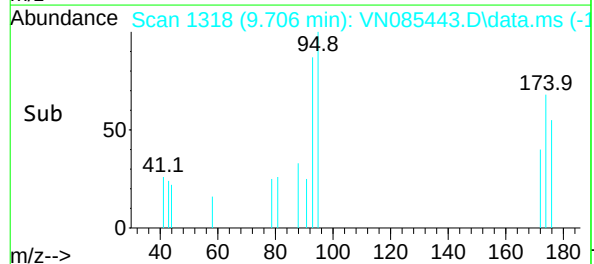


Tgt Ion:	93	Resp:	1769
Ion	Ratio	Lower	Upper
93	100		
95	86.5	64.7	97.1
174	77.4	69.0	103.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#47

Bromodichloromethane

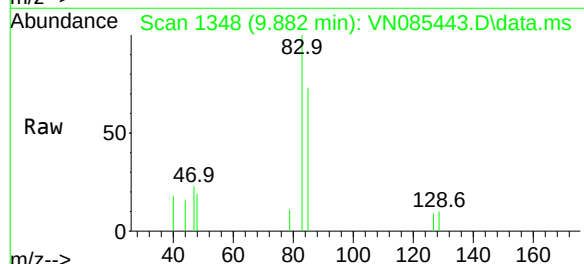
Concen: 0.882 ug/l

RT: 9.882 min Scan# 1348

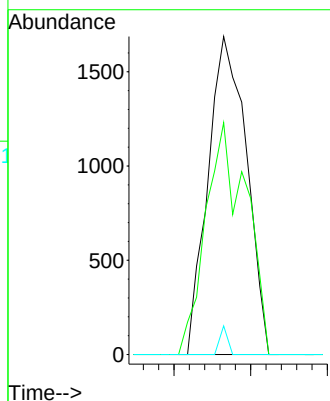
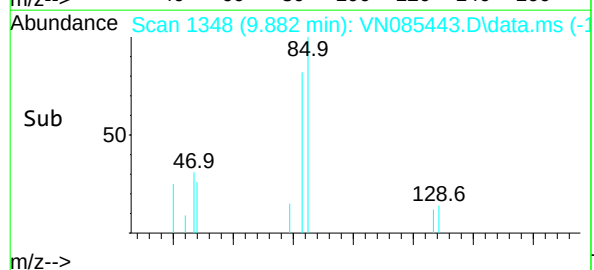
Delta R.T. 0.000 min

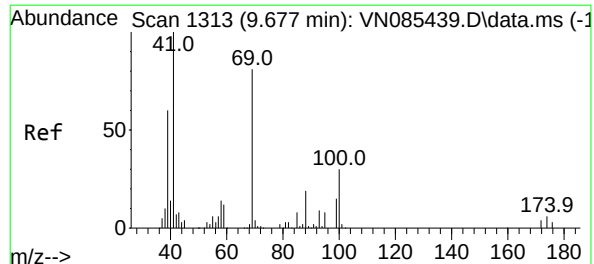
Lab File: VN085443.D

Acq: 14 Jan 2025 17:19



Tgt Ion:	83	Resp:	2935
Ion	Ratio	Lower	Upper
83	100		
85	72.9	51.2	76.8
127	9.0	6.5	9.7





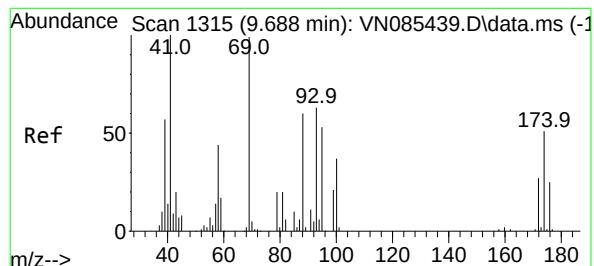
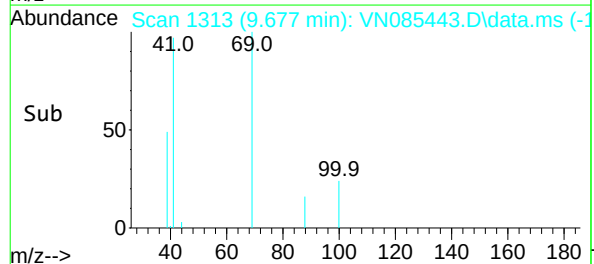
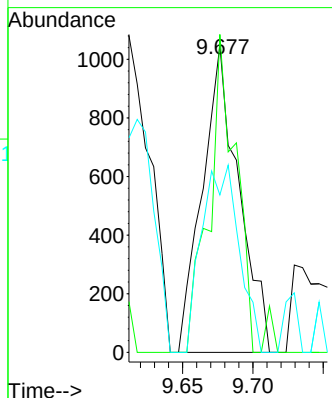
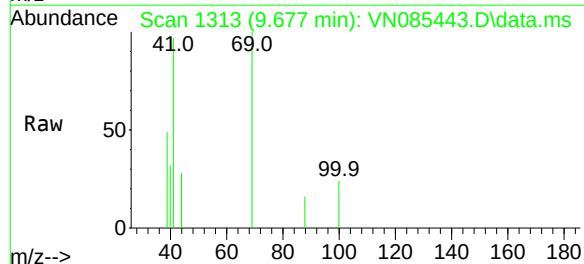
#48
Methyl methacrylate
Concen: 0.878 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 1886
Ion Ratio Lower Upper
41 100
69 76.2 64.7 97.1
39 62.8 49.0 73.6

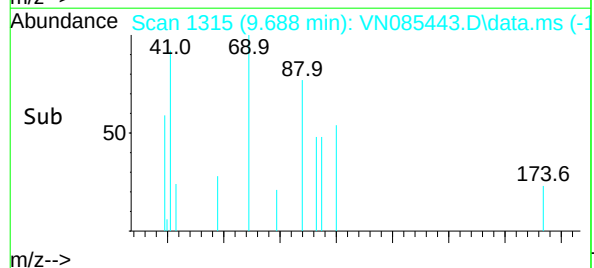
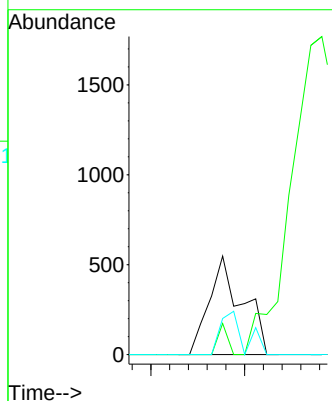
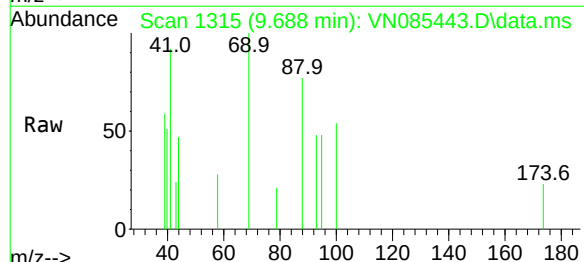
Manual Integrations
APPROVED

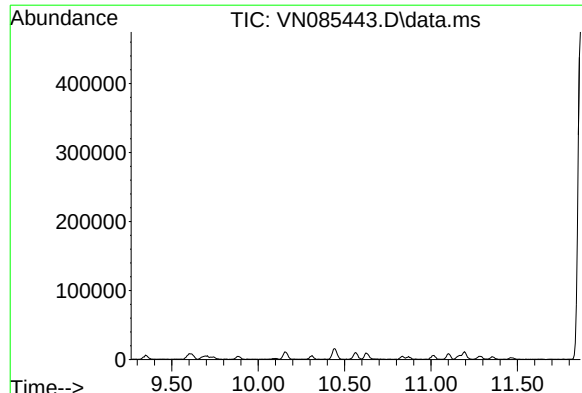
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#49
1,4-Dioxane
Concen: 18.616 ug/l
RT: 9.688 min Scan# 1315
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion: 88 Resp: 673
Ion Ratio Lower Upper
88 100
43 0.0 26.6 39.8#
58 31.1 59.5 89.3#





#50

Toluene-d8

Concen: 0.000 ug/l

Expected RT: 10.56 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 98

Sig Exp Ratio

98 100

100 65.3

Instrument :

MSVOA_N

ClientSampleId :

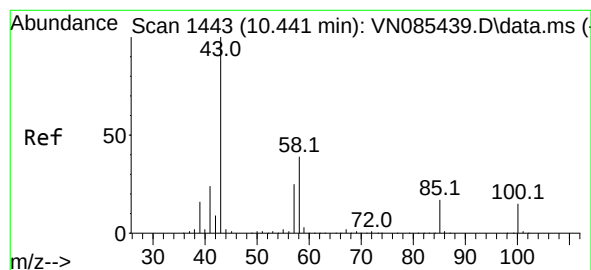
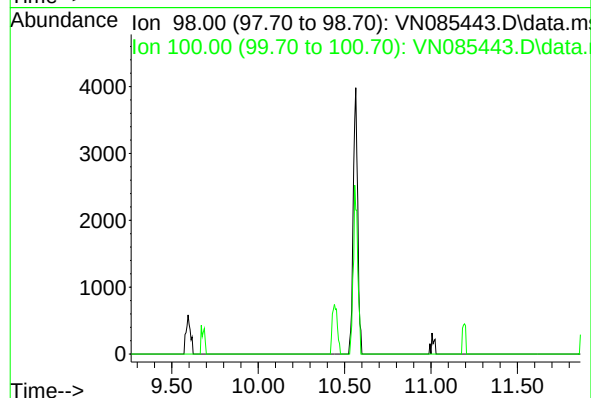
VSTDICC001

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#51

4-Methyl-2-Pentanone

Concen: 4.163 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. 0.000 min

Lab File: VN085443.D

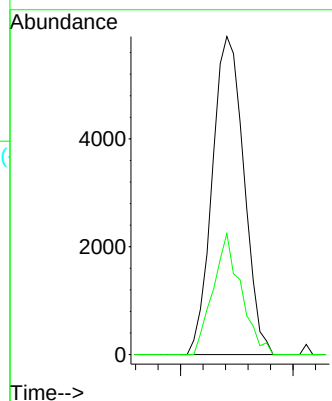
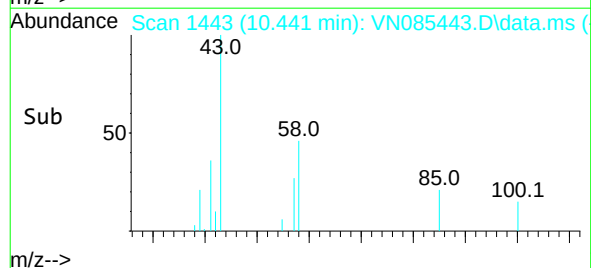
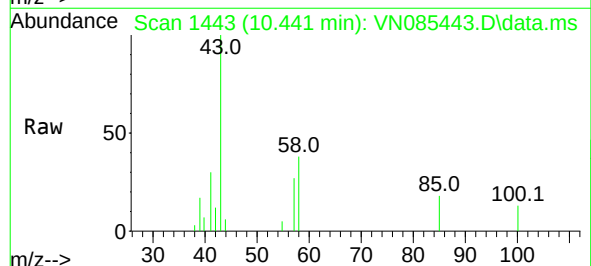
Acq: 14 Jan 2025 17:19

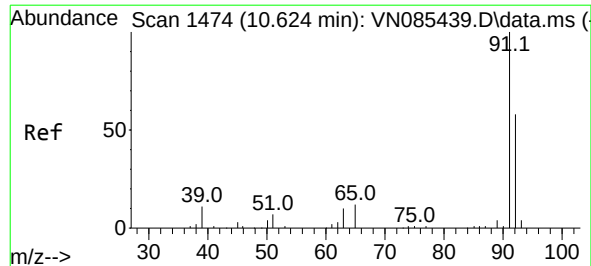
Tgt Ion: 43 Resp: 11523

Ion Ratio Lower Upper

43 100

58 33.6 30.5 45.7





#52

Toluene

Concen: 0.814 ug/l

RT: 10.618 min Scan# 14

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC001

Tgt Ion: 92 Resp: 4180

Ion Ratio Lower Upper

92 100

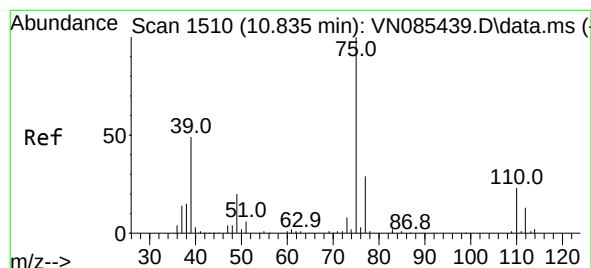
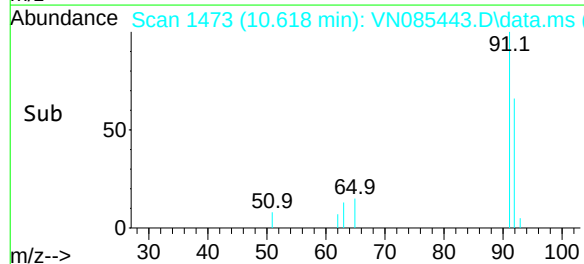
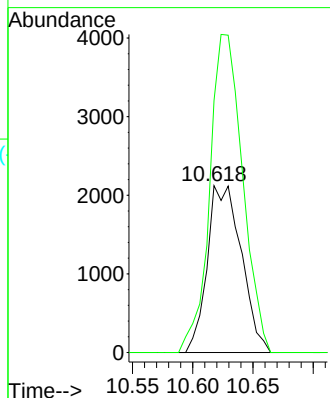
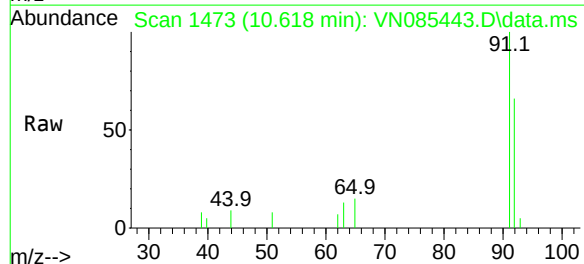
91 183.9 139.2 208.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#53

t-1,3-Dichloropropene

Concen: 0.802 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. -0.000 min

Lab File: VN085443.D

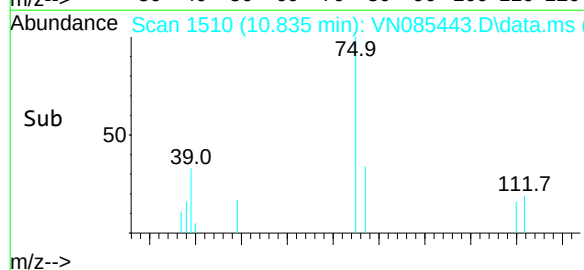
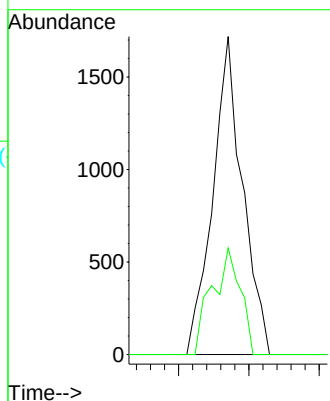
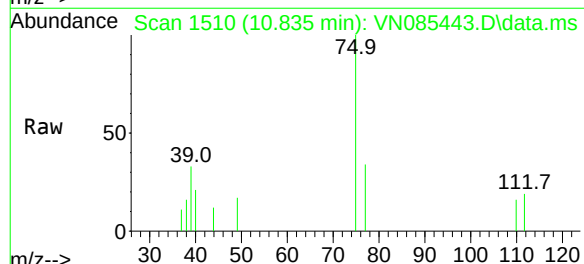
Acq: 14 Jan 2025 17:19

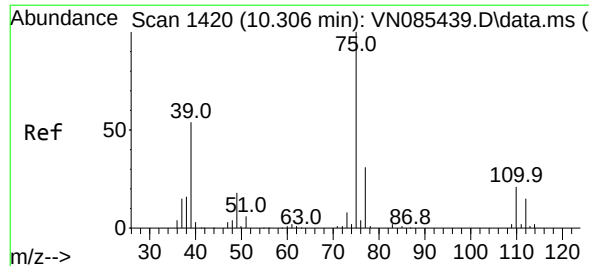
Tgt Ion: 75 Resp: 2522

Ion Ratio Lower Upper

75 100

77 33.5 23.5 35.3





#54

cis-1,3-Dichloropropene

Concen: 0.811 ug/l

RT: 10.312 min Scan# 14

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 75 Resp: 2725

Ion Ratio Lower Upper

75 100

77 39.0 25.0 37.4

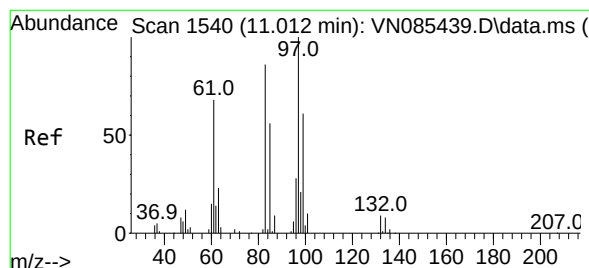
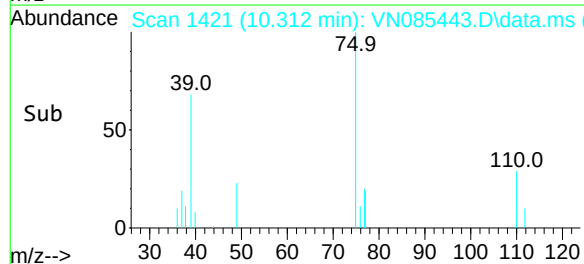
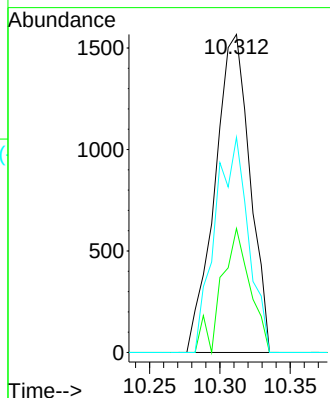
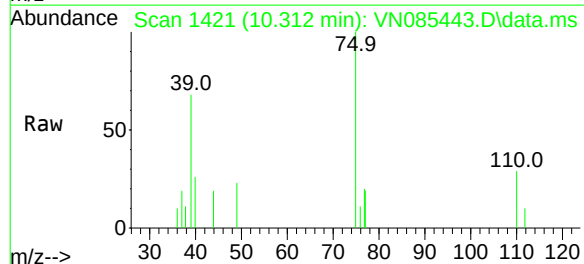
39 67.6 43.1 64.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#55

1,1,2-Trichloroethane

Concen: 0.935 ug/l

RT: 11.018 min Scan# 1541

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 97 Resp: 1901

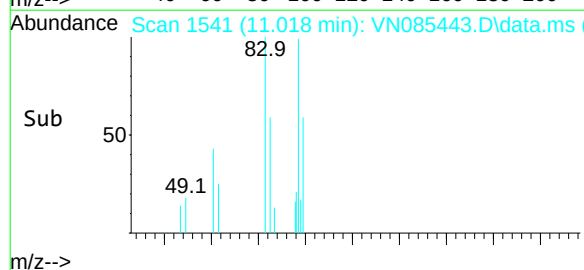
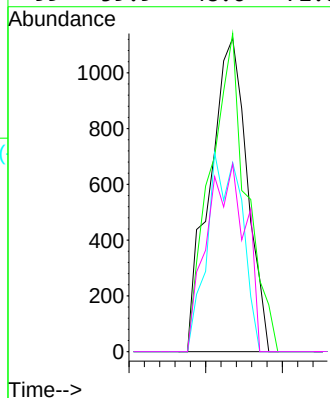
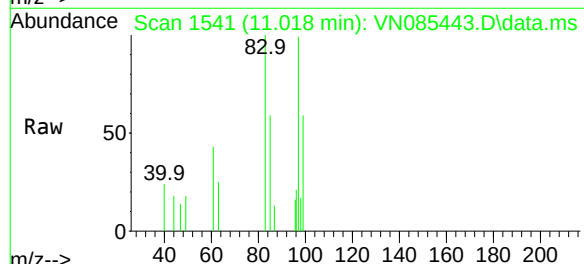
Ion Ratio Lower Upper

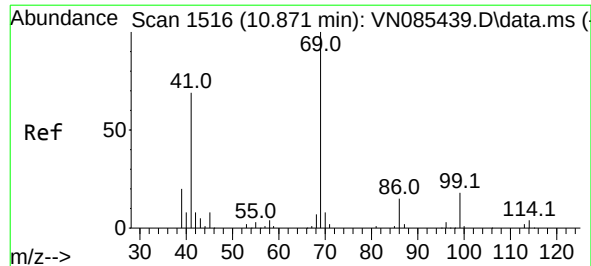
97 100

83 101.5 69.0 103.6

85 60.3 44.6 66.8

99 59.9 48.6 72.8





#56

Ethyl methacrylate

Concen: 2.471 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC001

Tgt Ion: 69 Resp: 1923

Ion Ratio Lower Upper

69 100

41 74.4 54.6 82.0

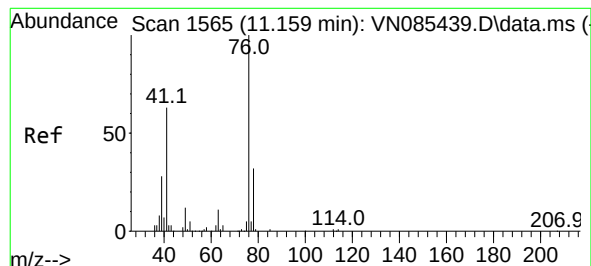
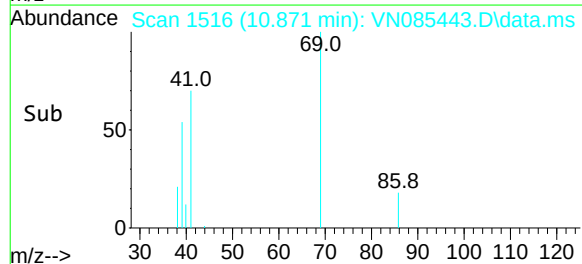
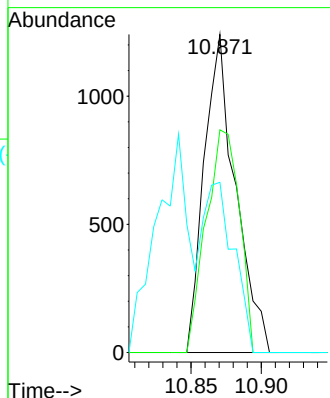
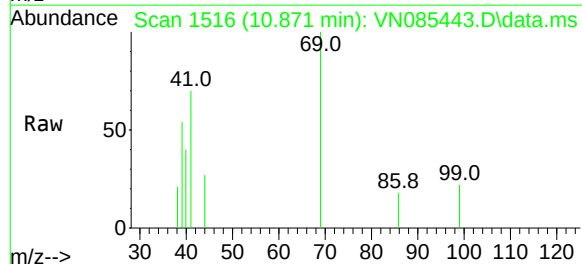
39 52.4 32.4 48.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#57

1,3-Dichloropropane

Concen: 0.881 ug/l

RT: 11.165 min Scan# 1566

Delta R.T. 0.006 min

Lab File: VN085443.D

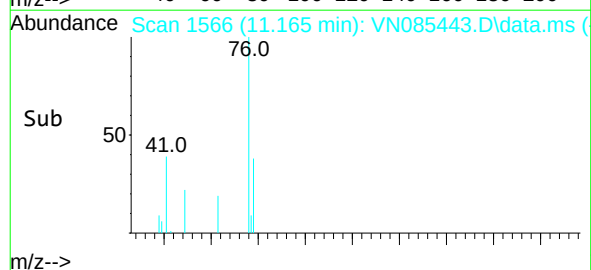
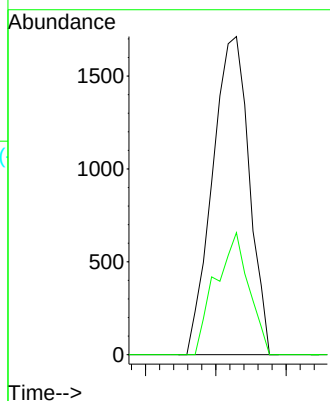
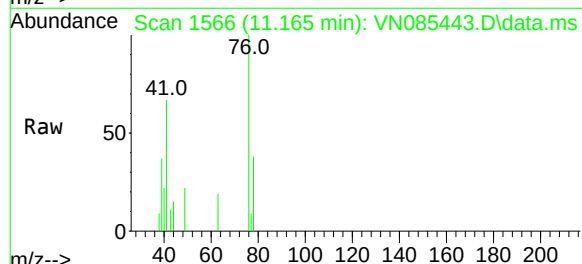
Acq: 14 Jan 2025 17:19

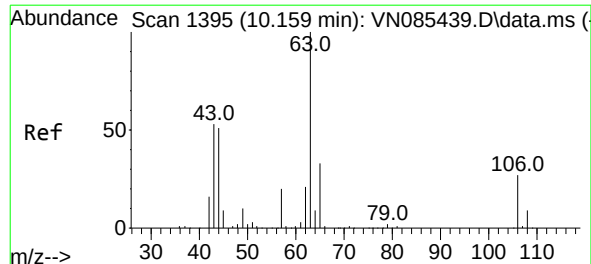
Tgt Ion: 76 Resp: 3113

Ion Ratio Lower Upper

76 100

78 34.9 25.6 38.4





#58

2-Chloroethyl Vinyl ether

Concen: 3.822 ug/l

RT: 10.153 min Scan# 1395

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

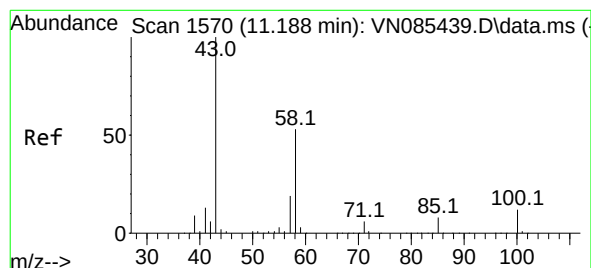
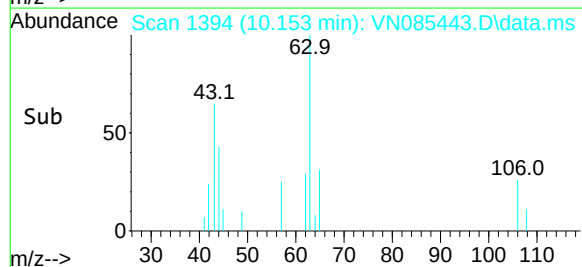
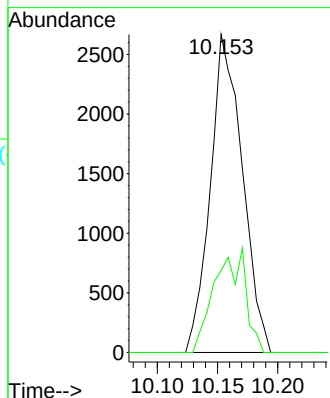
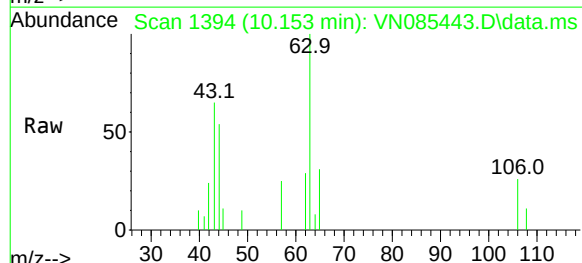
ClientSampleId :

VSTDIC001

Tgt Ion: 63 Resp: 4929
Ion Ratio Lower Upper
63 100
106 31.7 21.6 32.4

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#59

2-Hexanone

Concen: 4.058 ug/l

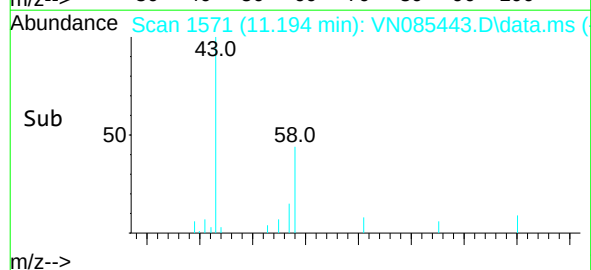
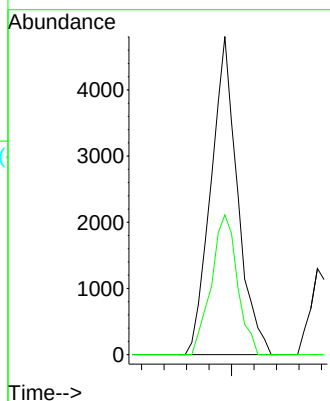
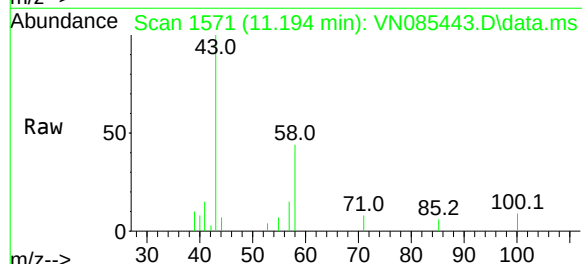
RT: 11.194 min Scan# 1571

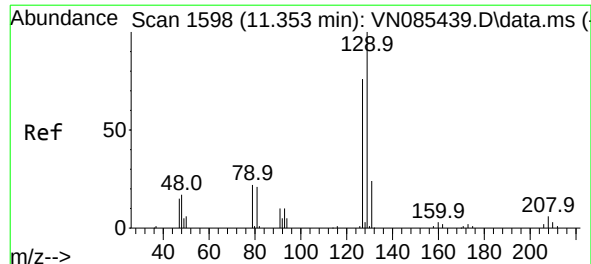
Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion: 43 Resp: 7905
Ion Ratio Lower Upper
43 100
58 42.9 26.2 78.6





#60

Dibromochloromethane

Concen: 0.953 ug/l

RT: 11.359 min Scan# 1598

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion:129 Resp: 2339

Ion Ratio Lower Upper

129 100

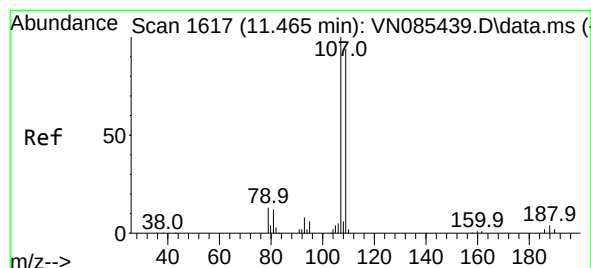
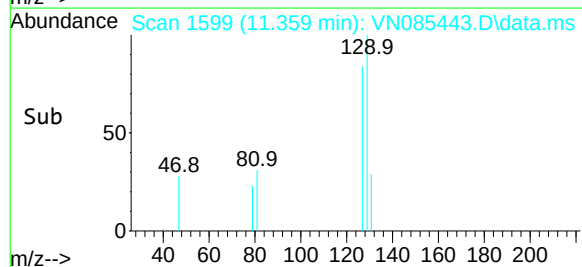
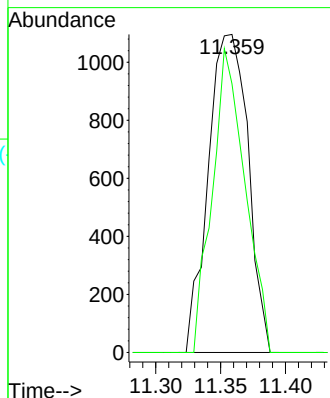
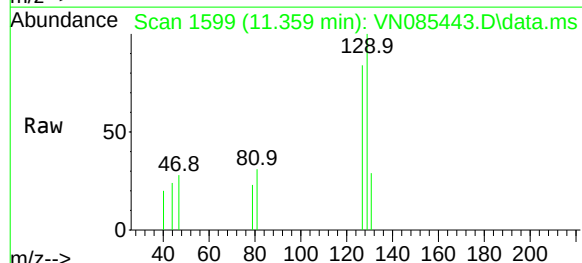
127 78.9 38.6 115.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#61

1,2-Dibromoethane

Concen: 1.000 ug/l

RT: 11.465 min Scan# 1617

Delta R.T. -0.000 min

Lab File: VN085443.D

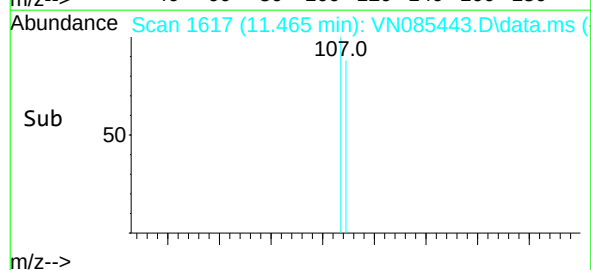
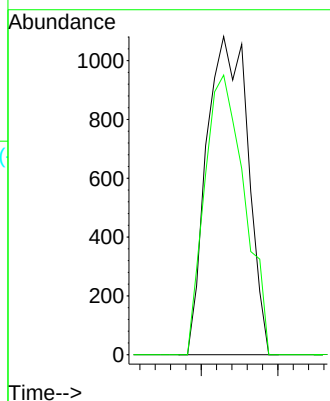
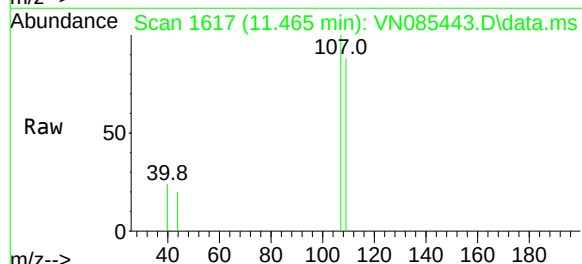
Acq: 14 Jan 2025 17:19

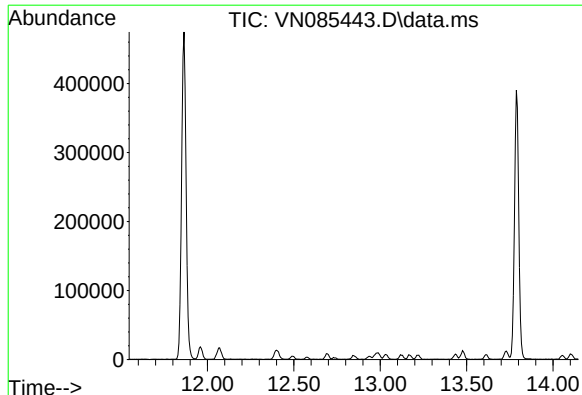
Tgt Ion:107 Resp: 2022

Ion Ratio Lower Upper

107 100

109 84.8 75.9 113.9





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

Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:	95
Sig	Exp Ratio
95	100
174	72.5
176	71.2

Instrument :

MSVOA_N

ClientSampleId :

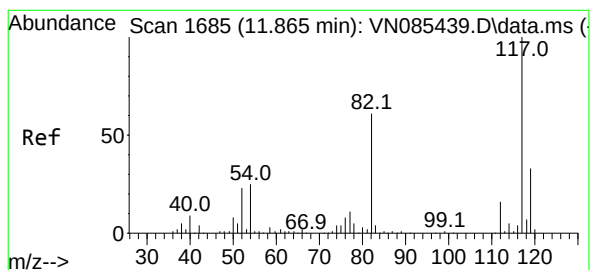
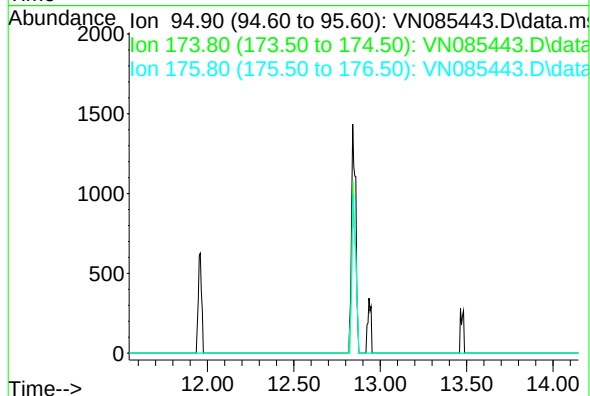
VSTDIC001

Manual Integrations

APPROVED

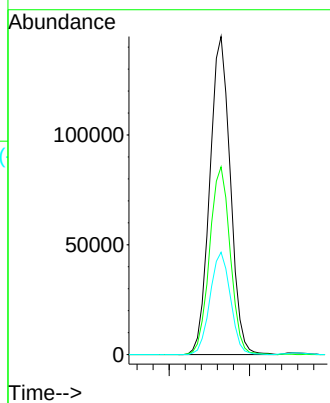
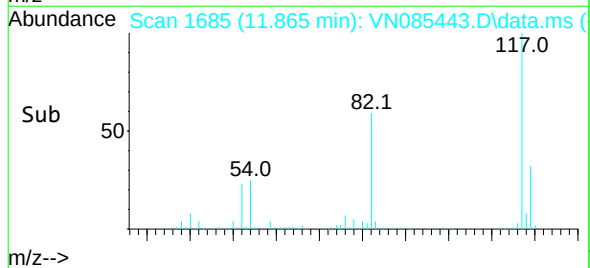
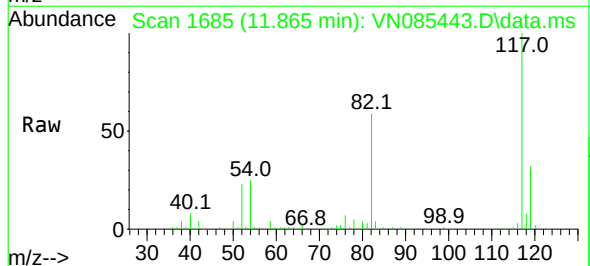
Reviewed By :John Carlone 01/15/2025

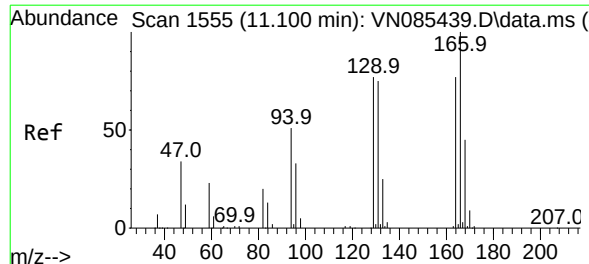
Supervised By :Mahesh Dadoda 01/15/2025



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085443.D
Acq: 14 Jan 2025 17:19

Tgt Ion:	117	Resp:	256851
Ion	Ratio	Lower	Upper
117	100		
82	59.0	48.6	72.8
119	32.2	26.6	39.8





#64

Tetrachloroethene

Concen: 0.947 ug/l

RT: 11.106 min Scan# 1555

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion:164 Resp: 1658

Ion Ratio Lower Upper

164 100

166 152.1 103.4 155.2

129 128.3 79.2 118.8#

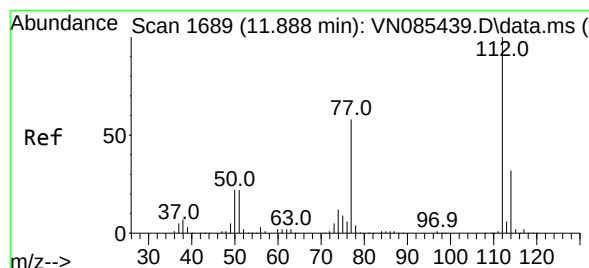
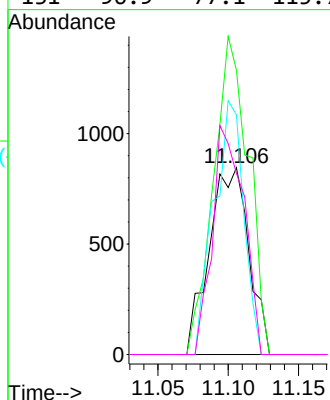
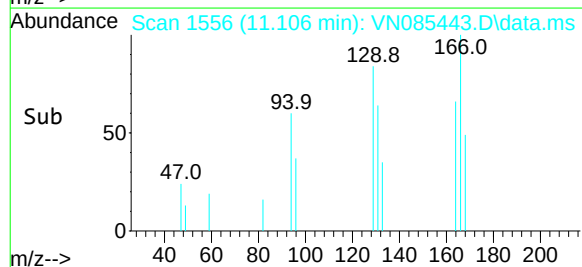
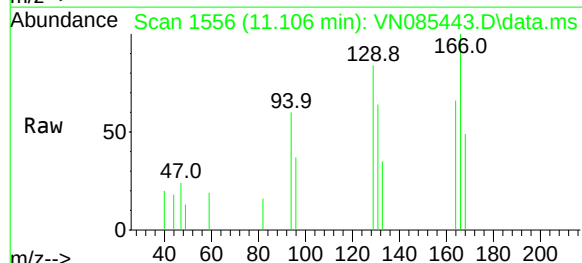
131 96.9 77.1 115.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#65

Chlorobenzene

Concen: 0.960 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085443.D

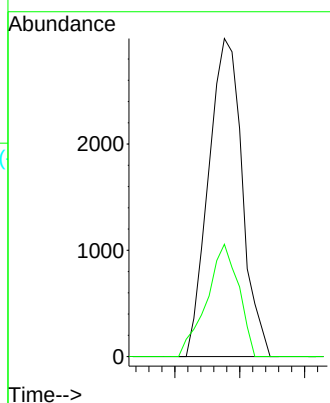
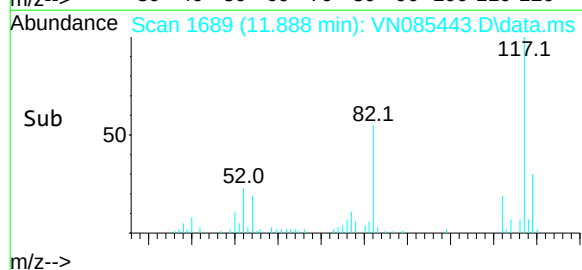
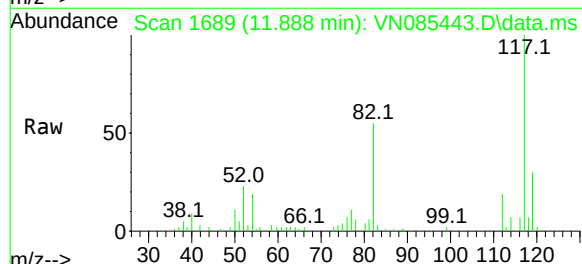
Acq: 14 Jan 2025 17:19

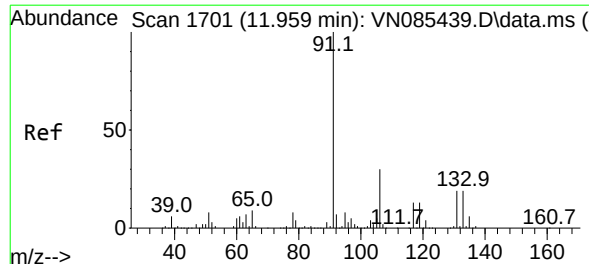
Tgt Ion:112 Resp: 5401

Ion Ratio Lower Upper

112 100

114 35.3 25.3 37.9





#66

1,1,1,2-Tetrachloroethane

Concen: 1.058 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

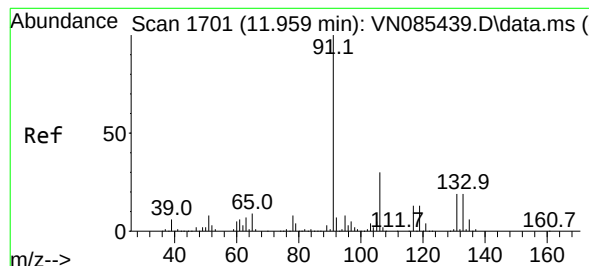
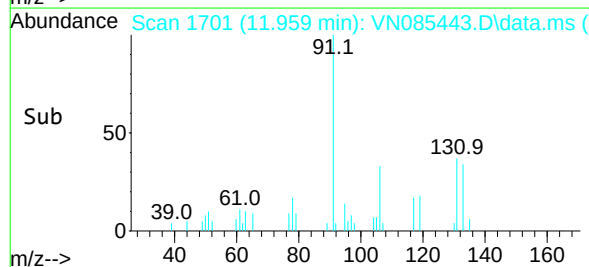
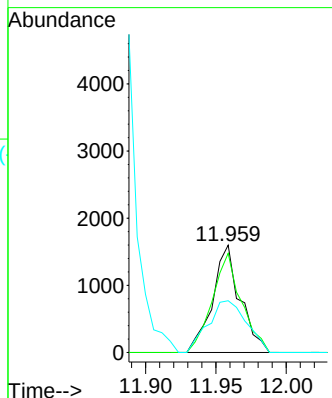
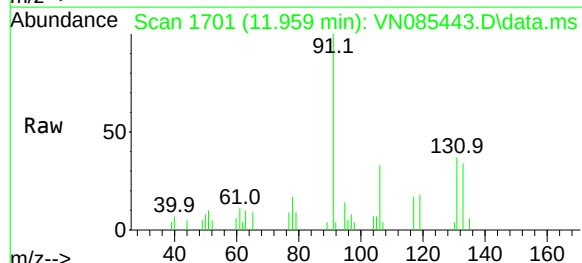
ClientSampleId :

VSTDIC001

Tgt Ion:	131	Resp:	2185
Ion Ratio	Lower	Upper	
131	100		
133	97.7	47.4	142.3
119	0.0	33.1	99.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#67

Ethyl Benzene

Concen: 0.802 ug/l

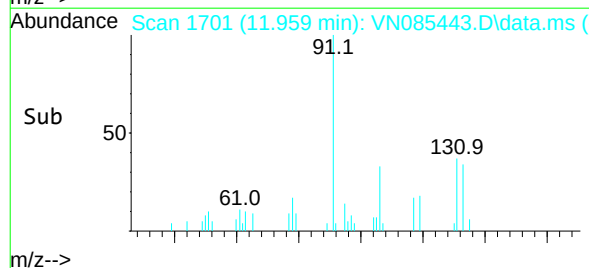
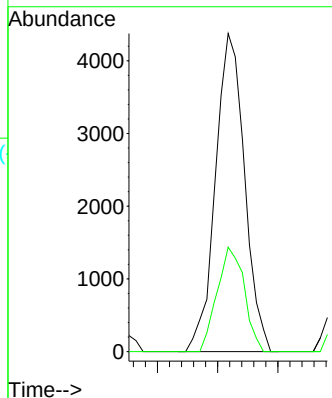
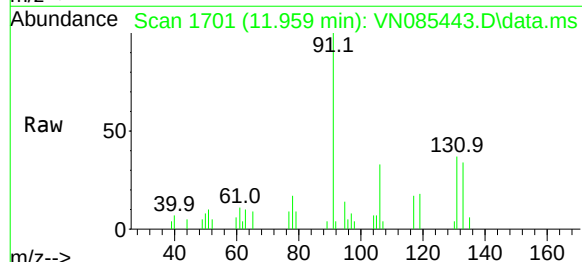
RT: 11.959 min Scan# 1701

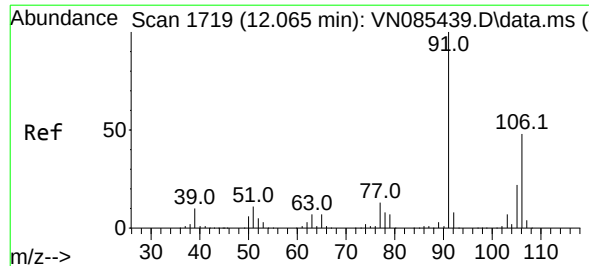
Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:	91	Resp:	7347
Ion Ratio	Lower	Upper	
91	100		
106	32.8	23.8	35.8





#68

m/p-Xylenes

Concen: 1.494 ug/l

RT: 12.070 min Scan# 1719

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC001

Tgt Ion:106 Resp: 5059

Ion Ratio Lower Upper

106 100

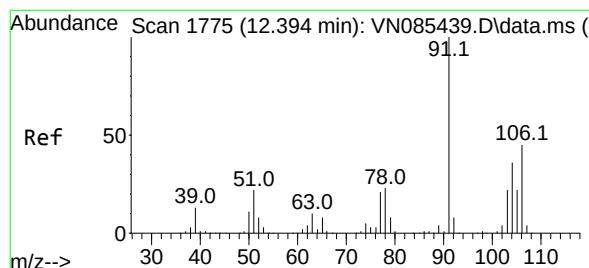
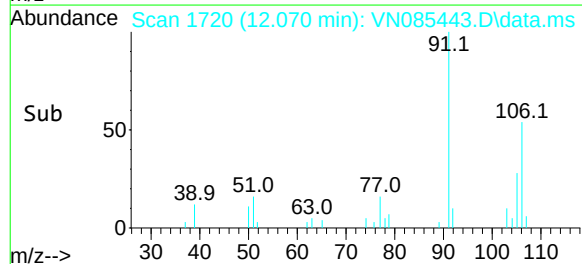
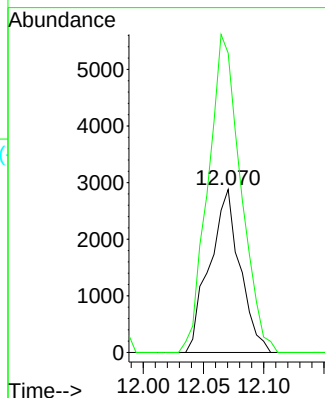
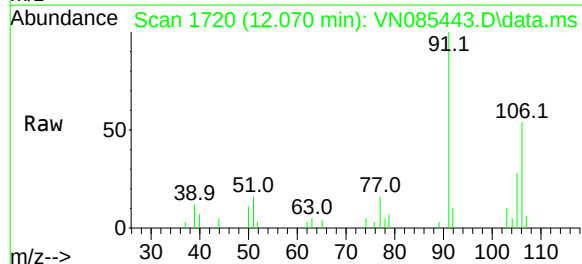
91 209.3 167.7 251.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#69

o-Xylene

Concen: 0.766 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085443.D

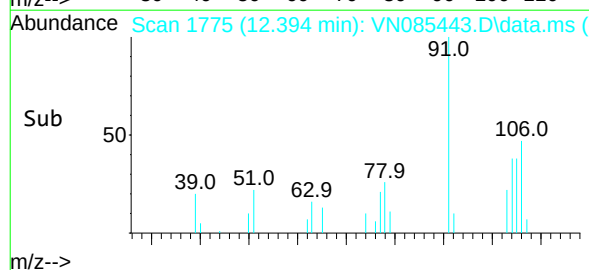
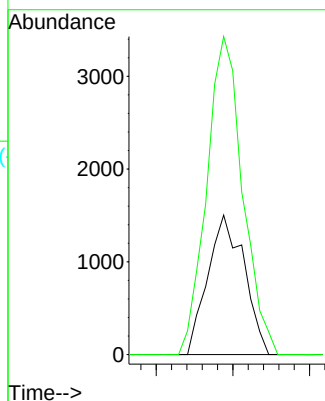
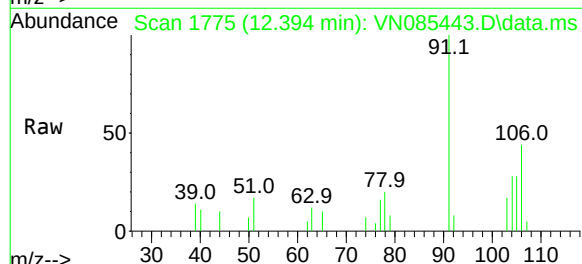
Acq: 14 Jan 2025 17:19

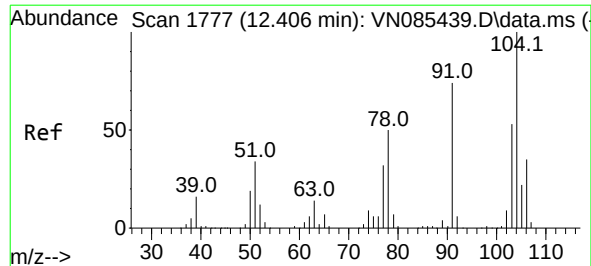
Tgt Ion:106 Resp: 2478

Ion Ratio Lower Upper

106 100

91 225.4 110.4 331.2





#70

Styrene

Concen: 0.712 ug/l

RT: 12.406 min Scan# 17

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

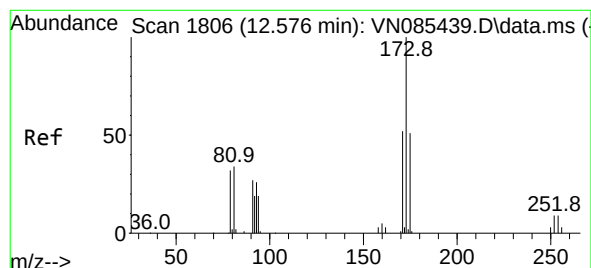
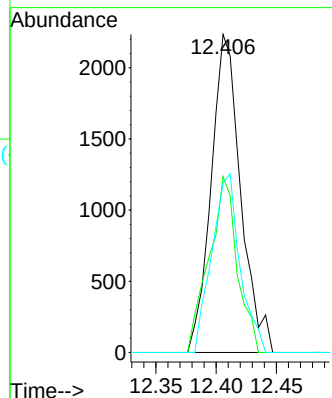
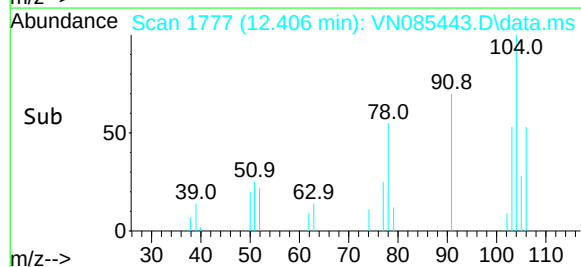
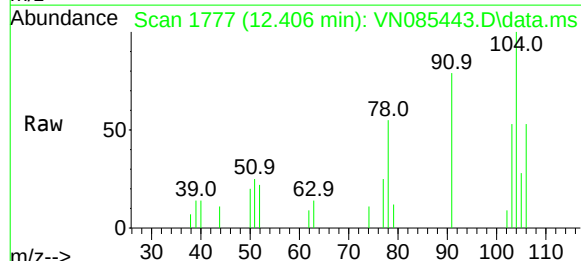
ClientSampleId :

VSTDICC001

Tgt Ion:	104	Resp:	3812
Ion	Ratio	Lower	Upper
104	100		
78	52.9	42.5	63.7
103	53.7	43.8	65.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#71

Bromoform

Concen: 0.818 ug/l

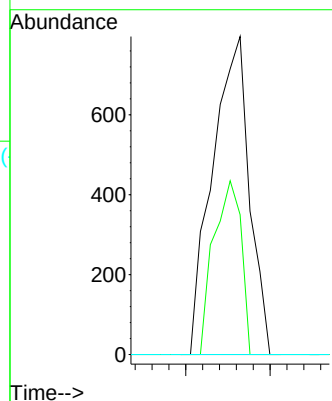
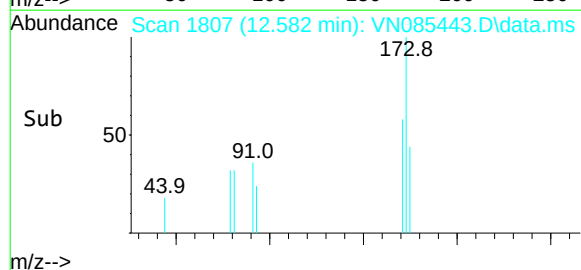
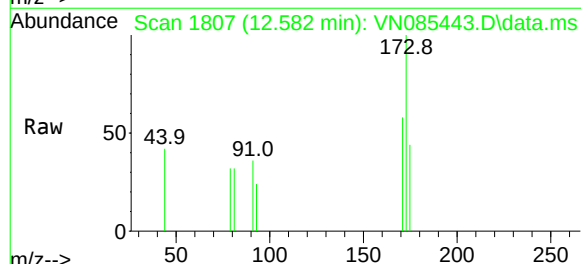
RT: 12.582 min Scan# 1807

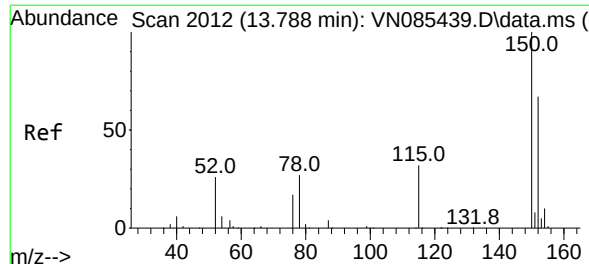
Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:	173	Resp:	1208
Ion	Ratio	Lower	Upper
173	100		
175	40.7	24.4	73.2
254	0.0	0.0	0.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC001

Tgt Ion:152 Resp: 99539

Ion Ratio Lower Upper

152 100

115 63.8 31.1 93.3

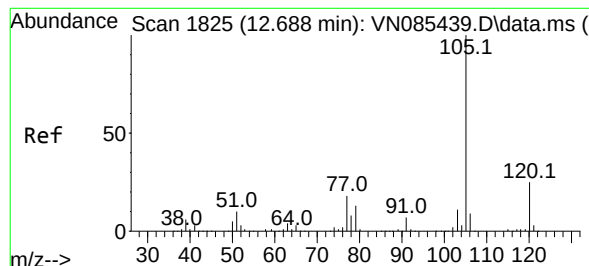
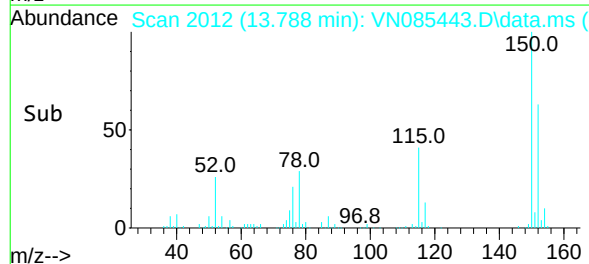
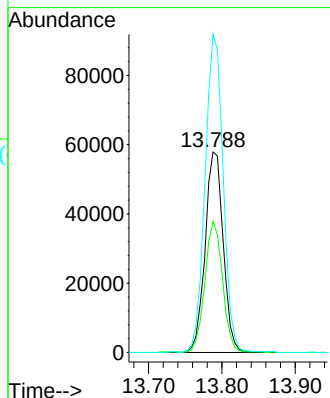
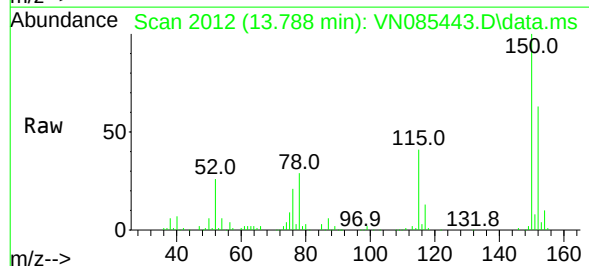
150 158.5 0.0 343.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#73

Isopropylbenzene

Concen: 0.820 ug/l

RT: 12.688 min Scan# 1825

Delta R.T. -0.000 min

Lab File: VN085443.D

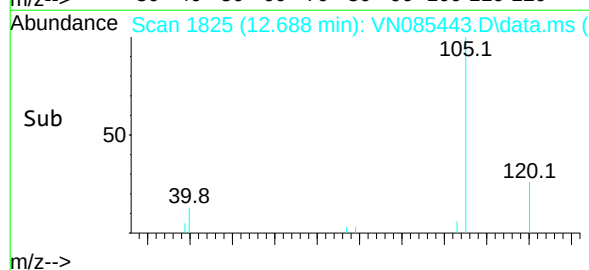
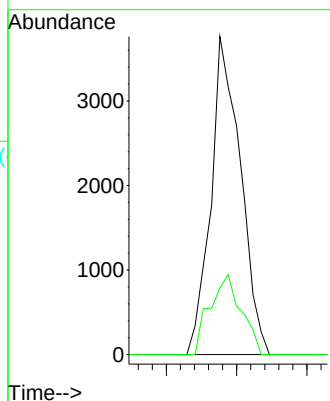
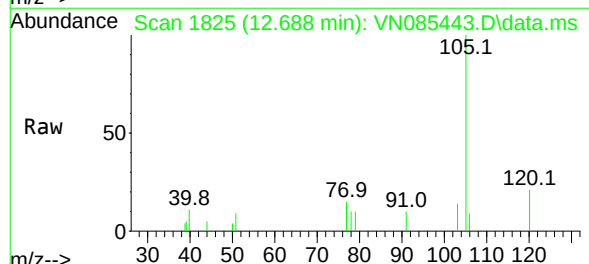
Acq: 14 Jan 2025 17:19

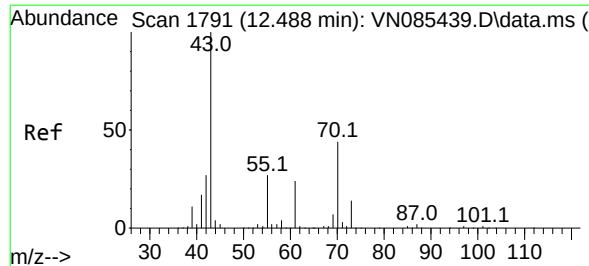
Tgt Ion:105 Resp: 5506

Ion Ratio Lower Upper

105 100

120 26.7 12.8 38.3





#74

N-ethyl acetate

Concen: 0.899 ug/l

RT: 12.494 min Scan# 1791

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 43 Resp: 2716

Ion Ratio Lower Upper

43 100

70 30.4 34.0 51.0#

55 24.2 21.4 32.2

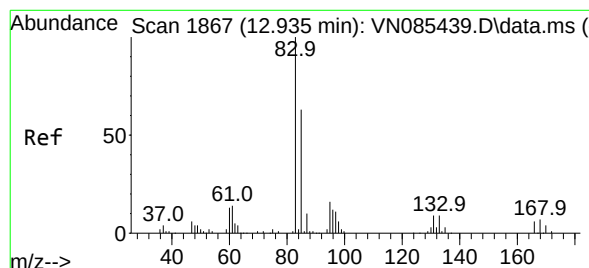
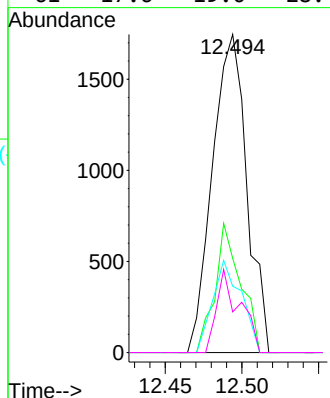
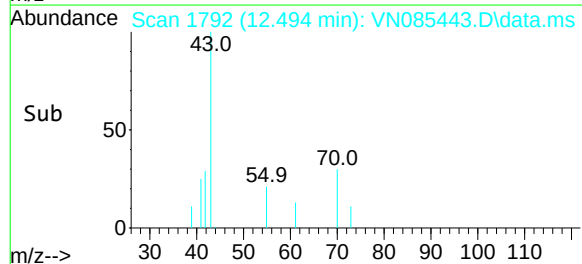
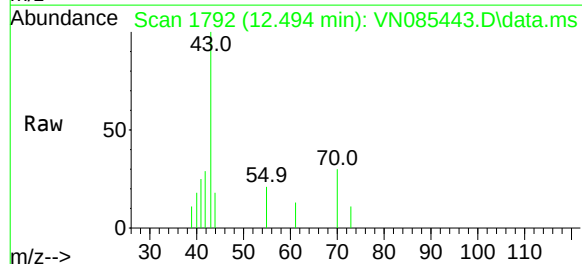
61 17.6 19.0 28.4#

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#75

1,1,2,2-Tetrachloroethane

Concen: 1.102 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

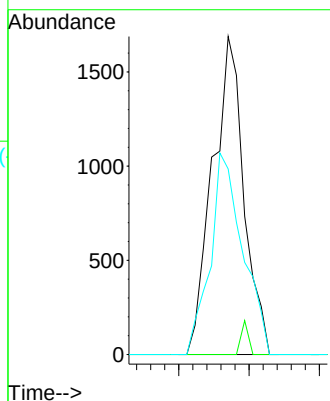
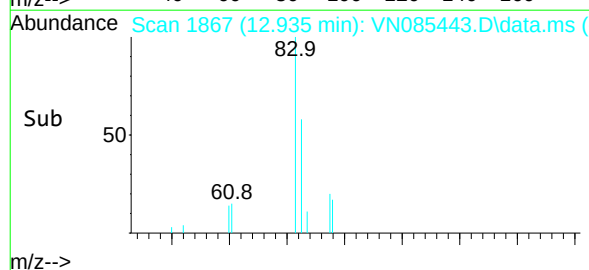
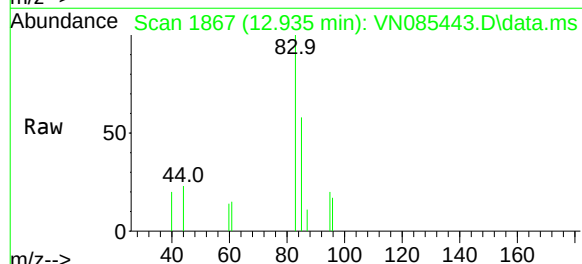
Tgt Ion: 83 Resp: 2616

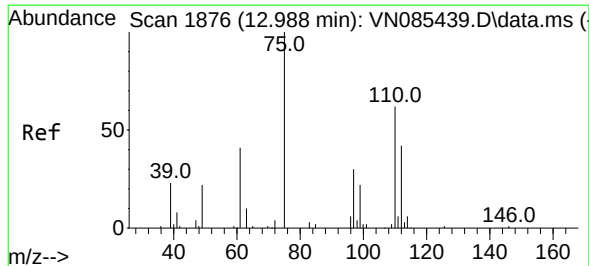
Ion Ratio Lower Upper

83 100

131 2.4 4.8 14.4#

85 65.7 32.2 96.6





#76

1,2,3-Trichloropropane

Concen: 1.088 ug/l m

RT: 12.982 min Scan# 1876

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 75 Resp: 2198

Ion Ratio Lower Upper

75 100

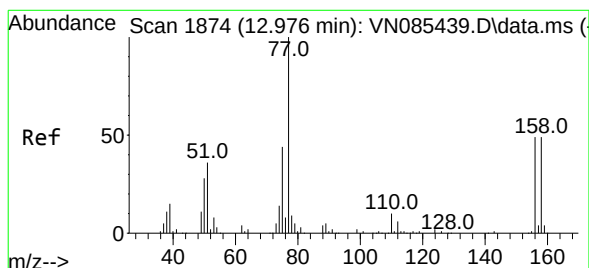
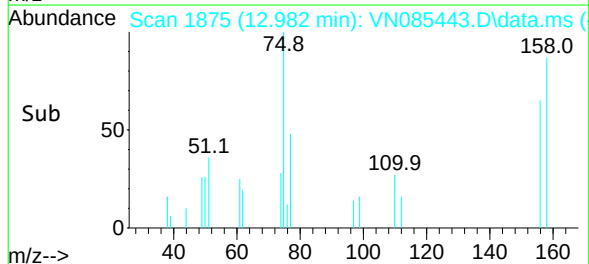
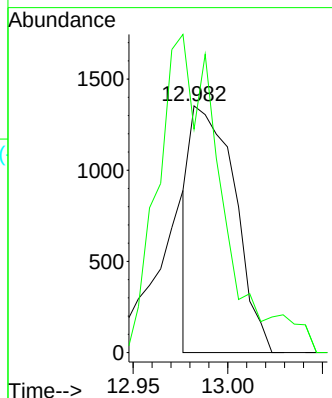
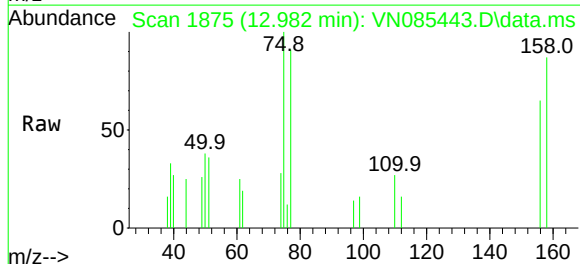
77 184.2 109.7 329.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#77

Bromobenzene

Concen: 0.987 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

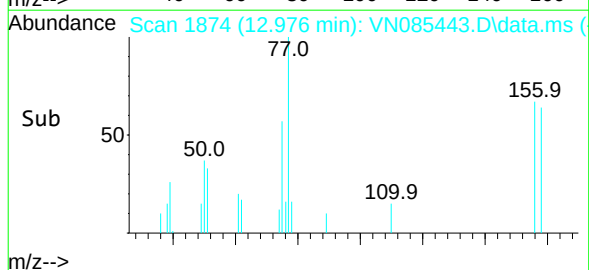
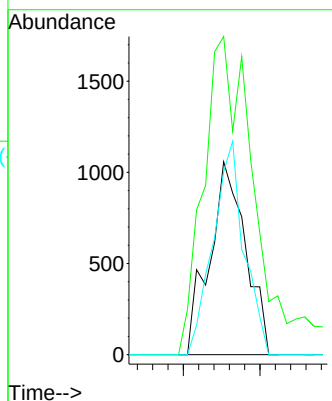
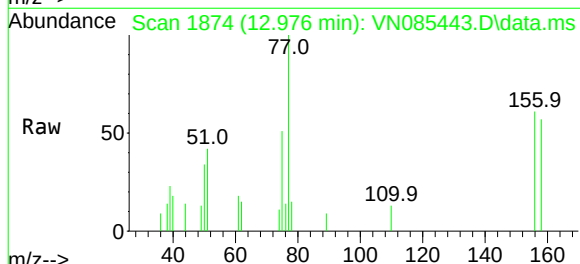
Tgt Ion:156 Resp: 1733

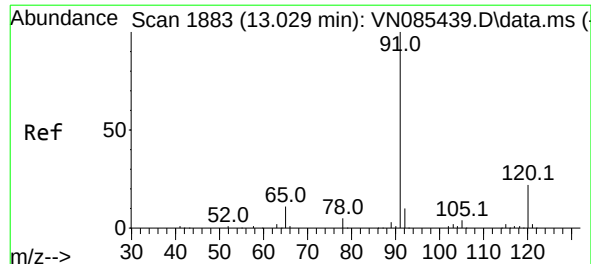
Ion Ratio Lower Upper

156 100

77 233.6 114.1 342.4

158 94.9 48.9 146.8





#78

n-propylbenzene

Concen: 0.808 ug/l

RT: 13.029 min Scan# 18

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 91 Resp: 6424

Ion Ratio Lower Upper

91 100

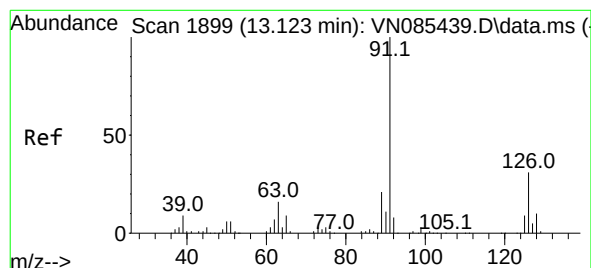
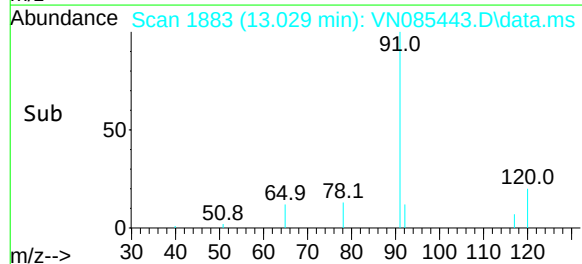
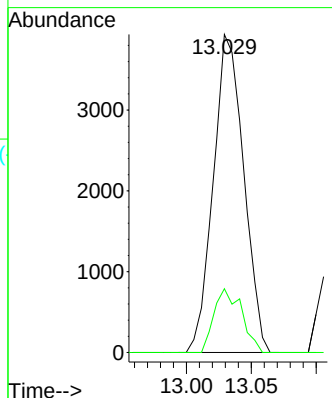
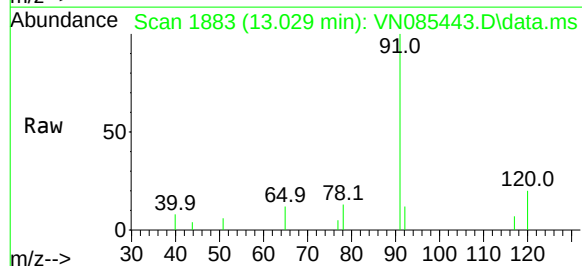
120 18.2 10.9 32.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#79

2-Chlorotoluene

Concen: 0.871 ug/l

RT: 13.117 min Scan# 1898

Delta R.T. -0.006 min

Lab File: VN085443.D

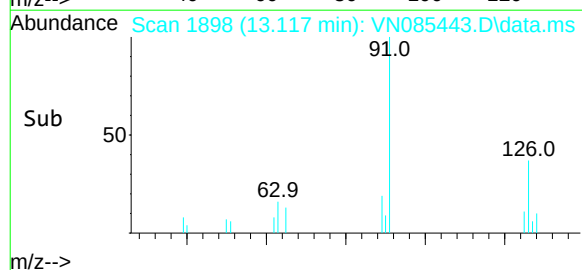
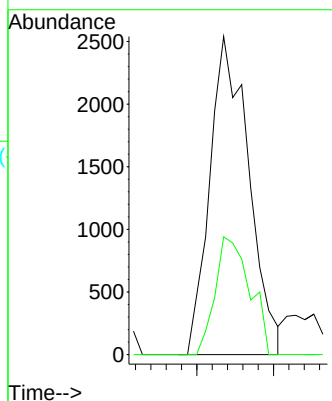
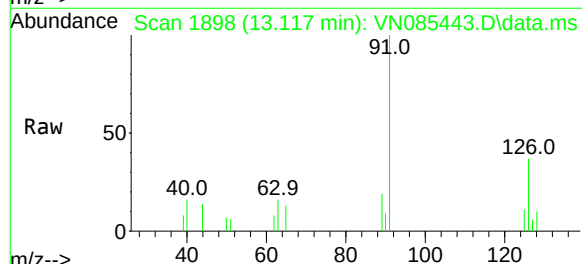
Acq: 14 Jan 2025 17:19

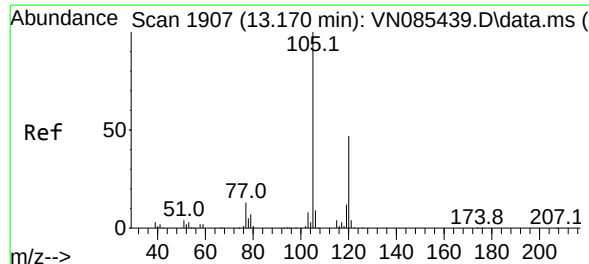
Tgt Ion: 91 Resp: 4483

Ion Ratio Lower Upper

91 100

126 32.9 15.7 47.1





#80

1,3,5-Trimethylbenzene

Concen: 0.775 ug/l

RT: 13.165 min Scan# 19

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion: 105 Resp: 4301

Ion Ratio Lower Upper

105 100

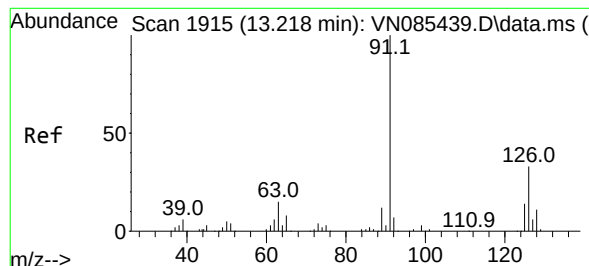
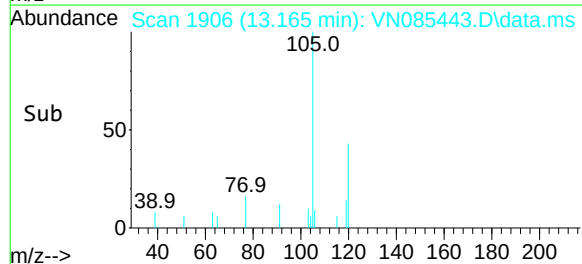
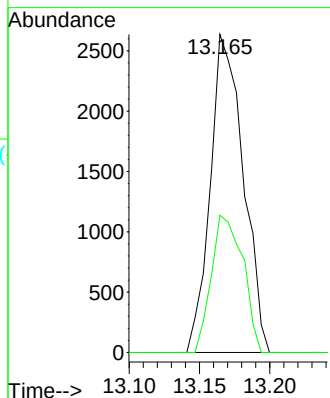
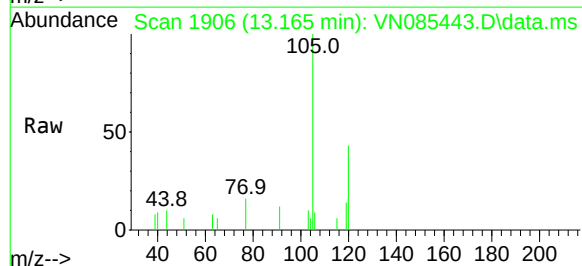
120 41.2 23.9 71.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#82

4-Chlorotoluene

Concen: 0.833 ug/l

RT: 13.223 min Scan# 1916

Delta R.T. 0.006 min

Lab File: VN085443.D

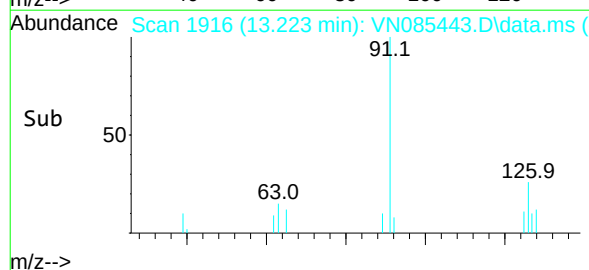
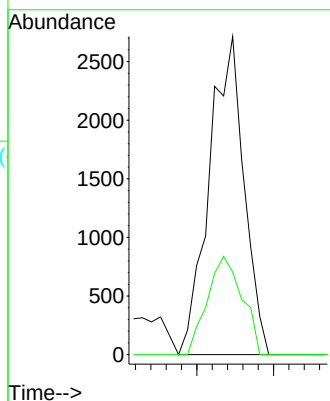
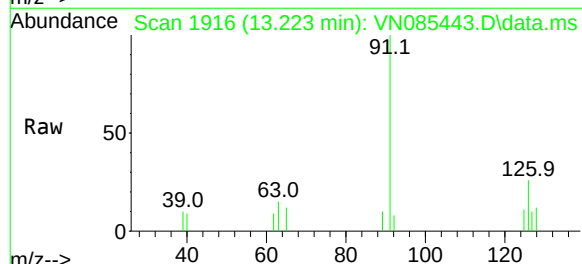
Acq: 14 Jan 2025 17:19

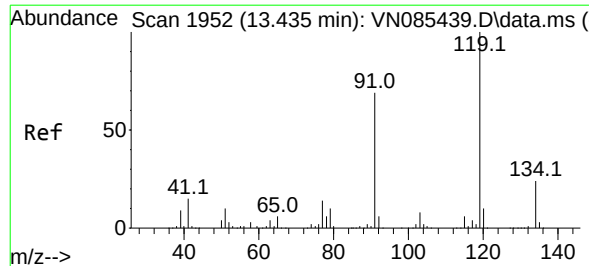
Tgt Ion: 91 Resp: 4268

Ion Ratio Lower Upper

91 100

126 31.0 15.9 47.7





#83

tert-Butylbenzene

Concen: 0.805 ug/l

RT: 13.435 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

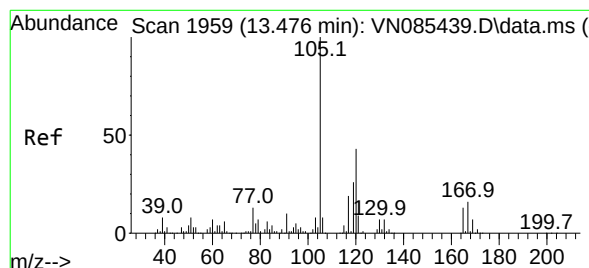
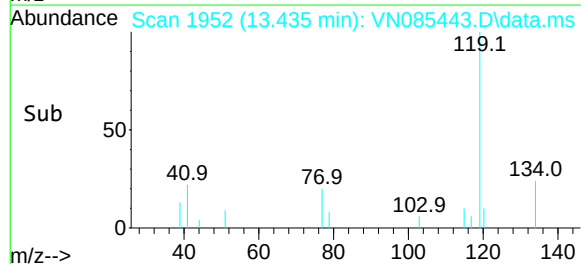
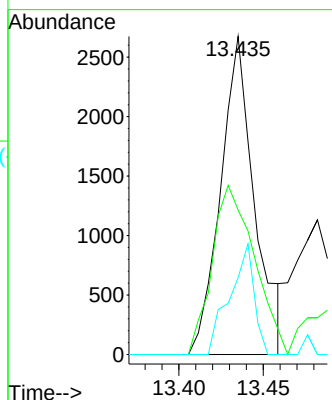
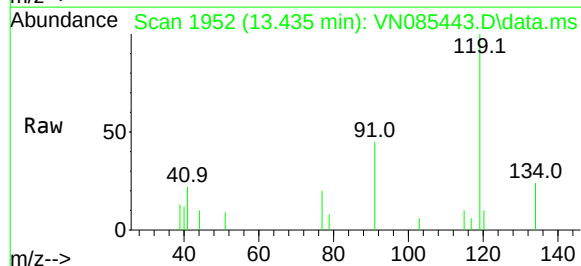
ClientSampleId :

VSTDICC001

Tgt	Ion	119	Resp:	3753
Ion	Ratio	Lower	Upper	
119	100			
91	65.9	35.1	105.3	
134	24.9	12.0	36.1	

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 0.679 ug/l

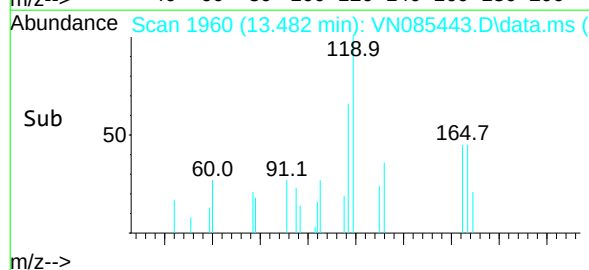
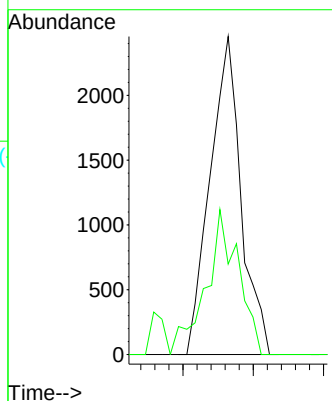
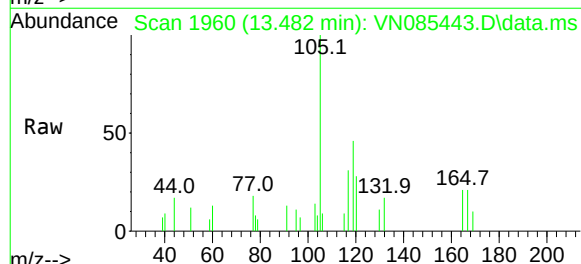
RT: 13.482 min Scan# 1960

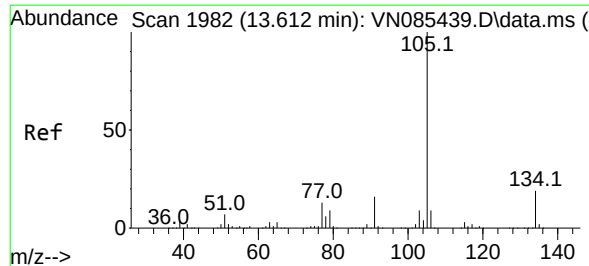
Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt	Ion	105	Resp:	3758
Ion	Ratio	Lower	Upper	
105	100			
120	47.7	21.6	65.0	





#85

sec-Butylbenzene

Concen: 0.714 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

VSTDIC001

Tgt Ion:105 Resp: 4614

Ion Ratio Lower Upper

105 100

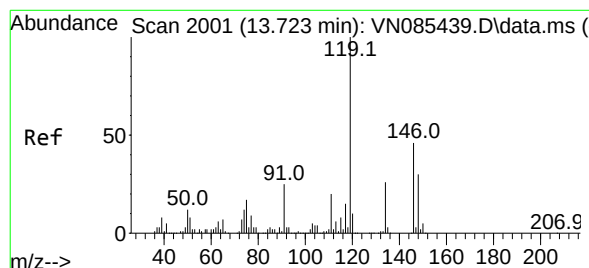
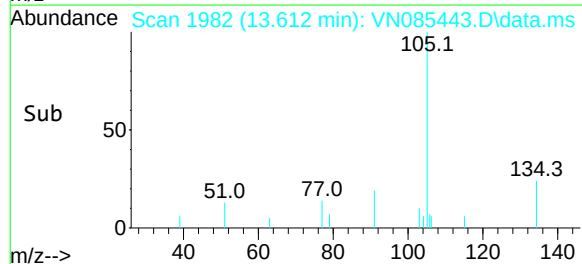
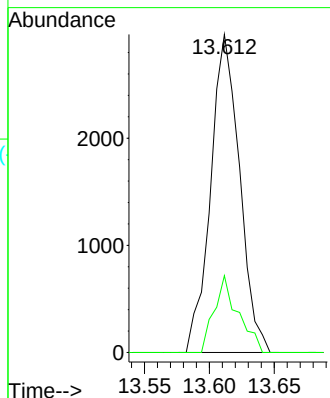
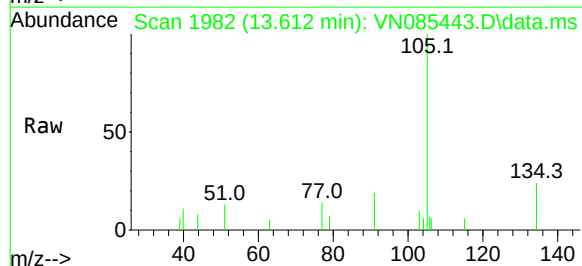
134 19.9 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 0.716 ug/l

RT: 13.723 min Scan# 2001

Delta R.T. 0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

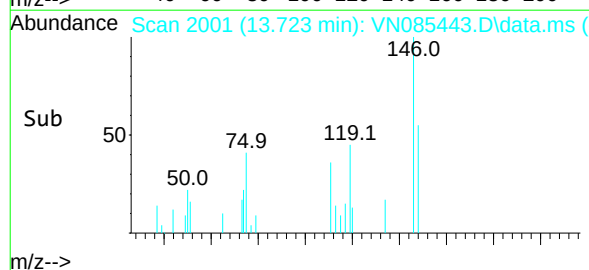
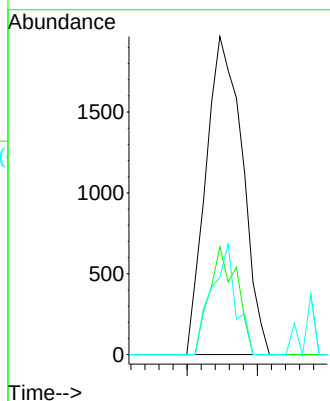
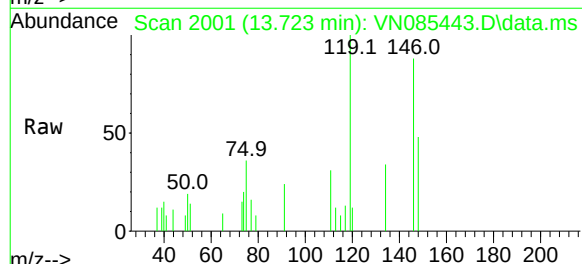
Tgt Ion:119 Resp: 3538

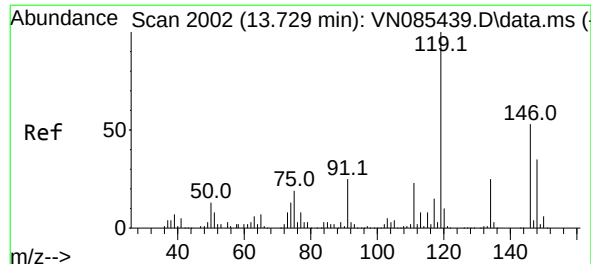
Ion Ratio Lower Upper

119 100

134 25.6 12.7 38.0

91 23.2 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 0.940 ug/l

RT: 13.723 min Scan# 20

Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

ClientSampleId :

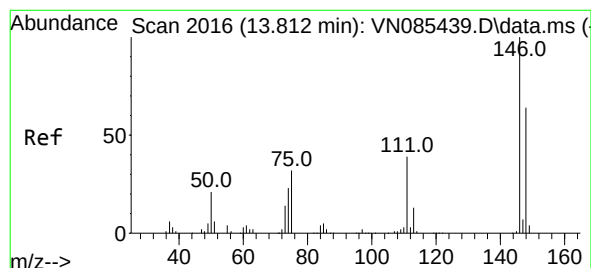
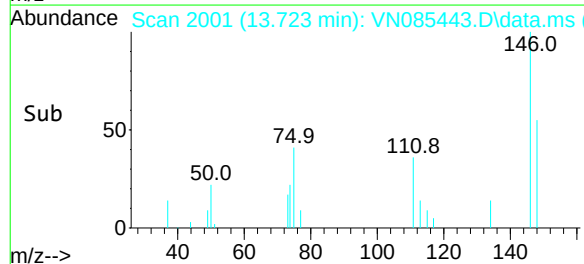
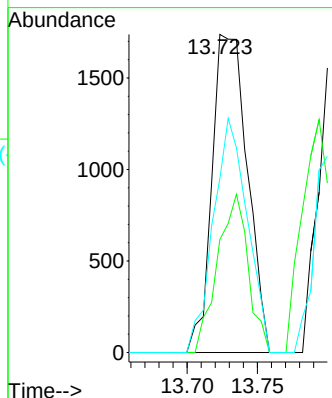
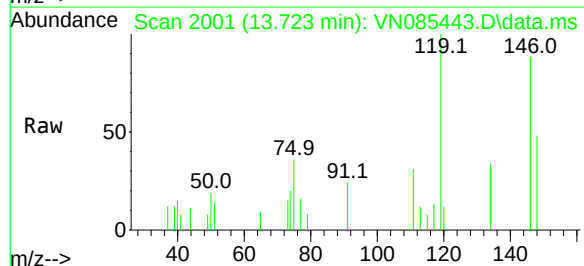
VSTDIC001

Tgt	Ion	146	Resp:	3038
Ion	Ratio	Lower	Upper	
146	100			
111	43.0	21.4	64.3	
148	70.9	32.3	96.9	

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#88

1,4-Dichlorobenzene

Concen: 1.050 ug/l m

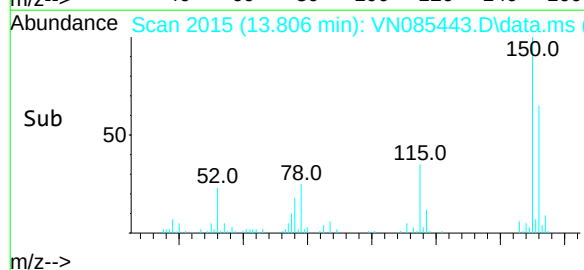
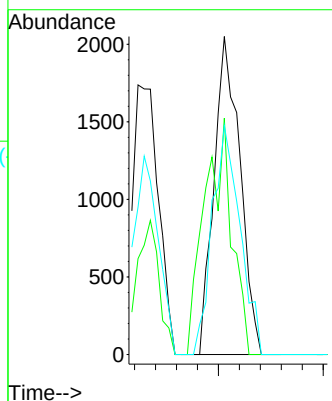
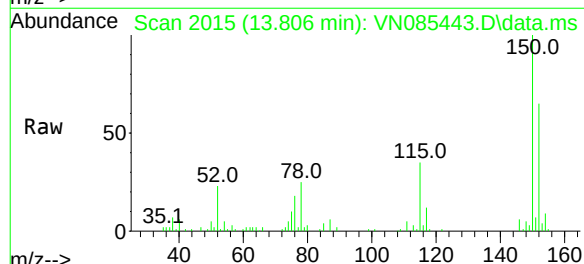
RT: 13.806 min Scan# 2015

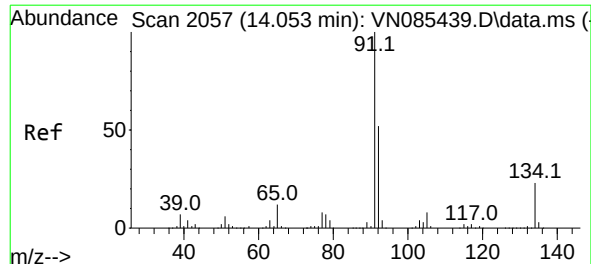
Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt	Ion	146	Resp:	3517
Ion	Ratio	Lower	Upper	
146	100			
111	37.2	21.3	63.7	
148	61.2	32.4	97.0	





#89

n-Butylbenzene

Concen: 0.761 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

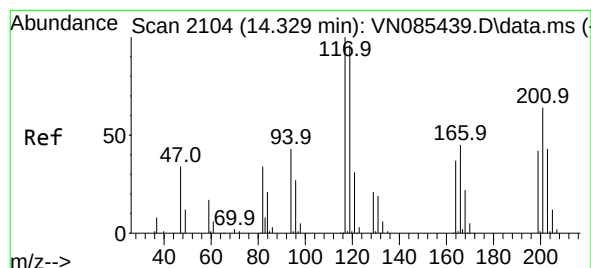
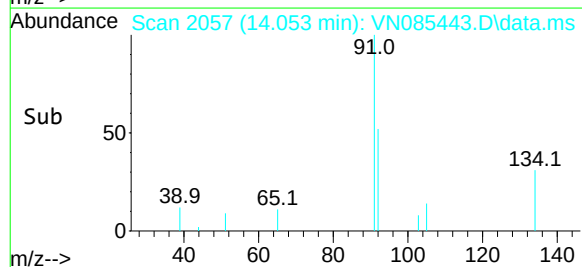
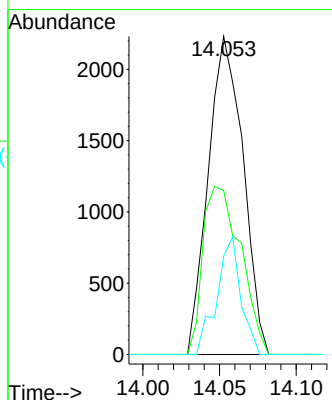
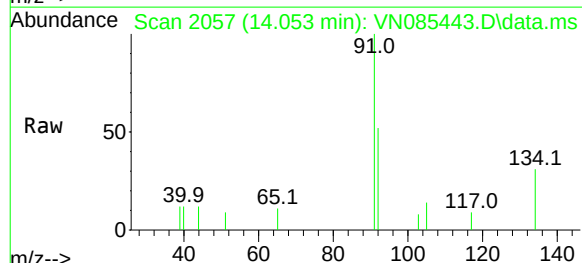
ClientSampleId :

VSTDIC001

Tgt Ion:	91	Resp:	3527
Ion Ratio	Lower	Upper	
91	100		
92	57.2	25.8	77.3
134	25.5	11.7	35.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#90

Hexachloroethane

Concen: 1.102 ug/l

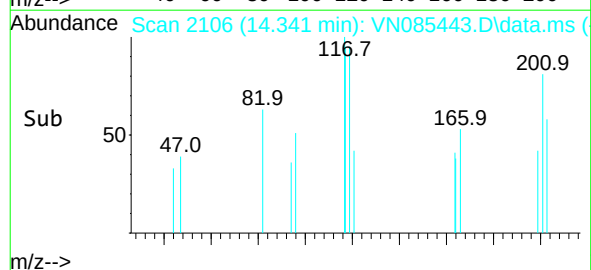
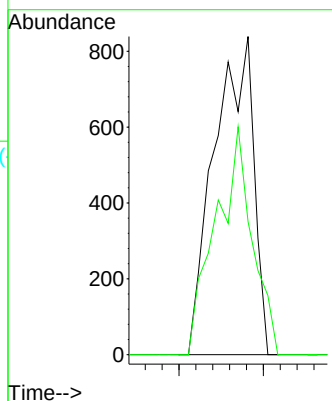
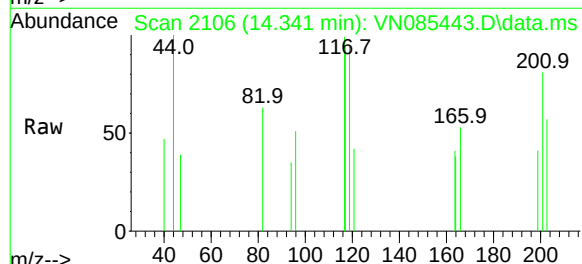
RT: 14.341 min Scan# 2106

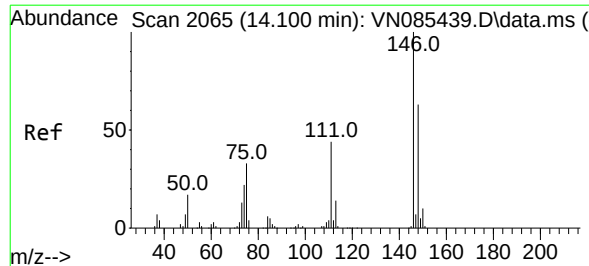
Delta R.T. 0.012 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:	117	Resp:	1355
Ion Ratio	Lower	Upper	
117	100		
201	66.5	33.7	101.0





#91

1,2-Dichlorobenzene

Concen: 1.090 ug/l

RT: 14.106 min Scan# 2065

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

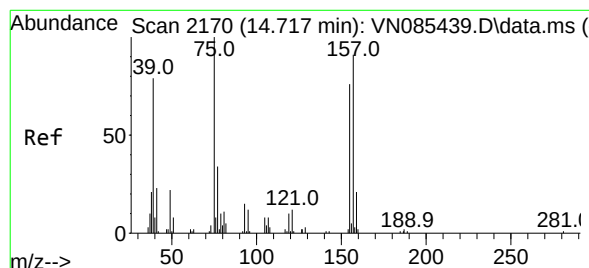
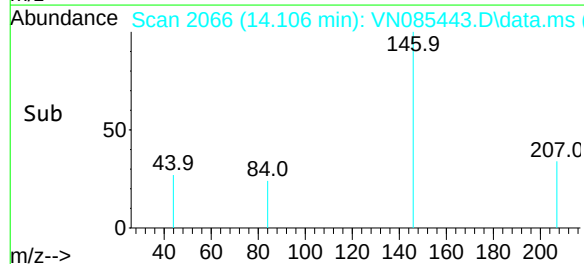
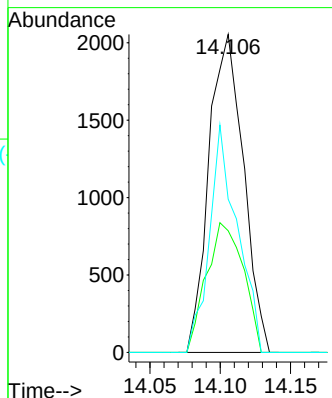
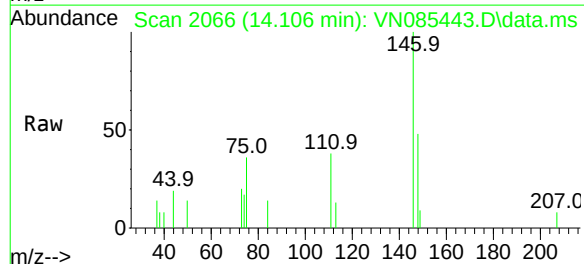
ClientSampleId :

VSTDIC001

Tgt Ion:	146	Resp:	3515
Ion	Ratio	Lower	Upper
146	100		
111	43.4	21.7	65.1
148	57.8	31.4	94.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.928 ug/l

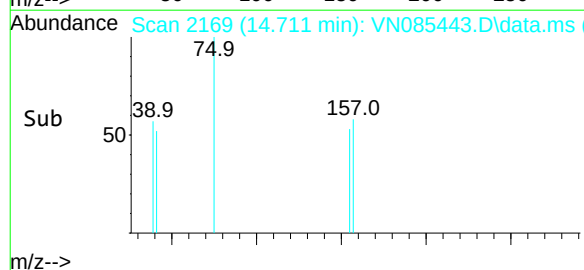
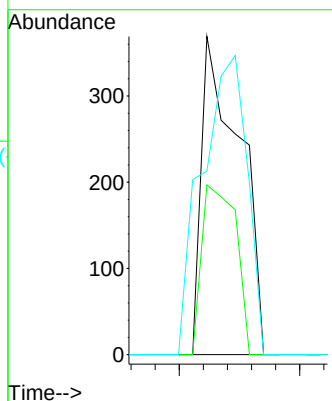
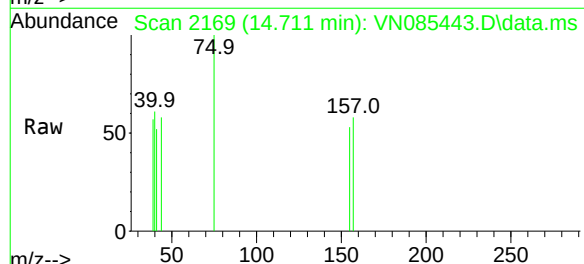
RT: 14.711 min Scan# 2169

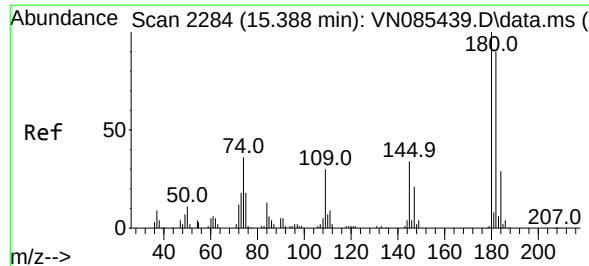
Delta R.T. -0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:	75	Resp:	402
Ion	Ratio	Lower	Upper
75	100		
155	48.0	36.4	109.2
157	112.7	45.4	136.1





#93

1,2,4-Trichlorobenzene

Concen: 0.874 ug/l

RT: 15.394 min Scan# 2284

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

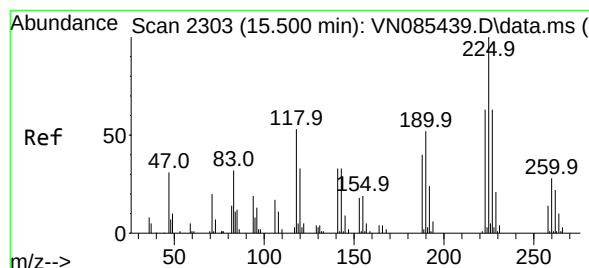
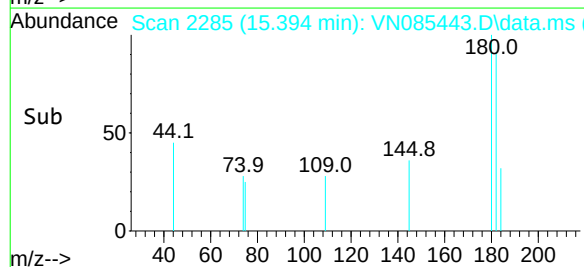
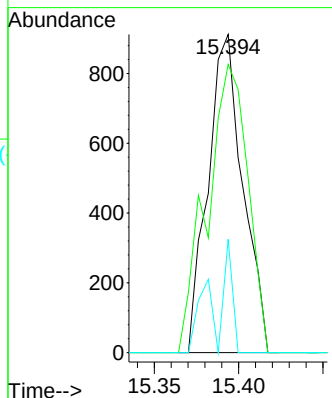
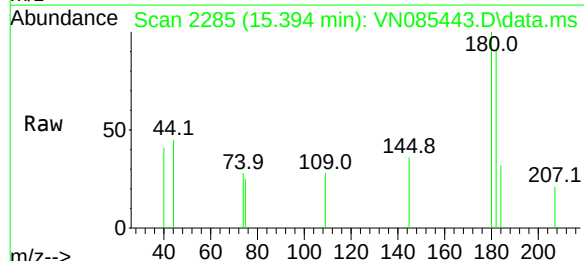
ClientSampleId :

VSTDIC001

Tgt Ion:	180	Resp:	1310
Ion Ratio	Lower	Upper	
180	100		
182	106.3	46.8	140.3
145	9.7	16.0	48.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

Concen: 1.033 ug/l

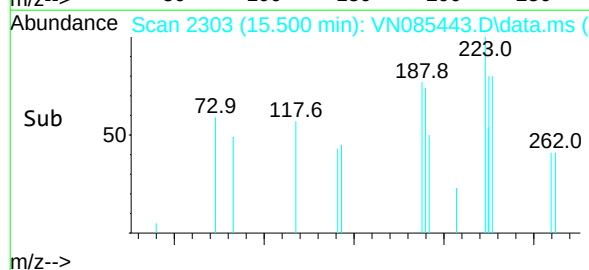
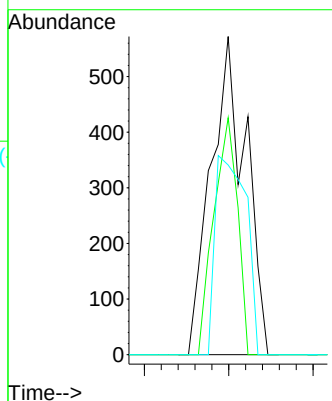
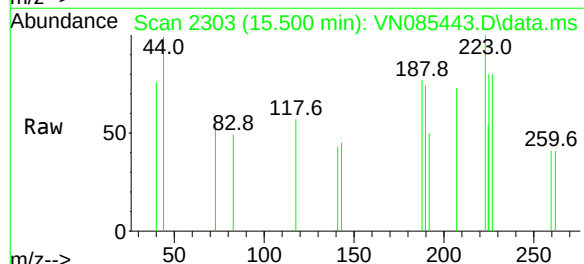
RT: 15.500 min Scan# 2303

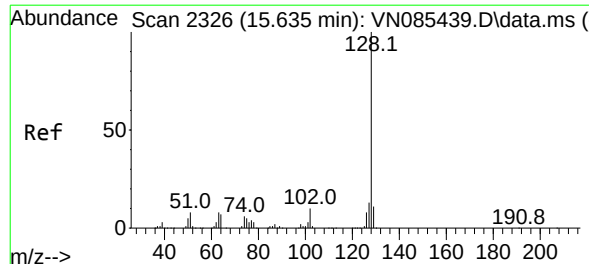
Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:	225	Resp:	822
Ion Ratio	Lower	Upper	
225	100		
223	50.7	30.7	92.1
227	55.7	30.9	92.5





#95

Naphthalene

Concen: 0.941 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Instrument :

MSVOA_N

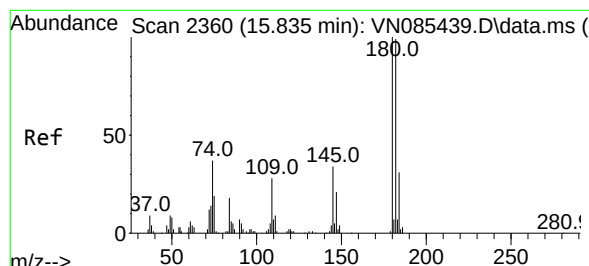
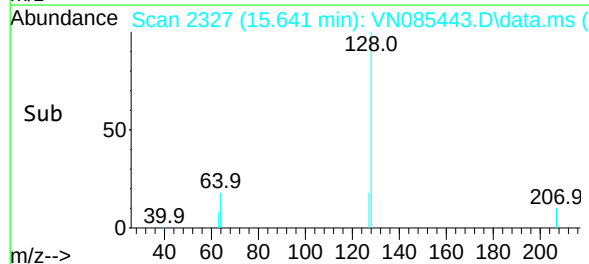
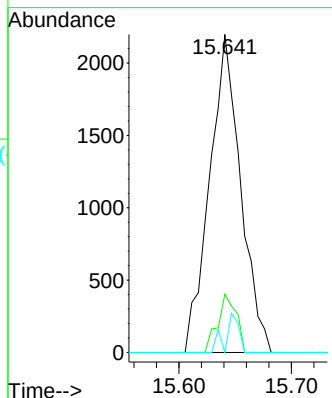
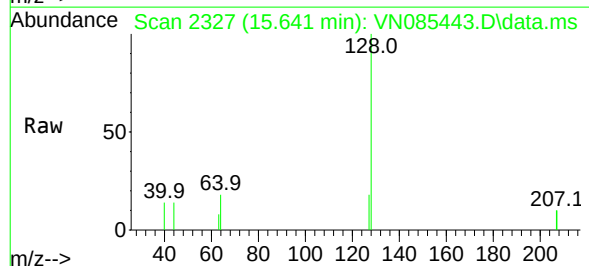
ClientSampleId :

VSTDIC001

Tgt Ion:	128	Resp:	4210
Ion	Ratio	Lower	Upper
128	100		
127	11.1	10.6	16.0
129	5.3	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 0.985 ug/l

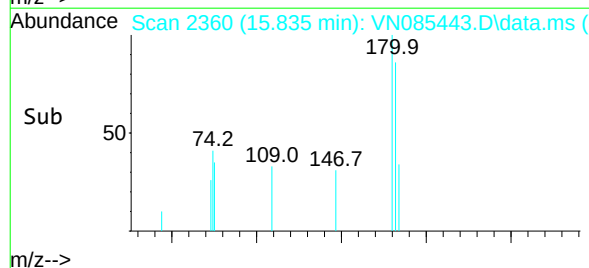
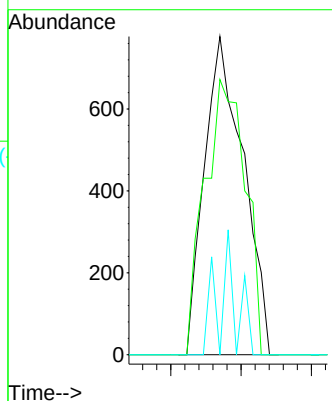
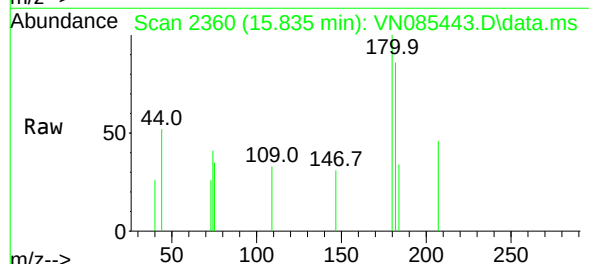
RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085443.D

Acq: 14 Jan 2025 17:19

Tgt Ion:	180	Resp:	1494
Ion	Ratio	Lower	Upper
180	100		
182	90.2	47.4	142.2
145	11.8	16.9	50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085445.D
 Acq On : 14 Jan 2025 18:06
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICSVN011425

Quant Time: Jan 15 02:20:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 01/15/2025
 Supervised By : Mahesh Dadoda 01/15/2025

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	219757	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	370487	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	320948	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	158525	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.571	65	176594	49.782	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	99.560%
35) Dibromofluoromethane	8.165	113	130487	50.768	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	101.540%
50) Toluene-d8	10.565	98	477630	52.302	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	104.600%
62) 4-Bromofluorobenzene	12.847	95	165249	52.899	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	105.800%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	130242	43.772	ug/l	100
3) Chloromethane	2.360	50	138152	42.883	ug/l	99
4) Vinyl Chloride	2.513	62	138316	42.715	ug/l	99
5) Bromomethane	2.954	94	80019	40.910	ug/l	91
6) Chloroethane	3.124	64	86837	42.299	ug/l	99
7) Trichlorofluoromethane	3.501	101	206526	43.956	ug/l	99
8) Diethyl Ether	3.959	74	69545	42.846	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	118310	44.706	ug/l	98
10) Methyl Iodide	4.595	142	140190	46.259	ug/l	98
11) Tert butyl alcohol	5.518	59	83933	206.633	ug/l	99
12) 1,1-Dichloroethene	4.342	96	106880	45.317	ug/l	98
13) Acrolein	4.177	56	135720	244.765	ug/l	99
14) Allyl chloride	5.024	41	170308	44.501	ug/l	99
15) Acrylonitrile	5.712	53	294062	227.920	ug/l	99
16) Acetone	4.418	43	245248	213.971	ug/l	98
17) Carbon Disulfide	4.712	76	300215	41.342	ug/l	100
18) Methyl Acetate	5.018	43	156938	45.028	ug/l	100
19) Methyl tert-butyl Ether	5.795	73	365819	47.768	ug/l	100
20) Methylene Chloride	5.271	84	122059	43.017	ug/l	98
21) trans-1,2-Dichloroethene	5.783	96	112597	44.672	ug/l	93
22) Diisopropyl ether	6.665	45	399206	46.996	ug/l	99
23) Vinyl Acetate	6.601	43	1471068	247.459	ug/l	100
24) 1,1-Dichloroethane	6.571	63	228489	44.114	ug/l	98
25) 2-Butanone	7.477	43	386125	228.924	ug/l	100
26) 2,2-Dichloropropane	7.489	77	199303	47.593	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	134920	45.446	ug/l	98
28) Bromochloromethane	7.812	49	106323	44.122	ug/l	100
29) Tetrahydrofuran	7.836	42	255650	239.065	ug/l	99
30) Chloroform	7.965	83	235923	44.071	ug/l	98
31) Cyclohexane	8.253	56	193034	42.878	ug/l	93
32) 1,1,1-Trichloroethane	8.165	97	208172	44.332	ug/l	99
36) 1,1-Dichloropropene	8.365	75	161834	44.863	ug/l	98
37) Ethyl Acetate	7.559	43	160656	44.123	ug/l	97
38) Carbon Tetrachloride	8.359	117	183592	44.456	ug/l	99
39) Methylcyclohexane	9.600	83	168431	49.687	ug/l	98
40) Benzene	8.600	78	494871	45.657	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
 Data File : VN085445.D
 Acq On : 14 Jan 2025 18:06
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN011425

Quant Time: Jan 15 02:20:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John Carlone 01/15/2025
 Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	89326	47.155	ug/l	99
42) 1,2-Dichloroethane	8.665	62	185663	45.481	ug/l	100
43) Isopropyl Acetate	8.683	43	265107	45.440	ug/l	99
44) Trichloroethene	9.347	130	110058	43.622	ug/l	96
45) 1,2-Dichloropropane	9.618	63	123876	44.744	ug/l	97
46) Dibromomethane	9.700	93	88325	44.214	ug/l	98
47) Bromodichloromethane	9.889	83	185808	45.655	ug/l	99
48) Methyl methacrylate	9.677	41	131142	49.948	ug/l	97
49) 1,4-Dioxane	9.689	88	35051	792.760	ug/l	98
51) 4-Methyl-2-Pentanone	10.441	43	832426	245.877	ug/l	99
52) Toluene	10.630	92	301911	48.073	ug/l	99
53) t-1,3-Dichloropropene	10.830	75	183680	47.757	ug/l	94
54) cis-1,3-Dichloropropene	10.312	75	196307	47.783	ug/l	98
55) 1,1,2-Trichloroethane	11.012	97	114757	46.173	ug/l	97
56) Ethyl methacrylate	10.871	69	182170	43.762	ug/l	98
57) 1,3-Dichloropropane	11.159	76	202583	46.877	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	403949	256.116	ug/l	99
59) 2-Hexanone	11.194	43	598433	251.213	ug/l	100
60) Dibromochloromethane	11.353	129	137831	45.935	ug/l	99
61) 1,2-Dibromoethane	11.465	107	110926	44.837	ug/l	100
64) Tetrachloroethene	11.100	164	98211	44.886	ug/l	96
65) Chlorobenzene	11.888	112	322723	45.901	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	115379	44.712	ug/l	99
67) Ethyl Benzene	11.959	91	577059	50.391	ug/l	97
68) m/p-Xylenes	12.071	106	437367	103.341	ug/l	100
69) o-Xylene	12.394	106	210698	52.093	ug/l	99
70) Styrene	12.406	104	355459	53.103	ug/l	100
71) Bromoform	12.577	173	90693	49.119	ug/l #	100
73) Isopropylbenzene	12.694	105	534428	49.951	ug/l	99
74) N-ethyl acetate	12.488	43	234342	48.730	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.935	83	164882	43.627	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	134976m	41.891	ug/l	
77) Bromobenzene	12.977	156	128968	46.138	ug/l	97
78) n-propylbenzene	13.029	91	645977	51.001	ug/l	100
79) 2-Chlorotoluene	13.124	91	392404	47.870	ug/l	99
80) 1,3,5-Trimethylbenzene	13.171	105	456048	51.604	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	58623m	49.226	ug/l	
82) 4-Chlorotoluene	13.218	91	398110	48.776	ug/l	100
83) tert-Butylbenzene	13.435	119	378478	50.997	ug/l	98
84) 1,2,4-Trimethylbenzene	13.477	105	457340	51.922	ug/l	100
85) sec-Butylbenzene	13.612	105	532578	51.777	ug/l	100
86) p-Isopropyltoluene	13.729	119	440284	47.795	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	236387	45.920	ug/l	99
88) 1,4-Dichlorobenzene	13.806	146	235319	44.102	ug/l	99
89) n-Butylbenzene	14.053	91	373227	50.578	ug/l	99
90) Hexachloroethane	14.329	117	88538	45.215	ug/l	100
91) 1,2-Dichlorobenzene	14.100	146	231646	45.113	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.718	75	31899	46.221	ug/l	97
93) 1,2,4-Trichlorobenzene	15.388	180	109157	45.739	ug/l	98
94) Hexachlorobutadiene	15.500	225	53358	42.112	ug/l	99
95) Naphthalene	15.641	128	335535	47.116	ug/l	100
96) 1,2,3-Trichlorobenzene	15.835	180	107583	44.551	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

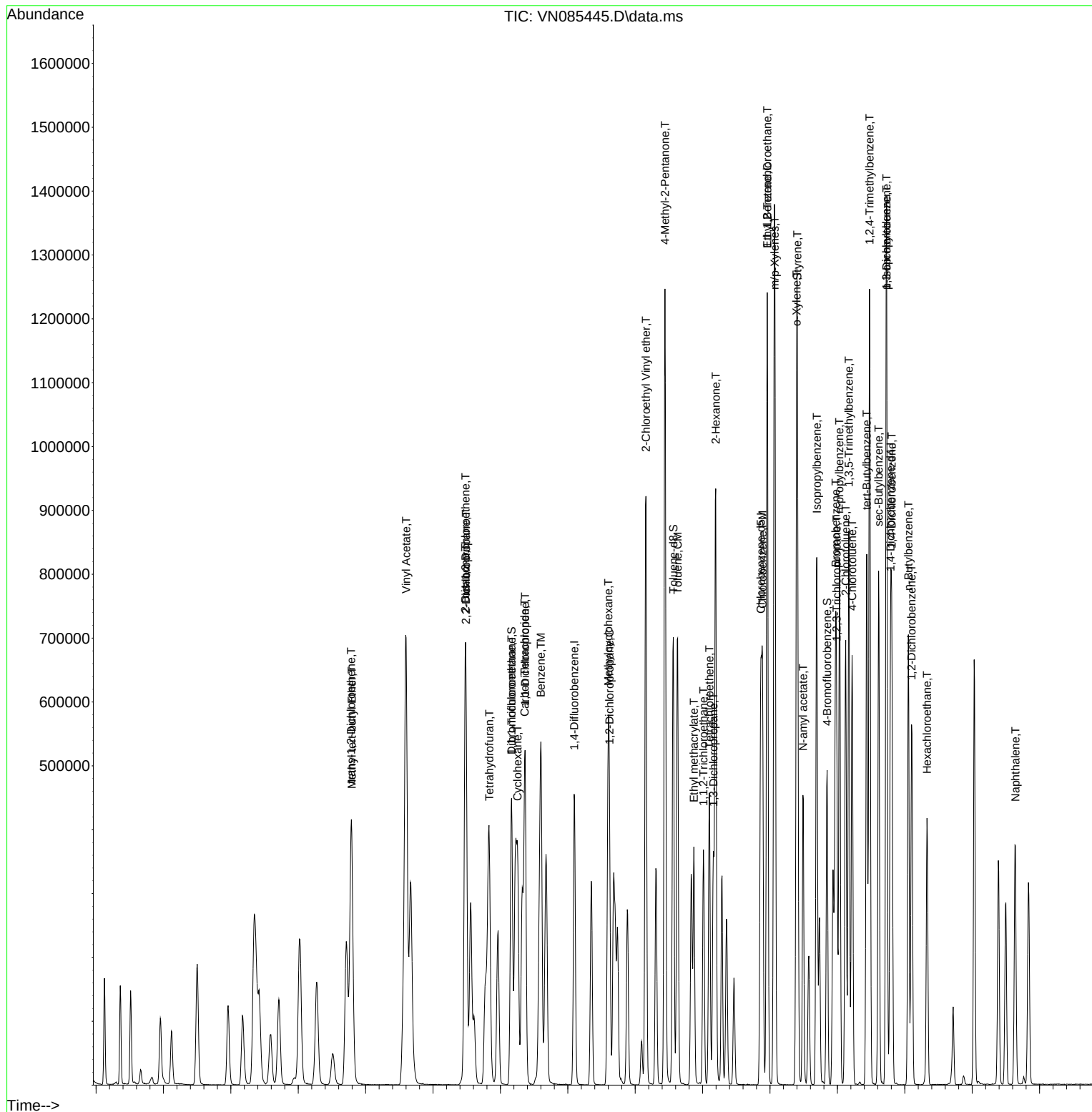
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\  
Data File : VN085445.D  
Acq On    : 14 Jan 2025   18:06  
Operator  : JC\MD  
Sample    : VSTDICV050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 12   Sample Multiplier: 1
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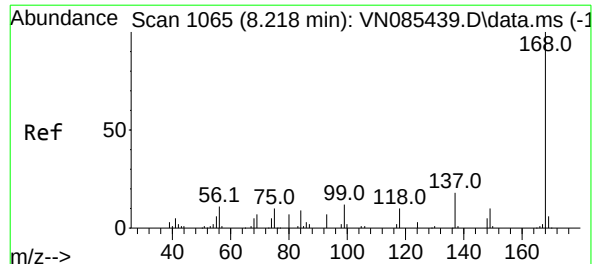
Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Manual Integrations

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration





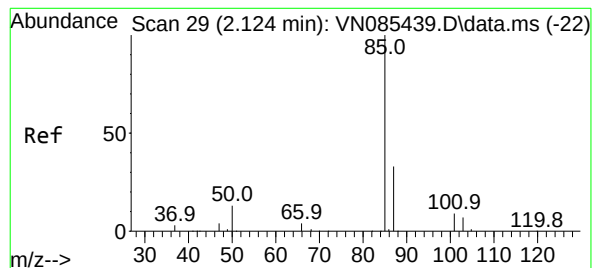
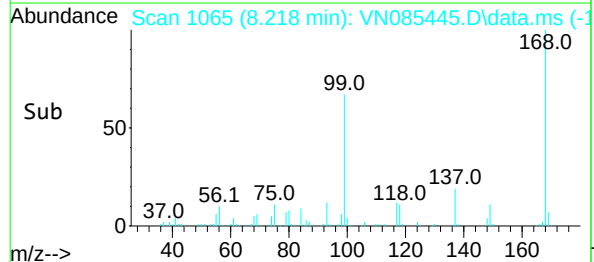
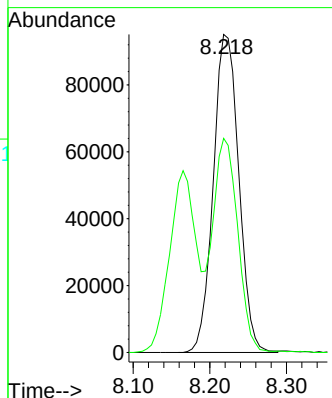
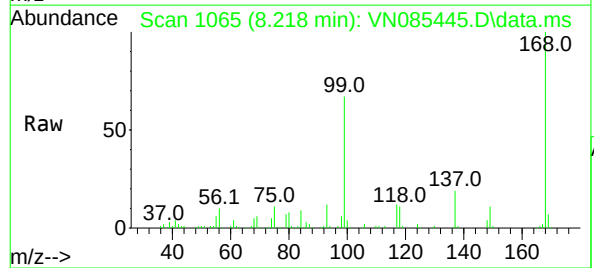
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 1065
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion:168 Resp: 219757
Ion Ratio Lower Upper
168 100
99 66.9 53.6 80.4

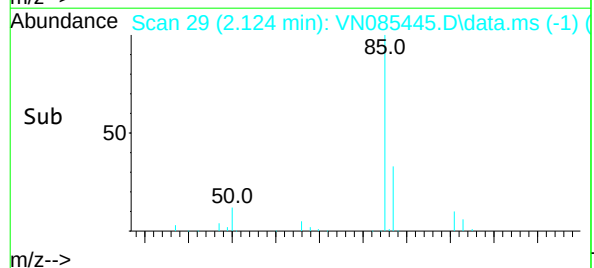
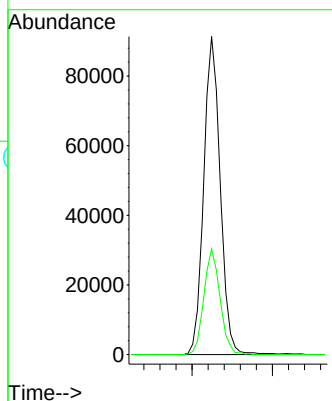
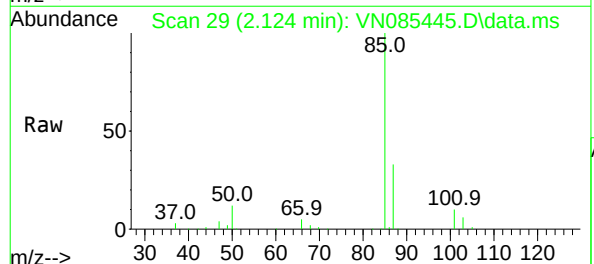
Manual Integrations
APPROVED

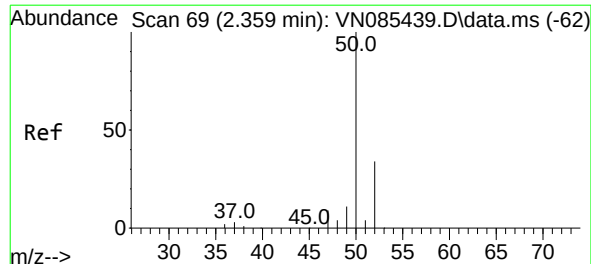
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#2
Dichlorodifluoromethane
Concen: 43.772 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 85 Resp: 130242
Ion Ratio Lower Upper
85 100
87 33.2 16.7 50.1





#3

Chloromethane

Concen: 42.883 ug/l

RT: 2.360 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 50 Resp: 138152

Ion Ratio Lower Upper

50 100

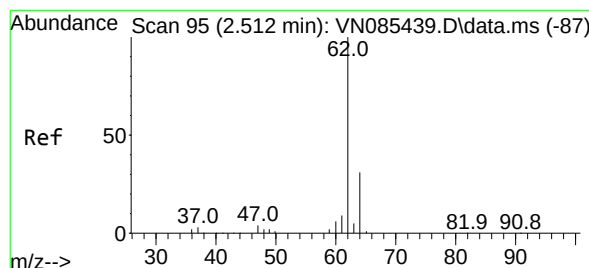
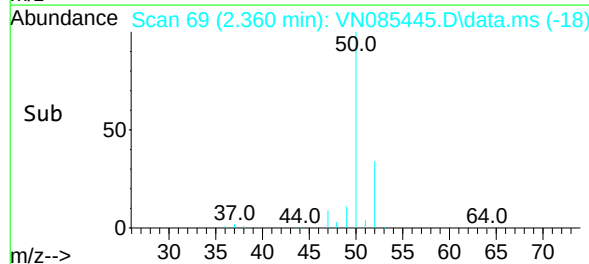
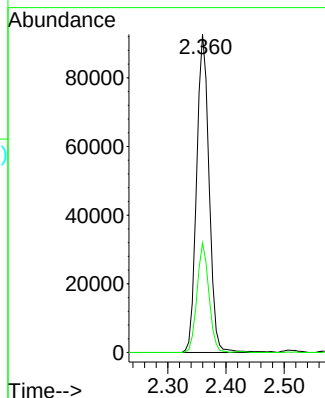
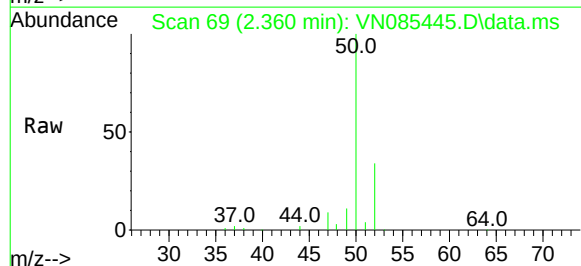
52 34.4 27.0 40.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#4

Vinyl Chloride

Concen: 42.715 ug/l

RT: 2.513 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085445.D

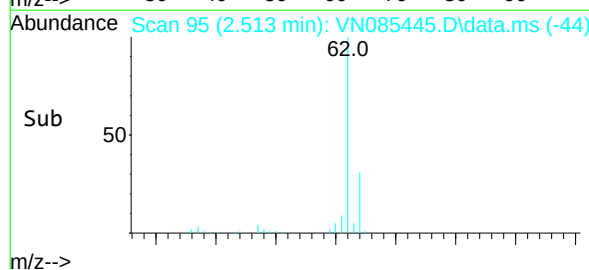
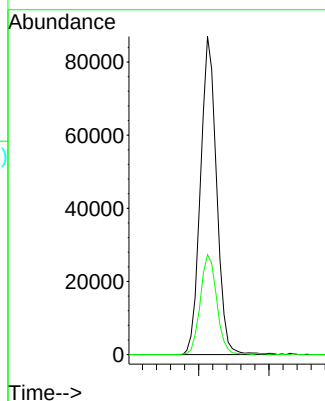
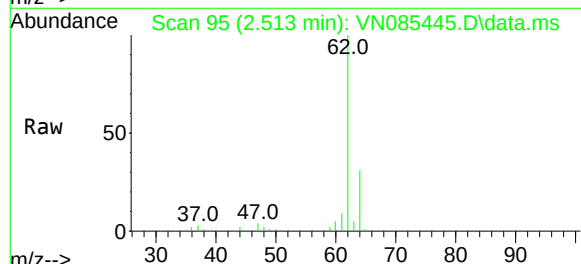
Acq: 14 Jan 2025 18:06

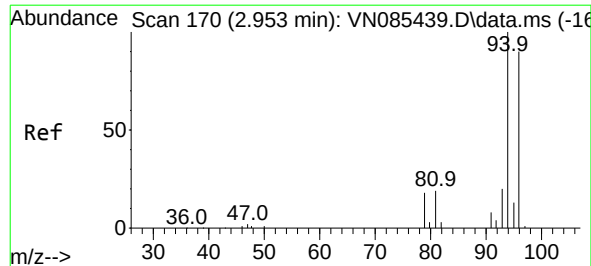
Tgt Ion: 62 Resp: 138316

Ion Ratio Lower Upper

62 100

64 31.4 24.8 37.2





#5

Bromomethane

Concen: 40.910 ug/l

RT: 2.954 min Scan# 170

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 94 Resp: 80019

Ion Ratio Lower Upper

94 100

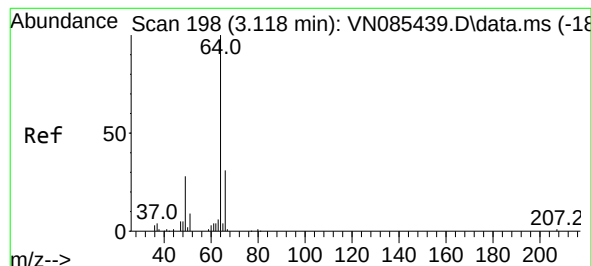
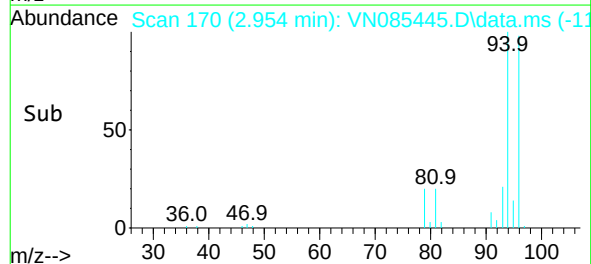
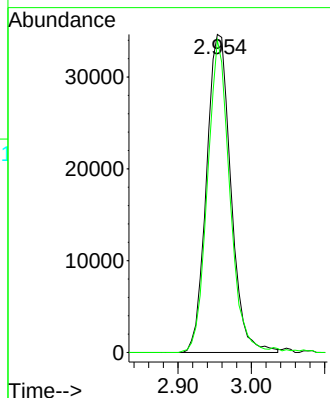
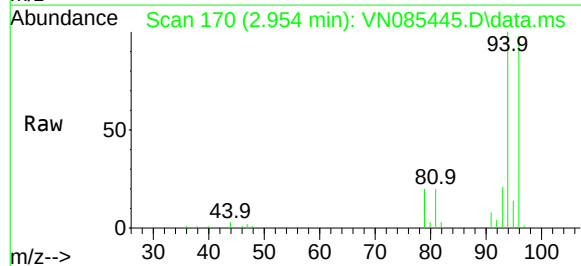
96 98.2 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#6

Chloroethane

Concen: 42.299 ug/l

RT: 3.124 min Scan# 199

Delta R.T. 0.006 min

Lab File: VN085445.D

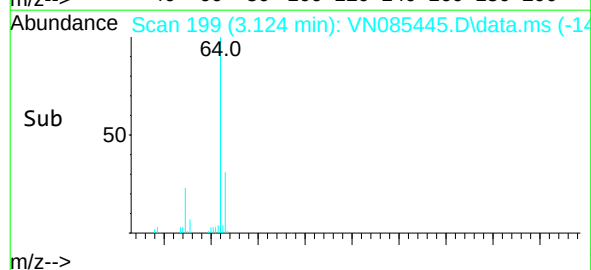
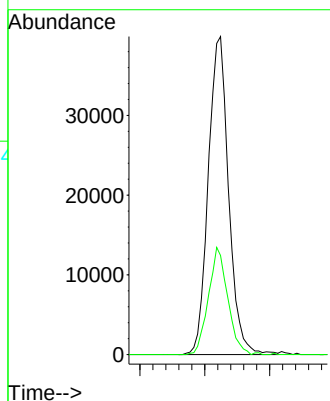
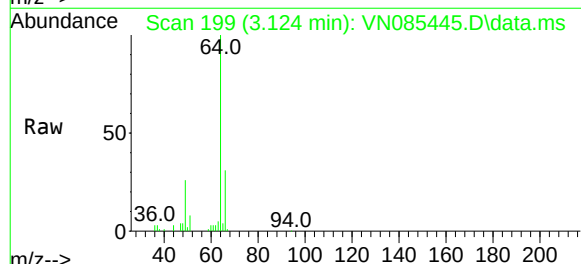
Acq: 14 Jan 2025 18:06

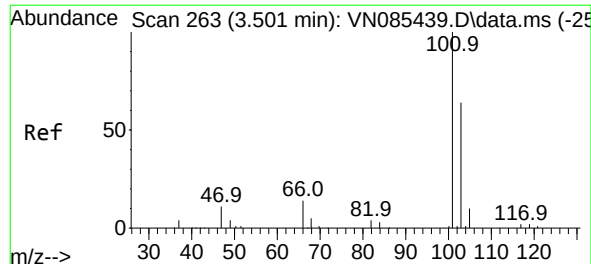
Tgt Ion: 64 Resp: 86837

Ion Ratio Lower Upper

64 100

66 31.1 24.6 36.8





#7

Trichlorofluoromethane

Concen: 43.956 ug/l

RT: 3.501 min Scan# 26

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVNVN011425

Tgt Ion:101 Resp: 206526

Ion Ratio Lower Upper

101 100

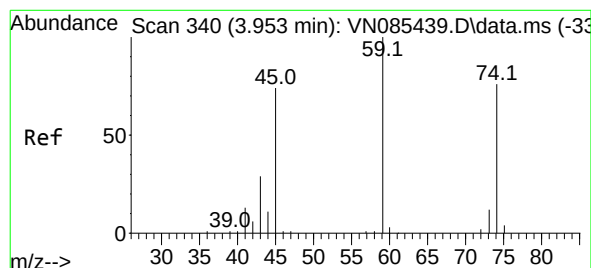
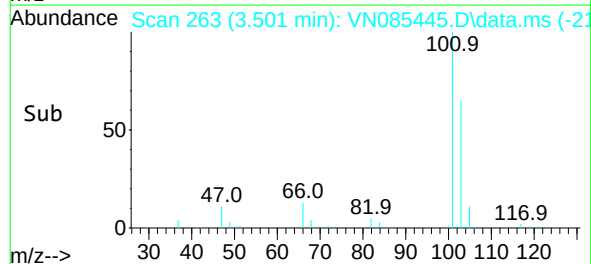
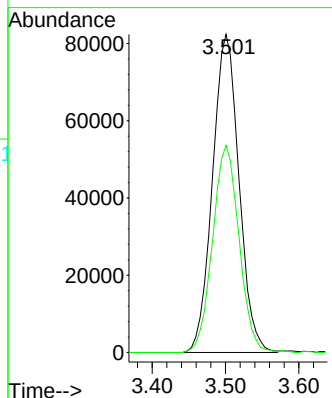
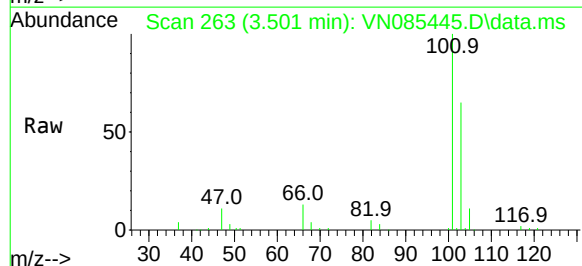
103 65.1 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#8

Diethyl Ether

Concen: 42.846 ug/l

RT: 3.959 min Scan# 341

Delta R.T. 0.006 min

Lab File: VN085445.D

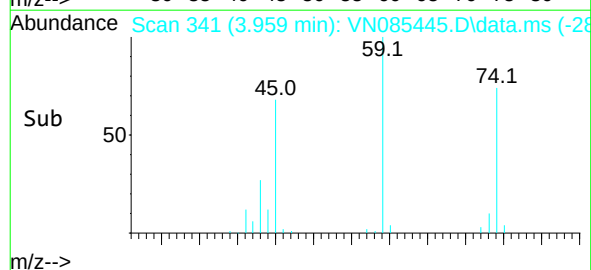
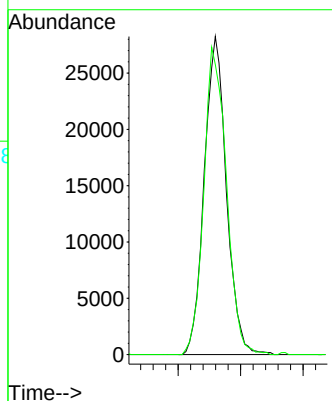
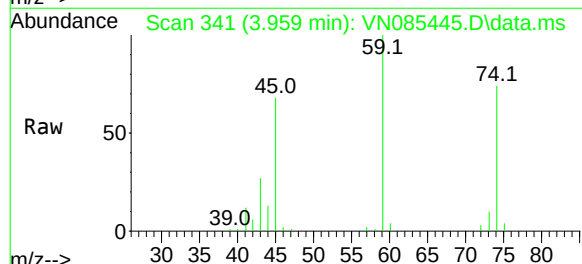
Acq: 14 Jan 2025 18:06

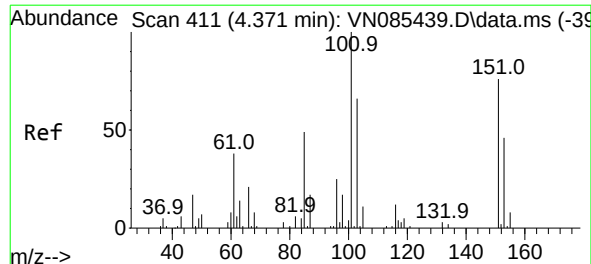
Tgt Ion: 74 Resp: 69545

Ion Ratio Lower Upper

74 100

45 99.0 49.7 149.1





#9

1,1,2-Trichlorotrifluoroethane

Concen: 44.706 ug/l

RT: 4.371 min Scan# 411

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVNV011425

Tgt Ion:101 Resp: 118310

Ion Ratio Lower Upper

101 100

85 45.9 37.8 56.8

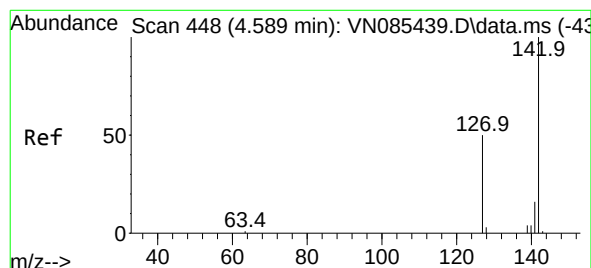
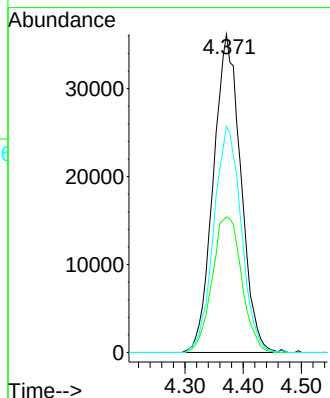
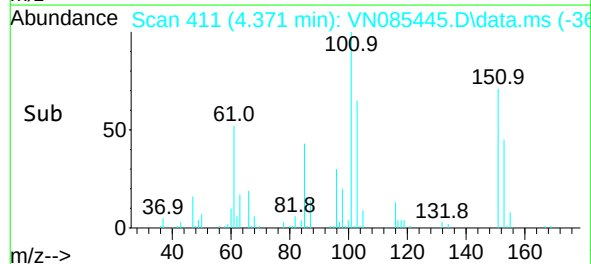
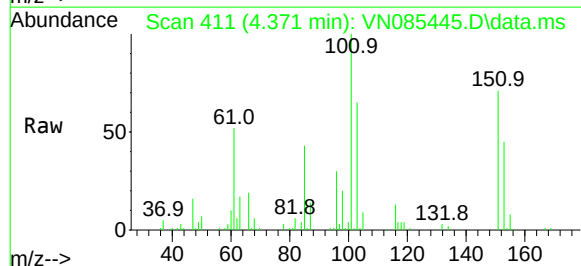
151 71.5 58.8 88.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#10

Methyl Iodide

Concen: 46.259 ug/l

RT: 4.595 min Scan# 449

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

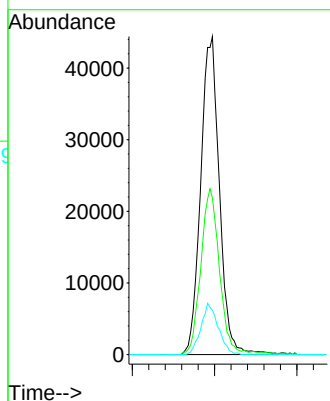
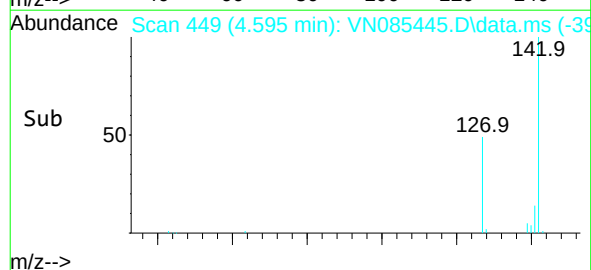
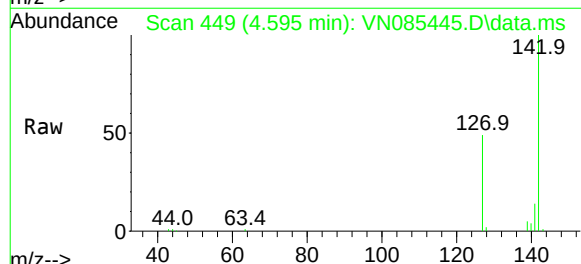
Tgt Ion:142 Resp: 140190

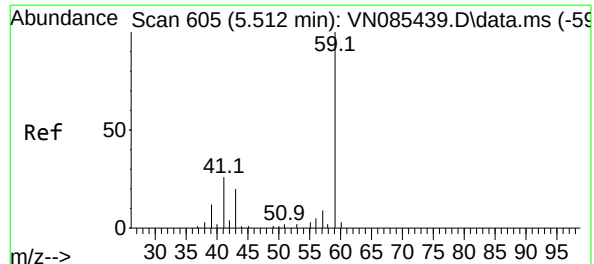
Ion Ratio Lower Upper

142 100

127 49.2 40.3 60.5

141 13.9 12.8 19.2





#11

Tert butyl alcohol

Concen: 206.633 ug/l

RT: 5.518 min Scan# 60

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 59 Resp: 83933

Ion Ratio Lower Upper

59 100

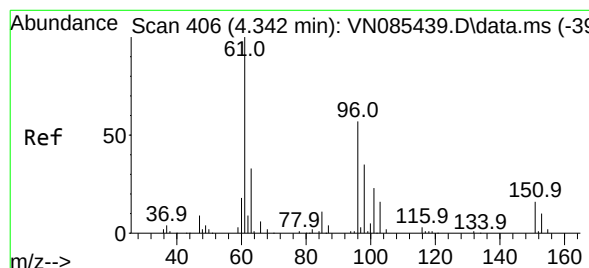
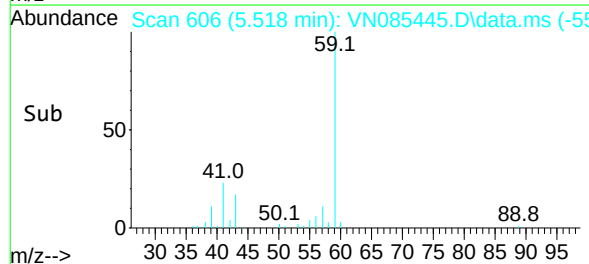
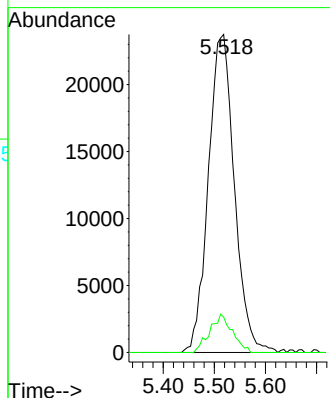
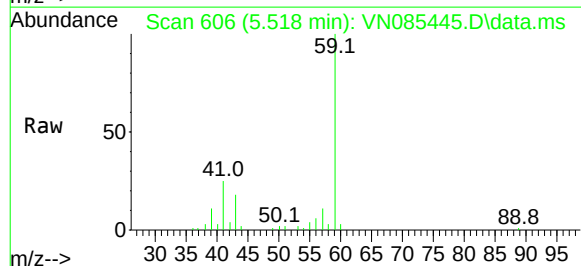
57 10.4 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#12

1,1-Dichloroethene

Concen: 45.317 ug/l

RT: 4.342 min Scan# 406

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

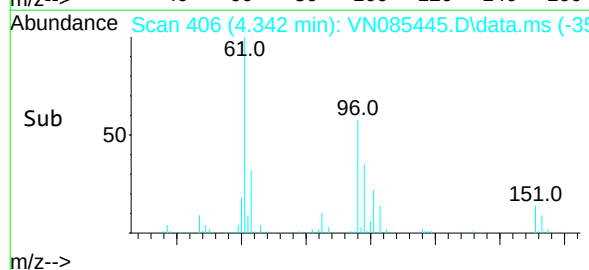
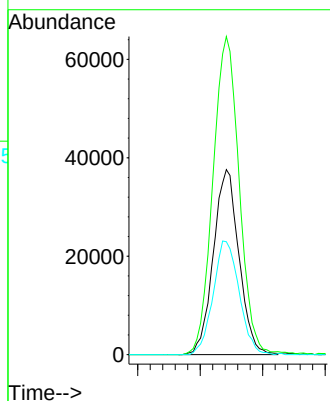
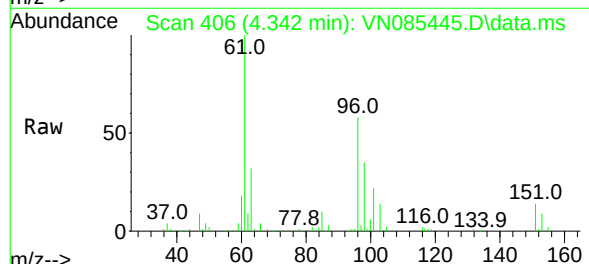
Tgt Ion: 96 Resp: 106880

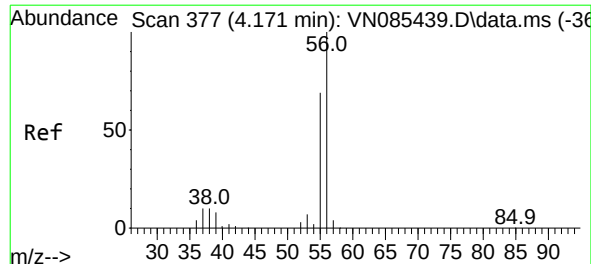
Ion Ratio Lower Upper

96 100

61 171.9 141.0 211.4

98 61.0 49.0 73.6





#13

Acrolein

Concen: 244.765 ug/l

RT: 4.177 min Scan# 377

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 56 Resp: 135720

Ion Ratio Lower Upper

56 100

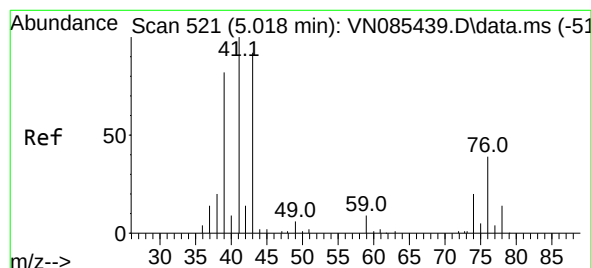
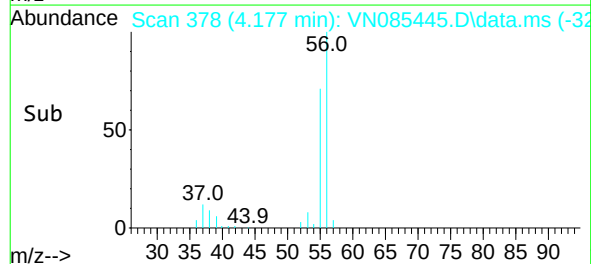
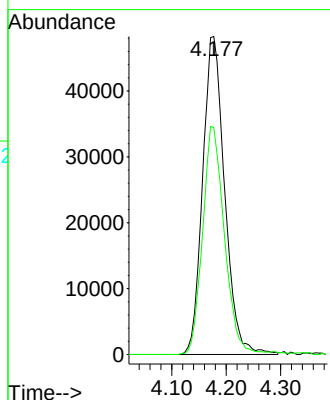
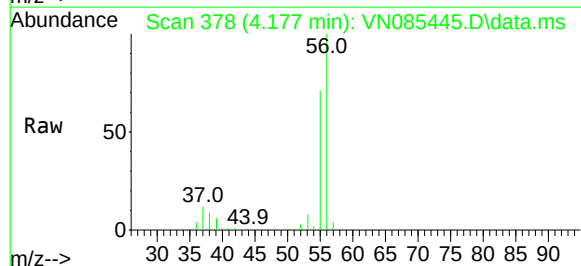
55 70.9 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#14

Allyl chloride

Concen: 44.501 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

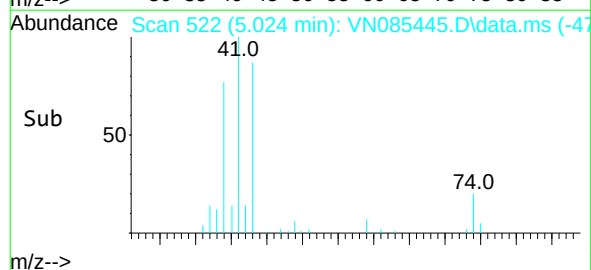
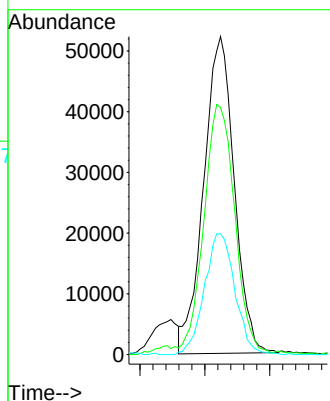
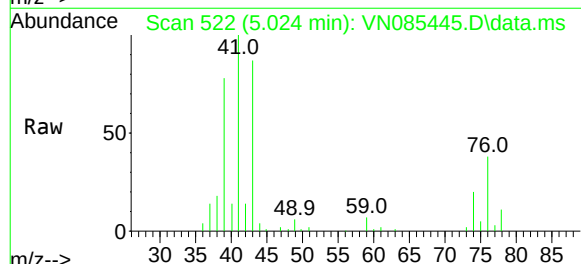
Tgt Ion: 41 Resp: 170308

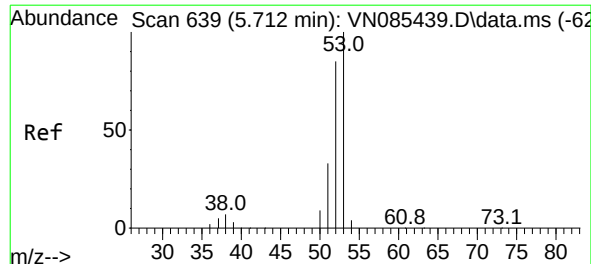
Ion Ratio Lower Upper

41 100

39 78.9 64.4 96.6

76 38.2 30.5 45.7





#15

Acrylonitrile

Concen: 227.920 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

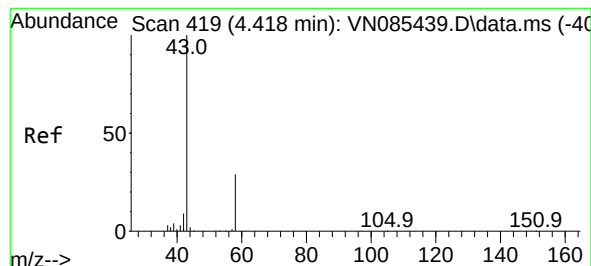
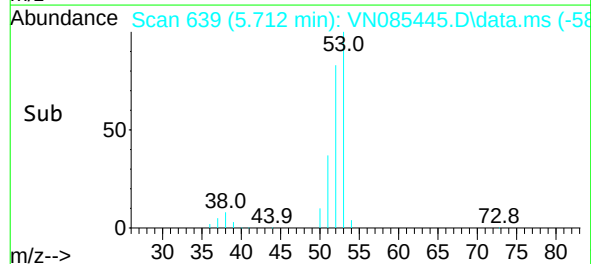
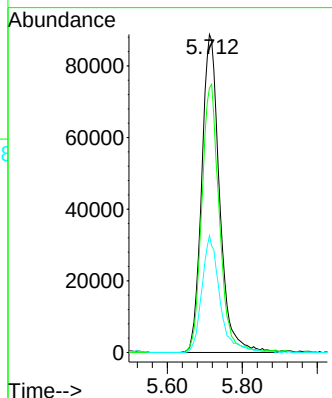
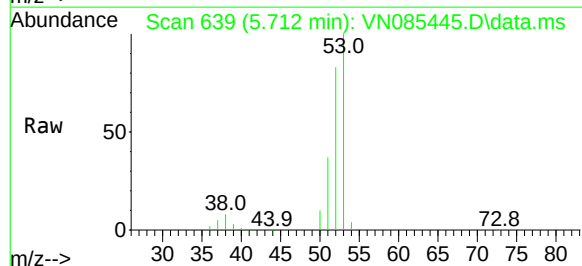
ClientSampleId :

ICVVN011425

Tgt Ion:	53	Resp:	294062
Ion	Ratio	Lower	Upper
53	100		
52	82.7	65.5	98.3
51	36.8	29.8	44.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#16

Acetone

Concen: 213.971 ug/l

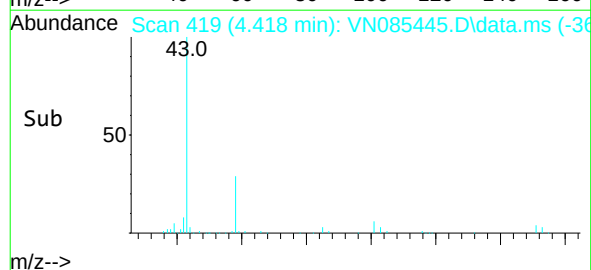
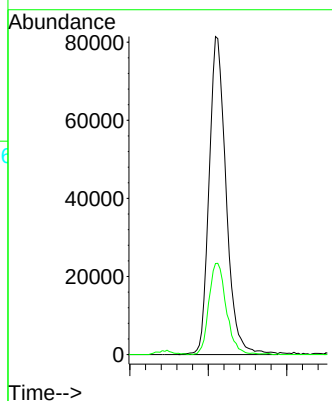
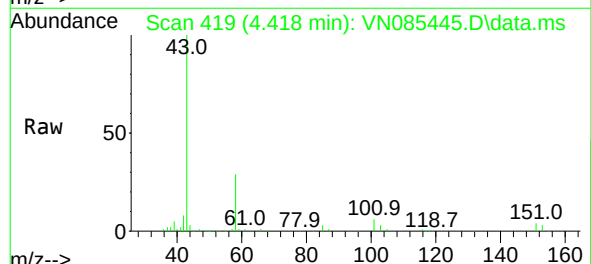
RT: 4.418 min Scan# 419

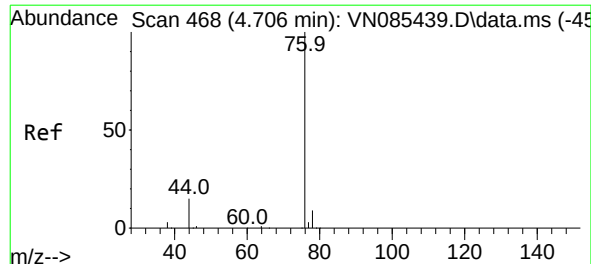
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	43	Resp:	245248
Ion	Ratio	Lower	Upper
43	100		
58	28.4	23.8	35.6





#17

Carbon Disulfide

Concen: 41.342 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 76 Resp: 300215

Ion Ratio Lower Upper

76 100

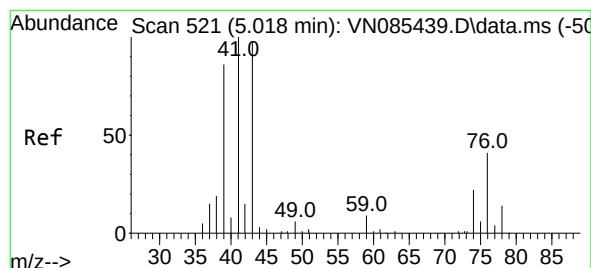
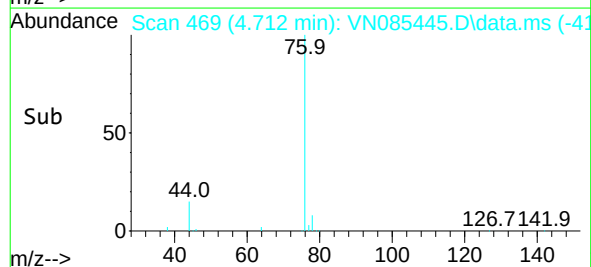
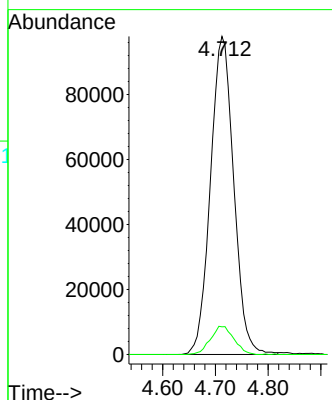
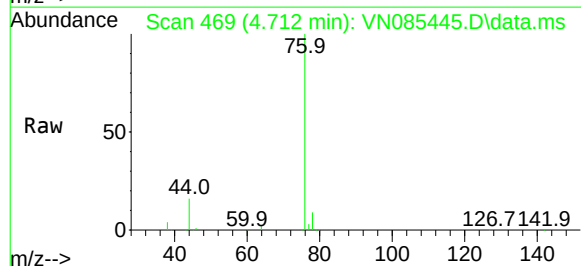
78 8.7 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#18

Methyl Acetate

Concen: 45.028 ug/l

RT: 5.018 min Scan# 521

Delta R.T. 0.000 min

Lab File: VN085445.D

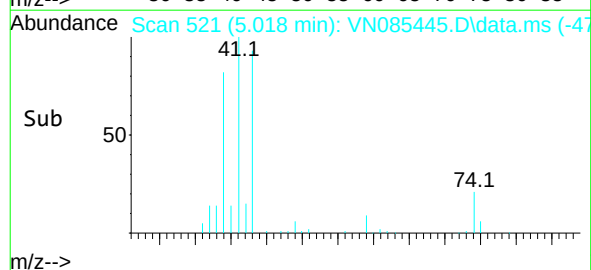
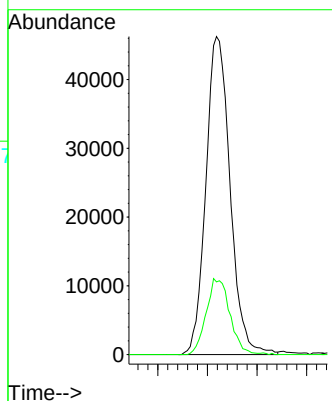
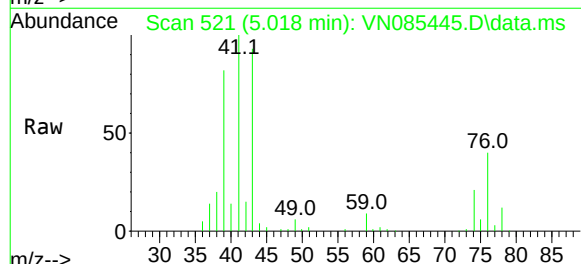
Acq: 14 Jan 2025 18:06

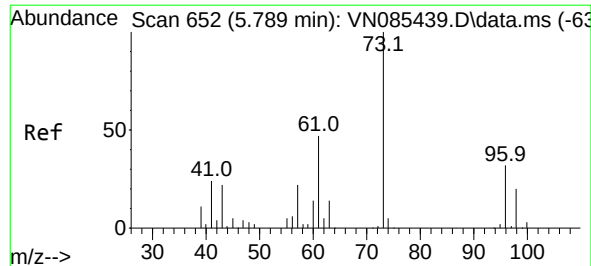
Tgt Ion: 43 Resp: 156938

Ion Ratio Lower Upper

43 100

74 23.4 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 47.768 ug/l

RT: 5.795 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 73 Resp: 365819

Ion Ratio Lower Upper

73 100

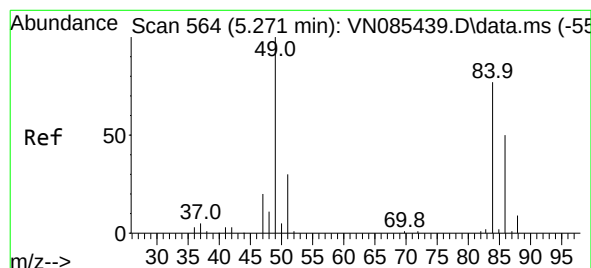
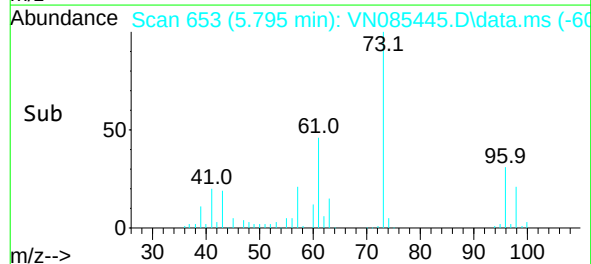
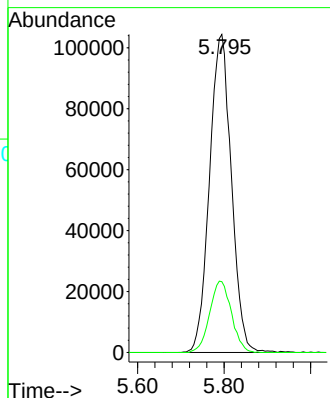
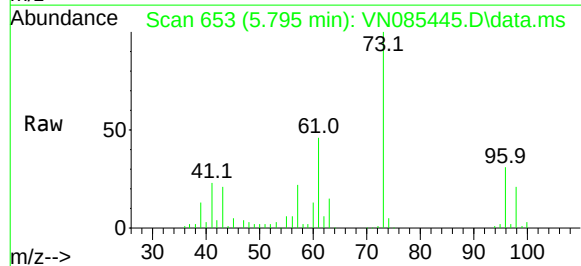
57 22.3 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#20

Methylene Chloride

Concen: 43.017 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion: 84 Resp: 122059

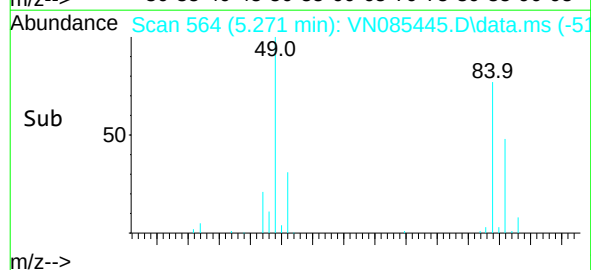
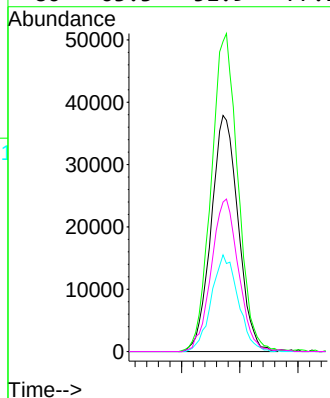
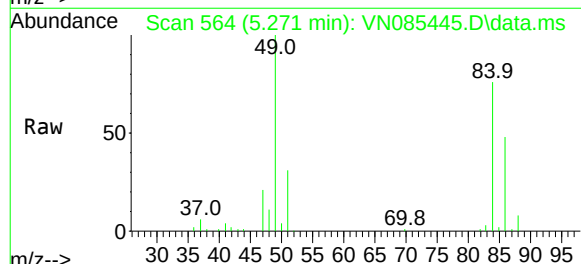
Ion Ratio Lower Upper

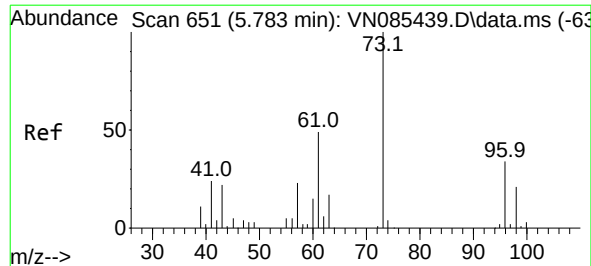
84 100

49 131.3 104.1 156.1

51 41.0 31.0 46.4

86 63.3 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 44.672 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085445.D

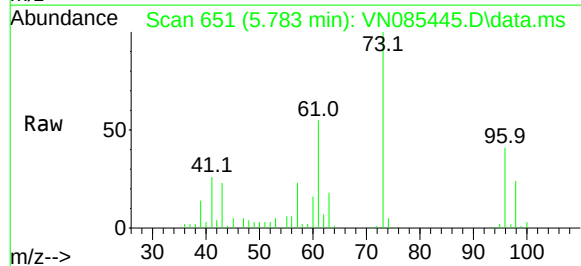
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

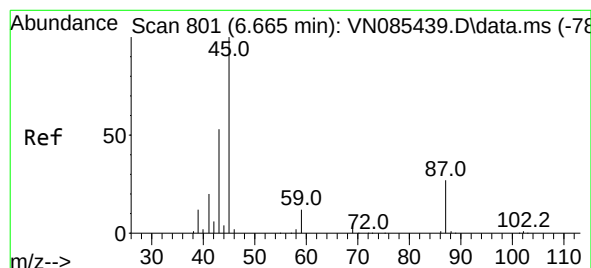
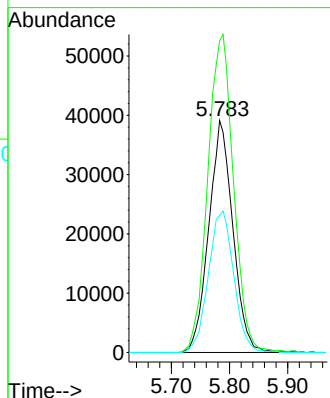
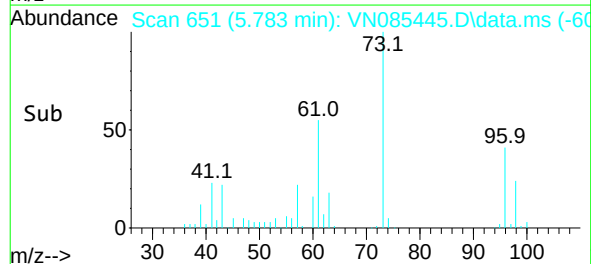
ICVVN011425



Tgt Ion:	96	Resp:	112597
Ion	Ratio	Lower	Upper
96	100		
61	134.3	115.7	173.5
98	59.1	49.8	74.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#22

Diisopropyl ether

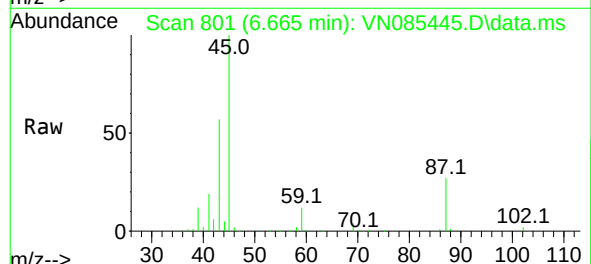
Concen: 46.996 ug/l

RT: 6.665 min Scan# 801

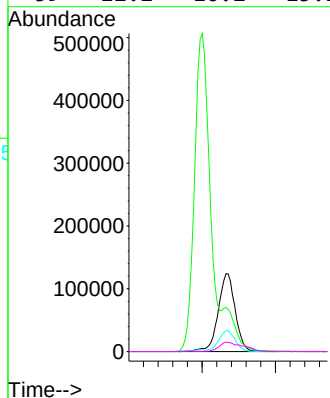
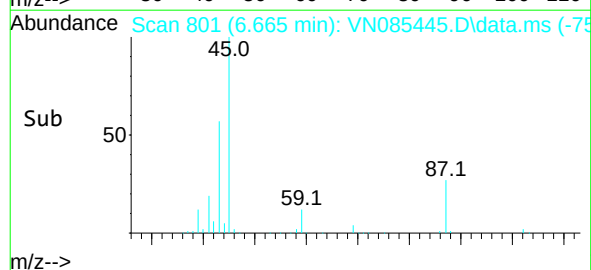
Delta R.T. 0.000 min

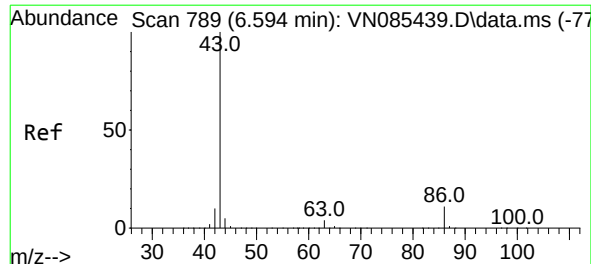
Lab File: VN085445.D

Acq: 14 Jan 2025 18:06



Tgt Ion:	45	Resp:	399206
Ion	Ratio	Lower	Upper
45	100		
43	56.0	45.0	67.6
87	26.8	21.8	32.8
59	12.2	10.2	15.2





#23

Vinyl Acetate

Concen: 247.459 ug/l

RT: 6.601 min Scan# 79

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 43 Resp: 1471068

Ion Ratio Lower Upper

43 100

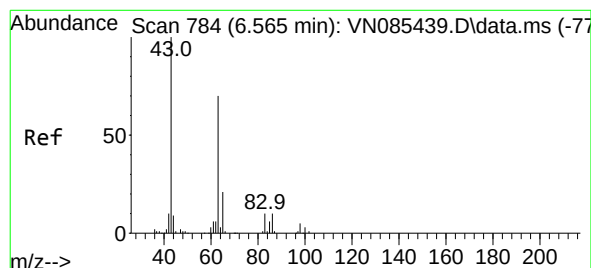
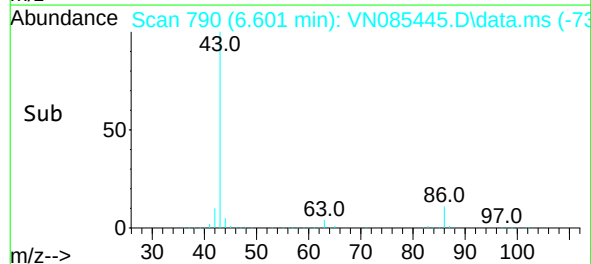
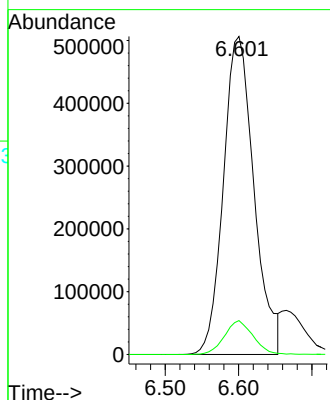
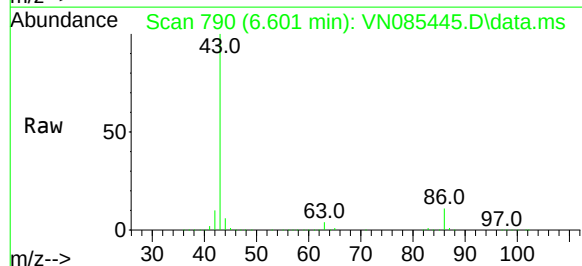
86 10.7 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#24

1,1-Dichloroethane

Concen: 44.114 ug/l

RT: 6.571 min Scan# 785

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

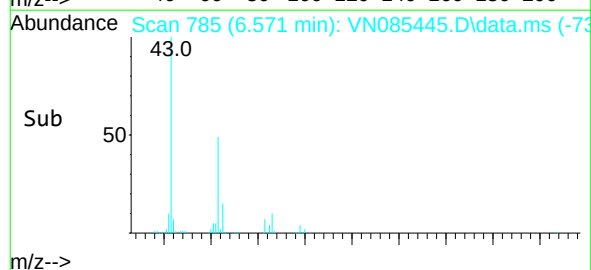
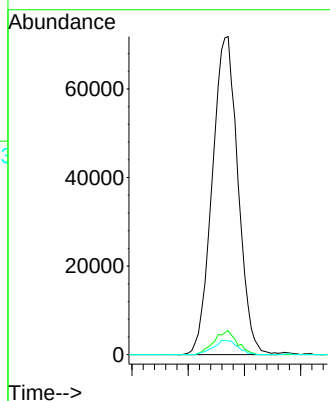
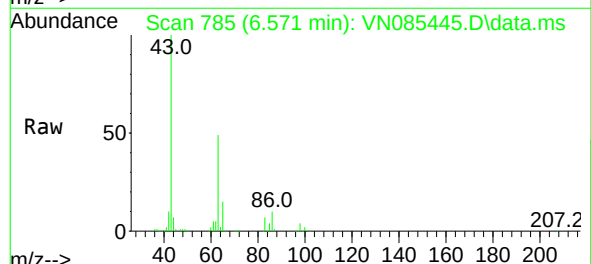
Tgt Ion: 63 Resp: 228489

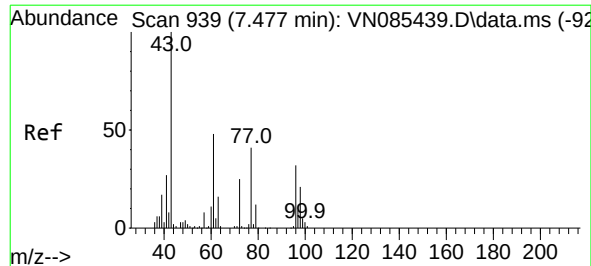
Ion Ratio Lower Upper

63 100

98 7.5 3.3 9.8

100 4.2 2.0 6.0





#25

2-Butanone

Concen: 228.924 ug/l

RT: 7.477 min Scan# 939

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 43 Resp: 386125

Ion Ratio Lower Upper

43 100

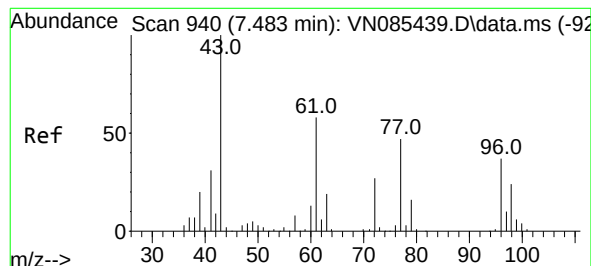
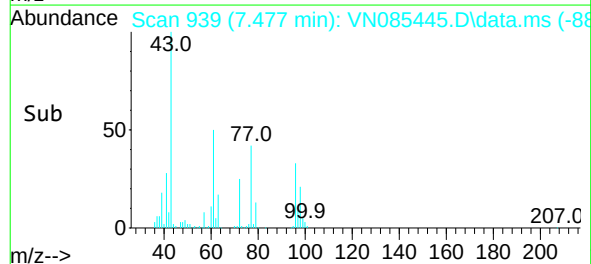
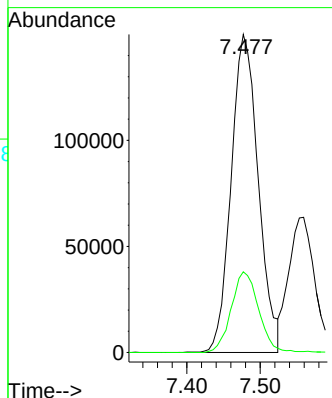
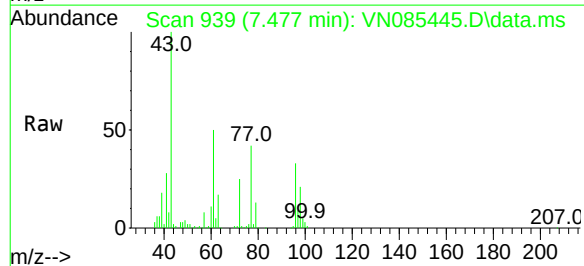
72 25.4 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#26

2,2-Dichloropropane

Concen: 47.593 ug/l

RT: 7.489 min Scan# 941

Delta R.T. 0.006 min

Lab File: VN085445.D

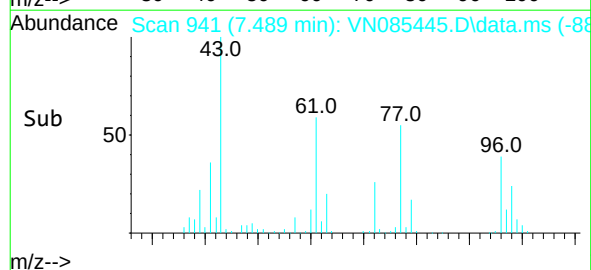
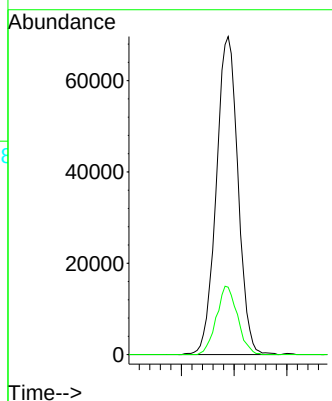
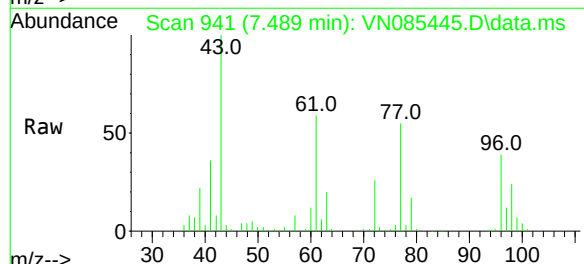
Acq: 14 Jan 2025 18:06

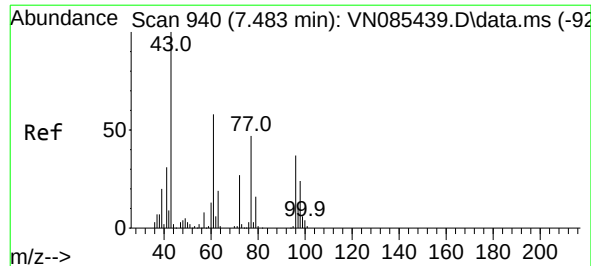
Tgt Ion: 77 Resp: 199303

Ion Ratio Lower Upper

77 100

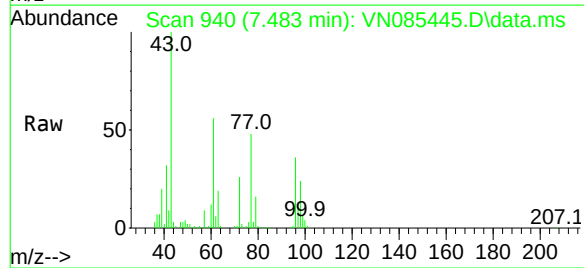
97 20.9 10.7 32.1





#27
cis-1,2-Dichloroethene
Concen: 45.446 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

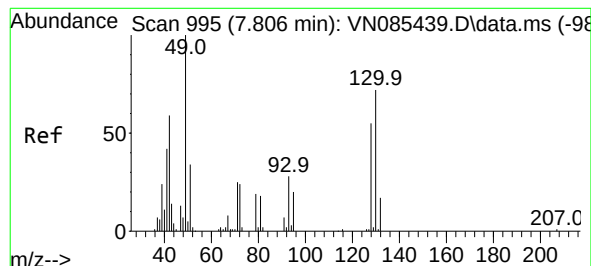
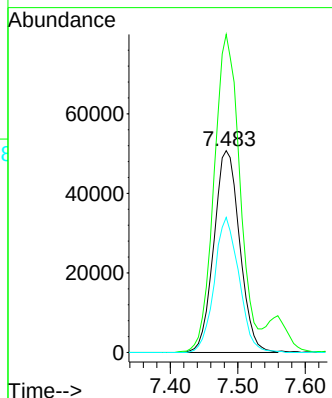
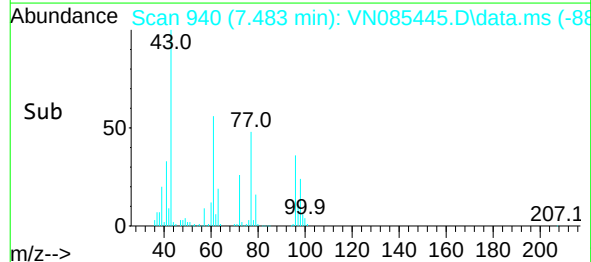
Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425



Tgt Ion: 96 Resp: 134920
Ion Ratio Lower Upper
96 100
61 158.0 0.0 311.8
98 64.1 0.0 126.0

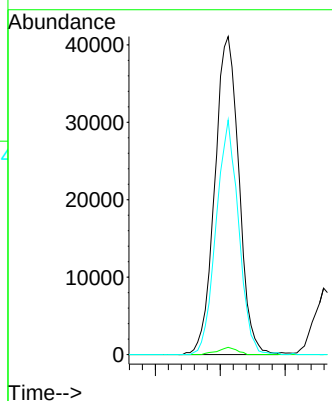
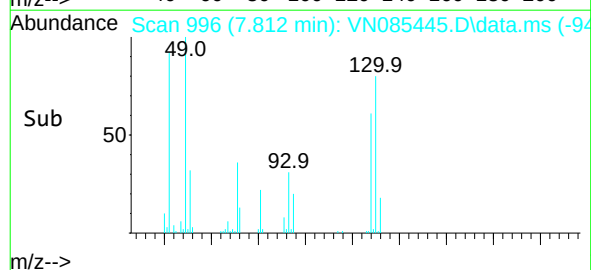
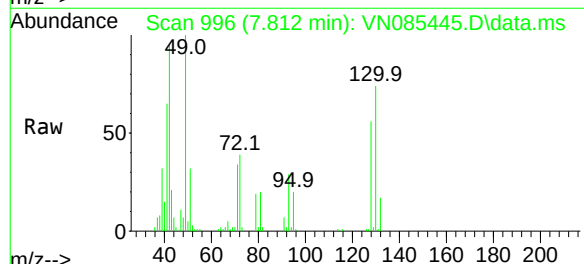
Manual Integrations
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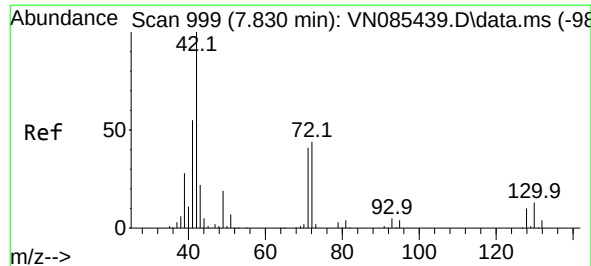
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#28
Bromochloromethane
Concen: 44.122 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 49 Resp: 106323
Ion Ratio Lower Upper
49 100
129 1.8 0.0 4.4
130 68.6 55.0 82.4





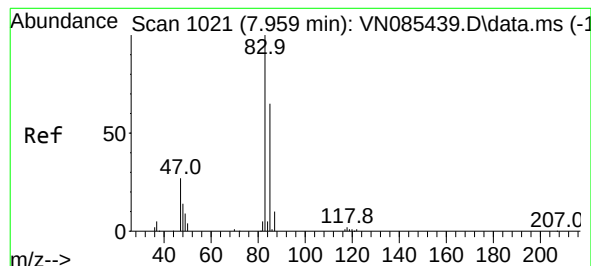
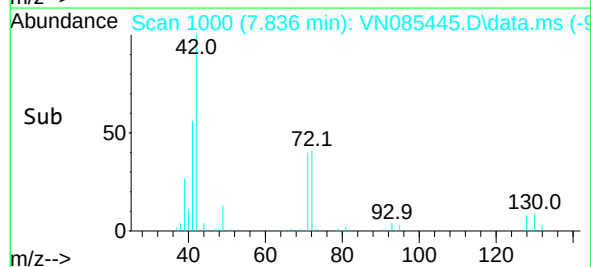
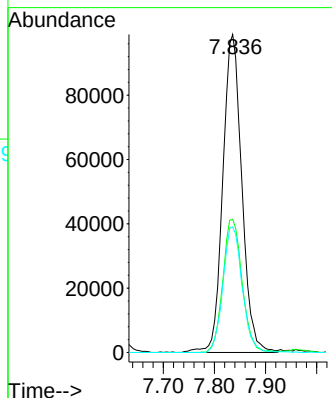
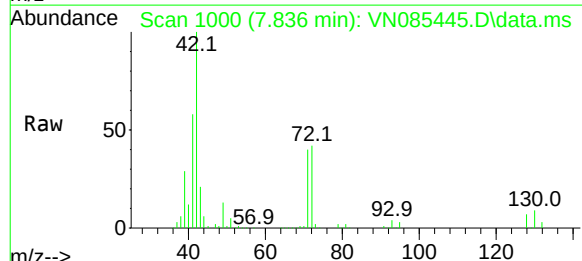
#29
Tetrahydrofuran
Concen: 239.065 ug/l
RT: 7.836 min Scan# 1000
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion: 42 Resp: 255650
Ion Ratio Lower Upper
42 100
72 42.5 34.2 51.2
71 39.9 32.5 48.7

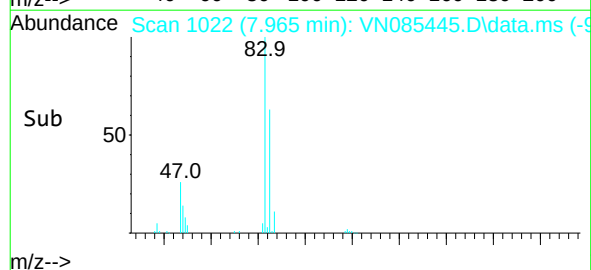
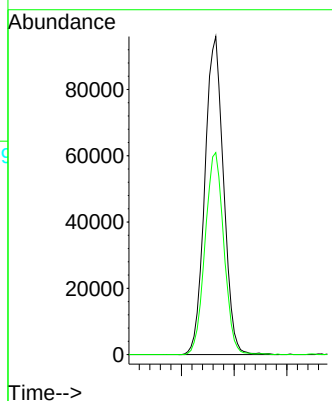
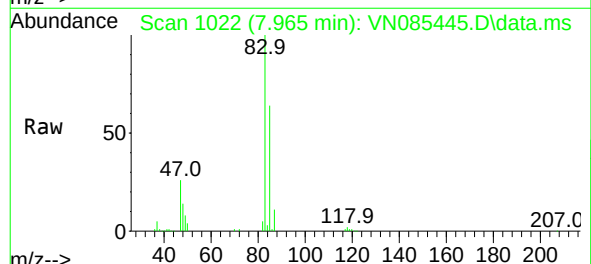
Manual Integrations
APPROVED

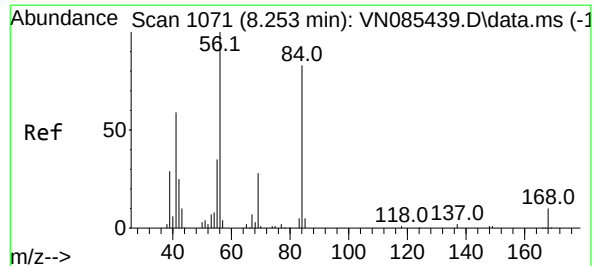
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#30
Chloroform
Concen: 44.071 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 83 Resp: 235923
Ion Ratio Lower Upper
83 100
85 63.5 51.8 77.6





#31

Cyclohexane

Concen: 42.878 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 56 Resp: 193034

Ion Ratio Lower Upper

56 100

69 30.5 22.2 33.4

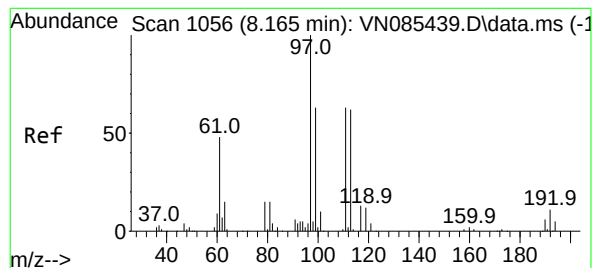
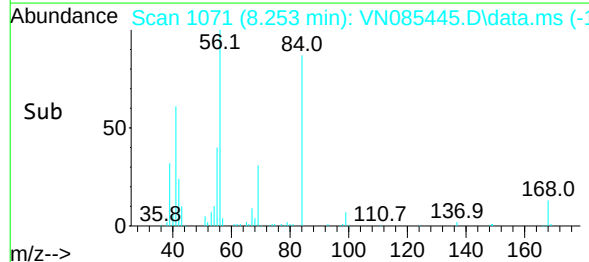
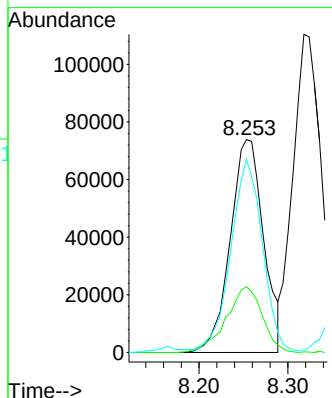
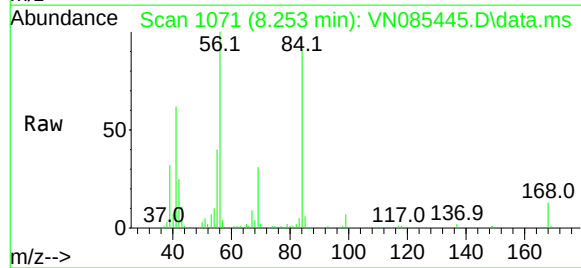
84 89.4 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#32

1,1,1-Trichloroethane

Concen: 44.332 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

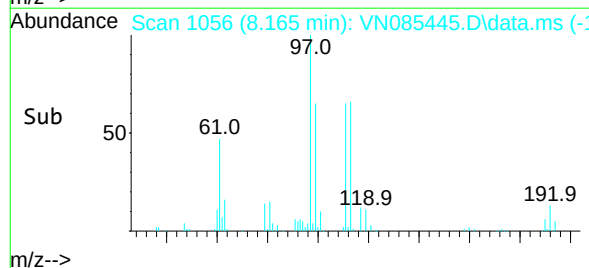
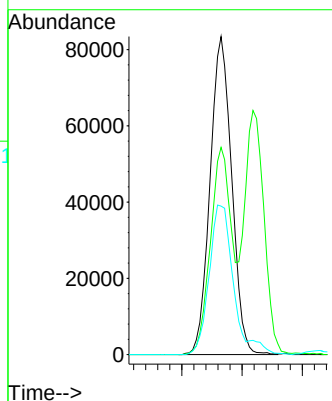
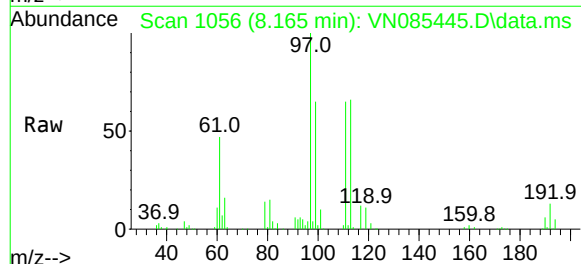
Tgt Ion: 97 Resp: 208172

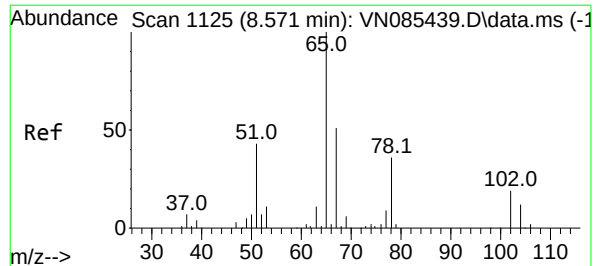
Ion Ratio Lower Upper

97 100

99 61.8 49.8 74.6

61 52.8 41.4 62.2





#33

1,2-Dichloroethane-d4

Concen: 49.782 ug/l

RT: 8.571 min Scan# 1125

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 65 Resp: 176594

Ion Ratio Lower Upper

65 100

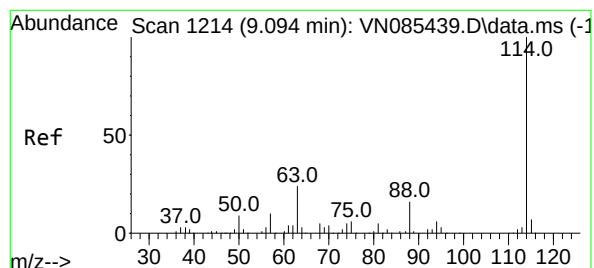
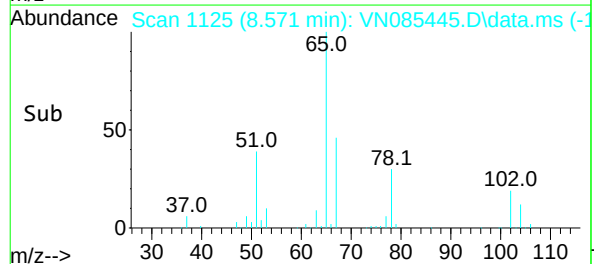
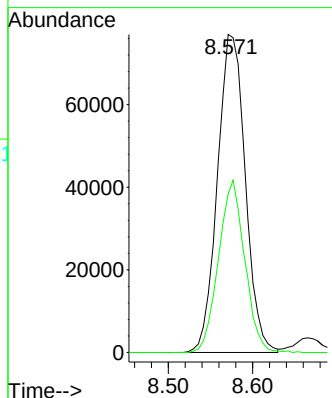
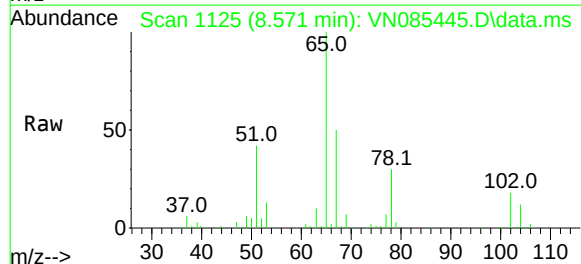
67 50.9 0.0 101.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

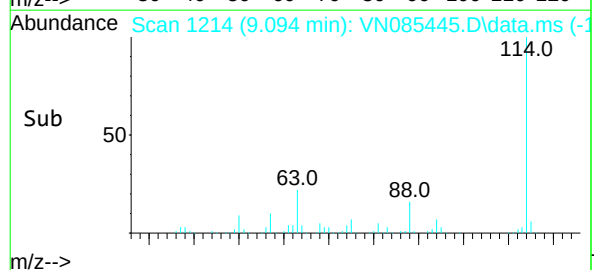
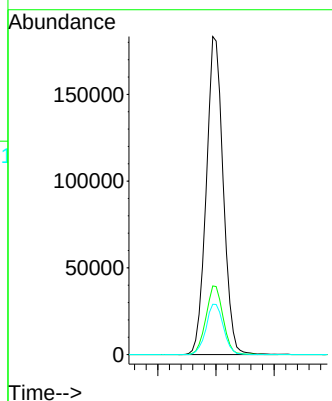
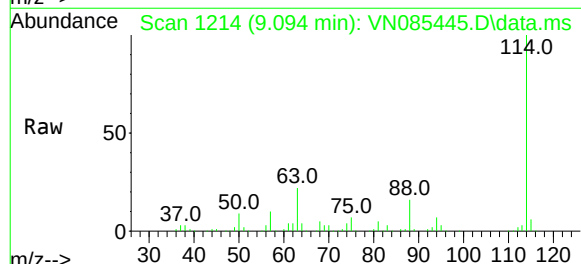
Tgt Ion:114 Resp: 370487

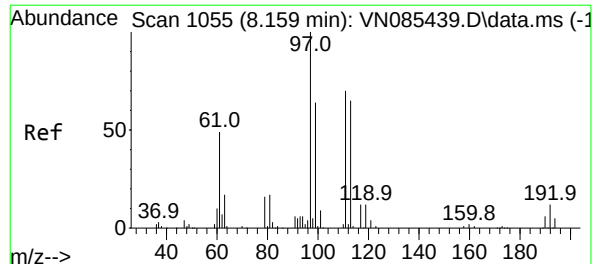
Ion Ratio Lower Upper

114 100

63 21.6 0.0 47.6

88 15.8 0.0 32.6





#35

Dibromofluoromethane

Concen: 50.768 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 113 Resp: 130487

Ion Ratio Lower Upper

113 100

111 102.5 82.7 124.1

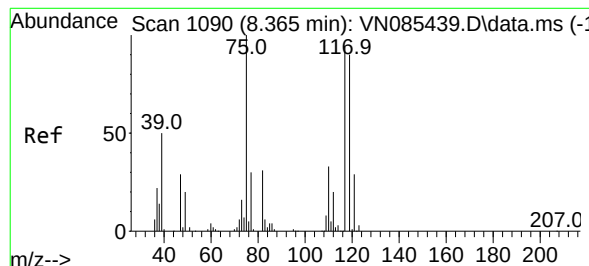
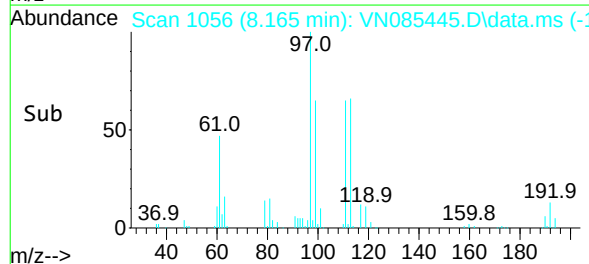
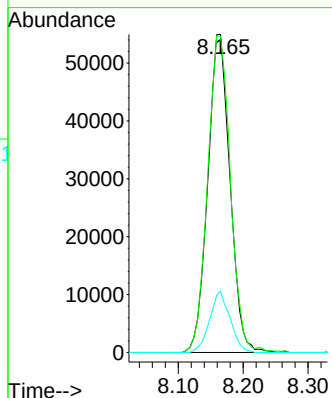
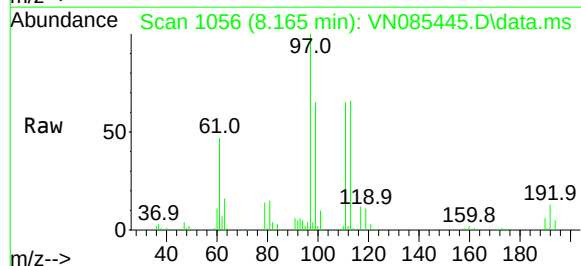
192 17.7 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/15/2025

Supervised By : Mahesh Dadoda 01/15/2025



#36

1,1-Dichloropropene

Concen: 44.863 ug/l

RT: 8.365 min Scan# 1090

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

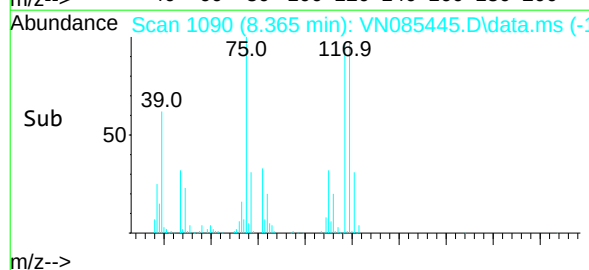
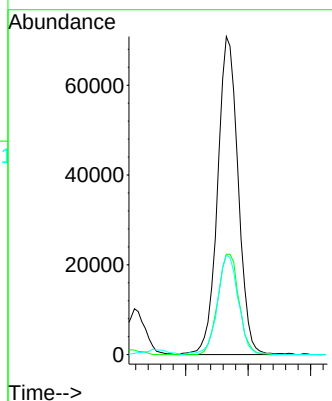
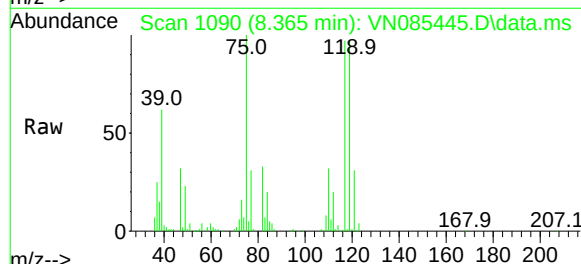
Tgt Ion: 75 Resp: 161834

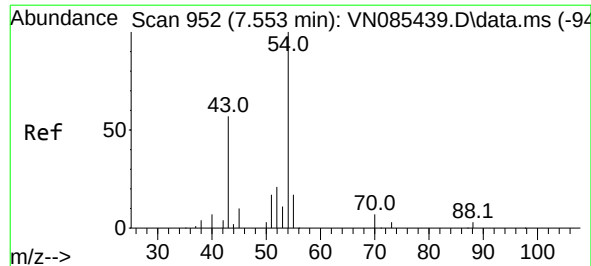
Ion Ratio Lower Upper

75 100

110 32.4 16.5 49.5

77 31.8 24.4 36.6





#37

Ethyl Acetate

Concen: 44.123 ug/l

RT: 7.559 min Scan# 952

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

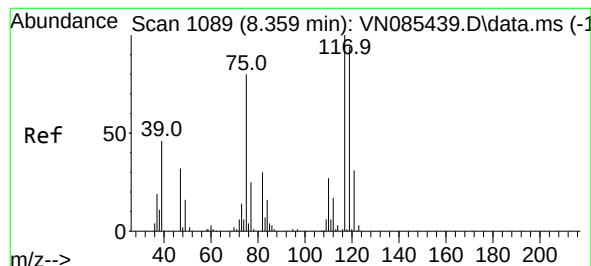
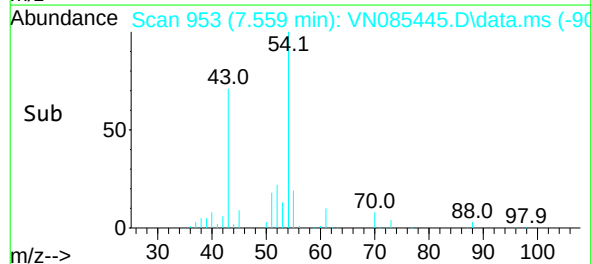
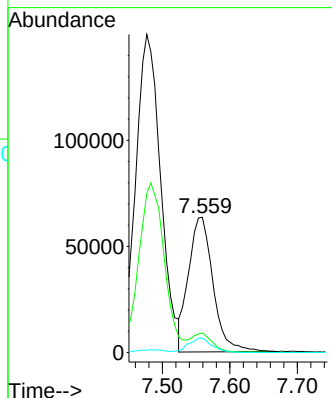
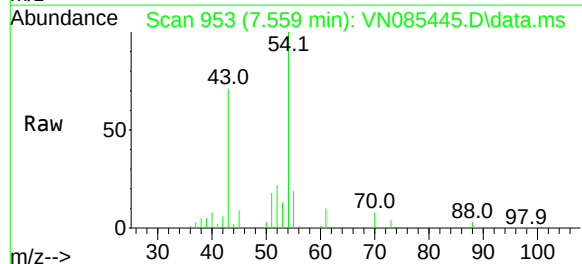
ClientSampleId :

ICVNV011425

Tgt Ion:	43	Resp:	160656
Ion	Ratio	Lower	Upper
43	100		
61	11.9	10.9	16.3
70	10.2	7.5	11.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#38

Carbon Tetrachloride

Concen: 44.456 ug/l

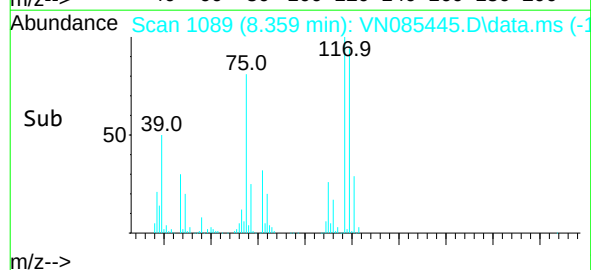
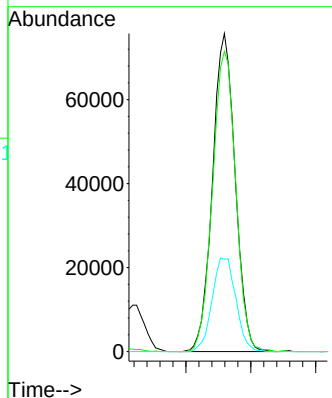
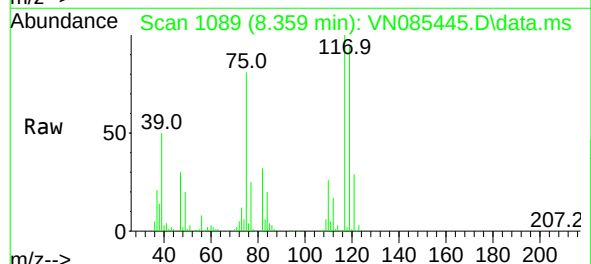
RT: 8.359 min Scan# 1089

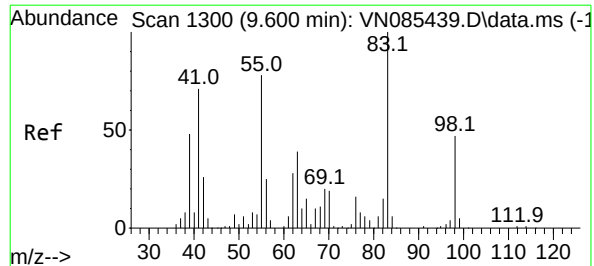
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	117	Resp:	183592
Ion	Ratio	Lower	Upper
117	100		
119	94.4	75.4	113.2
121	29.0	24.6	37.0





#39

Methylcyclohexane

Concen: 49.687 ug/l

RT: 9.600 min Scan# 13

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

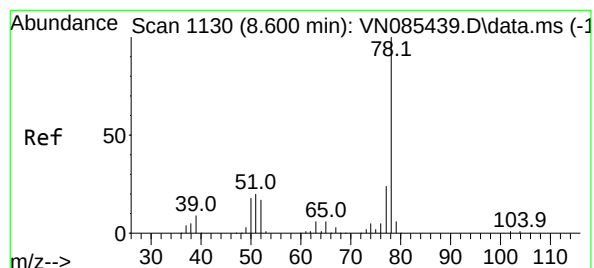
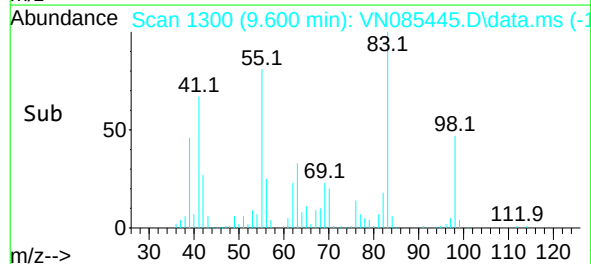
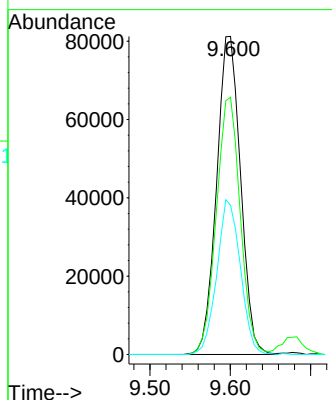
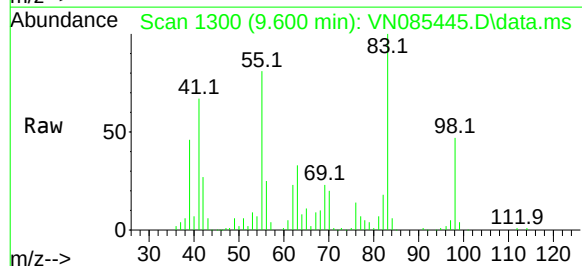
ClientSampleId :

ICVVN011425

Tgt Ion:	83	Resp:	168431
Ion	Ratio	Lower	Upper
83	100		
55	80.9	62.6	94.0
98	46.9	37.7	56.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#40

Benzene

Concen: 45.657 ug/l

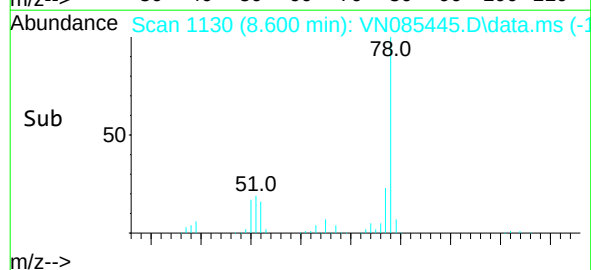
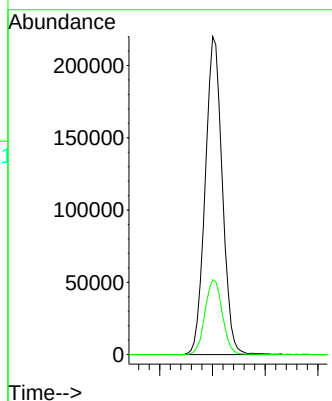
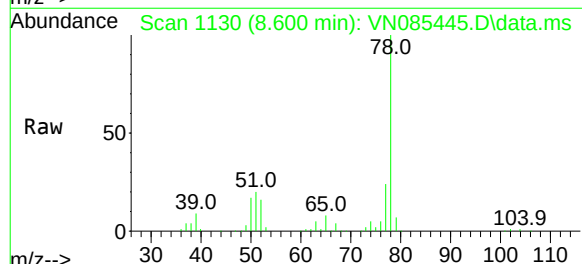
RT: 8.600 min Scan# 1130

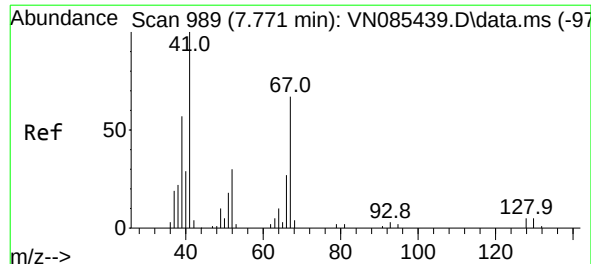
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	78	Resp:	494871
Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.0	28.6





#41

Methacrylonitrile

Concen: 47.155 ug/l

RT: 7.777 min Scan# 99

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 41 Resp: 89326

Ion Ratio Lower Upper

41 100

39 56.6 46.0 69.0

67 70.9 57.4 86.2

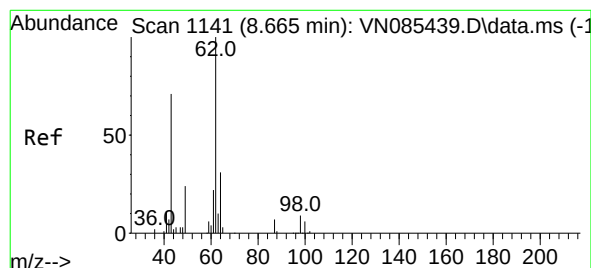
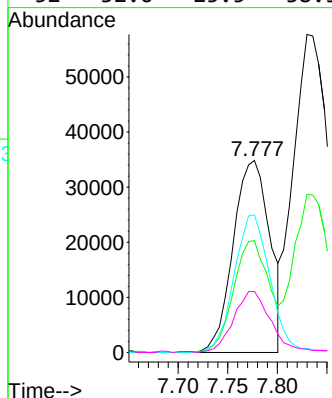
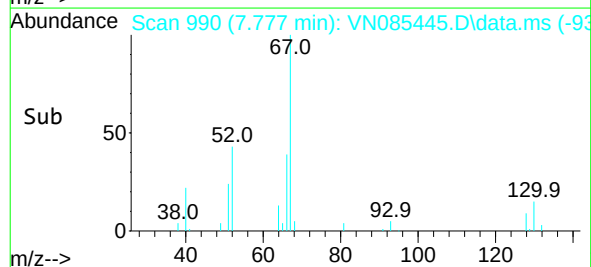
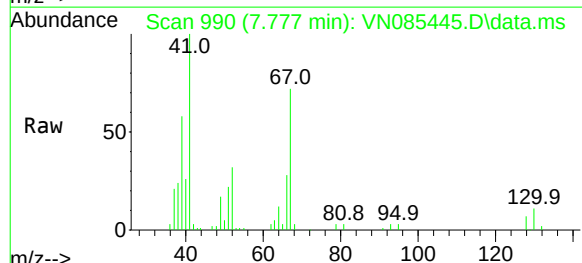
52 32.6 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#42

1,2-Dichloroethane

Concen: 45.481 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. 0.000 min

Lab File: VN085445.D

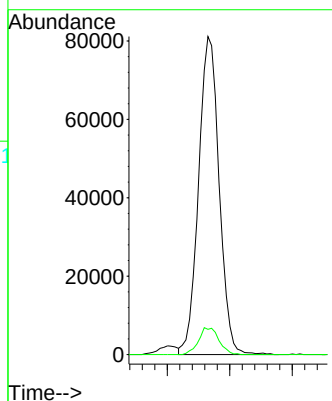
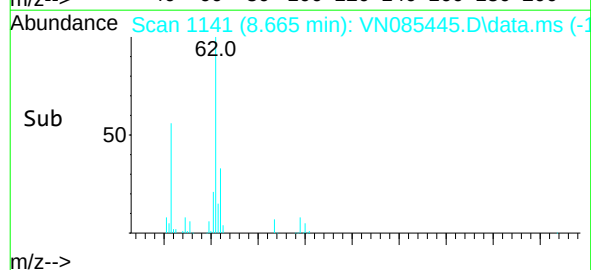
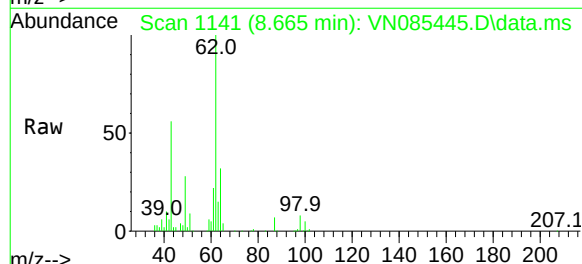
Acq: 14 Jan 2025 18:06

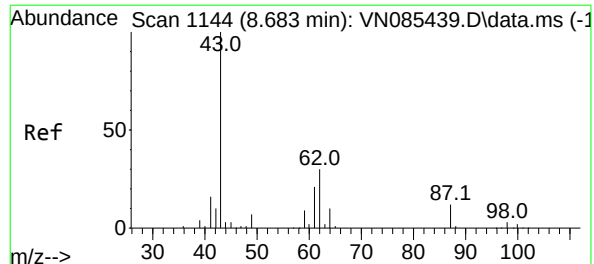
Tgt Ion: 62 Resp: 185663

Ion Ratio Lower Upper

62 100

98 8.3 0.0 17.0





#43

Isopropyl Acetate

Concen: 45.440 ug/l

RT: 8.683 min Scan# 1144

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

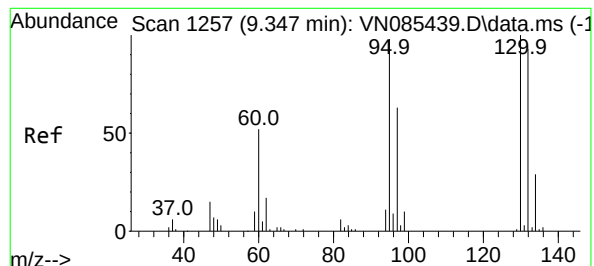
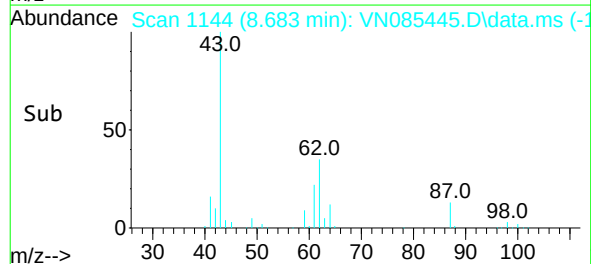
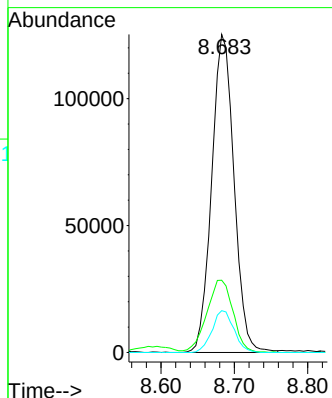
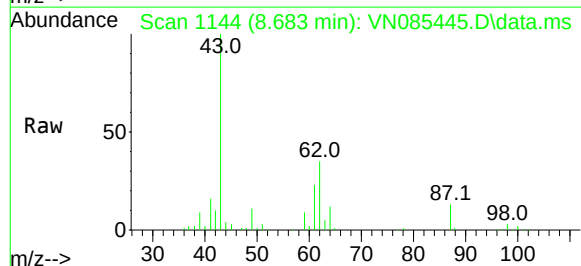
ClientSampleId :

ICVVN011425

Tgt Ion:	43	Resp:	265107
Ion	Ratio	Lower	Upper
43	100		
61	26.7	20.7	31.1
87	12.9	9.8	14.8

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#44

Trichloroethene

Concen: 43.622 ug/l

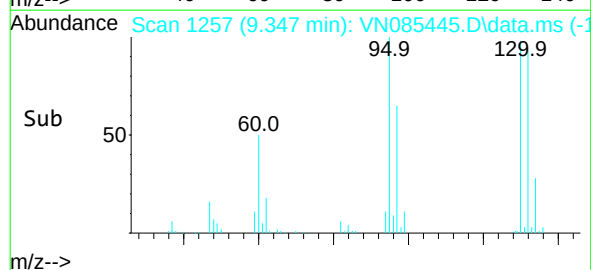
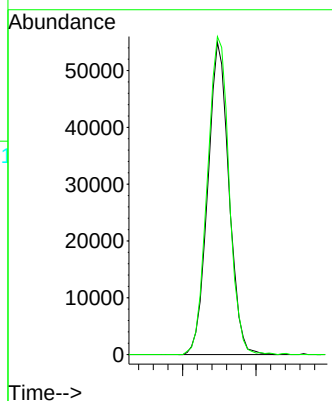
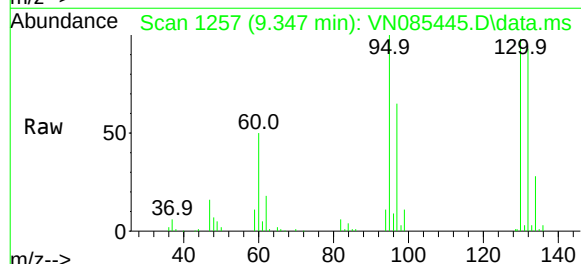
RT: 9.347 min Scan# 1257

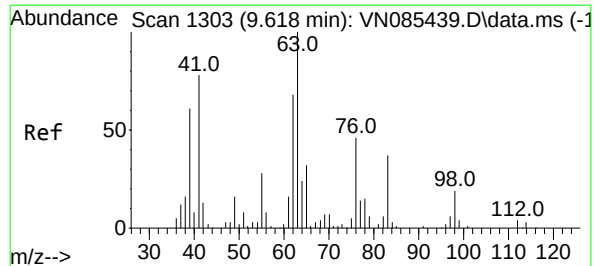
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	130	Resp:	110058
Ion	Ratio	Lower	Upper
130	100		
95	101.9	0.0	195.8





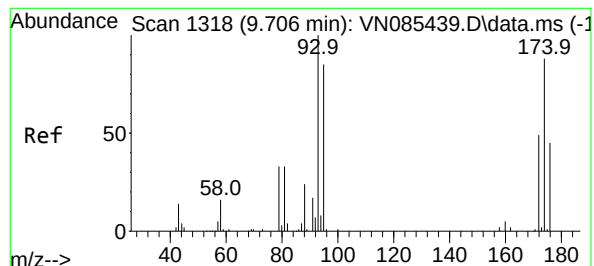
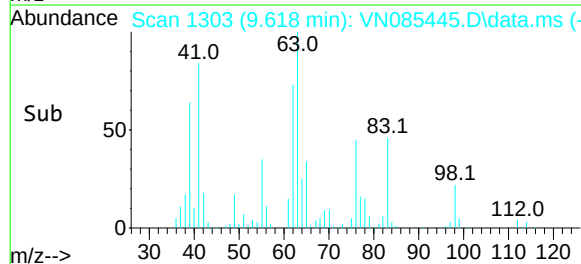
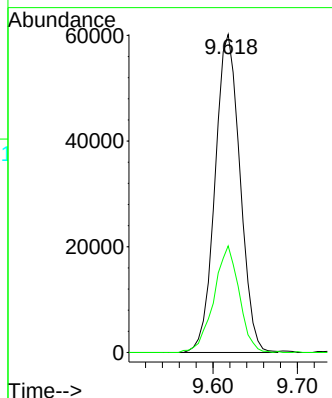
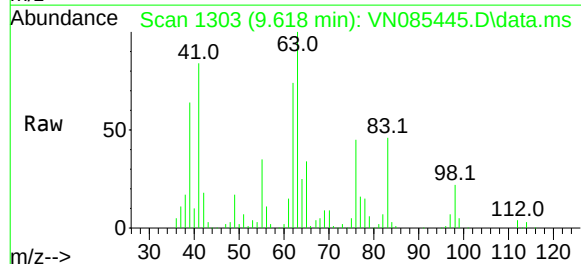
#45
1,2-Dichloropropane
Concen: 44.744 ug/l
RT: 9.618 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion: 63 Resp: 123876
Ion Ratio Lower Upper
63 100
65 33.5 25.6 38.4

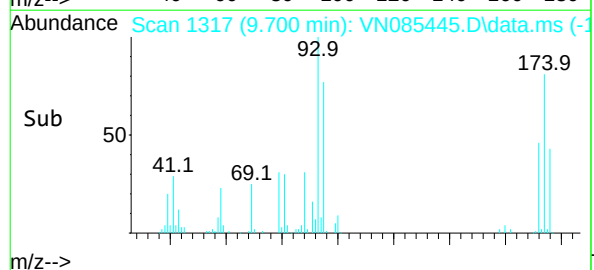
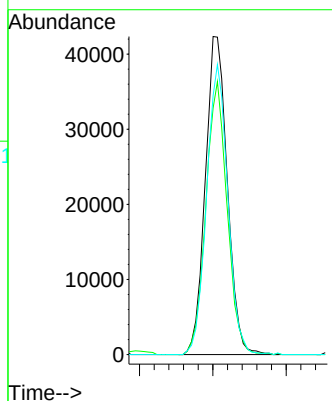
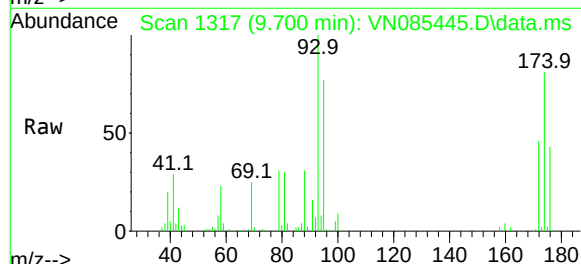
Manual Integrations
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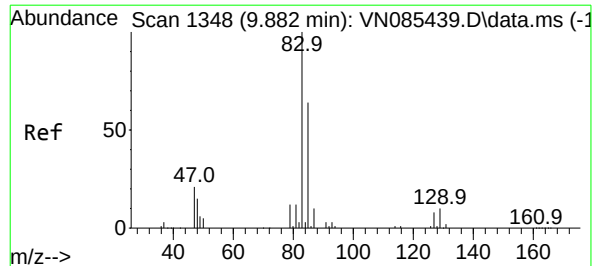
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#46
Dibromomethane
Concen: 44.214 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. -0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 93 Resp: 88325
Ion Ratio Lower Upper
93 100
95 82.9 64.7 97.1
174 88.0 69.0 103.4





#47

Bromodichloromethane

Concen: 45.655 ug/l

RT: 9.889 min Scan# 1348

Delta R.T. 0.007 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 83 Resp: 185808

Ion Ratio Lower Upper

83 100

85 63.5 51.2 76.8

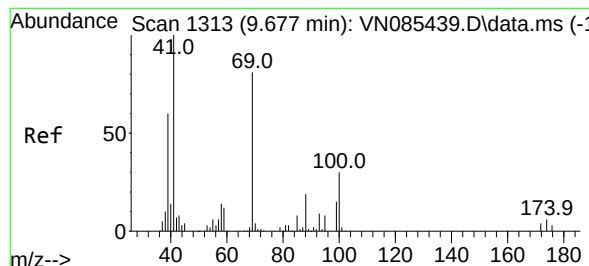
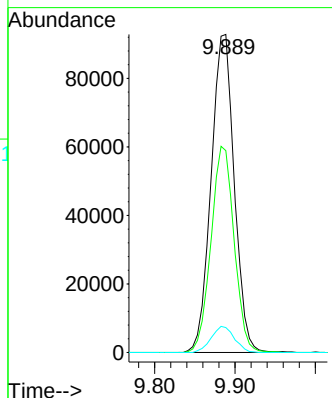
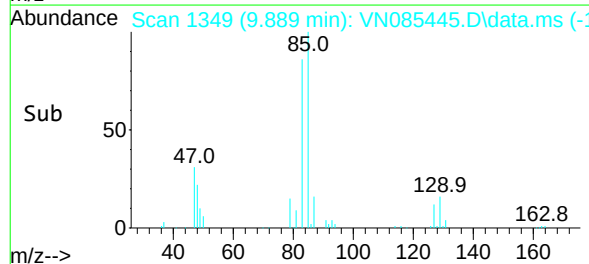
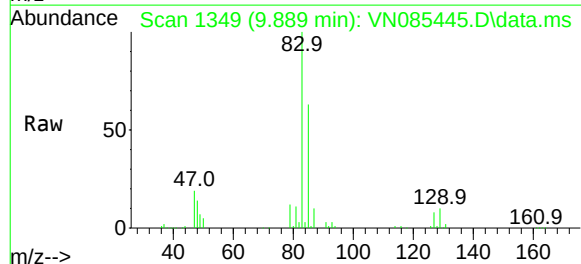
127 7.8 6.5 9.7

Manual Integrations

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Supervised By :Mahesh Dadoda 01/15/2025



#48

Methyl methacrylate

Concen: 49.948 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

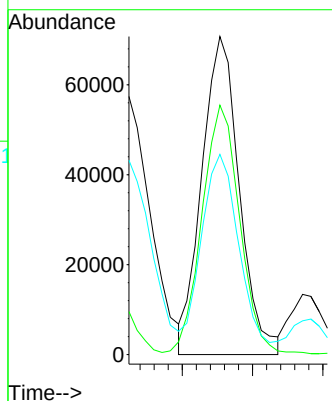
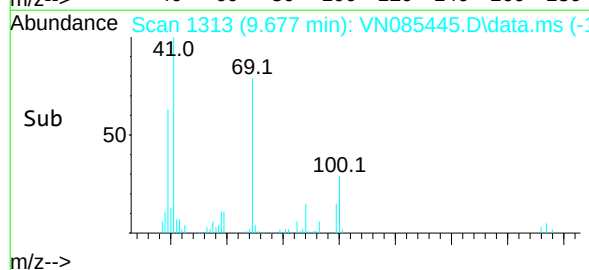
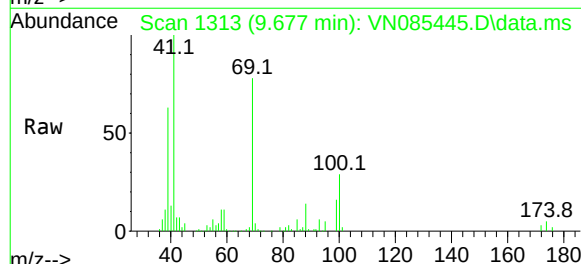
Tgt Ion: 41 Resp: 131142

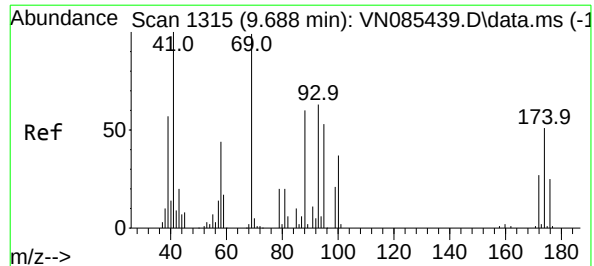
Ion Ratio Lower Upper

41 100

69 78.6 64.7 97.1

39 63.3 49.0 73.6





#49

1,4-Dioxane

Concen: 792.760 ug/l

RT: 9.689 min Scan# 1315

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 88 Resp: 35051

Ion Ratio Lower Upper

88 100

43 33.8 26.6 39.8

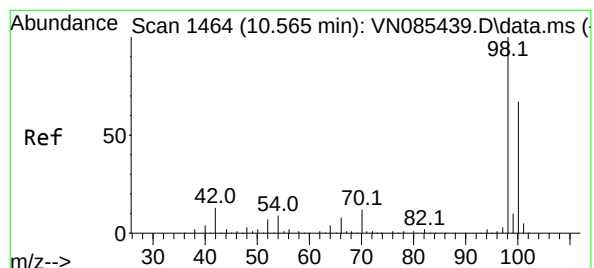
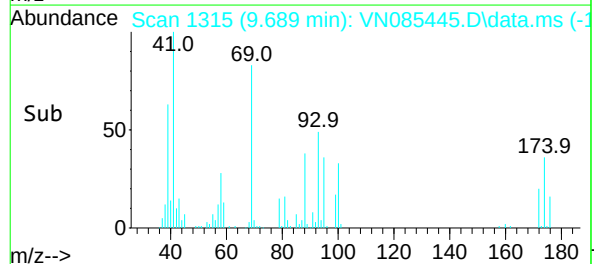
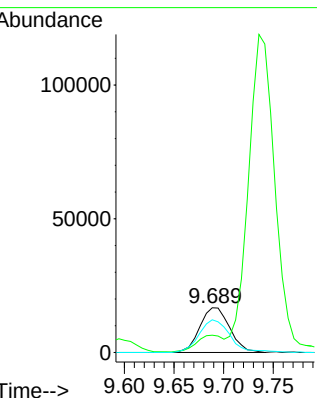
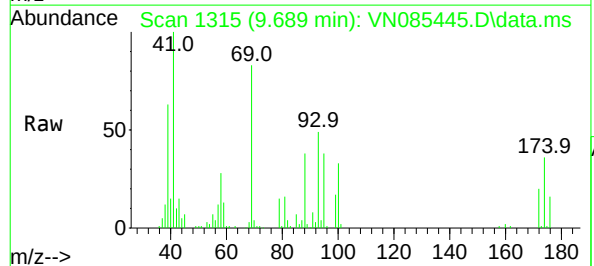
58 76.1 59.5 89.3

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Supervised By :Mahesh Dadoda 01/15/2025



#50

Toluene-d8

Concen: 52.302 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085445.D

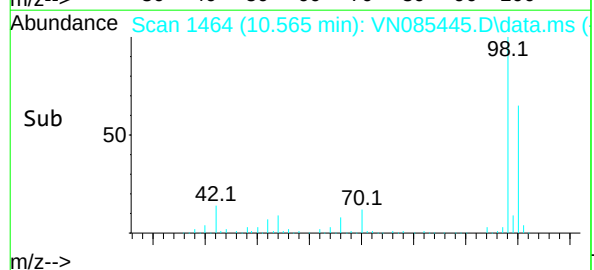
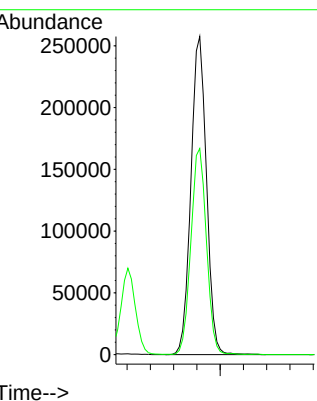
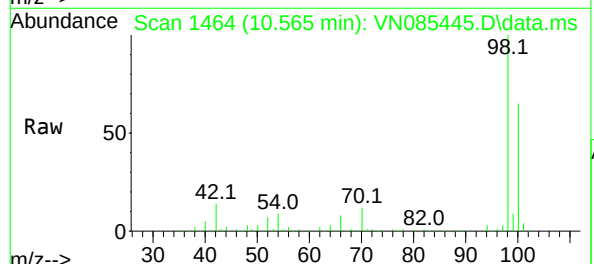
Acq: 14 Jan 2025 18:06

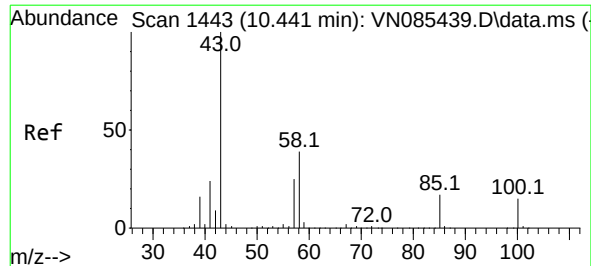
Tgt Ion: 98 Resp: 477630

Ion Ratio Lower Upper

98 100

100 64.7 52.2 78.4





#51

4-Methyl-2-Pentanone

Concen: 245.877 ug/l

RT: 10.441 min Scan# 14

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 43 Resp: 832426

Ion Ratio Lower Upper

43 100

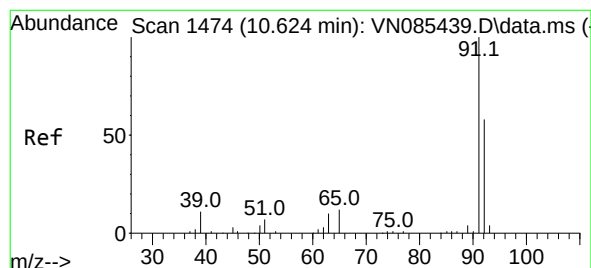
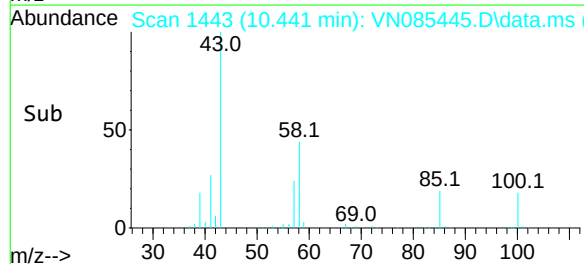
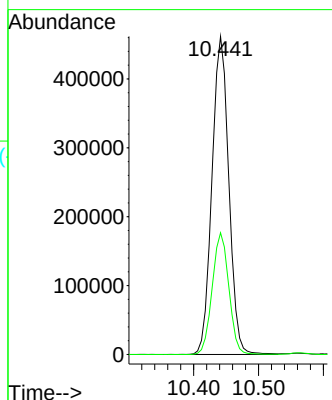
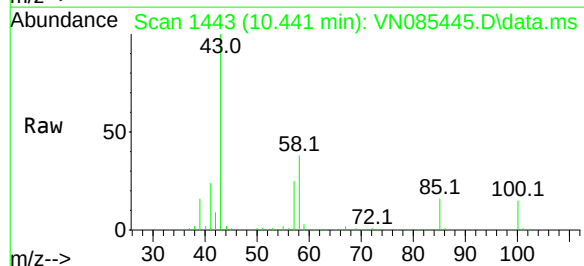
58 37.8 30.5 45.7

Manual Integrations

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Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#52

Toluene

Concen: 48.073 ug/l

RT: 10.630 min Scan# 1475

Delta R.T. 0.006 min

Lab File: VN085445.D

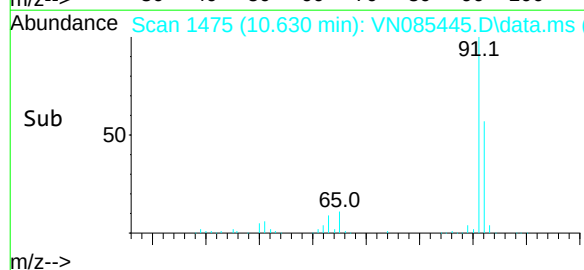
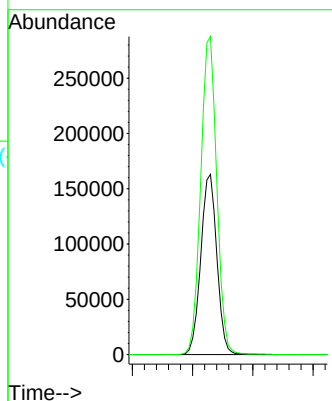
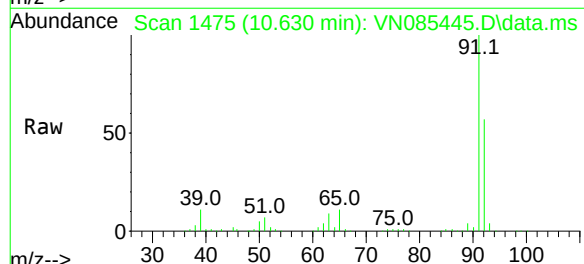
Acq: 14 Jan 2025 18:06

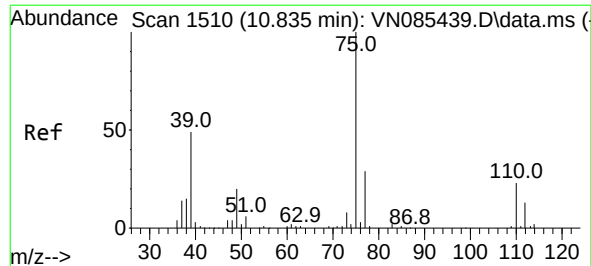
Tgt Ion: 92 Resp: 301911

Ion Ratio Lower Upper

92 100

91 175.7 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 47.757 ug/l

RT: 10.830 min Scan# 1510

Delta R.T. -0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 75 Resp: 183680

Ion Ratio Lower Upper

75 100

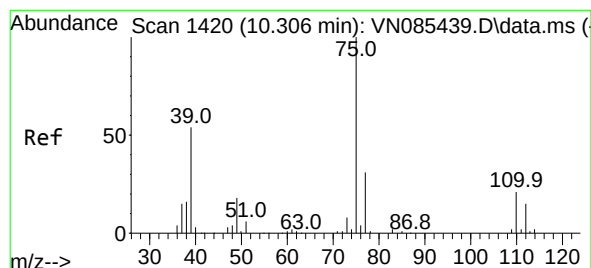
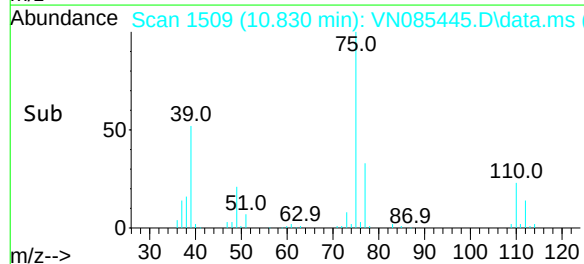
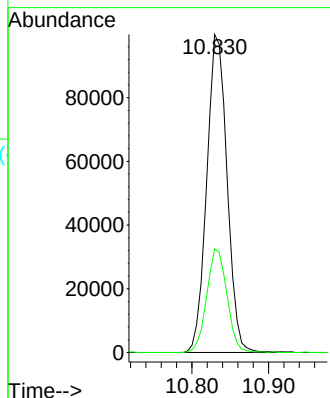
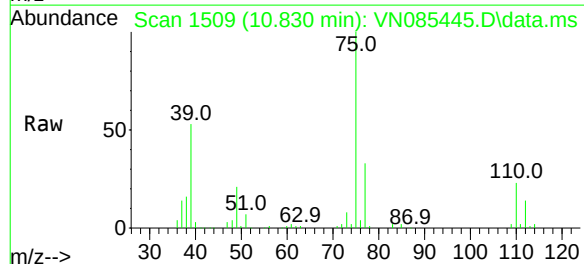
77 32.6 23.5 35.3

Manual Integrations

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#54

cis-1,3-Dichloropropene

Concen: 47.783 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

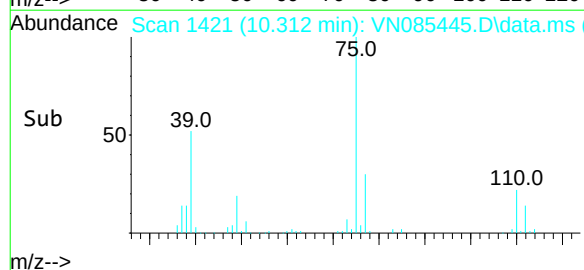
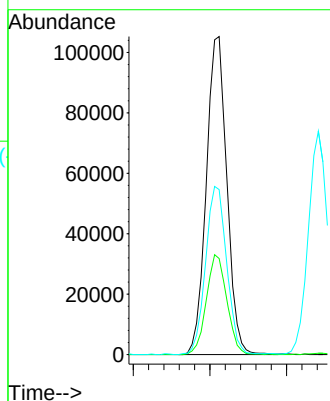
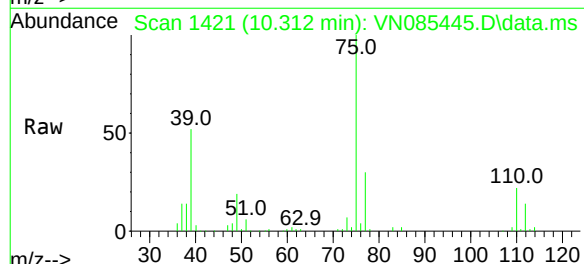
Tgt Ion: 75 Resp: 196307

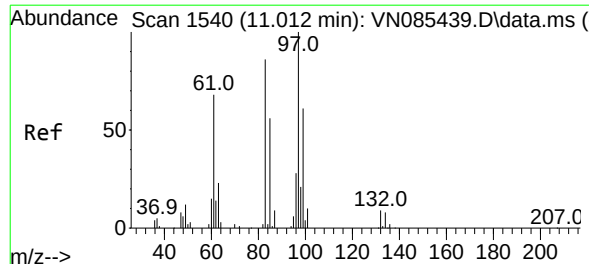
Ion Ratio Lower Upper

75 100

77 30.2 25.0 37.4

39 51.9 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 46.173 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 97 Resp: 114757

Ion Ratio Lower Upper

97 100

83 83.7 69.0 103.6

85 53.2 44.6 66.8

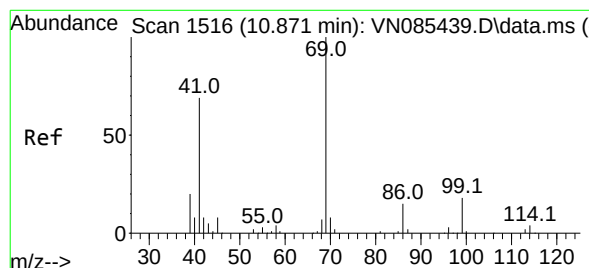
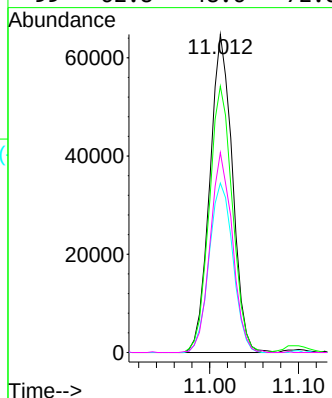
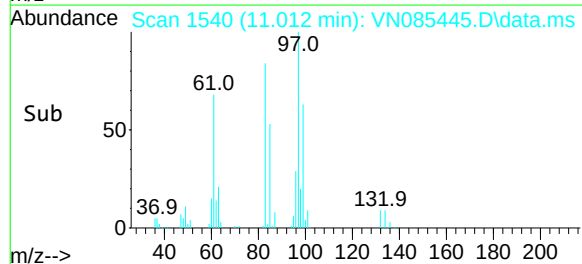
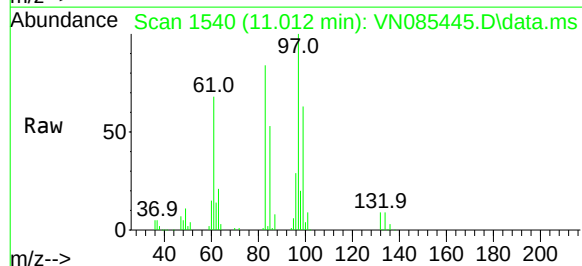
99 62.8 48.6 72.8

Manual Integrations

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#56

Ethyl methacrylate

Concen: 43.762 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

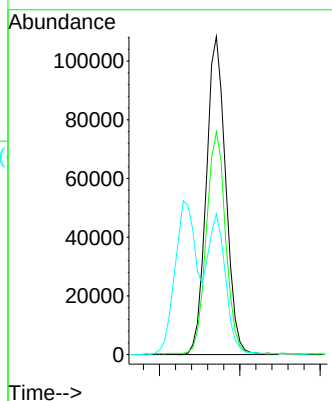
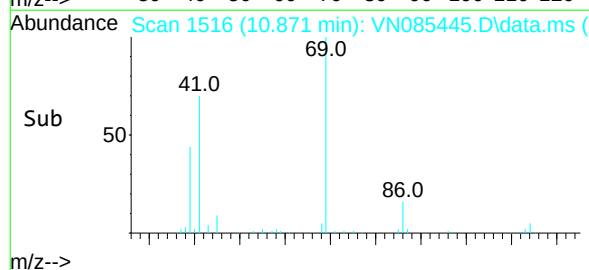
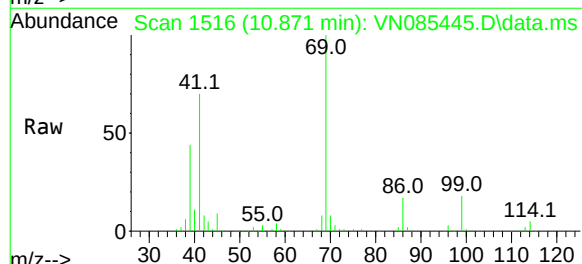
Tgt Ion: 69 Resp: 182170

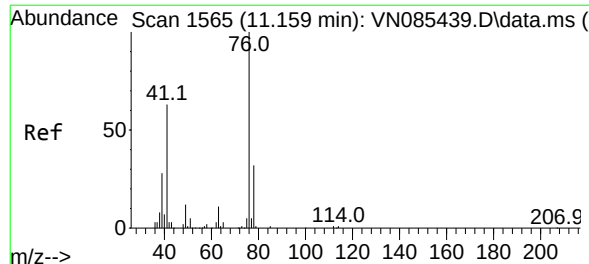
Ion Ratio Lower Upper

69 100

41 70.4 54.6 82.0

39 40.2 32.4 48.6





#57

1,3-Dichloropropane

Concen: 46.877 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 76 Resp: 202583

Ion Ratio Lower Upper

76 100

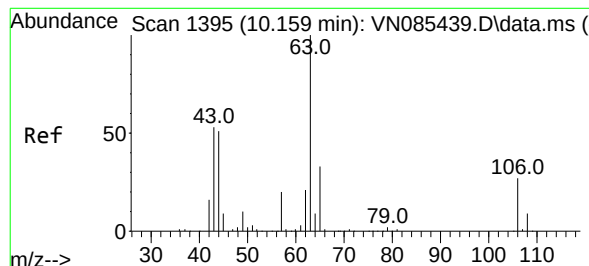
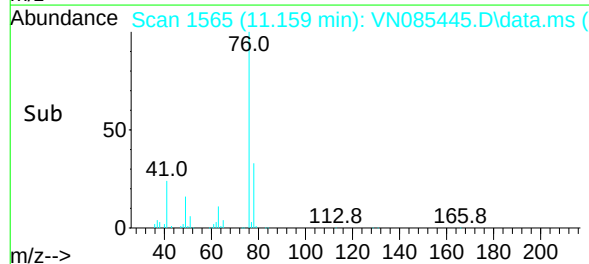
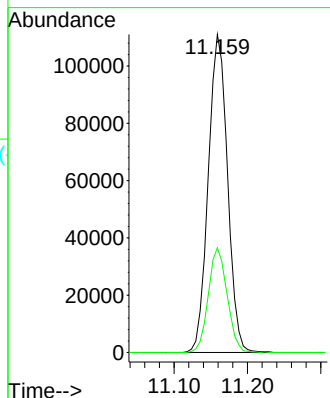
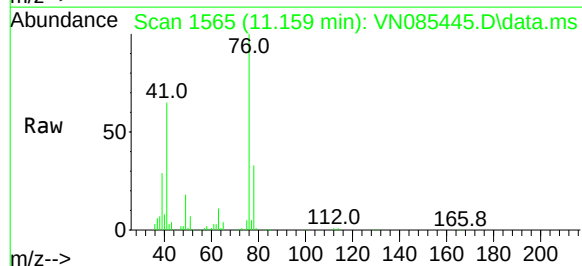
78 32.1 25.6 38.4

Manual Integrations

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Supervised By :Mahesh Dadoda 01/15/2025



#58

2-Chloroethyl Vinyl ether

Concen: 256.116 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. 0.000 min

Lab File: VN085445.D

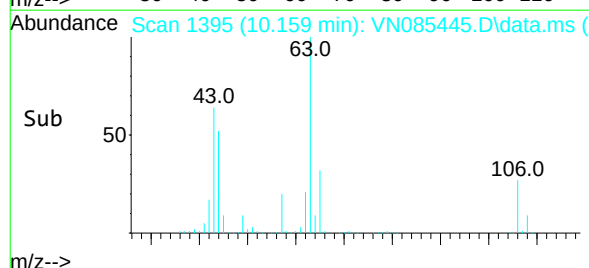
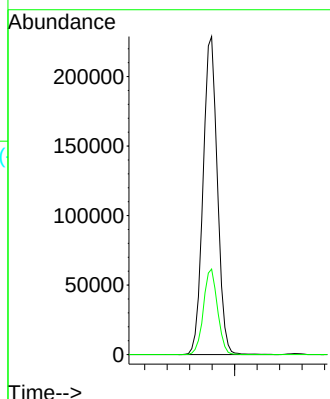
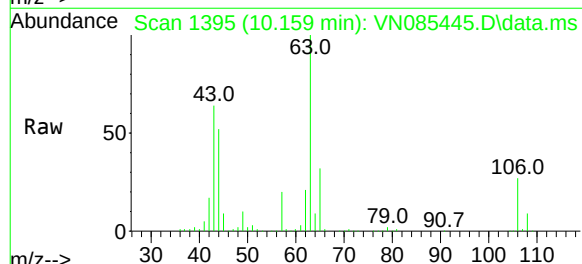
Acq: 14 Jan 2025 18:06

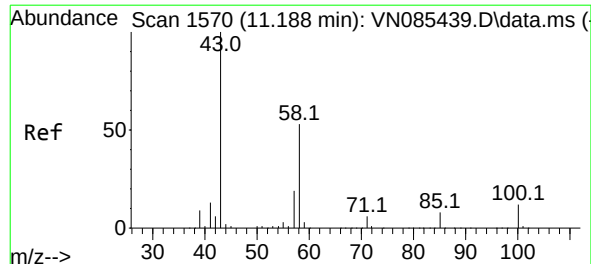
Tgt Ion: 63 Resp: 403949

Ion Ratio Lower Upper

63 100

106 26.4 21.6 32.4





#59

2-Hexanone

Concen: 251.213 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 43 Resp: 598433

Ion Ratio Lower Upper

43 100

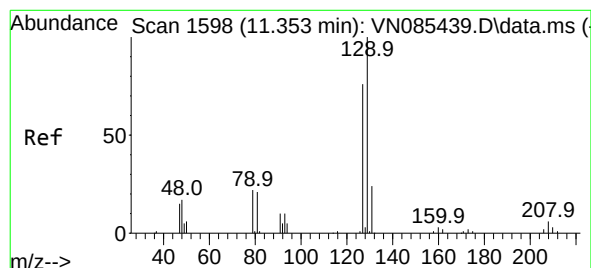
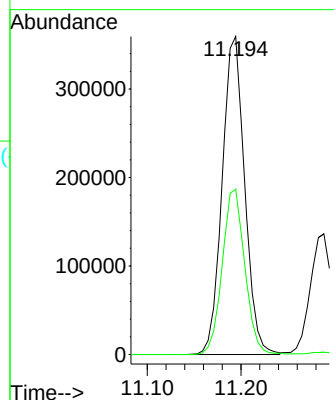
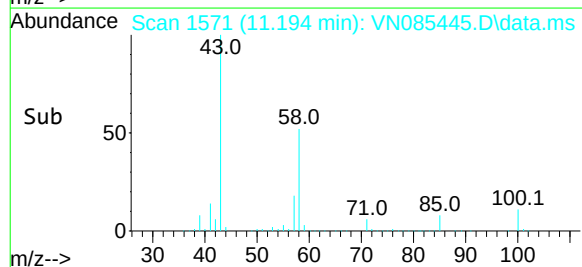
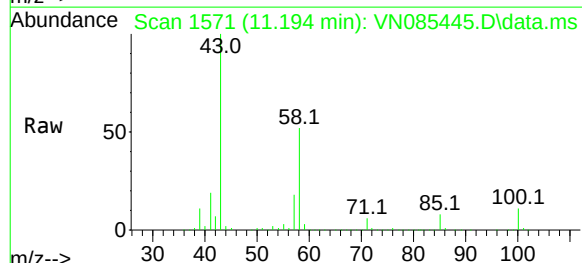
58 52.1 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#60

Dibromochloromethane

Concen: 45.935 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085445.D

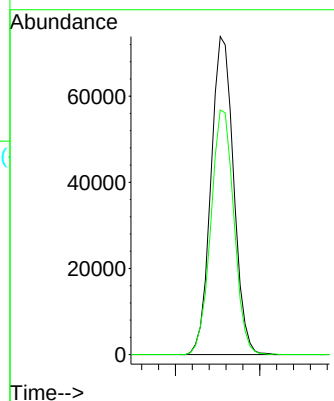
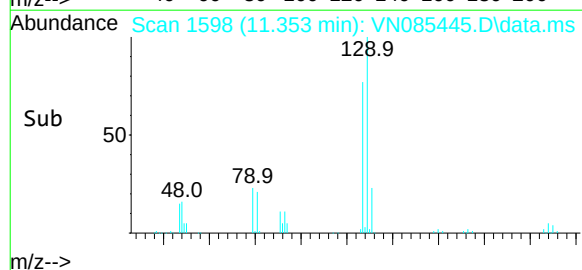
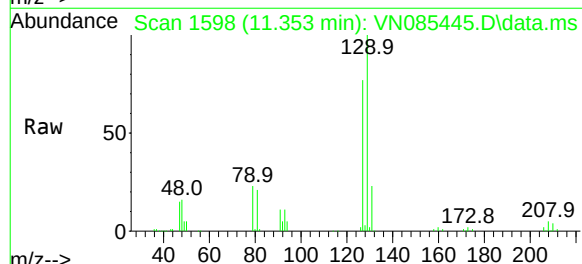
Acq: 14 Jan 2025 18:06

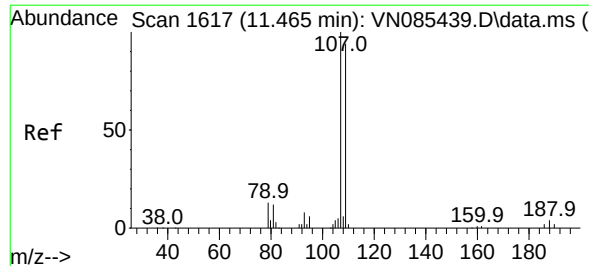
Tgt Ion:129 Resp: 137831

Ion Ratio Lower Upper

129 100

127 78.1 38.6 115.8





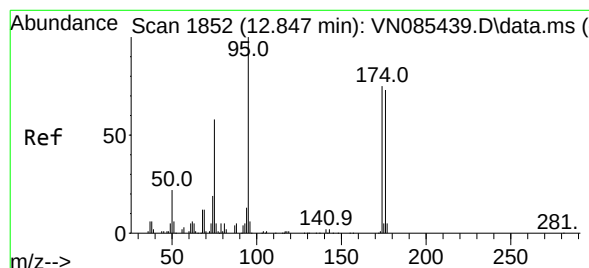
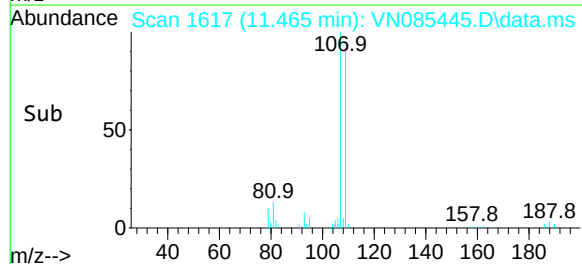
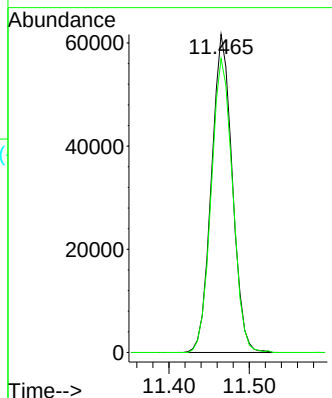
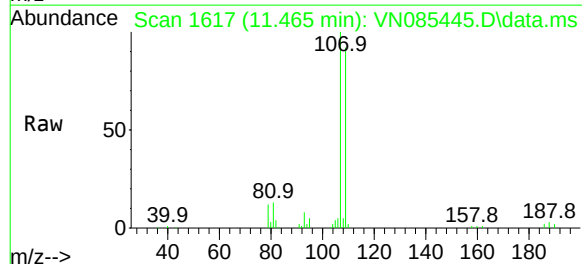
#61
1,2-Dibromoethane
Concen: 44.837 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion: 107 Resp: 110926
Ion Ratio Lower Upper
107 100
109 94.7 75.9 113.9

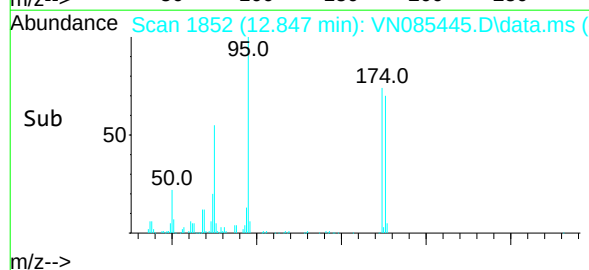
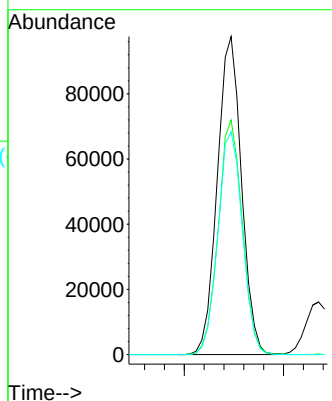
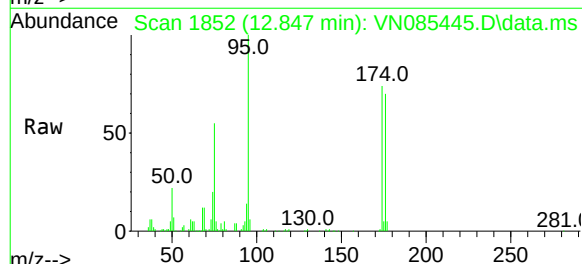
Manual Integrations
APPROVED

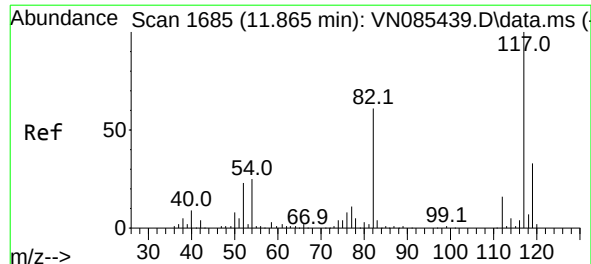
Reviewed By : John Carlone 01/15/2025
Supervised By : Mahesh Dadoda 01/15/2025



#62
4-Bromofluorobenzene
Concen: 52.899 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion: 95 Resp: 165249
Ion Ratio Lower Upper
95 100
174 73.1 0.0 145.0
176 70.8 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVNV011425

Tgt Ion:117 Resp: 320948

Ion Ratio Lower Upper

117 100

82 60.1 48.6 72.8

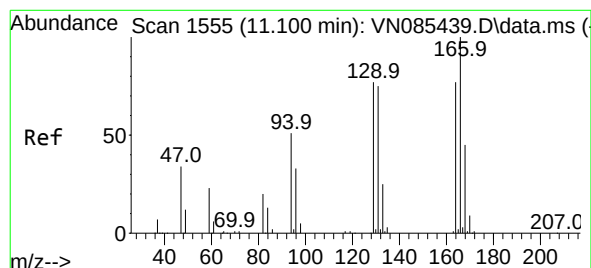
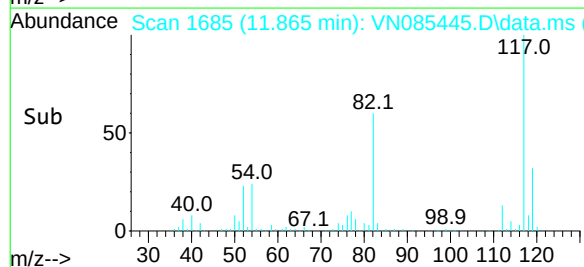
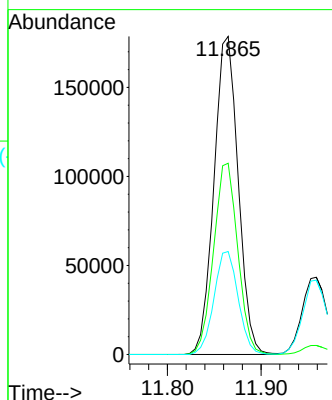
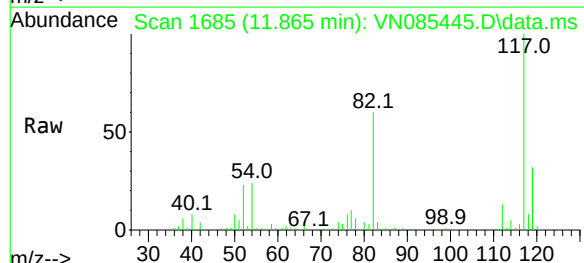
119 32.4 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#64

Tetrachloroethene

Concen: 44.886 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:164 Resp: 98211

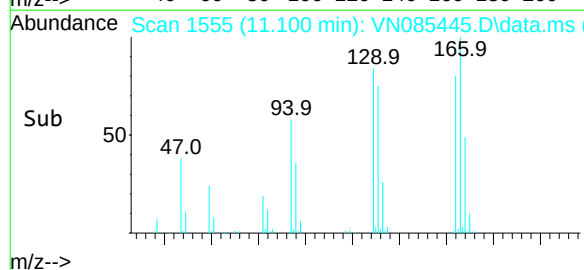
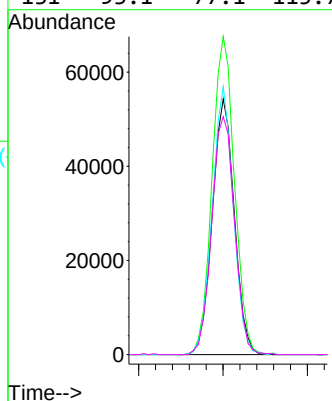
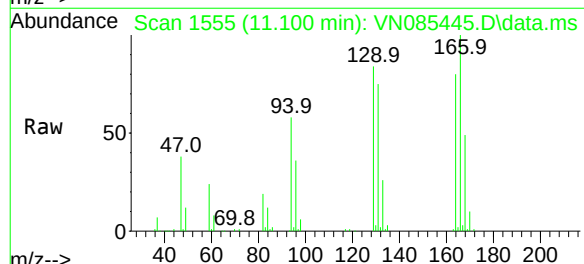
Ion Ratio Lower Upper

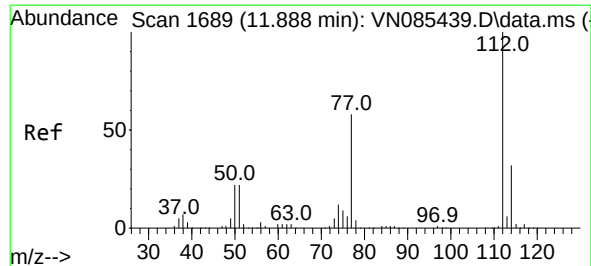
164 100

166 124.4 103.4 155.2

129 104.8 79.2 118.8

131 93.1 77.1 115.7





#65

Chlorobenzene

Concen: 45.901 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion:112 Resp: 322723

Ion Ratio Lower Upper

112 100

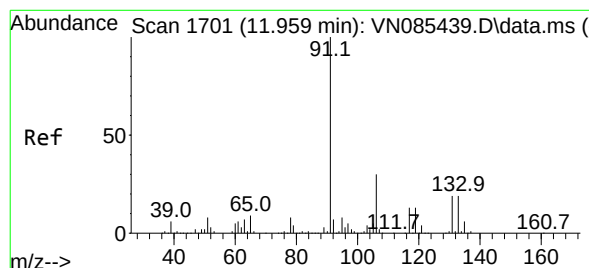
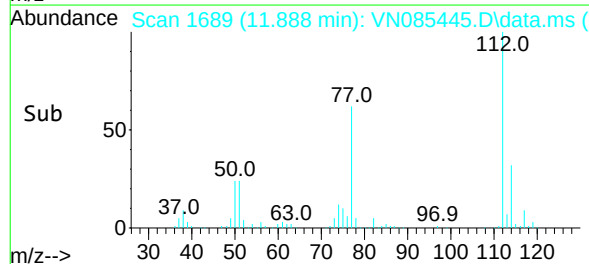
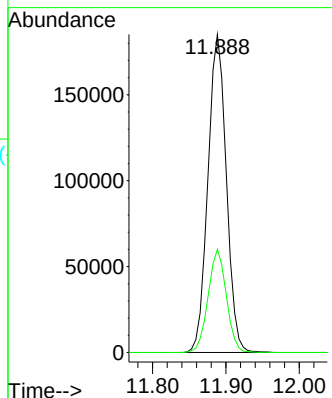
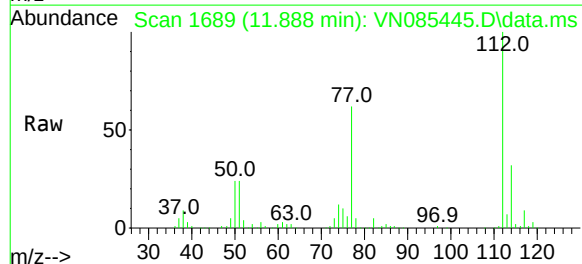
114 32.4 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 44.712 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

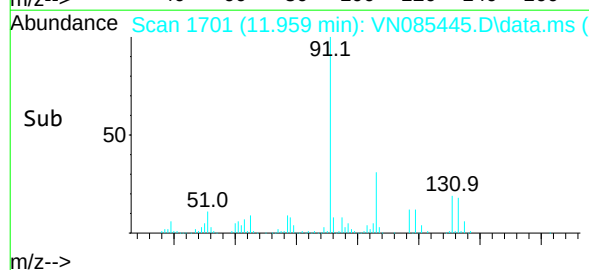
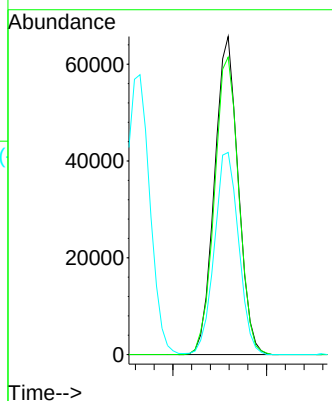
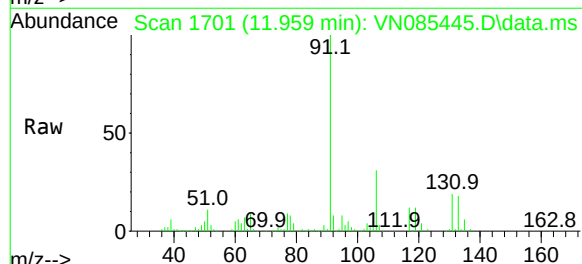
Tgt Ion:131 Resp: 115379

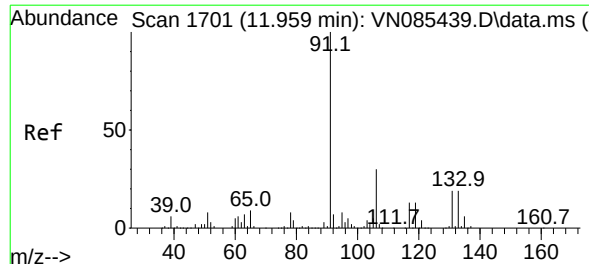
Ion Ratio Lower Upper

131 100

133 95.8 47.4 142.3

119 65.2 33.1 99.5





#67

Ethyl Benzene

Concen: 50.391 ug/l

RT: 11.959 min Scan# 17

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICV011425

Tgt Ion: 91 Resp: 577059

Ion Ratio Lower Upper

91 100

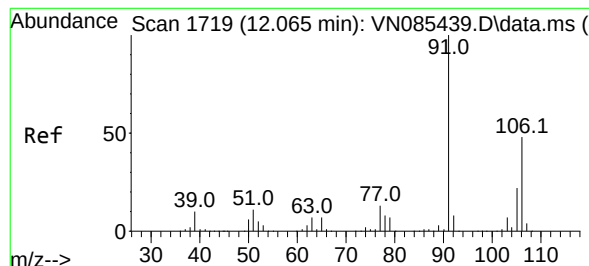
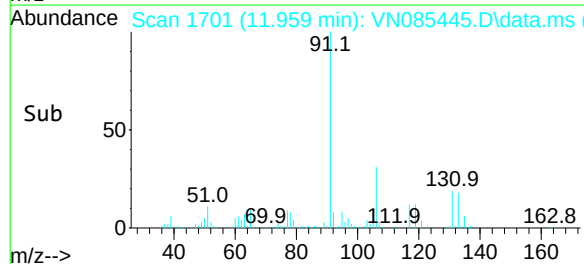
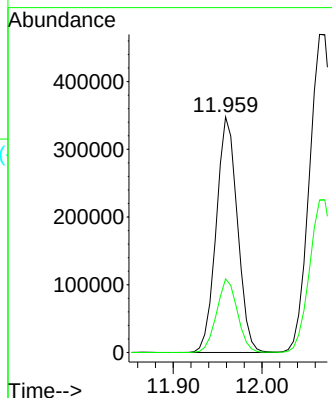
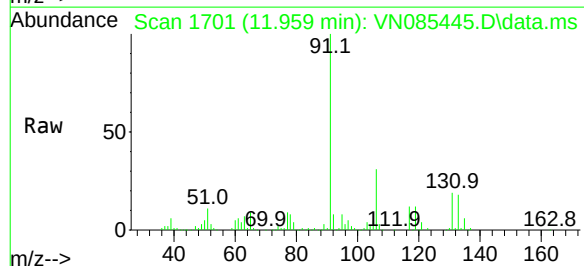
106 31.2 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#68

m/p-Xylenes

Concen: 103.341 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085445.D

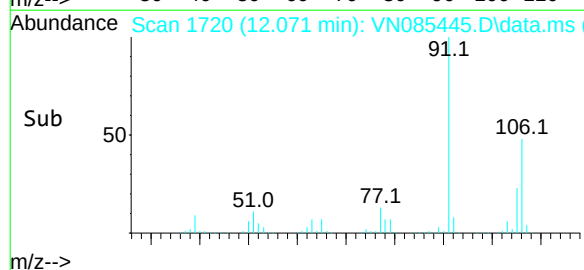
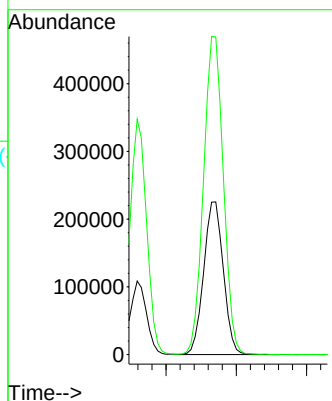
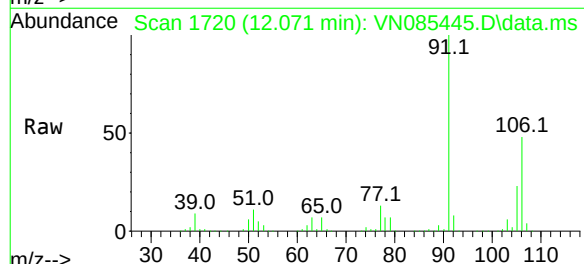
Acq: 14 Jan 2025 18:06

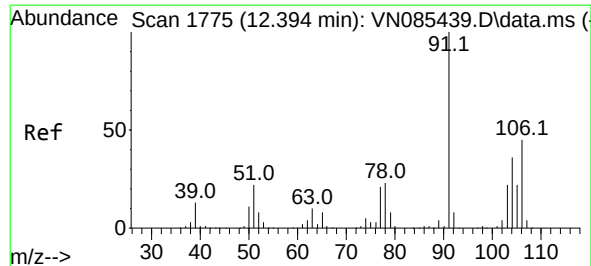
Tgt Ion:106 Resp: 437367

Ion Ratio Lower Upper

106 100

91 210.1 167.7 251.5





#69

o-Xylene

Concen: 52.093 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVNVN011425

Tgt Ion:106 Resp: 210698

Ion Ratio Lower Upper

106 100

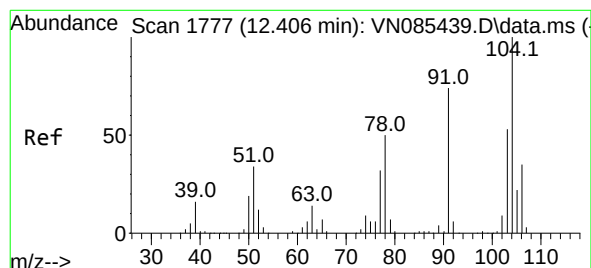
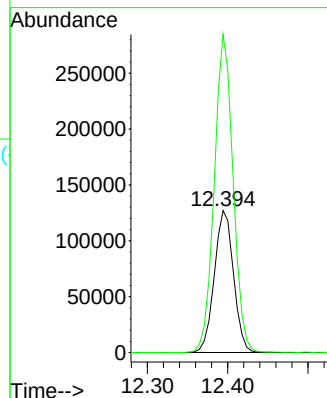
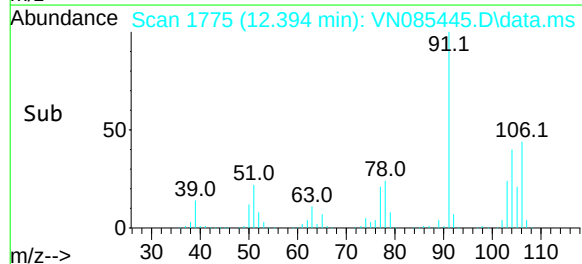
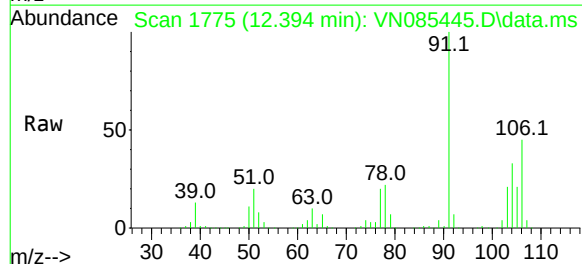
91 219.9 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#70

Styrene

Concen: 53.103 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

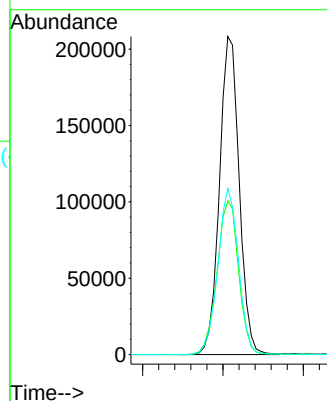
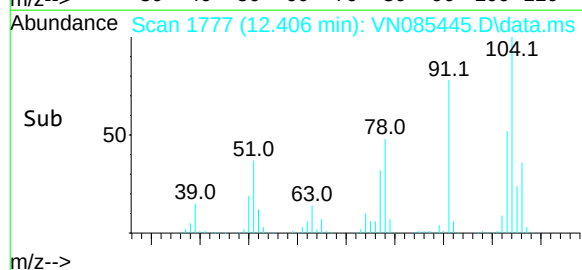
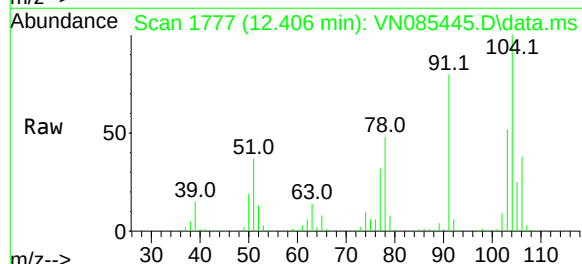
Tgt Ion:104 Resp: 355459

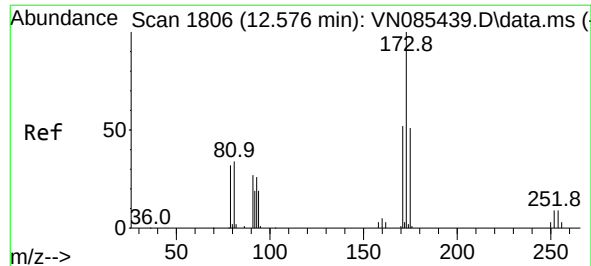
Ion Ratio Lower Upper

104 100

78 52.8 42.5 63.7

103 54.5 43.8 65.8





#71

Bromoform

Concen: 49.119 ug/l

RT: 12.577 min Scan# 18

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

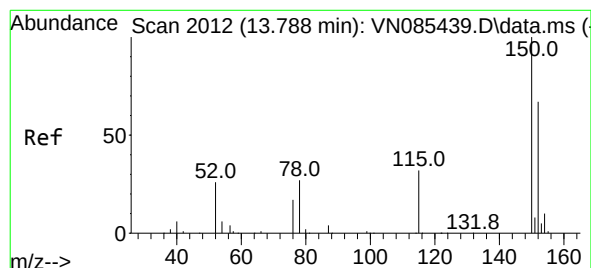
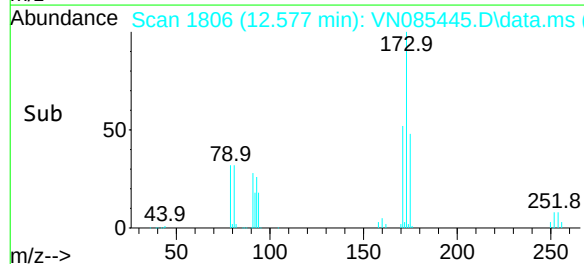
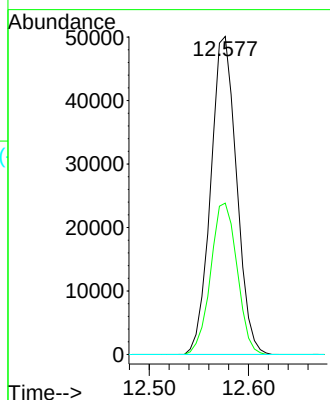
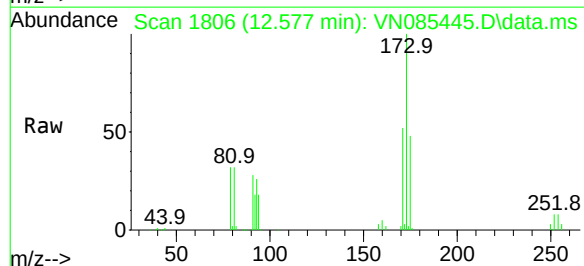
Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion:	173	Resp:	90693
Ion Ratio	Lower	Upper	
173	100		
175	48.7	24.4	73.2
254	0.0	0.0	0.0

Manual Integrations
APPROVEDReviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

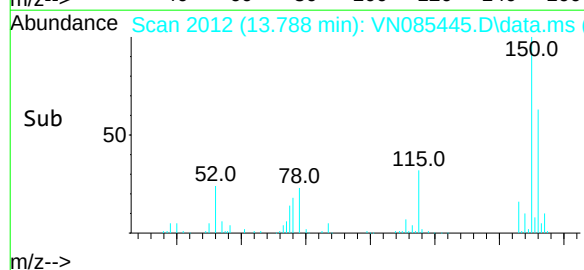
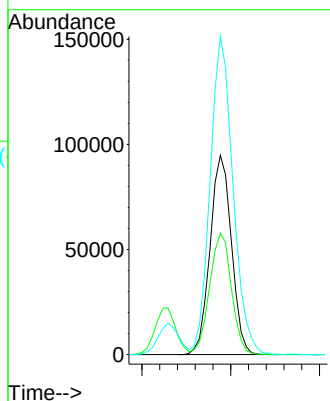
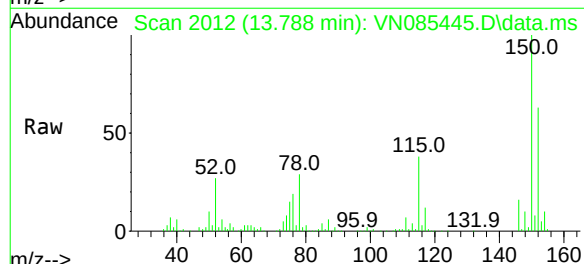
RT: 13.788 min Scan# 2012

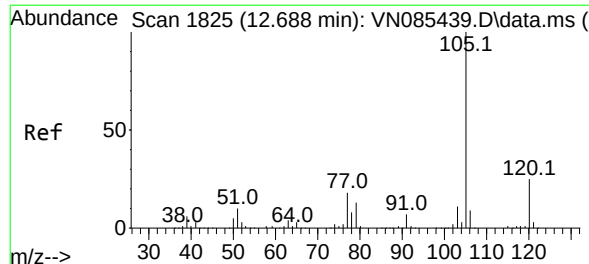
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	152	Resp:	158525
Ion Ratio	Lower	Upper	
152	100		
115	62.2	31.1	93.3
150	171.0	0.0	343.6





#73

Isopropylbenzene

Concen: 49.951 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVNV011425

Tgt Ion: 105 Resp: 534428

Ion Ratio Lower Upper

105 100

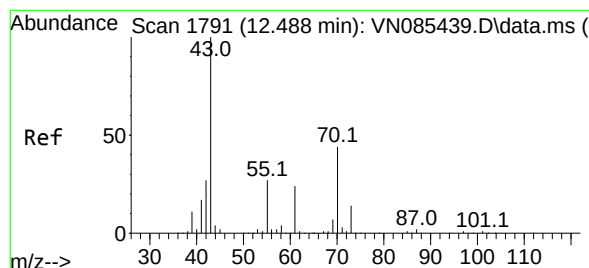
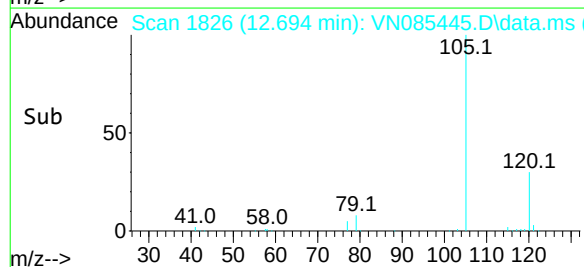
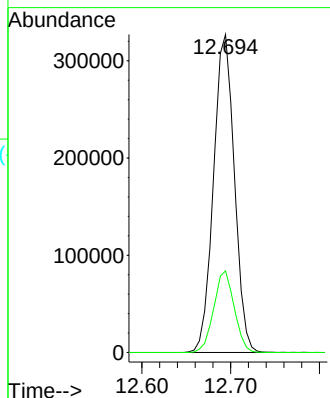
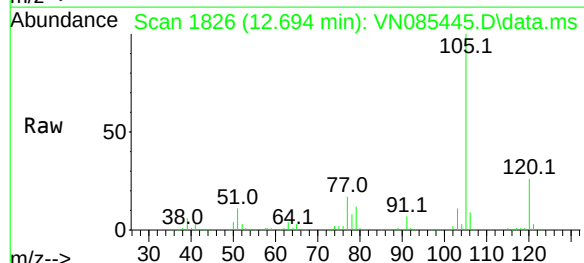
120 25.2 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#74

N-ethyl acetate

Concen: 48.730 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion: 43 Resp: 234342

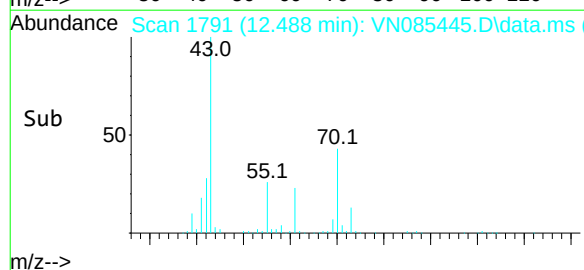
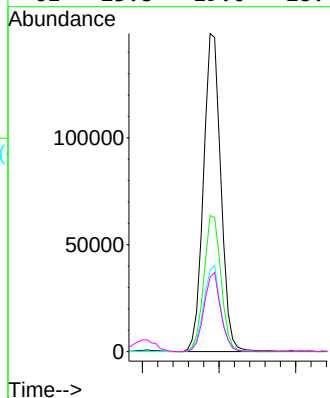
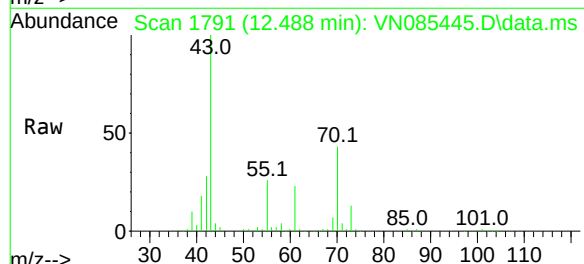
Ion Ratio Lower Upper

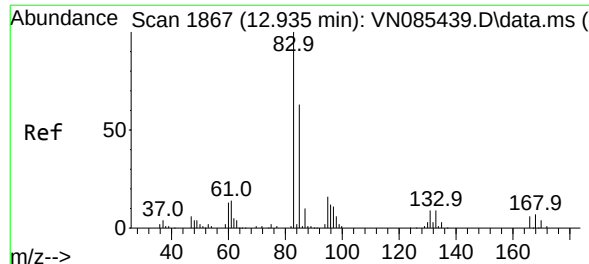
43 100

70 42.2 34.0 51.0

55 26.5 21.4 32.2

61 23.8 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 43.627 ug/l

RT: 12.935 min Scan# 18

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

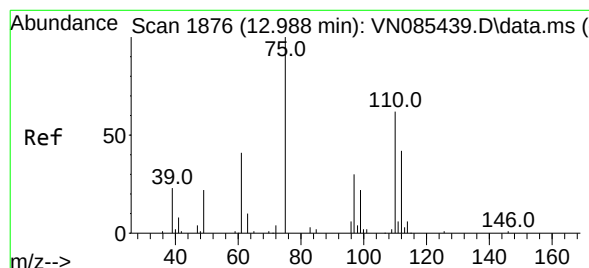
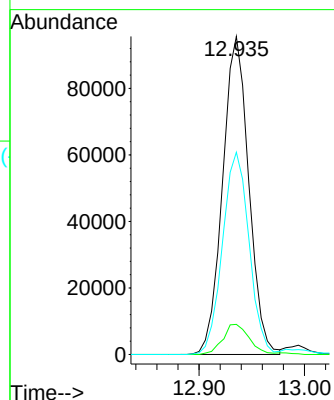
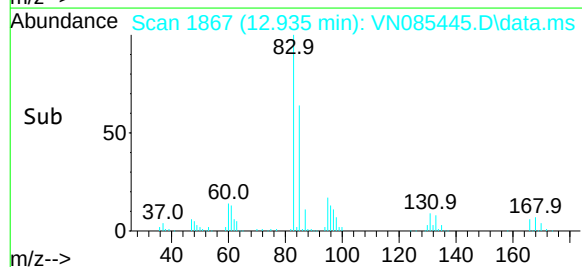
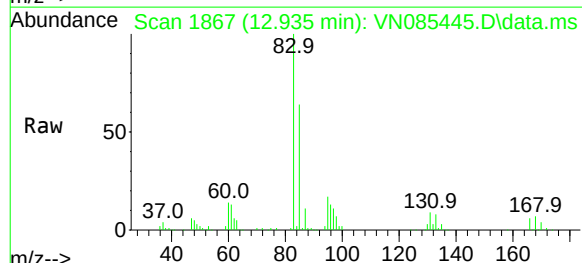
ClientSampleId :

ICVVN011425

Tgt Ion:	83	Resp:	164882
Ion	Ratio	Lower	Upper
83	100		
131	9.9	4.8	14.4
85	64.6	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#76

1,2,3-Trichloropropane

Concen: 41.891 ug/l m

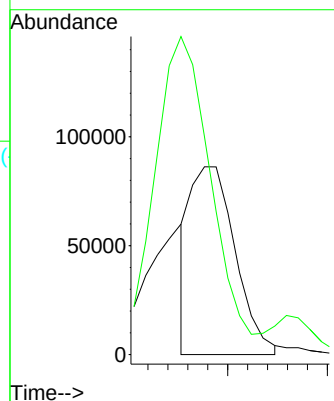
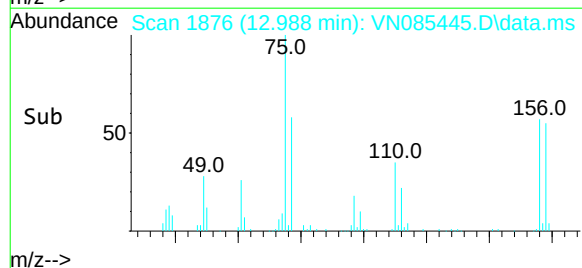
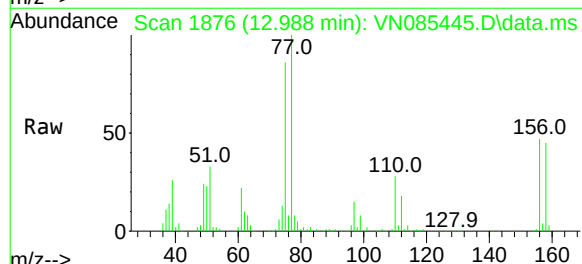
RT: 12.988 min Scan# 1876

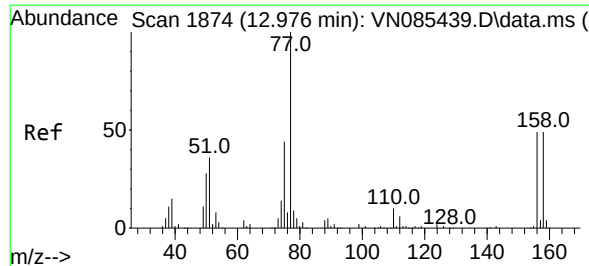
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	75	Resp:	134976
Ion	Ratio	Lower	Upper
75	100		
77	213.9	109.7	329.2





#77

Bromobenzene

Concen: 46.138 ug/l

RT: 12.977 min Scan# 1874

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

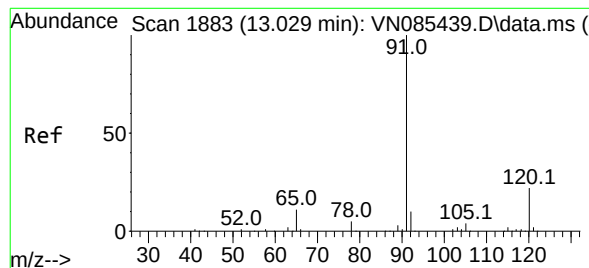
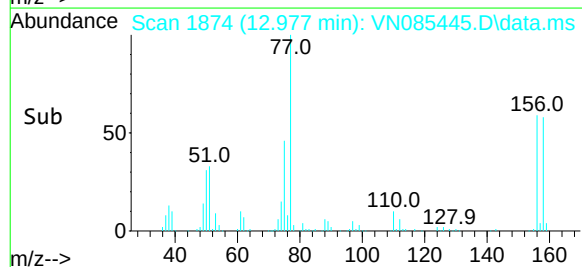
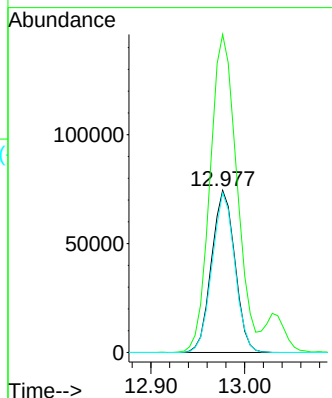
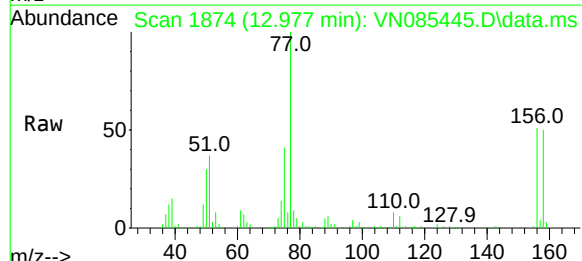
Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion:	156	Resp:	128968
Ion Ratio	Lower	Upper	
156	100		
77	223.8	114.1	342.4
158	95.7	48.9	146.8

Manual Integrations
APPROVEDReviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

#78

n-propylbenzene

Concen: 51.001 ug/l

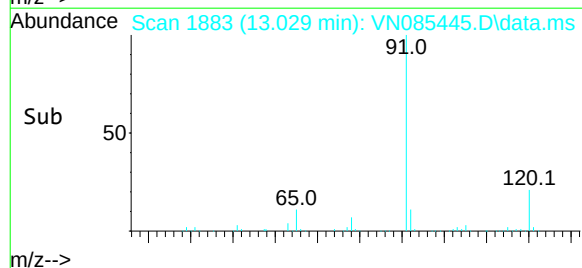
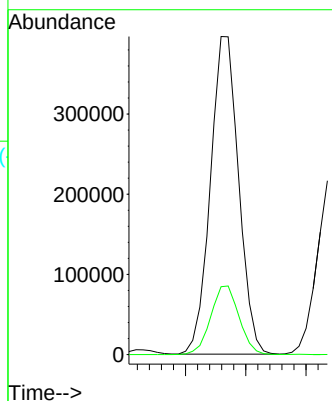
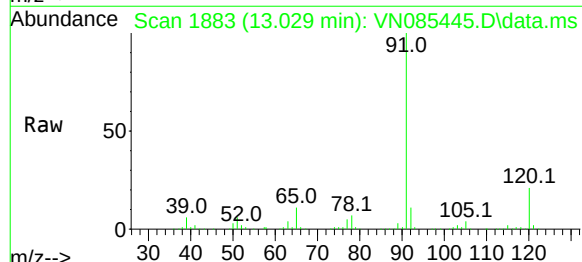
RT: 13.029 min Scan# 1883

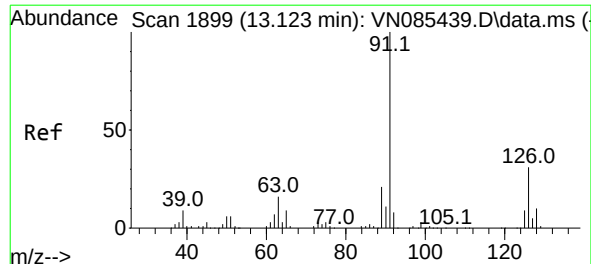
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	91	Resp:	645977
Ion Ratio	Lower	Upper	
91	100		
120	21.7	10.9	32.6





#79

2-Chlorotoluene

Concen: 47.870 ug/l

RT: 13.124 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion: 91 Resp: 392404

Ion Ratio Lower Upper

91 100

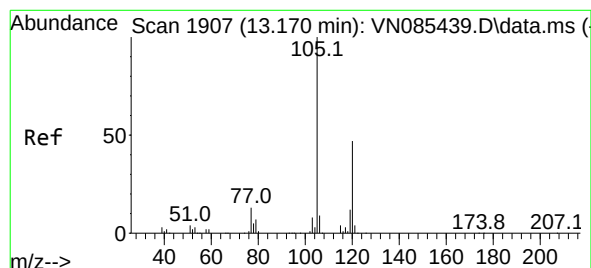
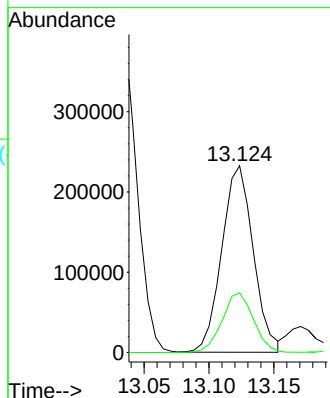
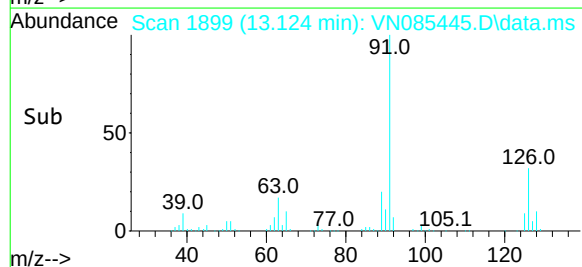
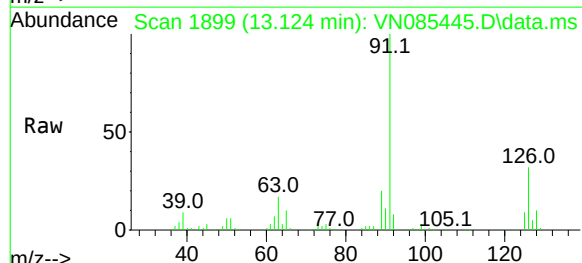
126 31.8 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#80

1,3,5-Trimethylbenzene

Concen: 51.604 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085445.D

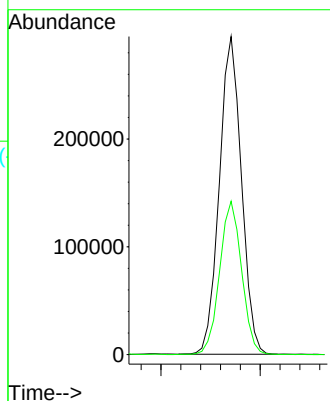
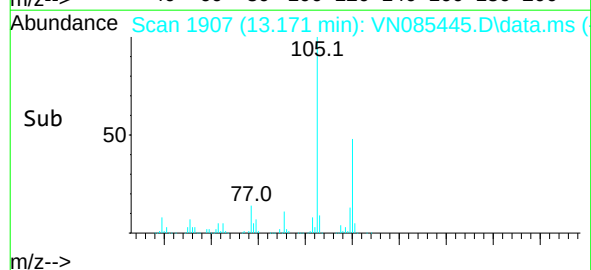
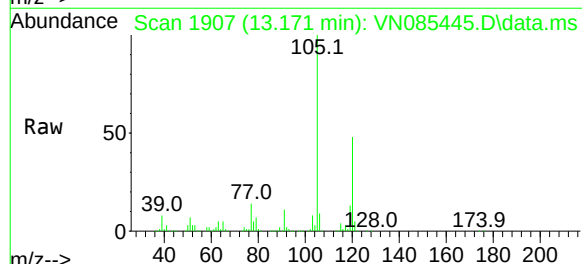
Acq: 14 Jan 2025 18:06

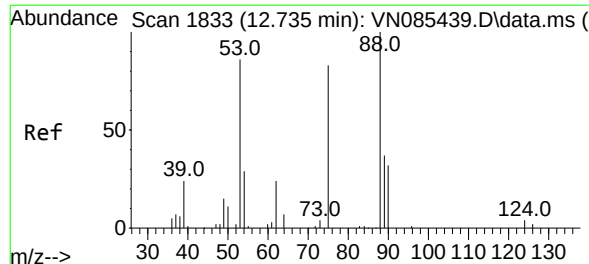
Tgt Ion:105 Resp: 456048

Ion Ratio Lower Upper

105 100

120 48.1 23.9 71.7





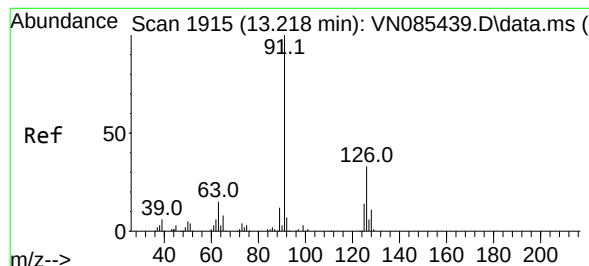
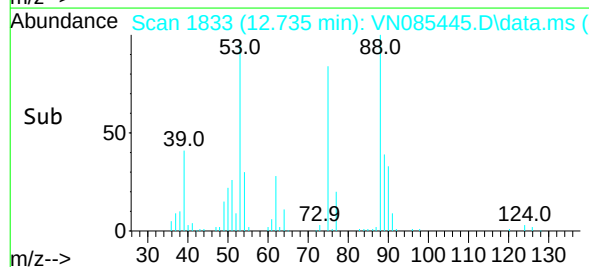
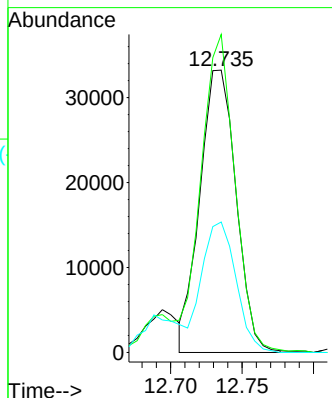
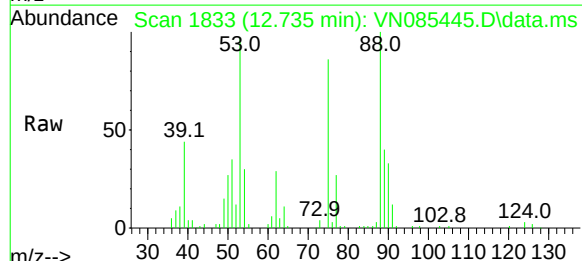
#81
trans-1,4-Dichloro-2-butene
Concen: 49.226 ug/l m
RT: 12.735 min Scan# 1833
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion:	75	Resp:	58623
Ion	Ratio	Lower	Upper
75	100		
53	118.0	95.6	143.4
89	43.3	37.0	55.6

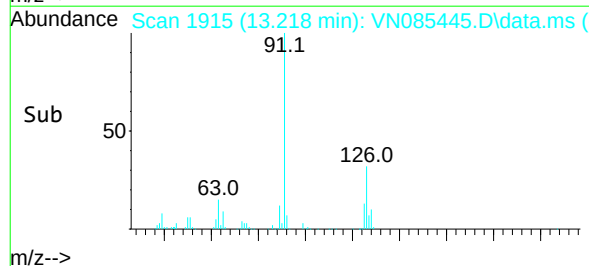
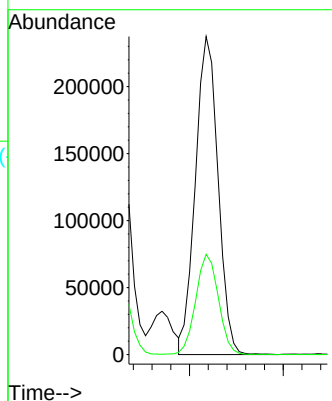
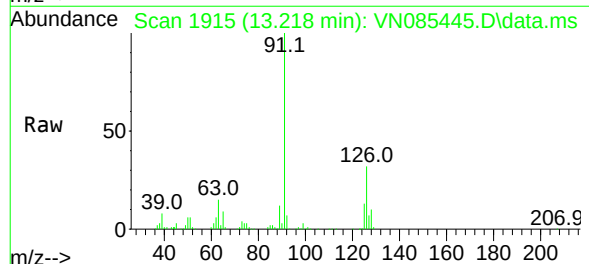
Manual Integrations
APPROVED

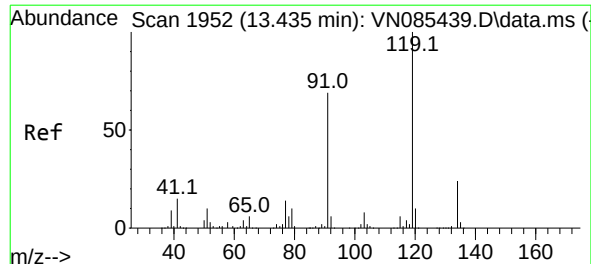
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#82
4-Chlorotoluene
Concen: 48.776 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion:	91	Resp:	398110
Ion	Ratio	Lower	Upper
91	100		
126	31.6	15.9	47.7





#83

tert-Butylbenzene

Concen: 50.997 ug/l

RT: 13.435 min Scan# 1952

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion:119 Resp: 378478

Ion Ratio Lower Upper

119 100

91 70.6 35.1 105.3

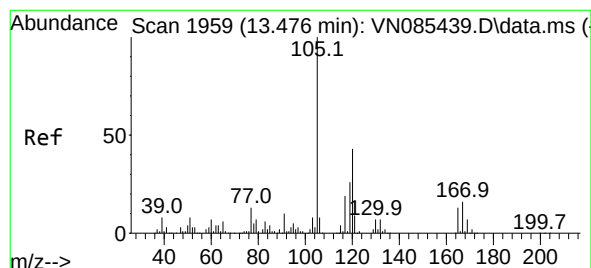
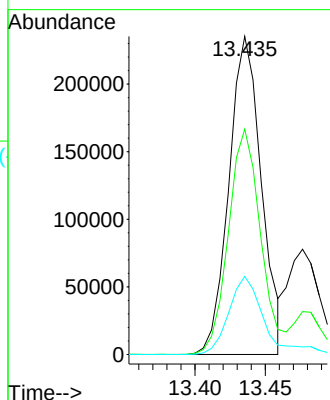
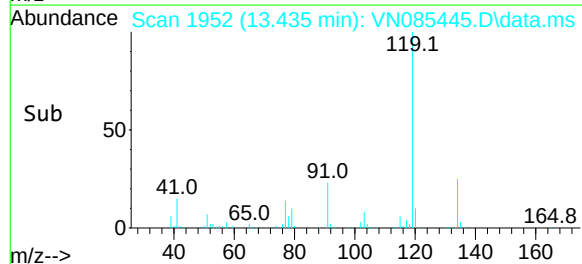
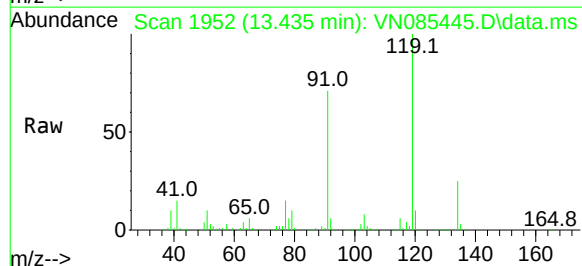
134 26.7 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#84

1,2,4-Trimethylbenzene

Concen: 51.922 ug/l

RT: 13.477 min Scan# 1959

Delta R.T. 0.000 min

Lab File: VN085445.D

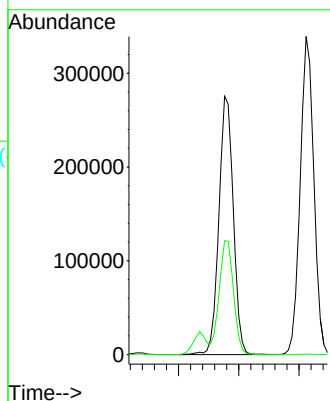
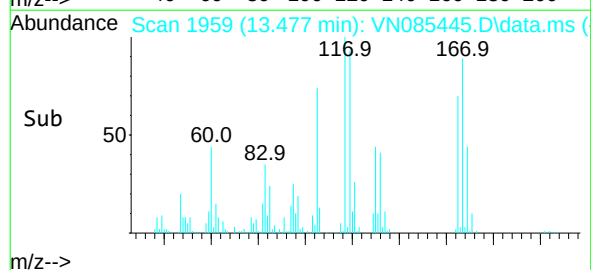
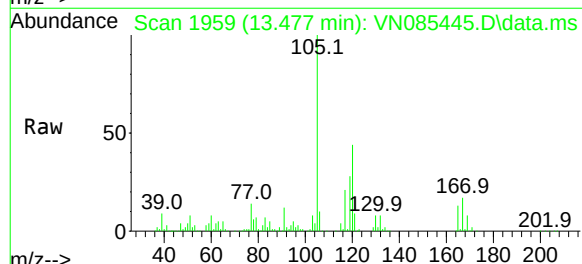
Acq: 14 Jan 2025 18:06

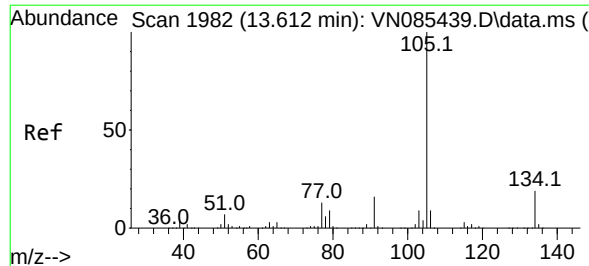
Tgt Ion:105 Resp: 457340

Ion Ratio Lower Upper

105 100

120 43.6 21.6 65.0





#85

sec-Butylbenzene

Concen: 51.777 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVVN011425

Tgt Ion:105 Resp: 532578

Ion Ratio Lower Upper

105 100

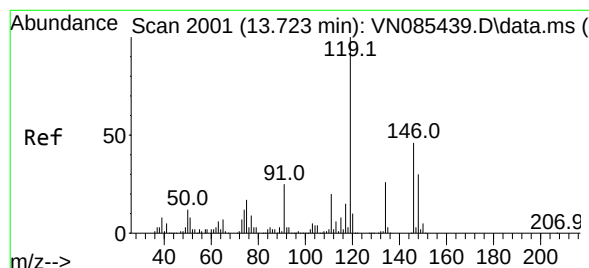
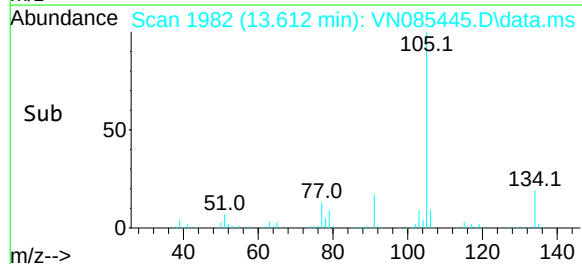
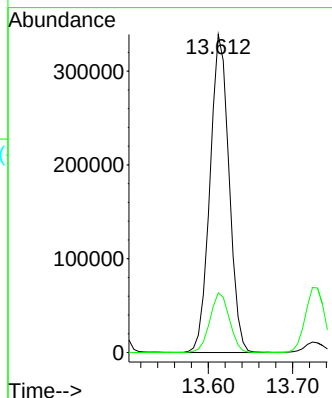
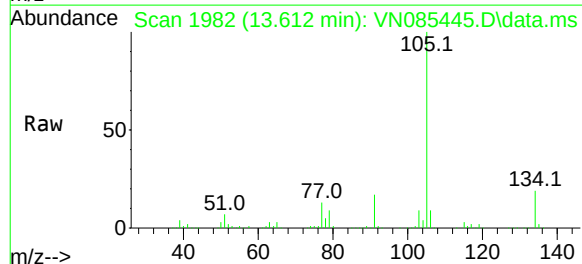
134 19.2 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#86

p-Isopropyltoluene

Concen: 47.795 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

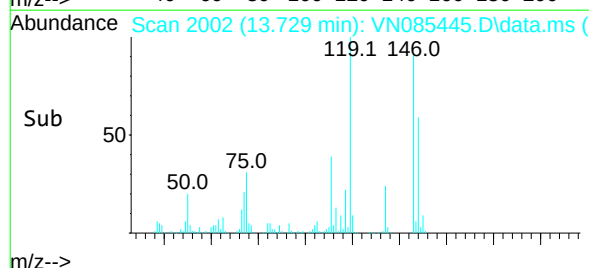
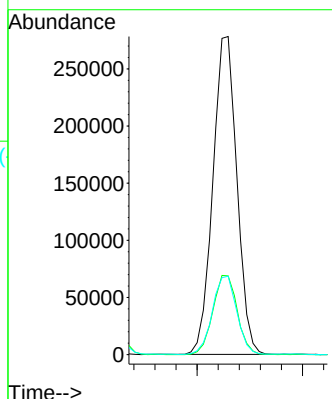
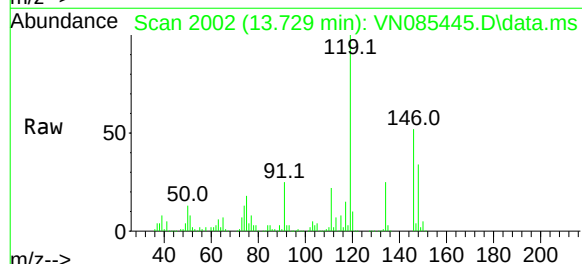
Tgt Ion:119 Resp: 440284

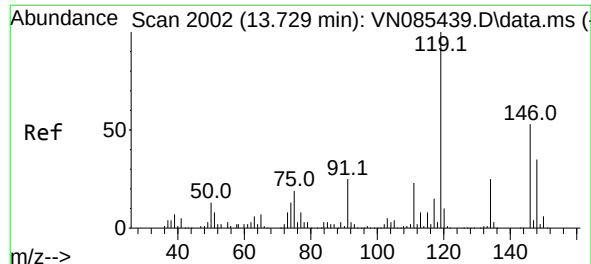
Ion Ratio Lower Upper

119 100

134 25.3 12.7 38.0

91 25.0 12.7 38.1





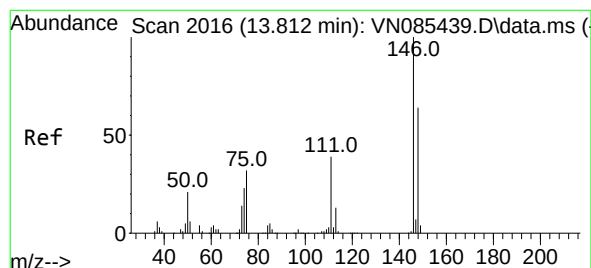
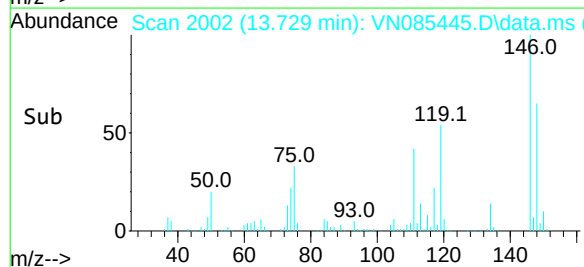
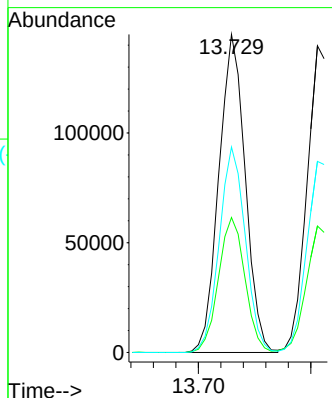
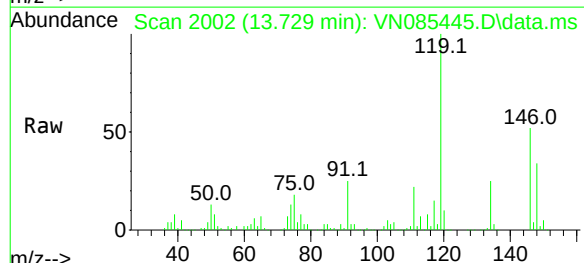
1,3-Dichlorobenzene
Concen: 45.920 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Tgt Ion	146	Resp	236387
Ion Ratio	100	Lower	Upper
111	42.6	21.4	64.3
148	63.8	32.3	96.9

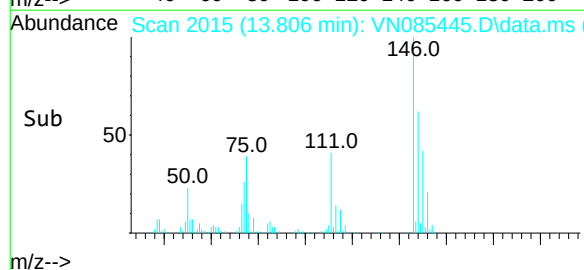
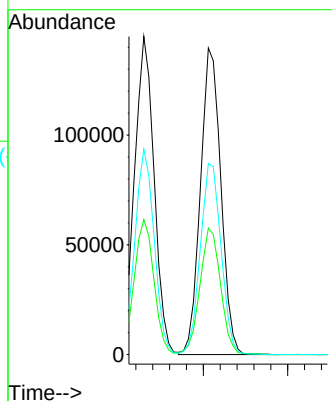
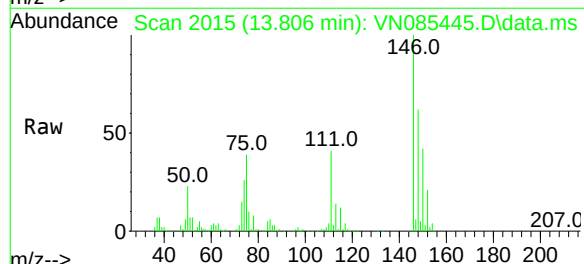
Manual Integrations
APPROVED

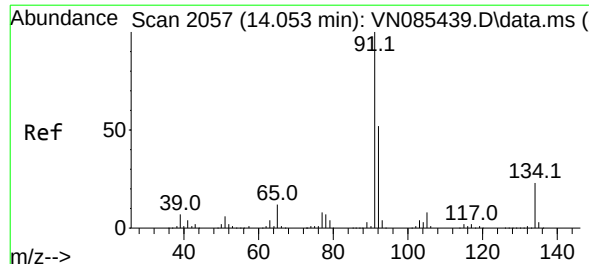
Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



1,4-Dichlorobenzene
Concen: 44.102 ug/l
RT: 13.806 min Scan# 2015
Delta R.T. -0.006 min
Lab File: VN085445.D
Acq: 14 Jan 2025 18:06

Tgt Ion	146	Resp	235319
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
111	41.9	21.3	63.7
148	63.5	32.4	97.0





#89

n-Butylbenzene

Concen: 50.578 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

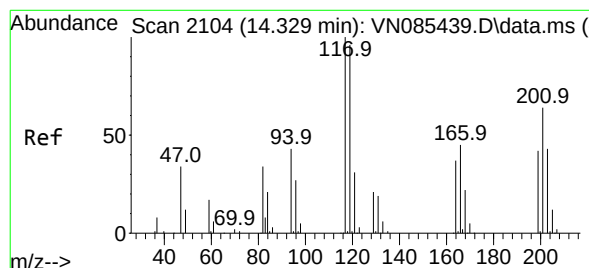
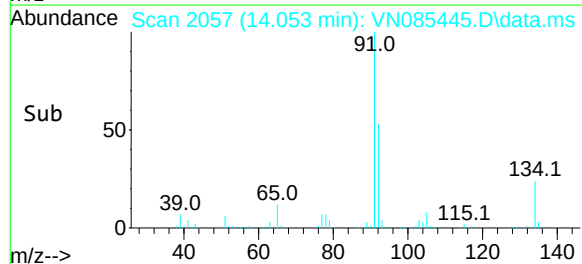
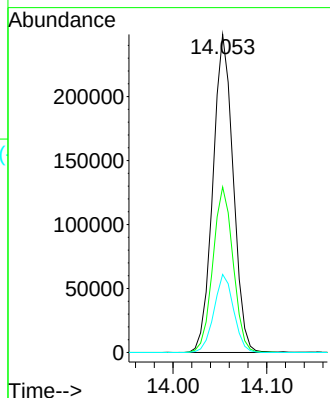
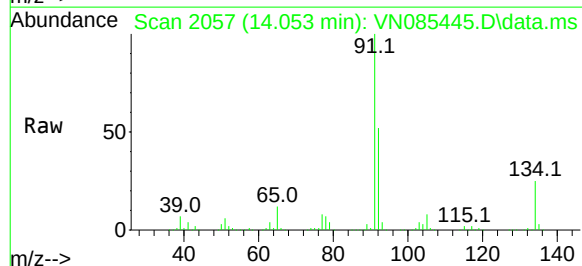
ClientSampleId :

ICVVN011425

Tgt Ion:	91	Resp:	373227
Ion	Ratio	Lower	Upper
91	100		
92	51.9	25.8	77.3
134	23.8	11.7	35.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#90

Hexachloroethane

Concen: 45.215 ug/l

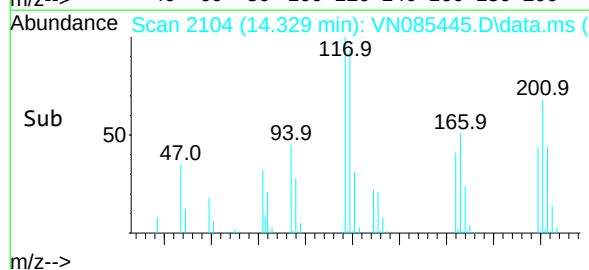
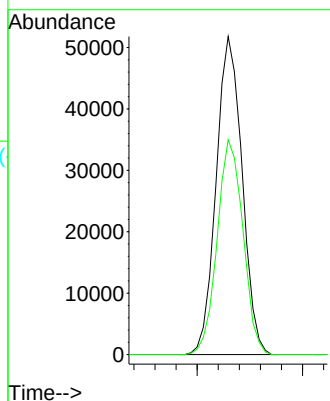
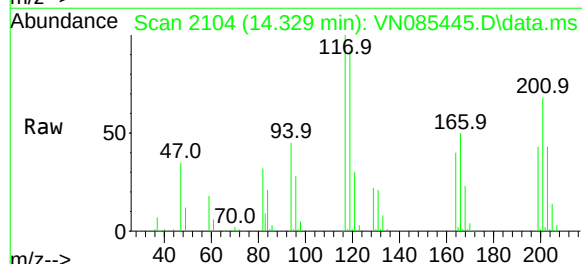
RT: 14.329 min Scan# 2104

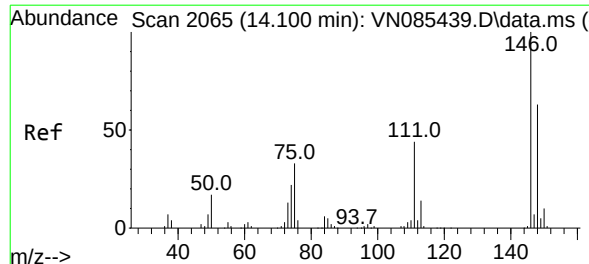
Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	117	Resp:	88538
Ion	Ratio	Lower	Upper
117	100		
201	67.2	33.7	101.0





#91

1,2-Dichlorobenzene

Concen: 45.113 ug/l

RT: 14.100 min Scan# 2065

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

ICVNV011425

Tgt Ion:146 Resp: 231646

Ion Ratio Lower Upper

146 100

111 43.9 21.7 65.1

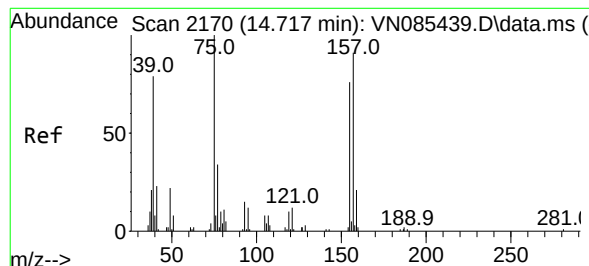
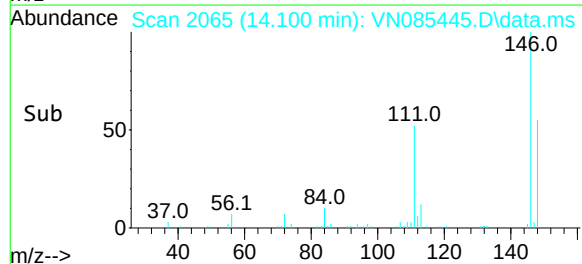
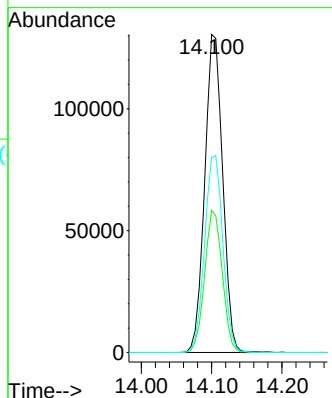
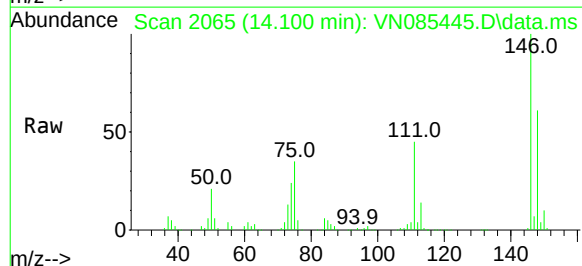
148 63.1 31.4 94.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/15/2025

Supervised By :Mahesh Dadoda 01/15/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 46.221 ug/l

RT: 14.718 min Scan# 2170

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

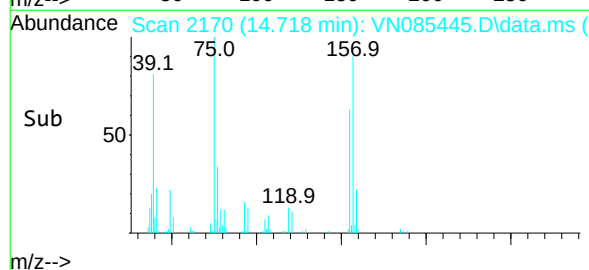
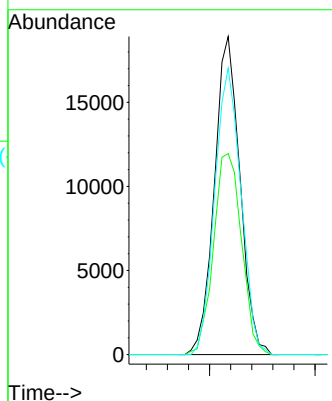
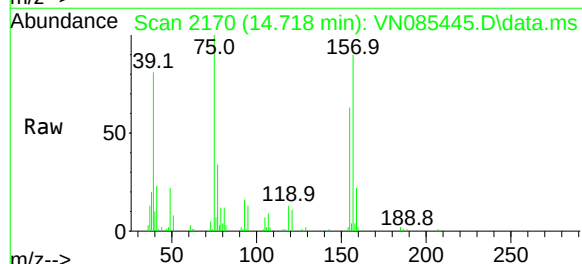
Tgt Ion: 75 Resp: 31899

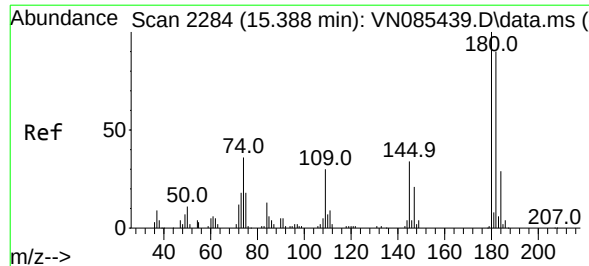
Ion Ratio Lower Upper

75 100

155 69.0 36.4 109.2

157 92.3 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 45.739 ug/l

RT: 15.388 min Scan# 2284

Delta R.T. 0.000 min

Lab File: VN085445.D

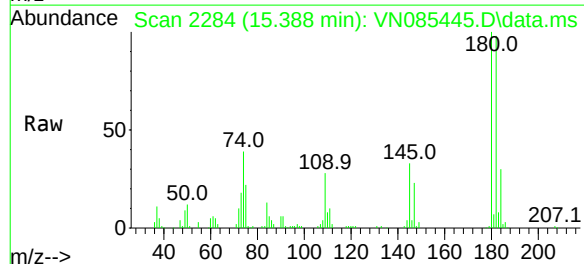
Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

ClientSampleId :

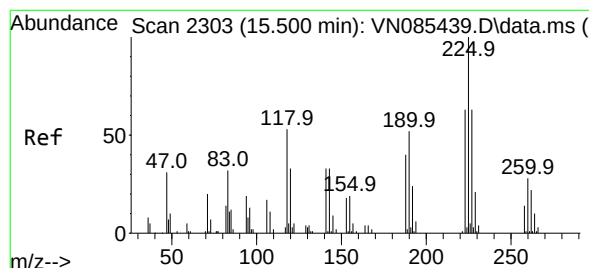
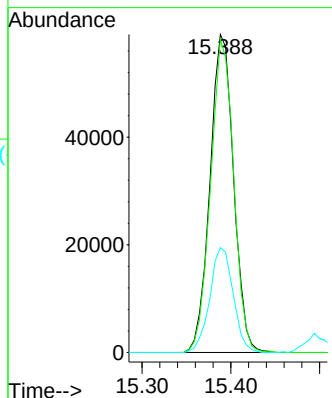
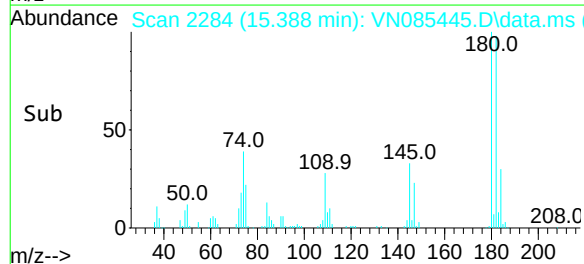
ICVVN011425



Tgt Ion:	180	Resp:	109157
Ion Ratio	Lower	Upper	
180	100		
182	96.3	46.8	140.3
145	32.7	16.0	48.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#94

Hexachlorobutadiene

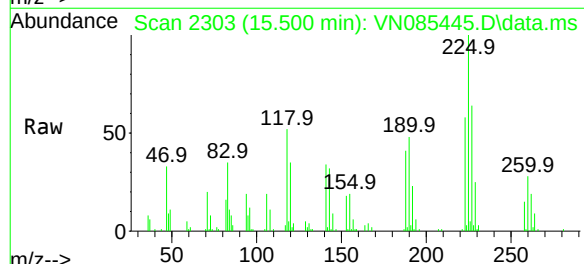
Concen: 42.112 ug/l

RT: 15.500 min Scan# 2303

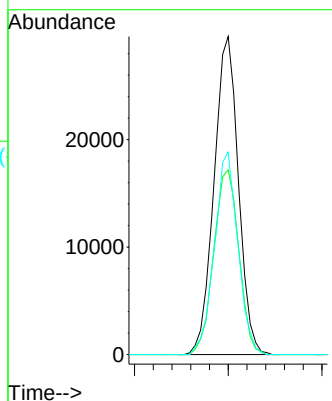
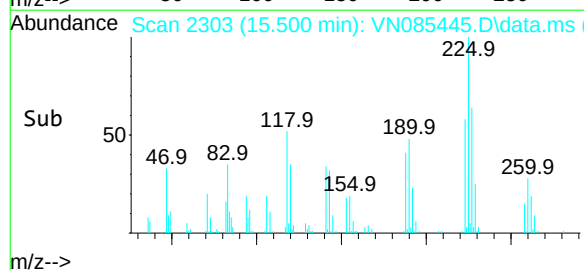
Delta R.T. 0.000 min

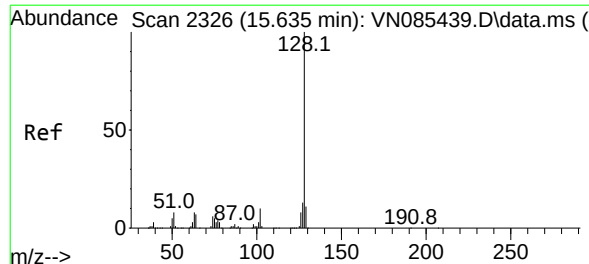
Lab File: VN085445.D

Acq: 14 Jan 2025 18:06



Tgt Ion:	225	Resp:	53358
Ion Ratio	Lower	Upper	
225	100		
223	59.8	30.7	92.1
227	61.2	30.9	92.5





#95

Naphthalene

Concen: 47.116 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Instrument :

MSVOA_N

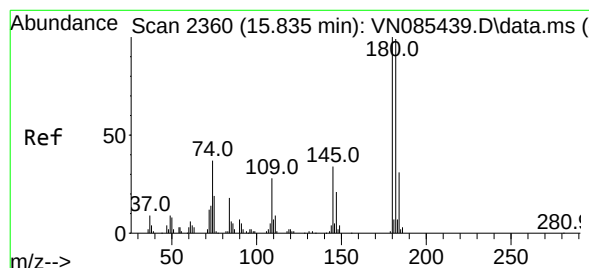
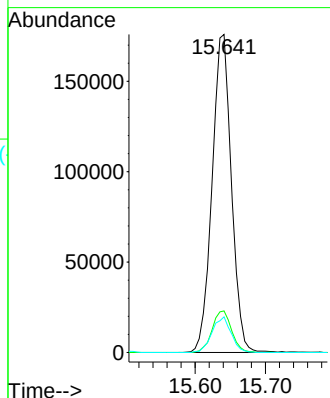
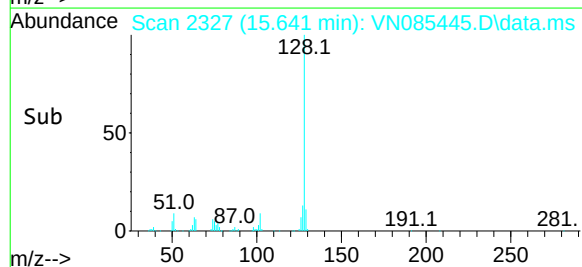
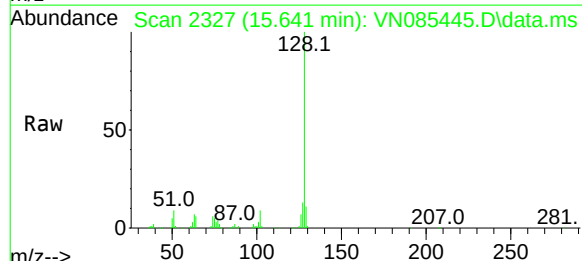
ClientSampleId :

ICVVN011425

Tgt Ion:	128	Resp:	335535
Ion Ratio	Lower	Upper	
128	100		
127	13.2	10.6	16.0
129	11.1	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



#96

1,2,3-Trichlorobenzene

Concen: 44.551 ug/l

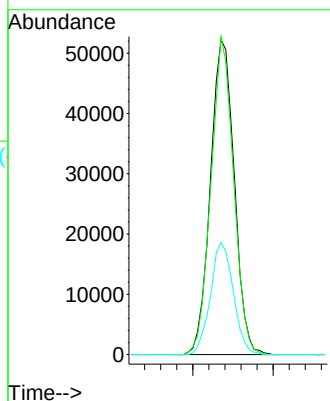
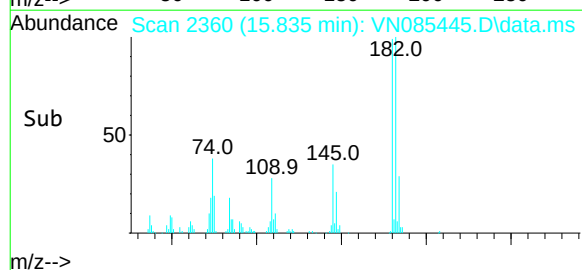
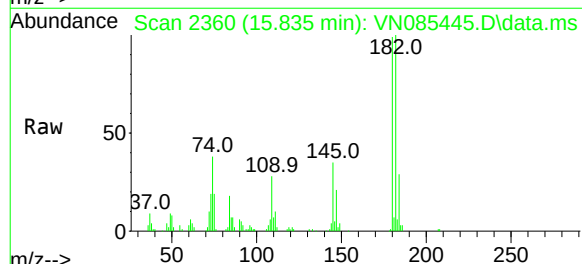
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085445.D

Acq: 14 Jan 2025 18:06

Tgt Ion:	180	Resp:	107583
Ion Ratio	Lower	Upper	
180	100		
182	95.6	47.4	142.2
145	34.3	16.9	50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	110	0.00
2 T	Dichlorodifluoromethane	0.677	0.593	12.4	104	0.00
3 P	Chloromethane	0.733	0.629	14.2	102	0.00
4 C	Vinyl Chloride	0.737	0.629	14.7#	101	0.00
5 T	Bromomethane	0.445	0.364	18.2	96	0.00
6 T	Chloroethane	0.467	0.395	15.4	103	0.00
7 T	Trichlorofluoromethane	1.069	0.940	12.1	104	0.00
8 T	Diethyl Ether	0.369	0.316	14.4	97	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.602	0.538	10.6	109	0.00
10 T	Methyl Iodide	0.690	0.638	7.5	98	0.00
11 T	Tert butyl alcohol	0.092	0.076	17.4	90	0.00
12 CM	1,1-Dichloroethene	0.537	0.486	9.5#	101	0.00
13 T	Acrolein	0.126	0.124	1.6	97	0.00
14 T	Allyl chloride	0.871	0.775	11.0	101	0.00
15 T	Acrylonitrile	0.294	0.268	8.8	99	0.00
16 T	Acetone	0.261	0.223	14.6	98	0.00
17 T	Carbon Disulfide	1.652	1.366	17.3	102	0.00
18 T	Methyl Acetate	0.793	0.714	10.0	100	0.00
19 T	Methyl tert-butyl Ether	1.742	1.665	4.4	98	0.00
20 T	Methylene Chloride	0.646	0.555	14.1	97	0.00
21 T	trans-1,2-Dichloroethene	0.573	0.512	10.6	102	0.00
22 T	Diisopropyl ether	1.933	1.817	6.0	98	0.00
23 T	Vinyl Acetate	1.353	1.339	1.0	99	0.00
24 P	1,1-Dichloroethane	1.178	1.040	11.7	98	0.00
25 T	2-Butanone	0.384	0.351	8.6	99	0.00
26 T	2,2-Dichloropropane	0.953	0.907	4.8	107	0.00
27 T	cis-1,2-Dichloroethene	0.675	0.614	9.0	99	0.00
28 T	Bromochloromethane	0.548	0.484	11.7	98	0.00
29 T	Tetrahydrofuran	0.243	0.233	4.1	98	0.00
30 C	Chloroform	1.218	1.074	11.8#	101	0.00
31 T	Cyclohexane	1.024	0.878	14.3	110	0.00
32 T	1,1,1-Trichloroethane	1.068	0.947	11.3	103	0.00
33 S	1,2-Dichloroethane-d4	0.807	0.804	0.4	107	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
35 S	Dibromofluoromethane	0.347	0.352	-1.4	107	0.00
36 T	1,1-Dichloropropene	0.487	0.437	10.3	103	0.00
37 T	Ethyl Acetate	0.491	0.434	11.6	97	0.00
38 T	Carbon Tetrachloride	0.557	0.496	11.0	102	0.00
39 T	Methylcyclohexane	0.457	0.455	0.4	107	0.00
40 TM	Benzene	1.463	1.336	8.7	100	0.00
41 T	Methacrylonitrile	0.256	0.241	5.9	97	0.00
42 TM	1,2-Dichloroethane	0.551	0.501	9.1	100	0.00
43 T	Isopropyl Acetate	0.787	0.716	9.0	96	0.00
44 TM	Trichloroethene	0.341	0.297	12.9	100	0.00
45 C	1,2-Dichloropropane	0.374	0.334	10.7#	98	0.00
46 T	Dibromomethane	0.270	0.238	11.9	97	0.00
47 T	Bromodichloromethane	0.549	0.502	8.6	98	0.00
48 T	Methyl methacrylate	0.354	0.354	0.0	98	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	0.006	0.005	16.7	81	0.00
50 S	Toluene-d8	1.232	1.289	-4.6	111	0.00
51 T	4-Methyl-2-Pentanone	0.457	0.449	1.8	99	0.00
52 CM	Toluene	0.848	0.815	3.9#	102	0.00
53 T	t-1,3-Dichloropropene	0.519	0.496	4.4	98	0.00
54 T	cis-1,3-Dichloropropene	0.554	0.530	4.3	98	0.00
55 T	1,1,2-Trichloroethane	0.335	0.310	7.5	99	0.00
56 T	Ethyl methacrylate	0.469	0.492	-4.9	99	0.00
57 T	1,3-Dichloropropane	0.583	0.547	6.2	99	0.00
58 T	2-Chloroethyl Vinyl ether	0.213	0.218	-2.3	99	0.00
59 T	2-Hexanone	0.321	0.323	-0.6	99	0.00
60 T	Dibromochloromethane	0.405	0.372	8.1	98	0.00
61 T	1,2-Dibromoethane	0.334	0.299	10.5	98	0.00
62 S	4-Bromofluorobenzene	0.422	0.446	-5.7	108	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	108	0.00
64 T	Tetrachloroethene	0.341	0.306	10.3	102	0.00
65 PM	Chlorobenzene	1.095	1.006	8.1	101	0.00
66 T	1,1,1,2-Tetrachloroethane	0.402	0.359	10.7	99	0.00
67 C	Ethyl Benzene	1.784	1.798	-0.8#	104	0.00
68 T	m/p-Xylenes	0.659	0.681	-3.3	104	0.00
69 T	o-Xylene	0.630	0.656	-4.1	104	0.00
70 T	Styrene	1.043	1.108	-6.2	102	0.00
71 P	Bromoform	0.288	0.283	1.7	98	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	0.00
73 T	Isopropylbenzene	3.375	3.371	0.1	106	0.00
74 T	N-amyl acetate	1.517	1.478	2.6	99	0.00
75 P	1,1,2,2-Tetrachloroethane	1.192	1.040	12.8	98	0.00
76 T	1,2,3-Trichloropropane	1.016	0.851	16.2	103	0.00
77 T	Bromobenzene	0.882	0.814	7.7	103	0.00
78 T	n-propylbenzene	3.995	4.075	-2.0	106	0.00
79 T	2-Chlorotoluene	2.586	2.475	4.3	104	0.00
80 T	1,3,5-Trimethylbenzene	2.787	2.877	-3.2	106	0.00
81 T	trans-1,4-Dichloro-2-butene	0.376	0.370	1.6	103	0.00
82 T	4-Chlorotoluene	2.574	2.511	2.4	105	0.00
83 T	tert-Butylbenzene	2.341	2.387	-2.0	106	0.00
84 T	1,2,4-Trimethylbenzene	2.778	2.885	-3.9	103	0.00
85 T	sec-Butylbenzene	3.244	3.360	-3.6	106	0.00
86 T	p-Isopropyltoluene	2.631	2.777	-5.5	105	0.00
87 T	1,3-Dichlorobenzene	1.624	1.491	8.2	103	0.00
88 T	1,4-Dichlorobenzene	1.683	1.484	11.8	103	0.00
89 T	n-Butylbenzene	2.327	2.354	-1.2	103	0.00
90 T	Hexachloroethane	0.618	0.559	9.5	105	0.00
91 T	1,2-Dichlorobenzene	1.620	1.461	9.8	102	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.218	0.201	7.8	98	0.00
93 T	1,2,4-Trichlorobenzene	0.753	0.689	8.5	95	0.00
94 T	Hexachlorobutadiene	0.400	0.337	15.8	99	0.00
95 T	Naphthalene	2.246	2.117	5.7	92	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.762	0.679	10.9	93	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	110	0.00
2 T	Dichlorodifluoromethane	50.000	43.772	12.5	104	0.00
3 P	Chloromethane	50.000	42.883	14.2	102	0.00
4 C	Vinyl Chloride	50.000	42.715	14.6#	101	0.00
5 T	Bromomethane	50.000	40.910	18.2	96	0.00
6 T	Chloroethane	50.000	42.299	15.4	103	0.00
7 T	Trichlorofluoromethane	50.000	43.956	12.1	104	0.00
8 T	Diethyl Ether	50.000	42.846	14.3	97	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	44.706	10.6	109	0.00
10 T	Methyl Iodide	50.000	46.259	7.5	98	0.00
11 T	Tert butyl alcohol	250.000	206.633	17.3	90	0.00
12 CM	1,1-Dichloroethene	50.000	45.317	9.4#	101	0.00
13 T	Acrolein	250.000	244.765	2.1	97	0.00
14 T	Allyl chloride	50.000	44.501	11.0	101	0.00
15 T	Acrylonitrile	250.000	227.920	8.8	99	0.00
16 T	Acetone	250.000	213.971	14.4	98	0.00
17 T	Carbon Disulfide	50.000	41.342	17.3	102	0.00
18 T	Methyl Acetate	50.000	45.028	9.9	100	0.00
19 T	Methyl tert-butyl Ether	50.000	47.768	4.5	98	0.00
20 T	Methylene Chloride	50.000	43.017	14.0	97	0.00
21 T	trans-1,2-Dichloroethene	50.000	44.672	10.7	102	0.00
22 T	Diisopropyl ether	50.000	46.996	6.0	98	0.00
23 T	Vinyl Acetate	250.000	247.459	1.0	99	0.00
24 P	1,1-Dichloroethane	50.000	44.114	11.8	98	0.00
25 T	2-Butanone	250.000	228.924	8.4	99	0.00
26 T	2,2-Dichloropropane	50.000	47.593	4.8	107	0.00
27 T	cis-1,2-Dichloroethene	50.000	45.446	9.1	99	0.00
28 T	Bromochloromethane	50.000	44.122	11.8	98	0.00
29 T	Tetrahydrofuran	250.000	239.065	4.4	98	0.00
30 C	Chloroform	50.000	44.071	11.9#	101	0.00
31 T	Cyclohexane	50.000	42.878	14.2	110	0.00
32 T	1,1,1-Trichloroethane	50.000	44.332	11.3	103	0.00
33 S	1,2-Dichloroethane-d4	50.000	49.782	0.4	107	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	109	0.00
35 S	Dibromofluoromethane	50.000	50.768	-1.5	107	0.00
36 T	1,1-Dichloropropene	50.000	44.863	10.3	103	0.00
37 T	Ethyl Acetate	50.000	44.123	11.8	97	0.00
38 T	Carbon Tetrachloride	50.000	44.456	11.1	102	0.00
39 T	Methylcyclohexane	50.000	49.687	0.6	107	0.00
40 TM	Benzene	50.000	45.657	8.7	100	0.00
41 T	Methacrylonitrile	50.000	47.155	5.7	97	0.00
42 TM	1,2-Dichloroethane	50.000	45.481	9.0	100	0.00
43 T	Isopropyl Acetate	50.000	45.440	9.1	96	0.00
44 TM	Trichloroethene	50.000	43.622	12.8	100	0.00
45 C	1,2-Dichloropropane	50.000	44.744	10.5#	98	0.00
46 T	Dibromomethane	50.000	44.214	11.6	97	0.00
47 T	Bromodichloromethane	50.000	45.655	8.7	98	0.00
48 T	Methyl methacrylate	50.000	49.948	0.1	98	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	792.760	20.7	81	0.00
50 S	Toluene-d8	50.000	52.302	-4.6	111	0.00
51 T	4-Methyl-2-Pentanone	250.000	245.877	1.6	99	0.00
52 CM	Toluene	50.000	48.073	3.9#	102	0.00
53 T	t-1,3-Dichloropropene	50.000	47.757	4.5	98	0.00
54 T	cis-1,3-Dichloropropene	50.000	47.783	4.4	98	0.00
55 T	1,1,2-Trichloroethane	50.000	46.173	7.7	99	0.00
56 T	Ethyl methacrylate	50.000	43.762	12.5	99	0.00
57 T	1,3-Dichloropropane	50.000	46.877	6.2	99	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	256.116	-2.4	99	0.00
59 T	2-Hexanone	250.000	251.213	-0.5	99	0.00
60 T	Dibromochloromethane	50.000	45.935	8.1	98	0.00
61 T	1,2-Dibromoethane	50.000	44.837	10.3	98	0.00
62 S	4-Bromofluorobenzene	50.000	52.899	-5.8	108	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	108	0.00
64 T	Tetrachloroethene	50.000	44.886	10.2	102	0.00
65 PM	Chlorobenzene	50.000	45.901	8.2	101	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	44.712	10.6	99	0.00
67 C	Ethyl Benzene	50.000	50.391	-0.8#	104	0.00
68 T	m/p-Xylenes	100.000	103.341	-3.3	104	0.00
69 T	o-Xylene	50.000	52.093	-4.2	104	0.00
70 T	Styrene	50.000	53.103	-6.2	102	0.00
71 P	Bromoform	50.000	49.119	1.8	98	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	108	0.00
73 T	Isopropylbenzene	50.000	49.951	0.1	106	0.00
74 T	N-amyl acetate	50.000	48.730	2.5	99	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	43.627	12.7	98	0.00
76 T	1,2,3-Trichloropropane	50.000	41.891	16.2	103	0.00
77 T	Bromobenzene	50.000	46.138	7.7	103	0.00
78 T	n-propylbenzene	50.000	51.001	-2.0	106	0.00
79 T	2-Chlorotoluene	50.000	47.870	4.3	104	0.00
80 T	1,3,5-Trimethylbenzene	50.000	51.604	-3.2	106	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	49.226	1.5	103	0.00
82 T	4-Chlorotoluene	50.000	48.776	2.4	105	0.00
83 T	tert-Butylbenzene	50.000	50.997	-2.0	106	0.00
84 T	1,2,4-Trimethylbenzene	50.000	51.922	-3.8	103	0.00
85 T	sec-Butylbenzene	50.000	51.777	-3.6	106	0.00
86 T	p-Isopropyltoluene	50.000	47.795	4.4	105	0.00
87 T	1,3-Dichlorobenzene	50.000	45.920	8.2	103	0.00
88 T	1,4-Dichlorobenzene	50.000	44.102	11.8	103	0.00
89 T	n-Butylbenzene	50.000	50.578	-1.2	103	0.00
90 T	Hexachloroethane	50.000	45.215	9.6	105	0.00
91 T	1,2-Dichlorobenzene	50.000	45.113	9.8	102	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	46.221	7.6	98	0.00
93 T	1,2,4-Trichlorobenzene	50.000	45.739	8.5	95	0.00
94 T	Hexachlorobutadiene	50.000	42.112	15.8	99	0.00
95 T	Naphthalene	50.000	47.116	5.8	92	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085445.D
Acq On : 14 Jan 2025 18:06
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN011425

Quant Time: Jan 15 02:20:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	44.551	10.9	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01
 Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG No.: Q1207
 Instrument ID: MSVOA_N Calibration Date/Time: 01/29/2025 11:08
 Lab File ID: VN085548.D Init. Calib. Date(s): 01/14/2025 01/14/2025
 Heated Purge: (Y/N) N Init. Calib. Time(s): 14:56 17:19
 GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.737	0.641		-13.03	20
1,1-Dichloroethene	0.537	0.511		-4.84	20
2-Butanone	0.384	0.403		4.95	20
Carbon Tetrachloride	0.557	0.568		1.98	20
Chloroform	1.218	1.236		1.48	20
Benzene	1.463	1.501		2.6	20
1,2-Dichloroethane	0.551	0.584		5.99	20
Trichloroethene	0.341	0.338		-0.88	20
Tetrachloroethene	0.341	0.339		-0.59	20
Chlorobenzene	1.095	1.109	0.3	1.28	20
1,2-Dichloroethane-d4	0.807	0.877		8.67	20
Dibromofluoromethane	0.347	0.387		11.53	20
Toluene-d8	1.232	1.409		14.37	20
4-Bromofluorobenzene	0.422	0.503		19.19	20

All other compounds must meet a minimum RRF of 0.010.
 RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
 Data File : VN085548.D
 Acq On : 29 Jan 2025 11:08
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDCCC050

Quant Time: Jan 30 00:29:17 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 01/30/2025
 Supervised By : Mahesh Dadoda 01/30/2025

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	190920	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	314840	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	285899	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	149148	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	167442	54.332	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 108.660%			
35) Dibromofluoromethane	8.165	113	121796	55.762	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 111.520%			
50) Toluene-d8	10.565	98	443525	57.152	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 114.300%#			
62) 4-Bromofluorobenzene	12.847	95	158301	59.631	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 119.260%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	111940	43.304	ug/l	99
3) Chloromethane	2.359	50	115154	41.143	ug/l	99
4) Vinyl Chloride	2.512	62	122379	43.501	ug/l	99
5) Bromomethane	2.948	94	72032	42.389	ug/l	100
6) Chloroethane	3.112	64	79983	44.845	ug/l	95
7) Trichlorofluoromethane	3.495	101	195725	47.949	ug/l	99
8) Diethyl Ether	3.959	74	64556	45.779	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.371	101	115688	50.319	ug/l	98
10) Methyl Iodide	4.589	142	124815	47.406	ug/l	99
11) Tert butyl alcohol	5.512	59	102889	291.560	ug/l	99
12) 1,1-Dichloroethene	4.342	96	97641	47.653	ug/l	98
13) Acrolein	4.177	56	107614	223.391	ug/l	97
14) Allyl chloride	5.024	41	154662	46.516	ug/l	98
15) Acrylonitrile	5.718	53	295011	263.192	ug/l	100
16) Acetone	4.424	43	251588	252.657	ug/l	99
17) Carbon Disulfide	4.712	76	247182	39.180	ug/l	98
18) Methyl Acetate	5.018	43	167018	55.159	ug/l	99
19) Methyl tert-butyl Ether	5.794	73	352742	53.017	ug/l	99
20) Methylene Chloride	5.271	84	118086	47.903	ug/l	99
21) trans-1,2-Dichloroethene	5.789	96	103461	47.247	ug/l	99
22) Diisopropyl ether	6.665	45	389107	52.726	ug/l	98
23) Vinyl Acetate	6.600	43	1384915	268.154	ug/l	100
24) 1,1-Dichloroethane	6.565	63	224264	49.838	ug/l	98
25) 2-Butanone	7.483	43	384379	262.309	ug/l	99
26) 2,2-Dichloropropane	7.483	77	201856	55.483	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	130967	50.778	ug/l	100
28) Bromochloromethane	7.806	49	93940	44.872	ug/l	98
29) Tetrahydrofuran	7.835	42	255872	275.413	ug/l	100
30) Chloroform	7.965	83	235995	50.743	ug/l	97
31) Cyclohexane	8.253	56	171079	43.741	ug/l	98
32) 1,1,1-Trichloroethane	8.165	97	206001	50.496	ug/l	98
36) 1,1-Dichloropropene	8.365	75	152490	49.744	ug/l	99
37) Ethyl Acetate	7.553	43	156704	50.645	ug/l	98
38) Carbon Tetrachloride	8.359	117	178752	50.934	ug/l	98
39) Methylcyclohexane	9.600	83	146134	50.729	ug/l	98
40) Benzene	8.606	78	472467	51.295	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
 Data File : VN085548.D
 Acq On : 29 Jan 2025 11:08
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 01/30/2025
 Supervised By :Mahesh Dadoda 01/30/2025

Quant Time: Jan 30 00:29:17 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.771	41	87947	54.633	ug/l	100
42) 1,2-Dichloroethane	8.665	62	183786	52.978	ug/l	99
43) Isopropyl Acetate	8.682	43	265698	53.590	ug/l	100
44) Trichloroethene	9.347	130	106402	49.626	ug/l	93
45) 1,2-Dichloropropane	9.618	63	123931	52.676	ug/l	98
46) Dibromomethane	9.706	93	86251	50.807	ug/l	96
47) Bromodichloromethane	9.882	83	190286	55.019	ug/l	99
48) Methyl methacrylate	9.677	41	126123	56.527	ug/l	98
49) 1,4-Dioxane	9.688	88	42044	1118.996	ug/l	97
51) 4-Methyl-2-Pentanone	10.441	43	841478	292.481	ug/l	100
52) Toluene	10.629	92	291059	54.537	ug/l	99
53) t-1,3-Dichloropropene	10.835	75	180662	55.275	ug/l	97
54) cis-1,3-Dichloropropene	10.312	75	192761	55.213	ug/l	99
55) 1,1,2-Trichloroethane	11.012	97	115225	54.555	ug/l	97
56) Ethyl methacrylate	10.871	69	177132	49.794	ug/l	100
57) 1,3-Dichloropropane	11.159	76	200617	54.627	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	373597	278.738	ug/l	100
59) 2-Hexanone	11.194	43	602196	297.473	ug/l	99
60) Dibromochloromethane	11.359	129	140958	55.280	ug/l	100
61) 1,2-Dibromoethane	11.465	107	112734	53.622	ug/l	98
64) Tetrachloroethene	11.100	164	97060	49.798	ug/l	98
65) Chlorobenzene	11.888	112	317067	50.625	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.959	131	119011	51.774	ug/l	98
67) Ethyl Benzene	11.959	91	558184	54.719	ug/l	100
68) m/p-Xylenes	12.070	106	428359	113.620	ug/l	99
69) o-Xylene	12.394	106	201478	55.920	ug/l	100
70) Styrene	12.412	104	353248	59.242	ug/l	99
71) Bromoform	12.576	173	92365	56.158	ug/l #	99
73) Isopropylbenzene	12.694	105	520261	51.684	ug/l	100
74) N-amyl acetate	12.488	43	232634	51.416	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	171790	48.312	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	138709m	45.756	ug/l	
77) Bromobenzene	12.976	156	129223	49.135	ug/l	99
78) n-propylbenzene	13.035	91	634672	53.259	ug/l	99
79) 2-Chlorotoluene	13.123	91	384203	49.816	ug/l	98
80) 1,3,5-Trimethylbenzene	13.170	105	448974	53.997	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	60833	54.293	ug/l	96
82) 4-Chlorotoluene	13.217	91	395084	51.449	ug/l	99
83) tert-Butylbenzene	13.435	119	358511	51.344	ug/l	98
84) 1,2,4-Trimethylbenzene	13.476	105	455009	54.905	ug/l	99
85) sec-Butylbenzene	13.612	105	521784	53.917	ug/l	100
86) p-Isopropyltoluene	13.729	119	434224	49.847	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	244334	50.447	ug/l	99
88) 1,4-Dichlorobenzene	13.812	146	243977	48.599	ug/l	98
89) n-Butylbenzene	14.053	91	371878	53.564	ug/l	99
90) Hexachloroethane	14.335	117	87853	47.686	ug/l	98
91) 1,2-Dichlorobenzene	14.106	146	235437	48.734	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	32314	49.766	ug/l	98
93) 1,2,4-Trichlorobenzene	15.394	180	112668	50.178	ug/l	99
94) Hexachlorobutadiene	15.500	225	56387	47.301	ug/l	98
95) Naphthalene	15.641	128	334098	49.863	ug/l	100
96) 1,2,3-Trichlorobenzene	15.835	180	111153	48.924	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085548.D
Acq On : 29 Jan 2025 11:08
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

Quant Time: Jan 30 00:29:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085548.D
Acq On : 29 Jan 2025 11:08
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 30 00:29:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Instrument :

MSVOA_N

ClientSampleId :

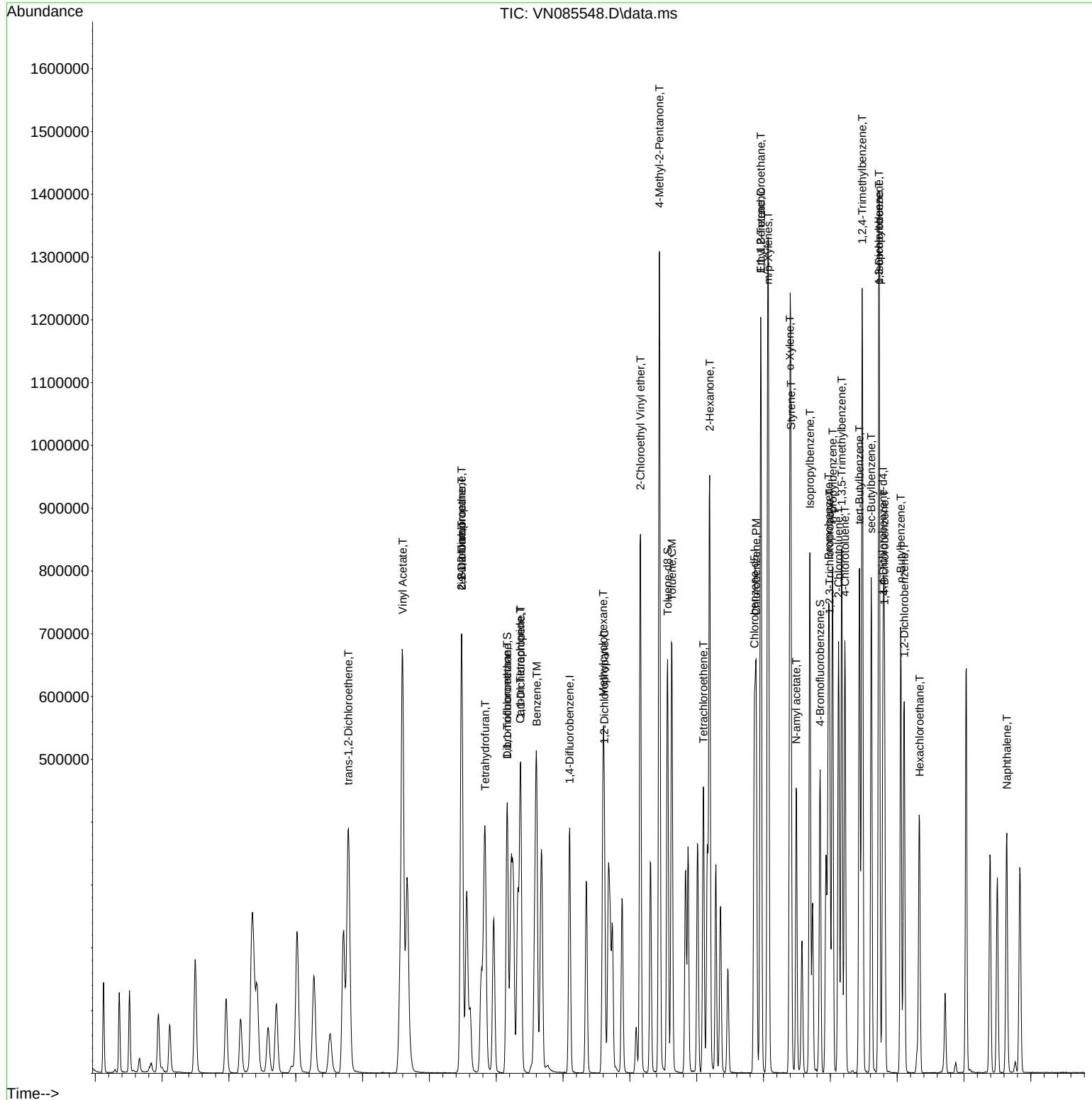
VSTDCCC050

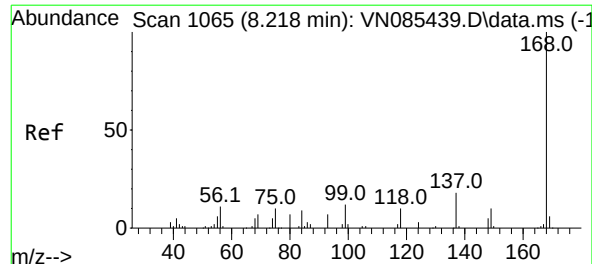
Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025





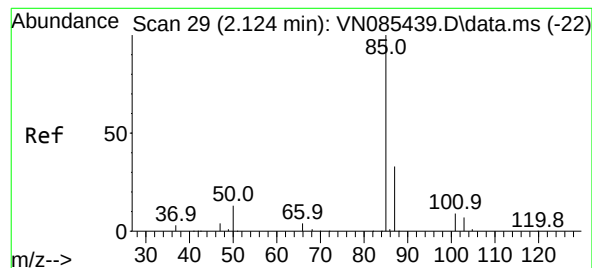
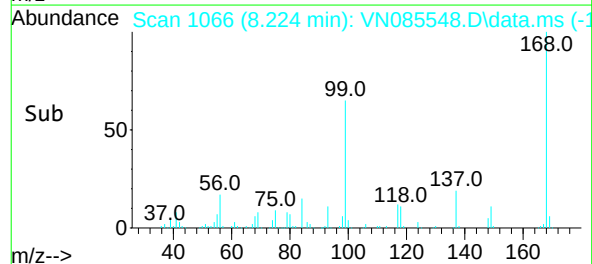
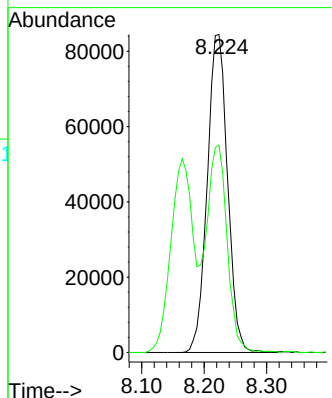
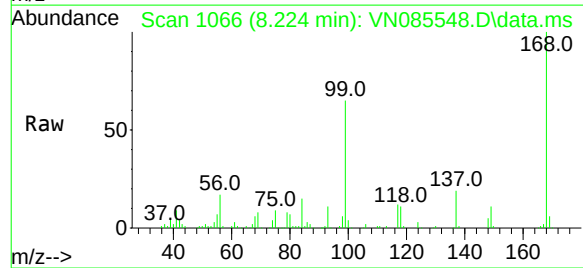
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion: 168 Resp: 190920
Ion Ratio Lower Upper
168 100
99 65.0 53.6 80.4

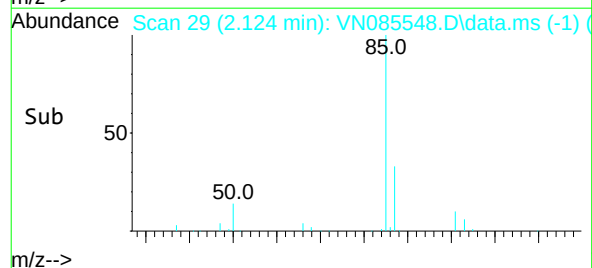
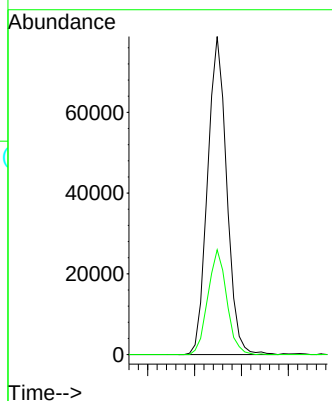
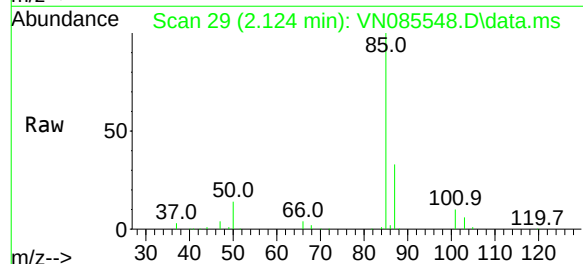
Manual Integrations
APPROVED

Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025

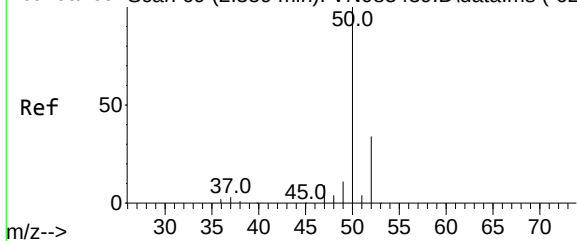


#2
Dichlorodifluoromethane
Concen: 43.304 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion: 85 Resp: 111940
Ion Ratio Lower Upper
85 100
87 32.9 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 41.143 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 50 Resp: 115154

Ion Ratio Lower Upper

50 100

52 34.6 27.0 40.6

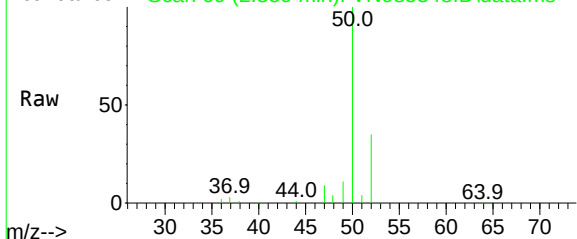
Manual Integrations

APPROVED

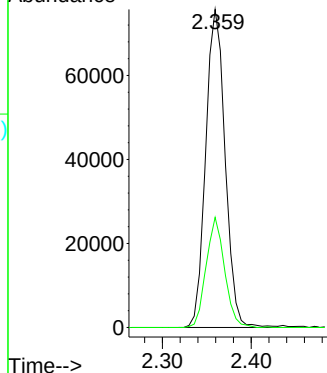
Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025

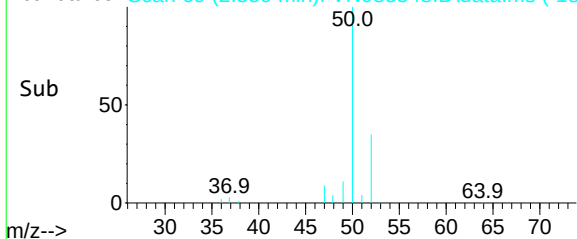
Abundance Scan 69 (2.359 min): VN085548.D\data.ms



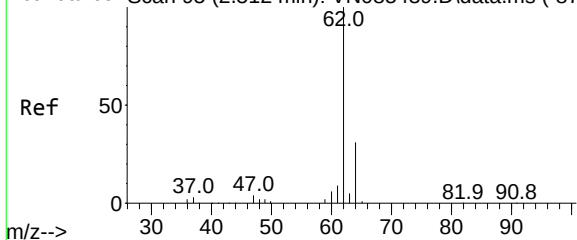
Abundance



Abundance Scan 69 (2.359 min): VN085548.D\data.ms (-18)



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 43.501 ug/l

RT: 2.512 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

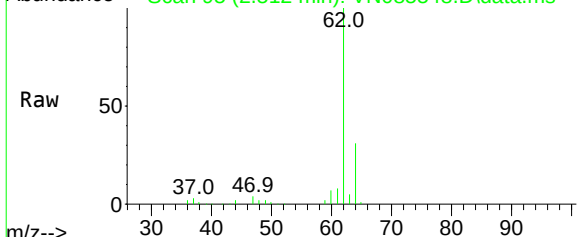
Tgt Ion: 62 Resp: 122379

Ion Ratio Lower Upper

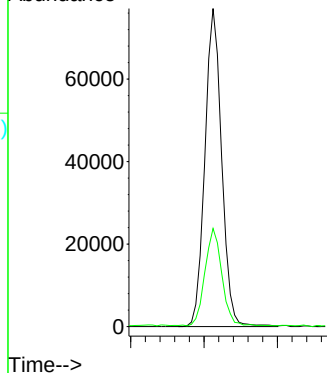
62 100

64 30.6 24.8 37.2

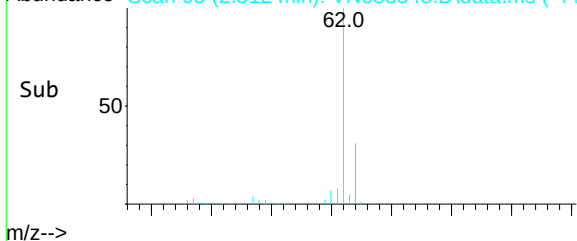
Abundance Scan 95 (2.512 min): VN085548.D\data.ms

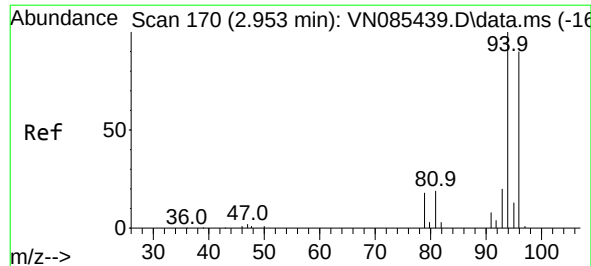


Abundance



Abundance Scan 95 (2.512 min): VN085548.D\data.ms (-44)



#5
Bromomethane

Concen: 42.389 ug/l

RT: 2.948 min Scan# 16

Delta R.T. -0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 94 Resp: 72032

Ion Ratio Lower Upper

94 100

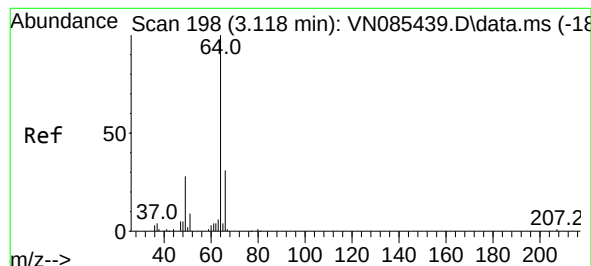
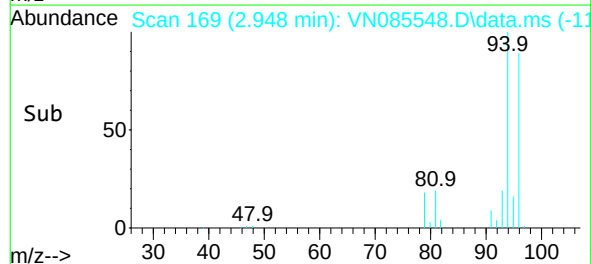
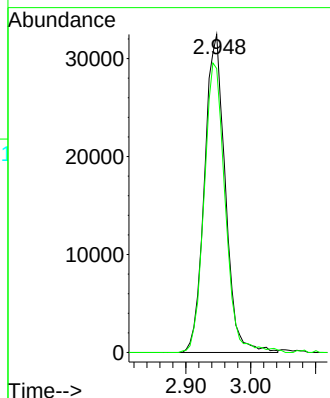
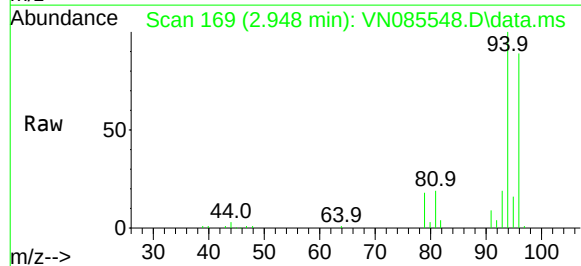
96 89.3 71.8 107.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#6

Chloroethane

Concen: 44.845 ug/l

RT: 3.112 min Scan# 197

Delta R.T. -0.006 min

Lab File: VN085548.D

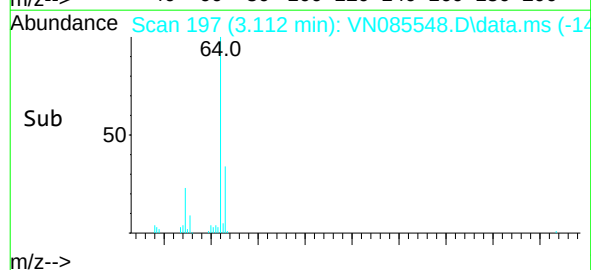
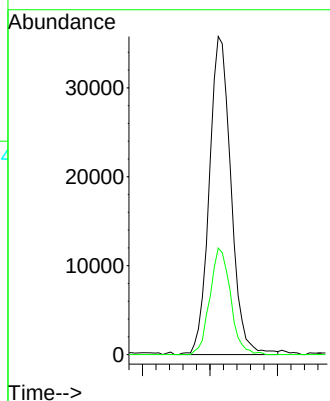
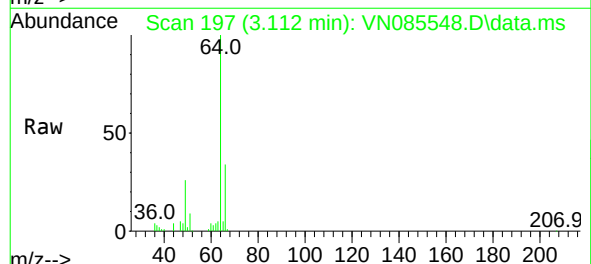
Acq: 29 Jan 2025 11:08

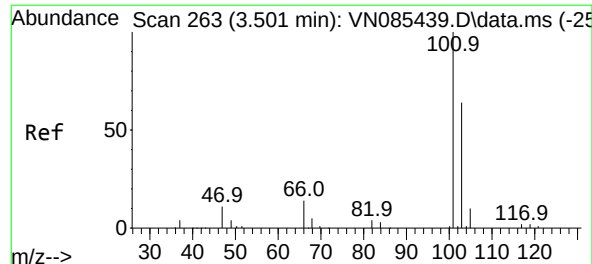
Tgt Ion: 64 Resp: 79983

Ion Ratio Lower Upper

64 100

66 33.5 24.6 36.8





#7

Trichlorofluoromethane

Concen: 47.949 ug/l

RT: 3.495 min Scan# 26

Delta R.T. -0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion:101 Resp: 195725

Ion Ratio Lower Upper

101 100

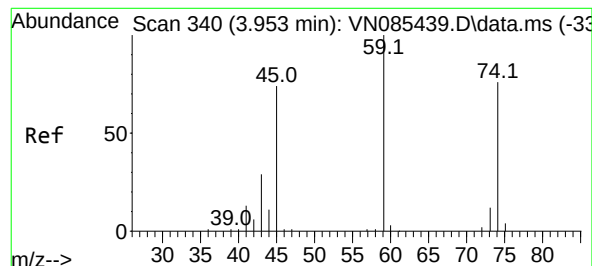
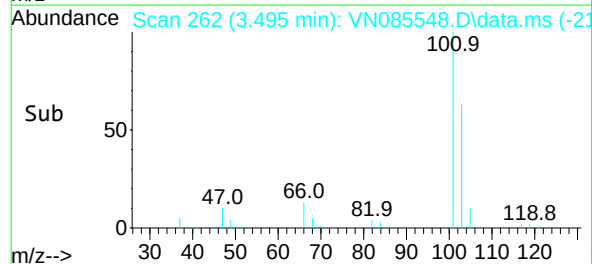
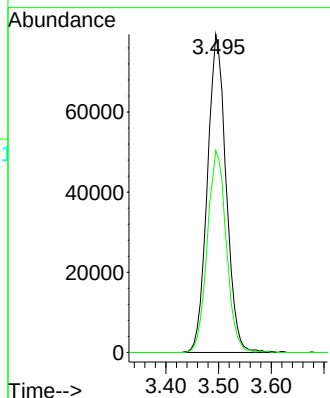
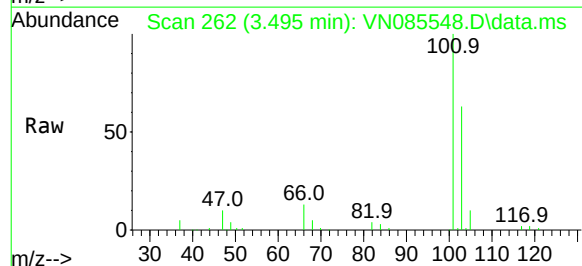
103 63.5 51.4 77.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#8

Diethyl Ether

Concen: 45.779 ug/l

RT: 3.959 min Scan# 341

Delta R.T. 0.006 min

Lab File: VN085548.D

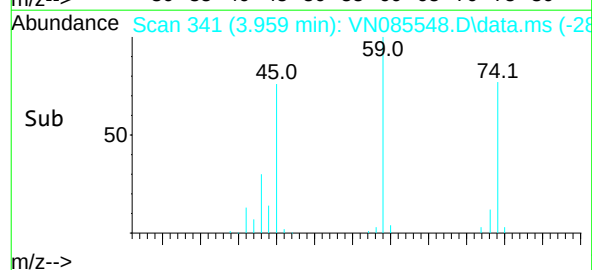
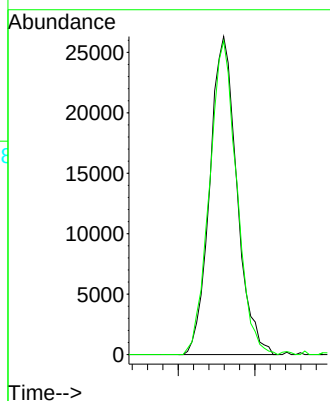
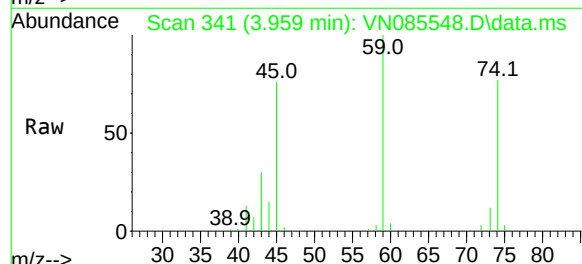
Acq: 29 Jan 2025 11:08

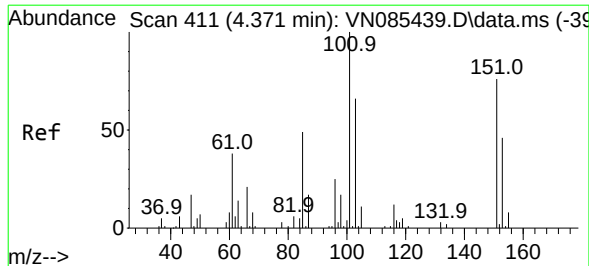
Tgt Ion: 74 Resp: 64556

Ion Ratio Lower Upper

74 100

45 98.8 49.7 149.1





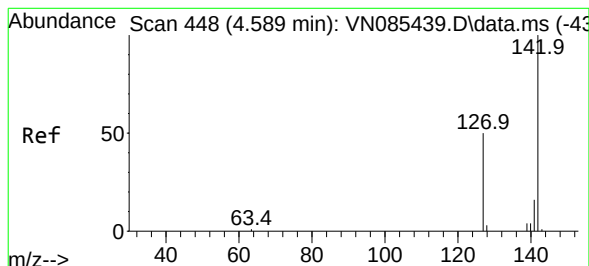
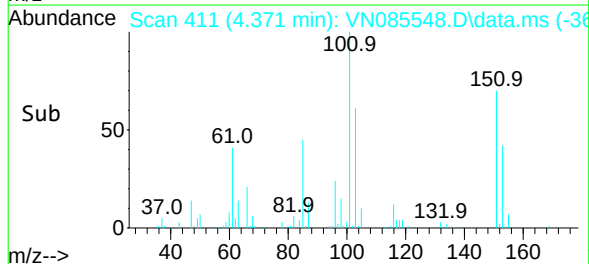
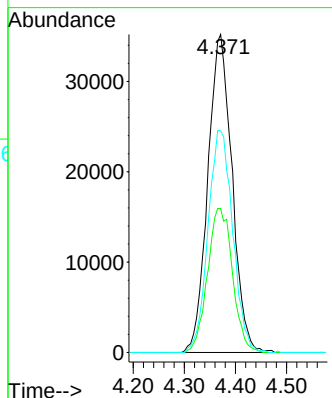
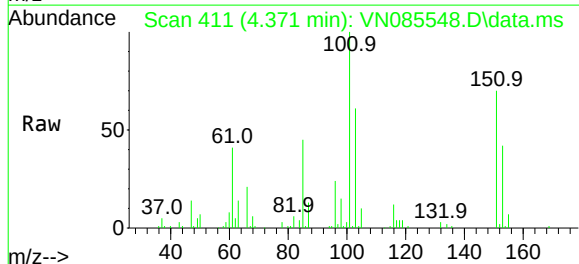
#9
1,1,2-Trichlorotrifluoroethane
Concen: 50.319 ug/l
RT: 4.371 min Scan# 411
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion:101 Resp: 115688
Ion Ratio Lower Upper
101 100
85 46.8 37.8 56.8
151 71.5 58.8 88.2

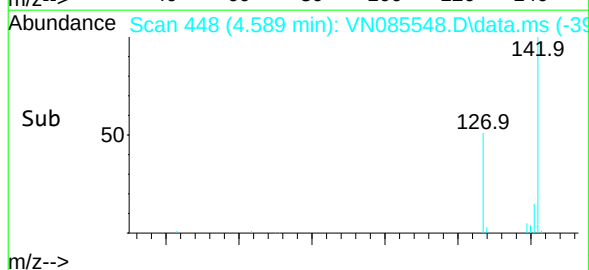
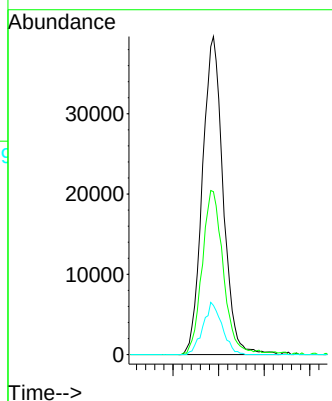
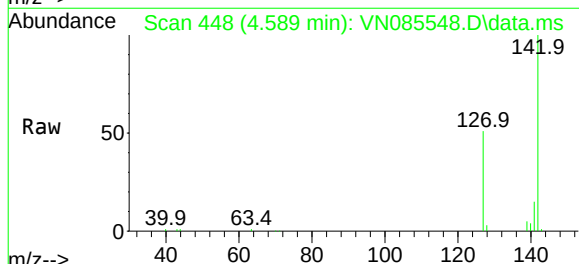
Manual Integrations
APPROVED

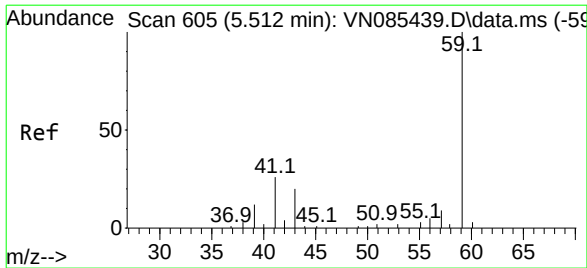
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#10
Methyl Iodide
Concen: 47.406 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion:142 Resp: 124815
Ion Ratio Lower Upper
142 100
127 51.2 40.3 60.5
141 15.5 12.8 19.2





#11

Tert butyl alcohol

Concen: 291.560 ug/l

RT: 5.512 min Scan# 605

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 59 Resp: 102889

Ion Ratio Lower Upper

59 100

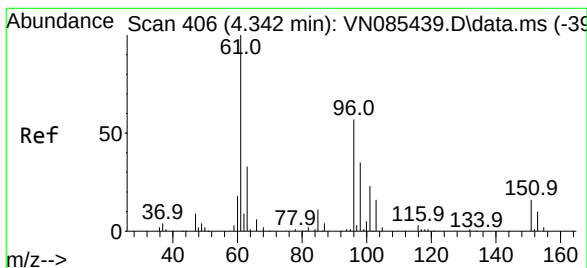
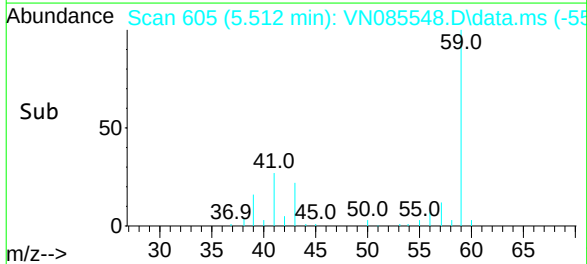
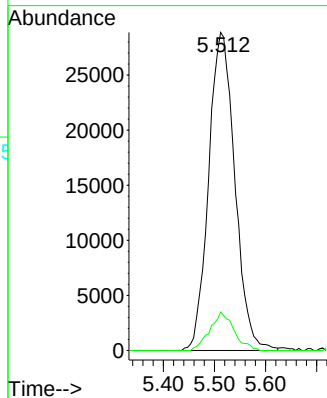
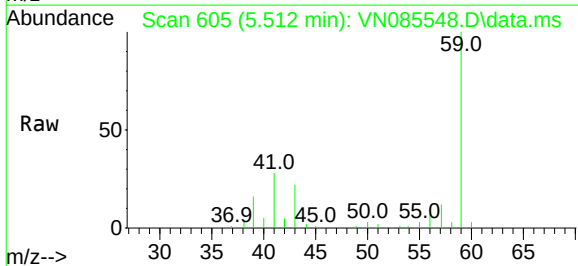
57 11.1 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#12

1,1-Dichloroethene

Concen: 47.653 ug/l

RT: 4.342 min Scan# 406

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

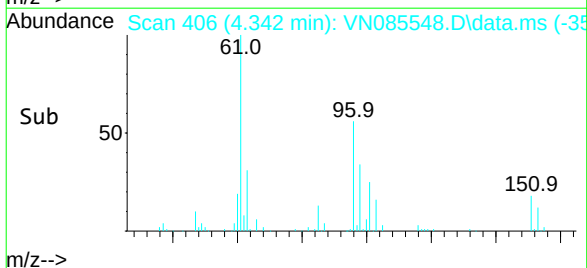
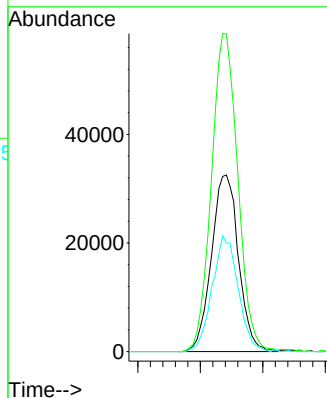
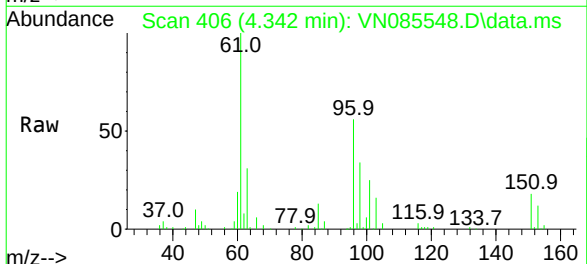
Tgt Ion: 96 Resp: 97641

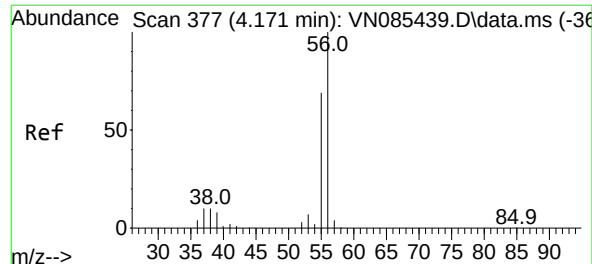
Ion Ratio Lower Upper

96 100

61 179.8 141.0 211.4

98 61.5 49.0 73.6





#13

Acrolein

Concen: 223.391 ug/l

RT: 4.177 min Scan# 377

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 56 Resp: 107614

Ion Ratio Lower Upper

56 100

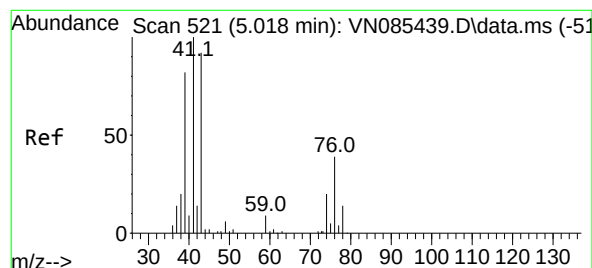
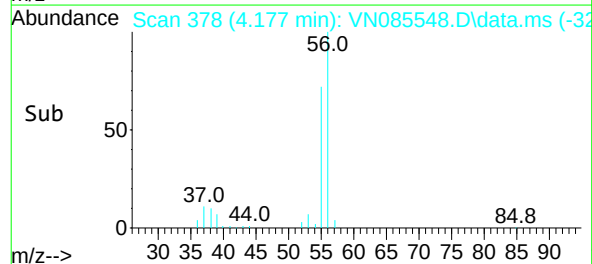
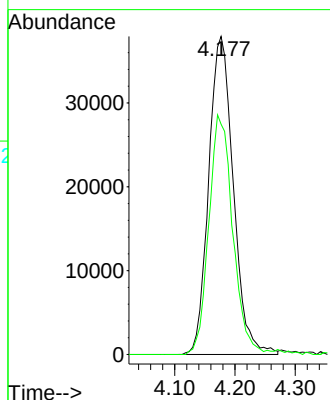
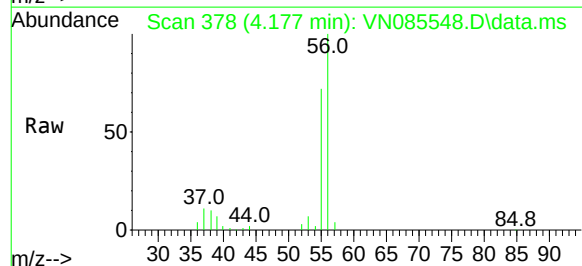
55 73.1 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#14

Allyl chloride

Concen: 46.516 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

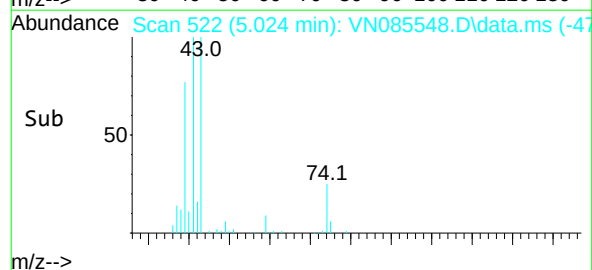
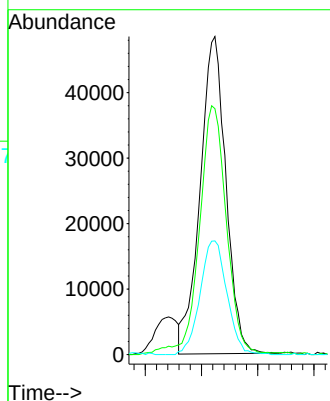
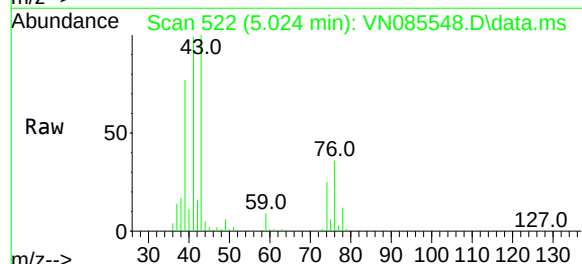
Tgt Ion: 41 Resp: 154662

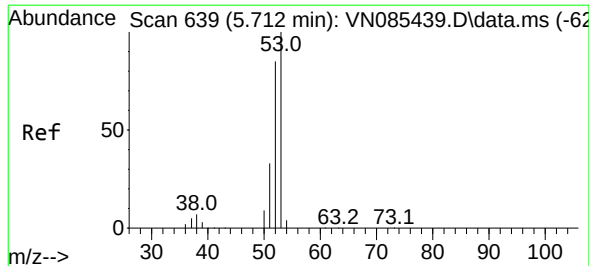
Ion Ratio Lower Upper

41 100

39 82.3 64.4 96.6

76 37.2 30.5 45.7





#15

Acrylonitrile

Concen: 263.192 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

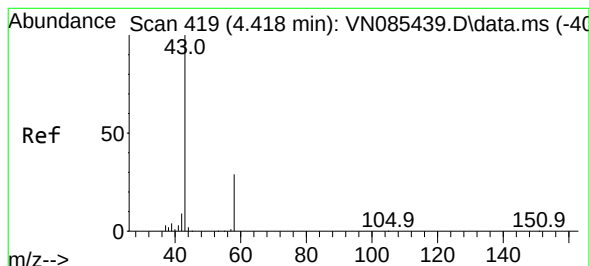
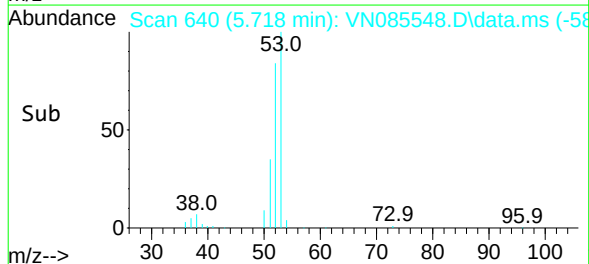
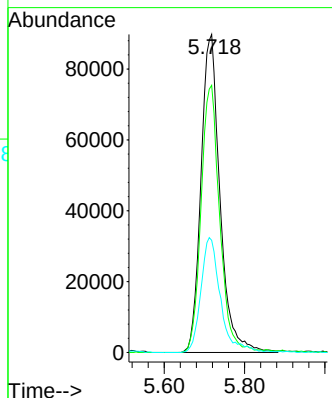
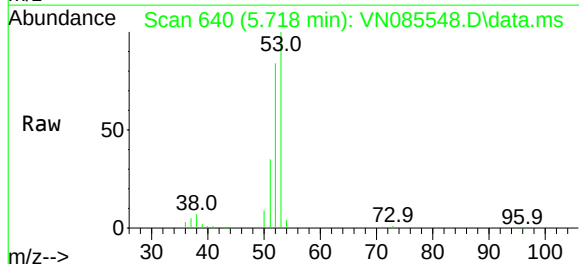
ClientSampleId :

VSTDCCC050

Tgt Ion:	53	Resp:	295011
Ion	Ratio	Lower	Upper
53	100		
52	82.5	65.5	98.3
51	37.2	29.8	44.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#16

Acetone

Concen: 252.657 ug/l

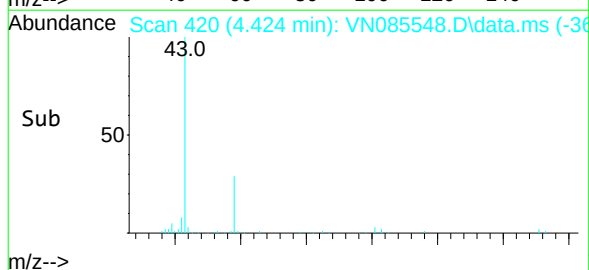
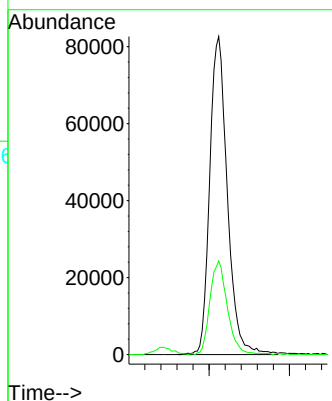
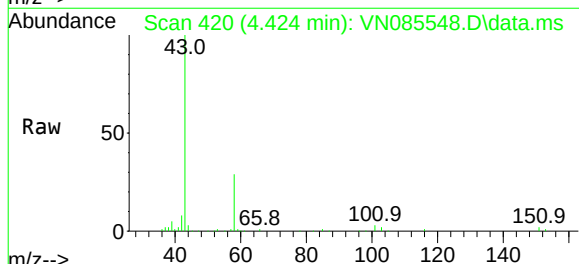
RT: 4.424 min Scan# 420

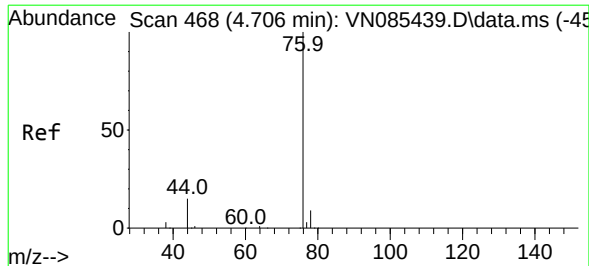
Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Tgt Ion:	43	Resp:	251588
Ion	Ratio	Lower	Upper
43	100		
58	29.2	23.8	35.6





#17

Carbon Disulfide

Concen: 39.180 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085548.D

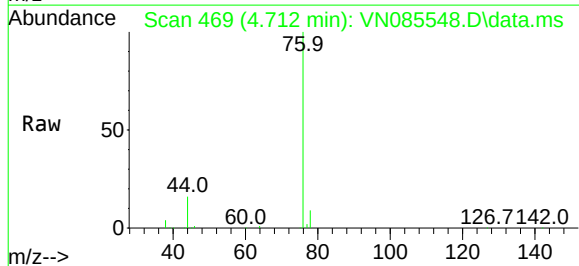
Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050



Tgt Ion: 76 Resp: 247182

Ion Ratio Lower Upper

76 100

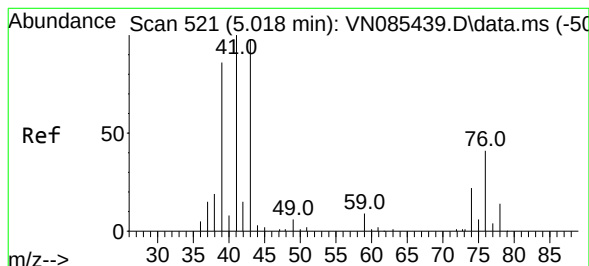
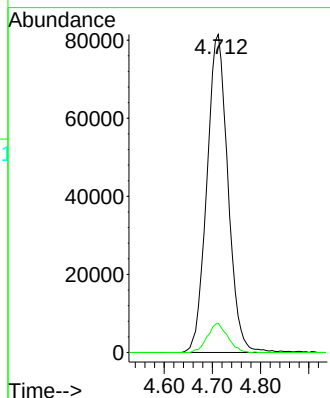
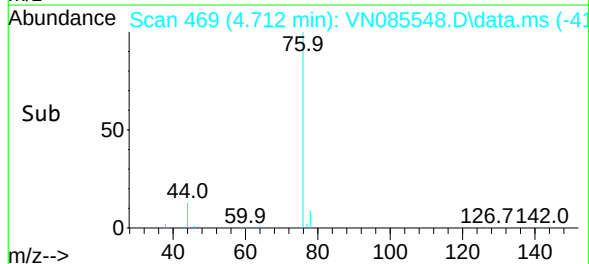
78 9.2 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#18

Methyl Acetate

Concen: 55.159 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085548.D

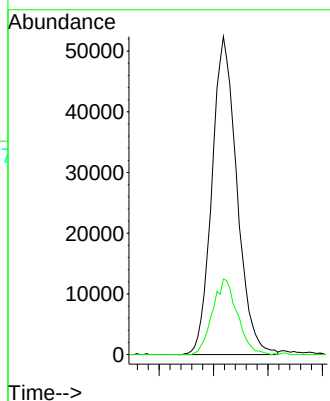
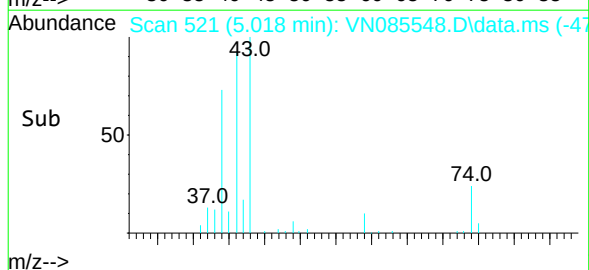
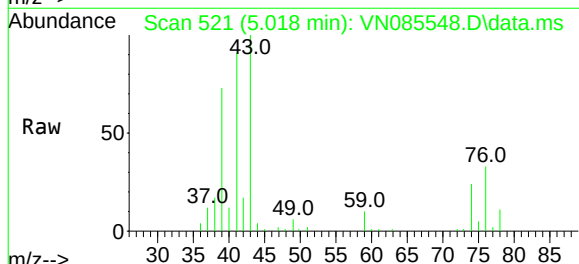
Acq: 29 Jan 2025 11:08

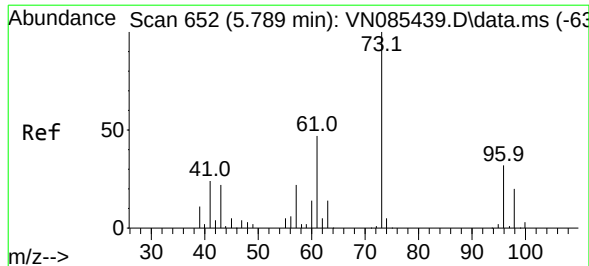
Tgt Ion: 43 Resp: 167018

Ion Ratio Lower Upper

43 100

74 23.7 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 53.017 ug/l

RT: 5.794 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 73 Resp: 352742

Ion Ratio Lower Upper

73 100

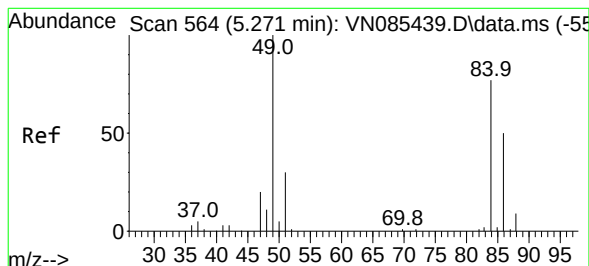
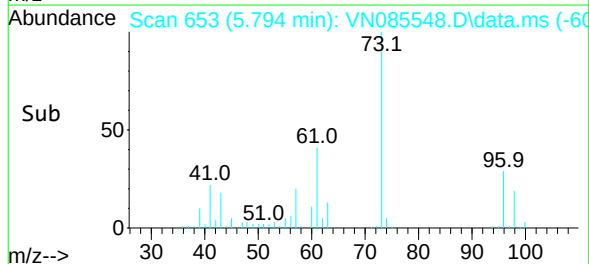
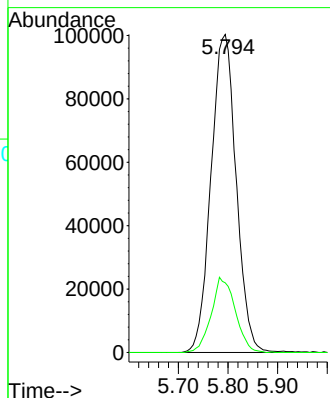
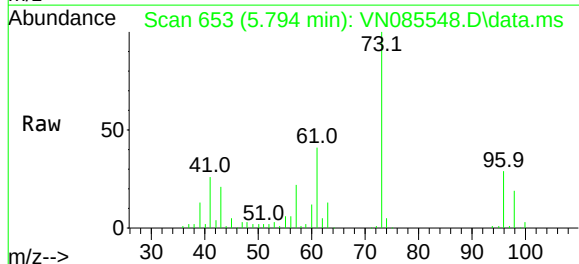
57 21.9 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#20

Methylene Chloride

Concen: 47.903 ug/l

RT: 5.271 min Scan# 564

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Tgt Ion: 84 Resp: 118086

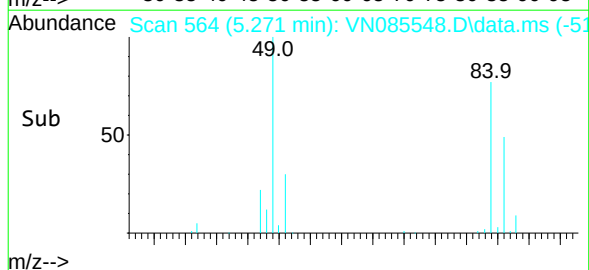
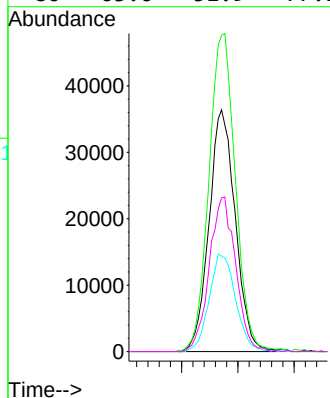
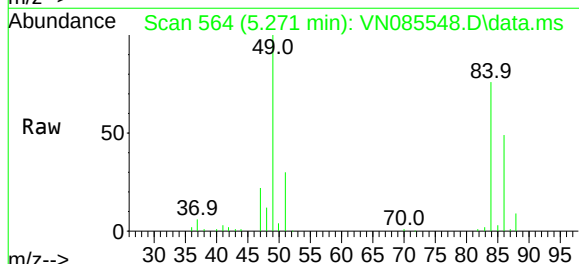
Ion Ratio Lower Upper

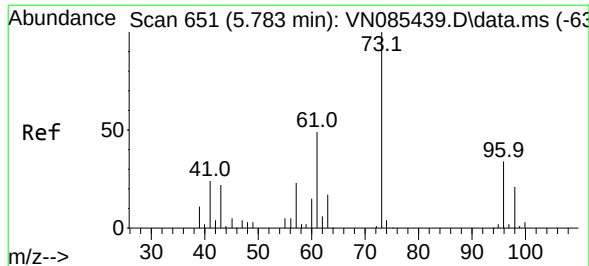
84 100

49 130.2 104.1 156.1

51 39.5 31.0 46.4

86 63.6 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 47.247 ug/l

RT: 5.789 min Scan# 651

Delta R.T. 0.006 min

Lab File: VN085548.D

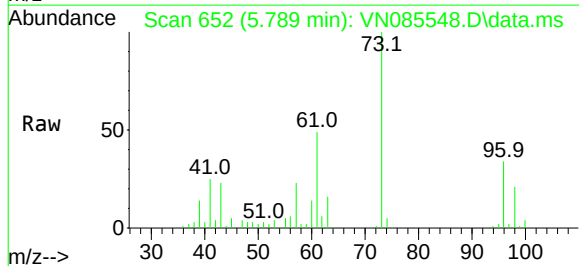
Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050



Tgt Ion: 96 Resp: 103461

Ion Ratio Lower Upper

96 100

61 145.6 115.7 173.5

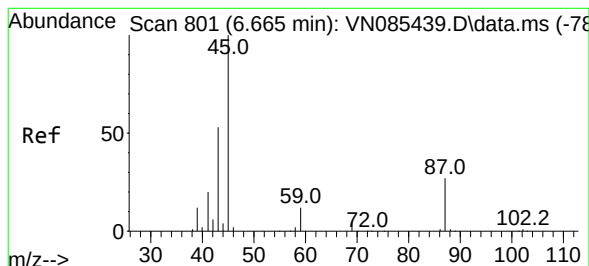
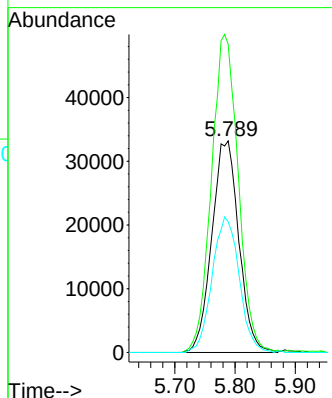
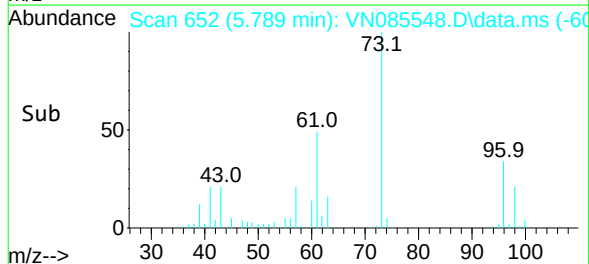
98 61.8 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#22

Diisopropyl ether

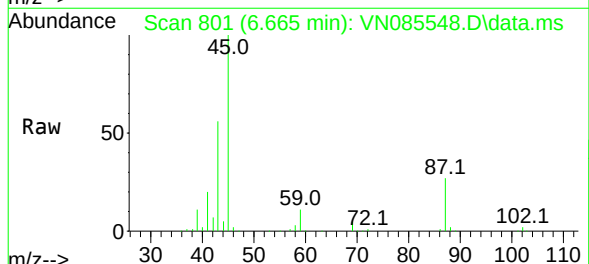
Concen: 52.726 ug/l

RT: 6.665 min Scan# 801

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08



Tgt Ion: 45 Resp: 389107

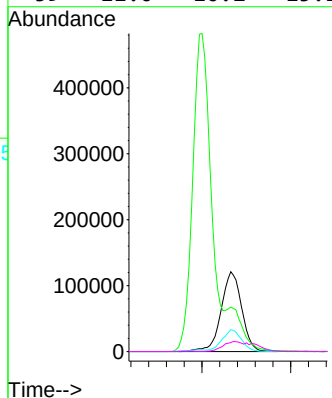
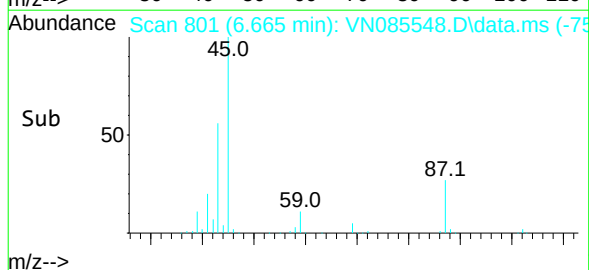
Ion Ratio Lower Upper

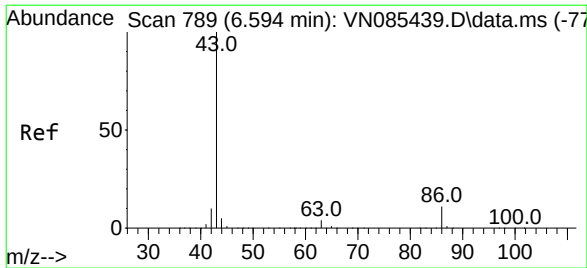
45 100

43 54.3 45.0 67.6

87 27.2 21.8 32.8

59 11.0 10.2 15.2





#23

Vinyl Acetate

Concen: 268.154 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 1384915

Ion Ratio Lower Upper

43 100

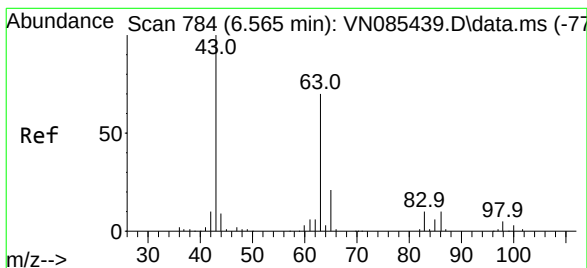
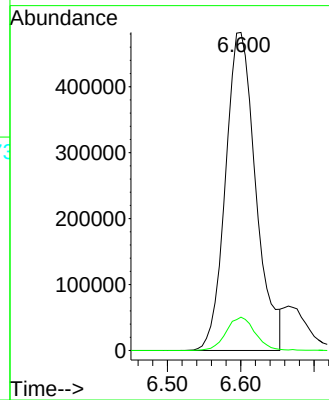
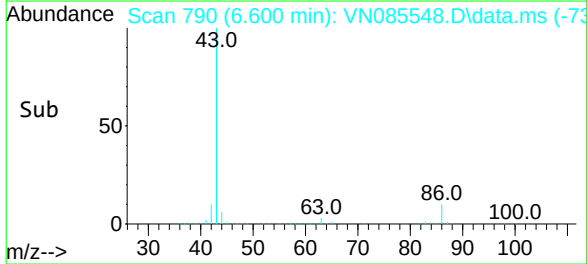
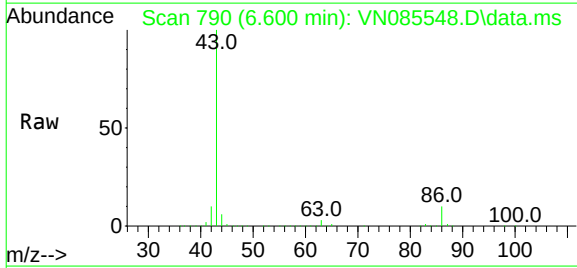
86 10.5 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#24

1,1-Dichloroethane

Concen: 49.838 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

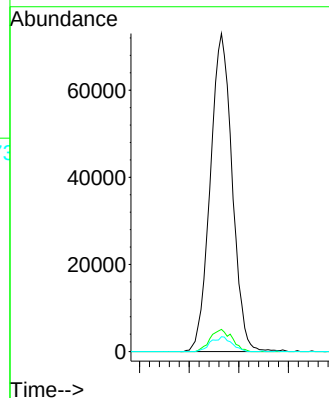
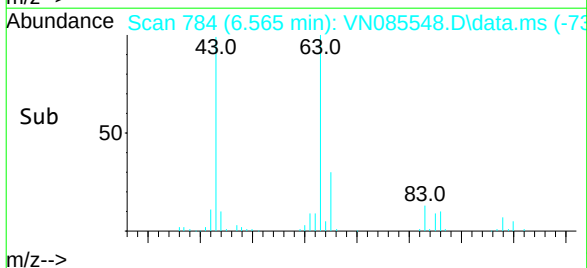
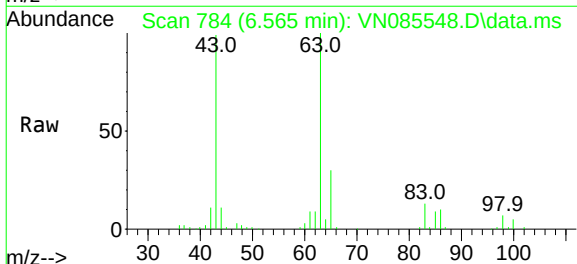
Tgt Ion: 63 Resp: 224264

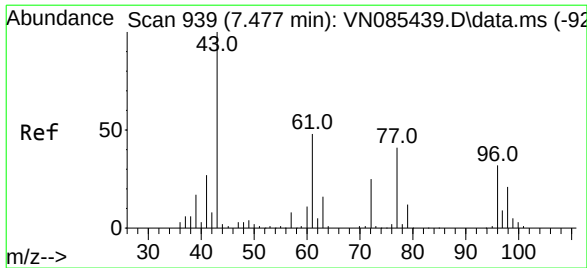
Ion Ratio Lower Upper

63 100

98 7.0 3.3 9.8

100 4.7 2.0 6.0





#25

2-Butanone

Concen: 262.309 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 384379

Ion Ratio Lower Upper

43 100

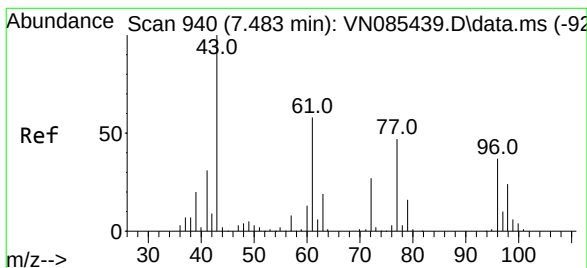
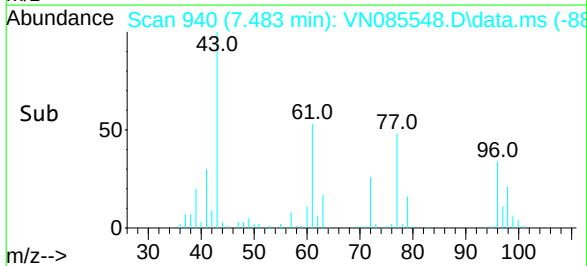
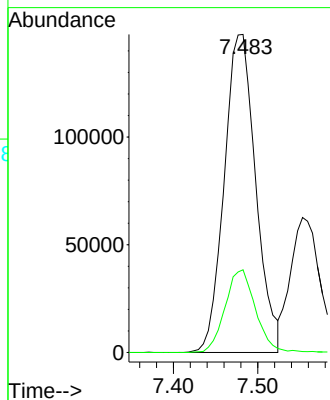
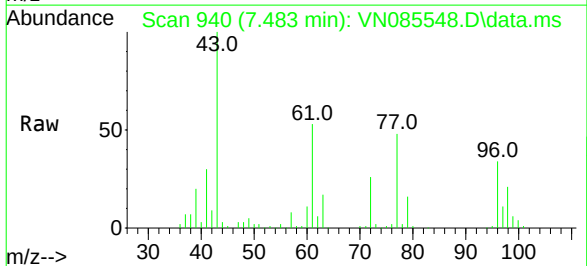
72 26.0 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#26

2,2-Dichloropropane

Concen: 55.483 ug/l

RT: 7.483 min Scan# 940

Delta R.T. -0.000 min

Lab File: VN085548.D

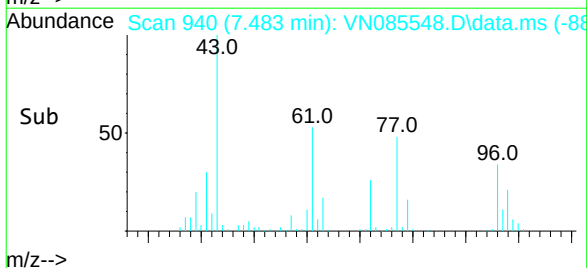
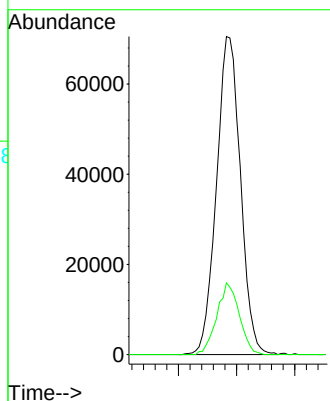
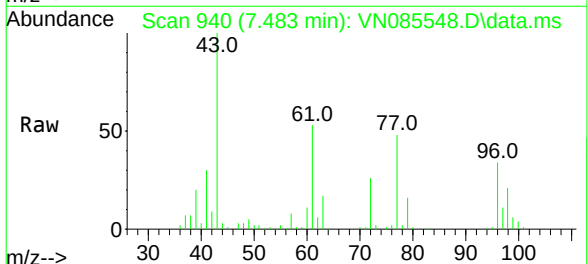
Acq: 29 Jan 2025 11:08

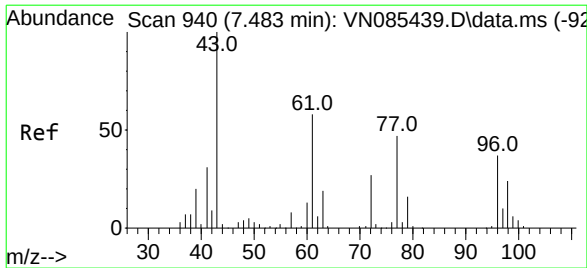
Tgt Ion: 77 Resp: 201856

Ion Ratio Lower Upper

77 100

97 21.1 10.7 32.1





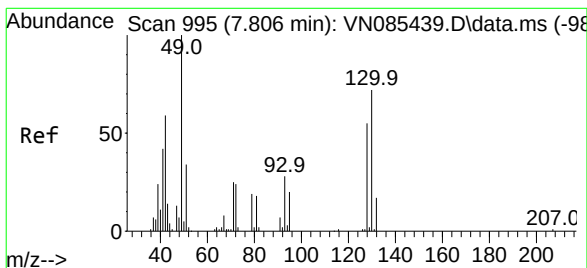
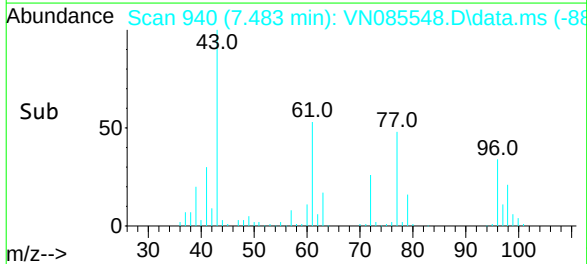
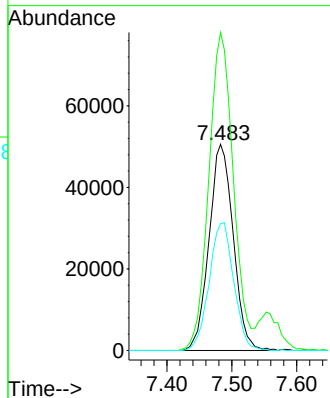
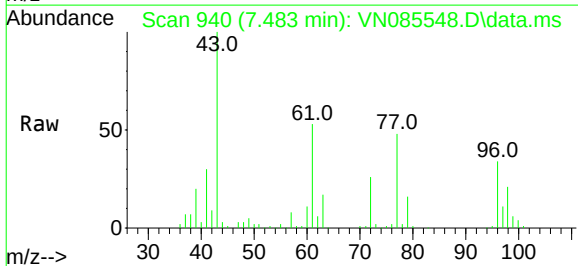
#27
cis-1,2-Dichloroethene
Concen: 50.778 ug/l
RT: 7.483 min Scan# 940
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion:	96	Resp:	130967
Ion	Ratio	Lower	Upper
96	100		
61	155.7	0.0	311.8
98	63.1	0.0	126.0

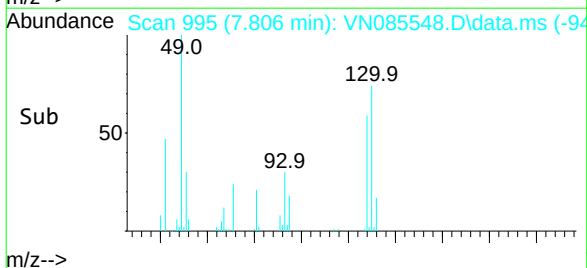
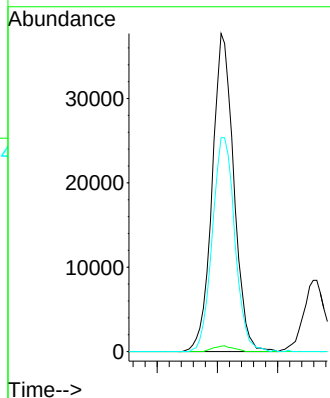
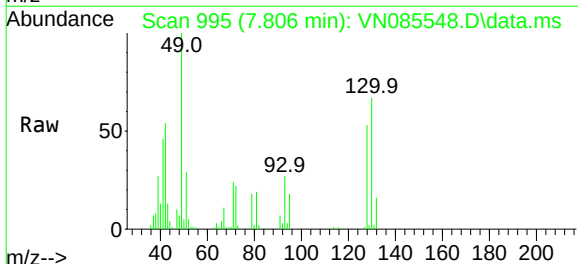
Manual Integrations
APPROVED

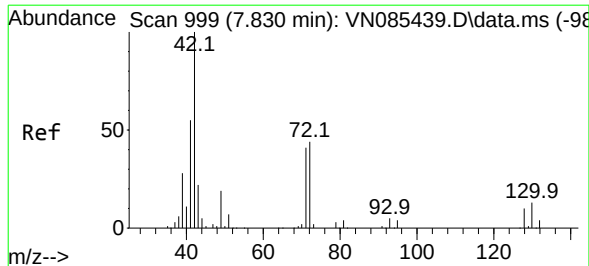
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#28
Bromochloromethane
Concen: 44.872 ug/l
RT: 7.806 min Scan# 995
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion:	49	Resp:	93940
Ion	Ratio	Lower	Upper
49	100		
129	1.7	0.0	4.4
130	70.1	55.0	82.4





#29

Tetrahydrofuran

Concen: 275.413 ug/l

RT: 7.835 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 42 Resp: 255872

Ion Ratio Lower Upper

42 100

72 43.1 34.2 51.2

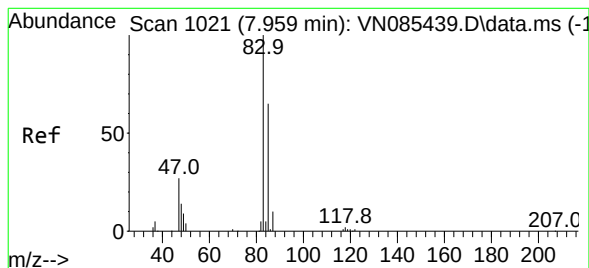
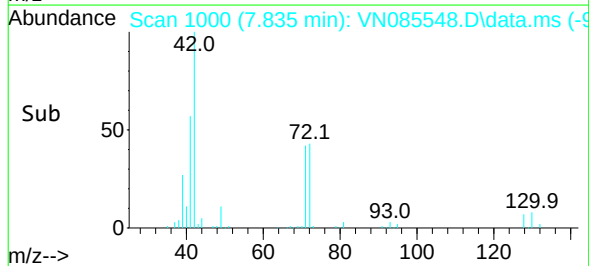
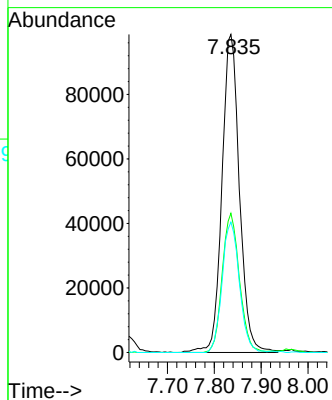
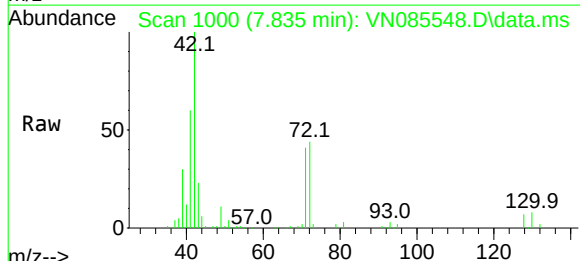
71 40.5 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#30

Chloroform

Concen: 50.743 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085548.D

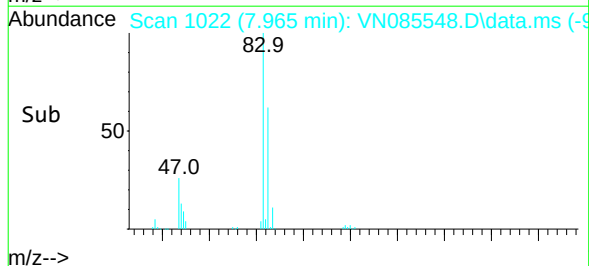
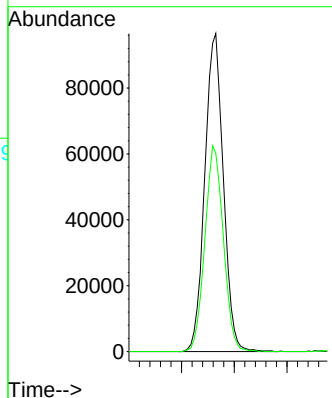
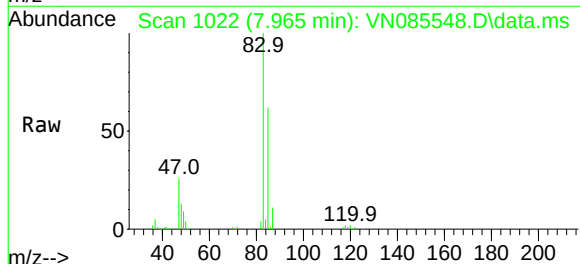
Acq: 29 Jan 2025 11:08

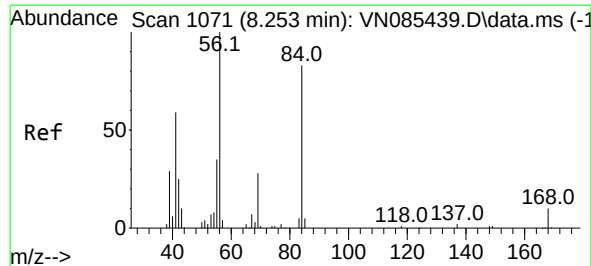
Tgt Ion: 83 Resp: 235995

Ion Ratio Lower Upper

83 100

85 62.4 51.8 77.6





#31

Cyclohexane

Concen: 43.741 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 56 Resp: 171079

Ion Ratio Lower Upper

56 100

69 30.0 22.2 33.4

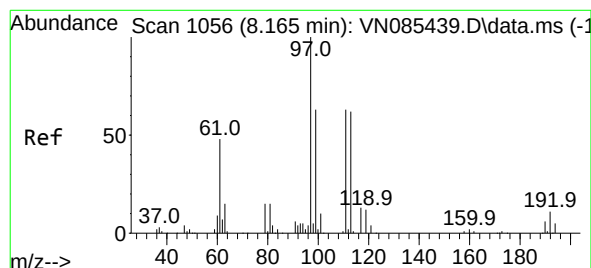
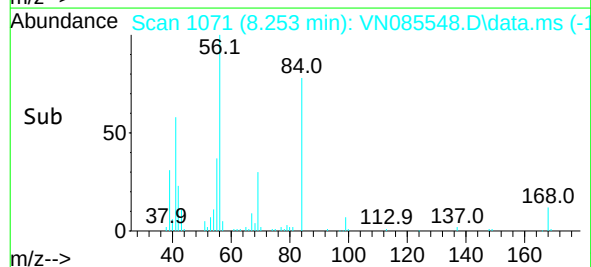
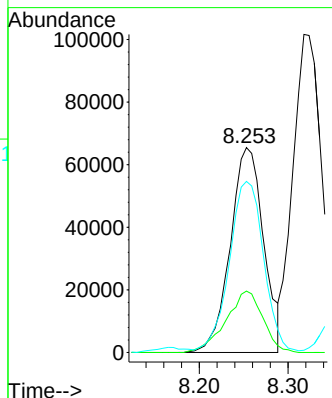
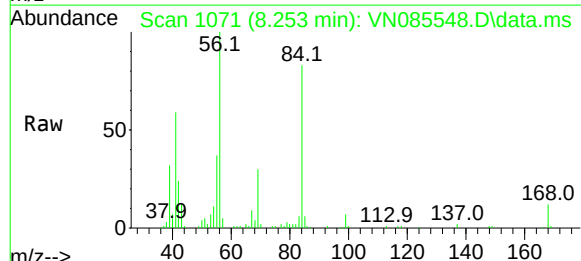
84 81.9 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#32

1,1,1-Trichloroethane

Concen: 50.496 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

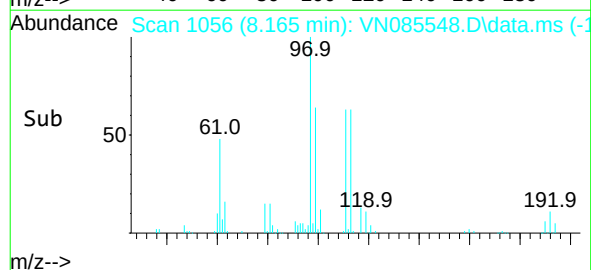
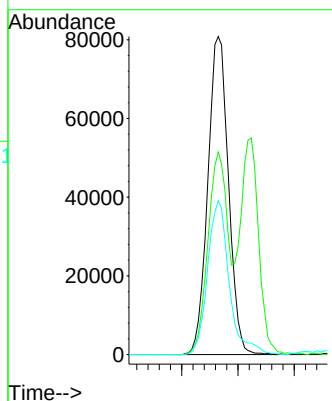
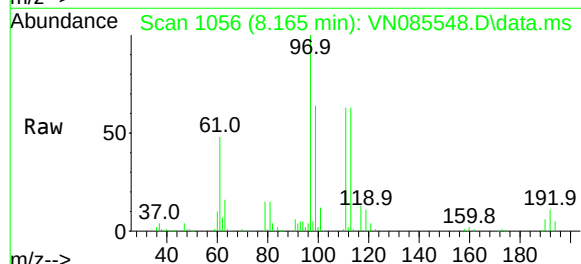
Tgt Ion: 97 Resp: 206001

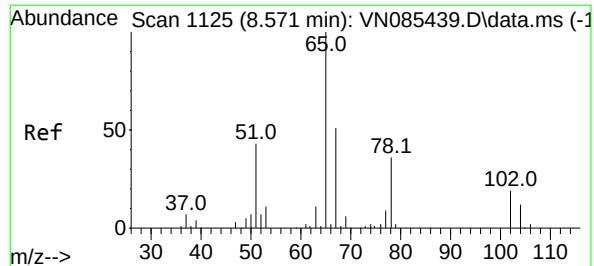
Ion Ratio Lower Upper

97 100

99 60.7 49.8 74.6

61 50.7 41.4 62.2





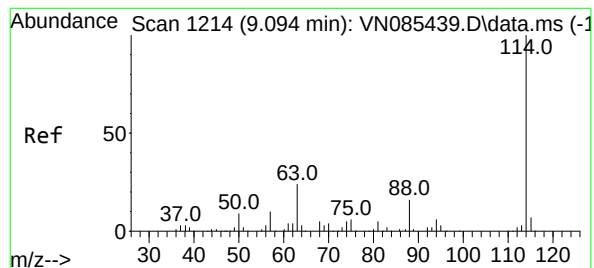
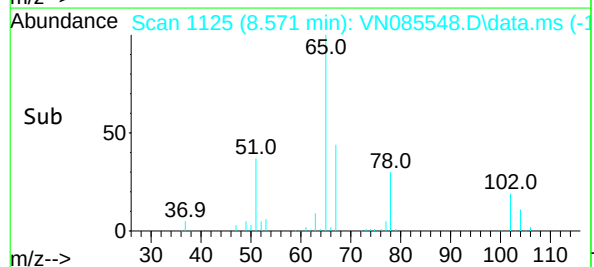
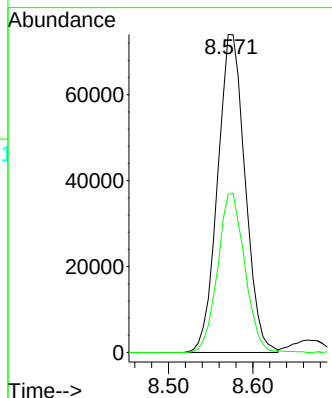
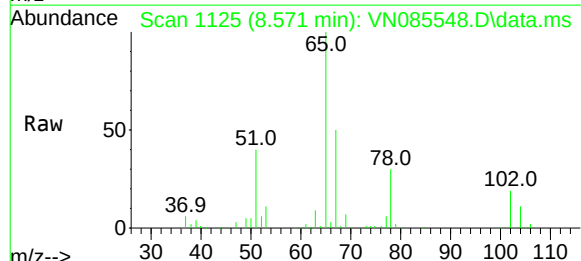
#33
1,2-Dichloroethane-d4
Concen: 54.332 ug/l
RT: 8.571 min Scan# 1125
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion: 65 Resp: 167442
Ion Ratio Lower Upper
65 100
67 49.6 0.0 101.6

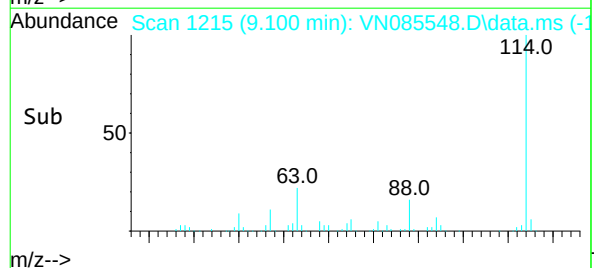
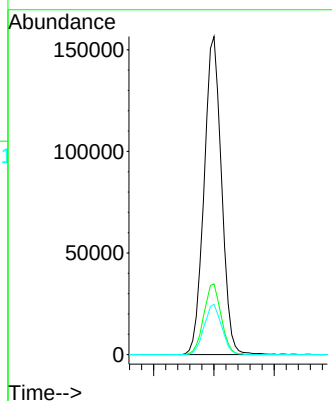
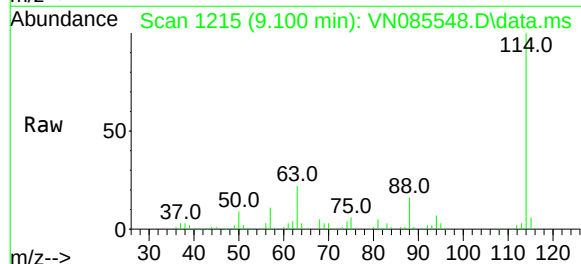
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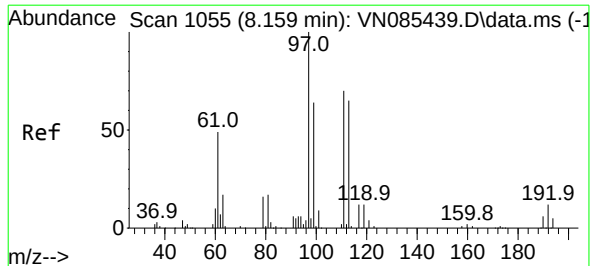
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

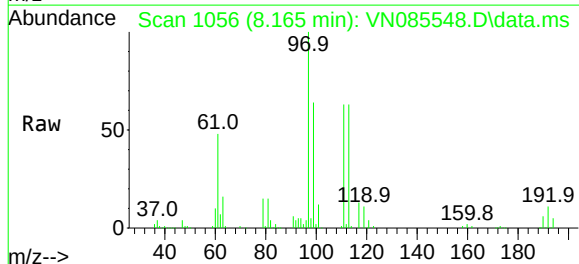
Tgt Ion:114 Resp: 314840
Ion Ratio Lower Upper
114 100
63 22.2 0.0 47.6
88 15.8 0.0 32.6





#35
Dibromofluoromethane
Concen: 55.762 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

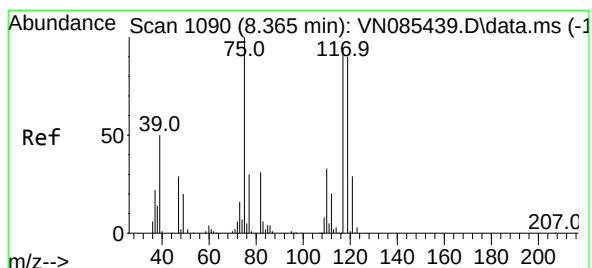
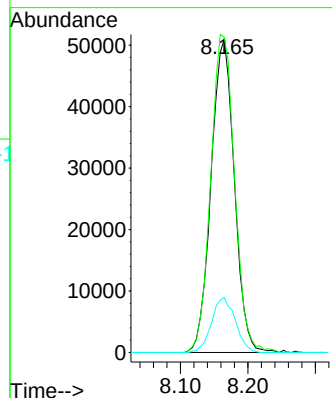
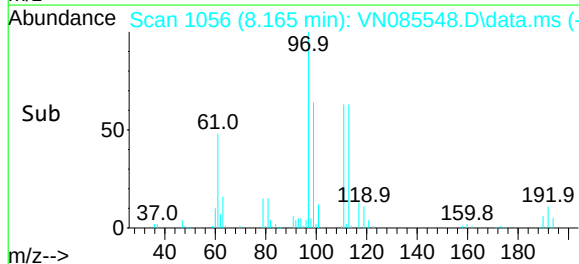
Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050



Tgt Ion: 113 Resp: 121796
Ion Ratio Lower Upper
113 100
111 104.4 82.7 124.1
192 18.0 14.3 21.5

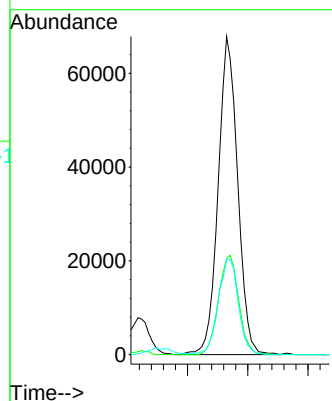
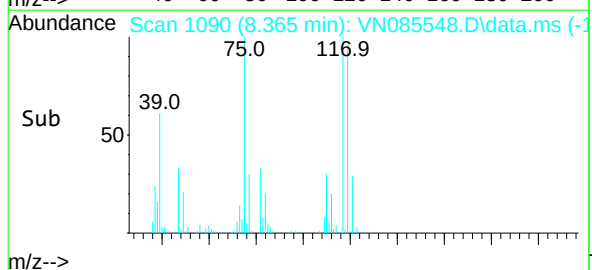
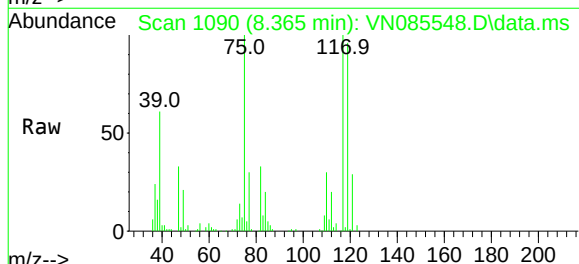
Manual Integrations
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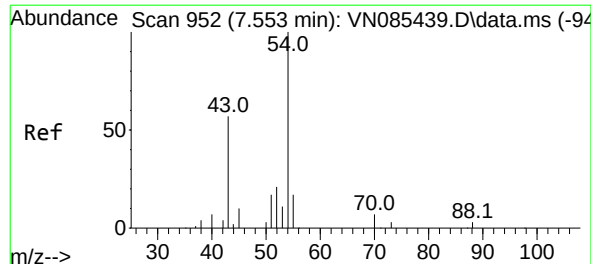
Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025



#36
1,1-Dichloropropene
Concen: 49.744 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion: 75 Resp: 152490
Ion Ratio Lower Upper
75 100
110 32.4 16.5 49.5
77 31.0 24.4 36.6





#37

Ethyl Acetate

Concen: 50.645 ug/l

RT: 7.553 min Scan# 952

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 156704

Ion Ratio Lower Upper

43 100

61 13.1 10.9 16.3

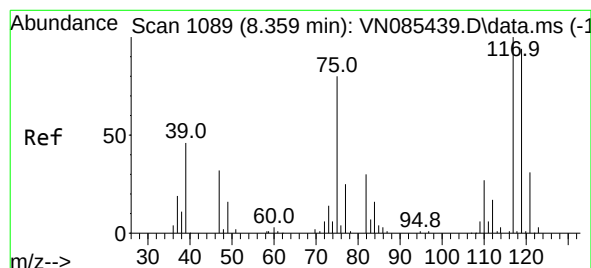
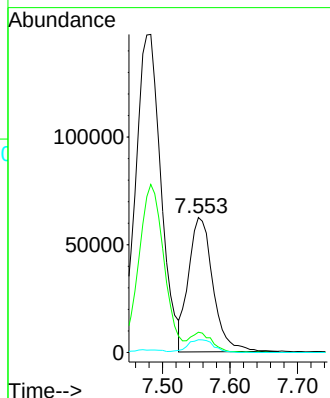
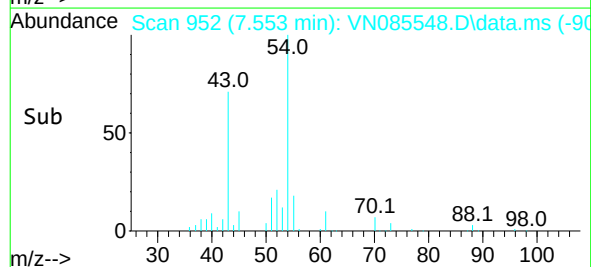
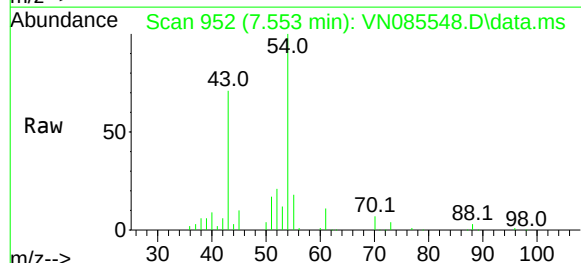
70 10.1 7.5 11.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#38

Carbon Tetrachloride

Concen: 50.934 ug/l

RT: 8.359 min Scan# 1089

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

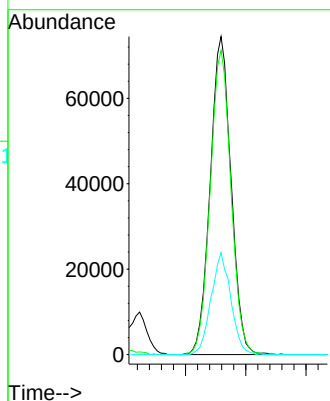
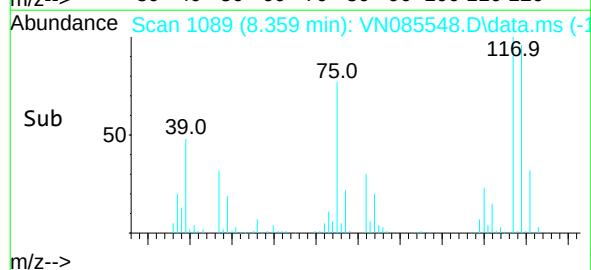
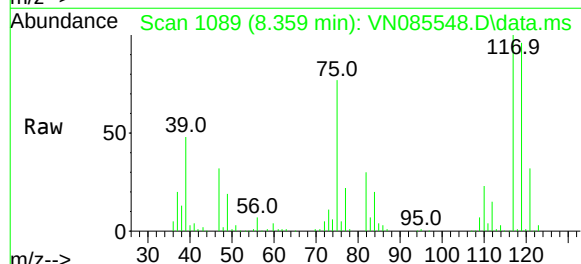
Tgt Ion:117 Resp: 178752

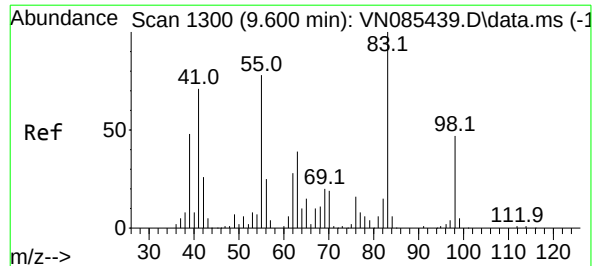
Ion Ratio Lower Upper

117 100

119 95.7 75.4 113.2

121 32.1 24.6 37.0





#39

Methylcyclohexane

Concen: 50.729 ug/l

RT: 9.600 min Scan# 13

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 83 Resp: 146134

Ion Ratio Lower Upper

83 100

55 80.8 62.6 94.0

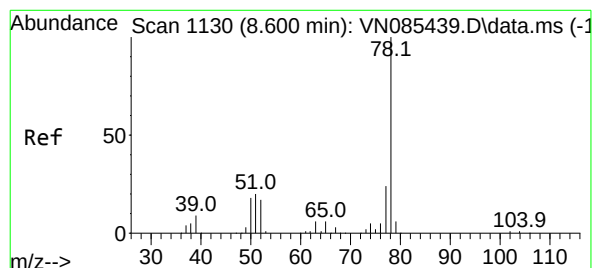
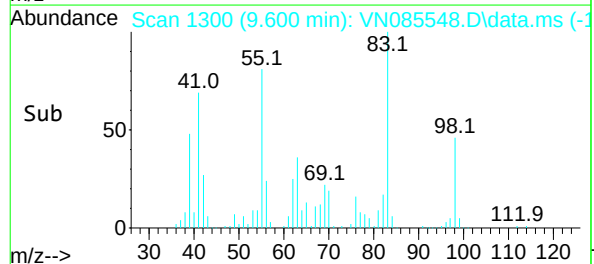
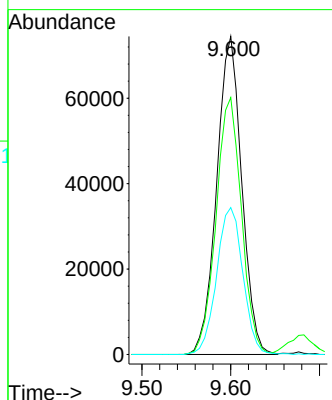
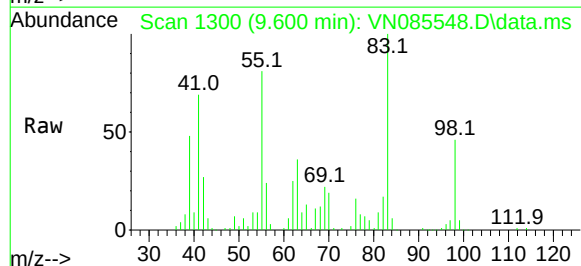
98 46.2 37.7 56.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#40

Benzene

Concen: 51.295 ug/l

RT: 8.606 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VN085548.D

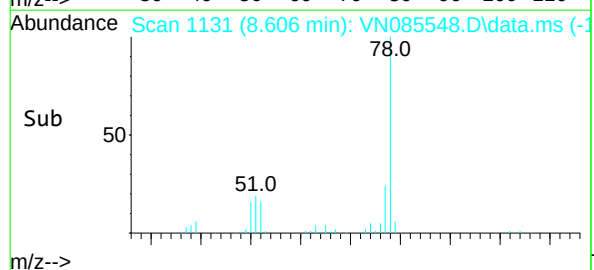
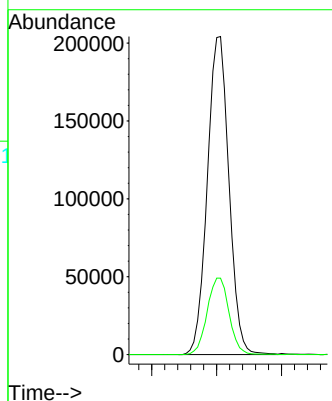
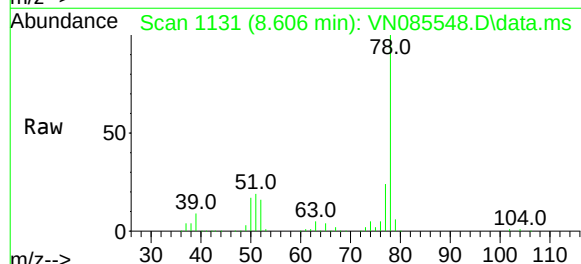
Acq: 29 Jan 2025 11:08

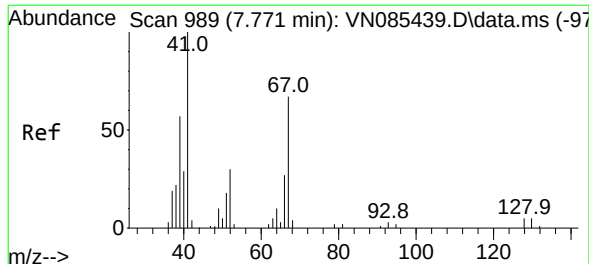
Tgt Ion: 78 Resp: 472467

Ion Ratio Lower Upper

78 100

77 24.0 19.0 28.6





#41

Methacrylonitrile

Concen: 54.633 ug/l

RT: 7.771 min Scan# 989

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 41 Resp: 87947

Ion Ratio Lower Upper

41 100

39 57.3 46.0 69.0

67 71.5 57.4 86.2

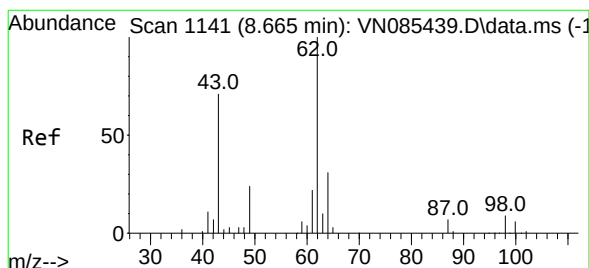
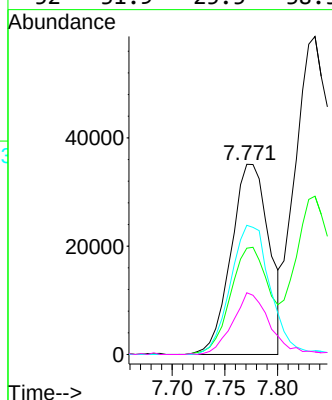
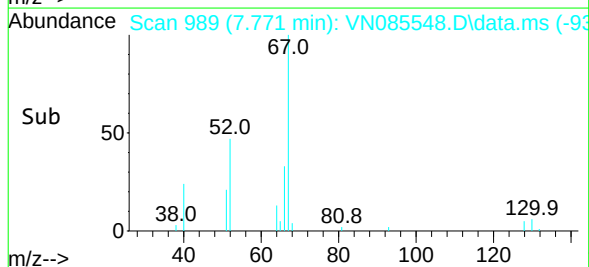
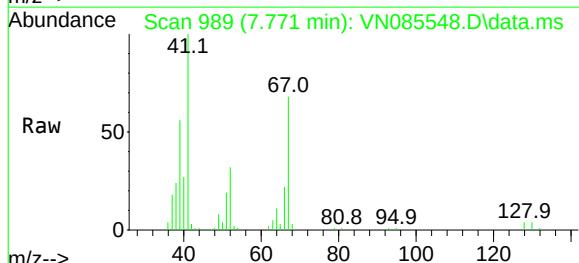
52 31.9 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#42

1,2-Dichloroethane

Concen: 52.978 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085548.D

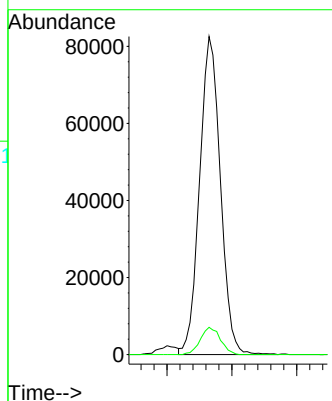
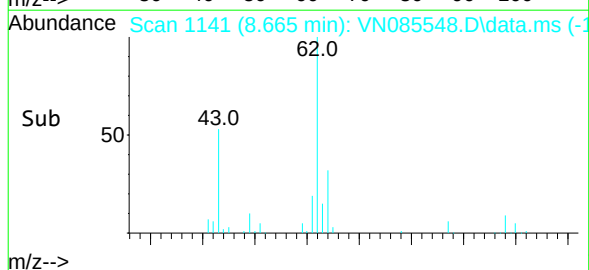
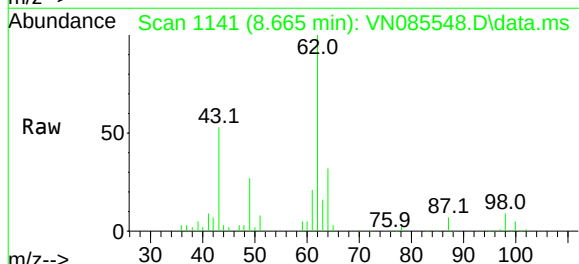
Acq: 29 Jan 2025 11:08

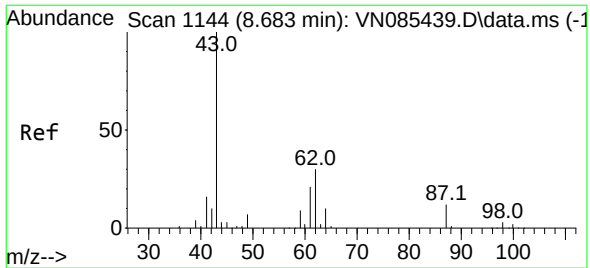
Tgt Ion: 62 Resp: 183786

Ion Ratio Lower Upper

62 100

98 8.3 0.0 17.0





#43

Isopropyl Acetate

Concen: 53.590 ug/l

RT: 8.682 min Scan# 1144

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 265698

Ion Ratio Lower Upper

43 100

61 26.0 20.7 31.1

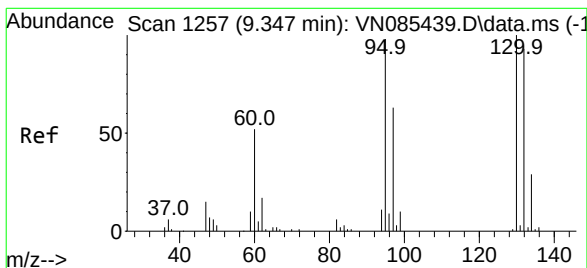
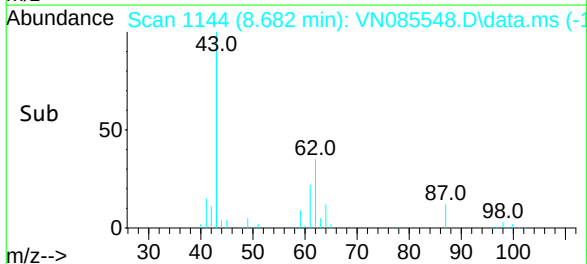
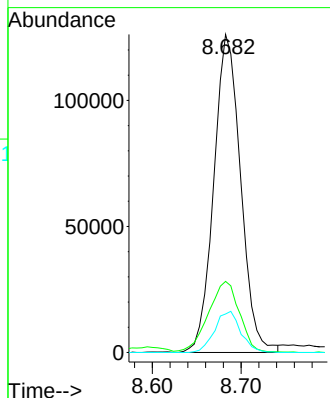
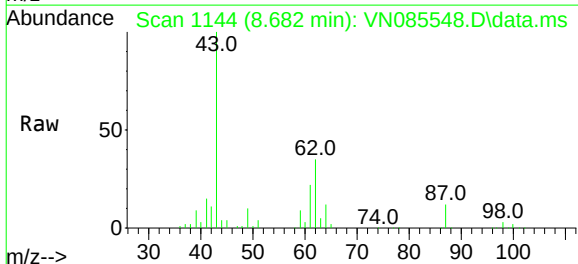
87 12.5 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#44

Trichloroethene

Concen: 49.626 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085548.D

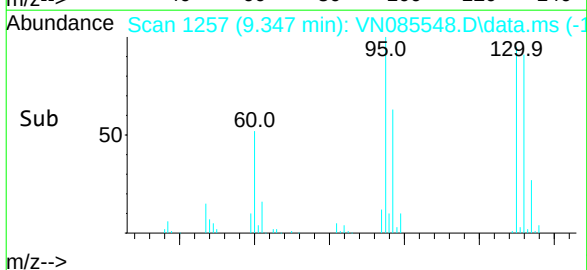
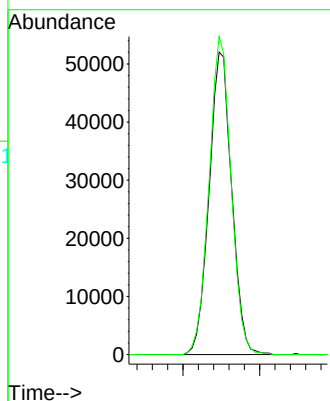
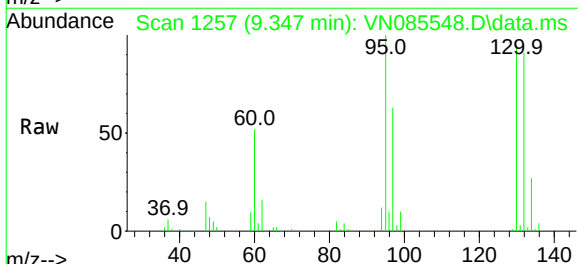
Acq: 29 Jan 2025 11:08

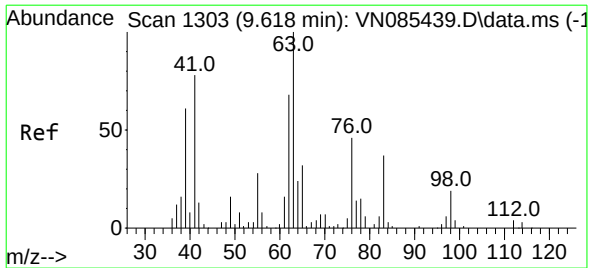
Tgt Ion:130 Resp: 106402

Ion Ratio Lower Upper

130 100

95 105.1 0.0 195.8





#45

1,2-Dichloropropane

Concen: 52.676 ug/l

RT: 9.618 min Scan# 13

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDC050

Tgt Ion: 63 Resp: 123931

Ion Ratio Lower Upper

63 100

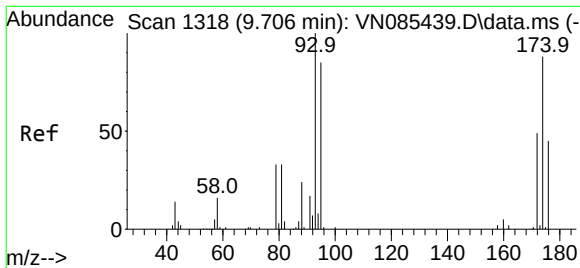
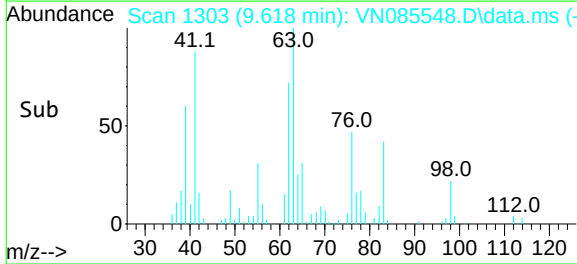
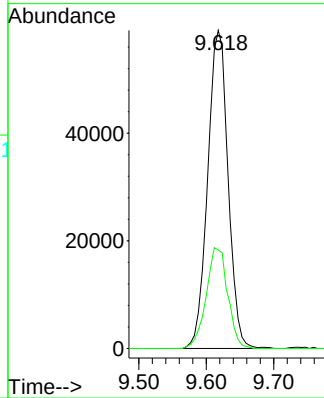
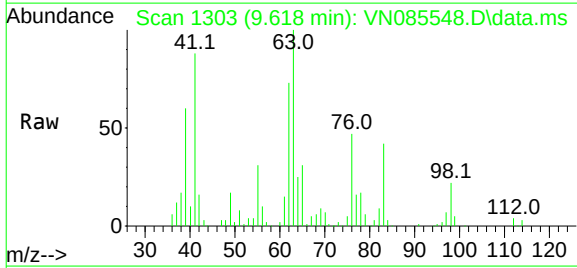
65 31.0 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#46

Dibromomethane

Concen: 50.807 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

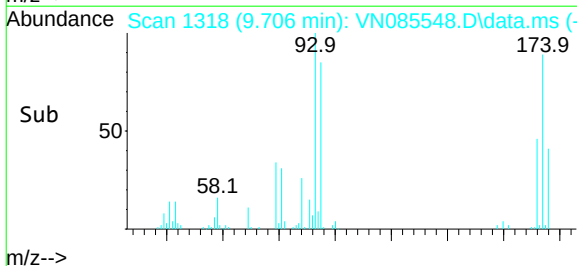
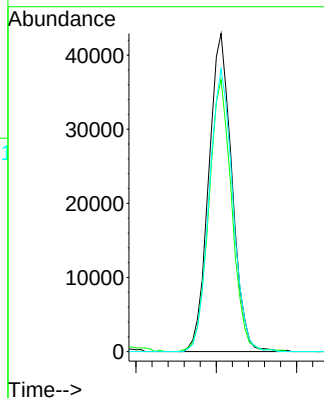
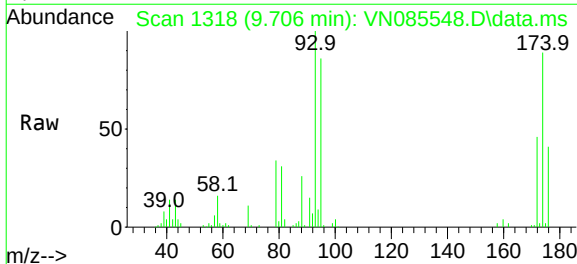
Tgt Ion: 93 Resp: 86251

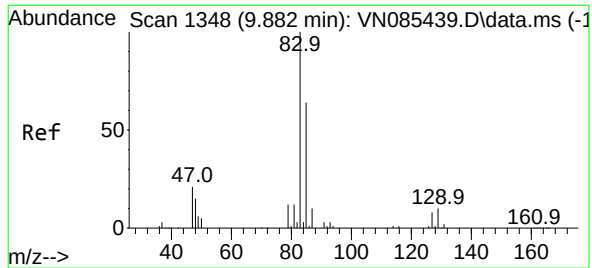
Ion Ratio Lower Upper

93 100

95 84.1 64.7 97.1

174 89.7 69.0 103.4





#47

Bromodichloromethane

Concen: 55.019 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 83 Resp: 190286

Ion Ratio Lower Upper

83 100

85 64.9 51.2 76.8

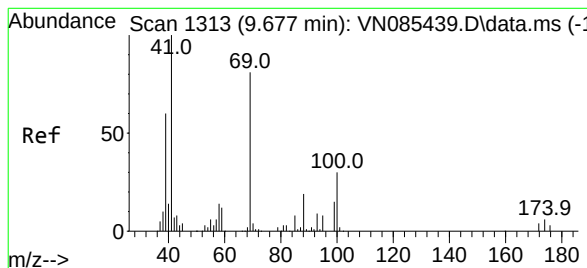
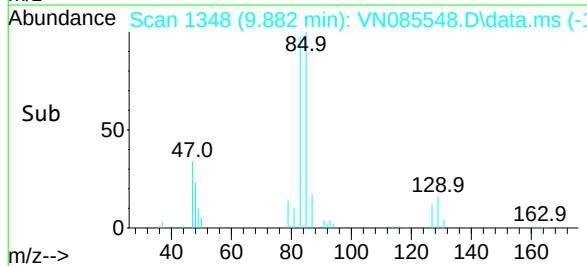
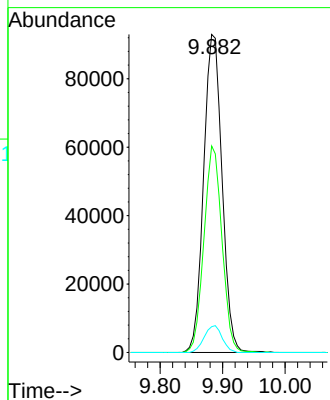
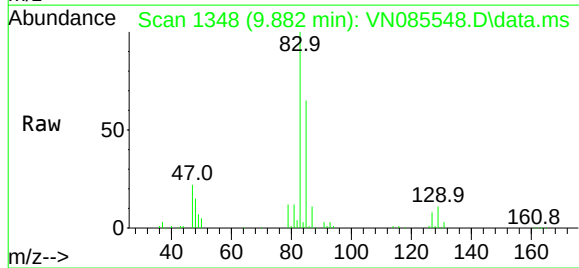
127 8.1 6.5 9.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#48

Methyl methacrylate

Concen: 56.527 ug/l

RT: 9.677 min Scan# 1313

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

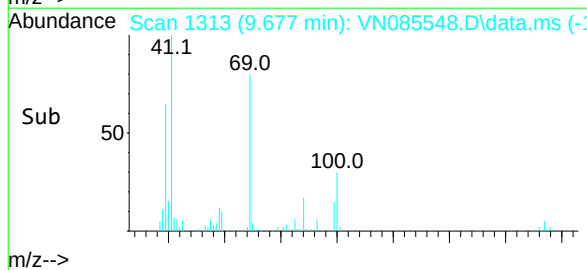
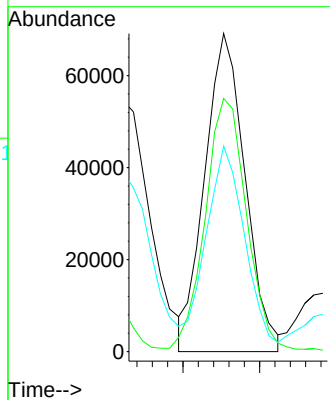
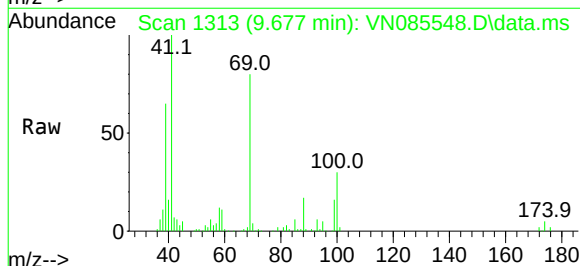
Tgt Ion: 41 Resp: 126123

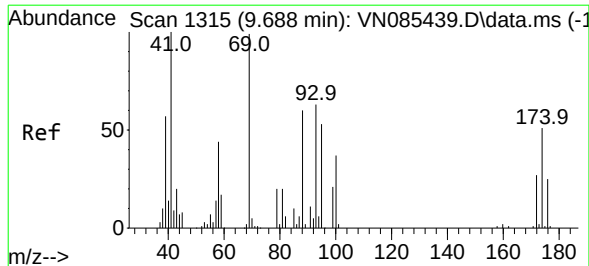
Ion Ratio Lower Upper

41 100

69 82.6 64.7 97.1

39 62.8 49.0 73.6





#49

1,4-Dioxane

Concen: 1118.996 ug/l

RT: 9.688 min Scan# 1315

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 88 Resp: 42044

Ion Ratio Lower Upper

88 100

43 29.9 26.6 39.8

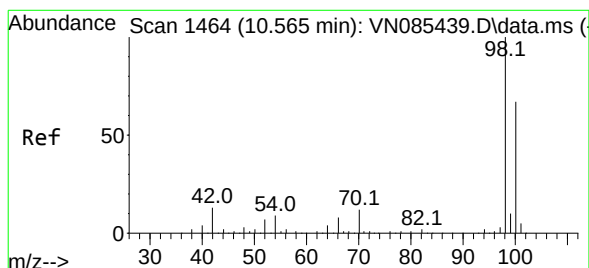
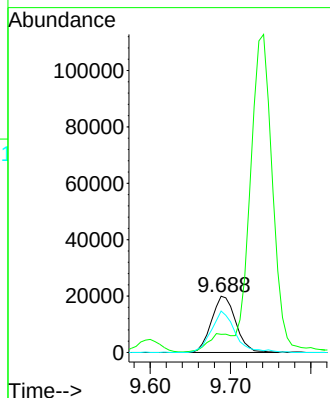
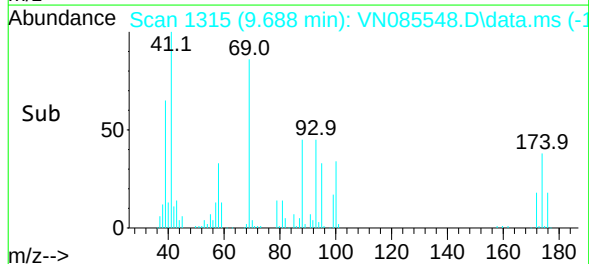
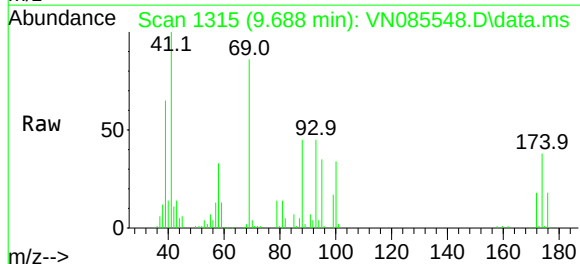
58 72.6 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#50

Toluene-d8

Concen: 57.152 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085548.D

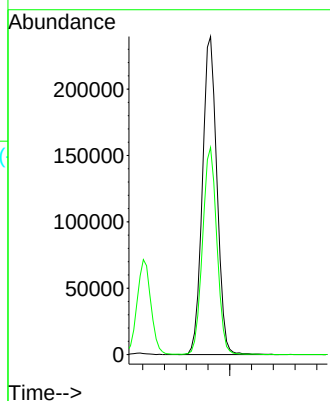
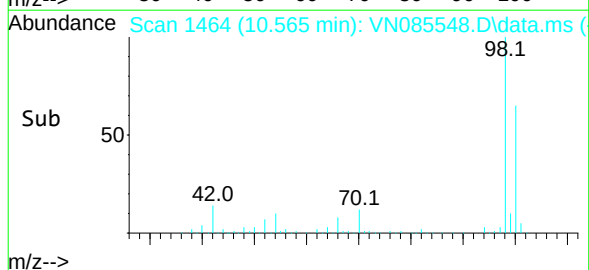
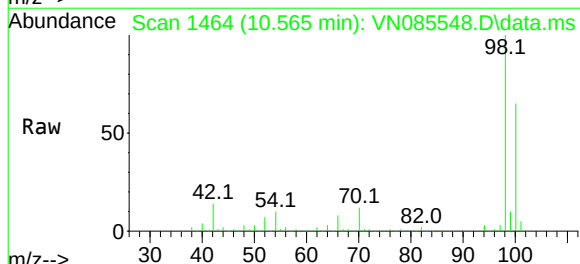
Acq: 29 Jan 2025 11:08

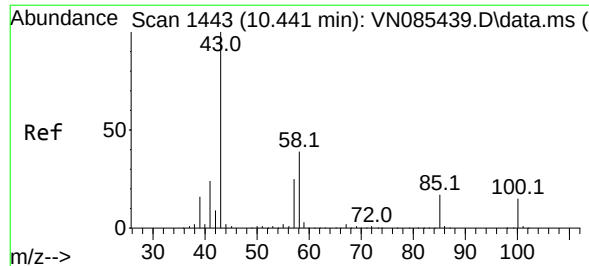
Tgt Ion: 98 Resp: 443525

Ion Ratio Lower Upper

98 100

100 64.0 52.2 78.4





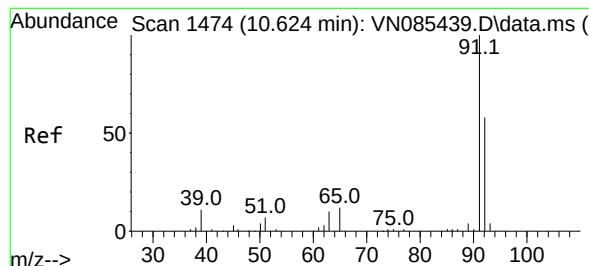
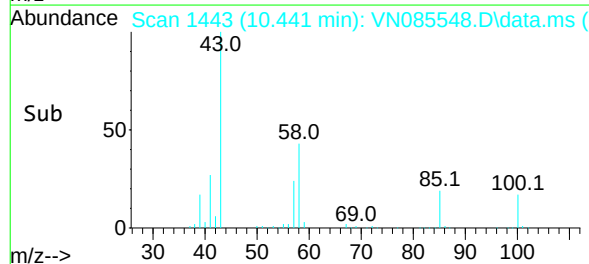
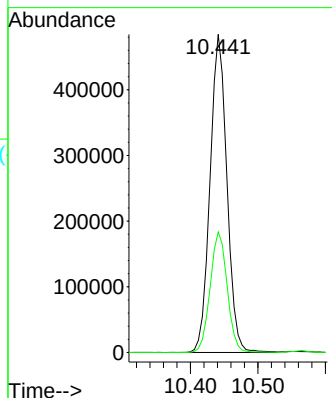
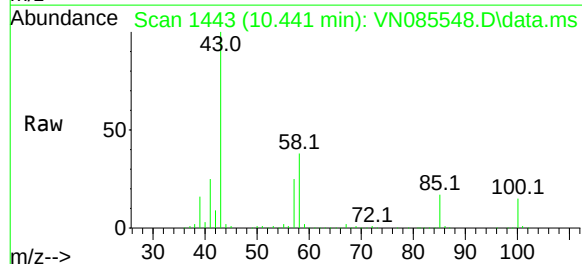
#51
4-Methyl-2-Pentanone
Concen: 292.481 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion: 43 Resp: 841478
Ion Ratio Lower Upper
43 100
58 38.2 30.5 45.7

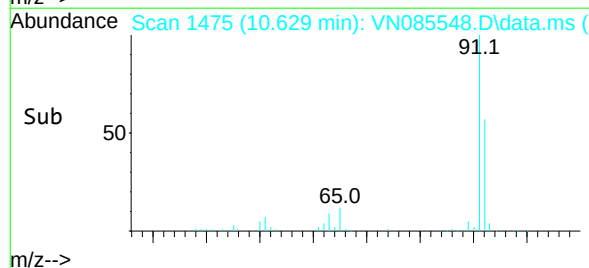
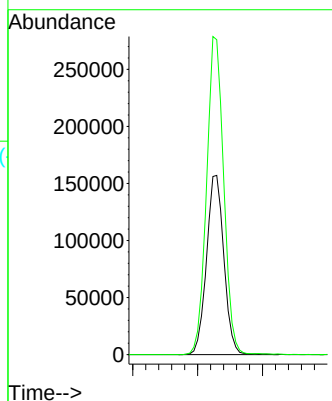
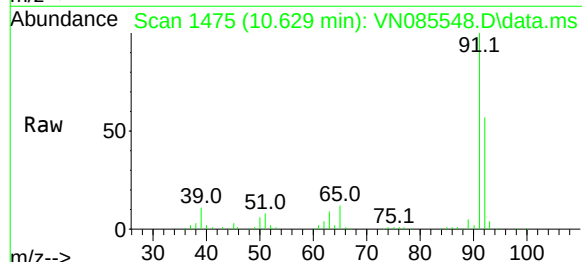
Manual Integrations
APPROVED

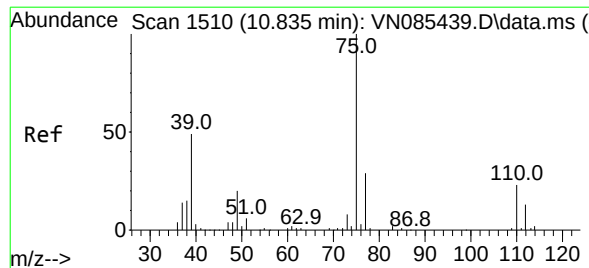
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#52
Toluene
Concen: 54.537 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion: 92 Resp: 291059
Ion Ratio Lower Upper
92 100
91 175.7 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 55.275 ug/l

RT: 10.835 min Scan# 1510

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 75 Resp: 180662

Ion Ratio Lower Upper

75 100

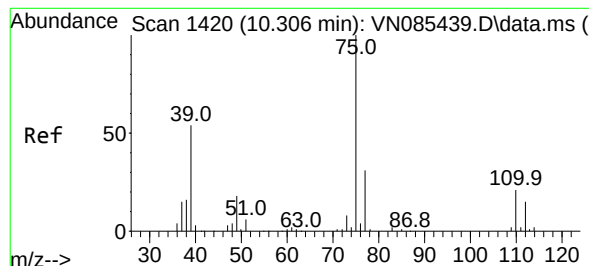
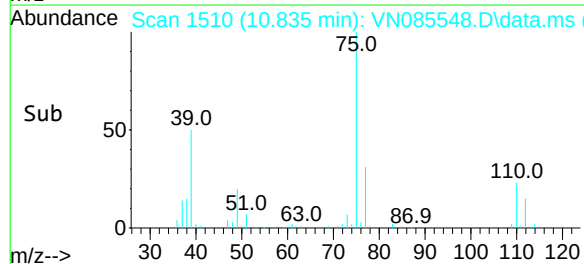
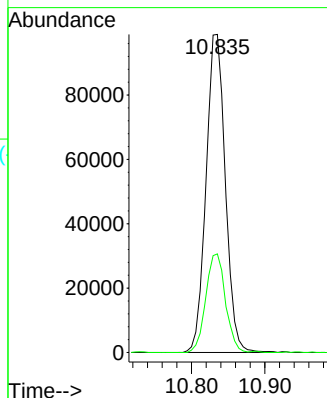
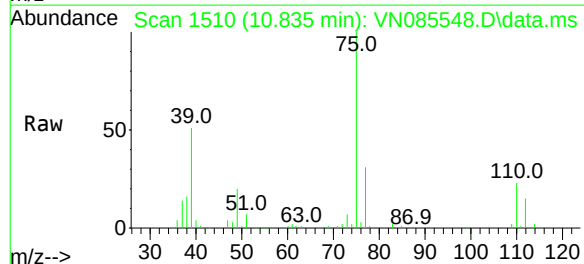
77 31.0 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#54

cis-1,3-Dichloropropene

Concen: 55.213 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

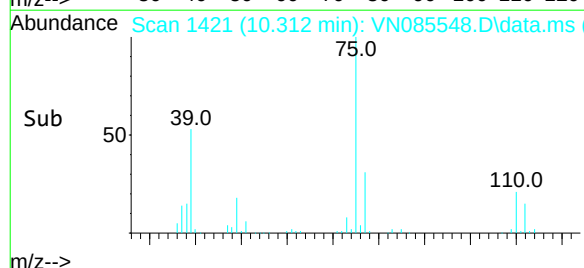
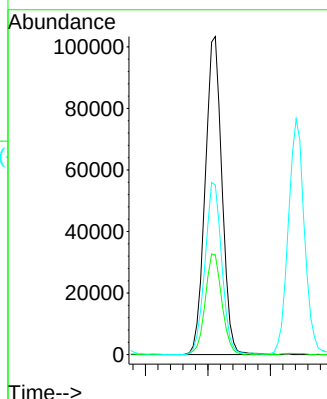
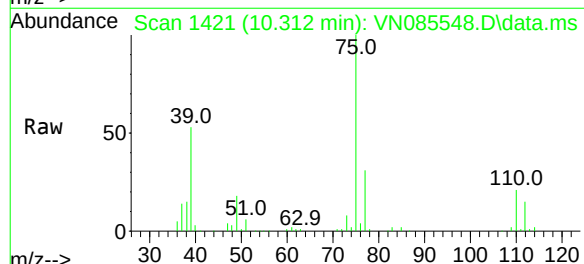
Tgt Ion: 75 Resp: 192761

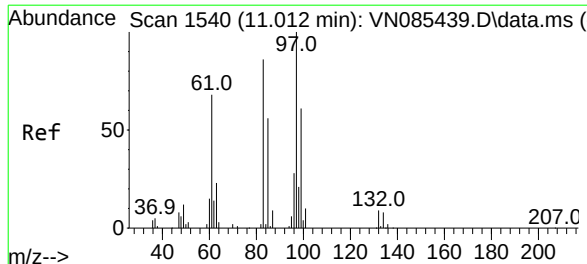
Ion Ratio Lower Upper

75 100

77 31.4 25.0 37.4

39 53.4 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 54.555 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDC050

Tgt Ion: 97 Resp: 115225

Ion Ratio Lower Upper

97 100

83 85.5 69.0 103.6

85 59.3 44.6 66.8

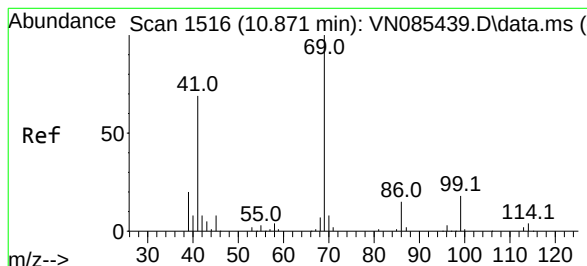
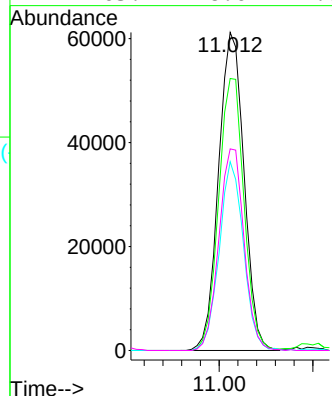
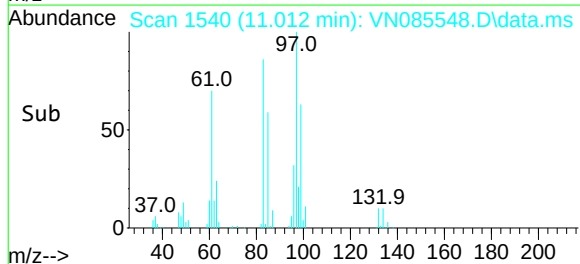
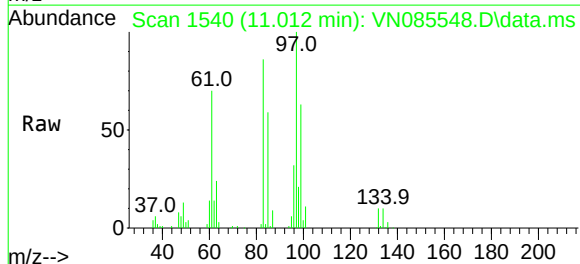
99 63.4 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#56

Ethyl methacrylate

Concen: 49.794 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

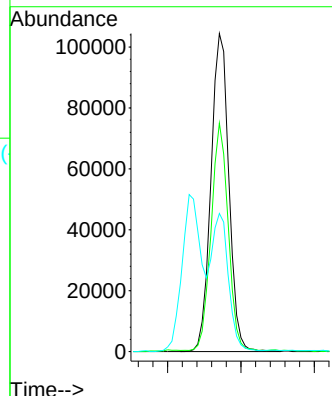
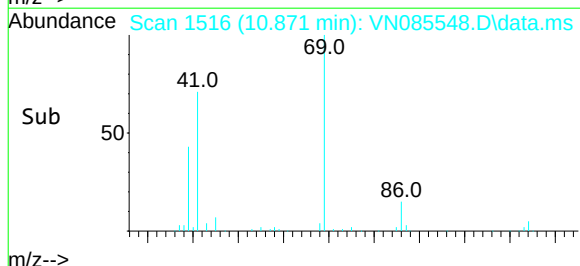
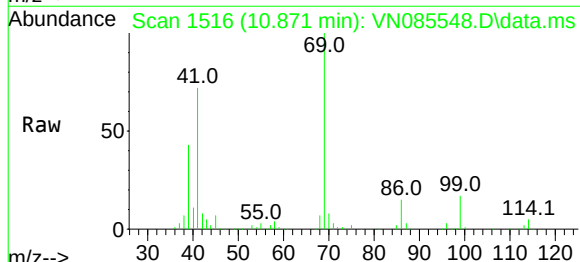
Tgt Ion: 69 Resp: 177132

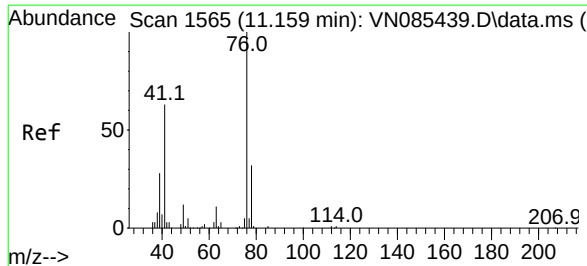
Ion Ratio Lower Upper

69 100

41 67.8 54.6 82.0

39 40.6 32.4 48.6





#57

1,3-Dichloropropane

Concen: 54.627 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 76 Resp: 200617

Ion Ratio Lower Upper

76 100

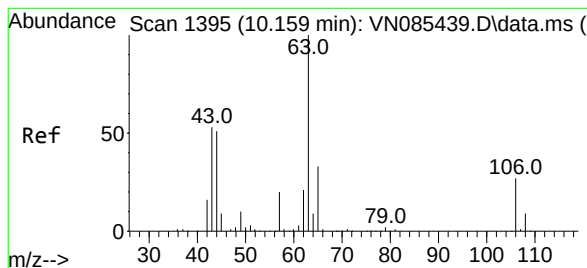
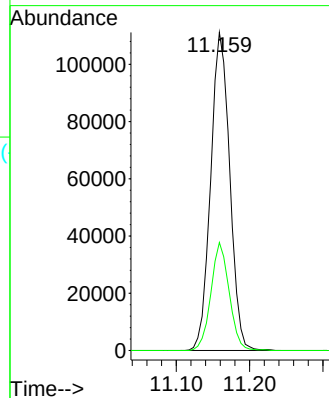
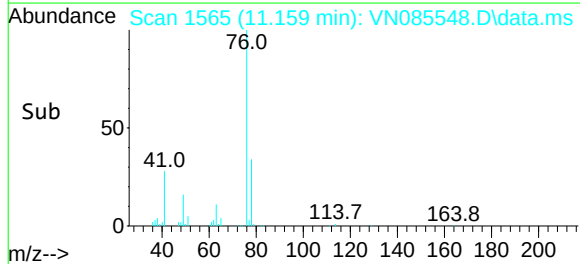
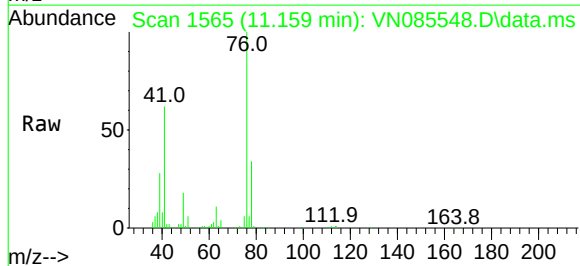
78 32.6 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#58

2-Chloroethyl Vinyl ether

Concen: 278.738 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. -0.000 min

Lab File: VN085548.D

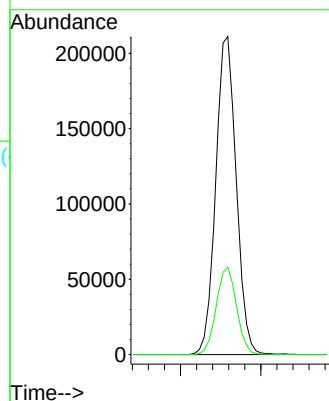
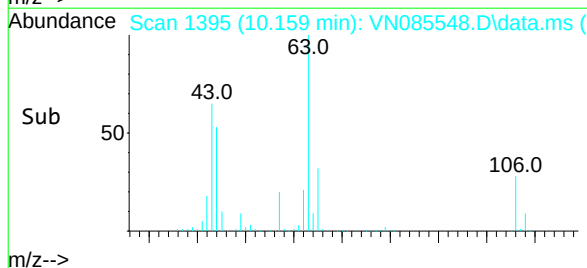
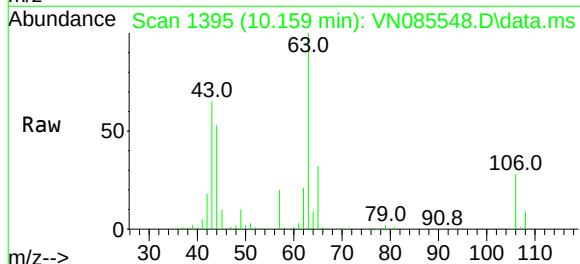
Acq: 29 Jan 2025 11:08

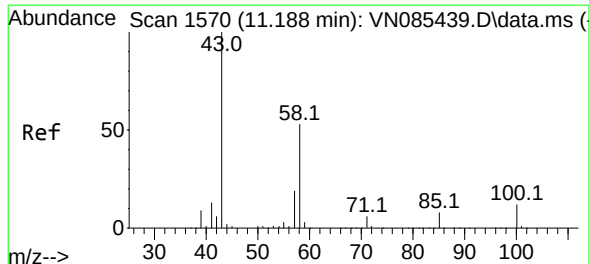
Tgt Ion: 63 Resp: 373597

Ion Ratio Lower Upper

63 100

106 27.2 21.6 32.4





#59

2-Hexanone

Concen: 297.473 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 43 Resp: 602196

Ion Ratio Lower Upper

43 100

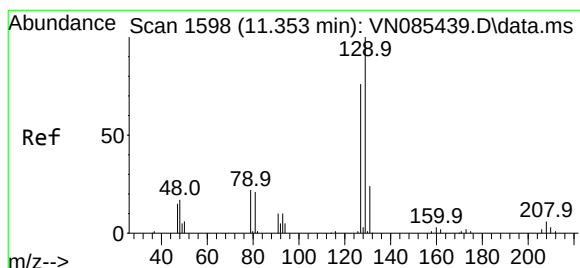
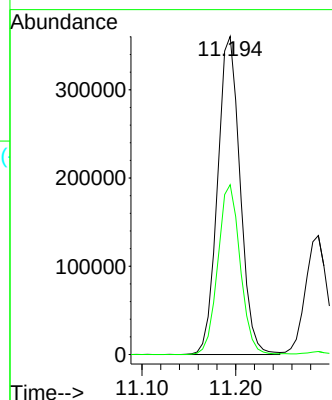
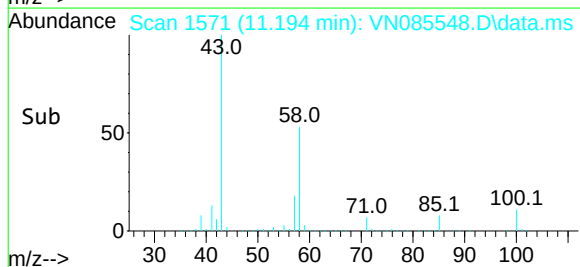
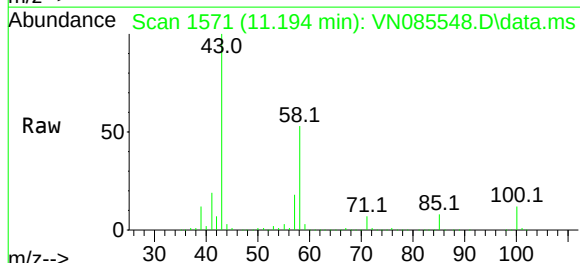
58 52.9 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#60

Dibromochloromethane

Concen: 55.280 ug/l

RT: 11.359 min Scan# 1599

Delta R.T. 0.006 min

Lab File: VN085548.D

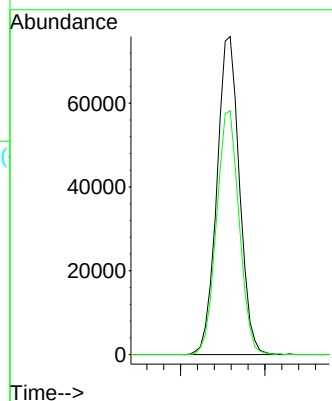
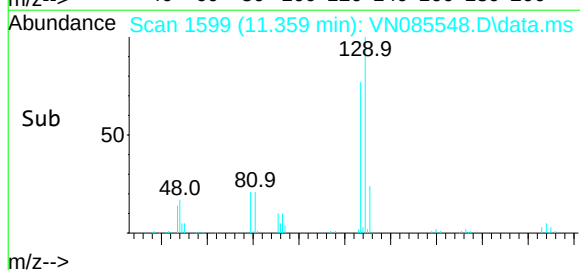
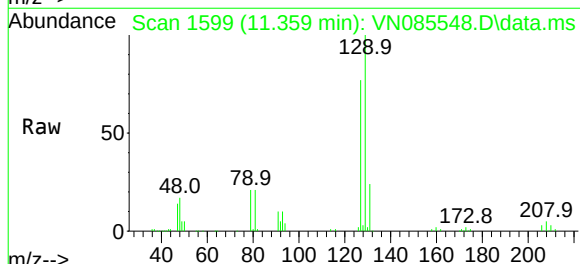
Acq: 29 Jan 2025 11:08

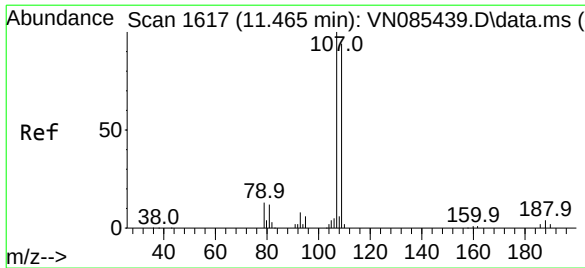
Tgt Ion:129 Resp: 140958

Ion Ratio Lower Upper

129 100

127 77.0 38.6 115.8





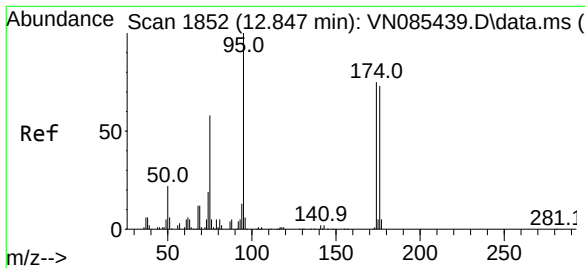
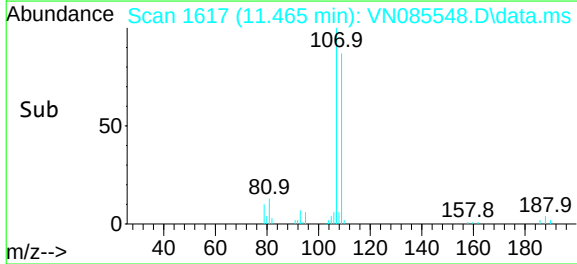
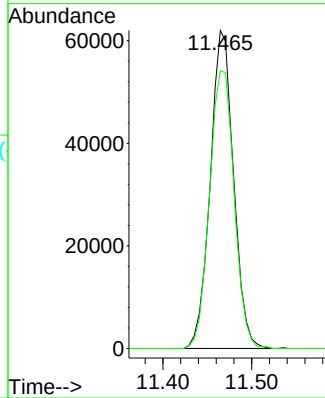
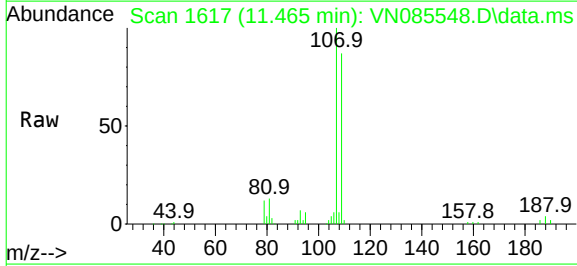
#61
1,2-Dibromoethane
Concen: 53.622 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion: 107 Resp: 112734
Ion Ratio Lower Upper
107 100
109 92.7 75.9 113.9

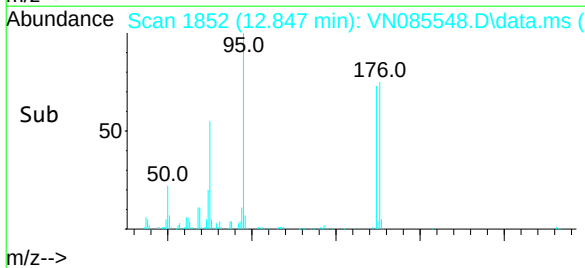
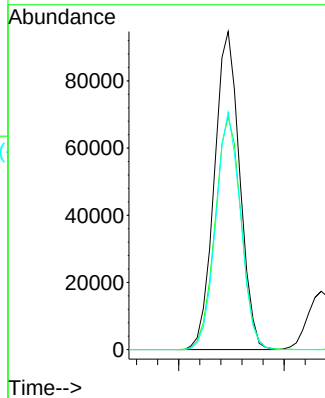
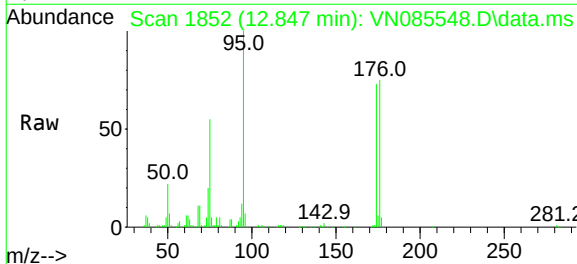
Manual Integrations
APPROVED

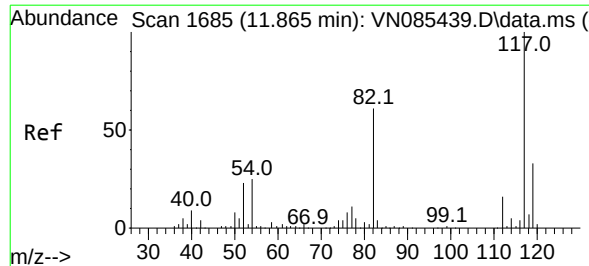
Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025



#62
4-Bromofluorobenzene
Concen: 59.631 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion: 95 Resp: 158301
Ion Ratio Lower Upper
95 100
174 74.9 0.0 145.0
176 72.9 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion:117 Resp: 285899

Ion Ratio Lower Upper

117 100

82 58.9 48.6 72.8

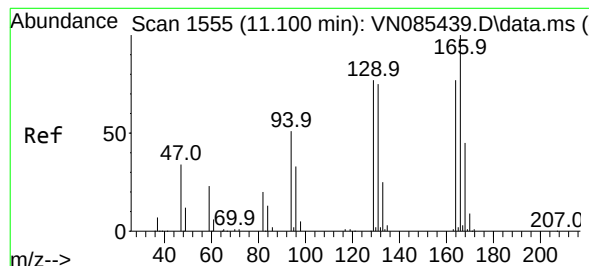
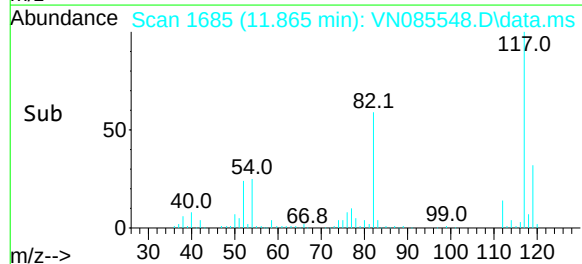
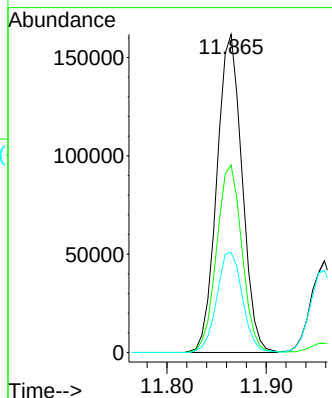
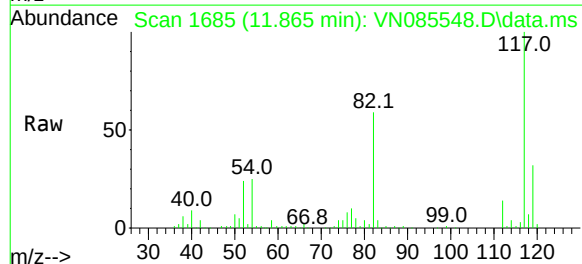
119 31.5 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#64

Tetrachloroethene

Concen: 49.798 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Tgt Ion:164 Resp: 97060

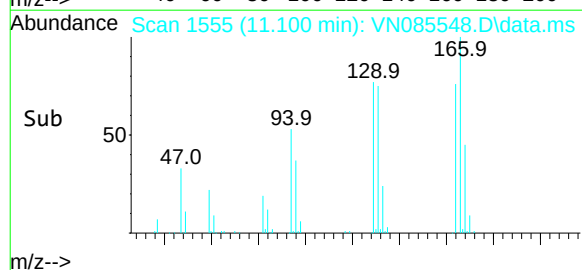
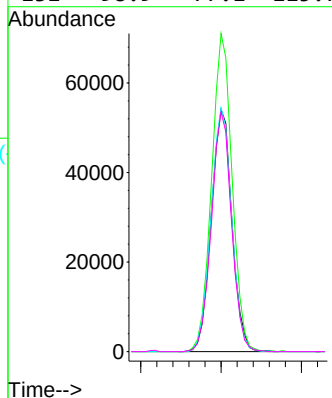
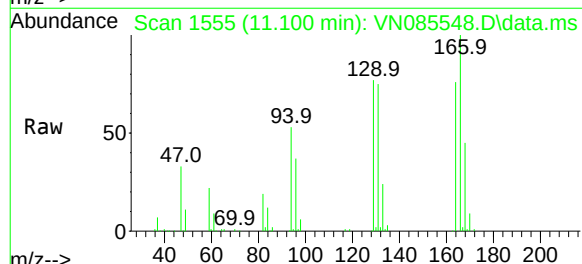
Ion Ratio Lower Upper

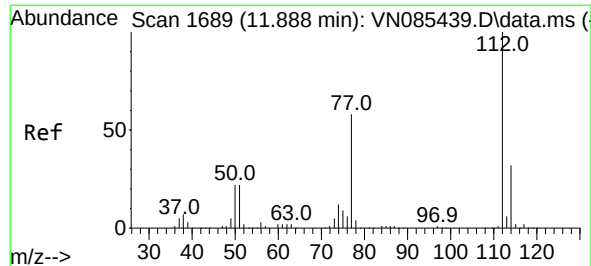
164 100

166 131.3 103.4 155.2

129 100.7 79.2 118.8

131 98.9 77.1 115.7





#65

Chlorobenzene

Concen: 50.625 ug/l

RT: 11.888 min Scan# 1689

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion:112 Resp: 317067

Ion Ratio Lower Upper

112 100

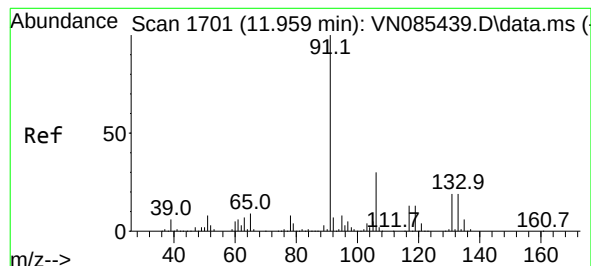
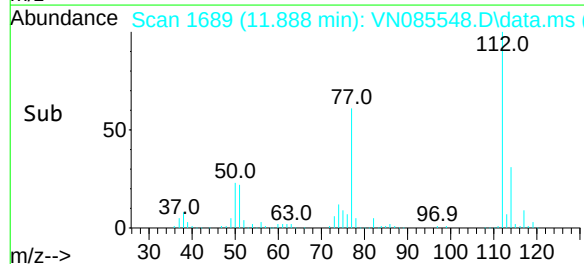
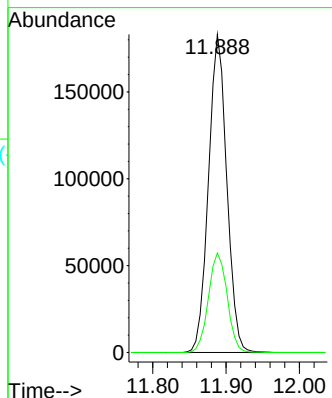
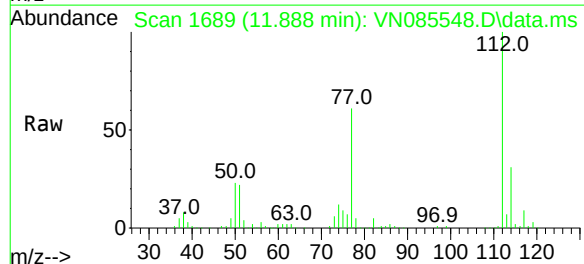
114 31.3 25.3 37.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#66

1,1,1,2-Tetrachloroethane

Concen: 51.774 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

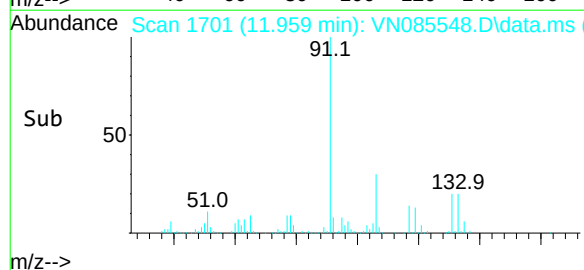
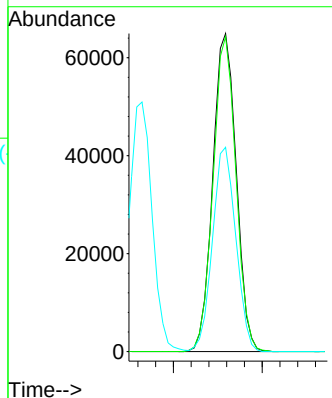
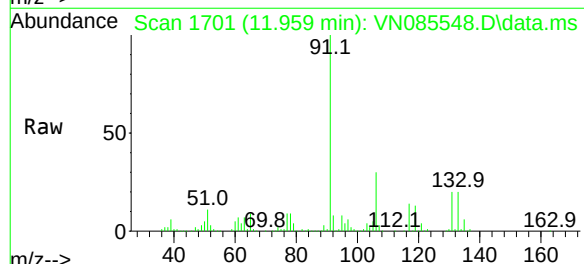
Tgt Ion:131 Resp: 119011

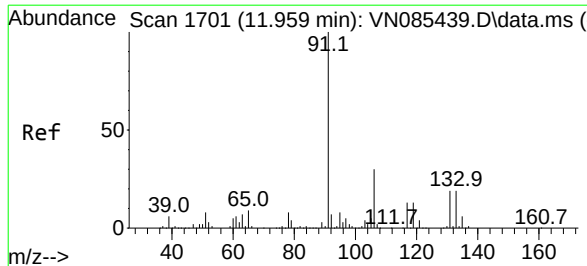
Ion Ratio Lower Upper

131 100

133 96.7 47.4 142.3

119 63.9 33.1 99.5





#67

Ethyl Benzene

Concen: 54.719 ug/l

RT: 11.959 min Scan# 17

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 91 Resp: 558184

Ion Ratio Lower Upper

91 100

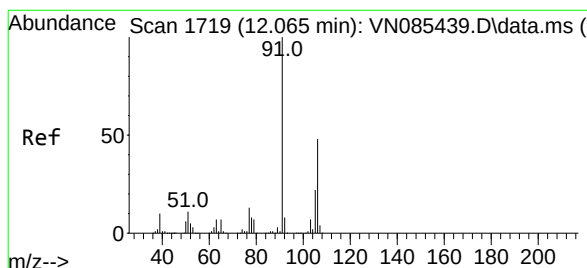
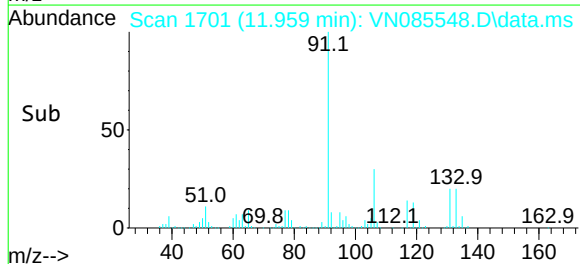
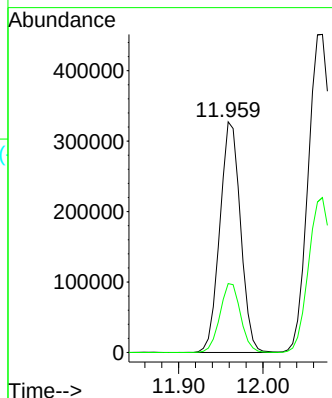
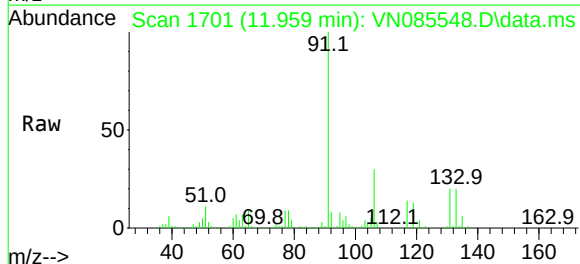
106 29.9 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#68

m/p-Xylenes

Concen: 113.620 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085548.D

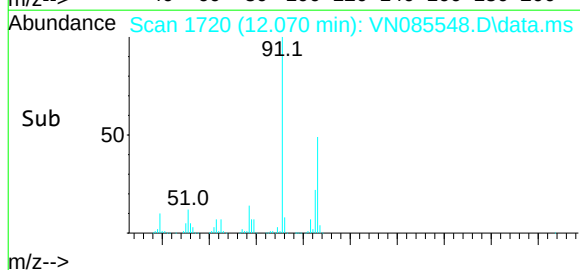
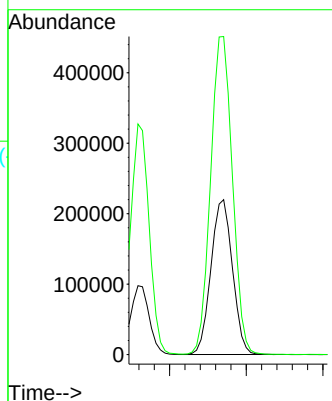
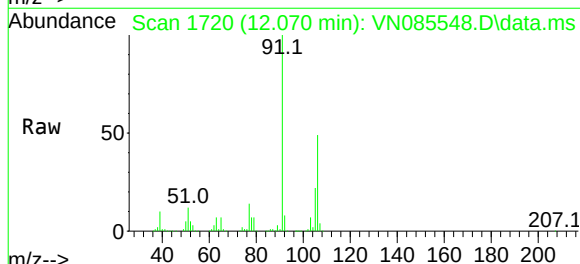
Acq: 29 Jan 2025 11:08

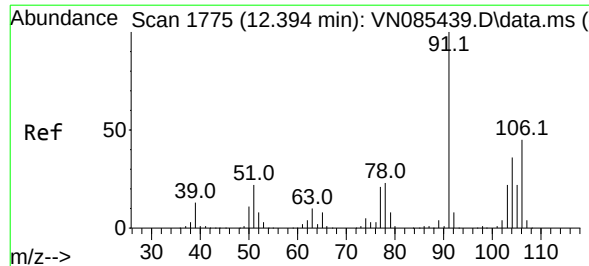
Tgt Ion:106 Resp: 428359

Ion Ratio Lower Upper

106 100

91 208.1 167.7 251.5





#69

o-Xylene

Concen: 55.920 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion:106 Resp: 201478

Ion Ratio Lower Upper

106 100

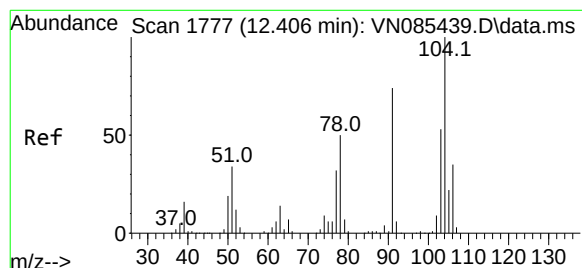
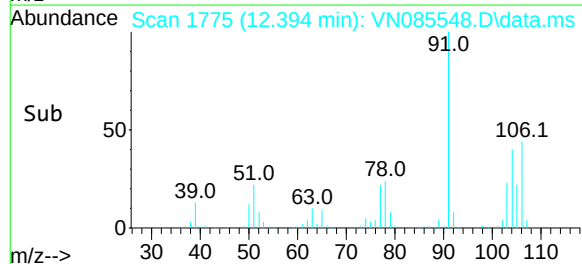
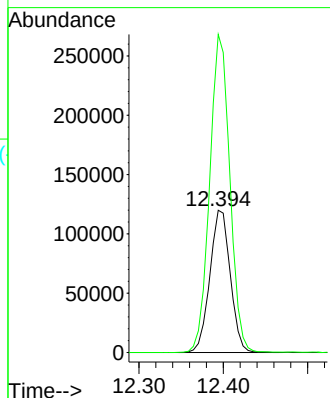
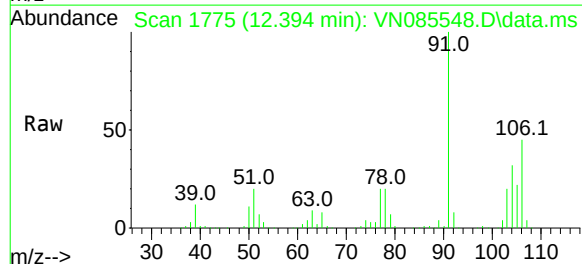
91 221.0 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#70

Styrene

Concen: 59.242 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

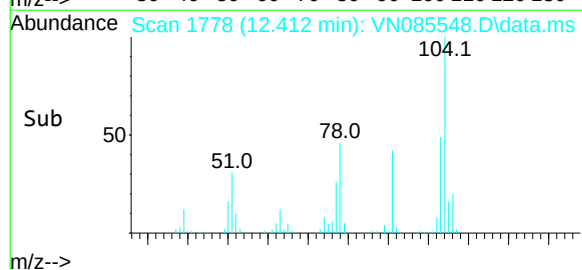
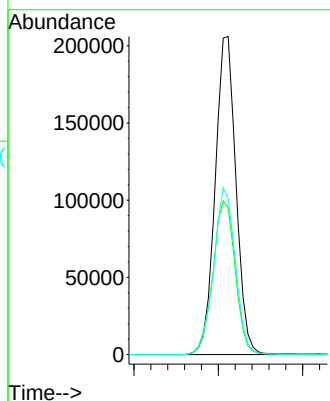
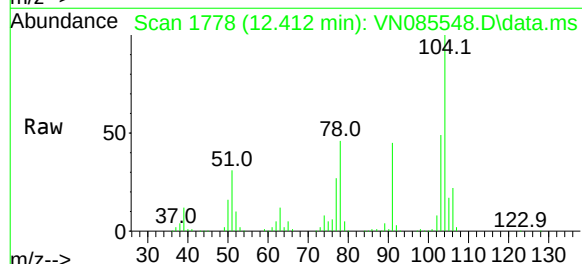
Tgt Ion:104 Resp: 353248

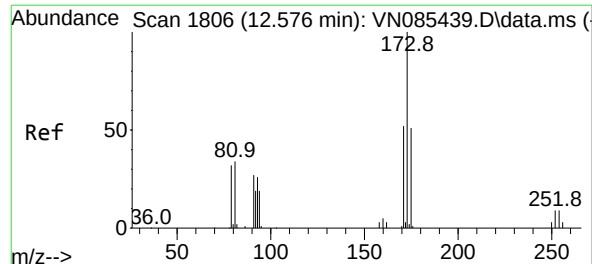
Ion Ratio Lower Upper

104 100

78 52.0 42.5 63.7

103 54.4 43.8 65.8





#71

Bromoform

Concen: 56.158 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

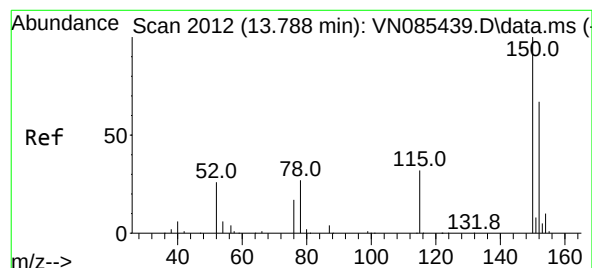
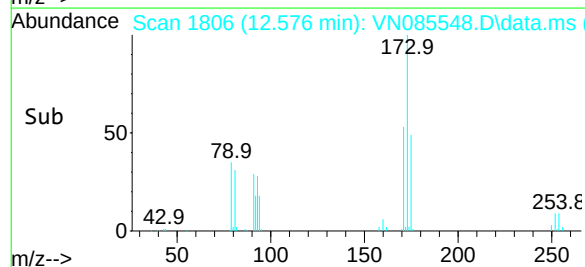
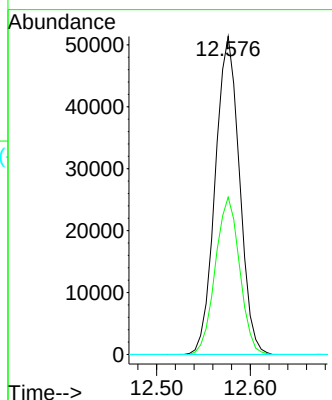
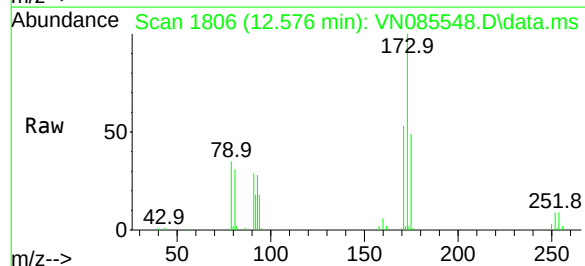
ClientSampleId :

VSTDCCC050

Tgt Ion:	173	Resp:	92365
Ion Ratio	Lower	Upper	
173	100		
175	49.4	24.4	73.2
254	0.0	0.0	0.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

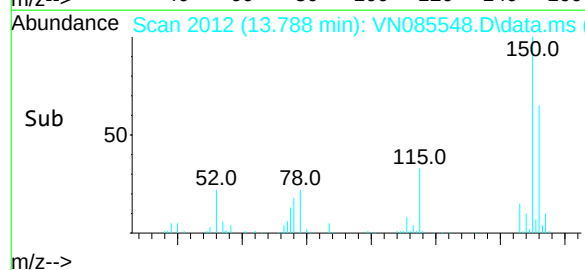
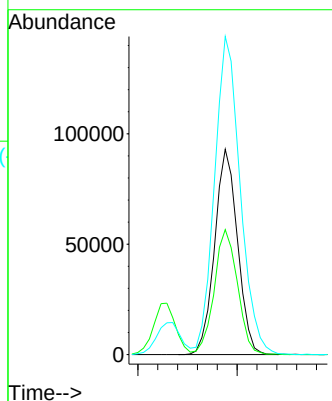
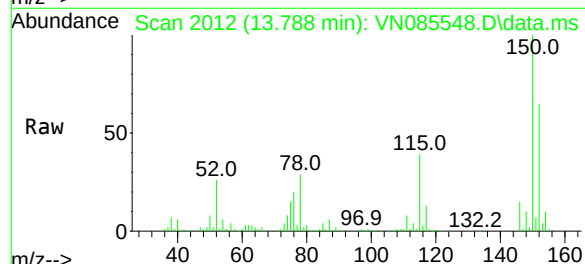
RT: 13.788 min Scan# 2012

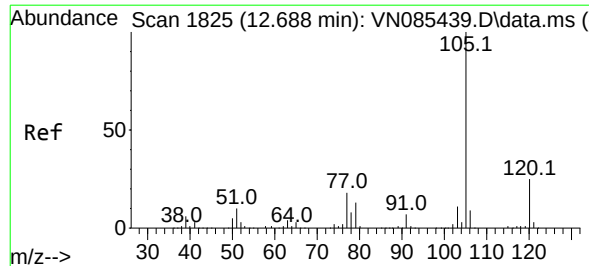
Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Tgt Ion:	152	Resp:	149148
Ion Ratio	Lower	Upper	
152	100		
115	62.0	31.1	93.3
150	174.0	0.0	343.6





#73

Isopropylbenzene

Concen: 51.684 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 105 Resp: 520261

Ion Ratio Lower Upper

105 100

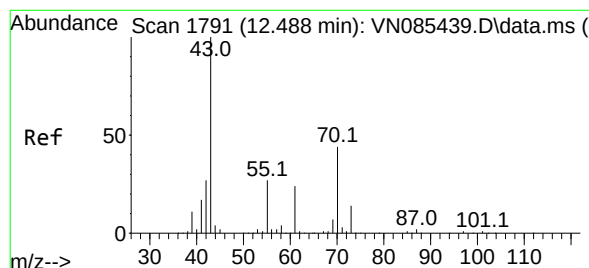
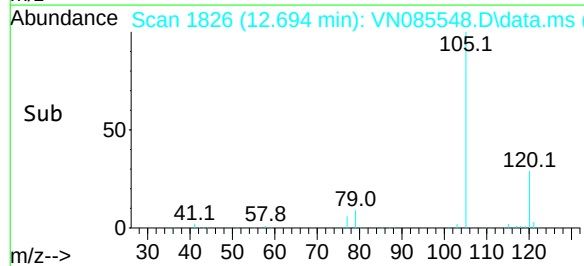
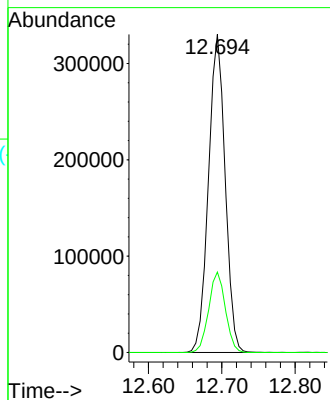
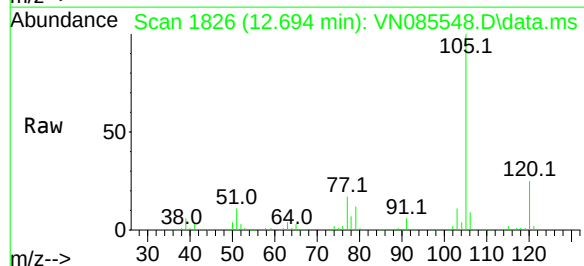
120 25.3 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#74

N-ethyl acetate

Concen: 51.416 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Tgt Ion: 43 Resp: 232634

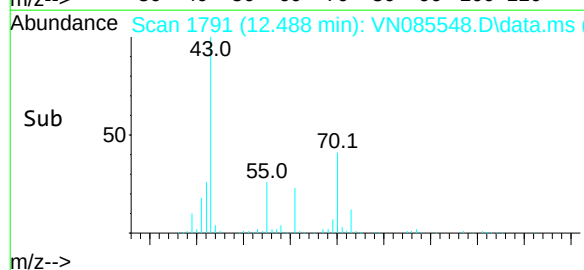
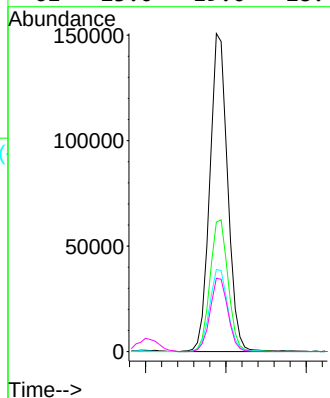
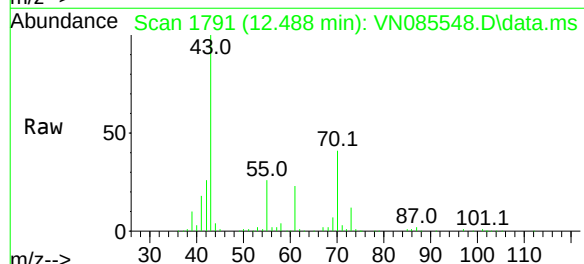
Ion Ratio Lower Upper

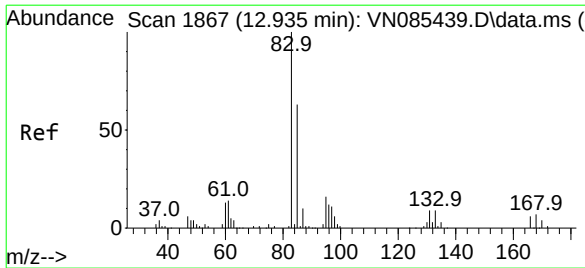
43 100

70 42.0 34.0 51.0

55 26.6 21.4 32.2

61 23.0 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 48.312 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

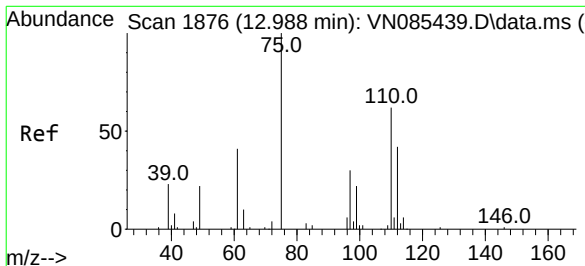
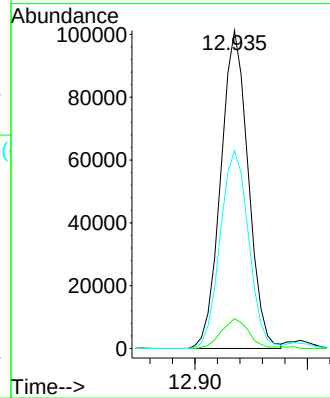
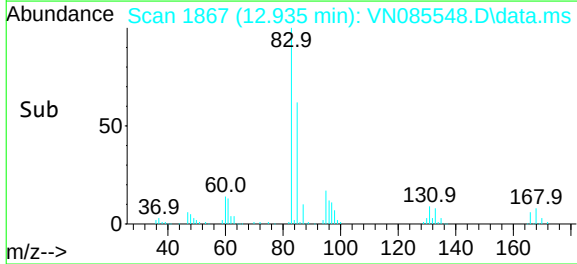
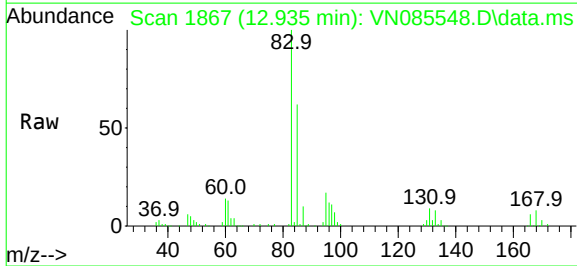
ClientSampleId :

VSTDCCC050

Tgt Ion:	83	Resp:	171790
Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	64.5	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#76

1,2,3-Trichloropropane

Concen: 45.756 ug/l m

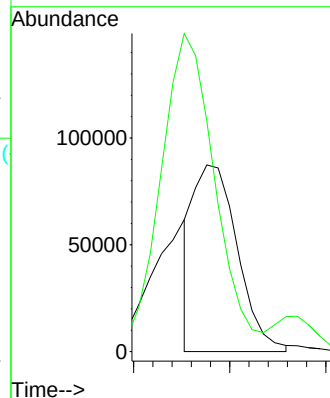
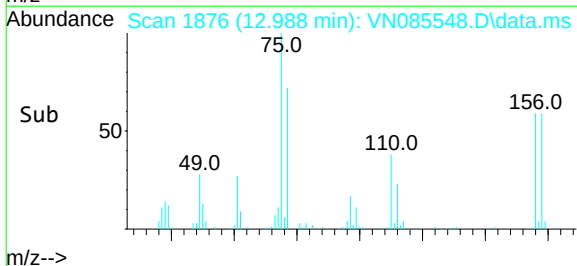
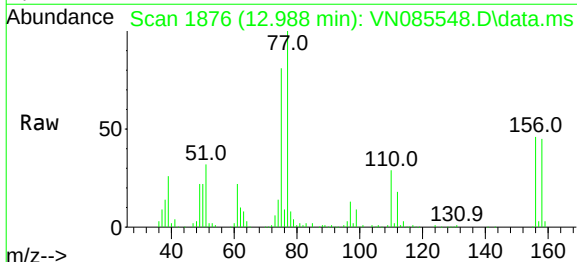
RT: 12.988 min Scan# 1876

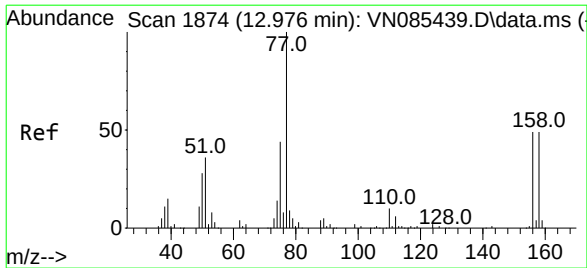
Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Tgt Ion:	75	Resp:	138709
Ion	Ratio	Lower	Upper
75	100		
77	211.4	109.7	329.2





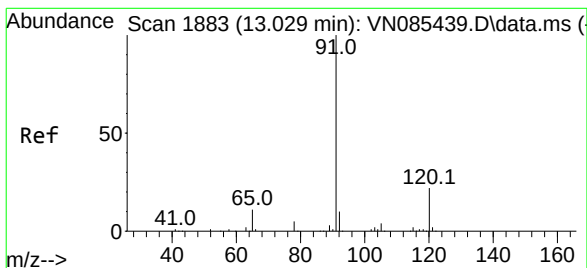
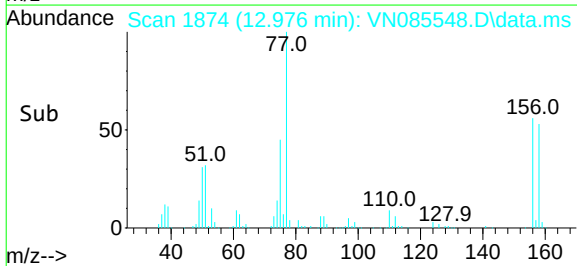
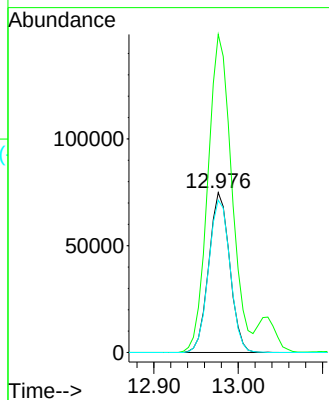
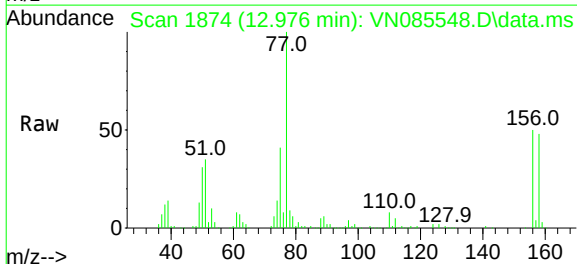
Bromobenzene
Concen: 49.135 ug/l
RT: 12.976 min Scan# 1874
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion	Ratio	Lower	Upper
156	100		
77	226.9	114.1	342.4
158	97.8	48.9	146.8

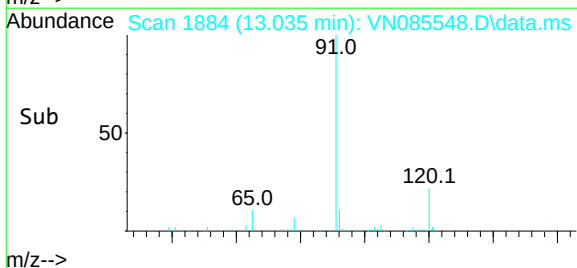
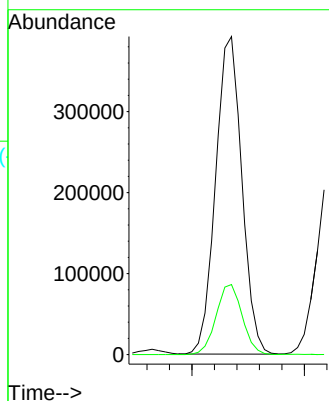
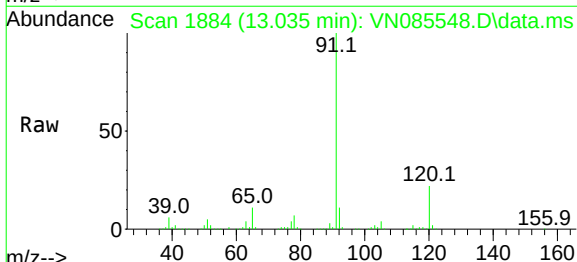
Manual Integrations
APPROVED

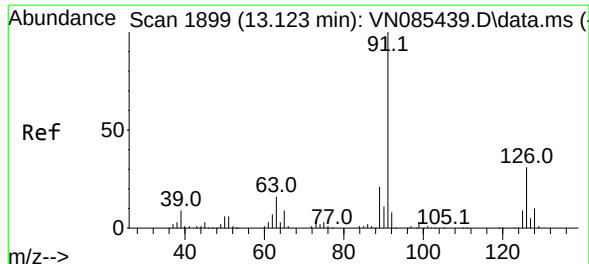
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



n-propylbenzene
Concen: 53.259 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.006 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion	Ratio	Lower	Upper
91	100		
120	21.9	10.9	32.6





#79

2-Chlorotoluene

Concen: 49.816 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 91 Resp: 384203

Ion Ratio Lower Upper

91 100

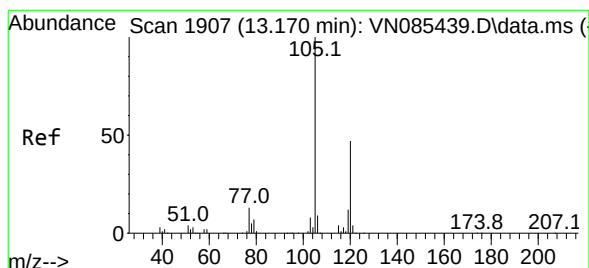
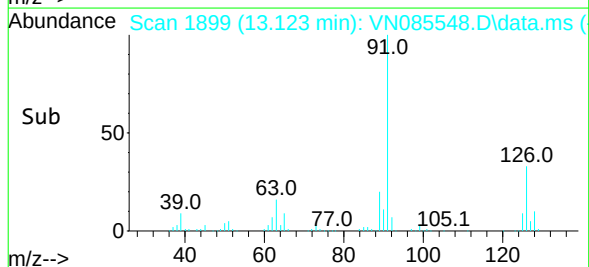
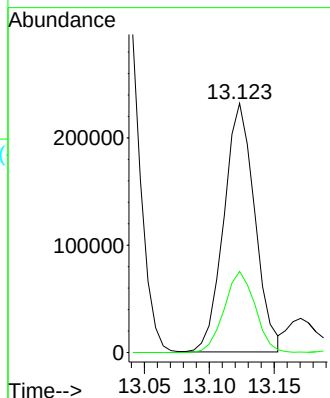
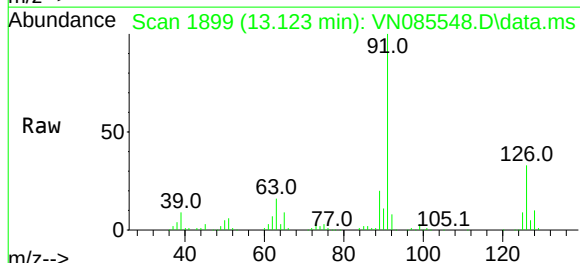
126 32.4 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#80

1,3,5-Trimethylbenzene

Concen: 53.997 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085548.D

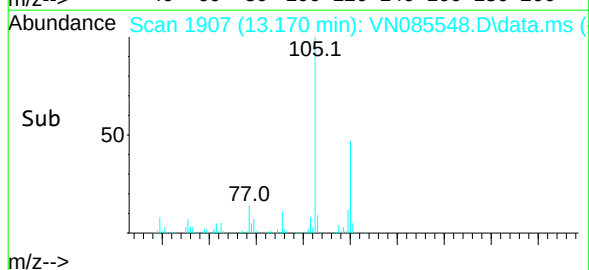
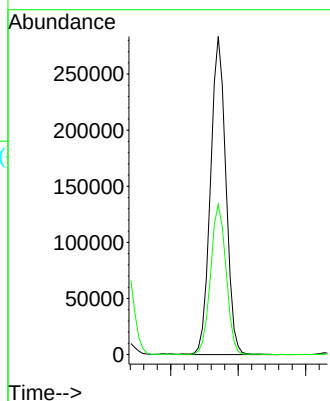
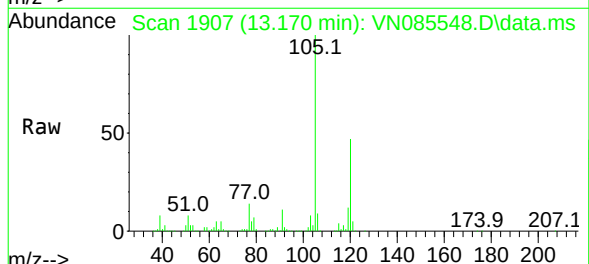
Acq: 29 Jan 2025 11:08

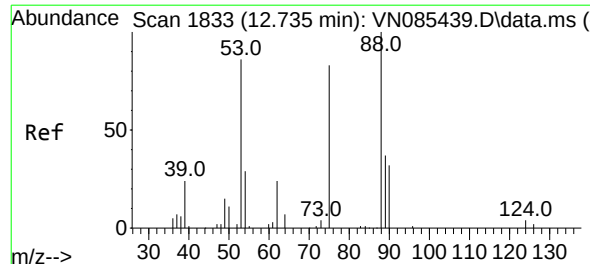
Tgt Ion:105 Resp: 448974

Ion Ratio Lower Upper

105 100

120 47.5 23.9 71.7





#81

trans-1,4-Dichloro-2-butene

Concen: 54.293 ug/l

RT: 12.735 min Scan# 1833

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion: 75 Resp: 60833

Ion Ratio Lower Upper

75 100

53 114.0 95.6 143.4

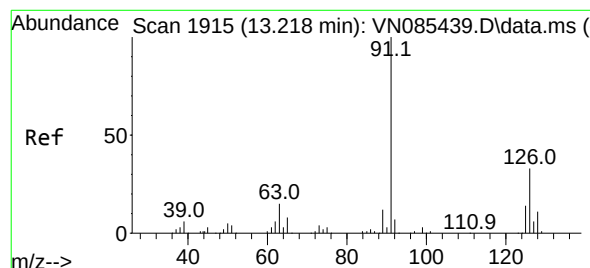
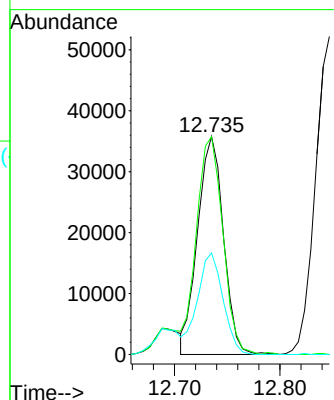
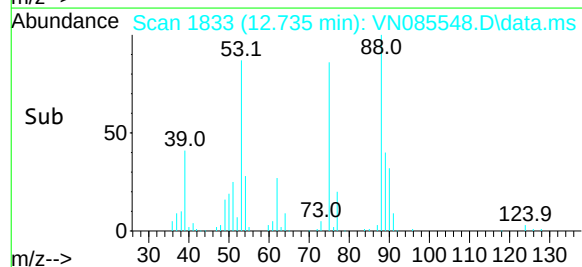
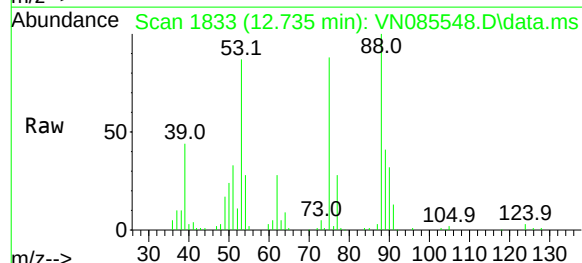
89 46.5 37.0 55.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#82

4-Chlorotoluene

Concen: 51.449 ug/l

RT: 13.217 min Scan# 1915

Delta R.T. -0.000 min

Lab File: VN085548.D

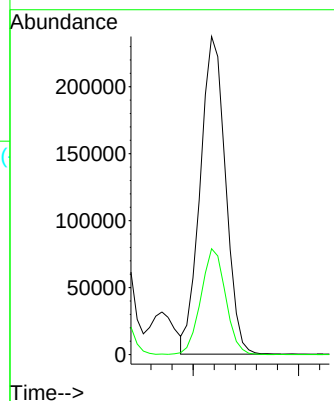
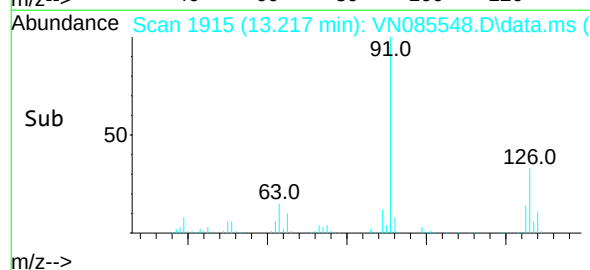
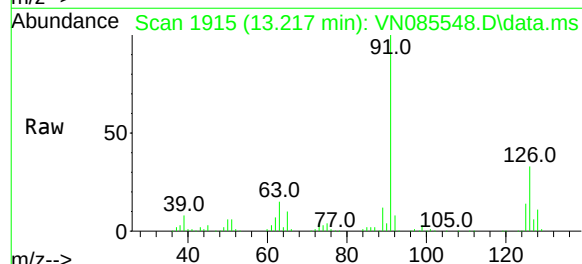
Acq: 29 Jan 2025 11:08

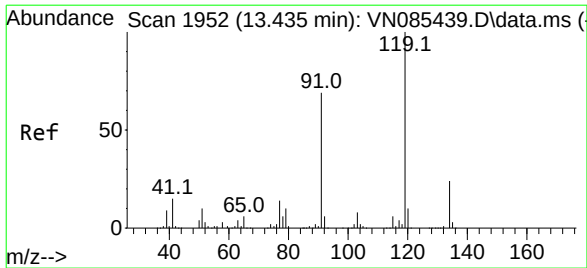
Tgt Ion: 91 Resp: 395084

Ion Ratio Lower Upper

91 100

126 32.6 15.9 47.7





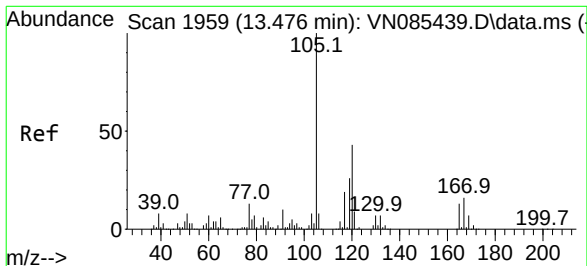
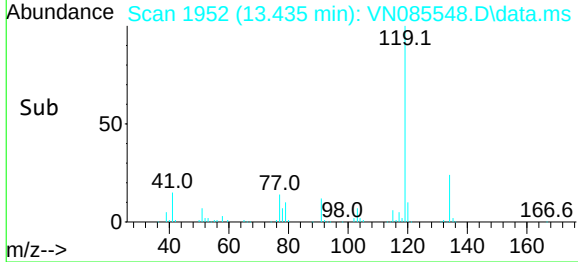
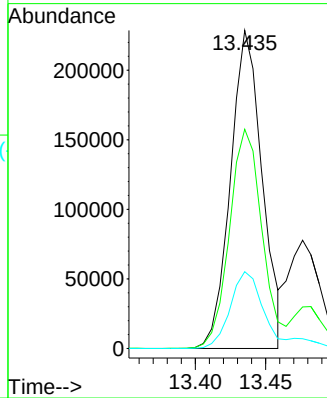
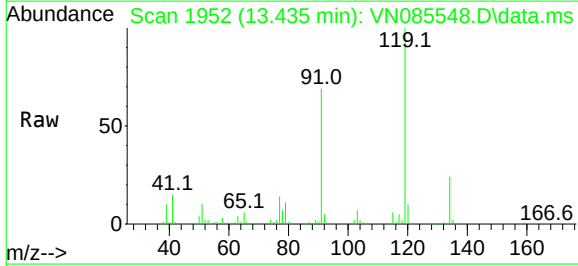
#83
tert-Butylbenzene
Concen: 51.344 ug/l
RT: 13.435 min Scan# 1952
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion	119	Resp	358511
Ion Ratio	100	Lower	Upper
91	71.5	35.1	105.3
134	24.8	12.0	36.1

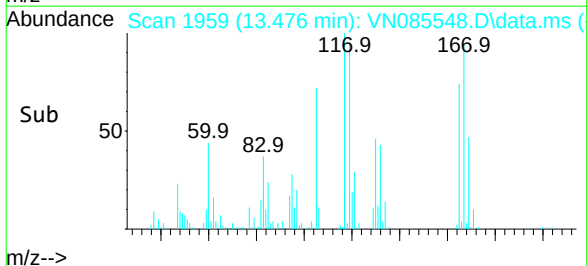
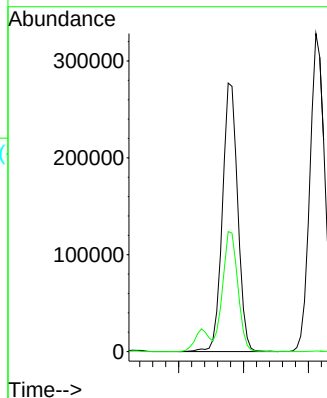
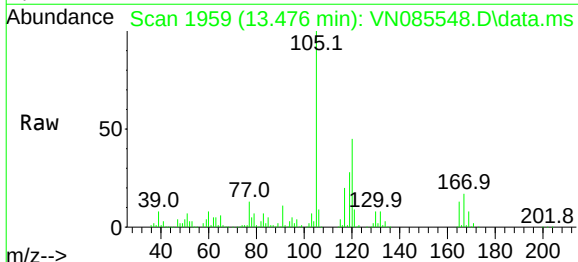
Manual Integrations
APPROVED

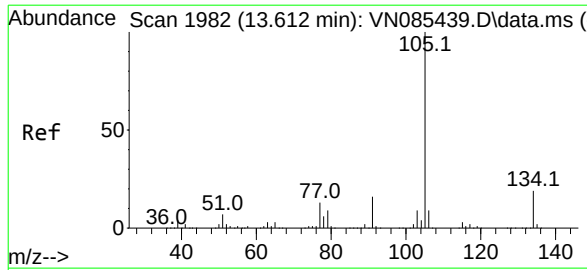
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#84
1,2,4-Trimethylbenzene
Concen: 54.905 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion	105	Resp	455009
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
120	44.2	21.6	65.0





#85

sec-Butylbenzene

Concen: 53.917 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion:105 Resp: 521784

Ion Ratio Lower Upper

105 100

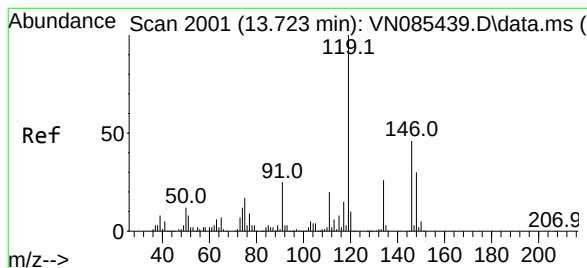
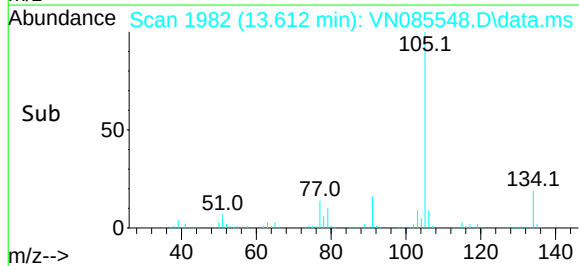
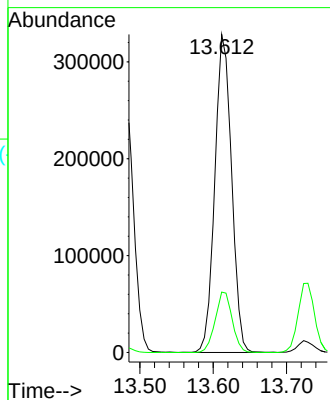
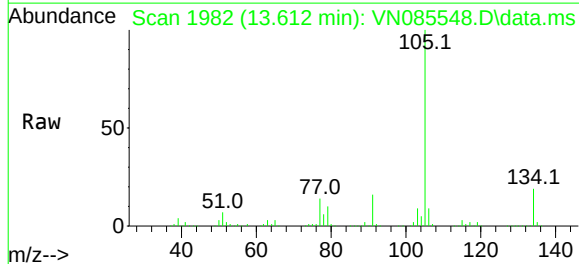
134 19.2 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#86

p-Isopropyltoluene

Concen: 49.847 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

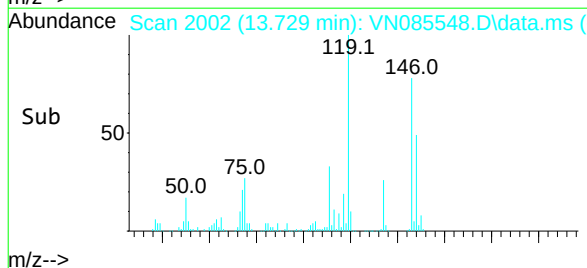
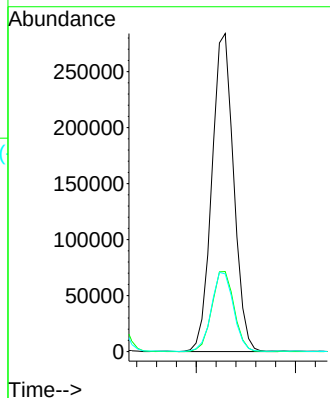
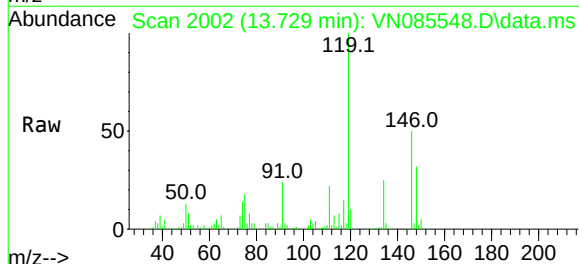
Tgt Ion:119 Resp: 434224

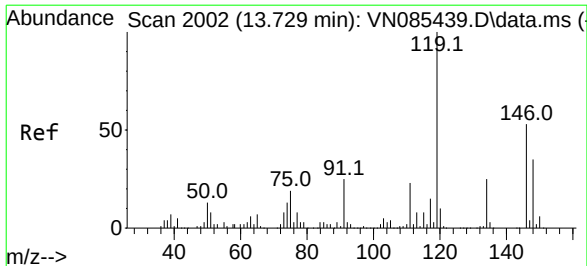
Ion Ratio Lower Upper

119 100

134 25.7 12.7 38.0

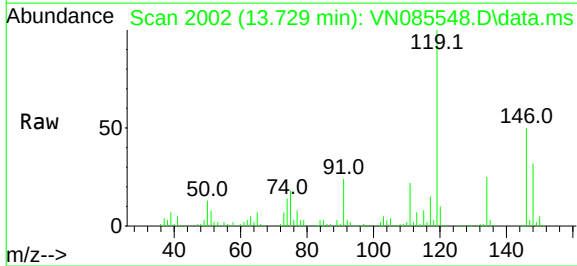
91 25.2 12.7 38.1





1,3-Dichlorobenzene
Concen: 50.447 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

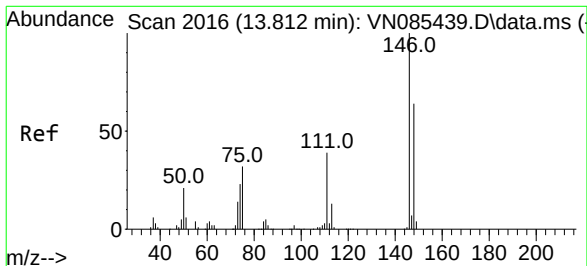
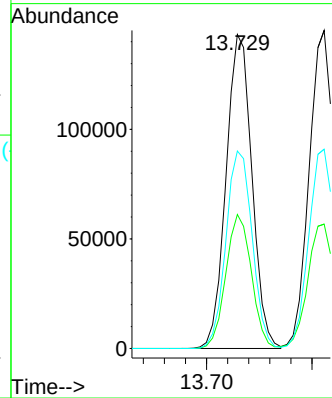
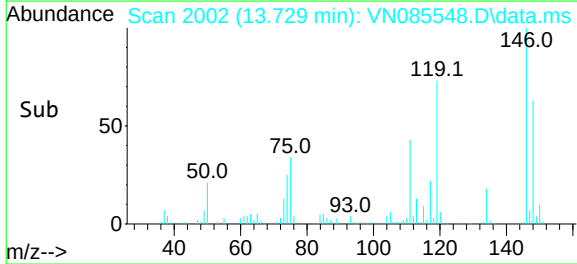
Instrument :
MSVOA_N
ClientSampleId :
VSTDC0050



Tgt Ion:146 Resp: 244334
Ion Ratio Lower Upper
146 100
111 42.1 21.4 64.3
148 63.9 32.3 96.9

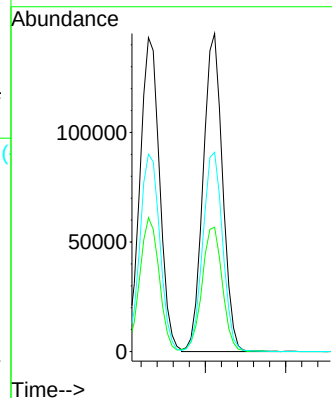
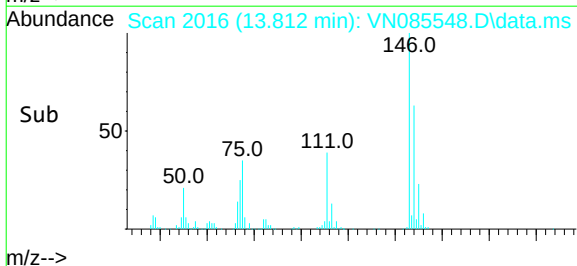
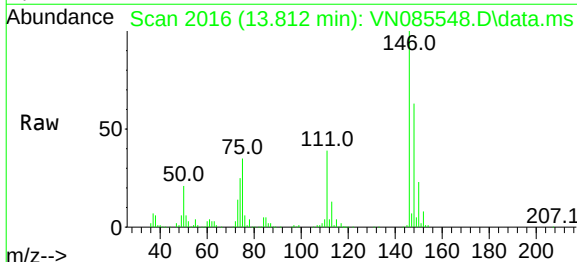
Manual Integrations
APPROVED

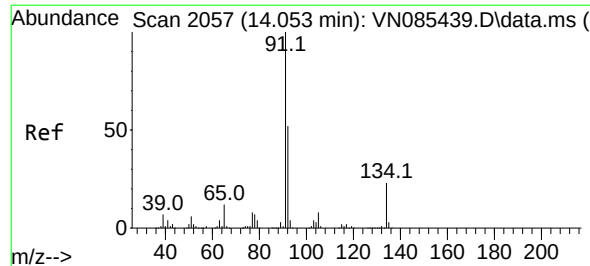
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



1,4-Dichlorobenzene
Concen: 48.599 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion:146 Resp: 243977
Ion Ratio Lower Upper
146 100
111 40.5 21.3 63.7
148 64.2 32.4 97.0





#89

n-Butylbenzene

Concen: 53.564 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

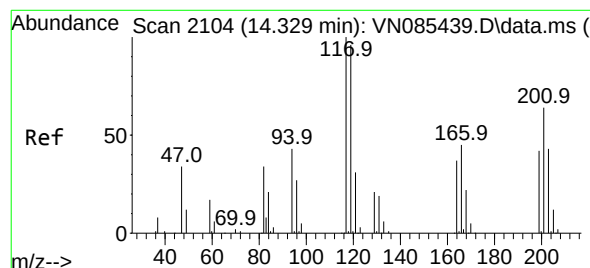
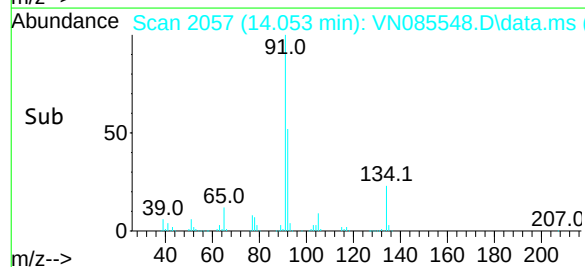
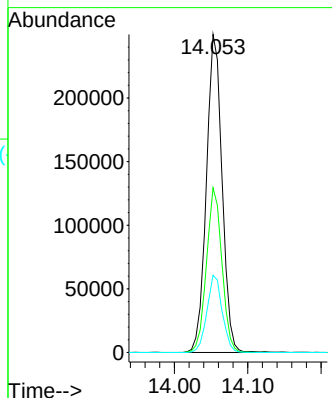
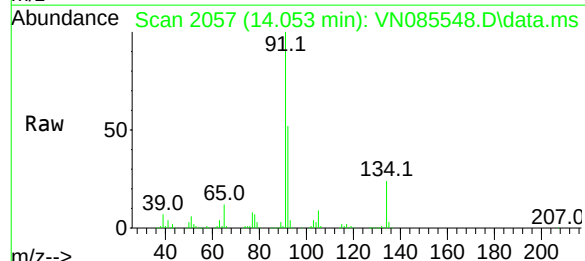
ClientSampleId :

VSTDCCC050

Tgt Ion:	91	Resp:	371878
Ion	Ratio	Lower	Upper
91	100		
92	51.0	25.8	77.3
134	23.7	11.7	35.1

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#90

Hexachloroethane

Concen: 47.686 ug/l

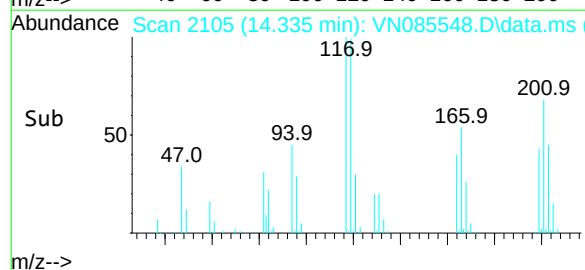
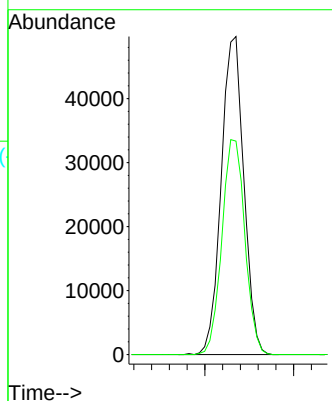
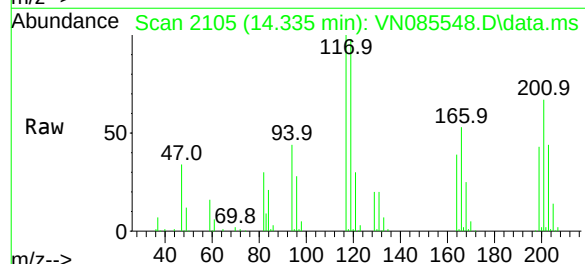
RT: 14.335 min Scan# 2105

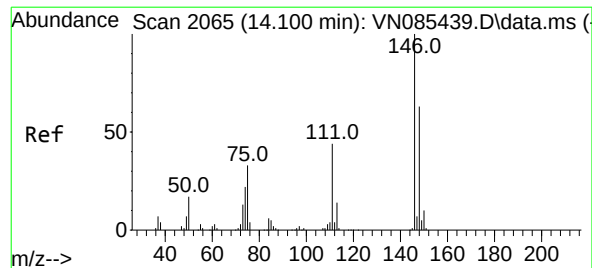
Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Tgt Ion:	117	Resp:	87853
Ion	Ratio	Lower	Upper
117	100		
201	68.6	33.7	101.0





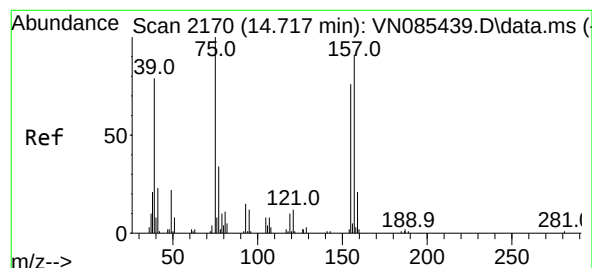
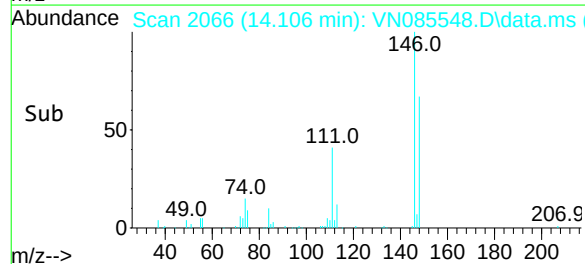
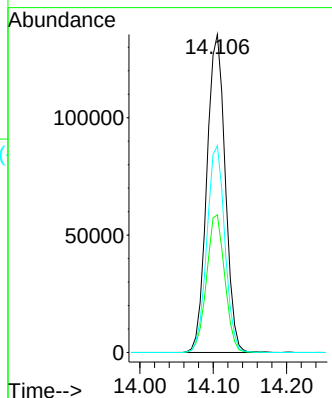
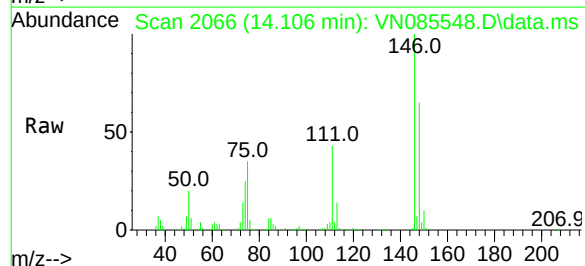
#91
1,2-Dichlorobenzene
Concen: 48.734 ug/l
RT: 14.106 min Scan# 2065
Delta R.T. 0.006 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion: 146 Resp: 235437
Ion Ratio Lower Upper
146 100
111 43.0 21.7 65.1
148 63.5 31.4 94.2

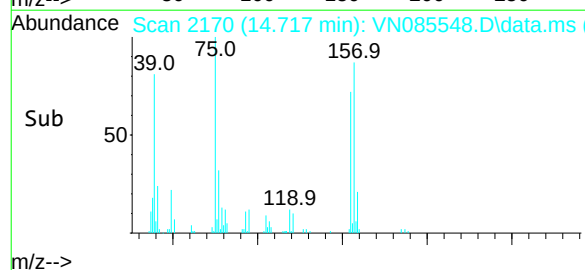
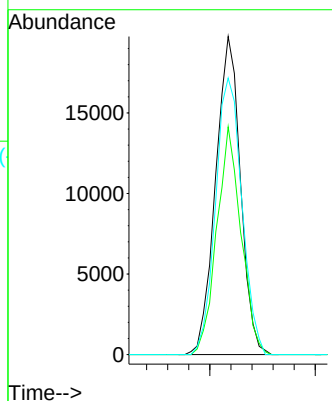
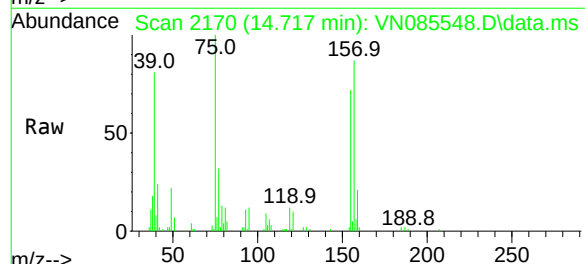
Manual Integrations
APPROVED

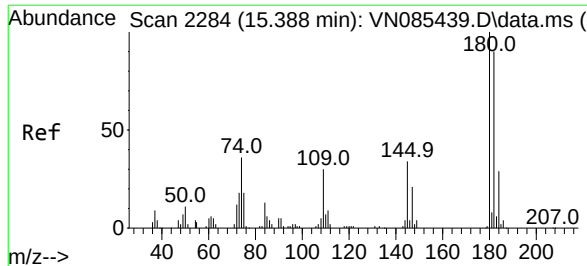
Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025



#92
1,2-Dibromo-3-Chloropropane
Concen: 49.766 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN085548.D
Acq: 29 Jan 2025 11:08

Tgt Ion: 75 Resp: 32314
Ion Ratio Lower Upper
75 100
155 70.0 36.4 109.2
157 92.2 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 50.178 ug/l

RT: 15.394 min Scan# 2284

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion:180 Resp: 112668

Ion Ratio Lower Upper

180 100

182 93.1 46.8 140.3

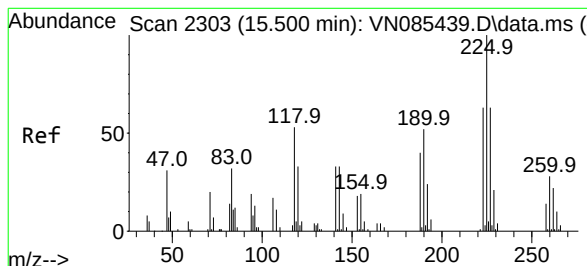
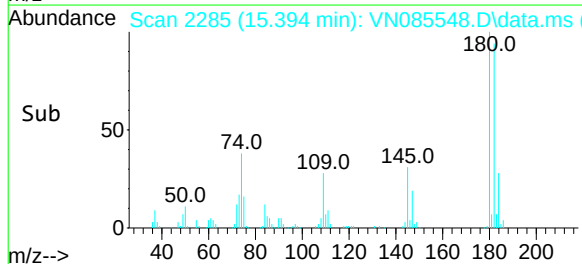
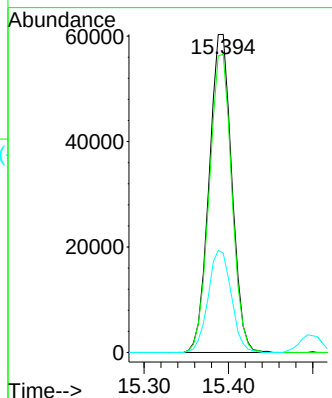
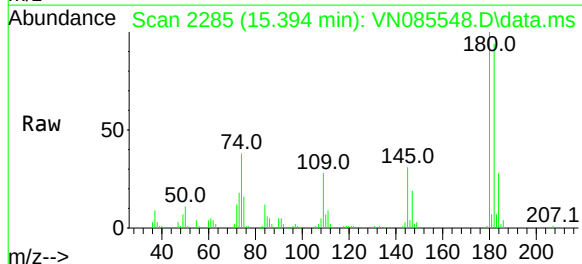
145 32.9 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#94

Hexachlorobutadiene

Concen: 47.301 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

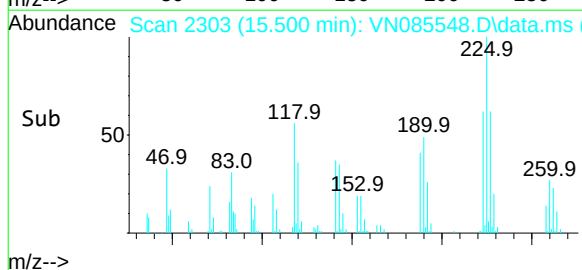
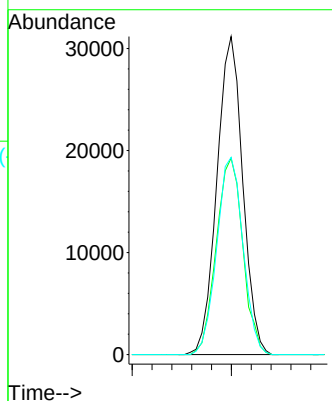
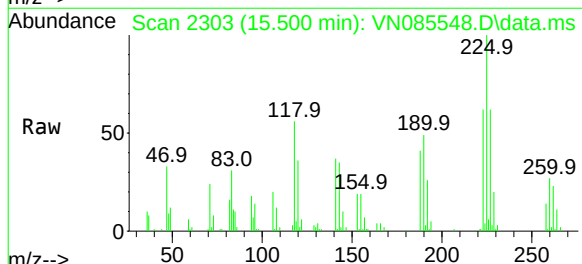
Tgt Ion:225 Resp: 56387

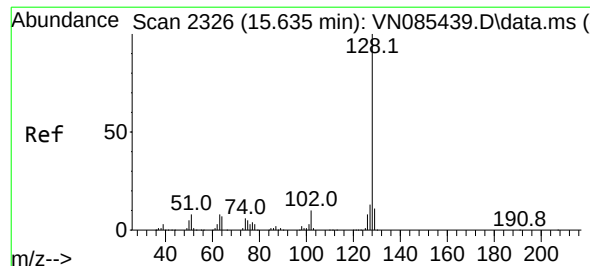
Ion Ratio Lower Upper

225 100

223 63.3 30.7 92.1

227 62.9 30.9 92.5





#95

Naphthalene

Concen: 49.863 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Tgt Ion:128 Resp: 334098

Ion Ratio Lower Upper

128 100

127 13.3 10.6 16.0

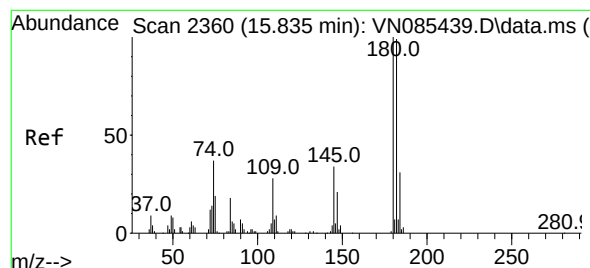
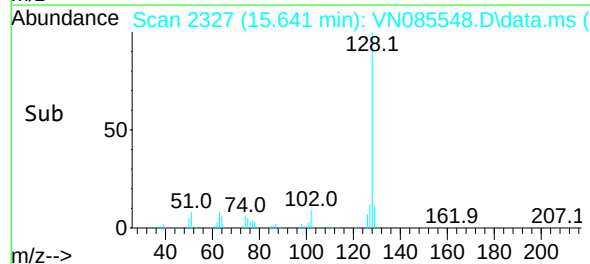
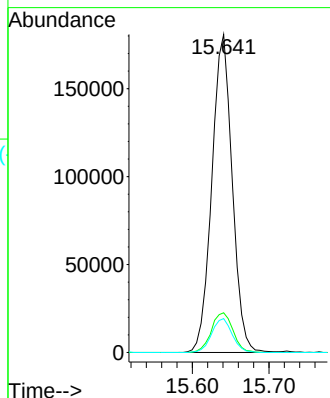
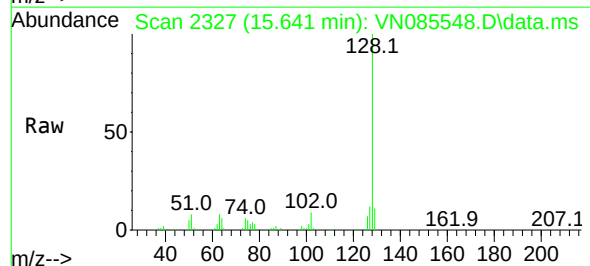
129 10.7 8.8 13.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#96

1,2,3-Trichlorobenzene

Concen: 48.924 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085548.D

Acq: 29 Jan 2025 11:08

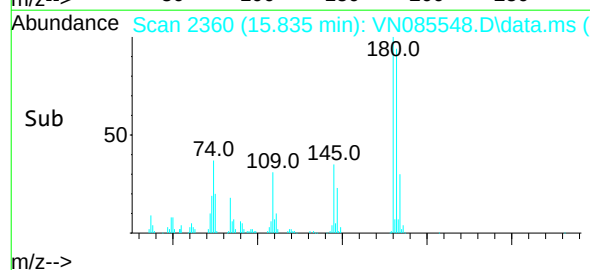
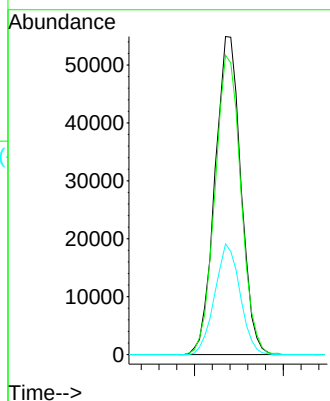
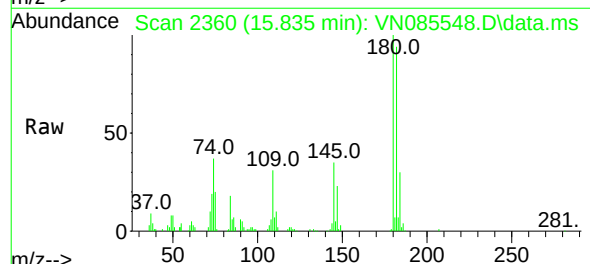
Tgt Ion:180 Resp: 111153

Ion Ratio Lower Upper

180 100

182 94.6 47.4 142.2

145 33.9 16.9 50.7



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085548.D
Acq On : 29 Jan 2025 11:08
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Jan 30 00:29:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	96	0.00
2 T	Dichlorodifluoromethane	0.677	0.586	13.4	89	0.00
3 P	Chloromethane	0.733	0.603	17.7	85	0.00
4 C	Vinyl Chloride	0.737	0.641	13.0#	89	0.00
5 T	Bromomethane	0.445	0.377	15.3	87	0.00
6 T	Chloroethane	0.467	0.419	10.3	95	0.00
7 T	Trichlorofluoromethane	1.069	1.025	4.1	98	0.00
8 T	Diethyl Ether	0.369	0.338	8.4	90	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.602	0.606	-0.7	107	0.00
10 T	Methyl Iodide	0.690	0.654	5.2	87	0.00
11 T	Tert butyl alcohol	0.092	0.108	-17.4	111	0.00
12 CM	1,1-Dichloroethene	0.537	0.511	4.8#	92	0.00
13 T	Acrolein	0.126	0.113	10.3	77	0.00
14 T	Allyl chloride	0.871	0.810	7.0	92	0.00
15 T	Acrylonitrile	0.294	0.309	-5.1	99	0.00
16 T	Acetone	0.261	0.264	-1.1	100	0.00
17 T	Carbon Disulfide	1.652	1.295	21.6	84	0.00
18 T	Methyl Acetate	0.793	0.875	-10.3	106	0.00
19 T	Methyl tert-butyl Ether	1.742	1.848	-6.1	94	0.00
20 T	Methylene Chloride	0.646	0.619	4.2	94	0.00
21 T	trans-1,2-Dichloroethene	0.573	0.542	5.4	93	0.00
22 T	Diisopropyl ether	1.933	2.038	-5.4	96	0.00
23 T	Vinyl Acetate	1.353	1.451	-7.2	93	0.00
24 P	1,1-Dichloroethane	1.178	1.175	0.3	96	0.00
25 T	2-Butanone	0.384	0.403	-4.9	99	0.00
26 T	2,2-Dichloropropane	0.953	1.057	-10.9	108	0.00
27 T	cis-1,2-Dichloroethene	0.675	0.686	-1.6	96	0.00
28 T	Bromochloromethane	0.548	0.492	10.2	87	0.00
29 T	Tetrahydrofuran	0.243	0.268	-10.3	99	0.00
30 C	Chloroform	1.218	1.236	-1.5#	101	0.00
31 T	Cyclohexane	1.024	0.896	12.5	97	0.00
32 T	1,1,1-Trichloroethane	1.068	1.079	-1.0	102	0.00
33 S	1,2-Dichloroethane-d4	0.807	0.877	-8.7	101	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	93	0.00
35 S	Dibromofluoromethane	0.347	0.387	-11.5	100	0.00
36 T	1,1-Dichloropropene	0.487	0.484	0.6	97	0.00
37 T	Ethyl Acetate	0.491	0.498	-1.4	94	0.00
38 T	Carbon Tetrachloride	0.557	0.568	-2.0	99	0.00
39 T	Methylcyclohexane	0.457	0.464	-1.5	93	0.00
40 TM	Benzene	1.463	1.501	-2.6	96	0.00
41 T	Methacrylonitrile	0.256	0.279	-9.0	96	0.00
42 TM	1,2-Dichloroethane	0.551	0.584	-6.0	99	0.00
43 T	Isopropyl Acetate	0.787	0.844	-7.2	96	0.00
44 TM	Trichloroethene	0.341	0.338	0.9	97	0.00
45 C	1,2-Dichloropropane	0.374	0.394	-5.3#	98	0.00
46 T	Dibromomethane	0.270	0.274	-1.5	95	0.00
47 T	Bromodichloromethane	0.549	0.604	-10.0	100	0.00
48 T	Methyl methacrylate	0.354	0.401	-13.3	95	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
 Data File : VN085548.D
 Acq On : 29 Jan 2025 11:08
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Jan 30 00:29:17 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	0.006	0.007	-16.7	98	0.00
50 S	Toluene-d8	1.232	1.409	-14.4	103	0.00
51 T	4-Methyl-2-Pentanone	0.457	0.535	-17.1	101	0.00
52 CM	Toluene	0.848	0.924	-9.0#	98	0.00
53 T	t-1,3-Dichloropropene	0.519	0.574	-10.6	96	0.00
54 T	cis-1,3-Dichloropropene	0.554	0.612	-10.5	96	0.00
55 T	1,1,2-Trichloroethane	0.335	0.366	-9.3	100	0.00
56 T	Ethyl methacrylate	0.469	0.563	-20.0	96	0.00
57 T	1,3-Dichloropropane	0.583	0.637	-9.3	98	0.00
58 T	2-Chloroethyl Vinyl ether	0.213	0.237	-11.3	91	0.00
59 T	2-Hexanone	0.321	0.383	-19.3	99	0.00
60 T	Dibromochloromethane	0.405	0.448	-10.6	100	0.00
61 T	1,2-Dibromoethane	0.334	0.358	-7.2	99	0.00
62 S	4-Bromofluorobenzene	0.422	0.503	-19.2	104	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00
64 T	Tetrachloroethene	0.341	0.339	0.6	101	0.00
65 PM	Chlorobenzene	1.095	1.109	-1.3	99	0.00
66 T	1,1,1,2-Tetrachloroethane	0.402	0.416	-3.5	102	0.00
67 C	Ethyl Benzene	1.784	1.952	-9.4#	101	0.00
68 T	m/p-Xylenes	0.659	0.749	-13.7	102	0.00
69 T	o-Xylene	0.630	0.705	-11.9	99	0.00
70 T	Styrene	1.043	1.236	-18.5	101	0.00
71 P	Bromoform	0.288	0.323	-12.2	100	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
73 T	Isopropylbenzene	3.375	3.488	-3.3	103	0.00
74 T	N-amyl acetate	1.517	1.560	-2.8	98	0.00
75 P	1,1,2,2-Tetrachloroethane	1.192	1.152	3.4	102	0.00
76 T	1,2,3-Trichloropropane	1.016	0.930	8.5	106	0.00
77 T	Bromobenzene	0.882	0.866	1.8	103	0.00
78 T	n-propylbenzene	3.995	4.255	-6.5	104	0.00
79 T	2-Chlorotoluene	2.586	2.576	0.4	101	0.00
80 T	1,3,5-Trimethylbenzene	2.787	3.010	-8.0	104	0.00
81 T	trans-1,4-Dichloro-2-butene	0.376	0.408	-8.5	106	0.00
82 T	4-Chlorotoluene	2.574	2.649	-2.9	104	0.00
83 T	tert-Butylbenzene	2.341	2.404	-2.7	100	0.00
84 T	1,2,4-Trimethylbenzene	2.778	3.051	-9.8	103	0.00
85 T	sec-Butylbenzene	3.244	3.498	-7.8	104	0.00
86 T	p-Isopropyltoluene	2.631	2.911	-10.6	103	0.00
87 T	1,3-Dichlorobenzene	1.624	1.638	-0.9	106	0.00
88 T	1,4-Dichlorobenzene	1.683	1.636	2.8	107	0.00
89 T	n-Butylbenzene	2.327	2.493	-7.1	102	0.00
90 T	Hexachloroethane	0.618	0.589	4.7	104	0.00
91 T	1,2-Dichlorobenzene	1.620	1.579	2.5	103	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.218	0.217	0.5	99	0.00
93 T	1,2,4-Trichlorobenzene	0.753	0.755	-0.3	98	0.00
94 T	Hexachlorobutadiene	0.400	0.378	5.5	105	0.00
95 T	Naphthalene	2.246	2.240	0.3	92	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085548.D
Acq On : 29 Jan 2025 11:08
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Jan 30 00:29:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.762	0.745	2.2	96	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085548.D
Acq On : 29 Jan 2025 11:08
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Jan 30 00:29:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	96	0.00
2 T	Dichlorodifluoromethane	50.000	43.304	13.4	89	0.00
3 P	Chloromethane	50.000	41.143	17.7	85	0.00
4 C	Vinyl Chloride	50.000	43.501	13.0#	89	0.00
5 T	Bromomethane	50.000	42.389	15.2	87	0.00
6 T	Chloroethane	50.000	44.845	10.3	95	0.00
7 T	Trichlorofluoromethane	50.000	47.949	4.1	98	0.00
8 T	Diethyl Ether	50.000	45.779	8.4	90	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	50.319	-0.6	107	0.00
10 T	Methyl Iodide	50.000	47.406	5.2	87	0.00
11 T	Tert butyl alcohol	250.000	291.560	-16.6	111	0.00
12 CM	1,1-Dichloroethene	50.000	47.653	4.7#	92	0.00
13 T	Acrolein	250.000	223.391	10.6	77	0.00
14 T	Allyl chloride	50.000	46.516	7.0	92	0.00
15 T	Acrylonitrile	250.000	263.192	-5.3	99	0.00
16 T	Acetone	250.000	252.657	-1.1	100	0.00
17 T	Carbon Disulfide	50.000	39.180	21.6	84	0.00
18 T	Methyl Acetate	50.000	55.159	-10.3	106	0.00
19 T	Methyl tert-butyl Ether	50.000	53.017	-6.0	94	0.00
20 T	Methylene Chloride	50.000	47.903	4.2	94	0.00
21 T	trans-1,2-Dichloroethene	50.000	47.247	5.5	93	0.00
22 T	Diisopropyl ether	50.000	52.726	-5.5	96	0.00
23 T	Vinyl Acetate	250.000	268.154	-7.3	93	0.00
24 P	1,1-Dichloroethane	50.000	49.838	0.3	96	0.00
25 T	2-Butanone	250.000	262.309	-4.9	99	0.00
26 T	2,2-Dichloropropane	50.000	55.483	-11.0	108	0.00
27 T	cis-1,2-Dichloroethene	50.000	50.778	-1.6	96	0.00
28 T	Bromochloromethane	50.000	44.872	10.3	87	0.00
29 T	Tetrahydrofuran	250.000	275.413	-10.2	99	0.00
30 C	Chloroform	50.000	50.743	-1.5#	101	0.00
31 T	Cyclohexane	50.000	43.741	12.5	97	0.00
32 T	1,1,1-Trichloroethane	50.000	50.496	-1.0	102	0.00
33 S	1,2-Dichloroethane-d4	50.000	54.332	-8.7	101	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	93	0.00
35 S	Dibromofluoromethane	50.000	55.762	-11.5	100	0.00
36 T	1,1-Dichloropropene	50.000	49.744	0.5	97	0.00
37 T	Ethyl Acetate	50.000	50.645	-1.3	94	0.00
38 T	Carbon Tetrachloride	50.000	50.934	-1.9	99	0.00
39 T	Methylcyclohexane	50.000	50.729	-1.5	93	0.00
40 TM	Benzene	50.000	51.295	-2.6	96	0.00
41 T	Methacrylonitrile	50.000	54.633	-9.3	96	0.00
42 TM	1,2-Dichloroethane	50.000	52.978	-6.0	99	0.00
43 T	Isopropyl Acetate	50.000	53.590	-7.2	96	0.00
44 TM	Trichloroethene	50.000	49.626	0.7	97	0.00
45 C	1,2-Dichloropropane	50.000	52.676	-5.4#	98	0.00
46 T	Dibromomethane	50.000	50.807	-1.6	95	0.00
47 T	Bromodichloromethane	50.000	55.019	-10.0	100	0.00
48 T	Methyl methacrylate	50.000	56.527	-13.1	95	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085548.D
Acq On : 29 Jan 2025 11:08
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Jan 30 00:29:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	1118.996	-11.9	98	0.00
50 S	Toluene-d8	50.000	57.152	-14.3	103	0.00
51 T	4-Methyl-2-Pentanone	250.000	292.481	-17.0	101	0.00
52 CM	Toluene	50.000	54.537	-9.1#	98	0.00
53 T	t-1,3-Dichloropropene	50.000	55.275	-10.5	96	0.00
54 T	cis-1,3-Dichloropropene	50.000	55.213	-10.4	96	0.00
55 T	1,1,2-Trichloroethane	50.000	54.555	-9.1	100	0.00
56 T	Ethyl methacrylate	50.000	49.794	0.4	96	0.00
57 T	1,3-Dichloropropane	50.000	54.627	-9.3	98	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	278.738	-11.5	91	0.00
59 T	2-Hexanone	250.000	297.473	-19.0	99	0.00
60 T	Dibromochloromethane	50.000	55.280	-10.6	100	0.00
61 T	1,2-Dibromoethane	50.000	53.622	-7.2	99	0.00
62 S	4-Bromofluorobenzene	50.000	59.631	-19.3	104	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	96	0.00
64 T	Tetrachloroethene	50.000	49.798	0.4	101	0.00
65 PM	Chlorobenzene	50.000	50.625	-1.3	99	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	51.774	-3.5	102	0.00
67 C	Ethyl Benzene	50.000	54.719	-9.4#	101	0.00
68 T	m/p-Xylenes	100.000	113.620	-13.6	102	0.00
69 T	o-Xylene	50.000	55.920	-11.8	99	0.00
70 T	Styrene	50.000	59.242	-18.5	101	0.00
71 P	Bromoform	50.000	56.158	-12.3	100	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	102	0.00
73 T	Isopropylbenzene	50.000	51.684	-3.4	103	0.00
74 T	N-amyl acetate	50.000	51.416	-2.8	98	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	48.312	3.4	102	0.00
76 T	1,2,3-Trichloropropane	50.000	45.756	8.5	106	0.00
77 T	Bromobenzene	50.000	49.135	1.7	103	0.00
78 T	n-propylbenzene	50.000	53.259	-6.5	104	0.00
79 T	2-Chlorotoluene	50.000	49.816	0.4	101	0.00
80 T	1,3,5-Trimethylbenzene	50.000	53.997	-8.0	104	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	54.293	-8.6	106	0.00
82 T	4-Chlorotoluene	50.000	51.449	-2.9	104	0.00
83 T	tert-Butylbenzene	50.000	51.344	-2.7	100	0.00
84 T	1,2,4-Trimethylbenzene	50.000	54.905	-9.8	103	0.00
85 T	sec-Butylbenzene	50.000	53.917	-7.8	104	0.00
86 T	p-Isopropyltoluene	50.000	49.847	0.3	103	0.00
87 T	1,3-Dichlorobenzene	50.000	50.447	-0.9	106	0.00
88 T	1,4-Dichlorobenzene	50.000	48.599	2.8	107	0.00
89 T	n-Butylbenzene	50.000	53.564	-7.1	102	0.00
90 T	Hexachloroethane	50.000	47.686	4.6	104	0.00
91 T	1,2-Dichlorobenzene	50.000	48.734	2.5	103	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	49.766	0.5	99	0.00
93 T	1,2,4-Trichlorobenzene	50.000	50.178	-0.4	98	0.00
94 T	Hexachlorobutadiene	50.000	47.301	5.4	105	0.00
95 T	Naphthalene	50.000	49.863	0.3	92	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085548.D
Acq On : 29 Jan 2025 11:08
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Jan 30 00:29:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.924	2.2	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6



QC SAMPLE DATA

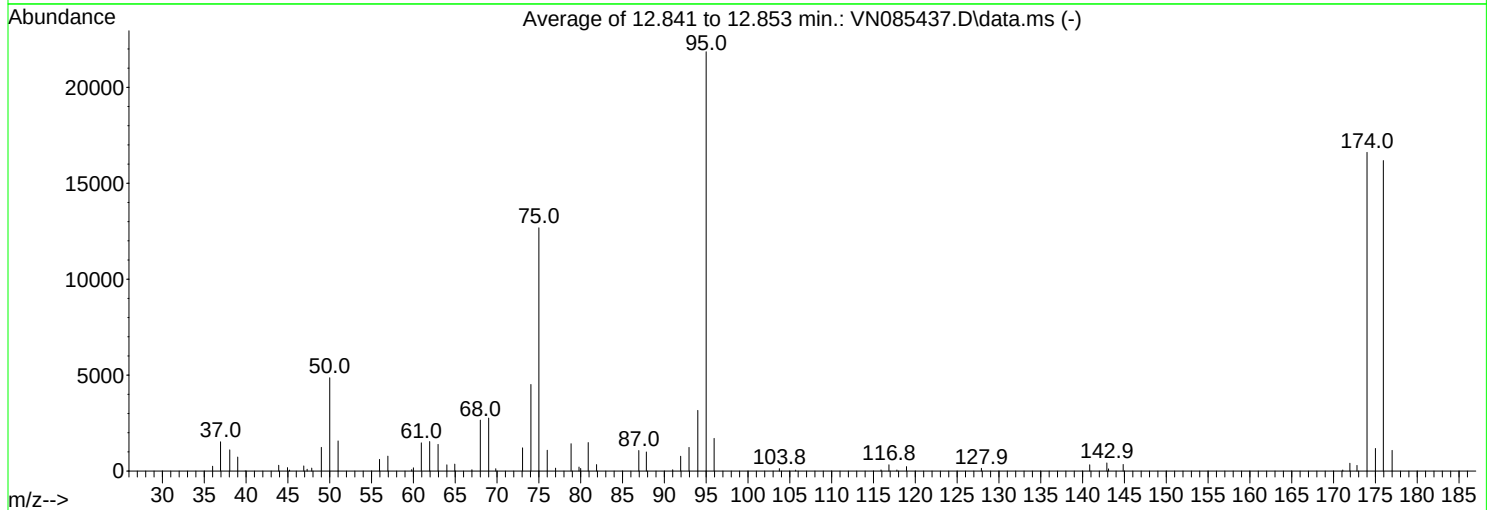
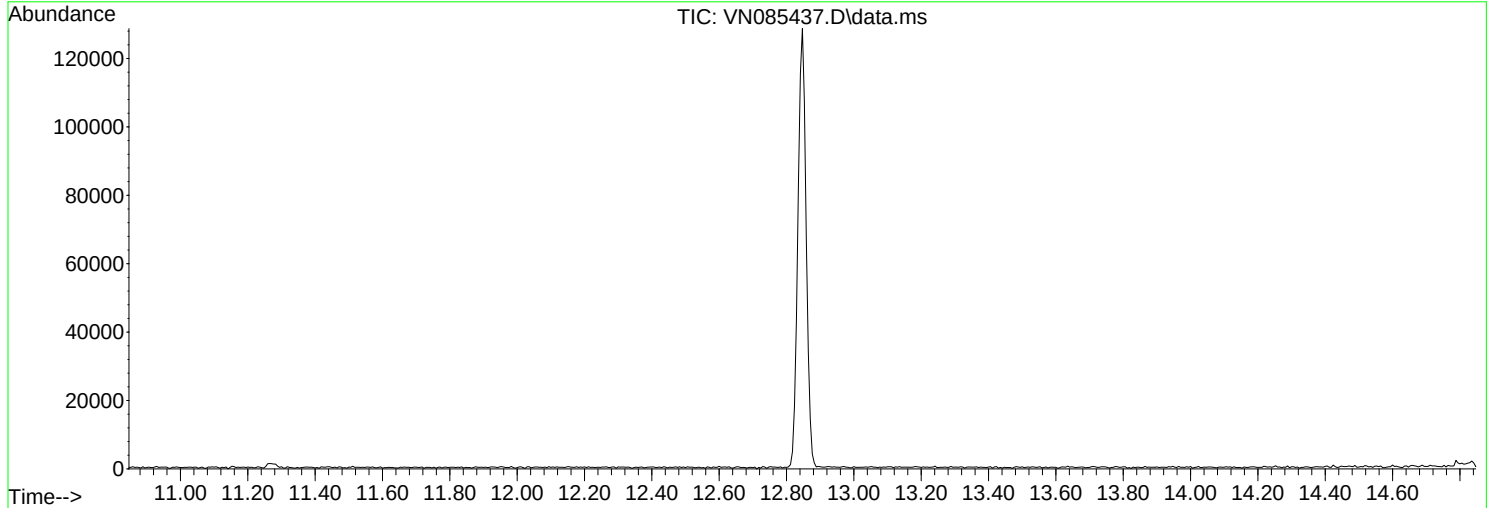
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN011425\
Data File : VN085437.D
Acq On : 14 Jan 2025 14:22
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Title : SW846 8260
Last Update : Wed Jan 15 02:16:08 2025



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

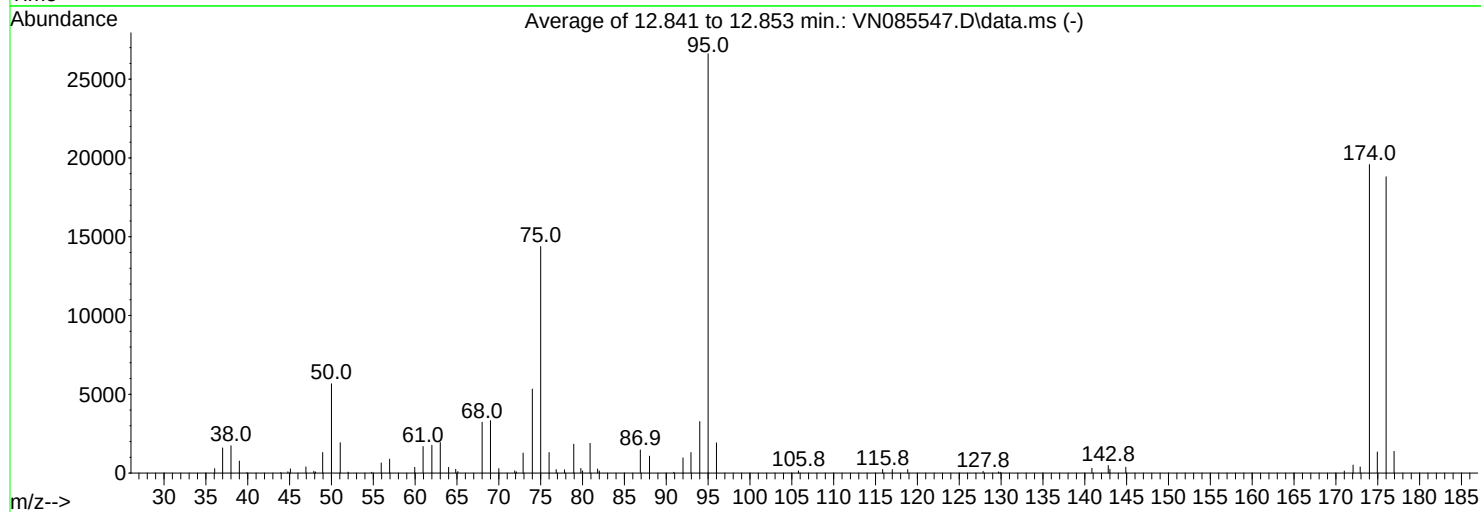
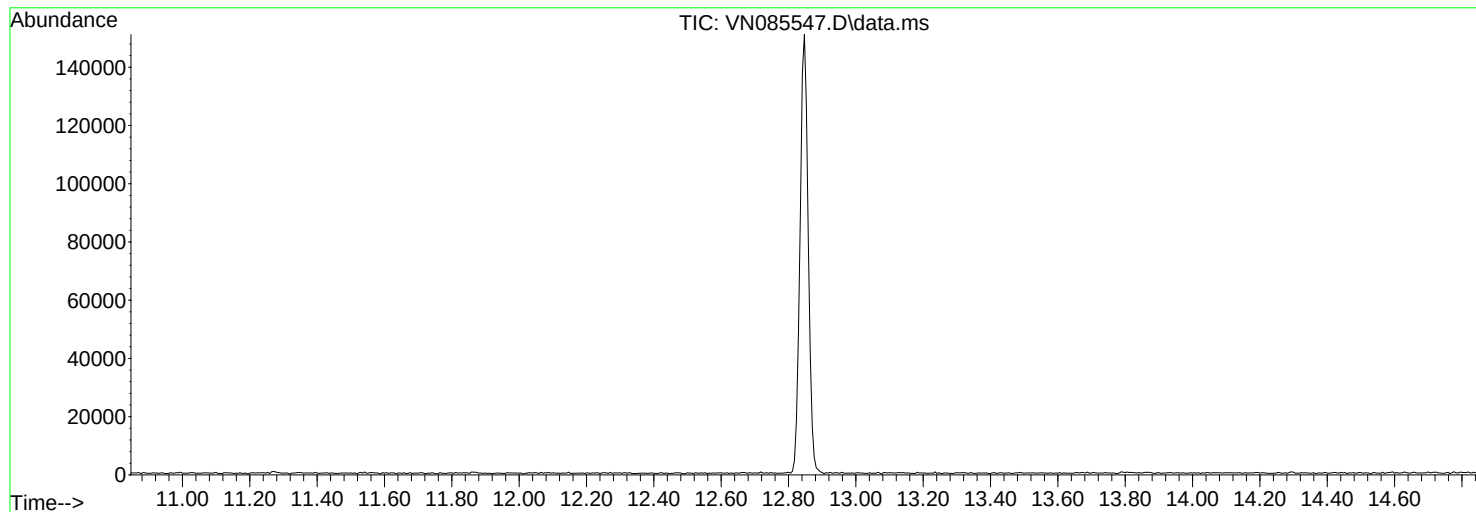
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	4864	PASS
75	95	30	60	58.0	12679	PASS
95	95	100	100	100.0	21856	PASS
96	95	5	9	7.8	1703	PASS
173	174	0.00	2	1.8	296	PASS
174	95	50	100	76.0	16613	PASS
175	174	5	9	7.1	1179	PASS
176	174	95	101	97.4	16185	PASS
177	176	5	9	6.7	1079	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085547.D
Acq On : 29 Jan 2025 10:35
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Title : SW846 8260
Last Update : Wed Jan 15 02:16:08 2025



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.3	5669	PASS
75	95	30	60	54.0	14378	PASS
95	95	100	100	100.0	26613	PASS
96	95	5	9	7.2	1922	PASS
173	174	0.00	2	2.0	389	PASS
174	95	50	100	73.6	19579	PASS
175	174	5	9	6.8	1340	PASS
176	174	95	101	96.0	18805	PASS
177	176	5	9	7.3	1380	PASS

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VN0129WBL01	SDG No.:	Q1207
Lab Sample ID:	VN0129WBL01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085550.D	1		01/29/25 12:06	VN012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	5.00	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	5.00	U	0.26	5.00	ug/L
78-93-3	2-Butanone	25.0	U	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	5.00	U	0.25	5.00	ug/L
67-66-3	Chloroform	5.00	U	0.26	5.00	ug/L
71-43-2	Benzene	5.00	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	5.00	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	5.00	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	5.00	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	5.00	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.3		74 - 125	115%	SPK: 50
1868-53-7	Dibromofluoromethane	53.7		75 - 124	107%	SPK: 50
2037-26-5	Toluene-d8	50.2		86 - 113	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.3		77 - 121	97%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	181000	8.224			
540-36-3	1,4-Difluorobenzene	341000	9.1			
3114-55-4	Chlorobenzene-d5	306000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	123000	13.788			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085550.D
Acq On : 29 Jan 2025 12:06
Operator : JC\MD
Sample : VN0129WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBL01

Quant Time: Jan 30 01:17:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	180587	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	341456	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	305749	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	123478	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	167019	57.295	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	=	114.600%	
35) Dibromofluoromethane	8.165	113	127269	53.726	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	=	107.460%	
50) Toluene-d8	10.565	98	422891	50.245	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	=	100.500%	
62) 4-Bromofluorobenzene	12.847	95	139125	48.323	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	=	96.640%	

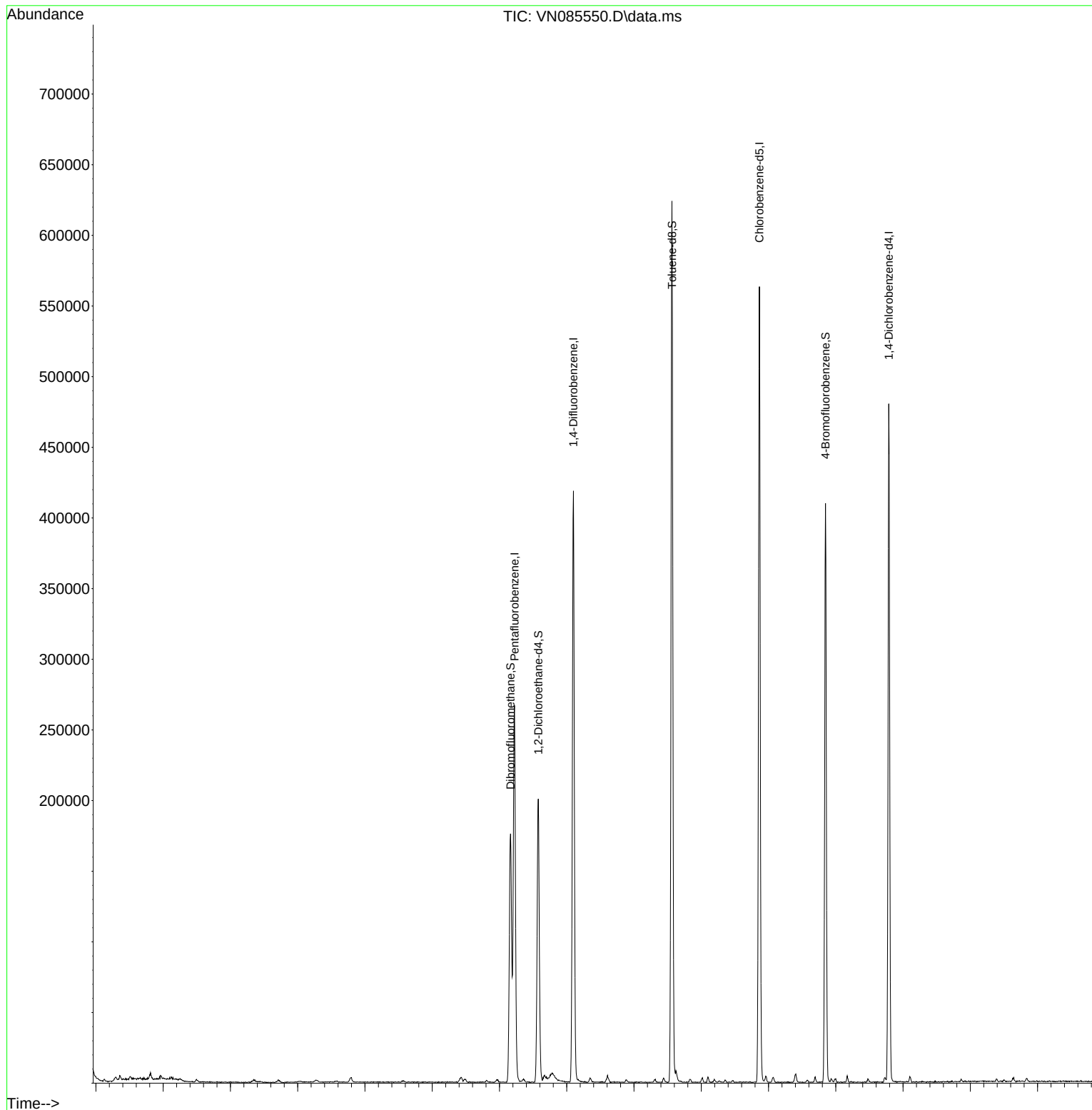
Target Compounds Qvalue

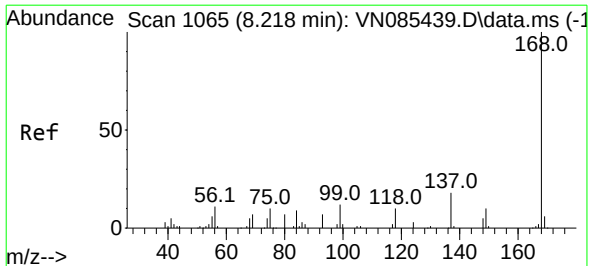
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085550.D
Acq On : 29 Jan 2025 12:06
Operator : JC\MD
Sample : VN0129WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBL01

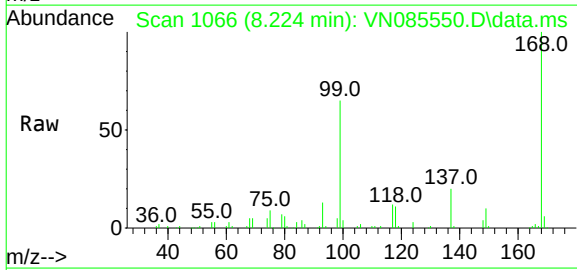
Quant Time: Jan 30 01:17:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration



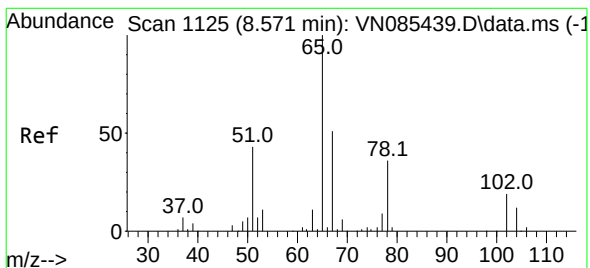
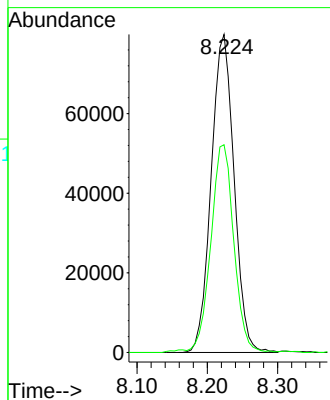
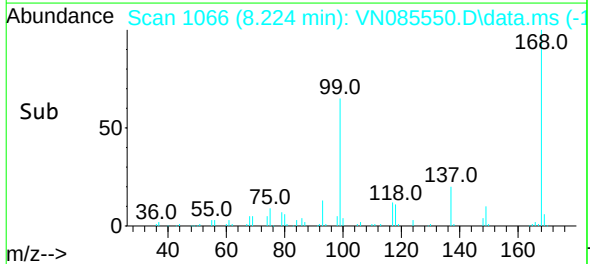


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085550.D
Acq: 29 Jan 2025 12:06

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBL01

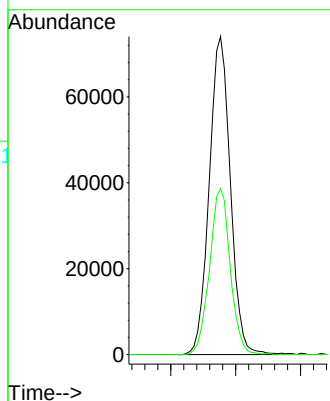
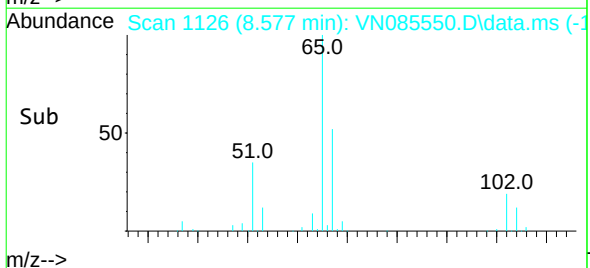
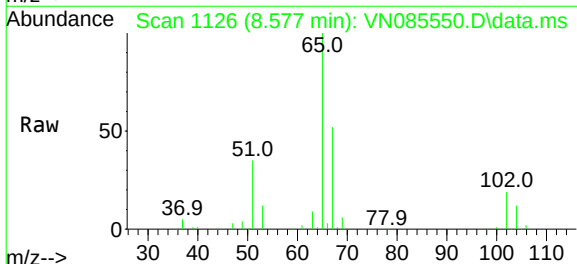


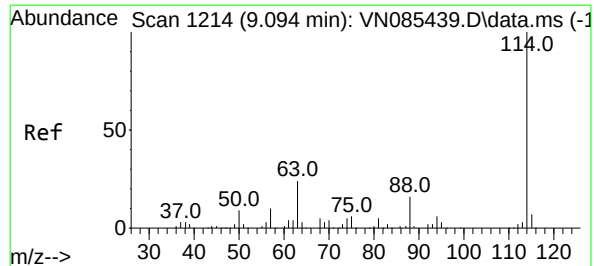
Tgt Ion:168 Resp: 180587
Ion Ratio Lower Upper
168 100
99 65.1 53.6 80.4



#33
1,2-Dichloroethane-d4
Concen: 57.295 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085550.D
Acq: 29 Jan 2025 12:06

Tgt Ion: 65 Resp: 167019
Ion Ratio Lower Upper
65 100
67 51.1 0.0 101.6

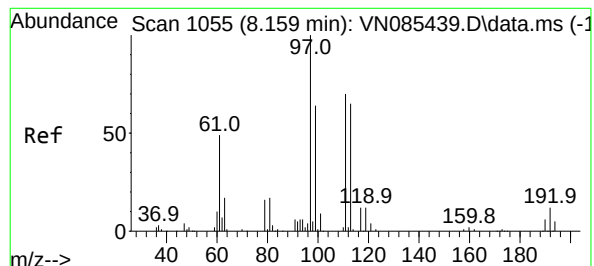
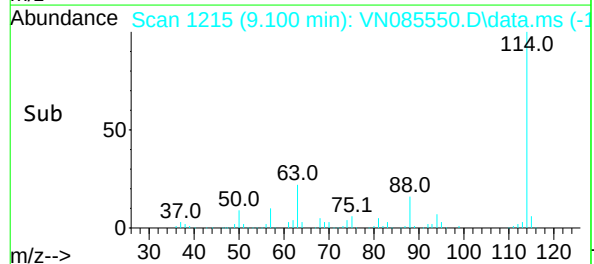
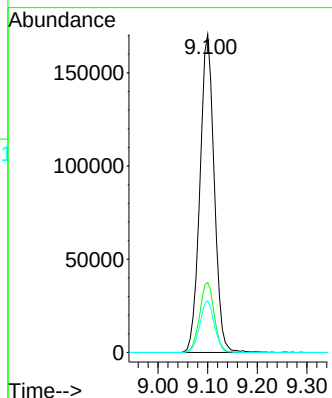
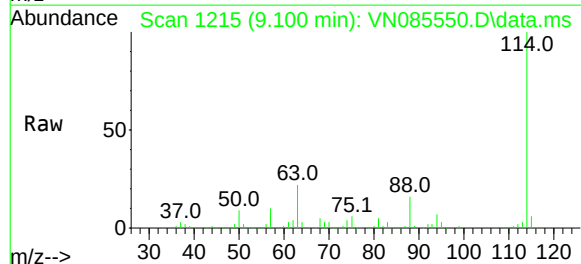




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085550.D
Acq: 29 Jan 2025 12:06

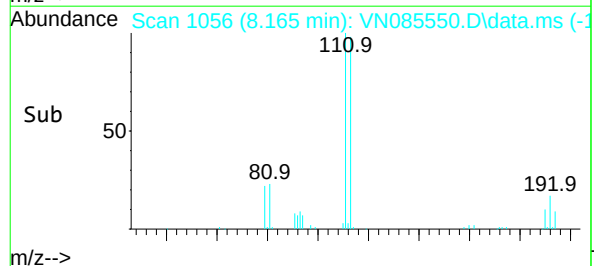
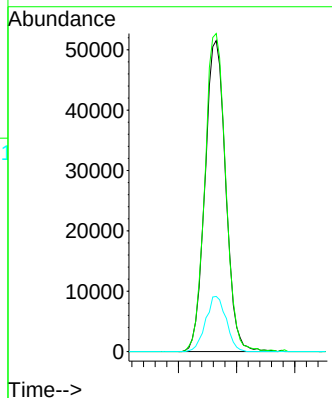
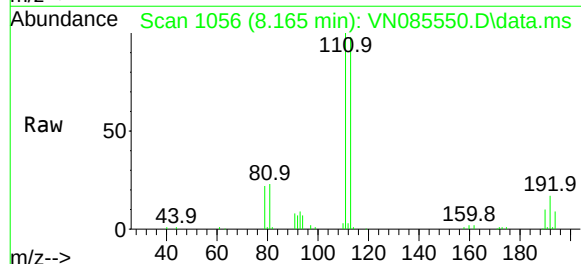
Instrument :
MSVOA_N
ClientSampleId :
VN0129WBL01

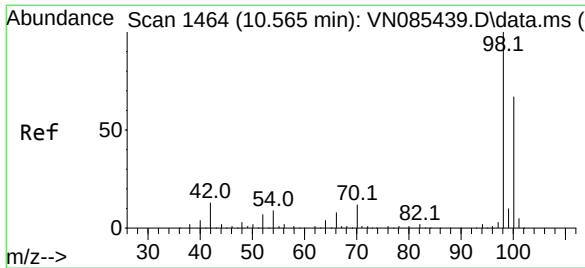
Tgt Ion	Ratio	Lower	Upper
114	100		
63	22.0	0.0	47.6
88	16.3	0.0	32.6



#35
Dibromofluoromethane
Concen: 53.726 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085550.D
Acq: 29 Jan 2025 12:06

Tgt Ion	Ratio	Lower	Upper
113	100		
111	102.7	82.7	124.1
192	17.6	14.3	21.5





#50

Toluene-d8

Concen: 50.245 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085550.D

Acq: 29 Jan 2025 12:06

Instrument :

MSVOA_N

ClientSampleId :

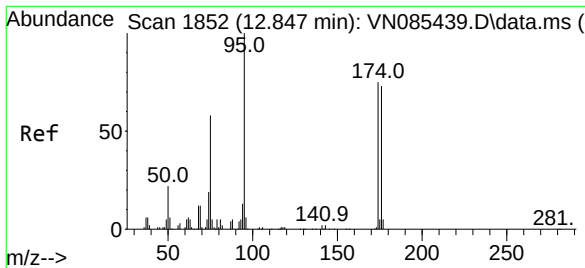
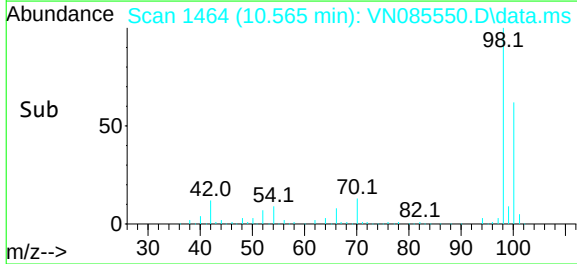
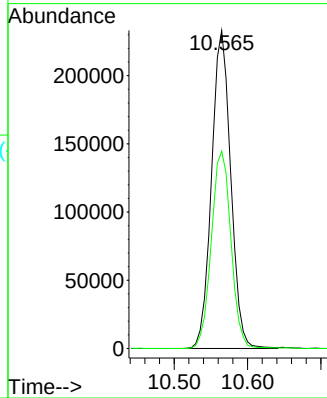
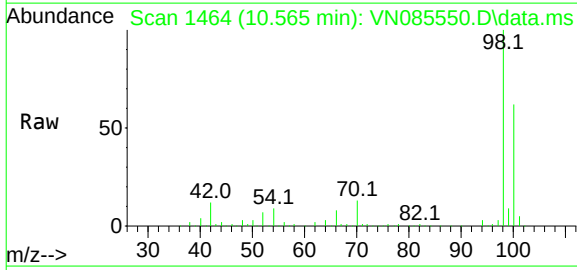
VN0129WBL01

Tgt Ion: 98 Resp: 422891

Ion Ratio Lower Upper

98 100

100 63.6 52.2 78.4



#62

4-Bromofluorobenzene

Concen: 48.323 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085550.D

Acq: 29 Jan 2025 12:06

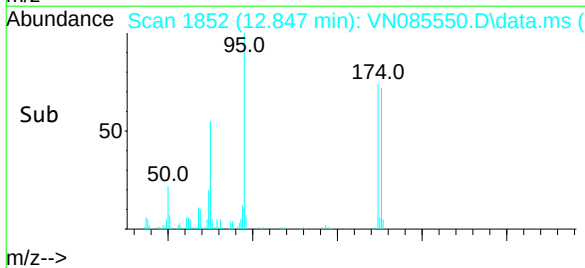
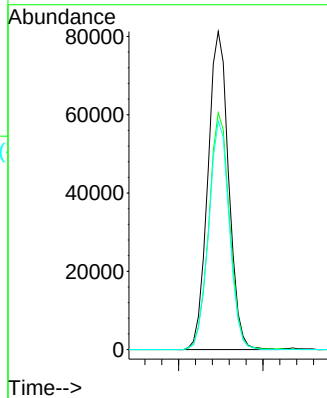
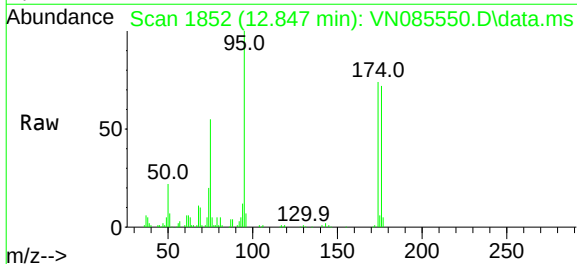
Tgt Ion: 95 Resp: 139125

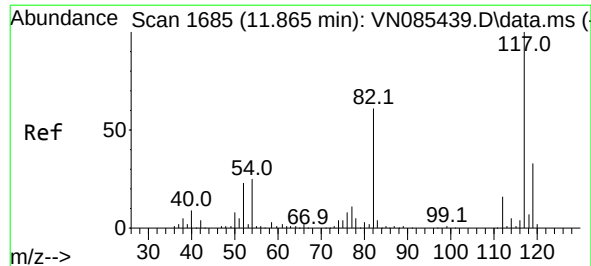
Ion Ratio Lower Upper

95 100

174 74.1 0.0 145.0

176 71.1 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. 0.000 min

Lab File: VN085550.D

Acq: 29 Jan 2025 12:06

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBL01

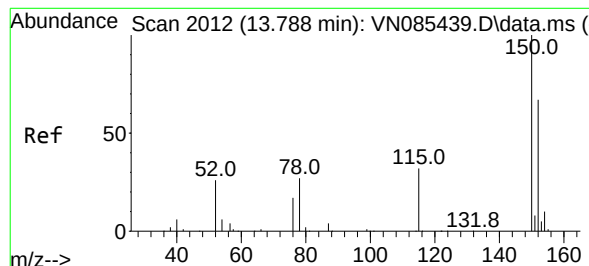
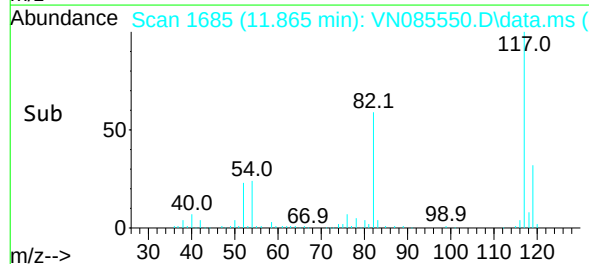
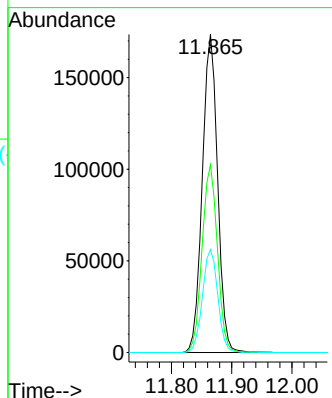
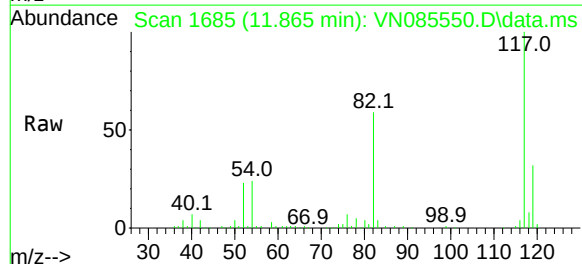
Tgt Ion:117 Resp: 305749

Ion Ratio Lower Upper

117 100

82 59.0 48.6 72.8

119 32.3 26.6 39.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN085550.D

Acq: 29 Jan 2025 12:06

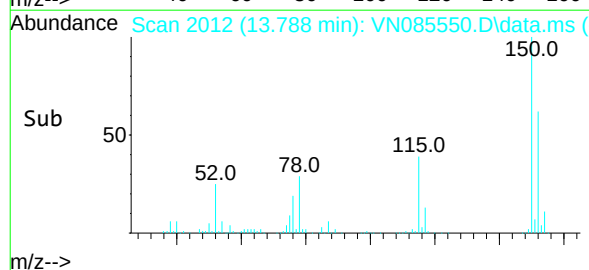
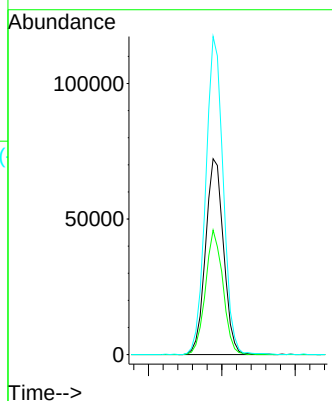
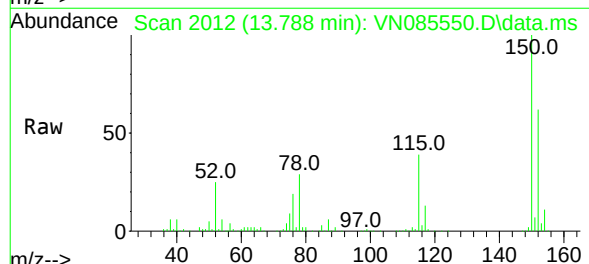
Tgt Ion:152 Resp: 123478

Ion Ratio Lower Upper

152 100

115 61.4 31.1 93.3

150 157.6 0.0 343.6



Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VN0129WBS01	SDG No.:	Q1207
Lab Sample ID:	VN0129WBS01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085551.D	1		01/29/25 12:30	VN012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	16.6		0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	18.0		0.26	5.00	ug/L
78-93-3	2-Butanone	100		1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	19.5		0.25	5.00	ug/L
67-66-3	Chloroform	19.2		0.26	5.00	ug/L
71-43-2	Benzene	19.4		0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	20.0		0.24	5.00	ug/L
79-01-6	Trichloroethene	18.9		0.32	5.00	ug/L
127-18-4	Tetrachloroethene	19.4		0.25	5.00	ug/L
108-90-7	Chlorobenzene	19.3		0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.8		74 - 125	102%	SPK: 50
1868-53-7	Dibromofluoromethane	52.1		75 - 124	104%	SPK: 50
2037-26-5	Toluene-d8	53.0		86 - 113	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	55.3		77 - 121	111%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	210000	8.224			
540-36-3	1,4-Difluorobenzene	351000	9.1			
3114-55-4	Chlorobenzene-d5	313000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	157000	13.788			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
 Data File : VN085551.D
 Acq On : 29 Jan 2025 12:30
 Operator : JC\MD
 Sample : VN0129WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0129WBS01

Manual Integrations APPROVED

Reviewed By : John Carlone 01/30/2025
 Supervised By : Mahesh Dadoda 01/30/2025

Quant Time: Jan 30 00:31:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	209601	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	351459	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	313028	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	156507	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.577	65	171860	50.795	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	101.600%
35) Dibromofluoromethane	8.165	113	126996	52.085	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	104.160%
50) Toluene-d8	10.565	98	459113	52.996	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	106.000%
62) 4-Bromofluorobenzene	12.847	95	163742	55.254	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	110.500%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	46350	16.332	ug/l	97
3) Chloromethane	2.360	50	51817	16.864	ug/l	96
4) Vinyl Chloride	2.513	62	51296	16.609	ug/l	97
5) Bromomethane	2.954	94	31079	16.659	ug/l	99
6) Chloroethane	3.124	64	35147	17.950	ug/l	99
7) Trichlorofluoromethane	3.495	101	82270	18.358	ug/l	99
8) Diethyl Ether	3.959	74	26961	17.415	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.371	101	46918	18.588	ug/l	99
10) Methyl Iodide	4.589	142	50486	17.466	ug/l	97
11) Tert butyl alcohol	5.512	59	44455	114.746	ug/l #	83
12) 1,1-Dichloroethene	4.336	96	40485	17.997	ug/l	89
13) Acrolein	4.177	56	38470	72.741	ug/l	100
14) Allyl chloride	5.024	41	62533	17.131	ug/l	99
15) Acrylonitrile	5.712	53	126967	103.177	ug/l	100
16) Acetone	4.424	43	112019	102.469	ug/l	99
17) Carbon Disulfide	4.712	76	104424	15.077	ug/l	99
18) Methyl Acetate	5.024	43	72461	21.798	ug/l	99
19) Methyl tert-butyl Ether	5.795	73	141193	19.330	ug/l	98
20) Methylene Chloride	5.271	84	49750	18.383	ug/l	99
21) trans-1,2-Dichloroethene	5.783	96	43039	17.903	ug/l	94
22) Diisopropyl ether	6.671	45	159448	19.680	ug/l	97
23) Vinyl Acetate	6.600	43	537237	94.751	ug/l	99
24) 1,1-Dichloroethane	6.565	63	93875	19.002	ug/l	98
25) 2-Butanone	7.483	43	166690	103.615	ug/l	100
26) 2,2-Dichloropropane	7.483	77	85168	21.323	ug/l	98
27) cis-1,2-Dichloroethene	7.483	96	51851	18.312	ug/l	98
28) Bromochloromethane	7.812	49	36776	16.001	ug/l	95
29) Tetrahydrofuran	7.836	42	108650	106.525	ug/l	99
30) Chloroform	7.959	83	97953	19.184	ug/l	99
31) Cyclohexane	8.253	56	70853	16.501	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	86797	19.380	ug/l	97
36) 1,1-Dichloropropene	8.371	75	62579	18.287	ug/l	99
37) Ethyl Acetate	7.553	43	69495	20.120	ug/l	97
38) Carbon Tetrachloride	8.359	117	76352	19.489	ug/l	99
39) Methylcyclohexane	9.594	83	55093	17.132	ug/l	96
40) Benzene	8.600	78	199602	19.413	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
 Data File : VN085551.D
 Acq On : 29 Jan 2025 12:30
 Operator : JC\MD
 Sample : VN0129WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0129WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 01/30/2025
 Supervised By :Mahesh Dadoda 01/30/2025

Quant Time: Jan 30 00:31:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	35881	19.967	ug/l	98
42) 1,2-Dichloroethane	8.665	62	77457	20.002	ug/l	99
43) Isopropyl Acetate	8.689	43	114457	20.680	ug/l	98
44) Trichloroethene	9.347	130	45202	18.886	ug/l	98
45) 1,2-Dichloropropane	9.624	63	51454	19.591	ug/l	97
46) Dibromomethane	9.706	93	35894	18.941	ug/l	96
47) Bromodichloromethane	9.883	83	79684	20.639	ug/l	96
48) Methyl methacrylate	9.677	41	49608	19.917	ug/l	98
49) 1,4-Dioxane	9.694	88	19127	456.023	ug/l	96
51) 4-Methyl-2-Pentanone	10.441	43	355666	110.742	ug/l	99
52) Toluene	10.630	92	121981	20.475	ug/l	99
53) t-1,3-Dichloropropene	10.836	75	73781	20.222	ug/l	99
54) cis-1,3-Dichloropropene	10.312	75	76573	19.648	ug/l	96
55) 1,1,2-Trichloroethane	11.012	97	48573	20.602	ug/l	95
56) Ethyl methacrylate	10.871	69	66949	18.136	ug/l	98
57) 1,3-Dichloropropane	11.159	76	83319	20.323	ug/l	98
58) 2-Chloroethyl Vinyl ether	10.159	63	131853	88.125	ug/l	100
59) 2-Hexanone	11.194	43	257774	114.068	ug/l	99
60) Dibromochloromethane	11.353	129	57964	20.364	ug/l	99
61) 1,2-Dibromoethane	11.465	107	47182	20.104	ug/l	96
64) Tetrachloroethene	11.100	164	41303	19.355	ug/l	96
65) Chlorobenzene	11.888	112	132226	19.282	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.959	131	50102	19.907	ug/l	99
67) Ethyl Benzene	11.959	91	213467	19.113	ug/l	98
68) m/p-Xylenes	12.071	106	164888	39.945	ug/l	100
69) o-Xylene	12.394	106	76089	19.288	ug/l	97
70) Styrene	12.406	104	131635	20.163	ug/l	99
71) Bromoform	12.577	173	38916	21.610	ug/l #	97
73) Isopropylbenzene	12.694	105	195492	18.507	ug/l	100
74) N-amyl acetate	12.488	43	89626	18.877	ug/l	99
75) 1,1,1,2-Tetrachloroethane	12.935	83	72950	19.551	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	68563m	21.554	ug/l	
77) Bromobenzene	12.977	156	51702	18.735	ug/l	98
78) n-propylbenzene	13.035	91	236875	18.943	ug/l	99
79) 2-Chlorotoluene	13.124	91	152450	18.837	ug/l	98
80) 1,3,5-Trimethylbenzene	13.171	105	170270	19.515	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	23443m	19.939	ug/l	
82) 4-Chlorotoluene	13.218	91	155061	19.243	ug/l	100
83) tert-Butylbenzene	13.435	119	134399	18.343	ug/l	97
84) 1,2,4-Trimethylbenzene	13.482	105	171306	19.699	ug/l	97
85) sec-Butylbenzene	13.612	105	191783	18.886	ug/l	98
86) p-Isopropyltoluene	13.729	119	157547	18.681	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	97536	19.191	ug/l	97
88) 1,4-Dichlorobenzene	13.812	146	95449	18.119	ug/l	99
89) n-Butylbenzene	14.053	91	127980	17.567	ug/l	99
90) Hexachloroethane	14.329	117	35454	18.339	ug/l	98
91) 1,2-Dichlorobenzene	14.100	146	93880	18.519	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.718	75	14729	21.617	ug/l	97
93) 1,2,4-Trichlorobenzene	15.394	180	41183	17.479	ug/l	99
94) Hexachlorobutadiene	15.500	225	22674	18.126	ug/l	98
95) Naphthalene	15.641	128	119085	16.937	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	41222	17.291	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085551.D
Acq On : 29 Jan 2025 12:30
Operator : JC\MD
Sample : VN0129WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

Quant Time: Jan 30 00:31:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

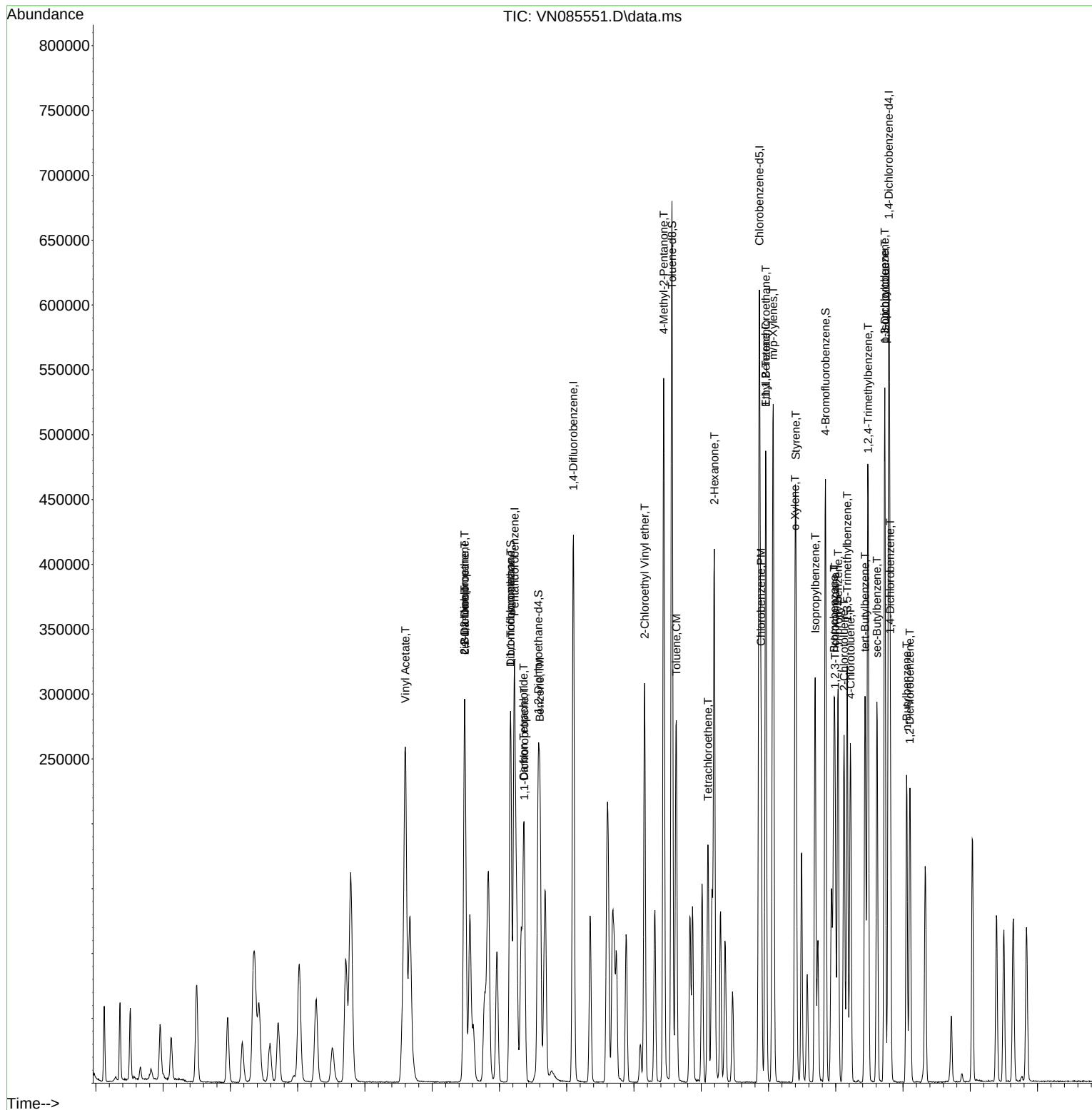
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
----------	------	------	----------	------	-------	----------

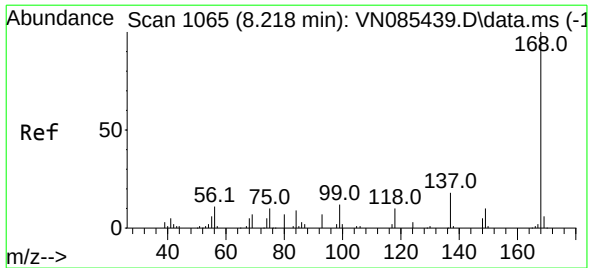
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Manual Integrations APPROVED

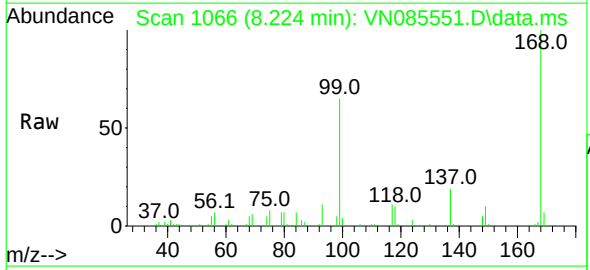
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1065
Delta R.T. 0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

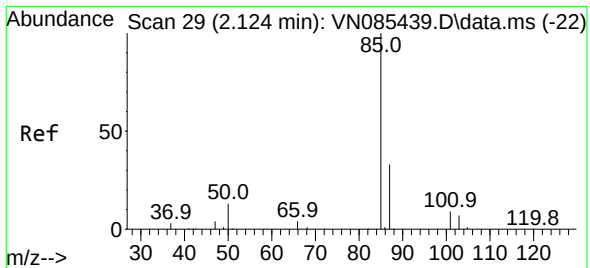
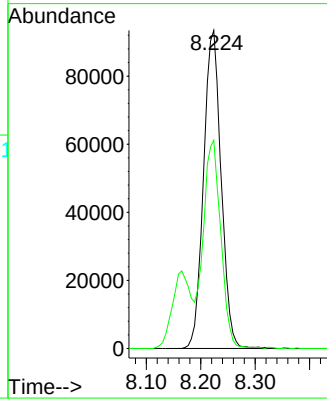
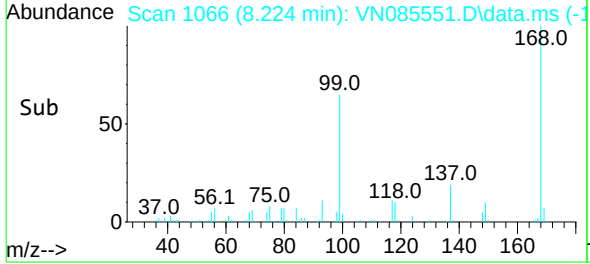
Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01



Tgt Ion: 168 Resp: 209601
Ion Ratio Lower Upper
168 100
99 65.5 53.6 80.4

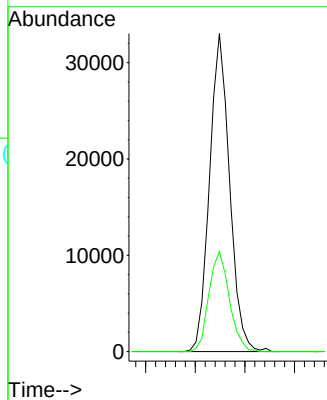
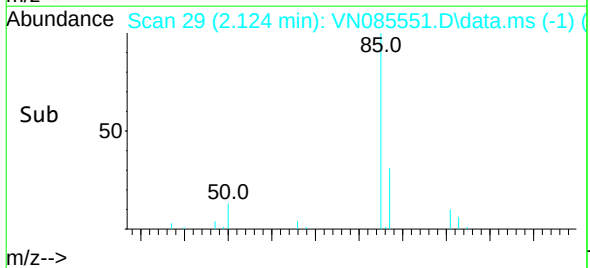
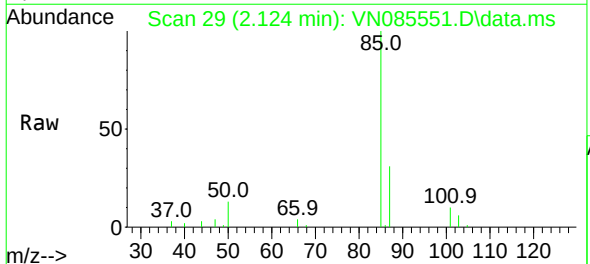
Manual Integrations
APPROVED

Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025

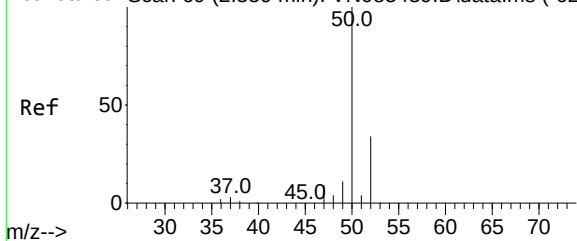


#2
Dichlorodifluoromethane
Concen: 16.332 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion: 85 Resp: 46350
Ion Ratio Lower Upper
85 100
87 31.4 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 16.864 ug/l

RT: 2.360 min Scan# 69

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 50 Resp: 51817

Ion Ratio Lower Upper

50 100

52 31.6 27.0 40.6

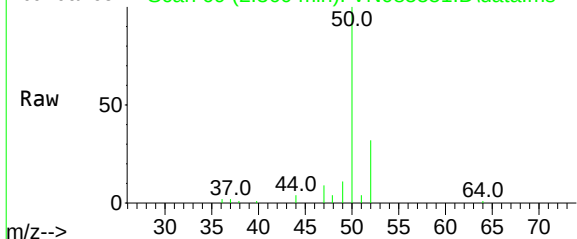
Manual Integrations

APPROVED

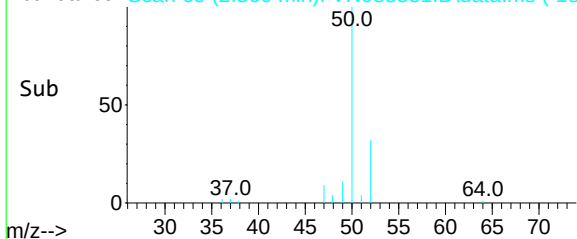
Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025

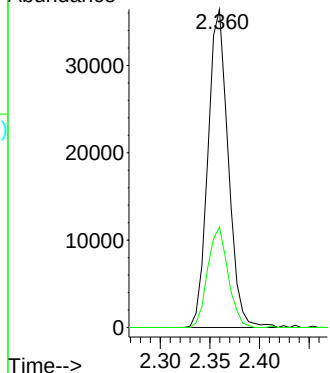
Abundance Scan 69 (2.360 min): VN085551.D\data.ms



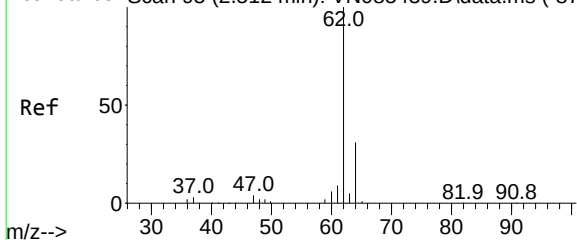
Abundance Scan 69 (2.360 min): VN085551.D\data.ms (-18)



Abundance



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 16.609 ug/l

RT: 2.513 min Scan# 95

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

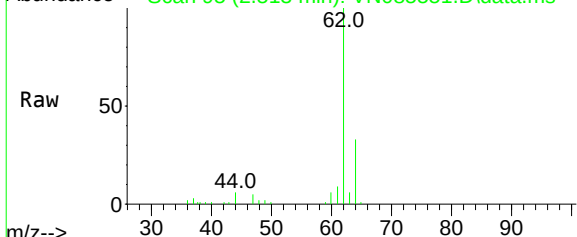
Tgt Ion: 62 Resp: 51296

Ion Ratio Lower Upper

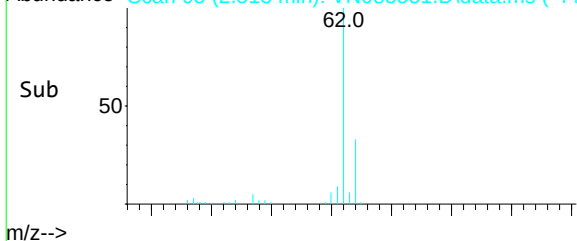
62 100

64 32.4 24.8 37.2

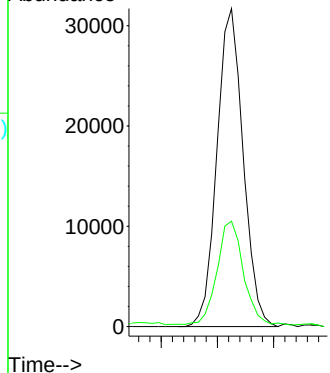
Abundance Scan 95 (2.513 min): VN085551.D\data.ms

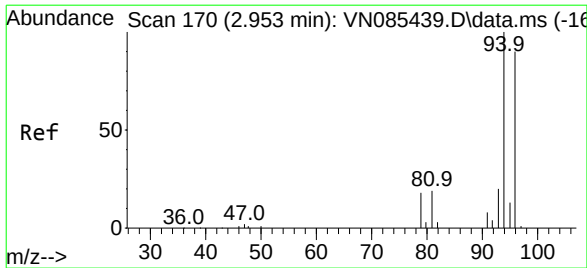


Abundance Scan 95 (2.513 min): VN085551.D\data.ms (-44)



Abundance





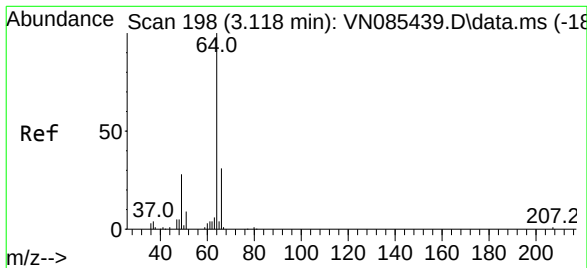
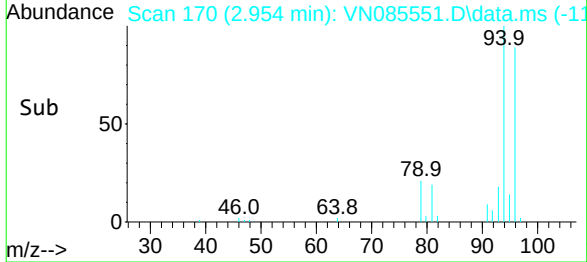
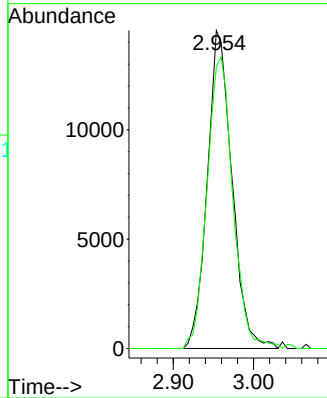
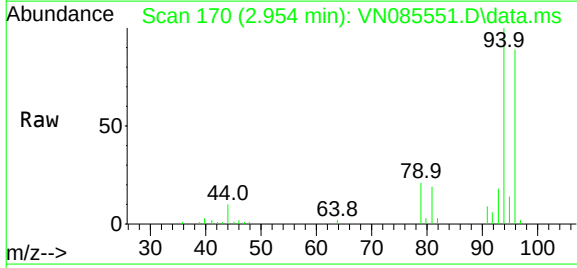
#5
Bromomethane
Concen: 16.659 ug/l
RT: 2.954 min Scan# 170
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion: 94 Resp: 31079
Ion Ratio Lower Upper
94 100
96 88.7 71.8 107.6

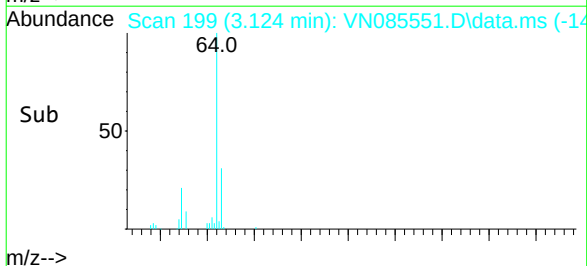
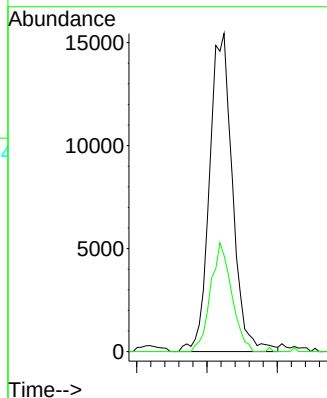
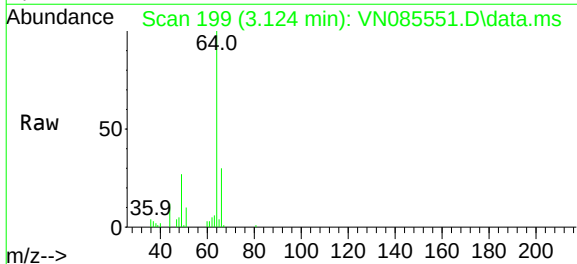
Manual Integrations
APPROVED

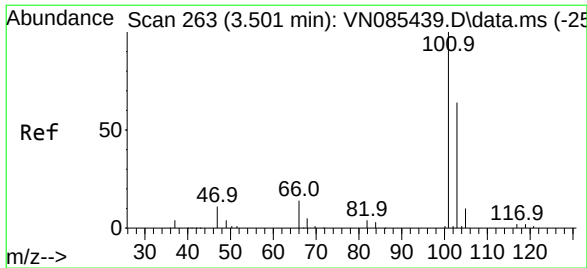
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#6
Chloroethane
Concen: 17.950 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion: 64 Resp: 35147
Ion Ratio Lower Upper
64 100
66 30.3 24.6 36.8





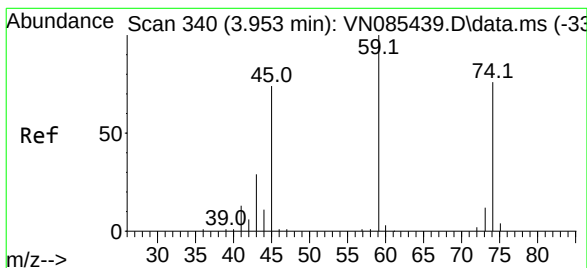
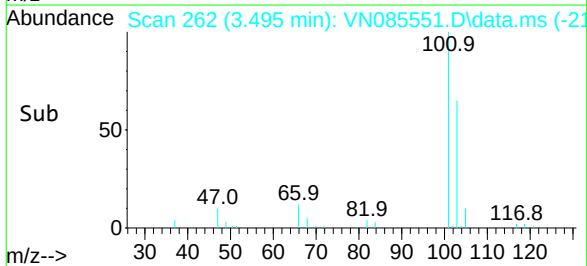
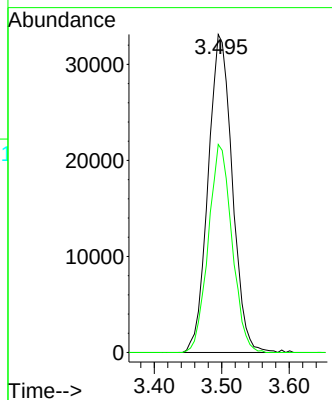
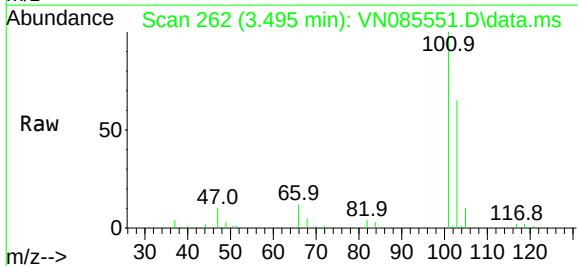
#7
Trichlorofluoromethane
Concen: 18.358 ug/l
RT: 3.495 min Scan# 263
Delta R.T. -0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion: 101 Resp: 82270
Ion Ratio Lower Upper
101 100
103 65.4 51.4 77.2

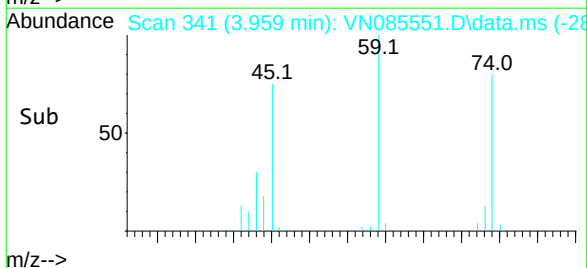
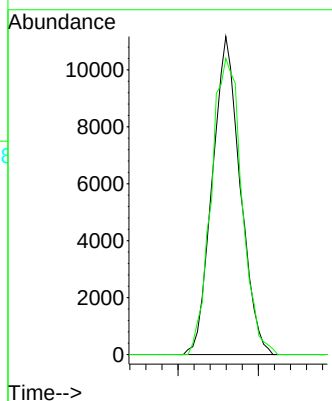
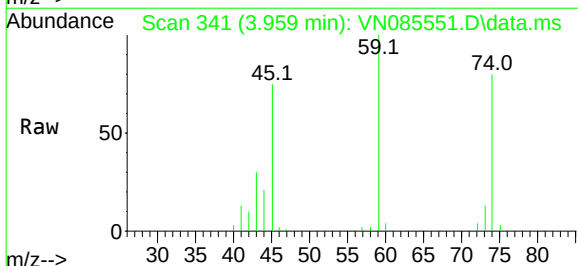
Manual Integrations
APPROVED

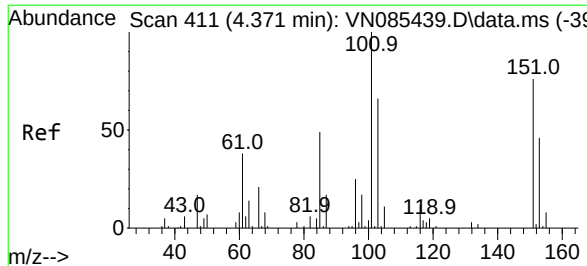
Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025



#8
Diethyl Ether
Concen: 17.415 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion: 74 Resp: 26961
Ion Ratio Lower Upper
74 100
45 102.3 49.7 149.1





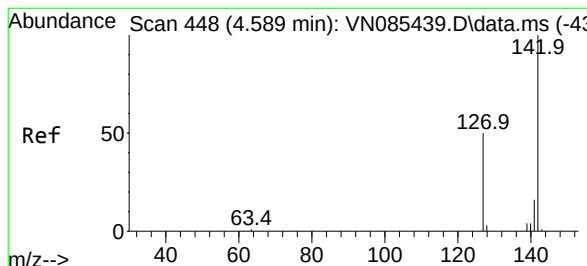
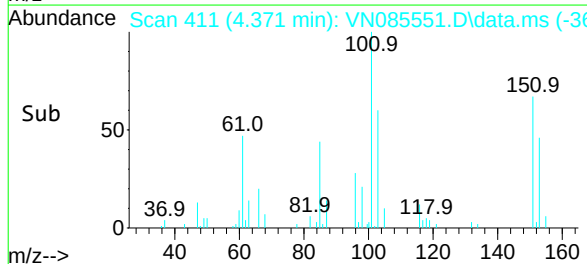
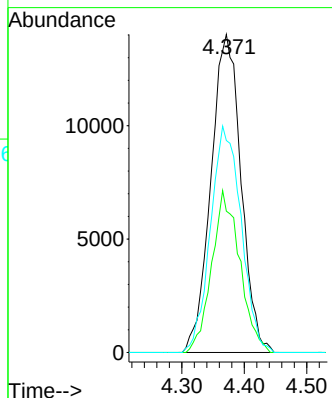
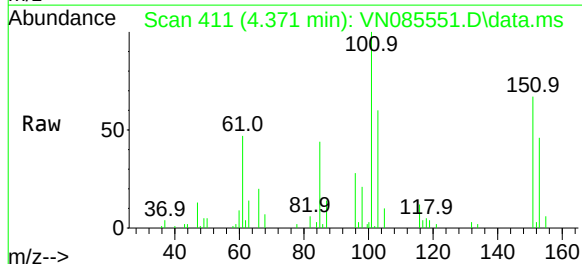
#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.588 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion:101 Resp: 46918
Ion Ratio Lower Upper
101 100
85 47.4 37.8 56.8
151 72.6 58.8 88.2

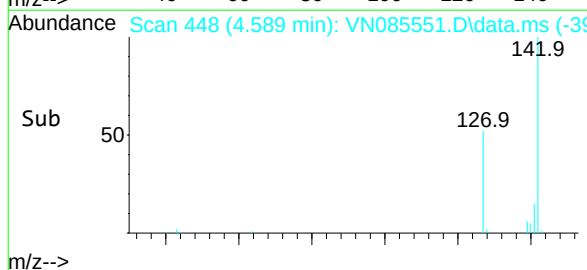
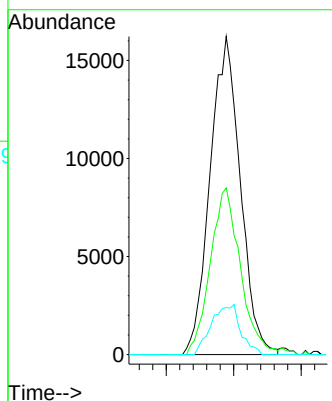
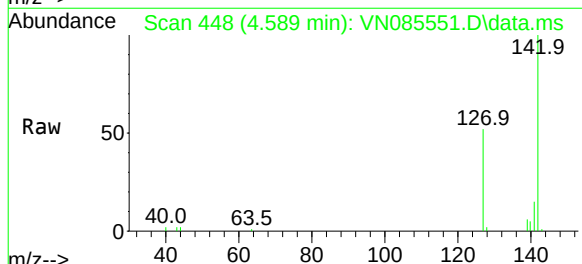
Manual Integrations
APPROVED

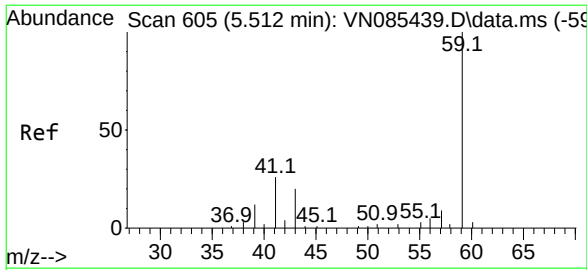
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#10
Methyl Iodide
Concen: 17.466 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion:142 Resp: 50486
Ion Ratio Lower Upper
142 100
127 52.4 40.3 60.5
141 14.8 12.8 19.2





#11

Tert butyl alcohol

Concen: 114.746 ug/l

RT: 5.512 min Scan# 605

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 59 Resp: 44455

Ion Ratio Lower Upper

59 100

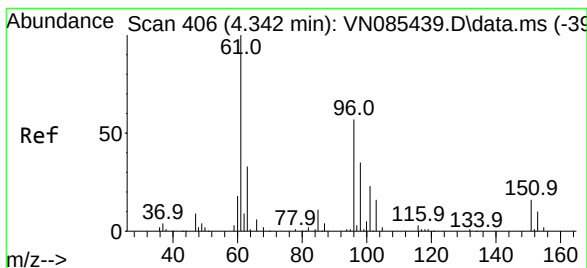
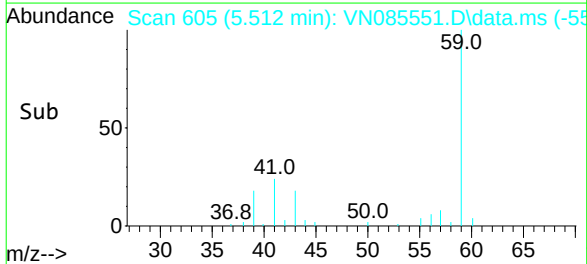
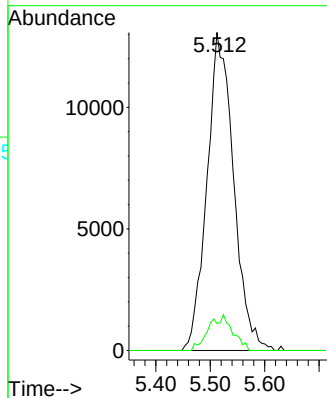
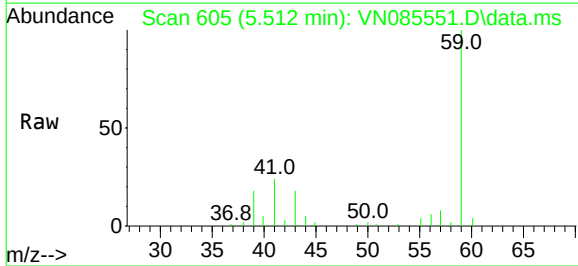
57 4.5 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#12

1,1-Dichloroethene

Concen: 17.997 ug/l

RT: 4.336 min Scan# 405

Delta R.T. -0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

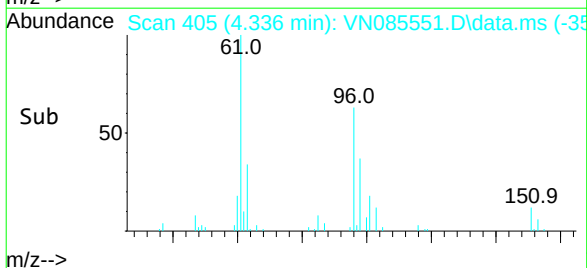
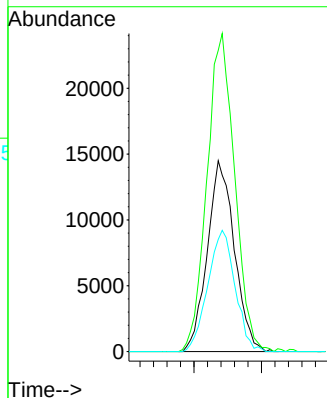
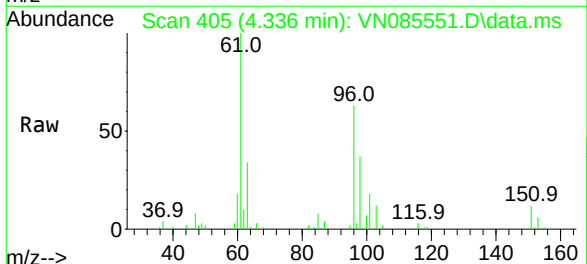
Tgt Ion: 96 Resp: 40485

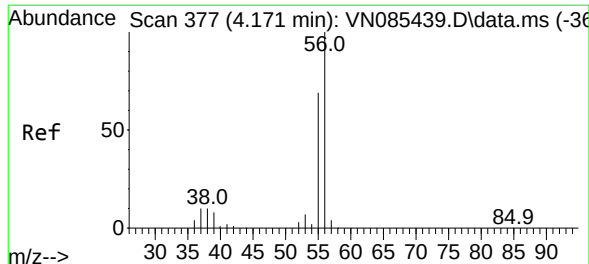
Ion Ratio Lower Upper

96 100

61 157.8 141.0 211.4

98 58.7 49.0 73.6





#13

Acrolein

Concen: 72.741 ug/l

RT: 4.177 min Scan# 377

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 56 Resp: 38470

Ion Ratio Lower Upper

56 100

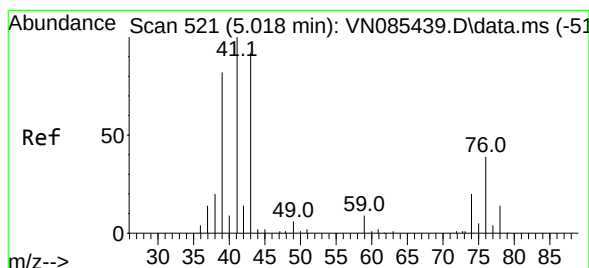
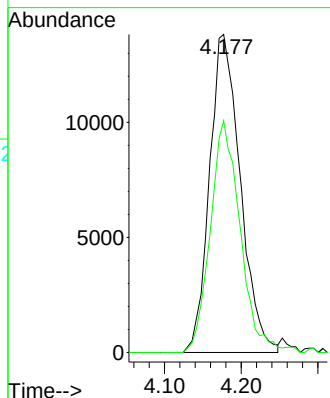
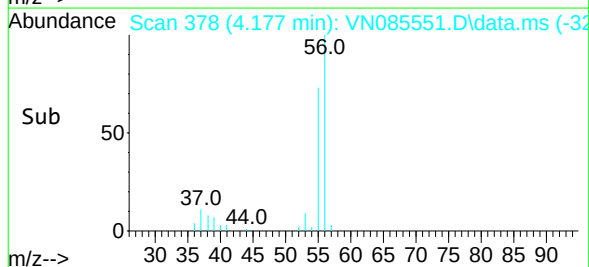
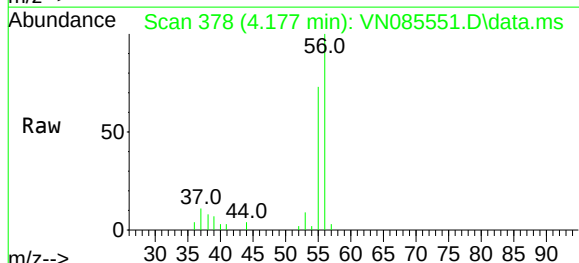
55 70.4 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#14

Allyl chloride

Concen: 17.131 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

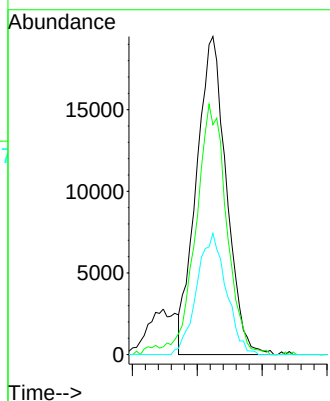
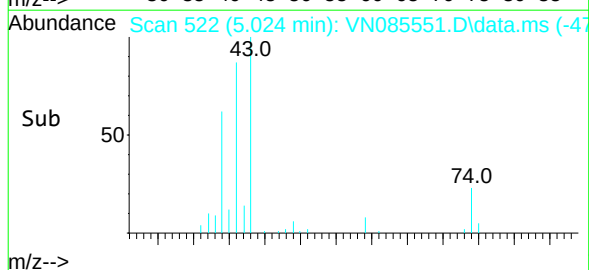
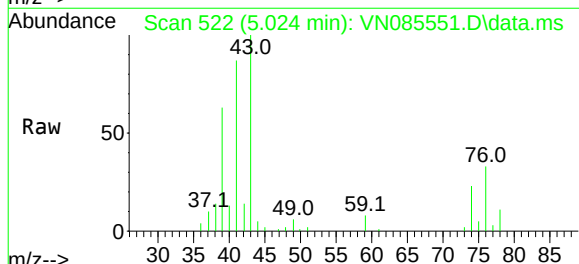
Tgt Ion: 41 Resp: 62533

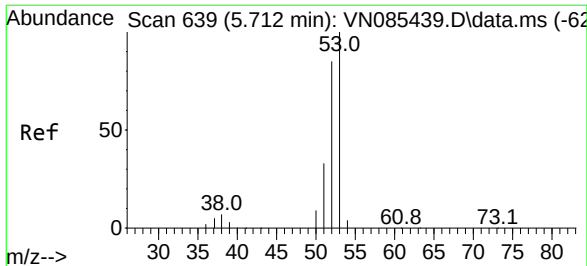
Ion Ratio Lower Upper

41 100

39 81.9 64.4 96.6

76 37.3 30.5 45.7





#15

Acrylonitrile

Concen: 103.177 ug/l

RT: 5.712 min Scan# 63

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

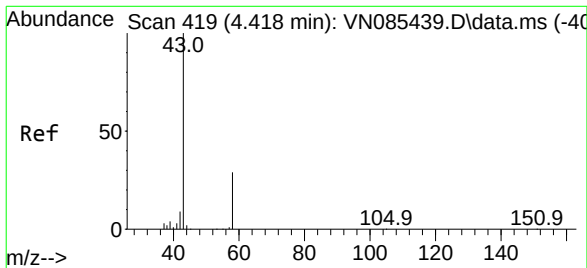
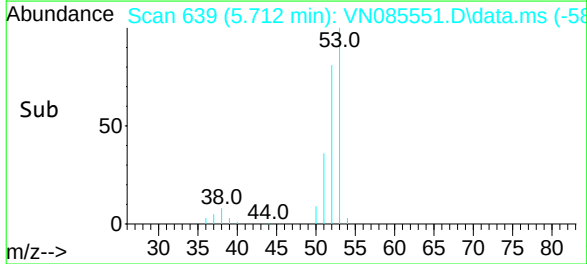
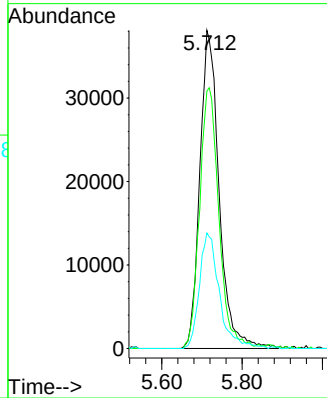
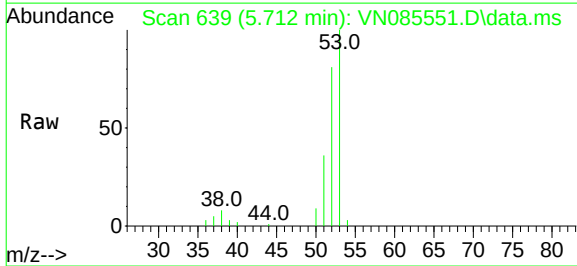
ClientSampleId :

VN0129WBS01

Tgt Ion:	53	Resp:	126967
Ion	Ratio	Lower	Upper
53	100		
52	81.9	65.5	98.3
51	37.7	29.8	44.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#16

Acetone

Concen: 102.469 ug/l

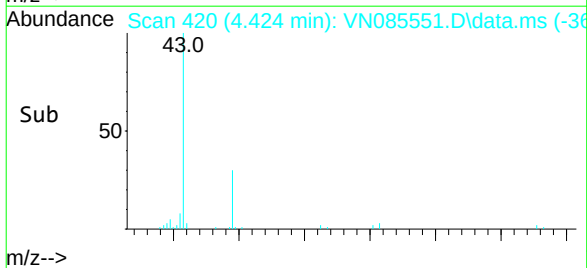
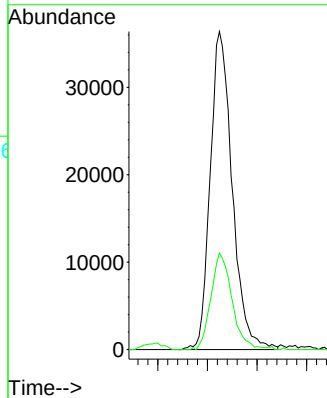
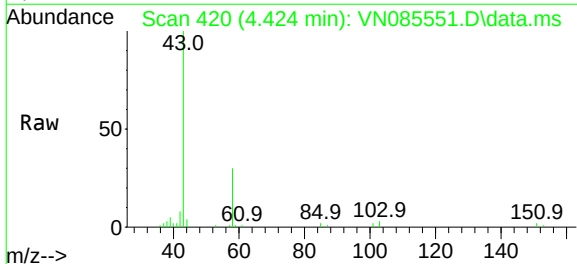
RT: 4.424 min Scan# 420

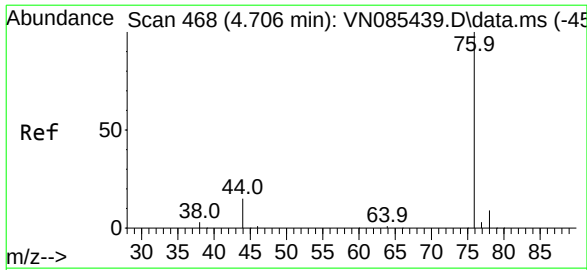
Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion:	43	Resp:	112019
Ion	Ratio	Lower	Upper
43	100		
58	30.3	23.8	35.6





#17

Carbon Disulfide

Concen: 15.077 ug/l

RT: 4.712 min Scan# 469

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 76 Resp: 104424

Ion Ratio Lower Upper

76 100

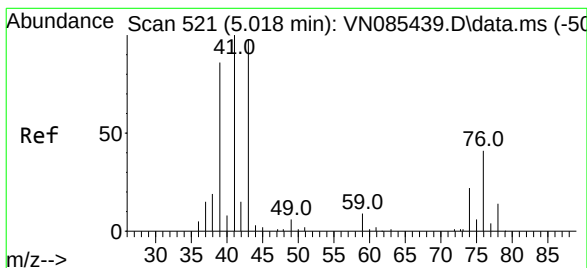
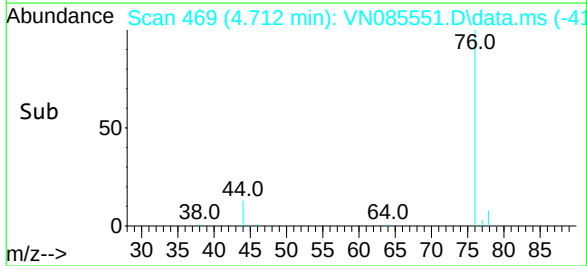
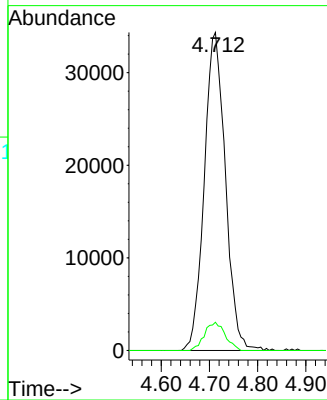
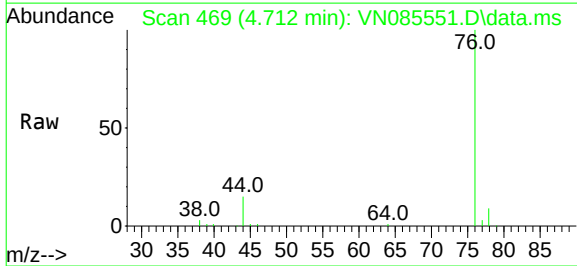
78 8.9 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#18

Methyl Acetate

Concen: 21.798 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN085551.D

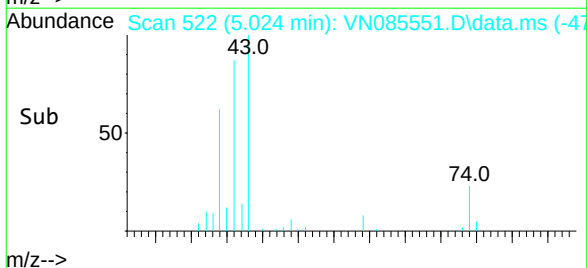
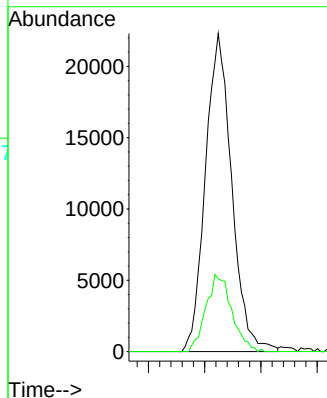
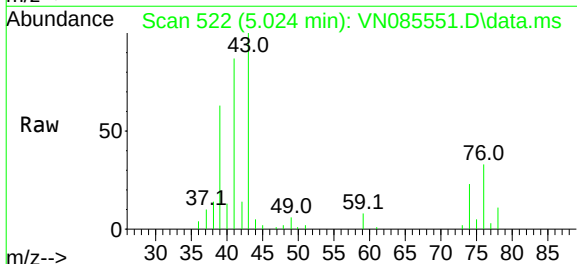
Acq: 29 Jan 2025 12:30

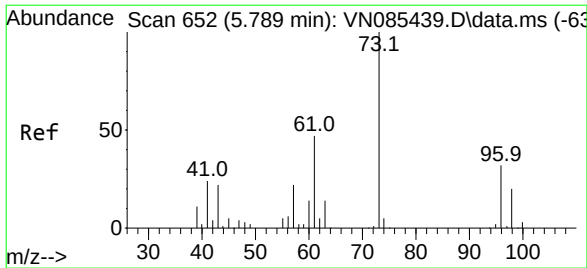
Tgt Ion: 43 Resp: 72461

Ion Ratio Lower Upper

43 100

74 23.8 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 19.330 ug/l

RT: 5.795 min Scan# 65

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 73 Resp: 141193

Ion Ratio Lower Upper

73 100

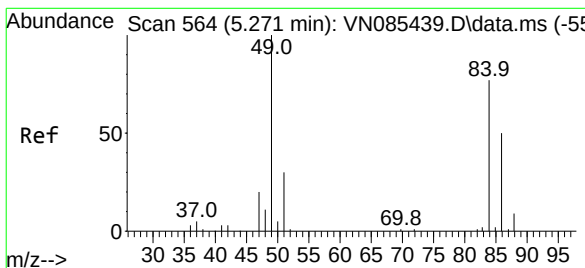
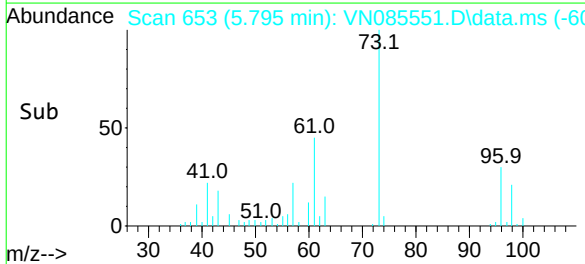
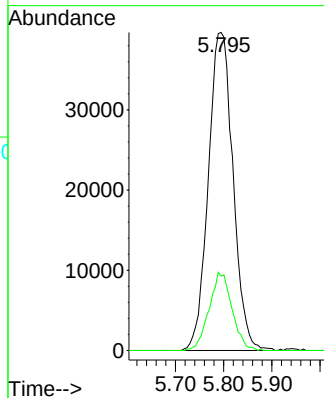
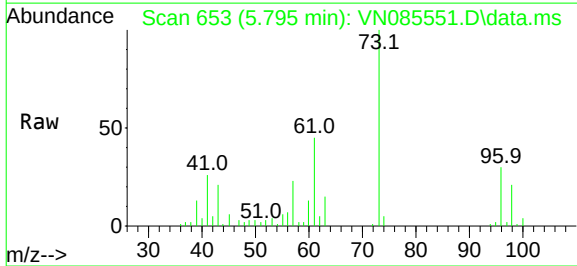
57 23.4 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#20

Methylene Chloride

Concen: 18.383 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion: 84 Resp: 49750

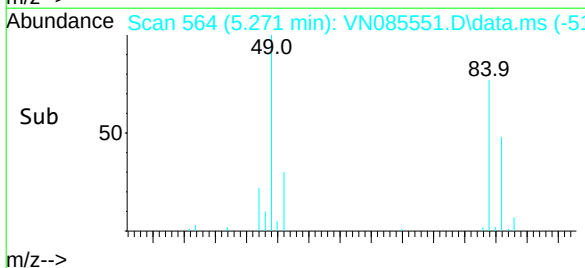
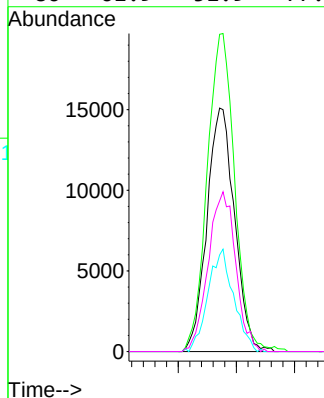
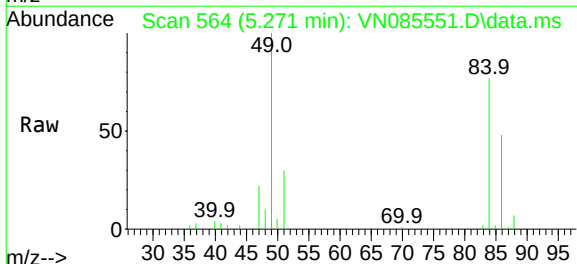
Ion Ratio Lower Upper

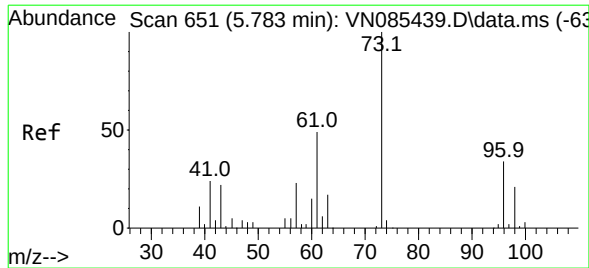
84 100

49 130.3 104.1 156.1

51 39.7 31.0 46.4

86 61.9 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 17.903 ug/l

RT: 5.783 min Scan# 651

Delta R.T. 0.000 min

Lab File: VN085551.D

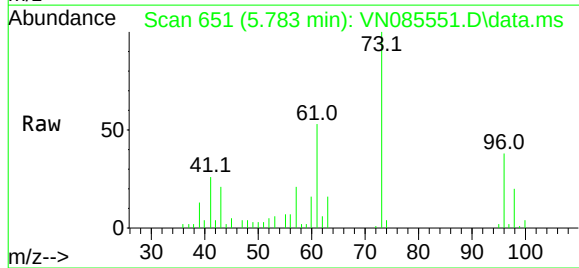
Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

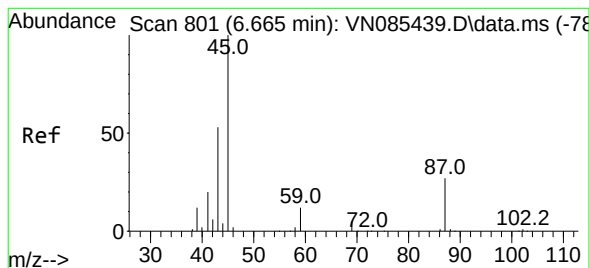
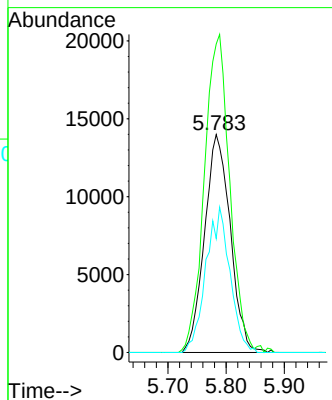
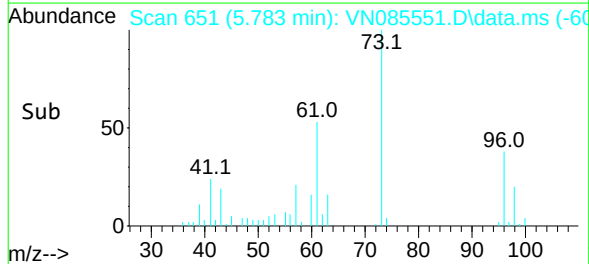
VN0129WBS01



Tgt Ion:	96	Resp:	43039
Ion	Ratio	Lower	Upper
96	100		
61	141.5	115.7	173.5
98	52.3	49.8	74.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#22

Diisopropyl ether

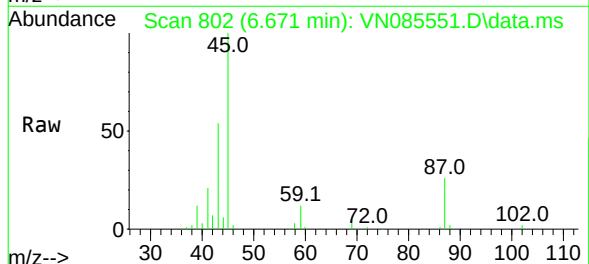
Concen: 19.680 ug/l

RT: 6.671 min Scan# 802

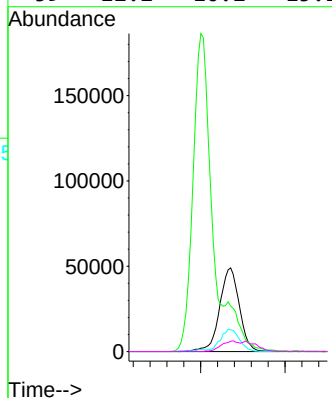
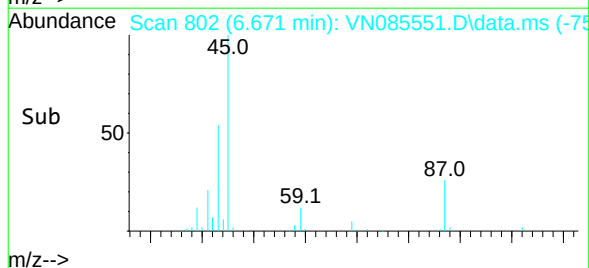
Delta R.T. 0.006 min

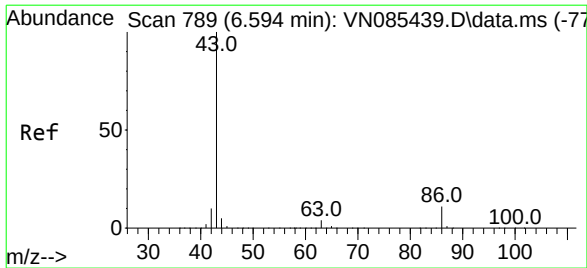
Lab File: VN085551.D

Acq: 29 Jan 2025 12:30



Tgt Ion:	45	Resp:	159448
Ion	Ratio	Lower	Upper
45	100		
43	53.4	45.0	67.6
87	25.9	21.8	32.8
59	12.2	10.2	15.2





#23

Vinyl Acetate

Concen: 94.751 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 43 Resp: 537237

Ion Ratio Lower Upper

43 100

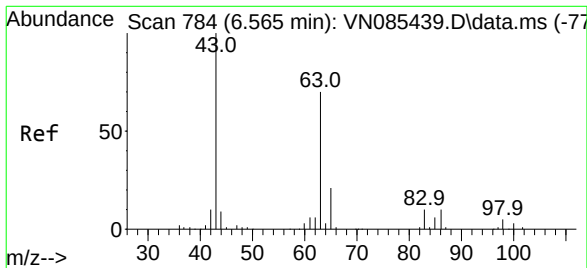
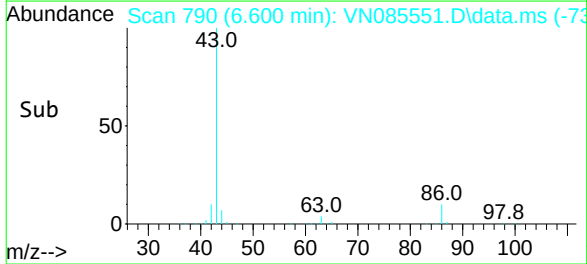
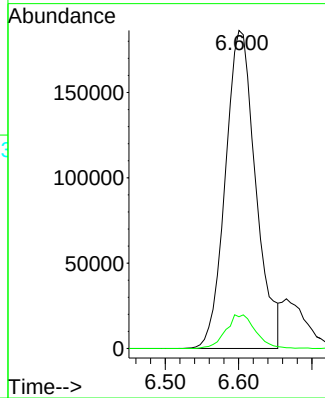
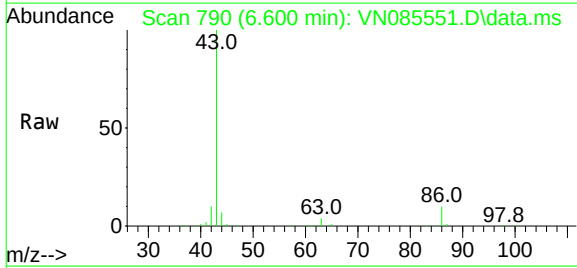
86 10.0 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#24

1,1-Dichloroethane

Concen: 19.002 ug/l

RT: 6.565 min Scan# 784

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

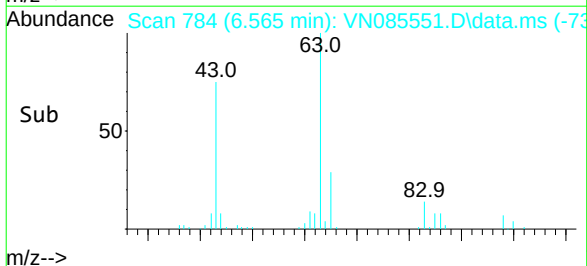
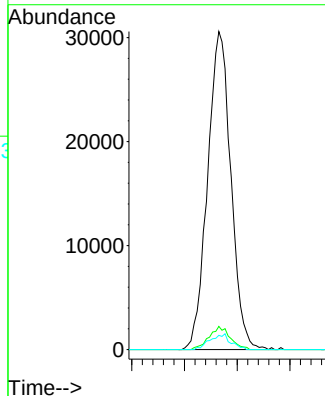
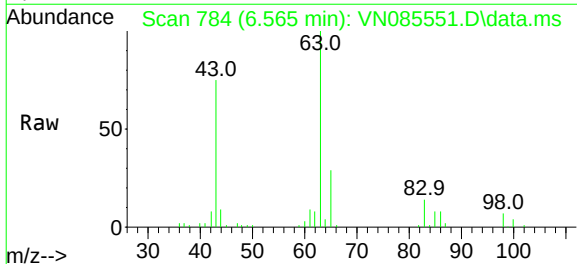
Tgt Ion: 63 Resp: 93875

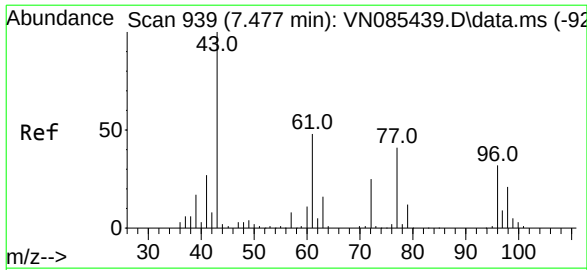
Ion Ratio Lower Upper

63 100

98 7.3 3.3 9.8

100 4.5 2.0 6.0





#25

2-Butanone

Concen: 103.615 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 43 Resp: 166690

Ion Ratio Lower Upper

43 100

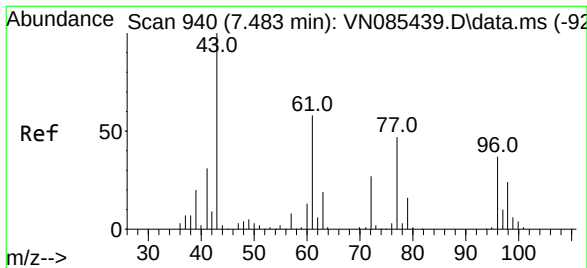
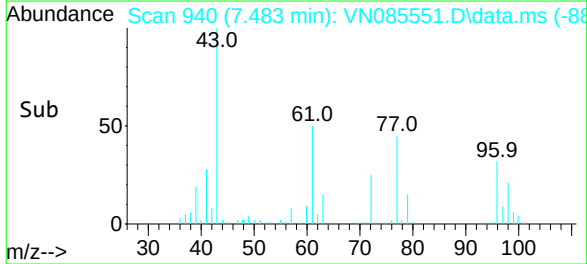
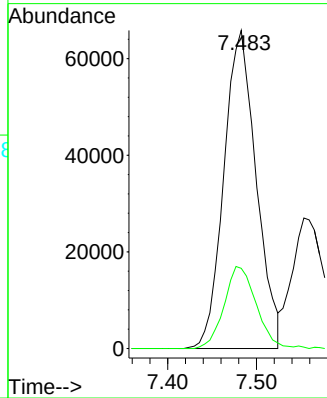
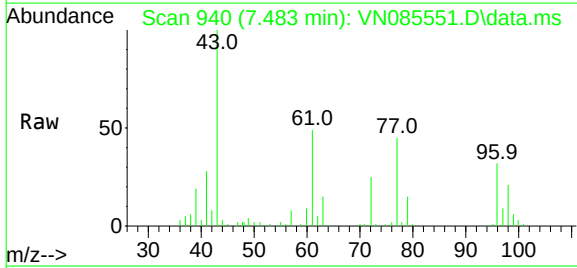
72 25.2 20.2 30.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#26

2,2-Dichloropropane

Concen: 21.323 ug/l

RT: 7.483 min Scan# 940

Delta R.T. 0.000 min

Lab File: VN085551.D

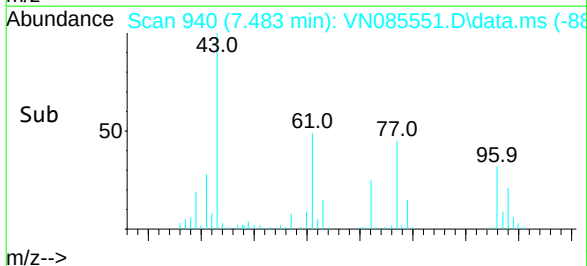
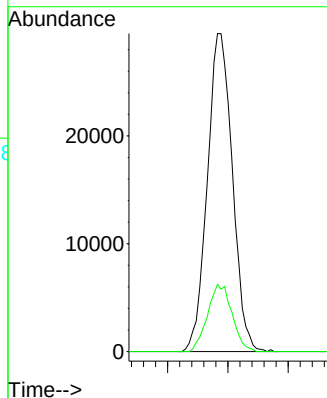
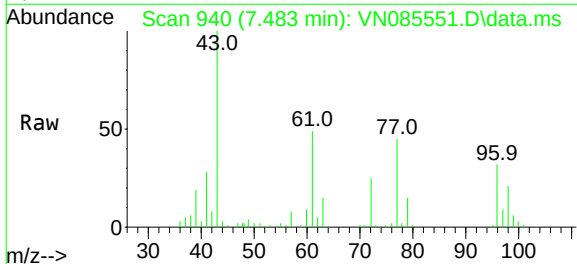
Acq: 29 Jan 2025 12:30

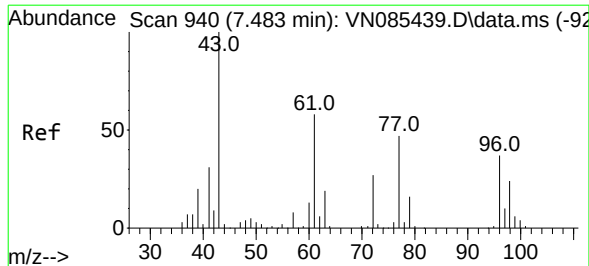
Tgt Ion: 77 Resp: 85168

Ion Ratio Lower Upper

77 100

97 20.7 10.7 32.1





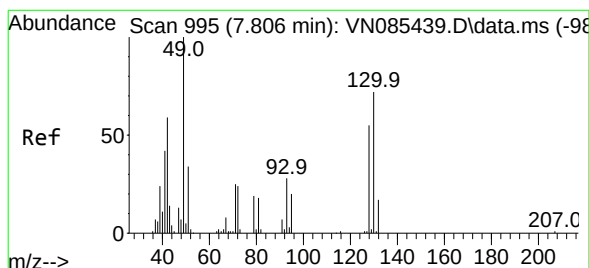
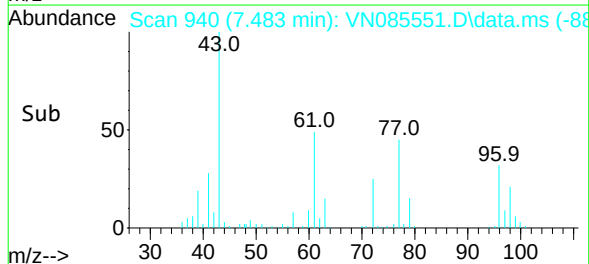
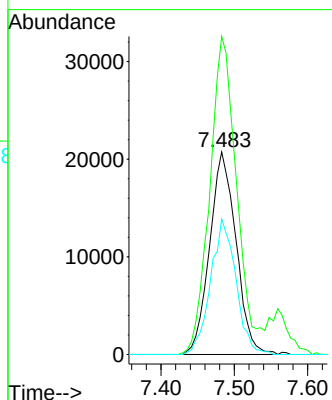
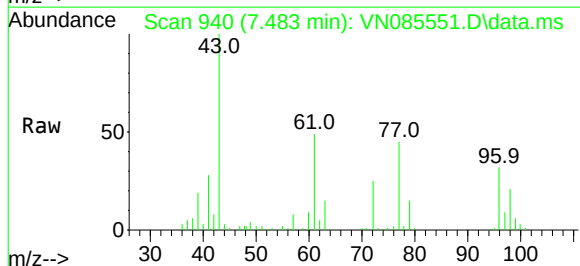
#27
cis-1,2-Dichloroethene
Concen: 18.312 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion	Ratio	Lower	Upper
96	100		
61	157.9	0.0	311.8
98	64.2	0.0	126.0

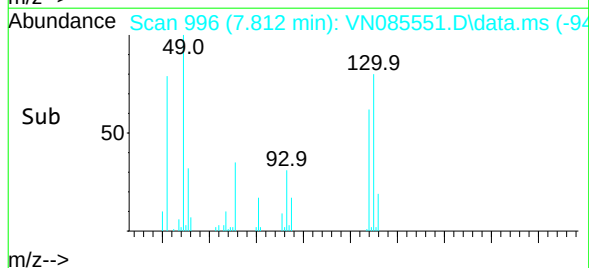
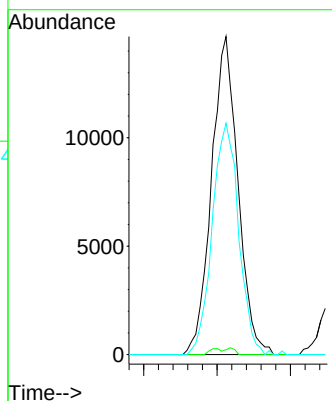
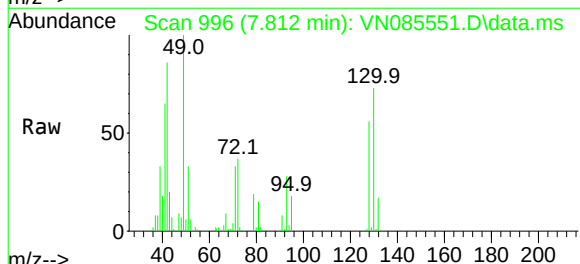
Manual Integrations
APPROVED

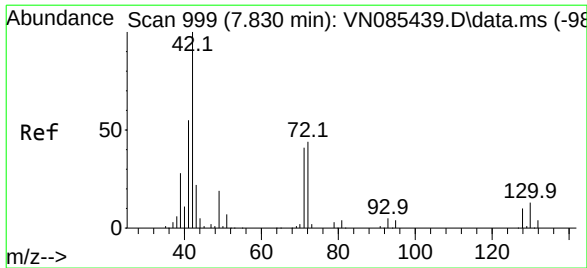
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#28
Bromochloromethane
Concen: 16.001 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.7	0.0	4.4
130	72.5	55.0	82.4





#29

Tetrahydrofuran

Concen: 106.525 ug/l

RT: 7.836 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 42 Resp: 108650

Ion Ratio Lower Upper

42 100

72 42.2 34.2 51.2

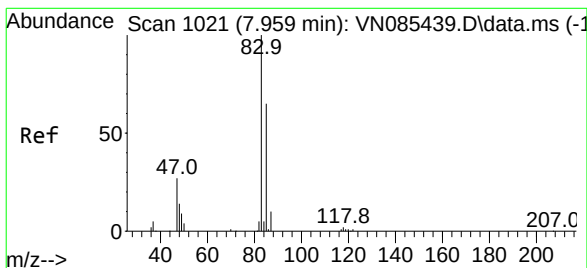
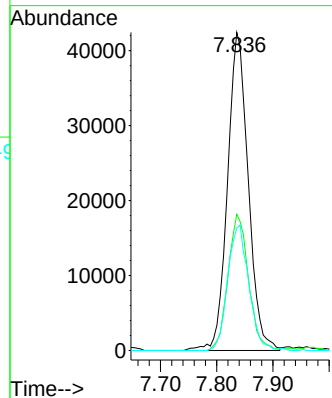
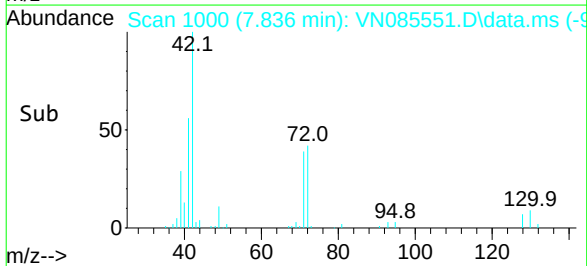
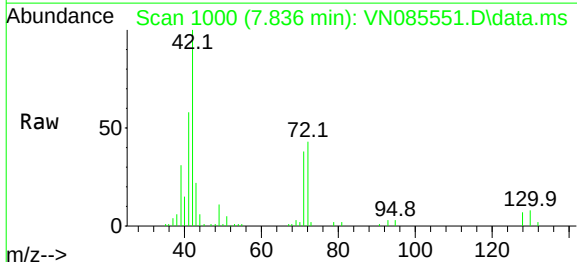
71 40.0 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#30

Chloroform

Concen: 19.184 ug/l

RT: 7.959 min Scan# 1021

Delta R.T. 0.000 min

Lab File: VN085551.D

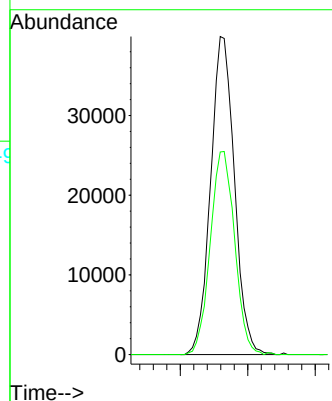
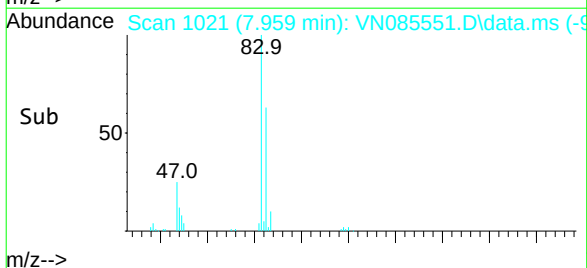
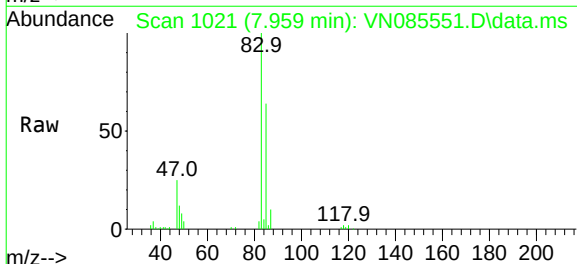
Acq: 29 Jan 2025 12:30

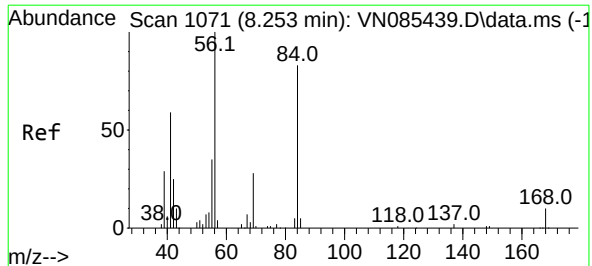
Tgt Ion: 83 Resp: 97953

Ion Ratio Lower Upper

83 100

85 63.7 51.8 77.6





#31

Cyclohexane

Concen: 16.501 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

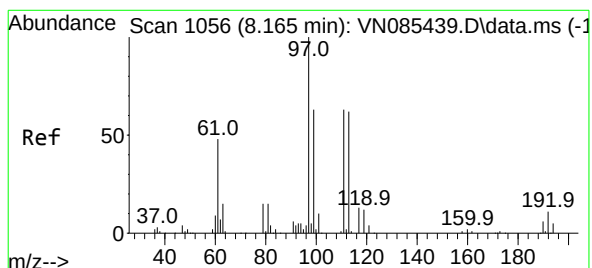
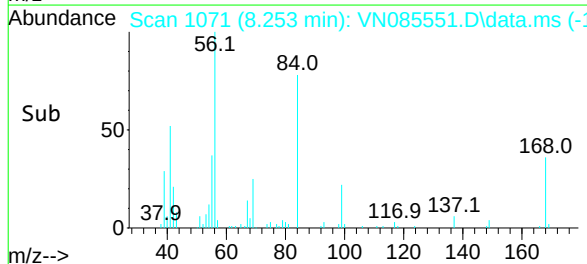
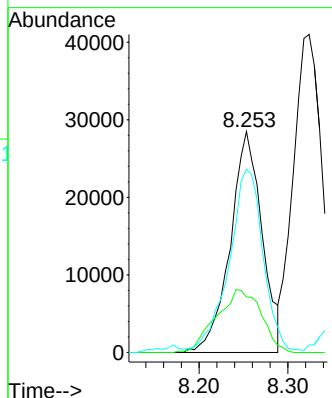
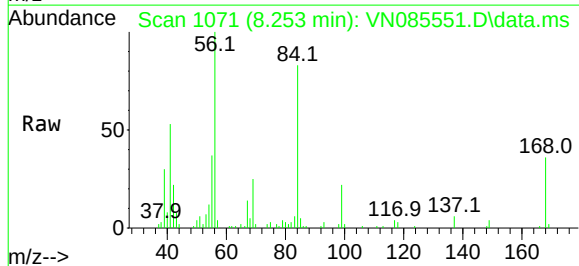
Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion:	56	Resp:	70853
Ion Ratio	Lower	Upper	
56	100		
69	24.6	22.2	33.4
84	81.1	66.4	99.6

Manual Integrations
APPROVEDReviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

#32

1,1,1-Trichloroethane

Concen: 19.380 ug/l

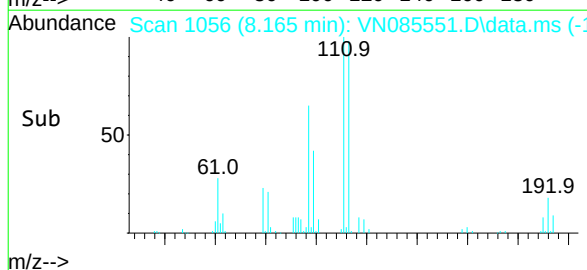
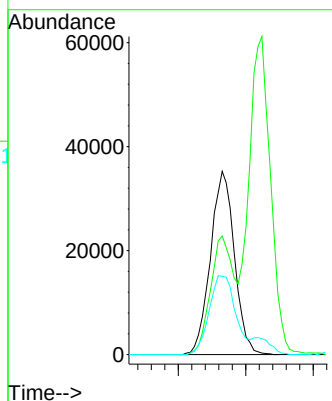
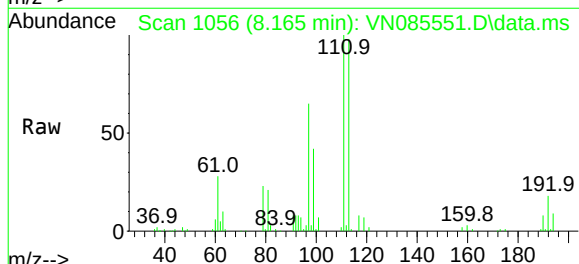
RT: 8.165 min Scan# 1056

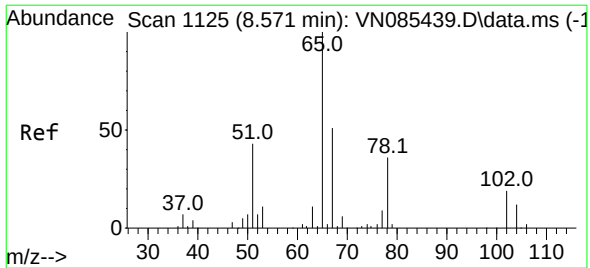
Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion:	97	Resp:	86797
Ion Ratio	Lower	Upper	
97	100		
99	63.5	49.8	74.6
61	47.9	41.4	62.2





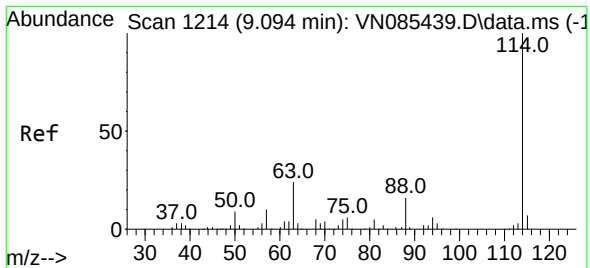
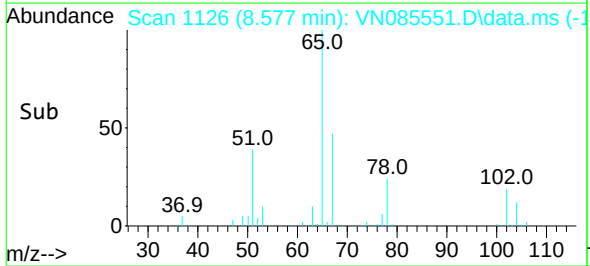
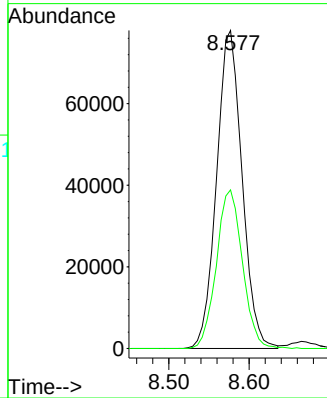
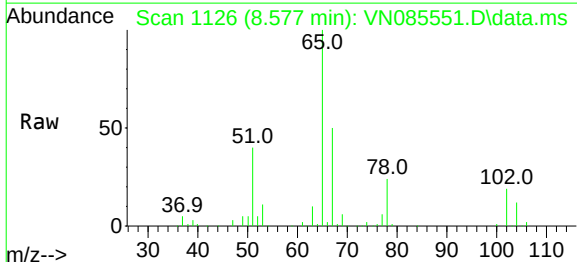
#33
1,2-Dichloroethane-d4
Concen: 50.795 ug/l
RT: 8.577 min Scan# 1125
Delta R.T. 0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion: 65 Resp: 171860
Ion Ratio Lower Upper
65 100
67 51.0 0.0 101.6

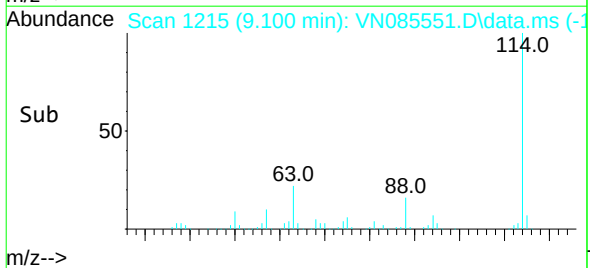
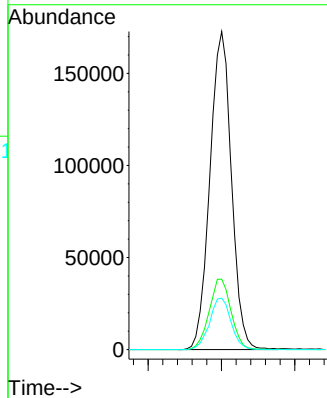
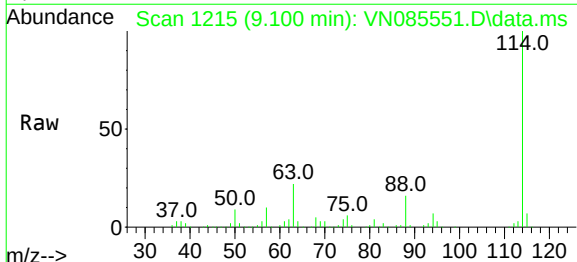
Manual Integrations
APPROVED

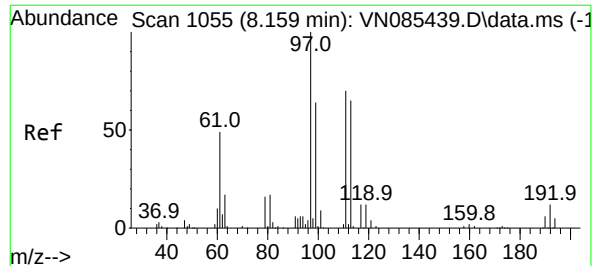
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion:114 Resp: 351459
Ion Ratio Lower Upper
114 100
63 22.1 0.0 47.6
88 16.2 0.0 32.6





#35

Dibromofluoromethane

Concen: 52.085 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 113 Resp: 126996

Ion Ratio Lower Upper

113 100

111 102.5 82.7 124.1

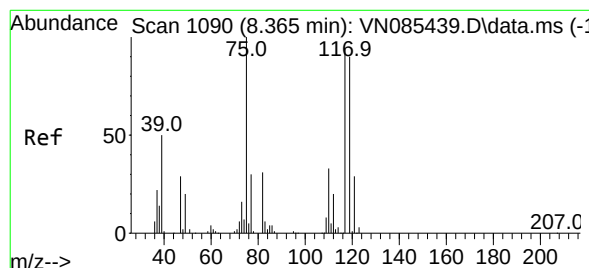
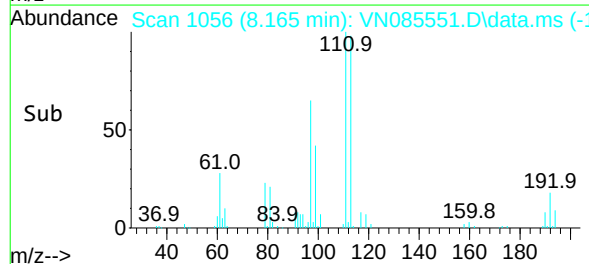
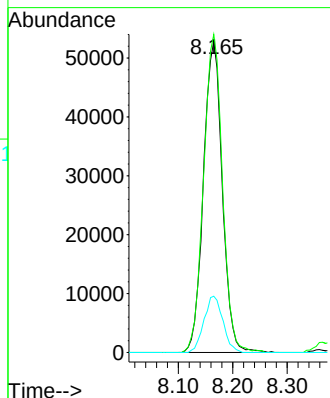
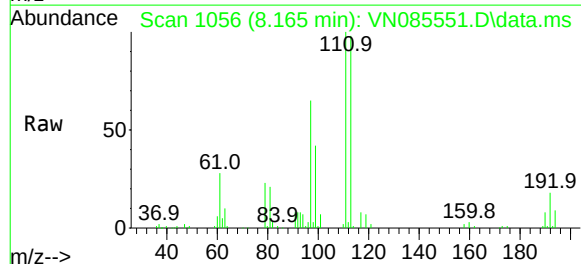
192 18.2 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/30/2025

Supervised By : Mahesh Dadoda 01/30/2025



#36

1,1-Dichloropropene

Concen: 18.287 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

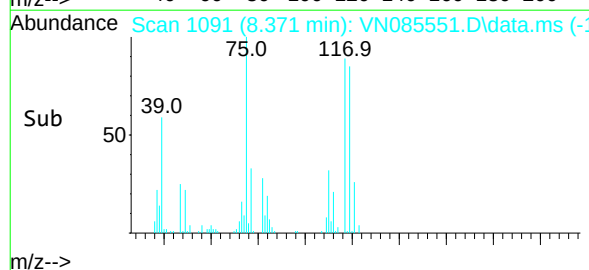
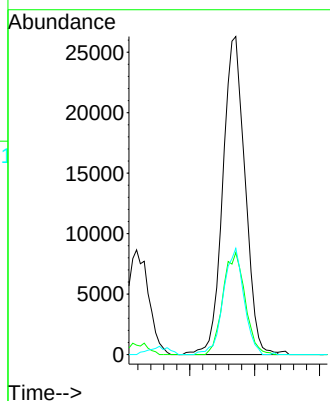
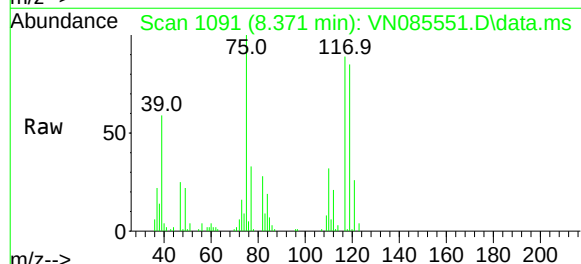
Tgt Ion: 75 Resp: 62579

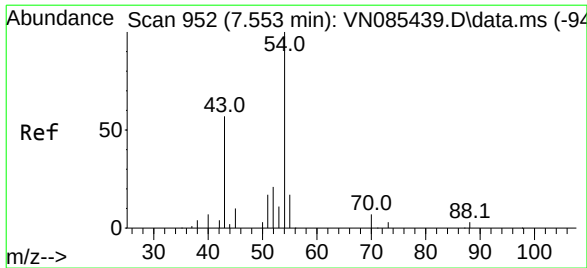
Ion Ratio Lower Upper

75 100

110 31.9 16.5 49.5

77 30.9 24.4 36.6





#37

Ethyl Acetate

Concen: 20.120 ug/l

RT: 7.553 min Scan# 952

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

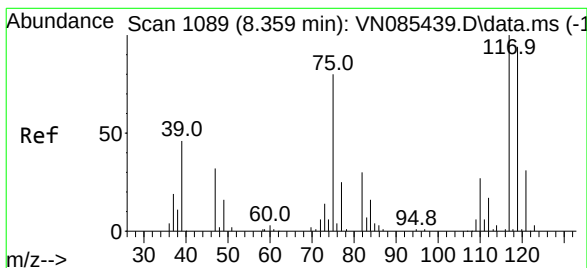
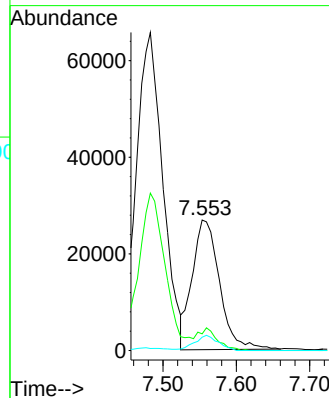
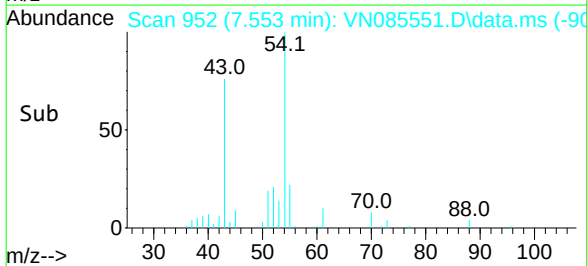
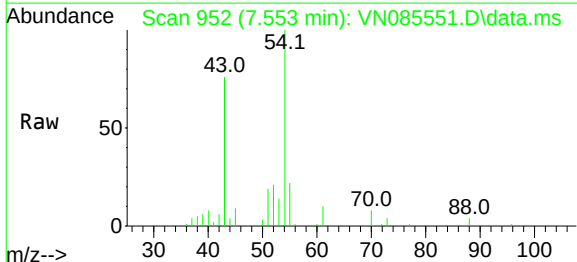
ClientSampleId :

VN0129WBS01

Tgt Ion:	43	Resp:	69495
Ion	Ratio	Lower	Upper
43	100		
61	12.0	10.9	16.3
70	10.1	7.5	11.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#38

Carbon Tetrachloride

Concen: 19.489 ug/l

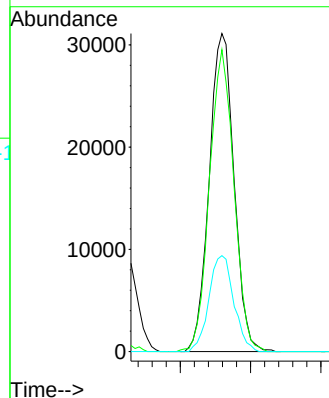
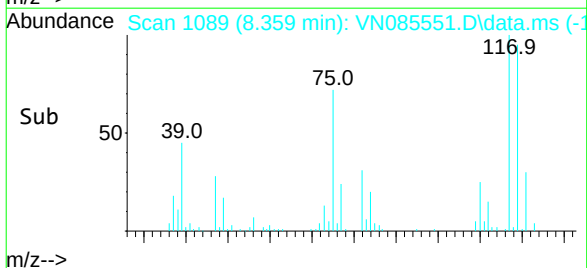
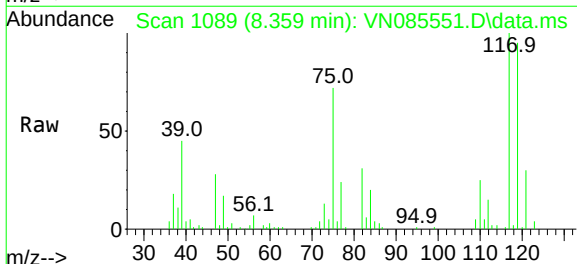
RT: 8.359 min Scan# 1089

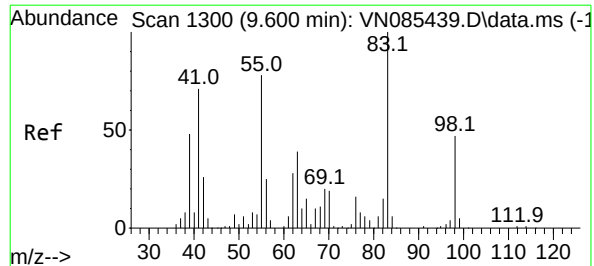
Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion:	117	Resp:	76352
Ion	Ratio	Lower	Upper
117	100		
119	94.9	75.4	113.2
121	30.2	24.6	37.0





#39

Methylcyclohexane

Concen: 17.132 ug/l

RT: 9.594 min Scan# 1299

Delta R.T. -0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

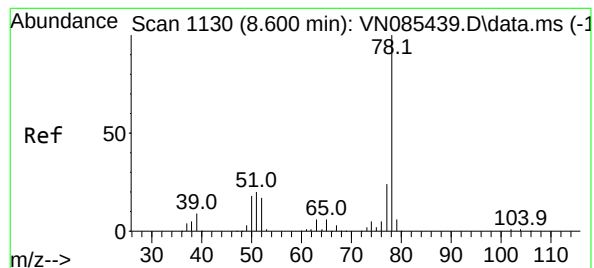
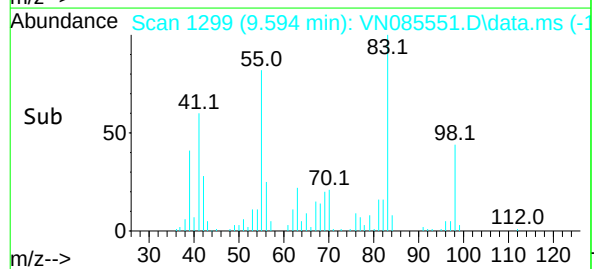
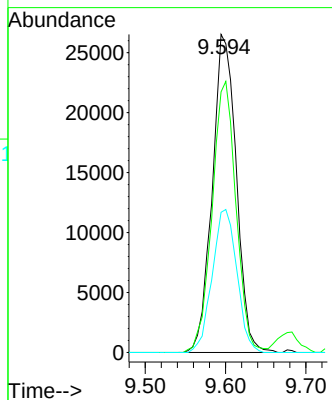
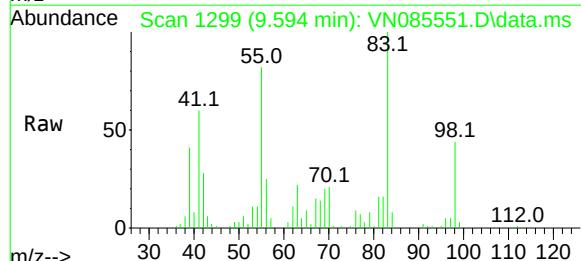
ClientSampleId :

VN0129WBS01

Tgt Ion:	83	Resp:	55093
Ion	Ratio	Lower	Upper
83	100		
55	81.9	62.6	94.0
98	44.1	37.7	56.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#40

Benzene

Concen: 19.413 ug/l

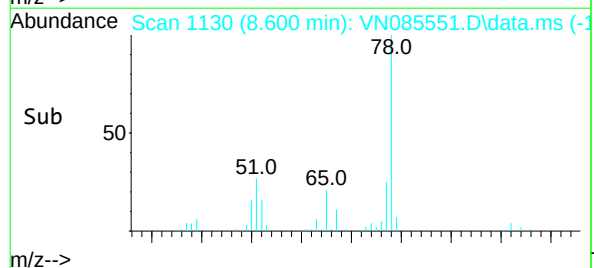
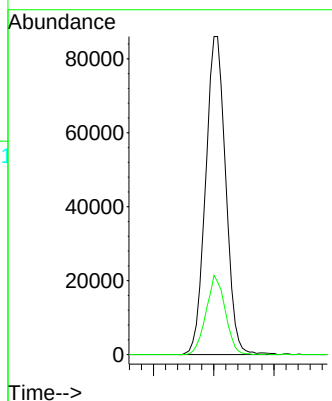
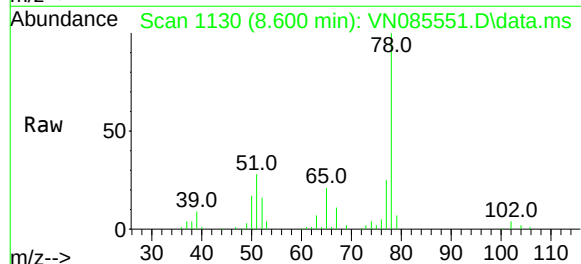
RT: 8.600 min Scan# 1130

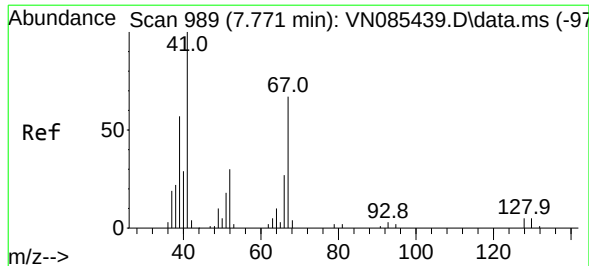
Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion:	78	Resp:	199602
Ion	Ratio	Lower	Upper
78	100		
77	24.9	19.0	28.6





#41

Methacrylonitrile

Concen: 19.967 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 41 Resp: 35881

Ion Ratio Lower Upper

41 100

39 59.3 46.0 69.0

67 72.9 57.4 86.2

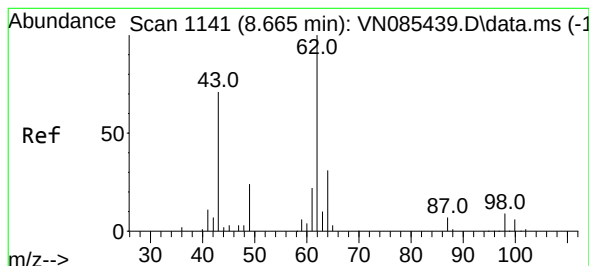
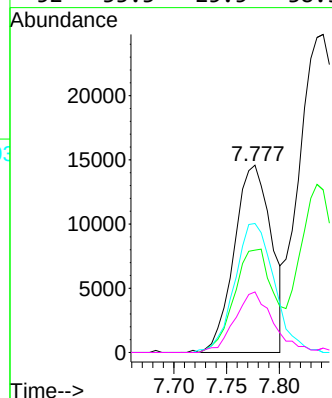
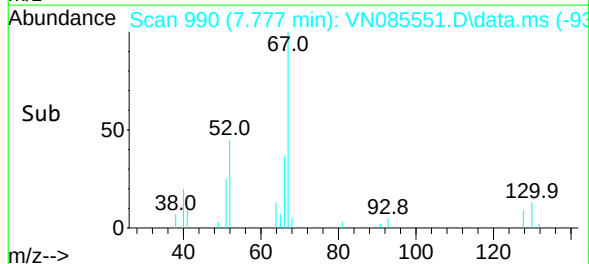
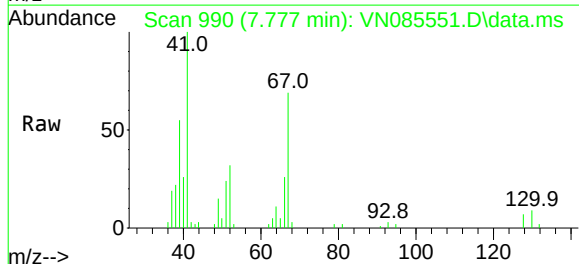
52 33.3 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#42

1,2-Dichloroethane

Concen: 20.002 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. 0.000 min

Lab File: VN085551.D

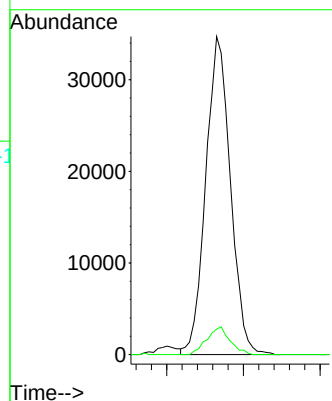
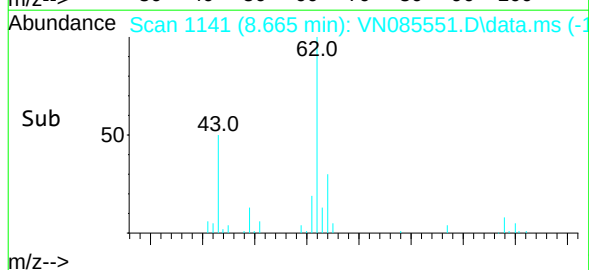
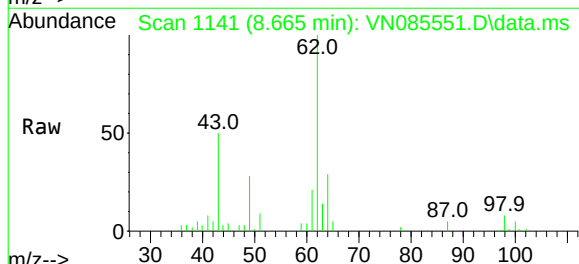
Acq: 29 Jan 2025 12:30

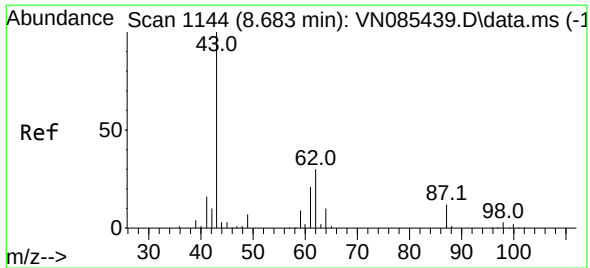
Tgt Ion: 62 Resp: 77457

Ion Ratio Lower Upper

62 100

98 8.2 0.0 17.0





#43

Isopropyl Acetate

Concen: 20.680 ug/l

RT: 8.689 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

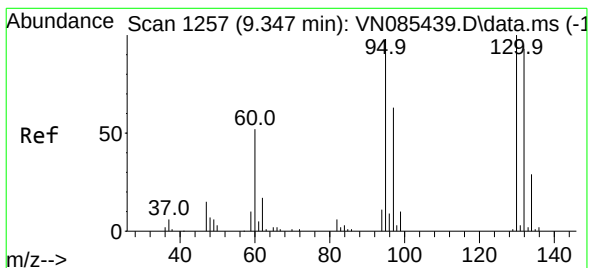
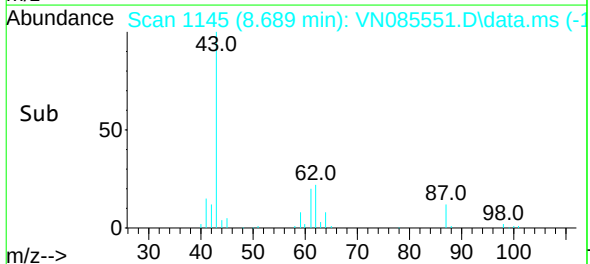
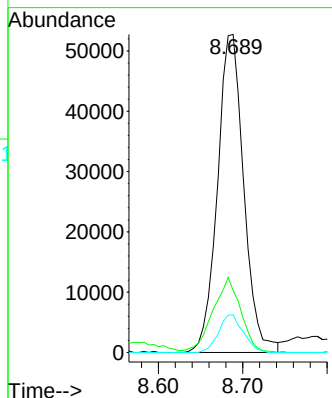
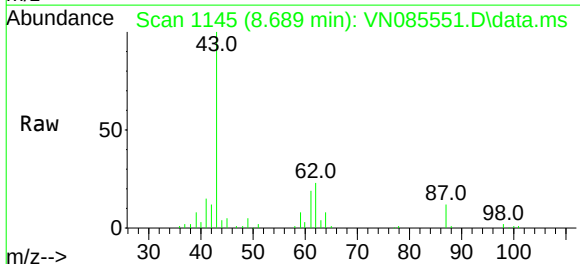
VN0129WBS01

Tgt Ion:	43	Resp:	114457
Ion	Ratio	Lower	Upper
43	100		
61	25.0	20.7	31.1
87	11.0	9.8	14.8

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#44

Trichloroethene

Concen: 18.886 ug/l

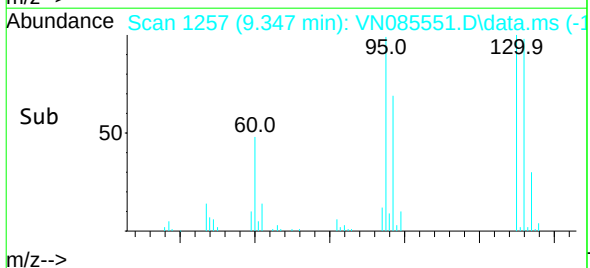
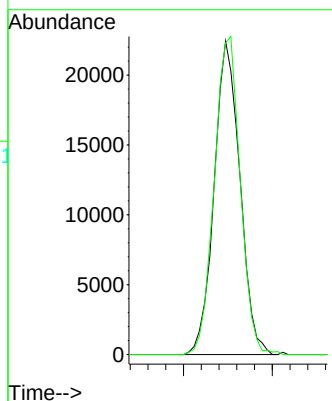
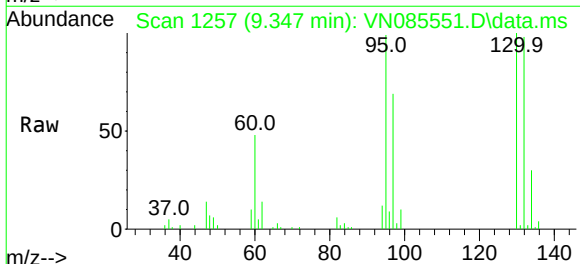
RT: 9.347 min Scan# 1257

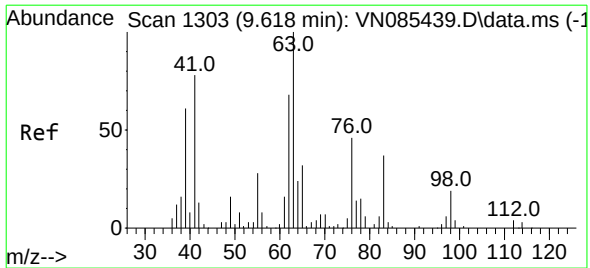
Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion:	130	Resp:	45202
Ion	Ratio	Lower	Upper
130	100		
95	99.4	0.0	195.8





#45

1,2-Dichloropropane

Concen: 19.591 ug/l

RT: 9.624 min Scan# 1304

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 63 Resp: 51454

Ion Ratio Lower Upper

63 100

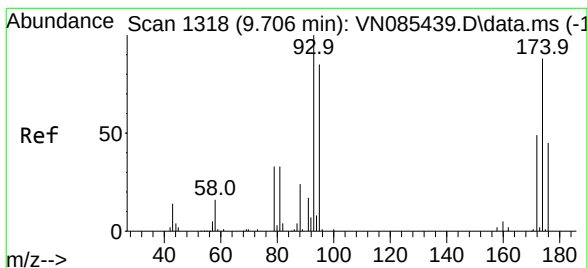
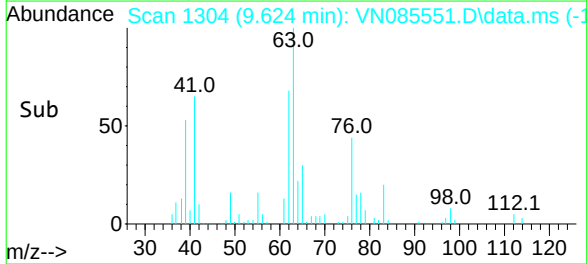
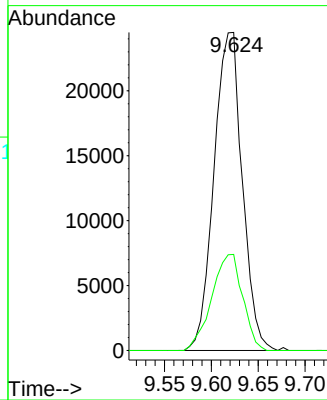
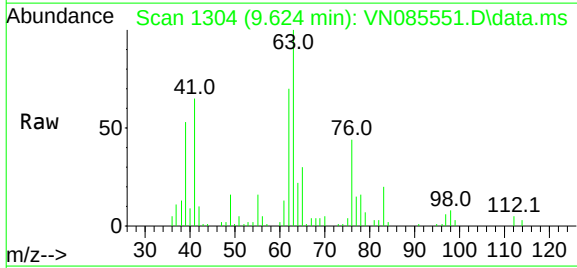
65 30.2 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#46

Dibromomethane

Concen: 18.941 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

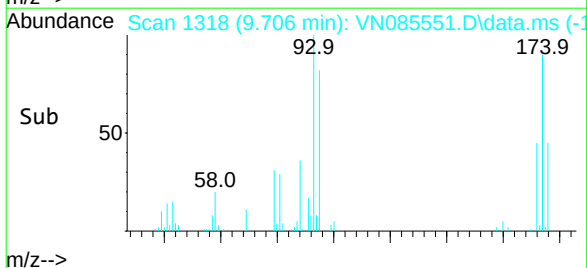
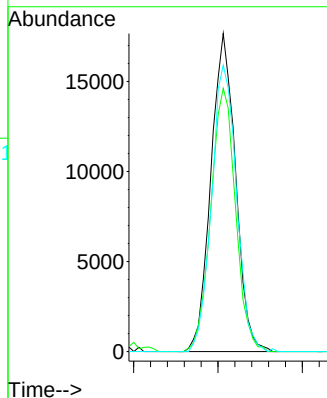
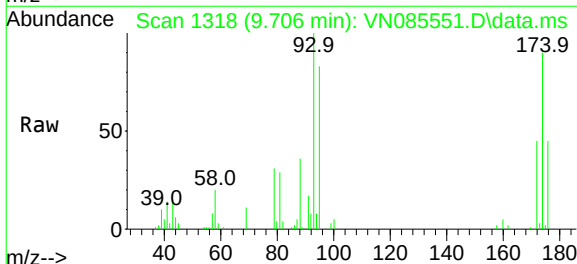
Tgt Ion: 93 Resp: 35894

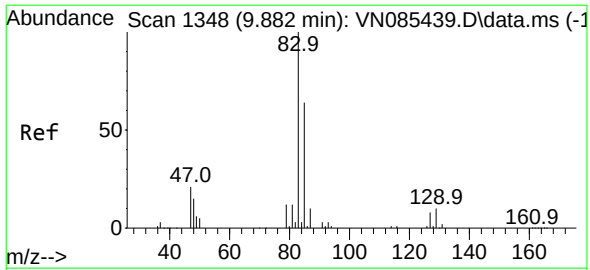
Ion Ratio Lower Upper

93 100

95 82.9 64.7 97.1

174 91.0 69.0 103.4





#47

Bromodichloromethane

Concen: 20.639 ug/l

RT: 9.883 min Scan# 13

Delta R.T. 0.001 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

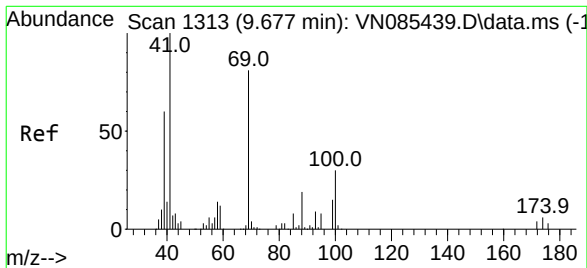
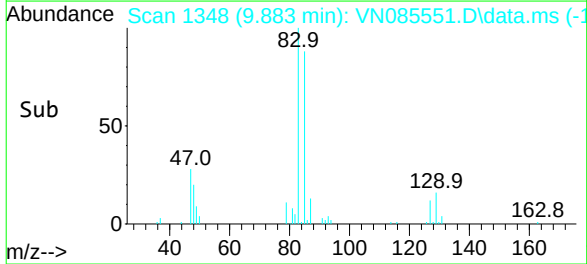
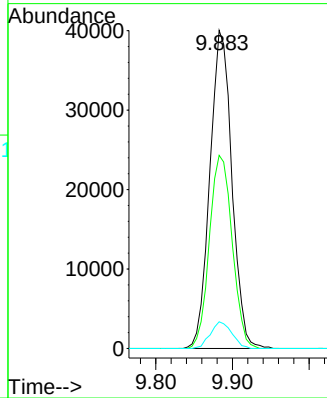
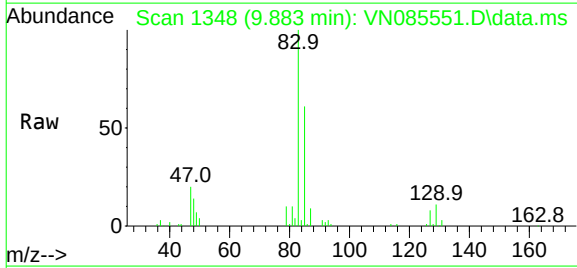
ClientSampleId :

VN0129WBS01

Tgt Ion:	83	Resp:	79684
Ion Ratio	Lower	Upper	
83	100		
85	60.7	51.2	76.8
127	8.4	6.5	9.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#48

Methyl methacrylate

Concen: 19.917 ug/l

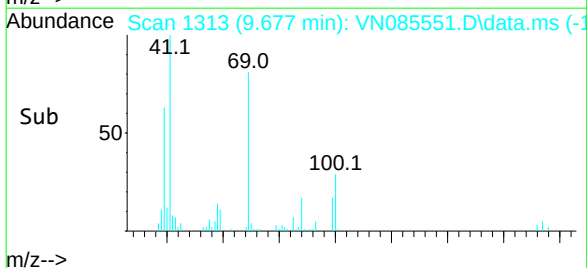
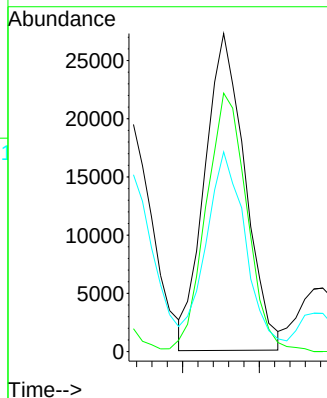
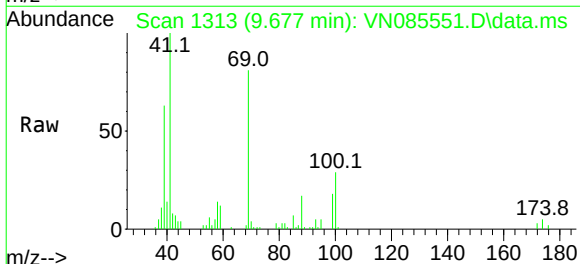
RT: 9.677 min Scan# 1313

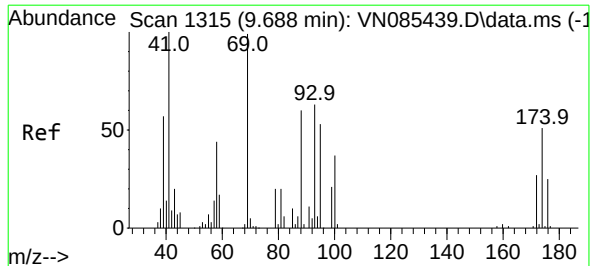
Delta R.T. -0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

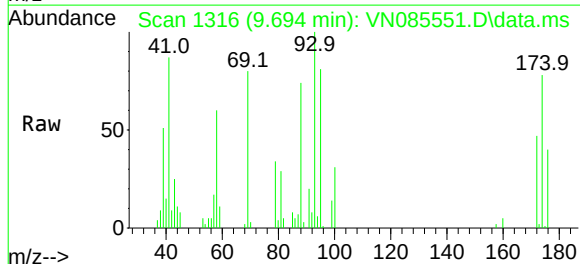
Tgt Ion:	41	Resp:	49608
Ion Ratio	Lower	Upper	
41	100		
69	82.9	64.7	97.1
39	63.1	49.0	73.6





#49
1,4-Dioxane
Concen: 456.023 ug/l
RT: 9.694 min Scan# 1315
Delta R.T. 0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

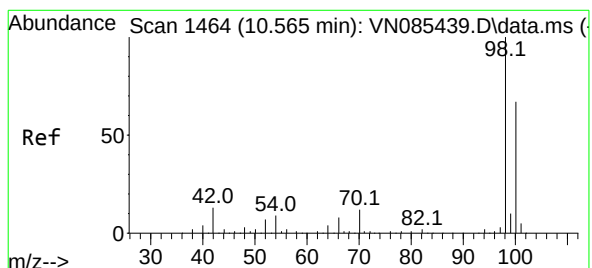
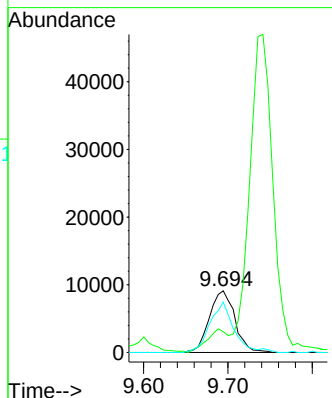
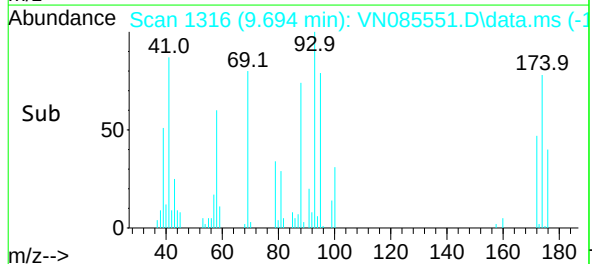
Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01



Tgt Ion: 88 Resp: 19127
Ion Ratio Lower Upper
88 100
43 30.5 26.6 39.8
58 78.0 59.5 89.3

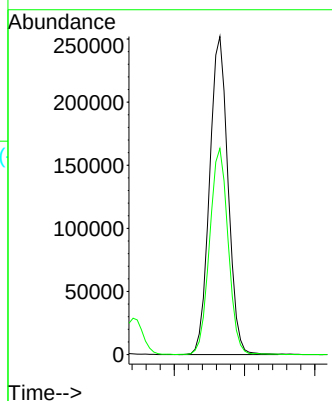
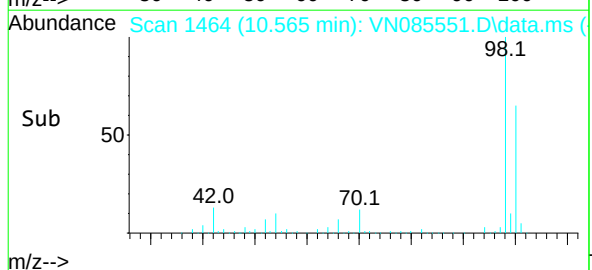
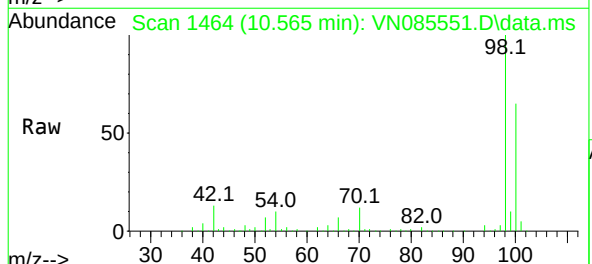
Manual Integrations
APPROVED

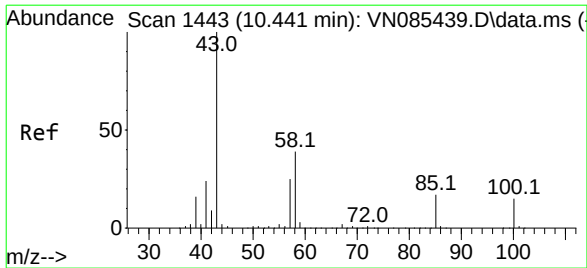
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#50
Toluene-d8
Concen: 52.996 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion: 98 Resp: 459113
Ion Ratio Lower Upper
98 100
100 65.2 52.2 78.4





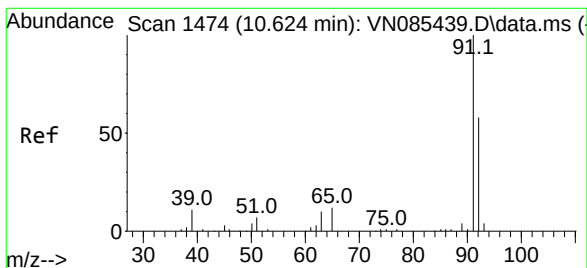
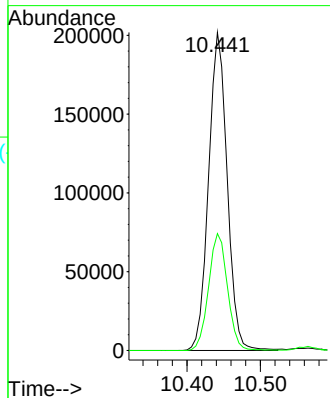
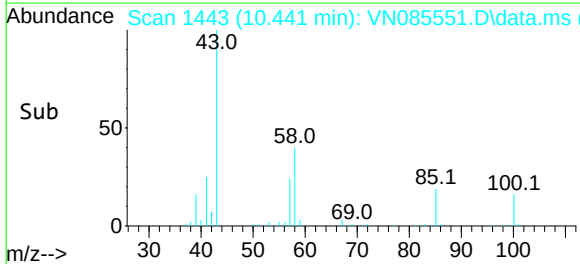
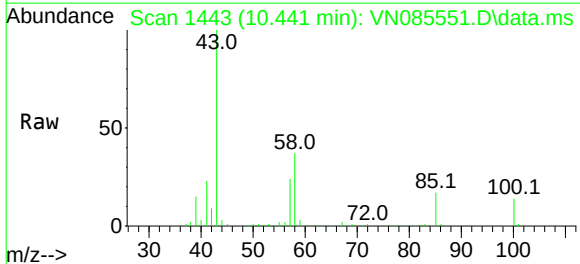
#51
4-Methyl-2-Pentanone
Concen: 110.742 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion: 43 Resp: 355666
Ion Ratio Lower Upper
43 100
58 37.5 30.5 45.7

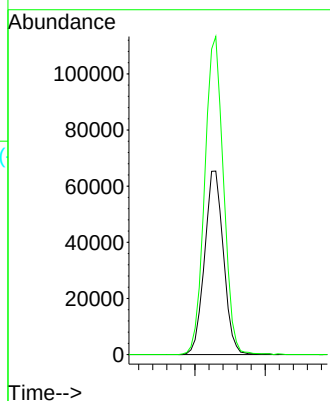
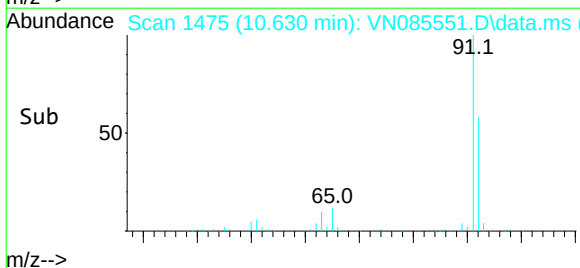
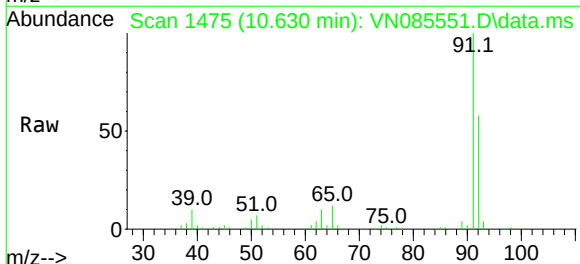
Manual Integrations
APPROVED

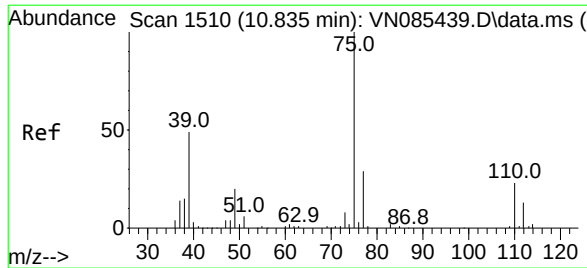
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#52
Toluene
Concen: 20.475 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.006 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion: 92 Resp: 121981
Ion Ratio Lower Upper
92 100
91 172.1 139.2 208.8





#53

t-1,3-Dichloropropene

Concen: 20.222 ug/l

RT: 10.836 min Scan# 1510

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 75 Resp: 73781

Ion Ratio Lower Upper

75 100

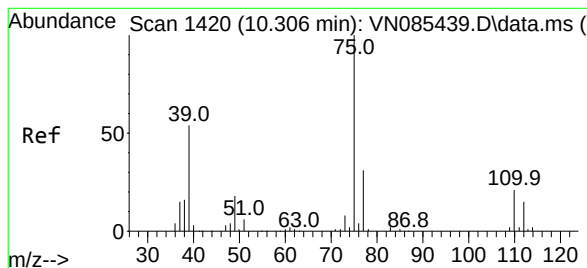
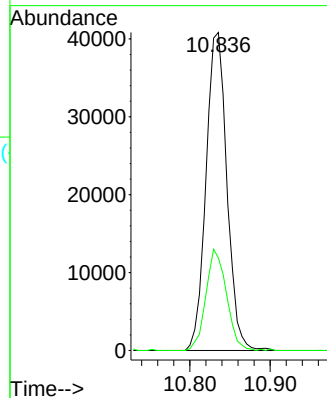
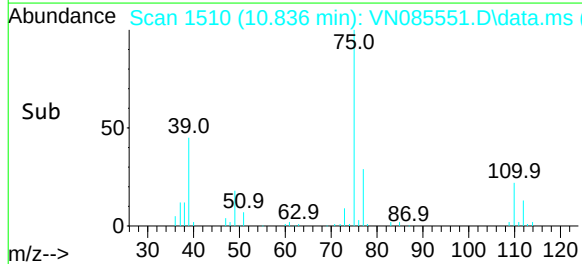
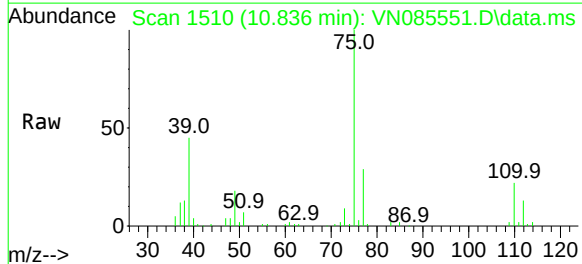
77 29.1 23.5 35.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#54

cis-1,3-Dichloropropene

Concen: 19.648 ug/l

RT: 10.312 min Scan# 1421

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

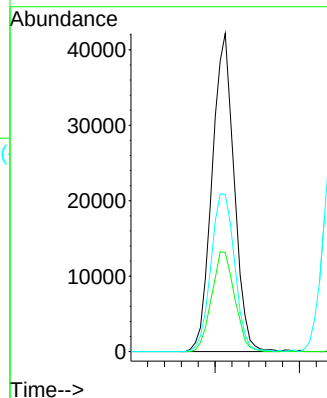
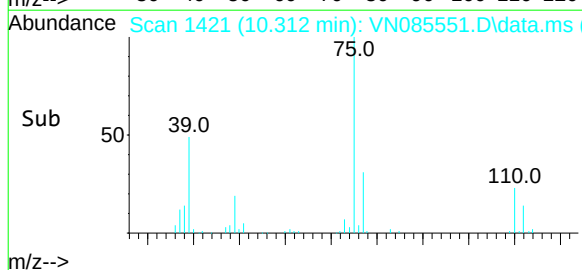
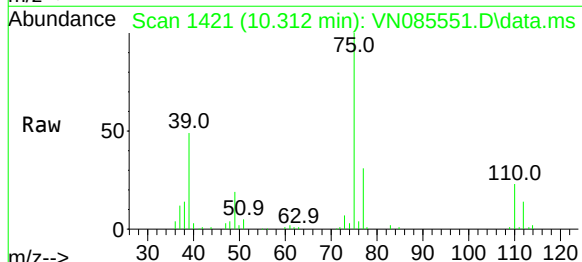
Tgt Ion: 75 Resp: 76573

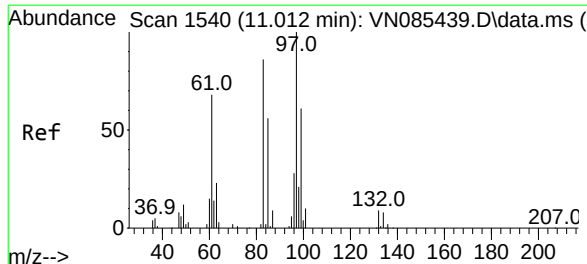
Ion Ratio Lower Upper

75 100

77 31.1 25.0 37.4

39 49.4 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 20.602 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 97 Resp: 48573

Ion Ratio Lower Upper

97 100

83 90.6 69.0 103.6

85 57.6 44.6 66.8

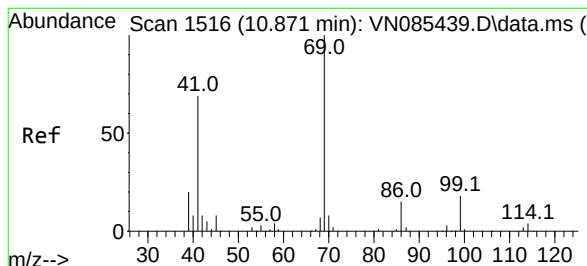
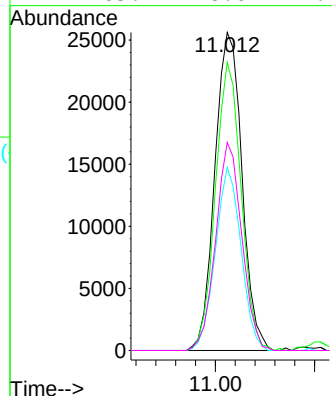
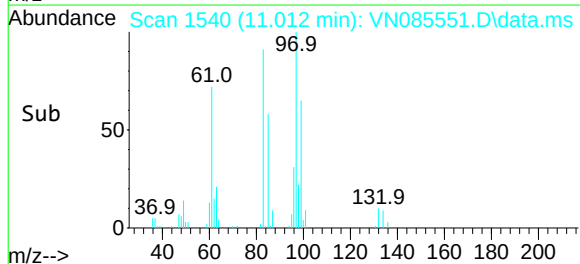
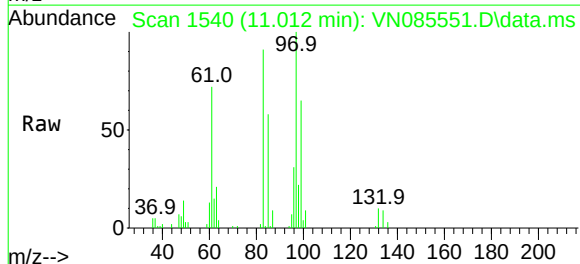
99 65.4 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#56

Ethyl methacrylate

Concen: 18.136 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

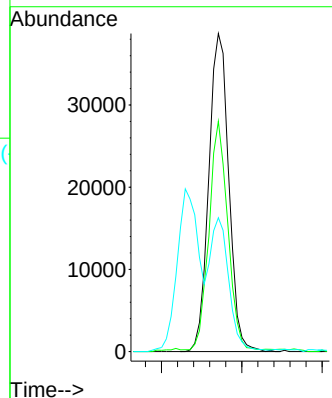
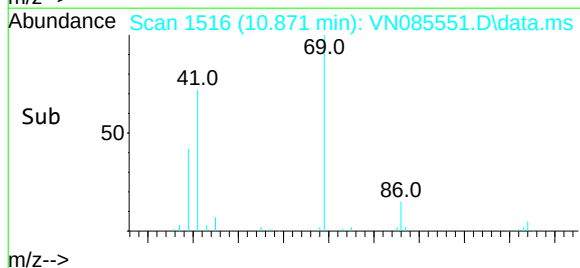
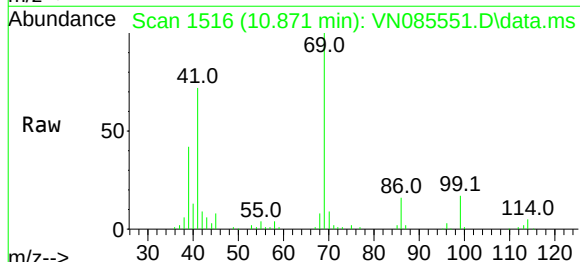
Tgt Ion: 69 Resp: 66949

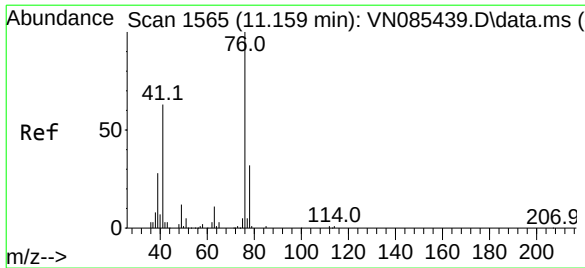
Ion Ratio Lower Upper

69 100

41 67.0 54.6 82.0

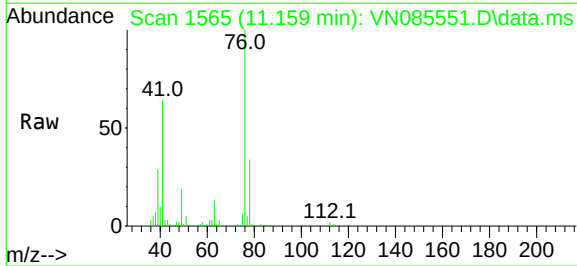
39 39.3 32.4 48.6





#57
1,3-Dichloropropane
Concen: 20.323 ug/l
RT: 11.159 min Scan# 1565
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

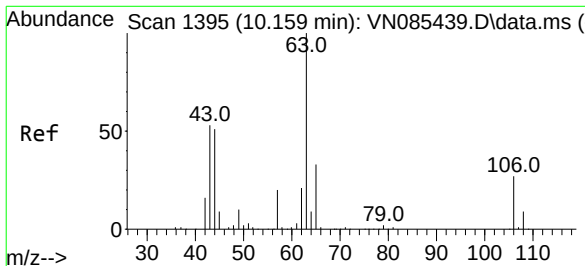
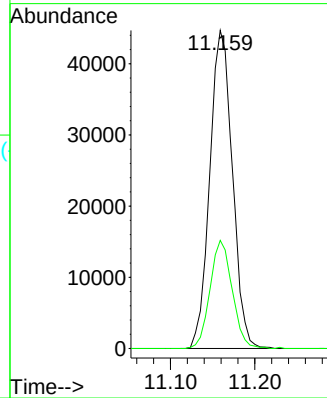
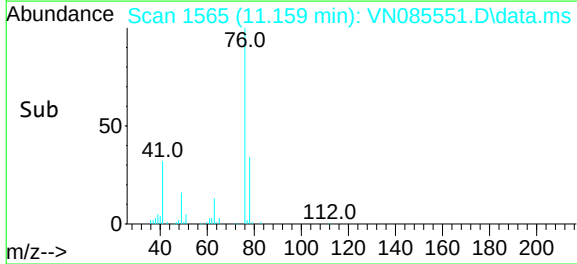
Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01



Tgt Ion: 76 Resp: 83319
Ion Ratio Lower Upper
76 100
78 33.3 25.6 38.4

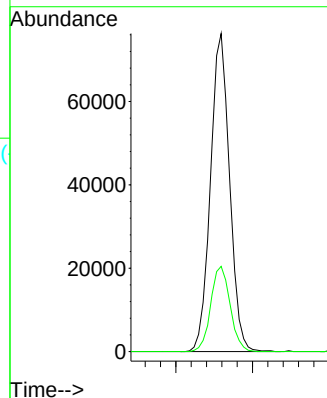
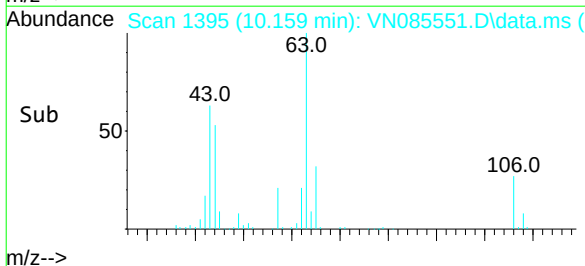
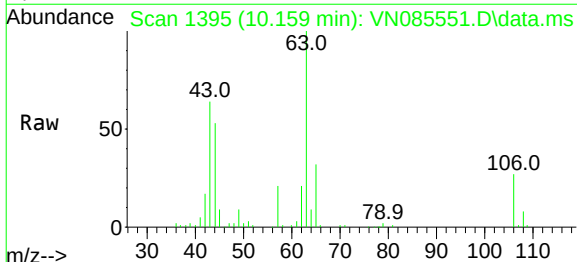
Manual Integrations
APPROVED

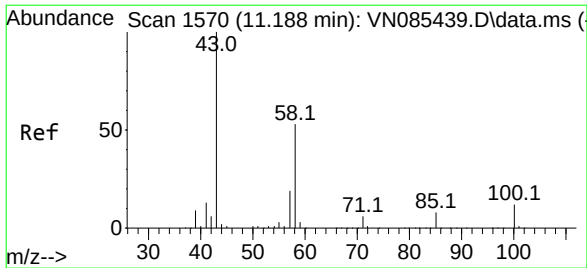
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#58
2-Chloroethyl Vinyl ether
Concen: 88.125 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion: 63 Resp: 131853
Ion Ratio Lower Upper
63 100
106 27.2 21.6 32.4





#59

2-Hexanone

Concen: 114.068 ug/l

RT: 11.194 min Scan# 1570

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 43 Resp: 257774

Ion Ratio Lower Upper

43 100

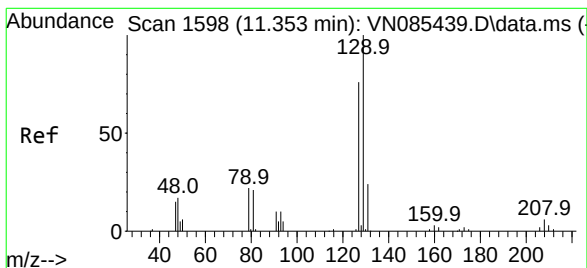
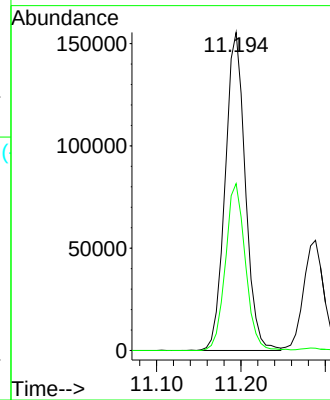
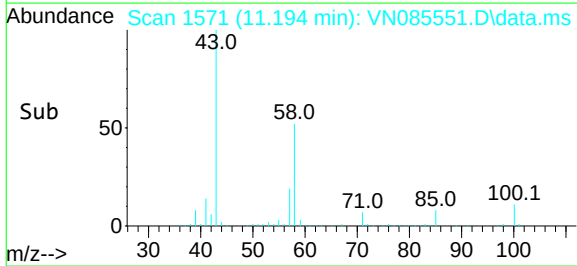
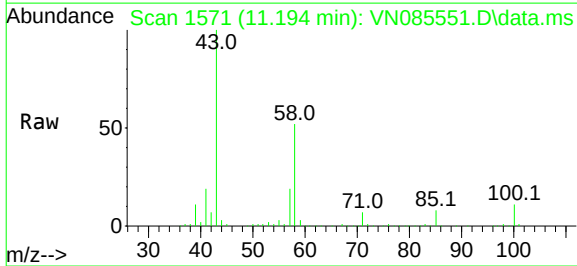
58 51.9 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#60

Dibromochloromethane

Concen: 20.364 ug/l

RT: 11.353 min Scan# 1598

Delta R.T. 0.000 min

Lab File: VN085551.D

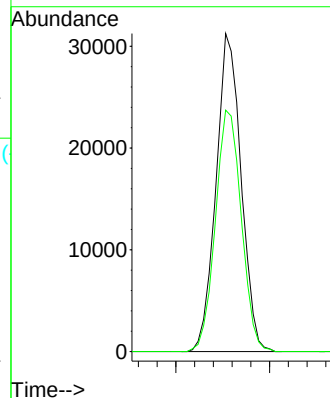
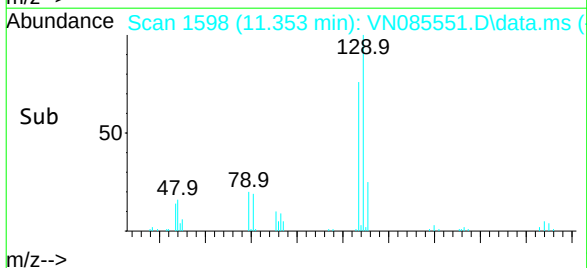
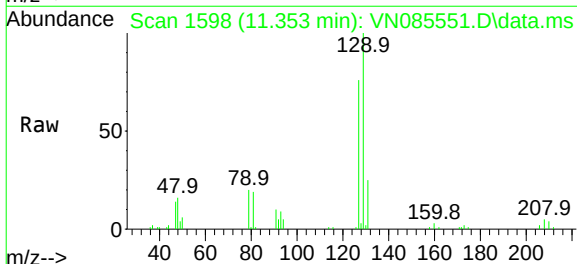
Acq: 29 Jan 2025 12:30

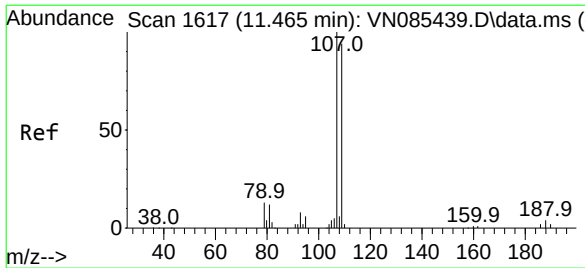
Tgt Ion:129 Resp: 57964

Ion Ratio Lower Upper

129 100

127 78.5 38.6 115.8





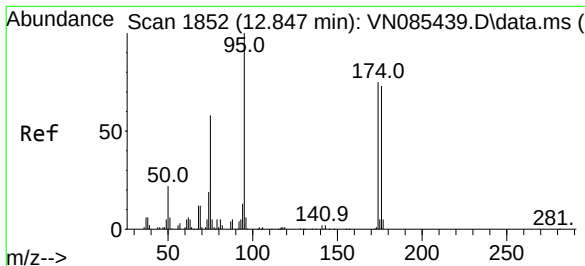
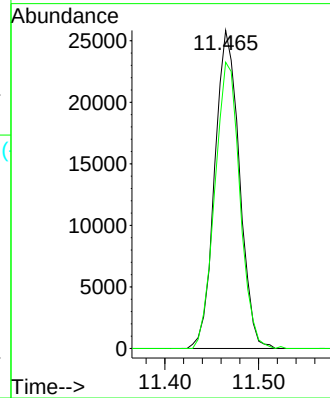
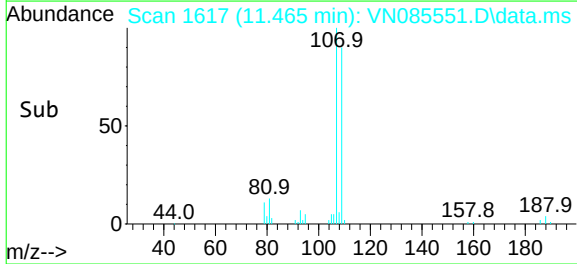
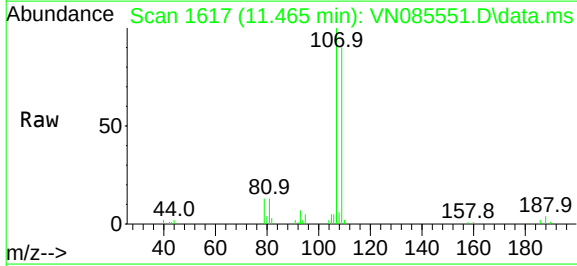
#61
1,2-Dibromoethane
Concen: 20.104 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion: 107 Resp: 47182
Ion Ratio Lower Upper
107 100
109 91.4 75.9 113.9

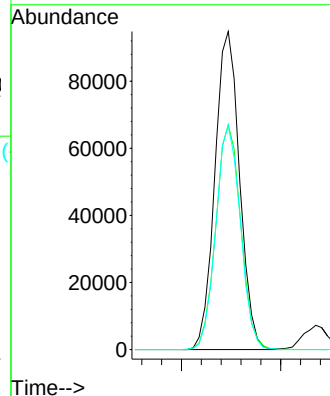
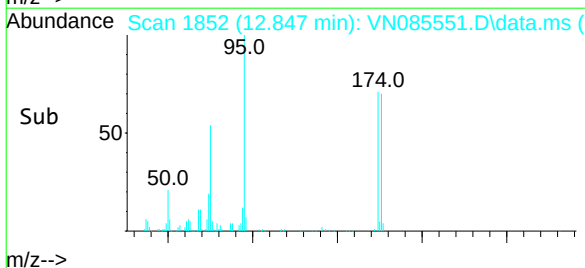
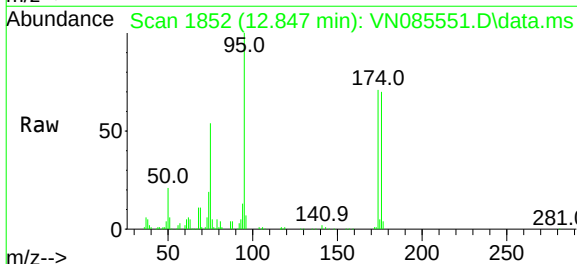
Manual Integrations
APPROVED

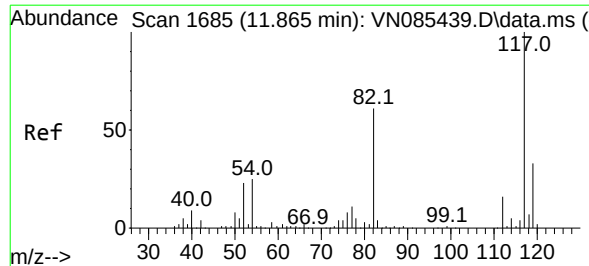
Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025



#62
4-Bromofluorobenzene
Concen: 55.254 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion: 95 Resp: 163742
Ion Ratio Lower Upper
95 100
174 71.4 0.0 145.0
176 70.0 0.0 142.4





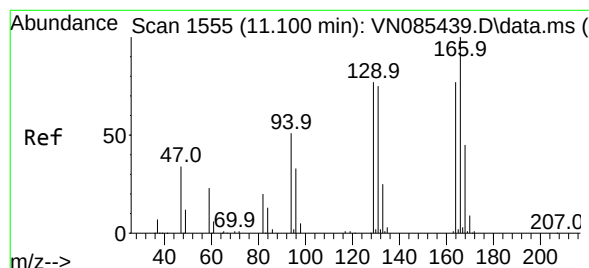
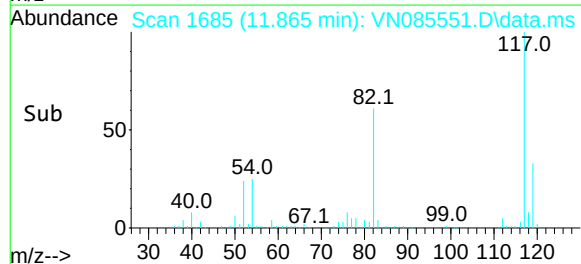
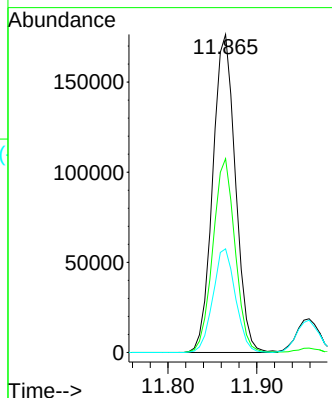
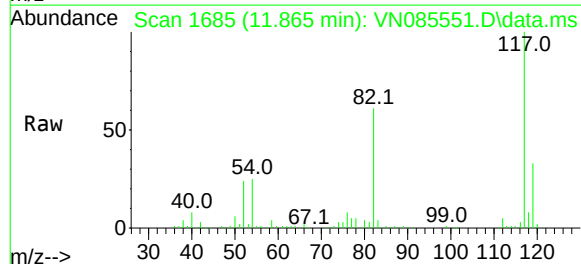
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion:117 Resp: 313028
Ion Ratio Lower Upper
117 100
82 60.9 48.6 72.8
119 32.6 26.6 39.8

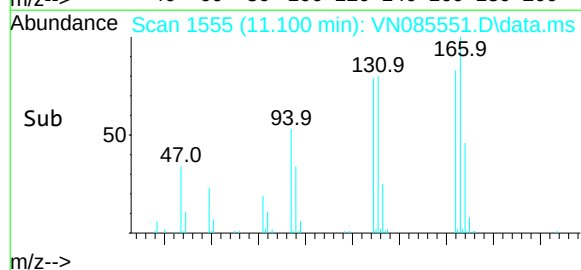
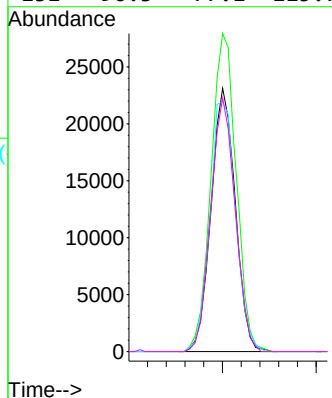
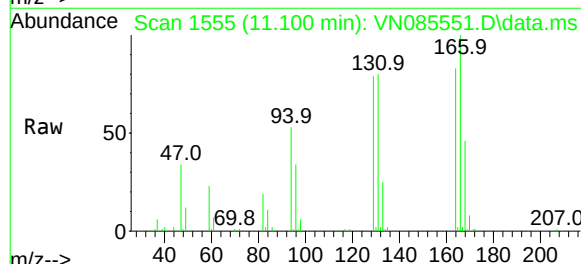
Manual Integrations
APPROVED

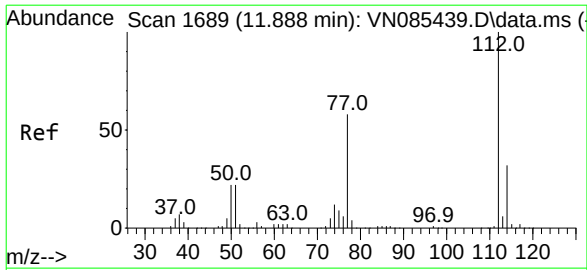
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#64
Tetrachloroethene
Concen: 19.355 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion:164 Resp: 41303
Ion Ratio Lower Upper
164 100
166 120.8 103.4 155.2
129 94.9 79.2 118.8
131 96.3 77.1 115.7





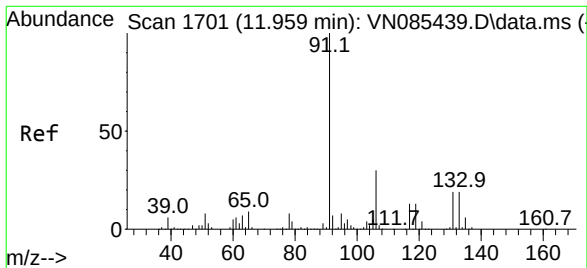
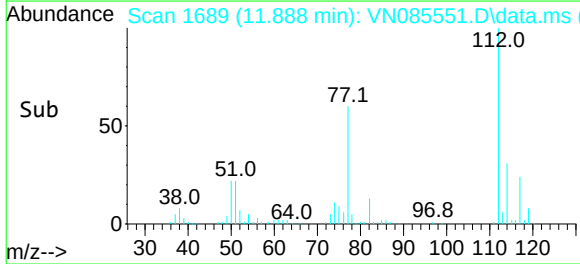
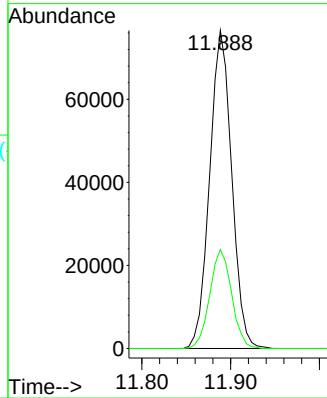
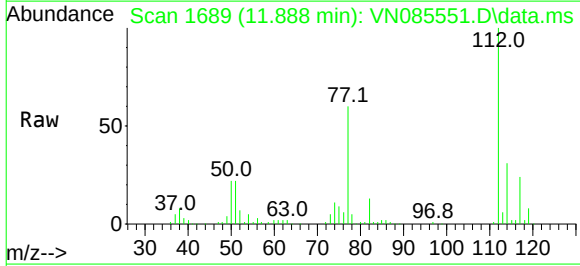
#65
Chlorobenzene
Concen: 19.282 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion:112 Resp: 132226
Ion Ratio Lower Upper
112 100
114 31.1 25.3 37.9

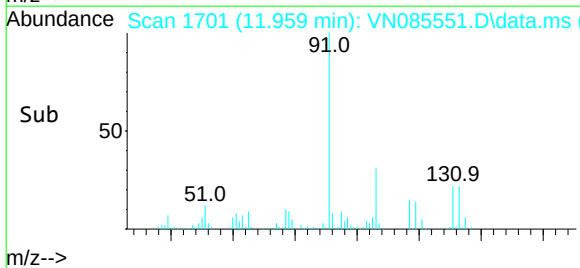
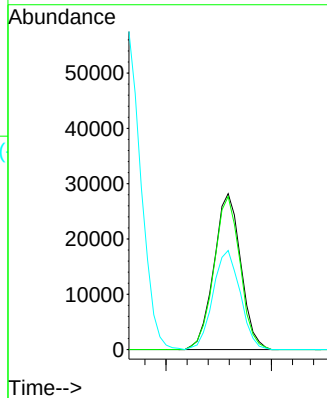
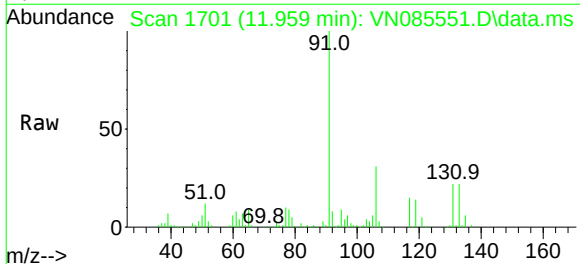
Manual Integrations
APPROVED

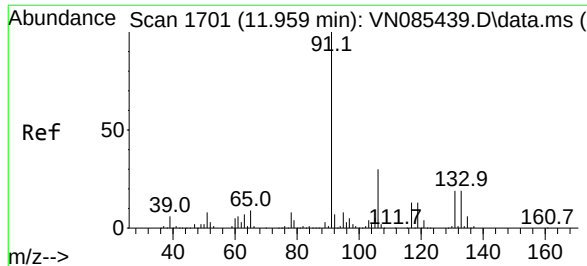
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#66
1,1,1,2-Tetrachloroethane
Concen: 19.907 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion:131 Resp: 50102
Ion Ratio Lower Upper
131 100
133 95.0 47.4 142.3
119 64.1 33.1 99.5





#67

Ethyl Benzene

Concen: 19.113 ug/l

RT: 11.959 min Scan# 1701

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 91 Resp: 213467

Ion Ratio Lower Upper

91 100

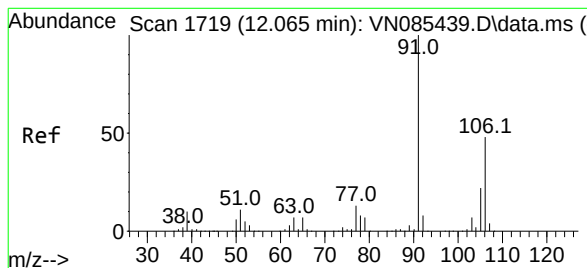
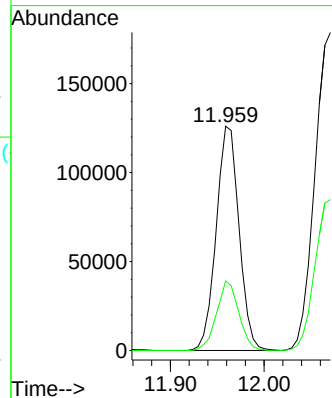
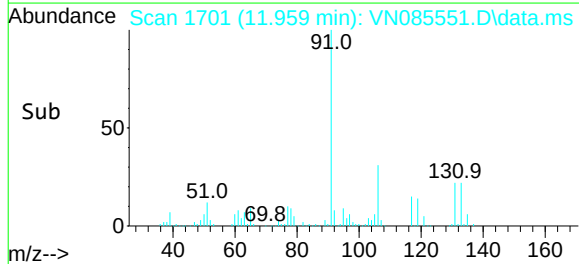
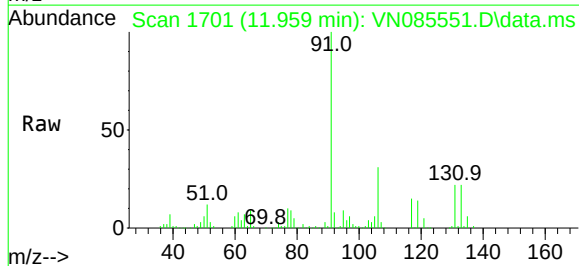
106 31.0 23.8 35.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#68

m/p-Xylenes

Concen: 39.945 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085551.D

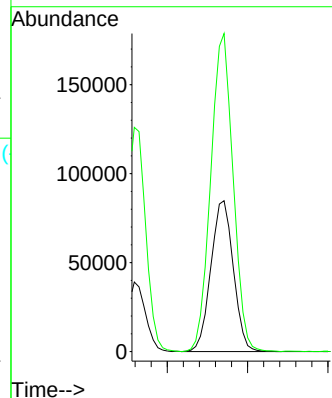
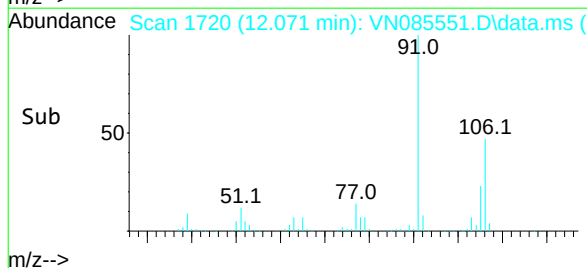
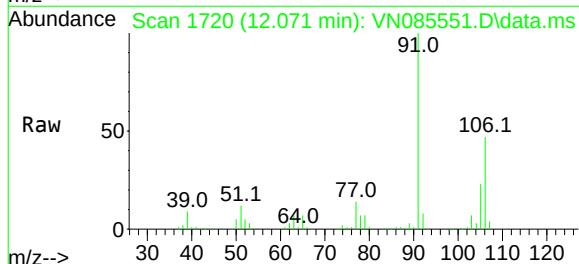
Acq: 29 Jan 2025 12:30

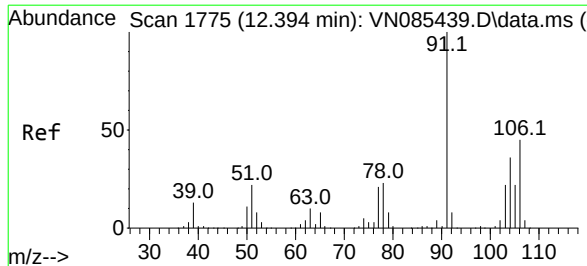
Tgt Ion:106 Resp: 164888

Ion Ratio Lower Upper

106 100

91 209.3 167.7 251.5





#69

o-Xylene

Concen: 19.288 ug/l

RT: 12.394 min Scan# 1775

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion:106 Resp: 76089

Ion Ratio Lower Upper

106 100

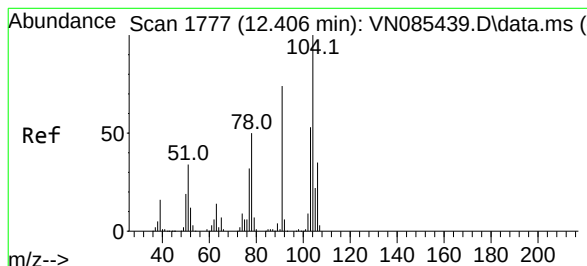
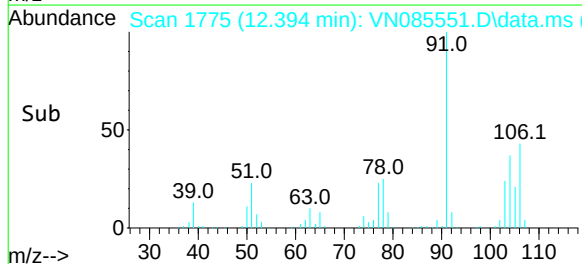
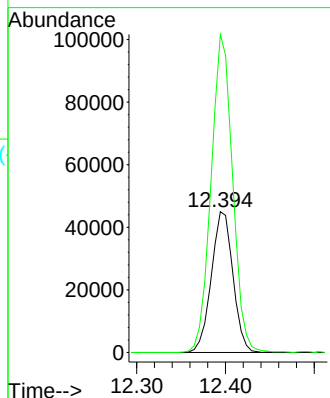
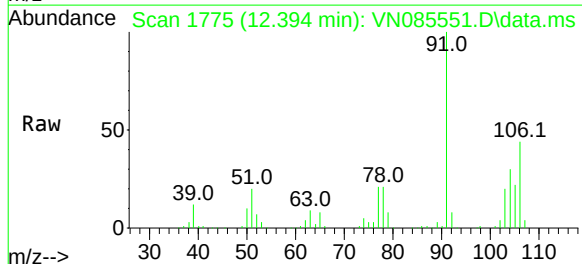
91 225.3 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#70

Styrene

Concen: 20.163 ug/l

RT: 12.406 min Scan# 1777

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

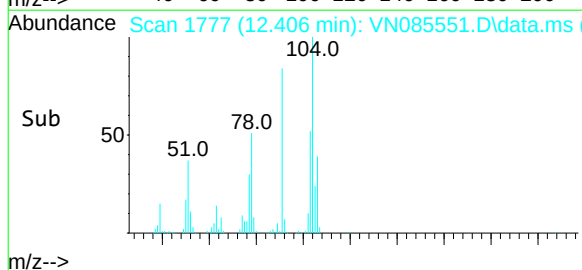
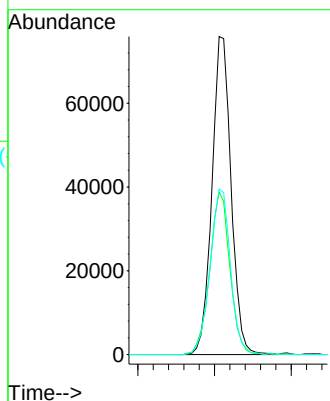
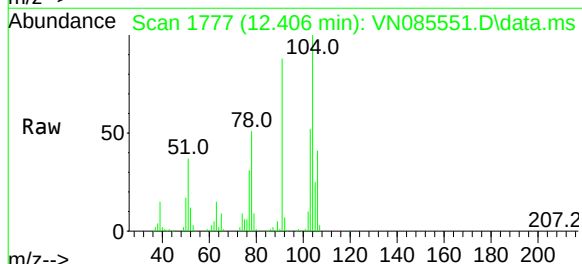
Tgt Ion:104 Resp: 131635

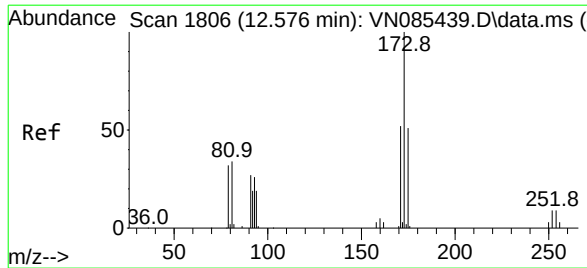
Ion Ratio Lower Upper

104 100

78 53.6 42.5 63.7

103 55.4 43.8 65.8





#71

Bromoform

Concen: 21.610 ug/l

RT: 12.577 min Scan# 1806

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

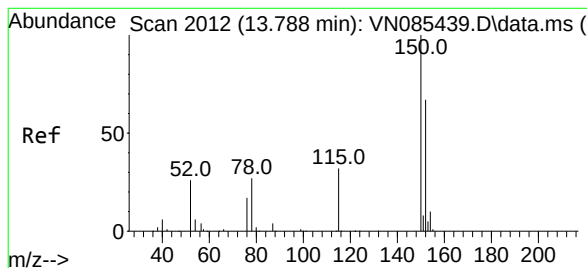
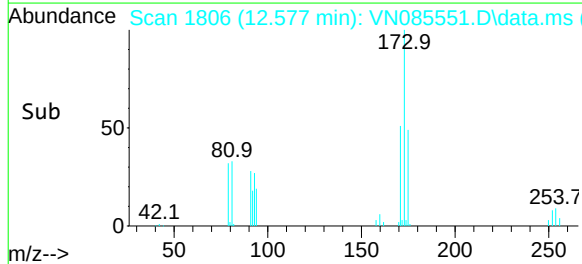
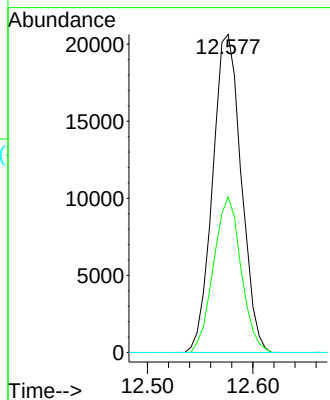
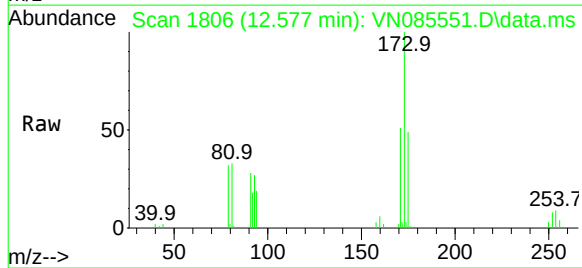
ClientSampleId :

VN0129WBS01

Tgt Ion:	173	Resp:	38916
Ion Ratio	Lower	Upper	
173	100		
175	47.1	24.4	73.2
254	0.0	0.0	0.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

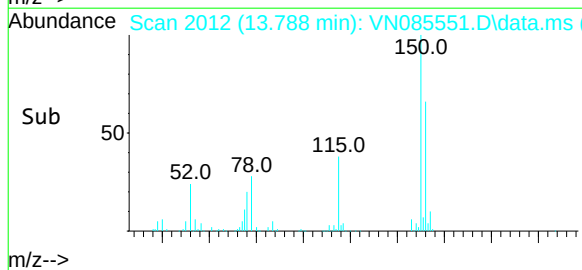
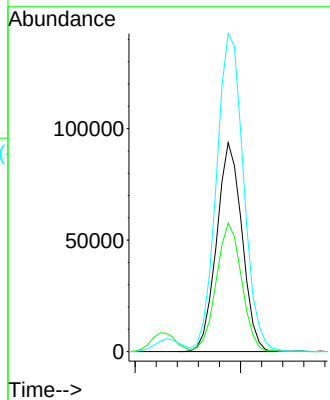
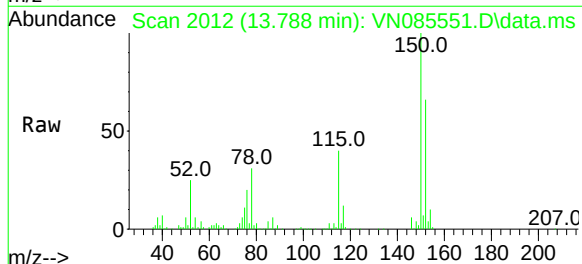
RT: 13.788 min Scan# 2012

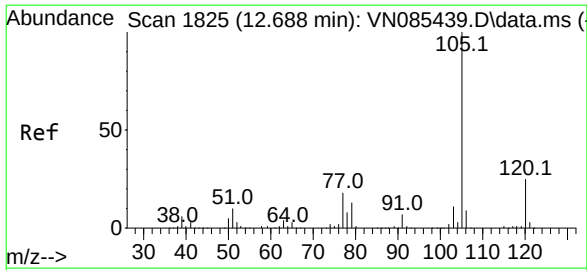
Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion:	152	Resp:	156507
Ion Ratio	Lower	Upper	
152	100		
115	61.7	31.1	93.3
150	163.2	0.0	343.6





#73

Isopropylbenzene

Concen: 18.507 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 105 Resp: 195492

Ion Ratio Lower Upper

105 100

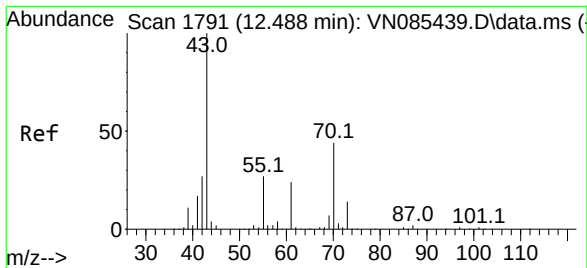
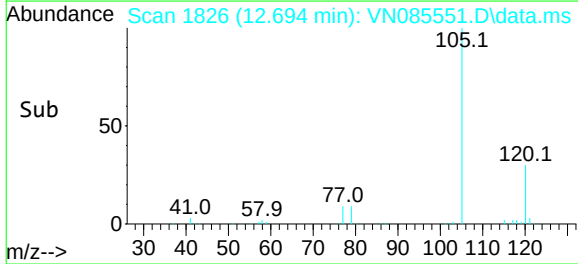
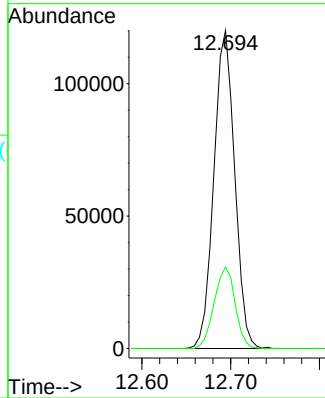
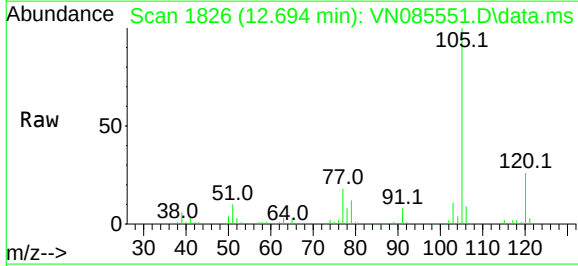
120 25.7 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#74

N-ethyl acetate

Concen: 18.877 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion: 43 Resp: 89626

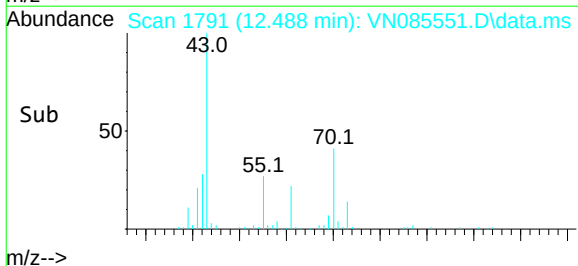
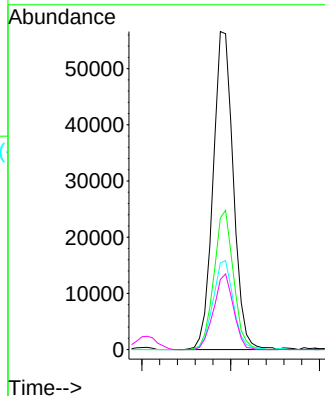
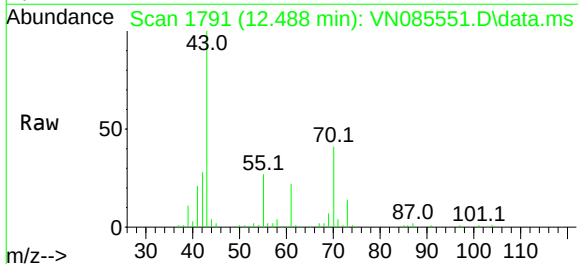
Ion Ratio Lower Upper

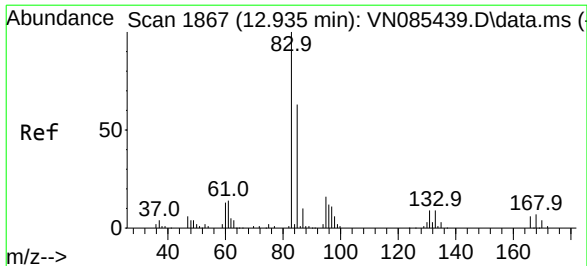
43 100

70 42.2 34.0 51.0

55 28.2 21.4 32.2

61 23.1 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 19.551 ug/l

RT: 12.935 min Scan# 1867

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

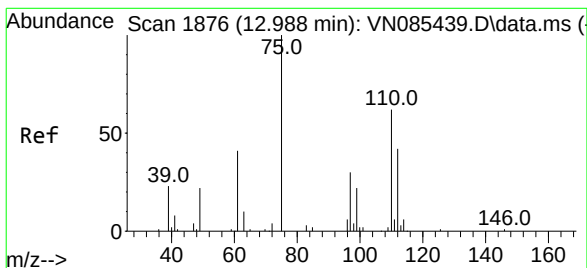
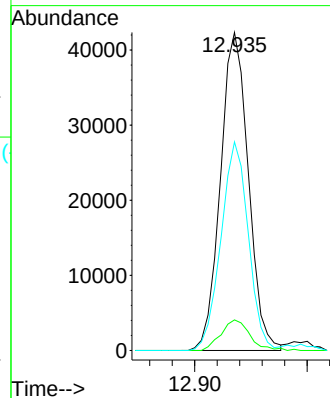
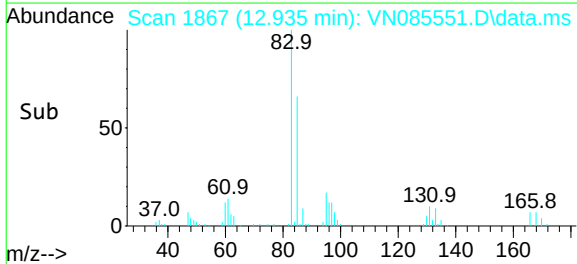
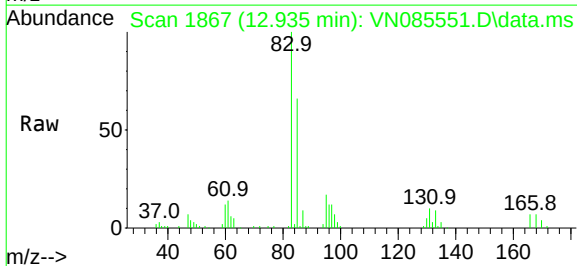
ClientSampleId :

VN0129WBS01

Tgt Ion:	83	Resp:	72950
Ion	Ratio	Lower	Upper
83	100		
131	10.0	4.8	14.4
85	64.4	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#76

1,2,3-Trichloropropane

Concen: 21.554 ug/l m

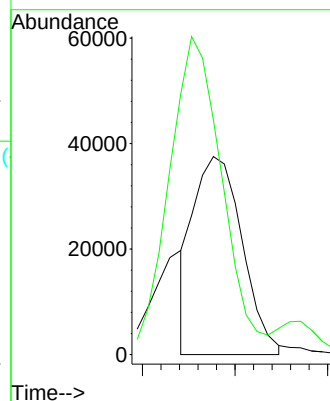
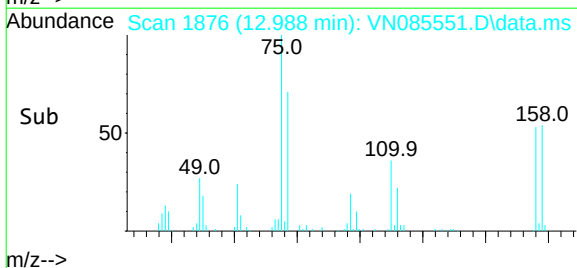
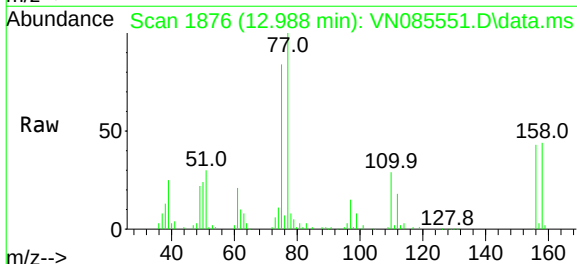
RT: 12.988 min Scan# 1876

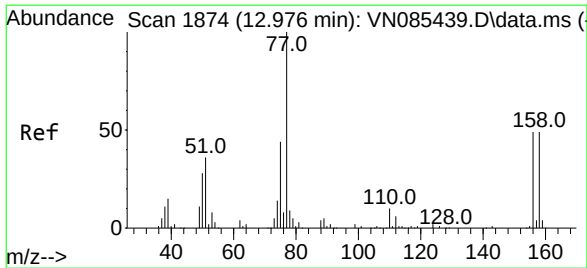
Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

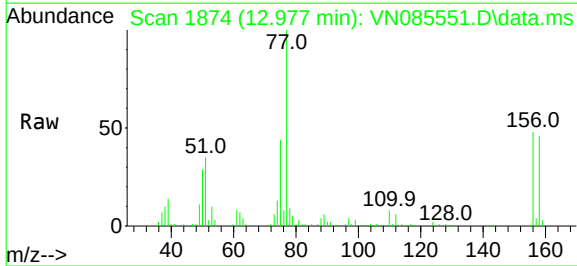
Tgt Ion:	75	Resp:	68563
Ion	Ratio	Lower	Upper
75	100		
77	175.4	109.7	329.2





Bromobenzene
 Concen: 18.735 ug/l
 RT: 12.977 min Scan# 1874
 Delta R.T. 0.000 min
 Lab File: VN085551.D
 Acq: 29 Jan 2025 12:30

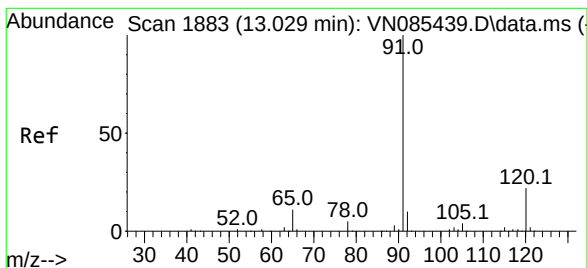
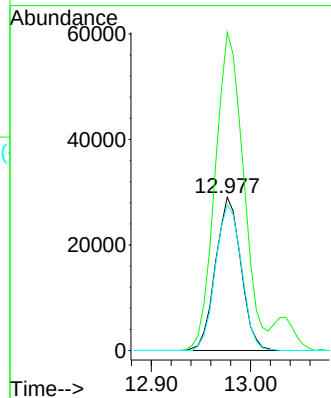
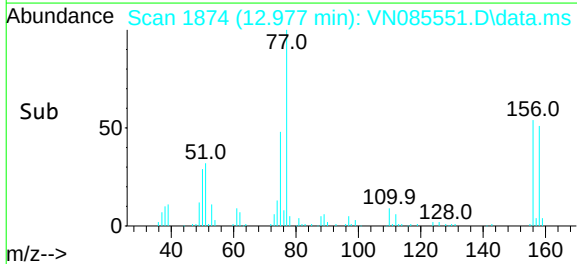
Instrument :
 MSVOA_N
 ClientSampleId :
 VN0129WBS01



Tgt Ion: 156 Resp: 51702
 Ion Ratio Lower Upper
 156 100
 77 232.6 114.1 342.4
 158 97.2 48.9 146.8

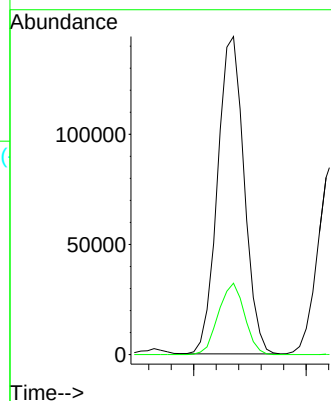
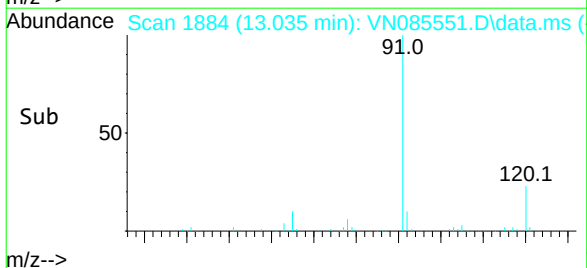
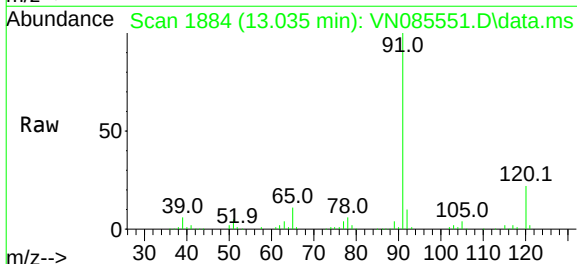
Manual Integrations
 APPROVED

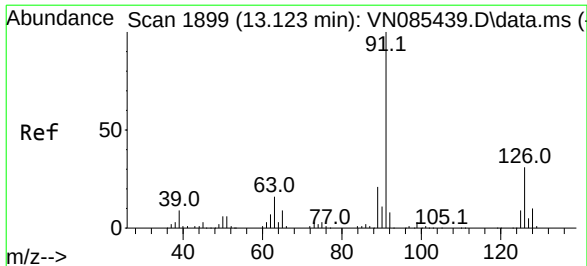
Reviewed By : John Carlone 01/30/2025
 Supervised By : Mahesh Dadoda 01/30/2025



n-propylbenzene
 Concen: 18.943 ug/l
 RT: 13.035 min Scan# 1884
 Delta R.T. 0.006 min
 Lab File: VN085551.D
 Acq: 29 Jan 2025 12:30

Tgt Ion: 91 Resp: 236875
 Ion Ratio Lower Upper
 91 100
 120 22.0 10.9 32.6





#79

2-Chlorotoluene

Concen: 18.837 ug/l

RT: 13.124 min Scan# 1899

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion: 91 Resp: 152450

Ion Ratio Lower Upper

91 100

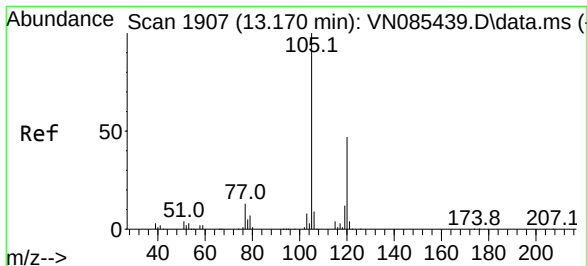
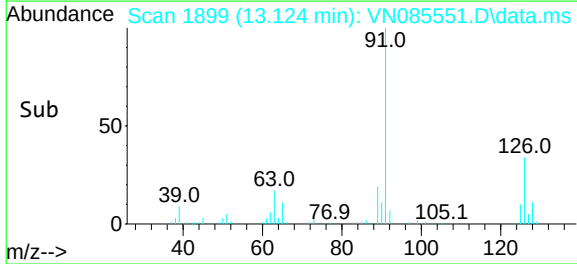
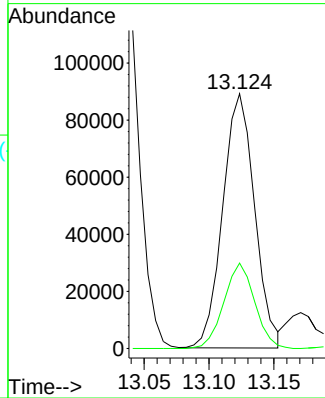
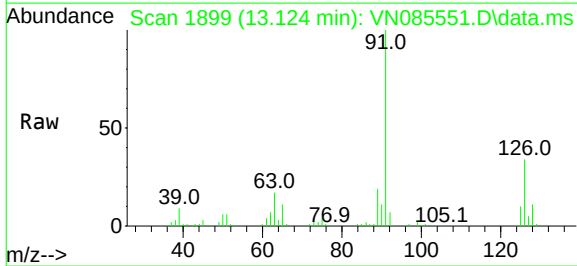
126 32.3 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#80

1,3,5-Trimethylbenzene

Concen: 19.515 ug/l

RT: 13.171 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VN085551.D

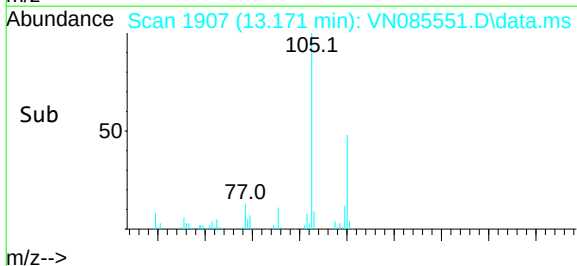
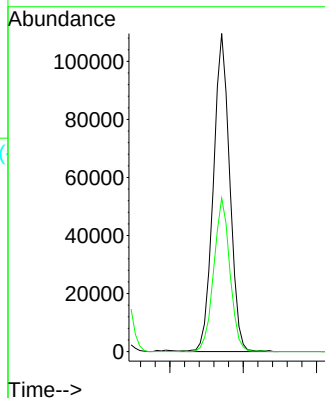
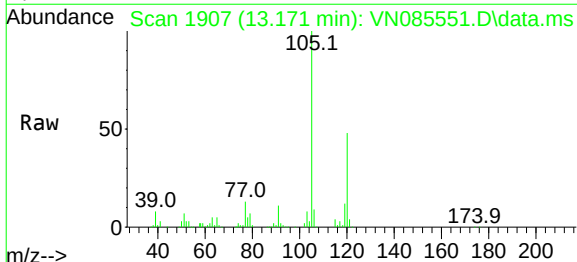
Acq: 29 Jan 2025 12:30

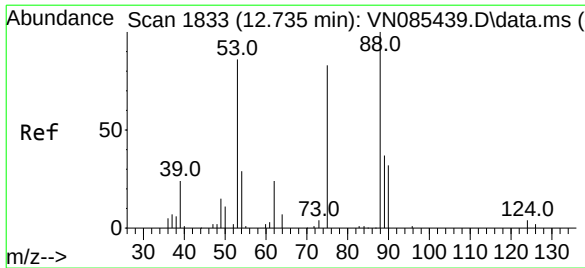
Tgt Ion:105 Resp: 170270

Ion Ratio Lower Upper

105 100

120 47.4 23.9 71.7





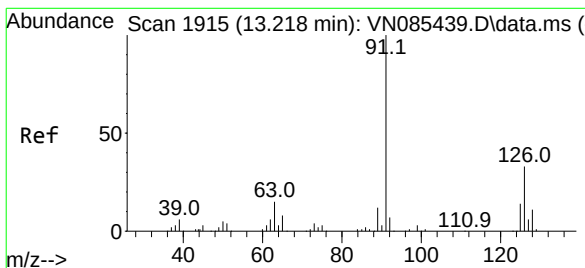
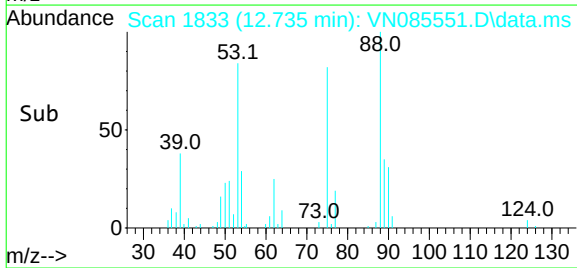
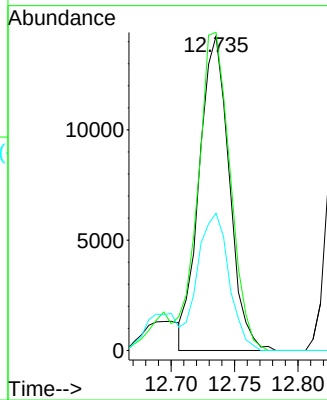
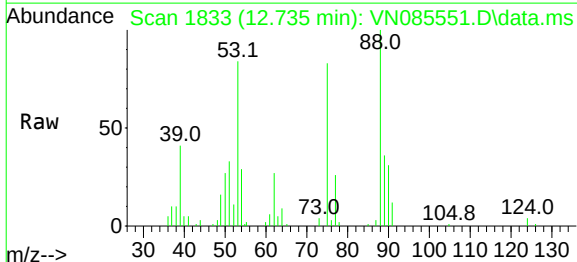
#81
trans-1,4-Dichloro-2-butene
Concen: 19.939 ug/l m
RT: 12.735 min Scan# 1833
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion:	75	Resp:	23443
Ion	Ratio	Lower	Upper
75	100		
53	118.0	95.6	143.4
89	46.1	37.0	55.6

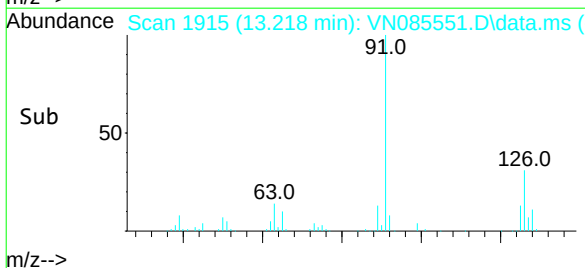
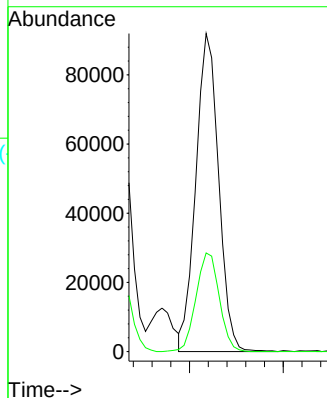
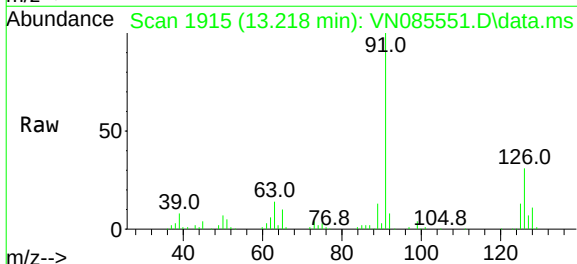
Manual Integrations
APPROVED

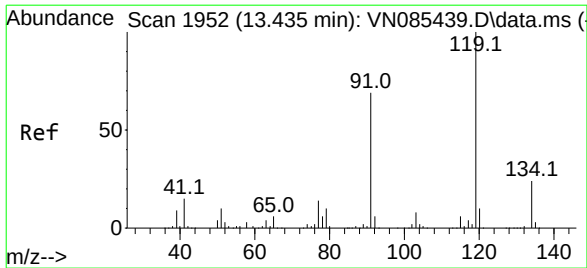
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#82
4-Chlorotoluene
Concen: 19.243 ug/l
RT: 13.218 min Scan# 1915
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion:	91	Resp:	155061
Ion	Ratio	Lower	Upper
91	100		
126	31.6	15.9	47.7





#83

tert-Butylbenzene

Concen: 18.343 ug/l

RT: 13.435 min Scan# 19

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion:119 Resp: 134399

Ion Ratio Lower Upper

119 100

91 72.3 35.1 105.3

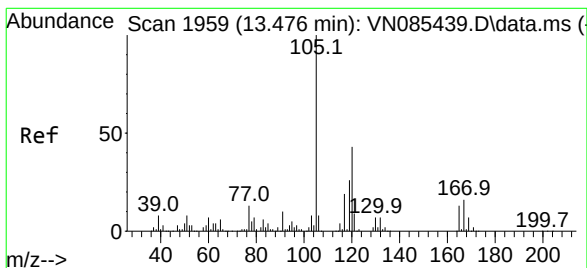
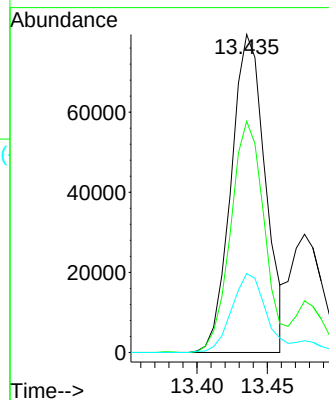
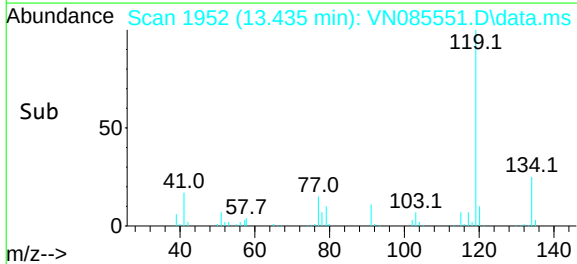
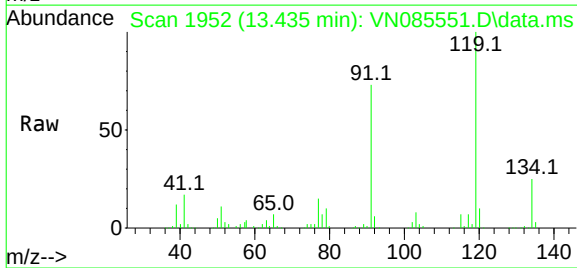
134 25.4 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#84

1,2,4-Trimethylbenzene

Concen: 19.699 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085551.D

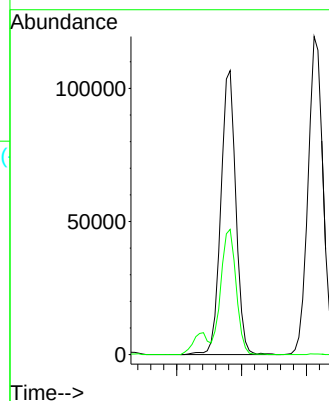
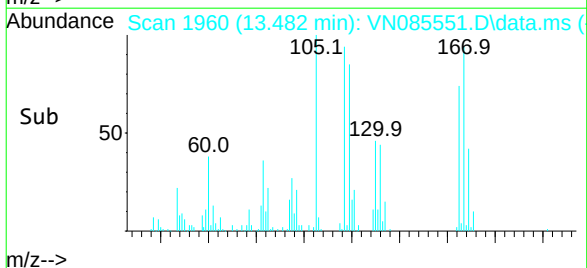
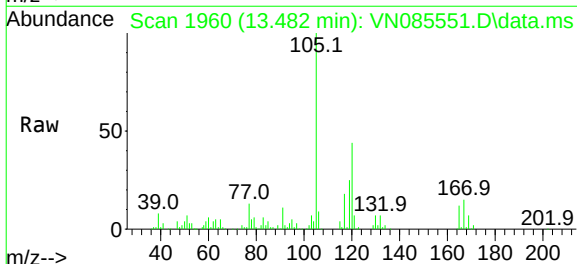
Acq: 29 Jan 2025 12:30

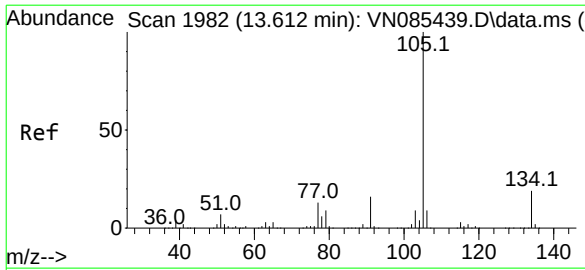
Tgt Ion:105 Resp: 171306

Ion Ratio Lower Upper

105 100

120 44.9 21.6 65.0





#85

sec-Butylbenzene

Concen: 18.886 ug/l

RT: 13.612 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion:105 Resp: 191783

Ion Ratio Lower Upper

105 100

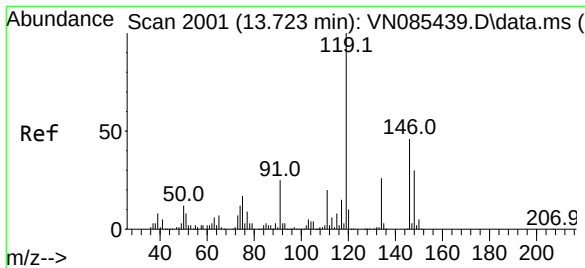
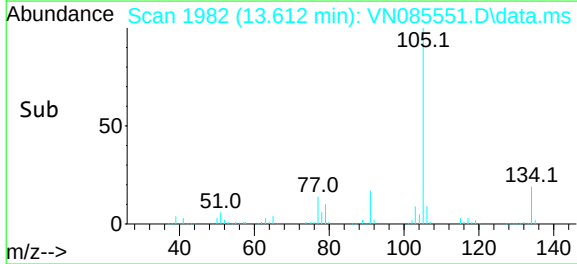
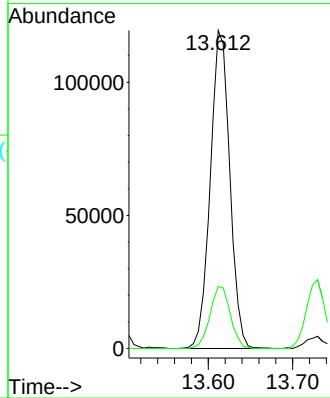
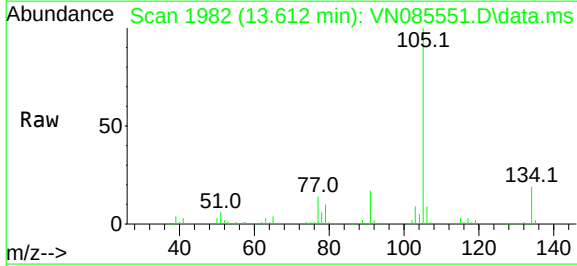
134 20.3 9.7 28.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#86

p-Isopropyltoluene

Concen: 18.681 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

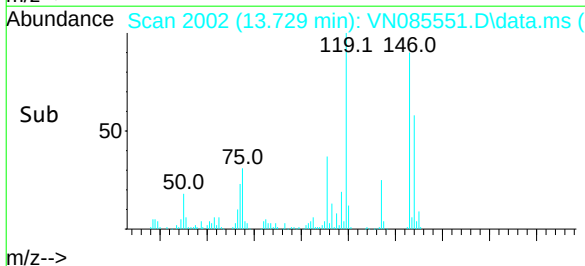
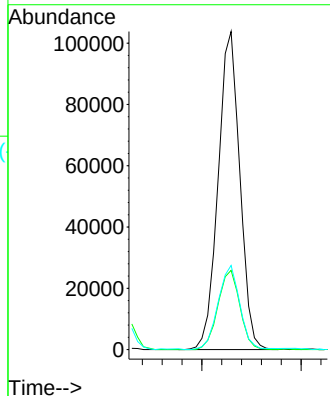
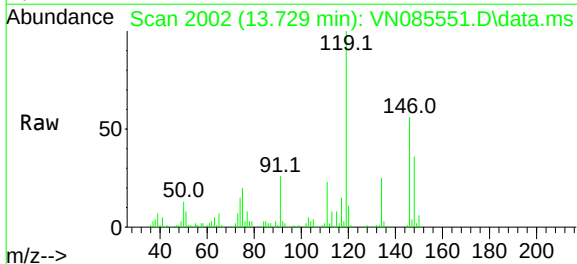
Tgt Ion:119 Resp: 157547

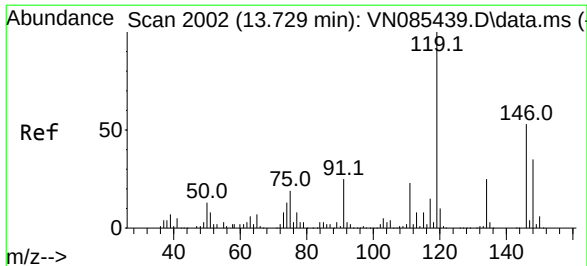
Ion Ratio Lower Upper

119 100

134 25.1 12.7 38.0

91 26.6 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 19.191 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBS01

Tgt Ion:146 Resp: 97536

Ion Ratio Lower Upper

146 100

111 41.0 21.4 64.3

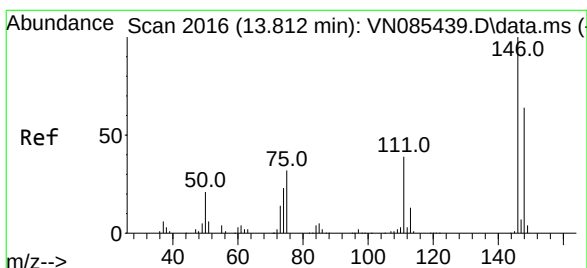
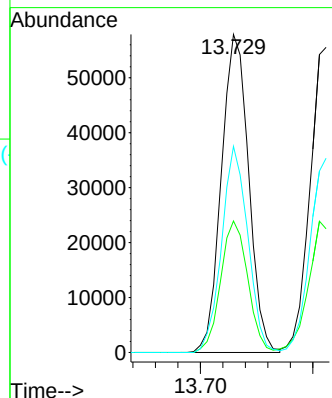
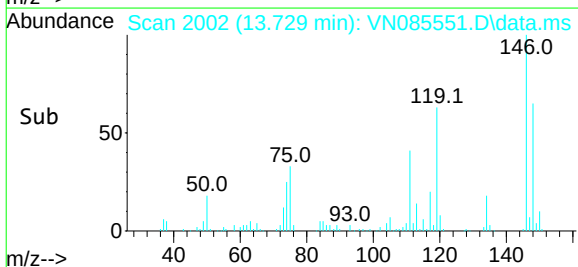
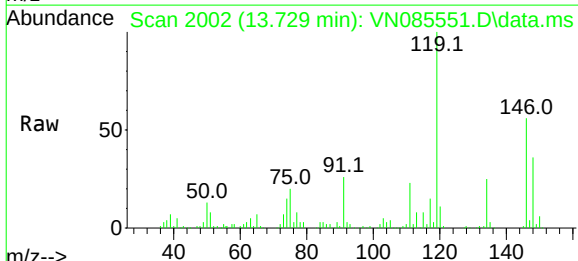
148 62.3 32.3 96.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#88

1,4-Dichlorobenzene

Concen: 18.119 ug/l

RT: 13.812 min Scan# 2016

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

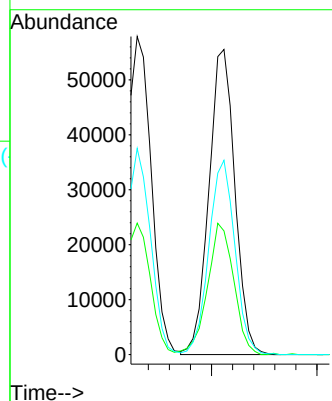
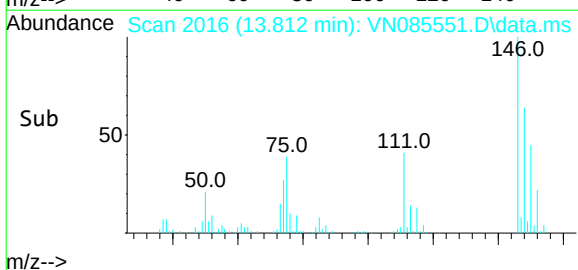
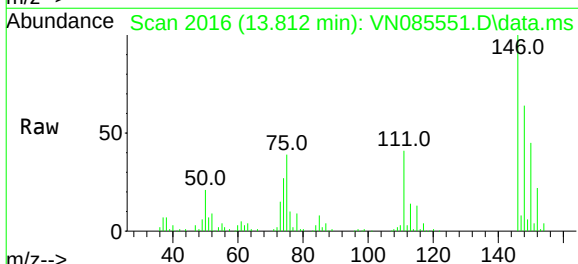
Tgt Ion:146 Resp: 95449

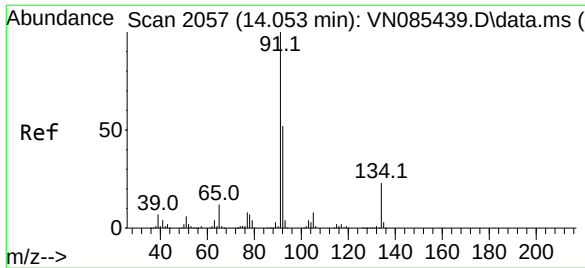
Ion Ratio Lower Upper

146 100

111 43.3 21.3 63.7

148 63.8 32.4 97.0





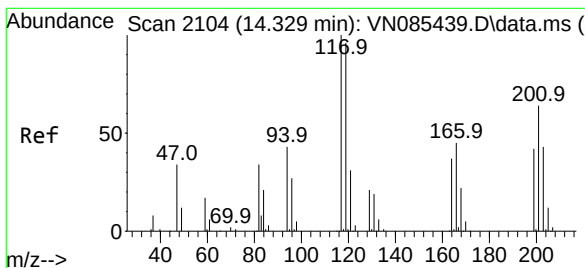
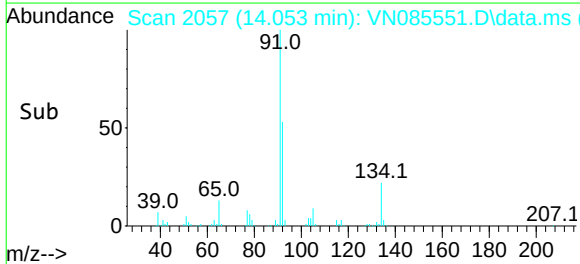
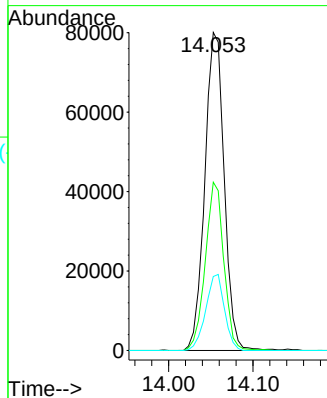
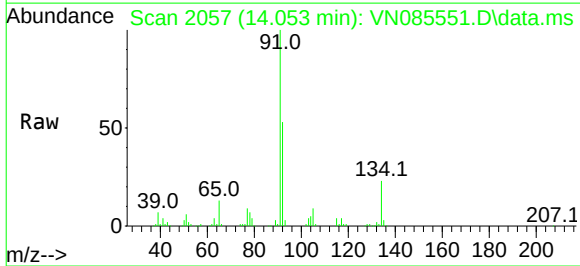
#89
n-Butylbenzene
Concen: 17.567 ug/l
RT: 14.053 min Scan# 2057
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01

Tgt Ion:	91	Resp:	127980
Ion Ratio	Lower	Upper	
91	100		
92	50.6	25.8	77.3
134	23.1	11.7	35.1

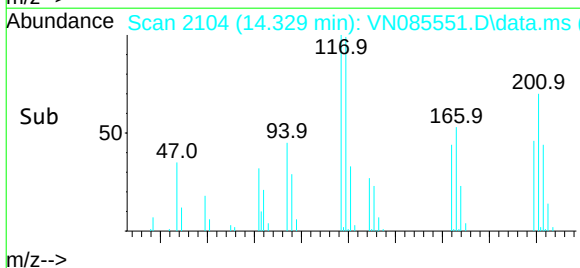
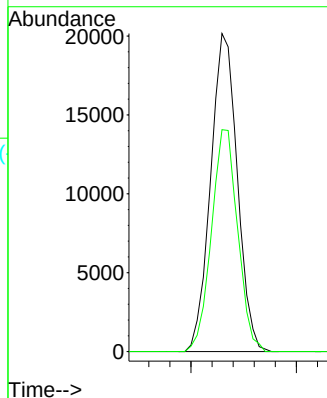
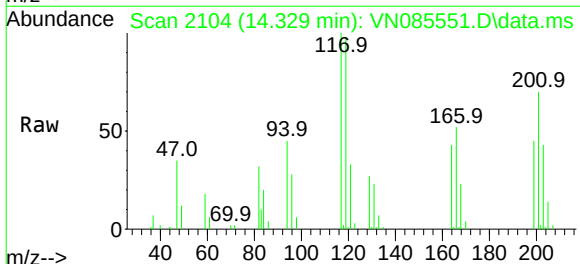
Manual Integrations
APPROVED

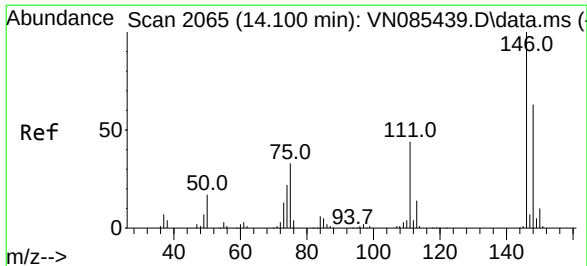
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#90
Hexachloroethane
Concen: 18.339 ug/l
RT: 14.329 min Scan# 2104
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

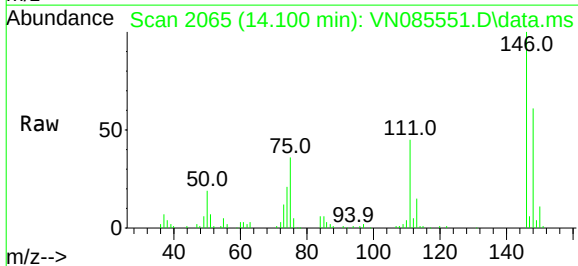
Tgt Ion:	117	Resp:	35454
Ion Ratio	Lower	Upper	
117	100		
201	68.7	33.7	101.0





#91
1,2-Dichlorobenzene
Concen: 18.519 ug/l
RT: 14.100 min Scan# 2065
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

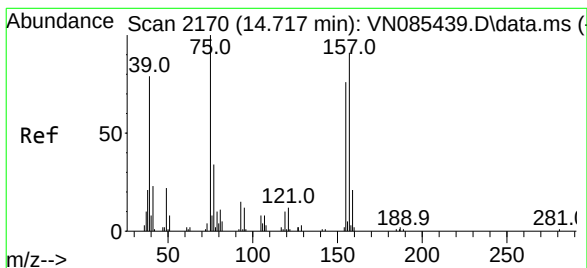
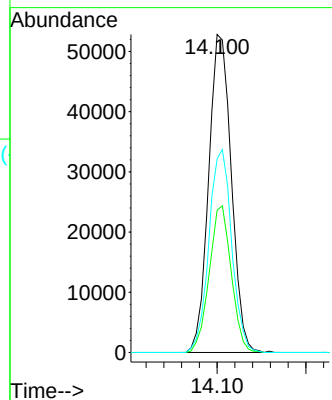
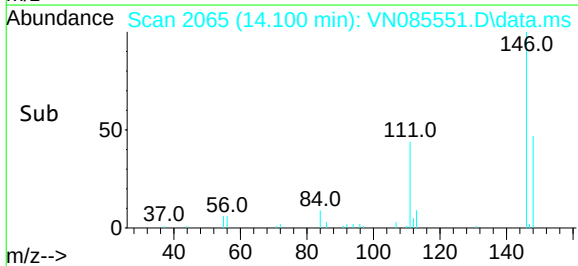
Instrument :
MSVOA_N
ClientSampleId :
VN0129WBS01



Tgt Ion: 146 Resp: 93880
Ion Ratio Lower Upper
146 100
111 44.7 21.7 65.1
148 64.1 31.4 94.2

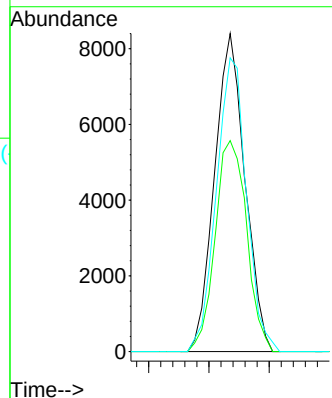
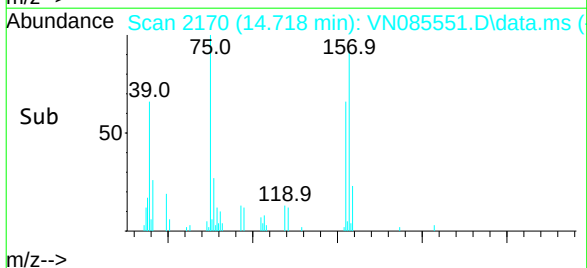
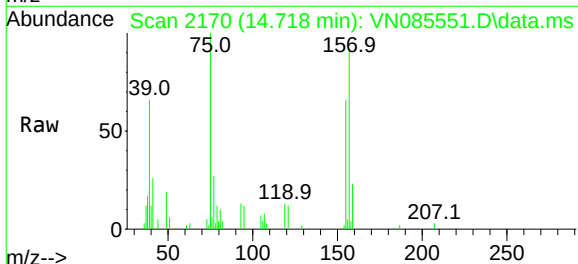
Manual Integrations
APPROVED

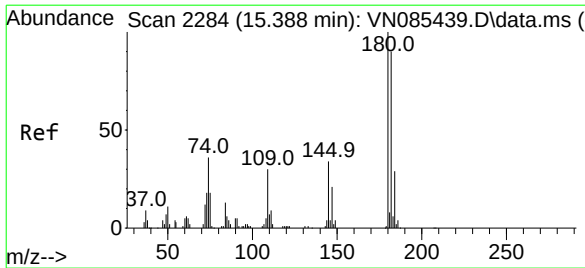
Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025



#92
1,2-Dibromo-3-Chloropropane
Concen: 21.617 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN085551.D
Acq: 29 Jan 2025 12:30

Tgt Ion: 75 Resp: 14729
Ion Ratio Lower Upper
75 100
155 68.7 36.4 109.2
157 91.5 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 17.479 ug/l

RT: 15.394 min Scan# 2284

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

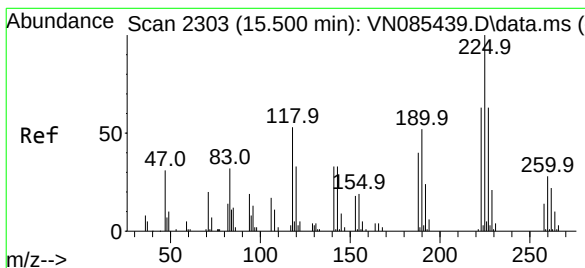
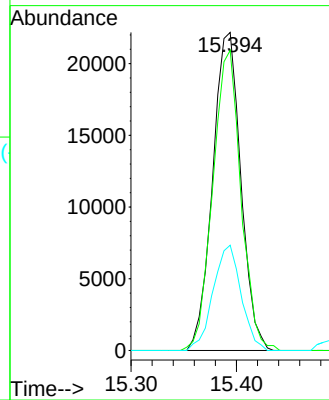
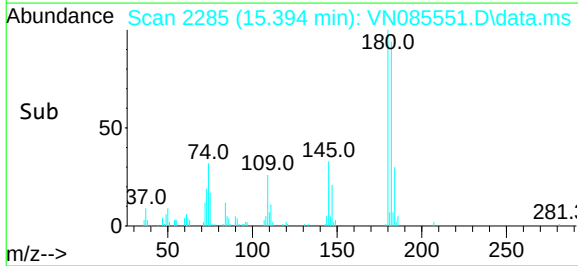
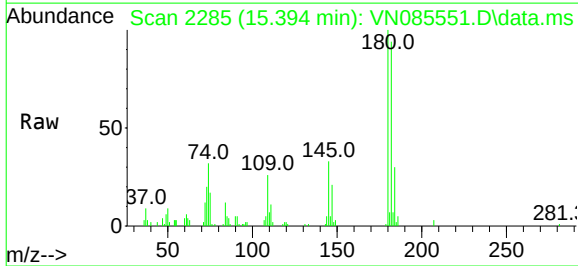
ClientSampleId :

VN0129WBS01

Tgt Ion:	180	Resp:	41183
Ion	Ratio	Lower	Upper
180	100		
182	94.1	46.8	140.3
145	32.9	16.0	48.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#94

Hexachlorobutadiene

Concen: 18.126 ug/l

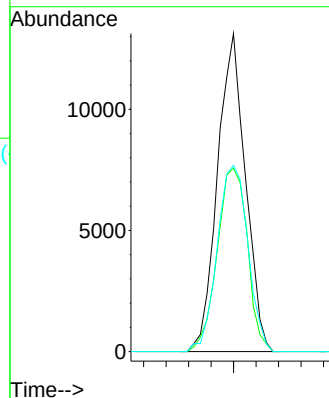
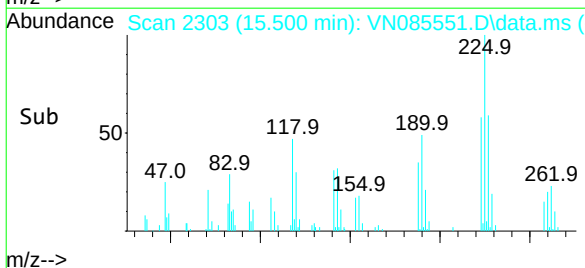
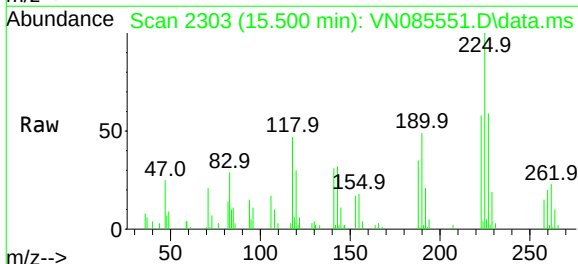
RT: 15.500 min Scan# 2303

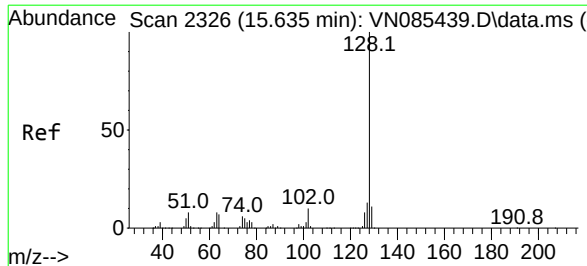
Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion:	225	Resp:	22674
Ion	Ratio	Lower	Upper
225	100		
223	62.3	30.7	92.1
227	64.4	30.9	92.5





#95

Naphthalene

Concen: 16.937 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Instrument :

MSVOA_N

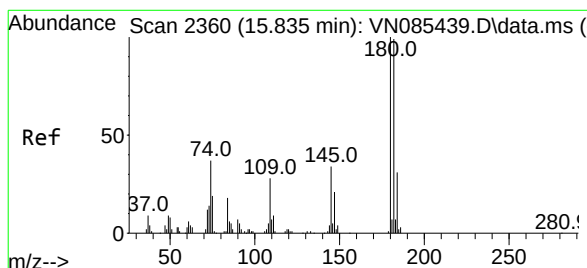
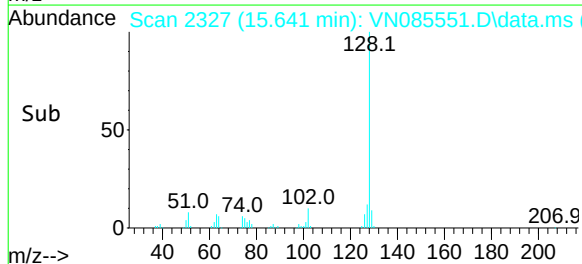
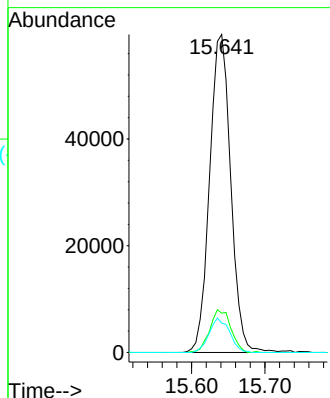
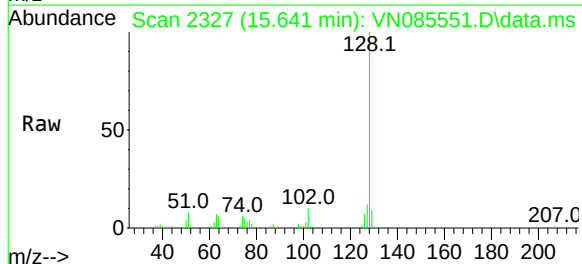
ClientSampleId :

VN0129WBS01

Tgt Ion:	128	Resp:	119085
Ion Ratio	Lower	Upper	
128	100		
127	13.4	10.6	16.0
129	10.5	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#96

1,2,3-Trichlorobenzene

Concen: 17.291 ug/l

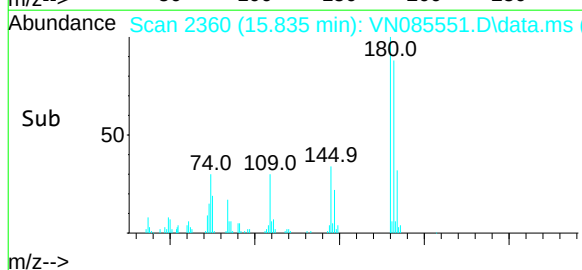
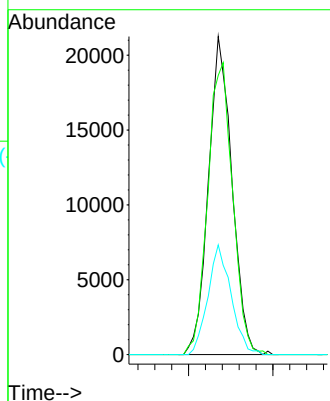
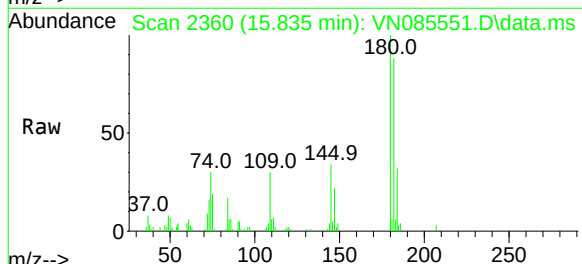
RT: 15.835 min Scan# 2360

Delta R.T. 0.000 min

Lab File: VN085551.D

Acq: 29 Jan 2025 12:30

Tgt Ion:	180	Resp:	41222
Ion Ratio	Lower	Upper	
180	100		
182	97.3	47.4	142.2
145	34.0	16.9	50.7



Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VN0129WBSD01	SDG No.:	Q1207
Lab Sample ID:	VN0129WBSD01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085552.D	1		01/29/25 13:04	VN012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	16.3		0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	17.9		0.26	5.00	ug/L
78-93-3	2-Butanone	110		1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	18.8		0.25	5.00	ug/L
67-66-3	Chloroform	19.4		0.26	5.00	ug/L
71-43-2	Benzene	19.3		0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	20.6		0.24	5.00	ug/L
79-01-6	Trichloroethene	18.3		0.32	5.00	ug/L
127-18-4	Tetrachloroethene	19.1		0.25	5.00	ug/L
108-90-7	Chlorobenzene	19.2		0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.9		74 - 125	104%	SPK: 50
1868-53-7	Dibromofluoromethane	52.8		75 - 124	106%	SPK: 50
2037-26-5	Toluene-d8	53.2		86 - 113	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.8		77 - 121	110%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	200000	8.224			
540-36-3	1,4-Difluorobenzene	334000	9.1			
3114-55-4	Chlorobenzene-d5	301000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	150000	13.788			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
 Data File : VN085552.D
 Acq On : 29 Jan 2025 13:04
 Operator : JC\MD
 Sample : VN0129WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0129WBSD01

Manual Integrations APPROVED

Reviewed By : John Carlone 01/30/2025
 Supervised By : Mahesh Dadoda 01/30/2025

Quant Time: Jan 30 00:32:54 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	199890	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	334279	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	300606	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	149604	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.577	65	167615	51.947	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	103.900%
35) Dibromofluoromethane	8.165	113	122390	52.775	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	105.560%
50) Toluene-d8	10.565	98	437973	53.154	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	106.300%
62) 4-Bromofluorobenzene	12.847	95	154451	54.798	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	109.600%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	42805	15.816	ug/l	97
3) Chloromethane	2.359	50	47501	16.210	ug/l	97
4) Vinyl Chloride	2.512	62	47977	16.289	ug/l	99
5) Bromomethane	2.953	94	30184	16.965	ug/l	95
6) Chloroethane	3.118	64	33491	17.935	ug/l	93
7) Trichlorofluoromethane	3.495	101	76946	18.004	ug/l	96
8) Diethyl Ether	3.959	74	26661	18.058	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	45479	18.893	ug/l	98
10) Methyl Iodide	4.589	142	49266	17.872	ug/l	97
11) Tert butyl alcohol	5.518	59	44436	120.269	ug/l	99
12) 1,1-Dichloroethene	4.342	96	38420	17.909	ug/l	97
13) Acrolein	4.177	56	40004	79.316	ug/l	99
14) Allyl chloride	5.018	41	61417	17.643	ug/l	97
15) Acrylonitrile	5.718	53	127045	108.256	ug/l	99
16) Acetone	4.430	43	114508	109.834	ug/l	100
17) Carbon Disulfide	4.712	76	96222	14.567	ug/l	98
18) Methyl Acetate	5.018	43	73000	23.027	ug/l	98
19) Methyl tert-butyl Ether	5.800	73	142230	20.418	ug/l	98
20) Methylene Chloride	5.277	84	49133	19.037	ug/l	93
21) trans-1,2-Dichloroethene	5.783	96	40021	17.456	ug/l	97
22) Diisopropyl ether	6.671	45	154873	20.044	ug/l	98
23) Vinyl Acetate	6.600	43	540007	99.867	ug/l	99
24) 1,1-Dichloroethane	6.565	63	90121	19.129	ug/l	96
25) 2-Butanone	7.483	43	167598	109.240	ug/l	98
26) 2,2-Dichloropropane	7.488	77	77491	20.344	ug/l	99
27) cis-1,2-Dichloroethene	7.488	96	50565	18.725	ug/l	99
28) Bromochloromethane	7.812	49	36396	16.605	ug/l	99
29) Tetrahydrofuran	7.835	42	110223	113.317	ug/l	99
30) Chloroform	7.965	83	94675	19.443	ug/l	98
31) Cyclohexane	8.253	56	65483	15.991	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	82021	19.203	ug/l	97
36) 1,1-Dichloropropene	8.371	75	58241	17.894	ug/l	100
37) Ethyl Acetate	7.559	43	69349	21.109	ug/l	98
38) Carbon Tetrachloride	8.359	117	69887	18.756	ug/l	95
39) Methylcyclohexane	9.600	83	52245	17.082	ug/l	97
40) Benzene	8.606	78	188989	19.325	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
 Data File : VN085552.D
 Acq On : 29 Jan 2025 13:04
 Operator : JC\MD
 Sample : VN0129WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0129WBSD01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 01/30/2025
 Supervised By : Mahesh Dadoda 01/30/2025

Quant Time: Jan 30 00:32:54 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 15 02:16:08 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	36813	21.538	ug/l	98
42) 1,2-Dichloroethane	8.665	62	75825	20.586	ug/l	99
43) Isopropyl Acetate	8.688	43	113844	21.627	ug/l	99
44) Trichloroethene	9.347	130	41582	18.266	ug/l	89
45) 1,2-Dichloropropane	9.618	63	49009	19.620	ug/l	97
46) Dibromomethane	9.706	93	35593	19.747	ug/l	97
47) Bromodichloromethane	9.882	83	76456	20.821	ug/l	98
48) Methyl methacrylate	9.677	41	52667	22.232	ug/l	96
49) 1,4-Dioxane	9.694	88	19418	486.754	ug/l	99
51) 4-Methyl-2-Pentanone	10.441	43	356810	116.808	ug/l	99
52) Toluene	10.629	92	113656	20.058	ug/l	100
53) t-1,3-Dichloropropene	10.829	75	71237	20.528	ug/l	97
54) cis-1,3-Dichloropropene	10.312	75	76587	20.661	ug/l	98
55) 1,1,2-Trichloroethane	11.012	97	47247	21.069	ug/l	95
56) Ethyl methacrylate	10.871	69	67955	19.225	ug/l	97
57) 1,3-Dichloropropane	11.159	76	81256	20.839	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	130784	91.903	ug/l	99
59) 2-Hexanone	11.194	43	257517	119.811	ug/l	99
60) Dibromochloromethane	11.359	129	56444	20.849	ug/l	98
61) 1,2-Dibromoethane	11.465	107	45570	20.415	ug/l	100
64) Tetrachloroethene	11.100	164	39105	19.082	ug/l	96
65) Chlorobenzene	11.888	112	126744	19.247	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	48168	19.929	ug/l	99
67) Ethyl Benzene	11.965	91	201511	18.788	ug/l	99
68) m/p-Xylenes	12.071	106	158394	39.958	ug/l	100
69) o-Xylene	12.400	106	73062	19.286	ug/l	96
70) Styrene	12.412	104	126846	20.232	ug/l	99
71) Bromoform	12.576	173	38486	22.255	ug/l #	100
73) Isopropylbenzene	12.694	105	187874	18.607	ug/l	100
74) N-ethyl acetate	12.494	43	90352	19.908	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.935	83	71580	20.069	ug/l	100
76) 1,2,3-Trichloropropane	12.994	75	60557m	19.915	ug/l	
77) Bromobenzene	12.976	156	49656	18.824	ug/l	98
78) n-propylbenzene	13.035	91	225452	18.861	ug/l	99
79) 2-Chlorotoluene	13.123	91	145834	18.851	ug/l	98
80) 1,3,5-Trimethylbenzene	13.170	105	163587	19.614	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	22453	19.978	ug/l	99
82) 4-Chlorotoluene	13.217	91	149335	19.387	ug/l	99
83) tert-Butylbenzene	13.435	119	126982	18.130	ug/l	97
84) 1,2,4-Trimethylbenzene	13.482	105	165028	19.853	ug/l	100
85) sec-Butylbenzene	13.617	105	186480	19.211	ug/l	100
86) p-Isopropyltoluene	13.729	119	152530	18.909	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	94099	19.369	ug/l	98
88) 1,4-Dichlorobenzene	13.812	146	92013	18.273	ug/l	99
89) n-Butylbenzene	14.053	91	124199	17.835	ug/l	100
90) Hexachloroethane	14.335	117	33768	18.273	ug/l	98
91) 1,2-Dichlorobenzene	14.106	146	89278	18.424	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.712	75	14040	21.557	ug/l	96
93) 1,2,4-Trichlorobenzene	15.394	180	40694	18.068	ug/l	97
94) Hexachlorobutadiene	15.500	225	21387	17.886	ug/l	95
95) Naphthalene	15.641	128	117949	17.550	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	41463	18.194	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN012925\
Data File : VN085552.D
Acq On : 29 Jan 2025 13:04
Operator : JC\MD
Sample : VN0129WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

Quant Time: Jan 30 00:32:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N011425W.M
Quant Title : SW846 8260
QLast Update : Wed Jan 15 02:16:08 2025
Response via : Initial Calibration

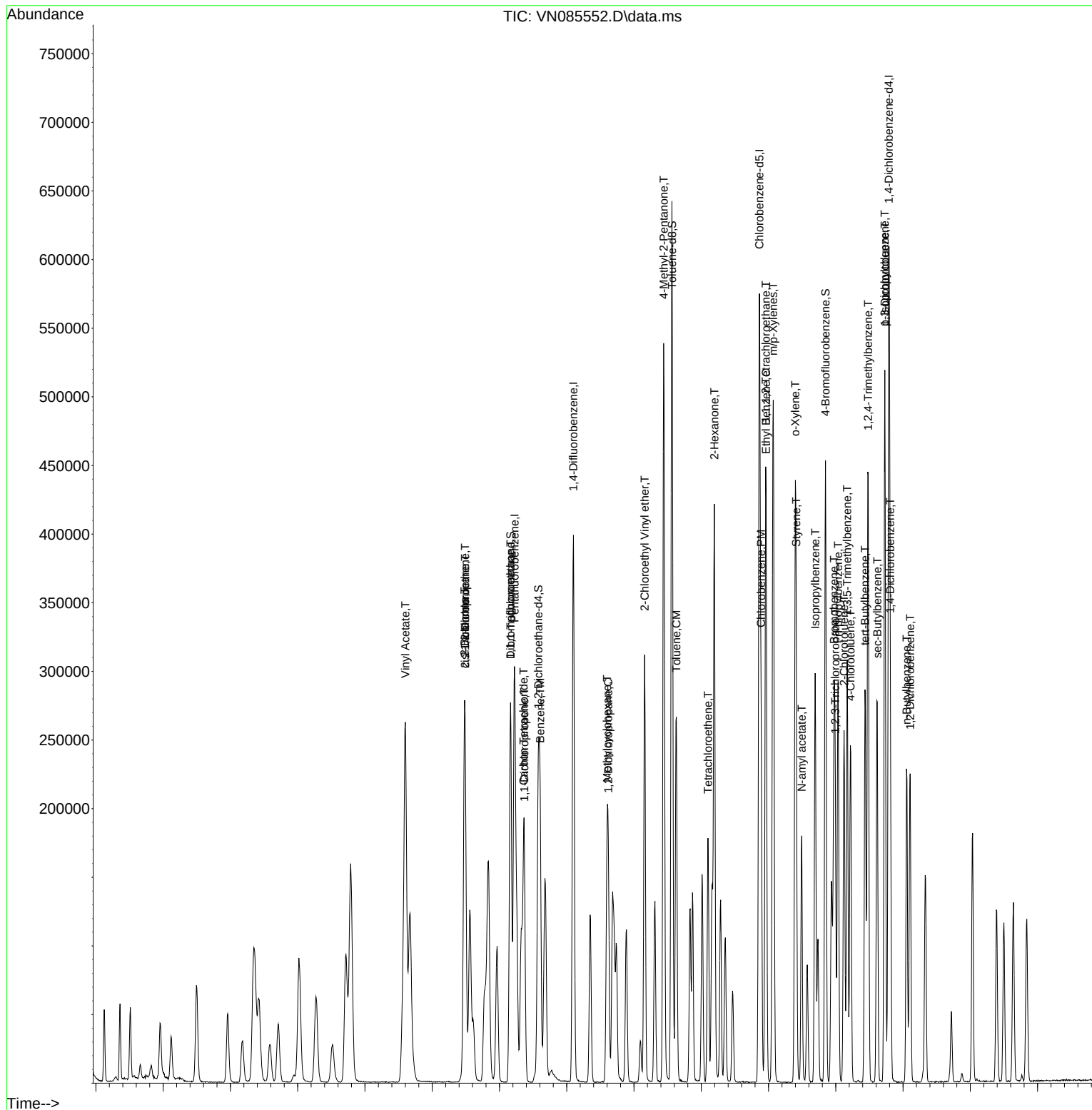
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
----------	------	------	----------	------	-------	----------

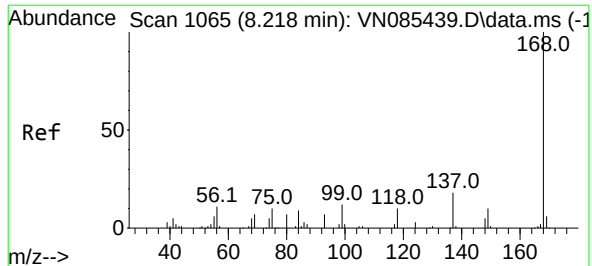
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Manual Integrations APPROVED

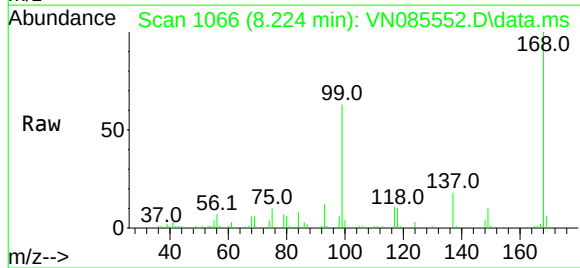
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

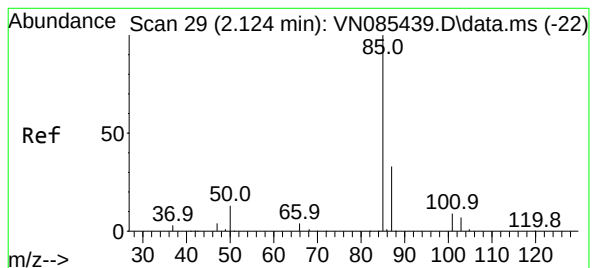
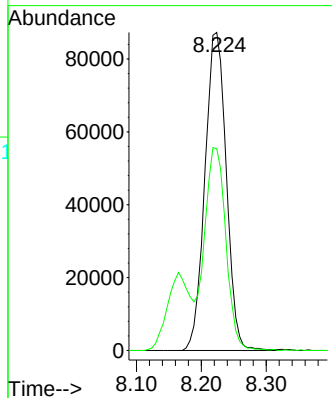
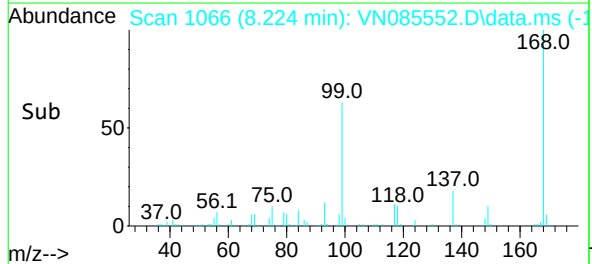
Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01



Tgt Ion: 168 Resp: 199896
Ion Ratio Lower Upper
168 100
99 63.4 53.6 80.4

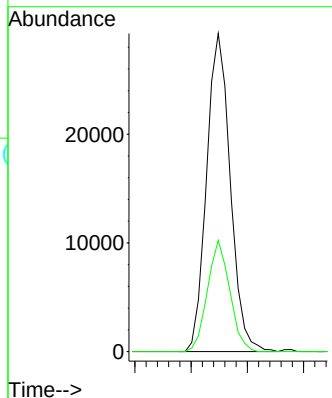
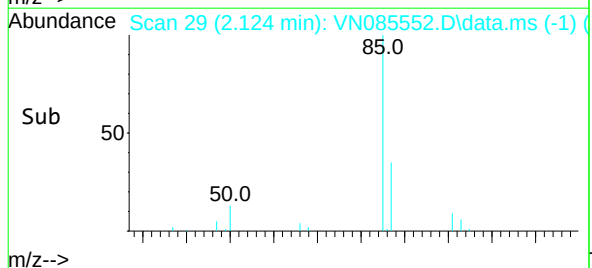
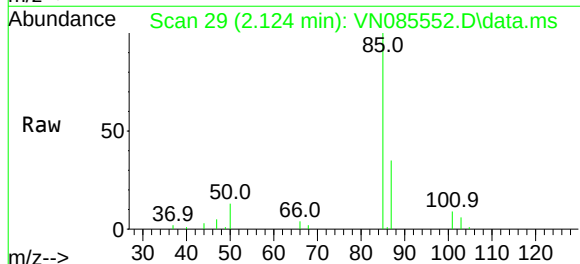
Manual Integrations
APPROVED

Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025

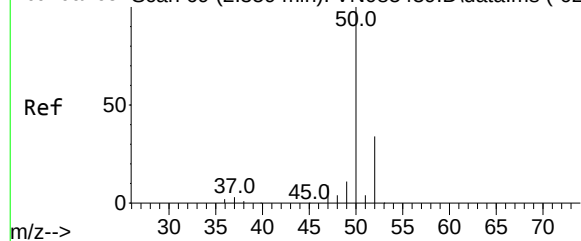


#2
Dichlorodifluoromethane
Concen: 15.816 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion: 85 Resp: 42805
Ion Ratio Lower Upper
85 100
87 35.0 16.7 50.1



Abundance Scan 69 (2.359 min): VN085439.D\data.ms (-62)



#3

Chloromethane

Concen: 16.210 ug/l

RT: 2.359 min Scan# 69

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 50 Resp: 47501

Ion Ratio Lower Upper

50 100

52 32.3 27.0 40.6

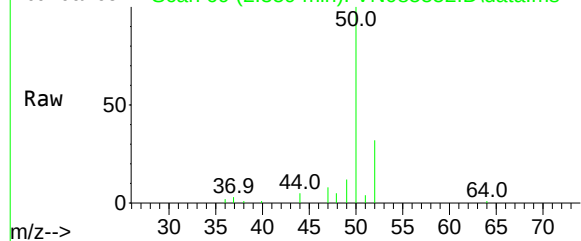
Manual Integrations

APPROVED

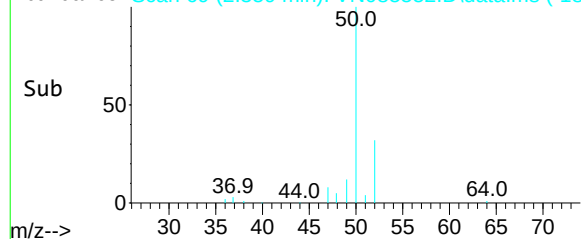
Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025

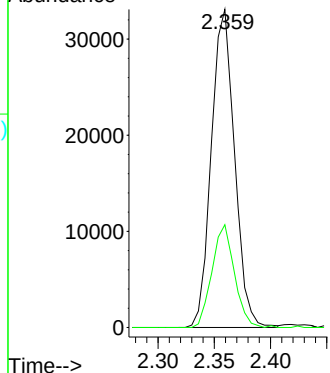
Abundance Scan 69 (2.359 min): VN085552.D\data.ms



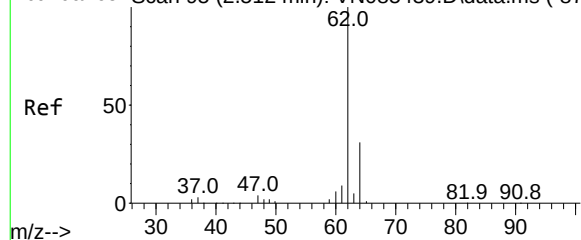
Abundance Scan 69 (2.359 min): VN085552.D\data.ms (-18)



Abundance



Abundance Scan 95 (2.512 min): VN085439.D\data.ms (-87)



#4

Vinyl Chloride

Concen: 16.289 ug/l

RT: 2.512 min Scan# 95

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

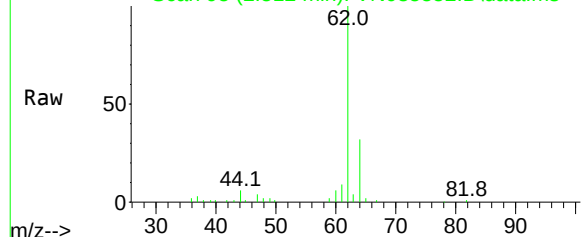
Tgt Ion: 62 Resp: 47977

Ion Ratio Lower Upper

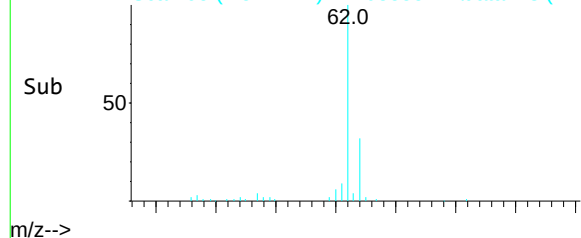
62 100

64 31.4 24.8 37.2

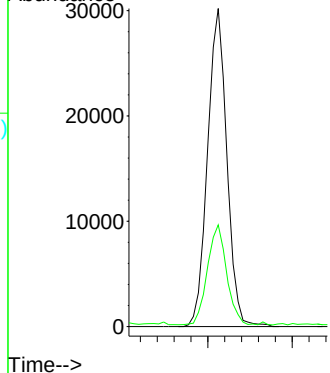
Abundance Scan 95 (2.512 min): VN085552.D\data.ms

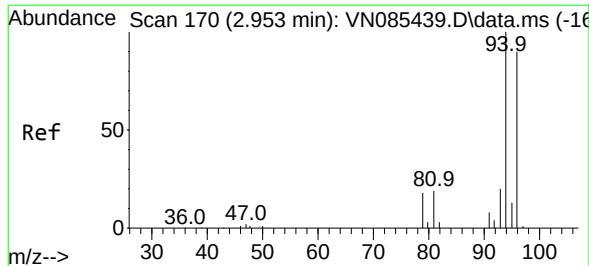


Abundance Scan 95 (2.512 min): VN085552.D\data.ms (-44)



Abundance





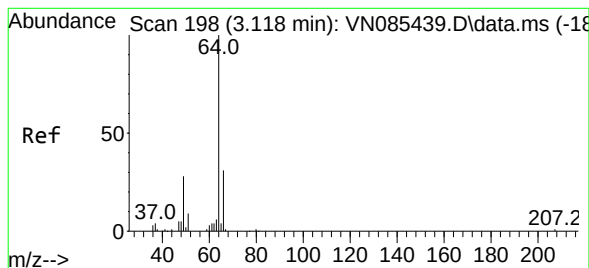
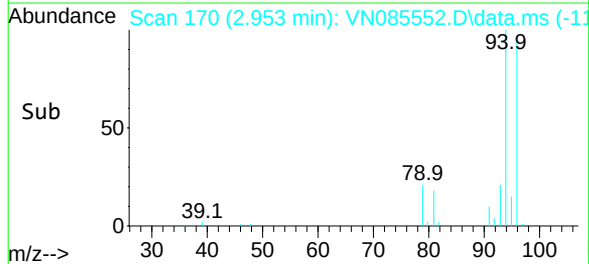
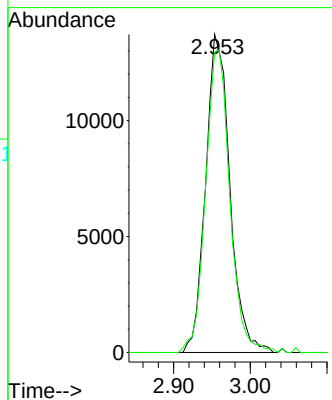
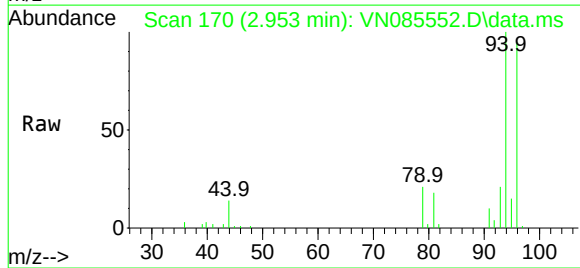
#5
Bromomethane
Concen: 16.965 ug/l
RT: 2.953 min Scan# 170
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion: 94 Resp: 30184
Ion Ratio Lower Upper
94 100
96 94.5 71.8 107.6

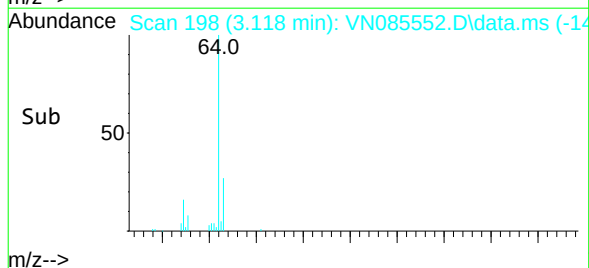
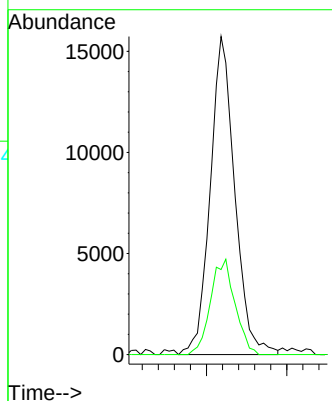
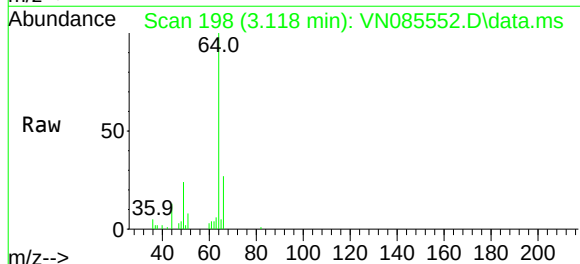
Manual Integrations
APPROVED

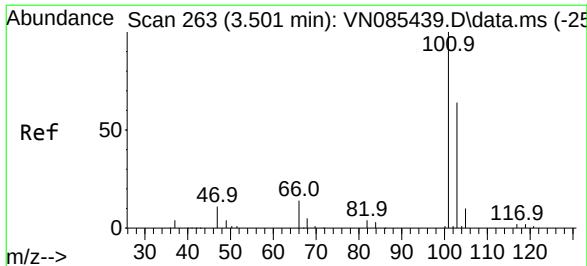
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#6
Chloroethane
Concen: 17.935 ug/l
RT: 3.118 min Scan# 198
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion: 64 Resp: 33491
Ion Ratio Lower Upper
64 100
66 26.8 24.6 36.8





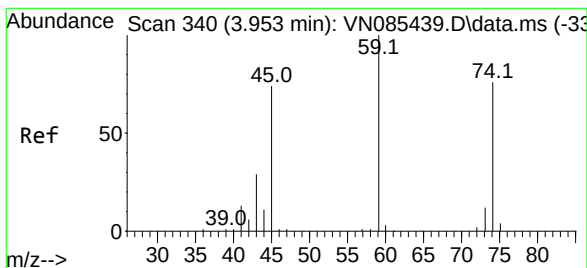
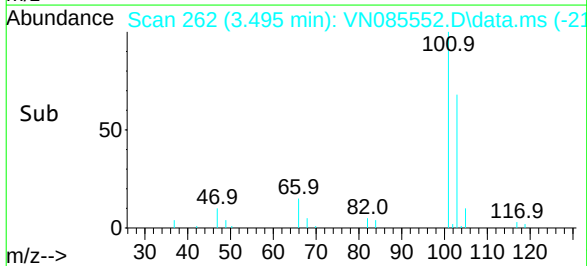
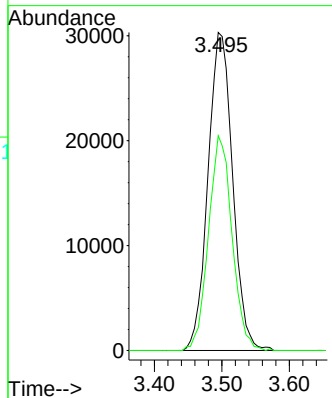
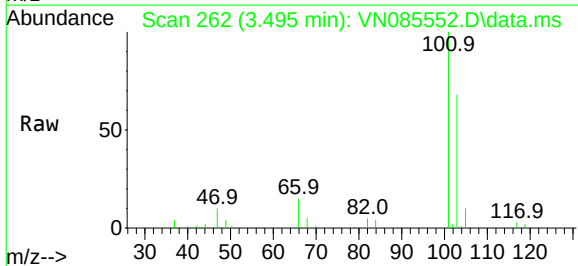
#7
Trichlorofluoromethane
Concen: 18.004 ug/l
RT: 3.495 min Scan# 263
Delta R.T. -0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion: 101 Resp: 76946
Ion Ratio Lower Upper
101 100
103 67.5 51.4 77.2

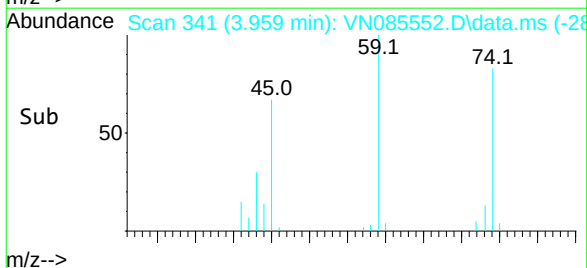
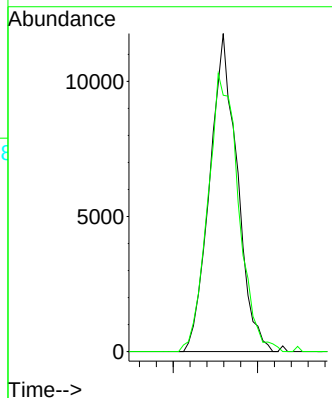
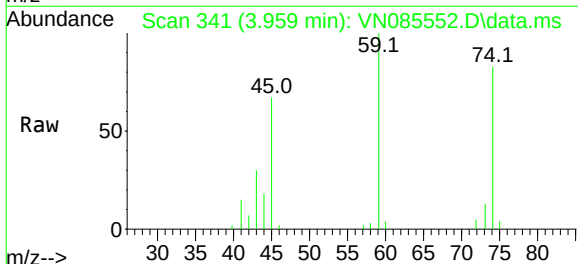
Manual Integrations
APPROVED

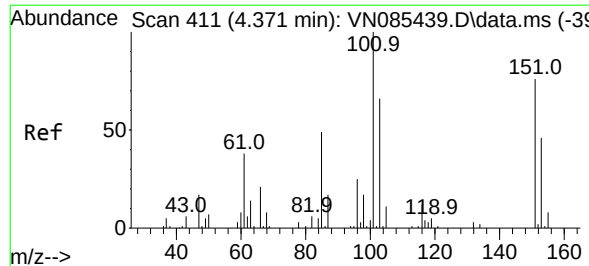
Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025



#8
Diethyl Ether
Concen: 18.058 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion: 74 Resp: 26661
Ion Ratio Lower Upper
74 100
45 97.9 49.7 149.1





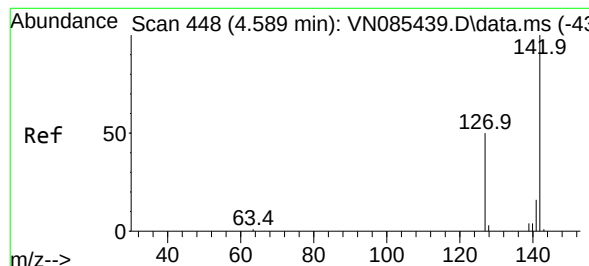
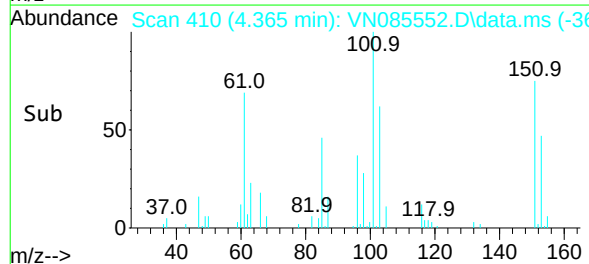
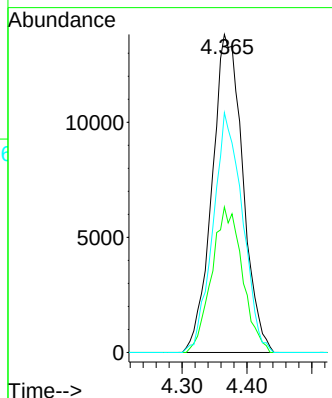
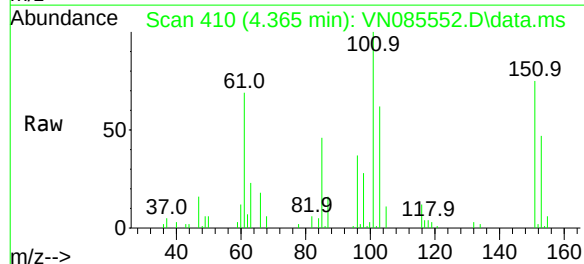
#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.893 ug/l
RT: 4.365 min Scan# 411
Delta R.T. -0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion:101 Resp: 45479
Ion Ratio Lower Upper
101 100
85 45.6 37.8 56.8
151 72.4 58.8 88.2

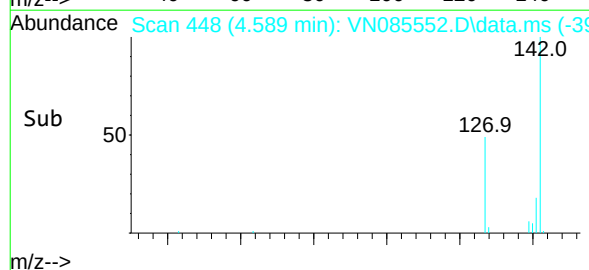
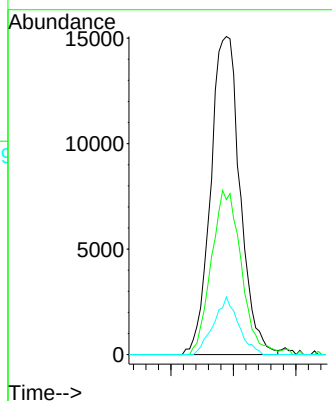
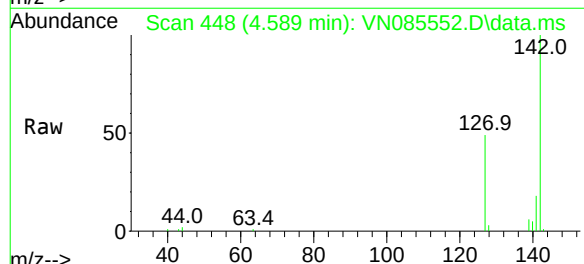
Manual Integrations
APPROVED

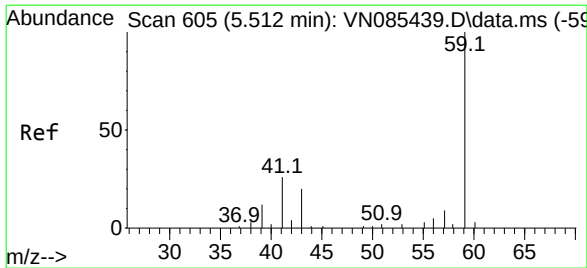
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#10
Methyl Iodide
Concen: 17.872 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion:142 Resp: 49266
Ion Ratio Lower Upper
142 100
127 48.7 40.3 60.5
141 18.1 12.8 19.2





#11

Tert butyl alcohol

Concen: 120.269 ug/l

RT: 5.518 min Scan# 605

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 59 Resp: 44436

Ion Ratio Lower Upper

59 100

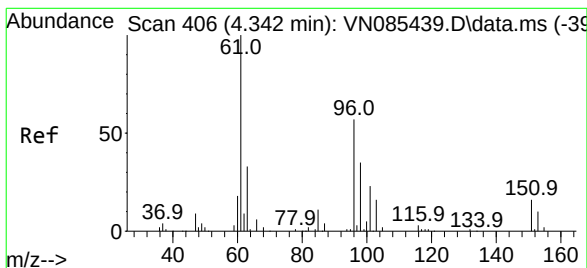
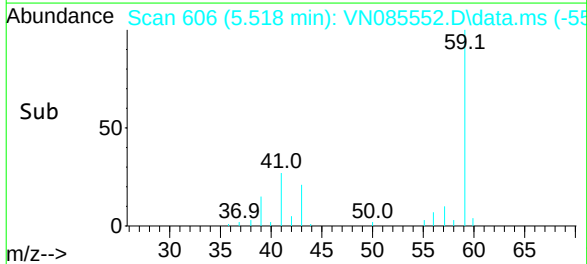
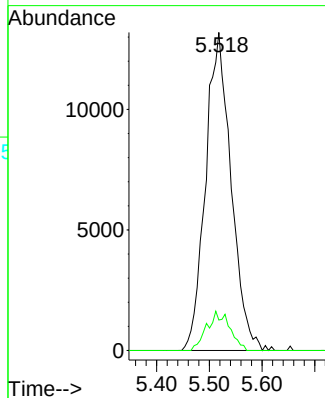
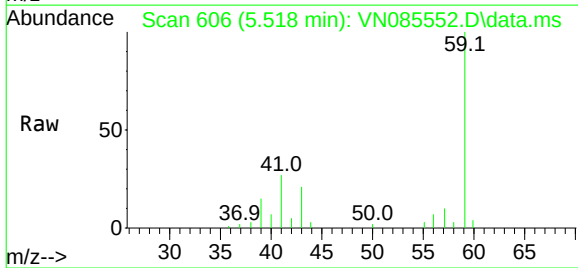
57 11.0 8.6 13.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#12

1,1-Dichloroethene

Concen: 17.909 ug/l

RT: 4.342 min Scan# 406

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

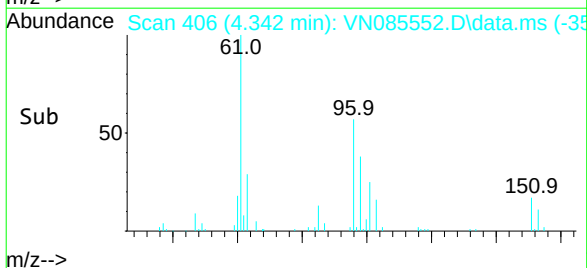
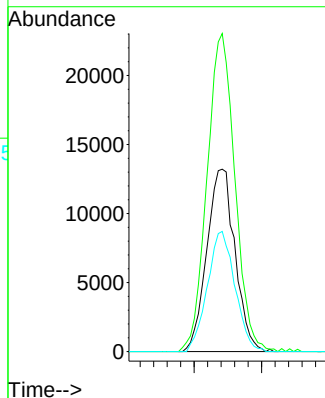
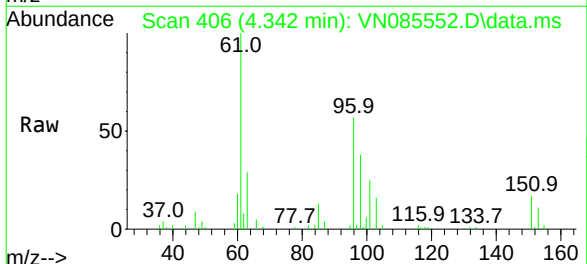
Tgt Ion: 96 Resp: 38420

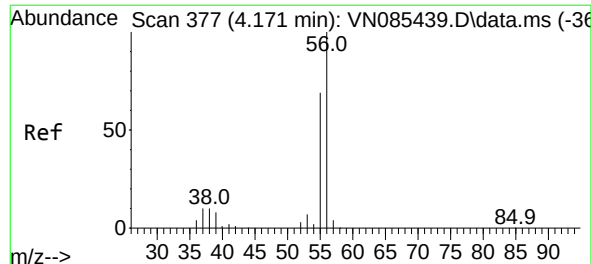
Ion Ratio Lower Upper

96 100

61 174.4 141.0 211.4

98 65.9 49.0 73.6





#13

Acrolein

Concen: 79.316 ug/l

RT: 4.177 min Scan# 377

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 56 Resp: 40004

Ion Ratio Lower Upper

56 100

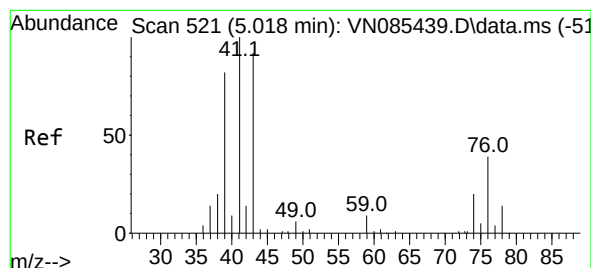
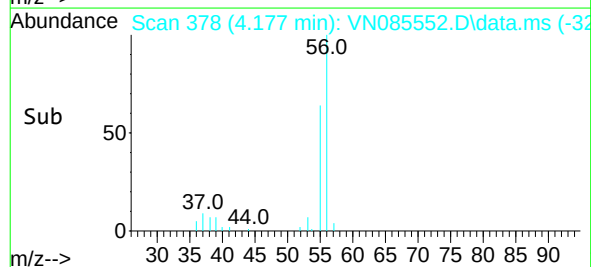
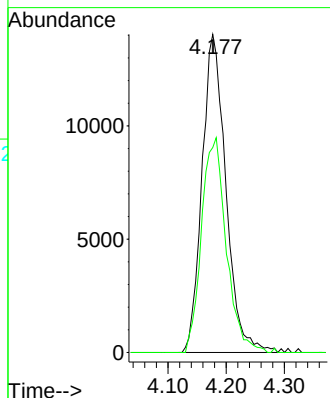
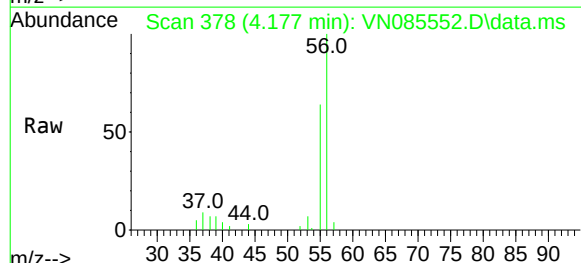
55 69.9 56.3 84.5

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#14

Allyl chloride

Concen: 17.643 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

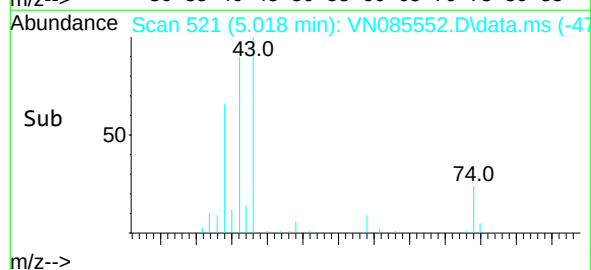
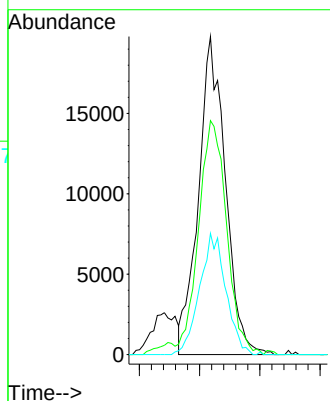
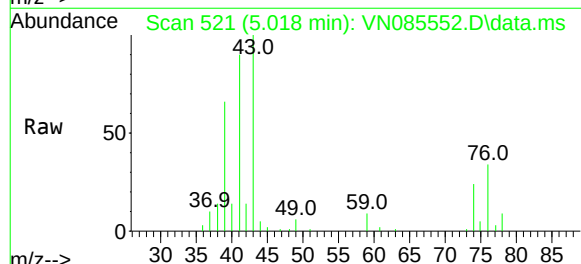
Tgt Ion: 41 Resp: 61417

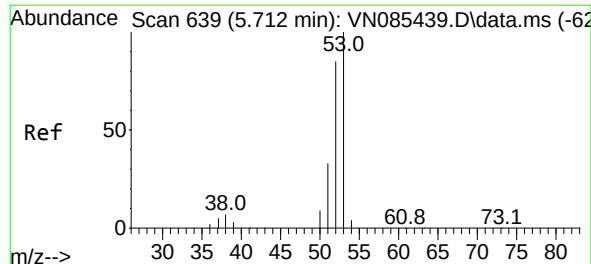
Ion Ratio Lower Upper

41 100

39 76.7 64.4 96.6

76 37.1 30.5 45.7





#15

Acrylonitrile

Concen: 108.256 ug/l

RT: 5.718 min Scan# 64

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 53 Resp: 127045

Ion Ratio Lower Upper

53 100

52 81.9 65.5 98.3

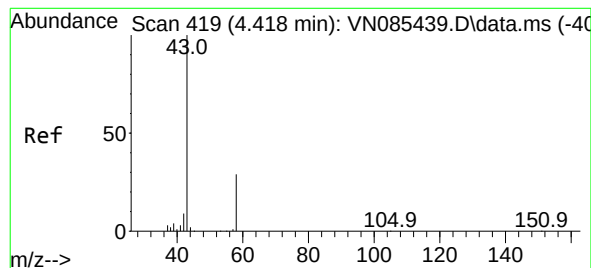
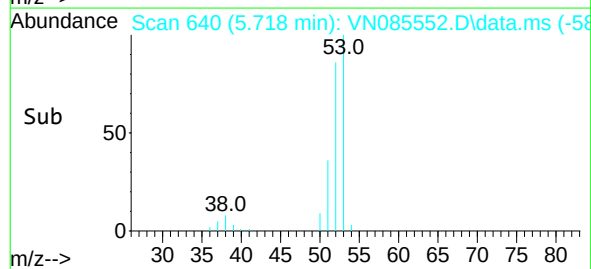
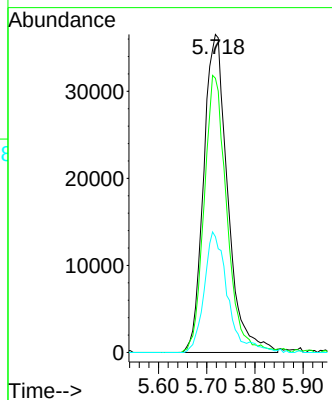
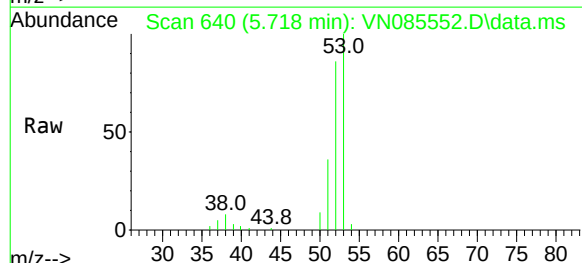
51 35.0 29.8 44.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#16

Acetone

Concen: 109.834 ug/l

RT: 4.430 min Scan# 421

Delta R.T. 0.012 min

Lab File: VN085552.D

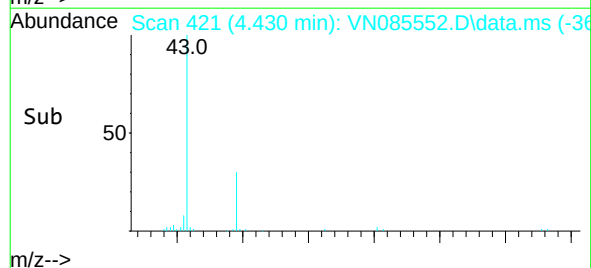
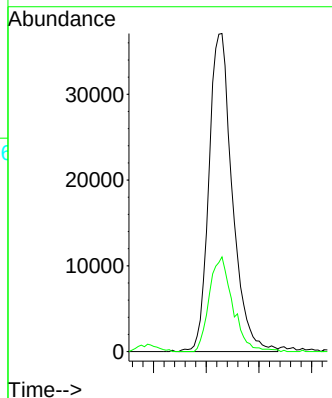
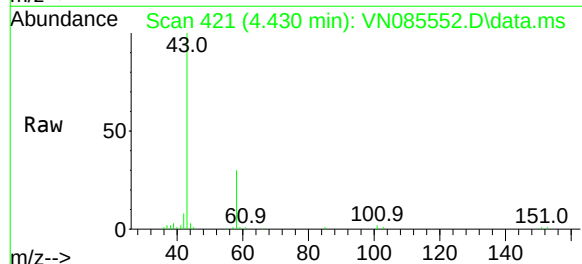
Acq: 29 Jan 2025 13:04

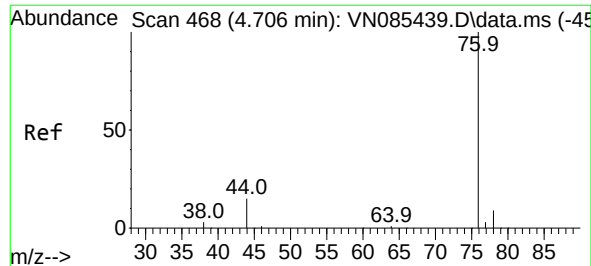
Tgt Ion: 43 Resp: 114508

Ion Ratio Lower Upper

43 100

58 29.8 23.8 35.6





#17

Carbon Disulfide

Concen: 14.567 ug/l

RT: 4.712 min Scan# 468

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 76 Resp: 96222

Ion Ratio Lower Upper

76 100

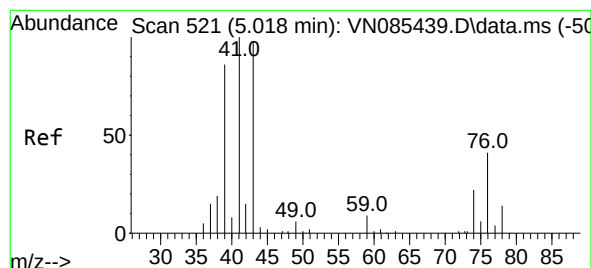
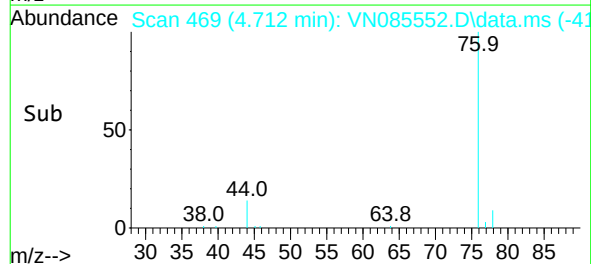
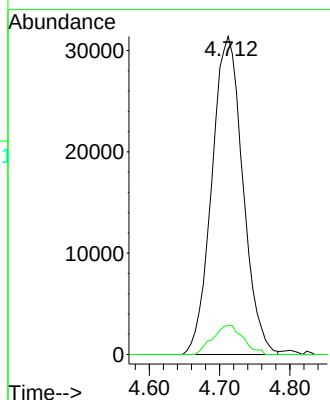
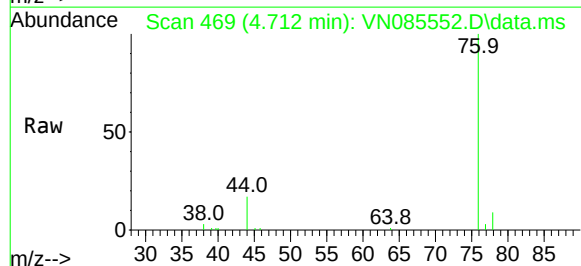
78 9.2 6.9 10.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#18

Methyl Acetate

Concen: 23.027 ug/l

RT: 5.018 min Scan# 521

Delta R.T. -0.000 min

Lab File: VN085552.D

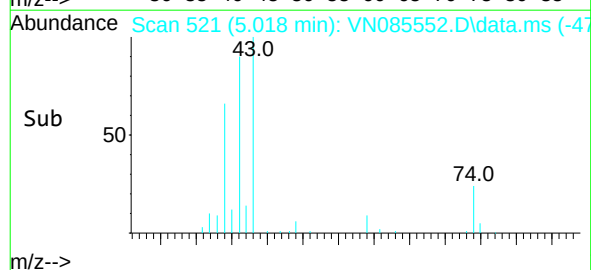
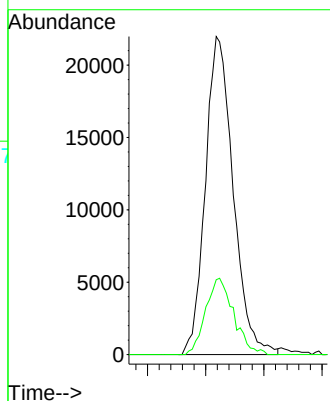
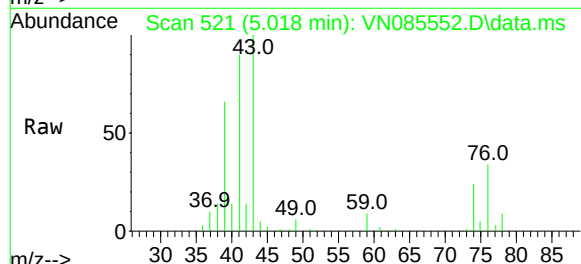
Acq: 29 Jan 2025 13:04

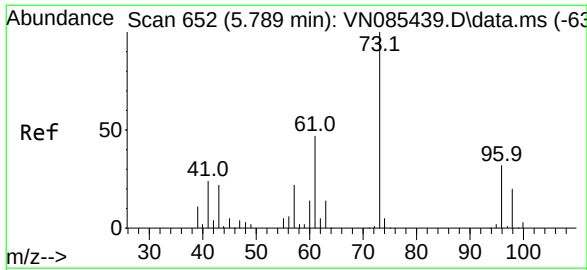
Tgt Ion: 43 Resp: 73000

Ion Ratio Lower Upper

43 100

74 24.2 18.6 28.0





#19

Methyl tert-butyl Ether

Concen: 20.418 ug/l

RT: 5.800 min Scan# 65

Delta R.T. 0.012 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 73 Resp: 142236

Ion Ratio Lower Upper

73 100

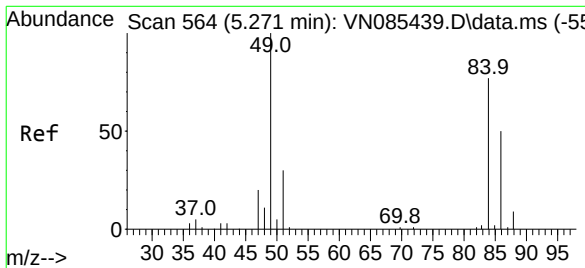
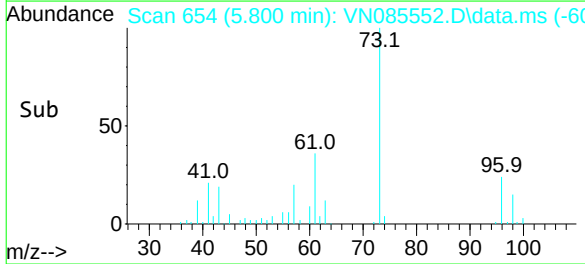
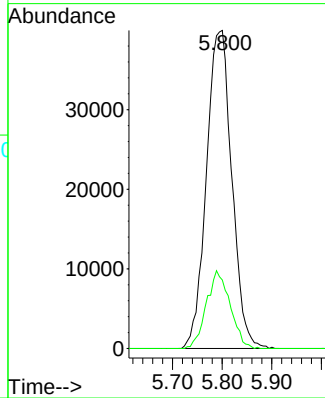
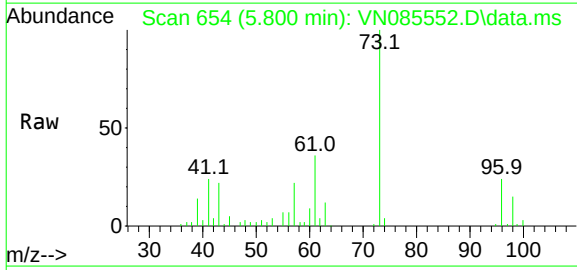
57 21.5 17.8 26.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#20

Methylene Chloride

Concen: 19.037 ug/l

RT: 5.277 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion: 84 Resp: 49133

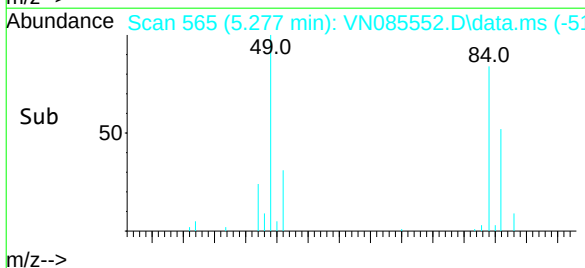
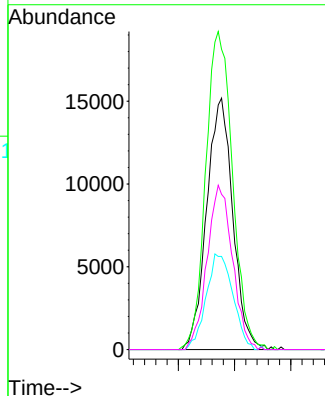
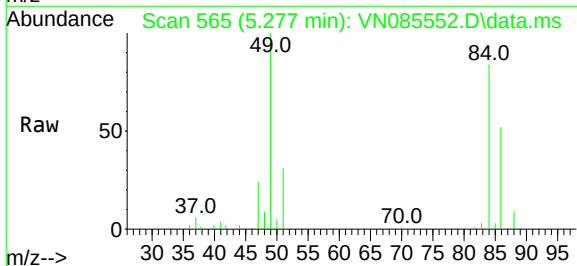
Ion Ratio Lower Upper

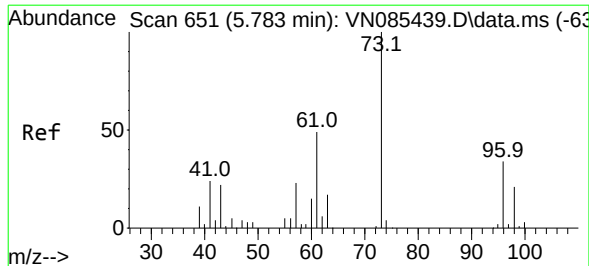
84 100

49 119.4 104.1 156.1

51 37.1 31.0 46.4

86 61.8 51.9 77.9





#21

trans-1,2-Dichloroethene

Concen: 17.456 ug/l

RT: 5.783 min Scan# 651

Delta R.T. -0.000 min

Lab File: VN085552.D

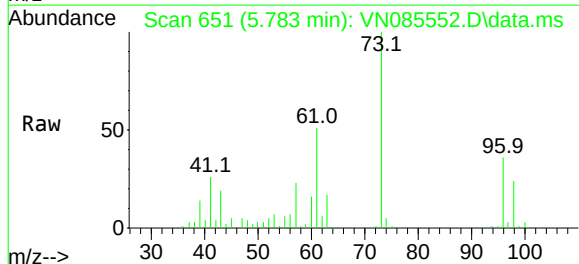
Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01



Tgt Ion: 96 Resp: 40021

Ion Ratio Lower Upper

96 100

61 141.4 115.7 173.5

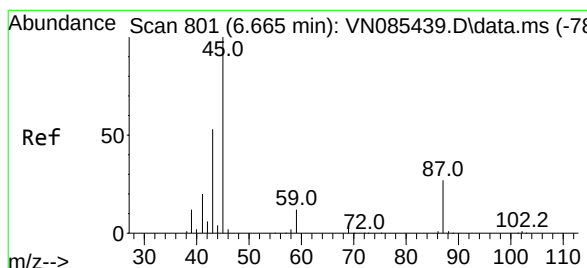
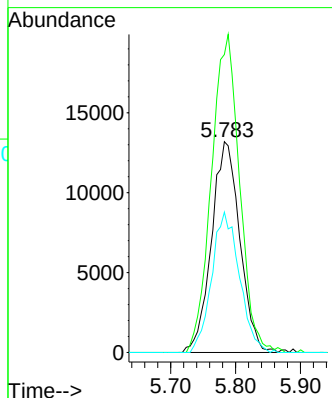
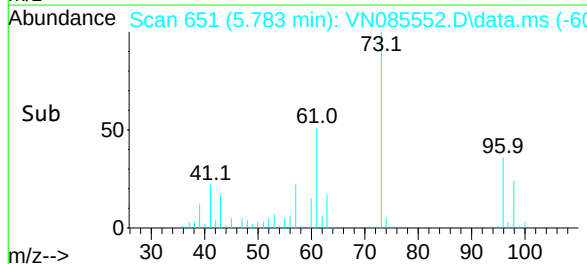
98 66.6 49.8 74.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#22

Diisopropyl ether

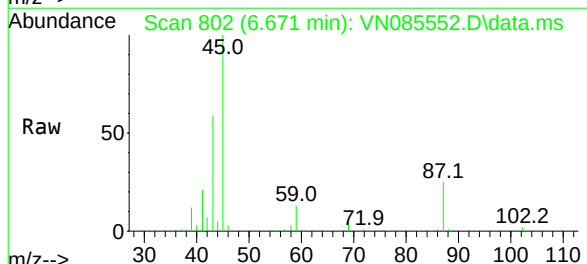
Concen: 20.044 ug/l

RT: 6.671 min Scan# 802

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04



Tgt Ion: 45 Resp: 154873

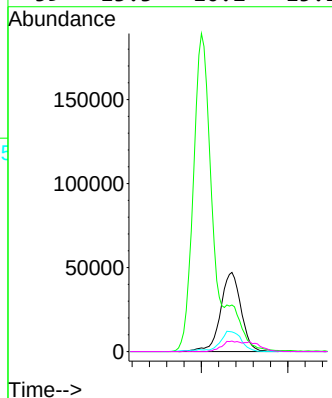
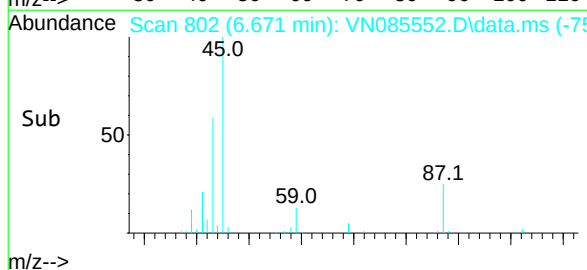
Ion Ratio Lower Upper

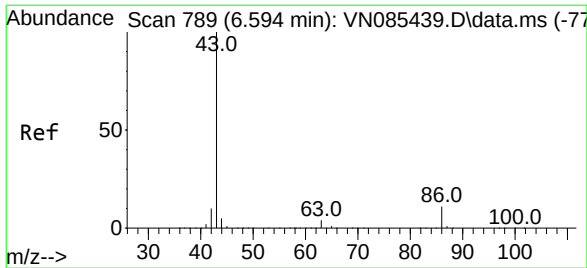
45 100

43 57.4 45.0 67.6

87 24.9 21.8 32.8

59 13.3 10.2 15.2





#23

Vinyl Acetate

Concen: 99.867 ug/l

RT: 6.600 min Scan# 790

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 43 Resp: 540007

Ion Ratio Lower Upper

43 100

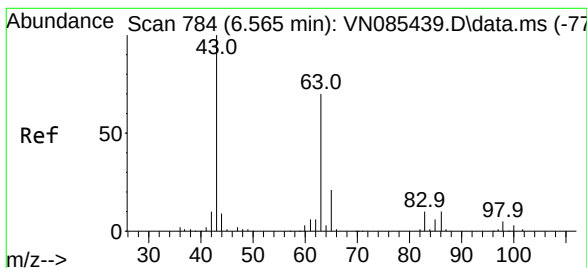
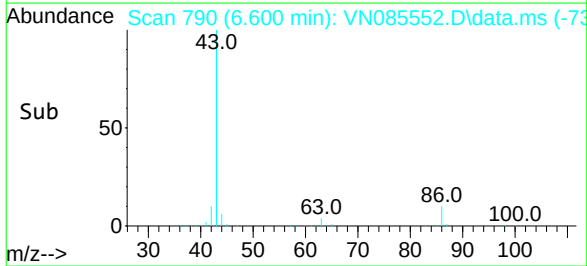
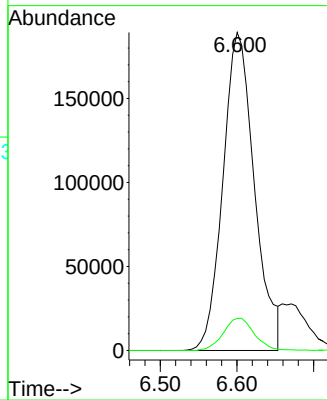
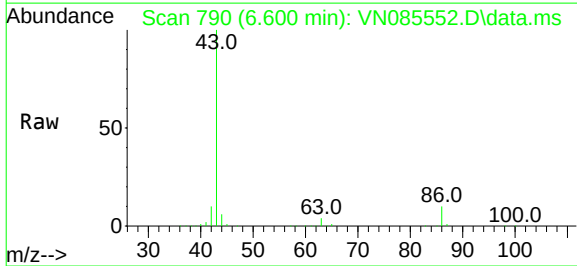
86 10.1 8.4 12.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#24

1,1-Dichloroethane

Concen: 19.129 ug/l

RT: 6.565 min Scan# 784

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

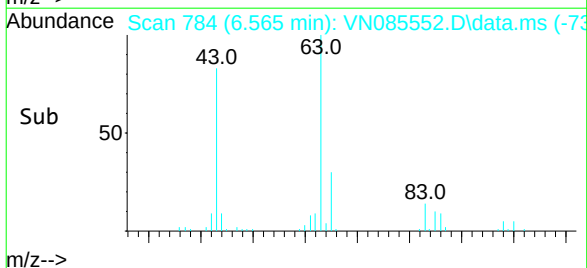
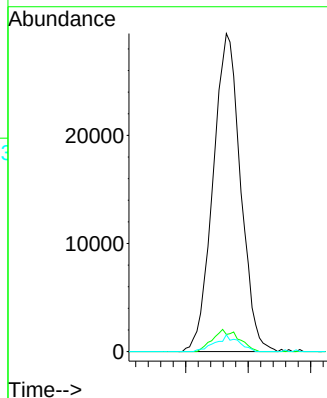
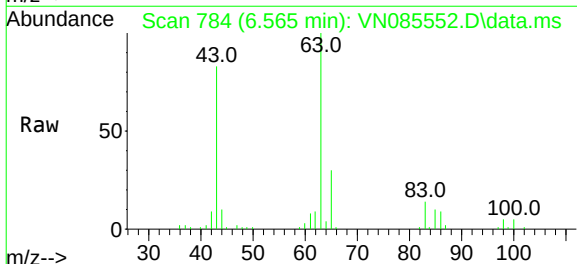
Tgt Ion: 63 Resp: 90121

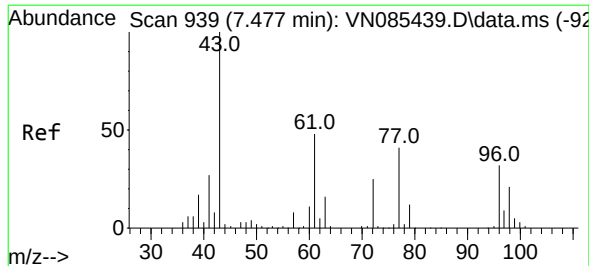
Ion Ratio Lower Upper

63 100

98 5.4 3.3 9.8

100 5.3 2.0 6.0





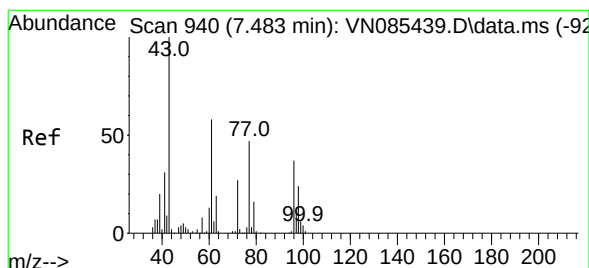
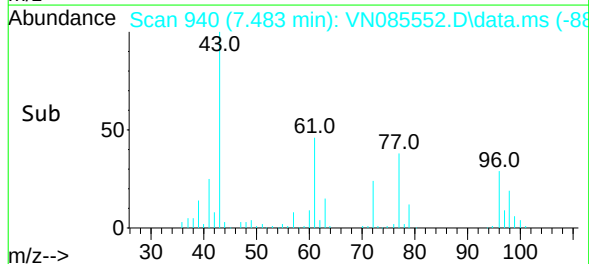
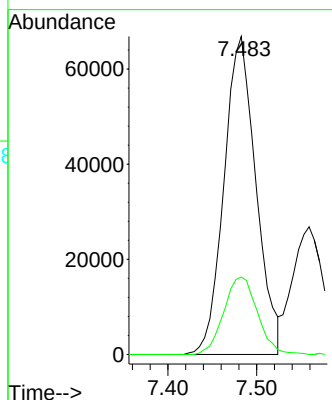
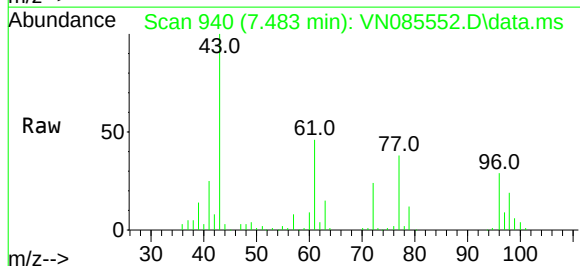
#25
2-Butanone
Concen: 109.240 ug/l
RT: 7.483 min Scan# 940
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion: 43 Resp: 167598
Ion Ratio Lower Upper
43 100
72 24.4 20.2 30.4

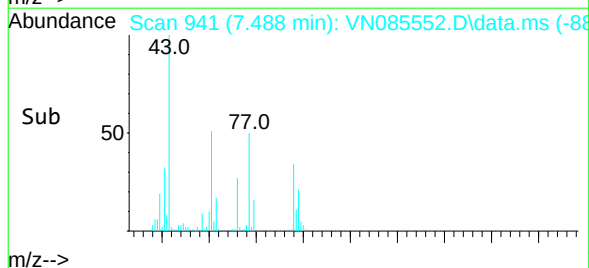
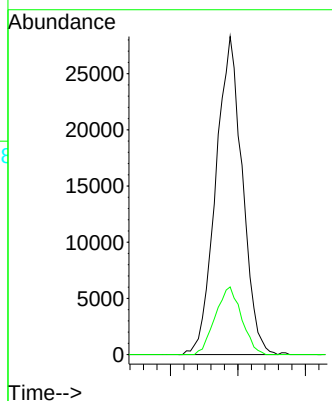
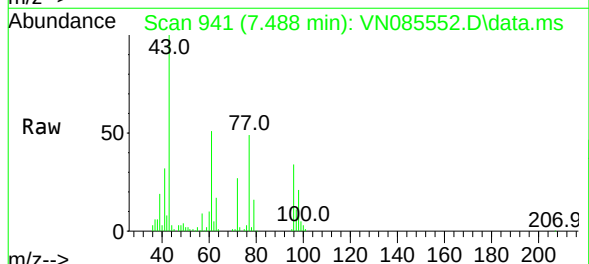
Manual Integrations
APPROVED

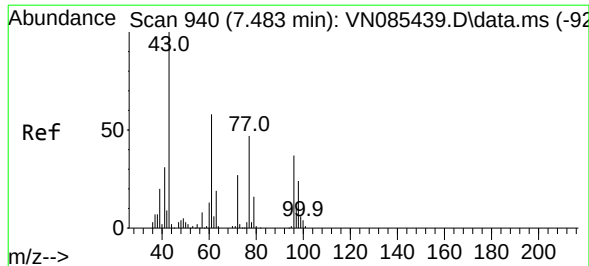
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#26
2,2-Dichloropropane
Concen: 20.344 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

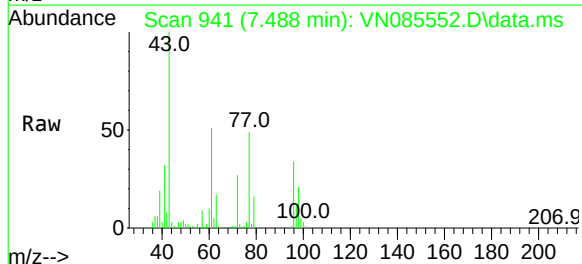
Tgt Ion: 77 Resp: 77491
Ion Ratio Lower Upper
77 100
97 21.0 10.7 32.1





#27
 cis-1,2-Dichloroethene
 Concen: 18.725 ug/l
 RT: 7.488 min Scan# 941
 Delta R.T. 0.006 min
 Lab File: VN085552.D
 Acq: 29 Jan 2025 13:04

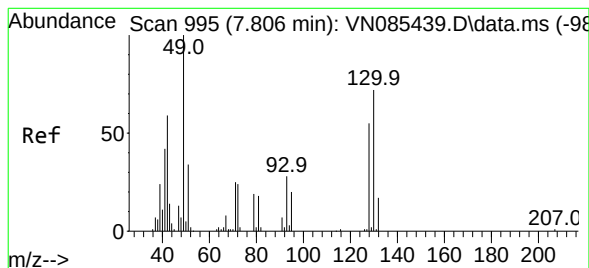
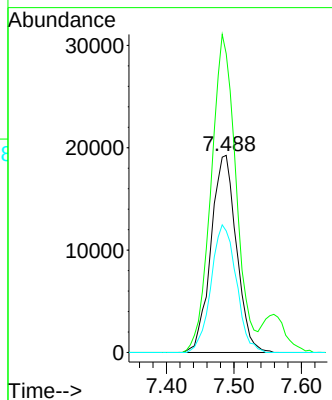
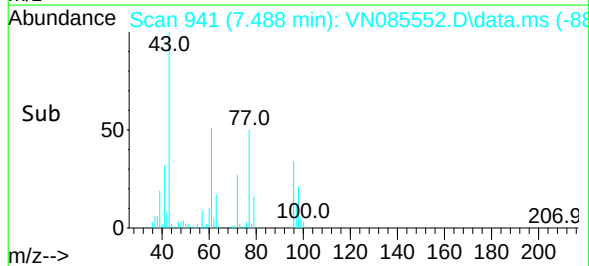
Instrument :
 MSVOA_N
 ClientSampleId :
 VN0129WBSD01



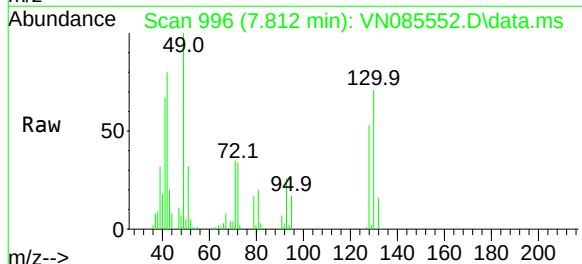
Tgt Ion: 96 Resp: 50565
 Ion Ratio Lower Upper
 96 100
 61 157.7 0.0 311.8
 98 64.2 0.0 126.0

Manual Integrations
 APPROVED

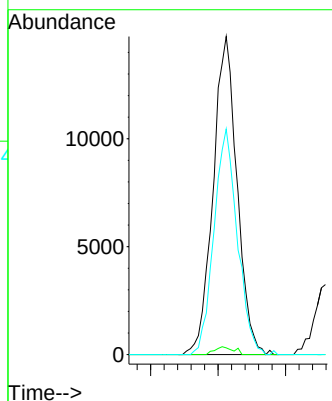
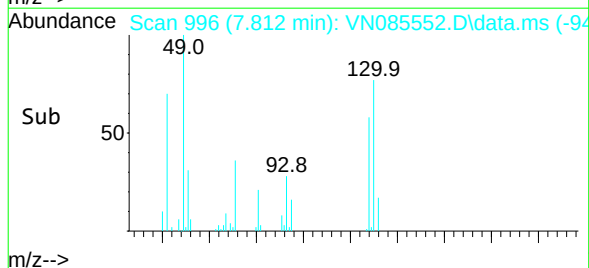
Reviewed By :John Carlone 01/30/2025
 Supervised By :Mahesh Dadoda 01/30/2025

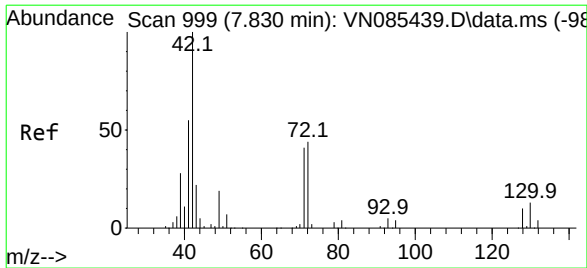


#28
 Bromochloromethane
 Concen: 16.605 ug/l
 RT: 7.812 min Scan# 996
 Delta R.T. 0.006 min
 Lab File: VN085552.D
 Acq: 29 Jan 2025 13:04



Tgt Ion: 49 Resp: 36396
 Ion Ratio Lower Upper
 49 100
 129 1.9 0.0 4.4
 130 69.1 55.0 82.4





#29

Tetrahydrofuran

Concen: 113.317 ug/l

RT: 7.835 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 42 Resp: 110223

Ion Ratio Lower Upper

42 100

72 43.0 34.2 51.2

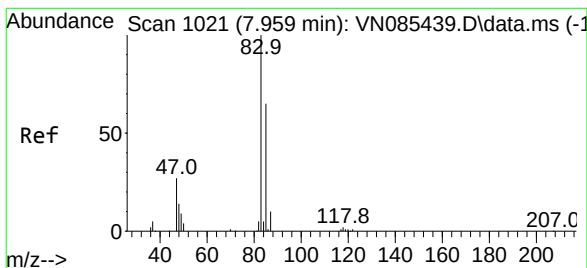
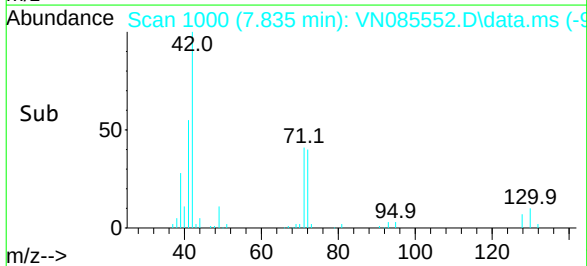
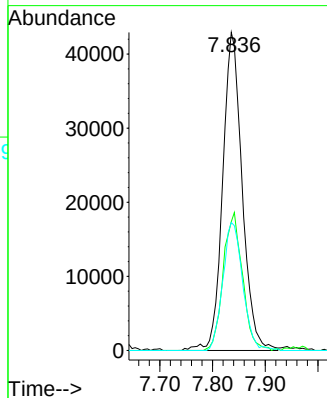
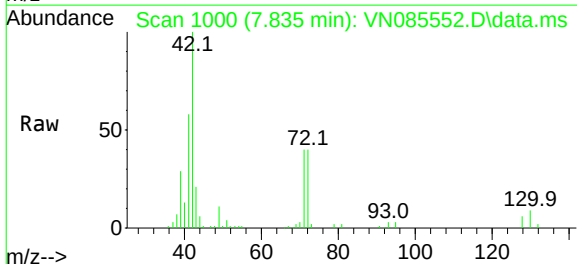
71 41.1 32.5 48.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#30

Chloroform

Concen: 19.443 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085552.D

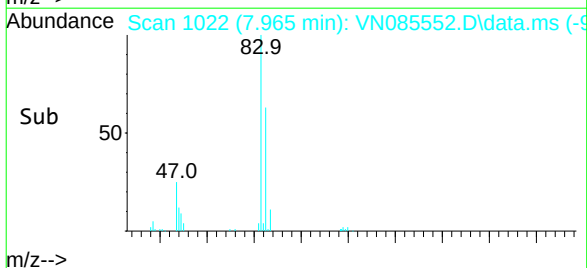
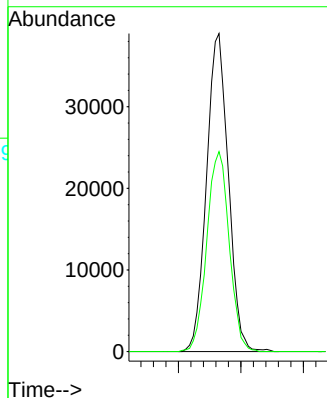
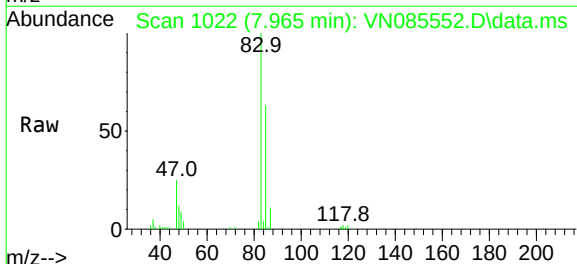
Acq: 29 Jan 2025 13:04

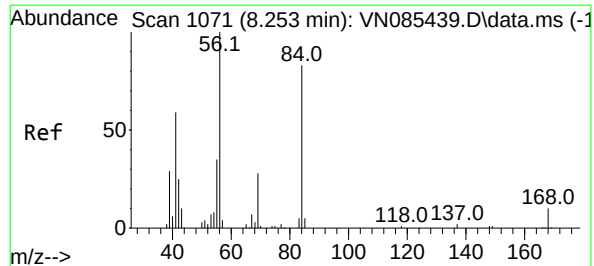
Tgt Ion: 83 Resp: 94675

Ion Ratio Lower Upper

83 100

85 62.9 51.8 77.6





#31

Cyclohexane

Concen: 15.991 ug/l

RT: 8.253 min Scan# 1071

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 56 Resp: 65483

Ion Ratio Lower Upper

56 100

69 29.8 22.2 33.4

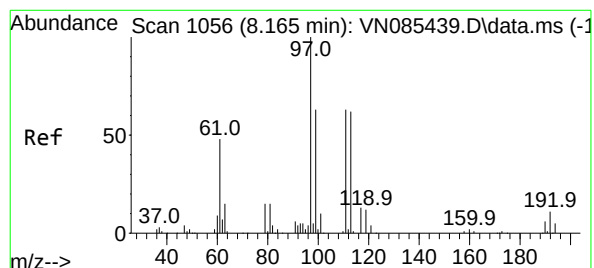
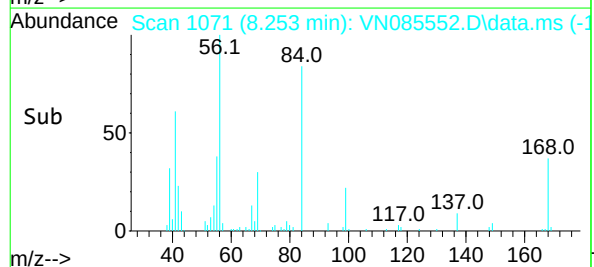
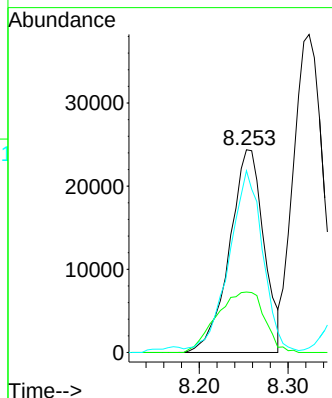
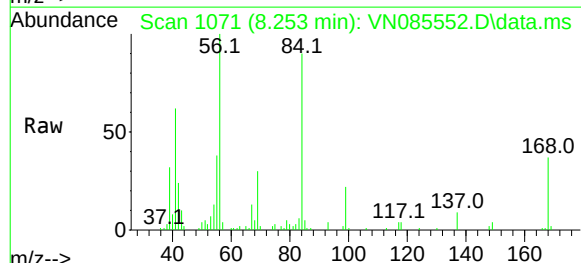
84 87.1 66.4 99.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#32

1,1,1-Trichloroethane

Concen: 19.203 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

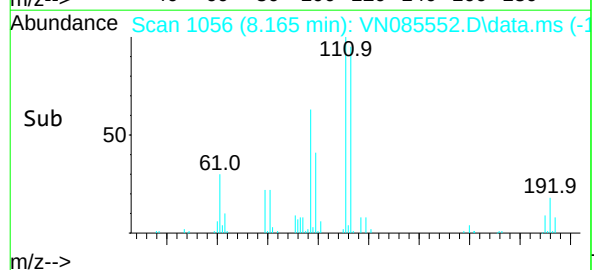
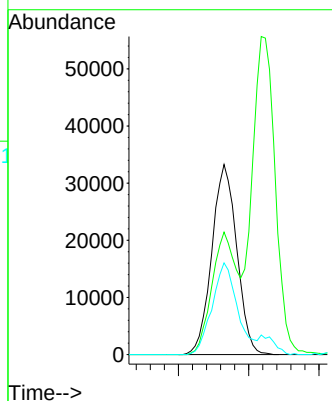
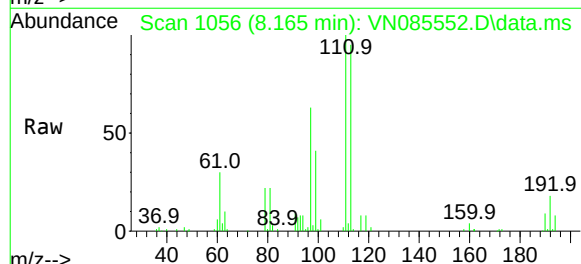
Tgt Ion: 97 Resp: 82021

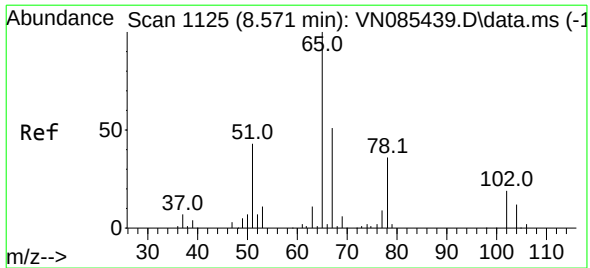
Ion Ratio Lower Upper

97 100

99 64.0 49.8 74.6

61 49.4 41.4 62.2





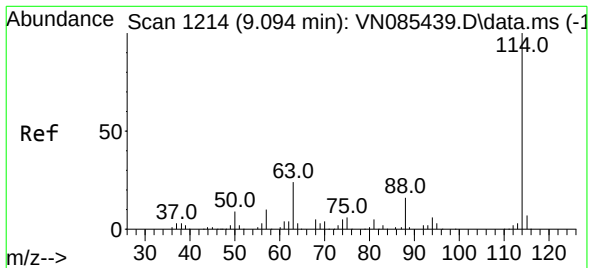
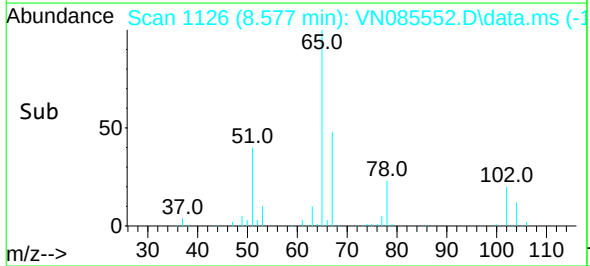
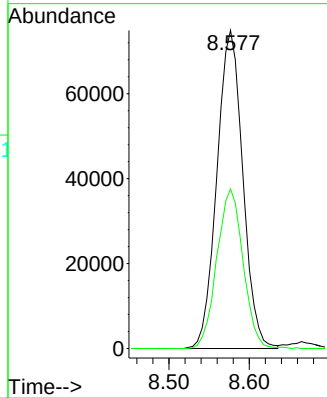
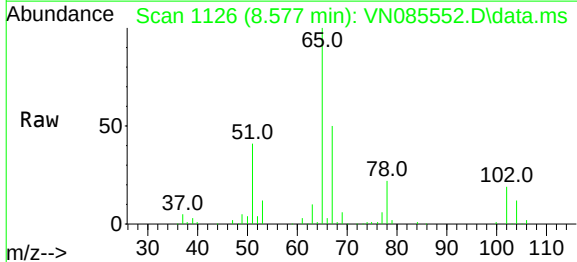
#33
1,2-Dichloroethane-d4
Concen: 51.947 ug/l
RT: 8.577 min Scan# 1125
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion: 65 Resp: 167615
Ion Ratio Lower Upper
65 100
67 50.7 0.0 101.6

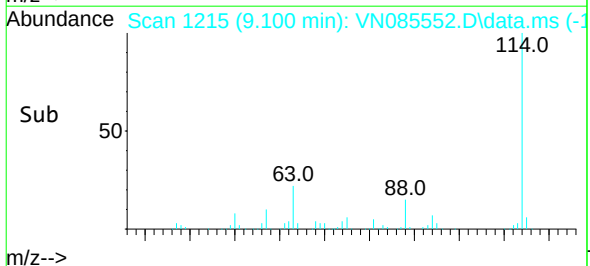
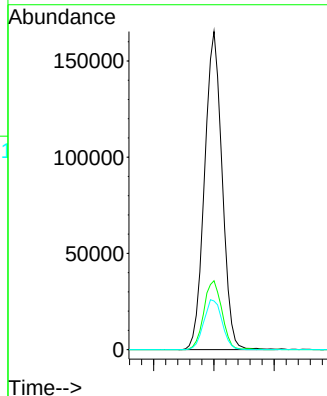
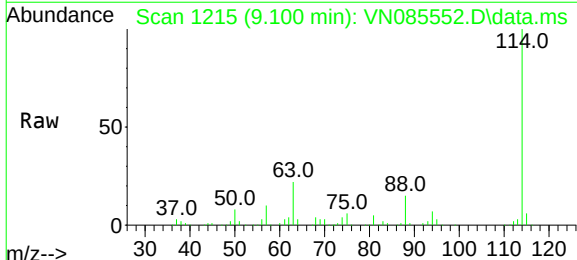
Manual Integrations
APPROVED

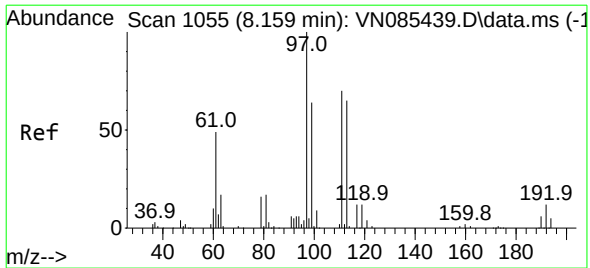
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion:114 Resp: 334279
Ion Ratio Lower Upper
114 100
63 21.6 0.0 47.6
88 15.3 0.0 32.6





#35

Dibromofluoromethane

Concen: 52.775 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 113 Resp: 122396

Ion Ratio Lower Upper

113 100

111 103.0 82.7 124.1

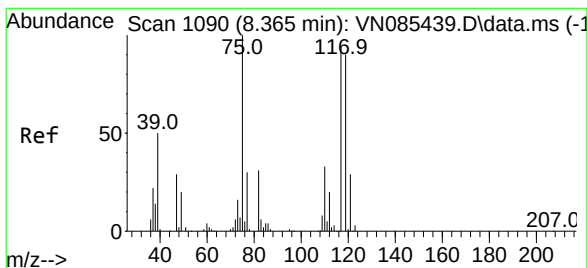
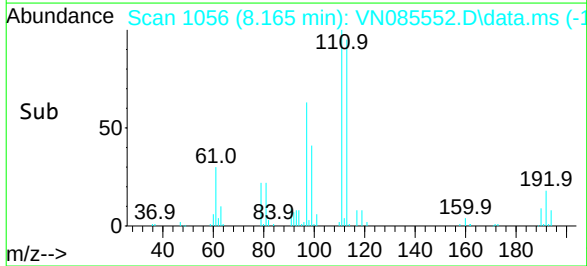
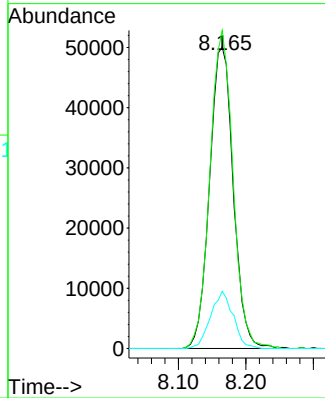
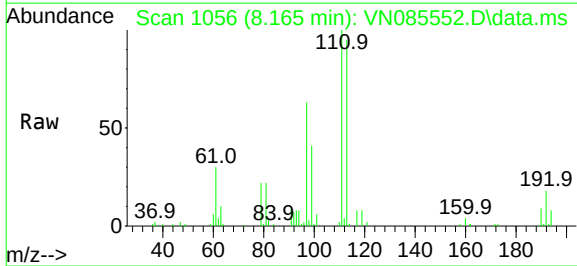
192 18.1 14.3 21.5

Manual Integrations

APPROVED

Reviewed By : John Carlone 01/30/2025

Supervised By : Mahesh Dadoda 01/30/2025



#36

1,1-Dichloropropene

Concen: 17.894 ug/l

RT: 8.371 min Scan# 1091

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

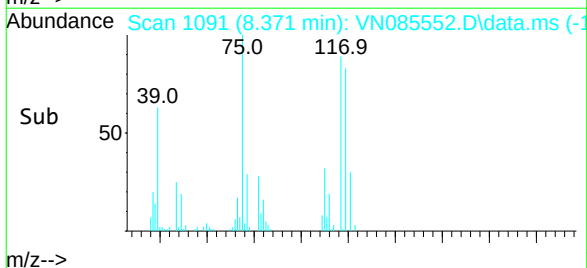
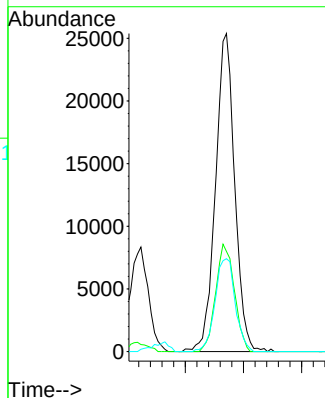
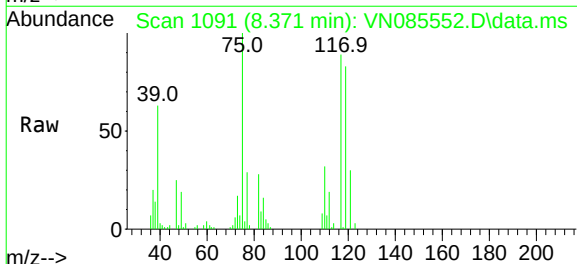
Tgt Ion: 75 Resp: 58241

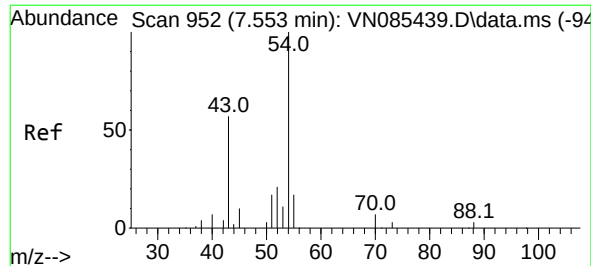
Ion Ratio Lower Upper

75 100

110 32.8 16.5 49.5

77 30.6 24.4 36.6





#37

Ethyl Acetate

Concen: 21.109 ug/l

RT: 7.559 min Scan# 95

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

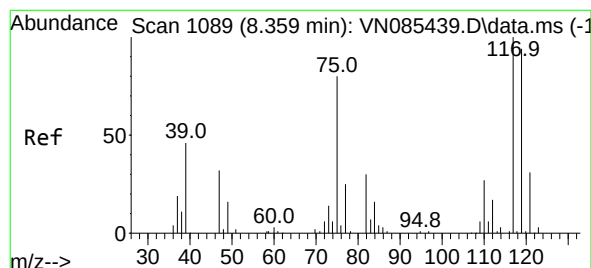
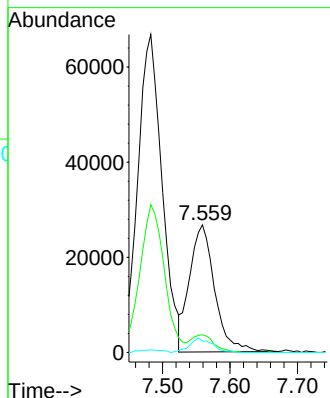
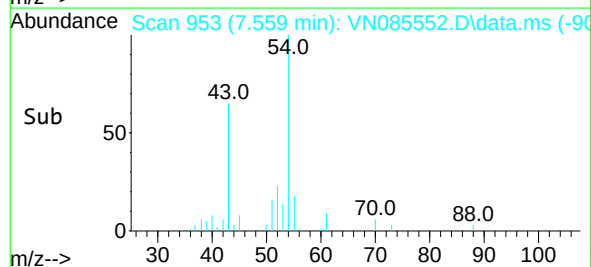
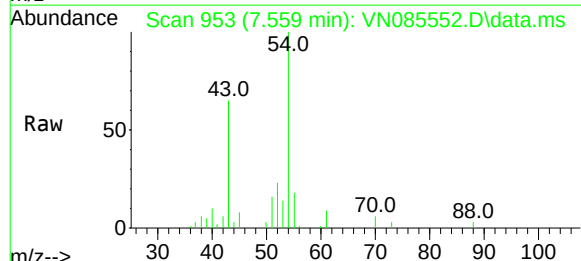
ClientSampleId :

VN0129WBSD01

Tgt Ion:	43	Resp:	69349
Ion	Ratio	Lower	Upper
43	100		
61	12.6	10.9	16.3
70	10.1	7.5	11.3

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#38

Carbon Tetrachloride

Concen: 18.756 ug/l

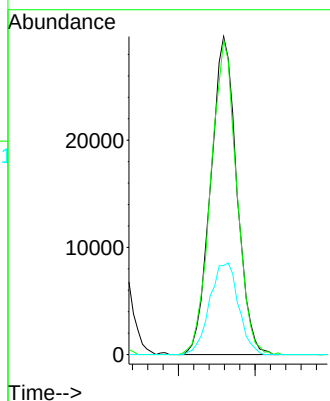
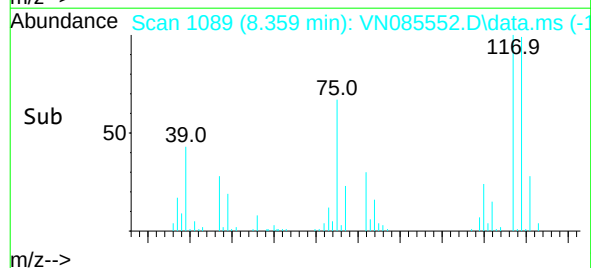
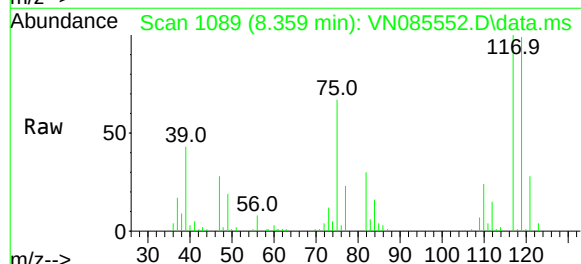
RT: 8.359 min Scan# 1089

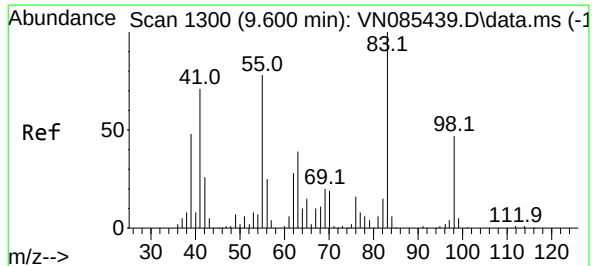
Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion:	117	Resp:	69887
Ion	Ratio	Lower	Upper
117	100		
119	98.9	75.4	113.2
121	28.0	24.6	37.0





#39

Methylcyclohexane

Concen: 17.082 ug/l

RT: 9.600 min Scan# 131

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

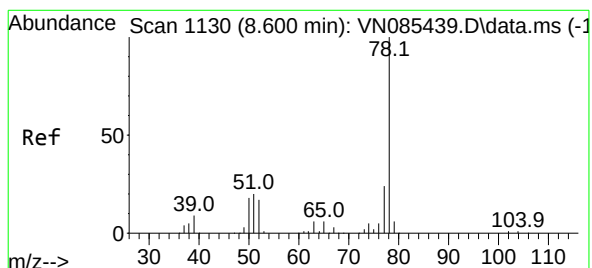
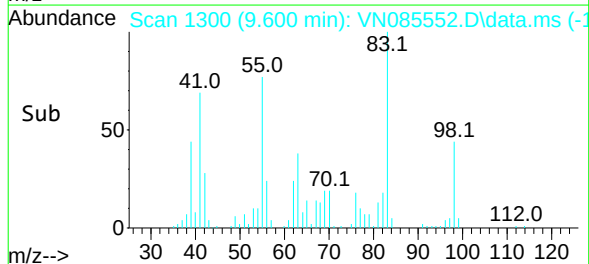
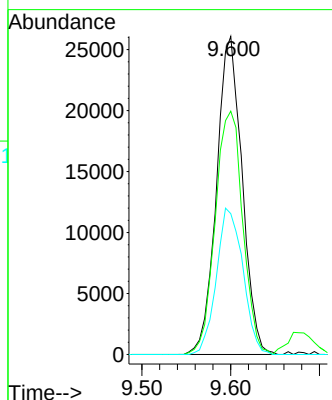
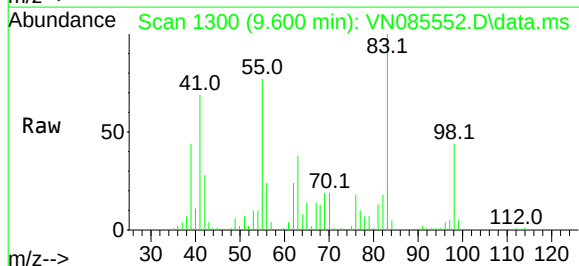
ClientSampleId :

VN0129WBSD01

Tgt Ion:	83	Resp:	52245
Ion	Ratio	Lower	Upper
83	100		
55	76.5	62.6	94.0
98	44.3	37.7	56.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#40

Benzene

Concen: 19.325 ug/l

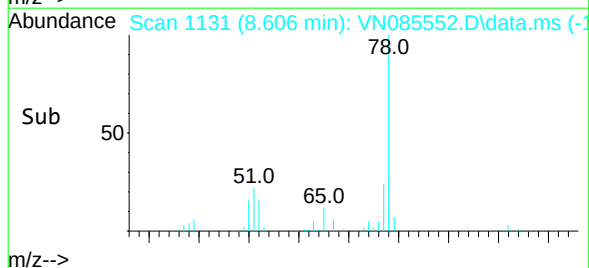
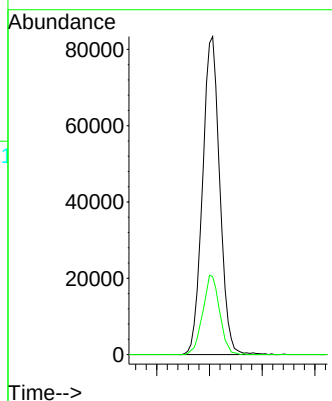
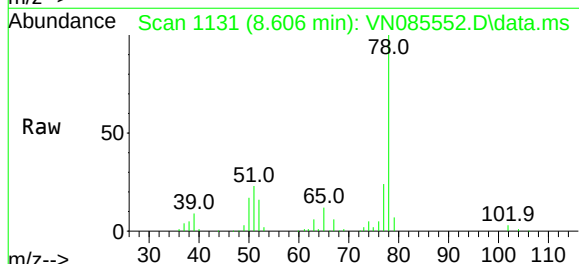
RT: 8.606 min Scan# 1131

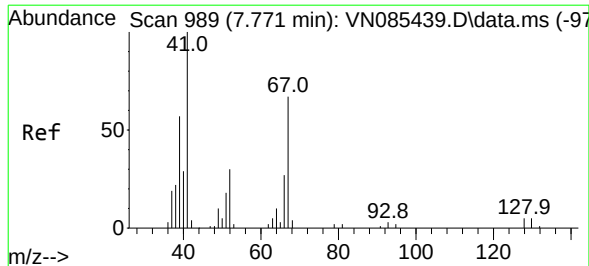
Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion:	78	Resp:	188989
Ion	Ratio	Lower	Upper
78	100		
77	24.5	19.0	28.6





#41

Methacrylonitrile

Concen: 21.538 ug/l

RT: 7.777 min Scan# 990

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 41 Resp: 36813

Ion Ratio Lower Upper

41 100

39 60.9 46.0 69.0

67 71.2 57.4 86.2

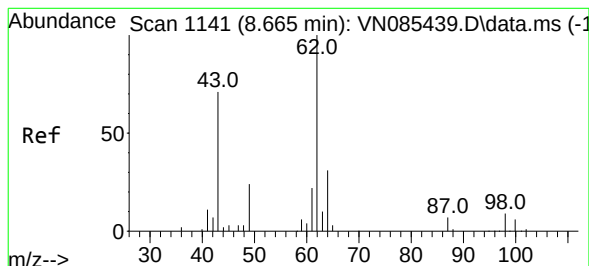
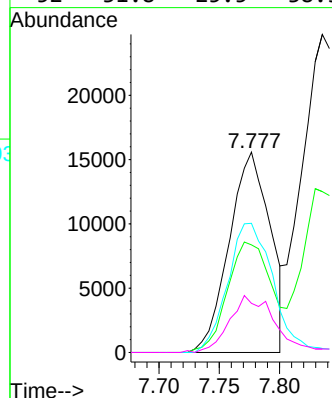
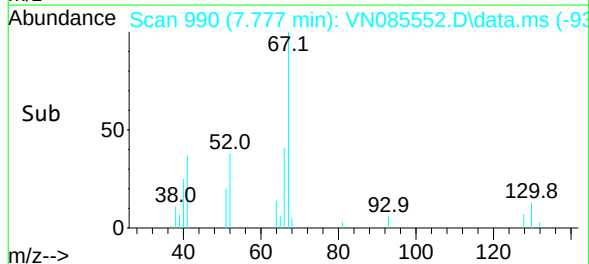
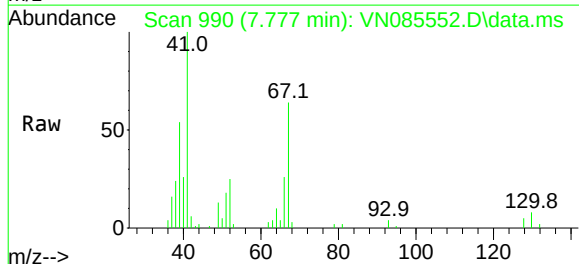
52 31.8 25.5 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#42

1,2-Dichloroethane

Concen: 20.586 ug/l

RT: 8.665 min Scan# 1141

Delta R.T. -0.000 min

Lab File: VN085552.D

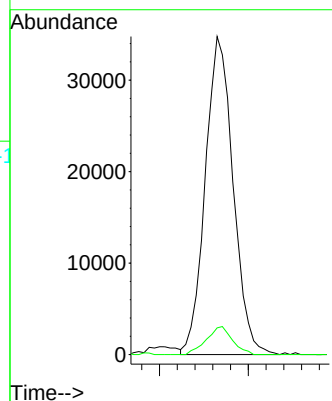
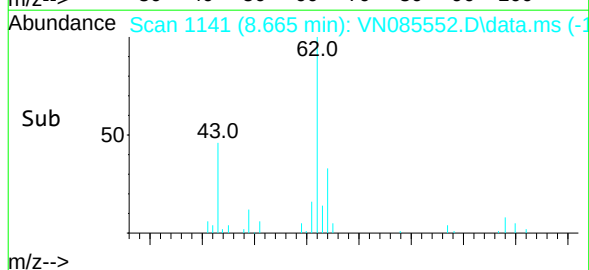
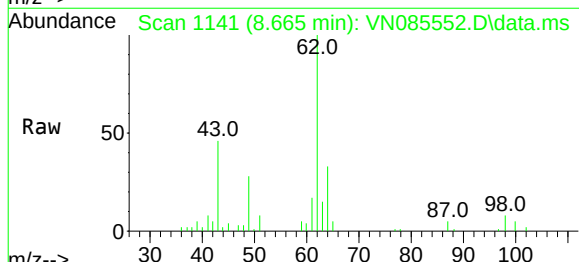
Acq: 29 Jan 2025 13:04

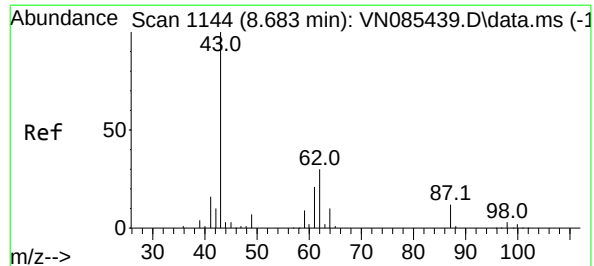
Tgt Ion: 62 Resp: 75825

Ion Ratio Lower Upper

62 100

98 8.2 0.0 17.0





#43

Isopropyl Acetate

Concen: 21.627 ug/l

RT: 8.688 min Scan# 1144

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 43 Resp: 113844

Ion Ratio Lower Upper

43 100

61 25.4 20.7 31.1

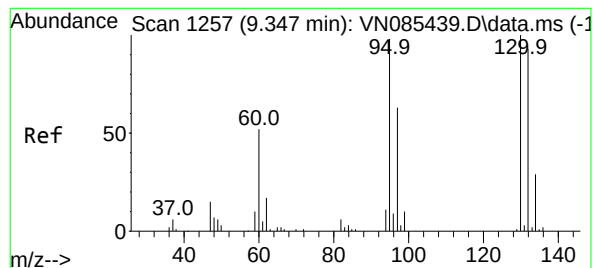
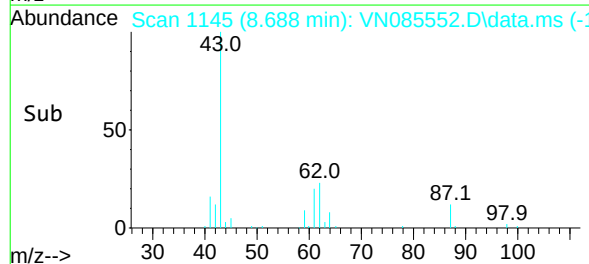
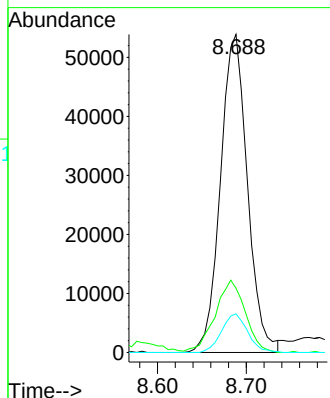
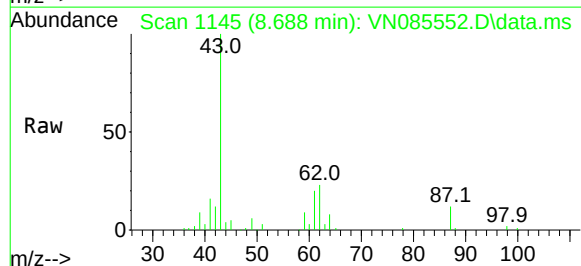
87 11.7 9.8 14.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#44

Trichloroethene

Concen: 18.266 ug/l

RT: 9.347 min Scan# 1257

Delta R.T. -0.000 min

Lab File: VN085552.D

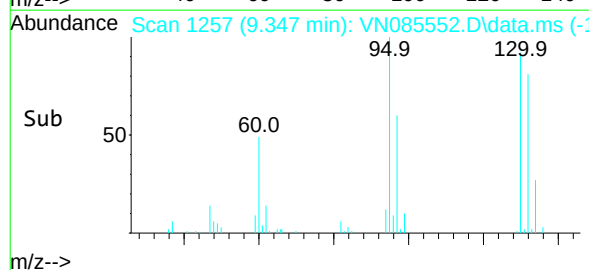
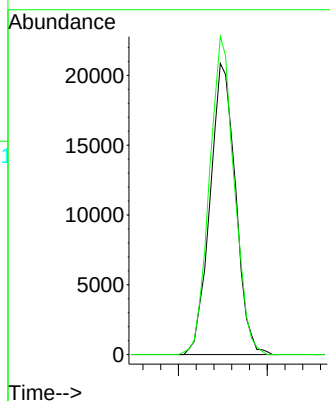
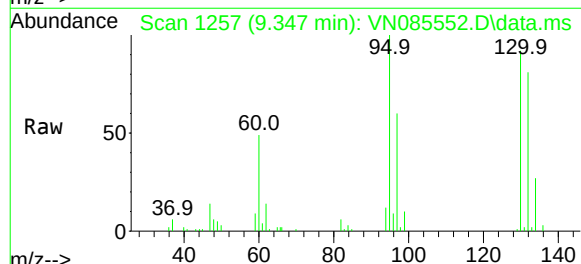
Acq: 29 Jan 2025 13:04

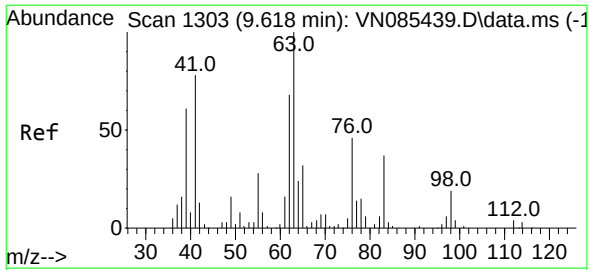
Tgt Ion:130 Resp: 41582

Ion Ratio Lower Upper

130 100

95 109.2 0.0 195.8





#45

1,2-Dichloropropane

Concen: 19.620 ug/l

RT: 9.618 min Scan# 1303

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 63 Resp: 49009

Ion Ratio Lower Upper

63 100

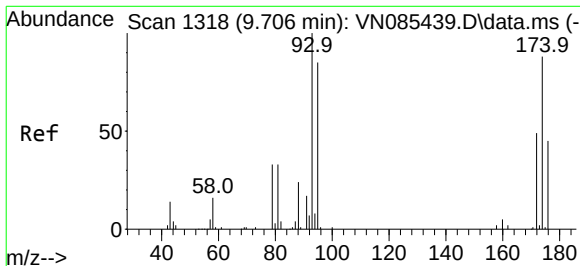
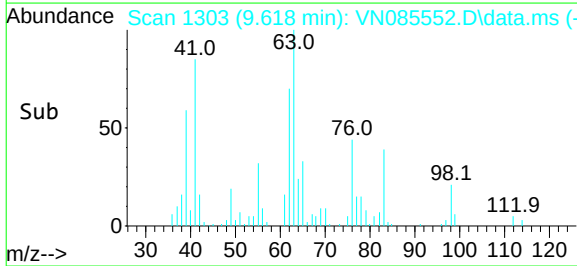
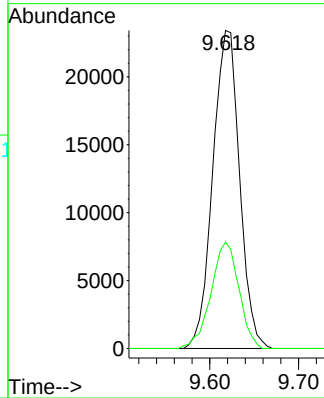
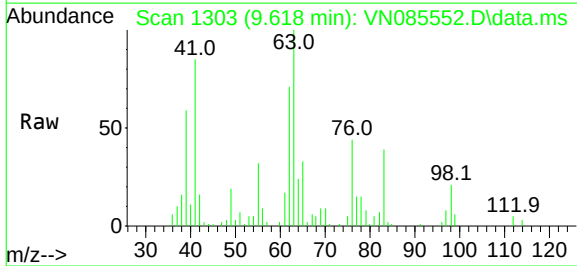
65 33.4 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#46

Dibromomethane

Concen: 19.747 ug/l

RT: 9.706 min Scan# 1318

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

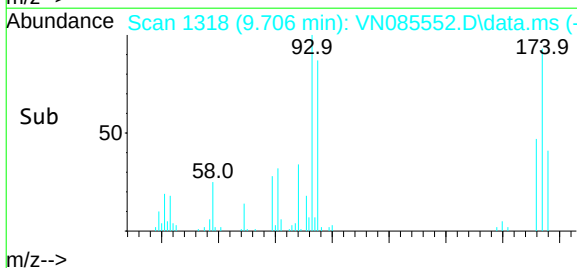
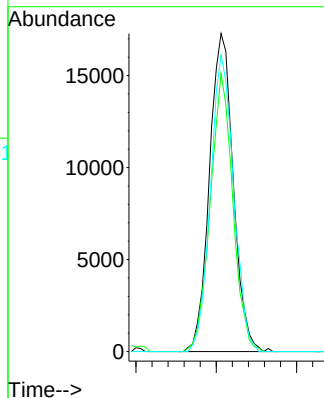
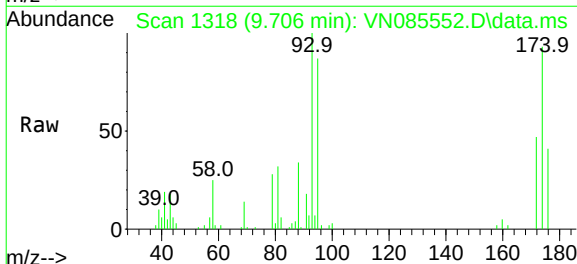
Tgt Ion: 93 Resp: 35593

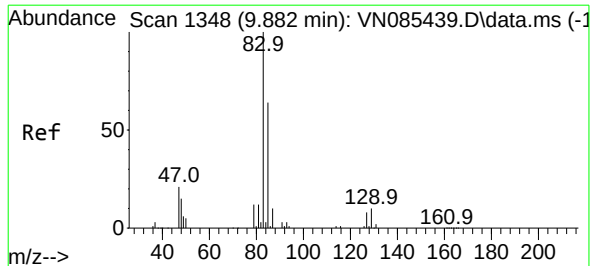
Ion Ratio Lower Upper

93 100

95 82.5 64.7 97.1

174 90.7 69.0 103.4





#47

Bromodichloromethane

Concen: 20.821 ug/l

RT: 9.882 min Scan# 1348

Delta R.T. 0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

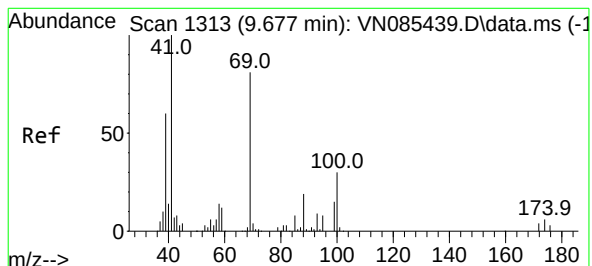
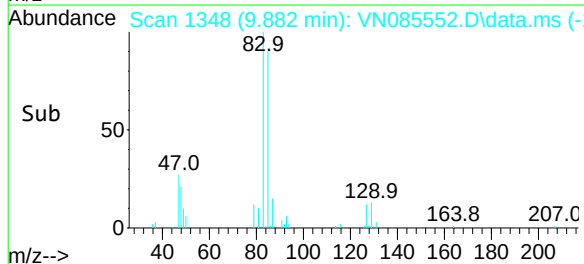
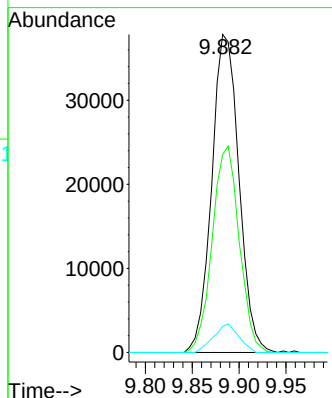
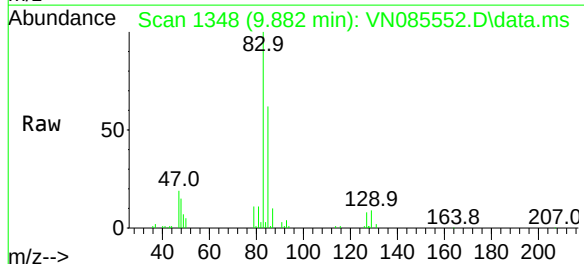
ClientSampleId :

VN0129WBSD01

Tgt Ion:	83	Resp:	76456
Ion Ratio	Lower	Upper	
83	100		
85	62.2	51.2	76.8
127	8.2	6.5	9.7

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#48

Methyl methacrylate

Concen: 22.232 ug/l

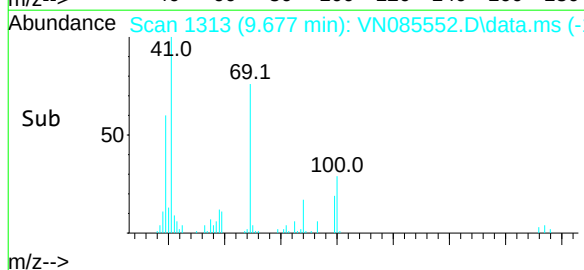
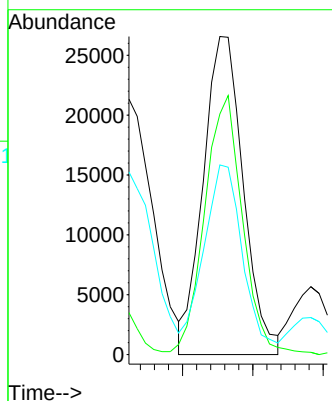
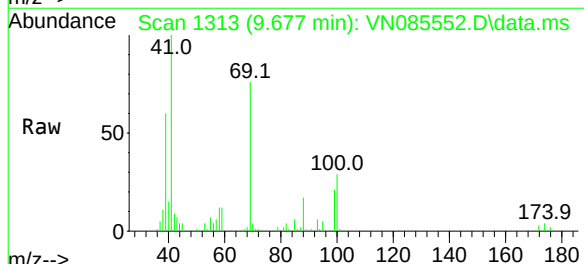
RT: 9.677 min Scan# 1313

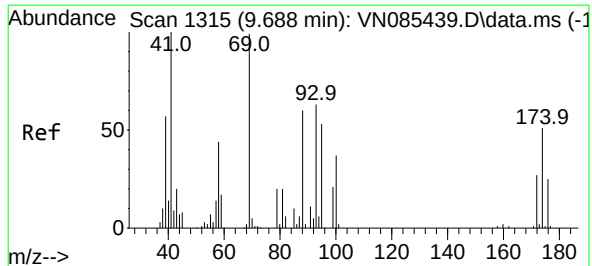
Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion:	41	Resp:	52667
Ion Ratio	Lower	Upper	
41	100		
69	77.0	64.7	97.1
39	58.7	49.0	73.6





#49

1,4-Dioxane

Concen: 486.754 ug/l

RT: 9.694 min Scan# 1315

Delta R.T. 0.006 min

Lab File: VN085552.D

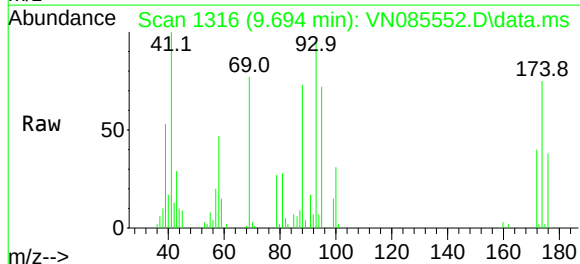
Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01



Tgt Ion: 88 Resp: 19418

Ion Ratio Lower Upper

88 100

43 32.9 26.6 39.8

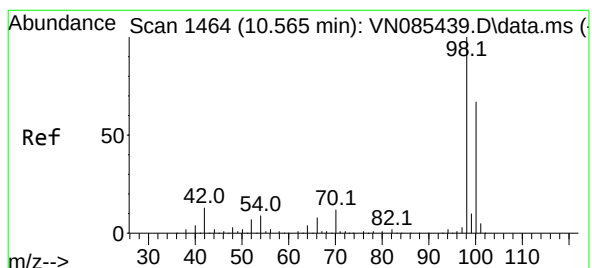
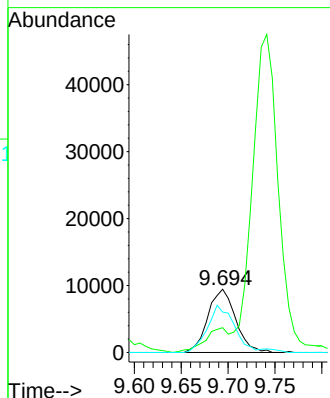
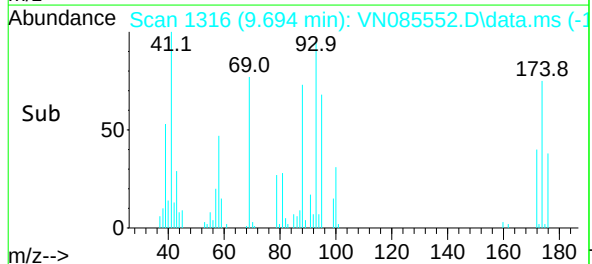
58 72.9 59.5 89.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#50

Toluene-d8

Concen: 53.154 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN085552.D

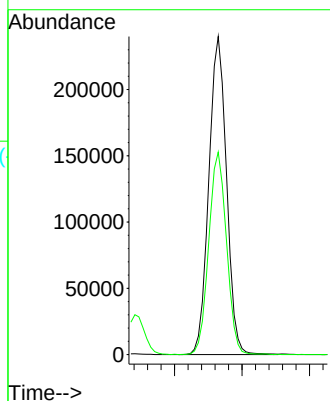
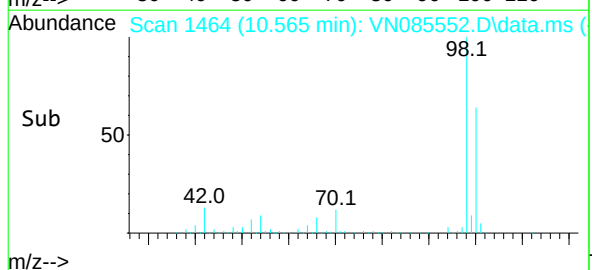
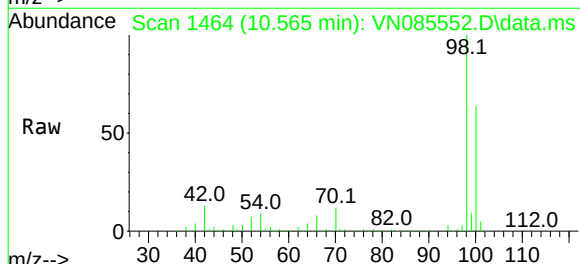
Acq: 29 Jan 2025 13:04

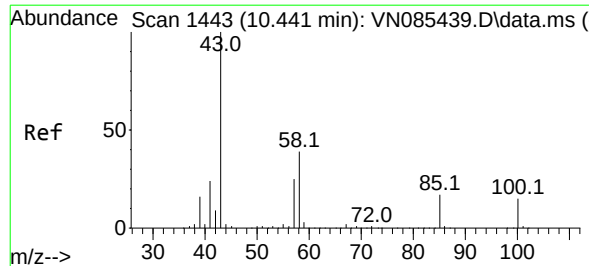
Tgt Ion: 98 Resp: 437973

Ion Ratio Lower Upper

98 100

100 63.9 52.2 78.4





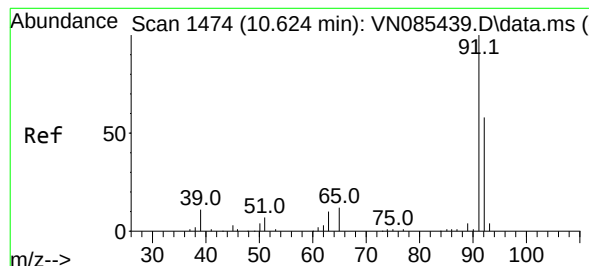
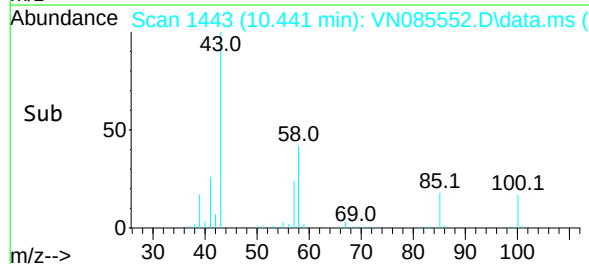
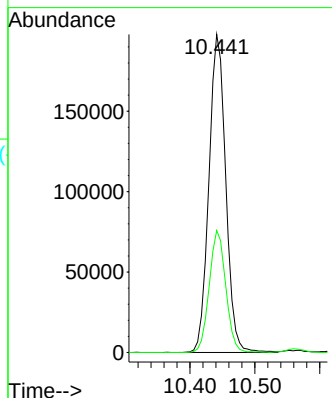
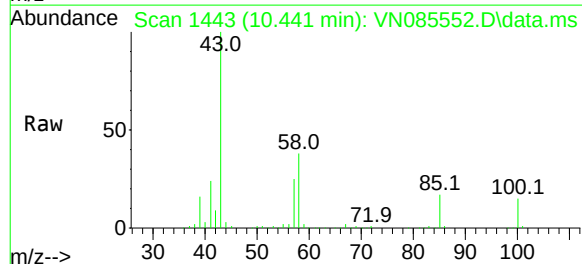
#51
4-Methyl-2-Pentanone
Concen: 116.808 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. 0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion: 43 Resp: 356810
Ion Ratio Lower Upper
43 100
58 37.6 30.5 45.7

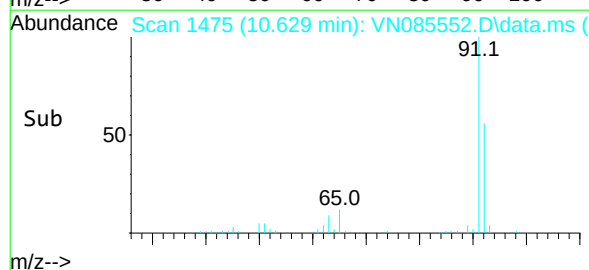
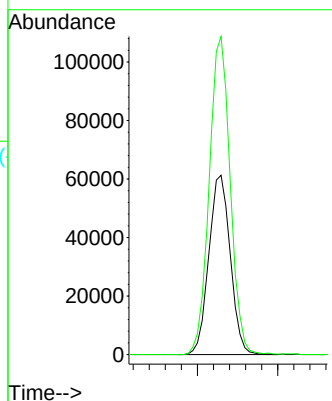
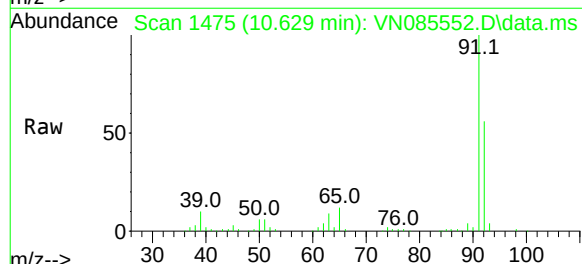
Manual Integrations
APPROVED

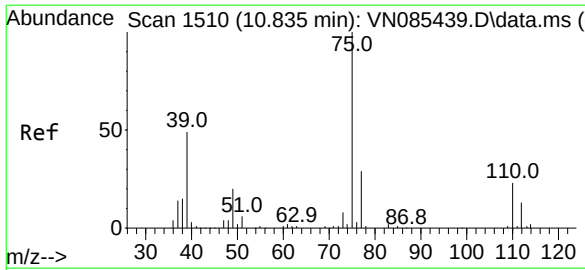
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#52
Toluene
Concen: 20.058 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.005 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

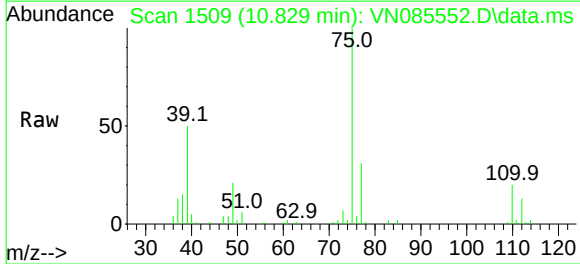
Tgt Ion: 92 Resp: 113656
Ion Ratio Lower Upper
92 100
91 173.5 139.2 208.8





#53
t-1,3-Dichloropropene
Concen: 20.528 ug/l
RT: 10.829 min Scan# 1510
Delta R.T. -0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

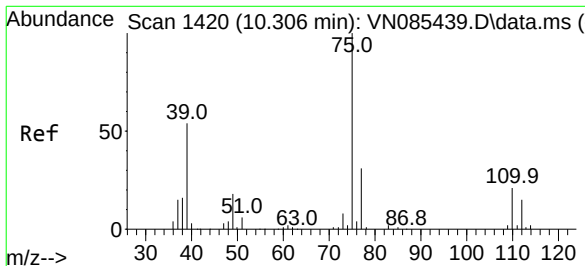
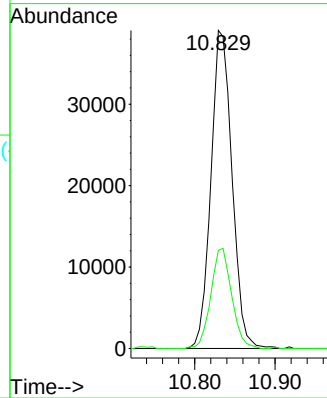
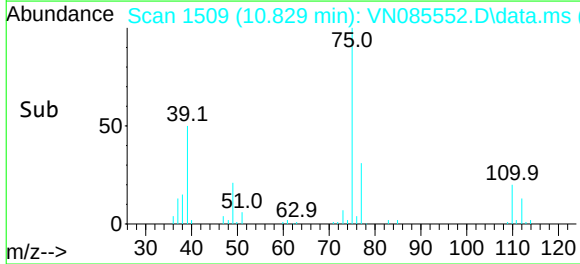
Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01



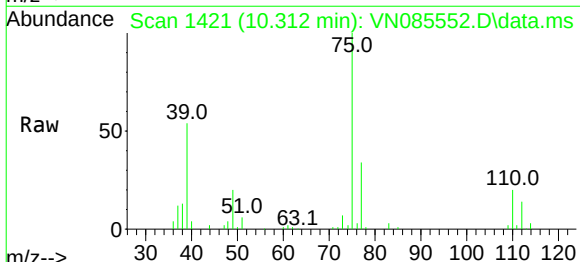
Tgt Ion: 75 Resp: 71237
Ion Ratio Lower Upper
75 100
77 30.9 23.5 35.3

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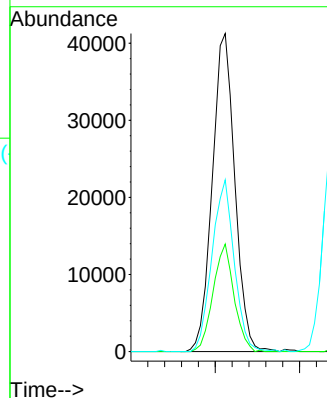
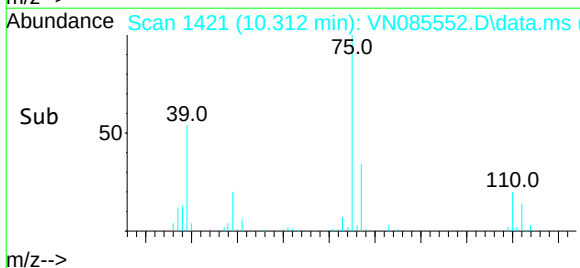
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

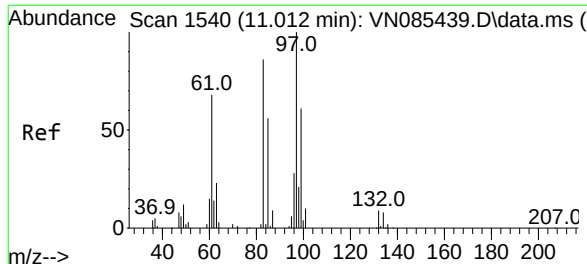


#54
cis-1,3-Dichloropropene
Concen: 20.661 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04



Tgt Ion: 75 Resp: 76587
Ion Ratio Lower Upper
75 100
77 33.8 25.0 37.4
39 54.0 43.1 64.7





#55

1,1,2-Trichloroethane

Concen: 21.069 ug/l

RT: 11.012 min Scan# 1540

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 97 Resp: 47247

Ion Ratio Lower Upper

97 100

83 91.6 69.0 103.6

85 58.8 44.6 66.8

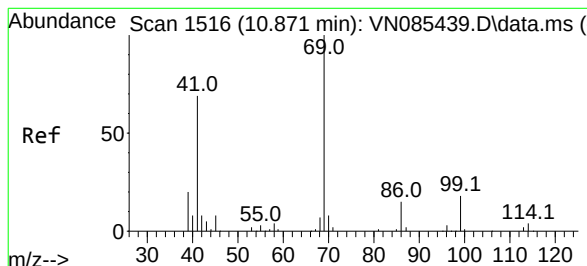
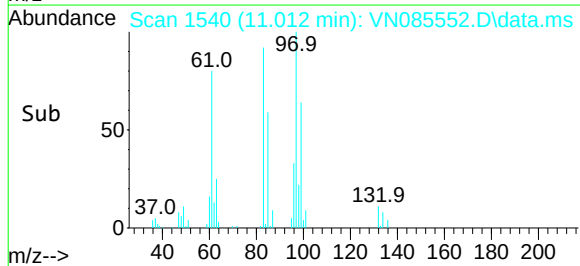
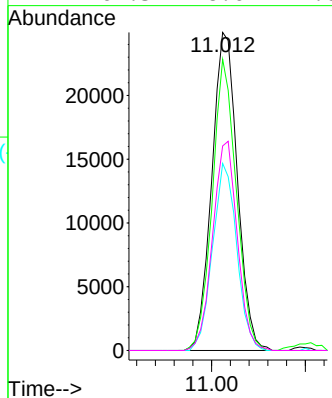
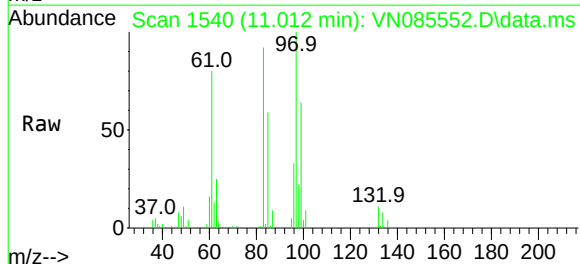
99 64.3 48.6 72.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#56

Ethyl methacrylate

Concen: 19.225 ug/l

RT: 10.871 min Scan# 1516

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

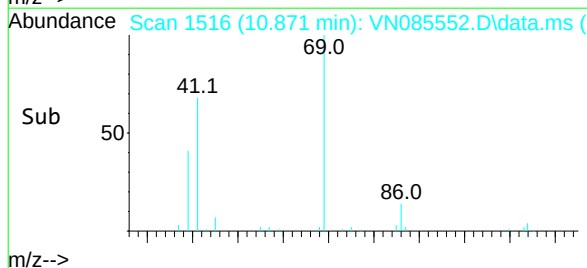
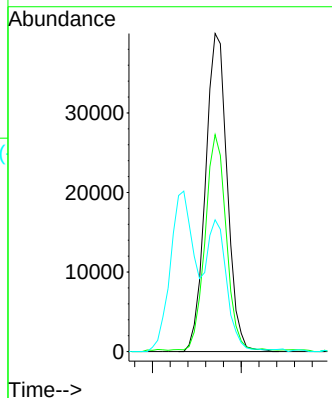
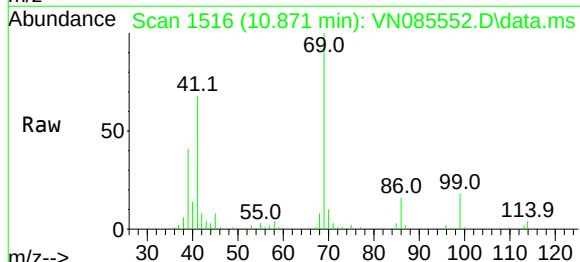
Tgt Ion: 69 Resp: 67955

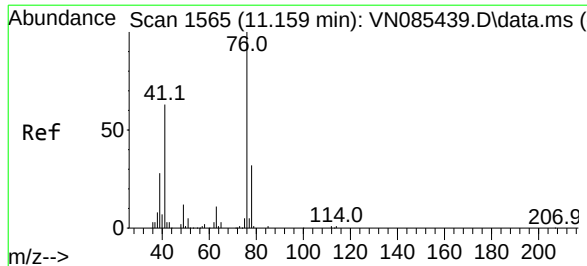
Ion Ratio Lower Upper

69 100

41 65.7 54.6 82.0

39 38.6 32.4 48.6





#57

1,3-Dichloropropane

Concen: 20.839 ug/l

RT: 11.159 min Scan# 1565

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 76 Resp: 81256

Ion Ratio Lower Upper

76 100

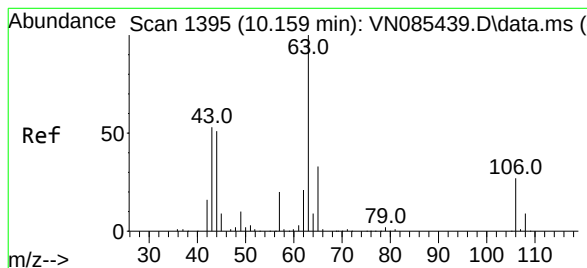
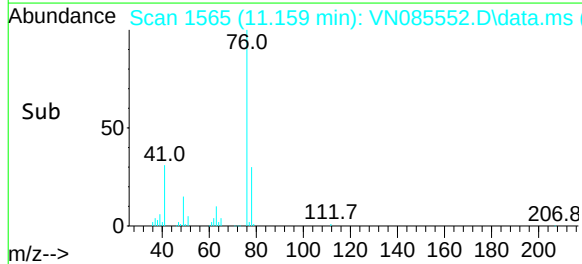
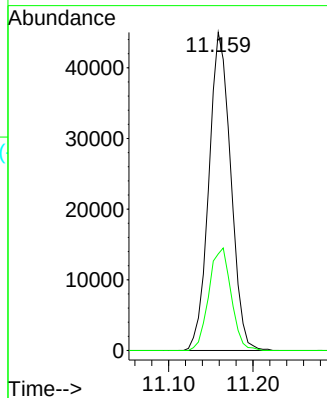
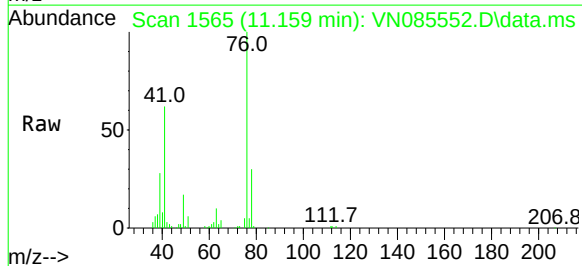
78 32.8 25.6 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#58

2-Chloroethyl Vinyl ether

Concen: 91.903 ug/l

RT: 10.159 min Scan# 1395

Delta R.T. -0.000 min

Lab File: VN085552.D

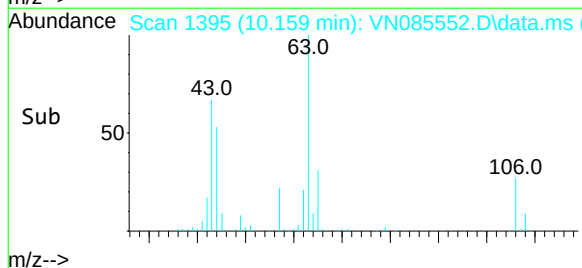
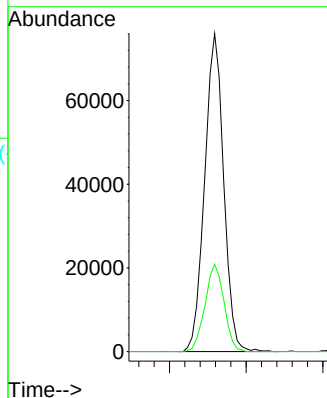
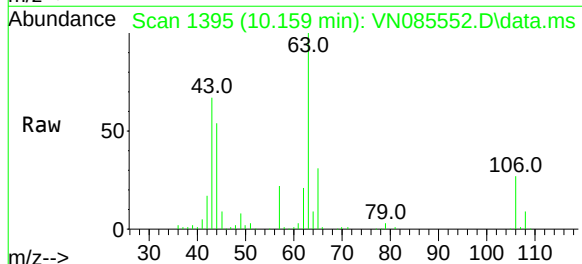
Acq: 29 Jan 2025 13:04

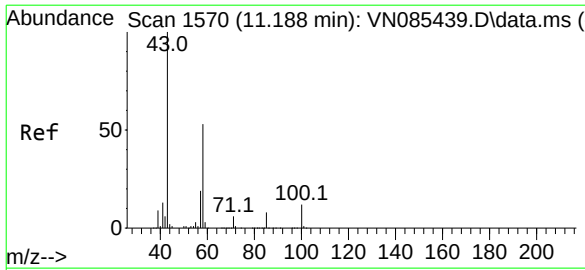
Tgt Ion: 63 Resp: 130784

Ion Ratio Lower Upper

63 100

106 27.5 21.6 32.4





#59

2-Hexanone

Concen: 119.811 ug/l

RT: 11.194 min Scan# 15

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 43 Resp: 257517

Ion Ratio Lower Upper

43 100

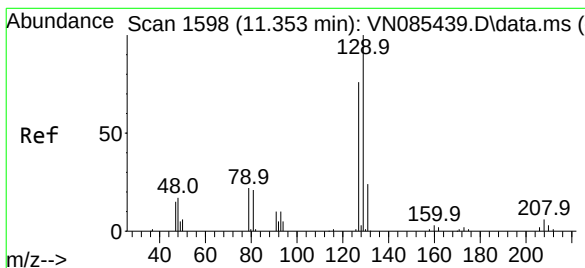
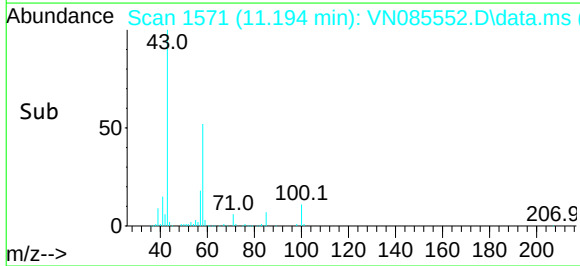
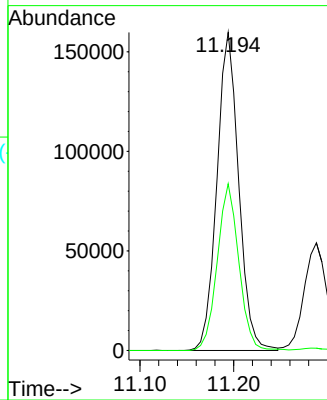
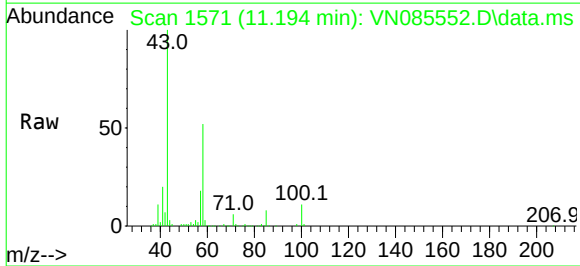
58 51.9 26.2 78.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#60

Dibromochloromethane

Concen: 20.849 ug/l

RT: 11.359 min Scan# 1599

Delta R.T. 0.006 min

Lab File: VN085552.D

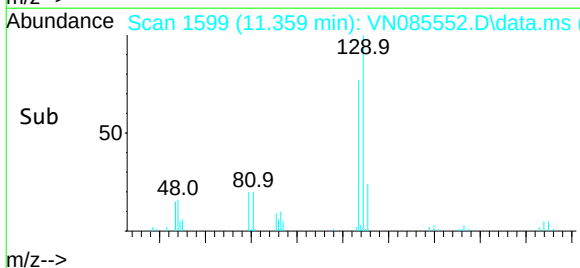
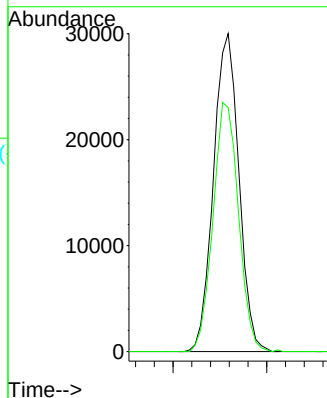
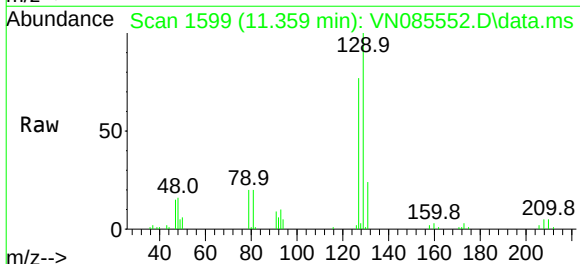
Acq: 29 Jan 2025 13:04

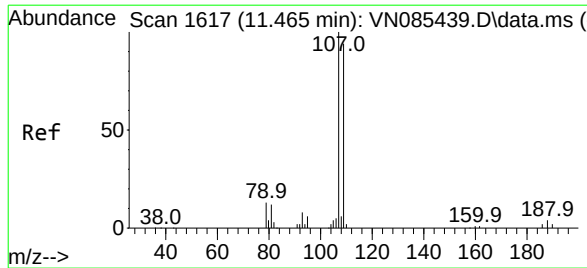
Tgt Ion:129 Resp: 56444

Ion Ratio Lower Upper

129 100

127 78.6 38.6 115.8





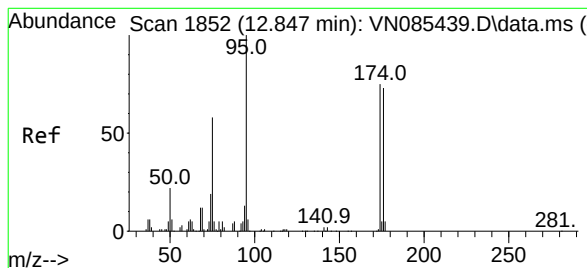
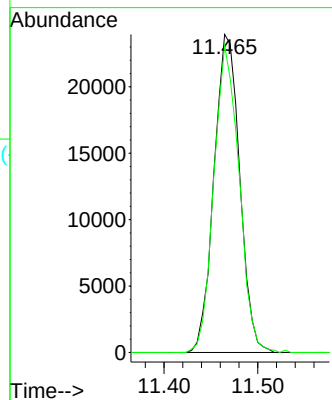
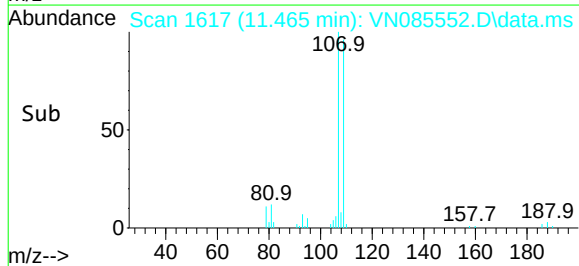
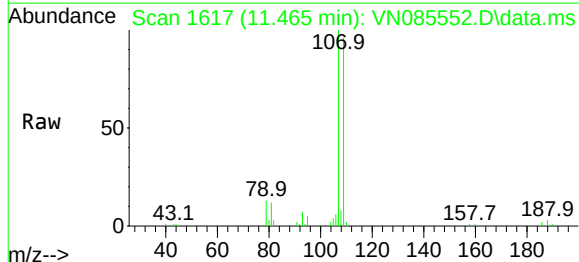
#61
1,2-Dibromoethane
Concen: 20.415 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion: 107 Resp: 45570
Ion Ratio Lower Upper
107 100
109 95.0 75.9 113.9

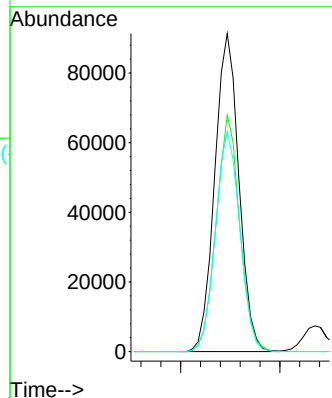
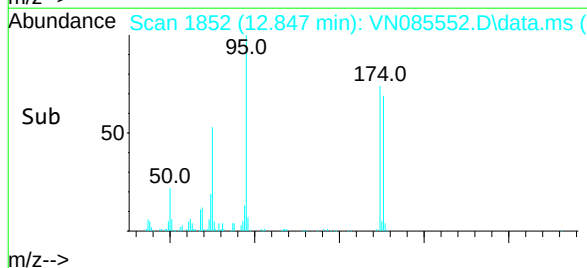
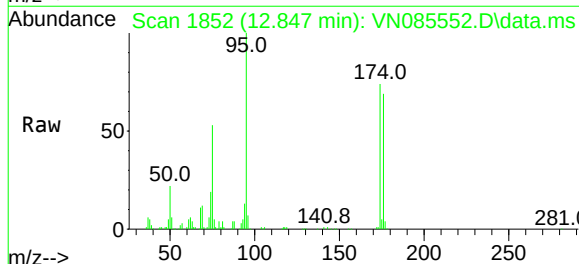
Manual Integrations
APPROVED

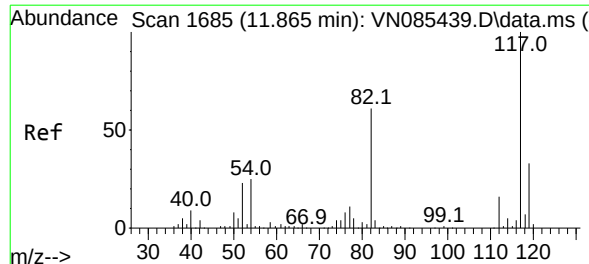
Reviewed By : John Carlone 01/30/2025
Supervised By : Mahesh Dadoda 01/30/2025



#62
4-Bromofluorobenzene
Concen: 54.798 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion: 95 Resp: 154451
Ion Ratio Lower Upper
95 100
174 72.2 0.0 145.0
176 69.8 0.0 142.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion:117 Resp: 300606

Ion Ratio Lower Upper

117 100

82 61.4 48.6 72.8

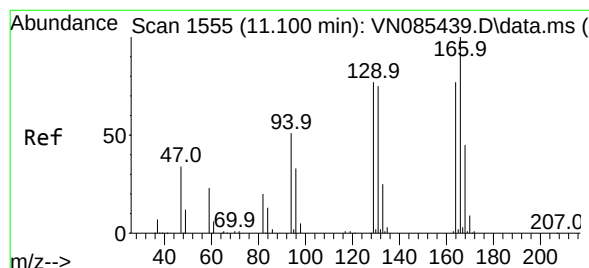
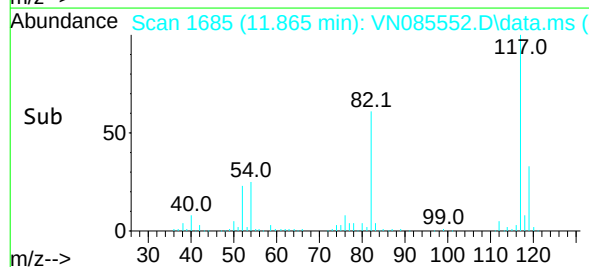
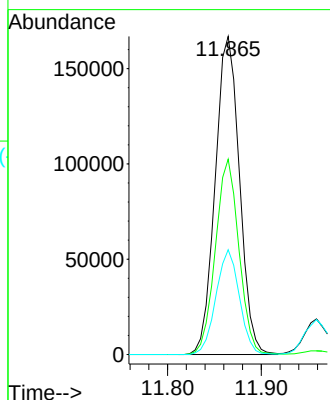
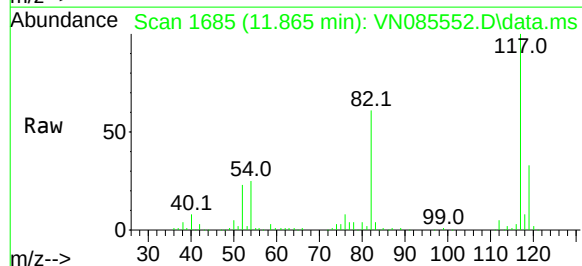
119 32.9 26.6 39.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#64

Tetrachloroethene

Concen: 19.082 ug/l

RT: 11.100 min Scan# 1555

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion:164 Resp: 39105

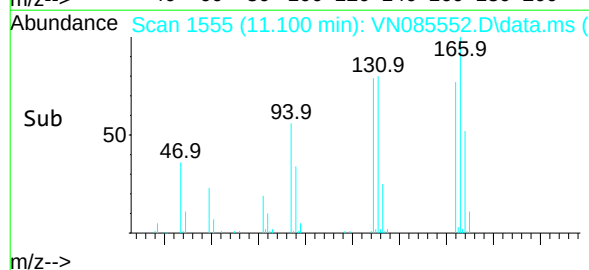
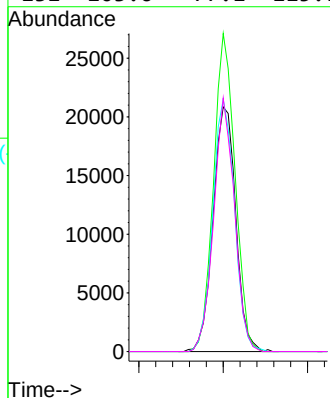
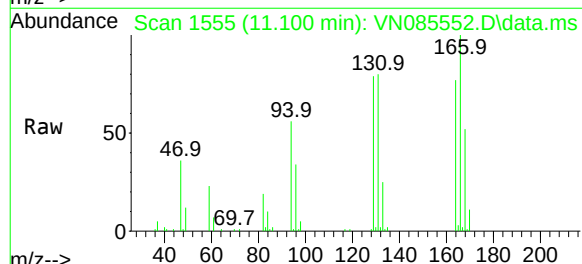
Ion Ratio Lower Upper

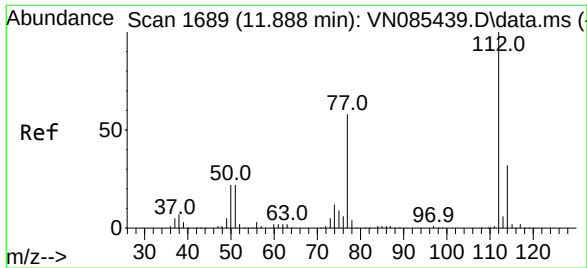
164 100

166 130.0 103.4 155.2

129 103.1 79.2 118.8

131 103.6 77.1 115.7





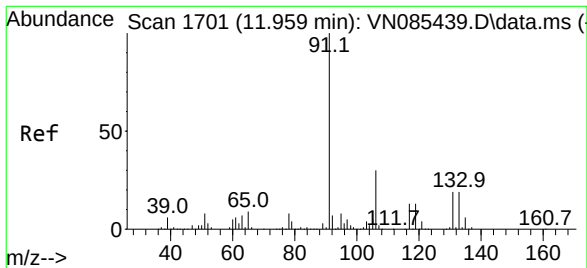
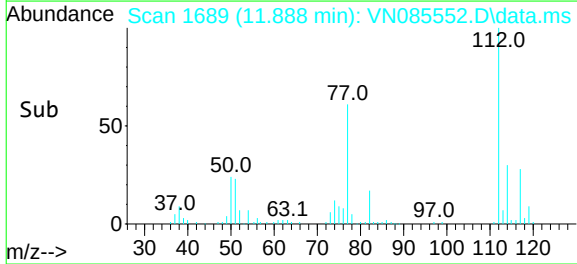
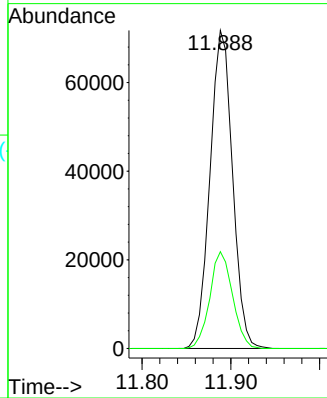
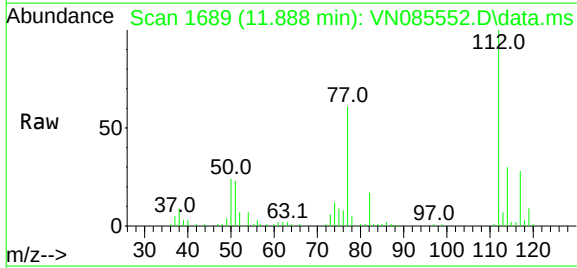
#65
Chlorobenzene
Concen: 19.247 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion:112 Resp: 126744
Ion Ratio Lower Upper
112 100
114 30.4 25.3 37.9

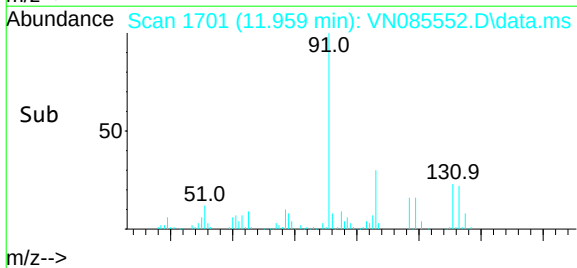
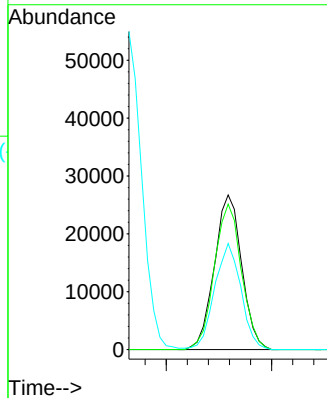
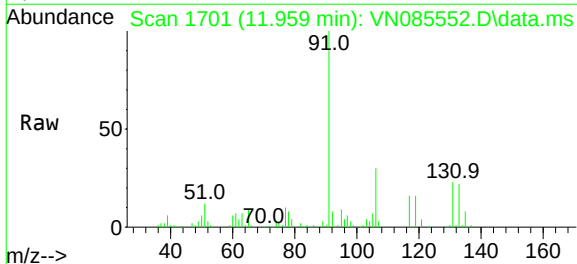
Manual Integrations
APPROVED

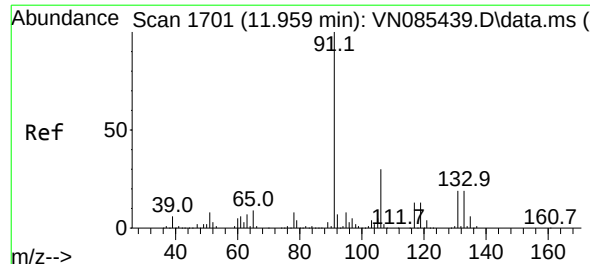
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#66
1,1,1,2-Tetrachloroethane
Concen: 19.929 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion:131 Resp: 48168
Ion Ratio Lower Upper
131 100
133 93.7 47.4 142.3
119 66.4 33.1 99.5





#67

Ethyl Benzene

Concen: 18.788 ug/l

RT: 11.965 min Scan# 17

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion: 91 Resp: 201511

Ion Ratio Lower Upper

91 100

106 30.2 23.8 35.8

Instrument :

MSVOA_N

ClientSampleId :

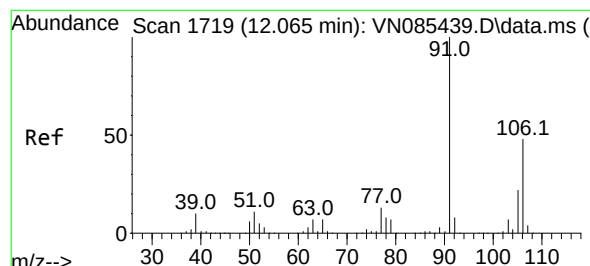
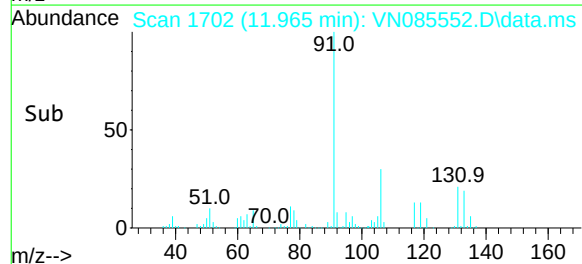
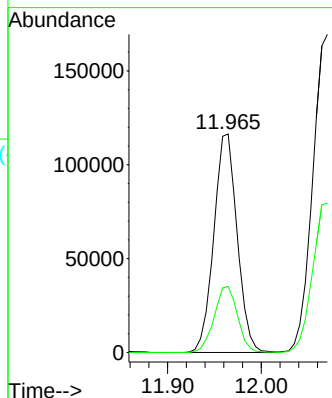
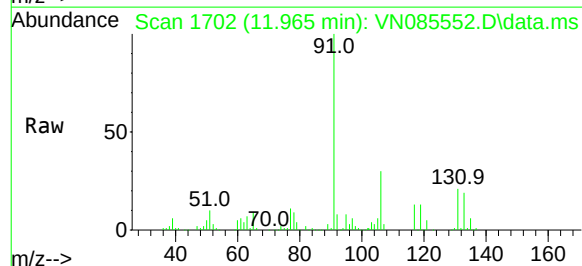
VN0129WBSD01

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#68

m/p-Xylenes

Concen: 39.958 ug/l

RT: 12.071 min Scan# 1720

Delta R.T. 0.006 min

Lab File: VN085552.D

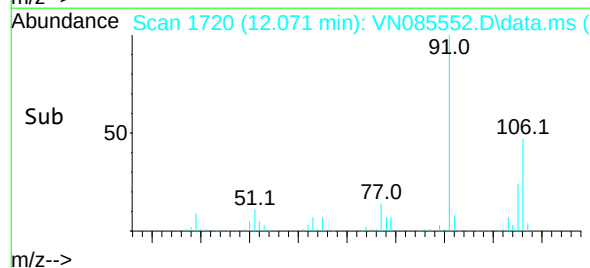
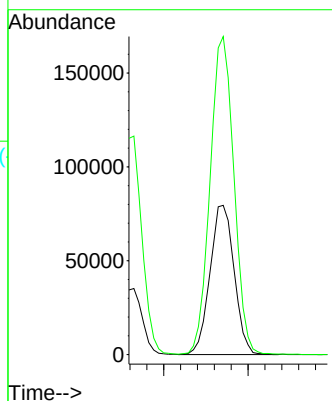
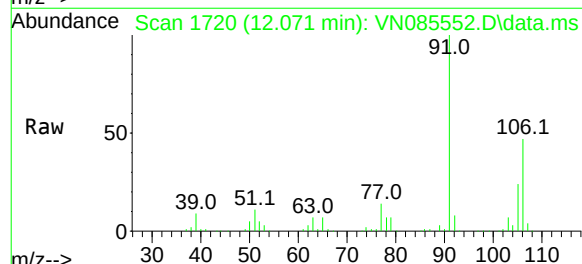
Acq: 29 Jan 2025 13:04

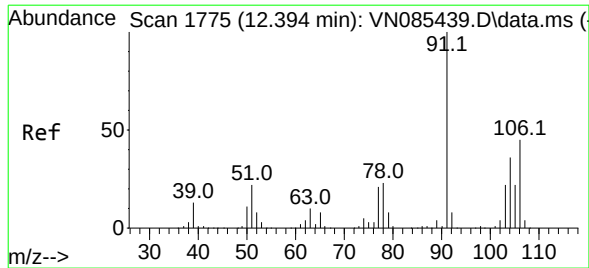
Tgt Ion:106 Resp: 158394

Ion Ratio Lower Upper

106 100

91 210.2 167.7 251.5





#69

o-Xylene

Concen: 19.286 ug/l

RT: 12.400 min Scan# 1775

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion:106 Resp: 73062

Ion Ratio Lower Upper

106 100

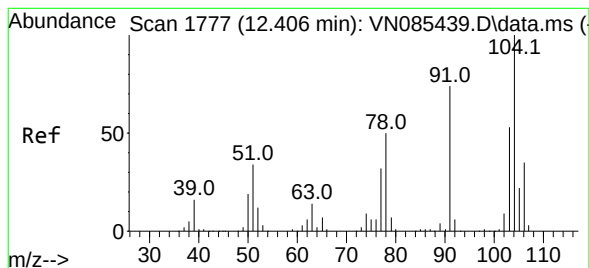
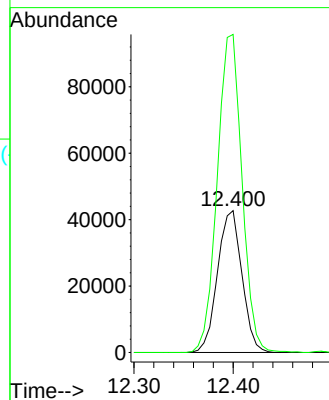
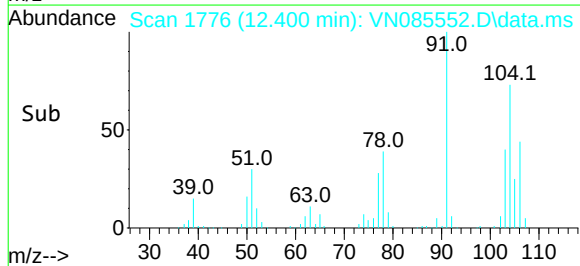
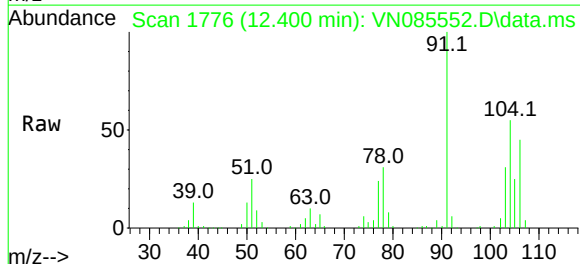
91 227.1 110.4 331.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#70

Styrene

Concen: 20.232 ug/l

RT: 12.412 min Scan# 1778

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

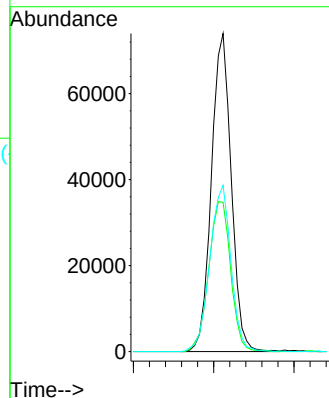
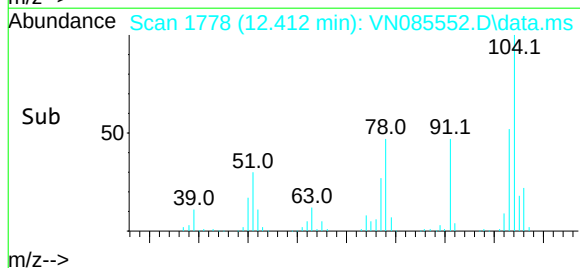
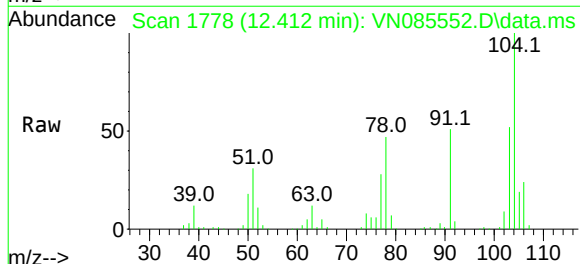
Tgt Ion:104 Resp: 126846

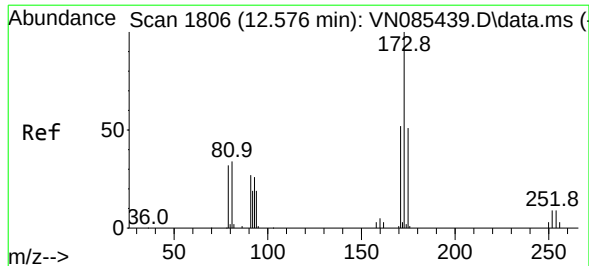
Ion Ratio Lower Upper

104 100

78 52.2 42.5 63.7

103 55.9 43.8 65.8





#71

Bromoform

Concen: 22.255 ug/l

RT: 12.576 min Scan# 1806

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

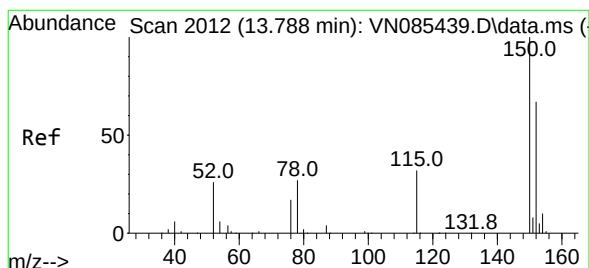
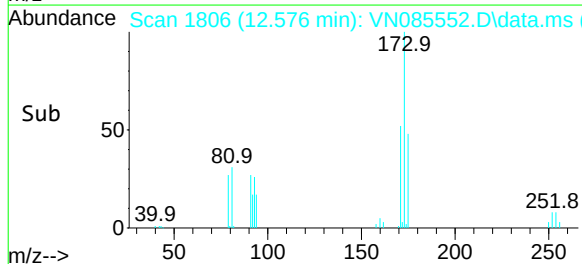
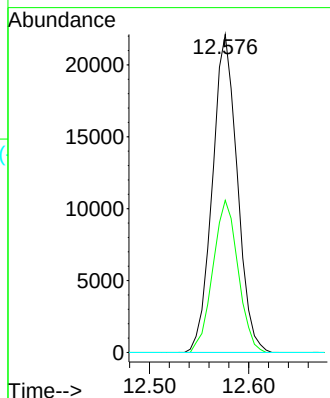
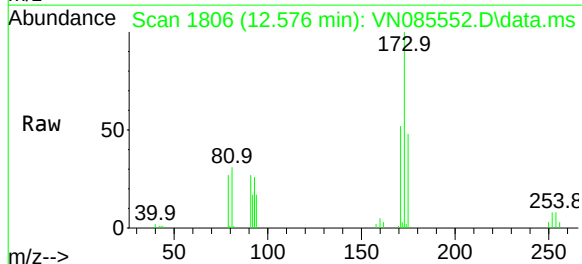
ClientSampleId :

VN0129WBSD01

Tgt Ion:	173	Resp:	38486
Ion Ratio	Lower	Upper	
173	100		
175	48.5	24.4	73.2
254	0.0	0.0	0.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

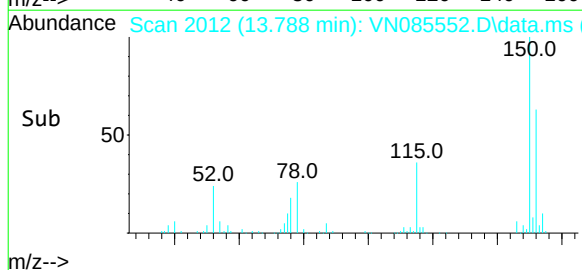
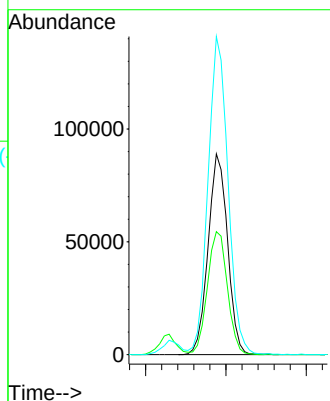
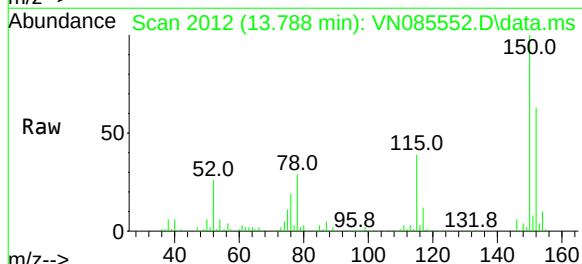
RT: 13.788 min Scan# 2012

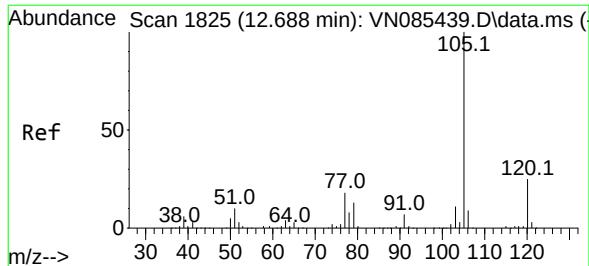
Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion:	152	Resp:	149604
Ion Ratio	Lower	Upper	
152	100		
115	62.8	31.1	93.3
150	162.6	0.0	343.6





#73

Isopropylbenzene

Concen: 18.607 ug/l

RT: 12.694 min Scan# 1825

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 105 Resp: 187874

Ion Ratio Lower Upper

105 100

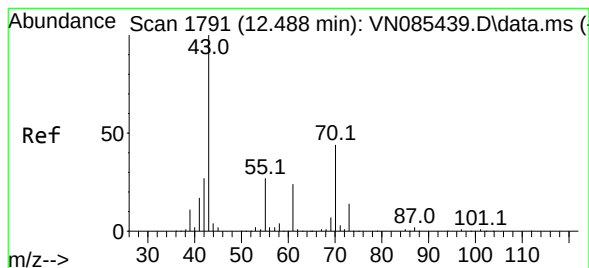
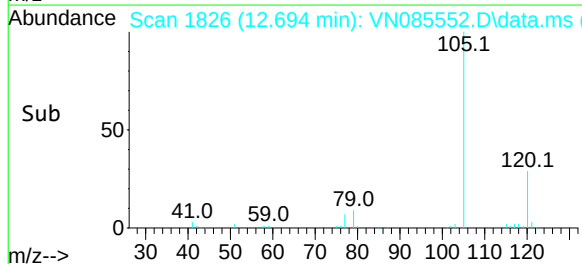
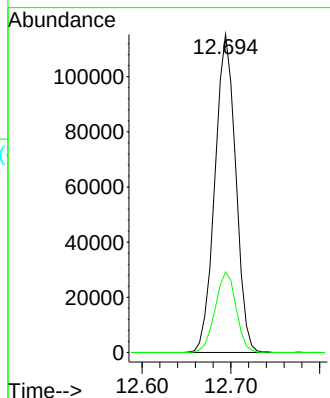
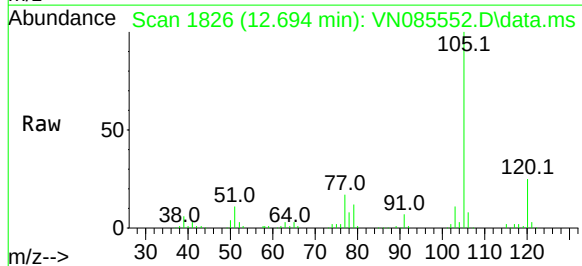
120 25.4 12.8 38.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#74

N-ethyl acetate

Concen: 19.908 ug/l

RT: 12.494 min Scan# 1792

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion: 43 Resp: 90352

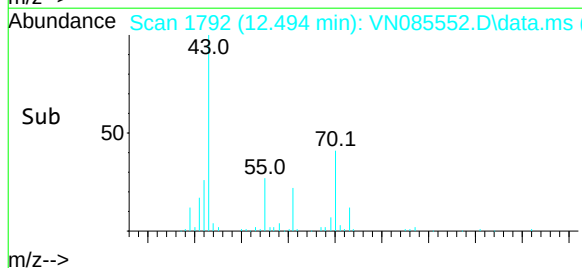
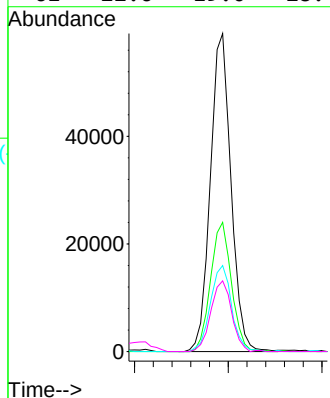
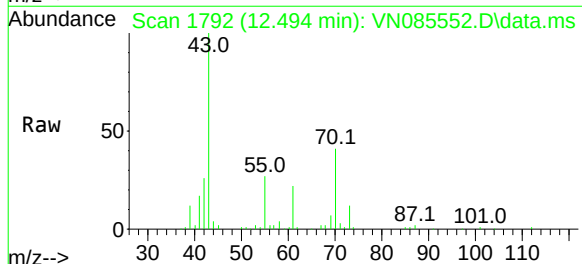
Ion Ratio Lower Upper

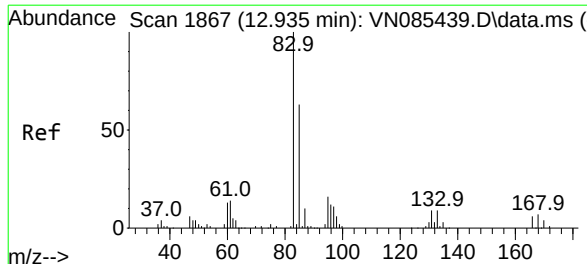
43 100

70 41.1 34.0 51.0

55 27.9 21.4 32.2

61 22.6 19.0 28.4





#75

1,1,2,2-Tetrachloroethane

Concen: 20.069 ug/l

RT: 12.935 min Scan# 18

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

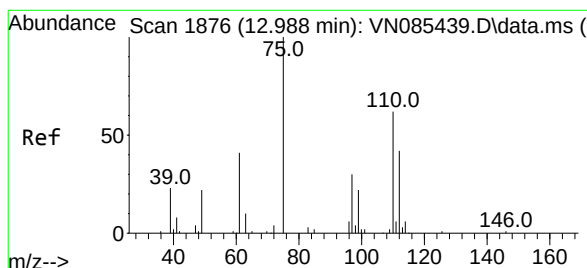
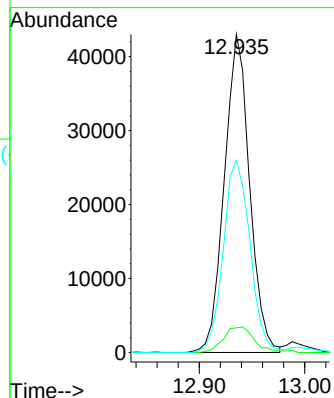
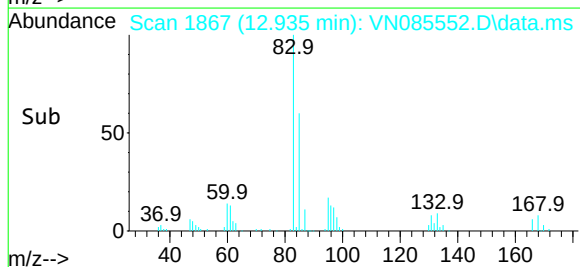
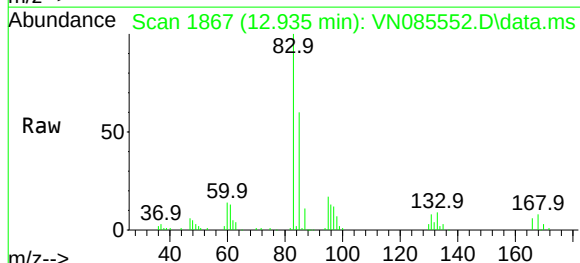
ClientSampleId :

VN0129WBSD01

Tgt Ion:	83	Resp:	71580
Ion	Ratio	Lower	Upper
83	100		
131	9.9	4.8	14.4
85	64.1	32.2	96.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#76

1,2,3-Trichloropropane

Concen: 19.915 ug/l m

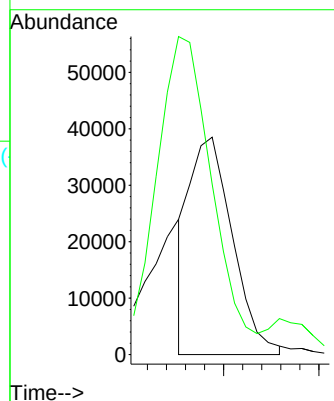
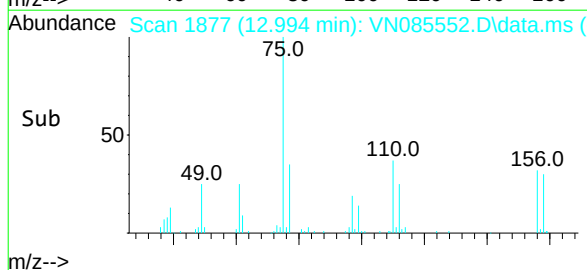
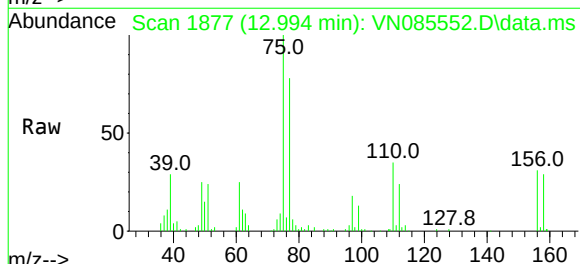
RT: 12.994 min Scan# 1877

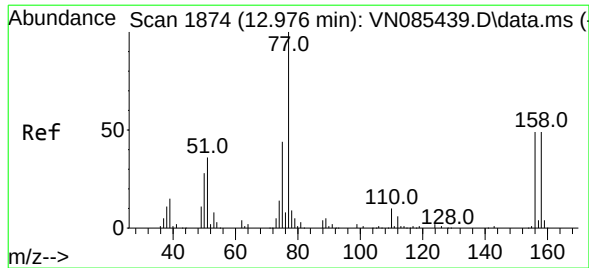
Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion:	75	Resp:	60557
Ion	Ratio	Lower	Upper
75	100		
77	190.0	109.7	329.2





#77

Bromobenzene

Concen: 18.824 ug/l

RT: 12.976 min Scan# 1874

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 156 Resp: 49656

Ion Ratio Lower Upper

156 100

77 231.7 114.1 342.4

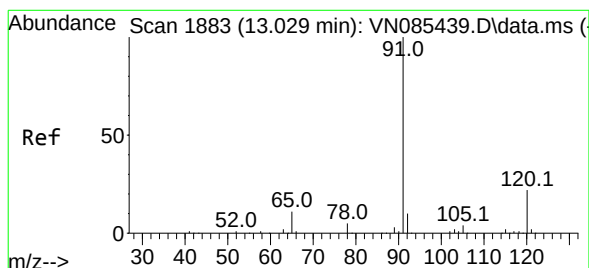
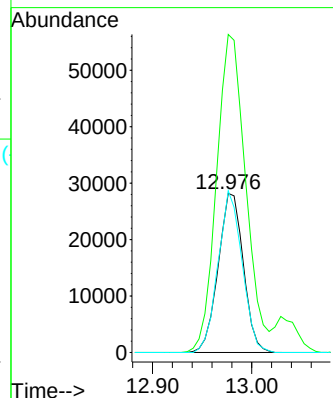
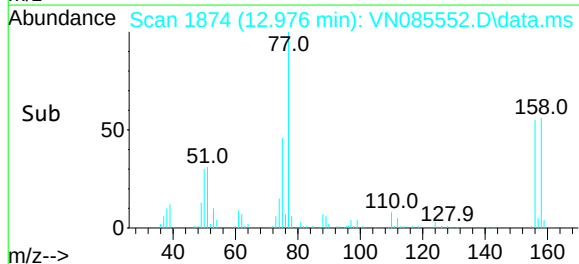
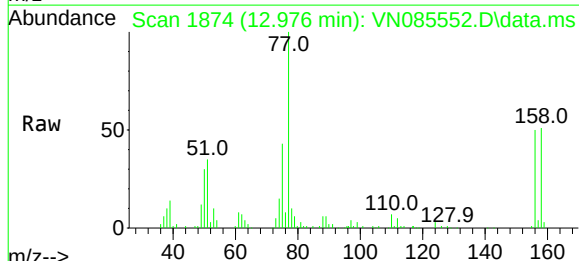
158 97.2 48.9 146.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#78

n-propylbenzene

Concen: 18.861 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. 0.006 min

Lab File: VN085552.D

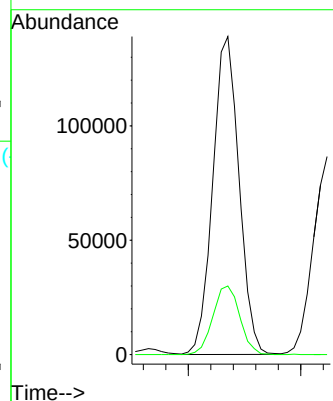
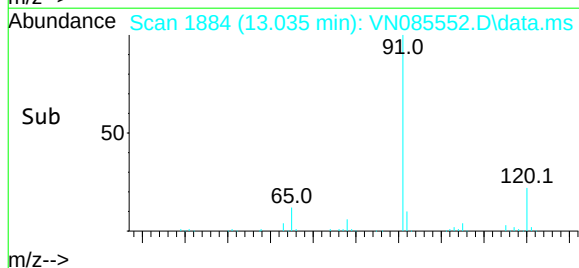
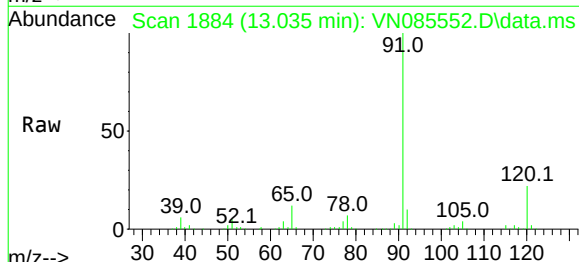
Acq: 29 Jan 2025 13:04

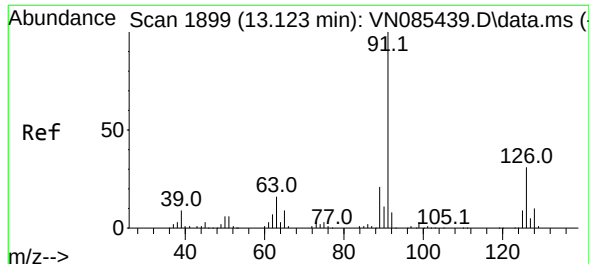
Tgt Ion: 91 Resp: 225452

Ion Ratio Lower Upper

91 100

120 22.1 10.9 32.6





#79

2-Chlorotoluene

Concen: 18.851 ug/l

RT: 13.123 min Scan# 1899

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion: 91 Resp: 145834

Ion Ratio Lower Upper

91 100

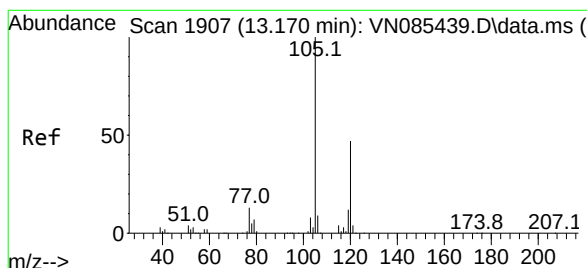
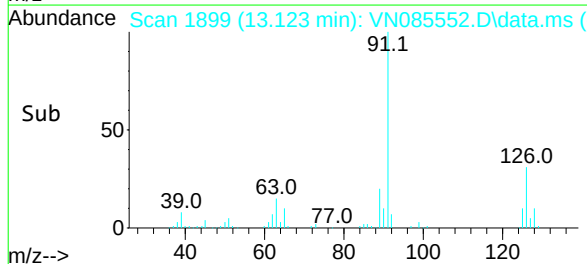
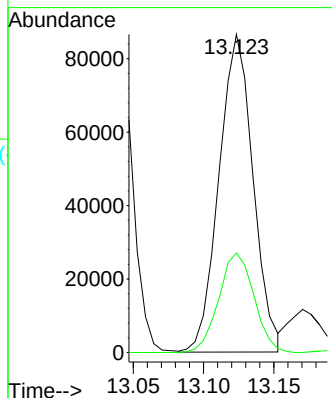
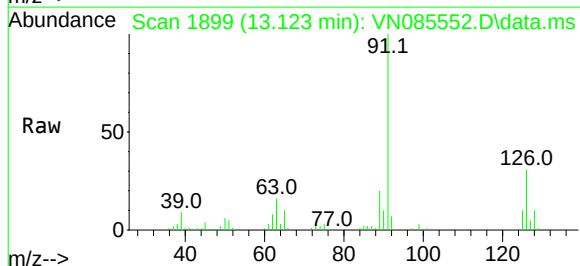
126 32.3 15.7 47.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#80

1,3,5-Trimethylbenzene

Concen: 19.614 ug/l

RT: 13.170 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VN085552.D

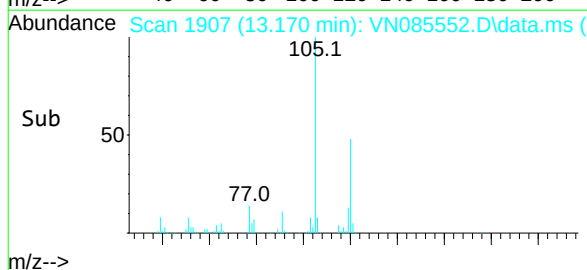
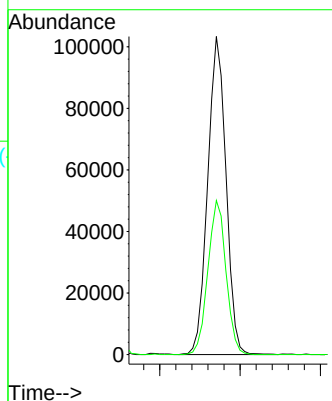
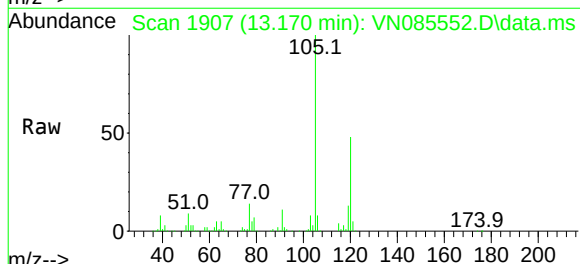
Acq: 29 Jan 2025 13:04

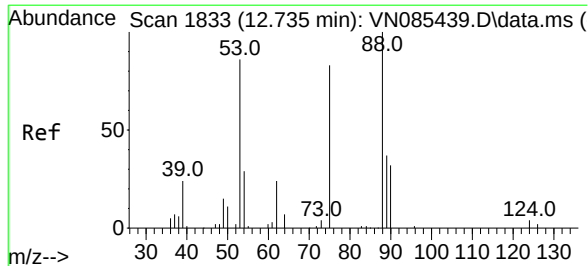
Tgt Ion:105 Resp: 163587

Ion Ratio Lower Upper

105 100

120 47.9 23.9 71.7





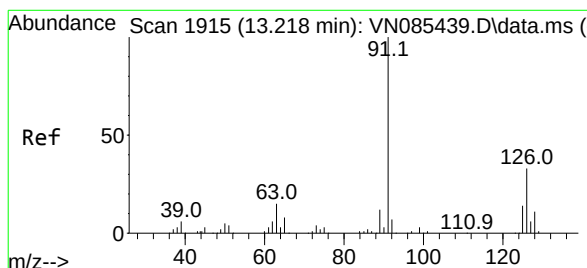
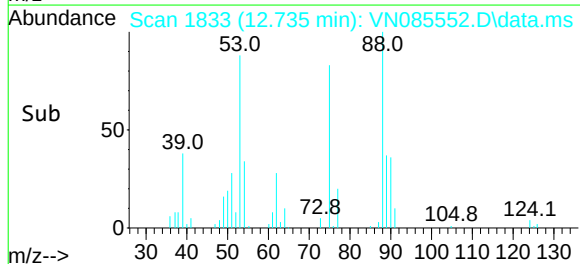
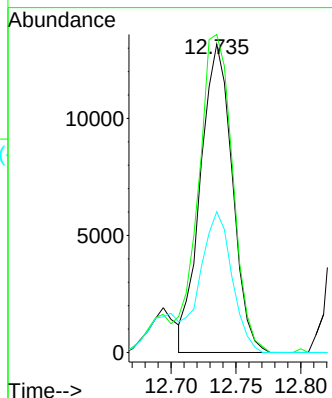
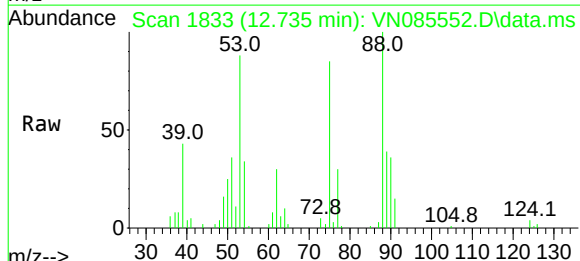
#81
trans-1,4-Dichloro-2-butene
Concen: 19.978 ug/l
RT: 12.735 min Scan# 1833
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion	Ratio	Lower	Upper
75	100		
53	121.3	95.6	143.4
89	45.9	37.0	55.6

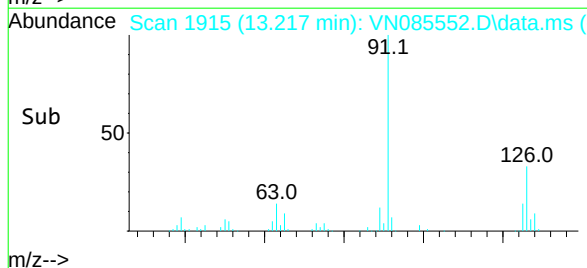
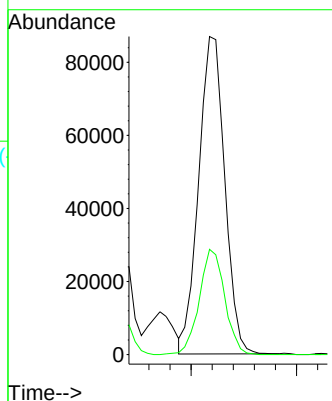
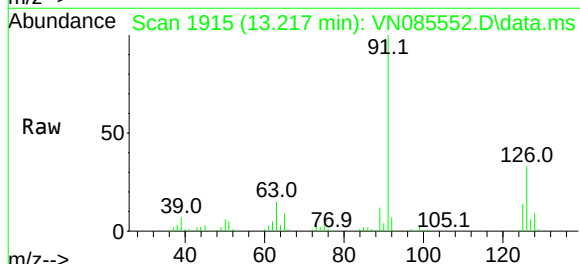
Manual Integrations
APPROVED

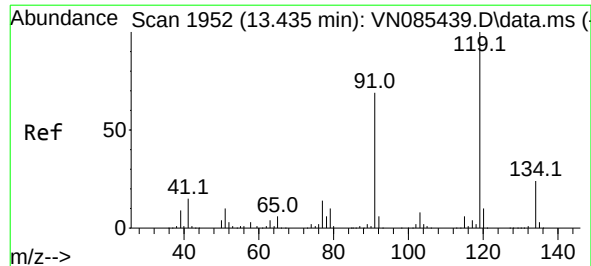
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#82
4-Chlorotoluene
Concen: 19.387 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion	Ratio	Lower	Upper
91	100		
126	32.3	15.9	47.7





#83

tert-Butylbenzene

Concen: 18.130 ug/l

RT: 13.435 min Scan# 19

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion:119 Resp: 126982

Ion Ratio Lower Upper

119 100

91 72.2 35.1 105.3

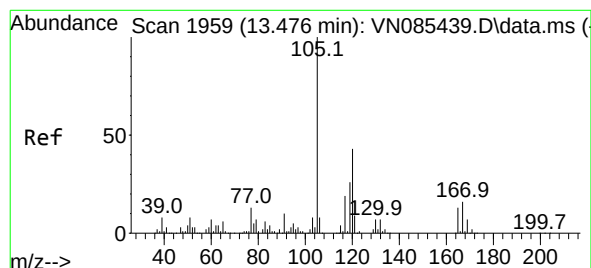
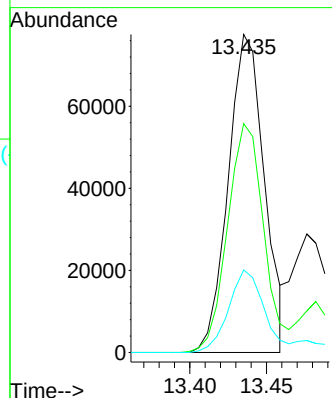
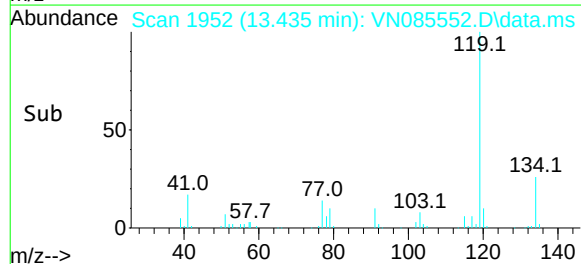
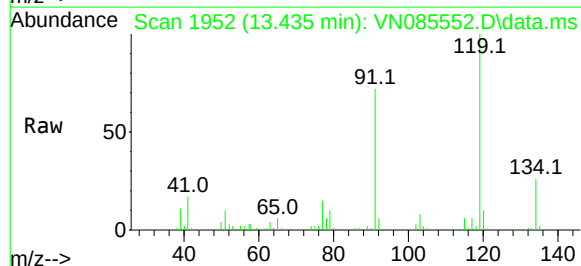
134 25.4 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#84

1,2,4-Trimethylbenzene

Concen: 19.853 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN085552.D

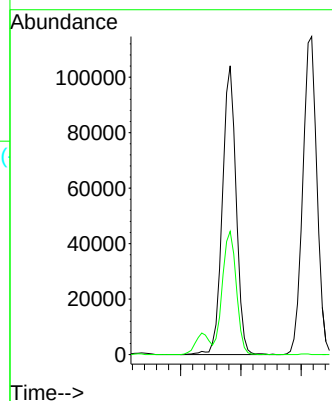
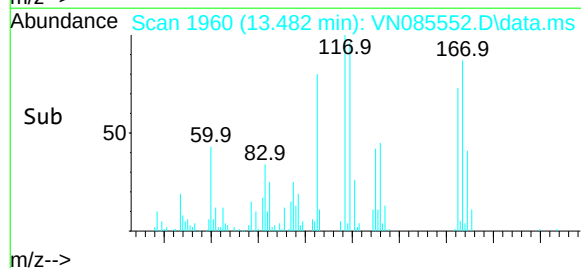
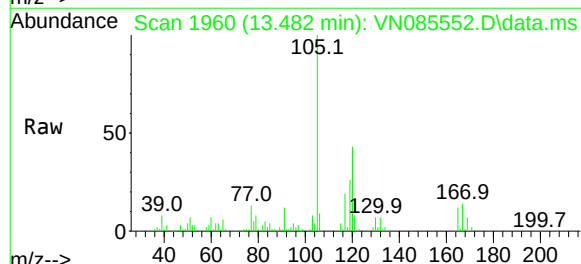
Acq: 29 Jan 2025 13:04

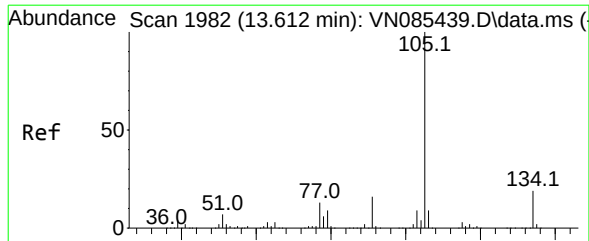
Tgt Ion:105 Resp: 165028

Ion Ratio Lower Upper

105 100

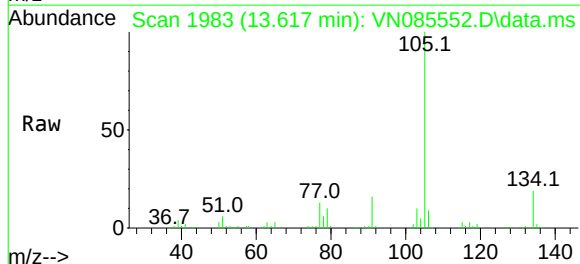
120 43.3 21.6 65.0





#85
sec-Butylbenzene
Concen: 19.211 ug/l
RT: 13.617 min Scan# 1982
Delta R.T. 0.005 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

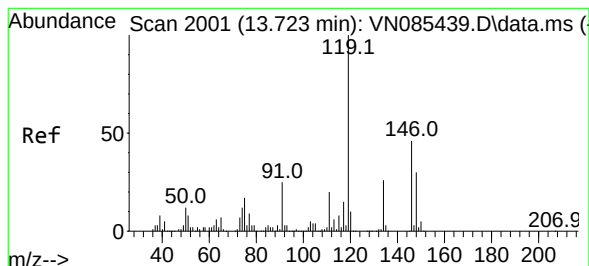
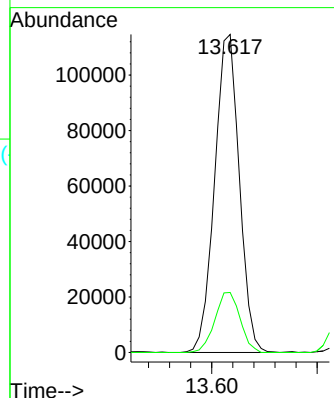
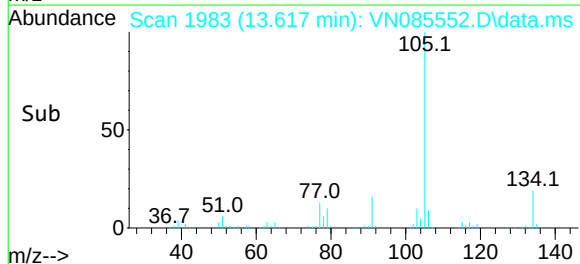
Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01



Tgt Ion:105 Resp: 186480
Ion Ratio Lower Upper
105 100
134 19.3 9.7 28.9

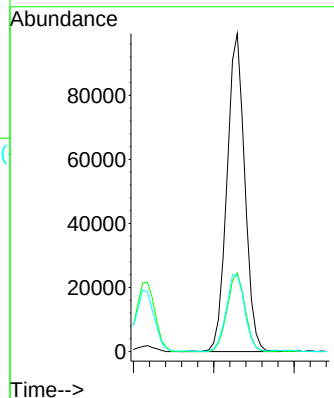
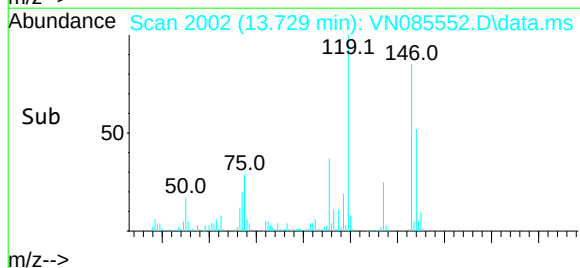
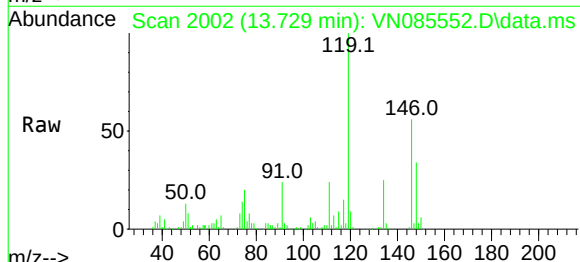
Manual Integrations
APPROVED

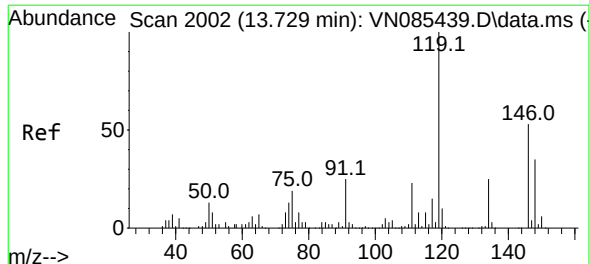
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#86
p-Isopropyltoluene
Concen: 18.909 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion:119 Resp: 152530
Ion Ratio Lower Upper
119 100
134 24.9 12.7 38.0
91 25.5 12.7 38.1





#87

1,3-Dichlorobenzene

Concen: 19.369 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

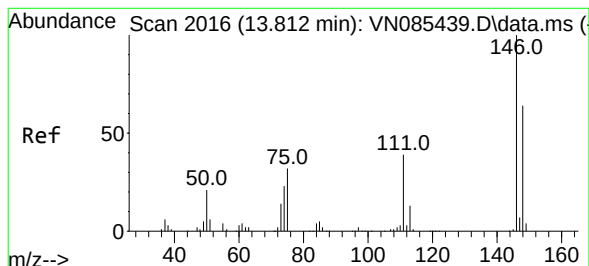
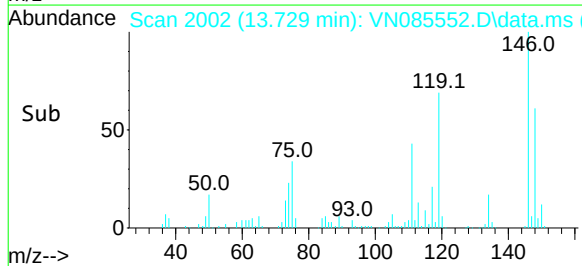
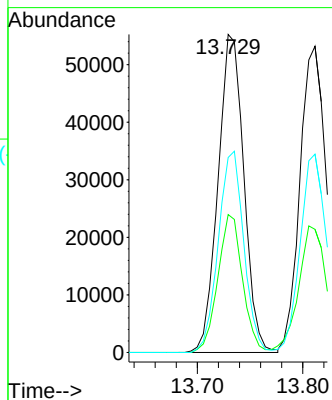
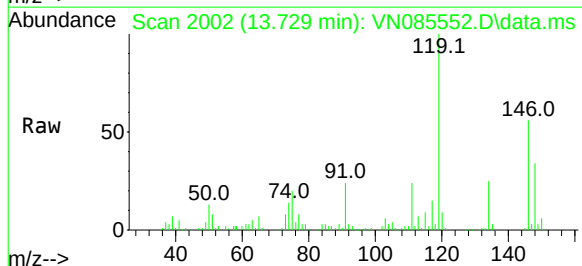
ClientSampleId :

VN0129WBSD01

Tgt Ion:	146	Resp:	94099
Ion Ratio	Lower	Upper	
146	100		
111	41.4	21.4	64.3
148	62.6	32.3	96.9

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#88

1,4-Dichlorobenzene

Concen: 18.273 ug/l

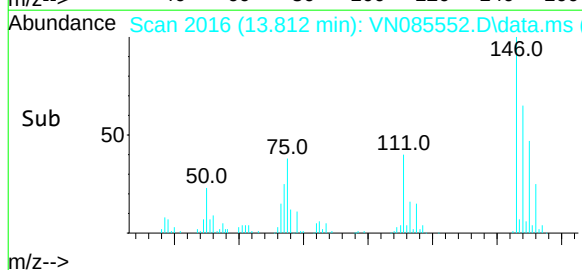
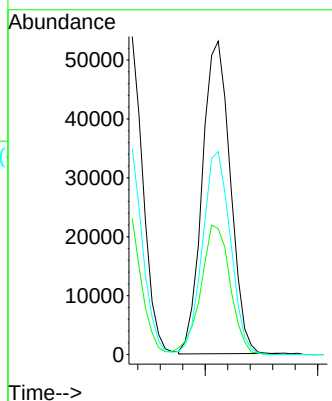
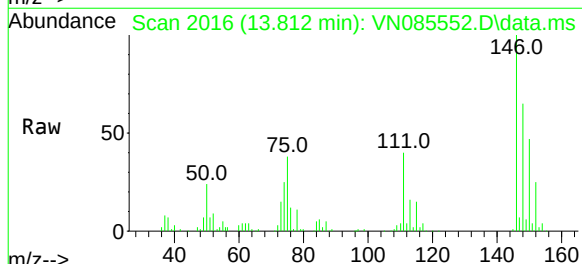
RT: 13.812 min Scan# 2016

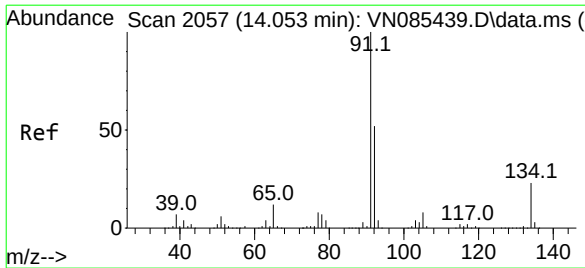
Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion:	146	Resp:	92013
Ion Ratio	Lower	Upper	
146	100		
111	43.5	21.3	63.7
148	64.8	32.4	97.0





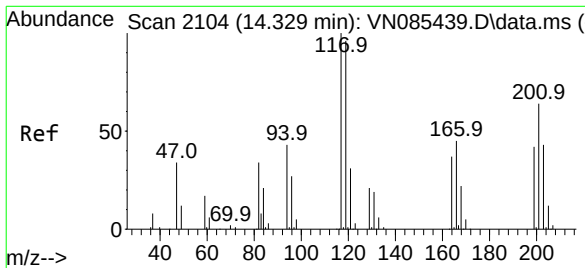
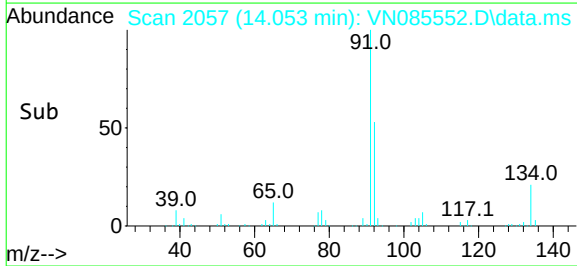
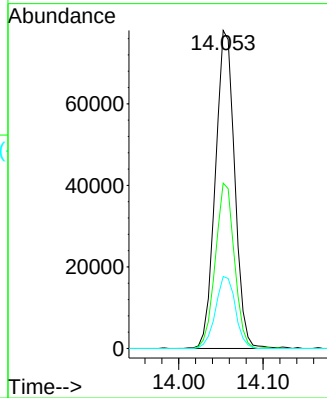
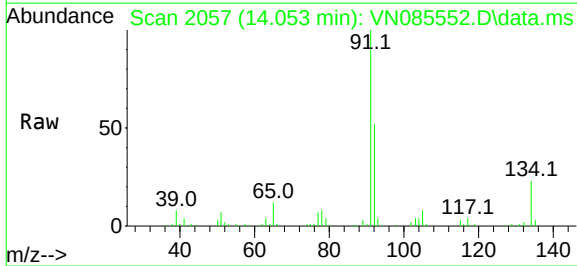
#89
n-Butylbenzene
Concen: 17.835 ug/l
RT: 14.053 min Scan# 2057
Delta R.T. -0.000 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Instrument :
MSVOA_N
ClientSampleId :
VN0129WBSD01

Tgt Ion:	91	Resp:	124199
Ion Ratio	Lower	Upper	
91	100		
92	51.1	25.8	77.3
134	23.3	11.7	35.1

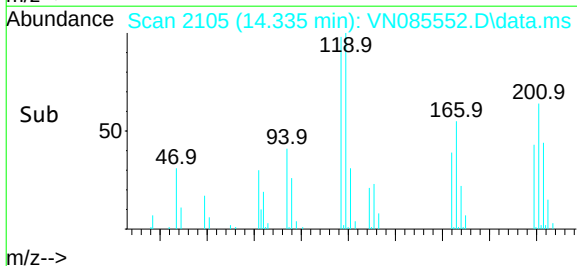
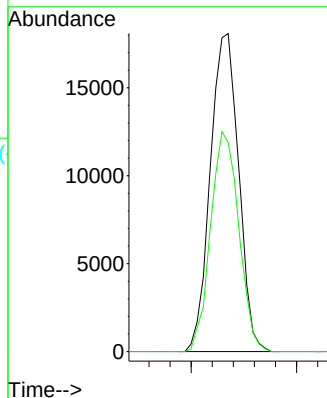
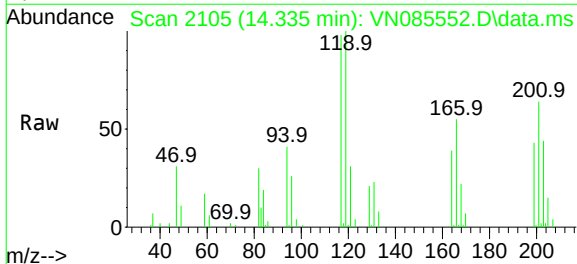
Manual Integrations
APPROVED

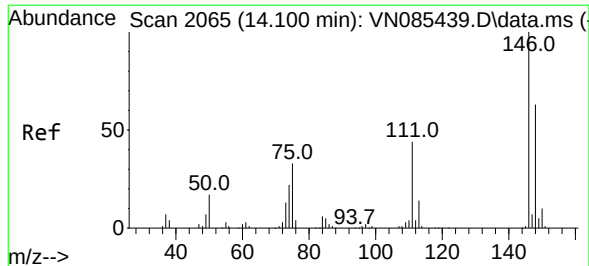
Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#90
Hexachloroethane
Concen: 18.273 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.006 min
Lab File: VN085552.D
Acq: 29 Jan 2025 13:04

Tgt Ion:	117	Resp:	33768
Ion Ratio	Lower	Upper	
117	100		
201	68.9	33.7	101.0





#91

1,2-Dichlorobenzene

Concen: 18.424 ug/l

RT: 14.106 min Scan# 2065

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion:146 Resp: 89278

Ion Ratio Lower Upper

146 100

111 43.7 21.7 65.1

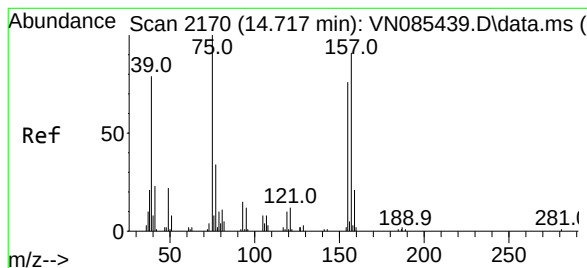
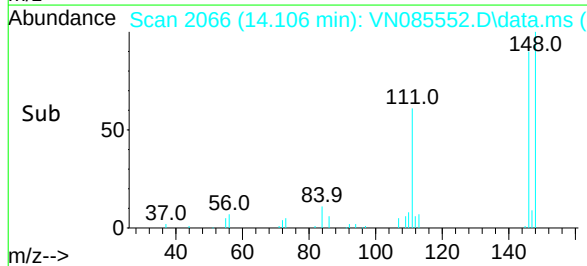
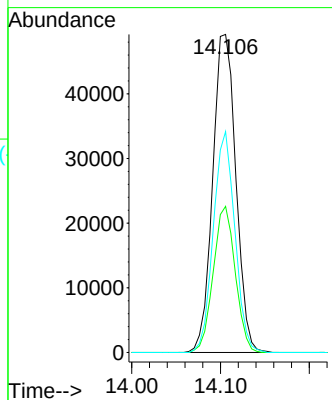
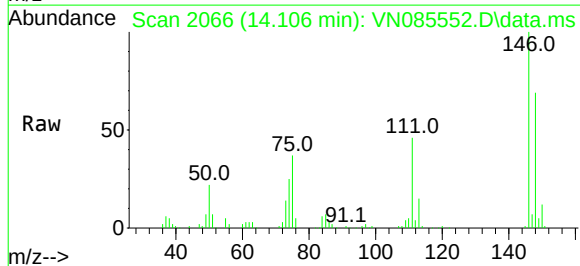
148 64.5 31.4 94.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#92

1,2-Dibromo-3-Chloropropane

Concen: 21.557 ug/l

RT: 14.712 min Scan# 2169

Delta R.T. -0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

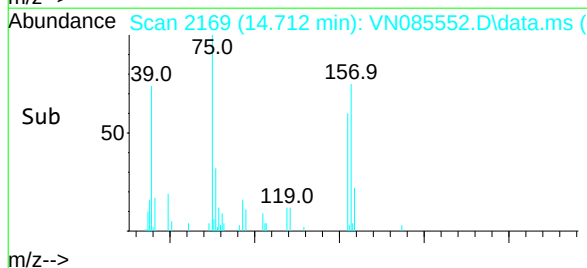
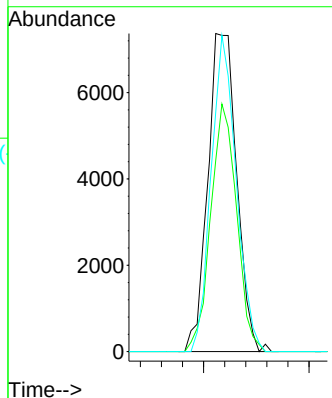
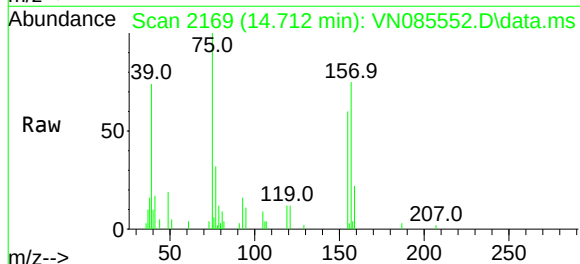
Tgt Ion: 75 Resp: 14040

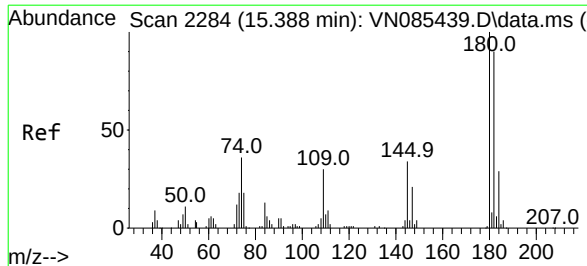
Ion Ratio Lower Upper

75 100

155 69.6 36.4 109.2

157 86.1 45.4 136.1





#93

1,2,4-Trichlorobenzene

Concen: 18.068 ug/l

RT: 15.394 min Scan# 2284

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

ClientSampleId :

VN0129WBSD01

Tgt Ion:180 Resp: 40694

Ion Ratio Lower Upper

180 100

182 96.7 46.8 140.3

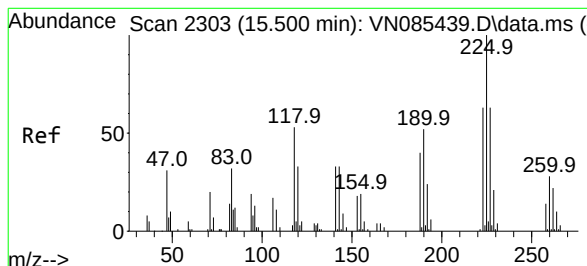
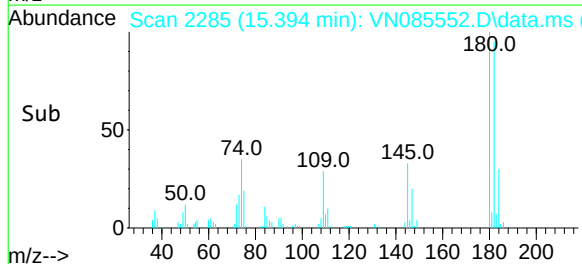
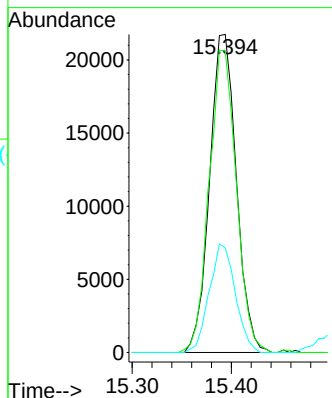
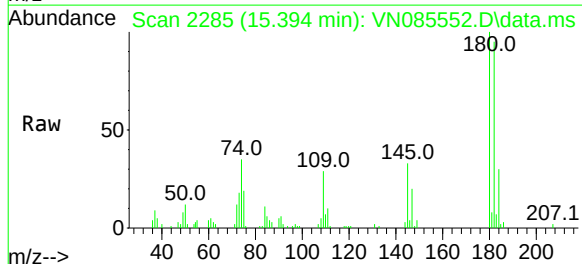
145 33.2 16.0 48.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 01/30/2025

Supervised By :Mahesh Dadoda 01/30/2025



#94

Hexachlorobutadiene

Concen: 17.886 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

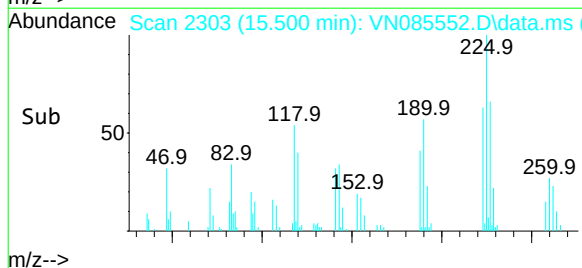
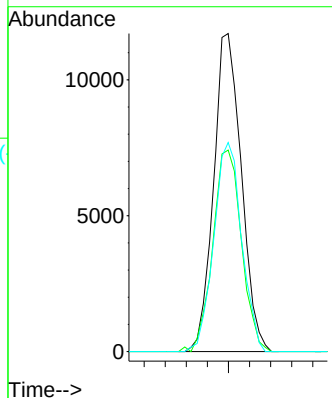
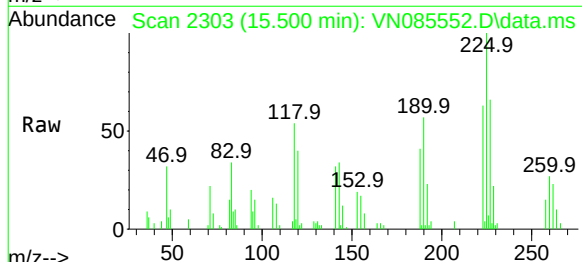
Tgt Ion:225 Resp: 21387

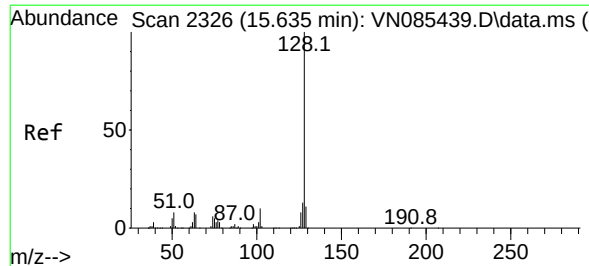
Ion Ratio Lower Upper

225 100

223 65.4 30.7 92.1

227 65.9 30.9 92.5





#95

Naphthalene

Concen: 17.550 ug/l

RT: 15.641 min Scan# 2326

Delta R.T. 0.006 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Instrument :

MSVOA_N

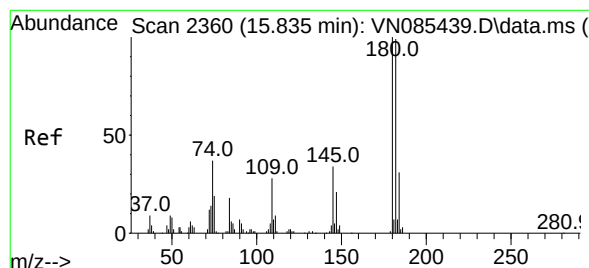
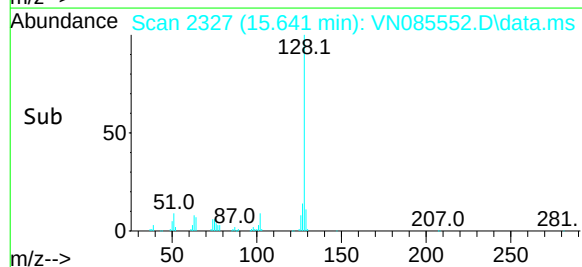
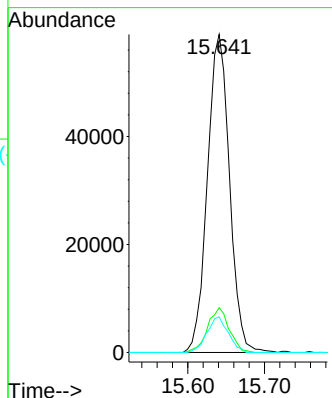
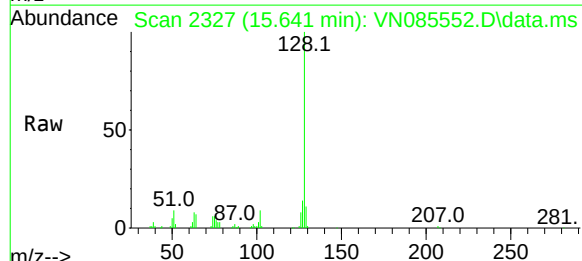
ClientSampleId :

VN0129WBSD01

Tgt Ion:	128	Resp:	117949
Ion Ratio	Lower	Upper	
128	100		
127	13.8	10.6	16.0
129	10.8	8.8	13.2

Manual Integrations
APPROVED

Reviewed By :John Carlone 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



#96

1,2,3-Trichlorobenzene

Concen: 18.194 ug/l

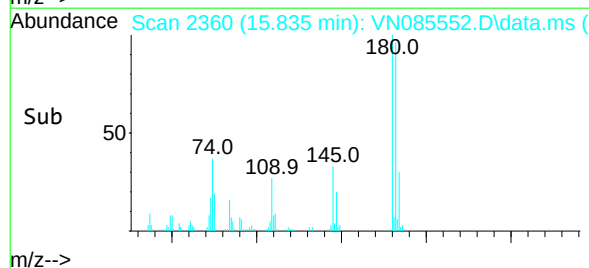
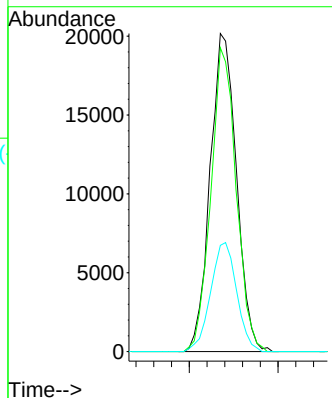
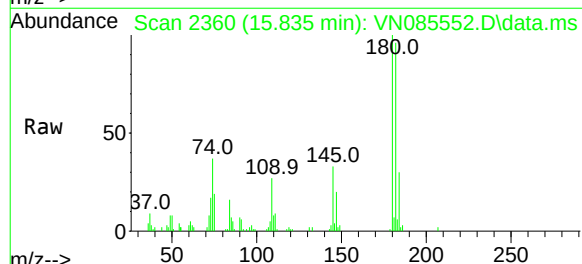
RT: 15.835 min Scan# 2360

Delta R.T. -0.000 min

Lab File: VN085552.D

Acq: 29 Jan 2025 13:04

Tgt Ion:	180	Resp:	41463
Ion Ratio	Lower	Upper	
180	100		
182	91.9	47.4	142.2
145	34.1	16.9	50.7



Manual Integration Report

Sequence:	VN011425	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN085438.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:09 AM	MMDadoda	1/15/2025 12:55:19 PM	Peak Integrated by Software
VSTDICCC050	VN085439.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:14 AM	MMDadoda	1/15/2025 12:55:22 PM	Peak Integrated by Software
VSTDICC020	VN085440.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:19 AM	MMDadoda	1/15/2025 12:55:25 PM	Peak Integrated by Software
VSTDICC020	VN085440.D	trans-1,4-Dichloro-2-but ene	JOHN	1/15/2025 9:31:19 AM	MMDadoda	1/15/2025 12:55:25 PM	Peak Integrated by Software
VSTDICC020	VN085440.D	Vinyl Acetate	JOHN	1/15/2025 9:31:19 AM	MMDadoda	1/15/2025 12:55:25 PM	Peak Integrated by Software
VSTDICC010	VN085441.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:23 AM	MMDadoda	1/15/2025 12:55:29 PM	Peak Integrated by Software
VSTDICC005	VN085442.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:28 AM	MMDadoda	1/15/2025 12:55:34 PM	Peak Integrated by Software
VSTDICC005	VN085442.D	Ethyl Acetate	JOHN	1/15/2025 9:31:28 AM	MMDadoda	1/15/2025 12:55:34 PM	Peak Integrated by Software
VSTDICC005	VN085442.D	Vinyl Acetate	JOHN	1/15/2025 9:31:28 AM	MMDadoda	1/15/2025 12:55:34 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	1,1,2-Trichlorotrifluoroet hane	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	1,1-Dichloroethane	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	1,4-Dichlorobenzene	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VN011425	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VN085443.D	2-Butanone	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	Ethyl Acetate	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICC001	VN085443.D	Vinyl Acetate	JOHN	1/15/2025 9:31:32 AM	MMDadoda	1/15/2025 12:55:39 PM	Peak Integrated by Software
VSTDICV050	VN085445.D	1,2,3-Trichloropropane	JOHN	1/15/2025 9:31:37 AM	MMDadoda	1/15/2025 12:55:43 PM	Peak Integrated by Software
VSTDICV050	VN085445.D	trans-1,4-Dichloro-2-butene	JOHN	1/15/2025 9:31:37 AM	MMDadoda	1/15/2025 12:55:43 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VN012925	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN085548.D	1,2,3-Trichloropropane	JOHN	1/30/2025 9:53:36 AM	MMDadoda	1/30/2025 11:55:49 AM	Peak Integrated by Software
VN0129WBS01	VN085551.D	1,2,3-Trichloropropane	JOHN	1/30/2025 9:53:41 AM	MMDadoda	1/30/2025 11:55:51 AM	Peak Integrated by Software
VN0129WBS01	VN085551.D	trans-1,4-Dichloro-2-butene	JOHN	1/30/2025 9:53:41 AM	MMDadoda	1/30/2025 11:55:51 AM	Peak Integrated by Software
VN0129WBSD01	VN085552.D	1,2,3-Trichloropropane	JOHN	1/30/2025 9:53:45 AM	MMDadoda	1/30/2025 11:55:54 AM	Peak Integrated by Software
VSTDCCC050	VN085574.D	1,2,3-Trichloropropane	JOHN	1/30/2025 9:54:03 AM	MMDadoda	1/30/2025 11:56:02 AM	Peak Integrated by Software
VSTDCCC050	VN085574.D	Isopropyl Acetate	JOHN	1/30/2025 9:54:03 AM	MMDadoda	1/30/2025 11:56:02 AM	Peak Integrated by Software

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN011425

Review By	John Carlone	Review On	1/15/2025 9:31:51 AM		
Supervise By	Maresh Dadoda	Supervise On	1/15/2025 12:55:51 PM		
SubDirectory	VN011425	HP Acquire Method	MSVOA_N	HP Processing Method	82N011425W.M
STD. NAME		STD REF.#			
Tune/Reschk		VP132529			
Initial Calibration Stds		VP132530,VP132531,VP132532,VP132533,VP132534,VP132535			
CCC					
Internal Standard/PEM					
ICV/I.BLK		VP132544			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	Sampled	Data File Name	Date-Time	Operator	Status
1	BFB	VN085437.D	14 Jan 2025 14:22	JC\MD	Ok
2	VSTDICC100	VN085438.D	14 Jan 2025 14:56	JC\MD	Ok,M
3	VSTDICCC050	VN085439.D	14 Jan 2025 15:19	JC\MD	Ok,M
4	VSTDICC020	VN085440.D	14 Jan 2025 15:43	JC\MD	Ok,M
5	VSTDICC010	VN085441.D	14 Jan 2025 16:07	JC\MD	Ok,M
6	VSTDICC005	VN085442.D	14 Jan 2025 16:31	JC\MD	Ok,M
7	VSTDICC001	VN085443.D	14 Jan 2025 17:19	JC\MD	Ok,M
8	IBLK	VN085444.D	14 Jan 2025 17:42	JC\MD	Ok
9	VSTDICV050	VN085445.D	14 Jan 2025 18:06	JC\MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN012925

Review By	John Carlone	Review On	1/30/2025 9:55:59 AM
Supervise By	Maresh Dadoda	Supervise On	1/30/2025 11:55:44 AM
SubDirectory	VN012925	HP Acquire Method	HP Processing Method 82N011425W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP132753		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP132754,VP132755		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085547.D	29 Jan 2025 10:35	JC\MD	Ok
2	VSTDCCC050	VN085548.D	29 Jan 2025 11:08	JC\MD	Ok,M
3	VN0129MBL01	VN085549.D	29 Jan 2025 11:42	JC\MD	Ok
4	VN0129WBL01	VN085550.D	29 Jan 2025 12:06	JC\MD	Ok
5	VN0129WBS01	VN085551.D	29 Jan 2025 12:30	JC\MD	Ok,M
6	VN0129WBSD01	VN085552.D	29 Jan 2025 13:04	JC\MD	Ok,M
7	PB166319TB	VN085553.D	29 Jan 2025 13:28	JC\MD	Ok
8	Q1205-02	VN085554.D	29 Jan 2025 13:52	JC\MD	Ok
9	Q1206-02	VN085555.D	29 Jan 2025 14:16	JC\MD	Ok
10	Q1206-06	VN085556.D	29 Jan 2025 14:40	JC\MD	Ok
11	Q1207-02	VN085557.D	29 Jan 2025 15:04	JC\MD	Ok
12	Q1207-06	VN085558.D	29 Jan 2025 15:29	JC\MD	Ok
13	Q1207-10	VN085559.D	29 Jan 2025 15:53	JC\MD	Ok
14	Q1207-14	VN085560.D	29 Jan 2025 16:17	JC\MD	Ok
15	Q1207-18	VN085561.D	29 Jan 2025 16:41	JC\MD	Ok
16	Q1209-04	VN085562.D	29 Jan 2025 17:05	JC\MD	Ok
17	Q1209-08	VN085563.D	29 Jan 2025 17:29	JC\MD	Ok
18	PB166319ZHE#01	VN085564.D	29 Jan 2025 17:53	JC\MD	Ok
19	PB166319ZHE#02	VN085565.D	29 Jan 2025 18:18	JC\MD	Ok
20	PB166319ZHE#03	VN085566.D	29 Jan 2025 18:42	JC\MD	Ok
21	PB166319ZHE#04	VN085567.D	29 Jan 2025 19:06	JC\MD	Ok,M

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN012925

Review By	John Carlone	Review On	1/30/2025 9:55:59 AM
Supervise By	Mahesh Dadoda	Supervise On	1/30/2025 11:55:44 AM
SubDirectory	VN012925	HP Acquire Method	HP Processing Method 82N011425W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP132753		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP132754,VP132755		

22	PB166319ZHE#05	VN085568.D	29 Jan 2025 19:30	JC\MD	Ok
23	PB166319ZHE#06	VN085569.D	29 Jan 2025 19:54	JC\MD	Ok
24	PB166319ZHE#07	VN085570.D	29 Jan 2025 20:19	JC\MD	Ok
25	PB166319ZHE#08	VN085571.D	29 Jan 2025 20:43	JC\MD	Ok,M
26	PB166319ZHE#09	VN085572.D	29 Jan 2025 21:07	JC\MD	Ok,M
27	PB166319ZHE#10	VN085573.D	29 Jan 2025 21:31	JC\MD	Ok
28	VSTDCCC050	VN085574.D	29 Jan 2025 21:55	JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN011425

Review By	John Carlone	Review On	1/15/2025 9:31:51 AM
Supervise By	Mahesh Dadoda	Supervise On	1/15/2025 12:55:51 PM
SubDirectory	VN011425	HP Acquire Method	MSVOA_N HP Processing Method 82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132529
Initial Calibration Stds	VP132530,VP132531,VP132532,VP132533,VP132534,VP132535
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP132544
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085437.D	14 Jan 2025 14:22		JC\MD	Ok
2	VSTDICC100	VSTDICC100	VN085438.D	14 Jan 2025 14:56		JC\MD	Ok,M
3	VSTDICCC050	VSTDICCC050	VN085439.D	14 Jan 2025 15:19	Comp.#56 is on Linear Regression	JC\MD	Ok,M
4	VSTDICC020	VSTDICC020	VN085440.D	14 Jan 2025 15:43	Comp.#86 is on Quadratic Regression	JC\MD	Ok,M
5	VSTDICC010	VSTDICC010	VN085441.D	14 Jan 2025 16:07		JC\MD	Ok,M
6	VSTDICC005	VSTDICC005	VN085442.D	14 Jan 2025 16:31		JC\MD	Ok,M
7	VSTDICC001	VSTDICC001	VN085443.D	14 Jan 2025 17:19		JC\MD	Ok,M
8	IBLK	IBLK	VN085444.D	14 Jan 2025 17:42		JC\MD	Ok
9	VSTDICV050	ICVVN011425	VN085445.D	14 Jan 2025 18:06		JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN012925

Review By	John Carlone	Review On	1/30/2025 9:55:59 AM
Supervise By	Mahesh Dadoda	Supervise On	1/30/2025 11:55:44 AM
SubDirectory	VN012925	HP Acquire Method	HP Processing Method 82N011425W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP132753
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP132754,VP132755

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085547.D	29 Jan 2025 10:35		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN085548.D	29 Jan 2025 11:08	V13516	JC\MD	Ok,M
3	VN0129MBL01	VN0129MBL01	VN085549.D	29 Jan 2025 11:42		JC\MD	Ok
4	VN0129WBL01	VN0129WBL01	VN085550.D	29 Jan 2025 12:06		JC\MD	Ok
5	VN0129WBS01	VN0129WBS01	VN085551.D	29 Jan 2025 12:30		JC\MD	Ok,M
6	VN0129WBSD01	VN0129WBSD01	VN085552.D	29 Jan 2025 13:04		JC\MD	Ok,M
7	PB166319TB	PB166319TB	VN085553.D	29 Jan 2025 13:28		JC\MD	Ok
8	Q1205-02	VNJ-236	VN085554.D	29 Jan 2025 13:52	vial A pH#5.0	JC\MD	Ok
9	Q1206-02	JPP-20.1-012725	VN085555.D	29 Jan 2025 14:16	vial A pH#5.0	JC\MD	Ok
10	Q1206-06	JPP-16.3-012725	VN085556.D	29 Jan 2025 14:40	vial A pH#5.0	JC\MD	Ok
11	Q1207-02	JPP-2.1-012725	VN085557.D	29 Jan 2025 15:04	vial A pH#5.0	JC\MD	Ok
12	Q1207-06	JPP-5.1-012725	VN085558.D	29 Jan 2025 15:29	vial A pH#5.0	JC\MD	Ok
13	Q1207-10	JPP-4.5-012725	VN085559.D	29 Jan 2025 15:53	vial A pH#5.0	JC\MD	Ok
14	Q1207-14	JPP-16.2-012725	VN085560.D	29 Jan 2025 16:17	vial A pH#5.0	JC\MD	Ok
15	Q1207-18	JPP-20.2-012725	VN085561.D	29 Jan 2025 16:41	vial A pH#5.0	JC\MD	Ok
16	Q1209-04	WC-4	VN085562.D	29 Jan 2025 17:05	vial A pH#5.0	JC\MD	Ok
17	Q1209-08	WC-5	VN085563.D	29 Jan 2025 17:29	vial A pH#5.0	JC\MD	Ok
18	PB166319ZHE#01	PB166319ZHE#01	VN085564.D	29 Jan 2025 17:53		JC\MD	Ok

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN012925

Review By	John Carlone	Review On	1/30/2025 9:55:59 AM
Supervise By	Maresh Dadoda	Supervise On	1/30/2025 11:55:44 AM
SubDirectory	VN012925	HP Acquire Method	HP Processing Method 82N011425W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP132753		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP132754,VP132755		

19	PB166319ZHE#02	PB166319ZHE#02	VN085565.D	29 Jan 2025 18:18	JC\MD	Ok
20	PB166319ZHE#03	PB166319ZHE#03	VN085566.D	29 Jan 2025 18:42	JC\MD	Ok
21	PB166319ZHE#04	PB166319ZHE#04	VN085567.D	29 Jan 2025 19:06	JC\MD	Ok,M
22	PB166319ZHE#05	PB166319ZHE#05	VN085568.D	29 Jan 2025 19:30	JC\MD	Ok
23	PB166319ZHE#06	PB166319ZHE#06	VN085569.D	29 Jan 2025 19:54	JC\MD	Ok
24	PB166319ZHE#07	PB166319ZHE#07	VN085570.D	29 Jan 2025 20:19	JC\MD	Ok
25	PB166319ZHE#08	PB166319ZHE#08	VN085571.D	29 Jan 2025 20:43	JC\MD	Ok,M
26	PB166319ZHE#09	PB166319ZHE#09	VN085572.D	29 Jan 2025 21:07	JC\MD	Ok,M
27	PB166319ZHE#10	PB166319ZHE#10	VN085573.D	29 Jan 2025 21:31	JC\MD	Ok
28	VSTDCCC050	VSTDCCC050EC	VN085574.D	29 Jan 2025 21:55	JC\MD	Ok,M

M : Manual Integration

SOP ID : M1311-TCLP-15
SDG No : N/A
Welgh By : JP
Balance ID : WC SC-7
pH Meter ID : WC PH METER-1
Extraction By : JP
Filter By : JP
Pippete ID : WC
Tumbler ID : ZHE-1
TCLP Filter ID : 50223706

Start Prep Date : 01/28/2025 **Time :** 16:30
End Prep Date : 01/29/2025 **Time :** 09:20
Combination Ratio : 20
ZHE Cleaning Batch : ~~N/A~~ VN012925
Initial Room Temperature: 23 °C
Final Room Temperature: 22 °C
TCLP Technician Signature : *JP*
Supervisor By : *12*

Standard Name	MLS USED	STD REF. # FROM LOG
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	WP110801
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
40ml VOA Vials	23237	N/A

Extraction Conformance/Non-Conformance Comments:

ALL ZHE samples are extracted and given as vial A & B. Leak checked after 10 mintues of tumbling. TUMBLER
 ZHE-1 checked,30 rpm.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/29/25 11:00	<i>JP</i> <i>1111D Room</i>	<i>JP</i> <i>100C Lab</i>
01/29/25	Preparation Group	Analysis Group

Sample ID	ClientID	ZHE Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB166319TB	LEB319	11	N/A	500	N/A	N/A	N/A	4.94	N/A	ZHE-1
Q1205-02	VNJ-236	01	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1206-02	JPP-20.1-012725	02	25.01	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1206-06	JPP-16.3-012725	03	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1207-02	JPP-2.1-012725	04	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1207-06	JPP-5.1-012725	05	25.05	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1207-10	JPP-4.5-012725	06	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1207-14	JPP-16.2-012725	07	25.04	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1207-18	JPP-20.2-012725	08	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1209-04	WC-4	09	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q1209-08	WC-5	10	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB166319TB	LEB319	N/A	N/A	N/A	N/A	N/A	N/A
Q1205-02	VNJ-236	N/A	N/A	N/A	N/A	100	N/A
Q1206-02	JPP-20.1-012725	N/A	N/A	N/A	N/A	100	N/A
Q1206-06	JPP-16.3-012725	N/A	N/A	N/A	N/A	100	N/A
Q1207-02	JPP-2.1-012725	N/A	N/A	N/A	N/A	100	N/A
Q1207-06	JPP-5.1-012725	N/A	N/A	N/A	N/A	100	N/A
Q1207-10	JPP-4.5-012725	N/A	N/A	N/A	N/A	100	N/A
Q1207-14	JPP-16.2-012725	N/A	N/A	N/A	N/A	100	N/A
Q1207-18	JPP-20.2-012725	N/A	N/A	N/A	N/A	100	N/A
Q1209-04	WC-4	N/A	N/A	N/A	N/A	100	N/A
Q1209-08	WC-5	N/A	N/A	N/A	N/A	100	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tclp zhe q1109 WorkList ID : 187225 Department : TCLP Extraction Date : 01-28-2025 14:22:11

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1205-02	VNJ-236	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	N31	01/28/2025	1311 ZHE
Q1206-02	JPP-20.1-012725	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/27/2025	1311 ZHE
Q1206-06	JPP-16.3-012725	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/27/2025	1311 ZHE
Q1207-02	JPP-2.1-012725	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/27/2025	1311 ZHE
Q1207-06	JPP-5.1-012725	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/27/2025	1311 ZHE
Q1207-10	JPP-4.5-012725	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/27/2025	1311 ZHE
Q1207-14	JPP-16.2-012725	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/27/2025	1311 ZHE
Q1207-18	JPP-20.2-012725	Solid	TCLP ZHE Extraction	Cool 4 deg C	RUTW01	E11	01/27/2025	1311 ZHE
Q1209-04	WC-4	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	N41	01/28/2025	1311 ZHE
Q1209-08	WC-5	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	N41	01/28/2025	1311 ZHE

Date/Time 01/28/25 14:30
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 01/28/25 17:00
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Prep Standard - Chemical Standard Summary

Order ID : Q1207

Test : TCLP VOA

Prepbatch ID :

Sequence ID/Qc Batch ID: VN012925,

Standard ID :

VP130430,VP131746,VP131767,VP132035,VP132096,VP132468,VP132613,VP132753,VP132754,VP132755,

Chemical ID :

V13391,V13446,V13457,V13460,V13465,V13466,V13707,V14145,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14614,V14624,V14627,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14754,V14756,V14801,V14814,V14830,V14831,V14832,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>
617	8260 Surrogate, 400PPM	VP130430	09/20/2024	02/28/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
09/26/2024								

FROM 0.40000ml of V13707 + 24.60000ml of V14145 = 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>
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

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>
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

<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

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>
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

<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	VP132468	01/08/2025	02/07/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								01/17/2025

FROM 1.00000ml of V14832 + 1.50000ml of V14830 + 1.50000ml of V14831 + 21.00000ml of V14627 = 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	VP132613	01/20/2025	02/28/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda 01/29/2025

FROM 0.40000ml of V13446 + 1.00000ml of V14175 + 1.00000ml of V14176 + 1.00000ml of V14433 + 1.00000ml of V14439 + 1.00000ml of V14521 + 1.00000ml of V14522 + 1.00000ml of V14722 + 1.00000ml of V14754 + 1.00000ml of V14756 + 1.00000ml of V14801 + 1.00000ml of V14814 + 1.50000ml of V14723 + 1.50000ml of V14724 + 10.60000ml of V14624 = Final Quantity: 25.000 ml

<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	VP132753	01/29/2025	01/30/2025	John Carlone	None	None	Maresh Dadoda 01/29/2025

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	VP132754	01/29/2025	01/30/2025	John Carlone	None	None	Maresh Dadoda
								01/29/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = 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	VP132755	01/29/2025	01/30/2025	John Carlone	None	None	Maresh Dadoda
								01/29/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP130430 + 0.00500ml of VP132096 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP132468 + 0.01250ml of VP132613 = Final Quantity: 40.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	11/22/2025	11/22/2024 / SAM	01/13/2023 / SAM	V13391

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0181905	02/28/2025	01/10/2025 / SAM	01/23/2023 / SAM	V13446

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	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

CHEMICAL RECEIPT LOG BOOK

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	06/10/2025	06/10/2024 / SAM	04/12/2023 / SAM	V13707

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	02/28/2025	08/29/2024 / SAM	02/06/2024 / SAM	V14145

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14433

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14439

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14521

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14522

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	06/10/2025	12/10/2024 / SAM	11/26/2024 / SAM	V14614

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	07/13/2025	01/13/2025 / SAM	11/26/2024 / SAM	V14624

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)	23I0762004	07/06/2025	01/06/2025 / SAM	11/26/2024 / SAM	V14627

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

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	V14723

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14724

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix, 500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	05/31/2031	01/10/2025 / SAM	12/17/2024 / SAM	V14754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix, 500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14756

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE	A0220563	06/30/2026	01/10/2025 / SAM	01/08/2025 / SAM	V14801

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

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)	010725	02/07/2025	01/08/2025 / SAM	01/08/2025 / SAM	V14830

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	010725	02/07/2025	01/08/2025 / SAM	01/08/2025 / SAM	V14831

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	010725	02/07/2025	01/08/2025 / SAM	01/08/2025 / SAM	V14832

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

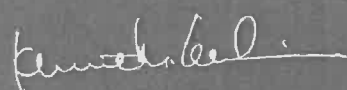
Material No.: 9077-02
Batch No.: 23I0762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

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.: 23I0762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

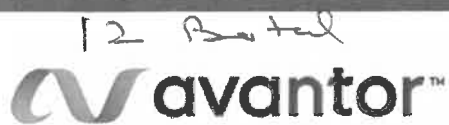
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	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



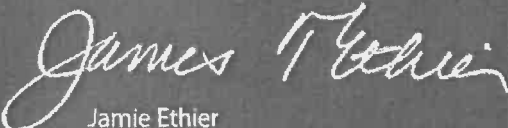
Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

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



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: **91980**
Lot Number: **010725**
Description: **Acrolein**

Expiration Date: **020725**Recommended Storage: **Refrigerate (4 °C)**Nominal Concentration (µg/mL): **5000**NIST Test ID#: **6UTB**

Solvent(s): **Water** Lot# **072324Q**

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

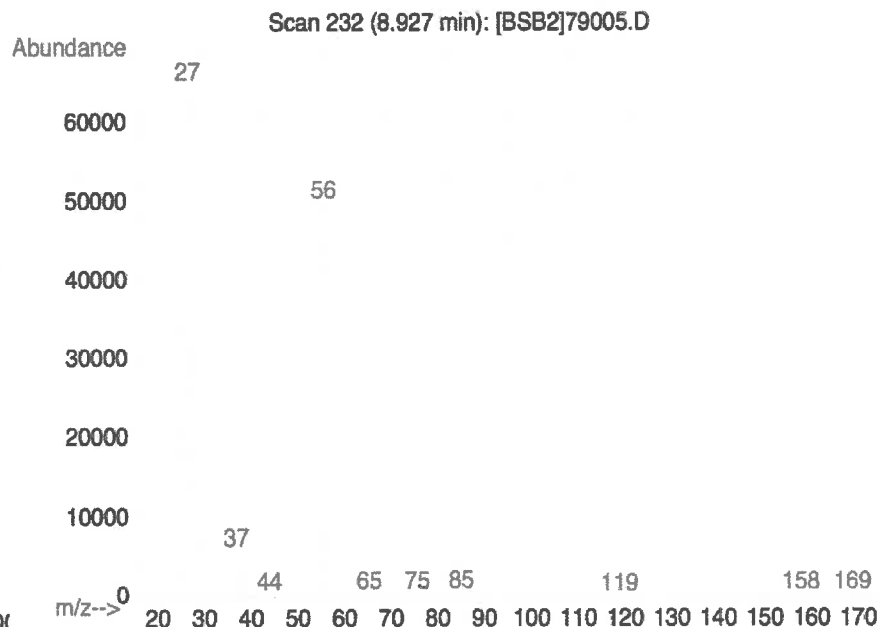
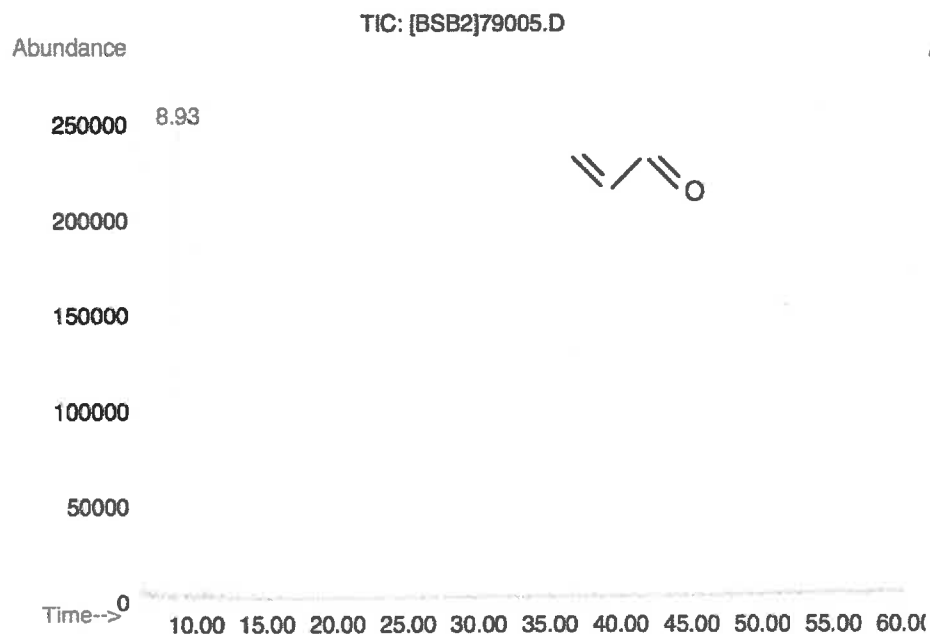
Weight(s) shown below were combined and diluted to (mL): **10.0**

<i>Anthony Mahoney</i>		010725
Formulated By:	Anthony Mahoney	DATE
<i>Pedro L. Rentas</i>		010725
Reviewed By:	Pedro L. Rentas	DATE

5 vial
V 14823 to
V 14829

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 Rossetto 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.
	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 (H ₂ O = 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


 ANAB ISO 17034 Accredited
 AR-1539 Certificate Number
<https://absolutestandards.com>

CERTIFIED WEIGHT REPORT

 Part Number: **91980**
 Lot Number: **010725**
 Description: **Acrolein**
Expiration Date: **020725**Recommended Storage: **Refrigerate (4 °C)**Nominal Concentration (µg/mL): **5000**NIST Test ID#: **6UTB**
 Solvent(s): **Water** Lot# **072324Q**

5E-05 Balance Uncertainty

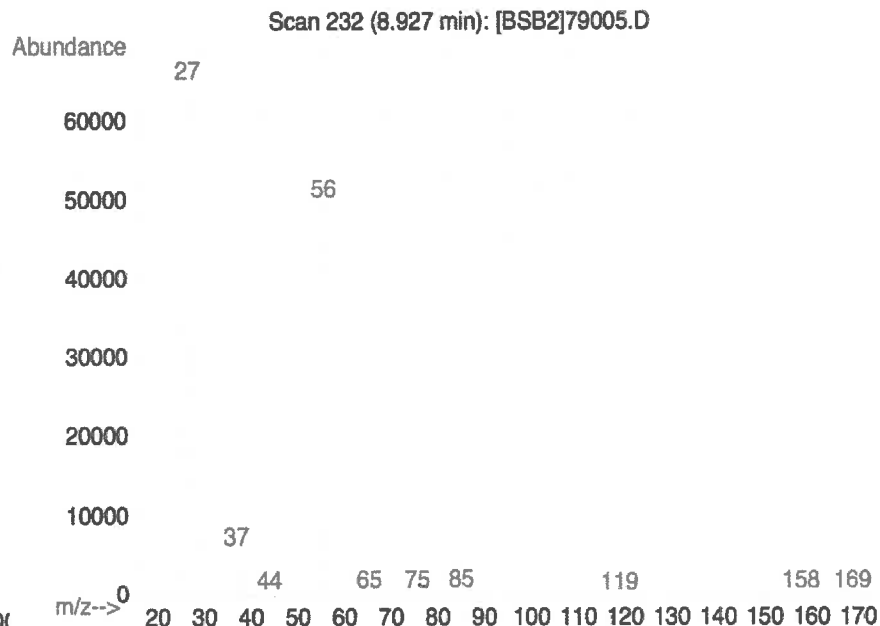
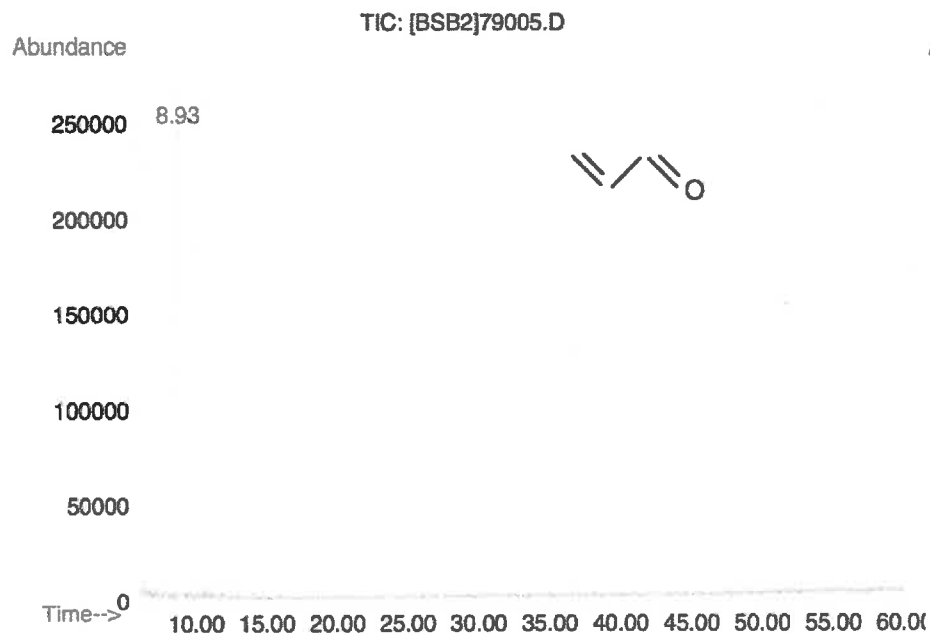
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): **10.0**

<i>Anthony Mahoney</i>		010725
Formulated By:	Anthony Mahoney	DATE
<i>Pedro L. Rentas</i>		010725
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	0.05178	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 Rossetto 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.
	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

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Certified Reference Material CRM


 ANAB ISO 17034 Accredited
 AR-1539 Certificate Number
 https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

 Part Number: 91980
 Lot Number: 010725
 Description: Acrolein

Expiration Date: 020725

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 5000

NIST Test ID#: 6UTB

 Solvent(s): Water
 Lot#: 072324Q

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

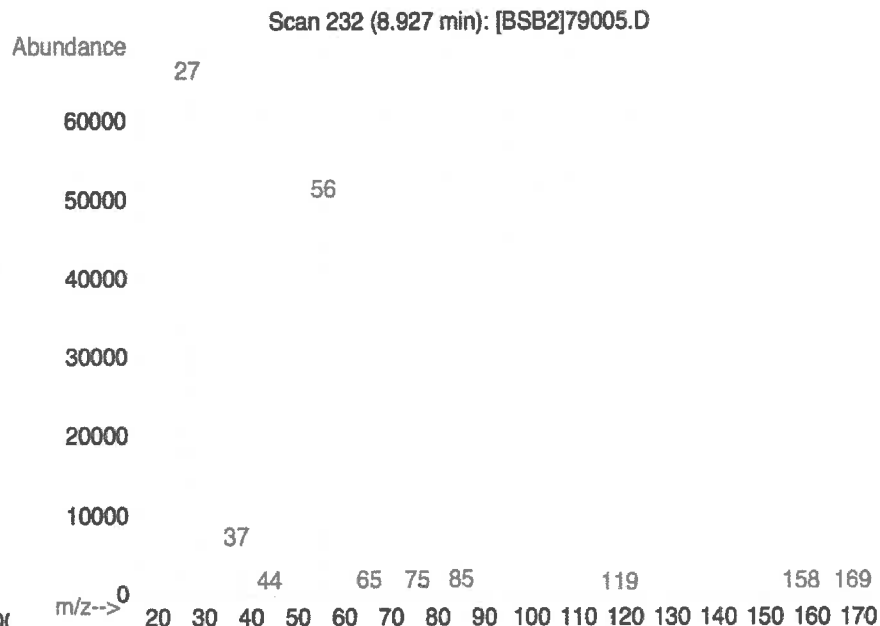
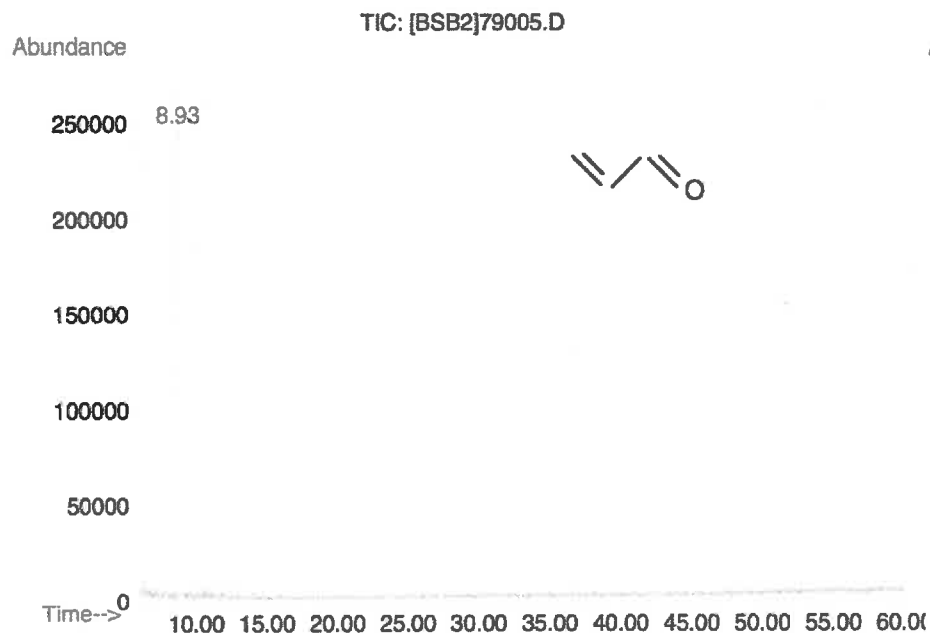
Weight(s) shown below were combined and diluted to (mL): 10.0

<i>Anthony Mahoney</i>		010725
Formulated By:	Anthony Mahoney	DATE
<i>Pedro L. Rentas</i>		010725
Reviewed By:	Pedro L. Rentas	DATE

 5 vial
 V 14823 to
 V 14829

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

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Address	44 Rossetto 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.
	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 (H ₂ O = 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

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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**

<i>Prashant Chauhan</i>		021624
Formulated By:	Prashant Chauhan	DATE
<i>Pedro L. Rentes</i>		021624
Reviewed By:	Pedro L. Rentes	DATE

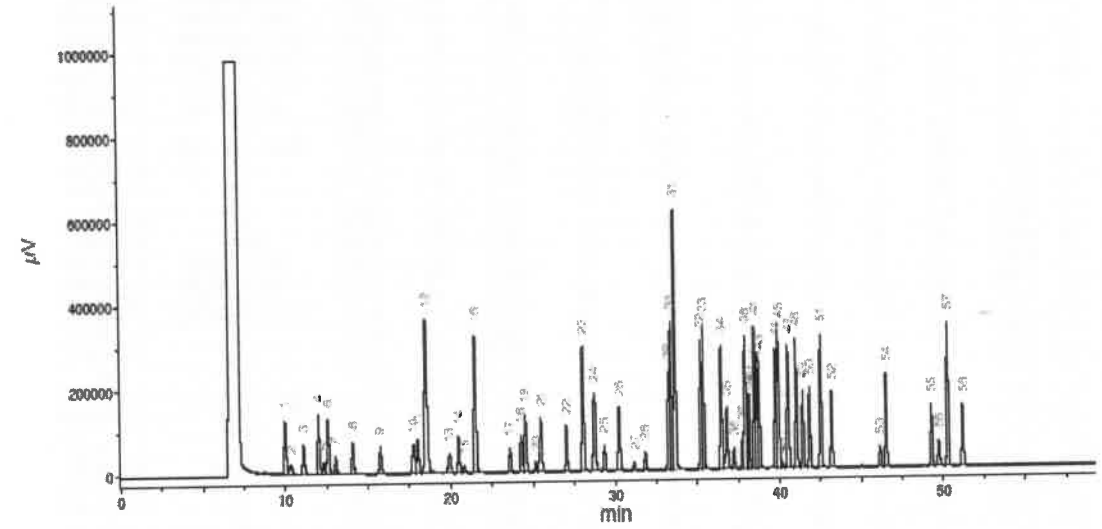
Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty
Flask Uncertainty

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 7000mg/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)	IK18CASA000K	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 70mg/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	96-33-3	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	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	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	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	75-35-4	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 105mg/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 108mg/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	or-rat 725mg/kg
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 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	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	106-57-8	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	95-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	or-rat 1063mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	2			

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-Hydropropane	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	37.93
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	46.46
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**

		021624
Formulated By:	Prashant Chauhan	DATE
		021624
Reviewed By:	Pedro L. Rentes	DATE

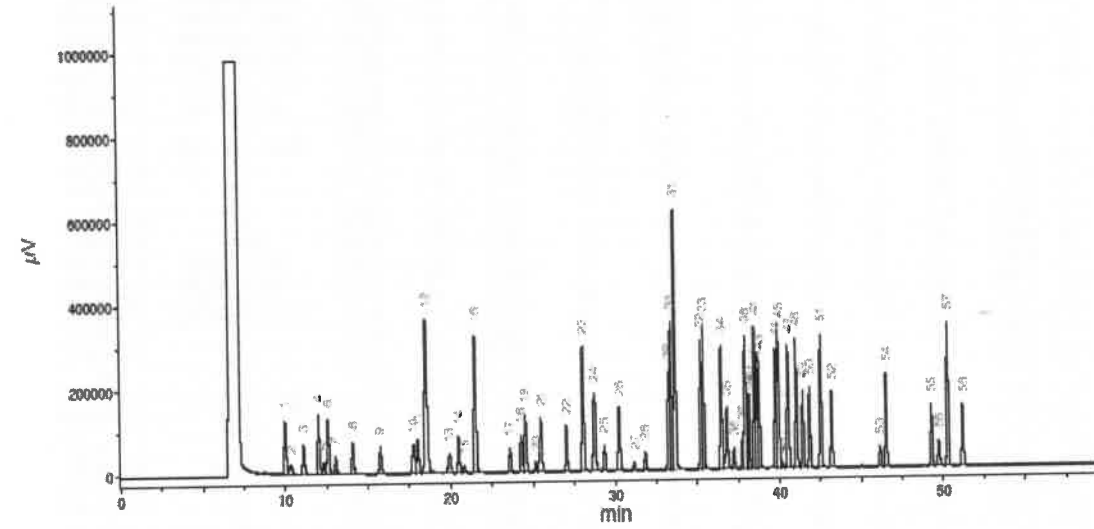
Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty: **5E-05** Flask Uncertainty: **0.021**

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 7000mg/kg
3. Carbon disulfide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	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	6.5	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 70mg/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	96-33-3	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 700mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	or-rat 720mg/kg
15. Perfluorooctane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (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	1999.6	22.9	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 105mg/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 108mg/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	584-20-7	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	106-93-4	20 ppm (8H)	or-rat 108mg/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-Dichloropropene	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 636mg/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	99-87-6	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	1999.8	22.9	106-98-3	200 ppm	or-rat 5000mg/kg
52. Toluene	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
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.8	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	106-57-8	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	1999.6	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	95-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	or-rat 1063mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5												

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-Hydropropane	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	37.93
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	46.46
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 Reference Material CRM

Dec 09/17/24

2 vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

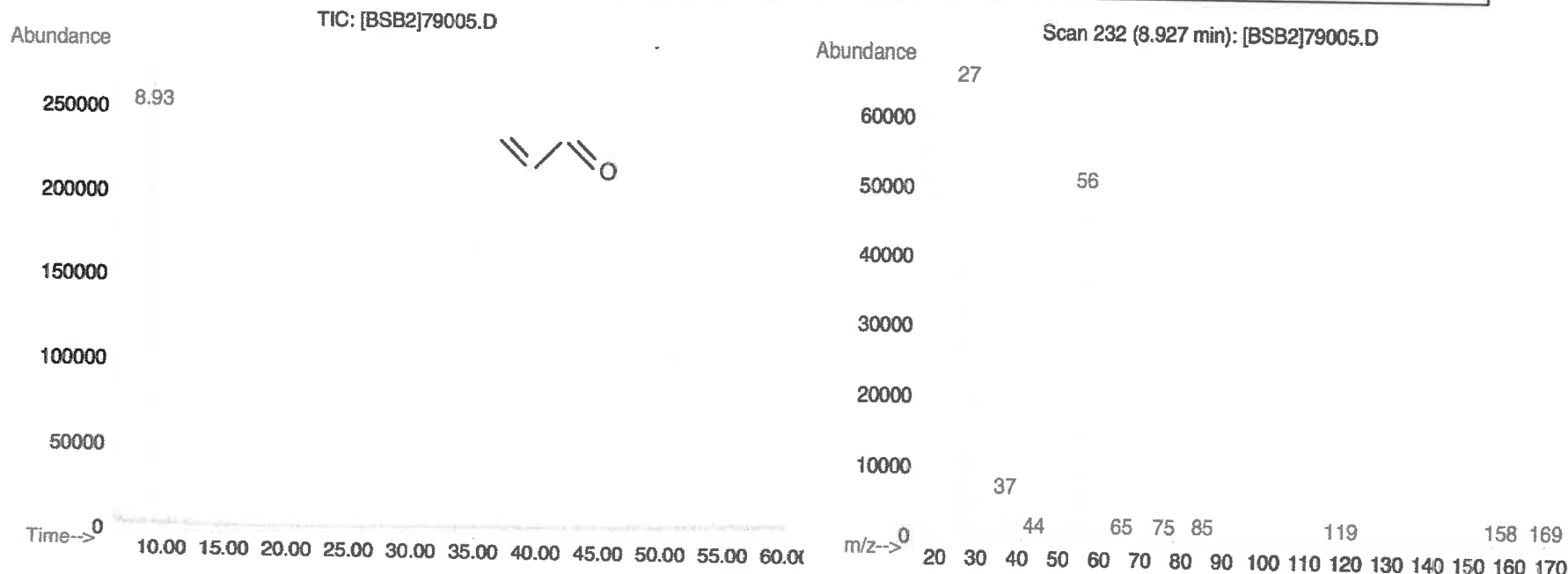
CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: AcroleinSolvent(s):
Water Lot# 072324QExpiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTBWeight(s) shown below were combined and diluted to (mL): 10.0
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Justin Dippold
091424 DATE	
Reviewed By:	Pedro L. Rentas
091424 DATE	

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
										CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	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 vlog



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
<https://Absolutestandards.com>

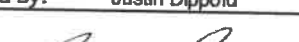
CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Solvent(s): Water
Lot# 072324Q

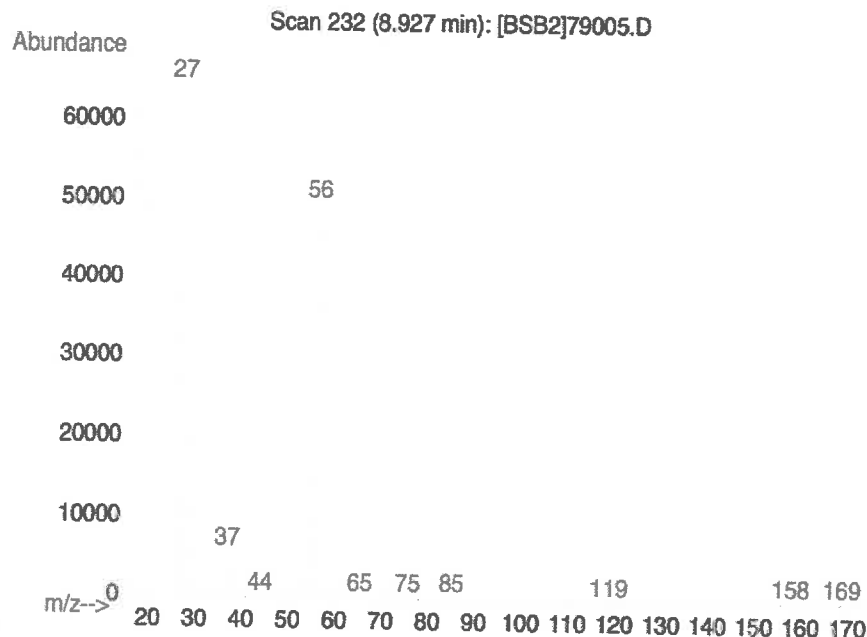
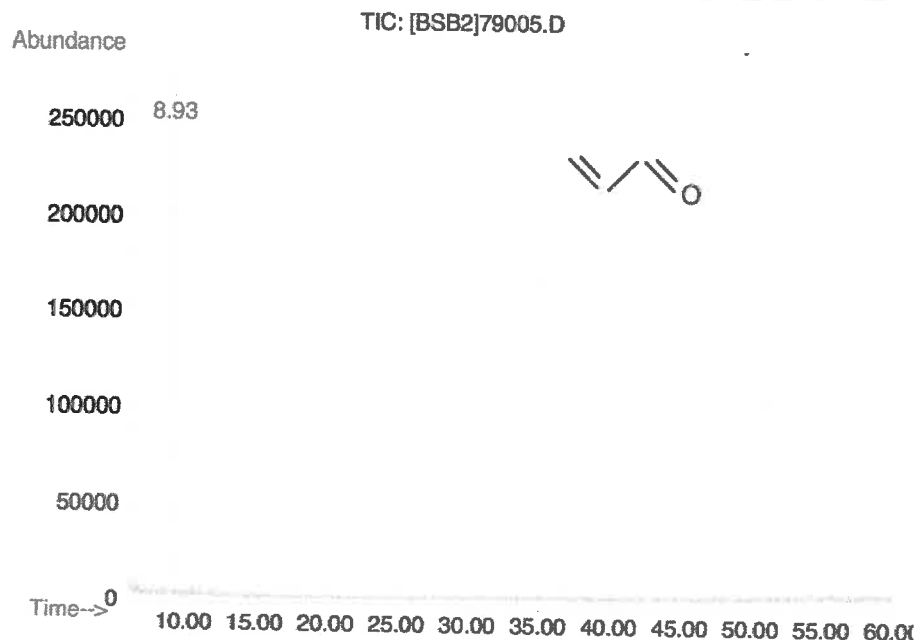
Expiration Date:	101424
Recommended Storage:	Refrigerate (4 °C)
Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Weight(s) shown below were combined and diluted to (mL):	10.0	0.001	Flask Uncertainty
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		091424
Formulated By:	Justin Dippold	DATE
		091424
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
										CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05186	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**

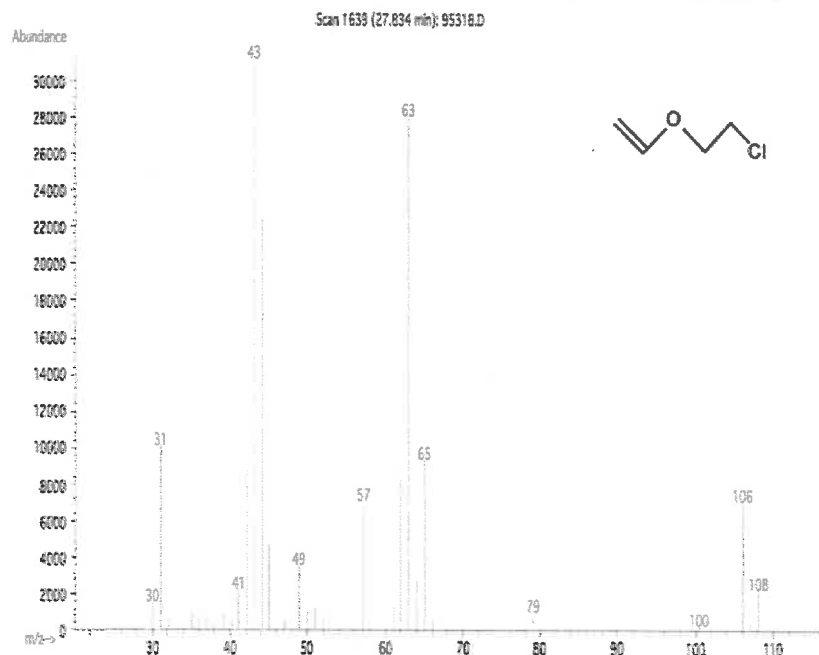
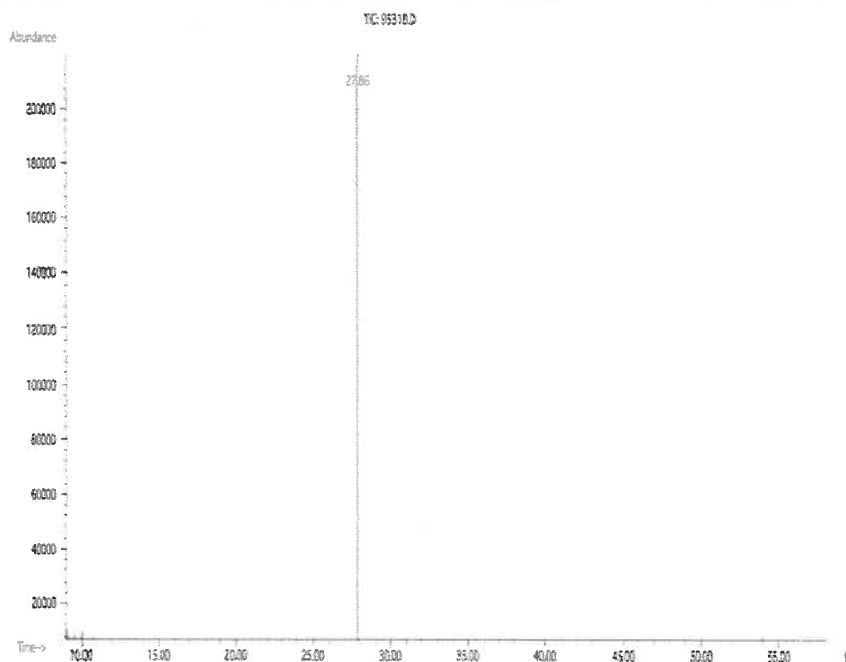
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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

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**

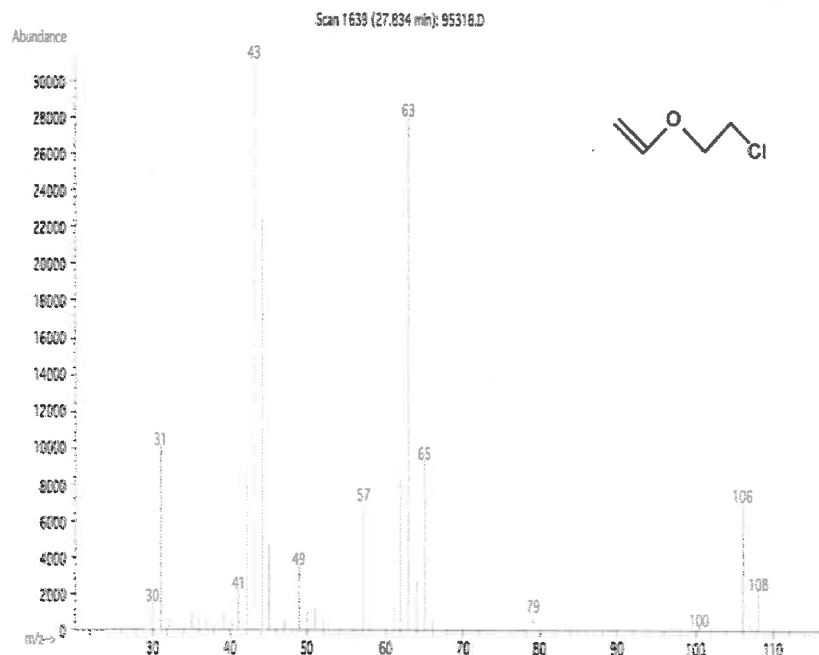
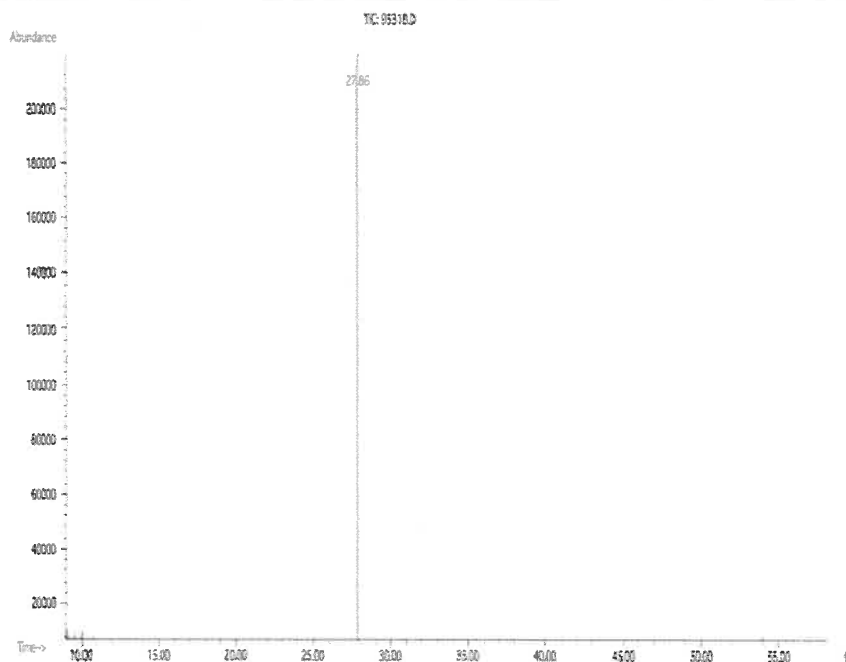
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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	SDS Information		
									Uncertainty (+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)
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

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**

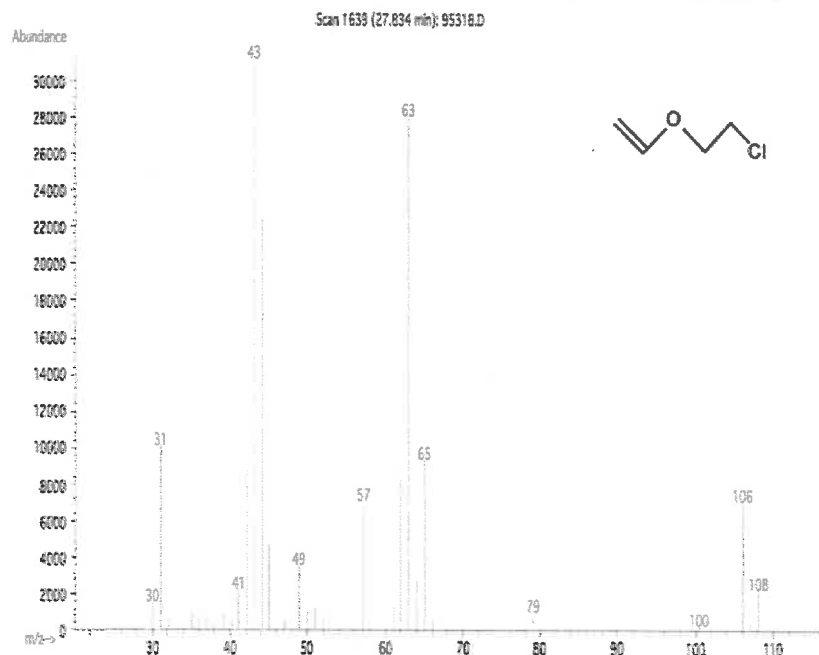
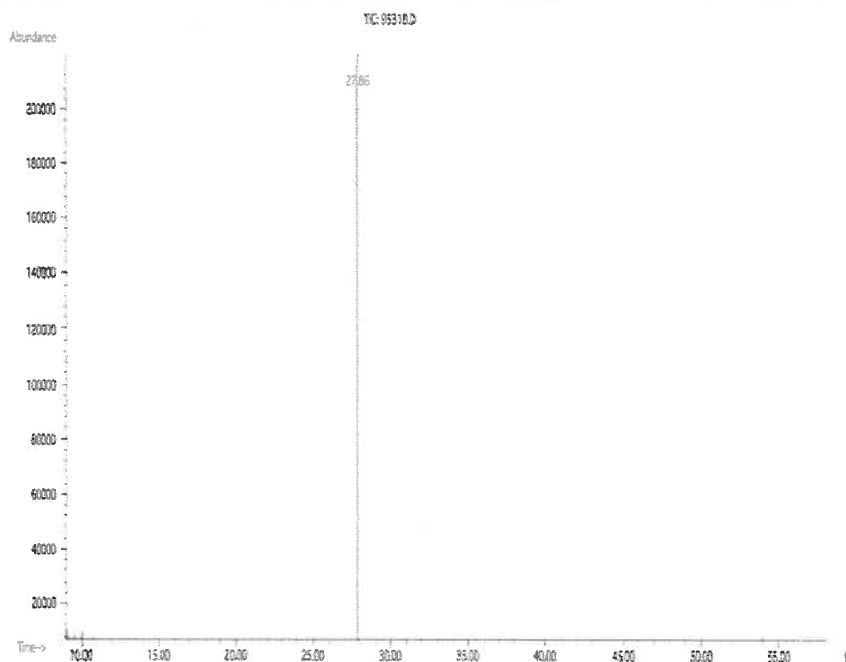
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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.



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Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	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.
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Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

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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**

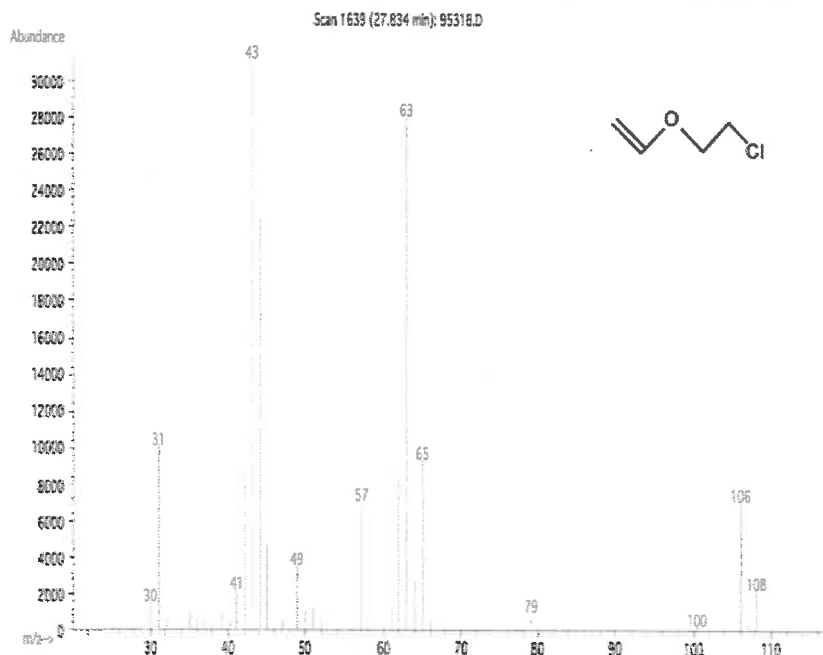
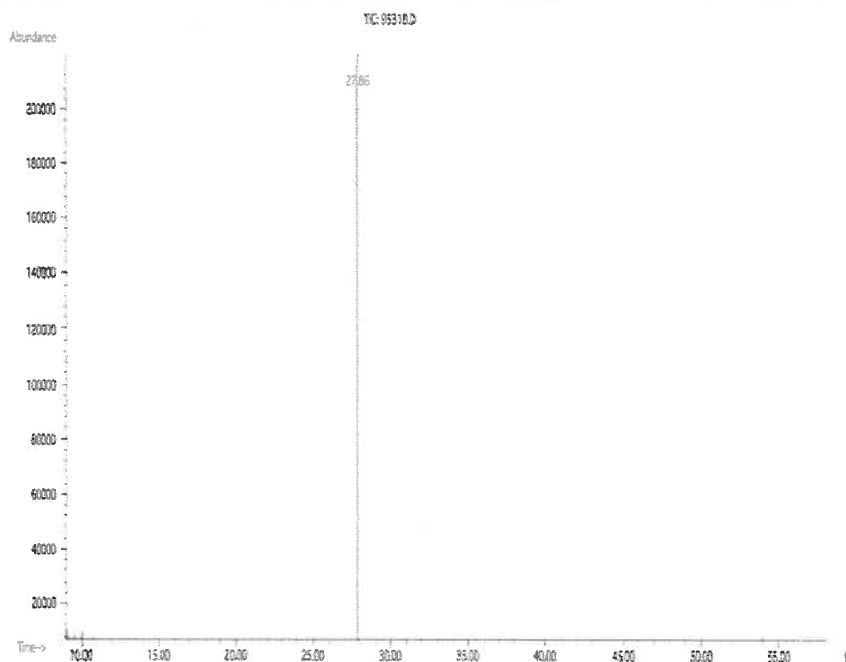
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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.,
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- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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

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.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0181905
Description : tert-Butanol Standard
tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 28, 2025 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	tert-Butanol (TBA)	50,126.0 µg/mL	+/-	293.4988	µg/mL	Gravimetric
	CAS # 75-65-0		+/-	1,073.7654	µg/mL	Unstressed
	Purity 99%		+/-	1,104.9494	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

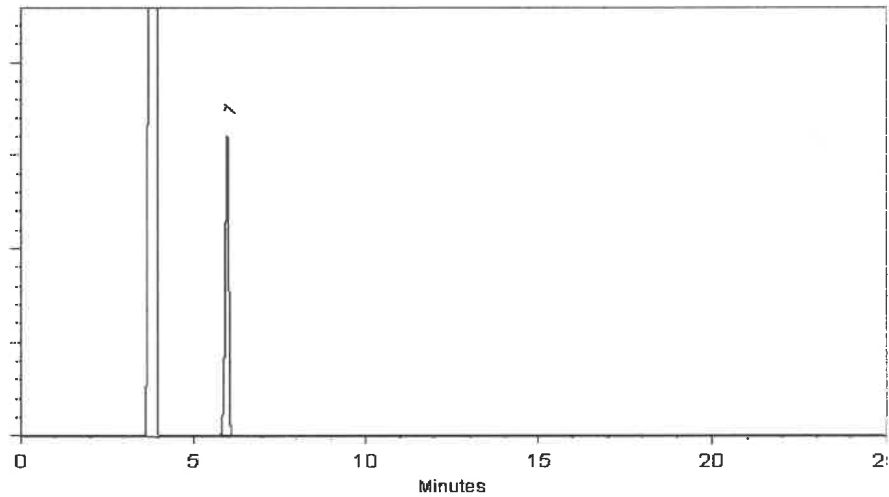
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

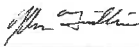
Inj. Temp:
200°C

Det. Temp:
250°C

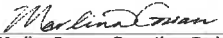
Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


John Friedline - Operations Technician I

Date Mixed: 16-Feb-2022 Balance: B442140311


Marlene Cowan - Operations Tech I

Date Passed: 21-Feb-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



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Fax: 1-814-353-1309

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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:

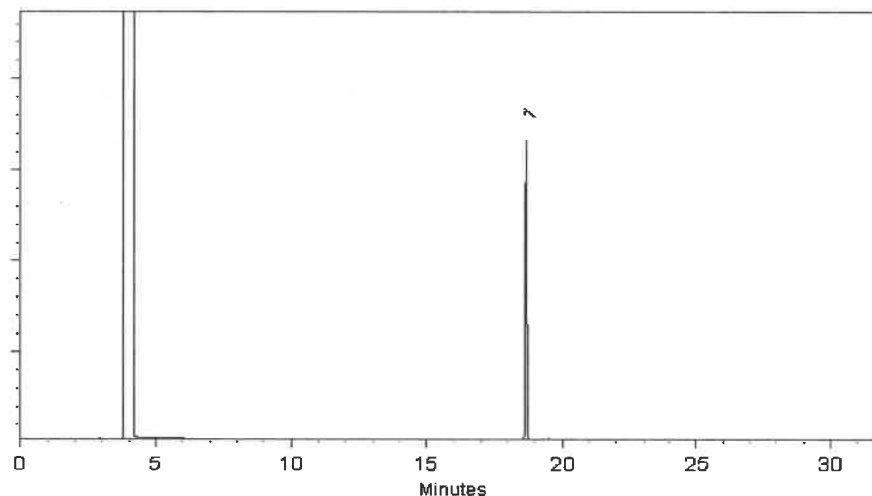
FID

Split Vent:

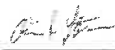
40 ml/min

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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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. : 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:

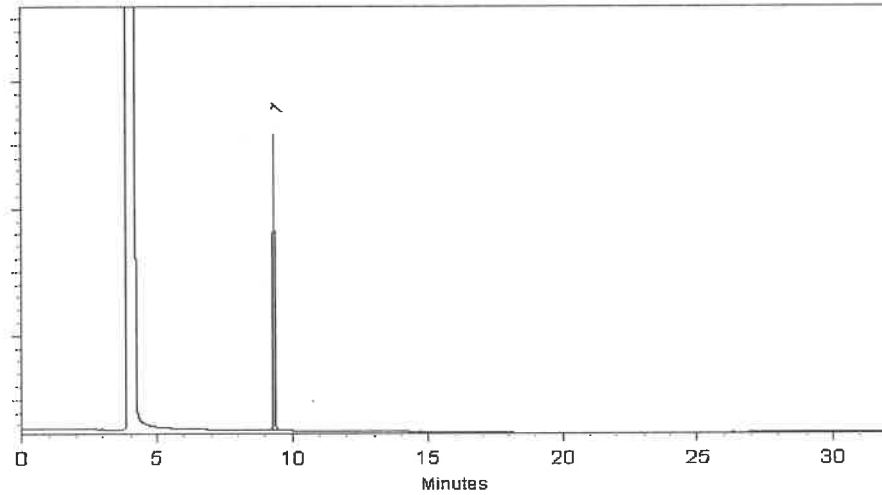
FID

Split Vent:

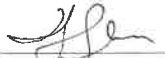
40 ml/min

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:

- 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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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. : 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:

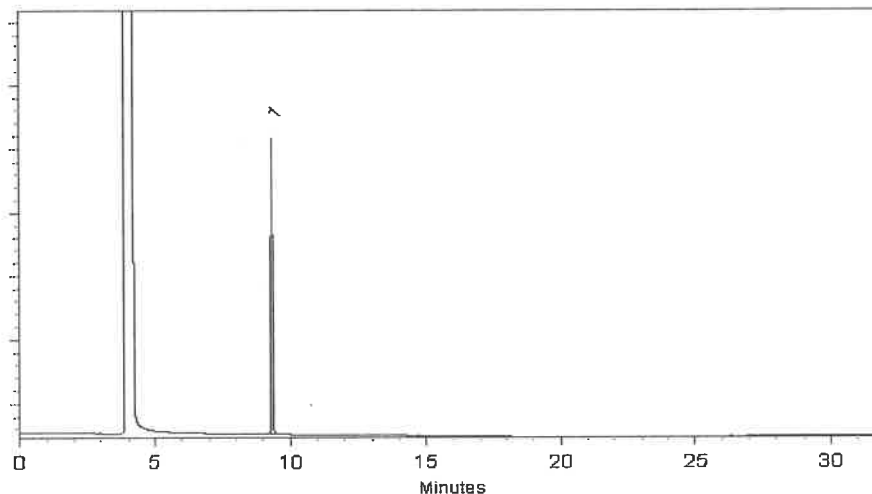
FID

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.
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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:

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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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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. : 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:

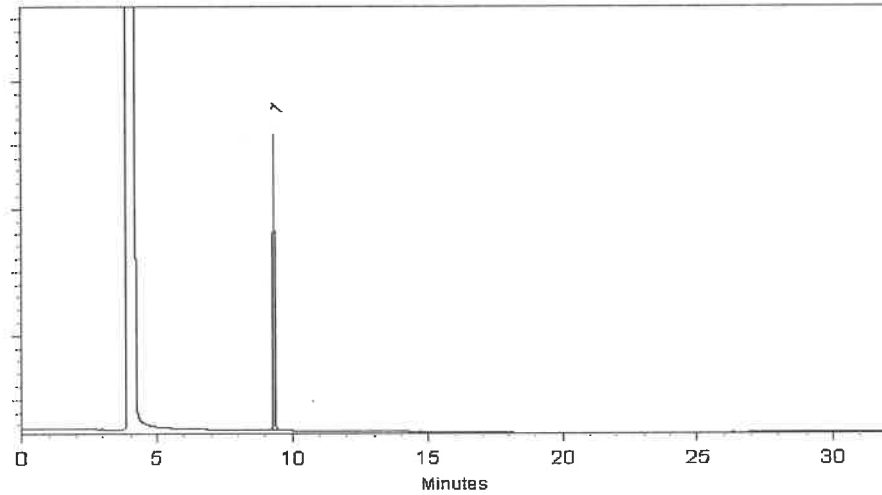
FID

Split Vent:

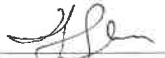
40 ml/min

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:

- 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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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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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. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

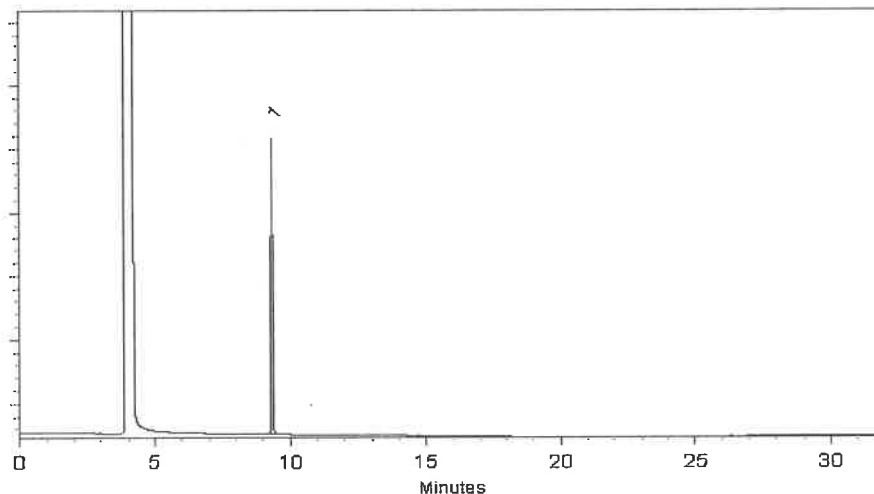
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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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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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

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:

- 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 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%.

- 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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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.)

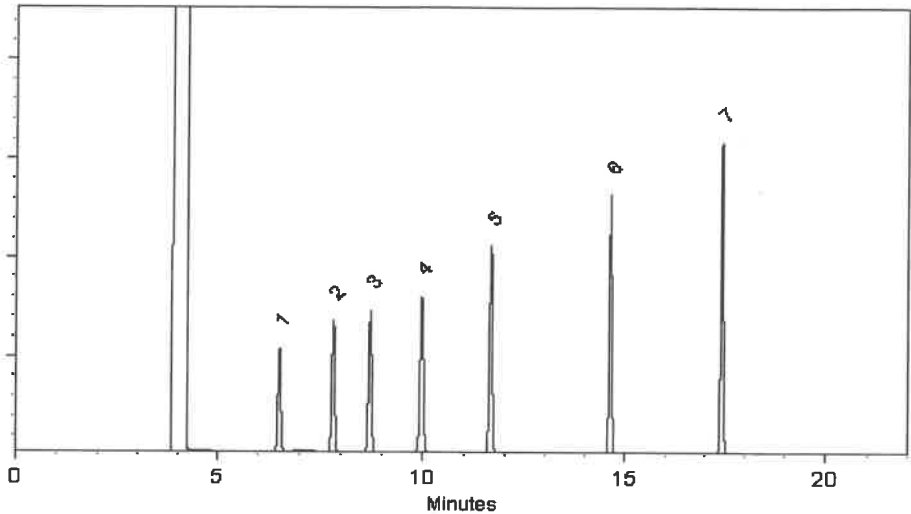
Inj. Temp:
200°C

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:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.)

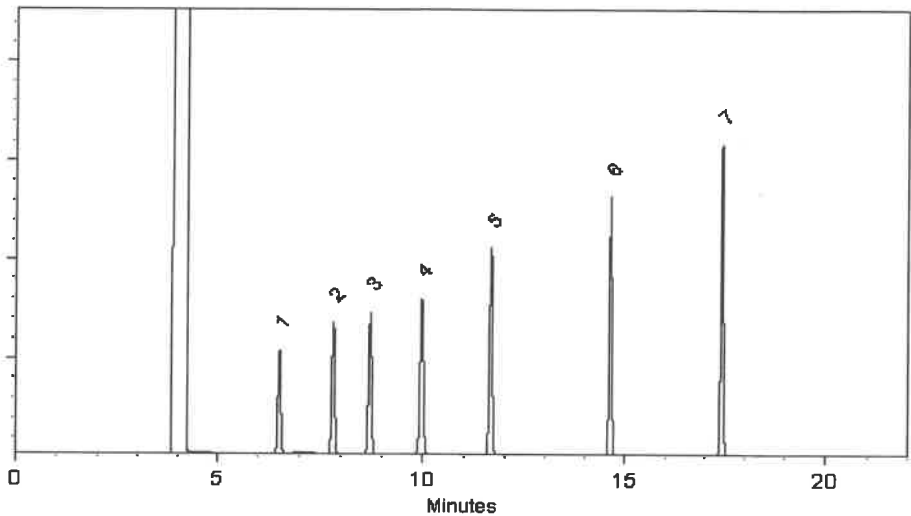
Inj. Temp:
200°C

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:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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gravimetric



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

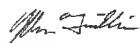
Expiration Date : April 30, 2027 **Storage:** 10°C or colder

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

RECEIVED
By Restek Center of Excellence, Apr 15, 2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Dec 12/17/24
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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:

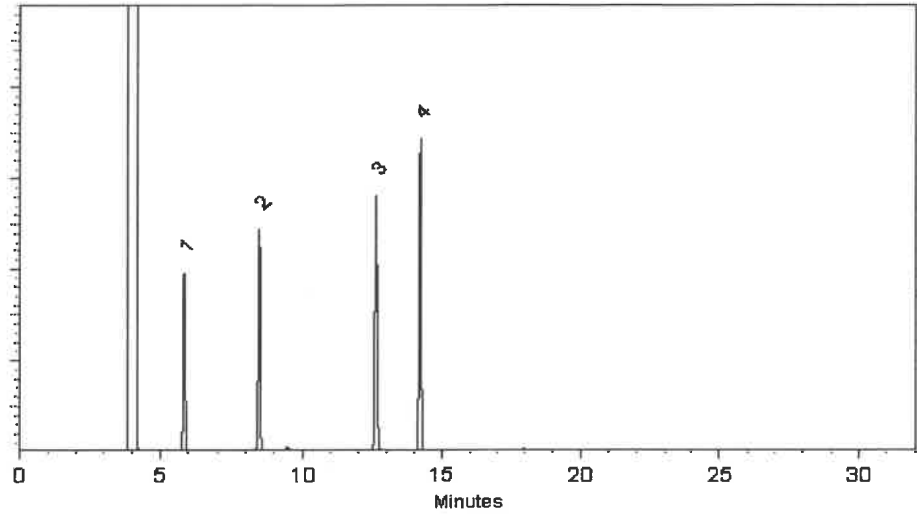
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

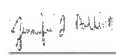


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

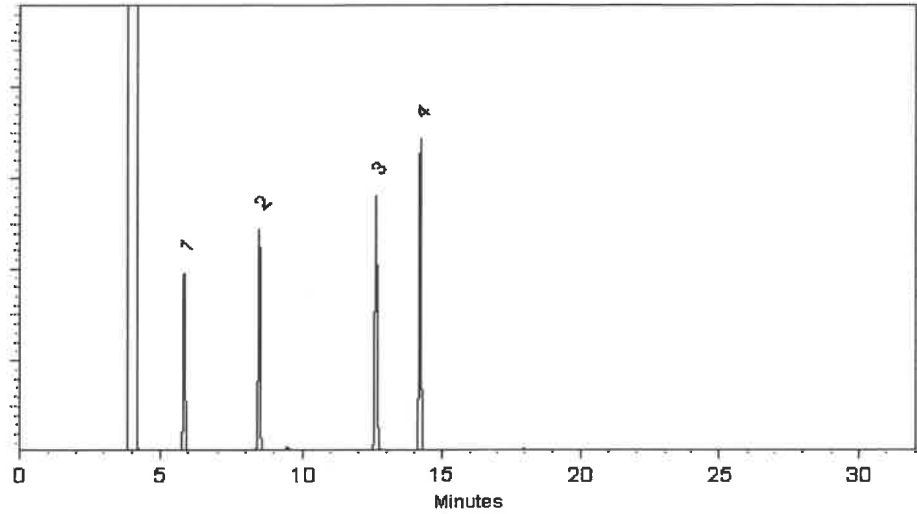
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

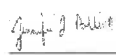


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

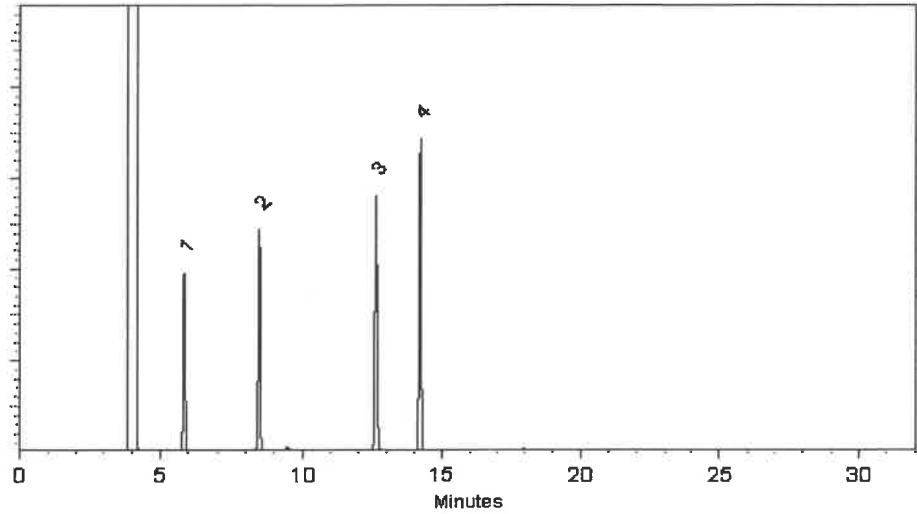
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

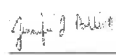


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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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V14727 to
V14756



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:

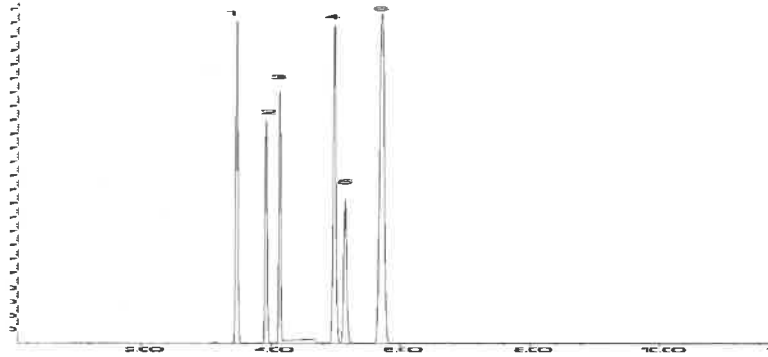
MSD

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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL
30 ml

Certificate of Analysis

chromatographic plus

V14727 to
V14756



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:

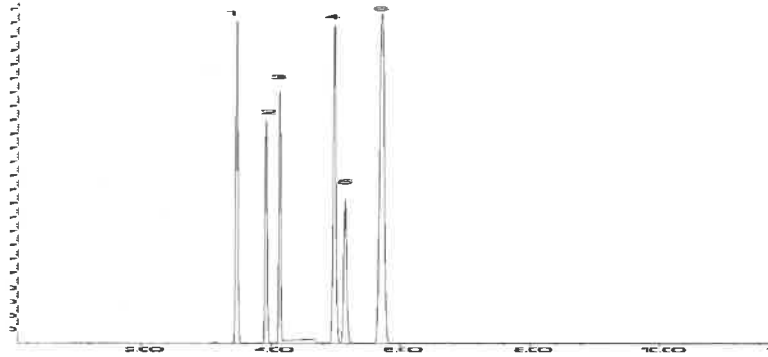
MSD

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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471
Description : Custom Vinyl Acetate Standard
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2026 **Storage:** -20°C or colder
Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

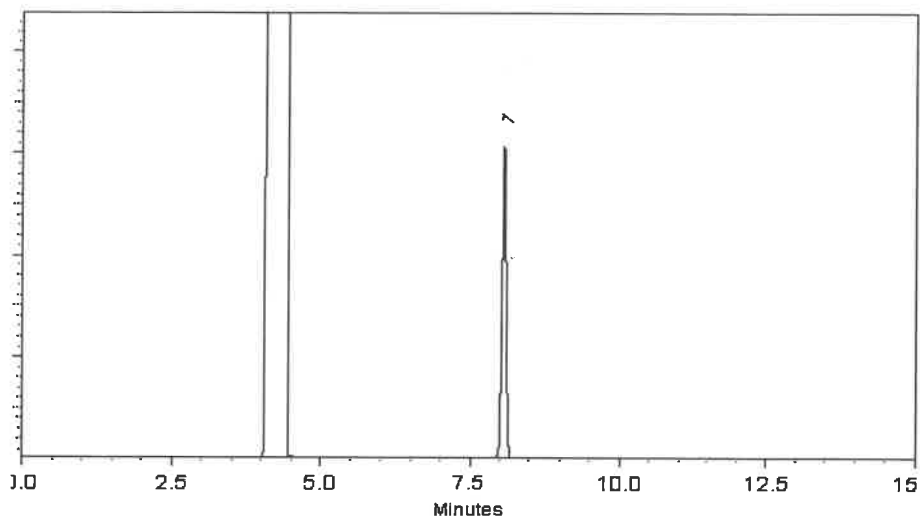
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pabon 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

10 vol Rec 01/08/25
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14793 to 14802



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-FL **Lot No.:** A0220563
Description : Custom Vinyl Acetate Standard
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2026 **Storage:** -20°C or colder
Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,060.0 µg/mL	+/- 278.5905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

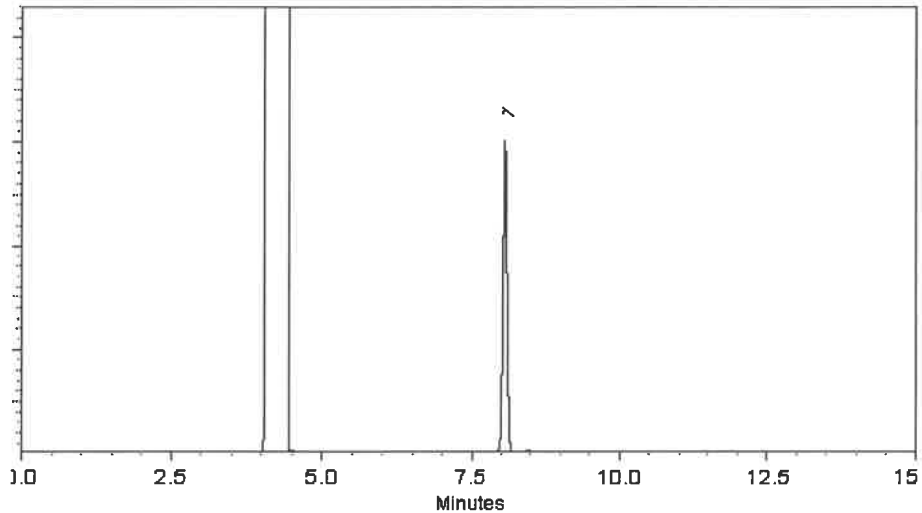
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

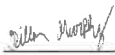


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckal - Mix Technician

Date Mixed: 30-Dec-2024

Balance Serial # B345965662


Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pothos at 7:11 am, Jan 03, 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:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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
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500 Series for Drinking Water
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Country of Origin: USA
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Jamie Ethier
Vice President Global Quality



SHIPPING DOCUMENTS

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CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. **Q1207**
QUOTE NO.
COC Number **2038583**

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: RU2 Engineering LLC
ADDRESS: 2 Melinda Drive
Monroe Twp, NJ 08831
CITY: STATE: ZIP:
ATTENTION: **Rutu Manani**
PHONE: **609-409-4564** FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: **SANDTWOOR BMLR Project**
PROJECT NO.: LOCATION: **Brooklyn, NY**
PROJECT MANAGER: **Rutu Manani**
e-mail: **Rmanani@RU2eng.com**
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: **Same as company address** PO#:
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) **Standard 10 days** DAYS*
HARDCOPY (DATA PACKAGE): **Standard 10 days** DAYS*
EDD: **Standard 10 days** DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☒ NYS ASP B
+ Raw Data ☐ Other
☐ EDD FORMAT

1. TEL VOCs + TICS + TBA
2. TEL VOCs
3. TPH
4. TEL GRO-DRO
5. TAL SVOCs + TICS
6. Pesticides, PCBs
7. ECRA Characterization
8. Paint Filter
9. Full TELP

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-OTHER	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9		
1.	JPP-2.1-012725	Soil		G	1/27/25	9:05	3	X	X	X								
2.	JPP-2.1-012725	Soil	C		1/27/25	9:08	7			X	X	X	X	X	X	X		
3.	JPP-5.1-012725	Soil		G	1/27/25	10:10	3	X	X	X								
4.	JPP-5.1-012725	Soil	C		1/27/25	10:10	7			X	X	X	X	X	X	X		
5.	JPP-4.5-012725	Soil		G	1/27/25	10:50	3	X	X	X								
6.	JPP-4.5-012725	Soil	C		1/27/25	10:50	7			X	X	X	X	X	X	X		
7.	JPP-16.2-012725	Soil		G	1/27/25	12:07	3	X	X	X								
8.	JPP-16.2-012725	Soil	C		1/27/25	12:09	7			X	X	X	X	X	X	X		
9.	JPP-20.2-012725	Soil		G	1/27/25	13:40	3	X	X	X								
10.	JPP-20.2-012725	Soil	C		1/27/25	13:40	7			X	X	X	X	X	X	X		

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. RVM	DATE/TIME: 1/28/2025	RECEIVED BY: [Signature] 1-28-25	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3-7 °C
RELINQUISHED BY SAMPLER: 2. [Signature]	DATE/TIME:	RECEIVED BY:	Comments: Preserve extra sample jar if additional analysis is required.
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME: 1259 1-28-25	RECEIVED BY: 3.	Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete
☐ YES ☐ NO

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1207	RUTW01	Order Date : 1/28/2025 11:40:00 AM	YG	Project Mgr :
Client Name : RU2 Engineering, LLC		Project Name : SANDTWOBR-BMCR Bro 02/03/25		Report Type : NYS ASP B
Client Contact : Rutu Manani		Receive Date/Time : 1/28/2025 12:59:00 PM		EDD Type : Excel NY
Invoice Name : RU2 Engineering, LLC		Purchase Order :		Hard Copy Date :
Invoice Contact : Rutu Manani				Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1207-01	JPP-2.1-012725	Solid	01/27/2025	09:05					
					VOCMS Group1		8260D	10 Bus. Days	
Q1207-05	JPP-5.1-012725	Solid	01/27/2025	10:10					
					VOCMS Group1		8260D	10 Bus. Days	
Q1207-09	JPP-4.5-012725	Solid	01/27/2025	10:50					
					VOCMS Group1		8260D	10 Bus. Days	
Q1207-13	JPP-16.2-012725	Solid	01/27/2025	12:07					
					VOCMS Group1		8260D	10 Bus. Days	
Q1207-17	JPP-20.2-012725	Solid	01/27/2025	13:40					
					VOCMS Group1		8260D	10 Bus. Days	

Relinquished By:

Date / Time :

[Signature]
1-28-25 1447

Received By:

Date / Time :

[Signature]
1/28/25 1447

Storage Area : VOA Refridgerator Room

[Signature]
1-28-25